

Public Works Department
Land Development Section
500 Castro Street
Mountain View, CA 94041
650-903-6311
public.works@mountainview.gov

IMPROVEMENT PLANS PLAN REVIEW CHECKLIST

I. Improvement Plan Checklist

A. <u>Purpose</u>

The following Improvement Plan Checklist has been established by the City of Mountain View to aid the Applicant (APPLICANT) and their design engineers in developing complete and consistent improvement plans. Using this checklist will expedite the application's review process.

B. <u>Existing Utilities</u>

- Public Works will furnish the APPLICANT with any available as-builts of existing water, sanitary sewer, storm drain, recycled water, and other utilities.
- 2. Any documentation provided by the City (with exception to benchmarking information and Standard Provisions) is based on information furnished by others and the City does not guarantee the accuracy of the information.
- 3. The location and elevation of existing utilities and adjacent subsurface features shall be verified in the field by the APPLICANT prior to approval of improvement plans and shown on the plans.
- 4. The APPLICANT shall submit a separate excavation permit application specific to the necessary pothole/utility verification work. Allow up to three weeks for the permit to be issued.

II. Requirements on All Improvement Plan Sheets:

A. General Criteria

- 1. Use 24" x 36" sheet size with a two-inch margin on the left side and a one-inch margin on the top, bottom, and right sides
- 2. The minimum scale shall be 1'' = 20' for the horizontal and 1'' = 4' for the vertical
- 3. Include the following information on each sheet:
 - Engineer of Record's name, professional license stamp (including number and expiration date) and signature on final set of all plan sheets
 - b. Title Block Sheet Name, Address, Tract Number, and Public Works Permit Number
 - c. North arrow at the top right corner of sheet (north pointing towards the top of the page)
 - d. Scale Bar next to North Arrow
 - e. Key Map
 - PIN Number in bold font as close as possible to the lower right-hand corner (obtained from Public Works after the first plan check)
 - g. Sheet page and number (use "C1.0, C1.0, C1.1, C2.0, C3.0, etc.")
 - h. Sheets pages numbered consecutively Sheet No. _ of _ sheets
 - i. Revisions Table and Date
 - j. Legend
 - k. As-built Signature Block
- 4. All referenced details for proposed improvements shall be included in the plan set on a separate sheet with appropriate detail numbers

B. Plan Views

The following information shall be included:

- 1. Street Names
- 2. Addresses
- 3. Soil Boring locations and Control Line Coordinates
- 4. City Monuments and Benchmarks
- 5. For all curves, include curve information in table format showing radius, delta, length, beginning of curve (BC) station/offset, and end of curve (EC) station/offset
- 6. Horizontal curves and sight distances designed per California Department of Transportation (Caltrans) Highway Design Manual (HDM)

- 7. Roadway and street width dimensions, including dimension from street centerline to property line
- 8. Top of curb, rim elevations at all drain structures with invert and flow line elevations. Invert and flow line elevations may be shown on the profile view
- 9. Lot lines, parcel lines, lot numbers, and lot letters. If applicable, they are shown consistent with the associated map
- 10. All easements with dimensions
- 11. Location of underground pipes and utilities for laterals and main lines (i.e. sanitary sewer, gas, water, etc.)
- 12. Surface and Overhead utilities including, but not limited to, fire hydrants, meters, valves, meters, vaults, etc.
- 13. Pedestrian Paths with grades
- 14. Americans with Disabilities Act (ADA) ramps at returns with details. Center line of ramp at flowline with station and offset shown
- 15. Existing and proposed signage and striping
- 16. Limits of Work

C. Profile Views and Cross Sections

- 1. Profile Views minimum scale of 1'' = 20' for the horizontal and 1'' = 4' for the vertical showing both existing and proposed grades
- 2. For new streets, cross sections shall be shown from public right-of-way line to public right-of-way line
- 3. Cross sections scale of 1'' = 10' and provided at the following locations:
 - At all half stations at 50-foot intervals (closer intervals may be required by Public Works). Cross section slopes shown.
 - b. At the Beginning and End of the Improvements
 - c. At existing driveways
 - d. At conform sections
 - e. At any other locations necessary for proper design
- 4. If curb and gutter is being replaced then the existing flow line and the proposed flowline and top of curb shall be shown
- 5. Cross sections at driveways shall extend beyond the public right-of-way as far as necessary to design the driveway conforms
- Cross section data shall be obtained from field surveys and not from aerial photogrammetry

- 7. Pavement Design Chart shown
- 8. The Design Traffic Index (TI) and R-values shall be placed directly below the typical section
- 9. Sidewalk, curb and gutter shown with elevations and referenced to details included in the plans
- 10. Right-of-Way and street width dimensions shown
- 11. New streets shall have a 2% cross slope. Improvement work shall have a minimum 1% and maximum 4% cross slope between gutter lip and crown of street
- 12. Super elevation grades shown as required by the Caltrans HDM
- 13. Pedestrian and/or bike paths shown
- 14. Location of underground pipes, utilities, and appurtenances for laterals and main lines
- 15. Utilities clearly labeled with stationing, size, material, length, slope, rim elevations, and invert elevations

D. Stationing

- 1. Centerline stationing labeled at 50-foot intervals and bearings identified
- 2. All improvements shall be referenced to the centerline stationing or a construction line referenced back to a centerline. Stations shall be shown for the following:
 - a. Beginning and end of public improvements
 - b. Limits of conform paving
 - c. Centerline of intersections
 - d. Curb returns
 - e. BC and EC of horizontal curves
 - f. Beginning of vertical curve (BVC), point of intersection (PI) and end of vertical curve (EVC)
 - g. Grade breaks
 - h. Signs
 - i. Manholes, Clean-outs and Inlets
 - i. Sewer Laterals
 - k. Fire Hydrants
 - 1. Water Valves, Blow-offs, Air Release, and Services
 - m. Tees and Crosses
 - n. Electroliers and Junction Boxes

- o. Driveways
- p. Traffic Signals and Controllers
- q. Street Trees
- r. Beginning and End of Bus Pads

III. General Sheet Order

A. Civil Plans

- 1. Title Sheet
- 2. General Notes
- 3. Key Map
- 4. Existing Conditions
- 5. Demolition Plan
- 6. Layout Plan, Street Cross Sections
- 7. Grading and Drainage Plan
- 8. Composite Utility Plan with Profile
- 9. Private Street Plan and Profile
- 10. City Construction Details only include details applicable to the project
- 11. Construction Details
- 12. Construction Staging and Phasing Plan
- 13. Stormwater Management Plan
- 14. Erosion Control Plan
- 15. County Best Management Practices Sheet
- 16. Traffic Control Notes
- 17. Traffic Control Plan

B. <u>Landscape Plans</u>

- 1. Existing Trees Plan
- 2. Planting Plans
- 3. Plant / Trees Photos
- 4. Tree Growth Projections
- 5. Hardscape and Lighting
- 6. Landscape Details
- 7. Irrigation Plans
- 8. Irrigation Details
- 9. Hydrozone and Water Use Calculations

C. <u>Joint Trench Plans</u>

- 1. Joint Trench Cover Sheet
- 2. Joint Trench General Notes
- 3. Joint Trench Composite Plans
- 4. Joint Trench Details
- 5. Off-Site Street Lighting Title Sheet provide off-site lighting separately if there are no joint trench plans
- 6. Off-Site Street Lighting Plans
- 7. Off-Site Street Lighting Details
- 8. Photometric and Power Plan

IV. Title Sheet Requirements

- A. The following information shall be included:
 - 1. Title of project in large font in the upper middle portion of the street showing the name of the project, tract number (if applicable), and project address
 - 2. Abbreviations Legend identifying abbreviations used. Abbreviations shall be consistent with the City Standard Provisions and shall be listed in alphabetical order
 - 3. Table listing City details referenced in the plans
 - 4. Maintenance and Inspection Table listing items to be inspected and maintained, and the responsible parties for the inspection and/or maintenance
 - 5. Vicinity Map with North Arrow (north pointing to the top of the page)
 - 6. Benchmark reference
 - 7. Basis of Bearings reference
 - 8. Haul Route Note
 - 9. Fire Protection Note
 - 10. Recology Mountain View Note
 - 11. Electric, Telephone, Gas, and CATV Installation Note
 - 12. Occupancy Release Note
 - 13. Sheet Index including Civil, Landscape and Joint Trench Plans identifying sheet name, sheet number and page number

- 14. Blocks identifying the Owner, Civil APPLICANT, Landscape Architect, Developer/Applicant, Architect, and Joint Trench Designer. Include the contact name, address, and telephone number
- 15. Design Revision Blocks
- 16. Signature Blocks at the bottom of the sheet with the following certifications and approvals:
 - a. Grading Certificate
 - b. As-built Plans
 - c. Engineer's Statement
 - d. Public Works

(Rev. 06-02-16)