



Plan Check Submittal Requirements

for Developer Designed and Constructed Projects

Submittal	Items Required
Preliminary Design	<p>For projects with a complex drainage system (e.g. drop structures, lined side slope soft-bottom channels, launch rock, debris basins, regional detention basins, levees, etc.) or that propose revisions to a FEMA/Ordinance 458 floodplain, or with the potential for maintenance difficulties due to access, right of way constraints, resource agency issues, etc., the District recommends a preliminary design (30%) level submittal of the improvement plans and drainage study followed by a meeting to discuss the project issues. The 30% level submittal is defined as follows:</p> <p>Catch Basin Hydrology and Preliminary Design Prepare hydrology study for, and preliminary sizing of proposed inlets/catch basins.</p> <ul style="list-style-type: none"> • The 10-year and 100-year Rational Method hydrology calculations shall be completed, together with street flow capacities to determine proposed inlet/catch basin locations. • Catch Basin lengths and locations shall be determined and compared to design topographic mapping to identify any space constraints. Ponding depths and flow-by rates shall be determined with flow-by values being added to the next downstream catch basin depending upon street carrying capacity. • Identify preliminary horizontal alignments for connector pipes, including estimated sizes. These horizontal alignments will be used to help identify if/where any potential utility conflicts may exist (for utility coordination), and where junctions with the mainline will be located. <p>Mainline Alignment and Profile For the preferred alignment, prepare initial engineered horizontal alignment and profile plots for the complete length of the project. Project mainline and lateral alignments shall be plotted on design mapping to scale with offsets to roadway centerline and property lines dimensioned. Profile shall show enough detail to allow an understanding of how the project will accommodate all vertical constraints, major utilities and outlet conditions.</p> <p>Prepare and overlay the HGL (pressurized) or Water Surface (non-pressurized) onto the profile. The hydraulics for the Mainline / Laterals should utilize the mainline / lateral flow rates identified by Planning during the PDR and the junction locations and estimated sizes determined by the Catch Basin Hydrology and preliminary design. Confirm all boundary condition assumptions (U/S and D/S controlling water surfaces, etc.).</p> <p>The Design Engineer shall determine if right of way (ROW) will be required in order to construct the project. If ROW is required, the Design Engineer shall determine the limits of land required for the project as well as ROW needed for mitigation and downstream impacts. The Design Engineer will also need to identify if the ROW is fee, easement, TCE, etc.</p> <p>For all other projects, the first submittal shall be as described below:</p>

<p>Plan Check 1 – Engineering Plans and Studies</p>	<p>The first submittal is to be prepared to a 90% or better level, submitted in hard copy format and include:</p> <ul style="list-style-type: none"> • Plan Check Application form. • Plan Check Deposit Based Fee Worksheet. • A copy of COAs with discussion as necessary to explain any unusual means of satisfying the COAs or any intended deviations. • Storm drain and / or channel improvement plans. • Hydrology (pre- and post-project, interim condition, existing and ultimate land use, as applies) and hydraulic report (to include narrative, boundary condition and other assumptions, maps, exhibits, mainline, lateral and catch basin hydrology, mainline, lateral and catch basin hydraulics, reference drawings (as-builts), digital versions of model input/output files). • Identification of easements where necessary. • Scour analysis if appropriate. • Debris potential and burned condition assessment if necessary. • CLOMR/LOMR documents if appropriate. • Final geotechnical investigation, including infiltration testing if necessary. • The following items as apply; street improvement plans, rough grading and erosion control plans, final tract/parcel map and environmental constraint sheet (ECS), and sewer and water plans. • Identification of any multi-use facilities and types of surfaces required. • Maintenance exhibit.
<p>Plan Check 1 – Environmental Documents</p>	<p>The first submittal must include the following environmental documents supporting construction, operation and maintenance of any facilities to be owned and / or operated by the District submitted in electronic format:</p> <ul style="list-style-type: none"> • CEQA documents (i.e. Initial Study, MND, EIR, etc.). • MSHCP Compliance documents, if applicable. • Regulatory permits (i.e. 401, 404, 1602 and related habitat assessments, survey reports, Biological Opinion, Incidental Take) and permit application packages. • Written confirmation from applicable agencies where permits are deemed unnecessary. • Final and permitted maintenance plans, if any. • Mitigation and monitoring plans, if any. • Electronic copy of the District storm drain/channel improvement plans.
<p>Plan Check 2 – Engineering Plans and Studies, and Environmental Documents</p>	<p>The second submittal is to be prepared to a 100% level. Plans and / or studies may be submitted in electronic format with prior agreement /direction from the plan checker. This submittal shall include:</p> <ul style="list-style-type: none"> • Plan check response letter addressing each comment from prior review. • Prior submittal redlines. • Plans, studies and maps addressing prior review comment. • Supplementary materials requested from prior review. • Identification of possible phasing and of any temporary measures or interim facilities required so support phased construction. • D-Load calculations (where RCP is used). • Structural calculations for non-standard design elements. • Letters of permission from affected property owners for offsite grading, ponding or discharge of concentrated drainage. • Water Quality Management Plan (if required by plan checker).
<p>Plan Check 3 - Engineering Plans and Studies, and Environmental Documents</p>	<p>The third submittal is to be prepared to a 100% level. Plans and / or studies may be submitted in electronic format with prior agreement / direction from the plan checker. This submittal shall include:</p> <ul style="list-style-type: none"> • Plan check response letter addressing each comment from prior review. • Prior submittal redlines.

	<ul style="list-style-type: none"> • Plans, studies and maps addressing prior review comments. • Supplementary materials requested from prior review. • Cooperative Agreement application package with all attachments – note that if there are outstanding project issues that could change the alignment, facility size, rights of way and / or maintenance responsibility for the subject drainage facilities, submittal of the Cooperative Agreement application package should be delayed until these issues have been fully resolved. • The following items are required for the District in-house all-hands project meeting and will be requested by the plan checker to be submitted as early as the third submittal. Submit these only when requested: <ul style="list-style-type: none"> ○ Reduced sized (11"x17") storm drain and / or channel improvement plans – 10 sets. ○ Construction materials quantity and cost estimate – to be used in preparation of the bonding letter to be prepared by the plan checker.
<p>Plan Check 4 and beyond, if necessary - Engineering Plans and Studies, and Environmental Documents</p>	<p>Submittals four and beyond, if necessary, are to be prepared to a 100% level. Plans and / or studies may be submitted in electronic format with prior agreement with / direction from the plan checker. Submittals shall include:</p> <ul style="list-style-type: none"> • Scheduling a review meeting with plan checker to ensure unresolved issues are being addressed. • Plan check response letter addressing each comment from prior review. • Prior submittal redlines. • Plans, studies and maps addressing prior review comments. • Supplementary materials requested from prior review.
<p>Mylars</p>	<p>Mylars shall be prepared, signed and stamped by the design engineer and submitted for District signature when requested by the plan checker. For projects located within an incorporated City, the mylars must also be signed by the City Engineer (or another authorized City signatory) prior to submittal to the District. Note that the District will not sign mylars until the Cooperative Agreement is executed.</p>