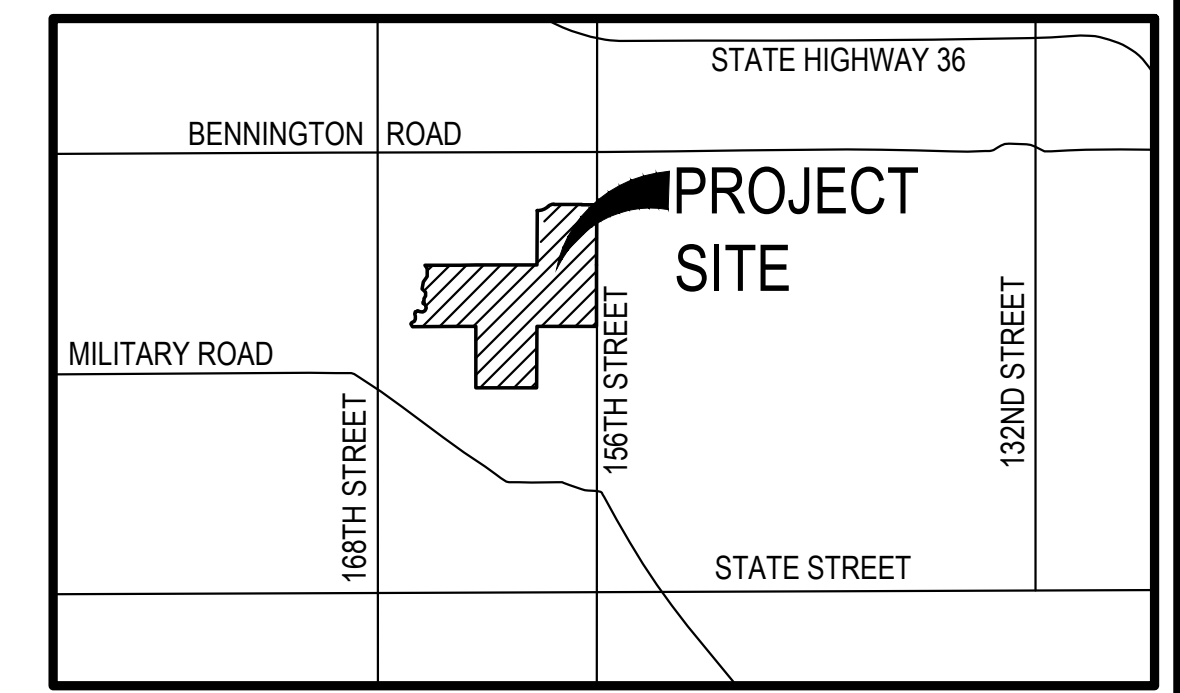
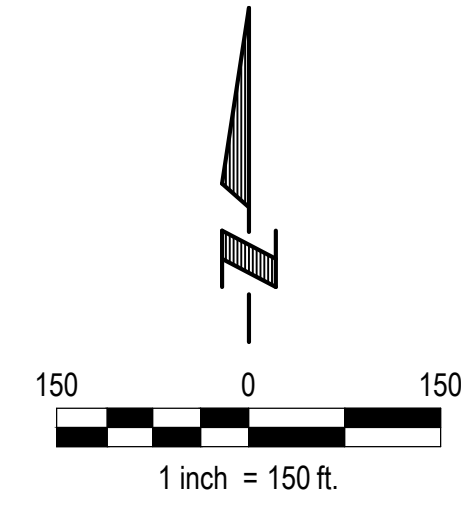


MORGAN RIDGE

LOTS 1 THRU 238 & OUTLOTS "A" THRU "H"
GRADING & STORMWATER POLLUTION PREVENTION PLAN - SECTION I
 Located in Section 15, Township 16N, Range 11E, of the 6th P.M.
 SID NO. 623
 BENNINGTON, NEBRASKA



VICINITY MAP

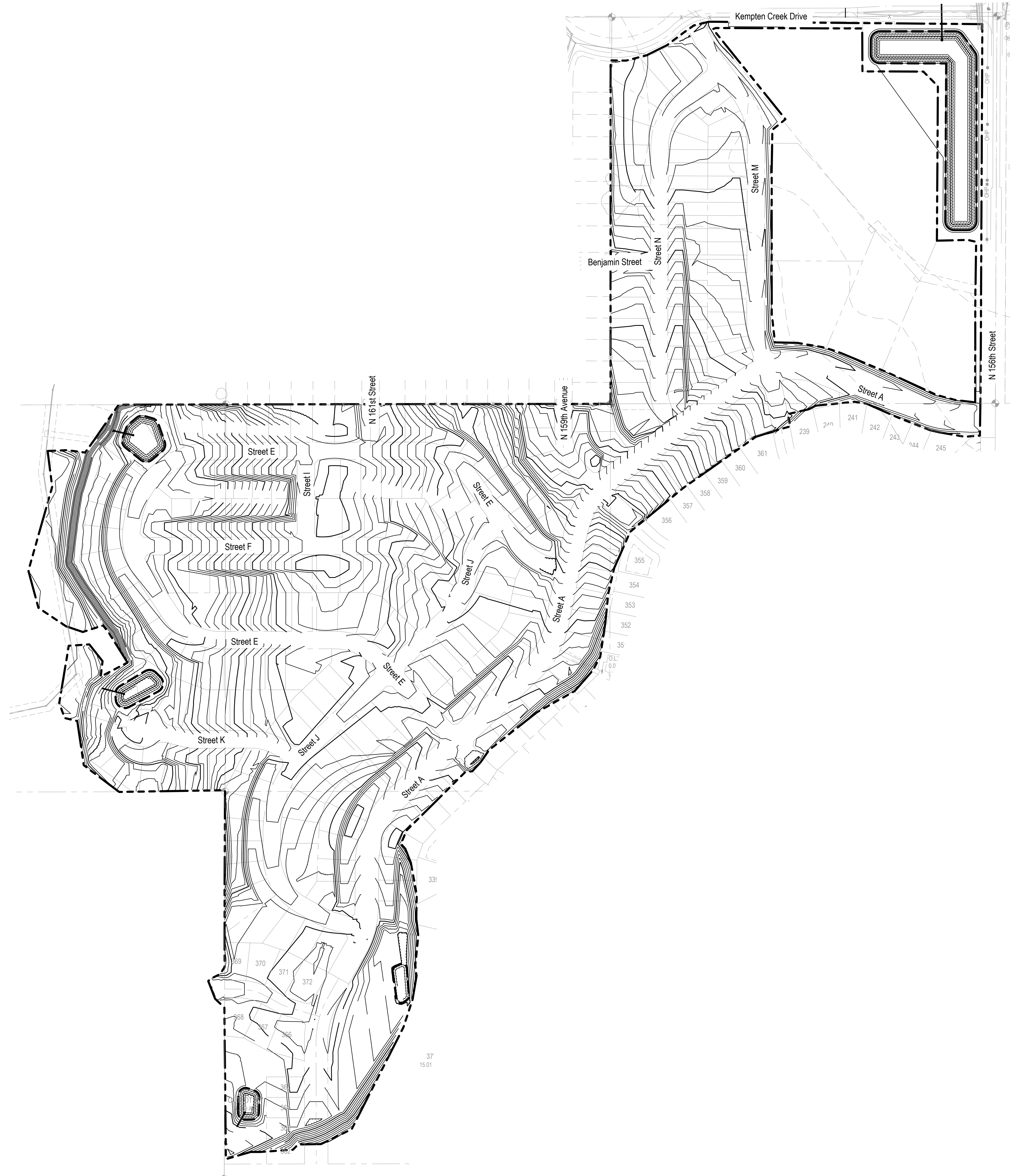


INDEX OF SHEETS

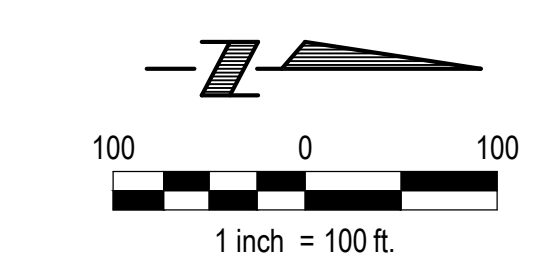
SHEET NO.	DESCRIPTION
1	COVER
2	GENERAL NOTES & DETAILS
3	GRADING & SWPPP - REMOVALS
4	GRADING & SWPPP - GRADING PLAN
5	GRADING & SWPPP - CUT-FILL TICKS
6	GRADING & SWPPP - BASIN A
7	GRADING & SWPPP - BASIN B
8	GRADING & SWPPP - BASIN C
9	GRADING & SWPPP - BASIN D
10	GRADING & SWPPP - DRAINAGE MAP

APPROXIMATE BID QUANTITIES

ITEM	DESCRIPTION	QUANTITY	UNIT
1	MOBILIZATION	1	LS
2	CLEARING AND GRUBBING - GENERAL	1	LS
3	EXCAVATION ON-SITE INCLUDES STRIPPINGS (ESTABLISHED QUANTITY)	689,655	CY
4	TOPSOIL RESPREAD (ESTABLISHED QUANTITY)	55,902	CY
5	CONSTRUCT SILT FENCE	9,603	LF
6	CONSTRUCT DIVERSION BERM	4,291	LF
7	CONSTRUCT EROSION CONTROL TERRACE	12,992	LF
8	CONSTRUCT 30" DIAMETER CMP RISER (2)	11	VF
9	CONSTRUCT 24" CMP BARREL	132	LF
10	CONSTRUCT 54" TYPE II AREA INLET (1)	6	VF
11	CONSTRUCT 72" TYPE II AREA INLET (1)	7	VF
12	CONSTRUCT 24" RCP BARREL	588	LF
13	CONSTRUCT 30" RCP BARREL	65	LF
14	CONSTRUCT 30" RC FLARED END SECTION	1	EA
15	CONSTRUCT TIMBER PIPE PILE SUPPORT	1	EA
16	CONSTRUCT 54" I.D. STORM MANHOLE (2)	25	VF
17	CONSTRUCT PIPE COUPLERS	18	EA
18	CONSTRUCT TYPE 'A' RIP RAP	55	TN
19	CONSTRUCT FLEXAMAT	92	SF
20	INSTALL TYPE 'B' SEEDING AND EROSION CONTROL MATTING	126,383	SF
21	SEED DISTURBED AREA, TYPE 'B'	105	AC
22	CONSTRUCT STONE CONSTRUCTION ENTRANCE	1	EA
23	CONSTRUCT CONCRETE RING RETAINER	2	EA
24	CONSTRUCT BAFFLE	360	LF
25	SAW CUT FULL DEPTH PAVEMENT	90	LF
26	REMOVE 9" P.C.C. AND 6" P.C.C. PAVEMENT COMPOSITE	120	SY
27	CONSTRUCT 9" P.C.C. WITH INTEGRAL CURB	110	SY
28	CONSTRUCT 6" P.C.C. MEDIAN SURFACING	10	SY
29	REMOVE TREES AND STUMPS	1	LS
30	REMOVE CONCRETE SLABS	865	SY
1A	DIRECT BORE 24" RCP BARREL (ALTERNATIVE BID ITEM)	65	LF



BENCHMARK:
BENCHMARK #1: Chiseled "X" north rim curb inlet manhole, first curb inlet west (2780±feet) of North 156th Street, curb inlet on north side of Bennington Road
ELEV: 1094.39
BENCHMARK #2: Chiseled "X" west rim curb inlet manhole, third curb inlet south (1150±feet) of Bennington Road, curb inlet on west side of North 156th Street.
ELEV: 1089.68



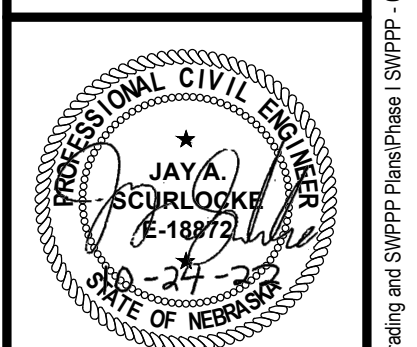
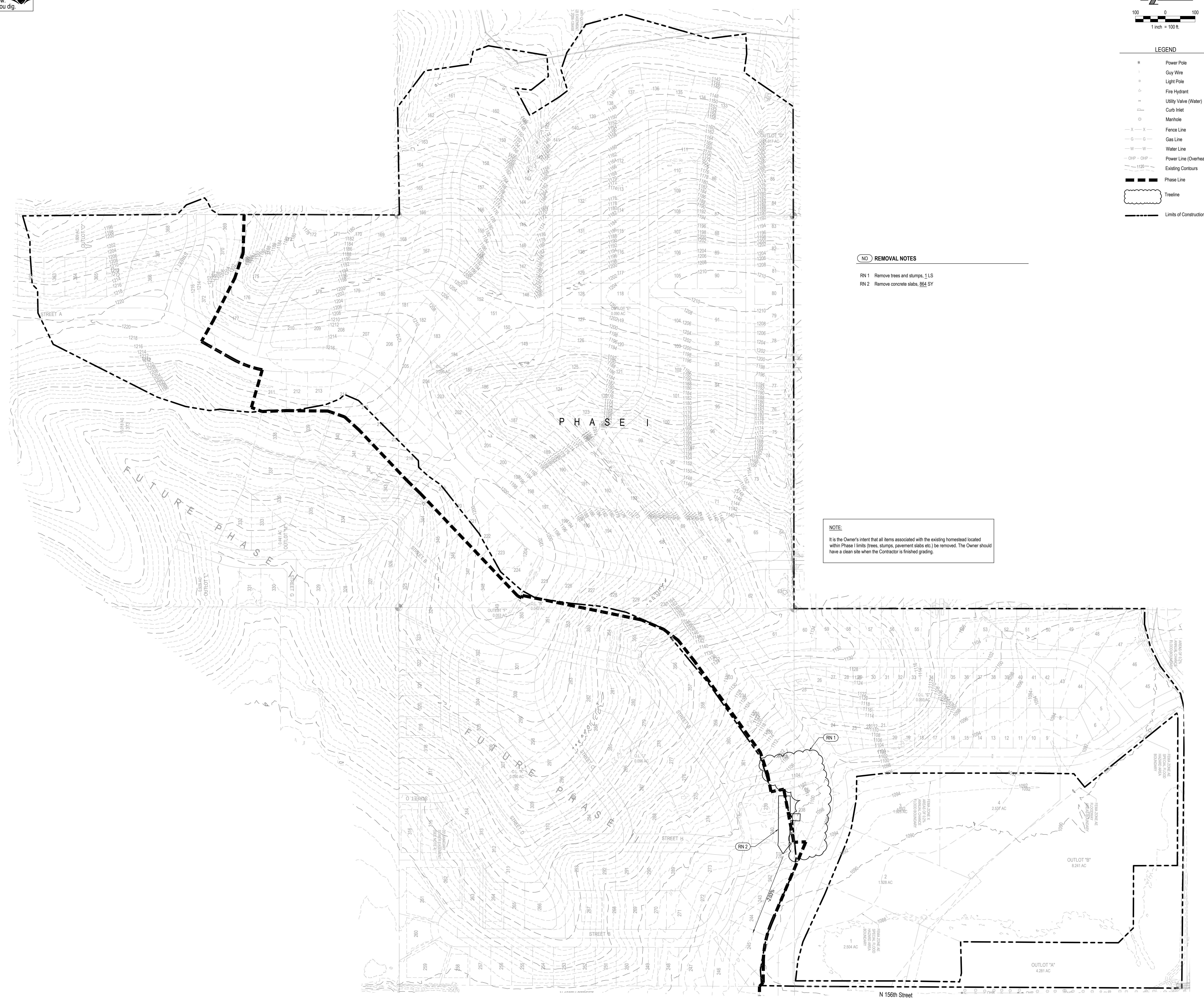
LEGEND

●	Power Pole
○	Guy Wire
○	Light Pole
○	Fire Hydrant
○	Utility Valve (Water)
○	Curb Inlet
○	Manhole
-X-X-	Fence Line
-G-G-	Gas Line
-W-W-	Water Line
-OHP-OHP-	Power Line (Overhead)
- - -	Existing Contours
- - -	Phase Line
○	Treeline
- - -	Limits of Construction

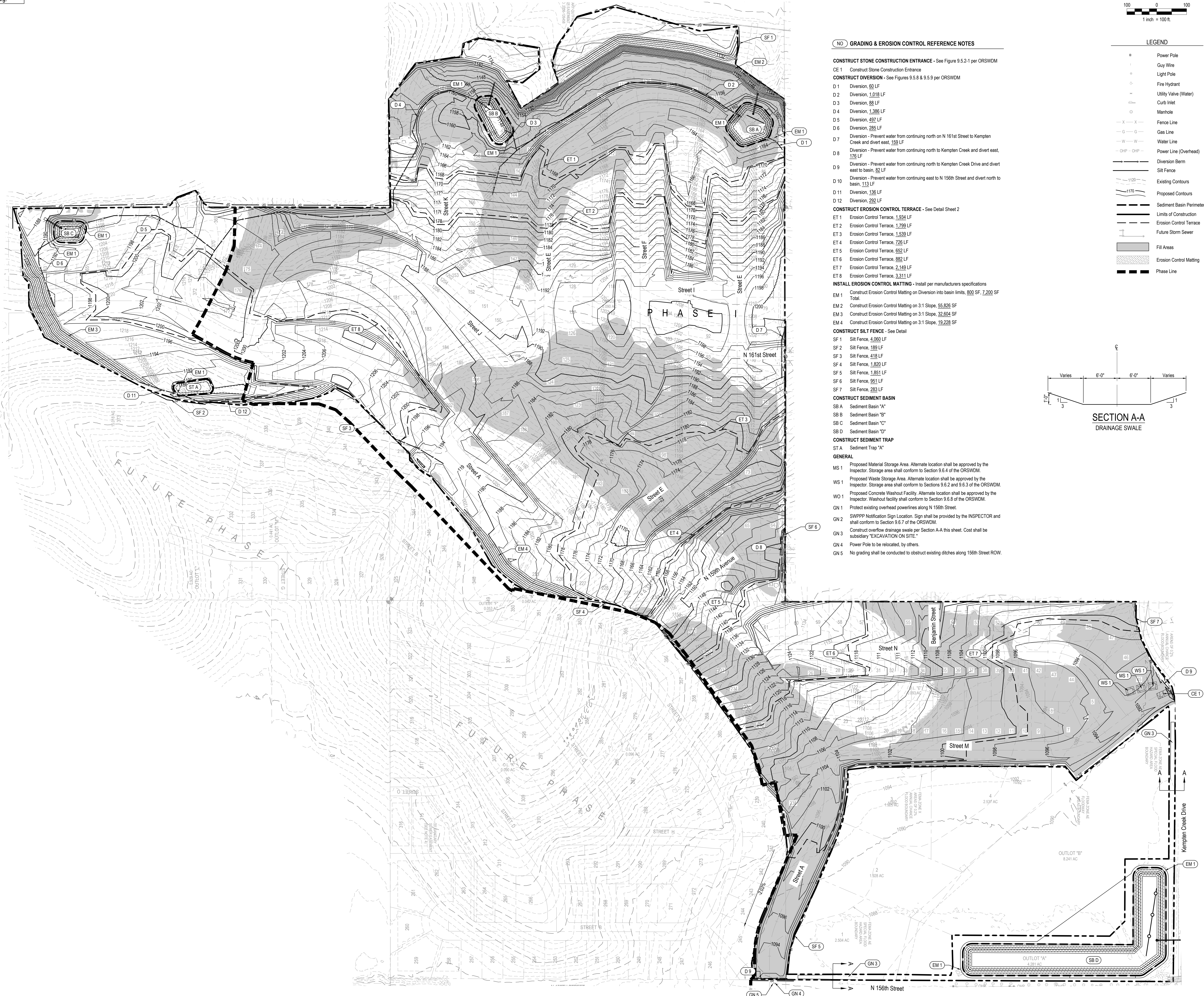
NO REMOVAL NOTES

- RN 1 Remove trees and stumps, 1LS
- RN 2 Remove concrete slabs, 884 SY

NOTE
 It is the Owner's intent that all items associated with the existing homestead located within Phase I limits (trees, stumps, pavement slabs etc.) be removed. The Owner should have a clean site when the Contractor is finished grading.



Revision	Date	Description
1	09/11/2022	ASB/KRM
2		ASB/KRM
3		ASB/KRM

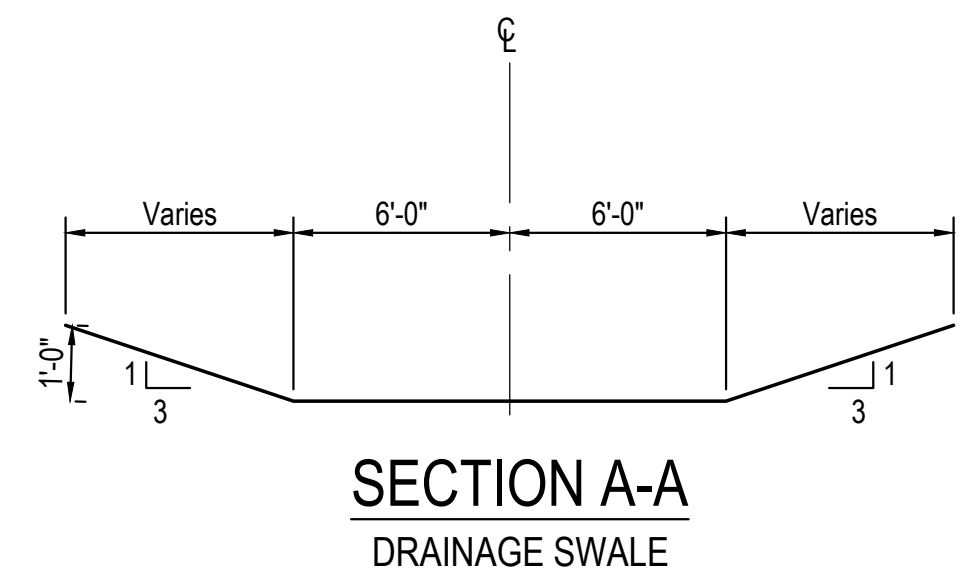


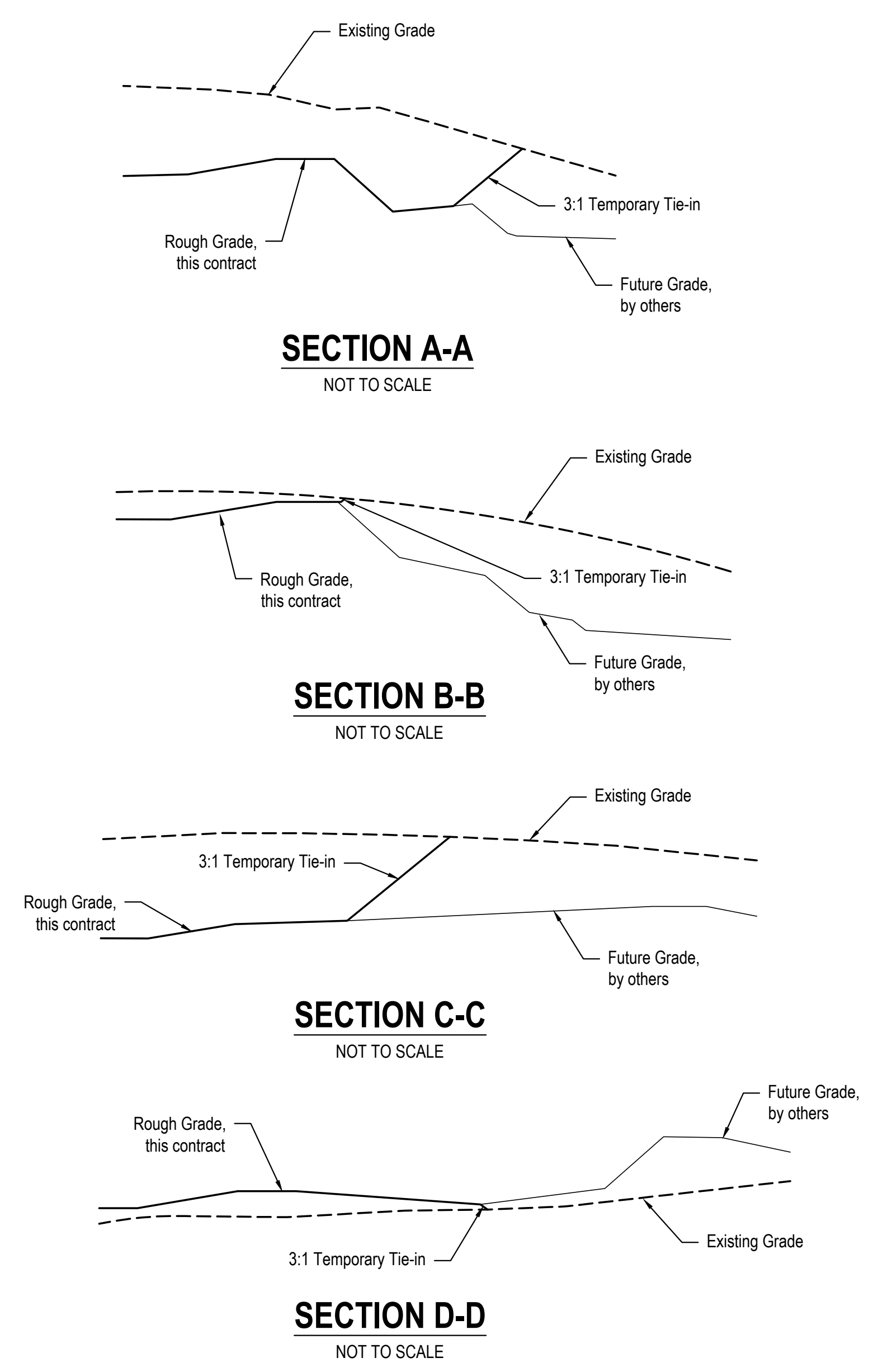
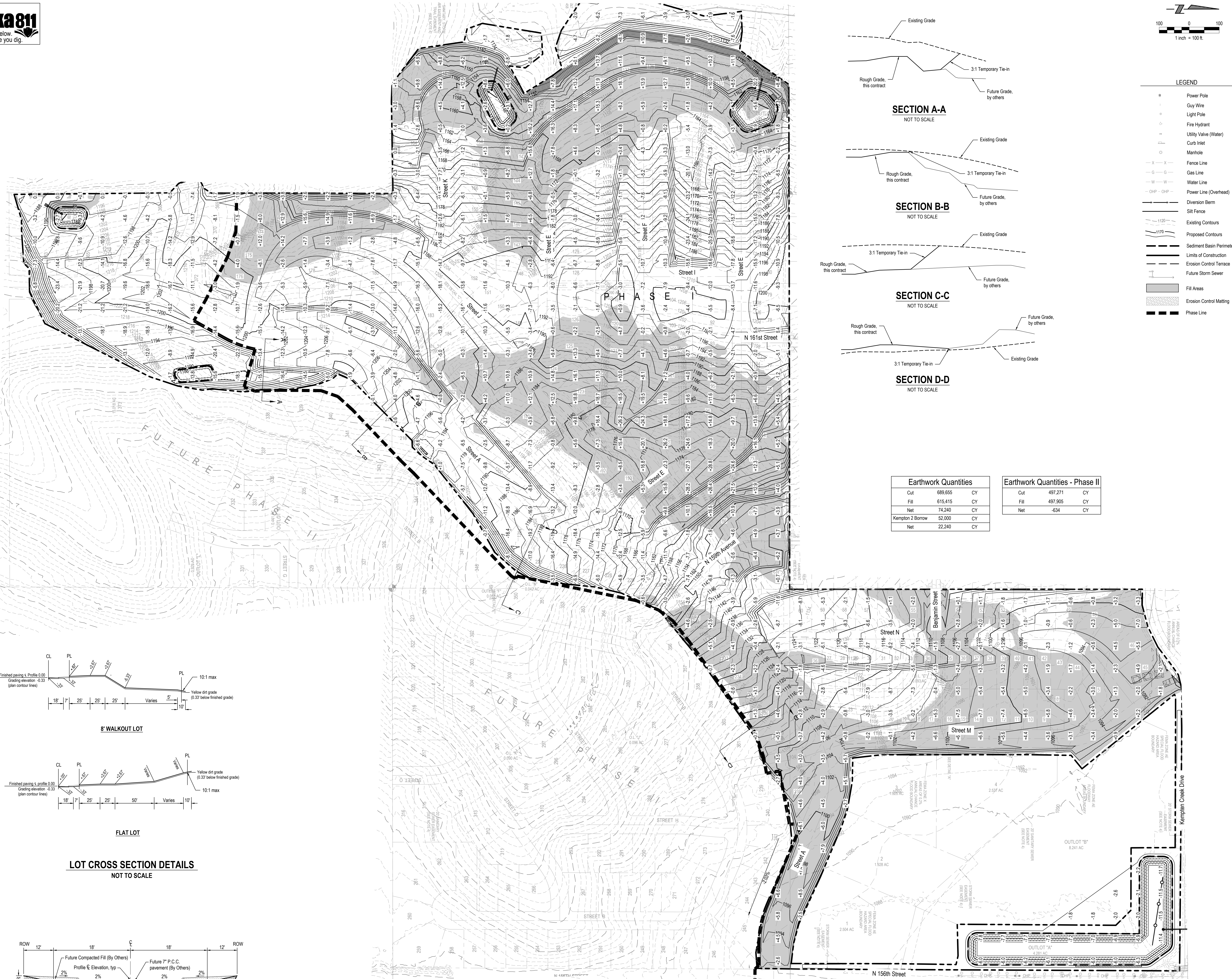
NO GRADING & EROSION CONTROL REFERENCE NOTES

- CONSTRUCT STONE CONSTRUCTION ENTRANCE** - See Figure 9.5.2-1 per ORSWDM
 CE 1 Construct Stone Construction Entrance
- CONSTRUCT DIVERSION** - See Figures 9.5.8 & 9.5.9 per ORSWDM
- D 1 Diversion, 60 LF
 - D 2 Diversion, 1,018 LF
 - D 3 Diversion, 88 LF
 - D 4 Diversion, 1,386 LF
 - D 5 Diversion, 497 LF
 - D 6 Diversion, 285 LF
 - D 7 Diversion - Prevent water from continuing north on N 161st Street to Kempton Creek and divert east, 175 LF
 - D 8 Diversion - Prevent water from continuing north to Kempton Creek and divert east, 175 LF
 - D 9 Diversion - Prevent water from continuing north to Kempton Creek Drive and divert east to basin, 82 LF
 - D 10 Diversion - Prevent water from continuing east to N 156th Street and divert north to basin, 113 LF
 - D 11 Diversion, 136 LF
 - D 12 Diversion, 292 LF
- CONSTRUCT EROSION CONTROL TERRACE** - See Detail Sheet 2
- ET 1 Erosion Control Terrace, 1,934 LF
 - ET 2 Erosion Control Terrace, 1,799 LF
 - ET 3 Erosion Control Terrace, 1,539 LF
 - ET 4 Erosion Control Terrace, 726 LF
 - ET 5 Erosion Control Terrace, 652 LF
 - ET 6 Erosion Control Terrace, 882 LF
 - ET 7 Erosion Control Terrace, 2,149 LF
 - ET 8 Erosion Control Terrace, 3,311 LF
- INSTALL EROSION CONTROL MATTING** - Install per manufacturers specifications
- EM 1 Construct Erosion Control Matting on Diversion into basin limits, 800 SF, 7,200 SF Total
 - EM 2 Construct Erosion Control Matting on 3:1 Slope, 55,826 SF
 - EM 3 Construct Erosion Control Matting on 3:1 Slope, 32,604 SF
 - EM 4 Construct Erosion Control Matting on 3:1 Slope, 19,228 SF
- CONSTRUCT SILT FENCE** - See Detail
- SF 1 Silt Fence, 4,090 LF
 - SF 2 Silt Fence, 189 LF
 - SF 3 Silt Fence, 418 LF
 - SF 4 Silt Fence, 1,820 LF
 - SF 5 Silt Fence, 1,851 LF
 - SF 6 Silt Fence, 951 LF
 - SF 7 Silt Fence, 283 LF
- CONSTRUCT SEDIMENT BASIN**
- SB A Sediment Basin "A"
 - SB B Sediment Basin "B"
 - SB C Sediment Basin "C"
 - SB D Sediment Basin "D"
- CONSTRUCT SEDIMENT TRAP**
- ST A Sediment Trap "A"
- GENERAL**
- MS 1 Proposed Material Storage Area. Alternate location shall be approved by the Inspector. Storage area shall conform to Section 9.6.4 of the ORSWDM.
 - WS 1 Proposed Waste Storage Area. Alternate location shall be approved by the Inspector. Storage area shall conform to Sections 9.6.2 and 9.6.3 of the ORSWDM.
 - WO 1 Proposed Concrete Washout Facility. Alternate location shall be approved by the Inspector. Washout facility shall conform to Section 9.6.8 of the ORSWDM.
 - GN 1 Protect existing overhead powerlines along N 156th Street.
 - GN 2 SWPPP Notification Sign Location. Sign shall be provided by the INSPECTOR and shall conform to Section 9.6.7 of the ORSWDM.
 - GN 3 Construct overflow drainage swale per Section A-A this sheet. Cost shall be subsidiary "EXCAVATION ON SITE."
 - GN 4 Power Pole to be relocated, by others.
 - GN 5 No grading shall be conducted to obstruct existing ditches along 156th Street ROW.

LEGEND

●	Power Pole
○	Guy Wire
○	Light Pole
○	Fire Hydrant
○	Utility Valve (Water)
○	Curb Inlet
○	Manhole
-X-X-	Fence Line
-G-G-	Gas Line
-W-W-	Water Line
-OHP-OHP-	Power Line (Overhead)
—	Diversion Berm
—	Silt Fence
—	Existing Contours
—	Proposed Contours
—	Sediment Basin Perimeter
—	Limits of Construction
—	Erosion Control Terrace
—	Future Storm Sewer
■	Fill Areas
■	Erosion Control Matting
—	Phase Line





LEGEND

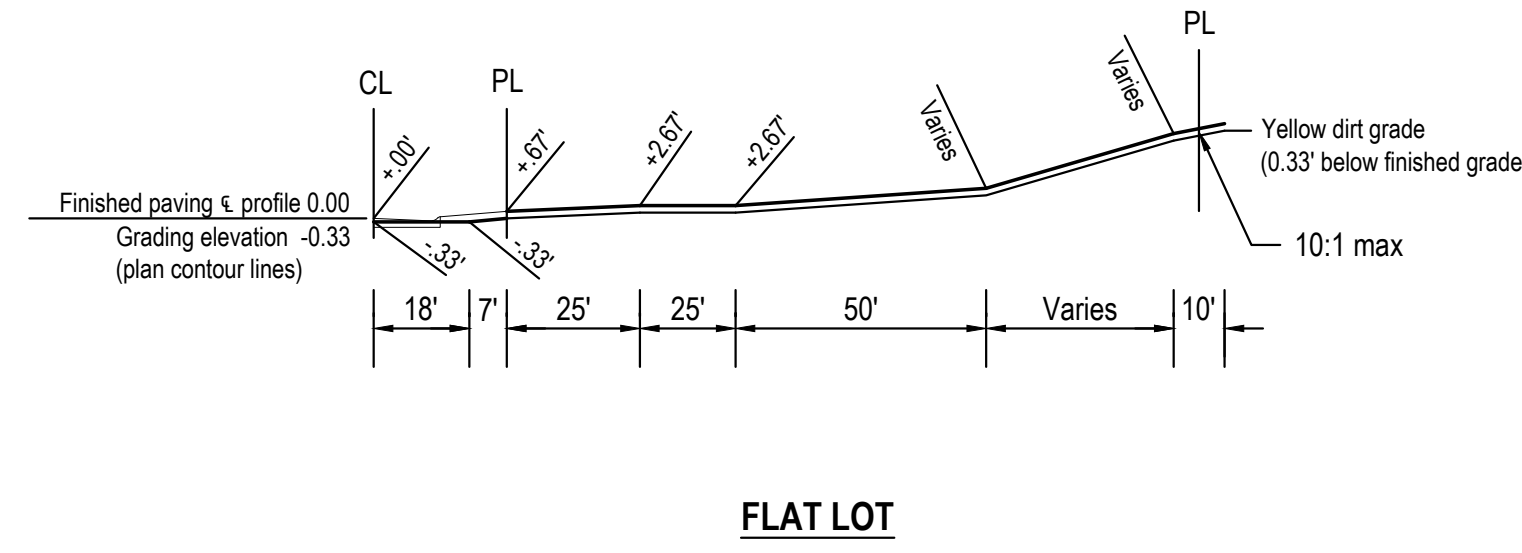
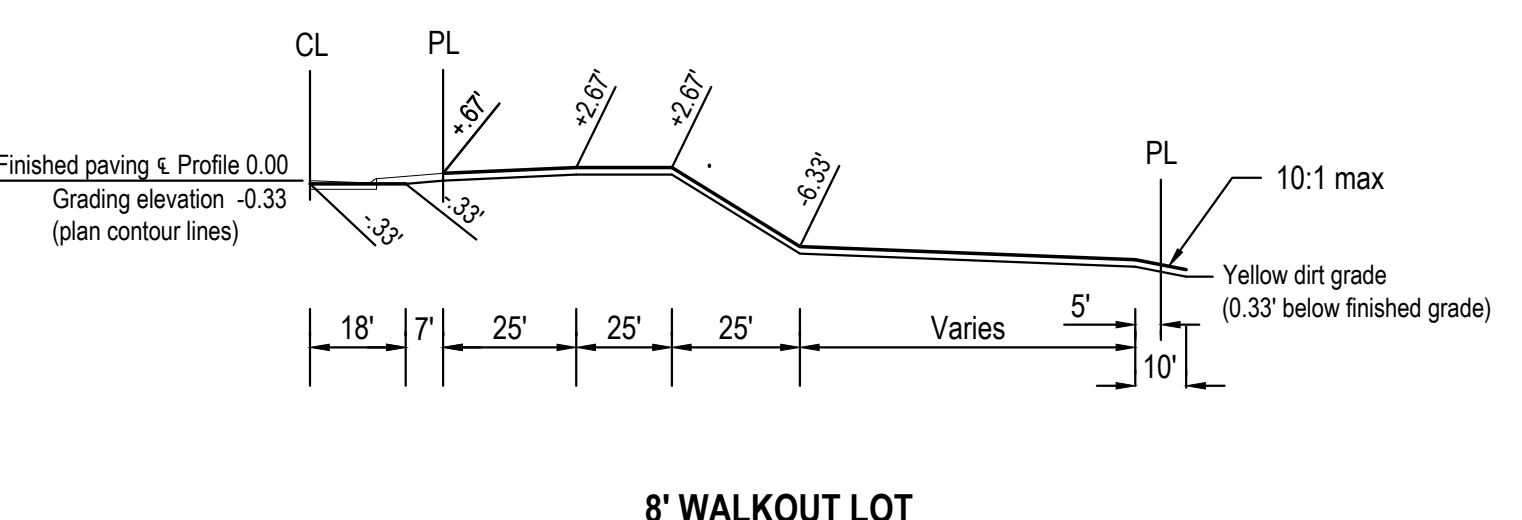
- Power Pole
- Guy Wire
- Light Pole
- Fire Hydrant
- Utility Valve (Water)
- Curb Inlet
- Manhole
- X-X- Fence Line
- G-G- Gas Line
- W-W- Water Line
- OHP-OHP- Power Line (Overhead)
- - - - - Diversion Berm
- - - - - Silt Fence
- - - - - Existing Contours
- - - - - Proposed Contours
- - - - - Sediment Basin Perimeter
- - - - - Limits of Construction
- - - - - Erosion Control Terrace
- - - - - Future Storm Sewer
- Fill Areas
- ▨ Erosion Control Matting
- - - - - Phase Line

Earthwork Quantities

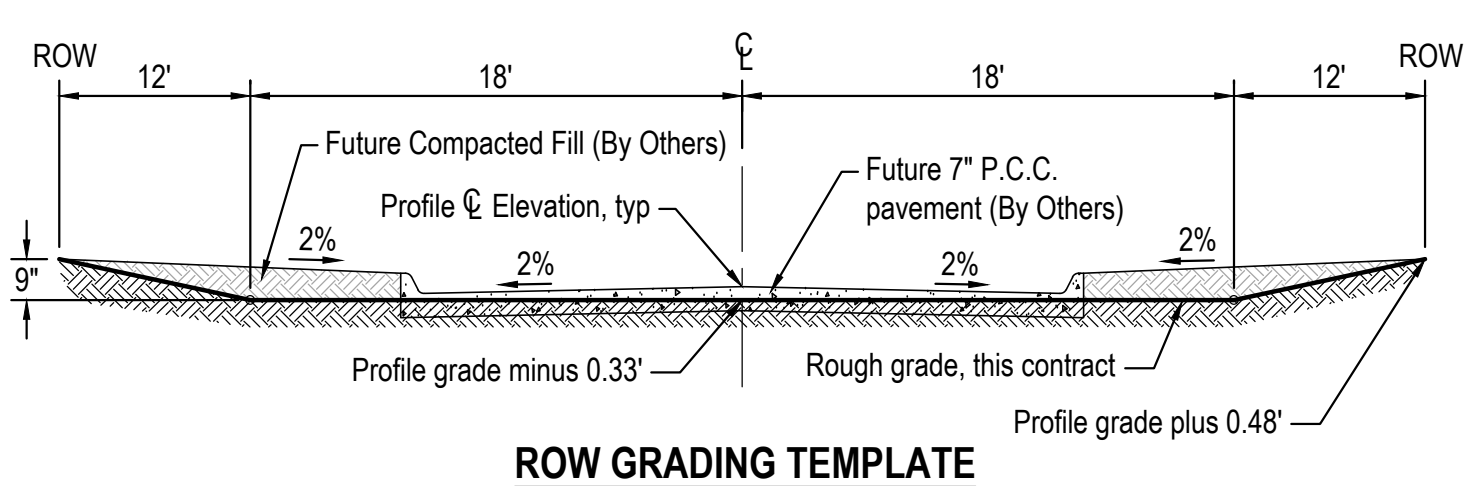
Cut	689,655	CY
Fill	615,415	CY
Net	74,240	CY
Kempton 2 Borrow	52,000	CY
Net	22,240	CY

Earthwork Quantities - Phase II

Cut	497,271	CY
Fill	497,905	CY
Net	-634	CY



LOT CROSS SECTION DETAILS
 NOT TO SCALE

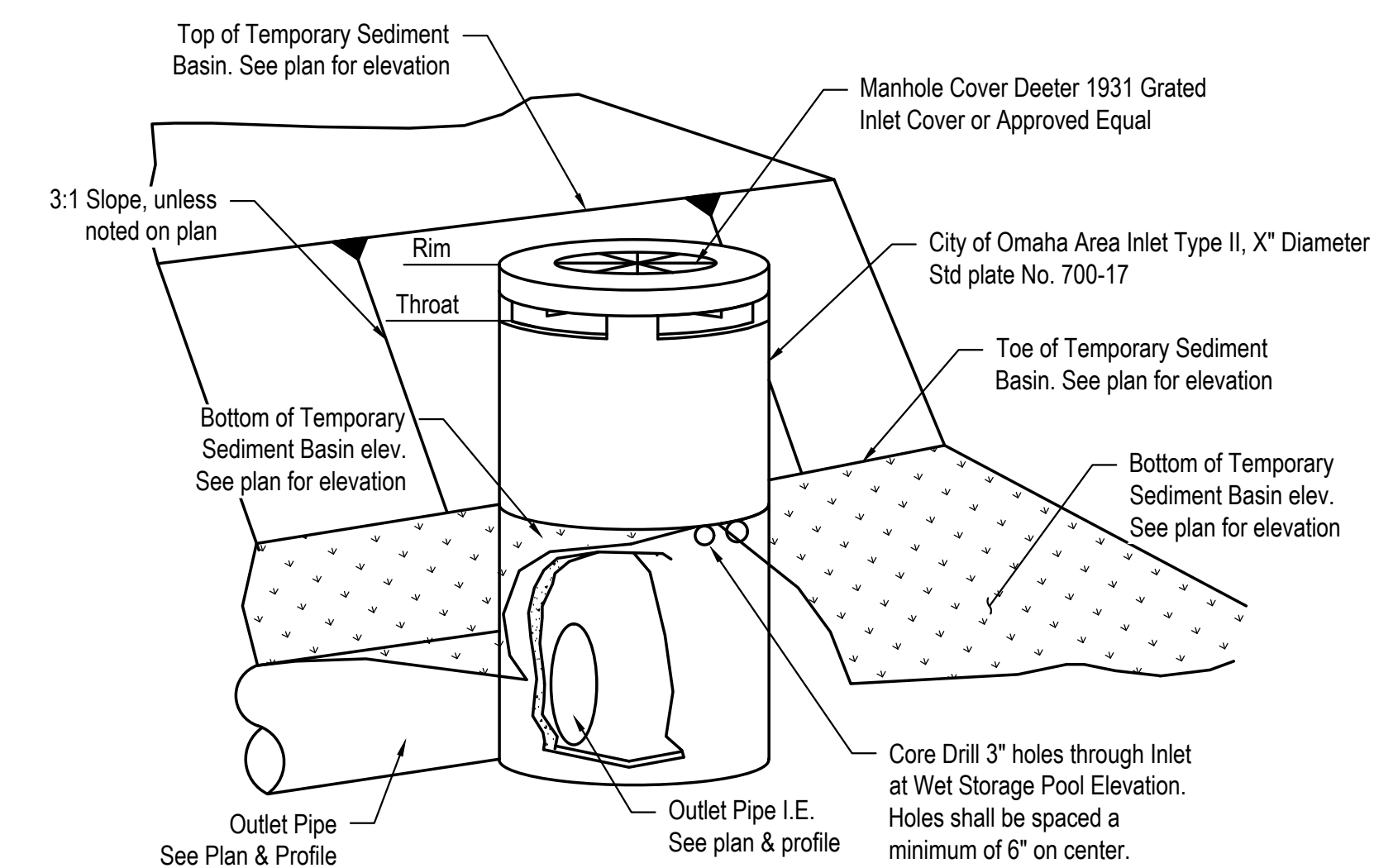


ROW GRADING TEMPLATE



SEDIMENT BASIN A
 SCALE: 1" = 30'

LEGEND	
■	Power Pole
—	Guy Wire
○	Light Pole
⊕	Fire Hydrant
—	Utility Valve (Water)
—	Curb Inlet
○	Manhole
— X —	Fence Line
— G —	Gas Line
— W —	Water Line
— OHP — OHP	Power Line (Overhead)
—	Diversion Berm
—	Silt Fence
— 1120 —	Existing Contours
— 1170 —	Proposed Contours
—	Sediment Basin Perimeter
—	Limits of Construction
—	Future Storm Sewer
▨	Erosion Control Matting

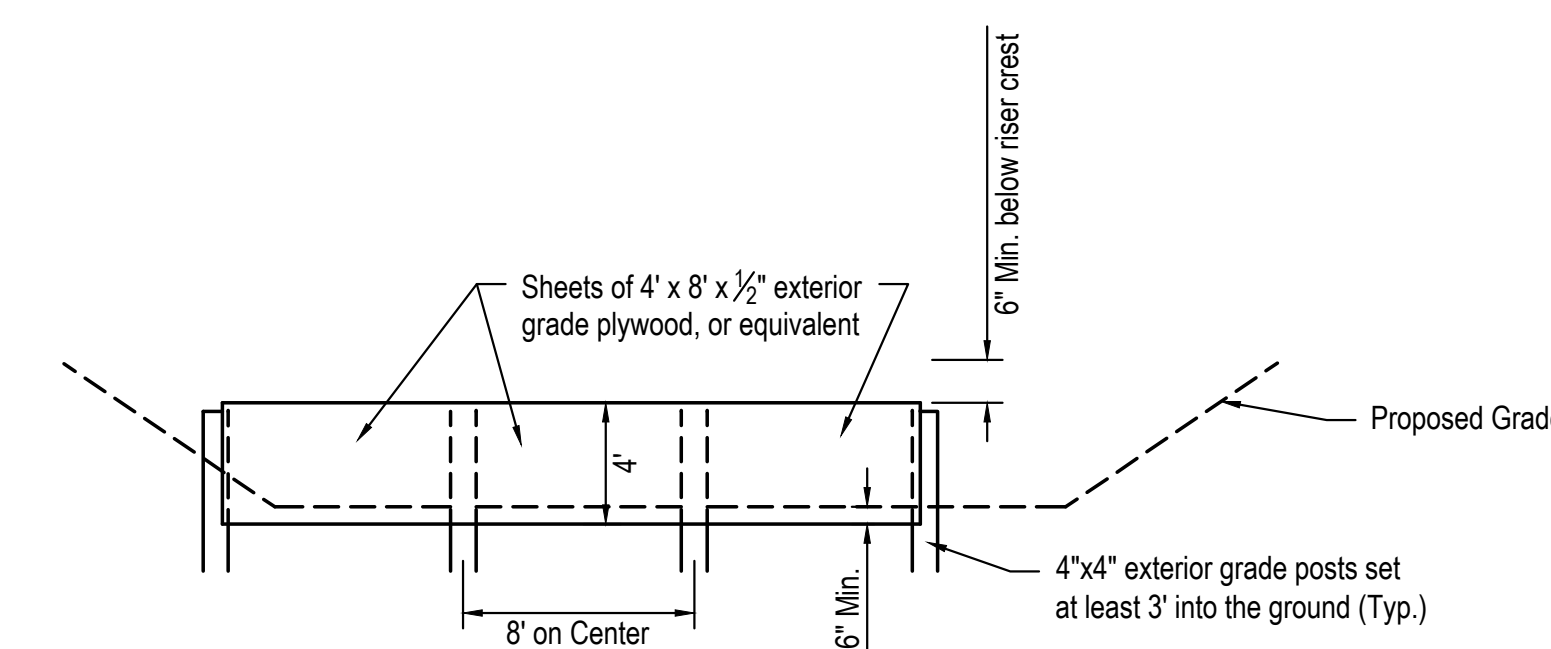
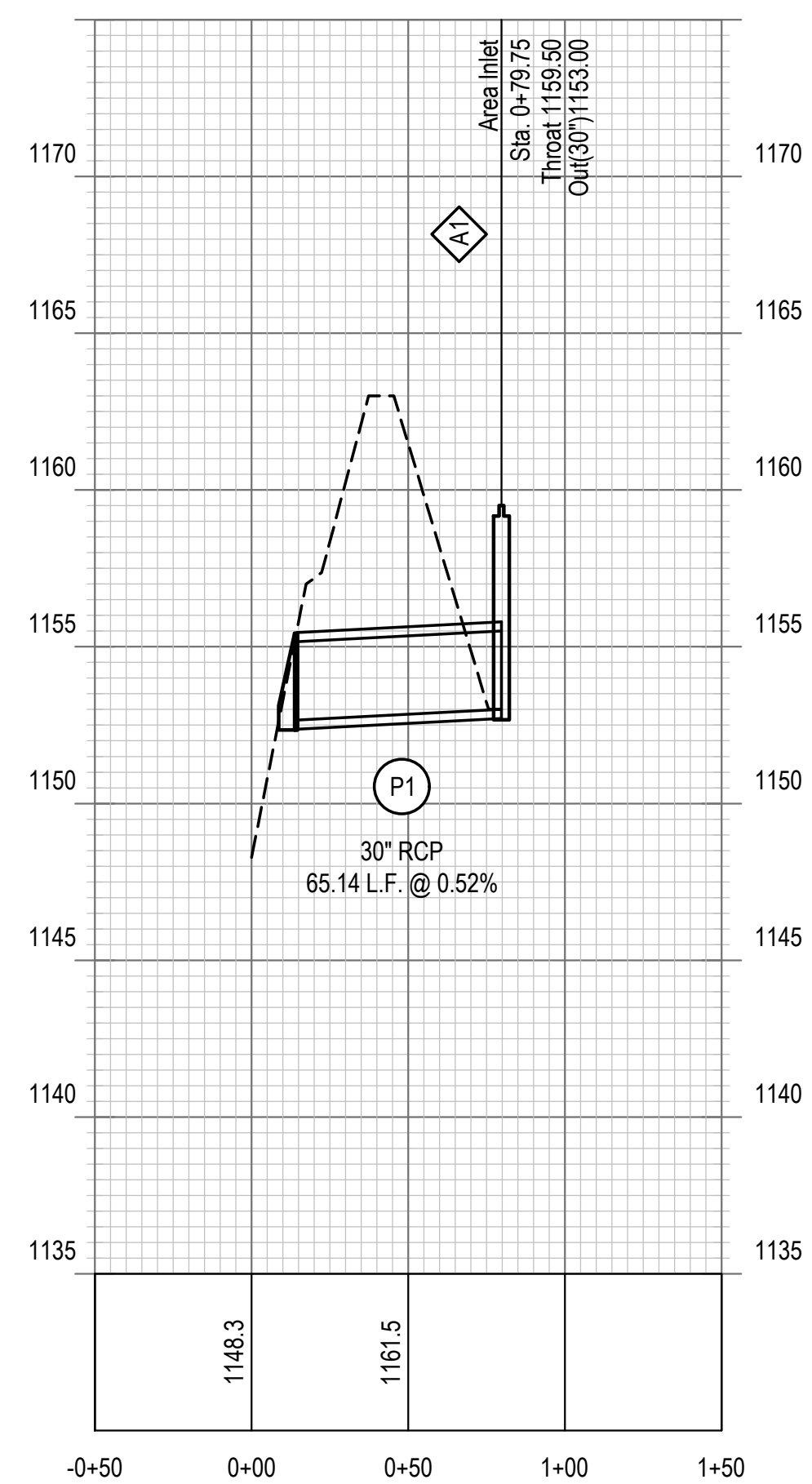


CITY OF OMAHA TYPE 2 AREA INLET
WITHOUT ORIFICE PLATE - DIAMETER VARIES
 NOT TO SCALE

- Notes:**
- For conversion to PCSMP Basin, holes at Wet Storage Pool Elevation will be grouted in and new holes will be drilled at a lower elevation. See PCSMP Plans.

NO REFERENCE NOTES

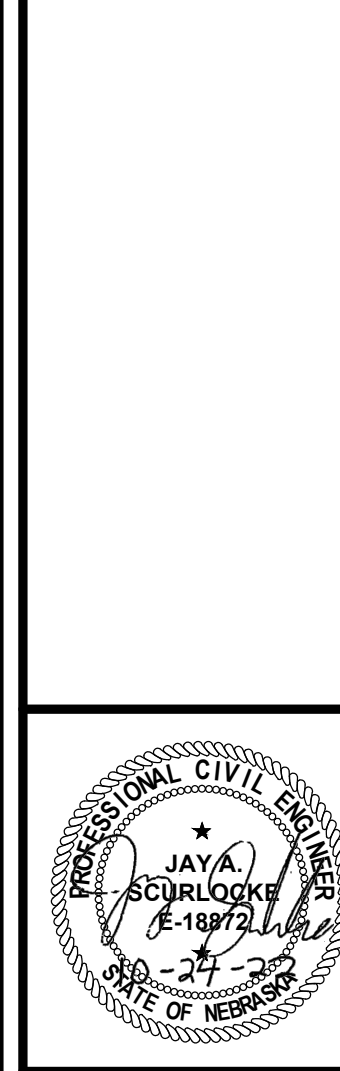
- Construct riser and base (per detail this sheet and data table below).
- Construct Type 'A' rip-rap scour hole. See detail and table on Sheet 2 for bid items, dimensions, and depth of scour hole.
- Construct sediment basin barrel. See data table this sheet for material, length, diameter, and elevations.
- Install pipe couplers on last 3 joints from flared end section per City of Omaha Standard Plate 700-04, 3 couplers per joint, 9 EA.
- Construct 30" RC Flared End Section, 1 EA.
- Construct baffle per detail this sheet, 64 LF.
- Construct anti-seep collar per detail on Sheet 2. Cost is subsidiary to pipe construction.
- Future storm sewer outlet.
- Future sanitary sewer.
- Construct Emergency Spillway - See Sediment Basin Data Table for length and elevation. Cost is subsidiary to bid item "EXCAVATION ON SITE".
- Seed and Mat disturbed area caused by the construction of the Outlet Pipe. Matting shall be North American Green S-75. Seeding shall be native seed, 579 SF.



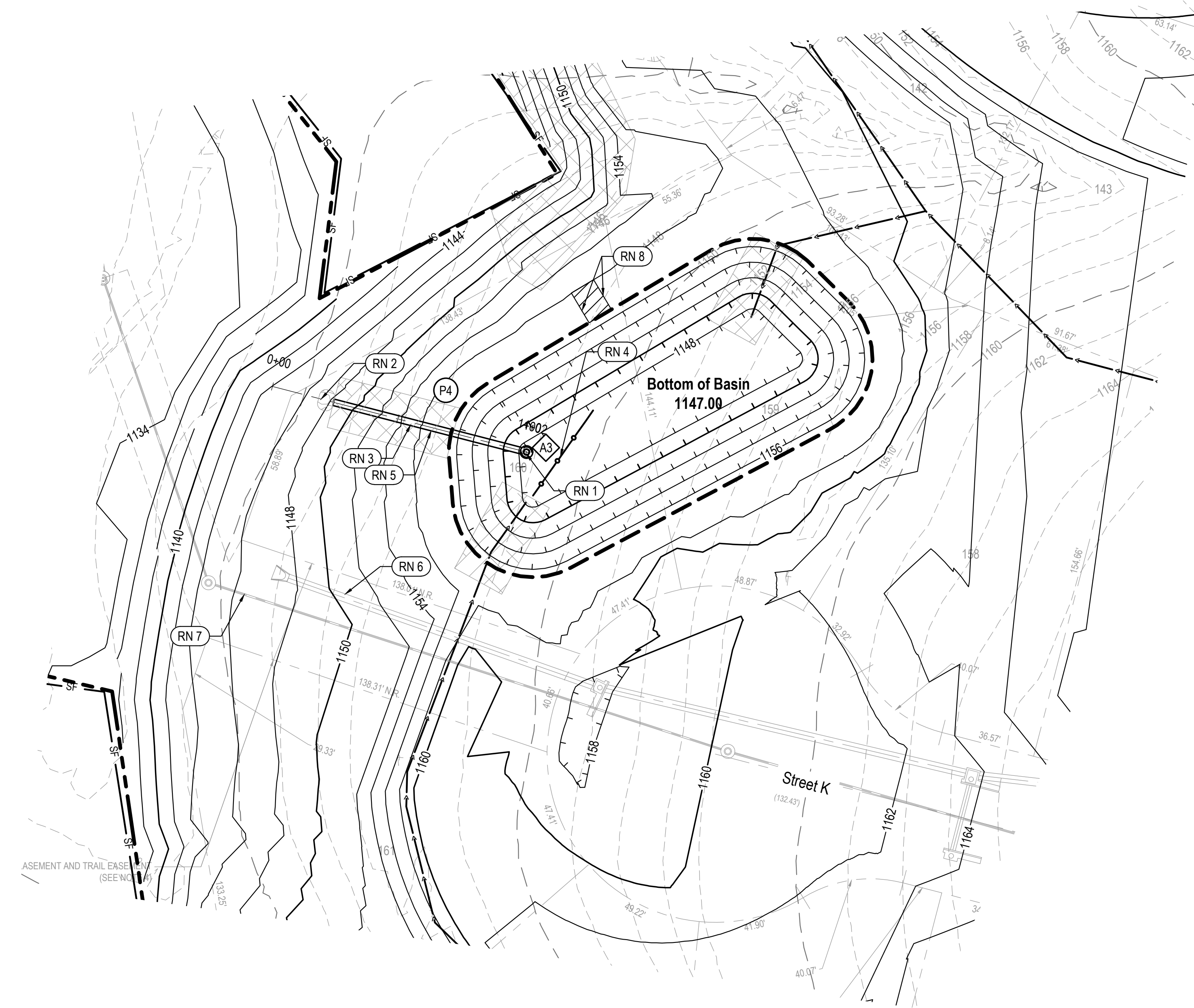
NOTE:
 Plywood sheets shall be attached to posts with galvanized exterior grade screws and washers.

SEDIMENT BASIN DATA TABLE

Basin No.	Drainage Area (Ac.)	2-Year Storm Event Discharge (cfs)	10-Year Storm Event Discharge (cfs)	Wet Storage Provided (CY)	Dry Storage Provided (CY)	Clean Out Storage Provided (CY)	Highwater Elevation (ft)	2-Year Storm Elevation (ft)	Top Berm Elevation (ft)	Bottom of Basin Elevation (ft)	Emergency Spillway Elevation (ft)	Emergency Spillway Width (ft)	Riser Type	Riser Diameter (ft)	Throat/ Riser Crest Elevation (ft)	Number of Dewatering Holes	Riser Dewatering Holes Diameter	Wet-Storage Holes Elevation (ft)	Clean Out Elevation (ft)	Anti-Vortex Device Diameter (in)	Anti-Vortex Device Height (in)	Barrel Diameter (in)	Barrel Length (ft)	Barrel Inlet Elevation (ft)	Barrel Outlet Elevation (ft)	Barrel Material
A	15.9	60	91	1076	1209	557	1162.00	1161.10	1163.00	1153.00	1161.10	20	Type II AI	54	1159.50	2	3	1156.63	1155.05	N/A	N/A	30	65	1153.00	1152.66	RCP

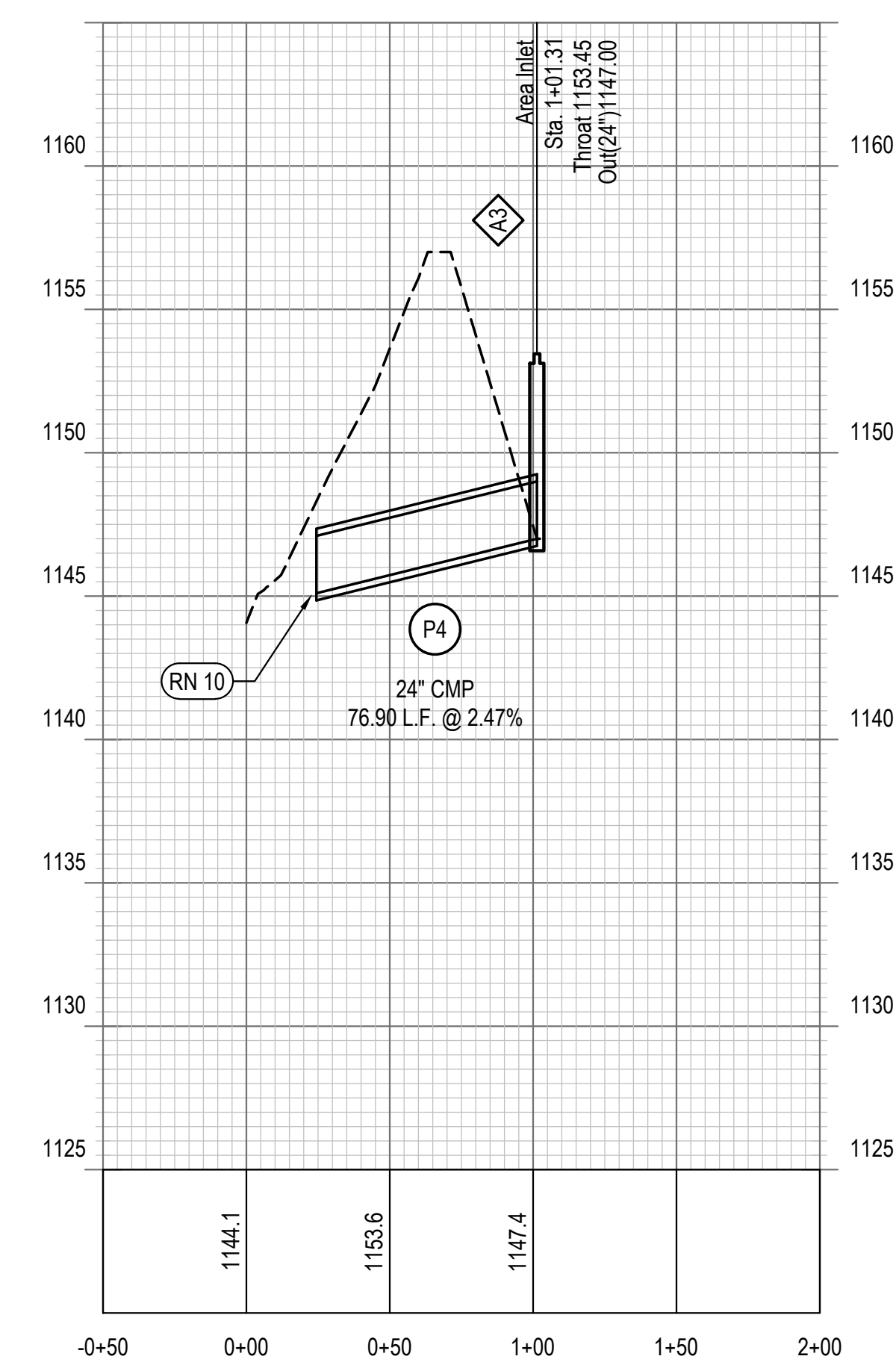


Revision	Description
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2	ASB/DM
3	ASB/DM
4	ASB/DM
5	ASB/DM
6	ASB/DM
7	ASB/DM

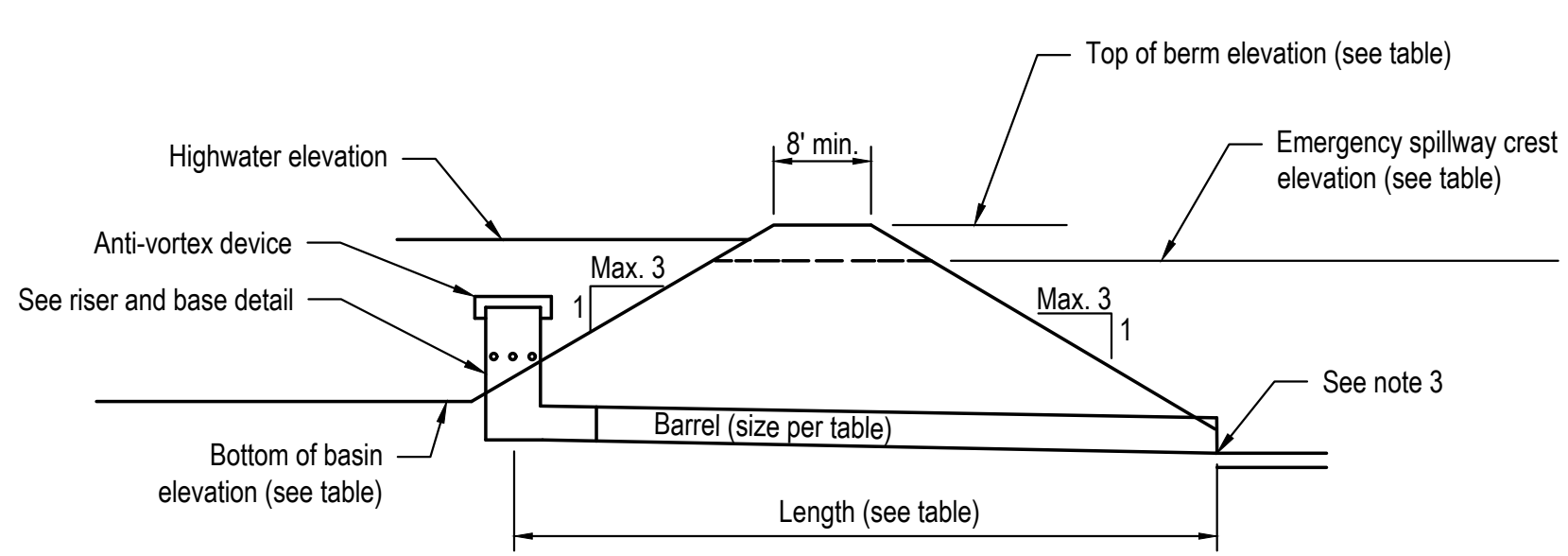


SEDIMENT BASIN B
 SCALE: 1" = 30'

- REFERENCE NOTES**
- RN 1 Construct riser and base (per detail this sheet and data table below) and anti-vortex device (see Figure 9-32 per ORSDM). Cost of riser, anti-vortex device shall be subsidiary to bid item "CONSTRUCT 30" DIAMETER CMP RISER, 6.5 VF.
 - RN 2 Construct Type 'A' rip-rap scour hole. See detail and table on Sheet 2 for bid items, dimensions, and depth of scour hole.
 - RN 3 Construct sediment basin barrel. See data table this sheet for material, length, diameter, and elevations.
 - RN 4 Construct baffle per detail this sheet, 40 LF.
 - RN 5 Construct anti-seep collar per detail on Sheet 2. Cost is subsidiary to pipe construction.
 - RN 6 Future storm sewer outlet.
 - RN 7 Future sanitary sewer.
 - RN 8 Construct Emergency Spillway - See Sediment Basin Data Table for length and elevation. Cost is subsidiary to bid item "EXCAVATION ON SITE".
 - RN 9 Seed and Mat disturbed area caused by the construction of the Outlet Pipe. Matting shall be North American Green S-75. Seeding shall be native seed, 954 SF.
 - RN 10 Grade to drain.

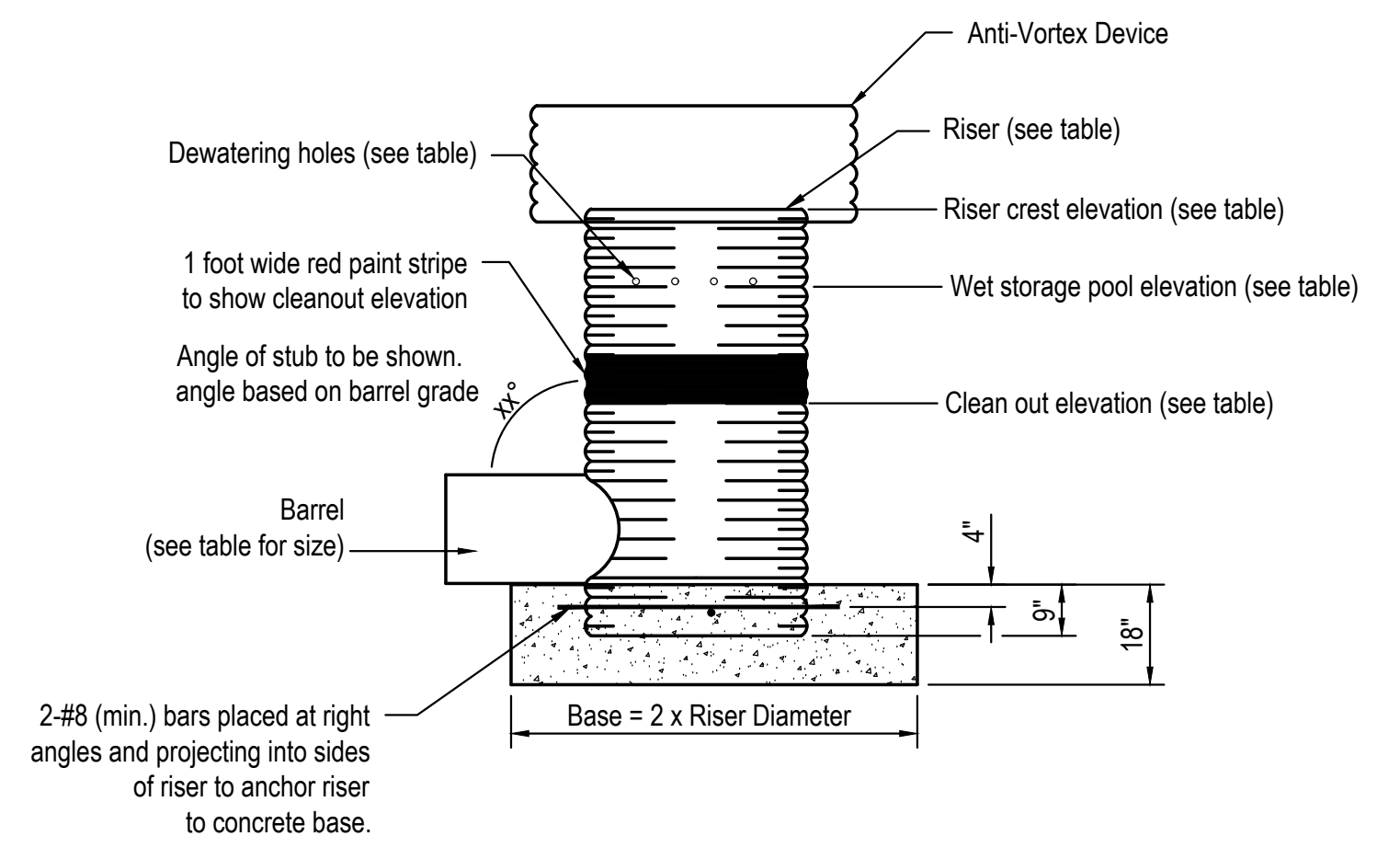


- LEGEND**
- Power Pole
 - Guy Wire
 - Light Pole
 - Fire Hydrant
 - Utility Valve (Water)
 - Curb Inlet
 - Manhole
 - X-X- Fence Line
 - G-G- Gas Line
 - W-W- Water Line
 - CHP- CHP (Overhead)
 - - - Diversion Berm
 - - - Silt Fence
 - - - Existing Contours
 - - - Proposed Contours
 - - - Sediment Basin Perimeter
 - - - Limits of Construction
 - - - Future Storm Sewer
 - ▨ Erosion Control Matting



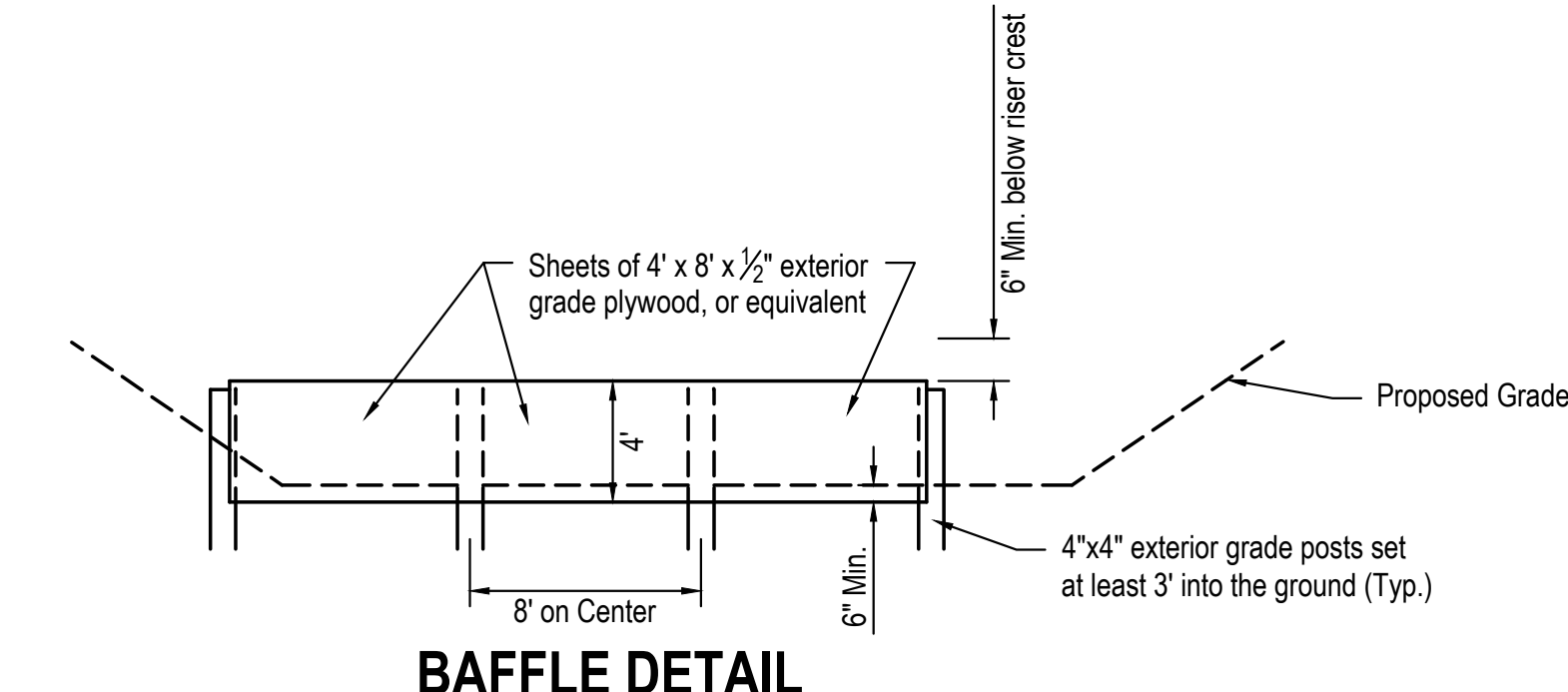
- NOTES**
- If spillway is constructed over fill, compact the embankment to a minimum of 95% of the Maximum Dry density within 3% below and 4% above optimum moisture as determined by ASTM D698 (Standard Proctor), or as recommended by the Geotechnical Engineer. Conduct a minimum of one compaction test every vertical foot of compacted fill placed, every 50 feet of embankment length. Provide test reports to the Engineer for review and approval. No testing or special compaction is required if spillway is constructed in cut areas on natural ground.
 - Riser and barrels shall be corrugated metal pipe. Reused pipes in good condition meeting the size requirements may be used following approval by the Engineer. Reused risers will be required to crest at the elevation indicated in the table below. The configuration of orifice holes must also meet the requirements below - exceeding the number of orifice holes will not be permitted.
 - The discharge flow line of the barrel shall be verified by the Engineer.

BASIN DETAIL
 NOT TO SCALE



- NOTES**
- Ensure that the concrete fills the bottom of the riser to the invert of the outlet pipe to counter flotation forces and prevent the riser from breaking away from the base.
 - If using aluminum or aluminized pipe risers, the embedded section shall be painted with zinc chromate or approved equivalent.
 - Position the bottom of the dewatering holes at the "Wet-Storage Pool Elevation" indicated in the Sediment Basin Data Table. Do not exceed the number of dewatering holes indicated.

RISER AND BASE DETAIL
 NOT TO SCALE

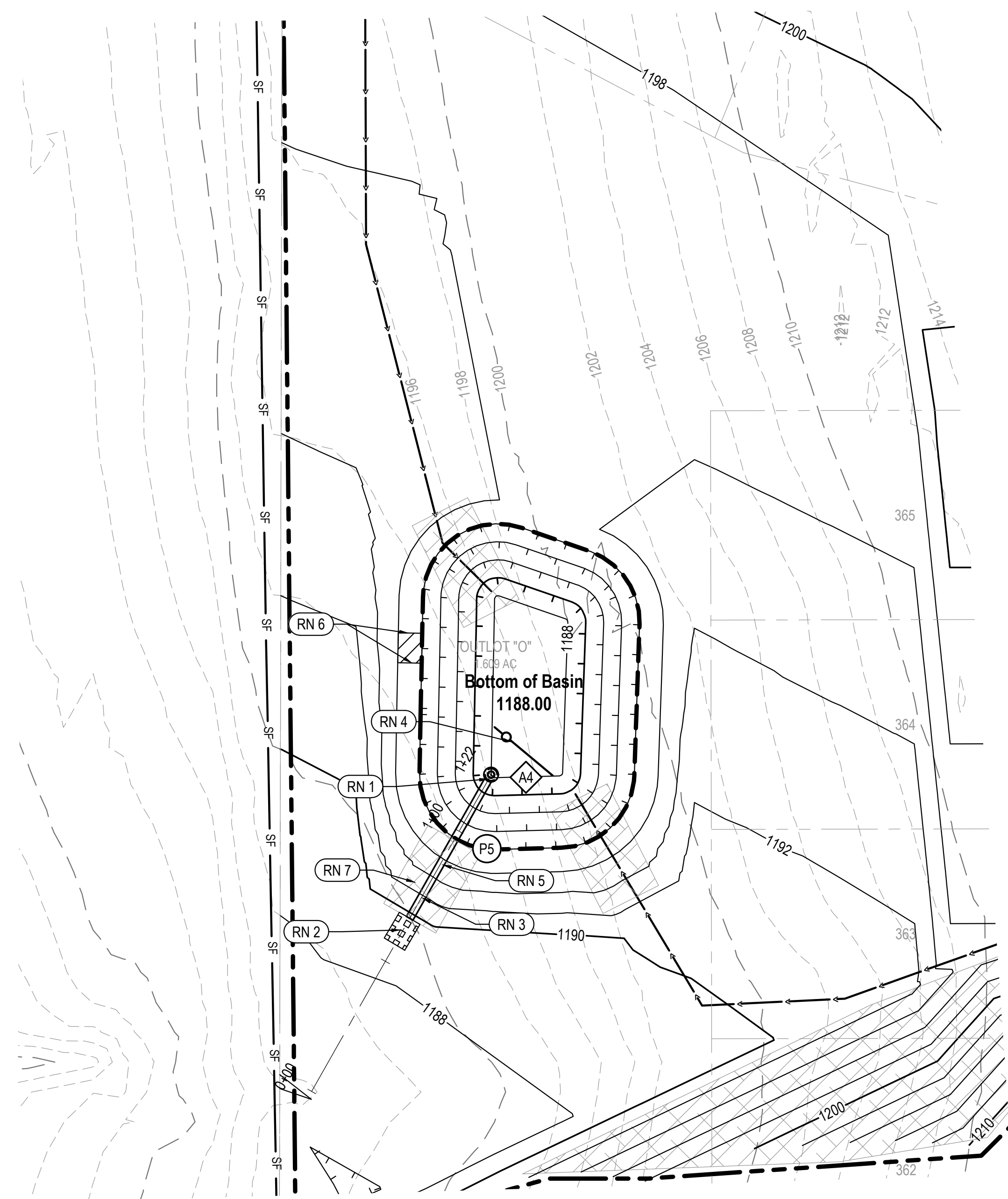


- NOTE:**
 Plywood sheets shall be attached to posts with galvanized exterior grade screws and washers.

BAFFLE DETAIL
 NOT TO SCALE

SEDIMENT BASIN DATA TABLE

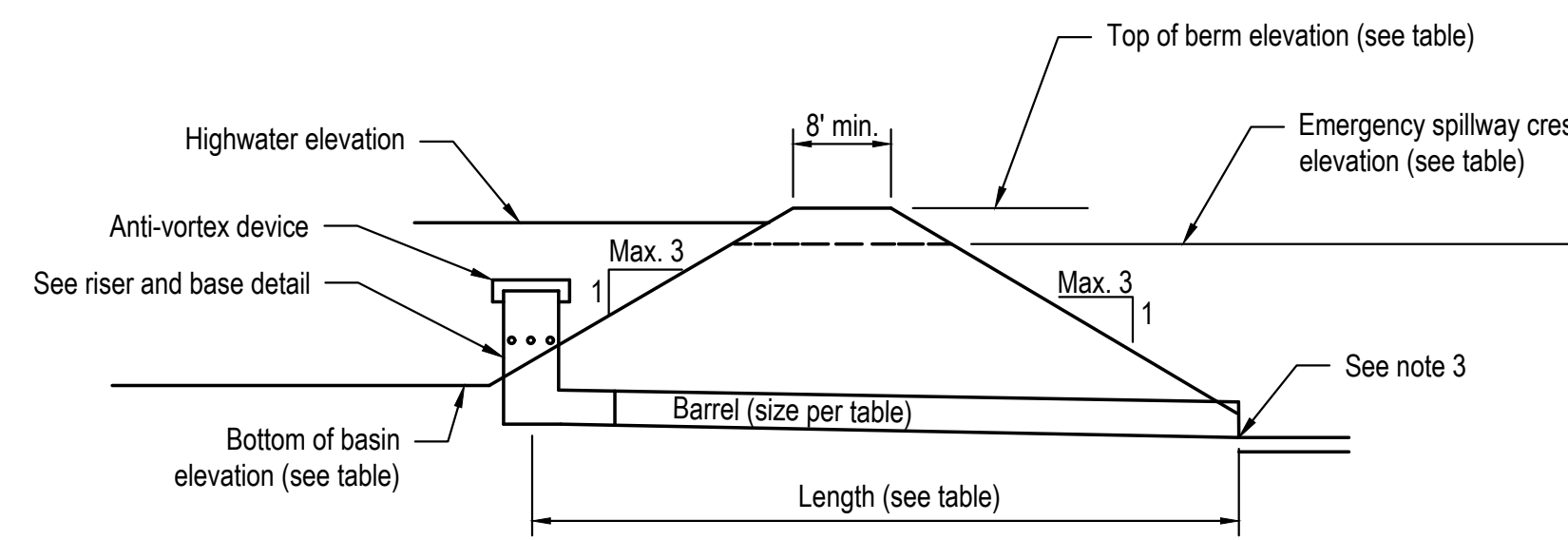
Basin No.	Drainage Area (Ac.)	2-Year Storm Event Discharge (cfs)	10-Year Storm Event Discharge (cfs)	Wet Storage Provided (CY)	Dry Storage Provided (CY)	Clean Out Storage Provided (CY)	Highwater Elevation (ft)	2-Year Storm Elevation (ft)	Top Berm Elevation (ft)	Bottom of Basin Elevation (ft)	Emergency Spillway Elevation (ft)	Emergency Spillway Width (ft)	Riser Type	Riser Diameter (ft)	Throat/ Riser Crest Elevation (ft)	Number of Dewatering Holes	Riser Dewatering Holes Diameter	Wet-Storage Holes Elevation (ft)	Clean Out Elevation (ft)	Anti-Vortex Device Diameter (in)	Anti-Vortex Device Height (in)	Barrel Diameter (in)	Barrel Length (ft)	Barrel Inlet Elevation (ft)	Barrel Outlet Elevation (ft)	Barrel Material
B	9.1	34	52	629	613	319	1156.00	1154.93	1157.00	1147.00	1154.93	10	CMP Riser	30	1153.45	2	2.5	1151.13	1149.93	54	17	24	77	1147.00	1145.10	CMP



SEDIMENT BASIN C
SCALE: 1" = 30'

LEGEND

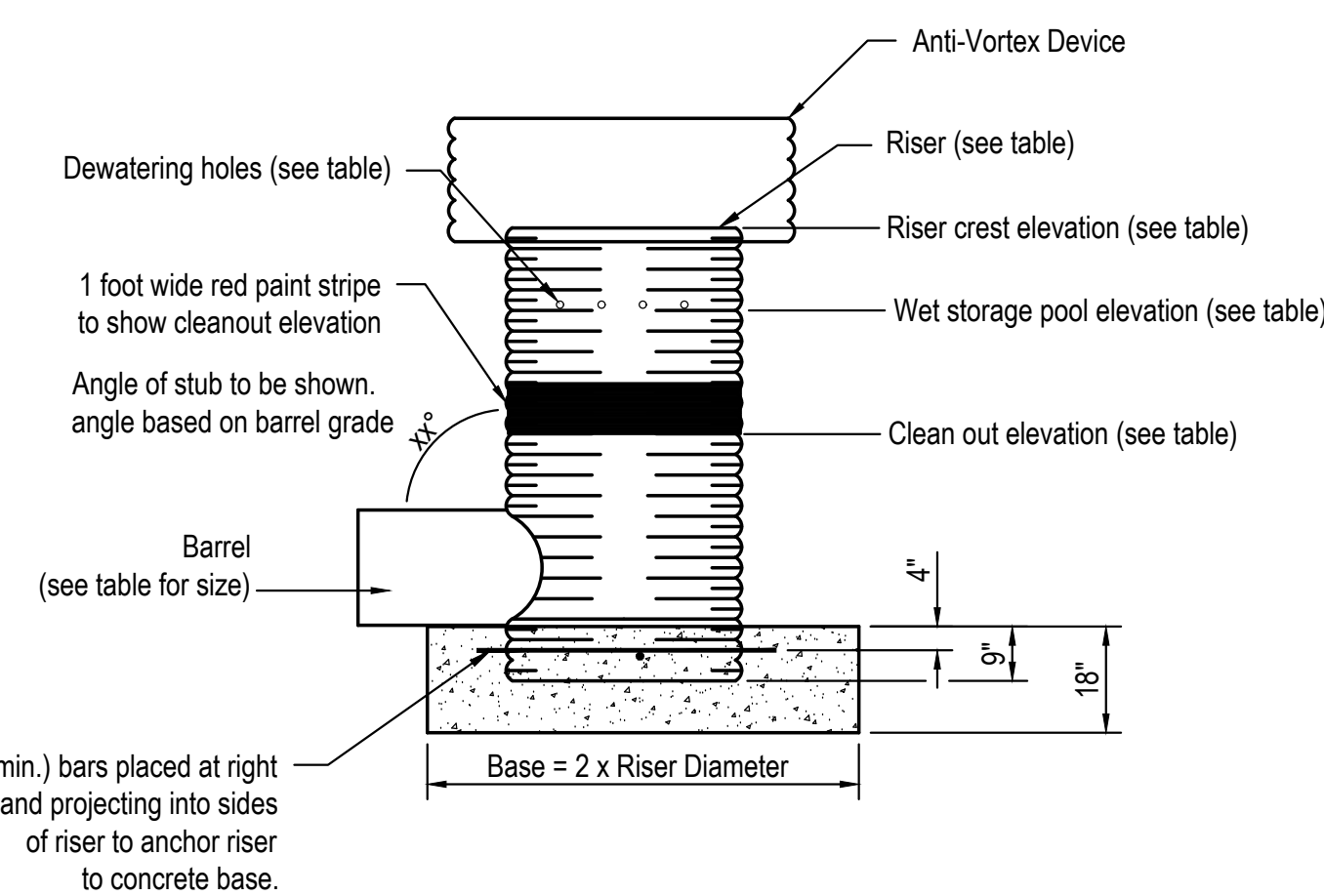
- Power Pole
- Guy Wire
- Light Pole
- Fire Hydrant
- Utility Valve (Water)
- Curb Inlet
- Manhole
- - - X - - - Fence Line
- - - G - - - Gas Line
- - - W - - - Water Line
- - - OHP - OHP - Power Line (Overhead)
- Diversion Berm
- - - Silt Fence
- - - Existing Contours
- - - Proposed Contours
- - - Sediment Basin Perimeter
- - - Limits of Construction
- - - Future Storm Sewer
- ▨ Erosion Control Matting



NOTES

- If spillway is constructed over fill, compact the embankment to a minimum of 95% of the Maximum Dry Density within 3% below and 4% above optimum moisture as determined by ASTM D698 (Standard Proctor) or as recommended by the Geotechnical Engineer. Conduct a minimum of one compaction test every vertical foot of compacted fill placed, every 50 feet of embankment length. Provide test reports to the Engineer for review and approval. No testing or special compaction is required if spillway is constructed in cut areas on natural ground.
- Riser and barrels shall be corrugated metal pipe. Reused pipes in good condition meeting the size requirements may be used following approval by the Engineer. Reused risers will be required to crest at the elevation indicated in the table below. The configuration of orifice holes must also meet the requirements below - exceeding the number of orifice holes will not be permitted.
- The discharge flow line of the barrel shall be verified by the Engineer.

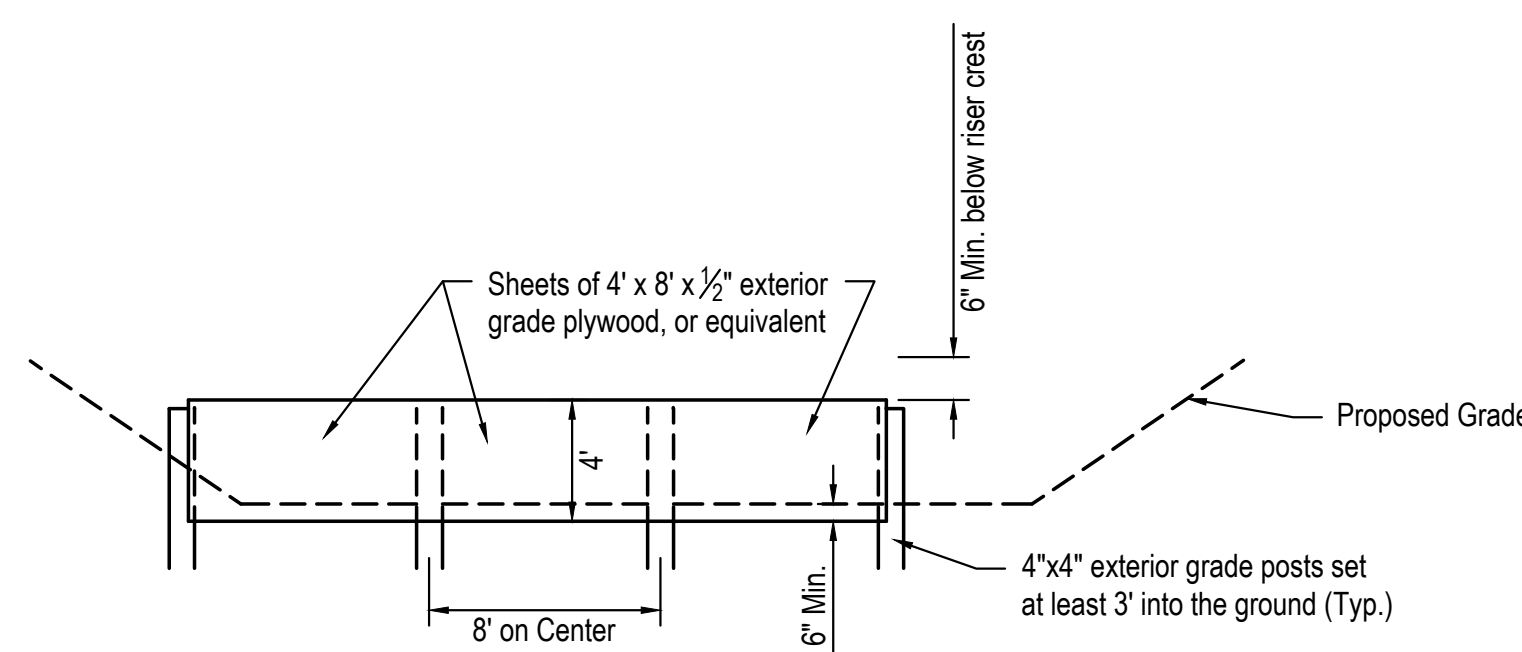
BASIN DETAIL
NOT TO SCALE



NOTES

- Ensure that the concrete fills the bottom of the riser to the invert of the outlet pipe to counter flotation forces and prevent the riser from breaking away from the base.
- If using aluminum or aluminumized pipe risers, the embedded section shall be painted with zinc chromate or approved equivalent.
- Position the bottom of the dewatering holes at the "Wet-Storage Pool Elevation" indicated in the Sediment Basin Data Table. Do not exceed the number of dewatering holes indicated.

RISER AND BASE DETAIL
NOT TO SCALE



BAFFLE DETAIL
NOT TO SCALE

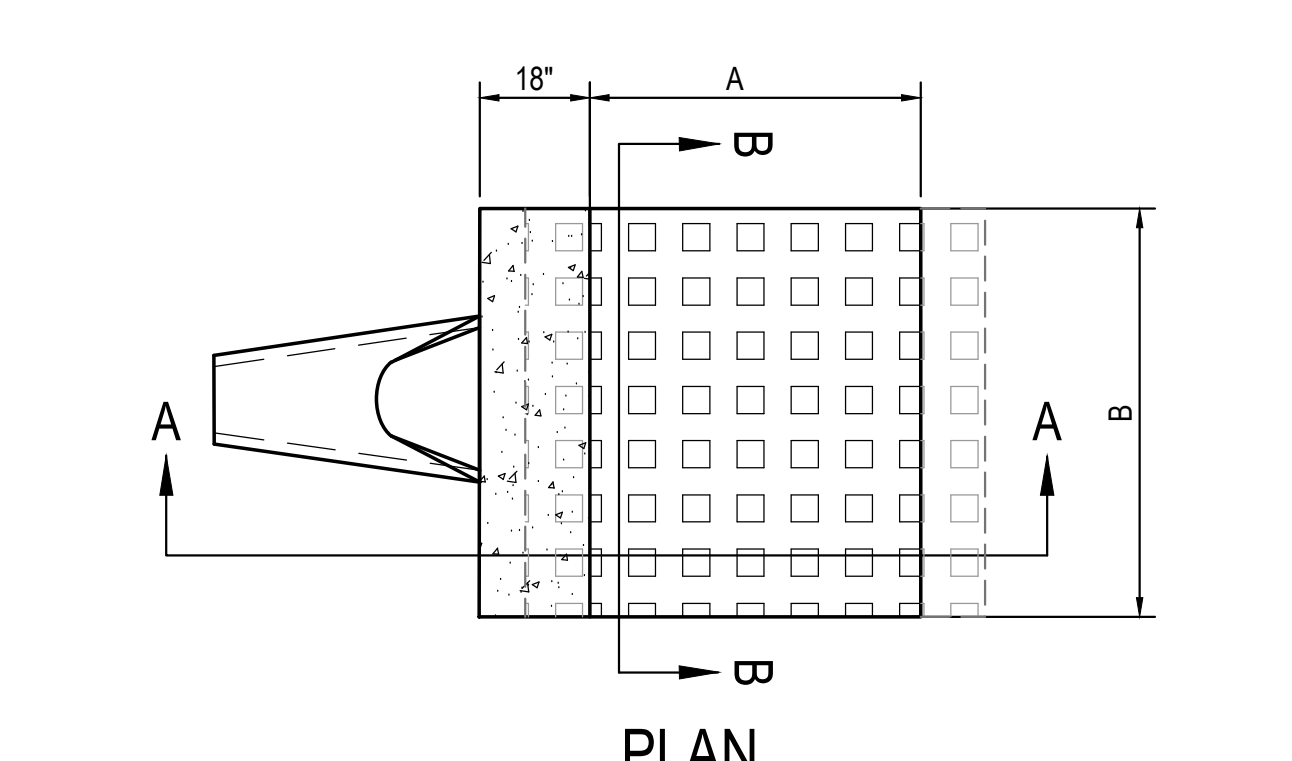
NOTE:
Plywood sheets shall be attached to posts with galvanized exterior grade screws and washers.



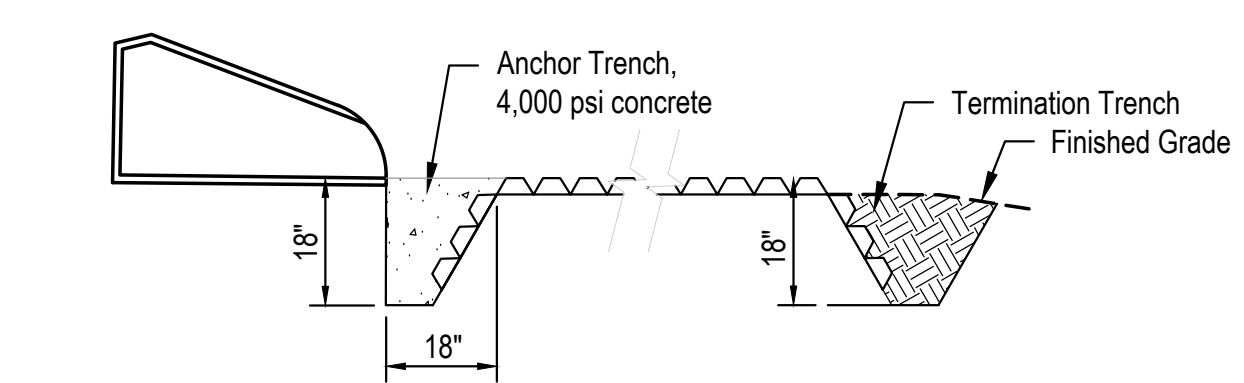
SILT TRAP A
SCALE: 1" = 30'

SILT TRAP DATA TABLE

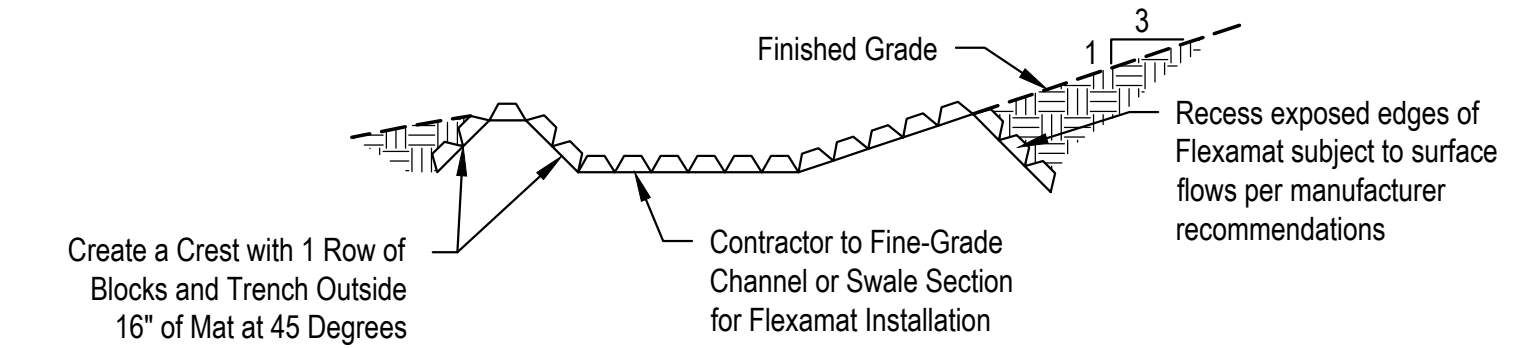
Silt Trap No.	Drainage Area (Ac.)	Wet Storage Provided (CY)	Dry Storage Provided (CY)	Clean Out Storage Provided (CY)	Top Berm Elevation (ft)	Bottom of Basin Elevation (ft)	Spillway Elevation (ft)	Spillway Width (ft)
A	3.2	215	215	111	1189.00	1185.00	1188.00	20



PLAN



SECTION A - A



SECTION B - B

FLEXAMAT TABLE

Basin	A	B
C	11.5'	8'

FLEXAMAT DETAIL
NOT TO SCALE

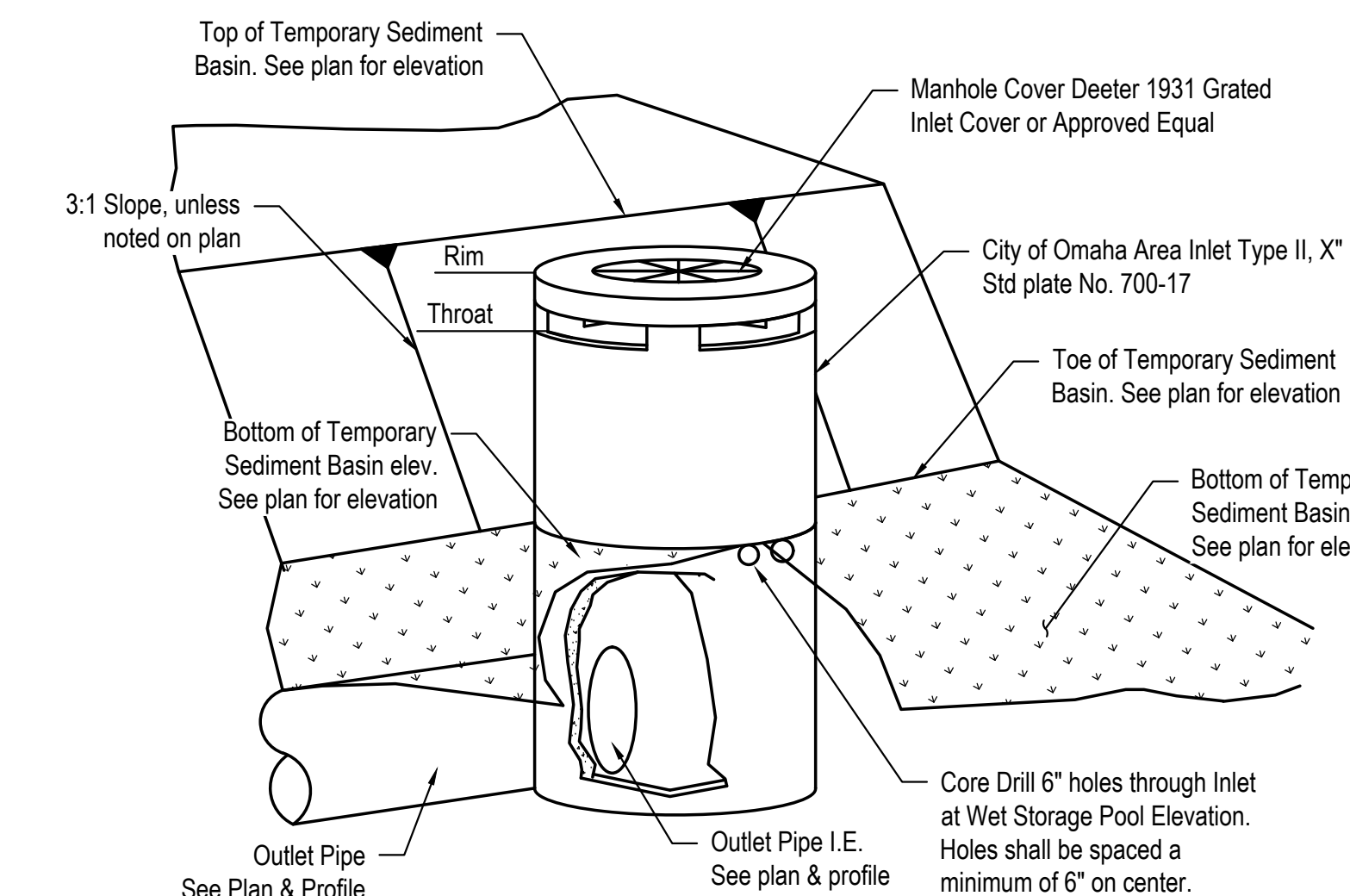
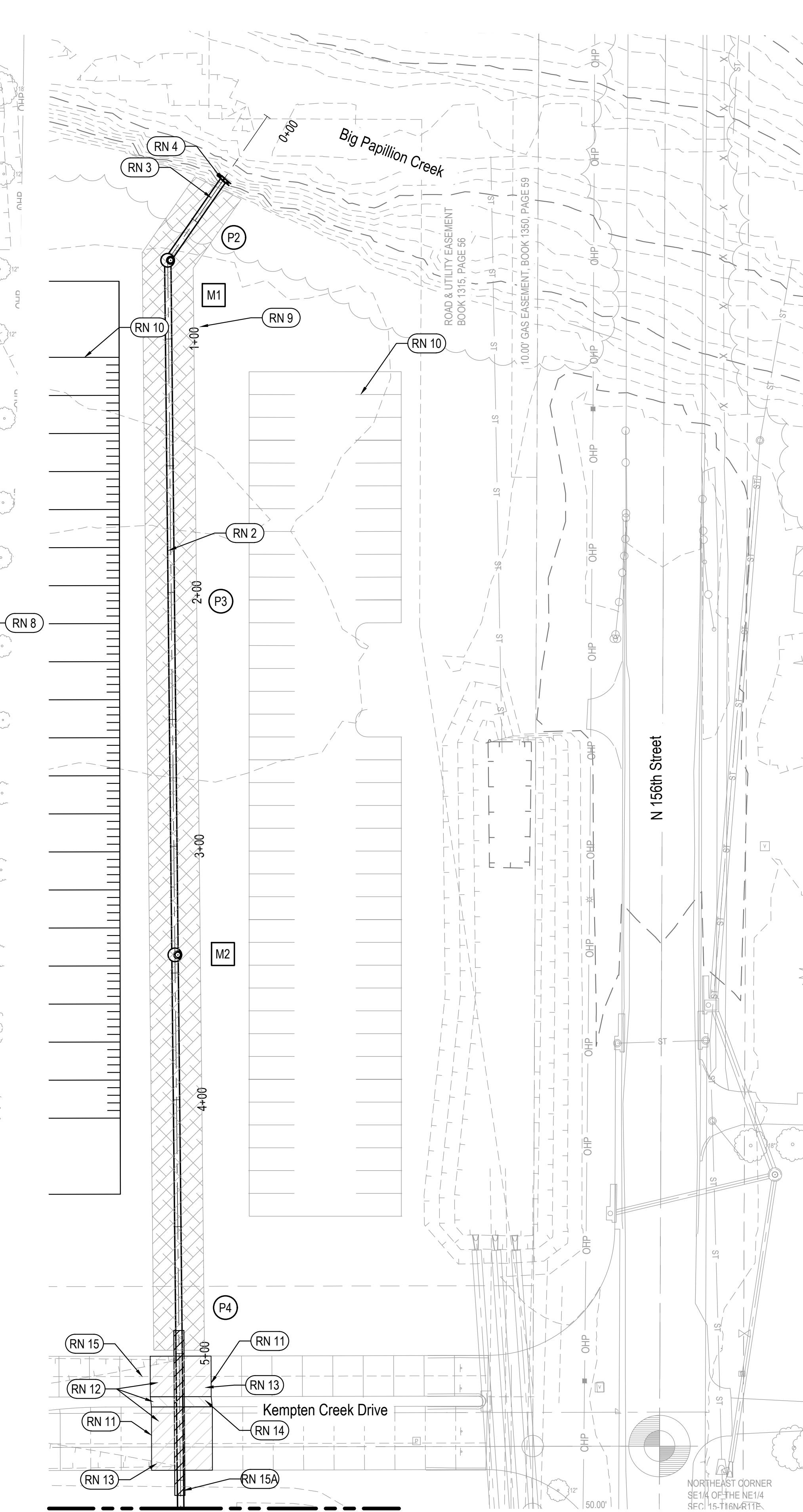
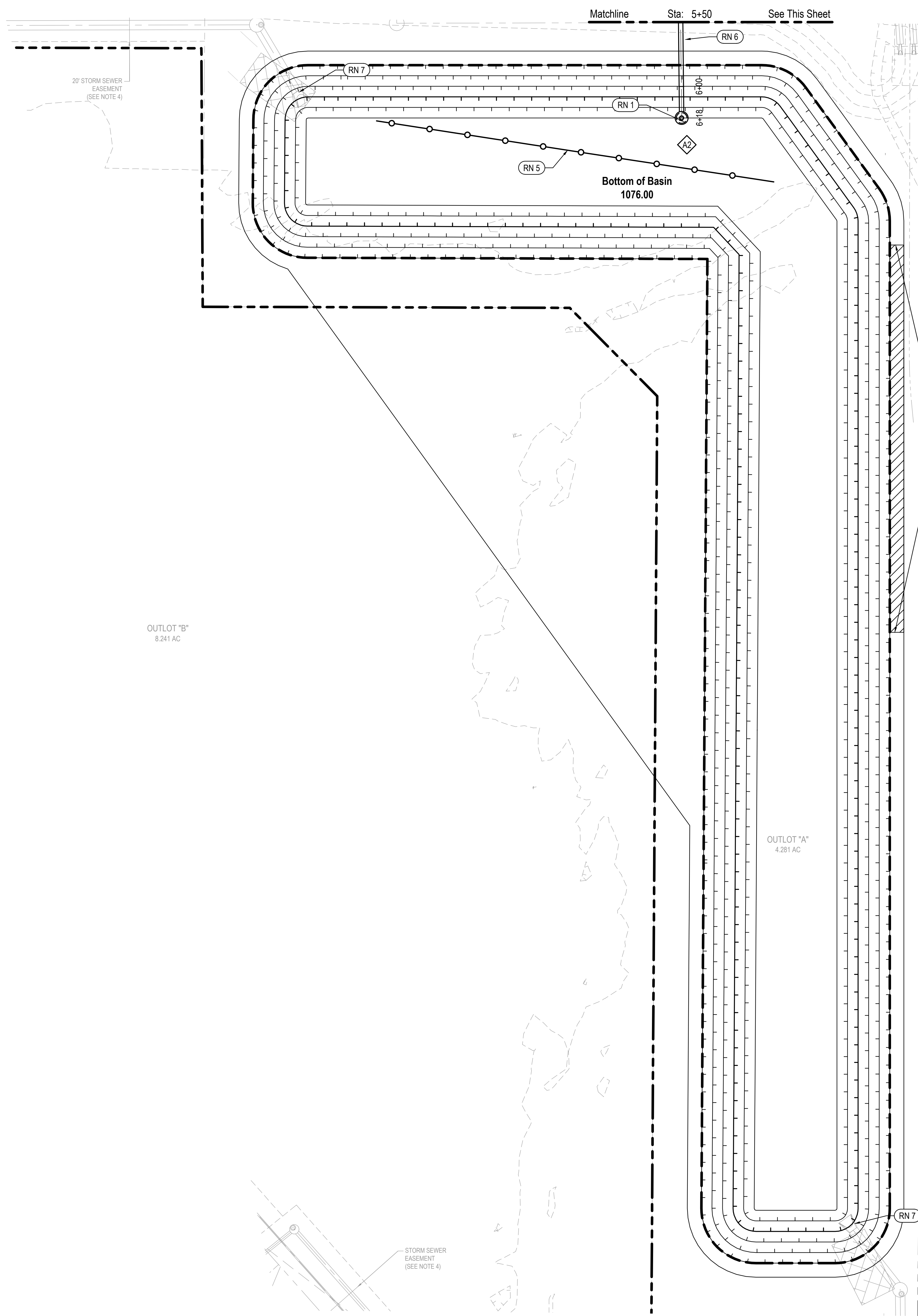
REFERENCE NOTES

- Construct riser and base (per detail this sheet and data table below) and anti-vortex device (see Figure 9-32 per ORSDM). Cost of riser, anti-vortex device shall be subsidiary to bid item "CONSTRUCT 30" CMP RISER, 4' LF.
- Construct Flexamat at outlet per manufacturers recommendation and detail this sheet.
- Construct sediment basin barrel. See data table this sheet for material, length, diameter, and elevations.
- Construct baffle per detail this sheet, 24 LF.
- Construct anti-seep collar per detail on Sheet 2. Cost is subsidiary to pipe construction.
- Construct Emergency Spillway - See Sediment Basin Data Table for length and elevation. Cost is subsidiary to bid item "EXCAVATION ON SITE".
- Seed and Mat disturbed area caused by the construction of the Outlet Pipe. Matting shall be North American Green S-75. Seeding shall be native seed, 604 SF.
- Grade to drain.
- Construct Silt Trap Emergency Spillway - See Silt Trap Data Table for length and elevation. Cost is subsidiary to bid item "EXCAVATION ON SITE".

SEDIMENT BASIN DATA TABLE

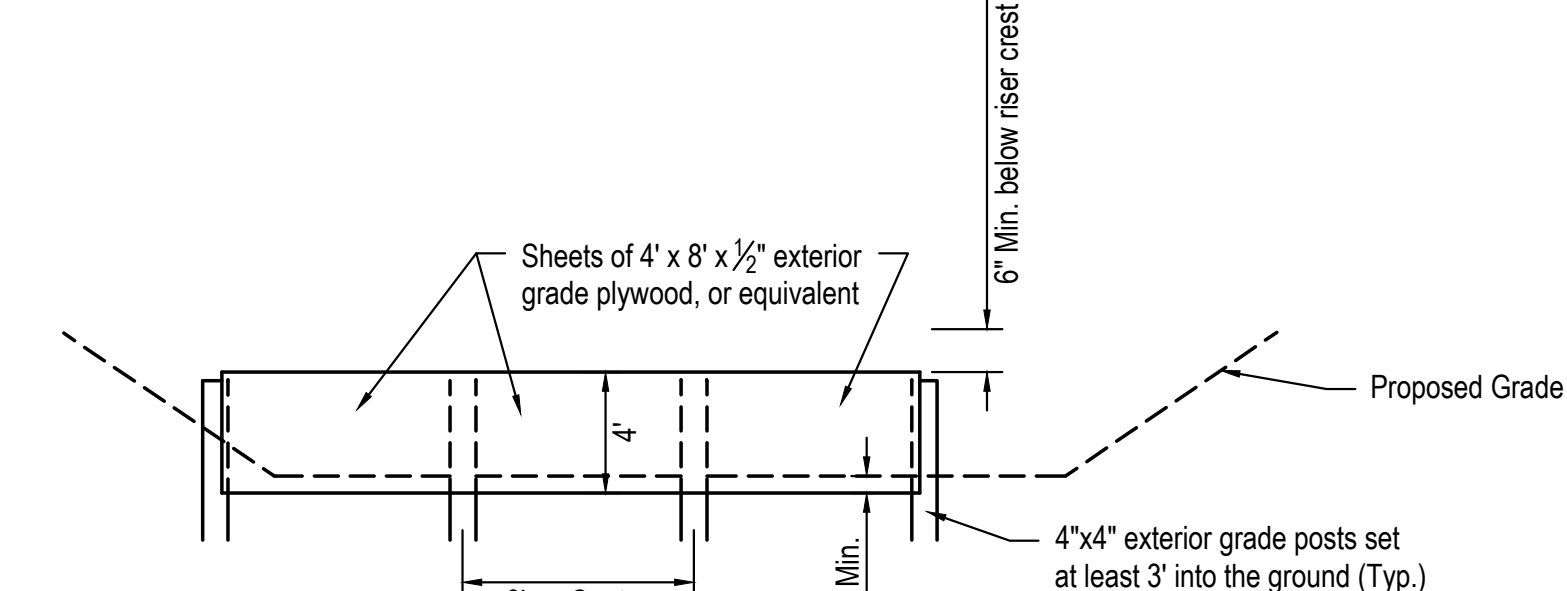
Basin No.	Drainage Area (Ac.)	2-Year Storm Event Discharge (cfs)	10-Year Storm Event Discharge (cfs)	Wet Storage Provided (CY)	Dry Storage Provided (CY)	Clean Out Storage Provided (CY)	Highwater Elevation (ft)	2-Year Storm Elevation (ft)	Top Berm Elevation (ft)	Bottom of Basin Elevation (ft)	Emergency Spillway Elevation (ft)	Emergency Spillway Width (ft)	Riser Type	Riser Diameter (ft)	Throat/ Riser Crest Elevation (ft)	Number of Dewatering Holes	Riser Dewatering Holes Diameter	Wet-Storage Holes Elevation (ft)	Clean Out Elevation (ft)	Anti-Vortex Device Diameter (in)	Anti-Vortex Device Height (in)	Barrel Diameter (in)	Barrel Length (ft)	Barrel Inlet Elevation (ft)	Barrel Outlet Elevation (ft)	Barrel Material
C	4.1	17	26	284	281	140	1195.00	1193.95	1196.00	1188.00	1194.16	10	CMP Riser	30	1193.16	1	2.5	1191.25	1189.96	54	17	24	55	1188.50	1187.90	CMP





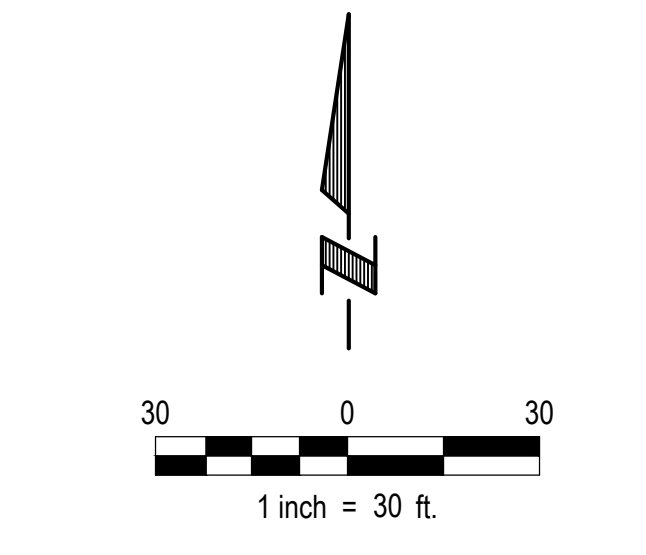
**CITY OF OMAHA TYPE 2 AREA INLET
WITHOUT ORIFICE PLATE - DIAMETER VARIES
NOT TO SCALE**

Notes:
1. For conversion to PCSMP Basin, holes at Wet Storage Pool Elevation will be grouted in and new holes will be drilled at a lower elevation. See PCSMP Plans.



**BAFFLE DETAIL
NOT TO SCALE**

NOTE: Plywood sheets shall be attached to posts with galvanized exterior grade screws and washers.



LEGEND

●	Power Pole
—	Gay Wire
○	Light Pole
⊕	Fire Hydrant
⊕	Utility Valve (Water)
⊕	Curb Inlet
○	Manhole
— X — X —	Fence Line
— G — G —	Gas Line
— W — W —	Water Line
— OHP — OHP —	Power Line (Overhead)
—	Division Berm
—	Silt Fence
—	Existing Contours
—	Proposed Contours
—	Sediment Basin Perimeter
—	Limits of Construction
—	Future Storm Sewer
▨	Erosion Control Matting
▨	9" P.C.C. Pavement with Integral Curb (10 SY)
▨	6" P.C.C. Median Surfacing (10 SY)
▨	Boring (Alternative Bid Item)

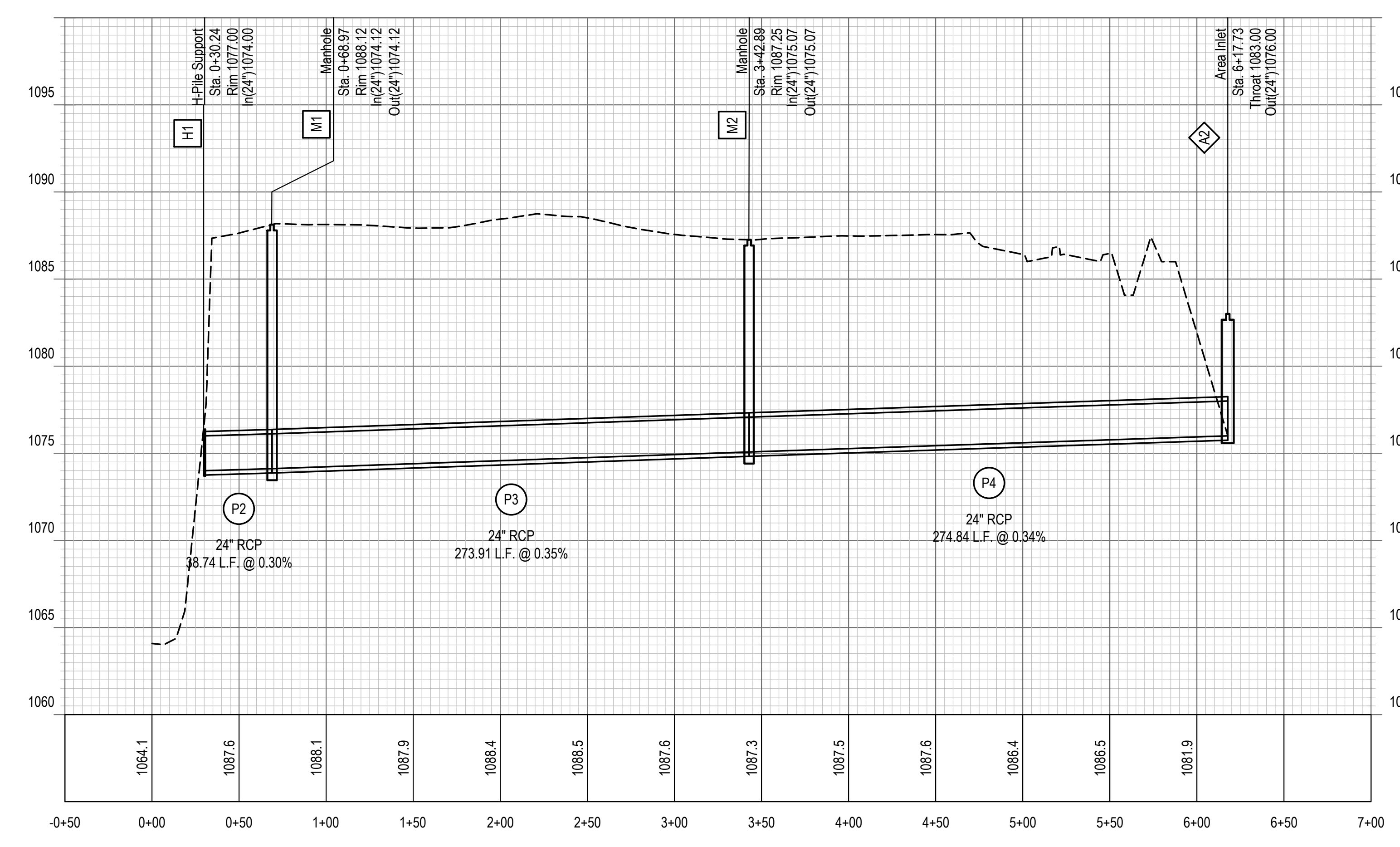
NO REFERENCE NOTES

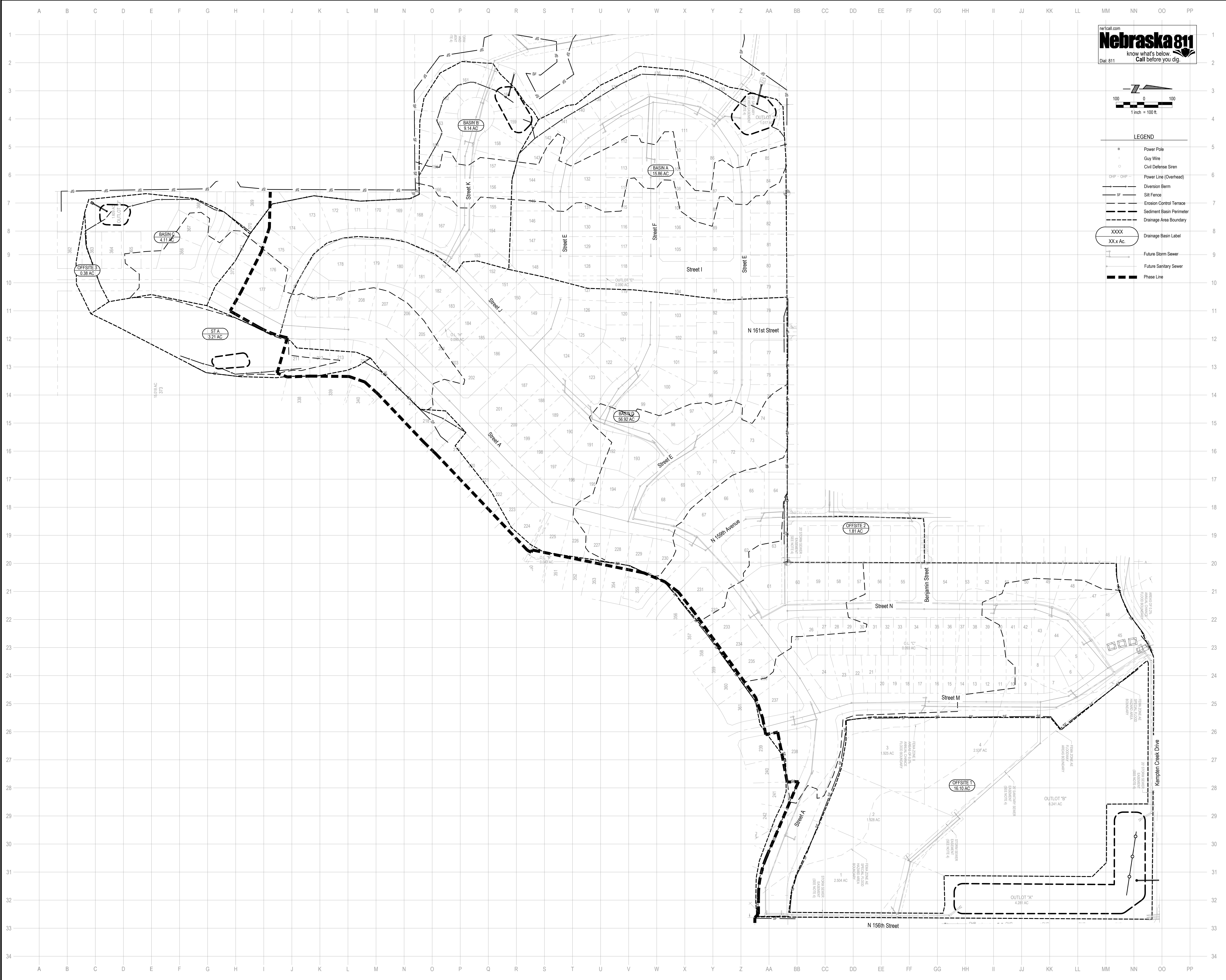
- RN 1 Construct riser and base (per detail this sheet and data table below, see Figure 9-32 per ORSDM). Cost shall be under bid item "CONSTRUCT 72" TYPE II AREA INLET" ZVF.
- RN 2 Construct sediment basin barrel. See data table this sheet for material, length, diameter, and elevations.
- RN 3 Install pipe couplers on last 3 joints from flared end section per City of Omaha Standard Plate 700-04, 3 couplers per joint, 9 EA.
- RN 4 Construct Timber Pipe Pile Support per City of Omaha Standard Plate 702-13. See Sediment basin Data Table for invert elevation.
- RN 5 Construct baffle per detail this sheet, 232 LF.
- RN 6 Construct anti-seep collar per detail on Sheet 2.
- RN 7 Future Storm sewer outlet
- RN 8 Construct Emergency Spillway - See Sediment Basin Data Table for length and elevation. Cost is subsidiary to bid item "EXCAVATION ON SITE".
- RN 9 Seed and Mat disturbed area caused by the construction of the Outlet Pipe. Matting shall be North American Green S-75. Seeding shall be native seed, 9,292 SF.
- RN 10 Concept Ballfields Layout. Final location of fields and additional facilities to be determined.
- RN 11 Saw cut full depth pavement, 90 LF Total
- RN 12 Remove 9" P.C.C. and 6" P.C.C. pavement composite, 120 SY to allow for installation of outlet pipe.
- RN 13 Construct 9" P.C.C. With Integral Curb, 110 SY Total
- RN 14 Construct 6" P.C.C. Median Surfacing, 10 SY
- RN 15 Match jointing layout in existing Kempton Creek Drive
- RN Direct Bore 24" RCP Barrel, 65 LF. Boring has been included as an alternative bid item contingent on site conditions.

CONSTRUCT STORM SEWER MANHOLE					
ID	Storm Sta.	Dia.	Details	Coordinates	Remarks
M1	0+68.97	54"	RIM = 1088.12 INV IN = 1074.12 (24") INV OUT = 1074.12 (24")	N: 85658.33 E: 95924.05	14.0 Construct with Concrete Ring Retainer
M2	3+42.89	54"	RIM = 1087.25 INV IN = 1075.07 (24") INV OUT = 1075.07 (24")	N: 85584.43 E: 95926.91	12.2 Construct with Concrete Ring Retainer

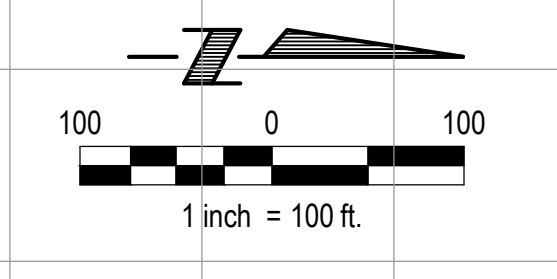
SEDIMENT BASIN DATA TABLE

Basin No.	Drainage Area (Ac.)	2-Year Storm Event Discharge (cfs)	10-Year Storm Event Discharge (cfs)	Wet Storage Provided (CY)	Dry Storage Provided (CY)	Clean Out Storage Provided (CY)	Highwater Elevation (ft)	2-Year Storm Elevation (ft)	Top Berm Elevation (ft)	Bottom of Basin Elevation (ft)	Emergency Spillway Elevation (ft)	Emergency Spillway Width (ft)	Riser Type	Riser Diameter (ft)	Throat/ Riser Crest Elevation (ft)	Number of Dewatering Holes	Riser Dewatering Holes Diameter	Wet-Storage Holes Elevation (ft)	Clean Out Elevation (ft)	Anti-Vortex Device Diameter (in)	Anti-Vortex Device Height (in)	Barrel Diameter (in)	Barrel Length (ft)	Barrel Inlet Elevation (ft)	Barrel Outlet Elevation (ft)	Barrel Material
D	75.6	296	419	5156	10270	2615	1085.00	1083.80	1086.00	1076.00	1085.00	220	Type II A	72	1083.00	2	6	1078.87	1077.57	N/A	N/A	24	552	1076.00	1074.00	RCP





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LEGEND

•	Power Pole
—	Guy Wire
○	Civil Defense Siren
ORP - ORP	Power Line (Overhead)
—	Diversion Berm
—	Silt Fence
—	Erosion Control Terrace
—	Sediment Basin Perimeter
—	Drainage Area Boundary
XXXX	Drainage Basin Label
○ XX.x AC	Drainage Basin Label
—	Future Storm Sewer
—	Future Sanitary Sewer
—	Phase Line

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 State of NE Certificate of Authorization #CA0089

E & A CONSULTING GROUP, INC.
 Engineering Answers

MORGAN RIDGE
 LOTS 1 THRU 238 & OUTLOTS 'A' THRU 'H'
GRADING & STORMWATER POLLUTION PREVENTION PLAN - SECTION I
 SHEET 10 OF 10
 BENNINGTON, NEBRASKA

**GRADING & SWPPP -
 DRAINAGE MAP**

Revision	Description
1	ISSUED FOR PERMITS

Project No: P2023-271-001
 Date: 09/17/2023
 Drawn By: ASB/KOM
 State: NE
 Sheet: 10 of 10