

Applicability

Anyone constructing public improvements in the public right-of-way is required to prepare a detailed plan showing the existing improvements and any proposed improvements to be constructed.

If the only improvements to be constructed include sanitary/storm sewer laterals, or one driveway for a single family detached residence, or private utilities, then this information does not apply. Other permits are issued to permit this type of work.

Approval of public improvement plans requires that the applicant has secured approval of all necessary Planning Department permits.

Improvement plans prepared for the construction of public improvements, in support of private development, shall be completed at no cost to the City. All City services required for their review, approval and inspection shall be paid for by cost recovery fees collected from the applicant.

- The plans must be adequate to bid and build the improvements at the correct location and elevation
- The plans must be suitable for use by people who are not technically oriented.
- The plans must be legible, not cluttered with minor or extraneous notes/items.
- The plans must be complete, signed, sealed and ready for construction. Plans cannot be reviewed at the 30%, 65%, or 90% stages. Incomplete plans will be returned for completion, prior to any review taking place.

Permit Type Summary

Depending on the type and extent of Public Improvements proposed, and if the improvements are being constructed in support of a subdivision of land, the plans will fall into one of the following 3 categories.

Minor Improvement Plan – A minor improvement project is defined as minor construction, valued generally at less than \$50,000, that does not change the line and grade of streets or sewers and involves the installation and/or modification of the following facilities:

- Installation of Storm and Sanitary Sewer Laterals
- Driveway Construction
- Closure of Driveways
- Installation of Handicap Ramps
- Replacement of Curb and Gutter
- Installation of Sidewalk
- Relocation of no more than two (2) Storm Inlets due to new driveway construction
- Installation of no more than two (2) Sewer Manholes
- Installation of no more than two (2) Electroliers
- Installation of Street Trees

Major Improvement Plan – A major improvement project is defined as all construction above and beyond the limitations of a minor improvement permit. A major improvement plan must be designed and prepared by a registered Civil Engineer.

Tract Improvement Plan – A Tract improvement plan is used to construct public improvements in support of Tract subdivisions. Tract subdivisions are subdivisions of land, which create 5 or more lots/units. If the project creates 2 – 4 lots/units, a minor or major improvement plan shall be used for the

construction of the public improvements. A Tract improvement plan must be designed and prepared by a registered Civil Engineer.

The table below is provided as a guide to the different types of improvement plans:

Requirements	Minor Improvement Plan	Major Improvement Plan	Tract Improvement Plan
Must be prepared by Registered Civil Engineer		✓	✓
No restrictions on who can prepare plan	✓		
Originals must be submitted on Mylar		✓	✓
Originals can be submitted on bond or vellum	✓		
Approval requires execution of a Construction Agreement including Bonds		✓	✓
Approval requires posting of a Certificate of Deposit to ensure completion of improvements	✓	✓	
Approval requires proof of Insurance on file with the City's Risk Manager	✓	✓	✓
Plan and Contract Approved By PW Director		✓	✓
Plan and Permit Approved By Project Engineer	✓		

Submittal Instructions

Initial Submittal

Schedule an Appointment with Staff

An appointment is required to submit an Improvement Plan application. Generally, most projects proposing public improvements have been through the Planning Permit process, at which time a Public Works Project Engineer was assigned to the Project. The Public Works Project Engineer will be your single point of contact for all Public Works permits related to this project. If you already know the name of the PW Project Engineer, please contact him/her directly to schedule an appointment for plan submittal. If you are unsure of the PW Project Engineer assigned to your project, please contact staff at (408) 535-7802 with your Planning Permit number, and we will look up the name of the Project Engineer assigned to your project.

However, if your project did not require a Planning Permit, a Project Engineer will need to be assigned to your project. Please fax a copy of your completed **Application for Public Works Permit** form, or the Transmittal letter described below, and a map showing the project's location to (408) 292-6054. A Project Engineer will be assigned to your project and will then call you to schedule an appointment for submittal.

When submitting Improvement Plans, include the following:

- 1) **Plans Prepared In Accordance With Attachment A** – Plans should follow requirements set forth in Attachment A of this document. Plan coversheet should include "Standard Improvement Plan Notes" as listed in Attachment B of this document. See Project Engineer for number of plans to submit.

- 2) **Transmittal** – On the transmittal letter, indicate why the plan is being submitted ... such as, is it a voluntary public improvement or is it to satisfy planning permit conditions.
- 3) **Permit Application (Minor only)** – include a completed “Application For Public Works Permit” application with your submittal. Provide the name, address, and phone number of the permittee and the contractor who will be doing the proposed construction work. Be sure to include the State Contractor’s and City Business License Numbers.
- 4) **Engineer’s Estimate** – include an engineer’s estimate showing unit prices, quantity and extensions for all construction items.
- 5) **Plan Review Fee** – include a plan review fee of either \$500 or 8% of your initial estimate for off-site improvement costs, whichever is greater.
- 6) **Additional Plans** – If the project includes any of the following, additional plans must be prepared and submitted. See Project Engineer for number of plans to submit.
 - *Subdivision maps (Parcel or Tract)* – if the improvement plan is in support of a subdivision of land, a map must be prepared and submitted by a Licensed Land Surveyor or Registered Civil Engineer qualified to prepare maps.
 - *Landscaping in the public right-of-way* – plan prepared by a licensed Landscape Architect
 - *Street Light construction or modification* – the applicant can either hire a private consultant to prepare a streetlight design or pay the City a fee to design the streetlighting system.
 - *Traffic Signal construction or modification* – the applicant can either hire a private consultant to prepare the Traffic Signal plans or pay the City a fee to prepare the plans.
 - *Private Streets* – if the project proposes construction of a residential Common Interest Development with a Homeowner’s Association, the private streets will require a “Private Street” permit. See the “Private Street” handout for more information.

Upon receipt, City staff will review the plans for completeness.

- If the initial submittal is complete, staff will review the plans and return comments to the applicant or the applicant’s representative. Any corrections or clarifications that are required shall be made. The plans and City checkprints will be resubmitted to the City for further review. Once the plans are ready for approval, the applicant is ready to make the final submittal.
- If the initial submittal is incomplete (incomplete design, missing plans, etc) staff will return the plans to the applicant for completion prior to any review taking place. This can potentially delay the issuance of a Public Works Clearance, which is required to get a building permit.

Final Submittal

Upon final submittal, the applicant shall satisfy all of the following conditions prior to project approval:

- 1) **Original Improvement Plans** – submit the original plans together with all City checkprints. The plans shall be signed and wet stamped by a Registered Civil Engineer (Majors and Tracts).
- 2) **Additional Plans / Map** – Any other plans (Landscaping, Private Streets, Traffic Signal, etc.) and/or a Parcel/Tract Map necessary for this project must also be complete and ready for approval. Maps require supporting documentation including, but not limited to: Current Title Report; Subdivision Guarantee; and County Tax Letter.

- 3) **Construction Agreement or Permit** – Execute and notarize the Construction Agreement and bonds, or permit prepared by Public Works staff. Please include the corporate resolution of signature authority if the person signing the agreement is signing on behalf of a partnership, corporation, etc.
- 4) **Surety** – All projects require some form of surety. Minor permits require a Certificate of Deposit (CD) for the total value of the proposed improvements. Major permits require bonds for the total value of the proposed improvements, plus a CD as a completion deposit. Tracts require bonds for the total value of the proposed improvements.
- 5) **Certificate of Insurance** – Submit a certificate of insurance to the office of the Risk Manager which meets City requirements. This insurance must be maintained for the duration of the project. See form titled “Insurance Requirements”.
- 6) **Fees** – All fees, as shown in the permit or Construction Agreement, are to be paid prior to approval.

Other Requirements

Contract/Permit Extension

The term of a valid Contract/Permit can be extended at the discretion of the PW Development Services Project Engineer. The required fee is listed in the “Development Permit Fees” fee schedule.

APPROVED PLAN REVISIONS AND FINAL ACCEPTANCE

Revisions to an Approved Plan

An improvement plan becomes a public record when approved by the City. Prior to approval it is the property of the engineer/architect/etc. Once a plan becomes public record, any changes require City approval and are to be done on the original drawing.

Revisions to plans may be required for various reasons. The design change should be based on recommendations made by the developer's engineer and must be approved by the City prior to revising the original plans. All changes to the original plans must be made by the applicant's engineer and initialed by the City for approval.

The developer's engineer (on behalf of the applicant) will either discuss the change with the Public Works Project Engineer and/or submit a checkprint showing the proposed change. If the proposed change is acceptable, the original drawing will be released from Public Works, Development Services (City Hall, 3rd Floor) to the engineer.

When making changes to the original, cross out or shade the old so that it is still legible and add the new, together with a revision number inside a diamond symbol. Return the changed plan to the Project Engineer in Public Works. Once the Project Engineer has approved the changes, the revised sheet(s) can be duplicated. The engineer should provide the City with copies of the revised sheet(s) and return the original plan, once he has made copies for his client's use.

Please Note: A plan revision fee will be due with each revision to the approved plan. The fee will be due prior to the approval of the revision. Submit plan revision fee according to the current "Public Works Permit Fees" fee schedule.

Final Acceptance

When the project inspector and the developer agree that all improvements have been completed and the original plans have been revised to reflect any field changes, the developer is required to request a final inspection. If any deficiencies are identified during the final inspection, a "punch list" is prepared. This list delineates any possible remaining work to be completed. Once the punch list is complete, the City files a final Notice of Completion and Acceptance.

Once the Notice of Completion and Acceptance is signed and recorded at the County's Recorders Office, the City will authorize release of the surety used for the project (bonds, CD, or cashier's check). If a Defective Materials and Workmanship bond was required, it will be held for one year to guarantee repair of any defective work within the public right-of-way.

REQUIREMENTS FOR PREPARATION OF IMPROVEMENT PLANS

Improvement plans are to be prepared in conformance with City Standard details. Public Works has prepared a standard improvement plan sheet for private development projects. This plan sheet can be obtained in CAD format from Development Services (City Hall, 3rd Floor) or a preprinted mylar for hand drafting can be purchased from San Jose Blue Print.

Plans should....

- 1) Be prepared on 24" x 36" Photographic Mylar.
- 2) Include a location map and align the north arrow on both the plan and location map to North and include the text word "North" or "N" on the north arrow.
- 3) Show all legend items as represented on the standard plan sheet for private development projects, as mentioned above.
- 4) Include within the title block the scale, engineer's name, address, phone number and registration expiration date.
- 5) Not show any on-site items on the plan unless it is a public facility maintained by the City. In rare cases, it may be necessary to show portions of the on-site sanitary or storm drainage system which can be indicated by faint dashes or other means to clearly distinguish on-site private improvements from the public improvements.
- 6) Include a surface improvement sheet, preferably on one sheet where practical
 - Dimensions for street and right-of-way widths
 - Lot numbers
 - Street names
 - North arrow
 - Reference to existing tract(s) along boundary of tracts
 - Scale: 1"=100' min. (1"=60' preferred); depends on size of project
 - Existing utility poles and other utility structures
 - Existing contours and spot elevations (lightly screened for hillside projects and perimeter contours for flat projects)
 - Electroliers (Street Lights)
 - Limit of pavement conforms, existing edge of pavement
 - Concrete work (curb, gutter, sidewalk, handicap ramps, driveways, etc)
 - Curb grades at curb returns and all changes of grade
 - Drainage Inlets
 - Direction of flow in gutter with longitudinal grade
 - Fire Hydrants
 - Monuments
 - Public Easements which contain surface improvements
- 7) Show existing conditions affecting the project site such as:
 - Adjacent public improvements
 - Electroliers/Street lights within 200 feet of project
 - Street trees

REQUIREMENTS FOR PREPARATION OF IMPROVEMENT PLANS

- Dimensions from property line to curb and from curb to centerline
 - All items listed under previous section (Section 6 – Surface Improvement Sheet)
- 8) Show Plan/Profile sheets for any sewer extensions. On simple projects, it may be added to the first sheet. Otherwise, prepare plan/profile sheets similar in layout to sheet 1 at a scale of 1" = 40' horizontal and 1" = 2 feet or 4 feet vertical. Draw the profile directly below the plan view. The plan and profile views should contain the following information:

Plan View	Profile View
<ul style="list-style-type: none"> • Property line • Face of curb, sidewalk, driveways • Centerline of street • Dimensions for curb to centerline and curb to property line • Centerline of sewer(s) • Horizontal curve data at face of curb and property line • Street light location and circuitry • Manholes • Laterals • Inlets • Existing utilities • Street trees • Monuments • TC grades to nearest 0.01' at all BC's, EC's, grade breaks, high points, low points, BVC's and EVC's 	<ul style="list-style-type: none"> • Proposed surface at top of curb or centerline • Vertical curve data • Existing surface (only if there is a significant change, 2 feet of cut or any fill, or if it is critical to the design) • Manholes, including inverts and any special circumstances such as "drops" • Flowline for storm and sanitary pipes • Entire pipe for waterlines in San Jose Municipal Water service area • Grades and slopes of surface improvements and pipes • Critical or conflict areas

- 9) Large-scale developments shall include a plan sheet showing the hydraulic calculations and drainage areas used for storm sewer main design.
- 10) Include all "Standard Notes" listed in Attachment B of this document.

STANDARD IMPROVEMENT PLAN NOTES

NOTE: This drawing is approved subject to

1. Approval of these plans does not release the owner of the responsibility for the correction of mistakes, errors, or omissions contained therein. If during the course of construction of the improvements, public interest requires a modification of or a departure from the city specifications or these improvement plans, the City Engineer shall have the authority to require such modification or departure and to specify the manner in which the same is to be made.
2. All work shall be done in accordance with the 1992 Standard Specifications for Public Works construction and the 1992 Standard Details and subsequent addenda for Public Works construction as adopted by the City Council. A digital copy of the Specifications and Details is available at: http://www.sanjoseca.gov/publicWorks/Details_Specs/
3. Contractor shall notify the Project Inspector at least 48 hours prior to starting work.
4. All Contractors will be responsible for the verification of locations of all existing utilities in the field. All Contractors shall call U.S.A. (CA. 1-800-227-2600) 48 hours before digging, and obtain an identification number (Section 4210.1 of the government code).
5. Compact subgrade for sidewalk and similar structures to 90% minimum relative density in lieu of the 95% required in section 21-1.05 of the Standard Specifications. Compact subgrade for curb, gutter and driveways to 95%. Relative compaction and moisture content of all native materials shall be determined by ASTM D2922 / D3017 and D1557.
6. All asphalt concrete mix shall be type 'A' – 3/4" coarse for base, 3/4" medium for surface and 1/2" medium for conforms. AC compaction shall be determined by ASTM D2950 or by testing cores selected per ASTM D979 / D3665 and tested per CAL 308. AC maximum density and air void content shall be determined on CAL 304 specimens tested per ASTM D1188. Air void content of all AC shall be 3-6% per ASTM D3203. Prior to constructing AC overlay, fill all cracks greater than 1/4" wide with crackfiller and remove and replace failed areas. All AC surfaces to be 98% relative compaction (U.O.N.).
7. Asphalt Coating:
 - A. Apply Tack Coat (aka paint binder) to surfaces designated in, and in accordance with, section 39-4.02 of the 1988 Caltrans Standard Specifications. The asphaltic emulsion used shall be SS-1H.
 - B. Prime coat all aggregate base surfaces prior to placing A.C. paving unless the total thickness of A.C. paving is 0.5 foot or greater. Prime coat all aggregate base surfaces that will be subjected to traffic prior to paving.
 - C. Construct prime coat in accordance with section 39-4.02 of the 1992 Caltrans Standard Specification, with the exception that SS-1H asphaltic emulsion shall be used in lieu of liquid asphalt. Prime Coat not required for full depth AC alternate.
8. All irrigation lines or other privately owned underground lines that require relocation as determined by the City Engineer shall be at the sole expense of the developer.

STANDARD IMPROVEMENT PLAN NOTES

9. Temporary street signs to be installed at all intersections before units are occupied.
10. As a water conservation measure, use of fire hydrant water or any other source of potable water for construction purposes is prohibited. Reclaimed water is available, on a cost recovery basis, at the City Water Pollution Control Plant located at 700 Los Esteros Road. For more information, please call Eric Hansen at (408) 363-4714.
11. Hazardous Materials
Upon discovery of hazardous material the contractor shall promptly notify the City in writing of any:
 - A. Material that the contractor believes may be material that is hazardous waste, as defined in Section 25117 of the Health and Safety code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law.
 - B. Subsurface or latent physical conditions at the site differing from those indicated.
 - C. Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the contract. The developer's agent shall promptly investigate the suspected condition and, as necessary, initiate further analysis of the problem. If remediation is required, a remediation plan will be submitted to the Director of Public Works for review by Environmental Management and, upon approval by the Director, be implemented at developer's sole expense.
12. In the event that Human Remains and/or Cultural Materials are found, all project-related construction should cease within a 100-foot radius. The contractor shall, pursuant to section 7050.5 of the Health and Safety code, and section 5097.94 of the Public Resources Code of the State of California, notify the Santa Clara County Coroner immediately.
13. Contractor shall provide video inspection of all storm and sanitary sewer mains. Video inspection of all mains shall be performed after all testing has been completed.
14. Contractor shall remove all U.S.A markings as soon as they are no longer needed. Only chalk paint shall be used in the Redevelopment Area (bounded by Julian Street and Highway 280, and between Highway 87 and Fourth Street). Removal of paint shall be by high water pressure method only.
15. Contractor shall stencil all storm drain inlets and catch basins with "NO DUMPING - FLOWS TO NEIGHBORHOOD CREEK" stencil. The Contractor shall locate the stencil on the face of the curb, adjacent to the catch basin hood. The left side is preferred. The stencils may be obtained, at no charge, through the Environmental Service Department (Christine Mohanna) by calling (408) 945-3000. Colors to be used are: Background-Bauer white, lettering-Bauer blue (Handicap). Paints to be used are: Pervo Plastic White Paint and Aervoe Blue Traffic Line Paint.

STANDARD IMPROVEMENT PLAN NOTES

16. Installation or removal of Street Trees requires a permit from the Department of Transportation. The City Arborist will specify species. Contact the City Arborist at (408) 277-4373 for a Tree Permit.
17. Sanitary and Storm Pipes
 - A. All VCP pipe applications 10" in diameter and greater shall require resilient compression joints (bell & spigot) as per section 1302-4.2.2. of the City Standard Specifications. Compression couplings (band seals) are allowed for VCP pipe applications of up to 8" in diameter as approved by the Director of Public Works.
 - B. All Storm Drain laterals to be 12" RCP unless noted otherwise.
 - C. All Sanitary sewer laterals to be 4" VCP unless noted otherwise.
 - D. All Sanitary sewer laterals to have a cleanout installed on-site within 5 feet of property line.
 - E. Bolt-down manhole covers shall be used when manholes are not in the street (i.e. when located in landscaped areas, sidewalks, on-site easements, etc.).
18. If Contractor damages existing asphalt section during the removal of existing curb and gutter or at the discretion of the Project Inspector, the asphalt concrete shall be repaired by sawcutting 12" minimum from the lip of gutter and installing a 12" minimum 'Deep-Lift' AC section.
19. City Survey Monuments shall be preserved. In the event that a City Monument is lost to construction activities, the Contractor shall, at the Contractor's sole expense, be responsible for its re-establishment and the filing of a Corner Record with the County's Surveyor's Office. A Record of Survey shall be filed for all new City Monuments set in conjunction with this improvement plan, unless a Final or Parcel Map requiring said monuments is recorded as part of this project.
20. Pavement Marking and Striping layout and Traffic Signal Loop layout services shall be provided by the Developer's Engineer, Surveyor, or other qualified personnel.
21. Bench Mark
22. Plan References (i.e. Planning permit number, Record Drawings, etc.)

STANDARD IMPROVEMENT PLAN NOTES

ELECTRICAL NOTES – STREET LIGHTING

1. Materials Submittal:

A list of the materials proposed by the Contractor to be used on this project for street lighting including, but not limited to luminaires, poles, conduit, conductors, pull boxes, and service equipment shall be submitted to the City's Project Inspector for review prior to the start of work. This list shall include the manufacturer's specifications for all applicable products.

2. Services:

A. Install a 240 v service next to each PG&E secondary box used for streetlight service, unless specified otherwise.

B. All electric service points shown on these plans were determined by PG&E and are tentative and shown for reference only. The actual service point(s) must be confirmed with P.G.&E. prior to construction of electrical work. All additional costs incurred for work modifications required due to final service point locations/adjustments shall be born by the permittee. If the final service point location(s) differ from the tentative location(s) shown on the plans, the permittee shall revise the plans and notify the Public Works Inspector of any changes and shall obtain city approval of changes prior to installation of electrical work.

3. Salvage of Equipment:

Street lighting service cabinets to be salvaged shall be delivered to the City of San Jose Electrical Maintenance Shop at 1404 Mabury Road. Other equipment to be salvaged shall be delivered to the City of San Jose Central Service Yard at 1661 Senter Road. Contact the Department of Transportation at (408) 277-5515, 48 hours in advance to arrange for acceptance of salvaged equipment.

4. Overhead Utility Conflicts:

Permittee is responsible for providing clearance for electroliers and traffic signal standards from overhead utility lines. Clearance must be a minimum of 10 feet from high voltage lines, 3 feet from secondary lines and 1 foot from communication lines. No electrolier or traffic signal standard shall be installed until proper clearance is obtained. All expenses associated with providing these clearances shall be borne by the developer.

5. All electrolier locations shall be staked in the field by the permittee.

6. All new conduit shall be 1-1/2" PVC with 2 #8 streetlight and 1 #8 ground conductors unless noted otherwise.

7. All new electroliers shall be type 10B pole with C-8 mast arm and luminaire as indicated unless noted otherwise.

8. All new pullboxes shall be #3-1/2 unless noted otherwise.

9. A continuous #10 AWG green grounding conductor shall be installed for each new luminaire on new or re-wired electroliers. The grounding conductor shall be terminated in the luminaire housing and connected to the grounding wire in the base of the pole.