

City of Santa Clarita Engineering Services Division 23920 Valencia Boulevard, Suite 300 Santa Clarita, California 91355 (661) 255-4942

SEWER CORRECTION SHEET

MC# Master Case No.	Assessor's Parcel No.	Tract / Parcel No. / Address	Lot No's.
ENG Project No.	SS Case No.		
Dwner	Telephone No.	e-mail address	Plan Check No. / Date
Design Engineer	Telephone No.	e-mail address	1 2 3
Plan Checker	Telephone No.	e-mail address	4

Return this Correction Sheet with your next submittal

A. GENERAL INFORMATION

- 1. Publicly maintained sewer systems shall be submitted to the Engineering Services Division for review and approval. Privately maintained sewer systems shall be submitted to the Building & Safety Division for review and approval.
- 2. A Sewer (Encroachment) Permit is required for the following:
 - a) All work within the public right-of-way
 - b) Publicly maintained sewer systems on private property
- 3. The City's approval of plans does not permit the violation of building codes, ordinances or state laws.
- 4. Counter consultations are not guaranteed unless scheduled in advance with the Plan Checker.
- 5. Standard forms used by this division are available on the City's website at www.santa-clarita.com/city-hall/departments/public-works/Engineering-services-forms
- 6. The City uses the following design standards for sewer improvements:
 - Standard Plans for Public Works Construction (APWA Standard Plans)
 - Los Angeles County Department of Public Works (LACDPW) Standard Plans

B. APPROVAL & PERMIT PROCESS

- 1. Prior to Sewer Plan approval, the plans for the proposed improvements shall address the information and corrections indicated by the circled items on this Sewer Correction Sheet.
- 2. This Sewer Correction Sheet must be returned with the red-lined check prints and two sets of revised plans after corrections have been made.
- 3. The applicant shall submit the sewer plans concurrently to the City of Santa Clarita Engineering Services Division and Los Angeles County Sewer Maintenance Division (SMD) for review. The City cannot approve the plans until SMD has reviewed the plans and all of their comments, and the City's comments, have been addressed.
- 4. After the Plan Checker has indicated that all plan check comments have been addressed, the engineer shall print a bond copy, sign the Private Engineer's Notice to Contractors, and sign and stamp every sheet.
- 5. The applicant/engineer submits the bond copy to the Plan Checker for City approval signatures. After the required City signatures are obtained (which typically takes 2 3 days), the Plan Checker will contact the applicant/engineer to inform them the approved plans are ready to be picked up.
- 6. The applicant/engineer obtains approval signatures on bond copy from:
 - a. Los Angeles County Sewer Maintenance Division
 - b. Los Angeles County Sanitation District
 - c. Los Angeles County Land Development Division (if required)
 - d. Newhall County Water District (if required)
- 7. The applicant/engineer sends a digital copy of the approved plan and a Cad file of the sewer showing only the sewer alignment and lot lines in the City's coordinate system.
- 8. Plan reviewer sends request to GIS to incorporate Sewer Plan feature into shapefile with case No. as an attribute.

9.	When the applicant is ready to obtain a Sewer (Encroachment) Permit to construct the sewer, they must bring two copies of the approved sewer plan to the Engineering Counter in Suite 140 and pay any remaining fees.
	to the Engineering Counter in Suite 140 and pay any remaining lees.

C. BONDS & FEES

1.	Post a Faithful Performance Bond for the sewer improvements in the amount of \$	
2.	Post a Labor & Materials Bond for the sewer improvements in the amount of \$	
3.	Submit payment for the Bond Processing Fee of \$	
4.	Submit payment for the Sewer Plan Check Fee of \$	
5.	Submit payment for the Document Imaging Fee of \$	

D. CITY APPROVALS

Engineering Services (661) 255-4942

- 1. Submit a Sewer Area Study, in accordance with the City's Sewer Area Study Policy, for review and approval. Sewer plans cannot be approved until the Sewer Area Study has been approved.
- 2. A revision to the Street Plans is required for

Submit payment for the Sewer Inspection Fee of \$

E. OUTSIDE AGENCY APPROVALS

Los Angeles County, Department of Public Works, Land Development Division

- Sewage from the proposed development is draining from the City into Los Angeles County jurisdiction. The approval block (designated E1) shown
 on Page 8 must be added to Page 1 of the Sewer Plan. After the Sewer Plan mylar has been approved by the City, the County Land Development
 Division must sign this approval block to indicate their acceptance of the sewage from the proposed development.
- 2. Sewage from the proposed development is draining from Los Angeles County into City jurisdiction. The approval block (designate E2) shown on Page 8 must be added to Page 1 of the Sewer Plan. After the Sewer Plan mylar has been approved by the County Land Development Division, the City must sign this block to indicate their acceptance of the sewage from the proposed development.

Los Angeles County, Department of Public Works, Sewer Maintenance Division (SMD)

 Submit plans to SMD for review. The City cannot approve the plans until SMD has issued a review letter, and all of their comments have been addressed.

Los Angeles County, Sanitation District

Obtain approval to connect to the County Sanitation District trunk sewer.

Los Angeles County, Building & Safety (Local office located at 23757 Valencia Blvd, Santa Clarita, California)

Obtain a saddle permit for the lateral connection(s) at Station(s)
 Refer to "Instructions to Sewer Contractors for obtaining Sewer Saddle Installation Permits" located on the City's website at www.santa-clarita.com/city-hall/departments/public-works/engineering-services/engineering-services-forms

Newhall County Water District (NCWD) (661) 259-3610

1. Obtain approval to connect to NCWD trunk sewer.

Los Angeles Department of Water and Power (LADWP) or, Santa Clarita Water District (SCWD) or, Castaic Lake Water Agency (CLWA) or, Newhall Water Company

1. Obtain approval from the respective Water agency when Sewer is crossing a waterline.

F. SEWER PLAN

General

- Submit a copy of the Final Conditions of Approval.
- Submit a copy of the Tentative Tract Map approved by the Planning Division (with Planning's approval stamp).
- 3. Submit a copy of the Site Plan approved by the Planning Division (with Planning's approval stamp).
- Submit field survey notes showing the invert elevations of the existing manhole where the proposed sewer will connect.
- 5. Submit a copy of the proposed on-site sewer plan indicating the point of connection to the public sewer system (marked "For Reference)
- 6. Submit a copy of the following plans for reference:

- 7. The following Conditions of Approval have not been addressed:
- 8. The Sewer Plan does not conform to the Approved Site Plan / Tentative Map. Either revise the sewer plan to match the approved plan or submit a revised Site Plan / Tentative Map with Planning's approval stamp.
- Check for any waterline crossings. Sewer should always be crossing under the waterline with minimum 3' of clearance from bottom of waterline to the
 top of sewer pipe. Sewer pipe crossing over waterline should never be allowed unless absolutely necessary and shall require a written approval from
 the corresponding water company/agency.

Plan Requirements

- 1. Sewer plans shall be 24- by 36-inch standard size.
- 2. Each sheet shall contain 2 pages.
- 3. Sewer plans shall be in the City's standard format which is available in AutoCAD format on the City's website at: www.santa-clarita.com/city-hall/departments/public-works/engineering-services/engineering-services-forms
- 4. Use the line types as indicated in the LACDPW Standard S-1 Legend for Sanitary Sewer Plans and Profiles and District Maps.
- 5. Do not use triangles for construction notes; a triangle is the symbol used for revisions to plans after they have been approved by the City.
- 6. City approval of sewer plans will only be given on bond copy.
- 7. Sewer Plans must be prepared by a registered civil engineer. The engineer must sign and stamp every sheet of the plans prior to City approval.

The following items shall be shown on Page 1

- 8. Plan information shall be in the upper right corner of Page 1, and shall include the following information:
 - Tract number
 - Private contract (PC) number (This number is assigned by City staff.)
 - Number of sheets and number of pages
- 9. A list of all APWA and LACDPW standard plans that are referenced on the sewer plan.
- 10. The City & County Approval Blocks, as shown on Page 8, shall be on the right side of Page 1.
- 11. Index Map - shall be on the left side of Page 1 and shall include the following information:
 - Scale (minimum 1" = 600')
 - North arrow
 - Tract boundary
 - Lot lines
 - City/County boundary
 - City/Caltrans boundary
 - Proposed sewer in heavy solid lines
 - All existing sewer lines in the vicinity
 - PC number of proposed and existing sewers
 - · Street names and right of way width
 - · Arrows indicating direction of flow
 - Existing and proposed manholes
 - · Plan page numbers in circles
 - · Thomas guide page number
 - Sewer Maintenance District (SMD) Index number obtain from Sanitation District
- 12. A revision block, as shown on Page 9, shall be plotted on the lower left corner of Page 1 below the Index Map.
- 13. Benchmark information shall be located in the upper left corner of Page 1 above the Index Map. Sewer plans must be prepared using the 2003 B.M.
- 14. Standard Sewer Notes and SWPPP Notes, as shown on Page 6 below, shall be included on the center section of Page 1.
- 15. Private Engineer's Notice to Contractors shall be located in the lower right corner of Page 1, and be signed by the engineer.

The following Items shall be shown on the lower right corner of every sheet.

- 16. Name, address, and phone number of the company who prepared the plan
- 17. Stamp and signature of the registered engineer who prepared the plan

Design Requirements

General

- 18. Pipe material shall be vitrified clay pipe (VCP)
- 19. Clean-outs are not allowed on publicly maintained sewers
- 20. The following indicates the minimum slope permissible for each pipe size:

Pipe size	Min. slope
8"	0.40%
10"	0.32%
12"	0.24%
15"	0.16%
18"	0.14%
21"	0.12%
24"	0.10%

Sewer Mains

- 21. The minimum size of a sewer main is 8"
- 22. Sewer mains shall be located 5' north or east of the street centerline, or 6' from curb line on a major highway
- 23. Major highways (8 lane and 6 lane highways as shown on the City's Master Plan of Highway & Roadway System) shall be double lined
- 24. Minimum depth of mainline sewer shall be 7.5' (measured from the top of manhole to the highest pipe invert).
- 25. The use of shallow manholes (LACDPW Standard Plan 2002-1) requires County approval.
- 26. Main line sewer shall be installed along the entire frontage of the proposed tract.
- 27. Common lower station shall be Station 0+00.00
- Maximum distance between manholes is 350'
- 29. Sewer main lines shall terminate with a manhole
- 30. Manholes are required at any horizontal change of alignment
- 31. Manholes shall not be located in cross gutters at street intersections.
- 32. Only one curve of any kind (horizontal or vertical) is allowed between manholes
- 33. Horizontal curves: Minimum radius = 120' Maximum delta = 60 degrees
- 34. Vertical curves: Minimum length = 40' (show grades at every 10' on profile)
- 35. LA County Code, Title 20 Utilities (Sewer Design) contains requirements for horizontal and vertical curves
- 36. Minimum distance between sewer pipes and water pipes shall be 10', or special construction is required per LACDPW Standard 2100-1
- 37. Clearance from storm drain per LACDPW Standard S-23 (special Cradling and Encasement as necessary)
- 38. If a structure footing is within a 45-degree angle of the main line sewer, the pressure on the main line sewer must be investigated and adequate protection must be provided if necessary refer to County Standard S-23 Case 1.

Sewer Laterals

- 39. 4" VCP shall be used for single family residence
- 40. 6" VCP shall be used for all commercial/industrial buildings
- 41. Laterals shall be spaced a minimum of 5' apart and a minimum of 5' from edge of manhole
- 42. All laterals shall be stationed
- 43. Laterals shall extend to the R/W or easement edge
- 44. Each lot shall be served with a lateral (including future lots)
- 45. Laterals cannot cross lot lines. If a sewer pipe must cross a lot to serve other lots, then the sewer must be a sewer main with easements.
- 46. Laterals shall be at right angles to the mainline, except at end of cul-de-sac (stub out 8" VCP from manhole and connect 4" house lateral.
- 47. Show direction of the wye(s) in the direction of flow of the main line.
- 48. Coordinate the alignment of the proposed on-site sewer with existing available sewer laterals.

Plan View

- 49. Plan views shall be oriented with the north arrow up or to the left.
- 50. The plan view shall show the following information:
 - a. Scale (1" = 40')
 - b. North arrow
 - c. Street name
 - d. Street dimensions
 - e. Street centerline
 - f. Curb line
 - g. Right-of-way
 - h. Tract boundary
 - City / County boundary
 - j. City / Caltrans boundary
 - k. Dimensioned distance between sewer and water mains
 - I. All easements (existing and proposed)
 - m. Proposed sewer easements (with bearings and distances)
 - n. Lot lines and lot numbers (station one lot line per block)
 - o. Pad elevations
 - p. Back water valve if required
 - q. Proposed sewer including size, type, line/bearing data, curve data, and beginning and end of curves
 - Manholes including stationing
 - s. Laterals including size and stationing
 - t. Existing and proposed utilities (water, storm drain, or any other utilities that may affect design -SCE, cable that crosses sewer)

- 51. All sewer mains shall be in a 10' wide easement if not in a public street. If the sewer main is within a private street or driveway, then the easement shall be the width of the private street/driveway. (16.19.070 UDC)
- 52. Sewer easements shall be labeled with one of the following notes:
 - a. Sanitary Sewer Easement to the City of Santa Clarita per Final Map
 - b. Sanitary Sewer Easement to the City of Santa Clarita per Separate Instrument #_____
- 53. Backwater valve requirement: If the pad elevation is lower than the first upstream top of manhole elevation, then a backwater valve is required.
- 54. A Letter of Permission is required for work within the following easement(s):

Profile View

- 55. The profile view shall show the following information:
 - a. Pipe size and type
 - b. Pipe slope
 - c. Distance between manholes
 - d. Manholes and manhole stations
 - e. Top of manhole elevation
 - f. Pipe invert elevations, entering and exiting the manhole
 - g. Show existing manholes with dashed lines and show proposed manholes with solid lines
 - h. If the same manhole is shown in a different profile, show the manhole with dashed lines
 - i. All utilities crossing the sewer with invert elevations, size, and description of utility
 - j. Profile of the curb line or centerline
 - k. Stationing of line to center of manhole and inverts
- 56. Pipe slopes shall be evenly divisible by 0.04
- 57. Drops across manhole shall be per County Sewer Design Manual Table S-C5
- 58. Pipe anchors per APWA Standard Plan 221-2 are required on pipes with a grade equal to or steeper than 30%
- 59. Sewers that are 20' in depth or greater shall be cast iron pipe. (Los Angeles County Municipal code 20.32.570: Vitrified clay pipe Installation specifications)
- 60. Sewer pipe installed under a railway shall be encased in concrete, or encased in a steel pipe backfilled with sand, or encased by other approved means which will protect the pipe to the same extent. (Municipal code 20.32.570: Vitrified clay pipe Installation specifications)
- 61. Sewer pipe with the top of pipe less than four feet below the surface shall be encased in concrete or other approved means to protect the pipe. (Municipal code 20.32.570: Vitrified clay pipe Installation specifications)
- 62. Vertical clearance and encasement or cradling per County standard 2100-1 & 2023-2 show limits in profile

F. SEWER PLAN NOTES

The following notes shall be shown on Page 1 of the Sewer Plans:

GENERAL NOTES

- A sewer construction permit shall be obtained and fees paid for construction inspection to the City of Santa Clarita, Engineering Services Division, 23920 Valencia Blvd. Suite 302, Santa Clarita, California, Phone: (661) 286-4123, at least 72 hours prior to start of work. Copies of all other required permits, such as Road Excavation, Caltrans, etc. must be filed with the permit application.
- 2. Contractor shall notify the City of Santa Clarita Public Works Inspection by phone at (661) 255-4942 at least 24 hours prior to start of work.
- Contractor shall notify Underground Service Alert (USA) at (800) 227-2600 at least forty-eight (48) hours prior to start of work. Contractor shall contact USA every 28 days for updates.
- 4. Prior to issuance of the required sewer construction permit, the contractor shall file a permit for excavation and trenches from the State of California Division of Industrial Safety, and a Certificate of Worker's Compensation Insurance with the City of Santa Clarita named as the Certificate Holder. The City of Santa Clarita shall be notified 30 days prior to cancellation of the insurance policy.
- 5. If work is done on a State Highway, a permit must be obtained from the State of California Department of Transportation, 120 South Spring Street, Los Angeles, California.
- 6. Approval of this plan by the City of Santa Clarita does not constitute a representation as to accuracy of the location or the existence or non-existence of any underground utility pipe or structure within the limits of this project.
- 7. All work shall be in accordance with the latest approved edition of the "Standard Specifications for Public Works Construction", including supplements and the latest "Special Provisions for the Construction of Sanitary Sewers", and shall be prosecuted only in the presence of the City of Santa Clarita.
- 8. The contractor's attention is directed to Section 7-10.4.1 of the "Standard Specifications for Public Works Construction" in regard to safety orders and shall conform to the "Minimum Public Safety Requirement" as shown on the Los Angeles County Department of Public Works Standard Plan 6008-1.
- 9. Elevations are in feet above U.S.C. and G.S. sea level datum of 1988.
- 10. No revisions shall be made in these plans without the approval of the City Engineer.

- 11. No representative of the City of Santa Clarita will survey or lay out any portion of the work.
- 12. Grades to which this improvement is to be constructed are shown on the plans and profiles. Grade points for top of curbs, centerline of streets, or centerline of alleys are shown by circles on profiles at all points between designated points. The grade shall be established so as to conform to a straight line between said designated points.
- 13. The private engineer shall furnish the City of Santa Clarita's Engineering Services Division with grade sheets and stationing for all house laterals and "Y" or "T" branches, and shall provide stakes for them at their proper locations with stationing plainly marked. All house laterals shall be constructed in a straight alignment at right angles from the main line sewer except as shown on the plans. House laterals from chimneys shall not have an angle of less than 45 degrees with the main line sewer. Any change in alignment shall be requested in writing by the private engineer.
- 14. The private engineer shall furnish the house lateral depth at the property line below the top of the curb elevation for each house lateral on the grade sheet.
- 15. An approved backwater valve is required when the pad is lower in elevation than the top of the next upstream manhole.

CONSTRUCTION NOTES

- Contractor shall provide survey stakes on the property line or property lines produced at right angles to the sewer line at the centerline of each manhole.
- 2. Vitrified clay pipe joints shall be type "D" or "G" in accordance with "Standard Specifications for Public Works Construction" Section 208-2.
- 3. If a power pole is within three feet of the sewer, the sewer shall be encased per LACDPW Standard Plan 2023-2, Case II, two feet on each side from the point of interference.
- 4. All joints between cast iron pipe and vitrified clay shall be made with a rubber sleeve joint, type "D" (with bushing if necessary) per "Standard Specifications for Public Works Construction" Section 208-2.
- 5. House laterals to be constructed with inverts at the property line six feet below curb grade, except as noted.
- 6. Wye or tee branches may be used for connections to the mainline sewers, except as noted.
- 7. If during the course of construction, it is determined that there is less than four feet of cover over the top of a mainline or house lateral V.C.P. sewer which is not indicated on the plans, the pipes shall be encased per LACDPW Standard Plan 2023-2, Case II, unless otherwise approved by the City Engineer.
- 8. All structures shall be either brick sewer manholes per APWA Standard Plan 203-0, precast concrete sewer manholes per APWA Standard Plan 200-2, or reinforced precast concrete manhole per LACDPW Standard Plan 2003-2, except as noted.
- Resurface all trenches within paved areas to meet the City of Santa Clarita, Los Angeles County Department of Public Works, or Caltrans'
 requirements in accordance with the permits.
- 10. Full compliance with Section 306-1.3.4 of the "Standard Specifications for Public Works Construction" will be required for backfill in street. Certification of backfill, compaction, and sand equivalents by a qualified civil engineer shall be provided by the permitee prior to the issuance of a certificate of partial acceptance.
- 11. All backfill and fills outside of the street right-of-way shall be compacted to 90% of the maximum density as determined by ASTM Soil Compaction Test D 1557-78 method "D," unless otherwise specified. This shall be certified by a qualified civil engineer. This certification shall be submitted to the City of Santa Clarita's Engineering Services Division prior to the acceptance of the work by the City.
- 12. Manhole tops in unimproved right-of-ways to be six inches above finished grade.
- 13. Manhole tops in improved right-of-ways to be level with finished grade.
- 14. Sewers to be tested for leakage per Section 306-1.4.4 of the "Standard Specifications for Public Works Construction" and "Special Provisions for the Construction of Sanitary Sewer".
- 15. All wyes and/or house laterals are to be located at least five (5) feet apart and not closer than five (5) feet to any manhole.
- 16. Comply with the requirements of Standard Drawing 2100-0, "Design Requirements for Sanitary Sewers in the Vicinity of Pressure Water Mains," and comply with the requirements.

STORMWATER POLLUTION PLAN NOTES

- Every effort should be made to eliminate the discharge of non-stormwater from the project site at all times.
- 2. Eroded sediments and other pollutants must be retained on site and may not be transported from the site via sheet flow, swales, area drains, natural drainage courses, or wind.
- 3. Stockpiles of earth and other construction-related materials must be protected from being transported from the site by the forces of wind or water.
- 4. Fuels, oils, solvents, and other toxic materials must be stored in accordance with their listing and are not to contaminate the soil and surface waters. All approved storage containers are to be protected from the weather. Spills must be cleaned up immediately and disposed of in a proper manner. Spills may not be washed into the drainage system.

- Excess or waste concrete may not be washed into the public right-of-way or any other drainage system. Provisions shall be made to retain concrete wastes on site until they can be disposed of as solid waste.
- 6. Trash and construction-related solid wastes must be deposited into a covered receptacle to prevent contamination of rainwater and dispersal by wind.
- 7. Sediments and other materials may not be tracked from the site by vehicle traffic. The construction entrance roadways must be stabilized so as to inhibit sediments from being deposited into the public right-of-way. Accidental depositions must be swept up immediately and may not be washed down by rain or other means.
- 8. Any slopes with disturbed soils denuded of vegetation must be stabilized so as to inhibit erosion by wind and water.
- 9. The following BMP's as outlined in, but not limited to, the "Best Management Practice Handbook, California Stormwater Quality Task Force, Sacramento, California, 1993," or the latest revised edition, may apply during the construction of this project (additional measures may be required if deemed appropriate by City inspectors):

Erosion Control

EC1 - Scheduling

EC2 - Preservation of Existing Vegetation

EC3 – Hydraulic Mulch

EC4 – Hydroseeding

EC5 – Soil Binders

EC6 – Straw Mulch EC7 – Geotextiles & Mats

EC8 – Wood Mulching

EC9 – Earth Dikes and Drainage Swales

EC10 - Velocity Dissipation Devices

EC11 - Slope Drains

Temporary Sediment Control

SE1 - Silt Fence

SE2 - Sediment Basin

SE3 - Sediment Trap

SE4 - Check Dam

SE5 - Fiber Rolls

SE6 - Gravel Bag Berm

SE7 - Street Sweeping and Vacuuming

SE8 – Sandbag Barrier

SE9 - Straw Bale Barrier

SE10 - Storm Drain Inlet Protection

Wind Erosion Control

WE1 - Wind Erosion Control

Equipment Tracking Control

TC1 - Stabilized Construction Entrance/Exit

TC2 - Stabilized Construction Roadway

TC3 - Entrance / Outlet Tire Wash

Non-Stormwater Management

NS1 - Water Conservation Practices

NS2 – Dewatering Operations

NS3 – Paving and Grinding Operations

NS4 - Temporary Stream Crossing

NS5 - Clear Water Diversion

NS6 - Illicit Connection / Discharge

NS7 - Potable Water / Irrigation

NS8 - Vehicle and Equipment Cleaning

NS9 - Vehicle and Equipment Fueling

NS10 - Vehicle and Equipment Maintenance

NS11 - Pile Driving Operations

NS12 – Concrete Curing

NS13 - Concrete Finishing

NS14 - Material and Equipment Use

NS15 - Demolition Adjacent to Water

NS16 - Temporary Batch Plants

Waste Management & Material Pollution Control

WM1 - Material Delivery and Storage

WM2 - Material Use

WM3 - Stockpile Management

WM4 - Spill Prevention and Control

WM5 - Solid Waste Management

WM6 - Hazardous Waste Management

WM7 - Contamination Soil Management

WM8 – Concrete Waste Management WM9 – Sanitary / Septic Waste Management

WM10 - Liquid Waste Management

construction.

4 Remodel and reconnect all existing house

laterals per LA County standards.

PROJECT ENGINEER DATE

SCALE: 1" = 40

25 0

