

**Project Name:** \_\_\_\_\_ **Project Number:** \_\_\_\_\_

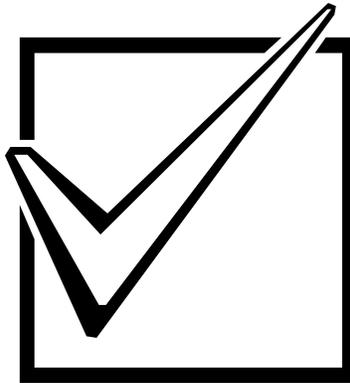
**Date Submitted:** \_\_\_\_\_ **Submittal Number:** \_\_\_\_\_

**Purpose of Checklist**

This checklist will help to ensure that your submitted plan is consistent with City of Centennial regulations. On the attached checklist, please check the box when the requirement has been met. When all items are complete, please read and sign the checklist at the bottom and submit it with your application and submittal materials.

**Purpose of Construction Document**

Construction Documents (CDs) are the plans used by the contractor to build the improvements specified in a MDP, FDP or SDP. CDs should meet the engineering standards used by the City of Centennial and should not deviate substantially from the site plan presented in the MDP, FDP or SDP.



# Construction Document Checklist

## Construction Document Checklist

Please check off the following items to ensure your application is complete. Sign and submit this checklist with your application when you are finished.

### All Plan Sheets

Applicant    Staff

|  |  |   |
|--|--|---|
|  |  | Key Map   |
|  |  | Title block<br>On extreme lower right hand corner, right side margin, or along the bottom edge of the sheet |
|  |  | Subdivision name and filing number  |
|  |  | Planned Unit Development name (if applicable)   |
|  |  | Type of improvement   |
|  |  | Engineer's name, mailing address, and phone number  |
|  |  | Owner/Developer name, mailing address, and phone number   |
|  |  | Sheet title   |
|  |  | Sheet number (consecutive, beginning with cover sheet)  |
|  |  | Graphic and written scale<br>Grading plans, site plans etc.: 1"=20' to 1"=100'                              |
|  |  | Plan and Profile Horizontal: 1"=50', Vertical: 1"=5' minimum  |
|  |  | Legend with all line types and map symbols, hatching patterns, etc.   |
|  |  | Original date of plan preparation and any subsequent revisions  |

### Cover Sheet

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|  |  |   |
|--|--|---|
|  |  | Engineer's certification, signature & seal  |
|  |  | Seal & signature of Colorado P.E. next to City approval block   |
|  |  | Vicinity map (1"=2000')   |
|  |  | City of Centennial approval block in the lower right hand corner  |
|  |  | General notes   |
|  |  | Additional notes for roadway plans  |
|  |  | Contact name and phone number for fire district, water district, sanitation district, utility notification, City of Centennial etc. |
|  |  | Sheet Index   |

# Construction Document Checklist

## Site Plan / Horizontal Control

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|  |  |   |
|--|--|---|
|  |  | Roads with road names labeled   |
|  |  | Adjacent properties labeled   |
|  |  | Locations of structures and natural features, including buildings, ditches or swales, and curb & gutter |
|  |  | Locations of structures and natural features within 100 feet of the boundary line                       |
|  |  | Location of proposed structures   |
|  |  | 2 benchmarks per each 160 acres or part thereof   |
|  |  | Additional notes for Roadway Plans  |
|  |  | Boundary line survey  |
|  |  | Property lines  |
|  |  | Show centerline of roads  |
|  |  | Existing & proposed ROW data (show ROW line and dimension)  |
|  |  | Existing & proposed easements (permanent and temporary) with dimensions and type                        |
|  |  | Dimensions from building to property line or benchmark  |
|  |  | Tie all dimensions to property line or benchmark  |
|  |  | Proposed curb data labeled (curb lengths, radii)  |
|  |  | Access widths labeled   |
|  |  | Sidewalk along public roads   |
|  |  | Handicap ramps with truncated dome warnings at entrances to public roads                                |
|  |  | Differentiate between catch and spill curb  |
|  |  | Angle, width and length of parking stalls   |

## Grading Plan

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|  |  |  |
|--|--|--|
|  |  | Roads with road names labeled  |
|  |  | Adjacent properties labeled  |
|  |  | Overall grading plan for the end of each phase of construction   |
|  |  | Callout of spot elevations   |
|  |  | Finish floor elevations for existing and proposed buildings  |
|  |  | Flow directional arrows with slopes of grade   |
|  |  | Drainage features, paved areas, and retaining walls shown and labeled  |
|  |  | Spill curb and catch curb differentiated   |
|  |  | Scale 1"=20' to 1"=200'  |
|  |  | Existing topography at 2-foot contour intervals (dashed), extending at least 100 feet beyond the boundary line |

## Construction Document Checklist

|  |  |   |
|--|--|---|
|  |  | Proposed topography at 2-foot contour intervals (heavy, solid)  |
|  |  | Locations of structures and natural features, including buildings, ditches or swales, and curb & gutter   |
|  |  | Locations of structures and natural features within 100 feet of the boundary line   |
|  |  | Location of proposed structures   |
|  |  | Elevations, dimensions, location, extent, and slope of all proposed grading   |
|  |  | Limits of clearing and grading or daylight line   |
|  |  | Cross section for retaining walls   |
|  |  | Show and label all existing and proposed easements  |
|  |  | Two benchmarks per 160 acres  |
|  |  | Call out where proposed structures tie into existing structures   |
|  |  | Provide the follow note: "These Construction Documents are not complete without the accompanying, most recently approved Grading, Erosion and Sediment Control (GESC) Plan drawings." |

### Street Plan & Profile

#### PLAN

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|  |  |   |
|--|--|---|
|  |  | Existing & proposed property line & ROW line with dimensions      |
|  |  | Existing & proposed easements & tracts with dimensions and type   |
|  |  | Survey lines and stations based on centerline only                |
|  |  | Roads with road names labeled                                     |
|  |  | Existing utilities and structures, including, but not limited to: |
|  |  | Water valves  |
|  |  | Fire hydrants   |
|  |  | Sanitary and storm sewer manholes                                 |
|  |  | Storm drainage facilities   |
|  |  | Telephone   |
|  |  | Fiber optic cable   |
|  |  | Gas   |
|  |  | Electric  |
|  |  | Ditches or swales   |
|  |  | Curbs and gutters   |
|  |  | Pavement limits   |
|  |  | Bridges or culverts   |
|  |  | Guardrails  |

## Construction Document Checklist

|  |  |   |
|--|--|---|
|  |  | Station and critical elevation (flowline, invert etc.) of all existing & proposed utility or drainage appurtenances in the right-of way or in drainage easements. Location of utilities dimensioned horizontally and vertically from roadway centerline profile grade |
|  |  | Storm drainage flow direction areas, especially at intersections  |
|  |  | Match-lines (if necessary)  |
|  |  | Station and elevation of all curb returns: existing and proposed horizontal PC, PT etc.; high or low point of all vertical curves   |
|  |  | Existing and proposed curb return radii   |
|  |  | Mid-block handicap ramp locations at tee intersection   |
|  |  | Complete horizontal curve data:<br>Radius (R)   |
|  |  | Degree of curvature (D)   |
|  |  | Point of curvature (P.C.)   |
|  |  | Point of tangency (P.T.)  |
|  |  | Tangent length (L)  |
|  |  | Centerline stations of all intersecting roads   |
|  |  | Survey ties to section or quarter corner (consistent with plat)   |
|  |  | Typical cross-sections for all existing and proposed roads:<br>Classification of road   |
|  |  | Profile grade design point (centerline, flowline, TOC, etc.)  |
|  |  | Road width  |
|  |  | Right of Way  |
|  |  | Type of curb, gutter and sidewalk   |
|  |  | Pavement cross slope  |
|  |  | Pavement thickness (must comply with geotechnical report)   |
|  |  | Structural material components of pavement, base & sub-base   |
|  |  | Existing construction and lane details for any existing arterial improvements (only if road intersects an arterial)   |
|  |  | Basis of elevations for plan view and profile are the same (flowline to flowline, TOC to TOC etc.)  |

### PROFILE

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|  |  |   |
|--|--|---|
|  |  | Label existing ground (dashed) and proposed ground (heavy, solid)   |
|  |  | Elevations based on centerline, top of curb, lip of gutter or flowline<br>Basis of elevations must be the same basis as the profile |
|  |  | Continuous stations for entire portion of road shown in plan view   |

## Construction Document Checklist

|  |  |  |
|--|--|--|
|  |  | All existing curbs, gutters, sidewalk, & pavement adjacent to road |
|  |  | Elevation and location of all utilities in the immediate vicinity  |
|  |  | Station & elevation of all horizontal curve data (P.C., P.T. etc.) |
|  |  | Station & elevation of existing and proposed vertical grade breaks |
|  |  | Distance and grade/slope between grade breaks                      |
|  |  | Complete vertical curve data:<br>High or low point                 |
|  |  | Point of intersection (P.I.)                                       |
|  |  | Point of curvature (P.C.)  |
|  |  | Point of tangency (P.T.)   |
|  |  | Length of curve (L)  |
|  |  | Algebraic difference in slopes in percent (A)                      |
|  |  | $K = L/A$ labeled  |
|  |  | Profiles for all curb returns (except medians)                     |

### Traffic Signals & Striping Plan

Applicant    Staff

|  |  |   |
|--|--|---|
|  |  | Based on Manual on Uniform Traffic Control Devices (MUTCD)  |
|  |  | Show general location of each sign (by station and side of road)  |
|  |  | Specify sign legend and sign type (from MUTCD)  |
|  |  | Specify sign size   |
|  |  | Provide a typical detail of installation dimensions (height, distance from curb)  |
|  |  | Specify design speeds used for basis of street design   |
|  |  | Detail post and base dimensions and installation plan (show wedge or sleeve, depth below surface, materials). Breakaway posts only. |
|  |  | Specify blank gauge of the sign   |
|  |  | Note the reflectorization provided  |
|  |  | The striping plan must show:<br>Color designation   |
|  |  | Lane width  |
|  |  | Stripe/skip   |
|  |  | Typical treatment for accel/decel lanes, turn lanes & crosswalks  |
|  |  | Sign inventory table showing type, size and quantity of each sign   |

# Construction Document Checklist

## Overall Utility Plan

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|  |  |  |
|--|--|--|
|  |  | Type, size, location and number of all underground utilities   |
|  |  | Sufficient surface features such as curb, walk, structures etc. to evaluate encroachment and access concerns & potential utility conflicts. Surface features should be faded back to emphasize utilities |
|  |  | Existing utilities and structures, including, but not limited to:  |
|  |  | Water valves   |
|  |  | Fire hydrants  |
|  |  | Sanitary and storm sewer manholes  |
|  |  | Storm drainage facilities  |
|  |  | Telephone  |
|  |  | Fiber optic cable  |
|  |  | Gas  |
|  |  | Electric   |
|  |  | Property line  |
|  |  | Roads with road names labeled  |
|  |  | Adjacent properties labeled  |
|  |  | Service lines and meter locations  |
|  |  | Storm & sanitary sewer lines with pipe size, length, type and slope  |
|  |  | Angles at alignment changes (if not shown on plan and profile)   |

## Storm Sewer Plan & Profile

### PLAN

Applicant Staff

|  |  |   |
|--|--|---|
|  |  | Sufficient surface features such as curb, walk, structures etc. to evaluate potential utility conflicts. Surface features should be faded back to emphasize utilities |
|  |  | Type, size, location and number of all underground utilities  |
|  |  | Storm drainage facilities   |
|  |  | Storm & sanitary sewer lines with pipe size, length, type and slope   |
|  |  | Elevation and location of all utilities in the immediate vicinity   |
|  |  | Show all utility crossings  |

# Construction Document Checklist

## PROFILE

Applicant    Staff

|  |  |   |
|--|--|---|
|  |  | Label existing ground (dashed) and proposed ground (heavy, solid)                   |
|  |  | Manhole designations & locations  |
|  |  | Manholes over 17' depth have an intermediate platform                               |
|  |  | Pipe size, length, type, slope between manholes, design flow, HGL                   |
|  |  | Proposed elevations for all pipe inverts, stubouts and manhole rims                 |
|  |  | Existing elevations (field verified) for all pipe inverts, stubouts, & manhole rims |
|  |  | Vertical distance between utilities   |

## Regulatory Approval

Applicant    Staff

|  |  |  |
|--|--|--|
|  |  | Appropriate water and sanitary district        |
|  |  | CDOT (for state highways)                      |
|  |  | Cherry Creek Basin Water Quality Authority     |
|  |  | Urban Drainage (maintenance eligible projects) |
|  |  | SEMSWA   |

## Detail Sheets

Applicant    Staff

|  |  |                             |
|--|--|-----------------------------|
|  |  | Applicable Standard Details |
|  |  | Striping details            |
|  |  | Sign details                |
|  |  | Drainage facility details   |

I \_\_\_\_\_ state that the submittal requirements listed within this packet have been provided in completion of the requirements for submission as required by the City of Centennial, and that all documents provided have been submitted in accordance with the requirements and guidelines of the City of Centennial.

I also understand that submitting erroneous information or an incomplete submittal may delay the processing of my application.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**Purpose of Checklist**

This checklist will help to assure that your submittal is consistent with City of Centennial Regulations. On the checklist below, please check the box when the materials have been provided. When all items are supplied, please read and sign the checklist at the bottom and submit it with your application and submittal materials.

The following are the minimum submittal requirements for a Construction Document. Please check off the following items to assure your application is complete

**Engineering (3 Complete Sets)**

Applicant    Staff

| Applicant | Staff |                        |
|-----------|-------|------------------------|
|           |       | Construction Documents |
|           |       | Fee                    |

**NOTE: YOU MUST BRING THIS MATRIX  
WHEN YOU SUBMIT YOUR APPLICATION**

**STAFF WILL NOT ACCEPT APPLICATION MATERIALS THAT ARE NOT COLLATED AND FOLDED.**

I \_\_\_\_\_ state that the above submittal requirements have been provided in completion of the requirements for submission as required by the City of Centennial, and that all documents provided have been submitted in accordance with the requirements and guidelines of the City of Centennial.

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\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date