

**CITY OF SHERMAN
CITY COUNCIL REGULAR MEETING AGENDA
COUNCIL CHAMBERS OF THE CITY HALL
220 WEST MULBERRY STREET
SHERMAN, TEXAS
MONDAY, JUNE 3, 2024
5:00 PM**

- A.1. CALL TO ORDER, QUORUM DETERMINED, MEETING DECLARED OPEN**
- A.2. PLEDGE OF ALLEGIANCE AND INVOCATION LED BY COUNCIL MEMBER PAMELA L. HOWETH**

Citizen Comments

B.1. CITIZEN COMMENTS

During this meeting, the City Council welcomes public comment only on agenda items listed under the Open Meeting portion of the agenda, in accordance with Texas Government Code Section 551.007. For items not listed on the agenda, those matters may be discussed with City staff during regular business hours, or with the Mayor or any Council member by contacting them at times other than at City Council meetings.

Consent Agenda

C.1. CONSENT AGENDA

Asterisked (*) items are considered to be routine and will be enacted in one motion without discussion unless a Council Member or a citizen requests a specific item be discussed and voted on separately

Public Hearing

D.1. PUBLIC HEARING

Final Statement/Action Plan for Program Year 2024 Community Development Block Grant

D.2. INTRODUCTION AND PUBLIC HEARING OF ORDINANCE NO. 6728

Ordinance Ordering a Special Election of the Qualified Voters of the City of Sherman, Texas, on the 14th Day of September 2024 for the Purpose of Electing One (1) Member of the Sherman City Council (District No. 1) to Fill the Vacancy Resulting from the Resignation of Council Member Shawn C. Teamann; Providing that the Election Shall be Administered by Grayson County, Texas; Designating Early Voting Polling Places and Hours; designation Election Day Polling Places and Hours; Ordering Notices of Election to be Given as Prescribed by Law in Connection with Such Election

D.3. INTRODUCTION AND PUBLIC HEARING OF ORDINANCE NO. 6729

Amending The Code Of Ordinances Of The City Of Sherman, Texas, Chapter 10 (Subdivision Regulation); Modifying Certain Existing Regulations And Prescribing New Regulations Relating To Plats, Subdivisions Of Land, Construction Of Public Infrastructure And Other Land Development Matters Pursuant To Chapter 212 Of The Texas Local Government Code And Other Applicable Law; Providing For Certain Definitions And Procedures; Providing Requirements And Regulations For The Preparation Of Plats; Providing For Acceptance Of Subdivisions And Requirements Prior To Acceptance Of Final Plats; Providing For Design Criteria And Construction Standards; Defining Responsibility For Payment Of Costs Of Public Infrastructure; Specifying Requirements For Surveying, Engineering And Final Acceptance Of Subdivisions; Providing For Various Improvements For All Subdivisions; Providing For Variances; Requiring Reservation Of Open Space And

Trails In Certain Residential Subdivisions; Extending Regulations To The Extraterritorial Jurisdiction Of The City; Delegating Authority Over Action On Certain Types Of Plats To The City Engineer Pursuant To Section 212.0065 Of The Texas Local Government Code; Providing A Penalty Clause With A Maximum Fine Of \$2,000, Savings/Repealing Clause, Severability Clause And An Effective Date; Providing For The Publication Of The Caption Hereof; Finding And Determining That The Meeting At Which This Ordinance Is Passed Was Noticed And Is Open To The Public As Required By Law

D.4. INTRODUCTION AND PUBLIC HEARING OF ORDINANCE NO. 6730

Approving and Adopting the Engineering Design Standards Manual for the City of Sherman, Texas; Providing for Regulation on Public Infrastructure Design and Other Standards; Delegation Authority to the City Engineer; Providing a Penalty Clause with a Maximum Fine of \$2,000, Savings/Repealing Clause, Severability Clause and an Effective Date; Providing for the Publication of the Caption Hereof

Close Public Hearing and Consider Adoption of Ordinances

E.1. CLOSE PUBLIC HEARING

Consider Adoption of Ordinance No. 6728, 6729 & 6730.

Resolutions

F.1. RESOLUTION NO. 7313

Authorizing Execution of a Joint Election Agreement with Grayson County, Texas, to Hold a Special Election on September 14, 2024.

F.2. RESOLUTION NO. 7314

Authorizing Publication of the Proposed Final Statement/Action Plan for the Community Development Block Grant for Program Year 2024; Authorizing Submission of the Block Grant Application; Authorizing Execution of Certifications of Compliance in Connection with the Administration and Conduct of the Community Development Program for Program Year 2024

F.3. * RESOLUTION NO. 7315

Authorizing Execution of a Professional Services Agreement with Huitt-Zollars, Inc. for the Lamberth & Shady Oaks Improvements

F.4. * RESOLUTION NO. 7316

Authorizing Execution of a Professional Services Agreement with Garver, LLC for the Stephens GST and PS Facility Improvements

F.5. * RESOLUTION NO. 7317

Authorizing Execution of An Easement to Oncor Electric Delivery Company, LLC for the Installation of Overhead and/or Underground Electric Supply for GlobalWafers America

F.6. * RESOLUTION NO. 7318

Authorizing Execution of an Agreement with David and Christy Baca for the Abatement of AD Valorem Property Taxes for the Construction of a New Single-Family Residence at 215 North Ricketts within the City of Sherman Reinvestment Zone, Number 10 (#10)

Request to Advertise

G.1. * REQUEST TO ADVERTISE

Request to Advertise Services to Perform the Annual Audit for the Period Ending September 30, 2024

Any item on this posted agenda may be discussed in Executive Session provided it is within one of the permitted categories under Chapter 551 of the Texas Government Code

Other Business

H.1. OTHER BUSINESS

Consider Request of the 2024 Earth Day Planning committee to Temporarily Close Certain Streets for the 16th Annual "Texoma Earth Day Festival" on its rescheduled date of Saturday, June 15th, 2024

H.2. *OTHER BUSINESS

Repair and Rework of the Luella 2 Woodbine Well under Emergency Designation

H.3. *OTHER BUSINESS

Repair and Rework of the Russell 1 T Well under Emergency Designation

COUNCIL COMMENTS

EXECUTIVE SESSION

In accordance with the Texas Open Meetings Act, Chapter 551 of the Texas Government Code, the City Council may hold an Executive Session if the discussion of any of the items identified in this agenda, or any of the items identified below, concern one or more of the following:

J.1. TEX. GOV'T CODE § 551.071

Seeking the advice of its attorney about pending or contemplated litigation, settlement offers or any matter in which the duty of the attorney to the City Council under the Texas Disciplinary Rules of Professional Conduct of the State Bar of Texas clearly conflicts with the Texas Open Meetings Act.

J.2. TEX. GOV'T CODE § 551.072

Deliberating the purchase, exchange, lease or value of real property if deliberation in an Open Meeting would have a detrimental effect on the position of the City in negotiations with a third person.

J.3. TEX. GOV'T CODE § 551.073

Deliberating a negotiated contract for a prospective gift or donation to the City if deliberation in an Open Meeting would have a detrimental effect on the position of the City in negotiations with a third person.

J.4. TEX. GOV'T CODE § 551.074

Deliberating the appointment, employment, evaluation, reassignment, duties, discipline or dismissal of a public officer or employee; or to hear a complaint or charge against an officer or employee unless the officer or employee who is the subject of the deliberation or hearing requests a public hearing

J.5. TEX. GOV'T CODE § 551.076

Deliberating the deployment, or specific occasions for implementation, of security personnel or devices or a security audit.

J.6. TEX. GOV'T CODE § 551.087

Discussing or deliberating commercial or financial information that the City has received from a business prospect that the City seeks to have locate, stay or expand in or near the City and with which the City is conducting economic development negotiations; or deliberating the offer of a financial or other incentive to a business prospect.

J.7. TEX. GOV'T CODE § 551.089

Deliberating security assessments or deployments relating to information resources technology, network security information, or the deployment or specific occasions for implementation of security personnel, critical

Any item on this posted agenda may be discussed in Executive Session provided it is within one of the permitted categories under Chapter 551 of the Texas Government Code

infrastructure or security devices.

The Council reconvenes into General Session

COUNCIL CALENDAR

- L.1. COUNCIL CALENDAR**
2024 Council Calendar

CERTIFICATION

I, the undersigned authority, do hereby certify that the above Notice of Regular Meeting of the City Council of the City of Sherman is a true and correct copy of said Notice and that I posted a true and correct copy of said Notice on the bulletin board at City Hall of said City of Sherman, Texas, a place convenient to the public, and said notice was posted on May 31, 2024 at 4:59 p.m., and said time of posting was 72 hours before said meeting was convened or called to order.

Dated this 31st day of May 2024. City of Sherman, Texas

City Clerk

The above agenda schedule represents an estimate of the order for the indicated items and is subject to change at any time. All agenda items are subject to final action by the City Council.

An unscheduled closed executive session may be held if the discussion of any of the above agenda items concerns the purchase, exchange, lease or value of real property; the appointment, employment, evaluation, reassignment, duties, discipline or dismissal of a public officer or employee; the deployment or use of security personnel or equipment; or requires consultations with the City Attorney.

At the discretion of the City Council, non-agenda items under the headings of “Citizens Requests”, “Media Questions”, and “Council Concerns” may be presented to the Council for informational purposes; however, by law, the Council shall not discuss, deliberate, or vote upon such matters except that a statement of specific factual information, a recitation of existing policy, and deliberations concerning the placing of the subject on a subsequent agenda may take place.

The City Attorney has approved the Executive Session items on this agenda

PERSONS WITH DISABILITIES, WHO PLAN TO ATTEND THIS MEETING AND WHO MAY NEED ASSISTANCE, ARE REQUESTED TO CONTACT LINDA ASHBY AT (903) 892-7204, TWO (2) WORKING DAYS PRIOR TO THE MEETING SO THAT APPROPRIATE ARRANGEMENTS CAN BE MADE.

<u>Mayor</u>	<u>Deputy Mayor</u>	<u>Council Members</u>	
David Plyler	Shawn C. Teamann	Henry Marroquin, Council-At-Large, PL #1 Juston Dobbs, Council-At-Large, PL #2 Shawn C. Teamann, Council – District #1	Josh Stevenson, Council – District #2 Pamela L. Howeth, Council – District #3 Daron Holland, Council – District #4



City Council Regular Meeting

Agenda Item No. D.1.

Meeting Date: 6/3/2024

Prepared By: Jana Garner, Grants Coordinator

Approved By: Robby Hefton, City Manager

Caption:

Public Hearing

Final Statement/Action Plan for Program Year 2024 Community Development Block Grant

Issue:

Approval of the Program Year (PY) 2024 Community Development Block Grant Final Statement/Action Plan

Background:

Each year, the City of Sherman receives an entitlement grant (Community Development Block Grant) from the U.S. Department of Housing and Urban Development (HUD). We are required to prepare and submit an annual Action Plan, which is a description of the activities that will be undertaken during the coming year to address the needs of our low- and moderate-income and special needs citizens. This Action Plan is based on a five (5) year Consolidated Plan & Strategy developed by City staff and approved by the Sherman City Council. It serves as the City's long-term planning tool to address the identified needs of public housing, homelessness, and other non-housing community development needs and activities within the City of Sherman. For PY 2024, the City will allocate the majority of the funds towards parks improvement, substandard structure demolition, and public service activities. Over the past five (5) years, the City of Sherman's history of allocations for the Community Development Block Grant is as follows:

PY 2020 - \$366,740.00

PY 2021 - \$378,731.00

PY 2022 - \$335,940.00

PY 2023 - \$308,195.00

PY 2024 - \$311,097.00

Origination:

Jana Garner, Grants Coordinator

Financial Consideration:

The City of Sherman has been allocated \$311,097 in Community Development Block Grant funds from HUD to address our various community development needs for low- and moderate-income and special needs citizens during PY 2024.

Staff Recommendation:

It is staff recommendation that the Sherman City Council approve the resolution to adopt the PY 2024 community Development Block Grant Final Statement/Action Plan as submitted.

Alternatives:

The Sherman City Council may change or re-appropriate these funds/allocations as they see fit.

Attachments:

1. Attachment A Final Statement Action Plan PY24
2. Resolution No. - PY 2024 CDBG Annual Action Plan

Attachment A

**CITY OF SHERMAN, TEXAS
FINAL STATEMENT/ACTION PLAN OF
COMMUNITY DEVELOPMENT OBJECTIVES
AND PROJECTED USE OF FUNDS FOR PROGRAM YEAR 2024**

GRANT NO: B-24-MC-48-0027

The City of Sherman has received notice from the U.S. Department of Housing and Urban Development (HUD) that its entitlement grant for the Community Development Program (CDBG) for program year 2024 is \$311,097.00. These funds will be available on October 1, 2024. Activities that directly benefit low- and moderate-income persons will be available citywide. Other activities which have an area benefit will only be available in areas of the city which are populated by a majority of low- and moderate-income persons. The City has met citizen participation requirements.

The City of Sherman's Consolidated Plan is a document which is required by the U.S. Department of Housing and Urban Development, and includes the following subjects: (1) Housing and Homeless Needs Assessment - A description of the jurisdiction's estimated housing needs for the ensuing five-year period; (2) Housing Market Analysis - A description of the significant characteristics of the jurisdiction's housing market, including supply, demand, condition and cost of housing and the housing stock and services available (i.e., public and assisted housing, homeless, elderly, frail elderly, persons with disabilities (mental/physical/developmental), persons with alcohol and other drug addictions, and persons with HIV/AIDS and related diseases; (3) Strategic Plan - A description of the five-year strategy and plan to address affordable housing, homelessness, other special needs and non-housing community development plan; and, (4) Action Plan - A description of the jurisdiction's one-year plan of activities to be undertaken during the coming year.

The overall goal of this community development planning and development program is to develop viable urban communities by providing suitable living environments and expanded economic opportunities, principally for low-moderate income persons and special need populations of the City of Sherman. Therefore, based on these objectives, the following use of funds is being proposed:

**COMMUNITY DEVELOPMENT PROGRAM ACTION PLAN
PROGRAM YEAR 2024**

DEMOLITION/CLEARANCE PROGRAM: \$88,000

A program to demolish vacant, substandard structures and clear property lots that pose a risk to health and safety.

HABITAT FOR HUMANITY: \$15,000

A program to provide external repairs to owner-occupied homes belonging to low- and moderate-income Sherman residents.

PARK IMPROVEMENT: \$106,996

A program to fund projects in parks within low- and moderate-income target areas and improve ADA accessibility in parks throughout the city of Sherman, promoting general health and wellness among the entire community. The focus will especially be to benefit those living in low-moderate income areas and those with disabilities.

PROGRAM ADMINISTRATION: \$54,439

- **BOYS & GIRLS CLUB OF SHERMAN, INC.: \$7,777**
Funds to be used to assist with the development and advancement of a teen program for those from low- and moderate-income households.
- **CASA OF GRAYSON COUNTY: \$7,777**
A program to train and support volunteer advocates and staff on process and procedures to advocate for foster children in Grayson County that have been abused or neglected.
- **CHILDREN'S ADVOCACY CENTER: \$7,777**
A program to provide high quality services to abused and traumatized children who, at one time, resided within the city limits of Sherman.
- **FOUR RIVERS OUTREACH: \$7,777**
A program that serves those who are overcoming their struggles with addiction by providing a men's residential 16-bed facility and a 12-month Life Renewal program. Recipients are those who, at one time, resided within the city limits of Sherman.

- **GRAND CENTRAL STATION: \$7,777**
A program to support nutrition, specifically food for low- and moderate-income Sherman residents.
- **GRAYSON COUNTY CRISIS CENTER: \$7,777**
A program of activities that will provide emergency assistance to homeless women and children of domestic violence who, at one time, resided within the city limits of Sherman.
- **TEXOMA FAMILY SHELTER, INC.: \$7,777**
A program of activities that will provide emergency assistance to homeless individuals and families, who at one time, resided within the city limits of Sherman.

PUBLIC SERVICE ACTIVITIES: \$46,662

- **CHILD & FAMILY GUIDANCE CENTER: \$7,777**
A program to provide counseling services for family dysfunction, alcohol and substance abuse, domestic violence, and sexual abuse for low- and moderate-income Sherman residents.
- **HOUSE OF ELI: \$7,777**
Funds will be used to house and assist young men, ages 18-21, who are aging out of foster care or being released from incarceration provide shelter, food, clothing, personal needs, and a family environment in which they can thrive.
- **MULTICULTURAL FAMILY CENTER: \$7,777**
Provide direct adult educational services to underserved immigrant population including ESL, Parenting, Family Literacy and Citizenship.
- **SHERMAN HOUSING AUTHORITY: \$7,777**
A program to address the problems of drug abuse and associated crime in public housing. Activities include increasing law enforcement services to stop the sale of illegal drugs in and around assisted housing, apprehend sellers of such drugs, and reduce crime in the assisted housing area.
- **TEXOMA AREA PARATRANSIT SYSTEM: \$7,777**
CDBG funds will pay for public transportation costs for eligible residents to access medical, nutrition, education, grocery, and other eligible activities.
- **UNITED WAY OF GRAYSON COUNTY: \$7,777**
Cradle to Workforce is to create safe neighborhood providers in low-income areas for our most vulnerable families who need flexible childcare schedules.

ALLOCATION FOR PROGRAM YEAR 2024:

\$311,097

The City of Sherman seeks, through the following program objectives, to improve housing conditions, neighborhood appearance, employment opportunities, and the overall quality of life for low and moderate-income citizens. No activities will be undertaken which cause involuntary displacement of persons.

CITY OF SHERMAN COMMUNITY DEVELOPMENT OBJECTIVES

1. Encourage citizen participation and input to obtain maximum public involvement in program activities.
2. Promote the general health and wellness of all members of the community through improved parks and recreational facilities in the low- and moderate-income target areas.
3. Improve the quality of life for Sherman residents with the removal of structures that create unsafe, unsanitary, and hazardous situations for the public.
4. Promote drug elimination programs for low- and moderate-income assisted housing families and households.
5. Provide support for provision of emergency shelter, food, and assistance to the homeless and those in danger of becoming homeless.
6. Assist in providing counseling services to youth and adults from low- and moderate-income families.
7. Assist in providing activities for children and teens from low- and moderate-income families.
8. Provide support for provision of shelter and assistance to men in overcoming addiction.
9. Provide services for abused and neglected children.

The Action Plan of Community Development Objectives and Projected Use of Funds for Program Year 2024 are available in the Finance Department of the City of Sherman. Any citizen or agency interested in commenting on this Final Statement of Objectives is invited to submit written comments c/o Jana Garner, Grants Coordinator, City of Sherman, P.O. Box 1106, Sherman, TX 75091-1106. Written comments must be received prior to 5:00 p.m. on July 5, 2024. Comments received will be included in the summary of citizen participation of this Plan.

RESOLUTION NO.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SHERMAN, TEXAS, AUTHORIZING PUBLICATION OF THE PROPOSED FINAL STATEMENT/ACTION PLAN FOR THE COMMUNITY DEVELOPMENT BLOCK GRANT FOR PROGRAM YEAR 2024; AUTHORIZING SUBMISSION OF THE BLOCK GRANT APPLICATION; AUTHORIZING EXECUTION OF CERTIFICATIONS OF COMPLIANCE IN CONNECTION WITH THE ADMINISTRATION AND CONDUCT OF THE COMMUNITY DEVELOPMENT PROGRAM FOR PROGRAM YEAR 2024

WHEREAS, under the Housing and Community Development Act of 1974, as amended, the City of Sherman is eligible to receive an estimated \$311,097 for program year 2024, to be expended on eligible activities primarily benefiting low- and moderate-income families and special need populations; and

WHEREAS, the Community Development Block Grant regulations require the opportunity for citizen participation in the development of the final statement and authorizing of the expenditure of such funds; and

WHEREAS, after proper notice was posted in public places and published on the website of the City of Sherman, public hearings were held by said Community Development Staff to receive citizen participation and input on May 7, 2024, and June 3, 2024; and

WHEREAS, the City Council, after due consideration of the proposed Community Development Final Statement and of all matters raised at public meetings, is of the opinion that, unless public comment warrants revisions, said final statement should be submitted to the U.S. Department of Housing and Urban Development as the Community Development Application for the City of Sherman for Program Year 2024, in order to secure funding as provided herein;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SHERMAN, TEXAS:

SECTION 1. That the Community Development Final Statement, embodying those projects set forth on Attachment "A", attached hereto and made a part hereof for all purposes, is hereby approved and adopted as the Community Development Plan of the City of Sherman, Texas, for Program Year 2024.

SECTION 2. That the City Council of the City of Sherman hereby certifies and assures the U.S. Department of Housing and Urban Development that development of this application for funds under the Housing and Community Development Act of 1974, as amended, and the implementation of the Block Grant Program will be conducted in accordance with all applicable provisions of the "Assurances" as required.

SECTION 3. That the City Manager of the City of Sherman is hereby authorized to execute, on behalf of the City of Sherman, the "Certifications" set forth on Attachment "B", attached hereto and made a part hereof for all purposes. These Certifications concern compliance with certain guidelines, regulations, and policies in preparation of this application and in conducting the Community Development Program of the City of Sherman.

SECTION 4. That the City Manager of the City of Sherman is hereby authorized to submit, as the Chief Executive Officer of the City of Sherman, and on behalf of the City of Sherman, the Community Development Final Statement and a certified copy of this resolution and all attachments thereto to the U.S. Department of Housing and Urban Development, in application for funds available to the City of Sherman under the Housing and Community Development Act of 1974, as amended. Said application shall be made on forms required by the U.S. Department of Housing and Urban Development.

SECTION 5. That the City Manager of the City of Sherman is hereby authorized and designated to act as Chief Executive Officer in connection with this application, and is hereby authorized and directed to provide such additional information as may be required in connection with said application.

SECTION 6. That it is hereby officially found and determined that the meeting at which this resolution is passed is open to the public and that public notice of the time, place, and purpose of said meeting was given as required by law.

PASSED AND APPROVED on this the _____ day of _____, 2024.

CITY OF SHERMAN, TEXAS

BY: _____
DAVID PLYLER, MAYOR

ATTEST:

BY: _____
LINDA ASHBY, CITY CLERK

APPROVED AS TO FORM AND CONTENT:

BY: _____
CITY ATTORNEY



City Council Regular Meeting

Agenda Item No. D.2.

Meeting Date: 6/3/2024

Prepared By: Linda Ashby, City Clerk

Approved By: Robby Hefton, City Manager

Caption:

INTRODUCTION AND PUBLIC HEARING OF ORDINANCE NO. 6728

Ordinance Ordering a Special Election of the Qualified Voters of the City of Sherman, Texas, on the 14th Day of September 2024 for the Purpose of Electing One (1) Member of the Sherman City Council (District No. 1) to Fill the Vacancy Resulting from the Resignation of Council Member Shawn C. Teamann; Providing that the Election Shall be Administered by Grayson County, Texas; Designating Early Voting Polling Places and Hours; designation Election Day Polling Places and Hours; Ordering Notices of Election to be Given as Prescribed by Law in Connection with Such Election

Issue:

To call a Special Election for September 14, 2024, to elect a City Council Member for Council Member, District 1, to fill an unexpired term until the Regular Municipal Election in November 2025. The position on the ballot will be for Council Member, District 1 (previously held by Shawn Teamann).

Background:

In compliance with applicable law, the City must, by ordinance, call a Special Election to fill the unexpired term for the seat vacated by Council Member Teamann. This ordinance also establishes the voting centers for this election.

Origination:

City Clerk's Office

Financial Consideration:

The City's cost for this Special Election is estimated to be approximately \$10,000.

Staff Recommendation:

It is recommended that the City Council approve the ordinance calling the Special Election for Saturday, September 14, 2024.

Alternatives:

There is no viable alternative.

Attachments:

1. Ordinance No. 6728

ORDINANCE NO. 6728

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF SHERMAN, TEXAS, ORDERING A SPECIAL ELECTION OF THE QUALIFIED VOTERS OF THE CITY OF SHERMAN, TEXAS, ON THE 14TH DAY OF SEPTEMBER, 2024, FOR THE PURPOSE OF ELECTING ONE (1) MEMBER OF THE SHERMAN CITY COUNCIL (DISTRICT NO. 1) TO FILL THE VACANCY RESULTING FROM THE RESIGNATION OF COUNCIL MEMBER SHAWN C. TEAMANN; PROVIDING THAT THE ELECTION SHALL BE ADMINISTERED BY GRAYSON COUNTY, TEXAS; DESIGNATING EARLY VOTING POLLING PLACES AND HOURS; DESIGNATING ELECTION DAY POLLING PLACES AND HOURS; ORDERING NOTICES OF ELECTION TO BE GIVEN AS PRESCRIBED BY LAW IN CONNECTION WITH SUCH ELECTION; PROVIDING FOR THE APPOINTMENT OF ELECTION JUDGES; AUTHORIZING THE MAYOR AND CITY CLERK TO TAKE ALL ACTIONS NECESSARY TO COMPLY WITH APPLICABLE ELECTION LAWS; FINDING AND DETERMINING THAT THE MEETING AT WHICH THIS ORDINANCE IS PASSED WAS NOTICED AND IS OPEN TO THE PUBLIC AS REQUIRED BY LAW.

WHEREAS, the City Council of the City of Sherman, Texas (“City Council”) finds that Council Member Shawn C. Teamann resigned from his position on the City Council, District No. 1, when he announced his candidacy for another elected office on May 17, 2024; and

WHEREAS, pursuant to Article XI, Section 11 and Article 16, Section 65 of the Texas Constitution, the Texas Election Code and the City Charter of the City of Sherman, Texas (“Sherman”), the City Council is required to order a special election to fill the vacancy in the office of the City Council, District No. 1, resulting from the resignation of Mr. Teamann; and

WHEREAS, the City Council hereby orders a special election to be held within Sherman on September 14, 2024, for the purpose of filling the vacancy in the office of City Council, District No. 1, who will complete the remaining term of office for District No. 1.

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF SHERMAN, TEXAS:

SECTION 1. That, in compliance with the City Charter, and in accordance with the laws and the Constitution of the State of Texas, a special election is hereby called and ordered for Saturday, September 14, 2024, at which election all qualified voters may vote for the purpose of electing one member of the Sherman City Council (District No. 1) to fill the vacancy resulting from the resignation of Council Member Shawn C. Teamann and complete the remaining term of office for District No. 1.

SECTION 2. That said election shall be administered by the County Elections Administrator, Grayson County, Texas in accordance with the Election Agreement executed pursuant to the authority of Resolution No. 7313, passed and approved on the 3rd day of June, 2024.

SECTION 3. That the County Elections Administrator shall prepare electronic ballots for early and election day voting and paper ballots for mail ballots and provisional ballots to be used in said election and shall label same "*Official Ballot*", on which ballot shall be printed the names of the candidates and the position of Council Member, District No. 1. The designation of the position on the official ballot shall be Council Member, District No. 1.

SECTION 4. Candidates must file for a specific place and adhere to the filing deadlines. Candidate packets are available in the City Clerk’s Office, 220 W. Mulberry Street, Sherman, Texas 75090. The candidate filing periods for the election are as follows:

Beginning: June 10, 2024 at 8:00 a.m.
Ending: July 10, 2024 at 5:00 p.m.

SECTION 5. That it shall further appear to the said City Clerk, before said candidate’s name is entered on said ballot, that he has filed an affidavit of loyalty with the City Clerk as required by the Election Code of the State of Texas.

SECTION 6. That, in the event there are two or more candidates for the same position, the position of such candidates’ names on the ballot shall be determined by lot conducted by the City Clerk in the presence of each candidate or candidate’s designated representative.

SECTION 7. That the polls shall be kept open from seven o'clock (7:00) a.m. until seven o'clock (7:00) p.m. on Election Day, and that due return shall be made to the City Council showing the number of votes cast for each candidate for the position of Council Member, District No. 1.

SECTION 8. That notice of said election shall be given by the Mayor of the City of Sherman by causing an election notice to be posted at City Hall and published in a daily newspaper published in the City in accordance with the provisions of the Texas Election Code.

SECTION 9. That the vote centers for this election shall be as follows:

<u>LOCATION</u>	<u>JUDGES</u>
Election Administration Building	TBD
115 W. Houston	Presiding Judge
Sherman, Texas	TBD
	Alternate Judge

Faith Church – West Entrance 1800 N. FM 1417 Sherman, Texas	TBD Presiding Judge
	TBD Alternate Judge
Municipal Building -- Ballroom 405 N. Rusk Sherman, Texas	TBD Presiding Judge
	TBD Alternate Judge

SECTION 10. That Direct Recording Electronic Equipment shall be used for voting at the foregoing election precincts.

SECTION 11. That the qualified voters, eligible to cast their ballots early under the laws of this State, shall be permitted to so cast their vote at the Grayson County Election Administration Building, 115 W. Houston, Sherman, Texas; from August 28 through August 30, 2024 from 8:00 a.m. to 5:00 p.m.; September 3 through September 6, 2024 from 8:00 a.m. to 5:00 p.m.; and September 9 and September 10, 2024, from 8:00 a.m. to 5:00 p.m.

SECTION 12. That the Presiding Judge for Early Voting shall be Julie Phillips, the Alternate Judge shall be Kelsi Stephens and additional Voting Clerks shall be appointed.

SECTION 13. That an Early Voting Ballot Board for verifying Early Voting ballots shall be appointed, by the Early Voting Judge, consisting of a Presiding Judge and additional Clerks.

SECTION 14. That the rate of pay set by Subchapter E, Sections 32.091 and 32.092 of Title 3 of the Election Code for Election Judges and Clerks shall be at an amount fixed by the appropriate authority, which is at least the federal minimum hourly wage. The judge who delivers the election returns may be paid an amount not to exceed \$25.00 for that service. No judge may be paid for more than one hour of work before the polls open.

SECTION 15. That Julie Phillips, County Elections Administrator, is hereby appointed Counting Station Presiding Manager.

SECTION 16. That the canvass of the Election Returns will be held in the Municipal Ballroom, 405 North Rusk Street, Sherman, Texas, as required under the Texas Election Code.

SECTION 17. That it is hereby officially found and determined that the meeting at which this ordinance is passed is open to the public and that public notice of the time, place, and purpose of said meeting was given as required by law.

INTRODUCED on this the 3rd day of June 2024.

ADOPTED on this the 3rd day of June 2024.

EFFECTIVE DATE on this the 3rd day of June 2024.

CITY OF SHERMAN, TEXAS

BY: _____
DAVID PLYLER, MAYOR

ATTEST:

BY: _____
LINDA ASHBY, CITY CLERK

**APPROVED AS TO FORM
AND CONTENT:
THE LAW FIRM OF ABERNATHY,
ROEDER, BOYD & HULLETT, P.C.**

BY: _____
RYAN D. PITTMAN, CITY ATTORNEY



City Council Regular Meeting

Agenda Item No. D.3.

Meeting Date: 6/3/2024

Prepared By: Rob Rae, Developmental Services Director, Wayne Lee, Director of Engineering

Approved By: Teri Fine, Assistant to the City Manager

Caption:

INTRODUCTION AND PUBLIC HEARING OF ORDINANCE NO. 6729

Amending The Code Of Ordinances Of The City Of Sherman, Texas, Chapter 10 (Subdivision Regulation); Modifying Certain Existing Regulations And Prescribing New Regulations Relating To Plats, Subdivisions Of Land, Construction Of Public Infrastructure And Other Land Development Matters Pursuant To Chapter 212 Of The Texas Local Government Code And Other Applicable Law; Providing For Certain Definitions And Procedures; Providing Requirements And Regulations For The Preparation Of Plats; Providing For Acceptance Of Subdivisions And Requirements Prior To Acceptance Of Final Plats; Providing For Design Criteria And Construction Standards; Defining Responsibility For Payment Of Costs Of Public Infrastructure; Specifying Requirements For Surveying, Engineering And Final Acceptance Of Subdivisions; Providing For Various Improvements For All Subdivisions; Providing For Variances; Requiring Reservation Of Open Space And Trails In Certain Residential Subdivisions; Extending Regulations To The Extraterritorial Jurisdiction Of The City; Delegating Authority Over Action On Certain Types Of Plats To The City Engineer Pursuant To Section 212.0065 Of The Texas Local Government Code; Providing A Penalty Clause With A Maximum Fine Of \$2,000, Savings/Repealing Clause, Severability Clause And An Effective Date; Providing For The Publication Of The Caption Hereof; Finding And Determining That The Meeting At Which This Ordinance Is Passed Was Noticed And Is Open To The Public As Required By Law

Issue:

Modifying Certain Existing Regulations And Prescribing New Regulations Relating To Plats, Subdivisions Of Land, Construction Of Public Infrastructure And Other Land Development Matters Pursuant To Chapter 212 Of The Texas Local Government Code And Other Applicable Law

Background:

On June 9th, 2023, City Council approved a resolution executing an agreement with Halff Associates to assist city staff in updating the Subdivision Ordinance. The effort to update the subdivision ordinance was put on hold in the fall of 2023 to allow for Halff Associates to assist in the creation of a tree protection and landscaping ordinance. The Subdivision Ordinance (Chapter 10) was last updated on September 18, 2023 (Ord. No. 6643) to address changes in State law regarding platting and civil review fees. The Subdivision Ordinance was updated again on December 18, 2023 (Ord. No. 6681) to include Tree Protection provisions. A summary of these proposed changes was presented to Council at the May 20, 2024 Council meeting.

This proposed ordinance is a full update of the subdivision ordinance that includes the following primary updates:

- Language that further clarifies development procedures, including the platting process.
- Requirements for the construction of public infrastructure.
- Specification on when a Traffic Impact Analysis (TIA) is required.
- Requirements for Trails and Open Space.

Along with the update to the Subdivision Ordinance, the scope of work included the creation of a Developer Guide to better communicate with development stakeholders the internal processes for development in the City of Sherman. This development guide has been available on the city's website since September 22, 2023.

Origination:

Development Services
Engineering

Financial Consideration:

There is no financial impact to be considered

Staff Recommendation:

Staff recommends City Council approve this Ordinance

Alternatives:

The City Council could choose not to adopt the proposed ordinance.

Attachments:

1. Ordinance No. 6729

ORDINANCE NO. 6729

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF SHERMAN, TEXAS, AMENDING THE CODE OF ORDINANCES OF THE CITY OF SHERMAN, TEXAS, CHAPTER 10 (SUBDIVISION REGULATION); MODIFYING CERTAIN EXISTING REGULATIONS AND PRESCRIBING NEW REGULATIONS RELATING TO PLATS, SUBDIVISIONS OF LAND, CONSTRUCTION OF PUBLIC INFRASTRUCTURE AND OTHER LAND DEVELOPMENT MATTERS PURSUANT TO CHAPTER 212 OF THE TEXAS LOCAL GOVERNMENT CODE AND OTHER APPLICABLE LAW; PROVIDING FOR CERTAIN DEFINITIONS AND PROCEDURES; PROVIDING REQUIREMENTS AND REGULATIONS FOR THE PREPARATION OF PLATS; PROVIDING FOR ACCEPTANCE OF SUBDIVISIONS AND REQUIREMENTS PRIOR TO ACCEPTANCE OF FINAL PLATS; PROVIDING FOR DESIGN CRITERIA AND CONSTRUCTION STANDARDS; DEFINING RESPONSIBILITY FOR PAYMENT OF COSTS OF PUBLIC INFRASTRUCTURE; SPECIFYING REQUIREMENTS FOR SURVEYING, ENGINEERING AND FINAL ACCEPTANCE OF SUBDIVISIONS; PROVIDING FOR VARIOUS IMPROVEMENTS FOR ALL SUBDIVISIONS; PROVIDING FOR VARIANCES; REQUIRING RESERVATION OF OPEN SPACE AND TRAILS IN CERTAIN RESIDENTIAL SUBDIVISIONS; EXTENDING REGULATIONS TO THE EXTRATERRITORIAL JURISDICTION OF THE CITY; DELEGATING AUTHORITY OVER ACTION ON CERTAIN TYPES OF PLATS TO THE CITY ENGINEER PURSUANT TO SECTION 212.0065 OF THE TEXAS LOCAL GOVERNMENT CODE; PROVIDING A PENALTY CLAUSE WITH A MAXIMUM FINE OF \$2,000, SAVINGS/REPEALING CLAUSE, SEVERABILITY CLAUSE AND AN EFFECTIVE DATE; PROVIDING FOR THE PUBLICATION OF THE CAPTION HEREOF; FINDING AND DETERMINING THAT THE MEETING AT WHICH THIS ORDINANCE IS PASSED WAS NOTICED AND IS OPEN TO THE PUBLIC AS REQUIRED BY LAW

WHEREAS, the City Council of the City of Sherman, Texas (“City Council”) finds that it is necessary to amend Chapter 10 (Subdivision Regulation) of the Code of Ordinances, City of Sherman, Texas (“Code of Ordinance”) to modify certain existing regulations and prescribing new regulations relating to plats, subdivisions of land, construction of public infrastructure and other land development matters (“City” or “Sherman”); and

WHEREAS, Sherman has complied with all legal notices and public hearing requirements as required by law; and

WHEREAS, the City Council finds that adopting this Ordinance promotes the health, safety and morals of Sherman and is in the best interest of the citizens of Sherman.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF SHERMAN, TEXAS:

SECTION 1: Findings Incorporated. The findings set forth above are incorporated into the body of this Ordinance as if fully set forth herein.

SECTION 2: Amendment to Chapter 10 (Subdivision Regulation) of the Code of Ordinances. Chapter 10 (Subdivision Regulation) of the Code of Ordinances is hereby amended as follows¹:

“CHAPTER 10 SUBDIVISION REGULATIONS

ARTICLE 10.01 GENERAL PROVISIONS

Sec. 10.01.001 Authority; extension to extraterritorial jurisdiction.

- (a) Authority. This Chapter and the following rules and regulations (sometimes referred to as the “subdivision regulations”) is adopted under the authority of the Constitution and laws of the State of Texas, including Chapter 212 of the Texas Local Government Code, and other applicable law.
- (b) Application in the ETJ. The City Council hereby extends the application of this Chapter and these subdivision regulations to the extraterritorial jurisdiction or ETJ of the City, as that area may exist from time to time. Such regulations shall be applicable to the filing of plats and the subdivision of land, as those terms or activities are defined herein and in Chapter 212 of the Texas Local Government Code, within the corporate limits of the City and its extraterritorial jurisdiction as they may be from time to time adjusted by annexation, disannexation, or otherwise. The City shall have all remedies and rights provided by said Chapter 212 with regard to the control and approval of subdivisions, plats, and other development both within the City and within its extraterritorial jurisdiction.
- (c) Interlocal Agreement with Grayson County. The City has executed an interlocal cooperation agreement with Grayson County as authorized under Chapter 242 of the Texas Local Government Code. Grayson County has assigned the City its respective authority to approve subdivision plats in the City’s ETJ. The agreement generally provides for the City to enforce its subdivision regulations within the applicable areas of the ETJ. These subdivision regulations will therefore be enforced to the fullest extent possible in the ETJ as agreed upon with Grayson County.

Sec. 10.01.002 Interpretation and purpose.

- (a) Minimum requirements. In the interpretation and application of the provisions of these subdivision regulations, it is the intention of the City that the principles, standards and requirements provided for herein shall be minimum requirements for the platting and developing of subdivisions within the City and its ETJ.
- (b) Purpose.
 - (1) The subdivision and platting of land is one of the first steps in the process of

¹ Deletions are evidenced by ~~striketrough~~; additions are italicized.

- development. The distribution and relationship of residential, nonresidential and agricultural uses throughout the community, along with the system of improvements for streets, utilities, public facilities and community amenities, determine, in large measure, the quality of life enjoyed by the residents of the City.
- (2) Health, safety, economy, amenities, environmental sensitivity, and convenience are all factors which influence and determine a community's quality of life and overall character. A community's quality of life is of the public interest. Consequently, the subdivision of land, as it affects a community's quality of life, is an activity where regulation is a valid function of municipal government.
 - (3) The regulations contained herein are intended to encourage the development of a quality municipal environment by establishing standards for the provision of adequate light, air, open space, storm water drainage, transportation, public utilities and facilities, and other needs necessary for ensuring the creation and continuance of a healthy, attractive, safe and efficient community that provides for the conservation, enhancement and protection of its human and natural resources.
 - (4) Through the application of these regulations and procedures, the interests of the public, as well as those of public and private parties, both present and future, having interest in property affected by these subdivision regulations, are protected by the granting of certain rights and privileges. By establishing a fair and rational procedure for developing land, these subdivision regulations provide for stability in the regulatory system governing development of land for its most beneficial and safest use in accordance with existing social, economic and environmental conditions and in furtherance of the public health, safety and welfare.
- (c) Minimum standards. Minimum standards for development are contained in the *Engineering Design Standards Manual* ~~City design standards~~, the building regulations, and the other development regulations in this Chapter. In addition, the Comprehensive Plan (including the future land use plan, thoroughfare plan, parks master plan, and other related plans, and amendments) contains policies designed to achieve an optimum quality of development in the City and its extraterritorial jurisdiction. If only the minimum standards are followed, as expressed by the various ordinances regulating land development, a standardization of development will occur. This will produce a monotonous municipal setting and physical environment within the community. Subdivision design shall be of a quality that will carry out the purpose and spirit of the policies expressed within the comprehensive plan and within this Chapter, and shall be encouraged to exceed the minimum standards required herein.

Sec. 10.01.003 Definitions.

For the purpose of interpreting this Chapter, certain words used herein are defined as follows:

Alley. A minor public right-of-way which is used primarily for vehicular service access to the back or the side of properties otherwise abutting on a street.

Building line. ~~The phrase "building line" shall be the line within a property which defines the minimum horizontal distance between the building and the adjacent property line.~~

Caliper inch, tree. The diameter of the trunk measured twelve (12) inches above grade.

City. The word "City" shall be the City of Sherman, Texas, together with its governing and

operating bodies.

~~City elevation datum:~~ ~~The City has adopted the U.S. Coast and Geodetic Survey Bench Mark reference system as the standard elevation reference for all work.~~

~~City Engineer, City Attorney, City Manager, Director of Development Services, Director of Parks and Recreation.~~ ~~Any office referred to in this Chapter by title, i.e., City Engineer, shall be the person with the authority to act on or delegate to their duly authorized representative the duties assigned by this Chapter. These positions of authority may not and do not need to represent formal job titles these persons may have.~~

~~City engineer, city attorney, city clerk, director of public works, director of utilities and engineering, director of public services:~~ ~~Any office referred to in this Chapter by title, i.e., city attorney, city clerk, city engineer, director of public works, director of utilities and engineering, director of public services, etc., shall be the person so retained in this position by the City, or his duly authorized representative.~~

~~Clear-cutting.~~ ~~The indiscriminate cutting, plowing, or grubbing of trees without regard to type or size for the purpose of clearing the land.~~

~~Collector street:~~ ~~The phrase “collector street” shall be a street which is continuous through several residential districts and is intended as a connecting street between residential districts and thoroughfares or business districts.~~

~~Council.~~ ~~The word “Council” or “City Council” shall be the duly elected governing body of the City.~~

~~Commission:~~ ~~The word “Commission” or “Planning Commission” shall be the official City Planning and Zoning Commission of the City, as appointed by the City Council.~~

~~Critically alter.~~ ~~The uprooting, removing the canopy or severing the main trunk of a tree, or causing damage which may cause a tree to die. This includes but is not limited to the removal of a tree from a property, damage inflicted upon a tree by machinery, storage of materials or the compaction of soil above the root system of a tree, a change in the natural grade above the root system of a tree, or excessive pruning.~~

~~Cul-de-sac.~~ ~~A street having but one outlet to another street and terminated on the closed end by a vehicular turnaround.~~

~~Dead-end street:~~ ~~A street, other than a cul-de-sac, with only one outlet.~~

~~Developer.~~ ~~Any person or any agent thereof, dividing or proposing to divide land so as to constitute a subdivision as that term is defined herein. The term “developer” shall be restricted to include only the owner, equitable owner or authorized agent of such owner or equitable owner, of land to be developed.~~

~~Development.~~ ~~The construction of new property improvements on a vacant tract of land or a redeveloping tract of land.~~

~~Drip line.~~ ~~A vertical line run through the outermost portion of the crown of a tree and extending to the ground. This may also be referred to as the critical root zone.~~

~~Engineer:~~ ~~A person duly authorized under state law to practice the profession of engineering in~~

the State of Texas.

Extraterritorial limits Jurisdiction or ETJ. ~~That~~ The area recognized by state law statutes as the extraterritorial limits of Sherman.

Final plat. The phrase “final plat” shall be any plat of any lot, tract, or parcel of land requested to be recorded of record in the deed records of Grayson County, Texas.

Floodplain. The area designated as being within the 100-year or 0.10 percent annual chance flood zone on the Federal Emergency Management Agency (FEMA) flood insurance map (FIRM).

Lot. A distinct and separate undivided tract or parcel of land having frontage on a public street, which is, or in the future may be, offered for sale, conveyance, transfer or improvement as a building site.

Marginal access street: ~~A street situated adjacent to a major street or highway that provides local traffic a route to travel that avoids the higher speed and traffic volume of the major street or highway.~~

Master plan. The phrase “master plan” shall be the Comprehensive Plan of the City and adjoining areas as adopted by the Planning and Zoning Commission and City Council, including all its revisions. The plan indicates the general locations recommended for various land uses, transportation routes, public and private buildings, streets, parks and other public and private developments and improvements.

May. The word “may” is permissive.

Mitigation, Tree. The method by which trees are replaced whether through replanting on the subject property, planting or transplanting to another location or same property, or through payment of fees-in-lieu of replanting approved by the City.

Parcel of land. Land in the City of Sherman city limits or extraterritorial jurisdiction, whether platted or not platted.

Pavement width: ~~The portion of a street available for vehicular traffic; where curbs are laid, it is the distance from back of curb to back of curb.~~

Person. Any individual, association, firm, corporation, governmental agency or political subdivision.

Planning and Zoning Commission. The word “Commission” or “Planning Commission” shall be the official City Planning and Zoning Commission of the City, as appointed by the City Council.

Preliminary plat. The phrase “preliminary plat” shall be any plat of any lot, tract or parcel of land that is not to be recorded, but is only a proposed division of land and is presented only for review and study by the City.

Professional Engineer. A person duly authorized under state law to practice the profession of engineering in the State of Texas.

Property Owners’ Association (POA). An association that is organized within a development in which individual owners share common interests and responsibilities for open space, landscaping, amenities or facilities, and which operates under recorded land agreements. This term also includes Homeowners’ Associations (HOAs) and Property Management Corporations (PMCs)

which are typically formed for multi-family and nonresidential developments.

Protective fencing. *Chain link, silt fence, or other fencing used to protect Preserved Trees during construction activities.*

Replatting. The word “replatting” shall be the resubdivision of any part of a previously platted subdivision, addition, lot or tract.

Shall. The word “shall” wherever used in this Chapter will be interpreted in its mandatory sense.

~~Standard pavement width. A street measuring thirty-one (31) feet from back of curb to back of curb.~~

Street. A public right-of-way, however designated, which provides vehicular *and/or pedestrian* access to adjacent areas.

Street perimeter buffer. *A required buffer located at the perimeters of a proposed development site which is directly adjacent to a street. These areas are considered as areas of high visual impact, and preservation of existing vegetation located along the perimeter of the proposed development site is highly encouraged and used to screen the site and minimize potential nuisances between land uses.*

~~Street width. The words “street width” shall be the shortest distance between the lines which delineate the right-of-way of a street. Local street. The phrase “local street” shall be a street which is intended primarily to serve traffic within a neighborhood or limited residential district, and which is not necessarily continuous through several residential districts.~~

~~Subdivider or developer. Any person or any agent thereof, dividing or proposing to divide land so as to constitute a subdivision as that term is defined herein. The terms “subdivider” and “developer” shall be restricted to include only the owner, equitable owner or authorized agent of such owner or equitable owner, of land to be subdivided.~~

Subdivision. The word “subdivision” shall mean the division of any lot, tract, or parcel of land situated within the corporate or extraterritorial limits of the City into two or more lots or sites for the immediate or future purpose of sale or development, or for laying out residential, commercial, or industrial lots, or any lots and streets, alleys, or other portions intended for public use or the use of purchasers or owners of lots fronting thereon or adjacent thereto. It also includes resubdivision or replatting of land, lots, or tracts. The division of land for agricultural purposes, in parcels of five acres or more, shall not be included within this definition unless such division of five acres or more includes the planning or development of a new street, alley or access easement.

Surveyor. A licensed state land surveyor or a registered public surveyor as authorized by state law to practice the profession of surveying in the State of Texas.

~~Thoroughfare streets. The phrase “thoroughfare streets” shall be the principal traffic thoroughfares continuous across the City, which are intended to connect remote parts of the City or areas adjacent thereto, and act as principal connecting streets with state and federal highways. Each thoroughfare street is designated on the major thoroughfare plan for Sherman.~~

Traffic Impact Analysis (TIA). *A traffic study performed by a professional engineer to determine the existing level of service of streets and intersections and the impact a proposed development will have on those streets and intersections.*

Tree, dead (or declining). A tree that is dead or in severe decline with substantial structural defects, no remedial options available, and no chance of recovery, as determined and documented by a certified arborist or registered landscape architect.

Tree, replacement. Trees planted to mitigate the loss of trees as a result of development or tree removal.

Tree, protected. Any tree of a size and species as outlined in Table 10.1 that is required to be protected under this section.

Tree, shade. The largest tree species in the landscape that provide the overhead structure needed for shading as they mature.

Tree, street. Trees planted within the right-of-way that may be located in a constrained location and should contain root systems and branch growth conducive to growth around pedestrians, vehicles, and public infrastructure.

Tree fund. A City-administered fund established for collection of fees-in-lieu or replacement trees paid as mitigation and may include other contributions made in support of tree protection efforts.

Tree survey. A plan or drawing to scale that identifies the exact size, location, condition (healthy, dead, or declining), and species of protected trees.

Utility easement. An interest in land granted to the City, to the public generally, and/or to a private utility corporation, for installing or maintaining utilities across, over or under private land, together with the right to enter thereon with machinery and vehicles necessary for the maintenance of said utilities.

Definitions not expressly prescribed herein are to be construed in accordance with customary usage in municipal planning and engineering practices.

Sec. 10.01.004 Adequate Public Facilities.

Infrastructure improvements serving development in the City limits and extraterritorial jurisdiction shall conform to and be properly related to the City's adopted comprehensive plan, public facilities plans, thoroughfare plans, infrastructure master plans, capital improvements plans, and other plans adopted by the City for public facilities and services, and shall, at a minimum, meet the service levels specified in such plans. Land shall not be approved for platting or development until either adequate public facilities necessary to serve the development exist along or are adjacent to the development or plans have been provided to construct such facilities, whether these facilities are to be located within the property being developed or offsite. The City shall not repair, maintain, install or provide any infrastructure for land in which the requirements of this Code have not been fully complied.

~~Sec. 10.01.004 Authority of city engineer.~~

~~The city engineer, or his representative, shall have the authority to inspect any and all improvements to insure the fulfillment of the intent of this Chapter. He has the authority to require the removal and/or replacement, at the expense of the developer, of any phase of the work which is not in accordance with the requirements of the plat, plans, specifications, or this Chapter.~~

Sec. 10.01.005 Plat required.

Pursuant to the authority granted in Chapter 212 of the Texas Local Government Code, the City Charter and other law, prior to the subdivision, resubdivision, assembly or development of any land in the city limits or extraterritorial jurisdiction, a plat and accompanying civil engineering plans shall be approved in accordance with this Chapter.

- (a) The owner of a tract of land located within the city limits or ETJ who divides a tract into two (2) or more parts that requires public improvements as specified in this Chapter shall submit a plat of the subdivision in accordance with this Chapter.*
- (b) A division of a tract under this section includes a division regardless of whether it is made by using a metes and bounds description in a deed of conveyance or in a contract for a deed, by using a contract for sale or other executory contract to convey or by using any other method. The division of any lot or any parcel of land by the use of metes and bounds description for the purpose of development is prohibited unless allowed by an exemption specified in this Chapter.*
- (c) No site development plan, building permit, certificate of occupancy, or utility service connection may be approved or issued for the construction or development of any parcel or tract of land unless such property has been platted or is otherwise in conformity with the regulations of this Chapter.*
- (d) The subdivision of any lot or any parcel of land by the use of a metes and bounds description for the purpose of sale, transfer, or lease with the intent of creating a building lot not in accordance with this Chapter shall be a violation.*
- (e) Every plat shall be consistent with, and conform to, existing zoning regulations and other adopted plans pertaining to land use and development.*
- (f) A plat shall not be submitted to the Planning and Zoning Commission for approval that contains an inconsistent zoning classification. This requirement may be waived by the City Engineer when an application for a zoning change for the property subject to the proposed plat, seeking proper zoning classification, has been filed with the City and is pending in accordance with the Zoning Ordinance.*
- (g) Each lot proposed as part of a plat submittal shall meet the minimum size and dimensional requirements in the Zoning Ordinance unless the lot is determined to be a legally existing nonconforming lot of record or a variance has prior approval from the Board of Adjustment.*

Sec. 10.01.006 Exemption from plat requirements.

A plat shall not be required for the following:

- (a) A division of land into parts greater than five (5) acres in which no public improvement, including right-of-way, easement, or physical improvement of any kind intended for public use is proposed or required under this Chapter, in accordance with Section 212.004 of the Texas Local Government Code.*
- (b) Acquisition of land by a city, county, or state for public improvements by dedication, condemnation, or easement.*
- (c) Sale, inheritance, or gift of land by metes and bounds of tracts upon which no improvements, development, subdivision or alteration is intended, provided however, that*

prior to construction of improvements, a plat meeting the requirements of this Chapter shall be completed, approved, and recorded.

- (d) Use of existing cemeteries complying with all state and local laws and regulations.*
- (e) A division of land created by order of a court of competent jurisdiction, including the probate of an estate, provided however, that prior to construction of improvements, a plat prepared in accordance with this Chapter shall be completed, approved, and recorded.*
- (f) In lieu of a plat being required, the City Engineer may require an easement or right-of-way dedication that a plat would have required to be dedicated as shown on adopted thoroughfare plans, to continue existing streets or to provide access or connectivity to adjacent properties or subdivisions.*

Sec. 10.01.007 Designated Approving Authorities

- (a) City Engineer. The City Engineer, or his/her designee, shall have the authority to review submitted applications in accordance with the procedures of this Chapter and review completed applications to ensure the fulfillment of the requirements of this Chapter. The City Engineer also has the authority to inspect any and all improvements required to be constructed in accordance with this Chapter. The City Engineer has the authority to require the removal and/or replacement, at the expense of the developer, of any phase of the work which is not in accordance with the requirements of the plat, plans, specifications, or this Chapter.*
- (b) Director of Development Services. The Director of Development Services, or his/her designee, may be a contributing reviewer and facilitator of the processing and approval of plats required by this Chapter. The Director may be authorized by the City Manager to make determinations as to the language and intent of this Chapter as it pertains to the relation to the Zoning Ordinance. The Director of Development Services shall act as the staff liaison to the Planning and Zoning Commission.*
- (c) Director of Parks and Recreation. The Director of Parks and Recreation, or his/her designee, may be a contributing reviewer to plats required by this Chapter and holds approval authority pertaining to parkland dedication and fees-in-lieu required by this Chapter.*
- (d) City Manager. The City Manager holds the authority to designate the City Engineer, Director of Development Services, Director of Parks and Recreation, and other authorities provided approval authorization by this Chapter. The City Manager subsequently confers powers and duties to those persons which may and does not need to be their official job title.*
- (e) Planning and Zoning Commission. The Planning and Zoning Commission shall hold meetings and have the powers and duties conferred by City Council, including approval of Final Plats, and as authorized by Chapter 212 of the Texas Local Government Code. Such powers and duties shall include exercising all the authority and control conferred by law relating to platting.*
- (f) Board of Adjustment. The Board of Adjustment shall hold meetings and have the powers and duties conferred by City Council, including approval of subdivision variances, and as*

- authorized by Chapter 212 of the Texas Local Government Code. Such powers and duties shall include exercising all the authority and control conferred by law relating to platting.*
- (g) *City Council. The City Council shall be constituted, have the powers and duties, and conduct all activities in accordance with the Texas Local Government Code, the City Charter, the City of Sherman Code of Ordinances and other law.*

Sec. 10.01.008 Enforcement of regulations.

- (a) *The City Engineer and the Development Services Director shall be responsible for any interpretation of this Subdivision Ordinance and where a determination is desired to be appealed to City Council, the City Council shall review the determination of the City Engineer and Development Services Director and consider a ruling.*
- (b) *Appropriate actions may be taken to prevent a violation of this Chapter in accordance with Section 10.05.002 of this Chapter or other law, including the prevention of unlawful construction; to restrain, correct, or abate a violation; or to prevent illegal occupancy of a building structure or premises. Furthermore, water meters, wastewater taps, or other utilities shall not be made available until compliance with this Chapter has been met.*

ARTICLE 10.02 DEVELOPMENT PROCEDURES

Sec. 10.02.001 Development application and processing procedures.

- (a) *Fee established.*
- (1) *The City Council shall establish a schedule of fees, charges and expenses, and a collection procedure for the intake and processing of plats, civil plans, engineering inspections, and engineering testing and other matters pertaining to this section.*
- (2) *The schedule of fees are set forth in Appendix C, Comprehensive Fee Schedule of the City of Sherman Code of Ordinances.*
- (3) *No application shall be accepted or reviewed, any official action taken, or any permits granted until all applicable costs, charges, fees, or expenses have been paid in full.*
- (4) *An application shall not be deemed complete, nor shall it be approved, if there are delinquent City taxes on the subject property.*
- (b)(a) *Pre-development application Meeting.*
- (1) *It is recommended that the applicant meet with an authorized representative of the Development Services Department to allow the applicant to learn the general procedures for approval, ~~and to review the general plan of the proposed development,~~ but the development/project shall not be discussed in sufficient detail to provide the City with fair notice of the project.*
- (2) *No applications may be submitted to or accepted for filing with representatives of the Development Services Department during the meeting.*
- (3) *No rights derived from Chapter 245 of the Texas Local Government Code, ~~as amended,~~ shall accrue from any Pre-development application Meeting, Development Review Process or documents offered for review in connection therewith. There shall be no vested rights based on a Pre-development application Meeting.*

(c)(b) General Application Contents.

(1) Application Contents Generally. All applications and filings shall meet the requirements as defined by the *Development Guide Application Checklist* and the *Engineering Design Standards Manual*, as exists or may be amended, which shall be established and maintained by the Director of Development Services and the Director of Engineering Services, respectively. Incomplete applications shall not be accepted. ~~for filing and shall not be considered officially filed.~~

(2)(A) Filing Procedure.

(A)(i) All applications and filings for approval required by this Chapter shall be filed with the Development Services Department.

(B)(ii) The *Development Guide Application Checklist*, as it exists or may be amended, shall prescribe the procedures for filing.

(C)(iii) All applications and filings shall occur only on official *Application Accepted Development Services Schedule Dates*, published as part of the *Planning and Zoning Schedule Development Application Checklist*.

(D)(iv) If an application or filing is rejected by the Development Services Department, then it is not considered filed under this Chapter or the law or regulation governing the application or filing, including Chapter 212 of the Texas Local Government Code, if applicable.

(E)(v) Any application submitted on a date other than an official *Application Accepted Development Services Schedule Date* shall be rejected and shall not be considered filed under this Chapter and the law or regulation governing the application or filing, including Chapter 212 of the Texas Local Government Code, if applicable.

(F)(vi) An application must be considered complete and officially filed in accordance with Section 10.02-001(e) of this Chapter prior to being processed for review and consideration.

(3)(B) Application Accepted Development Review Schedule Dates. The Director of Development Services shall publish schedules of the official Development Review Processing Dates as follows:

(A)(i) A *Planning and Zoning Development Services Schedule* for all land development applications and filings for the period January 1st to December 31st of each year shall be set by the Planning and Zoning Commission on or before December 1st of the year before such period and shall be published as part of the *Development Guide Application Checklist*. Any changes or amendments to the approved schedule require Planning and Zoning Commission approval.

(B) Official Filing Date. *The 30-day time period established by state law for taking action on a complete application shall commence on the official filing date for the complete application pursuant to the Planning and Zoning Schedule, published as part of the Development Guide. The official filing date shall be defined as the date the application is deemed complete by the responsible official in the manner prescribed by Article 10.02.*

(C)(ii) A Disapproval Development Services Schedule for the period January 1st to December 31st of each year shall be set by the Planning and Zoning

Commission on or before December 1st of the year before such period and shall be published as part of the Development ~~Guide Application Checklist~~. Any changes or amendments to the schedule require Planning and Zoning Commission approval. The Disapproval Development Services Schedule shall govern an applicant's response to the conditional approval or disapproval of a plat subject to Section 212.0093 of the Texas Local Government Code. Any such response submitted on a date other than an official Disapproval Development Services Schedule Date shall be rejected and shall not be considered filed under this Chapter and the law or regulation governing the application or filing, including Chapter 212 of the Texas Local Government Code, if applicable.

- ~~(C) Fees Required. The City Council shall establish a schedule of fees, charges and expenses, and a collection procedure for platting applications and other matters pertaining to this section. The schedule of fees are set forth in Appendix C (Comprehensive Fee Schedule) of the Sherman Code of Ordinances, which may be altered or amended only by City Council.~~
- ~~(D) Delinquent City Taxes on Property. An application shall not be deemed complete, nor shall it be approved, if there are delinquent City taxes on the subject property.~~
- ~~(2) Modification of Applications Prior to Approval. The applicant may modify a complete application following its filing and prior to the expiration of the period during which the City is required to act on the application only in accordance with the following conditions.~~
 - ~~(A) If the modification is for revisions requested by the City, and the modification is received at least fourteen (14) calendar days prior to the time scheduled for decision on the application, the application shall be decided within the original period for decision (from the original official filing date) prescribed by this Chapter.~~
 - ~~(B) Any other modifications to an application will not be accepted.~~
- ~~(d)(e) Initiation, Complete Application and Expiration.~~
 - (1) Initiation by Owner. An application required under this Chapter may be initiated only by the owner of the land subject to the application, or by the owner's duly authorized representative. If the applicant is a representative of the property owner, the application shall include a written and notarized statement from the property owner, such as a duly executed "Power of Attorney," authorizing the representative to file the application on the owner's behalf.
 - (2) Applicability. The procedures within this Section shall apply to all applications that are required by the City and submitted in accordance with this Chapter.
 - (3) Determination of Completeness. Every application shall be subject to a determination of completeness by the responsible official for processing the application. An application must be complete in order to be accepted for review by the City.
 - (A) The application shall only be accepted by the responsible official for processing when it is accompanied by all documents required by, and prepared in accordance with, the requirements of this Chapter *and as*

described in the Development Guide. A typographical error shall not, by itself, constitute an incomplete application.

~~(B) A determination of completeness shall not constitute a determination of compliance with the substantive requirements of this Chapter.~~

(B)(C) A determination of completeness shall be conducted in accordance with the following procedures:

(i) If the application does not contain all information, as defined by the *Development Guide Application Checklist*, as it exists or may be amended, and/or does not conform to all standards required by any ordinance, law, or regulation governing the application, then it shall be considered incomplete. The applicant shall be notified in writing within ten (10) business days if the submitted application is incomplete.

(ii) The City shall reject all incomplete applications and provide written notice of the rejection to the applicant by one of the following methods:

- (1) Mail;
- (2) Email;
- (3) Delivery service; or
- (4) Hand delivery or other delivery method of written notice approved by the Director of Development Services.

The written notice need not identify all reasons why the application was deemed incomplete. If the notice contains one or more reasons why the application was deemed incomplete, addressing the reason(s) identified in the notice does not guarantee acceptance of a subsequent application.

(iii) If the application is determined to be complete, the application shall be processed as prescribed by this Chapter.

~~(iv)(D) A determination of completeness shall not constitute a determination compliance with the substantive requirements of this Chapter and does not guarantee the application~~ It is not guaranteed that an accepted, complete application will be approved, if after the application is deemed complete, it is determined that the application does not comply with this Chapter and all other applicable laws or regulations.

(4) 30-Day Action Extension Request.

(A) Request. An applicant may submit in writing a request to extend the 30-day action in relation to the decision time for plats of thirty (30) days, as mandated by state law.

(B) Received. If the applicant requests an extension, such request must be received by the municipal authority on or before the eleventh (11th) calendar day prior to the municipal authority's deadline to act at which action would have to be taken on the application (based on the 30-day requirement in state law). Extension requests that are not received by that day shall not be considered properly submitted, and action shall be taken

on the application at such meeting as scheduled.

- (C) Requirements Maintained. Submission of a request to extend the 30-day action, and acceptance of such waiver by the municipal authority, shall not be deemed in any way a waiver of any requirement within this Subdivision Chapter. A waiver from requirements herein is a separate and distinct process.
- (5) Modification of Applications Prior to Approval. *The applicant may modify a complete application following its filing and prior to the expiration of the period during which the City is required to act on the application only in accordance with the following conditions.*
 - (A) *If the modification is for revisions requested by the City, and the modification is received at least fourteen (14) calendar days prior to the time scheduled for decision on the application, the application shall be decided within the original period for decision (from the original official filing date) prescribed by this Chapter.*
 - (B) *Any other modifications to an application will not be accepted.*
- ~~(5) Official Filing Date. The 30-day time period established by state law for taking action on an application shall commence on the official filing date for the complete application pursuant to the Development Services Schedule, published as part of the Development Application Checklist. The official filing date shall be defined as the date the application is deemed complete by the responsible official in the manner prescribed by Subsection 4(c)(3).~~
- (6) Concurrent Applications. *Consideration for each application shall remain in the appropriate sequence of development. Any application submitted concurrently is subject to the approval of all related applications. Denial or disapproval of any individual application from a group of concurrently submitted applications shall stop consideration of all subsequent applications, if such approval is necessary for the subsequent applications to proceed.*

Sec. 10.02.002 Preliminary Plat.

A Preliminary Plat depicts the layout of a proposed subdivision or any unplatted property and is required prior to approval of any division of land, as specified in this ordinance.

- (a) Processing of Preliminary Plat Application.
 - (1) *The submittal of a Preliminary Plat must be complete with accurate information prior to filing for review of the contents. It is the responsibility of the surveyor to prepare the plat with clarity, informed knowledge of the appropriate requirements, and conformance with this Chapter.*
 - (2) *Upon the determination of a complete application, a Preliminary Plat application shall be processed for review by the City Engineer or his/her designee and applicable public entities to determine that the plat meets or exceeds the requirements of this Chapter and adopted City plans and policies prior to any action taken, per Section 10.02.001.*
- (b) Action of the City Engineer.
 - (1) *Within 30 days after the Preliminary Plat application is accepted, the City Engineer shall approve or disapprove such plat, or conditionally approve it with*

- modifications. City staff shall inform the applicant through written notice of the action taken within 10 days, stating the reasons for the action taken.*
- (2) *The City Engineer's conditional approval of a Preliminary Plat shall be deemed as an expression of approval of the layout submitted on the Preliminary Plat as a guide to the installation of streets, water, wastewater, and other required improvements and utilities, and to the preparation of the Final Plat. Conditional approval of a Preliminary Plat shall not constitute automatic approval of the Final Plat.*
 - (3) *Approval or conditional approval of a Preliminary Plat shall be effective for a period of 24 months from the date of the approval letter or conditional approval letter. At that point, the Preliminary Plat shall be considered expired.*
 - (c) *Parent Tract Concept Plan. If the proposed subdivision is a portion of a larger tract of land which is intended to be subsequently subdivided with infrastructure connected to the subject plat, the preliminary and Final Plats shall be accompanied by a layout of the entire area, showing a conceptual proposed layout of streets and trails, preliminary drainage, parkland, and similar improvements for such areas. The overall layout shall be reviewed by the City Engineer and attached to and filed with a copy of the approved subdivision plat in the permanent City files. Thereafter, plats of subsequent units of such subdivision shall generally conform to such approved overall layout, at the City Engineer's discretion and consistent with this Chapter.*
 - (d) *Phasing. The City Engineer shall require the developer to file a proposed subdivision phasing plan providing for continuity of development for any individual phases of reasonable proportions. Single-lot Final Plats and plats that create discontinuity within the development may be prohibited by the City Engineer. A preliminary plat shall be required for each subsequent phase of development.*
 - ~~(a) Procedure for approval of preliminary plat.~~
 - ~~(1) On reaching conclusions as recommended in Section 10.02.001, the developer shall have prepared a preliminary plat of the proposed subdivision for submission to City for staff approval.~~
 - ~~(2) Copies of the preliminary plat as described in subsection (b) shall be submitted to the Development Services Department on the dates specified in the Development Services Schedule. The plat shall be transmitted by letter, which shall include a formal request for consideration by the commission.~~
 - ~~(3) A preliminary plat is required for all new subdivisions, phasing of any master subdivisions, and replats.~~
 - ~~(4) A fee set by the approved fee schedule per plat shall be collected by the Development Services Department when a preliminary plat is submitted to the City for staff approval. The plat will not be reviewed or considered in any respect until such fee has been collected and the deliverables required on the Development Application Checklist are provided.~~
 - ~~(e)(b) Form and content of preliminary plat. The submitted Preliminary Plat shall clearly depict the following information: The plat shall be drawn to a scale of not to exceed one inch equals one hundred feet on paper measuring twenty-four (24) inches by thirty-six (36)~~

inches. It shall show or be accompanied by this information:

- (1) *Landowner, Applicant, Agent, or Developer's name, as applicable. The name of the owner and developer.*
- (2) *Surveyor's company name along with the licensed professional's name and RPLS # for the person responsible for the preparation of the plat. The name and seal of the licensed state land surveyor or registered public surveyor responsible for the survey and preparation of the plat.*
- (3) The title ~~or name~~ of the subdivision, which must not be so similar to that of an existing subdivision as to cause confusion.
 - (A) *For preliminary replats, the title of the proposed preliminary replat must be unique and reference "being a replat of the [lot(s) of and block(s) of the parent plat]." The title shall not be so similar to that of an existing subdivision as to cause confusion.*
- (4) *Date block with submittal date. North point, date, scale.*
- (5) *Plat Summary Table to include total acreage of new plat, and the proposed number of total lots arranged by use and area of each lot to ensure compliance with zoning. The location, name, and width of all existing and dedicated streets, alleys, and easements within or adjacent to the proposed subdivision, or within a distance of two hundred (200) feet of the proposed subdivision. If there are no adjacent existing or dedicated streets and alleys within two hundred (200) feet of the proposed subdivision on any side, then a map on a smaller scale showing the outline and ownership of adjacent properties, locations of the nearest subdivisions, and existing or dedicated streets and alleys must accompany the preliminary plat.*
- (6) *Street Summary Table for streets or street rights-of-way to be dedicated with the plat, including street classification type, street name(s), street length, pavement and curb dimensions, and right-of-way. All physical features of the property to be subdivided, including location and size of all watercourses, ravines, bridges, culverts, existing structures, drainage area in acres draining into the subdivision, and other features pertinent to the subdivision. This information shall be shown on the contour map.*
- (7) *The plat shall be drawn to a scale of not to exceed 1 inch:100 feet on a 24x36 inch document format. The location, size, type and approximate depth of all existing utilities shall be shown. Invert elevations of all existing sewer lines and drainage structures shall be shown.*
- (8) *North arrow and scale shall be included on each page that depicts the land being platted. The preliminary plat shall be submitted on a contour map with all elevations referenced to City datum. The contours shall be shown at intervals of not more than five (5) feet for terrain with an average slope of two percent (2%) or more, and at an interval of two (2) feet for terrain with slope less than two percent (2%).*
- (9) *When more than one sheet is used for a plat, a key map showing the entire subdivision on a smaller scale shall be shown on the first sheet. The plat shall show the actual boundary survey; however, the layout of the proposed subdivision lots, blocks and streets may be scaled dimensions. The acreage to be subdivided shall be shown.*

- (10) *Boundary Survey with point of beginning, bearings and distances referenced to survey lines and established subdivisions, and complete and accurate field notes of said boundaries. The proposed plan for the subdivision shall be shown, including all proposed streets and their names, alleys, easements, blocks, lots, building lines, etc., with principal dimensions. The width of rights-of-way for streets and alleys and the proposed pavement width shall be shown.*
- (11) *The location, name, and width of all existing and proposed blocks, street and alley rights-of-way, existing and proposed easements, clearly visually depicted and labeled in the proposed subdivision boundary and within a distance of 200 feet of the proposed subdivision. Widths of existing rights-of-way and existing pavement shall be identified at two points and determined by found monuments on both sides of the roadway. ~~Show boundary of a FEMA flood zone.~~*
- (12) *Proposed street stubs to adjacent properties showing a conceptual continued projection of such a street. City staff may request additional information to ensure the projected street can be constructed without obvious constraint. The proposed plan for all water, sanitary sewer and drainage utilities shall be shown.*
- (13) *Existing physical features within and directly adjacent to the proposed subdivision, including the location and size of watercourses, ravines, bridges, culverts, existing structures, and other features pertinent to the subdivision. Dimensions shall be shown from existing structures to existing and proposed rights-of-way and easements. ~~A designation of the proposed uses of land within the subdivision and any zoning amendments requested shall be shown.~~*
- (14) *The location, size, and type of all existing city utilities shall be represented as obtained from City of Sherman records. If the proposed subdivision is a portion of a tract which is later to be subdivided in its entirety, then a tentative master plat of the entire subdivision shall be submitted with the preliminary plat of the portion first to be subdivided. The master plat shall conform in all respects to the requirements of the preliminary plat, except it may be on a scale of not more than one inch to four hundred (400) feet.*
- (15) *Topographic contours, using the City of Sherman Geodetic Control Survey, shall be shown at intervals of not more than two (2) feet unless approved by the City Engineer. Contours shall not interfere with the legibility of other plat information. The following notice shall be placed on the preliminary plat: "Preliminary Plat, for Inspection Purposes Only. In No Way Official or Approved for Record Purposes."*
- (16) *Lots shall be labeled by lot-and-block number with acreage or square footage represented on each lot. A table may be used to display this information on the plat. ~~The following certificate shall be placed on the preliminary plat:~~*

City Engineer	Date
City of Sherman	

Attest:

City Clerk

- (17) *Lots in the ETJ shall show the required building lines per Grayson County Subdivision Regulations.*
- (18) *Boundaries of existing 1% flood zone (if applicable).*
- (19) *Proposed phasing boundary lines for subdivisions may be shown on a Master Preliminary Plat. A preliminary plat for each phase shall be required.*
- (20) *All necessary dimensions, including linear, angular and curvilinear, and other surveying information necessary to reproduce the plat on the ground shall be shown. The linear and curvilinear dimensions shall be shown in feet and decimals of a foot. The angular dimensions shall be shown by true bearings in degrees, minutes and seconds. The length of all straight lines, deflection angles, radii, tangents, central angles of curves, and the chords and arcs of curves shall be shown. All curve information shall be shown for the center line of the street based on arc definitions. Dimensions shall be shown from all angle points and points of curve of lot lines. All lots on curves shall be shown with curve length dimensions based on arc definitions.*
- (21) *Avigation Release, per the Development Guide (if applicable).*
- (22) *Notes to be added to the Preliminary Plat:*
 - (A) *Utility providers and notation as to how water and wastewater will be served to the property (as will be represented on subsequent civil plans).*
 - (B) *All easements and rights of way dedicated to the City of Sherman by this plat include the following rights:*
 - (i) *The right of the City to change the size of any facilities installed, maintained, or operated within the area;*
 - (ii) *The right of the City to relocate any facilities within the area; and*
 - (iii) *The right of the City to remove from the area vegetation or other obstructions which endanger or may interfere with the efficiency and maintenance of any facilities within the area.*

~~(c) — Processing of preliminary plat.~~

- ~~(1) — The City Engineer shall check the preliminary plat as to its conformity with the comprehensive plan, thoroughfare plan, future land use plan, trails master plan zoning districts, and the standards and specifications set forth or referred to herein.~~
- ~~(2) — Within thirty (30) days after the preliminary plat application is accepted, the City Engineer shall approve or disapprove such plat, or conditionally approve it with modifications. The developer shall be informed by mail or email of the action taken.~~
- ~~(3) — The City Engineer's approval or conditional approval of a preliminary plat shall be deemed as an expression of approval of the layout submitted on the preliminary plat as a guide to the installation of streets, water, sewer, and other required improvements and utilities, and to the preparation of the final plat. Approval or conditional approval of a preliminary plat shall not constitute automatic approval of the final plat.~~
- ~~(5) — Approval or conditional approval of a preliminary plat shall be effective for a period of twenty-four (24) months.~~

Sec. 10.02.003 Final Plat.

Final Plats are technically complete versions of an approved Preliminary Plat, unless approved changes are authorized, and are prepared for recording if approved by the Planning and Zoning Commission.

(a) Procedure for approval of final plat.

- (1) *Approval or conditional approval of the Preliminary Plat by the City Engineer is required prior to the submittal of a Final Plat to the City. ~~The submission of a preliminary plat and its approval by the City Engineer shall be a condition precedent to the acceptance of an application for a final plat.~~*
- (2) *All changes, alterations, modifications, and all appropriate documentation required on the conditional approval of the Preliminary Plat and from the civil plan review shall be incorporated into the Final Plat. ~~Final plat may not be submitted until the civil engineering plans are sufficiently complete as determined by the City Engineer.~~*
- (3) *The Final Plat shall be consistent with the approved Preliminary Plat and shall conform to all requirements of this Chapter. ~~All changes, alterations and modifications required on the preliminary plat and from the civil plan review shall be incorporated into the final plat.~~*
- (4) *A Final Plat application may not be submitted until the civil plans are sufficiently complete and construction of the public infrastructure has commenced, as determined by the City Engineer, and the area proposed for Final Plat will be adequately served by public infrastructure. ~~The final plat may constitute only that portion of the approved preliminary plat which the developer proposed to record and develop at that time, provided that such portion conforms to all requirements of these conditions.~~*
- (5) ~~The final plat shall be submitted to the Planning and Zoning Commission through the Development Services Department on the dates specified in the Development Services Schedule. The plat shall be transmitted by letter, which shall include a formal request for consideration by the Planning and Zoning Commission.~~
- (6) ~~A fee set by the approved fee schedule per plat shall be collected by the Development Services Department when a final plat is submitted to the City for staff approval. The plat will not be reviewed or considered in any respect until such fee has been collected and the deliverables required on the Development Application Checklist are provided.~~
- (5)(7) *The final plat ~~should~~ shall be accompanied by a letter from the electric, gas and phone companies stating that all easements are satisfactory for the installation and maintenance of their respective utilities. The letter shall be accompanied by a print of the final plat showing the proposed utility plans.*

(b) Processing of Final Plat Application.

- (1) *The submittal of a Final Plat must be complete with accurate information prior to filing for review of the contents. It is the responsibility of the preparing professional surveyor to prepare the plat with clarity, informed knowledge of the appropriate requirements, and conformance with this Chapter.*

- (2) *Upon the determination of a complete application, a Final Plat application shall be processed for review by the City Engineer or his/her designee and applicable public entities to determine that the plat meets or exceeds the requirements of this Chapter and adopted City plans and policies prior to any action taken, per Section 10.02.001 of this Chapter.*
- (3) *Proposed subdivisions outside of the corporate limits that are adjacent to the Sherman city limits, requesting voluntary annexation, shall be annexed into the City prior to approval of the Final Plat by the Planning and Zoning Commission and the acceptance of the dedication of streets, alleys, and easements.*
- (c) *Final Plat Sections. A developer, at their option, may obtain approval of a portion or a section of a subdivision provided it meets all the requirements of this Chapter. In the event that a Preliminary Plat and the Final Plat thereof are approved in phased sections, each Final Plat shall carry the name of the entire subdivision, but shall bear a distinguishing letter, number or subtitle. Block numbers shall run consecutively throughout the entire subdivision, even though such subdivision may be approved in sections.*
- (d) *Action of Planning and Zoning Commission.*
 - (1) *The City Engineer shall transmit his/her recommendations to the Planning and Zoning Commission in writing ahead of consideration of action at a public meeting.*
 - (2) *Within 30 days after the Final Plat application is accepted, the Planning and Zoning Commission shall approve or disapprove the plat.*
 - (3) *If the plat is disapproved, the Planning and Zoning Commission shall within 10 days give written notice to the developer, stating the reasons for disapproval.*
- (e) *Plat Recordation. An approved Final Plat shall be officially recorded at the county clerk's office once the City Engineer has certified all steps for accepting required public infrastructure have taken place and the Planning and Zoning Commission approves the plat.*
- (f)(b) *Form and content of final plat.* *The submitted Final Plat shall clearly depict the following information:*
 - (1) *Landowner, Applicant, Agent, or Developer's name, as applicable.*
 - (2) *Surveyor's company name along with the licensed professional's name and seal for the person responsible for the preparation of the plat.*
 - (3) *The title or name of the subdivision, which must not be so similar to that of an existing subdivision as to cause confusion.*
 - (A) *For replats, the title of the proposed replat must be unique and reference "being a replat of the [lot(s) of and block(s) of the parent plat]." The title shall not be so similar to that of an existing subdivision as to cause confusion.*
 - (4) *Date block with submittal date and approval date (to be added later).*
 - (5) *Signature Blocks of the approving authorities and Certifications of the plat preparers as found and specified in the Development Guide.*
 - (6) *Plat Summary Table to include total acreage of new plat, and the proposed number of total lots arranged by use and size of lot to ensure compliance with zoning.*
 - (7) *Street Summary Table for streets or street rights-of-way to be dedicated with the*

- plat, including street classification type, street name, street length, pavement and curb dimensions, and right-of-way.*
- (8) The plat shall be drawn to a scale of not to exceed 1 inch:100 feet on a 24x36 inch document format.*
 - (9) North arrow and scale shall be included on each page that depicts the land being platted.*
 - (10) When more than one sheet is used for a plat, a key map showing the entire subdivision on a smaller scale shall be shown on the first sheet.*
 - (11) Boundary Survey with point of beginning, bearings and distances referenced to survey lines and established subdivisions, and complete and accurate field notes of said boundaries.*
 - (12) The location, name, and width of all existing and proposed blocks, street and alley rights-of-way, existing and proposed easements, clearly visually depicted and labeled in the proposed subdivision boundary and within a distance of 200 feet of the proposed subdivision. Widths of existing rights-of-way shall be identified at two points and determined by found monuments along both side of the roadway.*
 - (13) Proposed street stubs to adjacent properties showing a conceptual continued projection of such a street. City staff may request additional information to ensure the projected street can be constructed without obvious constraint.*
 - (14) Existing physical features within and directly adjacent to the proposed subdivision, including the location and size of watercourses, ravines, bridges, culverts, and other features pertinent to the subdivision.*
 - (15) The location, size, and type of all easements shall be represented.*
 - (16) All monuments and control points shall be set or recovered by a licensed surveyor, placed prior to the recording of the plat per the requirements of the Engineering Design Standards Manual.*
 - (17) Lots shall be labeled by lot-and-block number with acreage or square footage represented on each lot. A table may be used to display this information on the plat.*
 - (18) Lots in the ETJ shall show the required building lines per Grayson County Subdivision Regulations.*
 - (19) Boundaries of existing 1% Flood Zone and base flood elevation (if applicable).*
 - (20) All necessary dimensions, including linear, angular and curvilinear, and other surveying information necessary to reproduce the plat on the ground shall be shown. The linear and curvilinear dimensions shall be shown in feet and decimals of a foot. The angular dimensions shall be shown by true bearings in degrees, minutes and seconds. The length of all straight lines, deflection angles, radii, tangents, central angles of curves, and the chords and arcs of curves shall be shown. All curve information shall be shown for the center line of the street based on arc definitions. Dimensions shall be shown from all angle points and points of curve of lot lines. All lots on curves shall be shown with curve length dimensions based on arc definitions.*
 - (21) Avigation Release, per the Development Guide (if applicable).*
 - (22) Owner's certificate of dedication: (To be placed on the plat in a manner that will permit the completion of the certificate by filling in the blank spaces.)*

OWNER'S CERTIFICATE OF DEDICATION

That _____ (owner), acting by and through its duly authorized agent, does hereby *certify and* adopt this plat designating the herein-described real property as _____ (title of plat), an addition to the City of Sherman, Grayson County, Texas, Being _____ (acres) acres situated in and being a portion of the _____ (Original survey), City of Sherman, Grayson County, Texas, and does hereby dedicate to the public use forever the streets and easements shown on this plat. *[Owner name] does herein certify the following:*

- 1. The streets and alleys are dedicated in fee simple for street and alley purposes.*
- 2. All public improvements and dedications shall be free and clear of all debt, liens, and other encumbrances.*
- 3. The easements and public use areas, as shown, and created by this plat, are dedicated for the public use forever for the purposes indicated on this plat.*
- 4. No buildings, fences, trees, shrubs or other improvements or growths shall be constructed or placed upon, over or across the easements as shown, except that landscape improvements may be placed in landscape easements if approved by the City of Sherman.*
- 5. The City of Sherman is not responsible for replacing any improvements in, under, or over any easements caused by maintenance or repair.*
- 6. Utility easements may also be used for the mutual use and accommodation of all public utilities desiring to use or using the same unless the easement limits the use to particular utilities, said use by public utilities being subordinate to the public's and City of Sherman's use thereof.*
- 7. The City of Sherman and public utilities shall have the right to remove and keep removed all or parts of any buildings, fences, trees, shrubs or other improvements or growths which may in any way endanger or interfere with the construction, maintenance, or efficiency of their respective systems in the easements.*
- 8. The City of Sherman and public utilities shall at all times have the full right of ingress and egress to or from their respective easements for the purpose of constructing, reconstructing, inspecting, patrolling, maintaining, reading meters, and adding to or removing all or parts of their respective systems without the necessity at any time procuring permission from anyone.*
- 9. All modifications to this document shall be by means of plat and approved by the City of Sherman.*

~~for the mutual use and accommodation of all public and private utilities desiring to use or using same. Any public or private utility shall have the right to remove and keep removed all or part of any buildings, fences, trees, shrubs or other improvements or growths which in any way endanger or interfere with the construction, maintenance, or efficiency of its respective systems on any of these easement strips and any public or private utility shall, at all times, have a right of ingress and egress to and from and upon said easement strips for the purpose of constructing, reconstructing, inspecting, patrolling, maintaining and adding to or~~

~~removing all or part of its respective system without permission of anyone.~~ This plat is approved subject to all ordinances, rules and regulations and resolutions of the City of Sherman, Texas.

WITNESS, my hand at _____, _____ County, Texas, this _____ day of _____, (year).

_____ (owner) _____

By: _____

STATE OF TEXAS
COUNTY OF GRAYSON

Before me, the undersigned authority, a Notary Public in and for the County and State on this day personally appeared _____, known to me to be the person and officer whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purpose and consideration therein and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this ____ day of _____, (year).

Notary Public, State of Texas

(22) *Notes to be added to the Final Plat:*

(A) *All easements and rights-of-way dedicated to the City of Sherman by this plat include the following rights:*

- (i) *The right of the City to change the size of any facilities installed, maintained, or operated within the area;*
- (ii) *The right of the City to relocate any facilities within the area; and*
- (iii) *The right of the City to remove from the area vegetation or other obstructions which endanger or may interfere with the efficiency and maintenance of any facilities within the area.*

(B) *Details regarding a Property Owners' Association (POA) that has been incorporated with the State of Texas responsible for any water detention facility, common properties, and/or amenities.*

(g) *Final plat expiration and extension.*

- (1) *Expiration.* *An approved final plat shall expire and shall thereafter be deemed null and void if the final plat has not been recorded as required in Section 10.02.003 within two years from the date of the Planning and Zoning Commission's approval of the final plat. Upon expiration, or upon denial of a timely submitted request for extension of plat approval, a new preliminary plat application shall be required to*

submitted, subject to requirements in effect at the time the new application is filed with the City.

- (2) *Extension.* *The Planning and Zoning Commission may extend a final plat for a period not to exceed one year on the written request of the applicant. The request must be filed before the final plat expires and must document the reasons for the extension. In determining whether to grant a request, the council shall take into account the reasons for the requested extension, the ability of the applicant to comply with any conditions attached to the original approval, whether extension is likely to result in timely completion of the project, and the extent to which any newly adopted regulations should be applied to the proposed development. In granting an extension, the council may impose such conditions as are needed to assure that the land will be developed in a timely fashion and that the public interest is served, including compliance with one or more new adopted development standards.*
- ~~(1) — The final plat shall be printed on mylar film measuring twenty-four (24) inches by thirty-six (36) inches. The scale shall be not to exceed one inch equals one hundred (100) feet maximum. The original shall be submitted to the Planning and Zoning Commission. The drawing shall be neat, legible and suitable for filing for record in the office of the county clerk of Grayson County. Patching and pasting of paper or other attachments is not acceptable. Allowance shall be made for a one-half (1/2) inch border at the top, bottom and right edges of the sheets, and a one and one-half (1 1/2) inch border at the left edge of the tracing sheets.~~
- ~~(2) — The revised final plat to be reviewed digitally by City staff prior to submitting mylar prints and tax certificates for filing.~~
- ~~(3) — When more than one sheet is used for a plat, a key map showing the entire subdivision on a smaller scale shall be shown on the first sheet.~~
- ~~(4) — The plat shall show or be accompanied by this information:
 - ~~(A) — The name of the owner and developer.~~
 - ~~(B) — The name of the licensed state land surveyor or registered public surveyor making the survey and preparing the plat.~~
 - ~~(C) — The name of the proposed subdivision and adjacent subdivisions.~~
 - ~~(D) — The name of all streets including a table of street names to be reviewed by the development services department.~~
 - ~~(E) — The numbers of lots and blocks, in accordance with a systematic arrangement.~~
 - ~~(F) — Show boundary of any FEMA flood zone and base flood elevation.~~
 - ~~(G) — List the Homeowner's Association (HOA) or Property Owner's Association (POA) that has been incorporated with the State of Texas responsible for any water detention facility, common properties, and/or amenities.~~
 - ~~(H) — North point, date, scale and acreage being subdivided.~~
 - ~~(I) — An accurate boundary survey of the property, with bearings and distances referenced to survey lines and established subdivisions, with complete and~~~~

accurate field notes of said boundaries. The lines, with dimensions, of all adjacent land, streets, alleys and easements in adjacent subdivisions shall be shown in dashed lines.

- (J) — Location of proposed lots, streets, alleys, easements, building setback lines (both front and side streets) and other features shall be shown with dimensions.
- (K) — Edge of existing and proposed pavement to be shown on plat.
- (L) — All necessary dimensions, including linear, angular and curvilinear, and other surveying information necessary to reproduce the plat on the ground shall be shown. The linear and curvilinear dimensions shall be shown in feet and decimals of a foot. The angular dimensions shall be shown by true bearings in degrees, minutes and seconds. The length of all straight lines, deflection angles, radii, tangents, central angles of curves, and the chords and arcs of curves shall be shown. All curve information shall be shown for the center line of the street based on arc definitions. Dimensions shall be shown from all angle points and points of curve of lot lines. All lots on curves shall be shown with curve length dimensions based on arc definitions.
- (M) — All survey monuments shall be shown on the plat.
- (N) — Certification that all taxes and fees have been paid.
- (O) — Certification by the surveyor who made the survey and prepared the plat shall be placed on the plat as follows:

~~KNOW ALL MEN BY THESE PRESENTS:~~

~~THAT I, _____, do hereby certify that I prepared this plat from an actual and accurate survey of the land and that the corner monuments shown thereon were properly placed under my personal supervision, in accordance with the subdivision regulations of the City of Sherman, Texas.~~

~~Signature: _____~~

~~Date: _____~~

~~The surveyor shall affix his seal on the plat adjacent to the certification.~~

- (P) — Certificate of approval by the Planning and Zoning Commission: (To be placed on the plat in a manner that will permit the completion of the certificate by filling in the blank spaces.)

~~Approved this _____ day of _____, 20____, by the City Planning and Zoning Commission of the City of Sherman, Texas.~~

~~_____~~
Chairman

~~_____~~
Secretary

(Q) ~~Owner's certificate of dedication: (To be placed on the plat in a manner that will permit the completion of the certificate by filling in the blank spaces.)~~

OWNER'S CERTIFICATE OF DEDICATION

~~That _____ (owner) _____, acting by and through its duly authorized agent, does hereby adopt this plat designating the herein described real property as _____ (title of plat) _____, an addition to the City of Sherman, Grayson County, Texas, Being _____ (acres) _____ acres situated in and being a portion of the _____ (Original survey) _____, City of Sherman, Grayson County, Texas and does hereby dedicate to the public use forever the streets and easements shown on this plat for the mutual use and accommodation of all public and private utilities desiring to use or using same. Any public or private utility shall have the right to remove and keep removed all or part of any buildings, fences, trees, shrubs or other improvements or growths which in any way endanger or interfere with the construction, maintenance, or efficiency of its respective systems on any of these easement strips and any public or private utility shall, at all times, have a right of ingress and egress to and from and upon said easement strips for the purpose of constructing, reconstructing, inspecting, patrolling, maintaining and adding to or removing all or part of its respective system without permission of anyone. This plat is approved subject to all ordinances, rules and regulations and resolutions of the City of Sherman, Texas.~~

~~WITNESS, my hand at _____, _____ County, Texas, this _____ day of _____, (year):~~

~~_____ (owner) _____~~

~~By: _____~~

~~STATE OF TEXAS
COUNTY OF GRAYSON~~

~~Before me, the undersigned authority, a Notary Public in and for the County and State on this day personally appeared _____, known to me to be the person and officer whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purpose and consideration therein and in the capacity therein stated.~~

~~GIVEN UNDER MY HAND AND SEAL OF OFFICE, this _____ day of _____, (year):~~

~~_____
Notary Public, State of Texas~~

~~(R) ~~Avigation Release: (To be placed on a preliminary plat, final plat, replat,~~~~

and any other plats, if applicable, in a manner that will permit the completion of the certificate by filling in the blank spaces.)

~~AVIGATION RELEASE~~

~~STATE OF TEXAS
COUNTY OF GRAYSON~~

~~KNOW ALL MEN BY THESE PRESENTS:~~

~~WHEREAS, _____, hereinafter called OWNER (whether one or more), is the owner of a certain parcel of land situated in the City of Sherman, Grayson County, Texas, being more particularly described in this plat.~~

~~OWNER does hereby waive, release, remise, quit claim and forever hold harmless the City of Sherman, Texas, a home-rule municipality, hereinafter called CITY, and the Sherman Municipal Airport, hereinafter called AIRPORT, and their respective successors and assigns, of and from any and all claims for damages of any kind that OWNER may now have or may hereinafter have in the future by reason of the passage of any and all aircraft ("aircraft" being defined for the purpose of this instrument as any contrivance now known or hereinafter invented, including but not limited to jet, propeller-driven, civil, military, experimental or commercial aircraft and helicopters, regardless of existing or future noise levels, designed or used for the purpose of transporting persons or property through the air, by whoever owned or operated), in the airspace over OWNER's property. Such release shall include, but not be limited to, any damages to OWNER'S property, such as noise, vibration, fumes, dust, fuel and lubricant particles, and all other effects that may be caused by the operation of aircraft landing at, taking off from, operating at or on, or being maintained at the Sherman Municipal Airport, whether such claim be for injury or death to person or persons or damages to or taking of property.~~

~~This Release shall be binding upon OWNER and OWNER's successors, heirs, executors, administrators and assigns, , and shall be a covenant running with the land.~~

~~Executed this _____ day of _____, AD, 20 ____.~~

~~_____
(Owner)~~

~~(c) — Processing of final plat.~~

~~(1) — The City Engineer shall check the final plat for conformity with the requirements of this Chapter and transmit his recommendations to the Planning and Zoning Commission in writing.~~

- (2) ~~Within thirty (30) days after the final plat application is accepted, the Planning and Zoning Commission shall approve, conditionally approve or disapprove the plat.~~
- (3) ~~If the plat is disapproved, the Planning and Zoning Commission shall give written notice to the developer, stating the reasons for disapproval.~~

Sec. 10.02.004 ~~Acceptance of final plat by sections.~~

~~A developer, at his option, may obtain approval of a portion or a section of a subdivision provided he meets all the requirements of this Chapter with reference to such portion or section in the same manner as is required for a complete subdivision. In the event that a subdivision and the final plat thereof are approved in sections by the commission, each final plat of each section shall carry the name of the entire subdivision, but shall bear a distinguishing letter, number or subtitle. Block numbers shall run consecutively throughout the entire subdivision, even though such subdivision may be finally approved in sections.~~

~~When the proposed subdivision constitutes a unit of a larger tract owned by the developer which is intended to be subsequently subdivided as additional units of the same subdivision, the preliminary and final plats shall be accompanied by a layout of the entire area, showing the tentative proposed layout of streets, blocks, drainage, water, sewer and other improvements for such areas. The overall layout, if approved by the commission, shall be attached to and filed with a copy of the approved subdivision plat in the permanent files of the city engineer. Thereafter, plats of subsequent units of such subdivision shall conform to such approved overall layout, unless changed by the commission. However, except where the developer agrees to such change, the commission may change such approved overall layout only when the commission finds:~~

- ~~(a) That adherence to the previously approved overall layout will hinder the orderly subdivision of other land in the area in accordance with the provisions of this Chapter, or~~
- ~~(b) That adherence to the previously approved overall layout will be detrimental to the public health, safety, or welfare, or will be injurious to other property in the area.~~

Sec. 10.02.005 Replatting

A property owner who proposes to further subdivide all or part of a recorded plat must obtain approval for a Replat as outlined in the procedures below and in conformance with Chapter 212 of the Texas Local Government Code.

- (a) ~~Procedure for approval of replats.~~ *Processing of Replat Application. Applications must follow the requirements outlined in Section 10.02.002 Preliminary Plat and Section 10.02.003 Final Plat. All replats shall include Preliminary Plat approval before application can be submitted to the Planning and Zoning Commission for replat approval.*
 - (1) *A Replat may not amend or remove any covenants or restrictions relevant to the preceding plat. The submission of a preliminary plat and its approval by the City Engineer shall be a condition precedent to the acceptance of an application for a replat.*
 - (2) ~~A replat may not be submitted until the civil engineering plans are sufficiently complete as determined by the City Engineer.~~
 - (3) ~~All changes, alterations and modifications required on the preliminary plat shall be incorporated into the replat.~~
 - (4) ~~The replat may constitute only that portion of the approved preliminary plat which~~

~~the developer proposed to record and develop at that time, provided that such portion conforms to all requirements of these conditions.~~

- ~~(5) The replat shall be submitted to the Planning and Zoning Commission through the Development Services Department on the dates specified in the Development Services Schedule. The replat shall be transmitted by letter, which shall include a formal request for consideration by the Planning and Zoning Commission.~~
- ~~(6) A fee set by the approved fee schedule per replat shall be collected by the Development Services Department when a replat is submitted to the City for staff approval. The replat will not be reviewed or considered in any respect until such fee has been collected and the deliverables required on the Development Application Checklist are provided.~~
- ~~(7) The replat shall be accompanied by a letter from the electric, gas and phone companies stating that all easements are satisfactory for the installation and maintenance of their respective utilities. The letter shall be accompanied by a print of the replat showing the proposed utility plans.~~

(b) Public hearings for certain replats.

Replats containing any area or lot that, during the preceding five (5) years, was limited by an interim or permanent zoning classification to residential use for not more than two (2) residential units per lot or in the preceding plat was limited by deed restrictions to residential use for not more than two residential units per lot, require compliance with Section 212.015 of the Texas Local Government Code and a public hearing with mailed written notice no less than fifteen (15) days prior to the Public Hearing, to all owners of lots that are part of the original subdivision and located within 200 feet of the boundary of the proposed Replat.

(b) Form and content of replat.

- ~~(1) The replat shall be printed on mylar film measuring twenty-four (24) inches by thirty-six (36) inches. The scale shall be not to exceed one inch equals one hundred (100) feet maximum. The original shall be submitted to the Planning and Zoning Commission. The drawing shall be neat, legible and suitable for filing for record in the office of the county clerk of Grayson County. Patching and pasting of paper or other attachments is not acceptable. Allowance shall be made for a one-half (1/2) inch border at the top, bottom and right edges of the sheets, and a one and one-half (1 1/2) inch border at the left edge of the tracing sheets.~~
- ~~(2) The revised final plat to be reviewed digitally by City staff prior to submitting mylar prints and tax certificates for filing.~~
- ~~(3) When more than one sheet is used for a plat, a key map showing the entire subdivision on a smaller scale shall be shown on the first sheet.~~
 - ~~(4) The replat shall show or be accompanied by this information:~~
 - ~~(A) The name of the owner and developer.~~
 - ~~(B) The name of the licensed state land surveyor or registered public surveyor making the survey and preparing the plat.~~
 - ~~(C) The name of the proposed subdivision and adjacent subdivisions.~~
 - ~~(D) The name of all streets including a table of street names to be reviewed by the development services department.~~

- (E) ~~The numbers of lots and blocks, in accordance with a systematic arrangement.~~
- (F) ~~Show boundary of any FEMA flood zone and base flood elevation.~~
- (G) ~~List the Homeowner's Association (HOA) or Property Owner's Association (POA) that has been incorporated with the State of Texas responsible for any water detention facility, common properties, and/or amenities.~~
- (H) ~~North point, date, scale and acreage being subdivided.~~
- (I) ~~An accurate boundary survey of the property, with bearings and distances referenced to survey lines and established subdivisions, with complete and accurate field notes of said boundaries. The lines, with dimensions, of all adjacent land, streets, alleys and easements in adjacent subdivisions shall be shown in dashed lines.~~
- (J) ~~Location of proposed lots, streets, alleys, easements, building setback lines (both front and side streets) and other features shall be shown with dimensions.~~
- (K) ~~Edge of existing and proposed pavement to be shown on plat.~~
- (L) ~~All necessary dimensions, including linear, angular and curvilinear, and other surveying information necessary to reproduce the plat on the ground shall be shown. The linear and curvilinear dimensions shall be shown in feet and decimals of a foot. The angular dimensions shall be shown by true bearings in degrees, minutes and seconds. The length of all straight lines, deflection angles, radii, tangents, central angles of curves, and the chords and arcs of curves shall be shown. All curve information shall be shown for the center line of the street based on arc definitions. Dimensions shall be shown from all angle points and points of curve of lot lines. All lots on curves shall be shown with curve length dimensions based on arc definitions.~~
- (M) ~~All survey monuments shall be shown on the replat.~~
- (N) ~~Certification that all taxes and fees have been paid.~~
- (O) ~~Certification by the surveyor who made the survey and prepared the replat shall be placed on the plat as follows:~~

~~KNOW ALL MEN BY THESE PRESENTS:~~

~~THAT I, _____, do hereby certify that I prepared this replat from an actual and accurate survey of the land and that the corner monuments shown thereon were properly placed under my personal supervision, in accordance with the subdivision regulations of the City of Sherman, Texas.~~

~~Signature: _____~~

~~Date: _____~~

The surveyor shall affix his seal on the replat adjacent to the certification.

- (P) Certificate of approval by the Planning and Zoning Commission: (To be placed on the plat in a manner that will permit the completion of the certificate by filling in the blank spaces.)

Approved this _____ day of _____, 20____, by the City Planning and Zoning Commission of the City of Sherman, Texas.

Chairman _____ Secretary _____

- (Q) Owner's certificate of dedication: (To be placed on the plat in a manner that will permit the completion of the certificate by filling in the blank spaces.)

OWNER'S CERTIFICATE OF DEDICATION

That _____ (owner) _____, acting by and through its duly authorized agent, does hereby adopt this plat designating the herein described real property as _____ (title of plat) _____, an addition to the City of Sherman, Grayson County, Texas, Being _____ (acres) _____ acres situated in and being a portion of the _____ (Original survey) _____, City of Sherman, Grayson County, Texas and does hereby dedicate to the public use forever the streets and easements shown on this plat for the mutual use and accommodation of all public and private utilities desiring to use or using same. Any public or private utility shall have the right to remove and keep removed all or part of any buildings, fences, trees, shrubs or other improvements or growths which in any way endanger or interfere with the construction, maintenance, or efficiency of its respective systems on any of these easement strips and any public or private utility shall, at all times, have a right of ingress and egress to and from and upon said easement strips for the purpose of constructing, reconstructing, inspecting, patrolling, maintaining and adding to or removing all or part of its respective system without permission of anyone. This plat is approved subject to all ordinances, rules and regulations and resolutions of the City of Sherman, Texas.

WITNESS, my hand at _____, _____ County, Texas, this _____ day of _____, (year).

(owner) _____

By: _____

STATE OF TEXAS
COUNTY OF GRAYSON

Before me, the undersigned authority, a Notary Public in and for the County and State on this day personally appeared _____, known to me to be the person and officer whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purpose and consideration therein and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this ____ day of _____, (year).

Notary Public, State of Texas

- (R) ~~Avigation Release: (To be placed on a preliminary plat, final plat, replat, and any other plats, if applicable, in a manner that will permit the completion of the certificate by filling in the blank spaces.)~~

~~AVIGATION RELEASE~~

~~STATE OF TEXAS~~

~~COUNTY OF GRAYSON~~

~~KNOW ALL MEN BY THESE PRESENTS:~~

~~WHEREAS, _____, hereinafter called OWNER (whether one or more), is the owner of a certain parcel of land situated in the City of Sherman, Grayson County, Texas, being more particularly described in this plat.~~

~~OWNER does hereby waive, release, remise, quit claim and forever hold harmless the City of Sherman, Texas, a home-rule municipality, hereinafter called CITY, and the Sherman Municipal Airport, hereinafter called AIRPORT, and their respective successors and assigns, of and from any and all claims for damages of any kind that OWNER may now have or may hereinafter have in the future by reason of the passage of any and all aircraft ("aircraft" being defined for the purpose of this instrument as any contrivance now known or hereinafter invented, including but not limited to jet, propeller-driven, civil, military, experimental or commercial aircraft and helicopters, regardless of existing or future noise levels, designed or used for the purpose of transporting persons or property through the air, by whoever owned or operated), in the airspace over OWNER's property. Such release shall include, but not be limited to, any damages to OWNER'S property, such as noise, vibration, fumes, dust, fuel and lubricant particles,~~

~~and all other effects that may be caused by the operation of aircraft landing at, taking off from, operating at or on, or being maintained at the Sherman Municipal Airport, whether such claim be for injury or death to person or persons or damages to or taking of property.~~

~~This Release shall be binding upon OWNER and OWNER's successors, heirs, executors, administrators and assigns, , and shall be a covenant running with the land.~~

Executed this _____ day of _____, AD, 20 ____.

(Owner)

~~(e) — Processing of replat.~~

- ~~(1) — The City Engineer shall check the replat for conformity with the requirements of this Chapter and transmit his recommendations to the Planning and Zoning Commission in writing.~~
- ~~(2) — Within thirty (30) days after the replat application is accepted, the Planning and Zoning Commission shall approve, conditionally approve or disapprove the replat.~~
- ~~(3) — If the replat is disapproved, the Planning and Zoning Commission shall give written notice to the developer, stating the reasons for disapproval.~~

Sec. 10.02.006 Development Plat

- (a) Authority. *This section is adopted pursuant to Texas Local Government Code, Chapter 212, Subchapter B, Sections 212.041 through 212.050.*
- (b) Applicability. *For purposes of this section, the term "development" means the construction of any building, structure or improvement of any nature (residential or nonresidential), or the enlargement of any external dimension thereof. This Section shall apply to any land lying within the City or within its extraterritorial jurisdiction in the following circumstances:*
 - (1) *The development of any tract of land which has not been platted or replatted prior to June 3, 2024, unless expressly exempted in this section;*
 - (2) *The development of any tract of land for which the property owner claims an exemption from platting under applicable law, including requirements to replat, which exemption is not expressly provided for in such regulations;*
 - (3) *The development of any tract of land for which the only access is a private easement or street;*
 - (4) *The division of any tract of land resulting in parcels or lots each of which is greater than five (5) acres in size, and where no public improvement is proposed to be dedicated or constructed.*
- (c) Exceptions. *No development plat shall be required where the proposed development conforms to all applicable City plans, including but not limited to. the Comprehensive Plan, Transportation Plan, Future Land Use Plan, Park and Trails Plan, utility plans and*

applicable capital improvements plans. The responsible authority may, from time to time, exempt other development or land divisions from all or a portion of the requirements of this section. In addition, the City Manager or his/her designee is authorized to exempt development from all or a portion of the requirements of this section where the property owner demonstrates in a written application that the development involves only the following: (1) the new construction of one (1) single-family residential unit and no other building, structure or improvement on property that is not located adjacent to a thoroughfare or other roadway shown on the City's thoroughfare plan; (2) the enlargement of any exterior dimension of one (1) existing, single-family residential unit and no other building, structure or improvement; or (3) the new construction of one (1) single-family residential unit and no other building, structure or improvement on property that is located adjacent to a thoroughfare or other roadway shown on the City's thoroughfare plan and the owner has dedicated or conveyed to the City the necessary right-of-way and easements for such thoroughfare or other roadway and related improvements.

- (d) Prohibition on Development. No development shall commence, nor shall any building permit, utility connection permit, electrical connection permit or similar permit be issued, for any development or land division subject to this section until a development plat has been approved by the City's appointed or elected body with authority over plats and filed with the City Secretary.*
- (e) Standards of Approval. The development plat shall not be approved until the following standards have been satisfied:*
 - (1) The proposed development conforms to all applicable City plans, including but not limited to, the Comprehensive Plan, Transportation Plan, Future Land Use Plan, Park and Trails Plan, utility plans and applicable capital improvements plans;*
 - (2) The proposed development conforms to the requirements of the Zoning Ordinance (if located within the City's corporate limits) and this Chapter;*
 - (3) The proposed development is adequately served by public facilities and services, parks and open space (to the extent necessary based on the nature of the development) in conformance with City regulations;*
 - (4) The proposed development will not create a safety hazard on a public street;*
 - (5) Required dedications and/or appropriate agreements for acceptance and use of public dedications to serve the development have been tendered; and*
 - (6) The proposed development conforms to the design and improvement standards contained in this Chapter, in the City's Engineering Design Standards Manual and in any other applicable codes or ordinances of the City related to development of a tract of land.*
- (f) Conditions. The Planning and Zoning Commission and City Council may impose such conditions on the approval of the development plat as are necessary to assure compliance with the standards in subsection (e) above.*
- (g) Approval Procedure. The application for a development plat shall be submitted to the City in the same manner as a final plat, and shall be approved, conditionally approved or denied by the Planning and Zoning Commission. Upon approval, the development plat shall be filed with the county.*
- (h) Submittal Requirements. Each development plat shall show all information that is required to be shown on a final plat and shall:*

- (1) *Be prepared by a registered professional land surveyor;*
- (2) *Clearly show the boundary of the development plat;*
- (3) *Show each existing or proposed building, structure or improvement or proposed modification of the external configuration of the building, structure or improvement involving a change therein;*
- (4) *Show all easements and rights-of-way within or adjacent to the development plat;*
- (5) *Be accompanied by the required number of copies of the plat, a completed application form, the required submission fee (in an amount equal to the fee associated with final plat submission) and a certificate or some other form of verification from the Grayson County Appraisal District showing that all taxes have been paid on the subject property and that no delinquent taxes exist against the property; and*
- (6) *Be submitted to the Department of Development Services for review with the application in the same manner as for a Final Plat; failure to so comply shall result in the application being determined to be incomplete and subject to expiration in the same manner as other plats under this Chapter.*

~~Sec. 10.02.006~~ — ~~Provisions for parks and recreational areas.~~

~~The City reserves the right to negotiate with the developer to acquire property within the subdivision for parks and recreational areas. The location of these areas will be in general accordance with the Comprehensive Plan for the City.~~

Sec. 10.02.007 Subdivision Variance Tree Protection

A variance of certain subdivision standards of this Chapter, as provided for within this Chapter, may be considered prior to or concurrently with a Preliminary Plat, Final Plat, or Replat to address unforeseen circumstances or other difficulties in developing a property under the specific provisions of this Chapter. The requirements for submitting a subdivision variance application shall follow the regulations in Section 14.06.006 (Variance Procedures) of this Code.

- (a) *Processing of Subdivision Variance Application.*
 - (1) *The City Engineer shall review the application, consider applicable criteria for approval, and prepare a report to the Board of Adjustment.*
 - (2) *The City Engineer's report may include a recommendation for final action.*

~~(a) — General~~

- ~~(1) — Purpose.~~ The purpose of this section is to preserve, protect and enhance existing trees and mitigate the effects of tree removal within the City of Sherman and its extraterritorial jurisdiction. Trees, particularly native species, add natural beauty and distinct local character, add shade, promote water conservation, provide locations for habitat, and increase property values. The provisions of this section are intended to support the long-term viability of healthy trees and promote natural ecological, environmental, and aesthetic quality in the community.
- ~~(2) — Authority.~~ The provisions of this section are adopted in accordance with state law and the City Charter. The provisions of this section shall be administered by the City Manager or his/her designee.
- ~~(3) — Applicability.~~ The provisions of this section shall apply to all property within the

~~City limits and its extraterritorial jurisdiction. Applications for approval of subdivisions of land or plats or tree removal permits submitted after December 18, 2023 shall account for protected trees within the subject property in accordance with the provisions of this section and otherwise comply with the requirements of this section.~~

~~(4) — Exemptions. Exemptions from the requirements of this section are as follows:~~

~~(A) — Subdivisions of land that total five (5) acres or less, or where no subdivision is proposed, parcels of land five (5) acre or less.~~

~~(B) — Trees that a certified arborist has determined and documented are dead, diseased, declining, or safety hazards.~~

~~(C) — Proposed public streets, utility easements, and required fire lanes.~~

~~(D) — As otherwise exempt under applicable law, including Section 212.905 of the Texas Local Government Code.~~

~~(b) — Definitions~~

~~Caliper inch. The diameter of the trunk measured twelve (12) inches above grade.~~

~~Clear-cutting. The indiscriminate cutting, plowing, or grubbing of trees without regard to type or size for the purpose of clearing the land.~~

~~Critically alter. The uprooting, removing the canopy or severing the main trunk of a tree, or causing damage which may cause a tree to die. This includes but is not limited to the removal of a tree from a property, damage inflicted upon a tree by machinery, storage of materials or the compaction of soil above the root system of a tree, a change in the natural grade above the root system of a tree, or excessive pruning.~~

~~Drip line. A vertical line run through the outermost portion of the crown of a tree and extending to the ground. This may also be referred to as the critical root zone.~~

~~Floodplain. The area designated as being within the 100-year floodplain on the Federal Emergency Management Agency (FEMA) flood insurance map (FIRM).~~

~~Mitigation. The method by which trees are replaced whether through replanting on the subject property, planting or transplanting to another location or same property, or through payment of fees in lieu of replanting approved by the City.~~

~~Parcel of land. Land in the City of Sherman city limits or extraterritorial jurisdiction, whether platted or not platted.~~

~~Street perimeter buffer. A required buffer located at the perimeters of a proposed development site which is directly adjacent to a street or roadway. These areas are considered as areas of high visual impact, and preservation of existing vegetation located along the perimeter of the proposed development site is highly encouraged and used to screen the site and minimize potential nuisances between land uses.~~

Protective fencing. Chain link, silt fence, or other fencing used to protect preserved trees during construction activities.

Tree, dead (or declining). A tree that is dead or in severe decline with substantial structural defects, no remedial options available, and no chance of recovery, as determined and documented by a certified arborist.

Tree, protected. Any tree of a size and species as outlined in Table 10.1 that is required to be protected under this section.

Tree, replacement. Trees planted to mitigate the loss of trees as a result of development or tree removal.

Tree, street. Trees planted within the right-of-way that may be located in a constrained location and should contain root systems and branch growth conducive to growth around pedestrians, vehicles, and public infrastructure.

Tree Fund. A City-administered fund established for collection of fees in-lieu or replacement trees paid as mitigation and may include other contributions made in support of tree protection efforts.

Tree survey. A plan or drawing to scale that identifies the exact size, location, condition (healthy, dead, or declining), and species of protected trees.

(c) — Tree Classifications

(1) — Protected Tree. Any species listed in Table 10.1 that measures 12 caliper inches or larger. Species not so listed do not require protection or replacement.

(2) — Heritage Tree. Any species listed in Table 10.1 that measures 36 caliper inches or larger.

(d) — Protected Tree Species

The requirements for tree replacement and mitigation as outlined in this section apply only to the trees listed in Table 10.1.

Table 10.1	
Common Name	Scientific Name
Pecan	Carya illinoensis
Black hickory	Carya texana
Walnut	Juglans nigra
Southern magnolia	Magnolia grandiflora
Texas oak	Quercus buckleyi
Red oak*	Quercus rubra
Bur oak*	Quercus macrocarpa
Chinkapin oak*	Quercus muehlenbergii
Shumard red oak	Quercus shumardii

Post oak	Quercus stellata
Live oak*	Quercus virginiana
Bald cypress	Taxodium distichum
American elm	Ulmus americana
Cedar elm*	Ulmus crassifolia
Lacebark elm*	Ulmus parvifolia
Chinese Pistachio*	Pistacia chinensis
Bigtooth maple	Acer grandidentatum
Caddo maple	Acer saccharum 'Caddo' (Acer barbatum)
Red mulberry	Morus rubra

* Trees that are recommended as appropriate street trees within public right-of-way or in close proximity.

~~(e) — Tree Removal Permit~~

- ~~(1) — Prohibited Activities. It is unlawful for any person to remove or critically alter a tree without first obtaining a tree removal permit where it is required by this section or unless otherwise authorized in this section. Each tree removed or critically altered without a required permit shall constitute a separate offense.~~
- ~~(2) — Presumption. Where trees are removed or critically altered in violation of this section but evidence of the number of trees so removed or critically altered is unavailable, it shall be presumed that every 1,200 gross square feet of tree canopy removed or critically altered, as shown on an aerial image taken within 36 months of the date of the removal or critical alteration, constitutes the removal or critical alteration of one tree.~~
- ~~(3) — Tree Removal Permit Required. A tree removal permit is required for the removal or critical alteration of any tree on a parcel greater than five (5) acres within the City limits or extraterritorial jurisdiction. A tree removal permit is not required if:~~
 - ~~a. — The tree is being removed or critically altered on an existing platted lot being used for a one- or two-family residence.~~
 - ~~b. — The tree endangers the public health, welfare, or safety and immediate removal is required from a certified arborist, including documentation stating the diameter, species and reason for removal;~~
 - ~~c. — The tree has disrupted a public utility service due to a tornado, storm, flood, or other force of nature. Critical alteration shall be limited to the portion of the tree reasonably necessary to re-establish or maintain reliable utility service;~~
 - ~~d. — The tree is being critically altered as part of routine utility maintenance;~~
 - ~~e. — The tree is located on City-owned property and is being critically altered as part of routine maintenance;~~
 - ~~f. — The tree is dead as documented by a certified arborist, including information citing the diameter, species, and reason for removal, unless~~

~~the tree was required under a landscape plan or was a required replacement tree under this section;~~

~~g. The tree is located on the property of a plant or tree nursery, or an orchard, where trees are planted and grown on the premises for the sale or intended sale to the general public in the ordinary course of the nursery's or orchard's business; or~~

~~h. Removing underbrush with hand tools, not including grubbing under drip lines.~~

~~(4) Tree Removal Permit Application. A tree removal permit application and submittal fees shall be submitted to the Development Services Department in conformance with the requirements of this section. All applications and filings shall meet the requirements as defined by the tree removal application checklist, as it exists or may be amended, which shall be established and maintained by the Director of Development Services.~~

~~(5) Approval. The City Manager or his/her designee shall have the authority to issue a tree removal permit if it complies with all the requirements of this Code.~~

~~(6) Appeals. See Subsection 10.02.007(j) for appeals.~~

~~(7) Expiration. A tree removal permit shall expire six months after its issuance.~~

~~(f) Tree Survey~~

~~(1) Tree Survey Required. A tree survey shall be submitted concurrent with the submittal of a preliminary plat application or a tree removal permit. The tree survey shall be performed and certified by a certified arborist, registered landscape architect, or registered professional land surveyor. The submitted tree survey shall include the exact size, location, condition (healthy, dead, or declining), and species of each protected tree that measures 12 caliper inches or larger. It is recommended that the tree survey include trees that measure eight (8) caliper inches or larger to retain eligibility for preserved tree credits according to Subsection 10.02.007(g)(1).~~

~~(2) Alternatives to a Tree Survey.~~

~~(A) No Protected Trees on Site. In lieu of a tree survey, the applicant may submit a sworn affidavit or sworn declaration from a certified arborist, registered landscape architect, or registered professional land surveyor certifying that there are no protected trees on the property or all protected trees on the property are entirely dead or declining. The affidavit or declaration shall be approved by the City Manager or his/her designee to be accepted as an alternative to the required tree survey.~~

~~(B) Preservation Areas. In lieu of a tree survey, the applicant may submit a landscape plan together with the preliminary plat submittal or a tree removal permit depicting no-disturbance preservation areas that include substantial existing tree canopy coverage that will not be disturbed, removed or critically altered, with the following conditions:~~

~~(i) The no-disturbance preservation areas shall constitute a minimum~~

of 20 percent of the land subject to the preliminary plat application or tree removal permit that contains a substantial existing tree canopy;

- (ii) — To confirm the existence of substantial existing tree canopy cover age in the designated areas, the alternative plan submittal shall include aerial photographs and on-site photos. City staff may deem it necessary to conduct a visit to the project site for visual confirmation, and if so, the applicant shall allow such visit;
- (iii) — Trees within the designated areas do not need to be identified as a protected tree species;
- (iv) — The areas may be selected by the applicant but shall be located in the following priority order:
 - (1) — Floodplains and riparian corridors;
 - (2) — Street perimeter buffer areas;
 - (3) — Trail corridors, as depicted in the City's adopted Trails Master Plan;
 - (4) — Parkland, open spaces, and outdoor amenity spaces; and
 - (5) — Other areas, as selected by the applicant.
- (v) — The City Manager or his/her designee must approve the landscape plan with such preservation areas designated, and such approval may be withheld at the sole discretion of the City Manager or his/her designee.

(g) — Tree Replacement Standards

- (1) — Mitigation Ratios. Protected trees meeting the minimum size and species requirements shall be replaced according to the mitigation ratios established in Table 10.2, unless an alternative to the tree survey requirement was approved under Section 10.02.007(f). To the extent any provision of this section conflicts with a provision of Section 212.905 of the Texas Local Government Code, the provision in Section 212.905 controls.

Table 10.2	
Caliper Inches	Mitigation ratio
12" – 23"	Replace 1 caliper inch for every 2 caliper inches removed
24" – 35"	Replace 1 caliper inch for every 1 caliper inch removed
36" and above	Replace 3 caliper inches for every 1 caliper inch removed

- (2) — Mitigation Limit. The total number of caliper inches required to be mitigated, as calculated according to the mitigation ratios in Table 10.2, shall not exceed 100 caliper inches per acre.
- (3) — Replacement Tree Size. All replacement trees required per the mitigation ratios in Table 10.2 shall be a minimum of three (3) caliper inches.

~~(4) — Landscape Credit. Replacement trees that are planted on site as mitigation for removal of protected trees are eligible to be counted toward the landscaping requirements of Section 14.04.006 of this Code.~~

~~(5) — Timing of Mitigation Compliance.~~

~~(A) — Replacement trees shall be planted within 90 days of issuance of a tree removal permit. If replacement trees cannot be planted within 90 days, the City Manager or his/her designee may approve a delay in replacement of up to six months after the date of tree removal permit issuance.~~

~~(B) — If an applicant cannot replace the mitigation trees required or gain approval to plant on an alternate site, a fee-in-lieu payment into the City Tree Fund shall be required before the tree removal permit can be issued.~~

~~(h) — Tree Preservation Incentives~~

~~(1) — Preserved Tree Credits. Trees listed in Table 10.1 that are preserved onsite and measure eight (8) caliper inches or greater may be credited toward the replacement trees required in Subsection 10.02.007(f)(1) or the landscape requirements in Subsection 14.04.006.~~

~~(2) — Preserved tree credits will be granted according to the standards set out in Table 10.3.~~

Table 10.3	
Preserved Tree Size (in caliper inches)	Credits toward replacement tree requirement
8" - 35"	1 caliper inch for every 1 caliper inch preserved
36" and above	36 caliper inches

~~(3) — Code Conflicts. In certain cases, the preservation of protected trees may be desirable enough to take priority over full compliance of certain conflicting subdivision and zoning regulations, including, but not limited to, setbacks, lot design standards, building heights, sidewalks, lighting, signage, parking spaces, parking lot design, and driveway separation. When a conflict exists between the preservation of a protected tree and other provisions of this Article 10 or of Article 14, the applicant may request an alternative standard or design. The applicant's request may be considered and approved by the City Manager or his/her designee, provided that a reasonable application of public health and safety standards are maintained with the proposed design.~~

~~(i) — Alternative Mitigation Methods~~

~~(1) — Fee-in-Lieu Payment. If replacement tree plantings cannot be fully accommodated on site with adequate space and conditions for long-term health, then an alternative fee-in-lieu payment to the City Tree Fund, which is hereby established, may be considered. If the applicant can demonstrate every effort has been made to plant the required replacement trees on site, the City Manager or his/her designee may consider a fee-in-lieu payment for the remaining balance of replacement tree value. Payments to the fund will be on a per caliper inch basis~~

and are set out in Appendix C, Fee Schedule, of this Code. Payments to the Tree Fund are to be used for the sole purpose of planting trees on public property, including parks, along streets, and in common open spaces, and can also be used for pruning, irrigation, and maintenance of trees on public property. Replacement trees and fee-in-lieu payments may be combined to satisfy the requirement.

~~(2) — Off Site Mitigation.~~ If replacement tree plantings cannot be fully accommodated on site, then replacement trees may be proposed to be planted in a location mutually agreed upon by the City Manager or his/her designee and the applicant, including parks and other public places such as streets, medians, and other common open spaces.

~~(j) — Appeals~~

~~The City Council shall consider an appeal seeking alternative compliance if it determines that all options to achieve compliance with this section have been exhausted and the required mitigation creates an undue hardship for the applicant. An applicant may submit an alternative compliance plan or request for relief from compliance as part of an appeal application to the City Council. The applicant's proposed alternative compliance plan shall clearly delineate any proposed reductions to the standards and depict alternative standards or relief.~~

~~(k) — Tree Protection Standards~~

~~To protect designated preserved trees or no-disturbance preservation areas during development, construction or disturbance is prohibited within the dripline area of the trees. During construction, this defined area shall be flagged and encircled with protective fencing and a three-inch layer of mulch spread beneath the drip line. Trees preserved on site must remain in compliance with the assurance of establishment and vitality requirement in Section 14.04.006 of this Code.~~

~~(l) — Enforcement~~

~~(1) — Enforcement.~~ The City shall determine compliance and enforcement in accordance with the provisions of this Code.

~~(2) Clear-cutting.~~ Clear-cutting of a property in advance or while seeking approval of annexation, zoning, utility agreement, development agreement, economic incentives, or other discretionary approvals of the Sherman City Council may result in denial or refusal of consideration.

Sec. 10.02.008 Property Owners' Association.

- (a) *Purpose.* The purpose for the establishment of a Property Owners' Association (also referred to as "Association") for residential developments is to create an organization that owns and is responsible for maintaining, among other things, commonly owned properties, amenities, rights-of-way and thoroughfare screening for the communal good of the development's property owners and residents.
- (b) *Applicability.* A POA shall be established for any development that contains any amenity, as defined in this section, or thoroughfare screening. For purposes of this section, the terms

- “Homeowners’ Association” and “Association” are interchangeable with the term “Property Owners’ Association” for multi-family and non-residential developments.*
- (c) *Descriptions of Elements Requiring a POA. Any one (1) or more of the following elements created as part of a development shall require formation and continued operation of a mandatory POA:*
- (1) *Amenity. Where proposed in conjunction with a development, the word “amenity” shall be as defined as an aesthetic or other physical improvement to a development that increases its quality, desirability, and/or marketability to the public, and shall include, but not be limited to, the following:*
 - (A) *Amenity center (i.e., private swimming pool, club house, tennis courts, etc.);*
 - (B) *Private recreational facility;*
 - (C) *Entry features;*
 - (D) *Open space - voluntary or as required by zoning, this Chapter or Development Agreement;*
 - (E) *Ponds and drainage ways, including detention or retention areas;*
 - (F) *Water fountains;*
 - (G) *Water features and creek areas;*
 - (H) *Hike-and-bike trails;*
 - (I) *Private streets; and*
 - (J) *Other commonly owned facilities.*
 - (2) *Thoroughfare Screening. Screening as required and generally regulated by Article 14.04.004 of this Code.*
- (d) *Procedure. The establishment of a required POA shall occur in conjunction with the recordation of the subdivision Final Plat, and shall generally be established as follows:*
- (1) *Documents Submitted for Review. The declaration, covenants and other necessary documents establishing the POA shall be submitted to the City for review by the City Attorney for conformance with this and other applicable ordinances prior to submission of the Final Plat, and prior to issuance of an Acceptance of Public Improvements letter for the development. POA documents shall include descriptions of any amenities, thoroughfare screening, and other areas for which the Association is responsible for maintenance, and shall outline the organization of the Association.*
 - (2) *Approval By City Attorney. All POA documents shall be reviewed by the City Attorney prior to recordation of the Final Plat. The applicant shall reimburse the City for all related legal costs for review of the POA documents. This reimbursement shall be paid in full prior to recordation of the Final Plat.*
 - (3) *Recordation. All POA documents shall be recorded at the County prior to the recordation of the Final Plat. Two (2) copies of the recorded documents shall be submitted to Development Services for City records within five (5) days following recordation.*
 - (4) *Additional Phases. An additional phase to an existing subdivision is not required to establish a separate and distinct POA, provided that:*
 - (A) *The existing, recorded Association documents are amended to incorporate the area of the new subdivision phase and to adopt the responsibility of its amenities, thoroughfare screening, and other areas for which the*

Association is responsible for maintenance.

(B) The applicant shall provide a draft of the amended covenants to the City Attorney for review prior to the recordation of the plat.

- (e) Notice to Purchasers. The developer shall be required to post notice in a prominent place at all model homes and sales offices stating the following:*
- (1) That an POA has been established for the subdivision;*
 - (2) That membership in the POA is mandatory for all lot owners; and*
 - (3) That the developer is required to provide to any person, upon their request, a complete copy of the Association documents and a five (5)-year projection (at a minimum), of Association dues, income and expenses.*
- (f) General Requirements. The following shall be set forth in the POA documents:*
- (1) A statement that membership in the Association is mandatory for all owners of property within the subdivision;*
 - (2) A listing of all required maintenance responsibilities, and where possible, the lot number(s), legal descriptions, street name(s), etc. as shown on the approved plat for areas to be the responsibility of the Association;*
 - (3) By-laws related to the governance of the Association;*
 - (4) Covenants for maintenance assessments, which shall run with the land;*
 - (5) Responsibility for liability insurance and local taxes;*
 - (6) Statement that the authority for enforcement of Association rules and regulations is solely the responsibility of the Association and is not, in any way, the responsibility of the City;*
 - (7) Authority for the Association to secure funds from its members sufficient to meet its responsibilities. This authority shall include the ability to collect dues, to increase dues, to charge special assessments, and to place liens against property for failing to pay dues and assessments.*
 - (A) Dues shall be calculated based on a cost projection for the maintenance of all amenities and based on eventual build-out of the subdivision;*
 - (B) Dues shall not be based on calculations which include monies from the developer which will not be provided following the transfer of the Association from the developer to the lot owners.*
 - (C) Dues shall be required to be disclosed to all lot owners at the time of property purchase by the lot owners.*
 - (8) Provision that no amendment of the Association documents relating to maintenance of amenities, thoroughfare screening, any other Association-maintained area or facility, or related reserve funds (as applicable) shall occur without prior City approval;*
 - (9) Written release of liability for maintenance to benefit the City; written indemnification of the City outlining that under no circumstances shall the City be liable to the Association or any property owner or their respective heirs, executors, administrators, devisees, personal representatives, successors or assigns for any damages, injuries (including death), and/or liability resulting from any amenity, on the private streets, within or adjacent to any Major Creek or tributary, associated with any thoroughfare screening or common landscaping, or from any other Association-owned and maintained area or facility;*

- (10) *Written assurance of funds based on an accredited cost projection analysis within a specific reserve account of the Association for the maintenance and removal of amenities as determined by the City; and*
- (11) *Written consent giving the City the authority to take the actions for violations as set forth in Section 10.02.007(h).*
- (12) *Other City requirements as applicable.*
- (g) *Supplementary Requirements.* *The POA shall also comply with the following regulations, where applicable:*
 - (1) *Association documents shall not overrule the landscaping or other provisions of the Zoning Ordinance by penalizing or restricting water conserving landscapes, or by requiring landscape materials that do not comply with Zoning Ordinance landscape requirements;*
 - (2) *Amenities.* *The following regulations shall apply to any subdivision that includes an amenity, as described in Section 10.02.007(3)(a):*
 - (A) *Where amenities are proposed in conjunction with a development, the applicant shall comply with those regulations outlined in Section 10.03.008 of this Code.*
 - (B) *All developments that require the provision of common open space shall submit covenants to maintain open space, recreational areas, and other commonly owned facilities for review with the Final Plat application.*
 - (3) *Thoroughfare Screening.* *All subdivisions that are required to provide thoroughfare screening per Section 14.04.004 of this Code shall comply with the following:*
 - (A) *The Property Owners' Association shall own and be responsible for the maintenance of all required screening walls and fences, landscaping, landscape edges, and landscape irrigation systems, and shall provide for the payment of dues and assessments required to maintain such improvements.*
 - (B) *The Association documents shall state that the City has no obligation to maintain or reconstruct the screening walls and fences, landscaping, landscape edges, and landscape irrigation systems in the event of damage to such improvements.*
 - (C) *The Association documents shall state that the City may, but is not obligated to, inspect screening walls and fences, landscaping, landscape edges, and landscape irrigation systems, and that the City may require maintenance and repairs necessary to ensure that such improvements are maintained to City standards.*
- (h) *Violations, Revocations & Liens*
 - (1) *The City will notify the Property Owners' Association of violations of any of the regulations specified within this Section.*
 - (2) *Failure to bring the subdivision into compliance with these regulations may cause the City to revoke the specific approval of the Association or take other remedies as outlined in this Section 10.02.007(h).*
 - (3) *The City shall have all lien, assessment and enforcement rights granted therein to the Association, and the City shall have the ability to enforce the liens and*

assessments, and avail itself of any other enforcement actions available to the City pursuant to State law and/or City regulations.

- (4) *Should the Association fail to carry out its duties as specified in this Ordinance, the City shall have the right and ability, after due notice to the Association, to perform the duties required by this or any other Ordinance, regulation or agreement with the City in order to bring the Association into compliance therewith. The City shall have the right and ability, after due notice to the Association to assess the Association, for the full amount owed and/or assess the property owners on a pro rata basis for all costs incurred by the City in performing said duties if the Association fails to do so. Said assessment shall constitute a lien, in favor of the City, upon the property for which the assessment is made.*

ARTICLE 10.03 PUBLIC INFRASTRUCTURE REQUIREMENTS ENGINEERING DESIGN, PLAN REVIEW, INSPECTION AND TESTING SERVICES

Sec. 10.03.001 *Minimum Required Improvements. Fee established.*

The standards and criteria established herein for dedication and construction of public improvements, facilities and infrastructure identify certain minimum requirements and sizing of utilities, streets, parks, and other facilities that have been determined by the City of Sherman to be necessary in order to provide the minimum level of service necessary to protect or promote the public health, safety and welfare. It is the intent of this Article that no development shall occur until and unless these minimum levels of service are met, consistent with the City's applicable master facilities plans and construction design standards. Adequate right-of-way and easements, both on- and off-site shall be dedicated in accordance with this Chapter to adequately account for extensions and infrastructure requirements necessary to serve each phase of a proposed development at service levels that meet city criteria. Therefore, each development shall be required to dedicate, construct or upgrade required facilities and infrastructure to a capacity that meets these minimum levels. Unless otherwise specified herein or agreed upon by contract of the City and developer, all required improvements shall be designed and constructed at the sole cost of the property owner or developer, including necessary testing and studies.

~~The City Council shall establish a schedule of fees, charges and expenses, and a collection procedure for engineering plan review, engineering inspections, and engineering testing and other matters pertaining to this Section. The schedule of fees are set forth in Appendix C (Comprehensive Fee Schedule) of the Sherman Code of Ordinances, which may be altered or amended only by City Council.~~

Sec. 10.03.002 *Engineering Design Standards Manual. Minimum—required improvements.*

The City's Engineering Design Standards Manual specifies all design criteria for infrastructure required in this Chapter, unless otherwise specified herein. This document may be amended from time to time,. In the event of a conflict between this Chapter and the Engineering Design Standards Manual, this Chapter shall control.

~~The developer shall place these improvements in all new subdivisions. The satisfactory installation~~

of these improvements shall be a precedent to the final approval and acceptance of the subdivision by the City.

- (1) Streets:
 - (A) Lime stabilized subgrade.
 - (B) Reinforced concrete street with integrated curb.
 - (C) Street signs.
 - (D) Alternate paving sections may be used in:
 - i Rural type subdivisions; and
 - ii Infill subdivisions with twenty (20) lots or less and completely surrounded by developed subdivisions with asphalt streets.
- (2) Water supply and distribution system:
 - (A) Water supply and treatment facilities if not connected to City system.
 - (B) Water mains.
 - (C) Fire hydrants.
 - (D) Service connections.
 - (E) Valves, fittings and miscellaneous parts required to complete the system.
- (3) Sewage collection and treatment system:
 - (A) Sewage collection lines.
 - (B) Manholes.
 - (C) Lift stations.
 - (D) Cleanouts and other miscellaneous elements required to complete the system.
 - (E) Sewage treatment facilities if not connected to City system.
 - (F) Service connections.
- (4) Storm drainage system:
 - (A) Storm sewer lines.
 - (B) Inlets.
 - (C) Manholes.
 - (D) Junction boxes.
 - (E) Drainage channels.
 - (F) Box culverts.
 - (G) Valley gutters and other miscellaneous elements required to complete the system.
- (5) Sidewalks (where required).

Sec. 10.03.003 *Streets and Pedestrian Facilities. Design criteria.*

The proposed street system shall extend all existing major streets and such existing secondary and local streets as may be necessary for convenience of traffic circulation and emergency ingress and egress. Dedication of public rights-of way or easements necessary to provide an adequate street and mobility network shall be provided and depicted on plats and/or civil plans. The arrangement, character, extent, width, alignment, and location of all streets, sidewalks, trails, public ways, alleys, and driveways shall be in conformance with the comprehensive plan, thoroughfare plan, and other plans and policies pertaining to mobility. In addition to the requirements of the Engineering Design Standards Manual, all streets and pedestrian facilities shall meet or exceed the guidelines in AASHTO's then-current A Policy on Geometric Design of Highways and Streets.

Street design shall be considered in relation to existing and planned streets, alleys and driveways,

topographical and environmental features, scenic views, and the land uses proposed to be served by such streets. Good community design requires quality neighborhood and arrangement of streets, lot, blocks and valuable physical characteristics. Quality subdivisions must have an interconnected system of sidewalks, trails, and streets that are timeless, safe, comfortable, and value-sustaining.

The following subsections provide specific requirements for elements of street and pedestrian infrastructure:

- (a) Street Types. There are multiple classifications of streets that may be represented on a plat to ensure compliance with the City's transportation master plans and those of other governmental entities within their area of jurisdiction. These street types include highways, major arterials, minor arterials, commercial collectors, residential collectors, urban streets, rural streets, alleys, and private streets. Each street type provides a certain degree of continuity, capacity, and accessibility to adjacent land uses and may be differentiated by both function and design. These street types are summarized in the Engineering Design Standards Manual, Section 2, including minimum standards, typical cross-sections, and design criteria.*
- (b) Street Access. A Plat will not be approved unless all of the proposed lots in a subdivision have safe and reliable street access for daily use and emergency purposes. All lots shall have direct access to an improved public street (or a public street that will be improved during construction of the proposed development) to the City's minimum design and paving standards, or to an approved public way that is connected to an improved public street. Except for lots that are provided access from an approved cul-de-sac, all lots within a development shall have at least two (2) means of access or approach. Where development phasing or constraints of the land prevent the provision of a second, separate means of access, the City may accept a temporary street connection provided that a second permanent access point can be reasonably anticipated with future development of adjacent properties.*
- (c) Rights-of-way and Easements*
 - (1) Minimum rights-of-way and design considerations required to accommodate needs for property access, future and expanded streets, and pedestrian facilities can be found in the Engineering Design Standards Manual, Section 2. Additional right-of-way or easements for design needs based on street type, intersection type, or other situation are further specified in the Manual. Additional right-of-way or easement space for these facilities may be required due to the entity requiring or controlling the facility, topography and other design considerations specified by the City Engineer.*
 - (2) In lieu of constructing a street as part of the subdivision and civil plan process, a developer may enter into a Development Agreement to dedicate the rights-of-way and delay or waive the construction of the public improvements to be dedicated.*
- (d) Street Elements*

- (1) *Curb and gutter. Curb and gutter shall be installed by the developer on both sides of all streets, in accordance with the Engineering Design Standards Manual unless otherwise specified herein or by the City Engineer.*
 - (2) *Street names. Names of new streets shall not duplicate or cause confusion with the names of existing streets, unless the new streets are a continuation of or in alignment with existing streets, in which case the names of existing streets shall be used.*
 - (3) *Street signs. The developer shall pay for street signs and installation thereof. The City will install the signs. Alternative street signs may be considered by the City Engineer if maintained by a Property Owner's Association.*
 - (4) *Streetlights. Street lighting shall be provided along all streets and thoroughfares in accordance with the Engineering Design Standards Manual.*
 - (5) *Intersections. Intersection design, signalization, right-of-way corner clips, curb radius, and site visibility, among other design elements, shall be in accordance with the standards of the Engineering Design Standards Manual and Section 10.03 of this Chapter.*
 - (6) *All other street design elements shall be installed in accordance with the Engineering Design Standards Manual.*
- (e) *Perimeter Streets*
- (1) *New streets. When a proposed subdivision abuts a planned thoroughfare depicted on the City's future transportation plans, the developer shall dedicate and construct a portion of the street consistent with the Engineering Design Standards Manual.*
 - (2) *Existing substandard streets. Where a proposed subdivision abuts an existing substandard street, or street that does not meet the future needs of the City per the transportation plan, the developer shall dedicate right-of-way and construct all or a portion of the abutting street and its appurtenances (such as curbs and gutters, sidewalks, barrier-free ramps, street trees, etc.) to the City's design standards for that type of street per the Engineering Design Standards Manual. If the City Engineer makes a determination that it is not feasible to construct the street and its appurtenances to its ultimate cross-section or portion thereof at that time, the City may require the developer to provide a minimum standard paved fire lane and pay in-lieu of said improvements into escrow funds in accordance with the Engineering Design Standards Manual and the traffic impact mitigation requirements in Section 10.03.004 of this Chapter for the future construction of the street as a condition of the plat approval. Partial street dedication and construction on an existing street shall be considered according to the Engineering Design Standards Manual, Section 2.*
- (f) *Block and Street Lengths*
- (1) *Street Length. Lengths of specific streets and situational intersections shall adhere to the specifications in the Engineering Design Standards Manual.*
 - (2) *Alley Length. Alleys shall not exceed 700 feet in length without an intermediate connection to a local street. No dead-end alleys are permitted.*

- (3) *Block Length. Blocks shall not exceed 1,200 feet in length, measured from street centerline to street centerline. In the case of nonrectangular blocks, each side of the block with lots fronting it shall not exceed 1,200 feet, measured between the vertices formed by the extension of right-of-way lines at each corner of the block.*
- (4) *Block Width. Blocks shall be wide enough to allow two (2) tiers of lots with a block width no less than two hundred feet (200'), except when prevented by the size of the property or the need to back up to a major thoroughfare.*
- (5) *Block Size. Blocks shall not exceed more than 20 lots on one side of a public street before a street crossing.*
- (6) *Mid-Block Pedestrian Connection. Where a residential block is 800 feet or greater in length, a minimum 15-foot-wide pass-through lot shall be required. The pass-through lot shall contain a minimum five (5)-foot public sidewalk that connects on both ends to a sidewalk or trail located only on a local or collector street, school, park, or compatible land use. This lot shall be owned and maintained by a designated Property Owner's Association with an access easement. The City Engineer shall maintain discretion where such a connection may be undesirable due to topography, incompatible adjacent land use, or similar reason. As an alternative to this pass-through lot, pocket parks, stormwater ponds, or a public street may take the place of the public sidewalk.*
- (7) *Street Connectivity. New developments shall connect to and provide projected street connections to adjacent properties, both existing and future, to allow access between developments for neighborhood traffic, allow for safe egress, and to enhance pedestrian and bicycle connectivity as recommended in the City's Comprehensive Plan.*
 - (A) *Street stubs shall be generally provided in each direction of the plat, as applicable and practical.*
 - (B) *At least two connections provided for subdivisions 30 lots or greater.*
 - (C) *At least three connections provided for subdivisions 80 lots or greater.*
 - (D) *As determined by the City Engineer for additional street stubs for larger subdivisions or relief of stubs considering topography, existing conditions, or adjacent land use to ensure compatibility.*

(g) *Sidewalks*

Sidewalks shall be installed as basic infrastructure for each street within or adjacent to a proposed subdivision for residential and non-residential development. The developer or the homebuilder shall pay and construct all sidewalks.

- (1) *Sidewalk elements. Sidewalk infrastructure elements may include sidewalk flatwork, curb ramps, railings, retaining walls, lighting, signage, safety elements, grading, etc. necessary to achieve accessible design in public street rights-of-way, access easements and other locations, per the Engineering Designs Standards Manual. Construction of any sidewalk shall conform to the standards and specifications contained in the Engineering Design Standards Manual, this Chapter and the City of Sherman Code of Ordinances.*

- (2) *Trails. Trails depicted in the Trails Master Plan shall be dedicated and constructed at the time of development as a public improvement in the general locations and alignments depicted therein, as further detailed in Section 10.03.008 of this Chapter.*
- (3) *Alternative pedestrian improvements. Alternative locations or design variation(s) of sidewalks, pedestrian access facilities, or hike and bike trails to a standard that deviates from the Engineering Design Standards Manual can be requested to the City Engineer.*
 - (A) *If an alternative is approved by the City Engineer, ownership and maintenance shall be transferred to the property owner or Property Owner's Association and recorded by separate instrument, along with a public access agreement.*
 - (B) *When the delay of sidewalk or trail construction is deemed appropriate due to a pending street or storm drainage improvement project, escrow funds in lieu of the construction of sidewalks may be approved by the City Engineer.*
 - (C) *When an administrative alternative cannot be achieved, a subdivision variance pursuant to Section 10.02.005 of this Chapter may be requested for either fees-in-lieu of construction, delay of construction, or waiver. Justifications for the variance include, but are not limited to, the location of the facility in relation to the existing or planned pedestrian network, the need for the facility, and/or topography/natural features.*

(h) Lot Access and Frontage

To protect property value and promote safety and compatibility, certain lots may be restricted along streets and other situations represented on a plat.

- (1) *Lot size, dimensions, setbacks, and orientation shall be in accordance with the zoning district and use requirement of the City's Zoning Ordinance (Chapter 14 of this Code).*
- (2) *Residential driveways on all streets shall be positioned away from intersections and curb inlets and may be required by the City Engineer to be larger lots for accommodation.*
- (3) *Residential lots created by plat shall not front onto a Major Arterial, Minor Arterial, or Commercial Collector.*
- (4) *Residential lots shall not front onto, nor shall a garage or driveway face onto, a Residential Collector, Urban Street, or Rural Street within 100 feet of the right-of-way line of the nearest Major Arterial or Minor Arterial.*
- (5) *Residential lots shall not front onto any portion of a Residential Collector or Urban Street that extends into a neighborhood for more than 600 feet.*
- (6) *Residential lots shall not front onto a roundabout. The City Engineer has the discretion on where the next adjacent lot shall be located from the intersection based on the roundabout design to ensure that the home is sited with adequate*

- distance from the roundabout where driveway access would not interfere with the roundabout approach or a splitter island.*
- (7) Lots created adjacent to any roadway in the ETJ shall have a setback per Grayson County Subdivision Regulations.*
 - (8) Reserve strips of land controlling access to other property or to any street or alley or having the effect of restricting access to the adjoining property are prohibited. Properties shall not be landlocked, and shall have public access to a legal right-of-way.*
 - (9) In certain instances, the City shall require a cross-access easement for internal drives to address safety and access conflicts. Location of cross-access easements shall be indicated on the plat or site development plan and shall be built to the Engineering Design Standards Manual.*
 - (10) Lot access to Texas Department of Transportation (TxDOT)-regulated roadways are permitted by the City Engineer, but shall meet access requirements.*
 - (11) Unless otherwise allowed in the City's Zoning Ordinance, a lot or a division of land fronting a public street shall have a minimum 60 feet of frontage.*
 - (i) Private Streets. New subdivisions may be constructed with private streets that meet or exceed the specifications set forth in the design standards for similar public streets. The construction of private streets shall be subject to standard City inspections. Any private street subdivisions that were in existence (i.e., platted of record at the county) on June 3, 2024 shall be allowed to remain as private street subdivisions provided that the conditions of the private streets and the maintenance thereof continues to meet or exceed City standards, and provided that a viable Property Owners' Association (POA) or other similar organization continues to exist to maintain the private streets and all appurtenances. The City will not assist in enforcing deed restrictions. The City may periodically inspect private streets and may require the POA or other responsible organization to make any repairs necessary to ensure efficient emergency access and to protect the public health, safety, convenience and welfare.*
 - (A) Private streets: Construction and maintenance cost. The City shall not pay for any portion of the cost of constructing or maintaining a private street.*
 - (B) Private streets: Traffic-control devices. All private traffic-control devices and regulatory signs shall conform to the Texas Manual of Uniform Traffic Control Devices, as amended, and to City standards.*
 - (C) Private streets: Restricted access. The entrances to all private streets shall be clearly marked with a sign, placed in a prominent and visible location, stating that the streets within the subdivision are private, and that they are not maintained nor regularly patrolled by the City. All restricted access entrances shall be manned 24 hours every day, or they shall provide a reliable, alternative means of ensuring access into the subdivision by the City, by emergency service providers, and by other utility or public service providers, such as postal carriers and utility companies, with appropriate identification. The method to be used to ensure City and emergency access into the subdivision shall be approved by the City's fire*

department and by any other applicable emergency service providers. If the Property Owners' Association (POA) fails to maintain reliable access as required herein, the City may enter the private street subdivision and remove any gate or device which is a barrier to access at the sole expense of the POA.

- (D) Private streets: Waiver of services. Certain City services may not be provided for private street subdivisions. Among the services which may not be provided include routine law enforcement patrols, enforcement of traffic and parking regulations, and preparation of accident reports. Depending upon the characteristics of the development and upon access limitations posed by the design of entrances into the subdivision, other services (such as sanitation) may also not be provided.
- (E) Private streets: Petition to convert to public streets. The Property Owners' Association (POA) may petition the City to accept private streets and any associated property as public streets and right-of-way upon written notice to all association members and upon the favorable vote of a majority of the membership. However, in no event shall the City be obligated to accept said streets as public. Should the City elect to accept the streets as public, then the City has the right to inspect the private streets and to assess the lot owners for the expense of needed repairs concurrent with the City's acceptance of the streets. The City shall be the sole judge of whether repairs are needed. The City may also require, at the association's or the lot owners' expense, the removal of any guard houses, access control devices, landscaping or other aesthetic amenities located within the street right-of-way or within any other common area. The City may also require the dedication of additional street right-of-way.
- (F) Private streets: Hold harmless. The Property Owners' Association (POA), as owner of the private streets and appurtenances, shall release, indemnify, defend and hold harmless the City, any other governmental entity, and any public utility entity for damages to the private streets that may be occasioned by the reasonable use of the private streets by same, and for damages and injury (including death) arising from the condition of the private streets, out of any use of access gates or cross-arms, or out of any use of the subdivision by the City or governmental or utility entity.

~~(a) — General.~~

- ~~(1) — Conformity with comprehensive plan: The subdivision shall conform to the comprehensive plan of the City and the parts thereof.~~
- ~~(2) — Reserve strips prohibited: There shall be no reserve strips controlling access to land dedicated or intended to be dedicated to public use.~~

~~(b) — Streets.~~

~~(1) — General:~~

- ~~(A) — Street layout: Adequate streets shall be provided by the developer, and the arrangement, character, extent, width, grade and location of each shall conform to the thoroughfare plan of the City, and shall be considered in their relation to existing and planned streets, to topographical conditions, to~~

public safety and convenience, and in their appropriate relationship to the proposed uses of land to be served by such streets. The street layout shall be devised for the most advantageous development of the entire neighborhood. The streets in the subdivision shall be dedicated to the City.

- (B) ~~Projection of streets: Where adjoining areas are not subdivided, the arrangement of streets in the subdivision shall make provision for the proper projection of streets into such unsubdivided areas.~~
- (C) ~~Standard pavement width: The standard pavement width on which the developer shall be required to construct all street improvements shall be thirty-one (31) feet back to back of curb. All street paving over this width shall be subject to participating aid by the City.~~
- (D) ~~Half streets or adjacent streets: No new half streets shall be platted except where the portion of the new street is the projection of an existing collector or thoroughfare street.~~
- (E) ~~Dead end streets: Dead end streets shall be prohibited except as short stubs to permit future extension into adjacent land not yet subdivided. In this case the streets shall extend to the boundaries of the land being subdivided.~~
- (F) ~~Cul-de-sacs: In general, streets leading to cul-de-sacs shall not exceed five hundred (500) feet in length, and the cul-de-sac shall have a turnaround right-of-way of not less than one hundred (100) feet in diameter in residential areas and two hundred (200) feet in commercial and industrial areas. The back of curb radius for residential cul-de-sacs shall be thirty-one (31) feet and the back of curb radius for industrial cul-de-sacs shall be ninety (90) feet.~~
- (G) ~~Curb and gutter: Curb and gutter shall be installed by the developer on both sides of all interior streets. Provisions for curb and gutter shall be made on boundary streets in accordance with Subsection 10.03.003(b)(1)(K).~~
- (H) ~~Street names: Names of new streets shall not duplicate or cause confusion with the names of existing streets, unless the new streets are a continuation of or in alignment with existing streets, in which case the names of existing streets shall be used.~~
- (I) ~~Streetlights: Streetlights shall be installed by the local electricity provider and approved by the City.~~
 - (i) ~~Local streets: In general, local streets shall have 0.2 horizontal footcandles maintained average, with a maximum uniformity ratio of one to six.~~
 - (ii) ~~Collector streets: In general, collector streets shall have 0.6 horizontal footcandles maintained average, with a maximum uniformity ratio of one to three.~~
- (J) ~~Street signs: The City shall install street signs, at the developer's expense, at all intersections within the subdivision. This fee shall be paid prior to acceptance of the streets and utilities.~~
- (K) ~~Boundary streets:~~
 - (i) ~~New local, collector, marginal access, and thoroughfare streets that will serve as boundary streets to a proposed subdivision shall~~

conform to the applicable sections of this Chapter for right-of-way and pavement width.

- (ii) ~~No new half streets shall be platted except as defined in Subsections 10.03.003(b)(1) and (d), or where required to accommodate previously platted half streets.~~

~~The developer shall make available by dedication that portion of right of way from his property that is a projection of a major or thoroughfare street.~~

- (iii) ~~When the proposed subdivision abuts upon an existing street or half street that does not conform to the requirements of this Chapter for right of way, the developer shall dedicate right of way sufficient to make the right of way on his side of the street conform to the general plan for this street and this Chapter.~~

- (iv) ~~When the proposed subdivision abuts upon an existing substandard boundary street, and the developer plats single family residential lots with direct access to the boundary street, the developer shall make a payment to the City to cover future paving improvements. This deposit shall be based upon the developer paying for curb and gutter and one half of the cost of paving a standard width street. This deposit shall be made in lieu of the actual construction in all cases and shall be made prior to the initiation of the one year warranty period and the issuance of occupancy permits. See Section 10.03.004 for further explanation.~~

- (v) ~~Boundary streets that are platted for the primary purpose of providing traffic routes into and through the subdivision shall be constructed as a part of the subdivision development or funding to be escrowed with the City if approved by the City Manager.~~

~~(L) Relation of adjoining streets and land~~

- (i) ~~The system of streets designated for the subdivision, except in unusual cases, must connect with streets already dedicated in adjacent subdivisions, and where adjacent connections are not platted, must, in general, be the reasonable projection of streets in the nearest subdivided tracts, and must continue to the boundaries of the tract subdivided, so that other subdividers may connect therewith.~~

- (ii) ~~Reserve strips of land controlling access to other property or to any street or alley, or having the effect of restricting or damaging the adjoining property for subdivision purposes, or which will not be taxable or accessible for special improvements shall not be permitted in any subdivision.~~

- (M) ~~Marginal access streets: Where a subdivision abuts or contains an existing or proposed major street, railroad, or highway, the commission may require marginal access streets, reverse frontage with screen planting contained in a nonaccess reservation along the rear property line, deep lots with rear~~

service alleys, or such other treatment as may be necessary for adequate protection of residential properties and to afford separation of through and local traffic.

- (N) ~~Block length and width: In general, intersecting streets determining the block lengths and widths shall be provided at such intervals as to serve cross traffic adequately and to meet existing streets. Where no existing subdivision controls, the blocks shall not exceed nine hundred (900) feet in length, nor be less than four hundred (400) feet in length. Where no existing subdivision controls, the block width or depth shall not exceed three hundred fifty (350) feet, nor be less than two hundred (200) feet. When possible, the block widths and lengths shall be such as to allow two (2) tiers of lots back to back.~~
- (O) ~~Corner clips: Corner clips shall be dedicated as public right-of-way in the following manner:
 - (i) ~~Up to 40 feet by 40 feet at the corner of arterial intersections~~
 - (ii) ~~20 feet by 20 feet at the corner of any minor arterial~~
 - (iii) ~~15 feet by 15 feet at the corner of any residential or local street~~
 - (iv) ~~10 feet by 10 feet at the corner of any alley intersection.~~~~
- (2) ~~Local street design criteria:
 - (A) ~~Terrain classification:
 - (i) ~~Ordinary: Cross slope range of 0% to 8%.~~
 - (ii) ~~Rolling: Cross slope range of 8.1% to 15%.~~
 - (iii) ~~Hilly: Cross slope of over 15%.~~~~
 - (B) ~~Development density:
 - (i) ~~Low: Two or less dwelling units per acre.~~
 - (ii) ~~Medium: Between two and six dwelling units per acre.~~
 - (iii) ~~High: Over six dwelling units per acre.~~~~
 - (C) ~~Street right-of-way width: The right-of-way of local streets shall be fifty (50) feet.~~
 - (D) ~~Pavement width: Local streets shall be thirty-one (31) feet wide from back of curb to back of curb.~~
 - (E) ~~Minimum centerline radius: The minimum centerline radius shall be one hundred seventy-five (175) feet.~~
 - (F) ~~Maximum street grade:
 - (1) ~~Ordinary terrain: 4.0%~~
 - (2) ~~Rolling terrain: 8.0%~~
 - (3) ~~Hilly terrain: 15.0%~~~~
 - (G) ~~Minimum street grade: The minimum grade for local streets shall be 0.40%.~~
 - (H) ~~Design speed:
 - (1) ~~Ordinary terrain: 25 mph.~~
 - (2) ~~Rolling terrain: 25 mph.~~
 - (3) ~~Hilly terrain: 20 mph.~~~~
 - (I) ~~Vertical curve length: The minimum vertical curve length (in feet) shall be calculated by multiplying the algebraic difference in grades (in percent) times the proper "K" factor.~~~~

20 mph, $K = 10$ for crest and 15 for sag curve
25 mph, $K = 15$ for crest and 20 for sag curve
30 mph, $K = 30$ for crest and 35 for sag curve

- (3) ~~Collector street design criteria:~~
 - (A) ~~Terrain classification: Same as for local street.~~
 - (B) ~~Development density: Same as for local street.~~
 - (C) ~~Street right-of-way width: The right-of-way for collector streets shall be sixty (60) feet.~~
 - (D) ~~Pavement width: Collector streets shall be thirty-seven (37) feet wide from back to [of] curb to back of curb.~~
 - (E) ~~Minimum centerline radius:~~
 - (i) ~~Without superelevation the minimum centerline radius shall be:~~
 - a. ~~Ordinary terrain: 375 feet~~
 - b. ~~Rolling terrain: 375 feet~~
 - c. ~~Hilly terrain: 260 feet~~
 - (ii) ~~With a superelevation of 0.08 foot per foot the minimum centerline radius may be decrease to these values:~~
 - a. ~~Ordinary terrain: 250 feet~~
 - b. ~~Rolling terrain: 250 feet~~
 - c. ~~Hilly terrain: 175 feet~~
 - (F) ~~Maximum street grade:~~
 - (i) ~~Ordinary terrain: 4.0%~~
 - (ii) ~~Rolling terrain: 8.0%~~
 - (iii) ~~Hilly terrain: 12.0%~~
 - (G) ~~Minimum street grade: The minimum grade for collector streets shall be 0.40%.~~
 - (H) ~~Design speed:~~
 - (i) ~~Ordinary terrain: 30 mph~~
 - (ii) ~~Rolling terrain: 30 mph~~
 - (iii) ~~Hilly terrain: 25 mph~~
 - (I) ~~Vertical curve length: Same as for local street.~~
- (4) ~~Marginal access streets:~~
 - (A) ~~Terrain classification: Same as local street.~~
 - (B) ~~Development density: Same as local street.~~
 - (C) ~~Street right-of-way width: The right-of-way for marginal access streets shall be forty (40) feet.~~
 - (D) ~~Pavement width: Marginal access streets shall be twenty-seven (27) feet wide from back of curb to back of curb.~~
 - (E) ~~Minimum centerline radius: Same as local street.~~
 - (F) ~~Maximum street grade: Same as local street.~~
 - (G) ~~Minimum street grade: Same as local street.~~
 - (H) ~~Design speed: Same as local street.~~
 - (I) ~~Vertical curve length: Same as local street.~~
- (5) ~~Thoroughfare street design criteria: Specific criteria for designing thoroughfare streets shall be developed for each individual street project. Generally, the~~

~~recommendations of the thoroughfare plan as they pertain to right-of-way and pavement width, in conjunction with recognized engineering criteria, shall be utilized to establish the design criteria for these streets.~~

~~(6) — Intersection design criteria:~~

~~(A) — Clear sight distance: The clear sight distance along each approach leg shall be:~~

~~(i) — Ordinary terrain: 90 feet~~

~~(ii) — Rolling terrain: 90 feet~~

~~(iii) — Hilly terrain: 70 feet~~

~~(B) — Vertical alignment within intersection area: In general, intersection areas shall be designed with a flat grade. In particular situations these grades may be permitted:~~

~~(i) — Ordinary terrain: Flat~~

~~(ii) — Rolling terrain: 2.0%~~

~~(iii) — Hilly terrain: 4.0%~~

~~(C) — Minimum angle of intersection: In general, all streets should intersect at approximately a ninety (90) degree angle, and in no case shall the angle be less than seventy-five (75) degrees. Not more than two streets shall intersect at one point.~~

~~(D) — Minimum curb radius:~~

~~(i) — Local local intersection, 20 feet~~

~~(ii) — Local collector intersection, 25 feet~~

~~(E) — Minimum centerline offset of adjacent intersections:~~

~~(i) — Local local, 150 feet~~

~~(ii) — Local collector, 150 feet~~

~~(iii) — Collector collector, 200 feet~~

~~(7) — Laboratory testing of street materials: The City will retain the services of a reputable commercial testing laboratory or will perform the necessary tests on subgrade soils and concrete. These laboratory tests will be made:~~

~~(A) — Proctor Density Curves to establish the optimum density-moisture relationship for the subgrade soil.~~

~~(B) — Tests during the construction phase to determine if the lime-stabilized subgrade and concrete material have been placed as specified.~~

~~(C) — The proper tests to determine if the concrete surfacing meets the requirements of the specifications.~~

~~(c) — Alleys:~~

~~(1) — General: Alleys shall be provided where existing alleys or previously platted alleys would be closed or shut off if an alley was not platted and constructed in the new subdivision. No dead-end alleys will be permitted. Where two (2) alleys intersect within a block, a cutoff of not less than ten (10) feet from the normal intersection of the property lines shall be provided along each property line. Alleys shall be platted approximately parallel to the frontage of the street. If alleys are not straight within each block, or if they do not connect on a straight course with the alleys of adjoining blocks, then an easement shall be provided where necessary on lot division lines for placing guy wires. Aerial overhang easements shall be provided~~

- where required by utility companies.
- (2) ~~Residential: Alleys with not less than twenty (20) feet of right-of-way width, with a paved surface of not less than ten (10) feet, shall be optional.~~
 - (3) ~~Commercial and industrial: Alleys or loading courts shall be provided in blocks to be used for any purpose other than residential. The minimum right-of-way width shall be thirty (30) feet, and such alley or court shall be paved in its entirety.~~
 - (4) ~~Paving:~~
 - (A) ~~All alleys shall be constructed of concrete. The minimum pavement width for alleys shall be ten (10) feet. The maximum width of pavement for alleys shall be sixteen (16) feet.~~
 - (B) ~~All aspects of alley construction shall be in accordance with the requirements and documents titled "City of Sherman Standard Specifications and Contract Documents for Public Works Construction" which are on file in the city clerk's office of the City. The city engineer may alter any alley construction requirements to meet special site conditions as warranted.~~
 - (d) ~~Easements: Utility easements shall be provided as required to provide adequate space for the installation and maintenance of all utility lines, sidewalks, and landscaping within the subdivision, and across adjacent property where necessitated by the subdivision of any land as follows:~~
 - (1) ~~Minimum ten (10) foot utility easement along urban and collector roadways.~~
 - (2) ~~Minimum fifteen (15) foot utility, sidewalk, and landscaping easement along arterials and highways.~~
 - (3) ~~Required easement to parallel the required corner clips with the exception of alley corner clips.~~
 - (e) ~~Lots:~~
 - (1) ~~The lot size, width, shape, depth and orientation, and the minimum building setback lines shall be in accordance with the zoning ordinance.~~
 - (2) ~~Each lot shall front upon a public street.~~
 - (3) ~~Double frontage lots should be avoided except where essential to provide separation of residential development from traffic arterials or to overcome specific disadvantages of topography and orientation. A planting screen reservation of at least ten feet, and across which there shall be no right of access shall be provided along the line of lots abutting such a traffic artery or other similar use.~~
 - (4) ~~Side lot lines shall be substantially at right angles or radial to street centerlines.~~
 - (f) ~~Sidewalks: Five (5) feet sidewalks shall be installed on all street frontages of residential and commercial subdivisions when removed from the curb. Six (6) feet sidewalks shall be installed on all street frontages of residential and commercial subdivisions when adjacent to the curb. Exceptions that may be granted by the City Engineer:~~
 - (1) ~~Lots adjacent to developed lots that have no sidewalk.~~
 - (2) ~~Rural type developments.~~
 - (g) ~~Water Supply and Distribution System:~~
 - (1) ~~All subdivisions shall be provided with water supply and water distribution systems approved by the City and meeting the requirements of the state department of health.~~

- (2) ~~The water supply and distribution system shall be designed to provide the anticipated water consumption within the subdivision, including fire protection. Recognized engineering design criteria shall be used to design the system.~~
- (3) ~~Fire hydrants shall be located so that every building within the subdivision will be within five hundred (500) feet of a fire hydrant. The water distribution system and the location of fire hydrants shall be in accordance with the requirements of the state board of insurance. Additional fire hydrants that are desired by the City shall be paid for by the City.~~
- (4) ~~The City may require larger water mains than are necessary to serve the subdivision in order to provide for future development for the area. In the event that larger lines are required, then the developer shall be entitled to participating aid from the City on said oversized lines.~~
- (h) ~~Sewage Collection and Treatment System:~~
 - (1) ~~All subdivisions shall be provided with an approved sewage collection and treatment system.~~
 - (2) ~~Connection with the City's sanitary sewer system shall be required except where the city engineer determines that such connection will require unreasonable expenditure when compared with other methods of sewage disposal.~~
 - (3) ~~When septic tanks are permitted, the developer shall conduct percolation tests under the supervision of a registered professional engineer in accordance with requirements of the state department of health in order to determine the adequacy of proposed lot sizes and the soil.~~
 - (4) ~~If a sanitary sewage treatment system is to be installed, the plans for such system shall be approved by the state department of health and a permit secured from the Texas water quality board prior to approval of the final plat by the City Council.~~
 - (5) ~~The sewage collection system shall be designed to handle the anticipated flow of sewage from within the subdivision, including development of future sections of the same subdivision. Recognized engineering design criteria in accordance with the requirements of the state department of health shall be used to design the system.~~
 - (6) ~~All sewer lines shall be on such a grade as to provide a minimum velocity of two (2) feet per second when using an "N" value of 0.013 in the Manning Formula.~~
 - (7) ~~The minimum size line, excluding house service lines, shall be six (6) inches in diameter.~~
 - (8) ~~Manholes shall not be spaced more than four hundred (400) feet apart and shall be provided at all changes in grade, direction and pipe size.~~
 - (9) ~~The City may require larger sewer lines than are necessary to serve the subdivision and future development of the same subdivision, in order to provide for future development of the area. In the event that said larger lines are required, then the developer shall be entitled to participating aid from the City on said oversized lines.~~
- (i) ~~Drainage:~~
 - (1) ~~That the 2002 Edition of the City of Sherman's Storm Drainage Design Manual, being Chapters 1 through 9, together with all appendices being A through G, is hereby adopted in its entirety as if fully set forth herein, as the Storm Drainage Design Manual of the City of Sherman, Texas.~~
 - (2) ~~The storm drainage system shall be designed in accordance with the requirements~~

of the City's Storm Drainage Design Manual.

- (j) ~~Water And Sewer House Service Connections:~~
 - (A) ~~Water and sewer service connections shall be provided for every lot in the subdivision and the City plumbing code shall govern the size and material.~~
 - (B) ~~Sewer lines shall be terminated with a cleanout and plug at the right-of-way line. The insertion of a precast plug and water lines shall terminate with a curb stop at the right-of-way line.~~
- (k) ~~Other Utilities:~~ The developer shall make arrangements with the appropriate private utility companies for the extension of their respective utility services to and within the subdivision.
- (l) ~~Site Grading:~~ Grading permit is required.
- (m) ~~Stormwater Criteria:~~
 - (1) ~~The developer shall be responsible for all costs associated with the construction of culverts, box culverts or bridges required to pass stormwater flows under streets. The following design criteria are to be utilized in calculating the required structure size:~~

Street Designation	Structure Capacity	Overflow
Local street (31 feet b/b)	25-year storm	100-year storm
Collector street (37 feet b/b)	50-year storm	100-year storm
Thoroughfare street	100-year storm	As required

- (2) ~~The quantities of storm flow shall be calculated utilizing the methodology as set forth in the City's Storm Drainage Design Manual.~~

Sec. 10.03.004 *Traffic Impact Analysis. Responsibility for payment of installation costs.*

- (a) *Purpose. The purpose of a Traffic Impact Analysis (TIA) is to assess the effects of specific development activity on the existing and planned thoroughfare system. Development activity may include but is not limited to rezoning, preliminary site plans, site plans, driveway permits, certificates of occupancy, and Thoroughfare Plan amendments.*
- (b) *Pre-submission Meeting. Prior to the commencement of a TIA, an initial or pre-submission meeting with City staff is required to establish a base of communication between the City and the applicant. This meeting will define the requirements and scope relative to conducting a TIA and ensure that any questions by the applicant are addressed.*
- (c) *Applicability of TIA Requirements*
 - (1) *Zoning. These TIA requirements shall apply to all zoning requests for land uses which will generate 2,500 or more vehicle trips per day or contain a density of 0.75 Floor Area Ratio (FAR) or greater. Applicable requests include zoning requests and Thoroughfare Plan amendments, if no previous traffic assessment was performed. Special circumstances, including but not limited to development with no case history, which do not meet the daily trip generation threshold, may also require a TIA. Such circumstances, as determined by the City Engineer may include,*

but are not limited to, impacts to residential neighborhoods from nonresidential development, inadequate site accessibility, the implementation of the surrounding Thoroughfare Plan is not anticipated during the estimated time period of the proposed development, the proposed land use differs significantly from that contemplated in the Comprehensive Plan, or the internal street or access is not anticipated to accommodate the expected traffic generation.

- (2) Development Site Plan. These TIA requirements shall apply to all development site plan requests for land uses, which will generate 1,000 or more vehicle trips per day or contain a density of 0.75 Floor Area Ratio (FAR) or generate over 100 total trips during the AM or PM peak hour. Developments that will generate less than 1,000 but 500 or more vehicle trips per day may require a TIA. Applicable development requests include concept plans, preliminary site plans, and site plans. Special cases, in which site generated peak hour trip activity is different from that of the adjacent street (weekdays 7:00-9:00 a.m. and 4:00-6:00 p.m.), may require an additional separate analysis as determined by the City Engineer. Such circumstances may include, but are not limited to, commercial/retail, entertainment or institutional activity. The City Engineer may waive the TIA for a development request if a TIA was performed previously with the Zoning request and conditions listed in the report are still current.*
- (3) Daycares and Schools. All development requests and/or specific use permit requests for a daycare, Montessori school, private school, charter school, or public school shall include, at a minimum, a traffic circulation study. This study shall include the estimated maximum peak hour trip generation of the facility, the planned circulation of inbound and outbound traffic during drop-off and pick-up operations, and the estimated length of the queue of cars waiting to pick up students. The design of the site and the circulation plan shall ensure that school traffic does not back up onto any public street. The traffic circulation study shall include a statement that the owner and/or operator of the daycare or school agrees to operate the facility in accordance with the approved circulation plan. The circulation plan must be approved by the City Engineer before the development request or the specific use permit can be approved.*
- (4) Determination of Applicability. The need for a TIA shall be determined by the City Engineer based upon the results and recommendation from a pre-application meeting. It shall be the responsibility of the applicant to demonstrate that a TIA should not be required. If a TIA is required, the level of effort for a TIA submission shall be determined by the City Engineer. Depending upon the specific site characteristics of the proposed development, one or more of the following elements may also be required as part of the TIA: an accident analysis, sight distance survey, traffic simulation, traffic signal warrant analysis, queuing analysis, turn lane analysis, and/or traffic circulation plan.*
- (d) Requirements for TIA Updates. A TIA shall be completed in accordance the requirements in the Engineering Design Standards Manual.*

- (e) *Traffic Impact Mitigation. Traffic impact mitigation may be required of the development subject to requirements in the Engineering Design Standards Manual.*
- (f) *Administration of the TIA. Based on the results of the TIA and actions recommended by the City Engineer, the Planning and Zoning Commission and/or the City Council, as appropriate, may take one or more of the following actions:*
 - (1) *Approve the zoning or development request, if the project has been determined to have no significant impact or where the impacts can be adequately mitigated;*
 - (2) *Approve the development request, subject to a phasing plan;*
 - (3) *Recommend study of the City's Thoroughfare Plan to determine amendments required to increase capacity;*
 - (4) *Recommend amendment of the Capital Improvement Program (CIP) to expedite construction of needed improvements; or*
 - (5) *Deny the zoning or development request, where the impacts cannot be adequately mitigated.*
- (g) *Cost of TIA Review by City. The cost for review of TIA submittals shall be based on the parameters set forth in the City's Development Fee Schedule and paid in full at time of submission.*

~~The purpose of this section is to define how costs of subdivision development are to be apportioned between the City and the developer.~~

~~(1) Streets:~~

~~(A) General: The developer shall pay the entire cost of constructing all streets. If any security other than cash is paid to the City to cover the future paving improvements, as is hereinafter required, the security shall contain a provision for increasing the amount of the security at a rate of four percent per annum. This increase shall be for the purpose of offsetting any increase in construction cost that occurs prior to the time that the improvements are actually constructed.~~

~~(B) Boundary streets:~~

~~(i) Existing streets: When the proposed subdivision abuts upon an existing substandard boundary street, and the developer plats single family residential lots with direct access to the boundary street, the developer shall make a payment to the City to cover future paving improvements. This deposit shall amount to the cost of curb and gutter, and one-half of the cost of constructing a street. Construction shall include required excavation, compacted limestone base, and surfacing a standard width street. The actual unit prices to determine the amount placed on deposit shall be determined by the director of engineering and planning from the latest available street construction costs within the City. This deposit shall be made in lieu of the actual construction in all cases, and shall be made prior to the initiation of the one-year warranty period and issuance of occupancy permits. This deposit shall draw interest annually at a rate not to exceed that which the City receives for the same sum being placed on certificates of deposit in a special account, regardless of the length of time the deposit remains, but not beyond the actual date construction commences. Developer to pay and~~

- build upgraded street. Escrow is an option with City Manager approval.
- (ii) ~~New streets: New boundary streets that are platted for the primary purpose of providing traffic routes into and through the subdivision shall be constructed by the developer as part of the subdivision development.~~
 - (C) ~~Thoroughfare streets: Boundary street criteria regarding street costs shall also apply to existing thoroughfares. The developer shall make a payment to the City to cover the future paving improvements. This deposit shall amount to the cost of curb and gutter and one half (1/2) of the cost of paving. The actual unit prices to determine the amount placed on deposit shall be the unit prices received under the terms of the bidding documents. This deposit shall be for one side of the street only and shall be doubled if both sides of the thoroughfare street will be in the proposed subdivision. This deposit shall be made in lieu of the actual construction in all cases, and shall be made prior to the initiation of the one-year warranty period and issuance of occupancy permits. Developer to pay and build half of the thoroughfare street unless City Manager approves the escrow of the funds to construct their portion of the thoroughfare.~~
 - (D) ~~Oversize streets in multifamily and commercial developments:~~
 - (i) ~~The minimum right-of-way width for streets in or adjacent to commercial and multifamily developments shall be sixty (60) feet. All streets within or adjacent to commercial subdivisions or multifamily portions of developments shall be constructed to a minimum width of thirty-seven (37) feet back-to-back of curb and conform to the construction and geometric criteria for collector streets.~~
 - (ii) ~~Additional traffic is generated when previously developed land bordering or containing existing streets is rezoned or replatted for high intensity uses. To address the additional traffic, the City will require additional street width up to one (1) traffic lane (twelve foot width). The property owner/developer will provide the additional right-of-way required and will bear all costs associated with the required widening of the street.~~
 - (iii) ~~Areas replatted or rezoned to multifamily or commercial status shall be required to comply with the requirements of this section.~~
 - (iv) ~~The developer shall bear all costs associated with streets in or adjacent to commercial and multifamily areas, except streets over thirty-seven (37) feet in width required by the City. The City will participate in the street construction costs (subject to funds availability and approval of the City Council) only when the extra street width is necessary to provide capacity to handle the through traffic above and beyond the traffic needs of the proposed development.~~
 - (v) ~~The board of adjustment shall have the authority to make recommendations to the City Council for exceptions to these requirements upon showing of justification, utilizing sound engineering practices.~~
 - (2) ~~Street Signs: The developer shall pay for street signs and their installation. The City will install the signs.~~
 - (3) ~~Sidewalks: The developer shall pay for all sidewalks.~~
 - (4) ~~Water Distribution System:~~

- ~~(A) — The developer shall pay all costs of the water supply and distribution system, except oversized mains which the City requires for future development of the area.~~
- ~~(B) — The City may require larger mains than are necessary to serve the subdivision in order to provide for future development of the area. In the event that said larger lines are required, then the developer shall be entitled to participating aid from the City on said oversized lines.~~
- ~~(C) — An eight-inch nominal inside diameter water main has been established by the City as the standard size of water main along Urban Streets and Residential Collectors for purposes of determining the extent of participating aid from the City. The City will only participate in the cost of water lines which are sized larger than eight (8) inches in diameter for reasons of providing for future development. This does not apply to lines sized larger than eight (8) inches for the purpose of serving future sections of the same subdivision.~~
- ~~(D) — A twelve-inch nominal inside diameter water main has been established by the City as the standard size of water main along Commercial Collectors and Arterial streets for purposes of determining the extent of participation aid from the City. The City will only participate in the cost of water lines which are sized larger than twelve (12) inches in diameter for reasons of providing for future development. This does not apply to lines sized larger than twelve (12) inches for the purpose of serving future sections of the same subdivision.~~
- ~~(E) — Six-inch lines will be acceptable for dead end mains of 250 feet or less with no fire hydrants on it and engineering calculations verify that a larger line will not be necessary, and the main will not be extended to serve a future development.~~
- ~~(F) — The amount of participation by the City will be determined by taking alternate bids for the oversized line and fittings versus the cost of an eight inch line and equivalent fittings. The City will pay the difference in cost between the oversized lines and the eight-inch line as determined by the alternate bids.~~
- ~~(G) — For water service connections made by the City, the City will provide the corporation cock and make the connection. The plumber shall be responsible for excavating and backfilling a suitable pit for the City to work in while making the connection. The plumber shall pay the standard “tap fee” for the size of the connection made.~~
- ~~(5) — Sewage Collection and Treatment System:~~
 - ~~(A) — The developer shall pay all costs of the sewage collection and treatment system, except oversized collection lines which the City requires for future development of the area.~~
 - ~~(B) — The City may require larger lines than are necessary to serve the subdivision in order to provide for future development of the area. In the event that said larger lines are required, the developer shall be entitled to participating aid from the City on said oversized lines.~~
 - ~~(C) — An eight (8) inch nominal inside diameter sewer line has been established by the City as the minimum size of sewer line for purposes of determining the extent of participating aid from the City. The City will only participate in the cost of sewer lines which are sized larger than eight (8) inches for reasons of providing for future development. This does not apply to lines sized larger than eight (8) inches for the~~

~~purpose of serving future sections of the same division.~~

- ~~(D) The amount of participation by the City will be determined by taking alternate bids for the oversized City line versus the cost of an eight (8) inch line. The City will pay the difference in cost between the oversized line and the eight (8) inch line, as determined by the alternate bids.~~
- ~~(6) Extensions of Water and Sewer Lines: All water and sewer line extensions shall comply with the requirements set forth in Article 13.07, Division 4 of the Code of Ordinances.~~
- ~~(7) Storm Drainage System: The developer shall pay all costs of the drainage system.~~
- ~~(8) Laboratory Testing Services: The City will pay all fees for laboratory testing required by this Chapter. The developer's contractor will be responsible to pay for all laboratory retesting fees associated with failed tests.~~
- ~~(9) Engineering And Surveying: The developer shall pay all fees and charges for engineering and surveying services required by this Chapter.~~
- ~~(10) All Other Costs: The developer shall pay all other costs that are not specifically covered by this section.~~

Sec. 10.03.005 ~~Water and Wastewater. Construction standards.~~

- (a) Water supply and distribution. The water infrastructure required to serve development shall adhere to the Engineering Design Standards Manual and include, at a minimum, all necessary water mains, fire hydrants, service connections, valves, fitting and miscellaneous parts required to complete the system, or water supply and treatment facilities needed if not connected to the City's water system.*
 - (1) The developer shall pay all costs of the water supply and distribution system, unless approved based on Section 10.03.011(b).*
 - (2) All easements required by the City shall be dedicated by plat if within the platted boundary, with locations approved by the City Engineer in accordance with the Engineering Design Standards Manual. If outside the platted boundary, easement documents, prepared and accepted by the City, shall be provided prior to receiving plans for construction. Said easements shall be filed by the City with Grayson County.*
- (b) Wastewater collection and treatment. The wastewater infrastructure required to serve development shall adhere to the Engineering Design Standards Manual and include, at a minimum, all necessary wastewater collection lines, manholes, lift stations, cleanouts, service connections, and other miscellaneous elements required to complete the system, or wastewater treatment facilities if not connected to the City's wastewater system.*
 - (1) The developer shall pay all costs of the wastewater collection and treatment system, except for oversizing of water mains included in the City's water master plans that serve needs projected beyond the development site and exceed the line size needed to serve the development.*
 - (2) The amount of participation by the City for oversized improvements will be determined by taking alternate bids for the infrastructure necessary above and fittings versus the cost of the minimum requirement determined by the Engineering Design Standards Manual. The City will pay the difference in cost between the*

oversized lines and minimum requirement as determined by the alternate bids and funding approved by City Council, subject to a development agreement between the property owner and the City.

- (3) All easements required by the City shall be dedicated by plat if within the platted boundary, with locations approved by the City Engineer in accordance with the Engineering Design Standards Manual. If outside the platted boundary, easement documents, prepared and accepted by the City, shall be provided prior to receiving plans for construction. Said easements shall be filed by the City with Grayson County.*
- (c) On-site wastewater system. In cases where the City Engineer determines that extension of, and connection to, the City's wastewater system is impractical or not feasible, and where the Grayson County approves the use of an on-site wastewater disposal system, such on-site system shall provide adequate sewage disposal for all lots, tracts, parcels and structures in the development as per the requirements of Grayson County.*
 - (1) Documentation from Grayson County allowing on-site wastewater for the proposed development, based on size of lot(s) and land use, shall be submitted to the City with civil plans.*
- ~~(a) All improvements shall be made in accordance with the standards established by this Chapter that are in effect at the time of submission of a plat or other land development permit application.~~
- ~~(b) The city engineer has been authorized to promulgate rules, regulations, standards, specifications and other documents as necessary to establish minimum criteria for the construction of streets and utilities to be constructed within the City and the area within the limits of its jurisdiction. These standards, specifications and documents are titled "City of Sherman Standard Specifications and Contract Documents for Public Works Construction" and are on file in the city clerk's office. This document may be amended periodically, provided that an amendment must be filed with the city clerk at least ten (10) days prior to the date such amendment becomes effective. These rules, regulations, standards, specifications and documents shall not conflict with this or any other ordinances of the City.~~

Sec. 10.03.006 *Storm Drainage. Surveying and engineering.*

- (a) Drainage system design. The drainage infrastructure required shall adhere to the Engineering Design Standards Manual and include, at a minimum, all necessary storm sewer lines, inlets, manholes, junction boxes, drainage channels, box culverts, valley gutters and other miscellaneous elements required to complete the system. The developer shall pay all costs of the design and development of stormwater drainage associated with the proposed development.*
- (b) 100-year floodplain. For the health, safety and welfare of the City's residents and for the conservation of water, storm drainage and wastewater facilities, the City prohibits development of any portion of a property that lies within the 100-year floodplain, in accordance with all Federal Emergency Management Agency (FEMA) regulations.*

- (c) *Off-site Drainage. When any proposed development requires off-site grading where storm water runoff has been collected or concentrated, it shall not be permitted to drain onto adjacent property except in existing major creeks, channels, storm sewers or streets unless one of the following is provided:*
- (1) *Notarized Letter of Permission. The letter shall state that the permission shall bind the owner of the affected property and be a covenant running with the land. It shall also refer to the plans for the improvements creating the need for the permission. The letter shall be filed with Grayson County.*
 - (2) *Drainage Easement. A drainage easement, either private or public, shall be dedicated for major creeks, ditches, culvert, or drainage channels and shall be of a width sufficient to comply with the criteria outlined in the Engineering Design Standards Manual.*
- (a) ~~Surveying:~~
- (1) ~~General: The developer shall retain a licensed surveyor to make all property surveys, prepare the plat, set the property monuments and lot corners and do the necessary construction staking. The fees, salary and other compensation for such surveying services shall be paid for by the developer.~~
 - (2) ~~Accuracy: All survey work shall have a maximum error of closure of one in seven thousand five hundred (1:7500).~~
 - (3) ~~Monuments: Permanent type monuments shall be placed at each corner and angle point of the boundary survey of the subdivision, as well as at the corners of all street intersections within the subdivision, and on all property line points of curve and tangent. These monuments shall be Class "B" concrete, eight (8) inches in diameter, and thirty-six (36) inches long. A three-fourths (3/4) inch diameter steel bar eighteen (18) inches long shall be placed in the center of this monument to denote the exact point being marked. These monuments shall be set so that they are flush with the finished grade.~~
 - (A) ~~Common boundaries: If the adjacent, abutting or adjoining property outside the subdivision does not belong to the developer of the subdivision being considered, then the developer must acquire written agreement between himself and the owner or owners of adjacent, abutting or adjoining property as to the common boundary line between said properties. In the event the developer of the subdivision under consideration and the owner or owners of adjacent, abutting or adjoining properties cannot agree on a common boundary line, then the City shall act, at the expense of the developer of the subdivision being considered to establish the legal boundary, and at least three (3) permanent markers shall be placed, with the consent of the City and the property owners involved, establishing an agreed point which shall be tied to the original survey or ancient subdivision as provided thereof.~~
- (b) ~~Engineering: The developer shall retain a registered civil engineer to prepare the plans and specifications and supervise the construction of the streets and utilities. Plans and specifications will not be reviewed or considered in any respect unless a registered civil engineer is in charge of the design and supervision of construction of the proposed improvements and his seal is affixed to the plans and specifications. It shall be the duty of~~

such engineer to insure that the plat, plans, and specifications are in accordance with the requirements of this Chapter, and that all improvements are constructed in accordance with this Chapter. The fees, salary and other compensation for such engineering services shall be paid by the developer. These provisions will not be applicable for utilities such as gas, telephone, and electric power, where such utilities are designed and constructed by private companies who are franchised to operate in Sherman.

Sec. 10.03.007 *Easements and Right-of-Way. Construction plans and specifications.*

- (a) *Easements and rights-of-way shall be dedicated per the dimensions and specifications established in the Engineering Design Standards Manual either by plat or by separate instrument if the City Engineer determines the need outside of the typical platting process.*
- (b) *Franchise utilities. Franchise utilities shall be made available for each lot, including electrical, telephone, television, internet, and other wire carrier type utilities. Franchise utilities shall typically be located in public utility easements (U.E.) provided at the locations and widths specified in the Engineering Design Standards Manual.*
- (c) *Abandonment. Public rights-of-way and easements held by the City shall be abandoned by separate instrument. Abandonment of a public right-of-way upon the request of a developer or property owner requires a process of property owner notification, approval of affected public utility companies and City Council approval, as follows:*
 - (1) *All property owners abutting the right-of-way or easement proposed for abandonment shall be notified by the applicant by certified letter. A written response from each abutting property owner in support or not in support of the abandonment shall be provided to the City Engineer by the applicant prior to City consideration of the action. If any landowners are not in support of the action and explain their reasons accordingly, the application shall not be considered for action by the City Council.*
 - (2) *All public utilities, including franchise utilities, must be in support of the abandonment prior to City consideration of the action.*
 - (3) *The applicant shall describe why the right-of-way or easement is no longer needed to serve a public purpose and explain the proposed new use of the area to be abandoned.*
 - (4) *The right-of-way/easement abandonment application shall be submitted along with the supporting documentation to the City Engineer for review and submittal to City Council for approval.*
- (d) *Encroachment Agreements. The City may allow permitting of certain property owner improvements within easements with the execution of an Encroachment Agreement, as detailed in the Engineering Design Standards Manual, Section 1.*

- ~~(a) General: Prior to the construction of any streets or utilities, the developer shall furnish two (2) complete sets of plans and specifications for said construction to the city engineer. These documents shall be transmitted in writing. These plans and specifications will be reviewed for conformity with this Chapter and the City standards. The plans and~~

specifications shall be approved in writing prior to any construction. Prior to construction the developer shall present to the City a signed and notarized developer's contract between himself and the City. The developer's contract shall be in accordance with Section 10.03.008 of this Chapter. The city engineer shall be notified prior to the beginning of construction so that he may inspect the work.

(b) — Plans:

- (1) — General: The plans shall be securely bound and shall consist of a title sheet and such plan-profile and detail sheets as are required to meet the requirements of this Chapter and to properly define the proposed work. The title sheet shall show the name of the subdivision, engineer, date, and an index of drawings. Each plan-profile and detail sheet shall contain this minimum general information: engineer's seal and signature, north arrow, and a title block showing name of the subdivision, scale, date, and sheet number. All plans shall be on media measuring twenty-four (24) inches by thirty-six (36) inches. Plan-profile sheets shall be drawn at an appropriate scale or as directed by the City Engineer.
- (2) — Plan-profile sheets for streets and alleys: There shall be a plan-profile for each street and alley. These plan-profiles shall show the rights-of-way of the streets, portions of rights-of-way of intersecting streets, location of curbs and gutters with respect to property lines, curb return radii, existing utilities, reference bench marks, and other information necessary to define the work. The profile shall show the existing ground on each side of the street at the property line, the proposed grade of the top of the curb for each side of the street, location of utilities, and other information necessary to define the work. The existing and proposed street centerline grades may be shown in lieu of property line and curb grades when permitted.
- (3) — Plan-profile sheets for sanitary sewer and storm sewer: The plans shall show all information necessary to locate and construct the proposed work, and shall show the locations of all manholes, inlets, and other appurtenances of the system. The profile shall show the existing natural ground at the sewer centerline and the proposed grade at the centerline if such grade will not be the same as the existing grade. The size, grade and material of the proposed pipes and the flow lines of all manholes, inlets, etc., shall be shown. Both the flow line and the inside top of the pipes shall be shown in the profile. These plans shall be accompanied by the engineer's calculations when requested by the city engineer.
- (4) — Plan for water distribution system: The plan shall show all information necessary to locate and construct the proposed work, and shall show the location of all valves, fittings, fire hydrants and other appurtenances of the system.

(c) — Specifications: The specifications shall be securely bound and shall consist of the following minimum information: General conditions of agreement, special conditions of agreement, and all applicable technical specifications. The special conditions shall contain provisions for time of completion, performance, and payment bonds, and other pertinent requirements.

Sec. 10.03.008 *Trails and Open Space.* ~~Developer's contract (Three-Party Agreement).~~

(a) Open space required.

The provision of adequate land for use as trails and open space is necessary for the protection of public health, safety, and general welfare of the community. Increased residential development in the city limits and extraterritorial jurisdiction impacts the current standards for recreational resources and creates the need for additional recreation resources as a result of the increased population so that adequate service levels for trails, and open space facilities may be maintained. To offset this impact, the City Council finds that is necessary to require trails and open space, where appropriate.

- (1) Applicability. *A contiguous residential subdivision, including a single-family or multifamily residential subdivision, with 2 or more gross acres or 20 or more lots located within the city limits or the extraterritorial jurisdiction shall provide for open space and land for trail and recreational purposes. A contiguous subdivision is defined as abutting or separated only by a local or collector street to the subdivision. Subdivisions separated by rights-of-way, drainage or utility easements in excess of sixty (60) feet in width shall not be considered as contiguous.*
- (2) Land area. *The minimum amount of land required to be reserved as open space shall be 10 percent of the total gross residential subdivision acreage.*
- (3) Location. *The open space shall be located within the proposed subdivision. Each phase of the proposed subdivision shall provide the required open space for that phase.*
- (4) Standards. *Land required for open space reservation for trail and recreational purposes shall meet the following size, character, and location conditions:*
 - (A) *At least 50 percent of the required open space shall be outside of the 1% floodplain on level, well-draining land that is suitable for use as a playfield or playground, as determined by the City.*
 - (B) *Required open space should include site features such as shade trees, vistas, visual interest, historic site elements, well-draining and stable soils, and areas suitable for constructing amenities.*
 - (C) *Open space not suitable for the development of amenities, as determined by the City, may not be accepted by the City as satisfying the open space requirement.*
 - (D) *Open space should be open to public view to enhance property value, protect public safety, and minimize conflict with adjacent land uses. Open space should be sited open to streets, other public uses such as schools and lots shall face onto the open space instead of backing to them (at least two sides of the open space). Exceptions can be considered due to topography, shape, drainage or other reasons.*
 - (E) *Required open space shall provide a minimum of 200 feet of frontage on a dedicated public street or of a width acceptable to the City. Secondary frontages to the open space may be smaller, particularly trail connections, and open space connections to multiple streets, sidewalks, and trails.*
 - (F) *The area shall not be subject to any reservation of record, liens or encumbrances of any kind, or easements which will interfere with the use of*

the land for open space, trail, or recreational purposes, as determined by the City.

- (G) Perpetual ownership, management, and maintenance of the required open space shall be transferred to a mandatory Property Owners' Association and recorded by separate instrument.*

(5) Usable Open Space Requirements.

- (A) Open space required to be reserved under this section shall be usable and include recreational facilities such as swimming pools, play equipment for children, ball fields, court games, picnic tables, or similar. Natural areas may be included as usable open space if improved with a minimum eight (8) feet wide concrete walking trail. Such facilities and improvements must be completed and accepted by the City as a condition of the City's final acceptance of the subdivision.*
- (B) Vehicle parking shall be provided along streets abutting the open space. These streets should be sized adequately to accommodate parking (typically parallel parking spaces) on both sides of the street and may require additional right-of-way and pavement at the discretion of the City Engineer based on location and context.*

- (6) Alternatives. Alternative design standards, locations, or contexts from the standards of this section may be considered by the Parks and Recreation Director if shown that the proposed alternative is otherwise superior to the standards presented in this Chapter and sufficiently advances the City's recreation goals.*

(b) Citywide Trails.

- (1) Applicability. All residential and commercial development shall be required to dedicate land and construct trails per the provisions of this section at the time of a plat or site plan.*
- (2) Locations. Trails depicted on the Trails Master Plan shall be dedicated to the City and constructed along with other required public infrastructure improvements. Trails shall be located in the general locations and alignments depicted in the Trails Master Plan. Trails required or proposed adjacent to creeks or greenways shall be coordinated with the Parks and Recreation Department and shall be staked in the field by the developer and approved by the Director of Parks and Recreation prior to the civil plans being issued for construction.*
- (3) Surface Area. If the trail is not located on City-owned property, a minimum of 25 feet of right-of-way or public access easement of suitable level ground surface for trail construction shall be dedicated to the City. This area shall be located outside of the 1% floodplain unless otherwise approved by the Director of Parks and Recreation. In areas of heavy tree cover or significant topography, additional land may be necessary to maintain trees.*
- (4) Trail Standards.*
 - (A) Trails shown on the Trails Master Plan shall be a minimum of 10 feet to 12 feet in width as determined by the Director of Parks and Recreation,*

constructed to the standards depicted in the Trails Master Plan, unless otherwise authorized by the Director of Parks and Recreation or in other City-approved plan or agreement.

- (B) If the trail is not located on City-owned property, a minimum of 20 feet of right-of-way or public access easement or 40 feet adjacent to a creek or other similar water feature, shall be dedicated as approved by the Director of Parks and Recreation.*
- (C) A trail constructed to the City's trail standards may be constructed within the right-of-way or public utility easement as a substitute for a street sidewalk if the Trails Master Plan designates a trail along the street.*
- (5) Alternatives. Alternative locations or design variation(s) of sidewalks, pedestrian access facilities, or hike and bike trails to a standard that deviates from the Trails Master Plan can be requested to the City Manager. If approved, ownership and maintenance shall be transferred to the property owner or Property Owners' Association and recorded by separate instrument, along with a public access agreement.*
- (c) Common Areas and improvements. A Property Owners' Association (POA) and a recorded declaration of covenants, conditions, and restrictions (CC&Rs) are required in accordance with Section 10.02.008 for any new development in which open space, trails or other areas or improvements are required under this section.*
- ~~(a) Prior to construction the developer shall present to the City a developer's contract on forms obtained from the city engineer. This contract shall itemize the obligations of the developer and the City with regard to the proposed subdivision and shall itemize any approved variances from the developer's contract.~~
- ~~(b) No work shall be performed within the proposed subdivision until the developer's contract has been signed and properly notarized by the developer and the City.~~
- ~~(c) No work shall be performed within the proposed subdivision until the developer has a signed contract with a private contractor for the complete installation of all streets, utilities, and other improvements.~~
- ~~(d) No work shall be performed within the proposed subdivision until the developer presents to the city manager a satisfactory performance bond and a payment bond as provided by applicable law, from the contractor in favor of the developer and the City. Such bond shall be made for one hundred percent (100%) of the contract price for all streets and utilities and public works to be installed in the new subdivision, and shall be in the form, and contain, all other provisions set forth in applicable law. The approved form of bonds are on file with the City's Engineering Department.~~

Sec. 10.03.009

~~Tree Protection Final inspection.~~

(a) General

- (1) Purpose. The purpose of this section is to preserve, protect and enhance existing trees and mitigate the effects of tree removal within the City of Sherman and its extraterritorial jurisdiction. Trees, particularly native species, add natural beauty and distinct local character, add shade, promote water conservation, provide*

locations for habitat, and increase property values. The provisions of this section are intended to support the long-term viability of healthy trees and promote natural ecological, environmental, and aesthetic quality in the community.

- (2) Authority. The provisions of this section are adopted in accordance with state law and the City Charter. The provisions of this section shall be administered by the City Manager or his/her designee.
- (3) Applicability. The provisions of this section shall apply to all property within the City limits and its extraterritorial jurisdiction. Applications for approval of subdivisions of land or plats or tree removal permits submitted after December 18, 2023 shall account for protected trees within the subject property in accordance with the provisions of this section and otherwise comply with the requirements of this section.
- (4) Exemptions. Exemptions from the requirements of this section are as follows:
 - (A) Subdivisions of land that total five (5) acres or less, or where no subdivision is proposed, parcels of land five (5) acre or less.
 - (B) Trees that a certified arborist has determined and documented are dead, diseased, declining, or safety hazards.
 - (C) Proposed public streets, utility easements, and required fire lanes.
 - (D) As otherwise exempt under applicable law, including Section 212.905 of the Texas Local Government Code.

(b) Definitions. *See Section 10.01.003*

~~Caliper inch. The diameter of the trunk measured twelve (12) inches above grade.~~

~~Clear cutting. The indiscriminate cutting, plowing, or grubbing of trees without regard to type or size for the purpose of clearing the land.~~

~~Critically alter. The uprooting, removing the canopy or severing the main trunk of a tree, or causing damage which may cause a tree to die. This includes but is not limited to the removal of a tree from a property, damage inflicted upon a tree by machinery, storage of materials or the compaction of soil above the root system of a tree, a change in the natural grade above the root system of a tree, or excessive pruning.~~

~~Drip line. A vertical line run through the outermost portion of the crown of a tree and extending to the ground. This may also be referred to as the critical root zone.~~

~~Floodplain. The area designated as being within the 100-year floodplain on the Federal Emergency Management Agency (FEMA) flood insurance map (FIRM).~~

~~Mitigation. The method by which trees are replaced whether through replanting on the subject property, planting or transplanting to another location or same property, or through payment of fees in lieu of replanting approved by the City.~~

~~Parcel of land. Land in the City of Sherman city limits or extraterritorial jurisdiction,~~

~~whether platted or not platted.~~

~~Street perimeter buffer. A required buffer located at the perimeters of a proposed development site which is directly adjacent to a street or roadway. These areas are considered as areas of high visual impact, and preservation of existing vegetation located along the perimeter of the proposed development site is highly encouraged and used to screen the site and minimize potential nuisances between land uses.~~

~~Protective fencing. Chain link, silt fence, or other fencing used to protect preserved trees during construction activities.~~

~~Tree, dead (or declining). A tree that is dead or in severe decline with substantial structural defects, no remedial options available, and no chance of recovery, as determined and documented by a certified arborist.~~

~~Tree, protected. Any tree of a size and species as outlined in Table 10.1 that is required to be protected under this section.~~

~~Tree, replacement. Trees planted to mitigate the loss of trees as a result of development or tree removal.~~

~~Tree, street. Trees planted within the right-of-way that may be located in a constrained location and should contain root systems and branch growth conducive to growth around pedestrians, vehicles, and public infrastructure.~~

~~Tree Fund. A City administered fund established for collection of fees in lieu or replacement trees paid as mitigation and may include other contributions made in support of tree protection efforts.~~

~~Tree survey. A plan or drawing to scale that identifies the exact size, location, condition (healthy, dead, or declining), and species of protected trees.~~

(c) Tree Classifications

- (1) Protected Tree. Any species listed in Table 10.1 that measures 12 caliper inches or larger. Species not so listed do not require protection or replacement.
- (2) Heritage Tree. Any species listed in Table 10.1 that measures 36 caliper inches or larger.

(d) Protected Tree Species

The requirements for tree replacement and mitigation as outlined in this section apply only to the trees listed in Table 10.1.

Table 10.1

Common Name	Scientific Name
Pecan	Carya illinoensis
Black hickory	Carya texana
Walnut	Juglans nigra
Southern magnolia	Magnolia grandiflora
Texas oak	Quercus buckleyi
Red oak*	Quercus rubra
Bur oak*	Quercus macrocarpa
Chinkapin oak*	Quercus muehlenbergii
Shumard red oak	Quercus shumardii
Post oak	Quercus stellata
Live oak*	Quercus virginiana
Bald cypress	Taxodium distichum
American elm	Ulmus americana
Cedar elm*	Ulmus crassifolia
Lacebark elm*	Ulmus parvifolia
Chinese Pistachio*	Pistacia chinensis
Bigtooth maple	Acer grandidentatum
Caddo maple	Acer saccharum 'Caddo' (Acer barbatum)
Red mulberry	Morus rubra

* Trees that are recommended as appropriate street trees within public right-of-way or in close proximity.

(e) Tree Removal Permit

- (1) Prohibited Activities. It is unlawful for any person to remove or critically alter a tree without first obtaining a tree removal permit where it is required by this section or unless otherwise authorized in this section. Each tree removed or critically altered without a required permit shall constitute a separate offense.
- (2) Presumption. Where trees are removed or critically altered in violation of this section but evidence of the number of trees so removed or critically altered is unavailable, it shall be presumed that every 1,200 gross square feet of tree canopy removed or critically altered, as shown on an aerial image taken within 36 months of the date of the removal or critical alteration, constitutes the removal or critical alteration of one tree.
- (3) Tree Removal Permit Required. A tree removal permit is required for the removal or critical alteration of any tree on a parcel greater than five (5) acres within the City limits or extraterritorial jurisdiction. A tree removal permit is not required if:
 - i. The tree is being removed or critically altered on an existing platted lot being used for a one- or two-family residence.
 - j. The tree endangers the public health, welfare, or safety and immediate removal is required from a certified arborist, including documentation stating the diameter, species and reason for removal;
 - k. The tree has disrupted a public utility service due to a tornado, storm, flood,

or other force of nature. Critical alteration shall be limited to the portion of the tree reasonably necessary to re-establish or maintain reliable utility service;

- l.* The tree is being critically altered as part of routine utility maintenance;
- m.* The tree is located on City-owned property and is being critically altered as part of routine maintenance;
- n.* The tree is dead as documented by a certified arborist, including information citing the diameter, species, and reason for removal, unless the tree was required under a landscape plan or was a required replacement tree under this section;
- o.* The tree is located on the property of a plant or tree nursery, or an orchard, where trees are planted and grown on the premises for the sale or intended sale to the general public in the ordinary course of the nursery's or orchard's business; or
- p.* Removing underbrush with hand tools, not including grubbing under drip lines.

(4) Tree Removal Permit Application. A tree removal permit application and submittal fees shall be submitted to the Development Services Department in conformance with the requirements of this section. All applications and filings shall meet the requirements as defined by the tree removal application checklist, as it exists or may be amended, which shall be established and maintained by the Director of Development Services.

(5) Approval. The City Manager or his/her designee shall have the authority to issue a tree removal permit if it complies with all the requirements of this Code.

(6) Appeals. See Subsection 10.03.009(j) for appeals.

(7) Expiration. A tree removal permit shall expire six months after its issuance.

(f) Tree Survey

(1) Tree Survey Required. A tree survey shall be submitted concurrent with the submittal of a preliminary plat application or a tree removal permit. The tree survey shall be performed and certified by a certified arborist, registered landscape architect, or registered professional land surveyor. The submitted tree survey shall include the exact size, location, condition (healthy, dead, or declining), and species of each protected tree that measures 12 caliper inches or larger. It is recommended that the tree survey include trees that measure eight (8) caliper inches or larger to retain eligibility for preserved tree credits according to Subsection 10.03.009(g)(1).

(2) Alternatives to a Tree Survey.

- (A) No Protected Trees on Site. In lieu of a tree survey, the applicant may submit a sworn affidavit or sworn declaration from a certified arborist, registered landscape architect, or registered professional land surveyor certifying that there are no protected trees on the property or all protected trees on the property are entirely dead or declining. The affidavit or

declaration shall be approved by the City Manager or his/her designee to be accepted as an alternative to the required tree survey.

(B) Preservation Areas. In lieu of a tree survey, the applicant may submit a landscape plan together with the preliminary plat submittal or a tree removal permit depicting no-disturbance preservation areas that include substantial existing tree canopy coverage that will not be disturbed, removed or critically altered, with the following conditions:

- (i) The no-disturbance preservation areas shall constitute a minimum of 20 percent of the land subject to the preliminary plat application or tree removal permit that contains a substantial existing tree canopy;
- (ii) To confirm the existence of substantial existing tree canopy coverage in the designated areas, the alternative plan submittal shall include aerial photographs and on-site photos. City staff may deem it necessary to conduct a visit to the project site for visual confirmation, and if so, the applicant shall allow such visit;
- (iii) Trees within the designated areas do not need to be identified as a protected tree species;
- (iv) The areas may be selected by the applicant but shall be located in the following priority order:
 - (1) Floodplains and riparian corridors;
 - (2) Street perimeter buffer areas;
 - (3) Trail corridors, as depicted in the City's adopted Trails Master Plan;
 - (4) Parkland, open spaces, and outdoor amenity spaces; and
 - (5) Other areas, as selected by the applicant.
- (v) The City Manager or his/her designee must approve the landscape plan with such preservation areas designated, and such approval may be withheld at the sole discretion of the City Manager or his/her designee.

(g) Tree Replacement Standards

- (1) Mitigation Ratios. Protected trees meeting the minimum size and species requirements shall be replaced according to the mitigation ratios established in Table 10.2, unless an alternative to the tree survey requirement was approved under Section 10.03.009(f). To the extent any provision of this section conflicts with a provision of Section 212.905 of the Texas Local Government Code, the provision in Section 212.905 controls.

Table 10.2	
Caliper Inches	Mitigation ratio
12" - 23"	Replace 1 caliper inch for every 2 caliper inches removed
24" - 35"	Replace 1 caliper inch for every 1 caliper inch removed

36" and above	Replace 3 caliper inches for every 1 caliper inch removed
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- (2) Mitigation Limit. The total number of caliper inches required to be mitigated, as calculated according to the mitigation ratios in Table 10.2, shall not exceed 100 caliper inches per acre.
- (3) Replacement Tree Size. All replacement trees required per the mitigation ratios in Table 10.2 shall be a minimum of three (3) caliper inches.
- (4) Landscape Credit. Replacement trees that are planted on site as mitigation for removal of protected trees are eligible to be counted toward the landscaping requirements of Section 14.04.006 of this Code.
- (5) Timing of Mitigation Compliance.
 - (A) Replacement trees shall be planted within 90 days of issuance of a tree removal permit. If replacement trees cannot be planted within 90 days, the City Manager or his/her designee may approve a delay in replacement of up to six months after the date of tree removal permit issuance.
 - (B) If an applicant cannot replace the mitigation trees required or gain approval to plant on an alternate site, a fee-in-lieu payment into the City Tree Fund shall be required before the tree removal permit can be issued.

(h) Tree Preservation Incentives

- (1) Preserved Tree Credits. Trees listed in Table 10.1 that are preserved onsite and measure eight (8) caliper inches or greater may be credited toward the replacement trees required in Subsection 10.03.009(f)(1) or the landscape requirements in Subsection 14.04.006.
- (2) Preserved tree credits will be granted according to the standards set out in Table 10.3.

Table 10.3	
Preserved Tree Size (in caliper inches)	Credits toward replacement tree requirement
8" - 35"	1 caliper inch for every 1 caliper inch preserved
36" and above	36 caliper inches

- (3) Code Conflicts. In certain cases, the preservation of protected trees may be desirable enough to take priority over full compliance of certain conflicting subdivision and zoning regulations, including, but not limited to, setbacks, lot design standards, building heights, sidewalks, lighting, signage, parking spaces, parking lot design, and driveway separation. When a conflict exists between the preservation of a protected tree and other provisions of this Chapter 10 or of Chapter 14, the applicant may request an alternative standard or design. The applicant's request may be considered and approved by the City Manager or his/her designee, provided that a reasonable application of public health and safety standards are maintained with the proposed design.

(i) Alternative Mitigation Methods

- (1) Fee-in-Lieu Payment. If replacement tree plantings cannot be fully accommodated on site with adequate space and conditions for long-term health, then an alternative fee-in-lieu payment to the City Tree Fund, which is hereby established, may be considered. If the applicant can demonstrate every effort has been made to plant the required replacement trees on site, the City Manager or his/her designee may consider a fee-in-lieu payment for the remaining balance of replacement tree value. Payments to the fund will be on a per caliper inch basis and are set out in Appendix C, Fee Schedule, of this Code. Payments to the Tree Fund are to be used for the sole purpose of planting trees on public property, including parks, along streets, and in common open spaces, and can also be used for pruning, irrigation, and maintenance of trees on public property. Replacement trees and fee-in-lieu payments may be combined to satisfy the requirement.
- (2) Off-Site Mitigation. If replacement tree plantings cannot be fully accommodated on site, then replacement trees may be proposed to be planted in a location mutually agreed upon by the City Manager or his/her designee and the applicant, including parks and other public places such as streets, medians, and other common open spaces.

(j) Appeals

The City Council shall consider an appeal seeking alternative compliance if it determines that all options to achieve compliance with this section have been exhausted and the required mitigation creates an undue hardship for the applicant. An applicant may submit an alternative compliance plan or request for relief from compliance as part of an appeal application to the City Council. The applicant's proposed alternative compliance plan shall clearly delineate any proposed reductions to the standards and depict alternative standards or relief.

(k) Tree Protection Standards

To protect designated preserved trees or no-disturbance preservation areas during development, construction or disturbance is prohibited within the dripline area of the trees. During construction, this defined area shall be flagged and encircled with protective fencing and a three-inch layer of mulch spread beneath the drip line. Trees preserved on site must remain in compliance with the assurance of establishment and vitality requirement in Section 14.04.006 of this Code.

(l) Enforcement

- (1) Enforcement. The City shall determine compliance and enforcement in accordance with the provisions of this Code.
- (2) Clear-cutting. Clear-cutting of a property in advance or while seeking approval of annexation, zoning, utility agreement, development agreement, economic incentives, or other discretionary approvals of the Sherman City Council may result in denial or refusal of consideration.

~~(a) Upon the completion of construction the developer shall arrange a final inspection of all streets and utilities. This inspection shall be attended by the developer, his engineer, the~~

contractor, and the city engineer.

- (b) ~~If the city engineer determines that the streets and utilities are complete and in accordance with this Chapter and the plans and specifications, he shall so inform the developer. The developer shall then transmit in writing to the City a notice of completion, the required bonds, and the as-built drawings.~~

Sec. 10.03.010 ~~Rural Subdivisions. Plans of Record drawings.~~

Single-family development in the extraterritorial jurisdiction or city limits in an estate or agricultural zoning district may be designed with alternative public improvements befitting a rural character. It is the intent that these modified standards be used to maintain a rural design aesthetic atmosphere for a development without sacrificing the integrity of the current or future public infrastructure systems. Subdivisions identified by the nature of their semi-rural location and which conform to the following standards may be allowed:

- (a) *The minimum area of each lot shall be one (1) acre.*
- (b) *Street standards shall be in accordance with the Engineering Design Standards Manual.*
- (c) *Surface drainage may be handled by open ditch, channel or other approved methods rather than a standard curb and gutter section.*
- (d) *The subdivision shall be served by an approved water supply and distribution system and an approved wastewater disposal system which may be by municipal wastewater, or lot by lot on-site septic system, subject to the other standards in this Chapter.*

~~Upon the completion of construction, and prior to the City's acceptance, the developer shall furnish the city engineer with a complete set of reproducible "plans of record" drawings and a set of prints made therefrom. Each sheet of these drawings shall be plainly marked "PLANS OF RECORD" and shall be signed by the engineer who prepared the plans and supervised the construction.~~

Sec. 10.03.011 ~~Responsibility for Cost of Improvements. Formal acceptance by City.~~

- (a) *Developer cost of installation. For all public improvements required in this Chapter, the developer shall be fully responsible for all costs to design and install the infrastructure, unless otherwise specified in this Chapter or development agreement approved by City Council.*
- (b) *Oversizing of roadway, water and/or wastewater infrastructure. When the City Engineer determines that roadway, water and/or wastewater improvements and facilities should be sized in excess of what is needed for an individual subdivision, either because the larger facility is expressed in a master plan or due to other factors that the City has determined is necessary to accommodate future growth, the City may elect to participate in the construction cost in order to oversize the facility. Subject to approval of the City Council through consideration of funding availability and method of reimbursement, the City shall arrange for the developer to design and construct the identified improvements, whether on-site or off-site of the property desired for development. A developer will not be required to bear the cost of over-sizing facilities beyond those necessary to support the specific development in question.*

- (1) *The amount of participation by the City for oversized improvements will be determined by taking alternate bids for the infrastructure necessary above and fittings versus the cost of the minimum requirement determined by the Engineering Design Standards Manual. The City will pay the difference in cost between the oversized lines and minimum requirement as determined by the alternate bids and funding approved by City Council, subject to a development agreement between the property owner and the City.*
- (c) *Pro-rata. All water and wastewater facility extensions will be handled under Article 13.07, Division 4, of the City of Sherman Code of Ordinances.*
- ~~(a) — After the city engineer has inspected the work and indicated to the developer that the streets and utilities are acceptable to the City, the developer shall give a formal notice of completion to the City. This notice shall be in writing, and shall be accompanied by the plans of record drawings, payment and performance bonds, and all fees that are due.~~
- ~~(b) — Upon receipt of the plans of record drawings, payment and performance bond, and all fees, the city engineer will issue a notice of acceptance of the streets and utilities.~~

Sec. 10.03.012 *Proportionality Appeal. Special provisions.*

- (a) *Definitions. For the purposes of this section, the following terms, phrases, words, and their derivatives shall have the meanings given herein.*
Public facilities system means the collection of water, wastewater, street, drainage or park facilities owned or operated by or on behalf of the City for the purpose of providing services to the public, including existing and new developments.
Public infrastructure improvement means a water, wastewater, street, drainage or park facility that is a part of one or more of the City's public facilities systems.
- (b) *Purpose, applicability and effect.*
 - (1) *Purpose. The purpose of a proportionality appeal is to assure that a requirement to dedicate, construct or pay a fee for a public infrastructure improvement imposed on a proposed plat as a condition of approval does not result in a disproportionate cost burden on the property owner, taking into consideration the nature and extent of the demands created by the proposed development on the City's public facilities systems.*
 - (2) *Applicability. An appeal under this section may be filed by a property owner to contest any requirement to dedicate land, to construct improvements or to pay development fees (other than impact fees adopted under Texas Local Government Code Chapter 395), for a public infrastructure improvement, which requirement is imposed under this Chapter to a plat application pursuant to this Chapter, whether the requirement is applicable under uniform standards, or is imposed pursuant to an individual evaluation of the proposed subdivision.*
- (c) *Proportionality determination by City Engineer. Prior to a decision by the Planning and Zoning Commission on a preliminary plat application, or if no preliminary plat application is required, on a final plat application, the City Engineer (who for the purposes of this subsection (c) must be a licensed professional engineer) shall affirm that public infrastructure improvements being imposed as a condition of plat approval is roughly proportionate to the demand created by the development on the City's public facilities*

systems, taking into consideration the nature and extent of the development proposed.

- (1) *In making his proportionality determination, the City Engineer may rely upon categorical findings pertaining to on-site improvements; the proposed or potential use of the land; the timing and sequence of development in relation to availability of adequate levels of public facilities; impact fee studies or other studies that measure the demand for services created by the development and the impact on the City's public facilities systems; the function of the public infrastructure improvements in serving the proposed development; the degree to which public infrastructure improvements to serve the subdivision are supplied by other developments; the anticipated participation by the City in the costs of such improvements; any reimbursements for the costs of public infrastructure improvements for which the proposed development is eligible; or any other information relating to the mitigating effects of the public infrastructure improvements on the impacts created by the development on the City's public facilities.*
- (2) *Based upon his proportionality determination, the City Engineer shall affirm that the public infrastructure improvement requirements of the subdivision regulations do not impose costs on the developer for such improvements that exceed those roughly proportionate to those incurred by the City in providing public facilities to serve the development.*
- (3) *The City Engineer may promulgate any application requirements that may assist in making the proportionality determination required by this subsection (c).*
- (d) Commission and City Council determination. *The Planning and Zoning Commission and City Council shall take into account the City Engineer's report concerning the proportionality of public infrastructure improvement requirements to be applied to a proposed preliminary or final plat application, as the case may be, in making its decision on the plat application, and shall identify any variation to the requirements that are to be included as conditions to plat approval.*
- (e) Appeals.
 - (1) Who may appeal. *An appeal to the City Council under this subsection (e) may be filed by a property owner or the applicant for a preliminary or final plat, in which a requirement to dedicate land for, construct or pay a fee, other than an impact fee, for a public infrastructure improvement has been applied or attached as a condition of approval, or as grounds for denying the plat application.*
 - (2) Time for filing and request for extension of time. *The appeal shall be filed in writing within 10 days of the date the Planning and Zoning Commission takes action to recommend applying the public infrastructure improvement requirement to the plat application. The appeal shall be filed with the City Manager or the manager's designee and shall be forwarded to the City Council for consideration in conjunction with its deliberations on the plat application. The applicant may request postponement of consideration of the plat application by the City Council pending preparation of the study required by subsection (4) below, in which case the applicant must officially withdraw the plat application from consideration.*
 - (3) Form of appeal. *An appeal under this subsection (e) shall allege that application of the standard or the imposition of conditions relating to the dedication,*

construction or fee requirement (other than impact fees adopted under Texas Local Government Code Chapter 395) is not roughly proportional to the nature and extent of the impacts created by the proposed development on the City's public facilities systems, or does not reasonably benefit the proposed development.

(4) Study required. *The appellant shall provide a study in support of the appeal that includes the following information within 30 days of the date of appeal, unless a longer time is requested:*

- (A) *Total capacity of the City's water, wastewater, street, drainage or park system to be utilized by the proposed development, employing standard measures of capacity and equivalency tables relating the type of development proposed to the quantity of system capacity to be consumed by the development. If the proposed development is to be developed in phases, such information also shall be provided for the entire development proposed, including any phases already developed.*
- (B) *Total capacity to be supplied to the City's water, wastewater, street, drainage or park facilities system by the dedication of an interest in land, construction of improvements or fee contribution. If the plat application is proposed as a phased development, the information shall include any capacity supplied by prior dedication, construction or fee payments.*
- (C) *Comparison of the capacity of the City's public facilities system(s) to be consumed by the proposed development with the capacity to be supplied to such system(s) by the proposed dedication of an interest in land, construction of improvements, or fee payment. In making this comparison, the impacts on the City's public facilities system(s) from the entire development shall be considered.*
- (D) *The amount of any City participation in the costs of oversizing the public infrastructure improvement to be constructed in accordance with the City's requirements.*
- (E) *Any other information that shows the alleged disproportionality between the impacts created by the proposed development and the dedication, construction or fee requirement imposed by the City.*

(f) Land in extraterritorial jurisdiction. *Where the subdivision or the public infrastructure improvements are located in the extraterritorial jurisdiction of the City and are to be dedicated to a county under an interlocal agreement under Texas Local Government Code Chapter 242, an appeal or study in support of the appeal shall not be accepted as complete for filing by the City Manager unless the appeal or study is accompanied by verification that a copy has been delivered to Grayson County.*

(g) Decision. *The City Council shall decide the appeal in conjunction with its decision on the plat application. The council shall base its decision on the criteria listed in subsection (h) of this section, and may take one of the following actions:*

- (1) *Deny the appeal, and impose the standard or condition on the plat application in accordance with the City Engineer's recommendation or the Planning and Zoning Commission's recommendation on the plat; or*
- (2) *Deny the appeal, upon finding that the proposed dedication, construction or fee requirements are inadequate to offset the impacts of the subdivision on the public*

- facilities system for water, wastewater, street, drainage or park improvements, and either deny the plat application or require that additional public infrastructure improvements be made as a condition of approval of the application; or*
- (3) Grant the appeal, and waive in whole or in part any dedication, construction or fee requirement for public infrastructure improvements to the extent necessary to achieve proportionality; or*
 - (4) Grant the appeal, and direct that the City participate in the costs of acquiring land for or constructing the public infrastructure improvement under standard participation policies.*
- (h) Criteria for approval. In deciding an appeal under this section, the City Council shall determine whether the application of the standard or condition requiring dedication of an interest in land for, construction of, or payment of a fee for public infrastructure improvements is roughly proportional to the nature and extent of the impacts created by the proposed subdivision on the City's public facilities systems for water, wastewater, street, drainage or park facilities, and reasonably benefits the development. In making such determination, the council shall consider the evidence submitted by the appellant, the City Engineer's report and recommendation, considering in particular the factors identified in subsection (c) of this section, and, where the property is located within the City's extraterritorial jurisdiction, any recommendations from the county.*
- (i) Action following decision. If the relief requested under the proportionality appeal is granted in whole or in part by the City Council, the dedication, construction or fee requirement initially recommended by the Planning and Zoning Commission as a condition of plat approval shall be modified accordingly, and the standards applied or the conditions attached to Commission's recommendation on the plat application shall be conformed to the relief granted. Thereafter, the appellant shall re-submit the plat application to the City Council within 90 days of the date relief under the appeal is granted, in whole or in part, showing conformity with the City Council's decision on the appeal.*
- (j) Expiration of relief. If an applicant for plat approval prevails on a proportionality appeal, but fails to conform the plat to the relief granted by the City Council with the 90-day period provided, the relief granted by the City Council on the appeal shall expire and:*
- (1) The council may extend the time for filing the revised plat application for good cause shown, but in any event, the expiration date for the relief granted shall not be extended beyond one year from the date relief was granted on the appeal.*
 - (2) If the plat application is modified to increase the number of residential units or the intensity of nonresidential uses, the responsible official may require a new study to validate the relief granted by the City Council.*
 - (3) If the plat application for which relief was granted is denied on other grounds, a new petition for relief shall be required on any subsequent application.*
- ~~(a) No building, repair, plumbing or electrical permits shall be issued by the City for any structure on a lot in a subdivision for which a final plat has not been approved and filed for record, nor for any structure on a lot within a subdivision in which the standards contained herein or referred to herein have not been complied with in full.~~
- ~~(b) The City shall not repair, maintain, install or provide any streets or public utility services in any subdivision for which a final plat has not been approved and filed for record, nor in~~

which the standards contained herein or referred to herein have not been complied with in full.

- (c) — ~~The City shall not sell or supply any water or sewerage service within a subdivision for which a final plat has not been approved or filed for record, nor in which the standards contained herein or referred to herein have not been complied with in full.~~
- (d) — ~~When directed by the City Council, the city attorney shall institute appropriate legal action to enforce the provisions of this Chapter or the standards referred to herein with respect to any violation thereof which occurs within the City, within the extraterritorial jurisdiction of the City, or within any area subject to all or a part of the provisions of this Chapter.~~
- (e) — ~~If any subdivision exists for which a final plat has not been approved or in which the standards contained herein or referred to herein have not been complied with in full, and the City Council shall pass a resolution reciting the fact of such noncompliance or failure to secure final plat approval, and reciting the fact that the provisions of Subsections (a), (b) and (c) of this Section will apply to the subdivision and the lots therein, the city clerk shall, when directed by the City Council, cause a certified copy of such resolution under the corporate seal of the City to be filed in the deed records of Grayson County. If full compliance and final plat approval are secured after the filing of such resolution, the City clerk shall forthwith file an instrument in the deed records stating that Subsections (a), (b) and (c) no longer apply.~~
- (f) — ~~Provided however, that the provisions of this Section shall not be construed to prohibit the issuance of permits for any lots upon which a residence building exists and was in existence prior to passage of this Chapter, nor to prohibit the repair, maintenance or installation of any street or public utility services for, to, or abutting any lot, the last recorded conveyance of which prior to passage of this Chapter was by metes and bounds, and/or any subdivision or lot therein, recorded or unrecorded, which subdivision was in existence prior to the passage of this Chapter.~~
- (g) — ~~Building permits for new residential construction may be issued after the developers' contract is executed and approved. Occupancy permits will be issued when utilities and streets are complete and accepted by the City.~~
- (h) — ~~Conditions: Occupancy permits: Deferment of final street improvements will be accepted only under the following conditions:~~
 - (1) — ~~The property is adequately served by all weather facilities for ingress and egress for pedestrian and vehicular traffic, including fire apparatus.~~
 - (2) — ~~The property is served by all essential permanent utilities, such as water, sewage, electricity, and gas.~~
 - (3) — ~~The reason for noncompletion at this time is beyond the control of the builder, and is one which makes it impossible and impractical to proceed.~~
 - (4) — ~~The work can be completed in twelve (12) months or less.~~
 - (5) — ~~The occupant of the deferred properties will not be seriously handicapped in the use of the properties by the deferment of the work, nor will postponement endanger, mar or destroy work previously completed (such as provision of adequate drainage outfall, for example).~~
 - (6) — ~~Issuance of occupancy permits: Acceptance of the foregoing conditions must be in writing and signed by both the developer and the prospective occupant with the understanding that the developer and the developer alone is responsible for the final~~

completion of the street improvements before a permit for occupancy will be issued; further, that it is clearly understood that the City is completely absolved from any difficulty that might arise due to improper alignment and grade of curb and gutter as they tie into both the driveway approach, and the street improvements of the new subdivision.

- (i) — ~~As a condition precedent to the approval of any plat or development, the city engineer, commission or City Council can require any reasonable requirement in the public interest to the approval or recommendation of approval of any plat or development within the City or its extraterritorial limits.~~

~~Sec. 10.03.013 — Industrial or commercial subdivisions.~~

~~An industrial or commercial subdivision shall be processed for approval in the same manner as provided for a residential subdivision. The minimum right-of-way width of a local street in an industrial or commercial subdivision shall be sixty (60) feet, and all other streets shall conform to the standards for major and secondary streets prescribed by the thoroughfare plan and this Chapter.~~

~~Sec. 10.03.014 — Availability of water and/or sewage utilities.~~

~~If a proposed subdivision is located beyond the drainage area of the sewage collection system, or beyond the area of the water distribution system, and these utilities cannot be extended to the area, the developer shall be required to furnish with his final plat satisfactory evidence, including (but without limitation) the results of soil tests and borings, and statements from local and state health authorities, water engineers, and other proper officials, that water satisfactory for human consumption may be obtained from surface or subsurface water sources on the land, and that soil conditions are such that satisfactory sewage disposal can be provided by the use of approved septic tank or other approved methods.~~

~~Sec. 10.03.015 — Reserved.~~

~~Sec. 10.03.016 — Modification of design requirements, minimum improvements, and subdivision regulations.~~

- (a) — ~~General: These rules and regulations are the standard requirements of the City. The planning commission may, when concurred in by the City Council, authorize a variance from these regulations when, in its opinion, undue hardship will result from requiring strict compliance. In granting a variance, the commission shall prescribe only conditions that it deems necessary to or desirable in the public interest. In making the findings hereinbelow required, the commission shall take into account the nature of the proposed use of the land involved, existing uses of land in the vicinity, the number of persons who will reside or work in the proposed subdivision, and the probable effect of such variance upon traffic conditions and upon the public health, safety, convenience, and welfare in the vicinity. No variance shall be granted unless the commission finds:~~
- ~~(1) — That there are special circumstances or conditions affecting the land involved such that the strict application of the provisions of this Chapter would deprive the applicant of the reasonable use of his land.~~
 - ~~(2) — That the variance is necessary for the preservation and enjoyment of a substantial property right of the applicant.~~

(3) — That the granting of the variance will not be detrimental to the public health, safety or welfare, or injurious to other property in the area.

(4) — That the granting of the variance will not have the effect of preventing the orderly subdivision of other land in the area in accordance with the provisions of this Chapter.

Such findings of the commission, together with the specific facts upon which such findings are based, shall be incorporated into the official minutes of the commission meeting at which such variance is granted. Variances may be granted only when in harmony with the general purpose and intent of this Chapter so that the public health, safety, or welfare may be secured and substantial justice done. Pecuniary hardship to the developer, standing alone, shall not be deemed to constitute undue hardship.

(b) — Specific Types of Land Subdivision: For specific types of land subdivision the commission may modify the subdivision regulations design requirements, and minimum improvements as set forth in this Chapter. The purpose of any modification to these regulations will be to allow diversification and flexibility in the relationship of various land uses and between buildings, structures and open space in planned building groups, while insuring substantial compliance to the overall land use density and other zoning and platting regulations; also to allow appropriate development of semi-rural subdivisions with regard to their geographical location within the extraterritorial limits of the City. Modification of these regulations may be made for the following types of subdivisions:

(1) — Subdivisions planned under the provisions of the zoning ordinance for “planned development,” and which may include residential subdivisions involving the cluster, townhouse, or patio house concept for planning residential areas.

(2) — Subdivisions identified by the nature of their semi-rural location and which conform to the following standards:

(A) — The minimum street right-of-way width shall be seventy (70) feet or greater if required for proper drainage. Centered within the designated right-of-way shall be a paved street surface of thirty (30) feet in width, constructed in accordance with the City’s paving standards. Surface drainage shall be handled by open ditch, channel or other approved methods rather than a standard curb and gutter section.

(B) — The subdivision shall be served by an approved water supply and distribution system and an approved wastewater disposal system which may be by municipal sewer, septic tank or separate treatment system facilities. If the water and sewer system are not connected to the City systems then the plans for these facilities shall be approved by the Texas State Department of Health and a permit secured from the Texas Water Quality Board prior to final approval of the final plat.

(C) — The minimum area of each lot shall be one acre and each lot shall have adjacent to the rear lot line a dedicated alley or easement, either for present or future use.

(D) — The proposed subdivision shall comply with the City master plan.

(E) — To assure compliance with the land use plan for the City and its environs, each subdivision shall be accompanied by restrictions or covenants which

are to be filed of record with the final plat.

- ~~(F) In cases where the semi-rural estate plan is not located within the corporate limits, then review of the subdivision plat shall be coordinated with Grayson County which shall approve the final plat prior to filing of record.~~
- ~~(G) Before an addition can be annexed into the City by request of the property owners or the developer, the streets and utilities shall meet all requirements of this Chapter pertaining to subdivisions developed within the city limits. If these streets and utilities are not in accordance with these standards then the property owners in the addition shall be responsible for the expense of improving these facilities to City standards.~~

ARTICLE 10.04 CIVIL PLANS AND ACCEPTANCE OF IMPROVEMENTS ADMINISTRATIVE PROVISIONS

Sec. 10.04.001 Civil Plan Preparation. Savings/Repealing

- (a) The developer shall retain a licensed professional engineer, registered in the State of Texas, to prepare the plans and specifications and supervise the construction of the streets and utilities. This professional engineer is responsible for the accuracy, completeness, and conformance to all applicable local, state, and federal standards. The City has no project design or engineering responsibility or liability.*
- (b) The developer shall retain a licensed surveyor, registered in the State of Texas, to make all property surveys, prepare the plat, set the property monuments and lot corners and do the necessary construction staking. Monuments shall be set on-site in accordance with the coordinate system, boundary locations, and materials specified in the Engineering Design Standards Manual, prior to City acceptance of the Final Plat.*
- (c) The developer shall pay all fees and charges for engineering and surveying services required by this Chapter.*
- (d) The provisions of this section will not apply to utilities such as gas, telephone, and electric power, where such utilities are designed and constructed by private companies who are franchised to operate in the City.*

~~All provisions of any ordinance in conflict with this Chapter are hereby repealed to the extent they are in conflict; but such repeal shall not abate any pending prosecution for violation of the repealed ordinance, nor shall the repeal prevent a prosecution from being commenced for any violation if occurring prior to the repeal of the ordinance. Any remaining portions of said ordinances shall remain in full force and effect.~~

Sec. 10.04.002 Civil Plan Application Procedure. ~~Schedule of Fees, Charges and Expenses~~

- (a) General.*
 - (1) Prior to the construction of any streets or utilities, Civil Plans adhering to the requirements of this Chapter and the Engineering Design Standards Manual shall be submitted to the City Engineer for review and consideration of approval.*

- (2) *The specifications and details provided in a complete set of Civil Plans will be reviewed by the City Engineer for conformance with this Chapter and other applicable standards. The plans shall be approved in writing prior to any construction.*
- (3) *Prior to construction the developer shall present to the City Engineer a signed and notarized Three Party Agreement in accordance with Section 10.04.004 of this Chapter.*
- (4) *The City Engineer shall schedule a pre-construction meeting before a Notice to Proceed (NTP) can be issued for construction of public infrastructure.*
- (5) *The City Engineer shall be notified prior to the beginning of construction so that inspections can be arranged.*
- (b) *Plan submittal process. The Civil Plan set shall be provided to the City in a manner consistent with the fees, application forms, and checklists published in the Development Guide. The plans shall be prepared with the specifications, engineer calculations, plan profiles, details, and other pertinent information necessary for review, as listed in the submittal requirements found in the Engineering Design Standards Manual.*
- ~~(a) The City Council shall establish a schedule of fees, charges and expenses, and a collection procedure for building permits, plan review, inspections, appeals and other matters pertaining to this Chapter. The schedule of fees are set forth in Appendix C (Comprehensive Fee Schedule) of the Code of Ordinances, which may be altered or amended only by the City Council.~~
- ~~(b) No permit shall be issued unless or until all applicable costs, charges, fees or expenses have been paid in full, nor shall any action be taken unless or until preliminary charges and fees have been paid in full.~~

Sec. 10.04.003 *Guarantee of Public Improvements. Penalty for Violations*

- (a) *Developer's guarantee. Before final acceptance of a subdivision located all or partially within the City or its extraterritorial jurisdiction, the City must be satisfied that all required public improvements have been constructed in accordance with the approved engineering plans and with the requirements of this Chapter.*
- (b) *Subdivision improvement agreement and guarantee. The City Manager may waive the requirement that the applicant complete and dedicate all public improvements prior to final acceptance of the subdivision and may permit the developer to enter into a subdivision improvement agreement by which the developer covenants to complete all required public improvements no later than two years following the date upon which the remainder of the subdivision is accepted. The City Manager may also require the developer to complete or dedicate some of the required public improvements prior to final acceptance of the subdivision, and to enter into a subdivision improvement agreement for completion of the remainder of the required improvements during such two-year period. The subdivision improvement agreement shall contain such other terms and conditions as are agreed to by the developer and the City.*

- (c) Security. Whenever the City permits an applicant to enter into a subdivision improvement agreement, it shall require the applicant to provide sufficient security, covering the completion of the public improvements. The security shall be in the form of cash escrow or, where authorized by the City, a performance bond or letter of credit or other security acceptable to the City Manager and the City Attorney, as security for the promises contained in the subdivision improvement agreement. Security shall be in an amount equal to 110% of the estimated cost of completion of the required public improvements and lot improvements. The City Engineer shall review and approve the cost estimates provided by the developer. Any security instrument, including a bond, letter of credit, or escrow agreement shall be subject to the review and approval of the City Engineer and the City Attorney.
- (d) Performance bond.
- (1) Requirements. If the City Council authorizes the applicant to post a performance bond as security for its promises contained in the subdivision improvement agreement, the performance bond shall comply with the following requirements:
- (A) All performance bonds must be in the forms acceptable to the City Engineer and the City Attorney;
- (B) All performance bonds must be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies," as published in Circular 570, as may be amended, by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury;
- (C) All performance bonds must be signed by an agent, and must be accompanied by a certified copy of the authority for him or her to act;
- (D) All performance bonds shall be obtained from surety or insurance companies that are duly licensed or authorized in the State of Texas to issue performance bonds for the limits and coverage required.
- (2) Additional surety. If the surety on any performance bond furnished by the applicant is declared bankrupt, or becomes insolvent, or its right to do business is terminated in the State of Texas, or the surety ceases to meet the requirements listed in Circular 570, the developer shall, within 20 calendar days thereafter, substitute another performance bond and surety, both of which must be acceptable to the City.
- (3) Withholding until improvements or other surety. The City may withhold building permits, certificates of occupancy or utility connections until such improvements are completed or other surety is provided to the City.
- (e) Letter of credit. If the City Manager authorizes the applicant to post a letter of credit as security for its promises contained in the improvement agreement, the letter of credit shall:
- (1) Be irrevocable;
- (2) Be for a term sufficient to cover the completion, maintenance and warranty periods, but in no event less than two years; and

- (3) *Require only that the City present the issuer with a signed draft and a certificate signed by an authorized representative of the City certifying to the City's right to draw funds under the letter of credit.*
- (f) *Reducing amount of surety. As portions of the public improvements are completed in accordance with the design standards and the approved engineering plans, the applicant may make written application to the City to reduce the amount of the original security. If the City is satisfied that such portion of the improvements has been completed in accordance with City standards, the City Manager (or designee) may cause the amount of the security to be reduced by such amount that he or she deems appropriate, so that the remaining amount of the security adequately insures the completion of the remaining public improvements.*
- (i) *Escrow policies and procedures for streets.*
 - (1) *Request for escrow. Whenever this Chapter requires a property owner to construct a street or thoroughfare, the property owner may petition the City to construct the street or thoroughfare, usually at a later date, in exchange for deposit of escrow as established in this section.*
 - (A) *The basis of such petition shall be the existence of unusual circumstance(s), such as a timing issue due to pending street improvements by another agency such as TxDOT or Grayson County that would present undue hardships or that would impede public infrastructure coordination or timing.*
 - (B) *If more than one street or thoroughfare must be constructed in order to meet adequacy requirements for streets, the City Manager (or designee) may prioritize streets for which escrow is to be accepted and require the deposit of all funds attributable to the development in escrow accounts for one or more of such affected streets.*
 - (C) *The City Council shall review the particular circumstances involved, and shall determine, at its sole discretion, whether or not provision of escrow deposits will be acceptable in lieu of the property owner's obligation to construct the street or thoroughfare with his or her development.*
 - (2) *Escrow deposit with the City. Whenever the City Council agrees, under this Chapter, to accept escrow deposits in lieu of construction by the property owner or developer of the street or thoroughfare, the property owner or developer shall deposit in escrow with the City an amount equal to costs of the following:*
 - (A) *Administration;*
 - (B) *Advertisements;*
 - (C) *Bidding;*
 - (D) *Contingency;*
 - (E) *Testing;*
 - (F) *Design;*
 - (G) *Construction;*
 - (H) *Permits;*

- (I) *Reviews and approvals;*
 - (J) *Inspections;*
 - (K) *Any additional land acquisition; and*
 - (L) *An appropriate (and realistic) inflation factor to ensure that the actual “future dollar” costs will be covered when actual construction occurs in the future.*
- (3) *Determination of escrow amount.* *The amount of the escrow shall be determined by using the maximum comparable “turn-key” bid price of construction of the street or thoroughfare improvements (including the items listed in subsection (2) above). Such determination of the escrow amount shall be made as of the time the escrow is due hereunder and shall be subject to the review and approval of the City Manager (or designee) and the City Engineer. The escrow amount shall be paid prior to release (approval) of engineering plans by the City Engineer. The obligations, responsibilities, and related liability of the property owner shall become those of the property owner’s transferees, successors and assigns.*
- (4) *Use of escrow.* *Escrowed amounts, along with any interest accrued on such amount, may be used for the purposes outlined in subsection (2) above in order to undertake construction of the facilities that are required as part of the development for which the escrow was submitted.*
- (5) *Termination of escrow.* *Escrows, or portions of escrowed amounts, which have been placed with the City under this section and which have been held for a period of 10 years from the date of such payment or agreement, in the event that the City has not authorized the preparation of plans and specifications for construction of such street facilities for which the escrow was made, shall, upon written request, be returned to the property owner, along with its accrued interest. Such return does not remove any obligations of the property owner for construction of the required facilities if a building permit has not been issued on the subject lot or if a new building permit is applied for.*
- (6) *Refund.* *If any street or highway for which escrow is deposited is constructed by a party other than the City or is reconstructed by another governmental authority at no cost to the City, the escrowed funds and accrued interest shall be refunded to the property owner or applicant who originally paid the escrow amount after completion and acceptance of the public improvements. In the event that a portion of the cost is borne by the City and the other portion of the cost by another party or governmental authority, the difference between the property owner’s actual proportionate cost and the escrowed funds, including accrued interest, if any, shall be refunded after completion and acceptance of the improvements.*
- (7) *Interest limitation.* *If money is refunded within six months of deposit, only the principal shall be refunded. Monies returned after this date will be refunded with 1/2 of its accrued interest.*

~~(a) — A violation of any of the provisions of this Chapter or failure to comply with any of its requirements shall constitute a class C misdemeanor. Any person who violates this Chapter~~

~~or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than two thousand dollars (\$2,000.00) and in addition shall pay all costs and expenses involved in the case. Each day such violation continues shall be considered a separate offense.~~

- ~~(b) Nothing herein contained shall prevent the City from taking such other lawful action as is necessary to prevent or remedy any violation including temporary restraining orders and temporary and permanent injunctions.~~
- ~~(c) An owner, occupant, tenant, manager or other person who violates any provision of this Chapter or who participates in, assists in or maintains a violation of this Chapter is subject to a civil penalty of up to one thousand dollars (\$1,000.00) per day for each violation and each day the violation occurs shall be a separate offense.~~

Sec. 10.04.004 *Three-Party Agreement Severability*

- (a) Prior to construction, the developer shall present to the City a Three-Party Agreement on a form obtained from and approved by the City Engineer. This contract shall itemize the obligations of the developer, contractor, and the City, along with any specific requirements granted for the proposed subdivision.*
- (b) No work shall be performed within the proposed subdivision until the Three-Party Agreement has been signed and properly notarized by the developer, contractor, and the City.*
- (c) No work shall be performed within the proposed subdivision until the developer presents to the City all required forms, as specified in Article 10.04. of this Chapter.*

- ~~(a) Unconstitutional or invalid section. Should any section, subsection, sentence, clause or phrase of this Chapter be declared unconstitutional or invalid by a court of competent jurisdiction, it is expressly provided that any and all remaining portions of this Chapter shall remain in full force and effect.~~
- ~~(b) Independent sections. The City hereby declares that it would have passed this Chapter, and each section, subsection, clause or phrase thereof irrespective of the fact that any one or more section, subsections, sentences, clauses and/or phrases be declared unconstitutional or invalid.~~

Sec. 10.04.005 *Inspection and Acceptance of Public Improvements Estoppel/Waiver*

- (a) General procedure.*
 - (1) The subdivider shall provide inspection service through his/her engineer to ensure that construction is being accomplished in accordance with the plans and specifications approved by the City Engineer.*
 - (A) The subdivider shall notify the public works director 48 hours prior to commencement of construction. This notice shall give the location and date of the start of construction.*
 - (B) The City shall have the right to inspect any construction work being performed to ensure that it is proceeding in accordance with the intent of the provisions of this Chapter.*

- (C) *Any change in design that is required during construction should be made by the licensed professional engineer whose seal and signature are shown on the plans. Another engineer may make revisions to the original engineering plans if so authorized by the owner of the plans, and if those revisions are noted on the plans or documents. All revisions shall be approved by the City Engineer.*
- (D) *If the City Engineer finds, upon inspection, that any of the required public improvements have not been constructed in accordance with the approved construction plans, the City's standards and/or the design standards, then the developer shall be responsible for completing and correcting the deficiencies (at his/her expense) such that they are brought into conformance with the applicable standards.*
- (2) *Testing laboratory services will be arranged by the City and paid for by the developer. It shall be the responsibility of director of public works (or designee) to coordinate the scheduling of all required tests with the testing laboratory. Testing shall be conducted in accordance with the procedures set forth in design standards for like work at the frequency specified thereon as directed by the City Engineer.*
- (b) Letter of satisfactory completion.
 - (1) *The City will only deem required public improvements satisfactorily completed when the applicant's engineer has certified to the City Engineer (through submission of detailed sealed "as-built," or record, drawings of the property) drawings that indicate all public improvements and their locations, dimensions, materials and other information required by the City Engineer, and when all required public improvements have been completed.*
 - (A) *The "as-builts" shall also include a complete set of sealed record drawings of the paving, drainage, water, sanitary sewer and other public improvements, showing that the layout of the lines and grades of all public improvements are in accordance with engineering plans for the plat, and showing all changes made in the plans during construction, and containing on each sheet an "as-built" stamp bearing the signature and seal of the licensed professional engineer and the date.*
 - (B) *One reproducible drawing of the utility plan sheets containing the as-built information shall also be submitted.*
 - (C) *The developer's engineer and/or RPLS shall also furnish the City with a copy of the approved final plat and "as-built" engineering plans, in such a digital format (on disk) that is compatible with the City CAD system.*
 - (2) *When the requirements of subsection (1) above have been met to the development services director and City Engineer's satisfaction, and when a maintenance bond has been received and approved as required in section 10.04.007 of this article, the City Manager shall issue a letter of satisfactory completion.*
- (c) Effect of acceptance. *Acceptance of the development shall mean that the developer has transferred all rights to all the public improvements to the City for use and maintenance,*

subject to the two-year maintenance bond.

~~The failure of the City to enforce any term or condition of this Chapter shall not constitute a waiver or estoppel or any subsequent violation of this Chapter.~~

Sec. 10.04.006 *Acceptance of Improvements*

- (a) *When the public improvements have been installed and final inspection has been acknowledged to meet all City standards, the City Engineer shall indicate to the developer that the streets and utilities are acceptable to the City. The developer shall then provide to the City Engineer a complete set of digital plans of the record drawings. Each sheet of these drawings shall be plainly marked "Plans of Record" which shall include a statement signed by the professional engineer that all improvements have been installed and constructed in accordance with this Chapter signed by the professional engineer who prepared the plans and supervised the construction. Record drawings must include any field changes and show actual built conditions, with additional specification found in the Engineering Design Standards Manual, Section 1.*
- (b) *Upon receipt of the plans of record drawings and all fees, the City Engineer will issue a formal notice of acceptance of the public improvements.*

Sec. 10.04.007 *Maintenance of Improvements*

- (a) *A written guarantee that all workmanship and materials associated with public improvements shall be free of defects for a period of two (2) years from the date of acceptance by the City Engineer shall be provided to the City. A 2-year maintenance bond in the amount of 110 percent of the total construction cost of all workmanship and materials shall be submitted to the City per an approved City form.*
- (b) *Public improvements constructed to a standard varying from City specifications but approved by the City Engineer shall be accompanied by a maintenance agreement with a Property Owners' Association for the proper and continuous operation, maintenance, and supervision of such facilities. A copy of the agreement(s) providing for such shall be presented to the City Engineer and approved as to form by the City Attorney prior to recordation of a Final Plat and shall be filed of record with the plat thereof.*
- (c) *The City shall not repair or maintain any infrastructure that has not been accepted by the City Engineer with the requisite maintenance guarantee.*

Sec. 10.04.008 *Withholding City Services and Improvements Until Acceptance.*

- (a) General policy. *The City hereby defines its policy to be that the City will withhold all City services and improvements of any type until all required improvements are properly constructed according to the approved engineering plans and to City standards, and until such public improvements are dedicated to and accepted by the City. This policy of withholding includes subdivision improvements as well as lot improvements.*
 - (1) Subdivision improvements. *Subdivision improvements include street maintenance, extension of City services from any subdivision or property, and all street, utility, storm drainage and other public improvements.*

- (2) Lot improvements. Lot improvements include retaining walls, grading, and improvements required for proper lot drainage and prevention of soil erosion.

ARTICLE 10.05 ADMINISTRATIVE PROVISIONS

Sec. 10.05.001 Nonconforming Situations

- (a) Nonconforming Lots. A nonconforming lot is a lot of record that does not meet the minimum area or dimensional requirements of either this Chapter or the zoning district in which the lot is located. Such nonconforming lots lawfully existing prior to June 3, 2024, shall be considered a legal nonconforming lot. A legal nonconforming lot may continue to exist indefinitely as is and can be developed as if it were a conforming lot, but only if the proposed land use is permitted in the assigned zoning district and all development standards are met. The owner of a nonconforming lot may eliminate the nonconformity through subdivision of land, rezoning to a different zoning district or seeking a variance. No new division of any lot or parcel shall be made that expands the existing nonconformity or creates a new nonconforming situation.
- (b) Governmental Acquisition of Right-of-Way. A lawful structure, lot or site made nonconforming regarding any requirement of this Chapter due to the acquisition of right-of-way by eminent domain, dedication, or purchase by a city, county, state, or federal agency shall be deemed legal nonconforming. Such exemption shall apply only to noncompliance that is a direct result of the acquisition of right-of-way.

Sec. 10.05.002 Penalty for Violations

- (a) The City may institute appropriate legal action to enforce the provisions of this Chapter or the standards referred to herein with respect to any violation thereof which occurs within the City, within the extraterritorial jurisdiction of the City, or within any area subject to all or a part of the provisions of this Chapter.
- (1) A violation of any of the provisions of this Chapter or failure to comply with any of its requirements shall constitute a class C misdemeanor. Any person who violates this Chapter or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than \$2,000.00 and in addition shall pay all costs and expenses involved in the case. Each day such violation continues shall be considered a separate offense.
- (2) A violation of any of the provisions of this chapter by the owner, tenant, occupant or manager of any building, structure, premises or part thereof, and any architect, builder, contractor, agent or other person who commits, participates in, assists in, or maintains such violation may each be found guilty of a class C misdemeanor with a fine of not more than \$2,000.00 per day and each day the violation occurs is a separate offense.
- (3) Nothing herein contained shall prevent the City from taking such other lawful action as is necessary to prevent or remedy any violation including temporary restraining orders and temporary and permanent injunctions.
- (4) An owner, occupant, tenant, manager or other person who violates any provision of this chapter or who participates in, assists in or maintains a violation of this

Chapter is subject to a civil penalty of up to \$1,000.00 per day for each violation and each day the violation occurs shall be a separate offense.

Sec. 10.05.003 *Prior Approvals*

- (a) *Prior approvals. Conditions and variances approved prior to the adoption of this Chapter are still in effect unless the conditions of the approvals are not met or the use changes.*
- (b) *Prior violations cited. Violations cited prior to the adoption of this Chapter are still in effect and compliance is enforceable.*
- (c) *Existing permits under construction. Nothing herein contained shall require any change in the plans, construction, or designated use of a building under construction at the time of the adoption of this Chapter.*
- (d) *Existing permits not under construction. Nothing herein contained shall require any change in plans, construction, or designated use of a building for which a building permit has been issued within 30 days prior to June 3, 2024, provided construction is started on said building within 120 days after adoption of this ordinance.*

Sec. 10.05.004 *Estoppel/Waiver*

The failure of the City to enforce any term or condition of this Chapter shall not constitute a waiver or estoppel or any subsequent violation of this Chapter.

Sec. 10.05.005 *Payment of all indebtedness attributable to a specific property.*

No person who owes delinquent taxes, delinquent paving assessments, delinquent fees, or any other delinquent debts or obligations to the City, and which are directly attributable to a piece of property, shall be allowed to receive approval for any plat or replat until the taxes, assessments, debts or obligations directly attributable to said property and owed by the property owner or a previous owner thereof shall have been first fully discharged by payment, or until an arrangement satisfactory to the City Manager has been made for the payment of such debts or obligations. It shall be the applicant's responsibility to provide evidence or proof that all taxes, assessments, debts or obligations have been paid at the time of submission for any application for approval under these subdivision regulations. A tax certificate shall also be provided as required by Section 12.002 of the Texas Property Code.

Sec. 10.05.006 *Right to deny hearing and plat.*

The City may deny a hearing and any application pursuant to this Chapter if the applicant does not submit all information and fees required by this Chapter.

Sec. 10.05.007 *Misrepresentation of facts.*

It shall be a violation of this Chapter for any person to knowingly or willfully misrepresent, or fail to include, any information required by this Chapter in any plat application or during any public hearing or meeting of the Planning and Zoning Commission or City Council. Such a violation shall constitute grounds for denial of the plat.

Sec. 10.05.008 *Diversity of ownership.*

Where the desirable development of a residential neighborhood, business park, commercial center, or other planned development is dependent upon coordination of diverse land ownership (i.e.,

separate tracts of land owned by more than one person), the Development Services Director may require that an overall area or neighborhood study be prepared prior to and as an additional requirement and condition of the submission of any plat application so that individual subdivisions may be developed in harmony with one another and their environs in accordance with the comprehensive plan.”

SECTION 4: Savings/Repealing. All provisions of any ordinance in conflict with this Ordinance are hereby repealed to the extent they are in conflict; but such repeal shall not abate any pending prosecution for violation of the repealed ordinance, nor shall the repeal prevent a prosecution from being commenced for any violation if occurring prior to the repeal of the ordinance. Any remaining portions of said ordinances shall remain in full force and effect.

SECTION 5: Severability. Should any section, subsection, sentence, clause or phrase of this Ordinance be declared unconstitutional and/or invalid by a court of competent jurisdiction, it is expressly provided that any and all remaining portions of this Ordinance shall remain in full force and effect. The City Council hereby declares that it would have passed this Ordinance, and each section, subsection, sentence, clause and phrase thereof regardless of whether any one or more sections, subsections, sentences, clauses and/or phrases may be declared unconstitutional and/or invalid.

SECTION 6: Open Meeting. The meeting at which this Ordinance was introduced and passed was open to the public and that public notice of the time, place and purpose of said meeting was given all as required by law.

SECTION 7: Effective Date; Publication. This Ordinance shall become effective from and after its adoption and publication as required by law. The City Clerk is directed to publish the caption of this Ordinance as required by law.

DULY PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF SHERMAN, TEXAS on this 3rd day of June 2024.

CITY OF SHERMAN,

DAVID PLYLER, MAYOR

ATTEST:

LINDA ASHBY, CITY CLERK

**APPROVED AS TO FORM:
ABERNATHY, ROEDER,
BOYD & HULLETT, P.C.**

RYAN D. PITTMAN, CITY ATTORNEY



City Council Regular Meeting

Agenda Item No. D.4.

Meeting Date: 6/3/2024

Prepared By: Amber Doan, Engineering Coordinator

Approved By: Robby Hefton, City Manager

Caption:

INTRODUCTION AND PUBLIC HEARING OF ORDINANCE NO. 6730

Approving and Adopting the Engineering Design Standards Manual for the City of Sherman, Texas; Providing for Regulation on Public Infrastructure Design and Other Standards; Delegation Authority to the City Engineer; Providing a Penalty Clause with a Maximum Fine of \$2,000, Savings/Repealing Clause, Severability Clause and an Effective Date; Providing for the Publication of the Caption Hereof

Issue:

Approving and Adopting the Engineering Design Standards Manual for the City of Sherman, Texas; Providing for Regulation on Public Infrastructure Design and Other Standards; Delegation Authority to the City Engineer

Background:

Due to the quantity and pace of growth occurring in the City, the Engineering Department identified that the engineering design standards within the subdivision ordinance were outdated and not detailed enough.

The Engineering Department received a draft design manual from Kimley-Horn compiled with design criteria from other DFW cities. City Engineering staff made modifications to customize the design criteria for Sherman's needs, including input from Sherman Fire Department, Solid Waste Services, Utility Maintenance, Street Maintenance, Development Services, and Engineering firms that frequently design subdivisions within the City.

A draft of the Engineering Design Standards Manual has been published on the Engineering Department's website since September 2023 for review and input. Many Engineering firms are already utilizing it for their public infrastructure designs per City staff request.

Origination:

Development Services
Engineering

Financial Consideration:

There is no financial impact to be considered

Staff Recommendation:

Staff recommends City Council approve this Ordinance

Alternatives:

The City Council could choose not to adopt the proposed ordinance.

Attachments:

1. Ordinance No. 6730
2. Exhibit A - Engineering Desing Standards Manual

ORDINANCE NO. 6730

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF SHERMAN, TEXAS, APPROVING AND ADOPTING THE ENGINEERING DESIGN STANDARDS MANUAL FOR THE CITY OF SHERMAN, TEXAS; PROVIDING FOR REGULATIONS ON PUBLIC INFRASTRUCTURE DESIGN AND OTHER STANDARDS; DELEGATING AUTHORITY TO THE CITY ENGINEER: PROVIDING A PENALTY CLAUSE WITH A MAXIMUM FINE OF \$2,000, SAVINGS/REPEALING CLAUSE, SEVERABILITY CLAUSE AND AN EFFECTIVE DATE; PROVIDING FOR THE PUBLICATION OF THE CAPTION HEREOF; FINDING AND DETERMINING THAT THE MEETING AT WHICH THIS ORDINANCE IS PASSED WAS NOTICED AND IS OPEN TO THE PUBLIC AS REQUIRED BY LAW.

WHEREAS, due to certain changes, growth and development of the City of Sherman, Texas (“City” or “Sherman”), it has become necessary to update the City’s infrastructure design requirements with an Engineering Design Standards Manual for the City; and

WHEREAS, the Engineering Department has prepared an Engineering Design Standards Manual to standardize the design and review of new public infrastructure for the City; and

WHEREAS, the City has complied with all legal notices and public hearing requirements as required by law; and

WHEREAS, the City Council desires to accept the recommendations of City staff to approve the Engineering Design Standards Manual.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF SHERMAN, TEXAS:

SECTION 1. The City Council hereby accepts and adopts the Engineering Design Standards Manual, attached hereto as Exhibit A and incorporated herein for all intents and purposes.

SECTION 2. The City Council hereby submits the Engineering Design Standards Manual to all citizen groups and committees, City boards and commissions, developers, engineering firms and all citizens interested in the engineering design standards and requirements for new public infrastructure in the City.

SECTION 3. As may be permitted under applicable law, the City Council hereby delegates authority to the City Engineer to issue updates and amendments to the Engineering Design Standards Manual from time to time that the City Engineer deems necessary for the protection of the public safety and welfare; for the economical maintenance and sustainability of public infrastructure; and for keeping current with industry-accepted engineering standards.

SECTION 4. Any person, firm, corporation or entity violating any provision of this Ordinance or the Engineering Design Standards Manual, as they exist or may be amended, shall be deemed guilty of a misdemeanor, and on conviction thereof, shall be fined in an amount not

exceeding TWO THOUSAND AND NO/100 DOLLARS (\$2,000.00). Each day a violation continues shall be considered a separate offense. The penal provisions imposed under this Ordinance shall not preclude Sherman from filing suit to enjoin the violation. Sherman retains all legal rights and remedies available to it pursuant to local, state and federal law.

SECTION 5. All provisions of any ordinance in conflict with this Ordinance are hereby repealed to the extent they are in conflict; but such repeal shall not abate any pending prosecution for violation of the repealed ordinance, nor shall the repeal prevent a prosecution from being commenced for any violation if occurring prior to the repeal of the ordinance. Any remaining portions of said ordinances shall remain in full force and effect.

SECTION 6. Should any section, subsection, sentence, clause or phrase of this Ordinance be declared unconstitutional and/or invalid by a court of competent jurisdiction, it is expressly provided that any and all remaining portions of this Ordinance shall remain in full force and effect. The City Council hereby declares that it would have passed this Ordinance, and each section, subsection, sentence, clause and phrase thereof regardless of whether any one or more sections, subsections, sentences, clauses and/or phrases may be declared unconstitutional and/or invalid.

SECTION 7. The meeting at which this Ordinance was introduced and passed was open to the public and that public notice of the time, place and purpose of said meeting was given all as required by law.

SECTION 8. This Ordinance shall become effective from and after its adoption and publication as required by law. The City Clerk is directed to publish the caption of this Ordinance as required by law.

DULY PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF SHERMAN, TEXAS on this 3rd day of June 2024.

CITY OF SHERMAN:

DAVID PLYLER, MAYOR

ATTEST:

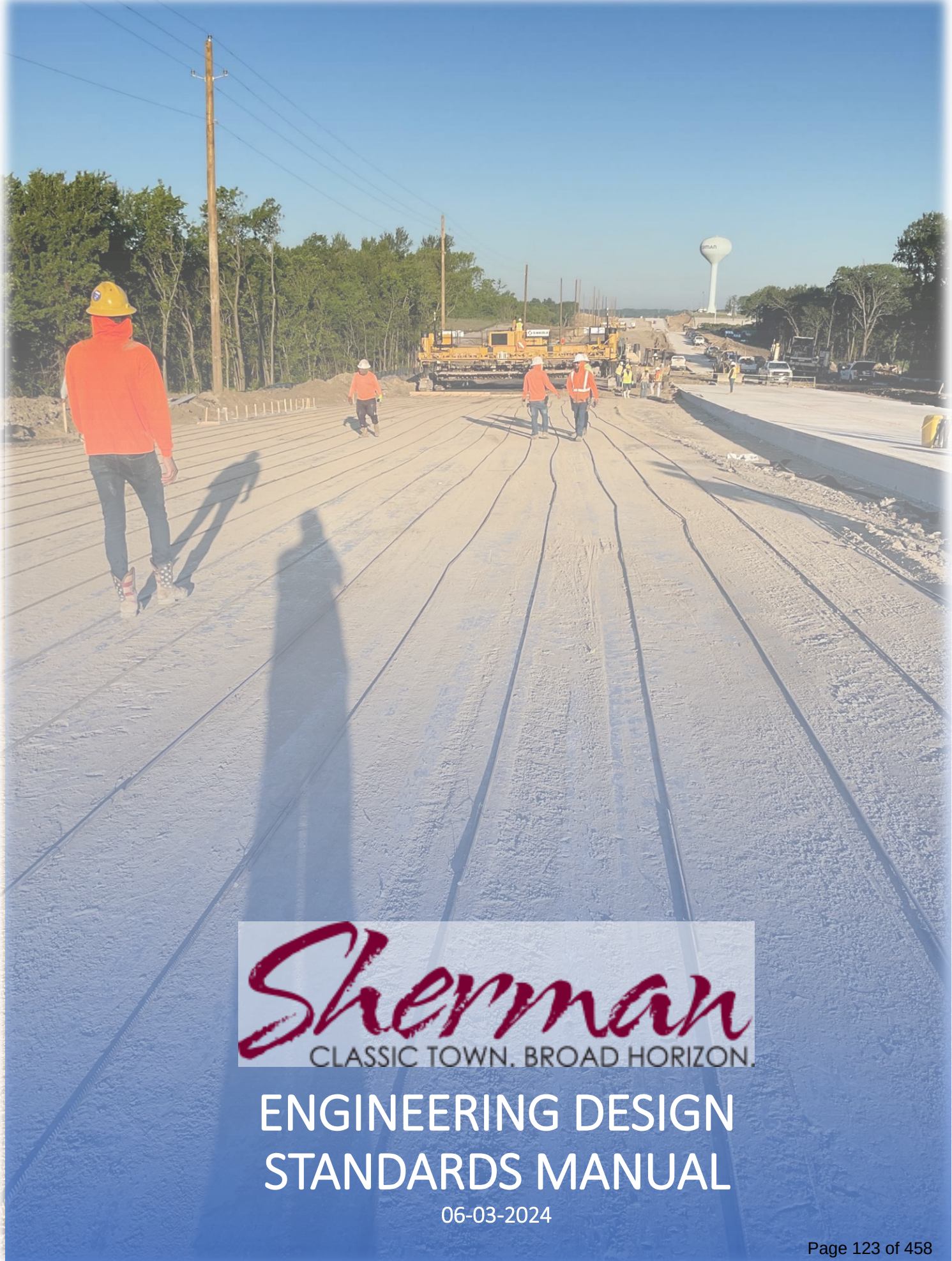
LINDA ASHBY, CITY CLERK

**APPROVED AS TO FORM:
ABERNATHY, ROEDER,
BOYD & HULLETT, P.C.**

RYAN D. PITTMAN, CITY ATTORNEY

Exhibit A

[__ *pages attached hereto*]



ENGINEERING DESIGN STANDARDS MANUAL

06-03-2024

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SECTION 1 GENERAL DESIGN REQUIREMENTS

1.1. Short Title

These are hereby adopted as a part of the “Engineering Design Standards Manual”, **Sections 1 – 8**, which shall be in full force and effect from and after the effective date of adoption of the Engineering Design Standards Manual.

1.2. Interpretation

In the interpretation and application of the provisions of these regulations, it is the intention of the City Council that the principles, standards and requirements provided for herein shall be minimum requirements for the design of both subdivisions and municipal capital projects in the City, and, where other City ordinances or regulations of the City are more restrictive in their requirements, such other ordinances or regulations shall govern.

The City has adopted various ordinances and master plans, which address various requirements not explicitly included in the Engineering Design Standards Manual. The Engineer is responsible for understanding and complying with the City’s various ordinances and master plans.

1.3. Enforcement

The City’s Engineering Design Standards Manual is issued by the Engineering Department, and are hereby authorized to enforce the provisions of this Engineering Design Standards Manual. The standards and any updates will be available on the City’s website.

This Engineering Design Standards Manual shall be in full force and effect immediately upon adoption by the City Council. Projects will be required to comply with all requirements. The standards include the various design criteria, technical specifications, and standard construction details which are considered minimum requirements for the design and construction of adequate public facilities within the City. The Engineer of record shall bear the sole responsibility for meeting the Engineering standard of care for all aspects of the design and providing a design that’s required by the site-specific conditions and intended use of the facilities, while at a minimum meeting the City’s design and construction requirements.

1.4. Amendment

- A. The City may amend the Engineering Design Standards Manual. In order to ensure that the Engineer has the City’s latest design standards, they are directed to the City’s website to acquire the City’s most current design standards. The Engineering Design Standards Manual will include a Record of Revisions to identify any revisions to the Engineering Design Standards Manual.
- B. A formal request to modify current design criteria or add new design criteria can be submitted to the City for consideration in writing to the City Engineer.

1.5. Deviation Requests

- A. All deviations from the requirements included in the Engineering Design Standards Manual must be approved by the City Engineer. A grant of an alternative material, design, or method of construction shall not affect nor relieve the Engineer of the obligation and responsibility of such material, design, or method of construction for the intended purposes.
- B. In the event that specific circumstances dictate requirements not already included in the Engineering Design Standards Manual, it shall be the responsibility of the Engineer to provide the additional information as deemed necessary by the City Engineer in writing for review.

1.6. Applicability

The Engineer shall be responsible for the applicability of the information contained in the Engineering Design Standards Manual to the design of their particular project. The Engineer shall also be responsible for the applicability and accuracy of the information furnished in their design. Acceptance by the City of the plans for construction shall not be construed to relieve the Engineer of any responsibility.

1.7. Other Local, State, and Federal Regulations

This is not intended to be a complete list and is provided for informational purposes only.

- [Section 404 of the Clean Water Act](#) (33 USC 1344)
- Water Rights
http://www.tceq.state.tx.us/permitting/water_supply/water_rights/permits.html
- Migratory Bird Treaty Act <http://www.fws.gov/pacific/migratorybirds/mbta.htm>
- Water Well Drilling <http://www.tgpc.state.tx.us/WaterWells.htm>
- Threatened and Endangered Species
<http://www.tpwd.state.tx.us/huntwild/wild/species/endang/index.phtml>
- The Antiquities Code of Texas <http://www.thc.state.tx.us/crm/crmantcode.shtml>
- Air Quality <http://www.tceq.state.tx.us/permitting/air/newsourcereview/before.html>
- [TCEQ Dam Requirements](#)
https://www.tceq.texas.gov/assets/public/comm_exec/pubs/rq/rq-473.pdf
- TxDOT Roadway Design Manual
<http://onlinemanuals.txdot.gov/txdotmanuals/rdw/rdw.pdf>
- TCEQ Drinking Water
[https://texreg.sos.state.tx.us/public/readtac\\$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=290](https://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=290)
- TCEQ Wastewater
[https://texreg.sos.state.tx.us/public/readtac\\$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=217](https://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=217)

1.8. Texas Accessibility Standards

All plans and specifications for the construction or alteration of public buildings and facilities, privately owned buildings and facilities leased or occupied by state agencies, places of public accommodation, pedestrian facilities within public right-of-way, and

commercial facilities must be in compliance with the Texas Accessibility Standards (TAS) for individuals with disabilities and must conform to the standards required by regulations issued by the [Texas Department of Licensing and Regulation \(TDLR\)](#), under the [Architectural Barriers Act, codified as Article 9102](#), Texas Civil Statutes (see [Architectural Barriers Administrative Rules – Section 68.30](#) for exemptions).

Projects with a total estimated construction cost of \$50,000 or more are required to submit a full set of construction documents in accordance with Administrative Rule 68.20 to TDLR for registration and review. For Public Right-of-Way projects, the estimated cost for the project shall be based on pedestrian elements only in accordance with Administrative Rule 68.102. If a project's total estimated construction cost is less than \$50,000, it is not required to be submitted to TDLR for registration and review; however, the project is still required to comply with TAS. An architect, engineer, interior designer, or landscape architect with overall responsibility for the design of a building or facility subject to subsection 5(j) of the Architectural Barriers Act, shall mail, ship, or hand-deliver the project registration form, review and inspection fees, and construction documents to the TDLR, a registered accessibility specialist, or a contract provider not later than thirty (30) business days after the design professional seals and signs the construction documents. An Architectural Barriers [Project Registration form](#) must be completed for each subject building or facility.

1.9. Submittal Requirements for Civil Plans

All construction plans prepared for public works infrastructure and private development drainage facilities shall be prepared and sealed by a Professional Engineer who is licensed in the State of Texas.

Plans shall be submitted on 22"x34" sheets to allow accurately scaled half-size (11"x17") reproduction. Plans shall include the following information.

- A. Title sheet shall include the name of the associated plat for all private development projects.
- B. Drainage Area Maps and Calculations - Drainage area maps and calculations shall be provided and shall include the following information at a minimum:
 1. Site map showing project limits with a scale of one (1) inch equals one hundred (100) feet. Large off-site drainage areas may use one (1) inch equals two hundred (200) feet. The City Engineer may require a larger scale if necessary to depict the necessary information in a readable format.
 2. The delineation of the overall watershed drainage area contributing runoff to the proposed system, including sub-drainage areas delineating contributing areas to the drainage design points/collection points.
 3. The limits of all floodplains and floodways (per the most recent or proposed Flood Insurance Study (FIS)) within the project area.
 4. Provide inlet identifying numbers (design point numbers). These inlet numbers shall correlate to the inlet calculations table and respective drainage area and shall also be identified within the construction plans.

5. Show streets, property lines, right-of-way, building footprints and locations of creeks, streams or other adjacent water bodies.
 6. Provide existing ground topography with one (1) foot or two (2) foot contours. Provide a hydrologic summary table showing drainage area calculations for both existing and proposed conditions for each design point basin.
 7. Provide calculations for the time of concentration (Tc) indicating how the total Tc was determined.
 8. Direction of flow (arrows) within streets, alleys, natural and man-made drainage ways, and at all system intersections including sags, crests and corners.
 9. All existing and proposed drainage facilities shall be clearly shown and differentiated on the drainage area map.
 10. The means provided for accommodating any increase in runoff due to the development shall be clearly depicted, along with the means for handling runoff that is conveyed to or through the site from upstream.
 11. This may be handled using general notes on the map
 12. Provide drainage area, inlet, storm drain, swale, channel and culvert computation tables as required.
 13. Additional information may be required at the discretion of the City Engineer to adequately address the particular conditions of a given project.
- C. Grading Plans - Grading plans shall be prepared for all proposed developments, and shall show the following information at a minimum:
1. Identifying all proposed structures, buildings, streets, parking areas, flumes, storm drain systems, open channels, creeks, etc.
 2. Identify locations of right-of-way, property lines and easements.
 3. Provide existing and proposed contours at one (1) foot intervals for all commercial and industrial developments, along with proposed flow arrows.
 4. Grading plans for residential developments shall show existing contours at one (1) foot intervals, and shall depict proposed grading by the use of spot elevations and flow arrows.
 5. Spot elevations shall be shown at the top of the curb adjacent to each lot line, and adjacent to each building corner as well as the upper end of each swale.
 6. Clearly show swales, ditches and other means of conveying storm water runoff across the proposed site.
 7. Finish floor elevations shall be shown, and flow arrows used to indicate flow patterns.

8. In residential developments, storm water may not cross more than one lot before being discharged to a street, alley, channel or other public storm drainage facility. In all other developments, concentrated storm water may not be discharged to an adjacent property (other than a recognized watercourse) except in a dedicated easement and an approved storm drainage system.
 9. Runoff from adjacent lots or properties shall be collected and conveyed in an easement rather than across lots.
 10. Positive overflow shall be provided at sump or low point inlets.
 11. Minimum finish floor elevations adjacent to such overflows shall be no less than 12" above the overland flow water surface elevation, with positive drainage provided away from the building.
 12. Minimum finish floor elevations shall be set at least two (2) feet above the 100-year base flood elevation of any adjacent stream for which base flood elevations have been set as depicted on the most current Flood Insurance Rate Map.
- D. Survey Control Sheet(s) including any City Benchmarks or other control used.
- E. Demolition Plans
- F. Site Plans
- G. Paving Plans
1. Plan and profile sheets at a scale not greater than 1"=40' horizontally, and 1"=4' vertically.
 2. All property lines, right-of-way lines, and easements shall be shown.
 3. Detailed geometry to facilitate construction, including stations at all changes in direction, including PC's, PT's, and PI's, along with complete curve data.
 4. Surface flow arrows shall be shown at all intersections and high points.
 5. Detailed contouring of intersections may be required for constructability and to convey how the drainage will traverse the intersection.
 6. Top of curb elevations with Station-offset shall be shown on the plan view at all PC's and PT's of intersection curb returns.
 7. Projected top of curb elevations with Station-offset shall be shown in the plan and profile views of the projected top of curb PI of the intersection curb returns.
 8. All existing and proposed utilities shall be shown in the plan view.
 9. Top of curb elevations shall be shown every 50' in the profile as well as at all VPC's, VPI's, and VPT's in the profile view.
 10. Vertical curve lengths and "K" values shall be shown in the profile view.

11. Provide cross sections a beginning station, end station, PC's, PT's, and every 50 and 100 foot station.

H. Street Light and Sign Plans

1. Street light and sign placement plan sheets at a scale not greater than 1"=100'.
2. Plans shall show the approximate location of all proposed street signage and light poles.
3. Street lights shall typically be placed on upstream side of an intersection to be placed on the opposite side of the intersection from a proposed stop sign.

I. Storm Drainage Plans - Storm drain plans shall be provided for all storm drainage systems including culverts and shall include the following information at a minimum:

1. An overall storm sewer plan at a scale not greater than 1"=100' may be provided to identify to the location of the different line segments.
2. Plan and profile sheets at a scale not greater than 1"=40' horizontally, and 1"=4' vertically. The storm drainage system shall be shown on separate sheets from the paving plans.
3. Detailed geometry to facilitate construction, including stations at all junctions, structures, pipe size changes, inlets, and all changes in direction, including PC's, PT's, and PI's, along with complete curve data.
4. Surface flow arrows shall be shown at all intersections and high points.
5. Storm drain pipes shall typically be located in the center of a lane of the roadway.
6. Junction boxes or in-line structures shall be spaced a maximum of 650' apart for pipe 42-inches or smaller in diameter, and a maximum of 1,150' apart for pipe 48-inches or greater in diameter.
7. Where multiple inlet leads intersect the main at the same station, a junction box shall be constructed.
8. All property lines, right-of-way lines, and easements shall be shown, and the storm drain facilities tied to these as appropriate.
9. All existing and proposed utilities shall be shown in the plan view, and in the profile view where such information is available.
10. Profiles shall include existing ground line at the center of the proposed storm drain, proposed ground line at the center of the proposed storm drain, design storm and 100-year hydraulic grade line (HGL) with HGL elevations at each junction, end of pipe, and pipe size change. Pipe flowline elevations shall be shown at fifty (50) foot intervals along the pipe. The profiles should identify the class of concrete pipe, size, length and slope of each pipe, along with the design flow, the full flow capacity of the pipe (Q capacity) in partial flow situations, design velocity, the friction slope, SD, and the velocity head.

11. The hydraulic grade line shown shall include all minor losses at appurtenances. The starting (downstream) elevation of the hydraulic grade line shall be based on downstream conditions. Determination of this starting elevation shall be documented.
12. In the plan view, indicate the size and type of inlet, top of curb elevation, hydraulic grade elevation, flowline elevation, and lead line length, size and slope for each inlet. All inlet laterals shall be shown in profile in the plans and shall show the HGL.
13. Laterals shall connect to the main such that the center of the lateral matches the center of the main.
14. All storm sewer main to storm sewer main connections and main line pipe size changes shall require a manhole or junction box.
15. Identify erosion protection measures for storm drain outfall structures, where required.
16. Identify benchmarks, including any City of Sherman benchmarks if available.
17. 60° inlet leads are preferred. Inlet leads shall connect to the main at a thirty-degree (30°) angle or greater (no connections greater than sixty degrees (60°) shall be permitted without a junction box. No connections greater than ninety degree (90°) will be permitted.
18. All storm drain fittings including pipe bends and wyes shall be prefabricated, unless connecting to an existing system whereas the City's standard connection detail shall be used.
19. Applicable City of Sherman Standard Construction details shall be included in the construction plans. Modifications to these standard details shall not be made without prior approval of the City Engineer.
20. Identify all proposed post-construction storm water quality Best Management Practices (BMPs). Include appropriate design calculations and other information in accordance with City or NCTCOG iSWM™ design guidelines.

J. Channel Plans

1. Plan and profile sheets at a scale not greater than 1"=40' horizontally, and 1"=4' vertically. Detailed geometry to facilitate construction, including stations at all junctions, structures, and all changes in direction, including PC's, PT's, and PI's, along with complete curve data.
2. All property lines, right-of-way lines, and easements shall be shown, and the channel facilities tied to these as appropriate.
3. All existing and proposed utilities shall be shown in the plan view, and in the profile view where such information is available.
4. Profiles shall include existing ground line at the center of the proposed channel, proposed ground line at the center of the proposed channel, channel slope,

proposed right and left top of bank, 100-year water surface elevation, and flowline elevations at each structure, grade change, etc., as well as at 50-foot intervals along the channel.

5. The runoff to be conveyed (Q100), the flow depth (D) in the channel, the capacity of the channel at full flow (Q provided), the Manning's "n" value used, and the velocity at Q100 shall be shown on the plans.
6. Identify erosion protection measures for storm drain outfall structures.
7. A typical section(s) shall be depicted on the plans, showing bottom width, side slopes, lining (if applicable), depth, etc.
8. Earthen channels shall have side slopes no steeper than 3H:1V.
9. Energy dissipation and erosion protection structures.
10. Actual cross sections shall be shown at no less than 100-foot intervals and at all PI's, PC's and PT's. □ Specify compaction requirements where fill shall be placed.

K. Detention/Retention Facilities

1. Show all hydrologic, routing, storage and outlet calculations. The Modified Rational method may be used for drainage areas less than two hundred (200) acres for all systems where it applies. For larger drainage areas and more complex smaller areas, a unit hydrograph method that employs reservoir routing calculations shall be used.
2. Retention Ponds shall have a 5' (ft) wide safety shelf two feet below the normal pool elevation, then slope 6H:1V to the bottom of the pond. Minimum depth of a retention pond is 6' (ft) and shall be aerated.
3. Provide detailed plans showing all aspects of the outlet structure(s), along with hydraulic calculations of the outlet(s).
4. Pond routing summary, including return event, peak flow in, peak flow out, critical duration, max water surface, and max storage volume shall be included on the plans.
5. Outfall rating curve showing the total pond discharge at all critical elevations from the flowline to the top of pond, in increments of 1' (ft) or less shall be included.
6. Grading plans shall be provided for the facility. A concrete pilot channel or approved equivalent with minimum slope of 0.50% shall be provided unless the pond bottom maintains a 2% slope to the outfall.
7. Show downstream conditions and provide information that shows the effect of the discharge on downstream properties and/or structures.
8. Show adequate erosion control measures at outlet structure(s).

9. Show pre- and post-development calculations for the 2-year, 10-year, 25-year and 100-year storm events, as well as any overflow facilities.
10. Show existing and proposed contours to depict slopes of embankments. The maximum slope of embankments shall be 3H:1V, without the use of retaining walls
11. Show emergency overflow provisions.

L. Erosion Control Plans

1. Erosion Control Plans shall be prepared and sealed by a licensed professional engineer in Texas.
2. Contours or other indication of flow direction shall be shown on the plan.
3. Show the location of all structural sediment control measures, including sediment pond locations (when required).
4. Sediment pond (when required) calculations shall be shown on the erosion control plan.
5. Concrete wash out location(s) shall be shown.
6. Stabilization measures shall be identified.
7. Required SWPPP maintenance and inspection procedures shall be outlined.
8. Project sequencing and/or phasing shall be identified.
9. Both construction (Stage 1) and post-construction (Stage 2) conditions shall be shown.

M. Water Plan and Profile

1. Minimum water main size will be 8-inch diameter unless approved otherwise by the City Engineer.
2. Water mains under 12-inch diameter only need to be shown in plan view. Water mains 12-inch diameter shall include plan and profile.
3. An overall water main plan at a scale not greater than 1"=100' may be provided to identify to the location of the different line segments.
4. Plan and profile sheets at a scale not greater than 1"=40' horizontally, and 1"=4' vertically. The water main system shall be shown on separate sheets from the paving plans.
5. Flowline elevations shall be shown every 50' in the profile and at all VPI's, in the profile view.
6. The pipe profile should identify the type and pressure class or DR of pipe, size, length and slope of each pipe between PI's.

7. Detailed geometry to facilitate construction, including stations at all bends, tees, crosses, fire hydrants, including PC's, PT's, and PI's, along with complete curve data.
8. Minimum laying radius for water mains shall be 1,150 feet.
9. Water mains will typically be placed 4 to 7 feet behind the back of curb or 2.5 to 5.5 feet in the right-of-way.
10. In line valves shall be spaced a maximum of 1,000' apart for pipe 12-inches or smaller in diameter, and a maximum of 3,000' apart for pipe 14-inches or greater in diameter. In line valves shall also be installed on the top of bank of either side of a creek crossing.
11. All property lines, right-of-way lines, and easements shall be shown, and the water main tied to these as appropriate.
12. All existing and proposed utilities shall be shown in the plan view, and in the profile view where such information is available.
13. Changes of alignment of water mains will be made with 45 degree bends or less whenever possible.
14. Identify benchmarks, including any City of Sherman benchmarks if available.
15. Applicable City of Sherman Standard Construction details shall be included in the construction plans. Modifications to these standard details shall not be made without prior approval of the City Engineer.

N. Wastewater Plan and Profile

1. Minimum wastewater main size shall be 8-inch diameter unless approved otherwise by the City Engineer.
2. An overall wastewater main plan at a scale not greater than 1"=100' may be provided to identify to the location of the different line segments.
3. Plan and profile sheets at a scale not greater than 1"=40' horizontally, and 1"=4' vertically. The wastewater system shall be shown on separate sheets from the paving plans.
4. Detailed geometry to facilitate construction, including stations at all junctions, structures, and all changes in direction, including PC's, PT's, and PI's, along with complete curve data.
5. Flowline elevations shall be shown every 50' in the profile and the flowline in and out of all pipes at manholes, in the profile view.
6. The pipe profile should identify the type and DR of pipe, size, length and slope of each pipe between manholes.
7. Minimum laying radius for wastewater mains shall be 1,150 feet.

8. Wastewater mains shall typically be located in the center of a lane of the roadway.
9. Manholes will be used at the end of the wastewater main.
10. All property lines, right-of-way lines, and easements shall be shown, and the wastewater main facilities tied to these as appropriate.
11. All existing and proposed utilities shall be shown in the plan view, and in the profile view where such information is available.
12. SDR 35 PVC pipe fittings may be used for pipe with less than 10 feet of cover. SDR 26 PVC pipe and fittings shall be used for pipe with 10 feet or more of cover.
13. An internal drop connection will typically be used for upstream pipe elevations entering a manhole that are 2 feet or higher than the downstream pipe elevation exiting the manhole.
14. Identify benchmarks, including any City of Sherman benchmarks if available.
15. Upstream pipes entering a manhole shall be no less than 90 degrees to the downstream pipe exiting a manhole unless otherwise approved by the City Engineer.
16. Applicable City of Sherman Standard Construction details shall be included in the construction plans. Modifications to these standard details shall not be made without prior approval of the City Engineer.

O. Plan Review Checklist

The Engineer shall prepare the design plans in accordance with the standard design checklist. The checklist is a tool for consultants, as City staff will review each plan submittal using the checklist as a guide.

1.10. Easements

- A. General - Easements shall be provided for public facilities including water, wastewater, reclaimed water, drainage features, and traffic signal or lighting equipment that are located outside the public right of way. For single-family residential developments, water, wastewater, reclaimed water and storm drain lines shall not cross residential lots unless specifically approved by the City Engineer. Additional easement width may be required to accommodate future maintenance of the facilities.
- B. Acquisition of Easements - Easements that have not been dedicated on a plat may be acquired by separate instrument. The acquisition of any easement is the owner's responsibility. If the owner cannot obtain a required offsite easement, the owner may request assistance from the City. Prior to requesting assistance, the owner shall provide a written offer to the property owner based on fair market value. The City's assistance does not relieve the owner of the cost of purchasing the easement. In addition, the owner shall reimburse the City for all costs associated with the

acquisition. The City of Sherman has no obligation to assist an owner with acquiring an offsite easement.

- C. The process for acquiring an easement by separate instrument is as follows:
1. Submit a metes and bounds description, a drawing of the easement sealed, signed and dated by a licensed surveyor, and ownership information to the Engineering Department.
 2. Engineering Department will prepare the easement documents on city forms.
 3. Person requesting the easement shall pay any document preparation and filing fees required by the city.
 4. After fee is paid to City, the easement documents will be sent to the person requesting the easement to obtain all necessary signatures (other than City's).
 5. Return all signed documents to the city for filing with the county.
 6. City will send a copy of the filed easement to the person requesting the easement and the easement grantor, if needed.
- D. Abandonment of Right-of-Way and Easements – Right-of-way and easements must be abandoned by separate instrument. Written City confirmation is required from all the public utility companies, including franchise utilities and the adjacent affected property owners indicating either agreement or disagreement to the proposed abandonment. The abandonment request will be forwarded to City Council for approval. Abandonments opposed by the affected property owners or utility owners will not be forwarded to City Council for approval. Right-of-way and easements granted to entities other than the City shall be abandoned by that entity.
- E. The following describes the process for abandoning right-of-way or easements:
1. All property owners abutting the proposed abandonment shall be notified by the applicant by certified letter. A written response from each abutting property owner must be received by the city prior to staff review.
 2. All public utilities including franchise utilities must not contest the abandonment.
 3. The applicant shall provide a description as to how the city originally acquired the right-of-way or easement (i.e., by plat, by separate instrument, etc.).
 4. The applicant shall describe why the easement is no longer needed.
- F. The right-of-way/easement abandonment application shall be submitted along with the supporting documentation to the Engineering Department for coordination and processing.
- G. Easement Use Agreements - The city may allow permitting of certain property owner improvements within easements with the execution of an Easement Use Agreement, which is in addition to a building permit. The agreement states that the City is not responsible for the maintenance or reconstruction of any improvements located in the easement or right-of-way and that the owner must remove the improvement at

the request of the City. Forms and instructions are available from the Engineering Department, or on the City's website.

- H. The Easement Use Agreement is processed by the Engineering Department with concurrence and review by Development Services. The following items will require an Easement Use Agreement:
 - 1. Brick, stone fences
 - 2. Retaining walls (less than 3 feet that support a structure, or greater than 3 feet)
 - 3. Private storm systems/area drains greater than 6" diameter
 - 4. Swimming pools and decks
 - 5. Wood decks, gazebos and patios (covered/uncovered)
 - 6. Buildings and other permanent improvements
- I. Items listed below may be allowed without the execution of an Easement Use Agreement and with approval from the City Engineer:
 - 1. Paving or flatwork
 - 2. Wooden or chain-link fences (where allowed)
 - 3. Retaining walls less than three feet in height that do not support a structure or infringe on the required visibility triangles.

1.11. Survey

A. General

- 1. In the interpretation and application of the provisions in these survey requirements, it is the intention of the City that the principals, standards and requirements provided herein shall be minimum standards for the projects involving survey, and where other Ordinances of the City are more restrictive, such Ordinances shall control, as they exist or may be amended.
- 2. All survey work shall be done in the NAD 83 CORS Grid Coordinate System utilizing control monuments established within the City of Sherman. Refer to The City of Sherman Geodetic Control Survey Technical Report.

B. Survey Markers and Monumentation

- 1. Markers - Markers consisting of minimum 3/8" diameter steel rods at least 24" long with caps identifying responsible surveying firm or RPLS number shall be placed at all:
 - a. Lot and block corners (wherever a lot line bearing changes);
 - b. Intersection points of alley and block lines;

- c. Curve and tangent points along block, lot and right-of-way lines within the subdivision; and
 - d. Right-of-way dedications.
- 2. Monuments - Monuments shall be installed and three dimensional coordinates noted on the Plat. Coordinates shall be established using the City's Monumentation System and using the City's Combined Scale Factor.
- 3. Subdivision Monumentation - At least two Markers shall be placed at property corners in addition to at least two Monuments at opposing ends of the property.
- 4. Capital Improvements Project Monuments - Found existing right-of-way monuments, survey markers, or property corners, and proposed monuments shall be shown on the construction drawings by northing and easting coordinates.
- 5. If new construction will damage, destroy, or alter existing survey markers, monuments, or property corners, they must be re-set prior to final acceptance.
- 6. Electronic Submittal Requirements - The City requires the submittal of CAD files for all plats within the City of Sherman for incorporation into the City's GIS system. The Engineer must provide Grid Coordinates (State Plane) or Surface Coordinates with Scale Factor. The electronic files shall include the following:
 - a. Two Monuments (with three-dimensional coordinates);
 - b. Markers at a minimum of two property corners (with three-dimensional coordinates);
 - c. Parcel boundaries; and
 - d. Right-of-way and easement dedications.
- C. Final Plat Acceptance - Prior to Final Plat Acceptance, all required Monuments must be found and re-set if damaged during construction.
 - 1. The Surveyor will provide two Monuments acceptable to the City and establish grid coordinates for the monuments in reference to the City of Sherman GPS Monuments.
 - 2. Elevations will be established on the two monuments on the vertical datum in reference to the City of Sherman GPS Monuments.
 - 3. In order to ensure that all necessary easements are reflected on the Final Plat, a preliminary inspection should be completed after all construction work has been done before the Final Plat is submitted for approval

1.12. Record Drawings

- A. Record Drawings must include any field changes and show actual built conditions. Digital submittal of record drawings in pdf format and AutoCAD dwg format shall be provided to the Engineering Department.

- B. To facilitate references during the plan review and intake process, each sheet should be bookmarked with the sheet number and title. For clarification, the individual pages should be labeled according to the sheet number and description of the plan sheet, i.e. 002-Site Plan, 010-Paving Plan, 020-Grading Plan, etc. The order of the drawings on the digital document should match the same order on the cover page.
- C. Plans and documents prepared by Design Professionals may be signed either digitally or physically in accordance with Texas Architectural Board and Texas Engineering Board standards. Plans prepared by Design Professionals shall contain an information block with name, license number, firm number, signature and contact information.

1.13. Definitions

- A. The definitions within this section are intended to provide descriptions for terms used within the Engineering Design Standards Manual. When words and terms are defined herein and in other City ordinance(s), they shall be read in harmony. If an irreconcilable conflict exists, the definition contained herein shall control. Where no definition appears, the term should be interpreted according to their customary usage in the practice of municipal planning and engineering. The City Engineer has the final determination of interpretation. Words used in the present tense include the future tense. Words in the singular tense include the plural tense. The word "shall" is mandatory and not directory. The word "may" is directory and not mandatory.
 - 1. **Approved, Accepted, Directed, Required, and Words of Like Import:** Whenever they apply to the work or its performance, the words "directed," "accepted," "required," "permitted," "ordered," "designated," "established," "prescribed" and words of like shall imply the direction, requirement, permission, order, designation or prescription of the City; and "approved," "acceptable," "satisfactory" and words of like import shall mean approved by, acceptable to or satisfactory to the City.
 - 2. **Backfill:** The term means the following (1) the placement of new dirt, fill, or other material to refill an Excavation; or (2) the return of excavated dirt, fill or other material to an Excavation.
 - 3. **City:** The term City means the City of Sherman or its authorized representative(s).
 - 4. **City Engineer:** The City Engineer or his/her authorized representative.
 - 5. **Compaction:** The term refers to consolidating material to prevent future settlement
 - 6. **Contract or Contract Documents:** Contract documents are all of the written, printed, typed, drawn instruments, plans, and specifications that comprise and govern the performance of the contract between the Owner and the Contractor.
 - 7. **Contractor:** The person, persons, partnership, firm, corporation, association or organization, or any combination thereof, as an independent contractor entering into the contract for the execution of the work, acting directly or through a duly authorized representative. Contractor does not refer to the City.
 - 8. **Development:** Refers to the project being designed or constructed. (see also Subdivision Ordinance)
 - 9. **Easement:** A property right giving an entity other than the owner permission to use a property for a specific purpose stated in the easement document. (see also Subdivision Ordinance)

10. **Emergency Operations:** Those operations and repairs necessary to prevent damage or injury and to protect the health or safety of the public or any person and the work necessary to address or prevent an immediate service interruption. Upgrading of facilities, new service installation and neighborhood improvement projects are not emergency operations.
11. **Engineer, Owner's Engineer, Design Engineer:** The Engineer or its duly authorized representative means the Engineer of the Owner, who is the Engineer of Record of the Contract Documents.
12. **Equal:** Materials, articles, or methods that are of equal or higher quality than those specified or shown on the drawings, as determined by the City's sole discretion.
13. **Excavation:** Excavation means any activity that removes or otherwise disturbs soil, pavement, driveways, curbs, or sidewalks in the right-of-way or an easement.
14. **100-Year Floodplain:** The area encumbered due to a flood having a one percent (1%) chance of being equaled or exceeded in any given year.
15. **Owner:** For the purposes of this manual, the term Owner refers to the entity that is financially responsible for developing and maintaining a particular site or project, either the City for public projects or the developer for private projects.
16. **Plan or Plans:** The plans are the drawings or reproductions therefrom made by or approved by the Owner showing in detail the location, dimension and position of the various elements of the project, including such profiles, typical cross-sections, layout diagrams, working drawings, preliminary drawings and such supplemental drawings as the Owner's Engineer may issue to clarify other drawings or for the purpose of showing changes in the work hereinafter authorized by the Owner.
17. **Private Facilities or Improvements:** Any improvements on private property where a public entity (i.e. the City) is not considered the Owner.
18. **Public Facilities or Improvements:** Public facilities and/or improvements include streets (including streetlights, street signs, signals and pavement markings), storm drainage systems, water lines, sanitary sewer lines, pedestrian improvements, or other similar improvements constructed within public right-of-way or easements. Typically, the City maintains public improvements after expiration of any applicable maintenance bonds.
19. **Private Fire Service Main:** Pipe and its appurtenances on private property beyond the meter supplying water for fire protection facilities such as automatic sprinkler systems
20. **Private Water Line:** Pipe and its appurtenances beyond the meter supplying potable water on private property.
21. **Right of Way or Public Right of Way (ROW):** A use of land dedicated by plat or metes and bounds to and for use by the public, which is separate and distinct from the lots and parcel abutting it, and which is not included within the dimensions or areas of such lots or parcels. Generally describes an area used for the provision of streets and utilities. Unless otherwise specified, the term right-of-way shall refer to a public right-of-way.
22. **Specifications or Technical Specifications:** Document giving a detailed description of the quantitative and qualitative requirements for products, materials, and workmanship

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SECTION 2 STREET CORRIDOR DESIGN REQUIREMENTS

2.1. General

- A. The arrangement, character, extent, width, alignment, and location of all streets, public ways, alleys, and driveways shall be in conformity with the City's Thoroughfare Plan and Comprehensive Plan and should be considered in their relation to existing and planned streets, alleys and driveways, topographical and environmental features, scenic views, and the land uses proposed to be served by such streets.
- B. All street designs shall meet the guidelines in AASHTO's current *A Policy on Geometric Design of Highways and Streets*
- C. Major and Minor Arterials will typically be required to plat at least a 15 foot wide Landscape, Sidewalk, and/or Utility Easement along the right-of-way. Fences and parking lots shall not be installed within these easements which are paralleling the right-of-way of Arterial roadways.
- D. Live street scaping materials, plants, trees, and locations within ROW and easements will conform to the applicable requirements as shown on the City of Sherman Construction Details, posted on-line.

2.2. Street Design

- A. **Street Definitions** – The City recognizes five basic classifications of public roadways that include highways, major arterials, minor arterials, commercial collectors, residential collectors and urban streets as identified in the transportation element of the Comprehensive Plan. Each class provides a certain degree of continuity, capacity, and accessibility to adjacent land uses. While differentiated by function, there is also a variance in geometric design. **Table 2.1** summarizes the general design criteria of roadways within the City. The typical cross sections are depicted in **Figure 2.1**.
 - 1. Major Arterials – Six-lane divided roadways defined herein as Major Arterial thoroughfares.
 - 2. Minor Arterials – Four-lane divided roadways defined herein as Minor Arterial thoroughfares.
 - 3. Commercial Collectors – Commercial collectors provide access from a Major Arterial or Minor Arterial thoroughfare to nonresidential properties and are defined herein as Commercial Collector thoroughfares. Commercial collectors connect to a Major Arterial or Minor Arterial thoroughfare, extend more than six hundred feet (600') into a residential neighborhood, and should have no homes fronting on them. Commercial collector cross section shall be used for industrial streets.
 - 4. Residential Collectors and Urban Streets – Streets with homes fronting on them that are defined herein each with different design characteristics.
 - 5. Rural Streets – Streets with homes fronting on them with lots of one (1) acre or greater.

6. Alley – Pavement behind homes that serve rear entry garages.
7. Private Streets – Private streets shall be designed and constructed to the same standards as public streets. Any gated entrances shall also meet the requirements of **Section 2.5.K**.

B. Roadway Geometrics – Geometrics of City streets shall be defined as the geometry of the pavement and curb areas that govern the movement of traffic within the confines of the right-of-way (ROW). Included in the geometrics are pavement width, horizontal and vertical curvature, width of traffic lanes, median nose radii, curb radii at street intersections, pavement cross-slope, crown height, pavement thickness, and geometric shapes of islands separating traffic movements and other features.

1. Design Speed – The design speed is a primary factor in the horizontal and vertical alignment of roadways. Design features such as curvature, super-elevation, turning movement radii, and sight distance affects roadway lane width, pavement width, pavement cross-slope, pavement crown, and clearances. Refer to **Table 2.1**.
2. Grades – Roadway grades shall be a minimum of eight-tenths percent (0.8%) in order to insure proper flow of surface drainage toward inlets and a maximum of six percent (6%). Steeper grades may be permitted on local residential streets and where required by topographical and/or natural features, as approved by the City Engineer.
3. Roadway Centerline
 - a. Roadways shall typically be placed in the center of the ROW. The centerline of curves shall be tangent to the centerline of street at each end of curve.
 - b. If offset, roadway centerlines for Commercial Collector, Residential Collector, and Urban Street thoroughfares shall be offset a minimum of one hundred and twenty-five feet (125'). If offset, Major Arterial and Minor Arterial thoroughfares shall be offset to meet the median requirements in **Section 2.3.B**.
4. Cross-Slope/Crown Height – Major Arterial and Minor Arterial thoroughfares shall typically have a two-percent (2%) cross-slope. The cross-slope can vary where there is a transition into or out of a maximum two percent (2%) superelevation. Refer to the standard details for Commercial Collector, Residential Collector, and Urban Street crown height, and Alley invert height.
5. Pavement Thickness and Reinforcement – See **Section 3** of the Engineering Design Standards Manual for minimum subgrade and pavement design requirements.
6. Transitions – Shall be designed based on the most current TMUTCD and AASHTO equations and guidelines for lane transitions.

C. Dead-End Streets/Cul-de-Sacs/Stub Streets

1. All dead-end streets shall have a turn-around unless otherwise allowed in Item 4. below. Turn-arounds at the end of dead-end streets (cul-de-sacs) shall have a circular driving surface that has a minimum radius of fifty feet (50') and a street right-of-way that has a minimum radius of sixty feet (60').
2. The maximum length of a dead-end street with a turn-around (cul-de-sac) shall be seven hundred feet (700'), measured from the right-of-way line of the intersecting street to the center point of the turn-around, except in conditions of unusual topography or approved otherwise by the City Engineer and Fire Marshall.
3. If any residential lot fronts onto the dead-end portion of a street that will be extended in the future, a temporary turn-around that meets the standards described above shall be constructed at the end of the dead-end street within a temporary street easement. The following note shall be placed on the plat: "Cross-hatched area is temporary street easement for turn-around until street is extended (give direction) with future development of abutting property".
4. A stub street is an undivided dead-end street that will be extended in the future that does not have a turn-around, which is only allowed under the following conditions: No residential lots shall front onto a stub street unless approved by the City Engineer. Non-residential lots adjacent to a stub street shall have access to another street. If the length of a residential stub street exceeds the depth of the adjacent residential lots, it shall be temporarily blocked at the rear edge of the lots (or alley) with Type III Barricade construction detail across the entire width of the road. If a non-residential stub street extends more than one hundred feet (100') beyond the last driveway on the street, it shall be temporarily blocked at the last driveway with Type III Barricade construction detail across the entire width of the road.
5. A stub street shall have permanent Type III barricades stating "Road Closed" installed at its terminus. The installation and cost of these barricades and signs shall be the responsibility of the developer.

D. Minimum Horizontal Design Radius

1. The minimum centerline radius is a function of design speed, superelevation, and the vehicle side friction factor. Side friction is the force that keeps a vehicle from sliding off of the roadway.
2. The minimum horizontal radii are shown in **Table 2.1** and are based upon the guidelines in AASHTO's 2018 edition of *A Policy on Geometric Design of Highways and Streets*.

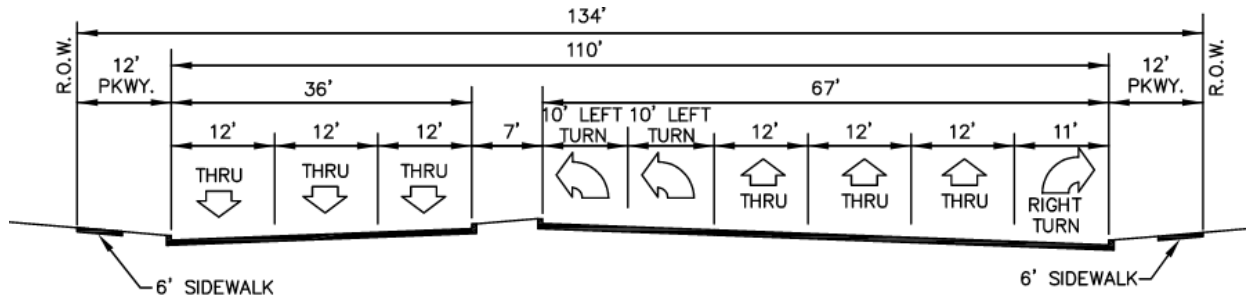
Table 2.1 – General Roadway Design Criteria

Criteria	Street Class						
	Major Arterial	Minor Arterial	Commercial Collector	Residential Collector	Urban Street	Rural Street	Alley
Right-of-Way (ROW)	120' ⁽¹⁾	90' ⁽²⁾	65'-75'	60'	50'	60'	20'-30'
Pavement Width (face to face)	36' in each direction	24' in each direction	44'-54'	36'	30'	24' w/2' shoulders	15'-24'
Traffic Lanes	6	4	2-4	2-3	2	2	1-2
Left Turn-lane Width	2 @ 10'	1 @ 11'	N.A.	N.A.	N.A.	N.A.	N.A.
Right Turn-lane Width	11'	11'	N.A.	N.A.	N.A.	N.A.	N.A.
Minimum Median Width	6'	6'	N.A.	N.A.	N.A.	N.A.	N.A.
Minimum Parkway Width Behind Curb	10'-6"	10'-6"	10'	11.5'	9.5'	18' ⁽⁴⁾	2.0'
Sidewalk Width detached from Curb/Adjacent to Curb	6'/7'	6'/7'	6'/7'	5'/6'	5'/6'	N.A.	N.A.
Design Speed, V (MPH)	45	45	30	30	30	30-45	15
Minimum Grade	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%
Maximum Grade	6%	6%	6%	6%	6%	6%	6%
Min. Horizontal Radii ⁽³⁾	1100'	1100'	350'	350'	200'	200'-1100'	50'
Min. Tangent Between Curves	100'	100'	100'	100'	0'	0'—100'	N.A.
Min. Vertical Crest Curve (K)	61	61	19	19	19	19-61	N.A.
Min. Vertical Sag Curve (K)	79	79	37	37	37	37-79	N.A.
Stopping Sight Distance	360'	360'	200'	200'	200'	200'-360'	80'
Parking	Prohibited	Prohibited	Allowed	Allowed	Allowed	Prohibited	Prohibited
Volume Range (VPD)	36-45,000	20-28,000	12-18,000	6-12,000	N.A.	6-12,000	N.A.

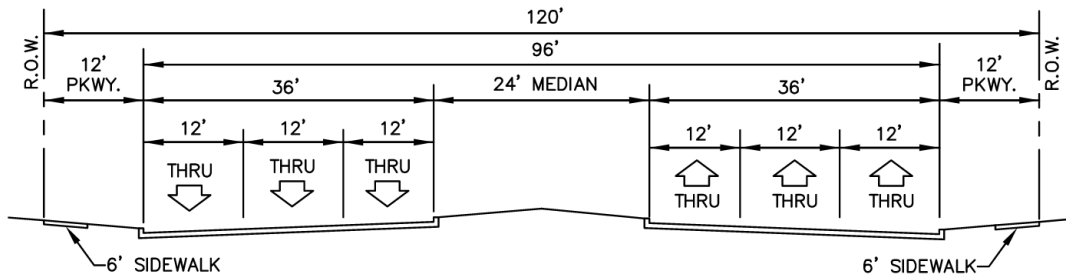
- (1) 134' ROW at intersections (See Figures 2.2 and 2.4)
(2) 101' ROW at intersections (See Figures 2.3 and 2.5)
(3) Based upon the negative x-slope of the section
(4) Dimension based upon edge of pavement (HMAC) to ROW

Figure 2.1 – Typical Cross Sections

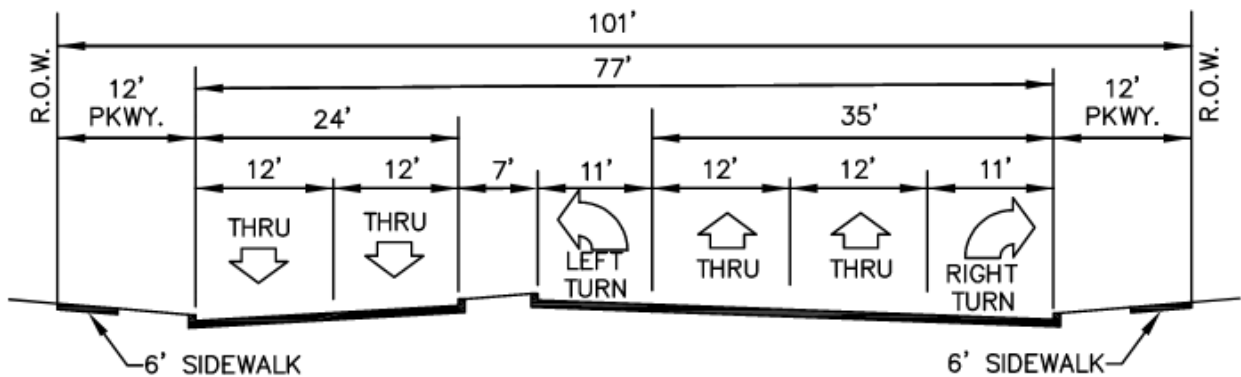
Major Arterial (Intersection)



Major Arterial (Midblock)



Minor Arterial (Intersection)



Minor Arterial (Midblock)

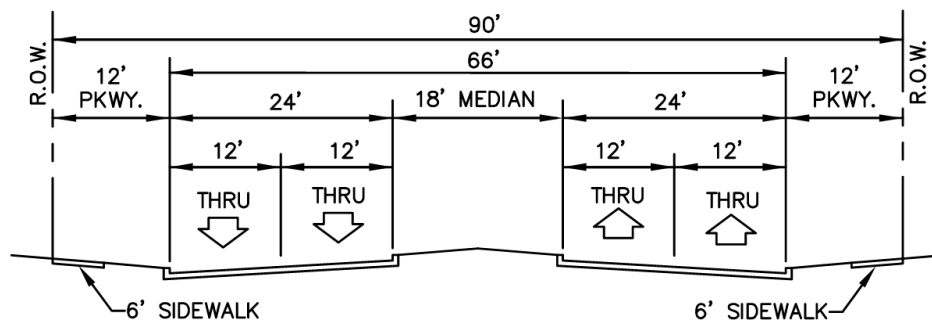
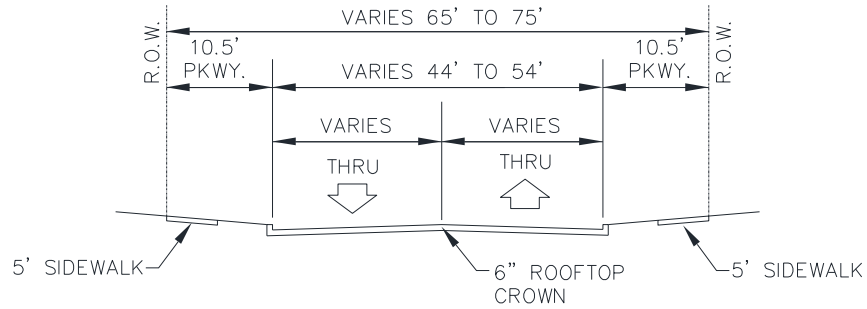
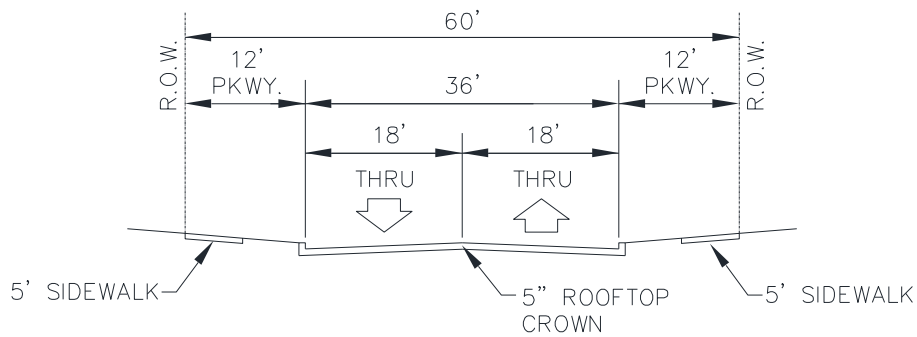


Figure 2.1 (Cont'd) – Typical Cross Sections

Commercial Collector



Residential Collector



Urban Street

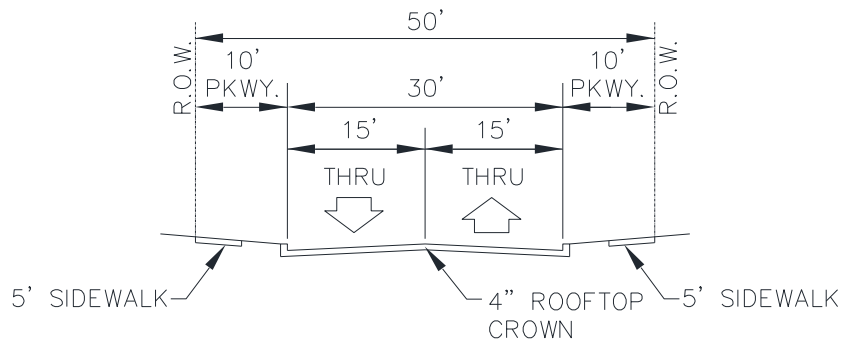
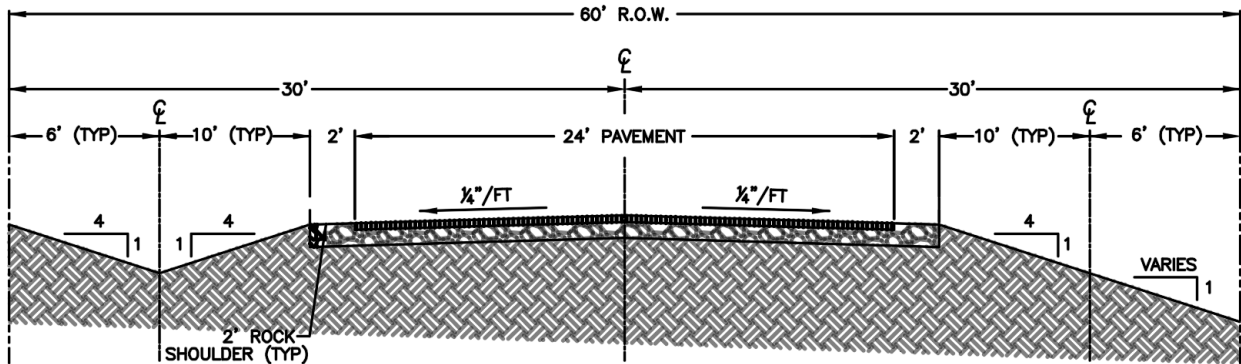


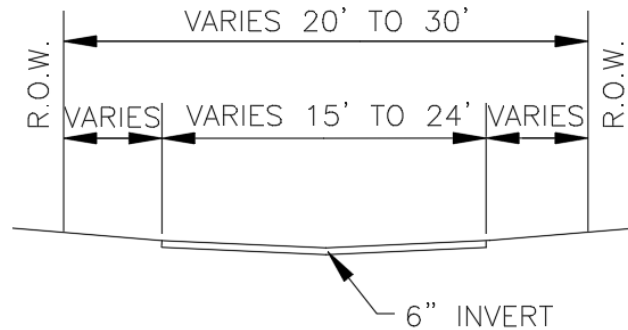
Figure 2.1 (Cont'd) – Typical Cross Sections

Rural Street

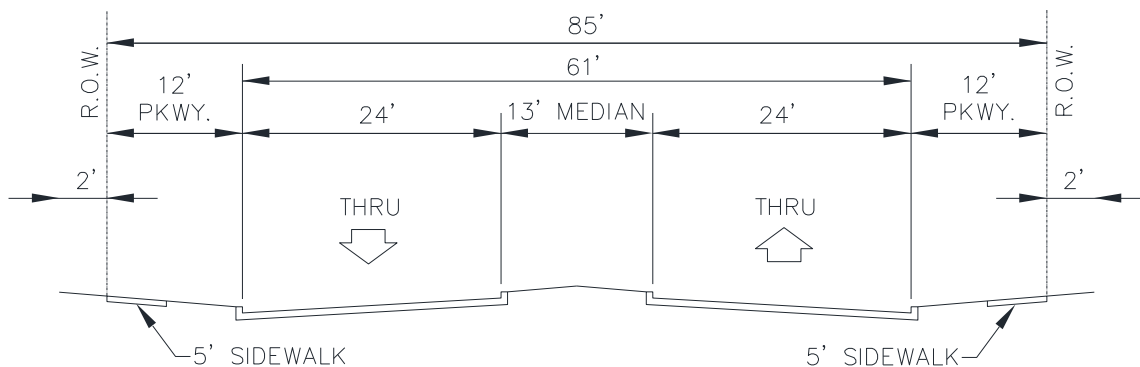


TYPICAL ROADWAY SECTION

Alley



Alternative Divided Residential Subdivision Entrance



E. Minimum Vertical Alignment

1. Vertical curves are utilized in roadway design to affect gradual change between tangent grades and will result in a design which is safe, comfortable in operation, pleasing in appearance and adequate for drainage. Vertical curve alignment shall also provide Stopping Sight Distance (SSD) in all cases. SSD is a function of design speed, perception-reaction time, and deceleration rate. The perception-reaction time is assumed to be 2.5 seconds and is in accordance with the guidelines in AASHTO's 2018 edition of *A Policy on Geometric Design of Highways and Streets*.
2. Vertical curves will be utilized at all grade transitions, vertical points of intersection (VPI's) are not permitted without prior approval of the City Engineer. Split curb profiles will be required on non-primary streets intersecting primary streets. The higher classification roadway is typically considered primary and the lesser classification roadway being typically considered non-primary. Grades approaching the intersection, on the non-primary roadway, are to be transitioned to match the profile grade of the primary intersecting roadway. If two (2) roadways of the same classification are intersecting, the roadway accommodating the through traffic will be considered the primary roadway and the non-primary roadway will be required to have split profiles to match the primary roadways profile.
3. The minimum acceptable length of Crest curves, shown in **Tables 2.3**, are based upon Stopping Sight Distance (SSD) calculations. The SSD equation used replaces the deceleration term in Equation 3.2 (AASHTO) with the braking distance Equation 3.3 (AASHTO). The resultant SSD compensates for braking on wet pavement for crest vertical curves SSD computations for grade adjustment may be necessary depending on terrain and traffic mix and shall be in accordance with the guidelines in AASHTO's current *A Policy on Geometric Design of Highways and Streets*.

Braking distance for highways on a grade (dry conditions) :
$$d_B = \frac{V^2}{30 \left[\left(\frac{a}{32.2} \right) \pm G \right]}$$

d_B = braking distance on grade, ft.

V – design speed, mph

a = deceleration, ft/s²

G = grade, rise/run, ft/ft

4. The minimum acceptable length of Sag Curves, shown in Table 2.4, are based upon several components such as effect of drainage, comfort factor, and headlight sight distance.
5. **Table 2.1** also shows values of K . K is defined as a measure of vertical curvature and is equivalent to the horizontal distance in feet required to make a one percent (1%) change in grade. K provides the values of A are equivalent to the algebraic difference in grade between the two grades that are being joined together by the vertical curve.

Table 2.3 – Minimum Acceptable Length of Crest Curve Given Speed and Difference in Grade of Road

Design Speed, V (MPH)	SSD (ft)	Length of Vertical Curve (L=KA)									
		A=1.6	A=2	A=3	A=4	A=5	A=6	A=7	A=8	A=9	A=10
30	205	50	50	60	80	100	120	140	160	180	190
35	260	50	65	95	130	160	190	220	255	285	315
40	315	75	95	140	185	230	280	325	370	415	460
45	380	110	135	205	270	335	405	470	540	605	670

Table 2.4 – Minimum Acceptable Length of Sag Curve Given Speed and Difference in Grade of Road

Design Speed, V (MPH)	SSD (ft)	Length of Vertical Curve (L=KA)									
		A=1.6	A=2	A=3	A=4	A=5	A=6	A=7	A=8	A=9	A=10
30	200	60	80	120	150	190	230	260	300	340	370
35	250	80	100	150	200	250	300	350	400	450	490
40	305	110	140	200	260	320	390	450	520	580	640
45	360	130	160	240	320	400	480	560	640	720	790

F. Standard Intersection Layout

1. Street intersections shall intersect at ninety-degree (90°) angles unless approved otherwise by the City Engineer. Intersection approaches for Major Arterial and Minor Arterial thoroughfares shall remain perpendicular for a minimum distance equal to the corresponding design speed Stopping Sight Distance (SSD) identified in **Table 2.1** unless approved otherwise by the City Engineer. For residential collector and/or local street intersections, up to a five-degree (5°) tolerance is allowable.
2. When the classification of a thoroughfare changes as it crosses an intersecting street, the design of both thoroughfare approaches shall maintain the characteristics of the higher-class thoroughfare for a minimum distance specified by the City Engineer.
3. The through lane(s) on one approach shall align with the receiving lane(s) on the other side of the intersection. If pre-existing physical encroachments make an offset necessary, a through lane can be offset no more than six feet (6') from its receiving lane when crossing a Minor Arterial or smaller thoroughfare and offset no more than eight feet (8') when crossing a Major Arterial thoroughfare. These

requirements apply to both public street and private driveway approaches to an intersection.

4. The curb radii shall be a minimum of twenty feet (20') where Residential Collector and Urban Streets intersect with Residential Collector and Urban Streets. The curb radii shall be a minimum of forty feet (40') where Major Arterial, Minor Arterial, and Commercial Collector thoroughfares intersect with Major and Minor Arterial thoroughfares. The curb radii at all other intersecting streets shall be a minimum of thirty feet (30'). Larger curb radii may be required to accommodate fire trucks and/or commercial trucks.
5. Major-Major Arterial, Major-Minor Arterial, and Minor-Minor Arterial intersections shall maintain a maximum slope of two percent (2%) a minimum distance of two hundred feet (200') upstream and downstream of the intersection unless approved otherwise by the City Engineer.
6. Roadway connections to a Major Arterial or Minor Arterial thoroughfare shall maintain a maximum slope of two percent (2%) a minimum distance of one hundred feet (100') upstream and downstream of the intersection unless approved otherwise by the City Engineer.
7. A separate grading plan shall be provided for Major-Major Arterial, Major-Minor Arterial, and Minor-Minor Arterial intersections. Grading plans shall account for future extensions of Major Arterial and Minor Arterial thoroughfares for a minimum distance of six hundred feet (600') beyond the curb return of the intersection in all directions.
8. At four-way intersections, the reduction of the crown height shall occur on the street with the through gutter.
 - a. For Commercial Collector and Residential Collectors, the crown height reduction to three inches (3") shall occur through the intersection and transition from the curb return to a point fifty feet (50') past the curb return.
 - b. For Urban Streets, the crown height reduction to two inches (2") shall occur through the intersection and transition from curb return to a point thirty feet (30') past the curb return.
9. A minimum of nine and a half feet (9.5') of parkway shall be maintained from the back of the curb along the curb's radius.

10. ROW width for a Major Arterial thoroughfare that intersects a Major or Minor Arterial thoroughfare shall be one hundred thirty-four feet (134') for a distance of seventy-five feet (75') and then taper at a 15:1 ratio to the standard ROW width. See **Figure 2.2**.

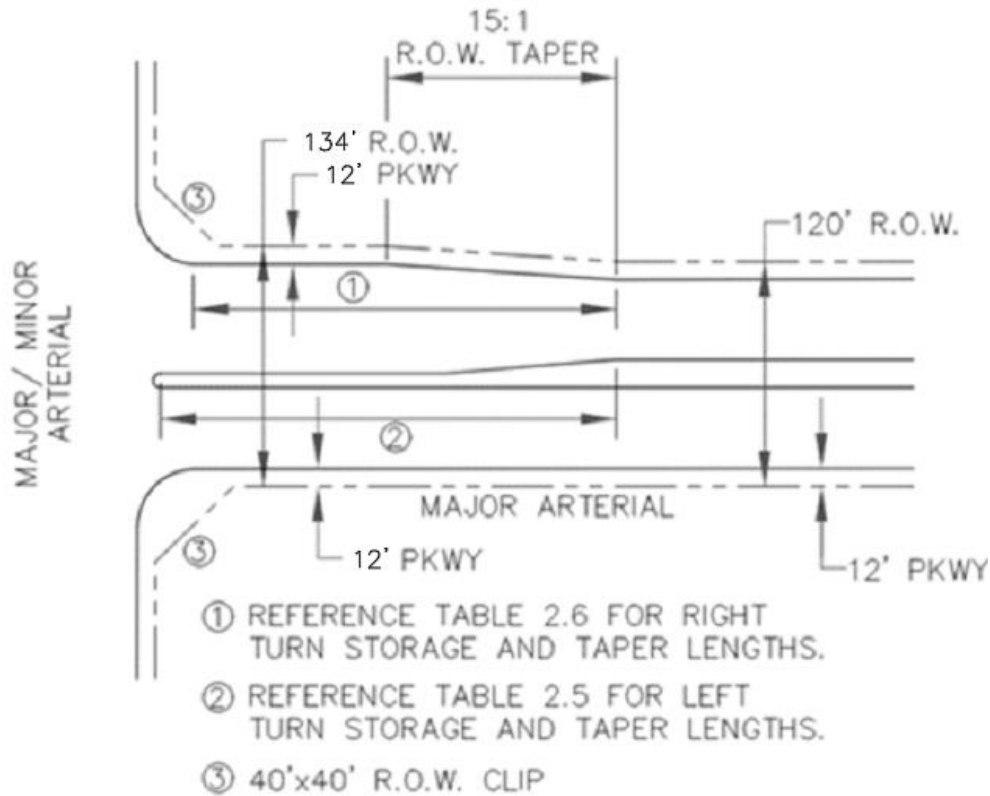


Figure 2.2 – Major Arterial Thoroughfare Intersection with Major/Minor Thoroughfare

ROW width for a Minor Arterial thoroughfare that intersects a Major Arterial or Minor Arterial thoroughfare shall be one hundred one feet (101') for a distance of twenty-five feet (25') and then taper at a 15:1 ratio to the standard ROW width to allow build-out of the intersection. See **Figure 2.3**.

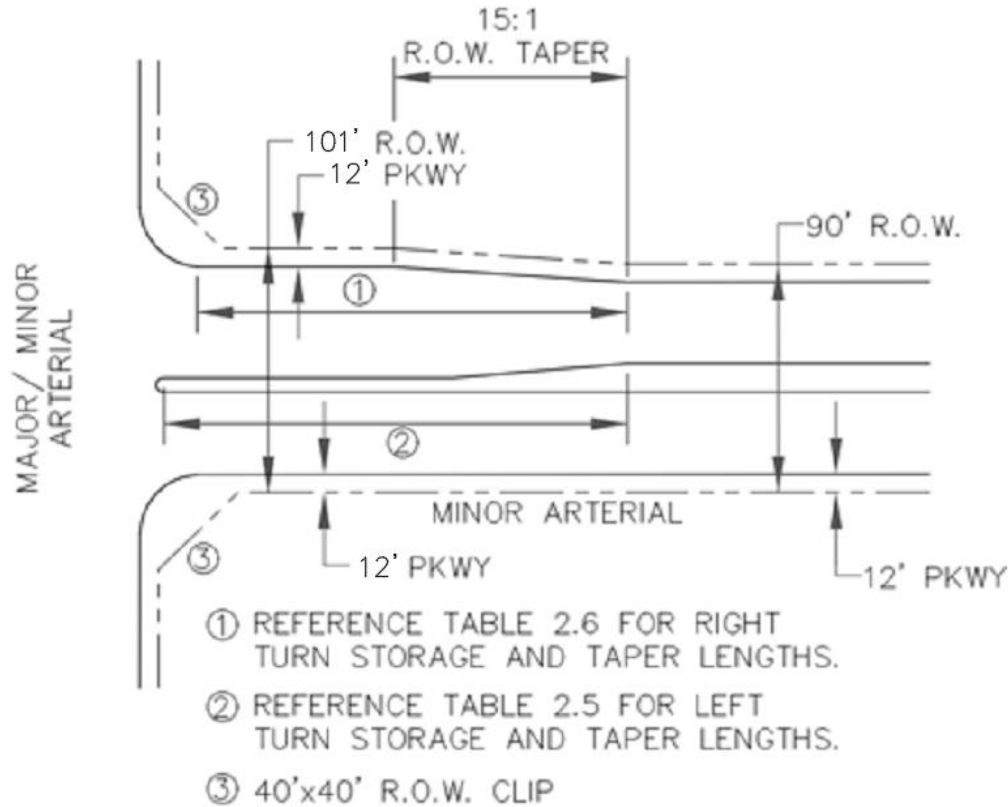


Figure 2.3 – Minor Arterial Thoroughfare Intersection with Major/Minor Thoroughfare

11. The ROW width for a Major Arterial thoroughfare that intersects with a pair of highway frontage roads shall be one hundred thirty-four feet (134') for a distance of three hundred feet (300') and then taper at a 15:1 ratio to the standard ROW width to allow build-out of the intersection. The ROW width for a Minor Arterial thoroughfare that intersects with a pair of highway frontage roads shall be one hundred one feet (101') for a distance of three hundred feet (300') and then taper at a 15:1 ratio to the standard ROW width to allow build-out of the intersection, see **Figure 2.4** and **Figure 2.5**.

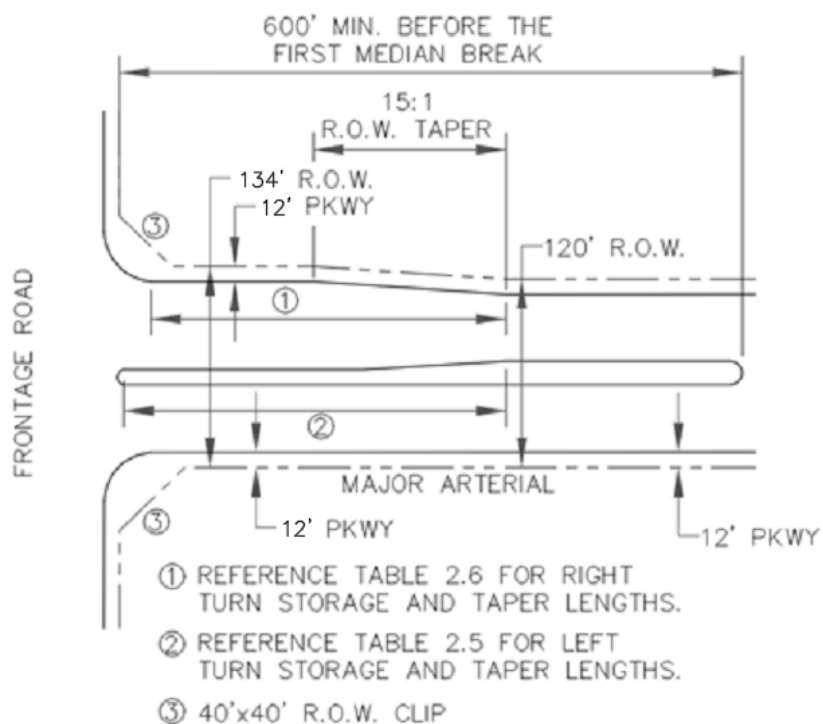


Figure 2.4 – Major Arterial Thoroughfare Intersection with Frontage

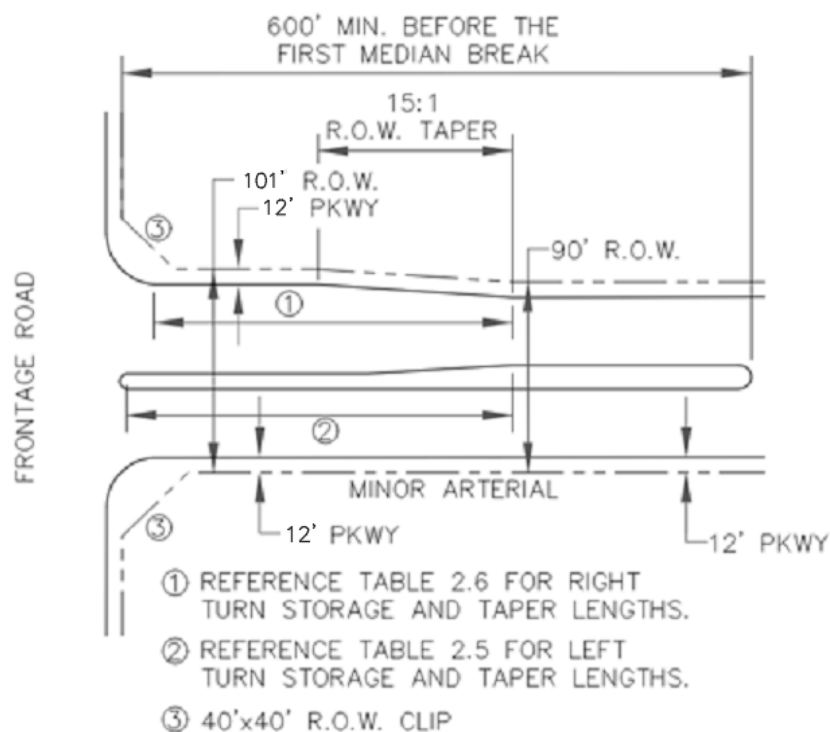


Figure 2.5 – Minor Arterial Thoroughfare Intersection with Frontage Road

G. Roundabouts

1. Roundabouts may be considered for the intersection of Minor Arterial, Commercial Collector, Residential Collector, or Urban Streets thoroughfares, with Commercial Collector, Residential Collector, or Urban Streets thoroughfares. Roundabouts shall not be installed at a Major-Major Arterial, Major-Minor Arterial, or Minor-Minor Arterial intersection without a detailed traffic simulation and cost-benefit analysis approved by the City Engineer. Roundabouts shall not be installed along a six-lane Major Arterial thoroughfare.
2. Roundabouts on private property that connect to a private street or to a fire lane shall be designed to the standards in these design requirements.
3. Roundabouts shall be designed to accommodate a City fire truck making all possible entry and exit movements.
4. Roundabouts shall include the typical features of a modern roundabout shown in **Figure 2.6** and described in these design requirements.
5. The curb surrounding the central island shall be six inch (6") vertical curb. The truck apron curb shall be three inch (3") mountable curb. The curb surrounding all faces of each splitter island shall be six inch (6") vertical curb.
6. The inscribed circle radius shall be a minimum of fifty-five feet (55') and a maximum of ninety feet (90') for a single lane roundabout, and a minimum of seventy-five feet (75') and a maximum of a hundred feet (110') for a two-lane roundabout.
7. The circulatory roadway shall have a minimum width of sixteen feet (16'), face-to-face. The circulatory roadway shall be at least as wide as the maximum entry width at the roundabout.
8. Truck aprons shall provide a solid surface of concrete pavers or stamped/colored concrete that are a contrasting color compared to the pavement of the circulatory roadway and shall not give the appearance of being a sidewalk.
9. Single lane entries and exits shall be a minimum of sixteen feet (16') wide, face to face.
10. Two-lane entries and exits shall be a minimum of twenty-four feet (24') wide, face to face.
11. Splitter islands shall provide a solid surface of concrete pavers or stamped/colored concrete unless the entry and exit on the same leg of the roundabout are both at least twenty-four feet (24') wide, face-to-face. The pavers shall be a contrasting color compared to the street pavement. If pavers are not required, the splitter island can contain landscaping provided it does not interfere with the necessary sight distance.
12. Crosswalks shall pass through or in advance of each splitter island.

13. All streets, fire lanes, and approved driveways shall intersect radially with a roundabout. Residential driveways shall not intersect with a roundabout.
14. Landscaping and/or monuments within the central island are required but shall be limited so that the minimum sight distances described in NCHRP Research Report: Guide for Roundabouts (2023). are provided at the roundabout. For vehicles approaching the roundabout, this includes the approach stopping sight distance to the crosswalk or the yield line, the stopping sight distance to the crosswalk on the next exit, and the intersection sight distance to circulating vehicles and vehicles entering at the immediate upstream entry. For circulating vehicles, this includes the stopping sight distance on the circulatory roadway.
15. Parking is prohibited within a roundabout.
16. On any approach to a roundabout, driveways, alley connections, and on-street parking shall not be permitted between the crosswalk and the yield line nor along any portion of street that contains a splitter island.
17. The ROW for a roundabout shall extend a minimum of twelve feet (12') beyond the back of its outer curb. The ROW for any street entering the roundabout will flare out as the street flares so that a minimum of twelve feet (12') is provided beyond the back of curb on each side of the street.
18. The roundabout entries and exits and the pavement cross slope contained within the inscribed circle radius shall not exceed two percent (2%). Roadway approaches to the roundabout shall have a maximum slope of two percent (2%) for a distance of at least two hundred feet (200') for Minor Arterial thoroughfares and at least one hundred feet (100') for Commercial Collector, Residential Collector, and Urban Street thoroughfares.
19. Roundabouts shall be illuminated by street lights as described in NCHRP Research Report: Guide for Roundabouts (2023).
20. To request the use of a roundabout, the engineer must provide the following information for the City's review
 - a. A horizontal geometry sheet including, lane widths, roundabout diameter, truck apron dimensions, splitter islands, proposed striping and cross-walk locations, by-pass lane if proposed, and a legend.
 - b. Fastest paths – a sheet including the fastest paths for all legs of the roundabout, including but not limited to, R1, R2, R5 variables with radius and speeds. These are to be presented in tabular form and adjacent to the entry leg being summarized. All paths are to be shown and labeled on the drawing for reference. Also include any assumptions and documents used for the analysis and a legend.
 - c. Design vehicle tracking for each leg. There will be a "window" for each leg which reflects what design vehicle is being used and its tracking through the first exit (90°) and the last exit (360°). All assumptions and tracking software to be noted on the sheet, including a legend.
 - d. Sight Distance envelopes for each leg. The following envelopes are to be shown:
 - i. Intersection Sight Distance Envelope
 - ii. Intersection Sight Distance Envelope, circulating

- iii. Stopping Sight Distance Envelope
- iv. Stopping Sight Distance Envelope, circulating
- v. Legend and design notes and assumptions.
- e. Angles of Visibility. Provide angles of visibility for all legs of the roundabout which include the sightlines less than 75° and the sight lines between 90° and 75°. Include a legend and notes. Include the vehicle location at leg with a shaded triangle projecting to the drivers left sightline. Include a typical schematic of the vehicle and sight triangle color coding.

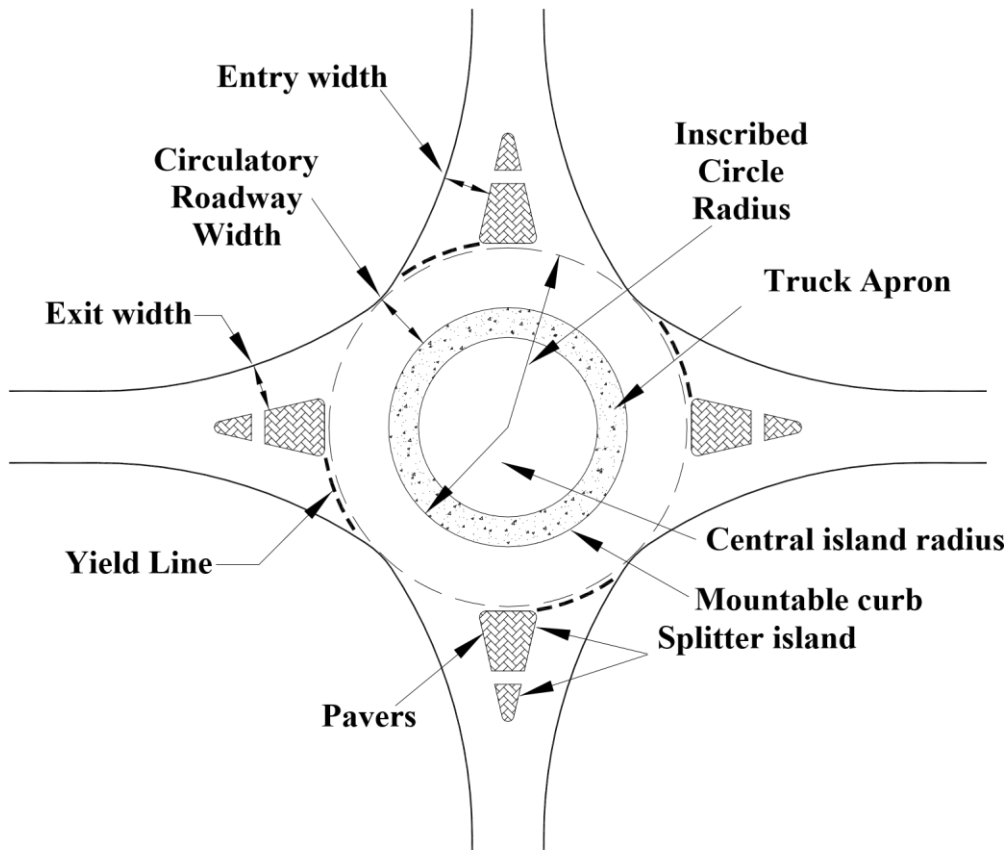


Figure 2.6 – Typical Roundabout

H. Residential Frontage

1. Residential lots shall not front onto a Major Arterial, Minor Arterials, or Commercial Collector thoroughfare unless parallel access roads are provided. The minimum distance between adjacent curbs of the thoroughfare and the access road shall be fifteen (15'). Access road ROW shall be in addition to the thoroughfare ROW.
2. Residential lots shall not front onto a Residential Collector or Urban Street within one hundred feet (100') of the ROW line of the nearest Major Arterial or Minor Arterial thoroughfare.
3. Residential lots shall not front onto any portion of a Residential Collector or Urban Street that is part of a residential collector, which is a street that connects

to a Major Arterial or Minor Arterial thoroughfare and extends into a neighborhood for more than six hundred feet (600') without changing direction (see **Section 2.2.J.2**).

4. Residential lots shall not front onto a roundabout. Residential lots adjacent to roundabouts shall be oriented so that their houses do not face the roundabout and their driveways do not intersect with the roundabout or along any section of street with a splitter island.

I. Partial Streets

1. Longitudinal partial dedications of Major Arterial and Minor Arterial thoroughfares shall be permitted when only one side of a future thoroughfare is being developed. In such a case, one-half of the total right-of-way shall be dedicated and a minimum of twenty-four feet (24') of pavement, face-to-face, shall be constructed.
2. Longitudinal partial dedications of Commercial Collector, a Residential Collector or Urban Street shall be prohibited, except when essential to the reasonable development of a property in conforming with the requirements of the Subdivision Ordinance, and where the Planning & Zoning Commission finds that it will be practical to require the dedication of the other portion of the street when the adjoining property is developed. Whenever a partial street exists along a common property line, the other portion of the street shall be dedicated when the adjoining property is subdivided or developed. Where a partial street is being dedicated along a common property line and the ultimate planned ROW width is sixty feet (60'), the first ROW dedication will be thirty-five feet (35').
 - a. The developer shall construct a minimum of twenty-four feet (24') of pavement, face-to-face, for all Commercial Collector or Residential Collectors that are partial streets at the time of development.
 - b. The developer shall construct the full width of pavement face-to-face for all Urban Streets that are partial street dedications at the time of development.

J. Street Lengths

1. Major Arterial, Minor Arterial, and Commercial Collector thoroughfares have no street length restrictions. Residential streets (Residential Collector or Urban Street in a single-family, duplex, or townhome neighborhood) shall have street length restrictions to discourage speeding and cut-through traffic.
2. A residential street that intersects with a Major Arterial or Minor Arterial thoroughfare and has residential lots fronting any portion of the street shall not exceed a maximum length of six hundred feet (600') measured from the Major Arterial or Minor Arterial thoroughfare ROW line. Such an entrance street shall be a minimum of thirty feet (30') wide, face to face, or Minor Arterial divided according to **Section 2.3.B.7**. On each side of the entrance street, at least one cross street shall have a minimum width of thirty feet (30'), face to face, between

the entrance street and the first intersection that provides access deeper into the subdivision. See **Figure 2.7** for an example.

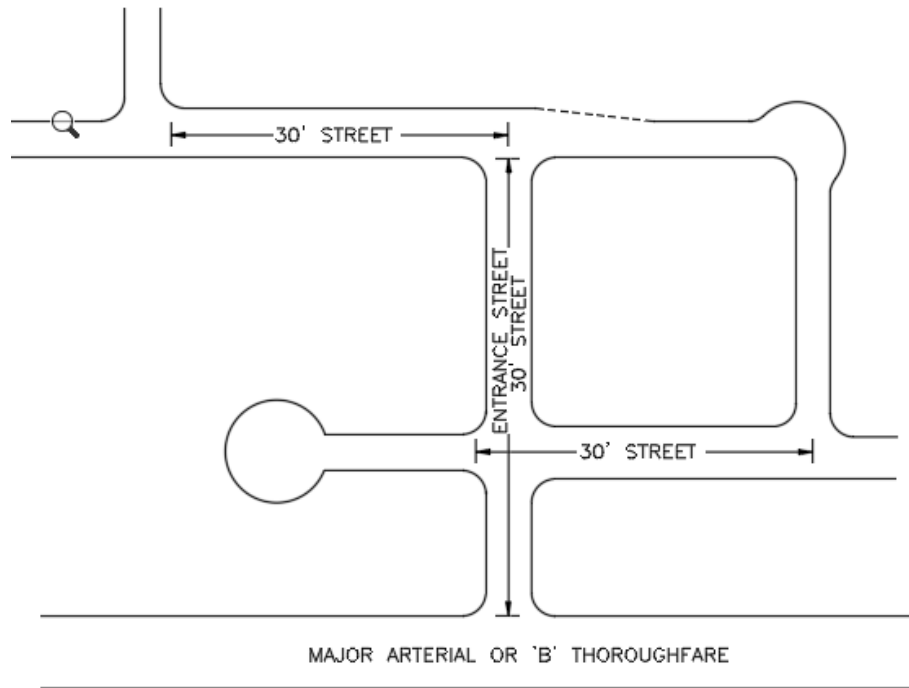


Figure 2.7 – Example of 30' Entrance Street Requirements

3. Residential streets that do not intersect with a Major Arterial or Minor Arterial thoroughfare shall not exceed one thousand two hundred feet (1,200') in length before changing direction. A change in direction occurs when one of the following elements is used:
 - a. A horizontal curve radius of three hundred fifty feet (350') for a Residential Collector or of two hundred feet (200') for a Urban Street that changes the course of the street between ninety (90°) and one hundred twenty degrees (120°) (see **Figure 2.8**).
 - b. A street offset using two elbow intersections, each between ninety (90°) and one hundred twenty degrees (120°). The minimum distance between reverse elbows shall be one hundred fifty feet (150'). See **Figure 2.9**.

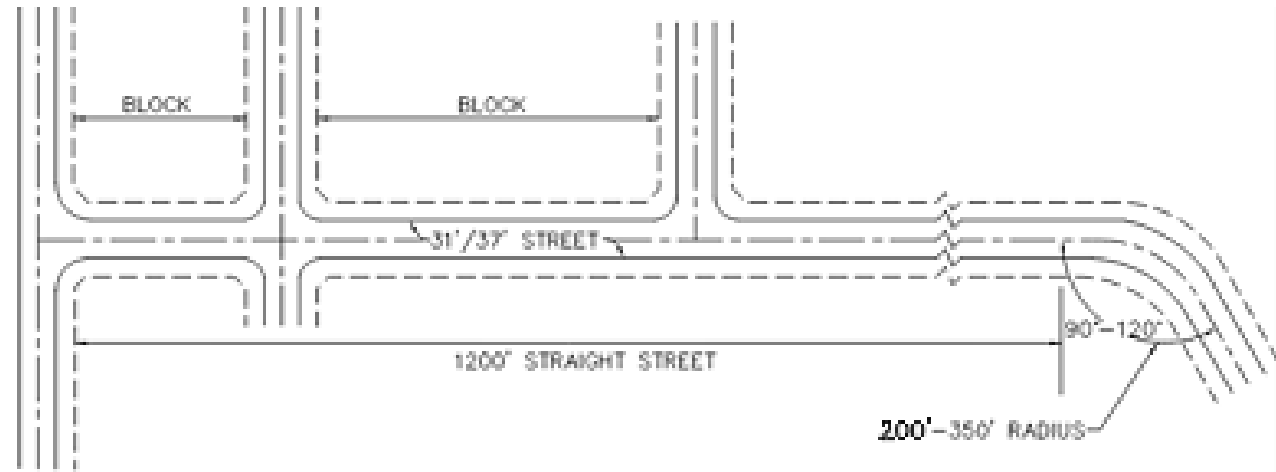


Figure 2.8 – Change in Street Direction: Curve

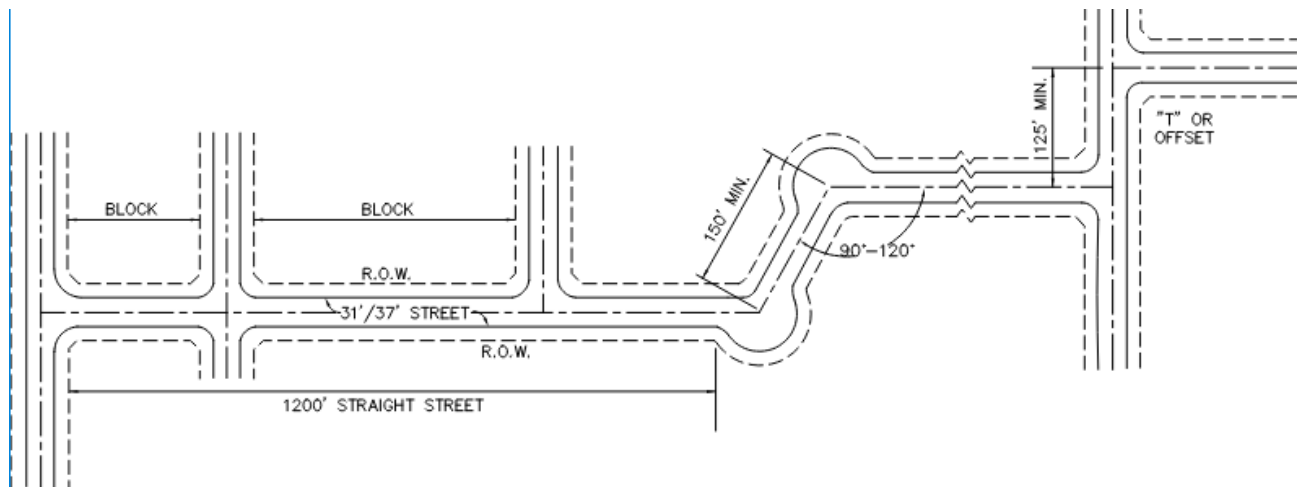


Figure 2.9 – Change in Street Direction: Offset

4. Urban Streets and Residential Collectors that do not intersect with a Major Arterial or Minor Arterial thoroughfare may extend to a length of one thousand eight hundred feet (1,800') without a change in direction when one of the following is provided:
 - a. A roadway (Zipper Street) with on street parking with may have a minimum twenty-four foot (24') wide travel section with parking cut-outs that are nine feet (9') wide and forty-four feet (44') to eighty-eight feet (88') long and a landscape island between the parking cut-outs that is a minimum of thirty feet (30') long and nine feet (9') wide. Front entry homes are prohibited on this type of street. See **Figure 2.10**.
 - b. A residential street with street trees, block lengths that do not exceed seven hundred feet (700'), and at least one four-leg intersection. See **Figure 2.11**.

-
- 22' TYP
- 60' ROW
- 5' SIDEWALK PLACED ON ROW LINE
- 9' PARKING
- 12' LANE
- 12' LANE
- 3' R. (MIN)
- 30' MIN
- 44' MIN - 88' MAX MUST BE IN 22' INCREMENTS
- 30' MIN
- 1800' MAXIMUM STREET LENGTH WITH PARKING CUTOUTS REAR ENTRY HOMES ONLY
- 30' MIN
- 30' MIN

Figure 2.10 – Maximum Street Length: Zipper Street

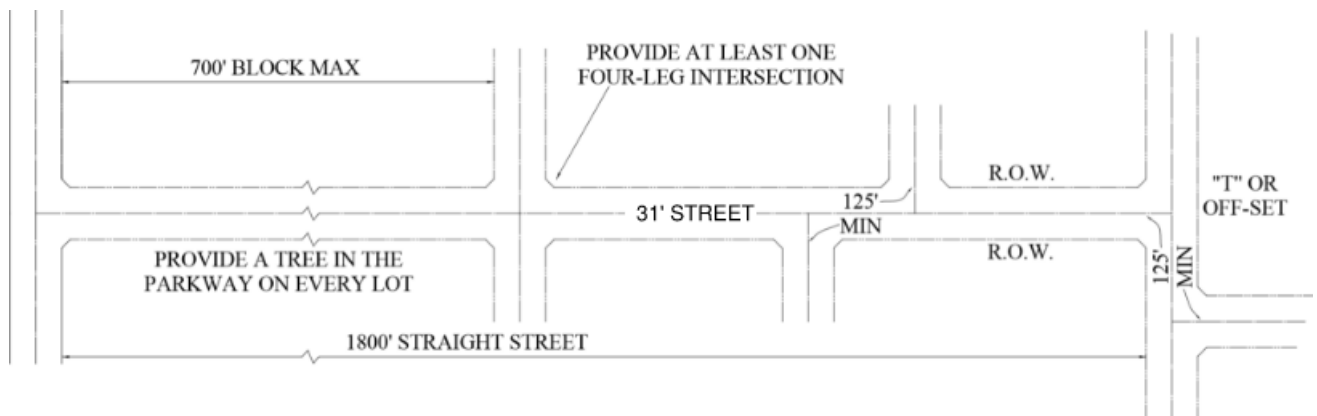


Figure 2.11 – Maximum Street Length: Short Blocks, Trees and A Four-Leg Intersection

K. Block Requirements

1. **Block Length** – Blocks shall not exceed one thousand two hundred feet (1,200') in length, measured from street ROW line to street ROW line. In the case of non-rectangular blocks, each side of the block with lots fronting it shall not exceed one thousand two hundred feet (1,200'), measured between the vertices formed by the extension of ROW lines at each corner of the block. Blocks shall be further restricted so that they shall contain no more than twenty (20) lots on one side. Blocks with a continuous series of lots longer than one thousand two hundred

feet (1,200'), measured along one or more sides, may be required to be bisected by a pedestrian easement and a sidewalk (see **Section 2.6.B.14**).

2. Block Width – Blocks shall be wide enough to allow two (2) tiers of lots and shall have a block width no less than two hundred feet (200'), except when only one tier of lots is possible due to the size of the property or the need to back up to a Major Arterial or Minor Arterial thoroughfare.

2.3. Median, Left-Turn Lane, Right-Turn Lane, Deceleration Lane, and Island Design

A. Required Median Openings and Left-Turn Lanes

1. Median openings on divided thoroughfares will typically be required at street intersections. Median openings may be constructed to serve non-residential drives provided that the minimum spacing requirements herein are met. Left-turn lanes are typically required for each street or driveway that connects to a median opening. The design of median openings and left-turn lanes shall accommodate potential future left-turn lanes that might serve undeveloped land.
2. Non-residential lots on a divided thoroughfare should be designed to have direct or indirect access to a median opening. Indirect access shall be provided through a series of access easements.
3. Multi-family developments on a divided thoroughfare may be approved by the City Engineer to have direct access to a median opening.
4. The City can modify, relocate, or remove any existing or planned median opening to facilitate traffic flow and/or preserve the health, safety and welfare of the Public, as reasonably determined by the City Engineer utilizing recognized industry standards as they exist, may be amended, or in the future arising.

B. Minimum Left-Turn Storage, Taper Length, and Median Opening Width, Location, and Spacing Requirements

1. Left-Turn Lane Storage
 - a. All single left-turn lanes constructed on divided thoroughfares of ultimate cross section width shall be a minimum of eleven feet (11') wide. Where double left-turn lanes are provided, each left-turn lane shall be a minimum of ten feet (10') wide.
 - b. All left-turn lanes constructed as future through lanes on divided thoroughfares shall be twelve feet (12') wide for the entire storage and taper length requirements as listed in **Table 2.5**.
 - c. Minimum storage requirements are listed in **Table 2.5**. Storage requirements may be increased by the City based upon actual and projected traffic demands of the properties that will be served by the left-turn lane.
 - d. Left-turn lanes will be delineated by using the current Texas Manual on Uniform Traffic Control Devices (TMUTCD).

- e. Concrete pavers shall be required in the median where the median width is six feet (6') or less, back of curb to back of curb. If the median width is greater than six feet (6'), then concrete pavers shall be required for a minimum distance of ten feet (10') from the median nose. See **Figure 2.12**.
2. Taper Length – The taper specifications for left-turn lane entrance areas are specified in **Table 2.5**. The variables used for the specifications are shown in **Figure 2.12**.

Table 2.5 – Minimum Left-Turn Lane Design Requirements

Type of Thoroughfare On	Type of Thoroughfare At	Turn Lane Width(s) (ft)	Length of Full-Width Storage(ft)	Minimum Taper Specifications		
				Length(ft)	R ₁ (ft)	R ₂ (ft)
Major Arterial	Major or Minor Arterial	10 ⁽¹⁾⁽⁴⁾	150,250 ⁽²⁾	150	300	300
Minor Arterial	Major or Minor Arterial	11	150	100	250	250
Major or Minor Arterial	Commercial or Residential Collector	11 ⁽⁴⁾	150	100	250	250
Major or Minor Arterial	Urban Street	11 ⁽⁴⁾	100 ⁽³⁾	100	250	250
Major or Minor Arterial	Non-Residential Driveway	11 ⁽⁴⁾	150	100	250	250
TxDOT Road	All types and Non-Residential Driveway	See TxDOT's <i>Roadway Design Guide</i> and Specifications				
Frontage Road	All types and Non-Residential Driveway	See TxDOT's <i>Roadway Design Guide</i> and Specifications				

1. Double left-turn lanes
2. 150 feet for the inside left-turn lane; 250 feet for the outside left-turn lane
3. 150 feet of storage shall be required for gated communities.
4. Left-turn lanes that will become a future through lane shall be twelve feet (12') in width and be square at the end and incorporate a street header.

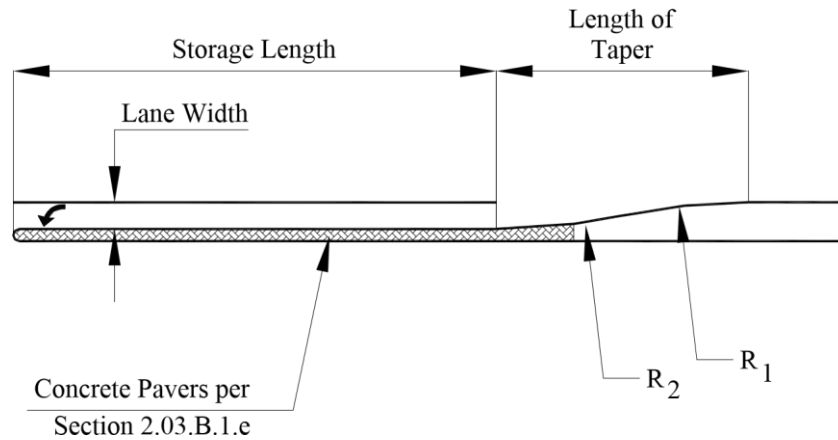


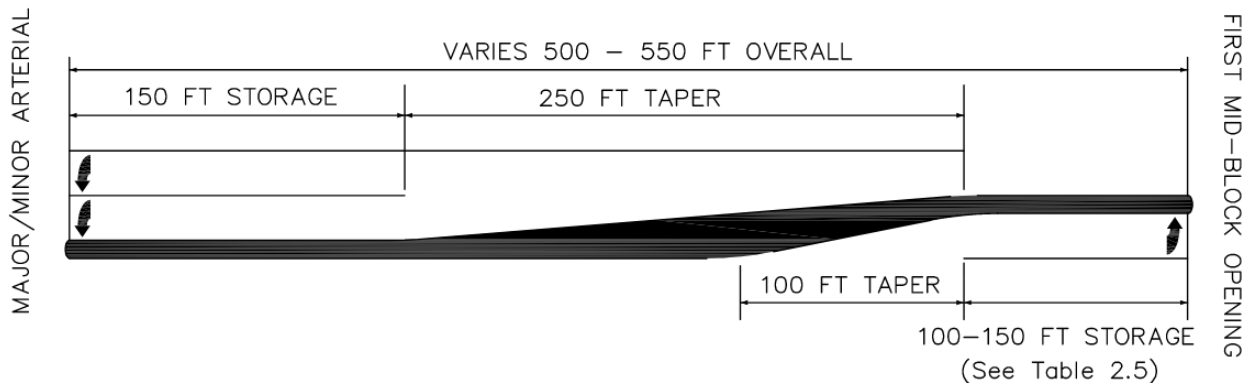
Figure 2.12 – Typical Left Turn Lane Dimensions

3. Median Openings

- Median openings shall accommodate all turning paths and crosswalks.
- The width of mid-block median openings shall not be less than sixty feet (60'). They may be greater than sixty feet (60') where necessary to accommodate turning paths and crosswalks subject to approval by the City Engineer.
- Median openings shall not be less than seventy feet (70') wide at divided high capacity driveways (see **Section 2.5.B.5**).

- The minimum distance to the first mid-block median opening along a Major Arterial or Minor Arterial thoroughfare that is immediately downstream from a Major Arterial or Minor Arterial thoroughfare is shown in **Figure 2.13**. This distance varies from five hundred fifty feet (550') to six hundred feet (600'), measured nose to nose, depending on the thoroughfare Major Arterial and the type of mid-block opening.

Major Arterial



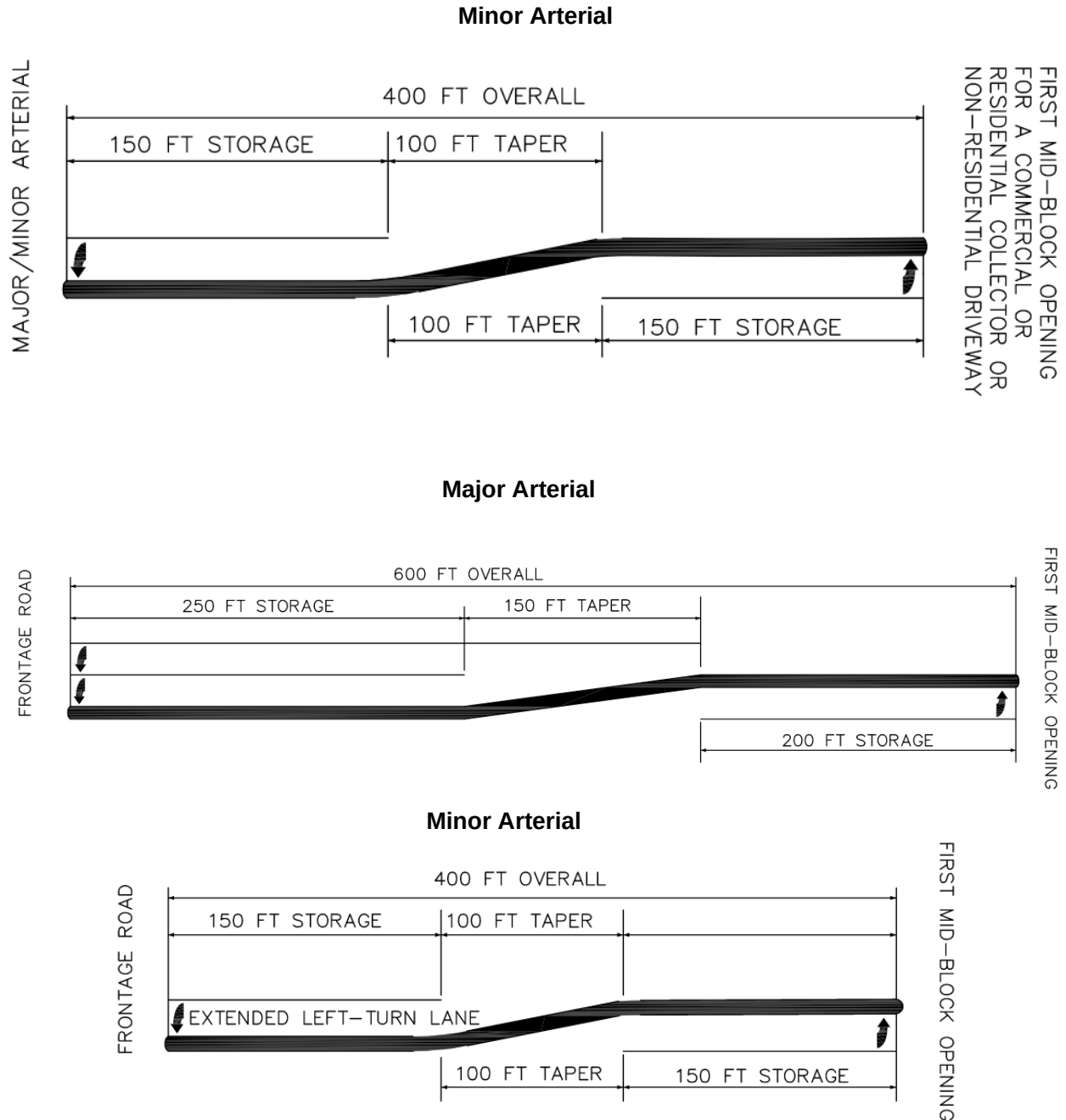
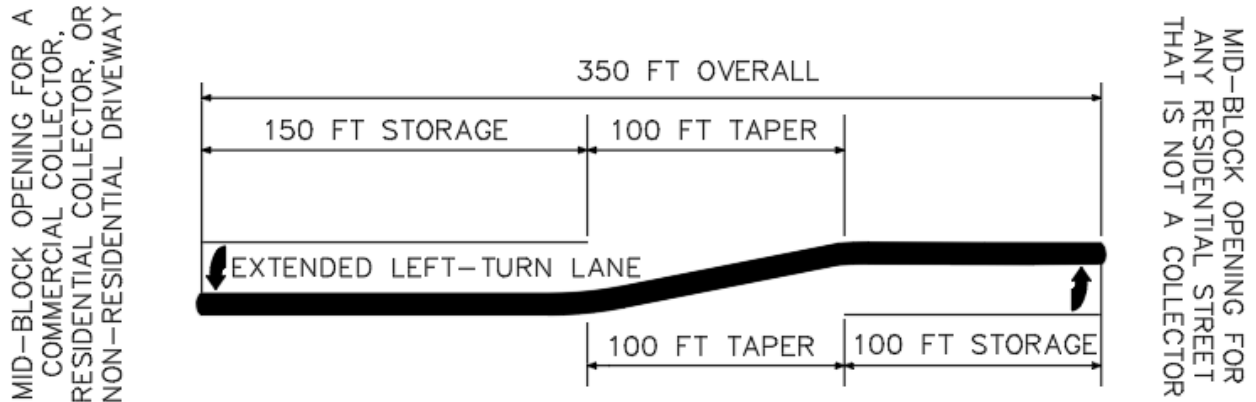


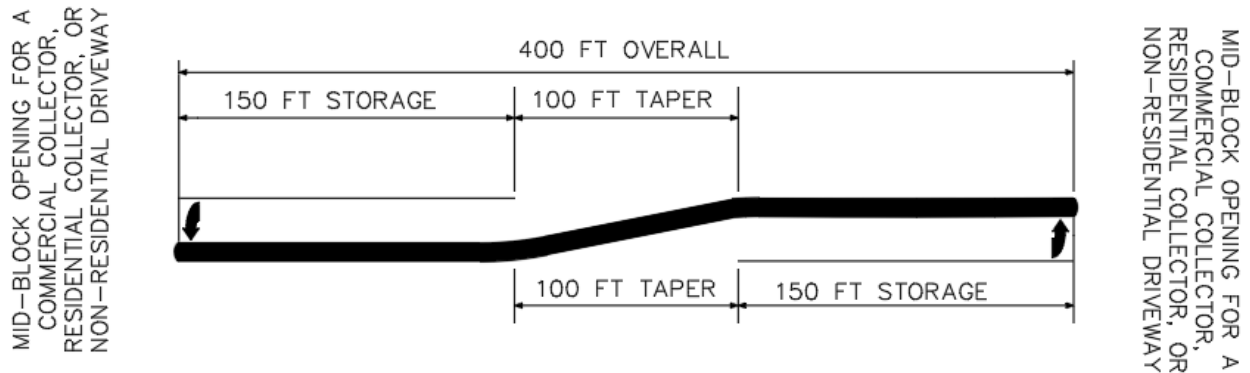
Figure 2.13 – Minimum Spacing between Major Arterial or Minor Arterial and First Mid-Block Median Opening on a Major Arterial or Minor Arterial

5. The minimum distance between median openings on a Major Arterial or Minor Arterial thoroughfare where left turn storage is provided in both directions for smaller intersecting thoroughfares and driveways is shown in **Figure 2.14**. The distances shown are measured nose to nose. Refer to **Table 2.11** for driveway design requirements.

Major Arterial or Minor Arterial Thoroughfare



Major Arterial or Minor Arterial Thoroughfare



Major Arterial or Minor Arterial Thoroughfare

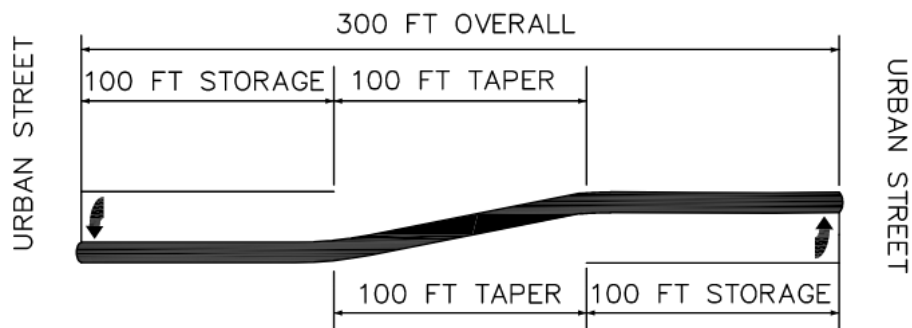


Figure 2.14 – Minimum Distance between Mid-Block Median Openings on a Major Arterial or Minor Arterial Thoroughfare

6. Medians without Left-Turn Lanes in Both Directions

- a. If a left-turn lane is required in only one direction, the minimum length of the median shall be the sum of the required left-turn storage, taper length, fifty-foot (50') tangent, and length of median nose. This requirement is reflected in **Figure 2.15**. This median design is only allowed if access is not compromised for vacant property on the opposite side of the thoroughfare.

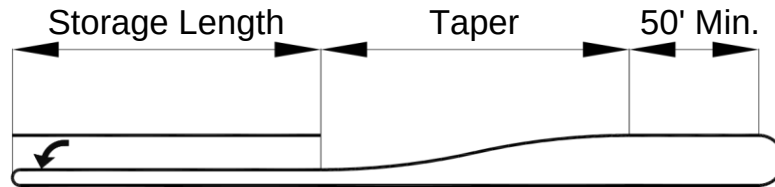


Figure 2.15 – Minimum Length of Median Where A Left-Turn Lane is Needed in Only One

7. Direction

- a. If the left-turn storage is not required in either direction, but the median is simply a spacer between two median openings, the minimum length of the spacer must be one hundred feet (100') (see **Figure 2.16**). A minimum spacing of one hundred feet (100') from the median opening to the first non-residential driveway shall be maintained.

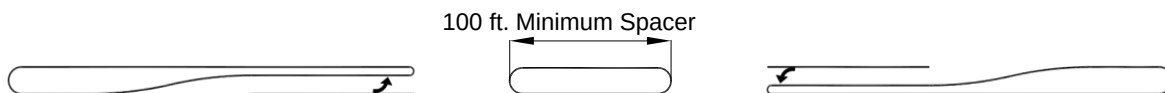


Figure 2.16 – Minimum Spacer Length

- b. If a driveway is not served by a left-turn lane, then seventy-five feet (75') of separation shall be provided from edge of driveway to the median opening.

8. Medians on Public Street Entrances to Developments

- a. Medians installed on undivided thoroughfares at entrances to subdivisions for aesthetics or any other purpose shall be a minimum of thirteen feet (13') wide and one hundred feet (100') long (see **Figure 2.1** for Divided Residential Subdivision Entrance cross section).
- b. A divided residential subdivision entrance shall taper to the normal residential street width upstream or downstream of the first street intersection. No part of the taper shall occur within an intersection.

- c. If specified by zoning, alternative design standards may be required for these types of subdivision entrances.

C. Minimum Right-Turn Storage and Taper Length

1. Right-Turn Lane Storage
 - a. At all intersections on Major Arterial and Minor Arterial thoroughfares, right-turn lanes shall be constructed at the time of development.
 - b. All right-turn storage areas shall be eleven feet (11') wide.
 - c. Additional ROW shall be required adjacent to right-turn lanes so that there is a minimum parkway as shown in **Figure 2.1**.
 - d. Right-turn lanes will be delineated by using the current Texas Manual on Uniform Traffic Control Devices (TMUTCD).
 - e. Minimum storage requirements are listed in **Table 2.6**. Storage requirements may increase based upon actual and projected traffic demands.
 - f. A minimum tangent section of thirty feet (30') shall be provided between the preceding driveway or cross street curb return and the taper of a right-turn lane.
2. Taper Length – The taper specifications for right-turn lane entrance areas are specified in **Table 2.6**. The variables used for the specification are shown in **Figure 2.17**.

Table 2.6 – Minimum Right-Turn Lane Design Requirements

Type of Thoroughfare On	Type of Thoroughfare At	Turn Lane Width(s) (ft)	Length of Full-Width Storage(ft) ⁽¹⁾	Taper Specifications ⁽²⁾		
				Length(ft)	R ₁ (ft)	R ₂ (ft)
Major Arterial	Major or Minor Arterial	11	225	150	300	300
Minor Arterial	Major or Minor Arterial	11	175	150	250	250
Major or Minor Arterial	Commercial or Residential Collector	11	150	110	250	250
Major or Minor Arterial	Urban Street	11	100	110	250	250
TxDOT Road	All types	See TxDOT's <i>Roadway Design Guide</i> and Specifications				
Frontage Road	All types	See TxDOT's <i>Roadway Design Guide</i> and Specifications				

1. Measured from the intersecting thoroughfare face of curb.

2. No driveways are permitted within the taper area.

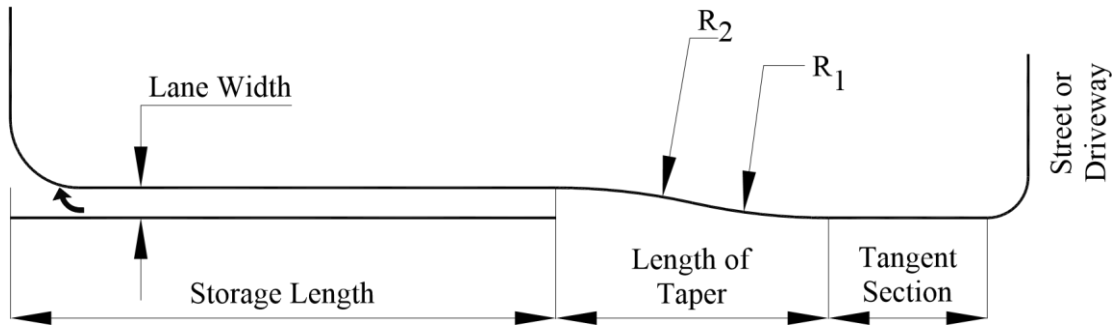


Figure 2.17 – Typical Right-Turn / Deceleration Lane Dimensions

D. Minimum Deceleration Lane Storage and Taper Length

1. Deceleration Lane Storage

- a. Deceleration lanes are required on Major Arterial and Minor Arterial thoroughfares at all non-residential and multi-family driveways.
- b. All deceleration lane storage areas shall be eleven feet (11') wide.
- c. Deceleration lanes will be delineated by using the current Texas Manual on Uniform Traffic Control Devices (TMUTCD)..
- d. Minimum storage requirements are listed in **Table 2.7**. Storage requirements may increase based upon actual and projected traffic demands.
- e. A minimum tangent section of thirty feet (30') shall be provided between the preceding driveway or cross street curb return and the taper of a deceleration lane.
- f. A tangent section is not required when a deceleration lane is immediately downstream from an intersecting Major Arterial or Minor Arterial thoroughfare.

2. Taper Length – The taper specifications for deceleration lane entrance areas are specified in **Table 2.7**. The variables used for the specification are shown in **Figure 2.17**.

Table 2.7 – Minimum Deceleration Lane Design Requirements

Type of Thoroughfare On	Type of Thoroughfare At	Turn Lane Width(s) (ft)	Length of Full-Width Storage(ft) ⁽¹⁾	Taper Specifications		
				Length(ft)	R ₁ (ft)	R ₂ (ft)
Major Arterial	Non-Residential Driveway	11	110 ⁽²⁾	110 ⁽²⁾	300	300
Minor Arterial	Non-Residential Driveway	11	90	110 ⁽²⁾	250	250
TxDOT Road	Non-Residential Driveway	See TxDOT's <i>Roadway Design Guide</i> and Specifications				
Frontage Road	Non-Residential Driveway	See TxDOT's <i>Roadway Design Guide</i> and Specifications				

1. Measured from the edge of the driveway.
2. When a deceleration lane is immediately downstream from an intersecting Major Arterial or Minor Arterial thoroughfare, its storage can be reduced to 100 feet and its taper can be reduced to 70 feet (see **Figure 2.23**)

E. Cost of Median Openings and Turn Lanes

1. Median openings, left-turn lanes, and right-turn lanes constructed for residential streets and/or subdivision entrances shall be the responsibility of the developer and shall be constructed to City (or TxDOT) standards and inspected by the governing entity.
2. Median openings, left-turn lanes and deceleration lanes for multi-family and non-residential developments shall be the responsibility of the developer and shall be constructed to City (or TxDOT) standards and inspected by the governing entity.

2.4. Alley Design

A. Alley Intersections

1. Alleys shall not intersect any Major Arterial, Minor Arterial, or Commercial Collector thoroughfare.
2. Alleys that are parallel to and share a common ROW line with a Major Arterial, Minor Arterial, or Commercial Collector thoroughfare or a residential collector shall turn away from that thoroughfare not less than forty-five feet (45') or one subdivision lot width (whichever is greater) from the cross street ROW as shown in **Figure 2.18**.
3. Alleys shall intersect with a residential street so that the alley ROW line is not less than forty-five feet (45') or one subdivision lot width (whichever is greater) from the ROW of the nearest cross street as shown in **Figure 2.18**.

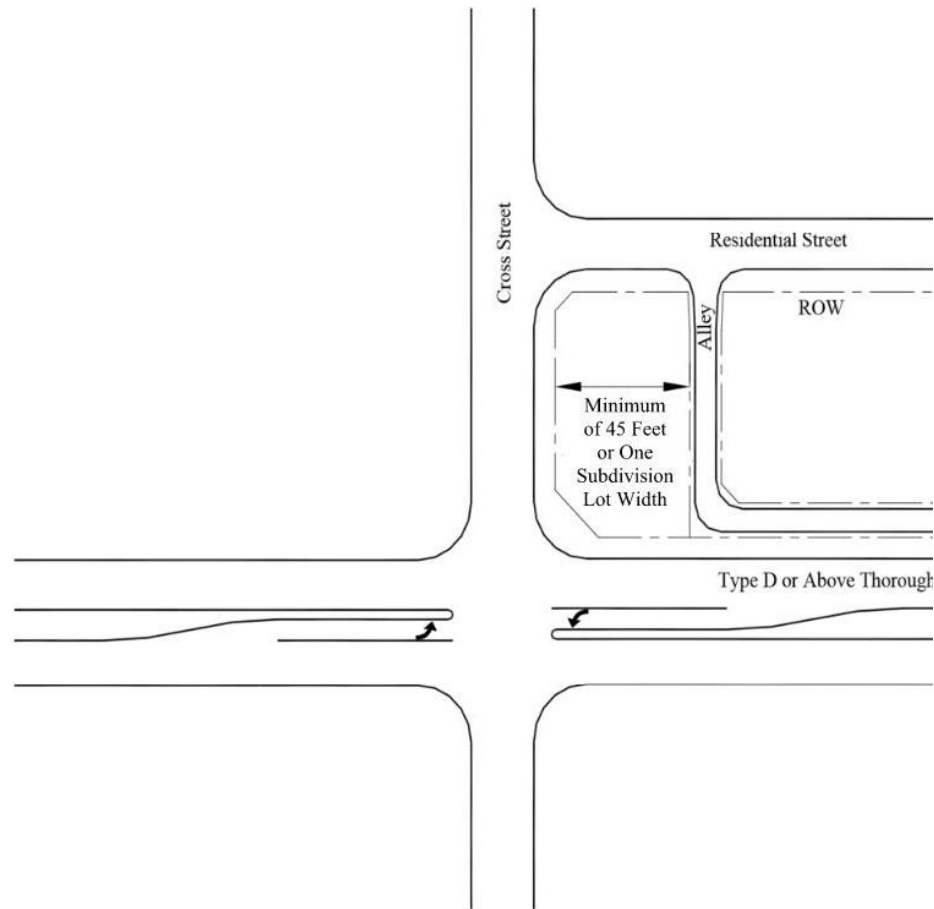


Figure 2.18 – Minimum Distance from Intersection for Parallel Alley

4. All alley intersections with streets shall be perpendicular or radial, within a five degree (5°) tolerance, at the intersection of the ROW lines.
5. The offset between alleys on opposite sides of a residential street shall be less than three feet (3') or greater than seventy-five feet (75') measured from edge of alley to edge of alley.
6. Alleys shall not align with existing or future streets or driveways on the opposite side of a street. Alleys should be offset from such a street or driveway by a minimum of seventy-five feet (75') measured from edge of alley to edge of street or driveway.
7. Alleys that intersect at "elbow" street intersections shall not intersect within thirty (30°) degrees of the centerline of the adjacent streets. See **Figure 2.19**.
8. Alleys shall not intersect with a roundabout.

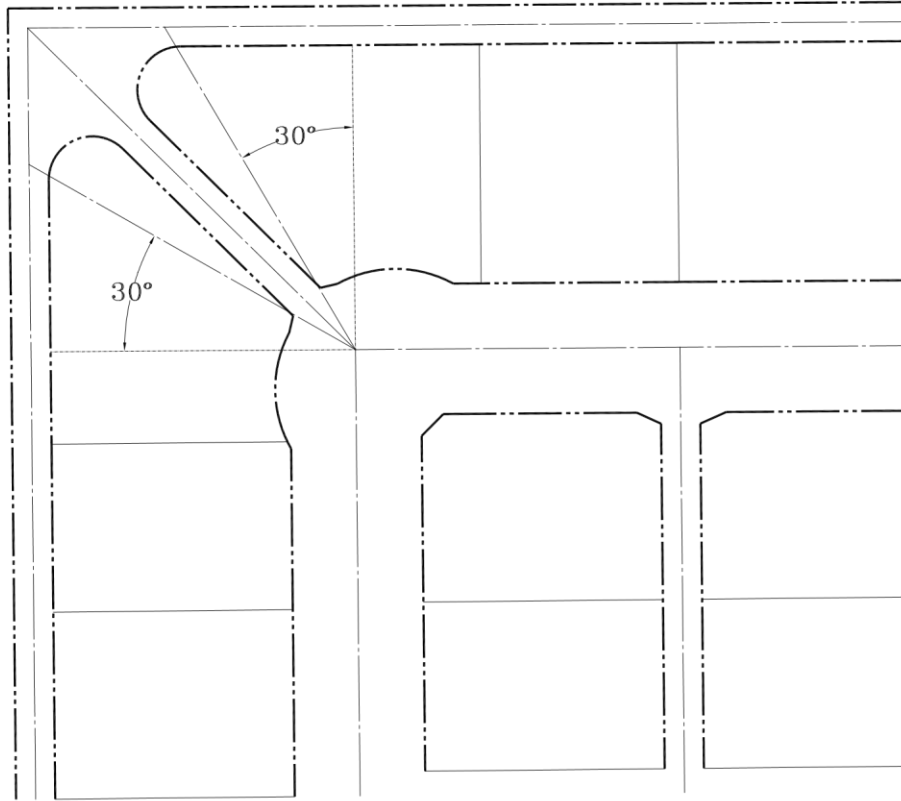


Figure 2.19 – Alley Intersecting an Elbow

9. Internal alley intersections shall consist of no more than three alley approaches.
10. The offset between alleys on the opposite side of an intersecting alley shall be a minimum of one hundred feet (100') measured from centerline to centerline.
11. As an alley approaches an intersection with another alley, the pavement width shall increase two feet (2') using a taper twenty feet (20') long. The wider pavement shall be maintained for a distance of fifteen feet (15') prior to the radius of the intersection. Two feet (2') of parkway shall be maintained between the pavement and the ROW line at all times. See **Figure 2.20**.
12. No permanent dead end alley shall be permitted in new subdivisions.

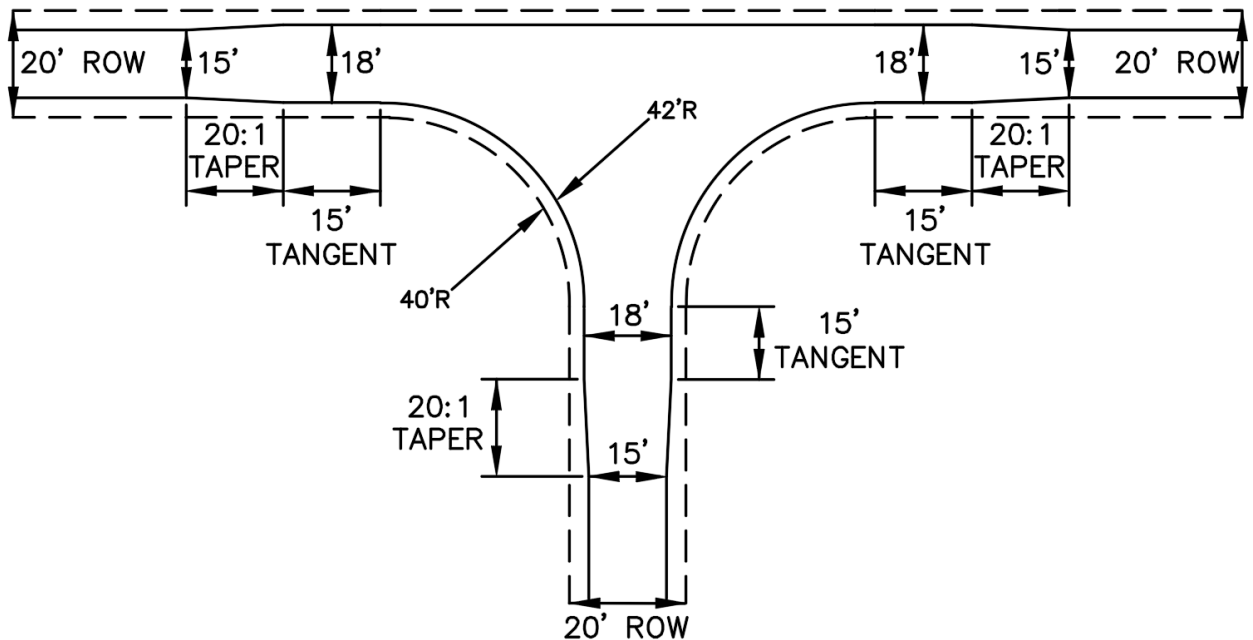


Figure 2.20 – Alley to Alley Intersection

13. The radius of alley pavement at street intersections shall not be less than fifteen feet (15'). At the intersection of two alleys, the radius of the alley ROW is dependent upon the alley ROW intersection angle as listed in **Table 2.8**. At the intersection of two alleys, the radius of the alley pavement shall be at least two feet (2') greater than the radius of the alley ROW.

Table 2.8 – Alley Intersecting Alley Radius

Alley ROW Intersection Angle	Minimum Required ROW Radius (ft)
1°-40°	70
41° -70°	50
71° -90°	40
> 90°	50

- B. Alley ROW Width** – Alley ROW shall be a minimum of twenty feet (20') wide unless approved otherwise by the City Engineer.
- C. Alley Pavement Width** – Alley pavement shall be a minimum of fifteen feet (15') wide except near alley intersections, as shown in **Figure 2.20**, and except near street intersections as shown in **Figure 2.21**.

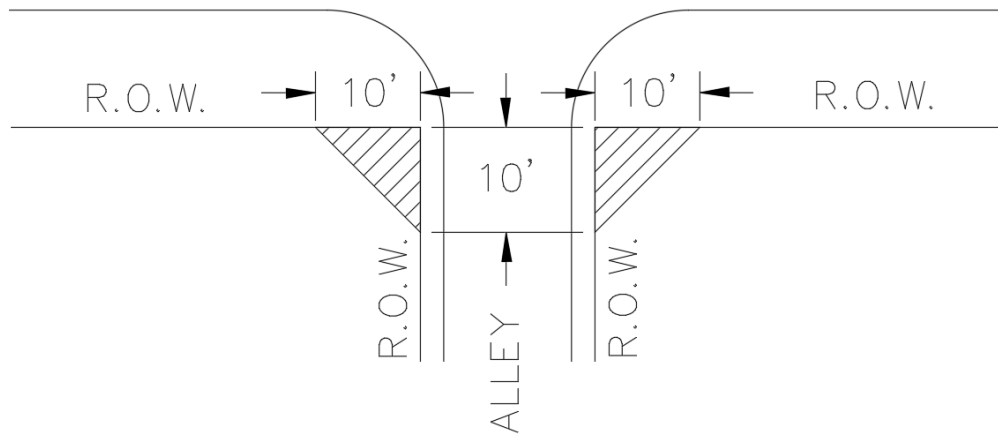


Figure 2.21 – Alley to Street Intersection

- D. Alley Length** – Alleys shall not exceed eight hundred feet (800') in length without an intermediate connection to a local street.
- E. Alley Pavement Thickness** – See **Section 3** of the Engineering Design Standards Manual for alley subgrade and pavement design requirements.
- F. Rear Alley Frontage** – The minimum alley rear frontage shall be twenty feet (20').
- G. Alley Visibility Obstructions**
 - 1. No fence, wall, screen, sign, structure, landscaping rock greater than four inches (4") in height, or foliage of hedges, trees, bushes, or shrubs shall be erected, planted or maintained in any alley ROW.
 - 2. Foliage of hedges, trees, bushes, and shrubs planted adjacent to the alley ROW shall be maintained by the property owner such that the overhang or encroachment shall be no less than fourteen feet (14') above the alley surface and no less than one foot (1') outside the edge of the pavement.
- H. Alley Grade**
 - 1. Alleys shall have a maximum grade of six percent (6%). Steeper grades may be permitted where required by topographical and/or natural features, as approved by the City Engineer.
 - 2. Alleys shall maintain a maximum cross-slope of two percent (2%) at the intersection of the adjacent sidewalk to meet accessibility standards.
- I. Vertical Curves in Alleys** – Vertical curves in alleys shall be used in order to provide a design which is safe, comfortable in operation, pleasing in appearance and adequate for drainage. Vertical curve alignment shall also provide stopping sight distance in all cases based on a design speed of 15 mph.

- J. Alley Screening Walls** – The area between screening walls and alleys shall be paved and graded to drain to the invert.

2.5. Driveway Design

- A. Introduction** – Driveway design standards are needed to provide safe and efficient vehicular access to and from the public street system, to provide public street capacity for accommodating peak traffic volumes of public streets, to maintain smooth traffic flow, and to maintain street ROW and drainage. The intent of driveway design standards is to achieve the following:

1. Prohibit the indiscriminate location and spacing of driveways while maintaining reasonable vehicular access to and from the public street system.
2. Reduce conflicting turning movements and congestion thereby reducing vehicular crashes.

B. Definition of Driveway Types

1. Residential Driveway – Provides access to a single-family residence, duplex, or multi-family building containing four or fewer dwelling units. Residential driveways shall intersect Residential Collector, and Urban Street thoroughfares only (according to the restrictions described below).
2. Non-Residential Driveway
 - a. Commercial Driveway – Provides direct access to an office, retail or institutional building, or multi-family building having more than four dwelling units. It is anticipated that such buildings will have incidental truck service. Commercial driveways shall typically access Major Arterial, Minor Arterial, or Commercial Collector thoroughfares only, with a maximum of one (1) driveway accessing a residential collector. In the case of multi-family developments, the primary driveway shall access a Major Arterial or Minor Arterial thoroughfare unless approved otherwise by the City Engineer.
 - b. Industrial Driveway – Serves truck movements to and from loading areas of an industrial facility, manufacturing, warehouse, or truck terminal. A retail development may have one or more driveways specially designed, signed, and located to provide access for trucks, which shall be considered industrial driveways. Industrial plant driveways whose principle function is to serve administrative or employee parking lots shall be considered commercial driveways. Industrial drives shall access Major Arterial, Minor Arterial, and Commercial Collector thoroughfares only.
3. Standard Driveway – Provides two-way access at a single, undivided curb opening. The minimum width of a standard driveway depends on land use and is shown in **Table 2.9**.
4. One-Way Driveway – Provides only inbound or outbound access and can only be permitted when the orientation of on-site circulation and parking layout clearly utilize the driveway for one-way movements. The minimum width for a one-way driveway depends on land use and is shown in **Table 2.9**.

5. High Capacity Driveways – Intended to provide two-way access with geometric provisions which more adequately respond to greater driveway volumes and/or access limitations than standard driveways. These provisions include increased width, increased internal storage and a median divider.
 - a. Divided high capacity driveways are required at the first median opening downstream of a Major-Major Arterial, Major-Minor Arterial, or Minor-Minor Arterial intersection.
 - b. The primary multi-family driveway shall be a divided high capacity driveway at a median opening.
 - c. Divided high capacity driveways are required on Major Arterial or Minor Arterial thoroughfares when the number of parking spaces per driveway exceeds two hundred (200), except along a frontage road.

C. Driveway General Design Parameters

1. The centerline angle for a driveway approach shall be ninety degrees (90°) to the street curb line for all driveways.
2. Driveways shall not be permitted in the taper area of any right-turn lane or deceleration lane.
3. Driveways that intersect at a mid-block median opening shall have the driveway centerline intersect with the midpoint of the median opening (measured nose-to-nose) unless approved otherwise by the City Engineer.
4. Driveway connections can be required by the City Engineer to ensure adequate circulation.
5. Driveway elevations at the ROW line of a public street shall be a minimum of six inches (6") above the street gutter. A residential driveway that intersects an alley shall be a minimum of three inches (3") above the edge of the alley pavement at the ROW line and shall be high enough to maintain gutter capacity.
6. Cross access is required between adjacent non-residential properties so that each property can share the use of the driveway(s) on the adjacent property. A shared driveway that is centered on the common property line is also encouraged. When one non-residential property develops before the adjacent property develops, the full width of the shared driveway shall be constructed at that time.
7. Driveway grades in a fire lane shall not exceed six percent (6%) and cross slope shall not exceed five percent (5%). Steeper grades may be permitted in areas where buildings are not present, as approved by the City Engineer and the Fire Department.
8. Driveways that serve as a fire lane shall be a minimum of twenty-four feet (24') in width.

9. Differential grades on driveways shall not exceed ten percent (10%) and spaced at least ten feet (10') between differential grades.
10. Maximum grade of a residential driveway beyond the right-of-way shall not exceed 10 percent (10%).
11. Maximum grade of a commercial or industrial driveway shall not exceed six percent (6%).
12. Any sidewalk access across a driveway shall meet all state and federal ADA requirements for accessibility.
13. Residential driveways shall be prohibited:
 - a. Along a Residential Collector or Urban Street within one hundred feet (100') of an intersection with a Major Arterial or Minor Arterial thoroughfare measured from the ROW line.
 - b. Along any part of a Major Arterial, Minor Arterial, or Commercial Collector thoroughfare.
14. Residential driveways shall provide access to an alley or an eligible public street according to the following restrictions:
 - a. A residential lot shall be allowed a maximum of one (1) driveway onto a public street, except in the case of a circular driveway approved by the City Engineer.
 - b. A residential driveway that provides access to a garage shall connect to an alley or shall connect to a residential street that is at least thirty feet (30') wide, face-to-face.
 - c. A residential lot shall be prohibited from having multiple driveway connections in a configuration that would create the possibility of a cut-through route between a public street and an alley that do not intersect or Minor Arterial between two public streets that do not intersect, as determined by the City Engineer.
 - d. If a residential driveway is shared between two properties, the driveway shall be centered on the common property line unless otherwise approved by the City Engineer.
 - e. A residential driveway connecting to an alley shall not be located within twenty feet (20') of the ROW line of a public street so as to prevent the driveway from being located in the alley taper
 - f. A residential driveway connecting to a residential collector or urban street shall be located no closer than ten feet (10') from the curb return of an intersection.
 - g. A residential driveway that changes in width as it extends onto the property shall do so with a curved transition or an angled transition that does not exceed a taper of one to one (1:1) within ten feet (10') of the property line.

15. Driveways shall be located so that they meet the required spacing from other driveways and streets, as described in Subsections F, G, and H below unless approved otherwise by the City Engineer. The spacing and location of driveways shall be related to existing driveways and streets and to future driveways and streets that are shown on approved preliminary site plans and/or site plans that have not expired.

D. Driveway Width – The width of a driveway refers to the width of pavement at the property line and is measured where the curb return radii ends perpendicular to the street curb or edge of pavement. The minimum and maximum widths of driveways are listed in **Table 2.9**. A driveway may transition to a different width as it extends onto the property, but its width shall not change abruptly at the property line.

Table 2.9 – Minimum and Maximum Driveway Widths⁽¹⁾

Driveway Type	Land Use	Width in Feet (face to face) ⁽²⁾	
		Minimum (ft)	Maximum(ft)
Standard Driveway	Residential	10	27 to a street 32 to an alley ⁽³⁾
	Commercial	30	36 (40 at a gas station)
	Industrial	30	40
One-Way Driveway	Residential (circular)	10	18
	Commercial	24	26
	Industrial	24	26
Divided High Capacity Driveway	Entrance	24	26
	Exit: Two Lanes	24	26
	Three Lanes	30	36
Driveway Medians		4	11

1. Driveway width at the property line. A driveway may transition to a different width as it extends onto the property.
2. Driveways that serve as a fire lane shall be a minimum of twenty-four feet (24') in width.
3. A residential driveway connecting to an alley may have a width up to a maximum of thirty-two feet (32') if the garage faces onto the alley; otherwise, its width is limited to twenty-four feet (27').

E. Driveway Radius

1. All driveways intersecting dedicated streets shall be built with a circular curb radius connecting the six-inch (6") raised curb of the roadway to the design width pavement of the driveway.
2. Driveway radii shall fall entirely within the subject property so as to begin at the street curb at the extension of the property line.
3. **Table 2.10** presents the minimum and/or maximum standards to be applied in designing and locating driveways on public streets.
4. High capacity driveways shall meet the same standards as those defined in **Table 2.10**.

Table 2.10 – Driveway Design Requirements

Criteria	Thoroughfare Classification	Residential Driveway (ft)	Commercial or Multi-family Driveway (ft)	Industrial Driveway (ft)
Driveway Curb Radius	Major Arterial	N.A.	30	40
	Minor Arterial	N.A.	30	40
	Commercial Collector	N.A.	30	40
	Residential Collector	5-10	30	N.A.
	Urban Street	5-10	N.A.	N.A.
Minimum Driveway Spacing Along Roadway (edge to edge)	Major Arterial	N.A.	280	280
	Minor Arterial	N.A.	260	260
	Commercial Collector	N.A.	90	90
	Residential Collector	20 (10 when enclosing both mailboxes) ⁽²⁾	max. of 1 drive	N.A.
	Urban Street	20 (10 when enclosing both mailboxes) ⁽²⁾	N.A.	N.A.
Minimum Distance to Intersection Along Roadway (edge to ROW line of intersecting street) ⁽¹⁾	Major Arterial	N.A.	75 / 200	75 / 200
	Minor Arterial	N.A.	75 / 200	75 / 200
	Commercial Collector	N.A.	100 / 100	100 / 100
	Residential Collector	10 from curb return to edge of drive	100 / 100	N.A.
	Urban Street	10 from curb return to edge of drive	N.A.	N.A.

1. Upstream / downstream distance to intersection. See **Figure 2.23**.

2. If both mailboxes are located between two driveways, those driveways can be exactly 10 feet apart. If they are more than 10 feet apart, they must be 20 feet apart or more.

F. Driveway Spacing

1. Spacing between driveways is measured along the property line from the edge of one driveway to the closest edge of the next driveway.
2. **Table 2.10** defines minimum driveway spacing as a function of thoroughfare classification.
3. In the vicinity of a railroad crossing, the closest edge of a driveway shall be a minimum of one hundred feet (100') from the railroad ROW line.
4. Non-residential and multi-family driveways on opposite sides of an undivided street shall align with each other or Minor Arterial spaced a minimum of seventy-five feet (75') apart, measured edge to edge, to ensure that conflicting movements do not overlap. This spacing shall also apply to a driveway that is on the opposite side of an undivided street from an intersecting street. See **Figure 2.22**.

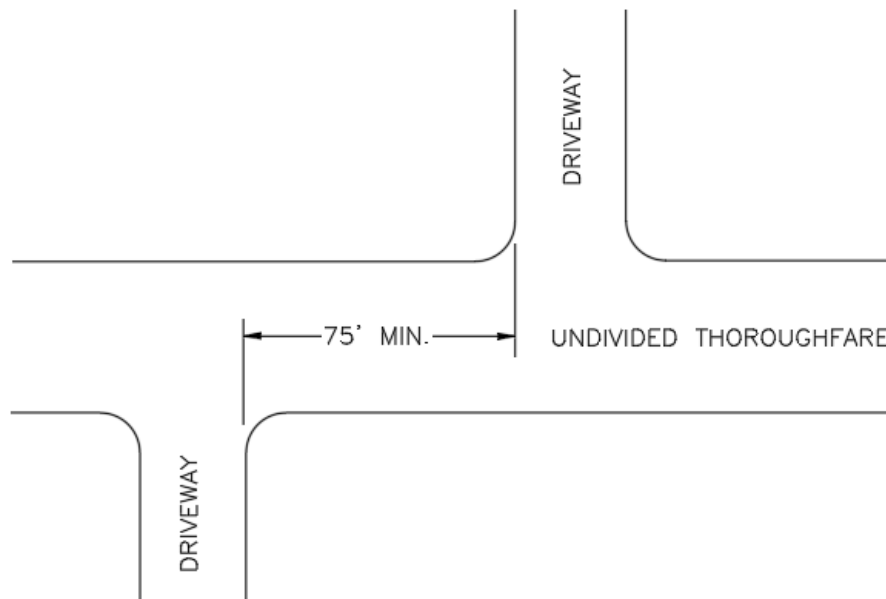


Figure 2.22 – Non-Residential and Multi-Family Driveway Spacing on Opposite Sides of an Undivided Street

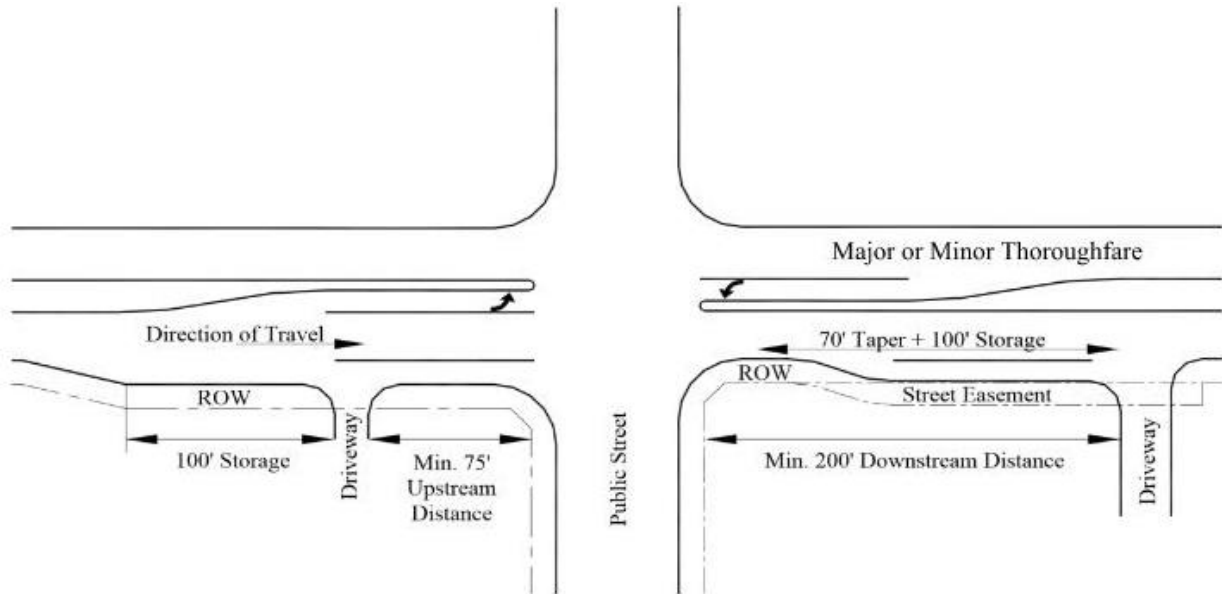


Figure 2.23 – Distance Between Driveway and Intersection

G. Distance between Driveway and Intersection

1. Adequate distance between cross street intersections and access driveways shall be provided to ensure intersection/driveway conflict areas are minimized.
2. **Table 2.10** defines the upstream and downstream distance from an intersection as a function of thoroughfare classification. The distances required from an intersection along a Major Arterial or Minor Arterial thoroughfare are shown in **Figure 2.23**.

H. Driveways Located in Right-Turn Lanes

1. A driveway located within the right-turn lane of a public street intersection shall be spaced so that its closest edge will be a minimum of seventy-five feet (75') in advance of the ROW line of the intersecting street. See **Figure 2.23**.
2. If a driveway is located within the right-turn lane of a public street intersection, the storage length of the right-turn lane shall extend a minimum of one hundred feet (100') beyond the upstream edge of the driveway (see **Figure 2.23**). No driveway shall be permitted within the taper area of a right-turn or deceleration lane.

I. Driveway Deceleration Lanes - Deceleration lanes are required on Major Arterial and Minor Arterial thoroughfares at all non-residential and multi-family driveways and shall meet the requirements of **Section 2.3.D**.

J. Driveway Storage Lengths

1. On-site internal storage shall be provided at all non-residential and multi-family driveways for queuing of vehicles off-street, to minimize congestion, and increase safety both on the public street and within the driveway.

2. Internal storage requirements shall be based on the number of parking spaces accessible by the affected driveway. Divide the total number of parking spaces by the number of driveways and then use **Table 2.11** to determine the amount of internal storage required. This calculation shall be based on the preliminary site plan for an overall development or the site plan for a specific lot, whichever produces the largest ratio of parking spaces per driveway.
3. Internal storage length shall be measured from the ROW line to the first intersecting aisle, internal driveway, or parking stall.
4. A circulation study will be required for all multi-story parking structures. Driveway storage requirements will be determined as a result of the study.

Table 2.11 – Minimum Driveway Storage Lengths

Parking Spaces per Driveway	Storage Required (ft)			
	Multi-family or Commercial Uses		Industrial Land Uses	
	Non-Median Opening ⁽¹⁾	Median Opening ⁽²⁾	Non-Median Opening ⁽¹⁾	Median Opening ⁽²⁾
Less than 25	25	25	25	25
25-50	25	40	25	40
51-100	25	40	40	40
101-200	40	80	40	60
More than 200	100	150	40	100

1. Includes driveways that connect to one-way frontage roads.
2. Includes any driveway where a left-turn exit can be made, including driveways that connect to undivided roadways.

K. Entrance Streets and Driveways for Gated Developments

1. To ensure that the minimum dimensions are adequate, a traffic study is required with the submission of a Specific Use Permit application for all gated communities.
2. Residential/Multi-family Developments
 - a. Gated developments shall have a median divided street or driveway that will allow for a vehicular turn-around prior to the gate in the event that access is denied.
 - b. The turn-around shall be a minimum of eighteen feet (18') in width.
 - c. Entry gates shall be set back from the ROW line a minimum of one hundred thirty-five feet (135') or as indicated in the traffic study. The card reader, or first stop, shall be set back from the ROW line a minimum of one hundred feet (100'), or as indicated in the traffic study, to provide storage for the longest queue of vehicles expected to access the gate. See **Figure 2.24**.

- d. Each direction of the divided street or driveway shall be a minimum of twenty-four feet (24') in width with curb radii of twenty-five feet (25'). See **Figure 2.24**.
 - e. The hinge point of the gate shall be a minimum of eighteen inches (18") behind back of the curb. The gate shall open to twenty-four inches (24") behind back of curb or edge of pavement.
 - f. Gates shall open sideways or swing open in the direction of travel on each side of the divided street.
 - g. Gates shall be equipped with emergency access devices as required by the Fire Department.
 - h. All gates shall provide pedestrian access. The movement of the gates shall not encroach on sidewalks.
 - i. Any alternative designs shall require the approval of the City Engineer.
3. Non-Residential Developments
- a. Gated developments shall have a median separating ingress and egress traffic flow allowing for a vehicular turn-around prior to the gate in the event that access is denied.
 - b. The turn-around shall be a minimum of eighteen feet (18') in width.
 - c. Entry gates shall be set back from the ROW line, or fire lane, a minimum of seventy-five feet (75'), or as indicated in the traffic study. The card reader, or first stop, shall be set back from the ROW line a minimum of forty feet (40'), or as indicated in the traffic study, to provide storage for the longest queue of vehicles expected to access the gate.
 - d. Each direction of the driveway shall be a minimum of twenty-four feet (24') in width with curb radii of twenty-five feet (25'). See **Figure 2.24**.

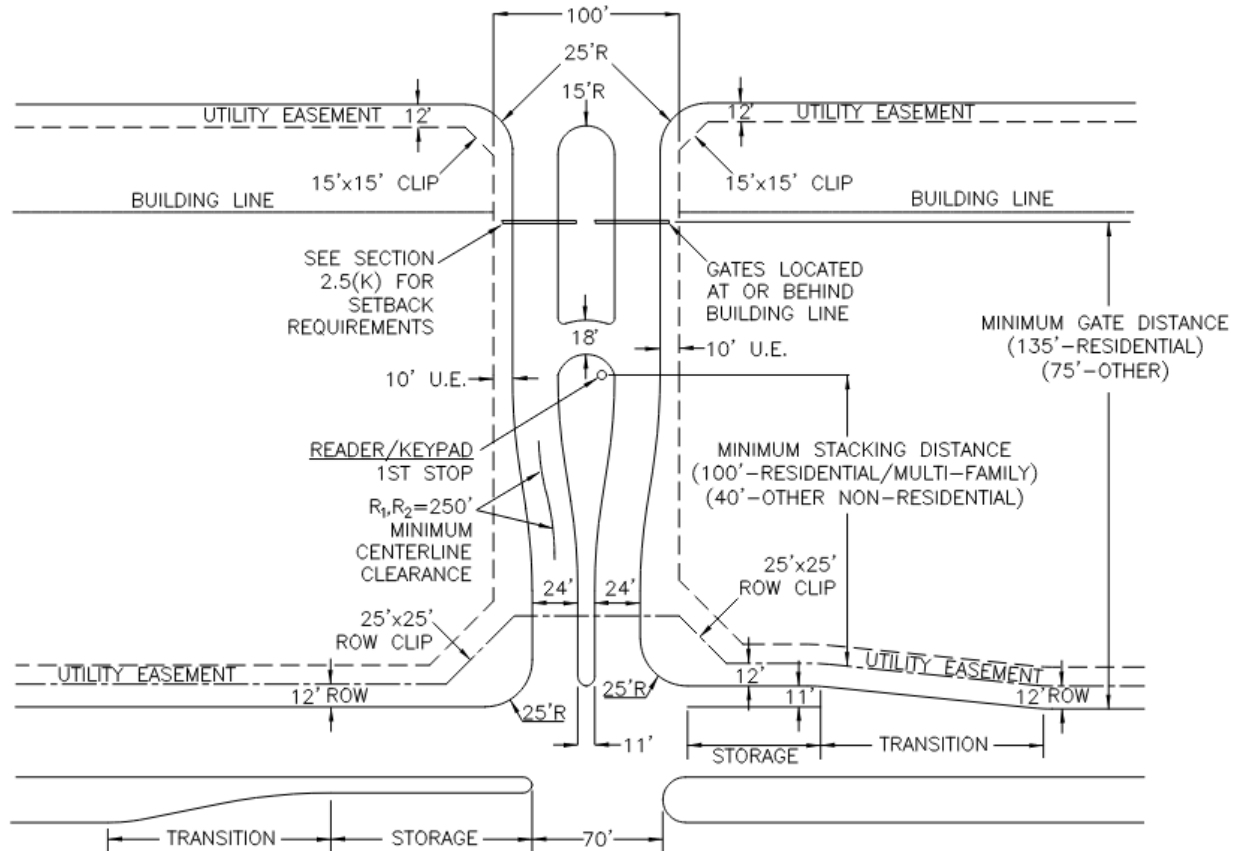


Figure 2.24 – Typical Gated Entrance Detail

- e. The hinge point of the gate shall be a minimum of eighteen inches (18") behind back of the curb or edge of pavement. The gate shall open to twenty-four inches (24") behind back of curb or edge of pavement.
 - f. Gates shall open sideways or swing open in the direction of travel on each side of the divided entrance.
 - g. Gates shall be equipped with emergency access devices as required by the Fire Department.
 - h. All gates shall provide pedestrian access. The movement of the gates shall not encroach on sidewalks.
4. Individual gated single-family residences shall have a minimum setback of twenty feet (20') from the property line. The movement of the gate(s) shall not encroach on a sidewalk, alley, or street.

L. Non-Conforming Driveways

1. All nonconforming driveways on a lot, tract, parcel or site shall be allowed to remain in use until the occurrence of one or more of the following events:
 - a. A change in use, or an increase in intensity of use, occurs such that the site requires a ten percent (10%) increase in required parking spaces.
 - b. Addition or expansion of required stacking spaces.
 - c. Any modification that changes the design or function of the existing driveway.
 - d. The addition of a median opening on the public street by a developer. All driveways that are served by the new median opening shall comply with the requirements of these standards.
2. Upon the occurrence of the events described above, the nonconforming driveway shall either be reconstructed in accordance with these design requirements, or eliminated.

2.6. Sidewalk Location and Design

- A. Definition of Sidewalk** – A sidewalk is defined as the paved area designated for pedestrian use which is generally located between the curb of the roadway and the adjacent property line. The inside edge of the sidewalk is the edge closest to the street while the outside edge of the sidewalk is farthest from the street.
- B. Sidewalk Design** – Sidewalks shall conform to the most current federal, state, and local ADA requirements and to the following standards:
1. **Sidewalk Grade** – The maximum grade of the sidewalk shall be five percent (5%) or the grade of the adjacent street, whichever is greater. The maximum cross-slope of the sidewalk shall be two percent (2%).
 2. **Zoning Classification Requiring Sidewalks** – Concrete sidewalks designed and located according to City standards shall be constructed along all streets in all zoning classifications except agriculture uses in agricultural zoned areas and Estate Residential zoned areas. Prior to developing any single-family, duplex, or townhome residential lots, residential developers shall build sidewalks along all streets adjacent to the subdivision and along the portions of any street within the subdivision where residential lots do not front or side onto the street. Sidewalks along residential lots shall be constructed by the homebuilder at the time each lot develops. Sidewalks adjacent to non-residential and multi-family land uses shall be built at the time of lot development.
 3. **Hike and Bike Master Plan** – Sidewalks shall be constructed with the width specified in the Hike and Bike Master Plan along thoroughfares that are designated as off-street hike and bike trail routes.
 4. **Major Arterial and Minor Arterial Thoroughfares** – A concrete sidewalk, a minimum six feet (6') in width, shall be located along all Major Arterial and Minor Arterial thoroughfares. The sidewalk should typically be located within the street

ROW, but may extend into a sidewalk easement. The inside edge of the sidewalk shall be no closer than three feet (3') from the back-of-curb.

5. Commercial Collector, Residential Collector, and Urban Street Thoroughfares – A concrete sidewalk, a minimum five feet (5') in width, shall be located along all Commercial Collector, Residential Collector, and Urban Street thoroughfares. The sidewalk shall be located within the street ROW unless pre-existing physical encroachments (e.g., utility infrastructure or trees) dictate otherwise. The outside edge of the sidewalk shall be located on the ROW line. If the sidewalk is adjacent to the back of curb, it shall be a minimum six feet (6') in width.
6. See **Section 3** of the Engineering Design Standards Manual for sidewalk thickness requirements.
7. Parkways – The area between the curb and ROW line shall be graded at two percent (2%) above the top of street curb. If the area between the curb and the sidewalk is at least three feet (3') wide, it shall contain grass that is maintained by the adjacent property owner. If the area between the curb and sidewalk is less than three feet (3') wide, it may be filled in concrete pavers in lieu of grass.
8. Meandering Sidewalks – Sidewalks along Major Arterial, Minor Arterial, and Commercial Collector thoroughfares and Residential Collectors may meander for aesthetics and/or to avoid pre-existing physical encroachments. Sidewalk easements adjacent to the standard ROW line will be required to contain any portion of the meandering sidewalk that extends beyond the ROW. Sidewalk easements shall provide a minimum clearance of one foot (1') beyond the outside edge of the sidewalk. The inside edge of a meandering sidewalk shall never be less than three feet (3') from the back-of-curb. A tangent calculated at any point along the centerline of a meandering sidewalk shall not be less than thirty degrees (30°) from perpendicular to the street. These requirements are shown in **Figure 2.25**.

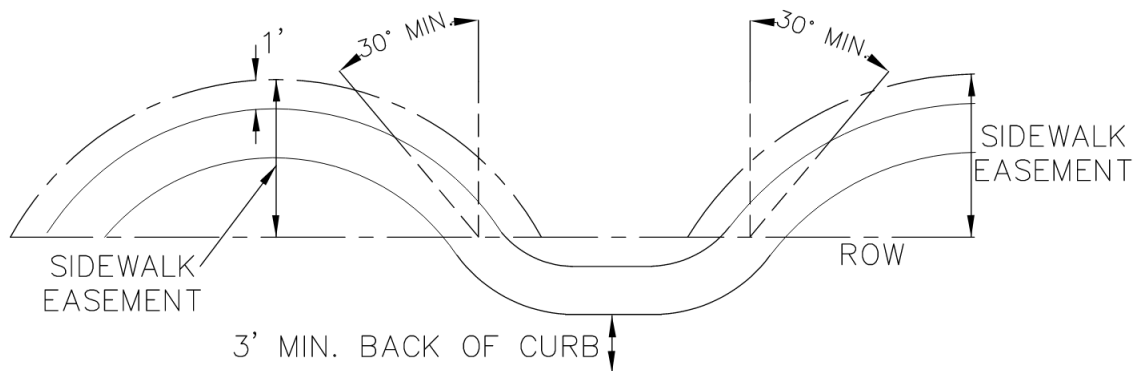


Figure 2.25 – Meandering Sidewalk Detail

9. Sidewalks Adjacent to Screening Walls – In areas where a screening wall is provided along a thoroughfare, the outside edge of the sidewalk shall either remain a minimum of three feet (3') from the wall, or the sidewalk shall be paved up to the wall with a sidewalk six feet (6') in width.

10. Access Ramps – Barrier-free ADA access ramps shall be provided at all street intersection corners, at all crosswalks, and across any curbed non-residential or multi-family driveway. Perpendicular ramps are required unless approved by the City Engineer.

11. Sidewalks on Bridges

- a. All street bridges shall have a sidewalk constructed on each side of the bridge. The sidewalk shall have a minimum width of six feet (6') with a parapet wall that is separated from the travel lane by an eighteen-inch (18") shoulder. See **Figure 2.26**.
- b. A standard pedestrian bridge rail protecting the sidewalk shall be provided on the outside edge of the bridge. See **Figure 2.26**.

12. Sidewalks/Trails Under Bridges – When new bridges are built as a part of the construction of a roadway or the reconstruction of a roadway and a pedestrian crossing is needed beneath the bridge, a sidewalk/trail shall be built as a part of the embankment design underneath the structure for future hike and bike trails. The City's Master Plans, Parks Department, or Engineering Department will designate whether a sidewalk/trail is built on one or both sides of the waterway and whether the sidewalk/trail shall be ten feet (10') or twelve feet (12') wide as determined by the City.

13. Sidewalks on Culverts – All culvert crossings shall have a sidewalk, a minimum of six feet (6') wide, constructed on each side of the culvert. A standard pedestrian hand rail as shown in **Figure 2.27** shall be provided on the outside edge of the culvert. A parapet wall may be required by the City Engineer.

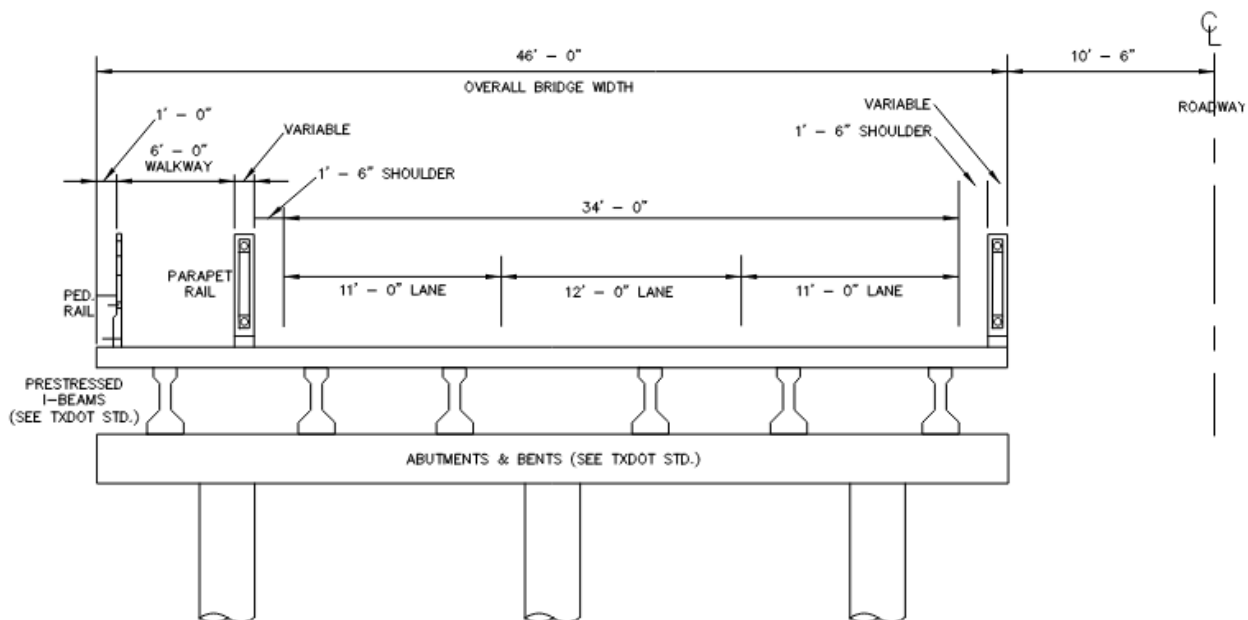


Figure 2.26 – Typical Sidewalk on Bridge Section

Typical Thoroughfare

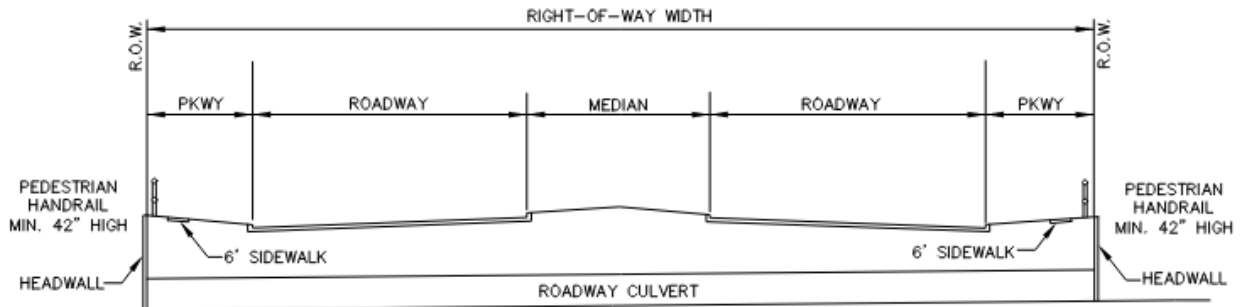


Figure 2.27 – Typical Pedestrian Handrail Over Culvert

14. Sidewalks between Residential Lots

- a. Where deemed necessary by the City Engineer or Development Services Director, a mid-block sidewalk may be required to be bisected by a twenty-five foot (25') wide pedestrian easement containing a sidewalk that is a minimum of five feet (5') wide in between lots. Such a mid-block pedestrian connection will be necessary where it would be beneficial to create a short-cut to walk to a school, park, trail, retail/commercial, or group of homes on the other side of the block. Pedestrian easements and sidewalk connections shall be provided between cul-de-sacs and adjacent streets.

15. Sidewalk Escrow – When the delay of sidewalk construction is deemed appropriate by the City due to future right-of-way improvements, escrow funds in lieu of the construction of sidewalks may be required by the City Engineer. Such funds shall be escrowed with the City prior to final acceptance of the development. The escrow amount shall be determined by the square footage of sidewalk to be constructed, as estimated by the developer, and approved by the City Engineer.

2.7. Public Right-of-Way Visibility Requirements

- A. **Sight Distance** - Adequate sight distance at the intersection of a thoroughfare and a proposed thoroughfare, driveway, or alley must be ensured. This sight distance is provided through the use of Corner Visibility Triangles and/or Sight Line Triangles. Corner Visibility Triangles are also known as ROW Corner Clips and Sight Line Triangles are also known as Visibility, Access and Maintenance Easements (VAMs). All intersection visibility requirements shall meet the guidelines for sight triangles in AASHTO's current *A Policy on Geometric Design of Highways and Streets*.

1. Corner Visibility Triangles shall be provided on all corners of an intersection between two thoroughfares or an intersection between an alley and a thoroughfare.

2. Sight Line Triangles shall be provided where a driveway, an alley, or a stop-controlled thoroughfare intersects an uncontrolled thoroughfare and on any signalized intersection approach where right turn on red operation is permitted.
3. No fence, wall, screen, sign, structure, foliage, hedge, tree, bush, shrub, berm, driveways, parking, drive aisles, or any other item, either man-made or natural shall be erected, planted, or maintained in a position that will obstruct or interfere with a driver's clear line of sight within a corner visibility triangle or a sight line triangle (i.e., a VAM).
4. The City has the right to prune or remove any vegetation within City right-of-way, including within the corner visibility triangle, and within sight line triangle easements (including VAMs), to abate a safety hazard and/or a nuisance.

B. Corner Visibility Triangles

1. The corner visibility triangle is defined at an intersection of two thoroughfares by extending the two ROW lines from their point of intersection to a distance as shown on **Table 2.12**. These two points are then connected with an imaginary line to form the corner visibility triangle as shown in **Figure 2.28**. This corner visibility triangle shall be dedicated as ROW.

Table 2.12 – Corner Visibility Triangle Distances

Type of Thoroughfare On	Type of Thoroughfare At	Distance ^(1,2) (X)
Major or Minor Arterials and Commercial Collectors	Major or Minor Arterials, Commercial Collectors, or any residential street that potentially will be signalized	40'
Major or Minor Arterials and Commercial Collectors	Urban Street that will remain unsignalized	25'
Residential Collector or Urban Street	Residential Collector or Urban Street	15'
Residential Collector or Urban Street	Alley	10'
TxDOT Road, Frontage Road	Use the specifications for a Major Arterial Thoroughfare	

1. The corner visibility triangle shall have the same dimension on all corners of the intersection.
2. Downtown visibility distances vary as required by the City Engineer.

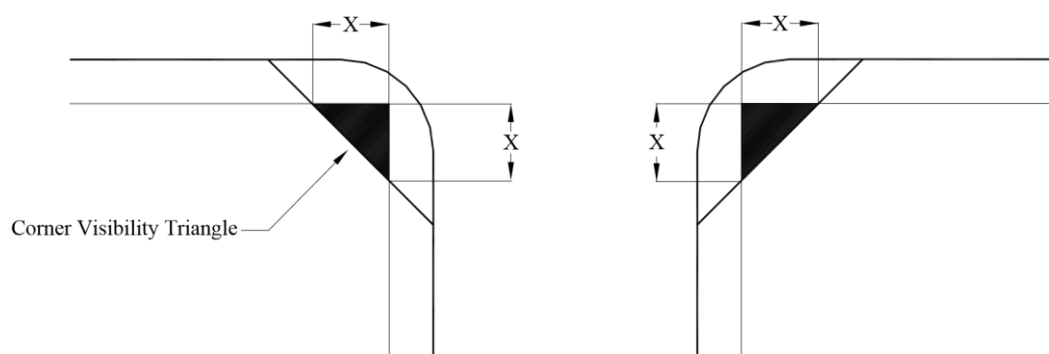


Figure 2.28 – Corner Visibility Triangle for an Intersection

2. Vision at all intersections of thoroughfares shall be clear at elevations between thirty inches (30") and nine feet (9') above the average gutter elevation within the corner visibility triangle and meet AASHTO's current minimum requirements.

3. Where alleys intersect residential Urban Street thoroughfares, the corner visibility triangle is measured as ten feet (10') along the residential street ROW and ten feet (10') along the alley ROW from the point of intersection. These two points are then connected with an imaginary line to form the corner visibility triangle as shown in **Figure 2.29**. The alley corner visibility triangle shall be dedicated as ROW.

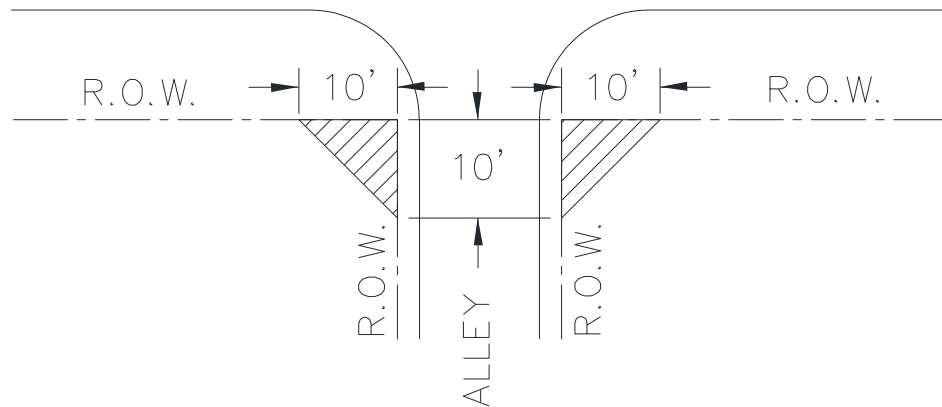


Figure 2.29 – Corner Visibility Triangle for an Alley

C. Sight Line Triangles

1. The sight line triangle, for Case B Intersection with Stop Controls, for the three cases of B1 – Left turns from the minor road ; Case B2 – Right turns from the minor road; and Case B3 – Crossing the major road from a minor-road approach. First, the vertex (decision point) of the departure sight triangle on the minor road should be 14.5 to 18 feet behind the edge of the major-road traveled way. The length of the sight triangle (dimension a) is the sum of the distance from the major road plus 0.5 lane width for vehicles approaching from the left, or 1.5 lane widths (plus the median, if any) for vehicles approaching from the right. For the sight line triangle to the left, construct a second imaginary line that is parallel to and at the midpoint of the stopped vehicle and continues to the left for a distance L (see **Table 2.13**) to its endpoint. To complete the sight line triangle, connect the endpoints of the first two lines as shown in **Figures 2.30** and **2.31**. In the case of the sight line triangle to the right, the second imaginary line is parallel and at the midpoint from the nearest edge of the conflicting traffic flow (or adjacent median in the event of a divided thoroughfare). It begins at the centerline of the vehicle and continues to the right for a distance R (see **Table 2.13**) to its endpoint. See **Figures 2.30** and **2.31**.
2. Distance to driver's eye for driveways that intersect a street is fifteen feet (15') from the intersecting curb line as shown in **Figures 2.30** and **2.31**.
3. In the case where the thoroughfare contains existing horizontal curvature, the distances L and R must be measured along the horizontal curve.

4. Sight Line Triangles that extend outside of the ROW shall be identified and dedicated as Visibility, Access and Maintenance Easements (VAMs) on the plat using City-approved VAM language.

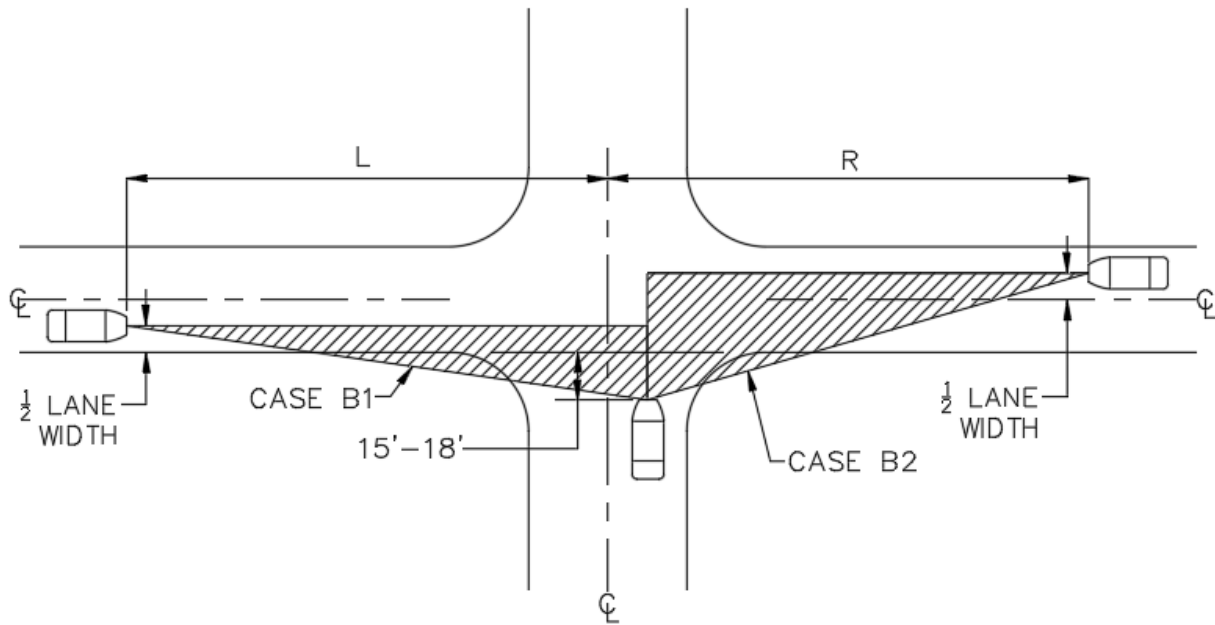


Figure 2.30 – Sight Line Triangle for Undivided Thoroughfare

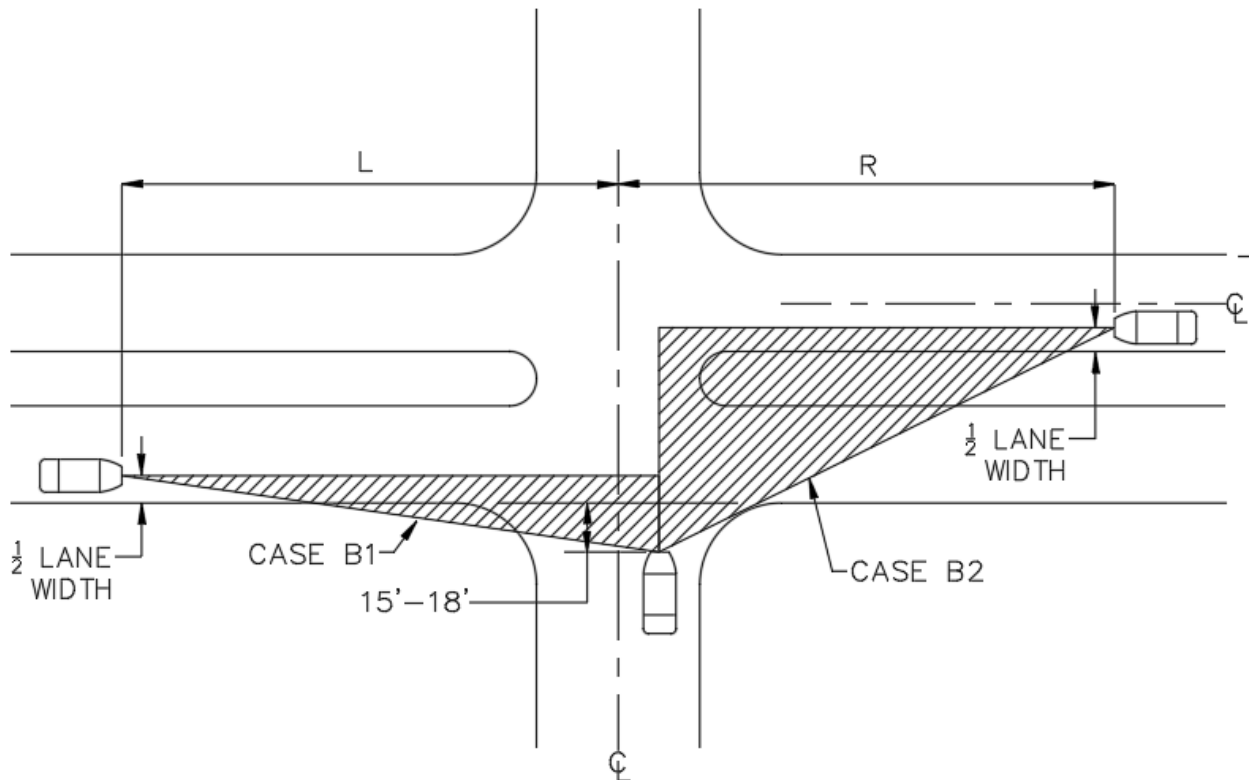


Figure 2.31 – Sight Line Triangle for Divided Thoroughfare

Table 2.13 – Sight Line Triangle Distances

Design Speed V (MPH)	Sight Distance by Lanes in Cross Section L and R (ft) ⁽⁴⁾		
	2	4 ⁽²⁾	6 ⁽²⁾
30	335	N/A	N/A
35	390	N/A	N/A
40	445	N/A	N/A
45	500	530	565

- (1) Source AASHTO's 2018 *A Policy on Geometric Design of Highways and Streets* – Chapter 9.
- (2) Manual calculations of the procedures in AASHTO's 2018 *A Policy on Geometric Design of Highways and Streets* – Chapter 9.
- (3) 150 feet with approval by the City Engineer.
- (4) The tabular data is only acceptable for major roadway grades between -3% and +3%. Grades outside this range require computational determination using the latest version of AASHTO.
- (5) Time Gaps will need to utilize combination truck, this accounts for trucks and trailers.

D. Traffic Control Devices – Any landscape requirements in the Engineering Design Standards Manual, the Subdivision Ordinance, the Zoning Ordinance, or any other City ordinance shall not interfere with the placement, visibility or maintenance of traffic control devices under governmental authority and control.

2.8. Traffic Signal Design

A. Introduction – According to the *Texas Manual of Uniform Traffic Control Devices* (TMUTCD), traffic control signals should not be installed unless one or more of the signal warrants in the manual are met. The satisfaction of a warrant or warrants is not in itself justification for a signal. Information should be obtained by means of engineering studies and compared with the requirements set forth in the warrants. The engineering study should indicate the installation of a traffic signal will improve the overall safety and/or operation of the intersection. If these requirements are not met, a traffic signal should neither be put into operation nor continued in operation (if already installed).

B. Warrant Criteria

1. To justify the installation of a traffic signal, Part IV in the TMUTCD shall be followed. Part IV describes the warrants for a traffic signal installation and provides guidelines and requirements for the actual design and operation of a traffic signal.
2. Engineering studies must be conducted in order to assess whether a particular location satisfies the warrant criteria listed in the TMUTCD. These studies may include one or more of the items listed in TMUTCD 4C.01 under Engineering Studies.

- C. Traffic Signal Spacing** – Signal spacing is an important factor in being able to provide progressive flow for a platoon of traffic. Traffic signal spacing shall be determined by the City Engineer.
- D. Traffic Signal Design and Installation** – The design and installation of traffic signals shall follow the latest TxDOT Specifications.
- E.** Lighted street name blades shall be required on all mast arms.
- F. Cost of Traffic Signal Installation**
 - 1. Traffic signals where a private driveway or a residential street intersects with a Major Arterial or Minor Arterial thoroughfare – The developer is responsible for the total cost of designing and constructing a traffic signal that would only be warranted based on the traffic generated by the development. The developer shall escrow funds for the cost of the traffic signal and the City shall construct the traffic signal at the time of development or when the development reaches a certain level of activity, as determined by the City Engineer. If a future traffic signal will equally serve a development on each side of the thoroughfare, each development shall be responsible for half the cost of the traffic signal.
 - 2. Traffic signals at Major-Major Arterial, Major-Minor Arterial, and Minor-Minor Arterial intersections – The developer on each corner of a Major-Major Arterial, Major-Minor Arterial, and Minor-Minor Arterial intersections is responsible for a portion of the cost of designing and constructing a future traffic signal at the intersection and shall escrow such funds with the City at the time of development. Seventy-five percent (75%) of the total cost of designing and constructing the traffic signal shall be divided equally among each of the four corners of the intersection and then proportionally assessed to each lot within a fifteen (15) acre area at each corner, measured eight hundred eight feet (808') in each direction from the corner. In the case of a three-leg intersection, an imaginary fourth leg shall be assumed for the purposes of creating four corners. As each lot develops as a portion of each corner, the trips generated by that land use shall be calculated and compared to the trips that would be generated by the total fifteen (15) acre area, the ratio of which determines the proportion of the traffic signal escrow that shall be assessed to that lot. If a preliminary site plan has not been approved for the whole fifteen (15) acre area, the land uses of a typical shopping center shall be assumed. If there are less than fifteen (15) acres that can be developed on a corner, the trips generated by a developing lot will be compared to a hypothetical fifteen (15) acre shopping center.

2.9. Street Lighting Design

- A.** The following standards shall apply to all Major Arterial and Minor Arterial Thoroughfares:
 - 1. Street lighting shall be placed in the medians, with spacing not to exceed one hundred eighty feet (180') and no closer than one hundred fifty feet (150') depending on median breaks and intersections.
 - 2. Unless a photometric analysis suggests the use of a different type of luminaire, street lighting shall use Full Cutoff, Type 3 Luminaires on thoroughfares with one

hundred twenty feet (120') of ROW and Full Cutoff, Type 2 Luminaires on thoroughfares with ninety feet (90') of ROW.

3. Unless otherwise directed or approved by the City Engineer, all new street lights shall be per standard City details with approved LED. All fixtures shall be purchased and installed by the Developer.
4. When partial thoroughfares are constructed, the City Engineer may allow the payment of a street light fee in lieu of installing the required lighting. Where property lines bisect thoroughfares, each Owner (Developer) is responsible for one half the total cost of fully developed street lighting along that segment of the thoroughfare.
5. Street lighting conduit shall be two-inch (2") Schedule 40 PVC or as required by the electric provider.
6. Conduit shall be installed as shown on the plans and as required by the City Engineer.

B. The following standards shall apply to all Commercial Collectors:

1. Street lighting shall be placed in the parkway between the curb and the sidewalk, with spacing not to exceed one hundred eighty feet (180') and no closer than one hundred fifty feet (150').
2. Street lighting shall use Full Cutoff, Type 2 Luminaires.
3. Unless otherwise directed or approved by the City Engineer, all new street lights shall be ONCOR or GCEC approved LED. All fixtures shall be purchased by the Developer directly from ONCOR or GCEC, and the Developer is responsible for all street light fixture costs as determined by ONCOR or GCEC.
4. Street lighting shall be installed prior to final acceptance of the construction of a commercial collector. When the delay of installing street lighting is deemed appropriate by the City Engineer, he/she may allow the payment of a street light fee in lieu of installing the required lighting. Where property lines bisect collectors, each owner (Developer) is responsible for one-half of the total cost of fully developed street lighting along that segment of the collector.
5. Street lighting conduit shall be two-inch (2") Schedule 40 PVC.
6. Conduit shall be installed as shown on the plans and as required by the City Engineer.

C. The following standards shall apply to all Type Residential Collector, and Urban Streets:

1. Luminaires shall be Acorn Style lamps and poles shall be black in color unless approved otherwise by the City Engineer. Pole height shall be twelve feet (12') for Residential Collector and Urban Street local streets and fourteen feet (14') for residential streets.
2. Lamp wattages shall be 27 watts LED or equivalent.

3. Street lights shall be installed without multiple luminaires.
4. Street lights shall typically be located at the upstream side of intersections and at mid-block locations if the block length is greater than six hundred feet (600'). Cul-de-sacs over two hundred twenty-five feet (225') in length, measured from centerline of cross street to center point of cul-de-sac, shall have a street light installed at the street intersection and at the beginning of the bulb. Other locations may be required as deemed necessary by the City Engineer. Refer to Figure 2.32 below for typical street light placement. Street lights shall not be closer than one hundred fifty feet (150') nor greater than six hundred feet (600') apart.

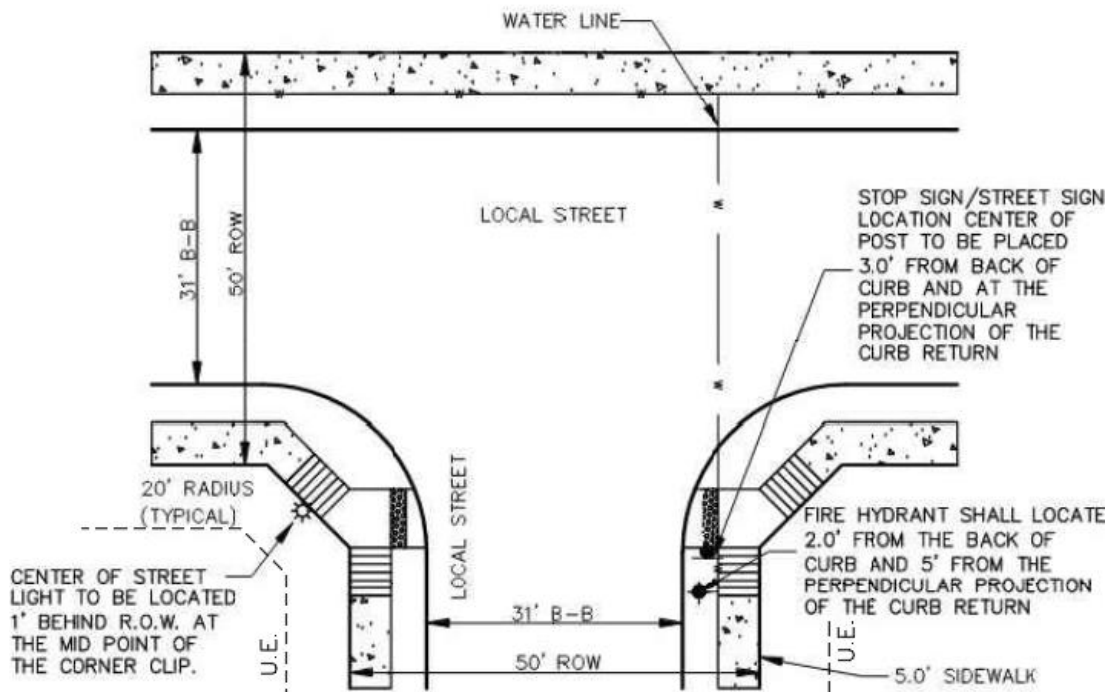


Figure 2.32 – Typical Street Light Placement

5. Subdivisions bounded by Major Arterial or Minor Arterial thoroughfares shall have a common type of luminaire throughout. Street lighting shall be installed prior to acceptance by the City Engineer.
- D.** A lighting plan shall be required anytime street lighting is proposed, or modified. The lighting plan shall be submitted to the City Engineer for a construction permit. A certified engineer, architect, landscape architect, lighting engineer or designer shall prepare the plan. The plan shall also contain a certification by the property owner or agent and the preparer of the plan that the street lighting depicted on the plan complies with these requirements. The submission shall contain but shall not necessarily be limited to the following:
1. Plans indicating the location of the lighting, and the type of illuminating devices, fixtures, lamps, supports, reflectors, and other devices;

2. Description of the illuminating devices, fixtures, lamps, supports, reflectors, and other devices and the description may include, but is not limited to, catalog cuts by manufacturers and drawings (including sections where required) and height of the luminaires;
 3. Photometric plan and data sheets, such as that furnished by manufacturers, or similar to that furnished by manufacturers or the lighting designer, showing the angle of cut off or light emissions; and
 4. Water and sewer locations along with any other existing utilities lightly shaded on plans showing any possible location conflicts with proposed lighting.
- E.** The following are exempt from these requirements:
1. “Cobra head” type lighting fixtures having dished or “drop” lenses or refractors which house other than incandescent light sources in undeveloped areas.
 2. Temporary lighting approved in writing by the City Engineer.
 3. Where existing or phased subdivisions are currently under construction, the continued use of previously approved street lighting will be permitted. When a new phase of a subdivision is divided by a residential collector, the street lighting standards contained in these requirements shall be required.
 4. The City Engineer may vary from these requirements as part of the approval of public street and sidewalk projects in overlay districts and Planned Developments.
 5. Lighting luminaires in existence on the effective date of these requirements shall be exempt from these standards and shall be considered legally non-conforming. Such fixtures may be repaired, maintained and/or replaced. If an identical replacement of non-conforming luminaires is not available, the new luminaires shall comply with these requirements.

2.10. Traffic Impact Analysis and Mitigation

- A. Purpose** – The purpose of a Traffic Impact Analysis (TIA) is to assess the effects of specific development activity on the existing and planned thoroughfare system. Development activity may include but is not limited to rezoning, preliminary site plans, site plans, driveway permits, certificates of occupancy, and Thoroughfare Plan amendments.
- B. Pre-submission Meeting** – Prior to the commencement of a TIA, an initial or pre-submission meeting with City staff is required to establish a base of communication between the City and the applicant. This meeting will define the requirements and scope relative to conducting a TIA and ensure that any questions by the applicant are addressed.
- C. Applicability of TIA Requirements**
1. **Zoning** – These TIA requirements shall apply to all zoning requests for land uses which will generate 2,500 or more vehicle trips per day or contain a density of

0.75 Floor Area Ratio (FAR) or greater. Applicable requests include zoning requests and Thoroughfare Plan amendments, if no previous traffic assessment was performed. Special circumstances, including but not limited to development with no case history, which do not meet the daily trip generation threshold, may also require a TIA. Such circumstances, as determined by the City Engineer may include, but are not limited to, impacts to residential neighborhoods from non-residential development, inadequate site accessibility, the implementation of the surrounding Thoroughfare Plan is not anticipated during the estimated time period of the proposed development, the proposed land use differs significantly from that contemplated in the Comprehensive Plan, or the internal street or access is not anticipated to accommodate the expected traffic generation.

2. Development Site Plan – These TIA requirements shall apply to all development site plan requests for land uses, which will generate 1,000 or more vehicle trips per day or contain a density of 0.75 Floor Area Ratio (FAR) or generate over 100 total trips during the AM or PM peak hour. Developments that will generate less than 1,000 but 500 or more vehicle trips per day may require a TIA. Applicable development requests include concept plans, preliminary site plans, and site plans. Special cases, in which site generated peak hour trip activity is different from that of the adjacent street (weekdays 7:00-9:00 a.m. and 4:00-6:00 p.m.), may require an additional separate analysis as determined by the City Engineer. Such circumstances may include, but are not limited to, commercial/retail, entertainment or institutional activity. The City Engineer may waive the TIA for a development request if a TIA was performed previously with the Zoning request and conditions listed in the report are still current.
3. Daycares and Schools – All development requests and/or specific use permit requests for a daycare, Montessori school, private school, charter school, or public school shall include, at a minimum, a traffic circulation study. This study shall include the estimated maximum peak hour trip generation of the facility, the planned circulation of inbound and outbound traffic during drop-off and pick-up operations, and the estimated length of the queue of cars waiting to pick up students. The design of the site and the circulation plan shall ensure that school traffic does back up onto any public street. The traffic circulation study shall include a statement that the owner and/or operator of the daycare or school agrees to operate the facility in accordance with the approved circulation plan. The circulation plan must be approved by the City Engineer before the development request or the specific use permit can be approved.
4. Determination of Applicability – The need for a TIA shall be determined by the City Engineer based upon the results and recommendation from a pre-development meeting. It shall be the responsibility of the applicant to demonstrate that a TIA should not be required. If a TIA is required, the level of effort for a TIA submission shall be determined by the City Engineer. Depending upon the specific site characteristics of the proposed development, one or more of the following elements may also be required as part of the TIA: an accident analysis, sight distance survey, traffic simulation, traffic signal warrant analysis, queuing analysis, turn lane analysis, and/or traffic circulation plan.

D. Requirements for TIA Updates – A TIA shall be updated when time or circumstances of the original study fall within the parameters presented in **Table**

2.14. The applicant is responsible for preparation and submittal of appropriate documentation in order for City staff to process the development application. A TIA for site development requests must be updated if two years have passed since the original submittal, or if existing or assumed conditions have changed within the defined study area. The City Engineer shall make the final determination as to the extent of a TIA update.

Table 2.14 – Criteria for Determining TIA Update Requirements

Original TIA Report was based on:	Changes to the Originally Proposed Development:	
	Access Changed ⁽¹⁾ or Trip Generation Increased by more than 10%	Access Not Changed and Trip Generation Increased by less than 10%
Zoning; or Preliminary Site Plan or Site Plan that is less than 2 years old	Letter Amendment Required: Identify and report only analysis conditions that have changed	Letter Documenting Change (No analysis is required)
Preliminary Site Plan or Site Plan that is more than 2 years old	Prepare New Study. Must meet all current TIA requirements	Prepare New Study. Must meet all current TIA requirements.

1. Changed access includes proposed new access or refinement of general access locations not specifically addressed in original proposed development.

E. Responsibility of TIA Preparation and Review

1. A TIA shall be prepared in accordance with all of the guidelines in this section and submitted to the City. The responsibility for TIA preparation shall rest with the applicant and must be performed by a Professional Engineer (P.E.) licensed in the State of Texas with experience in traffic and transportation engineering and preapproved by the City. The final TIA report must be signed and sealed by the P.E. responsible for the analysis to be considered for review by the City. City staff shall serve primarily in a review and advisory capacity and will only provide data to the applicant when available.
2. It shall be the responsibility of the applicant to submit a digital draft TIA report and executive summary with the zoning and/or development request submission. Incomplete TIAs or failure to submit a TIA shall delay approval of construction plans and building permits. Should it be determined during the review of any plans that a TIA is required, consideration shall be deferred until the developer submits a completed TIA and the City has reviewed the assessment.
3. The City shall review the TIA and provide comments to the applicant. It shall be the responsibility of the applicant to submit a digital finalized TIA report and executive summary once all review comments have been addressed.

F. TIA Standards

1. Design Level of Service – The minimum acceptable level of service (LOS) within the City shall be defined as LOS “D” in the peak hour for all critical movements and links. All development impacts on both thoroughfare and intersection operations must be measured against this standard.
2. Trip Generation Resources – The City’s standard for trip generation rates for various land use categories shall be those found in the latest edition of *Trip Generation* published by the Institute of Transportation Engineers (ITE) or other published or recognized sources applicable to the region. Alternate trip generation rates may be accepted on a case-by-case basis if the applicant can provide current supporting data substantiating that their development significantly differs from the ITE rates. The City Engineer must approve alternative trip generation rates in writing in advance of the TIA submission.
3. Trip Reductions – Trip reductions for passer-by trips and mixed-use developments will be permitted, subject to analytical support provided by the applicant and approval by the City Engineer on a case-by-case basis. Assumptions relative to automobile occupancy, transit mode share, or percentage of daily traffic to occur in the peak hour must be documented and will be considered subject to analytical support provided by the applicant.
4. Study Horizon Years – The TIA must evaluate the impact of the proposed development on both existing traffic conditions and future traffic conditions for the horizon year(s). These applications should also assume full development of the Master Thoroughfare Plan or pending amendments.

G. TIA Methodology

1. Site Location/Study Area – A brief description of the size, general features, and location of the site, including a map of the site in relation to the study area and surrounding vicinity.
2. Existing Zoning – A description of the existing zoning for the site and adjacent property, including land area by zoning classification and density by FAR, square footage, number of hotel rooms, and dwelling units (as appropriate);
3. Existing Development – A description of any existing development on the site and adjacent to the site and how it would be affected by the development proposal;
4. Proposed Zoning / Site Development – A description of the proposed zoning/development for the site, including land area by zoning classification and density by FAR, square footage, number of hotel rooms, and dwelling units (as appropriate); identify other adjacent land uses that have similar peaking characteristics as the proposed land use; identify recently approved or pending land uses within the area;
5. Thoroughfare System – A description and map of existing planned or proposed thoroughfares and traffic signals for horizon year(s) within the study area;

6. Existing Traffic Volumes – Recent traffic counts for existing thoroughfares and major intersections within the study area;
7. Projected Traffic Volumes – Background traffic projections for the planned thoroughfare system within the study area for the horizon year(s);
8. Density of Development – A table displaying the amount of development assumed for existing zoning and/or the proposed development (using gross floor area, dwelling units, occupied beds, etc., as required by the trip generation methodology);
9. Existing Site Trip Generation – A table displaying trip generation rates and total trips generated by land use category for the AM and PM peak hours and on a daily basis, assuming full development and occupancy based on existing zoning (if applicable), and including all appropriate trip reductions (as approved by the City Engineer);
10. Proposed Site Trip Generation – A table displaying trip generation rates and total trips generated by land use category for the AM and PM peak hours and on a daily basis, assuming full development and occupancy for the proposed development, and including all appropriate trip reductions (as approved by the City Engineer);
11. Net Change in Trip Generation (for rezoning cases) – Proposed trip generation minus existing trip generation (if applicable); the net increase in trips to be added to base volumes for the design year;
12. Trip Distribution and Traffic Assignment – Tables and figures of trips generated by the proposed development (or net change in trips, if applicable) added to the existing and projected volumes, as appropriate, with distribution and assignment assumptions, unless computer modeling has been performed;
13. Level of Service Evaluations – Capacity analyses for weekday AM and PM peak hours of the roadway and peak hour of the site, if different from the roadway, for Major and Minor Arterial existing conditions and horizon year projections for intersections, thoroughfare links, median openings and turn lanes associated with the site, as applicable;
14. Traffic Signal Evaluations – The need for new traffic signals based on warrants and their impact on the performance of the transportation system;
15. Evaluation of Proposed/Necessary Mitigation – Capacity analyses for weekday AM and PM peak hours of the roadway and peak hour of the site, if different from the roadway, for intersections, thoroughfare links, median openings and turn lanes associated with the site under proposed/necessary traffic mitigation measures;
16. Conclusions – Identification of all thoroughfares, driveways, intersections, and individual movements that exceed LOS “D” or degrade by one or more LOS, the percentage of roadway volume change produced by the proposed development, and any operational problems likely to occur;

17. Recommendations – Proposed impact mitigation measures consistent with Subsection I below; and
18. Other information required for proper review – As requested by the City Engineer.

H. TIA Report Format

1. The TIA report must be prepared on 8½" x 11" sheets. However, it may contain figures on larger sheets, provided they are folded to this size. All text and map products shall be computer-based and provided in both published format and computer file format (PDF). In addition, all electronic files used as part of the traffic analysis (i.e., Synchro, HCS, Passer II/III, CORSIM, VISSIM, etc.) shall be provided.
2. The sections of the TIA report should be categorized according to the outline shown below:

Executive Summary

- I. Introduction
 - A. Purpose
 - B. Methodology
 - II. Existing and Proposed Land Use
 - A. Site Location/Study Area
 - B. Existing Zoning
 - C. Existing Development
 - D. Proposed Zoning (if applicable)
 - III. Existing and Proposed Transportation System
 - A. Thoroughfare System
 - B. Existing Traffic Volumes
 - C. Projected Traffic Volumes
 - IV. Site Traffic Characteristics
 - A. Existing Site Trip Generation (if applicable)
 - B. Proposed Site Trip Generation
 - C. Net Change in Trip Generation (if applicable)
 - D. Trip Distribution and Traffic Assignment
 - V. Traffic Analysis
 - A. Level of Service Evaluations
 - B. Traffic Signal Evaluations
 - VI. Mitigation
 - VII. Conclusions
 - VIII. Recommendations
- Appendices

I. Traffic Impact Mitigation

1. Mitigation of traffic impacts shall be required if the proposed development would cause a facility or traffic movement to exceed LOS “D”, or where it already exceeds LOS “D” and the development would contribute five percent (5%) or more of the total traffic during any projected horizon year. If mitigation is required, the applicant must only mitigate the impact of the proposed development, and would not be responsible for alleviating any deficiencies in the thoroughfare system that may occur without the proposed development.
2. Acceptable mitigation measures shall include:
 - a. Staging of development in order to relate site development to the construction of the required thoroughfare system;
 - b. Staging of development so that the site contributes less than five percent (5%) of the total traffic to the affected facility or traffic movement during the projected horizon year;
 - c. Off-site improvements, including the provision of right-of-way and/or the participation in funding for needed thoroughfare and intersection improvement projects (including, but not limited to, through lanes, turn lanes or traffic signals); and
 - d. On-site improvements, including access controls and site circulation adjustments.
3. Mitigation is not required if it can be shown that the traffic impacts of the project are fully mitigated ten (10) years after the final opening with any improvements that are already programmed to be implemented within five (5) years of the initial opening.

SECTION 3	PAVEMENT AND SUBGRADE DESIGN REQUIREMENTS	2
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3.2.	Existing Surface/Subsurface Investigation	3
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SECTION 3 PAVEMENT AND SUBGRADE DESIGN REQUIREMENTS

3.1. General

- A. The following specifies minimum standards required for the pavement and subgrade design for roadways and alleys within the City. These minimum standards are not intended to replace the professional judgment of the Geotechnical Engineer for any specific project. The standards may need to be expanded or modified on a case by case basis as determined necessary and appropriate by the Geotechnical Engineer, and as approved by the City Engineer in writing.
- B. **Table 3.1** lists the City's minimum pavement and subgrade thicknesses and dimensions. In no case shall the pavement and subgrade be less than the minimums.

Table 3.1 – Pavement and Subgrade Minimum Standards

Criteria	Thoroughfare Classification				
	Major Arterial	Minor Arterial	Commercial Collector	Residential Collector and Urban Street	Alley
Concrete Thickness	9"	8"	7"	6"	See SD
Reinforcing Steel	#4 on 12" c-c	#4 on 12" c-c	#4 on 18" c-c	#3 on 18" c-c	#3 on 18" c-c
Cement Subgrade Thickness if PI<20	8"	8"	8"	8"	8"
Lime Subgrade Thickness if PI>20	8"	8"	8"	8"	8"
Cement/Lime ¹ Application Rate	8%	8%	8%	8%	8%
Flexbase Subgrade Thickness if Sulfates>6,000 ppm	6"	6"	6"	6"	6"
MC Depth	Per Geotech Report	Per Geotech Report			
SG Behind BOC	1-ft	1-ft	1-ft	1-ft	1-ft
MB Behind BOC	6-ft**	6-ft**	6-ft**	6-ft**	6-ft**

Hand placed concrete to be 4500 psi, air 3%-6%, 5" maximum slump

Machine placed concrete to be 4000 psi, air 3%-6%, 5" maximum slump.

MC = Moisture Conditioning

SG = Subgrade

BOC = Back of Curb

MB = Moisture Barrier

SD = Standard Detail

* Alleys shall be paved with concrete having a minimum 8" thickness in commercial areas and 6" thickness in residential areas.

**If Moisture Barrier at back of curb is recommended in Geotech report

1 – Value to be based upon lime series, refer to 3.4.A.1

- C. All roadways and alleys shall have a geotechnical investigation and pavement and subgrade design performed. Results of the geotechnical investigations, engineering analyses, and recommendations shall be presented in a Geotechnical Report for Roadways ("Report"). The Report and any subsequent re-evaluations and/or supplemental reports shall be signed and sealed by a Licensed Professional Engineer in the State of Texas trained and qualified to provide geotechnical engineering analysis and pavement and subgrade design recommendations.
- D. The Report shall address all items listed in the Geotechnical Report for Roadways Checklist ("Checklist"). The Checklist shall be filled out completely and submitted with the Report. Any "N/A" response on the Checklist shall include a written explanation and adequate justification as deemed necessary by the City Engineer.
- E. The *Summary of Geotechnical Recommendations Form* ("Form") shall be filled out completely and submitted with the Report.
- F. City review of the Report will be conducted as a means to verify if the pavement and subgrade design has been performed in general conformance to the City's requirements, and shall not be considered a detailed technical review of the pavement and subgrade design for adequacy, accuracy, or completeness. The Geotechnical Engineer performing the pavement and subgrade design shall remain responsible for the technical adequacy, accuracy, and completeness of the pavement and subgrade design and shall not be relieved of any responsibility for such as a result of the City's review.
- G. The information and recommendations contained in the Geotechnical Report and any subsequent re-evaluation and/or supplement reports shall be accepted by the City Engineer in writing prior to Release of Construction.
- H. Fire lane paving shall be designed in accordance with the City's Fire Marshal or Letter of Recommendation from the Geotechnical recommendations for such use.
- I. The Engineer shall prepare a site-specific jointing plan for any roundabout. This includes, but is not necessarily limited to, expansion and contraction/sawed joints. Refer to **Section 2** and Standard Details for more information on roundabouts.
- J. Refer to the Standard Details and Technical Specifications for additional specific minimum requirements related to pavement and subgrade.

3.2. Existing Surface/Subsurface Investigation

- A. Field Investigation elements include:
 - 1. Borings shall be drilled on center of lane at 500-foot spacing (or less), alternating between each roadway direction or on a 400-foot grid throughout a subdivision to a depth of at least 20 feet below finished subgrade.
 - 2. Borings shall be sampled at 3-foot intervals or less to a depth of 10 feet, and at 5-foot intervals or less thereafter.
 - 3. Bulk samples of each soil type encountered in the upper 5 feet shall be taken for Laboratory Investigation.

B. Laboratory Investigation elements include:

1. Moisture Content Tests (ASTM D 2216) shall be performed. When the samples are wetter than normally expected due to seasonal variability, the samples shall be air dried such that the samples represent the drier portion of the year. Average all swell test results to determine the mean maximum swell percentage and the standard deviation.
 - a. For samples taken during the months of June through September, use the mean swell percentage.
 - b. For samples taken during the months of October through May, use the mean plus one standard deviation to determine the design swell percentage.
2. Soil types in each boring shall be classified as follows:
 - a. Atterberg limits (ASTM D 4318)
 - b. Percent Passing the No. 200 sieve (ASTM D 1140)
 - c. Moisture/Density

- C. A geotechnical re-evaluation may be required if more than two months occur between the end of moisture conditioning and beginning of liming operations; when conditions have changed significantly between moisture conditioning and liming operations; when Contractor and/or Owner have not properly maintained moisture content; or as deemed necessary by the City. The re-evaluation shall include additional field and laboratory testing to confirm moisture conditioning is still acceptable, or how to rectify the substandard condition prior to liming operations as necessary. Borings for the re-evaluation will be required on center of lane at 1,000-foot spacing (or less) or on a 800-foot grid throughout a subdivision to a depth of at least 20 feet below finished grade. The cost for these borings and laboratory work will be at the Contractor's and/or Owner's expense.

3.3. Subsurface Design

- A. Laboratory investigation elements include determining swell characteristics and movement potential using the Swell Test and the calculated Potential Vertical Rise (PVR) – TxDOT Tex-124-E methods for a 20-foot depth of moisture penetration. The results of both tests shall be included in the Report. The Geotechnical Engineer shall use the more conservative value in determining swell potential and depths of moisture treatment.
1. Swell Test: Test for swell potential using swell test (ASTM D 4546) at 200 psf stress at least two samples per boring at varying depths from 0' to 10' to determine the average swell potential of the subgrade.
 2. PVR-TxDOT Tex-124-E: Test for swell potential using swell test (ASTM D 4546) and/or soil suction tests (ASTM D 5298) necessary to calculate PVR for a 20-foot moisture penetration. The PVR shall be calculated based upon 20-foot moisture penetration and shall provide moisture treatment depth to limit PVR to 4.5 inches.

- B. The Geotechnical Engineer shall address transitions between zones of varying depths of moisture treatment. Zones shall remain at the most conservative depth 150 feet from the location of the boring resulting in the greatest depth, prior to transitioning to a zone with less moisture conditioning depth. In no case shall the transitions be greater than 1H:1V.
- C. If street trees are proposed and within the limits of the moisture treated subgrade and moisture barriers, the Geotechnical Engineer shall address this condition in the Report and propose an alternate moisture barrier for the City's review.
- D. All subsurface improvements shall be in accordance with the Technical Specifications unless otherwise approved by the City Engineer.

3.4. Subgrade Design

- A. Laboratory Investigation elements include:
 - 1. Lime stabilization series for each soil type expected to be in the upper 12 inches of the subgrade. The Eades-Grimm method of pH testing shall be used to obtain a beginning point. Additional testing shall be performed for each soil type to determine lime content. Minimum design criteria are:
 - a. pH = 12.4 (or maximum pH) after mellowing (ASTM D 2976)
 - b. Swell potential <1.0 percent under 200 psf stress test (ASTM D 4546)
 - c. The minimum lime content shall be the percentage, by weight, of hydrated lime as determined by lime stabilization series plus 1.0%, and in no case be less than the City's minimum requirements as listed in **Table 3.1**.
 - 2. Test for sulfates in the upper 3' of the subgrade in each boring using EPA 9038 or EPA 375.4 with 10:1 dilution ratio. Provide testing to determine the levels of sulfate present in all soil types in the upper 3'.
- B. Formations having over 6,000 ppm (0.6%) sulfates shall require a minimum of 6" of Flexbase subgrade. Lime or Cement treatment shall not be allowed unless approved otherwise by the City Engineer.
- C. Alternative subgrade options may be proposed by the Geotechnical Engineer, and may be approved by the City Engineer in writing.
- D. Flexible base, if proposed as an alternative subgrade, shall have a minimum depth of 6-inches and shall extend a minimum of 1-foot behind the back of curb. Flexible base shall meet TxDOT Specifications, Item 247, Type D, Grade 1 or 2 with Triax TX 140 Geogrid (or approved equal) under the flexible base.
- E. All subgrade improvements shall be in accordance with the Technical Specifications unless otherwise approved by the City Engineer.

3.5. Pavement Design

- A. All concrete pavement shall be in accordance with Technical Specification unless otherwise approved by the City Engineer.

- B. The minimum pavement sections listed in **Table 3.1** are based on the Pavement Design Input Values contained in **Table 3.2**. It is the Geotechnical Engineer's responsibility to ensure those input values are applicable. In no case shall the pavement sections be less than the City's minimum. A pavement design shall be required when any of the input values deviate from the City's input values listed in **Table 3.2**. When a pavement design is required, it shall be based on the American Association of State Highway and Transportation Officials (AASHTO) Guide for Design of Pavement Structures, current edition, utilizing WinPAS Pavement Analysis Software or equivalent. A printout from the software program will be required.

Table 3.2 – Minimum Pavement Design Input Values

Input	Thoroughfare Classification			
	Major Arterial	Minor Arterial	Commercial Collector	Residential Collector-Alley
Design Period	20 years	20 years	20 years	20 years
Initial Serviceability	4.5	4.5	4.5	4.5
Terminal Serviceability	2.5	2.3	2.3	2.0
Concrete MOR @ 28 days	620 psi	620 psi	620 psi	620 psi
Concrete E @ 28 days	5,000,000 psi	5,000,000 psi	5,000,000 psi	5,000,000 psi
Modulus of Subgrade Reaction (Eagle Ford Shale Formation)	300 psi/in	300 psi/in	300 psi/in	300 psi/in
Reliability	90%	90%	85%	85%
Standard Deviation	0.35	0.35	0.35	0.35
Load Transfer Coefficient	2.9	2.9	2.9	2.9
Drainage Coefficient	1.0	1.0	1.0	1.0
Design Average Daily Traffic (ADT)	60,000	30,000	20,000	12,000
Traffic Growth Rate	0%	0%	0%	0%
Percent Trucks	2%	2%	1%	1%
Lanes	6	4	2-4	2
Lane Distribution Factor	0.7	1	1	1

*If anticipated percentage of trucks for proposed development exceeds the minimum criteria shown in **Table 3-2**, the actual percentage shall be used.

Geotechnical Report for Roadways Checklist

Project Name: _____

Geotechnical Engineer/Firm: _____

Report Date: _____

Date Received: _____

Note: Any N/A response shall include a written explanation with adequate justification, as deemed necessary by the City Engineer.

COMPLETE	N/A	
☐	☐	1. SECTION 3.1 GENERAL
☐	☐	A. Include the <i>Summary of Recommendations Form</i>
☐	☐	B. Description of Project
☐	☐	C. Location of Project
☐	☐	D. Roadway type and classification
☐	☐	E. Grading plan and summary
☐	☐	F. Discussion of underground utilities within the Project limits
COMPLETE	N/A	2. SECTION 3.2 EXISTING SURFACE/SUBSURFACE INVESTIGATION
☐	☐	A. Discussion of existing surface/subsurface conditions that may affect subgrade and pavement design or performance (i.e. vegetation, terrain, existing structures, existing pavement, etc.)
☐	☐	B. Discussion of geological conditions that may impact subgrade and pavement design or performance. Specify formation.
☐	☐	C. Surface/subsurface conditions with logs i. Sampling techniques ii. Description of soil and rock encountered, including lab test details iii. Discussion of water and groundwater conditions iv. Discussion of seasonal variations in moisture content v. Atterberg limits (ASTM D 4318) vi. Percent Passing the No. 200 sieve (ASTM D 1140)
☐	☐	D. All standards used in field and laboratory testing shall be identified. Any deviations to standard procedures shall be discussed.
COMPLETE	N/A	3. SECTION 3.3 SUBSURFACE DESIGN
☐	☐	A. Expansive Soils Evaluation vii. Percent swell calculation and test results viii. Effect of cut/fills (i.e. long-term soil uplift in cut areas; settlement overburden pressure effects in fill areas) ix. Identify soil movement estimates at each boring location x. Explanation of anomalous variations within the soil profile and between borings (i.e., Atterberg limits, PI, sulfates, clay to rock, etc.)
☐	☐	B. Soil Moisture Conditioning xi. Discussion of swell test results summary xii. Recommended depth of moisture conditioning xiii. Address transition between zones of varying depth xiv. Discussion of possible variations during construction and mitigation thereof xv. Discussion of techniques to maintain moisture in soil

- xvi. Discussion of methods to test soil moisture conditioning during construction (i.e. a second geotechnical investigation/re-evaluation may be required to specifically address soil moisture prior to lime operations)
- xvii. Address street trees

COMPLETE

N/A

4. SECTION 3.4 SUBGRADE DESIGN

☐
☐

A. Subgrade Stabilization

- i. Typical subgrade type
- ii. Explanation of anomalous soil conditions anticipated and discussion of potential variations to consider
- iii. Construction techniques to implement
- iv. Effects of rock/rock fragments encountered during construction and recommendations to abate

☐
☐

B. Soluble Sulfates

- v. Identify soluble sulfate test results; summarize results and discuss variations
- vi. Discussion of techniques during construction to mitigate sulfate-induced heaving
- vii. Sulfate retesting during construction

COMPLETE

N/A

5. SECTION 3.5 PAVEMENT DESIGN

☐
☐

A. Identify roadway type(s) and classifications(s)

☐
☐

B. Identify deviations from Pavement Design Input Values (Re: **Table 3-2)**

☐
☐

C. Identify recommended pavement section

COMPLETE

N/A

6. APPENDIX

☐
☐

A. Geological Map

☐
☐

B. Boring Locations

☐
☐

C. Boring Logs

☐
☐

D. Grading Plan (for non-linear projects)

☐
☐

E. Cut vs. fill by station number (for linear projects)

☐
☐

F. Printout from WinPAS pavement design software program or equivalent

☐
☐

G. Proposed typical section with dimensions showing pavement thickness, subgrade type and thickness, moisture conditioning depth, and location of moisture barrier. If applicable, location of proposed trees and root barriers shall be shown.

Summary of Geotechnical Recommendations Form

Project Name: _____

Geotechnical Engineer/Firm: _____

Report Date: _____

Date Received: _____

Geotechnical Engineer must fill out this form completely, and submit with the Report. A proposed typical section detail must be provided.

1. DESIGN INPUT VALUES:

Thoroughfare Classification(s): _____

Formation: _____

PI Range: _____

Pavement Design Input Value Deviation(s): _____

2. DESIGN RECOMMENDATIONS:

Moisture Conditioning Depth (inches): _____ *If yes, include plan layout depicting limits*

Lime Thickness (inches): _____

Lime Application Rate (calculated): _____ + 1% = _____
lab value minimum required

Lime Application Rate (design value): _____

Alternate Subgrade (Y/N): _____ *If yes, describe*

Sulfates over 6,000 ppm (Y/N): _____ *If yes, flexbase required*

Concrete Thickness (inches): _____

Miscellaneous Items and Notes:

Geotechnical Engineer Signature: _____

Date: _____

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SECTION 4 DRAINAGE DESIGN REQUIREMENTS

4.1. General

- A. This section contains the minimum storm drainage design criteria to be followed in the design of storm drainage facilities and establishes the design procedures to be used on drainage projects in the City of Sherman.
- B. The design factors, formulas, graphs and procedures described herein are intended to serve as guidelines. Responsibility for the actual design remains with the design Engineer of record.
- C. It is the responsibility of the Engineer to provide all necessary calculations and designs described herein. The Engineer shall provide the City the data, calculations, and designs necessary to demonstrate the design does not adversely impact the surrounding or downstream property and meet local, state, and federal rules, regulations, and requirements.
- D. When available, the Engineer shall use the FEMA and/or City's base models for development along floodplain areas. If a model is not available, the Engineer shall be required to provide a floodplain model that establishes a 1% storm BFE for any drainage area of 100 acres or greater.

4.2. FEMA Criteria

- A. The developer or owner is required to meet all Federal Emergency Management Agency (FEMA) regulations. When a submittal to FEMA is required, the submittal must be submitted to and approved by the City Engineer prior to submitting to FEMA. Conditional Letter of Map Revisions (CLOMRs) and Letter of Map Revisions (LOMRs) are required for any modifications to a floodplain or floodway.
- B. A Certificate of Occupancy will not be issued by the City until a copy of the FEMA approval letter for the LOMR is sent to the City (if required for the site). In the typical development of a site, a CLOMR precedes site development, and a LOMR follows site development and is based on as built conditions.

4.3. City Criteria

- A. Runoff calculations are required for development of property one acre or greater, or any property that is platted as a part of an overall tract which is greater than one acre in size, or where major streams (under FEMA Jurisdiction) are proposed to be modified. In cases where major streams are proposed to be modified, a CLOMR is required prior to construction, and a LOMR is required after construction is complete before an occupancy permit will be issued.
- B. The Rational Method is to be used to calculate runoff for situations in which the drainage area is less than 200 acres unless approved otherwise by the City Engineer. A unit hydrograph method is required for drainage areas 200 acres and larger.

- C. Runoff calculations must be based on the proposed lot grading for the development. Runoff contributed from off-site sources must be considered in the calculations. All offsite drainage must be calculated using existing land use. Existing upstream detention can and shall be considered when analyzing the 100-year conditions of the watershed.
- D. There are Soil Conservation Service (SCS) Dams (detention) within the City of Sherman ETJ limits that will affect flows in the watershed. The developer/land owner should contact the City Engineer to determine where any new dams have been designed or are under construction (as these may not have been included in the Sherman Master Drainage Plan analysis of existing conditions).
- E. All drainage systems shall provide for positive overflow at all low points. Positive overflow means that when the inlets do not function properly or when the design capacity of the conduit is exceeded, the excess flow for the 100-year storm event can be conveyed overland without flooding any inhabitable structures.
- F. Detention facilities are required in the City of Sherman unless one or more of the following is met as required by the City Engineer:
 - 1. Runoff from the site can be directly carried to a designated FEMA floodway and the developing site is less than 10 percent of the upstream watershed AND post runoff velocities are non-erosive or do not increase existing erosive velocities to downstream outfalls. In cases where there is not adequate capacity in the downstream system to safely convey water (i.e. without adversely impacting property downstream), detention shall be utilized.
 - 2. The downstream drainage system is shown, to the satisfaction of the City Engineer, to have adequate capacity to accommodate the post runoff conditions AND the velocities are non-erosive or do not increase existing erosive velocities to downstream outfalls.
 - 3. The post runoff conditions are the same as previous development on the site.
 - 4. The proposed development is “in-fill” or less than 1 acre of development and in the opinion of the City Engineer the impermeability of the development is not greater than surrounding developed properties.
- G. Property shall be developed so that the rate of runoff created by the development as it leaves the property does not exceed the pre-developed rate of runoff.
- H. In some cases where downstream facilities are planned ("future drainage facilities"), the City Engineer may allow a higher rate of runoff. However, this variance must be approved in by the City Engineer. Also, this rate of runoff must not at any time cause flooding to existing property until the future drainage facilities are in-place.
- I. The intent of these detention standards is to address conditions where there is not adequate downstream capacity in the water course to carry ultimate developed flows and where no future drainage facilities are planned (as described above), the burden of detaining incremental flows is spread out across all the land owners (rather than the last developed property needing to detain all flows due to the increase in flows from previous development).

4.4. Design Storm Frequency

- A. All drainage facilities shall be designed based on runoff from a 100-year storm event. The City of Sherman Zoning Map shall be used to identify current land use.
- B. All open and closed drainage systems shall be designed to provide positive overflow and protection of all public and private property during a storm event having a 100-year recurrence interval, regardless of the design storm frequency of a particular drainage facility.

The design of storm drainage facilities shall include sufficient calculations and analysis, as deemed necessary by the City Engineer, to prove the facility can convey the runoff from the following design storm frequencies and freeboard.

DRAINAGE FACILITY DESIGN STORM FREQUENCY AND FREEBOARD

Drainage Area	Design Storm Frequency
<100 Acres	25
≥100 Acres<640 Acres	50
≥640 Acres	100

Type of Facility	Freeboard
Closed Storm Sewer System	1 foot from top of ground at drop inlets and 1 foot below gutter at curb inlets
Street, Roadside Ditch and Culverts	100-year storm contained within the right-of-way with 100-year overflow
Bridge	100-year with 2 feet to bridge low-cord beam
Street Culvert	Design Storm with 1 foot from pavement edge or gutter and 100-year contained within right-of-way and drainage easements
Channel	Design Storm with 1 foot to top of bank and 100-year contained within right-of-way and drainage easements

A storm sewer system shall be designed to pick up flow from a street when the runoff from a twenty-five (25) year frequency storm exceeds the capacity of the street to the top of curb; or the spread of water on a collector or arterial street does not leave one (1) traffic lane dry whichever is more restrictive. Urban residential streets and parking lots shall not direct flow into a collector or larger street in excess of the capacity stated above.

4.5. Runoff Calculations

- A. Design flow of storm water runoff is to be calculated using the Rational Method for storm drainage systems serving a watershed area less than two hundred (200) acres. This method will primarily be used for the design of storm drainage systems and

small channels. A unit hydrograph method shall be used to determine runoff from watershed areas larger than two hundred (200) acres and for more complex applications where the City Engineer deems the Rational Method is not appropriate.

4.6. Rational Method

- A. The Rational Method is based on the direct relationship between rainfall and runoff, and the method is expressed by the following equation:

$$Q = C * I * A$$

Where:

- Q = the storm flow at a given point in cubic feet per second (cfs) a coefficient of runoff
- C = representing the ratio of rainfall to peak runoff.
- I = rainfall intensity in inches per hour for a period equal to the time of flow from the uppermost point of the drainage area to the point under consideration. Refer to **Appendix A** for the IDF table which is to be used for all computations.
- A = the area contributing to the point of design, in acres.
- B. Runoff coefficients for the City of Sherman are shown in **Table 4.1**. These coefficients shall be the minimum used and shall be based on full development. Smaller coefficients may be used if approved by the City Engineer in writing. For land uses other than those listed in **Table 4.1**, where the designated runoff coefficient is not representative, a composite runoff coefficient shall be calculated using the appropriate factor for undeveloped land given in the table and 1.00 for impervious areas.
- C. The size and shape of the watershed and sub-areas shall be determined for each design point through the use of planimetric-topographic maps, and supplemented by field surveys in areas where topographic data has changed or where the contour interval is insufficient to adequately determine the direction of flow. Offsite drainage areas shall be delineated using a minimum of 2-foot topographic contours. The latest City topography is recommended for any offsite drainage area delineations. Drainage area maps shall identify the source of offsite topography. Drainage areas within a development area will be delineated based on field-surveyed topography. The outline of the drainage area contributing to the system being designed and an outline of the sub-drainage area contributing to each inlet point shall be determined and shown on the drainage area map.

Table 4.1 – Runoff Coefficients & Minimum Inlet Times

Zoning/Land Use*	Runoff Coefficient "C"	Minimum Inlet Time in Minutes**
Undeveloped Land/Open Space	--	--
0%--3% Slope	0.25	15
>3%--≤5% Slope	0.30	15
Greater than 5% Slope	0.35	15
Developed Park Land	0.40	15
Single Family Residential R-E & R-A ≥ 1 Acre	0.50	15
Single Family Residential R-12 ≥ 12,000 sf < 1 Acre	0.60	15
Single Family Residential R-6 ≥ 6,000 sf < 12,000 sf	0.65	15
Single Family Residential R-4 & R-5 < 6,000 sf	0.70	15
R-2F (Duplex)	0.70	15
R-TH (Town Home) & MF-15	0.80	10
MF-30	0.90	10
School	0.70	15
Church	0.75	15
Commercial	0.90	10
Industrial	0.85	10
Roadway Right-of-Way	0.90	10
Water Body	1.00	--

* For any land use not listed, the runoff coefficient shall be calculated based on a weighted percentage of pervious (C=given above) and impervious (C=1.00) surface and provide the computations.

** Inlet time may vary from Time of Concentration. See **Section 4.7** for more information. Inlet time should be confirmed prior to using the minimum value.

- D. Drainage areas shall conform to the natural topography of the watershed contributing to the proposed storm drainage facilities. Where discharge toward off-site adjacent property is relocated, such relocation shall be acknowledged by the downstream property owner or any other property owner who may be affected. No diversion of drainage from one watershed to another shall be permitted without the written approval of the City Engineer.

4.7. Time of Concentration

- A. The time of concentration is defined as the longest time, without unreasonable delay, that will be required for a drop of water to flow from the upper limit of a drainage

area to the design point under consideration. The time of concentration to any point in a storm drainage system is a combination of the inlet time and the time of flow in the storm drain system. The inlet time is the time for water to flow overland to the first storm drain inlet in the proposed drainage system.

- B. Overland sheet flow occurs in the uppermost area of the defined basin. The maximum length allowed for overland sheet flow shall not be more than 100 feet. Beyond this distance, the flow becomes shallow concentrated flow. The Time of Concentration in hours for overland sheet flow is determined using the following equation:

$$T_{\text{Csheetsflow}} = \frac{0.007(nL)^{0.8}}{\sqrt{P_2} * S^{0.4}}$$

Where:

$T_{\text{Csheetsflow}}$	=	Time of concentration of overland sheet flow (hr)
n	=	Manning's roughness coefficient for sheet flow (Appendix A)
L	=	Sheet flow length, ft (maximum: 100 ft)
P_2	=	2-year 24-hour rainfall depth (in)
S	=	Slope of hydraulic grade line (land slope, ft/ft)

- C. Shallow concentrated flow can occur on unpaved areas such as yards, parks, and open space, or on paved areas such as parking lots and street gutters and is essentially a small swale or ditch and velocity (V) should be calculated using the open channel equations.. The Time of Concentration in minutes for shallow concentrated flow is determined using the following equation:

$$T_{\text{Cshallowconflow}} = \left(\frac{D}{60V} \right)$$

Where:

$T_{\text{Cshallowconflow}}$	=	Time of concentration of shallow concentrated flow (minutes)
D	=	Distance along the flow path (feet)
V	=	Velocity (feet per second)

- D. For purposes of calculating inlet capacity, inlet times may be calculated as described above, but in no case shall the inlet time used be less than the time shown in **Table 4.1**. Except in unusual cases, the inlet times shown in **Table 4.1** should be used, as they will be shorter than the inlet time calculated as described above.

4.8. Unit Hydrograph Methods

- A. Runoff from drainage areas larger than two hundred (200) acres will be determined using a Unit Hydrograph method. Various analysis methods can be implemented using computer software including the U.S. Army Corp's of Engineers' HEC-HMS

computer program, XPSWMM, or InfoWorks. Other software programs may be used with prior approval by the City Engineer.

- B. A 24-hour rainfall duration should be appropriate for most applications. An alternate duration may be utilized with written approval of the City Engineer. The duration shall be large enough to capture all excess rainfall as well as provide reasonable runoff volumes when performing storage analyses. Computation intervals should be tested for sensitivity to the hydrograph peak, and shall not be greater than 15 minutes.
- C. The effects of urbanization should be reflected in the precipitation loss rates. The Soil Conservation Service (SCS) curve number method may be used in this way. Suitable curve numbers for various urban land uses have been published by the SCS in TR-55, Urban Hydrology for Small Watersheds.
- D. Routing, when appropriate, shall use the Modified Puls methodology. Reach lengths shorter than the computation interval should not incorporate routing.

4.9. Storm Sewer Systems and Appurtenances

- A. Street Capacity
 - 1. Straight Crown Streets:
 - a. All straight crown street capacities shall be hydraulically designed using Manning's equation:

$$Q = \left(\frac{1.486}{n} \right) A (R^{2/3}) (S^{1/2})$$

Where:

- Q = Gutter flow (cfs)
 - n = Manning's roughness coefficient, (0.0175 for concrete street)
 - A = Cross section flow area (ft²)
 - R = Hydraulic radius of the conduit in feet, which is the area of the flow divided by the wetted perimeter (R=A/P)
 - P = Wetted perimeter (ft)
 - S = Slope of the hydraulic gradient (ft/ft)
- 2. The City requires a minimum of 9' of pavement clear in each direction during the 25-year storm event for Major and Minor Arterials.
 - 3. During a 25-year storm event, the City requires a minimum of 9' of pavement clear for Commercial and Residential Collectors.
 - 4. During a 25-year storm event, the gutter depth on Urban Streets are required by the City not to exceed 6" or top of curb, whichever is less.
 - 5. During a 100-year storm event, the gutter depth on Minor and Major Arterials are required by the City not to exceed 6" or the top of curb, whichever is less.
 - 6. The 100-year storm event shall be contained with the right-of-way and overflow drainage easements for all streets besides Minor and Major Arterials.

B. Alley Capacity

1. All alley capacities shall be hydraulically designed using Manning's equation.
2. The 25-year storm event shall be contained within the edge of pavement.
3. The 100-year storm event shall be contained within the right-of-way and overflow drainage easements.
4. In residential areas where the standard alley section capacity is exceeded, storm sewer systems with inlets shall be provided.
5. Grate combination inlets shall be located in alleys upstream from an intersection and where necessary to prevent water from entering intersections in amounts exceeding allowed street capacity. Grate inlet capacity shall have a 2x factor of safety.

C. Valley Gutters

1. The use of valley gutters to convey storm water across a street intersection is subject to the following criteria:
 - a. A major street (thoroughfare) shall not be crossed with a valley gutter.
 - b. A collector street shall not be crossed with a valley gutter.

4.10. Inlet Location and Capacity

- A. Gutter Flow - Curb inlets shall be placed to ensure that the flow in a street does not exceed the dry pavement requirements per **Section 4.9**. The following form of the Manning's equation should be used to evaluate gutter flow hydraulics for straight crown streets:

$$Q = \left[\frac{0.56}{n} \right] S_x^{5/3} S^{1/2} T^{8/3}$$

Where:

- Q = Gutter flow rate (cfs)
 S_x = Pavement cross slope (ft/ft)
 S = Longitudinal slope (ft/ft)
 T = Width of flow in roadway (ft)
 n = Manning's roughness coefficient

Depth of flow in the gutter can be calculated using the following modified form of the equation above:

$$y_o = z \left(\frac{QnS_x}{S^{1/2}} \right)^{3/8}$$

Where:

- y_o = depth of water in the curb and gutter cross section (ft)
 Q = gutter flow rate (cfs)
 n = Manning's roughness coefficient

- S = longitudinal slope (ft/ft)
 S_x = pavement cross slope (ft/ft)
 Z = 1.24

If the flow in the gutter is still excessive, the storm sewer shall be extended to a point where the gutter flow can be effectively intercepted by curb inlets.

- B. Capacity of Curb Inlet on Grade - To determine the capacity of a curb inlet on grade, first determine the ratio of the flow in the locally depressed gutter section to the total flow in the road.

$$E_0 = 1 / \left\{ 1 + \frac{S_w}{S_x} \left[\left(1 + \frac{S_w/S_x}{(T/W) - 1} \right)^{2.67} - 1 \right]^{-1} \right\}$$

Where:

- E_0 = Ratio of flow in the depressed gutter to the total flow
 S_w = Gutter cross slope (ft/ft)
 S_x = Roadway cross slope (ft/ft)
 T = Width of flow in roadway (ft)
 W = Width of depressed gutter section (ft)

Then calculate the equivalent cross slope at the depressed curb inlet opening.

$$S_e = S_x + \frac{a}{e} E_0$$

Where:

- S_e = Equivalent cross slope (ft/ft)
 S_x = Roadway cross slope (ft/ft)
 a = Gutter Depression Depth (ft)
 W = Width of depressed gutter section (ft)
 E_0 = Ratio of flow in the depressed gutter to the total flow

Then calculate the inlet length required to capture 100% of the gutter flow.

$$L_T = 0.60Q^{0.42}S^{0.3} \left(\frac{1}{nS_e} \right)^{0.6}$$

Where:

- L_T = Required length of inlet (ft)
 Q = Total flow in the roadway (cfs)
 S = Roadway longitudinal slope (ft/ft)
 n = Manning's roughness coefficient
 S_e = Equivalent cross slope (ft/ft)

The efficiency of a curb inlet opening shorter than L_T is:

$$E = 1 - \left(1 - \frac{L}{L_T}\right)^{1.8}$$

Where:

- E = Inlet efficiency
- L = Length of the curb inlet opening (ft)
- L_T = Required length of inlet to capture 100% of the roadway flow (ft)

The total flow captured by the curb inlet is:

$$Q_i = EQ$$

Where:

- Q_i = Flow capture by inlet (cfs)
- E = Inlet efficiency
- Q = Total flow in the roadway (cfs)

- C. Capacity of Curb Inlets in Sag - The capacity of a curb inlet in sag depends on the water depth at the curb opening and the height of the curb opening. The inlet operates as a weir to a depth equal to the curb opening height and as an orifice at depths greater than 1.4 times the opening height. At depths between 1.0 and 1.4 times the opening height, flow is in a transition stage and the capacity should be based on the lesser of the computed weir and orifice capacities.

1. If the depth of flow in the gutter (d) is less than or equal to 1.4 times the inlet opening height (h), (d ≤ 1.4H), determine the length of inlet required considering weir control. Calculate the capacity of the inlet when operating under weir conditions with the following equation:

$$Q = (L + 1.8W)^{1.5}$$

2. Rearrange above equation to produce the following relation for curb inlet length required:

$$L = \left(\frac{Q}{C_w y_o^{1.5}}\right) - 1.8W$$

Where:

- Q = total flow reaching inlet (cfs)
- C_w = weir coefficient (3.0)
- y_o = head at inlet opening (ft)
- L = length of curb inlet opening (ft)
- W = lateral width of depression (ft)

$$y_o = z \left(\frac{Q_n S_x}{S^{1/2}}\right)^{3/8}$$

Where:

- y_o = depth of water in the curb and gutter cross section (ft)
- Q = gutter flow rate (cfs)
- n = Manning's roughness coefficient
- S = longitudinal slope (ft/ft)
- S_x = pavement cross slope (ft/ft)
- Z = 1.24

3. If the depth of flow in the gutter is greater than the inlet opening height ($d > h$), determine the length of inlet required considering orifice control. The equation for interception capacity of a curb opening as an orifice follows:

$$Q = C_o h L \sqrt{2 g d_e}$$

Where:

- Q = total flow reaching inlet (cfs)
- C_o = orifice coefficient = 0.70
- h = depth of opening (ft) (this depth will vary slightly with the inlet detail used)
- L = length of curb opening inlet (ft.)
- g = acceleration due to gravity = 32.2 ft/s²
- d_e = effective head at the centroid of the orifice (ft)
 $d_e = d - h/2$

Rearranging equation allows a direct solution for required length:

$$L = Q / (C_o h \sqrt{2 g d_e})$$

4. If both steps 1 and 2 were performed (i.e., $h < d \leq 1.4h$), choose the larger of the two computed lengths as being the required length.
5. Select a standard inlet length that is greater than the required length.

D. Capacity of Wye Inlets

$$\frac{Q}{P} = 3.1 y^{3/2}$$

Where:

- Q = Flow (cfs)
- P = perimeter of opening (ft)
- y = head/depth (ft)

Wye (drop) inlets shall be located to collect water on non-paved areas where it is not practical to use a headwall. No double Wye inlets shall be allowed.

E. Curb Inlet Placement

1. Placing several curb inlets at a single location is only permitted in areas with steep grades (4% or greater) to prevent flooding and avoid exceeding street capacity in flatter reaches downstream.

2. No more than 15' of inlet shall be constructed at one location along one curb line unless approved otherwise by the City Engineer.
3. Curb inlets shall be placed upstream from right angle turns and street intersections.
4. Inlet gutter depressions shall not encroach into the curb return of right angle turns, street intersections, or driveway approaches unless approved otherwise by the City Engineer.
5. An emergency overflow path shall be provided on the plans for sag locations. An emergency overflow path is the path the storm water will take if the drainage facility becomes clogged or ceases to function as designed. The emergency overflow path must be located within public right-of-way or within a drainage easement.
6. Curb inlet depth shall not be less than 4.5' from top of curb for all public improvements.
7. Inlets are required at the low point of a super elevation to prevent flow across the roadway.
8. Recessed inlets are to be used on all Major and Minor Arterials. All other roadway sections are to have non-recessed (standard) curb inlets, unless otherwise approved, in advance, by the City Engineer.

Inlet ID			Drainage Areas				Design Storm Flows				Roadway Geometry				Flow Depth & Spread		Inlet Geometry					Inlet Design Summary						Comments
Design Point	Inlet No.	Station ID (XX+XX.XX)	Area No.	Area (acres)	Runoff "C"	Conc. Time (min.)	25-Year Intensity (in./hr)	25-Year Q (cfs)	25-Year Carryover Q (cfs)	25-Year Total Gutter Q (cfs)	Roadway Longitudinal Slope (%)	Roadway Cross Slope (Sx) (%)	Manning's Pavement "n"	Curb Height (ft)	25-Year Depth of Flow (ft)	25-Year Spread of Flow (<=X ft) (ft)	Gutter Cross Slope (Sw) (%)	Width of Gutter Depression (W) ft	Gutter Depression Depth (a) (ft)	Ratio of Flow in Depressed Gutter to Total Flow (Eo) (ft/ft)	Equivalent Cross Slope (ft/ft)	Length Required (ft)	Length Provided (ft)	Inlet Efficiency (%)	25-Year Captured Q (cfs)	25-Year Carryover Q (cfs)	Target Inlet	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	

Figure 4.1 – On-Grade Inlet Spreadsheet (25-year)

Inlet ID			Drainage Areas				Design Storm Flows				Roadway Geometry				Flow Depth & Spread		Inlet Geometry					Inlet Design Summary						Comments
Design Point	Inlet No.	Station ID (XX+XX.XX)	Area No.	Area (acres)	Runoff "C"	Conc. Time (min.)	100-Year Intensity (in./hr)	100-Year Q (cfs)	100-Year Carryover Q (cfs)	100-Year Total Gutter Q (cfs)	Roadway Longitudinal Slope (%)	Roadway Cross Slope (Sx) (%)	Manning's Pavement "n"	Curb Height (ft)	100-Year Depth of Flow (ft)	100-Year Spread of Flow (<=X ft) (ft)	Gutter Cross Slope (Sw) (%)	Width of Gutter Depression (W) ft	Gutter Depression Depth (a) (ft)	Ratio of Flow in Depressed Gutter to Total Flow (Eo) (ft/ft)	Equivalent Cross Slope (ft/ft)	Length Required (ft)	Length Provided (ft)	Inlet Efficiency (%)	100-Year Captured Q (cfs)	100-Year Carryover Q (cfs)	Target Inlet	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	

Figure 4.2 – On-Grade Inlet Spreadsheet (100-year)

Inlet ID			Drainage Areas				Design Storm Flow			Approaching Roadway Geometry					Approaching Flow Characteristics				Inlet Geometry & Summary							Comments
Design Point	Inlet No.	Station ID (XX+XX.XX)	Area No.	Area (acres)	Runoff "C"	Conc. Time (min.)	25-Year Intensity (in./hr)	25-Year Carryover Q (cfs)	25-Year Q (cfs)	Roadway Long. Slope ("Upstream") (%)	Roadway Long. Slope ("Downstream") (%)	Roadway Cross Slope (%)	Lane(s) Width to Median (ft)	Manning's Pavement "n"	"Upstream" Side		"Downstream" Side		Width of Gutter Depression (ft)	Required Length of Inlet (ft)	Inlet Length Provided (ft)	Capture Efficiency (%)	Depth of Inlet Opening (ft)	Type of Flow (orifice/weir)	25-Year Carryover Q (cfs)	
															25-Year Depth of Flow (ft)	25-Year Spread of Flow (ft)	25-Year Depth of Flow (ft)	25-Year Spread of Flow (ft)								
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27

Figure 4.3 – In-Sag Inlet Spreadsheet (25-year)

Inlet ID			Drainage Areas				Design Storm Flow			Approaching Roadway Geometry					Approaching Flow Characteristics				Inlet Geometry & Summary							Describe the 100-Year Positive Overflow Route if One is Needed (i.e. flow elevation exceeds limits defined in Criteria Manual)
Design Point	Inlet No.	Station ID (XX+XX.XX)	Area No.	Area (acres)	Runoff "C"	Conc. Time (min.)	100-Year Intensity (in./hr)	100-Year Carryover Q (cfs)	100-Year Q (cfs)	Roadway Long. Slope ("Upstream") (%)	Roadway Long. Slope ("Downstream") (%)	Roadway Cross Slope (%)	Lane(s) Width to Median (ft)	Manning's Pavement "n"	"Upstream" Side		"Downstream" Side		Width of Gutter Depression (ft)	Required Length of Inlet (ft)	Inlet Length Provided (ft)	Capture Efficiency (%)	Depth of Inlet Opening (ft)	Type of Flow (orifice/weir)	100-Year Carryover Q (cfs)	
															100-Year	100-Year	100-Year	100-Year								
															Depth of Flow (ft)	Spread of Flow (ft)	Depth of Flow (ft)	Spread of Flow (ft)								
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27

Figure 4.4 – In-Sag Inlet Spreadsheet (100-year)

- F. The Inlet Spreadsheets provided in **Figures 4.1 through 4.4** on the previous page shall be provided with the construction plans for review by the City. A description of each of the columns shown in the inlet spreadsheet is provided below:

Column	On-Grade Inlets	In-Sag Inlets
1	Design Point for inlet	
2	Inlet number	
3	Location of inlet by storm drain station number	
4	Drainage area designation for incremental area	
5	Drainage area size (acres)	
6	Runoff coefficient "C"	
7	Time of concentration (minutes)	
8	Intensity (in./hr)	
9	Runoff, $Q=CIA$ (cfs)	Carryover flow from upstream inlet (cfs)
10	Carryover flow from upstream inlet (cfs)	Runoff, $Q=CIA$ (cfs)
11	Total gutter flow (Column 9 + Column 10) (cfs)	Roadway long. slope (higher station side) (%)
12	Roadway longitudinal slope (%)	Roadway long. slope (lower station side) (%)
13	Roadway cross slope (S_x) (%)	Roadway cross slope (%)
14	Manning's pavement "n" (0.0175 (concrete), 0.018 (asphalt))	Width of lane(s) as measured to the roadway median
15	Curb height (0.50 ft (typ.))	Manning's pavement "n" (0.0175 (concrete), 0.018 (asphalt))
16	Depth of flow (immediately upstream of inlet) (ft), using Manning's Eq.	Depth of flow (immediately upstream of inlet) (ft), using Manning's Eq.
17	Spread of flow (immediately upstream of inlet) (ft), using Manning's Eq.	Spread of flow (immediately upstream of inlet) (ft), using Manning's Eq.
18	Gutter cross slope (S_w) (%), taken from inlet detail at inlet opening	Depth of flow (immediately downstream of inlet) (ft), using Manning's Eq.
19	Width of gutter depression (W) (ft), taken from inlet detail at inlet opening	Spread of flow (immediately downstream of inlet) (ft), using Manning's Eq.
20	Gutter depression depth (a) (ft), taken from inlet detail at inlet opening	Width of gutter depression (W) (ft), taken from inlet detail at inlet opening

Column	On-Grade Inlets	In-Sag Inlets
21	Ratio of flow in depressed gutter to total flow (E_o) (ft/ft), using Eq. in Section 4.10.B.	Length of inlet (ft) required to capture 100% of gutter flow, using appropriate equations for both interception capacity and required length in Section 4.10.C. depending on whether "weir" or "orifice" flow controls
22	Equivalent cross slope (ft/ft), using Eq. in Section 4.10.B.	Total length (ft) of inlet opening provided
23	Length required (L_T) (ft) to capture 100% of gutter flow, using Eq. in Section 4.10.B.	Capture efficiency (%) (Column 22 divided by Column 21)
24	Length provided (ft) (actual design length of inlet (multiple of 5', minimum of 5'))	Depth of inlet opening (ft), taken from inlet detail
25	Inlet efficiency (E) (%), using Eq. in Section 4.10.B.	Indicate either "weir" or "orifice" flow. If the maximum depth of flow at the inlet opening (on either the upstream or downstream side) is less than or equal to 1.4 times the inlet opening height, weir flow controls. Otherwise, orifice flow controls.
26	Captured flow (Q_i) (cfs) = $Q \cdot E$, using Eq. in Section 4.10.B.	Carryover Q (cfs) (total flow at inlet less the flow captured by the inlet)
27	Carryover Q (cfs) (total flow at inlet less the flow captured by the inlet)	Include any pertinent comments, including the positive overflow route for the inlet.
28	Note the inlet number which will receive the carryover flow.	-----
29	Include any pertinent comments for clarification.	-----

4.11. Inlet Sizing

- A. Under normal conditions, the minimum curb inlet size shall be five (5) feet. Standard inlet sizes will be in increments of five (5) feet to a maximum of fifteen (15) feet. The minimum criteria for the sizing and placement of on-grade inlets and sump inlets is provided below. In all cases, inlet calculations shall be provided by the design engineer to verify the inlet sizing is adequate to meet the design intent.

- B. The capacity of a depressed curb inlet on-grade will be based on the following equation:

$$Q_1 = 0.7 (H_1^{5/2} - a^{5/2})/y_0$$

Where:

- Q₁ = Discharge into inlet per foot of inlet opening (cfs/ft)
H₁ = Total depth of flow at inlet throat (a+y₀)
a = Gutter Depression
y₀ = Depth of flow in approach gutter (ft)

- C. The capacity of low point or drop inlets will be determined based on the broad-crested weir formula where the depth of flow does not exceed the height of the inlet opening. The weir equation is as follows:

$$Q_1 = 3.0 (H_1)^{3/2}$$

- D. The orifice equation should be used to determine the capacity of an inlet where the depth exceeds the inlet opening height. The orifice equation used for curb inlet design is as follows:

$$Q_1 = 4.82 (H_1)^{1/2} A_L$$

Where: A_L = area for 1 ft length of opening (sf)

- E. Combination curb and grate inlets and grate inlets not combined with a curb inlet shall only be allowed with written permission from the City Engineer. Because of the tendency for clogging, combination inlets at alley low points shall be designed as curb inlets, neglecting any grate inlet capacity (100% clogging). Combination inlets on-grade shall be calculated using a clogging factor of 50%. Capacity of grate inlets on grade is a function of the number, size, and orientation of the grate openings, in addition to the depth of flow in the gutter. Calculation of the capacity of combination inlets shall be based on these factors, and may be as provided by grate inlet manufacturers. Low point grate inlets that are not combined with a curb inlet shall be calculated using a clogging factor of 75% an on-grade grate inlets shall be calculated using a clogging factor of 50%. Suitable grate inlet design calculations and efficiency data for various sizes and shapes of grates have been published by the FHWA in HEC-12, Drainage of Highway Pavements.

4.12. Hydraulic Design of Closed Conduits

- A. After completing the computations of the quantity of storm runoff entering each inlet, the size and gradient of pipe required to carry the design storm are to be determined. All hydraulic gradient calculations are required to begin at the outfall of the system. Computer software can be used to aid in the design process, however, hydraulic gradient calculations shall be provided for review in the standard table format provided on **Figure 4.5**. The following shall apply for establishing the starting elevation of the hydraulic gradient:

1. The 100-year water surface elevation of the receiving creek, stream, or other open channel shall be used as the starting elevation (tailwater) for the hydraulic gradient in most cases.
2. If the outfall channel is a river or stream, it may be necessary to consider the joint or coincidental probability of two hydrologic events occurring at the same time to adequately determine the elevation of the tailwater in the receiving stream. The relative independence of the discharge from the storm drainage system can be qualitatively evaluated by a comparison of the drainage area of the receiving stream to the area of the storm drainage system. For example, if the storm drainage system has a drainage area much smaller than that of the receiving stream, the peak discharge from the storm drainage system may be out of phase with the peak discharge from the receiving watershed. **Table 4.2** provides a comparison of discharge frequencies for coincidental occurrence for the 2-, 5-, 10-, 25-, 50-, and flood mitigation design storms. This table can be used to establish an appropriate design tailwater elevation for a storm drainage system based on the expected coincident storm frequency on the outfall channel. For example, if the receiving stream has a drainage area of 200 acres and the storm drainage system has a drainage area of 2 acres, the ratio of receiving area to storm drainage area is 200 to 2 which equals 100 to 1. From **Table 4.2** and considering a 10-year design storm occurring over both areas, the flow rate in the main stream will be equal to that of a five year storm when the drainage system flow rate reaches its 10-year peak flow at the outfall. Conversely, when the flow rate in the main channel reaches its 10-year peak flow rate, the flow rate from the storm drainage system will have fallen to the 5- year peak flow rate discharge. This is because the drainage areas are different sizes, and the time to peak for each drainage area is different.

Table 4.2

<u>Area ratio</u>	<u>2-year design</u>		<u>5-year design</u>	
	Main Stream	Tributary	Main Stream	Tributary
10,000:1	1	2	1	5
	2	1	5	1
1,000:1	1	2	2	5
	2	1	5	2
100:1	2	2	2	5
	2	2	5	5
10:1	2	2	5	5
	2	2	5	5
1:1	2	2	5	5
	2	2	5	5
<u>Area ratio</u>	<u>10-year design</u>		<u>25-year design</u>	
	Main Stream	Tributary	Main Stream	Tributary
10,000:1	1	10	2	25
	10	1	25	2
1,000:1	2	10	5	25
	10	2	25	5
100:1	5	10	10	25
	10	5	25	10
10:1	10	10	10	25
	10	10	25	10
1:1	10	10	25	25
	10	10	25	25
<u>Area ratio</u>	<u>50-year design</u>		<u>100-year design</u>	
	Main Stream	Tributary	Main Stream	Tributary
10,000:1	2	50	2	100
	50	2	100	2
1,000:1	5	50	10	100
	50	5	100	10
100:1	10	50	25	100
	50	10	100	25
10:1	25	50	50	100
	50	25	100	50
1:1	50	50	100	100
	50	50	100	100

There may be instances in which an excessive tailwater causes flow to back up the storm drainage system and out of inlets and access holes, creating unexpected and perhaps hazardous flooding conditions. The potential for this should be considered. Flap gates placed at the outlet can sometimes alleviate this condition; otherwise, it may be necessary to isolate the storm drain from the outfall by use of a pump station.

[illegible]

$$Q = VA$$

where

$$V = \frac{1.486 R^{2/3} S^{1/2}}{n}$$

and

$$Q = \frac{1.486 A R^{2/3} S^{1/2}}{n}$$

- V = Velocity of flow in conduit (fps)
n = Mannings roughness coefficient of conduit or channel (see **Table 4.3**)
R = Hydrualic radius (A/P) (ft)
S = Friction Slope (ft/ft)
P = Wetted perimeter (ft)

Table 4.3 – Manning’s Roughness Coefficients “n” for Storm Drains

Materials of Construction	Mannin 's Coefficient "n"
Monolithic Concrete Structure (Box Culvert)	0.015
Concrete Pipe	
Good alignment, smooth joints	0.013
Fair alignment, ordinary joints	0.015
Poor alignment, poor joints	0.017

- C. The hydraulic grade line (HGL) shall be designed to be at least one (1) foot below the top of ground, or top of gutter or top of edge of pavement elevation whichever is the deepest. Once the HGL is set, the depth and slope of the pipe may be determined. The pipe shall be located so that the inside top of the pipe is at or below the HGL and at or above the minimum slope shown in **Table 4.4**. In some situations, generally at the upstream end of a pipe system, the inside top of the pipe may be above the HGL, which results in partial flow. The HGL shall be shown in the profile on the plans for all storm drain lines, including inlet leads,. In all cases the HGL elevation, including entrance head loss, shall be below the designed inlet throat elevation.
- D. Any proposed drainage system conduit in public right-of-way or easement shall be reinforced concrete pipe (RCP) or reinforced concrete box sections, including detention pond piping. High density polyethylene pipe (HDPE) and corrugated metal pipe (CMP) is not permitted in public right-of-way or easements, PVC pipe is only permitted for collection of roof drains, however PVC may be allowed in other unique situations if approved by the City Engineer. The minimum slope of a pipe or box section should be capable of producing a velocity of at least 2.5 feet per second when flowing full. **Table 4.4** gives the minimum slopes for storm drain pipes based on this criterion. The maximum slope of a pipe or box section shall not exceed those shown in **Table 4.4**.
- E. From the time storm water first enters the storm drainage system at the upstream inlet until it discharges at the outlet, it will encounter a variety of structures such as inlets, manholes, junctions, bends, and enlargements that will cause minor head losses. In general, these minor losses can be expressed as a function of velocity head. **Figure 4.6** shows the various cases and the method of computing the associated minor head loss. The minimum storm sewer pipe diameter shall be 18-inches for laterals and crossing under drive approaches, and 24-inches for mains. Pipe sizes shall not decrease in the downstream direction.

Table 4.4 – Minimum & Maximum Grades for Storm Drains

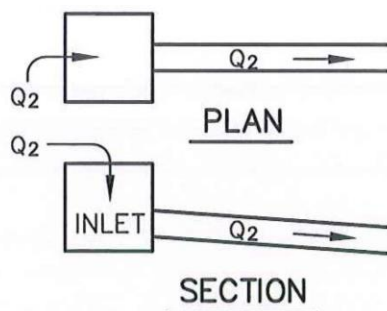
Pipe Size (inches)	Minimum Concrete Pipe Slope (ft/ft) n = 0.013	Maximum Concrete Pipe Slope (ft/ft) n = 0.013
18	0.00177	0.344
21	0.00144	0.325
24	0.00121	0.306
27	0.00103	0.297
30	0.00090	0.287
33	0.00079	0.287
36	0.00070	0.287
39	0.00063	0.278
42	0.00057	0.268
45	0.00052	0.259
48	0.00048	0.249
54	0.00041	0.249
60	0.00036	0.231
66	0.00031	0.231
72	0.00028	0.213
78	0.00025	0.213

- F. The junction of in-line pipes of different diameters shall be made with a manhole or junction box such that the crowns (inside tops or soffits) are at the same elevation. When lateral pipes connect to trunk mains, they shall be connected with the center of the lateral matching the center of the trunk main.

The algebraic difference of a vertical point of intersection (VPI) of in-line pipes of the same diameter shall not exceed the values noted in **Table 4.5** unless approved otherwise by the City Engineer.

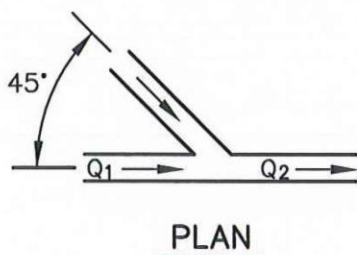
Table 4.5 Maximum Allowable Deflection by Storm Drain Pipe Size

Pipe Size (ID) (inches)	Percent Deflection (%)
18	2.50
21	1.45
24	1.45
27	1.26
30	1.25
36	0.85
42	1.15
48	1.16
54	1.13
60	1.10
66	1.09
72	1.13



$$H_j = 1.25 \frac{V_2^2}{2g}$$

INLET AT BEGINNING OF LINE

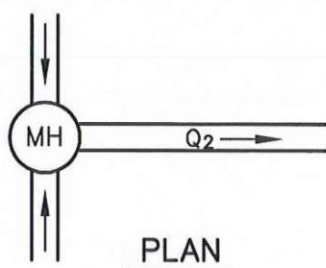


$$H_j = \frac{V_2^2}{2g} - \frac{K V_1^2}{2g}$$

$$H_j = \frac{V_2^2}{2g} - \frac{0.75 V_1^2}{2g}$$

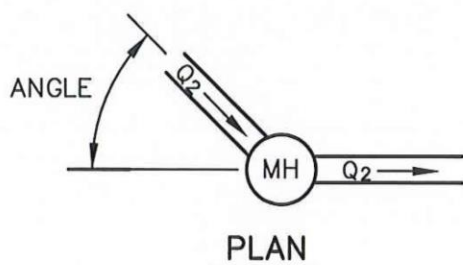
FOR 60°, USE K=0.43
(K=COEFFICIENT OF HEAD LOSS)

45° WYE CONNECTION



$$H_j = \frac{V_2^2}{2g}$$

INCOMING OPPOSING FLOWS AT MANHOLE

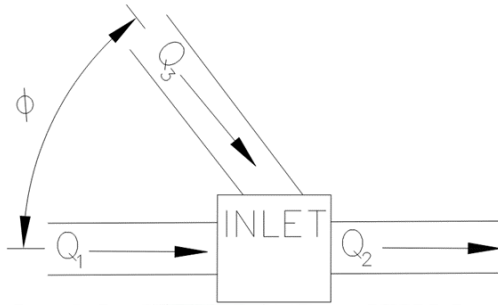


ANGLE	K
0	0.15
15	0.19
30	0.35
45	0.47
60	0.56
75	0.64
90	0.70

$$H_j = K \frac{V_2^2}{2g}$$

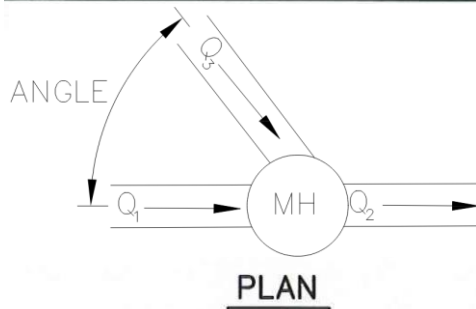
CHANGE IN DIRECTION AT MANHOLE

Figure 4.6 – Minor Head Losses



$$H_j = \frac{Q_2 V_2^2 - Q_1 V_1^2 - \cos \phi Q_3 V_3^2}{2gQ_2}$$

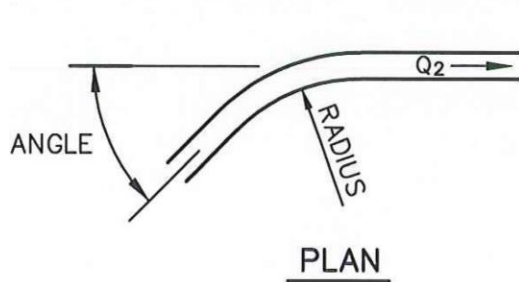
INLET WITH MULTIPLE ENTERING FLOWS



ANGLE	K
15	0.81
30	0.65
45	0.53
60	0.44
75	0.36
90	0.30

$$H_j = \frac{V_2^2}{2g} - K \frac{V_1^2}{2g}$$

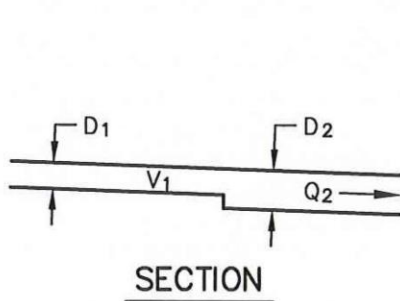
MANHOLE WITH LATERAL



ANGLE	K		
	RADIUS (# DIA's)		
	1	2-8	8-20
90	0.50	0.45	0.40
60	0.43	0.38	0.34
45	0.35	0.32	0.28
22½	0.20	0.18	0.16

$$H_j = K \frac{V_2^2}{2g}$$

CONDUIT ON CURVE



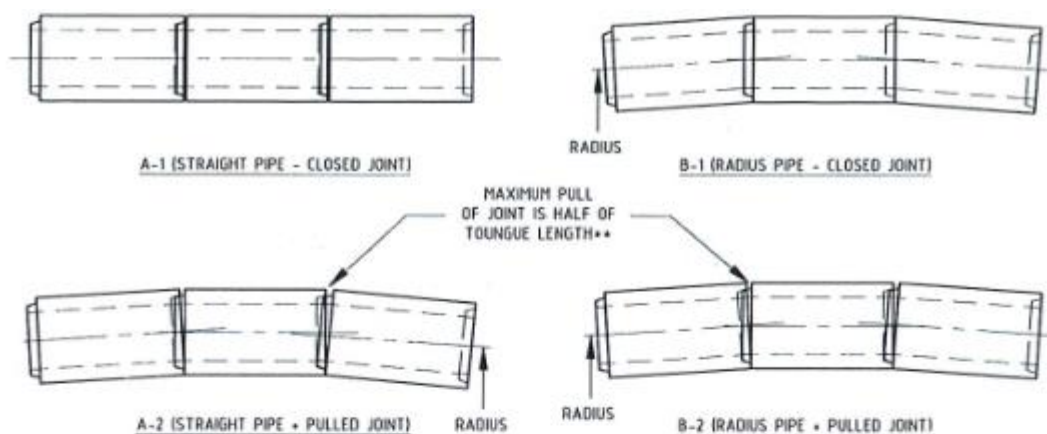
$\frac{D_2}{D_1}$	K
1.2	0.10
1.4	0.23
1.5	0.29
1.6	0.35
1.8	0.44
2.0	0.52
2.5	0.65

$$H_j = K \frac{V_1^2}{2g}$$

PIPE ENLARGEMENT

Figure 4.6 – Minor Head Losses

- G. Where a storm sewer system discharges into a pond or lake, the outside top of the pipe shall be set below the normal pool of the lake. The impact on tailwater from fluctuations in the pond or lake level should be considered in designing the pipe system. Where storm sewers discharge into channels or streams, adequate measures shall be taken to control erosion using concrete headwalls, rock riprap, gabions, and/or other means as necessary.
- H. Storm drain junction boxes are needed for access to underground storm sewers for inspection and cleanout. Junction boxes should be located at junctions of large storm drain main lines, main line pipe size changes, and at changes in alignment or grade that exceed pipe manufacturer's recommend maximum joint deflection, see **Figure 4.7**.
- I. For pipes larger than 42-inches, junction boxes or other access points shall be located at intervals not to exceed one thousand one hundred fifty (1,150) feet. They shall be located at intervals not to exceed six hundred fifty (650) feet for pipes 42-inches in diameter or smaller. Junction boxes shall be constructed in accordance with the City's standard details.
- J. The invert of the junction box should be rounded to match the inverts of the pipes entering the junction box in order to reduce eddying and resultant head losses. The junction box floor shall be provided with a minimum of 0.1' fall from upstream to downstream pipe flowlines. The invert should be rounded to a minimum depth equal to the design flow depth. At junctions with other storm drain main lines, the maximum interior angle of intersection of pipes in the junction box shall be ninety degrees (90°).
- K. Storm sewers will typically be located in the center of a travel lane. Storm sewers should be straight between junction boxes where possible. Where curves are necessary to conform to street layout, the radius of curvature should not be less the radius for the respective size pipe shown in **Figure 4.7**. The use of radius/beveled pipe must be approved by the City Engineer and shall have the use of radius/beveled pipe along with the manufacturer(s) noted on the plans. The minimum radius of curvature should not be less than the pipe manufacturer's recommendation. Head losses shall be calculated for bends and curves as shown on **Figure 4.6**.



STANDARD RADIUS DESIGN DATA				
ID PIPE	JOINT LENGTH	A-2 RADIUS	B-1 RADIUS	B-2 RADIUS
Ø In.	ft.	ft.	ft.	ft.
18	4	90	65	35
21	4	110	65	40
24	4	140	65	40
27	4	135	65	40
30	4	135	65	45
33	4	140	65	45
36	4	120	65	45
39	*	*	*	*
42	4	125	75	45
45	*	*	*	*
48	4	125	75	45
51	*	*	*	*
54	4	120	85	45
60	4	125	85	50
66	4	125	80	50
72	4	120	80	45
78	*	*	*	*
84	*	*	*	*
90	*	*	*	*
96	*	*	*	*
102	*	*	*	*
108	*	*	*	*
120	*	*	*	*

NOTE:

- * - FOR SPECIAL RADIUS DESIGN CONTACT MANUFACTURER.
- * - DIMENSIONS VARY; CONTACT MANUFACTURER.
- ** - JOINT OPENING SUBJECT TO LOCAL SPECIFICATIONS.

Figure 4.7 – Radius Design Data for Cylindrical* Pipe

*Alternative pipe shapes to be approved by engineer.

- L. A headwall shall be constructed at the outfall of any storm drainage system. If the outlet velocity exceeds the maximum permissible velocity for the channel (see **Table 4.6**), an apron of erosion protection or energy dissipation is required. Erosion protection shall consist of concrete, gabion mattress or grouted rock riprap between the storm sewer headwall and the channel. All gabion and grouted rock shall be

constructed with a layer of filter fabric under the rock. The calculation for the length and width of the erosion protection outfall apron shall be per the "Garry Gregory Method" as outlined in the **Section 4.17**. In unique situations, other methods for calculating erosion protection may be presented to the City Engineer for approval.

4.13. Open Channels

- A. Concrete drainage channels will not be allowed within the City of Sherman unless written approval is received from the City Engineer. Open channels shall be designed to carry the design frequency storm event with one (1) foot of freeboard to the top of bank and 100-year storm within drainage easements and right-of-way. A 10-foot wide access ramp into the channel shall be included for maintenance purposes. If the outlet velocity of an improved channel discharging into an existing channel exceeds the maximum permissible velocity for the existing channel, erosion protection is required. This protection shall consist of a section of rock riprap or other energy dissipation measures at the intersection of the two channels. The dimensions and material of the erosion protection shall be specified as required to protect the channel from erosion. Erosion protection measures that promote sustainability and water quality are allowed and encouraged.
- B. Freeboard is the height of the improved channel above the calculated water surface. Minimum freeboard shall be one (1) foot, and additional freeboard shall be provided to accommodate superelevation or other factors causing a rise in the water surface. Superelevation of the water surface shall be determined at horizontal curves in order to properly specify freeboard. The minimum radius of curvature shall be not less than three times the top width for improved channels in a sub-critical flow regime, unless detailed calculations indicate a smaller radius can be used without causing excessive velocities, shear stresses, or waves on the outside of the channel.

Table 4.6 – Roughness Coefficients and Maximum Velocities for Open Channels

Channel Description	Roughness Coefficient			Maximum Velocity (ft/s)
	Minimum	Normal	Maximum	
MINOR NATURAL STREAMS				
Moderately Well-Defined Channel				
Grass and Weeds, Little Brush	0.025	0.030	0.033	6
Dense Weeds Little Brush	0.030	0.035	0.040	6
Weeds, Light Brush on Banks	0.030	0.035	0.040	6
Weeds, Heavy Brush on Banks	0.035	0.050	0.060	6
Weeds, Dense Willows on Banks	0.040	0.060	0.060	6
Irregular Channel with Pools and Meanders				
Grass and Weeds, Little Brush	0.035	0.040	0.043	6
Dense Weeds, Little Brush	0.040	0.045	0.050	6
Weeds, Light Brush on Banks	0.040	0.045	0.050	6
Weeds, Heavy Brush on Banks	0.045	0.060	0.070	6

Channel Description	Roughness Coefficient			Maximum Velocity (ft/s)
	Minimum	Normal	Maximum	
Weeds, Dense Willows on Banks	0.050	0.070	0.080	6
Flood Plain, Pasture				
Short Grass, No Brush	0.025	0.030	0.035	5
Tall Grass, No Brush	0.030	0.035	0.050	6
Flood Plain, Cultivated				
No Crops	0.025	0.030	0.035	3
Mature Crops	0.030	0.040	0.050	5
Flood Plain, Uncleared				
Heavy Weeds, Light brush	0.035	0.050	0.070	6
Medium to Dense Brush	0.070	0.100	0.160	6
Trees with Flood Stage below Branches	0.080	0.100	0.120	6
MAJOR NATURAL STREAMS				
The roughness coefficient is less than that for minor streams of similar description because banks offer less effective resistance.				
Moderately Well-Defined Channel	0.025		0.060	6
Irregular Channel	0.035		0.100	6
UNLINED VEGETATED CHANNELS				
Mowed Grass, Clay Soil	0.030	0.035	0.040	6
Mowed Grass, Sandy Soil	0.030	0.035	0.040	5
UNLINED NON-VEGETATED CHANNELS				
Sandy Soils	0.025	0.030	0.035	2.5
Silts	0.025	0.030	0.035	1.5
Sandy Silts	0.025	0.030	0.035	3
Clays	0.025	0.030	0.035	4
Clean Gravel Section	0.020	0.025	0.030	6
Shale	0.025	0.030	0.035	10
Rock	0.020	0.025	0.030	15
LINED CHANNELS				
Smooth Finished Concrete	0.015	0.018	0.020	15
Riprap Rubble ,	0.030	0.040	0.050	10
Riprap Grouted ,	0.030	0.035	0.040	10
PAVEMENTS				
Concrete Pavement	0.015	0.018	0.020	15
Asphalt Pavement	0.016	0.018	0.022	15
CONCRETE CULVERT				
Circular or Box	0.011	0.013	0.015	15

- C. For waterways included in the Flood Insurance Study (FIS), flood elevations shall be determined by the same methodology as used in the FIS unless other methods are approved by the City Engineer.
- D. The composite roughness coefficient should account for the sediment, debris, and vegetation that can reasonably be expected in the channel environment. The roughness coefficients given in this Manual are minimum and should be increased at the discretion of the design engineer to account for expected conditions. If the possibility exists that high bed loads or debris can accumulate in the channel, the 'n' factor should be adjusted or other measures taken to ensure that flow shifts from super-critical to sub-critical will not cause flooding.
- E. All channels shall be designed to operate in sub-critical conditions except at hydraulic jumps, such as at culverts, bridges and drop structures, and shall be designed for stable flow (Froude number less than 0.90). In instances of super-critical flow, or locations where flow passes through critical depth, channels shall be lined to prevent scour and erosion. Channels shall convey the design storm with one (1) foot of freeboard to the top of channel bank and 100-year within drainage easements and right-of-way. Maximum allowable channel velocities shall be as shown in **Table 4.6**; however, good engineering judgment may indicate that lower velocities are necessary in specific situations. The values provided in **Table 4.6** shall be used as a guide; actual conditions may require deviation from these values and shall be approved by the City Engineer. Drop structures, if needed to provide grade control and maintain sub-critical flow, shall be constructed of reinforced concrete lining or gabion structures.

4.14 Roadside Ditches

- A. Roadside ditches, where permitted, shall be designed to convey runoff from a 100-year storm contained within the right-of-way. All roadside ditches shall be protected with sod, back sloping, and/or other bank protection designed and constructed to control erosion. Any earthen slopes shall have proper vegetative cover and shall be no steeper than 4H:1V.
- B. Freeboard is the height of the improved ditch above the calculated water surface. Minimum freeboard shall be one (1) foot, and additional freeboard shall be provided to accommodate superelevation or other factors causing a rise in the water surface. Superelevation of the water surface shall be determined at horizontal curves in order to properly specify freeboard. The minimum radius of curvature shall be not less than three times the top width for improved channels in a sub-critical flow regime, unless detailed calculations indicate a smaller radius can be used without causing excessive velocities, shear stresses, or waves on the outside of the channel.

4.15 Culverts

- A. A culvert is used to convey storm water runoff through roadway embankments. Culverts shall be designed to convey the design frequency storm. A minimum of one (1) foot of freeboard is required between the design frequency storm headwater and

- either the top of curb or edge of pavement, whichever is applicable. The allowable headwater is the depth of water that can be ponded at the upstream end of the culvert. The headwater shall be based on the design storm, and shall not increase the flood hazard of adjacent property.
- B. The culvert length shall be chosen to provide minimum 4H:1V embankment slopes. The culvert flowline shall be aligned with the channel bottom and the skew angle of the stream.
 - C. The culvert skew shall not exceed forty-five degrees (45°) as measured from a line perpendicular to the roadway centerline without the approval of the City Engineer.
 - D. Depending on the type of hydraulic operation, a culvert may function either under inlet control or outlet control. Inlet control exists when the barrel capacity exceeds the culvert inlet capacity and the tailwater is not high enough to control culvert operation. Headwater depth and entrance conditions control the culvert capacity. Outlet control exists when the culvert inlet capacity exceeds the barrel capacity, or the tailwater elevation is high enough to create a backwater condition through the culvert. The tailwater elevation and the slope, length and roughness of the culvert determine the culvert capacity. Both types of operation shall be considered, and the culvert capacity will be based on the type of operation that yields the higher headwater of the two. Inlet control shall not be assumed without the prior approval of the City Engineer.
 - E. The City Engineer may require submittal of documentation on any nomograph or table used to analyze culverts, although a backwater analysis is encouraged. If the culvert is being analyzed as part of a stream or waterway, which is being modeled using a water surface profile program such as HEC-2 or HEC-RAS, then the water surface profile model may be used to analyze the culvert.
 - F. The tailwater shall be determined for the design discharge, based on the hydraulic conditions of the downstream channel. Open channel flow methods should be used for this analysis.
 - G. A headwall or wingwalls and apron shall be constructed at both ends of all culverts. For small culverts (30" in diameter or less), a sloped end section or a sloped headwall may be specified. The headwall and wingwall design depends largely on hydraulic characteristics of the flow, the site conditions and potential for erosion and scour. The most current TxDOT details for headwalls and wingwalls are acceptable for use in construction of end treatments.
 - H. If the outlet velocity exceeds the maximum permissible velocity for the channel it may be mitigated with either channel improvements for erosion protection or energy dissipation. Erosion protection may consist of an apron of rock riprap between the storm sewer headwall and the channel. The apron length, width, and median stone diameter shall be specified as required to protect the channel from erosion. Alternate erosion protection measures that promote sustainability and water quality are allowed and encouraged.

- I. The minimum velocity in the culvert barrel shall be 2.5 feet per second in a 5-year storm. Maximum allowable velocity in the culvert is 15 feet per second in a 100-year storm. However, downstream conditions will generally impose more stringent limits
- J. The minimum culvert diameter shall be eighteen (18) inches. Culvert material shall be limited to reinforced concrete unless otherwise approved by the City Engineer for alternate materials.

4.16 Bridges

- A. Bridges shall be designed to span the entire stream or channel without restricting flow. To the extent possible, bridges will span streams and channels at a ninety-degree (90⁰) angle.
- B. Flow hydraulics through the bridge shall be modeled using HEC-2 or HEC-RAS. Bridges shall be designed so that the lowest point of the bridge, the low chord, will be a minimum of two (2) feet above the 100-year water surface elevation.

4.17 Energy Dissipation

- A. Erosive forces at work in the natural drainage network are often increased by urban land development projects. When the drainage network is altered and runoff is captured and released in a more concentrated fashion the potential for erosion can increase. Excessive velocities and erosion potential shall be considered for all proposed storm drain outfalls, culverts, detention ponds, bridges, and open channels. Design of drainage systems and outfalls shall result in a calculated velocity below the maximum allowable velocity noted in **Table 4.6**. In addition, any location that has the potential for erosion per the City Engineer but is below the maximum velocity identified in **Table 4.6** shall require permanent erosion control and/or energy dissipation structures.
- B. Several resources are available for the design of energy dissipation structures. The North Central Texas Council of Government's (NCTCOG) iSWMTM Technical Design Manual contains design guidelines for rock riprap protection using the "Garry Gregory Method". Other techniques and design methods may be utilized, such as those documented in Engineering Manual 1110-2-1601 (USACE) and HEC-14, Hydraulic Design of Energy Dissipators for Culverts and Channels (FHWA).

4.18 Detention and Retention Facilities

- A. Proposed developments shall provide detention or downstream drainage system improvements if the downstream drainage system does not have sufficient capacity. Detention facilities for proposed developments are to be maintained by the respective landowners within the development. This detention statement shall be inserted on the Final Plat for any development project with detention facilities.
- B. A downstream assessment shall be performed for detention facilities to a point that meets the Ten Percent Rule, or to a recognized water course to verify the adequacy of

the downstream system. Increased storm water runoff shall not adversely affect adjoining property, create erosive velocities, or increase existing erosive velocities. Permanent impoundments of water shall be constructed in such a way to prevent negative effects on aesthetics, function, flooding, health, and safety.

- C. Detention storage facilities serving drainage areas smaller than two hundred (200) acres may use the Modified Rational Method for storage calculations. If the Modified Rational Method is used, computations shall be provided for review and approval in the format provided in the example below, and summaries of methods and results shall be provided in the construction plans.

Example:

GIVEN: A 25-acre site, currently open space, is to be developed for retail use. The entire site is the drainage area of the proposed detention basin.

DETERMINE: The maximum release rate and required detention storage, detention basin size and shape, and outlet structure configuration for the 2-, 10-, and 100-year events (sample calculations for the 100-year storm are provided below)

SOLUTION:

Step 1. Determine peak runoff rate prior to site development. This is the maximum release rate from the site after development.

Step 2. Determine inflow for storms of various durations in order to determine maximum volume required with release rate determined in Step 1.

NOTE: Incrementally increase durations to maximum required volume. The duration with a peak inflow less than maximum release rate or where required storage is less than storage for the prior duration, is the last increment.

Present Conditions

$Q = CIA$

$$C = 0.30$$

$$T_c = 20 \text{ min.}$$

$$I_{100} = 8.95 \text{ in./hr}$$

$$Q_{100} = 0.30 \times 8.95 \times 25 = 67.1 \text{ cfs}$$

Future Conditions (Retail)

$$C = 0.90$$

$$T_c = 15 \text{ min.}$$

$$I_{100} = 10.00 \text{ in./hr}$$

$$Q_{100} = 0.90 \times 10.00 \times 25 = 225.0 \text{ cfs}$$

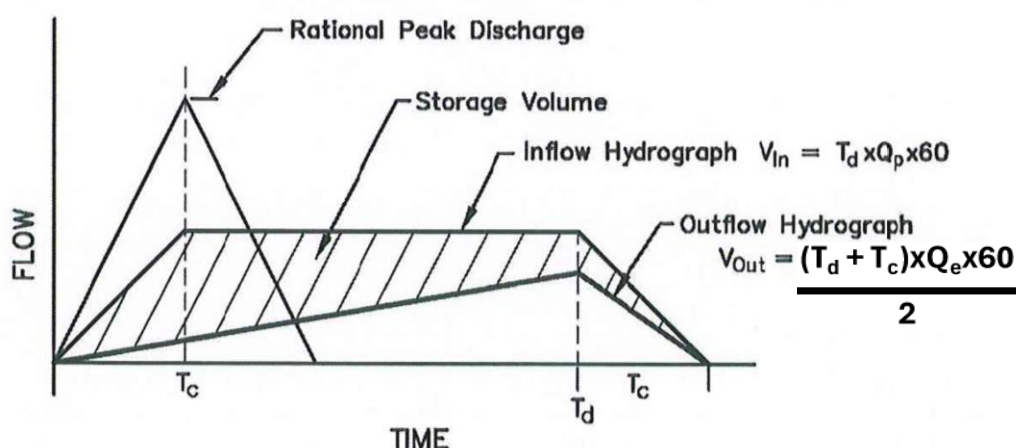
Check various storm durations: $Q_p = C \times I \times A$

15 min.	I = 10.00	$Q_p = 0.90 \times 10.00 \times 25 = 225.0$	cfs
20 min.	I = 8.95	$Q_p = 0.90 \times 8.95 \times 25 = 201.5$	cfs
30 min.	I = 6.86	$Q_p = 0.90 \times 6.86 \times 25 = 154.4$	cfs
40 min.	I = 6.09	$Q_p = 0.90 \times 6.09 \times 25 = 137.1$	cfs
50 min.	I = 5.32	$Q_p = 0.90 \times 5.32 \times 25 = 119.7$	cfs
60 min.	I = 4.55	$Q_p = 0.90 \times 4.55 \times 25 = 102.4$	cfs
70 min.	I = 4.29	$Q_p = 0.90 \times 4.29 \times 25 = 96.6$	cfs
80 min.	I = 4.04	$Q_p = 0.90 \times 4.04 \times 25 = 90.8$	cfs
90 min.	I = 3.78	$Q_p = 0.90 \times 3.78 \times 25 = 85.1$	cfs
100 min.	I = 3.53	$Q_p = 0.90 \times 3.53 \times 25 = 79.3$	cfs
110 min.	I = 3.27	$Q_p = 0.90 \times 3.27 \times 25 = 73.5$	cfs
120 min.	I = 3.01	$Q_p = 0.90 \times 3.01 \times 25 = 67.8$	cfs
130 min.	I = 2.90	$Q_p = 0.90 \times 2.90 \times 25 = 65.3$	cfs
140 min.	I = 2.79	$Q_p = 0.90 \times 2.79 \times 25 = 62.7$	cfs
150 min.	I = 2.68	$Q_p = 0.90 \times 2.68 \times 25 = 60.2$	cfs
160 min.	I = 2.56	$Q_p = 0.90 \times 2.56 \times 25 = 57.7$	cfs
170 min.	I = 2.45	$Q_p = 0.90 \times 2.45 \times 25 = 55.1$	cfs
180 min.	I = 2.34	$Q_p = 0.90 \times 2.34 \times 25 = 52.6$	cfs

Maximum Storage Volume is determined by deducting the volume of runoff released during the time of inflow from the total inflow volume.

Inflow = Storm duration x respective peak discharge x 60 sec./min.

Outflow = Half of inflow time ($T_d + T_c$) x control release discharge x 60 sec./min.



15 min. Storm	Inflow	$15 \times 225.0 \times 60 \text{ sec./min.}$	$= 202,500 \text{ cf}$
	Outflow	$0.5 \times 30 \times 67.1 \times 60 \text{ sec./min.}$	$= 60,390 \text{ cf}$
	Storage		<u>142,110 cf</u>
20 min. Storm	Inflow	$20 \times 201.5 \times 60 \text{ sec./min.}$	$= 241,800 \text{ cf}$
	Outflow	$0.5 \times 35 \times 67.1 \times 60 \text{ sec./min.}$	$= 70,455 \text{ cf}$
	Storage		<u>171,345 cf</u>
30 min. Storm	Inflow	$30 \times 154.4 \times 60 \text{ sec./min.}$	$= 277,920 \text{ cf}$
	Outflow	$0.5 \times 45 \times 67.1 \times 60 \text{ sec./min.}$	$= 90,585 \text{ cf}$
	Storage		<u>187,335 cf</u>
40 min. Storm	Inflow	$40 \times 137.1 \times 60 \text{ sec./min.}$	$= 329,040 \text{ cf}$
	Outflow	$0.5 \times 55 \times 67.1 \times 60 \text{ sec./min.}$	$= 110,715 \text{ cf}$
	Storage		<u>218,325 cf</u>
50 min. Storm	Inflow	$50 \times 119.7 \times 60 \text{ sec./min.}$	$= 359,100 \text{ cf}$
	Outflow	$0.5 \times 65 \times 67.1 \times 60 \text{ sec./min.}$	$= 130,845 \text{ cf}$
	Storage		<u>228,255 cf</u>
60 min. Storm	Inflow	$60 \times 102.4 \times 60 \text{ sec./min.}$	$= 368,640 \text{ cf}$
	Outflow	$0.5 \times 75 \times 67.1 \times 60 \text{ sec./min.}$	$= 150,975 \text{ cf}$
	Storage		<u>217,665 cf</u>
70 min. Storm	Inflow	$70 \times 96.6 \times 60 \text{ sec./min.}$	$= 405,720 \text{ cf}$
	Outflow	$0.5 \times 85 \times 67.1 \times 60 \text{ sec./min.}$	$= 171,105 \text{ cf}$
	Storage		<u>234,615 cf</u>
80 min. Storm	Inflow	$80 \times 90.8 \times 60 \text{ sec./min.}$	$= 435,840 \text{ cf}$
	Outflow	$0.5 \times 95 \times 67.1 \times 60 \text{ sec./min.}$	$= 191,235 \text{ cf}$
	Storage		<u>244,605 cf</u>
90 min. Storm	Inflow	$90 \times 85.1 \times 60 \text{ sec./min.}$	$= 459,540 \text{ cf}$
	Outflow	$0.5 \times 105 \times 67.1 \times 60 \text{ sec./min.}$	$= 211,365 \text{ cf}$
	Storage		<u>248,175 cf</u>
100 min. Storm	Inflow	$100 \times 79.3 \times 60 \text{ sec./min.}$	$= 475,800 \text{ cf}$
	Outflow	$0.5 \times 115 \times 67.1 \times 60 \text{ sec./min.}$	$= 231,495 \text{ cf}$
	Storage		<u>244,305 cf</u>

110 min. Storm	Inflow	$110 \times 73.5 \times 60 \text{ sec./min.}$	= 485,100 cf
	Outflow	$0.5 \times 125 \times 67.1 \times 60 \text{ sec./min.}$	= <u>251,625 cf</u>
	Storage		233,475 cf
120 min. Storm	Inflow	$120 \times 67.8 \times 60 \text{ sec./min.}$	= 488,160 cf
	Outflow	$0.5 \times 135 \times 67.1 \times 60 \text{ sec./min.}$	= <u>271,755 cf</u>
	Storage		216,405 cf
130 min. Storm	Inflow	$130 \times 65.3 \times 60 \text{ sec./min.}$	= 509,340 cf
	Outflow	$0.5 \times 145 \times 67.1 \times 60 \text{ sec./min.}$	= <u>291,885 cf</u>
	Storage		217,455 cf
140 min. Storm	Inflow	$140 \times 62.7 \times 60 \text{ sec./min.}$	= 526,680 cf
	Outflow	$0.5 \times 155 \times 67.1 \times 60 \text{ sec./min.}$	= <u>312,015 cf</u>
	Storage		214,665 cf
150 min. Storm	Inflow	$150 \times 60.2 \times 60 \text{ sec./min.}$	= 541,800 cf
	Outflow	$0.5 \times 165 \times 67.1 \times 60 \text{ sec./min.}$	= <u>332,145 cf</u>
	Storage		209,655 cf
160 min. Storm	Inflow	$160 \times 57.7 \times 60 \text{ sec./min.}$	= 553,920 cf
	Outflow	$0.5 \times 175 \times 67.1 \times 60 \text{ sec./min.}$	= <u>352,275 cf</u>
	Storage		201,645 cf
170 min. Storm	Inflow	$170 \times 55.1 \times 60 \text{ sec./min.}$	= 562,020 cf
	Outflow	$0.5 \times 185 \times 67.1 \times 60 \text{ sec./min.}$	= <u>372,405 cf</u>
	Storage		189,615 cf
180 min. Storm	Inflow	$180 \times 52.6 \times 60 \text{ sec./min.}$	= 568,080 cf
	Outflow	$0.5 \times 195 \times 67.1 \times 60 \text{ sec./min.}$	= <u>392,535 cf</u>
	Storage		175,545 cf

Maximum volume required is 248,175 cf, and the critical storm duration is 90 minutes for the 100-year storm.

Step 3.

Size the basin to contain the required volume for the 100-year storm while maintaining minimum slope and freeboard requirements.

Step 4.

Using the selected geometry of the basin as determined above and the storage volumes required for each storm event, determine the maximum depth in the basin for each

storm. To design the outlet structure for the required multiple frequencies, the calculations shown above may be repeated for each frequency in tabular form as shown below. For each storm event, the highest storage value calculated, along with the selected basin size and shape, determines the maximum depth for each event. This depth is the head used in outlet structure design.

Step 5.

A trial outlet structure is selected, and may be a weir, an orifice (pipe), a V-notch weir, or a combination of outlets.

The outlet structure is designed using the head calculated above, to provide a peak discharge that is no greater than 2% above existing (undeveloped) peak runoff for each of the 2-, 10-, and 100-year storm events.

Several iterations may be necessary to balance discharge from the outlet structure, pond geometry and head. If the discharge is significantly different (either higher or lower) than the discharge assumed in Step 2, the actual operation of the pond will not correspond to the calculations. Discharge for any given event may not exceed the allowable discharge determined in Step 1 by more than 2% nor may actual discharge be more than 10% below the allowable discharge.

- D. All storage facilities serving drainage areas greater than two hundred (200) acres, or where the Modified Rational Method is not applicable, shall be analyzed using HEC-HMS or other approved software for reservoir routing of an inflow hydrograph. The software program or computational method shall be approved by the City Engineer. The analysis should consist of comparing the design flows at a point or points downstream of the proposed storage site with and without storage. Design calculations shall show the effects of the detention facility in each of the 2-, 10-, and 100-year storm events. This may require the use of multi-stage control structures. The detention facility shall be designed to provide the required detention for all of the above-listed frequencies.
- E. The potential for the impact of sedimentation on the detention facility should be evaluated. A means of access for maintenance of the facility shall be provided.
- F. The outlet control structures for detention storage facilities typically include a principal outlet and an emergency overflow. The principal outlet functions to restrict the outflow. The principal outlet shall be designed to accommodate the 2-, 10-, and 100-year frequency storms while maintaining a minimum freeboard of one (1) foot to the top of the pond embankment.
- G. The outlet control structure may be drop inlets, pipes, culverts, weirs, or orifices. Checks should be made to determine if the outlet structure is controlled by weir or orifice flow. The tailwater on the structure could significantly affect its capacity. The engineer should carefully evaluate potential tailwater effects of the downstream system, whether it be a ditch, pipe, road, or creek.
- H. If a riser pipe outlet is used, it shall be protected by a trash rack and anti-vortex plate.

- If an orifice plate is used, it shall be protected with a trash rack with at least 10 square feet of open surface area. In both cases, the rack shall be hinged or easily removable to allow for cleaning. The rack shall be adequately secured to prevent it from being removed or opened when maintenance is not occurring.
- I. All ponds that impound 25 feet of water depth and more than 15 acre-feet or 6 feet of water depth and more than 50 acre-feet per TCEQ rules shall have an emergency overflow spillway or structure designed to convey the 100- year, 24-hour design storm for post-development site conditions, assuming the pond is full to the overflow spillway or structure crest. The overflow shall be designed to convey these extreme event peak flows around the berm structure for discharge into the downstream conveyance system. The overflow shall be designed and sited to protect the structural integrity of the berm.
 - J. The subgrade of the spillway shall be set at or above the 100-year overflow elevation of the control structure. The spillway shall be located to direct overflows safely into the downstream conveyance system. The emergency overflow spillway shall be armored with riprap or other flow-resistant material that will protect the embankment and minimize erosion. The overflow erosion protection shall be designed in accordance with the guidelines provided in **Section 4.17**, and shall extend to the toe of each face of the berm embankment. The emergency overflow spillway weir section shall be designed for the maximum design storm event for post-development conditions.
 - K. All TCEQ requirements for impoundment and dam safety shall apply. These requirements relate to both the size and the hazard classification of the embankment. Copies of all materials submitted to TCEQ for permitting, along with the TCEQ permits and Emergency Action Plan, shall be submitted to the City Engineer.

4.19 Levees

- A. The use of levees is discouraged in the City of Sherman, except in cases to meet freeboard requirements.

4.20 Buildings

- A. The finished floor (FF) elevation of commercial buildings shall be 2 feet above existing FEMA 100-year water surface elevation.
- B. The FF elevation of residential buildings shall be 2 feet above the WSE of the 100-year floodplain or 2 feet above existing FEMA flood elevation.
- C. All buildings shall be located outside of the current 100-year floodway and floodplain.

4.21 Floodplain Alterations

- A. No new construction is allowed in floodplain areas, but construction is allowed in those areas that have been reclaimed from the floodplain.

- B. Floodplain alteration shall be allowed only if all the following criteria are met:
1. Flood studies shall include flows generated for existing conditions and existing conditions for the 2-, 5-, 10-, 25-, and 100-year storm events.
 2. Alterations of the floodplain shall not increase the water surface elevation of the design flood of the creek on other properties.
 3. Alterations of the floodplain shall not increase velocities that result in erosion where there was no erosion or cause increased erosion downstream.
 4. Alterations shall be in compliance with FEMA guidelines.
 5. Alterations of the floodplain shall meet the requirements of **Section 4.2**.
 6. Alterations shall result in no loss of valley storage.
 7. Any alteration of floodplain areas shall not cause any additional expense in any current or projected public improvements, including maintenance.
 8. The floodplain shall be altered only to the extent permitted by equal conveyance on both sides of the natural channel, as defined by the United States Army Corps of Engineers in a HEC-RAS analysis. The right of equal conveyance applies to all owners and uses, including greenbelt, park areas, and recreational areas. Owners may relinquish their right to equal conveyance by providing a written agreement to the City Engineer.
 9. A grading permit shall be required to perform any grading activities on site.
 10. The toe of any fill shall parallel the natural direction of the flow.
 11. Grading activities in the floodplain shall incorporate and consider other City planning documents and ordinances.
 12. Incorporates and considers other City planning documents and ordinances.
- C. The above criteria shall be met before any floodplain alteration may occur. Typical projects requiring a floodplain alteration include placing fill (whether or not it actually raises the property out of the floodplain) constructing a dam, straightening channel sections, making improvements, (substantial or otherwise), to existing structures in a floodplain in which the existing outside dimensions of the structure are increased, and temporary storage of fill materials, supplies and equipment.
- D. In general, the information needed for the application shall be performing by running a backwater model, such as HEC-2 or HEC-RAS, and a flood routing model, such as TR-20, HEC-1, or HECHMS. Unless a pre-existing model is in place, HEC-HMS and HEC-RAS shall be used. The backwater information shall be used to determine that upstream water surface elevations and erosive velocities have not increased. Flood routing information shall be used to insure that the cumulative effects of the reduction

in floodplain storage of floodwater will not cause downstream increases in water surface elevations and erosive velocities.

- E. The Engineer is responsible for providing documentation of the relevant USACE approved permits prior to beginning modification to the floodplain, or for providing a signed and sealed statement detailing why such permits are unnecessary.
- F. Verification of Floodplain Alterations:
 - 1. Prior to final acceptance by the City, a certified statement shall be prepared by a Licensed Professional Engineer showing that all lot elevations, as developed within the subject project, meet the required minimum finished floor elevations shown on the construction plans. This certification shall be filed with the City Engineer.
 - 2. In addition, at any time in the future when a building permit is desired for existing platted property which is subject to flooding or carries a specified or recorded minimum finished floor elevation, a Registered Professional Land Surveyor shall survey the property prior to obtaining a building permit. The certified survey data showing the property to be at or above the specified elevation shall be furnished to the City Engineer for approval. Certification of compliance pertaining to specified finished floor elevations shall be required prior to framing the building.
 - 3. The owner/developer shall furnish, at his expense, to the City Engineer sufficient engineering information to confirm that the minimum finished floor elevations proposed are required. Construction permits will not be issued until a Conditional Letter of Map Revision (CLOMR) or amendment has been accepted by the City Engineer and FEMA. Letters of Map Revision shall be submitted to and approved by the City Engineer and FEMA prior to final acceptance of the project. The contractor shall supply to the City Engineer all necessary documentation and fees to be forwarded to FEMA for application for a Letter of Map Amendment if the Letter of Map Revision has not yet become effective.
 - 4. All submittals to FEMA shall be made by the owner's/developer's Engineer. The owner/developer will provide the City with an additional copy of the CLOMR or LOMR submittal. Upon City approval, the owner/developer will forward the submittal to FEMA.
 - 5. All responses to FEMA comments shall be submitted to the City prior to resubmittal to FEMA.

4.22. Drainage Easements

- A. The following minimum width exclusive drainage easements are required when facilities are not located within public rights-of-way or easements:

1. Storm sewers are to be located within the center of a 15' drainage easement or 1.5 times the depth plus the width of the structure rounded up to the nearest 5', whichever is greater.
 2. Overflow flumes are to be typically centered on a property line within a 10' drainage easement.
- B. Storm drain lines are considered public if they cross property lines and collect runoff from adjacent properties. Drainage easements shall be dedicated to the City when a drainage system crosses a property line. For single-family residential developments, public storm drain lines shall not cross residential lots unless approved otherwise by the City Engineer.
- C. Private drainage Easements shall be dedicated for all floodplains and shall be dedicated for all detention facilities or be on a designated property owner's association Lot, and shall be maintained by a designated property owner's association.

APPENDIX A

City of Sherman Intensity-Duration-Frequency (IDF) Data

Storm Duration (min.)	Rainfall Intensity (in./hr)					
	Storm Frequency					
	2	5	10	25	50	100
5	5.93	7.22	8.30	10.78	13.20	15.13
10	4.75	5.80	6.67	8.67	10.60	12.20
15	3.93	4.79	5.50	7.13	8.69	10.00
20	3.53	4.30	4.93	6.39	7.78	8.95
30	2.72	3.31	3.79	4.91	5.96	6.86
40	2.40	2.93	3.36	4.35	5.29	6.09
50	2.09	2.54	2.92	3.79	4.61	5.32
60	1.77	2.16	2.49	3.23	3.94	4.55
70	1.66	2.03	2.34	3.04	3.71	4.29
80	1.55	1.89	2.19	2.85	3.48	4.04
90	1.44	1.76	2.04	2.66	3.25	3.78
100	1.32	1.63	1.88	2.46	3.02	3.53
110	1.21	1.49	1.73	2.27	2.80	3.27
120	1.10	1.36	1.58	2.08	2.57	3.01
130	1.05	1.30	1.52	2.00	2.47	2.90
140	1.01	1.25	1.45	1.91	2.37	2.79
150	0.96	1.19	1.39	1.83	2.27	2.68
160	0.91	1.13	1.32	1.75	2.18	2.56
170	0.87	1.08	1.26	1.67	2.08	2.45
180	0.82	1.02	1.19	1.58	1.98	2.34

Note: Frequency adjustment factors are incorporated into the intensities in this table.

Roughness Coefficients (Manning's n) for Sheet Flow

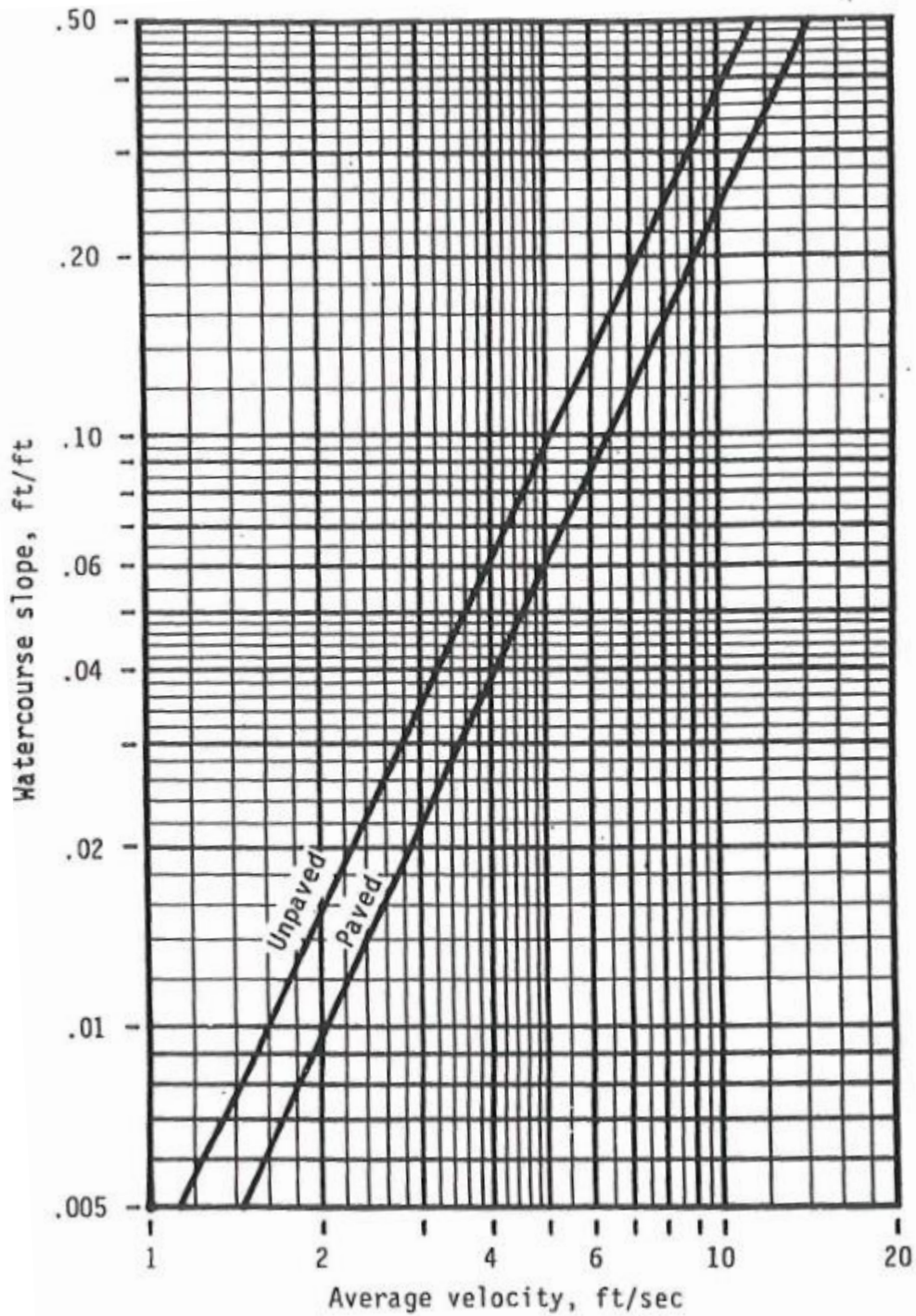
Surface Description	N^1
Smooth Surface (concrete, asphalt, gravel, or bare soil)	0.011
Fallow (no residue)	0.05
Cultivated Soils:	
Residue Cover less than or equal to 20%	0.06
Residue Cover greater than 20%	0.17
Grass:	
Short grass prairie	0.15
Dense grass ²	0.24
Bermudagrass	0.41
Range (natural)	0.13
Woods: ³	
Light underbrush	0.40
Dense underbrush	0.80

1 - The n values are a composite of information compiled by Engman (1986).

2 - Includes species such as weeping lovegrass, bluegrass, buffalo grass, blue gama grass, and native mixtures.

3 - When selecting n, consider cover to a height of about 0.1 ft. This is the only part of the plant cover that will obstruct sheet flow

Time of Concentration Shallow Concentrated Flow Velocity Estimation Nomograph



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SECTION 5 STORMWATER QUALITY DESIGN

5.1. General

- A. Post-construction runoff controls shall be used to minimize increases in stormwater runoff rates and volumes, soil and stream channel erosion, sediment transport and the discharge of pollutants to the City's Municipal Separate Storm Sewer System (MS4). The City of Sherman encourages use of these standards for the purpose of protecting local water resources from degradation and to protect the general health, safety and welfare of the public residing in affected watersheds.
- B. All new development and re-development projects, one acre or larger, or less than one acre if part of a larger common plan of development or sale, should implement Best Management Practices (BMP's) to minimize water quality impacts from development after construction is complete (post-construction). Examples of various long-term post-construction BMPs are provided below.
- Floodplain and channel buffers
 - Stormwater treatment ponds and wetlands
 - Grassed swales and channels
 - Detention and retention facilities
 - Energy dissipators and velocity control structures
 - Infiltration trenches
 - Rain gardens
 - Green roofs
 - Open spaces
 - Native landscaping
 - Porous parking surfaces
 - Stormwater re-use and rainwater harvesting
 - Tree preservation and tree planting
 - Stormwater treatment system
- C. It is the responsibility of the design engineer to verify the adequacy of the postconstruction BMP for mitigating the runoff effects from the proposed project. Guidelines for the selection and design of post-construction BMPs may be found in the North Central Texas Council of Government's (NCTCOG) integrated Stormwater Management (iSWM™) Technical Manual, Site Development Controls. These BMPs are acceptable for design of stormwater controls within this section, however the design of detention facilities shall be as defined in the **Section 4** of the Engineering Design Standards Manual.
- D. It is recommended that the owner, developer and/or design engineer consult with the City Engineer prior to design of any post-construction BMPs to discuss and evaluate the intended BMP performance criteria (e.g. water quality, channel protection, runoff volume reduction, etc.) and related long term maintenance requirements. All post-construction BMP's shall be submitted to the City Engineer for review and approval prior to construction of the proposed project.

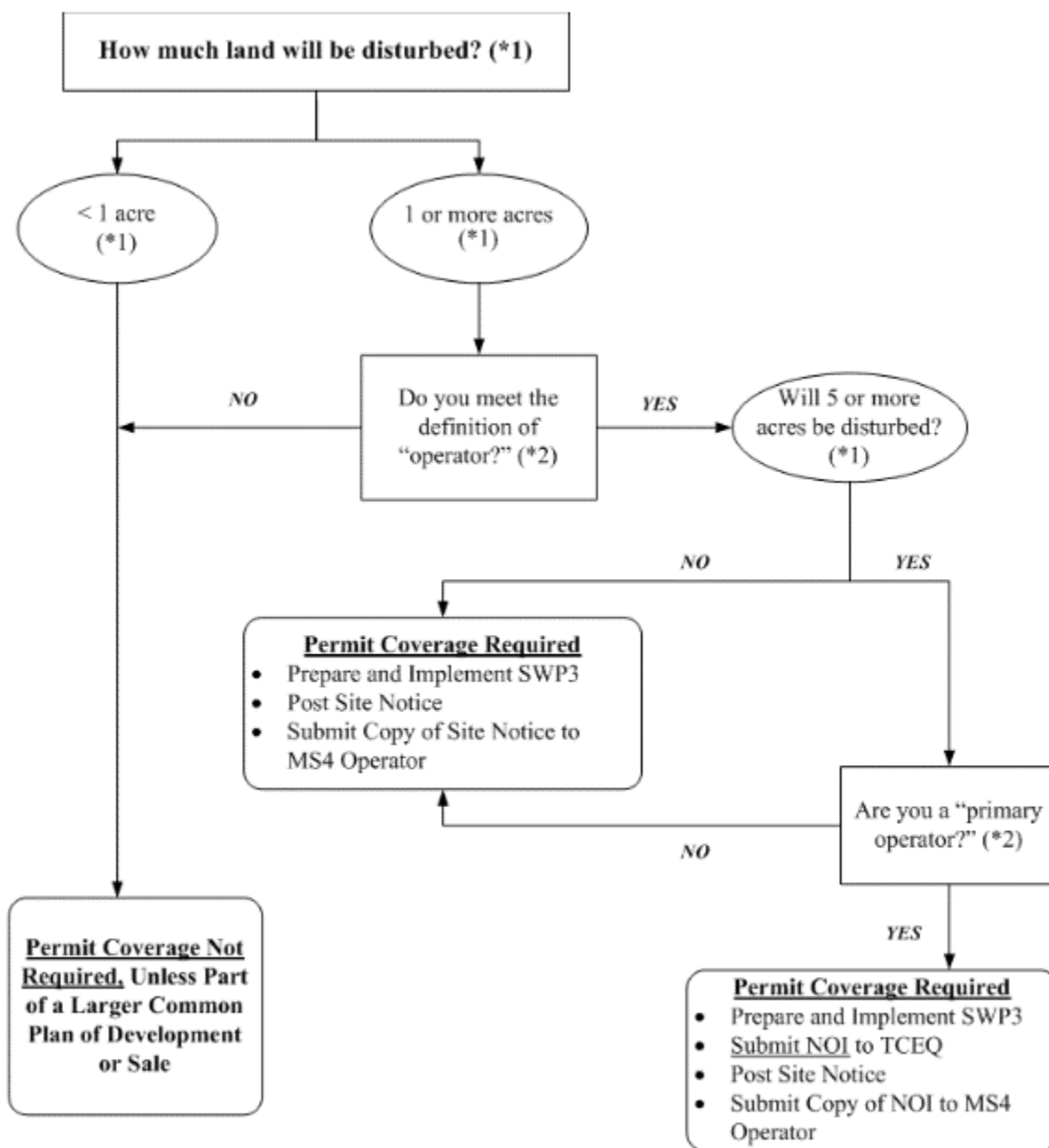
- E. All post-construction BMPs shall have an enforceable long term operation and maintenance agreement by a property owner association to ensure the system functions as designed. This agreement will include any and all maintenance easements as required to access and inspect the stormwater practices, and to perform routine maintenance as necessary to ensure proper functioning of the stormwater practice. Unless otherwise agreed upon by the City of Sherman, the long term operation and maintenance of any post-construction BMPs shall be the responsibility of the property owner or property owner association.

5.2. Construction Site Stormwater Pollution Prevention

- A. All construction activity, regardless of size, shall have stormwater pollution prevention BMP's installed prior to any land disturbing activities to prevent the discharge of pollutants to the City's MS4. It is the responsibility of owners, developers and contractors to maintain compliance with the (TCEQ) stormwater construction permit TXR150000. All stormwater BMP's shall be provided, constructed and maintained per the City of Sherman's Erosion Control Details, or in the absence of an applicable City detail, the standards set forth in the NCTCOG iSWM™ Technical Manual, Construction Controls and approved by the City Engineer.
- B. The developer or owner is responsible for providing the City Engineer with a copy of the TCEQ Construction Site Notice for projects between 1 and 5 acres or the TCEQ Notice of Intent (NOI) for projects larger than 5 acres and a digital copy of the TCEQ SWPPP prior to any land disturbing activities. Reference the TCEQ general permit TXR150000 for further information. Less than 1` acre. Refer to TCEQ Construction Permit Flow Chart in TXR150000 to help determine whether a construction site is regulated under the TCEQ permitting program
- C. The developer or owner shall fill out the City of Sherman's Storm Water Pollution Prevention Packet even for sites that disturb less than one acre.
- D. Inspections of BMP's shall be designated to be performed every 7 days with a designated day of the week in the SWPPP.

Figure 5.1 – TCEQ SWPPP Permit and Operator Determination Flowchart

When calculating the acreage of land area disturbed, include the disturbed land-area of all construction and construction support activities.



- (*1) To determine the size of the construction project, use the size of the entire area to be disturbed, and include the size of the larger common plan of development or sale, if the project is part of a larger project (refer to Part I.B., "Definitions," for an explanation of "common plan of development or sale").
- (*2) Refer to the definitions for "operator," "primary operator," and "secondary operator" in Part I., Section B. of this permit.

- E. It is the intent of the City of Sherman that sediment from construction sites be contained on the site. Sediment ponds shall be provided for construction sites 10 acres or larger as required by the TCEQ TPDES Construction Permit.
- F. Accordingly, Stormwater Pollution Prevention Plans (SWPPP) shall address two stages.
 - 1. Stage 1 refers to the initial grading and infrastructure construction phase of the development. Sediment ponds, boundary silt fence, or other approved mass grading erosion and sediment controls shall be installed before construction may commence. Inlet protection devices shall be installed until streets and alleys have been paved. Immediately after paving, an erosion control blanket (or other erosion control method as approved by the City Engineer) shall be installed adjacent to paved surfaces such as alleys, streets, flumes, etc., in addition to the placement of silt fence along the downslope boundaries of the site. No construction is permitted until Stage 1 erosion controls are installed and the City has received a copy of the NOI or Construction Site Notice.
 - 2. Stage 2 refers to the period of time after acceptance of the development by the City and prior to completion of homes or other buildings. During this stage, an erosion control blanket (or other erosion control method as approved by the City Engineer) shall be placed adjacent to all streets and alleys and at the project perimeter to contain sediment within the block and prevent transport to the pavement. The maintenance of this perimeter erosion control system becomes the builder's responsibility once a building permit is issued. The developer is then responsible for the perimeter erosion controls until the development or phase is 95% built out.

After the site meets TCEQ stabilization requirements, all temporary BMP's shall be removed and the developer or owner shall provide the City Engineer with a copy of the TCEQ Construction Site Notice with removal date for projects between 1 and 5 acres or the TCEQ Notice of Termination (NOT) for projects larger than 5 acres

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SECTION 6 GENERAL WATER/WASTEWATER DESIGN REQUIREMENTS

6.1. General

- A. The intent of the water/wastewater system design requirements is to list minimum requirements for public water distribution and transmission system facilities, public wastewater collection system facilities, and respective appurtenances.
- B. Design criteria for all water systems shall comply with Texas Commission on Environmental Quality (TCEQ) [Chapter 290](#), Subchapter D (Rules and Regulations for Public Water Systems), latest revision. Chapter 290 is included in Part I of Title 30 of the Texas Administrative Code..
- C. Design criteria for all wastewater systems shall comply with Texas Commission on Environmental Quality (TCEQ) [Chapter 217](#), Subchapter C (Conventional Collection Systems), latest revision. Chapter 217 is included in Part I of Title 30 of the Texas Administrative Code.
- D. Water and wastewater mains shall be sized and extended through the limits of a development to serve adjacent properties.
- E. Dead end water mains are not allowed unless approved in writing by the City Engineer; however, if approved, an automatic flushing device shall be provided (See **Section 7.13**). Automatic flushing devices must have an air gap prior to flushing into the storm sewer system.
- F. In the design plans, all isolation valves, fittings, blowoffs, air release valves, fire hydrants, manholes, or other components to the water or wastewater system shall have either station/offset or northing/easting coordinates provided.

6.2. Easements

- A. In single-family residential developments, water, and wastewater mains shall not cross residential lots unless specifically approved by the City Engineer, in which case the easement shall be a minimum of 15' in width unless approved otherwise by the City Engineer.
- B. Water mains 18" and larger shall be located in an easement parallel and adjacent to the right-of way unless approved otherwise by the City Engineer.
- C. All easements required by the City shall be dedicated by plat if within the platted boundary. If outside the platted boundary, provide easement by separate instrument prior to receiving plans authorized by the City for construction.
- D. Site paving, such as, parking, fire lanes and access drives are allowed over utility easements unless the easement prohibits otherwise.
- E. The following minimum width exclusive utility easements are required when facilities are not located within public rights-of-way:

1. Water mains 12" and smaller are to be located within the center of a minimum 15' utility easement.
 2. Easement widths for water mains 18" and larger shall be a minimum of 20' subject to the approval of the City Engineer.
 3. Wastewater mains 12" and smaller with a depth up to 10' are to be located in the center of a 15' utility easement.
 4. Wastewater mains 15" and larger or with a depth between 10' and 20' are to be located in the center of a 20' utility easement.
 5. Water and wastewater mains with a depth between than 20' and 30' are to be located in the center of a 30' utility easement.
 6. Water and wastewater mains with a depth greater than 30' shall be located in the center of a utility easement width as determined by the City Engineer.
- F. Fire hydrants and automatic flushing valves located within the public rights-of-way and shall typically be located between 1.5' and 8' of the edge of pavement and outside of sidewalk.
- G. 2" and smaller meters serving multi-family residential and non-residential developments shall be located within the right-of-way or in a minimum 5' x 5' utility easement.
- H. 3" and larger meters shall be located within a minimum 20' x 10' utility easement outside the right-of-way.
- I. All appurtenances such as air release valves with vents must be contained within utility easements with a minimum 3' clearance from the edge of the easement.

6.3. Thrust Restraint

- A. All pressurized water and wastewater mains shall be restrained against thrust forces due to change in pipeline diameter or alignment in order to prevent joint separation or movement.
- B. Thrust restraint shall be accomplished by concrete thrust blocks and mechanically restrained joints.
- C. All valves, fittings and changes in elevation shall have concrete thrust blocks and restrained joints installed unless approved otherwise by the City Engineer.
- D. Thrust blocking shall be 2,000 psi concrete per and be able to withstand a minimum 200 psi test pressure with a minimum safety factor of 1.5 without exceeding the soil bearing capacity.
- E. Restrained joints lengths shall be calculated to withstand a minimum 200 psi test pressure with a minimum factor of safety of 2.0.
- F. The following technical references are available for calculating thrust restraint systems:

1. AWWA Manual M9: Concrete Pressure Pipe by AWWA, Latest Edition.
2. AWWA Manual M11: Steel Pipe – A Guide for Design and Installation by AWWA, Latest Edition.
3. AWWA Manual M23: PVC Pipe – Design and Installation by AWWA, Latest Edition.
4. Thrust Restraint for Ductile Iron Pipe by Ductile Iron Pipe Research Association (DIPRA), 2006, or Latest Edition.
5. Thrust Blocking, per City standard details.

6.4. Pavement Cut and Repair

- A. Water and wastewater and reclaimed water main improvements shall be designed to minimize the impact to existing pavement, where feasible.
- B. No pavement shall be cut unless approved in writing by the City Engineer. Existing pavement cut, excavation, and repair shall be in accordance with City details.
- C. Full panel concrete pavement replacement will be required if pavement must be cut.

6.5. Trenchless Construction

- A. Launching and receiving pits for trenchless construction shall be a minimum of 2' from the edge of pavement or greater if directed by the City Engineer.
- B. The location, size and depth of the launching and receiving pits for trenchless construction shall be evaluated during construction plan review.
- C. Methods of trenchless construction shall be called out on the plans and approved by the City Engineer.

6.6. Crossings

- A. Highway Crossings
 1. The design of water and wastewater mains within a state highway must be in compliance with all applicable requirements of the Texas Department of Transportation (TXDOT), unless a variance is approved by TXDOT. The following reference applies: Title 43 of the Texas Administrative Code, Part 1, Chapter 21, Subchapter C – Utilities Accommodation
 2. Water and wastewater mains shall be located so as to avoid or minimize the impact to future highway projects and improvements, to allow other utilities in the right-of-way, and to permit access to water and wastewater mains and other utility facilities for their maintenance with minimum interference to highway traffic
 3. New water and wastewater mains crossing a highway shall be installed at approximately 90° to the centerline of the highway,

4. New water and wastewater mains located longitudinally along a highway shall typically be designed parallel to the right-of-way within an easement.
5. All water and wastewater crossings shall be encased with steel casing pipe in accordance with City specifications, or approved equal. Casing pipe shall be extended to 2' from the edge of pavement or back of curb.
6. Water valves, manholes and other appurtenances shall not be placed in the pavement or shoulder of highway.
7. Water main crossings shall include a valve on each side of the highway crossing.
8. Individual service meters shall be placed outside the limits of the right-of-way.

B. City Owned Roadway Crossings

1. Water and wastewater mains shall be located so as to avoid or minimize the impact to future road projects and improvements, to allow other utilities in the right-of-way, and to permit access to water and wastewater mains and other utility facilities for their maintenance with minimum interference to roadway traffic
2. New water and wastewater mains crossing a roadway shall be installed at approximately 90° to the centerline of the roadway,
3. All water and wastewater crossings shall be encased with steel casing pipe in accordance with City specifications, or approved equal. Casing pipe shall be extended to 2' from the edge of pavement or back of curb.
4. Individual service meters shall be placed at the edge of the right-of-way.

C. Railroad Crossings

1. The design of water and wastewater mains within railroad right-of-way must be in compliance with the requirements of the appropriate railroad authority. The designer should determine which railroad company right-of-way is being crossed and obtain their utility accommodation policies prior to beginning the design. The following references may be applicable:
 - a. Utility Accommodation Policy by the respective railroad owner.
 - b. American Railway Engineering & Maintenance Association (AREMA), Latest Edition.
2. New water and wastewater mains crossing a railroad shall be installed at approximately 90° to the centerline of the railroad.
3. New water and wastewater mains located longitudinally along a railroad shall be designed parallel to the right-of-way and within an easement. No main shall be located closer than 25' from the centerline of an active track.
4. All water and wastewater crossings shall be encased with steel casing pipe or approved equal. Casing pipe crossing railroad tracks shall be designed to withstand E80 railroad loadings and shall extend to the right-of-way lines.

5. Water valves, manholes, meters and other appurtenances shall be placed outside the limits of the right-of-way.
6. Water main crossings shall include a valve on each side of the railroad crossing.

D. Creek Crossings

1. All water and wastewater mains crossing under a flowing stream or semi-permanent body of water such as a marsh or pond shall be encased with concrete or steel casing pipe or approved equal.
2. Wastewater main crossings shall include a manhole on each side of the creek crossing beyond the top of creek bank.
3. Water main crossings shall include a valve beyond the top of creek bank on each side.
4. Water mains installed under and across creeks or ditches shall be designed according to the following:
 - a. Water mains with less than 4' of cover shall be protected by 3,600 psi concrete encasement a minimum of 10' past the top of the embankment on each side.
 - b. Trench backfill under creeks and ditches shall consist of flowable backfill in accordance with City standards.
 - c. Rock bottom creeks and ditches shall include a 6" concrete cap at the surface in accordance with City standards.
 - d. Bank stabilization shall be required at all crossings and shall consist of a pervious armored surface to resist scour and shear forces on all disturbed areas.

- E. Elevated Crossings – Elevated crossings for water and wastewater mains shall require approval of the City Engineer.

6.7. Corrosion Protection

- A. Corrosion protection should be considered on all RCCP and metal water mains that are 16" diameter or greater.
- B. All water and wastewater mains requiring a corrosion protection system shall be designed by a NACE certified professional engineer.

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SECTION 7 WATER DESIGN REQUIREMENTS

7.1. General

- A. Refer to **Section 6** for general requirements.

7.2. Water Main Location

- A. Water mains 12" and smaller shall be installed 4.5' from the back of the curb, as measured to the centerline of pipe.
- B. Water mains larger than 12" shall be installed in a dedicated water main easement or under street pavement.
- C. Water mains shall be designed to minimize bends and fittings and follow right-of-way or centerline alignment curves at a uniform distance from the right-of-way or centerline. Minimum horizontal or vertical radius for pipe shall be 1,150' which is equivalent to 1 degree of joint deflection.
- D. Dead end water mains shall extend a minimum of 5' beyond the edge of the pavement. If adjacent to a fitting, extend a minimum of 20' or one pipe joint beyond fitting.

7.3. Horizontal and Vertical Alignment

- A. A clearance of 18" should be maintained when crossing storm drain systems. Where minimum clearance cannot be achieved, water mains shall be encased in 6" of flowable fill in accordance with the standard detail. Steel casing pipe shall be used under all box culverts unless approved otherwise by the City Engineer.
- B. Lines 12" and smaller shall have a minimum cover of 4' as measured from the top of ground, edge of pavement, or top of curb, whichever is the greater depth.
- C. Lines larger than 12" shall have a minimum cover of 6' as measured from the top of ground, edge of pavement or top of curb, whichever is the greater depth.
- D. Water mains shall be designed as straight as possible following the existing or proposed grade at the minimum depth of cover. Bends shall be provided where vertical slope changes exceed 80% (or 3.25" per joint) of the manufacturer's recommended joint deflection.
- E. High points that trap air and restrict water flow shall be avoided and shall require air release valves on mains larger than 12-inches.

7.4. Separation Distance between Water and Wastewater Mains

- A. The separation distance between water mains and wastewater mains, manholes or other appurtenances is governed by Title 30 of the Texas Administrative Code, Part 1, [Chapter 290](#), Subchapter D, Rule 290.44(e) and [Chapter 217](#), Subchapter C, Rule 217.53(d).

7.5. Average Daily Water Demands

- A. Apart from project specific water demand and/or actual flow measurements, the values in **Table 7.1** shall be used when calculating the average daily water demands.

Table 7.1 – Average Daily Water Demands

Land Use	Design	Calculation
Apartment	2.5 persons/unit 120 gallons per person per day	300 gpd/unit
Residential/ Townhome	2.85 persons/unit 120 gallons per person per day	342 gpd/unit
Hospital (Beds)	350 gallons per day per bed	350 gpd/bed
Nursing Home or Other Institution (Beds)	180 gallons per day per bed	180 gpd/bed
Commercial/ Industrial/Office	1 person per parking space, or 1 person per 400 SF of building	35 gpd/person
School	30 gallons per student/day	30 gpd/student

*Minimum peaking factors used for projecting maximum daily demand and peak hourly demand shall be as follows or per TCEQ, whichever is greater:

- 1.9 for peaking from average day to maximum daily demand
- 1.25 for peaking from maximum day to peak hour

7.6. Water Main Sizing

- A. The following criteria shall be used to size water mains.

- Average daily water demands less than 80,000 gallons per day:
 - Single Family Residential
 - Water mains shall typically be a minimum of 8".
 - Water mains may be a minimum of 6" on a dead end main if:
 - A fire hydrant on the 6" main is no more than 100' from an 8" main and;
 - The 6" main is no longer than 250' off of an 8" main
 - Water mains may be a minimum of 4" on a dead end main if:
 - No fire hydrant is on the 4" main and;
 - The 4" main is no longer than 250' off of an 8" main
 - Water mains shall be a minimum of 12" along arterial streets.

- b. Multi-Family Residential/Mixed Use
 - i. Water mains shall be a minimum of 8" and shall be extended to provide service to adjacent properties.
 - ii. Water mains along collector streets may be required to be a minimum of 12" and shall be required to be a minimum of 12" along arterial streets.
 - iii. Looped systems (i.e. two separate water taps internally looped) are encouraged for multi-family residential developments.
- c. Commercial, Schools and Manufacturing
 - i. Water mains shall be a minimum of 8" and shall be extended to provide service to adjacent properties.
 - ii. Water mains shall be a minimum of 12" along collector and arterial streets.
- 2. Average daily water demands greater than 80,000 gallons per day shall submit the following information with the plans:
 - a. Zoning
 - b. Area in acres
 - c. Type of Development
 - d. Number of units and/or building square footage
 - e. Exhibit with connection locations and proposed water main schematic
 - f. Projected Average Daily Water Demands

7.7. Water Main Materials

- A. Polyvinyl Chloride (PVC) Pipe
 - 1. PVC water mains 4" to 24" shall typically be AWWA C900 DR18.
- B. Ductile Iron Pipe – Shall only be allowed with written approval from the City Engineer. Ductile iron pipe shall typically not be allowed in clay soils. Ductile iron water mains 16" in diameter and larger shall be in accordance with ANSI/AWWA C151/A21.50 with a minimum pressure class of 150 psi. It shall be the Engineer's responsibility to determine whether a higher pressure class is required.
- C. Other pipe materials shall only be allowed with written approval from the City Engineer.
- D. Pipe inside casing or direct bores shall be joint restrained or fused PVC.

- E. Fittings - All fittings shall be ductile iron and have mechanical restraints and concrete thrust blocking.
- F. Refer to Approved Material List for acceptable products.

7.8. Water Services

- A. Minimum requirements for water services are as follows:
 - 1. Minimum $\frac{3}{4}$ " meter and $\frac{3}{4}$ " services are required for all residential and commercial services. The size necessary shall be selected based on design calculations of actual demands.
 - 2. Bullhead connections are not permitted.
 - 3. Meters 2" and larger are required to be in a concrete vault with bypass.
 - 4. Domestic or irrigation service connections shall not be allowed on a fire hydrant lead or fire service line.
 - 5. A domestic or irrigation service connection shall not have any splices between the main and meter.
 - 6. A fire service line shall be a minimum of 6".
 - 7. Meter boxes shall be placed at the edge of the right-of-way or in a dedicated utility easement.
 - 8. Meter boxes shall not be allowed in sidewalks, driveways, parking lots, or places where traffic may run over them.
 - 9. Meters shall be placed generally 3' off the residential side lot line and have 10' separation from the wastewater service line according to the Standard Details.
 - 10. Refer to Approved Material List for acceptable products.

7.9. Valves

- A. Isolation Valves
 - 1. Isolation valves should typically be placed at intersection Tee's and Crosses and at every other fire hydrant Tee as required to meet 7.9.A.3.
 - 2. Isolation valves shall not be over 1,000' apart for lines 12" and smaller. For lines 16" and larger, valves shall not be over 3,000' apart.
 - 3. Two isolation valves shall be placed such that only one fire hydrant/fire fighting apparatus and one fire sprinkler private service system is shut down at a time. No more than three isolations valves shall be used to shut down the combined fire hydrant/fire fighting apparatus and fire sprinkler system private service main.

4. Intersection Tee's and Crosses should typically be surrounded by isolation valves unless approved otherwise by the City Engineer.
5. Water mains supplying an automatic fire sprinkler system shall include isolation valves on the private fire service main.
6. Isolation valves shall not be located in parking spaces or barrier free ramps.
7. Isolation valves shall be placed on either side of highway crossing, railroad crossings, creek crossing, or other similar crossing.

B. Air Release Valves

1. The Engineer shall be responsible for locating and sizing air release valves in accordance with AWWA Manual M51: Air-Release, Air/Vacuum & Combination Air Valve.
2. Air release valves shall be installed at the edge of the right-of-way or easement on water mains larger than 12". Vent pipes shall discharge air above grade and above 100-year floodplain elevation if applicable.
3. Air valves are not required on water distribution mains 12" and smaller where fire hydrants and service connections provide a means for venting trapped air.
4. Air valve manholes shall not be located in parking spaces.

C. Blowoff Valves

1. Blowoff valves shall be provided on water mains larger than 12", at low points.
2. Blowoff valves shall discharge to a drainage channel, creek, storm sewer or culvert. Direct connection of a discharge pipe shall not be made to a drainage inlet or storm sewer or culvert.

7.10. Fire Hydrants

A. Fire hydrants shall meet the following minimum guidelines:

1. Fire hydrants shall be installed at a minimum of 10' from the curb return on all streets.
2. Fire hydrants shall be installed at a minimum of 2' and a maximum of 6' from the edge of pavement on all streets.
3. Fire hydrants should be typically located at all main entrances and intersecting streets and fire lanes.
4. Fire hydrants shall be spaced every 500' along undeveloped roadways.
5. Fire hydrant leads exceeding 100' shall be a minimum 8" line.

6. Fire hydrants shall be provided every 500' and within 250' of the end of a cul-de-sac within residential developments as measured along the curb or edge of pavement.
7. Fire hydrants shall be provided every 300' and within 150' of the end of a cul-de-sac along commercial properties including apartments and townhomes.
8. The fire hydrant shall not be located in the sidewalk.
9. Fire hydrants location is subject to approval of the Fire Marshal.

7.11. Connections to Existing Water Mains

- A. Taps to water mains should be made with a pipe no larger than 75% of the size of the line being tapped.
- B. The smallest pipe connection to water mains 20" and larger is 12". For smaller service line connections, a reducer will be required. For multiple smaller service line connections, a 12" or smaller parallel public main may be required.

7.12. Backflow Prevention

- A. Backflow prevention devices shall be required at the following locations in order to protect the public water system from cross contamination:
 1. Commercial property water service lines
 2. Dedicated irrigation lines
 3. Private fire service main supplying fire sprinkler systems
 4. Multi-family residential water service lines

7.13. Automatic Flushing Valve

- A. Automatic Flush Valves shall be placed on dead-end water mains. Water mains anticipated to be extended in the future may be required to install an automatic flush valve, depending on the timing of future work and the specific location.
- B. Automatic Flush Valves shall drain to the storm drain system with an above ground air gap. Direct connection to the storm drain system is prohibited.
- C. Refer to Standard Detail for typical installation and Approved Material List for acceptable products.

7.14. Vaults

- A. Shop drawings shall be submitted for meter vaults, detector check vaults, and valve vaults for review and approval. Vaults shall be in accordance with the City's Standard Details and Approved Materials.
- B. All vaults shall have sloped bottoms towards a floor drain to remove water build up.

- C. The vault shall have a lockable aluminum door with an aluminum frame. The minimum opening size shall be 2 feet x 3 feet or large enough to adequately maintain the vault. Door and frame shall be in accordance with the Approved Materials

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SECTION 8 WASTEWATER DESIGN REQUIREMENTS

8.1. General

- A. Refer to **Section 6** for additional general wastewater design requirements.
- B. Design criteria for all wastewater systems shall comply with [TCEQ Chapter 217](#) (Design Criteria for Domestic Wastewater Systems), latest revision. Chapter 217 is included in Part 1 of Title 30 of the Texas Administrative Code.
- C. Wastewater mains shall be sized and extended through the limits of a development to serve adjacent properties.
- D. Inverted siphons shall not be allowed without written approval from the City Engineer.

8.2. Wastewater Main Location

- E. Wastewater mains serving subdivisions and commercial developments shall be located under street paving along the center of a travel lane.
- F. Wastewater mains shall not be located in side yard or back yard utility easements without written approval of the City Engineer.
- G. Wastewater mains located near open waterways shall follow the alignment of the waterway along the top of bank and be located a minimum of 15' beyond the top of bank within a minimum 25' easement. Wastewater manholes shall not be located in the flow line of an existing waterway.
- H. No wastewater main shall be located inside the storm sewer system.

8.3. Horizontal and Vertical Alignment

- A. Wastewater mains shall be designed as straight as possible between manholes.
- B. Wastewater mains running parallel with public right-of-ways shall match change in street direction. When streets have horizontal curvature of 1,150' radius or greater, curved sewers are acceptable to maintain parallel alignment.
- C. Minimum depth of cover for wastewater main shall be 4'.
- D. In general, the minimum depth for a wastewater main to serve a given residential property with a 4" lateral shall be 3' plus 1% times the length of the house lateral (the distance from the wastewater main to the center of the house). Thus, for a house 135' from the wastewater main, the depth would be $3' + 1\% \times 135' = 3.0 + 1.35 = 4.35'$. The depth of the flow line of the wastewater main should then be at least 4.35" below the elevation of the ground at the point where the service enters the house.
- E. No vertical bends or vertical curves shall be allowed between manholes.
- F. A clearance of 18" should be maintained when crossing storm drain systems. Where minimum clearance cannot be achieved, wastewater mains shall be encased in 6" of

flowable fill in accordance with the standard detail. Steel casing pipe shall be used under all box culverts unless approved otherwise by the City Engineer.

- G. A parallel wastewater main may be required for wastewater lateral connections on wastewater mains deeper than 12'.
- H. Wastewater mains shall be placed on such a grade that the velocity is not less than 2 fps or more than 10 fps at design peak flow. The following table of values may be used:

Table 8.1 – Minimum and Maximum Grades for Wastewater Mains*

Size of Pipe (inches)	Minimum Slope (Percent)	Maximum Slope (Percent)
6	0.50	12.35
8	0.34	8.40
10	0.25	6.23
12	0.20	4.88
15	0.15	3.62
18	0.12	2.83
21	0.10	2.30
24	0.08	1.93
27	0.07	1.65
30	0.06	1.43
33	0.06	1.26
36	0.05	1.12
39	0.04	1.01
>39	**	**

*The slopes were calculated using Manning's Equation and a roughness coefficient of 0.013.

**For lines larger than 39" in diameter, the slope shall be determined using the following equation.

$$V = \left(\frac{1.486}{n} \right) * (R^{2/3}) * (S^{1/2})$$

where:

- V = Velocity of flow in wastewater main (fps)
- n = Roughness coefficient of the wastewater
- R = Hydraulic radius of the wastewater main (ft), which is equal to the area of the flow divided by the wetted perimeter (R=A/P)
- S = Slope of the hydraulic gradient (ft/ft)

8.4. Separation Distance between Water and Wastewater Mains

- A. The separation distance between wastewater and water mains or other appurtenances is governed by Title 30 of the Texas Administrative Code, Part 1, Chapter 217, Subchapter C, Rule 217.53(d).
- B. Wastewater mains shall be installed in trenches separate from water mains.

8.5. Wastewater Flows

- A. If project specific wastewater flow projections or actual flow measurements are not available for a development, the criteria in **Table 8.2** shall be used to calculate average daily and peak wastewater flows. This criteria meets or exceeds the minimum requirements as set by TCEQ in Title 30 of the Texas Administrative Code, Part 1, Chapter 217, Subchapter C, Rule 217.32(a)(3).

Table 8.2 – Wastewater Flow Projections

Land Use	Design Factors	Average Daily Wastewater Flows	Peak Wastewater Flows*
Apartment	2.5 persons/unit 100 gallons per person per day	250 gpd/unit	1,000 gpd/unit
Residential/ Townhome	2.85 persons/unit 100 gallons per person per day	285 gpd/unit	1,140 gpd/unit
Hospital (Beds)	250 gallons per bed per day	250 gpd/bed	1,000 gpd/bed
Nursing Home or Other Institution (Beds)	125 gallons per day per bed	125 gpd/bed	500 gpd/bed
Commercial/ Industrial/Office	1 person per parking space, or 1 person per 400 s.f. of building 20 gallons per day/person	30 gpd/person	120 gpd/person
School	20 gallons per student/day	20 gpd/student	80 gpd/student

* Peak flow is based on a peaking factor of 4.0.

8.6. Wastewater Main Sizing

- A. Although the Wastewater System Master Plan may be used as a guide for sizing wastewater mains, sizing should be based on an engineering analysis of initial and future flow of the total drainage area to be served.
- B. Wastewater mains shall be sized to carry the ultimate peak flow at 100% of the full flow capacity of the pipe. A peaking factor less than 4 may be considered for wastewater mains with diameters 24" and larger with flow data provided to the City.
- C. Pipe capacity shall be calculated using Manning's equation. A roughness coefficient of 0.013 shall be used.

8.7. Wastewater Main Materials

- A. Polyvinyl Chloride (PVC) Wastewater Pipe
- B. PVC non-pressure rated gravity wastewater mains from 6" to 15" in diameter shall be SDR 35 (if less than 10' deep) or SDR 26 (if 10' or deeper) (ASTM D3034).
- C. PVC non-pressure rated gravity wastewater mains 18" in diameter and greater shall have a minimum pipe stiffness of 46 psi or 115 psi and be manufactured in accordance with ASTM F679 (solid wall).
- D. PVC pressure rated gravity wastewater mains and force mains shall be AWWA C900 DR25 with a minimum pressure rating of 165 psi. Plans shall call out the pipe color to be green.
- E. PVC profile wall pipe shall not be allowed.
- F. Fiberglass (Glass-Fiber-Reinforced Thermosetting Resin) Pipe
 - 1. Fiberglass non-pressure rated gravity wastewater mains 18" in diameter and greater shall be in accordance with ASTM D3262 with a minimum Stiffness Class (SN) of 46 (if less than 10' deep) or Stiffness Class (SN) of 72 (if 10' or deeper).
 - 2. Fiberglass pressure rated gravity wastewater mains and force mains 18" in diameter and greater shall be in accordance with ASTM D3754 with a minimum pressure rating of 150 psi.
- G. Vitrified clay pipe will not be allowed.

8.8. Wastewater Service Laterals

- A. The sizes and locations of laterals shall be designated as follows:
 - 1. Wastewater service laterals for single-family residential shall be a minimum of 4" diameter PVC SDR35 from the main to the right-of-way. Laterals shall typically be installed 2.5' from the lot line with a cleanout at the right-of-way that allows cleaning of the service from the main to the right-of-way. The wastewater service lateral shall have a minimum separation distance of 10' separation from the water service.
 - 2. Wastewater service laterals for multiple units, apartments, local retail, and commercial developments shall be a minimum of 6" in diameter.
 - 3. Wastewater service laterals for manufacturing and industrial shall be a minimum of 8".
 - 4. Manholes are required on 6" and larger wastewater service laterals where they connect to the main line unless approve otherwise by the City Engineer.
 - 5. Wastewater service laterals shall not be attached to wastewater mains that are deeper than 10' will require a deep wastewater service drop connection per City detail.

6. Each building shall have only one wastewater service lateral, except duplexes which shall have two wastewater service laterals independently attached to the main.
7. All mains installed for future developable areas shall include wastewater service laterals with cleanout at the right-of-way; the use of boots will not be permitted.
8. All wastewater service laterals crossing water mains shall conform to the requirements of the TCEQ Chapter 217, Subchapter C, Rule 217.53(d), latest revision.

8.9. Manholes and Cleanouts

- A. Manholes shall be installed at all changes in grade and direction, and have a maximum spacing of 500'.
- B. A manhole shall be located at the end of a wastewater main. Mainline cleanouts are not permitted unless approved otherwise by the City Engineer.
- C. Manholes on curved wastewater mains shall be located at the P.C. and P.T. of the curve and have a maximum spacing of 300' along the curve.
- D. Manholes shall be constructed of monolithic, cast-in-place concrete, precast concrete, or fiberglass.
- E. Manhole cones shall typically be concentric type and 36" tall unless otherwise approved by the City Engineer.
- F. The minimum elevation difference between any pipe flowline into a manhole and any pipe flowline out of a manhole shall be 0.1 feet except when setting a new manhole on an existing wastewater main.
- G. Manholes shall be sized as follows:
 1. 4' in diameter for 8", 10", and 12" pipe.
 2. 5' in diameter for 15", 18", 21", 24" and 27" pipe.
 3. 6' in diameter for 30" and 36" pipe.

These sizes are minimums and may require to be larger depending on the number of lines in or the angles between lines. There shall be a minimum of 12" separation between the OD's of the pipes on the inside of the manhole.

- H. Where manholes are required to be bolted and sealed, a vent shall be installed no more than every 1,500 or every third manhole. The vent shall be a minimum of 2' above the 100-year floodplain elevation or 6' above the adjacent ground line, whichever is higher. The Engineer shall provide the elevation of the 100-year floodplain on the profile.
- I. Construct manholes within 30' of each end of wastewater mains that are installed by other than open cut and within 30' of each end of aerial crossings.

- J. Public manholes shall not be located in parking lot parking spaces.
- K. A manhole with pipes of different sizes must have the tops of the pipes at the same elevation and flow channels in the invert sloped on an even slope from pipe to pipe.
- L. Public manhole covers shall have the City logo as shown in the City's standard details. Private manhole covers shall NOT have the City logo.

8.10. Wastewater Lift Stations

- A. Subdivisions shall be laid out so that all wastewater mains will be gravity flow. The use of a wastewater lift station must be approved by the City Engineer.
 - 1. All wastewater lift stations shall be designed in accordance with TCEQ Chapter 217
 - 2. The Engineer shall prepare an engineering design report for the wastewater lift station.
 - 3. The lift station shall be connected to the City Supervisory Control and Data Acquisition (SCADA) system. The Developer shall pay all costs associated with the SCADA including all labor, equipment, materials, and programming of the City's computer and testing. The SCADA equipment shall be installed by the City's preferred integrator for Computerized Monitoring and Control Specifications for Wastewater Lift Stations.
 - 4. Control panels shall be NEMA 4x rated with a sun shade as approved by the City, HOA switch, pump fail light, two pump alternator, time delay switch, and a runtime hour meter per pump. Control panels shall be installed on a stainless steel structure.
 - 5. The City may require a chemical injection system for odor control.
 - 6. The chemical tank shall have a thickened concrete foundation.
 - 7. If carbon filters are required, the housing shall be painted per the approval of the City Engineer.
 - 8. Lift stations with two or more wet wells shall include a sluice gate between each wet well.
 - 9. Each pump shall have two stainless steel guide rails.
 - 10. Pumps shall be controlled by transducers with backup floats.
 - 11. All lift stations shall include:
 - a. Lightning protection
 - b. Convenience outlet (GFI)
 - c. A yard light with Hand Off Auto (H-O-A) switch
 - d. Backup generator

12. For all pump stations, all pumps are required to have swinging check valves, breakers, and starters.
13. Plug valves and check valves shall be mounted in a separate vault next to the wet well.
14. Pumps over 5 hp shall be “soft start” pumps.
15. All lift stations shall include a landscaping and irrigation plan around the perimeter that shall be approved by the City.
16. All lift stations shall include an 8’ tall black vinyl chain link security fence with black privacy slats, black posts and rails, and a 16’ slide gate.

8.11. Force Mains

- A. Use green-colored pipe material.
- B. Wastewater force mains shall be PVC AWWA C900 DR 18, or as determined by the Engineer.
- C. Minimum size for force mains is controlled by TCEQ Chapter 217.
- D. Plug valves shall be installed every 1,000’ of force main.

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SECTION 9 AIRPORT DESIGN AND CONSTRUCTION REQUIREMENTS

9.1. General

- A. The Sherman Municipal Airport (KSWI) is an ARC B-II airport.
- B. Design criteria for the airport shall be consistent with all applicable FAA Advisory Circulars, FAA and TxDOT Aviation construction specifications and details.
- C. Construction will be in accordance with approved FAA and TxDOT construction specifications related to the proposed work on the airport.

9.2. Runway

- A. The Runway Design Code (RDC) will be for a B-II airport, with an approach reference code of B-II-5000.
- B. The pavement strength will equal or exceed the requirements for 19,000 lbs. single gear aircraft, or as shown on construction details or the FAA's minimum pavement section.
- C. Runway connectors will be designed per the current addition of AC150/5300 manual.
- D. Markings for are to be for a Non Precision runway.
- E. Lighting will be Medium Intensity Runway Lighting (MIRL).

9.3. Taxiway

- A. The Taxiway design criteria will be as shown for a Taxiway Design Group (TDG) II in the current addition of AC150/5300 manual.

9.4. Apron and Taxilane(s)

- A. These will be designed per the most restrictive aircraft classification which will use the facility. This will be determined by the City of Sherman Engineering department, based upon the proposed development, Airport Layout Plan (current or draft) and the need on the field.

9.5. Consultants

- A. To perform engineering work on the airport, the consultant will need to provide the City of Sherman Engineering Department a statement of qualifications. This statement will need to provide the following:
 - 1. At least two projects within the last 5 years successfully completed on a similar or higher classification airport.
 - 2. References for the projects.
 - 3. TxDOT planning contact for the projects.

4. An organization chart with the team members who will perform the work.
- B. The City will review for and notify the developer if the consultant meets the requirements for designing work on the airport.
- C. The Consultant will provide the project specifications as part of the plan review process to the City for review and comment.

9.6. Contractors

- A. Developers wanting to develop on the airport and are ready to engage a contractor, the developer will need to provide the following:
 1. At least two projects within the last 5 years successfully completed on a similar or higher classification airport.
 2. References for the projects.
 3. TxDOT construction contact for the projects.
 4. All sub-contractors and their resume of working on airports.
- B. The Engineering department will review the qualifications to ensure the contractor is with how to perform the work and manage airport safety, in accordance with FAA and TxDOT specifications. The City reserves the right to disallow any contractor or sub-contractor to work on the airport based upon past performance or reference checks.



City Council Regular Meeting

Agenda Item No. F.1.

Meeting Date: 6/3/2024

Prepared By: Linda Ashby, City Clerk

Approved By: Robby Hefton, City Manager

Caption:

RESOLUTION NO. 7313

Authorizing Execution of a Joint Election Agreement with Grayson County, Texas, to Hold a Special Election on September 14, 2024.

Issue:

To approve an agreement between the City of Sherman and Grayson County, Texas, for the administration of a Special Municipal Election on September 14, 2024, to fill the vacancy in the office of the City Council, District No. 1.

Background:

Deputy Mayor Shawn Teamann resigned from his City Council seat on May 17, 2024, creating a vacancy on the City Council until his term ends in November 2025. By law, the City must hold a Special Election to fill that seat for the remainder of his term.

Origination:

The request originated with the City Clerk's Office.

Financial Consideration:

A Special Election is estimated to cost approximately \$10,000.

Staff Recommendation:

It is the staff recommendation that the Council approve a contract with Grayson County to administer the Special Election.

Alternatives:

The City could hold their own Special Election.

Attachments:

1. Resolution No. 7313
2. Grayson County Contract - Special Election - September 2024

RESOLUTION NO. 7313

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SHERMAN, TEXAS, AUTHORIZING EXECUTION OF A JOINT ELECTION AGREEMENT WITH GRAYSON COUNTY, TEXAS, TO HOLD A SPECIAL ELECTION ON SEPTEMBER 14, 2024; FINDING AND DETERMINING THAT THE MEETING AT WHICH THIS RESOLUTION IS PASSED WAS NOTICED AND IS OPEN TO THE PUBLIC AS REQUIRED BY LAW.

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SHERMAN, TEXAS:

SECTION 1. That the Mayor be and is hereby authorized and directed, subject to all contract documents being properly completed and approved as to form and content by the City Attorney, to execute an agreement with Grayson County, Texas, to hold a special election on September 14, 2024, in accordance with the terms and provisions of the agreement attached hereto and made a part hereof for all purposes.

SECTION 2. That it is hereby officially found and determined that the meeting at which this resolution is passed is open to the public and that public notice of the time, place, and purpose of said meeting was given as required by law.

DULY PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF SHERMAN, TEXAS on this the 3rd day of June 2024.

CITY OF SHERMAN, TEXAS

BY: _____
DAVID PLYLER, MAYOR

ATTEST:

BY: _____
LINDA ASHBY, CITY CLERK

**APPROVED AS TO FORM
AND CONTENT:
THE LAW FIRM OF ABERNATHY,
ROEDER, BOYD & HULLETT, P.C.**

BY: _____
RYAN D. PITTMAN, CITY ATTORNEY

**City of Sherman
and
Grayson County Election Administration**

CONTRACT FOR ELECTION SERVICES- September 14, 2024 Election

BY THE TERMS OF THIS CONTRACT made and entered into by and between the City of Sherman, Texas (the "City") and the **ELECTIONS ADMINISTRATOR OF GRAYSON COUNTY** (the "EA"), pursuant to the authority in Subchapter D, Section 31.091, of Chapter 31, of the Texas Election Code, agree to the following terms in regard to administration of the City of Sherman Election to be held on September 14, 2024. The City named above will enter into a Joint Election Agreement under the authority of Section 271 of the Texas Election Code.

THIS AGREEMENT is entered into in consideration of the mutual covenants and promises hereinafter set out. IT IS AGREED AS FOLLOWS:

I. PRINCIPAL DUTIES AND SERVICES OF THE EA. The EA shall be responsible for performing the following duties and shall furnish the following services and equipment:

The EA shall arrange for appointment, notification, training and compensation of all presiding judges, clerks, supervisor of Central Count and judge of the Early Voting Ballot Board.

1. The EA shall be responsible for notification of each Election Day and Early Voting presiding judge and alternate judge of his or her appointment. Mail ballots will be processed as per applicable election code by a Ballot Board appointed by the EA.
2. Training will be provided for any workers that have no previous elections experience. The training will be held in standard procedures as set forth by the Secretary of State and will include training on the Election Systems and Software (ES&S) voting system and Votesafe electronic pollbooks.
3. Election judges shall be responsible for returning election supplies to the Grayson County Election Administrator's office located at 115 W. Houston St., Sherman, Texas. Compensation for the delivery of supplies will be \$25.00.
4. Each election judge shall receive \$12.00 per hour for services rendered. Each alternate judge shall receive \$11.00 and clerks shall receive \$10.00 per hour for services rendered. Members of the ballot board shall receive \$12.00 per hour for services rendered.

The EA shall procure, prepare, and distribute all election equipment and supplies.

1. The EA shall provide all lists of registered voters required for use on election day and for the early voting period required by law. The list of registered voters will be programmed on electronic pollbooks.
2. The EA shall prepare and arrange for the distribution of all election equipment and supplies required to hold an election.
3. The EA shall arrange for the use of all early voting and election day polling places.

The EA shall be appointed as the Early Voting Clerk by the entities.

1. The EA shall supervise and conduct early voting by mail and in person and shall secure personnel to serve as Early Voting Deputies.
2. Early Voting by personal appearance for the election shall be conducted during the time period and at the locations listed in Exhibit A attached and incorporated by reference into this contract.
3. All applications for an Early Voting mail ballot shall be received and processed by the Grayson County Elections Administrator's office located at 115 W. Houston St., Sherman, Texas 75090 or by email at votegrayson@co.grayson.tx.us or by fax to 903-891-4370. Applications for mail ballots received by the City shall immediately be faxed to

the EA for timely processing. The original application shall then be forwarded to the EA for proper retention.

The EA shall be responsible for establishing and operating Central Count to tabulate election results.

1. The EA shall prepare, test and run the County's Tabulation System in accordance with the statutory requirements.
2. The Public Logic and Accuracy Test of the electronic voting system shall be conducted by the EA and notice of the date shall be posted in a local newspaper.
3. Election night reports will be available to each entity after tabulation is completed. Early voting results will be released to each entity after 7 pm on Election Day if requested. Provisional ballots will be tabulated after election night in accordance with the law.
4. The EA shall prepare the unofficial canvass report after all results have been counted and will provide a copy of the unofficial canvass to each entity as soon as possible after all returns have been tallied.
5. The EA shall conduct a manual count as prescribed by Section 127.201 of the Texas Election Code and submit a report to the Secretary of State in a timely manner, unless waived by the Secretary of State.
6. The EA shall be the custodian of the voted ballots and shall retain all election materials for a period of 22 months pursuant to applicable election codes.

II. PRINCIPAL DUTIES AND SERVICES OF THE CITY. The City shall assume the following responsibilities:

- A. Prepare the election orders, resolutions, notices, official canvass and other pertinent documents for adoption by the appropriate office or body. They shall arrange for publication of their respective notices as required by law.
- B. If requested, shall provide the EA with an updated map and street index of its jurisdictions in an electronic or printed format.
- C. Provide the EA with the ballot layout and Spanish interpretation in an electronic format that can be transmitted via e-mail. Word format works best for programming purposes.
 1. Deliver to the EA as soon as possible, but no later than August 1, 2024, the official ballot wording for the September 14, 2024 Election.
 2. Approve the ballot format prior to the final printing and programming.
- D. Compensate the EA for any additional verified cost incurred in the process of running this election or for a manual count of this election, if required.
- E. Reimburse Grayson County for the entities' portion of the printing costs and programming of any and all related materials for ballots, early voting, election day voting, election kits, and for the ES&S voting machines. Agree to pay an administrative fee not to exceed ten percent (10%) of the City's portion of the total cost of the election.
- F. The EA will submit invoices to the City not later than 45 days after the election and the entities will submit payment within 45 days of receipt of the invoice. A cost estimate is set forth in Exhibit B attached and incorporated into this contract.
- G. In the event of a contested election, agree to provide competent legal counsel and representation for the EA and staff, covering any and all legal fees and costs as a result of this elections process.
- H. In the event of a recount, agrees to reimburse any expenses incurred by the EA's office not covered by the charges assessed to the person requesting the recount. This would include, but not be limited to the compensation costs of any Grayson County Election personnel required to work beyond regular office hours in order to conduct said recount of this election. The recount shall take place at the EA's office and the EA's office shall assist the Recount Supervisor and/or Recount Coordinator in the completion of the recount.

- I. If required by law, prepare and submit to the U.S. Department of Justice under the Federal Voting Rights Act of 1965, any required submissions on voting changes. (Submission to the Dept. of Justice is not required by law as of the signing of this contract.)

III. GENERAL PROVISIONS.

- A. The City agrees to save and hold harmless the EA from any and all claims arising out of the failure or omission of the City to perform its obligations under this contract.
- B. The EA agrees to save and hold harmless the City from any and all claims arising out of the failure or omission of the County and the EA to perform their obligations under this contract.
- C. Nothing contained in this contract shall authorize or permit a change in the officer with whom or the place at which any document or record relating to the September 14, 2024 Election is to be filed or the place at which any function is to be carried out, or any nontransferable functions specified under Section 31.096 of the Texas Election Code.
- D. Upon request, the EA shall provide copies of all invoices, cost reports and other charges incurred in the process of administering said election for the City.
- E. The EA shall file copies of this contract with the County Auditor and the County Treasurer of Grayson County, Texas.
- F. If either entity cancels their election pursuant to Section 2.05 of the Texas Election Code, they will not be liable for any further costs incurred by the EA in conducting the September 14, 2024 Election.

EXECUTED THIS _____ DAY OF _____, 2024.

City of Sherman

Grayson County Elections Administrator

Exhibit "A"

(Sites may be added if countywide polling places are utilized.)

EARLY VOTING

POLLING PLACE	ADDRESS	CITY
Grayson County Elections Administration	115 W. Houston St.	Sherman
DATE	DAY	TIME
August 28-30	Wednesday-Friday	8:00 am-5:00 pm
September 3-6	Tuesday-Friday	8:00 am-5:00 pm
September 9-10	Monday-Tuesday	8:00 am-5:00 pm

ELECTION DAY

POLLING PLACE	ADDRESS	CITY
Grayson County Elections Administration	115 W. Houston St.	Sherman
Faith Church	1800 N. FM 1417	Sherman
Municipal Building, Ballroom	405 North Rusk	Sherman
DATE	DAY	TIME
September 14	Saturday	7:00 am-7:00 pm

Ballot by mail applications may be submitted by mail to:

Grayson County Early Voting Clerk
115 W. Houston
Sherman, TX 75090

Or by e-mail: votegrayson@co.grayson.tx.us (If submitted by e-mail; original must be received by the office within 4 business days.)

Or by fax: 903-891-4370 (If submitted by e-mail; original must be received by the office within 4 business days.)

Last day to apply for Ballot by mail (Received, not Postmarked): **Tuesday, September 3, 2024.**

Exhibit “B”

Cost Estimate-September 2024

DESCRIPTION	AMOUNT
*Early Voting Workers (1 Judge; 1 Alt. Judge; 1 Clerk)	2,500.00
*Election Day Workers (1 Judge; 1 Alt. Judge; 1 Clerk)	500.00
*Voting Machine Rental (2 Ballot Marking Devices-same devices used early voting & Election Day)	500.00
*Scanner Rental (1 for early voting & 1 for Election Day)	600.00
*Polling Location Supplies-Early Voting & Election Day	100.00
*Equipment and Supply Delivery; Site Support	100.00
Mail Ballots, Ballot Processing and Ballot Board	200.00
Logic and Accuracy Testing, Electronic Media Rental and Election Results Tabulation	500.00
Programming for Electronic Voting Machines (ES&S)	1,500.00
SUBTOTAL	6,500.00
10% Administrative Fee	650.00
*If two entities hold a joint election these fees will be shared.	
ESTIMATE TOTAL	7,150.00



City Council Regular Meeting

Agenda Item No. F.2.

Meeting Date: 6/3/2024

Prepared By: Jana Garner, Grants Coordinator

Approved By: Robby Hefton, City Manager

Caption:

Resolution No. 7314

Authorizing Publication of the Proposed Final Statement/Action Plan for the Community Development Block Grant for Program Year 2024; Authorizing Submission of the Block Grant Application; Authorizing Execution of Certifications of Compliance in Connection with the Administration and Conduct of the Community Development Program for Program Year 2024

Issue:

Approval of the Program Year 2024 Community Development Block Grant Final Statement / Action Plan

Background:

Each year, the City of Sherman receives an entitlement grant (Community Development Block Grant) from the U.S. Department of Housing and Urban Development (HUD). We are required to prepare and submit an annual Action Plan, which is a description of the activities that will be undertaken during the coming year to address the needs of our low- and moderate-income and special needs citizens. This Action Plan is based on a five (5) year Consolidated Plan & Strategy developed by City staff and approved by the Sherman City Council. It serves as the City's long-term planning tool to address the identified needs of public housing, homelessness, and other non-housing community development needs and activities within the City of Sherman. For PY 2024, the City will allocate the majority of the funds towards parks improvement, substandard structure demolition, and public service activities. Over the past five (5) years, the City of Sherman's history of allocations for the Community Development Block Grant is as follows:

PY 2020 - \$366,740.00

PY 2021 - \$378,731.00

PY 2022 - \$335,940.00

PY 2023 - \$308,195.00

PY 2024 - \$311,097.00

Origination:

Finance Department

Financial Consideration:

The City of Sherman has been allocated \$311,097 in Community Development Block Grant funds from HUD to address our various community development needs for low- and moderate-income and special needs citizens during PY 2024.

Staff Recommendation:

It is staff recommendation that the Sherman City Council approve the resolution to adopt the PY 2024 Community Development Block Grant Final Statement/Action Plan as submitted.

Alternatives:

The Sherman City Council may change or re-appropriate these funds/allocations as they see fit.

Attachments:

1. Resolution No. 7314
2. Attachment A Final Statement Action Plan PY24

RESOLUTION NO. 7314

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SHERMAN, TEXAS, AUTHORIZING PUBLICATION OF THE PROPOSED FINAL STATEMENT/ACTION PLAN FOR THE COMMUNITY DEVELOPMENT BLOCK GRANT FOR PROGRAM YEAR 2024; AUTHORIZING SUBMISSION OF THE BLOCK GRANT APPLICATION; AUTHORIZING EXECUTION OF CERTIFICATIONS OF COMPLIANCE IN CONNECTION WITH THE ADMINISTRATION AND CONDUCT OF THE COMMUNITY DEVELOPMENT PROGRAM FOR PROGRAM YEAR 2024

WHEREAS, under the Housing and Community Development Act of 1974, as amended, the City of Sherman is eligible to receive an estimated \$311,097 for program year 2024, to be expended on eligible activities primarily benefiting low- and moderate-income families and special need populations; and

WHEREAS, the Community Development Block Grant regulations require the opportunity for citizen participation in the development of the final statement and authorizing of the expenditure of such funds; and

WHEREAS, after proper notice was posted in public places and published on the website of the City of Sherman, public hearings were held by said Community Development Staff to receive citizen participation and input on May 7, 2024, and June 3, 2024; and

WHEREAS, the City Council, after due consideration of the proposed Community Development Final Statement and of all matters raised at public meetings, is of the opinion that, unless public comment warrants revisions, said final statement should be submitted to the U.S. Department of Housing and Urban Development as the Community Development Application for the City of Sherman for Program Year 2024, in order to secure funding as provided herein;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SHERMAN, TEXAS:

SECTION 1. That the Community Development Final Statement, embodying those projects set forth on Attachment "A", attached hereto and made a part hereof for all purposes, is hereby approved and adopted as the Community Development Plan of the City of Sherman, Texas, for Program Year 2024.

SECTION 2. That the City Council of the City of Sherman hereby certifies and assures the U.S. Department of Housing and Urban Development that development of this application for funds under the Housing and Community Development Act of 1974, as amended, and the implementation of the Block Grant Program will be conducted in accordance with all applicable provisions of the "Assurances" as required.

SECTION 3. That the City Manager of the City of Sherman is hereby authorized to execute, on behalf of the City of Sherman, the "Certifications" set forth on Attachment "B", attached hereto and made a part hereof for all purposes. These Certifications concern compliance with certain guidelines, regulations, and policies in preparation of this application and in conducting the Community Development Program of the City of Sherman.

SECTION 4. That the City Manager of the City of Sherman is hereby authorized to submit, as the Chief Executive Officer of the City of Sherman, and on behalf of the City of Sherman, the Community Development Final Statement and a certified copy of this resolution and all attachments thereto to the U.S. Department of Housing and Urban Development, in application for funds available to the City of Sherman under the Housing and Community Development Act of 1974, as amended. Said application shall be made on forms required by the U.S. Department of Housing and Urban Development.

SECTION 5. That the City Manager of the City of Sherman is hereby authorized and designated to act as Chief Executive Officer in connection with this application, and is hereby authorized and directed to provide such additional information as may be required in connection with said application.

SECTION 6. That it is hereby officially found and determined that the meeting at which this resolution is passed is open to the public and that public notice of the time, place, and purpose of said meeting was given as required by law.

DULY PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF SHERMAN, TEXAS on this the 3rd day of June 2024.

CITY OF SHERMAN, TEXAS

BY: _____
DAVID PLYLER, MAYOR

ATTEST:

BY: _____
LINDA ASHBY, CITY CLERK

**APPROVED AS TO FORM
AND CONTENT:
THE LAW FIRM OF ABERNATHY,
ROEDER, BOYD & HULLETT, P.C.**

BY: _____
RYAN D. PITTMAN, CITY ATTORNEY

Attachment A

**CITY OF SHERMAN, TEXAS
FINAL STATEMENT/ACTION PLAN OF
COMMUNITY DEVELOPMENT OBJECTIVES
AND PROJECTED USE OF FUNDS FOR PROGRAM YEAR 2024**

GRANT NO: B-24-MC-48-0027

The City of Sherman has received notice from the U.S. Department of Housing and Urban Development (HUD) that its entitlement grant for the Community Development Program (CDBG) for program year 2024 is \$311,097.00. These funds will be available on October 1, 2024. Activities that directly benefit low- and moderate-income persons will be available citywide. Other activities which have an area benefit will only be available in areas of the city which are populated by a majority of low- and moderate-income persons. The City has met citizen participation requirements.

The City of Sherman's Consolidated Plan is a document which is required by the U.S. Department of Housing and Urban Development, and includes the following subjects: (1) Housing and Homeless Needs Assessment - A description of the jurisdiction's estimated housing needs for the ensuing five-year period; (2) Housing Market Analysis - A description of the significant characteristics of the jurisdiction's housing market, including supply, demand, condition and cost of housing and the housing stock and services available (i.e., public and assisted housing, homeless, elderly, frail elderly, persons with disabilities (mental/physical/developmental), persons with alcohol and other drug addictions, and persons with HIV/AIDS and related diseases; (3) Strategic Plan - A description of the five-year strategy and plan to address affordable housing, homelessness, other special needs and non-housing community development plan; and, (4) Action Plan - A description of the jurisdiction's one-year plan of activities to be undertaken during the coming year.

The overall goal of this community development planning and development program is to develop viable urban communities by providing suitable living environments and expanded economic opportunities, principally for low-moderate income persons and special need populations of the City of Sherman. Therefore, based on these objectives, the following use of funds is being proposed:

**COMMUNITY DEVELOPMENT PROGRAM ACTION PLAN
PROGRAM YEAR 2024**

DEMOLITION/CLEARANCE PROGRAM: \$88,000

A program to demolish vacant, substandard structures and clear property lots that pose a risk to health and safety.

HABITAT FOR HUMANITY: \$15,000

A program to provide external repairs to owner-occupied homes belonging to low- and moderate-income Sherman residents.

PARK IMPROVEMENT: \$106,996

A program to fund projects in parks within low- and moderate-income target areas and improve ADA accessibility in parks throughout the city of Sherman, promoting general health and wellness among the entire community. The focus will especially be to benefit those living in low-moderate income areas and those with disabilities.

PROGRAM ADMINISTRATION: \$54,439

- **BOYS & GIRLS CLUB OF SHERMAN, INC.: \$7,777**
Funds to be used to assist with the development and advancement of a teen program for those from low- and moderate-income households.
- **CASA OF GRAYSON COUNTY: \$7,777**
A program to train and support volunteer advocates and staff on process and procedures to advocate for foster children in Grayson County that have been abused or neglected.
- **CHILDREN'S ADVOCACY CENTER: \$7,777**
A program to provide high quality services to abused and traumatized children who, at one time, resided within the city limits of Sherman.
- **FOUR RIVERS OUTREACH: \$7,777**
A program that serves those who are overcoming their struggles with addiction by providing a men's residential 16-bed facility and a 12-month Life Renewal program. Recipients are those who, at one time, resided within the city limits of Sherman.

- **GRAND CENTRAL STATION: \$7,777**
A program to support nutrition, specifically food for low- and moderate-income Sherman residents.
- **GRAYSON COUNTY CRISIS CENTER: \$7,777**
A program of activities that will provide emergency assistance to homeless women and children of domestic violence who, at one time, resided within the city limits of Sherman.
- **TEXOMA FAMILY SHELTER, INC.: \$7,777**
A program of activities that will provide emergency assistance to homeless individuals and families, who at one time, resided within the city limits of Sherman.

PUBLIC SERVICE ACTIVITIES: \$46,662

- **CHILD & FAMILY GUIDANCE CENTER: \$7,777**
A program to provide counseling services for family dysfunction, alcohol and substance abuse, domestic violence, and sexual abuse for low- and moderate-income Sherman residents.
- **HOUSE OF ELI: \$7,777**
Funds will be used to house and assist young men, ages 18-21, who are aging out of foster care or being released from incarceration provide shelter, food, clothing, personal needs, and a family environment in which they can thrive.
- **MULTICULTURAL FAMILY CENTER: \$7,777**
Provide direct adult educational services to underserved immigrant population including ESL, Parenting, Family Literacy and Citizenship.
- **SHERMAN HOUSING AUTHORITY: \$7,777**
A program to address the problems of drug abuse and associated crime in public housing. Activities include increasing law enforcement services to stop the sale of illegal drugs in and around assisted housing, apprehend sellers of such drugs, and reduce crime in the assisted housing area.
- **TEXOMA AREA PARATRANSIT SYSTEM: \$7,777**
CDBG funds will pay for public transportation costs for eligible residents to access medical, nutrition, education, grocery, and other eligible activities.
- **UNITED WAY OF GRAYSON COUNTY: \$7,777**
Cradle to Workforce is to create safe neighborhood providers in low-income areas for our most vulnerable families who need flexible childcare schedules.

ALLOCATION FOR PROGRAM YEAR 2024:

\$311,097

The City of Sherman seeks, through the following program objectives, to improve housing conditions, neighborhood appearance, employment opportunities, and the overall quality of life for low and moderate-income citizens. No activities will be undertaken which cause involuntary displacement of persons.

CITY OF SHERMAN COMMUNITY DEVELOPMENT OBJECTIVES

1. Encourage citizen participation and input to obtain maximum public involvement in program activities.
2. Promote the general health and wellness of all members of the community through improved parks and recreational facilities in the low- and moderate-income target areas.
3. Improve the quality of life for Sherman residents with the removal of structures that create unsafe, unsanitary, and hazardous situations for the public.
4. Promote drug elimination programs for low- and moderate-income assisted housing families and households.
5. Provide support for provision of emergency shelter, food, and assistance to the homeless and those in danger of becoming homeless.
6. Assist in providing counseling services to youth and adults from low- and moderate-income families.
7. Assist in providing activities for children and teens from low- and moderate-income families.
8. Provide support for provision of shelter and assistance to men in overcoming addiction.
9. Provide services for abused and neglected children.

The Action Plan of Community Development Objectives and Projected Use of Funds for Program Year 2024 are available in the Finance Department of the City of Sherman. Any citizen or agency interested in commenting on this Final Statement of Objectives is invited to submit written comments c/o Jana Garner, Grants Coordinator, City of Sherman, P.O. Box 1106, Sherman, TX 75091-1106. Written comments must be received prior to 5:00 p.m. on July 5, 2024. Comments received will be included in the summary of citizen participation of this Plan.



City Council Regular Meeting

Agenda Item No. F.3.

Meeting Date: 6/3/2024

Prepared By: Wayne Lee, Director of Engineering

Approved By: Robby Hefton, City Manager

Caption:

*** RESOLUTION NO. 7315**

Authorizing Execution of a Professional Services Agreement with Huitt-Zollars, Inc. for the Lamberth & Shady Oaks Improvements

Issue:

To consider a Professional Services Agreement with Huitt-Zollars, Inc. for design and construction phase services for the Lamberth & Shady Oaks Improvements project.

Background:

Lamberth Road, within the design limits, is a narrow two-lane roadway with drainage ditches which connects the existing 4-lane divided Lamberth Road to the east and the newly constructed Lamberth Road to the west, which serves the ongoing Hickory Hill Planned Development. This design of Lamberth Road, will provide construction drawings to build the roadway to its ultimate 5-lane undivided minor arterial roadway section and provide the needed roadway capacity for the development to the west.

Shady Oaks Lane, within the design limits, is a narrow 2-lane asphalt with drainage ditches and connects to a 37-foot wide concrete curb and gutter street from approximately Shady Oaks Circle to Canyon Creek Drive. This design of Shady Oaks Lane will provide construction drawings to extend the 37-foot wide concrete curb and gutter street section from Shady Oaks Circle to Lamberth Road, providing increased capacity, safety, and interconnectivity to Pecan Grove Park amenities and events.

Origination:

Engineering Department

Financial Consideration:

Funding needed for this design and construction phase services contract is \$684,610.00.

Staff Recommendation:

It is recommended that the professional service agreement with Huitt-Zollars, Inc. be approved.

Alternatives:

As may be directed by City Council.

Attachments:

1. Resolution No. 7315
2. Agreement - Signed
3. Location Map

RESOLUTION NO. 7315

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SHERMAN, TEXAS, AUTHORIZING EXECUTION OF A PROFESSIONAL SERVICES AGREEMENT WITH HUITT-ZOLLARS, INC. FOR THE LAMBERTH & SHADY OAKS IMPROVEMENTS; FINDING AND DETERMINING THAT THE MEETING AT WHICH THIS RESOLUTION IS PASSED WAS NOTICED AND IS OPEN TO THE PUBLIC AS REQUIRED BY LAW.

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SHERMAN, TEXAS:

SECTION 1. That the City Manager be and is hereby authorized and directed, subject to all contract documents being properly completed and approved as to form and content by the City Attorney, to execute a Professional Services Agreement with Huitt-Zollars, Inc. for the Lamberth & Shady Oaks Improvements, in accordance with all contract documents attached hereto and made a part hereof for all purposes.

SECTION 2. That it is hereby officially found and determined that the meeting at which this resolution is passed is open to the public and that public notice of the time, place, and purpose of said meeting was given as required by law.

DULY PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF SHERMAN, TEXAS on this the 3rd day of June 2024.

CITY OF SHERMAN, TEXAS

ATTEST:

BY: _____
LINDA ASHBY, CITY CLERK

BY: _____
DAVID PLYLER, MAYOR

**APPROVED AS TO FORM AND
CONTENT:
THE LAW FIRM OF ABERNATHY,
ROEDER, BOYD & HULLETT, P.C.**

BY: _____
RYAN D. PITTMAN, CITY ATTORNEY

AGREEMENT
BETWEEN
THE CITY OF SHERMAN, TEXAS AND
HUITT-ZOLLARS, INC.
FOR
PROFESSIONAL SERVICES

Made as of the _____ day of _____, 2024

Between City: **The City of Sherman, Texas**
 220 W. Mulberry Street
 Sherman, Texas 75090
 Telephone: (903) 892-7208

and Consultant: **Huitt-Zollars, Inc.**
 1800 Teague Drive, Suite 100
 Sherman, Texas 75090
 Telephone: (903) 328-2090
 Facsimile: (903) 328-2089

for the following Project: **3113 - Lamberth & Shady Oaks Improvements**

THIS AGREEMENT ("Agreement") is made and entered into by and between the City of Sherman, Texas, a home-rule municipality ("City"), and Huitt-Zollars, Inc., a Texas corporation ("Consultant"), to be effective from and after the date as provided above. City and Consultant are at times each referred to herein as a "party" or collectively as the "parties."

WHEREAS, City desires to engage Consultant to provide professional civil engineering services for the 3113 - Lamberth & Shady Oaks Improvements Project ("Project"); and

WHEREAS, Consultant desires to render such professional services ("Services") for City on the terms and conditions provided herein.

NOW, THEREFORE, KNOW ALL PERSONS BY THESE PRESENTS:

That for and in consideration of the covenants contained herein, for the mutual benefits to be obtained hereby and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

ARTICLE 1 CONSULTANT'S SERVICES

- 1.1 **Employment of Consultant** – City hereby agrees to retain Consultant to perform the Services in connection with the Project. Consultant agrees to perform the Services in accordance with the terms and conditions of this Agreement. Consultant further agrees that if any employee of Consultant who is performing the day-to-day Services under this Agreement for the Project is separated, for any reason, from employment with Consultant, Consultant shall provide City with written notice thereof at least five (5) business days' prior to said separation unless circumstances reasonably warrant a shorter notice period, which shall not exceed two (2) business days following the separation.
- 1.2 **Scope of Services** – The parties agree that Consultant shall perform the Services as are set forth and described in **Exhibit A**, attached hereto and incorporated herein by reference for all purposes ("**Scope of Services**"). The parties understand and agree that deviations or modifications to the Scope of Services described in **Exhibit A**, in the form of a written amendment to this Agreement, may be authorized from time to time by City ("**Amendment(s)**").
- 1.2.1 **Requirement of Written Amendment** – "Extra" work, "claims" invoiced as "extra" work or "claims" which have not been issued as a duly executed, written Amendment by the Sherman Director of Engineering or designee will not be authorized for payment and/or shall not become part of this Agreement. A duly executed, written Amendment requiring additional funding of \$50,000 or more of the original contract amount shall be preceded by the Sherman City Council's authorization for the Sherman City Manager to execute said Amendment.
- 1.2.2 **CONSULTANT SHALL NOT PERFORM ANY "EXTRA" WORK AND/OR ADDITIONAL SERVICES WITHOUT A DULY EXECUTED, WRITTEN AMENDMENT ISSUED BY THE CITY OF SHERMAN.**
- 1.3 **Schedule of Work** – Consultant agrees to commence work immediately on the execution of this Agreement, and to proceed diligently with said work to completion as described in the Project Engineering Budget Summary, attached hereto as **Exhibit B** and incorporated herein by reference for all purposes.
- 1.4 **Standard of Care** – Consultant shall perform the Services required hereunder in accordance with the prevailing engineering standard of care by exercising the skill and care ordinarily utilized by engineers performing the same or similar services under the same or similar circumstances in the State of Texas.

ARTICLE 2 CITY'S RESPONSIBILITIES

City shall do the following in a timely manner so as not to delay the Services of Consultant:

- 2.1 **Project Data** – City shall furnish required information that is reasonably requested by Consultant and that City has in its possession at the time of Consultant's request, as expeditiously as necessary for the orderly progress of the Project, and Consultant shall be entitled to rely upon the accuracy and completeness of the information furnished by City under this Article 2.1.
- 2.2 **City Project Manager** – When necessary in City's sole discretion, City shall designate a representative authorized to act on City's behalf with respect to the Project ("Project Manager"). City, the Project Manager and/or his or her authorized designee shall examine the documents submitted by Consultant and shall render any required decisions pertaining thereto as soon as practicable to avoid unreasonable delay in the progress of Consultant's Services.

ARTICLE 3 CONSULTANT'S COMPENSATION

- 3.1 **Compensation for Consultant's Services** – As described in "Article 1, Consultant's Services" of this Agreement, compensation for this Project shall be:
(a) for Basic Services, on a lump sum basis or an hourly (time and material) basis in an amount not to exceed **Five Hundred Sixty-Six Thousand Three Hundred Ten Dollars (\$566,310)** ("Consultant's Fee"); and (b) paid in accordance for Special Services, on a lump sum basis or an hourly (time and material) basis, in an amount not to exceed **One Hundred Eighteen Thousand Three Hundred Dollars (\$118,300)** (collectively, "Consultants Fee"); and (c) paid in accordance with this Article 3 and the Project Engineering Budget Summary as set forth in Exhibit B.
- 3.1.1 **Completion of Record Documents** – City and Consultant agree that the completion of Record Documents and/or "As-Built" Documents, including hard copy formatting and electronic formatting, shall be completed, submitted to, and accepted by City prior to payment. Completion of the Record Documents and/or "As-Built" documents shall be included in the Consultant's Fee and considered to be within the Scope of Services defined under this Agreement." The electronic formatting shall be consistent with the standards established in Exhibit C, Guidelines for Computer Aided Design and Drafting ("CADD"), which is attached hereto and incorporated herein by reference for all purposes.
- 3.1.2 **Disputes between City and Construction Contractor** – If the Project involves Consultant performing Construction Administration Services relating to an agreement between a Construction Contractor ("Contractor") and City, and on receipt of a written request by City, Consultant shall

research previous and existing conditions of the Project, and make a determination whether or not to certify that sufficient cause exists for City to declare Contractor in default of the terms and conditions of the Agreement. Consultant shall submit his findings in writing to City, or submit a written request for a specific extension of time (including the basis for such extension), within fifteen (15) calendar days of receipt of the written request from City. City and Consultant agree that if requested by City, completion of this task shall be included in the Consultant's Fee and considered to be within the Scope of Services as defined under this Agreement.

3.1.3 **Consultation and Approval by Governmental Authorities and Franchised Utilities** – Consultant shall be solely responsible for identifying and analyzing the requirements of governmental agencies and all franchise utilities involved with the Project, and for consulting with such agencies and utilities to obtain all necessary approvals and/or permissions. Consultant shall be responsible for preparation and timely submittal of documents required for review, approval and/or recording by such agencies and/or utilities. Consultant shall be solely responsible for making such changes in the construction documents ("Construction Documents") as may be required by existing written standards promulgated by such agencies and/or utilities at no additional charge to City.

3.2 **Direct Expenses** – Direct Expenses ("Direct Expenses") are included in Consultant's Fee as described in Article 3.1 of this Agreement and include actual reasonable and necessary expenditures made by Consultant and Consultant's employees and subcontractors in the interest of the Project. All submitted Direct Expenses are to be within the amounts as stated in the Project Engineering Budget Summary set forth in Exhibit B, and consistent with Exhibit D, Guidelines for Direct Expenses; General and Administrative Markup; Travel and Subsistence Expenses, which is attached hereto and incorporated herein by reference for all purposes. Consultant shall be solely responsible for the auditing and accuracy of all Direct Expenses, including those of its subcontractors, prior to submitting to City for reimbursement. Any over-payment by City for errors in submittals for reimbursement may be deducted from Consultant's subsequent payment for Services; provided, however, that this shall not be City's sole and exclusive remedy for said over-payment.

3.3 **Additional Services** – Consultant shall provide the Services as described in the Scope of Services set forth in **Exhibit A** of this Agreement. If authorized in writing by City, Consultant shall provide additional services, to be compensated as provided in an Amendment to the Contract on a cost not to exceed sum or hourly basis in accordance with this paragraph ("Additional Services") and a mutually agreed estimate of man-hours and expenses. These services may include, but are not limited to:

3.3.1 Additional meetings, hearings, work-sessions or other similar presentations

which are not provided for or contemplated in the Scope of Services described in **Exhibit A**.

- 3.3.2 Additional drafts and revisions to the Project which are not provided for or contemplated in the Scope of Services as described in **Exhibit A**.
- 3.3.3 Additional copies of final reports and construction plans which are not provided for or contemplated in the Scope of Services as described in **Exhibit A**.
- 3.3.4 Photography, professional massing models which are not provided for or contemplated in the Scope of Services as described in **Exhibit A**.
- 3.3.5 Compensation for Additional Services authorized by City shall be in addition to Consultant's Fee and shall be based on direct billable labor rates and expenses.
- 3.3.6 Compensation for Additional Services authorized by City shall be in addition to Consultant's Fee and shall be based on an hourly basis according to the following personnel rates. The rates set forth in this chart are subject to reasonable change provided prior written notice of said change is given to and approved by City.

Huitt-Zollars 2024 Hourly Rate Sheet

Position	Hourly Rate
Principal	\$325.00
Sr. Project Manager	\$285.00
QA Manager	\$300.00
Sr. Structural Engineer	\$270.00
Sr. Civil Engineer	\$250.00
Civil Engineer	\$200.00
Structural Engineer	\$200.00
EIT	\$155.00
Sr. Landscape Architect	\$195.00
Landscape Architect	\$155.00
Landscape Architect Intern	\$115.00
Sr. CADD Technician	\$160.00
CADD Technician	\$110.00
Survey Manager	\$240.00
Sr. Project Surveyor	\$200.00
Project Surveyor	\$150.00
Survey Technician	\$120.00
1-Person Survey Crew	\$120.00
2-Person Survey Crew	\$180.00

Construction Manager	\$200.00
Resident Engineer	\$155.00
Sr. Resident Project Representative	\$200.00
Resident Project Representative	\$160.00
Sr. Project Support	\$1115.00
Project Support	\$100.00

Reimbursable Expenses

Consultants	Cost + 10%
Other Direct Costs	Cost + 10%
Mileage	IRS Standard Business Mileage Rate

- 3.4 **Invoices** – No payment to Consultant shall be made until Consultant tenders an invoice to City. Consultant shall submit monthly invoices for Services rendered, based upon the actual percentage of work complete at the time the invoice is prepared, or shall submit invoices to City immediately upon completion of each individual task listed in **Exhibit B**. On all submitted invoices for Services rendered, Consultant shall include appropriate background materials to support the submitted charges on said invoice. Upon request, such background material may include, but is not limited to, employee timesheets, invoices for work obtained from other parties, and receipts and/or log information relating to Direct Expenses. All invoices shall provide a summary methodology for administrative markup and/or overhead charges.
- 3.5 **Timing of Payment** – City shall make payment to Consultant for said invoices within thirty (30) days following receipt and acceptance thereof. The parties agree that payment by City to Consultant is considered to be complete upon mailing of payment by City. Furthermore, the parties agree that the payment is considered to be mailed on the date that the payment is postmarked.
- 3.6 **Disputed Payment Procedures** – In the event of a disputed or contested billing by City, only that portion so contested may be withheld from payment, and the undisputed portion will be paid. City shall notify Consultant of a disputed invoice, or portion of an invoice, in writing by the twenty-first (21st) calendar day after the date City receives the invoice. City shall provide Consultant an opportunity to cure the basis of the dispute. If a dispute is resolved in favor of Consultant, City shall proceed to process said invoice, or the disputed portion of the invoice, within the provisions of **Article 3.5** of this Agreement. If a dispute is resolved in favor of City, Consultant shall submit to City a corrected invoice, reflecting any and all payment(s) of the undisputed amounts, documenting the credited amounts, and identifying outstanding amounts on said invoice to aid City in processing payment for the remaining balance. Such revised invoice shall have a new invoice number, clearly referencing the previous submitted invoice. City agrees to exercise reasonableness in contesting any billing or portion thereof that has background materials supporting the submitted charges.

- 3.7 **Failure to Pay** – Failure of City to pay an invoice, for a reason other than on written notification as stated in the provisions of Article 3.6 of this Agreement, to Consultant within sixty (60) days from the date of the invoice shall grant Consultant the right, in addition to any and all other rights provided, to, upon written notice to City, suspend performance under this Agreement, and such act or acts shall not be deemed a breach of this Agreement. However, Consultant shall not suspend performance under this Agreement prior to the tenth (10th) calendar day after written notice of suspension was provided to City, in accordance with Chapter 2251, Subchapter “D” of the TEX. GOV’T CODE. City shall not be required to pay any invoice submitted by Consultant if Consultant breached any provision(s) herein.
- 3.8 **Adjusted Compensation** – If the Scope of the Project (“Scope of the Project”) or if the Services are materially changed due to no error by Consultant in the performance of Services under this Agreement, the amounts of Consultant’s compensation shall be equitably adjusted as approved by City in its sole discretion. Any additional amounts paid to Consultant as a result of any material change to the Scope of the Project shall be authorized by written Change Order duly executed by both parties before the Services are performed.
- 3.9 **Project Suspension** – If the Project is suspended or abandoned in whole or in part for more than three (3) months, Consultant shall be entitled to compensation for any and all work completed to the satisfaction of City in accordance with the provisions of this Agreement prior to suspension or abandonment. In the event of such suspension or abandonment, Consultant shall deliver to City all finished or unfinished documents, data, studies, drawings, maps, models, reports, photographs and/or any other items prepared by Consultant in connection with this Agreement prior to Consultant receiving final payment. If the Project is resumed after being suspended for more than three (3) months, Consultant’s compensation shall be equitably adjusted as approved by City. Any additional amounts paid to Consultant after the Project is resumed shall be agreed upon in writing by both parties before the services are performed.
- 3.10 **Fixed Budget Limit for Construction Cost** - If a fixed budget limit for the Construction Cost has been established, the Consultant shall be permitted to make reasonable adjustments in the scope of the Project and to include alternate bid items in the Bid Proposal to adjust the Construction Cost to the fixed limit. However, this paragraph shall not operate to increase the fixed budget limit of the Construction Cost established in this Agreement. All adjustments in the Scope of the Project shall be approved by the City and documented in writing. Should the lowest bona fide bid for construction of the Project be in excess of 130% of **\$6,790,000.00** due to the negligence or other fault of the Consultant, the City may (1) give written approval of an increase in such fixed limit, (2) authorize rebidding or re-negotiating of the Project, (3) terminate the Project and this Agreement in accordance herewith, or (4), require that the Consultant adjust the Project scope

or quality, or both, as necessary to reduce the Construction Cost to within the budgetary constraints. In the case of (4) the Consultant, without additional charge to the City, shall consult with the City and shall revise and modify the drawings and specifications as necessary to achieve compliance with the fixed limitation on Construction Cost. These revisions and modifications may include splitting the Project into multiple Construction Phases that will fall within budget constraints. The Consultant shall provide the services defined in Exhibit A, as required, for each of the new phases created by splitting the Project.

ARTICLE 4 OWNERSHIP OF DOCUMENTS

- 4.1 **Documents Property of City** – The Project is the property of City, and Consultant may not use the documents, plans, data, studies, surveys, drawings, maps, models, reports, photographs and/or any materials for any other purpose not relating to the Project without City's prior written consent. City shall be furnished with such reproductions of the Project, plans, data, documents, maps, and any other information as defined in **Exhibit A**. Upon completion of the work, or any earlier termination of this Agreement under **Article 3** and/or **Article 8** of this Agreement, Consultant will revise plans, data, documents, maps, and any other information as defined in **Exhibit A** to reflect changes while working on the Project through the date of completion of the work, as solely determined by City, or the effective date of any earlier termination of this Agreement under **Article 3** and/or **Article 8** of this Agreement, and promptly furnish the same to City in an acceptable electronic format. All such reproductions shall be the property of City who may use them without Consultant's permission for any purpose relating to the Project, including, but not limited to, completion of the Project, and/or additions, alterations, modifications, and/or revisions to the Project. Any reuse of the documents not relating to the Project shall be at City's own risk.
- 4.2 **Documents Subject to Laws Regarding Public Disclosure** – Consultant acknowledges that City is a governmental entity and that all documents, plans, data, studies, surveys, drawings, maps, models, reports, photographs and/or any items prepared or furnished by Consultant (and Consultant's professional associates and/or sub-consultants) under this Agreement are instruments of service in respect of the Project and property of City. Upon completion of the Project, all of the documents, plans, data, studies, surveys, drawings, maps, models, reports, photographs and/or any items prepared or furnished by Consultant (and Consultant's professional associates and/or sub-consultants) shall thereafter be subject to the Texas Public Information Act (Chapter 552, TEX. GOV'T CODE, as amended) and any other applicable laws requiring public disclosure of the information contained in said documents.

ARTICLE 5 CONSULTANT'S INSURANCE REQUIREMENTS

- 5.1 **Required General Liability Insurance** – Consistent with the terms and provisions of **Exhibit E**, Contractor Insurance Guidelines, which is attached hereto and incorporated herein by reference for all purposes, Consultant shall procure and maintain throughout the term of this Agreement, at no expense to City, a general liability insurance policy with a company that maintains a minimum rating of “A” by A.M. Best’s Key Rating Guide, or other equivalent rating service(s), and is authorized to transact business in the State of Texas, in an amount not less than One Million and 00/100 Dollars (\$1,000,000.00) for each occurrence, and Two Million and 00/100 Dollars (\$2,000,000.00) in the aggregate. Such policy shall name City, its officers, agents, representatives, and employees as additional insureds as to all applicable coverage. Such policy shall provide for a waiver of subrogation against City for injuries, including death, property damage, or any other loss to the extent that same is covered by the proceeds of the insurance. Such policy shall require the provision of written notice to City at least thirty (30) days prior to cancellation, non-renewal or material modification of any policies, evidenced by return receipt or United States Certified Mail. Consultant shall furnish City with certificates and required endorsement(s) evidencing such coverage prior to commencing work on the Project.
- 5.2 **Required Professional Liability Insurance** – Consistent with the terms and provisions of **Exhibit E**, Consultant shall procure and maintain throughout the term of this Agreement, at no expense to City, a professional liability (errors and omissions) insurance policy with a company that maintains a minimum rating of “A” by A.M. Best’s Key Rating Guide, or other equivalent rating service(s), and is authorized to transact business in the State of Texas, in an amount not less than One Million and 00/100 Dollars (\$1,000,000.00) for each claim, and Two Million and 00/100 Dollars (\$2,000,000.00) in the aggregate. Such policy shall require the provision of written notice to City at least thirty (30) days prior to cancellation, non-renewal or material modification of any policies, evidenced by return receipt or United States Certified Mail. Consultant shall furnish City with certificates and required endorsement(s) evidencing such coverage prior to commencing work on the Project.
- 5.3 **Required Workers Compensation Insurance** – Consistent with the terms and provisions of **Exhibit E**, Consultant shall procure and maintain throughout the term of this Agreement, at no expense to City, all Statutory Workers Compensation Insurance as required by the laws of the State of Texas. Such insurance policy shall be with a company that maintains a minimum rating of “A” by A.M. Best’s Key Rating Guide, or other equivalent service(s), and is authorized to transact business in the State of Texas. Such policy shall require the provision of written notice to City at least thirty (30) days prior to cancellation, non-renewal or material modification of any policies, evidenced by return receipt or United States Certified Mail. Consultant shall furnish City with certificates and required endorsement(s) evidencing such coverage prior to commencing work on the Project.
- 5.4 **Circumstances Requiring Umbrella Coverage or Excess Liability Coverage** – If the Project’s size and scope warrant, and if identified on the checklist located in **Exhibit E**, Consultant shall procure and maintain throughout the term of this

Agreement, at no expense to City, an umbrella coverage or excess liability coverage insurance policy with a company that maintains a minimum rating of "A" by A.M. Best's Key Rating Guide, or other equivalent rating service(s), and is authorized to transact business in the State of Texas, in an amount of Two Million and 00/100 Dollars (\$2,000,000.00). Such policy shall require the provision of written notice to City at least thirty (30) days prior to cancellation, non-renewal, or material modification of any policies, evidenced by return receipt or United States Certified Mail. Consultant shall furnish City with certificates and required endorsement(s) evidencing such coverage prior to commencing work on the Project.

ARTICLE 6 CONSULTANT'S ACCOUNTING RECORDS

Records of Direct Expenses and expenses pertaining to services performed in conjunction with the Project shall be kept on the basis of generally accepted accounting principles. Invoices will be sent to City as indicated in Article 3.4 of this Agreement. Copies of employee time sheets, receipts for direct expense items and other records of Project expenses will be made available if requested.

ARTICLE 7 AUDITS AND RECORDS/VENDOR DISCLOSURE

Consultant agrees that at any time during normal business hours and as often as City may deem necessary, Consultant shall make available to representatives of City for examination all of its records with respect to all matters covered by this Agreement, and will permit such representatives of City to audit, examine, copy and make excerpts or transcripts from such records, and to make audits of all contracts, invoices, materials, payrolls, records of personnel, conditions of employment and other data relating to all matters covered by this Agreement, and for a period of four (4) years from the date of final settlement of this Agreement or for such other or longer period, if any, as may be required by applicable statute or other lawful requirement.

Consultant agrees that it is further aware of the vendor disclosure requirements set forth in Chapter 176, TEX. LOC. GOV'T CODE, as amended, and will abide by the same. In this connection, a lawful representative of Consultant shall execute and deliver to City the Conflict of Interest Questionnaire, Form CIQ, attached hereto as Exhibit F and incorporated herein for all purposes, no later than the Effective Date of this Agreement.

ARTICLE 8 TERMINATION OF AGREEMENT/REMEDIES

City may, upon thirty (30) days written notice to Consultant, terminate this Agreement, for any reason or no reason at all, before the termination date hereof, without prejudice to any other remedy it may have. If City terminates this Agreement due to a default of and/or breach by Consultant and the expense of finishing the Project exceeds Consultant's Fee at the time of termination, Consultant waives its right to any portion of Consultant's Fee as set forth in Article 3 of this Agreement and agrees to pay any costs over and above the fee which City is required to pay in order to finish the Project. On any default and/or breach by Consultant, City may elect not to terminate the Agreement, and in such event, it may make good the deficiency in which the default consists, and deduct the costs from Consultant's Fee due Consultant as set forth in Article 3 of this Agreement. If City terminates this Agreement and Consultant is not in default of the Agreement, Consultant shall be entitled to compensation for any and all work completed to the satisfaction of City in accordance with the provisions of this Agreement prior to termination.

In the event of any termination, Consultant shall deliver to City all finished and/or unfinished documents, data, studies, surveys, drawings, maps, models, reports, photographs and/or any items prepared by Consultant in connection with this Agreement prior to Consultant receiving final payment.

The rights and remedies provided by this Agreement are cumulative, and the use of any one right or remedy by either party shall not preclude or waive its rights to use any or all other remedies. These rights and remedies are given in addition to any other rights the parties may have by law, statute, ordinance, or otherwise.

ARTICLE 9 DISPUTE RESOLUTION/MEDIATION

In addition to all remedies at law, the parties may agree to attempt to resolve any controversy, claim or dispute arising out of or relating to the interpretation or performance of this Agreement, or breach thereof, by voluntary mediation to be conducted by a mutually acceptable mediator. However, if both parties do not agree to voluntarily mediate any such controversy, claim or dispute, mediation shall not be required.

ARTICLE 10 INDEMNITY

CONSULTANT SHALL RELEASE, DEFEND, INDEMNIFY AND HOLD HARMLESS CITY AND ITS CITY COUNCIL MEMBERS, OFFICERS, AGENTS, REPRESENTATIVES AND EMPLOYEES (COLLECTIVELY REFERRED TO AS "CITY") FOR PURPOSES OF THIS ARTICLE 10) FROM AND AGAINST ALL DAMAGES, INJURIES (WHETHER IN CONTRACT

OR IN TORT, INCLUDING PERSONAL INJURY AND DEATH), CLAIMS, PROPERTY DAMAGES (INCLUDING LOSS OF USE), LOSSES, DEMANDS (REGARDLESS OF WHETHER THE ALLEGATIONS ARE FALSE, FRAUDULENT OR GROUNDLESS), SUITS, ACTIONS, JUDGMENTS, LIENS, COSTS AND EXPENSES, INCLUDING REASONABLE ATTORNEY'S FEES AND EXPENSES (INCLUDING ATTORNEY'S FEES AND EXPENSES INCURRED IN ENFORCING THIS ARTICLE 10), THAT IN WHOLE OR IN PART ARISE OUT OF OR ARE CONNECTED WITH, OR THAT ARE ALLEGED TO HAVE ARISEN OUT OF OR CONNECTED WITH, GOODS AND/OR SERVICES PROVIDED BY CONSULTANT, ITS OFFICERS, AGENTS, REPRESENTATIVES, EMPLOYEES, SUBCONTRACTORS, LICENSEES, INVITEES OR ANY OTHER THIRD PARTIES FOR WHOM CONSULTANT IS LEGALLY RESPONSIBLE (COLLECTIVELY REFERRED TO AS "CONSULTANT" FOR PURPOSES OF THIS ARTICLE 10) PURSUANT TO THIS AGREEMENT AND/OR THE NEGLIGENT, GROSSLY NEGLIGENT AND/OR INTENTIONAL WRONGFUL ACT AND/OR OMISSION OF CONSULTANT IN ITS/THEIR PERFORMANCE OF THIS AGREEMENT, REGARDLESS OF THE JOINT OR CONCURRENT NEGLIGENCE OR STRICT LIABILITY OF THE CITY (COLLECTIVELY, "CLAIMS"). THIS INDEMNIFICATION PROVISION AND THE USE OF THE TERM "CLAIMS" IS ALSO SPECIFICALLY INTENDED TO APPLY TO, BUT IS NOT LIMITED TO, ANY AND ALL CLAIMS, WHETHER CIVIL OR CRIMINAL, BROUGHT AGAINST CITY BY ANY GOVERNMENT AUTHORITY OR AGENCY RELATED TO ANY PERSON PROVIDING SERVICES UNDER THIS AGREEMENT THAT ARE BASED ON ANY FEDERAL IMMIGRATION LAW AND ANY AND ALL CLAIMS, DEMANDS, DAMAGES, ACTIONS AND CAUSES OF ACTION OF EVERY KIND AND NATURE, KNOWN AND UNKNOWN, EXISTING OR CLAIMED TO EXIST, RELATING TO OR ARISING OUT OF ANY EMPLOYMENT RELATIONSHIP BETWEEN CONSULTANT AND ITS EMPLOYEES OR SUBCONTRACTORS AS A RESULT OF THAT SUBCONTRACTOR'S OR EMPLOYEE'S EMPLOYMENT AND/OR SEPARATION FROM EMPLOYMENT WITH THE CONSULTANT, INCLUDING BUT NOT LIMITED TO ANY DISCRIMINATION CLAIM BASED ON SEX, SEXUAL ORIENTATION OR PREFERENCE, RACE, RELIGION, COLOR, NATIONAL ORIGIN, AGE OR DISABILITY UNDER FEDERAL, STATE OR LOCAL LAW, RULE OR REGULATION, AND/OR ANY CLAIM FOR WRONGFUL TERMINATION, BACK PAY, FUTURE WAGE LOSS, OVERTIME PAY, EMPLOYEE BENEFITS, INJURY SUBJECT TO RELIEF UNDER THE WORKERS' COMPENSATION ACT OR WOULD BE SUBJECT TO RELIEF UNDER ANY POLICY FOR WORKERS COMPENSATION INSURANCE, AND ANY OTHER CLAIM, WHETHER IN TORT, CONTRACT OR OTHERWISE. CONSULTANT IS EXPRESSLY REQUIRED TO DEFEND CITY AGAINST ALL SUCH CLAIMS; PROVIDED, HOWEVER,

THAT IF A COURT OF COMPETENT JURISDICTION SIGNS A JUDGMENT THAT BECOMES FINAL AND NON-APPEALABLE, DETERMINING THAT THE CITY (WITHOUT WAIVING ANY GOVERNMENTAL IMMUNITY) HAS JOINT, CONCURRENT OR SOLE NEGLIGENCE FOR THE CLAIMS IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS ("JUDGMENT"), THEN CONSULTANT IS NOT REQUIRED TO INDEMNIFY OR DEFEND CITY TO THE EXTENT OF THE NEGLIGENCE APPORTIONED TO CITY FOR EACH CAUSE(S) OF ACTION IDENTIFIED IN THE JUDGMENT. IN THE EVENT THE JUDGMENT PROVIDES THAT CITY IS JOINTLY, CONCURRENTLY OR SOLELY NEGLIGENT FOR THE CLAIMS REFERRED TO THEREIN, CITY AGREES TO REIMBURSE CONSULTANT FOR ALL REASONABLE AND NECESSARY COSTS INCURRED AND PAID BY CONSULTANT THAT ARE ATTRIBUTABLE TO CITY'S PERCENTAGE OF JOINT, CONCURRENT OR SOLE NEGLIGENCE, AS SET FORTH IN THE JUDGMENT, INCLUDING REASONABLE AND NECESSARY ATTORNEY'S FEES AND EXPENSES, WITHIN SIXTY (60) DAYS OF THE DATE THE JUDGMENT BECOMES FINAL AND NON-APPEALABLE. IF THIS AGREEMENT IS A CONTRACT FOR ENGINEERING OR ARCHITECTURAL SERVICES, THEN CONSULTANT'S INDEMNITY AND DEFENSE OBLIGATIONS UNDER THIS ARTICLE 10 ARE LIMITED BY, AND TO BE READ AS COMPLYING WITH, SECTION 271.904 OF THE TEXAS LOCAL GOVERNMENT CODE.

IN ITS SOLE DISCRETION, CITY SHALL HAVE THE RIGHT TO APPROVE OR SELECT DEFENSE COUNSEL TO BE RETAINED BY CONSULTANT IN FULFILLING ITS OBLIGATION HEREUNDER TO DEFEND AND INDEMNIFY CITY, UNLESS SUCH RIGHT IS EXPRESSLY WAIVED BY CITY IN WRITING. CITY RESERVES THE RIGHT TO PROVIDE A PORTION OR ALL OF ITS OWN DEFENSE; HOWEVER, CITY IS UNDER NO OBLIGATION TO DO SO. ANY SUCH ACTION BY CITY IS NOT TO BE CONSTRUED AS A WAIVER OF CONSULTANT'S OBLIGATION TO DEFEND CITY OR AS A WAIVER OF CONSULTANT'S OBLIGATION TO INDEMNIFY CITY PURSUANT TO THIS AGREEMENT. CONSULTANT SHALL RETAIN CITY-APPROVED DEFENSE COUNSEL WITHIN SEVEN (7) BUSINESS DAYS OF CITY'S WRITTEN NOTICE THAT CITY IS INVOKING ITS RIGHT TO DEFENSE OR INDEMNIFICATION UNDER THIS AGREEMENT. IF CONSULTANT FAILS TO RETAIN COUNSEL WITHIN SUCH TIME PERIOD, CITY SHALL HAVE THE RIGHT TO RETAIN DEFENSE COUNSEL ON ITS OWN BEHALF, AND CONSULTANT SHALL BE LIABLE FOR ALL COSTS INCURRED BY CITY. THE RIGHTS AND OBLIGATIONS CREATED BY THIS ARTICLE SHALL SURVIVE TERMINATION OF THIS AGREEMENT.

ARTICLE 11 NOTICES

Any notice provided or permitted to be given under this Agreement must be in writing and may be served by depositing the same in the United States Mail, addressed to the party to be notified, postage pre-paid and registered or certified with return receipt requested; by facsimile; by electronic mail, with documentation evidencing the addressee's receipt thereof; or by delivering the same in person to such party a via hand-delivery service, or any courier service that provides a return receipt showing the date of actual delivery of same to the addressee thereof. Notice given in accordance herewith shall be effective upon receipt at the address of the addressee. For purposes of notification, the addresses of the parties shall be as follows:

If to City, addressed to:

Wayne E. Lee, P.E., CFM
Director of Engineering
City of Sherman
220 W Mulberry St.
Sherman, TX 75091
Telephone: (903) 892-7327
Email: waynel@cityofsherman.com

With a copy to:

Abernathy, Roeder, Boyd & Hullett, P.C.
Attention: Ryan D. Pittman
1700 Redbud Blvd., Suite 300
McKinney, Texas 75069
Telephone: (214) 544-4000
Facsimile: (214) 544-4054
Email: rpittman@abernathy-law.com

If to Consultant, addressed to:

John Ho, P.E.
Vice President
Huitt-Zollars, Inc.
1800 Teague Drive, Suite 100
Sherman, Texas 75090
Telephone: (214) 934-5635
Email: JHo@Huitt-Zollars.com

ARTICLE 12 MISCELLANEOUS

- 12.1 **Complete Agreement** – This Agreement, including the exhibits hereto labeled “A” through “F,” all of which are incorporated herein for all purposes, constitute the entire Agreement by and between the parties regarding the subject matter hereof and supersedes all prior and/or contemporaneous written and/or oral understandings. This Agreement may not be amended, supplemented, and/or modified except by written agreement duly executed by both parties. The following exhibits are attached below and made a part of this Agreement:

- 12.1.1 **Exhibit A**, Scope of Services.
- 12.1.2 **Exhibit B**, Project Engineering Budget Summary.
- 12.1.3 **Exhibit C**, Guidelines for Computer Aided Design and Drafting (CADD).
- 12.1.4 **Exhibit D**, Guidelines for Direct Expenses; General and Administrative Markup; Travel and Subsistence Expenses.
- 12.1.5 **Exhibit E**, Contractor Insurance Guidelines.
- 12.1.6 **Exhibit F**, Conflict of Interest Questionnaire, Form CIQ.

To the extent that **Exhibit A**, **Exhibit B**, **Exhibit C**, **Exhibit D**, **Exhibit E**, or **Exhibit F** are in conflict with provisions of this Agreement or each other, the provisions of this Agreement, then the provisions of **Exhibit B**, **Exhibit C**, **Exhibit D**, **Exhibit E**, **Exhibit F** or **Exhibit A** shall prevail in that order.

- 12.2 **Assignment and Subletting** – Consultant agrees that neither this Agreement nor the work to be performed hereunder will be assigned or sublet without the prior written consent of City. Consultant further agrees that the assignment or subletting of any portion or feature of the work or materials required in the performance of this Agreement shall not relieve Consultant of its full obligations to City as provided by this Agreement. All such approved work performed by assignment or subletting shall be billed through Consultant, and there shall be no third-party billing.
- 12.3 **Attorney's Fees** – If either party files any action or brings any proceeding against the other arising from this Agreement, then as between City and Consultant, the prevailing party shall be entitled to recover as an element of its costs of suit, and not as damages, reasonable and necessary attorneys' fees and litigation expenses both at trial and on appeal, subject to the limitations set forth in TEX. LOC. GOV'T CODE § 271.153, as it exists or may be amended, if applicable.
- 12.4 **Successors and Assigns** – City and Consultant, and their respective partners, assigns, successors, subcontractors, executors, officers, agents, employees, representatives and administrators are hereby bound to the terms and conditions

of this Agreement.

- 12.5 **Savings/Severability** – In the event of a term, condition, or provision of this Agreement is determined to be invalid, illegal, void, unenforceable, or unlawful by a court of competent jurisdiction, then that term, condition, or provision, shall be deleted and the remainder of the Agreement shall remain in full force and effect as if such invalid, illegal, void, unenforceable or unlawful provision had never been contained in this Agreement.
- 12.6 **Governing Law/Venue** – This Agreement shall be governed by and construed in accordance with the laws of the State of Texas, without regard to conflict of law principles. The exclusive venue for any action arising out of this Agreement shall be a court of appropriate jurisdiction in Grayson County, Texas.
- 12.7 **Execution/Consideration** – This Agreement is executed by the parties hereto without coercion or duress for any substantial consideration, the sufficiency of which is forever confessed.
- 12.8 **Authority** – The individuals executing this Agreement on behalf of the respective parties below represent to each other that all appropriate and necessary action has been taken to authorize the individual who is executing this Agreement to do so for and on behalf of the party for which his or her signature appears, that there are no other parties or entities required to execute this Agreement in order for the same to be an authorized and binding agreement on the other party for whom the individual is signing this Agreement and that each individual affixing his or her signature hereto is authorized to do so, and such authorization is valid and effective on the date hereof.
- 12.9 **Waiver** – Waiver by either party of any breach of this Agreement, or the failure of either party to enforce any of the provisions of this Agreement, at any time, shall not in any way affect, limit, or waive such party's right thereafter to enforce and compel strict compliance.
- 12.10 **Headings** – The headings of the various sections of this Agreement are included solely for convenience of reference and are not to be full or accurate descriptions of the content thereof.
- 12.11 **Multiple Counterparts** – This Agreement may be executed in a number of identical counterparts, each of which shall be deemed an original for all purposes. An electronic mail and/or facsimile signature will also be deemed to constitute an original if properly executed and delivered to the other party.
- 12.12 **Immunity** – It is expressly understood and agreed that, in the execution and performance of this Agreement, City has not waived, nor shall be deemed to have waived, any immunity, governmental, sovereign and/or official, or defense that is available to it against claims arising in the exercise of governmental powers and

functions. By entering into this Agreement, the parties do not create any obligations, express or implied, other than those set forth in this Agreement.

- 12.13 **Incorporation of Recitals** – The representations, covenants and recitations set forth in the foregoing recitals of this Agreement are true and correct and are incorporated into the body of this Agreement and adopted as findings of City and the authorized representative of Consultant.
- 12.14 **Additional Representations** – Each signatory represents this Agreement has been read by the party for which this Agreement is executed and that such party has had the opportunity to confer with its counsel.
- 12.15 **Miscellaneous Drafting Provisions** – This Agreement shall be deemed drafted equally by all parties hereto. The language of all parts of this Agreement shall be construed as a whole according to its fair meaning, and any presumption or principle that the language herein is to be construed against any party shall not apply.
- 12.16 **No Third-Party Beneficiaries** – Nothing in this Agreement shall be construed to create any right in any third party not a signatory to this Agreement, and the parties do not intend to create any third-party beneficiaries by entering into this Agreement.
- 12.17 **Indemnity** – The parties agree that the Indemnity provision set forth in Article 10 of this Agreement is conspicuous and the parties have read and understood the same.
- 12.18 **Representations** – All representations and covenants made by one party to the other in this Agreement or in any certificate or other instrument delivered by one party to the other under this Agreement shall be considered to have been relied upon by the other party and will survive the satisfaction of any fees under this Agreement, regardless of any investigation made by either party.
- 12.19 **Independent Contractor** – In performing this Agreement, Consultant shall act as an independent contractor with respect to City. In no event shall this Agreement be construed as establishing a partnership, joint venture or similar relationship between the parties and nothing herein shall authorize either party to act as agent for the other. Consultant shall be liable for its own debts, obligations, acts and omissions, including the payment of all required withholding, social security and other taxes and benefits with respect to all of Consultant's officers, directors, partners, employees and representatives, who shall not be considered City employees and shall not be eligible for any employee benefit plan offered by City.
- 12.20 **Debarment/Suspension** – City is prohibited from making any award or permitting any award at any tier to any party which is debarred or suspended or otherwise excluded from or ineligible for participation in federal assistance programs under Executive Order 12549, Debarment and Suspension. City, Consultant and Consultant's subcontractors shall comply with federal and state regulations

regarding debarment and suspension. Consultant shall include a statement of compliance with federal and state debarment and suspension regulations in all third-party agreements for work on the Project.

- 12.21 **Restrictions on Lobbying** – City and Consultant are prohibited from using funds awarded under the Agreement for lobbying purposes. Consultant shall include a statement of compliance with this provision in applicable procurement solicitations and third-party agreements for work on the Project.
- 12.22 **Appropriation of Funds** – Funds are not presently budgeted for City's performance under this Agreement beyond the end of City's current fiscal year. City will give Consultant sixty (60) days' notice if funds for City's performance are not budgeted to continue beyond that time. City shall have no liability for payment of any money for services performed after the end of City's current fiscal year unless and until such funds are budgeted.
- 12.23 **Certifications Required by Texas Law** – In accordance with Chapter 2270 of the Texas Government Code (to the extent applicable), Consultant hereby certifies that Consultant does not boycott Israel and will not boycott Israel during the term of any contract with City, including during the term of this Agreement. In accordance with Chapter 809 of the Texas Government Code (to the extent applicable), Consultant hereby certifies that Consultant does not boycott energy companies and will not boycott energy companies during the term of any contract with City, including during the term of this Agreement. In accordance with Chapter 2274 of the Texas Government Code (to the extent applicable), Consultant hereby certifies that Consultant does not have a practice, policy, guidance or directive that discriminates against a firearm entity or firearm trade association and will not discriminate against a firearm entity or firearm trade association during the term of any contract with City, including during the term of this Agreement. The foregoing terms have the meanings ascribed to them in the referenced statutes if defined therein.
- 12.24 **Reference to Consultant** – When referring to "Consultant," this Agreement shall refer to and be binding upon Consultant, and its officers, directors, partners, employees, representatives, contractors, subcontractors, licensees, invitees, agents, successors, assignees (as authorized herein), vendors, grantees, trustees, legal representatives and/or any other third parties for whom Consultant is legally responsible.
- 12.25 **Reference to City** – When referring to "City," this Agreement shall refer to and be binding upon City, its Council members, officers, agents, representatives, employees and/or any other authorized third parties for whom City is legally responsible.

IN WITNESS WHEREOF, the parties have executed this Agreement and caused this Agreement to be effective on the date set forth in the introductory clause of this Agreement.

CITY:
City of Sherman, Texas,
a Texas home-rule municipality

CONSULTANT:
Huitt-Zollars, Inc.
a Texas corporation

By: _____
Robby Hefton, City Manager

By: _____
John Ho, P.E. Vice President

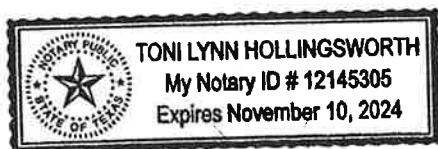
APPROVED AS TO FORM:

Abernathy, Roeder, Boyd & Hullett, P.C.
Ryan D. Pittman, City Attorneys

STATE OF TEXAS §
 §
COUNTY OF DALLAS §

BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED **JOHN HO**, KNOWN TO ME TO BE ONE OF THE PERSONS WHOSE NAMES ARE SUBSCRIBED TO THE FOREGOING INSTRUMENT; HE ACKNOWLEDGED TO ME THAT HE IS THE PRESIDENT AND DULY AUTHORIZED REPRESENTATIVE FOR **HUITT-ZOLLARS, INC.**, AND THAT HE EXECUTED SAID INSTRUMENT FOR THE PURPOSES AND CONSIDERATION THEREIN EXPRESSED.

GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS 30th DAY
OF May 2024.



Toni Lynn Hollingsworth
NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS
My commission expires: 11-10-24

EXHIBIT A SCOPE OF SERVICES

I. PROJECT DESCRIPTION



This project consists of the preparation of construction plans, details and bidding documents for the reconstruction of Lamberth Road and Shady Oaks Lane in the City of Sherman, Grayson County, Texas. The reconstruction of both roadways is described below.

Lamberth Road: From approximately 200 feet east of the Shady Oaks Lane intersection to approximately 2,000 feet west, a proposed 5-lane roadway composed of concrete paving with monolithic curb & gutter for a width totaling 63-foot B-B. The existing asphalt roadway is approximately 19 feet wide. The west end of the proposed roadway will transition back to the 2-lane concrete roadway and the east end will transition and tie-in to the existing divided roadway east of the Shady Oaks Lane intersection. Driveway approaches will also be replaced with reinforced concrete pavement. Proposed improvements also include storm drain and culvert replacement. The roadway will be constructed within the current 86 feet of right-of-way.

Shady Oaks Lane: From approximately 300 feet south of the Lamberth Road intersection to approximately 1,700 feet north to the existing 37-foot concrete B-B, a 3-lane roadway. The existing asphalt roadway is approximately 15 feet wide. The south end of the proposed pavement will transition back to the existing asphalt pavement. Driveway approaches will also be replaced with reinforced concrete pavement. Proposed improvements also include a new 8-inch water main replacing the existing 2-inch water main including fire hydrants, services and appurtenances. Proposed storm drain construction will also be constructed

**EXHIBIT A
SCOPE OF SERVICES**

along the new roadway. The existing right-of-way width is 50 feet and the need for additional right-of-way is anticipated and is to be 60 feet wide. The roadway will be constructed within the proposed 60-foot of right-of-way.

II. GENERAL REQUIREMENTS

- A.** Specific design requirements shall be obtained from the City of Sherman Engineering Design Standards. Consultant will establish and summarize design criteria. The design criteria will be reviewed by the City for approval prior to beginning design work.
- B.** Consultant shall coordinate with other engineering consultants, utility companies, franchise utilities, City of Sherman, pipeline companies, and any other entity which has facilities within or adjacent to the Project.
- C.** Each time the Consultant submits plans and/or specifications to City, one (1) copy (as well as PDF version) of each shall be submitted, unless otherwise instructed. These shall be reviewed and checked by City and returned to Consultant for corrections. When the corrected copies of the plans and specifications are returned to City, the original and reviewed plans and specifications shall also be returned to City. All plans, specifications, documents, provisions, attachments, and correspondence provided in accordance with this contract shall be dated.
- D.** The Consultant shall submit a monthly report outlining, at a minimum, the work on the project which occurred the previous month, the work expected to be completed the following month, the next major project milestone, and any information needed from the City. The report is to be submitted with monthly invoice.
- E. Communications and Reporting:**
 - i Attend a pre-design project kickoff meeting, in person, with City staff to confirm and clarify scope, understand City objectives, and ensure economical and functional designs meet City requirements.
 - ii Attend review meeting, in person, with the City at the end of each design phase.
 - iii Prepare and submit monthly invoices in the format acceptable to the City.
 - iv Prepare and submit monthly progress reports.
 - v Prepare and submit baseline Project Schedule initially, Project Schedule updates, and updated Opinion of Probable Construction Cost with each plan submittal.
 - vi Coordinate with other agencies and entities as necessary for the design of the proposed infrastructure and provide and obtain information needed to prepare the design.
 - vii With respect to coordination with permitting authorities, Consultant shall communicate with permitting authorities such that their regulatory requirements are appropriately reflected in the designs. Consultant shall

**EXHIBIT A
SCOPE OF SERVICES**

- work with regulatory authorities to obtain approval of the designs, and make changes necessary to meet their requirements.
- viii Attend additional project coordination meetings, in person, if needed.

III. TASK SUMMARY. BASIC SERVICES

A. Preliminary Design Phase (30%)

- a. Prepare preliminary engineering review drawings to include preliminary horizontal and vertical alignments of all proposed improvements, construction plans on 11" x 17" sheets with a scale of 1" = 40' H and 1" = 5' V on 11" x 17" sheets with minimal construction-related notes. Cross-sections at least every fifty (50) feet will be required for paving-related or channel-related projects. If necessary, report in sufficient detail to indicate clearly any of the problems involved and provide alternate solutions available to the City. Include preliminary layouts, a right-of-way map, sketches, and cost estimates for the Project and set forth clearly the Consultant's recommendations for any alternate designs.
- b. Water, sanitary sewer, and storm drains will be shown on the plans based on field information and surveys collected by the Consultant and from existing "Record Drawings" provided by the City of Sherman. Other utilities should be shown on the plans based on field information and surveys collected by the Consultant, utility locates requested by the Consultant, and any available "Record Drawings" that the Consultant can obtain from other utilities.
- c. Depending on comments received from the City's review and field investigations, another set of preliminary phase construction drawings may be required.
- d. Upon completion of the Preliminary Design Phase, the Engineer will advise the City of any geotechnical, soil, foundation, or other subsurface investigations or any special surveys, Level B or A SUE, or special testing which, in the opinion of the Consultant, may be required for the proper execution of the project, and assist the City in arranging for the conduct of such investigations and tests. The performance of geotechnical investigations and tests will not be a part of the Consultant's Basic Engineering Services and will not be included unless specifically authorized in writing under "F. Special Services."
- e. Prior to the Preliminary review meeting with the City, the Consultant shall schedule and attend a project site visit with the City Project Manager and Construction personnel to walk the project. The Consultant shall summarize the City's comments from the field visit and submit this information to the City in writing.
- f. The Consultant will consult with the City, public utilities, private utilities and government agencies to determine the approximate location of above and underground utilities, and other facilities (current and future) that have an impact

**EXHIBIT A
SCOPE OF SERVICES**

or influence on the project. Consultant will design City facilities to avoid or minimize conflicts with existing utilities, and where known and possible, consider potential future utilities in designs.

B. Intermediate Design Plans (60%)

- a. Prepare intermediate engineering review drawings that address all comments from the preliminary engineering review, including detailed construction-related notes. Cross-sections at least every fifty (50) feet will be required for paving-related or channel-related projects. Driveway profiles will be required for paving-related projects. All cross-sections will reflect the cut and fill quantities at each section. A general notes sheet(s), coordinate control sheet(s), proposed construction sequencing sheet(s), proposed erosion control plan sheet(s), and City Standard detail sheet(s) will be required for the project. Plans will include paving plans/profiles, drainage area map, storm sewer plans/profiles, striping and pavement marking plans, erosion control plans, sequence of construction plans and horizontal and vertical control plans. All pertinent drainage information showing calculations for drainage areas, inlet capacity, spread of flow and depth in street, and hydraulic grade line will be provided.
- b. Prepare miscellaneous plan sheets, including cover sheet, index, general notes, project control (1"=100' scale, 22"x34" sheets), and applicable City standard details.
- c. Prepare Preliminary Project Manual, including Bid Form and Special Conditions and technical specifications.

C. Final Design/Construction Plans (90%, 100%)

- a. Prepare final engineering review drawings that address all comments from the intermediate review.
- b. Prepare detailed cost estimates based on current unit prices from the proposal of authorized construction, which shall include summaries of bid items and quantities on the unit price system of bidding, wherever practical.
- c. Finalize miscellaneous plan sheets, including cover sheet, index, general notes, project control (1"=100' scale, 11"x17"), and applicable City standard details.
- d. Submit three (3) final sealed copies each of any necessary right-of-way or easement documents.
- e. When required by the nature of the project, the Consultant shall provide necessary exhibits and attend a public meeting with the City.

EXHIBIT A
SCOPE OF SERVICES

- f. Upon completion of the final design review (90%), the Consultant shall furnish to the City up to five (5) additional copies and a pdf of the construction drawings to be forwarded to the utility companies.
- g. Upon completion of the final design review (90%), the Consultant shall furnish to the City, where required by the circumstances of the assignment, the engineering data, construction plans, completed forms, and reports necessary for applications for routine permits by local, state, and federal authorities (as distinguished from detailed applications and supporting documents for government grants-in-aid or for planning advances not included in Basic Engineering Services).

D. Bid Phase Services

- a. Prepare bid set drawings and specifications that address all comments from the final design review and additional information provided by utility relocations and right-of-way negotiations.
- b. Furnish to the City all necessary copies of approved Construction Contract Documents needed for competitive bidding (plans, specifications, notice to bidders, proposals, etc.). All sets of Construction Contract Documents in excess of eight (8) copies are to be paid for separately as provided hereinafter.
- c. Consultant will submit the project plans to the State of Texas for the TAS/ADA review, if required for the Project. Consultant will prepare the application and make the submittal. The City will provide a check for the fee based on the construction cost of pedestrian improvements per the submittal requirements. Consultant will address comments from the review and revise plans if necessary.
- d. Assist the City in the advertisement of the Project for competitive bids.
- e. Assist the City with any Pre-Bidders meetings.
- f. Prepare addenda as appropriate to interpret, clarify, or expand the Bid Documents.
- g. Assist the City in the opening and tabulation of bids for construction of the Project.
- h. Prepare a written summary of the bid tabulation and evaluation together with a letter addressing the award of the construction contract.
- i. Assist in the preparation of formal Conformed Construction Contract Documents, provide four (4) copies of contracts to be executed by the contractor,

EXHIBIT A
SCOPE OF SERVICES

and coordinate their execution by the respective parties.

- j. The Consultant shall not be required to guarantee the accuracy of the final design Cost of Construction, but may be required to provide additional services at no cost to the City if bids for the Project exceed the fixed budget limit for the Construction Cost as provided in Article 3.

E. Construction Phase Services

- a. Conformed Document submittal:
 - i. Update the Bid Documents (plans and Project Manual) to incorporate bid addenda items
 - ii. Print up to ten (10) sets of 11"x17" plans and Project Manuals for issuance at the Pre-Construction Conference. The City will provide the number to be printed up the 10 copies noted.
 - iii. Package and submit CAD base files upon request.
- b. Site Visits upon request
- c. *Pre-Construction Meeting*. Attend Pre-Construction Meeting(s) prior to commencement of Work at the Site
- d. *Franchise Utility Coordination*. Assist the City with franchise utility coordination efforts and conflict resolution during construction.
- e. *Requests for information*. Coordinate with Engineer and issue clarifications and interpretations of the Contract Documents to City as appropriate to the orderly completion of Contractor's work. Such clarifications and interpretations will be consistent with the intent of the Contract Documents. Field Orders authorizing variations from the requirements of the Contract Documents will be made by City.
- f. *Change Orders*. Recommend Change Orders to City, as appropriate. Review and make recommendations related to Change Orders submitted or proposed by the Contractor. Task includes preparing plan sheet revisions.
- g. *Shop Drawings, Samples, and Submittals*. Review and approve or take other appropriate action in respect to Shop Drawings, Samples, Submittals and other data which Contractor is required to submit, but only for conformance with the information given in the Contract Documents and compatibility with the design concept of the completed Project as a functioning whole as indicated in the Contract Documents. Such review and approvals or other action will not extend to means, methods, techniques, equipment choice and usage, sequences, schedules, or procedures of construction or to related safety precautions and programs.
- h. *Substitutes and "or-equal."* Evaluate and determine the acceptability of substitute or "or-equal" materials and equipment proposed by Contractor in accordance with the Contract Documents, but subject to the provisions of applicable standards of state or local government entities.
- i. *Disagreements between City and Contractor*. As necessary, render written decision on all claims of City and Contractor relating to the acceptability of Contractor's work or the interpretation of the requirements of the Contract

EXHIBIT A
SCOPE OF SERVICES

Documents pertaining to the progress of Contractor's work. In rendering such decisions, Consultant shall be fair and not show partiality to City or Contractor and shall not be liable in connection with any decision rendered in good faith in such capacity.

- j. *Limitation of Responsibilities.* Consultant shall not be responsible for the acts or omissions of any Contractor, or of any of their subcontractors, suppliers, or of any other individual or entity performing or furnishing the Work. Consultant shall not have the authority or responsibility to stop the work of any Contractor.
- k. Consultant shall prepare construction Record Documents based on the information received from Contractor within 30 days of final completion in accordance with the Agreement. Consultant shall submit one full size set and one pdf file of the Record Documents.

F. Special Services

- A. Various services incidental to the project, but not within the scope of the Basic Engineering Services covered by A., B., C., D., and E preceding, which may be performed or arranged for separately by City, or may be added to the Consultant's responsibilities by mutual agreement and written authorization include but are not necessarily limited to the following:
 - a. Design Surveying - to collect information required for design, including photogrammetry, land surveying, and related office computations and drafting. All surveys and coordinate information shall be based on the NAD 83 CORS Grid Coordinate System utilizing control monuments established within the City of Sherman. This also includes refreshing and re-establishing benchmarks and reference points on NAD 83 CORS Grid Coordinate System for construction of the project, one time only. This does not include construction staking.
 - b. Staking of the Centerline of the proposed Project for utility coordination. The Consultant or its surveyor shall stake the centerline throughout the extent of the Project. The beginning and the end of the Project shall be designated. The points of intersection, points of curvature, and points of tangency of all horizontal curves shall be designated. Stations and half-stations (50-foot and 100-foot) shall be designated throughout the entire Project, on tangential and curvilinear portions. Said centerline control is to be established in a timely fashion as directed by City staff. Said centerline control markings are to be a one-time event and shall be of a nature to last a minimum of eight months.
 - c. Furnish five (5) descriptive instruments related to the acquisition of easements and/or rights-of-way. The description of these parcels should be rotated to match the bearings of the individual deeds. The payment for these instruments will be made on a per parcel basis unless otherwise indicated. As part of providing instruments for right-of-way acquisition, the Engineer/Surveyor will need to stake the corners of the acquisition.
 - d. Appearances before hearings for eminent domain proceedings are specifically not included in the specified per parcel payment.

**EXHIBIT A
SCOPE OF SERVICES**

- e. Appearances before regulatory agencies.
- f. Assistance to the City as an expert witness in any litigation or claim, arising from, or in connection with, the Project.
- g. Special investigations involving detailed consideration of operation, maintenance, and overhead expense; preparation of rate schedules; preparation of special reports and an engineer's certificate as required for marketing bonds; earnings and expense statements; preparation of assessment rolls; special feasibility studies; appraisals; valuations; and material audits or inventories required for certification of force account construction performed by the City.
- h. Detailed mill, shop, and/or laboratory inspection of materials or equipment.
- i. Geotechnical Investigation & Report - obtain the services of a qualified geotechnical engineering laboratory to conduct soil and foundation investigations, including test borings, soil tests, and analyses of test results. Perform eight (8) borings, drilled throughout the project corridor to a depth of 20 feet. A report will be provided to show a summary of investigations, locations of borings, soil classification, groundwater conditions and recommendations for pavement subgrade and pavement designs.
- j. Preparation of applications and supporting documents for government grants or planning advances for public works projects.
- k. Preparation of report, sketches, drawings, presentations, and permit applications involving environmental, historical, and archaeological considerations.
- l. Revision of reports and Construction Contract Documents after specific approval by City.
- m. Subsurface Utility Engineering that involves Level "A" or "B" identification of a utility. Providing Level "B" SUE excluding water, sewer and storm along the project limits.

IV. ITEMS NOT INCLUDED IN THE SCOPE OF SERVICES

A. Additional Services not included in the Scope of Services – City and Consultant agree the following services are beyond the Scope of Services described in the tasks above. However, Consultant can provide these services, if needed, upon the City's written request. Any additional amounts paid to the Consultant as a result of any material change to the Scope of the Project shall be agreed upon in writing by both parties before the services are performed. These Additional Services include the following:

- 1. Water and Wastewater plans/profiles, other than 8" water in Shady Oaks Lane
- 2. Landscape and Irrigation plans
- 3. Lighting plans
- 4. Signal plans
- 5. USACE Individual Permitting
- 6. Fee for Permitting
- 7. Traffic Control Plans

EXHIBIT A
SCOPE OF SERVICES

8. Trench Safety Plans
9. Construction Staking, except the staking noted in F, ii above
10. Construction Inspections
11. Tree Mitigation Plans
12. TDLR Inspection

**EXHIBIT B
PROJECT ENGINEERING BUDGET SUMMARY**

I. Basic Services

A. Preliminary Design Plans (30%) (Expected Completion:)	\$105,715.00 (LS)
B. Intermediate Design Plans (60%) (Expected Completion:)	\$191,085.00 (LS)
C. Final Design/Construction Plans (90%) (Expected Completion:)	\$148,735.00 (LS)
D. Final Design/Construction Plans (100%) (Expected Completion:)	\$49,510.00 (LS)
E. Bid Phase Services (Expected Completion:)	\$15,205.00 (NTE)
F. <u>Construction Phase Services</u>	<u>\$56,060.00 (NTE)</u>

<i>Total Basic Services</i>	<u><i>\$566,310.00</i></u>
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II. Special Services

Descriptive instruments for 4 parcels at <u>\$4,500</u> each:	\$18,000.00 (EA)
Design Surveying	\$46,000.00 (LS)
Stake Centerline for Utility Coordination	\$3,500.00 (NTE)
<u>Geotechnical Investigation & Report:</u>	<u>\$20,900.00 (NTE)</u>
<u>Level "B" Subsurface Utility Engineering</u>	<u>\$29,900.00 (NTE)</u>

<i>Total Special Services</i>	<i>\$118,300.00</i>
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<i>Project Budget, Grand Total</i>	<i>\$684,610.00</i>
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EXHIBIT C
GUIDELINES FOR COMPUTER AIDED DESIGN AND DRAFTING (CADD)

1. Files shall done in DWG/DXF format.
2. Files shall be georeferenced in the State Plane, Texas North Central FIPS 4202 (feet) coordinate system, using a datum of NAD 83 Grid.
3. If a surface adjustment factor is applied to the data, any surface adjustment factors used should be clearly documented on the drawing.
4. If submissions for the Project relate to a plat, the file submitted must match exactly the plat that is submitted for recording.
5. The file shall contain required features for the project type as detailed below:
 - a. Pre-Construction/As-Built Plans and/or Record Documents:
 - i. Layers from Final Plat Requirements as Applicable to Project Type.
 - ii. Water Utility Features.
 - iii. Sanitary Sewer Features.
 - iv. Storm Sewer Features.
6. Each required feature group should be provided as a separate layer within the file.
7. Layer names should be representative of the information contained in the layer.
8. Line work should be done per accepted industry norms.
9. Text should not be smaller than 0.08" on a full-size sheet, and should be a font such as Simplex, Calibri, or Arial.

EXHIBIT D
CONSULTANT'S GUIDELINES FOR DIRECT EXPENSES; GENERAL AND
ADMINISTRATIVE MARKUP; TRAVEL AND SUBSISTENCE EXPENSES

- I. **CONSULTANT'S RESPONSIBILITY**. Consultant shall be solely responsible for the auditing and accuracy of all Direct Expenses, approved markup (general and/or administrative), and approved travel and/or subsistence charges, including those of its subcontractors, prior to submitting to City for reimbursement. Any over-payment by City for errors in submittals for reimbursement may be deducted from Consultant's subsequent payment(s) for services; however, this shall not be City's sole and exclusive remedy for said over-payment.

II. **GUIDELINES FOR DIRECT EXPENSES**.

- A. **Local Transportation** – Transportation in connection with the Project, when such transportation is not a function of routine performance of the duties of Consultant in connection with the Project, and when such transportation exceeds beyond fifty (50) miles from the Project site, shall be reimbursed at a standard mileage rate consistent with that as issued, and periodically revised, by the United States Internal Revenue Service (IRS). Under no circumstances shall City reimburse Consultant at a higher standard mileage rate or pay additional markup on charges for local transportation. Completion of City's Standard Mileage Log is required for submittal of these charges for reimbursement, including justification for each submitted expense.

Under no circumstances are charges associated with rental cars for local transportation eligible for reimbursement by City. Toll road subscriptions or toll plaza receipts are not reimbursable. Consultant agrees to place these standards in all subcontracts for work on the Project.

- B. **Supplies, Material, Equipment** – City shall reimburse the actual cost of other similar direct Project-related expenses, which are duly presented in advance and approved by City's Project Manager in writing.
- C. **Commercial Reproduction** – City shall reimburse the actual cost of reproductions, specifically limited to progress prints prepared for presentation to City at each phase of progress, and final Construction Documents prepared for distribution at bidding phase, provided that Consultant has duly obtained at least three (3) quotations from commercial firms and has chosen the best value for City. Consultant shall provide such documentation to City for review prior to submitting these expenses for reimbursement. Consultant agrees to place these standards in all subcontracts for work on the Project.
- D. **In-House Reproduction** – Consultant shall make arrangements with City for prior approval of in-house reproduction rates prior to submitting these expenses for reimbursement. City shall provide Consultant with a standard format for documenting these charges. Completion of City's reproduction log is required as a prerequisite for payment, including the number or reproductions, the date, time,

EXHIBIT D
CONSULTANT'S GUIDELINES FOR DIRECT EXPENSES; GENERAL AND
ADMINISTRATIVE MARKUP; TRAVEL AND SUBSISTENCE EXPENSES

description, the approved standard rate, and a justification for each submitted expense for reimbursement. Consultant agrees to place these standards in all subcontracts for work on the Project.

- E. **Commercial Plotting** – City shall reimburse the actual cost of plots, specifically limited to final documents, provided Consultant has duly obtained at least three (3) quotations from commercial firms and has chosen the best value for City. Consultant shall provide such documentation to City for review prior to submitting these expenses for reimbursement. Consultant agrees to place these standards in all subcontracts for work on the Project.
- F. **In-House Plotting** – Consultant shall make arrangements with City for prior written approval of in-house plotting rates prior to submitting these charges for reimbursement. City shall provide Consultant with a standard format for documenting these charges. Completion of City's reproduction log is required as a prerequisite for payment, including the number of plots, the date, time, description, the approved standard rate, and a justification for each submitted charge for reimbursement.
- G. **Communications** – Reimbursement for expenses relating to electronic communications shall be limited to long-distance telephone or fax toll charges specifically required in the discharge of professional responsibilities related to the Project. Telephone service charges including office or cellular phones, WATTS, or Metro line services or similar charges are not reimbursable.
- H. **Postage, Mail, and Delivery Service** – City shall reimburse the actual cost of postage and delivery of Instruments of Service, provided Consultant duly considers all circumstances (including available time for assured delivery) of the required delivery and selects the best value for City, which may require comparison of delivery costs offered by three (3) or more sources or methods of delivery, which at a minimum shall include U.S. Mail. Courier service is acceptable only in circumstances requiring deadline-sensitive deliveries and not for the convenience of Consultant and/or Consultant's employees. Consultant agrees to place these standards in all subcontracts for work on the Project.
- I. **Meals and Other Related Charges** – Meals or any other related expenses are not reimbursable unless incurred outside a fifty (50) mile radius of the Project, and then only reimbursable for the actual cost subject to compliance with City's currently adopted policy. Non-allowable costs include, but are not limited to, charges for entertainment, alcoholic beverages, and gratuities.

III. GUIDELINES FOR GENERAL AND ADMINISTRATIVE MARKUP.

- A. **Requirement of Prior Approval** – Consultant may be allowed to charge a General and/or Administrative Markup on work completed if Consultant can clearly define to City specifically what costs are included in the markup calculation. To apply General and/or Administrative Markup, Consultant must also document to City what costs would be considered direct costs. City shall issue approval in writing to allow Consultant to charge General and/or Administrative Markup. City reserves the right to reject any and all requests for General and/or Administrative Markup.

IV. GUIDELINES FOR TRAVEL AND SUBSISTENCE EXPENSES.

- A. **Requirement of Prior Approval** – City shall reimburse the actual cost of travel and/or subsistence expenses upon prior written approval by City's Project Manager.
- B. **Adherence to Currently Adopted City Travel Policy** – Reimbursements shall be governed by the same travel policies provided for City employees according to current adopted policy. Prior to the event, Consultant shall request, and City's Project Manager shall provide the provisions and the restrictions that apply to out-of-town reimbursements.

**EXHIBIT E
CONTRACTOR'S INSURANCE GUIDELINES**

I. GENERAL INSURANCE REQUIREMENTS –

- A. All policies shall name the City of Sherman, its officers, agents, representatives and employees as additional insured as to all applicable coverage with the exception of workers compensation insurance and professional liability insurance.
- B. Such policies shall require the provision of written notice to City at least thirty (30) days prior to cancellation, non-renewal or material modification of any policies, evidenced by return receipt or United States Certified Mail.
- C. Such policies shall provide for a waiver of subrogation against City for injuries, including death, property damage or any other loss to the extent the same is covered by the proceeds of the insurance.

II. INSURANCE COMPANY QUALIFICATION – All insurance companies providing the required insurance shall be authorized to transact business in the State of Texas, and shall have a minimum rating of "A" by A.M. Best's Key Rating Guide, or other equivalent rating service(s).

III. CERTIFICATE OF INSURANCE – A Certificate of Insurance and policy endorsement(s) evidencing the required insurance shall be submitted prior to execution of the Agreement. If the Agreement is renewed or extended by City, a Certificate of Insurance and policy endorsement(s) shall also be provided to City prior to the date the Agreement is renewed or extended.

IV. INSURANCE CHECKLIST – "X" means that the following coverage(s) is required for this Agreement.

Coverage Required		Limits
<u> X </u> 1.	Worker's Compensation & Employer's Liability	▪ Statutory Limits of the State of Texas
<u> X </u> 2.	General Liability	▪ Minimum \$1,000,000.00 each occurrence; ▪ Minimum \$2,000,000.00 in the aggregate
<u> </u> 3.	XCU Coverage	▪ Minimum \$1,000,000.00 each occurrence; ▪ Minimum \$2,000,000.00 in the

- X 4. Professional Liability
- aggregate Minimum \$1,000,000.00 each claim;
 - Minimum \$2,000,000.00 in the aggregate
- X 5. Umbrella Coverage of Excess Liability Coverage
- An amount of \$2,000,000.00
 - Minimum \$2,000,000.00 in the aggregate
- X 6. City and its officers, agents, representatives and employees named as additional insured on General Liability Policy, as provided above. This coverage is primary to all other coverage City may possess.
- X 7. General Liability Insurance provides for a Waiver of Subrogation against the City for injuries, including death, property damage, or any other loss to the extent that same is covered by the proceeds of the insurance. All insurance policies that are required to name the City as an additional insured must be endorsed to read as primary and non-contributory coverage regardless of the application of other insurance.
- X 8. Thirty (30) days' notice of cancellation, non-renewal, or material change required. The words "endeavor to" and "but failure" (to end of sentence) are to be eliminated from the Notice of Cancellation provision on standard ACORD certificates.
- X 9. Insurance company has a minimum rating of "A" by A.M. Best's Key Rating Guide, or other equivalent rating service(s).
- X 10. The Certificate of Insurance must state the project title and bid number.
11. Other Insurance Requirements (State Below):

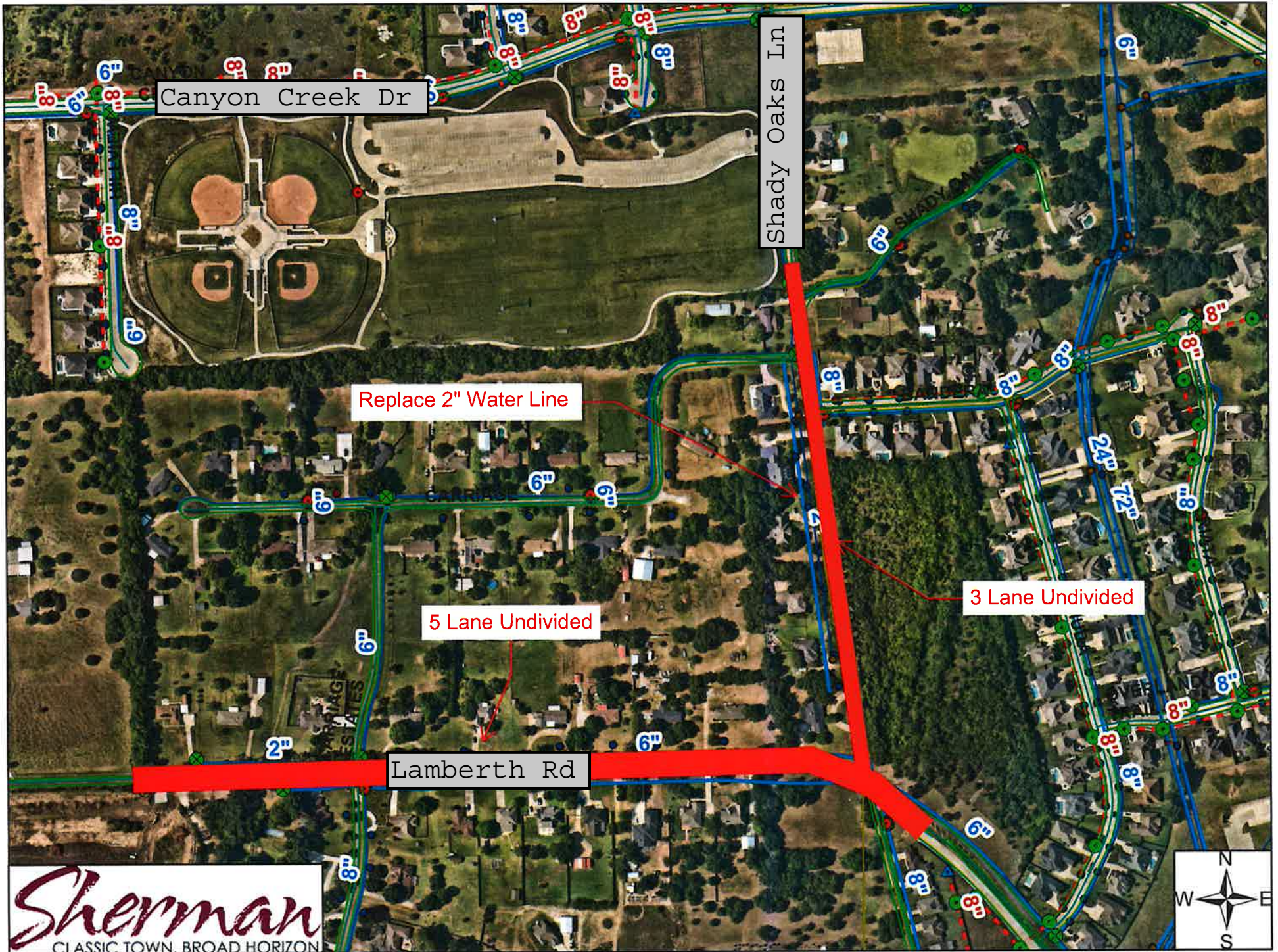
EXHIBIT F
CONFLICT OF INTEREST QUESTIONNAIRE, FORM CIQ

CONFLICT OF INTEREST QUESTIONNAIRE For vendor doing business with local governmental entity		FORM CIQ
This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session. This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a). By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. See Section 176.006(a-1), Local Government Code. A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.		OFFICE USE ONLY
1 Name of vendor who has a business relationship with local governmental entity. Huitt-Zollars, Inc.	2 ☐ Check this box if you are filing an update to a previously filed questionnaire. (The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)	
3 Name of local government officer about whom the information is being disclosed. N/A Name of Officer		
4 Describe each employment or other business relationship with the local government officer, or a family member of the officer, as described by Section 176.003(a)(2)(A). Also describe any family relationship with the local government officer. Complete subparts A and B for each employment or business relationship described. Attach additional pages to this Form CIQ as necessary. A. Is the local government officer or a family member of the officer receiving or likely to receive taxable income, other than investment income, from the vendor? ☐ Yes ☒ No B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer or a family member of the officer AND the taxable income is not received from the local governmental entity? ☐ Yes ☒ No		
5 Describe each employment or business relationship that the vendor named in Section 1 maintains with a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership interest of one percent or more.		
6 ☐ Check this box if the vendor has given the local government officer or a family member of the officer one or more gifts as described in Section 176.003(a)(2)(B), excluding gifts described in Section 176.003(a-1).		
7 [Signature] Signature of vendor doing business with the governmental entity 5/30/2024 Date		

Form provided by Texas Ethics Commission

www.ethics.state.tx.us

Revised 1/1/2021



Canyon Creek Dr

Shady Oaks Ln

Replace 2" Water Line

5 Lane Undivided

3 Lane Undivided

Lamberth Rd

Project Limits

Sherman
CLASSIC TOWN. BROAD HORIZON





City Council Regular Meeting

Agenda Item No. F.4.

Meeting Date: 6/3/2024

Prepared By: Tom Pruitt, Utility Engineer

Approved By: Robby Hefton, City Manager

Caption:

*** RESOLUTION NO. 7316**

Authorizing Execution of a Professional Services Agreement with Garver, LLC for the Stephens GST and PS Facility Improvements

Issue:

To consider a Professional Services Agreement with Garver, LLC for the Stephens GST and PS Facility Improvements

Background:

During a recent inspection, the ground storage tank was found to have critical deficiencies.

Improvements will consist primarily of design services to sand blast and coat the exterior and interior of the Stephens Ground Storage Tank. The design will also be to replace two pumps and motors and associated check valves and gate valves, new exterior drain pipe, replace the ladder and access hatch if warranted, replace tank lighting, install an antenna ring, and design for recoating exterior valves and piping.

Origination:

Engineering Department

Financial Consideration:

Funding needed for the agreement is \$139,686.00.

Staff Recommendation:

It is recommended that the contract for professional services with Garver LLC for the Stephens GST and PS Facility Improvements be approved.

Alternatives:

As may be directed by the City Council

Attachments:

1. Resolution No. 7316
2. Professional Services Agreement
3. Location Map

RESOLUTION NO. 7316

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SHERMAN, TEXAS, AUTHORIZING EXECUTION OF A PROFESSIONAL SERVICES AGREEMENT WITH GARVER, LLC FOR THE STEPHENS GST AND PS FACILITY IMPROVEMENTS; FINDING AND DETERMINING THAT THE MEETING AT WHICH THIS RESOLUTION IS PASSED WAS NOTICED AND IS OPEN TO THE PUBLIC AS REQUIRED BY LAW.

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SHERMAN, TEXAS:

SECTION 1. That the City Manager be and is hereby authorized and directed, subject to all contract documents being properly completed and approved as to form and content by the City Attorney, to execute a Professional Services Agreement with Garver, LLC for the Stephens GST and PS Facility Improvements, in accordance with all contract documents attached hereto and made a part hereof for all purposes.

SECTION 2. That it is hereby officially found and determined that the meeting at which this resolution is passed is open to the public and that public notice of the time, place, and purpose of said meeting was given as required by law.

DULY PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF SHERMAN, TEXAS on this the 3rd day of June 2024.

CITY OF SHERMAN, TEXAS

ATTEST:

**BY: _____
LINDA ASHBY, CITY CLERK**

**BY: _____
DAVID PLYLER, MAYOR**

**APPROVED AS TO FORM AND
CONTENT:
THE LAW FIRM OF ABERNATHY,
ROEDER, BOYD & HULLETT, P.C.**

**BY: _____
RYAN D. PITTMAN, CITY ATTORNEY**

AGREEMENT
BETWEEN
THE CITY OF SHERMAN, TEXAS AND
Garver, LLC
FOR
PROFESSIONAL SERVICES

Made as of the _____ day of _____, 2024:

Between City: **The City of Sherman, Texas**
 220 W. Mulberry Street
 Sherman, Texas 75090
 Telephone: (903) 892-7208

and Consultant: **Garver LLC**
 3000 Internet Blvd, Suite 400
 Frisco, TX 75034
 Telephone: (972) 377-7480

for the following Project: **Stephens GST and PS Facility Improvements**

THIS AGREEMENT ("Agreement") is made and entered into by and between the City of Sherman, Texas, a home-rule municipality ("City"), and Garver, LLC a Texas limited liability company ("Consultant"), to be effective from and after the date as provided above. City and Consultant are at times each referred to herein as a "party" or collectively as the "parties."

WHEREAS, City desires to engage Consultant to provide professional services for the Stephens GST and PS Facility Improvements Project ("Project"); and

WHEREAS, Consultant desires to render such professional services ("Services") for City on the terms and conditions provided herein.

NOW, THEREFORE, KNOW ALL PERSONS BY THESE PRESENTS:

That for and in consideration of the covenants contained herein, for the mutual benefits to be obtained hereby and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

ARTICLE 1 CONSULTANT'S SERVICES

- 1.1 **Employment of Consultant** – City hereby agrees to retain Consultant to perform the Services in connection with the Project. Consultant agrees to perform the Services in accordance with the terms and conditions of this Agreement. Consultant further agrees that if any employee of Consultant who is performing the day-to-day Services under this Agreement for the Project is separated, for any reason, from employment with Consultant, Consultant shall provide City with written notice thereof at least five (5) business days' prior to said separation unless circumstances reasonably warrant a shorter notice period, which shall not exceed two (2) business days following the separation.
- 1.2 **Scope of Services** – The parties agree that Consultant shall perform the Services as are set forth and described in **Exhibit A**, attached hereto and incorporated herein by reference for all purposes ("**Scope of Services**"). The parties understand and agree that deviations or modifications to the Scope of Services described in **Exhibit A**, in the form of a written amendment to this Agreement, may be authorized from time to time by City ("**Amendment**").
- 1.2.1 **Requirement of Written Amendment** – "Extra" work, "claims" invoiced as "extra" work or "claims" which have not been issued as a duly executed, written Amendment by the Sherman Director of Engineering or designee will not be authorized for payment and/or shall not become part of this Agreement. A duly executed, written Amendment requiring additional funding of \$50,000 or more of the original contract amount shall be preceded by the Sherman City Council's authorization for the Sherman City Manager to execute said Amendment.
- 1.2.2 **CONSULTANT SHALL NOT PERFORM ANY "EXTRA" WORK AND/OR ADDITIONAL SERVICES WITHOUT A DULY EXECUTED, WRITTEN AMENDMENT ISSUED BY THE CITY.**
- 1.3 **Schedule of Work** – Consultant agrees to commence work immediately on the execution of this Agreement, and to proceed diligently with said work to completion as described in the Project Engineering Budget Summary, attached hereto as **Exhibit B** and incorporated herein by reference for all purposes.
- 1.4 **Standard of Care** – Consultant shall perform the Services required hereunder in accordance with the prevailing engineering standard of care by exercising the skill and care ordinarily utilized by engineers performing the same or similar services under the same or similar circumstances in the State of Texas.

ARTICLE 2 CITY'S RESPONSIBILITIES

City shall do the following in a timely manner so as not to delay the Services of Consultant:

- 2.1 **Project Data** – City shall furnish required information that is reasonably requested by Consultant and that City has in its possession at the time of Consultant's request, as expeditiously as necessary for the orderly progress of the Project, and Consultant shall be entitled to rely upon the accuracy and completeness of the information furnished by City under this Article 2.1.
- 2.2 **City Project Manager** – When necessary in City's sole discretion, City shall designate a representative authorized to act on City's behalf with respect to the Project ("Project Manager"). City, the Project Manager and/or his or her authorized designee shall examine the documents submitted by Consultant and shall render any required decisions pertaining thereto as soon as practicable to avoid unreasonable delay in the progress of Consultant's Services.

ARTICLE 3 CONSULTANT'S COMPENSATION

- 3.1 **Compensation for Consultant's Services** – As described in "Article 1, Consultant's Services" of this Agreement, compensation for this Project shall be: (a) for Basic Services, on a Lump Sum basis in an amount not to exceed **one hundred thirty-nine thousand, six hundred eighty-six Dollars and zero cents (\$139,686.00)**; and (b) for Special Services, in an amount not to exceed **zero Dollars (\$0.00)** (collectively, "Consultant's Fee"); and (c) paid in accordance with this Article 3 and the Project Engineering Budget Summary as set forth in **Exhibit B**.
- 3.1.1 **Completion of Record Documents** – City and Consultant agree that the completion of Record Documents and/or "As-Built" Documents, including hard copy formatting and electronic formatting, shall be completed, submitted to, and accepted by City prior to payment. Completion of the Record Documents and/or "As-Built" documents shall be included in the Consultant's Fee and considered to be within the Scope of Services defined under this Agreement." The electronic formatting shall be consistent with the standards established in **Exhibit C**, Guidelines for Computer Aided Design and Drafting ("CADD"), which is attached hereto and incorporated herein by reference for all purposes.
- 3.1.2 **Disputes between City and Construction Contractor** – If the Project involves Consultant performing Construction Administration Services relating to an agreement between a Construction Contractor ("Contractor") and City, and on receipt of a written request by City, Consultant shall research previous and existing conditions of the Project, and make a determination whether or not to certify that sufficient cause exists for City to

declare Contractor in default of the terms and conditions of the Agreement. Consultant shall submit his findings in writing to City, or submit a written request for a specific extension of time (including the basis for such extension), within fifteen (15) calendar days of receipt of the written request from City. City and Consultant agree that if requested by City, completion of this task shall be included in the Consultant's Fee and considered to be within the Scope of Services as defined under this Agreement.

3.1.3 **Consultation and Approval by Governmental Authorities and Franchised Utilities** – Consultant shall be solely responsible for identifying and analyzing the requirements of governmental agencies and all franchise utilities involved with the Project, and for consulting with such agencies and utilities to obtain all necessary approvals and/or permissions. Consultant shall be responsible for preparation and timely submittal of documents required for review, approval and/or recording by such agencies and/or utilities. Consultant shall be solely responsible for making such changes in the construction documents ("Construction Documents") as may be required by existing written standards promulgated by such agencies and/or utilities at no additional charge to City.

3.2 **Direct Expenses** – Direct Expenses ("Direct Expenses") are included in Consultant's Fee as described in Article 3.1 of this Agreement and include actual reasonable and necessary expenditures made by Consultant and Consultant's employees and subcontractors in the interest of the Project. All submitted Direct Expenses are to be within the amounts as stated in the Project Engineering Budget Summary set forth in **Exhibit B**, and consistent with **Exhibit D**, Guidelines for Direct Expenses; General and Administrative Markup; Travel and Subsistence Expenses, which is attached hereto and incorporated herein by reference for all purposes. Consultant shall be solely responsible for the auditing and accuracy of all Direct Expenses, including those of its subcontractors, prior to submitting to City for reimbursement. Any over-payment by City for errors in submittals for reimbursement may be deducted from Consultant's subsequent payment for Services; provided, however, that this shall not be City's sole and exclusive remedy for said over-payment.

3.3 **Additional Services** – Consultant shall provide the Services as described in the Scope of Services set forth in **Exhibit A** of this Agreement. If authorized in writing by City, Consultant shall provide additional services, to be compensated as provided in an Amendment to the Contract on a cost not to exceed sum or hourly basis in accordance with this paragraph ("Additional Services") and a mutually agreed estimate of man-hours and expenses. These services may include, but are not limited to:

3.3.1 Additional meetings, hearings, work-sessions or other similar presentations which are not provided for or contemplated in the Scope of Services described in **Exhibit A**.

- 3.3.2 Additional drafts and revisions to the Project which are not provided for or contemplated in the Scope of Services as described in **Exhibit A**.
- 3.3.3 Additional copies of final reports and construction plans which are not provided for or contemplated in the Scope of Services as described in **Exhibit A**.
- 3.3.4 Photography, professional massing models which are not provided for or contemplated in the Scope of Services as described in **Exhibit A**.
- 3.3.5 Compensation for Additional Services authorized by City shall be in addition to Consultant's Fee and shall be based on direct billable labor rates and expenses.
- 3.3.6 Compensation for Additional Services authorized by City shall be in addition to Consultant's Fee and shall be based on an hourly basis according to the personnel rates described in **Exhibit B**. The rates set forth in **Exhibit B** are subject to reasonable change provided prior written notice of said change is given to and approved by City.
- 3.4 **Invoices** – No payment to Consultant shall be made until Consultant tenders an invoice to City. Consultant shall submit monthly invoices for Services rendered, based upon the actual percentage of work complete at the time the invoice is prepared, or shall submit invoices to City immediately upon completion of each individual task listed in **Exhibit B**. On all submitted invoices for Services rendered, Consultant shall include appropriate background materials to support the submitted charges on said invoice. Upon request, such background material may include, but is not limited to, employee timesheets, invoices for work obtained from other parties, and receipts and/or log information relating to Direct Expenses. All invoices shall provide a summary methodology for administrative markup and/or overhead charges.
- 3.5 **Timing of Payment** – City shall make payment to Consultant for said invoices within thirty (30) days following receipt and acceptance thereof. The parties agree that payment by City to Consultant is considered to be complete upon mailing of payment by City. Furthermore, the parties agree that the payment is considered to be mailed on the date that the payment is postmarked.
- 3.6 **Disputed Payment Procedures** – In the event of a disputed or contested billing by City, only that portion so contested may be withheld from payment, and the undisputed portion will be paid. City shall notify Consultant of a disputed invoice, or portion of an invoice, in writing by the twenty-first (21st) calendar day after the date City receives the invoice. City shall provide Consultant an opportunity to cure the basis of the dispute. If a dispute is resolved in favor of Consultant, City shall proceed to process said invoice, or the disputed portion of the invoice, within the

provisions of Article 3.5 of this Agreement. If a dispute is resolved in favor of City, Consultant shall submit to City a corrected invoice, reflecting any and all payment(s) of the undisputed amounts, documenting the credited amounts, and identifying outstanding amounts on said invoice to aid City in processing payment for the remaining balance. Such revised invoice shall have a new invoice number, clearly referencing the previous submitted invoice. City agrees to exercise reasonableness in contesting any billing or portion thereof that has background materials supporting the submitted charges.

- 3.7 **Failure to Pay** – Failure of City to pay an invoice, for a reason other than on written notification as stated in the provisions of Article 3.6 of this Agreement, to Consultant within sixty (60) days from the date of the invoice shall grant Consultant the right, in addition to any and all other rights provided, to, upon written notice to City, suspend performance under this Agreement, and such act or acts shall not be deemed a breach of this Agreement. However, Consultant shall not suspend performance under this Agreement prior to the tenth (10th) calendar day after written notice of suspension was provided to City, in accordance with Chapter 2251, Subchapter “D” of the TEX. GOV’T CODE. City shall not be required to pay any invoice submitted by Consultant if Consultant breached any provision(s) herein.
- 3.8 **Adjusted Compensation** – If the Scope of the Project (“Scope of the Project”) or if the Services are materially changed due to no error by Consultant in the performance of Services under this Agreement, the amounts of Consultant’s compensation shall be equitably adjusted as approved by City in its sole discretion. Any additional amounts paid to Consultant as a result of any material change to the Scope of the Project shall be authorized by written Change Order duly executed by both parties before the Services are performed.
- 3.9 **Project Suspension** – If the Project is suspended or abandoned in whole or in part for more than three (3) months, Consultant shall be entitled to compensation for any and all work completed to the satisfaction of City in accordance with the provisions of this Agreement prior to suspension or abandonment. In the event of such suspension or abandonment, Consultant shall deliver to City all finished or unfinished documents, data, studies, drawings, maps, models, reports, photographs and/or any other items prepared by Consultant in connection with this Agreement prior to Consultant receiving final payment. If the Project is resumed after being suspended for more than three (3) months, Consultant’s compensation shall be equitably adjusted as approved by City. Any additional amounts paid to Consultant after the Project is resumed shall be agreed upon in writing by both parties before the services are performed
- 3.10 **Fixed Budget Limit for Construction Cost** – If a fixed budget limit for the Construction Cost has been established, the Consultant shall be permitted to make reasonable adjustments in the scope of the Project and to include alternate bid items in the Bid Proposal to adjust the Construction Cost to the fixed limit. However, this paragraph shall not operate to increase the fixed budget limit of the

Construction Cost established in this Agreement. All adjustments in the Scope of the Project shall be approved by the City and documented in writing. Should the lowest bona fide bid for construction of the Project be in excess of 130% of Consultant's 100% Final Design OPCC due to the negligence or other fault of the Consultant, the City may (1) give written approval of an increase in such fixed limit, (2) authorize rebidding or re-negotiating of the Project, (3) terminate the Project and this Agreement in accordance herewith, or (4), require that the Consultant adjust the Project scope or quality, or both, as necessary to reduce the Construction Cost to within the budgetary constraints. In the case of (4) the Consultant, without additional charge to the City, shall consult with the City and shall revise and modify the drawings and specifications as necessary to achieve compliance with the fixed limitation on Construction Cost. These revisions and modifications may include splitting the Project into multiple Construction Phases that will fall within budget constraints. The Consultant shall provide the services defined in Exhibit A, as required, for each of the new phases created by splitting the Project.

ARTICLE 4 OWNERSHIP OF DOCUMENTS

- 4.1 **Documents Property of City** – The Project is the property of City, and Consultant may not use the documents, plans, data, studies, surveys, drawings, maps, models, reports, photographs and/or any materials for any other purpose not relating to the Project without City's prior written consent. City shall be furnished with such reproductions of the Project, plans, data, documents, maps, and any other information as defined in **Exhibit A**. Upon completion of the work, or any earlier termination of this Agreement under Article 3 and/or Article 8 of this Agreement, Consultant will revise plans, data, documents, maps, and any other information as defined in **Exhibit A** to reflect changes while working on the Project through the date of completion of the work, as solely determined by City, or the effective date of any earlier termination of this Agreement under Article 3 and/or Article 8 of this Agreement, and promptly furnish the same to City in an acceptable electronic format. All such reproductions shall be the property of City who may use them without Consultant's permission for any purpose relating to the Project, including, but not limited to, completion of the Project, and/or additions, alterations, modifications, and/or revisions to the Project. Any reuse of the documents not relating to the Project shall be at City's own risk.
- 4.2 **Documents Subject to Laws Regarding Public Disclosure** – Consultant acknowledges that City is a governmental entity and that all documents, plans, data, studies, surveys, drawings, maps, models, reports, photographs and/or any items prepared or furnished by Consultant (and Consultant's professional associates and/or sub-consultants) under this Agreement are instruments of service in respect of the Project and property of City. Upon completion of the Project, all of the documents, plans, data, studies, surveys, drawings, maps, models, reports, photographs and/or any items prepared or furnished by

Consultant (and Consultant's professional associates and/or sub-consultants) shall thereafter be subject to the Texas Public Information Act (Chapter 552, TEX. GOV'T CODE, as amended) and any other applicable laws requiring public disclosure of the information contained in said documents.

ARTICLE 5 CONSULTANT'S INSURANCE REQUIREMENTS

- 5.1 **Required General Liability Insurance** – Consistent with the terms and provisions of **Exhibit E**, Contractor Insurance Guidelines, which is attached hereto and incorporated herein by reference for all purposes, Consultant shall procure and maintain throughout the term of this Agreement, at no expense to City, a general liability insurance policy with a company that maintains a minimum rating of "A" by A.M. Best's Key Rating Guide, or other equivalent rating service(s), and is authorized to transact business in the State of Texas, in an amount not less than One Million and 00/100 Dollars (\$1,000,000.00) for each occurrence, and Two Million and 00/100 Dollars (\$2,000,000.00) in the aggregate. Such policy shall name City, its officers, agents, representatives, and employees as additional insureds as to all applicable coverage. Such policy shall provide for a waiver of subrogation against City for injuries, including death, property damage, or any other loss to the extent that same is covered by the proceeds of the insurance. Such policy shall require the provision of written notice to City at least thirty (30) days prior to cancellation, non-renewal or material modification of any policies, evidenced by return receipt or United States Certified Mail. Consultant shall furnish City with certificates and required endorsement(s) evidencing such coverage prior to commencing work on the Project.
- 5.2 **Required Professional Liability Insurance** – Consistent with the terms and provisions of **Exhibit E**, Consultant shall procure and maintain throughout the term of this Agreement, at no expense to City, a professional liability (errors and omissions) insurance policy with a company that maintains a minimum rating of "A" by A.M. Best's Key Rating Guide, or other equivalent rating service(s), and is authorized to transact business in the State of Texas, in an amount not less than One Million and 00/100 Dollars (\$1,000,000.00) for each claim, and Two Million and 00/100 Dollars (\$2,000,000.00) in the aggregate. Such policy shall require the provision of written notice to City at least thirty (30) days prior to cancellation, non-renewal or material modification of any policies, evidenced by return receipt or United States Certified Mail. Consultant shall furnish City with certificates and required endorsement(s) evidencing such coverage prior to commencing work on the Project.
- 5.3 **Required Workers Compensation Insurance** – Consistent with the terms and provisions of **Exhibit E**, Consultant shall procure and maintain throughout the term of this Agreement, at no expense to City, all Statutory Workers Compensation Insurance as required by the laws of the State of Texas. Such insurance policy shall be with a company that maintains a minimum rating of "A" by A.M. Best's Key

Rating Guide, or other equivalent service(s), and is authorized to transact business in the State of Texas. Such policy shall require the provision of written notice to City at least thirty (30) days prior to cancellation, non-renewal or material modification of any policies, evidenced by return receipt or United States Certified Mail. Consultant shall furnish City with certificates and required endorsement(s) evidencing such coverage prior to commencing work on the Project.

- 5.4 **Circumstances Requiring Umbrella Coverage or Excess Liability Coverage** – If the Project's size and scope warrant, and if identified on the checklist located in **Exhibit E**, Consultant shall procure and maintain throughout the term of this Agreement, at no expense to City, an umbrella coverage or excess liability coverage insurance policy with a company that maintains a minimum rating of "A" by A.M. Best's Key Rating Guide, or other equivalent rating service(s), and is authorized to transact business in the State of Texas, in an amount of Two Million and 00/100 Dollars (\$2,000,000.00). Such policy shall require the provision of written notice to City at least thirty (30) days prior to cancellation, non-renewal, or material modification of any policies, evidenced by return receipt or United States Certified Mail. Consultant shall furnish City with certificates and required endorsement(s) evidencing such coverage prior to commencing work on the Project.

ARTICLE 6 CONSULTANT'S ACCOUNTING RECORDS

Records of Direct Expenses and expenses pertaining to services performed in conjunction with the Project shall be kept on the basis of generally accepted accounting principles. Invoices will be sent to City as indicated in Article 3.4 of this Agreement. Copies of employee time sheets, receipts for direct expense items and other records of Project expenses will be made available if requested.

ARTICLE 7

AUDITS AND RECORDS/VENDOR DISCLOSURE

Consultant agrees that at any time during normal business hours and as often as City may deem necessary, Consultant shall make available to representatives of City for examination all of its records with respect to all matters covered by this Agreement, and will permit such representatives of City to audit, examine, copy and make excerpts or transcripts from such records, and to make audits of all contracts, invoices, materials, payrolls, records of personnel, conditions of employment and other data relating to all matters covered by this Agreement, and for a period of four (4) years from the date of final settlement of this Agreement or for such other or longer period, if any, as may be required by applicable statute or other lawful requirement.

Consultant agrees that it is further aware of the vendor disclosure requirements set forth in Chapter 176, TEX. LOC. GOV'T CODE, as amended, and will abide by the same. In this connection, a lawful representative of Consultant shall execute and deliver to City the Conflict of Interest Questionnaire, Form CIQ, attached hereto as **Exhibit F** and incorporated herein for all purposes, no later than the Effective Date of this Agreement.

ARTICLE 8

TERMINATION OF AGREEMENT/REMEDIES

City may, upon thirty (30) days written notice to Consultant, terminate this Agreement, for any reason or no reason at all, before the termination date hereof, without prejudice to any other remedy it may have. If City terminates this Agreement due to a default of and/or breach by Consultant and the expense of finishing the Project exceeds Consultant's Fee at the time of termination, Consultant waives its right to any portion of Consultant's Fee as set forth in Article 3 of this Agreement and agrees to pay any costs over and above the fee which City is required to pay in order to finish the Project. On any default and/or breach by Consultant, City may elect not to terminate the Agreement, and in such event it may make good the deficiency in which the default consists, and deduct the costs from Consultant's Fee due Consultant as set forth in Article 3 of this Agreement. If City terminates this Agreement and Consultant is not in default of the Agreement, Consultant shall be entitled to compensation for any and all work completed to the satisfaction of City in accordance with the provisions of this Agreement prior to termination.

In the event of any termination, Consultant shall deliver to City all finished and/or unfinished documents, data, studies, surveys, drawings, maps, models, reports, photographs and/or any items prepared by Consultant in connection with this Agreement prior to Consultant receiving final payment.

The rights and remedies provided by this Agreement are cumulative, and the use of any one right or remedy by either party shall not preclude or waive its rights to use any or all other remedies. These rights and remedies are given in addition to any other rights the parties may have by law, statute, ordinance, or otherwise.

ARTICLE 9 DISPUTE RESOLUTION/MEDIATION

In addition to all remedies at law, the parties may agree to attempt to resolve any controversy, claim or dispute arising out of or relating to the interpretation or performance of this Agreement, or breach thereof, by voluntary mediation to be conducted by a mutually acceptable mediator. However, if both parties do not agree to voluntarily mediate any such controversy, claim or dispute, mediation shall not be required.

ARTICLE 10 INDEMNITY

CONSULTANT SHALL RELEASE, DEFEND, INDEMNIFY AND HOLD HARMLESS CITY AND ITS CITY COUNCIL MEMBERS, OFFICERS, AGENTS, REPRESENTATIVES AND EMPLOYEES (COLLECTIVELY REFERRED TO AS “CITY” FOR PURPOSES OF THIS ARTICLE 10) FROM AND AGAINST ALL DAMAGES, INJURIES (WHETHER IN CONTRACT OR IN TORT, INCLUDING PERSONAL INJURY AND DEATH), CLAIMS, PROPERTY DAMAGES (INCLUDING LOSS OF USE), LOSSES, DEMANDS (REGARDLESS OF WHETHER THE ALLEGATIONS ARE FALSE, FRAUDULENT OR GROUNDLESS), SUITS, ACTIONS, JUDGMENTS, LIENS, COSTS AND EXPENSES, INCLUDING REASONABLE ATTORNEY’S FEES AND EXPENSES (INCLUDING ATTORNEY’S FEES AND EXPENSES INCURRED IN ENFORCING THIS ARTICLE 10), THAT IN WHOLE OR IN PART ARISE OUT OF OR ARE CONNECTED WITH, OR THAT ARE ALLEGED TO HAVE ARISEN OUT OF OR CONNECTED WITH, GOODS AND/OR SERVICES PROVIDED BY CONSULTANT, ITS OFFICERS, AGENTS, REPRESENTATIVES, EMPLOYEES, SUBCONTRACTORS, LICENSEES, INVITEES OR ANY OTHER THIRD PARTIES FOR WHOM CONSULTANT IS LEGALLY RESPONSIBLE (COLLECTIVELY REFERRED TO AS “CONSULTANT” FOR PURPOSES OF THIS ARTICLE 10) PURSUANT TO THIS AGREEMENT AND/OR THE NEGLIGENT, GROSSLY NEGLIGENT AND/OR INTENTIONAL WRONGFUL ACT AND/OR OMISSION OF CONSULTANT IN ITS/THEIR PERFORMANCE OF THIS AGREEMENT, REGARDLESS OF THE JOINT OR CONCURRENT NEGLIGENCE OR STRICT LIABILITY OF THE CITY (COLLECTIVELY, “CLAIMS”). THIS INDEMNIFICATION PROVISION AND THE USE OF THE TERM “CLAIMS” IS ALSO SPECIFICALLY INTENDED TO APPLY TO, BUT IS NOT LIMITED TO, ANY AND ALL CLAIMS, WHETHER CIVIL OR CRIMINAL, BROUGHT AGAINST CITY BY ANY GOVERNMENT AUTHORITY OR AGENCY RELATED TO ANY PERSON PROVIDING SERVICES UNDER THIS AGREEMENT THAT ARE BASED ON ANY FEDERAL IMMIGRATION LAW AND ANY AND ALL CLAIMS, DEMANDS, DAMAGES, ACTIONS AND CAUSES OF ACTION OF EVERY KIND AND NATURE, KNOWN AND

UNKNOWN, EXISTING OR CLAIMED TO EXIST, RELATING TO OR ARISING OUT OF ANY EMPLOYMENT RELATIONSHIP BETWEEN CONSULTANT AND ITS EMPLOYEES OR SUBCONTRACTORS AS A RESULT OF THAT SUBCONTRACTOR'S OR EMPLOYEE'S EMPLOYMENT AND/OR SEPARATION FROM EMPLOYMENT WITH THE CONSULTANT, INCLUDING BUT NOT LIMITED TO ANY DISCRIMINATION CLAIM BASED ON SEX, SEXUAL ORIENTATION OR PREFERENCE, RACE, RELIGION, COLOR, NATIONAL ORIGIN, AGE OR DISABILITY UNDER FEDERAL, STATE OR LOCAL LAW, RULE OR REGULATION, AND/OR ANY CLAIM FOR WRONGFUL TERMINATION, BACK PAY, FUTURE WAGE LOSS, OVERTIME PAY, EMPLOYEE BENEFITS, INJURY SUBJECT TO RELIEF UNDER THE WORKERS' COMPENSATION ACT OR WOULD BE SUBJECT TO RELIEF UNDER ANY POLICY FOR WORKERS COMPENSATION INSURANCE, AND ANY OTHER CLAIM, WHETHER IN TORT, CONTRACT OR OTHERWISE. CONSULTANT IS EXPRESSLY REQUIRED TO DEFEND CITY AGAINST ALL SUCH CLAIMS; PROVIDED, HOWEVER, THAT IF A COURT OF COMPETENT JURISDICTION SIGNS A JUDGMENT THAT BECOMES FINAL AND NON-APPEALABLE, DETERMINING THAT THE CITY (WITHOUT WAIVING ANY GOVERNMENTAL IMMUNITY) HAS JOINT, CONCURRENT OR SOLE NEGLIGENCE FOR THE CLAIMS IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS ("JUDGMENT"), THEN CONSULTANT IS NOT REQUIRED TO INDEMNIFY OR DEFEND CITY TO THE EXTENT OF THE NEGLIGENCE APPORTIONED TO CITY FOR EACH CAUSE(S) OF ACTION IDENTIFIED IN THE JUDGMENT. IN THE EVENT THE JUDGMENT PROVIDES THAT CITY IS JOINTLY, CONCURRENTLY OR SOLELY NEGLIGENT FOR THE CLAIMS REFERRED TO THEREIN, CITY AGREES TO REIMBURSE CONSULTANT FOR ALL REASONABLE AND NECESSARY COSTS INCURRED AND PAID BY CONSULTANT THAT ARE ATTRIBUTABLE TO CITY'S PERCENTAGE OF JOINT, CONCURRENT OR SOLE NEGLIGENCE, AS SET FORTH IN THE JUDGMENT, INCLUDING REASONABLE AND NECESSARY ATTORNEY'S FEES AND EXPENSES, WITHIN SIXTY (60) DAYS OF THE DATE THE JUDGMENT BECOMES FINAL AND NON-APPEALABLE. IF THIS AGREEMENT IS A CONTRACT FOR ENGINEERING OR ARCHITECTURAL SERVICES, THEN CONSULTANT'S INDEMNITY AND DEFENSE OBLIGATIONS UNDER THIS ARTICLE 10 ARE LIMITED BY, AND TO BE READ AS COMPLYING WITH, SECTION 271.904 OF THE TEXAS LOCAL GOVERNMENT CODE.

IN ITS SOLE DISCRETION, CITY SHALL HAVE THE RIGHT TO APPROVE OR SELECT DEFENSE COUNSEL TO BE RETAINED BY CONSULTANT IN FULFILLING ITS OBLIGATION HEREUNDER TO DEFEND AND INDEMNIFY CITY, UNLESS SUCH RIGHT IS

EXPRESSLY WAIVED BY CITY IN WRITING. CITY RESERVES THE RIGHT TO PROVIDE A PORTION OR ALL OF ITS OWN DEFENSE; HOWEVER, CITY IS UNDER NO OBLIGATION TO DO SO. ANY SUCH ACTION BY CITY IS NOT TO BE CONSTRUED AS A WAIVER OF CONSULTANT'S OBLIGATION TO DEFEND CITY OR AS A WAIVER OF CONSULTANT'S OBLIGATION TO INDEMNIFY CITY PURSUANT TO THIS AGREEMENT. CONSULTANT SHALL RETAIN CITY-APPROVED DEFENSE COUNSEL WITHIN SEVEN (7) BUSINESS DAYS OF CITY'S WRITTEN NOTICE THAT CITY IS INVOKING ITS RIGHT TO DEFENSE OR INDEMNIFICATION UNDER THIS AGREEMENT. IF CONSULTANT FAILS TO RETAIN COUNSEL WITHIN SUCH TIME PERIOD, CITY SHALL HAVE THE RIGHT TO RETAIN DEFENSE COUNSEL ON ITS OWN BEHALF, AND CONSULTANT SHALL BE LIABLE FOR ALL COSTS INCURRED BY CITY. THE RIGHTS AND OBLIGATIONS CREATED BY THIS ARTICLE SHALL SURVIVE TERMINATION OF THIS AGREEMENT.

ARTICLE 11 NOTICES

Any notice provided or permitted to be given under this Agreement must be in writing and may be served by depositing the same in the United States Mail, addressed to the party to be notified, postage pre-paid and registered or certified with return receipt requested; by facsimile; by electronic mail, with documentation evidencing the addressee's receipt thereof; or by delivering the same in person to such party a via hand-delivery service, or any courier service that provides a return receipt showing the date of actual delivery of same to the addressee thereof. Notice given in accordance herewith shall be effective upon receipt at the address of the addressee. For purposes of notification, the addresses of the parties shall be as follows:

If to City, addressed to:

Wayne E. Lee, P.E., CFM
Director of Engineering
City of Sherman
220 W Mulberry St.
Sherman, TX 75091
Telephone: (903) 892-7327
Email: waynel@cityofsherman.com

With a copy to:

Abernathy, Roeder, Boyd & Hullett, P.C.
Attention: Ryan D. Pittman
1700 Redbud Blvd., Suite 300
McKinney, Texas 75069
Telephone: (214) 544-4000
Facsimile: (214) 544-4054

Email: rpittman@abernathy-law.com

If to Consultant, addressed to:

Lance Klement, P.E.

Senior Project Manager

Garver

3000 Internet Blvd., Suite 400

Frisco, Texas 75034

Telephone: (214) 619-9047

Email: LPKlement@GarverUSA.com

ARTICLE 12 MISCELLANEOUS

12.1 **Complete Agreement** – This Agreement, including the exhibits hereto labeled “A” through “F,” all of which are incorporated herein for all purposes, constitute the entire Agreement by and between the parties regarding the subject matter hereof and supersedes all prior and/or contemporaneous written and/or oral understandings. This Agreement may not be amended, supplemented, and/or modified except by written agreement duly executed by both parties. The following exhibits are attached below and made a part of this Agreement:

12.1.1 **Exhibit A**, Scope of Services.

12.1.2 **Exhibit B**, Project Engineering Budget Summary.

12.1.3 **Exhibit C**, Guidelines for Computer Aided Design and Drafting (CADD).

12.1.4 **Exhibit D**, Guidelines for Direct Expenses; General and Administrative Markup; Travel and Subsistence Expenses.

12.1.5 **Exhibit E**, Contractor Insurance Guidelines.

12.1.6 **Exhibit F**, Conflict of Interest Questionnaire, Form CIQ.

To the extent that **Exhibit A**, **Exhibit B**, **Exhibit C**, **Exhibit D**, **Exhibit E**, or **Exhibit F** are in conflict with provisions of this Agreement or each other, the provisions of this Agreement, then the provisions of **Exhibit B**, **Exhibit C**, **Exhibit D**, **Exhibit E**, **Exhibit F** or **Exhibit A** shall prevail in that order.

12.2 **Assignment and Subletting** – Consultant agrees that neither this Agreement nor the work to be performed hereunder will be assigned or sublet without the prior written consent of City. Consultant further agrees that the assignment or subletting of any portion or feature of the work or materials required in the performance of this Agreement shall not relieve Consultant of its full obligations to City as provided by this Agreement. All such approved work performed by assignment or subletting shall be billed through Consultant, and there shall be no third party billing.

12.3 **Attorney’s Fees** – If either party files any action or brings any proceeding against the other arising from this Agreement, then as between City and Consultant, the prevailing party shall be entitled to recover as an element of its costs of suit, and not as damages, reasonable and necessary attorneys’ fees and litigation expenses both at trial and on appeal, subject to the limitations set forth in TEX. LOC. GOV’T CODE § 271.153, as it exists or may be amended, if applicable.

12.4 **Successors and Assigns** – City and Consultant, and their respective partners, assigns, successors, subcontractors, executors, officers, agents, employees,

representatives and administrators are hereby bound to the terms and conditions of this Agreement.

- 12.5 **Savings/Severability** – In the event of a term, condition, or provision of this Agreement is determined to be invalid, illegal, void, unenforceable, or unlawful by a court of competent jurisdiction, then that term, condition, or provision, shall be deleted and the remainder of the Agreement shall remain in full force and effect as if such invalid, illegal, void, unenforceable or unlawful provision had never been contained in this Agreement.
- 12.6 **Governing Law/Venue** – This Agreement shall be governed by and construed in accordance with the laws of the State of Texas, without regard to conflict of law principles. The exclusive venue for any action arising out of this Agreement shall be a court of appropriate jurisdiction in Grayson County, Texas.
- 12.7 **Execution/Consideration** – This Agreement is executed by the parties hereto without coercion or duress for any substantial consideration, the sufficiency of which is forever confessed.
- 12.8 **Authority** – The individuals executing this Agreement on behalf of the respective parties below represent to each other that all appropriate and necessary action has been taken to authorize the individual who is executing this Agreement to do so for and on behalf of the party for which his or her signature appears, that there are no other parties or entities required to execute this Agreement in order for the same to be an authorized and binding agreement on the other party for whom the individual is signing this Agreement and that each individual affixing his or her signature hereto is authorized to do so, and such authorization is valid and effective on the date hereof.
- 12.9 **Waiver** – Waiver by either party of any breach of this Agreement, or the failure of either party to enforce any of the provisions of this Agreement, at any time, shall not in any way affect, limit, or waive such party's right thereafter to enforce and compel strict compliance.
- 12.10 **Headings** – The headings of the various sections of this Agreement are included solely for convenience of reference and are not to be full or accurate descriptions of the content thereof.
- 12.11 **Multiple Counterparts** – This Agreement may be executed in a number of identical counterparts, each of which shall be deemed an original for all purposes. An electronic mail and/or facsimile signature will also be deemed to constitute an original if properly executed and delivered to the other party.
- 12.12 **Immunity** – It is expressly understood and agreed that, in the execution and performance of this Agreement, City has not waived, nor shall be deemed to have

waived, any immunity, governmental, sovereign and/or official, or defense that is available to it against claims arising in the exercise of governmental powers and functions. By entering into this Agreement, the parties do not create any obligations, express or implied, other than those set forth in this Agreement.

- 12.13 **Incorporation of Recitals** – The representations, covenants and recitations set forth in the foregoing recitals of this Agreement are true and correct and are incorporated into the body of this Agreement and adopted as findings of City and the authorized representative of Consultant.
- 12.14 **Additional Representations** – Each signatory represents this Agreement has been read by the party for which this Agreement is executed and that such party has had the opportunity to confer with its counsel.
- 12.15 **Miscellaneous Drafting Provisions** – This Agreement shall be deemed drafted equally by all parties hereto. The language of all parts of this Agreement shall be construed as a whole according to its fair meaning, and any presumption or principle that the language herein is to be construed against any party shall not apply.
- 12.16 **No Third-Party Beneficiaries** – Nothing in this Agreement shall be construed to create any right in any third party not a signatory to this Agreement, and the parties do not intend to create any third party beneficiaries by entering into this Agreement.
- 12.17 **Indemnity** – The parties agree that the Indemnity provision set forth in Article 10 of this Agreement is conspicuous and the parties have read and understood the same.
- 12.18 **Representations** – All representations and covenants made by one party to the other in this Agreement or in any certificate or other instrument delivered by one party to the other under this Agreement shall be considered to have been relied upon by the other party and will survive the satisfaction of any fees under this Agreement, regardless of any investigation made by either party.
- 12.19 **Independent Contractor** – In performing this Agreement, Consultant shall act as an independent contractor with respect to City. In no event shall this Agreement be construed as establishing a partnership, joint venture or similar relationship between the parties and nothing herein shall authorize either party to act as agent for the other. Consultant shall be liable for its own debts, obligations, acts and omissions, including the payment of all required withholding, social security and other taxes and benefits with respect to all of Consultant's officers, directors, partners, employees and representatives, who shall not be considered City employees and shall not be eligible for any employee benefit plan offered by City.

- 12.20 **Debarment/Suspension** – City is prohibited from making any award or permitting any award at any tier to any party which is debarred or suspended or otherwise excluded from or ineligible for participation in federal assistance programs under Executive Order 12549, Debarment and Suspension. City, Consultant and Consultant's subcontractors shall comply with federal and state regulations regarding debarment and suspension. Consultant shall include a statement of compliance with federal and state debarment and suspension regulations in all third-party agreements for work on the Project.
- 12.21 **Restrictions on Lobbying** – City and Consultant are prohibited from using funds awarded under the Agreement for lobbying purposes. Consultant shall include a statement of compliance with this provision in applicable procurement solicitations and third-Party agreements for work on the Project.
- 12.22 **Appropriation of Funds** – Funds are not presently budgeted for City's performance under this Agreement beyond the end of City's current fiscal year. City will give Consultant sixty (60) days' notice if funds for City's performance are not budgeted to continue beyond that time. City shall have no liability for payment of any money for services performed after the end of City's current fiscal year unless and until such funds are budgeted.
- 12.23 **Certifications Required by Texas Law** – In accordance with Chapter 2270 of the Texas Government Code (to the extent applicable), Consultant hereby certifies that Consultant does not boycott Israel and will not boycott Israel during the term of any contract with City, including during the term of this Agreement. In accordance with Chapter 809 of the Texas Government Code (to the extent applicable), Consultant hereby certifies that Consultant does not boycott energy companies and will not boycott energy companies during the term of any contract with City, including during the term of this Agreement. In accordance with Chapter 2274 of the Texas Government Code (to the extent applicable), Consultant hereby certifies that Consultant does not have a practice, policy, guidance or directive that discriminates against a firearm entity or firearm trade association and will not discriminate against a firearm entity or firearm trade association during the term of any contract with City, including during the term of this Agreement. The foregoing terms have the meanings ascribed to them in the referenced statutes if defined therein.
- 12.24 **Reference to Consultant** – When referring to "Consultant," this Agreement shall refer to and be binding upon Consultant, and its officers, directors, partners, employees, representatives, contractors, subcontractors, licensees, invitees, agents, successors, assignees (as authorized herein), vendors, grantees, trustees, legal representatives and/or any other third parties for whom Consultant is legally responsible.

12.25 **Reference to City** – When referring to “City,” this Agreement shall refer to and be binding upon City, its Council members, officers, agents, representatives, employees and/or any other authorized third parties for whom City is legally responsible.

IN WITNESS WHEREOF, the parties have executed this Agreement and caused this Agreement to be effective on the date set forth in the introductory clause of this Agreement.

CITY:

City of Sherman, Texas,
a Texas home-rule municipality

By: _____
Robby Hefton, City Manager

CONSULTANT:

Garver, LLC
a Texas limited liability company

By: _____
Lance Klement, PE
Senior Project Manager

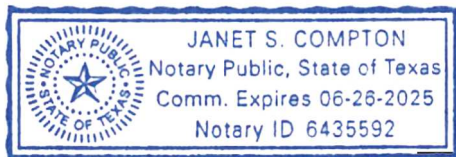
APPROVED AS TO FORM:

Abernathy, Roeder, Boyd & Hullett, P.C.
Ryan D. Pittman, City Attorneys

STATE OF TEXAS §
 §
COUNTY OF Collin §

BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED Lance Klement, KNOWN TO ME TO BE ONE OF THE PERSONS WHOSE NAMES ARE SUBSCRIBED TO THE FOREGOING INSTRUMENT; HE ACKNOWLEDGED TO ME THAT HE IS THE PRESIDENT AND DULY AUTHORIZED REPRESENTATIVE FOR Garver, AND THAT HE EXECUTED SAID INSTRUMENT FOR THE PURPOSES AND CONSIDERATION THEREIN EXPRESSED.

GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS 17th DAY OF May 2024.



A handwritten signature in blue ink that reads "Janet Compton". The signature is written in a cursive style and is positioned to the right of the notary seal.

NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS
My commission expires: 6/26/2025

EXHIBIT A SCOPE OF SERVICES

I. PROJECT DESCRIPTION

Generally, the scope of services includes development of construction details and specifications for improvements to the **Stephens GST and PS Facility**.

Improvements will consist primarily of sand blasting and coating of the exterior and interior of the tank, replacing two pumps and motors and associated check valve and gate valves, new exterior drain pipe, replacing the ladder and access hatch if warranted, replacing tank lighting, installing an antenna ring, and recoating exterior valves and piping.

II. GENERAL REQUIREMENTS

- A.** Specific design requirements shall be obtained from the City of Sherman Engineering Design Standards. Consultant will establish and summarize design criteria. The design criteria will be reviewed by the City for approval prior to beginning design work.
- B.** Consultant shall coordinate with other engineering consultants, utility companies, franchise utilities, City of Sherman, pipeline companies, and any other entity which has facilities within or adjacent to the Project.
- C.** Each time the Consultant submits plans and/or specifications to City, two (2) copies (as well as PDF versions) of each shall be submitted, unless otherwise instructed. These shall be reviewed and checked by City and returned to Consultant for corrections. When the corrected copies of the plans and specifications are returned to City, the original and reviewed plans and specifications shall also be returned to City. All plans, specifications, documents, provisions, attachments, and correspondence provided in accordance with this contract shall be dated.
- D.** The Consultant shall submit a monthly report outlining, at a minimum, the work on the project which occurred the previous month, the work expected to be completed the following month, the next major project milestone, and any information needed from the City. The report is to be submitted with monthly invoice.
- E.** Communications and Reporting:
 - i Attend a pre-design project kickoff meeting with City staff to confirm and clarify scope, understand City objectives, and ensure economical and functional designs meet City requirements.
 - ii Attend review meeting with the City at the end of each design phase.
 - iii Prepare and submit monthly invoices in the format acceptable to the City.
 - iv Prepare and submit monthly progress reports.
 - v Prepare and submit baseline Project Schedule initially, Project Schedule

EXHIBIT A SCOPE OF SERVICES

- updates, and updated Opinion of Probable Construction Cost (OPCC) with each plan submittal.
- vi Coordinate with other agencies and entities as necessary for the design of the proposed infrastructure and provide and obtain information needed to prepare the design.
- vii With respect to coordination with permitting authorities, Consultant shall communicate with permitting authorities such that their regulatory requirements are appropriately reflected in the designs. Consultant shall work with regulatory authorities to obtain approval of the designs, and make changes necessary to meet their requirements.
- viii Attend additional project coordination meetings, if needed.

III. TASK SUMMARY. BASIC SERVICES

A. Task 1 – Preliminary Design Phase

During the preliminary design phase of the project, Garver will produce preliminary designs for one (1) construction contract, plans, including construction details and quantities, special provisions, and OPCC. The following items shall be included in the scope of the design:

- i. Incorporating lead abatement into the design if necessary based on lead testing conducted by the Owner
 - ii. Sandblasting and recoating of the interior and exterior of the entire GST, including chemical power washing of interior of the tank.
 - iii. Replacing of the water access hatch if warranted.
 - iv. Replace tank ladder.
 - v. Replacing and widening the manhole on the top of the tank.
 - vi. Application of “Confined Space Entry” placards to the water access hatch, view port, both overflow burst disks, and all manway access hatches in compliance with OSHA regulations.
 - vii. Replacing the two smaller booster pumps and associated check valves/gate valves.
 - viii. Relocating the drain line and mud valve outside of the tank.
 - ix. Replacing the exterior tank lights.
 - x. Sandblasting and recoating of exposed piping and valves on site.
 - xi. Installation of cathodic protection on the GST.
 - xii. Address chlorine vault flooding.
- a. Prepare preliminary engineering review drawings to include preliminary horizontal and vertical alignments of all proposed improvements with minimal construction-related notes. Cross-sections at least every fifty (50) feet will be required for paving-related or channel-related projects. If necessary, report in sufficient detail to indicate clearly any of the problems involved and provide alternate solutions available to the City. Include preliminary layouts, a right-of-way map, sketches, and cost estimates for the Project and set forth clearly the

EXHIBIT A SCOPE OF SERVICES

Consultant's recommendations for any alternate designs.

- b. Water, sanitary sewer, and storm drains will be shown on the plans based on field information and from existing "Record Drawings" provided by the City of Sherman. Other utilities should be shown on the plans based on field information collected by the Consultant, utility locates requested by the Consultant, and any available "Record Drawings" that the Consultant can obtain from other utilities.
- c. Depending on comments received from the City's review and field investigations, another set of preliminary phase construction drawings may be required.
- d. Upon completion of the Preliminary Design Phase, the Engineer will advise the City of any geotechnical, soil, foundation, or other subsurface investigations or any special surveys, Level B or A SUE, or special testing which, in the opinion of the Consultant, may be required for the proper execution of the project, and assist the City in arranging for the conduct of such investigations and tests. The performance of geotechnical investigations and tests will not be a part of the Consultant's Basic Engineering Services and will not be included unless specifically authorized in writing under "F. Special Services."
- e. Prior to the Preliminary review meeting with the City, the Consultant shall schedule and attend a project site visit with the City Project Manager and Construction personnel to walk the project. The Consultant shall summarize the City's comments from the field visit and submit this information to the City in writing.
- f. The Consultant will consult with the City, public utilities, private utilities and government agencies to determine the approximate location of above and underground utilities, and other facilities (current and future) that have an impact or influence on the project. Consultant will design City facilities to avoid or minimize conflicts with existing utilities, and where known and possible, consider potential future utilities in designs.

B. Task 2 – Intermediate Design Plans (90%)

During the intermediate design phase of the project, Garver will produce intermediate designs, including plans, specifications, intermediate construction details and quantities, special provisions, and OPCC.

- a. Prepare intermediate engineering review drawings that address all comments from the preliminary engineering review, including detailed construction-related notes. Cross-sections at least every fifty (50) feet will be required for paving-related or channel-related projects. Driveway profiles will be required for

EXHIBIT A SCOPE OF SERVICES

paving-related projects. A general notes sheet(s), coordinate control sheet(s), proposed traffic control sheet(s), proposed erosion control plan sheet(s), and detail sheet(s) will be required for all projects. Drainage-related projects will require all pertinent information showing calculations for drainage areas, inlet capacity, spread of flow and depth in street, and hydraulic grade line.

- b. Prepare miscellaneous plan sheets, including cover sheet, index, general notes, project control and applicable City standard details.
- c. The Contract Documents will consist of specifications that set forth requirements for construction of the improvements and shall include the Owner's standard front ends and information as required by the Owner to competitively bid the work.
- d. The intermediate design will be completed as a 90% set. Garver will submit 90% documents to the Owner for review. Upon receipt of the Owner review comments, Garver will update the documents and produce a 100% contract documents for bidding and construction.

C. Task 3 – Final Design/Construction Plans (100%)

During the final design phase of the project, Garver will produce final designs, including plans, specifications, final construction details and quantities, special provisions, and OPCC.

- a. Prepare final engineering review drawings that address all comments from the intermediate review.
- b. Prepare detailed cost estimates based on current unit prices from the proposal of authorized construction, which shall include summaries of bid items and quantities on the unit price system of bidding, wherever practical.
- c. Finalize miscellaneous plan sheets, including cover sheet, index, general notes, project control and applicable City standard details.
- d. Submit three (3) final sealed copies each of any necessary right-of-way or easement documents.
- e. When required by the nature of the project, the Consultant shall provide necessary exhibits and attend a public meeting with the City.
- f. Upon completion of the final design review, the Consultant shall furnish to the City up to four (4) additional copies and a pdf of the construction drawings to be forwarded to the utility companies.

EXHIBIT A SCOPE OF SERVICES

- g. Upon completion of the final design review, the Consultant shall furnish to the City, where required by the circumstances of the assignment, the engineering data, construction plans, completed forms, and reports necessary for applications for routine permits by local, state, and federal authorities (as distinguished from detailed applications and supporting documents for government grants-in-aid or for planning advances not included in Basic Engineering Services).

D. Task 4 – Bid Phase Services

Upon receipt of the design approval letter from TCEQ and approval to advertise from the City, Consultant will commence the Bid Phase Services for one construction contract.

The bidding period for prospective bidders is assumed to be a 30-day duration period. During the bidding period phase of the project, Consultant will:

- a. Prepare and submit Advertisement for Bids to Greater Texoma Utility Authority (GTUA) per their requirements. GTUA will submit the advertisement to newspapers and will pay advertising costs outside of this contract.
- b. Post advertisement for bids, construction contract documents, and any associated information to Consultant's online plan room for download by prospective bidders (at an appropriate cost for handling).
- c. Support the contract documents by preparing addenda as appropriate and posting on Consultant's online plan room.
- d. Respond to questions submitted on Consultant's online plan room as appropriate.
- e. Conduct one pre-bid meeting.
- f. Prepare a pre-bid meeting agenda. Following City authorization, post the pre-bid meeting presentation with attendance record on Consultant's online plan room.
- g. Conduct a construction site tour following the pre-bid meeting by interested pre-bid meeting attendees and other interested parties.
- h. Host, attend, and manage the bid opening process.
- i. Prepare bid tabulation.
- j. Evaluate bids and recommend award.

EXHIBIT A SCOPE OF SERVICES

- k. Prepare formal Construction Contract Documents, provide four (4) copies of contracts to be executed by the contractor, and coordinate their execution by the respective parties.
- l. The Consultant shall not be required to guarantee the accuracy of the final design OPCC, but may be required to provide additional services at no cost to the City if bids for the Project exceed the fixed budget limit for the Construction Cost as provided in Article 3.

E. Construction Phase Services

During the construction phase of work, Consultant will accomplish the following:

- a. Conformed Document submittal:
 - i. Update the Bid Documents (plans and Project Manual) to incorporate bid addenda items
 - ii. Print up to ten (10) sets 11"x17" plans and Project Manuals for issuance at the Pre-Construction Conference.
 - iii. Package and submit CAD base files upon request.
- b. Attend nine progress/coordination meetings with the Owner/Contractor. Additional site visits upon request.
- c. *Pre-Construction Meeting.* Attend Pre-Construction Meeting(s) prior to commencement of Work at the Site.
- d. *Franchise Utility Coordination.* Assist the City with franchise utility coordination efforts and conflict resolution during construction.
- e. *Requests for information.* Coordinate with Engineer and issue clarifications and interpretations of the Contract Documents to City as appropriate to the orderly completion of Contractor's work. Such clarifications and interpretations will be consistent with the intent of the Contract Documents. Field Orders authorizing variations from the requirements of the Contract Documents will be made by City. Consultant will respond to up to 25 RFIs.
- f. *Change Orders.* Recommend Change Orders to City, as appropriate. Review and make recommendations related to Change Orders submitted or proposed by the Contractor. Task includes preparing plan sheet revisions. If redesign or substantial engineering or surveying is required in the preparation of these change order documents, the Owner will pay Consultant an additional fee to be agreed upon by the Owner and Consultant.
- g. *Shop Drawings, Samples, and Submittals.* Review and approve or take other

EXHIBIT A SCOPE OF SERVICES

appropriate action in respect to Shop Drawings, Samples, Submittals and other data which Contractor is required to submit, but only for conformance with the information given in the Contract Documents and compatibility with the design concept of the completed Project as a functioning whole as indicated in the Contract Documents. Such review and approvals or other action will not extend to means, methods, techniques, equipment choice and usage, sequences, schedules, or procedures of construction or to related safety precautions and programs. Consultant will review up to 30 submittals.

- h. *Substitutes and "or-equal."* Evaluate and determine the acceptability of substitute or "or-equal" materials and equipment proposed by Contractor in accordance with the Contract Documents, but subject to the provisions of applicable standards of state or local government entities.
- i. *Disagreements between City and Contractor.* As necessary, render written decision on all claims of City and Contractor relating to the acceptability of Contractor's work or the interpretation of the requirements of the Contract Documents pertaining to the progress of Contractor's work. In rendering such decisions, Consultant shall be fair and not show partiality to City or Contractor and shall not be liable in connection with any decision rendered in good faith in such capacity.
- j. *Limitation of Responsibilities.* Consultant shall not be responsible for the acts or omissions of any Contractor, or of any of their subcontractors, suppliers, or of any other individual or entity performing or furnishing the Work. Consultant shall not have the authority or responsibility to stop the work of any Contractor.
- k. Participate in final project inspection, prepare punch list, review final project closing documents, and submit final pay request.
- l. Consultant shall prepare construction Record Documents based on the information received from Contractor within 30 days of final completion in accordance with the Agreement. Consultant shall submit one full size set and one pdf file of the Record Documents.

F. Special Services

- i. N/A

IV. ITEMS NOT INCLUDED IN THE EXISTING SCOPE OF SERVICES

- A **Additional Services not included in the existing Scope of Services** – City and Consultant agree the following services are beyond the Scope of Services described in the tasks above. However, Consultant can provide these services, if needed, upon the City's written request. Any additional amounts paid to the

EXHIBIT A SCOPE OF SERVICES

Consultant as a result of any material change to the Scope of the Project shall be agreed upon in writing by both parties before the services are performed. These Additional Services include the following:

1. Construction observation services
2. Public outreach
3. Facility condition assessments
4. Emergency response planning
5. Hazard mitigation planning
6. Funding assistance
7. Evaluation of structural integrity of facilities
8. Survey of any kind
9. Startup assistance
10. Operations support services
11. Warranty assistance services
12. Geotechnical services
13. Utility location services
14. Operational audit/optimization
15. Environmental handling and documentation, including wetlands identification or mitigation plans or other work related to environmentally or historically (culturally) significant items
16. Modeling of the water system.

V. Schedule

Garver shall begin work under this Agreement within ten (10) days of a Notice to Proceed and shall complete the work in accordance with the schedule below:

<u>Phase Description</u>	<u>Calendar Days</u>
30% Submittal	30 days from NTP
90% Submittal	60 days from Owner comments on 30%
100% Submittal	14 days from Owner comments on 90%
Bid Services	30 days from Owner approval to advertise
Construction Services	270 days from Owner award to low bidder

EXHIBIT B
PROJECT BUDGET SUMMARY

I. Basic Services

A. Preliminary Design Plans (30%)	\$40,614.00
B. Intermediate Design Plans (90%)	\$26,700.00
C. Final Design/Construction Plans (100%)	\$18,236.00
D. Bid Phase Services	\$11,100.00
E. <u>Construction Phase Services</u>	<u>\$43,036.00</u>

<i>Total Basic Services (Lump Sum)</i>	<i>\$139,686.00</i>
---	----------------------------

II. Special Services

<u>N/A</u>	<u>\$0.00</u>
------------	---------------

<i>Total Authorized Special Services</i>	<i>\$0.00</i>
---	----------------------

<i>Project Budget, Grand Total (Not-To-Exceed)</i>	<i>\$139,686.00</i>
---	----------------------------



Exhibit B
City of Sherman
Stephens GST and PS Improvements
Garver Hourly Rate Schedule: July 2024 - June 2025

Classification	Rates	Classification	Rates
Engineers / Architects		Resource Specialists	
E-1	\$ 130.00	RS-1	\$ 104.00
E-2	\$ 144.00	RS-2	\$ 137.00
E-3	\$ 174.00	RS-3	\$ 194.00
E-4	\$ 203.00	RS-4	\$ 268.00
E-5	\$ 247.00	RS-5	\$ 335.00
E-6	\$ 304.00	RS-6	\$ 411.00
E-7	\$ 422.00	RS-7	\$ 460.00
Planners		Environmental Specialists	
P-1	\$ 157.00	ES-1	\$ 104.00
P-2	\$ 196.00	ES-2	\$ 131.00
P-3	\$ 244.00	ES-3	\$ 168.00
P-4	\$ 273.00	ES-4	\$ 198.00
P-5	\$ 308.00	ES-5	\$ 248.00
Designers		ES-6	\$ 318.00
D-1	\$ 118.00	ES-7	\$ 398.00
D-2	\$ 135.00	ES-8	\$ 450.00
D-3	\$ 161.00	Project Controls	
D-4	\$ 193.00	PC-1	\$ 106.00
Technicians		PC-2	\$ 140.00
T-1	\$ 95.00	PC-3	\$ 178.00
T-2	\$ 114.00	PC-4	\$ 229.00
T-3	\$ 139.00	PC-5	\$ 280.00
T-4	\$ 180.00	PC-6	\$ 361.00
Surveyors		PC-7	\$ 454.00
S-1	\$ 58.00	Administration / Management	
S-2	\$ 77.00	AM-1	\$ 75.00
S-3	\$ 103.00	AM-2	\$ 96.00
S-4	\$ 148.00	AM-3	\$ 134.00
S-5	\$ 187.00	AM-4	\$ 171.00
S-6	\$ 218.00	AM-5	\$ 209.00
2-Man Crew (Survey)	\$ 225.00	AM-6	\$ 272.00
3-Man Crew (Survey)	\$ 282.00	AM-7	\$ 320.00
2-Man Crew (GPS Survey)	\$ 245.00	M-1	\$ 510.00
3-Man Crew (GPS Survey)	\$ 302.00		
Construction Observation			
C-1	\$ 112.00		
C-2	\$ 140.00		
C-3	\$ 171.00		
C-4	\$ 221.00		
C-5	\$ 259.00		

EXHIBIT C

GUIDELINES FOR COMPUTER AIDED DESIGN AND DRAFTING (CADD)

1. Files shall done in DWG/DXF format.
2. Files shall be georeferenced in the State Plane, Texas North Central FIPS 4202 (feet) coordinate system, using a datum of NAD 83 Grid.
3. If a surface adjustment factor is applied to the data, any surface adjustment factors used should be clearly documented on the drawing.
4. If submissions for the Project relate to a plat, the file submitted must match exactly the plat that is submitted for recording.
5. The file shall contain required features for the project type as detailed below:
 - a. Pre-Construction/As-Built Plans and/or Record Documents:
 - i. Layers from Final Plat Requirements as Applicable to Project Type.
 - ii. Water Utility Features.
 - iii. Sanitary Sewer Features.
 - iv. Storm Sewer Features.
6. Each required feature group should be provided as a separate layer within the file.
7. Layer names should be representative of the information contained in the layer.
8. Line work should be done per accepted industry norms.

Text should not be smaller than 0.08" on a full size sheet, and should be a font such at Simplex, Calibri, or Arial.

EXHIBIT D
CONSULTANT'S GUIDELINES FOR DIRECT EXPENSES; GENERAL AND
ADMINISTRATIVE MARKUP; TRAVEL AND SUBSISTENCE EXPENSES

- I. **CONSULTANT'S RESPONSIBILITY.** Consultant shall be solely responsible for the auditing and accuracy of all Direct Expenses, approved markup (general and/or administrative), and approved travel and/or subsistence charges, including those of its subcontractors, prior to submitting to City for reimbursement. Any over-payment by City for errors in submittals for reimbursement may be deducted from Consultant's subsequent payment(s) for services; however, this shall not be City's sole and exclusive remedy for said over-payment.

II. **GUIDELINES FOR DIRECT EXPENSES.**

- A. **Local Transportation** – Transportation in connection with the Project, when such transportation is not a function of routine performance of the duties of Consultant in connection with the Project, and when such transportation exceeds beyond fifty (50) miles from the Project site, shall be reimbursed at a standard mileage rate consistent with that as issued, and periodically revised, by the United States Internal Revenue Service (IRS). Under no circumstances shall City reimburse Consultant at a higher standard mileage rate or pay additional markup on charges for local transportation. Completion of City's Standard Mileage Log is required for submittal of these charges for reimbursement, including justification for each submitted expense.

Under no circumstances are charges associated with rental cars for local transportation eligible for reimbursement by City. Toll road subscriptions or toll plaza receipts are not reimbursable. Consultant agrees to place these standards in all subcontracts for work on the Project.

- B. **Supplies. Material. Equipment** – City shall reimburse the actual cost of other similar direct Project-related expenses, which are duly presented in advance and approved by City's Project Manager in writing.
- C. **Commercial Reproduction** – City shall reimburse the actual cost of reproductions, specifically limited to progress prints prepared for presentation to City at each phase of progress, and final Construction Documents prepared for distribution at bidding phase, provided that Consultant has duly obtained at least three (3) quotations from commercial firms and has chosen the best value for City. Consultant shall provide such documentation to City for review prior to submitting these expenses for reimbursement. Consultant agrees to place these standards in all subcontracts for work on the Project.
- D. **In-House Reproduction** – Consultant shall make arrangements with City for prior approval of in-house reproduction rates prior to submitting these expenses for reimbursement. City shall provide Consultant with a standard format for documenting these charges. Completion of City's reproduction log is required as

EXHIBIT D
CONSULTANT'S GUIDELINES FOR DIRECT EXPENSES; GENERAL AND ADMINISTRATIVE MARKUP; TRAVEL AND SUBSISTENCE EXPENSES

a prerequisite for payment, including the number or reproductions, the date, time, description, the approved standard rate, and a justification for each submitted expense for reimbursement. Consultant agrees to place these standards in all subcontracts for work on the Project.

- E. **Commercial Plotting** – City shall reimburse the actual cost of plots, specifically limited to final documents, provided Consultant has duly obtained at least three (3) quotations from commercial firms and has chosen the best value for City. Consultant shall provide such documentation to City for review prior to submitting these expenses for reimbursement. Consultant agrees to place these standards in all subcontracts for work on the Project.
- F. **In-House Plotting** – Consultant shall make arrangements with City for prior written approval of in-house plotting rates prior to submitting these charges for reimbursement. City shall provide Consultant with a standard format for documenting these charges. Completion of City's reproduction log is required as a prerequisite for payment, including the number of plots, the date, time, description, the approved standard rate, and a justification for each submitted charge for reimbursement.
- G. **Communications** – Reimbursement for expenses relating to electronic communications shall be limited to long-distance telephone or fax toll charges specifically required in the discharge of professional responsibilities related to the Project. Telephone service charges including office or cellular phones, WATTS, or Metro line services or similar charges are not reimbursable.
- H. **Postage, Mail, and Delivery Service** – City shall reimburse the actual cost of postage and delivery of Instruments of Service, provided Consultant duly considers all circumstances (including available time for assured delivery) of the required delivery and selects the best value for City, which may require comparison of delivery costs offered by three (3) or more sources or methods of delivery, which at a minimum shall include U.S. Mail. Courier service is acceptable only in circumstances requiring deadline-sensitive deliveries and not for the convenience of Consultant and/or Consultant's employees. Consultant agrees to place these standards in all subcontracts for work on the Project.
- I. **Meals and Other Related Charges** – Meals or any other related expenses are not reimbursable unless incurred outside a fifty (50) mile radius of the Project, and then only reimbursable for the actual cost subject to compliance with City's currently adopted policy. Non-allowable costs include, but are not limited to, charges for entertainment, alcoholic beverages, and gratuities.

EXHIBIT D
CONSULTANT'S GUIDELINES FOR DIRECT EXPENSES; GENERAL AND ADMINISTRATIVE MARKUP; TRAVEL AND SUBSISTENCE EXPENSES

III. GUIDELINES FOR GENERAL AND ADMINISTRATIVE MARKUP.

- A. **Requirement of Prior Approval** – Consultant may be allowed to charge a General and/or Administrative Markup on work completed if Consultant can clearly define to City specifically what costs are included in the markup calculation. To apply General and/or Administrative Markup, Consultant must also document to City what costs would be considered direct costs. City shall issue approval in writing to allow Consultant to charge General and/or Administrative Markup. City reserves the right to reject any and all requests for General and/or Administrative Markup.

IV. GUIDELINES FOR TRAVEL AND SUBSISTENCE EXPENSES.

- A. **Requirement of Prior Approval** – City shall reimburse the actual cost of travel and/or subsistence expenses upon prior written approval by City's Project Manager.
- B. **Adherence to Currently Adopted City Travel Policy** – Reimbursements shall be governed by the same travel policies provided for City employees according to current adopted policy. Prior to the event, Consultant shall request, and City's Project Manager shall provide the provisions and the restrictions that apply to out-of-town reimbursements.

EXHIBIT E
CONTRACTOR'S INSURANCE GUIDELINES

I. GENERAL INSURANCE REQUIREMENTS –

- A. All policies shall name the City of Sherman, its officers, agents, representatives and employees as additional insured as to all applicable coverage with the exception of workers compensation insurance and professional liability insurance.
- B. Such policies shall require the provision of written notice to City at least thirty (30) days prior to cancellation, non-renewal or material modification of any policies, evidenced by return receipt or United States Certified Mail.
- C. Such policies shall provide for a waiver of subrogation against City for injuries, including death, property damage or any other loss to the extent the same is covered by the proceeds of the insurance.

II. INSURANCE COMPANY QUALIFICATION – All insurance companies providing the required insurance shall be authorized to transact business in the State of Texas, and shall have a minimum rating of "A" by A.M. Best's Key Rating Guide, or other equivalent rating service(s).

III. CERTIFICATE OF INSURANCE – A Certificate of Insurance and policy endorsement(s) evidencing the required insurance shall be submitted prior to execution of the Agreement. If the Agreement is renewed or extended by City, a Certificate of Insurance and policy endorsement(s) shall also be provided to City prior to the date the Agreement is renewed or extended.

IV. INSURANCE CHECKLIST – "X" means that the following coverage(s) is required for this Agreement.

Coverage Required		Limits
<u> X </u>	1. Worker's Compensation & Employer's Liability	▪ Statutory Limits of the State of Texas
<u> X </u>	2. General Liability	▪ Minimum \$1,000,000.00 each occurrence; ▪ Minimum \$2,000,000.00 in the aggregate
<u> </u>	3. XCU Coverage	▪ Minimum \$1,000,000.00 each occurrence; ▪ Minimum \$2,000,000.00 in the aggregate

EXHIBIT E
CONTRACTOR'S INSURANCE GUIDELINES

-
- | | | | |
|---------------|-----|---|--|
| <u> X </u> | 4. | Professional Liability | <ul style="list-style-type: none">▪ Minimum \$1,000,000.00 each claim;▪ Minimum \$2,000,000.00 in the aggregate |
| <u> X </u> | 5. | Umbrella Coverage of Excess Liability Coverage | <ul style="list-style-type: none">▪ An amount of \$2,000,000.00▪ Minimum \$2,000,000.00 in the aggregate |
| <u> X </u> | 6. | City and its officers, agents, representatives and employees named as additional insured on General Liability Policy, as provided above. This coverage is primary to all other coverage City may possess. | |
| <u> X </u> | 7. | General Liability Insurance provides for a Waiver of Subrogation against the City for injuries, including death, property damage, or any other loss to the extent that same is covered by the proceeds of the insurance. All insurance policies that are required to name the City as an additional insured must be endorsed to read as primary and non-contributory coverage regardless of the application of other insurance. | |
| <u> X </u> | 8. | Thirty (30) days' notice of cancellation, non-renewal, or material change required. The words "endeavor to" and "but failure" (to end of sentence) are to be eliminated from the Notice of Cancellation provision on standard ACORD certificates. | |
| <u> X </u> | 9. | Insurance company has a minimum rating of "A" by A.M. Best's Key Rating Guide, or other equivalent rating service(s). | |
| <u> X </u> | 10. | The Certificate of Insurance must state the project title and bid number. | |
| <u> </u> | 11. | Other Insurance Requirements (State Below): | |

EXHIBIT F
CONFLICT OF INTEREST QUESTIONNAIRE, FORM CIQ

CONFLICT OF INTEREST QUESTIONNAIRE For vendor doing business with local governmental entity		FORM CIQ
This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session. This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a). By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. See Section 176.006(a-1), Local Government Code. A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.		OFFICE USE ONLY
1 Name of vendor who has a business relationship with local governmental entity. Garver, LLC		Date Received
2 ☐ Check this box if you are filing an update to a previously filed questionnaire. (The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)		
3 Name of local government officer about whom the information is being disclosed. N/A _____ Name of Officer		
4 Describe each employment or other business relationship with the local government officer, or a family member of the officer, as described by Section 176.003(a)(2)(A). Also describe any family relationship with the local government officer. Complete subparts A and B for each employment or business relationship described. Attach additional pages to this Form CIQ as necessary. A. Is the local government officer or a family member of the officer receiving or likely to receive taxable income, other than investment income, from the vendor? ☐ Yes ☐ No B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer or a family member of the officer AND the taxable income is not received from the local governmental entity? ☐ Yes ☐ No		
5 Describe each employment or business relationship that the vendor named in Section 1 maintains with a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership interest of one percent or more.		
6 ☐ Check this box if the vendor has given the local government officer or a family member of the officer one or more gifts as described in Section 176.003(a)(2)(B), excluding gifts described in Section 176.003(a-1).		
7  _____ Signature of vendor doing business with the governmental entity		5/17/2024 _____ Date

Form provided by Texas Ethics Commission

www.ethics.state.tx.us

Revised 1/1/2021



Sherman
CLASSIC TOWN. BROAD HORIZON.



City Council Regular Meeting

Agenda Item No. F.5.

Meeting Date: 6/3/2024

Prepared By: Teri Fine, Assistant to the City Manager

Approved By: Robby Hefton, City Manager

Caption:

*** RESOLUTION NO. 7317**

Authorizing Execution of An Easement to Oncor Electric Delivery Company, LLC for the Installation of Overhead and/or Underground Electric Supply for GlobalWafers America

Issue:

Authorizing Execution of An Easement to Oncor Electric Delivery Company, LLC for the Installation of Overhead and/or Underground Electric Supply for GlobalWafers America.

Background:

As a part of the construction of GlobalWafers America, Oncor Electric Delivery must install a new transmission line outside the right of way and an underground service line to the new transformer. This installation requires an easement from the City of Sherman as the proposed lines will be installed within the City-owned property.

Origination:

Oncor Electric Delivery Company, LLC
City Manager's Office

Financial Consideration:

None

Staff Recommendation:

It is recommended that the easement be approved and that the City Manager be authorized to execute the documents.

Alternatives:

As may be directed by the Council

Attachments:

1. Resolution No. 7317
2. Easement

RESOLUTION NO. 7317

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SHERMAN, TEXAS, AUTHORIZING EXECUTION OF AN EASEMENT TO ONCOR ELECTRIC DELIVERY COMPANY, LLC FOR THE INSTALLATION OF OVERHEAD AND/OR UNDERGROUND ELECTRIC SUPPLY FOR GLOBALWAFERS AMERICA; FINDING AND DETERMINING THAT THE MEETING AT WHICH THIS RESOLUTION IS PASSED WAS NOTICED AND IS OPEN TO THE PUBLIC AS REQUIRED BY LAW.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SHERMAN, TEXAS:

SECTION 1. That the City Manager be and is hereby authorized and directed, subject to all contract documents being properly completed and approved as to form and content by the City Attorney, to execute an Easement to Oncor Electric Delivery Company, LLC for the installation of overhead and/or underground electric supply for the GlobalWafers America.

SECTION 2. That it is hereby officially found and determined that the meeting at which this resolution is passed is open to the public and that public notice of the time, place, and purpose of said meeting was given as required by law.

DULY PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF SHERMAN, TEXAS, on this the 3rd day of June 2024.

CITY OF SHERMAN, TEXAS

ATTEST:

BY: _____
LINDA ASHBY, CITY CLERK

BY: _____
DAVID PYLER, MAYOR

**APPROVED AS TO FORM
AND CONTENT:
THE LAW FIRM OF ABERNATHY,
ROEDER, BOYD & HULLETT, P.C.**

BY: _____
RYAN D. PITTMAN, CITY ATTORNEY

EASEMENT
TRACT 1 - 0.0495 Acres

THE STATE OF TEXAS §
 § KNOW ALL MEN BY THESE PRESENTS:
COUNTY OF GRAYSON §

That CITY OF SHERMAN, TEXAS, a Texas home-rule municipality (hereinafter called the "Grantor"), whether one or more, for and in consideration of Ten and no/100 Dollars (\$10.00) and other valuable consideration to Grantor in hand paid by ONCOR ELECTRIC DELIVERY COMPANY LLC, a Delaware limited liability company (hereinafter referred to as "Grantee"), has granted, sold and conveyed and by these presents does grant, sell and convey unto said Grantee, its successors and assigns, an easement for electric power lines and communication lines used for the purpose of operating the electric power facilities, consisting of variable number of wires, and all necessary appurtenances including supporting structures, foundations, guy wires and guy anchorages (the "Facilities") over, under, across and upon all that certain tract(s) of land located in Grayson County, Texas, more particularly described in ***Exhibits A and B***, attached hereto and made part hereof, and by its conveyance of this easement, Grantor consents to the route as described on the exhibits attached hereto.

Together with: (1) the right of ingress and egress over and along the easement for the purpose of and with the right to construct, operate, improve, reconstruct, replace, repair, inspect, patrol, maintain and add or remove such electric power and communication lines or other associated Facilities as the Grantee may from time to time find necessary, convenient or desirable to erect thereon during the initial construction of the Facilities or at any time thereafter; (2) the right to install gates in all existing and future fences crossing the easement area, provided such gates will be installed in a manner that will not weaken such fences; (3) the right to relocate the Facilities along the same general direction of said lines within the easement area; (4) the right to trim and cut down trees and shrubbery on the easement area, including by use of herbicides or other similar chemicals approved by the U.S. Environmental Protection Agency, to the extent, in the reasonable judgment of the Grantee, necessary to prevent possible interference with the operation of said lines or to remove possible hazard thereto; (5) the right to prevent, after the date of this easement, the construction on the easement area of any or all buildings, structures and obstructions, and the right to remove, at Grantor's expense, any such buildings, structures or obstructions constructed after the date of this easement.

Grantor shall not make or cause any changes in grade, elevation, or contour of the land (except those activities, excluding terracing, associated with normal agricultural activities) within the easement described herein without first providing advance notice and obtaining prior written consent to do so from Grantee. If written consent is not obtained prior to any action by Grantor that causes any changes in grade, elevation, or contour of the land within the, Grantor shall, upon demand from

Line: _____
E- _____
WA# _____

Grantee, at Grantor's expense, restore the easement to its previously existing condition, or reimburse Grantee fully for the cost of adjusting its Facilities as necessary to accommodate the change in grade, elevation, or contour of the land within the easement in the event Grantor fails to promptly restore the grade, elevation, or contour to its previously existing condition.

Grantor shall not perform any excavations, trenching, or other soil disturbing activities (except those activities, excluding terracing, associated with normal agricultural activities) that, in the sole judgment of Grantee, will endanger the integrity of the supporting structures and/or foundations or other Facilities, as applicable, or perform any other activities that may, in the sole judgement of Grantee, remove, reduce, or adversely affect or impact the lateral support of the supporting structures and/or foundations or other Facilities, as applicable, without first providing advance notice and obtaining prior written consent to do so from Grantee. If prior written consent is not obtained by Grantor prior to performing any excavation, trenching or other soil disturbing activity that endangers the integrity of the supporting structures or foundations or other Facilities, as applicable, Grantor shall, upon demand from Grantee, at Grantor's expense, restore the easement and right-of-way to its previously existing condition, or reimburse Grantee fully for the cost of adjusting its Facilities as necessary to accommodate the excavation, trenching, or soil disturbing activity in the event Grantor fails to promptly restore the easement to its previously existing condition or cannot do so.

Grantor reserves the right to use the easement area provided such use shall not include the growing of trees thereon or any other use that might, in the sole judgment of Grantee, interfere with the exercise by the Grantee of the rights hereby granted. Grantor further reserves the right to lay out, dedicate, construct, maintain and use across said strip such roads, streets, alleys, railroad tracks, underground telephone cables and conduits and gas, water and sewer pipe lines as will not interfere with Grantee's use of said land for the purpose aforesaid, provided all such facilities shall be located at angles of not less than 45 degrees to any of Grantee's lines, and shall be so constructed as to provide with respect to Grantee's Facilities the minimum clearances provided by law and recognized as standard in the electrical industry, as same may change from time to time. Grantor also reserves the right to erect fences not more than 8 feet high across said land, provided all such fences shall have gates, openings, or removable sections at least 16 feet wide which will permit Grantee reasonable access to all parts of said land. Should Grantee later determine that a width greater than 16 feet is necessary, then Grantee shall have the right granted above to install additional or wider gates at its sole discretion, but the installation of such additional or wider gates shall be at the sole expense of Grantee.

Grantor retains all right, title, and interest in and to all oil, gas, and other minerals (whether by law classified as part of the mineral estate or the surface estate) and groundwater in, on, and under the strip or land described herein; provided, however, that Grantor shall not be permitted to drill for oil, gas, and other minerals,

Line: _____
E- _____
WA# _____

and groundwater from and under said strip of land but Grantor may extract oil, gas, and other minerals, and groundwater from and under said strip of land by directional drilling, mining, or other means, so long as Grantee's use of said strip is not disturbed, which use shall include the right of Grantee to physical and/or lateral support for the Facilities, as well as the right that the Facilities shall not be endangered, obstructed, or interfered with by such operations.

In addition to the consideration above recited for the easement hereby granted, the Grantee will pay to the owner of the land, and, if leased, to his tenant, as they may be respectively entitled for actual damages to fences and growing crops and improvements located on the easement caused by reason of the construction, maintenance, addition or removal of said lines; provided, however, that no such payment will be made for trimming or removal of trees growing on the easement, nor for removal of buildings, structures, or obstructions erected upon the easement after granting of this easement and right-of-way.

TO HAVE AND TO HOLD the above described easement unto the said Grantee, its successors and assigns, until all of said lines and other Facilities shall be abandoned, and in that event said easement shall cease and all rights herein granted shall terminate and revert to Grantor or Grantor's heirs, successors or assigns; and Grantor hereby binds Grantor and Grantor's heirs, successors, assigns, and legal representatives, to warrant and forever defend the above described easement unto Grantee, its successors and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof by, through or under GRANTOR, but not otherwise. This easement may be assigned in whole or in part.

(THIS SPACE INTENTIONALLY LEFT BLANK)

Line: _____
E- _____
WA# _____

EXECUTED this _____ day of _____, 2024.

GRANTOR:
CITY OF SHERMAN, TEXAS,
a Texas home-rule municipality,

By: _____

Name: _____

Title: _____

ACKNOWLEDGEMENT

STATE OF TEXAS §

§
COUNTY OF _____ §

BEFORE ME, the undersigned authority, on this day personally appeared _____, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this _____ day
of _____, A.D. 2024.

Notary Public in and for the State of Texas

Line: _____
E- _____
WA# _____

EXECUTED this _____ day of _____, 2024.

GRANTEE:

ONCOR ELECTRIC DELIVERY COMPANY LLC,
a Delaware limited liability company

By: _____
Name: _____
Title: _____

STATE OF TEXAS §
 §
COUNTY OF TARRANT §

BEFORE ME, the undersigned authority, on this day personally appeared _____ as the Attorney-in-Fact of ONCOR ELECTRIC DELIVERY COMPANY LLC a Delaware limited liability company, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same for the purposes and consideration therein expressed, in the capacity therein stated and he/she is authorized to do so.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this __ day of _____, A. D. 2024.

Notary Public in and for the State of Texas

After recording, return to:
Oncor Electric Delivery Company
Attn: Laura DeLaPaz (13)
777 Main Street, Suite 707
Fort Worth, Texas 76102

Line: _____
E- _____
WA# _____

Exhibit A

Page 1 of 1
Date: 01/09/24

12036-City of Sherman R3 FN

EXHIBIT A
FIELD NOTES
CITY OF SHERMAN
0.0495 ACRE TRANSMISSION LINE EASEMENT AREA

Being all of that certain lot, tract, or parcel of land being located in the E. JONES SURVEY, ABSTRACT 625, Grayson County, Texas, being a portion of that certain 7.7109 acre tract conveyed to City of Sherman by document recorded in Document Number 2018-1927, Official Records, Grayson County, Texas (O.R.,G.Co.,Tx.), and being a portion of Lot 5, Block 1, BUSINESS PARK ONE, NORTHGATE DRIVE PHASE FOUR, by plat recorded in Document Number 2019-62, Plat Records, Grayson County, Texas (P.R.,G.Co.,Tx.) and being more particularly described, by metes and bounds, as follows:

BEGINNING at a point for corner (N 7,270,569.77 E 2,541,101.92) in East Right-Of-Way (R.O.W.) line of Northgate Drive, being common Northwest corner of said Lot 5 and Southwest corner of Lot 6 of said Block 1, bearing South 37 degrees 12 minutes 31 seconds West a distance of 872.85 feet from a 1/2 inch iron pin found in South R.O.W. line of West Travis Street for common Northeast corner of said Lot 6 and Northwest corner of that certain 88.372 acres conveyed to Sherman 301-A, LLC and Sherman 301-B, LLC by deed recorded in Document Number 2021-22359, Official Records, Grayson County, Texas (O.R.,G.Co.,Tx.);

THENCE departing said East R.O.W. line of Northgate Drive and with common North line of said Lot 5 and South line of said Lot 6, North 80 degrees 07 minutes 53 seconds East a distance of 56.38 feet to a point for corner;

THENCE departing said common line, South 26 degrees 31 minutes 20 seconds West a distance of 95.02 feet to a point for corner in common West line of said Lot 5 and said East R.O.W. line of Northgate Drive;

THENCE with said common line, North 09 degree 52 minutes 07 seconds West a distance of 76.49 feet to the point of BEGINNING, containing 0.0495 of an acre of land.

(See attached "EXHIBIT B")



PREPARED FROM DEED RECORDS FURNISHED AND A SURVEY
MADE ON THE GROUND IN OCTOBER & NOVEMBER, 2023,

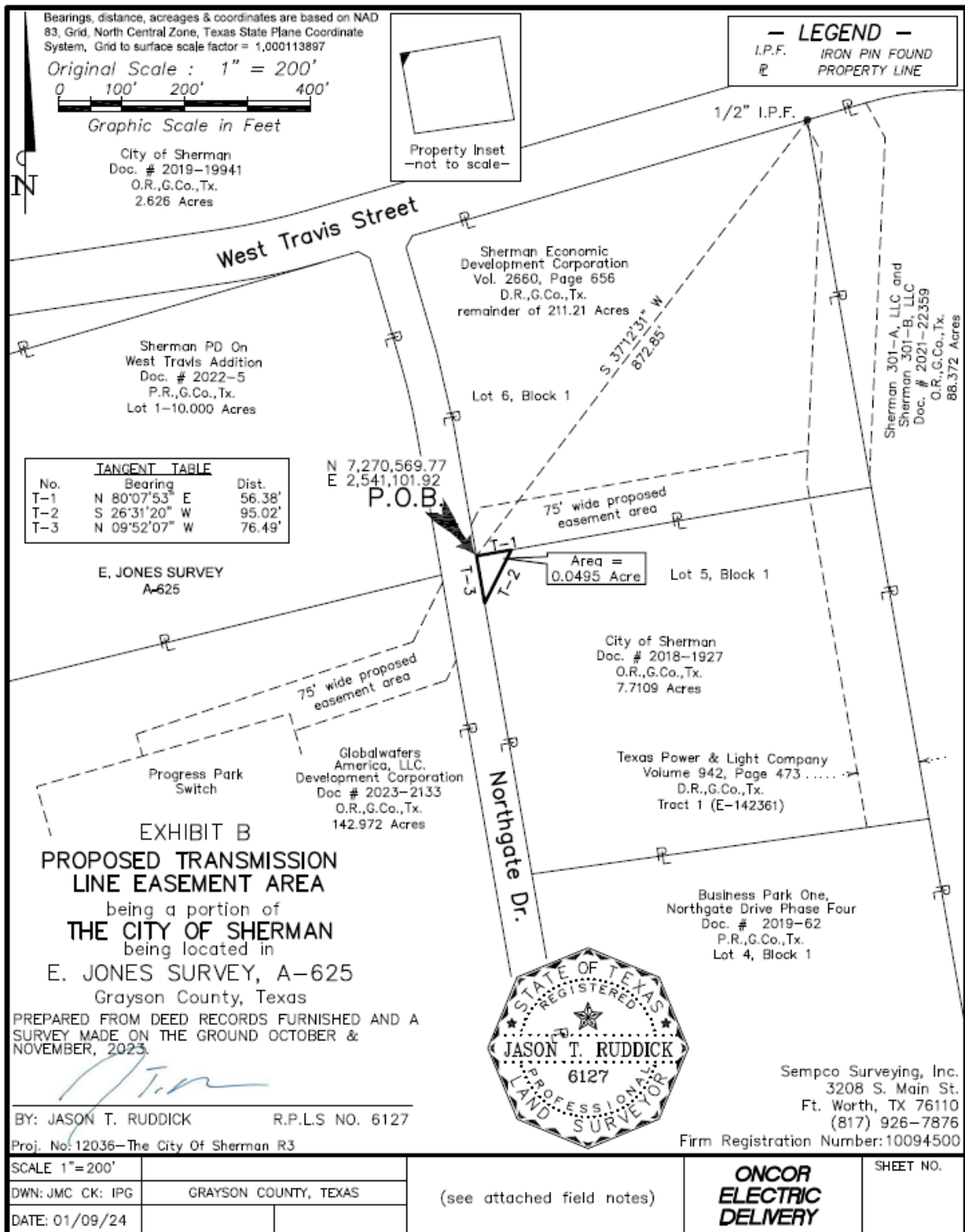
BY: JASON T. RUDDICK

R.P.L.S. 6127

NOTE: Bearings, distances, acreages and coordinates are based on
NAD 83, Grid, North Central Zone, Texas State Plane Coordinate
System. Grid to surface scale factor = 1.000113897

Line: _____
 E- _____
 WA# _____

Exhibit B





City Council Regular Meeting

Agenda Item No. F.6.

Meeting Date: 6/3/2024

Prepared By: Rob Rae, Developmental Services Director

Approved By: Robby Hefton, City Manager

Caption:

*** RESOLUTION NO. 7318**

Authorizing Execution of an Agreement with David and Christy Baca for the Abatement of AD Valorem Property Taxes for the Construction of a New Single-Family Residence at 215 North Ricketts within the City of Sherman Reinvestment Zone, Number 10 (#10)

Issue:

This item is to consider property tax abatement for the construction of a new single-family residence at 215 North Ricketts situated within City of Sherman Reinvestment Zone, Number Ten (#10).

Background:

On June 5, 2023, City Council renewed the residential tax abatement program to encourage the redevelopment within the City of Sherman's Reinvestment Zone, Number Ten (#10). This application is for the construction of a new single-family residence at this location. This lot is in the current designated zone for residential tax abatement.

Origination:

David and Christy Baca

Financial Consideration:

A \$75.00 application fee has been received for this residential lot. If granted, the initial abatement for this property will be approximately \$685.80 annually.

Staff Recommendation:

The staff recommends approval of this abatement since it meets the requirements of the process.

Alternatives:

The City Council could decide against granting this abatement.

Attachments:

1. Resolution No. 7318
2. Residential Tax Abatement Agreement
3. Exhibit A - Plat
4. Deed
5. Application
6. Building Permit
7. Site Plan
8. Location Map
9. Site Photo
10. Reinvestment Zone Map

RESOLUTION NO. 7318

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SHERMAN, TEXAS, AUTHORIZING EXECUTION OF AN AGREEMENT WITH DAVID AND CHRISTY BACA FOR THE ABATEMENT OF AD VALOREM PROPERTY TAXES FOR THE CONSTRUCTION OF A NEW SINGLE-FAMILY RESIDENCE AT 215 NORTH RICKETTS STREET WITHIN CITY OF SHERMAN REINVESTMENT ZONE, NUMBER TEN (#10); FINDING AND DETERMINING THAT THE MEETING AT WHICH THIS RESOLUTION IS PASSED WAS NOTICED AND IS OPEN TO THE PUBLIC AS REQUIRED BY LAW.

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SHERMAN, TEXAS:

SECTION 1. That the City Manager be and is hereby authorized and directed, subject to receipt of a fully-executed agreement from David and Christy Baca and subject to all contract documents being properly completed and approved as to form and content by the City Attorney, to execute an agreement with David and Christy Baca for the abatement of ad valorem property taxes for a period of ten (10) years, for the construction of one (1) new single-family residence at 215 North Ricketts Street, lying within City of Sherman Reinvestment Zone, Number Ten (#10), in accordance with the City's policies and procedures established for this purpose.

SECTION 2. That it is hereby officially found and determined that the meeting at which this resolution is passed is open to the public and that public notice of the time, place, and purpose of said meeting was given as required by law.

DULY PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF SHERMAN, TEXAS, on this the 3rd day of June 2024.

CITY OF SHERMAN, TEXAS

BY: _____
DAVID PLYLER, MAYOR

ATTEST:

BY: _____
LINDA ASHBY, CITY CLERK

**APPROVED AS TO FORM AND
CONTENT:
THE LAW FIRM OF ABERNATHY,
ROEDER, BOYD & HULLETT, P.C.**

BY: _____
RYAN D. PITTMAN, CITY ATTORNEY

THE STATE OF TEXAS §
 §
COUNTY OF GRAYSON §

AGREEMENT

THIS AGREEMENT, entered into by and between the **CITY OF SHERMAN, TEXAS**, a home rule city and municipal corporation of the State of Texas, duly acting herein by and through its City Manager, hereinafter referred to as CITY, and **DAVID AND CHRISTY BACA** hereinafter referred to as OWNER,

WITNESSETH:

WHEREAS, on the 18th day of April, 2016, the City Council of Sherman, Texas, passed Ordinance No. 5948 establishing a reinvestment zone for residential tax abatement, as authorized by Chapter 312 of the Texas Tax Code, as amended, hereinafter referred to as CODE; and

WHEREAS, on the 19th day of August, 2019, the City Council of Sherman, Texas adopted Ordinance No. 6241 and redesignated the Reinvestment Zone to be City of Sherman Reinvestment Zone, Number Ten (#10); and

WHEREAS, on the 9th day of June, 2023, the City Council of Sherman, Texas adopted Ordinance No. 6598 and renewed the designation of the Residential Reinvestment Zone, Number Ten (#10); and

WHEREAS, the CITY has adopted a resolution (Resolution No. 7085) stating that it elects to be eligible to participate in a residential tax abatement program; and

WHEREAS, the CITY desires to create the proper economic and social environment to induce the investment of private resources in real estate construction located in incorporated areas of the CITY; and

WHEREAS, the CITY hereby finds that it may effectively encourage and assist the creation of such an environment by participating in tax abatement pursuant to the CITY; and

WHEREAS, the CITY has created a reinvestment zone within its jurisdiction to induce the investment of private resources in real estate construction located in incorporated areas of the CITY, and OWNER has agreed to construct certain real property improvements; and

WHEREAS, OWNER is prepared to comply with the provisions of the CITY'S guidelines and criteria enacted the 18th day of April, 2016;

NOW, THEREFORE, WITNESS THIS TAX ABATEMENT AGREEMENT which provides as follows:

I.

1.01 To the extent authorized by the Texas Constitution and by the Tax Code, CITY hereby agrees to exempt from City of Sherman taxation a portion of the increase in value of taxable real property of OWNER in the CITY over the same real property and its value as calculated by the Grayson Appraisal District for ad valorem property tax purposes in accordance with the following schedule. Such tax exemption shall be in effect for tax years beginning January 1, 2024, and continuing for tax years 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, and 2033 with same constituting ten (10) tax years. However, nothing contained herein shall be construed to grant an abatement of taxes to be assessed based on the change of use of the property from an agricultural use to another use, sometimes referred to as rollback taxes, penalties or interest. In the event rollback taxes are applicable for the real property utilized by OWNER, then such increase in value of taxable property resulting from such rollback shall be used as the tax value for such property for the tax year 2024, sometimes referred to herein as the Base Tax Year.

SCHEDULE OF TAXES ASSESSED

<u>TAX YEAR</u>	<u>ABATEMENT</u>
2024	100%
2025	100%
2026	100%
2027	100%
2028	100%
2029	100%
2030	80%
2031	60%
2032	40%
2033	20%

II.

2.01 OWNER warrants and represents that the real property upon which OWNER has constructed or will construct improvements is qualified property within the meaning of that Act, and that such has been and will remain eligible for tax abatement under the provisions of the Property Redevelopment and Tax Abatement Act, Sections 312.001, et seq., Texas Tax Code.

2.02 To continue to qualify for tax abatement under the terms of this Agreement, OWNER hereby warrants and represents that the improvements made by OWNER on the real property described herein are for residential use.

2.03 The tax abatement granted under the terms of the Agreement shall only be implemented if the appraised value of all real property and improvements located thereon owned by OWNER and lying within designated zone exceeds the base year value. The OWNER agrees that Grayson Appraisal District shall, at reasonable times upon reasonable notice, have access to the property made the subject of this Agreement, and that the above set forth inspectors shall be

able to inspect the property to ensure that the improvements are being made in accordance with the terms and conditions hereof and utilized in accordance with this Agreement.

III.

3.01 The term of this Agreement shall be for tax years 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, and 2033 as indicated above in paragraph 1.01.

IV.

4.01 The kind, number and location of all proposed property improvements are set forth as follows:

Construction of one (1) new Single-Family Residence at 215 North Ricketts Street, Sherman, Texas, and as more particularly described by metes and bounds as to hereafter include the property described in **Exhibit A**:

5.01 OWNER agrees that, should he fail to make improvements substantially as described or fail to perform any other term or covenant hereof, CITY shall have the right, after giving notice and opportunity to cure as hereinafter set out, to recapture all tax revenue on said property in the zone lost as a result of this Agreement for the entire term of the Agreement. Such recapture shall mean that all of such property shall be taxed at the full improved value as assessed by the Grayson Appraisal District for all years this Agreement has been in effect. The payment of such recaptured taxes minus any taxes paid by OWNER during the years this Agreement has been in force shall be due January 1 of the next following year and shall be delinquent if not paid on or prior to January 31st. Penalties and interest shall be calculated thereafter as if all taxes had become due in the same year. The CITY agrees prior to enforcement of the terms of this paragraph to give 120 days' written notice to the address shown below of OWNER'S default in completing the improvements called for in this Agreement, and OWNER shall have the right to cure such default within the 120-day period.

VI.

6.01 This Agreement shall inure to the benefit of CITY and OWNER, and shall be binding upon them, their heirs, successors and assigns. It is specifically provided and agreed that the right to tax abatement shall inure to the benefit of subsequent owners so long as the term and conditions of this Agreement are in effect.

VII.

7.01 CITY agrees that this Agreement may be assigned, and the improvements leased or sub-leased, without any further necessity for consent, by the OWNER to any person, firm or corporation.

VIII.

8.01 At any time before the expiration of the term hereof, this Agreement may be modified by the mutual action of the parties hereto to include other provisions that could have been included in the original agreement or to delete provisions that were not necessary to the original agreement. Such modification must be in writing and signed by all the parties hereto and made by the same procedure by which the original Agreement was approved and executed. In no event may the original Agreement be modified so as to extend the term beyond the original term of this Agreement.

IX.

9.01 This Agreement shall be construed subject to the laws of the State of Texas, and particularly to the Property Redevelopment and Tax Abatement Act, Chapter 312 of the Texas Tax Code.

9.02 All appraisal values for real property shall be made by the Grayson Appraisal District or such other entity as may succeed or replace such District.

9.03 OWNER is hereby notified that the Grayson Appraisal District may impose additional requirements which must be met in order for OWNER to realize the benefit of tax abatement and this Agreement. Contact should be made by OWNER with the District in person at 512 North Travis Street, Sherman, Texas, or by telephone at (903) 893-9673.

X.

10.01 This Agreement is subject to all provisions of all outstanding bond issues of CITY. To the extent that this Tax Abatement Agreement conflicts with any of the provisions of such bond issues, such bond issues and attendant documents thereto shall control.

XI.

11.01 This Tax Abatement Agreement is specifically subject to present laws of the State of Texas and any future laws enacted subsequent to the execution of this Agreement which may provide retroactively for a modification of Agreements of this type as a matter of law. Upon the effective date of any such law, then this Agreement shall automatically be so modified.

XII.

12.01 Notices required by this Agreement shall be mailed to the following addresses as some may be in the future changed by either party upon written notice to the other:

City of Sherman
P.O. Box 1106
Sherman, Texas 75091-1106
(903) 892-7200

David and Christy Baca
1237 JP Cave Road
Sherman, TX 75090
(903) 267-6635

Copy to: Grayson Appraisal District
512 North Travis Street
Sherman, Texas 75090
(903) 893-9673

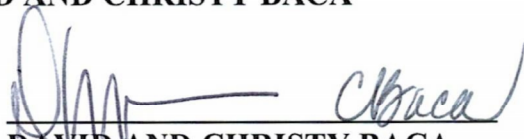
This Agreement is performable in Grayson County, Texas. Witness our hands on this the

23rd day of April, 2024.

CITY:
CITY OF SHERMAN, TEXAS

OWNER:
DAVID AND CHRISTY BACA

BY: _____
ROBBY HEFTON

BY:  _____
DAVID AND CHRISTY BACA

ATTEST:

BY: _____
LINDA ASHBY
CITY CLERK

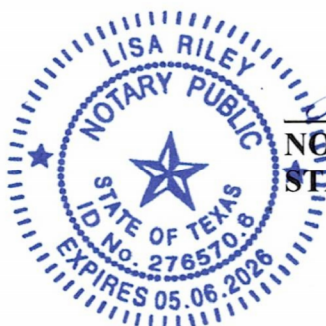
APPROVED AS TO FORM
AND CONTENT:
THE LAW FIRM OF ABERNATHY,
ROEDER, BOYD & HULLETT, P.C.

BY: _____
RYAN D. PITTMAN
CITY ATTORNEY

THE STATE OF TEXAS §
COUNTY OF GRAYSON §

BEFORE ME, the undersigned authority, on this day personally appeared **DAVID AND CHRISTY BACA** known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and consideration therein express.

GIVEN UNDER MY HAND and seal of office this 23rd day of April, 2024 A.D.



Lisa Riley
NOTARY PUBLIC IN AND FOR THE
STATE OF TEXAS

7509 PENNRIDGE CIRCLE
ROWLETT, TX 75088

FIRM REGISTRATION NO. 10194366

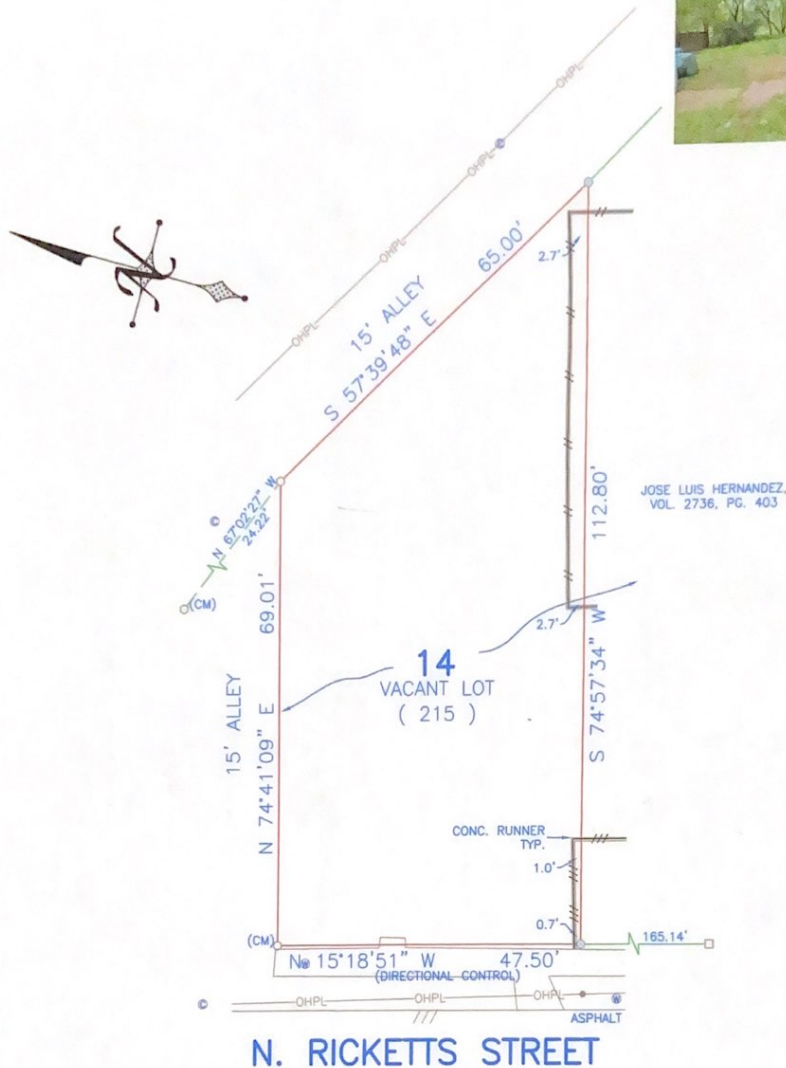
SURVEY PLAT



BARRY S. RHODES Registered Professional Land Surveyor (214) 326-1090

This is to certify that I have, this date, made a careful and accurate survey on the ground of property located at No. 215 N. RICKETTS STREET in the City of SHERMAN Texas.

BEING THE NORTH 1/2 OF LOT FOURTEEN (14) OF PARK VIEW ADDITION TO THE CITY OF SHERMAN, TEXAS AS SHOWN PER PLAT OF RECORDED IN VOLUME 306, PAGE 155, DEED RECORDS, GRAYSON COUNTY, TEXAS.



BEARINGS ARE BASED ON NAD 83
DATUM, TEXAS STATE PLANE
COORDINATE SYSTEM, NORTH
CENTRAL ZONE

ACCEPTED BY: _____

TEXAS TITLE

The plat hereon is true, correct, and accurate representation of the property as determined by survey, the lines and dimensions of said property being as indicated by the plat: the size, location and type of building and improvements are as shown, all improvements being within the boundaries of the property, set back from property lines the distance indicated, or visible and apparent easements. TITLE AND ABSTRACTING WORK FURNISHED BY TEXAS TITLE

THERE ARE NO ENCROACHMENTS, CONFLICTS, OR PROTRUSIONS, EXCEPT AS SHOWN.

Scale: 1" = 20'
Date: 04/16/21
G. F. No.: 2107080-105
Job no.: 202103059
Drawn by: JMJ

USE OF THIS SURVEY FOR ANY OTHER PURPOSE OR OTHER PARTIES SHALL BE AT THEIR RISK AND UNDERSIGNED IS NOT RESPONSIBLE TO OTHER FOR ANY LOSS RESULTING THEREFROM.
THIS SURVEY WAS PERFORMED EXCLUSIVELY FOR TEXAS TITLE

LEGEND	
WOOD FENCE	TEXT
CHAIN LINK	IMPROVEMENTS
IRON FENCE	BOUNDARY LINE
WIRE FENCE	SETBACK
CM	CONTROLLING WORKLINE
MON	MONUMENTS OF RECORD DIGNITY
1/2" IRON ROD FOUND	
1/2" YELLOW-CAPPED IRON ROD SET	
SET 'X'	
POST FOUND	
1/2" PIPE FOUND	
PK NAIL FOUND	
CABLE	ELECTRIC
CLEAN OUT	POOL EQUIP
GAS METER	POWER POLE
FIRE HYDRANT	TELEPHONE
LIGHT POLE	WATER METER
MANHOLE	WATER VALVE
(UNLESS OTHERWISE NOTED)	



0141052

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OR ALL OF THE FOLLOWING INFORMATION FROM ANY INSTRUMENT THAT TRANSFERS AN INTEREST IN REAL PROPERTY BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

GENERAL WARRANTY DEED

THE STATE OF TEXAS §
 § KNOW ALL BY THESE PRESENTS: THAT
COUNTY OF GRAYSON §

MARIA A. GARCIA, an unmarried woman ("Grantor"), whose mailing address is

_____,
for and in consideration of the sum of TEN AND NO/100 DOLLARS (\$10.00) cash and other
good and valuable consideration to Grantor in hand paid by DAVID BACA AND CHRISTY
BACA ("Grantee"), whose mailing address is 1237 SE Cane Road
Sherman TX 75090,
the receipt and sufficiency of which consideration is hereby acknowledged and confessed, has
GRANTED, SOLD AND CONVEYED, and by these presents does GRANT, SELL AND
CONVEY, unto Grantee, the following real property, together with all improvements thereon
(the "Property"):

BEING THE NORTH 1/2 OF LOT FOURTEEN (14) OF PARK VIEW
ADDITION TO THE CITY OF SHERMAN, TEXAS, AS PER PLAT OF
RECORD IN VOLUME 306, PAGE 155, DEED RECORDS, GRAYSON
COUNTY, TEXAS.

TO HAVE AND TO HOLD the Property, together with all and singular the rights and
appurtenances thereto in any way belonging unto the said Grantee, their heirs, successors and
assigns forever; and Grantor does hereby bind Grantor, their heirs, executors and administrators
to WARRANT AND FOREVER DEFEND all and singular the Property unto the said Grantee,
their heirs, successors and assigns, against every person whomsoever lawfully claiming or to
claim the same, or any part thereof, provided, however, that this conveyance is made by Grantor
and accepted by Grantee subject (i) to the liens securing payment of ad valorem taxes for the
current and all subsequent years; and (ii) easements, liens, reservations, covenants, conditions,
and restrictions of record in Grayson County, Texas, or visible or apparent on the ground to the
extent the foregoing affect the Property. By acceptance of this Deed, Grantee assumes and
agrees to perform all of the obligations of Grantor under said easements, reservations, covenants,
conditions and restrictions, and agrees to pay and indemnifies and agrees to hold Grantor
harmless from and against all ad valorem taxes relating to the Property, for the current and all
subsequent years.

When the context requires, singular nouns and pronouns include the plural.

EXECUTED as of the acknowledgment date below, EFFECTIVE for all purposes as of
the 2 day of September, 2022.

GRANTOR:



MARIA A. GARCIA

ACKNOWLEDGEMENT

STATE OF TEXAS

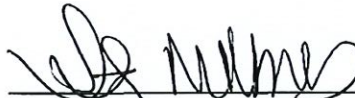
§

§

COUNTY OF Cameron §

Before me, a Notary Public, on the 2 day of September, 2022,
personally appeared **MARIA A. GARCIA**, who acknowledged that she did sign the foregoing
instrument, and acknowledged to me that she executed the same for the uses and purposes and
consideration therein expressed.





Notary Public, State of Texas

PREPARED IN THE OFFICE OF:

THE HAY LEGAL GROUP PLLC
611 W. 5th Street, Suite 300
Austin, Texas 78701

**CITY OF SHERMAN
APPLICATION FOR RESIDENTIAL TAX ABATEMENT**

Property Owner:

Name: David and Christy Baca

Mailing Address: 1237 JP Cave Road, Sherman, Texas 75090

Telephone Number: 903.267.6635

Contact (if different than owner):

Name: _____

Mailing Address: _____

Telephone Number: _____

Property:

Physical Address: 215 North Ricketts Street, Sherman, Texas 75092

Summary Legal Description: Lot: 14R-1 Block: _____ Addition: _____

Full Legal Description: Include as an attachment a full legal description with metes and bounds.

Improvements:

Type of Improvements (please check one). New Construction: ☒ _____ Remodeling: _____

Estimated Value of Improvements: \$135,000.00

Estimated Date of Start of Construction: 11-20-2023

Estimated Date of Completion of Project: 5-15-2024

Description of Project: New 1,394 square foot two-story house with attached one car garage
to be located at 215 North Ricketts Street, Sherman, Texas 75092.

Applicant(s): David Baca

Date: 4-8-2024

Date: _____



CITY OF SHERMAN
New Residential Building Permit
#23-004495 | Issued on: 09/06/2023 at 10:11 AM

Project Description: New single-family residential

ADDRESS 215 N RICKETTS St Sherman, TX	LEGAL Park View Addn, Lot N1/2 14, 47.5x115x65x68.9	PERMIT HOLDER David Baca BACA Architecture (903) 893-5800	COLLABORATORS • David Baca BACA Architecture (903) 893-5800 • TOP OF TEXAS CONSTRUCTION LLC CHASE HALL (580) 364-4025	OWNERS • DAVID AND CHRISTY BACA
--	--	---	--	--

INFORMATION FIELDS

Subcontractor	Top of Texas	Square Feet	1394
Bedrooms	3	Bathrooms	2
Number of Stories	2	Number of Acres	.14
Type of Construction List	Wood Frame	Garage Parking	1
Off Street Parking	1	Tax Abatement	Yes
Sewer Disposal	Public Sewer	Water Supply	Public
Heating	Electric	Permit Certification	Yes
Proposed Use	Spec homes		

FEE	TOTAL	PAID	DUE
Building Permit Fee (R)	\$ 418.20	\$ 418.20	\$ 418.20
Storm Water Fee	\$ 25.00	\$ 25.00	\$ 25.00
Impact Fee Zone 2	\$ 2,228.00	\$ 2,228.00	\$ 2,228.00
TOTALS	\$ 2,671.20	\$ 2,671.20	\$ 0.00

NOTICE

This permit becomes null and void if work or constructions authorized is not commenced within 6 months, or if construction or work is suspended or abandoned for a period of 6 months at any time after work is started. This permit is for the Permit Holder only. Repermitting will be required if Contractor changes.

I hereby certify that I have read and examined this document and know the same to be true and correct. All provisions of laws and ordinances governing this type of work will be complied with whether specified herein or not. Granting of a permit does not presume to give authority to violate or cancel the provision of any other state or local law regulating construction or the performance of construction.

It shall be the duty of the holder of this permit to notify the Building Department when work is ready for inspection. It shall be the duty of the Permit Holder to provide access to and means for inspections of such work required by the adopted codes.

Permit not valid until signed by all parties.

(Signature of Contractor or Authorized Agent)

Date

(Approved By) Flood Plain Administrator

Date

(Approved By) Building Official or his Designee

Date

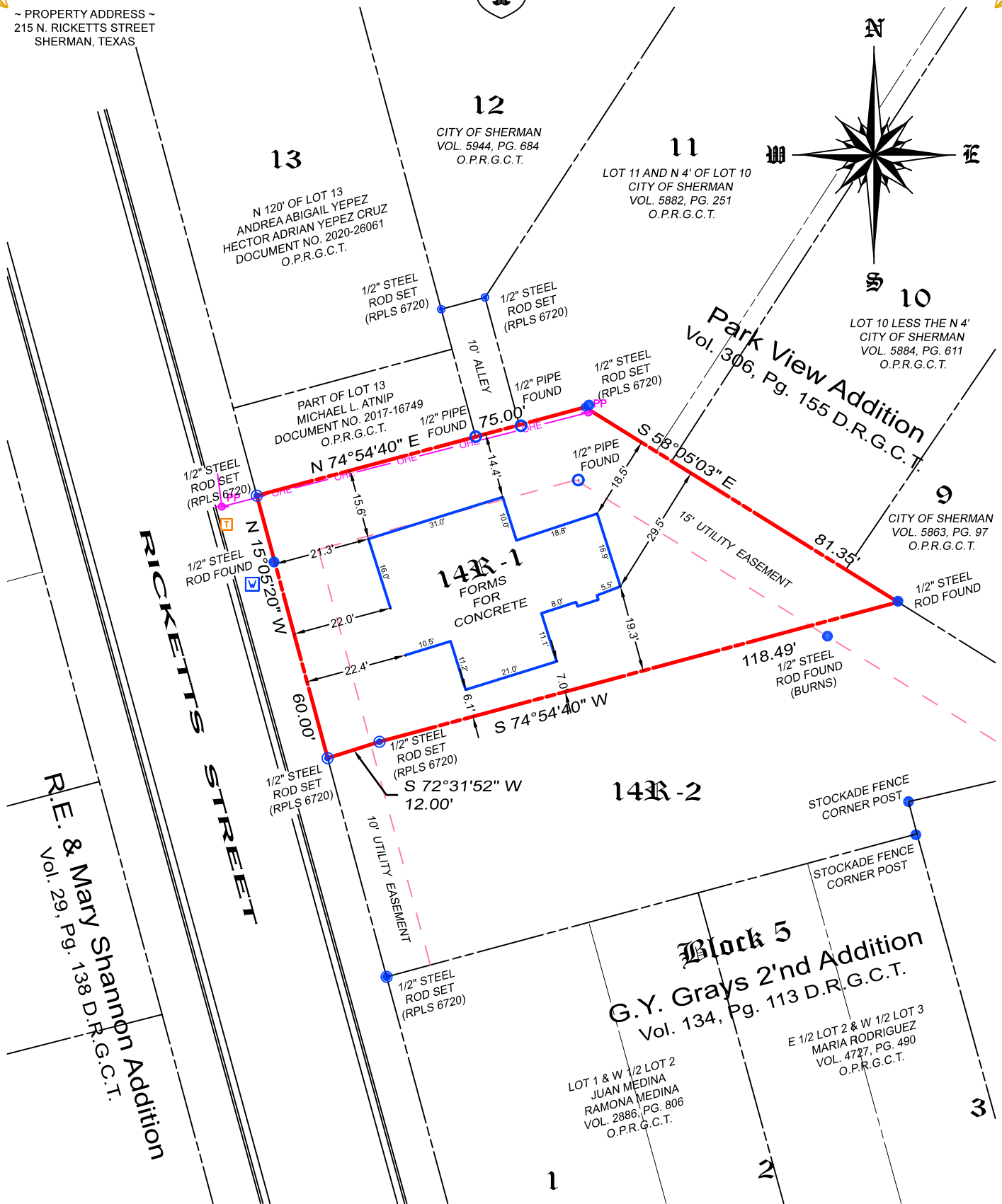
Note: This permit is not approved or valid until signed by the Building Official or his Designee.

**ALL WORK AND MATERIAL
TO COMPLY WITH
2018 IRC, 2018 IECC
AND 2020 NEC**

MARKED PLANS IN MYGOV



~ PROPERTY ADDRESS ~
215 N. RICKETTS STREET
SHERMAN, TEXAS



~ BASIS OF BEARINGS ~
GRID NORTH, NAD 83
TEXAS STATE PLANE COORDINATE SYSTEM
NORTH CENTRAL ZONE (4202)

0 30 60



SCALE ~ 1" = 30'

Copyright © 2023
Copley Land Surveying, Inc.
All rights reserved.

Form Survey

Lot 14R-1, Block 3

Replat of Lot 14

Parkview Addition

Sherman, Texas

Legend

--- BOUNDARY LINE
--- PROPERTY LINE
--- CONCRETE



DATE OF LAST SITE VISIT: 9/14/2023



Copley Land Surveying

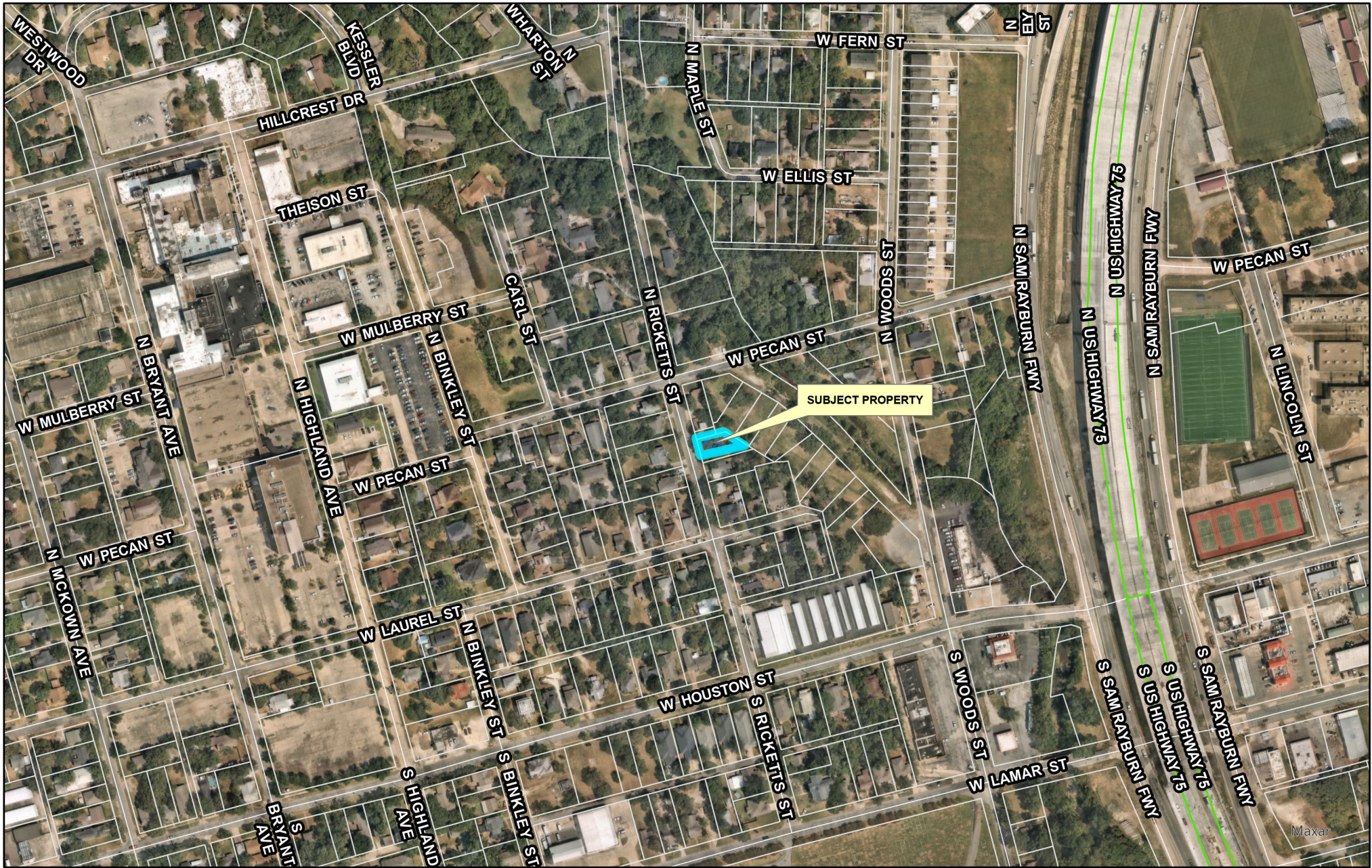
5904 Texoma Parkway, Sherman, Texas 75090

TX 903-415-0643

john@copleylandsurveying.com

CLS Job# 23030104 Lot 14R-1JF





City of Sherman, Texas
Development Services Department

CITY OF SHERMAN
LOCATION MAP
215 N RICKETTS ST



Date: 4/15/2024 3:00 PM

Untitled Map

Write a description for your map.

Legend

-  215 N Ricketts St
-  Tracks



Google Earth

© 2024 Google

5.80 ft





City Council Regular Meeting

Agenda Item No. G.1.

Meeting Date: 6/3/2024

Prepared By:

Approved By: Robby Hefton, City Manager

Caption:

*** REQUEST TO ADVERTISE**

Request to Advertise Services to Perform the Annual Audit for the Period Ending September 30, 2024

Issue:

Requesting permission to advertise for services to perform the annual audit for the fiscal year ending September 30, 2024.

Background:

By Charter, the City Council is required to annually appoint an independent auditor to perform a financial audit for the City. Additionally, a compliance audit is required in years when federal and state grant expenditures exceed certain thresholds. Staff seeks permission to advertise for audit services for the fiscal year ending September 30, 2024.

Origination:

Financial Consideration:

The cost of advertising will be less than \$500.00.

Staff Recommendation:

Staff recommends that the Council instruct the Audit Committee to seek proposals for the services of an independent auditor to perform the annual audit for the fiscal year ending September 30, 2024. The CFO will present the Audit Committee with a list of potential auditors.

Alternatives:

As may be directed by the City Council

Attachments:

None



City Council Regular Meeting

Agenda Item No. H.1.

Meeting Date: 6/3/2024

Prepared By: Sarah McRae, Tourism Manager

Approved By: Robby Hefton, City Manager

Caption:

Other Business

Consider Request of the 2024 Earth Day Planning committee to Temporarily Close Certain Streets for the 16th Annual "Texoma Earth Day Festival" on its rescheduled date of Saturday, June 15th, 2024

Issue:

The 2024 Earth Day Planning Committee proposes holding the "Texoma Earth Day Festival" on Saturday, June 15th, after being forced to cancel the festival on its original date due to inclement weather. They have requested barricades for two street closures and have reserved the Municipal Ballroom and Lucy Kidd-Key Park.

Background:

Ms. Amy Hoffman-Shehan, representing the 2024 Earth Day Planning Committee, proposes holding the 16th Annual "Texoma Earth Day Festival" on the Sherman Municipal Grounds, from 9:00 a.m. to 4:00 p.m., on Saturday, June 15th. In order to accommodate the festival, the Committee requested delivery and pick up of barricades for street closures around the Municipal Building, and cones to be placed behind the Gazebo Stage. The street closure time is from 6:00 a.m. to 5:00 p.m.

Origination:

Ms. Amy Hoffman-Shehan, Event Organizer, 2024 Earth Day Planning Committee

Financial Consideration:

Barricade placement and removal will be provided by the City of Sherman Street Department.

Staff Recommendation:

It is recommended that the City Council authorize the street closures and the utilization of the Municipal Grounds and City resources to accommodate this event.

Alternatives:

As directed by the Council

Attachments:

1. Special Event Packet City of Sherman
2. Street Closure Map 2024



Special Events Policies and Procedures Manual & Application

Community and Support Services Department
405 N. Rusk
903-892-7230

The City of Sherman is host to a wide variety of special events each year. Those events range from small gatherings to larger community events. The City has recognized that these special events have become an important part of our resident's life by enhancing tourism, culture, recreation and education as well as providing economic benefit to businesses in the City.

Some gatherings due to their size and special requirements may place unique demands on public resources. In order to plan for those demands and to ensure that public health and safety is protected, it is necessary that the city have advance notice of these special events. This manual will provide details outlining what types of events can be hosted and where.

The purpose of the Special Events Policies and Procedures Manual is to provide a consolidated manual to enable special event coordinators or those thinking of hosting an event easy access to the necessary information to help make the event a success. The primary goal of this manual is to create a win-win relationship between the City of Sherman and event organizers. By creating this relationship both parties will be able to receive, in a timely manner, the required information to plan a special event, big or small.

The specific objectives of the policy and procedure manual ensure that:

- The City of Sherman's assets are protected;
- The City of Sherman's citizens interests are met;
- The event organizers work with the merchants and residents to ensure that any negative impact is kept to a minimum;
- All Federal, County and Municipal laws, regulations and statutes are observed;
- The event organizers work closely with the Community and Support Services Department or designee;
- All special event applications are handled in a fair and equitable manner;
- Each event is evaluated in a consistent manner;
- All direct costs related to the services provided by the City of Sherman are recovered.

A special event is defined as a one time, annual, or infrequently occurring event on City of Sherman property that is reserved for exclusive use. Types of events may include but are not limited to: Cultural events that celebrate/educate heritage and cultures; Theatrical events; Commemorative events acknowledging significant dates or occurrences; Community events that provide the community with an opportunity to celebrate; Athletic events; Artistic events that celebrate/display creative and artistic works; or Commercial events designed to generate surplus revenue.

Special Event Permit Application Process

1. Complete the Special Event Permit Application and submit it to the Department of Community and Support Services, along with any applicable fees, sixty (60) days prior to the event date. The Community and Support Services Office is located in the Sherman Municipal Building at 405 N. Rusk on the 2nd Floor.
2. To ensure that your event is moved along in a timely manner, include as much information as possible on the application. You will be contacted for verification if questions arise.
3. After departmental approval from all affected departments, event approval will be placed on the City Council agenda.
4. You will be notified within 30 days of application submittal the date your event will go to City Council for approval. (All special events require City Council approval.)
5. It is advised, but not required; that you or someone from your organization is present at the City Council meeting to answer any questions that may arise.
6. After the City Council has approved your event you will receive written notification of the approval of your Special Event Application.

Events that will be held on the Municipal Grounds or at a park facility will require facility reservation prior to completion of the Special Event Application. Facility reservation does not guarantee event approval, nor does event approval guarantee facility reservation. Facility reservations will be checked prior to event approval and any event that does not have the appropriate facility reserved will be denied.

For annual events, you can submit a Date Request Form to hold the date of your event for the following year. Event date requests should be submitted by October 31st prior to the event year. An event date request may still be submitted after October 31st; however, the event application must be submitted a minimum of sixty (60) days prior to your event. Remember to check facility availability prior to submitting a Date Request Form.

General Policies and Procedures

1. All legislation, bylaws, regulations and City of Sherman Code of Ordinances must be adhered to.
2. The special event staff and volunteers must adhere to all special event policies and procedures. In the interest of public safety, a zero tolerance policy is enforced for all special events. This means failure to comply with standards will result in ticketing and/or closure of event.
3. The special event operator is required to provide evidence of all necessary licenses/permits required to operate the event.
4. The special event operator is required to submit an Emergency Plan with the special event application. The Emergency Plan must identify potential risks and provide information on how to respond to those risks (i.e. severe weather, notification system and evacuation plan).
5. All special events must comply with current ADA standards to allow participation of all residents at the special event they are planning. For useful information on planning an accessible event, please contact the Community and Support Services Office.
6. No person may be permitted at any special event to: (a) carry or sell firearms or prohibited weapons or (b) carry or sell illegal drugs or (c) carry or sell alcohol.
7. Notwithstanding any of the above, the community and support services department or its designee may vary any element of this policy at their sole discretion.
8. Chalk can be used on a limited basis, as outlined by the Public Works Department or designate to enhance the event setup.
9. Facilities will not be used for anything other than what is permitted by the Community and Support Services Department.

Special Event Insurance

1. The special event organizer must maintain commercial liability insurance, with the city listed as an additional insured before the special events permit will be issued.
2. The certificate shall serve as evidence of a policy written by a company licensed in the state.
3. The policy is to be in effect for the duration of the event, with minimum limits of liability of \$500,000.00 per occurrence, \$1,000,000.00 aggregate for bodily injury, personal injury and property damage, and \$100,000.00 per injury, \$300,000.00 per occurrence and \$100,000.00 per occupational disease.
4. The liability insurance requirements shall not apply to private parties that will not be open to the general public.
5. The City of Sherman reserves the right, solely at its discretion, to set higher insurance limits. This may be required depending on the type of activity planned during the event (e.g. fireworks displays, amusement rides).
6. The special event organizer shall indemnify and hold the City of Sherman harmless from and against all liability, loss, claims, demands, costs, and expenses, including reasonable legal fees, occasioned wholly or in part by any negligence or act of omissions by the above names, their officers, agents, employees, volunteers or others for whom they are responsible at law, arising out of any cause whatsoever, either direct or indirect, through its use and/or operation of city property in connection with the special event.

Special Event Emergency Procedures

1. Fire Code requires a Public Safety Plan for certain events. If a Plan is required, it must address how the organizer plans to alert both the attendees and emergency services personnel to the emergency, how they plan to move attendees to safety and provide Fire and Police access to the scene. The City will notify you if a Plan is required.
2. At no time may the activities of the special event restrict access to the street by police and fire vehicles.

3. Prepare an emergency plan to address the following issues:

- Medical Aid: Know the location of first-aid kits; identify people who have knowledge of CPR and/or a medical background.
- Fire Emergencies: Provide fire extinguishers/extinguishing equipment, garden hoses, etc., for all cooking areas.
- Maintaining and/or providing emergency access (moving barricades, tables, etc.) when necessary.

The emergency plan should identify all persons assigned to execute the emergency plan operation, the method to alert the personnel (i.e., bullhorn, whistle, bell, etc.), and the response to put into action for the emergency situation.

4. Fire hydrants shall not be blocked at any time by vehicles, tables, decoration, etc. A minimum six-foot clearance must be maintained around hydrants at all times, and a clear unobstructed path from the street to the hydrant. Ropes or other objects shall not be attached to fire hydrants at any time.
5. In the event an emergency vehicle must enter the event area, a minimum sixteen (16) foot wide road clearance must be maintained for the emergency vehicles. At all times during the event, persons shall be designated to be available to move barricades, tables, chairs, etc. if necessary.
6. If emergency vehicles are requested to respond to your event, the designated personnel must immediately go to the appropriate barricades and standby, as the responding vehicles will need access to your event. Having this standby procedure will prevent any delays for the emergency vehicles.

City of Sherman – Police & Fire Rescue Services

1. Crowd control will be the responsibility of the event organizer. A detailed plan outlining the measures put in place to deal with crowd control will be the responsibility of the event organizer. The plan will need to be submitted to the Community and Support Services department along with application submission.
2. The need for the use of security will be evaluated by the Sherman Police Department on an event by event basis. The cost of special/additional support will be the responsibility of the event organizer.

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3. The plan will be forwarded by the Community and Support Services department, as needed, to the City of Sherman Fire Department to ensure adequate measures are in place for fire and life safety concerns. If there are any concerns, the event organizer will be contacted prior to your event being placed on the City Council agenda.

Street Closure

1. Applicants requesting a temporary street (meaning any part of the municipal road allowance) closure for any special event will need to request the street closure on the Special Event application.
2. Approval is contingent upon ensuring adequate signage and barricades, a traffic control plan and providing adequate emergency access at all times to the satisfaction of the Community and Support Services department or designate.
3. To request a temporary street closure, the applicant may be asked to submit a petition signed and approved by 100% of the business and residence owners or habitants of adjacent properties on the affected street(s) or block(s).
4. In the event an emergency vehicle must enter the closed area, a minimum sixteen (16) foot wide road clearance must be maintained.
5. The applicant or designee must be present on the site during the entire duration of the street closure.
6. Possession and/or consumption of alcoholic beverages on the closed portion of the street is prohibited, unless approval is granted by motion and order by the City Council.

Noise Policy

1. Noise issues will fall subject to the guidelines set forth in Article 8.07 of the Sherman Code of Ordinances.
2. The creating of any unreasonably loud, disturbing and unnecessary noise within the corporate city limits of the city is prohibited.

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3. Any noise of such character, intensity or duration as to be detrimental to the life or health of any individual, or in disturbance of the public peace and welfare, is prohibited.
 4. The maintenance or operation of any loudspeaker or amplifying device on the outside of any building or structure in the city whereby music, speaking or noises of any type are or may be transmitted outside the confines of a fully enclosed stone or wood structure is prohibited.
 5. The amplification of sound for special events will be limited to the hours of 8:00a.m. until 9:00p.m., per City Ordinance.

Garbage/Recycling/Site Cleanup/General Maintenance

1. The special event organizer is responsible for the cleanup of the location to the satisfaction of the Community and Support Services Director or designee and the removal of all garbage by noon the day after the event ends.
2. The City will provide all normal maintenance services to its current routine standards including, but not restricted to, grass cutting, snow and ice clearing and any regular janitorial services and supplies at the event location before and during the event. Any additional maintenance required by the special event organizer prior to or during the event, may be at the cost and responsibility of the special event organizer.
3. The City of Sherman will not supply any additional garbage containers over and above the current level for special events, without prior notification. It will be the sole responsibility of the special event organizer to notify the City of collection service needs for the event. Additional fees may be required for additional services.
4. The special event organizer will use recycling containers for beverage cans and bottles.
5. Each event should have the same number of recycling containers as garbage containers and place them appropriately throughout the site.
6. The special event organizer will ensure that a suitable location is provided for food and merchandise vendors to place flattened corrugated cardboard boxes. These will be kept separate from any other recyclables or garbage.

Miscellaneous Requirements

1. Bathroom Facility Requirements

A. The following should be considered when determining the number of toilets to provide at your event.

- Duration of the event
- Weather conditions
- Crowd size, and
- Ticketed or unticketed event.

Where local laws or regulations do not exist, the following table can be used as a guide. Assume a 50/50 male/female split unless otherwise advised.

Crowd Size	Number of Facilities Necessary (dependent on event hours)								
	1	2	3	4	5	6	7	8	9
500	2	4	4	5	6	7	9	9	10
1,000	4	6	8	8	9	9	11	12	13
2,000	5	6	9	12	14	16	18	20	23
3,000	6	9	12	16	20	24	26	30	34
4,000	8	13	16	22	25	30	35	40	45
5,000	12	16	20	25	31	38	44	50	56
10,000	15	25	38	50	63	75	88	100	113

B. A copy of the contract with the Waste Disposal Company must be provided to the Community and Support Services Department no less than 14 days prior to the event.

- Note: the special event coordinator must ensure all washroom/hand wash stations are kept stocked with toilet paper and hand sanitizer.

C. There should be a minimum of one handwashing station with hot/warm water, liquid soap and paper towels immediately adjacent to the bathroom facilities. Washrooms in nearby stores or restaurants are not sufficient. The use of antiseptic hand gels can be used, but it is a good practice to have one handwashing station in case the need arises. The handwashing facilities must be accessible to all event attendees.

D. For more information on portable bathroom facilities please visit the Portable Sanitation Association website at www.psai.org/about.html.

2. Vendors

- A. In the interest of public safety, a zero tolerance policy is enforced for all special events. This means failure to comply with standards may result in ticketing and/or closure.
- B. All vendors will be required to ensure:
 - All outdoor electrical cords used are in good operating condition.
 - The use of manufactured extension cords with a three wire configuration or 2 wire polarized outdoor rated cords are acceptable (no modification to cords or equipment is permitted).
 - The use of panels that are properly assembled and contained in an approved weatherproof enclosure supplying 15 and 20 amp receptacles only which are protected by Ground Fault Circuit Interrupters.
 - Any non weatherproof equipment used in display enclosures (tents, gazebos etc) shall be protected from inclement weather.
 - All vendors shall supply the event organizer with the voltage and current that their equipment will require to eliminate overloading of circuits.
 - All trailers that are self contained and/or have lighting and equipment may be subjected to a field evaluation by the City of Sherman.

3. Food Vendors

- A. The City of Sherman has adopted the provisions of the current rules or rules as amended by the state board of health found in 25 Texas Administrative Code, chapter 229, sections 161 through 171 and 173 through 175, regarding the regulation of food establishments in this jurisdiction.
- B. All food vendors must have a temporary food permit.
- C. For further information regarding permitting of food vendors please contact the Grayson County Health Department.

4. Alcohol & TABC Licensing

- A. The drinking of any alcoholic beverages or the possession of any open container which contains an alcoholic beverage is prohibited and unlawful in the following places:
 - In any public park; on the sidewalks, streets and alleys; on any public parking lot; the Ham Center and the Youth Center.
 - In or on any public school district campus or facility.

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- On any private parking lot of any shopping center or any parking lot of any retail or commercial business.
 - In any theatre building and/or drive-in theater within the corporate limits of the city.
- B. An alcoholic beverage is defined as any spirits, wine, beer, ale or other liquid containing more than one-half of one (1) percent alcohol by volume.
- C. Event organizers must acquire the appropriate temporary permit from the TABC for all events where alcohol will be consumed. If a letter of permission is needed from the City, the request must be made no later than 2 (two) weeks prior to the event date.

5. Petting Zoos or Open Farms

- A. Your petting zoo or farm is designed to provide children and students with the joy of coming close to animals. You must remember, however, animals can carry diseases that can make humans ill, and proper precautions must be taken to ensure that the health and safety of all visitors are protected, especially children.

- B. For the safety of attendees, the City of Sherman requires the following:

Handwashing:

- Staff/Volunteers must encourage all visitors to wash their hands after handling the animals and before consuming food or drinks.
- There should be a minimum of one handwashing station with hot/warm water, liquid soap and paper towels immediately adjacent to the animal petting area. Washrooms in nearby stores or restaurants are not sufficient.
- The use of antiseptic hand gels can be used, but it is a good practice to have one handwashing station in case the need arises.
- Temporary handwash stations should be installed when permanent facilities are not immediately available.
- The exit to the animal area should be controlled to ensure that all participants pass by the handwash facilities and can use them if they choose.
- Handwashing facilities must be accessible to all visitors.

Operation:

- The public should not be permitted access to any animal enclosure except under the direct supervision of trained personnel. These enclosures should be kept locked outside of regular business hours.

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- Ensure that any manure is quickly and thoroughly cleaned up, and appropriately discarded. Straw and sawdust bedding should be replaced at least daily.
 - Staff/Volunteers must report all animal bites or scratches, or other injuries resulting from animal contact to Sherman Police Dispatch at 903-892-7290.

Animals:

- Potentially dangerous animals should not be included in a petting zoo. Reptiles and amphibians are not recommended.
- All animals must be in good health, and any animals with diarrhea must be excluded from display immediately.
- All animals must have up to date vaccinations for diseases applicable to the region. Vaccination records must be readily available when requested.
- All animals must have a friendly disposition, and must be comfortable with extensive petting or handling.

Signs:

- Ensure signs are erected at the entrance of the petting zoo or farm encouraging the act of washing hands upon leaving the animal area and before eating.



Special Event Application

This agreement is between the City of Sherman, hereinafter referred to as City, and an event/event coordinator, hereinafter referred to as event, for the cooperation of planning and operating a Special Event.

City reserves the right to close down or cancel any Event that is in violation of any City Ordinance or deviation from this agreement. The City also reserves the right to close down or cancel the Event if public safety or affected department supervisors deem the event unsafe for public participation.

- Application must be submitted at least 60 days prior to the event date.
- The Event must carry property, bodily injury and municipal liability insurance of \$1,000,000.00 per occurrence. The City of Sherman must be shown as an additional named insured on the insurance declaration. One (1) original copy of insurance must be submitted 30 days prior to event date.
- Alcohol distribution or consumption in any City Park and/or street is prohibited, unless approval is granted by motion and order by the City Council. A special event permit for alcohol on private property in conjunction with a Sherman private club may be permitted with a T.A.B.C license. Certain city-owned properties may allow for the consumption of alcohol.
- Please provide all information pertaining to the event as accurately as possible.

General Event Information

Official Name of Event: Texoma Earth Day Festival

Type of Event: (i.e. Carnival, Circus, 1 Mile/5 K Run, etc.) Family festival

Event Date: April 20, 2024 Event Times: 9:00 am to 4:00 pm

Alternate Date: _____ Event Times: _____

*Alternate date required in case of weather delays

Location of Event: Municipal Building, Lucy Kidd-Key Park, Pecan, S Rusk & Elm Streets adjacent to park

Event Contact Name: Amy Hoffman-Shehan

Event Contact Address: 1503 S Travus St, Sherman, TX 75090

Event Contact Phone: 903-821-8198

Event Contact Email: amychs17@gmail.com

Alternate Event Contact Name: Marla Loturco

Alternate Event Contact Address: 1725 S FM 1417 #17109

Alternate Event Contact Phone: 940-367-3291

Alternate Event Contact Email: marla.ruu@gmail.com

Event Day Emergency Contact: Amy Hoffman-Shehan Phone: 903-821-8198

Event Day Emergency Contact: Marla Loturco Phone: 40-367-3291

Estimated # of Participants: 200 vendors & volunteers Spectators: 1000-1500

Is Event Private or Open to the Public? ☐ Private Event ☒ Public Event

Description of Event

Include background/history of this event or type of event and a timeline of event. Maps and site plans are required; site plans should include location of concessions, port-a-lets and dumpsters; description of routes to be used, severe weather emergency plan, etc. Clean-up deposit may be required.

This will be the 16th annual Texoma Earth Day Festival. The festival includes vendors, workshops, entertainment, demonstrations, displays, and a wide variety of recycling opportunities

Public Services

Will event take place at a public park/facility? ☒ Yes ☐ No

park/facility? Municipal Building & Lucy Kidd-Key Park

*Park and/or facility reservation(s) required prior to completing this application.

Will you need any public street closures? X Yes _____ No

If Yes, which streets? S Elm Street between Mulberry and Pecan, including barricades at Mulberry adjacent to City Hall, S Rusk Street between Mulberry and Pecan, Pecan Street between Rusk & Elm. We will need cones on Rusk St near gazebo to reserve space for Sherman Animal Shelter adoption trailer. They will arrive around noon after another event.

*Closure of TxDOT controlled streets will need prior approval by TxDOT.

*Police and Fire vehicles must have access through street closures if the need arises.

Street closure time: 6:00 am on 4/20/24 Time closure removed: 5:00 pm on 4/20/24

*Barricades will be provided by the City for the listed street closures. Fees may be required for additional barricade requests.

Where are the parking areas located: (Include on site plan) vendors will park on west side of Rusk adjacent to stadium, public parking on N parking lot, City Hall parking lots

Does your event require special/additional support? (Fee may be required)

X Police
(crowd control, traffic control, etc.)
If yes, contact Jarena Capps, Police
Department, 903-892-7397

_____ Fire Department
(EMT Support, etc.)
If yes, contact Chief Jones, Fire
Department, 903-892-7263

X Other recycling services, including drug collection from police, traffic control for
(provide detail) recycling event . We are working on recycling services directly with Solid
Waste & Sherman Police. We will need 8 hand sanitizers for the grounds.

If any special/additional support is checked above it is the responsibility of the event coordinator to contact the person listed above, prior to approval. If no contact is made by the event coordinator, the approval process for your special event will cease.

Number of trash containers and size requested over and above the current level: 6 trash cans on grounds, see attached list for recycling containers

*Per city ordinance, all solid waste services must be provided by the city. Additional fees are possible for solid waste services.

Concessions

Will food concessions be present at the event? ☒ Yes ☐ No

Name, Address & Phone Number for Food Vendors: To be provided by early April.
Registrations to date are Tacos Hondumex, Coffee Obsessed & Blessed, Rollin' Woodfired Pizza,
Old Man Kettle Corn, Lemonade Depot, HTeaO Sherman, Sugar & Spice State Fair Mini Donuts

*All food vendors are required to have the appropriate permits required by the city or the county.

Fire Prevention

Will you have any tents at the event? ☒ Yes ☐ No

Will any tents be over 200sq. ft.? ☐ Yes ☒ No

*No smoking signs and 5lb. ABC extinguishers are required in all tents over 200sq. ft.

Will any tents be enclosed? ☐ Yes ☒ No

*A permit (\$50.00 fee) must be obtained from the Developmental Services Department for enclosed tents.

*A flame certificate for the tent and a site plan showing the setback from the property lines will be required to obtain this permit.

Will you have bounce houses? ☐ Yes ☒ No Number: _____

Will you have other air supported structures? ☐ Yes ☒ No

Will there be fireworks? ☐ Yes ☒ No

Will there be any temporary structures built or placed on site? ☐ Yes ☒ No

If Yes, describe: _____
One 20 x 10 tent without sides for dining area

Miscellaneous

Will you need the use of city water and/or electricity? ☒ Yes ☐ No

*Additional fees will apply to the usage of city utilities
Need electricity turned on by 7:00 am

Where will restroom facilities be located? portable toilets on parking lot south side of Municipal building

*Depending on accessibility of restroom facilities, city may require portable toilets to be used

Will there be music or any other use of a loudspeaker? X Yes ____ No

If Yes, please fill out the following:

Type of loudspeakers: Cadence Studios set up How many: _____

Type of Amplifiers: _____ How many: _____

Type of electrical devices: _____ How many: _____

Date and time loudspeakers/amplifiers/electrical devices will be in use: _____

*Loudspeakers/Amplifiers/Electrical Devices cannot be used during the hours of 9pm to 8am

Will you have any animals at the event? X Yes ____ No

If yes, are any prohibited/regulated animals? Pet adoptions through Sherman Animal Shelter only

*All pet owners must abide by Grayson County leash law

Public Information

Describe signage that will be used for the event, to include placement of signs: banner on
gazebo stage, sign stakes as indicated on the map

Describe how you will notify residents affected by the event either living on the route/course or
nearby. no nearby residents

*Proof of notification may be required

Overnight Accommodation Needs

Will event produce overnight stays in Sherman hotels, motels or bed and breakfasts? If so, how
many rooms potentially? unknown but two vendors will travel from outside the area

* The Sherman Chamber of Commerce is available for assistance with hotel information and
accommodation needs for the event.

Agreement:

Initial AHS I hereby attest that the information contained in this application is true and correct. I understand that this is only an application and not a guarantee that a permit will be issued. If a permit is issued, I agree that: (1) if any of the information contained in this application is found to be false: or (2) should my conduct, or the conduct of any participants or guests, not adhere to the Special Event Policies and Procedures: or (3) should any applicable city, county, state or federal rules, regulations, codes or laws be violated, any permit issued shall automatically become null and void and any activity associated with this permit will immediately cease.

Initial AHS Applicant agrees to assume the defense of and indemnify and save harmless the City, its council members, boards, commissions, officers, employees and agents, from all suits, actions, damages or claims to which the City may be subjected of any kind or nature whatsoever resulting from, caused by, arising out of or as a consequence of such temporary street closure and the activities permitted in connection therewith. The city may require, as a condition of issuance of a permit, that the applicant obtain insurance to serve this end, in such an amount and with such terms as the City determines to be appropriate under the circumstances. This shall be a continuing release and shall remain in effect until revoked in writing.

Initial AHS In case of emergency or for reasons beyond the City's control, the City reserves the right to cancel the permit prior to scheduled use without liability. Refunds will be made if cancellation by the City is necessary.

Initial AHS Alcohol must be confined to private property. Alcohol consumed on Public property is a violation of city Ordinance and is prohibited.

Signature:

I the undersigned representative have read the policies and procedures with reference to this application. The information contained herein is complete and accurate.

Amy Hoffman-Shehan
Signature

3-26-24
Date

For Office Use Only

DEPARTMENT APPROVALS

DEPARTMENT	DATE	SIGNATURE
City Council Approval		
Fire Department		
Police Department		
Public Works Department		
Solid Waste & Recycling Department		
Parks & Recreation Department		



Special Event Date Request Form

Name of Event:
Type of Event (i.e. Carnival, Circus, Festival, 1 Mile/5 K Run, etc.):
Location of Event:
Date of Event:
Event Contact Name:
Event Contact Address:
Event Contact Phone:
Event Contact Email:

Completion and approval of the Special Event Date Request Form does not guarantee event approval. The Community and Support Services Department must receive the completed Special Event Application 60 days prior to the event date. If the application is not received the date will be released 60 days prior to the event.

Requester Signature:	Date:
----------------------	-------

*Office Use Only
Date Request Received:
Event Date Hold Approved: YES NO
If NO, reason:
Date 60 Days Prior to the Event Date:
Date Special Event Application Received:
Requested Event Date Released: YES NO Date:
Community and Support Services Department Signature:





City Council Regular Meeting

Agenda Item No. H.2.

Meeting Date: 6/3/2024

Prepared By: Tom Pruitt, Utility Engineer

Approved By: Robby Hefton, City Manager

Caption:

***OTHER BUSINESS**

Repair and Rework of the Luella 2 Woodbine Well under Emergency Designation

Issue:

To allow the repair and rework of the Luella 2 Woodbine Well under Emergency Designation

Background:

The Luella 2WB (Woodbine) groundwater well has suffered failure due to a lighting strike. Upon inspection, it was determined that the motor had failed and that there was a hole blown out of the top due to the lighting strike. The pump was found to still be operational, but did contain some wear to the bearings and rings that will be corrected as part of this repair. A large portion of the cost for this repair is due to approximately 1,000 linear feet of wiring that has to be replaced.

The well was removed from service and inspected and tested with the recommended course of action provided by Weisinger Incorporated on May 10, 2024. The City of Sherman has used this service company before and have found them to be competent and timely in their work. As we approach the summer months, it is critical that this well be repaired and put back into operation as soon as possible.

Origination:

Water Production

Financial Consideration:

The City staff's estimated cost to repair the well is approximately \$287,742.00. The cost of the repair due to the lightning strike is covered by insurance. Normal costs due to wear will be paid by the Utility Fund.

Staff Recommendation:

It is recommended that the emergency repair to the Luella 2 Woodbine Well under Emergency Designation be approved and that the City Manager be authorized to execute any required contract documents.

Alternatives:

As may be directed by the City Council

Attachments:

1. Quote - Luella 2 Woodbine
2. Unsigned Agreement

3. Location Map

May 10, 2024

City of Sherman
243 La Cima Dr.
Sherman, TX 75090

Attn: Oscar Canales

Ref: Luella 2 Woodbine Water Well

Mr. Canales:

As you requested, we have removed the pumping equipment and have completed a TV Survey of the referenced water well. Listed below are our findings and recommendations.

Inspections of the pumping equipment found that the 175 HP motor megged bad and has a hole blown in it near the top. The pump is in good condition but does contain some over tolerance wear to the bronze bearings and wear rings. The existing 350MCM cable megged very low (337.5, 8.44 & 17.88 Mega Ohms), dry and the spool is too large to perform the water immersion testing. All 950' of the 5"-8RD column pipes are in good shape but the springs on both check valves were found to be weak resulting in them needing to be replaced.

A TV Survey was performed on 04/29/2024 to investigate the conditions of the well after removing the pumping equipment. The static water level was 645 feet and the total depth viewed was 1128 feet. The screens appear to be mostly open. There were no structural issues noted at this time. Based on the review of the TV survey, we are recommending no downhole rehabilitation efforts and proceed with setting the permanent pumping equipment back in the well. Please consider the following:

Scope of Services and Materials

Pumping Equipment

- | | |
|---|--------------|
| - Rebuild the existing pump with a new 416 stainless steel pump shaft, new bronze bowl bearings, wear rings and 8" x 10" motor adapter plate. | \$11,172.00 |
| - New 200 HP, 3/60/460 volt, 3600 RPM Hitachi High Heat submersible motor derated to 175 HP | \$68,371.00 |
| - 1000 ft. new Paige Hydroflex 350MCM 3C WG cable with splice kits | \$154,519.00 |
| - New 5"8V x 5" 8RD x 5' T&C lift nipple with centralizers | \$987.00 |
| - 2 each new 5" 8RD check valves | \$11,280.00 |
| - 965 ft. new 1/4" stainless steel airline complete with water level detector kit | \$5,081.00 |
| - Miscellaneous items to make operational | \$2025.00 |



May 10, 2024
Attn: Oscar Canales
Ref: Luella 2 Woodbine Water Well
Page -2-

Installation of New Pumping Equipment

- Haul pumping equipment to the well site
- Service rig and crew to install pumping equipment in the well
- Service Technician to start-up, test the well, and collect (1) bacteriological sample

Total of Materials and Services Outlined Above\$280,723.00

Adder to Provide Performance, Payment, and Maintenance Bonds\$7,019.00

We thank you for the opportunity to offer you our services as we wait for your response.

Sincerely,

A handwritten signature in blue ink, appearing to read "Randy Hagen", is written over a light blue horizontal line.

Randy Hagen

AGREEMENT

THIS AGREEMENT is by and between the CITY OF SHERMAN, TEXAS, a home-rule municipality (the "CITY"), and Weisinger Incorporated, a corporation (the "CONTRACTOR"). CITY and CONTRACTOR are sometimes referred to collectively as the "parties" or individually as a "party."

CITY and CONTRACTOR, in consideration of the mutual covenants hereinafter set forth and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, agree as follows:

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CONTRACTOR shall complete all Work as specified or indicated in the Contract Documents and shall furnish all personnel, labor, equipment, supplies and all other items necessary to provide the services and deliverables as specified by the terms and conditions of the Contract Documents. The Work project is generally described as follows:

Luella 2 Woodbine Emergency Repair – Emergency Designation

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The Project has been designed by City of Sherman Engineering Department, Sherman, Texas, who is hereinafter called ENGINEER and who is to act as CITY'S representative, assume all duties and responsibilities and have the rights and authority assigned to ENGINEER in the Contract Documents in connection with completion of the Work in accordance with the Contract Documents.

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- 3.1 The Work will be substantially completed and ready for final payment within 60 calendar days from the date when the Contract Time commences to run, as provided in the Special Conditions.
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At the unit prices shown on the Quote included in the Contract Documents.

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If the contract amount of this contract is less than \$5,000,000, no interest will be paid to the CONTRACTOR on retained money. When the contract amount exceeds \$5,000,000, no interest will be paid unless required by law.

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- 7.3 CONTRACTOR has obtained and carefully studied (or assumes responsibility for obtaining and carefully studying) all such examinations, investigations, explorations, tests, reports and studies in addition to, or to supplement, those referred to above, which pertain to the subsurface or physical conditions at or contiguous to the site, or otherwise may affect the cost, progress, performance or furnishing of the Work as CONTRACTOR considers necessary for the performance or furnishing of the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents, and no additional examinations, investigations, explorations, tests, reports, studies or similar information or data are, or will be, required by CONTRACTOR for such purposes.
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assumes responsibility for the accurate location of all Underground Facilities, whether indicated in the Contract Documents, or not. No additional examinations, investigations, explorations, tests, reports, studies or similar information or data in respect of said Underground Facilities are, or will be, required by CONTRACTOR in order to perform and furnish the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents.

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The "Contract Documents," which comprise the entire agreement between CITY and CONTRACTOR concerning the Work, consist of the following:

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- 8.4 Agenda Item
- 8.5 Request for Quotation
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- 8.15 Special Conditions
- 8.16 General Conditions of Agreement
- Technical Specification prepared or issued by City of Sherman 5/15/2024
- 8.17 The following, which may be delivered or issued after the Effective Date of the Agreement and are not attached hereto:

All written Amendments, change orders, and other documents amending, modifying, or supplementing the Contract Documents pursuant to the Special Provisions. The parties understand and agree that deviations or modifications to the scope of Work described in the

Contract Documents, in the form of one or more written Contingency Change Allowance or also change orders, may be authorized from time to time by CITY ("Change Orders"). "Extra" work, "claims" invoiced as "extra" work or "claims" which have not been issued as a duly executed, written Change Orders by the Sherman City Manager or his designee will not be authorized for payment and/or shall not become part of this Agreement. A duly executed, written Change Order shall be preceded by the City Council's authorization for the City Manager to execute said Change Order. CONTRACTOR agrees that CITY'S project managers are authorized to issue Contingency Allowance Authorization but CITY'S project managers, superintendents and/or inspectors not authorized to issue verbal or written Change Orders.

There are no contract Documents other than those listed above in this Agreement. The Contract Documents may only be amended, modified or supplemented, as outlined in this Contract.

Article 9. INDEMNITY

CONTRACTOR HEREBY RELEASES AND SHALL DEFEND, INDEMNIFY AND HOLD HARMLESS CITY AND ITS CITY COUNCIL MEMBERS, OFFICERS, AGENTS, REPRESENTATIVES AND EMPLOYEES (COLLECTIVELY REFERRED TO AS "CITY" FOR PURPOSES OF THIS SECTION) FROM AND AGAINST ALL DAMAGES, INJURIES (WHETHER IN CONTRACT OR IN TORT, INCLUDING PERSONAL INJURY AND DEATH), CLAIMS, PROPERTY DAMAGES (INCLUDING LOSS OF USE), LOSSES, DEMANDS, SUITS, ACTIONS, JUDGMENTS, LIENS, COSTS AND EXPENSES, INCLUDING REASONABLE ATTORNEY'S FEES AND EXPENSES (INCLUDING ATTORNEY'S FEES AND EXPENSES INCURRED IN ENFORCING THIS SECTION), THAT IN WHOLE OR IN PART ARISE OUT OF OR ARE CONNECTED WITH GOODS AND/OR SERVICES PROVIDED BY CONTRACTOR, ITS OFFICERS, AGENTS, REPRESENTATIVES, EMPLOYEES, SUBCONTRACTORS, LICENSEES, INVITEES OR ANY OTHER THIRD PARTIES FOR WHOM CONTRACTOR IS LEGALLY RESPONSIBLE (COLLECTIVELY REFERRED TO AS "CONTRACTOR" FOR PURPOSES OF THIS SECTION) PURSUANT TO THIS AGREEMENT AND/OR THE NEGLIGENT, GROSSLY NEGLIGENT AND/OR INTENTIONAL WRONGFUL ACT AND/OR OMISSION OF CONTRACTOR IN ITS/THEIR PERFORMANCE OF THIS AGREEMENT, REGARDLESS OF THE JOINT OR CONCURRENT NEGLIGENCE OF CITY (COLLECTIVELY, "CLAIMS"). THIS INDEMNIFICATION PROVISION AND THE USE OF THE TERM "CLAIMS" IS ALSO SPECIFICALLY INTENDED TO APPLY TO, BUT IS NOT LIMITED TO, ANY AND ALL CLAIMS, WHETHER CIVIL OR CRIMINAL, BROUGHT AGAINST CITY BY ANY GOVERNMENT AUTHORITY OR AGENCY RELATED TO ANY PERSON PROVIDING SERVICES UNDER THIS AGREEMENT THAT ARE BASED ON ANY FEDERAL IMMIGRATION LAW AND ANY AND ALL CLAIMS, DEMANDS, DAMAGES, ACTIONS AND CAUSES OF ACTION OF EVERY KIND AND NATURE, KNOWN AND UNKNOWN, EXISTING OR CLAIMED TO EXIST, RELATING TO OR ARISING OUT OF ANY EMPLOYMENT RELATIONSHIP BETWEEN CONTRACTOR AND ITS EMPLOYEES OR SUBCONTRACTORS AS A RESULT OF THAT SUBCONTRACTOR'S OR EMPLOYEE'S EMPLOYMENT AND/OR SEPARATION FROM EMPLOYMENT WITH CONTRACTOR, INCLUDING BUT NOT LIMITED TO ANY DISCRIMINATION CLAIM BASED ON SEX, SEXUAL ORIENTATION OR PREFERENCE, RACE, RELIGION, COLOR, NATIONAL ORIGIN, AGE OR DISABILITY UNDER FEDERAL, STATE OR LOCAL LAW, RULE OR REGULATION, AND/OR ANY CLAIM FOR WRONGFUL TERMINATION, BACK PAY, FUTURE WAGE LOSS, OVERTIME PAY, EMPLOYEE BENEFITS, INJURY SUBJECT TO RELIEF UNDER THE WORKERS' COMPENSATION ACT OR WOULD BE SUBJECT TO RELIEF UNDER ANY POLICY FOR WORKERS COMPENSATION INSURANCE, AND ANY OTHER CLAIM, WHETHER IN TORT, CONTRACT OR OTHERWISE.

IN ITS SOLE DISCRETION, CITY SHALL HAVE THE RIGHT TO APPROVE OR SELECT DEFENSE COUNSEL TO BE RETAINED BY CONTRACTOR IN FULFILLING ITS OBLIGATION HEREUNDER TO DEFEND AND INDEMNIFY CITY, UNLESS SUCH RIGHT IS EXPRESSLY WAIVED BY CITY IN WRITING. CITY RESERVES THE RIGHT TO PROVIDE A PORTION OR ALL OF ITS OWN DEFENSE; HOWEVER, CITY IS UNDER NO OBLIGATION

TO DO SO. ANY SUCH ACTION BY CITY IS NOT TO BE CONSTRUED AS A WAIVER OF CONTRACTOR'S OBLIGATION TO DEFEND CITY OR AS A WAIVER OF CONTRACTOR'S OBLIGATION TO INDEMNIFY CITY PURSUANT TO THIS AGREEMENT. CONTRACTOR SHALL RETAIN CITY-APPROVED DEFENSE COUNSEL WITHIN SEVEN (7) BUSINESS DAYS OF CITY'S WRITTEN NOTICE THAT CITY IS INVOKING ITS RIGHT TO DEFENSE OR INDEMNIFICATION UNDER THIS AGREEMENT. IF CONTRACTOR FAILS TO RETAIN COUNSEL WITHIN SUCH TIME PERIOD, CITY SHALL HAVE THE RIGHT TO RETAIN DEFENSE COUNSEL ON ITS OWN BEHALF, AND CONTRACTOR SHALL BE LIABLE FOR ALL COSTS INCURRED BY CITY.

THE RIGHTS AND OBLIGATIONS CREATED BY THIS SECTION SHALL SURVIVE TERMINATION OF THIS AGREEMENT.

Article 10. LIABILITY

To the fullest extent permitted by law, CONTRACTOR shall be fully and solely responsible and liable for its own acts and omissions, including those of its officers, agents, representatives, employees, subcontractors, licensees, invitees and all other parties performing services for or on behalf of CONTRACTOR under this Agreement, and for any and all damage to CONTRACTOR's equipment and other property. CITY assumes no such responsibility or liability. CITY shall have no such responsibility or liability to either CONTRACTOR or its officers, agents, representatives, employees, subcontractors, licensees, invitees or other persons.

Article 11. TERMINATION

CITY is entitled to terminate this Agreement at any time for any reason or for no reason by giving CONTRACTOR at least thirty (30) days' prior written notice of the termination date.

CITY is entitled to terminate this Agreement immediately on breach of any term or provision of the Contract Documents by CONTRACTOR. If at any time during the term of this Agreement, CONTRACTOR shall fail to commence the work in accordance with the provisions of the Contract Documents or fail to diligently perform the work in an efficient, timely and careful manner and in strict accordance with the provisions of the Contract Documents, then CITY shall have the right to terminate this Agreement. Any such act by CITY shall not be deemed a waiver of any other right or remedy of CITY.

The rights and remedies provided by this Agreement are cumulative, and the use of any one right or remedy by either party shall not preclude or waive its rights to use any or all other remedies. These rights and remedies are given in addition to any other rights the parties may have by law, statute, ordinance, or otherwise.

Article 12. MISCELLANEOUS

12.1 Terms used in the Agreement will have the meanings indicated in the Special Conditions.

12.2 No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically, but without limitation, monies that may become due and monies that are due, may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

- 12.3 CONTRACTOR acknowledges and agrees that the existence of a prohibited interest during the term of this Agreement will render this Agreement voidable. CONTRACTOR further acknowledges and agrees that it also is aware of, and will abide by, the vendor disclosure requirements set forth in Chapter 176 of the Texas Local Government Code, as amended.
- 12.4 Each party represents and warrants to the other that it has the full power and authority to enter into and fulfill the obligations of this Agreement. The respective signatories to this Agreement, by affixing their signatures hereto, warrant and represent that they have the authority to bind their respective parties as duly authorized representatives thereof.
- 12.5 The parties acknowledge and agree that, in executing and performing this Agreement, CITY has not waived, nor shall be deemed to have waived, any defense or immunity, including governmental, sovereign and official immunity, that would otherwise be available to it against claims arising in the exercise of governmental powers and functions. By entering into this Agreement, the parties do not create any obligations, express or implied, other than those set forth herein.
- 12.6 In the event that a term, condition or provision of this Agreement is determined to be invalid, illegal, void, unenforceable or unlawful by a court of competent jurisdiction, then that term, condition or provision shall be deleted and the remainder of the Agreement shall remain in full force and effect as if such invalid, illegal, void, unenforceable or unlawful provision had never been included in this Agreement.
- 12.7 If either party files any action or brings any proceeding against the other arising from this Agreement, then as between CITY and CONTRACTOR, the prevailing party shall be entitled to recover as an element of its costs of suit, and not as damages, reasonable and necessary attorneys' fees and litigation expenses both at trial and on appeal, subject to the limitations set forth in TEX. LOC. GOV'T CODE § 271.153, as it exists or may be amended, if applicable.
- 12.8 The laws of the State of Texas shall govern the interpretation, validity, performance and enforcement of this Agreement, without regard to conflict of law principles. This Agreement is performable in Grayson County, Texas, and the exclusive venue for any action arising out of this Agreement shall be a court of appropriate jurisdiction in Grayson County, Texas.
- 12.9 Waiver by either party of any breach of this Agreement, or the failure of either party to enforce any of the provisions of this Agreement, at any time, shall not in any way affect, limit, or waive such party's right thereafter to enforce and compel strict compliance.
- 12.10 CONTRACTOR covenants and agrees that CONTRACTOR is an independent contractor and not an officer, agent, servant or employee of CITY; that CONTRACTOR shall have exclusive control of and exclusive right to control the details of the work performed hereunder and all persons performing the same; that the doctrine of respondent superior shall not apply as between CITY and CONTRACTOR, its officers, agents, employees, contractors, subcontractors and consultants; and that nothing herein shall be construed as creating a partnership or joint enterprise between CITY and CONTRACTOR.
- 12.11 This Agreement shall be deemed drafted equally by all parties hereto. The language of all parts of this Agreement shall be construed as a whole according to its fair meaning, and any presumption or principle that the language herein is to be construed against any party shall not apply. Headings in

this Agreement are for the convenience of the parties and are not intended to be used in construing this document.

- 12.12 This Agreement may be executed in a number of identical counterparts, each of which shall be deemed an original for all purposes. An electronic mail and/or facsimile signature will also be deemed to constitute an original if properly executed and delivered to the other party.
- 12.13 CITY and CONTRACTOR each binds itself, its partners, successors, assign, and legal representatives to the other party hereto, its partners, successors, assign and legal representatives in respect of all covenants, agreements and obligations contained in the Contract Documents.

Article 13. **OTHER PROVISIONS**

None.

IN WITNESS WHEREOF, CITY and CONTRACTOR have signed this Agreement in multiple copies. One counterpart each has been delivered to CITY, CONTRACTOR and ENGINEER. All portions of the Contract Documents have been signed or identified by CITY and CONTRACTOR or by ENGINEER on their behalf. The date this Agreement is signed by the last party to sign it (as indicated by the date associated with that party's signature below) will be deemed the effective date of this Agreement (the "Effective Date").

CITY: CITY OF SHERMAN, TEXAS

CONTRACTOR: WEISINGER INCORPORATED

By: _____

By: _____

Date: _____

Date: _____

(Corporate Seal)

Attest: _____

Attest: _____

Address for giving notices:

Address for giving notices:



Sherman
CLASSIC TOWN. BROAD HORIZON.



City Council Regular Meeting

Agenda Item No. H.3.

Meeting Date: 6/3/2024

Prepared By: Tom Pruitt, Utility Engineer

Approved By: Robby Hefton, City Manager

Caption:

***OTHER BUSINESS**

Repair and Rework of the Russell 1 T Well under Emergency Designation

Issue:

To allow the repair and rework of the Russell 1 T Well under Emergency Designation

Background:

The Russell 1T (Trinity) groundwater well has suffered failure and has been removed from service. Upon inspection, it was determined that the existing submersible pumping equipment had failed. Debris was observed in various locations which may have led to the failure of the pump. Due to the characteristics of the Trinity aquifer, it has been found that a lineshaft turbine pump is a better option for the pumping equipment. This repair would clean the debris discovered in the well and also replace the pumping equipment.

The well was removed from service and inspected and tested with the recommended course of action provided by Weisinger Incorporated on May 17, 2024. The City of Sherman has used this service company before and have found them to be competent and timely in their work. As the summer months approach, it is critical that this well be repaired and put back into operation as soon as possible. The last major repair made to this well was in 2010.

Origination:

Water Production

Financial Consideration:

The City staff's estimated cost to repair the well is approximately \$402,650.00. The City's Utility Fund will be utilized to fund the repairs.

Staff Recommendation:

It is recommended that the emergency repair to the Russell 1 T Well under Emergency Designation be approved and that the City Manager be authorized to execute any required contract documents.

Alternatives:

As may be directed by the City Council

Attachments:

1. Quote - Russell 1 Trinity
2. Unsigned Agreement
3. Location Map

May 17, 2024

City of Sherman
243 La Cima Dr.
Sherman, TX 75090

Attn: Oscar Canales

Ref: Russell 1 Trinity Well

Mr. Canales:

As you requested, we have removed the pumping equipment and have completed a TV survey of the referenced water well. The TV survey performed on 5/9/2024 showed a static water level of 790 feet, and the total depth viewed was 2341 feet. Debris was observed in various spots throughout the 10" screen and liner (mostly steel banding), and there appears to be approximately 30 feet of fill in the well. We recommend, as the most feasible course of action, to push the loose debris in the liner to the bottom of the well before attempting to set the permanent pumping equipment.

Based on prior discussions with the City we are proposing to replace the submersible pumping equipment with oil-lubricated lineshaft pumping equipment.

Please consider the following:

Scope of Services

Push loose debris to bottom of the well \$34,107.00

- Furnish workover pipe and equipment, and service rig and crew to run tooling to push loose debris to the bottom of the well.
- Perform a TV survey to determine the effectiveness of pushing debris to the bottom of the well and to re-examine the screen and liner.

Proposed Lineshaft Pumping Equipment

- | | |
|---|--------------|
| - New 200 HP, 1800 RPM, 460v, VHS motor, WP1 enclosure, premium efficient, 175% EHT | \$35,503.00 |
| - New 400 GPM at 1075' TDH pump bowl with factory test | \$44,524.00 |
| - 1140 ft. new 8" x 1-15/16" x 3" column assembly, including one mid-stretch assembly, bowl suction pipe and stainless steel cone strainer. | \$195,281.00 |
| - New fabricated steel discharge head with adjustable top column flange and lock ring | \$11,948.00 |
| - New 1-15/16" motor drive shaft | \$1,367.00 |
| - New 1-15/16" x 3" tension bearing | \$1,722.00 |



May 17, 2024
Mr. Oscar Canales
Ref: City of Sherman Dorchester 9 Trinity
Page -2-

- | | |
|--|------------|
| - New heated oil reservoir and lubrication system | \$6,784.00 |
| - 1150 ft. new PVC coated 1/4" stainless steel airline | 5,164.00 |
| - Miscellaneous items to make operational | 3,342.00 |
| - Shop labor to assemble the new equipment and load for shipment | 8,910.00 |

<u>Installation of New Pumping Equipment</u>	\$44,177.00
--	-------------

- Haul pumping equipment to the well site
- Service rig and crew to install pumping equipment in the well
- Service Technician to start up, test the well, and collect three (3) bacteriological samples

Estimated Subtotal for Scope of Services and Materials Outlined \$392,829.00

Adder to Provide Performance, Payment, and Maintenance Bonds \$9,821.00

Work previously approved (to be invoiced separately) \$25,885.00

Thank you for the opportunity to offer you our services as we await your response.

Sincerely,

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Randy Hagen

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- 8.17 The following, which may be delivered or issued after the Effective Date of the Agreement and are not attached hereto:

All written Amendments, change orders, and other documents amending, modifying, or supplementing the Contract Documents pursuant to the Special Provisions. The parties understand and agree that deviations or modifications to the scope of Work described in the

Contract Documents, in the form of one or more written Contingency Change Allowance or also change orders, may be authorized from time to time by CITY ("Change Orders"). "Extra" work, "claims" invoiced as "extra" work or "claims" which have not been issued as a duly executed, written Change Orders by the Sherman City Manager or his designee will not be authorized for payment and/or shall not become part of this Agreement. A duly executed, written Change Order shall be preceded by the City Council's authorization for the City Manager to execute said Change Order. CONTRACTOR agrees that CITY'S project managers are authorized to issue Contingency Allowance Authorization but CITY'S project managers, superintendents and/or inspectors not authorized to issue verbal or written Change Orders.

There are no contract Documents other than those listed above in this Agreement. The Contract Documents may only be amended, modified or supplemented, as outlined in this Contract.

Article 9. INDEMNITY

CONTRACTOR HEREBY RELEASES AND SHALL DEFEND, INDEMNIFY AND HOLD HARMLESS CITY AND ITS CITY COUNCIL MEMBERS, OFFICERS, AGENTS, REPRESENTATIVES AND EMPLOYEES (COLLECTIVELY REFERRED TO AS "CITY" FOR PURPOSES OF THIS SECTION) FROM AND AGAINST ALL DAMAGES, INJURIES (WHETHER IN CONTRACT OR IN TORT, INCLUDING PERSONAL INJURY AND DEATH), CLAIMS, PROPERTY DAMAGES (INCLUDING LOSS OF USE), LOSSES, DEMANDS, SUITS, ACTIONS, JUDGMENTS, LIENS, COSTS AND EXPENSES, INCLUDING REASONABLE ATTORNEY'S FEES AND EXPENSES (INCLUDING ATTORNEY'S FEES AND EXPENSES INCURRED IN ENFORCING THIS SECTION), THAT IN WHOLE OR IN PART ARISE OUT OF OR ARE CONNECTED WITH GOODS AND/OR SERVICES PROVIDED BY CONTRACTOR, ITS OFFICERS, AGENTS, REPRESENTATIVES, EMPLOYEES, SUBCONTRACTORS, LICENSEES, INVITEES OR ANY OTHER THIRD PARTIES FOR WHOM CONTRACTOR IS LEGALLY RESPONSIBLE (COLLECTIVELY REFERRED TO AS "CONTRACTOR" FOR PURPOSES OF THIS SECTION) PURSUANT TO THIS AGREEMENT AND/OR THE NEGLIGENT, GROSSLY NEGLIGENT AND/OR INTENTIONAL WRONGFUL ACT AND/OR OMISSION OF CONTRACTOR IN ITS/THEIR PERFORMANCE OF THIS AGREEMENT, REGARDLESS OF THE JOINT OR CONCURRENT NEGLIGENCE OF CITY (COLLECTIVELY, "CLAIMS"). THIS INDEMNIFICATION PROVISION AND THE USE OF THE TERM "CLAIMS" IS ALSO SPECIFICALLY INTENDED TO APPLY TO, BUT IS NOT LIMITED TO, ANY AND ALL CLAIMS, WHETHER CIVIL OR CRIMINAL, BROUGHT AGAINST CITY BY ANY GOVERNMENT AUTHORITY OR AGENCY RELATED TO ANY PERSON PROVIDING SERVICES UNDER THIS AGREEMENT THAT ARE BASED ON ANY FEDERAL IMMIGRATION LAW AND ANY AND ALL CLAIMS, DEMANDS, DAMAGES, ACTIONS AND CAUSES OF ACTION OF EVERY KIND AND NATURE, KNOWN AND UNKNOWN, EXISTING OR CLAIMED TO EXIST, RELATING TO OR ARISING OUT OF ANY EMPLOYMENT RELATIONSHIP BETWEEN CONTRACTOR AND ITS EMPLOYEES OR SUBCONTRACTORS AS A RESULT OF THAT SUBCONTRACTOR'S OR EMPLOYEE'S EMPLOYMENT AND/OR SEPARATION FROM EMPLOYMENT WITH CONTRACTOR, INCLUDING BUT NOT LIMITED TO ANY DISCRIMINATION CLAIM BASED ON SEX, SEXUAL ORIENTATION OR PREFERENCE, RACE, RELIGION, COLOR, NATIONAL ORIGIN, AGE OR DISABILITY UNDER FEDERAL, STATE OR LOCAL LAW, RULE OR REGULATION, AND/OR ANY CLAIM FOR WRONGFUL TERMINATION, BACK PAY, FUTURE WAGE LOSS, OVERTIME PAY, EMPLOYEE BENEFITS, INJURY SUBJECT TO RELIEF UNDER THE WORKERS' COMPENSATION ACT OR WOULD BE SUBJECT TO RELIEF UNDER ANY POLICY FOR WORKERS COMPENSATION INSURANCE, AND ANY OTHER CLAIM, WHETHER IN TORT, CONTRACT OR OTHERWISE.

IN ITS SOLE DISCRETION, CITY SHALL HAVE THE RIGHT TO APPROVE OR SELECT DEFENSE COUNSEL TO BE RETAINED BY CONTRACTOR IN FULFILLING ITS OBLIGATION HEREUNDER TO DEFEND AND INDEMNIFY CITY, UNLESS SUCH RIGHT IS EXPRESSLY WAIVED BY CITY IN WRITING. CITY RESERVES THE RIGHT TO PROVIDE A PORTION OR ALL OF ITS OWN DEFENSE; HOWEVER, CITY IS UNDER NO OBLIGATION

TO DO SO. ANY SUCH ACTION BY CITY IS NOT TO BE CONSTRUED AS A WAIVER OF CONTRACTOR'S OBLIGATION TO DEFEND CITY OR AS A WAIVER OF CONTRACTOR'S OBLIGATION TO INDEMNIFY CITY PURSUANT TO THIS AGREEMENT. CONTRACTOR SHALL RETAIN CITY-APPROVED DEFENSE COUNSEL WITHIN SEVEN (7) BUSINESS DAYS OF CITY'S WRITTEN NOTICE THAT CITY IS INVOKING ITS RIGHT TO DEFENSE OR INDEMNIFICATION UNDER THIS AGREEMENT. IF CONTRACTOR FAILS TO RETAIN COUNSEL WITHIN SUCH TIME PERIOD, CITY SHALL HAVE THE RIGHT TO RETAIN DEFENSE COUNSEL ON ITS OWN BEHALF, AND CONTRACTOR SHALL BE LIABLE FOR ALL COSTS INCURRED BY CITY.

THE RIGHTS AND OBLIGATIONS CREATED BY THIS SECTION SHALL SURVIVE TERMINATION OF THIS AGREEMENT.

Article 10. LIABILITY

To the fullest extent permitted by law, CONTRACTOR shall be fully and solely responsible and liable for its own acts and omissions, including those of its officers, agents, representatives, employees, subcontractors, licensees, invitees and all other parties performing services for or on behalf of CONTRACTOR under this Agreement, and for any and all damage to CONTRACTOR's equipment and other property. CITY assumes no such responsibility or liability. CITY shall have no such responsibility or liability to either CONTRACTOR or its officers, agents, representatives, employees, subcontractors, licensees, invitees or other persons.

Article 11. TERMINATION

CITY is entitled to terminate this Agreement at any time for any reason or for no reason by giving CONTRACTOR at least thirty (30) days' prior written notice of the termination date.

CITY is entitled to terminate this Agreement immediately on breach of any term or provision of the Contract Documents by CONTRACTOR. If at any time during the term of this Agreement, CONTRACTOR shall fail to commence the work in accordance with the provisions of the Contract Documents or fail to diligently perform the work in an efficient, timely and careful manner and in strict accordance with the provisions of the Contract Documents, then CITY shall have the right to terminate this Agreement. Any such act by CITY shall not be deemed a waiver of any other right or remedy of CITY.

The rights and remedies provided by this Agreement are cumulative, and the use of any one right or remedy by either party shall not preclude or waive its rights to use any or all other remedies. These rights and remedies are given in addition to any other rights the parties may have by law, statute, ordinance, or otherwise.

Article 12. MISCELLANEOUS

12.1 Terms used in the Agreement will have the meanings indicated in the Special Conditions.

12.2 No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically, but without limitation, monies that may become due and monies that are due, may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

- 12.3 CONTRACTOR acknowledges and agrees that the existence of a prohibited interest during the term of this Agreement will render this Agreement voidable. CONTRACTOR further acknowledges and agrees that it also is aware of, and will abide by, the vendor disclosure requirements set forth in Chapter 176 of the Texas Local Government Code, as amended.
- 12.4 Each party represents and warrants to the other that it has the full power and authority to enter into and fulfill the obligations of this Agreement. The respective signatories to this Agreement, by affixing their signatures hereto, warrant and represent that they have the authority to bind their respective parties as duly authorized representatives thereof.
- 12.5 The parties acknowledge and agree that, in executing and performing this Agreement, CITY has not waived, nor shall be deemed to have waived, any defense or immunity, including governmental, sovereign and official immunity, that would otherwise be available to it against claims arising in the exercise of governmental powers and functions. By entering into this Agreement, the parties do not create any obligations, express or implied, other than those set forth herein.
- 12.6 In the event that a term, condition or provision of this Agreement is determined to be invalid, illegal, void, unenforceable or unlawful by a court of competent jurisdiction, then that term, condition or provision shall be deleted and the remainder of the Agreement shall remain in full force and effect as if such invalid, illegal, void, unenforceable or unlawful provision had never been included in this Agreement.
- 12.7 If either party files any action or brings any proceeding against the other arising from this Agreement, then as between CITY and CONTRACTOR, the prevailing party shall be entitled to recover as an element of its costs of suit, and not as damages, reasonable and necessary attorneys' fees and litigation expenses both at trial and on appeal, subject to the limitations set forth in TEX. LOC. GOV'T CODE § 271.153, as it exists or may be amended, if applicable.
- 12.8 The laws of the State of Texas shall govern the interpretation, validity, performance and enforcement of this Agreement, without regard to conflict of law principles. This Agreement is performable in Grayson County, Texas, and the exclusive venue for any action arising out of this Agreement shall be a court of appropriate jurisdiction in Grayson County, Texas.
- 12.9 Waiver by either party of any breach of this Agreement, or the failure of either party to enforce any of the provisions of this Agreement, at any time, shall not in any way affect, limit, or waive such party's right thereafter to enforce and compel strict compliance.
- 12.10 CONTRACTOR covenants and agrees that CONTRACTOR is an independent contractor and not an officer, agent, servant or employee of CITY; that CONTRACTOR shall have exclusive control of and exclusive right to control the details of the work performed hereunder and all persons performing the same; that the doctrine of respondent superior shall not apply as between CITY and CONTRACTOR, its officers, agents, employees, contractors, subcontractors and consultants; and that nothing herein shall be construed as creating a partnership or joint enterprise between CITY and CONTRACTOR.
- 12.11 This Agreement shall be deemed drafted equally by all parties hereto. The language of all parts of this Agreement shall be construed as a whole according to its fair meaning, and any presumption or principle that the language herein is to be construed against any party shall not apply. Headings in

this Agreement are for the convenience of the parties and are not intended to be used in construing this document.

- 12.12 This Agreement may be executed in a number of identical counterparts, each of which shall be deemed an original for all purposes. An electronic mail and/or facsimile signature will also be deemed to constitute an original if properly executed and delivered to the other party.
- 12.13 CITY and CONTRACTOR each binds itself, its partners, successors, assign, and legal representatives to the other party hereto, its partners, successors, assign and legal representatives in respect of all covenants, agreements and obligations contained in the Contract Documents.

Article 13. **OTHER PROVISIONS**

None.

IN WITNESS WHEREOF, CITY and CONTRACTOR have signed this Agreement in multiple copies. One counterpart each has been delivered to CITY, CONTRACTOR and ENGINEER. All portions of the Contract Documents have been signed or identified by CITY and CONTRACTOR or by ENGINEER on their behalf. The date this Agreement is signed by the last party to sign it (as indicated by the date associated with that party's signature below) will be deemed the effective date of this Agreement (the "Effective Date").

CITY: CITY OF SHERMAN, TEXAS

CONTRACTOR: WEISINGER INCORPORATED

By: _____

By: _____

Date: _____

Date: _____

(Corporate Seal)

Attest: _____

Attest: _____

Address for giving notices:

Address for giving notices:



2024 Council Calendar

January						
Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

February						
Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	8	8	9	10
12	13	13	14	15	16	17
18	19	20	22	22	23	24
25	26	27	28	29		

March						
Su	Mo	Tu	We	Th	Fr	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

April						
Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

May						
Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

June						
Su	Mo	Tu	We	Th	Fr	Sa
						1
2	3	6	7	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

July						
Su	Mo	Tu	We	Th	Fr	Sa
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14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

August						
Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

September						
Su	Mo	Tu	We	Th	Fr	Sa
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15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

October						
Su	Mo	Tu	We	Th	Fr	Sa
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6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

November						
Su	Mo	Tu	We	Th	Fr	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

December						
Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

	Holiday
	Holiday for Firefighters/Police Only
	City Council Regular Meeting
	Special Called Meeting
	Budget Workshop
	Cancelled City Council Meeting

CALLED MEETINGS	
4/19/2024	Budget Planning Meeting
5/23/2024	CIP Work Session
6/20/2024	Budget Workshop Day 1
6/21/2024	Budget Workshop Day 2