

INTRODUCTION

This document has been prepared and compiled by the Engineering Staff of the Public Works Department. This document is to assist developers in understanding the current procedures for the Engineering Department review and approval process of developments within the City.

The review process for a site plan submitted will require one approval.

The subdivision review process will require either two or three approvals. These include CONCEPTUAL approval, PRELIMINARY approval, and FINAL approval.

The review process for all development in areas designated as “sensitive lands,” in the zoning ordinance and all Planned Residential Unit Developments (PRUDs) will require all three approvals listed above.

In addition to the required reviews and approvals, a specific development request may also include Annexation and/or rezone.

This document includes a CHECKLIST to guide the developer through the review and approval process and the DESIGN STANDARDS required for each phase of the submittal process.

The items contained in the document have been prepared as a supplement to the adopted subdivision ordinances and standards, and are provided as an aid to the Developer. Through the use of this document, the Developer will be able to more closely comply with adopted standards.

This document does not, nor is it intended to, fully represent the current adopted subdivision ordinance, construction standards, master plans, or other City requirements. The Developer shall be responsible to comply with all aspects of the adopted ordinances of the City.

Conceptual Approval Checklist

(Required for development in sensitive lands and for all PRUD'S)

- One (1) set submitted for the Engineering Department.
- Site plan has legal description for the boundary.
- Site plan shows the lot configuration.
- Area of each lot is indicated.
- Contour lines (proposed and existing) are shown, with contour intervals clearly identified.
- Lot slope and buildable area shown.
- Street configurations with centerline slopes shown.
- Typical street cross-section is shown.
- Locations of all cuts/fills in excess of 6 feet are shown.
- Locations of existing utilities are shown.
- Proposed storm drainage system shown.
- Proposed culinary water system shown.
- Proposed secondary water system shown (if available).
- Proposed sanitary sewer system shown.
- Proposed land drain system shown.
- Boundary and elevation of the FEMA flood 100-year plain area, if applicable.
- Submittal of a geotechnical report if within sensitive lands.

Preliminary Approval Checklist

- One (1) set submitted for the Engineering Department.
- Preliminary dedication plat with legal description, lot configuration, and area of each lot is indicated.
- Contour lines (existing and proposed) are shown.
- Slope of each lot and buildable area shown.
- Street configurations with slopes shown.
- Street cross-section is shown with sidewalk, park strip and curb & gutter.
- The placement of intersections does not exceed the maximum block length allowed for the zone; are at right angles; are aligned with adjacent intersections as allowed by the City standards.
- The length of cul-de-sacs does not exceed 500 feet.
- Radius of all horizontal curves shall be identified.
- Locations of all cuts/fills in excess of 3 feet shown.
- Locations of existing utilities (water, sewer, storm drain, irrigation, streets, etc) are shown.
- Locations of existing overhead utilities are shown.
- Proposed method to control storm drainage is shown, including storm drain master plans with calculations for the pipe system and detention (if required).
- Location(s) of existing easements are shown.
- Proposed location(s) for the sanitary sewer, land drain, storm drain (including inlets), water (including valves and hydrants), irrigation, street lighting, and other public utilities shown.
- Boundaries and elevation of the 100-year flood plain as defined by FEMA map, including map and panel number.
- Written approval from adjacent property owner(s) agreeing to grant an easement for utility line extension, if the line extension crosses private property. (Subject to City approval.)
- Written approval from the State Engineer for any stream alteration.
- Written approval from Davis County Flood Control if discharging into a creek or stream.
- Written approval for offsite easements.
- Written approval from irrigation users for any change to an existing system.
- Submittal of the geotechnical report.
- A preliminary property title report is submitted.
- Submittal of a Traffic Study, if required.

Final Site Plan – Checklist

DEDICATION PLAT

- Paper copy of the final dedication plat shall be submitted for the Engineering Department.
- An electronic copy of the dedication plat in AutoCAD format shall be submitted, in order to expedite the review process.
- The boundary narrative matches the drafted description.
- The boundary matches the adjacent properties or parcels.
- The boundary is referenced from a found Davis County section corner, and uses Davis County bearings and coordinates. The basis of bearing is established using 2 found Davis County section corners.
- The boundary closes within approved limits.
- The dedication plat format conforms to Davis County Recorder standards.
- The street centerline information is complete (bearings, & distance, delta, tangent, radius, chord bearing and distance).
- The individual lots close with centerline and boundary information.
- The area of each lot is shown.
- Lot numbers are shown and conform to Phase numbering.
- The centerline monuments are shown at all intersections.
- ALL existing easements are clearly shown and identified.
- All new public utility easements (front lot, rear lot and side lot) are shown.
- North arrow and drawing scale is shown.
- The property title report is submitted with the dedication plat.

FINAL DRAWINGS

- Five sets of construction drawings submitted for the Engineering Department.
- All off-site easements, on Layton City forms, have been signed and submitted with the drawings.
- The final drawing is consistent with the approved Preliminary Site Plan.
- The cost estimate is included for the project.
- A Professional Engineer shall sign and stamp final drawings.

CULINARY WATER

- The culinary water system is of the size and type approved by the City on the preliminary drawings.
- The culinary water system has fire hydrants placed as approved on the preliminary drawings and at all dead end points.
- The culinary water system has isolation valves installed at intersections, cul-de-sacs and other locations required by the City Engineer.
- The culinary water system is installed at the appropriate location in the street, typically 4 feet north and east of centerline.
- The culinary water system is C900 DR14 for pipe sizes 3”-10” and class 51 ductile iron pipe for pipe 12” and larger.
- A note is provided indicating water service line and meter sizes.
- A note is provided indicating thrust blocking on all fittings.
- Dedication of water shares.
- A note indicating the lot numbers required to have a Fire Suppression System, with size and type.

SANITARY SEWER

- The sanitary sewer lines are shown on both the plan and profile drawings.
- The plan and profile drawing has a benchmark referenced to a physical feature AND to a found Davis County section corner.
- The sanitary sewer system is of the size and type approved by the City on the preliminary drawings, and/or as required by the City Engineer.
- The sanitary sewer system has manholes placed as approved on the preliminary drawings, at all dead end points, and as required by the City Engineer.
- The sanitary sewer system is installed at the appropriate location in the street, typically 9 feet south and west of centerline.
- The sanitary sewer system will indicate a separate lateral from the main line to 10 feet inside the property line for each building lot.

STORM DRAIN SYSTEM

- The storm drain system is of the size and type approved by the City on the preliminary drawings, or as required by the City Engineer.
- The storm drain system has clean out boxes and inlet boxes placed as approved on the preliminary drawings, at all dead end points and as required by the City Engineer.
- The storm drain lines are shown on both a plan and profile drawings.
- The plan and profile drawing has a benchmark referenced to a physical feature AND to a found Davis County section corner.
- The storm drain lines have the minimum cover as required in the specifications and the proper offset from the curb line.
- The type of box is shown for locations deeper than typical 36" to flow-line.
- The storm drain system is typically installed on the south and west sides of the streets, at the lip of curb.
- The storm drain system cannot act as a land drain system.
- Double inlet boxes are placed at all invert and isolated low street areas.
- A note shall be added indicating all inlet grates shall be bicycle safe type covers.
- Submittal of a copy of the Davis County Flood Control permit if required.

LAND DRAIN SYSTEM

- The land drain system lines are shown on both a plan and profile drawings.
- The plan and profile drawing has a benchmark referenced to a physical feature AND to a found Davis County section corner.
- The land drain line system is of the size and type approved by the City on the preliminary drawings, and/or as required by the City Engineer.
- The land drain line system has manholes placed as approved on the preliminary drawings, at all dead end points, and as required by the City Engineer.
- The land drain line system is installed at the appropriate location in the street, typically 10 feet north and east of centerline.
- The land drain line system will indicate a separate lateral from the main line to 10 feet inside the property line for each building lot.

S T R E E T D E S I G N

- The street widths conform to the cross-section widths approved in the preliminary drawings and/or as required by the City Engineer.
- The street cross-section shows the placement of sidewalk, park strip and curb & gutter as approved on the preliminary drawings or as required by the City Engineer.
- The pavement structure is a minimum 3" asphalt and 8" gravel road base or as required by the geotechnical report or City Engineer.
- The drawings of the curb & gutter show both the plan and profile design.
- The plan and profile drawing has a benchmark referenced to a physical feature AND to a found Davis County section corner.
- The centerline street design reflects the correct "K" value for vertical, or as required by the City Engineer.
- The centerline street design has the proper horizontal curve design.
- The placement of intersections conforms to the City standards.
- The top of curb (TBC) elevations are clearly shown on the plan drawing.
- The type of slope reinforcement (retaining wall, armor wall, extended slopes) shall be shown for all cut/fill areas exceeding 24 inches.
- The length of cul-de-sacs conforms to City Standards.
- The street slope does not exceed 8% or as approved by the City Engineer and the City Fire Chief.
- Lighting in the public right of way is shown on the plan view drawings.

S T O R M W A T E R P O L L U T I O N P R E V E N T I O N P L A N R E Q U I R E M E N T S

- Submit a Storm Water Pollution Prevention Plan and State of Utah Water Quality Permit.

G E O T E C H N I C A L I N F O R M A T I O N

- The requirements listed in the geotechnical report have been included in the construction drawings.

I R R I G A T I O N S Y S T E M S

- The irrigation users have submitted a written statement approving the system modification. This includes pressure systems and open-ditch flood irrigation systems.
- The flood irrigation system is located with all control structures in either the park strip area or behind the sidewalk.
- The pressure irrigation system is installed at an appropriate location in the street, typically at the lip of curb or in the 7.5 ft. parkstrip.
- The flood irrigation systems pipe through a development is located within a private irrigation easement.
- A copy of the receipt for payment for secondary water service from Davis Weber Canal Company or Kays Creek Irrigation Company must be submitted.

T E L E P H O N E & P O W E R

- The existing overhead utilities along the frontage are indicated to be buried along the frontage of the subdivision.

SUBDIVISION DEVELOPMENT CHECKLIST PUBLIC WORKS DEPARTMENT

The following is a brief outline of the submittal requirements that a developer should consider when submitting for ANNEXATION, REZONE, CONCEPTUAL APPROVAL, PRELIMINARY PLAN APPROVAL, and FINAL PLAN APPROVAL. This outline also lists the items that the Public Works Department will provide at each approval level.

I. ANNEXATION

- A. The developer will provide a location map and plat of the proposed annexation.
 - 1. The map will show the location of the parcel to be annexed, and will include the legal description of the parcel to be annexed.
 - a. The legal description for the annexation will match the adjacent annexation parcels as recorded at the Davis County Recorder's Office or on file with the City recorder. A conceptual plan of the proposed development may be required.
- B. The Public Works Department will provide a report concerning the actual annexation. The report will define the availability of water, sewer, storm drainage and street configuration for the proposed annexation area. This information will be of a general nature, and is not intended to be inclusive of all requirements for the proposed annexation area. The report will include development requirements that will be imposed as a condition of annexation.

II. REZONE

- A. The Developer will provide the site plan location map. The map will show the location of the parcel for rezone and will include the legal description for the rezone.
- B. The Public Works Department will provide a one or two sentence statement concerning the actual rezone. The Public Works department will provide a statement which defines the availability of water, sewer, storm drainage and the street configuration for the proposed rezone area. This information will be of a general nature, and is not intended to be inclusive of all requirements for the proposed rezone area.

III. CONCEPTUAL SUBDIVISION APPROVAL

- A. Conceptual approval is required for all developments in the designated "sensitive lands" area and all Planned Residential Unit Developments (PRUD's). The configuration of the lots and streets is considered.
- B. The developer will submit:
 - 1. Lot configuration
 - a. Conceptual site plan with boundary and legal description.
 - (1) The site plan shall include adjacent parcels.
 - (2) The site plan shall be scaled no smaller than 1"=60'.
 - b. Area of each lot
 - c. Contour lines, existing and proposed, with actual elevations referenced to Davis County information.
 - (1) 2-foot intervals are preferred while 5 foot or 10-foot intervals will be accepted. Additional contour information may be required.

- d. Slope and size of buildable area of all lots exceeding 25%. (Minimum building area is 30% with 5000 sq. ft., 50-foot minimum one side dimension).
- e. The site plan will show the location of any retaining structures that exceed a height of 10 feet that maybe/will be required to be constructed prior to the construction of any home.
- 2. Street configuration
 - a. Indications of street slopes over 8%
 - b. Proposed street cross section
 - c. Locations of cuts/fills exceeding 6 feet.
- 3. Location of existing and proposed improvements
 - a. Location of water, sewer, storm drainage, streets, and natural drainage path.
 - b. Locations of existing easement, i.e. Weber Basin Water, petroleum gas lines, irrigation lines, power lines, phone lines, private access easements.
- C. The Public Works Department will provide the following information:
 - 1. A written memorandum addressing the acceptability of the street configuration, the street cross-section, the slope of the lots. The Planning Department will address the lot size and their configuration.
 - 2. The memorandum will provide information concerning waterline size, possible off-site utility system improvements, sanitary sewer size and details, storm drain configuration, land drainage requirements, slope protection requirements (including easements and re-vegetation), and possibly other items specific to the development.

IV. PRELIMINARY SUBDIVISION APPROVAL

- A. The purpose of the Preliminary Subdivision Plan is to show the feasibility of the proposed development and the conformance to the adopted standards. The Staff, Planning Commission, and City Council may make alterations to the Preliminary Site Plan as necessary to make the development conform to the standards and expectations of the City. The preliminary approval will give the developer the direction needed to complete the final compilation of the construction drawings. The preliminary approval shall terminate one year after the City Council has given approval.
- B. The developer will submit the soils study for the development area with the preliminary plan. The soils study will contain the minimum information required, as shown in the geotechnical section of this booklet, and the drawings will reflect the recommendations of the soils report.
- C. The developer will submit the preliminary plan containing the following information:
 - 1. Lot configuration
 - a. Preliminary dedication plat with boundary legal description.
 - (1) The plan shall include adjacent parcels.
 - b. Area of each lot
 - c. Contour lines, existing and proposed, with actual elevations referenced to Davis County information.
 - (1) 2-foot intervals are preferred while 5 foot or 10-foot intervals will

- be accepted. Additional contour information may be required.
- d. Slope and size of buildable area of all lots. (Minimum building area is 30% or less with 5000 sq. ft., 50-foot minimum one side dimension).
2. Street configuration
 - a. Indications of all street slopes
 - b. Radius of all horizontal curves shall be identified.
 - c. Proposed street cross section conforming to City Street Standards.
 - d. The preliminary site plan shall include cross-section drawings at locations where the slopes will have cuts or fills exceeding 5 feet on either side of the street. The cross-section drawings shall be spaced no greater than 50 feet.
 3. Location of existing improvements
 - a. Location of water, sewer, storm drainage, streets, irrigation (open ditch or pressure lines) and natural drainage paths and/or creeks and streams.
 - b. Locations of existing easement, i.e. Weber Basin Water, petroleum gas lines, irrigation lines, power lines, phone lines, private access easements.
 - (1) All easements shall be shown on the preliminary dedication plat.
 - c. Location of all cuts/fills exceeding 3 feet at the right-of-way line.
 4. Proposed configuration of public utilities, i.e., Sanitary sewer, culinary water, storm drainage, land drainage, street lighting, pressure irrigation, telephone, natural gas, electrical power, cable T.V.
 - a. The sizes of the system(s) shall be shown but the City has the right to require size changes prior to final submittal.
 5. Boundaries of areas subject to flooding or listed on the FEMA flood plain maps and drawings. FEMA 100 year flood plain map and panel number must be noted on plans.
 - a. Areas subject to flooding may include low areas created by street construction.
 6. Written approval from affected entities.
 - a. Stream alteration - State Engineer
 - b. Irrigation system relocation - Irrigation users and company.
 - c. Acknowledgment to grant easements on adjacent private property from the property owner(s).
 - d. A copy of the Davis County Flood Control permit approving the layout of storm drain system and discharge into the creek.
 - e. All developments located in a FEMA flood zone will be responsible for approval from FEMA.
 7. Submittal of a preliminary title report and complete geotechnical report.
- D. The Public Works Department will provide the following information:
1. A written memorandum addressing the acceptability of the street configuration, the street cross-section, the slope of the lots. The Planning Department will address the lot size and their configuration.
 2. The memorandum will provide information concerning waterline size, possible off-site utility system improvements, sanitary sewer size and details, storm drain configuration, land drainage requirements, lighting requirements, slope protection requirements (including easements and re-vegetation), and possibly other items

specific to the development.

V. FINAL SUBDIVISION APPROVAL

- A. The purpose of the Final Subdivision Plan is to show the final construction details of the project; provide the final dedication plat information; provide the necessary access easements. The development configuration conforms to the approved preliminary plan but may be a portion or phase of the overall preliminary plan. The Staff, Planning Commission, and City Council will grant final approval. The final approval shall be submitted within one year of the Preliminary approval.
- B. The Developer will submit Six (6) sets of drawings containing the following information:
 - 1. Dedication Plat - Refer to the Dedication Plat section.
 - a. Electronic file of Dedication Plat in an AutoCAD format.
 - b. Final title report.
 - 2. Construction Drawings
 - a. Culinary Water design - Refer to the culinary water section.
 - b. Sanitary sewer design - Refer to the sanitary sewer section.
 - c. Storm drainage collection system - Refer to the storm drainage improvement section.
 - d. Land drainage design - Refer to the land drainage section.
 - e. Street design showing TBC elevations at all PC, PT points (both horizontal and vertical) and at points not to exceed 100 feet, rates of grade, "K" values on all vertical curves. (Refer to the Streets section).
 - f. Storm Water Pollution Prevention Plan shall be included with all final plan submittals.
 - 3. All easements for the off-site improvements crossing private property in those locations approved by the City Engineer.
 - 4. Cost estimate for the entire project.
 - 5. Other information required for preliminary approval.
- C. The Public Works Department will provide a memorandum stating that the drawings are acceptable OR a memorandum stating the corrections required on the drawings.