



City of Sachse Engineering Department Plan Review Checklist

Updated: April, 2015

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 3 full size (24x36 or 22x34) and 2 half size (11x17 or 12x18) sets of engineering plans to the Engineering Department at 3815-B Sachse Road, Sachse, TX 75048
 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

	Yes	No	N/A
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	_____	_____	_____
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

	Yes	No	N/A
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	_____	_____	_____
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	_____	_____	_____

F. Stormwater Pollution Prevention Plan**Yes No N/A**

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 other agency? | _____ | _____ | _____ |
|--|-------|-------|-------|