City of Winlock

Sewer Extension to Industrial Park

Winlock, Washington

Project Directory

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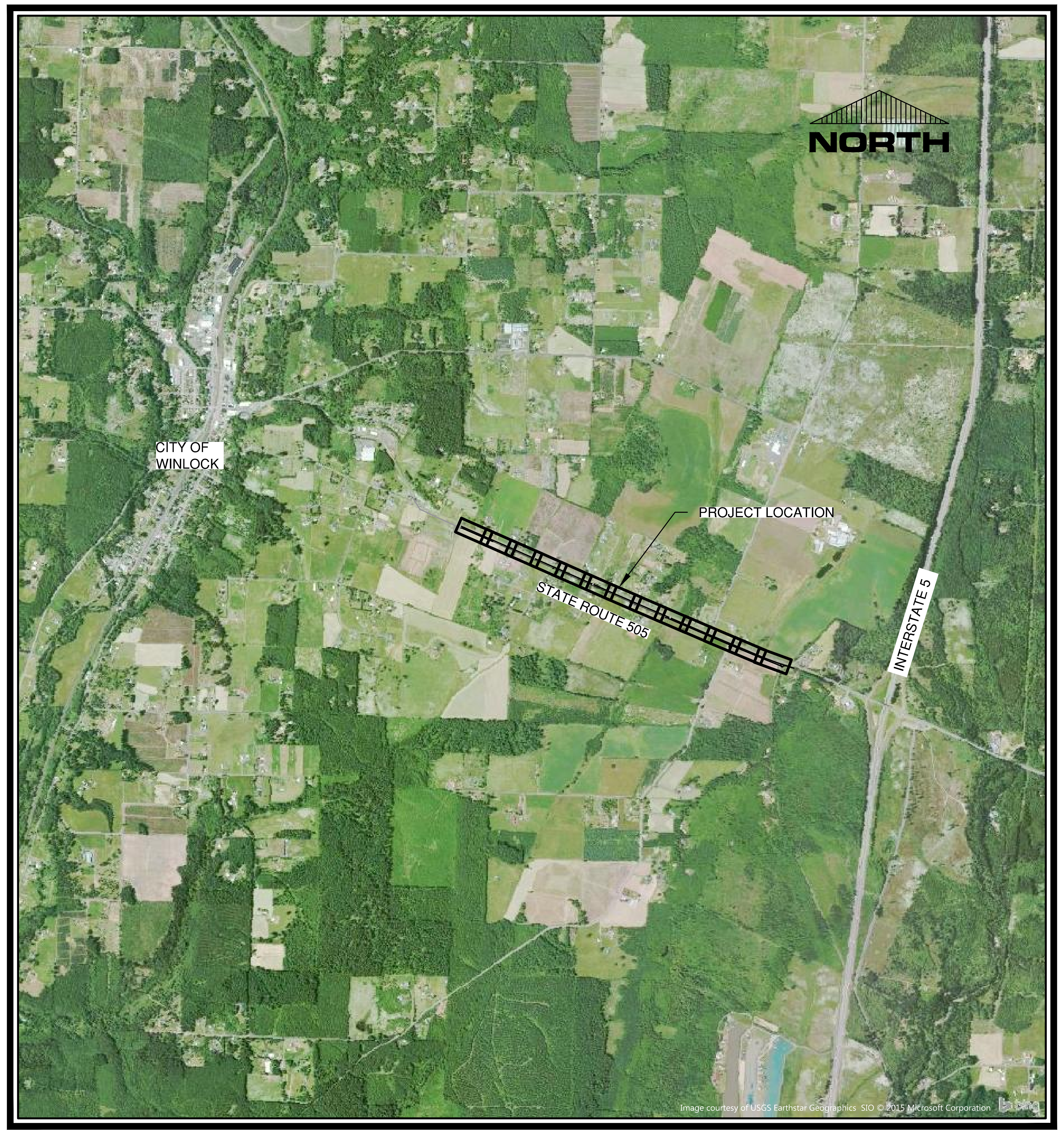

Image courtesy of USGS Earthstar Geographics SIO © 2015 Microsoft Corporation

Vicinity Map

Scale: 1" = 2000'

City of Winlock

Mayor

Lonnie Dowell

City Council

Barbra Pedersen
Sarah Gifford
Jerry Rader
Sam Patrick
Aaron Mummert

City Clerk

Tedi Curry

Public Works Superintendant

Gregg Robinson

Wastewater Superintendent

Rodney Cecil

General
Cover Sheet

City of Winlock
Sewer Extension to Industrial Park
Winlock, Washington

Horizontal Scale: 1"=30'
Vertical Scale: NA
Datum: NAD83/91 NAVD 88
Survey Book: 1656
Project Phase:

Project Milestone:
90%
Revision Date:
3/9/2016

GIBBS & OLSON
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Project Manager: MM
Designed by: ----
CAD by: DM
Checked by: ----
Approved by: ----
Project Number:
08564012
Drawing Number:
G1
Sheet Number:
1 of ----

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Abbreviations

A.B.	Anchor Bolt
ADJ.	Adjust
AC	Asphalt Concrete
ALUM.	Aluminum
APPROX.	Approximately
ASPH.	Asphalt
ASS'Y	Assembly
AVE.	Avenue
BFV	Butterfly Valve
BLKG	Blocking
BLDG	Building
CB	Catch Basin
CI	Cast Iron
CL	Centerline
CLR	Clear
CMP	Corrugated Metal Pipe
CO	Cleanout
CONC.	Concrete
CONST.	Construction
CPLG	Coupling
CSBC	Crushed Surfacing Base Course
CSTC	Crushed Surfacing Top Course
CU	Cubic
CV	Check Valve
DI	Ductile Iron
DWG	Drawing
DWY	Driveway
(E)	East
EC	Erosion Control
EL.	Elevation
EOP	Edge of Pavement
EXIST.	Existing
E.W.	Each Way
FCA	Flange Coupling Adapter
FLG	Flange
FND	Found
FOC	Face of Curb
GALV	Galvanized
GV	Gate Valve
HDPE	High Density Polyethylene
HMA	Hot Mix Asphalt
ILLUM.	Illumination
INV.	Invert
I.E.	Invert Elevation
INT	Intersection
I.P.	Iron Pipe
JUNCT.	Junction
LT.	Left
LF	Lineal Feet
MAX.	Maximum
MD	Measure Down
MIN.	Minimum
MH	Manhole
MJ	Mechanical Joint
(N)	North
(NE)	Northeast
NPT	National Pipe Thread
N.S.	Non-Shrink
(NW)	Northwest
N.T.S.	Not to Scale
O.C.	On Center
O.D.	Outside Diameter
O/S	Offset
PE	Plain End
PERF.	Perforated
PVC	Polyvinyl Chloride
PVMT	Pavement
PRKG	Parking
PRV	Pressure Reducing Valve
PROV.	Provisions
RBC	Rebar and Cap
RPBA	Reduced Pressure Backflow Assembly
RT.	Right
ROW	Right-of-Way
S/W	Sidewalk
S	Slope
(S)	South
SCH	Schedule
SD	Storm Drain
SDCB	Storm Drain Catch Basin
SDMH	Storm Drain Manhole
SHT.	Sheet
SQ.	Square
SS	Sanitary Sewer
SSCO	Sanitary Sewer Cleanout
SSMH	Sanitary Sewer Manhole
SST	Stainless Steel
ST	Street
STA.	Station
STD.	Standard
STL.	Steel
STRUCT.	Structure
(SE)	Southeast
(SW)	Southwest
TELE.	Telephone
TEMP.	Temporary
TESC	Temporary Erosion and Sediment Control
TRANS.	Transition
TYP.	Typical
U.N.O.	Unless Noted Otherwise
(W)	West
W/	With
W.M.	Water Main
WSDOH	Wash. State Dept. of Health
YD	Yard
Ø	Diameter

Legends

Existing Linetypes

- Existing Building
- Existing Cable TV - Buried
- Existing Centerline Road
- Existing Concrete
- Existing Creek/Ditch
- Existing Curb
- Existing Fence
- Existing Gas
- Existing Guardrail
- Existing Gravel
- Existing Gutter Line
- Existing Pavement Edge
- Existing Power - Aerial
- Existing Power - Buried
- Existing Retaining Wall
- Existing Right-Of-Way
- Existing Sanitary Sewer
- Existing Sidewalk
- Existing Storm Drain
- Existing Telephone - Buried
- Existing Toe of Slope
- Existing Top of Slope
- Existing Brush Line
- Existing Water

Proposed Linetypes

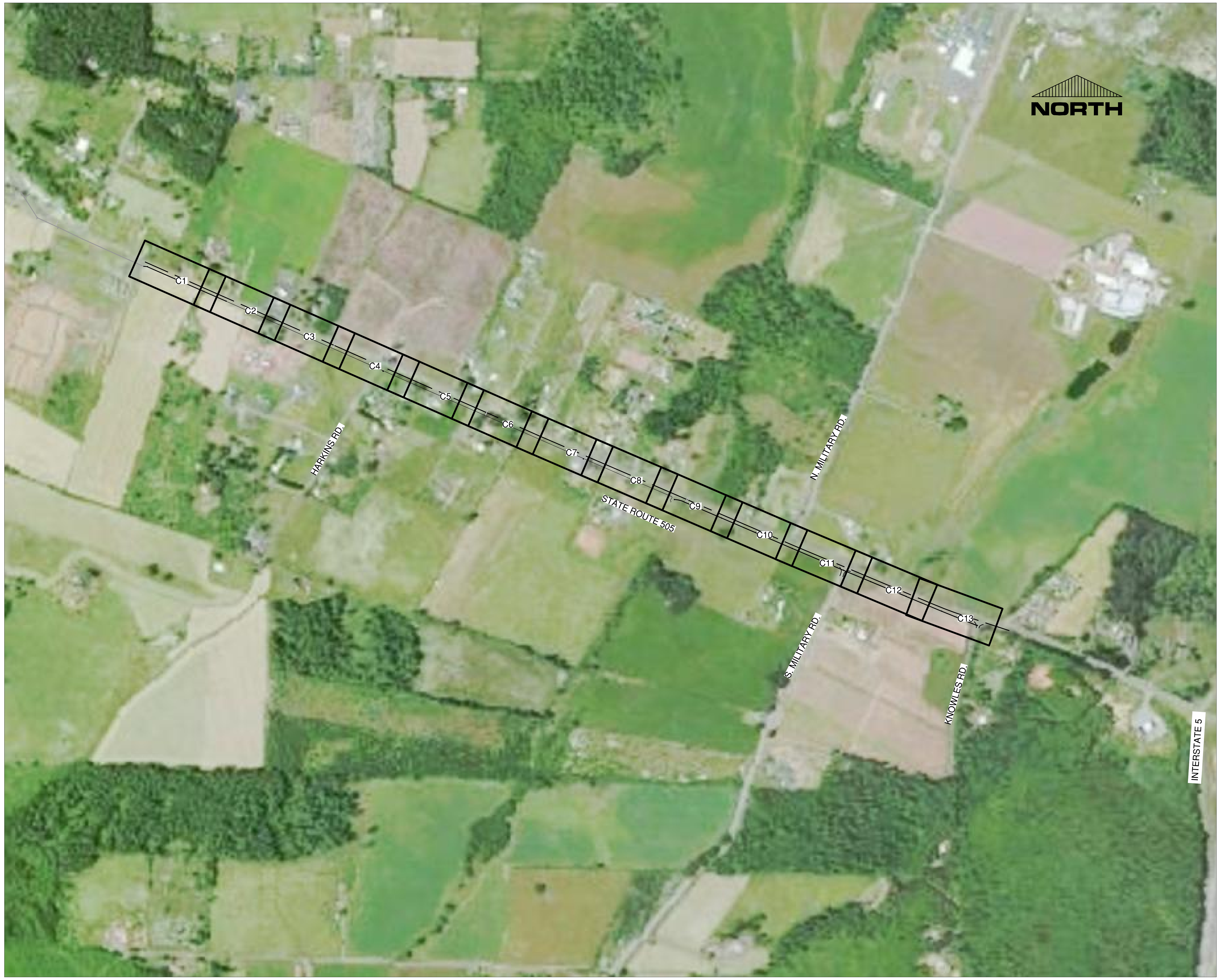
- Proposed Sanitary Sewer
- Utility to be Abandoned

Existing Symbols

- Existing Yard Light
- Existing Hydrant
- Existing Water Meter
- Existing Gate Valve
- Existing Water Vault
- Existing Mail Box
- Existing Sign
- Existing Conifer Tree
- Existing Deciduous Tree
- Existing Shrub
- Existing Power Pole
- Existing Power Pole Anchor
- Existing Power Transformer
- Existing Power Vault
- Existing Sewer Cleanout
- Existing Sewer Manhole
- Existing Storm Culvert
- Existing SDCB
- Existing SDMH
- Existing Telephone Pole
- Existing Telephone Pole Anchor
- Existing Telephone Riser

Proposed Symbols

●	Proposed Sanitary Manhole
•	Proposed Sanitary Cleanout
#	Survey Control Point
▨	Asphalt Patch



SHEET INDEX SITE PLAN

Survey Control Data

Point No.	Northing	Easting	Elev.	Description
4	426887.4432	1036908.8178	450.29	NGS MON A535
31	427085.9598	1036519.9596	452.38	G&O CONTROL CAP
33	429674.2921	1030660.6271	450.75	FND TVP#8
35	429742.7842	1030551.6787	449.61	BM#28
39	425607.6330	1040188.5040	359.20	MAG NAIL
50	429766.3496	1030377.0377	450.10	LS 16908
51	428917.3828	1032304.6017	478.29	LS 29269
52	429288.2746	1031442.0453	476.08	LS 34147
53	428848.0504	1032584.4813	471.81	MAG NAIL
54	428458.3830	1033454.5683	469.51	MAG NAIL
55	428101.2127	1034272.2527	453.50	MAG NAIL

Sheet Index

Sheet No.	Drawing No.	Sheet Title
General		
1	G1	Cover Sheet
2	G2	Sheet Index, Legend
Plan and Profile		
3	C1	Sta. 0+00 to Sta. 5+50
4	C2	Sta. 5+50 to Sta. 11+00
5	C3	Sta. 11+00 to Sta. 16+50
6	C4	Sta. 16+50 to Sta. 22+00
7	C5	Sta. 22+00 to Sta. 27+50
8	C6	Sta. 27+50 to Sta. 33+00
9	C7	Sta. 33+00 to Sta. 38+50

Sheet Index

Sheet No.	Drawing No.	Sheet Title
Plan and Profile		
10	C8	Sta. 38+50 to Sta. 44+00
11	C9	Sta. 44+00 to Sta. 49+50
12	C10	Sta. 49+50 to Sta. 55+00
13	C11	Sta. 55+00 to Sta. 60+50
14	C12	Sta. 60+50 to Sta. 66+00
15	C13	Sta. 66+00 to Sta. 70+79.75
Pump Station		
16	SP1	Site Plan
17	M1	Plan and Details
18	M2	Electrical Enclosure

Sheet Index

Sheet No.	Drawing No.	Sheet Title
Details		
19	SD1	Miscellaneous Details
20	D1	Standard Details
21	D2	Standard Details

General
Sheet Index,Legend

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Sewer Extension to Industrial Park
Winlock, Washington

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2 of **----**

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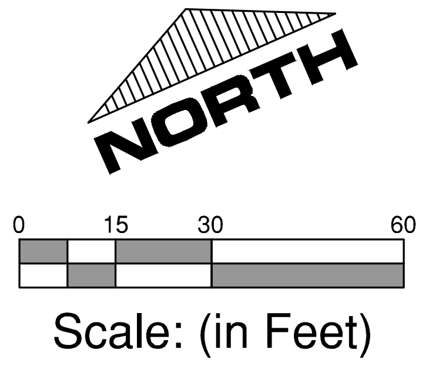

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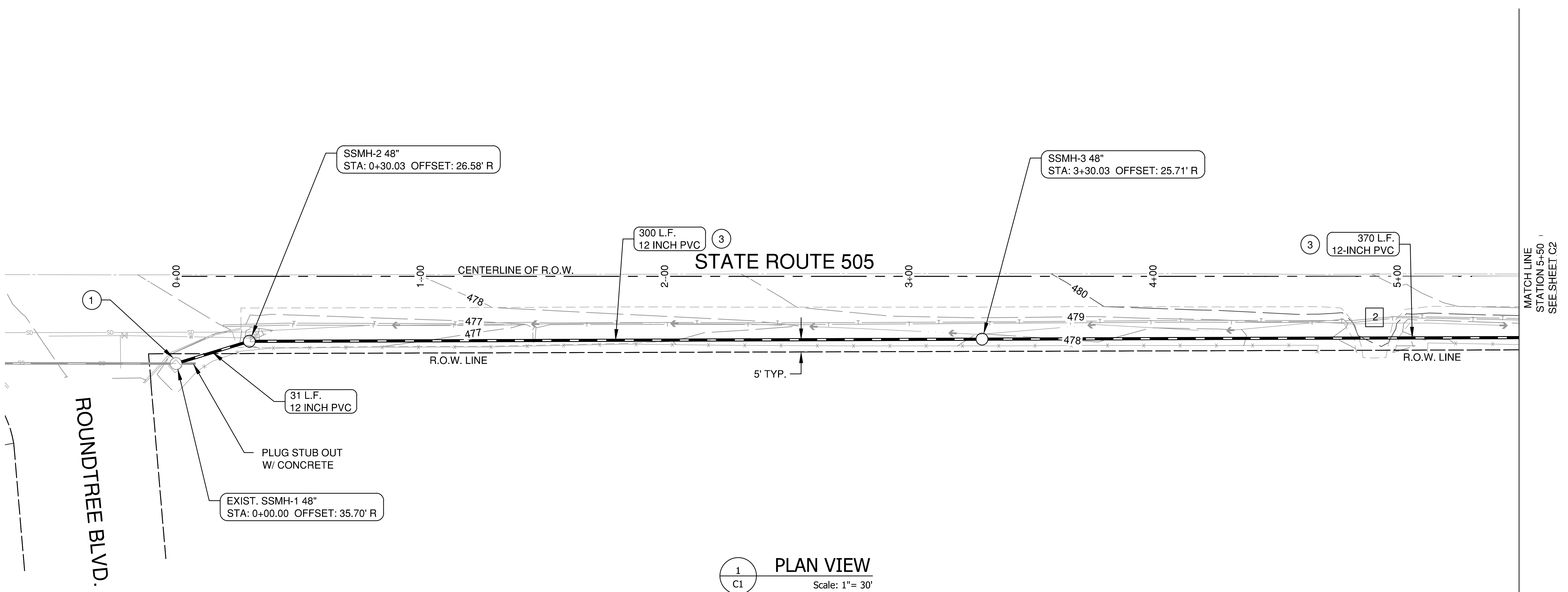


1 / C1 **PLAN VIEW**

Scale: 1"= 30'

INSTALL

- ① CORE DRILL EXIST. MANHOLE AND INSTALL KOR-N-SEAL BOOT.
- ② AIR/VAC RELEASE PER DETAIL 1 DRAWING SD1
- ③ OPEN CUT TRENCHING METHOD FOR SANITARY SEWER CONSTRUCTION.
- ④ CONTRACTOR'S OPTION TO INSTALL 4" AND 8" HDPE FORCE MAINS IN A 16" HDPE CASING AS SHOWN ON THE DRAWINGS, OR USE HDD TO INSTALL 4" AND 8" HDPE FORCE MAINS WITH NO CASING, PER SPECIFICATION SECTION 02311, AT A DEPTH TO PREVENT BLOW OUT.
- ⑤ FLUSHING CONNECTION PER DETAIL DRAWING D2.

SURFACE RESTORATION

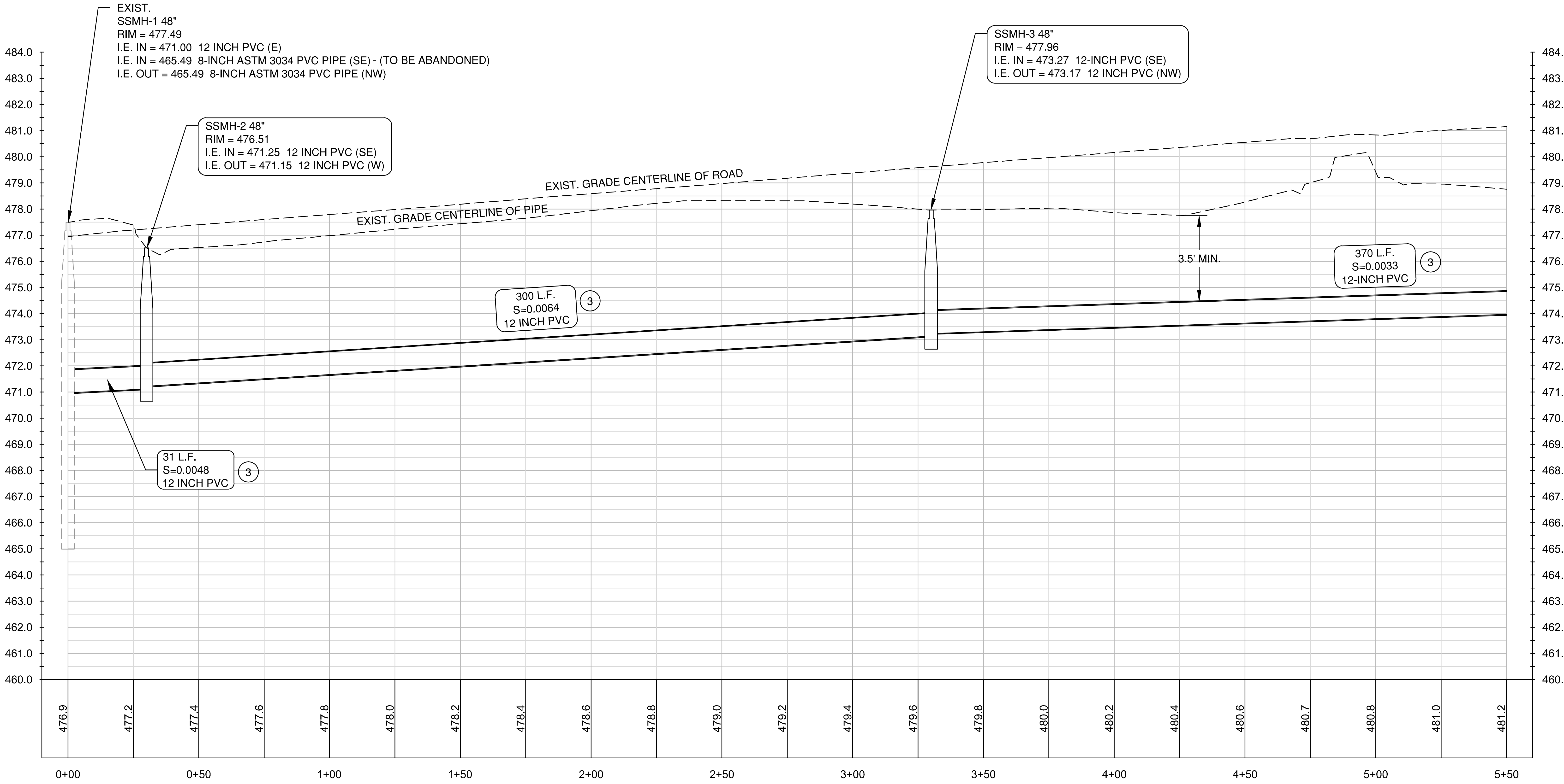
- 1 SAW CUT LINE.
- 2 HOT MIX ASPHALT PATCH PER STD DETAIL DRAWING
- 3 CSTC SURFACING, PER STD DETAIL DRAWING
- 4 HYDROSEED PER SPECIFICATIONS.

NOTE:
CONTRACTOR TO EXPOSE AND CAREFULLY MOVE TWO CENTURYLINK CABLES (NOT IN CONDUITS) OUT OF HARMS WAY PRIOR TO TRENCH EXCAVATION; THEN REINSTALL THEM IN THE PIPE ZONE BACKFILL WITH 24" MINIMUM COVER.

811

Know what's **below.**
Call 811 before you dig.

CAUTION: LOCATION OF EXISTING UTILITIES SHOWN IS APPROXIMATE AND MAY NOT BE ACCURATE OR ALL INCLUSIVE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY LOCATION AND DEPTH OF UTILITIES PRIOR TO PROCEEDING WITH CONSTRUCTION.



2 / C1 **PROFILE VIEW**

Scale: Vert.1"= 3' Horz. 1"=30'

Plan & Profile

STA. 0+00 TO STA. 5+50

City of Winlock

Sewer Extension to Industrial Park

Winlock, Washington

Horizontal Scale: 1"=30'
Vertical Scale: NA
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Project Phase:

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CAD by: DM
Checked by: ----
Approved by: ----
Project Number:
08564012
Drawing Number:
C1
Sheet Number:
3 of **----**

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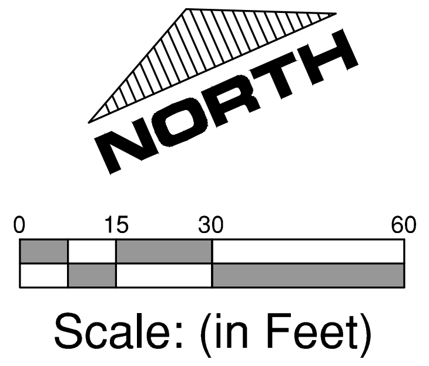

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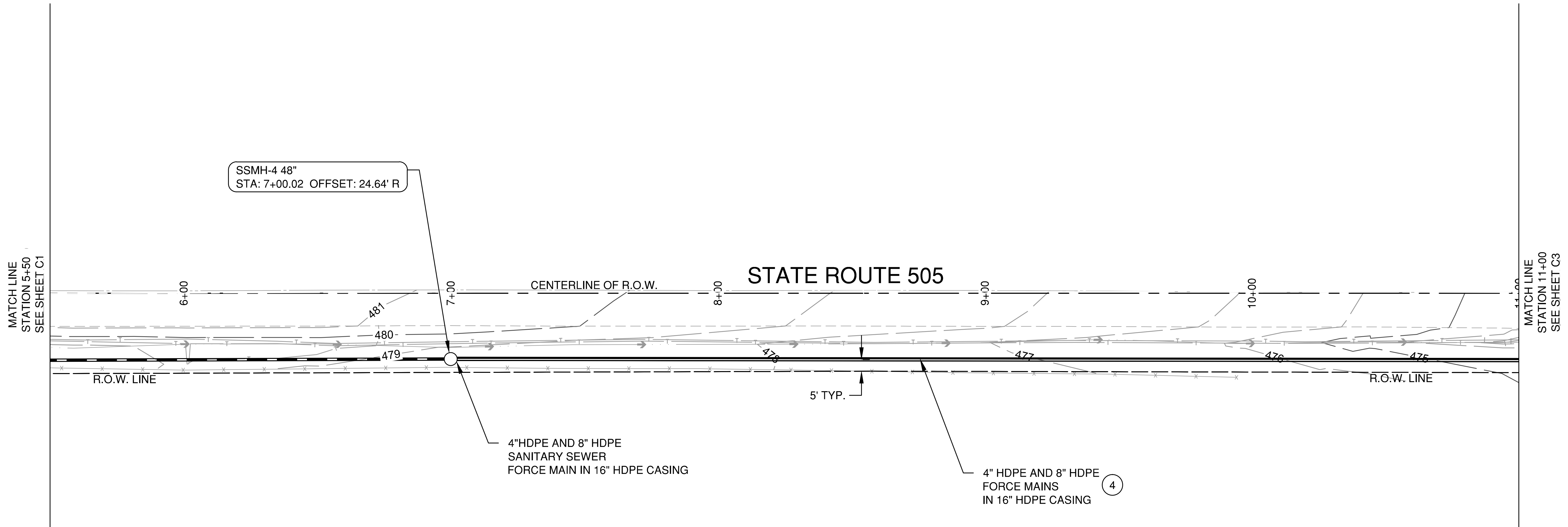

1
C2
PLAN VIEW
Scale: 1"= 30'

INSTALL

1. CORE DRILL EXIST. MANHOLE AND INSTALL KOR-N-SEAL BOOT.
2. AIR/VAC RELEASE PER DETAIL 1 DRAWING SD1
3. OPEN CUT TRENCHING METHOD FOR SANITARY SEWER CONSTRUCTION.
4. CONTRACTOR'S OPTION TO INSTALL 4" AND 8" HDPE FORCE MAINS IN A 16" HDPE CASING AS SHOWN ON THE DRAWINGS, OR USE HDD TO INSTALL 4" AND 8" HDPE FORCE MAINS WITH NO CASING, PER SPECIFICATION SECTION 02311, AT A DEPTH TO PREVENT BLOW OUT.
5. FLUSHING CONNECTION PER DETAIL DRAWING D2.

SURFACE RESTORATION

1. SAW CUT LINE.
2. HOT MIX ASPHALT PATCH PER STD DETAIL DRAWING
3. CSTC SURFACING, PER STD DETAIL DRAWING
4. HYDROSEED PER SPECIFICATIONS.

NOTE:
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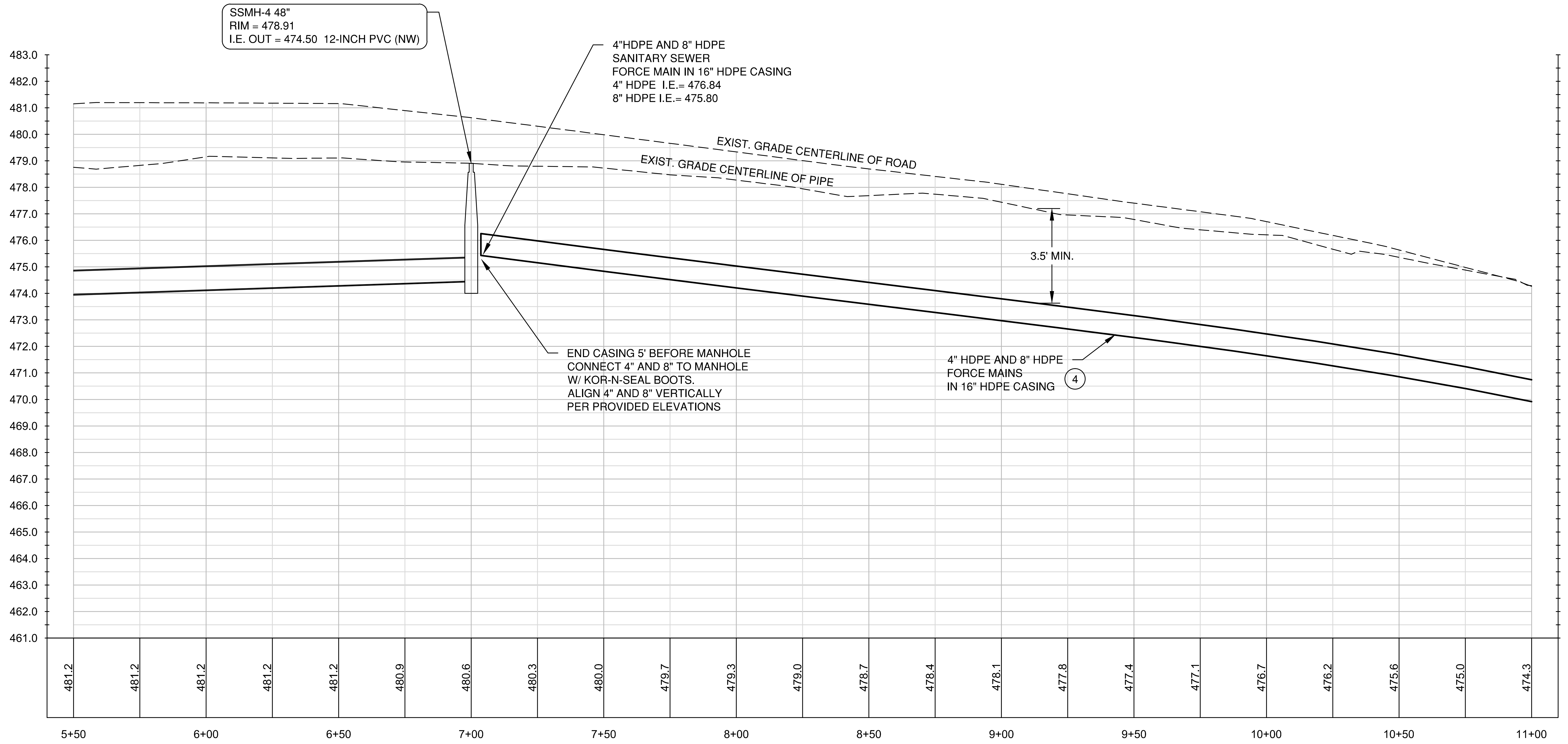

2
C2
PROFILE VIEW
Scale: Vert.1"= 3' Horz. 1"=30'

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Plan & Profile
STA. 5+00 TO STA. 11+00

City of Winlock
Sewer Extension to Industrial Park
Winlock, Washington

Horizontal Scale: 1"=30'
Vertical Scale: NA
Datum: NAD83/91 NAVD 88
Survey Book: 1656
Project Phase:

Project Milestone:
90%
Revision Date:
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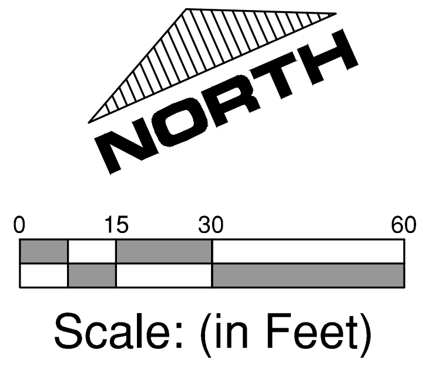

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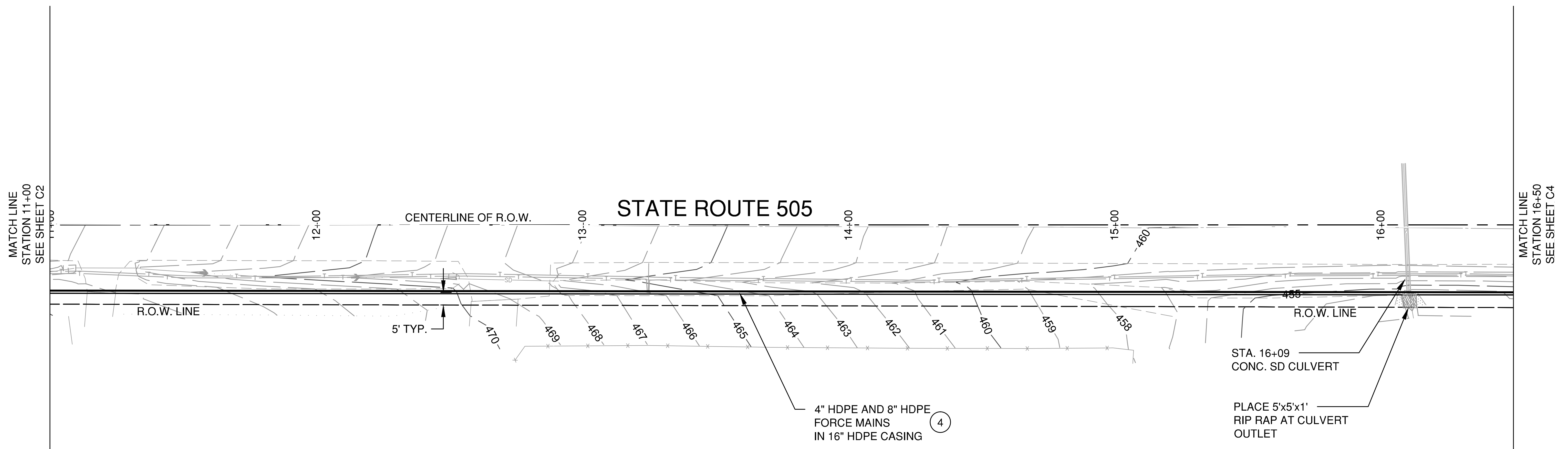
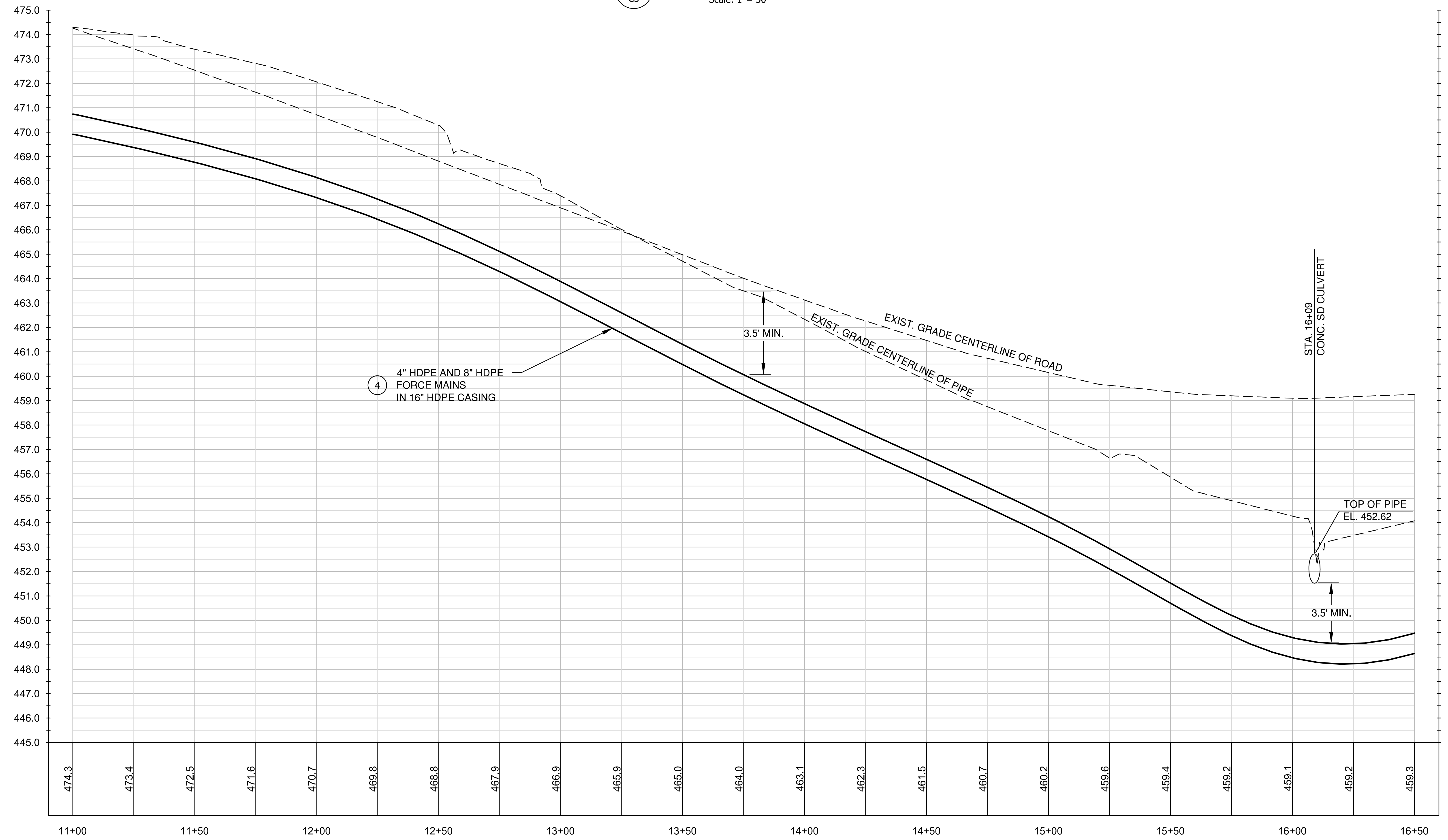


1 / C3 PLAN VIEW

Scale: 1"= 30'



2 / C3 PROFILE VIEW

Scale: Vert.1"= 3' Horz. 1"=30'

INSTALL

1. CORE DRILL EXIST. MANHOLE AND INSTALL KOR-N-SEAL BOOT.
2. AIR/VAC RELEASE PER DETAIL 1 DRAWING SD1
3. OPEN CUT TRENCHING METHOD FOR SANITARY SEWER CONSTRUCTION.
4. CONTRACTOR'S OPTION TO INSTALL 4" AND 8" HDPE FORCE MAINS IN A 16" HDPE CASING AS SHOWN ON THE DRAWINGS, OR USE HDD TO INSTALL 4" AND 8" HDPE FORCE MAINS WITH NO CASING, PER SPECIFICATION SECTION 02311, AT A DEPTH TO PREVENT BLOW OUT.
5. FLUSHING CONNECTION PER DETAIL DRAWING D2.

SURFACE RESTORATION

1. SAW CUT LINE.
2. HOT MIX ASPHALT PATCH PER STD DETAIL DRAWING
3. CSTC SURFACING, PER STD DETAIL DRAWING
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Plan & Profile
STA. 11+00 TO STA. 16+50

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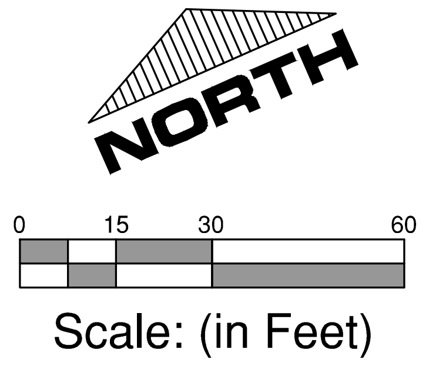

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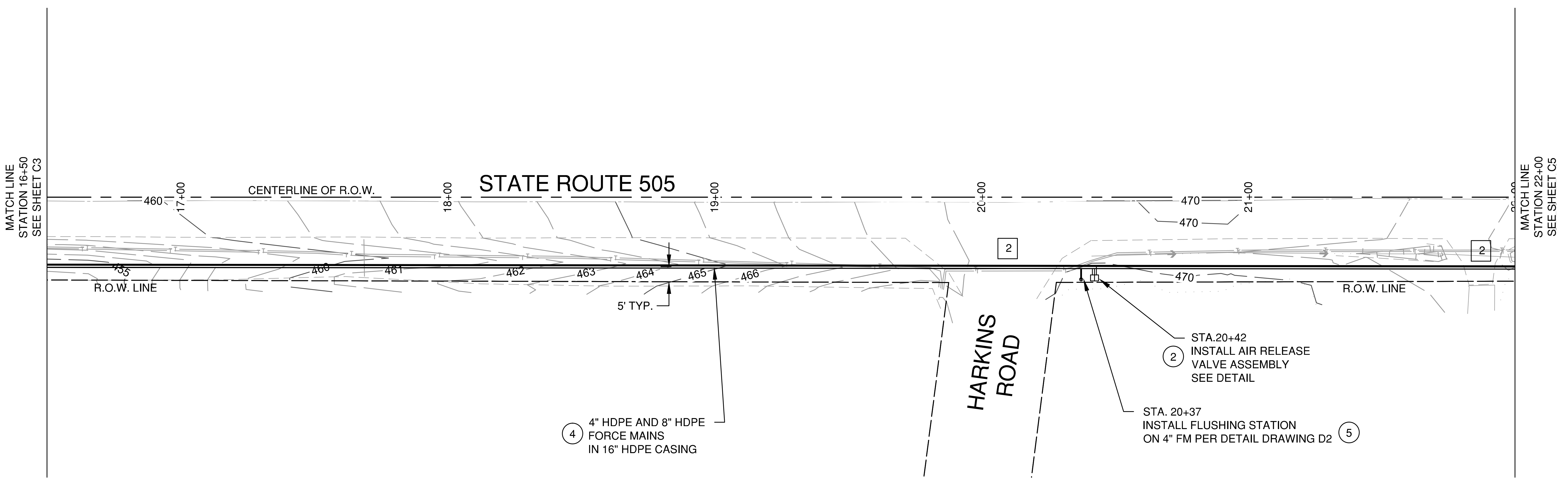
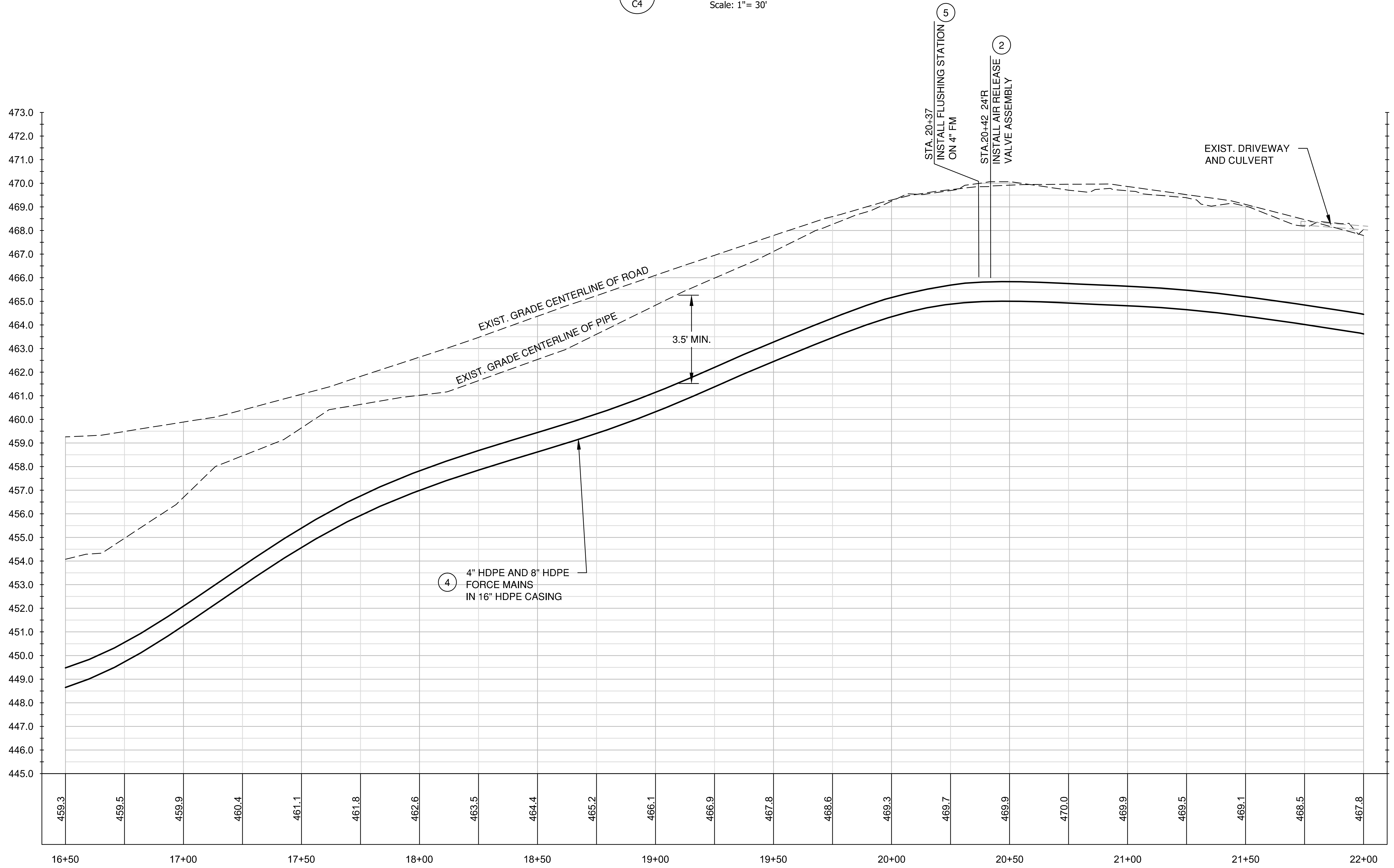


STA.20+42
② INSTALL AIR RELEASE
VALVE ASSEMBLY
SEE DETAIL

STA. 20+37
INSTALL FLUSHING STATION
ON 4" FM PER DETAIL DRAWING D2 ⑤

④ 4" HDPE AND 8" HDPE
FORCE MAINS
IN 16" HDPE CASING

PLAN VIEW
1
C4
Scale: 1"= 30'



⑤ STA. 20+37
INSTALL FLUSHING STATION
ON 4" FM

② STA. 20+42. 24'R
INSTALL AIR RELEASE
VALVE ASSEMBLY

④ 4" HDPE AND 8" HDPE
FORCE MAINS
IN 16" HDPE CASING

PROFILE VIEW
2
C4
Scale: Vert.1"= 3' Horz. 1"=30'

INSTALL

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SURFACE RESTORATION

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STA. 16+50 TO STA. 22+00

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6 of **----**

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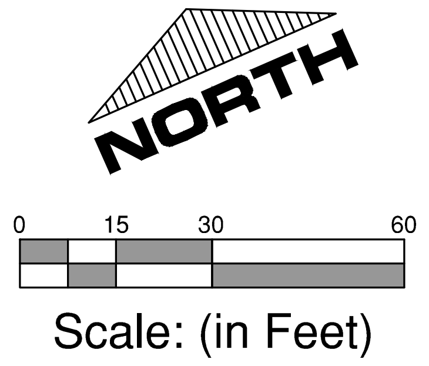
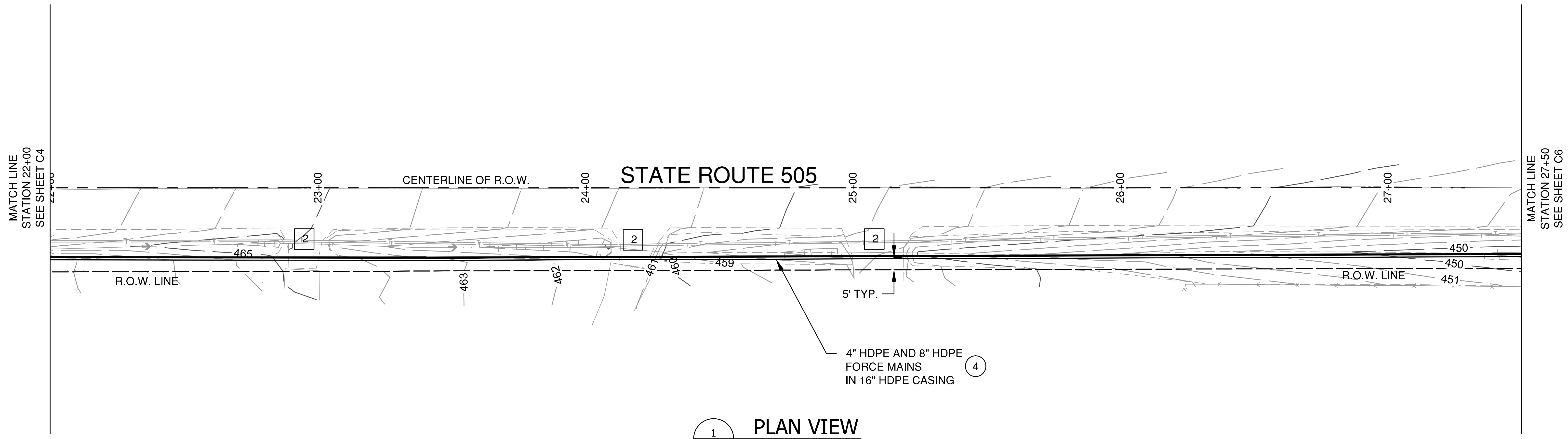
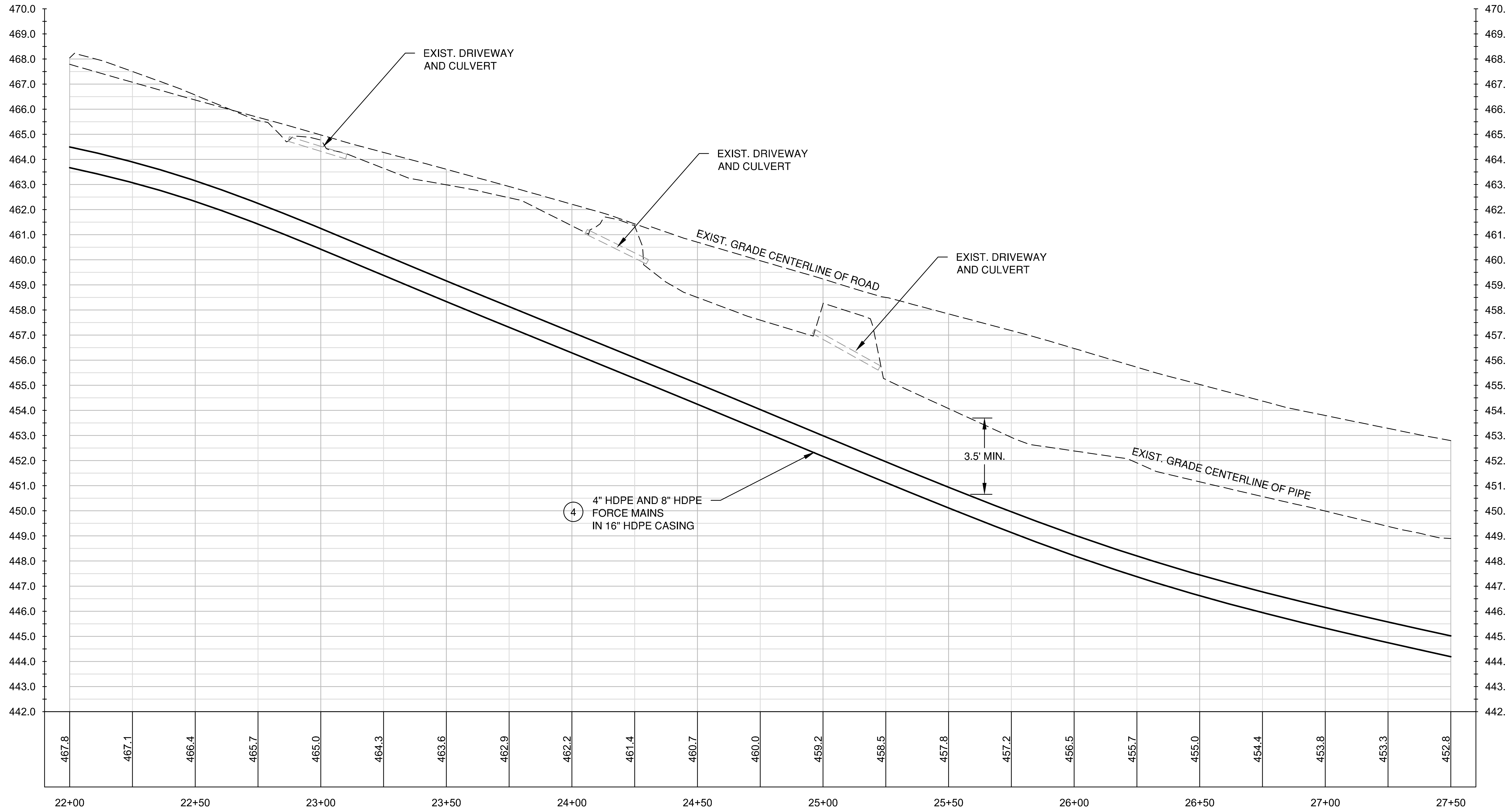




1
C5

PLAN VIEW

Scale: 1"= 30'



2
C5

PROFILE VIEW

Scale: Vert.1"= 3' Horz. 1"=30'

INSTALL

- ① CORE DRILL EXIST. MANHOLE AND INSTALL KOR-N-SEAL BOOT.
- ② AIR/VAC RELEASE PER DETAIL 1 DRAWING SD1
- ③ OPEN CUT TRENCHING METHOD FOR SANITARY SEWER CONSTRUCTION.
- ④ CONTRACTOR'S OPTION TO INSTALL 4" AND 8" HDPE FORCE MAINS IN A 16" HDPE CASING AS SHOWN ON THE DRAWINGS, OR USE HDD TO INSTALL 4" AND 8" HDPE FORCE MAINS WITH NO CASING, PER SPECIFICATION SECTION 02311, AT A DEPTH TO PREVENT BLOW OUT.
- ⑤ FLUSHING CONNECTION PER DETAIL DRAWING D2.

SURFACE RESTORATION

- 1 SAW CUT LINE.
- 2 HOT MIX ASPHALT PATCH PER STD DETAIL DRAWING
- 3 CSTC SURFACING, PER STD DETAIL DRAWING
- 4 HYDROSEED PER SPECIFICATIONS.

NOTE:
CONTRACTOR TO EXPOSE AND CAREFULLY MOVE TWO CENTURYLINK CABLES (NOT IN CONDUITS) OUT OF HARMS WAY PRIOR TO TRENCH EXCAVATION; THEN REINSTALL THEM IN THE PIPE ZONE BACKFILL WITH 24" MINIMUM COVER.

811

Know what's **below.**
Call 811 before you dig.

CAUTION: LOCATION OF EXISTING UTILITIES SHOWN IS APPROXIMATE AND MAY NOT BE ACCURATE OR ALL INCLUSIVE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY LOCATION AND DEPTH OF UTILITIES PRIOR TO PROCEEDING WITH CONSTRUCTION.

Plan & Profile
STA. 22+00 TO STA. 27+50

City of Winlock
Sewer Extension to Industrial Park
Winlock, Washington

Horizontal Scale: 1"=30'
Vertical Scale: NA
Datum: NAD83/91 NAVD 88
Survey Book: 1656
Project Phase:

Project Milestone:
90%
Revision Date:
3/9/2016

GIBBS & OLSON
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Project Manager: MM
Designed by: ----
CAD by: DM
Checked by: ----
Approved by: ----
Project Number:
08564012
Drawing Number:
C5
Sheet Number:
7 of **----**

DRAWING: T:\CIVIL 3D\PROJECTS\08564012.ACT\DESIGN.DWG, LAYOUT TAB: C5, PLOT DATE: 3/9/2016 10:54:36 AM, DRAWING SAVE DATE: 3/8/2016 3:03:10 PM, PLOTTED BY: SMCWILLIAMS
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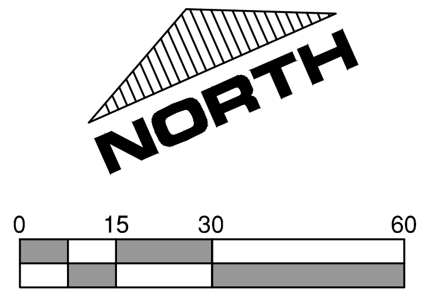
PROFILE: GIBBS & OLSON STANDARD – C3D IMPERIAL 2015, PLOT DEVICE: GIBBS & OLSON – DWG TO PDF.PC3, PLOT STYLE TABLE: GIBBS–OLSON STANDARD MONOCHROME.CTB, PAPER SIZE: GIBBS & OLSON – PLANSHEET D SIZE (34.00 X 22.00 INCHES)



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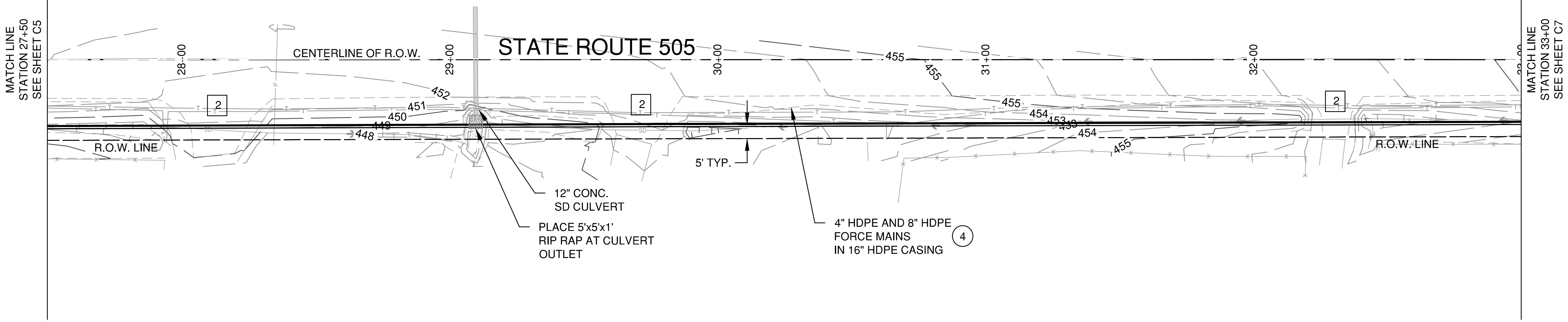

① C6 **PLAN VIEW**
Scale: 1"= 30'

INSTALL

1. CORE DRILL EXIST. MANHOLE AND INSTALL KOR-N-SEAL BOOT.
2. AIR/VAC RELEASE PER DETAIL 1 DRAWING SD1
3. OPEN CUT TRENCHING METHOD FOR SANITARY SEWER CONSTRUCTION.
4. CONTRACTOR'S OPTION TO INSTALL 4" AND 8" HDPE FORCE MAINS IN A 16" HDPE CASING AS SHOWN ON THE DRAWINGS, OR USE HDD TO INSTALL 4" AND 8" HDPE FORCE MAINS WITH NO CASING, PER SPECIFICATION SECTION 02311, AT A DEPTH TO PREVENT BLOW OUT.
5. FLUSHING CONNECTION PER DETAIL DRAWING D2.

SURFACE RESTORATION

1. SAW CUT LINE.
2. HOT MIX ASPHALT PATCH PER STD DETAIL DRAWING
3. CSTC SURFACING, PER STD DETAIL DRAWING
4. HYDROSEED PER SPECIFICATIONS.

NOTE:
CONTRACTOR TO EXPOSE AND CAREFULLY MOVE TWO CENTURYLINK CABLES (NOT IN CONDUITS) OUT OF HARMS WAY PRIOR TO TRENCH EXCAVATION; THEN REINSTALL THEM IN THE PIPE ZONE BACKFILL WITH 24" MINIMUM COVER.

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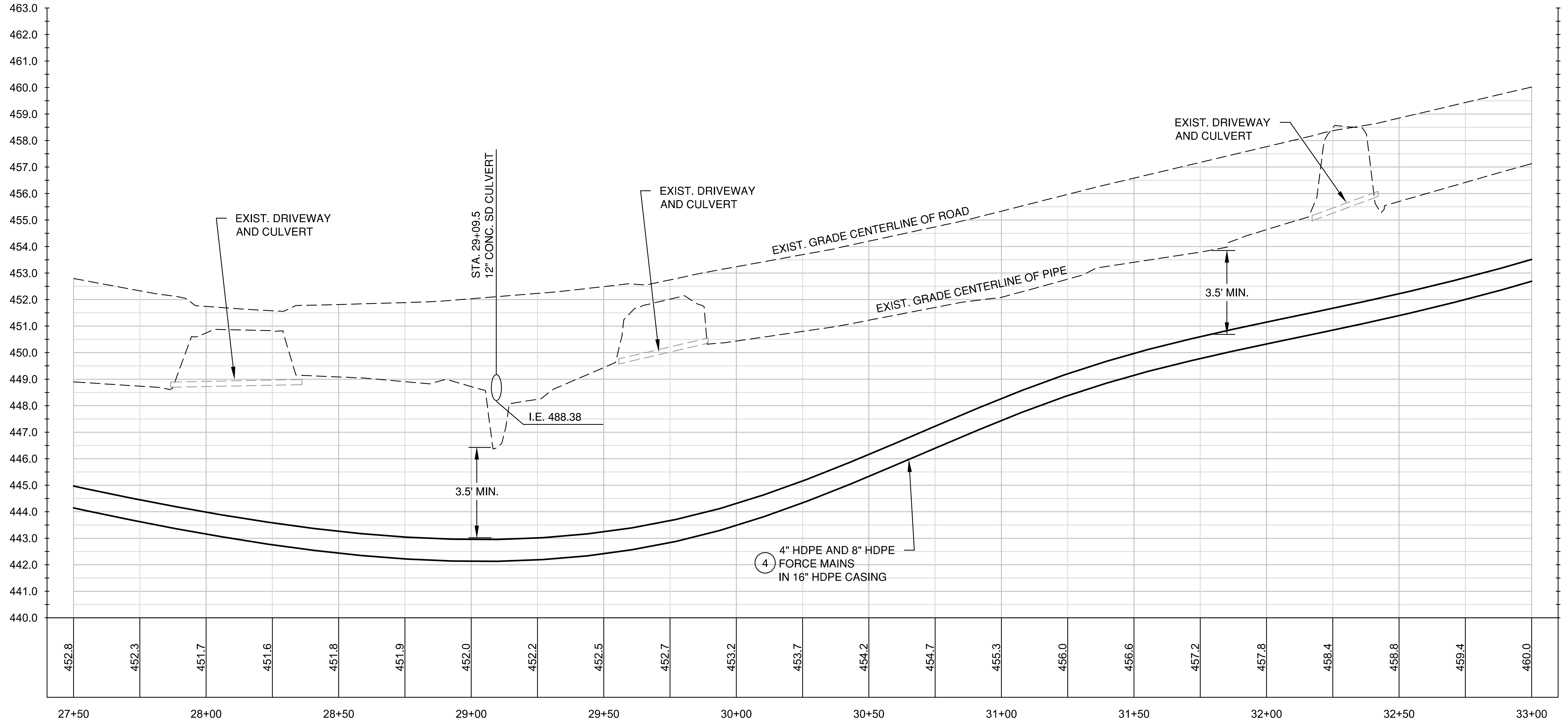

② C6 **PROFILE VIEW**
Scale: Vert.1"= 3' Horz. 1"=30'

Plan & Profile
STA. 27+50 TO STA. 33+00

City of Winlock
Sewer Extension to Industrial Park
Winlock, Washington

Horizontal Scale: 1"=30'
Vertical Scale: NA
Datum: NAD83/91 NAVD 88
Survey Book: 1656
Project Phase:

Project Milestone:
90%
Revision Date:
3/9/2016

GIBBS & OLSON
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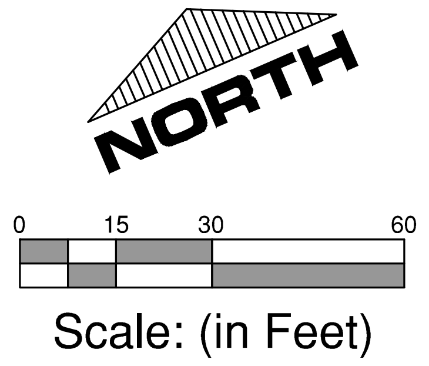
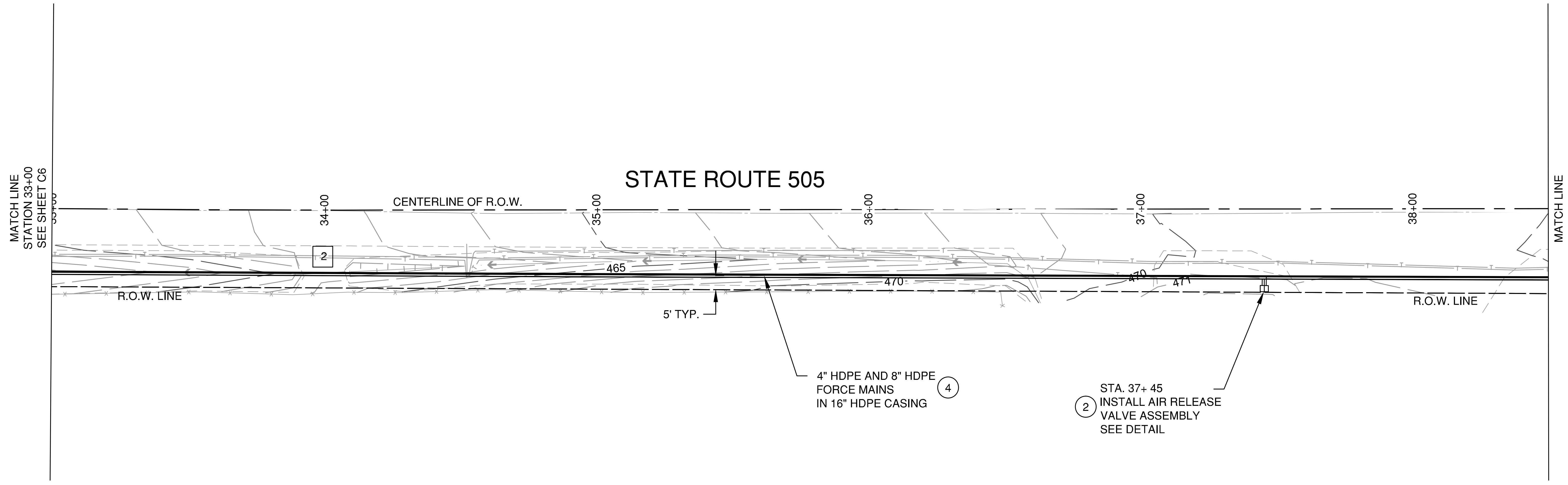
Project Manager: MM
Designed by: ----
CAD by: DM
Checked by: ----
Approved by: ----
Project Number:
08564012
Drawing Number:
C6
Sheet Number:
8 of **----**





1
C7
PLAN VIEW
Scale: 1"= 30'

INSTALL

① CORE DRILL EXIST. MANHOLE AND INSTALL KOR-N-SEAL BOOT.

② AIR/VAC RELEASE PER DETAIL 1 DRAWING SD1

③ OPEN CUT TRENCHING METHOD FOR SANITARY SEWER CONSTRUCTION.

④ CONTRACTOR'S OPTION TO INSTALL 4" AND 8" HDPE FORCE MAINS IN A 16" HDPE CASING AS SHOWN ON THE DRAWINGS, OR USE HDD TO INSTALL 4" AND 8" HDPE FORCE MAINS WITH NO CASING, PER SPECIFICATION SECTION 02311, AT A DEPTH TO PREVENT BLOW OUT.

⑤ FLUSHING CONNECTION PER DETAIL DRAWING D2.

SURFACE RESTORATION

- 1 SAW CUT LINE.
- 2 HOT MIX ASPHALT PATCH PER STD DETAIL DRAWING
- 3 CSTC SURFACING, PER STD DETAIL DRAWING
- 4 HYDROSEED PER SPECIFICATIONS.

NOTE:
CONTRACTOR TO EXPOSE AND CAREFULLY MOVE TWO CENTURYLINK CABLES (NOT IN CONDUITS) OUT OF HARMS WAY PRIOR TO TRENCH EXCAVATION; THEN REINSTALL THEM IN THE PIPE ZONE BACKFILL WITH 24" MINIMUM COVER.

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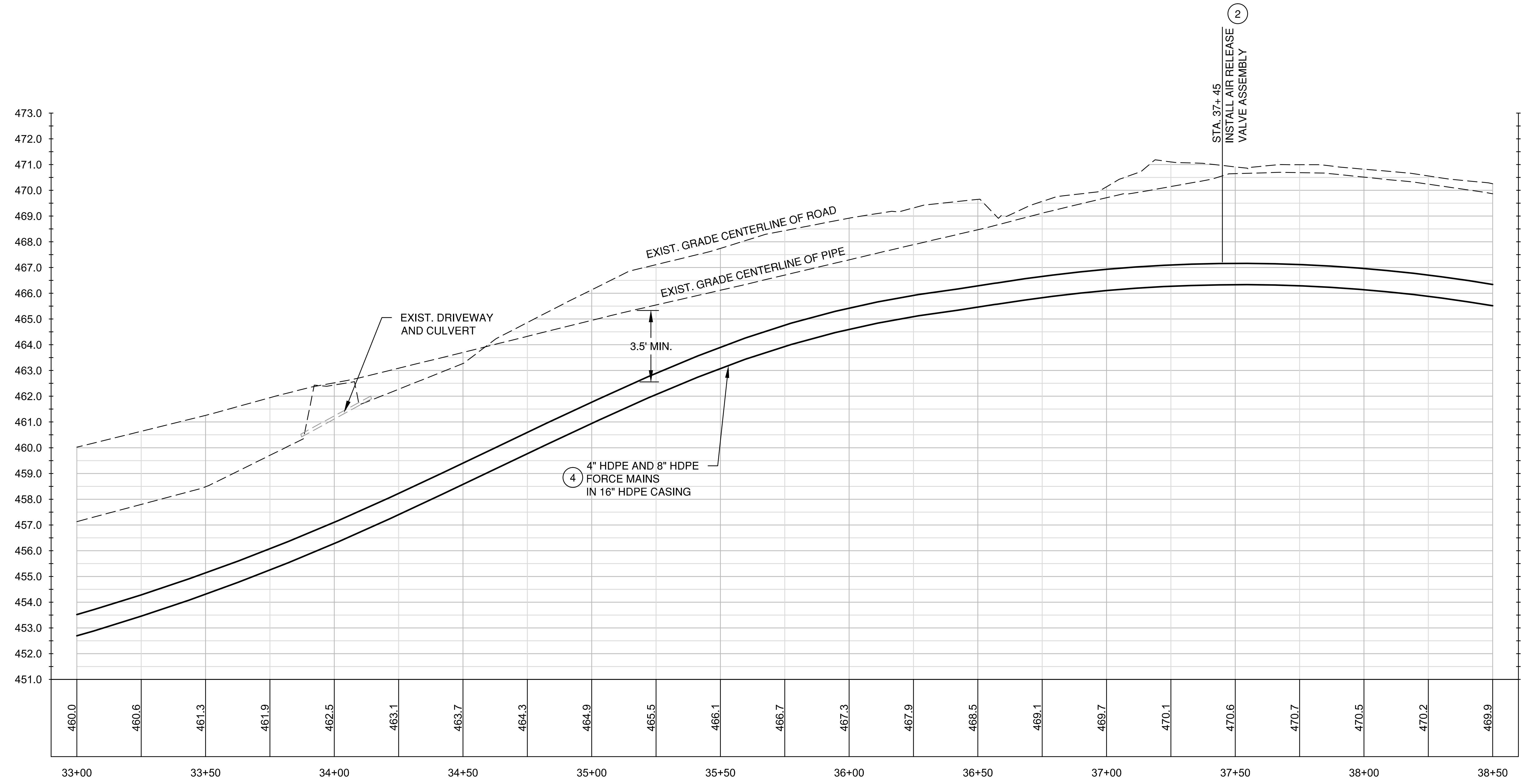

2
C7
PROFILE VIEW
Scale: Vert.1"= 3' Horz. 1"=30'

Plan & Profile
STA. 33+00 TO STA. 38+50

City of Winlock
Sewer Extension to Industrial Park
Winlock, Washington

Horizontal Scale: 1"=30'
Vertical Scale: NA
Datum: NAD83/91 NAVD 88
Survey Book: 1656
Project Phase:

Project Milestone:
90%
Revision Date:
3/9/2016

GIBBS & OLSON
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Project Manager: MM
Designed by: ----
CAD by: DM
Checked by: ----
Approved by: ----
Project Number:
08564012
Drawing Number:
C7
Sheet Number:
9 of **----**

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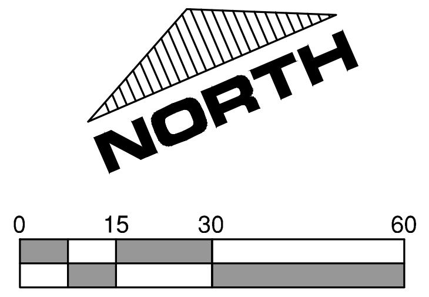
PROFILE: GIBBS & OLSON STANDARD -- C3D IMPERIAL 2015, PLOT DEVICE: GIBBS & OLSON -- DWG TO PDF.PC3, PLOT STYLE TABLE: GIBBS-OLSON STANDARD MONOCHROME.CTB, PAPER SIZE: GIBBS & OLSON -- PLANSHEET D SIZE (34.00 X 22.00 INCHES)



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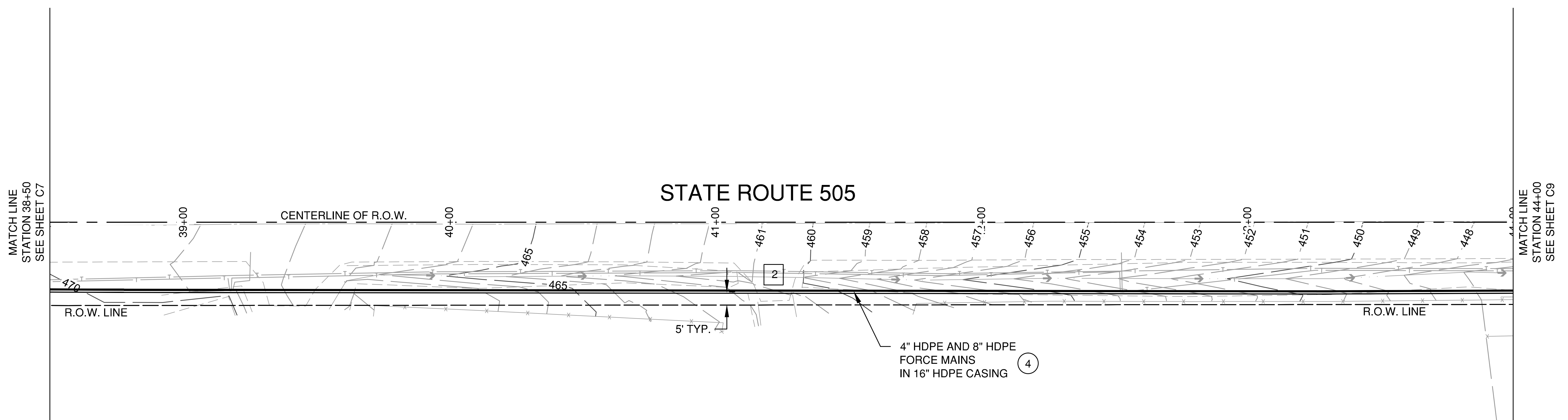
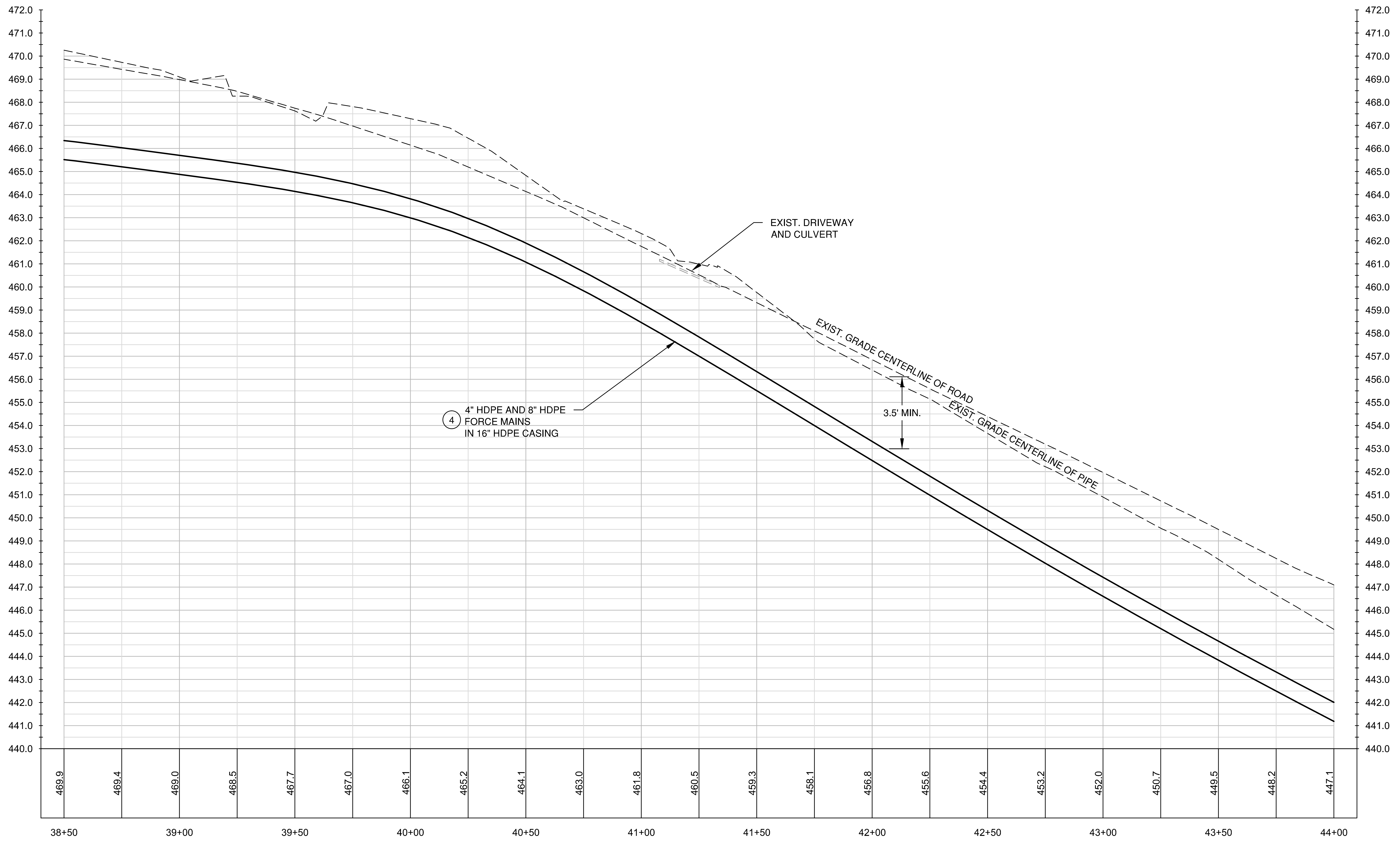


1 C8 PLAN VIEW

Scale: 1"= 30'



2 C8 PROFILE VIEW

Scale: Vert.1"= 3' Horz. 1"=30'

INSTALL

① CORE DRILL EXIST. MANHOLE AND INSTALL KOR-N-SEAL BOOT.

② AIR/VAC RELEASE PER DETAIL 1 DRAWING SD1

③ OPEN CUT TRENCHING METHOD FOR SANITARY SEWER CONSTRUCTION.

④ CONTRACTOR'S OPTION TO INSTALL 4" AND 8" HDPE FORCE MAINS IN A 16" HDPE CASING AS SHOWN ON THE DRAWINGS, OR USE HDD TO INSTALL 4" AND 8" HDPE FORCE MAINS WITH NO CASING, PER SPECIFICATION SECTION 02311, AT A DEPTH TO PREVENT BLOW OUT.

⑤ FLUSHING CONNECTION PER DETAIL DRAWING D2.

SURFACE RESTORATION

1 SAW CUT LINE.

2 HOT MIX ASPHALT PATCH PER STD DETAIL DRAWING

3 CSTC SURFACING, PER STD DETAIL DRAWING

4 HYDROSEED PER SPECIFICATIONS.

NOTE:
CONTRACTOR TO EXPOSE AND CAREFULLY MOVE TWO CENTURYLINK CABLES (NOT IN CONDUITS) OUT OF HARMS WAY PRIOR TO TRENCH EXCAVATION; THEN REINSTALL THEM IN THE PIPE ZONE BACKFILL WITH 24" MINIMUM COVER.

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Plan & Profile
STA. 38+50 TO STA. 44+00

City of Winlock
Sewer Extension to Industrial Park
Winlock, Washington

Horizontal Scale: 1"=30'
Vertical Scale: NA
Datum: NAD83/91 NAVD 88
Survey Book: 1656
Project Phase:

Project Milestone:
90%
Revision Date:
3/9/2016

GIBBS & OLSON
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Project Manager: MM
Designed by: ----
CAD by: DM
Checked by: ----
Approved by: ----
Project Number:
08564012
Drawing Number:
C8
Sheet Number:
10 of **----**

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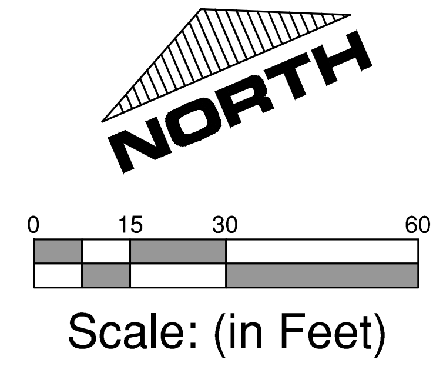

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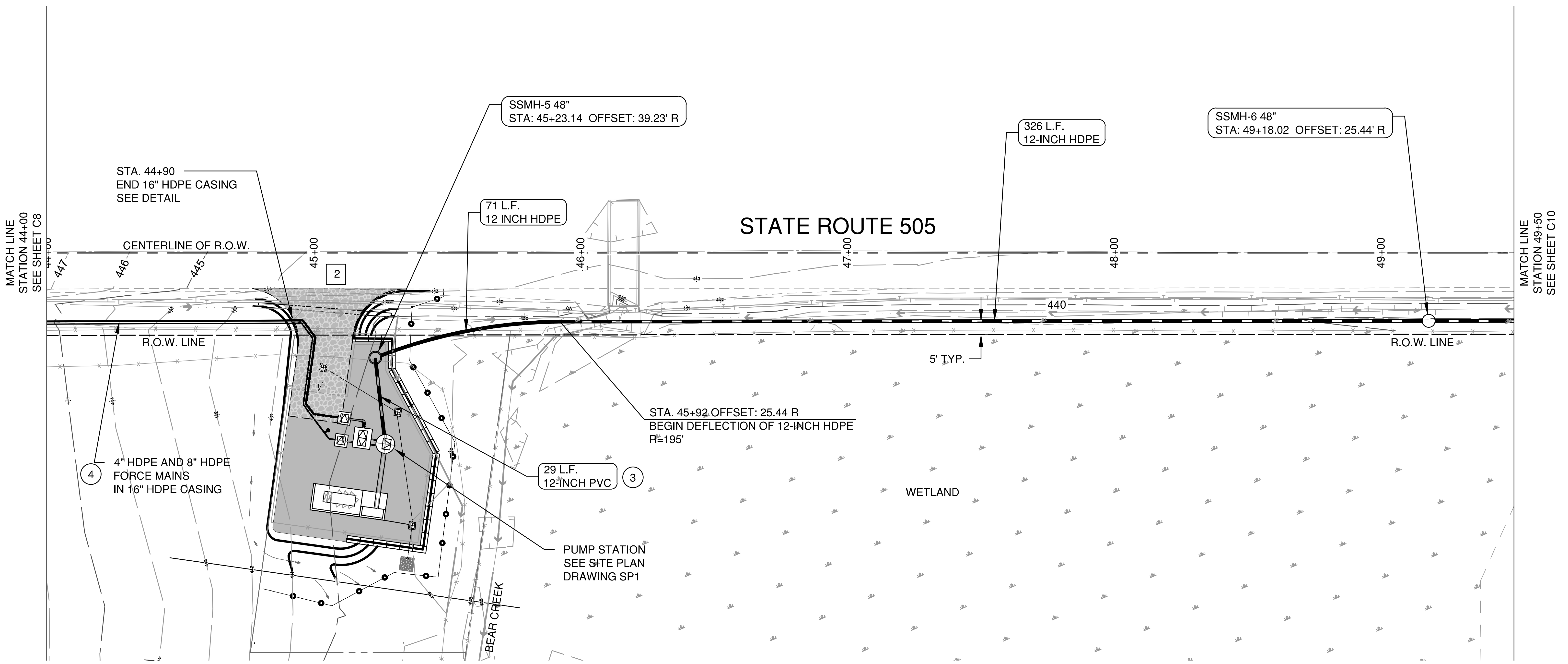
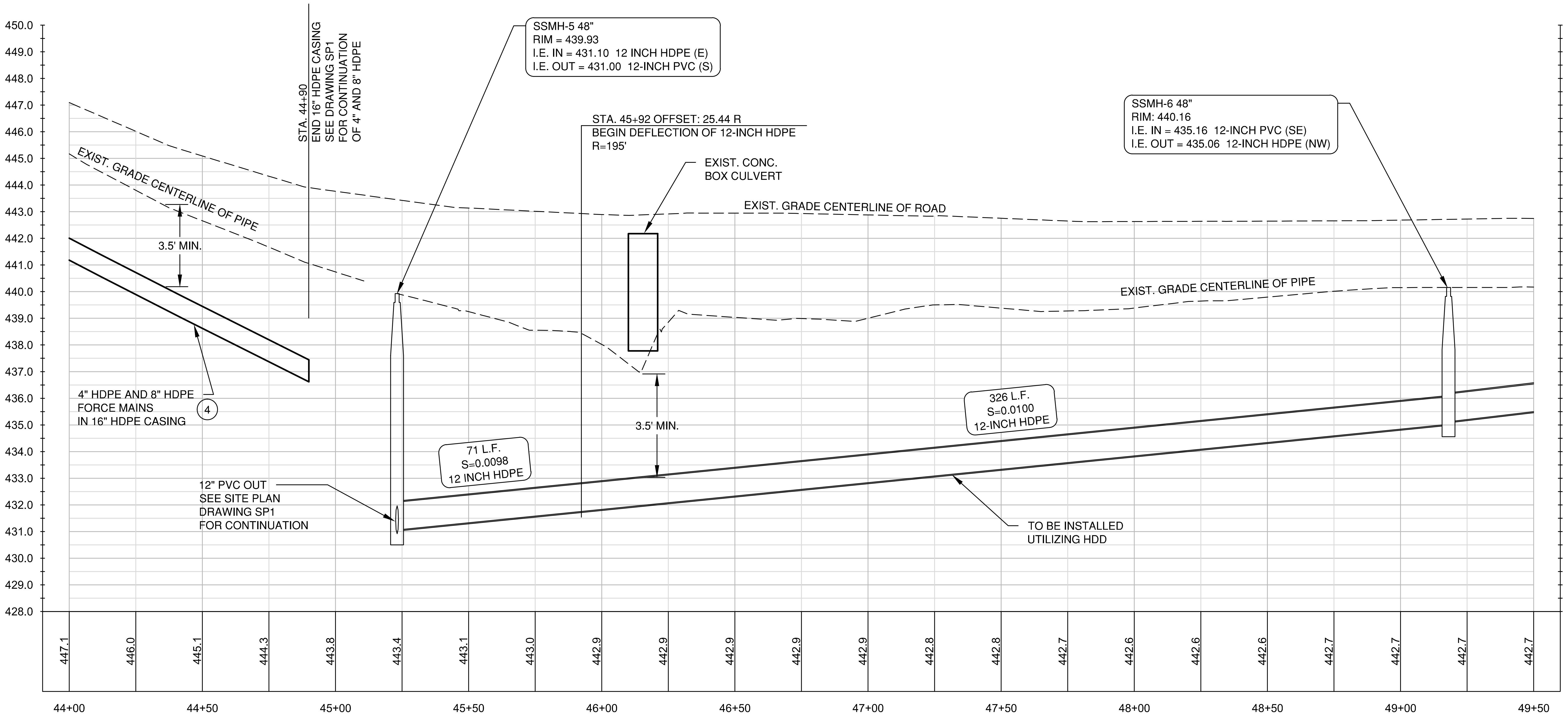

STATE ROUTE 505
MATCH LINE STATION 44+00 SEE SHEET C8
MATCH LINE STATION 49+50 SEE SHEET C10
CENTERLINE OF R.O.W.
R.O.W. LINE
R.O.W. LINE
45+00
46+00
47+00
48+00
49+00
447
446
445
440
2
STA. 44+90 END 16" HDPE CASING SEE DETAIL
SSMH-5 48" STA: 45+23.14 OFFSET: 39.23' R
71 L.F. 12 INCH HDPE
326 L.F. 12-INCH HDPE
SSMH-6 48" STA: 49+18.02 OFFSET: 25.44' R
5' TYP.
STA. 45+92 OFFSET: 25.44 R BEGIN DEFLECTION OF 12-INCH HDPE R=195'
29 L.F. 12-INCH PVC
3
4
4" HDPE AND 8" HDPE FORCE MAINS IN 16" HDPE CASING
WETLAND
PUMP STATION SEE SITE PLAN DRAWING SP1
BEAR CREEK

1 C9 PLAN VIEW
Scale: 1"= 30'


450.0
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447.0
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439.0
438.0
437.0
436.0
435.0
434.0
433.0
432.0
431.0
430.0
429.0
428.0
STA. 44+90 END 16" HDPE CASING SEE DRAWING SP1 FOR CONTINUATION OF 4" AND 8" HDPE
SSMH-5 48"
RIM = 439.93
I.E. IN = 431.10 12 INCH HDPE (E)
I.E. OUT = 431.00 12-INCH PVC (S)
STA. 45+92 OFFSET: 25.44 R
BEGIN DEFLECTION OF 12-INCH HDPE
R=195'
EXIST. CONC. BOX CULVERT
SSMH-6 48"
RIM: 440.16
I.E. IN = 435.16 12-INCH PVC (SE)
I.E. OUT = 435.06 12-INCH HDPE (NW)
EXIST. GRADE CENTERLINE OF PIPE
EXIST. GRADE CENTERLINE OF ROAD
EXIST. GRADE CENTERLINE OF PIPE
3.5' MIN.
3.5' MIN.
4" HDPE AND 8" HDPE FORCE MAINS IN 16" HDPE CASING
4
71 L.F. S=0.0098 12 INCH HDPE
326 L.F. S=0.0100 12-INCH HDPE
12" PVC OUT SEE SITE PLAN DRAWING SP1 FOR CONTINUATION
TO BE INSTALLED UTILIZING HDD
447.1
446.0
445.1
444.3
443.8
443.4
443.1
443.0
442.9
442.9
442.9
442.9
442.9
442.8
442.8
442.7
442.6
442.6
442.6
442.7
442.7
442.7
442.7
44+00
44+50
45+00
45+50
46+00
46+50
47+00
47+50
48+00
48+50
49+00
49+50

2 C9 PROFILE VIEW
Scale: Vert.1"= 3' Horz. 1"=30'

INSTALL

1. CORE DRILL EXIST. MANHOLE AND INSTALL KOR-N-SEAL BOOT.
2. AIR/VAC RELEASE PER DETAIL 1 DRAWING SD1
3. OPEN CUT TRENCHING METHOD FOR SANITARY SEWER CONSTRUCTION.
4. CONTRACTOR'S OPTION TO INSTALL 4" AND 8" HDPE FORCE MAINS IN A 16" HDPE CASING AS SHOWN ON THE DRAWINGS, OR USE HDD TO INSTALL 4" AND 8" HDPE FORCE MAINS WITH NO CASING, PER SPECIFICATION SECTION 02311, AT A DEPTH TO PREVENT BLOW OUT.
5. FLUSHING CONNECTION PER DETAIL DRAWING D2.

SURFACE RESTORATION

1. SAW CUT LINE.
2. HOT MIX ASPHALT PATCH PER STD DETAIL DRAWING
3. CSTC SURFACING, PER STD DETAIL DRAWING
4. HYDROSEED PER SPECIFICATIONS.

NOTE:
CONTRACTOR TO EXPOSE AND CAREFULLY MOVE TWO CENTURYLINK CABLES (NOT IN CONDUITS) OUT OF HARMS WAY PRIOR TO TRENCH EXCAVATION; THEN REINSTALL THEM IN THE PIPE ZONE BACKFILL WITH 24" MINIMUM COVER.

811
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Plan & Profile
STA. 44+00 TO STA. 49+50

City of Winlock
Sewer Extension to Industrial Park
Winlock, Washington

Horizontal Scale: 1"=30'
Vertical Scale: NA
Datum: NAD83/91 NAVD 88
Survey Book: 1656
Project Phase:

Project Milestone:
90%
Revision Date:
3/9/2016

GIBBS & OLSON
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Project Manager: MM
Designed by: ----
CAD by: DM
Checked by: ----
Approved by: ----
Project Number:
08564012
Drawing Number:
C9
Sheet Number:
11 of **----**

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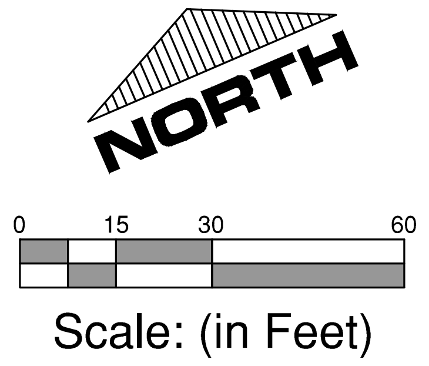
PROFILE: GIBBS & OLSON STANDARD – C3D IMPERIAL 2015, PLOT DEVICE: GIBBS & OLSON – DWG TO PDF.PC3, PLOT STYLE TABLE: GIBBS-OLSON STANDARD MONOCHROME.CTB, PAPER SIZE: GIBBS & OLSON – PLANSHEET D SIZE (34.00 X 22.00 INCHES)



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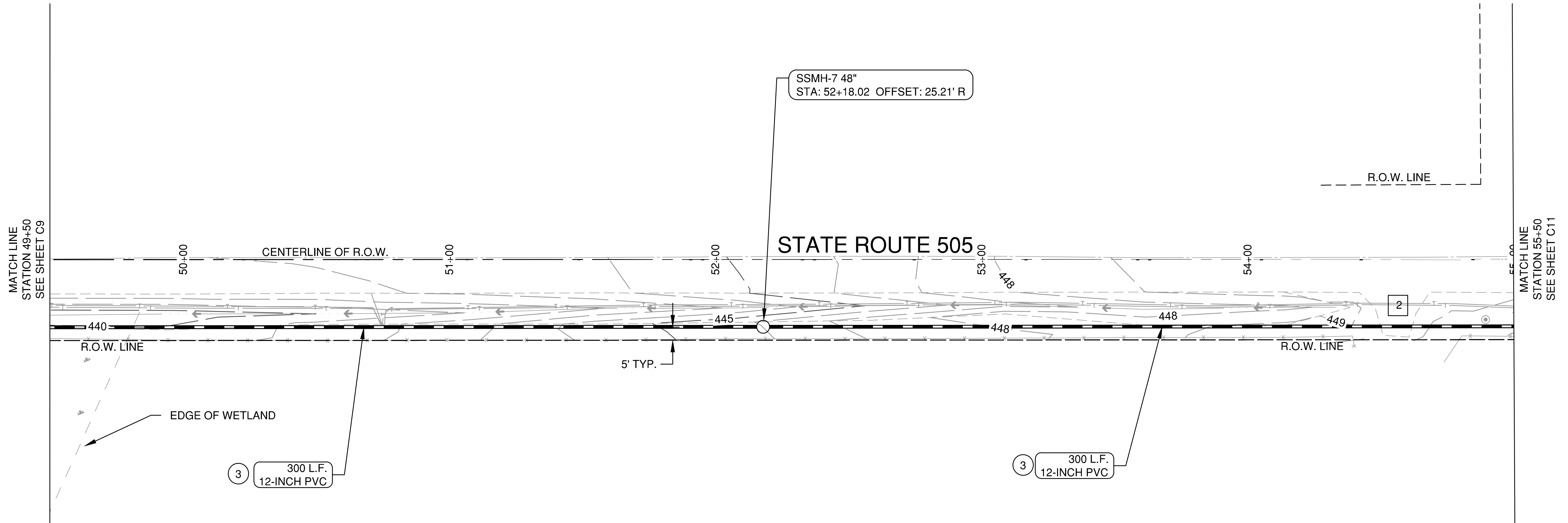

①
C10

PLAN VIEW

Scale: 1"= 30'

INSTALL

1. CORE DRILL EXIST. MANHOLE AND INSTALL KOR-N-SEAL BOOT.
2. AIR/VAC RELEASE PER DETAIL 1 DRAWING SD1
3. OPEN CUT TRENCHING METHOD FOR SANITARY SEWER CONSTRUCTION.
4. CONTRACTOR'S OPTION TO INSTALL 4" AND 8" HDPE FORCE MAINS IN A 16" HDPE CASING AS SHOWN ON THE DRAWINGS, OR USE HDD TO INSTALL 4" AND 8" HDPE FORCE MAINS WITH NO CASING, PER SPECIFICATION SECTION 02311, AT A DEPTH TO PREVENT BLOW OUT.
5. FLUSHING CONNECTION PER DETAIL DRAWING D2.

SURFACE RESTORATION

1. SAW CUT LINE.
2. HOT MIX ASPHALT PATCH PER STD DETAIL DRAWING
3. CSTC SURFACING, PER STD DETAIL DRAWING
4. HYDROSEED PER SPECIFICATIONS.

NOTE:
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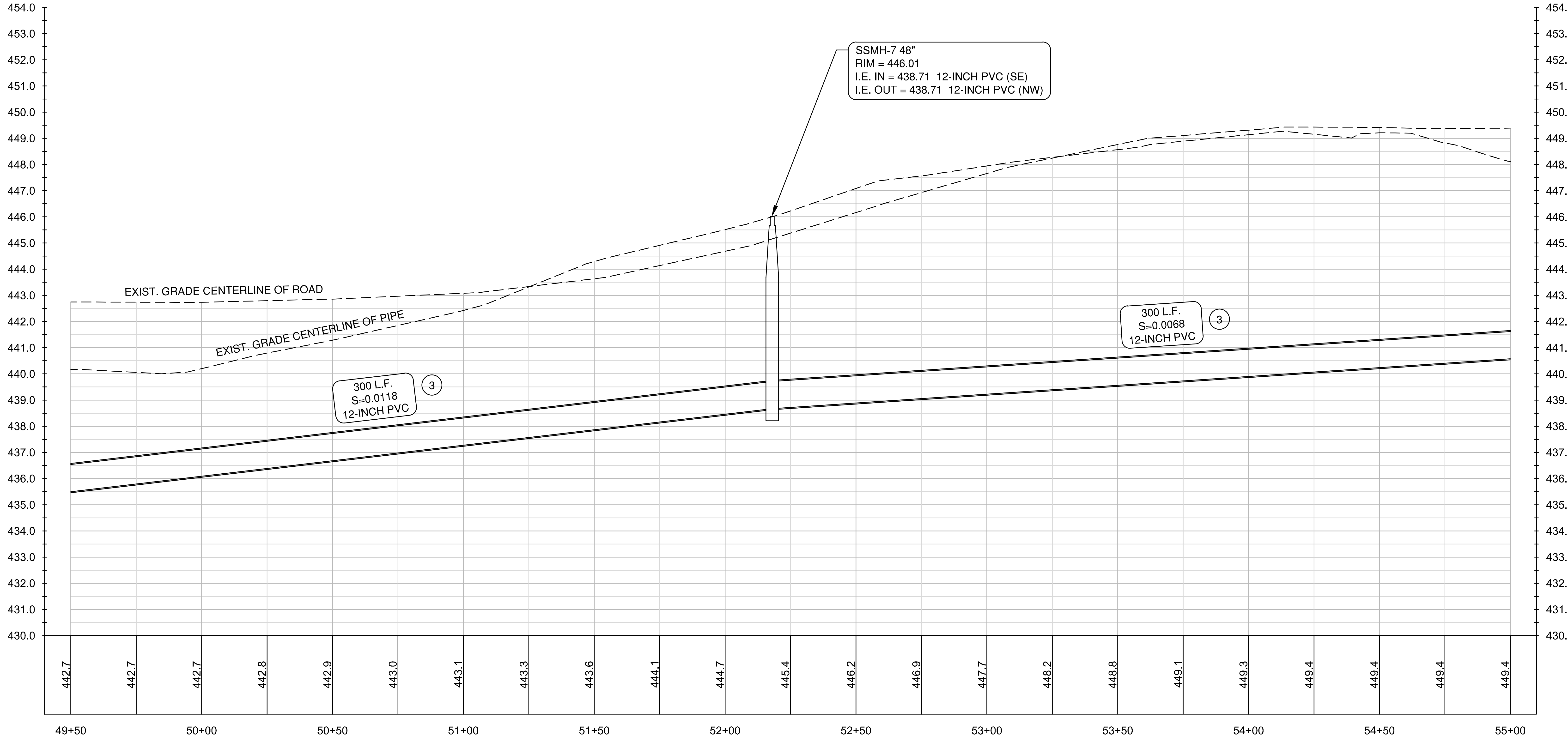


②
C10

PROFILE VIEW

Scale: Vert.1"= 3' Horz. 1"=30'

Plan & Profile

STA. 49+50 TO STA. 55+00

City of Winlock

Sewer Extension to Industrial Park

Winlock, Washington

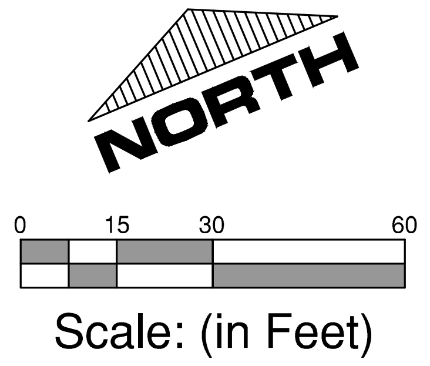
Horizontal Scale: 1"=30'
Vertical Scale: NA
Datum: NAD83/91 NAVD 88
Survey Book: 1656
Project Phase:

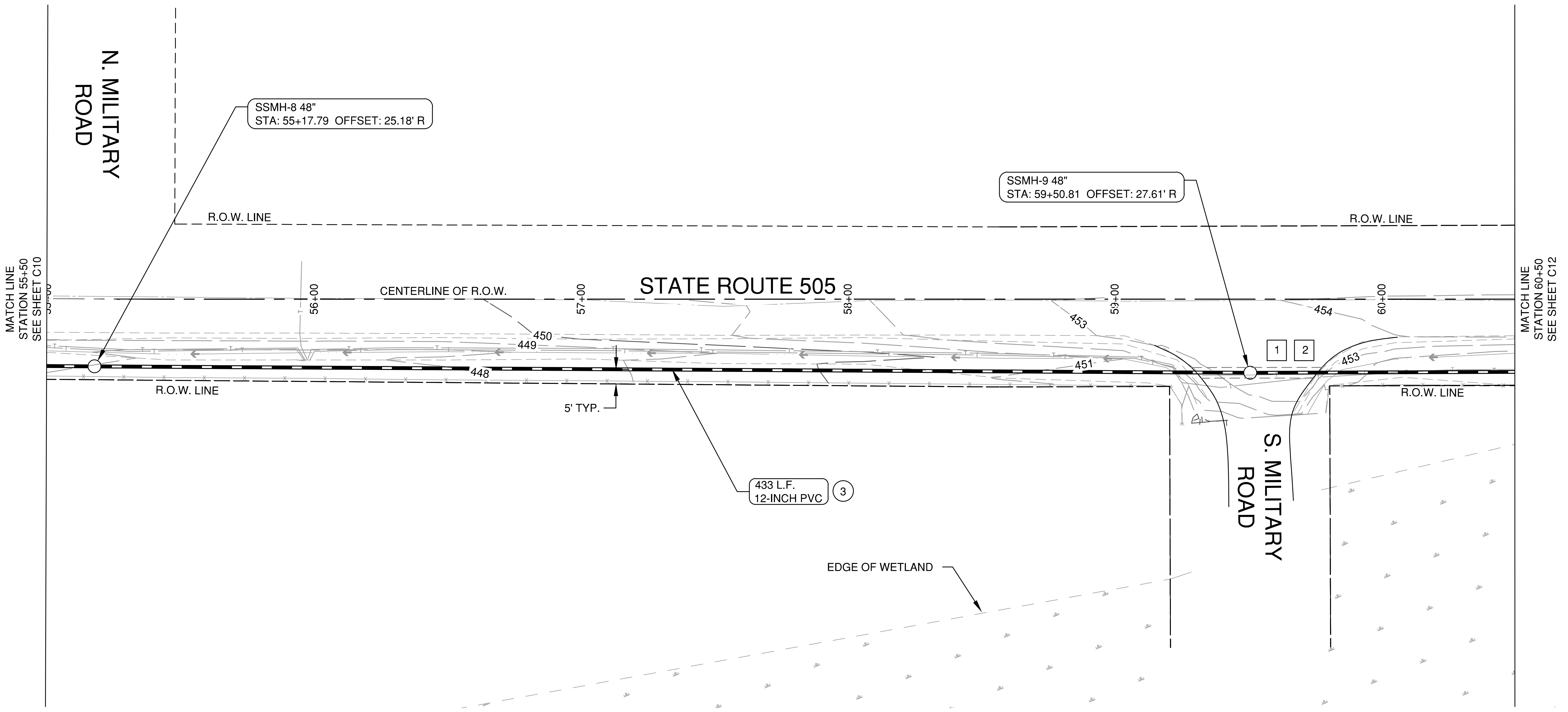
Project Milestone:
90%
Revision Date:
3/9/2016

GIBBS & OLSON
www.gibbs-olson.com

Project Manager: MM
Designed by: ----
CAD by: DM
Checked by: ----
Approved by: ----
Project Number:
08564012
Drawing Number:
C10
Sheet Number:
12 of ----

DRAWING: T:\CIVIL 3D\PROJECTS\08564012.ACT\DESIGN.DWG, LAYOUT TAB: C10, PLOT DATE: 3/9/2016 10:55:26 AM, DRAWING SAVE DATE: 3/8/2016 3:03:10 PM, PLOTTED BY: SMCWILLIAMS
PROFILE: GIBBS & OLSON STANDARD – C3D IMPERIAL 2015, PLOT DEVICE: GIBBS & OLSON – DWG TO PDF.PC3, PLOT STYLE TABLE: GIBBS-OLSON STANDARD MONOCHROME.CTB, PAPER SIZE: GIBBS & OLSON – PLANSHEET D SIZE (34.00 X 22.00 INCHES)





1
C11
PLAN VIEW
Scale: 1"= 30'

INSTALL

1. CORE DRILL EXIST. MANHOLE AND INSTALL KOR-N-SEAL BOOT.
2. AIR/VAC RELEASE PER DETAIL 1 DRAWING SD1
3. OPEN CUT TRENCHING METHOD FOR SANITARY SEWER CONSTRUCTION.
4. CONTRACTOR'S OPTION TO INSTALL 4" AND 8" HDPE FORCE MAINS IN A 16" HDPE CASING AS SHOWN ON THE DRAWINGS, OR USE HDD TO INSTALL 4" AND 8" HDPE FORCE MAINS WITH NO CASING, PER SPECIFICATION SECTION 02311, AT A DEPTH TO PREVENT BLOW OUT.
5. FLUSHING CONNECTION PER DETAIL DRAWING D2.

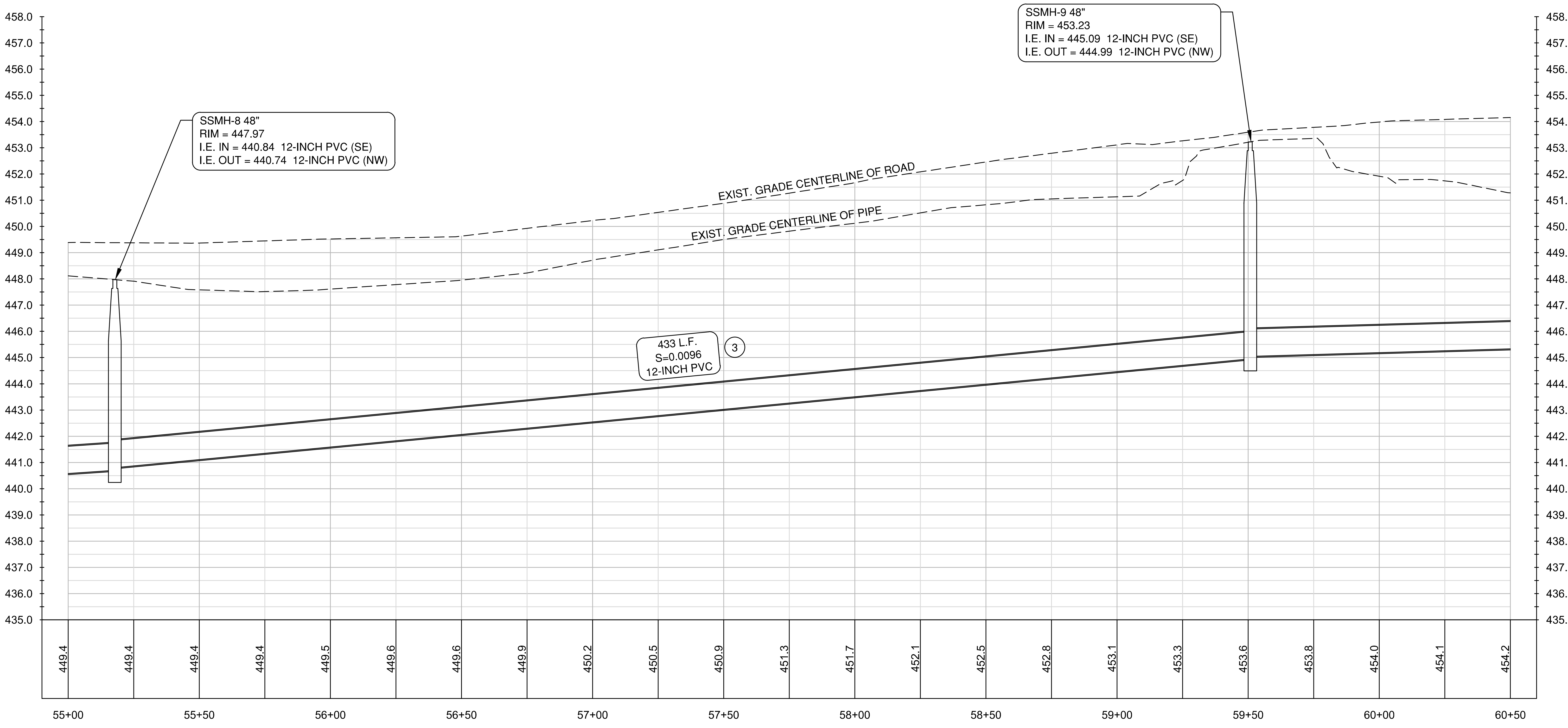
SURFACE RESTORATION

1. SAW CUT LINE.
2. HOT MIX ASPHALT PATCH PER STD DETAIL DRAWING
3. CSTC SURFACING, PER STD DETAIL DRAWING
4. HYDROSEED PER SPECIFICATIONS.

NOTE:
CONTRACTOR TO EXPOSE AND CAREFULLY MOVE TWO CENTURYLINK CABLES (NOT IN CONDUITS) OUT OF HARMS WAY PRIOR TO TRENCH EXCAVATION; THEN REINSTALL THEM IN THE PIPE ZONE BACKFILL WITH 24" MINIMUM COVER.

811
Know what's **below.**
Call 811 before you dig.

CAUTION: LOCATION OF EXISTING UTILITIES SHOWN IS APPROXIMATE AND MAY NOT BE ACCURATE OR ALL INCLUSIVE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY LOCATION AND DEPTH OF UTILITIES PRIOR TO PROCEEDING WITH CONSTRUCTION.



2
C11
PROFILE VIEW
Scale: Vert.1"= 3' Horz. 1"=30'

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PROFILE: GIBBS & OLSON STANDARD – C3D IMPERIAL 2015, PLOT DEVICE: GIBBS & OLSON – DWG TO PDF.PC3, PLOT STYLE TABLE: GIBBS-OLSON STANDARD MONOCHROME.CTB, PAPER SIZE: GIBBS & OLSON – PLANSHEET D SIZE (34.00 X 22.00 INCHES)

Plan & Profile
STA. 55+00 TO STA. 60+50

City of Winlock
Sewer Extension to Industrial Park
Winlock, Washington

Horizontal Scale: 1"=30'
Vertical Scale: NA
Datum: NAD83/91 NAVD 88
Survey Book: 1656
Project Phase:

Project Milestone:
90%
Revision Date:
3/9/2016

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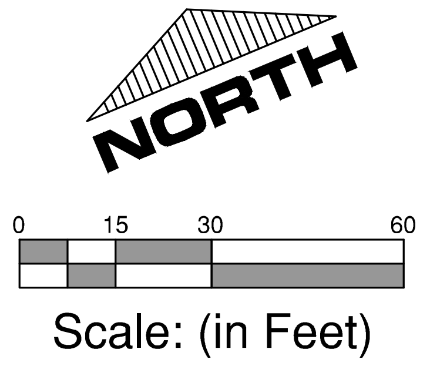
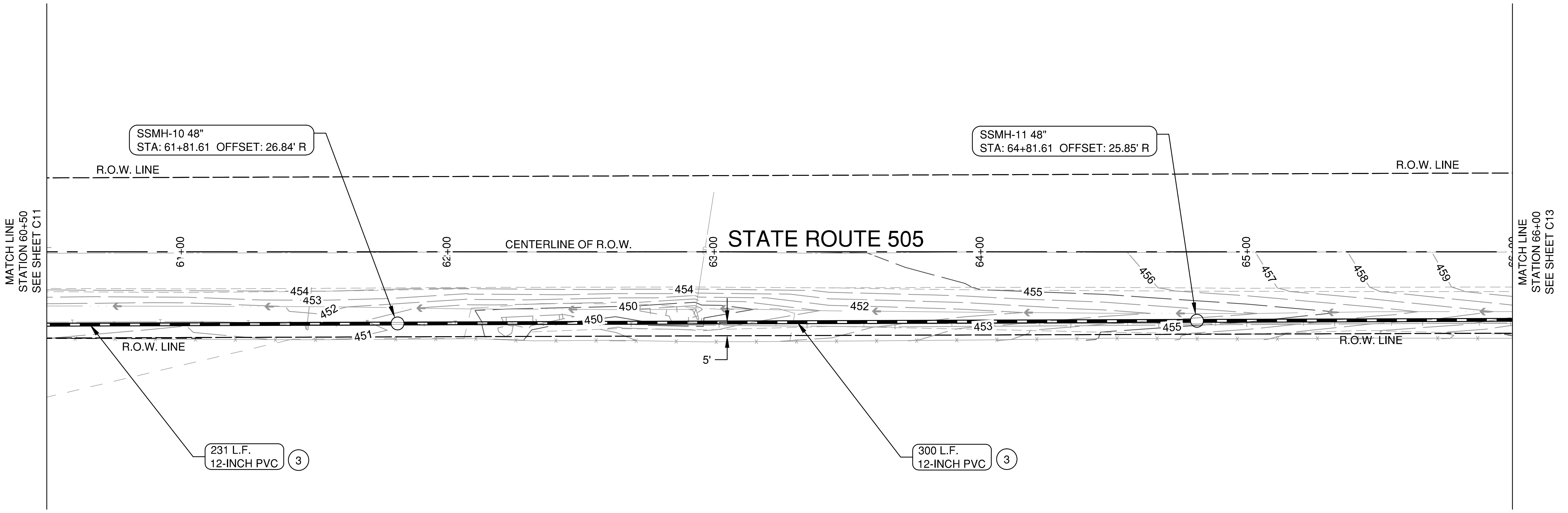
Project Manager: MM
Designed by: ----
CAD by: DM KS
Checked by: ----
Approved by: ----
Project Number:
08564012
Drawing Number:
C11
Sheet Number:
13 of **----**

DRAWING: T:\CIVIL 3D\PROJECTS\08564012.ACT\DESIGN.DWG, LAYOUT TAB: C12, PLOT DATE: 3/9/2016 10:55:46 AM, DRAWING SAVE DATE: 3/8/2016 3:03:10 PM, PLOTTED BY: SMCWILLIAMS
PROFILE: GIBBS & OLSON STANDARD – C3D IMPERIAL 2015, PLOT DEVICE: GIBBS & OLSON – DWG TO PDF.PC3, PLOT STYLE TABLE: GIBBS-OLSON STANDARD MONOCHROME.CTB, PAPER SIZE: GIBBS & OLSON – PLANSHEET D SIZE (34.00 X 22.00 INCHES)





① C12 PLAN VIEW
Scale: 1"= 30'

INSTALL

① CORE DRILL EXIST. MANHOLE AND INSTALL KOR-N-SEAL BOOT.

② AIR/VAC RELEASE PER DETAIL 1 DRAWING SD1

③ OPEN CUT TRENCHING METHOD FOR SANITARY SEWER CONSTRUCTION.

④ CONTRACTOR'S OPTION TO INSTALL 4" AND 8" HDPE FORCE MAINS IN A 16" HDPE CASING AS SHOWN ON THE DRAWINGS, OR USE HDD TO INSTALL 4" AND 8" HDPE FORCE MAINS WITH NO CASING, PER SPECIFICATION SECTION 02311, AT A DEPTH TO PREVENT BLOW OUT.

⑤ FLUSHING CONNECTION PER DETAIL DRAWING D2.

SURFACE RESTORATION

1 SAW CUT LINE.

2 HOT MIX ASPHALT PATCH PER STD DETAIL DRAWING

3 CSTC SURFACING, PER STD DETAIL DRAWING

4 HYDROSEED PER SPECIFICATIONS.

NOTE:
CONTRACTOR TO EXPOSE AND CAREFULLY MOVE TWO CENTURYLINK CABLES (NOT IN CONDUITS) OUT OF HARMS WAY PRIOR TO TRENCH EXCAVATION; THEN REINSTALL THEM IN THE PIPE ZONE BACKFILL WITH 24" MINIMUM COVER.

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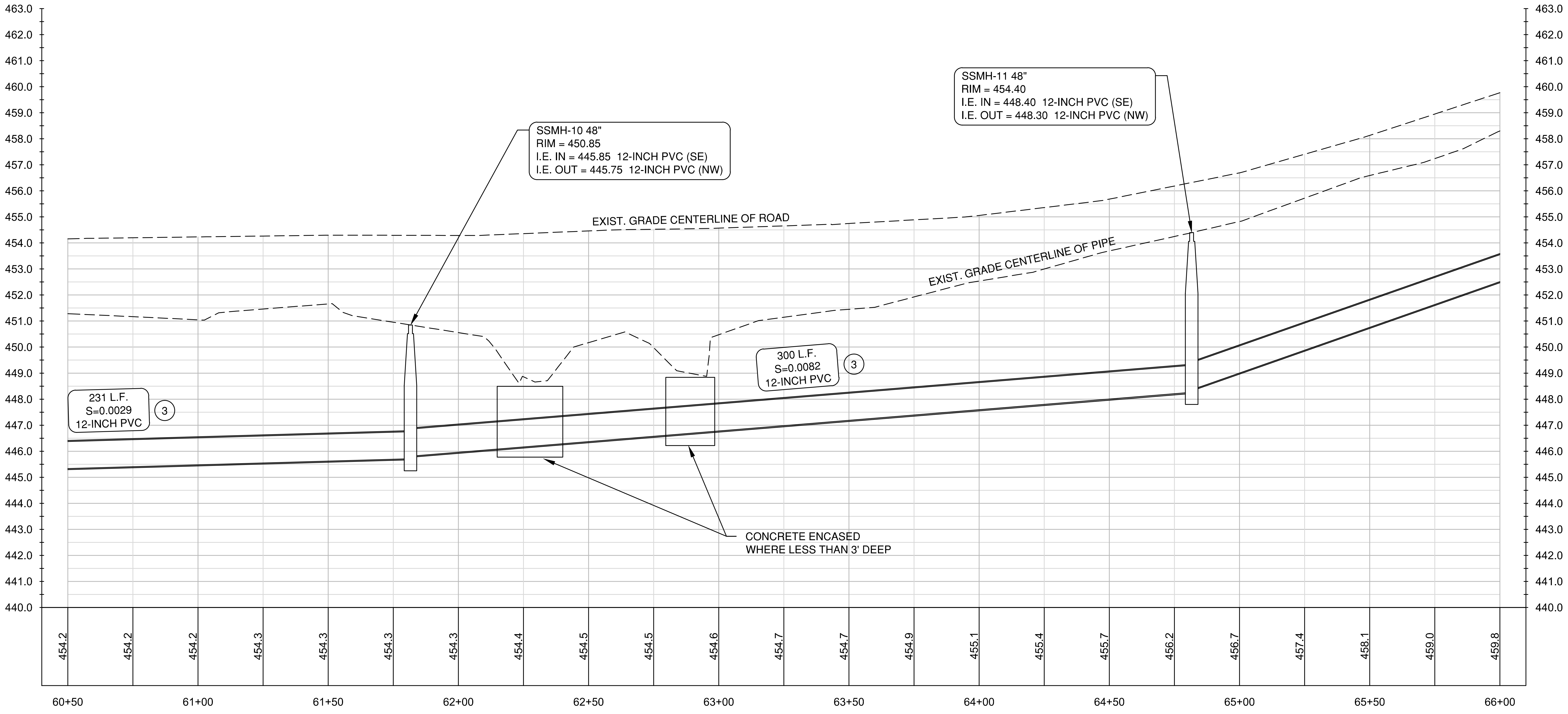

② C12 PROFILE VIEW
Scale: Vert.1"= 3' Horz. 1"=30'

Plan & Profile
STA. 60+50 TO STA. 66+00

City of Winlock
Sewer Extension to Industrial Park
Winlock, Washington

Horizontal Scale: 1"=30'
Vertical Scale: NA
Datum: NAD83/91 NAVD 88
Survey Book: 1656
Project Phase:

Project Milestone:
90%
Revision Date:
3/9/2016

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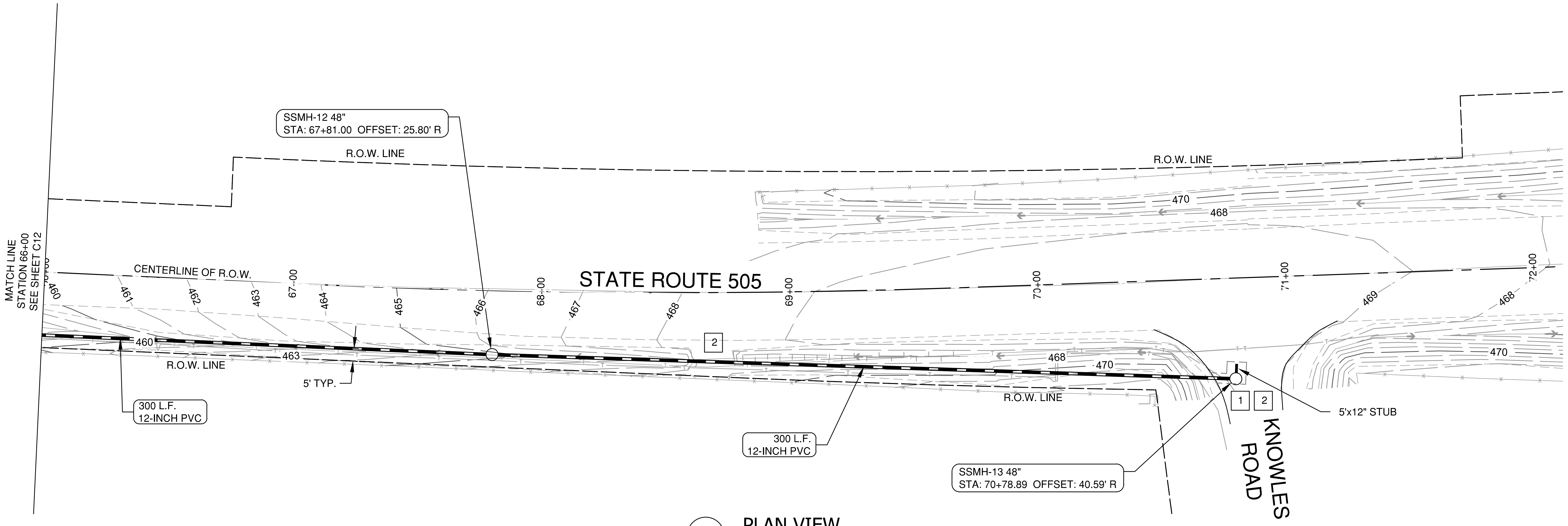
Designed by: ----
CAD by: DM KS
Checked by: ----
Approved by: ----
Project Number:
08564012
Drawing Number:
C12
Sheet Number:
14 of **----**

NORTH

0 15 30 60

Scale: (in Feet)



1 C13 PLAN VIEW
Scale: 1"= 30'

INSTALL

① CORE DRILL EXIST. MANHOLE AND INSTALL KOR-N-SEAL BOOT.

② AIR/VAC RELEASE PER DETAIL 1 DRAWING SD1

③ OPEN CUT TRENCHING METHOD FOR SANITARY SEWER CONSTRUCTION.

④ CONTRACTOR'S OPTION TO INSTALL 4" AND 8" HDPE FORCE MAINS IN A 16" HDPE CASING AS SHOWN ON THE DRAWINGS, OR USE HDD TO INSTALL 4" AND 8" HDPE FORCE MAINS WITH NO CASING, PER SPECIFICATION SECTION 02311, AT A DEPTH TO PREVENT BLOW OUT.

⑤ FLUSHING CONNECTION PER DETAIL DRAWING D2.

SURFACE RESTORATION

1 SAW CUT LINE.

2 HOT MIX ASPHALT PATCH PER STD DETAIL DRAWING

3 CSTC SURFACING, PER STD DETAIL DRAWING

4 HYDROSEED PER SPECIFICATIONS.

NOTE:
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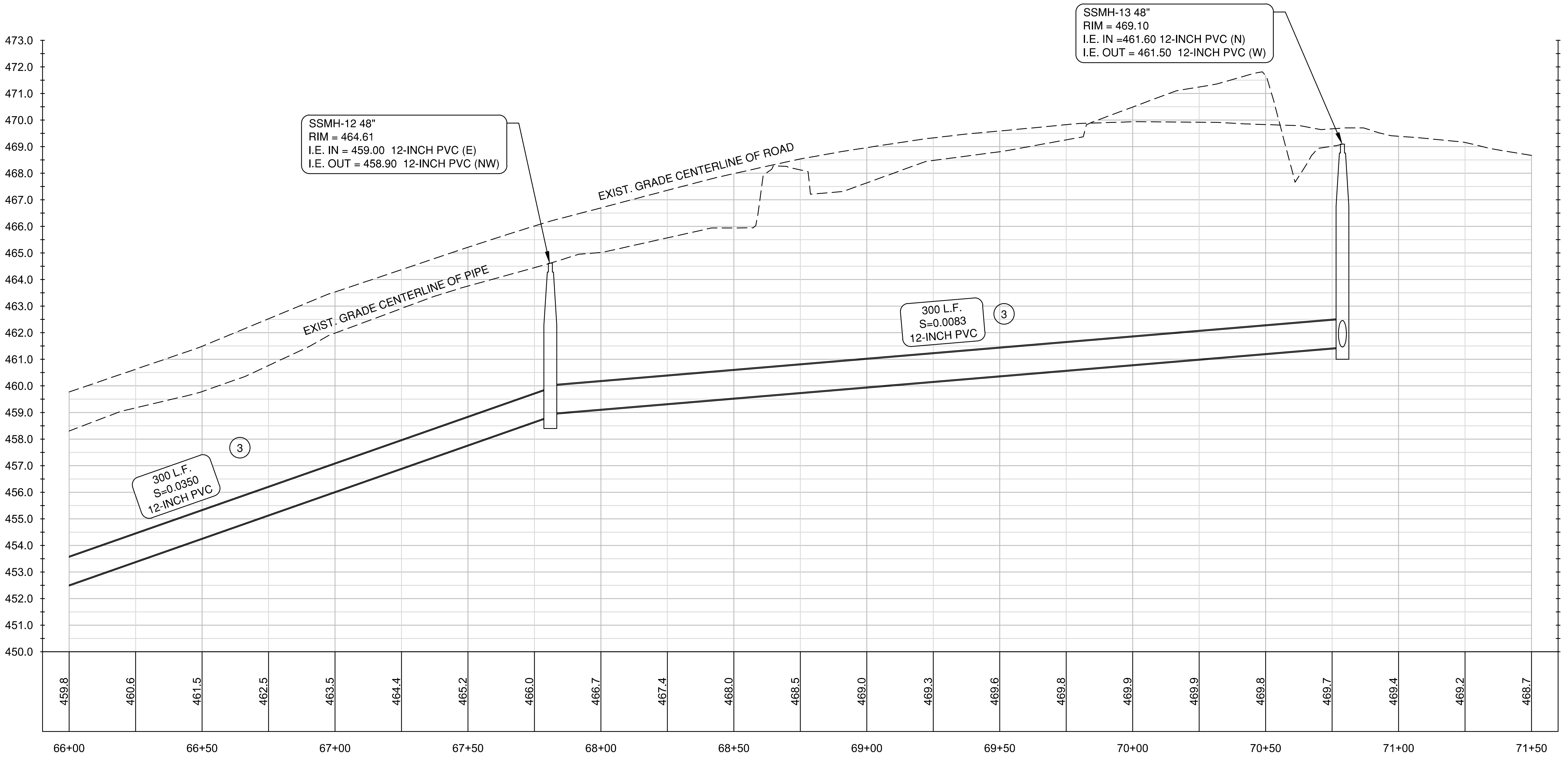

2 C13 PROFILE VIEW
Scale: Vert.1"= 3' Horz. 1"=30'

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Plan & Profile
STA. 66+00 TO STA. 70+79.75

City of Winlock
Sewer Extension to Industrial Park
Winlock, Washington

Horizontal Scale: 1"=30'
Vertical Scale: NA
Datum: NAD83/91 NAVD 88
Survey Book: 1656
Project Phase:

Project Milestone:
90%
Revision Date:
3/9/2016

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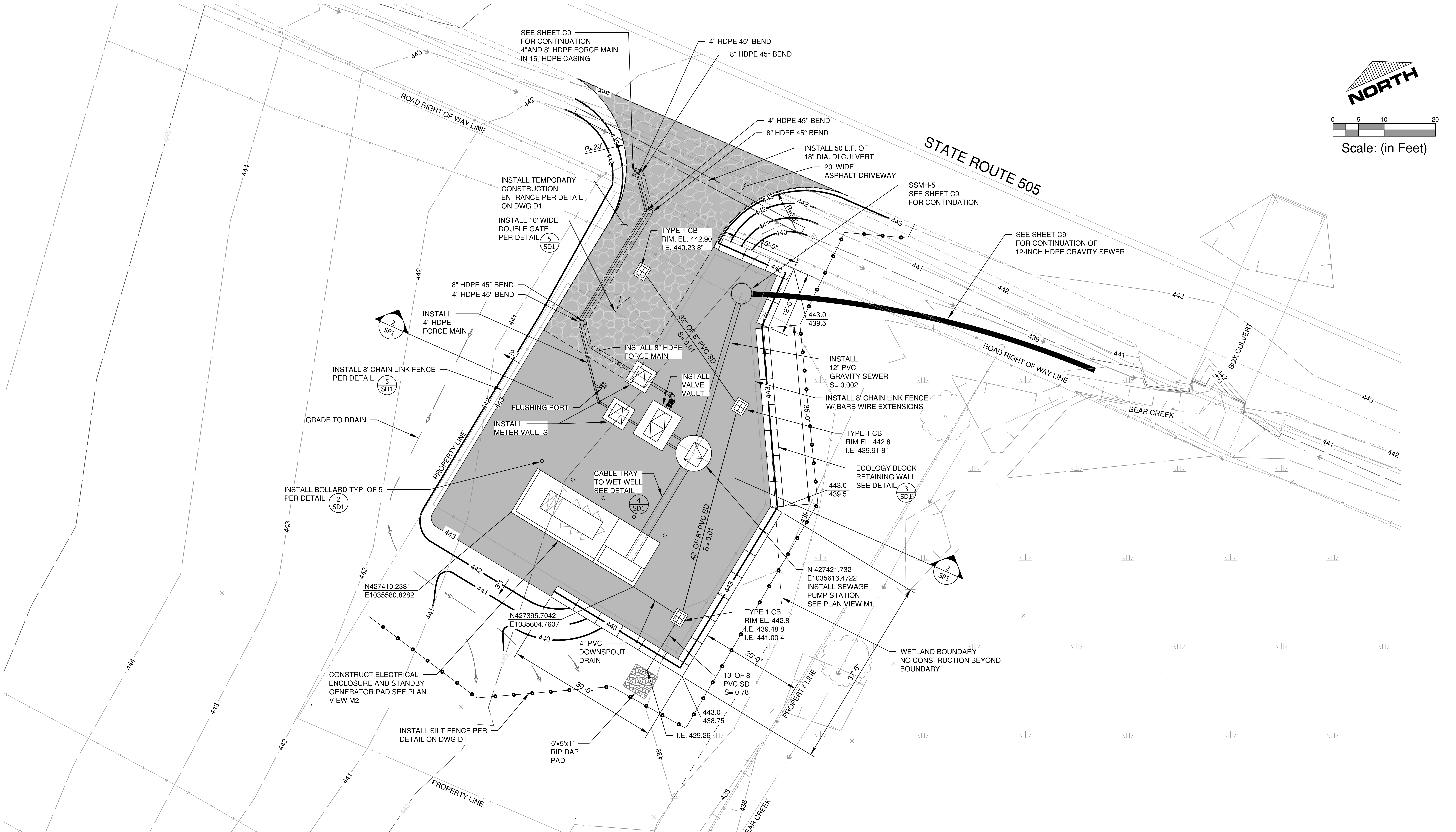
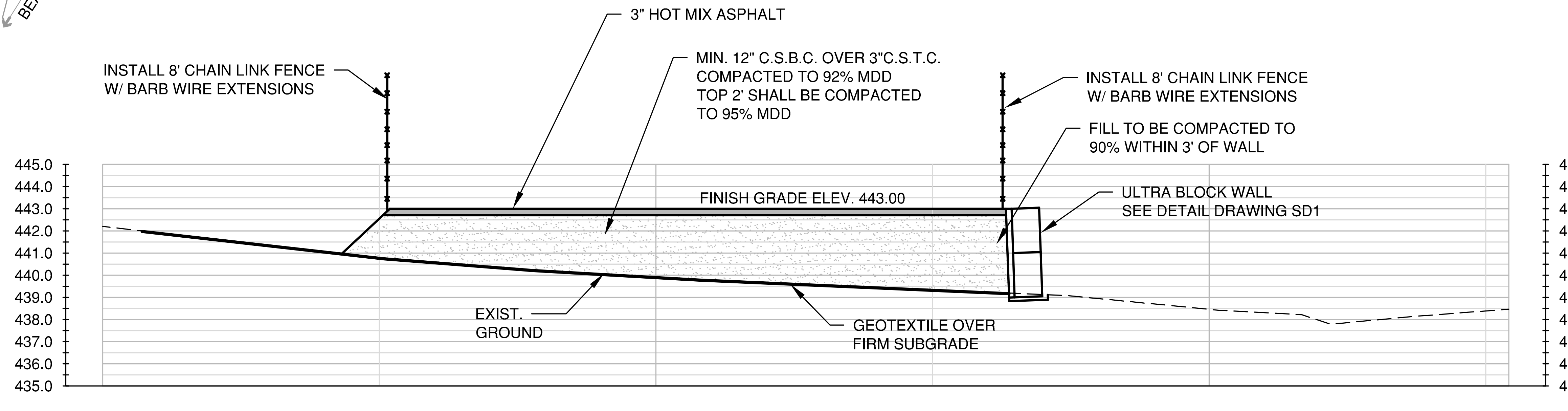
Project Manager: MM
Designed by: ----
CAD by: DM KS
Checked by: ----
Approved by: ----
Project Number:
08564012
Drawing Number:
C13
Sheet Number:
15 of **----**



1/SP1 **SITE PLAN**
Scale: 1"= 10'



2/SP1 **TYPICAL X-SECTION**
Scale: Vert. 1"=2' Horz.1"= 10'

Pump Station
Site Plan

City of Winlock
Sewer Extension to Industrial Park
Winlock, Washington

Horizontal Scale: 1"=30'
Vertical Scale: NA
Datum: NAD83/91 NAVD 88
Survey Book: 1656
Project Phase:

Project Milestone:
90%
Revision Date:
3/9/2016

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Project Manager: MM
Designed by: JJ
CAD by: DM KS
Checked by: MM
Approved by: ----
Project Number:
08564012
Drawing Number:
SP1
Sheet Number:
16 of **----**

DRAWING: T:\CIVIL 3D\PROJECTS\08564012.ACT\PUMP STATION\SITE PLAN.DWG, LAYOUT TAB: SP1, PLOT DATE: 3/9/2016 2:10:02 PM, DRAWING SAVE DATE: 3/9/2016 2:08:44 PM, PLOTTED BY: SMCWILLIAMS
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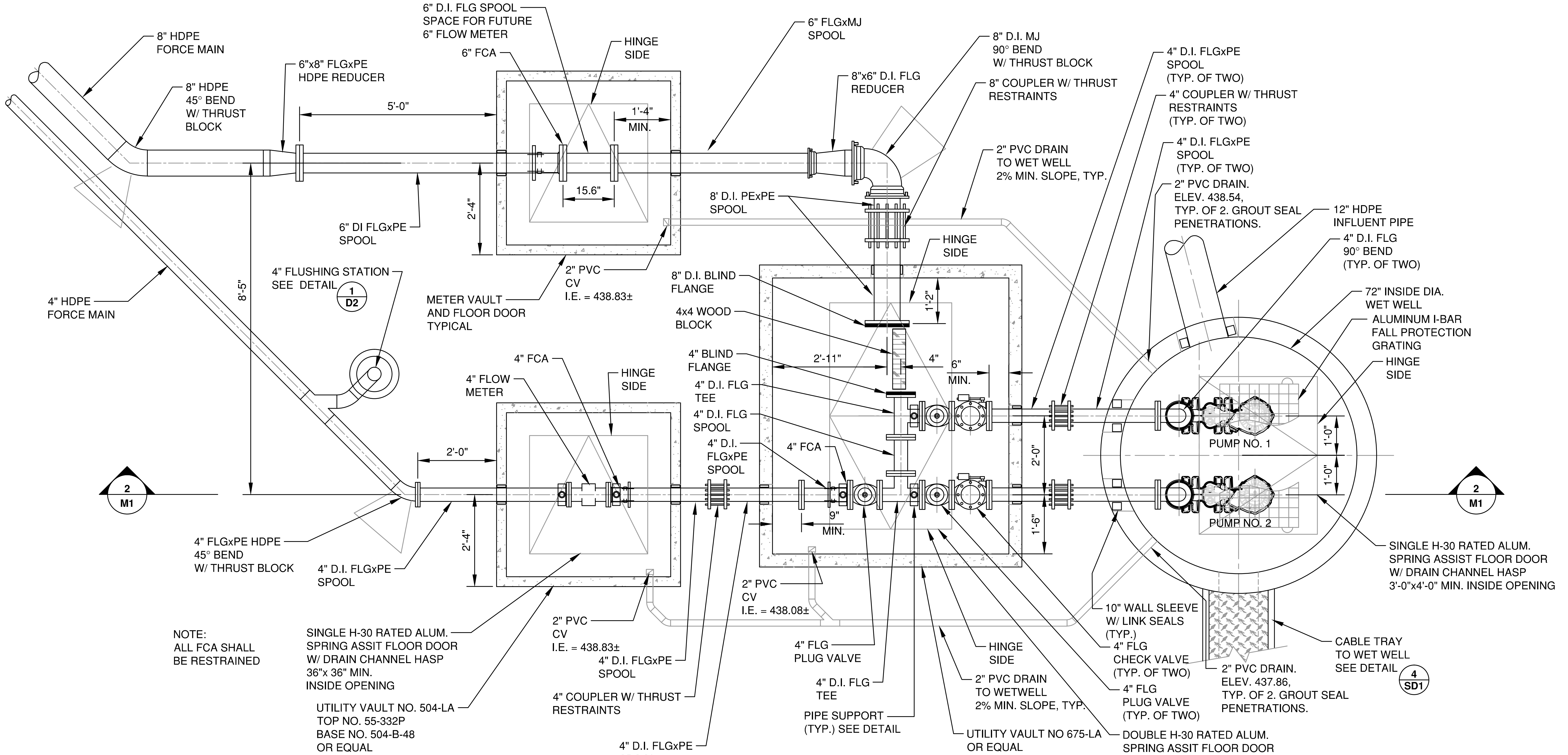
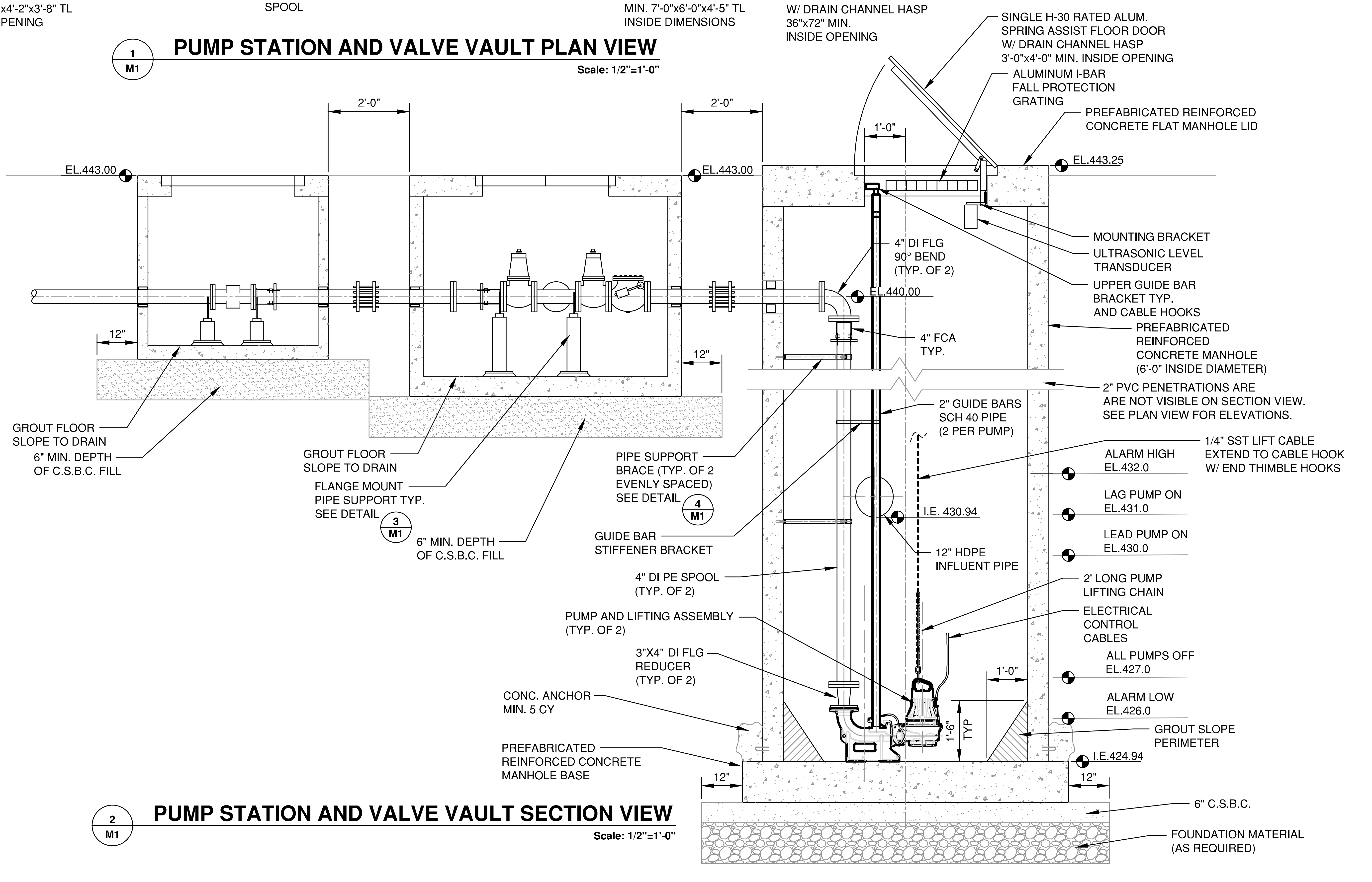

8" HDPE FORCE MAIN
6" D.I. FLG SPOOL SPACE FOR FUTURE 6" FLOW METER
6" FCA
HINGE SIDE
6"x8" FLGxPE HDPE REDUCER
8" HDPE 45° BEND W/ THRUST BLOCK
5'-0"
1'-4" MIN.
15.6"
6" FLGxMJ SPOOL
8" D.I. MJ 90° BEND W/ THRUST BLOCK
8"x6" D.I. FLG REDUCER
8" COUPLER W/ THRUST RESTRAINTS
4" D.I. FLGxPE SPOOL (TYP. OF TWO)
4" COUPLER W/ THRUST RESTRAINTS (TYP. OF TWO)
4" D.I. FLGxPE SPOOL (TYP. OF TWO)
2" PVC DRAIN. ELEV. 438.54, TYP. OF 2. GROUT SEAL PENETRATIONS.
2" PVC DRAIN TO WET WELL 2% MIN. SLOPE, TYP.
6" DI FLGxPE SPOOL
2'-4"
8'-5"
8' D.I. PExPE SPOOL
HINGE SIDE
4" HDPE FORCE MAIN
4" FLUSHING STATION SEE DETAIL 1 D2
METER VAULT AND FLOOR DOOR TYPICAL
2" PVC CV I.E. = 438.83±
8" D.I. BLIND FLANGE
4x4 WOOD BLOCK
1'-2"
12" HDPE INFLUENT PIPE
4" D.I. FLG 90° BEND (TYP. OF TWO)
72" INSIDE DIA. WET WELL
ALUMINUM I-BAR FALL PROTECTION GRATING
HINGE SIDE
4" FCA
4" FLOW METER
HINGE SIDE
4" BLIND FLANGE
2'-11"
4"
6" MIN.
4" D.I. FLG TEE
4" D.I. FLG SPOOL
4" D.I. FLGxPE SPOOL
4" FCA
PUMP NO. 1
1'-0"
2'-0"
1'-0"
PUMP NO. 2
2 M1
2'-0"
9" MIN.
1'-6"
2 M1
4" FLGxPE HDPE 45° BEND W/ THRUST BLOCK
4" D.I. FLGxPE SPOOL
2'-4"
SINGLE H-30 RATED ALUM. SPRING ASSIST FLOOR DOOR W/ DRAIN CHANNEL HASP 3'-0"x4'-0" MIN. INSIDE OPENING
NOTE: ALL FCA SHALL BE RESTRAINED
SINGLE H-30 RATED ALUM. SPRING ASSIT FLOOR DOOR W/ DRAIN CHANNEL HASP 36"x 36" MIN. INSIDE OPENING
2" PVC CV I.E. = 438.08±
2" PVC CV I.E. = 438.83±
4" D.I. FLGxPE SPOOL
4" FLG PLUG VALVE
4" COUPLER W/ THRUST RESTRAINTS
UTILITY VAULT NO. 504-LA TOP NO. 55-332P BASE NO. 504-B-48 OR EQUAL MIN. 4'-2"x4'-2"x3'-8" TL INSIDE OPENING
4" D.I. FLG TEE
PIPE SUPPORT (TYP.) SEE DETAIL
4" D.I. FLGxPE SPOOL
HINGE SIDE
2" PVC DRAIN TO WETWELL 2% MIN. SLOPE, TYP.
UTILITY VAULT NO 675-LA OR EQUAL MIN. 7'-0"x6'-0"x4'-5" TL INSIDE DIMENSIONS
10" WALL SLEEVE W/ LINK SEALS (TYP.)
4" FLG CHECK VALVE (TYP. OF TWO)
4" FLG PLUG VALVE (TYP. OF TWO)
2" PVC DRAIN. ELEV. 437.86, TYP. OF 2. GROUT SEAL PENETRATIONS.
CABLE TRAY TO WET WELL SEE DETAIL 4 SD1
DOUBLE H-30 RATED ALUM. SPRING ASSIT FLOOR DOOR W/ DRAIN CHANNEL HASP 36"x72" MIN. INSIDE OPENING

1 M1

PUMP STATION AND VALVE VAULT PLAN VIEW

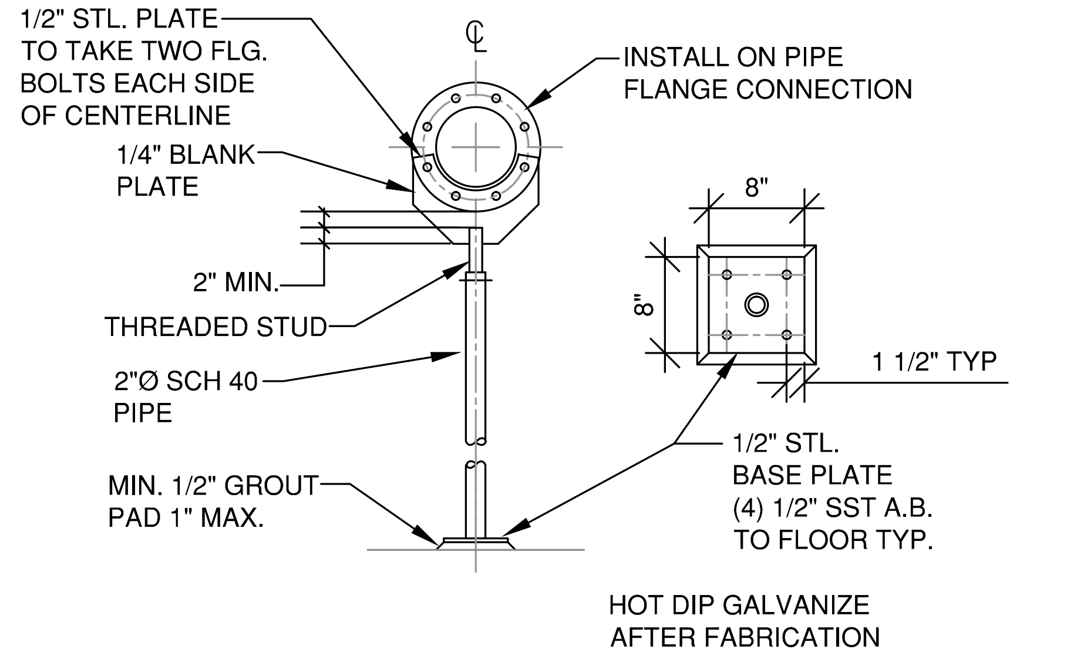
Scale: 1/2"=1'-0"


SINGLE H-30 RATED ALUM. SPRING ASSIST FLOOR DOOR W/ DRAIN CHANNEL HASP 3'-0"x4'-0" MIN. INSIDE OPENING
ALUMINUM I-BAR FALL PROTECTION GRATING
PREFABRICATED REINFORCED CONCRETE FLAT MANHOLE LID
2'-0"
2'-0"
1'-0"
EL.443.00
EL.443.00
EL.443.25
MOUNTING BRACKET
ULTRASONIC LEVEL TRANSDUCER
UPPER GUIDE BAR BRACKET TYP. AND CABLE HOOKS
4" DI FLG 90° BEND (TYP. OF 2)
EL.440.00
PREFABRICATED REINFORCED CONCRETE MANHOLE (6'-0" INSIDE DIAMETER)
4" FCA TYP.
12"
12"
2" PVC PENETRATIONS ARE ARE NOT VISIBLE ON SECTION VIEW. SEE PLAN VIEW FOR ELEVATIONS.
2" GUIDE BARS SCH 40 PIPE (2 PER PUMP)
1/4" SST LIFT CABLE EXTEND TO CABLE HOOK W/ END THIMBLE HOOKS
ALARM HIGH EL.432.0
LAG PUMP ON EL.431.0
LEAD PUMP ON EL.430.0
I.E. 430.94
12" HDPE INFLUENT PIPE
GROUT FLOOR SLOPE TO DRAIN
6" MIN. DEPTH OF C.S.B.C. FILL
GROUT FLOOR SLOPE TO DRAIN
FLANGE MOUNT PIPE SUPPORT TYP. SEE DETAIL 3 M1
6" MIN. DEPTH OF C.S.B.C. FILL
PIPE SUPPORT BRACE (TYP. OF 2 EVENLY SPACED) SEE DETAIL 4 M1
GUIDE BAR STIFFENER BRACKET
4" DI PE SPOOL (TYP. OF 2)
PUMP AND LIFTING ASSEMBLY (TYP. OF 2)
3"X4" DI FLG REDUCER (TYP. OF 2)
2' LONG PUMP LIFTING CHAIN
ELECTRICAL CONTROL CABLES
ALL PUMPS OFF EL.427.0
1'-0"
ALARM LOW EL.426.0
1'-6" TYP
GROUT SLOPE PERIMETER
CONC. ANCHOR MIN. 5 CY
PREFABRICATED REINFORCED CONCRETE MANHOLE BASE
I.E.424.94
12"
12"
6" C.S.B.C.
FOUNDATION MATERIAL (AS REQUIRED)

2 M1

PUMP STATION AND VALVE VAULT SECTION VIEW

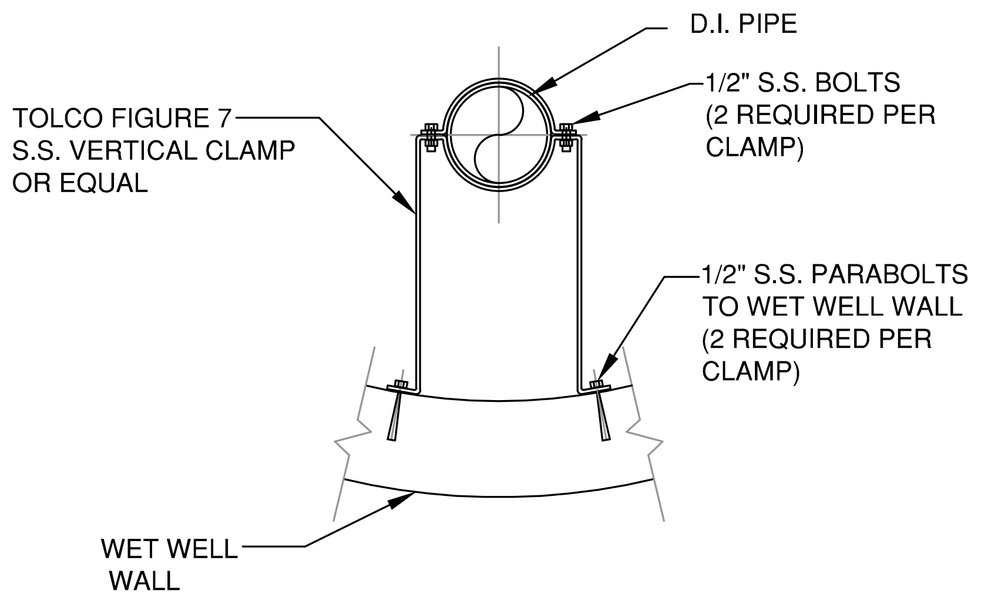
Scale: 1/2"=1'-0"


1/2" STL. PLATE TO TAKE TWO FLG. BOLTS EACH SIDE OF CENTERLINE
℄
INSTALL ON PIPE FLANGE CONNECTION
1/4" BLANK PLATE
8"
8"
2" MIN.
THREADED STUD
1 1/2" TYP
2"Ø SCH 40 PIPE
1/2" STL. BASE PLATE (4) 1/2" SST A.B. TO FLOOR TYP.
MIN. 1/2" GROUT PAD 1" MAX.
HOT DIP GALVANIZE AFTER FABRICATION

3 M1

FLANGE MOUNT PIPE SUPPORT DETAIL

Scale: N.T.S.


D.I. PIPE
TOLCO FIGURE 7 S.S. VERTICAL CLAMP OR EQUAL
1/2" S.S. BOLTS (2 REQUIRED PER CLAMP)
1/2" S.S. PARABOLTS TO WET WELL WALL (2 REQUIRED PER CLAMP)
WET WELL WALL

4 M1

PIPE SUPPORT BRACE DETAIL

Scale: N.T.S.

Pump Station
Plan and Details

City of Winlock
Sewer Extension to Industrial Park
Winlock, Washington

Horizontal Scale: 1"=30'
Vertical Scale: NA
Datum: NAD83/91 NAVD 88
Survey Book: 1656
Project Phase:

Project Milestone:
90%
Revision Date:
3/9/2016

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Project Manager: MM
Designed by: ----
CAD by: DM
Checked by: ----
Approved by: ----
Project Number:
08564012
Drawing Number:
M1
Sheet Number:
17 of ----

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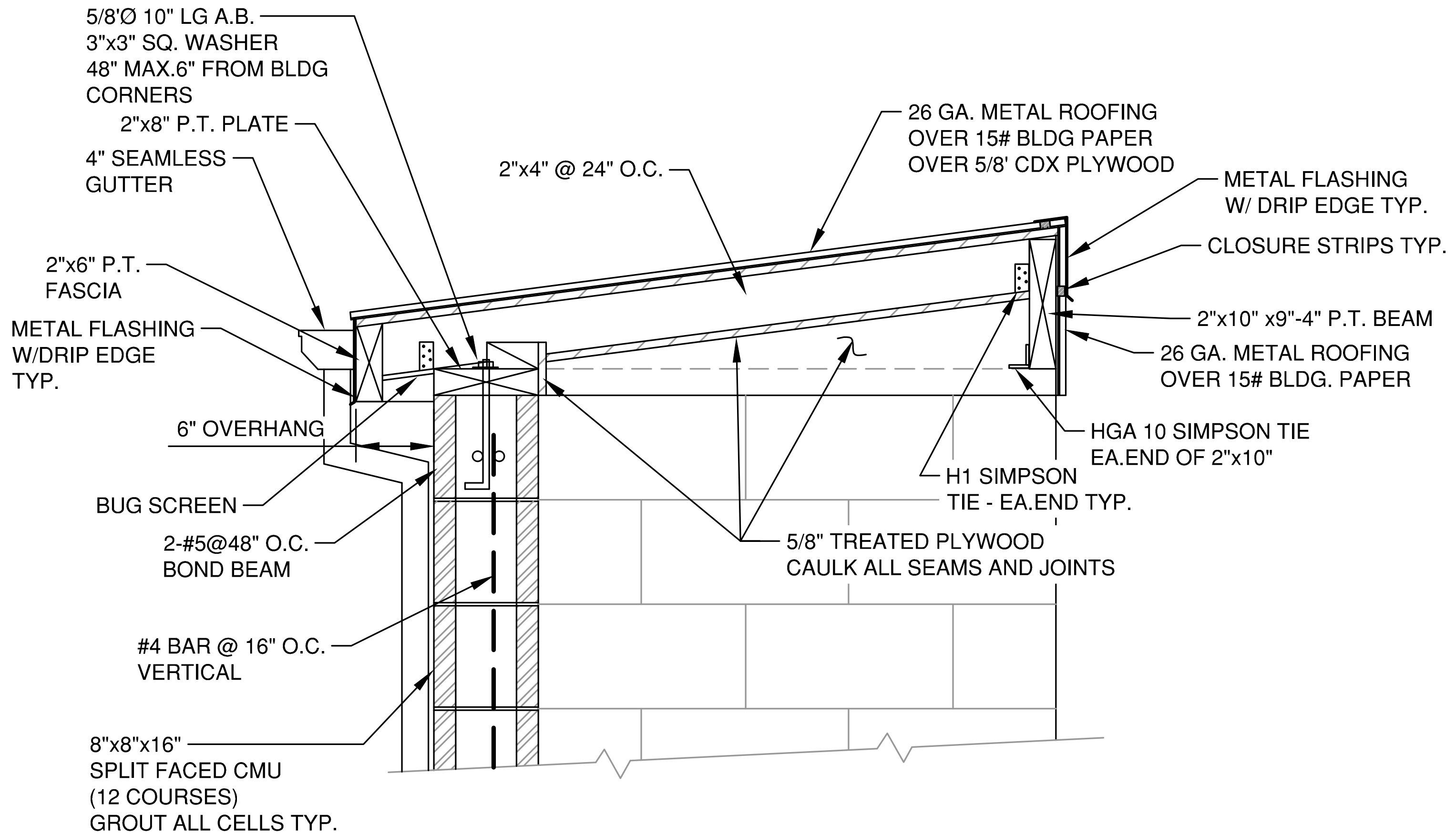
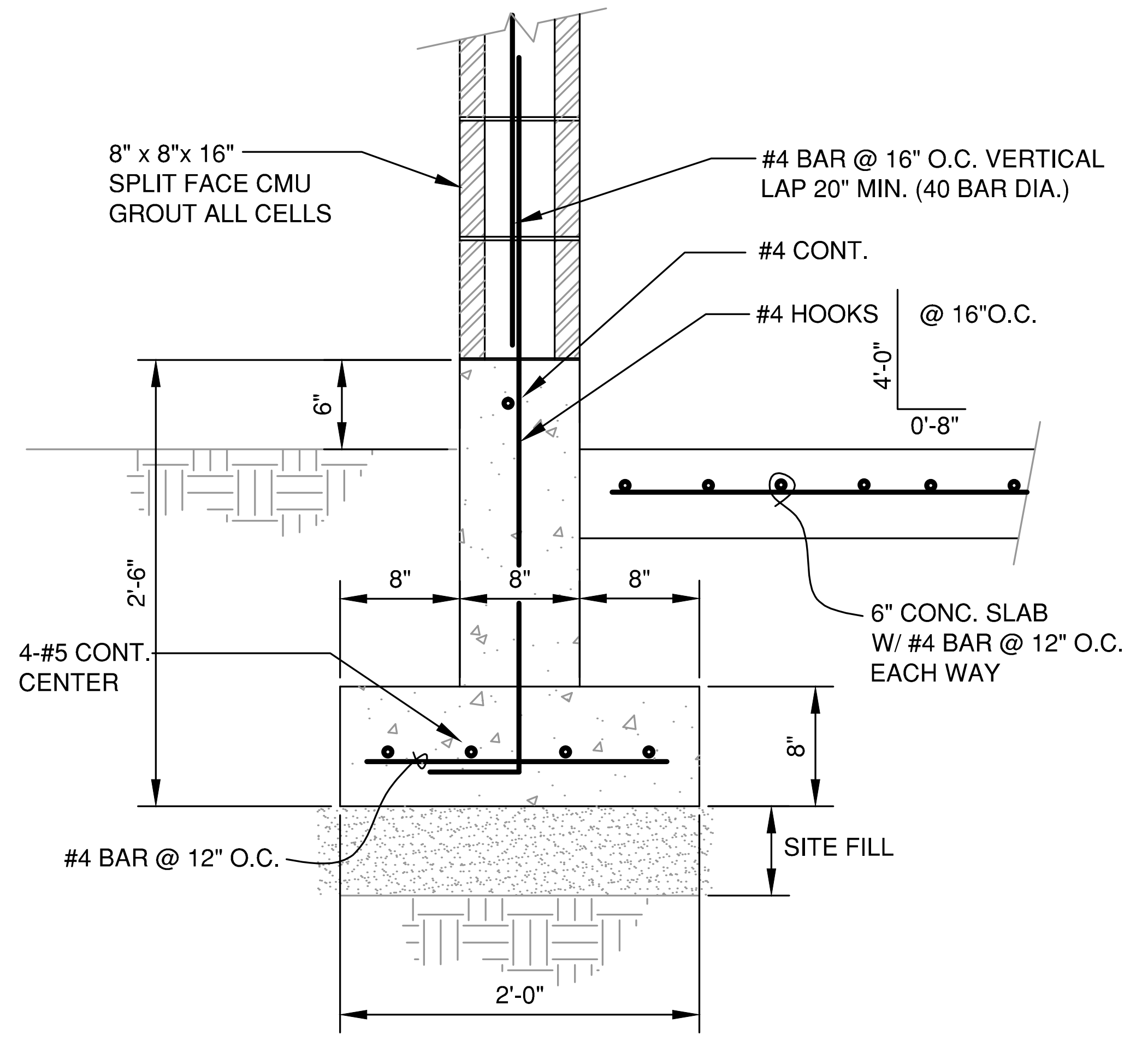
PROFILE: GIBBS & OLSON STANDARD – C3D IMPERIAL 2015, PLOT DEVICE: GIBBS & OLSON – DWG TO PDF.PC3, PLOT STYLE TABLE: GIBBS-OLSON STANDARD MONOCHROME.CTB, PAPER SIZE: GIBBS & OLSON – PLANSHEET D SIZE (34.00 X 22.00 INCHES)


5/8"Ø 10" LG A.B.
3"x3" SQ. WASHER
48" MAX.6" FROM BLDG CORNERS
2"x8" P.T. PLATE
4" SEAMLESS GUTTER
2"x6" P.T. FASCIA
METAL FLASHING W/DRIP EDGE TYP.
6" OVERHANG
BUG SCREEN
2-#5@48" O.C. BOND BEAM
#4 BAR @ 16" O.C. VERTICAL
8"x8"x16" SPLIT FACED CMU (12 COURSES) GROUT ALL CELLS TYP.
2"x4" @ 24" O.C.
26 GA. METAL ROOFING OVER 15# BLDG PAPER OVER 5/8" CDX PLYWOOD
METAL FLASHING W/ DRIP EDGE TYP.
CLOSURE STRIPS TYP.
2"x10" x9'-4" P.T. BEAM
26 GA. METAL ROOFING OVER 15# BLDG. PAPER
HGA 10 SIMPSON TIE EA.END OF 2"x10"
H1 SIMPSON TIE - EA.END TYP.
5/8" TREATED PLYWOOD CAULK ALL SEAMS AND JOINTS

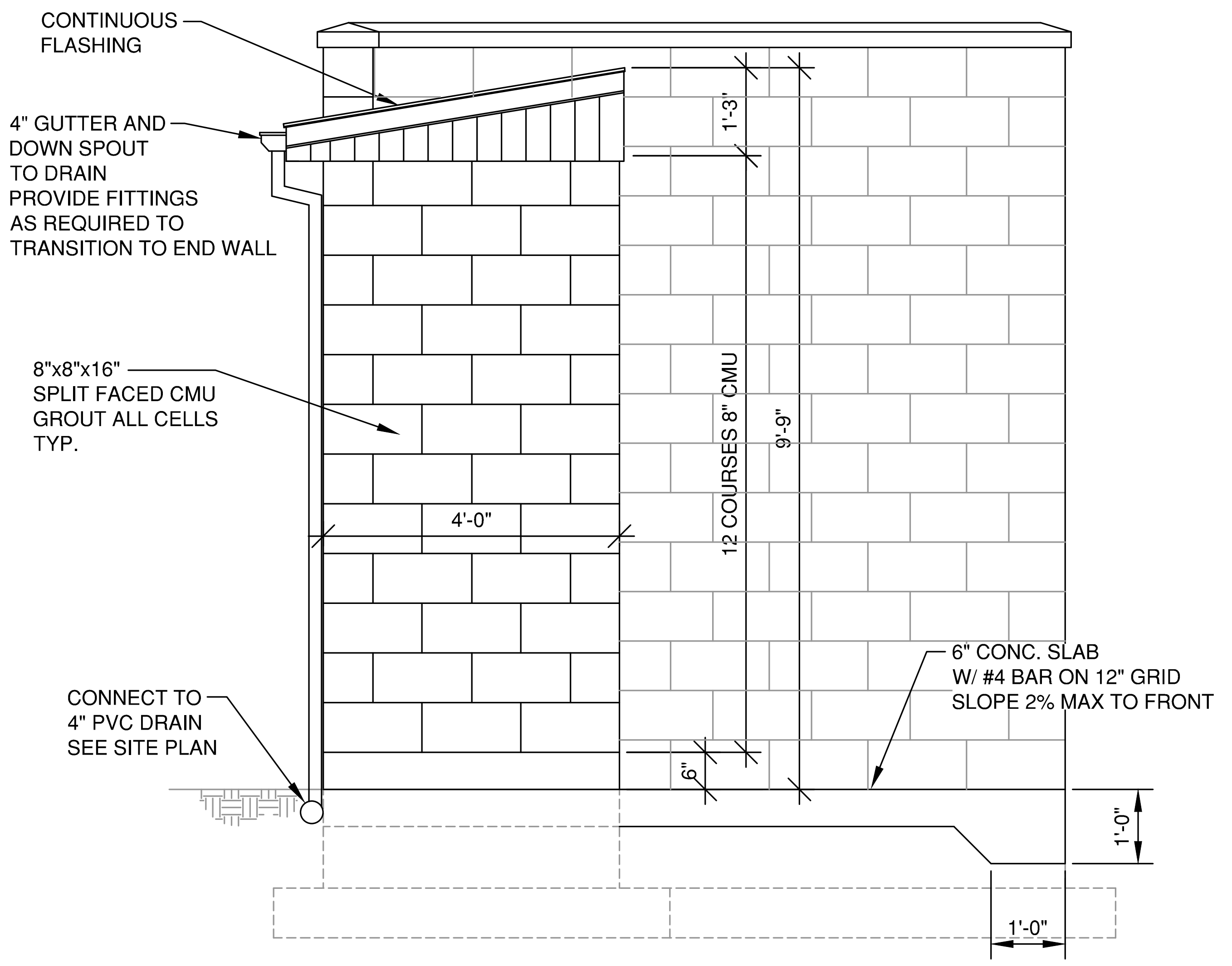
5 M2 **TYPICAL SECTION**

Scale: N.T.S.


8" x 8"x 16" SPLIT FACE CMU GROUT ALL CELLS
#4 BAR @ 16" O.C. VERTICAL LAP 20" MIN. (40 BAR DIA.)
#4 CONT.
#4 HOOKS @ 16"O.C.
4'-0"
0'-8"
6"
2'-6"
8"
8"
8"
4-#5 CONT. CENTER
6" CONC. SLAB W/ #4 BAR @ 12" O.C. EACH WAY
8"
#4 BAR @ 12" O.C.
SITE FILL
2'-0"

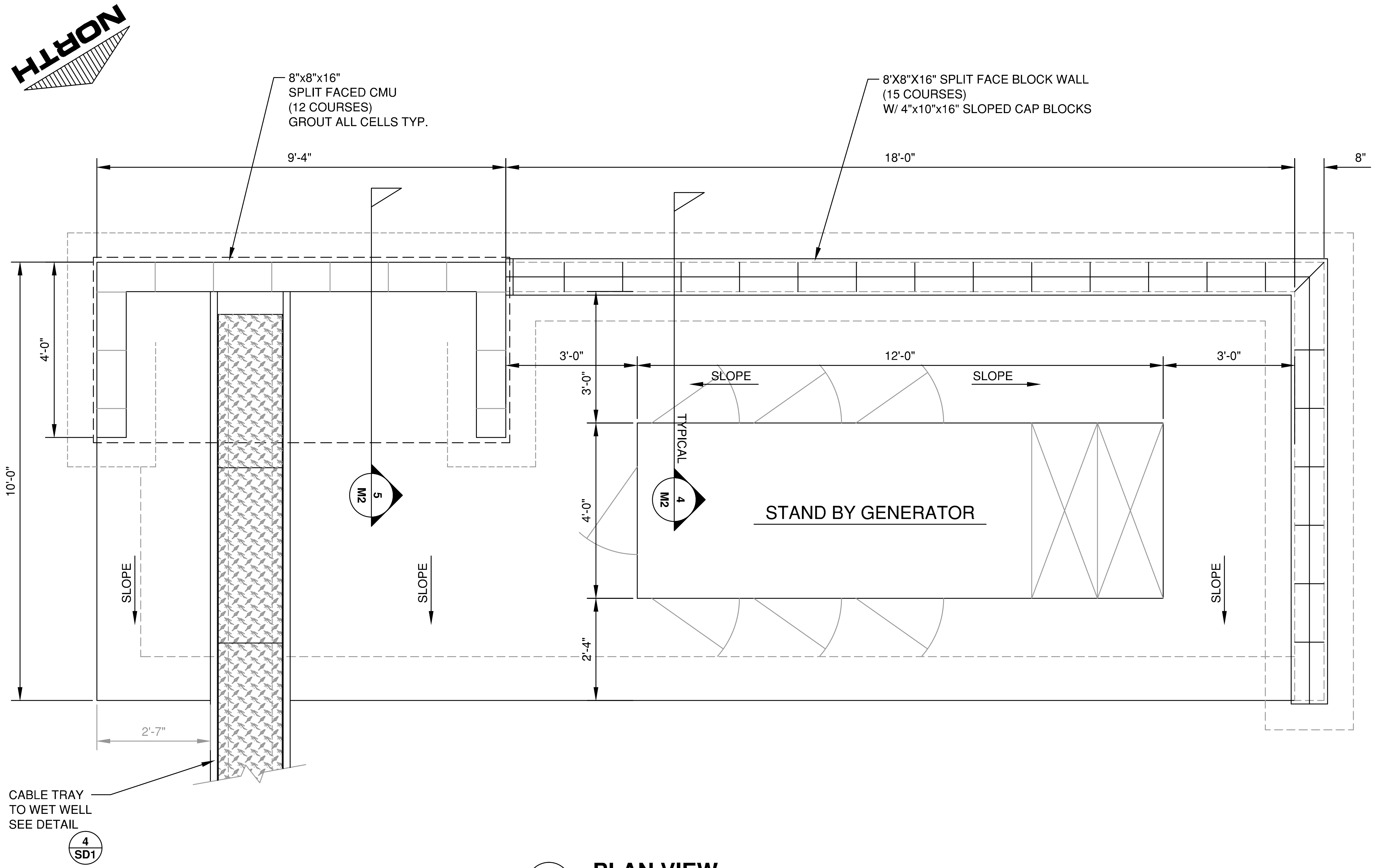
4 M2 **DETAIL**

Scale: N.T.S.


CONTINUOUS FLASHING
4" GUTTER AND DOWN SPOUT TO DRAIN PROVIDE FITTINGS AS REQUIRED TO TRANSITION TO END WALL
8"x8"x16" SPLIT FACED CMU GROUT ALL CELLS TYP.
4'-0"
1'-3"
12 COURSES 8" CMU
9'-9"
6" CONC. SLAB W/ #4 BAR ON 12" GRID SLOPE 2% MAX TO FRONT
CONNECT TO 4" PVC DRAIN SEE SITE PLAN
6"
1'-0"
1'-0"

3 M2 **ELEVATION VIEW (LOOKING WEST)**

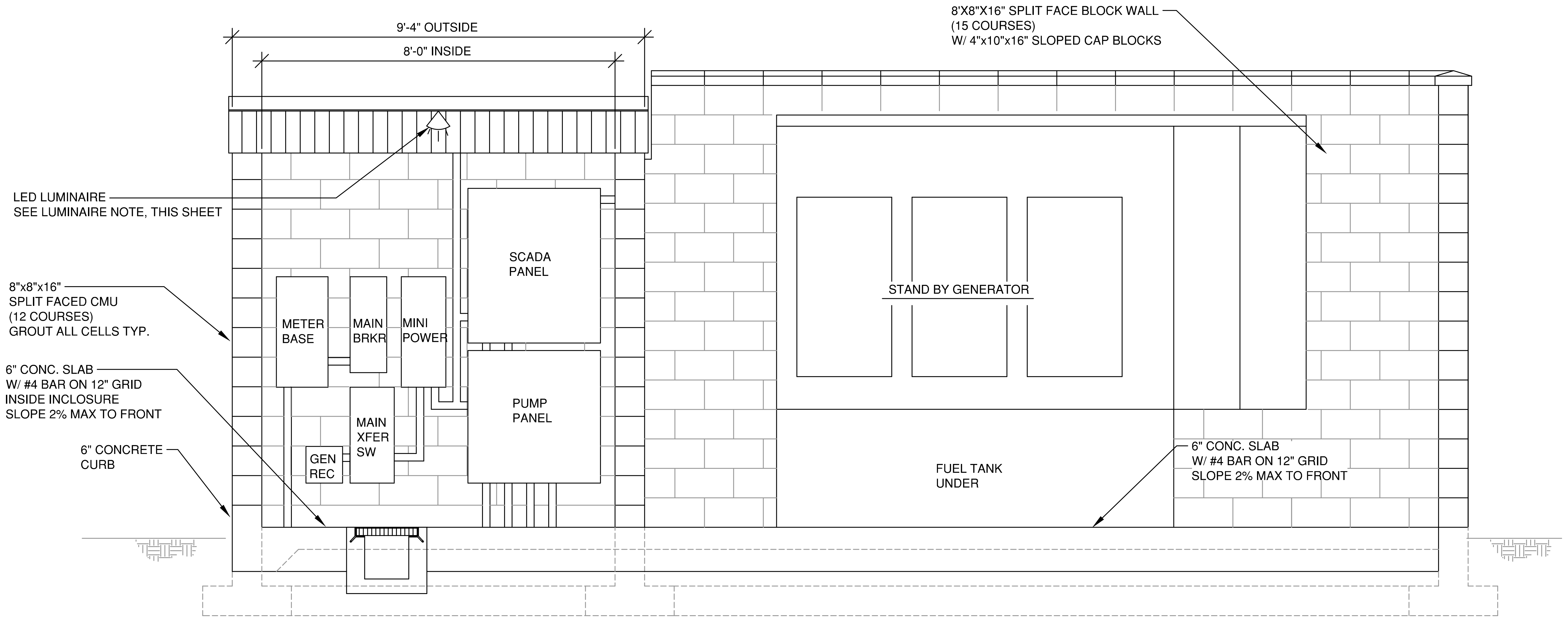
Scale: 1/2"=1'-0"


NORTH
8"x8"x16" SPLIT FACED CMU (12 COURSES) GROUT ALL CELLS TYP.
8'X8"X16" SPLIT FACE BLOCK WALL (15 COURSES) W/ 4"x10"x16" SLOPED CAP BLOCKS
9'-4"
18'-0"
8"
4'-0"
10'-0"
3'-0"
12'-0"
3'-0"
3'-0"
SLOPE
SLOPE
TYPICAL
5 M2
4 M2
STAND BY GENERATOR
4'-0"
2'-4"
SLOPE
SLOPE
SLOPE
2'-7"
CABLE TRAY TO WET WELL SEE DETAIL
4 SD1

1 M2 **PLAN VIEW**

Scale: 1/2"=1'-0"

LUMINAIRE NOTE: LED HIGH PERFOMANCE TRI-HEAD FLOOD LIGHT LUMINAIRE. 50,000 HOUR SERVICE LIFE. 5000k COLOR TEMPERATURE, 2067 LUMENS. CORROSION RESISTANT ALUMINUM HOUSING W/ BRONZE FINISH AND CLEAR ACRYLIC FULLY GASKETED LENS. LITHONIA #OFLR-9LN-120-BZ. INCLUDE ON/OFF/AUTO SWITCH AND PHOTOCELL.


9'-4" OUTSIDE
8'-0" INSIDE
8'X8"X16" SPLIT FACE BLOCK WALL (15 COURSES) W/ 4"x10"x16" SLOPED CAP BLOCKS
LED LUMINAIRE SEE LUMINAIRE NOTE, THIS SHEET
SCADA PANEL
STAND BY GENERATOR
8"x8"x16" SPLIT FACED CMU (12 COURSES) GROUT ALL CELLS TYP.
METER BASE
MAIN BRKR
MINI POWER
6" CONC. SLAB W/ #4 BAR ON 12" GRID INSIDE INCLOSURE SLOPE 2% MAX TO FRONT
MAIN XFER SW
PUMP PANEL
6" CONCRETE CURB
GEN REC
FUEL TANK UNDER
6" CONC. SLAB W/ #4 BAR ON 12" GRID SLOPE 2% MAX TO FRONT

2 M2 **ELEVATION VIEW (LOOKING SOUTH)**

Scale: 1/2"=1'-0"

Pump Station
Electrical Enclosure

City of Winlock
Sewer Extension to Industrial Park
Winlock, Washington

Horizontal Scale: 1"=30'
Vertical Scale: NA
Datum: NAD83/91 NAVD 88
Survey Book: 1656
Project Phase:

Project Milestone:
90%
Revision Date:
3/9/2016

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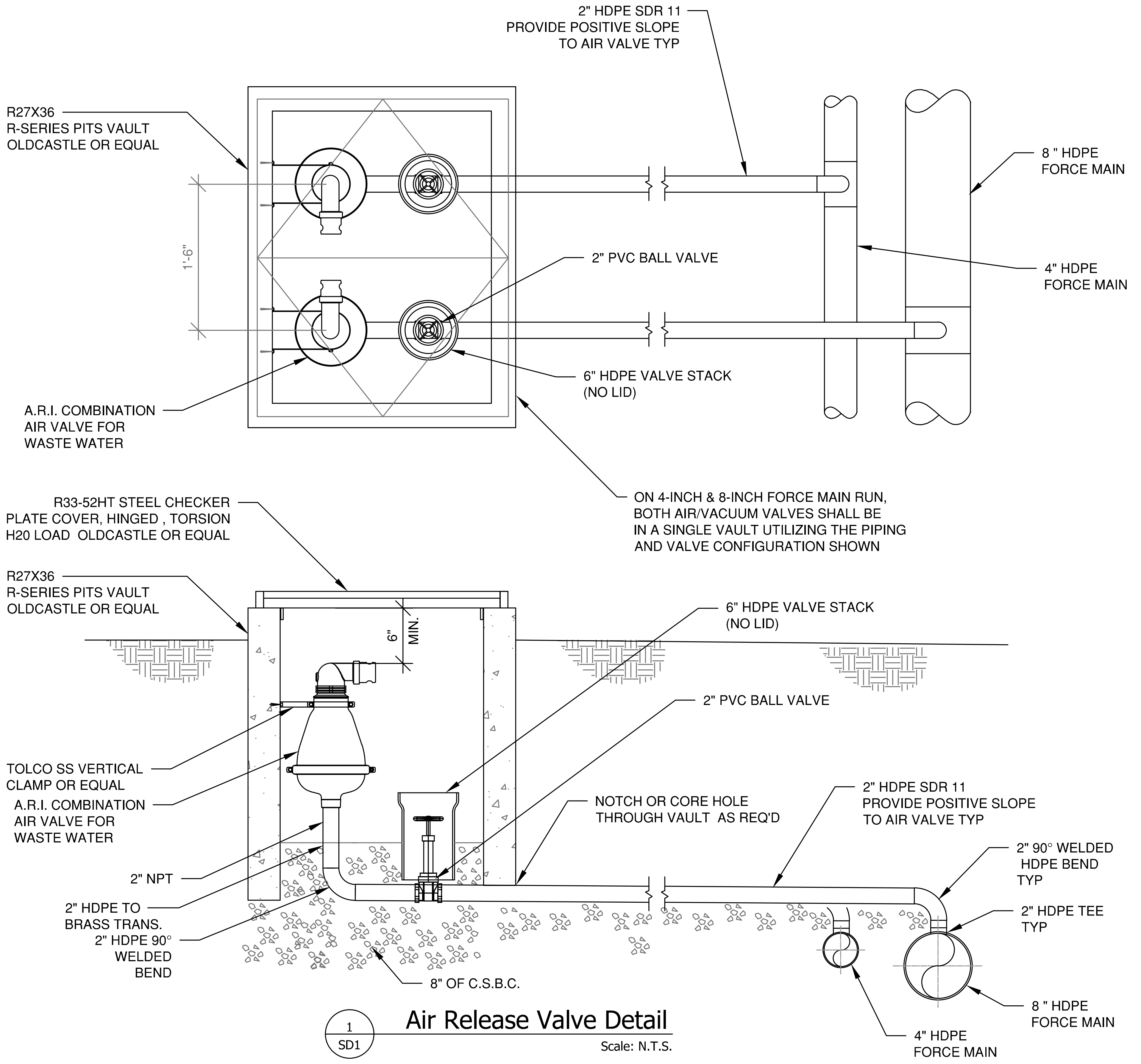
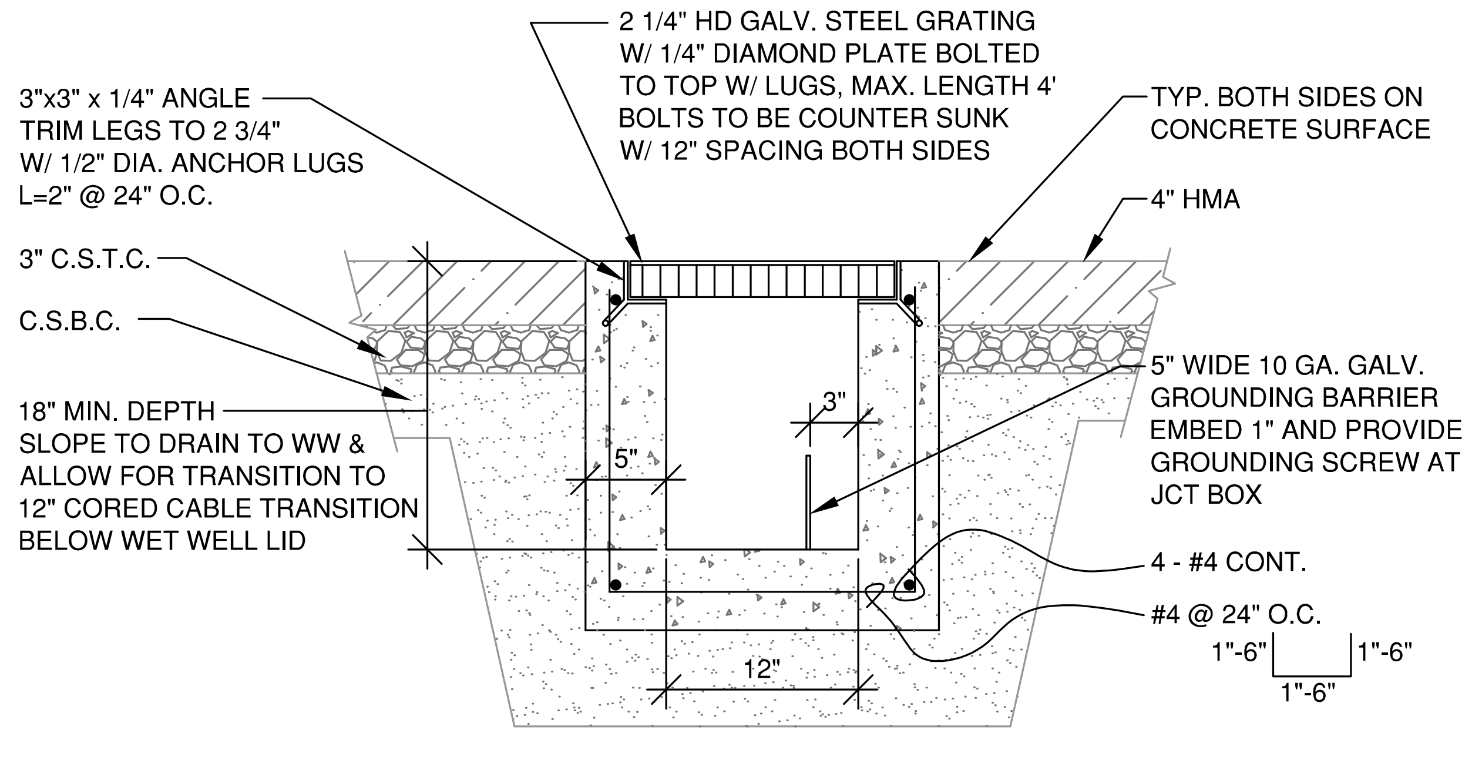
Project Manager: MM
Designed by: ----
CAD by: DM
Checked by: ----
Approved by: ----
Project Number:
08564012
Drawing Number:
M2
Sheet Number:
18 of **----**



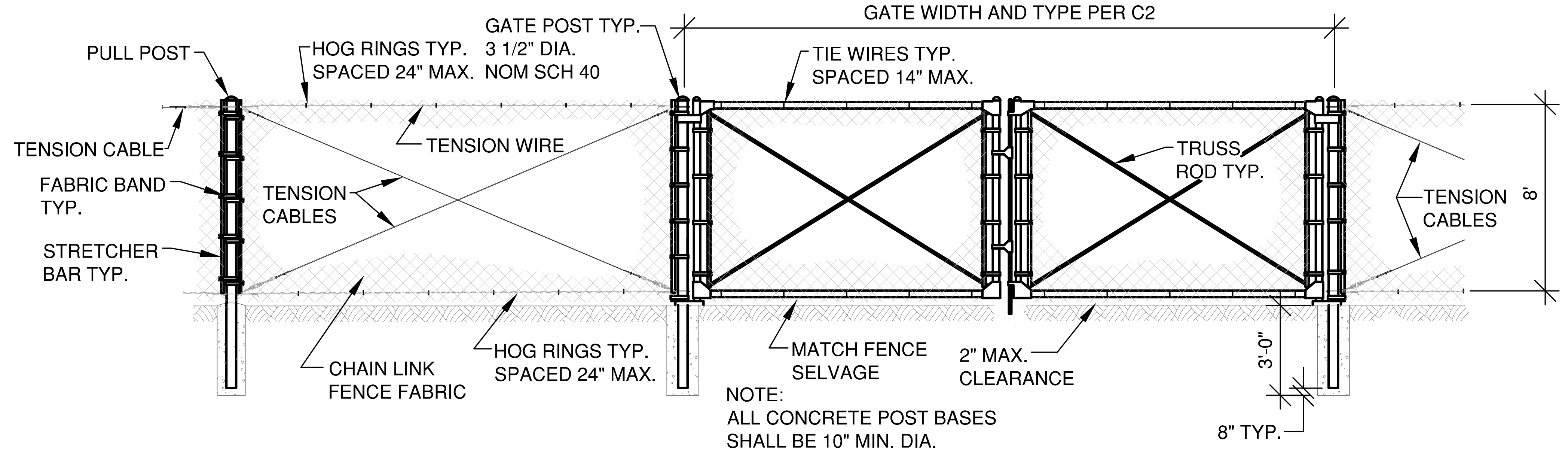
1 SD1 Air Release Valve Detail

Scale: N.T.S.



4 SD1 CABLE TRAY TO WET WELL DETAIL

Scale: N.T.S.

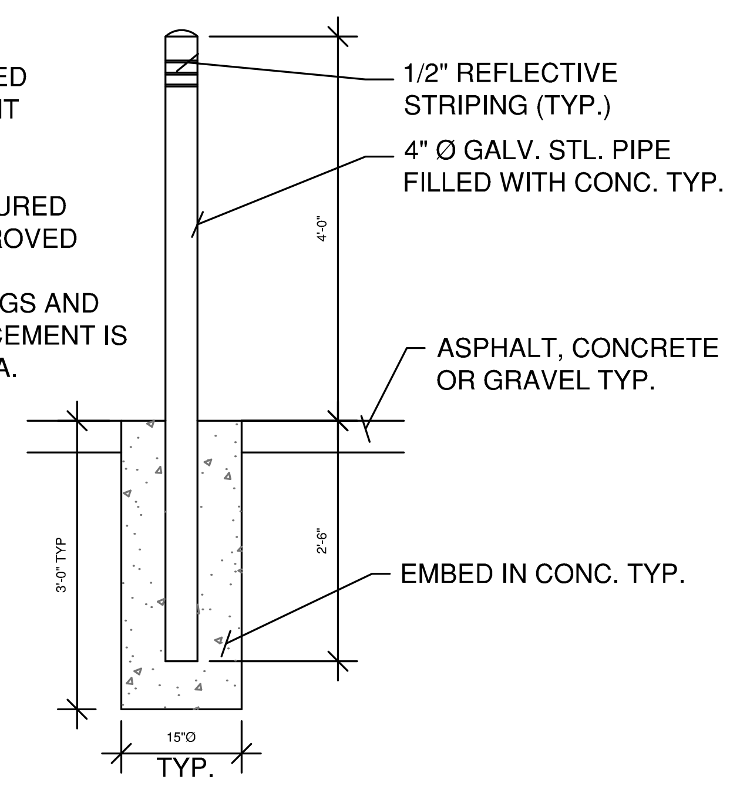


NOTE:
ALL CONCRETE POST BASES
SHALL BE 10" MIN. DIA.

5 SD1 TYPICAL FENCE AND GATE DETAIL

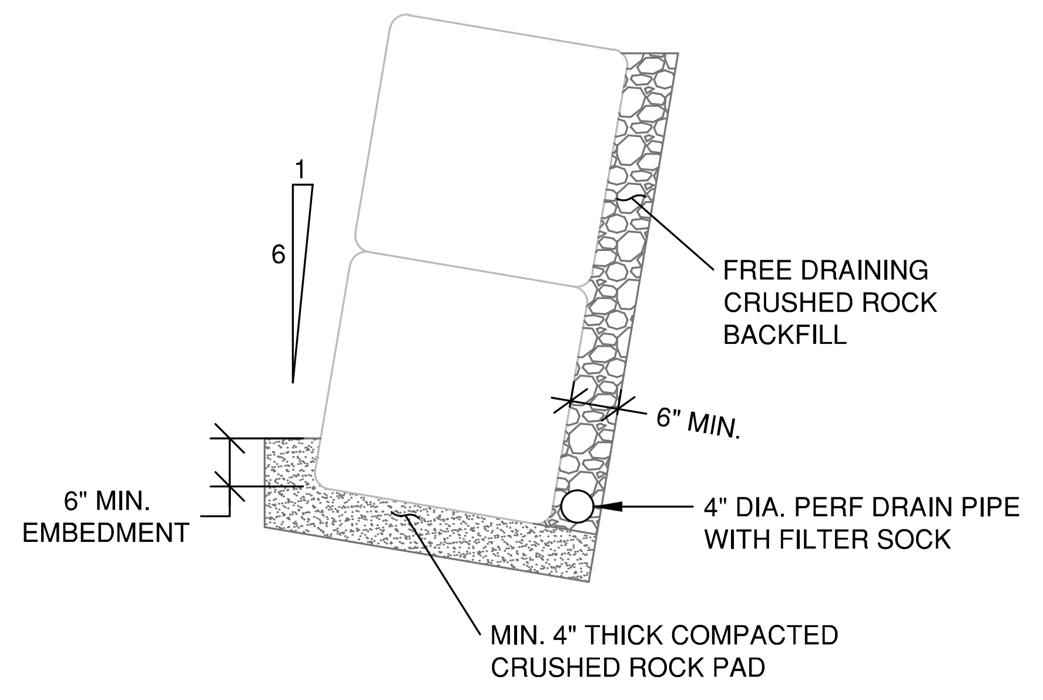
Scale: N.T.S.

NOTES:
1. BOLLARDS SHALL BE PAINTED W/ MIN. 2 COATS UV RESISTANT COATING OR COVERED WITH PVC BUMPER POST COVER, OSHA YELLOW, AS MANUFACTURED BY IDEALSHIELD, INC. OR APPROVED EQUAL.
2. EMBED BOLLARD IN FOOTINGS AND APRONS WHEN BOLLARD PLACEMENT IS W/IN FOOTING OR APRON AREA.



2 SD1 BOLLARD DETAIL

Scale: 1/4"=1'-0"



3 SD1 TYPICAL ULTRABLOCK WALL DETAIL

Scale: 1/2"=1'-0"

Details
Micellaneous Details

City of Winlock
Sewer Extension to Industrial Park
Winlock, Washington

Horizontal Scale: 1"=30'
Vertical Scale: NA
Datum: NAD83/91 NAVD 88
Survey Book: 1656
Project Phase:

Project Milestone:
90%
Revision Date:
3/9/2016

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Project Manager: MM
Designed by: ----
CAD by: DM KS
Checked by: ----
Approved by: ----
Project Number:
08564012
Drawing Number:
SD1
Sheet Number:
19 of **----**

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DRAWING: T:\CIVIL 3D\PROJECTS\08564012.ACT\DETAILS\STANDARD DETAILS.DWG, LAYOUT TAB: D1, PLOT DATE: 3/9/2016 10:57:02 AM, DRAWING SAVE DATE: 3/8/2016 5:05:53 PM, PLOTTED BY: SMCWILLIAMS
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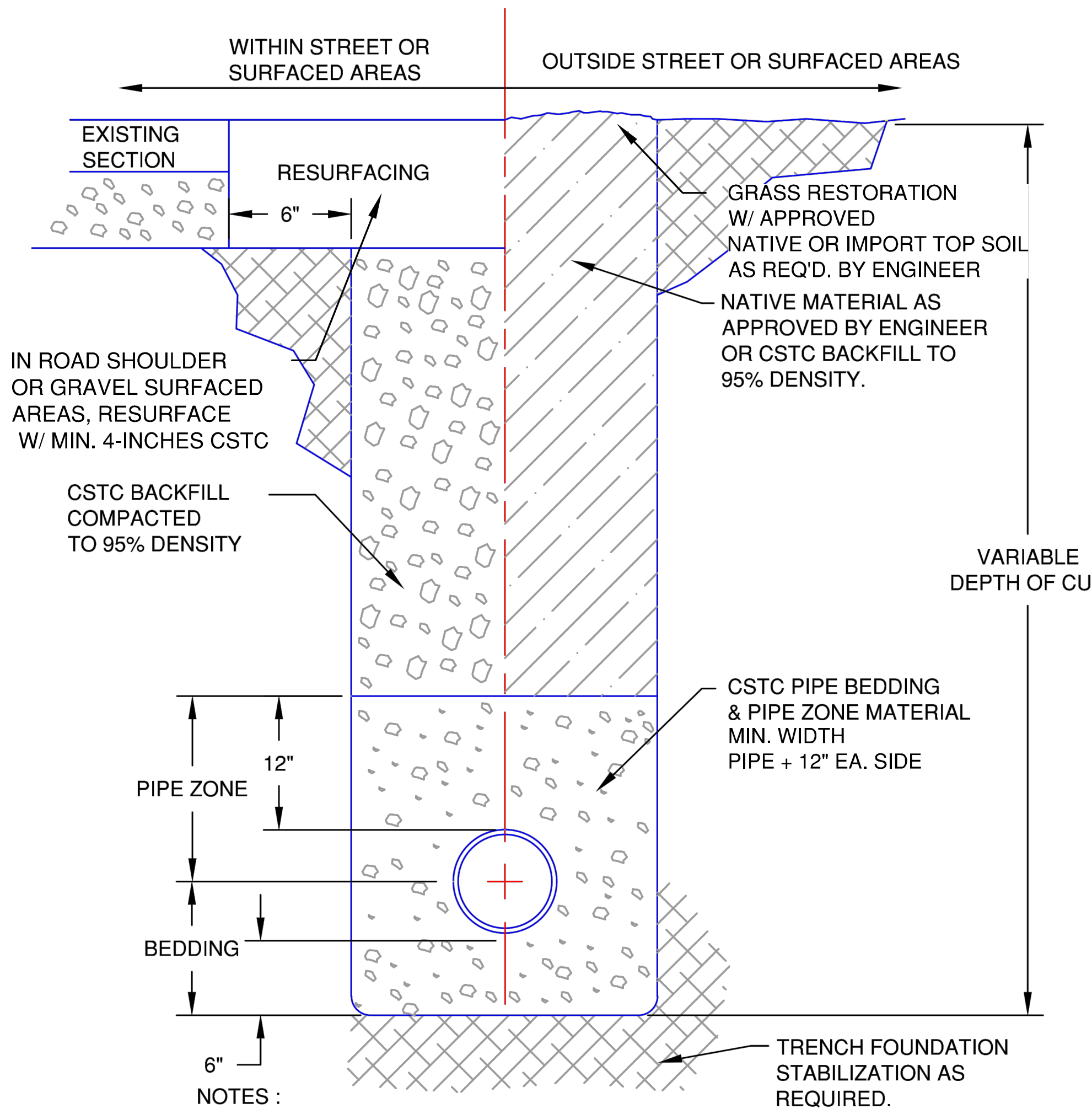
WITHIN STREET OR SURFACED AREAS
OUTSIDE STREET OR SURFACED AREAS
EXISTING SECTION
RESURFACING
6"
GRASS RESTORATION W/ APPROVED NATIVE OR IMPORT TOP SOIL AS REQ'D. BY ENGINEER
NATIVE MATERIAL AS APPROVED BY ENGINEER OR CSTC BACKFILL TO 95% DENSITY.
IN ROAD SHOULDER OR GRAVEL SURFACED AREAS, RESURFACE W/ MIN. 4-INCHES CSTC
CSTC BACKFILL COMPACTED TO 95% DENSITY
VARIABLE DEPTH OF CUT
CSTC PIPE BEDDING & PIPE ZONE MATERIAL MIN. WIDTH PIPE + 12" EA. SIDE
12"
PIPE ZONE
BEDDING
6"
TRENCH FOUNDATION STABILIZATION AS REQUIRED.

NOTES :
1. ALL CUTS IN PAVEMENT SHALL BE SAW CUT.
2. ALL CUT EDGES SHALL BE SAND SEALED.
3. RESURFACING TO BE MIN. 3" HMA ASPHALT OR MATCH EXISTING WHICHEVER IS GREATER.
4. THIS TRENCH BACKFILL REQUIREMENT APPLIES TO ALL UNDERGROUND CONDUITS.
5. CSTC BACKFILL SHALL EXTEND 2 FT. BEYOND EDGE OF STREET OR SURFACED AREA.
6. BACKFILL SHALL BE PLACED AND COMPACTED IN A MAX. OF 6" LIFTS IN PAVEMENT AND A MAXIMUM OF 12" LIFTS OUTSIDE PAVEMENT.

TYPICAL TRENCH SECTION

SCALE:N.T.S.

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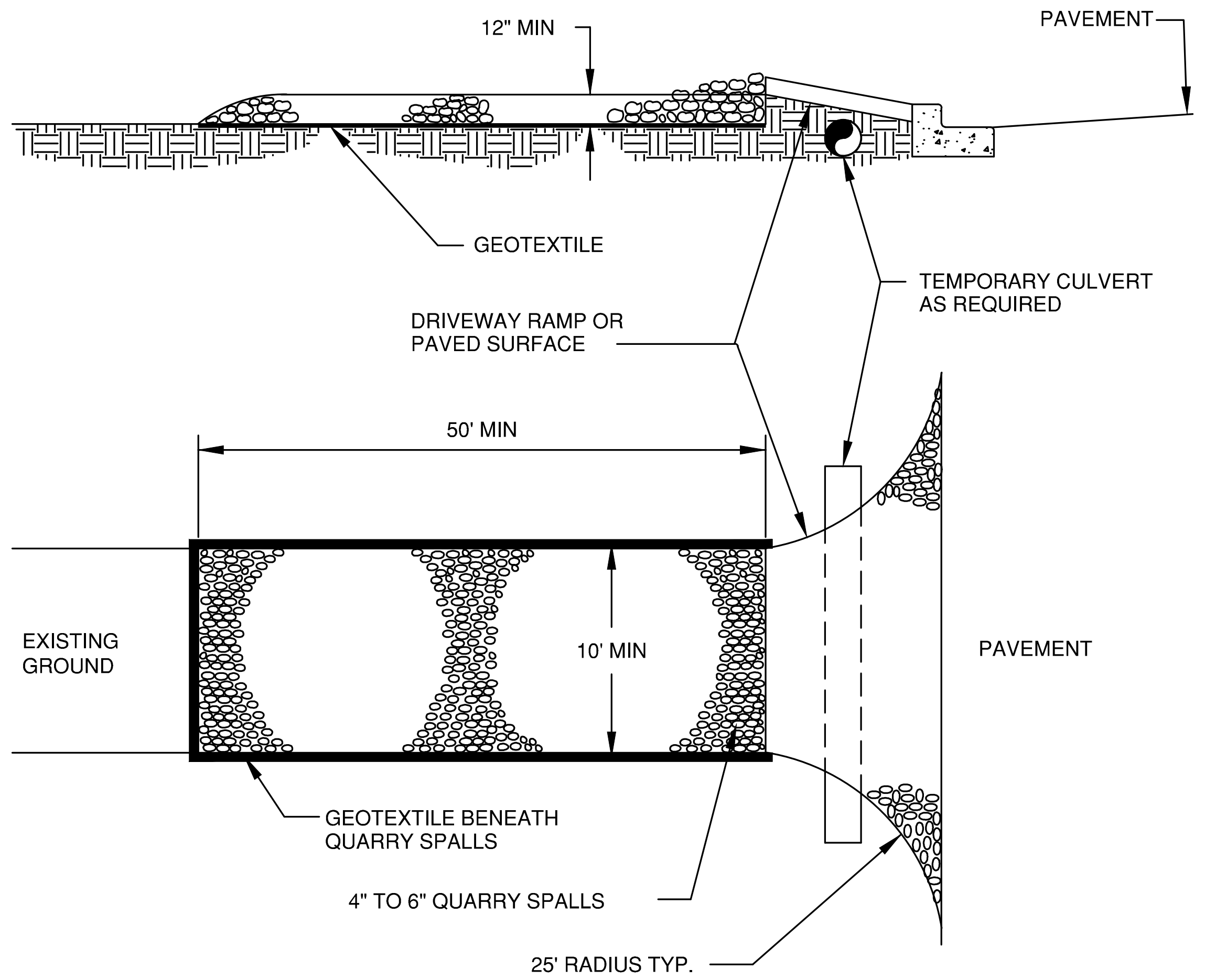
Standard Details
Miscellaneous
Typical Trench Section



NOTES

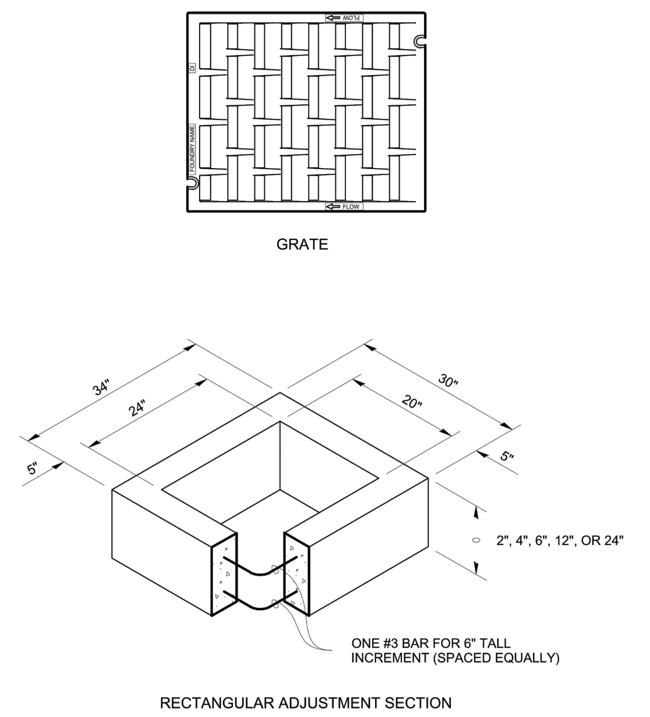
1. PAD SHALL BE REMOVED AND REPLACED WHEN SOIL IS EVIDENT ON THE SURFACE OF THE
S DIRECTED BY THE ENGINEER.

.L BE INSTALLED IN PLANTING STRIP AS APPROPRIATE.

3. CONTRACTOR RESPONSIBLE FOR CURB CONDITION.

CONSTRUCTION ENTRANCE

N.T.S.

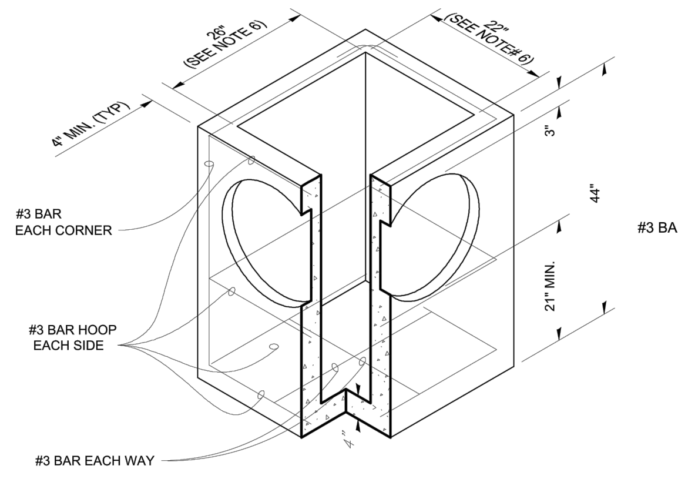


GRATE

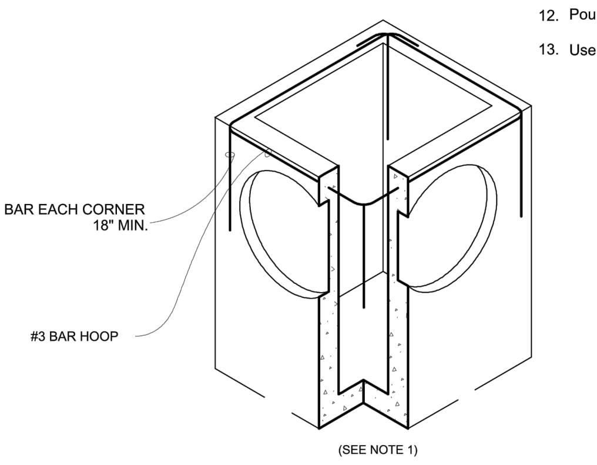
RECTANGULAR ADJUSTMENT SECTION

PIPE ALLOWANCES	
PIPE MATERIAL	MAXIMUM INSIDE DIAMETER
REINFORCED OR PLAIN CONCRETE	12"
ALL METAL PIPE	15"
CPSSP ✕ **(STD. SPEC. 9-05.20)**	12"
SOLID WALL PVC **(STD. SPEC. 9-05.12(1))**	15"
PROFILE WALL PVC **(STD. SPEC. 9-05.12(2))**	15"

✕ CORRUGATED POLYETHYLENE STORM SEWER PIPE



PRECAST BASE SECTION



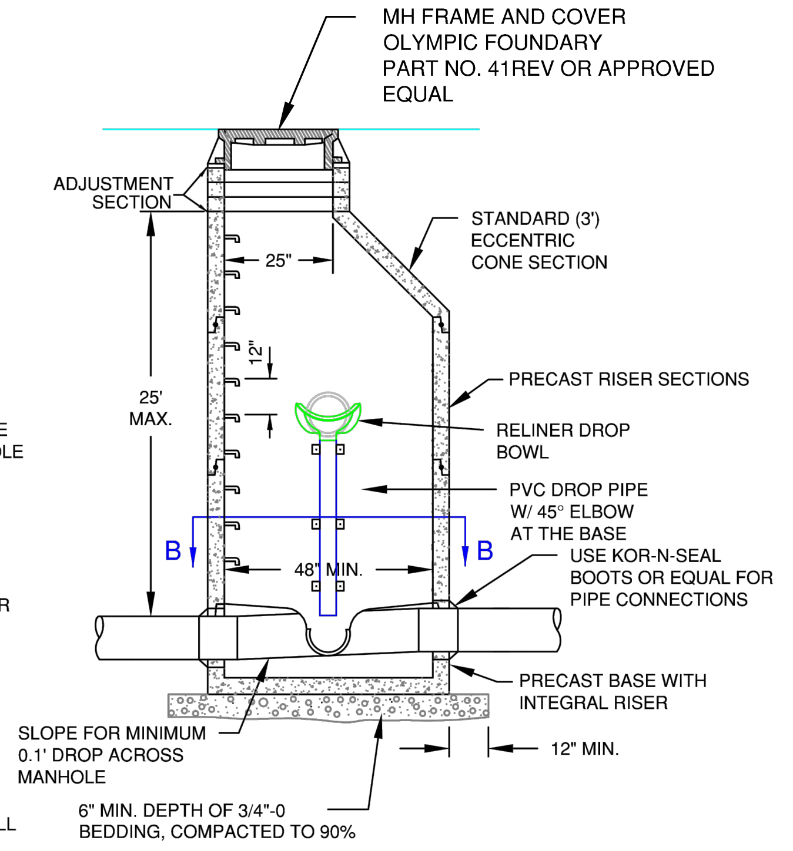
ALTERNATIVE PRECAST BASE SECTION

NOTES

1. As acceptable alternatives to the rebar shown in the PRECAST BASE SECTION, fibers (placed according to the Standard Specifications), or wire mesh having a minimum area of 0.12 square inches per foot shall be used with the minimum required rebar shown in the ALTERNATIVE PRECAST BASE SECTION. Wire mesh shall not be placed in the knockouts.
2. The knockout diameter shall not be greater than 20". Knockouts shall have a wall thickness of 2" minimum to 2.5" maximum. Provide a 1.5" minimum gap between the knockout wall and the outside of the pipe. After the pipe is installed, fill the gap with joint mortar in accordance with Standard Specification 9-04.3.
3. The maximum depth from the finished grade to the lowest pipe invert shall be 5'.
4. The frame and grate may be installed with the flange down, or integrally cast into the adjustment section with flange up.
5. The Precast Base Section may have a rounded floor, and the walls may be sloped at a rate of 1:24 or steeper.
6. The opening shall be measured at the top of the Precast Base Section.
7. All pickup holes shall be grouted full after the basin has been placed.
8. Standard curb inlet bases shall be precast concrete. construction of cast-in-place bases, including slip-form method, are not permitted without approval from the engineer.
9. Pipe ends shall be flush with the inner wall or 1" maximum intrusion.
10. Masonry, cinder blocks, or similiar materials may be used to adjust the risers to grade prior to grouting. Wood or other non-durable materials shall not be used for this purpose.
11. Grouting shall be sufficient to prevent leaks between the precast components of the completed structure & shall be performed inside, between & outside of all risers, joints & pipe penetrations.
12. Poured in place catch basins may be approved. (submit shop drawing)
13. Use combination inlet where curbs are present unless otherwise approved.

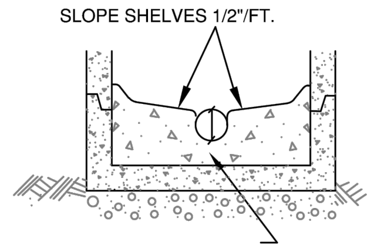
TYPE 1 CATCH BASIN

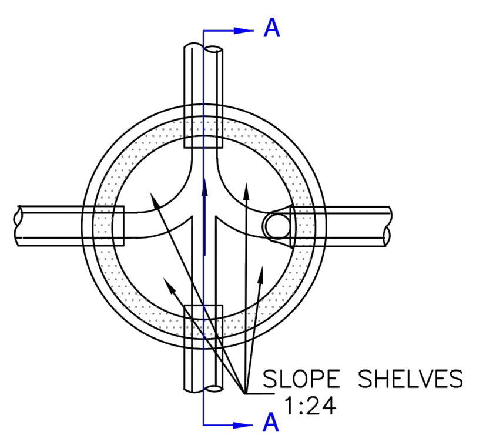
N.T.S.


MH FRAME AND COVER OLYMPIC FOUNDARY PART NO. 41REV OR APPROVED EQUAL
ADJUSTMENT SECTION
STANDARD (3') ECCENTRIC CONE SECTION
25"
12"
25' MAX.
PRECAST RISER SECTIONS
RELINER DROP BOWL
PVC DROP PIPE W/ 45° ELBOW AT THE BASE
B
B
48" MIN.
USE KOR-N-SEAL BOOTS OR EQUAL FOR PIPE CONNECTIONS
PRECAST BASE WITH INTEGRAL RISER
12" MIN.
SLOPE FOR MINIMUM 0.1' DROP ACROSS MANHOLE
6" MIN. DEPTH OF 3/4"-0 BEDDING, COMPACTED TO 90%

1. ALL NOTES FOR SHALLOW MANHOLE DETAIL SHALL APPLY.
2. STEPS SHALL BE PREFORMED STEEL REINFORCED POLY-PROPYLENE PLASTIC, CONFORMING WITH ASTM C478 AND ASTM A615.
3. ALL STEPS WITHIN A MANHOLE SHALL BE OF THE SAME DESIGN TYPE AND SIZE.
4. LOOSE STEPS SHALL BE CAUSE FOR REJECTION OF THAT MANHOLE CONE OR SECTION.
5. STEPS ARE TO BE DRIVEN INTO PRE-FORMED HOLES IN PRECAST CONCRETE MANHOLE CONE AND SECTIONS BY THE MANHOLE MANUFACTURER PRIOR TO DELIVERY TO THE JOB SITE.
6. MIN. HORIZONTAL PULLOUT LOAD SHALL BE 1500 LBS.
7. STEPS SHALL BE ALIGNED VERTICALLY.
8. INLETS GREATER THAN 2.0-FT. ABOVE THE OUTLET INVERT SHALL BE BUILT AS A DROP.
9. DROP INLETS SHALL BE CONSTRUCTED USING THE "RELINER" INSDIE DROP SYSTEM AS MANUFACTURED BY DURAN INC. (WWW.RELINER.COM). THE SYSTEM SHALL BE SECURED USING THE OPTIONAL STAINLESS STEEL DROP BOWL INSTALLATION KIT. THE DROP PIPE SHALL BE ATTACHED USING THE "RELINER STAINLESS STEEL ADJUSTABLE CLAMPING BRACKETS". ONE EVERY 4-FEET OF PIPE WITH TWO BEING THE MINIMUM.

SECTION A-A





PLAN

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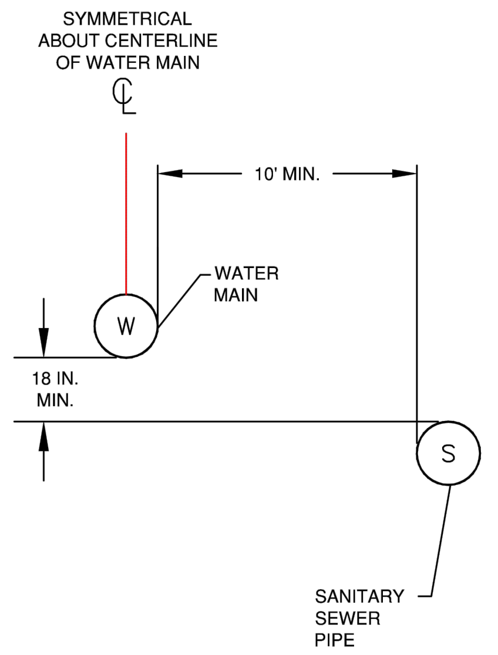
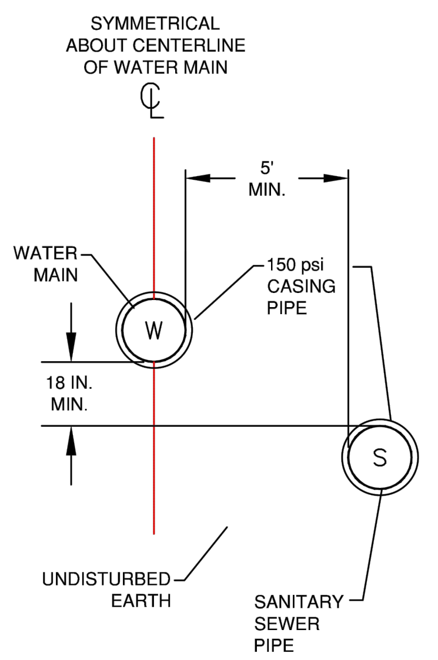
Standard Details
Sewer Details
Manhole Detail



REQUIRED SEPARATION BETWEEN WATER MAINS AND SANITARY SEWERS



REQUIRED SEPARATION BETWEEN WATER MAINS AND SANITARY SEWERS, UNUSUAL CONDITIONS

NOTES:

1. WHERE THE PROPOSED SEWER MAIN WILL BE INSTALLED PARALLEL TO AN EXISTING WATER MAIN, THE SEPARATION BETWEEN THE TWO SHALL BE AS INDICATED ABOVE.
   a.) IF SEPARATION CANNOT BE MET, WATER LINE SHALL BE SLEEVED PER THE SPECIFICATIONS.
2. CROSSINGS:
   a.) WHEREVER POSSIBLE, THE BOTTOM OF THE WATER MAIN SHALL BE 1.5 FEET ABOVE THE TOP OF THE SEWER MAIN.
   b.) WHERE IT IS NOT POSSIBLE FOR THE SEWER MAIN TO BE 1.5 FEET BELOW THE WATER MAIN, OR THE SEWER MAIN PASSES OVER THE WATER MAIN, THE CONSTRUCTION SHALL CONFORM TO THE THE REQUIREMENTS OF D.O.E. DESIGN CRITERIA SECTION C1-9 AND SHALL BE APPROVED ON A CASE BY CASE BASIS.

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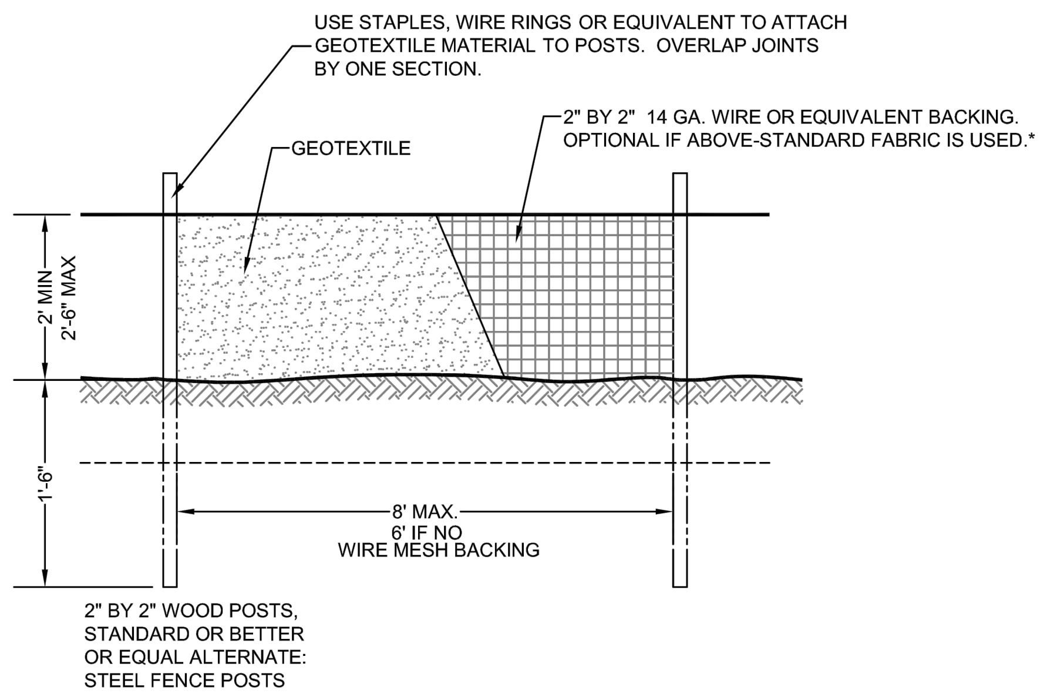
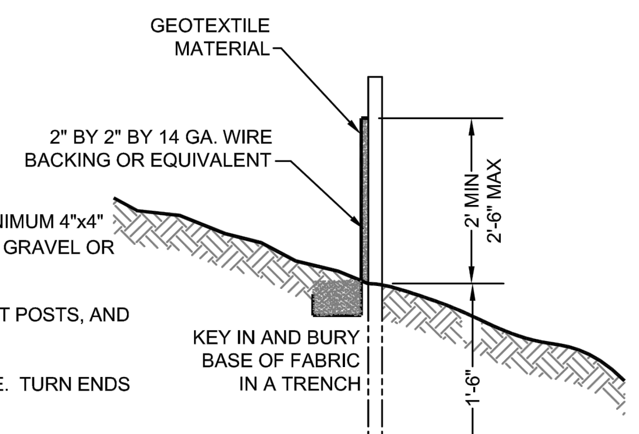
Standard Details
Sewer Details
Separation Detail


USE STAPLES, WIRE RINGS OR EQUIVALENT TO ATTACH GEOTEXTILE MATERIAL TO POSTS. OVERLAP JOINTS BY ONE SECTION.
GEOTEXTILE
2" BY 2" 14 GA. WIRE OR EQUIVALENT BACKING. OPTIONAL IF ABOVE-STANDARD FABRIC IS USED.*
2' MIN 2'-6" MAX
1'-6"
8' MAX. 6' IF NO WIRE MESH BACKING
2" BY 2" WOOD POSTS, STANDARD OR BETTER OR EQUAL ALTERNATE: STEEL FENCE POSTS

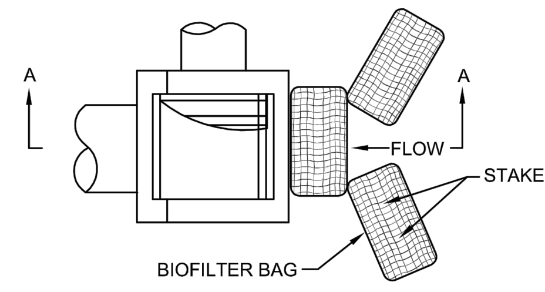

GEOTEXTILE MATERIAL
2" BY 2" BY 14 GA. WIRE BACKING OR EQUIVALENT
2' MIN 2'-6" MAX
KEY IN AND BURY BASE OF FABRIC IN A TRENCH
1'-6"

NOTES:
1. BURY BOTTOM OF FILTER MATERIAL IN A MINIMUM 4"x4" TRENCH. BACKFILL WITH ¾" - 1-½" WASHED GRAVEL OR NATIVE SOIL AND COMPACT.
2. JOINTS IN GEOTEXTILE SHALL BE SPLICED AT POSTS, AND OVERLAP BY AT LEAST ONE SECTION.
3. PLACE ALONG CONTOURS WHERE POSSIBLE. TURN ENDS UP SLOPEFOR ADDED STRENGTH.
4. ADD BARRIERS AT BASE AS NECESSARY TO DISRUPT ACCUMULATED CONCENTRATED FLOWS.
5. FENCE TO BE MAINTAINED BY CONTRACTOR.
6. SILT FENCES SHALL BE INSTALLED IN AREAS OF CLEARING, GRADING, OR DRAINAGE PRIOR TO STARTING THOSE ACTIVITIES.

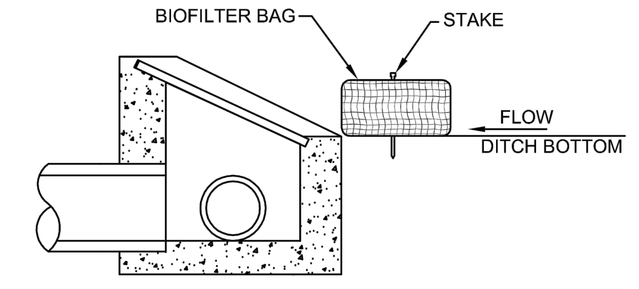
* GEOTEXTILE STANDARDS ARE FOUND IN THE W.WA STORMWATER MANUAL VOLUME II, CHAPTER 4 TABLE 4-10.
GO TO:
HTTP"//WWW.ECY.WA.GOV/PROGRAMS/WQ/STORMWATER/MANUAL.HTML

SILT FENCE

N.T.S.

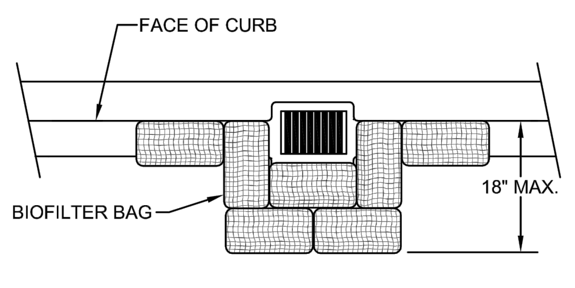


PLAN

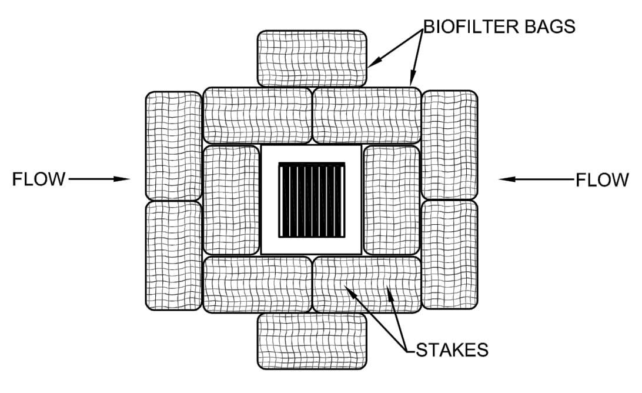


SECTION A-A

DITCH INLET



PLAN
CATCH BASIN



AREA DRAIN

NOTES:
1. USE 2 STAKES PER BAG. STAKES MAY BE OMITTED IF BAGS ARE PLACED ON PAVEMENT SURFACE.
2. OVERLAP ALL BAG JOINTS SIX INCHES.
3. BAGS ON PAVEMENT SHALL BE SECURED TO PREVENT MOVEMENT DURRING RAIN EVENTS.

INLET PROTECTION BIOFILTER BAGS

N.T.S.

City of Winlock
Sewer Extension to Industrial Park
Winlock, Washington

Details
Standard Details

Horizontal Scale: 1"=30'
Vertical Scale: NA
Datum: NAD83/91 NAVD 88
Survey Book: 1656
Project Phase:

Project Milestone:
90%
Revision Date:
3/9/2016

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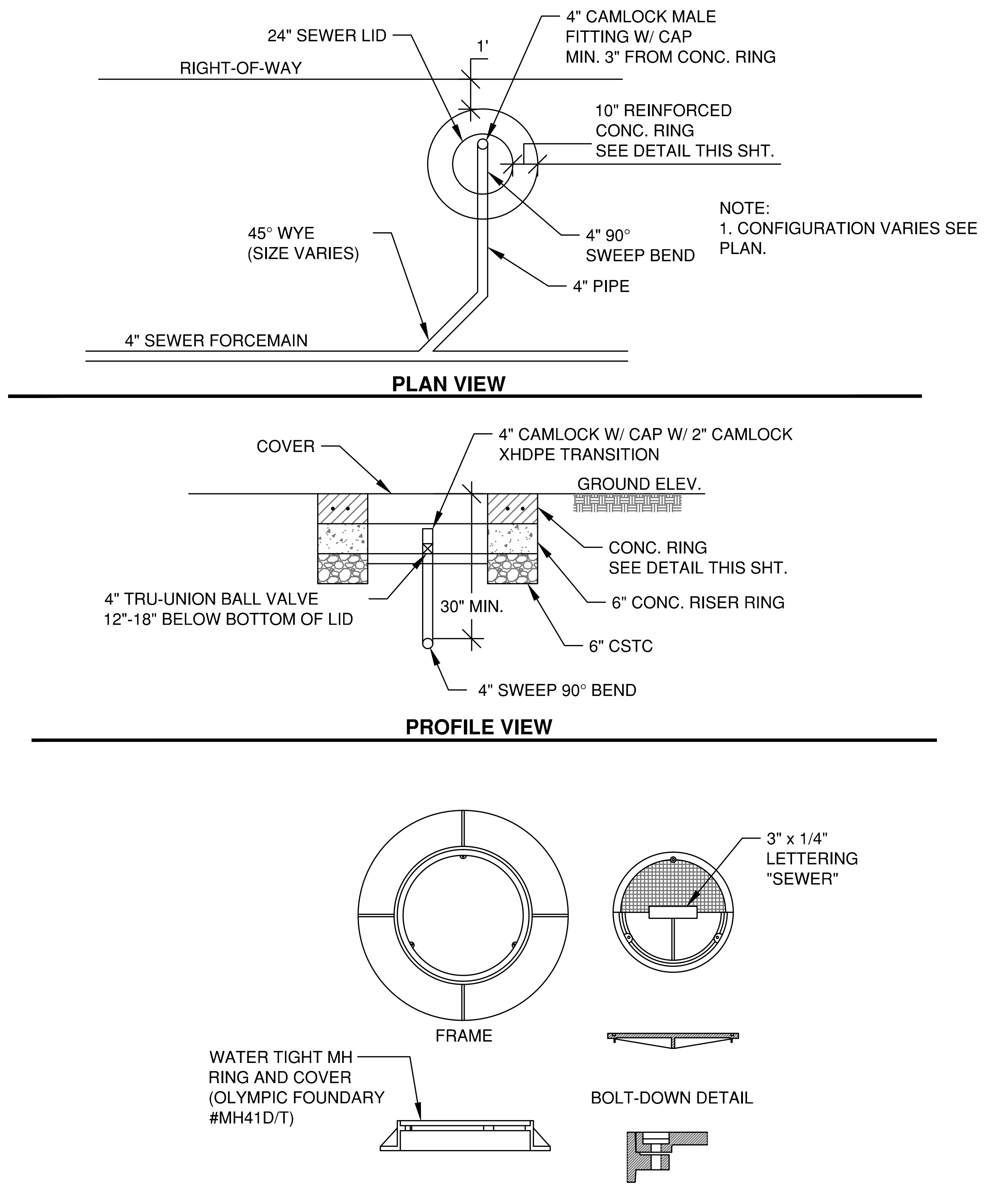
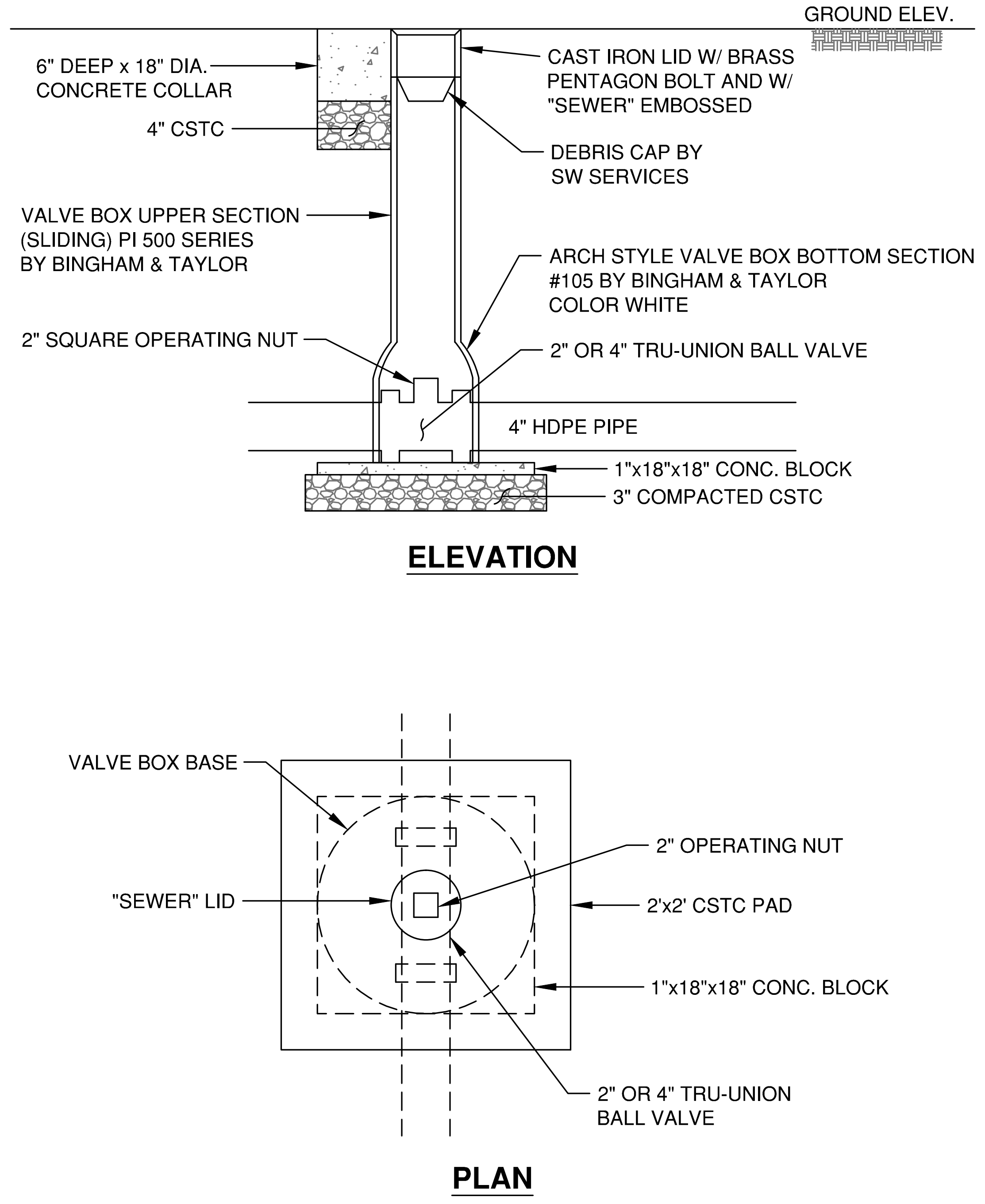
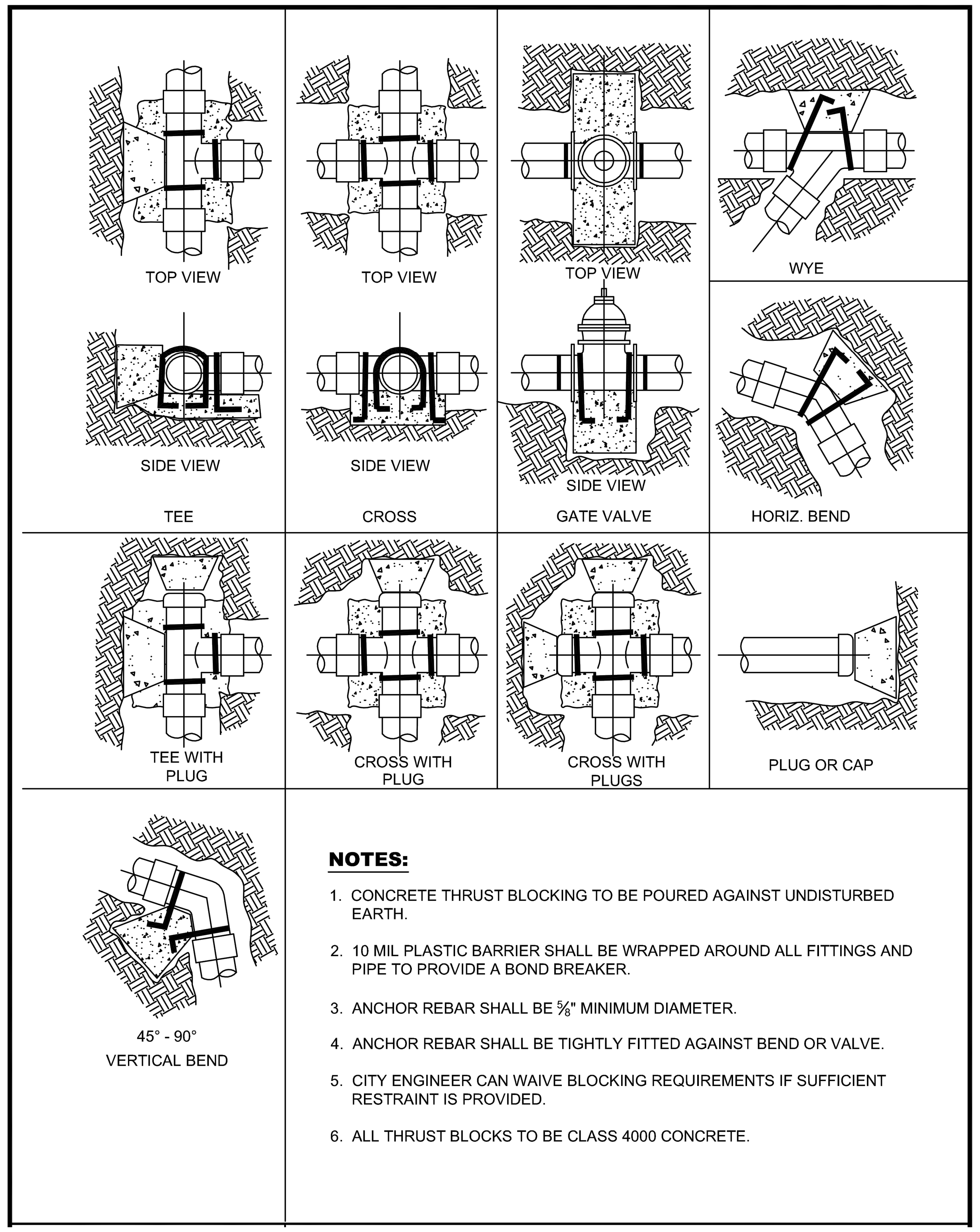
Project Manager: MM
Designed by: ----
CAD by: DM KS
Checked by: ----
Approved by: ----
Project Number:
08564012
Drawing Number:
D1
Sheet Number:
20 of **----**


24" SEWER LID
RIGHT-OF-WAY
1'
4" CAMLOCK MALE FITTING W/ CAP MIN. 3" FROM CONC. RING
10" REINFORCED CONC. RING SEE DETAIL THIS SHT.
NOTE:
1. CONFIGURATION VARIES SEE PLAN.
45° WYE (SIZE VARIES)
4" 90° SWEEP BEND
4" PIPE
4" SEWER FORCEMAIN
PLAN VIEW
COVER
4" CAMLOCK W/ CAP W/ 2" CAMLOCK XHDPE TRANSITION
GROUND ELEV.
CONC. RING SEE DETAIL THIS SHT.
4" TRU-UNION BALL VALVE 12"-18" BELOW BOTTOM OF LID
30" MIN.
6" CONC. RISER RING
6" CSTC
4" SWEEP 90° BEND
PROFILE VIEW
3" x 1/4" LETTERING "SEWER"
FRAME
WATER TIGHT MH RING AND COVER (OLYMPIC FOUNDARY #MH41D/T)
BOLT-DOWN DETAIL

1
D2
FLUSHING CONNECTION DETAIL
4" PRESSURE PIPE
Scale: N.T.S.


GROUND ELEV.
6" DEEP x 18" DIA. CONCRETE COLLAR
4" CSTC
CAST IRON LID W/ BRASS PENTAGON BOLT AND W/ "SEWER" EMBOSSED
DEBRIS CAP BY SW SERVICES
VALVE BOX UPPER SECTION (SLIDING) PI 500 SERIES BY BINGHAM & TAYLOR
ARCH STYLE VALVE BOX BOTTOM SECTION #105 BY BINGHAM & TAYLOR COLOR WHITE
2" SQUARE OPERATING NUT
2" OR 4" TRU-UNION BALL VALVE
4" HDPE PIPE
1"x18"x18" CONC. BLOCK
3" COMPACTED CSTC
ELEVATION
VALVE BOX BASE
2" OPERATING NUT
"SEWER" LID
2'x2' CSTC PAD
1"x18"x18" CONC. BLOCK
2" OR 4" TRU-UNION BALL VALVE
PLAN

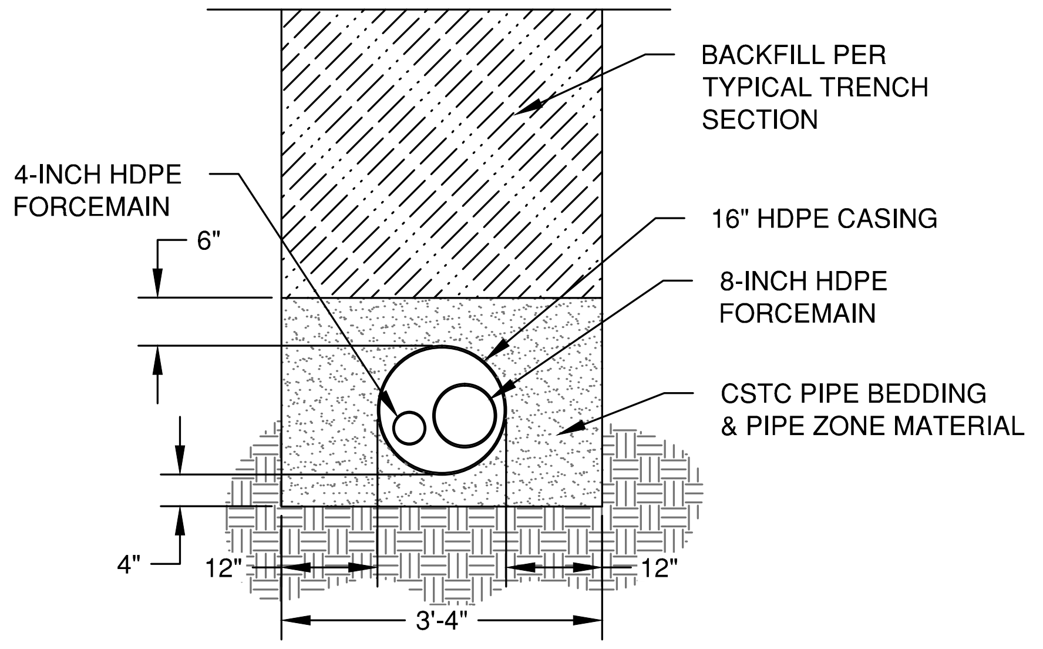
2
D2
4" ISOLATION VALVE DETAIL
Scale: N.T.S.



NOTES:

1. CONCRETE THRUST BLOCKING TO BE POURED AGAINST UNDISTURBED EARTH.
2. 10 MIL PLASTIC BARRIER SHALL BE WRAPPED AROUND ALL FITTINGS AND PIPE TO PROVIDE A BOND BREAKER.
3. ANCHOR REBAR SHALL BE $\frac{5}{8}$" MINIMUM DIAMETER.
4. ANCHOR REBAR SHALL BE TIGHTLY FITTED AGAINST BEND OR VALVE.
5. CITY ENGINEER CAN WAIVE BLOCKING REQUIREMENTS IF SUFFICIENT RESTRAINT IS PROVIDED.
6. ALL THRUST BLOCKS TO BE CLASS 4000 CONCRETE.

3
D2
BLOCKING DETAIL
Scale: N.T.S.


BACKFILL PER TYPICAL TRENCH SECTION
4-INCH HDPE FORCEMAIN
16" HDPE CASING
6"
8-INCH HDPE FORCEMAIN
CSTC PIPE BEDDING & PIPE ZONE MATERIAL
4"
12"
12"
3'-4"

TYPICAL TRENCH SECTION
16" HDPE CASING W/ 4"HDPE AND 8" HDPE FORCEMAIN

4
D2
Scale: N.T.S.

Details
Standard Details

City of Winlock
Sewer Extension to Industrial Park
Winlock, Washington

Horizontal Scale: 1"=30'
Vertical Scale: NA
Datum: NAD83/91 NAVD 88
Survey Book: 1656
Project Phase:

Project Milestone:
90%
Revision Date:
3/9/2016

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www.gibbs-olson.com

Project Manager: MM
Designed by: ----
CAD by: DM KS
Checked by: ----
Approved by: ----
Project Number:
08564012
Drawing Number:
D2
Sheet Number:
21 of **----**

DRAWING: T:\CIVIL 3D\PROJECTS\08564012.ACT\DETAILS\STANDARD DETAILS.DWG, LAYOUT TAB: D2, PLOT DATE: 3/9/2016 10:57:16 AM, DRAWING SAVE DATE: 3/8/2016 5:05:53 PM, PLOTTED BY: SMCWILLIAMS
PROFILE: GIBBS & OLSON STANDARD – C3D IMPERIAL 2015, PLOT DEVICE: GIBBS & OLSON – DWG TO PDF.PC3, PLOT STYLE TABLE: GIBBS–OLSON STANDARD MONOCHROME.CTB, PAPER SIZE: GIBBS & OLSON – PLANSHEET D SIZE (34.00 X 22.00 INCHES)