

**PERMITS:**

1. THE PROPERTY OWNER OR HIS AGENT I.E. CONTRACTOR SHALL APPLY FOR THE APPROPRIATE PERMITS PRIOR TO ENGAGING IN ANY SEWER WORK. WORK ASSOCIATED WITH HOUSE SEWERS SHALL BE GOVERNED BY A PLUMBING PERMIT. WORK ASSOCIATED WITH LATERAL SEWERS SHALL BE GOVERNED BY AN ENCROACHMENT PERMIT.
2. THE PROPERTY OWNER OR HIS AGENT I.E. CONTRACTOR SHALL SUBMIT, ALONG WITH HIS PERMIT APPLICATION(S), A DRAWING THAT ILLUSTRATES THE EXTENT OF THE WORK. IN THE CASE OF SEWER PROJECTS FOR SINGLE-FAMILY HOMES, THE FOLLOWING INFORMATION MUST BE CLEARLY INDICATED OR CONVEYED BY THE DRAWING:
  - A. HOMEOWNER'S NAME, ADDRESS, AND TELEPHONE NUMBER ON THE TOP RIGHT HAND CORNER OF THE PORTRAIT ORIENTATION OF THE DRAWING;
  - B. CONTRACTOR'S NAME, ADDRESS, TELEPHONE NUMBER, FAX NUMBER, AND CONTRACTOR'S LICENSE NUMBER ON THE BOTTOM RIGHT HAND CORNER OF THE PORTRAIT ORIENTATION OF THE DRAWING;
  - C. PLAN VIEW SHOWING THE APPROXIMATE LOCATION, AS MEASURED FROM TWO PROPERTY CORNERS, OF THE LOT LINES, BACK OF SIDEWALK, FACE OF CURB, BUILDING WALL, CLEANOUTS, AND ALIGNMENT OF THE BUILDING SEWERS;
  - D. PROFILE VIEW SHOWING ROUGHLY THE VERTICAL RELATIONSHIP BETWEEN THE PROPOSED SEWER INVERT AND THE GROUND SURFACE, THE SIZE, LENGTH AND SLOPE OF THE SEWER, PIPE MATERIAL, AND PIPE CLASS.

THE PROPERTY OWNER OR HIS AGENT I.E. CONTRACTOR SHALL NEATLY MARK UP THIS DRAWING WITH THE ACTUAL CONSTRUCTED FEATURES AND SUBMIT A LEGIBLE COPY OF THIS "AS-BUILT" DRAWING TO THE CITY AT THE COMPLETION OF THE PROJECT.

THE CITY WILL REQUIRE THE PROPERTY OWNER TO SOLICIT THE ASSISTANCE OF A LICENSED CIVIL ENGINEER TO PREPARE AND SUBMIT PLANS FOR SEWER PROJECTS THAT ARE PROPOSED FOR DEVELOPMENTS OTHER THAN SINGLE-FAMILY HOMES.
3. UPON RECEIVING A PERMIT APPLICATION FOR SEWER WORK PROPOSED FOR A SINGLE-FAMILY RESIDENCE AND WITHIN THE HOMEOWNER'S PROPERTY, THE CITY WILL REVIEW THE DRAWING, MARK IT UP WITH COMMENTS, AND FORWARD IT TO THE CONTRACTOR/ENGINEER WITHIN SEVEN (7) WORKING DAYS OF THE RECEIPT DATE. (THE REVIEW PROCESS MAYBE DIFFERENT FOR SEWER WORK PROPOSED IN PUBLIC RIGHT-OF-WAYS AND NON-SINGLE FAMILY RESIDENCES.)
  - A. IF THE WORD "APPROVED" APPEAR ON THE DRAWING, THE CONTRACTOR MAY PROCEED WITH THE SEWER WORK.
  - B. IF THE WORDS "NOT APPROVED" APPEAR ON THE DRAWING, THE CONTRACTOR/ENGINEER MUST REVISE THE DRAWING, RE-SUBMIT IT FOR REVIEW AND AWAIT FOR FURTHER COMMENTS.

**BONDS, AGREEMENTS AND LICENSES:**

- CONTRACTOR THAT WILL BE PERFORMING WORK WITHIN THE PUBLIC RIGHT-OF-WAY (I.E. REQUIRING AN ENCROACHMENT PERMIT) SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS:
1. POSSESSES EITHER A CLASS "A" GENERAL ENGINEERING CONTRACTOR LICENSE, A C-34 PIPELINE LICENSE, A C-42 SANITATION SYSTEMS LICENSE, OR A C-36 PLUMBING LICENSE;
  2. PROCURE A BUSINESS LICENSE FROM THE CITY'S FINANCE DEPARTMENT;
  3. POST A REFUNDABLE CASH BOND IN THE AMOUNT OF \$600 MINIMUM OR AS DETERMINED BY THE ENGINEERING DIVISION. THIS DEPOSIT WILL BE RETAINED UNTIL AFTER FINAL ACCEPTANCE OF THE WORK AND WILL BE REFUNDED ONLY UPON WRITTEN APPLICATION.

**ENGINEERING REQUIREMENTS:**

1. MINIMUM SIZE AND SLOPE:  
 THE MINIMUM SIZE OF A BUILDING SEWER THAT IS PROPOSED FOR A SINGLE-FAMILY RESIDENCE SHALL BE 4-INCHES NOMINAL DIAMETER, WITH A MINIMUM SLOPE OF 2% UNLESS OTHERWISE APPROVED. THE MINIMUM SIZE AND SLOPE FOR A BUILDING SEWER THAT IS PROPOSED FOR A DEVELOPMENT THAT IS NOT A SINGLE-FAMILY RESIDENCE SHALL BE DETERMINED BY A LICENSED CIVIL ENGINEER WORKING ON BEHALF OF THE PROPERTY OWNER.
2. PIPE MATERIALS AND JOINTS:  
 HOUSE SEWERS SHALL BE CONSTRUCTED USING ONE OF THE FOLLOWING MATERIALS LISTED BELOW, WITH THE CORRESPONDING TYPE OF JOINT AND REFERENCE SPECIFICATIONS:
 

PIPE	CLASS	JOINTS	REFERENCES
ABS	SCH40	SOLVENT CEMENT	ASTM D2751, ASTM D2235,
HDPE	DR17	BUTT FUSION	ASTM D3261, ASTM 3350
PVC	SDR26	ELASTOMETRIC GASKET	ASTM D3212, ASTM 3034 ASTM F477

PVC SDR26 AND HDPE DR17 ARE THE ONLY TYPES OF PIPES ALLOWED FOR USE AS SEWER LINES WITHIN CITY RIGHT-OF-WAY.
3. CONNECTION TO MAIN SEWERS:  
 CONNECTION TO MAIN SEWERS SHALL BE DONE BY ONE OF TWO METHODS:
  - A. METHOD A - CONTRACTOR SHALL REPLACE A SECTION OF THE MAIN SEWER WITH A PVC SDR26 OR HDPE DR17 WYE. THE PVC WYE AND MAIN SEWER SHALL BE JOINED USING MISSION ARC COUPLING OR EQUAL, OF THE SAME SIZE OF THE MAINLINE. WHEN USING PVC SDR26, A PVC SDR26 TO SCH.40 IPS BUSHING SHALL BE GLUED ONTO THE ENDS OF THE PIPE WHERE CONNECTION TO CLAY IS MADE. THIS WILL ENSURE THE UNIFORM TIGHTENING OF THE COUPLING. DONUT-SHAPED RINGS SHALL NOT BE USED FOR COMPRESSION SEALING OF JOINTS. WHEN A WYE IS CUT INTO EXISTING CLAY PIPE, THE CONNECTION SHALL BE TO A FULL LENGTH OF CLAY PIPE. THE JOINT BETWEEN THE PVC WYE AND PVC LATERAL SEWER SHALL BE OF THE PUSH-ON, ELECTROMETRIC GASKET TYPE.

**CITY OF PACIFICA**  
 DEPARTMENT OF PUBLIC WORKS  
 WASTEWATER DIVISION

**STANDARD**  
 SANITARY SEWER COLLECTION SYSTEM  
 GENERAL BUILDING NOTES  
 SHEET 1 OF 2

△				SEP 2013	DWG. NO. WW100
△					
REV	DATE	BY	CREATED BY		
			M. AGUILAR		

**ENGINEERING REQUIREMENTS (CONT'D)**

- B. METHOD B - CONTRACTOR SHALL CONTRACT WITH TAP-TITE WORKS, INC., WHO WILL PERFORM THE ACTUAL WORK OF TAPPING INTO THE MAIN SEWER.
- 4. OTHER CONNECTIONS:  
 WHEN JOINING ANY ANY 4" PLASTIC PIPE TO 4" CAST IRON PIPE, A MISSION MR56 44 ARC COUPLING OR EQUAL SHALL BE REQUIRED. WHEN JOINING ANY 4" PLASTIC PIPE TO 4" VCP (CLAY) PIPE, A MISSION MR02 44 ARC COUPLING OR EQUAL SHALL BE REQUIRED. WHEN PVC SDR26 IS USED, A PVC SDR26 TO ABS SCH.40 IPS BUSHING SHALL BE GLUED ONTO THE ENDS OF THE PIPE WHERE CONNECTIONS TO OTHER TYPES OF PIPE ARE MADE TO ENSURE THE UNIFORM TIGHTENING OF THE COUPLING. WHEN JOINING PVC SDR26 TO ABS SCH.40, A RIGID TYPE OF REDUCER COUPLING MUST BE GLUED USING A MULTI-PURPOSE ABS TO PVC CEMENT.
- 5. CLEANOUTS:  
 CLEANOUTS SHALL CONSIST OF A 45 DEG. WYE OF THE SAME SIZE AND TYPE AS THE BUILDING SEWER BROUGHT UP TO GRADE LEVEL. THE TOP OF WHICH SHALL BE PROVIDED WITH A REGULATION CLEANOUT, 4" MIN. IN SIZE WITHIN A SIDEWALK BOX AND REMOVABLE COVER.  
 CLEANOUT SHALL BE PROVIDED AT THE FOLLOWING LOCATION:
  - A. AT THE POINT OF CONNECTION TO THE BUILDING DRAIN;
  - B. AT A POINT WITHIN 2 FEET OF THE HOMEOWNER'S PROPERTY LINE, IF ONE DOES NOT ALREADY EXIST;
  - C. AT ANY SINGLE TURN GREATER THAN 45 DEG.;
  - D. AT ANY INTERVALS ALONG THE BUILDING SEWER WHERE THE ACCUMULATIVE TOTAL OF DEFLECTION FROM THE POINT OF CONNECTION TO THE MAIN SEWER OR FROM ANOTHER CLEANOUT EXCEEDS 45 DEG.;
  - E. AT INTERVALS NOT TO EXCEED 100 FEET ALONG THE BUILDING SEWER;
  - F. AT ANY LOCATION DESIGNATED BY THE CITY. THIS INCLUDES HAVING TO INSTALL A CLEANOUT WITHIN THE PUBLIC RIGHT-OF-WAY, IN WHICH CASE THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR MAINTAINING AND REPAIRING THE PORTION OF THE BUILDING SEWER FROM THE BUILDING DRAIN TO THE SAID CLEANOUT IN THE PUBLIC RIGHT-OF-WAY.
- 6. TRENCH AND BACKFILL/BEDDING:
  - A. CONTRACTOR SHALL REFER TO CITY OF PACIFICA STANDARD DWG. NOS. 300 AND 301 FOR TRENCH DETAILS AND REQUIREMENTS.
  - B. INITIAL BACKFILL/BEDDING MATERIAL SHALL BE 3/8-INCH CHIPS AND SHALL BE APPROVED BY CITY PRIOR TO INSTALLATION.

**REPAIR OF EXISTING BUILDING & PUBLIC SEWERS**

- 1. "SPOT REPAIRS ARE DEFINED AS THOSE THAT ARE MADE AT A SINGLE LOCATION ALONG AN EXISTING SEWER WITHOUT HAVING TO REPLACE A SUBSTANTIAL LENGTH OF THE SEWER. SUCH REPAIRS WILL NOT BE ALLOWED UNLESS OTHERWISE APPROVED BY THE CITY.
- 2. IN NO CASE WILL A SPOT REPAIR BE MADE ON EXISTING SEWER THAT IS NOT MADE OF ABS, PVC OR PE PIPE MATERIALS.

**INSPECTION:**

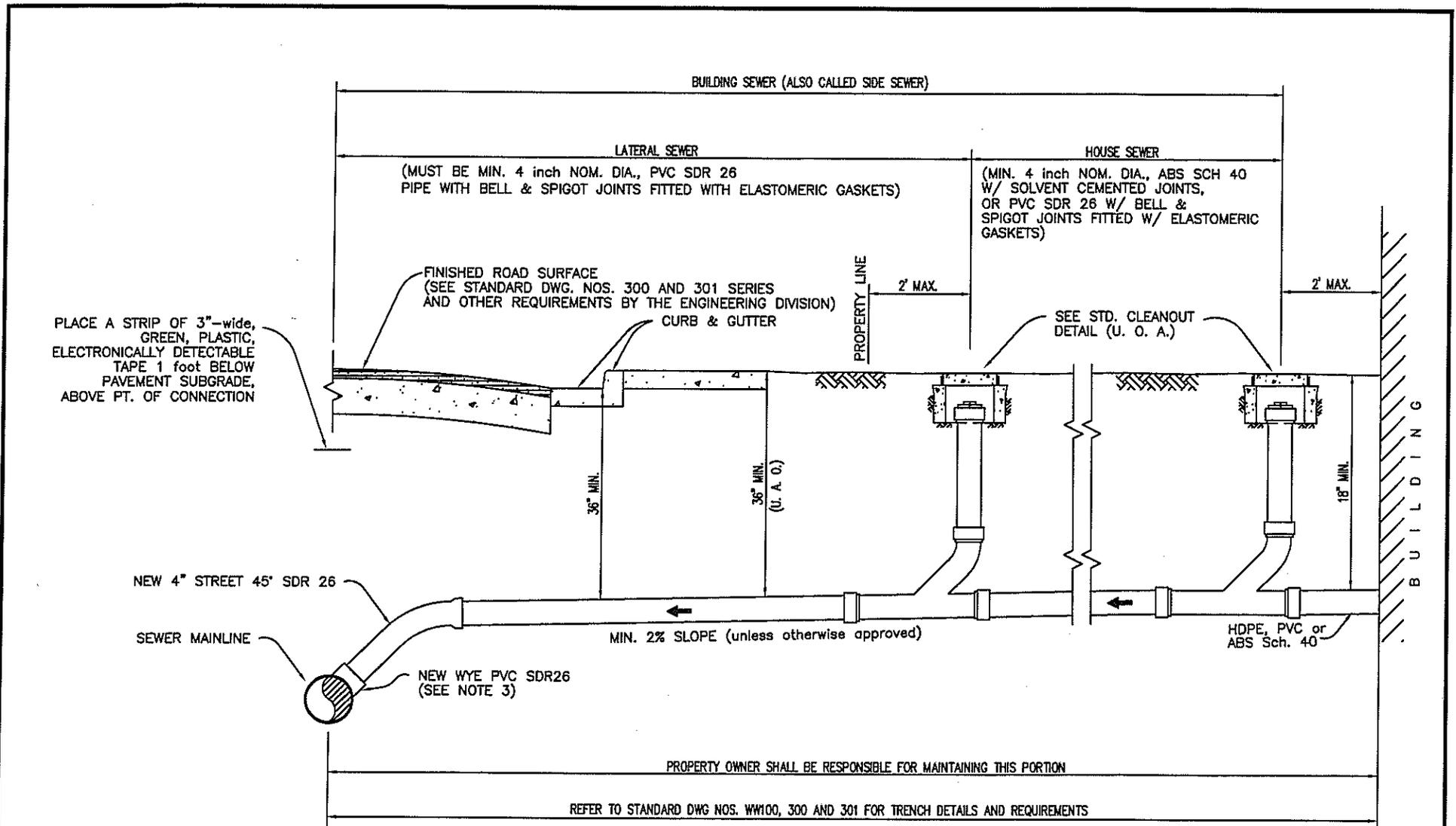
NO PORTION OF ANY PIPE OR STRUCTURE CAN BE BACKFILLED WITHOUT PRIOR INSPECTION AND APPROVAL FROM THE CITY.

**CITY OF PACIFICA**  
 DEPARTMENT OF PUBLIC WORKS  
 WASTEWATER DIVISION

**STANDARD**  
 SANITARY SEWER COLLECTION SYSTEM  
 GENERAL BUILDING NOTES  
 SHEET 2 OF 2

△			SEP 2013
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DWG. NO.  
 WW100



PLACE A STRIP OF 3"-wide, GREEN, PLASTIC, ELECTRONICALLY DETECTABLE TAPE 1 foot BELOW PAVEMENT SUBGRADE, ABOVE PT. OF CONNECTION

(MUST BE MIN. 4 inch NOM. DIA., PVC SDR 26 PIPE WITH BELL & SPIGOT JOINTS FITTED WITH ELASTOMERIC GASKETS)

(MIN. 4 inch NOM. DIA., ABS SCH 40 W/ SOLVENT CEMENTED JOINTS, OR PVC SDR 26 W/ BELL & SPIGOT JOINTS FITTED W/ ELASTOMERIC GASKETS)

FINISHED ROAD SURFACE (SEE STANDARD DWG. NOS. 300 AND 301 SERIES AND OTHER REQUIREMENTS BY THE ENGINEERING DIVISION) CURB & GUTTER

SEE STD. CLEANOUT DETAIL (U. O. A.)

NEW 4" STREET 45' SDR 26

SEWER MAINLINE

NEW WYE PVC SDR26 (SEE NOTE 3)

MIN. 2% SLOPE (unless otherwise approved)

HDPE, PVC or ABS Sch. 40

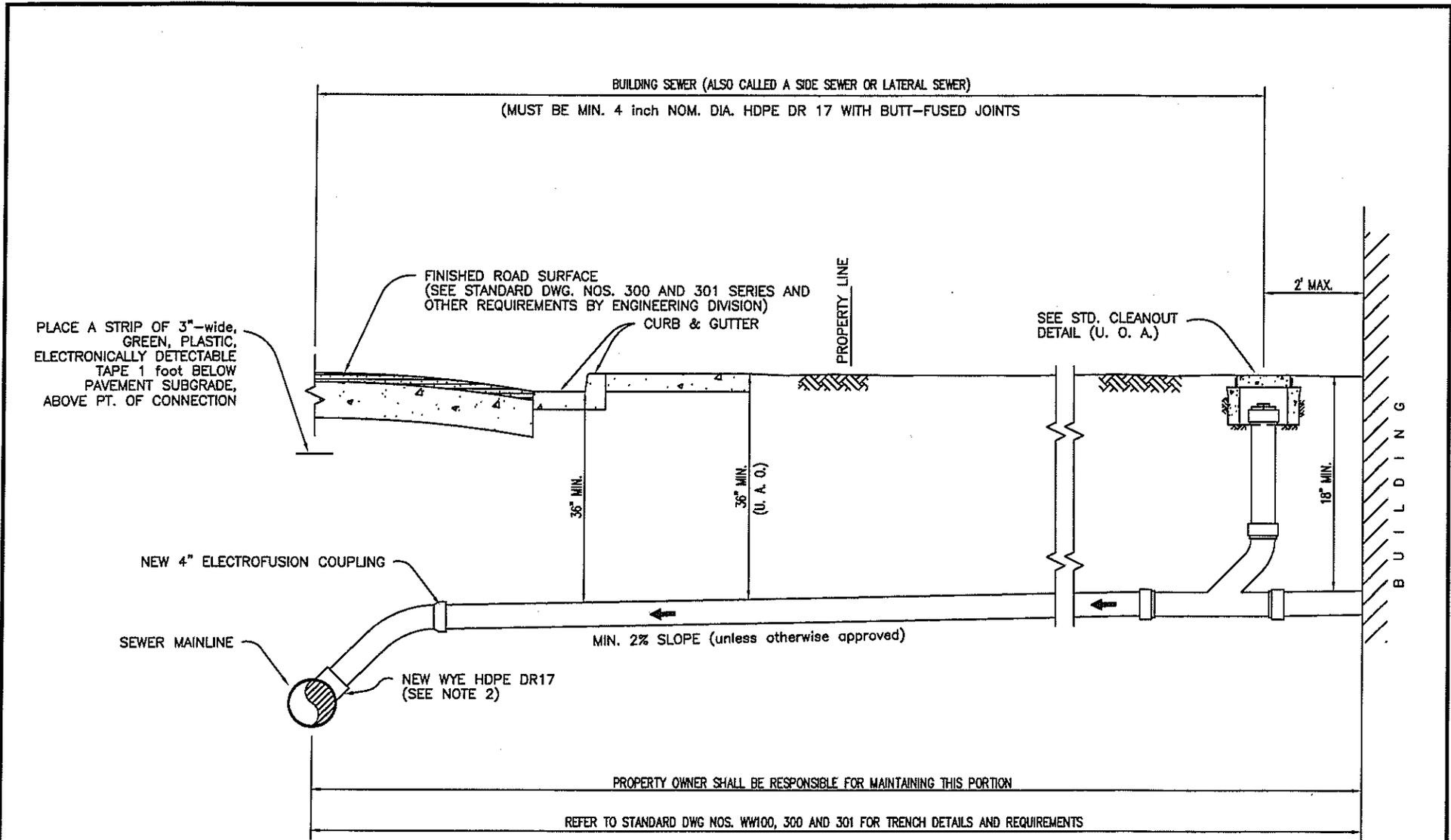
PROPERTY OWNER SHALL BE RESPONSIBLE FOR MAINTAINING THIS PORTION

REFER TO STANDARD DWG NOS. WW100, 300 AND 301 FOR TRENCH DETAILS AND REQUIREMENTS

**NOTES:**

1. (U. O. A.) UNLESS OTHERWISE APPROVED
2. ALL SIDEWALK CLEAN-OUT SHALL BE RELOCATED 2' BEHIND PROPERTY LINE
3. THE PVC WYE AND MAIN SEWER SHALL BE JOINED USING MISSION ARC COUPLING OR EQUAL. SEE STANDARD DWG. NO. WW100 FOR ADDITIONAL DETAILS.

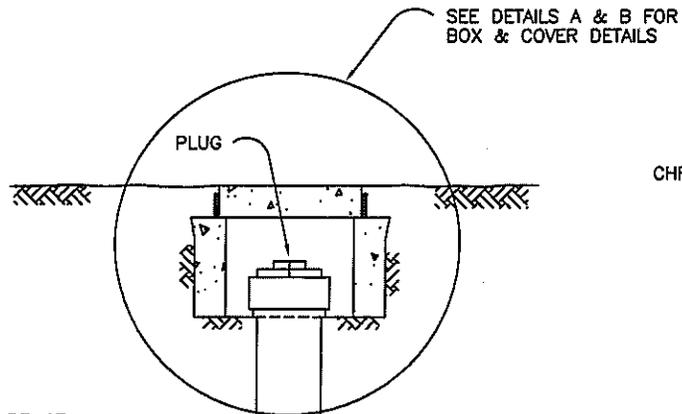
<b>CITY OF PACIFICA</b> DEPARTMENT OF PUBLIC WORKS WASTEWATER DIVISION	<b>STANDARD</b> SANITARY SEWER COLLECTION SYSTEM BUILDING SEWER LATERAL PVC SDR 26			△		SEP 2013	DWG. NO. <b>WW201</b>
	△			REV	DATE	BY	
				CREATED BY: M. Agülar			



**NOTES:**

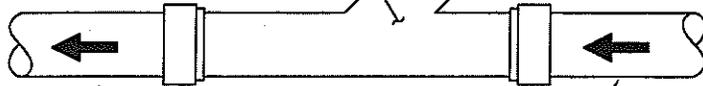
1. (U. O. A.) UNLESS OTHERWISE APPROVED
2. THE HDPE WYE AND MAIN SEWER SHALL BE JOINED USING MISSION ARC COUPLING OR EQUAL. SEE STANDARD DWG. NO. WW100 FOR ADDITIONAL DETAILS.

<b>CITY OF PACIFICA</b> DEPARTMENT OF PUBLIC WORKS WASTEWATER DIVISION	<b>STANDARD</b>	△			SEP 2013	DWG. NO. <b>WW202</b>
	SANITARY SEWER COLLECTION SYSTEM BUILDING SEWER LATERAL HDPE DR 17 BUTT FUSED	△				
			REV	DATE	BY	CREATED BY: M. Aguirre



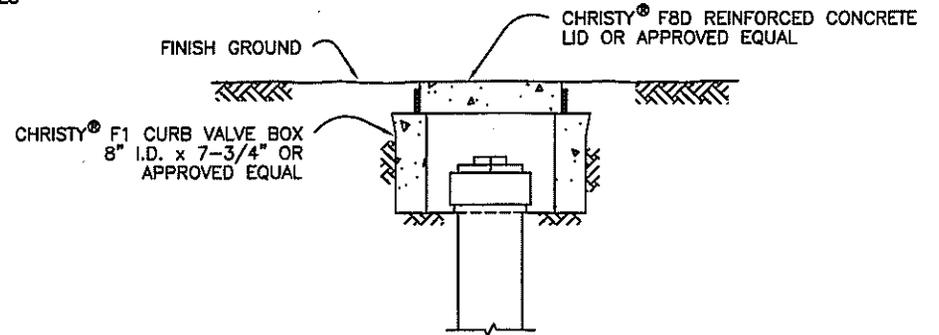
MIN. 4" PVC SDR 26, HDPE DR 17 or ABS Sch 40 RISER SECTION

PVC SDR 26, HDPE DR 17 or ABS Sch 40 COMBO WYE — MIN. 4" x 4"

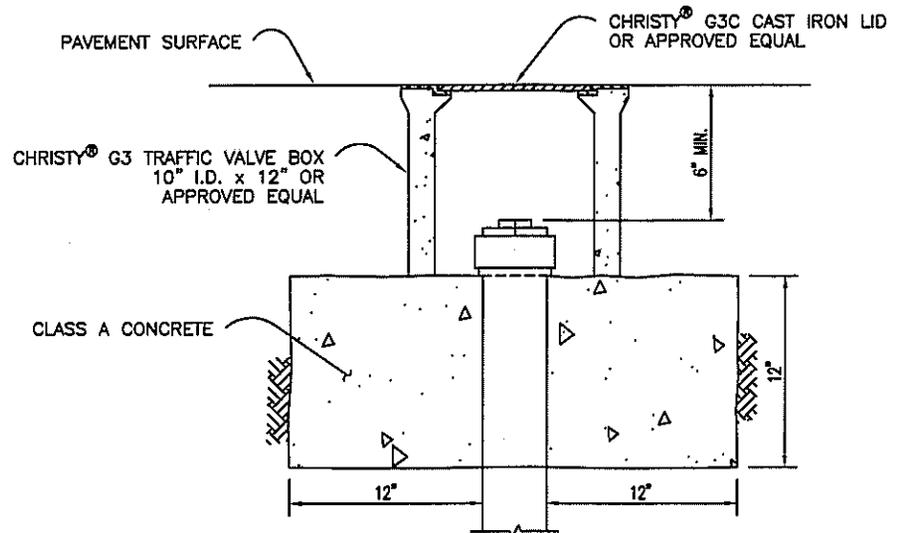


PVC SDR 26, HDPE DR 17 or ABS Sch 40 BUILDING SEWER

**CLEANOUT RISER**



**DETAIL A CLEANOUT RISER IN UNPAVED, NON-TRAFFICKED AREAS**



**DETAIL B CLEANOUT RISER IN PAVED, TRAFFICKED AREAS**

**CITY OF PACIFICA**  
DEPARTMENT OF PUBLIC WORKS  
WASTEWATER DIVISION

**STANDARD**  
SANITARY SEWER COLLECTION SYSTEM  
STANDARD CLEANOUT

△			SEP 2013
△			
REV	DATE	BY	CREATED BY: M. Aguilera

DWG. NO.  
**WW101**