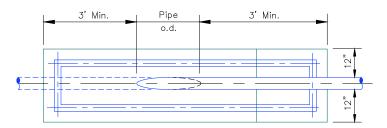
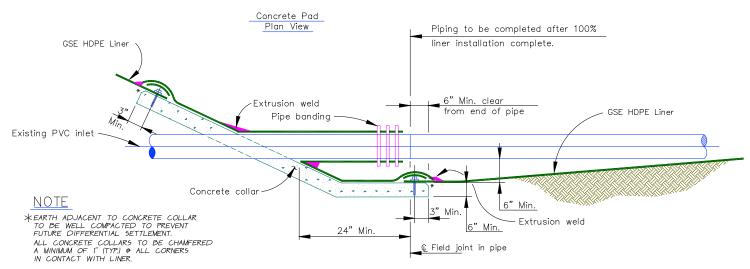


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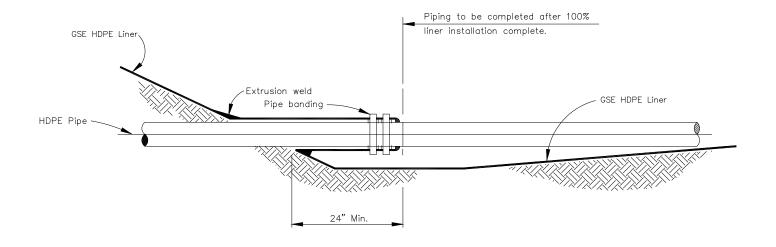
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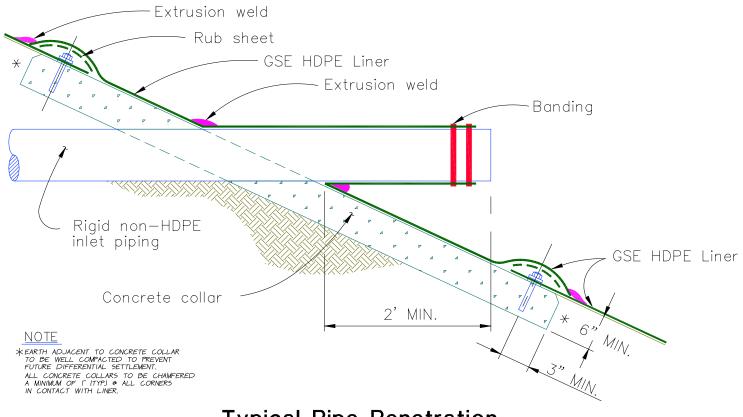




(Banded pipe) Not to scale



(Banded pipe) Not to scale

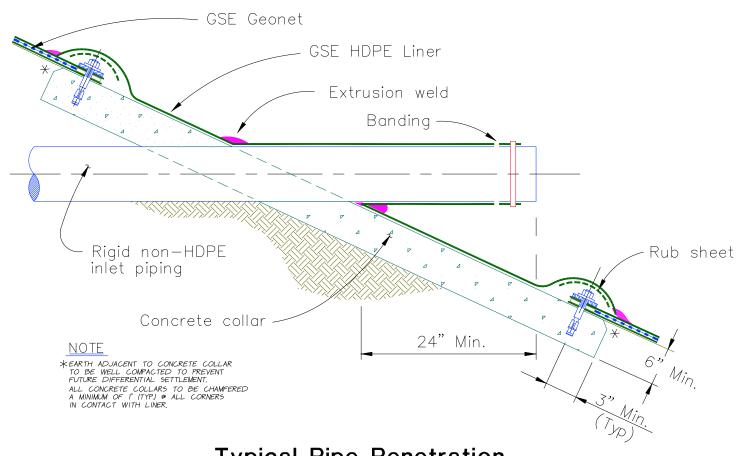


(Banded pipe) Not to scale



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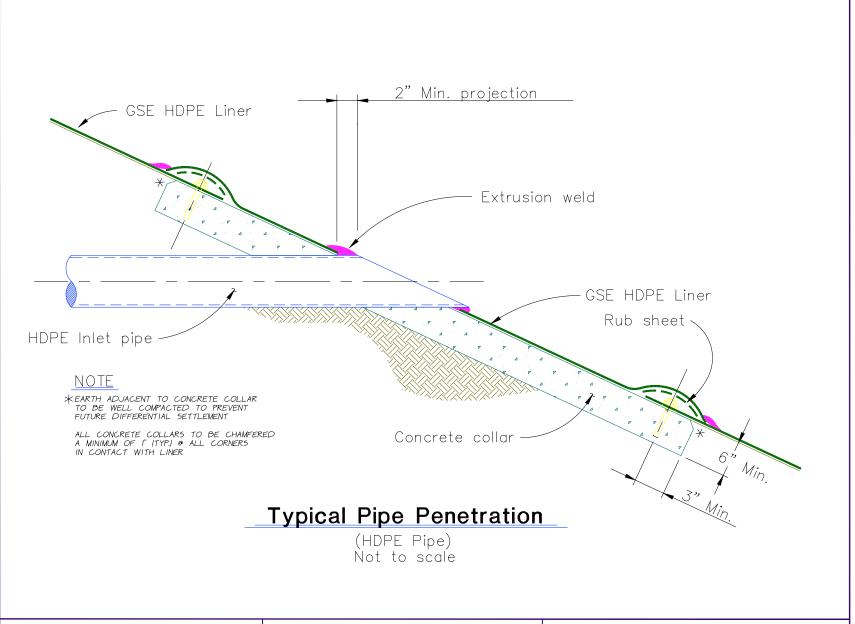


(Banded pipe) Not to scale



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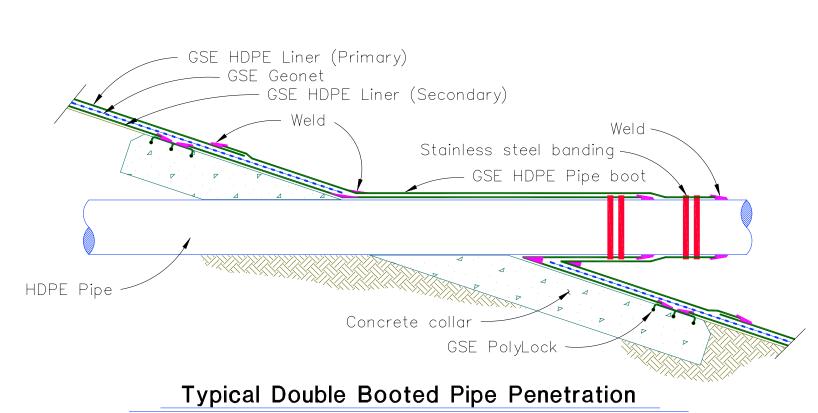
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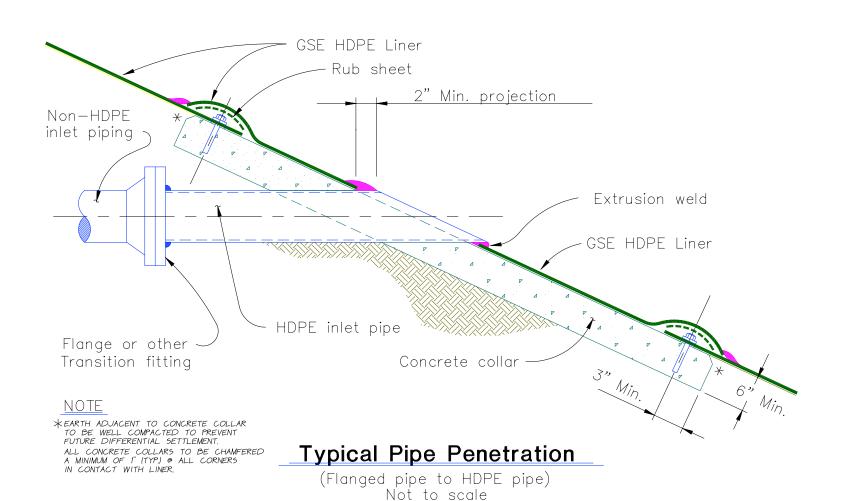
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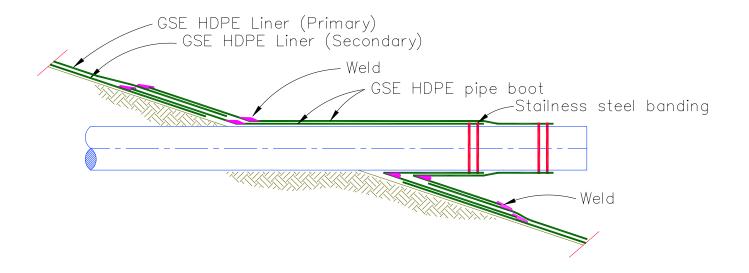
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Not to scale

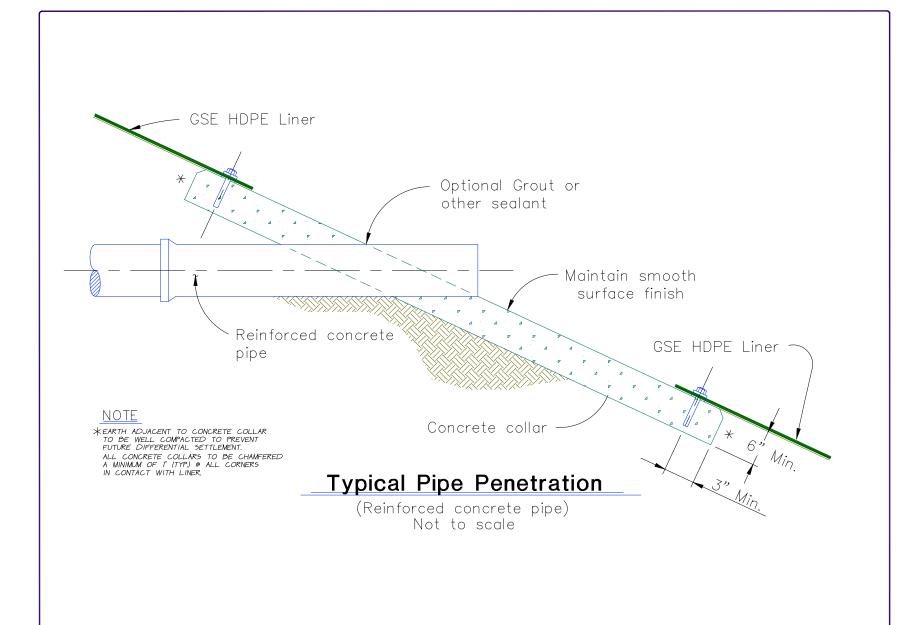






#### Typical Double Booted Pipe Penetration

Not to scale

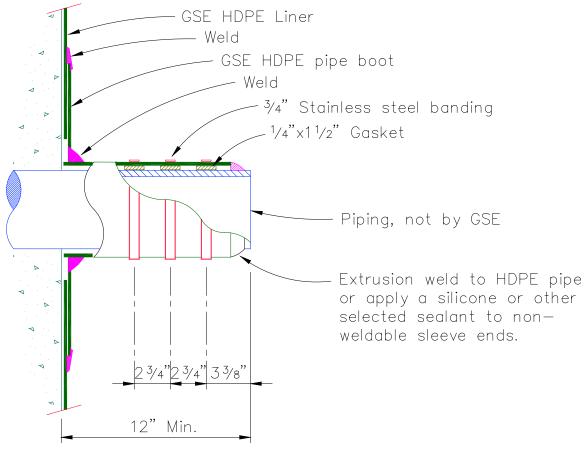




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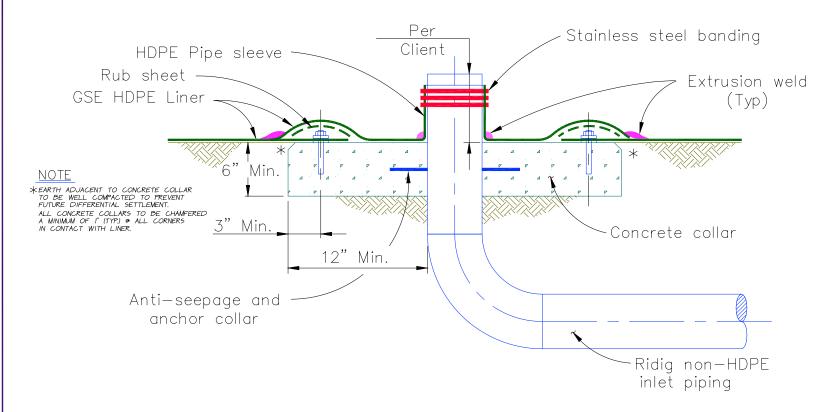
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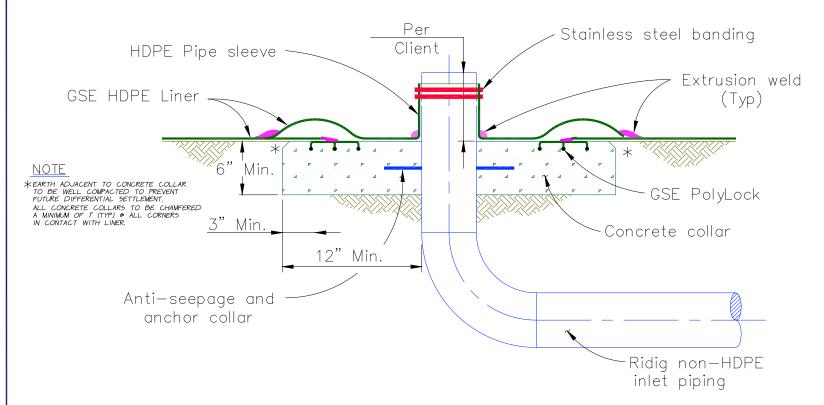
#### Typical Penetration Thru Concrete Wall

Not to scale

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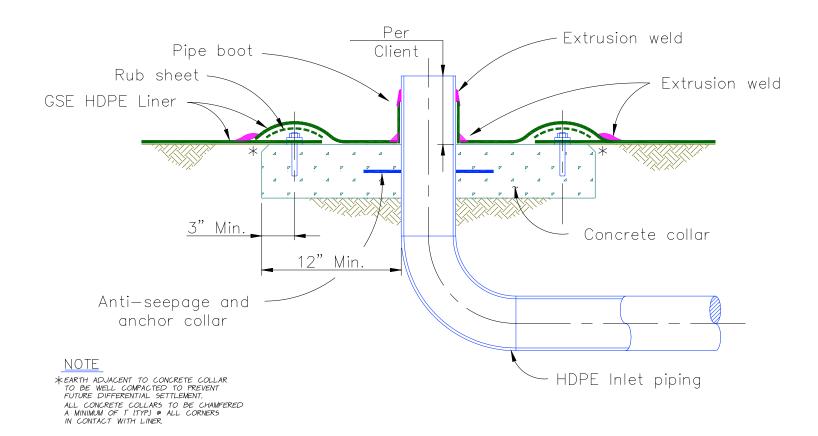
(Non-HDPE Pipe) Not to scale



(Non-HDPE Pipe)
Not to scale

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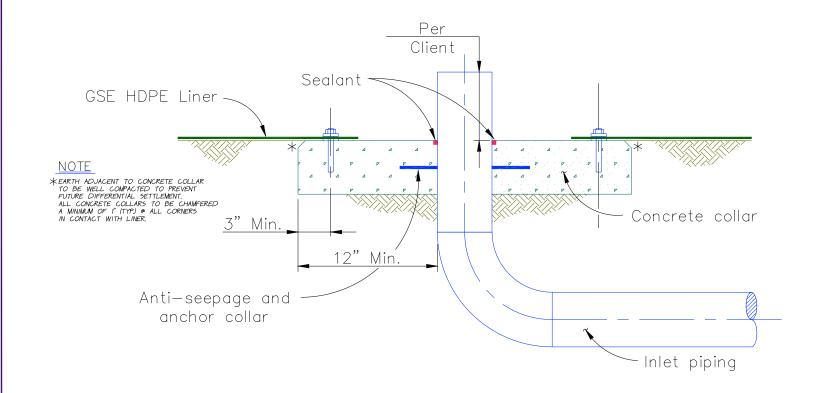


(HDPE Pipe) Not to scale

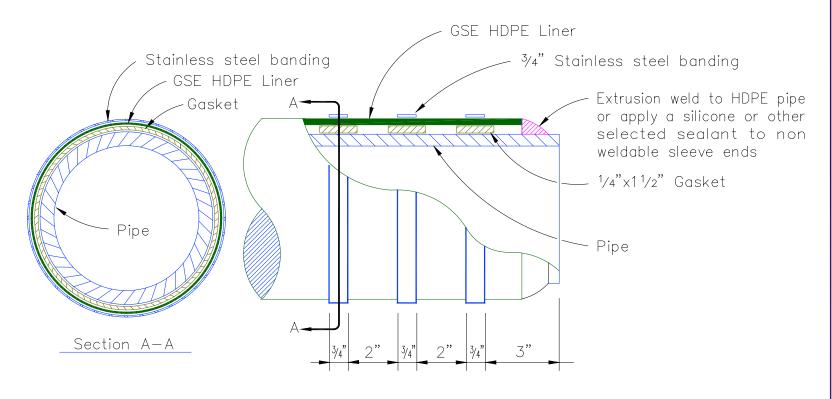


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 12-15-98
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 D-PT013



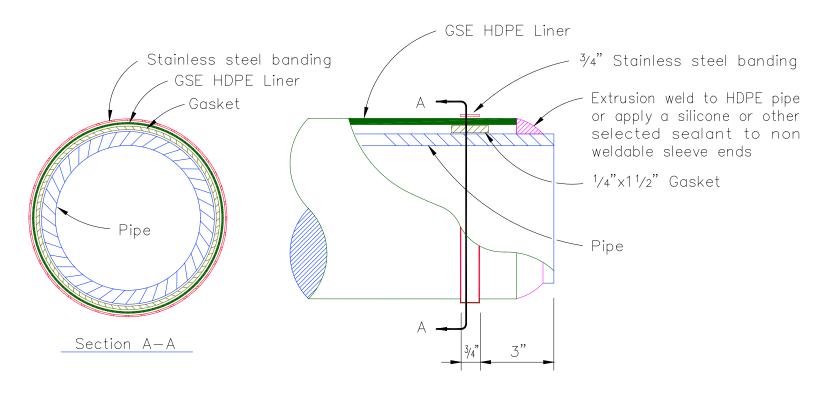
(Other than HDPE pipe) Not to scale



(Vertical or horizontal) Not to scale

DWG. NO.

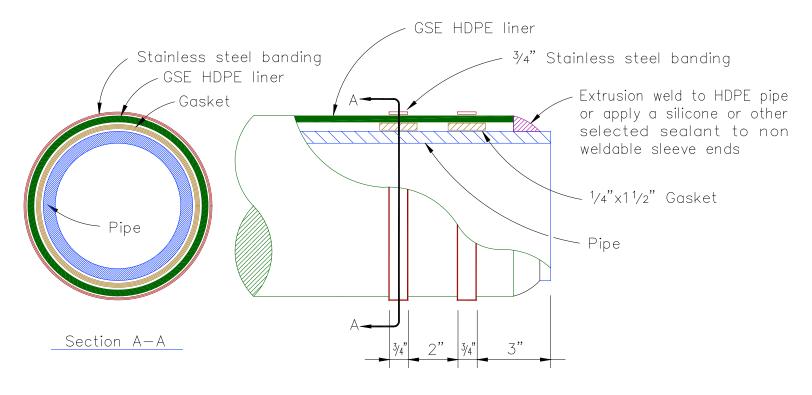
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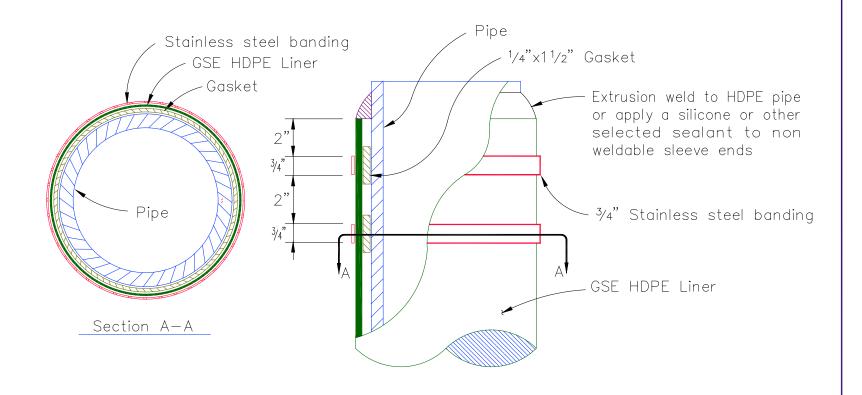
(Vertical or horizontal) Not to scale

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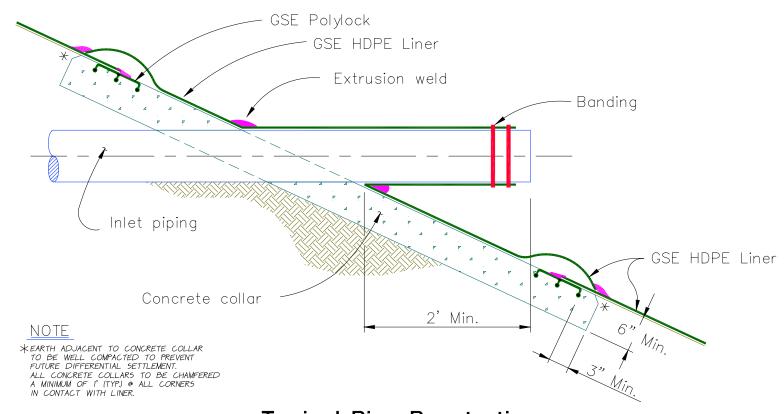
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(Vertical or horizontal) Not to scale



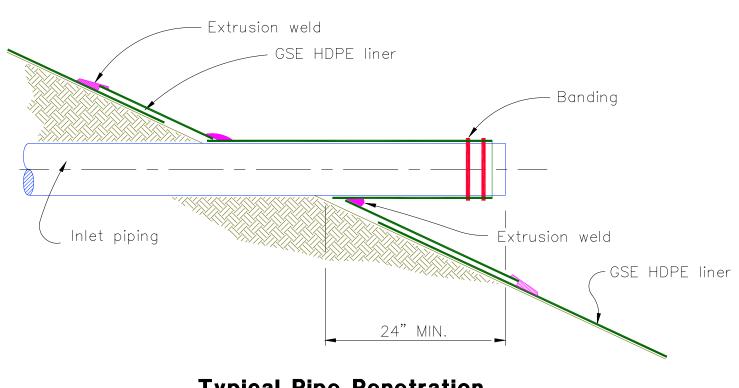
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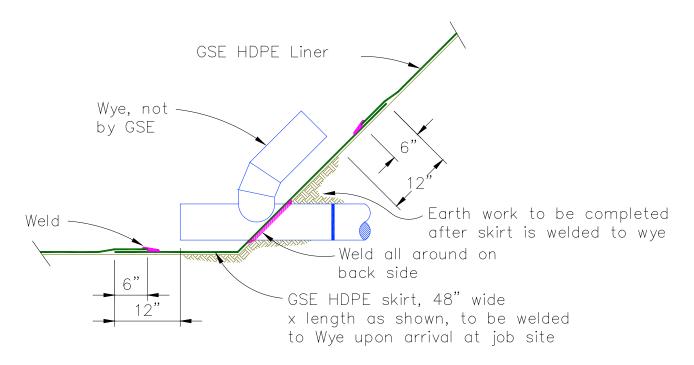
(Banded Pipe) Not to scale

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(Banded Pipe) Not to scale



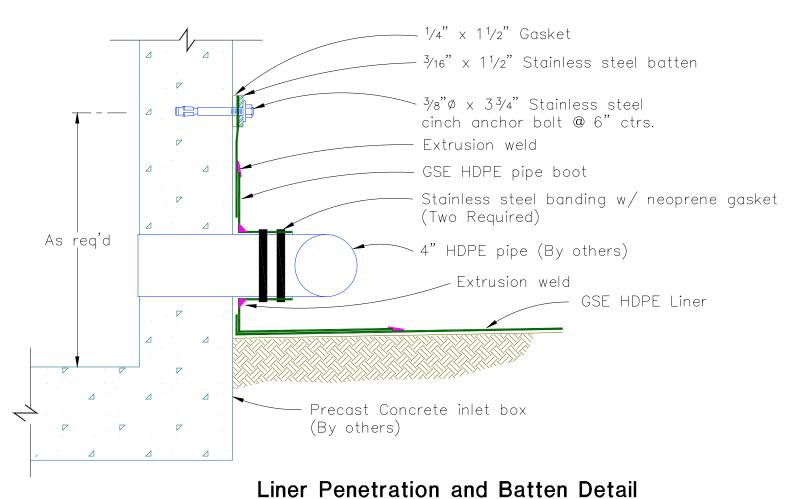
#### Typical Wye Penetration

Not to scale

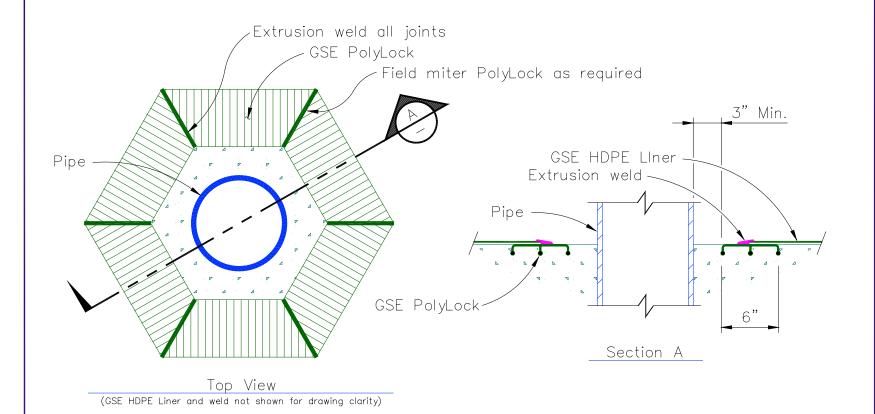
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DWG. NO.

D-PT022



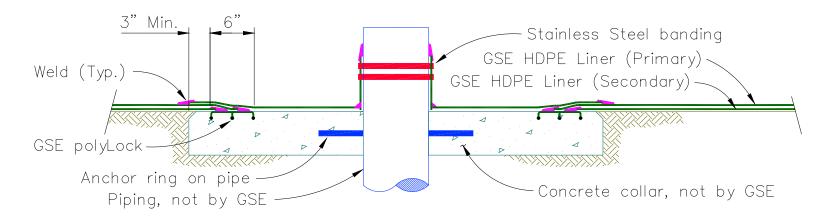
Not to scale



#### PolyLock Embedded Pipe Penetration

Not to scale

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 Don
 DATE
 12-15-98
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#### Single Pipe Boot With Double Liner

Not to scale

DATE

12-15-98

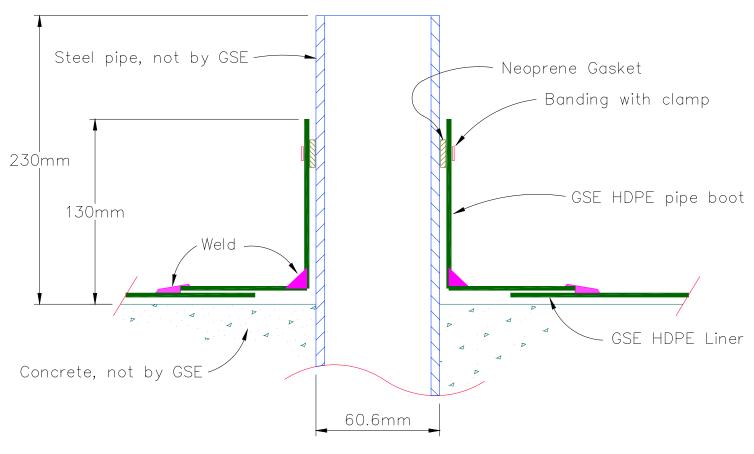
REVISION

DRAWN

Don

DWG. NO.

D-PT025



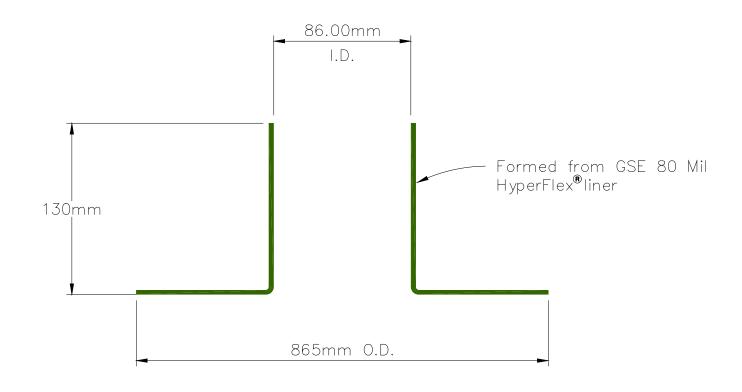
#### Typical Steel Pipe Penetration

Not to scale



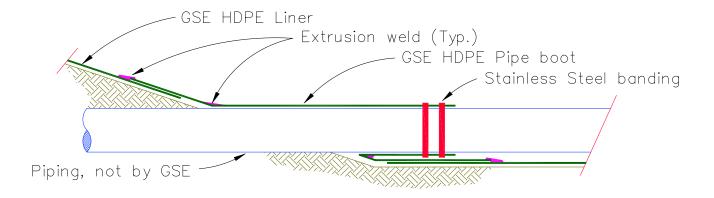
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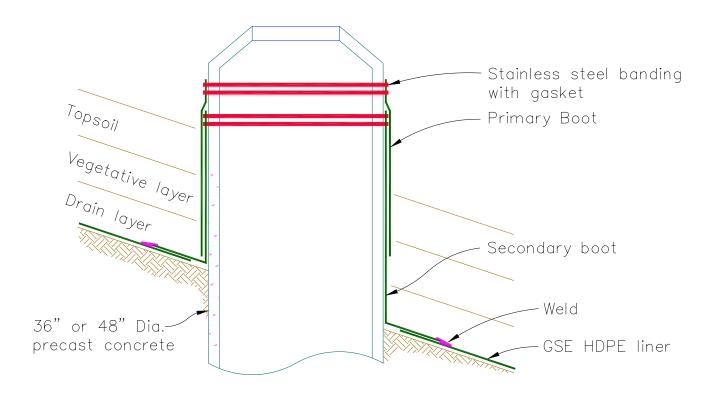


### Typical Section Thru Vacuum Formed Pipe Boot

Not to scale

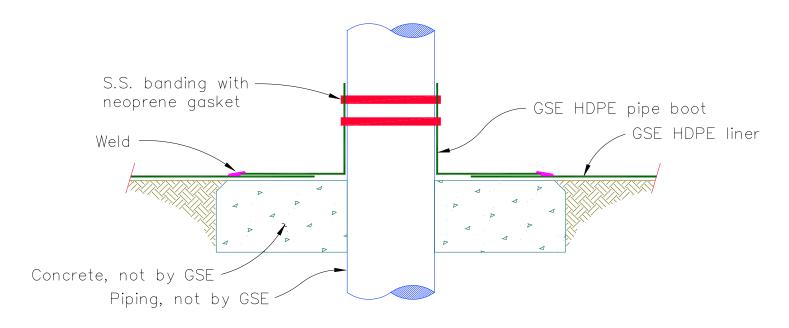


# Typical Pipe Penetration Not to scale

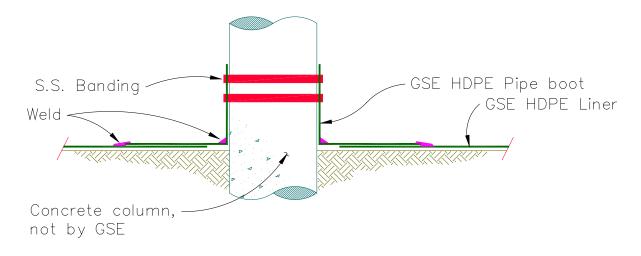


#### Typical Section Thru Manhole

Not to scale

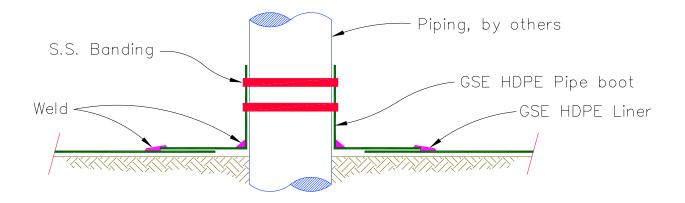


Not to scale



#### Typical Liner Boot At Concrete Column

Not to scale



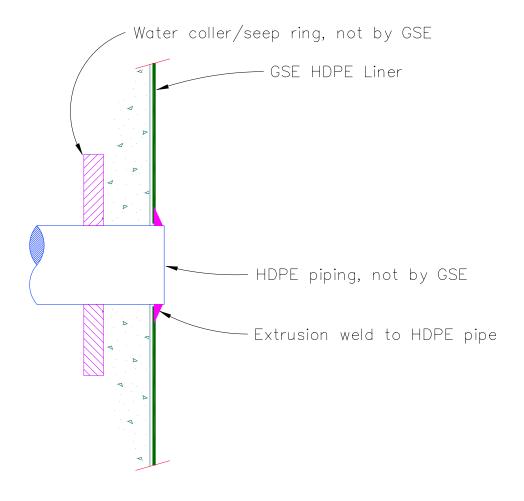
#### Typical Vertical Pipe Penetration

Not to scale

DWG. NO.

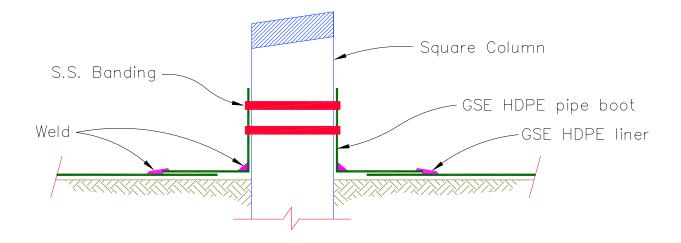
D-PT031

DRAWN Don DATE 12-15-98 REVISION 1



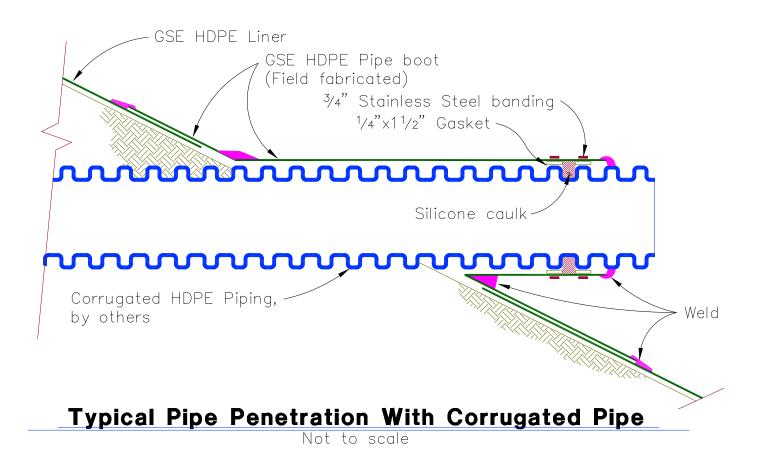
#### Typical Penetration Thru Concrete Wall

Not to scale



#### Typical Vertical Pipe Penetration

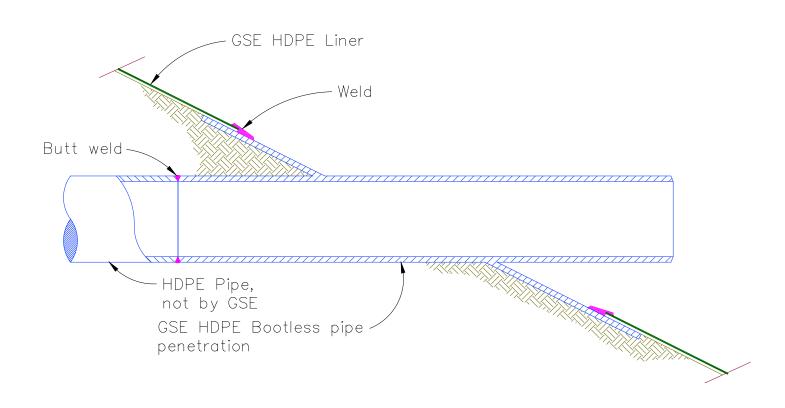
Not to scale



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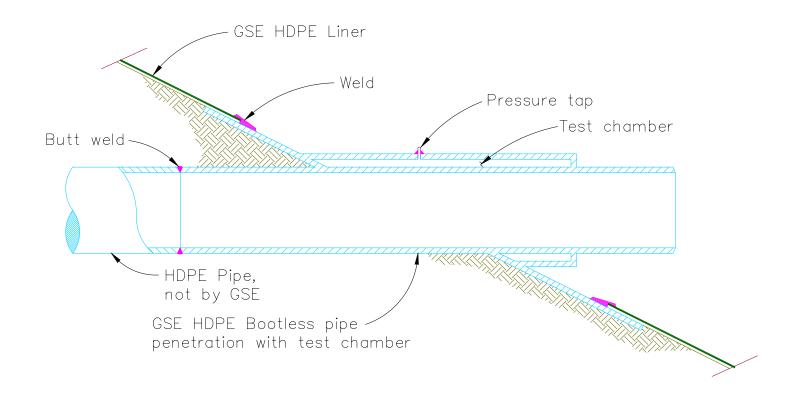
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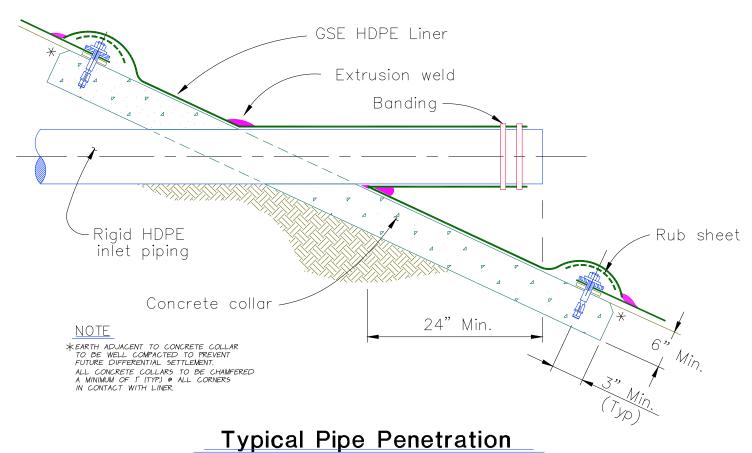
#### **Typical Bootless Pipe Penetration**

Not to scale



### Typical Bootless Pipe Penetration With Test Chamber

Not to scale

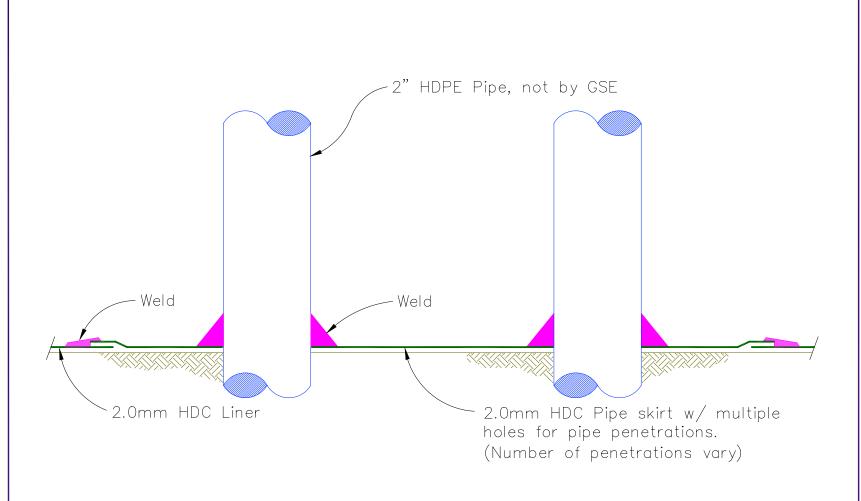


(Banded pipe)

(Banded pipe) Not to scale



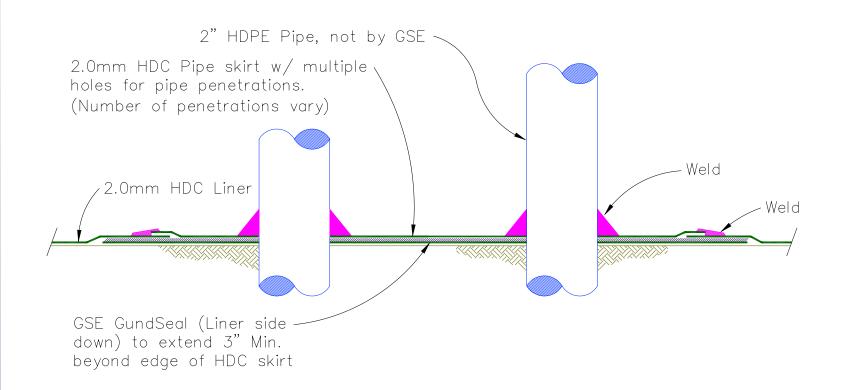
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# GSE HDC Pipe Skirt w/ Multiple Penetrations

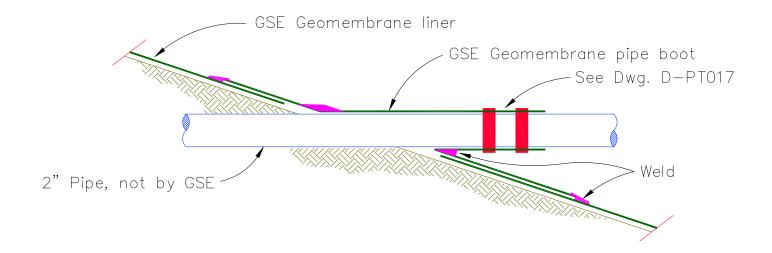
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# GSE HDC Pipe Skirt w/ Multiple Penetrations

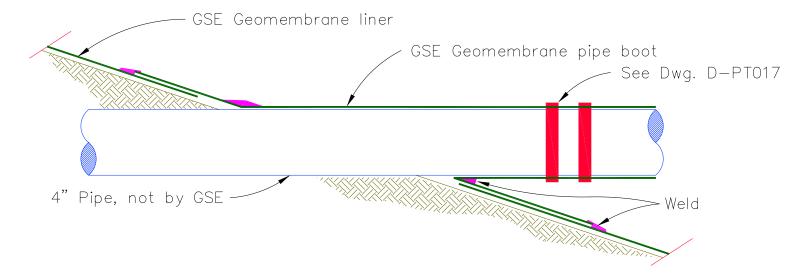
(With GSE GundSeal Base) Not to scale



# 2" Pipe Penetration

Not to Scale

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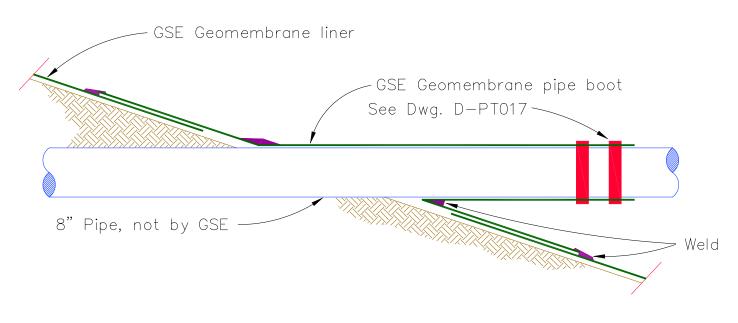
4" Pipe Penetration

Not to Scale

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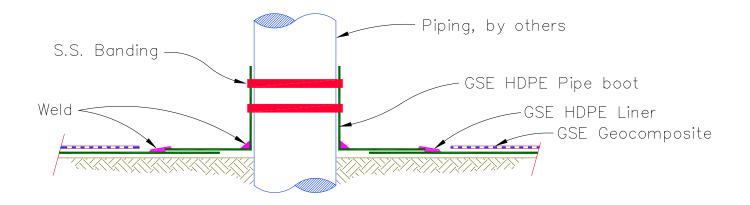
8" Pipe Penetration

Not to Scale

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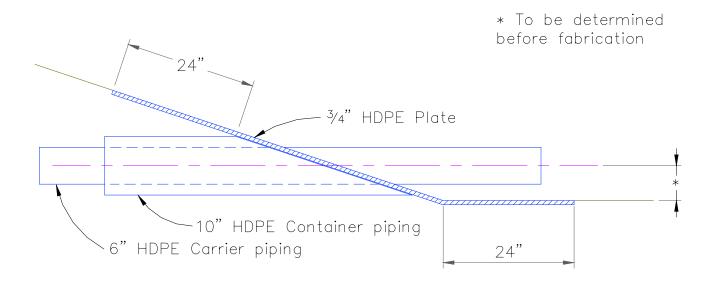
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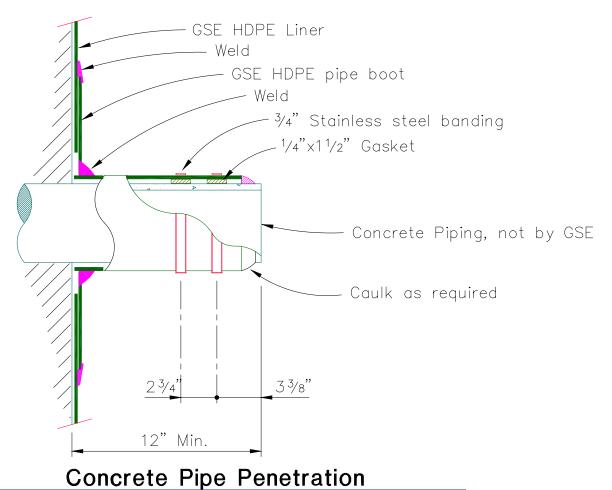
# Typical Vertical Pipe Penetration

Not to scale



# HDPE Pipe Penetration With HDPE Plate

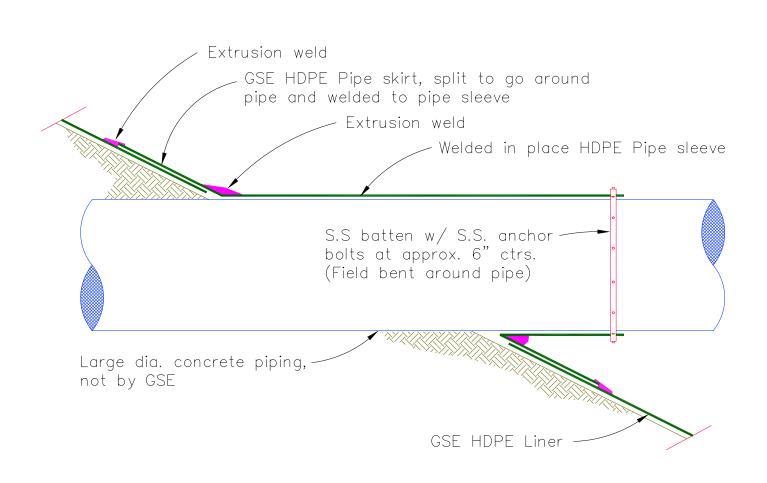
Not to scale



Not to scale

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#### Large Diameter Concrete Pipe Penetration

Not to scale

12-15-98



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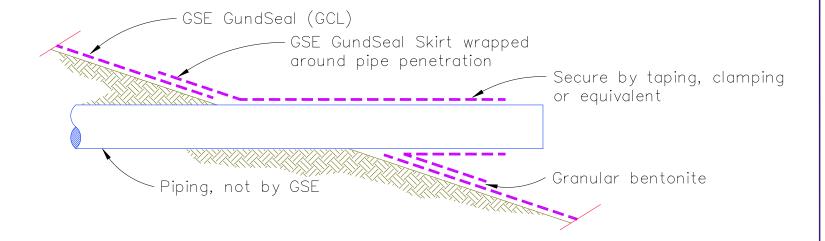
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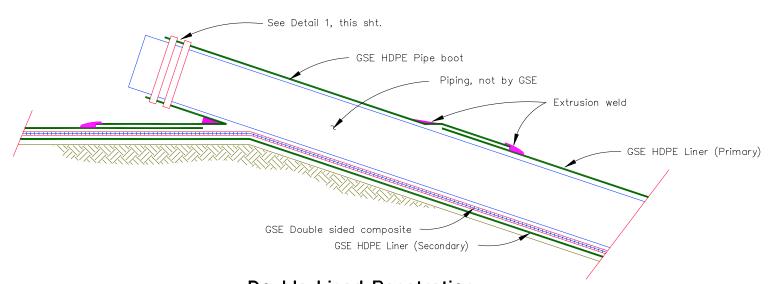
D-PT046

REVISION



# Typical GundSeal Pipe Penetration Detail

Not to scale



**Double Lined Penetration** 

Stainless steel banding
GSE HDPE Liner

Gasket

Extrusion weld to HDPE pipe or apply a silicone or other selected sealant to non weldable sleeve ends

Pipe

3/4" Stainless steel banding

Section A-A

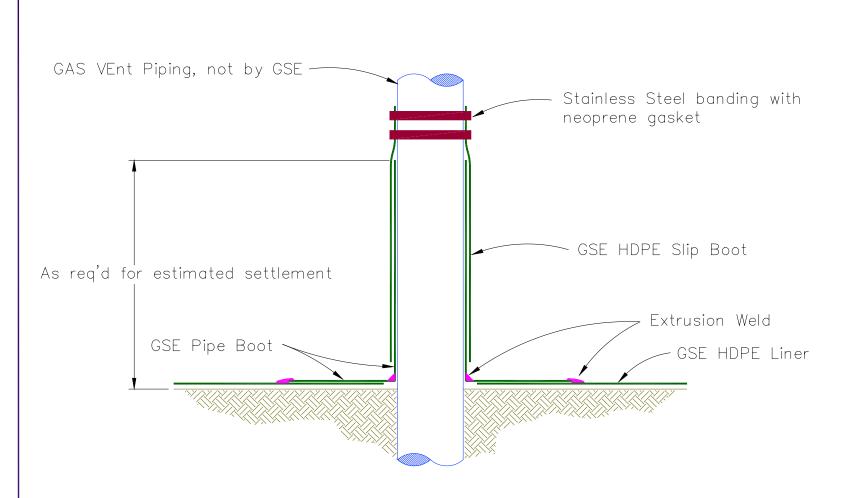
#### Detail 1

Not to scale



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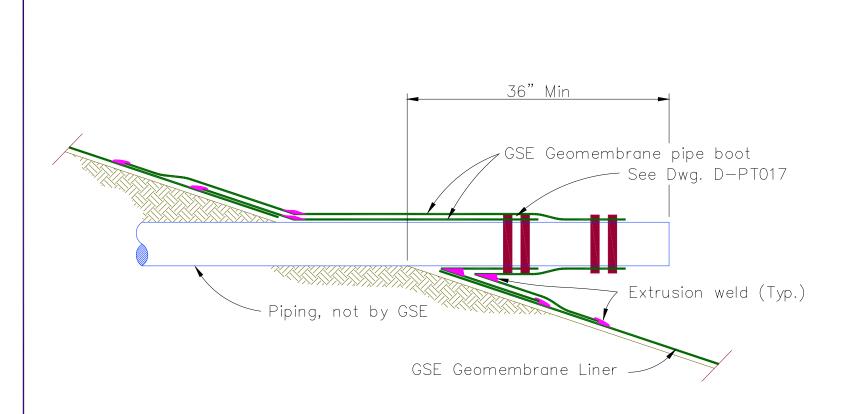


# Typical Gas Vent With HDPE Slip Boot

Not to scale

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# Minimum Pipe Projection W/ Double Boot

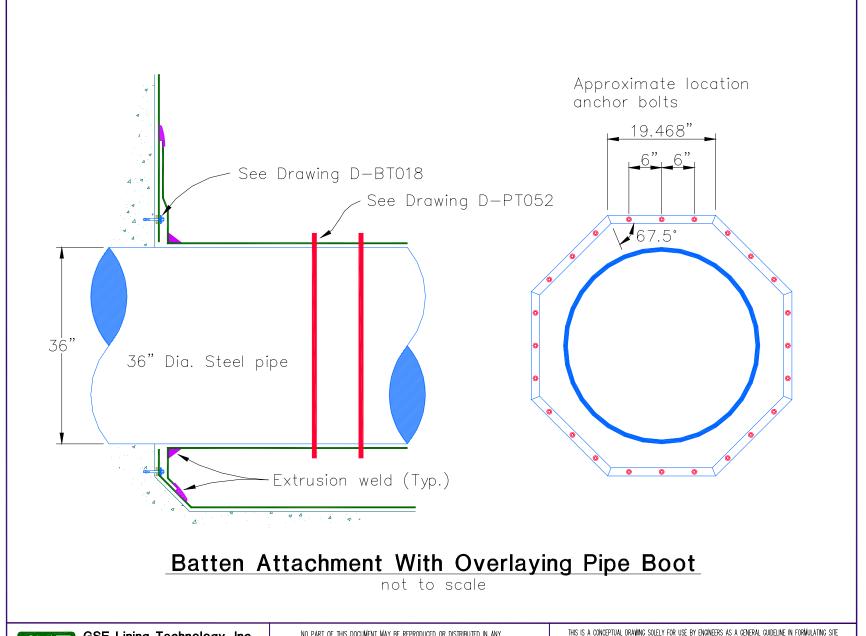
(Shown w/ single liner, double liner similar)
Not to scale



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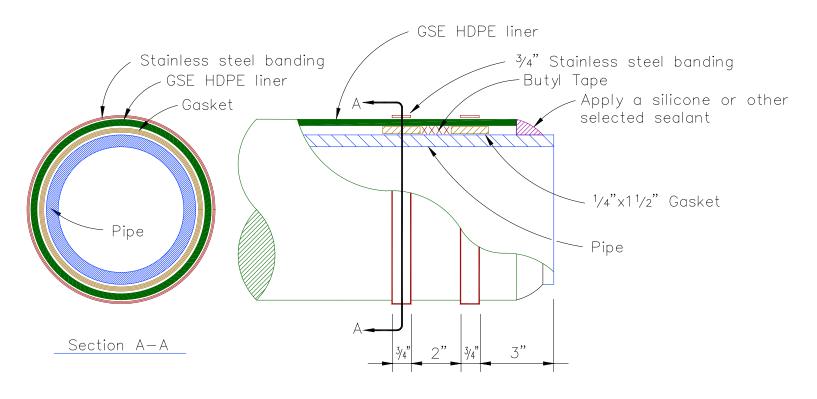
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# Typical Pipe Penetration Seal

(Vertical or horizontal) Not to scale