

**Engineering Site Plan Checklist**

- All sheets shall be formatted as follows and include the information below unless otherwise specified:
  - North arrow
  - Scale - Maximum scale of one inch equals 20 feet (1"=20') for lots up to three (3) acres and one inch equals 40 feet (1"=40') for lots over three (3) acres
  - Be on a sheet size that is 22 inches by 34 inches
  - Location map in top right corner or top left corner, one inch equals 1,000 feet (1" = 1,000') (Must use city base map).
  - The date the original plans were submitted and dates of revisions for resubmittals.
  - A title block located at top center of the cover sheet and the bottom right-hand side of subsequent pages to include project's name, addition's name, lot, block and phase designations, total acreage, zoning classification and address if available. Based on the following template:

<p><b>ENGINEERING SITE PLAN FOR</b>  <b>NAME OF THE PROJECT</b>  <b>NAME OF THE ADDITION</b>  <b>LOT(S) &amp; BLOCK(S) &amp; PHASE(S)</b>  <b>TOTAL ACERAGE</b>  <b>ZONING</b></p>
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- Information shall be consistent and accurate on all pages of the engineering site plan
- Cover sheet which shall include:
  - Approval signature blocks, provided below;

<b>Approved for Construction</b>		
<b>CITY DEPARTMENT</b>	<b>DATE</b>	<b>SIGNATURE</b>
Planning and Zoning		
Engineering		
Building Inspection		
Fire Prevention		
Public Services		
ADA		
Parks		

<b>Approved for Construction</b>			
<b>UTILITY</b>	<b>COMPANY</b>	<b>DATE</b>	<b>SIGNATURE</b>
Electric			
Gas (if applicable)			
Telecommunications			
Cable			
Solid Waste			

- Name, address and phone number of contact person of developer, owner, builder, engineer or surveyor

- All previously approved or new requests for variances, administrative modifications and alternative standards.
- The site plan sheets shall include the following. This information may be shown on several sheets to promote legibility and clarity of plans:
  - A summary table for building square footage by proposed use with total number of parking spaces required for each, building height, impervious area in square feet and R.O.W. square footage or acreage (if applicable).
  - Distances and bearings of the lot including total land area, subdivision lot, and block designation and phase lines. The entire platted lot shall be shown on the engineering site plan.
  - Iron rods set or found.
  - Contours with intervals of two (2) feet or less, referred to sea level datum, including city benchmark.
  - Building setback lines including required setback from all water, sanitary sewer and drainage easements.
  - Zoning of subject lot and adjoining property.
  - Easements or encumbrances which impact development of the lot.
  - Control of access lines, corner clips and clear vision areas.
  - Traffic control signals, devices, and striping and traffic control plan in conformance with the latest edition of the Texas Manual on Uniform Traffic Control Devices.
  - Median openings, traffic islands, turning lanes, and acceleration and deceleration lanes.
  - Public streets, alleys, and easements adjacent to the site showing right-of-way and limits of paving.
  - The dimensions, locations, and design of the proposed driveway(s), existing driveway(s) and associated deceleration lanes, if any;
  - All existing or proposed driveways, gutters, storm sewers, manholes, fire hydrants, utility poles, service fixtures, trees and other features which may affect proposed driveway, turn lane or median opening location and operation;
  - Any existing driveways or curb cuts located on adjacent lots or lots across the street.
  - All of the geometric design features of the roadway, including medians, the number and width of travel lanes, the presence or absence of a shoulder or on-street parking;
  - Driveways, sidewalks, water and sanitary sewer services, grading, drainage and other Site Improvements.
  - Parking layout, including maneuvering, loading and unloading service areas and required truck berths
  - Screening, including height and type of construction.
  - Landscaping and open space with dimensions and total square footage.
  - Construction details for all site improvements, as applicable.
  - Fire protection including fire hydrants, fire lanes, fire lines and related fire protection devices.
  - Location and screening of all outdoor receptacles.
  - Other utilities.
  - Finished floor elevation.
  - Requested administrative modifications and alternative standards.

- Note stating required exterior finish, if applicable.
- Location of all proposed free-standing signage
- Location of all free standing light fixtures.
- Construction plans, as outlined in Section 4.B., for any site improvements
- Traffic Impact Analysis. Assumptions and parameters for the Traffic Impact Analysis shall be approved by the City Engineer prior to completing the analysis. May be on 8.5" by 11" paper with no location map, scale or north arrow.
- Landscape Plan, prepared by a landscape architect registered in the State of Texas which shall include and be presented as follows:
  - Landscape requirement table listing each applicable landscaping requirement and the landscaping provided to meet that requirement; landscape strip, tree in strip, parking lot landscape area, tree in parking lot, mitigation requirement (if any). A sample table is provided below.

Landscape Requirement Table			
Code Standard	Formula	Required	Provided
Landscaping along Street A (300 LF)		30 wide buffer	30 wide buffer
	1 shade tree per 30 LF	10 Trees	11 Tree
	1 Ornamental Tree per 30 LF	10 Trees	11 Trees
	Max 50% turf area	Max 4,500 SF Turf	4,400 SF Turf and 4,600 Shrubs and Groundcover
Parking Lot Landscaping (28,000 SF Parking Lot with 100 spaces)	8% landscaped	Min 2,240 SF Landscaped	3,000 SF Landscaped
	1 Shade tree per 15 spaces	7 Canopy Trees	8 Canopy Trees
Mitigation	See Tree Mitigation Plan	123"	123" planted for street landscaping and parking lot landscaping

- Landscape materials table listing the common name, scientific name, quantity, size, and any symbol or abbreviation used on the plan for each plant species used.

Symbol or Abbreviation	Common Name	Scientific Name	Quantity	Size
LO	Live Oak	<i>Quercus virginiana</i>	7	3"
DE	Cedar Elm	<i>Ulmus crassifolia</i>	6	3"
BC	Bald Cypress	<i>Taxodium distichum</i>	6	3"
Ag	Agarita	<i>Berberis trifoliolata</i>	24	5 gallons

- All easements and utility lines, overhead and underground

- All pavement area measure in square feet, building areas measured in square feet, and detention/retention areas
- All landscaped areas including landscape strips, buffers, parking lot islands, and any other plantings etc.
- Show location of all proposed plant materials, with species clearly labeled, consistent with landscape materials table.
- Label any trees planted for mitigation purposes with an "M".
- Name address and phone number for developer and landscape architect/designer
- Site boundary
- Landscape must be consistent with all other sheets submitted as part of the Engineering Site Plan.
- Landscape notes, including a note on automatic irrigation to be provided and planting details.
- Tree survey and tree preservation plan, where required by and in compliance with Article VIII, Chapter 4.
  - Location of all protected trees
  - All pavement, building footprints, easements and existing and proposed grade.
  - A summary of the total inches removed requiring mitigation and how that mitigation will be provided,
  - Table containing list of all protected trees, with information on species, Diameter at Breast Height size, whether preserved or removed, whether exempt or mitigation required and, if mitigation is required, the amount of inches or fee for that mitigation. A sample is below:

Tree Survey, Preservation and Mitigation						
Tree ID	Species	Size (DBH)	Protected	Preserved	Mitigation Credit	Mitigation Required
001	Post Oak	10"	YES	YES	20"	-
002	Cedar Elm	12"	YES	NO	-	12"
003	Callary Pear	20"	NO (species)	NO	-	-
004	Black Jack Oak	4"	NO (size)	YES	4"	-
005	Live Oak	16"	NO (existing ROW)	NO	-	-
006	American Elm	22"	YES	NO	-	22"
007	Hackberry	9"	YES	NO	-	9"
008	Maple	9"	YES	YES	9"	-
Total					33"	43"
Mitigation Plan Summary: 10" mitigation required; 6" to be provided through landscape plantings (see landscape plans) and 4" to be provided through fee payment of \$600.00						

- Conceptual façade plans showing each building elevation with building materials labeled, windows, doors, heights and including a material percentage table. Building elevations shall be labeled by the cardinal direction they face and reference the street they face, in any.
- Turning templates to ensure fire access. Details on requirements for turn templates shall be kept on file by the Fire Marshal.
- Tax certificates showing no taxes due. These do not need to be formatted.
- Photometric Plans with information as required in Article VIII, Chapter 11 Section 7

- Other approvals as required by this UDC.
- Complete construction plans for public improvements, if any, are required. Construction plans shall contain engineering data for the construction of all public improvements (streets, water, sanitary sewer, storm sewer, grading, filling, erosion control and paving) and be presented and contain information as follows:
  - Plans and profiles shall be drawn on sheets measuring 22" × 34" overall dimensions.
  - Maximum scale for all construction plans shall be 1" = 40' horizontal and 1" = 5' vertical. (e.g. 1" = 50' horizontal and 6' vertical are not acceptable) Construction plans for street reconstruction shall be drawn to a 1" = 20' scale.
  - North point arrow oriented to top or right of the sheet.
  - Date: (Dates of revisions to be added with each modified set of plans).
  - Benchmark description to sea level datum (to be obtained from City Engineer's office). In the event a benchmark is not available near the project site, a temporary benchmark shall be established based on the City's benchmark.
  - Cross-sections of proposed streets and alleys drawn to a maximum scale of 1" = 10' horizontal and 1" = 2' vertical and drawn from beyond right-of-way to beyond right-of-way.
  - Proposed street and alley pavement sections shall include thickness of pavement, base course, subgrade, pavement cross-slope, parkway cross-slope, location and width of sidewalks, typical location of underground utilities.
  - Plan and profile of each street and alley with top of curb grades for streets and center lines for alleys. The plan view shall show all existing features and the profile view shall include the existing ground. The profile gradelines and cross-sections of intersecting streets should be adjusted to provide a smooth junction and proper drainage.
  - A drainage area map to a maximum scale 1" = 200', (1" = 1000' if the area is over 500 acres) of all areas contributing storm water runoff or drainage within and surrounding the proposed subdivision. The drainage area map shall include size of areas, storm frequency, duration data, amounts of runoff, points of concentration and any additional data determined to be necessary by the City Engineer for the proper design of drainage facilities.
  - A plan and profile of proposed storm sewer showing hydraulic gradient and hydraulic data, pipe grades and sizes, manholes, inlets, pipe connections, culverts, outfall structures, bridges, ditches.
  - A plan and profile of the proposed water distribution system showing pipe sizes, location of valves, fire hydrants, fittings and other appurtenances, including installation and backfill details.
  - A plan and profile of the proposed sanitary sewer system with pipe grades and sizes, manholes, cleanouts and other appurtenances, including installation and backfill details.
  - All utility profiles shall include the elevation of other utility crossings.
  - Each plan and profile sheet shall be signed and sealed by a state-licensed professional civil engineer.
  - Trench safety plan, prepared by a state-licensed professional engineer, and soil analysis when required by state or federal law.
  - The city reserves the right to require corrections to the submitted construction plans based on actual field conditions which are found to be contrary to the information shown on the plans.

- The engineer certifying the construction plans is responsible for the accuracy and completeness of plans submitted for review and construction.
- Grading plans which show contour intervals of two (2) feet or less, finished contours and/or grades.
- Finished floor elevation, proposed grading and drainage for all lots designated for single-family uses. The builder is responsible for furnishing a certification of the foundation elevation and building setbacks prior to construction of a foundation.
- Tree survey and tree preservation plan, where required by and in compliance with Article VIII, Chapter 4, Section 7, and a tree mitigation plan, where required by and in compliance with Article VIII, Chapter 4, Section 8.
- Erosion control plans for both during and after construction.
- A traffic control plan shall be submitted for all proposed construction within a right-of-way. The traffic control plan shall incorporate all applicable TxDOT traffic control plan sheets.
- A street lighting plan in accordance with this UDC. The city will coordinate the installation of the street lighting system with the utility company.
- The External agency permit submittals. Submittals for floodplain development to F.E.M.A., and the U.S. Corps of Engineers (C.D.C. applications), can be processed concurrently with City staff approval. Submittals for TXDOT permits will be processed through City initiation (per TXDOT policy) only upon completion of City staff review. Permits are granted only to the City by TXDOT and not to private developers.
- The contractor shall establish erosion control devices in accordance with the current Texas Pollution Discharge Elimination System (TPDES) requirements.
- All previously approved or new requests for variances, administrative modifications standards.