Storm Drain Plan Review Checklist

OC PLANNING
A DIVISION OF OC PUBLIC WORKS

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FACILITY NO. _____ TENTATIVE TRACT/PM NO. _____

Received Date: _____ Checked By: _____ Checked Date: _____

DESCRIPTION	Check					
	1st	2nd	3rd	4th	Final Mylar	Comments
1. OVERALL CRITERIA						
Drainage Acceptance letter at upstream						
Drainage Acceptance letter at downstream						
Tract S.D. General Notes						
Plan Data Matches Hydrology Calcs						
Design Q Frequency						
Design Q Flow						
Pipe Diameter						
Pipe n value						
Pipe Slope "s"						
Plan data matches Hydraulics Calks						
Design Q Frequency						
Design Q Flow						
Pipe Diameter						
Pipe n value						
Pipe flowline slope						
Pipe friction slope						
Normal Depth						
Critical Depth						
HGL elevations						
2. PLAN SHEET: GENERAL						
Engineer to submit plans in person with a "Subdivision Improvement Plan Submittal Form" filled out and signed by the plan checker accepting plans.						
Signature and seal of engineer on plans.						
All sheets (originals) to be inked linen, mylar or chonoflex, 24" x 36", with a ½ " margin on all sides except for the left side, which will be 1 ½".						
All sheets must be labeled consecutively, "Sheet ___ of ___", in the lower right hand corner.						
All stationing should refer to centerline of storm drain unless otherwise noted. Negative stationing is not allowed.						
North arrows should point to top or right of sheet.						
Structural calculations must be submitted with plans, including a retaining wall, R.C.B. or bridge, unless the structure is taken directly from the Standard Plans.						
Minimum Cover 30" in roads						

DESCRIPTION	Check					
	1st	2nd	3rd	4th	Final Mylar	Comments
Maximum Cover 15ft						
Cover over 20 feet consult Lo. Dr. Man						
Pipe aligned in outside lane or parking						
Minimum pipe slope .001						
Minimum pipe velocity 3fps						
Minimum pipe size 18in.						
Alignment away from slopes and ret. walls						
RCP velocity > 20fps use 1.5” steel clearance						
RCP > 40% slope use cut off walls						
pH less than 6.5, RCP special Design						
Soil Sulfate > 2000ppm\ RCP Special Design						
CSP, plastic, etc. See Loc. Dr. Man						
3. PLAN SHEET: PLAN VIEW						
Construction Notes						
Hydraulic Data Table						
S.D. Easement per Loc. Dr. Man						
Manhole Location and spacing per L.D. Man						
Match lines and sheet reference						
Street Name Reference						
Mainline and laterals are shown						
Pipe bedding per SP1319 is required for all RCP						
S.D. Centerline and Stationing of BC and EC						
Centerline Curve Data						
Bearing and Distance						
Ties to street centerline at SD ends						
Angle point stationing						
Junction Structure Type, stations, angle and elevations.						
Inlet Type, station, and Height						
S.D. Laterals shown and identified						
Easement Lines						
Show structures crossing						
Median drain tie to S.D.						
Local Depression Details reference street plans						
Use of Standard Symbols						
Other Improvements Noted on Plan						
RDMD Standard Plans Referenced						
North Arrow						
Existing Improvements shown dashed with all plan reference file numbers shown						
Improvements to be constructed:						
a. Proposed paving shown shaded						
b. Joins						
Stationing to read left to right, and run from downstream to upstream.						
a. Negative stationing is not allowed						
b. Stationing has preference over north arrow						
c. Right end of one sheet to join left end of next sheet.						
4. PROFILE:						
Plot of Hydraulic Grade Line						
Mainline and laterals are shown						
Scales, Horizontal and Vertical						
Datum at both edges of sheet						

DESCRIPTION	Check					
	1st	2nd	3rd	4th	Final Mylar	Comments
Stationing:						
Stationing to increase left to right						
Scale (horizontal 1”=40 typically, or 1”=20) and (vertical 1”=4’ or 1”=8’ typically)						
At bottom edge of Profile grid						
All Grade Breaks and equations						
Beginning and Ending of junction structures and at inlets.						
Elevations:						
At each edge of grid (one to two foot intervals)						
At Beginning and Ending of Junction structures and at inlets.						
Proposed Finished Surface with grade in percent (solid line), label						
Street or road centerline and name where it crosses Profile line						
Pipe length size and D Load on profile below pipe						
Location and elevation of utilities crossing S.D.						
5. INLETS FROM NATURAL CHANNEL						
Depth at inlet per Hydraulic calculations						
Riprap to 1.5 ft above Q10 tailwater						
Riprap 10 feet upstream of inlet structure						
6. OUTLETS TO NATURAL CHANNEL						
Scour Protection						
Length Table 5-8 LD Man-min 25’						
Height to match depth of flow						
Gradation of riprap per SP 1808 or as designed						
Energy Dissipaters per Loc. Dr. Man.						
Scour protection installed D/S of Energy Dissipater						

REVIEWED BY: _____

PRINTED NAME: _____

DATE: _____

COMPANY: _____