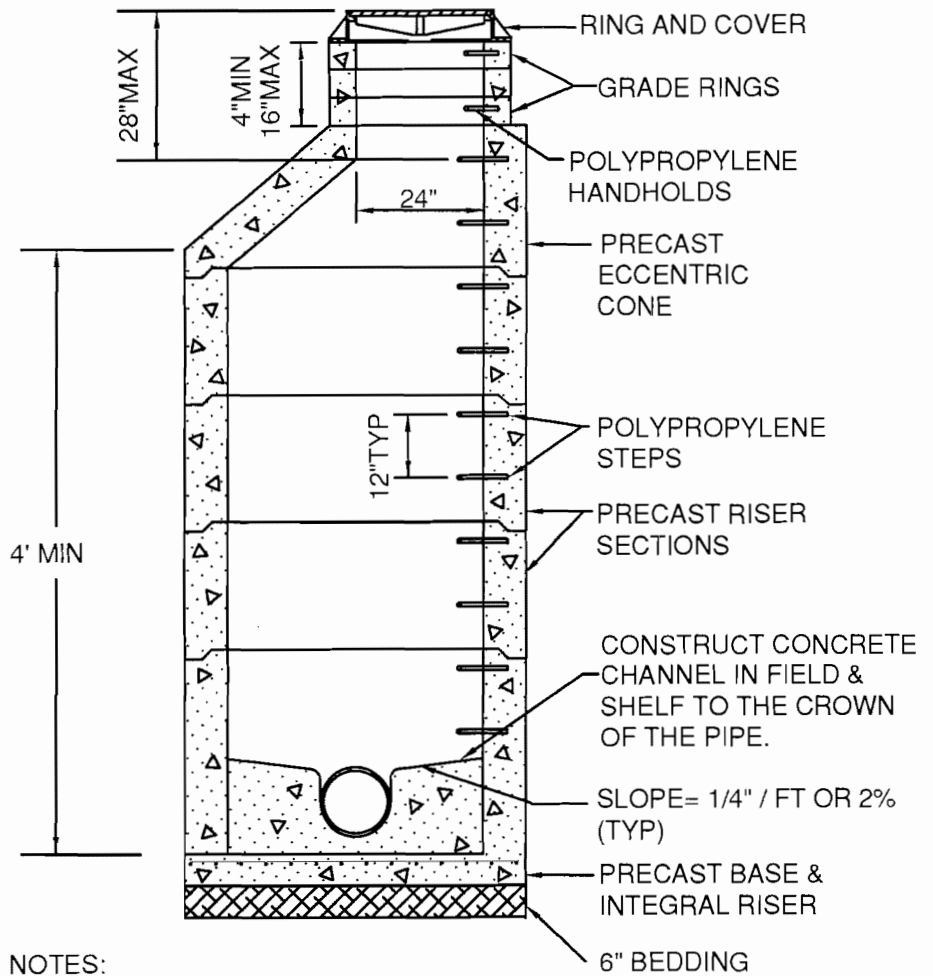


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NOTES:

1. PRECAST MANHOLES SHALL MEET THE REQUIREMENTS OF ASTM C478. JOINTS SHALL BE RUBBER GASKETED CONFORMING TO ASTM C443 AND SHALL BE GROUTED FROM THE INSIDE. LIFT HOLES AND GRADE RINGS SHALL BE GROUTED FROM THE OUTSIDE & INSIDE OF THE MANHOLE.
2. STEPS IN MANHOLE SHALL HAVE 6" MINIMUM CLEARANCE. HANDHOLES IN ADJUSTMENT SECTION SHALL HAVE 3" MINIMUM CLEARANCE. THE FIRST STEP OR HANDHOLD SHALL BE A MAXIMUM OF 12" FROM THE TOP OF THE COVER.
3. CONNECTION TO MANHOLE SHALL BE MADE BY KOR-N-SEAL BOOT, UNLESS AN ALTERNATIVE CONNECTION METHOD IS SPECIFICALLY APPROVED BY THE CITY.
4. NON-REINFORCED CONCRETE IN CHANNEL AND SHELF SHALL BE ψ COMMERCIAL GRADE 3000.
5. SEE DETAIL 5-3 FOR MANHOLE COLLAR INSTALLATION.
6. A SEWER GUARD SHALL BE INSTALLED IN ANY MANHOLE SUBJECT TO FLOODING.

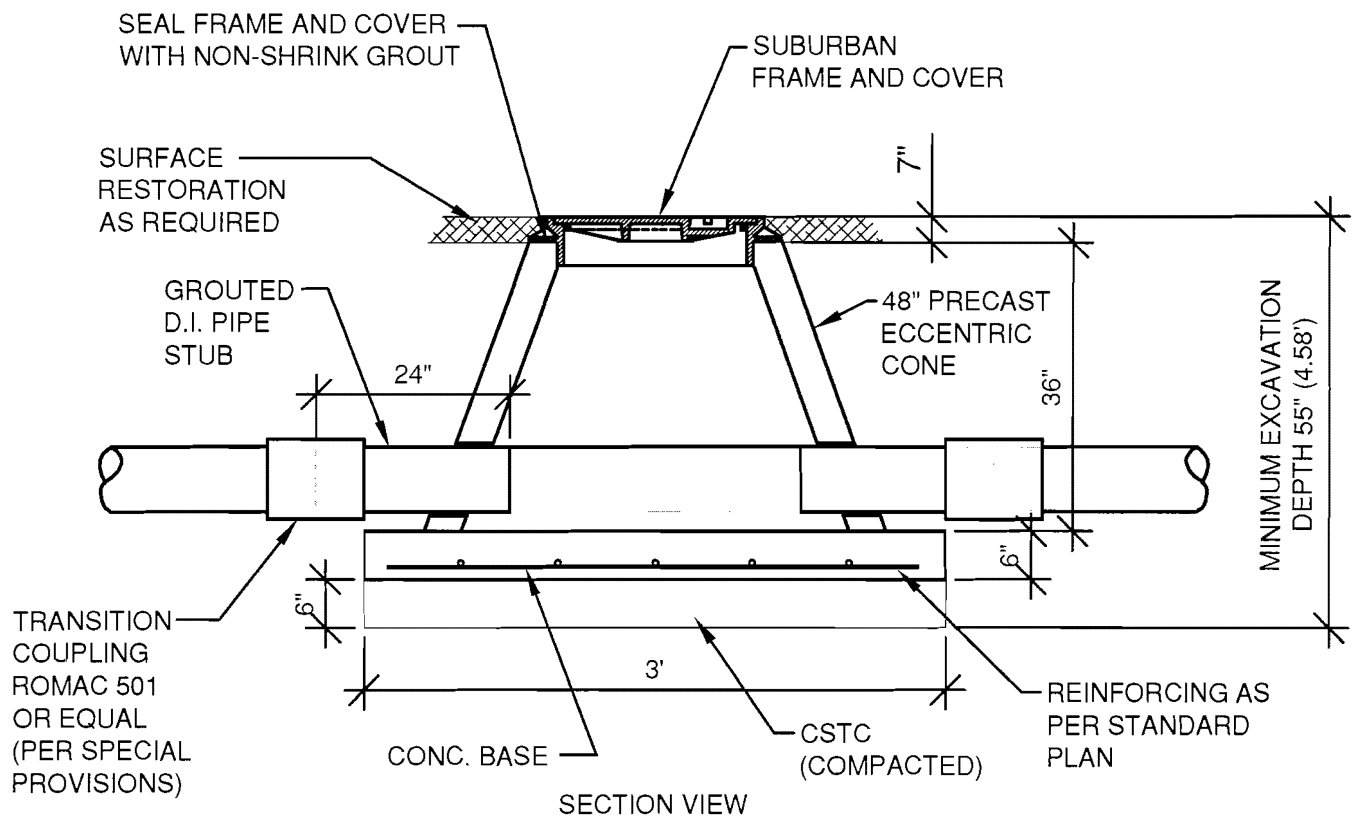
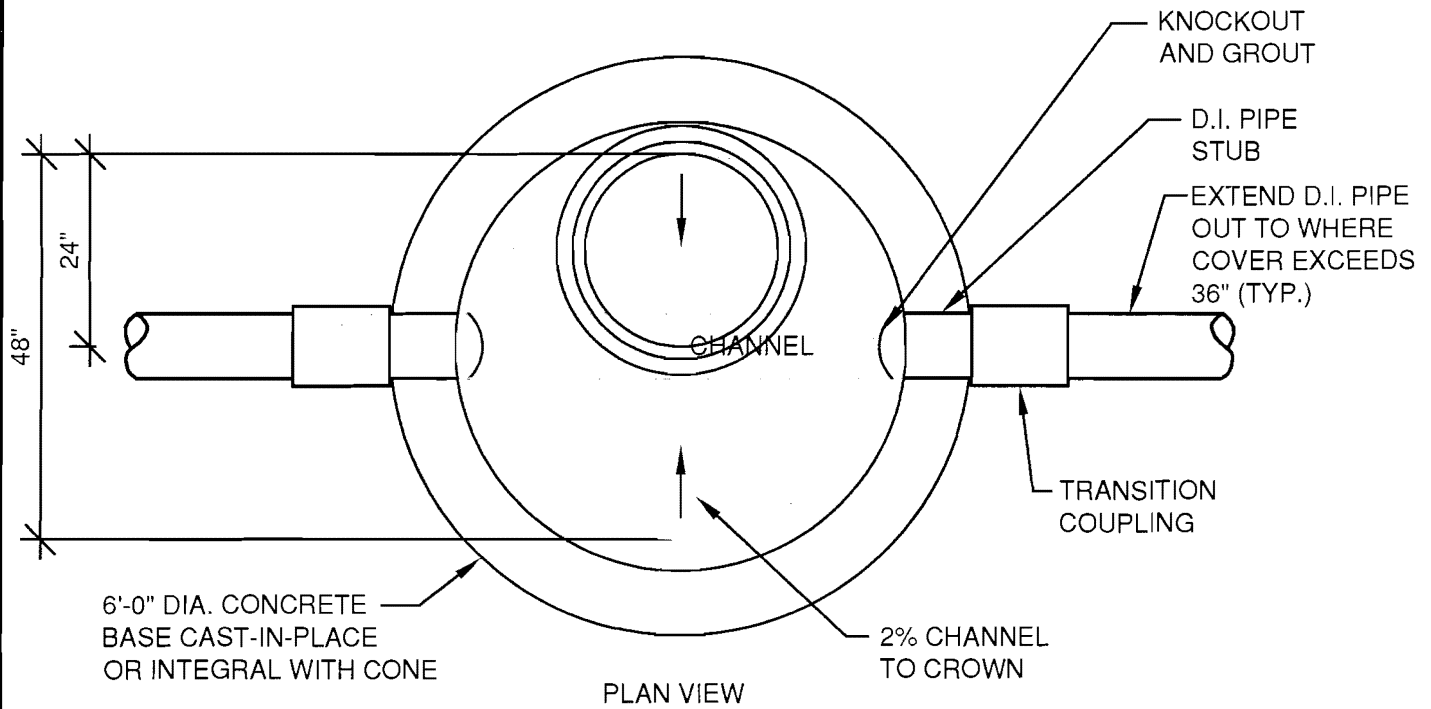


CITY OF WINLOCK
DEPARTMENT OF PUBLIC WORKS

SEWER DETAILS
TYPICAL MANHOLE

REVISED
08/20/2007

DRAWING
NO.
5-1



NOTE:
 SHALL MANHOLE INSTALLATIONS ARE FOR SPECIAL CIRCUMSTANCES AND MUST BE APPROVED PRIOR TO DESIGN AND INSTALLATION.



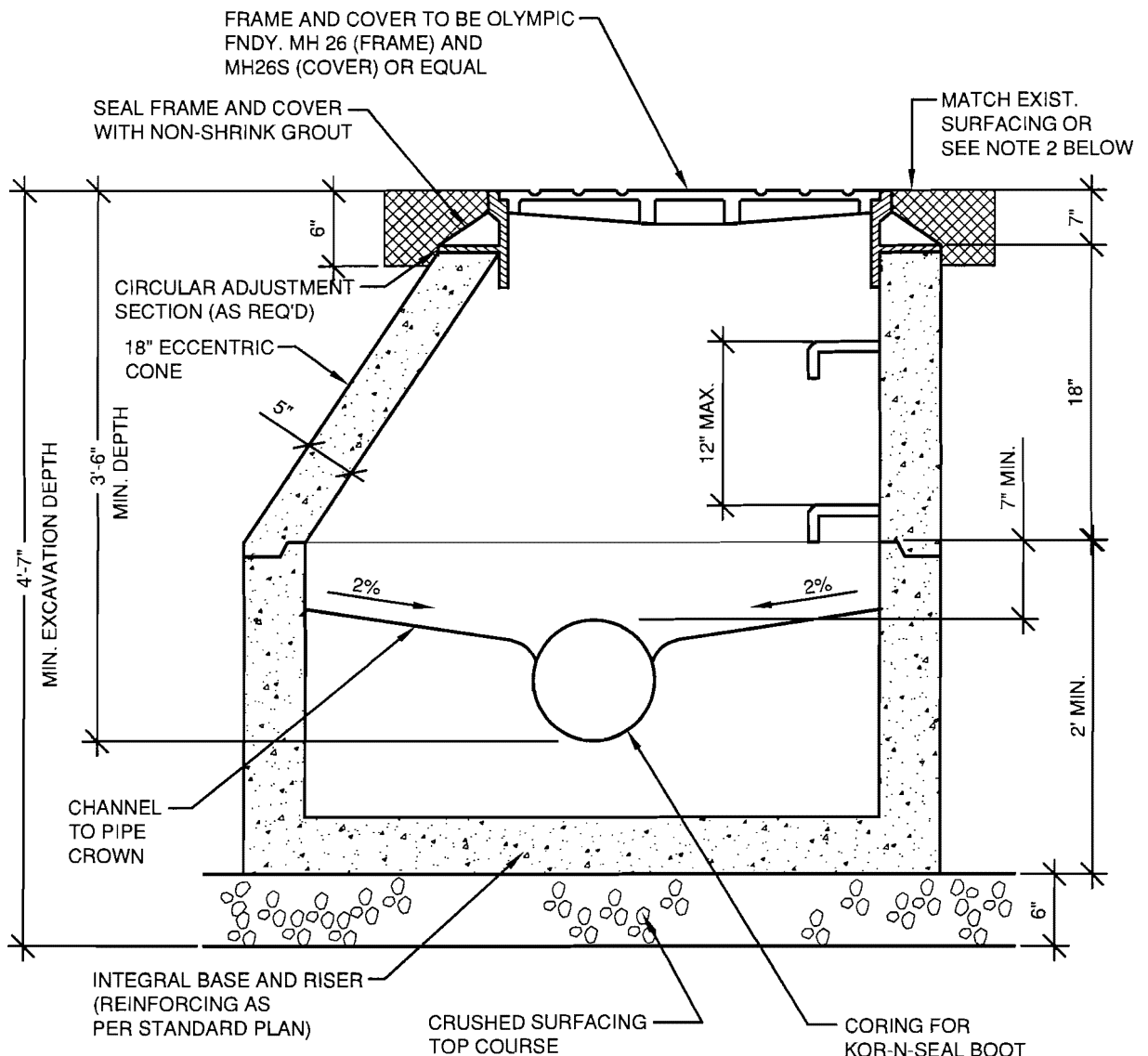
CITY OF WINLOCK
 DEPARTMENT OF PUBLIC WORKS

SEWER DETAILS
 SHALLOW MANHOLE
 LESS THAN 3.5'

REVISED
 08/20/2007

DRAWING
 NO.
5-2a

T:\Custom\Details\City of Winlock\Details-Sewer.dwg, 5-2b-S-MH-1, 8/22/2007 10:04:14 AM, D\Frye, DWG6 ePlot.pc3, Gibbs & Olson - Report A Size (8.50 x 11.00 Inches), 1:1, Gibbs & Olson, Inc.



NOTES:

1. SEWER MAIN PIPE SHALL BE C900 PVC OR CL50 D.I. WHERE COVER IS LESS THAN 36" TO TOP OF PIPE.
2. KNOCKOUTS SHALL HAVE A WALL THICKNESS OF 2" MINIMUM TO 2 1/2" MAXIMUM.



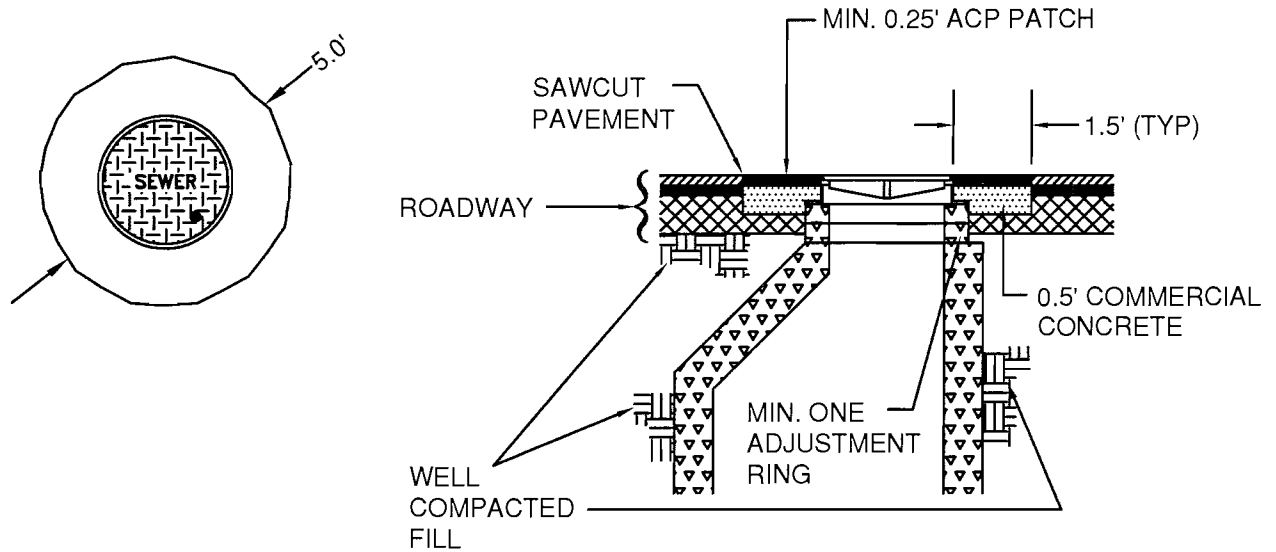
CITY OF WINLOCK
DEPARTMENT OF PUBLIC WORKS

SEWER DETAILS
SHALLOW MANHOLE
3.5' - 5.5'

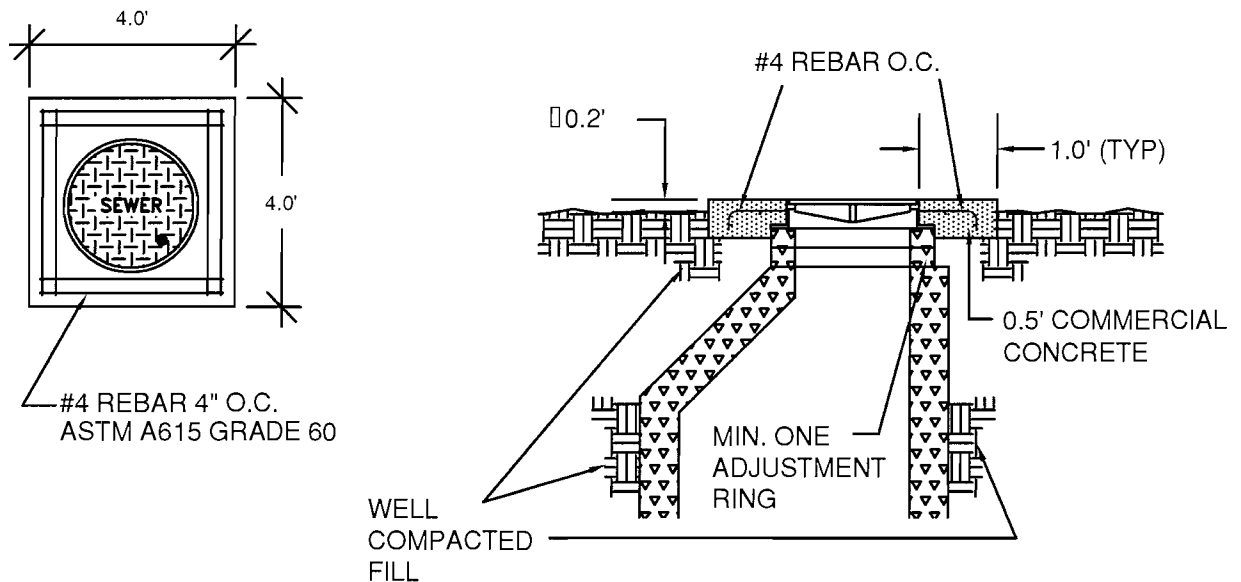
REVISED
08/20/2007

DRAWING
NO.
5-2b

MANHOLE IN ASPHALT



MANHOLE OUTSIDE ASPHALT



NOTES:

1. FRAME AND COVER SHALL BE OLYMPIC FOUNDARY MH26 AND MH26S OR APPROVED EQUAL.
2. SINGLE OPENING IN LID FOR USE OF MANHOLE HOOK IS REQUIRED.
3. JOINTS BETWEEN EACH ADJUSTMENT RING INCLUDING WHERE FRAME & MANHOLE CONE MEET RINGS, SHALL INCLUDE ACTIVATED OAKUM OR APPROVED EQUAL.

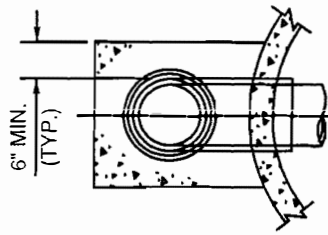


CITY OF WINLOCK
DEPARTMENT OF PUBLIC WORKS

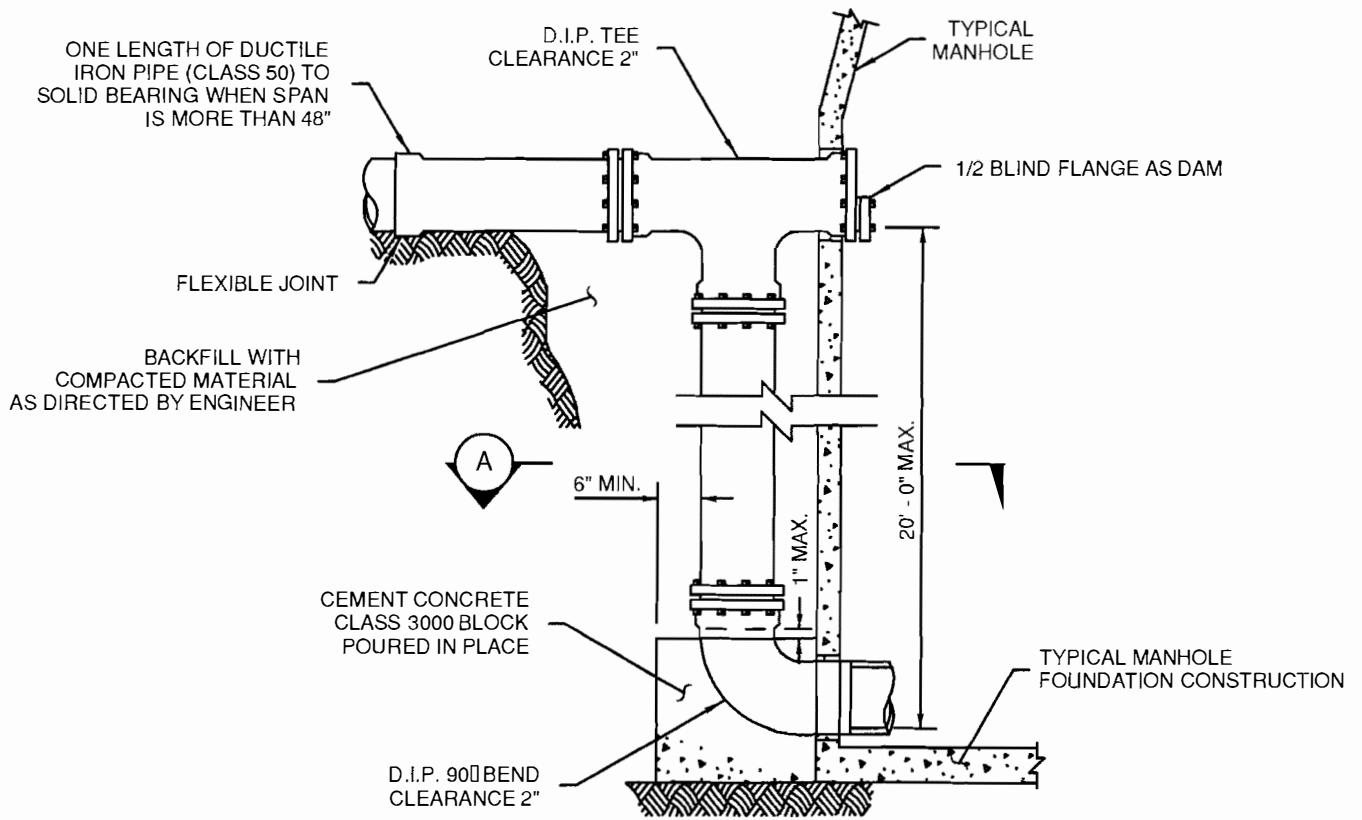
SEWER DETAILS
MANHOLE COLLAR

REVISED
08/20/2007

DRAWING
NO.
5-3



SECTION A



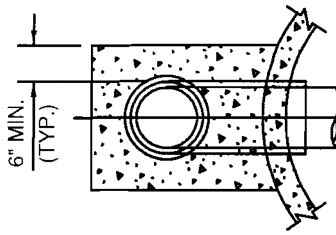
ELEVATION

DUCTILE IRON
DROP CONNECTION

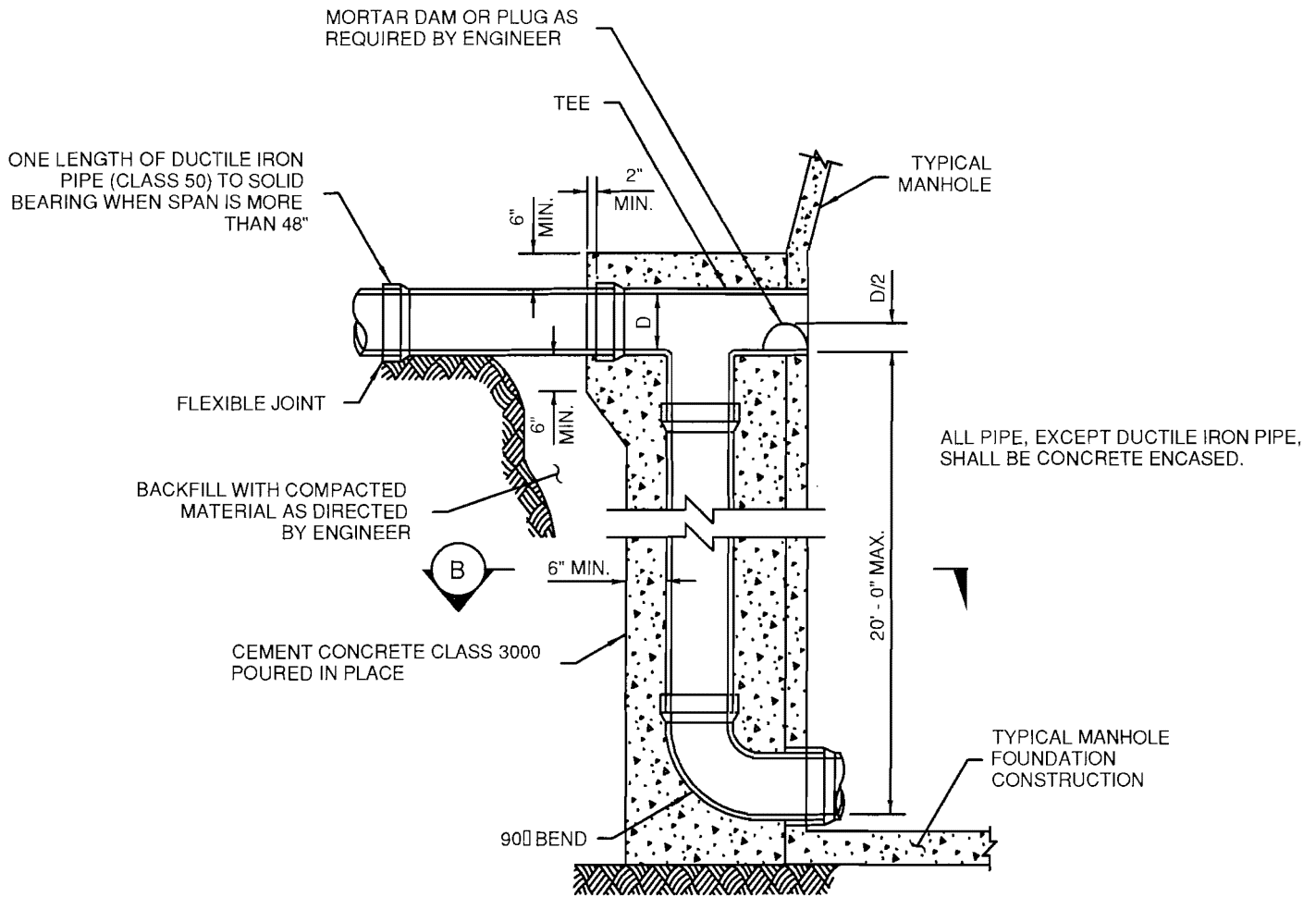


<p>CITY OF WINLOCK DEPARTMENT OF PUBLIC WORKS</p>	<p>SEWER DETAILS DROP CONNECTION A - DUCTILE IRON ENCASED</p>	<p>REVISED 08/20/2007</p>	<p>DRAWING NO. 5-4a</p>
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T:\CustomDetails\City of Winlock\Details Sewer\dwg\1-dia-DI-Drop.dwg, 8/22/2007 10:04:16 AM, DFrye, DWFS ePlat.ec3, Gibbs & Olson - Report A Size (8.50 x 11.00 inches), 1:1, Gibbs & Olson, Inc.



SECTION B



ELEVATION

CONCRETE ENCASED
DROP CONNECTION

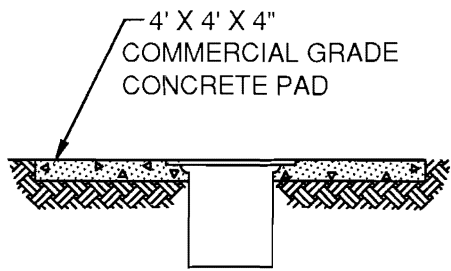


CITY OF WINLOCK
DEPARTMENT OF PUBLIC WORKS

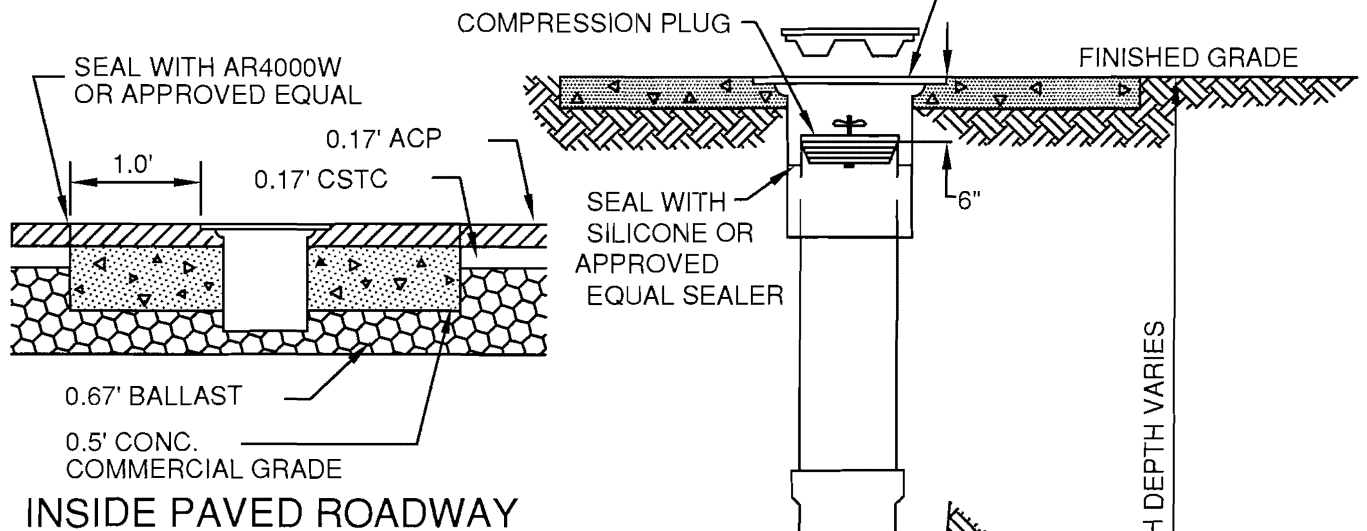
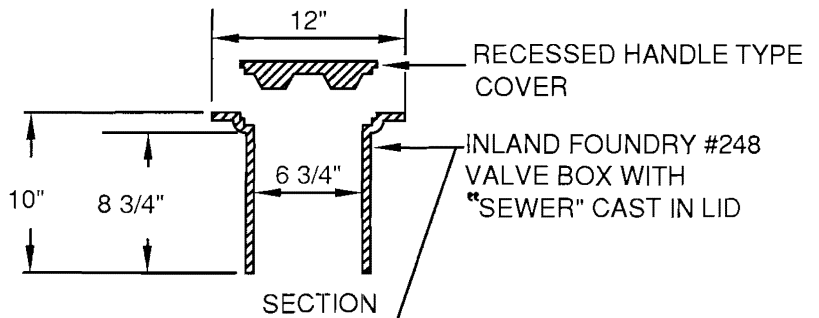
SEWER DETAILS
DROP CONNECTION B -
CONCRETE ENCASED

REVISED
08/20/2007

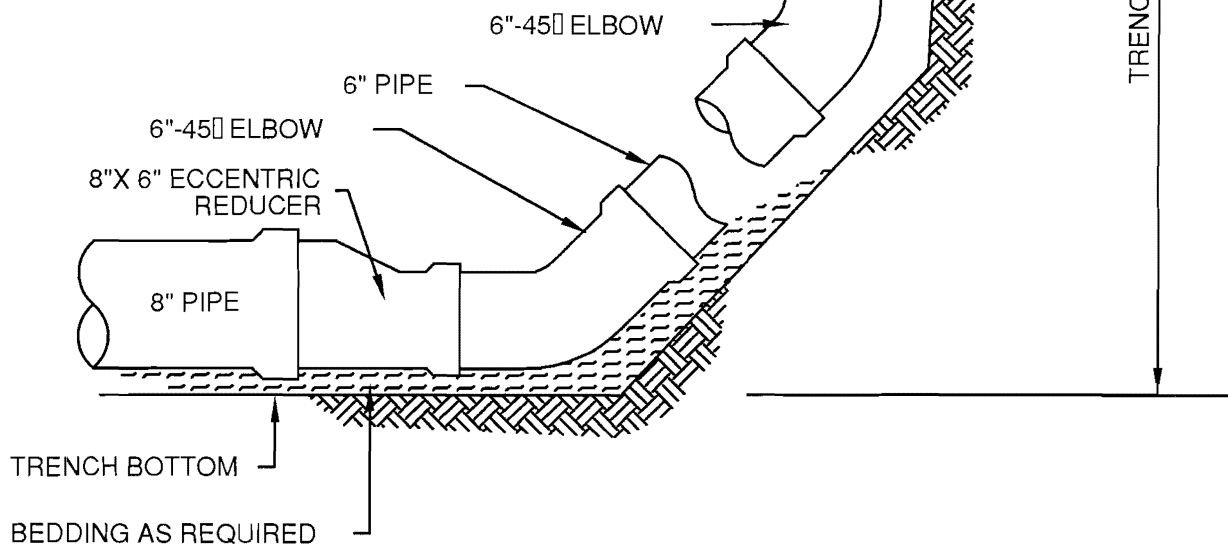
DRAWING
NO.
5-4b



OUTSIDE PAVED AREA



INSIDE PAVED ROADWAY



NOTES:

1. ALL SEWER PIPE SHALL BE ASTM 3034 SDR 35.
2. SILICONE SEALANT SHALL NOT INTERFERE WITH REMOVAL OF THE PLUG.

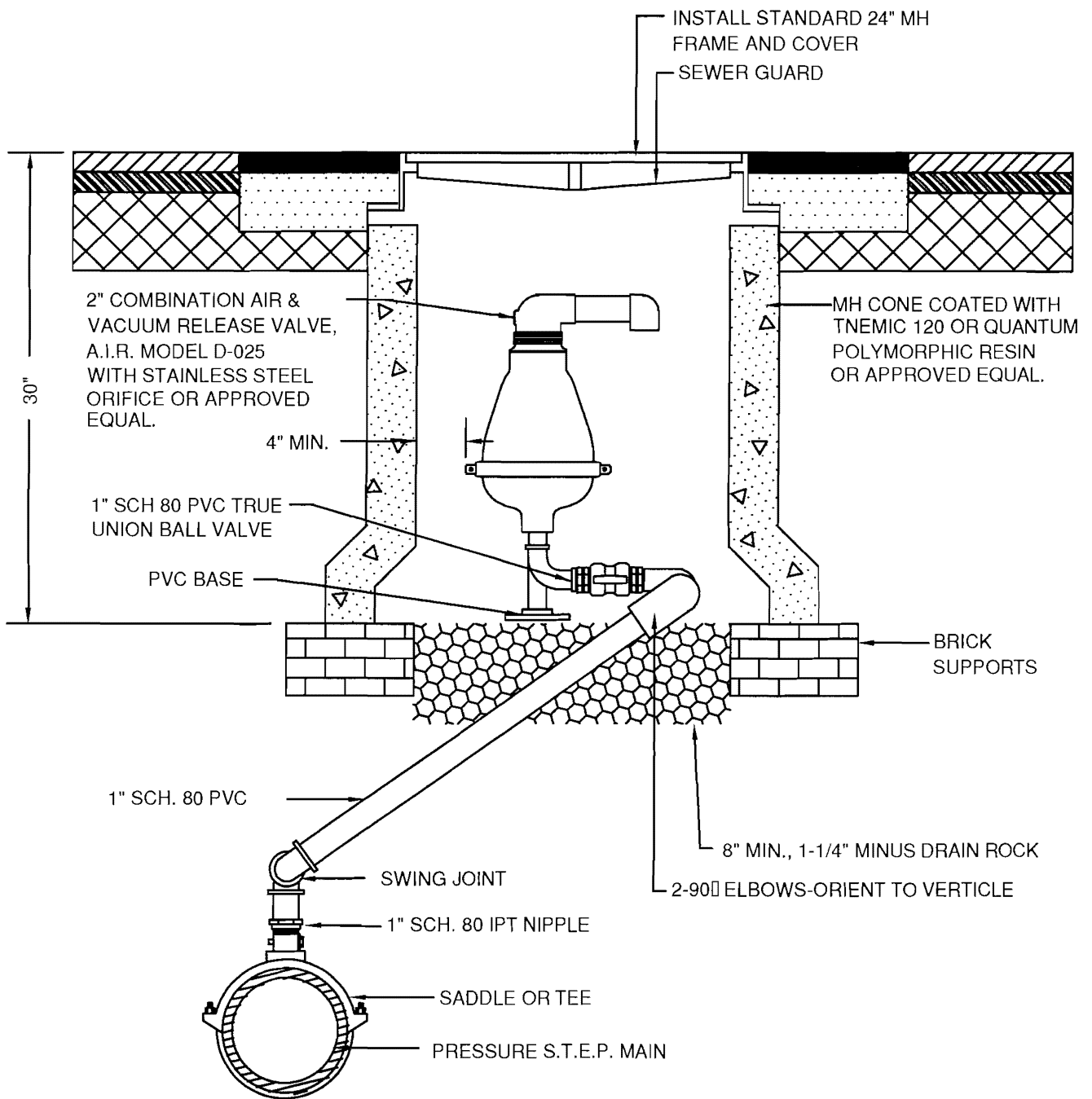


CITY OF WINLOCK
DEPARTMENT OF PUBLIC WORKS

SEWER DETAILS
CLEANOUT

REVISED
08/20/2007

DRAWING
NO.
5-5



NOTES:

1. LOCATE AIR RELEASE ASSEMBLY IN SIDEWALK WHEN POSSIBLE.
2. ALL FASTENERS SHALL BE STAINLESS STEEL.



CITY OF WINLOCK
DEPARTMENT OF PUBLIC WORKS

SEWER DETAILS
S.T.E.P. SYSTEM AIR
RELEASE ASSEMBLY

REVISED
08/20/2007

DRAWING
NO.
5-6

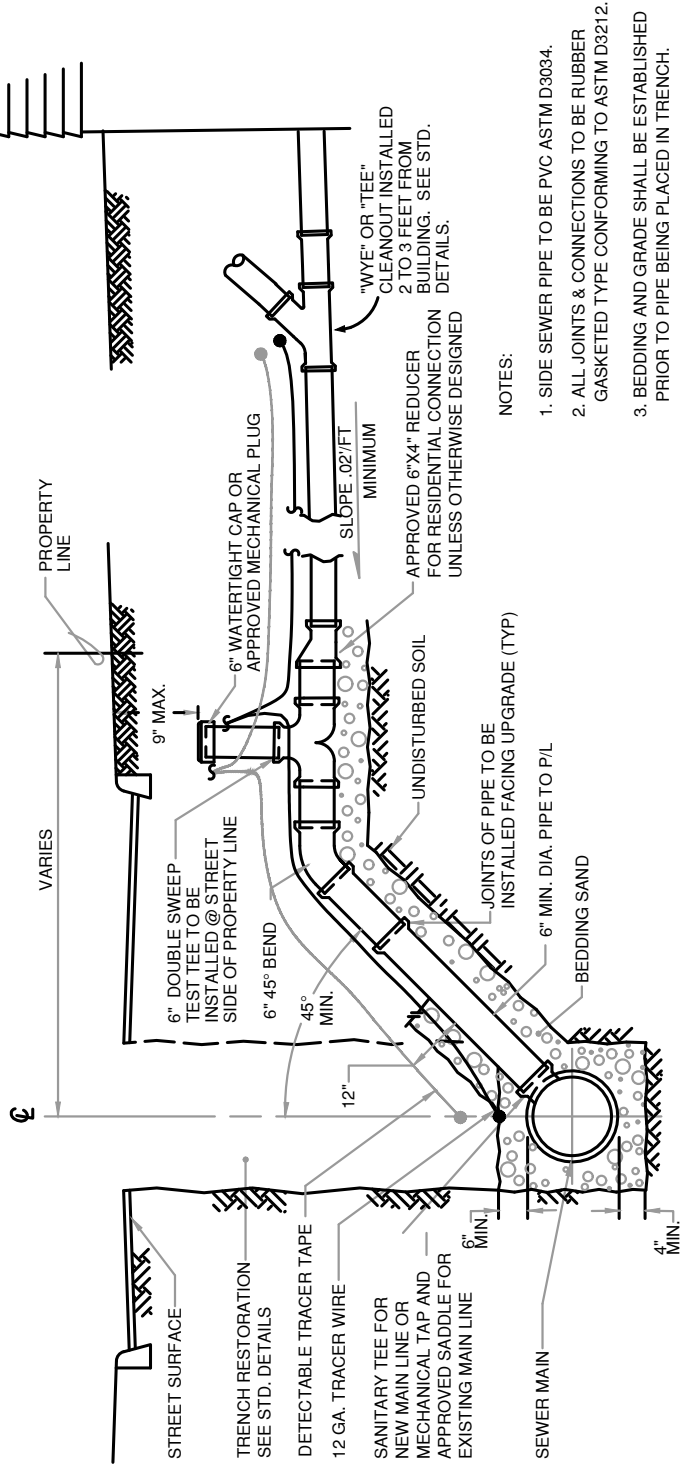


CITY OF WINLOCK
DEPARTMENT OF PUBLIC WORKS

OPTION 1
SEWER DETAILS
LATERAL SERVICE
CONNECTION

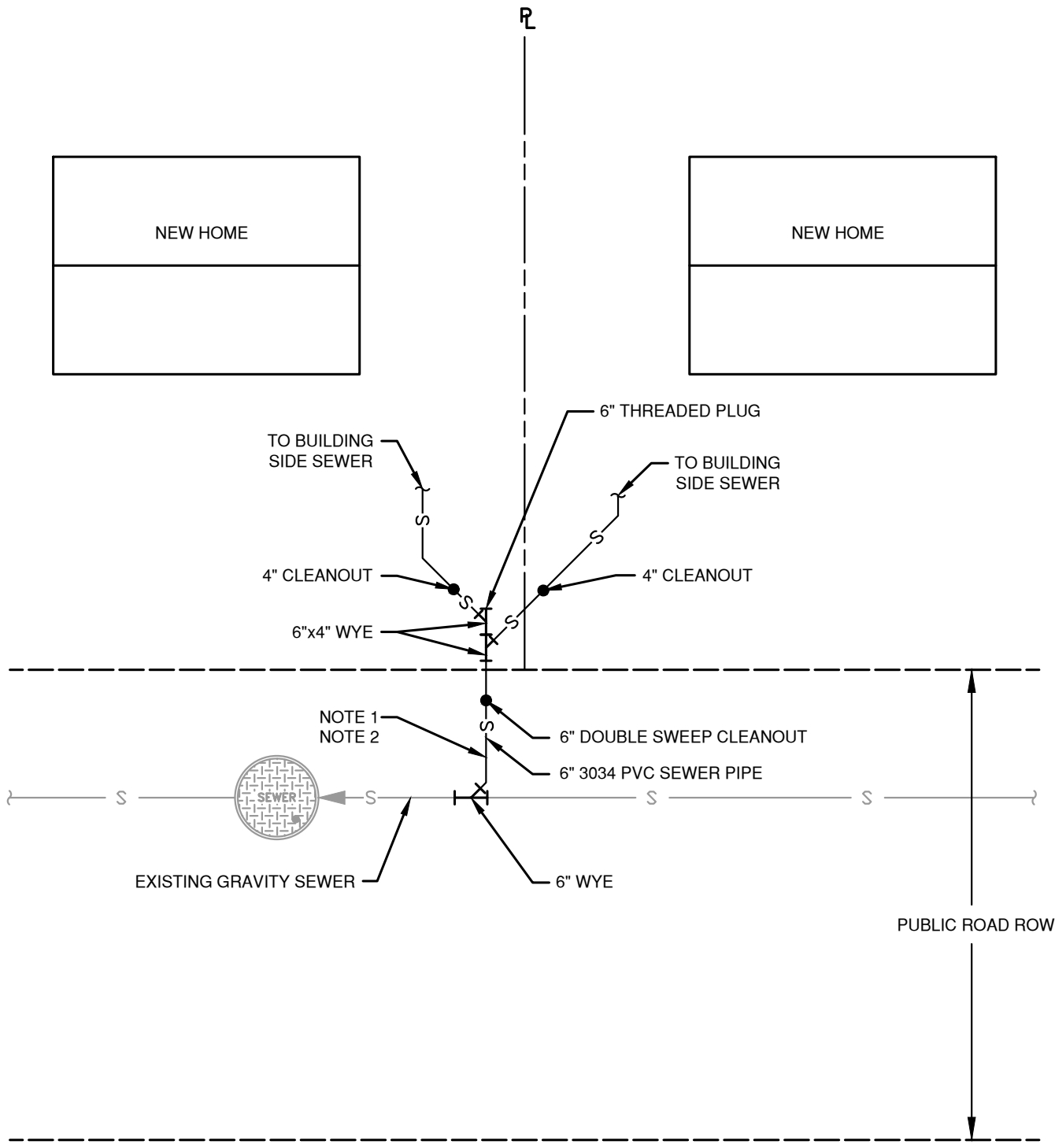
REVISED
9/10/2020

DRAWING
NO.
5-7



NOTES:

1. SIDE SEWER PIPE TO BE PVC ASTM D3034.
2. ALL JOINTS & CONNECTIONS TO BE RUBBER GASKETED TYPE CONFORMING TO ASTM D3212.
3. BEDDING AND GRADE SHALL BE ESTABLISHED PRIOR TO PIPE BEING PLACED IN TRENCH.



NOTE 1
NOTE 2



EXISTING GRAVITY SEWER

PUBLIC ROAD ROW

- NOTE 1 - INSTALL 12 GA. DETECTABLE TRACER WIRE ABOVE SEWER SERVICE LINE FROM THE SEWER MAIN TO THE 4" CLEANOUT.
- NOTE 2 - INSTALL DETECTABLE TRACER WIRE 12" ABOVE THE SEWER SERVICE LINE FROM THE SEWER MAIN TO THE 4" CLEANOUT.

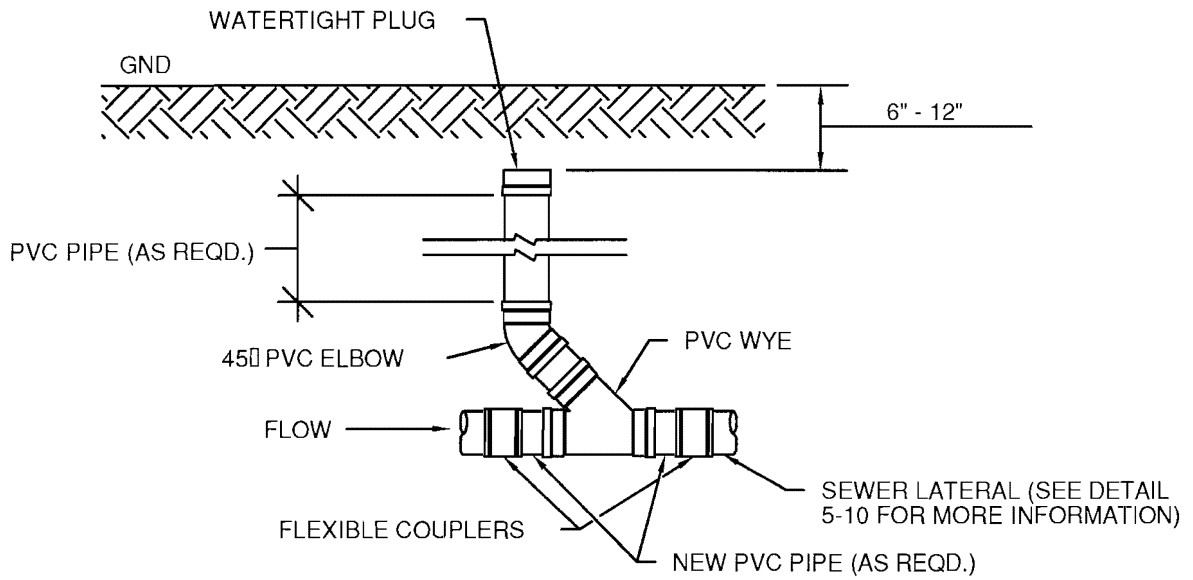


CITY OF WINLOCK
DEPARTMENT OF PUBLIC WORKS

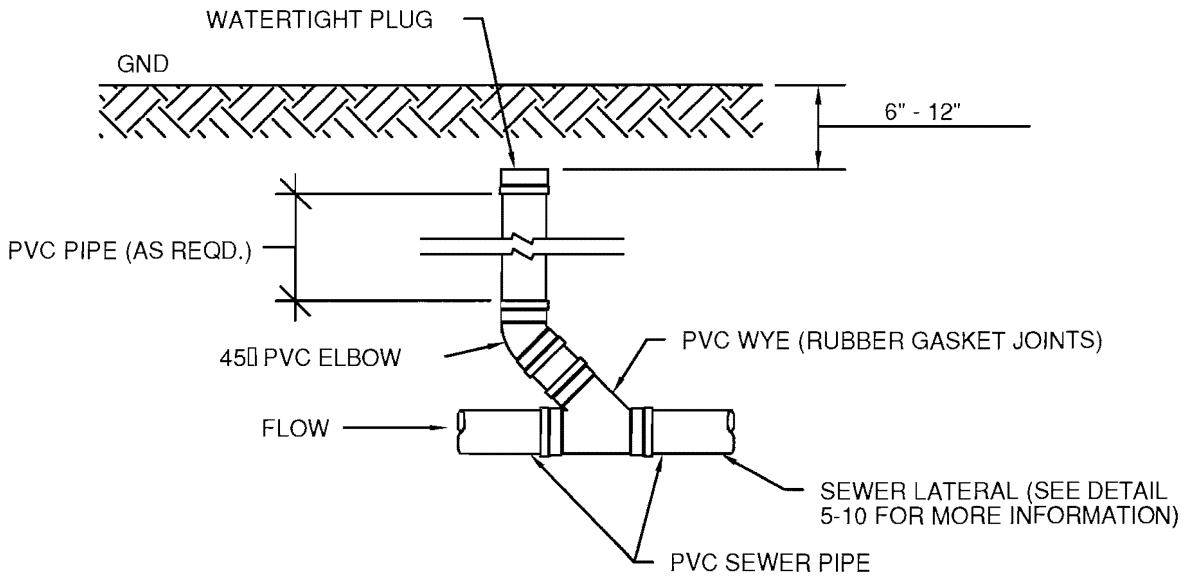
OPTION 2
SEWER DETAILS
LATERAL SERVICE
CONNECTION

REVISED
9/10/2020

DRAWING
NO.
5-7a



CLEANOUT DIAGRAM FOR RETROFITTING EXISTING SERVICES



**CLEANOUT DIAGRAM
FOR NEW SERVICES**

NOTES:

1. ALL JOINT CONNECTIONS SHALL BE RUBBER GASKETED.
2. SANITARY TEES MAY BE USED FOR DEPTHS LESS THAN 3', LIPON APPROVAL OF THE PUBLIC WORKS DIRECTOR.



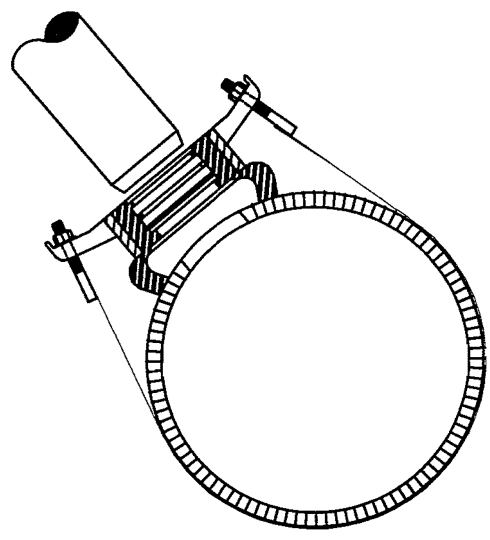
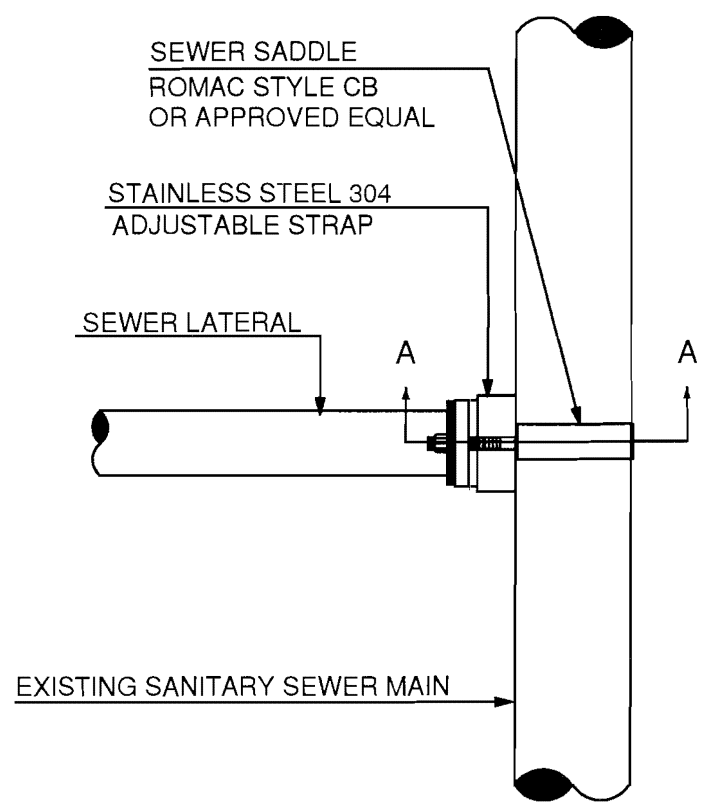
CITY OF WINLOCK
DEPARTMENT OF PUBLIC WORKS

**SEWER DETAILS
SIDE SEWER CLEANOUT**

**REVISED
08/20/2007**

**DRAWING
NO.
5-8**

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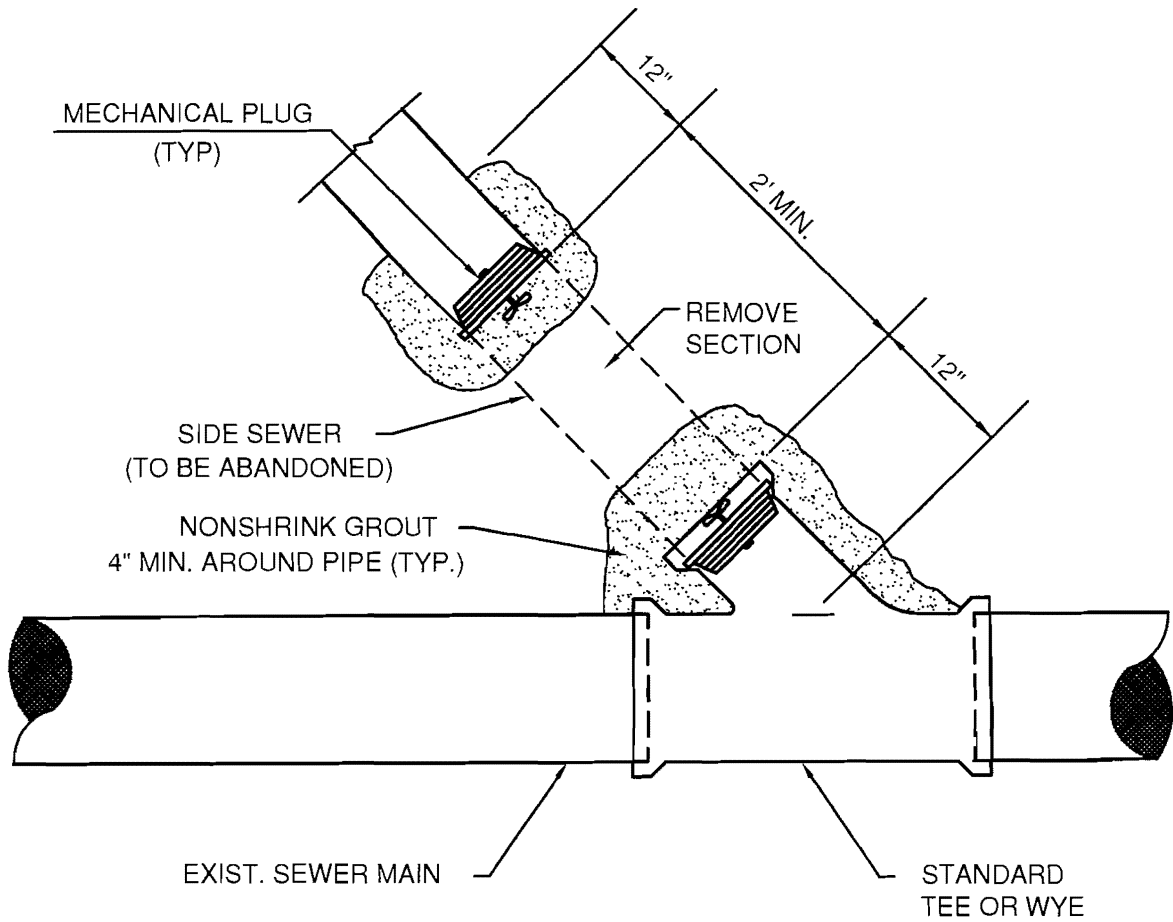
SECTION A-A

NOTES:

1. BOLTS, NUTS, WASHERS, AND 1/2" N.C. ROLL THREAD ARE TO BE TEFLON COATED.
2. THE STAINLESS BAND SHALL BE 3 1/2" MINIMUM WIDTH.
3. ALL FASTENERS SHALL BE STAINLESS STEEL.
4. PIPE MUST BE CORED (DRILLED) WITH A HOLE SAW OF APPROVED DIAMETER. CORE HOLE MUST BE INSPECTED AND APPROVED.



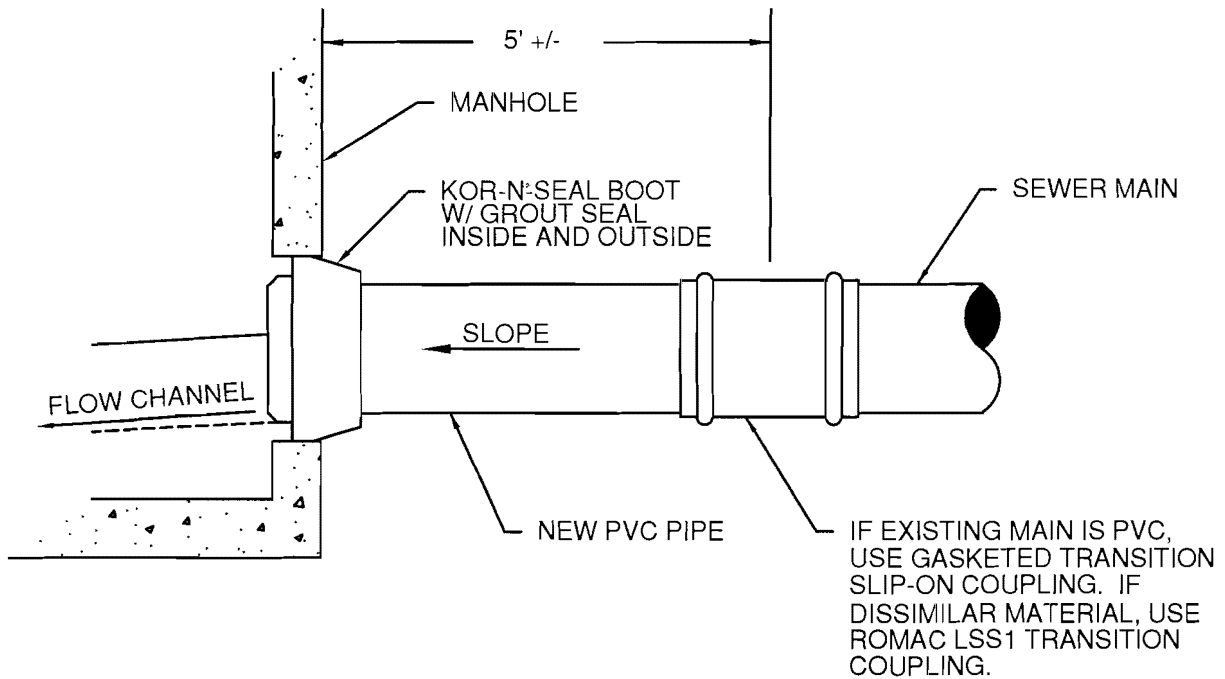
<p>CITY OF WINLOCK DEPARTMENT OF PUBLIC WORKS</p>	<p>SEWER DETAILS SANITARY SEWER SADDLE TAP</p>	<p>REVISED 08/20/2007</p>	<p>DRAWING NO. 5-9</p>
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NOTE:
 THIS DETAIL SHALL APPLY TO SIDE
 SEWERS WHICH ARE TO BE ABANDONED.



CITY OF WINLOCK DEPARTMENT OF PUBLIC WORKS	SEWER DETAILS SIDE SEWER PLUG	REVISED 08/20/2007	DRAWING NO. 5-10
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NOTES:

1. ALL FASTENERS & CLAMPS ARE TO BE STAINLESS STEEL.
2. NEW SECTION OF PIPE IS TO BE INSTALLED AT APPROXIMATELY THE SAME SLOPE AS THE EXISTING LINE.
3. USE SLIP-ON GASKETED COUPLING FOR PVC AND OTHER COUPLINGS AS DIRECTED BY THE CITY WHEN CONNECTING TO OTHER EXISTING PIPE MATERIALS.



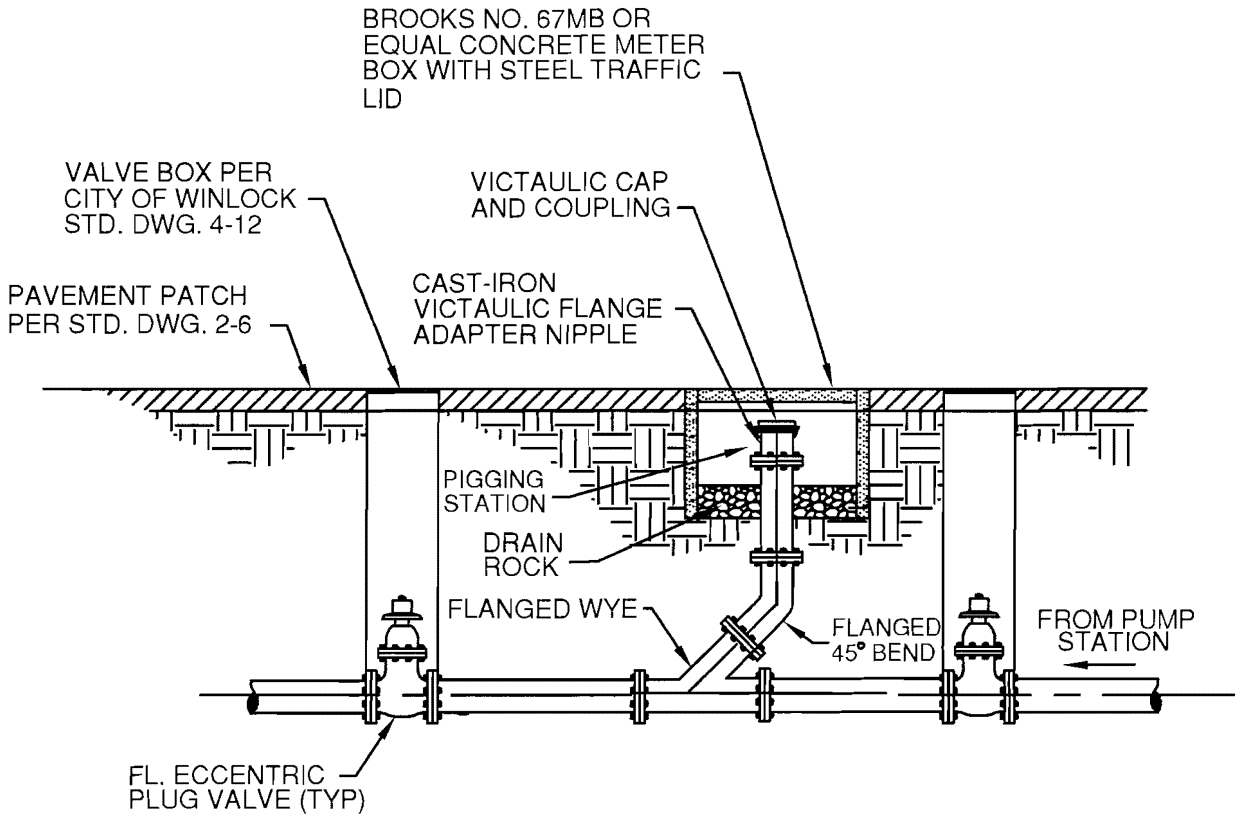
CITY OF WINLOCK
DEPARTMENT OF PUBLIC WORKS

SEWER DETAILS
SANITARY SEWER
CONNECTION

REVISED
08/20/2007

DRAWING
NO.
5-11

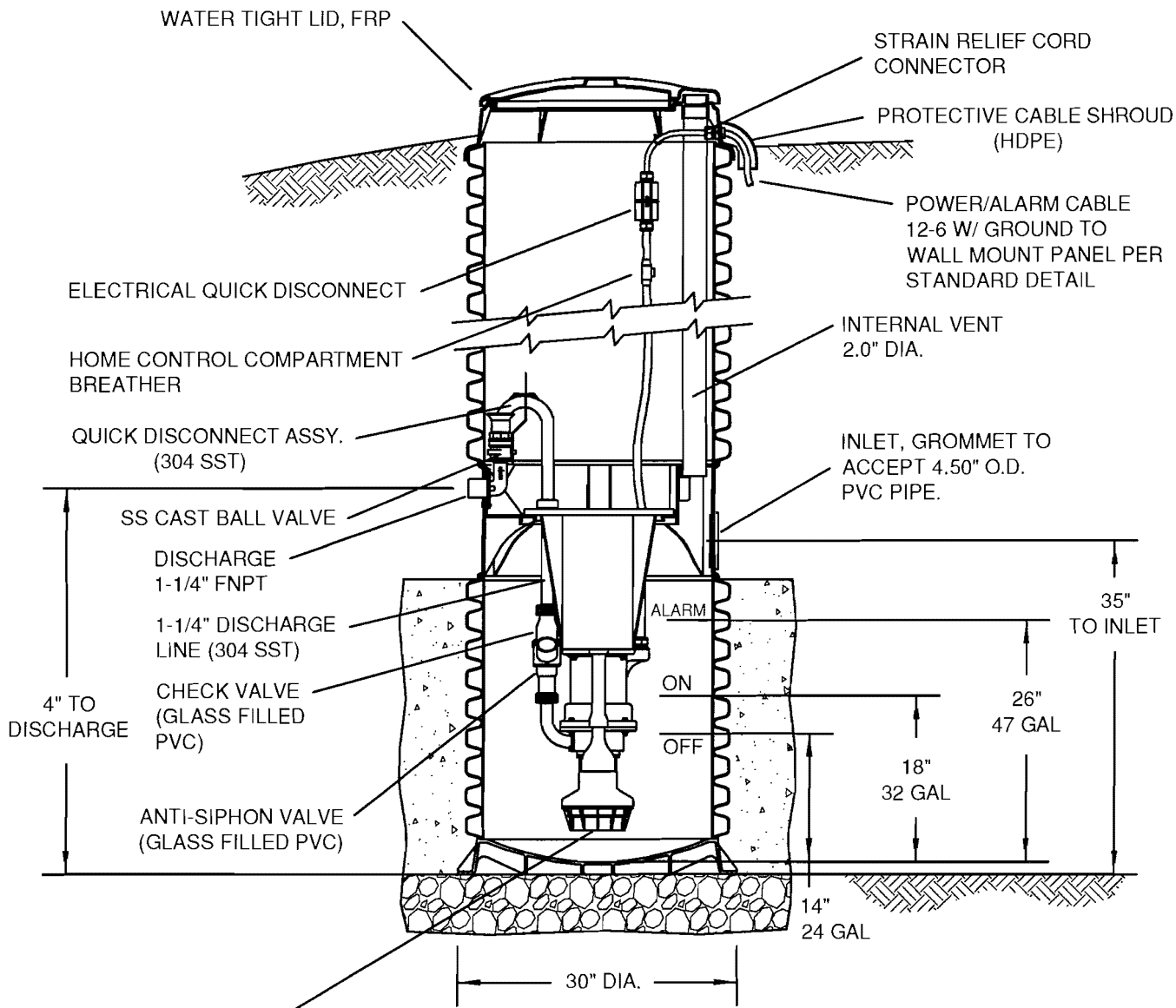
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NOTE:
 SUBSTITUTE MATERIALS CAN BE USED, UPON APPROVAL
 BY THE CITY, IF MAIN LINES ARE HDPE OR PVC.



<p>CITY OF WINLOCK DEPARTMENT OF PUBLIC WORKS</p>	<p>SEWER DETAILS PIG PORT</p>	<p>REVISED 08/20/2007</p>	<p>DRAWING NO. 5-12</p>
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SEMI-POSITIVE DISPLACEMENT TYPE PUMP
 DIRECTLY DRIVEN BY A 1 HP MOTOR
 CAPABLE OF DELIVERING 9 GPM AT 138' TDH

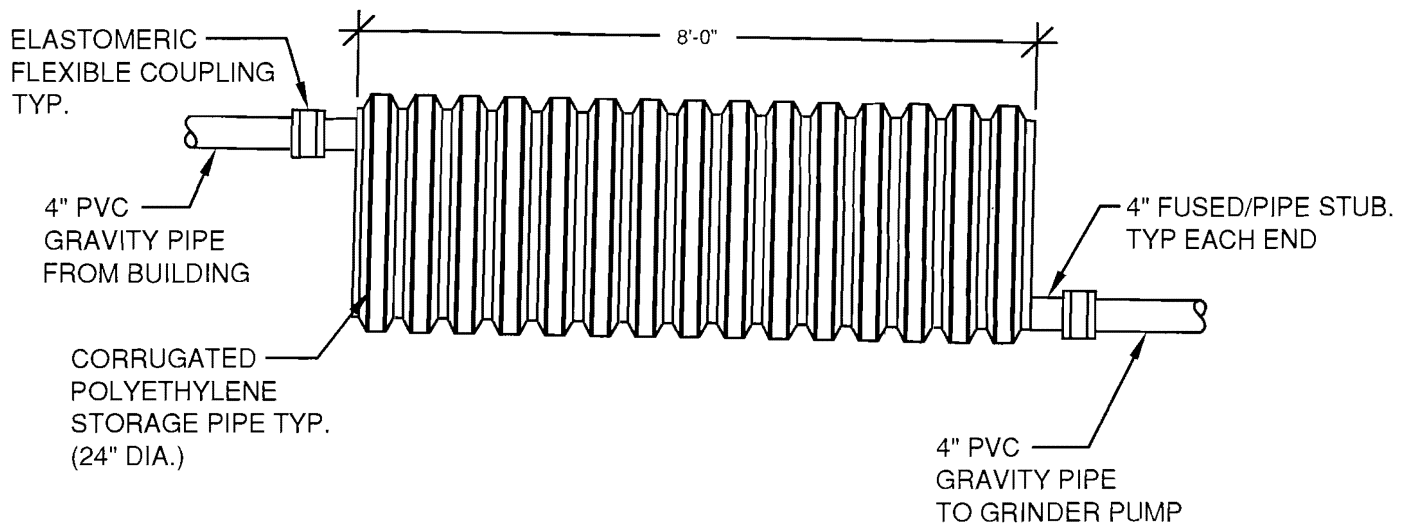
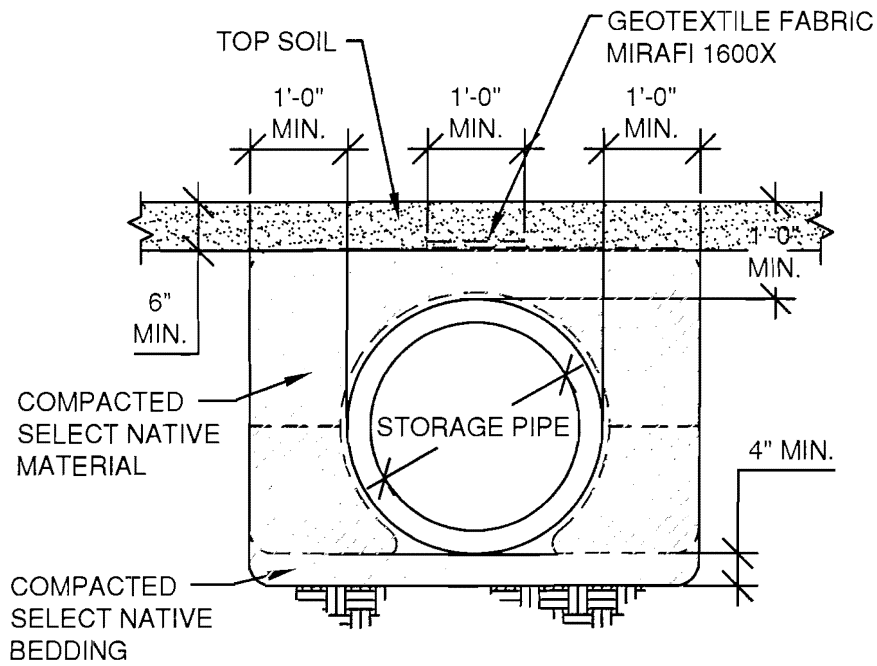


CITY OF WINLOCK
 DEPARTMENT OF PUBLIC WORKS

SEWER DETAILS
GRINDER PUMP DETAIL

REVISED
08/20/2007

DRAWING
NO.
5-13

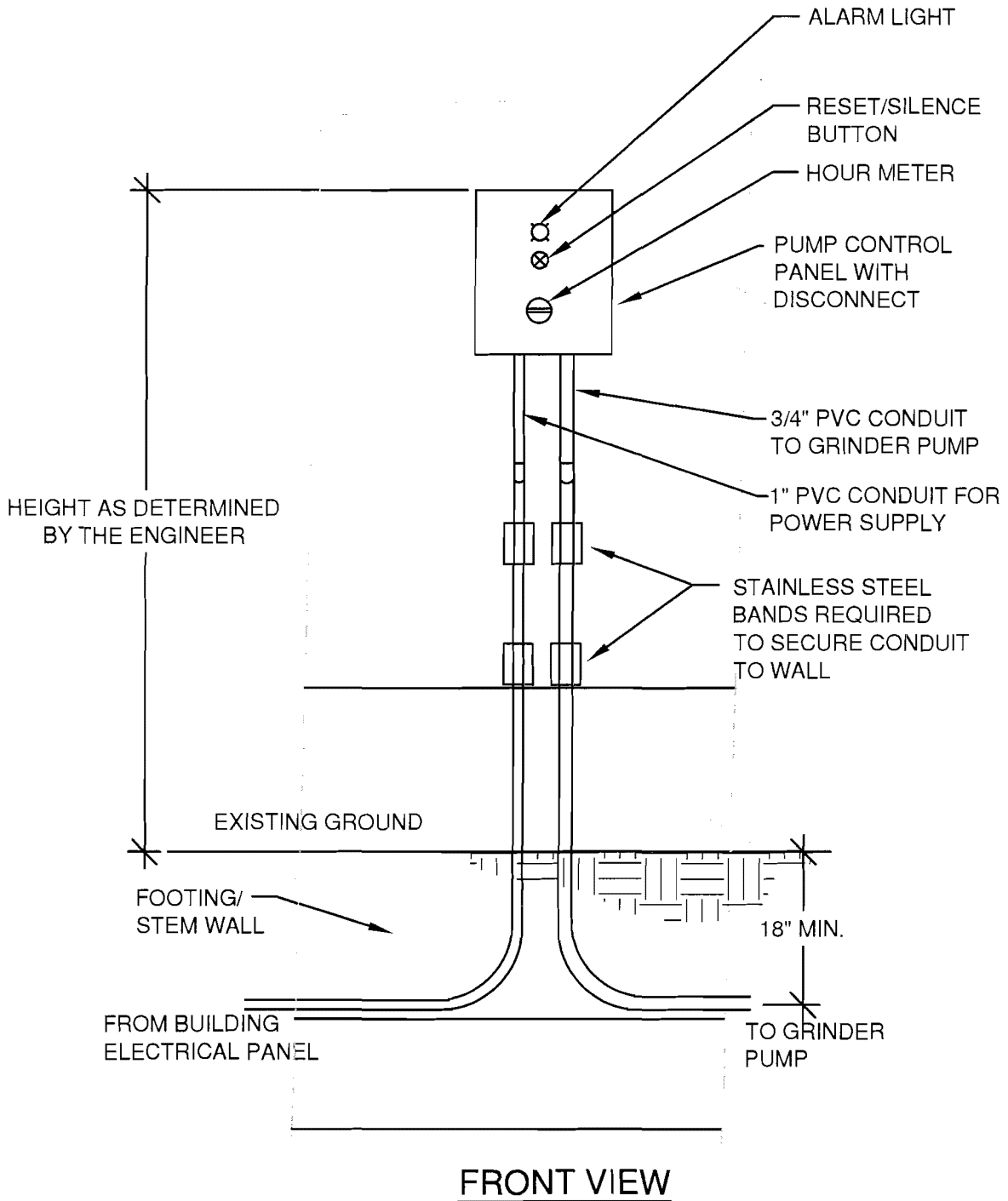


CITY OF WINLOCK
DEPARTMENT OF PUBLIC WORKS

SEWER DETAILS
GRINDER PUMP
STORAGE PIPE

REVISED
08/20/2007

DRAWING
NO.
5-14

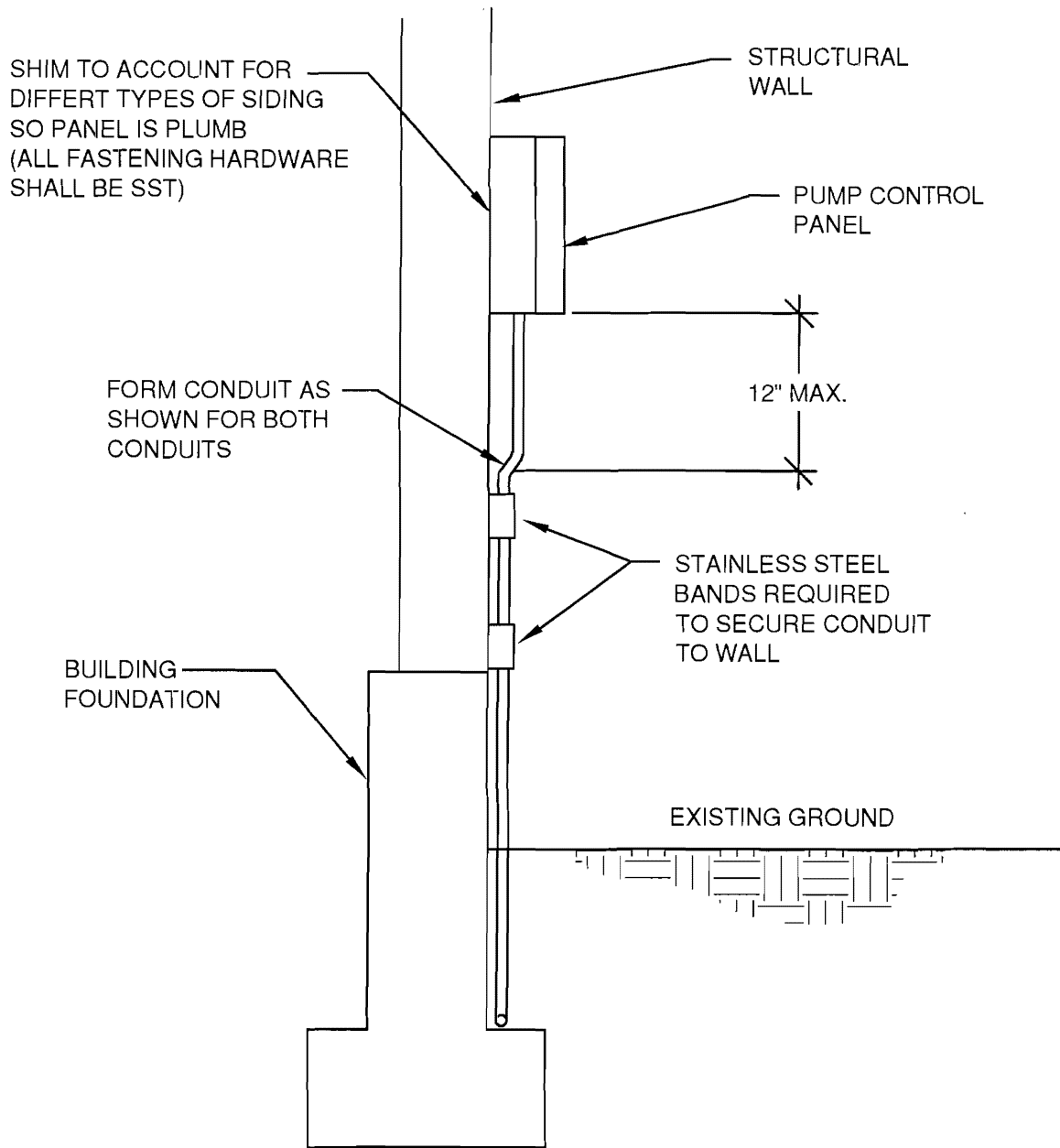


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<p>CITY OF WINLOCK DEPARTMENT OF PUBLIC WORKS</p>	<p>SEWER DETAILS TYPICAL PUMP CONTROL PANEL INSTALLATION</p>	<p>REVISED 08/20/2007</p>	<p>DRAWING NO. 5-15a</p>
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SIDE VIEW



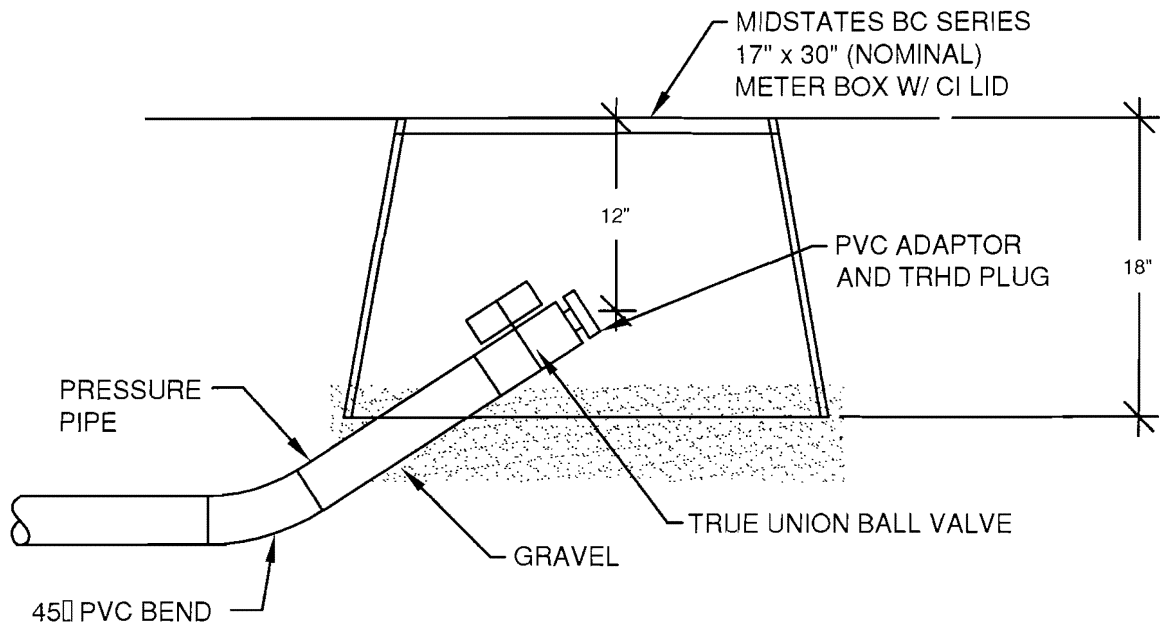
CITY OF WINLOCK
DEPARTMENT OF PUBLIC WORKS

SEWER DETAILS
TYPICAL PUMP CONTROL
PANEL INSTALLATION

REVISED
08/20/2007

DRAWING
NO.
5-15b

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CITY OF WINLOCK
DEPARTMENT OF PUBLIC WORKS

SEWER DETAILS
PVC PRESSURE
CLEANOUT DETAIL

REVISED
08/20/2007

DRAWING
NO.
5-16