

GREEN INFRASTRUCTURE GRANT PROGRAM DESIGN SUBMITTAL CHECKLIST

Site Investigation and Studies

Site investigations and studies are to be completed as early as possible during design development and submitted with the 35% Design Submittal. SFPUC should be made immediately aware of study outcomes that result in significant changes to the submitted concept design (e.g., changes to soil type, BMP selection, or total DMA).

- **Site Survey:** if no site survey exists, complete a topographical survey of the project area
- **Infiltration Test:** if infiltration BMPs are proposed, perform an infiltration test using an SFPUC approved infiltration testing method [🔗]
- **Structural Feasibility Study:** if structural BMPs are proposed on an existing facility (e.g., vegetated roof), have the structural loading capacity assessed by a structural engineer to confirm feasibility

35% Design Submittal (100% DD)

The 35% design drawings define the preliminary site layout and design schemes, including key details and calculations to explain the overall stormwater management plan.

- **General:** draft notes, abbreviations, legend, location map, sheet index/key map (if necessary)
- **Existing Conditions and Demolition Plan:** site survey including all available/known utility information and demolition area delineated
- **Site Plan:** overall site plan showing existing and proposed facilities and limit of work
- **Facility Layout Plan:** existing vegetation, structures, and utilities; drainage facility locations and critical dimensions (width, length, area)
- **Grading and Drainage Plan(s):** existing site contours and drainage structures to remain, important spot elevations (FG, TC, FL, HP/LP, RIM, INVs), surface drainage routing, stormwater pipe locations and routing, drainage structures with detail references, connections to existing storm drain/combined sewer pipes
- **Site Utility Plan:** utility points of connections at buildings, alignments on site, and lateral connections to existing storm drain or combined sewer infrastructure
- **Civil Details:** preliminary details; green infrastructure components to be customized using SFPUC GI Typical Details [🔗], or equivalent
- **Landscape Plans:** site materials plan, planting areas, and draft plant schedule
- **Landscape Details:** preliminary details; green infrastructure components to be customized using SFPUC GI Typical Details [🔗]

- **Stormwater Management Plan:** stormwater management plan drawing; Calculation Summary Table showing management areas, facility sizes, and performance; preliminary details; and updated grant application BMP Performance Calculator (see SFPUC SMP examples [🔗])
- **Specifications:** table of contents or outline specifications
- **Construction Cost Estimate:** estimate of probable construction cost based on 35% design (AACE class 3) with appropriate design/estimating contingency included (recommended 10% to 30%)
- **Supporting Documentation (if applicable):** infiltration test results using an SFPUC approved infiltration testing methods [🔗] ; structural feasibility assessment; manufacturer cut sheets and relevant O&M materials

65% Design Submittal (50% CD)

The 65% design drawings address 35% comments, refine the layout and drainage plan, add detail to the grading of the facilities and project site, add irrigation plans, refine the cost estimate, and confirm demo and utility work.

- **General:** refine notes and legend/abbreviation information
- **Existing Conditions and Demolition Plan:** add detail on type of demolition, identifying removal of on-site and adjoining infrastructure including concrete, pavement, curbs, site furnishings, and utilities
- **Site Plan:** refine project layout
- **Facility Layout Plan:** refine and add detail to drainage facility dimensioning, add notes on all site improvements, dimension key setbacks to buildings, property lines, and utilities
- **Grading and Drainage Plan(s):** add all spot elevations, refined project grading including proposed contours, stormwater pipe attributes (size, length, inverts), drainage structure attributes (size, rim, inverts)
- **Site Utility Plan:** add utility pipe sizes, invert elevations, materials, and manhole attributes
- **Civil Details:** add specific details for all drainage structures, utilities, and site features
- **Landscape Plans:** refine materials plan, finalize plant schedule and develop quantities
- **Landscape Details:** add specific planting details, draft signage (if included)
- **Irrigation Plans:** points of connection, meters, backflows, pipes, valves
- **Stormwater Management Plan:** update stormwater management plan to incorporate SFPUC feedback on 35% submittal and match current design configuration; update stormwater performance calculator
- **Specifications:** draft full specifications
- **Construction Cost Estimate:** updated estimate of probable construction cost based on 65% design (AACE class 2) with appropriate design/estimating contingency included (recommended 10% to 20%)
- **Supporting Documentation (if applicable):** updated infiltration test results; updated structural assessment; include manufacturer cut sheets and relevant O&M manuals

95% Design Submittal (90% CD)

The 95% design drawings address 65% comments and provide details for all materials and structures and specificity for locating all project elements necessary to build the project.

- **General**
- **Existing Conditions and Demolition Plan**
- **Site Plan**
- **Facility Layout Plan**
- **Grading and Drainage Plan(s):** add enlarged plans as required
- **Site Utility Plan**
- **Civil Details**
- **Erosion and Sediment Control Plan:** plan view of project site, nearby storm drains and/or catch basins, footprints of green infrastructure features, existing and proposed drainage patterns, and proposed sediment and erosion control measures including those for protecting green infrastructure facilities with notes and details
- **Landscape Plans**
- **Landscape Details: final signage (if included)**
- **Irrigation Plans**
- **Stormwater Management Plan:** updated SMP with final calculations
- **Specifications:** Final full specifications
- **Construction Cost Estimate:** updated estimate of probable construction cost based on 95% design (AACE class 2) with appropriate design/estimating contingency included (recommended 10%)