PRELIMINARY PLAN (PPLN) SUBMITTAL REQUIREMENTS
Section 18-45

Applications must contain the following information in the format described. Applications will not be accepted if required items are missing or incomplete.

1. **Application Form** – must be signed by landowner or be accompanied by an authorization letter.
2. **Application Fee** – refer to the application form
3. **Letter of Intent** – describing the proposal and listing contact information for the development team (planner, engineer, developer, etc.)
4. **Title Commitment** – dated no more than thirty (30) days prior to application date and inclusive of electronic copies of all B2 exception documents.
5. **Plan Set:**
   a. **Cover Sheet**
   b. **Existing Conditions (ALTA) Survey**
   c. **Preliminary Site Plan**
6. **Conceptual Building Design**
7. **Traffic Impact Study (TIS)**
   a. **Note**: TIS is reviewed with the Preliminary Plan. The final TIS will be reviewed and approved with review of the civil Construction Drawings. Refer to Standards and Specifications and Traffic Study Checklist.
8. **Preliminary Drainage Plan and Preliminary Utility Plan** (these are separate plans from the overall CSP).
9. **Additional reports/plans/information as deemed necessary**

   This is a general list of requirements. Some projects may require more or less information. However, each element should be reviewed for inclusion on a submittal.

PLAN SET CONTENTS

ALL PLANS TO INCLUDE:

- Consistent sheet size, preferably 22 inches x34 inches
- Subdivision name (proposed or existing name)
- North arrow
- Keys/Legends
- Graphic and written scale

COVER SHEET TO INCLUDE:

- Vicinity map (approximate scale: one-inch = 600 feet)
- Legal Description of the property
- Owner name, address, and telephone number
- Land Use Table with:
  - Gross and net area of the property
  - Area of each general land use category
  - Maximum permitted building height
  - Required building setbacks
  - Required landscape buffers
  - Anticipated number of lots and tracts
  - Residential developments: Proposed dwelling units and density (min and max)
  - Include any unique criteria for development of the property
- **General notes (Notes in ALL CAPS should be copied verbatim on the plans):**
  - Residential Developments: PLD DEDICATION TO BE BASED ON ACTUAL FINAL UNIT COUNT AT TIME OF SUBDIVISION AND/OR DEVELOPMENT PERMIT.
  - PRIOR TO SUBDIVISION OF PROJECTS WITH 4 OR MORE LOTS, A DEVELOPMENT PLAN SHALL BE SUBMITTED FOR INTERNAL PUBLIC AND PRIVATE SHARED ROADWAYS AND OTHER COMMON AREAS. PLANS SHALL INCLUDE ALL REQUIREMENTS IN THE DEVELOPMENT PLAN CHECKLIST.
  - THE ADJACENT PROPERTY OWNER OR ASSIGNS IS RESPONSIBLE FOR MAINTAINING THE LANDSCAPING, INCLUDING RIGHT-OF-WAY LANDSCAPING SUCH AS MEDIANS AND TRAFFIC CIRCLES ON NON-ARTERIAL ROADWAYS.
  - THE PROPOSED SITE PLAN INCLUDED IN THIS PLAN SET IS CONCEPTUAL IN NATURE. THE FINAL CIVIL SITE DESIGN FOR THE REQUIRED PUBLIC/PRIVATE IMPROVEMENTS (INCLUDING BUT NOT LIMITED TO ROADWAY SECTIONS, SIDEWALKS, WATER,

SANITARY SEWER, STORM SEWER, DRAINAGE, OTHER GENERAL INFRASTRUCTURE, ETC.) AND THE ASSOCIATED EASEMENTS AND RIGHTS-OF-WAY FOR THOSE IMPROVEMENTS SHALL BE DETERMINED WITH THE SUBDIVISION PLAT, DEVELOPER'S AGREEMENT AND CIVIL CONSTRUCTION DRAWINGS. THESE IMPROVEMENTS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS FOR PUBLIC AND PRIVATE IMPROVEMENTS AND BASED UPON APPROVED MASTER PLANS APPROVED AT THE TIME OF THE RECORDATION OF THE DEVELOPER'S AGREEMENT.

- THE PRELIMINARY PLAN IS INTENDED TO PROVIDE A FRAMEWORK FOR THE GENERAL DEVELOPMENT OF THE SITE AND IS NOT INTENDED TO BE A CONSTRUCTION PLAN. SITE LAYOUT AND DESIGN FEATURES SHOWN ON THIS PLAN ARE ILLUSTRATIVE AND THE FINAL DESIGN WILL BE DETERMINED AT THE TIME OF THE DEVELOPMENT PLAN AND CONSTRUCTION DRAWINGS, IN ACCORDANCE WITH THE APPLICABLE ZONE DISTRICT REGULATIONS AND ANY ADDITIONAL CRITERIA ESTABLISHED IN THIS PRELIMINARY PLAN.
- THE PRELIMINARY PLAN IS INTENDED TO GUIDE ALL FUTURE SUBDIVISIONS OF THE SITE. THE PLANNING DIRECTOR OR DESIGNEE MAY ALLOW FOR MINOR ADJUSTMENTS TO THE PLANS DEPICTED HEREIN TO RESOLVE SITE DESIGN CONFLICTS OR ADDRESS TECHNICAL DETAILS DISCOVERED DURING SUBSEQUENT REVIEWS OF THE SUBDIVISION PLAT, DEVELOPMENT PLAN, LANDSCAPE PLAN AND CONSTRUCTION DRAWINGS. SUCH ADJUSTMENTS TO THE PLANS MAY BE DUE TO ACTUAL SITE CONDITIONS OR UNFORESEEN TECHNICAL ISSUES INVOLVING INFRASTRUCTURE ON THE SITE, AS WELL AS OTHER RELEVANT FACTORS THAT MAY ARISE.
- PROPOSED IMPROVEMENTS DEPICTED IN THIS PLAN OUTSIDE OF THE BOUNDARY OF THE PRELIMINARY PLAN ARE THE RESPONSIBILITY OF THE DEVELOPER. TIMING AND EXTENT OF IMPROVEMENTS WILL BE DETERMINED WITH A DEVELOPER'S AGREEMENT.

- **Project Specific Notes (Notes in ALL CAPS should be copied verbatim on the plans):**
  - Public Land Dedication statement with proposed method of compliance
  - (If applicable): THE CITY OF THORNTON MAINTAINS THE STRUCTURAL INTEGRITY OF THE CONCRETE SURFACE OF THE REGIONAL MULTI-PURPOSE TRAIL; DEVELOPER/ASSIGNS MAINTAINS THE ADJACENT LANDSCAPING AND DAY TO DAY MAINTENANCE SUCH AS SNOW REMOVAL.

- Description of design theme required throughout the Preliminary Plan to establish a unified development, including items such as architectural style, building materials, colors, and/or building forms.
- (For residential subdivisions and multiple lot non-residential projects): A COMMON INTEREST COMMUNITY WILL BE FORMED FOR COMMON AND RIGHT-OF-WAY LANDSCAPE MAINTENANCE
- (If applicable) A statement of maintenance for arterial medians and or roundabout islands, city owned parks (city of Thornton maintained) and/or metro district parks (metro district maintained).

EXISTING CONDITIONS SURVEY TO INCLUDE:

- All minimum standard detail requirements for ALTA land title surveys.
- Current zoning of property and any adjacent properties within 300 feet of the property.
- The location of any existing buildings on or adjacent to the property.
- Topography on the property and within 300 feet of the property (unless otherwise agreed upon)
- Irrigation ditches, drainageways, lakes, wetlands, and floodplains
- Location of adjacent property lines, burial grounds, railroad rights-of-way, watercourses, irrigation ditches, gas and oil wells, production sites, and leases.
- Significant environmental features, such as bluffs, trees and woodlands, environmental hazards, and sensitive areas
- Tree survey by an independent consultant per Section 18-590.

PRELIMINARY SITE PLAN TO INCLUDE:

- Key map as needed for large projects (more than four sheets)
- Location of general land use areas
- Major pedestrian and all vehicular points of ingress and egress, including required multi-use regional trails.
    - Proposed access level (full, 3/4, RI/RO).
- General layout of internal circulation including arterial and collector streets and regional trails
- Present zoning on the property and zoning within 300 feet adjacent to the property and any proposed zoning changes.
- The site boundary depicted as a distinguishable line type.
- Existing easements

- Location of adjacent property lines, burial grounds, railroad rights-of-way, watercourses, irrigation ditches, gas and oil wells, production sites, and leases and setbacks.
- Location and dimensions of all existing rights-of-way, roadway centerlines, section lines, alleys, other public ways or private streets within or adjacent to the property.
- Proposed general locations of rights-of-way.
- Existing and proposed driveway locations within 250 feet of the property.
- Conceptually identify general locations of required landscape screening, setbacks and buffers.

CONCEPTUAL BUILDING DESIGN TO INCLUDE:

- Drawings or images depicting conceptual building design such as common building materials, accents, color palettes, roadway treatments, crosswalk pavement, lighting details, monumentation, and any other design features to ensure a consistent style/architectural theme throughout the development site to create the impression of a unified project and overall sense of a unique or identifiable place. Strategies to achieve this may include:
    - Using similar or complementary architectural styles, materials, colors or design details
    - Using similar or complementary building shapes and/or forms

PRELIMINARY UTILITY PLAN CONTENTS

ALL SHEETS TO INCLUDE:

- 22 inches X 34 inches sheets and shall have sufficient clarity to indicate the required information.
- Graphic and written scale.

COVER SHEET TO INCLUDE:

- Title Block (lower right corner).
- Legend which includes all line types and symbols.
- Revision number and date
- Name of professional engineer and firm
- Professional Engineer's (PE) number, signature and stamp
- Drawing sheet index
- General Notes:
    - ALL WATERLINES AND SANITARY SEWER LINES SHALL BE CONSTRUCTED PER THE CITY OF THORNTON STANDARDS AND SPECIFICATION FOR THE DESIGN AND CONSTRUCTION OF PUBLIC AND PRIVATE IMPROVEMENTS AND ALL APPLICABLE MASTER PLANS IN EFFECT AT THE TIME OF DEVELOPMENT. LARGER LINES SHALL

BE CONSTRUCTED IF NECESSARY TO SERVE THE DEVELOPMENT. LINE SIZES SHALL BE DETERMINED WITH THE FINAL UTILITY REPORT.

- ALL OFF-SITE EASEMENTS REQUIRED FOR THE CONSTRUCTION OF THE WATER AND SANITARY SEWER SYSTEMS SHALL BE ACQUIRED BY THE DEVELOPER PRIOR TO APPROVAL OF THE SUBDIVISION PLAT. THE RECEPTION NUMBERS FOR THESE EASEMENTS SHALL BE INCLUDED ON THE PLAT.
- ALL WATERLINES CONSTRUCTED SHALL BE LOOPED; IN ADDITION, THE SYSTEM PRESSURE REDUCING VALVES SHALL BE UTILIZED TO KEEP THE STATIC PRESSURES BELOW 100 PSI. A MINIMUM STATIC PRESSURE OF 40 PSI SHALL BE MAINTAINED FOR THE SITE.
- COORDINATION IS REQUIRED FOR SERVING WATER AND SANITARY SEWER TO THE ADJACENT PROPERTY OWNERS. STUB-OUTS SHALL BE PROVIDED FOR FUTURE DEVELOPMENT OF THESE PROPERTIES.
- THE DEVELOPER IS RESPONSIBLE FOR ANY IMPROVEMENTS TO APPLICABLE LIFT STATIONS WHICH ARE NECESSARY TO SERVE THIS DEVELOPMENT. IMPROVEMENTS WILL BE DETERMINED WITH THE FINAL UTILITY REPORT.
- A FINAL UTILITY REPORT WILL BE REQUIRED WITH THE DEVELOPMENT OF EACH PLANNING AREA. A SANITARY SEWER BASIN STUDY IS REQUIRED WITH THE REPORT TO EVALUATE THE EXISTING SANITARY SEWER SYSTEM DOWNSTREAM OF THE PROPOSED DEVELOPMENT, AS WELL AS ANTICIPATED DEVELOPMENT UPSTREAM FOR THE SIZING OF THE FACILITIES. ALL NECESSARY IMPROVEMENTS REQUIRED TO SERVE THE DEVELOPMENT ARE THE RESPONSIBILITY OF THE DEVELOPER.
- THE OWNER AGREES TO PARTICIPATE IN ALL REIMBURSEMENT AGREEMENTS ASSOCIATED WITH THE PROPERTY.
- ALL METERS SHALL BE SIZED IN ACCORDANCE WITH THE ADOPTED VERSION OF INTERNATIONAL PLUMBING CODE AND ALL ADOPTED APPENDICES IN EFFECT AT THE TIME OF APPROVAL.

PRELIMINARY WATER PLAN TO INCLUDE:

- Adjacent developments and associated land uses.
- City of Thornton boundary (if applicable).
- Adjacent water zones (if applicable).
- Proposed category of and use and acreage for each planning area.

- Show existing waterlines and easements adjacent to or within the development and proposed connection points. Label with size and type of pipe.
- Show conceptual and/or preliminary location of proposed waterline connection to the property. Not to include size, type, service location, dimensioning or proposed easement.
- Any proposed off-site improvements.
- Approximate high and low topography for each pressure zone within the development and all associated high and low static pressures.
- Approximate location of applicable pressure reducing valves (PRVs)

PRELIMINARY SANITARY SEWER PLAN TO INCLUDE:

- Adjacent developments and associated land uses
- City of Thornton boundary (if applicable)
- Existing topography
- Associated sanitary sewer basin boundary as part of the cities Master Utility Plan
- Proposed category of land use and acreage for each planning area
- Show existing sanitary sewer and easements adjacent to or within the development and proposed outfall connection point. Labeled with size, slope and type of pipe
- Show conceptual and/or preliminary location of proposed sanitary sewer connection to the property. Not to include size, type, service location, dimensioning or proposed easements. Include a table providing the anticipated peak flow for each category of land use. If any areas have already been included in a Final Utility Report, then a comparison of the anticipated flows from the approved report shall be included.
- Proposed off-site improvements
- Applicable lift stations.

PRELIMINARY DRAINAGE PLAN CONTENTS

ALL SHEETS TO INCLUDE:

- 22 inches X 34 inches sheets and shall have sufficient clarity to indicate the required information.
- Graphic and written scale.

COVER SHEET TO INCLUDE:

- Name of Subdivision
- Vicinity Map
- Title Block (lower right corner)
- Legend which includes all line types and symbols

- Revision number and date
- Name of professional engineer and firm
- Drawing numbers
- A note shall be added to indicate how nuisance flows will be handled through parcels downstream of the development and if any easements are anticipated to be acquired by the developer. This may include letters of acknowledgment from the downstream property owner(s) between the proposed development and an approved drainageway.
- General notes:
  - STORM DRAINAGE SHALL NOT ENTER ANY EXISTING IRRIGATION CHANNELS. THE DEVELOPER WILL BE RESPONSIBLE FOR BYPASSING THESE FACILITIES AS REQUIRED BY THE CITY AND THE APPROPRIATE DITCH COMPANY.
  - ALL OFF-SITE EASEMENTS REQUIRED TO CONVEY DEVELOPED DRAINAGE TO AN ACCEPTABLE OUTFALL LOCATION, AS DETERMINED BY THE CITY, SHALL BE ACQUIRED AND RECORDED BY THE DEVELOPER PRIOR TO APPROVAL OF THE SUBDIVISION PLAT. THE RECEPTION NUMBER(S) FOR THESE EASEMENTS SHALL BE SHOWN ON THE PLAT.
  - INFRASTRUCTURE SHALL BE PROVIDED TO ACCOUNT FOR ALL UPSTREAM PARCELS WHO HISTORICALLY CONVEY DRAINAGE THROUGH THE DEVELOPMENT.
  - SEEPAGE ANALYSIS AND STRUCTURAL BANK INTEGRITY ANALYSIS FOR EACH EXISTING (IF IT IS UPSTREAM) AND EACH PROPOSED DRAINAGEWAY WITHIN THE DEVELOPMENT SHALL BE SUBMITTED TO THE CITY WITH THE FIRST SUBDIVISION PLAT FOR THE PROPERTY.
  - THE IMPROVEMENTS SHALL CONFORM TO THE CURRENT DRAINAGE MASTER PLAN AT THE TIME OF DEVELOPMENT. IF THERE IS NOT A MASTER PLAN AT THE TIME OF DEVELOPMENT, THE DEVELOPER WILL BE REQUIRED TO PREPARE A BASIN STUDY TO DETERMINE THE IMPACTS AND IDENTIFY MITIGATION MEASURE FOR THE PROPOSED PROJECT. STORM WATER QUALITY AND DETENTION ARE REQUIRED FOR ALL PORTIONS OF THE DEVELOPMENT INCLUDING THE ULTIMATE ROADWAY CONSTRUCTION. ALL DRAINAGE WORK IS TO BE COMPLETED TO BECOME MAINTENANCE ELIGIBLE TO MILE HIGH FLOOD DISTRICT (MFHD) UPON COMPLETION OF WORK.
  - CLOMR’S/LOMR’S WILL BE REQUIRED WITH THIS DEVELOPMENT FOR ANY ADJUSTMENTS TO THE FLOODPLAIN.

- ALL WETLANDS AND BODIES OF WATER SHALL BE IDENTIFIED ON THE DRAINAGE PLAN. NO LOTS SHALL BE WITHIN A 50-FOOT RADIUS OF DELINEATED WETLANDS AND 75-FOOT RADIUS OF ANY BODY OF WATER.
- DETENTION PONDS SHALL BE COMBINED WHEREVER POSSIBLE AND SHALL BE SIZED USING CUHP OR AN EQUIVALENT INFLOW HYDROGRAPH METHOD.
- ACCESS SHALL BE PROVIDED TO AND WITHIN ALL DRAINAGEWAYS AND STORMWATER CONTROL MEASURES FOR MAINTENANCE.

HISTORIC DRAINAGE PATTERN SHEET TO INCLUDE:

- This should include sufficient detail to identify existing drainage flows entering this site from surrounding developments and associated runoff through the site. Drainage basins need to be defined for all portions of the subject property, all offsite areas that drain onto the subject property, and for the adjacent half of any roads within the subject property frontage on said roads. The existing major and minor basin lines should be included as appropriate for the site on the map. Flow direction arrows should also be included on the map.
- A table should be provided summarizing the 5-year and 100-year rational flow rates from all drainage basins defined.
- City of Thornton boundary (where applicable).
- Existing contours at two (2)-foot intervals. The contours shall extend to all areas which are tributary to this development but at a minimum 300 feet beyond the subdivision boundary unless otherwise agreed by Development Engineering Manager. Adequate contour labels should be provided. The City Web Map has publicly available topo data.
- Existing floodplain information. Floodplain limits and water surface elevations using Flood Insurance Rate Maps (F.I.R.M.) maps, Flood Insurance Study (FIS), or Flood Hazard Area Delineation (FHAD) information, whichever has the most restrictive information.
- Existing irrigation ditches and ponds.
- Existing drainageways, including 100-year flow rates or 100-year water surface elevations.

PROPOSED DRAINAGE PATTERN SHEET TO INCLUDE:

- Single sheet (Scale of 1” = 100’ to 1” = 400’ sufficient to show all information)
- Must show the path of drainage from the upper end of any off-site basins to the defined major drainageways. This should identify any major facilities from the property (i.e. development, existing property which may be affected, irrigation ditches, existing detention facilities, culverts, and storm sewers) along the path to the nearest major drainageway.
- The existing storm sewer system the development is proposing to utilize, labeled with the size, as-built slope and type of pipe.

- Drainage basins need to be defined for all portions of the subject property, all offsite areas that drain onto the subject property, and for the adjacent half of any roads within the subject property frontage on said roads. The existing proposed major basin lines shall be included as appropriate for the site on the map. Flow direction arrows shall also be included on the map.
- A table should be provided summarizing the 5-year and 100-year rational flow rates from all drainage basins defined.
- City of Thornton boundary (where applicable).
- Proposed grading with contours at two (2)-foot intervals and flow direction. Adequate contour labels shall be provided.
- Identify all required off-site improvements.
- If the land has been included in a previous Drainage Report, identify and include in a note that a comparison must be made between the new proposed (anticipated) flows and those identified in the original report at the Development Permit and Construction Drawing submittal phase.
- Existing floodplain information. Floodplain limits, 100-year flow rates and water surface elevations using Flood Insurance Rate Maps (F.I.R.M.) maps, Flood Insurance Study (FIS), or Flood Hazard Area Delineation (FHAD) information, whichever has the most restrictive information.
- Existing irrigation ditches and pond.