



City of Sachse Engineering Department Plan Review Checklist

Updated: May 26, 2021

Project/Subdivision Name: _____

Project Contact Information

Name: _____ Company: _____

Phone: _____ Email: _____

Engineer of Record Information

Name: _____ Company: _____

Phone: _____ Email: _____

Instructions: Complete the following checklist and include with your submittal to the Engineering Department

Submittal Requirements

1. Submit 1 full size (22x34) of engineering plans to the Engineering Department for the first submittal at 3815-B Sachse Road, Sachse, TX 75048. All subsequent submittal can be done using PDF files.
2. Include the Tree Management Plan, Landscape Plan and Irrigation Plan in each plan set
3. Include payment for the Engineering Review Fee (\$300.00), and the completed checklist

A. Platting & Zoning

1. Do not include a copy of the Final Plat in the submittal, unless it was previously approved and filed.
2. Has a Preliminary Plat been submitted for this project? _____
 - a. If so, was it approved by City Council? _____
3. Include a copy of the approved Preliminary Plat (if completed) in the plan submittal.
4. Do the proposed easements correspond with the approved Preliminary Plat? _____
 - a. If not, please explain: _____

5. Is the project within the limits of an approved Planned Development or SUP? _____
 - a. If so, provide the PD/SUP information on the cover page of the plan set.
 - b. Are the minimum design and construction standards of the PD/SUP met? _____
 - i. Review the PD/SUP documents to confirm compliance with all requirements.

B. Plans - General	Yes	No	N/A
1. Title Block			
a. Project name and location provided	_____	_____	_____
b. Title agrees with the Preliminary Plat	_____	_____	_____
c. Sheets are numbered	_____	_____	_____
d. Name and address of the Engineer provided	_____	_____	_____
e. Engineer seal and signature provided	_____	_____	_____
f. Engineer Firm Registration Number provided	_____	_____	_____
2. Location Map provided	_____	_____	_____
3. North Arrow shown correctly on each sheet	_____	_____	_____
4. Scale shown correctly on each sheet	_____	_____	_____
5. Elevation benchmark information provided & tied to City Monuments	_____	_____	_____
6. Street names are shown and correct (existing & proposed)	_____	_____	_____
7. Street right-of-ways are labeled and shown (existing & proposed)	_____	_____	_____
8. Adjacent subdivision names and/or property owners shown	_____	_____	_____
9. Name, size, and location of all existing easements are shown with recording information			
a. Utility easements	_____	_____	_____
b. Drainage easements	_____	_____	_____
c. Franchise utility easements	_____	_____	_____
d. Mutual access easements	_____	_____	_____
10. Name, size, and location of all proposed easements are shown			
a. Utility easements	_____	_____	_____
b. Drainage easements	_____	_____	_____
c. Franchise utility easements	_____	_____	_____
d. Mutual access easements	_____	_____	_____
11. Existing & proposed building setback lines and lot lines are shown	_____	_____	_____
12. Name, size, and location of existing fire lanes are shown	_____	_____	_____
13. Name, size, and location of proposed fire lanes are shown	_____	_____	_____
14. Size, location, and material of existing public water mains and fire hydrants are shown	_____	_____	_____
15. Size, location, and material of existing public sewer mains and manholes are shown	_____	_____	_____
16. Location and material type of existing public and private pavement is shown (streets, driveways, sidewalks, parking)	_____	_____	_____

C. Paving

C1. Streets

1. General

- a. A transportation impact analysis been completed for the project
- b. Proposed left turn and deceleration lanes are shown in accordance with the TIA, transitions are sized per the design speed, and the lanes contain the proper storage length
- c. Public right-of-way has been dedicated and dimensioned per the project zoning, City Ordinances, and City of Sachse Thoroughfare Plan

Yes No N/A

- d. Sight distance easements are shown at intersections

- e. All proposed streets, driveways, and sidewalks are properly dimensioned

- f. Proposed sidewalks are shown to be:

- i. 4' wide (residential)

- ii. 5' wide (non-residential)

- iii. 6' wide (along back of curb)

- g. Sidewalk cross-slope and longitudinal slope in accordance with ADA and TDLR requirements

- h. Barrier free ramps are shown at all intersections

2. Typical Section

- a. Centerline dimensioned to property lines and curbs
- b. Pavement slope/crown specified
- c. Paving thickness and strength labeled, meets/exceeds City standard
- d. Paving reinforcement labeled, meets/exceeds City standard
- e. Subgrade and lime shown, meets/exceeds City standard
- f. Additional cross-sections provided for all transitions

3. Horizontal Alignment

- a. The minimum centerline street radius matches the design speed of the street
- b. Street intersection spacing is equal to or greater than 150 feet

	Yes	No	N/A
4. Vertical Alignment			
a. Proposed pavement matches existing pavement elevation at tie-in locations	_____	_____	_____
b. Spot elevations are provided at transitions and tie-in locations	_____	_____	_____
c. Minimum slope equal to or greater than 0.75%	_____	_____	_____
d. Crest vertical curves are provided where vertical grade difference exceeds 2%	_____	_____	_____
e. Vertical curves meet minimum sight distance requirements for design speed	_____	_____	_____
f. Sag vertical curves are provided where vertical grade difference exceeds 2%	_____	_____	_____
5. Traffic Control – Construction			
a. Traffic Control Plan provided	_____	_____	_____
b. Lane closures shown with appropriate signage per MUTCD	_____	_____	_____
c. Detour routes provided, if necessary	_____	_____	_____
d. Detour route clear and well-marked	_____	_____	_____
6. Traffic Control – Signage & Striping			
a. Striping and traffic buttons shown per MUTCD standards	_____	_____	_____
b. Street signage is shown per MUTCD standards	_____	_____	_____
7. Street Drainage			
a. Drainage patterns clearly shown	_____	_____	_____
b. Inlets are located at sag vertical curves and where appropriate to capture runoff	_____	_____	_____
c. Inlets are labeled with size, Q ₁₀₀ , and paving station	_____	_____	_____
d. Parkway grades consistent with typical section	_____	_____	_____
8. Franchise Utilities			
a. Have franchise utilities been contacted and notified?	_____	_____	_____
b. Existing gas/electric/cable/fiber lines are shown on plan	_____	_____	_____
9. Lighting			
a. Existing street lights are shown on the plan	_____	_____	_____
b. Proposed street lights are shown on the plan	_____	_____	_____
c. Maximum street light spacing is equal to or less than 500 feet	_____	_____	_____
d. Street lights are provided in areas of potential vehicular/pedestrian conflict, including all street intersections	_____	_____	_____

	Yes	No	N/A
C2. Site Paving			
1. Has a geotechnical report been provided?	_____	_____	_____
2. Minimum paving sections (unless geotechnical report states otherwise)			
a. Driveways – minimum 6", 3500 PSI, #4 @ 18"	_____	_____	_____
b. Fire lane– minimum 7", 3500 PSI, #4 @ 18"	_____	_____	_____
c. Dumpster Areas– minimum 7", 3500 PSI, #3 @ 18"	_____	_____	_____
d. Drive Aisles– minimum 6", 3500 PSI, #3 @ 18"	_____	_____	_____
e. Parking Areas– minimum 5", 3500 PSI, #3 @ 18"	_____	_____	_____
f. Sidewalks - minimum 4", 3000 PSI, #3 @ 24"	_____	_____	_____
3. Paving Details			
a. Concrete paving section detail has been provided	_____	_____	_____
b. Paving connection detail has been provided	_____	_____	_____
c. Construction and expansion joint details have been provided	_____	_____	_____
d. Driveway details meet City of Sachse standards	_____	_____	_____
4. All connections to existing pavement match the existing pavement elevation	_____	_____	_____
5. All connections to existing pavement are shown to have proper doweling at the connection	_____	_____	_____
6. Driveway slopes are less than a 10% grade	_____	_____	_____
7. Fire lane is shown to provide access to all points of the building (consult with Fire Marshall for requirements)	_____	_____	_____
8. Fire lane cross slope is equal to or less than 5%	_____	_____	_____
9. Accessible route from the building to the public right-of-way has been provided and meets ADA and TDLR requirements	_____	_____	_____
10. Paving Plan shows proposed striping for parking, accessible routes, and fire lane	_____	_____	_____
11. Accessible Parking spaces are provided in number and layout to meet ADA and TDLR requirements	_____	_____	_____
12. Retaining walls & screening walls			
a. No retaining walls or screening walls are placed within the public right-of-way	_____	_____	_____
b. All retaining walls greater than or equal to 4-feet in height are shown to be within a wall maintenance easement	_____	_____	_____
c. All screening walls are shown to be within a wall maintenance easement	_____	_____	_____
d. All retaining walls greater than or equal to 4-feet in height have been designed by a structural engineer	_____	_____	_____
e. Screening wall design and layout meets zoning requirements	_____	_____	_____
f. Construction details for screening walls and retaining walls have been provided	_____	_____	_____

	Yes	No	N/A
D. Grading and Drainage			
1. Drainage Area Map			
a. Existing and proposed drainage divides are shown	_____	_____	_____
b. Direction of proposed runoff is shown using flow arrows	_____	_____	_____
c. Time of concentration, rainfall intensity, and runoff coefficients meet City of Sachse standards	_____	_____	_____
d. Runoff computations are provided for each drainage area	_____	_____	_____
e. Offsite drainage is shown per available record drawings and/or available topographic data	_____	_____	_____
2. Grading Plan			
a. Existing and proposed elevations are shown with elevation contours based upon City of Sachse benchmarks	_____	_____	_____
b. Spot elevations are provided in key locations, including but not limited to building corners, inlet locations, and curb/gutter	_____	_____	_____
c. All existing & proposed building finished floor elevations are shown	_____	_____	_____
d. No proposed grades exceed a slope of 4:1, unless special design to prevent erosion and slope failure is provided	_____	_____	_____
3. On-site drainage			
a. All existing and proposed drainage easements are shown	_____	_____	_____
b. Pipe size, material, flow line, slope, $Q_{capacity}$, Q_{100} , and station information shown for each pipe	_____	_____	_____
c. Inlet locations, sizes, and Q_{100} shown for each inlet	_____	_____	_____
d. Erosion protection is provided at the outfall of all drainage structures	_____	_____	_____
e. The site grading and storm drainage is designed to accept offsite runoff, if applicable	_____	_____	_____
4. Drainage in the public right-of-way			
a. Storm pipe is Class III RCP or better, with a minimum diameter of 18"	_____	_____	_____
b. Profile provided for all storm improvements in the public right-of-way	_____	_____	_____
c. Existing and proposed hydraulic data is provided for each section of pipe in the system	_____	_____	_____
d. All existing and proposed storm laterals are shown with station and flow line information	_____	_____	_____
5. Storm water detention			
a. Plan shows the location and layout of detention system	_____	_____	_____
b. Detention provided for the 100-yr storm, discharge limited to pre-development conditions	_____	_____	_____
c. Computations provided for peak discharge, 100-yr water surface, detention volume required/proposed, and sizing of outfall structure	_____	_____	_____

E. Water & Sanitary Sewer

1. Public Water System

- a. Are the proposed water improvements consistent with the City of Sachse 10-yr CIP?
- b. All existing and proposed water easements are shown in the plans
- c. All public water mains on private property are in a dedicated easement
- d. The minimum water main size is 8"
- e. A profile is provided for all water mains 12" and larger
- f. Valves are shown in proper locations to allow proper isolation of the system
- g. Air release valves and blowoff valves are shown at peaks and valleys in the system
- h. Fire hydrants are provided in accordance with City of Sachse requirements for fire protection (consult with Fire Marshall for requirements)
- i. Dead end mains are less than 150-feet, unless with written approval of the City Engineer

Yes	No	N/A
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

2. Private Water System

- a. Water service meets City of Sachse plumbing code requirements
- b. Water service is sized appropriately for the facility
- c. Water meters are placed in a location free of obstructions
- d. Water meters are sized appropriately for the facility

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

3. Public Sewer System

- a. Are the proposed sanitary sewer improvements consistent with the City of Sachse 10-yr CIP?
- b. All existing and proposed sanitary sewer easements are shown in the plans
- c. All public sanitary sewer mains on private property are in a dedicated easement
- d. The minimum sanitary sewer main size is 8"
- e. A profile is provided for all public sanitary sewer mains
- f. Pipe slope meets TCEQ requirements
- g. Manhole size and pipe material meet current City of Sachse standards for the depth of the main

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

4. Private Sewer System

- a. Sewer laterals meet City of Sachse plumbing code requirements
- b. Sewer lateral sized appropriately for the facility
- c. Sewer cleanouts in unpaved areas have concrete pad

_____	_____	_____
_____	_____	_____
_____	_____	_____

	Yes	No	N/A
F. Stormwater Pollution Prevention Plan			
1. Erosion Control			
a. Is the disturbed area greater than 5 acres?	_____	_____	_____
b. A completed SWPPP with NOI shall be submitted to the City of Sachse prior to construction taking place	_____	_____	_____
c. Silt fence or similar product shown to be placed along the perimeter on all downhill sides of the disturbed area	_____	_____	_____
d. Inlet protection is shown on all existing and proposed inlets	_____	_____	_____
e. Rock check dams and other devices shown in existing and proposed drainage channels	_____	_____	_____
f. Sedimentation basin plan and details provided (if applicable)	_____	_____	_____
G. Watercourses			
2. Floodplain			
a. Is any portion of the property shown to be in the 100-yr floodplain in the latest FEMA FIRM for Dallas/Collin County?	_____	_____	_____
b. The limits of the floodplain are clearly delineated on the plans, with flood zone designations and base flood elevations shown	_____	_____	_____
c. Is there any proposed construction within or immediately adjacent to the floodplain?	_____	_____	_____
d. Has a hydraulic/hydrologic study of the watercourse been prepared? (if yes, please provide)	_____	_____	_____
e. A CLOMR/LOMR process may be required for construction within the floodplain (contact City Engineer)	_____	_____	_____
f. All proposed buildings have a minimum finished floor elevation of 2 feet above the adjacent base flood elevation as shown in the FEMA FIRM	_____	_____	_____
2. Wetlands			
a. Has any portion of the property been identified as a wetlands area by the Army Corps of Engineers, or other agency?	_____	_____	_____
3. Water of the US			
a. Has any watercourse on the property been identified as a jurisdictional waters of the US by the Army Corps of Engineers, or another agency?	_____	_____	_____