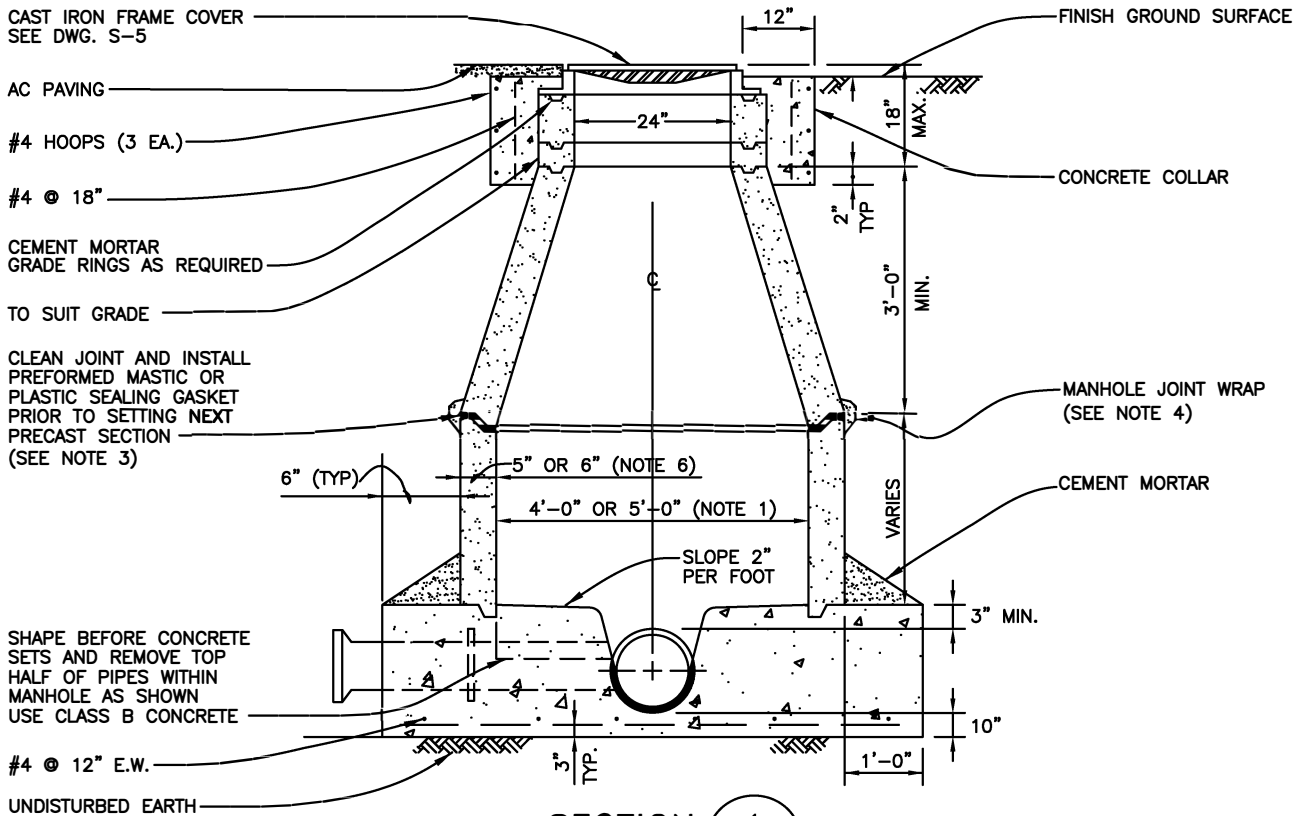


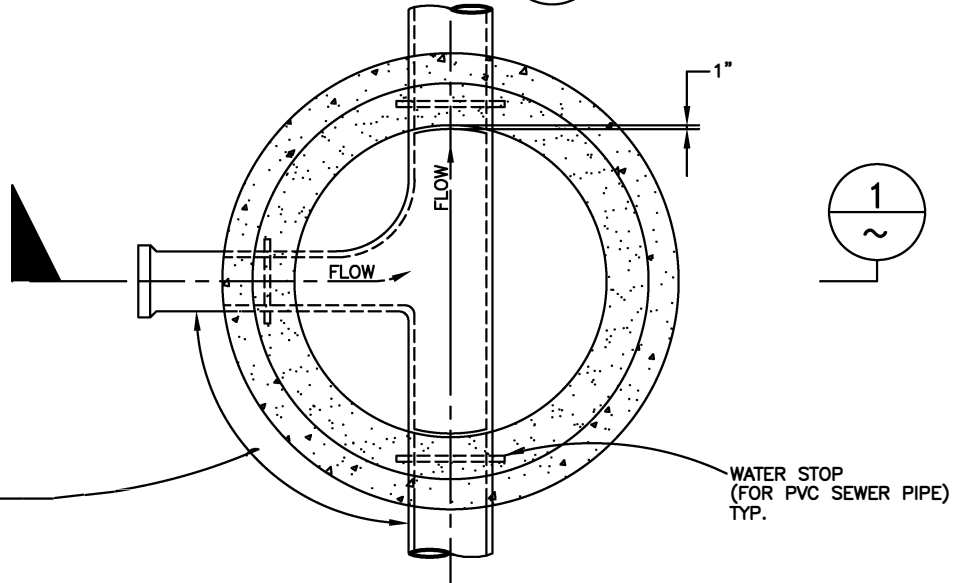
ADWF, MGD	PF
.01	3.00
.05	2.40
.07	2.29
.08	2.25
.12	2.17
.14	2.14
.15	2.13
.16	2.12
.22	2.09
.40	2.02
.46	2.00
.57	1.96
.84	1.91

REV. 04/07

Dublin San Ramon Services District	DATE MAY 1987
PEAKING FACTOR VERSUS AVERAGE DAILY FLOW	DESIGNED DJM
SIGNED COPY ON FILE AT DISTRICT OFFICE	DRAWING S-1



SECTION 1
NTS

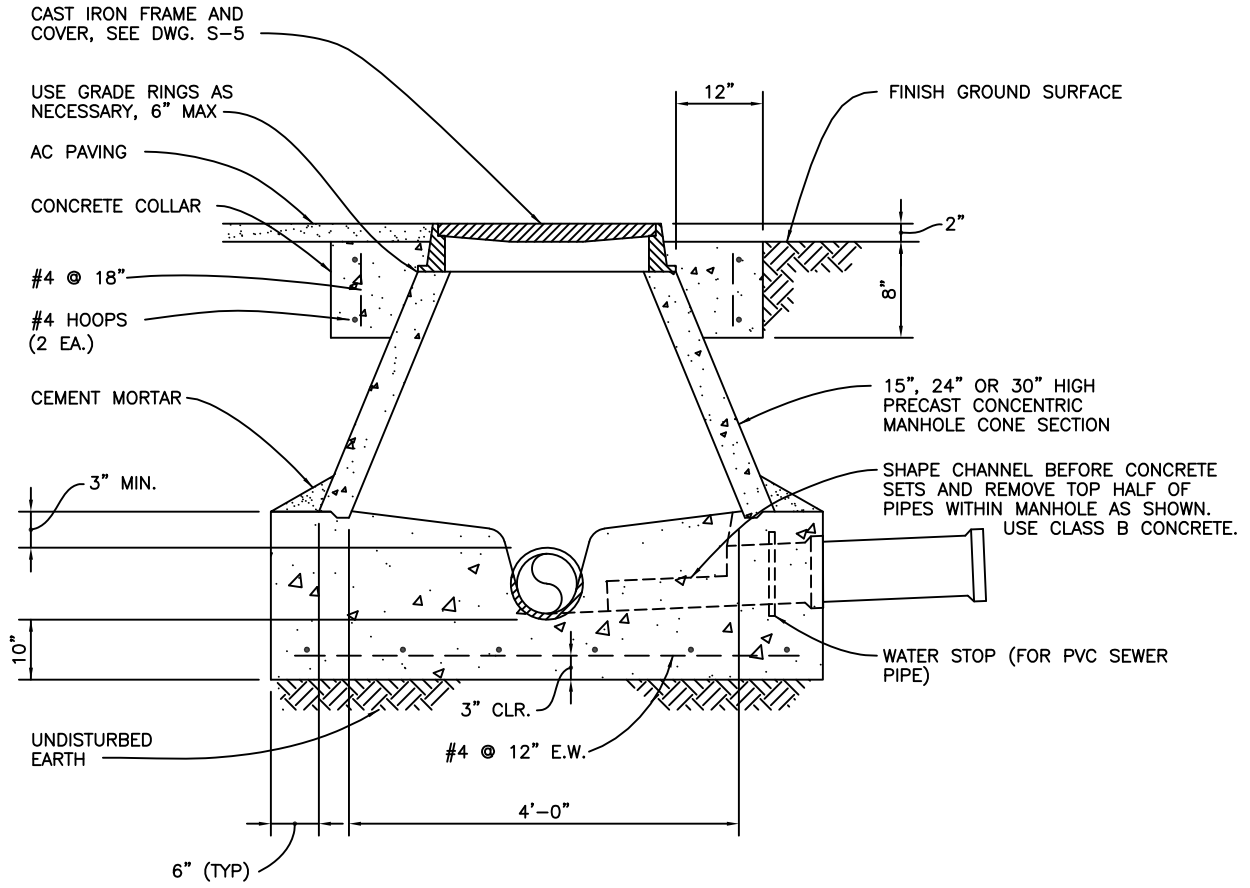


PLAN

NOTES:

1. SEE SPEC. SEC. III-A5-7 FOR CRITERIA ON MANHOLE SIZING. NTS
2. MANHOLE SHALL HAVE NO STEPS.
3. USE JOINT SEALANT FROM APPROVED MATERIALS LIST BETWEEN JOINTS. TRIM ALL JOINTS AFTER COMPLETION.
4. JOINTS SHALL BE WRAPPED WITH 9-INCH EXTERNAL CONCRETE JOINT WRAP FROM APPROVED MATERIALS LIST.
5. 5" WALL THICKNESS FOR MANHOLES UP TO 4-FT DIAMETER AND 6" WALL THICKNESS FOR 5-FT DIAMETER MANHOLES.

Dublin San Ramon Services District	DATE DEC 2020
STANDARD MANHOLE	REVISED BY RM
SIGNED COPY ON FILE AT DISTRICT OFFICE	DRAWING S-2



NOTES:

1. TO BE USED WHERE DISTANCE FROM TOP OF BASE TO BOTTOM OF COVER FRAME IS BETWEEN 15" AND 30".
2. MANHOLE SHALL HAVE NO STEPS.
3. JOINTS, IF USED, SHALL BE WRAPPED WITH 9-INCH RUB'R-NEK EXTERNAL CONCRETE JOINT WRAP, OR APPROVED EQUAL.

Dublin San Ramon Services District

DATE
DEC 2019

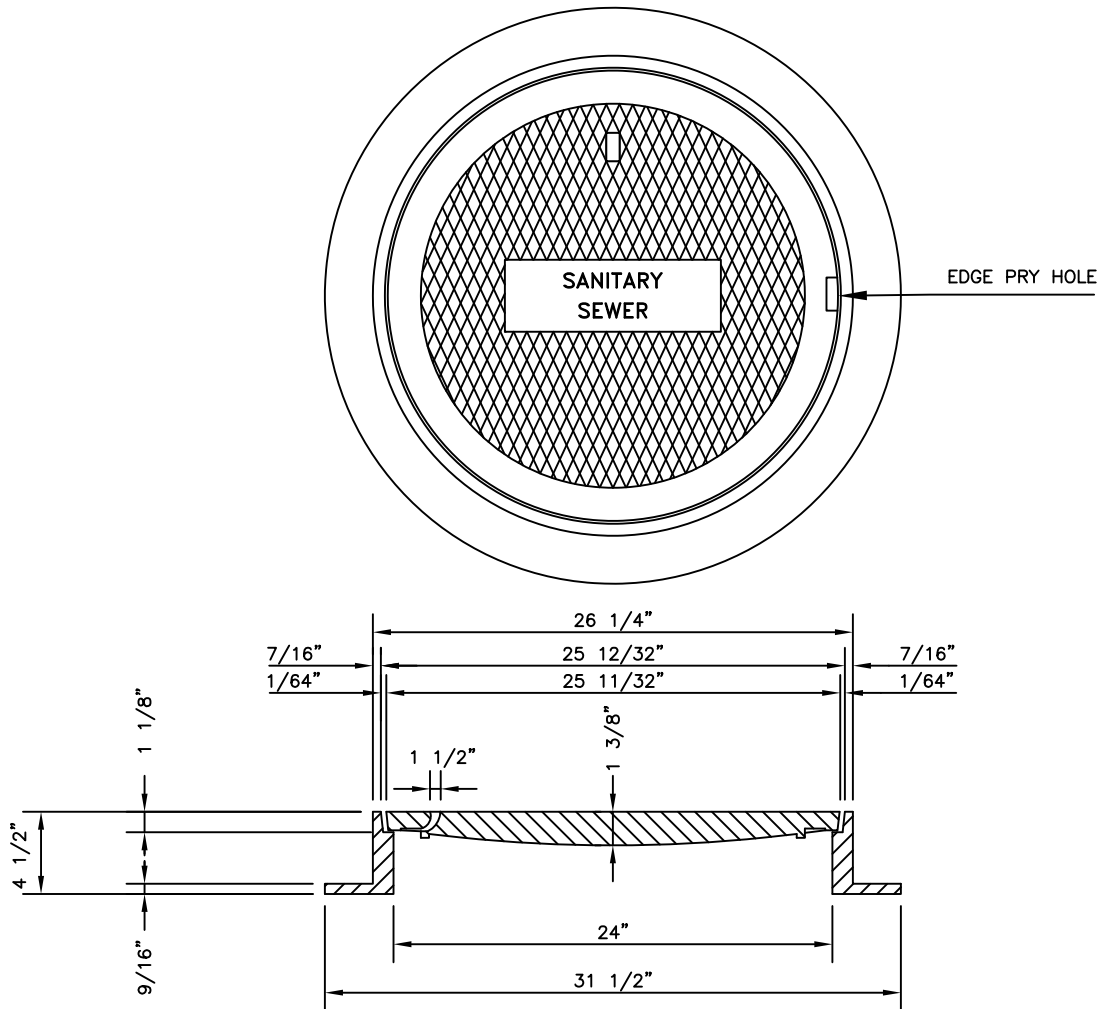
STANDARD SHALLOW MANHOLE

DESIGNED
BD

SIGNED COPY ON FILE AT DISTRICT OFFICE

DRAWING
S-4

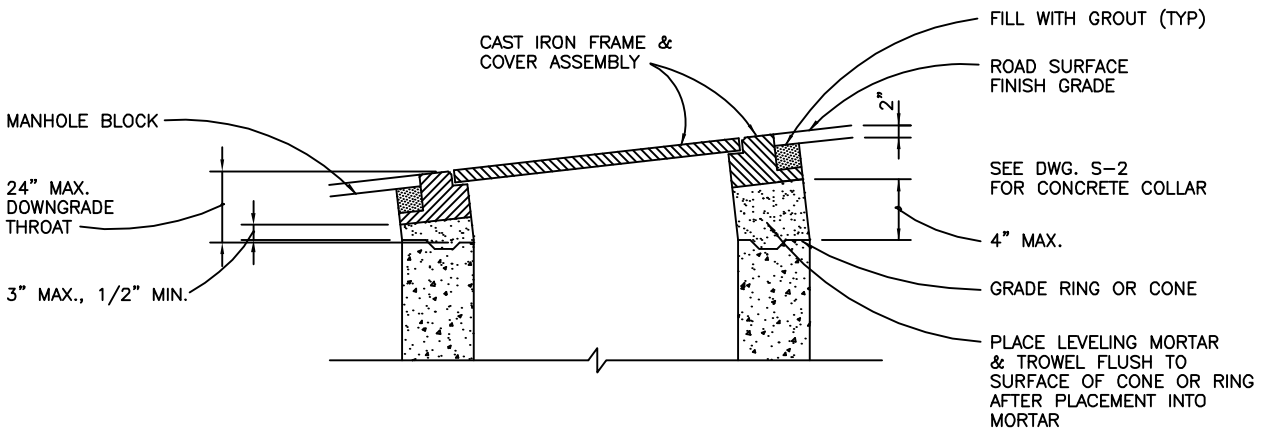
STANDARD 24" HEAVY DUTY NON-ROCKING MANHOLE FRAME AND COVER



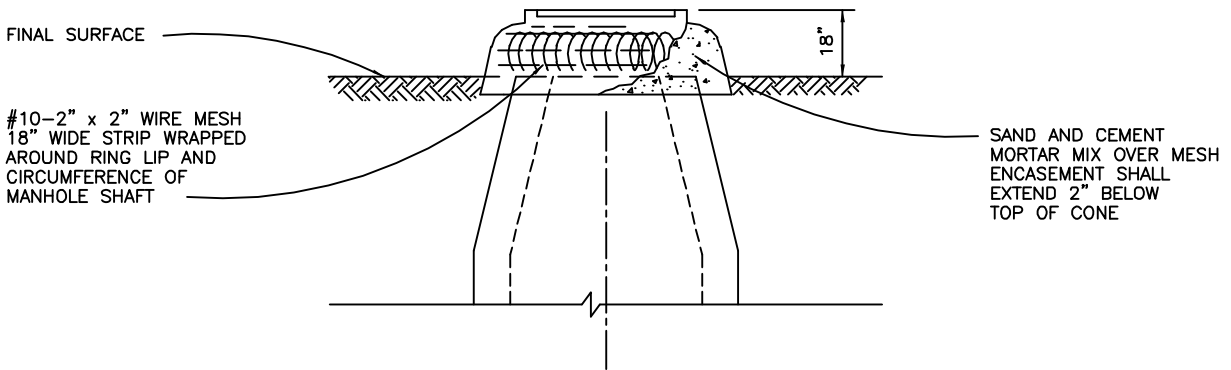
NOTES:

1. SPECIFY SANITARY SEWER WHEN ORDERING CASTINGS DIPPED IN ASPHALT PAINT.
2. WHERE THE DISTRICT ENGINEER DEEMS NECESSARY FOR HEIGHTENED PROTECTION OF THE PUBLIC OR ITS FACILITIES, PARMEX MANHOLE FRAME AND COVER, OR APPROVED EQUAL MAY BE REQUIRED.
3. FRAME AND COVER SHALL BE ON APPROVED MATERIALS LIST, OR APPROVED EQUAL.

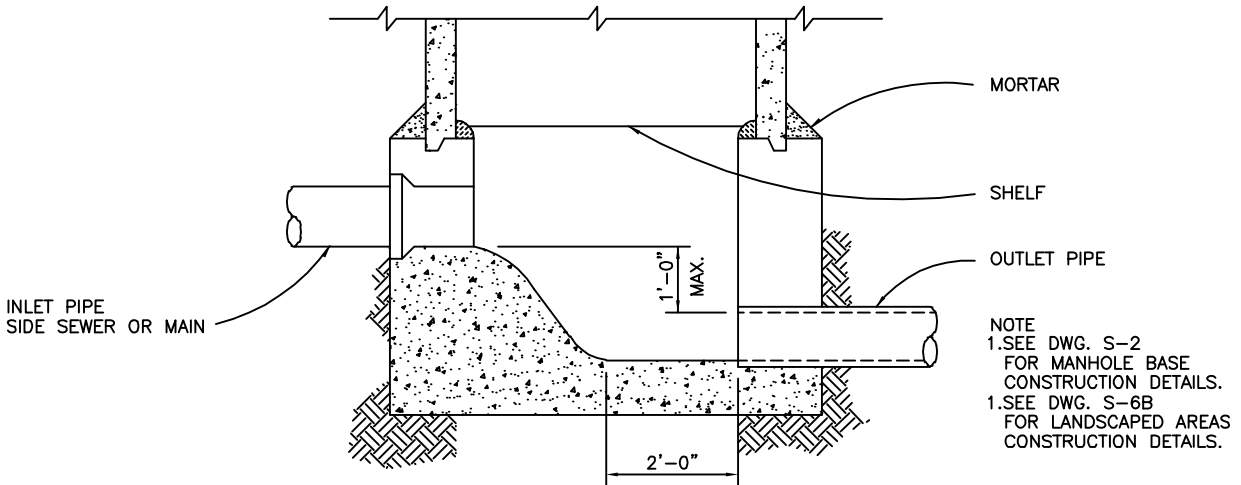
Dublin San Ramon Services District	REVISION DATE DEC 2019
STANDARD MANHOLE FRAME AND COVER	REVISED BY BD
SIGNED COPY ON FILE AT DISTRICT OFFICE	DRAWING S-5



ADJUSTMENT TO FINISH GRADE DETAIL



MANHOLE SECURING DETAIL FOR UNDEVELOPED AREA

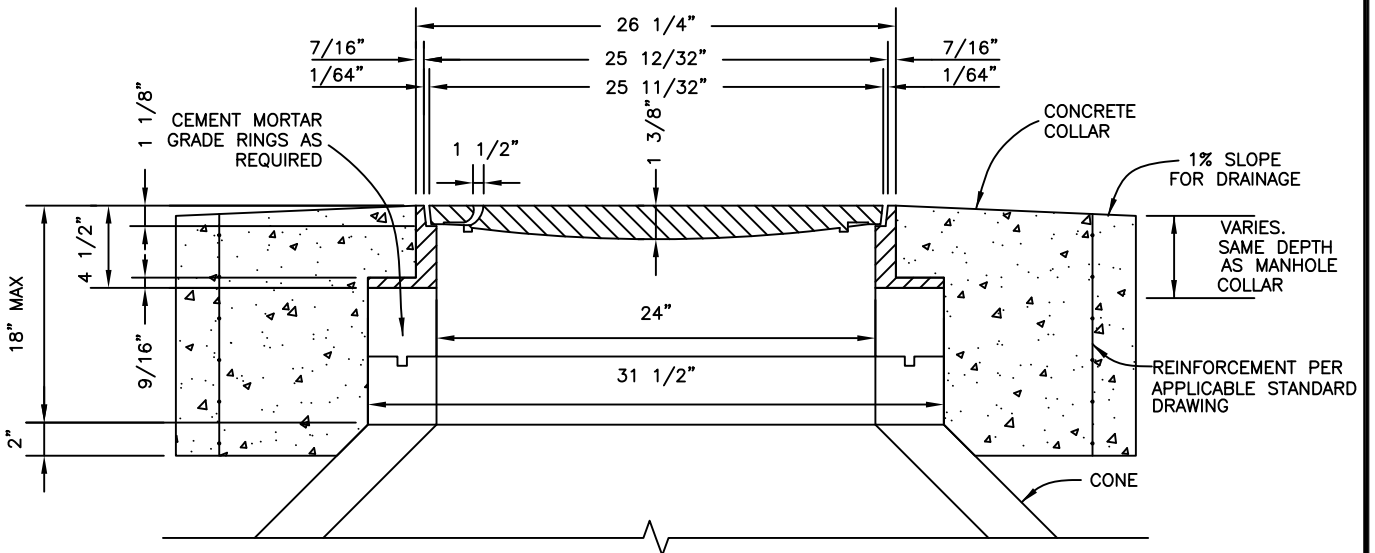
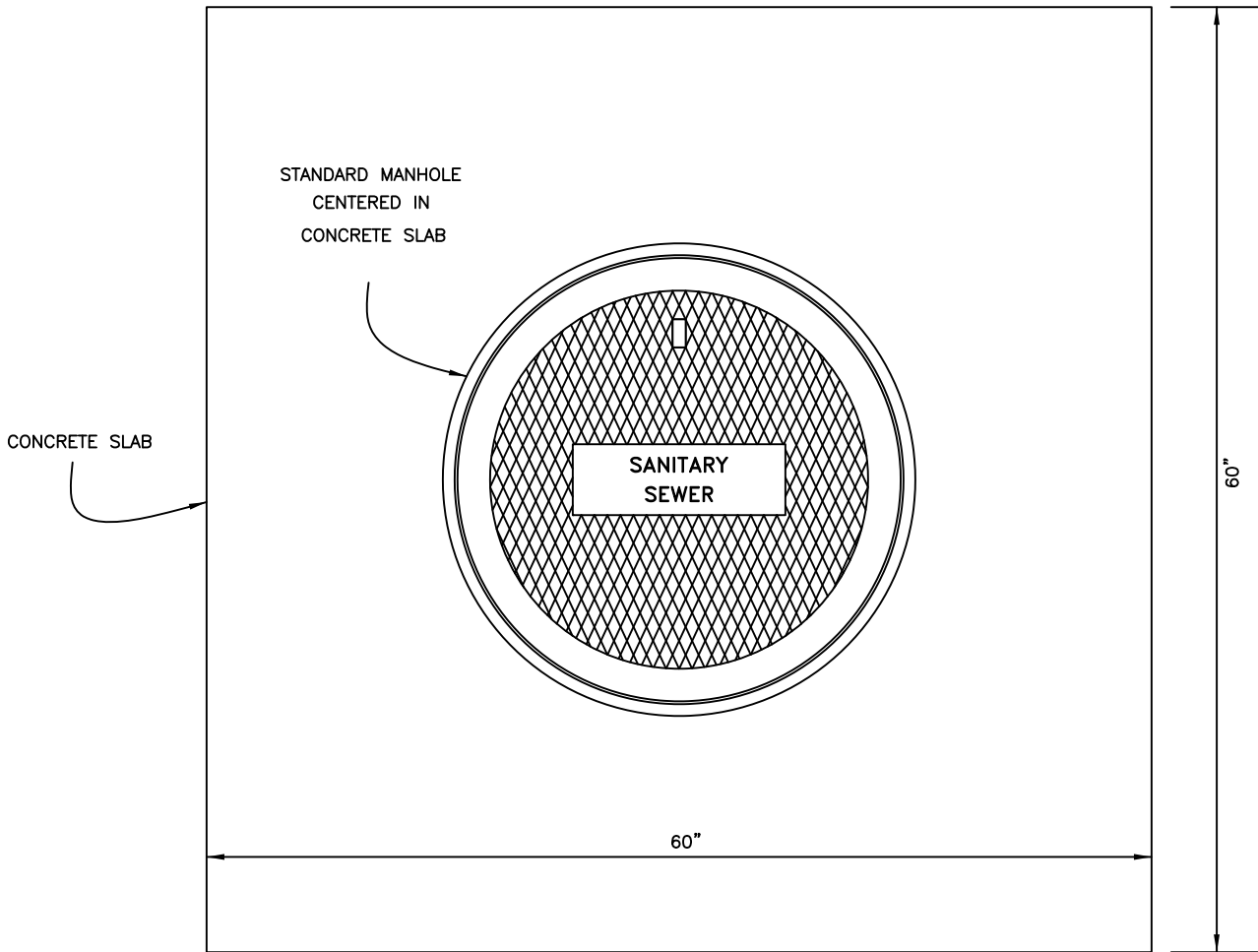


ALLOWABLE DROP IN MANHOLES

REV. 05-14-2018

Dublin San Ramon Services District	DATE DEC 2019
MISCELLANEOUS MANHOLE DETAILS	DESIGNED KP
SIGNED COPY ON FILE AT DISTRICT OFFICE	DRAWING S-6

UNPAVED AND LANDSCAPED AREAS



Dublin San Ramon Services District

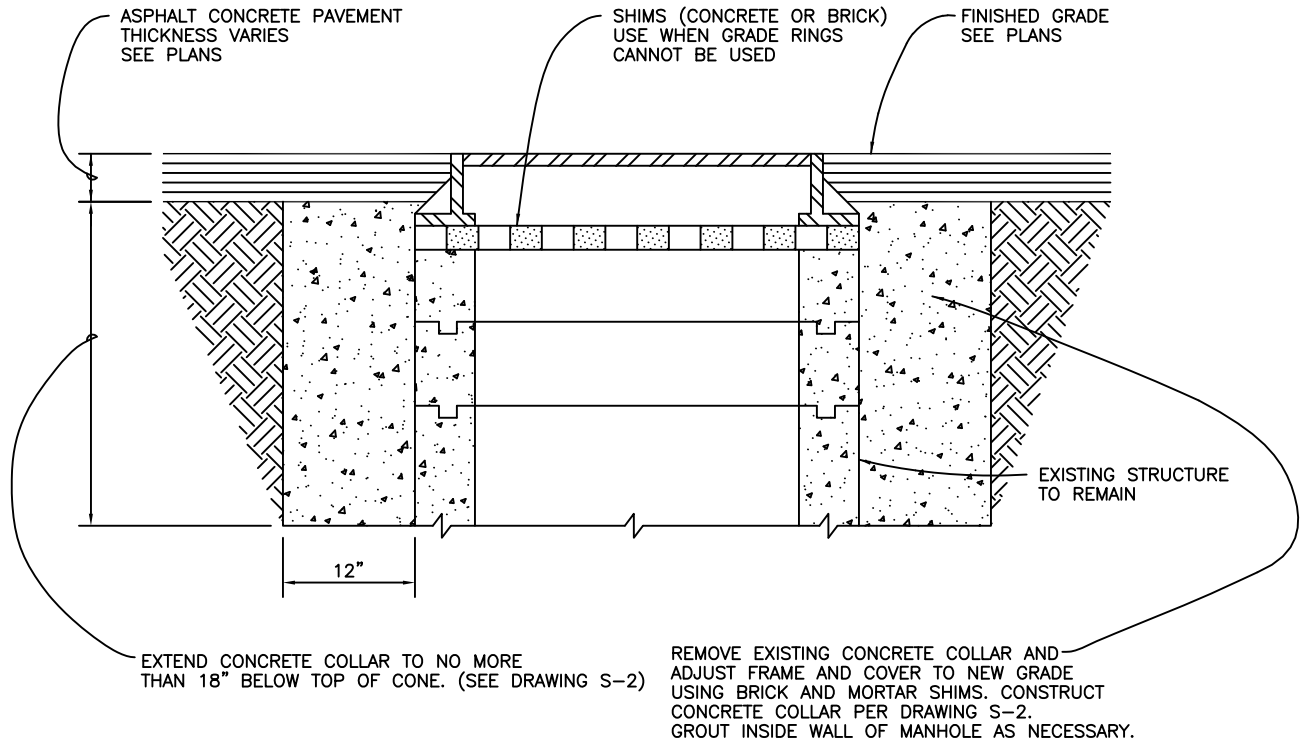
DATE
DEC 2019

MANHOLE PAD DETAIL

DESIGNED
BD

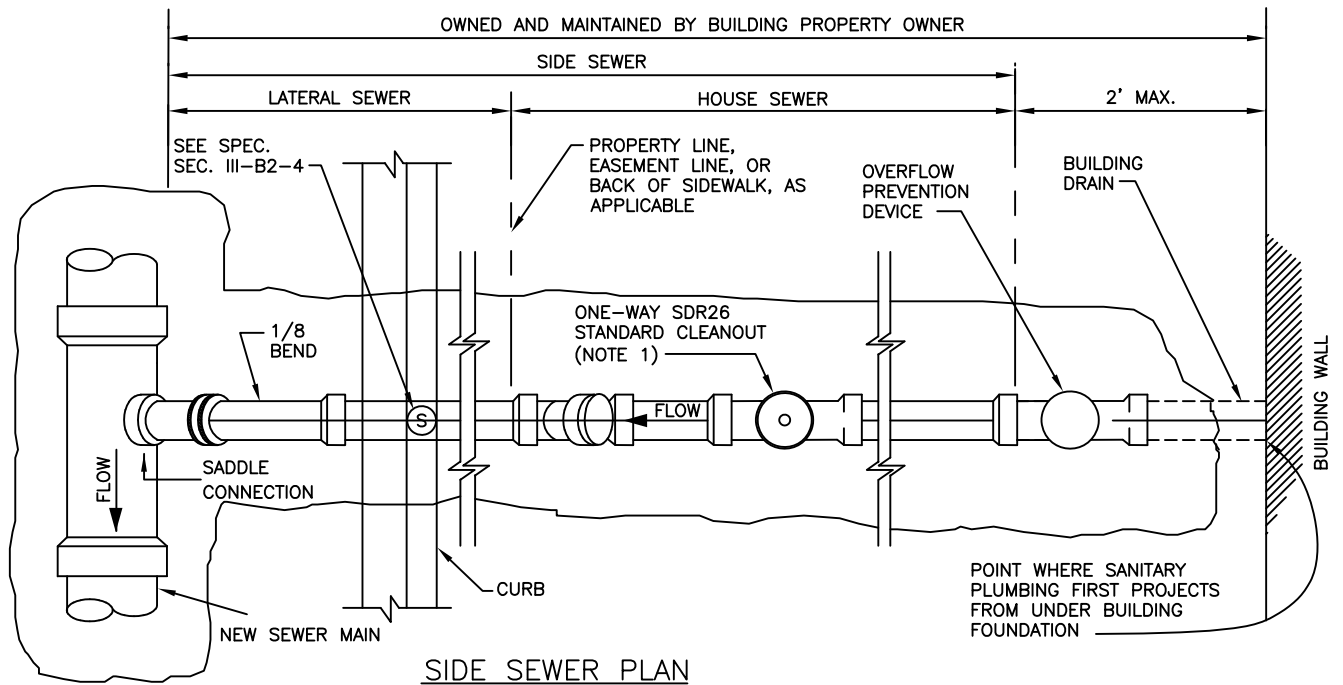
SIGNED COPY ON FILE AT DISTRICT OFFICE

DRAWING
S-6A

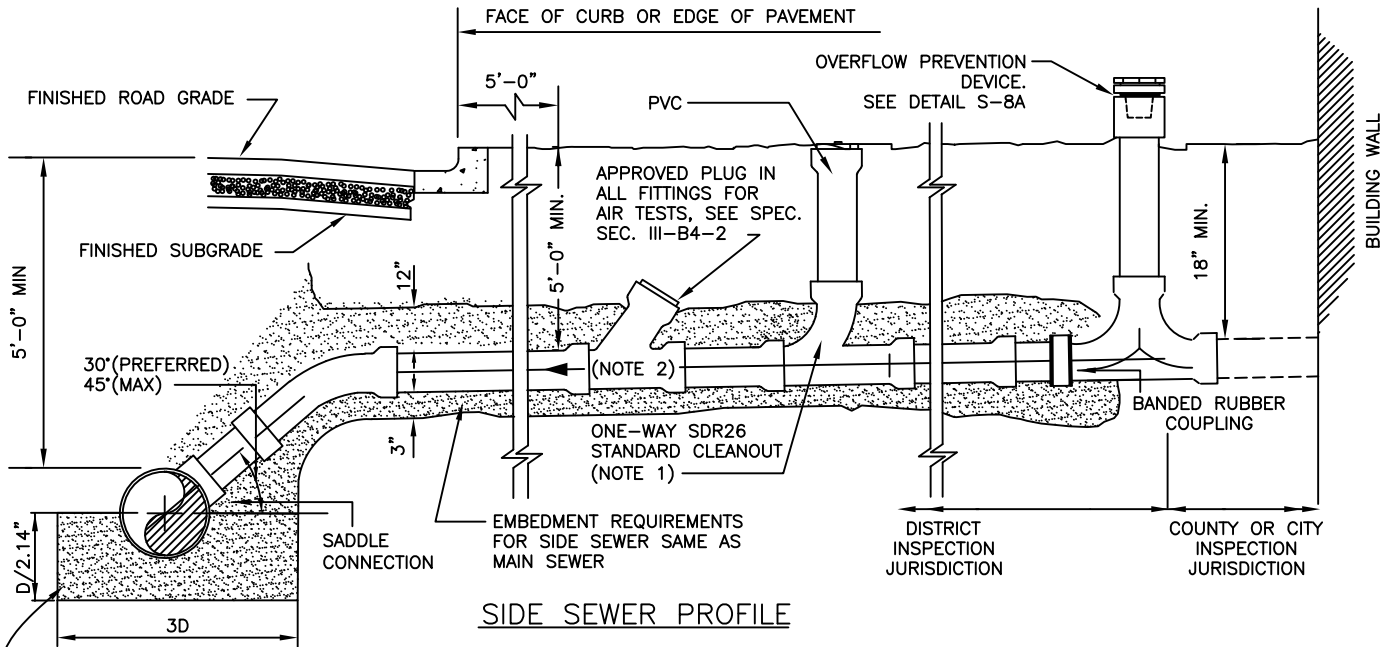


TYPICAL SECTION THROUGH STRUCTURE

Dublin San Ramon Services District	DATE DEC 2019
MANHOLE FRAME AND COVER ADJUSTMENT DETAILS	DESIGNED BD
SIGNED COPY ON FILE AT DISTRICT OFFICE	DRAWING S-7



SIDE SEWER PLAN



SIDE SEWER PROFILE

CLASS A OR B CONCRETE REQUIRED WHEN SERVICE ANGLE GREATER THAN 30°

NOTE:

1. CLEANOUT SHALL BE EQUAL IN SIZE TO SIDE SEWER. SEE SECTION III-A6 FOR LOCATION.
2. MIN. SLOPE SHALL BE 0.02 FT/FT (S=0.02).
3. SIDE SEWER, INCLUDING LATERAL SEWER AND HOUSE SEWER, IS OWNED AND MAINTAINED BY THE OWNER OF THE PROPERTY IT SERVES.
4. INSTALL SEWER OVERFLOW PREVENTION DEVICE ON ALL LATERALS. SEE DRAWING S-8A.
5. FOR SIDE SEWER REPLACEMENTS, AIR TEST REQUIRED AT 3 PSI FOR 3 MINUTES.
6. FOR SIDE SEWER REPAIRS, STAINLESS STEEL ADJUSTABLE REPAIR COUPLINGS ARE REQUIRED.

Dublin San Ramon Services District

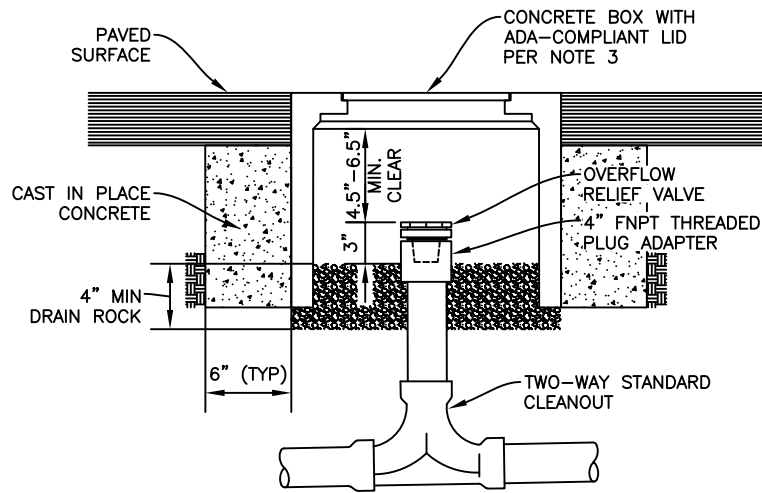
DATE
FEB 2021

TYPICAL SIDE SEWER INSTALLATION

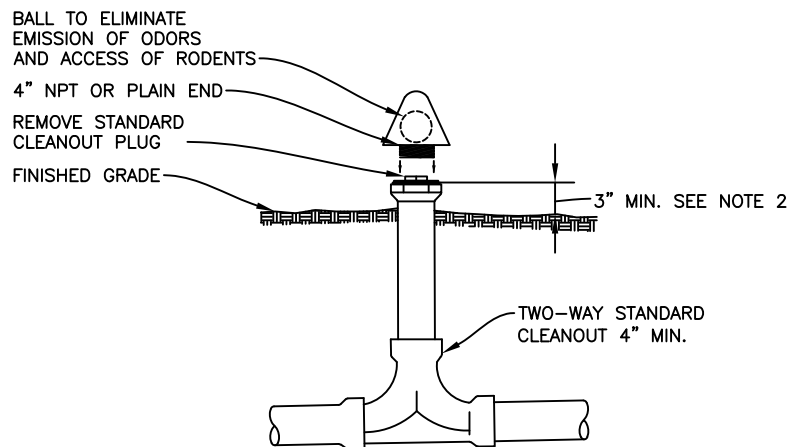
DESIGNED
RM

SIGNED COPY ON FILE AT DISTRICT OFFICE

DRAWING
S-8



(TYPE 1-TYPICAL INSTALLATION)



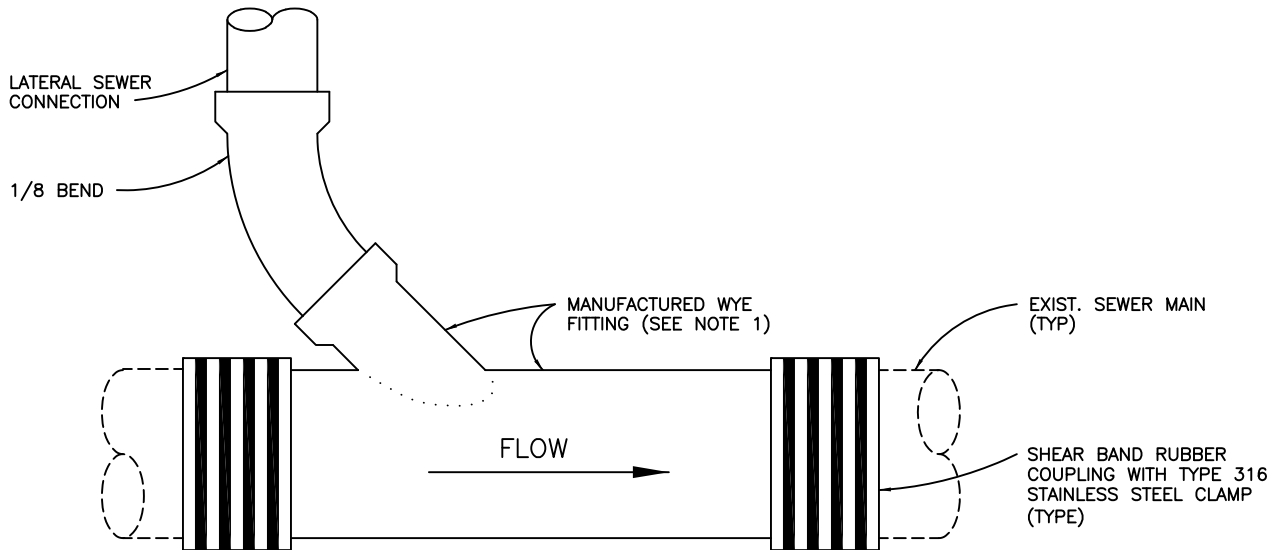
FINISHED GRADE SHALL SLOPE AWAY FROM THE BUILDING

(TYPE 2-ALTERNATIVE OPTION)

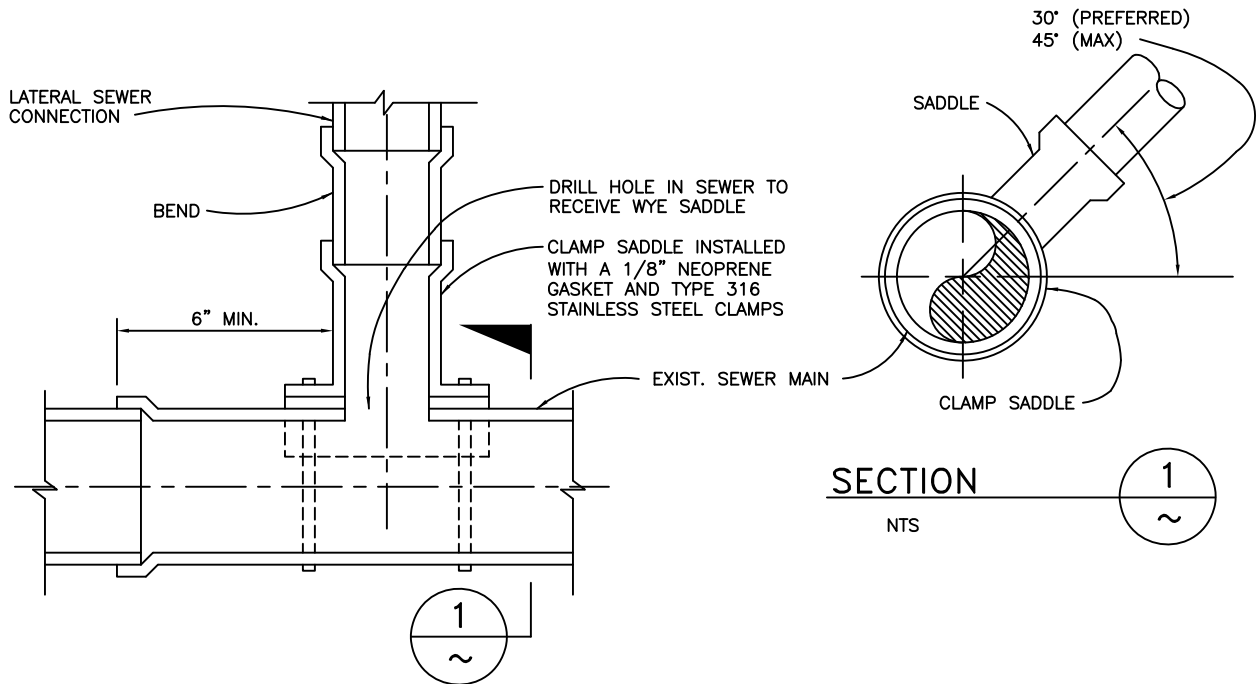
NOTE:

1. AN OVERFLOW RELIEF VALVE PER DSRSD APPROVED MATERIALS LIST IS REQUIRED ON ALL NEW SIDE SEWER CONNECTIONS, REPAIRS AND ALTERATIONS TO EXISTING SIDE SEWERS.
2. SPECIFIC LOCATION SHALL BE DETERMINED BY THE CONTRACTOR AND THE PROPERTY OWNER SUCH THAT THE TOP ELEVATION OF THE OVERFLOW DEVICE IS A MINIMUM OF SIX INCHES BELOW THE LOWEST FINISHED FLOOR ELEVATION OF THE CONNECTED BUILDING.
3. IN TRAFFIC AREAS USE 12"x12" TRAFFIC-RATED CONCRETE DRAIN BOX WITH G-5 CAST IRON, ADA-COMPLIANT GRATE. IN NON-TRAFFIC AREAS USE 8" ROUND CONCRETE BOX WITH CAST-IRON, ADA-COMPLIANT GRATED LID (F-8 BOX). BOX AND GRATE SHALL BE AS LISTED IN THE DSRSD APPROVED MATERIALS LIST OR APPROVED EQUAL.

Dublin San Ramon Services District	DATE FEB 2021
TYPICAL OVERFLOW RELIEF VALVE INSTALLATION	DESIGNED RM
SIGNED COPY ON FILE AT DISTRICT OFFICE	DRAWING S-8A



DRY CONNECTION



WET TAP CONNECTION

(SEE NOTE 2)

NOTES:

1. MANUFACTURED WYE SADDLE INSTALLED ON SEWER SECTION WITH PLAIN ENDS.
2. APPROVAL OF DISTRICT ENGINEER REQUIRED FOR WET CONNECTION.
3. PRE-CONSTRUCTION AND POST-CONSTRUCTION TELEVISION INSPECTION REQUIRED IN THE PRESENCE OF DSRSD CONSTRUCTION INSPECTOR.

Dublin San Ramon Services District

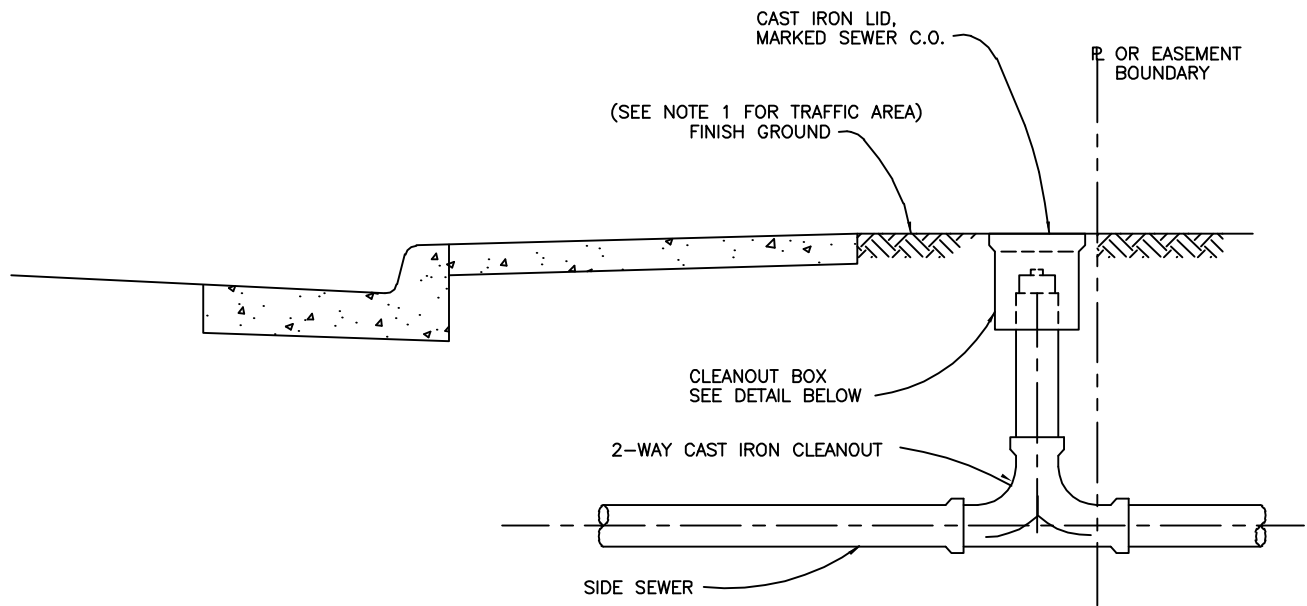
DATE
DEC 2019

LATERAL SEWER CONNECTION TO EXISTING SEWER MAIN

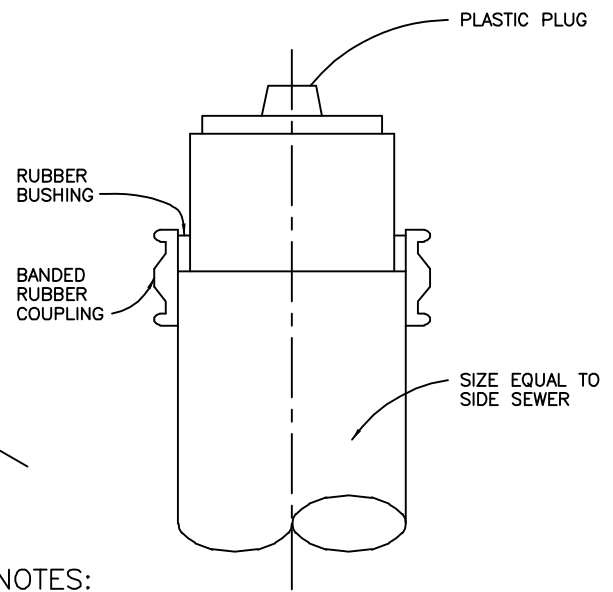
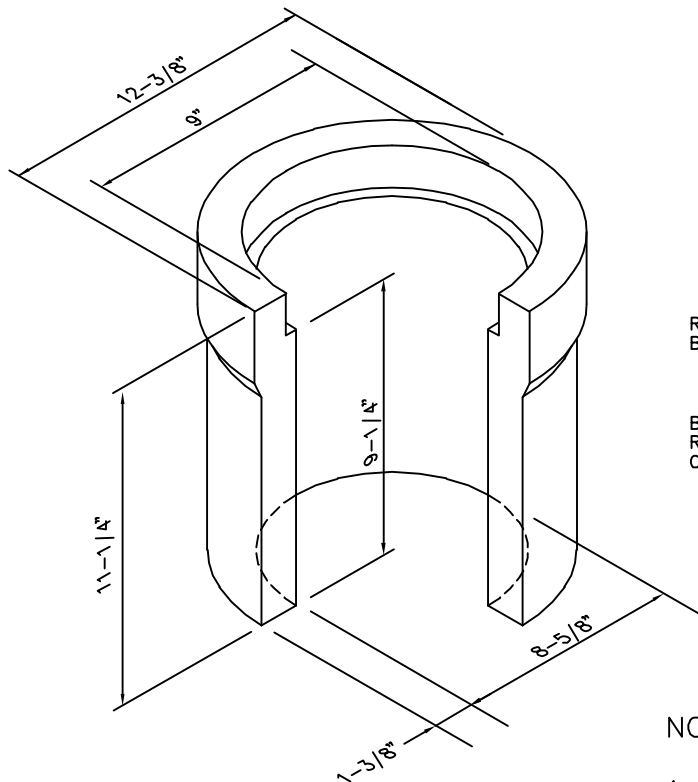
DESIGNED
BD

SIGNED COPY ON FILE AT DISTRICT OFFICE

DRAWING
S-9



CLEANOUT RISER



NOTES:

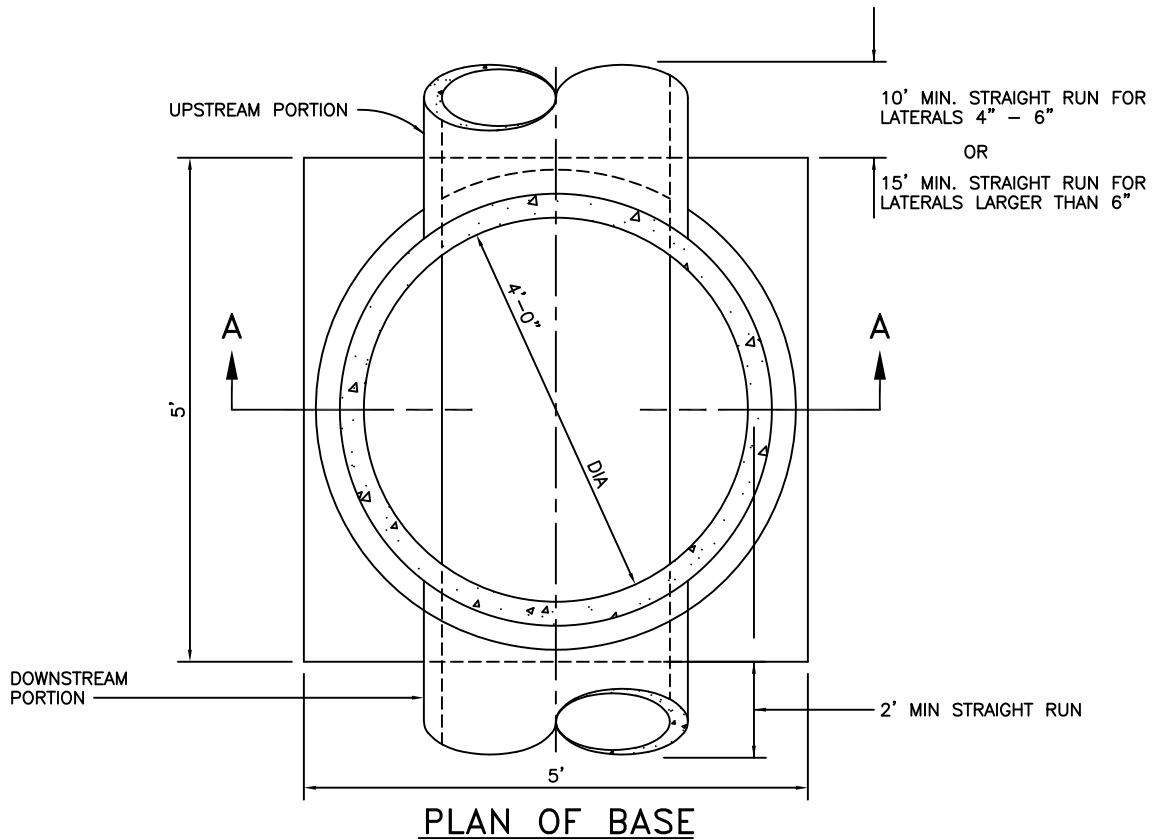
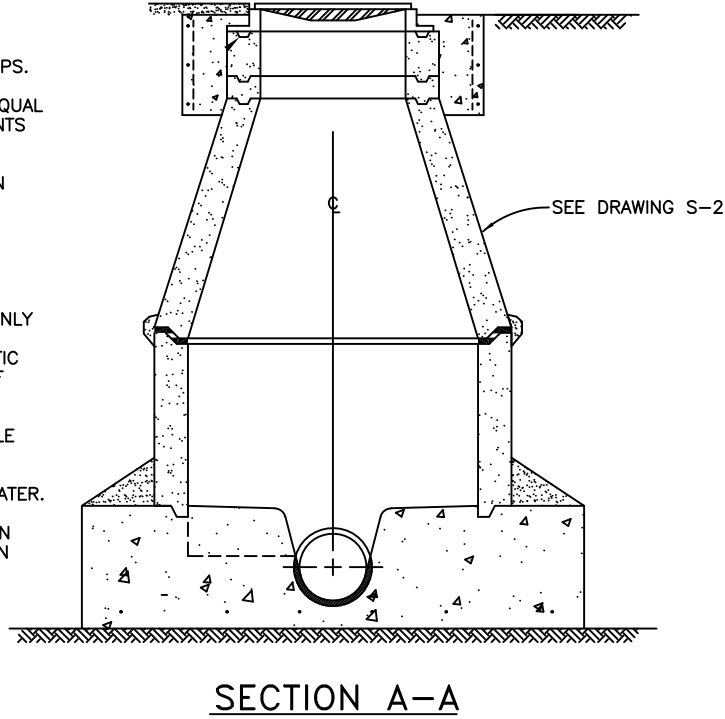
1. IN STREETS OR PARKING LOTS, CLEAN-OUT BOX MUST BE A G-5 (CHRISTY) BOX WITH METAL LID MARKED "SEWER".

REV. 08/11

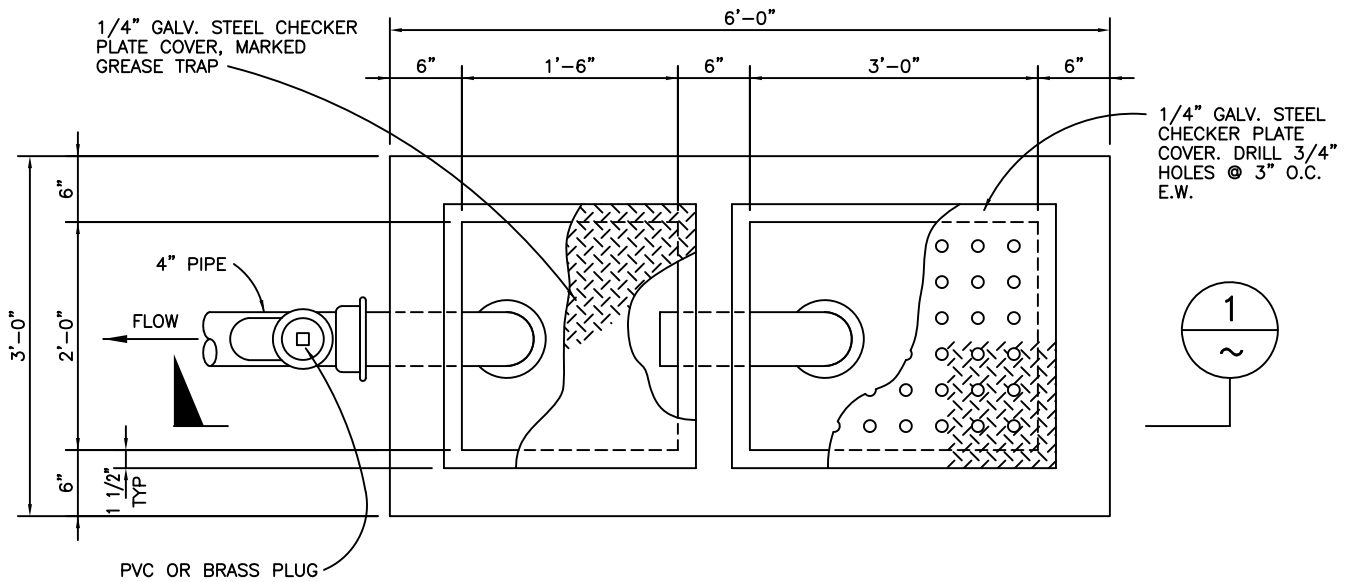
Dublin San Ramon Services District	DATE DEC 2019
SIDE SEWER CLEANOUT RISER	DESIGNED KP
SIGNED COPY ON FILE AT DISTRICT OFFICE	DRAWING S-10

NOTES:

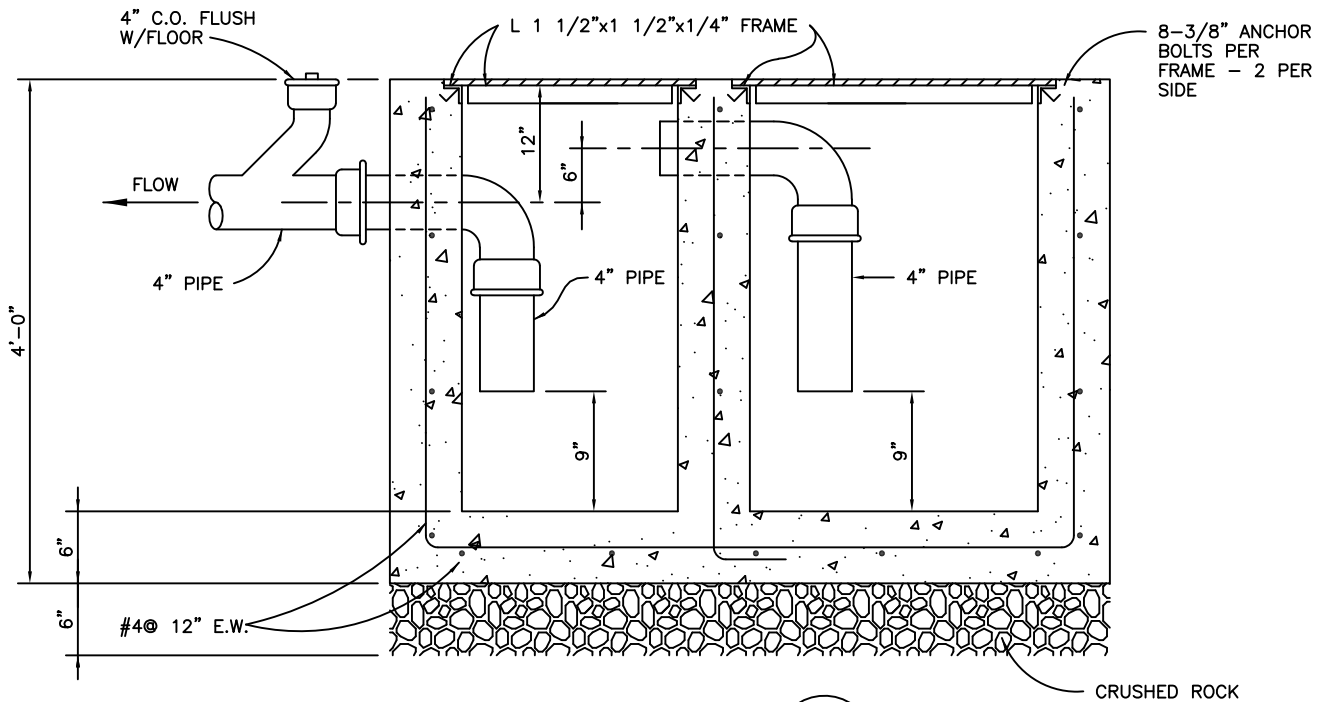
1. MANHOLES SHALL HAVE NO STEPS.
2. USE RAMNECK OR APPROVED EQUAL BETWEEN JOINTS. TRIM ALL JOINTS AFTER COMPLETION.
3. THERE SHALL BE NO ANGLES IN MANHOLE. IT SHALL ONLY BE A STRAIGHT THRU FLOWLINE.
4. MAINTAIN CONSTANT SLOPE UPSTREAM AND THRU MANHOLE.
5. SAMPLING MANHOLE ALLOWED ONLY FOR NONRESIDENTIAL BUILDING SERVICE LATERALS IN NONTRAFFIC AREAS AND UPON APPROVAL OF DISTRICT ENGINEER.
6. LOCATION OF SAMPLING MANHOLE SHALL BE DESIGNATED BY THE DISTRICT PRIOR TO APPROVAL AND ISSUANCE OF THE WASTEWATER. WASTE INSPECTOR FOR LOCATION OF SAMPLING WELL, IF LOCATION IS NOT SHOWN ON APPROVED DRAWINGS.
7. JOINTS SHALL BE WRAPPED WITH 9-INCH RUB'R-NEK EXTERNAL CONCRETE JOINT WRAP, OR APPROVED EQUAL.



Dublin San Ramon Services District	DATE DEC 2019
SAMPLING MANHOLE	DESIGNED BD
SIGNED COPY ON FILE AT DISTRICT OFFICE	DRAWING S-11



PLAN



SECTION

NTS

NOTES:

1. FLOOR SHALL DRAIN TO DRILLED PLATE COVER.
2. PIPES SHALL BE DIP, OR PVC (CAST IRON IS NOT ALLOWED).
3. TWO 18" DRAIN INLETS MAY BE SUBSTITUTED FOR CAST IN PLACE TRAP.

Dublin San Ramon Services District

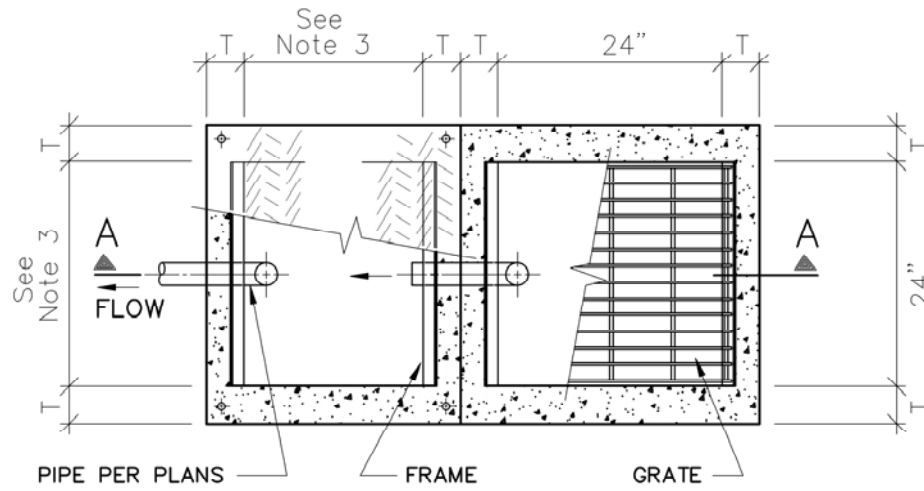
DATE
DEC 2019

GREASE AND SAND TRAP

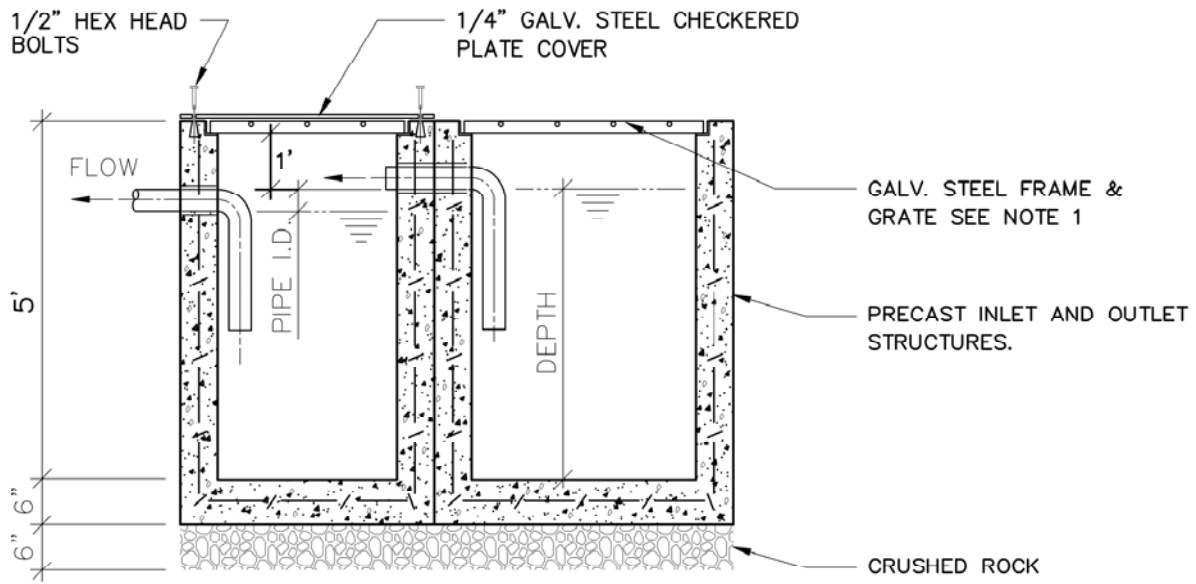
DESIGNED
BD

SIGNED COPY ON FILE AT DISTRICT OFFICE

DRAWING
S-12



PLAN VIEW



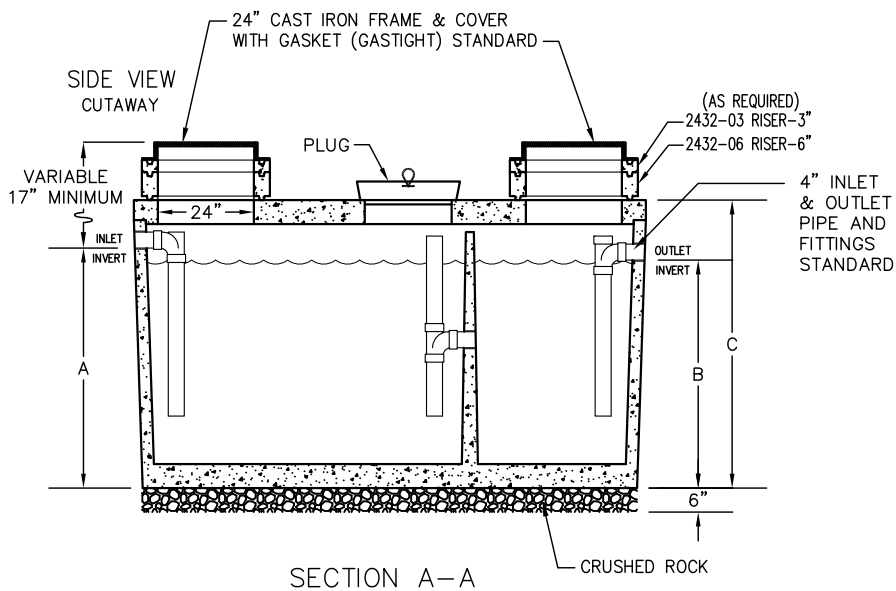
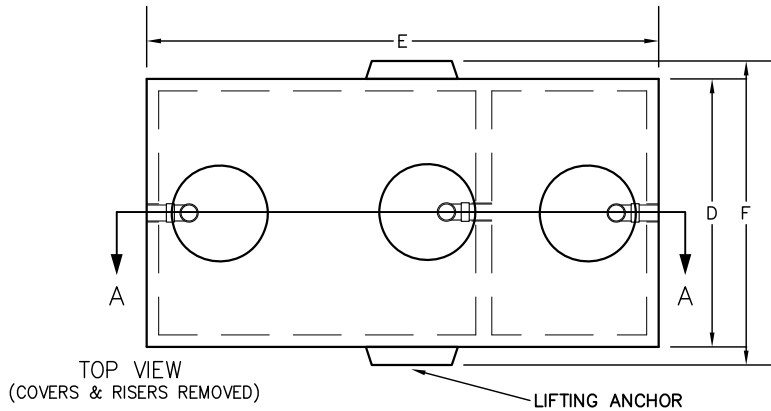
OUTLET INLET

SECTION A-A

NOTES :

1. FRAMES, GRATES, AND CHECKER PLATE COVER SHALL BE RATED FOR H20 HWY. LOADING.
2. PIPE OPENINGS SHALL BE CAST INTO INLETS.
3. EITHER A 16"x16" OR 24"x24" CONCRETE BOX CAN BE USED PER DSRSD APPROVAL.

Dublin San Ramon Services District	REVISION DATE DEC 2019
GREASE AND SAND TRAP FOR TRASH ENCLOSURES	REVISED BY BD
SIGNED COPY ON FILE AT DISTRICT OFFICE	DRAWING S-12A



1. CONCRETE GREASE INTERCEPTOR SHALL BE AS LISTED ON THE APPROVED MATERIALS LIST, OR APPROVED EQUAL.
2. THE GREASE INTERCEPTOR SHALL BE LOCATED AND INSTALLED OUTSIDE OF THE BUILDING.
3. THE GREASE INTERCEPTOR SHALL BE LOCATED AND/OR CONSTRUCTED IN SUCH A MANNER AS TO EXCLUDE THE ENTRANCE OF SURFACE, STORM, OR RAINWATER.
4. SIZE OF GREASE INTERCEPTOR SHALL BE APPROVED BY THE DISTRICT ENGINEER.
5. BOX DESIGN LOAD IS H2O TRAFFIC LOADING WITH 1' TO 6' OF SOIL COVER.
6. ALL EXPOSED EXTERIOR COUPLINGS SHALL BE "NO-HUB" COUPLINGS ALL INTERIOR FITTINGS SHALL BE "NO-HUB" CAST IRON OR APPROVED EQUAL.
7. INSTALL SAMPLING BOX WITHIN 3' OF THE OUTLET OF THE GREASE INTERCEPTOR.
8. GREASE INTERCEPTOR SHALL BE SET ON DRAIN ROCK.

CAPACITY IN GALLONS	REFERENCE MODEL (JENSEN)	A	B	C	D	E	F
750	JP750EPE-G	5'-0"	4'-9"	6'-3"	4'-0"	8'-1"	4'-3"
1000	JP1000EPE-G	5'-0"	4'-9"	6'-3"	5'-1"	8'-2"	5'-4"
1200	JP1200EPE-G	5'-0"	4'-9"	6'-6"	5'-9"	8'-6"	6'-0"
1500	JP1500EPE-G	5'-0"	4'-9"	6'-3"	5'-7"	10'-8"	5'-10"

Dublin San Ramon Services District

REVISION DATE
DEC 2019

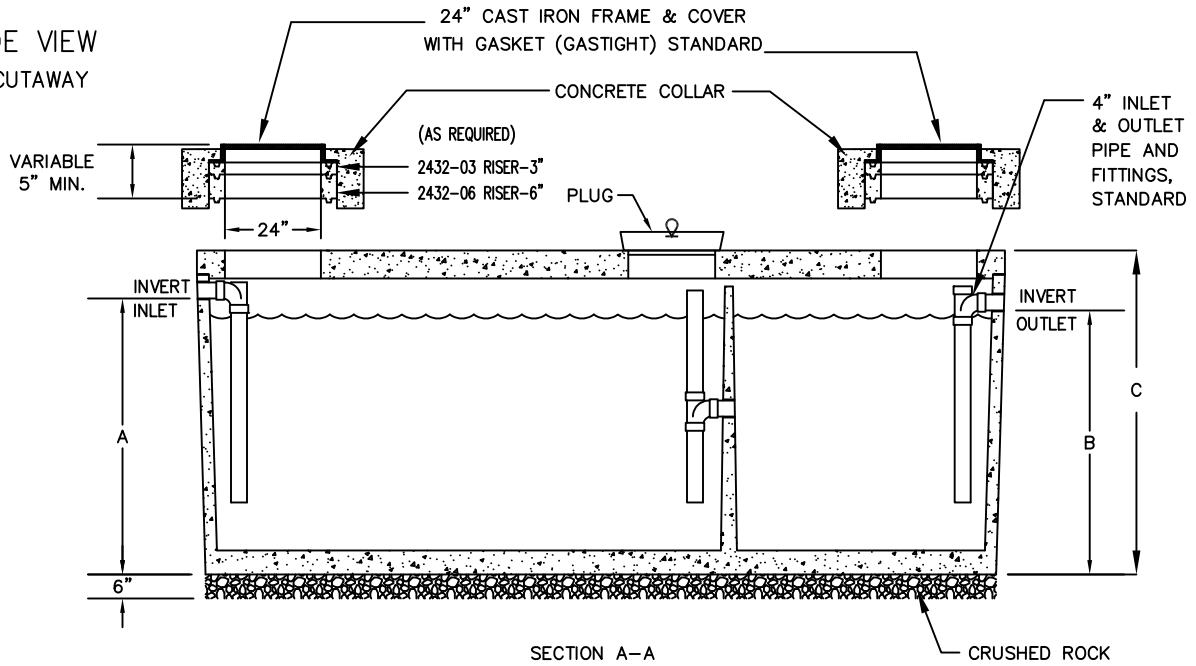
GREASE INTERCEPTOR
750 - 1500 GALLON CAPACITY

REVISED BY
BD

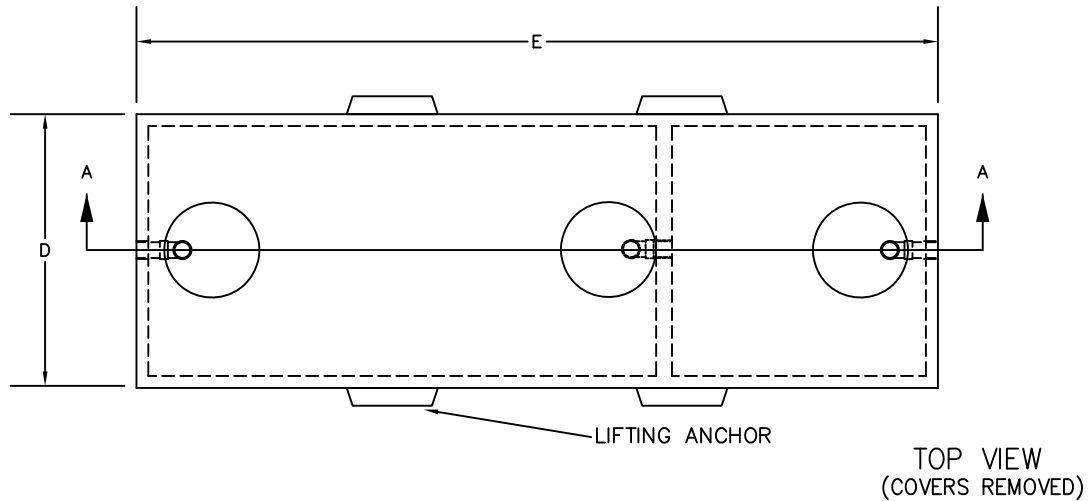
SIGNED COPY ON FILE AT DISTRICT OFFICE

DRAWING
S-13

SIDE VIEW
CUTAWAY



SECTION A-A



TOP VIEW
(COVERS REMOVED)

1. CONCRETE GREASE INTERCEPTOR SHALL BE AS LISTED ON THE APPROVED MATERIALS LIST, OR APPROVED EQUAL.
2. THE GREASE INTERCEPTOR SHALL BE LOCATED AND INSTALLED OUTSIDE OF THE BUILDING.
3. THE GREASE INTERCEPTOR SHALL BE LOCATED AND/OR CONSTRUCTED IN SUCH A MANNER AS TO EXCLUDE THE ENTRANCE OF SURFACE, STORM, OR RAINWATER.
4. SIZE OF GREASE INTERCEPTOR SHALL BE APPROVED BY THE DISTRICT ENGINEER.
5. BOX DESIGN LOAD IS H2O TRAFFIC LOADING WITH 1' TO 6' OF SOIL COVER.
6. ALL EXPOSED EXTERIOR COUPLINGS SHALL BE "NO-HUB" COUPLINGS ALL INTERIOR FITTINGS SHALL BE "NO-HUB" CAST IRON OR APPROVED EQUAL.
7. INSTALL SAMPLING BOX WITHIN 3' OF THE OUTLET OF THE GREASE INTERCEPTOR.
8. GREASE INTERCEPTOR SHALL BE SET ON DRAIN ROCK.

CAPACITY IN GALLONS	REFERENCE MODEL (JENSEN)	A	B	C	D	E
2000	JP2000EPE-G	5'-0"	4'-9"	6'-0"	4'-11"	15'-11"
2500	JZ2500EPE-G	5'-0"	4'-9"	6'-0"	5'-9"	16'-10"
3000	JZ3000EPE-G	5'-9"	5'-6"	6'-9"	5'-9"	16'-10"

Dublin San Ramon Services District

REVISION DATE

DEC 2019

GREASE INTERCEPTOR

REVISED BY

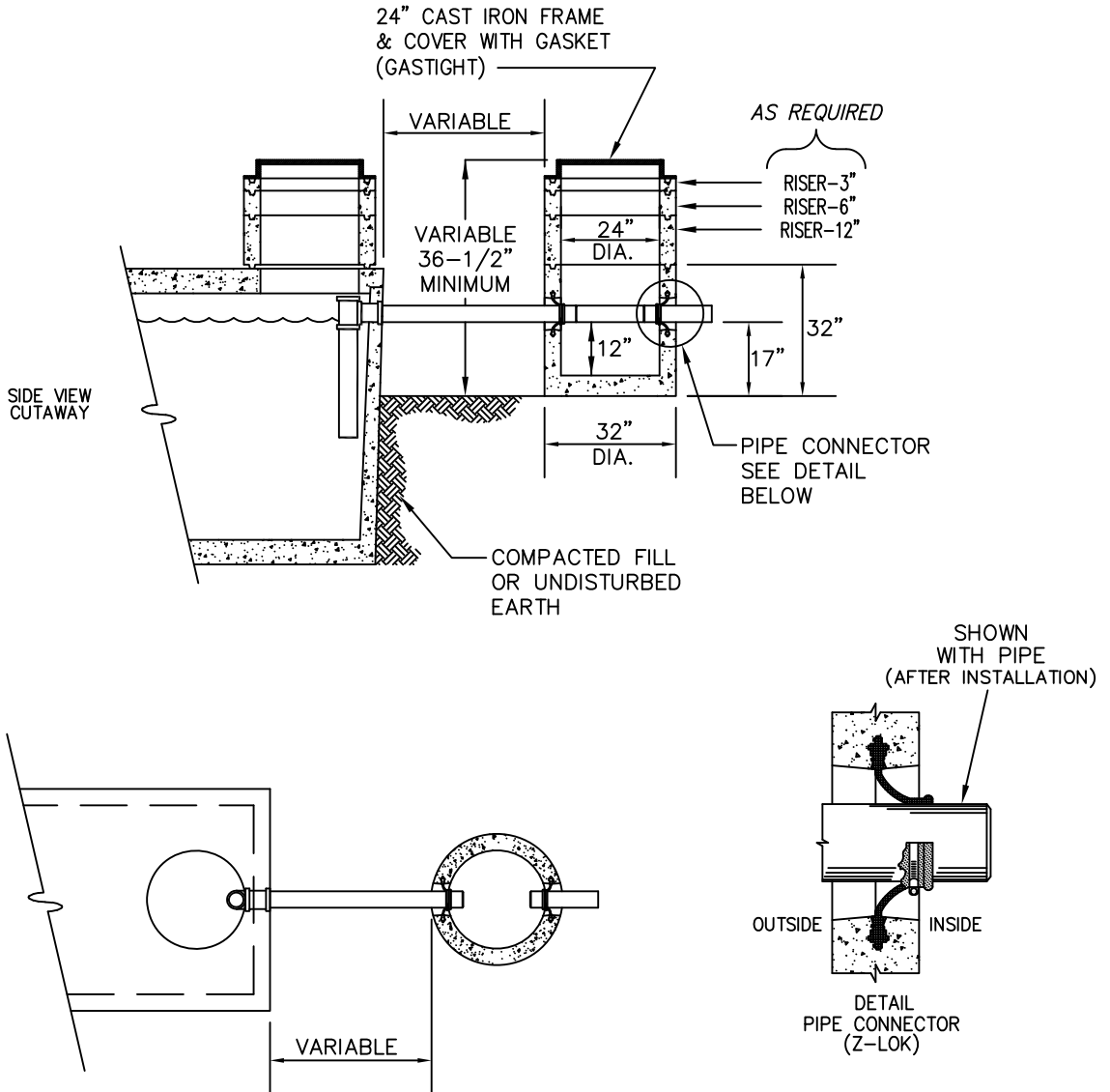
2000 - 3000 GALLON CAPACITY

BD

SIGNED COPY ON FILE AT DISTRICT OFFICE

DRAWING

S-14



NOTES:

1. SAMPLE BOX SHALL BE LISTED ON THE APPROVED MATERIAL LIST, OR APPROVED EQUAL.
2. THIS SAMPLE BOX IS NOT INTENDED FOR THE INTRODUCTION OF DOMESTIC SEWAGE. LOCATION AND TRIBUTARY DISCHARGE SOURCES SHALL BE APPROVED BY THE DSRSD INSPECTOR.

Dublin San Ramon Services District

REVISION DATE
OCT 2017

SAMPLING BOX

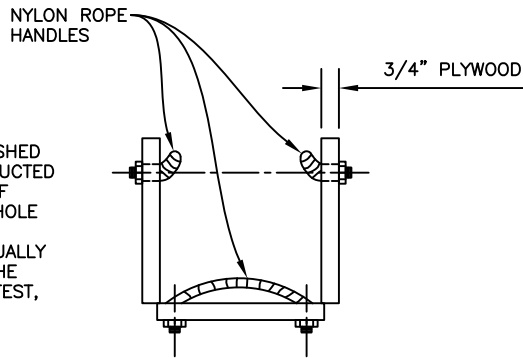
REVISED BY
BD

SIGNED COPY ON FILE AT DISTRICT OFFICE

DRAWING
S-15

INSTALLATION

FALSE MANHOLE BOTTOM SHALL BE FURNISHED AND INSTALLED IN ALL MANHOLES CONSTRUCTED IN ADVANCE OF PAVING OR IN ADVANCE OF PROPERTY DEMOLITION. THESE FALSE MANHOLE BOTTOMS WILL BE INSTALLED AT A TIME DIRECTED BY THE ENGINEER BUT WILL USUALLY BE AFTER ALL WORK IS COMPLETED ON THE WASTEWATER SYSTEM INCLUDING THE AIR TEST, BUT PRIOR TO THE FINAL INSPECTION.

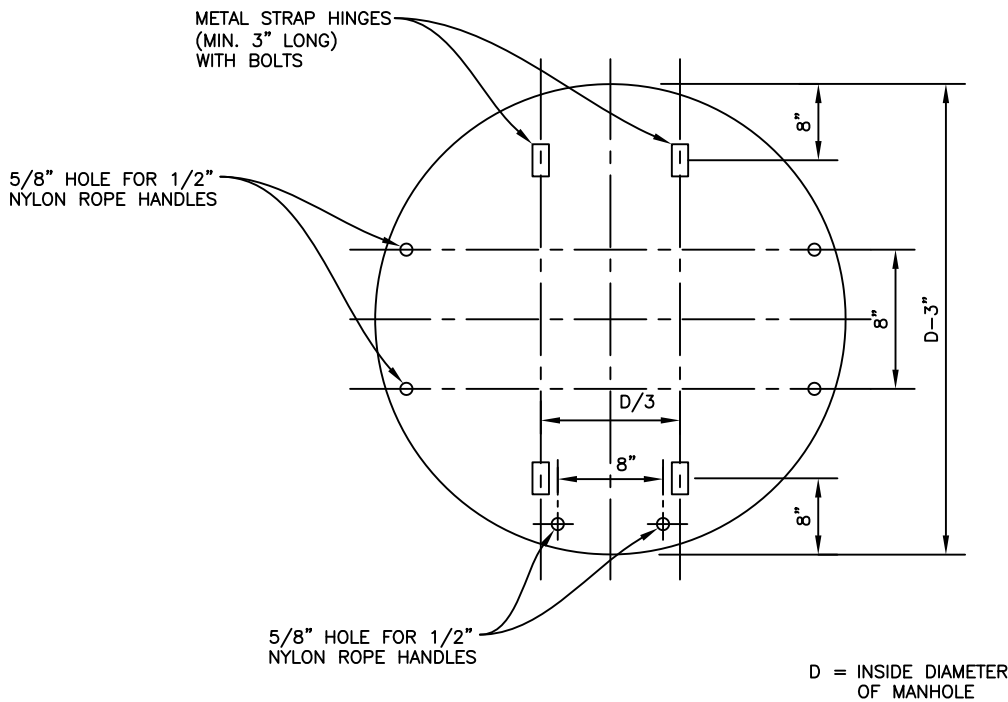


REMOVAL

FALSE MANHOLE BOTTOM SHALL BE REMOVED AFTER THE FINAL APPURTENANCE ADJUSTMENT INSPECTION. THE PAVING CONTRACTOR AND OWNER'S REPRESENTATIVE WILL COORDINATE THE REMOVAL OF THE FALSE MANHOLE BOTTOMS. CONTRACTOR SHALL REMOVE DEBRIS CAUGHT ON THE FALSE BOTTOM AND NOT ALLOW IT TO DROP INTO MANHOLE.

INSTALLATION AND REMOVAL POSITION

NOT TO SCALE



PLAN VIEW

NOT TO SCALE

Dublin San Ramon Services District	DATE DEC 2019
MANHOLE: FALSE BOTTOM	DESIGNED RM
SIGNED COPY ON FILE AT DISTRICT OFFICE	DRAWING S-16