

## Civil (Utility) Plan Pre-Acceptance Review Checklist

**Checklist to be filled out by Licensed Civil Engineer in the State of Colorado. Checklist shall be uploaded separately with the civil plans.** Checklist shall be used as a guidance document only and shall not be considered comprehensive for submittal requirements. Please reference the most recent Aurora Criteria Manuals for full requirements.

**\*\*\*Submittal shall be held if all applicable items are not included\*\*\***

Subdivision Name: \_\_\_\_\_ RSN: \_\_\_\_\_

Submitting Engineer: \_\_\_\_\_

Reviewer: \_\_\_\_\_ Date: \_\_\_\_\_

Company: \_\_\_\_\_ Phone: \_\_\_\_\_

Contact Name: \_\_\_\_\_ Email: \_\_\_\_\_

If this is a revision to a previously approved plan set: Sheet #: \_\_\_\_\_

### **Department/Division Anticipated for Review**

Engineering      Traffic      \*Deferral \_\_\_\_\_

Water      Parks      ASAP Option 1

Life Safety      Forestry      ASAP Option 2

\*Requires pre-approval by City Engineer.

**Agencies Anticipated for Review**

	Mile High Flood District (Urban Drainage - 76429)
	Cherry Creek Basin Authority (76440 and 74751)
	Arapahoe County Public Works and Development (76868)
	Adams County (76891)
	Douglas County (76848)
	DEN Utilities (76454)
	DEN Planning (195201)
	DEN Traffic (190420)
	DEN USDA (203012)
	DEN Real Estate (226497)
	E-470 Public Highway Authority (153791)
	City and County of Denver (submitted by Applicant directly to Denver)
	Greenwood Village (76450)
	Centennial (154195)
	CDOT REGION 1 (71431)
	SEMSWA (154197 and 189470)
	Town of Parker (76453)
	E.C.C.V. W&S District (77378 and 77377)
	RTD (Referral Contact - 72157)
	ACWWA (154200)
	PSCO (71465)
	Other _____

**The checklist shall be used for both the Pre-Acceptance and the Routing Slip / Checklist. The Routing Slip / Checklist cover sheet will be added at time of Civil Plan Submittal.**

All submittals shall be routed through the Engineering Services Division. The consultant will be notified by email when plan comments are ready to be downloaded. Plans are reviewed on a first come – first serve basis only.

After all approval signatures are obtained, the signature set shall become the property of the City of Aurora.

Plans will be returned to the consultant for lack of adequate information or conflicts with City of Aurora design criteria and identified on the Pre-Acceptance checklist. The checklist items must be corrected prior to acceptance by the Engineering Services section. Plans submitted without the required drainage report accompanying them or reports without the required plans will be considered incomplete submittals and returned to the consultant without review. The most current version of the Inspection and Maintenance Agreement must be signed and notarized at time of Signature Set to obtain approval.

The section numbers referenced in the tables below can be found in the City of Aurora Roadway Design and Construction Specifications, latest revision except those marked with a superscript (#). Those documents are referenced to the manuals noted below:

1. City of Aurora Storm Drainage and Technical Criteria Manual (latest revision).
2. Aurora Water Standard Specifications regarding Water, Sanitary Sewer and Storm Drainage Infrastructure (latest revision).
3. City of Aurora Rules and Regulations regarding Stormwater Discharges Associated with Construction Activities.

	<b>All Submittals</b>	<b>Section No.</b>	<b>Included</b>	<b>N/A</b>
	<b>General</b>			
1	Vicinity Map (scale)	2.03.4		
2	Key Map (scale)	2.03.5		
3	Title Block, subdivision name lower right corner.	2.03.5.01		
4	Approval Block, lower right corner.	2.03.5.02		
5	Correct scale.	2.03.5.03		
6	North Arrow.	2.03.5.04		
7	Date.	2.03.5.05		
8	Benchmark (NAVD 1988).	2.03.5.07		
9	Underground utilities.	2.03.5.08		
10	Private improvements.	2.03.5.09, 2.03.6.15		
11	No copyright note.	2.03.5.10		
12	Required Notes/ Utility Notes/Erosion Control Notes.	2.03.6, 5.05.1 <sup>2</sup> & 2.2.2 <sup>3</sup>		
13	Subdivision Names and City of Aurora Civil Plan Approval Numbers on adjacent sites.	2.03.7		
14	Details	2.03.8		
15	Preliminary Drainage Report Approved (minimum one review of site and PD with no significant comments).	2.04.2		
16	Reports side bound and types on 8 ½" x 11" paper	2.04.3, 2.31 <sup>1</sup>		
17	Match Lines and Sheet Numbers	2.06.1.08		
18	Survey Control Drawing	2.11		
19	Correct sheet size	3.01		
20	Plan quality, line quality, text size.	3.01, 3.02		
21	Sequential Numbering including Cover Sheet Index.	3.03		
	<b>Storm Drain Plan &amp; Profile</b>			
22	Elevations and stationing on profile view.	2.07.2		
23	Horizontal control dimensions.	2.07.2		
24	Easements with dimensions.	2.07.2		

25	Pipe lengths, size, slope, inverts, bedding class for pipe and material type.	2.07.3		
26	Manhole inside diameter, size of inlets.	5.07 <sup>2</sup> & 6.50 <sup>1</sup>		
27	Drop through manholes and inlets.	5.03.4 <sup>2</sup> & 6.45 <sup>1</sup>		
28	Number of pipes and sizes coming into any manhole or inlet.	5.07 <sup>2</sup> & 10.08 <sup>2</sup>		
29	Show water and sanitary sewer alignment on plan view.	2.07		
30	Clearance of utility crossings with labeling.	11.08 <sup>2</sup>		
31	Show and label proposed and existing grades in profile view.	2.07.3.01		
32	Maintenance access and utility easements.	3.62 <sup>1</sup> & 5.06 <sup>2</sup>		
33	Label private utilities (detention pond outlets, on-site pipes, and drainage pans).	2.07.2.07		
34	Detail of all connections to existing drainage systems and channels.	2.07.2		
35	Miscellaneous appurtenance (trash racks, handrails, dowel pins, and guardrails).	2.07.2		
36	Show and label hydraulic grade lines with design frequency.	2.07.3.09		
	<b>Erosion &amp; Sediment Control Report</b>			
37	Current SWMP Report Template.	2.2.1 <sup>3</sup>		
38	Signature Block includes owner and design engineer information.	2.2.1 <sup>3</sup>		
39	Subdivision Name and Filing No.	2.2.1 <sup>3</sup>		
40	Section 6 Probable Cost sheet.	2.2.1 <sup>3</sup>		
41	Appendix A and B (Floodplain and Soils Information)	2.2.1 <sup>3</sup>		
42	Sediment Trap/Basin calculations in Appendix D	2.2.1 <sup>3</sup>		
43	Standard Erosion Control Notes	2.2.1 <sup>3</sup>		
44	Project Name, Location, Owner Contact, Design Firm, and other project information.	2.2.2 <sup>3</sup>		
45	Initial, Interim and Post Paving plans.	2.2.2 <sup>3</sup>		
46	Elevation contours and drainage arrows.	2.2.2 <sup>3</sup>		
47	Benchmark information.	2.2.2 <sup>3</sup>		
48	Limits of construction and perimeter BMPs.	2.2.2 <sup>3</sup>		
49	Stockpile location including protection and stabilization.	2.2.2 <sup>3</sup>		
50	Storage areas including staging, trailer, and concrete washouts.	2.2.2 <sup>3</sup>		
51	Temporary roads and VTC.	2.2.2 <sup>3</sup>		
52	Status of Initial BMPs shown on Post Paving plan.	2.2.2 <sup>3</sup>		

53	Temporary Sediment Basin information including riser pipe details, dimensions, tributary area, volume, and discharge protection.	2.2.2 <sup>3</sup>		
54	Slope stabilization (Erosion Control Blankets) on any slopes 4:1 or steeper.	2.2.2 <sup>3</sup>		
	<b>Overall Utility Plans</b>			
	<i><b>Note:</b> Identify Utility Phasing - Show utility phasing on the overall utility plans. Extension agreements are issued based upon the phasing plan. The entire extension agreement must be completed prior to testing and initial acceptance.</i>			
55	Resistivity test results for public water main installation.	5.05.2 <sup>2</sup>		
56	Standard Utility Notes.	5.05.1 <sup>2</sup>		
57	Phasing Plan included (for phased utilities).	2.07		
58	Fixture Unit Table and Meter Sizing Table, excluding single family attached or detached.	5.05.3 <sup>2</sup>		
59	Wet Tap sizes, labeled.	11.06 <sup>2</sup>		
60	Waterline lowering shown with vertical bends labeled.	2.07		
61	Horizontal control dimensions.	2.07		
62	Easements with dimensions for water meters and fire hydrants.	2.07		
63	Service line piping length, size, and type of pipe, labeled in Overall Utility Plan (excluding single family attached or detached).	2.07		
64	Pipe length, size, and material type.	2.07		
65	Pipe line fittings including bends, tees, valves, air reliefs, and blow-offs.	2.07		
66	Existing utility information, including size and material type.	2.07		
67	Label all fire lines as "PRIVATE", include length, size, and type of pipe.	5.05.4 <sup>2</sup>		
68	Finish grade at base of the hydrant (Flange Elevation).	16.03.3 <sup>2</sup>		
69	Show domestic and irrigation water meters with easements clearly labeled. <i>Note: All meter pits must be located two feet (2') from all concrete .</i>	2.07		
	<b>Sanitary Sewer Plan &amp; Profile</b>			
70	Elevation and stationing on profile view.	2.07.2		
71	Horizontal control dimensions.	2.07.2		
72	Easements with dimensions.	2.07.2		

73	Service line piping length, size, and slope (multi-family and commercial properties only).	2.07.2		
74	Clean-outs required per specification.	23.01 <sup>2</sup> & 23.06 <sup>2</sup>		
75	Pipe length, size, slope, inverts, bedding class for pipe and material type.	2.07.3		
76	Manhole inside diameter/location per specifications.	5.06 <sup>2</sup> & 5.07 <sup>2</sup>		
77	Manhole requirement where service line diameter is equal to or greater than seventy-five percent (75%) of existing main.	23.05.1 <sup>2</sup>		
78	No direct service taps on interceptors fifteen inches (15") and larger.	23.05.1 <sup>2</sup>		
79	Tees on main, wyes on stub outs at cul-de-sacs.	23.05.1 <sup>2</sup>		
80	Drop through manholes (0.2 straight, 0.3 bends).	5.03.4 <sup>2</sup>		
81	Profile shall depict utility crossings for water mains, fire hydrant laterals, fire lines, and storm sewers.	2.07 & 11.08 <sup>2</sup>		
82	Clearance of utility crossings labeled.	2.07 & 11.08 <sup>2</sup>		
83	Proposed and existing surface grades in profile view; ensure RIM elevation match future grades.	2.07		
84	Label private utilities as "private" (under drains, service lines, manholes as applicable).	2.07.2.07		
85	Maintenance access to all Public manholes per specification.	5.06 <sup>2</sup>		
86	License Agreement for gravity under drains tying into mains and following the utility trench.	24.00 <sup>2</sup>		
	<b>Water Lines sixteen inches (16") and larger (Plan and Profile Required)</b>			
87	Elevation and stationing on profile view.	2.07.2		
88	Horizontal control dimensions.	2.07.2		
89	Easements with dimensions.	2.07.2		
90	Pipe length, size, material type, and slope.	2.07.3 & 11.00 <sup>2</sup>		
91	Pipeline fittings, including bends, tees, valves, air reliefs, and blow-offs.	2.07.3 & 11.05 <sup>2</sup>		
92	Finished grade at base of fire hydrants (flange elevation), return fire hydrant lateral to bury depth of five and half (5.5') feet.	16.01 <sup>2</sup> & 16.03.3 <sup>2</sup>		
93	Existing unused stub-outs removed and blind flanged at main.	2.07.2		
94	Constructability of future large diameter main extension (bulkheads, blow-offs, air vacs, valving and water availability).	2.07		
95	Provide pressure zone labeling at Zone boundaries, zone valves, check valves, and P.R.V.s.	5.00 <sup>2</sup> , 15.00 <sup>2</sup>		

96	Elevations and stationing on profiles, provide depth of cover to accommodate appurtenances, such as air vacs and butterfly valves, as necessary.	2.07.3		
97	Final grade over water line, set RIM elevations to final grade.	2.07		
98	Station and elevation at all breaks in grade, grade shall be zero percent (0%) entering and exiting air vac butterfly vault locations.	2.07		
99	Detail thrust restraint on lines larger than twenty-four inches (24").	11.09 <sup>2</sup>		

I hereby certify that the information provided above is complete and accurate.

\_\_\_\_\_  
Printed Name & Title

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date