



PUBLIC WORKS DEPARTMENT

MEMORANDUM

DATE: December 28, 2018
TO: Public Works Development Division staff and consultants
CC: Andy Russell, City Engineer
FROM: Laurie Sucgang, Senior Civil Engineer
SUBJECT: Improvement Plan General Notes

Use only those applicable notes and/or add/modify as necessary.

All lettering shall be 1/8" minimum size of appropriate weight to assure legibility, even after reduction or other means of reproduction of drawings.

General Notes:

1. Basis of elevation datum (if City/County benchmark, give number, location, and elevation).
2. "Review of plans does not relieve the owner/developer of responsibility for correction of mistakes, errors or omissions. Final approval of construction or installation subject to inspection test and acceptance." (INCLUDE IN CITY SIGNATURE BLOCK)
3. Prior to the start of construction, the developer and/or contractor shall contact the City's Public Works Department at (925) 833-6630 and request a Preconstruction Conference.
4. These plans show existing features including, but not limited to trees, utilities, and structures that may be affected by the construction or placement of the proposed engineered improvements. The contractor shall immediately notify the engineer if there are any existing features, whether shown or not shown on these plans that could in any way be in potential conflict with the design of these plans. All work within the vicinity of a potential conflict shall cease until an adequate and appropriate solution is determined by the engineer and approved by the Public Works Department.
5. Should it appear that the work to be done, or any matter relative thereto, is not sufficiently detailed or explained on these plans, the contractor shall contact _____ (name of design engineer) at _____ (phone number) for such further explanations as may be necessary.
6. All revisions to this plan must be reviewed by the Public Works Department prior to construction and shall be accurately shown on revised plans signed by the City Engineer.



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7. A grading permit from the Public Works Department will be required for all grading and/or work on-site.
8. All grading and public improvements shall be constructed in accordance with the provisions of the current city ordinances and standard plans. The grading and improvements are subject to the inspection and approval of the Public Works Department. Inspection shall be scheduled with the Public Works Department at (925) 833-6630 at least two working days prior to the start of construction.
9. CALL BEFORE YOU DIG! Notify Underground Service Alert (USA) at (800) 227-2600 at least two working days prior to any excavation. The USA authorization number shall be kept at the jobsite.
10. The Developer/contractor is required by state law to actively research work area prior to construction, reference monuments and replace those damaged or removed during construction.
11. All grading to be accomplished per the recommendations in the soils report "_____"
prepared by _____ dated _____.
12. The soils engineer shall inspect and test the excavation, placement of fills and backfilling and compaction of trenches. The soils engineer shall submit soils reports as required and will determine the suitability of any fill material. Upon completion of grading operation the soils engineer shall state in a report to the City of Dublin that inspections and tests were made by him/her or under his/her supervision and that in his/her opinion all embankments and excavation were constructed in accordance with the approved grading plans and approved revisions thereto and all embankments and excavations are acceptable for their intended use.
13. Erosion and sediment control facilities shall be installed prior to October 1 and shall be maintained daily until April 30. These facilities shall control and contain erosion-caused silt deposits and provide for the safe discharge of silt-free storm waters into existing storm drain facilities. Erosion and sediment control supplies must be kept on-site during the dry season and employed, as necessary prior to and during rain events. Design of these facilities must be approved/updated each year prior to September 30 and shall be signed by the City Engineer, or his designee. [Consider the note for Erosion Control Plan Set.]
14. Seasonally appropriate best management practices for the following six (6) site management categories must be implemented year-round: (1) Erosion control, (2) Run-on and run-off control, (3) Sediment control, (4) Good site management and housekeeping, (5) Non-stormwater management, and (6) Active treatment systems, as necessary. [Consider the note for Erosion Control Plan Set.]



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15. If, during construction, archaeological remains are encountered, construction in the vicinity shall be halted, an archaeologist consulted, and the City Planning Department notified. If, in the opinion of the archaeologist, the remains are significant, measures, as may be required by the Planning Director, shall be taken to protect them.
16. The contractor shall design, construct and maintain all safety devices, including shoring, and shall be responsible for conformance to all Local, State and Federal safety and health standards, laws and regulations.
17. A California Division of Occupational Safety and Health (CAL OSHA) permit shall be obtained for trenches five feet or greater in depth. A copy of this permit shall be supplied to the Public Works Department. An additional copy shall be kept at the jobsite at all times.
18. All new utility distribution services shall be placed underground.
19. Prior to placing curb, gutter, sidewalk, asphalt concrete, subbase, or base material, all underground facilities within the right-of-way shall be installed, backfill completed, and the Public Works Department notified by each of the utility companies having facilities within the work area, that the utility installation has satisfactorily passed acceptance tests.
20. All manholes or inlets over 5 feet in depth shall be provided with polypropylene steps. The steps shall be integrally cast into the walls of the manhole or inlet whether precast or field cast. The steps shall be installed in accordance with Caltrans specifications and City of Dublin/Alameda County Standard Plans, and CAL OSHA requirements, if applicable.
21. When widening the pavement on an existing road, the existing pavement shall be sawcut to a neat line and removed back to an existing adequate structural section, or to the original road section (1 foot minimum). An exploratory trench, or potholing, may be required to determine the limits of pavement removal.
22. All retaining walls that will be constructed with the grading shown on these grading plans will require a grading permit from the Public Works Department. Any future retaining walls over three feet in height (two-feet with surcharge) will require a building permit and must be shown on the plot plan.
23. All public storm drain lines shall be Class III RCP unless otherwise specified on the plans.
24. No trees shall be removed unless they are shown and noted to be removed on the improvement plans. All trees conflicting with grading, utilities, or other improvements, or overhanging the



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sidewalk or pavement so as to form a nuisance or hazard, shall be trimmed and properly graded and sealed. The drip line of trees to be saved will be fenced, and no grading shall take place within this fenced area.

25. Existing public improvements that are damaged by the project construction shall be repaired or replaced. Existing damaged public improvements within the project limits shall be repaired or replaced even if the damage occurred prior to the start of construction.
26. All traffic striping and markings shall be thermoplastic. (On Traffic Signing & Striping Plan)
27. All traffic striping shall be cat-tracked prior to final installation. Final installation of striping will be allowed only after approval of the striping layout by the Public Works Department. (On Traffic Signing & Striping Plan)
28. Order of work for road widening and median island construction in which traffic striping will be relocated:
 - a. Rough grading
 - b. Storm drain and drainage structures
 - c. Utility installation
 - d. Curb, gutter, and sidewalk
 - e. Pavement construction
 - f. Remove conflicting striping, markings, pavement markers, and signs, and install interim striping
 - g. Install final striping and markings
 - h. Install final signing (at interim locations if necessary)
 - i. Construct median curb
 - j. Complete final striping, markings, pavement markers, and sign installation
29. The typical section of the following listed streets shall be continued through the intersection:
(List of street names)
30. The thickness of subbase, base, and surfacing shall be based on traffic index and soils test for "R" value.
31. A storm water pollution prevention plan (SWPPP) for _____(project name, tract ____)
_____ (residential, commercial) development, has been prepared for
_____ (developer name) by _____ (engineer name) dated _____. The
SWPPP contains a copy of the "Notice of Intent" filed with the State Water Quality Control Board.
The general contractor is responsible for keeping a copy of the SWPPP onsite at all times and



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implementing its provisions. The contractor is responsible for ensuring all subcontractors and suppliers are aware of and implement the measures in the SWPPP.

32. An encroachment permit will be required for any construction activity within a public street right of way that has been accepted by the City.
33. A traffic control plan, prepared by a registered civil engineer in accordance with the current California MUTCD, shall be submitted for review and approval by the City, a minimum of 10 days prior to commencement of any construction activity that impacts traffic on public streets (vehicular, bicycle, or pedestrian). A separate construction haul route plan shall be submitted for review and approval by the City, a minimum of 10 days prior to commencement of any construction activity that requires hauling of any construction materials.

Storm Drain Video Inspection Requirements:

1. Prior to final lift of roadway paving, the storm drain system, including the main line, laterals and interiors of storm structures in all public and private right of way and storm drain easements, shall be flushed and visually inspected by means of closed-circuit television (CCTV). Any necessary clean out of the system shall be completed, defects shall be repaired and the system shall be televised again to confirm satisfactory repair work prior to acceptance. Note that subdrain lines in stormwater treatment facilities and measures located in the public right of way must be televised to demonstrate the subdrain is clear of sediment and debris prior to the City's acceptance of the stormwater treatment improvements.
2. Video inspection will be done one section (structure to structure) at a time. The camera will pan the interiors of all structures and when in the pipe, will stop at each joint to rotate 360 degrees to pan the entire joint.
3. The camera shall be specifically designed and constructed for such inspection. Lighting for the camera shall be suitable to allow a clear color picture of the entire periphery of the pipe. The camera shall be operative in 100% humidity conditions without causing the camera to fog. The camera, television monitor, and other components of the video system shall be capable of producing picture quality to the satisfaction of the Public Works Department.
4. The Public Works Department shall be notified 48 hours prior to televising and must be onsite to confirm flow rate prior to televising. The camera shall be moved through the line in a downstream direction at a moderate rate, stopping when necessary to permit proper documentation of the storm drain condition. In no case will the television camera be pulled at a speed greater than 30 feet per minute. Manual winches, power winches, TV cable, and powered rewinds or other devices



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that do not obstruct the camera view or interfere with proper documentation of the storm drain conditions shall be used to move the camera through the line.

5. The importance of accurate distance measurements is emphasized. Measurement for location of defects shall be above ground by means of a meter device. Marking on the cable, or the line, which would require interpolation for depth of insertion pit, will not be allowed. Accuracy of the distance meter shall be checked by use of a walking meter, roll-a-tape, or other suitable device and the accuracy shall be satisfactory to the Public Works Department.
6. Documentation of the television results shall be as follows:
The purpose of televising shall be to supply a visual and audio record of problem areas of the lines that may be replayed.
Recording playback shall be at the same speed that it was recorded.
The format shall be DVD.
The accompanying audio shall provide a description of what is encountered such as joints, problem areas, and broken pipe.
The DVD shall have displayed the number of feet from the starting structure for each segment.
7. Sections of pipe from structure to structure shall be audibly and visually identified in the video using the same nomenclature as on the improvement plans (e.g. "SDMH #2 to SDMH #3" or "STA 10+55"). Each DVD must be labeled with the following information: Date, Project #, the Locations, and Types of Structures shown on the DVD.
8. Title to the DVD shall be with the City. The contractor shall submit a copy of the DVD for review by the Public Works Department during the project. The contractor shall also provide a written summary of the DVD with dimensions and information, specifically identifying problem areas and broken pipe.

Stormwater Management Plan Set Notes:

1. Prior to delivery of biotreatment soil, the contractor shall provide required documentation (available at www.ci.dublin.ca.us/1656/Stormwater-Development-Submittal-Require) to the Public Works Inspector demonstrating that the biotreatment soil complies with specifications included in the most recent version of the Alameda County Clean Water Program's C.3 Stormwater Technical Manual. Receipts or delivery tickets for the biotreatment soil and Class II Perm must be retained for review by the Public Works Inspector.
2. The required minimum stormwater biotreatment facility surface area is that area that achieves the required ponding depth and is underlain by 18 inches of biotreatment soil.



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3. All site grading and drainage conveyance must cause runoff from drainage management areas (DMA) to drain to designated receiving facility (i.e. grade breaks must conform to DMA delineations, curb cuts must effectively direct flows into facilities, etc.).
4. Contractor must maintain record documents of construction changes ("as-built drawings") for any facilities and related design features and must provide said documentation to the Public Works Department upon completion of construction.
5. The project civil engineer or landscape architect is responsible for ensuring that the facilities are constructed in accordance with approved plans. Prior to building permit final inspection or certificate of occupancy or acceptance of improvements, the Public Works Inspector shall require the project civil engineer or landscape architect to submit a statement certifying that the facilities have been installed properly and in accordance with the approved stormwater management plan or any revisions thereof.
6. Any asymmetrical stormwater treatment areas shall be staked and surveyed prior to construction of these stormwater treatment areas.
7. Install storm drain medallions or inlet markers that read "No Dumping – Drains to Creek" on all public and private storm drain inlets in accordance with City standard detail CD-704. The medallions may be purchased from the Public Works Department located at 100 Civic Plaza, Dublin, CA.
8. Prior to the City granting final building permit inspection or certificate of occupancy or acceptance of improvements, the applicant shall provide GPS coordinates for all installed stormwater treatment facilities, hydromodification management measures, and trash capture devices. The coordinates shall be in a format determined by the Public Works Department.
9. Prior to the City's acceptance of improvements within the public right of way, subdrain lines in stormwater treatment facilities and measures located in the right-of-way must be televised to demonstrate the subdrain is clear of sediment and debris.
10. Prior to the City's acceptance of improvements within the public right of way, any underground stormwater treatment units shall be inspected and maintenance activities conducted, including but not limited to removal and replacement of media filtration cartridges, as applicable.

Erosion and Sediment Control Plan Set Notes:

1. Contractor shall keep construction traffic out of locations where stormwater treatment facilities and measures will be installed to minimize compaction of existing soils.



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2. Protect stormwater treatment facilities from construction site runoff. Once imported materials are installed in stormwater treatment facilities, runoff from unstabilized areas must be diverted away from such facilities.
3. The construction BMPs shown on the plan are minimum requirements. The City Engineer or Public Works Inspector is authorized to require additional BMPs to prevent non-stormwater discharges.
4. All site grading and drainage conveyance must cause runoff from drainage management areas (DMA) to drain to designated receiving facility (i.e. grade breaks must conform to DMA delineations, curb cuts must effectively direct flows into facilities, etc.).
5. A storm water pollution prevention plan (SWPPP) for _____ (project name, tract _____) _____ (residential, commercial) development, has been prepared for _____ (developer name) by _____ (engineer name) dated _____. The SWPPP contains a copy of the "Notice of Intent" filed with the State Water Quality Control Board. The general contractor is responsible for keeping a copy of the SWPPP onsite at all times and implementing its provisions. The contractor is responsible for ensuring all subcontractors and suppliers are aware of and implement the measures in the SWPPP.

Small Projects - General Notes:

1. **CALL BEFORE YOU DIG!** Contact Underground Service Alert (USA) at 1-800-227-2600 at least 2 working days before excavating.
2. Unless otherwise noted on the plans, finished ground surfaces shall be graded to drain the finished site properly within 10-feet of any building foundation with a slope of 5% away from any building or structure. All exterior hardscape within 10-feet of a building foundation shall be installed with a 2% minimum slope away from any building or structure. Drainage swales shall be a 1.5% minimum slope. All graded slopes shall have a maximum slope of 3H to 1V (33%), unless shown otherwise on the plans.
3. Lot grading shall conform at the property lines and shall not slope toward property lines in a manner which would cause storm water to flow onto neighboring property. Historic drainage patterns shall not be altered in a manner to cause drainage problems to neighboring property.
4. New rainwater downspouts shall be disconnected and direct runoff to a landscaped area. Downspouts may be connected to a pop-up drainage emitter in the landscaped area or may drain to splash blocks or cobblestones that direct water away from the building.
5. Install storm drain medallions or inlet markers that read "No Dumping – Drains to Creek" on all



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public and private storm drain inlets in accordance with City standard detail CD-704. The medallions may be purchased from the Public Works Department located at 100 Civic Plaza, Dublin, CA.

6. Contractor to field verify existing drainage. If the existing drainage system is damaged during excavation, contractor shall repair and/or reroute drainage system and connect to existing drainage facility as necessary.
7. Existing public improvements that are damaged by the project construction shall be repaired or replaced. Existing damaged public improvements within the project limits shall be repaired or replaced even if the damage occurred prior to the start of construction.
8. Erosion and sediment control facilities shall be installed prior to October 1 and shall be maintained daily until April 30. These facilities shall control and contain erosion-caused silt deposits and provide for the safe discharge of silt-free storm waters into existing storm drain facilities. Erosion and sediment control supplies must be kept on-site during the dry season and employed, as necessary prior to and during rain events.
9. Seasonally appropriate best management practices for the following site management categories must be implemented year-round: 1) erosion control; 2) run-on and run-off control; 3) sediment control; 4) good site management; and 5) non-stormwater management.
10. An encroachment permit will be required for any construction activity within a public street right of way that has been accepted by the City.

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