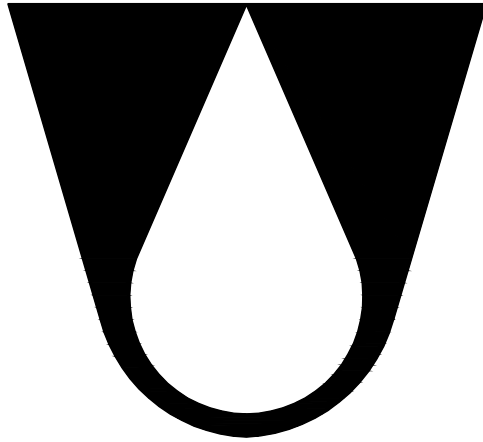


WEST BAY
SANITARY DISTRICT



STANDARD
DETAILS

500 LAUREL STREET
MENLO PARK, CALIFORNIA

MAY 2015

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WEST BAY
SANITARY DISTRICT

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APPROVED BY:

/S/ - PHIL SCOTT

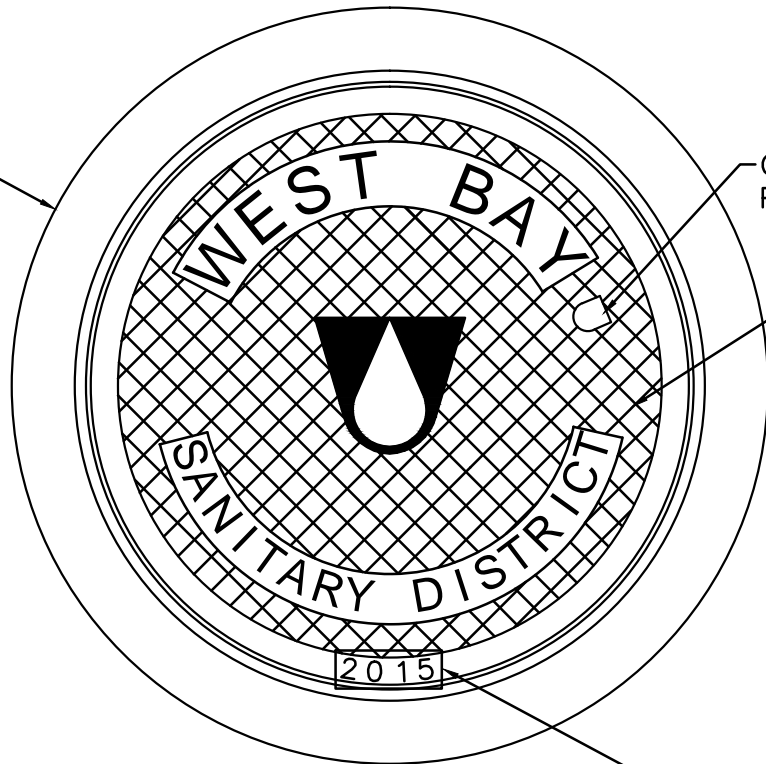
DISTRICT MANAGER

05-20-15

DATE:

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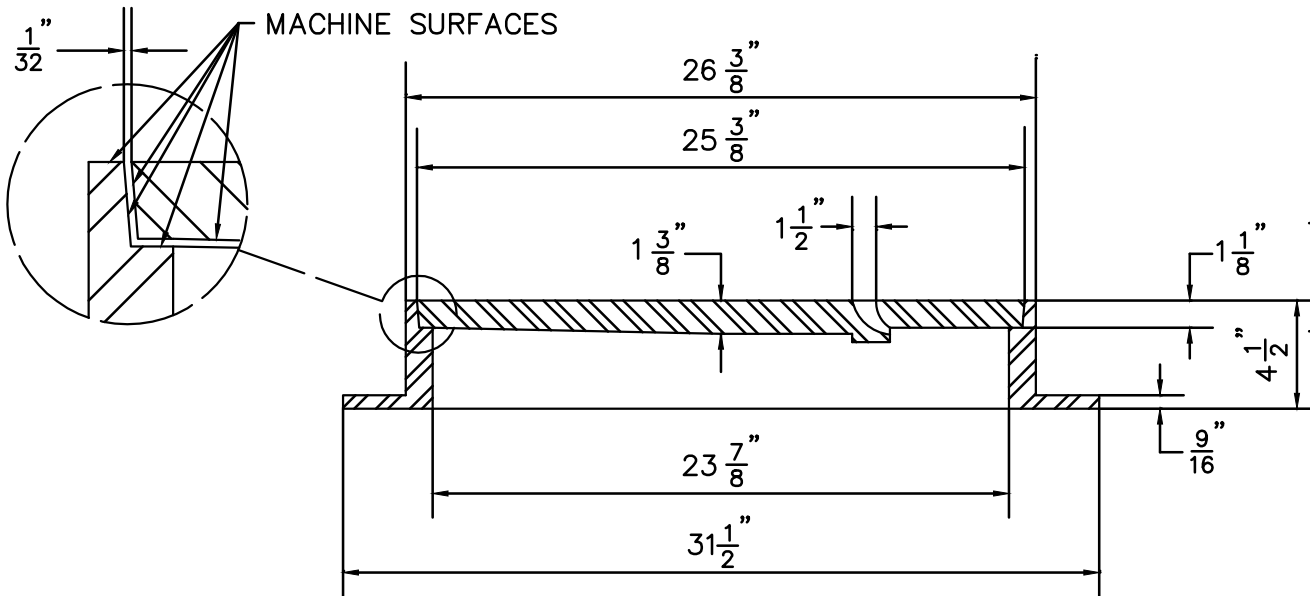
D&L FOUNDRY
STD. A-1024
MANHOLE RING
AND COVER OR
APPROVED EQUAL.



ONE MAN BLIND
PICK HOLE

SKID RESISTANT
DIAMOND TREAD
PATTERN

INSTALL CURRENT YEAR



SECTION

NOTES:

- 1) CAST IRON FOR FRAME AND COVER SHALL BE CLASS 30 MINIMUM PER ASTM A-48.
- 2) COVERS SHALL BE H-20, FULL VEHICULAR TRAFFIC LOADING, RATED AND SHALL NOT EXCEED 145 POUNDS IN WEIGHT.
- 3) THE FRAME AND COVER SHALL BE PAINTED OR DIPPED IN ASPHALT PRIOR TO LEAVING FOUNDRY.

WEST BAY
SANITARY DISTRICT

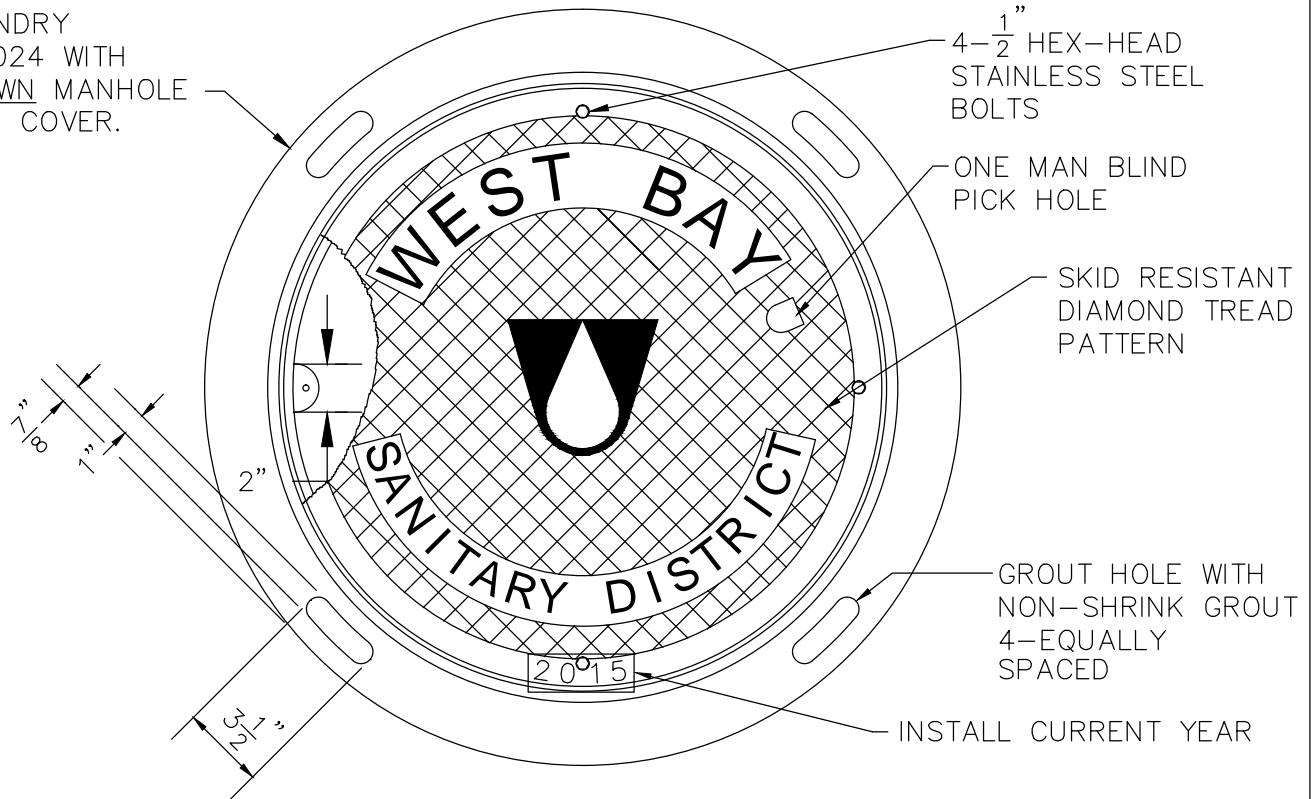
MANHOLE FRAME AND COVER

APPROVED BY:

/S/ - PHIL SCOTT
DISTRICT MANAGER

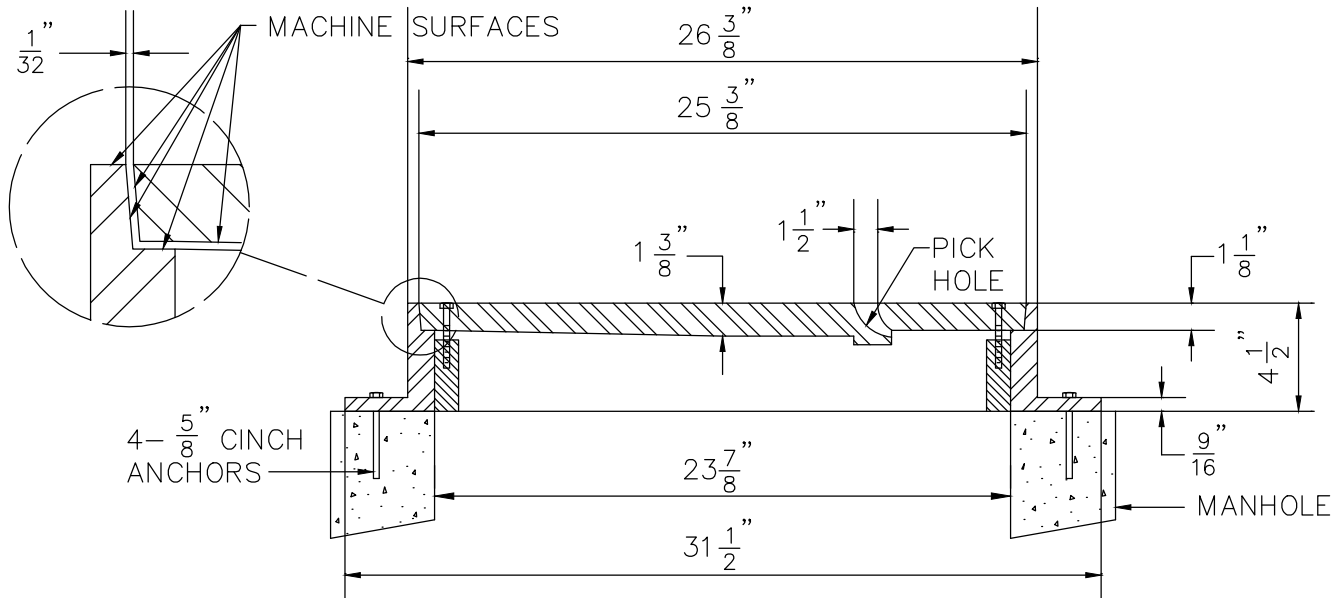
05-20-15
DATE:

D&L FOUNDRY
 STD A-1024 WITH
 BOLT-DOWN MANHOLE
 RING AND COVER.



PLAN

OPTION OF MANHOLE
 RIM WITH HINGE AND
 J-BOLT LOCK IN LIEU
 OF 4 BOLTS



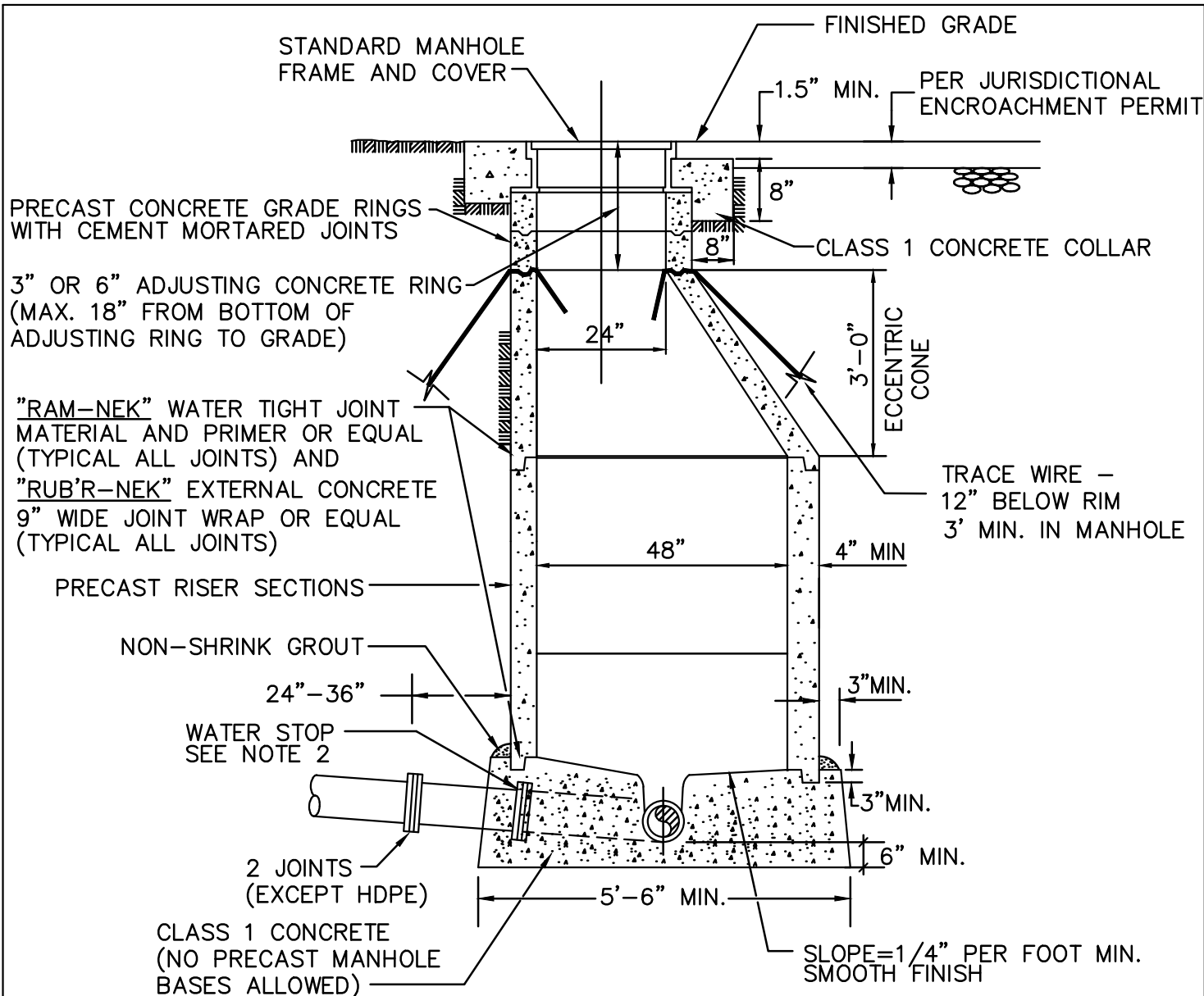
SECTION

NOTES:

1) ALL MATERIAL SHALL CONFORM TO ASTM SPECIFICATION A-159-70T-G3000.

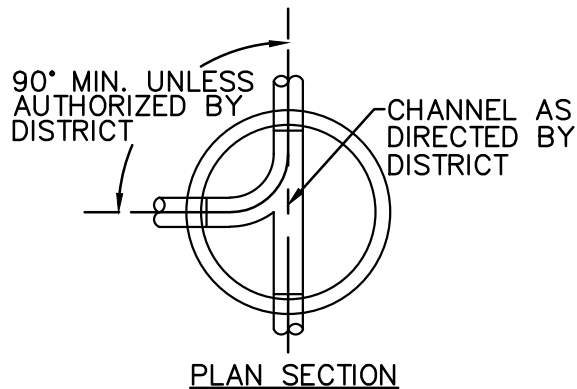
2) COVERS SHALL BE H-20, FULL VEHICULAR TRAFFIC LOADING, RATED AND SHALL NOT EXCEED 145 POUNDS IN WEIGHT.

WEST BAY		
SANITARY DISTRICT		
SCREW DOWN TYPE MANHOLE FRAME AND COVER		
APPROVED BY:		
/S/ - PHIL SCOTT		05-20-15
DISTRICT MANAGER		DATE:
		2



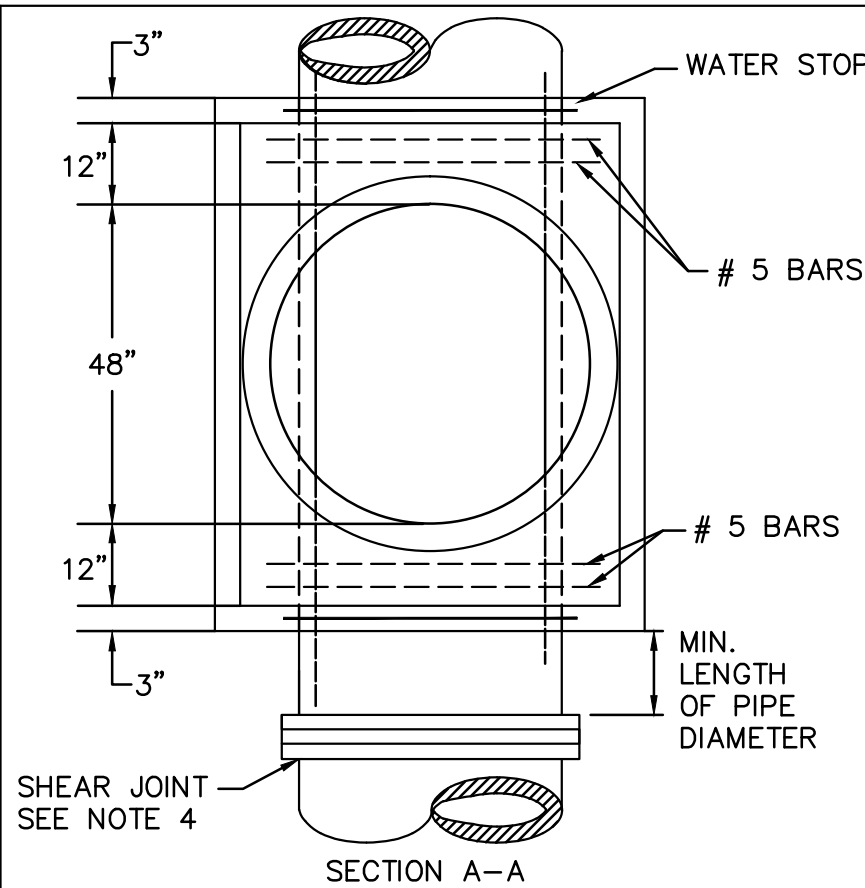
NOTES:

- 1) MANHOLE BASES SHALL BE PLACED ON IMPORTED BEDDING MATERIAL COMPACTED TO 95% RELATIVE COMPACTION.
- 2) AN APPROVED WATER STOP SHALL BE INSTALLED ON ALL FLEXIBLE PIPE ENTERING OR LEAVING A MANHOLE, AND CENTERED UNDER MANHOLE WALL.
- 3) INSTALL "RAM-NEK" WATER TIGHT JOINT MATERIAL OR EQUAL BETWEEN EACH JOINT OF CONE AND BARREL SECTIONS TO MAKE A FLEXIBLE WATERTIGHT JOINT. AFTER JOINT IS MADE, TRIM JOINT SMOOTH ON INSIDE OF MANHOLE.
- 4) STEPS IN MANHOLES ARE NOT ALLOWED.
- 5) TRACE WIRE SHALL BE SOLID AND COATED 8 GAUGE COPPER WIRE PLACED 12" BELOW RIM WITH 3' COILED UP IN MANHOLE.
- 6) MANHOLES SHALL BE VACUUM TESTED.
- 7) ECCENTRIC CONE SHALL BE POSITIONED IN SUCH A MANNER OVER CENTER OF PIPE FOR INSTALLATION OF FLOW METER SENSOR BRACKET.
- 8) CONCRETE PLATFORMS MAY BE REQUIRED ON A CASE BY CASE BASIS.



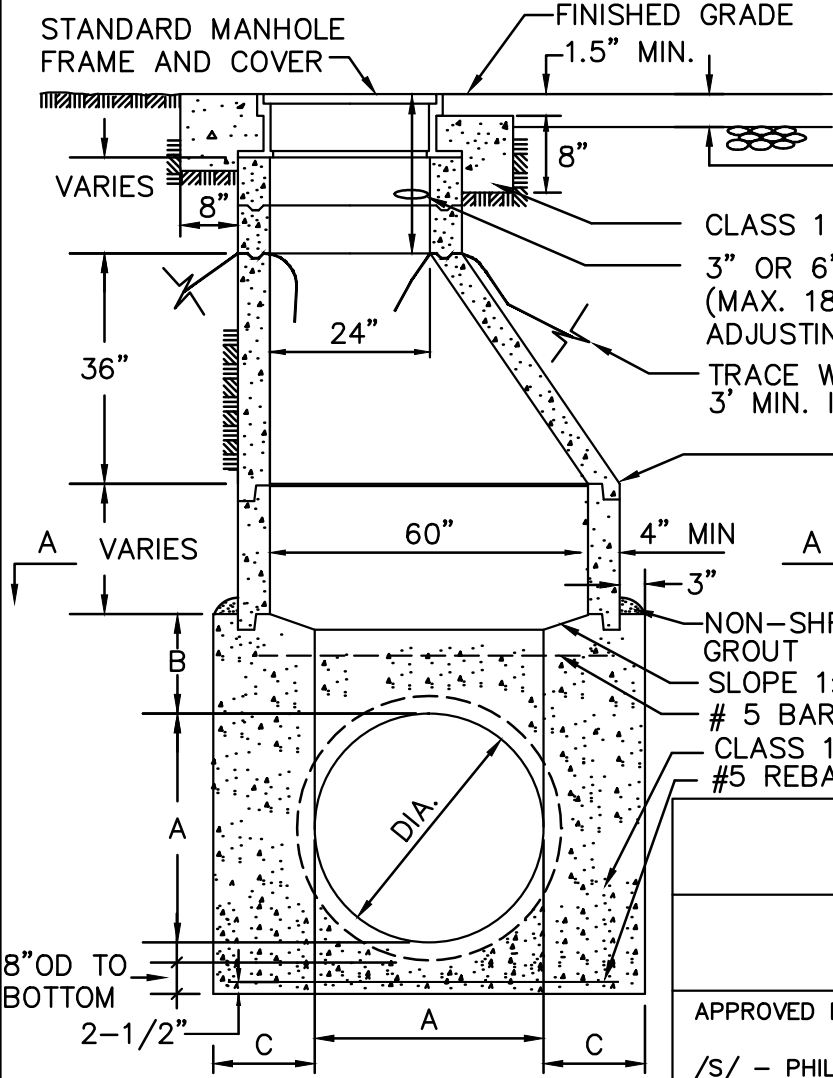
WEST BAY	
SANITARY DISTRICT	
MANHOLE FOR 21" DIAMETER AND SMALLER PIPE	
APPROVED BY:	
/S/ - PHIL SCOTT	05-20-15
DISTRICT MANAGER	DATE:
	3

DIA.	A	B	C MIN.
24"	24"	9"	19"
27"	27"	9"	17.5"
30"	30"	9"	16"
36"	36"	9.5"	13"



NOTES:

- 1) MANHOLE SHALL BE VACUUM TESTED.
- 2) ECCENTRIC CONE SHALL BE POSITIONED IN SUCH A MANNER OVER CENTER OF PIPE FOR INSTALLATION OF FLOW METER SENSOR BRACKET.
- 3) TRACE WIRE SHALL BE SOLID AND COATED 8 GAUGE COPPER WIRE PLACED 12" BELOW RIM WITH 3' COILED UP IN MANHOLE.
- 4) SHEAR JOINT SHALL BE INSTALLED ON ALL INCOMING AND OUTGOING PIPES A DISTANCE OF ONE PIPE DIAMETER AWAY FROM THE OUTSIDE OF THE MANHOLE.



- PER JURISDICTIONAL ENCROACHMENT PERMIT
- CLASS 1 CONCRETE COLLAR
- 3" OR 6" ADJUSTING CONCRETE RING (MAX. 18" FROM BOTTOM OF ADJUSTING RING TO GRADE)
- TRACE WIRE - 12" BELOW RIM 3' MIN. IN MANHOLE
- "RAM-NEK" WATER TIGHT JOINT MATERIAL AND PRIMER OR EQUAL (TYPICAL ALL JOINTS) AND
- "RUB'R-NEK" EXTERNAL CONCRETE 9" WIDE JOINT WRAP OR EQUAL (TYPICAL ALL JOINTS)
- NON-SHRINK GROUT
- SLOPE 1:10 (TYP.)
- # 5 BARS
- CLASS 1 CONCRETE
- #5 REBAR @ 12" O.C.E.W.

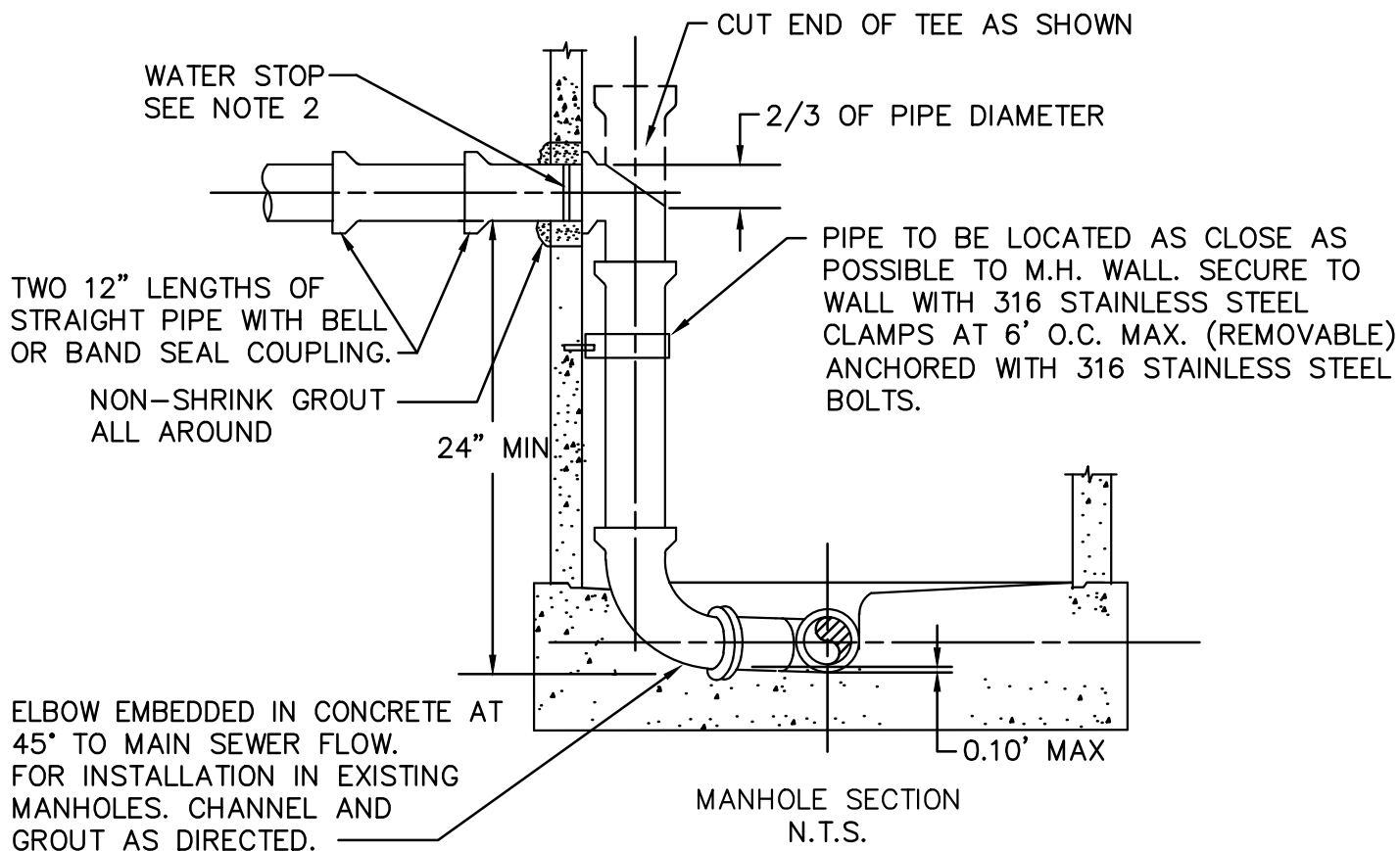
WEST BAY
SANITARY DISTRICT

MANHOLE FOR 24" DIAMETER AND LARGER PIPE

APPROVED BY:

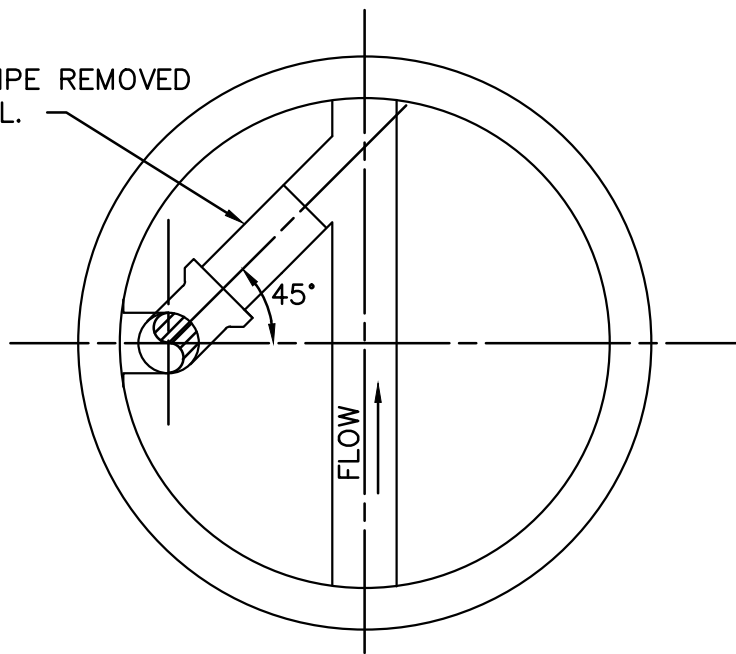
/S/ - PHIL SCOTT
DISTRICT MANAGER

05-20-15
DATE:



ELBOW EMBEDDED IN CONCRETE AT 45° TO MAIN SEWER FLOW. FOR INSTALLATION IN EXISTING MANHOLES. CHANNEL AND GROUT AS DIRECTED.

TOP 1/2 PIPE REMOVED BEYOND ELL.



NOTE:

1. ALL INSIDE DROP PIPING TO BE SAME SIZE AND MATERIAL AS EXTERNAL PIPE, UNLESS APPROVED BY DISTRICT.
2. AN APPROVED WATER STOP SHALL BE INSTALLED ON ALL FLEXIBLE PIPE ENTERING OR EXITING MANHOLE.
3. SEE DETAIL 3 AND 4 FOR MANHOLE DETAIL.

WEST BAY
SANITARY DISTRICT

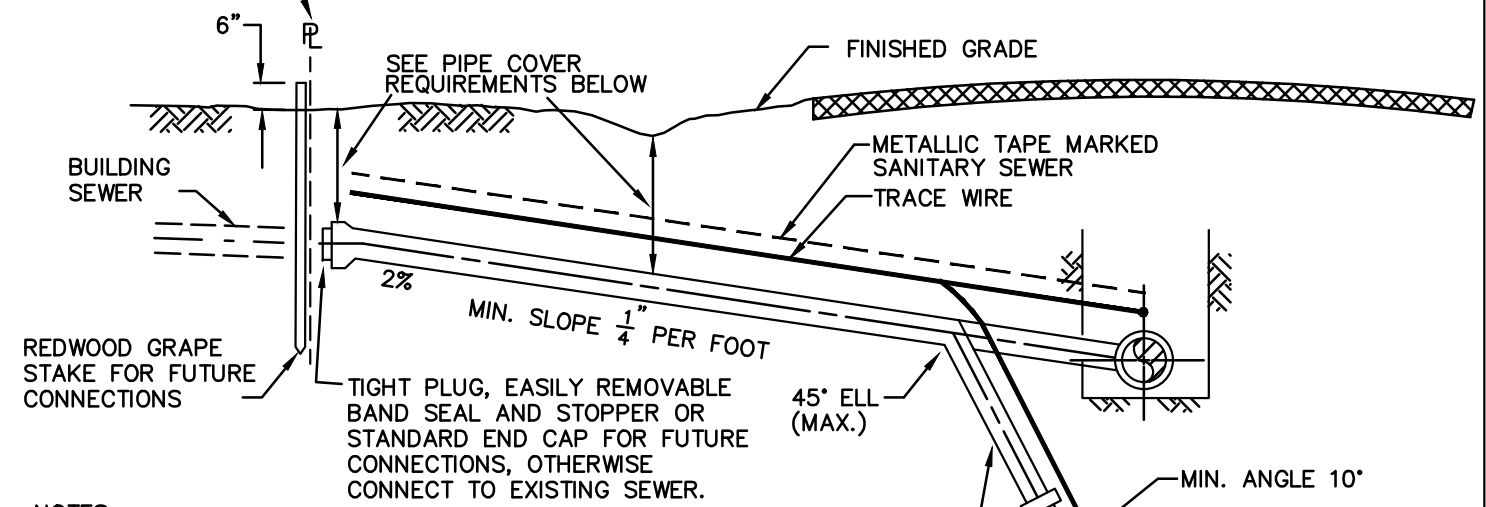
STANDARD INSIDE DROP MANHOLES
(4", 6" AND 8" DIAMETER PIPES ONLY)

APPROVED BY:

/S/ - PHIL SCOTT
DISTRICT MANAGER

05-20-15
DATE:

INSTALL WYE C/O AT OR WITHIN FIVE FEET OF PROPERTY LINE



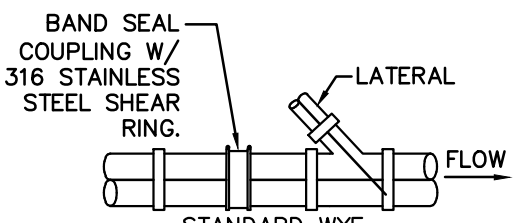
NOTES:

1. FOR SEWER DEPTHS FROM MINIMUM COVER TO 5 FEET, USE STANDARD WYE CONNECTION. FOR DEPTHS BELOW 5 FEET, USE STANDARD TEE CONNECTION WITH SLOPING RISER AS SHOWN. TAP-TITE CONNECTIONS MAY BE USED WHERE APPLICABLE.
2. WHEN SEWER IS AT MINIMUM DEPTH, HOLD SERVICE LINE TO MINIMUM SLOPE AND LESSEN COVER AT PROPERTY LINE, OTHERWISE 3 FEET OF COVER TO OFFICIAL GRADE IS REQUIRED AT PROPERTY LINE.
3. THE LOCATION OF ALL SEWER LATERALS SHALL BE MARKED WITH A LETTER "S" ON TOP OF CURB OR BACK OF WALK.
4. ALL SERVICE TEES OR WYES SHALL BE MANUFACTURER'S STANDARD FITTINGS. CONNECTION CLOSURE SHALL BE BY STANDARD BAND SEAL COUPLINGS WITH 316 STAINLESS STEEL SHEAR RING ON SERVICE ADDITIONS. NO PIPE BREAKING AND CONCRETE PATCHING WILL BE PERMITTED, ONLY NEATLY SNAPPED OR SAWCUT LENGTHS WILL BE ALLOWED.
5. 8 GAUGE COPPER WIRE OR COATED COPPER WIRE FOR TRACING PURPOSES SHALL BE PLACED ON ALL NEW LATERALS AND REPLACEMENT LATERALS WHEN EXCAVATION IS FROM MAIN LINE TO THE PROPERTY LINE CLEANOUT. WIRE TO BE BROUGHT TO RISER WITH TWO FEET COILED INSIDE BOX.
6. TAP-TITE AND TEE CONNECTIONS ARE NOT ALLOWED IN TERMINATING SEWER MAINS (MOST UPSTREAM LINE).
7. CONTRACTOR SHALL PLACE ROOT CONTROL FABRIC OVER ALL JOINTS AS SHOWN ON WEST BAY SANITARY DISTRICT DETAIL NO. 13.
8. CONTRACTOR SHALL INSTALL BEDDING AND BACKFILL MATERIAL AS SHOWN ON WEST BAY SANITARY DISTRICT DETAIL NO. 8.
9. PIPE MATERIAL FOR LATERALS SHALL BE DIP CLASS 50 OR 51, OR PVC C900 DR18.

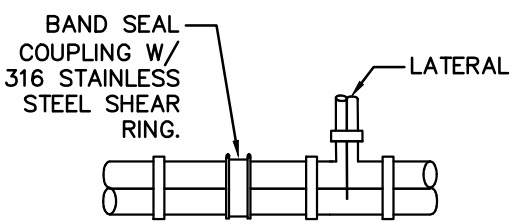
RISER TO REST AGAINST UNDISTURBED SOIL. WHERE TRENCH IS TOO WIDE, PVC C-900 DR 18 PIPE SHALL BE USED AND SHALL BE INSTALLED VERTICALLY IN CONCRETE CRADLE.

POUR CONCRETE SUPPORT 1'-0" WIDE

DEEP SEWER - GREATER THAN 10'



SEE NOTES 1 AND 4



SEE NOTES 1 AND 4

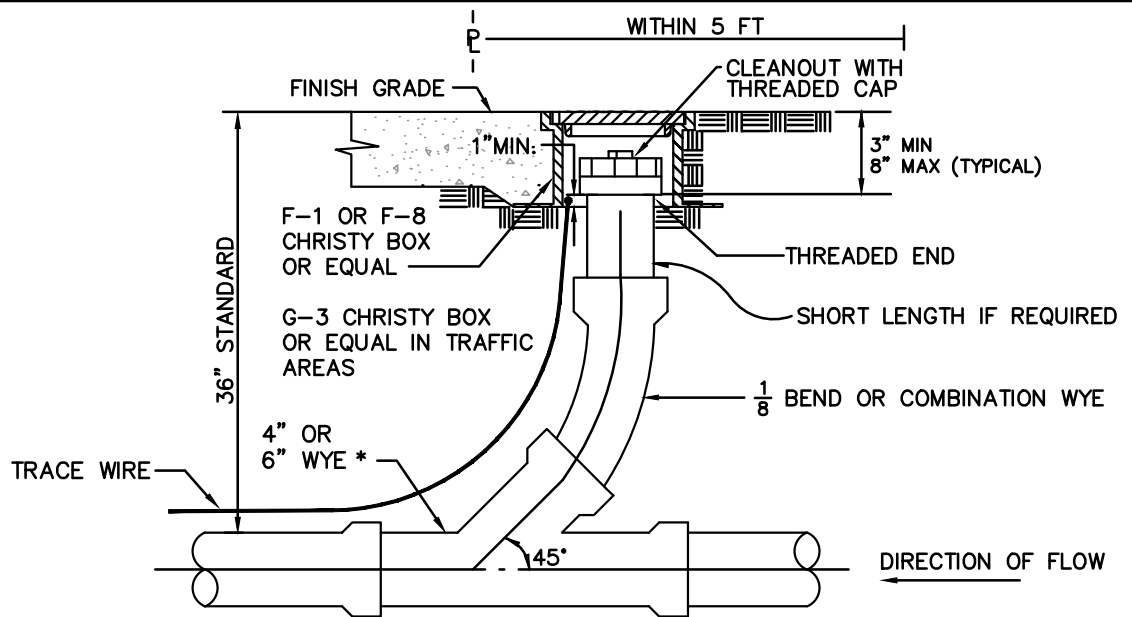
WEST BAY
SANITARY DISTRICT

SANITARY SEWER
LATERAL CONNECTIONS

APPROVED BY:

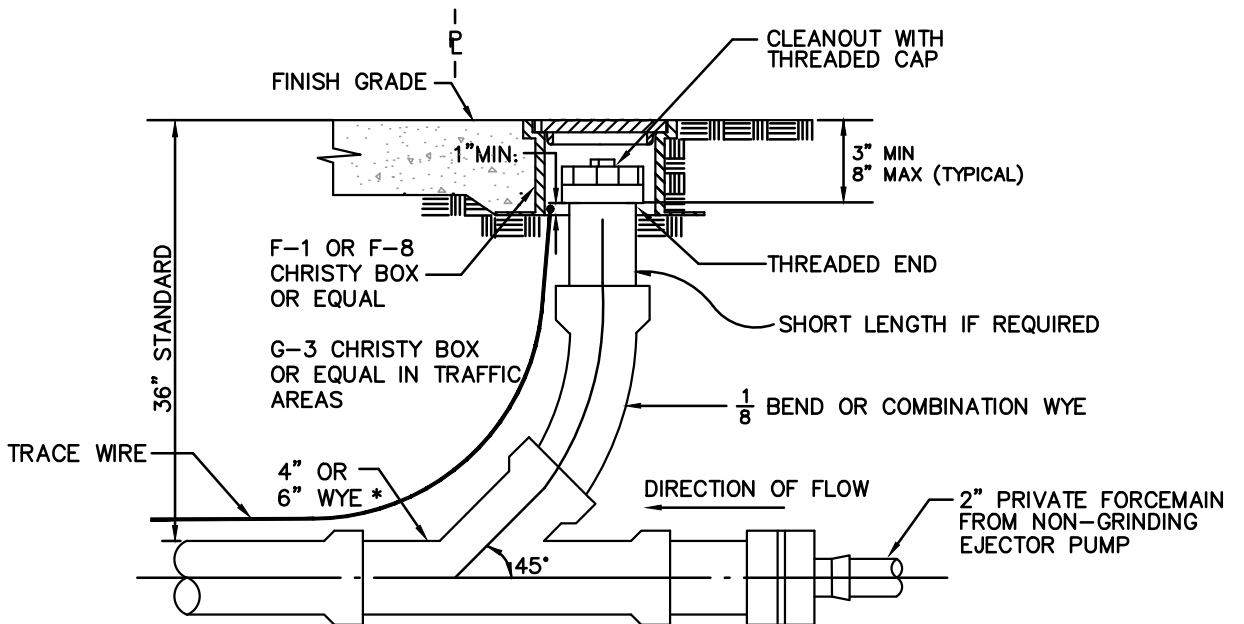
/s/ - PHIL SCOTT
DISTRICT MANAGER

05-20-15
DATE:



NOTE: SEWER PIPE JOINTS SHALL BE "BELL AND SPIGOT" JOINTS

VERTICAL RISER/GRAVITY SEWER



NOTE: SEWER PIPE JOINTS SHALL BE "BELL AND SPIGOT" JOINTS

VERTICAL RISER/PRIVATE FORCEMAIN TO GRAVITY SEWER

NOTES:

- 1) THE CLEAN OUT ASSEMBLY SHALL BE THE SAME SIZE AS THE LATERAL SEWER IT SERVICES.
- 2) COVERS SHALL BE C.I. FOR STREETS, ALLEYS OR DRIVES, OTHERWISE FIBRELYTE OR CONCRETE FOR NON-TRAFFIC USE.
- 3) #8 GAUGE SOLID AND COATED COPPER WIRE FOR TRACING PURPOSES SHALL BE PLACED ON ALL NEW LATERALS AND REPLACEMENT LATERALS WHEN EXCAVATION IS FROM MAIN LINE TO THE PROPERTY LINE CLEANOUT. WIRE TO BE BROUGHT TO RISER WITH TWO FEET COILED INSIDE BOX.
- 4) ALL CLEAN OUT BOX LIDS SHALL BE MARKED WITH A LETTER "S" OR THE WORD "SEWER".
- 5) WYE SHALL BE INSTALLED AT OR WITHIN 5 FEET OF PROPERTY LINE.

6) CONTRACTOR SHALL PLACE ROOT CONTROL FABRIC OVER ALL JOINTS AS SHOWN ON WEST BAY SANITARY DISTRICT DETAIL NO. 13.

7) CONTRACTOR SHALL INSTALL BEDDING AND BACKFILL MATERIAL AS SHOWN ON WEST BAY SANITARY DISTRICT DETAIL NO. 8.

WEST BAY

SANITARY DISTRICT

SERVICE LATERAL CLEANOUT

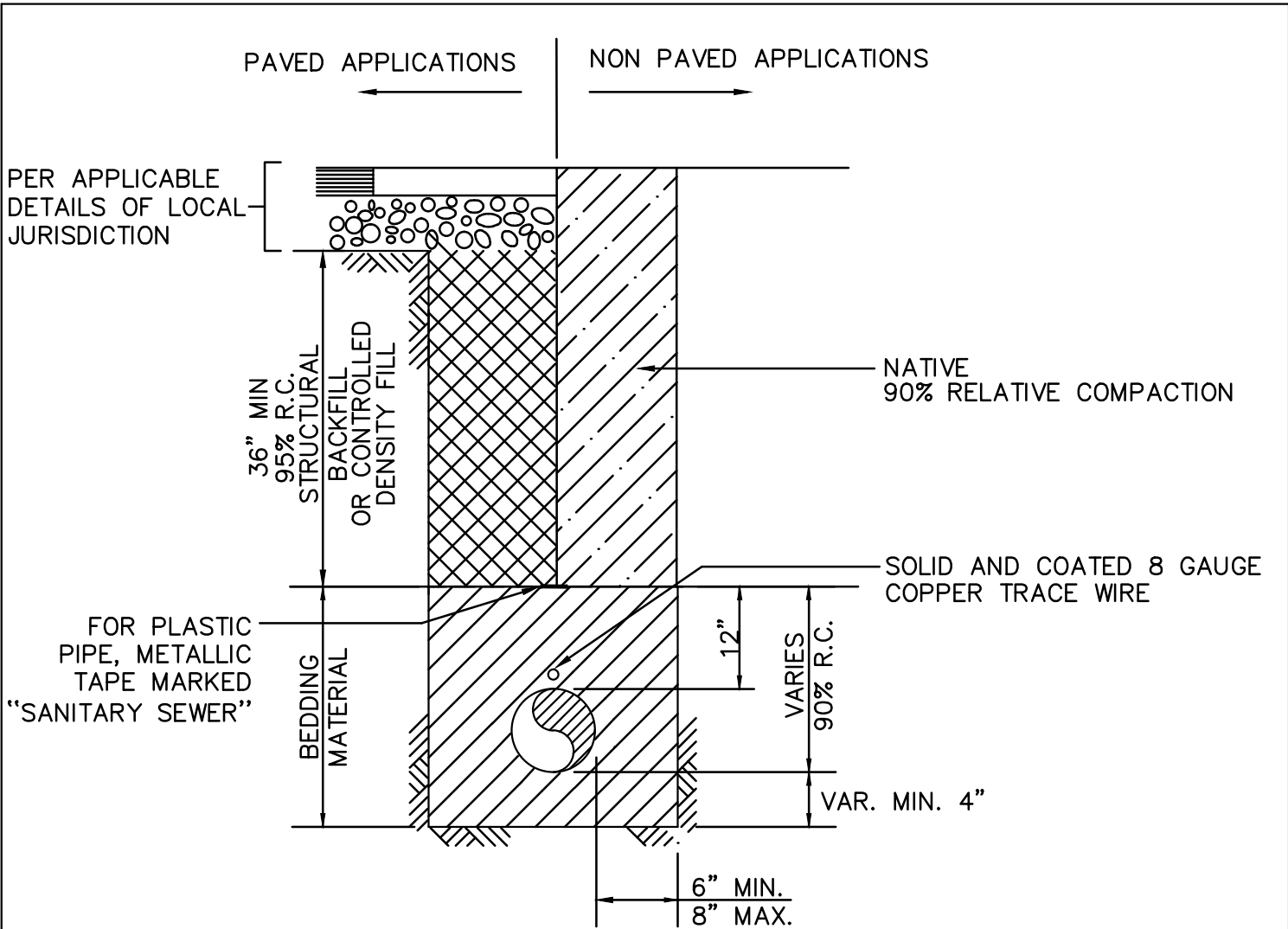
APPROVED BY:

/s/ - PHIL SCOTT

DISTRICT MANAGER

05-20-15

DATE:



TYPICAL TRENCH SECTION

BEDDING MATERIAL

ANGULAR BEDDING MATERIAL REQUIREMENTS
PERCENT PASSING (CRUSHED DRAIN ROCK)

SIEVE SIZES	PERCENTAGE PASSING
1"	100
3/4"	90-100
3/8"	20-55
#4	0-10
#8	0-5

STRUCTURAL BACKFILL

STRUCTURAL BACKFILL REQUIREMENTS
PERCENT PASSING

SIEVE SIZES	PERCENTAGE PASSING
1-1/2"	100
3/4"	80-100
#4	30-60
#30	5-35
#200	0-12

WEST BAY

SANITARY DISTRICT

EXCAVATION, BACKFILL AND
SURFACE RESTORATION

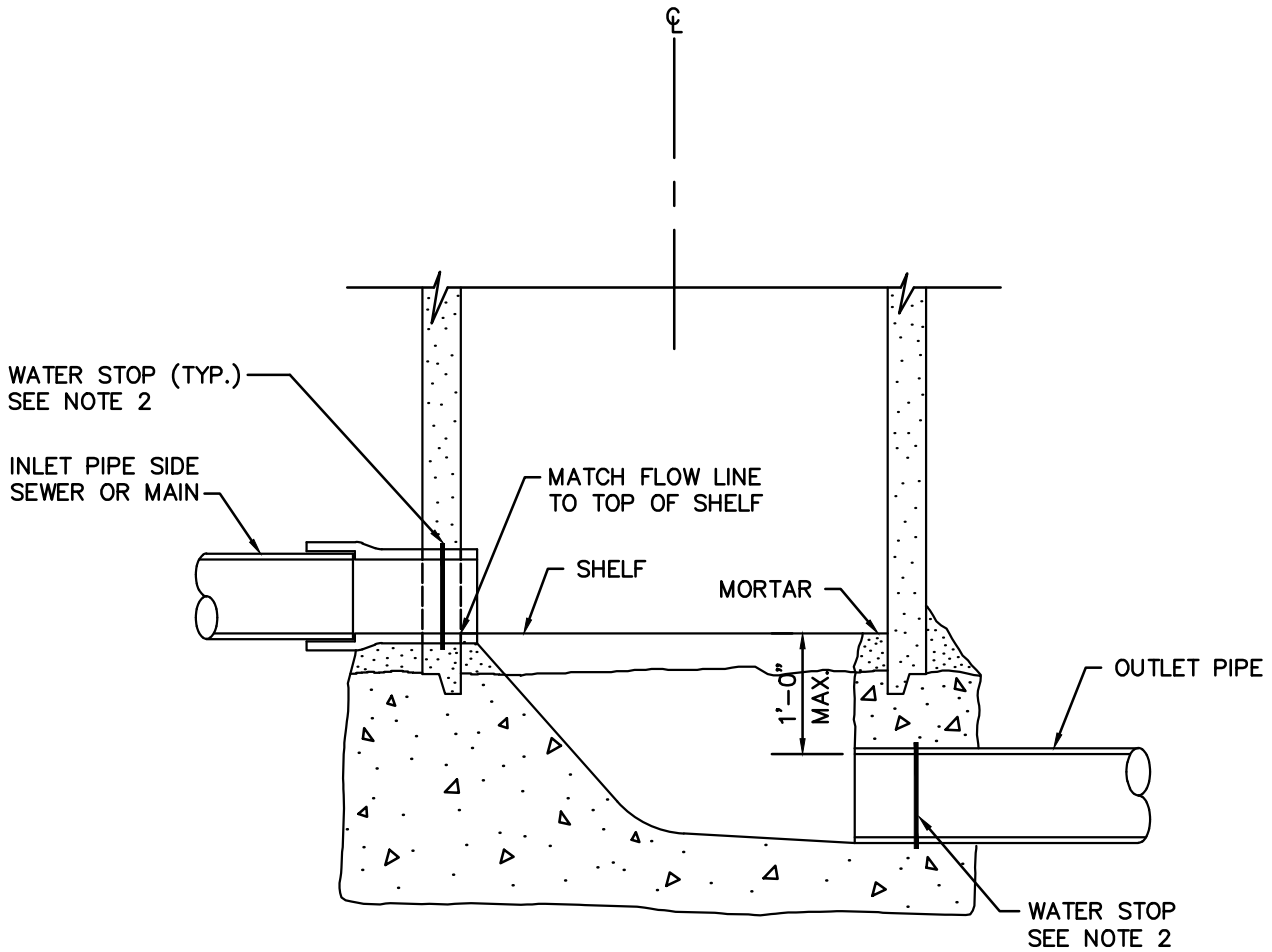
APPROVED BY:

/s/ - PHIL SCOTT

DISTRICT MANAGER

05-20-15

DATE:



ELEVATION

NOTES:

- 1) SEE STANDARD MANHOLE DETAIL FOR MANHOLE CONSTRUCTION AND DIMENSIONS.
- 2) AN APPROVED WATER STOP SHALL BE INSTALLED ON ALL FLEXIBLE PIPE ENTERING OR EXITING MANHOLE.

WEST BAY
SANITARY DISTRICT

DROP MANHOLE DETAIL FOR CONNECTION
OF EXISTING SEWER TO NEW MANHOLE

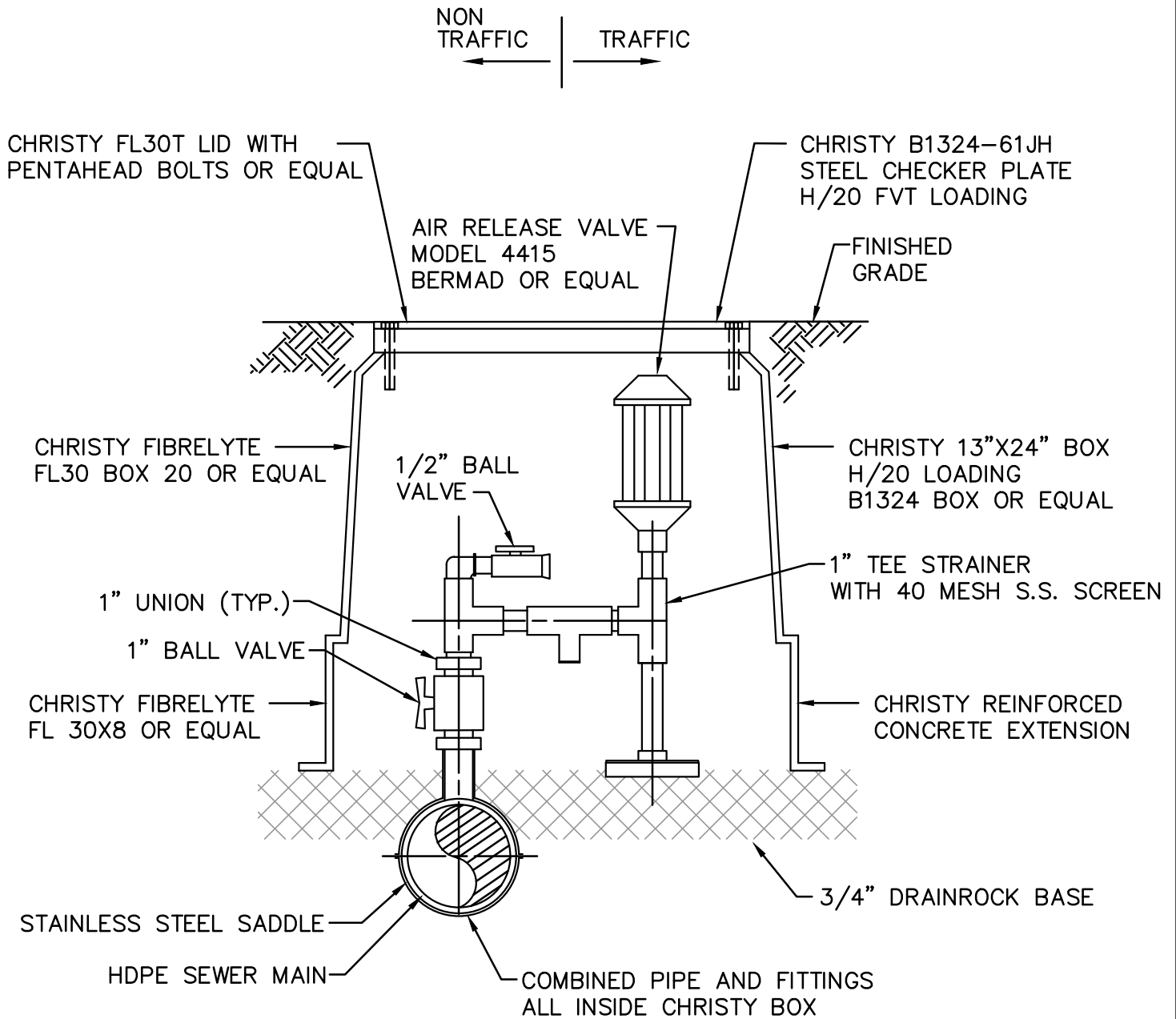
APPROVED BY:

/S/ - PHIL SCOTT

DISTRICT MANAGER

05-20-15

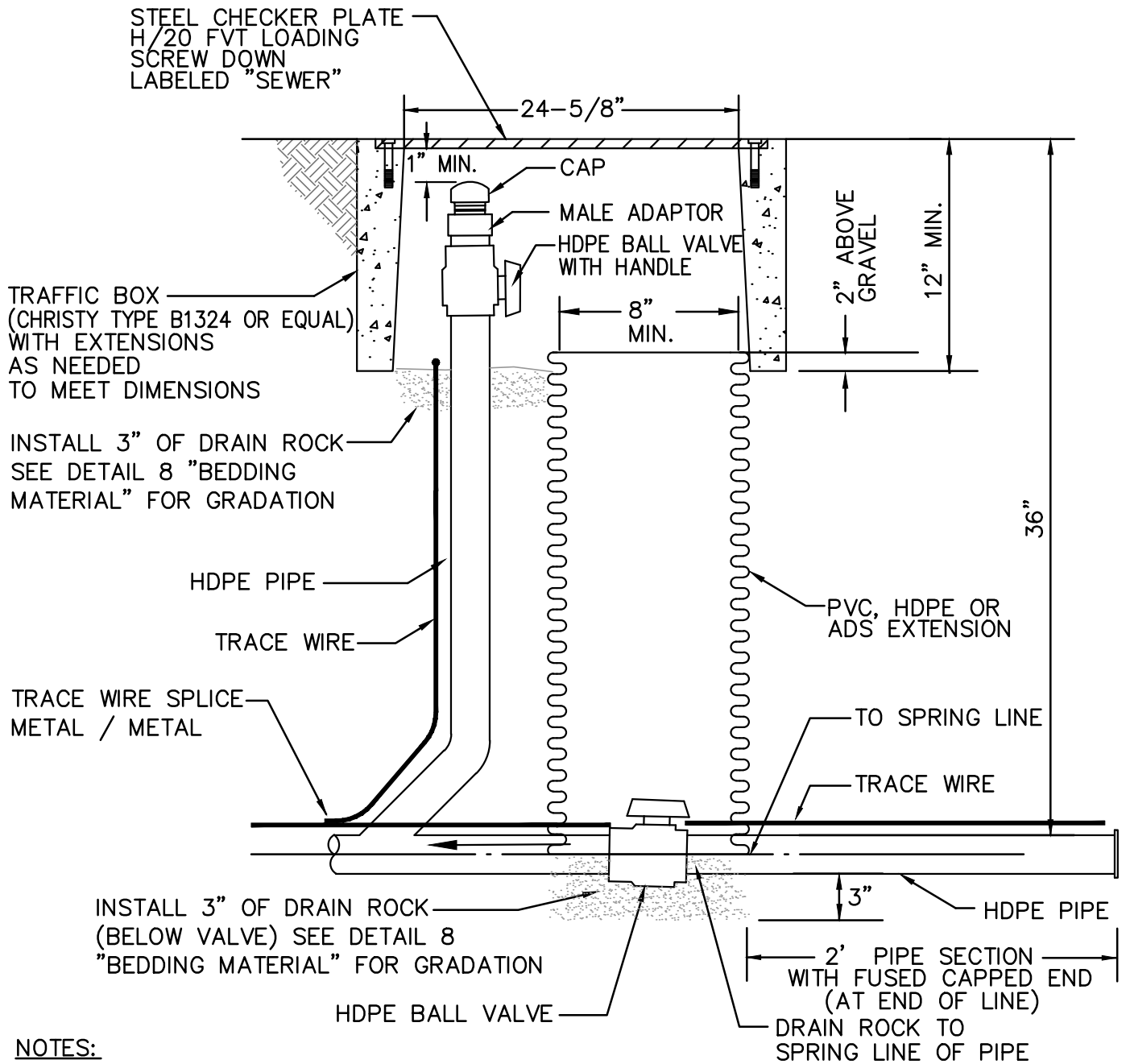
DATE:



NOTE:

- 1) AIR RELEASE ASSEMBLY PIPE AND FITTINGS TO BE PVC.
- 2) THE CONTRACTOR MUST OBTAIN A CLASS 3 PERMIT FROM THE DISTRICT PRIOR TO INSTALLATION.

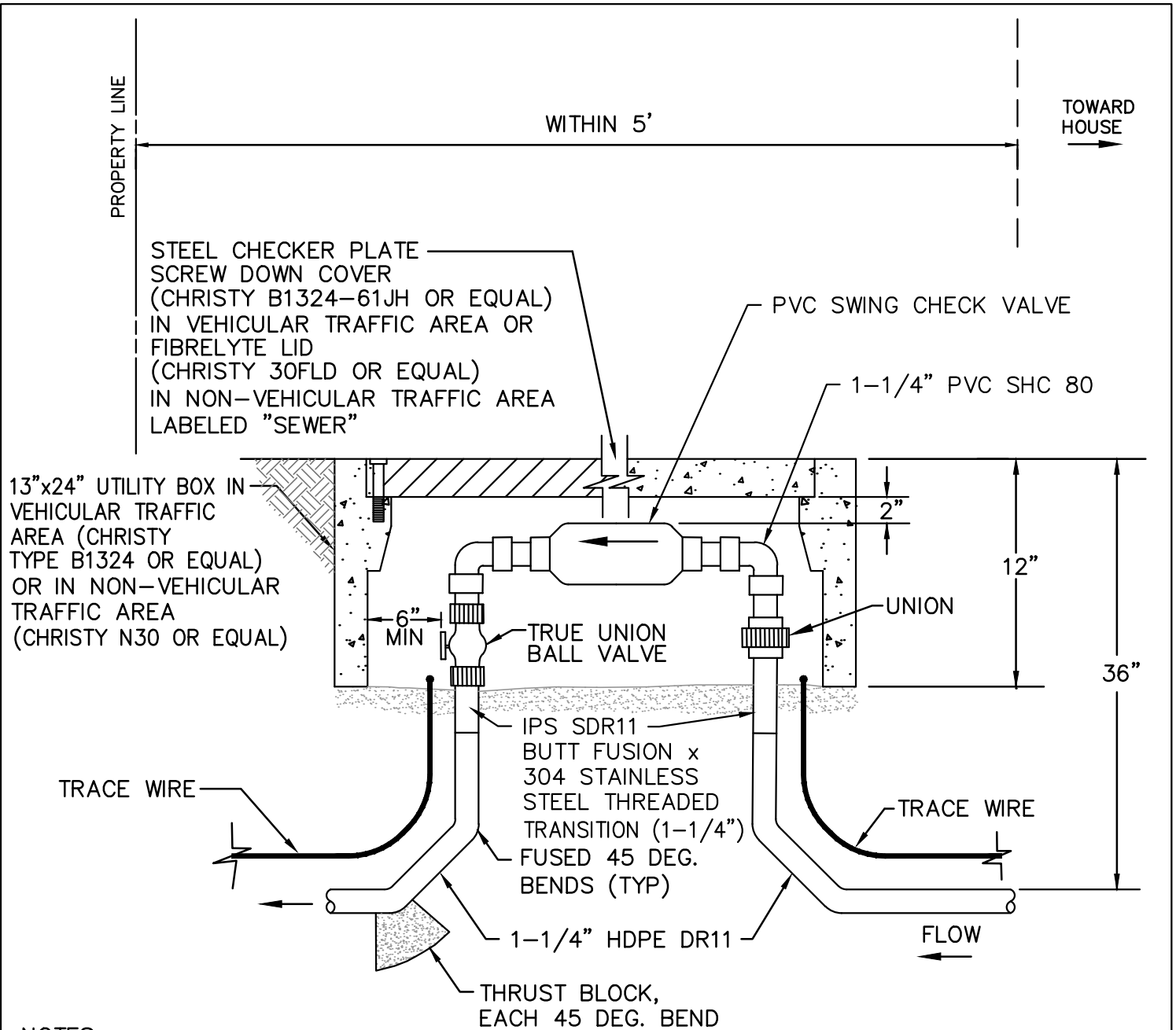
WEST BAY	
SANITARY DISTRICT	
AIR RELEASE ASSEMBLY FOR STEP MAIN	
APPROVED BY:	
/S/ - PHIL SCOTT	05-20-15
DISTRICT MANAGER	DATE:
	10



NOTES:

1. CONTRACTOR SHALL SUPPLY DISTRICT WITH 4'-5' VALVE ACTUATOR HANDLE TO TURN VALVE.
2. ALL HDPE JOINTS SHALL BE FUSED.
3. TRACE WIRE SHALL BE CONTINUOUS 8 GAUGE SOLID AND COATED COPPER WITH 2 FEET COILED IN BOX.
4. RISER SHALL BE SAME SIZE AS FORCEMAIN.

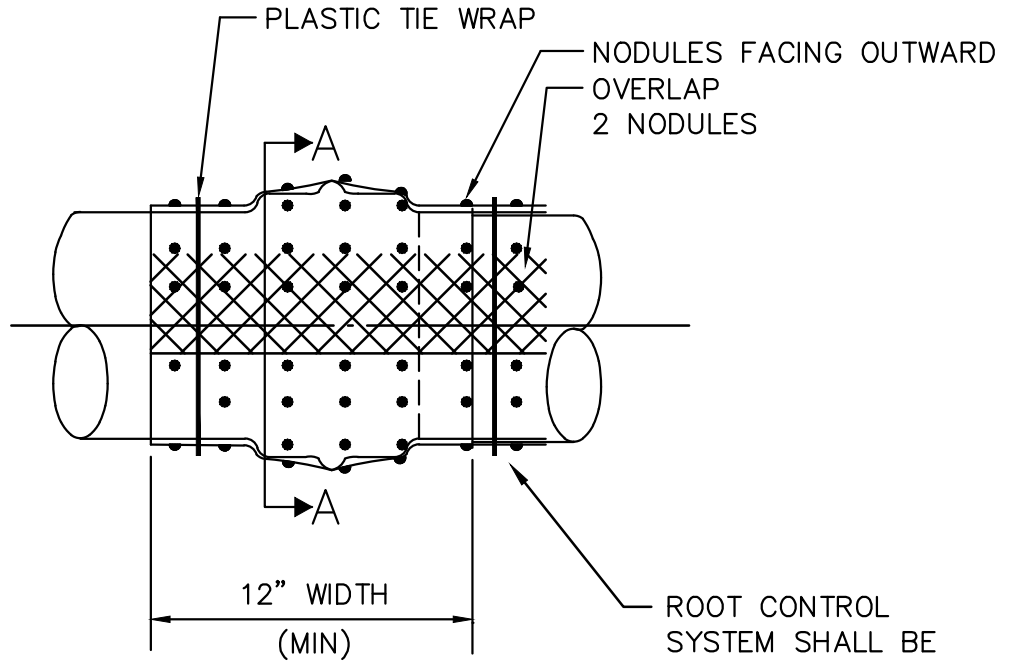
WEST BAY	
SANITARY DISTRICT	
CLEANOUT 2"-3" FORCEMAIN (STEP AND GRINDER PUMP SYSTEMS)	
APPROVED BY:	
/s/ - PHIL SCOTT	05-20-15
DISTRICT MANAGER	DATE:



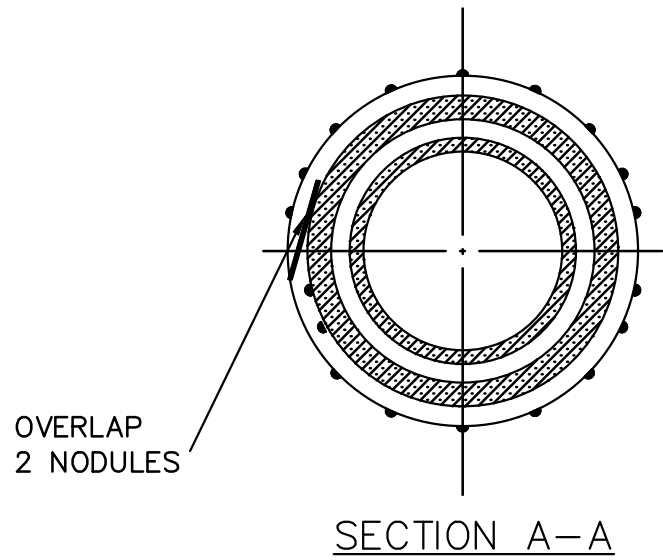
NOTES:

1. THE LATERAL CHECK VALVE STATION SHALL BE LOCATED IN AN AREA APPROVED BY THE DISTRICT.
2. ALL PVC JOINTS SHALL BE GLUED/SOLVENT WELDED.
3. TRACE WIRE SHALL BE CONTINUOUS 8 GAUGE SOLID AND COATED COPPER WIRE WITH TWO FEET COILED IN BOX.
4. COVER OVER FORCE MAIN SHALL BE 36" UNLESS OTHERWISE APPROVED BY THE DISTRICT.
5. ALL PIPINGS SHOULD BE PVC SCHEDULE 80 OR HDPE SDR11.

WEST BAY	
SANITARY DISTRICT	
1-1/4" LATERAL CHECK VALVE STATION	
APPROVED BY:	
/s/ - PHIL SCOTT	05-20-15
DISTRICT MANAGER	DATE:
	12



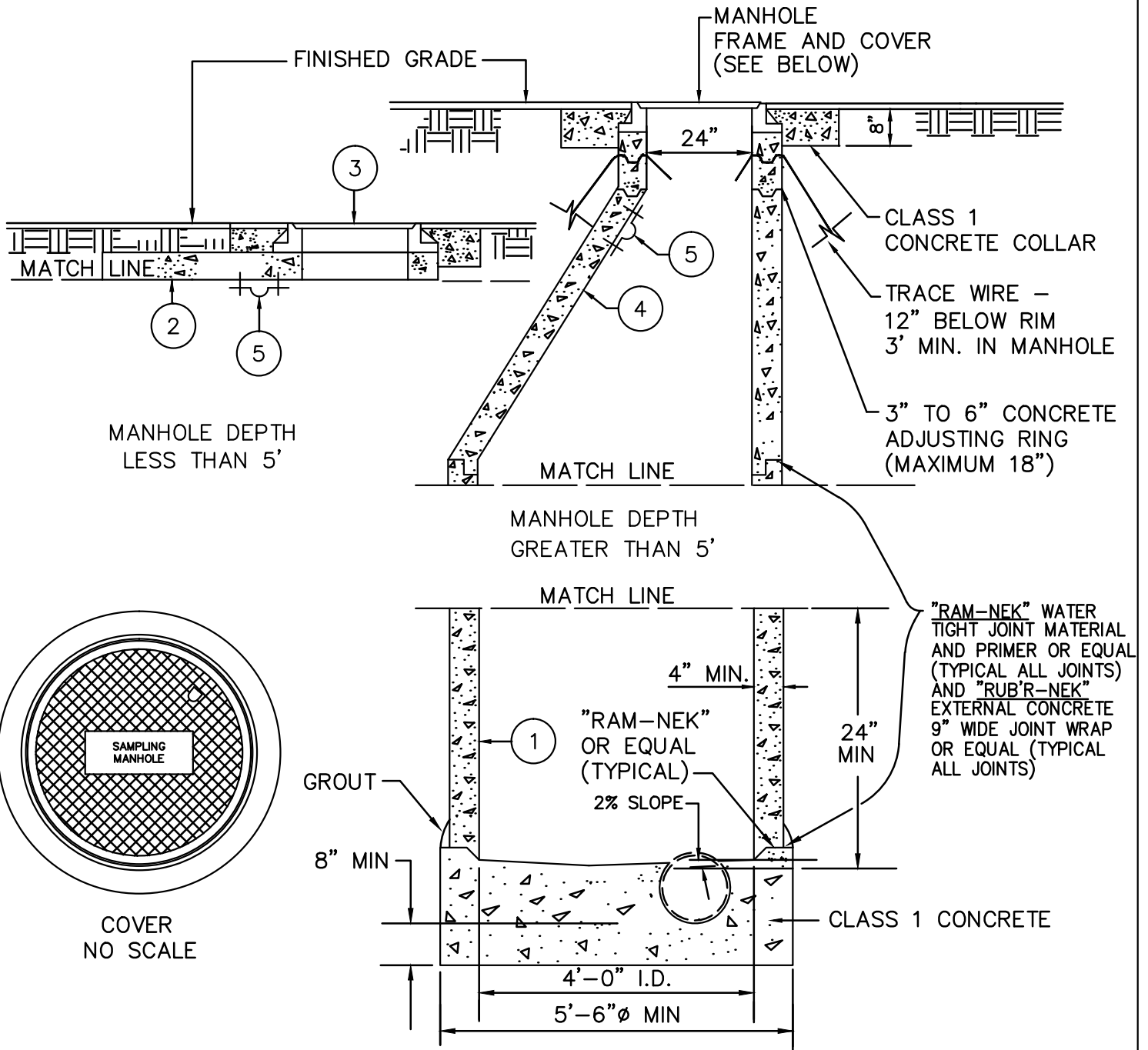
ROOT CONTROL SYSTEM SHALL BE BIOBARRIER OR EQUAL, INSTALLED PER MANUFACTURER RECOMENDATION



APPLICATION (ALL JOINTS):

- 1) ALL NEW MAIN SEWER PROJECTS.
- 2) ALL NEW OR REPLACEMENT SANITARY SEWER LATERAL CONNECTIONS.
- 3) SANITARY SEWER LATERAL REPAIRS.

WEST BAY SANITARY DISTRICT	
ROOT CONTROL SYSTEM	
APPROVED BY:	
/s/ - PHIL SCOTT	05-20-15
DISTRICT MANAGER	DATE:



NOTE:

- 1) STANDARD 48" DIAMETER PRECAST MANHOLE SECTION WITHOUT STEPS. HEIGHT AS REQUIRED. SECTIONS SHALL CONFORM TO ASTM C 478
 - 2) PRECAST MANHOLE CAP DESIGNED FOR H-20 FVT LOADING.
 - 3) D&L FOUNDRY STD. A-1024 MANHOLE RING AND COVER OR APPROVED EQUAL WITHIN 5' OF PROPERTY LINE.
 - 4) ECCENTRIC CONE SECTION. MANHOLE OPENING TO BE PLACED OVER CHANNEL
 - 5) WROUGHT STEEL STRAP WITH 3/8" CINCH ANCHORS-GRINNELL FIG. 262 FOR 2" PIPE
- 1) FLEXIBLE PIPE ONLY – AN APPROVED WATER STOP SHALL BE INSTALLED ON ALL FLEXIBLE PIPE ENTERING OR EXITING SAMPLING MANHOLE.
 - 2) ECCENTRIC CONE SHALL BE POSITIONED IN SUCH A MANNER OVER CENTER OF PIPE FOR INSTALLATION OF FLOW METER SENSOR BRACKET.

WEST BAY

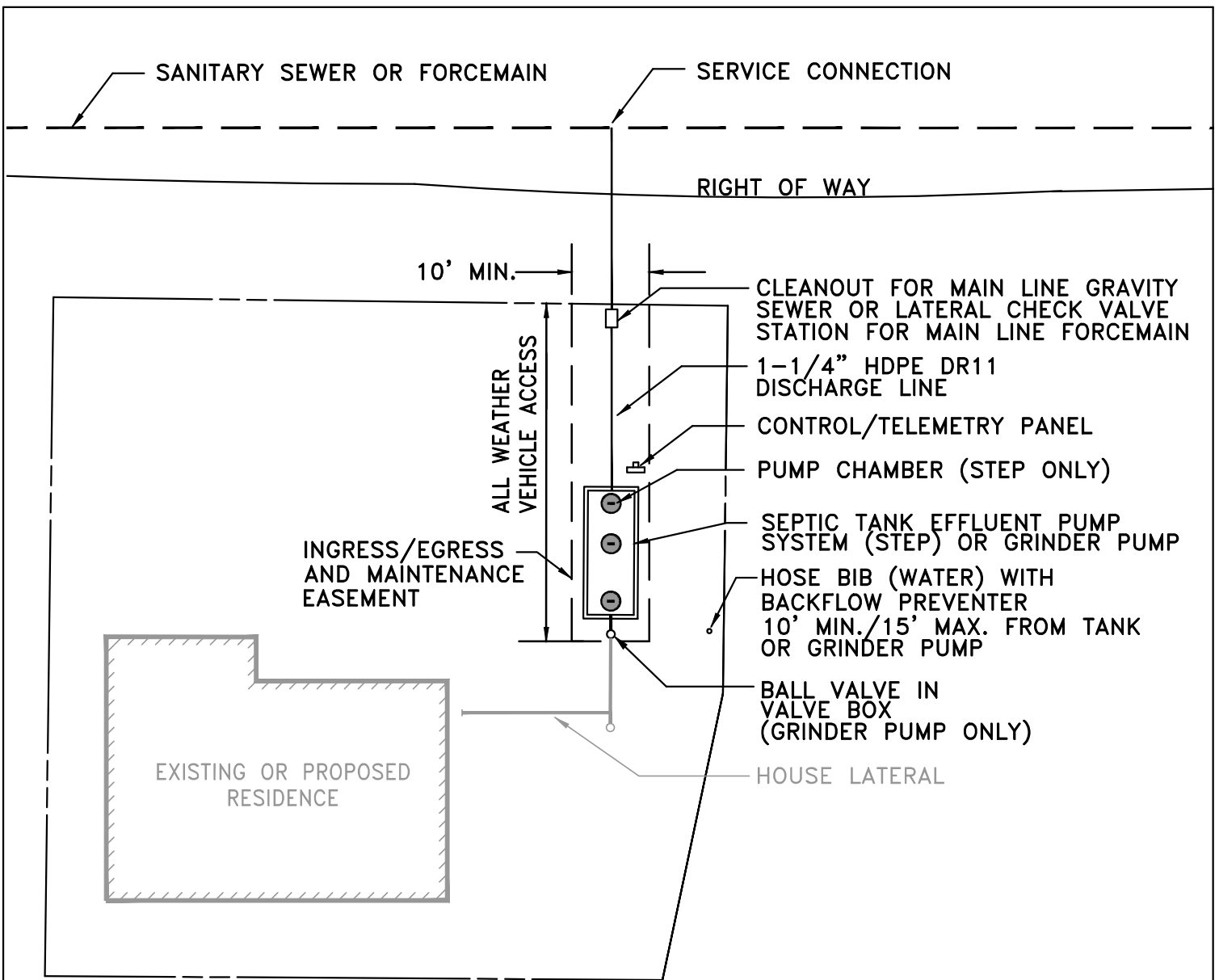
SANITARY DISTRICT

SAMPLING MANHOLE

APPROVED BY:

/s/ - PHIL SCOTT
DISTRICT MANAGER

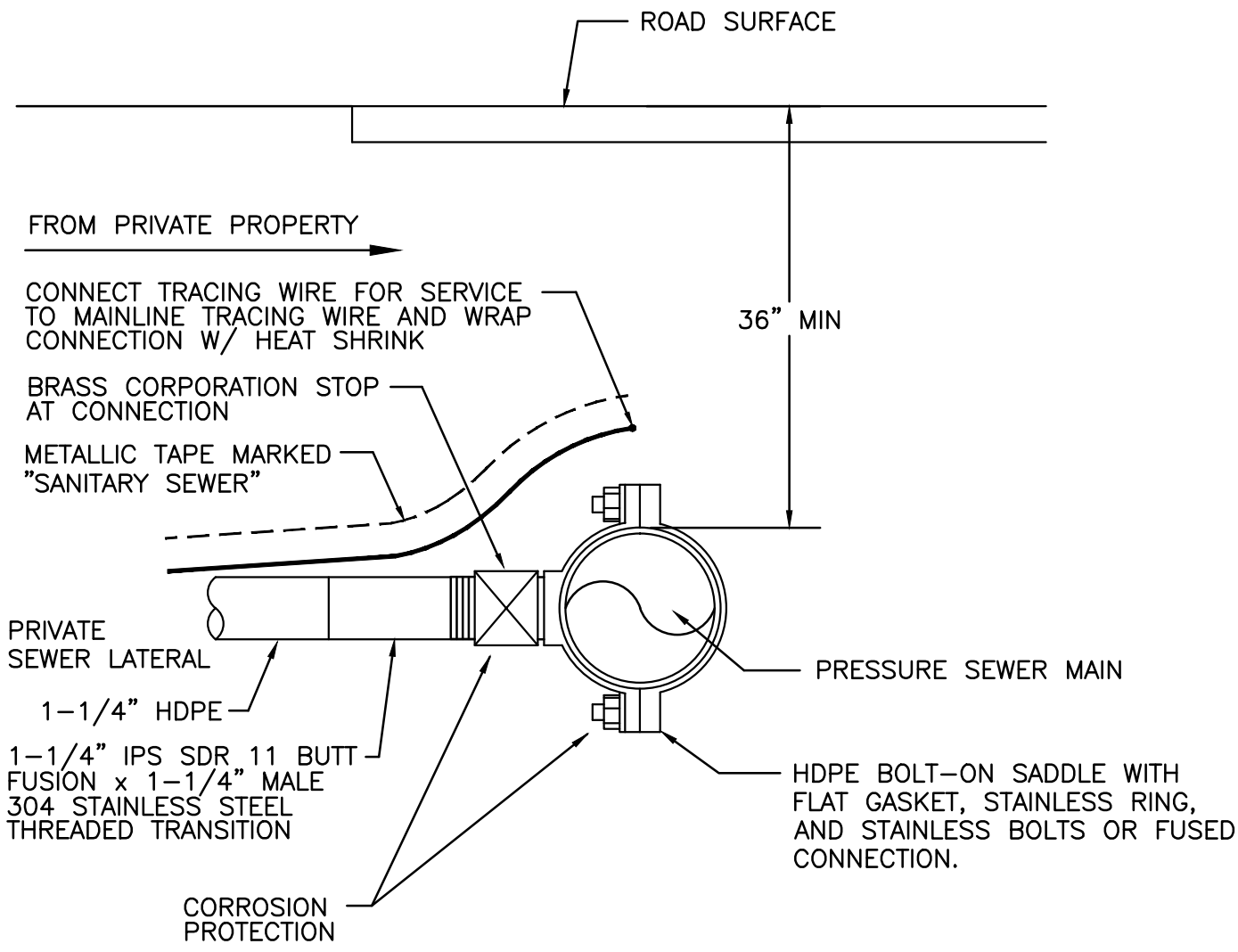
05-20-15
DATE:



NOTES:

- 1) FOR USE IN THE ON-SITE WASTEWATER DISPOSAL ZONE (OWDZ) ONLY.
- 2) LOCATION OF ALL SANITARY FACILITIES SHALL BE SUBJECT TO DISTRICT APPROVAL.
- 3) PROVIDE VEHICLE ACCESS TO GRINDER PUMP/STEP SYSTEM.
- 4) AN EASEMENT SHALL BE GRANTED TO THE DISTRICT FOR VEHICULAR INGRESS/EGRESS AND FOR MAINTENANCE PURPOSES.
- 5) COATED #8 GAUGE WIRE FOR TRACING PURPOSES SHALL BE PLACED ON ALL NEW LATERALS/DISCHARGE LINES.
- 6) CONTRACTOR/APPLICANT SHALL ANNEX INTO THE WEST BAY SANITARY DISTRICT BOUNDARY AND ON-SITE WASTEWATER DISPOSAL ZONE, OBTAIN BOARD APPROVAL, SUBMIT PUMP INFORMATION, SUBMIT ENGINEERED DRAWINGS & MUST OBTAIN A CLASS 3 PERMIT PRIOR TO INSTALLATION.

WEST BAY SANITARY DISTRICT	
TYPICAL STEP/GRINDER PUMP SYSTEM LAYOUT ON-SITE WASTEWATER DISPOSAL ZONE (OWDZ) ONLY	
APPROVED BY:	
/s/ - PHIL SCOTT	05-20-15
DISTRICT MANAGER	DATE:



NOTES:

1. TRACE WIRE SHALL BE CONTINUOUS COATED #8 WIRE.
2. THE CONTRACTOR SHALL EXCAVATE BY HAND EXPOSING THE EXISTING PRESSURE SEWER MAIN.
3. THE CONTRACTOR SHALL COAT CONNECTION WITH CORROSION PROTECTION.

WEST BAY	
SANITARY DISTRICT	
FORCEMAIN SERVICE CONNECTION	
APPROVED BY:	
/s/ - PHIL SCOTT	05-20-15
DISTRICT MANAGER	DATE:
16	

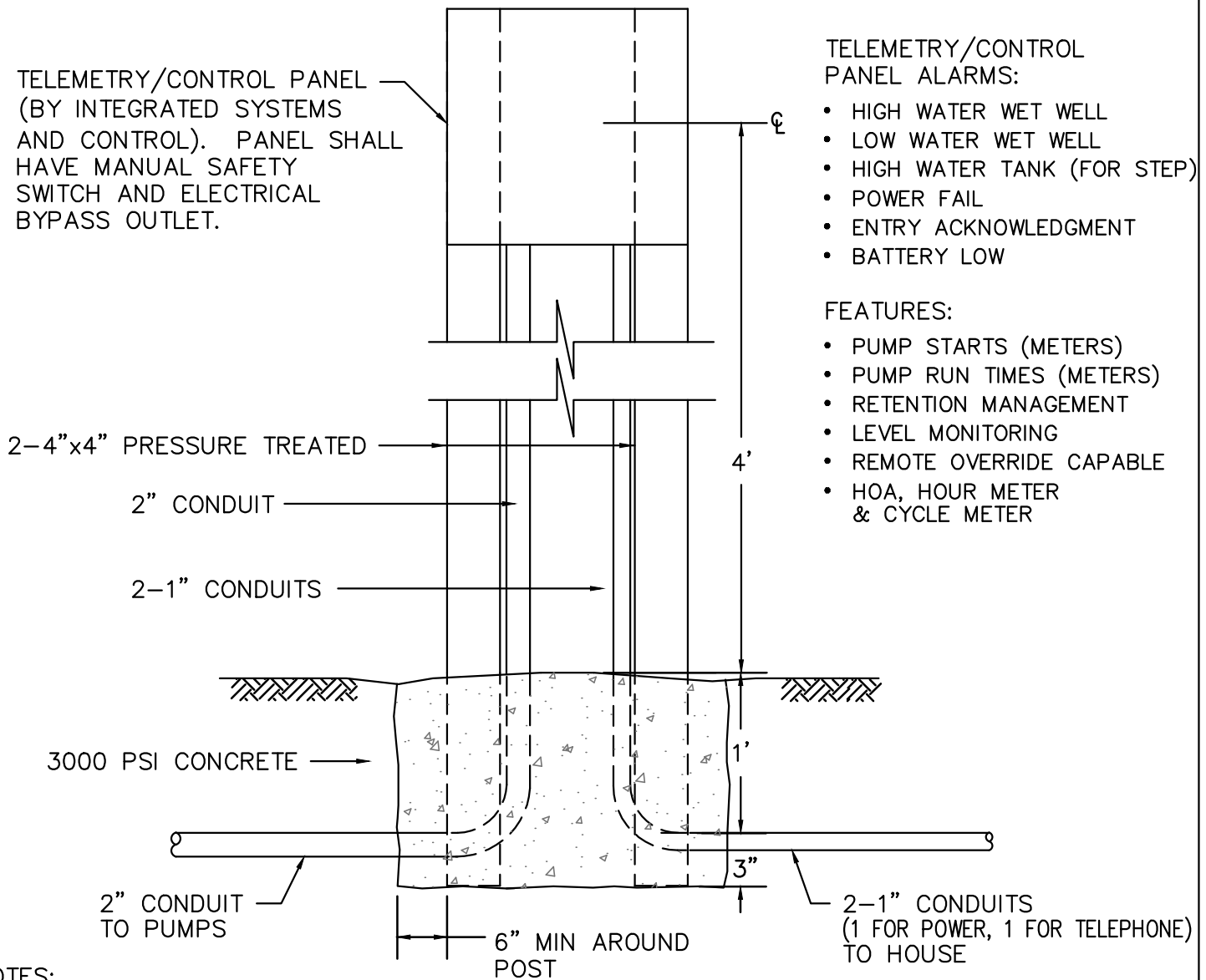
TELEMETRY/CONTROL PANEL (BY INTEGRATED SYSTEMS AND CONTROL). PANEL SHALL HAVE MANUAL SAFETY SWITCH AND ELECTRICAL BYPASS OUTLET.

TELEMETRY/CONTROL PANEL ALARMS:

- HIGH WATER WET WELL
- LOW WATER WET WELL
- HIGH WATER TANK (FOR STEP)
- POWER FAIL
- ENTRY ACKNOWLEDGMENT
- BATTERY LOW

FEATURES:

- PUMP STARTS (METERS)
- PUMP RUN TIMES (METERS)
- RETENTION MANAGEMENT
- LEVEL MONITORING
- REMOTE OVERRIDE CAPABLE
- HOA, HOUR METER & CYCLE METER



NOTES:

- 1) THE PANEL IS TO CONTROL THE PUMPS AND TO NOTIFY WEST BAY SANITARY DISTRICT SHOULD A MALFUNCTION OCCUR.
- 2) THE PROPERTY OWNER SHALL PROVIDE A DEDICATED PHONE LINE FOR THE PANEL. THE PHONE LINE'S SINGLE PURPOSE SHALL BE FOR TELEMETRY PANEL USE, AND PAID FOR AT THE HOMEOWNERS EXPENSE.
- 3) THE PROPERTY OWNER SHALL PROVIDE A DEDICATED ELECTRICAL CIRCUIT FOR THE PANEL. THE CIRCUIT'S SINGLE PURPOSE SHALL BE FOR TELEMETRY PANEL USE, AND PAID FOR AT THE HOMEOWNERS EXPENSE.
- 4) CONTROL/TELEMETRY PANEL SHALL BE SUPPLIED, APPROVED, AND CERTIFIED BY INTEGRATED SYSTEMS AND CONTROL (ISAC). (530) 878-9038.
- 5) LOCATION SUBJECT TO DISTRICT APPROVAL.
- 6) BURIED CONDUIT SHALL BE PVC SCHEDULE 80. EXPOSED CONDUIT SHALL BE GALVANIZED STEEL OR ALUMINUM.
- 7) CONTROL PANEL MUST BE SUPPLIED WITH HAND-OFF-AUTO SWITCH, HOUR METER, AND CYCLE METER.

WEST BAY
SANITARY DISTRICT

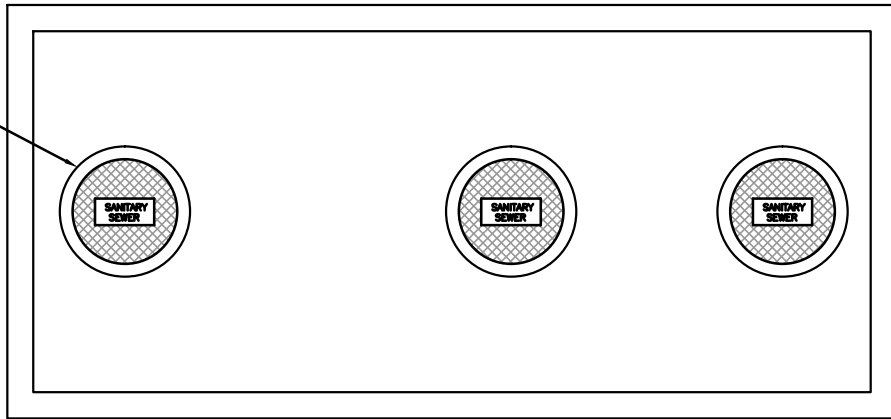
CONTROL/TELEMETRY PANEL
STEP/GRINDER SYSTEMS

APPROVED BY:

/s/ - PHIL SCOTT
DISTRICT MANAGER

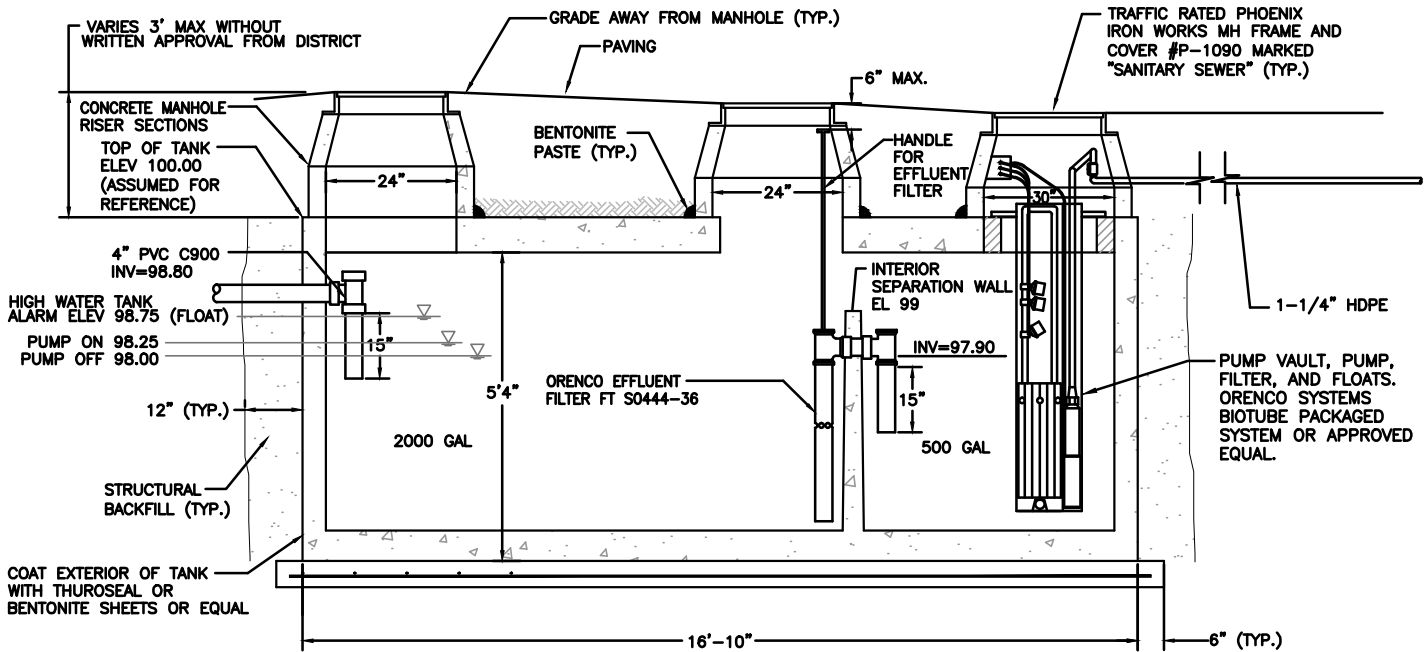
05-20-15
DATE:

TRAFFIC RATED PHOENIX IRON WORKS MH FRAME AND COVER #P-1090 MARKED "SANITARY SEWER" (TYP.)

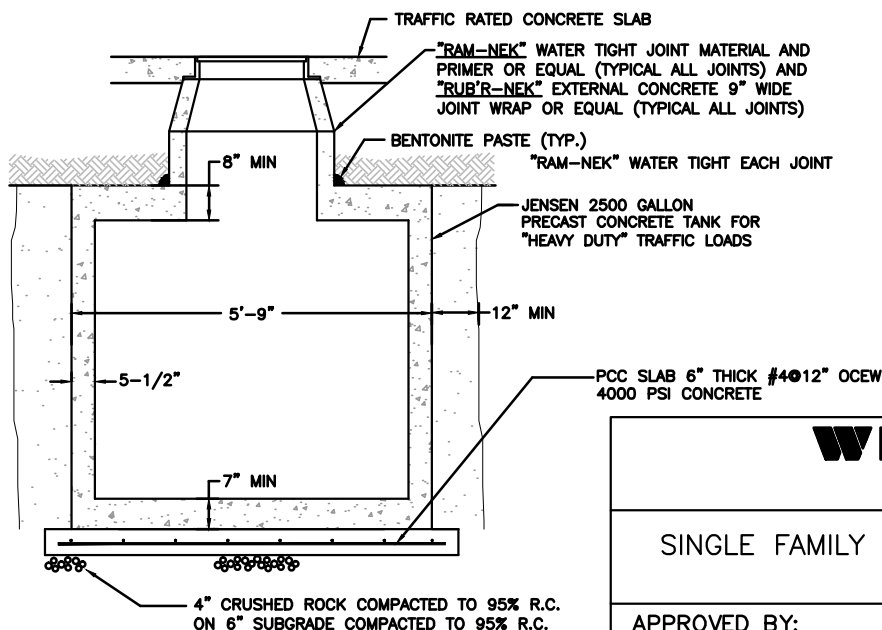


PCC SLAB

PLAN VIEW
NOT TO SCALE



LONGITUDINAL TANK CROSS SECTION
NOT TO SCALE



NOTE:

TANK SHALL BE A TWO COMPARTMENT PRECAST CONCRETE TANK WITH THREE MANHOLES AND GAS-TIGHT LIDS. THE SEDIMENT COMPARTMENT SHALL HAVE 2000 GAL. CAPACITY AND THE EFFLUENT COMPARTMENT SHALL HAVE 500 GAL. CAPACITY.

TYPICAL TANK CROSS SECTION
NOT TO SCALE

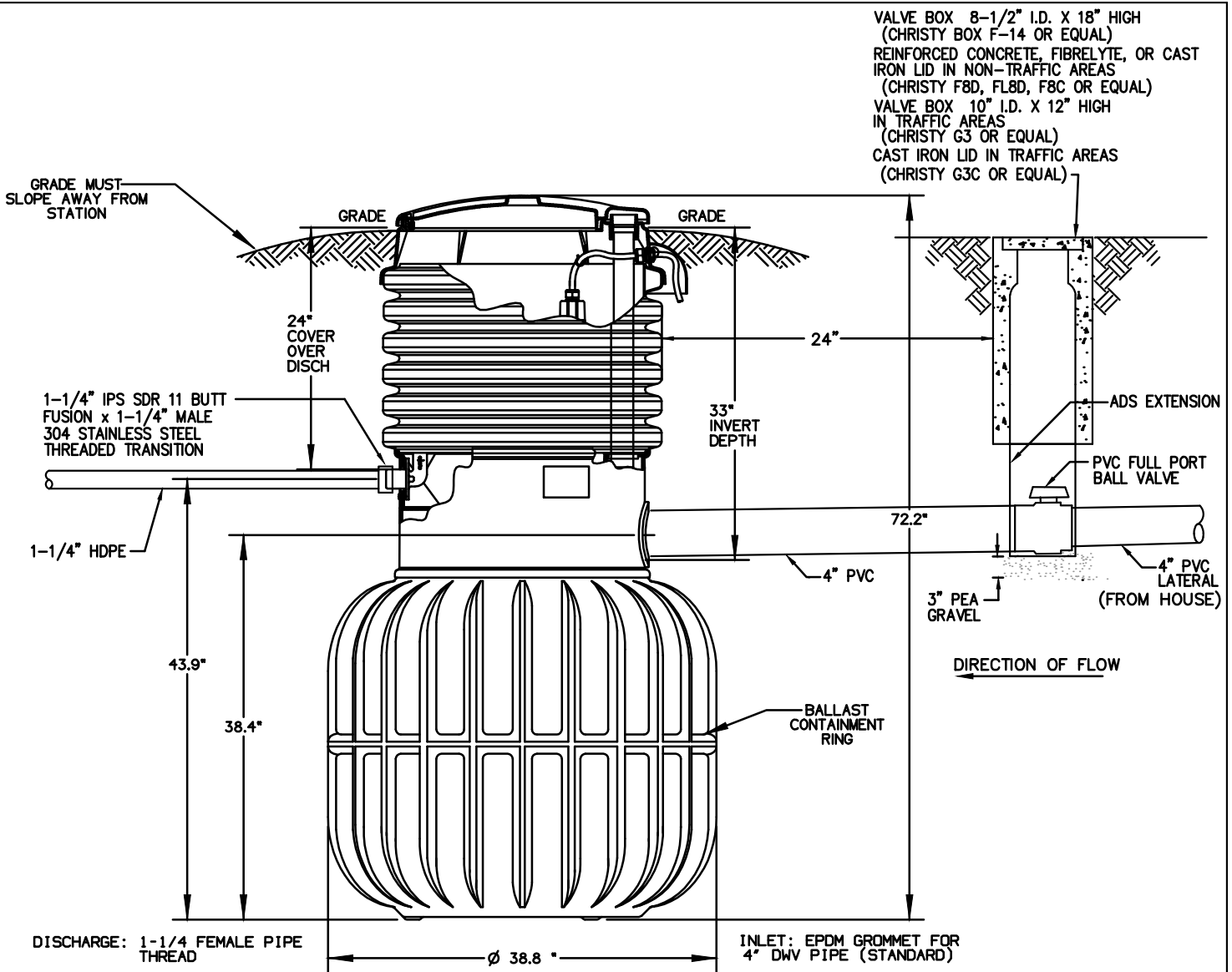
WEST BAY
SANITARY DISTRICT

SINGLE FAMILY SEPTIC TANK EFFLUENT PUMPING (STEP) SYSTEM

APPROVED BY:

/S/ - PHIL SCOTT
DISTRICT MANAGER

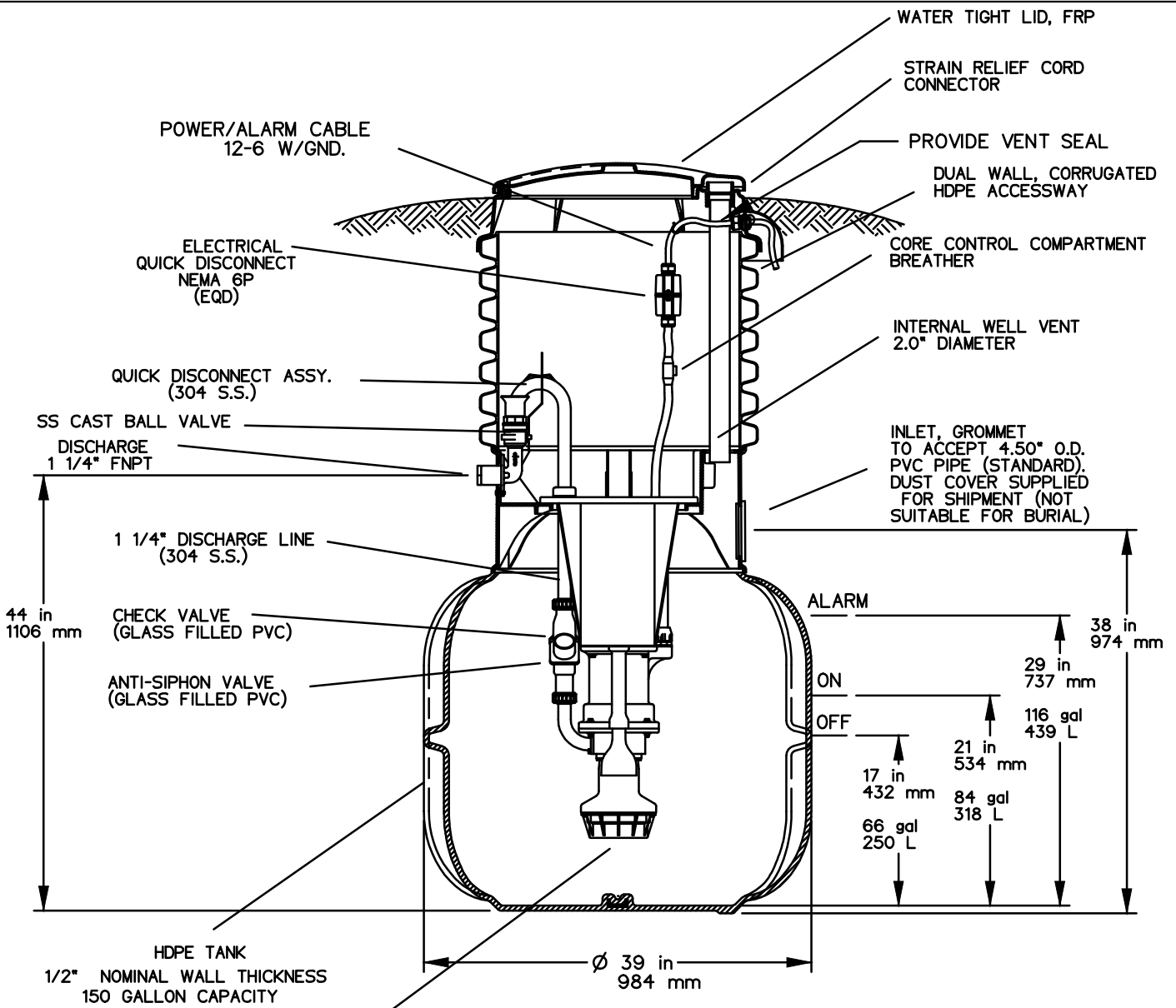
05-20-15
DATE:



NOTES:

1. Pump shall be Environment One Model DH151-74 with poured-in-place concrete anchor. (2773 Balltown Road, Schenectady, NY 12309-1090. (518) 346-6161, Fax (518) 346-6188. Local Representative: Signa Mechanical (949) 548-1125).
2. Pump shall be installed per manufacturer's recommendations.
3. See Single Family Grinder Pump Information Detail for pump anchor detail.
4. See 1-1/4 Inch Lateral Check Valve Station Detail for discharge line valve requirements.
5. Contractor shall supply District with handle to turn PVC ball valve.
6. Control Panel (supplied by ISAC (per West Bay Detail #17)).
7. If the homeowner has an on-site pump system that pumps into the grinder pump, the homeowner shall notify the District when applying for permit. Additional requirements specific to the project will be applied.
8. Owner shall provide a spare grinder pump to the District.

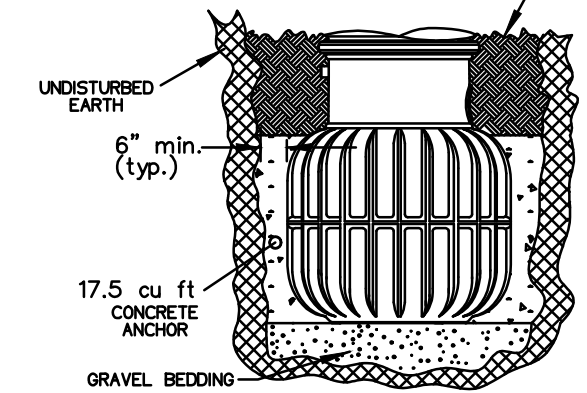
WEST BAY	
SANITARY DISTRICT	
SINGLE FAMILY GRINDER PUMP INSTALLATION DETAIL	
APPROVED BY:	
/S/ - PHIL SCOTT	05-20-15
DISTRICT MANAGER	DATE:



SEMI-POSITIVE DISPLACEMENT TYPE PUMP
 DIRECTLY DRIVEN BY A 1 HP MOTOR
 CAPABLE OF DELIVERING 9 gpm AT 138' T.D.H.

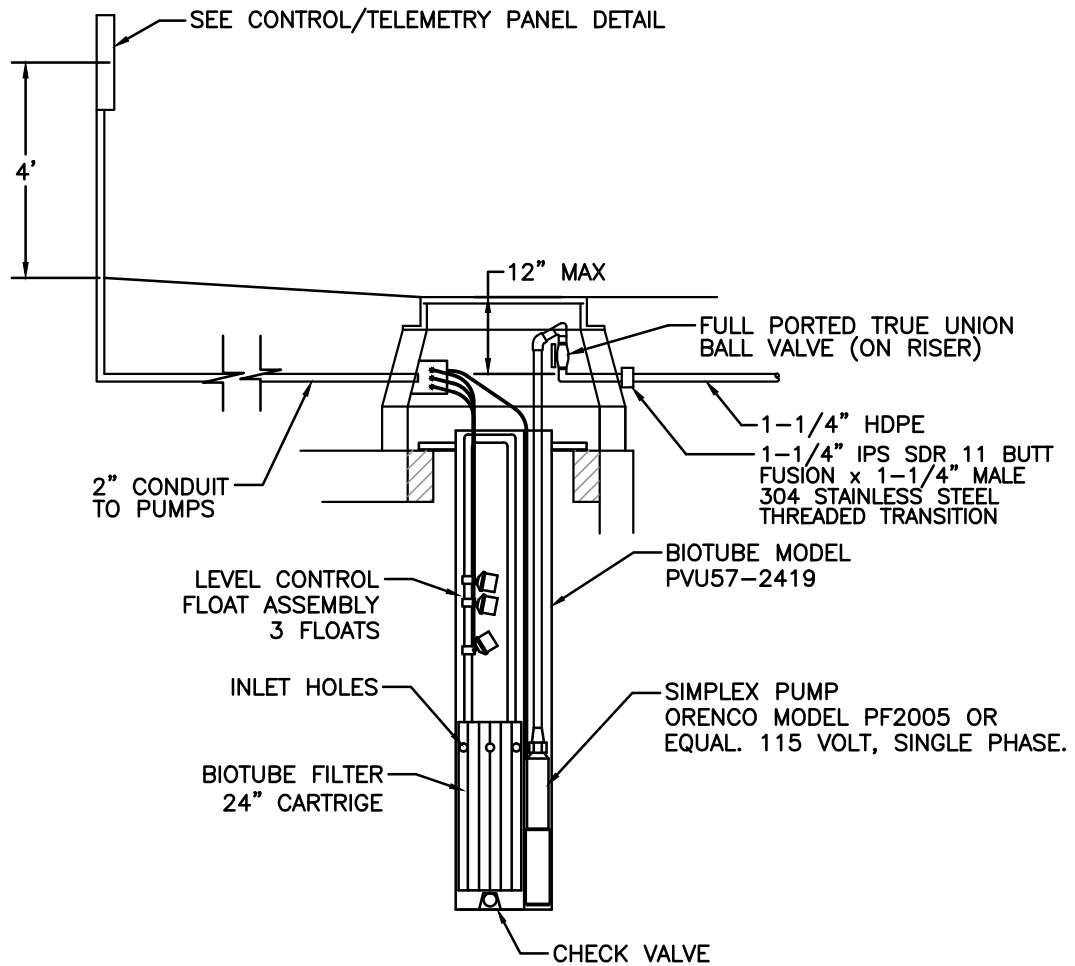
NOTE:
 1. Pump shall be Environment One Model DH151-74 with poured-in-place concrete anchor. (2773 Balltown Road, Schenectady, NY 12309-1090. (518) 346-6161, Fax (518) 346-6188. Local Representative: Signa Mechanical (949) 548-1125. OWNER SHALL PROVIDE A SPARE PUMP TO THE DISTRICT.

FILL TO GRADE WITH CLEAN, COMPACTABLE BACKFILL, SUCH AS PEA GRAVEL OR CRUSHED STONE, 1/8" - 3/4" IN SIZE. CLAY AND SILTS ARE NOT ACCEPTABLE BACKFILL

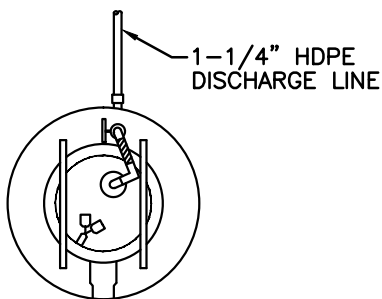


POURED-IN-PLACE CONCRETE ANCHOR DETAIL

WEST BAY	
SANITARY DISTRICT	
SINGLE FAMILY GRINDER PUMP INFORMATION DETAIL	
APPROVED BY:	
/s/ - PHIL SCOTT	05-20-15
DISTRICT MANAGER	DATE:



PUMP DETAIL
NOT TO SCALE



TOP VIEW
RISER ASSEMBLY

NOTES:

- 1) INSTALL PUMP AND VAULT PER MANUFACTURER'S RECOMMENDATIONS.
- 2) CORD LENGTHS TO BE DETERMINED BY DESIGN ENGINEER OR CONTRACTOR.
- 3) SPARE PUMP TO BE PROVIDED TO THE DISTRICT.

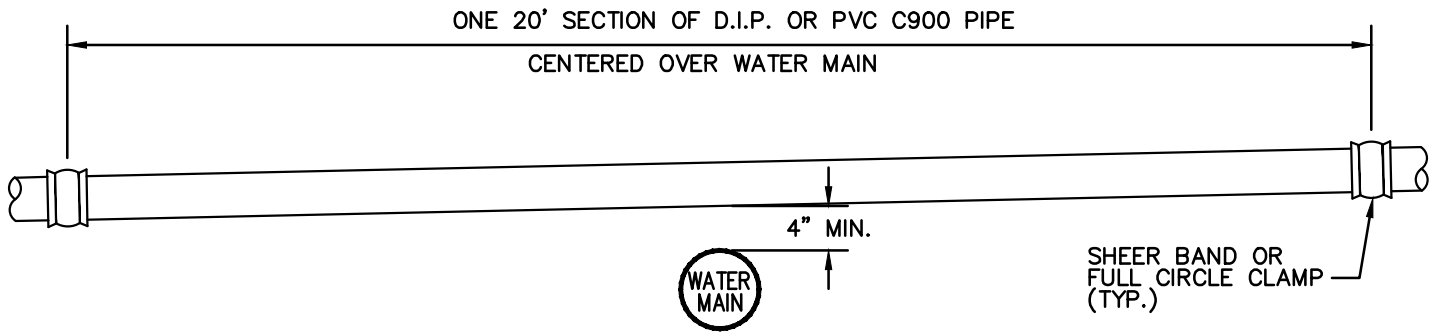
WEST BAY
SANITARY DISTRICT

PUMP DETAIL—SINGLE FAMILY SEPTIC TANK
EFFLUENT PUMP (STEP) SYSTEM

APPROVED BY:

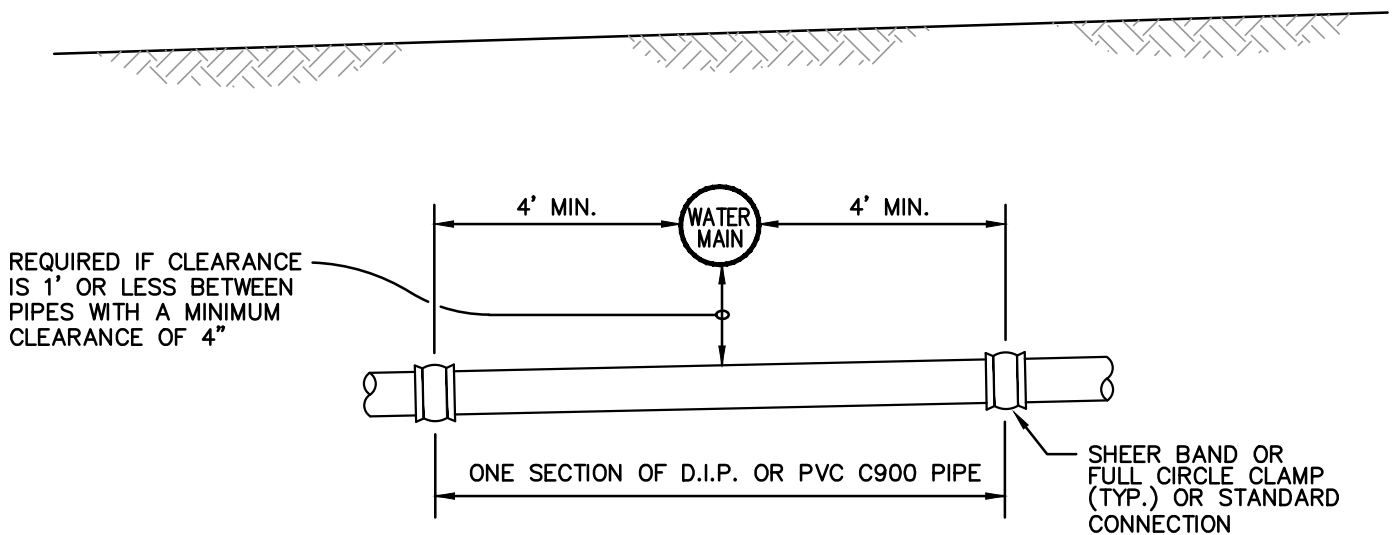
/S/ - PHIL SCOTT
DISTRICT MANAGER

05-20-15
DATE:



NOTE:
 REQUIRED WHENEVER A SANITARY SEWER MAIN
 OR LATERAL CROSSES OVER A WATER MAIN.

TYPICAL CROSSING OVER WATER MAIN



TYPICAL CROSSING UNDER WATER MAIN

WEST BAY
 SANITARY DISTRICT

SANITARY SEWER WATER MAIN CROSSINGS

APPROVED BY:

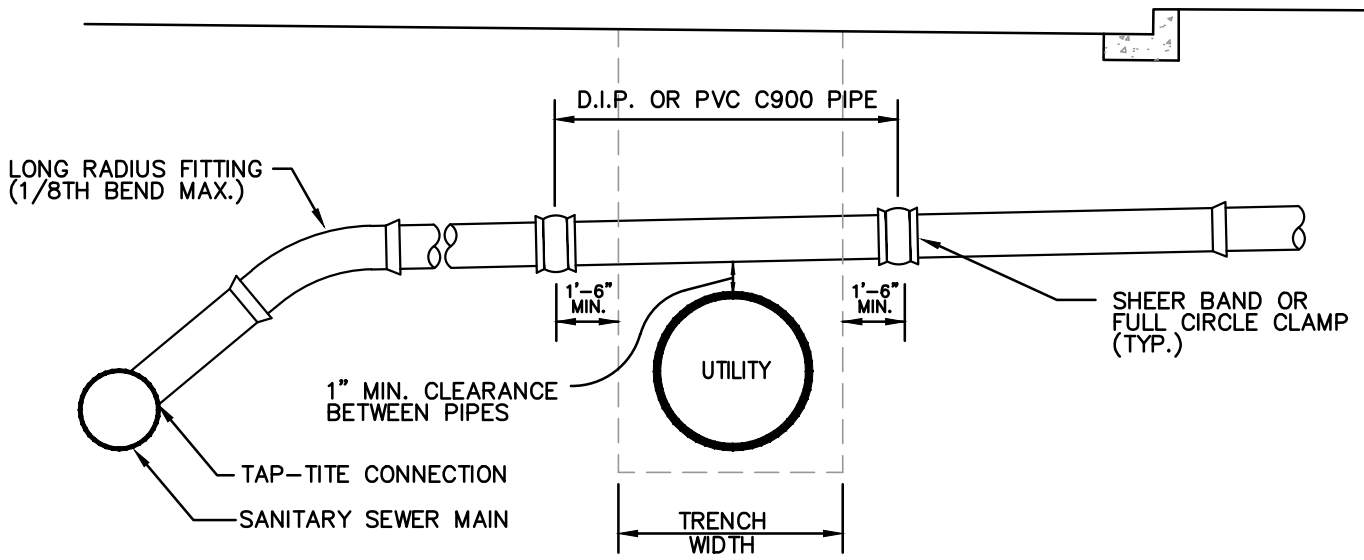
/S/ - PHIL SCOTT

DISTRICT MANAGER

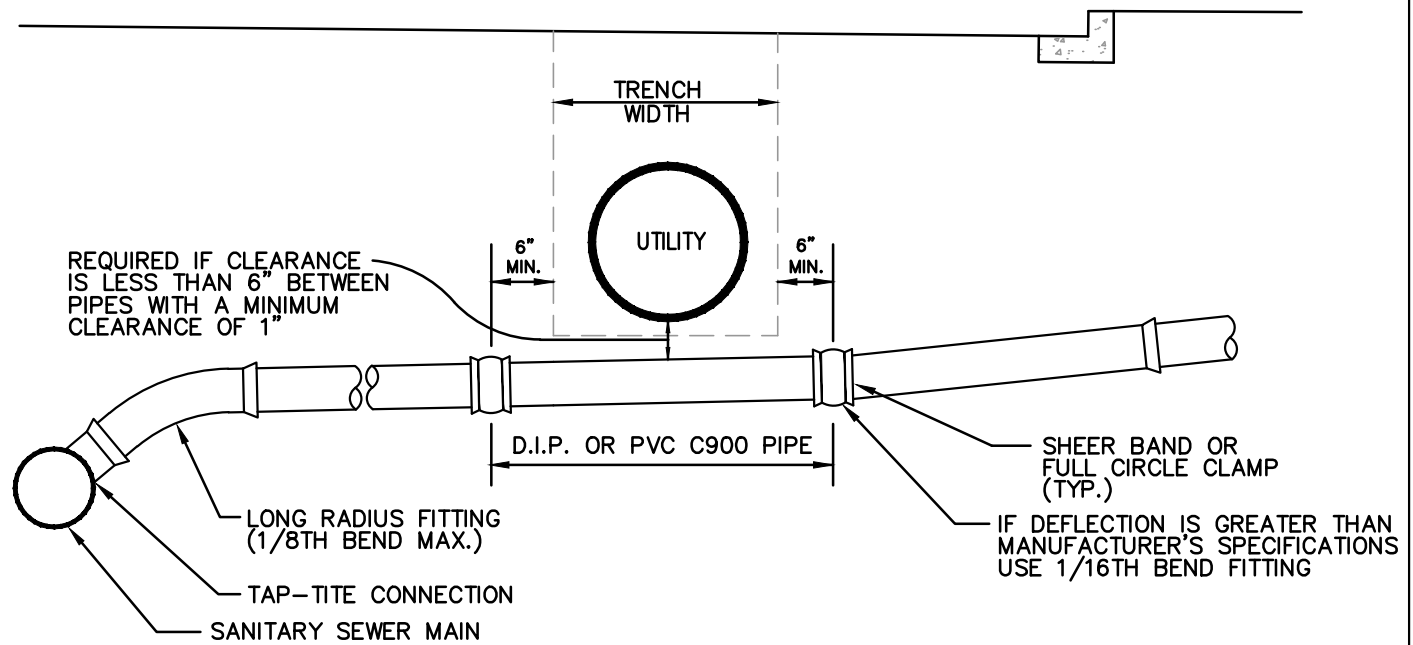
05-20-15

DATE:

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TYPICAL LATERAL CROSSING OVER UTILITY (EXCLUDING WATER)

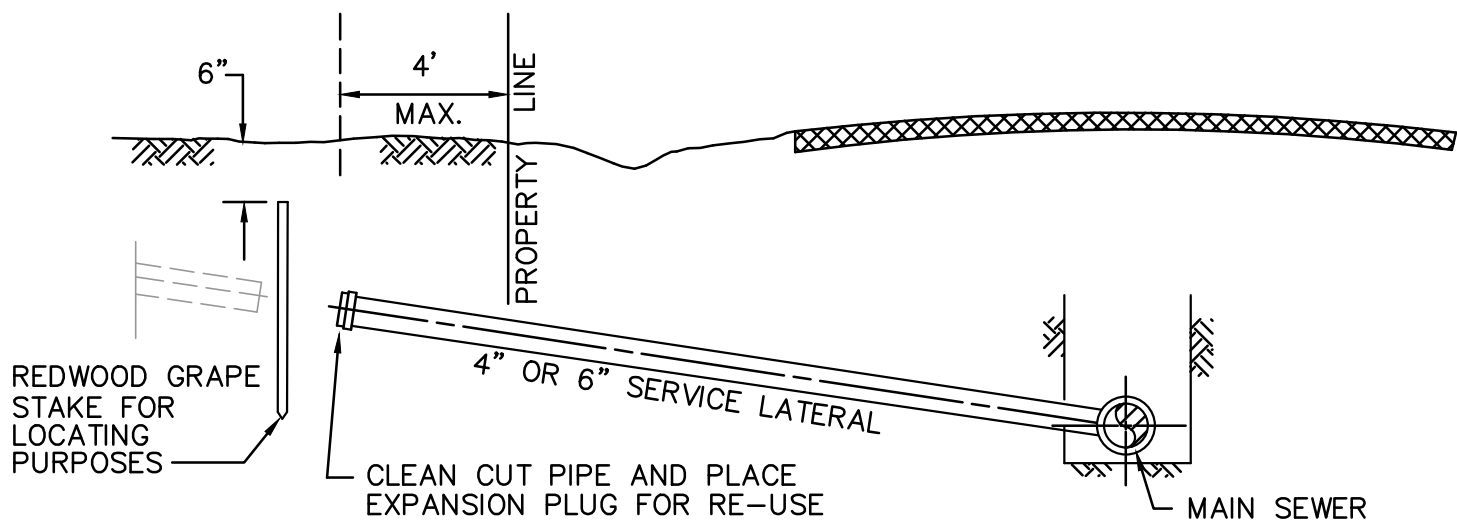


TYPICAL LATERAL CROSSING UNDER UTILITY (EXCLUDING WATER)

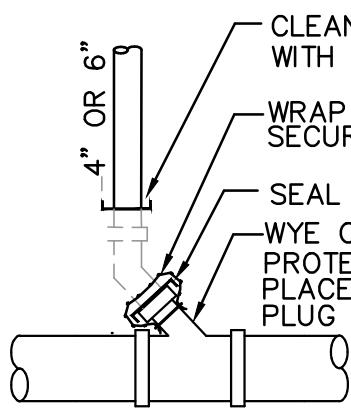
NOTE:

- 1) D.I.P. PIPE SHALL BE CLASS 50 OR 51, OR PVC PIPE SHALL BE C-900 DR 18.

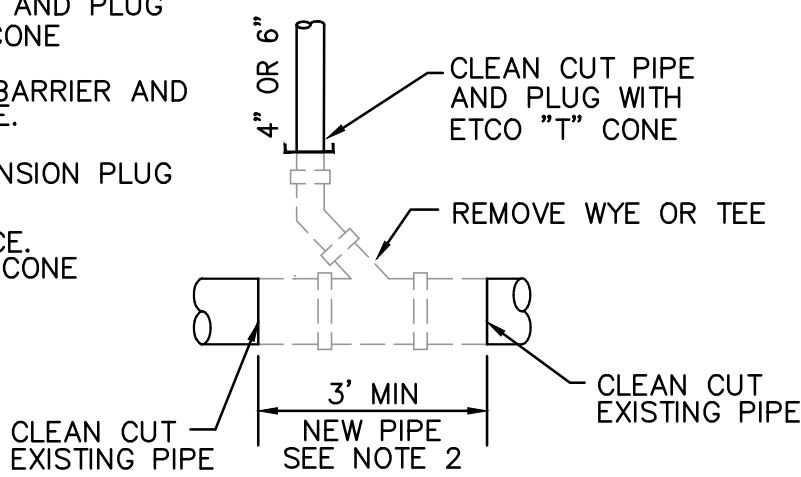
WEST BAY SANITARY DISTRICT	
SANITARY SEWER LATERAL UTILITY CROSSINGS (EXCLUDING WATER)	
APPROVED BY: /s/ - PHIL SCOTT DISTRICT MANAGER	05-20-15 DATE:
23	



LATERAL DISCONNECTION AT PROPERTY LINE FOR RE-USE



DETAIL 1



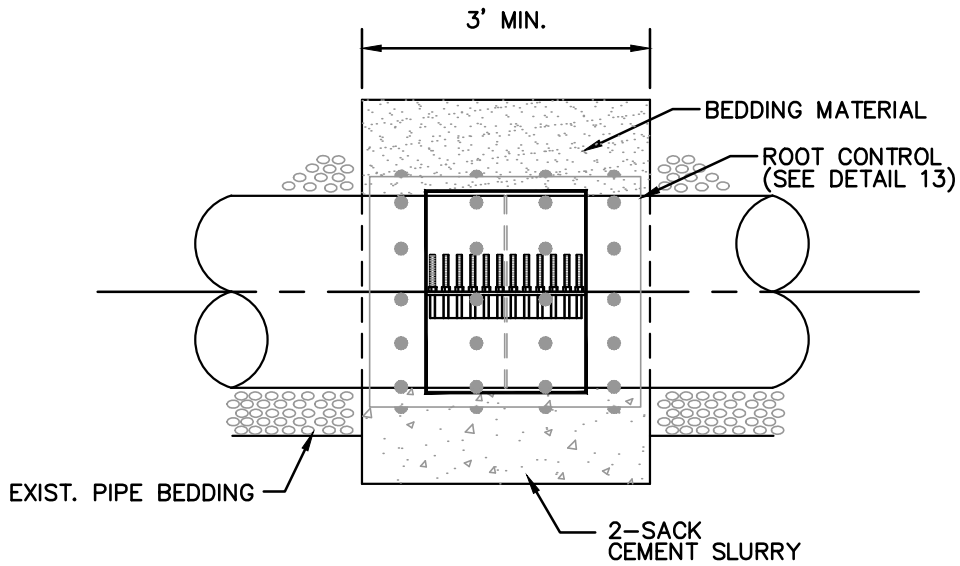
DETAIL 2

LATERAL DISCONNECTION AT MAIN SEWER (SEE NOTES 1&5)

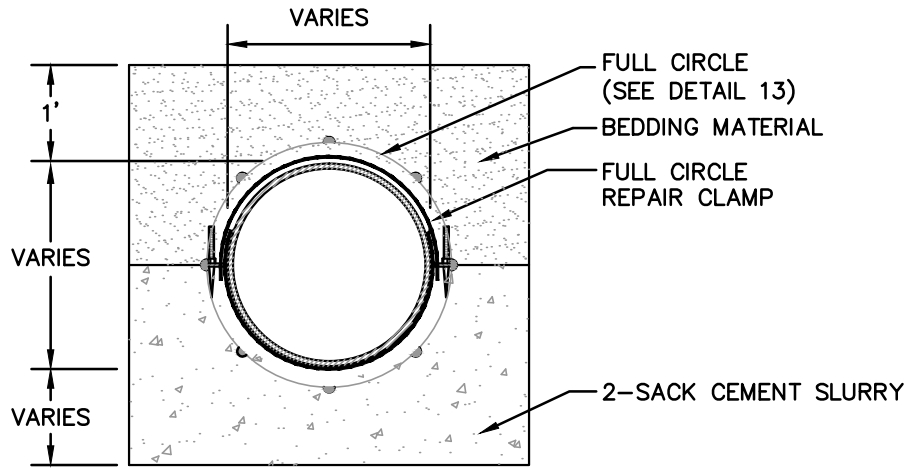
NOTES:

- 1) THE CONTRACTOR SHALL EXCAVATE BY HAND EXPOSING THE WYE/TEE AT THE MAIN SEWER LINE FOR INSPECTION BY A WEST BAY REPRESENTATIVE. IF THE MAIN AND WYE/TEE ARE DEEMED IN GOOD CONDITION, PLUG WYE/TEE AS SHOWN IN DETAIL 1. IF THE MAIN IS IN GOOD CONDITION AND THE WYE/TEE IS IN POOR CONDITION, REMOVE TEE AND SECTION OF PIPE AS SHOWN IN DETAIL 2. IF BOTH MAIN AND WYE/TEE ARE IN POOR CONDITION, NOTIFY WBSD.
- 2) REPLACEMENT PIPE SHALL MATCH EXISTING SEWER MAIN PIPE. COUPLING SHALL BE SMITH-BLAIR 226 FULL CIRCLE STAINLESS STEEL CLAMP OR EQUAL FOR MAIN DIAMETER LESS THAN 15" AND ROCKWELL 228 FULL CIRCLE CLAMP OR EQUAL FOR MAIN 15" OR GREATER.
- 3) IF SEWER MAIN IS CONCRETE ENCASED OR CRADLED, ANY PORTION REMOVED BY CONTRACTOR SHALL BE REPLACED ENTIRELY TO THE SATISFACTION OF THE DISTRICT'S FIELD REPRESENTATIVE.
- 4) CONTRACTOR SHALL SUPPLY ADDRESS OF ABANDONED LATERAL AND DISTANCE AS MEASURED FROM THE DOWNSTREAM MANHOLE.
- 5) IT IS THE CONTRACTORS RESPONSIBILITY TO CONFIRM THAT NO OTHER PROPERTIES ARE CONNECTED TO THE LATERAL PRIOR TO DISCONNECTION.

WEST BAY	
SANITARY DISTRICT	
SANITARY SEWER LATERAL DISCONNECTIONS	
APPROVED BY:	
/s/ - PHIL SCOTT	05-20-15
DISTRICT MANAGER	DATE:



PLAN



SECTION

NOTE:

1. REPAIR SLEEVE SHALL BE STAINLESS STEEL FULL CIRCLE ROCKWELL 228, 3 BAND, 20" WIDE CLAMP OR EQUAL.

WEST BAY
SANITARY DISTRICT

REPAIR COUPLING FOR 15" DIAMETER AND LARGER PIPE

APPROVED BY:

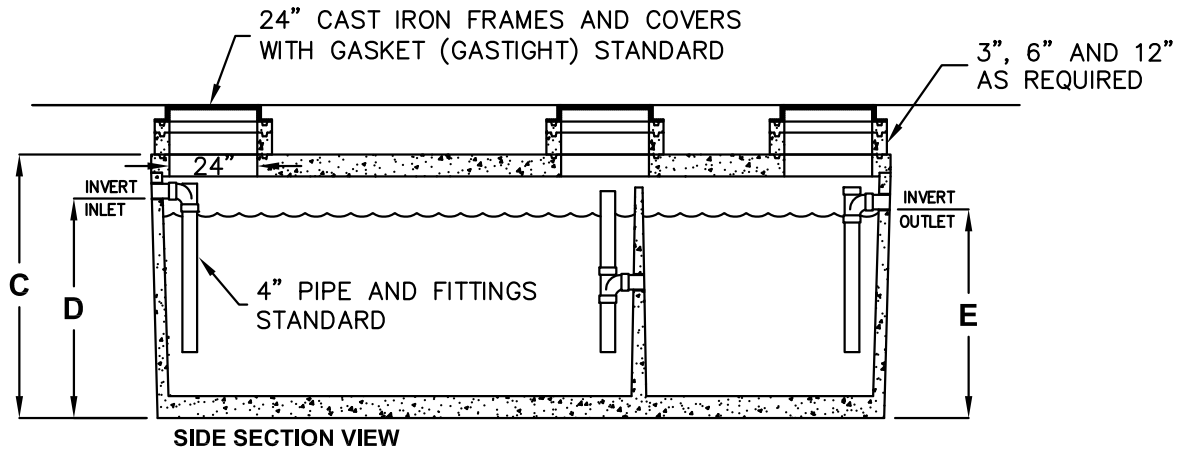
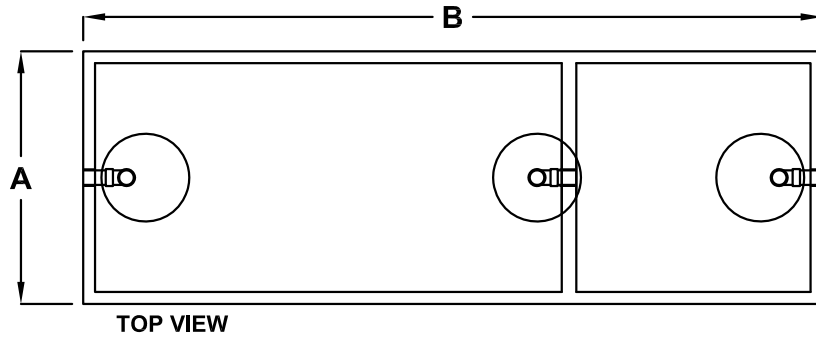
/s/ - PHIL SCOTT

DISTRICT MANAGER

05-20-15

DATE:

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LIQUID CAPACITY (GALLONS)	DIM A	DIM B	DIM C	DIM D	DIM E
320	3'-0"	7'-0"	4'-6"	3'-7"	3'-4"
500	4'-0"	6'-0"	5'-10"	4'-10"	4'-7"
750	4'-0"	8'-1"	6'-3"	5'-0"	4'-9"
1000	5'-1"	8'-2"	6'-3"	5'-0"	4'-9"
1200	5'-9"	8'-6"	6'-6"	5'-0"	4'-9"
1500	5'-7"	10'-8"	6'-3"	5'-0"	4'-9"
2000	4'-11"	15'-11"	6'-0"	5'-0"	4'-9"
2500	5'-9"	16'-10"	6'-0"	5'-0"	4'-9"
3000	5'-9"	16'-10"	6'-9"	5'-9"	5'-6"
4000	7'-8"	16'-7"	6'-9"	5'-6"	5'-3"
5000	7'-8"	16'-7"	7'-11"	6'-9"	6'-6"

NOTES:

DESIGN LOAD: H-20 TRAFFIC WITH DRY SOIL CONDITIONS (WATER LEVEL BELOW TANK.)

BEDDING NOTE: SUITABLE SUB-BASE BEDDED WITH GRANULAR MATERIAL SHALL BE PREPARED TO HANDLE ANTICIPATED LOADS.

WEST BAY
SANITARY DISTRICT

GREASE INTERCEPTOR

APPROVED BY:

/S/ - PHIL SCOTT
DISTRICT MANAGER

05-20-15
DATE:

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