

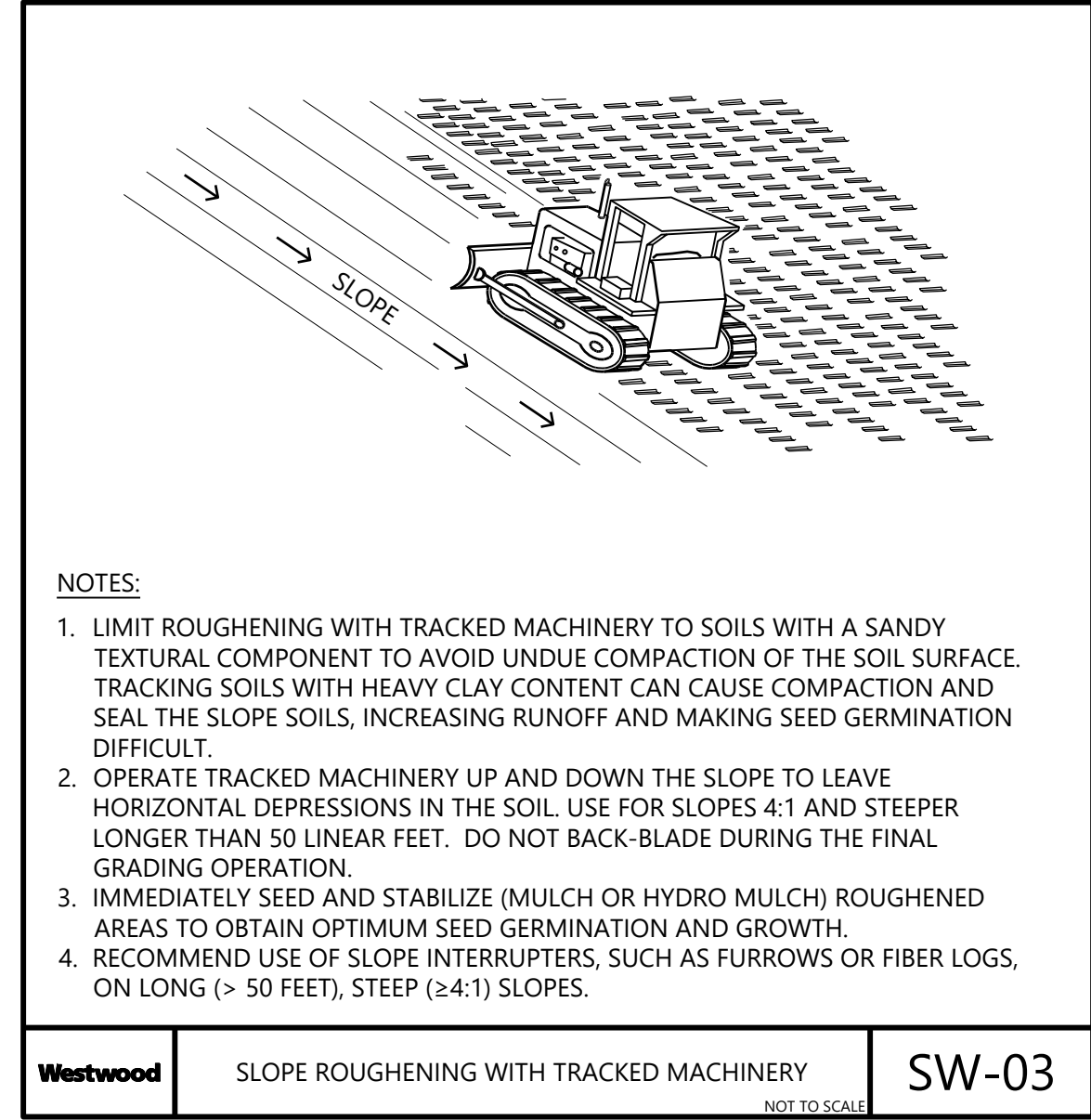
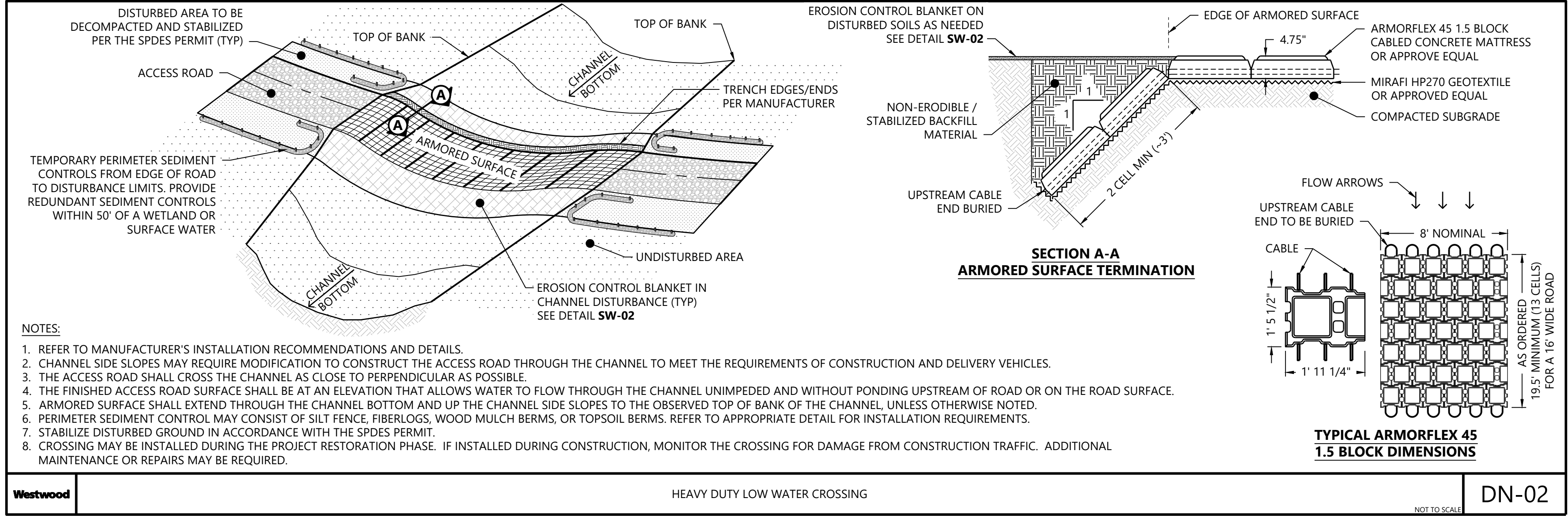
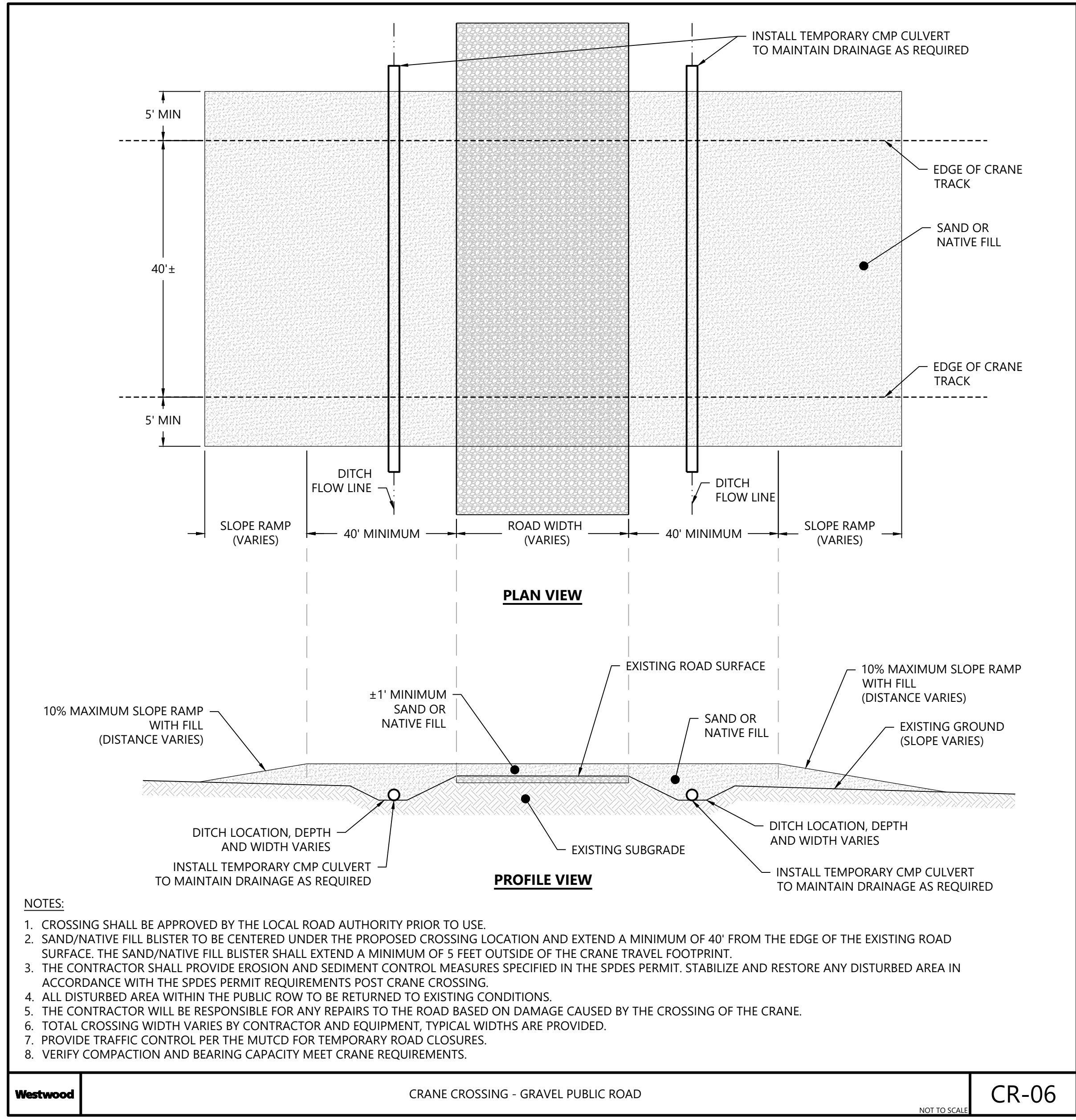
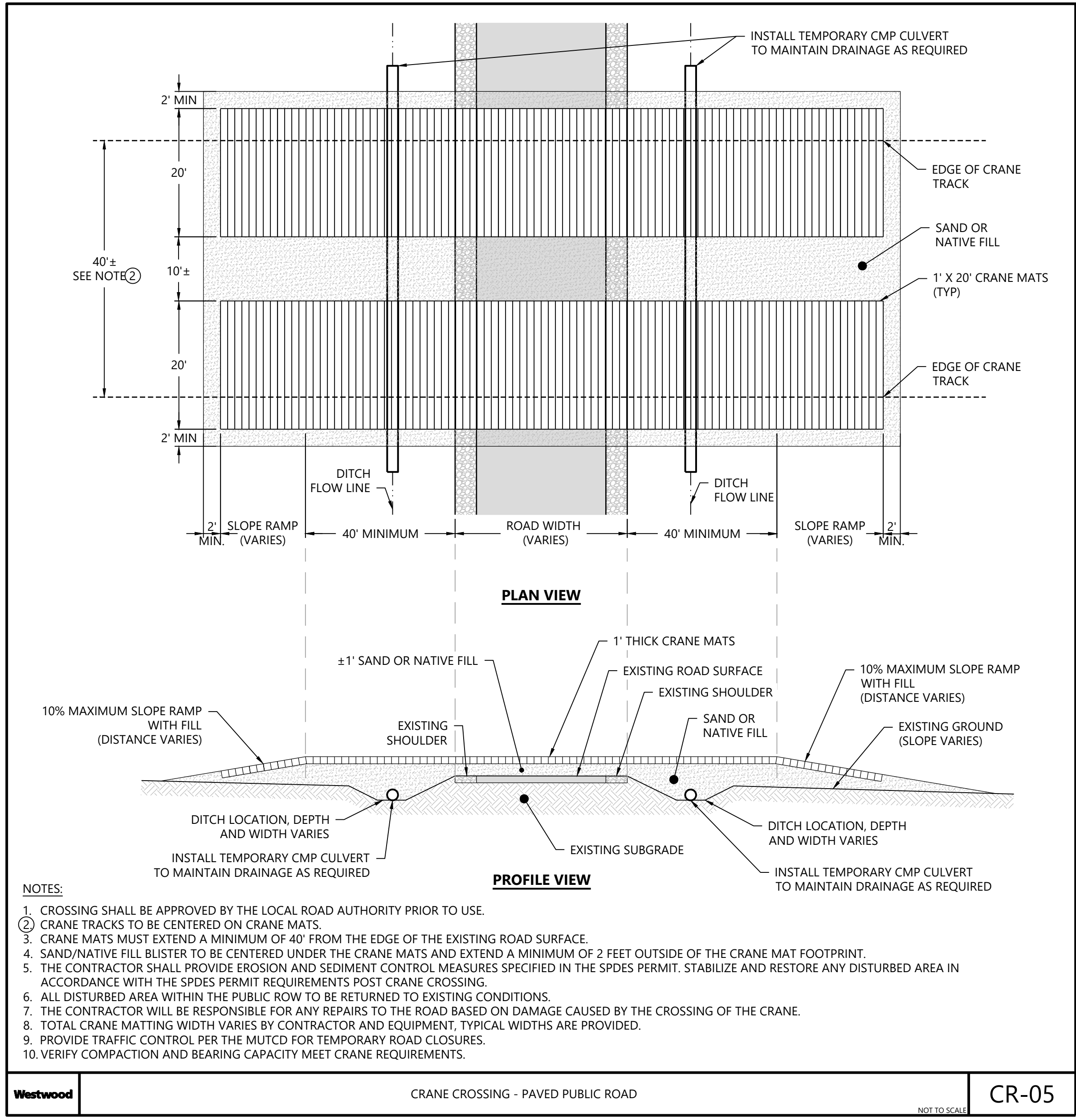


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Hoffman Falls Wind LLC

90 State Street
 Albany, NY 12207

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0	01/30/2026	IFC SET		NA	HC AL
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Hoffman Falls Wind Project
 Madison County, New York

Construction Details - 6

ISSUE FOR CONSTRUCTION

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Alison Leach
 04/15/2026

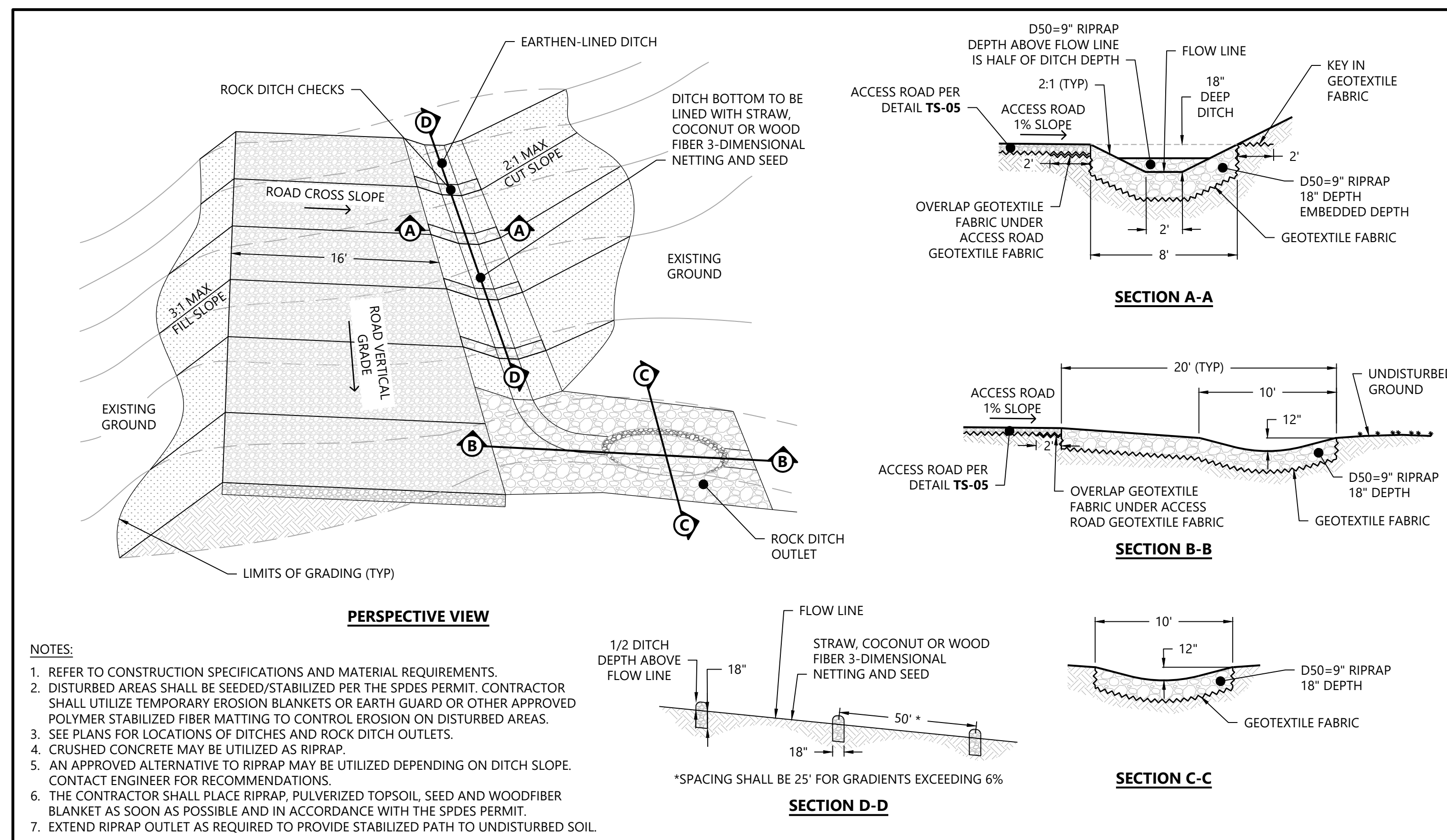
PREPARED FOR:

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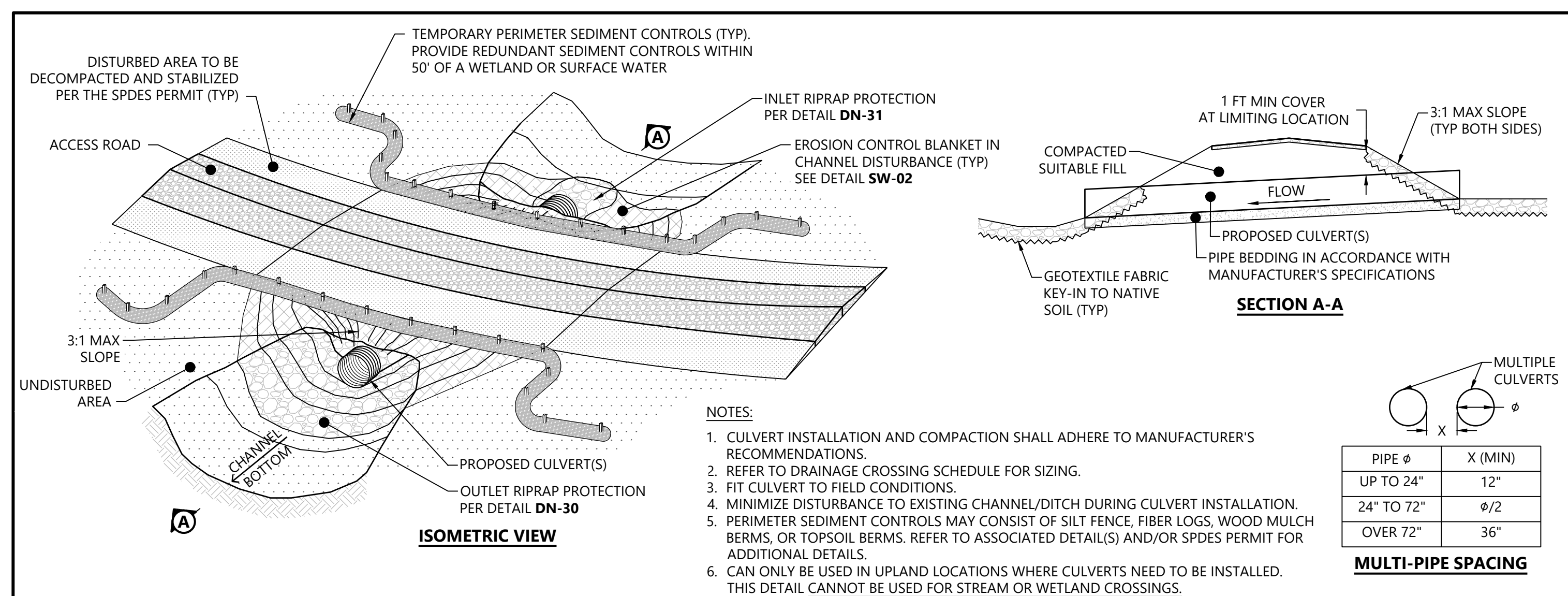
90 State Street
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0	01/30/2026	IFC SET		NA	HC AL
1	04/15/2026	ORES COMMENTS		NA	HC AL



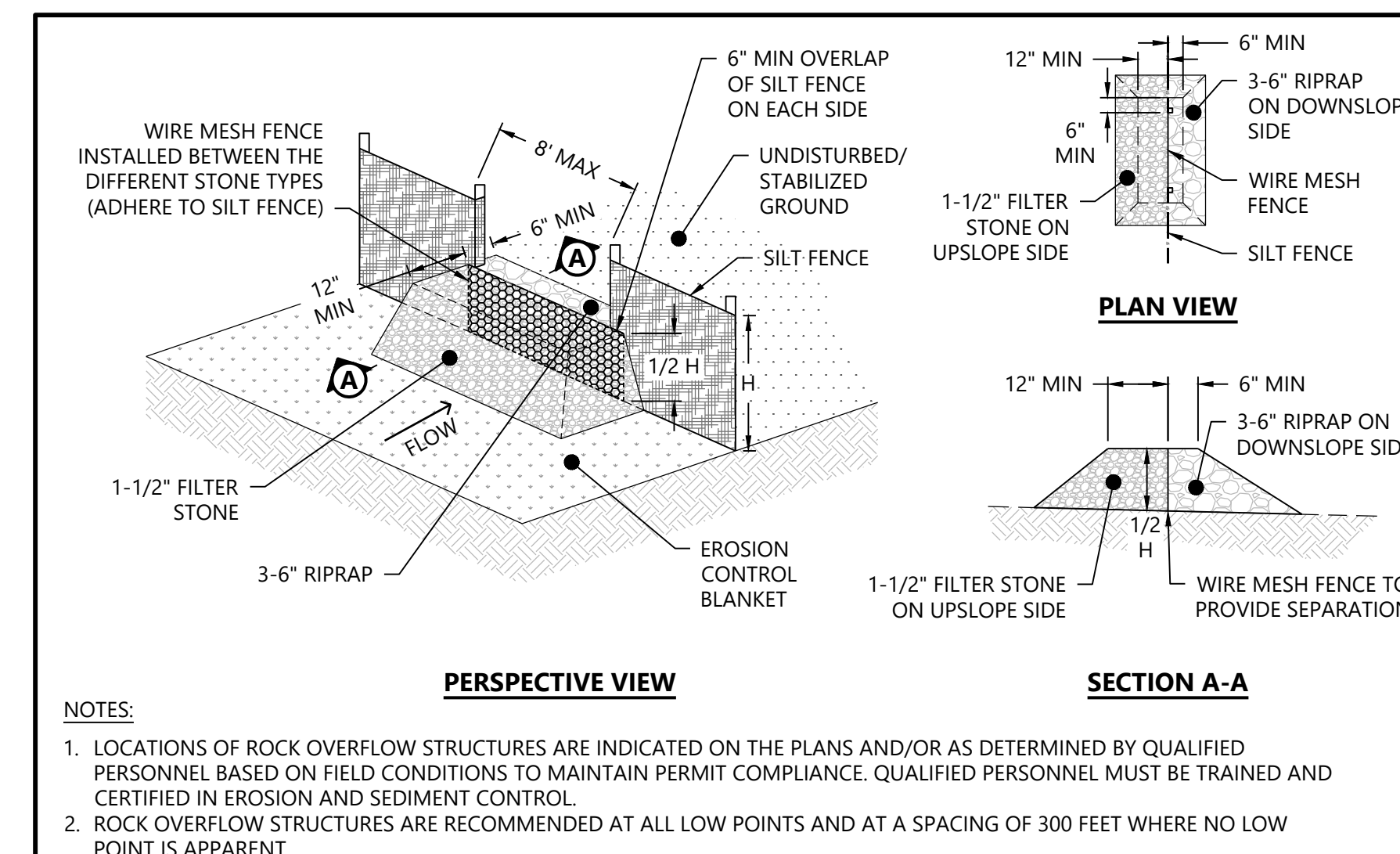
Westwood ROADSIDE DITCH - EARTHEN LINED WITH ROCK CHECKS DN-23 NOT TO SCALE



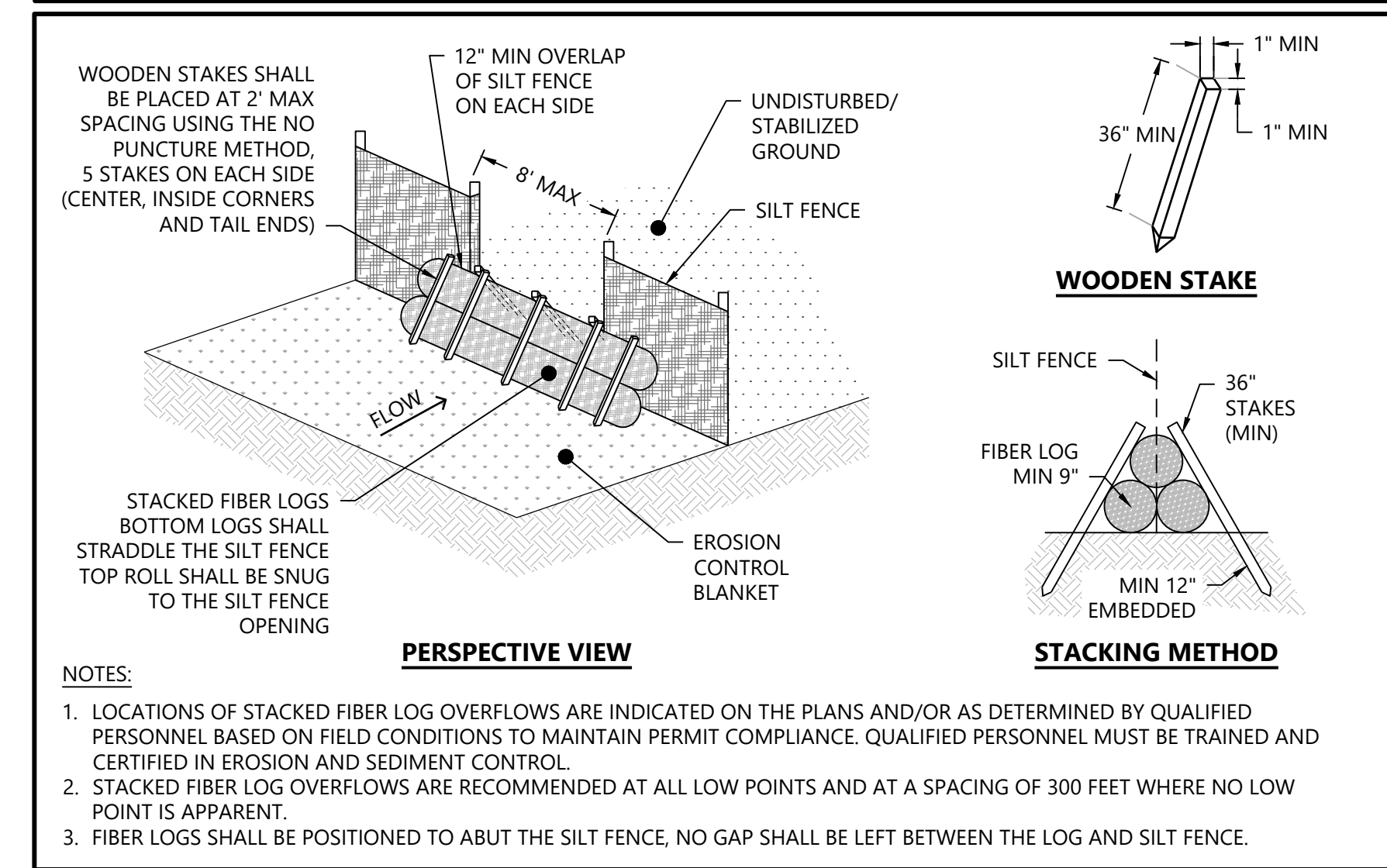
MULTI-PIPE SPACING

PIPE Ø	X (MIN)
UP TO 24"	12"
24" TO 72"	Ø/2
OVER 72"	36"

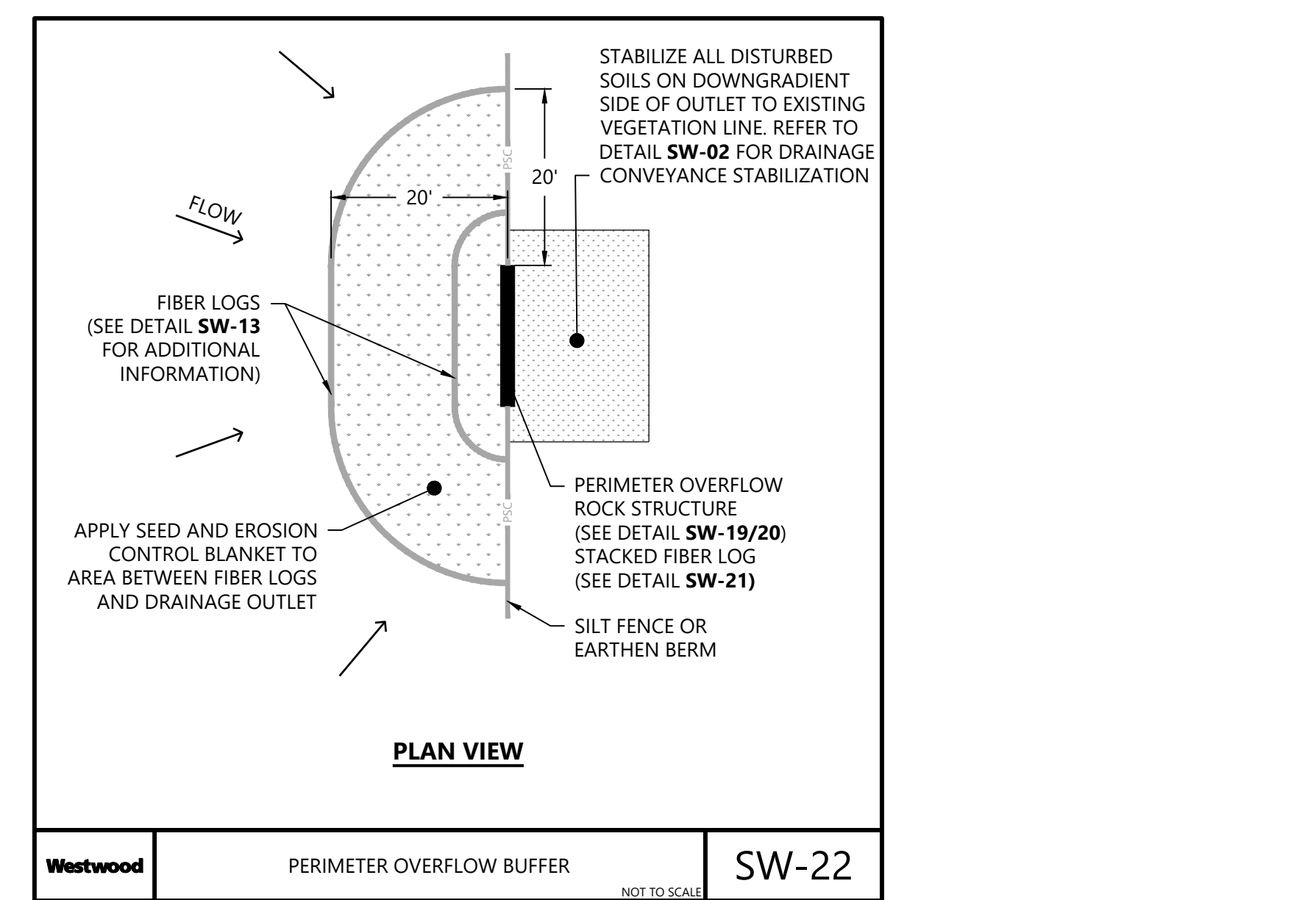
Westwood CULVERT CROSSING DN-03 NOT TO SCALE



Westwood ROCK OVERFLOW STRUCTURE FOR SILT FENCE - HALF HEIGHT SW-19 NOT TO SCALE



Westwood STACKED FIBER LOG OVERFLOW FOR SILT FENCE SW-21 NOT TO SCALE



Westwood PERIMETER OVERFLOW BUFFER SW-22 NOT TO SCALE

Hoffman Falls Wind Project
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BROAD-BASED DIP - Sediment Removal Efficiency: **VERY LOW**. This device by itself is not an **ABACT** for special protection watersheds, but like a waterbar can be used to make an **ABACT BMP work more effectively**. Broad-based dips may be used to direct runoff from active access roads to well-vegetated areas or sediment removal BMPs (e.g. sediment traps or sediment basins). Broad-based dips, unlike waterbars, are easily traversed by most construction equipment and typically require less maintenance to ensure their integrity. Due to the nature of broad-based dips, they should not be constructed on roads with grades exceeding 10%. Where access roads exceed 10% gradients, insloping or other deflection devices should be used to control runoff.



PA DEP

Discharges should be to the downslope side of access roads with a maximum gradient of 3% in the dip. For access roads with grades up to 5%, Standard Construction Detail # 3-6 should be used. Roadways with steeper grades should use Standard Construction Detail # 3-7.

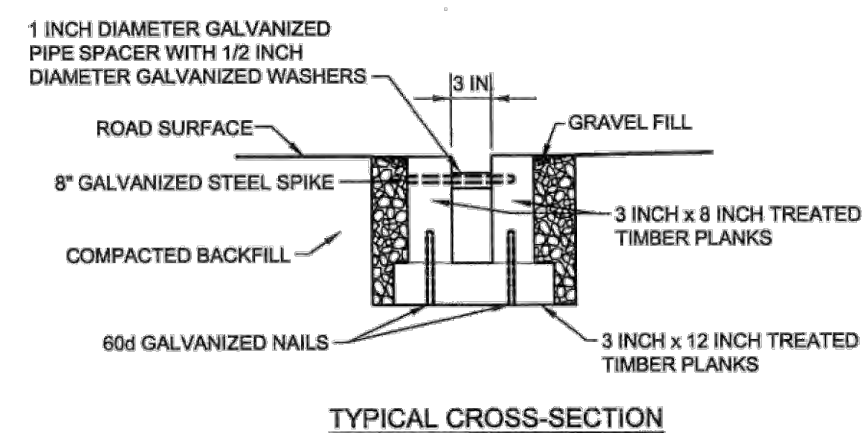
TABLE 3.2 – Maximum Spacing of Broad-based Dips, Open-top Culverts and Deflectors

Road Grade (Percent)	Spacing Between Dips, Culverts, or Deflectors (feet)
<2	300
3	235
4	200
5	180
6	165
7	155
8	150
9	145
10	140

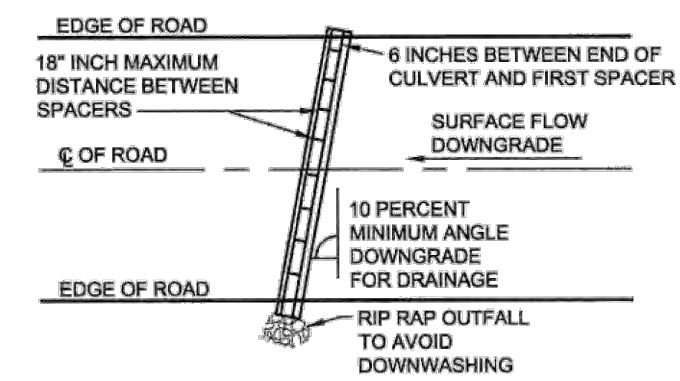
USDA Forest Service

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**STANDARD CONSTRUCTION DETAIL #3-8
Open-top Culvert**



TYPICAL CROSS-SECTION



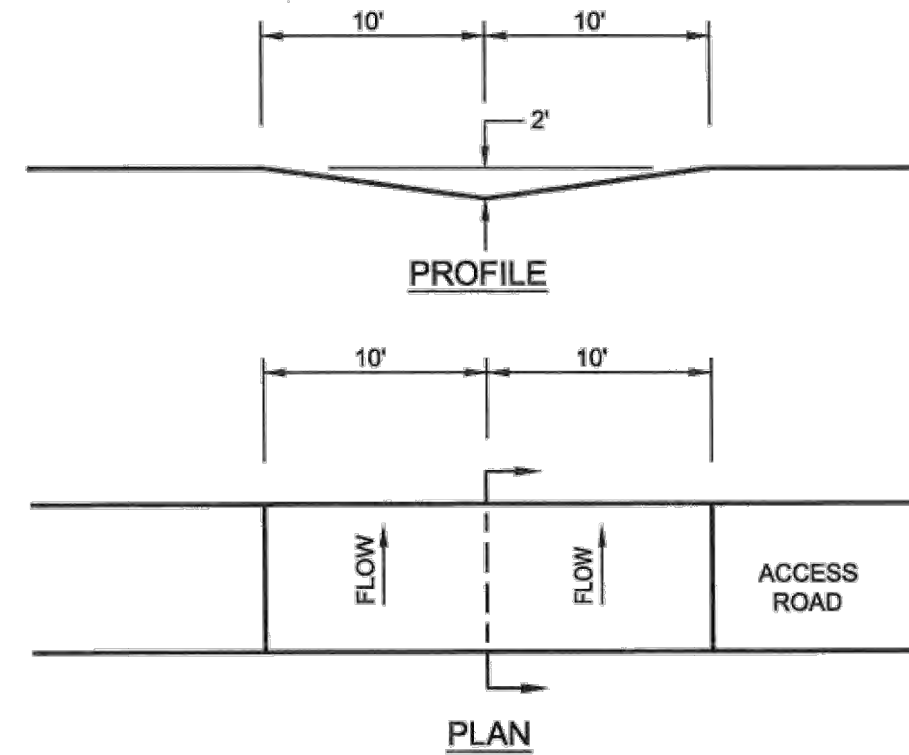
TYPICAL PLAN VIEW

USDA Forest Service

Culverts shall be inspected weekly and after runoff events.
 Damaged or non-functioning culverts shall be repaired by the end of the workday.
 Accumulated sediment shall be removed within 24 hours of inspection.
 Maximum spacing of open-top culverts shall be as shown in Table 3.2.

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**STANDARD CONSTRUCTION DETAIL # 3-6
Broad-based Dip for Low Gradient (<5%) Roadways**



PLAN

Maine DEP

Broad-based dips shall be constructed to the dimensions shown and at the locations shown on the plan drawings.

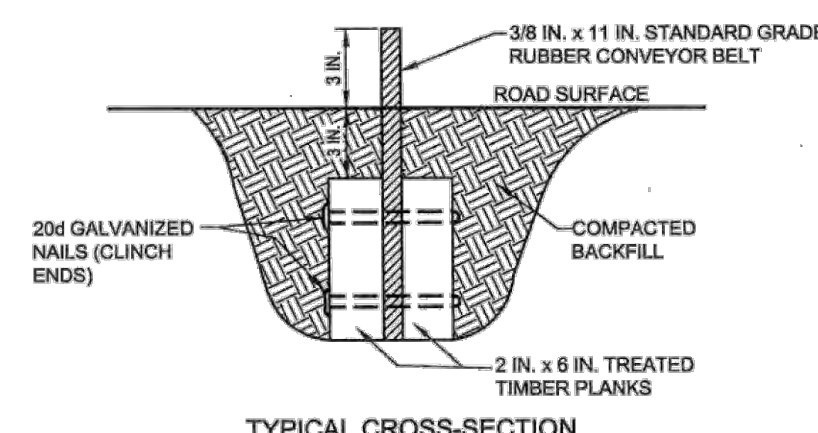
Dips shall be oriented so as to discharge to the low side of the roadway.

Dips shall be inspected daily. Damaged or non-functioning dips shall be repaired by the end of the workday.

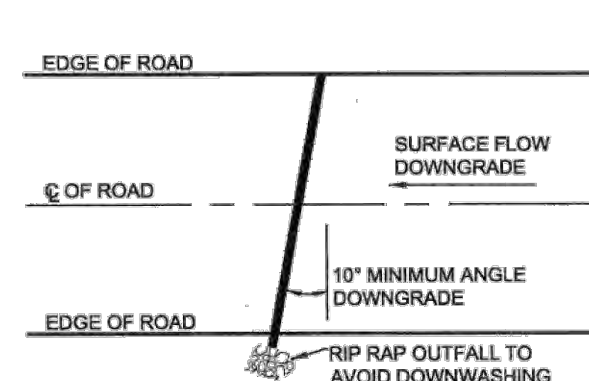
Maximum spacing of broad-based dips shall be as shown in Table 3.2.

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**STANDARD CONSTRUCTION DETAIL #3-9
Water Deflector**



TYPICAL CROSS-SECTION



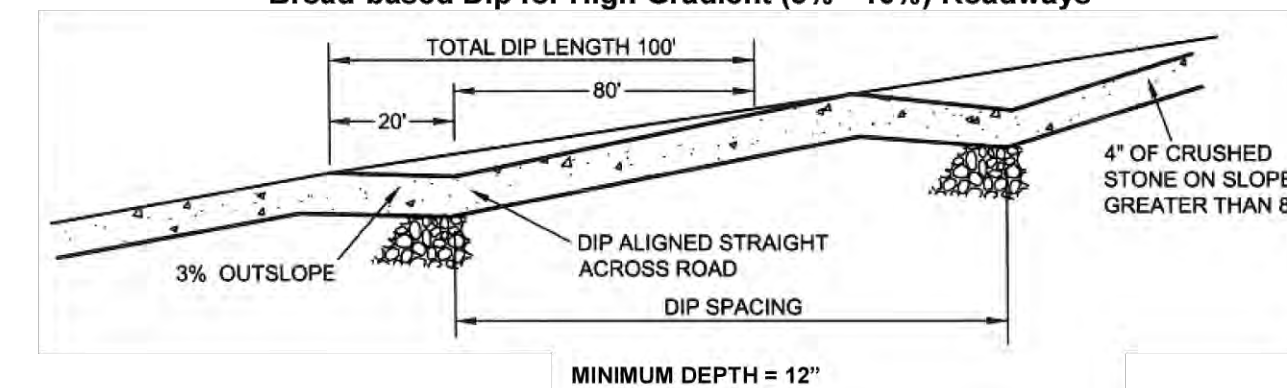
TYPICAL PLAN VIEW

USDA Forest Service

Deflector shall be inspected weekly and after each runoff event.
 Accumulated sediment shall be removed from deflector within 24 hours of inspection.
 Belt shall be replaced when worn and no longer effective.
 Maximum spacing of deflectors shall be as shown in Table 3.2.

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**STANDARD CONSTRUCTION DETAIL # 3-7
Broad-based Dip for High Gradient (5% - 10%) Roadways**



USDA Forest Service

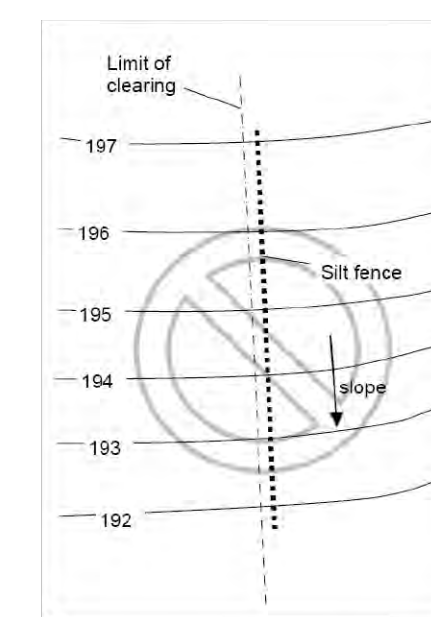
Broad-based dips shall be constructed to the dimensions shown and at the locations shown on the plan drawings.

Dips shall be oriented so as to discharge to the low side of the roadway.

Dips shall be inspected daily. Damaged or non-functioning dips shall be repaired by the end of the workday.

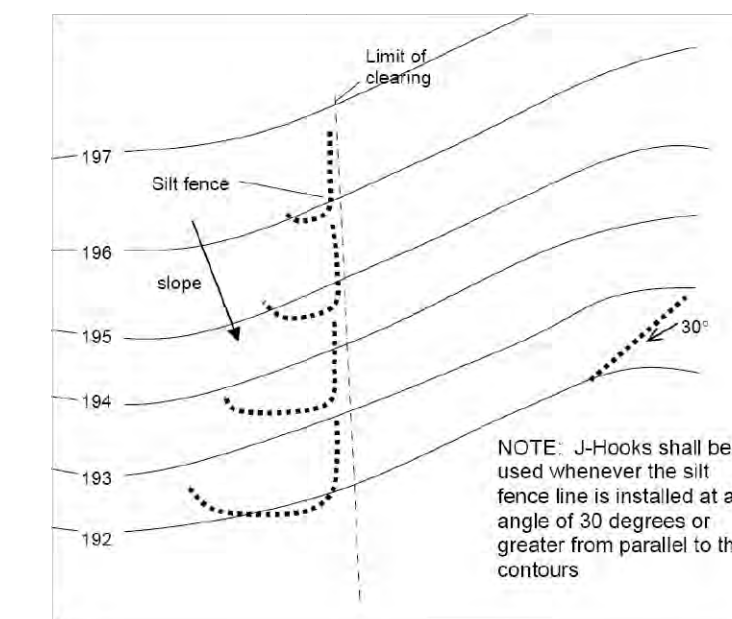
Maximum spacing of broad-based dips shall be as shown in Table 3.2.

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INCORRECT

Silt fence installed parallel to slope (perpendicular to contour) in one, long run

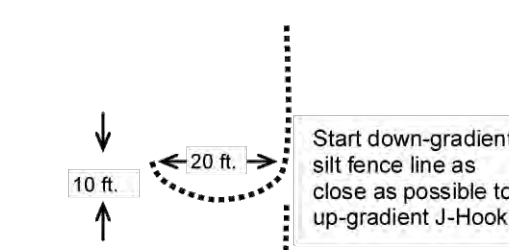


CORRECT

Silt fence installed in shorter runs with "J-Hooks" to avoid concentration of flows at one location by trapping runoff at multiple points along a slope.

Purpose:
 The proper operation of silt fence depends on the ability to temporarily pond runoff behind the fence, allowing time for sediments to settle. Silt fence is not a filter. If water flows around the end(s), the silt fence fails to function. It must be placed where it will store water - often times along a slope a "smile" or J-hook shape is required to create a storage area. Long runs should be avoided, and broken up into smaller segments.

Slope Steepness	Maximum Space between silt fence rows or J-hooks (ft.)
2:1 (50%)	25
3:1 (33%)	50
4:1 (25%)	75
5:1 or flatter (20%)	100



Typical J-Hook Dimensions

Minimum width of J-Hook recommended at 20 ft with a depth of 10 ft. Where space is limited (e.g., along narrow rights of way), narrower hooks can be used with a higher spacing frequency.

Figure A7.2 Installation of "J-Hooks" on slopes (Adapted from CNMI DEQ, 2009)



Alison Leach
 04/15/2026

PREPARED FOR:

Hoffman Falls Wind LLC

90 State Street
 Albany, NY 12207

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Hoffman Falls Wind Project
 Madison County, New York

Construction Details -
 8

ISSUE FOR CONSTRUCTION

DATE: 04/15/2026

SHEET: C707 1

REV:



Alison Leach
 04/15/2026

PREPARED FOR:

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PIPE DIAMETER (D)	L 1:1	L 2:1	L 3:1	X	Y	RIPRAP SIZE (D50)	RIPRAP DEPTH	
(IN)	(FT)	(FT)	(FT)	(FT)	(FT)	(IN)	(FT)	
12	1	4	7	10	2	4	6	1
15	1.25	4.5	7.8	11	2.5	5	6	1
18	1.5	5	8.5	12	3	6	6	1
21	1.75	5.5	9.3	13	3.5	7	9	1.5
24	2	6	10	14	4	8	9	1.5
30	2.5	7	11.5	16	5	10	9	1.5
36	3	8	13	18	6	12	9	1.5
42	3.5	9	14.5	20	7	14	9	1.5
48	4	10	16	22	8	16	9	1.5
54	4.5	11	17.5	24	9	18	12	2
60	5	12	19	26	10	20	12	2
>60	>5							

CONTACT ENGINEER FOR SPECIFIC DESIGN

NOTES:
 1. RIPRAP IS NOT REQUIRED AT CULVERTS 21" OR LESS, UNLESS SPECIFICALLY SHOWN ON THE PLANS.
 2. RIPRAP SHALL BE INSTALLED AT ALL CULVERTS 24" THROUGH 60" PER THIS DETAIL, UNLESS APPROVED BY THE ENGINEER.
 3. THE CONTRACTOR SHALL PLACE RIPRAP, PULVERIZED TOPSOIL, SEED AND WOODFIBER BLANKET IMMEDIATELY AFTER PIPE IS INSTALLED, EXTEND AREA TO MATCH UNDISTURBED SOIL.
 4. CONFIRM REQUIREMENTS IN PUBLIC RIGHT-OF-WAY WITH THE AUTHORITY HAVING JURISDICTION.
 5. DIMENSION "D" EQUALS INSIDE DIAMETER OF PIPE.
 6. RIPRAP SHALL EXTEND THE ENTIRE WIDTH BETWEEN MULTIPLE CULVERTS.
 7. RIPRAP MATERIAL SHALL MEET THE REQUIREMENTS OF THE LATEST EDITION OF THE FHWA STANDARD SPECIFICATIONS FP-14 SECTION 705.02. CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH SECTION 251.

Westwood PERMANENT RIPRAP AT CULVERT INLETS NOT TO SCALE DN-31

NOTES:
 1. REFER TO TABLE 4 ON SHEET C717 FOR ELEVATIONS AND SIZES.
 2. SEE PLANS FOR BASIN LOCATIONS.
 3. ALL GRADED SLOPES SHALL BE A MAXIMUM 4H:1V UNLESS SHOWN OTHERWISE.
 4. REFER TO SPDES PERMIT AND ESC PLAN FOR ADDITIONAL BASIN BMPs AND INSPECTION AND MAINTENANCE PROCEDURES.
 5. IMMEDIATELY FOLLOWING BASIN CONSTRUCTION, THE SIDE SLOPES OF THE BASIN SHALL BE FULLY STABILIZED. TEMPORARY EROSION AND SEDIMENT CONTROL FEATURES SHALL REMAIN UNTIL PROJECT SITE IS FULLY STABILIZED AND THE BASIN IS RESTORED OR CONVERTED TO PERMANENT CONDITIONS.

Westwood PERMANENT STORMWATER WET SEDIMENTATION BASIN NOT TO SCALE DN-44

NOTES:
 1. AVOID DISTURBANCE TO THE WETLAND/STREAM DURING CONSTRUCTION.
 2. REFER TO PROJECT SPCC PLAN FOR ADDITIONAL REQUIREMENTS.
 3. CONSTRUCT TOPSOIL BERM TO PROTECT EXISTING WETLAND/STREAM WHERE BORING WILL OCCUR FOR UNDERGROUND COLLECTION SYSTEM INSTALLATION.
 4. ADDITIONAL SOILS SHALL BE STOCKPILED ADJACENT TO THE BORE PIT AND PROTECTED WITH PERIMETER SEDIMENT CONTROL.
 5. ALTERNATE PERIMETER SEDIMENT CONTROLS MAY CONSIST OF SILT FENCE, FIBER LOGS, OR WOOD MULCH BERMS. REFER TO APPROPRIATE DETAILS FOR INSTALLATION REQUIREMENTS.
 6. REDUNDANT PERIMETER SEDIMENT CONTROLS ARE REQUIRED WITHIN 50' OF A WETLAND OR SURFACE WATER.
 7. UPON REMOVAL OF THE BORE PITS, THE DISTURBED AREAS SHALL BE RESTORED TO NATIVE CONDITIONS. REFER TO THE SPDES PERMIT.

Westwood POWER COLLECTION SYSTEM CROSSING OF EXISTING SWALE - BORE PIT NOT TO SCALE SW-65

NOTES:
 1. CHANNEL SIDE SLOPES MAY REQUIRE MODIFICATION TO CONSTRUCT THE ACCESS ROAD THROUGH THE CHANNEL TO MEET REQUIREMENTS OF CONSTRUCTION AND DELIVERY VEHICLES.
 2. THE ACCESS ROAD SHALL CROSS THE CHANNEL AS CLOSE TO PERPENDICULAR AS POSSIBLE.
 3. THE FINISHED ACCESS ROAD SURFACE SHALL BE AT AN ELEVATION THAT ALLOWS WATER TO FLOW THROUGH THE CHANNEL UNIMPEDED AND WITHOUT PONDING UPSTREAM OF ROAD OR ON THE ROAD SURFACE.
 4. ARMORED SURFACE SHALL EXTEND THROUGH THE CHANNEL BOTTOM AND UP THE CHANNEL SIDE SLOPES TO THE OBSERVED TOP OF BANK OF THE CHANNEL, UNLESS OTHERWISE NOTED.
 5. PERIMETER SEDIMENT CONTROL MAY CONSIST OF SILT FENCE, FIBERLOGS, WOOD MULCH BERMS, OR TOPSOIL BERMS. REFER TO APPROPRIATE DETAIL FOR INSTALLATION REQUIREMENTS.
 6. STABILIZE DISTURBED GROUND IN ACCORDANCE WITH THE SPDES PERMIT.
 7. CROSSING MAY BE INSTALLED DURING THE PROJECT RESTORATION PHASE. IF INSTALLED DURING CONSTRUCTION, MONITOR THE CROSSING FOR DAMAGE FROM CONSTRUCTION TRAFFIC. ADDITIONAL MAINTENANCE OR REPAIRS MAY BE REQUIRED.

Westwood STANDARD DUTY LOW WATER CROSSING NOT TO SCALE DN-01

NOTES:
 1. REFER TO THE MANUFACTURER OR SUPPLIER OF THE PRODUCT FOR APPLICATION, IMPLEMENTATION, AND SPECIFICATION REQUIREMENTS.
 2. ALL HYDRAULICALLY APPLIED MATERIAL SHALL BE APPROVED BY ALL JURISDICTIONS HAVING AUTHORITY.
 3. APPLY HYDRAULICALLY APPLIED MATERIAL TO EXPOSED SOILS FOR STABILIZATION MEASURES. EXPOSED SOILS MAY INCLUDE ROUGH GRADED AREAS, SOIL STOCKPILES, CUT/FILL SLOPES, ETC.
 4. PREPARE SOIL SURFACES IN ACCORDANCE WITH PLANNED SEED BED PREPARATION.
 5. AVOID OVER SPRAY ONTO ROADS AND INFRASTRUCTURE.
 6. APPLY FROM TWO DIRECTIONS (90 DEGREES BETWEEN) TO ADEQUATELY COVER THE SOIL.
 7. ALLOW ADEQUATE TIME FOR HYDRAULICALLY APPLIED MATERIAL TO DRY. HYDRAULICALLY APPLIED MATERIAL SHOULD NOT BE APPLIED IMMEDIATELY BEFORE, DURING OR IMMEDIATELY AFTER RAINFALL OR IF THE SOIL IS SATURATED.
 8. APPLY SEED PRIOR TO HYDRAULICALLY APPLIED MATERIAL OR MIX SEED WITH HYDRAULICALLY APPLIED MATERIAL PRIOR TO APPLICATION.

Westwood SLOPE STABILIZATION - HYDRAULICALLY APPLIED MATERIAL NOT TO SCALE SW-04

Hoffman Falls Wind Project
 Madison County, New York

Construction Details - 9

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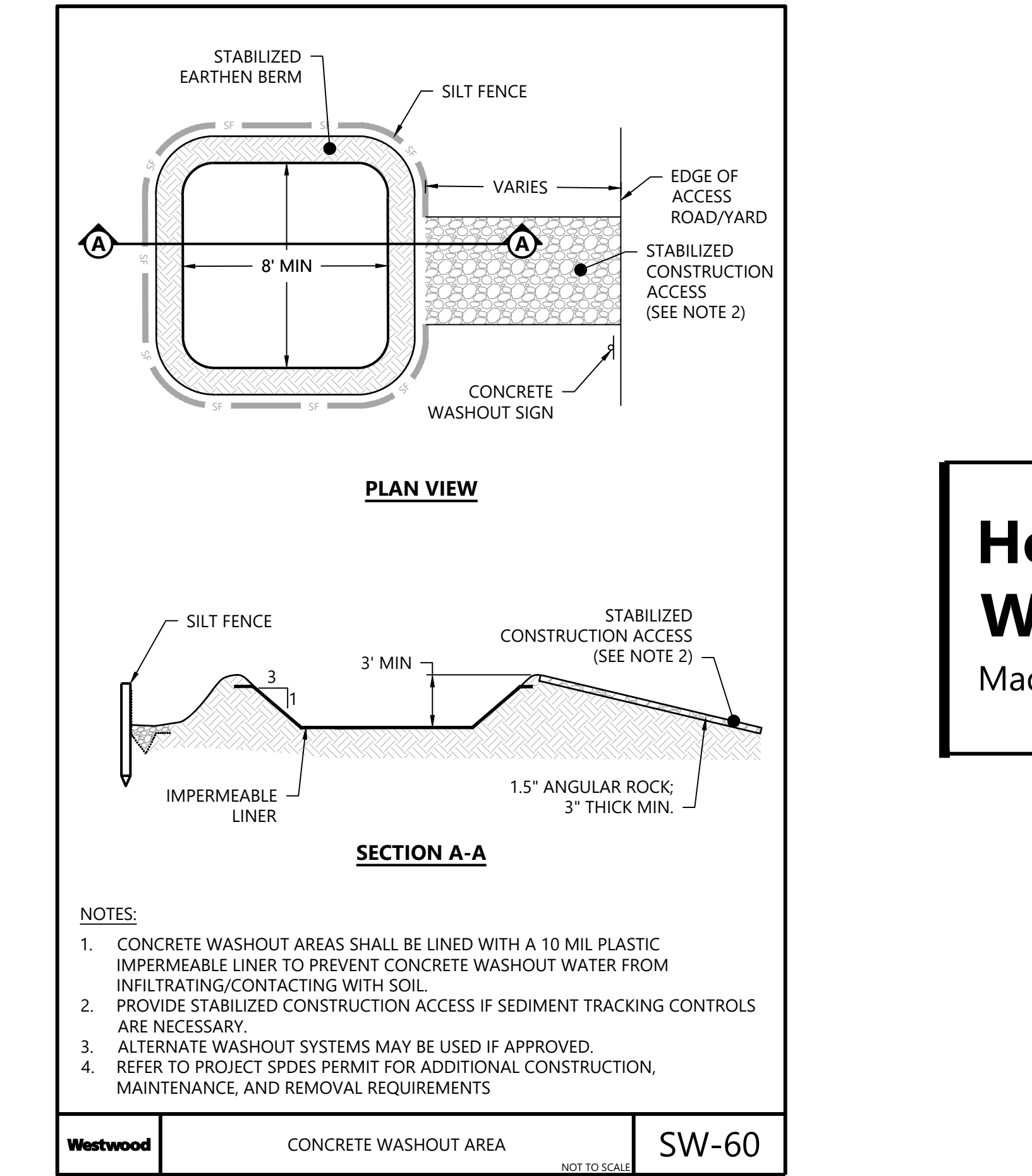
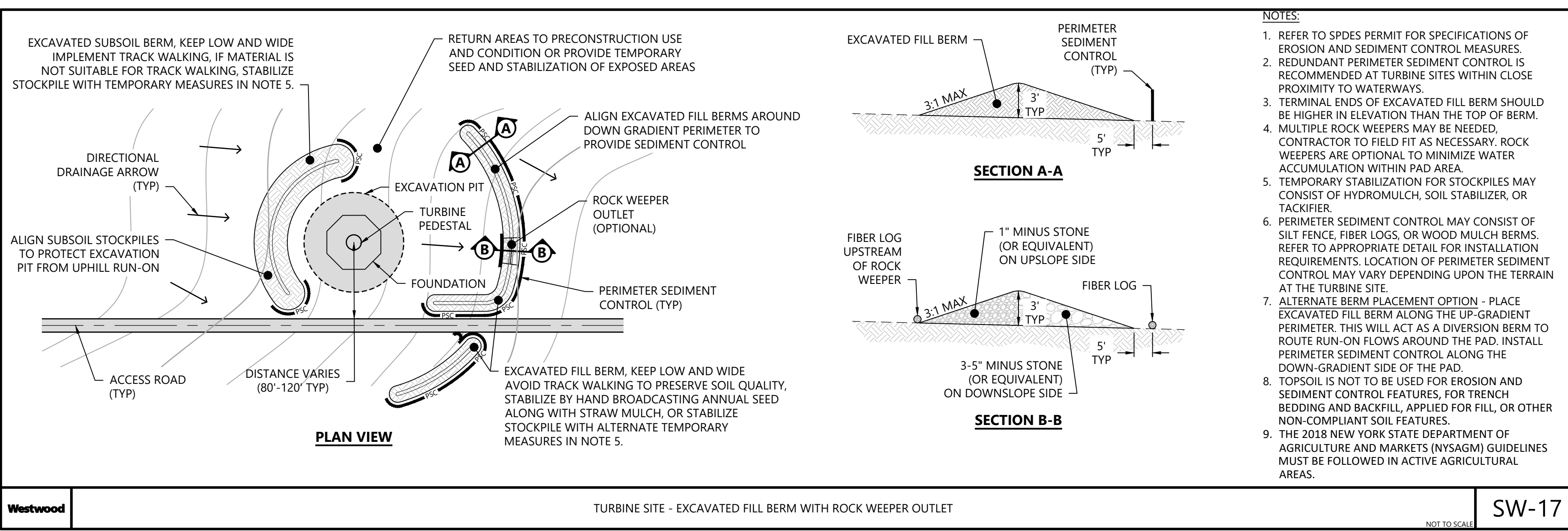
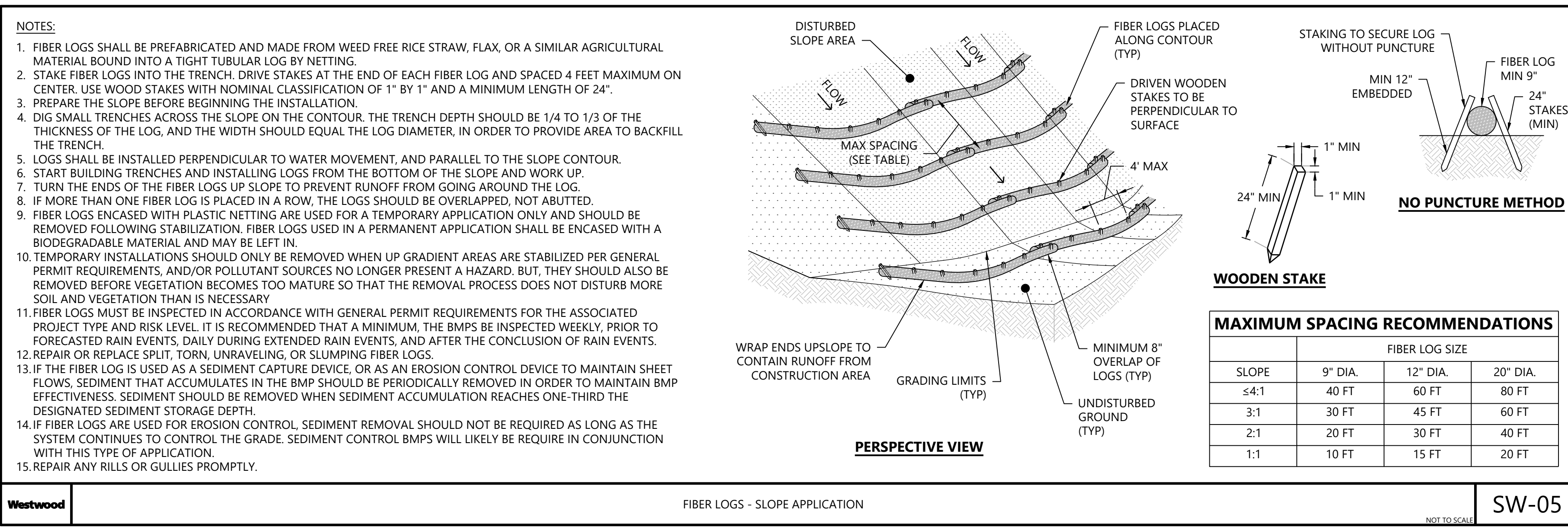
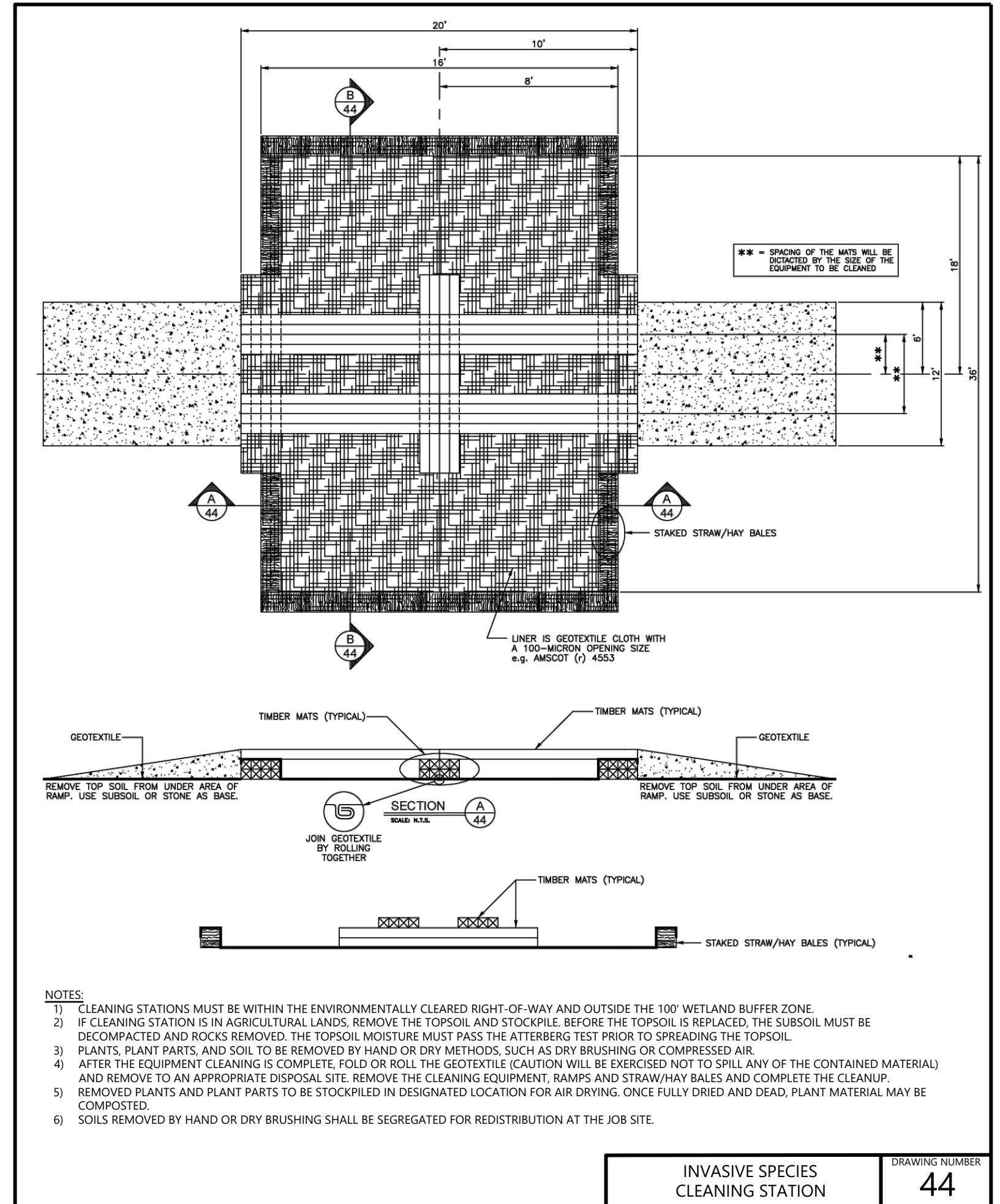
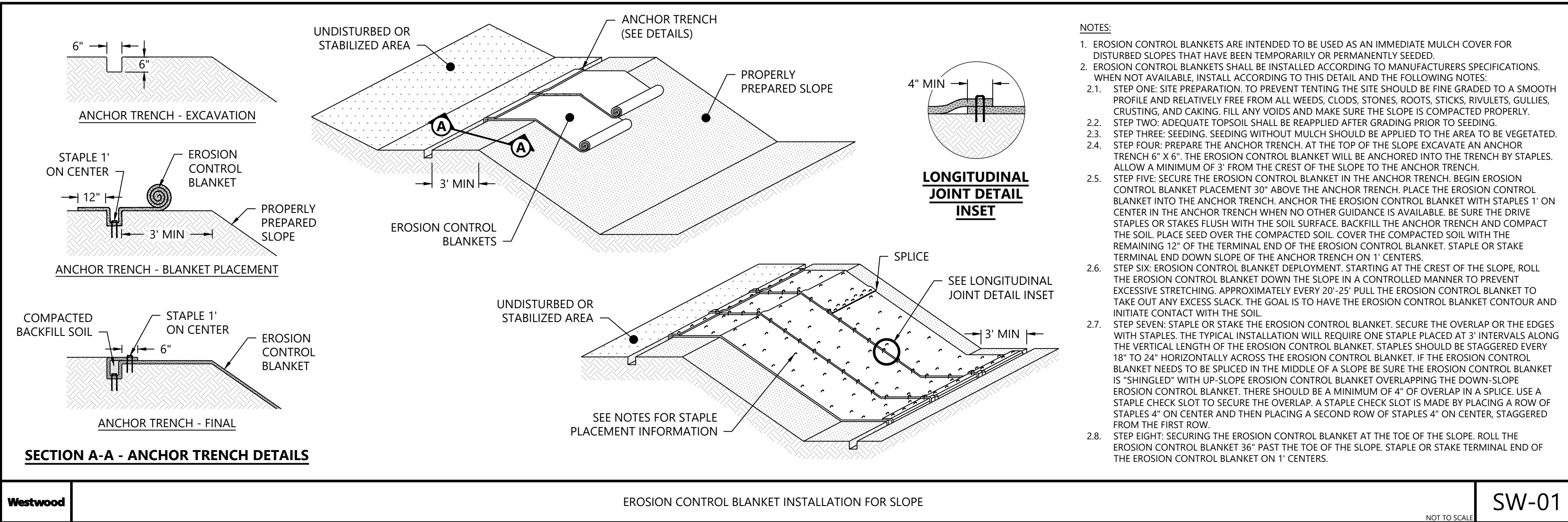
PREPARED FOR:

Hoffman Falls Wind LLC

90 State Street
 Albany, NY 12207

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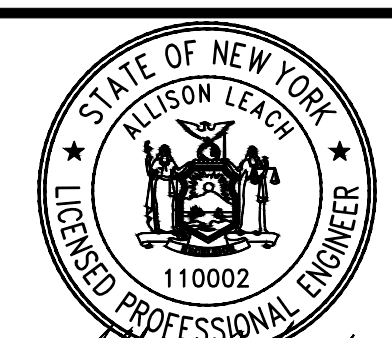
Hoffman Falls Wind Project
 Madison County, New York

Construction Details - 10

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DATE: 04/15/2026

SHEET: C709 1



Alison Leach
 04/15/2026

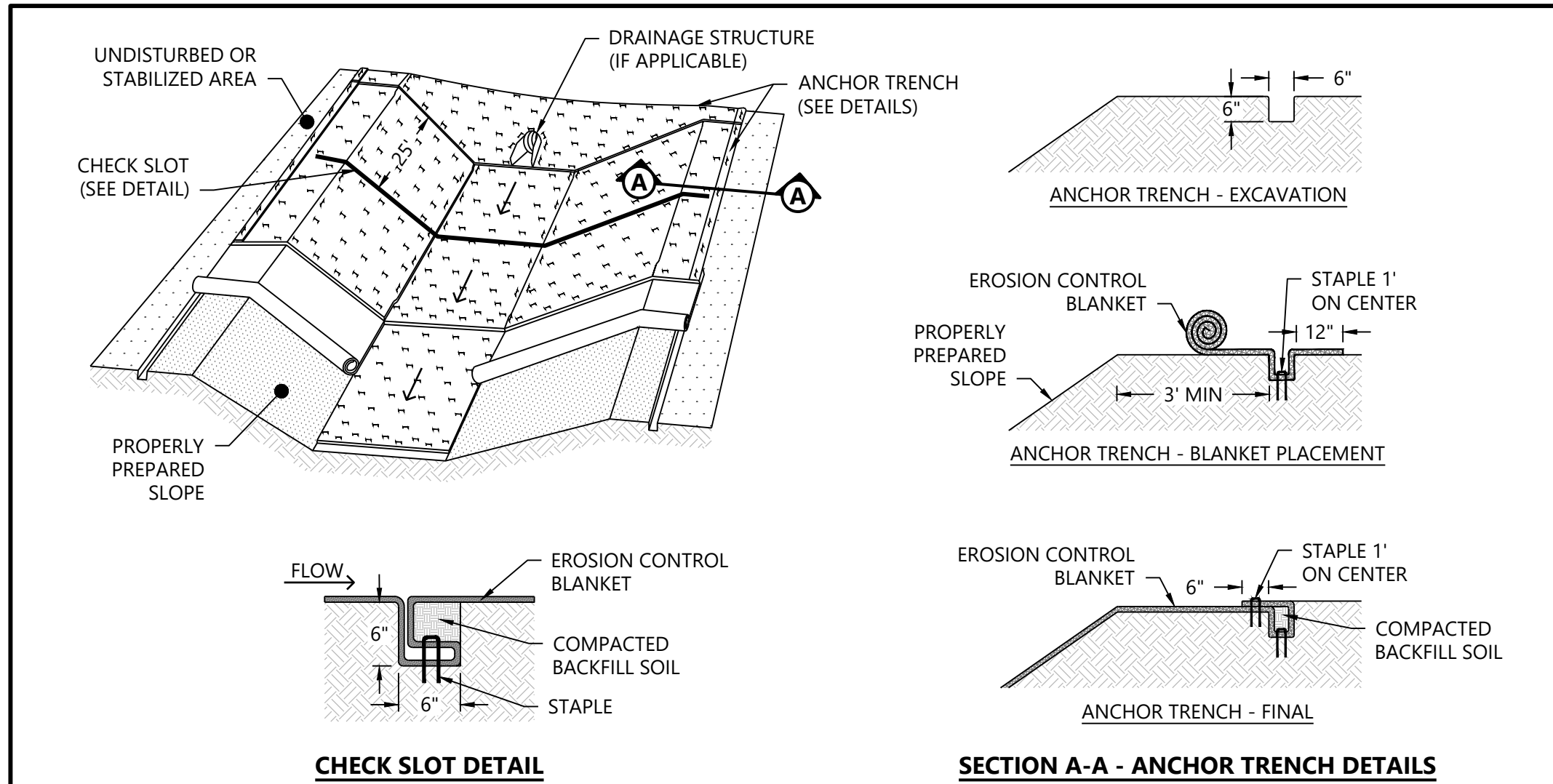
PREPARED FOR:

Hoffman Falls Wind LLC

90 State Street
 Albany, NY 12207

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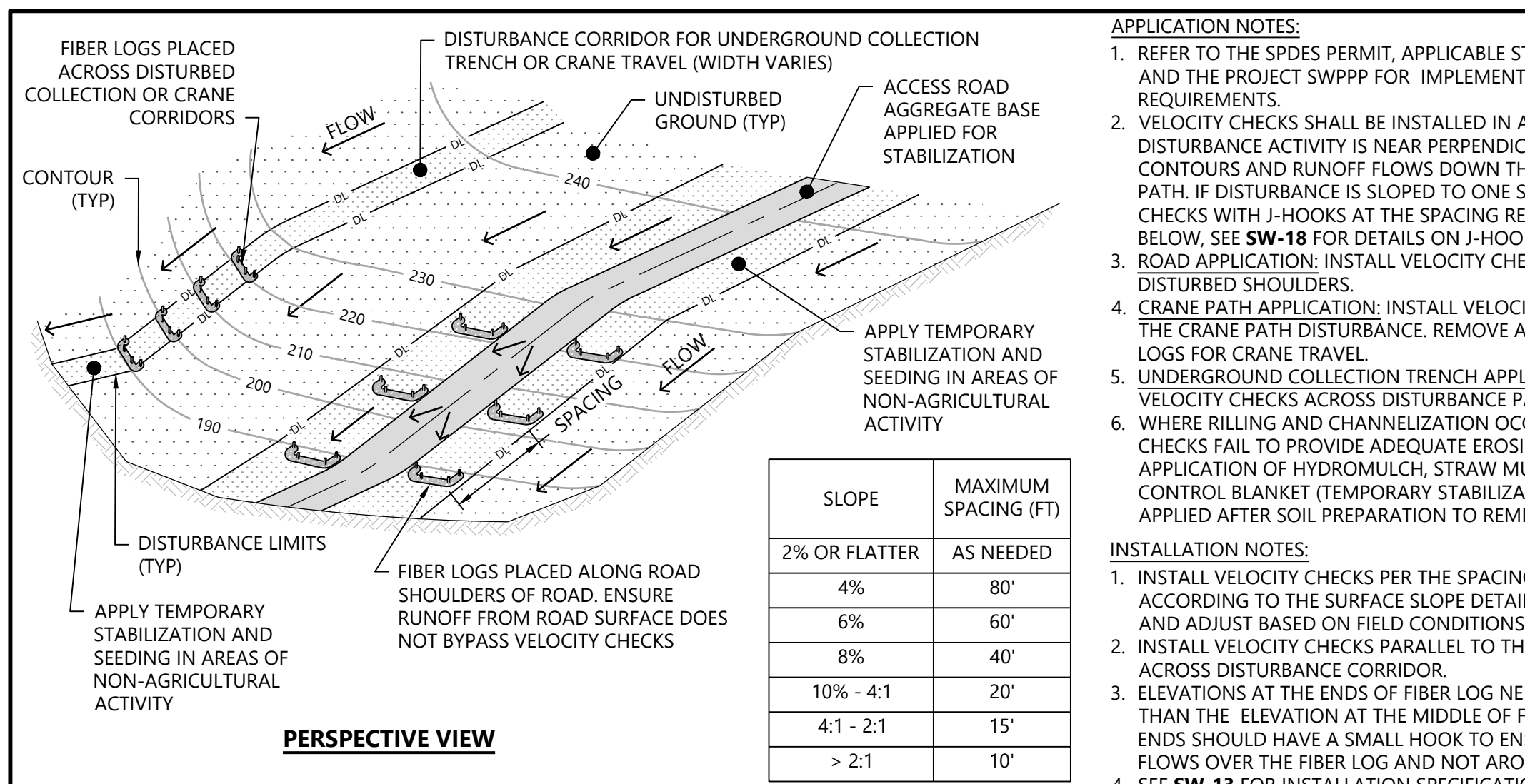
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1	04/15/2026	ORES COMMENTS	NA	HC	AL



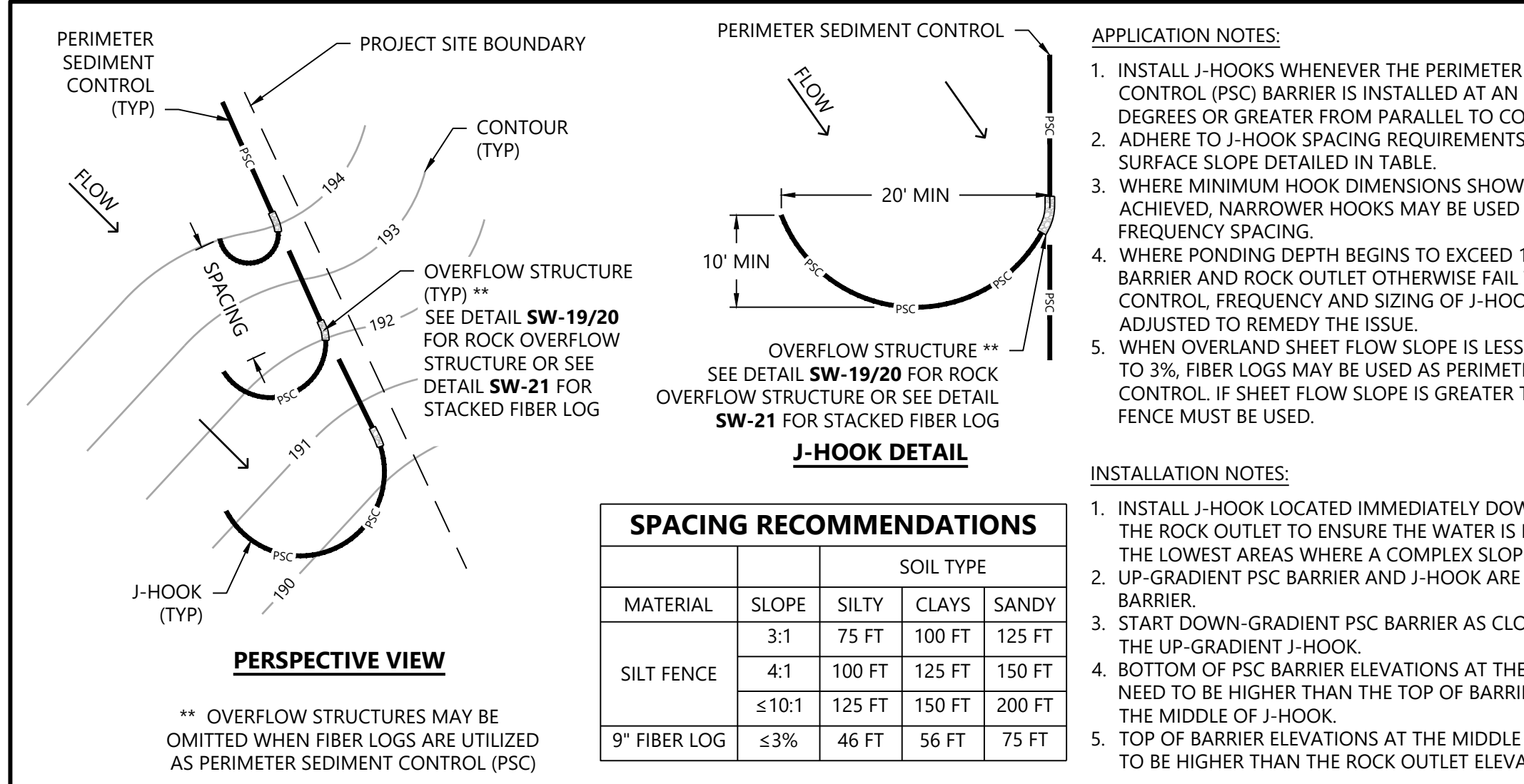
NOTES:

- EROSION CONTROL BLANKETS ARE USED TO TEMPORARILY AND PERMANENTLY STABILIZE DITCHES AND SWALES.
- EROSION CONTROL BLANKETS SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS. WHEN NOT AVAILABLE INSTALL ACCORDING TO THIS DETAIL AND THE FOLLOWING NOTES:
 - STEP ONE: SITE PREPARATION. TO PREVENT TENTING THE CHANNEL SHOULD BE FINE GRADED TO A SMOOTH PROFILE AND RELATIVELY FREE FROM ALL WEEDS, CLODS, STONES, ROOTS, STICKS, RIVULETS, GULLIES, CRUSTING, AND CAKING. FILL ANY VOIDS AND MAKE SURE THE CHANNEL IS COMPACTED PROPERLY.
 - STEP TWO: ADEQUATE TOPSOIL SHALL BE REAPPLIED AFTER GRADING PRIOR TO SEEDING.
 - STEP THREE: SEEDING. SEEDING WITHOUT MULCH SHOULD BE APPLIED TO THE AREA TO BE VEGETATED.
 - STEP FOUR: ANCHORING THE EROSION CONTROL BLANKET. EROSION CONTROL BLANKETS SHALL BE ANCHORED AT THE BEGINNING OF THE CHANNEL. A 6" X 6" DEEP TRENCH SHOULD BE EXCAVATED PERPENDICULAR TO THE DIRECTION OF WATER FLOW ACROSS THE ENTIRE WIDTH OF THE CHANNEL. THE EROSION CONTROL BLANKET SHOULD BE LAID IN THE CHECK SLOT WITH 30" OF THE EROSION CONTROL BLANKET EXTENDING UPSTREAM OF THE ANCHORING TRENCH. STAKE OR STAPLE THE EROSION CONTROL BLANKET IN THE CHECK SLOT ON 12" CENTERS WHEN NO OTHER GUIDANCE IS AVAILABLE. BACKFILL THE ANCHOR TRENCH AND COMPACT THE SOIL. PLACE SEED OVER THE COMPACTED SOIL. COVER THE COMPACTED SOIL WITH THE REMAINING 12 INCHES OF THE TERMINAL END OF THE EROSION CONTROL BLANKET. STAPLE OR STAKE TERMINAL END DOWN SLOPE OF THE ANCHOR TRENCH ON 12" CENTERS.
 - STEP FIVE: EROSION CONTROL BLANKET DEPLOYMENT IN THE CHANNEL BOTTOM. THE EROSION CONTROL BLANKETS SHOULD BE UNROLLED IN THE DIRECTION OF WATER FLOW. FIRST THE EROSION CONTROL BLANKET IS DEPLOYED IN THE CHANNEL BOTTOM. IT IS ALSO NECESSARY TO PREVENT A SEAM FROM GOING DOWN THE CENTER OF THE CHANNEL BOTTOM OR IN AREAS OF CONCENTRATED WATER FLOW. WHEN INSTALLING TWO EROSION CONTROL BLANKETS SIDE BY SIDE IN A WATERWAY THE CENTER OF THE EROSION CONTROL BLANKET SHOULD BE CENTERED IN THE AREA OF CONCENTRATED WATER FLOW. INSTALL ADJOINING EROSION CONTROL BLANKETS AWAY FROM THE CENTER OF THE CHANNEL BOTTOM. ADJOINING EROSION CONTROL BLANKETS SHOULD BE OVERLAPPED 4" TO 6". CONTINUE TO INSTALL A COMMON ROW OF STAPLES AT 2' CENTERS ALONG THE LENGTH OF THE OVERLAP.
 - STEP SIX: CHECK SLOTS. CHECK SLOTS SHOULD BE PLACED PERPENDICULAR TO THE FLOW DIRECTION ACROSS THE ENTIRE WIDTH OF THE CHANNEL AT 25' INTERVALS AND AT THE TERMINAL END OF THE CHANNEL. THE CHECK SLOTS SHOULD BE PLACED IN A 6" X 6" TRENCH AS SHOWN. SECURE THE EROSION CONTROL BLANKET IN THE DIRECTION OF THE WATER FLOW. AS THE EROSION CONTROL BLANKET IS INSTALLED FROM THE CHANNEL BOTTOM UP THE SLOPE, A SHINGLE TYPE INSTALLATION IS NECESSARY WITH THE UP-SLOPE EROSION CONTROL BLANKET OVERLAPPING THE LOWER EROSION CONTROL BLANKET APPROXIMATELY 4". ANCHOR THE EROSION CONTROL BLANKETS WITH A MINIMUM OF ONE STAPLE EVERY 24" ACROSS THE WIDTH AND ONE STAPLE EVERY 36" DOWN ITS LENGTH. IF THE EROSION CONTROL BLANKET NEEDS TO BE SPLICED, BE SURE THE EROSION CONTROL BLANKET IS "SHINGLED" WITH THE UPSTREAM EROSION CONTROL BLANKET OVERLAPPING THE DOWNSTREAM EROSION CONTROL BLANKET. THERE SHOULD BE A MINIMUM OF 4" OF OVERLAP IN A SPLICE. USE A STAPLE CHECK SLOT TO SECURE THE OVERLAP. ANCHOR THE EROSION CONTROL BLANKET PLACED AT THE TOP OF THE CHANNEL SLOPE IN THE SAME MANNER AS SHOWN.
 - STEP EIGHT: TERMINAL END. SECURE THE EROSION CONTROL BLANKET AT THE TERMINAL END OF THE CHANNEL WITH A SLOT SIMILAR TO THE ONE MADE AT THE BEGINNING OF THE CHANNEL.

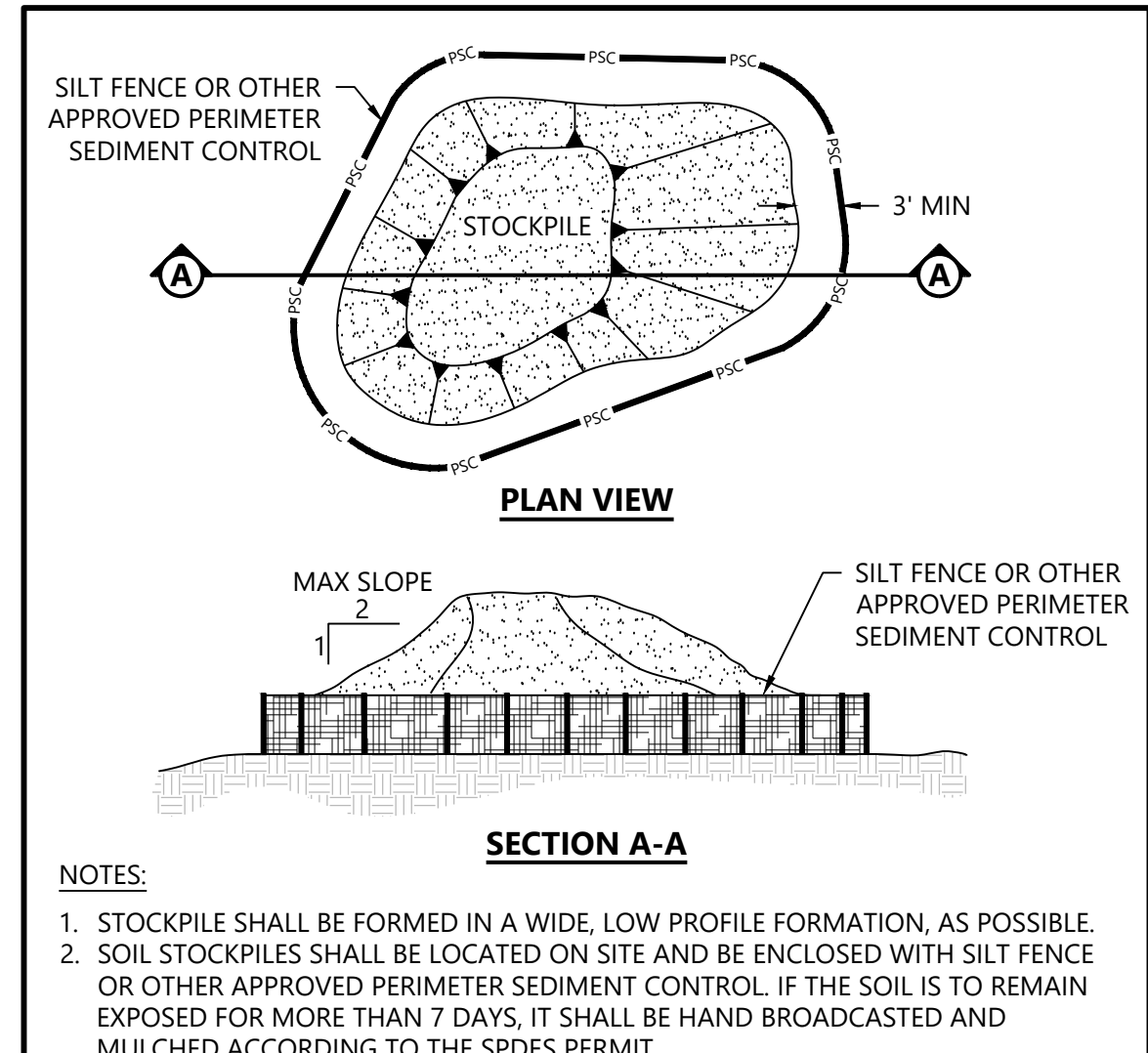
Westwood EROSION CONTROL BLANKET INSTALLATION FOR CHANNEL SW-02 NOT TO SCALE



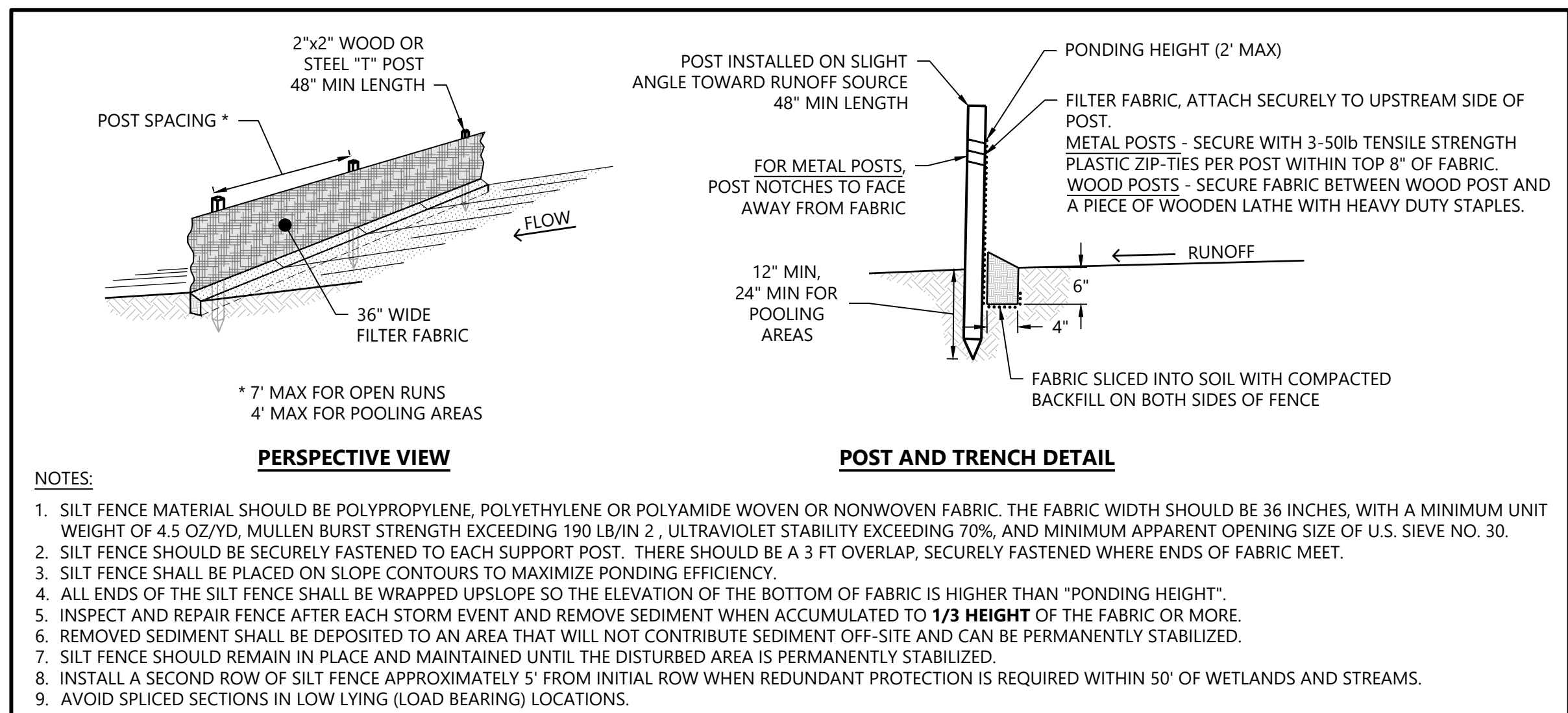
Westwood VELOCITY CHECKS - FIBER LOGS SW-07 NOT TO SCALE



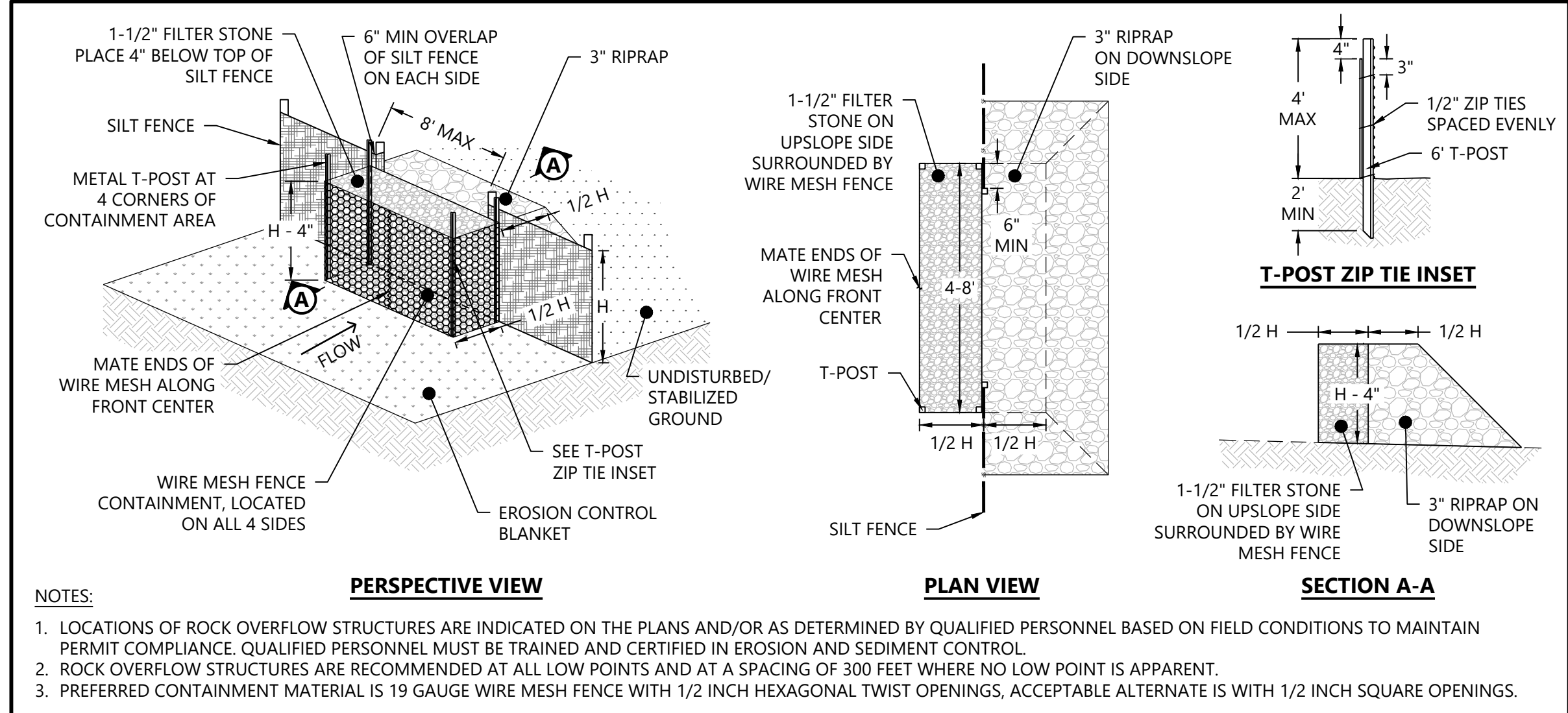
Westwood PERIMETER SEDIMENT CONTROL - J-HOOK APPLICATION SW-18 NOT TO SCALE



Westwood SOIL STOCKPILE PROTECTION SW-10 NOT TO SCALE



Westwood SILT FENCE SW-11 NOT TO SCALE



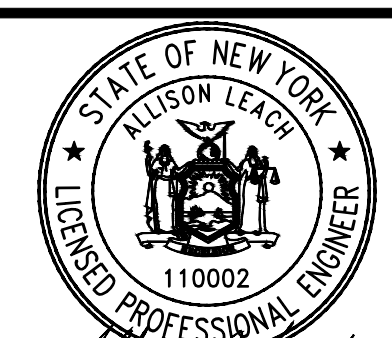
Westwood ROCK OVERFLOW STRUCTURE FOR SILT FENCE - FULL HEIGHT SW-20 NOT TO SCALE

Hoffman Falls Wind Project
 Madison County, New York

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 04/15/2026

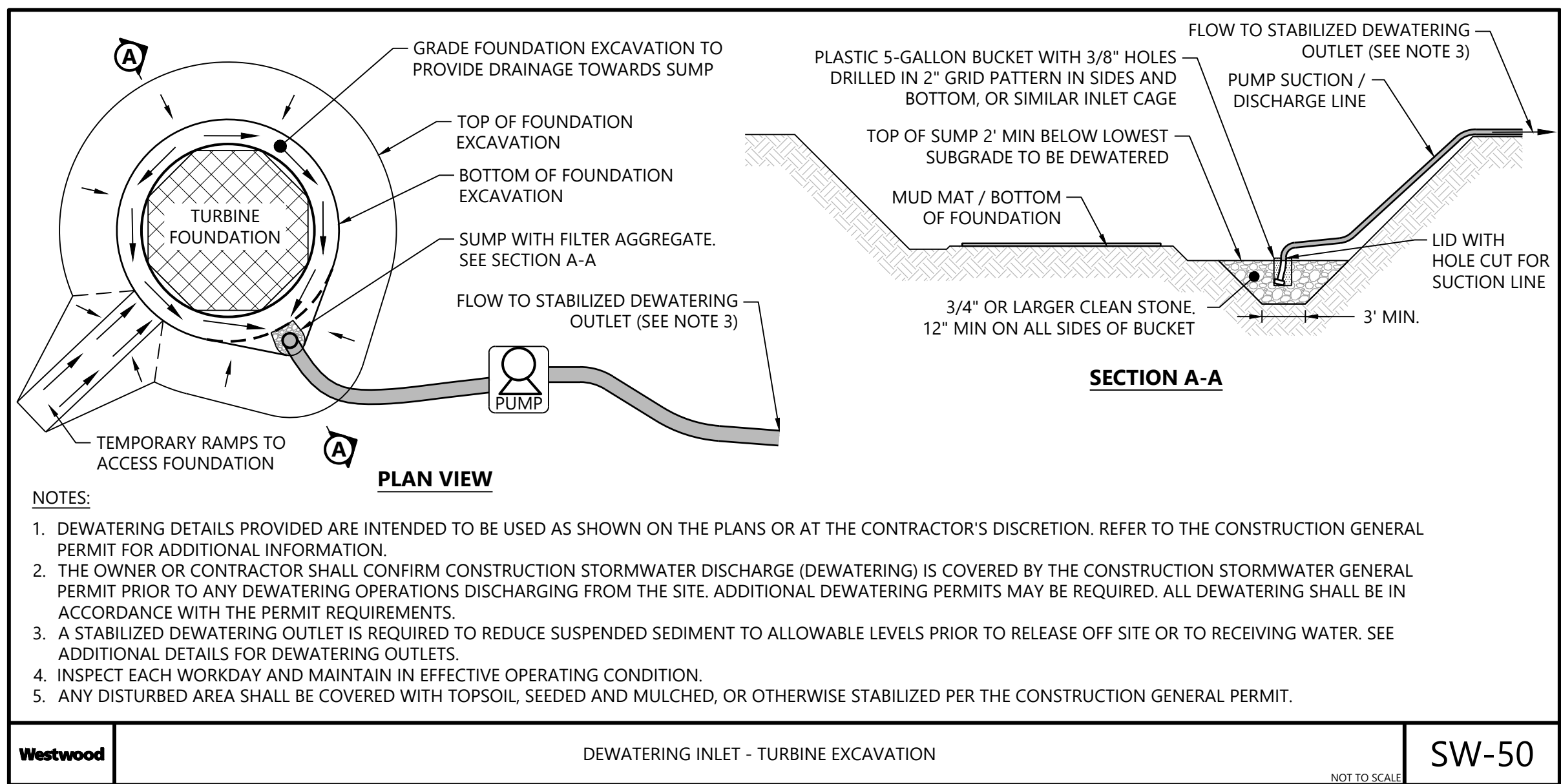
PREPARED FOR:

Hoffman Falls Wind LLC

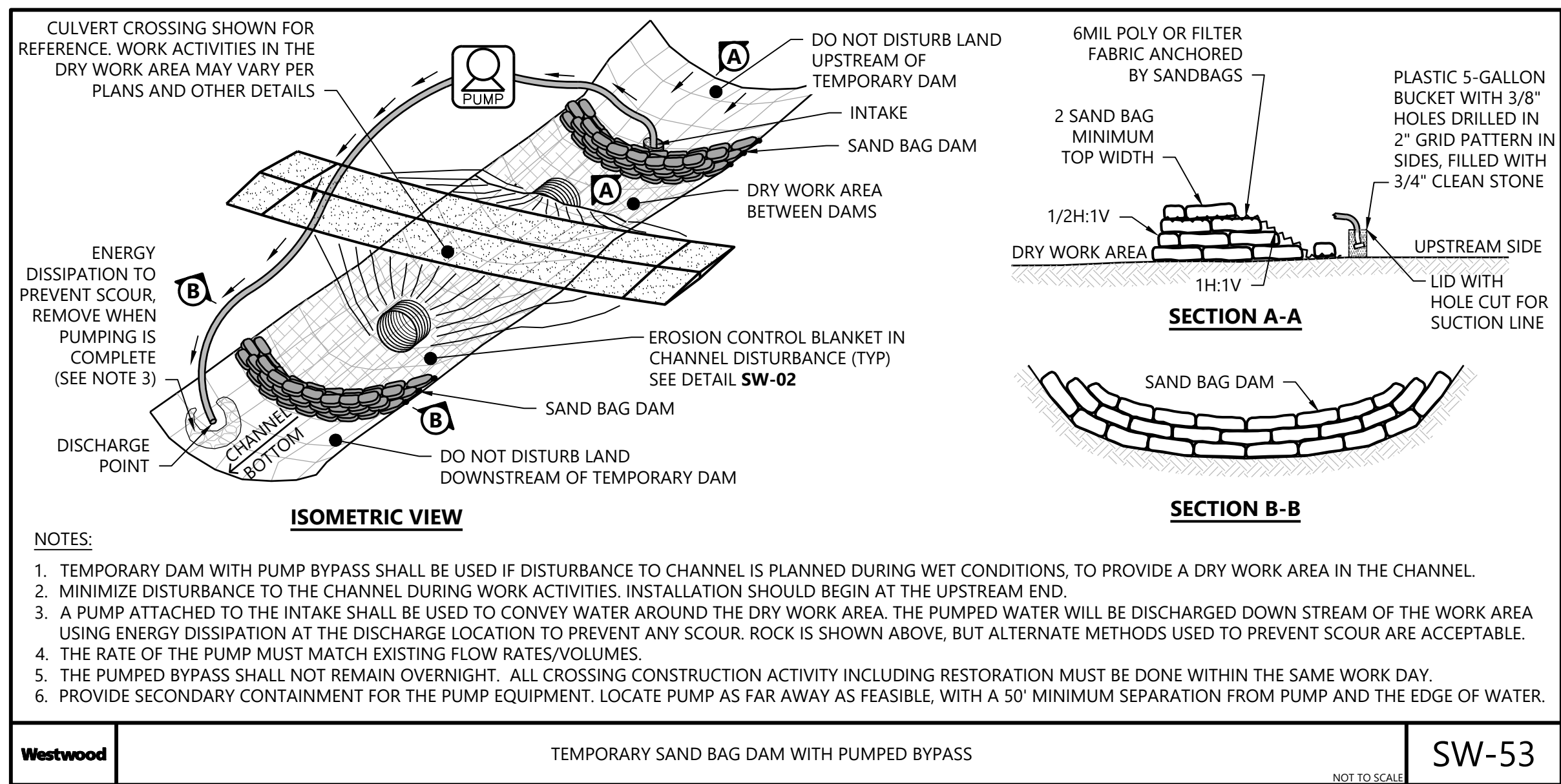
90 State Street
 Albany, NY 12207

REVISIONS:

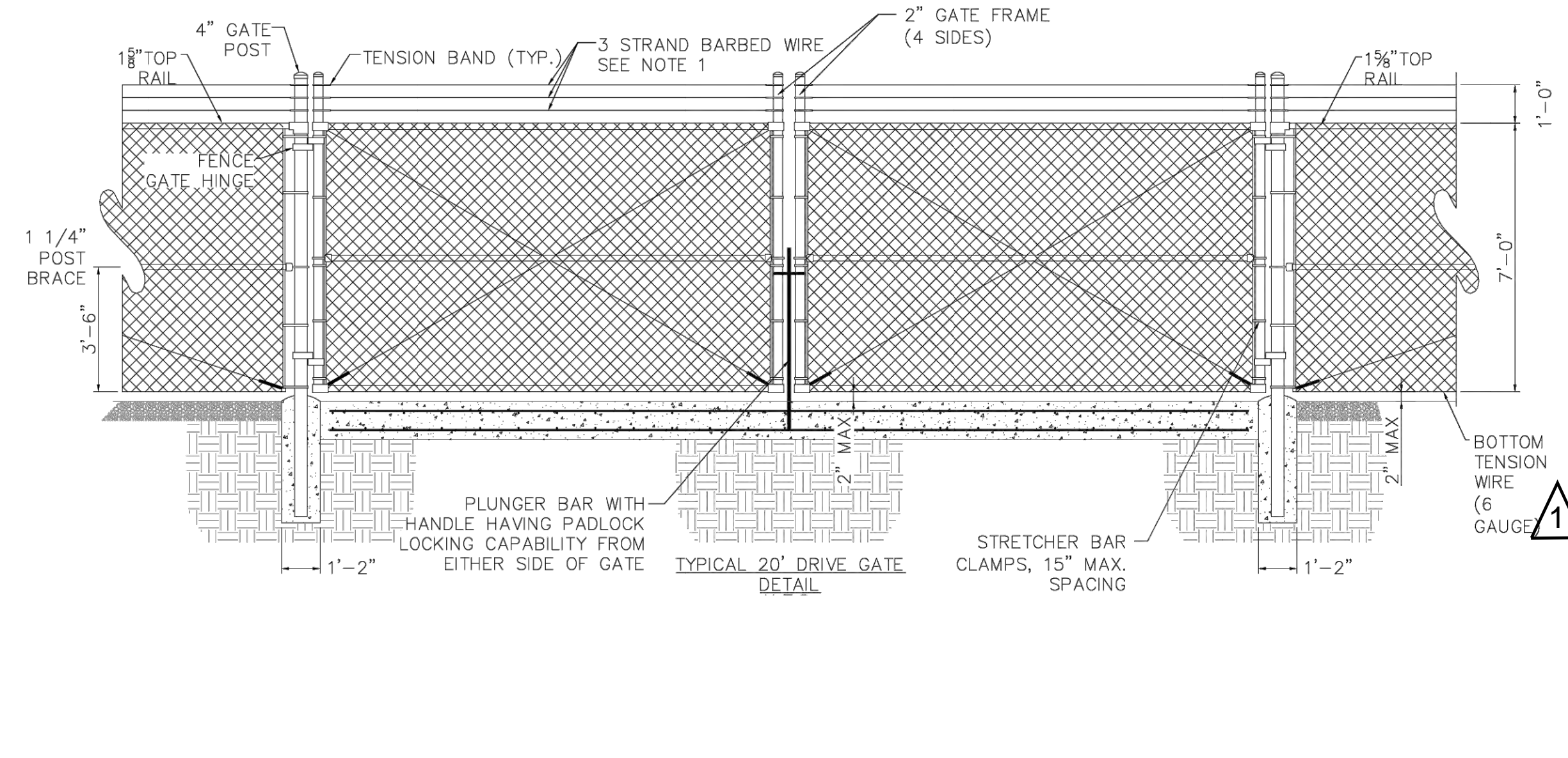
#	DATE	COMMENT	BY	CHK	APP
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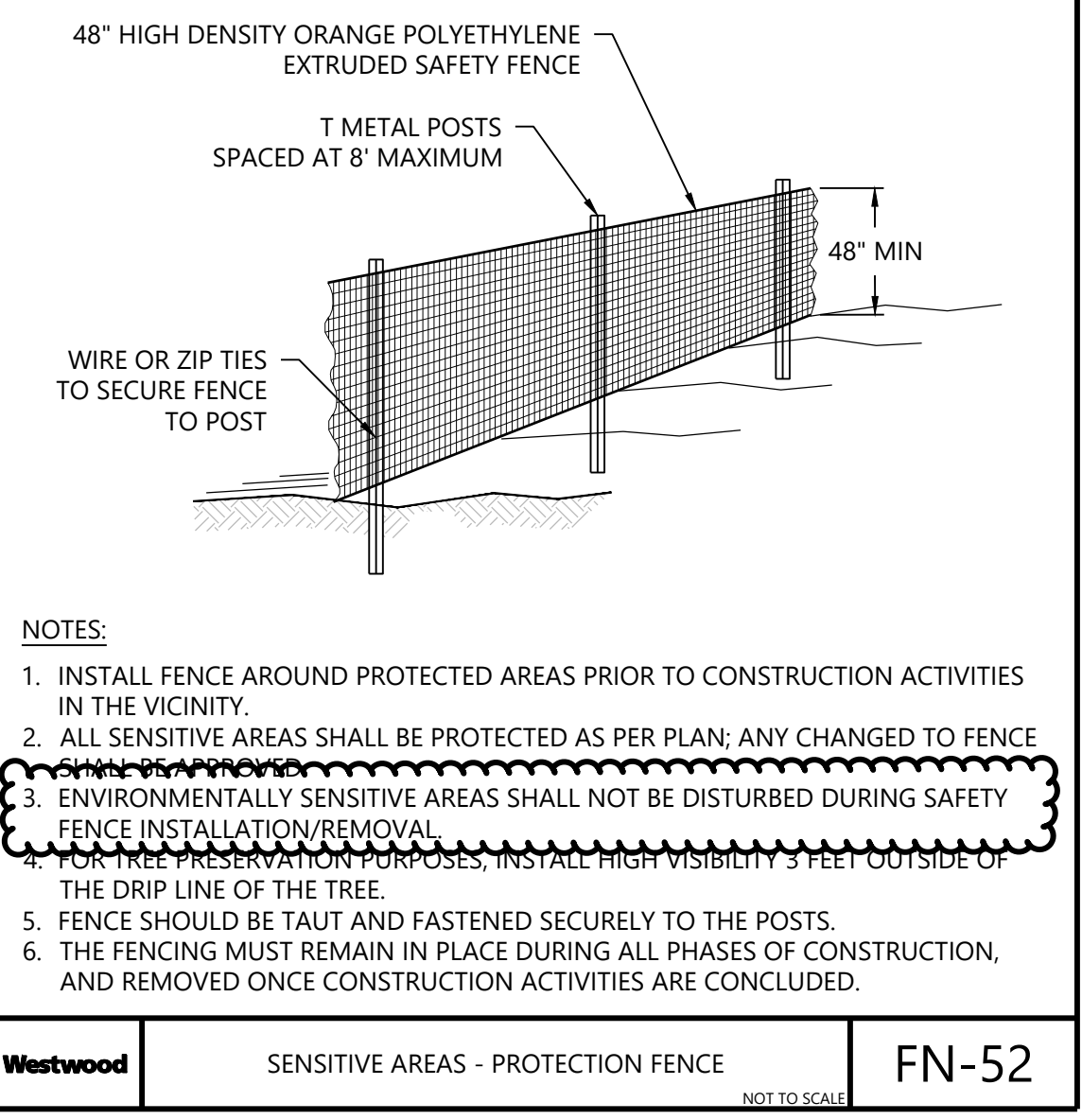
Westwood DEWATERING INLET - TURBINE EXCAVATION NOT TO SCALE SW-50



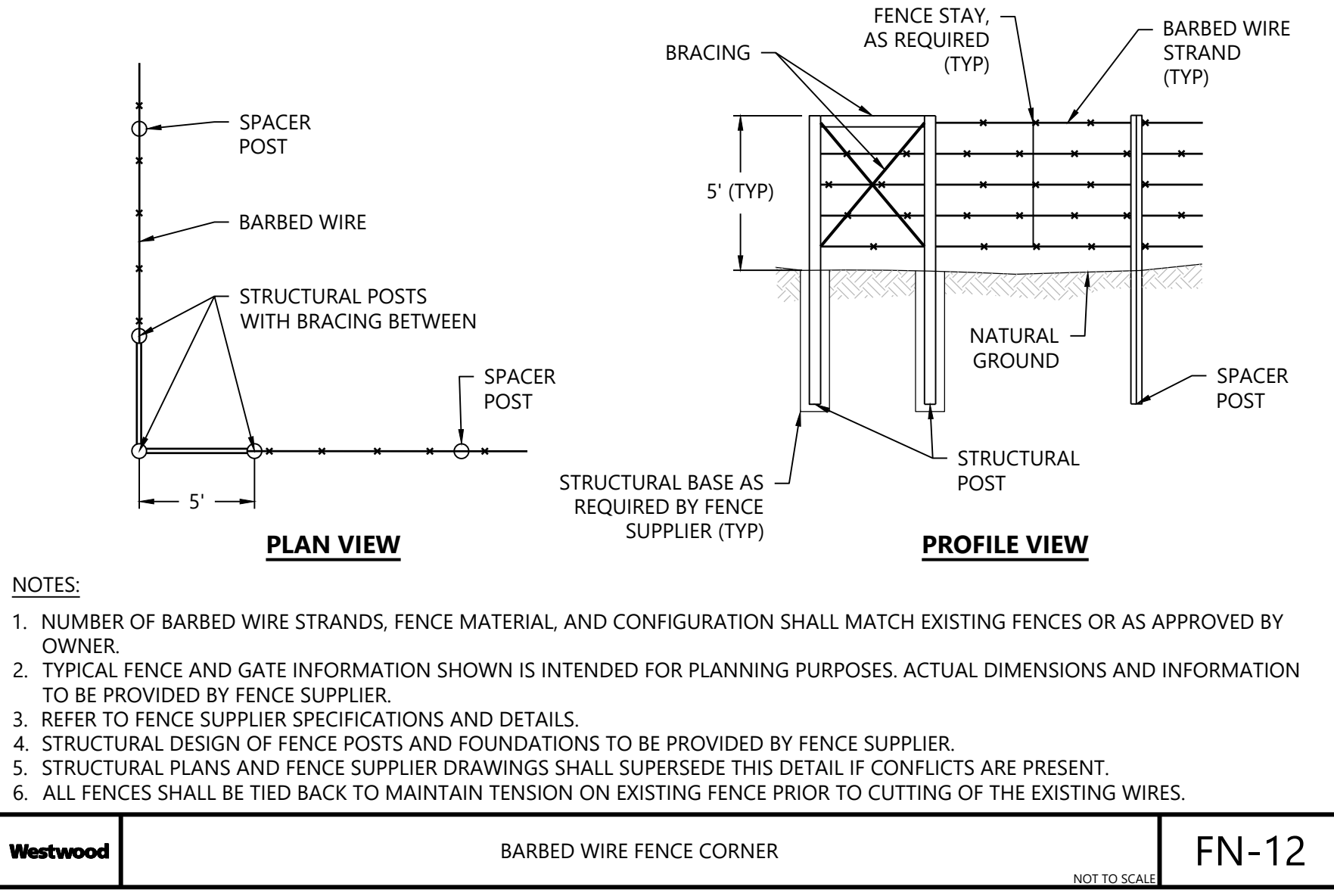
Westwood TEMPORARY SAND BAG DAM WITH PUMPED BYPASS NOT TO SCALE SW-53



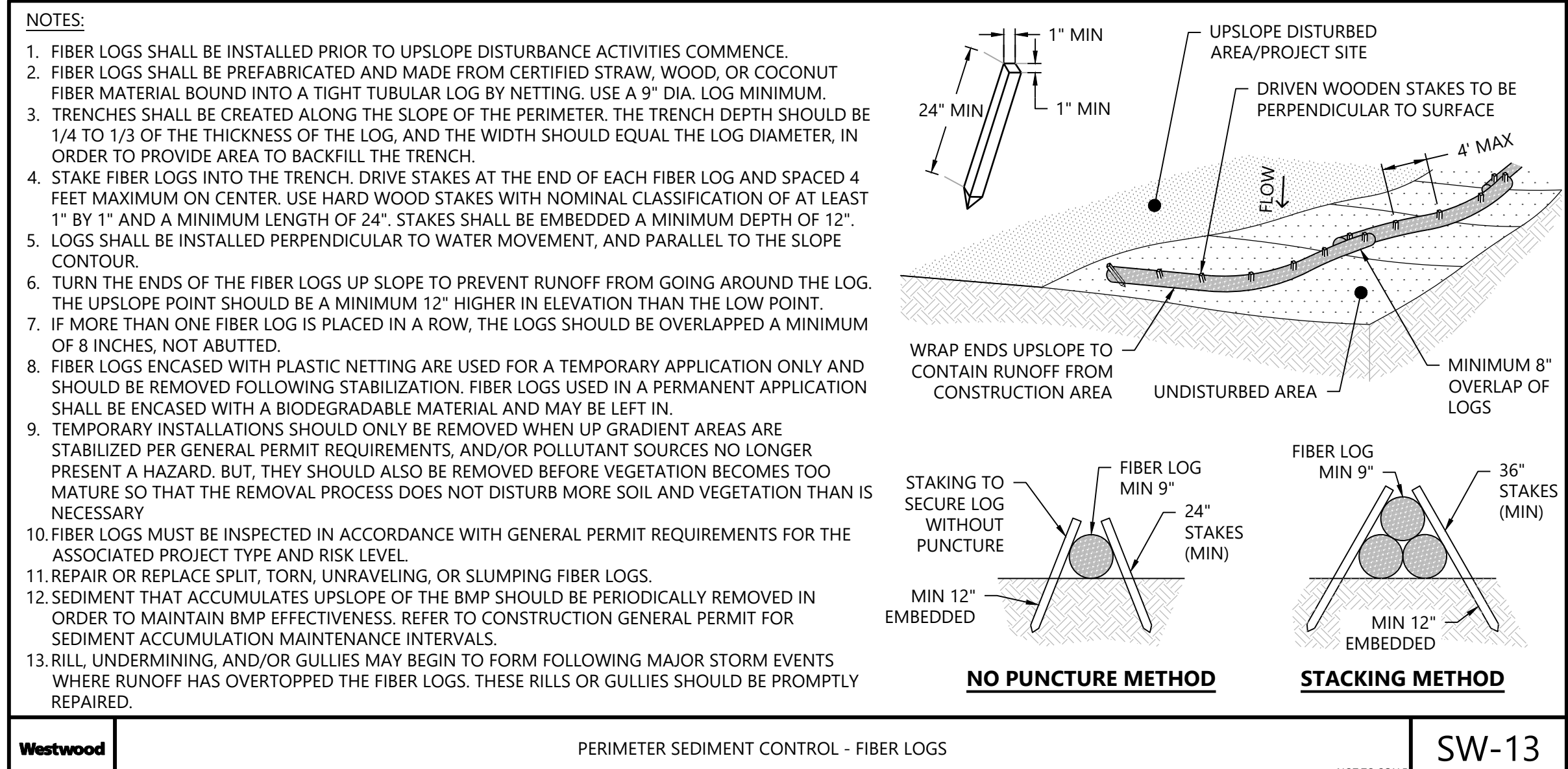
Westwood BARBED WIRE FENCE CORNER NOT TO SCALE FN-12



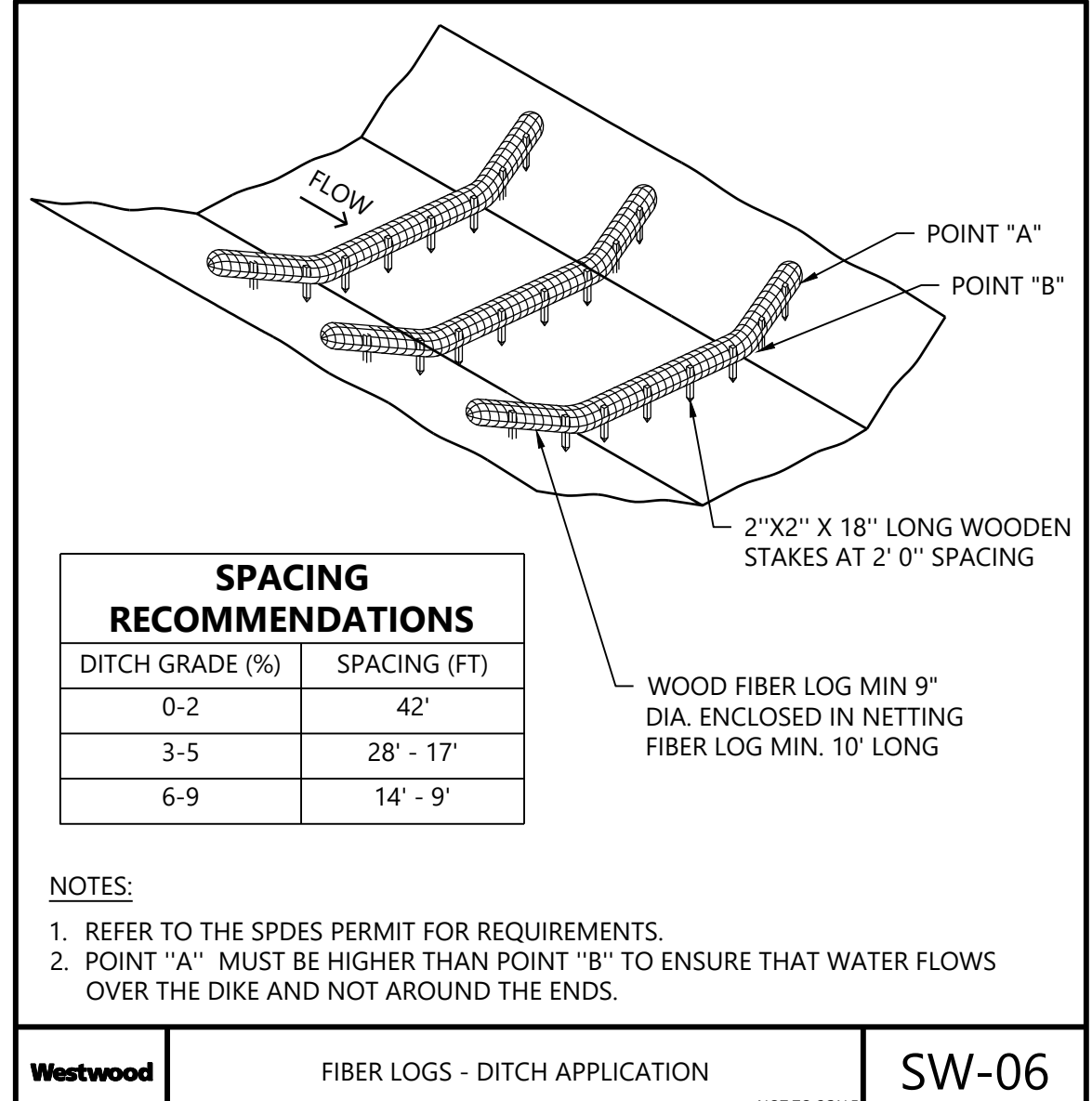
Westwood SENSITIVE AREAS - PROTECTION FENCE NOT TO SCALE FN-52



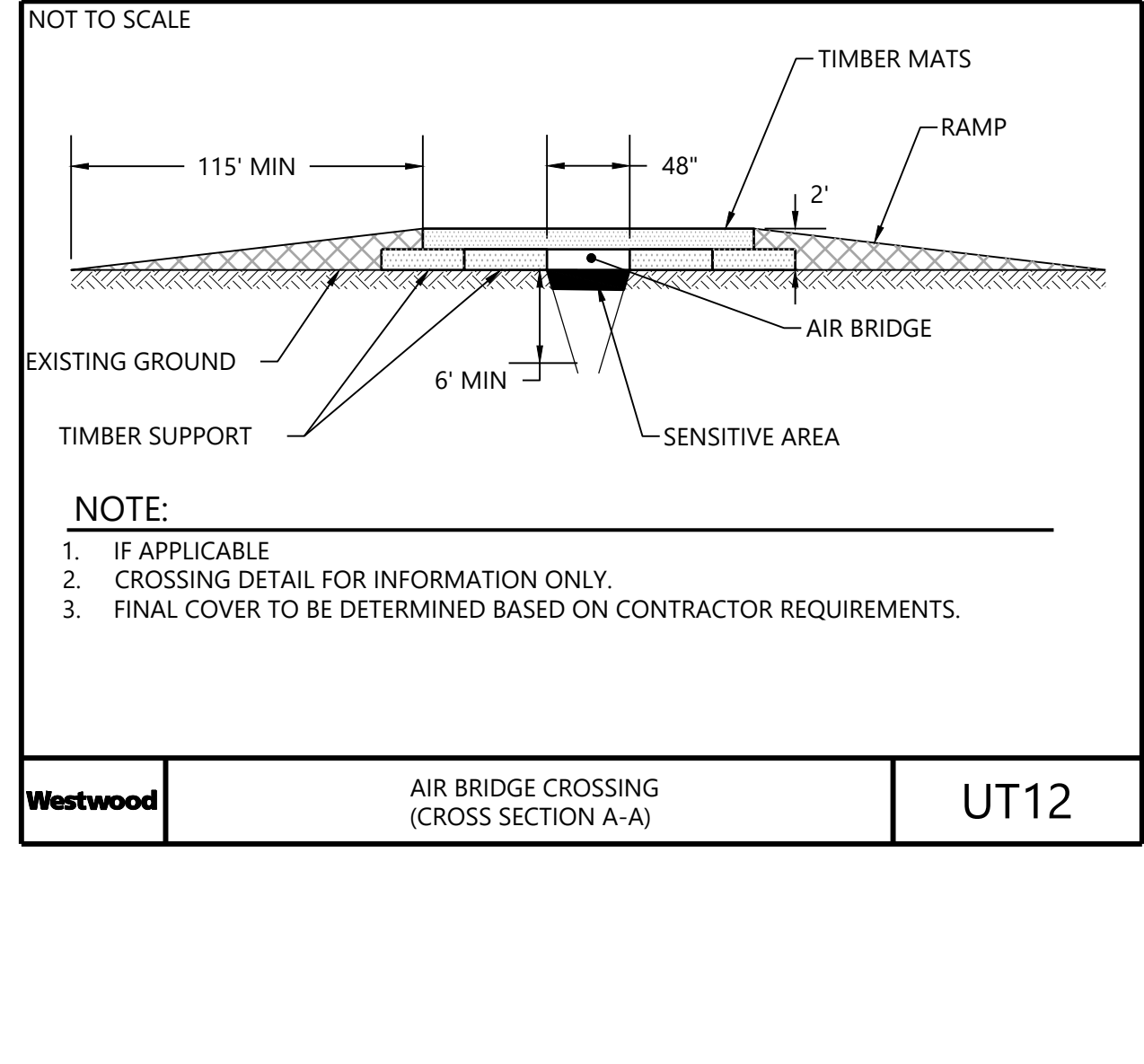
Westwood BARBED WIRE FENCE CORNER NOT TO SCALE FN-12



Westwood PERIMETER SEDIMENT CONTROL - FIBER LOGS NOT TO SCALE SW-13



Westwood FIBER LOGS - DITCH APPLICATION NOT TO SCALE SW-06



Westwood AIR BRIDGE CROSSING (CROSS SECTION A-A) UT12

Hoffman Falls Wind Project
 Madison County, New York

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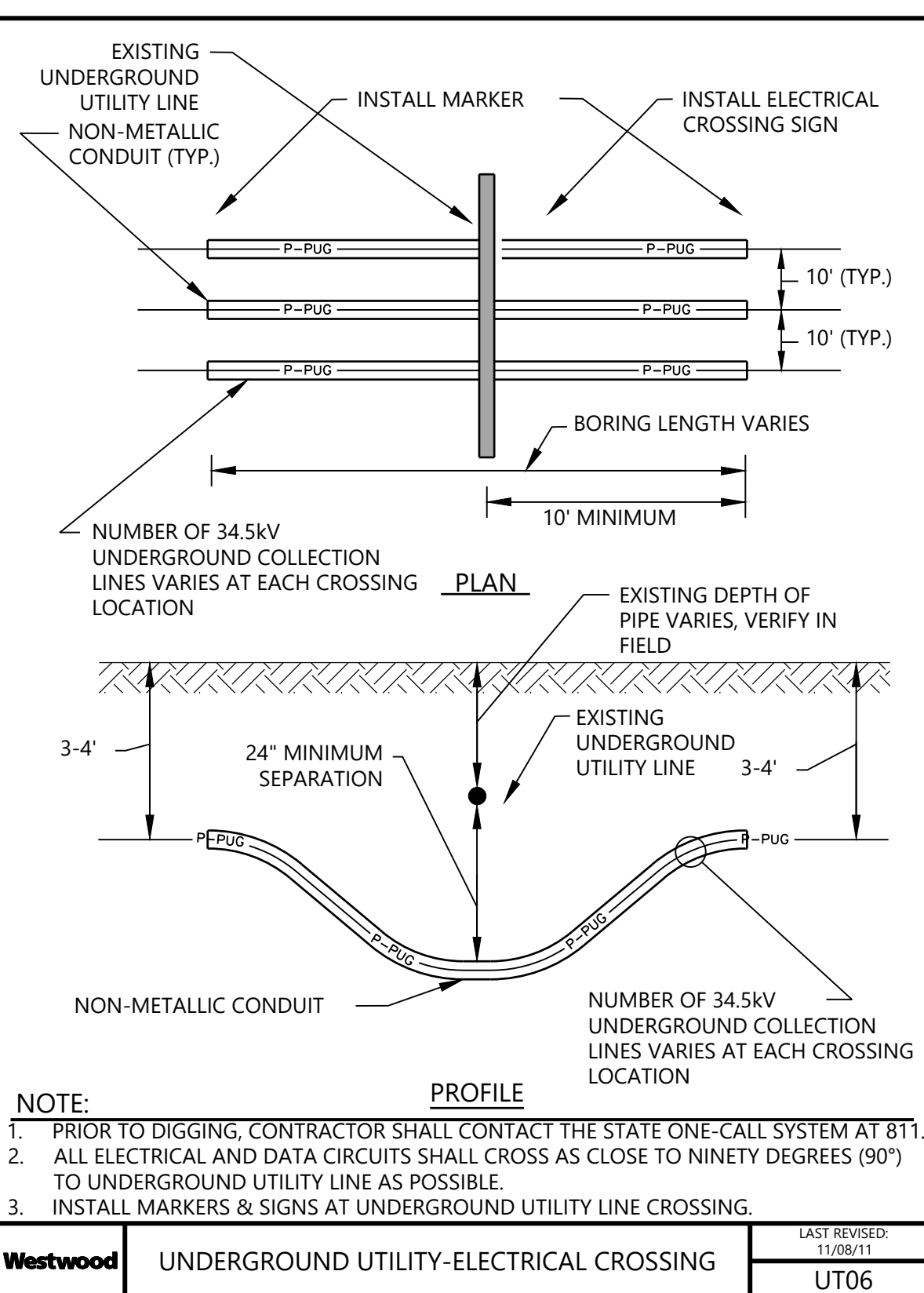
PREPARED FOR:

Hoffman Falls Wind LLC

90 State Street
 Albany, NY 12207

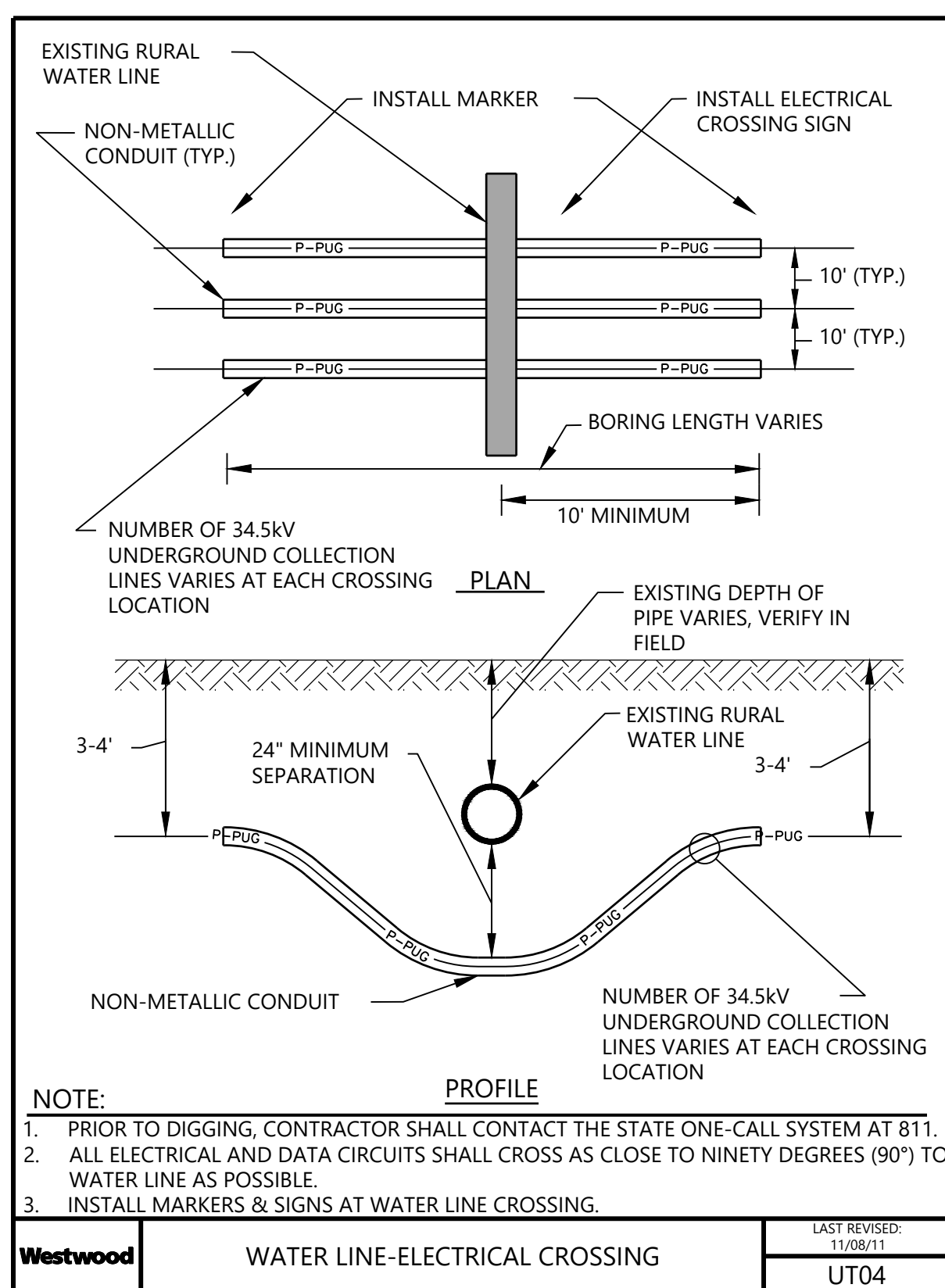
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1	04/15/2026	ORES COMMENTS		NA	HC AL



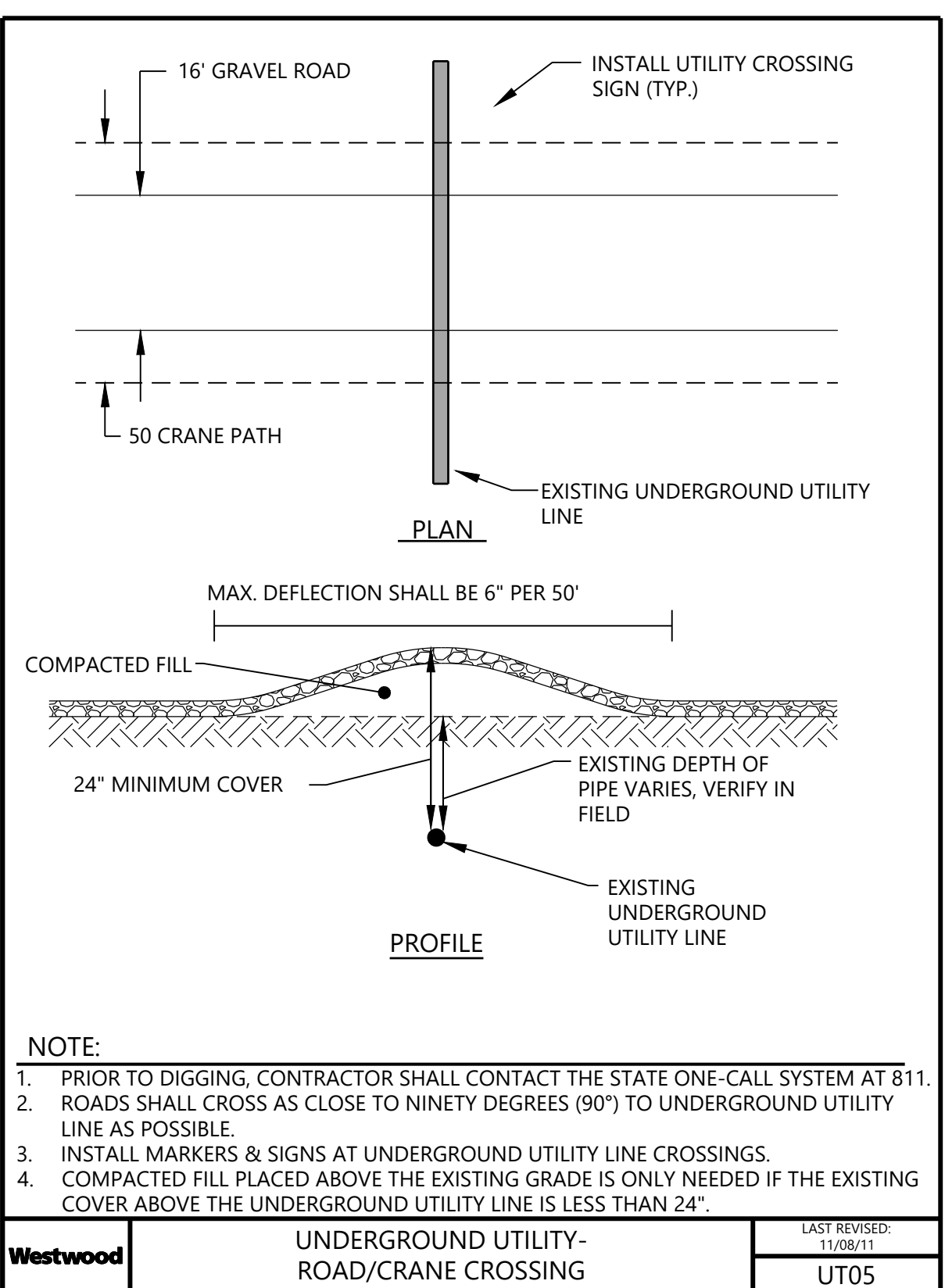
NOTE:
 1. PRIOR TO DIGGING, CONTRACTOR SHALL CONTACT THE STATE ONE-CALL SYSTEM AT 811.
 2. ALL ELECTRICAL AND DATA CIRCUITS SHALL CROSS AS CLOSE TO NINETY DEGREES (90°) TO UNDERGROUND UTILITY LINE AS POSSIBLE.
 3. INSTALL MARKERS & SIGNS AT UNDERGROUND UTILITY LINE CROSSING.

Westwood UNDERGROUND UTILITY-ELECTRICAL CROSSING UT06
 LAST REVISED: 11/08/11



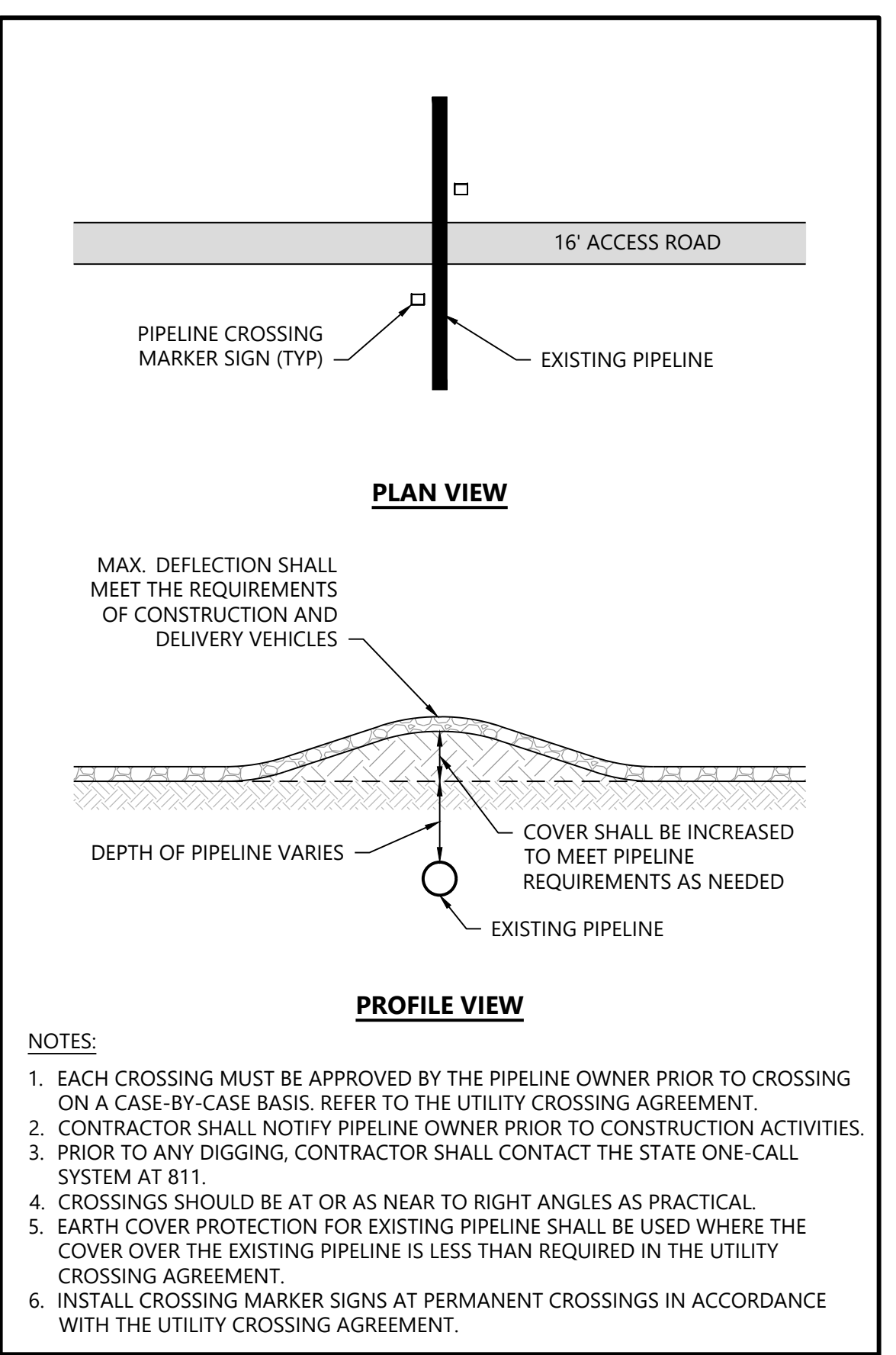
NOTE:
 1. PRIOR TO DIGGING, CONTRACTOR SHALL CONTACT THE STATE ONE-CALL SYSTEM AT 811.
 2. ALL ELECTRICAL AND DATA CIRCUITS SHALL CROSS AS CLOSE TO NINETY DEGREES (90°) TO WATER LINE AS POSSIBLE.
 3. INSTALL MARKERS & SIGNS AT WATER LINE CROSSING.

Westwood WATER LINE-ELECTRICAL CROSSING UT04
 LAST REVISED: 11/08/11



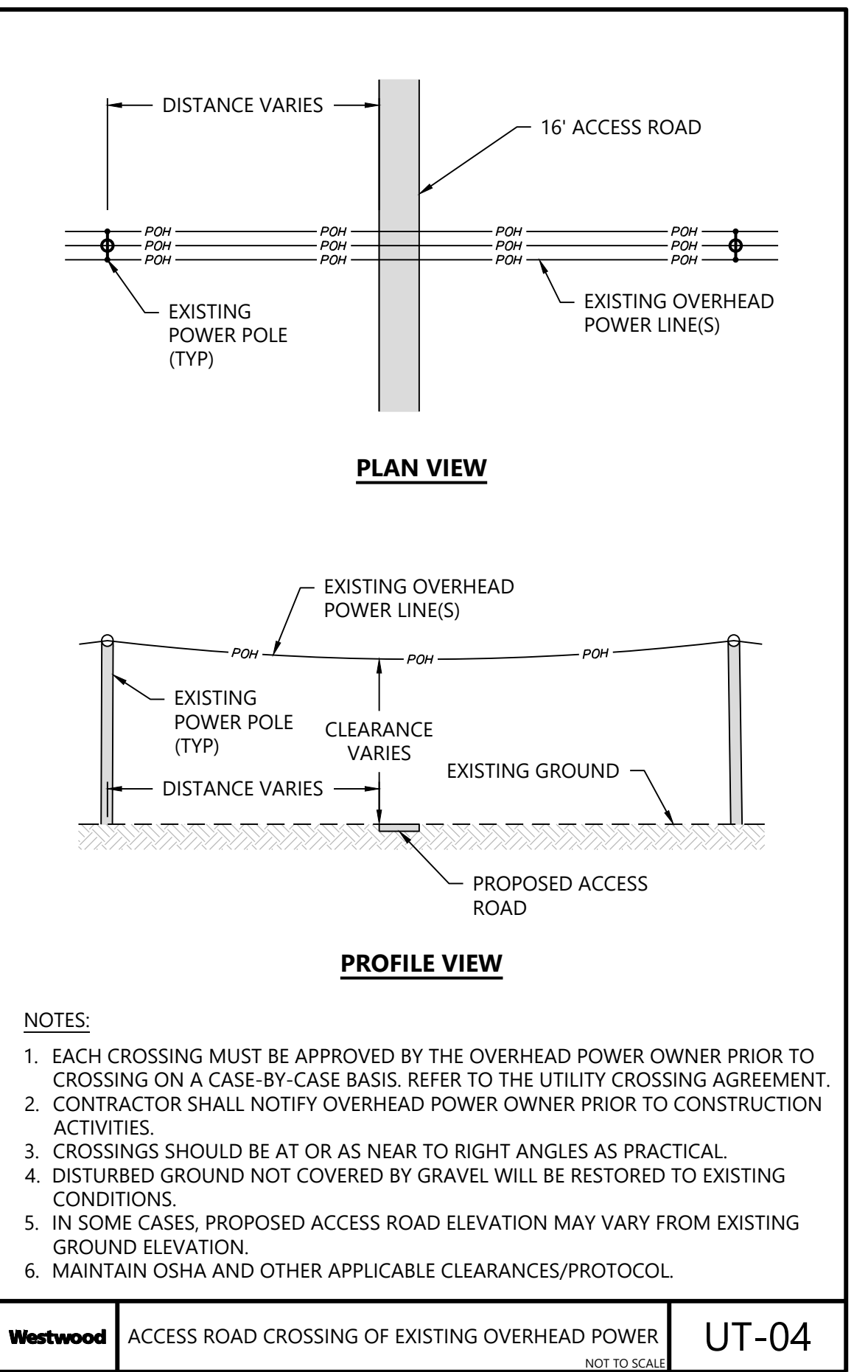
NOTE:
 1. PRIOR TO DIGGING, CONTRACTOR SHALL CONTACT THE STATE ONE-CALL SYSTEM AT 811.
 2. ROADS SHALL CROSS AS CLOSE TO NINETY DEGREES (90°) TO UNDERGROUND UTILITY LINE AS POSSIBLE.
 3. INSTALL MARKERS & SIGNS AT UNDERGROUND UTILITY LINE CROSSINGS.
 4. COMPACTED FILL PLACED ABOVE THE EXISTING GRADE IS ONLY NEEDED IF THE EXISTING COVER ABOVE THE UNDERGROUND UTILITY LINE IS LESS THAN 24".

Westwood UNDERGROUND UTILITY-ROAD/CRANE CROSSING UT05
 LAST REVISED: 11/08/11



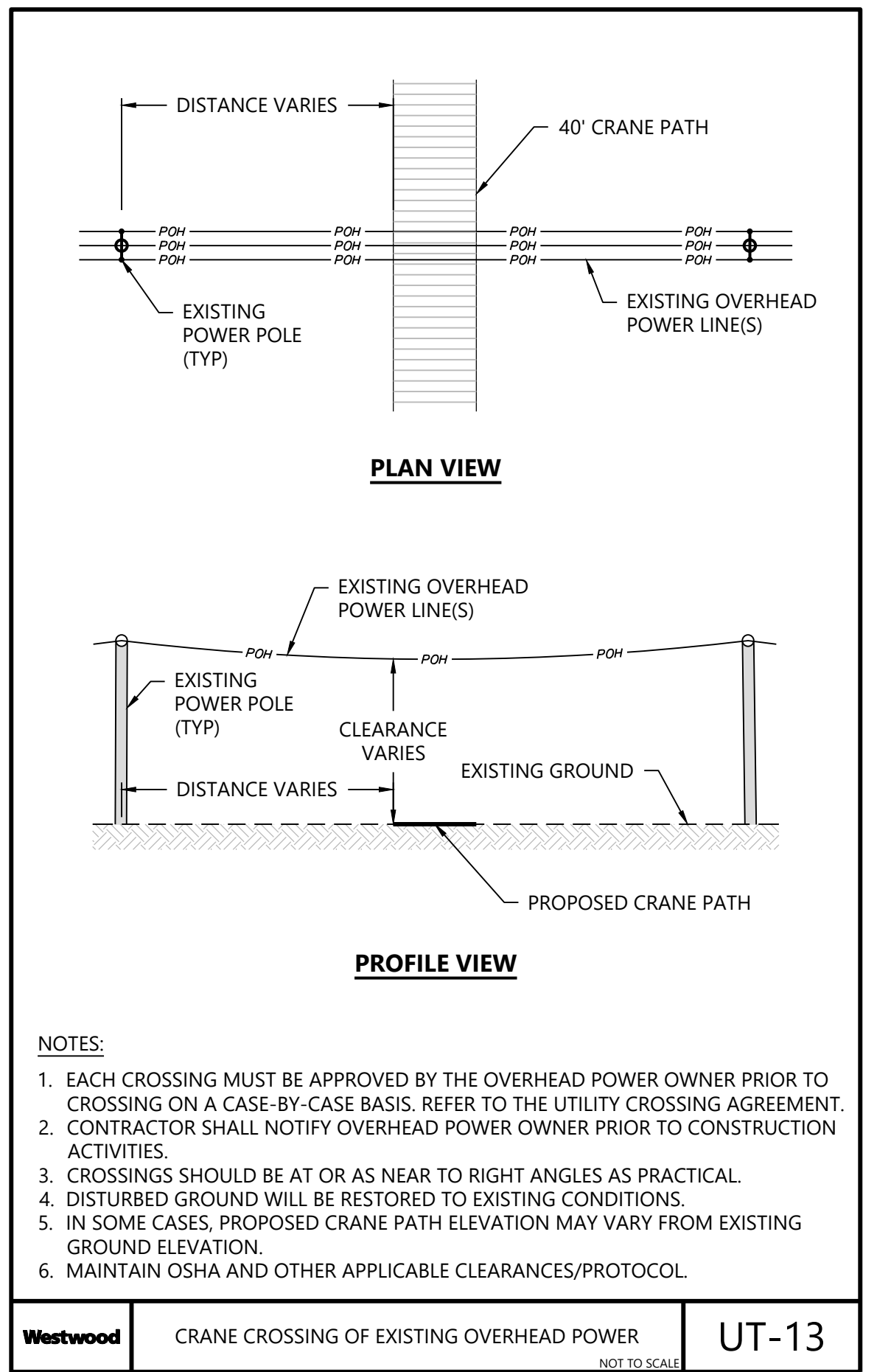
NOTES:
 1. EACH CROSSING MUST BE APPROVED BY THE PIPELINE OWNER PRIOR TO CROSSING ON A CASE-BY-CASE BASIS. REFER TO THE UTILITY CROSSING AGREEMENT.
 2. CONTRACTOR SHALL NOTIFY PIPELINE OWNER PRIOR TO CONSTRUCTION ACTIVITIES.
 3. PRIOR TO ANY DIGGING, CONTRACTOR SHALL CONTACT THE STATE ONE-CALL SYSTEM AT 811.
 4. CROSSINGS SHOULD BE AT OR AS NEAR TO RIGHT ANGLES AS PRACTICAL.
 5. EARTH COVER PROTECTION FOR EXISTING PIPELINE SHALL BE USED WHERE THE COVER OVER THE EXISTING PIPELINE IS LESS THAN REQUIRED IN THE UTILITY CROSSING AGREEMENT.
 6. INSTALL CROSSING MARKER SIGNS AT PERMANENT CROSSINGS IN ACCORDANCE WITH THE UTILITY CROSSING AGREEMENT.

Westwood ACCESS ROAD CROSSING OF EXISTING PIPELINE UT-01
 NOT TO SCALE



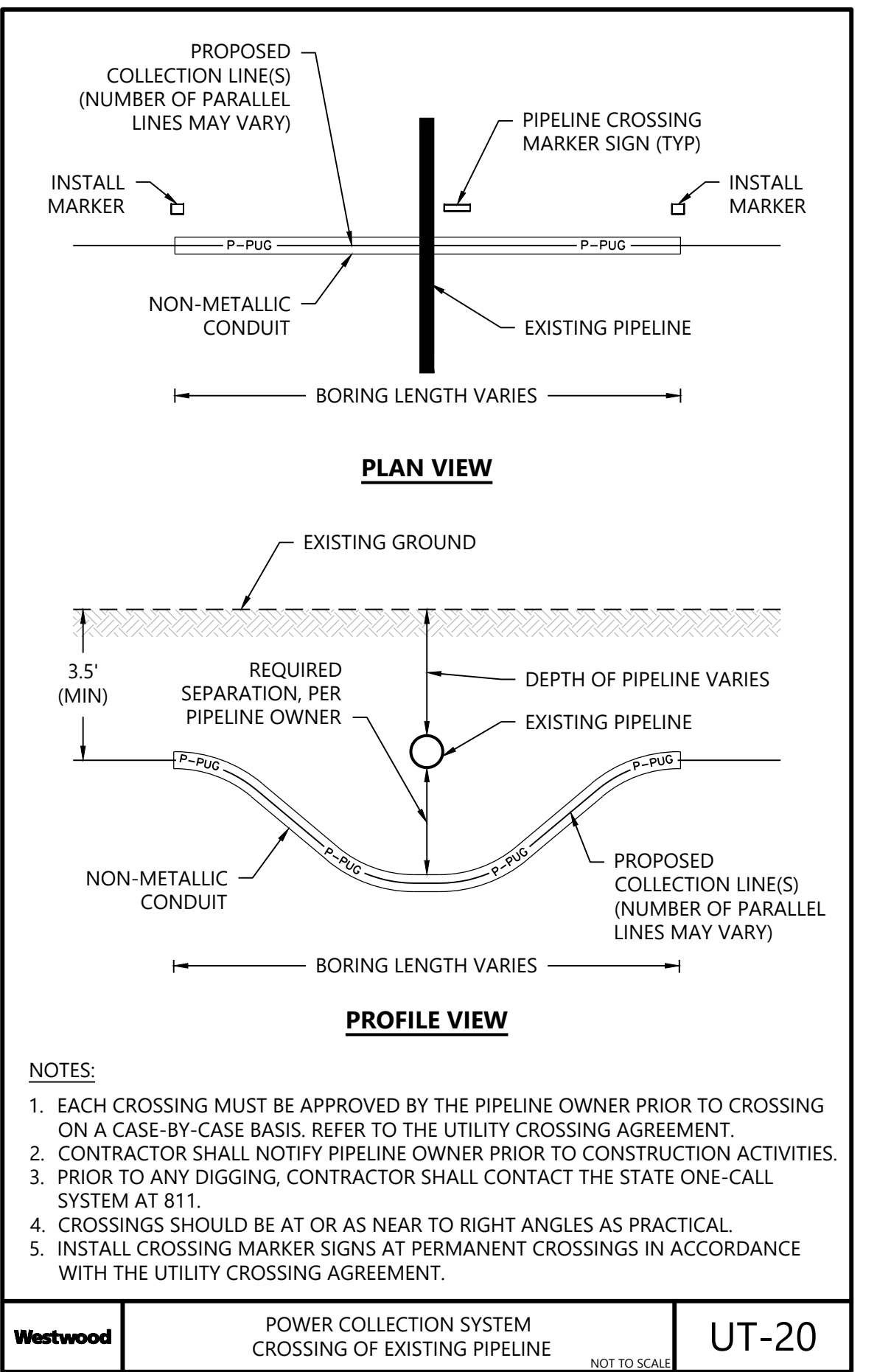
NOTES:
 1. EACH CROSSING MUST BE APPROVED BY THE OVERHEAD POWER OWNER PRIOR TO CROSSING ON A CASE-BY-CASE BASIS. REFER TO THE UTILITY CROSSING AGREEMENT.
 2. CONTRACTOR SHALL NOTIFY OVERHEAD POWER OWNER PRIOR TO CONSTRUCTION ACTIVITIES.
 3. CROSSINGS SHOULD BE AT OR AS NEAR TO RIGHT ANGLES AS PRACTICAL.
 4. DISTURBED GROUND NOT COVERED BY GRAVEL WILL BE RESTORED TO EXISTING CONDITIONS.
 5. IN SOME CASES, PROPOSED ACCESS ROAD ELEVATION MAY VARY FROM EXISTING GROUND ELEVATION.
 6. MAINTAIN OSHA AND OTHER APPLICABLE CLEARANCES/PROTOCOL.

Westwood ACCESS ROAD CROSSING OF EXISTING OVERHEAD POWER UT-04
 NOT TO SCALE



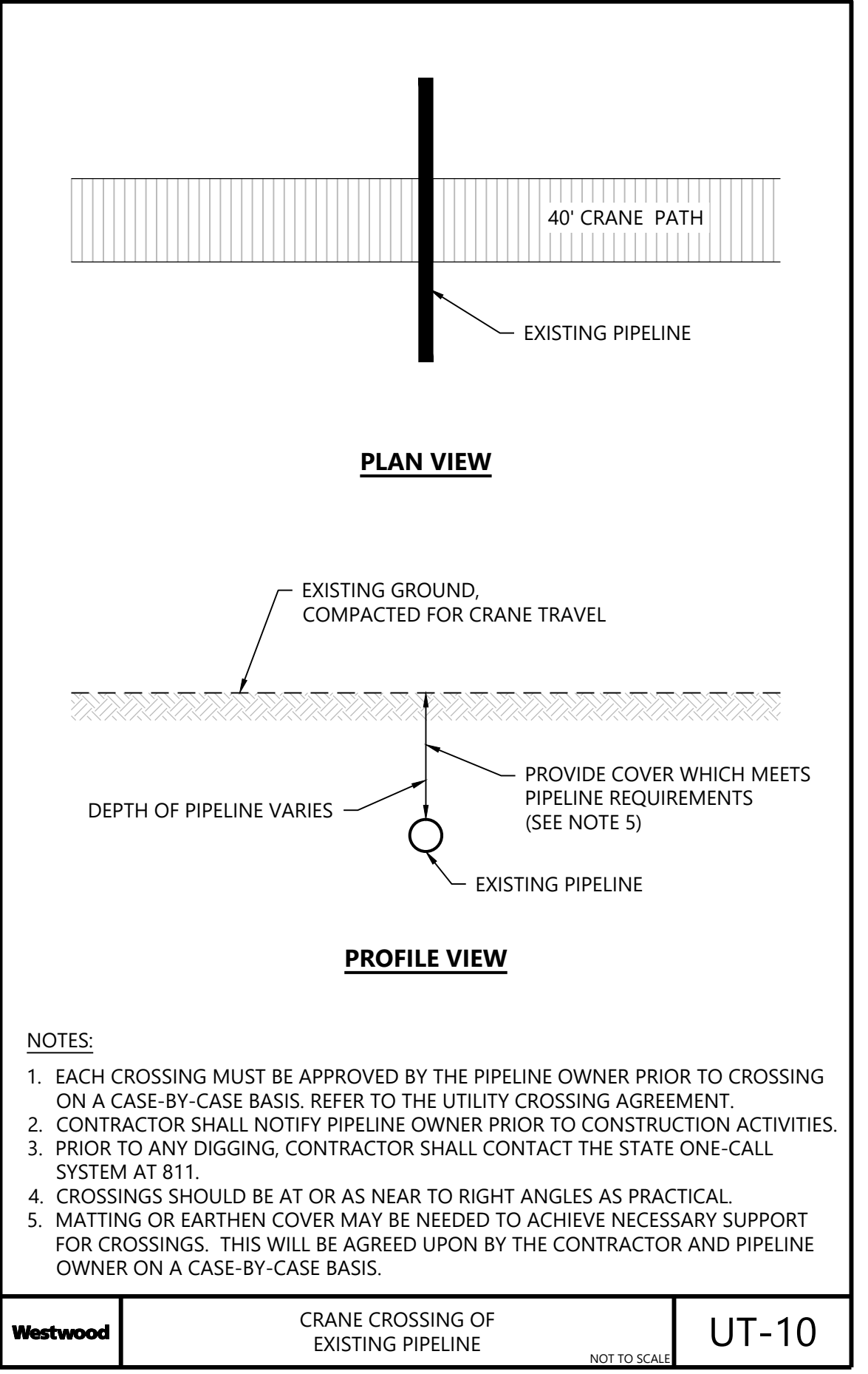
NOTES:
 1. EACH CROSSING MUST BE APPROVED BY THE OVERHEAD POWER OWNER PRIOR TO CROSSING ON A CASE-BY-CASE BASIS. REFER TO THE UTILITY CROSSING AGREEMENT.
 2. CONTRACTOR SHALL NOTIFY OVERHEAD POWER OWNER PRIOR TO CONSTRUCTION ACTIVITIES.
 3. CROSSINGS SHOULD BE AT OR AS NEAR TO RIGHT ANGLES AS PRACTICAL.
 4. DISTURBED GROUND WILL BE RESTORED TO EXISTING CONDITIONS.
 5. IN SOME CASES, PROPOSED CRANE PATH ELEVATION MAY VARY FROM EXISTING GROUND ELEVATION.
 6. MAINTAIN OSHA AND OTHER APPLICABLE CLEARANCES/PROTOCOL.

Westwood CRANE CROSSING OF EXISTING OVERHEAD POWER UT-13
 NOT TO SCALE



NOTES:
 1. EACH CROSSING MUST BE APPROVED BY THE PIPELINE OWNER PRIOR TO CROSSING ON A CASE-BY-CASE BASIS. REFER TO THE UTILITY CROSSING AGREEMENT.
 2. CONTRACTOR SHALL NOTIFY PIPELINE OWNER PRIOR TO CONSTRUCTION ACTIVITIES.
 3. PRIOR TO ANY DIGGING, CONTRACTOR SHALL CONTACT THE STATE ONE-CALL SYSTEM AT 811.
 4. CROSSINGS SHOULD BE AT OR AS NEAR TO RIGHT ANGLES AS PRACTICAL.
 5. INSTALL CROSSING MARKER SIGNS AT PERMANENT CROSSINGS IN ACCORDANCE WITH THE UTILITY CROSSING AGREEMENT.

Westwood POWER COLLECTION SYSTEM CROSSING OF EXISTING PIPELINE UT-20
 NOT TO SCALE



NOTES:
 1. EACH CROSSING MUST BE APPROVED BY THE PIPELINE OWNER PRIOR TO CROSSING ON A CASE-BY-CASE BASIS. REFER TO THE UTILITY CROSSING AGREEMENT.
 2. CONTRACTOR SHALL NOTIFY PIPELINE OWNER PRIOR TO CONSTRUCTION ACTIVITIES.
 3. PRIOR TO ANY DIGGING, CONTRACTOR SHALL CONTACT THE STATE ONE-CALL SYSTEM AT 811.
 4. CROSSINGS SHOULD BE AT OR AS NEAR TO RIGHT ANGLES AS PRACTICAL.
 5. MATTING OR EARTHEN COVER MAY BE NEEDED TO ACHIEVE NECESSARY SUPPORT FOR CROSSINGS. THIS WILL BE AGREED UPON BY THE CONTRACTOR AND PIPELINE OWNER ON A CASE-BY-CASE BASIS.

Westwood CRANE CROSSING OF EXISTING PIPELINE UT-10
 NOT TO SCALE

Hoffman Falls Wind Project
 Madison County, New York

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FIGURE 2.1
 STABILIZED CONSTRUCTION ACCESS

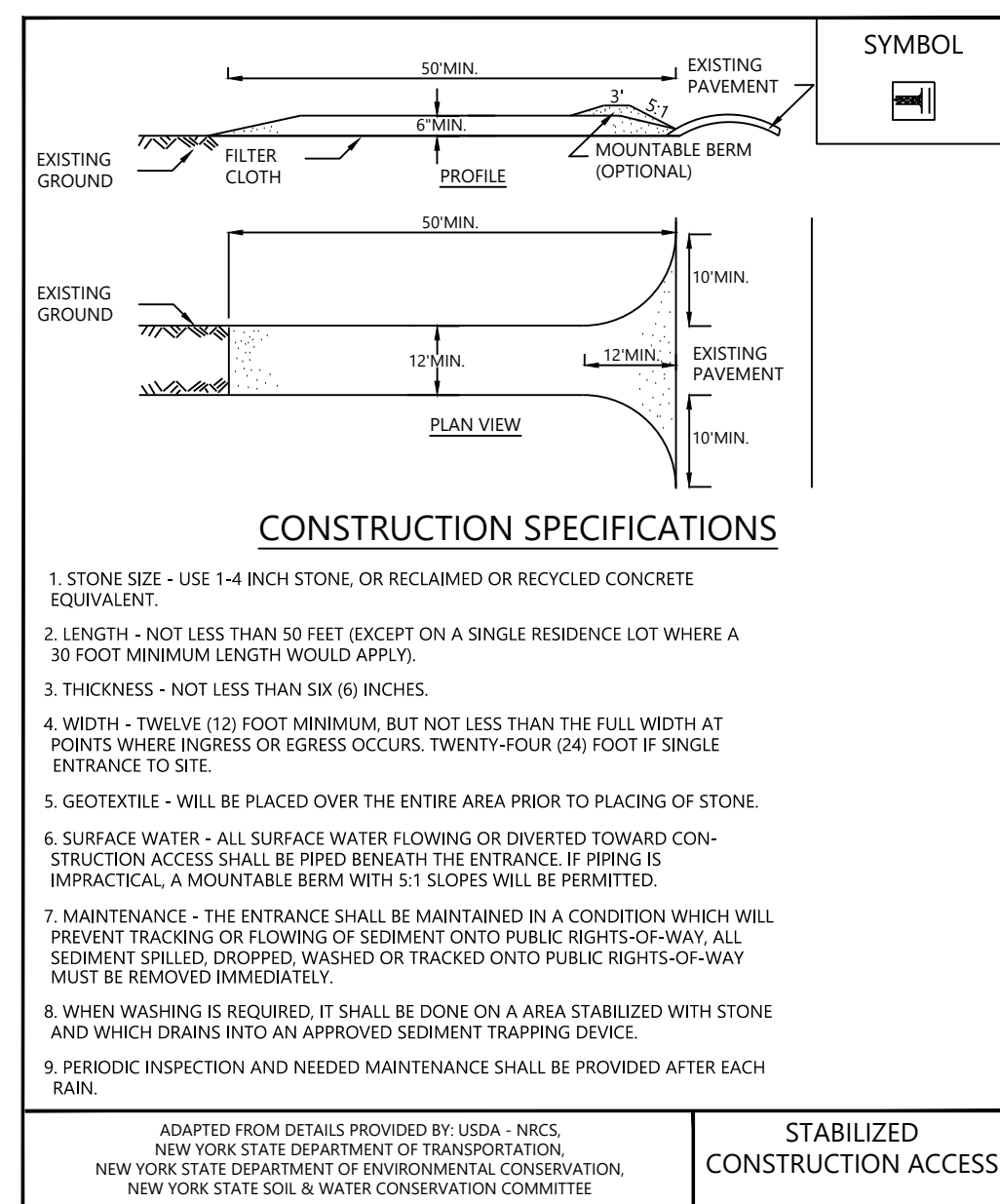


FIGURE 2.2
 TEMPORARY ACCESS BRIDGE

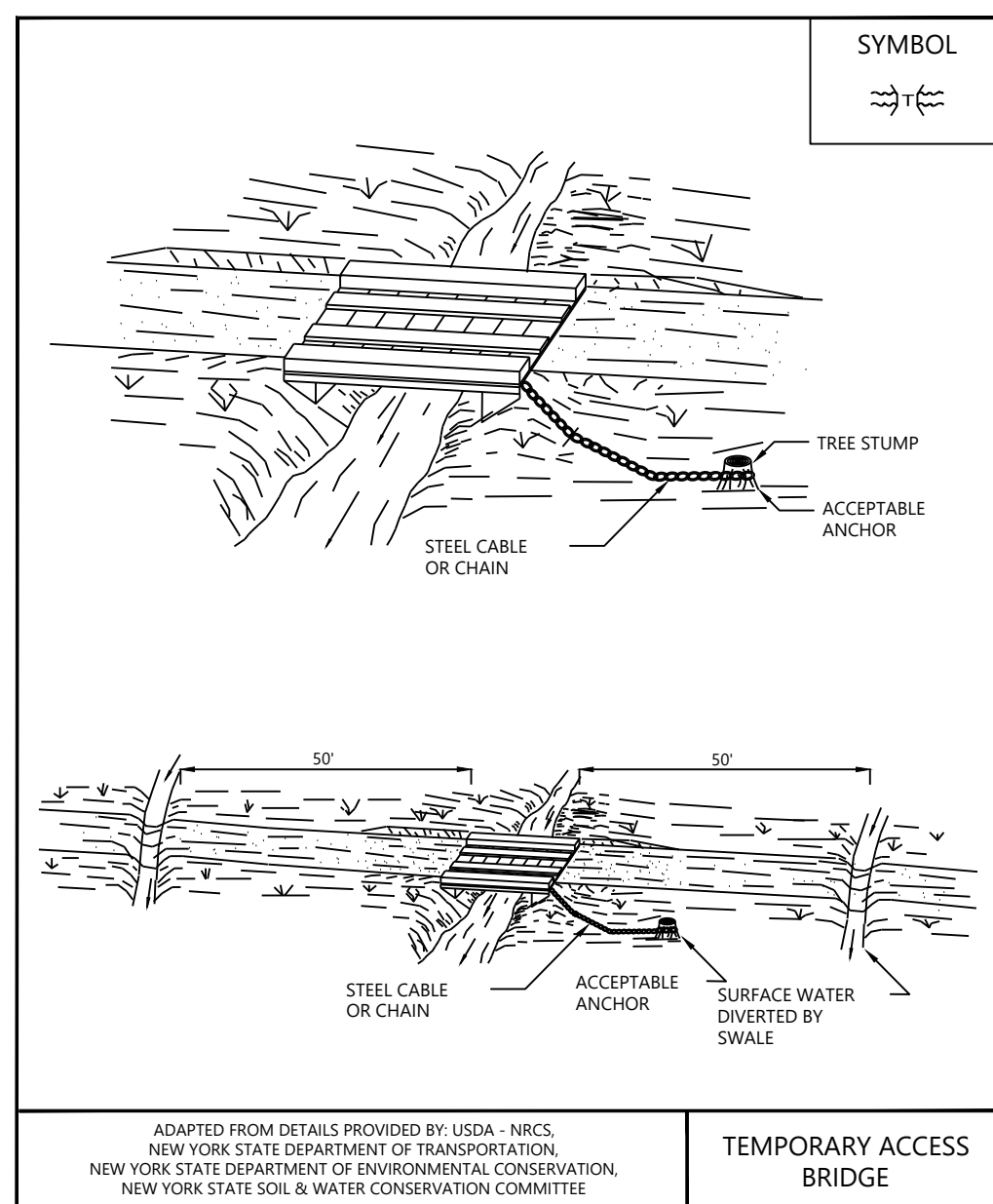


FIGURE 2.3
 TEMPORARY ACCESS CULVERT

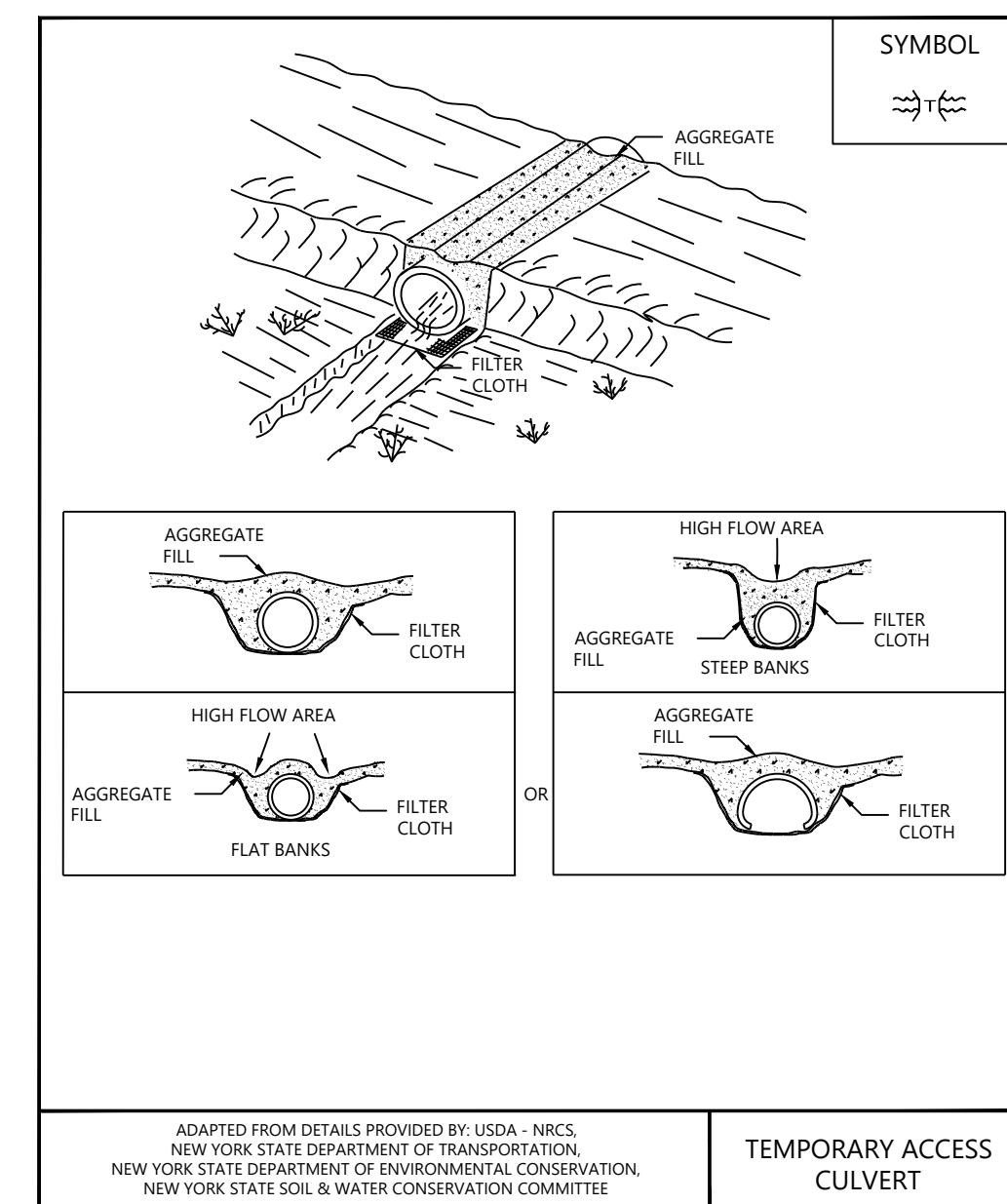


FIGURE 3.1
 STONE CHECK DAM DETAIL

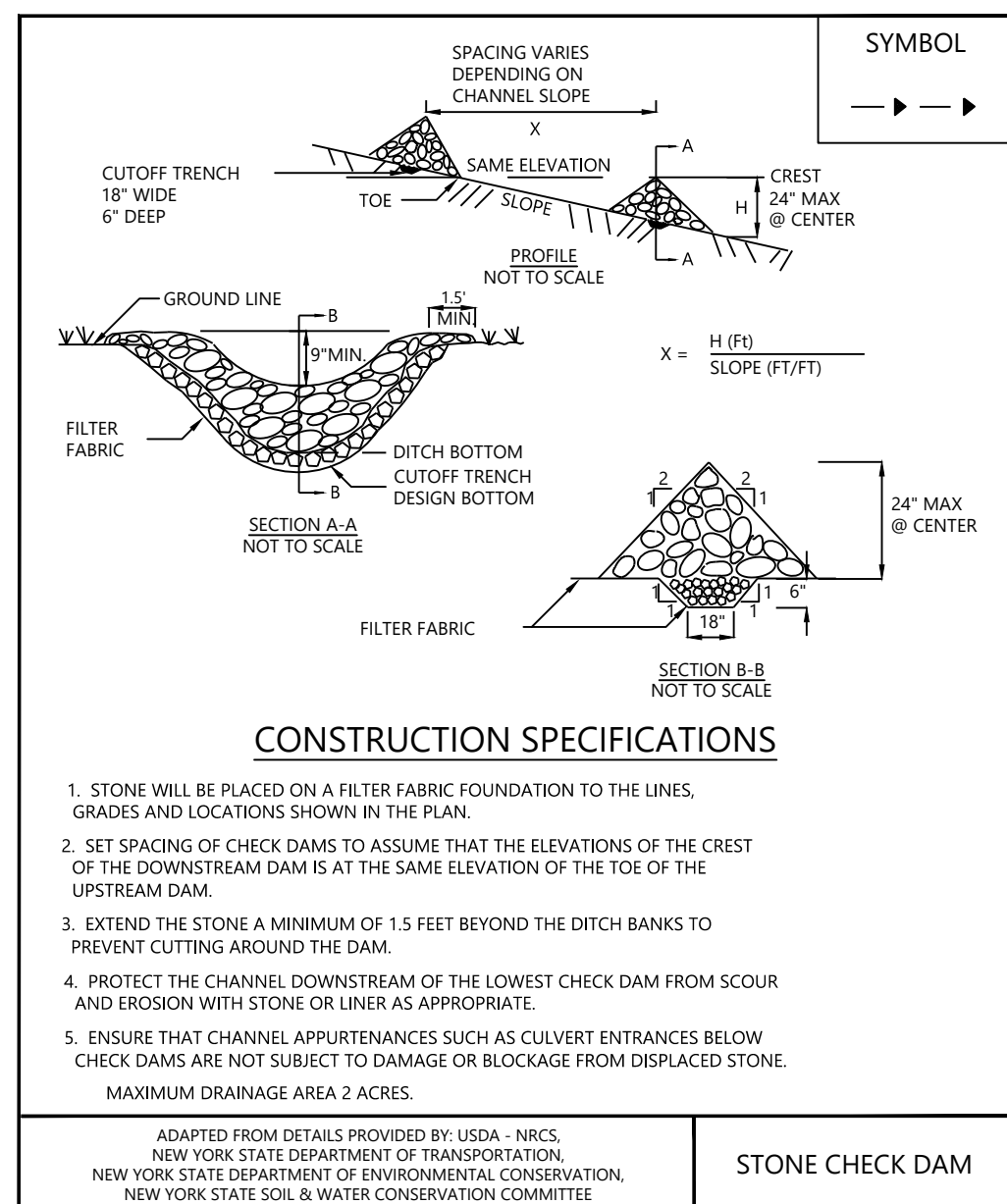


FIGURE 3.2
 CONSTRUCTION DITCH DETAIL

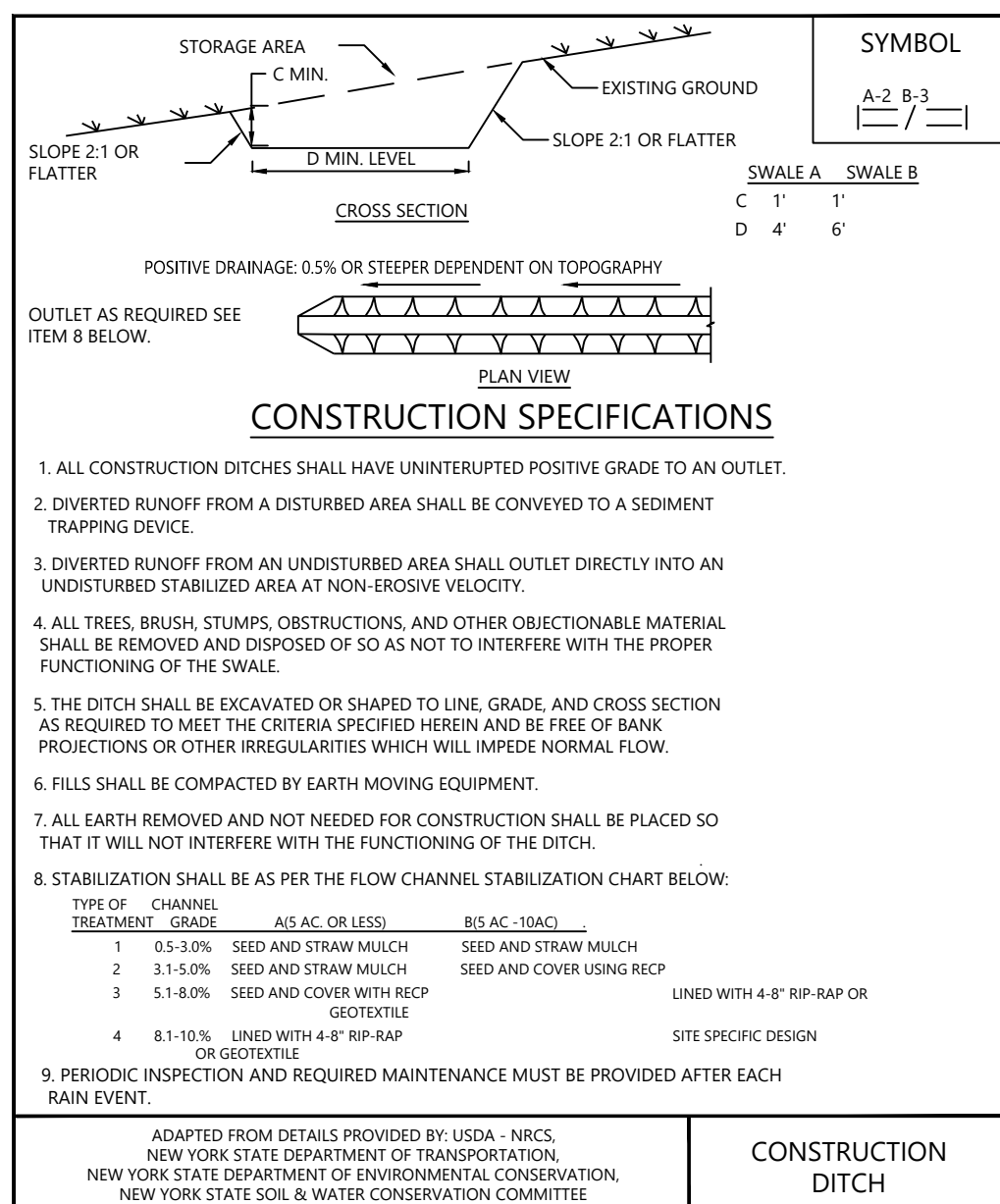
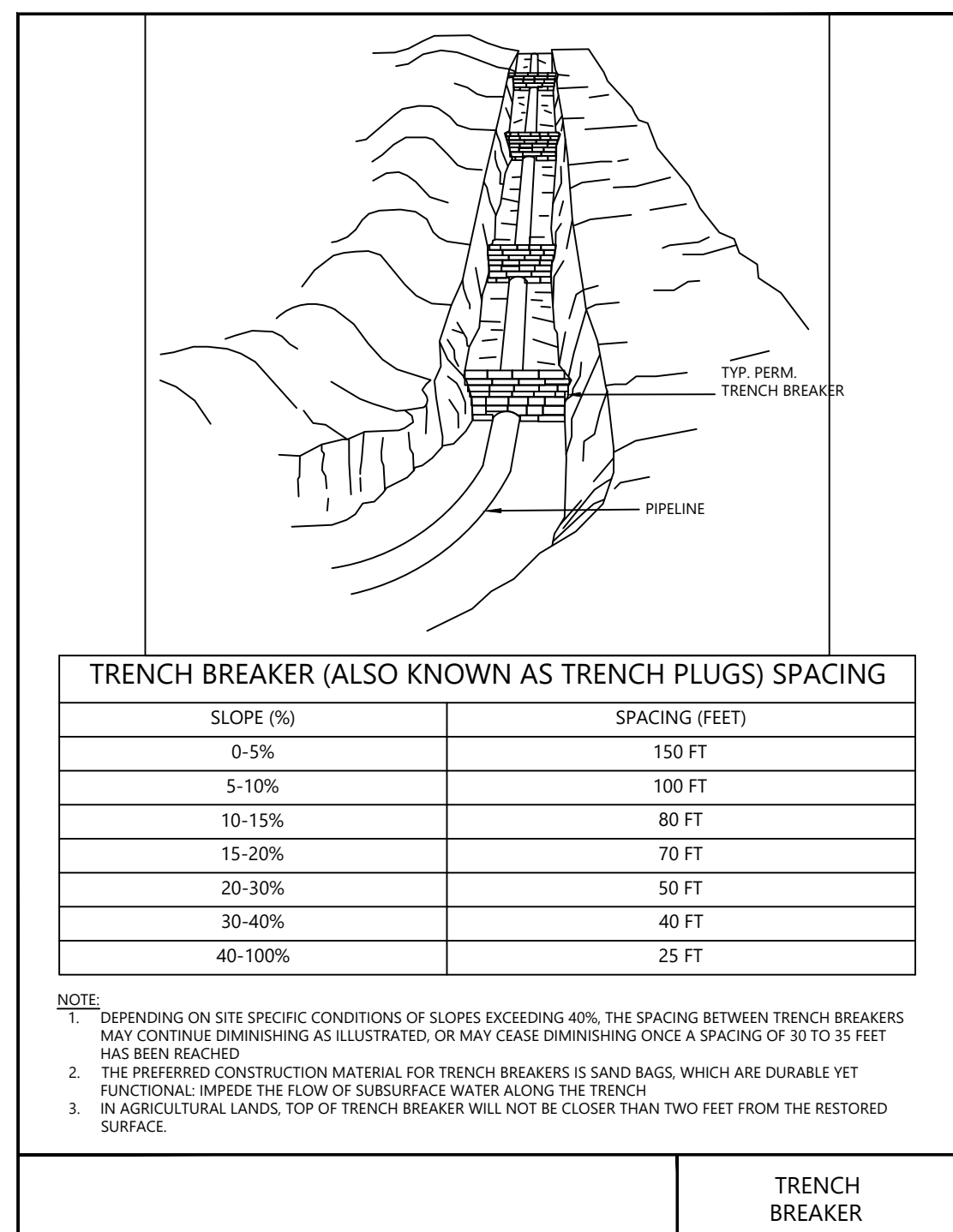


FIGURE 12
 TRENCH BREAKER DETAIL



Hoffman Falls Wind Project
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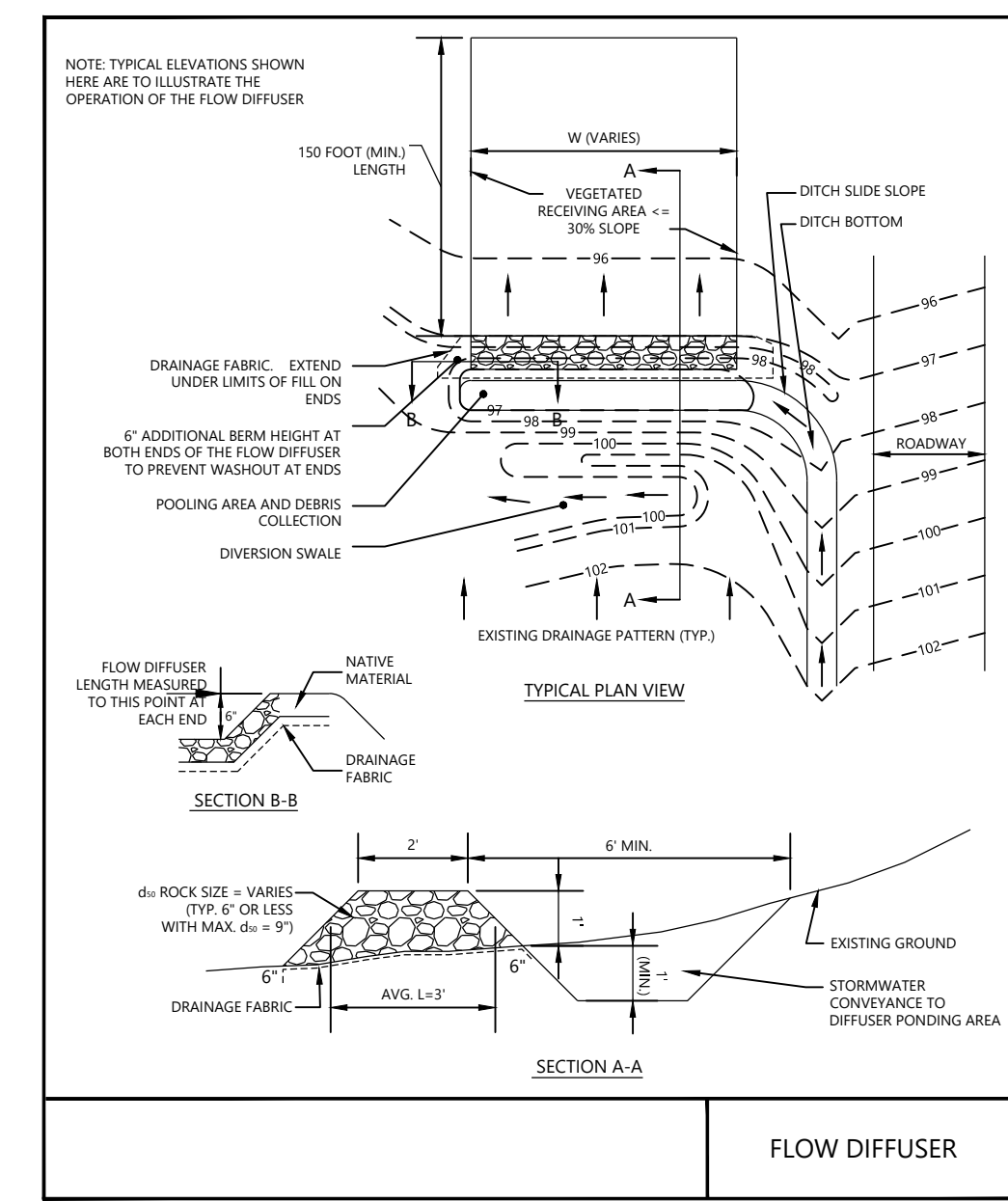
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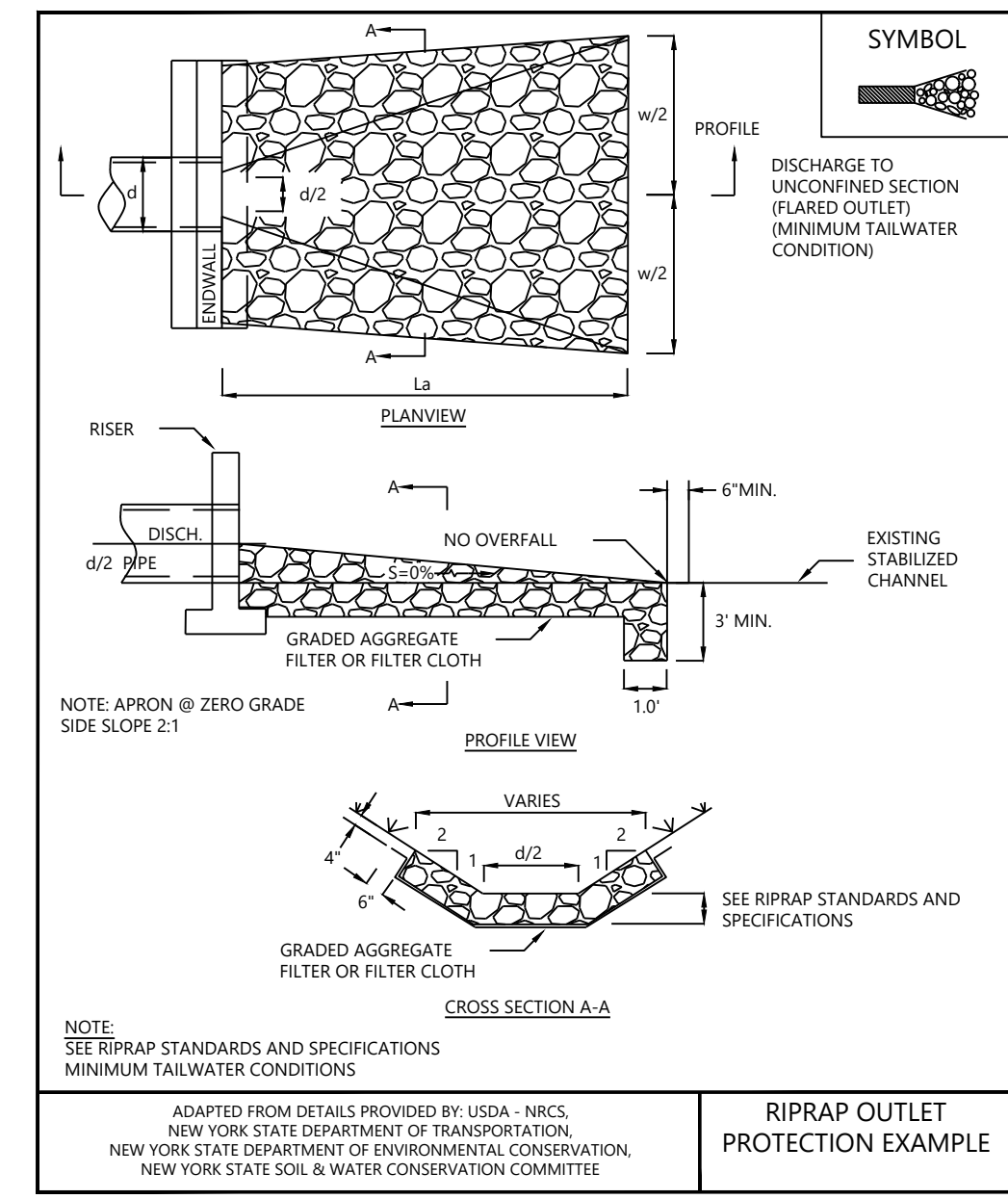
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FIGURE 3.6
 FLOW DIFFUSER DETAIL



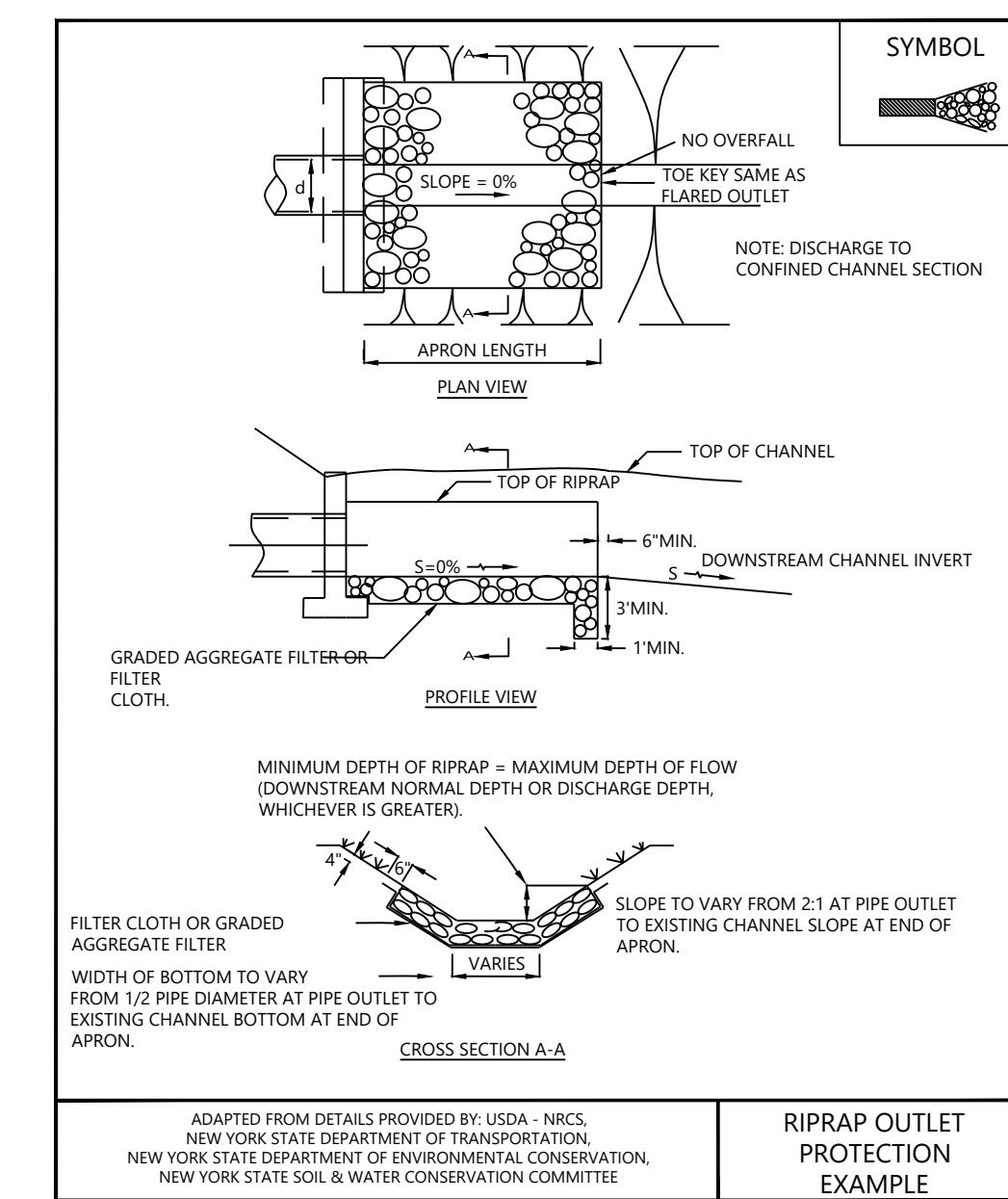
FLOW DIFFUSER

FIGURE 3.18
 RIPRAP OUTLET PROTECTION DETAIL (1)



RIPRAP OUTLET PROTECTION EXAMPLE

FIGURE 3.19
 RIPRAP OUTLET PROTECTION DETAIL (2)



RIPRAP OUTLET PROTECTION EXAMPLE

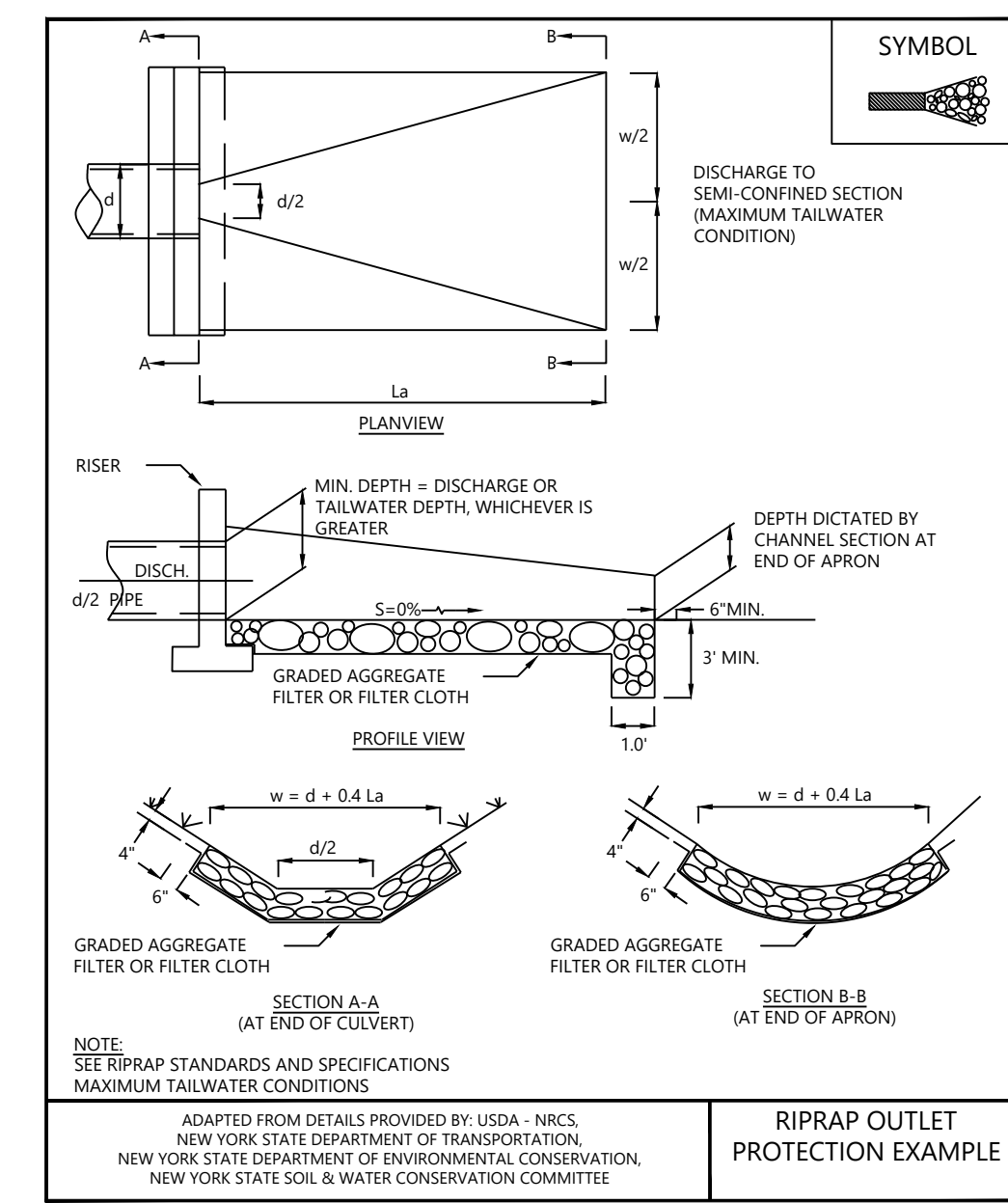
SCHEDULE FOR STORM DRAIN

CULVERT DIAMETER (D)	LENGTH (L)	WIDTH (W)	STONE d ₅₀
12"	8'	12'	6"
18"	10'	12'	6"
24"	12'	14'	6"
30"	16'	20'	12"
36"	20'	23'	12"

The minimum thickness of the riprap layer shall be 1.5 times the maximum rock diameter for d₅₀ of 15 inches or less, and 1.2 times the maximum rock size for d₅₀ greater than 15 inches. The following chart lists some examples:

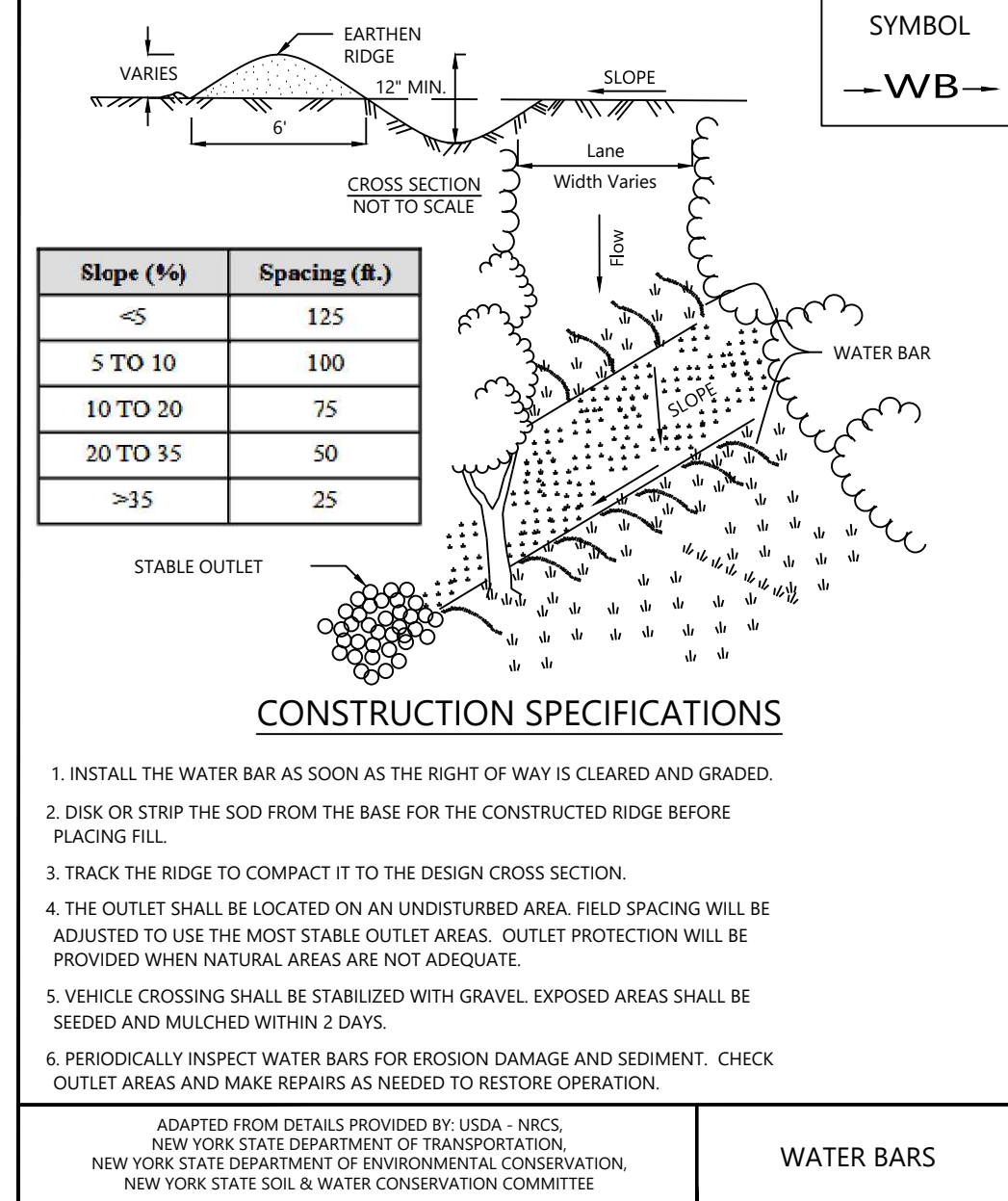
D ₅₀ (inches)	d _{max} (inches)	Minimum Blanket Thickness (inches)
4	6	9
6	9	14
9	14	20
12	18	27
15	22	32
18	27	32
21	32	38
24	36	43

FIGURE 3.20
 RIPRAP OUTLET PROTECTION DETAIL (3)



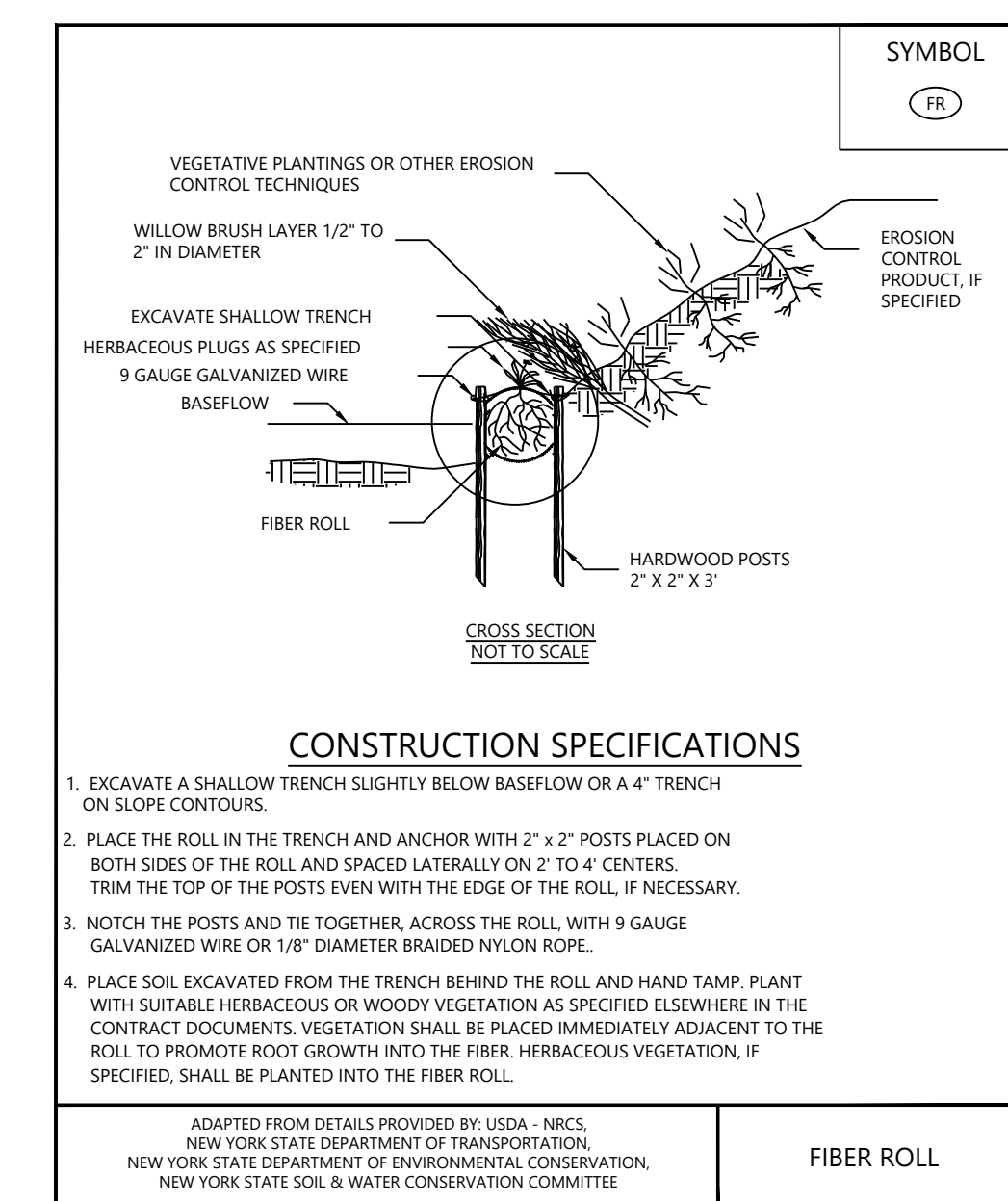
RIPRAP OUTLET PROTECTION EXAMPLE

FIGURE 3.22
 WATER BAR DETAIL



WATER BARS

FIGURE 4.8
 FIBER ROLL



FIBER ROLL

Hoffman Falls Wind Project
 Madison County, New York

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Figure 4.1
 Angles of Repose of Riprap Stones (FHWA)

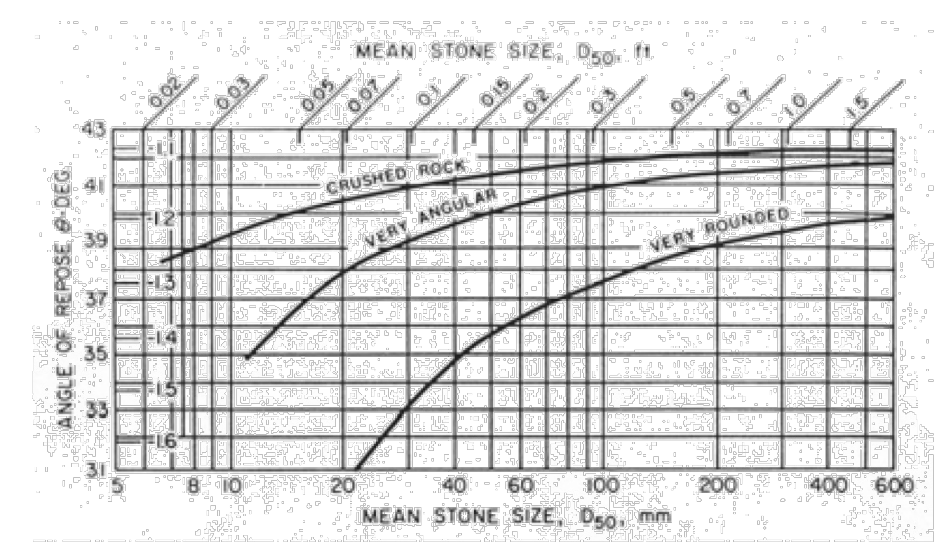


Figure 4.2
 Typical Riprap Slope Protection Detail

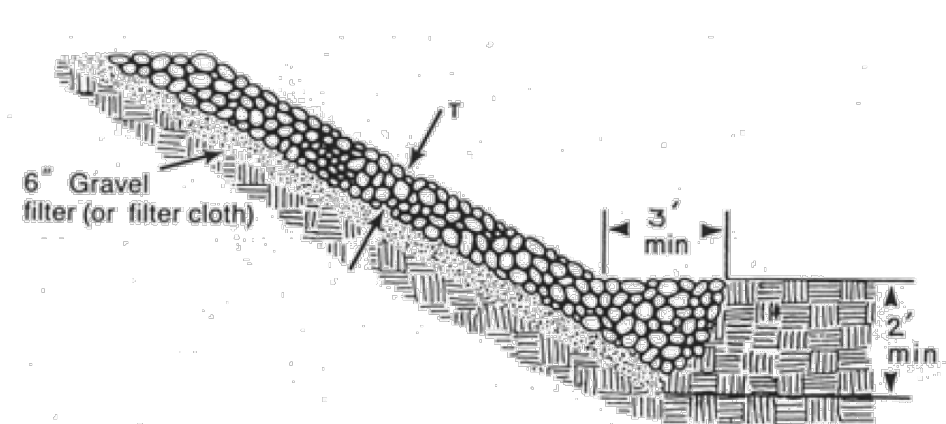


FIGURE 4.3
 RIPRAP CHANNEL STABILIZATION

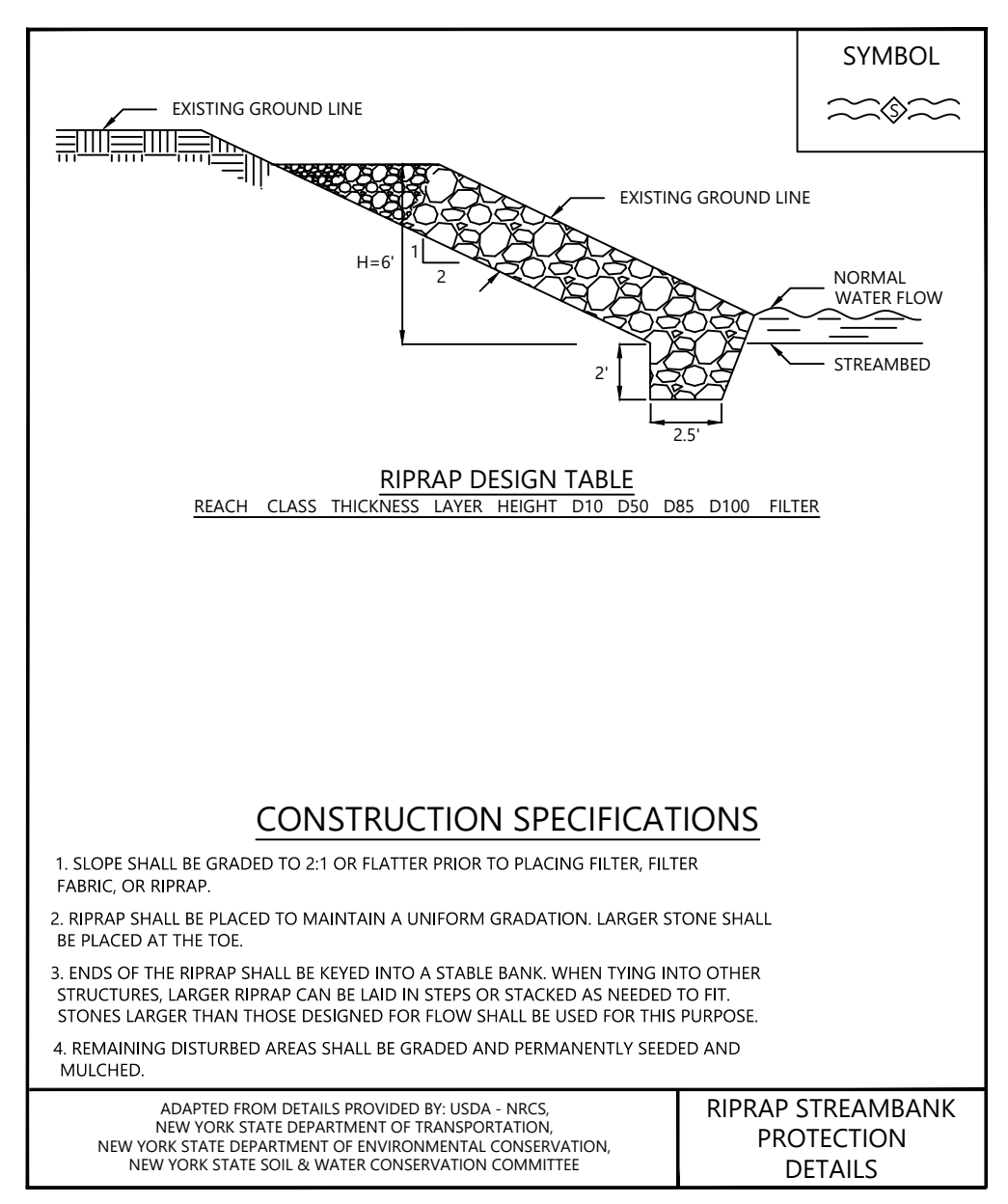
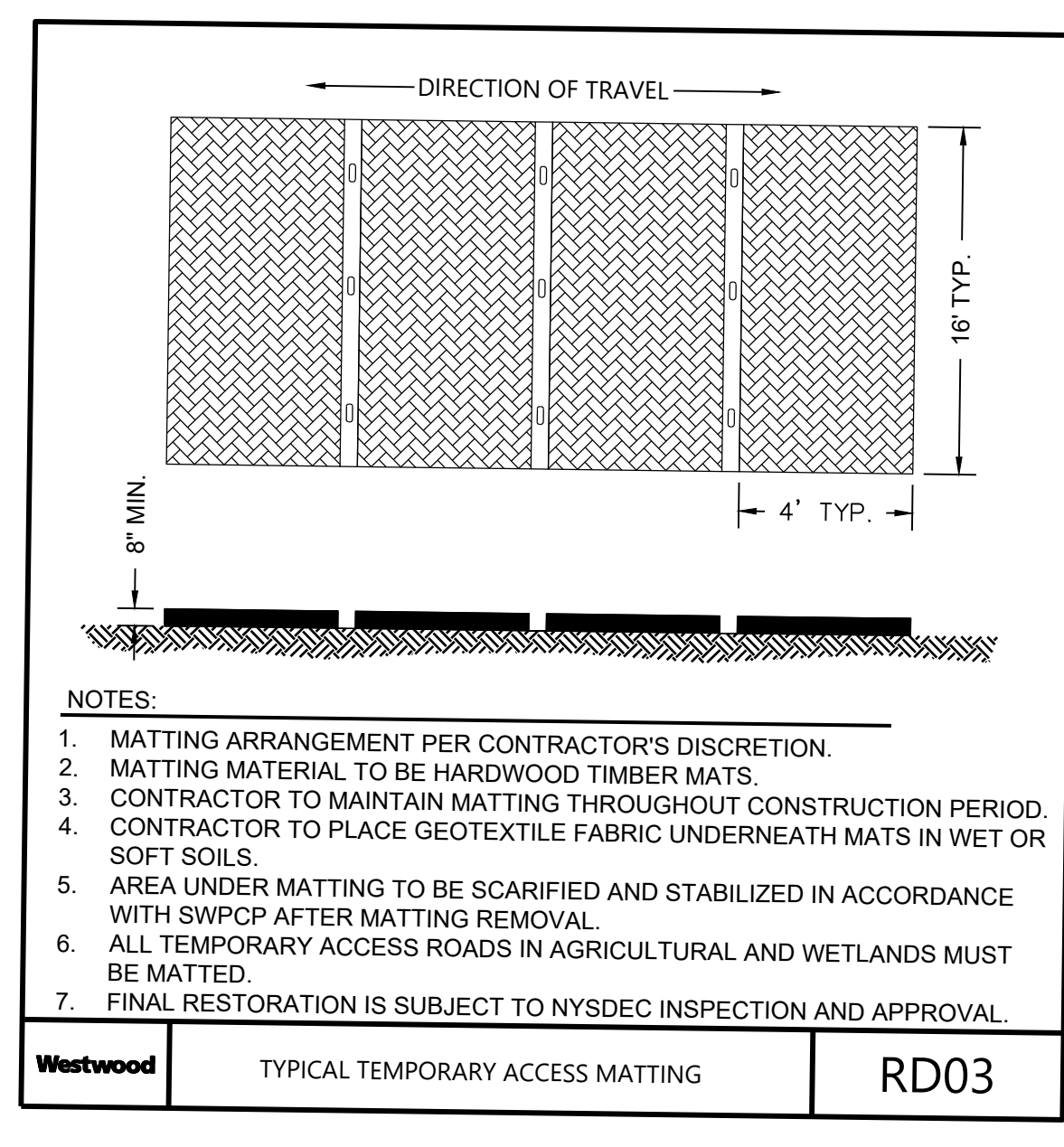
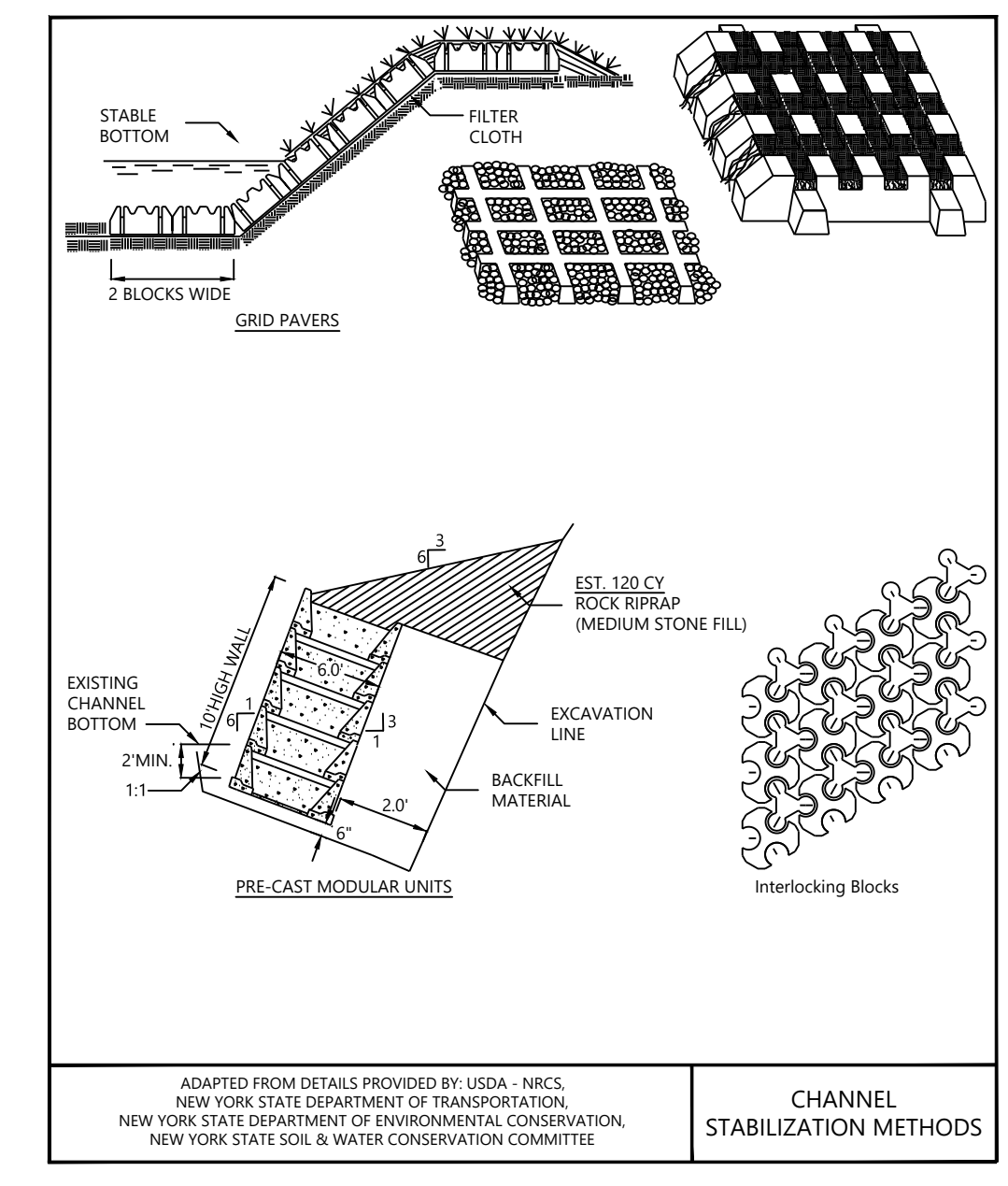


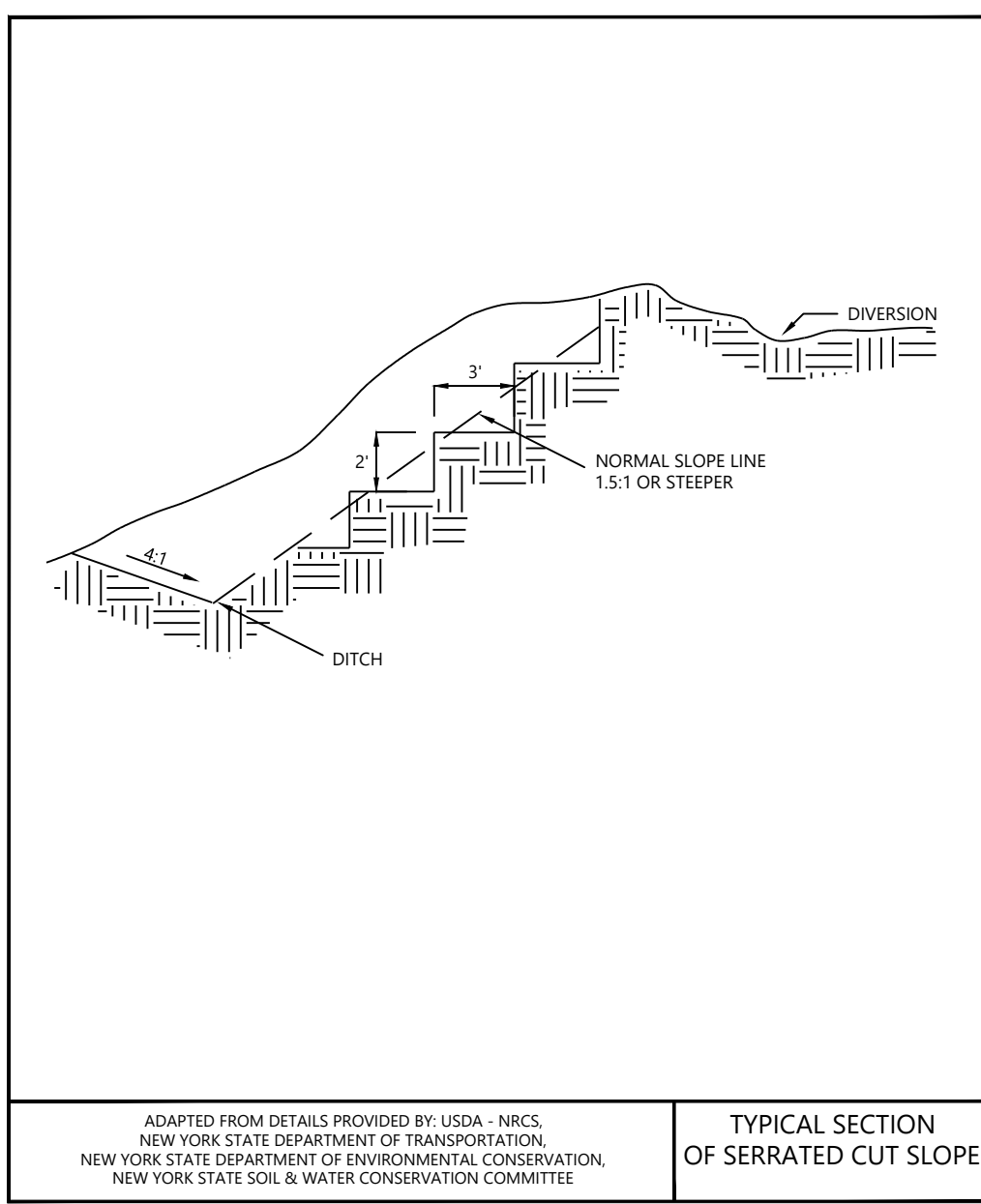
FIGURE 4.4
 CHANNEL STABILIZATION METHODS



- NOTES:**
- MATting ARRANGEMENT PER CONTRACTOR'S DISCRETION.
 - MATting MATERIAL TO BE HARDWOOD TIMBER MATS.
 - CONTRACTOR TO MAINTAIN MATting THROUGHOUT CONSTRUCTION PERIOD.
 - CONTRACTOR TO PLACE GEOTEXTILE FABRIC UNDERNEATH MATS IN WET OR SOFT SOILS.
 - AREA UNDER MATting TO BE SCARIFIED AND STABILIZED IN ACCORDANCE WITH SWPCP AFTER MATting REMOVAL.
 - ALL TEMPORARY ACCESS ROADS IN AGRICULTURAL AND WETLANDS MUST BE MATted.
 - FINAL RESTORATION IS SUBJECT TO NYSDEC INSPECTION AND APPROVAL.

Westwood TYPICAL TEMPORARY ACCESS MATting RD03

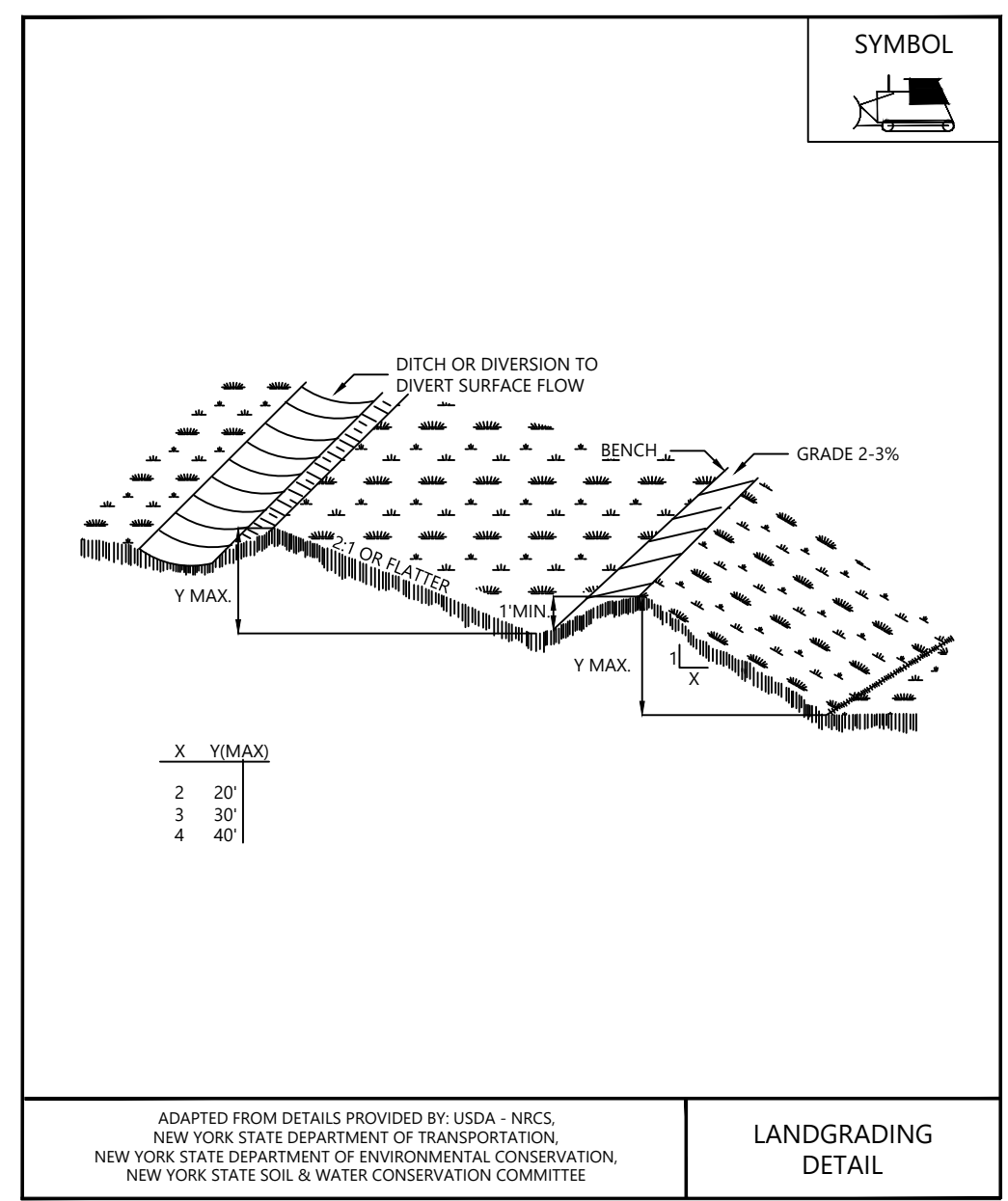
FIGURE 4.9
 TYPICAL SECTION OF SERRATED CUT SLOPE



ADAPTED FROM DETAILS PROVIDED BY: USDA - NRCS, NEW YORK STATE DEPARTMENT OF TRANSPORTATION, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE

TYPICAL SECTION OF SERRATED CUT SLOPE

FIGURE 4.10
 LANDGRADING



ADAPTED FROM DETAILS PROVIDED BY: USDA - NRCS, NEW YORK STATE DEPARTMENT OF TRANSPORTATION, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE

LANDGRADING DETAIL

FIGURE 4.11
 LANDGRADING - CONSTRUCTION SPECIFICATIONS

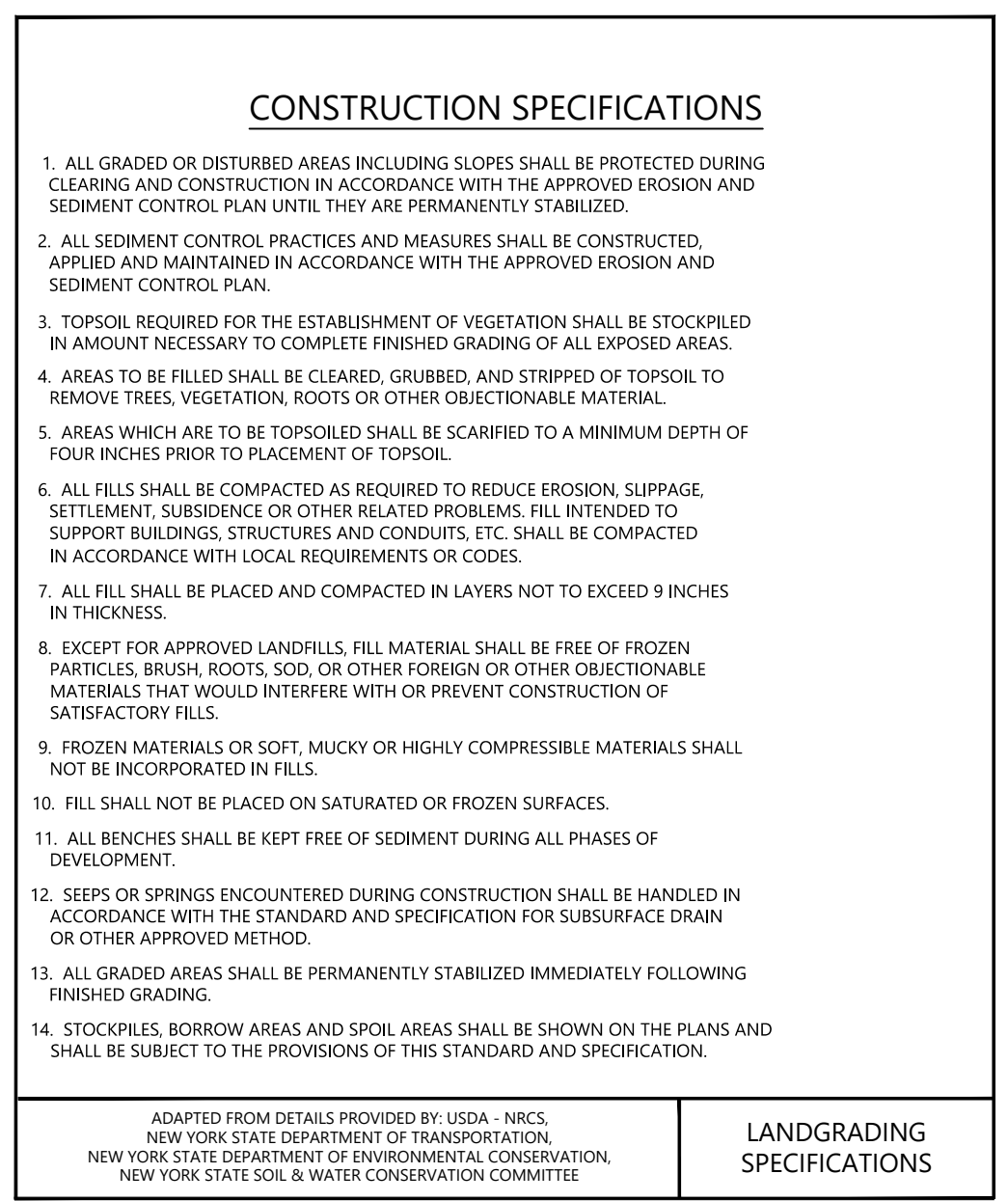
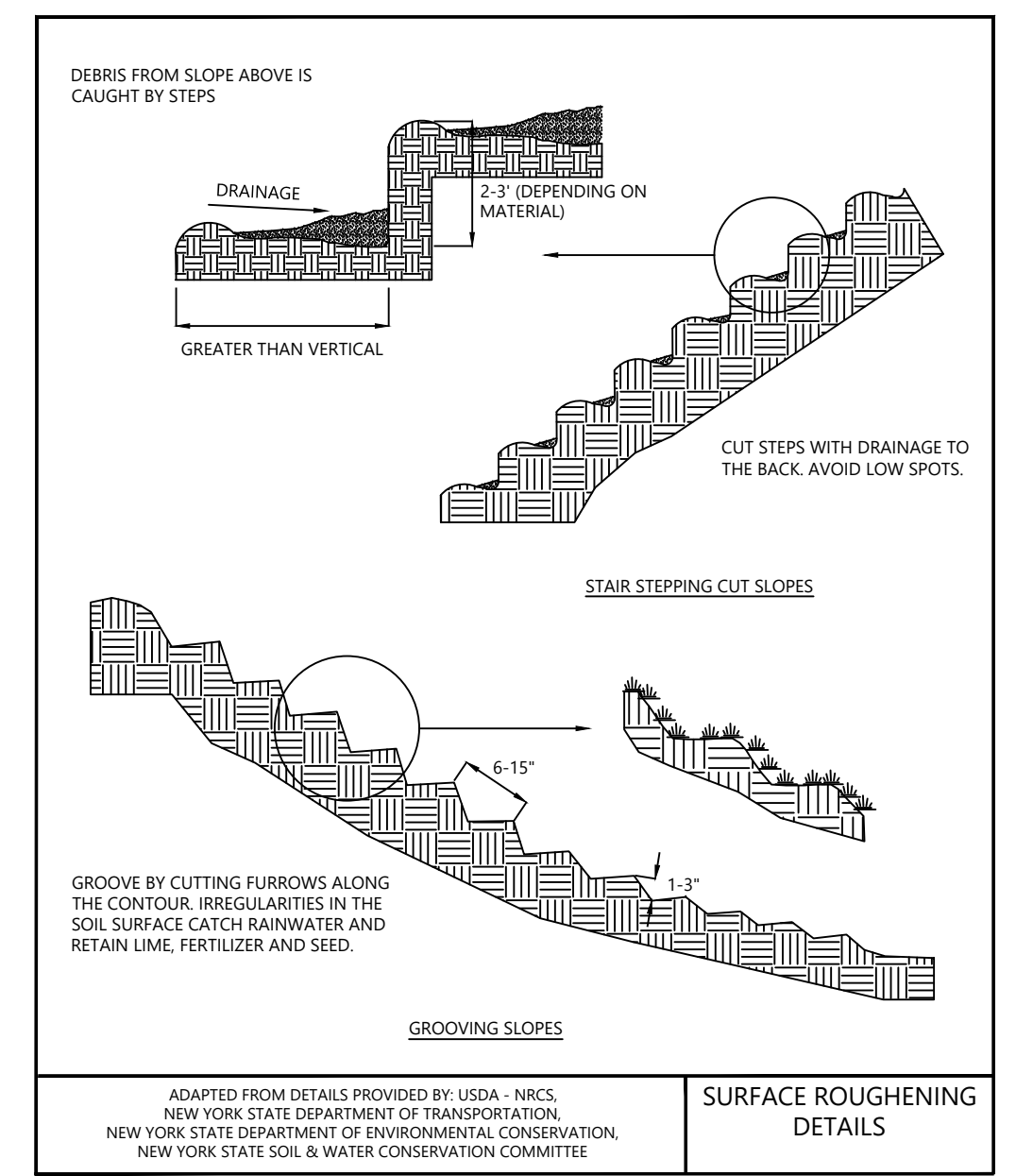


FIGURE 4.18
 SURFACE ROUGHENING



ADAPTED FROM DETAILS PROVIDED BY: USDA - NRCS, NEW YORK STATE DEPARTMENT OF TRANSPORTATION, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE

SURFACE ROUGHENING DETAILS

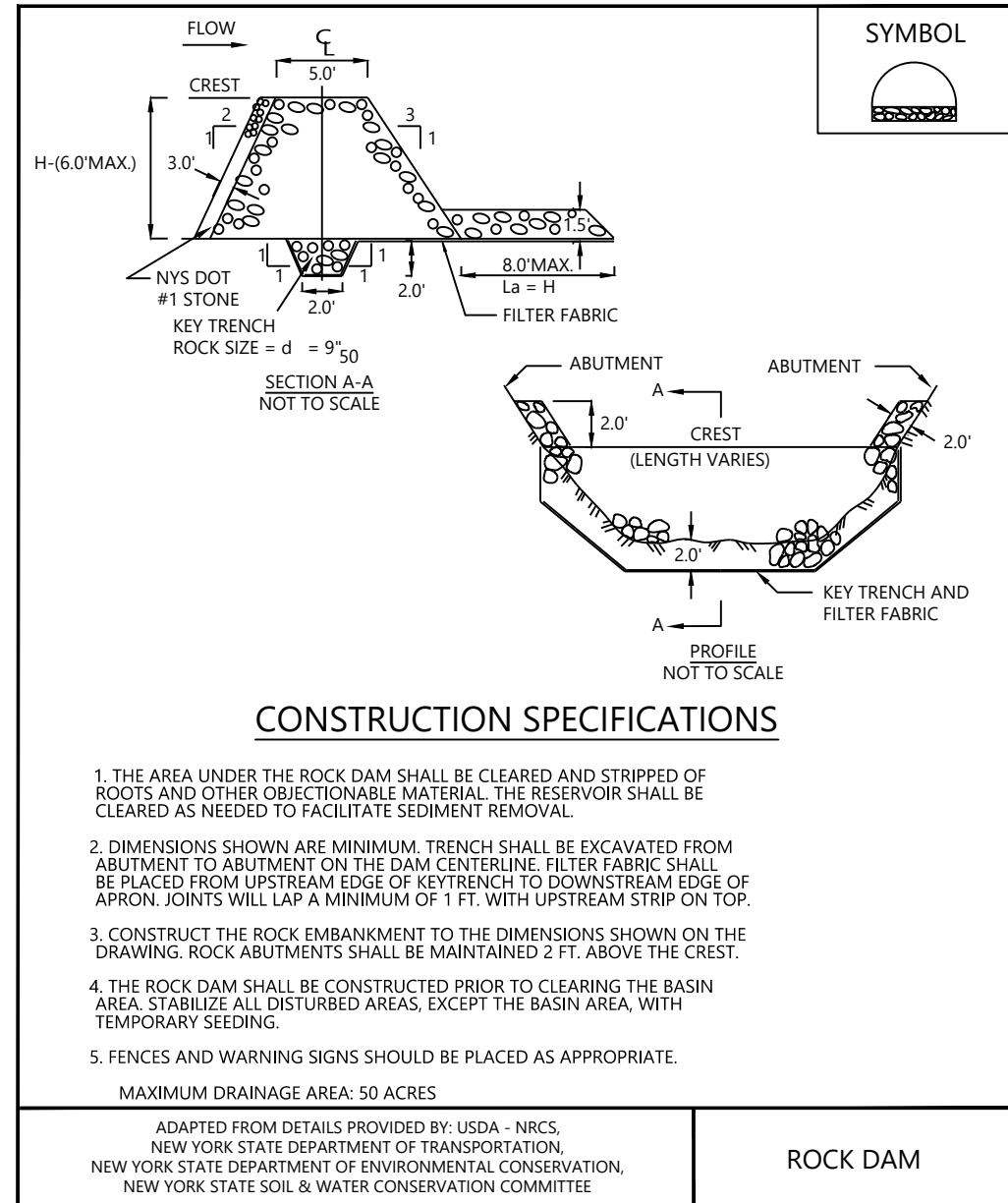
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 Madison County, New York

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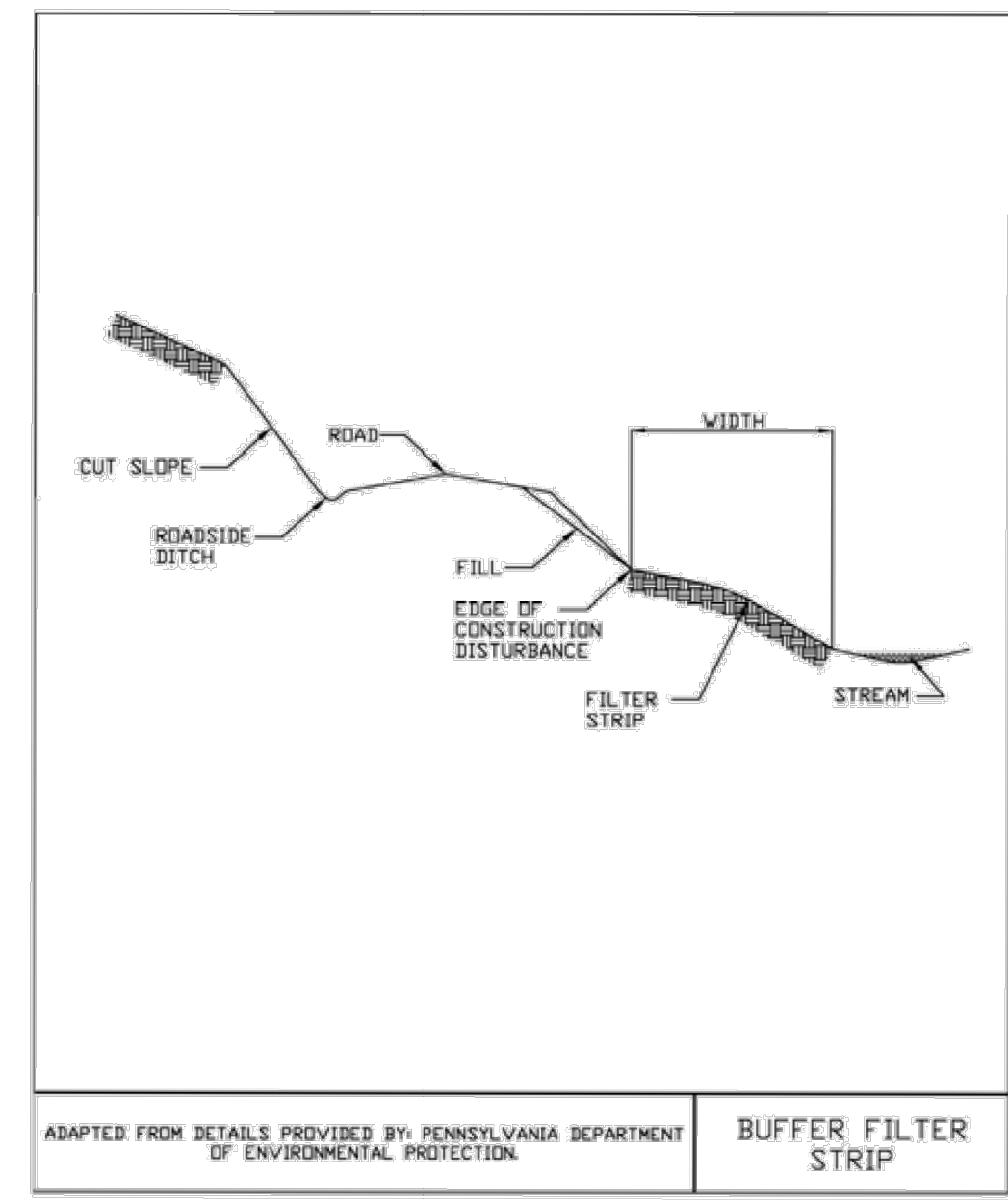
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 SHEET: C715 1

FIGURE 5.7
ROCK DAM



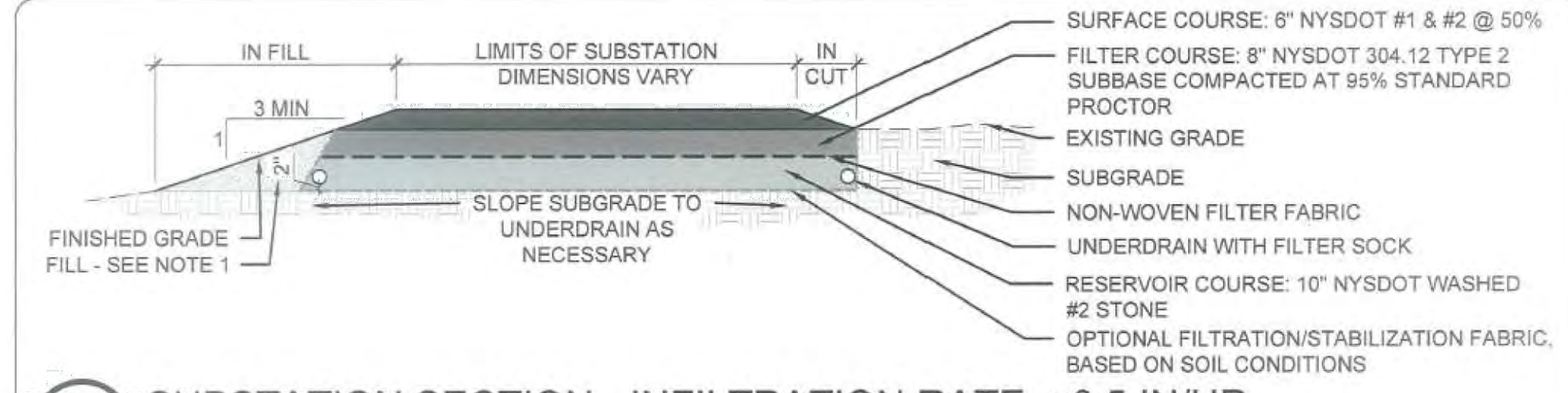
ROCK DAM

Figure 5.1
Buffer Filter Strip



ADAPTED FROM DETAILS PROVIDED BY: PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

BUFFER FILTER STRIP



1 SUBSTATION SECTION - INFILTRATION RATE < 0.5 IN/HR
Scale: NTS

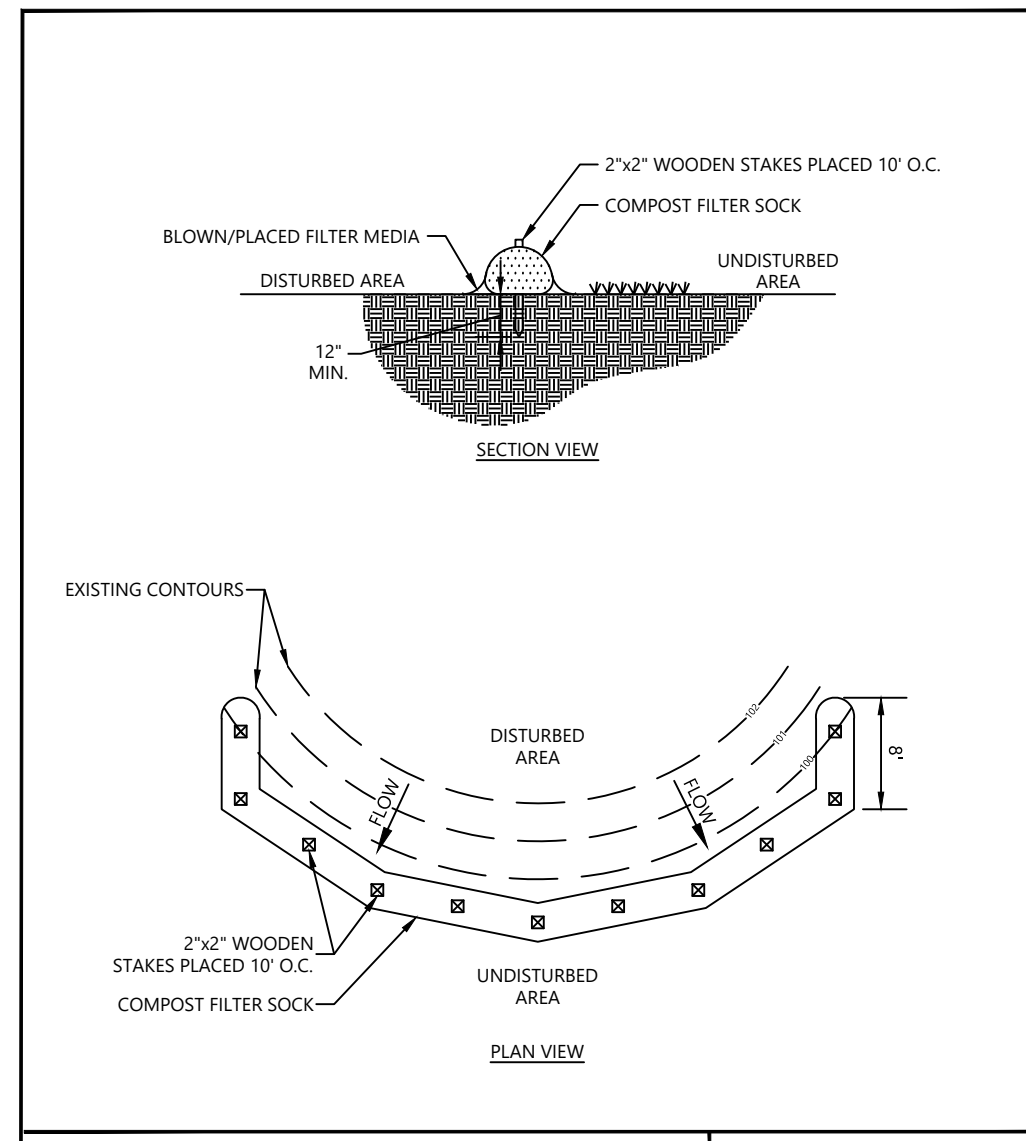
- NOTES:
- ALL FILL USED FOR SIDE SLOPES SHALL BE ONSITE MATERIAL FROM AREA CUT TO CREATE THE SUBSTATION OR SHALL BE OFFSITE FILL COMPACTED TO HAVE AN INFILTRATION RATE LESS THAN THE SUBSTATION SUBGRADE.
 - UNDERDRAIN SIZE AND LAYOUT WILL VARY DEPENDING ON THE SIZE OF THE SUBSTATION.
 - UNDERDRAIN WILL DAYLIGHT AND DISCHARGE TO A LEVEL SPREADER THEN A VEGETATED FILTER STRIP OR RIPARIAN FOREST BUFFER TO MEET RUNOFF REDUCTION VOLUME REQUIREMENTS.
 - LEVEL SPREADER SHALL BE DESIGNED PER THE NYS STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL TO CREATE SHEET FLOW PRIOR TO DISCHARGE TO THE VEGETATED FILTER STRIP OR RIPARIAN FOREST BUFFER.
 - VEGETATED FILTER STRIP OR RIPARIAN FOREST BUFFER WIDTH SHALL BE 50 FEET PER ACRE OF SUBSTATION. LENGTH AND REMAINING DESIGN CRITERIA SHALL BE PER THE 2010 NYS STORMWATER MANAGEMENT DESIGN MANUAL.
 - UNDERDRAINS SHALL BE SIZED TO MEET CHANNEL PROTECTION VOLUME (C_{pv}), OVER BANK FLOOD CONTROL (Q_p) AND EXTREME FLOOD CONTROL (Q_f) DESIGN CRITERIA.
 - THIS SECTION SHALL BE APPLICABLE TO MEET THE STORMWATER MANAGEMENT REQUIREMENTS OF NEW DEVELOPMENT AND REDEVELOPMENT PROJECTS, PER THE 2010 NYS STORMWATER MANAGEMENT DESIGN MANUAL, FOR SITES WITH INFILTRATION RATES LESS THAN 0.5 INCHES PER HOUR.
 - ALL THOSE UTILIZING THIS SECTION, WITH THE EXCEPTION OF NATIONAL GRID, SHALL INCLUDE THE FOLLOWING NOTE IN ALL STORMWATER REPORTS AND DRAWINGS:
"NATIONAL GRID (NG) TOGETHER WITH THE CONSULTING FIRM, ENVIRONMENTAL DESIGN & RESEARCH (EDR), PREPARED A NYSDEC STORMWATER MANAGEMENT PROTOTYPE SYSTEM (SYSTEM), WHICH MAY BE APPLICABLE TO SUBSTATION PROJECTS. THE USER ASSUMES THE SOLE RESPONSIBILITY FOR THE USE OF THIS SYSTEM, ITS APPLICABILITY TO THE PROJECT SITE, AND VERIFICATION OF THE APPROPRIATE USE AND COMPLIANCE WITH VILLAGE, TOWN, CITY, COUNTY, STATE, AND FEDERAL STORMWATER REQUIREMENTS FOR THIS LOCATION."

PROJECT TITLE: NATIONAL GRID - SUBSTATION STORMWATER MANAGEMENT PRACTICES
DRAWING TITLE: PROPOSED SUBSTATION SECTIONS FOR INFILTRATION RATES LESS THAN 0.5 IN/HR
DRAWN BY: CB
CHECKED BY: TD

EDR JOB NUMBER: 12073
DRAWING NUMBER: C-102
SCALE: NTS
DATE: 2/25/2016

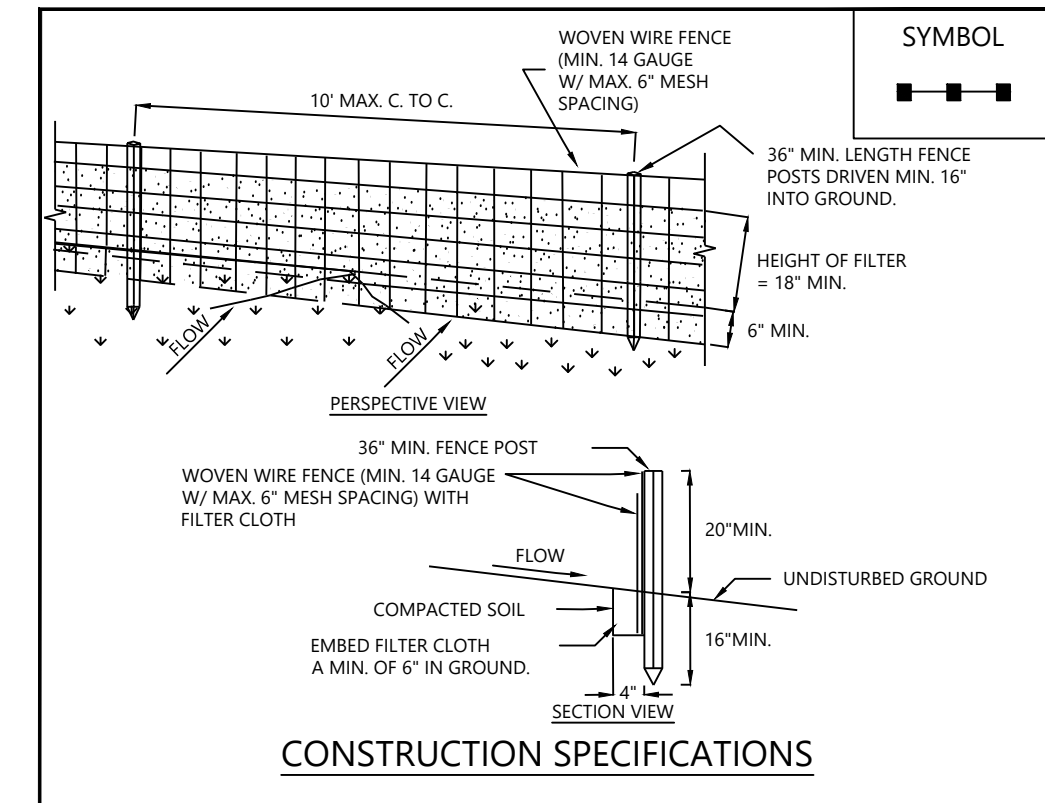
Environmental Design & Research, Landscape Architecture, Engineering & Environmental Services, LLP
217 Montgomery Street, Suite 1000
Newark, New York 10220
P. 315.471.0688

FIGURE 5.2
COMPOST FILTER SOCK



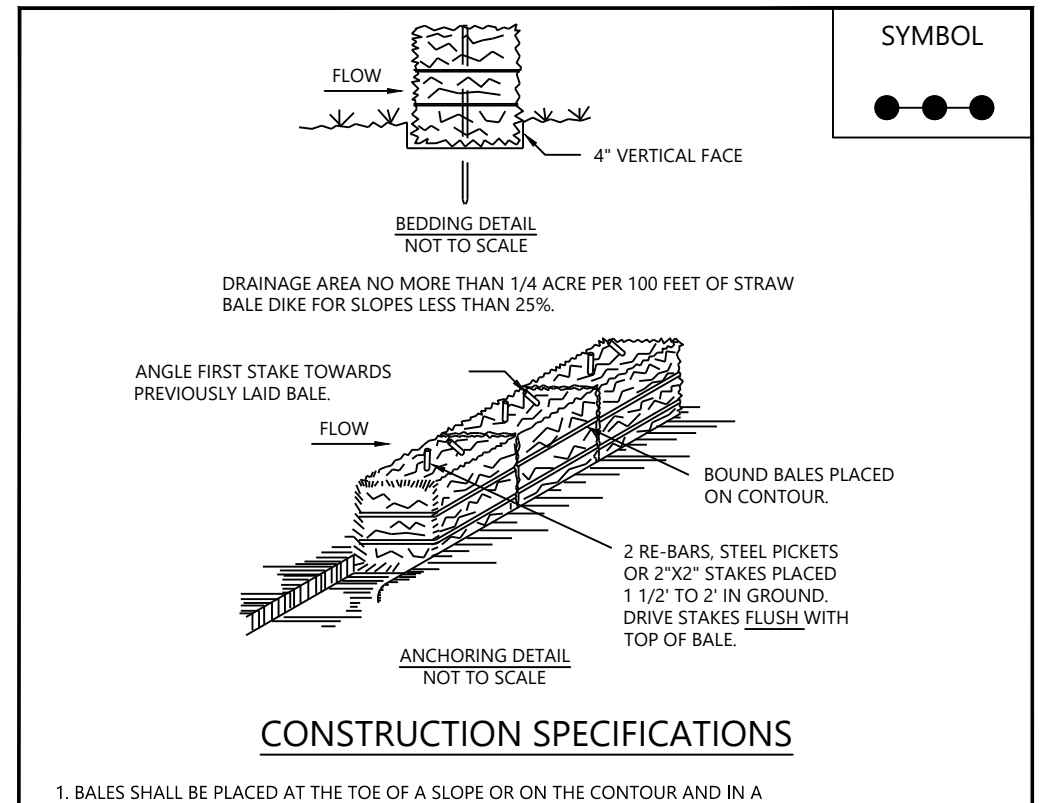
COMPOST FILTER SOCK

FIGURE 5.30
REINFORCED SILT FENCE



REINFORCED SILT FENCE

FIGURE 5.34
STRAW BALE DIKE



STRAW BALE DIKE

Wet Swale (O-2)

Wet swales are a vegetated conveyance channel designed to retain water/create marshy conditions that support wetland vegetation. A seasonal high water table or poorly drained soils are necessary to retain water. The wet swale essentially acts as a linear shallow wetland treatment system, where the WQ₂ is retained.

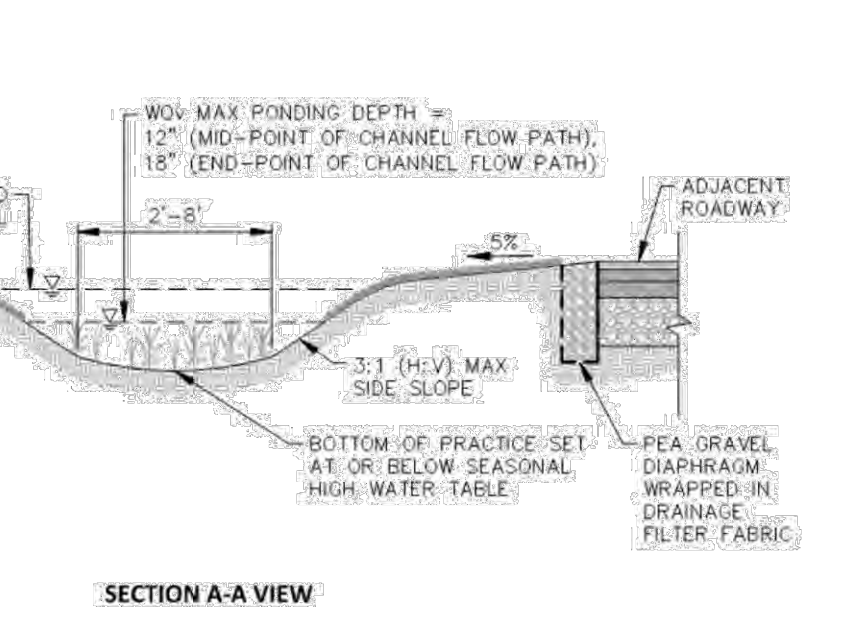
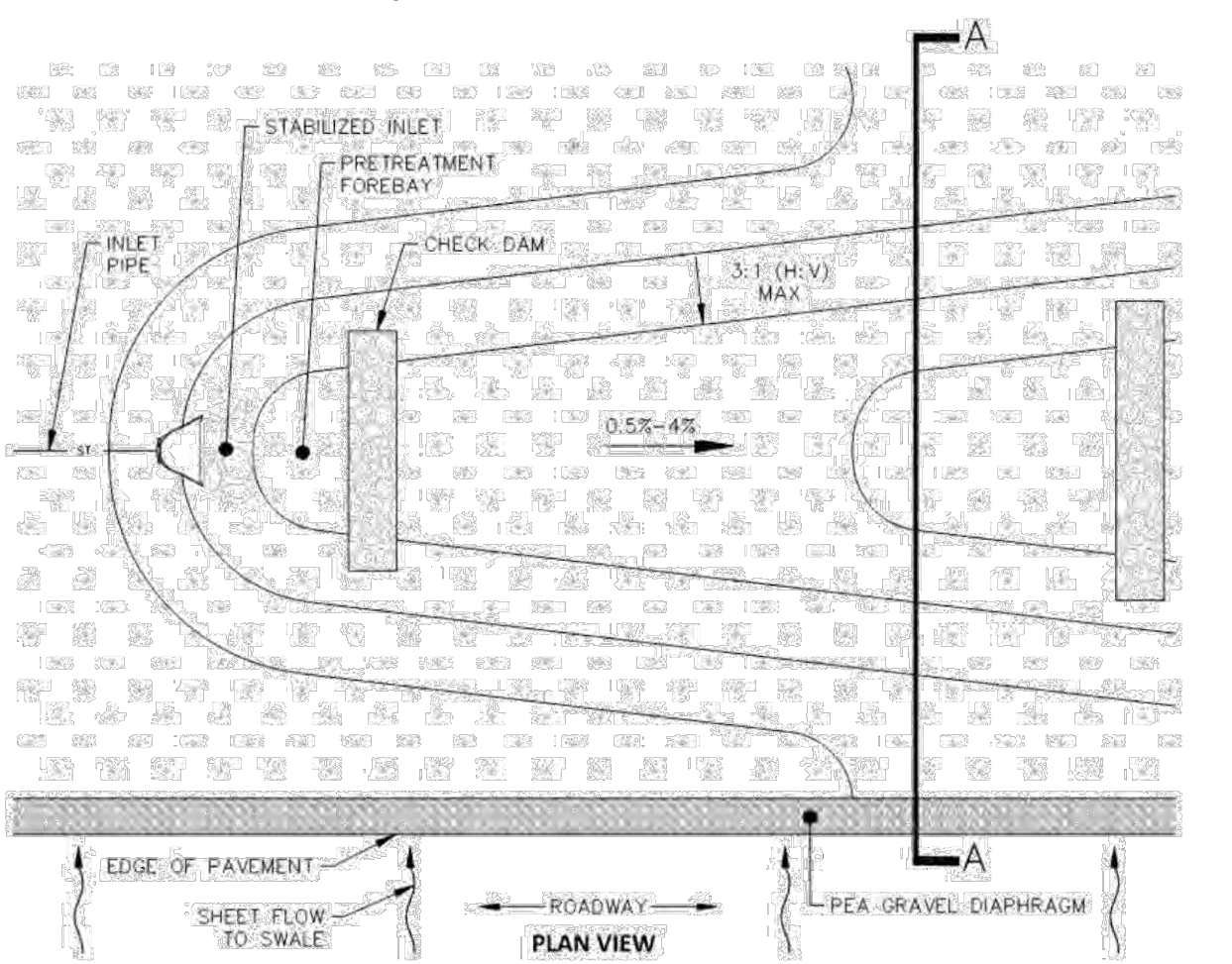


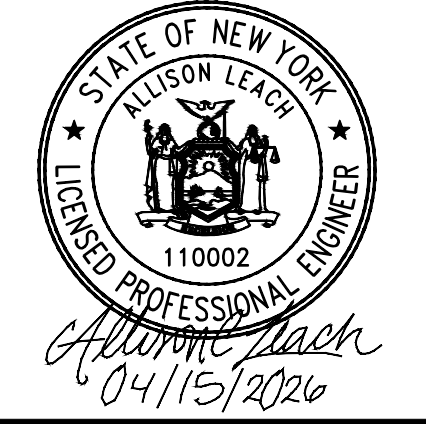
Figure 6.23 Wet Swale (O-2)

Hoffman Falls Wind Project
Madison County, New York

Construction Details - 17

ISSUE FOR CONSTRUCTION

DATE: 04/15/2026
REV: 1
SHEET: C716



PREPARED FOR:

Hoffman Falls Wind LLC

90 State Street
Albany, NY 12207

REVISIONS:

#	DATE	COMMENT	BY	CHK	APP
0	01/30/2026	IFC SET	NA	HC	AL
1	04/15/2026	ORES COMMENTS	NA	HC	AL



PREPARED FOR:

Hoffman Falls Wind LLC

90 State Street
 Albany, NY 12207

REVISIONS:

#	DATE	COMMENT	BY	CHK	APR
0	01/30/2026	IFC SET	NA	AL	
1	04/15/2026	ORES COMMENTS	NA	HC	AL

ACCEPTABLE FILL MATERIALS: STORMTECH SC SERIES CHAMBER

NOTES:

- CHAMBERS CANNOT BE USED AS COMMON CONVEYANCE CULVERTS SINCE TYPICAL CULVERT FLOWS CAN EASILY EXCEED SCOUR VELOCITIES EVEN WITH SCOUR PREVENTION MEASURES IN PLACE
- OPEN BOTTOM CULVERTS ARE HIGHLY SUSCEPTIBLE TO SCOUR BUT BY UTILIZING GOOD DESIGN PRACTICES AND SCOUR PROTECTION MEASURES THEY CAN BE A VIABLE OPTION. IT WILL BE IMPORTANT TO ENSURE NO IMPACTS TO WETLANDS/STREAMS ARE PRESENTED WITH THE SCOUR PROTECTION.
- THE DESIGN ENGINEER MUST ANALYZE THE FLOWS AND VELOCITIES THROUGH THE CHAMBER SYSTEM AND DESIGN THE APPROPRIATE SCOUR PREVENTATIVE MEASURES AT THE INLET, DOWN THE BARREL OF THE CHAMBERS AND AT THE OUTLET.
- HEADWALL DESIGN TO BE DETERMINED BY DESIGN ENGINEER PER LOCAL REQUIREMENTS

PLEASE NOTE:

- THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
- STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) MAX LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
- WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
- ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'C' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.

1 SHEET OF 4

ACCEPTABLE FILL MATERIALS: STORMTECH SC SERIES CHAMBER

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	NA	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	AASHTO M145 ¹ A-1, A-2, A-3 OR AASHTO M43 ¹ 3, 387, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 10,000 lbs (45 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	AASHTO M43 ¹ 3, 387, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.

PLEASE NOTE:

- THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
- STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (150 mm) MAX LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
- WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
- ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'C' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.

NOTES:

- SC-310 CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2922 (POLYETHYLENE) OR ASTM F2418-16a (POLYPROPYLENE), "STANDARD SPECIFICATION FOR CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- SC-740 CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.6 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 400 LBS/IN² (SC-310) OR 500 LBS/IN² (SC-740). AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

3 SHEET OF 4

ACCEPTABLE FILL MATERIALS: STORMTECH MC SERIES CHAMBER

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	NA	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	AASHTO M145 ¹ A-1, A-2, A-3 OR AASHTO M43 ¹ 3, 387, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	AASHTO M43 ¹ 3, 4	NO COMPACTION REQUIRED.

PLEASE NOTE:

- THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
- STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) MAX LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
- WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
- ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'C' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.

NOTES:

- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS AND 60X101.
- MC SERIES CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
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 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.6 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 500 LBS/IN² (SC-310) OR 500 LBS/IN² (SC-740). AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

4 SHEET OF 4

OPEN BOTTOM CULVERT/STREAM CROSSING NOTES:

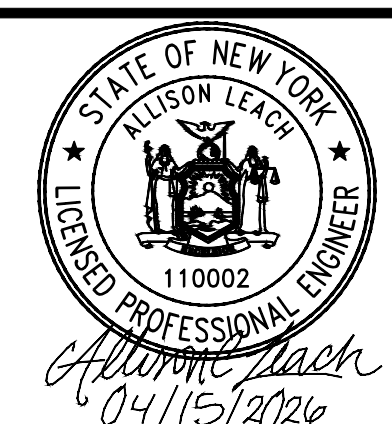
- VERIFY STRUCTURAL PLANS OF INDIVIDUAL OPEN BOTTOM CULVERT CROSSINGS PRIOR TO INSTALLATION. PLANS SHOWN ON THIS SHEET ARE TO PROVIDE GENERAL GUIDELINES. IF APPLICABLE, PRE-FABRICATED ENVIROBRIDGE STYLE CROSSINGS MAY BE USED WITH CONTRACTOR AND EOR REVIEW AND APPROVAL.
- NO IMPACTS TO STREAMS OR WETLANDS ALLOWED DURING THE INSTALLATION AND MAINTENANCE OF THESE CULVERTS. ALL CONSTRUCTION ACTIVITIES MUST AVOID JURISDICTIONAL IMPACTS TO WETLANDS AND STREAMS.
- ARTICLE VIII AND USACE STANDARDS MUST BE MAINTAINED IN INSTALLING AND MAINTAINING THESE CROSSINGS.
- CULVERT DIAMETER SHALL BE MINIMUM 1.25X WIDTH OF THE STREAM CHANNEL AT THE ORDINARY HIGH WATER MARK.
- PROVIDE ENVIRONMENTAL CONTROLS AND STABILIZATION TECHNIQUES AS REQUIRED PRIOR TO THE START OF CONSTRUCTION. ENVIRONMENTAL CONTROLS SHALL BE IN ACCORDANCE WITH NY STATE STANDARD SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.
- TEMPORARY MATTING, JUMP BRIDGES, AIR BRIDGES, OR A EOR APPROVED EQUAL IS TO BE USED TO ACCESS BOTH SIDES OF THE CROSSING LOCATION.

Hoffman Falls Wind Project
 Madison County, New York

Construction Details -
 18

ISSUE FOR CONSTRUCTION

DATE: 04/15/2026
 SHEET: C717 1



PREPARED FOR:

Hoffman Falls Wind LLC

90 State Street
 Albany, NY 12207

REVISIONS:

#	DATE	COMMENT	BY	CHK	APR
0	01/30/2026	IFC SET	NA	HC	AL
1	04/15/2026	ORES COMMENTS	NA	HC	AL

ACCEPTABLE FILL MATERIALS: STORMTECH SC SERIES CHAMBER

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBBASE REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE (A LAYER) TO 18" (457 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. OR AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER THE CHAMBERS IS REACHED. THE CHAMBERS IS REACHED 6" (150 mm) MAX LIFTS TO A WELL GRADED MATERIAL PROCESSED AGGREGATE VEHICLE WEIGHT NOT TO EXCEED 10,000 LBS.
B	EMBODIMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE (A LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.

PLEASE NOTE:
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NOTES:
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 • OPEN BOTTOM CULVERTS ARE HIGHLY SUSCEPTIBLE TO SCOUR BUT BY UTILIZING GOOD DESIGN PRACTICES AND SCOUR PROTECTION MEASURES THEY CAN BE A VALUABLE OPTION. IT WILL BE IMPORTANT TO ENSURE NO IMPACTS TO WETLANDS/STREAMS ARE PRESENTED WITH THE SCOUR PROTECTION.
 • THE DESIGN ENGINEER MUST ANALYZE THE FLOWS AND VELOCITIES THROUGH THE CHAMBER SYSTEM AND DESIGN THE APPROPRIATE SCOUR PREVENTATIVE MEASURES AT THE INLET, DOWN THE BARREL OF THE CHAMBERS AND AT THE OUTLET.
 • HEADWALL DESIGN TO BE DETERMINED BY DESIGN ENGINEER PER LOCAL REQUIREMENTS

OPEN BOTTOM CULVERT/STREAM CROSSING DETAIL
 DRAWN: R/LJ
 CHECKED: KMS
 DATE: 3/29/19

Stormtech
 4640 TREEMAN BLVD
 HELLGARD, OH 43025

ADS
 4640 TREEMAN BLVD
 HELLGARD, OH 43025

1 SHEET OF 4

ACCEPTABLE FILL MATERIALS: STORMTECH SC SERIES CHAMBER

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
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C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE (A LAYER) TO 18" (457 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. OR AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER THE CHAMBERS IS REACHED. THE CHAMBERS IS REACHED 6" (150 mm) MAX LIFTS TO A WELL GRADED MATERIAL PROCESSED AGGREGATE VEHICLE WEIGHT NOT TO EXCEED 10,000 LBS.
B	EMBODIMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE (A LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.

PLEASE NOTE:
 1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE."
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NOTES:
 1. SC-310 CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2322 (POLYETHYLENE) OR ASTM F2418-16a (POLYPROPYLENE), "STANDARD SPECIFICATION FOR CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
 2. SC-740 CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
 3. CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
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 5. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
 6. REQUIREMENTS FOR HANDLING AND INSTALLATION:
 • TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 • TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
 • TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, (a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 400 LBS/INW. (AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

MC SERIES
 LOW VELOCITY STREAM CROSSING
 DRAWN: R/LJ
 CHECKED: KMS
 DATE: 3/29/19

Stormtech
 4640 TREEMAN BLVD
 HELLGARD, OH 43025

ADS
 4640 TREEMAN BLVD
 HELLGARD, OH 43025

4 SHEET OF 4

ACCEPTABLE FILL MATERIALS: STORMTECH MC SERIES CHAMBER

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBBASE REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE (A LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. OR AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL, AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	EMBODIMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE (A LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE AASHTO M43 ¹ 3, 4	NO COMPACTION REQUIRED.

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 1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE."
 2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
 3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
 4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOLS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.

NOTES:
 1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS AND 60x101.
 2. MC SERIES CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
 3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
 4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
 5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
 • TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 • TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
 • TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, (a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 500 LBS/INW. (AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

Hoffman Falls Wind Project
 Madison County, New York

Construction Details - 19

ISSUE FOR CONSTRUCTION

DATE: 04/15/2026
 SHEET: C718 1

GENERAL NOTES

- THE PLANIMETRIC FEATURES SHOWN ON THE PLANS ARE PROVIDED BY HOFFMAN FALLS WIND LLC BASED ON AERIAL PHOTOGRAPHY. GROUND SURFACE CONTOURS AND ELEVATIONS ARE PROVIDED BY HOFFMAN FALLS WIND LLC BASED ON AERIAL PHOTOGRAPHY. NOT ACTUAL FIELD SURVEYING. AS SUCH, THE ACCURACY OF THE ELEVATIONS AND CONTOURS IS NOT AS HIGH AS INFORMATION GATHERED USING CONVENTIONAL FIELD SURVEYING PROCEDURES. THE CONTRACTOR MAY FIND THAT GROUND ELEVATIONS DETERMINED DURING FIELD VARY FROM THE GROUND ELEVATIONS SHOWN ON THE DRAWINGS. WHERE MAJOR DISCREPANCIES ARE FOUND, THE OWNER AND ENGINEER SHALL BE CONTACTED AND NOTIFIED.
- PROPERTY LINES, ROW LINES, AND EASEMENTS ARE BASED ON ALTA SURVEY PREPARED BY WESTWOOD PROFESSIONAL SERVICES.
- WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE OWNER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERRED THEIR LOCATION.
- THE CONTRACTOR SHALL NOTIFY STATE UTILITY LOCATE SERVICE (DIG SAFELY NEW YORK 811) AT LEAST 48 HOURS BEFORE EXCAVATION ACTIVITIES COMMENCE.
- UTILITY LOCATIONS SHOWN ON THE PLANS ARE BASED ON ALTA SURVEY PREPARED BY WESTWOOD PROFESSIONAL SERVICES. CONTRACTOR AND OWNER ARE RESPONSIBLE FOR LOCATING ALL UTILITIES PRIOR TO CONSTRUCTION. IF UTILITIES ARE DETERMINED TO EXIST THAT ARE NOT SHOWN ON THE PLANS THE ENGINEER SHALL BE CONTACTED IMMEDIATELY. THE CONTRACTOR SHALL PROTECT EXISTING UTILITIES AND RELOCATE AS REQUIRED IN COORDINATION WITH UTILITY AND LANDOWNER.
- THE CONTRACTOR SHALL NOTIFY AND COORDINATE ALL WORK WITH THE UTILITY COMPANIES.
- UTILITY CROSSING REQUIREMENTS HAVE NOT BEEN COMPLETED FOR THE PROJECT. CONTRACTOR SHALL VERIFY CROSSING DESIGNS WITH ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION.
- CONTRACTOR TO VERIFY EXISTING CONDITIONS SHOWN ON THE PLANS PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER IF THERE ARE ANY DISCREPANCIES.
- ANY FACILITIES REMOVED TO ALLOW FOR CONSTRUCTION (MAILBOXES, SIGNS, FENCES, LIGHTING, ETC.) SHALL BE REPLACED BY THE CONTRACTOR IN A CONDITION AS GOOD AS EXISTING.
- THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING DRAINAGE THROUGHOUT THE CONSTRUCTION OF THIS PROJECT. CONSTRUCTION ACTIVITIES SHALL NOT BLOCK THE NATURAL OR MANMADE CREEKS OR DRAINAGE SWALES CAUSING RAINWATER TO POND. DEPENDING ON FIELD CONDITIONS, ADDITIONAL CULVERTS IN EXCESS OF THOSE ON THE PLANS MAY BE REQUIRED.
- IF LOCALIZED LOW POINTS ARE ENCOUNTERED DURING TOPSOIL STRIPPING, MASSAGE SURROUNDING AREA TO MAINTAIN POSITIVE DIRECTION OF DRAINAGE TO MINIMIZE PONDING OF STORMWATER DURING RAINFALL EVENTS.
- ROAD MAINTENANCE IS EXPECTED OVER THE LIFE OF THE FACILITY. ROADS SHALL BE MAINTAINED BY THE PROJECT OWNER. MAINTENANCE THROUGH CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL CLEAN THE LOCATION OF THE WORK AND ALL GROUND IN THE PROJECT AREA OCCUPIED BY THE CONTRACTOR DURING THE PROJECT. THE CONTRACTOR SHALL REMOVE ALL RUBBISH, EXCESS MATERIALS, TEMPORARY STRUCTURES, AND EQUIPMENT, LEAVING THE LOCATION OF THE WORK CLEANED TO THE SATISFACTION OF THE OWNER AND ENGINEER.
- HAUL ROUTES SHOWN ON THE PLANS ARE PROVIDED BY HOFFMAN FALLS WIND LLC. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM THE SUITABILITY OF THIS ROUTE, INCLUDING EXISTING BRIDGE AND CULVERT STRUCTURES, FOR CONSTRUCTION TRAFFIC.
- CONTRACTOR SHALL REVIEW ENVIRONMENTAL REPORTS PRIOR TO WORK WITHIN OR IN PROXIMITY TO WETLAND OR STREAM AREAS. NO REPLACEMENT OF EXISTING WETLAND OR STREAM CULVERT CROSSINGS ALLOWED.
- WHILE BUILDING THE ROADS AND EXCAVATING THE TURBINE FOUNDATIONS, EXCESS SOIL WILL RESULT. THE CONTRACTOR SHALL DISPOSE OF THIS EXCESS SOIL IN AN APPROVED MANNER. NO TOPSOIL WILL BE ALLOWED TO LEAVE THE PROPERTY FROM WHICH IT WAS DUG WITHOUT APPROVAL OF HOFFMAN FALLS WIND LLC, THE LANDOWNER, AND THE ENVIRONMENTAL MONITOR. EXCESS TOPSOIL SHALL BE DISTRIBUTED INTO A THIN LAYER ON LAND IMMEDIATELY ADJACENT TO WHERE THE TOPSOIL ORIGINATED. WHILE DOING SO THE CONTRACTOR SHALL AVOID CAUSING RIDGES OR MOUNDS THAT WOULD MAKE IT DIFFICULT FOR STORM WATER RUNOFF TO DRAIN. THE FINAL SURFACE OF THE DISTURBED TOPSOIL SHALL BE SMOOTH AND FOLLOW THE NATURAL CONTOUR OF THE LAND.
- FINALIZE GRADING AROUND THE BASE OF TURBINES IN ACCORDANCE WITH DETAIL TS03-A/TS03-B.
- GRADE ALL PROPOSED ROADS TO A MAXIMUM SLOPE OF 12%. IF 12% SLOPE CANNOT BE ACHIEVED, THE CONTRACTOR MAY UTILIZE ASSIST VEHICLES FOR THE PURPOSE OF DELIVERIES U TO 16% AS PER VESTAS SPEC.
- TEMPORARY INTERSECTION WIDENINGS SHALL, UPON COMPLETION OF ALL PROJECT CONSTRUCTION ACTIVITIES OR UPON NOTIFICATION TO THE CONTRACTOR BY THE ENGINEER, BE REMOVED AND RESTORED TO ITS ORIGINAL LINES AND GRADES AND STABILIZED/SEEDED IN ACCORDANCE WITH THE PROJECT SWPPP.
- CRANE PATHS ARE SHOWN ON THE CONSTRUCTION PLANS. IF THE CONTRACTOR PROPOSES ALTERNATE CRANE PATHS, THEY SHALL MAKE SURE THAT ENVIRONMENTALLY SENSITIVE AREAS ARE NOT DISTURBED. FINAL CRANE PATH ALIGNMENTS SHALL BE DETERMINED BY THE CONTRACTOR BASED UPON FIELD CONDITIONS WITHIN THE CONSTRUCTION EASEMENTS, AND THE PROJECT BOUNDARY. ALL PROPOSED CRANE PATH MODIFICATIONS MUST BE APPROVED BY HOFFMAN FALLS WIND LLC AND THE ENVIRONMENTAL MONITOR.
- TURBINE SETBACKS ARE NOT IDENTIFIED ON THE CONSTRUCTION PLANS. IT SHALL BE THE RESPONSIBILITY OF THE OWNER TO ENSURE THAT ALL TURBINE SETBACKS MEET PROJECT REQUIREMENTS.
- THE CONTRACTOR SHALL BE FAMILIAR WITH THE REPORTS AND SHALL REVIEW ALL RECOMMENDATIONS.
- REFER TO ELECTRICAL PLANS FOR LOCATIONS, CONSTRUCTION DETAILS AND SPECIFICATIONS FOR THE UNDERGROUND/OVERHEAD POWER COLLECTION SYSTEM, CONTROL BUILDING, SUBSTATION, AND PERMANENT AND TEMPORARY FIBER OPTIC LINES.
- WIND TURBINE TOWER DOOR ORIENTATION SHALL BE CONFIRMED WITH THE OWNER PRIOR TO CONSTRUCTION.
- ISOLATED GRADING FOR CRANE PATHS MAY BE REQUIRED. CONTRACTOR TO GRADE ACCORDING TO CRANE MANUFACTURER'S SPECIFICATIONS.
- NO IMPACTS TO THESE AVOIDANCE AREAS ARE ALLOWED EXCEPT IN THE LOCATIONS SHOWN ON THE PLANS.
- CONTRACTOR SHALL PROVIDE STAKING WHERE APPROPRIATE TO ENSURE ALL CONSTRUCTION ACTIVITIES STAY WITHIN THE PROJECT BOUNDARY.
- TIMBER MATTING REQUIRED WHEN CROSSING AGRICULTURAL LAND.
- SENSITIVE AREAS WILL REQUIRE SILT FENCING TO BE INSTALLED ALONG THE BORDER WHERE THESE FEATURES EXIST WITHIN 100' OF ACCESS ROADS AND OTHER FACILITIES.
- REFER TO TREE CLEARING PLANS FOR EROSION AND SEDIMENTATION CONTROL CONTINUATION.
- EROSION AND SEDIMENT CONTROL BMP INSTALLATION TO BE ADJUSTED AS NEEDED TO ACCOMMODATE ACTUAL CONTOURS IDENTIFIED IN THE FIELD DURING VARIOUS PHASES OF THE PROJECT.
- CONTRACTOR SHALL REPAIR CRUSHED OR SEVERED DRAIN TILE IN ACCORDANCE WITH THE DRAIN TILE REPAIR DETAIL UT-41 AND THE APPROVED DRAINAGE REMEDIATION PLAN. THE ENVIRONMENTAL MONITOR SHALL COORDINATE WITH NYSAGM TO ENSURE COMPLIANCE WITH THE APPROVED DRAINAGE REMEDIATION PLAN.
- A THIRD-PARTY ENVIRONMENTAL MONITOR SHALL BE HIRED TO OVERSEE CONSTRUCTION, RESTORATION, AND FOLLOW-UP MONITORING IN AGRICULTURAL AREAS. THE ENVIRONMENTAL MONITOR SHALL BE ON-SITE WHENEVER CONSTRUCTION OR RESTORATION WORK IS OCCURRING IN AGRICULTURAL LANDS AND SHALL COORDINATE WITH THE NYSAGM TO ENSURE THAT THE GOALS OF THE NYSAGM GUIDELINES ARE BEING MET TO THE FULLEST EXTENT PRACTICABLE.
- ALL DISTURBED AREAS ARE TO BE RESTORED TO PRE-EXISTING OR BETTER CONDITIONS. THE CONTRACTOR IS TO ENSURE RESTORATION OF THE ENTIRE WORK SITE IS IN COMPLIANCE WITH THE 94-C PERMIT AND NYSAGM GUIDELINES FOR WIND ENERGY PROJECTS.
- CONSTRUCTION WORK SHALL BE LIMITED TO THE HOURS OF 7:00 A.M. TO 8:00 P.M. MONDAY THROUGH SATURDAY AND 8:00 A.M. TO 8:00 P.M. SUNDAYS AND NATIONAL HOLIDAYS. FOR CERTAIN CONSTRUCTION PHASES AND ACTIVITIES, ADDITIONAL WORK HOURS MAY BE NECESSARY AND SHALL BE NOTIFIED IN ACCORDANCE WITH THE ARTICLE VIII PERMIT. ACCESS RESTRICTED IN ENVIRONMENTALLY SENSITIVE AREAS IDENTIFIED ON THE PLANS BETWEEN THE PERIOD OF DECEMBER THROUGH MARCH. THE ENVIRONMENTAL MONITOR SHALL MONITOR ACTIVITIES WITHIN THE ENVIRONMENTALLY SENSITIVE AREA DURING APPROVED TIME FRAMES.

ROAD DESIGN PARAMETERS

- THE ROAD SECTION HAS BEEN DESIGNED TO ACCOMMODATE WIND TURBINE COMPONENT DELIVERY DURING CONSTRUCTION AND LIGHT DUTY TRUCKS FOR LOW VOLUME USE IN NORMAL OPERATING CONDITIONS. THE ROAD DESIGN SPECIFIED IS NOT INTENDED FOR ALL WEATHER USE FOR HEAVY DUTY, HIGH VOLUME, CONSTRUCTION LOADS.
- ROAD MAINTENANCE CAN BE EXPECTED OVER THE LIFE OF THE PERMANENT FACILITY AND MAY INCLUDE BLADING AND REPLACEMENT OF AGGREGATE MATERIAL.
- CONTRACTOR SHALL CONFIRM ROAD DESIGN MEETS THE REQUIREMENTS OF THE TURBINE MANUFACTURER ACCESS ROAD MANUAL.

STORM WATER DESIGN PARAMETERS

- ANTICIPATED DRAINAGE CROSSINGS ARE SHOWN ON THE CONSTRUCTION PLANS BASED LARGELY ON OBSERVATION OF DRAINAGE CHANNELS/DRAINAGE EROSION FROM THE AERIAL IMAGERY, GIS STREAM LINEWORK AND EXISTING TOPOGRAPHY DATA AVAILABLE. ADDITIONAL CULVERTS/LOW WATER CROSSINGS MAY NEED TO BE INSTALLED IN AREAS WHERE CONCENTRATED FLOW IS EXPECTED DUE TO THE CONSTRUCTION ACTIVITIES.
- CULVERTS WITHIN THE ROWS HAVE BEEN SIZED BY WESTWOOD. UPLAND CULVERTS SHALL BE SIZED TO MATCH THE DOWNSTREAM CULVERT SIZE WHERE AVAILABLE. WHERE THERE IS NO DOWNSTREAM CULVERT, COUNTY ROAD CULVERT SIZES BASED ON A 10 YEAR STORM EVENT, AND STATE ROAD CULVERTS HAVE BEEN SIZED BY NYSDOT OR THE 10 YEAR STORM EVENT. IN-FIELD CULVERTS HAVE BEEN SIZED BASED UPON A 10 YEAR STORM EVENT FOR NON-JURISDICTIONAL CROSSINGS. CULVERTS FOR JURISDICTIONAL CROSSINGS HAVE BEEN SIZED BASED ON ORES AND USACE GENERAL GUIDELINES FOR STREAM CROSSINGS. THE MINIMUM TYPICAL CULVERT SIZE IS 18". IT IS EXPECTED THAT CULVERTS WILL BE OVERTOPPED DURING SOME STORMS AND MAINTENANCE WILL BE REQUIRED THROUGH THE LIFE OF THE PROJECT.
- ALL CULVERTS SHALL BE INSTALLED PER NEW YORK STATE DEPARTMENT OF TRANSPORTATION AND/OR MADISON COUNTY STANDARD SPECIFICATIONS. CULVERTS WITHIN THE DOUBLE-WALLED HOPE PILE WITH SMOOTH INTERIOR WALLS WITH FARED END SECTIONS OR PERMANENT INSTALLATIONS IN ACCORDANCE WITH NYSDOT PERMITS. CULVERTS WITHIN THE NYSDOT ROW REQUIRE FLARED END SECTIONS IN ACCORDANCE WITH NYSDOT PERMITS. ALL TEMPORARY PORTIONS OF THE INSTALLED CULVERTS SHALL BE REMOVED UPON COMPLETION OF THE PROJECT.
- WHEN INSTALLING DRAINAGE CULVERTS THE CONTRACTOR SHALL USE JUDGMENT IN SETTING THE FLOW LINE ELEVATIONS AND CULVERT LONGITUDINAL SLOPE. TYPICALLY, THE FLOW LINE ELEVATIONS AND LONGITUDINAL SLOPE OF THE CULVERT SHOULD MATCH THE NATURAL GROUND ELEVATIONS AND SLOPE TO ENSURE POSITIVE DRAINAGE. CULVERTS SHALL BE SUMPED 2.5" BELOW THE EXISTING CHANNEL FLOW LINE. CULVERTS LARGER THAN 48" SHALL BE EMBEDDED 1 FOOT BELOW THE GRADE OF THE STREAM. MINIMUM COVER SHALL ADHERE TO MANUFACTURER'S RECOMMENDATIONS. WHEN POSSIBLE, ALL CULVERTS SHOULD BE PLACED AT A MINIMUM 0.5% GRADE. CULVERTS PERCHED ABOVE THE GRADE OF THE STREAM ARE NOT ALLOWED. CULVERTS IN JURISDICTIONAL STREAMS REQUIRE 20% EMBEDMENT.
- LOW WATER CROSSINGS HAVE BEEN DESIGNED TO ALLOW NATURAL DRAINAGE TO OCCUR POST CONSTRUCTION OF THE ACCESS ROADS. IT IS ANTICIPATED THAT DURING "HEAVY" RAIN STORM EVENTS AND DURING THE FREEZE/THAW CYCLE SOME ACCESS ROADS MAY BE DIFFICULT TO TRAVERSE DUE TO THE SEASONAL ENVIRONMENTAL CONDITIONS. MAINTENANCE OF THE ACCESS ROADS MAY BE REQUIRED DUE TO NATURAL DRAINAGE.

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY EROSION CONTROL MEASURES IN COMPLIANCE WITH THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT. THE PROJECT STORMWATER POLLUTION PREVENTION PLAN (SWPPP) HAS BEEN PREPARED BY WESTWOOD. CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH THE SWPPP AND THE NEW YORK STATE STATE GENERAL PERMIT GP-20-001 REFER TO THE SWPPP FOR EROSION CONTROL AND RESTORATION SPECIFICATIONS, SEDIMENT AND EROSION CONTROL PROCEDURES, LOCATIONS OF BMPs, DETAILS, AND INSPECTION INFORMATION.
- NON-STORM WATER POLLUTANTS SUCH AS CONCRETE, FLY ASH, LIME, ASPHALT MATERIALS, OILS, AND OTHER MATERIALS SHALL BE CONTAINED AND NOT ALLOWED TO BE DISCHARGED FROM THE PROJECT AREA.

EXECUTION

- CLEARING AND GRUBBING
 - 1.1. THE CONTRACTOR SHALL BE REQUIRED TO REMOVE ALL TREES, STUMPS, BRUSH, AND DEBRIS WITHIN THE FIELD DELINEATED TREE CLEARING AREAS AS SHOWN ON THE PLANS. THE CONTRACTOR IS TO REMOVE ONLY THOSE TREES WHICH ARE DESIGNATED BY THE OWNER'S REPRESENTATIVE FOR REMOVAL AND SHALL EXERCISE EXTREME CARE AROUND EXISTING TREES TO BE SAVED.
- EXCAVATIONS
 - 2.1. TOPSOIL SHALL BE STRIPPED FROM ALL ROADWAY AREAS AT A DEPTH DETERMINED BY THE ENVIRONMENTAL MONITOR PER AGM GUIDELINES. TOPSOIL SHALL NOT BE STRIPPED OUTSIDE OF THE DESIGNATED DISTURBANCE AREAS.
 - 2.2. ANY TOPSOIL THAT HAS BEEN STRIPPED SHALL BE RE-SPREAD WITHIN GRADING AREAS. ALL TOPSOIL SHALL BE REDISTRIBUTED TO THE LAND OWNER'S PROPERTY OF WHERE IT ORIGINATED FROM. SEEDING AND MULCHING TO BE UNDER THE DIRECTION OF THE ENVIRONMENTAL MONITOR IN CONSULTATION WITH THE PROPERTY OWNER. AGM WILL BE CONSULTED WHERE AGRICULTURAL AREAS ARE CONCERNED.
- SUBGRADE
 - 3.1. SUBGRADE SOIL BELOW FILL SHALL BE COMPACTED AND PROOF-ROLLED IN ACCORDANCE WITH TABLE 1.
 - 3.2. WHERE APPLICABLE, GEOTEXTILE FABRIC SHALL BE PLACED AFTER SUBGRADE TESTING REQUIREMENTS AS SPECIFIED IN TABLE 1. GEOTEXTILE FABRIC SHALL BE INSTALLED PER MANUFACTURER RECOMMENDATION.
- STRUCTURAL FILL AND EMBANKMENTS
 - 4.1. FILL MAY BE PLACED ABOVE GRADE AFTER TOPSOIL STRIPPING, IN LOOSE LIFTS NOT EXCEEDING 1 FOOT, AND COMPACTED IN ACCORDANCE WITH TABLE 1.
 - 4.2. SIDE SLOPES GREATER THAN 3:1 WILL NOT BE PERMITTED, UNLESS OTHERWISE NOTED ON THE PLAN.
- AGGREGATE PLACEMENT
 - 5.1. SUBSEQUENT TO THE SUBGRADE PREPARATION, THE AGGREGATE BASE SHALL BE PLACED, COMPACTED, AND TESTED TO THE SPECIFICATIONS IDENTIFIED IN TABLE 1.
- GENERAL FILL
 - 6.1. CLEAN ON-SITE SOILS OR APPROVED IMPORTED MATERIAL MAY BE USED AS FILL MATERIAL FOR GENERAL SITE GRADING IN NON-STRUCTURAL FILL LANDSCAPING AREAS. THIS MATERIAL SHALL BE PLACED IN LOOSE LIFTS NOT TO EXCEED 1 FOOT.
- SEEDING, MULCHING, AND STABILIZATION
 - 7.1. PRIOR TO FINAL STABILIZATION, TOPSOIL SHALL BE DISTRIBUTED OVER THE EXPOSED DISTURBED AREAS, EXCLUDING THE AGGREGATE DRIVING SURFACE.
 - 7.2. FOLLOWING ROUGH GRADING OPERATIONS, TOPSOIL CAN BE USED TO BRING THE GROUND ELEVATIONS UP TO THE DESIGNED FINISHED GRADE ELEVATIONS IN NON-STRUCTURAL AREAS.
 - 7.3. ALL DISTURBED AREAS SHALL HAVE TEMPORARY AND PERMANENT STABILIZATION MEASURES ESTABLISHED IN ACCORDANCE WITH THE PROJECT SWPPP.

INSPECTIONS AND TESTING

- SUBGRADE
 - A. TESTING SHALL BE PERFORMED BY A DESIGNATED INDEPENDENT TESTING AGENCY
 - B. FOR PASSING CRITERIA, REFER TO GEOTECH INFORMATION.
 - C. TESTING AND INSPECTION RECORDS SHALL BE MAINTAINED BY THE CONTRACTOR AND MADE ACCESSIBLE TO THE CIVIL EOR AT THEIR REQUEST
 - C.1. THE ENGINEER MAY REVIEW THE TESTING AND INSPECTION RECORDS TO CHECK CONFORMANCE WITH THE DRAWINGS AND SPECIFICATIONS. THE ENGINEER'S REVIEW DOES NOT RELIEVE THE CONSTRUCTION CONTRACTOR FROM THE RESPONSIBILITY FOR CORRECTING DEFECTIVE WORK.
 - D. REFER TO TABLE 1 FOR PROJECT TESTING SPECIFICATIONS
 - E. PROOF ROLLING: PROOF ROLLING SHALL BE PERFORMED IN THE PRESENCE OF THE GEOTECHNICAL ENGINEER OR QUALIFIED GEOTECHNICAL REPRESENTATIVE
 - E.1. UNSTABILIZED SUBGRADE AND AGGREGATE BASE SHALL BE PROOF ROLLED USING A FULLY LOADED TANDEM AXLE DUMP TRUCK WITH A MINIMUM GROSS WEIGHT OF 20 TONS OR A FULLY LOADED WATER TRUCK WITH AN EQUIVALENT AXLE LOADING
 - F. IF THE PROOF ROLL REQUIREMENTS CANNOT BE ACHIEVED, THE FOLLOWING ALTERNATES MAY BE IMPLEMENTED:
 - F.1. SCARIFY, DRY, AND RECOMPACT SUBGRADE AND PERFORM ADDITIONAL PROOFROLL AND DCP.
 - F.2. REMOVE UNSUITABLE MATERIAL AND REPLACE WITH CRUSHED AGGREGATE BASE.
- AGGREGATE BASE: IF THE PROOF ROLL REQUIREMENTS CANNOT BE ACHIEVED, THE FOLLOWING ALTERNATES MAY BE IMPLEMENTED:
 - A. ADD ADDITIONAL 2 INCHES OF AGGREGATE.

TABLE 2: NYSDOT TYPE 2 SUBBASE COURSE AGGREGATE

SIIEVE SIZE	PERCENT PASSING
2"	100
1 1/2"	50-90
3/4"	70-35
3/8"	25-60
#40	5-40
#200	0-10

LIQUID LIMIT (MAX) = 45
PLASTICITY INDEX = 0-15
LA ABRASION (% MAX) = 40%

TABLE 4: IMPORTED STRUCTURAL FILL

SIIEVE SIZE	PERCENT PASSING
3"	100
#200	10-100

**IMPORTED STRUCTURAL FILL SHOULD CONTAIN NO PARTICLES LARGER THAN 3 INCHES AND LESS THAN 10 PERCENT, BY WEIGHT, OF MATERIAL FINER THAN A NO. 200 MESH SIEVE.
***THE IMPORTED MATERIALS SHALL BE FREE OF RECYCLED CONCRETE, ASPHALT, BRICKS, GLASS AND PYRITIC SHALE ROCK.
***ADDITIONAL LABORATORY TESTING WILL BE REQUIRED TO DETERMINE IF THE ON-SITE SOILS ARE SUITABLE FOR USE AS STRUCTURAL FILL ON SITE, HOWEVER IT IS NOT EXPECTED TO MEET THE CRITERIA FOR STRUCTURAL FILL.

PRODUCTS

- ROAD AGGREGATE SHALL BE CRUSHED AGGREGATE MEETING NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION (DATE: JULY 9, 2020) PROVIDED IN TABLE 7.1.1, OR AN APPROVED EQUAL. AT LEAST TWO FRACTURED FACES IS REQUIRED.
- ROAD SHOULDERS, AND CRANE PATHS SHALL CONSIST OF COMPACTED NATIVE SOILS.
- CULVERTS: SEE PLAN FOR CULVERT LOCATIONS. ACCESS ROAD CULVERTS SHALL MEET THE MINIMUM SPECIFICATIONS SET FORTH BY THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION AND/OR THE COUNTY. ALL CULVERTS SHALL BE MANUFACTURED OF CORRUGATED METAL PIPES.
- GEOTEXTILE FABRIC SHALL BE MIRAFI HP570 OR APPROVED EQUAL IF REQUIRED.
- STRUCTURAL FILL: CLEAN SOIL THAT IS FREE OF SIGNIFICANT ORGANIC OR DELETERIOUS MATTER, OR IMPORTED SOIL AS APPROVED BY THE ENGINEER.

TABLE 1: MATERIAL TESTING SCHEDULE

	Location	Required Test	ASTM Standard	Frequency	Specified Criteria	
Subgrade (Non-cement Stabilized)	Access Roads Spur Roads Met Tower Roads	Standard Proctor	ASTM D-698	1 per soil type as determined by independent testing agency	N/A	
	Public Road Improvements Substation Area O&M Area	Nuclear Density	ASTM D-6938	Roads: 1 test per 2,500 LF (minimum 1 per road) Areas: 1 test per 5,000 SF (minimum 1 per area)	95% of Standard Proctor Maximum Dry Density +/- 2% of Optimum Moisture Content	
		Proof Roll	N/A	Entire Length / Area	No rutting greater than 1.5" and no "pumping" of the soil beneath/behind the loaded truck. See testing requirements for additional information.	
	Temporary Roads Temporary Intersection Improvements Laydown Yard Batch Plant Turbine Pads (Staging Areas)	Proof Roll	N/A	Entire Length / Area	No rutting greater than 1.5" and no "pumping" of the soil beneath/behind the loaded truck. See testing requirements for additional information.	
General Fill (for Mass Grading)	Crane Walks ¹ Crane Pads ¹	EXCLUDED ¹	EXCLUDED ¹	EXCLUDED ¹	EXCLUDED ¹	
	Source (On -Site Borrow) (Imported Fill) (Common Excavation)	Standard Proctor	ASTM D-698	1 per soil type/source as determined by independent testing agency	N/A	
		Moisture Content	ASTM D-2216		LL < 45 and PI < 20	
		Atterberg Limits	ASTM D-4318			
	Embankments Turbine Pads (Staging Areas) Intersection Improvements	Nuclear Density	ASTM D-6938	1 test per 5,000 SF per lift 1 test per 30,000 SF per lift (Turbine Pads only)	95% of Standard Proctor Maximum Dry Density +/- 2% of Optimum Moisture Content	
	Access Roads Spur Roads Met Tower Roads Public Road Improvements Substation Area O&M Area Laydown/Batch Plant	Proof Roll	N/A	Entire Length / Area (Final Surface)	No rutting greater than 1.5" and no "pumping" of the soil beneath/behind the loaded truck. See earthwork specifications for additional information.	
	Aggregate Material	Quarry Testing (Pre-Placement)	Grain Size Analysis	ASTM C-136	Per source from quarry. Sample from site every 5,000CY.	See Table 2
			Standard Proctor	ASTM D-698		N/A
			Moisture Content	ASTM D-2216		See Table 2
			Atterberg Limits	ASTM D-4318		See Table 2
Los Angeles Abrasion			ASTM C-131	See Table 2		
Access Roads Spur Roads Met Tower Roads Public Road Improvements Substation (Base Aggregate Only) O&M Area Aggregate Rings Intersection Improvements Laydown/Batch Plant	Proof Roll	N/A	Entire Length / Area	No rutting greater than 1.5" and no "pumping" of the soil beneath/behind the loaded truck. See earthwork specifications for additional information.		

¹Structural design, recommendations, and testing for crane walks and crane pads is excluded from the engineering design contained within these plans. Refer to the geotechnical report, project specific crane walk/pad structural design (if available), geotechnical engineer, and/or contractor for specific information.

GENERAL ENVIRONMENTAL RESTRICTIONS:

- ALL EQUIPMENT ACCESS, STORAGE OF EQUIPMENT AND MATERIALS, AND OTHER CONSTRUCTION ACTIVITIES WILL BE CONFINED TO THE ACCESS ROADS, LAYDOWN AREAS, AND THE COLLECTION LINE AND TRANSMISSION LINE ROUTES AS DEPICTED ON THE FINAL CONSTRUCTION DRAWINGS.
- EQUIPMENT WILL UTILIZE THE INTERSECTION OF ACCESS ROADS AND EXISTING ROADS FOR TURNING. WORK AREAS, SUCH AS TURBINE SITES AND LAYDOWN AREAS, WILL ALSO PROVIDE AREAS FOR EQUIPMENT TURNING AND PARKING, IN ADDITION TO DESIGNATED TURNING LOCATIONS.
- FUGITIVE DUST RESULTING FROM CONSTRUCTION ACTIVITIES WILL BE MINIMIZED TO THE MAXIMUM EXTENT PRACTICAL BY IMPLEMENTING APPROPRIATE CONTROL MEASURES. THESE MEASURES INCLUDE THE APPLICATION OF MULCH, WATER, OR STONE ON ACCESS ROADS, EXPOSED SOILS, STOCKPILED SOILS, OR UNPAVED PUBLIC ROADS WHEN DRY AND WINDY CONDITIONS EXIST. A WATERING VEHICLE WILL BE AVAILABLE ON AN AS-NEEDED BASIS. REFER TO DUST CONTROL PLAN PREPARED BY WESTWOOD.
- WITHIN 100 FEET OF STATE REGULATED WETLANDS AND 50 FEET OF STATE REGULATED STREAMS, REMOVE ONLY THE MINIMUM VEGETATION NECESSARY TO ALLOW CONSTRUCTION AND OPERATION OF THE FACILITY.
- STREAMS AND WETLANDS WILL BE PROTECTED FROM INDIRECT IMPACTS DURING CONSTRUCTION BY UTILIZING VARIOUS EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH APPROVED PROJECT STORMWATER POLLUTION PREVENTION PLAN (SWPPP). SUCH MEASURES WILL INCLUDE, BUT NOT BE LIMITED TO, SILT FENCES PLACED BETWEEN WATER RESOURCE BOUNDARIES AND CONSTRUCTION AREAS. EXPOSED SOIL WILL BE SEEDED AND/OR MULCHED, AS SOON AS PRACTICABLE, BUT IN ANY EVENT, NO LATER THAN THE END OF THE WORK DAY IN WHICH SITE DISTURBANCE OCCURS, TO ASSURE THAT EROSION AND SILTATION IS KEPT TO A MINIMUM ALONG STREAM AND WETLAND BOUNDARIES.
- TEMPORARY EROSION CONTROL DEVICES AND STABILIZATION PRACTICES WILL BE INSTALLED SOON AS PRACTICABLE AND APPROPRIATE, IN ACCORDANCE WITH THE SWPPP. EROSION CONTROL DEVICES WILL BE INSTALLED AFTER CLEARING, BUT PRIOR TO SOIL DISTURBANCE.
- THE SEEDING MIXTURE WILL BE IN ACCORDANCE TO THE BILLBOOK AND THE DISCRETION OF THE ENVIRONMENTAL MONITOR. THE SEEDING MIXTURE WILL ALSO BE IN ACCORDANCE WITH THE AGM'S FERTILIZING, LIME, AND SEEDING RECOMMENDATIONS IN LANDS THAT WILL BE RETURNED TO AGRICULTURAL USE.
- THE BOP CONTRACTOR WILL LOCATE AND DISTRIBUTE EXCESS EXCAVATION MATERIAL IN NON-AGRICULTURE UPLAND AREAS (I.E. OUTSIDE OF WETLANDS, STREAMS, AND AGRICULTURAL FIELDS), WHERE PRACTICAL. SUCH MATERIAL WILL BE USED AS ROAD FILL OR BACKFILL AROUND STRUCTURES. EROSION CONTROL PRACTICES WILL BE INSTALLED, AND EXPOSED SOILS STABILIZED IN ACCORDANCE WITH THE SWPPP.
- CONSTRUCTION EQUIPMENT SANITATION: THE INTRODUCTION OF NON-NATIVE INVASIVE PLANT SPECIES WILL BE CONTROLLED BY ASSURING THAT ALL CONSTRUCTION EQUIPMENT IS CLEAN UPON ARRIVAL ON-SITE, AND THAT EQUIPMENT UTILIZED IN AREAS WITH AN ABUNDANCE OF INVASIVE SPECIES WILL BE CLEANED PRIOR TO MOVING TO ANOTHER SITE. THE INTENT IS THAT EQUIPMENT SHOULD ARRIVE AT THE SITE CLEAN AND LEAVE THE SITE CLEAN. EQUIPMENT/CLOTHING CLEANING STATIONS WILL BE ESTABLISHED TO ENSURE THAT INVASIVE SPECIES SEEDS AND OTHER VIABLE PLANT PARTS CANNOT ESCAPE IN RUNOFF OR THROUGH OTHER MEANS.

SPECIFIC STREAM CROSSING RESTRICTIONS:

- EXCEPT WHERE CROSSED BY PERMITTED ACCESS ROADS OR THROUGH USE OF TEMPORARY MATTING, WETLANDS AND STREAMS ARE DESIGNATED "NO EQUIPMENT ACCESS"
- NO DISTURBANCE TO THE STREAM BED OR BANKS IS ALLOWED DURING THE INSTALLATION OF TEMPORARY OR PERMANENT WETLAND OR STREAM CROSSINGS.
- IF AN EXISTING CULVERT IS BLOCKED, CRUSHED, OR OTHERWISE DAMAGED BY CONSTRUCTION OR MAINTENANCE, COORDINATE WITH THE OWNER'S REPRESENTATIVE AND THE EM PRIOR TO COMPLETING ANY REPAIRS THAT COULD RESULT IN WETLAND OR STREAM IMPACTS.



Alison Leach
04/15/2026

PREPARED FOR:

Hoffman Falls Wind LLC

90 State Street
Albany, NY 12207

REVISIONS:

#	DATE	COMMENT	BY	CHK	APR
0	01/30/2026	IFC SET		NA	HC AL
1	04/15/2026	ORES COMMENTS		NA	HC AL

Hoffman Falls Wind Project

Madison County, New York

General Notes - 1

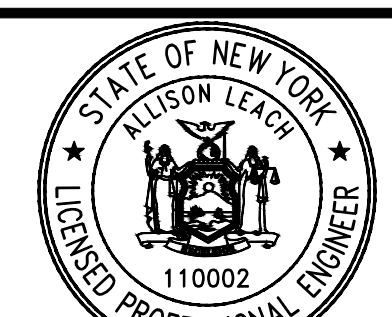


ISSUE FOR CONSTRUCTION

DATE: 04/15/2026

SHEET: C720 1

REV:



Alison Leach
 04/15/2026

PREPARED FOR:

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REVISIONS:

#	DATE	COMMENT	BY	CHK	APR
0	01/30/2026	IFC SET		NA	HC AL
1	04/15/2026	ORES COMMENTS		NA	HC AL

COMPLIANCE GENERAL NOTES

- THE CONTRACTOR SHALL CONSTRUCT THE FACILITY CONSISTENT WITH THE NEW YORK STATE DEPARTMENT OF AGRICULTURE AND MARKETS (AGM) GUIDELINES FOR AGRICULTURAL MITIGATION FOR WIND POWER PROJECTS, TO THE MAXIMUM EXTENT PRACTICABLE.
- REPRESENTATIVES FROM THE NYS OFFICE OF RENEWABLE ENERGY SITING, NYS DEPARTMENT OF PUBLIC SERVICE AND/OR THE NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION SHALL BE PERMITTED TO INSPECT THE WORK SITE (INCLUDING RELEVANT RECORDS) AT ANY TIME DEEMED NECESSARY, TO ENSURE THAT ALL ACTIVITIES ARE IN ACCORDANCE WITH THE TERMS AND CONDITIONS SPECIFIED IN THE ISSUED PERMITS AND CERTIFICATES.
- TREE AND VEGETATION CLEARING SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR FACILITY CONSTRUCTION. SURROUNDING TREES AND VEGETATION WILL NOT BE CUT DOWN ON ANY PROPERTY SOLELY TO REDUCE TURBULENCE OR INCREASE WIND FLOW TO THE FACILITY. TO REDUCE MORTALITY TO NESTING/ROOSTING BIRDS AND BATS, ALL TREE CLEARING ACTIVITIES (EXCEPT FOR HAZARD TREE REMOVAL) SHALL BE CONDUCTED BETWEEN NOVEMBER 1 AND APRIL 1 AND DOES NOT INCLUDE TREES LESS THAN OR EQUAL TO 3 INCHES IN DIAMETER AT BREST HEIGHT (DBH).
- ALL EQUIPMENT ACCESS, STORAGE OF EQUIPMENT AND MATERIALS, AND OTHER CONSTRUCTION ACTIVITIES WILL BE CONFINED TO THE LIMITS OF DISTURBANCE AS DEPICTED ON THE FINAL CONSTRUCTION DRAWINGS.
- WOOD CHIP DEPTH SHALL NOT BE GREATER THAN THREE (3) INCHES. WOOD CHIPS SHALL NOT BE STORED OR DISPOSED OF IN WETLANDS, WITHIN STREAM BANKS, DELINEATED FLOODWAYS, OR ACTIVE AGRICULTURAL FIELDS.
- AREAS DENOTED AS "PROPOSED BLADE SWING AREA" NEED TO BE FREE OF OBJECTS, WHICH INCLUDES BUT IS NOT LIMITED TO TREES AND SIGNS, ADDITIONAL AGGREGATE, GRUBBING, OR SOIL DISTURBANCE IS NOT NEEDED IN THESE AREAS.
- IN ACTIVE PASTURE AREAS THE CONTRACTOR SHALL INSTALL TEMPORARY FENCE AND PROVIDE TEMPORARY LIVESTOCK AND FARM EQUIPMENT CROSSINGS (OR TRENCH PLUGS) WHERE REQUESTED AND/OR NEEDED BY FARM OWNER/OPERATOR.
- THE CONTRACTOR SHALL REPAIR AND RESTORE ANY DRAIN TILE DAMAGED FROM SITE ACTIVITIES IN ACCORDANCE WITH THE DRAINAGE REMEDIATION PLAN SUBMITTED AS A PART OF THE ARTICLE VIII APPLICATION.
- THE EM/AM/SWPPP INSPECTOR WILL OVERSEE AND ENSURE THAT ALL CONSTRUCTION ACTIVITIES ARE COMPLIANT WITH AGRICULTURAL CONDITIONS AND REQUIREMENTS SET FORTH IN THE ARTICLE VIII SITING PERMIT, INCLUDING THE APPROVED AGRICULTURAL REMEDIATION PLAN AND AGRICULTURAL CO

THREATENED AND ENDANGERED SPECIES

- EXCLUDING BALD EAGLES (HALIAEetus LEUCOCEPHALUS), IF AT ANY TIME AN ACTIVE NEST OF ANY FEDERALLY OR STATE LISTED THREATENED OR ENDANGERED (TE) BIRD SPECIES IS DISCOVERED WITHIN AN ACTIVE CLEARING SITE, THE REGIONAL NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (DEC) NATURAL RESOURCE SUPERVISOR (607-622-8273) WILL BE NOTIFIED WITHIN FORTY-EIGHT (48) HOURS OF DISCOVERY, AND THE NEST SITE WILL BE MARKED. AN AREA FIVE HUNDRED (500) FEET IN RADIUS AROUND THE NEST WILL BE AVOIDED UNTIL NOTICE TO CONTINUE CONSTRUCTION AT THAT SITE IS GRANTED BY THE REGIONAL ORES NATURAL RESOURCE SUPERVISOR.
- IF AT ANY TIME A BALD EAGLE NEST OR COMMUNAL ROOST (DEFINED AS A CLOSE CLUSTER OF TREES WITH 4 OR MORE EAGLES OBSERVED PERCHED) IS LOCATED, THE REGIONAL ORES NATURAL RESOURCE SUPERVISOR WILL BE NOTIFIED WITHIN FORTY-EIGHT (48) HOURS OF DISCOVERY, AND PRIOR TO ANY DISTURBANCE OF THE NEST OR IMMEDIATE AREA, AN AREA OF AT LEAST 0.25 MILES (1,320 FEET) IF THERE IS NOT VISUAL BUFFER OR IF THERE IS A VISUAL BUFFER AN AREA OF AT LEAST SIX HUNDRED SIXTY (660) FEET IN RADIUS FROM THE NEST TREE OR COMMUNAL ROOST WILL BE POSTED AND AVOIDED UNTIL NOTICE TO CONTINUE CONSTRUCTION WITHIN THE BUFFER IS GRANTED BY THE REGIONAL ORES NATURAL RESOURCE SUPERVISOR. THE NEST TREE OR COMMUNAL ROOST WILL NOT BE APPROACHED UNDER ANY CIRCUMSTANCES UNLESS AUTHORIZED BY THE REGIONAL ORES NATURAL RESOURCE SUPERVISOR.
- REPORT ALL OCCURRENCES OF TE AVIAN SPECIES TO THE ENVIRONMENTAL MONITOR. IF A TE AVIAN SPECIES IS OBSERVED DEMONSTRATING BREEDING BEHAVIOR IT SHOULD BE REPORTED TO THE NATURAL RESOURCES SUPERVISOR WITHIN TWENTY-FOUR (24) HOURS.
- IF ANY DEAD, INJURED OR DAMAGED STATE-LISTED TE SPECIES, OR THEIR PARTS, EGGS, OR NESTS ARE DISCOVERED WITHIN THE PROJECT AREA THE REGIONAL DEC REGION 7 NATURAL RESOURCE SUPERVISOR AND UNITED STATES FISH AND WILDLIFE SERVICE (USFWS) (607-753-9334) MUST BE NOTIFIED WITHIN TWENTY-FOUR (24) HOURS TO ARRANGE FOR RECOVERY AND TRANSFER OF THE SPECIMENS.
- ALL SNAG AND CAVITY TREES DEFINED UNDER ORES PROGRAM POLICY ONRDLF-2 RETENTION ON STATE FORESTS WILL BE RETAINED UNLESS THEIR REMOVAL IS NECESSARY FOR PROTECTION OF HUMAN LIFE AND PROPERTY. SNAG OR CAVITY TREES MAY BE REMOVED AFTER BEING CLEARED BY THE ENVIRONMENTAL MONITOR WHO SHALL CONDUCT AN EMERGENCY COUNT FOR BATS. UNOCCUPIED SNAGS AND CAVITY TREES WILL BE REMOVED WITHIN TWENTY-FOUR (24) HOURS OF A NEGATIVE EMERGENCY COUNTY.
- LEAVE ALL KNOWN AND DOCUMENTED MATERNITY ROOST TREES OF LISTED BAT SPECIES AND ANY TREES WITHIN A 150-FOOT RADIUS OF DOCUMENTED SUMMER OCCURRENCE.
- IF ANY BAT IS OBSERVED FLYING FROM A TREE OR A TREE THAT HAS BEEN CUT, TREE CLEARING ACTIVITIES WITHIN 150-FEET OF THE TREE SHALL BE SUSPENDED AND THE ORES WILDLIFE STAFF SHALL BE NOTIFIED WITHIN TWENTY-FOUR (24) HOURS. A STOP WORK ORDER SHALL IMMEDIATELY BE ISSUED AND THE ORES STAFF CONSULTED BEFORE RESUMPTION OF WORK.
- NO GROUND DISTURBANCE OR CONSTRUCTION RELATED ACTIVITIES WITHIN OCCUPIED WINTERING AND BREEDING HABITAT IDENTIFIED IN THE APPROVED NET CONSERVATION BENEFIT PLAN SHALL BE CONDUCTED DURING THE RESTRICTED PERIODS IDENTIFIED IN 19 NYCRR 900-6.4(a). IF ACTIVITIES MUST OCCUR WITHIN THIS TIME WINDOW, THE OCCUPIED HABITAT AREAS PROPOSED FOR ACTIVE CONSTRUCTION SHALL BE ASSESSED WEEKLY BY THE ON-SITE ENVIRONMENTAL MONITOR OR BIOLOGIST.

WETLANDS AND STREAMS, VEGETATION AND INVASIVE SPECIES

- ALL NECESSARY PRECAUTIONS SHALL BE TAKEN TO PRECLUDE CONTAMINATION OF ANY WETLAND OR WATERWAY BY SUSPENDED SOLIDS, SEDIMENTS, FUELS, SOLVENTS, LUBRICANTS, EPOXY COATINGS, PAINTS, CONCRETE, LEACHATE OR ANY OTHER ENVIRONMENTALLY DELETERIOUS MATERIALS ASSOCIATED WITH THE PROJECT.
- ALL CONSTRUCTION ACTIVITY, INCLUDING CLEARING OF VEGETATION, IS TO TAKE PLACE WITHIN THE PROJECT SITE AS DEPICTED ON PROJECT PLANS. NO CONSTRUCTION ACTIVITY IS TO TAKE PLACE WITHIN AREAS TO BE LEFT IN A NATURAL CONDITION. STAKING AND/OR FLAGGING CONSTRUCTION LIMITS SHALL OCCUR PRIOR TO ANY SITE DISTURBANCE.
- ALL EQUIPMENT AND MACHINERY SHALL BE STORED AND SAFELY CONTAINED MORE THAN 100 FEET LANDWARD OF THE REGULATED WETLAND OR WATER BODY AT THE END OF EACH WORK DAY. THIS WILL SERVE TO AVOID THE INADVERTENT LEAKAGE OF DELETERIOUS SUBSTANCES INTO THE REGULATED AREA.
- WETLANDS, STREAMS, AND BUFFER BOUNDARIES SHALL BE FLAGGED PRIOR TO CONSTRUCTION.
- ALL MOBILE EQUIPMENT, EXCLUDING DEWATERING PUMPS, MUST BE FUELED IN A LOCATION AT LEAST 100 FEET FROM THE TOP OF STREAM BANK, WETLAND, OR OTHER WATER BODY. DEWATERING PUMPS OPERATED CLOSER THAN 100 FEET FROM THE STREAM BANK, WETLAND, OR WATER BODY, MUST BE ON AN IMPERVIOUS SURFACE AND ABSORBENTS CAPABLE OF CONTAINING ANY LEAKAGE OF PETROLEUM PRODUCTS.
- SPILLAGE OF FUELS, WASTE OILS, OTHER PETROLEUM PRODUCTS OR HAZARDOUS MATERIALS SHALL BE REPORTED TO THE DEC' SPILL HOTLINE (1-800-457-7362) WITHIN TWO HOURS ACCORDING TO THE ORES SPILL REPORTING AND INITIAL NOTIFICATION REQUIREMENTS TECHNICAL FIELD GUIDANCE.
- ALL EQUIPMENT TO CONSTRUCT THE TEMPORARY OR PERMANENT STREAM CROSSINGS, MUST BE INSPECTED DAILY FOR LEAKS OF PETROLEUM, OTHER FLUIDS, OR CONTAMINANTS AND MAY ONLY ENTER A STREAM CHANNEL IF FOUND TO BE FREE OF ANY LEAKAGE. A SPILL KIT MUST BE ON SITE AND ANY LEAKS MUST BE STOPPED AND CLEANED UP IMMEDIATELY.
- VISIBLY TURBID DISCHARGES FROM LAND CLEARING, SHALL NOT ENTER ANY SURFACE WATER BODY. ALL NECESSARY MEASURES SHALL BE IMPLEMENTED TO PREVENT ANY VISIBLE INCREASE IN TURBIDITY OR SEDIMENTATION DOWNSTREAM OF THE WORK SITE, INCLUDING BUT NOT LIMITED TO THE USE OF:
 - APPROPRIATELY MAINTAINED UPLAND SETTLING BASINS;
 - CRUSHED STONE, SAND, OR SILT SCREENING (MAXIMUM OPENING SIZE OF U.S. SIEVE NUMBER 20) TO FILTER TURBID WATERS;
 - SILT-BAGS OR SIMILAR PRE-CONSTRUCTED STRUCTURE DESIGNED TO REMOVE SILT AND SEDIMENT PARTICLES BEFORE THEY ARE DISCHARGED; OR
 - GRASSY UPLAND AREAS AT A SUFFICIENT DISTANCE FROM THE RECEIVING WATER BODY TO PREVENT A VISUALLY DISCERNIBLE TURBID DISCHARGE TO THE RECEIVING WATER.
- AT LOCATIONS WHERE TEMPORARY WETLAND CROSSINGS ARE NECESSARY IMPACTS WILL BE AVOIDED THROUGH THE USE OF TIMBER MATS.
- CLEARED VEGETATION AND SLASH FROM WETLANDS AND ADJACENT AREAS WILL NOT BE BURNED OR BURIED WITHIN THE WETLAND OR ADJACENT AREA. THE VEGETATION MUST BE DISPOSED OF OUTSIDE OF THE WETLAND AND ADJACENT AREA, BUT SLASH THAT IS CUT MAY BE LEFT IN PLACE (PROP AND LOG OR PILED IN DRY OR SEASONALLY SATURATED PORTIONS OF FRESHWATER WETLANDS AND 100-FOOT ADJACENT AREAS TO CREATE WILDLIFE BRUSH PILES).
- TO CONTROL THE SPREAD OF INVASIVE INSECTS, THE CONTRACTOR WILL:
 - ENSURE THAT ALL CONSTRUCTION EQUIPMENT (INCLUDING TIMBER MATS) IS CLEAN UPON ARRIVAL ON SITE, AND THAT EQUIPMENT UTILIZED IN AREAS WITH AN ABUNDANCE OF INVASIVE SPECIES ARE CLEANED PRIOR TO MOVING TO ANOTHER SITE.
 - COORDINATE FOR SALE AND USE OF THE MERCHANTABLE TIMBER; AND PROVIDE UNMERCHANTABLE TIMBER AS FIREWOOD TO ADJACENT LANDOWNERS OR THE GENERAL PUBLIC PURSUANT TO THE ORES' FIREWOOD RESTRICTIONS TO PROTECT FORESTS FROM INVASIVE SPECIES FOUND IN 6 NYCRR PART 192.5;
 - MAKE SURE CREWS ARE TRAINED TO IDENTIFY THE ASIAN LONGHORNED BEETLE AND THE EMERALD ASH BORER AND ANY OTHER INSECTS THAT THE ORES IDENTIFIES AS A POTENTIAL PROBLEM. IF THESE INSECTS ARE ROUND, THEY MUST BE REPORTED TO THE

- ORES REGIONAL FORESTER, AND
 - COMPLY WITH SITE-SPECIFIC PLANS FOR MANAGEMENT OF JAPANESE KNOTWEED AND SPECIES AS DESCRIBED IN THE INVASIVE SPECIES CONTROL PLAN (ISCP).
- IF A ONE-TIME CROSSING OF A STREAM OCCURS AS PART OF AN INSTALLATION OF A TEMPORARY BRIDGE AND A TIRE MAT IS USED, THE FOLLOWING RESTRICTIONS APPLY:
 - THE MAT MUST FOLLOW THE CONTOUR OF THE STREAMBED AND ALLOW FOR A LOW FLOW CHANNEL AND NOT CHANGE THE FLOW PATH OF THE STREAM.
 - THE MAT SHALL BE REMOVED IMMEDIATELY AFTER THE CROSSING OF THE STREAM OCCURS.
- IF ANY TREES AND SHRUBS GROWING WITHIN 50 FEET OF STREAMS NEED TO BE CUT IN THE PROCESS OF CONSTRUCTING OVERHEAD POWER LINE CROSSINGS, THEY SHALL BE CUT OFF WITH AT LEAST TWO FEET OF THE STUMP REMAINING. STUMPS AND ROOT SYSTEMS SHALL NOT BE DAMAGED TO FACILITATE STUMP SPROUTING. ALL TREES AND SHRUBS CUT WITHIN THE 50 FOOT BUFFER AREA SHALL BE LEFT ON THE GROUND.
- CLEARING OF NATURAL VEGETATION ALONG STREAMS AND WITHIN WETLANDS SHALL BE LIMITED TO THAT MATERIAL WHICH POSES A HAZARD OR HINDRANCE TO THE CONSTRUCTION ACTIVITY. SNAGS WHICH PROVIDE SHELTER IN STREAMS FOR FISH SHALL NOT BE DISTURBED UNLESS THEY CAUSE SERIOUS OBSTRUCTIONS, SCOURING OR EROSION. TREES SHALL NOT BE FELLED INTO ANY STREAM OR ONTO THE IMMEDIATE STREAM BANK.
- RESTRICTED ACTIVITIES PERTAIN TO A BUFFER ZONE OF 300 FEET ON EITHER SIDE OF THE BOUNDARIES OF WATER-RELATED RESOURCES (STREAMS, WETLANDS, SPRINGS, WELLS, DRAINAGE, ETC.) AND INCLUDE THE FOLLOWING RESTRICTIONS:
 - NO DEPOSITION OF SLASH WITHIN IDENTIFIABLE STREAM CHANNELS OR WOOD CHIPS WITHIN 25 FEET OF WETLANDS;
 - NO UNNECESSARY REMOVAL OF WOODY VEGETATION OR DEGRADATION OF STREAM BANKS;
 - NO EQUIPMENT WASHING OR REFUELING EXCEPT AS SPECIFIED IN THE FINAL CONSTRUCTION DRAWINGS;
 - AND NO STORAGE MIXING OR HANDLING OF ANY PETROLEUM OR CHEMICAL MATERIALS IN OPEN CONTAINERS.
 - REFUELING OF EQUIPMENT MUST UTILIZE SECONDARY CONTAINMENT MEASURES.
 - REFUELING OR CHEMICAL STORAGE CAN NOT OCCUR WITHIN 300 FEET.

WOOD/SLASH DISPOSAL METHODS

NOTE 1: CONTRACTOR IS TO PROPERLY REMOVE AND DISPOSE OF THE TIMBER, COORDINATE WITH THE DEVELOPER.
 NOTE 2: TREES WILL BE FELLED AND CUT TO APPROPRIATE LENGTHS WITHIN THE LIMITS OF DISTURBANCE IN PROXIMITY TO THE PROPOSED LOG STORAGE AREA. FELLED TIMBER WILL BE STACKED IN PLACE UNTIL SUFFICIENT SPACE HAS BEEN CLEARED TO ESTABLISH IDENTIFIED LOG STORAGE AREAS. APPROXIMATE LOG STORAGE AREAS WILL BE FINALIZED BASED ON FIELD CONDITIONS.

- TYPE 1 - UPLAND TREE REMOVAL
- CONSISTS OF REMOVING ALL WOODY DEBRIS AND OR LOGS FROM THE PROPERTY. BRUSH/SLASH SHOULD BE CHIPPED AND SPREAD WITHIN THE LIMITS OF DISTURBANCE. ALTERNATIVELY, LOGS SHALL BE PLACED IN PILES IN DESIGNATED STORAGE AREAS AS SHOWN, OR AT THE EDGE OF LIMITS OF DISTURBANCE.
- TYPE 2 - WETLAND/STREAM REMOVAL
- CONSISTS OF DROPPING LOPPING TREES SO THAT THE SLASH LIES AS CLOSE TO THE GROUND AS PRACTICABLE, WITH BRANCHES AND LIMB WOOD NOT EXCEEDING AN AVERAGE DEPTH OF TWENTY-FOUR (24) INCHES, INCLUDING WETLAND AND STREAMS AREAS, WOOD DISPOSAL WILL ADHERE TO THE FOLLOWING ADDITIONAL CONDITIONS INCLUDED:
 - ONLY A SELECTIVE PORTION OF VEGETATION, AS NEEDED TO PREVENT THE BLOCKING OF FLOW AND THE TRAPPING OF DEBRIS, IS TO BE REMOVED FROM THE WATER COURSE AND FLOODWAY. ALL CUTTINGS (REGARDLESS OF LOCATIONS) ARE TO BE CUT AND BUCKED TO LIE NEAR GROUND LEVEL. HOWEVER WHERE TREE ROOT BASES ARE ATTACHED TO THE STREAM BANK, THEY WILL BE LEFT IN PLACES. THE REMAINDER OF THE TREE WILL BE CUT FROM THE BASE PRIOR TO REMOVAL.

DANGER TREES

- A DANGER TREE IS ANY TREE ROOTED OUTSIDE OF A ROW THAT DUE TO ITS PROXIMITY AND PHYSICAL CONDITION (I.E. MORALITY, LEAN, DECAY, CAVITIES, CRACKS, WEAK BRANCHING, ROOT LIFTING, OR OTHER INSTABILITY), POSES A PARTICULAR DANGER TO A CONDUCTOR OR OTHER KEY COMPONENT OF THE FACILITY.
- ALL DANGER TREES WILL BE REMOVED AT THE TIME OF THE INITIAL CLEARING AND AS PART OF THE NORMAL CLEARING ACTIVITIES. THE SLASH FROM THESE DANGER TREES WILL BE DISPOSED OF IN ACCORDANCE WITH THE SLASH DISPOSAL METHOD DESIGNATED FOR THE WORK AREA ADJOINING THE AREA FROM WHICH THE DANGER TREES HAVE BEEN REMOVED.

PROCEDURE FOR OFF-SITE REMOVAL OF STUMPS, CHIPS, AND SLASH

- WHERE OFF-SITE REMOVAL OF STUMPS, CHIPS, OR SLASH IS NECESSARY, ALL MATERIALS WILL BECOME THE PROPERTY OF THE CONTRACTOR. IN ALL CASES, ALL MATERIAL THAT IS REMOVED FROM THE SITE WILL BE DISPOSED ON IN AN ENVIRONMENTALLY-ACCEPTABLE MANNER AND IN COMPLIANCE WITH ALL APPLICABLE RULES AND REGULATIONS INCLUDING 6 NYCRR PART 192 AND ALL OTHER INVASIVE SPECIES REGULATIONS.
- THE CONTRACTOR WILL PROVIDE HOFFMAN FALLS WIND LLC WITH A DESCRIPTION AND THE LOCATION OF ALL PROPOSED OFF-SITE DISPOSAL SITES PRIOR TO THE START OF THE PROJECT. THE ENVIRONMENTAL MONITOR (EM) WILL INSPECT ALL PROPOSED OFF-SITE DISPOSAL SITES TO ENSURE THAT THEY ARE SUITABLE AND WILL NOTIFY ORES.

ENVIRONMENTALLY SENSITIVE AREA PROTECTION

- A PRECONSTRUCTION MEETING SHALL BE HELD WITH THE CONTRACTOR TO DISCUSS THE AREAS OF SENSITIVITY, AVOIDANCE MEASURES AND THE EXTENT OF THE PROTECTION MEASURES.
- NO GRADING OR SIGNIFICANT GROUND DISTURBANCE IS ALLOWED WITHIN ENVIRONMENTALLY SENSITIVE AREAS. SIGNIFICANT GROUND DISTURBANCE IS DEFINED AS EXCAVATION OR GRADING MORE THAN 6 INCHES DEEP, GRUBBING OR STUMP REMOVAL, AND TRENCHING WIDER THAN 3 FEET.
- "ENVIRONMENTAL SENSITIVE AREAS" ARE TO BE MARKED IN THE FIELD BY CONSTRUCTION FENCING WITH SIGNS THAT RESTRICT ACCESS.
- IN THE EVENT THAT ARCHAEOLOGICAL MATERIALS, HUMAN REMAINS, OR EVIDENCE OF HUMAN BURIALS ARE ENCOUNTERED DURING CONSTRUCTION, ALL WORK IN THE VICINITY OF THE FIND WILL BE IMMEDIATELY HALTED AND THE UNANTICIPATED DISCOVERY PLAN WILL BE IMPLEMENTED.

TRENCHLESS CROSSING NOTES

- THE CONTRACTOR SHALL ADHERE TO APPROVED CONTINGENCY PLAN/INADVERTENT RELEASE PLAN PRIOR TO COMMENCING ANY TRENCHLESS DRILLING OPERATIONS. IN THE EVENT OF AN INADVERTENT DRILLING MUD RETURN THE CONTRACTOR WILL BE RESPONSIBLE FOR REPORTING THE EVENT IN ACCORDANCE WITH THE VIII SITING PERMIT.
- TRENCHLESS CROSSINGS ARE TO BE COMPLETED BY HORIZONTAL DIRECTIONAL DRILLING (HDD) OR BORE
- CONTRACTOR SHALL LIMIT TREE CLEARING OVER HDDS AND BORES. NO TREE CLEARING OUTSIDE THE DISTURBANCE LIMITS IS ALLOWED UNLESS EXPLICITLY AUTHORIZED.
- THE CONTRACTOR SHALL COMPLETE THE HDD IN GENERAL ACCORDANCE WITH THE CONCEPTUAL DRILL PATH SHOWN ON THE DRAWINGS. THE MINIMUM CLEARANCES FROM UTILITIES, STREAMS, WETLANDS, AND PAVED AREAS ARE SHOWN ON THE PLANS.
- CONCEPTUAL ALIGNMENT SHOWN IS FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN EVALUATION BASED UPON AVAILABLE TOOLS, EQUIPMENT, AND MATERIALS PROPOSED FOR USE IN BID PRICE AND GIVEN THE AVAILABLE SUBSURFACE CONDITIONS

TRAFFIC CONTROL:

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING TRAFFIC CONTROL DEVICES SUCH AS BARRICADES, WARNING SIGNS, DIRECTIONAL SIGNS, FLAGGERS AND LIGHTS TO CONTROL THE MOVEMENT OF TRAFFIC WHERE NECESSARY. PLACEMENT OF THESE DEVICES SHALL BE APPROVED BY THE CITY/COUNTY AND ENGINEER PRIOR TO PLACEMENT. TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE LATEST VERSION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

TEMPORARY SEEDING NOTES:

- TEMPORARY SEEDINGS MAY BE NECESSARY TO PROTECT AN AREA, OR SECTION, WHERE FINAL GRADING IS COMPLETE, WHEN PREPARING FOR WINTER WORK SHUTDOWN, OR TO PROVIDE COVER WHEN PERMANENT SEEDINGS ARE LIKELY TO FAIL DUE TO MID-SUMMER HEAT AND DROUGHT. THE INTENT IS TO PROVIDE TEMPORARY PROTECTIVE COVER DURING TEMPORARY SHUTDOWN OF CONSTRUCTION AND/OR WHILE WAITING FOR OPTIMAL PLANTING TIME.
- WATER MANAGEMENT PRACTICES MUST BE INSTALLED AS APPROPRIATE FOR SITE CONDITIONS. THE AREA MUST BE ROUGH GRADED AND SLOPES PHYSICALLY STABLE. LARGE DEBRIS AND ROCKS ARE USUALLY REMOVED. SEEDBED MUST BE SEEDDED WITHIN 24 HOURS OF DISTURBANCE OR SCARIFICATION OF THE SOIL SURFACE WILL BE NECESSARY PRIOR TO SEEDING.
- FERTILIZER OR LIME ARE NOT TYPICALLY USED FOR TEMPORARY SEEDINGS.
- ANY SEEDING METHOD MAY BE USED THAT WILL PROVIDE UNIFORM APPLICATION OF SEED OF THE AREA AND RESULT IN RELATIVELY GOOD SOIL TO SEED CONTACT.
- MULCH THE AREA WITH STRAW AT 2 TONS/ACRE (APPROXIMATELY 90 POUNDS/1000 SQUARE FEET OR 2 BALES). QUALITY OF STRAW MULCH ALLOWABLE WILL BE DETERMINED BASED ON LONG TERM USE AND VISUAL CONCERNS. MULCH ANCHORING WILL BE REQUIRED WHERE WIND OR AREAS OF CONCENTRATED WATER ARE OF CONCERN. WOOD FIBER HYDROMULCH OR OTHER SPRAYABLE PRODUCTS APPROVED FOR EROSION CONTROL (BIODEGRADABLE WEB OR MESH) MAY BE USED IF APPLIED ACCORDING TO MANUFACTURER'S SPECIFICATION.

PERMANENT SEEDING NOTES:

- THIS PRACTICE APPLIES TO ALL DISTURBED AREAS VOID OF, OR HAVING INSUFFICIENT, COVER TO PREVENT EROSION AND SEDIMENT TRANSPORT. SEE ADDITIONAL STANDARDS FOR SPECIAL SITUATIONS SUCH AS SAND DUNES AND SAND AND GRAVEL PITS.
- ALL WATER CONTROL MEASURES WILL BE INSTALLED AS NEEDED PRIOR TO FINAL GRADING AND SEEDBED PREPARATION. ANY SEVERELY COMPACTED SECTIONS WILL REQUIRE CHISELING OR DISKING TO PROVIDE AN ADEQUATE ROOTING ZONE, TO A MINIMUM DEPTH OF 12 INCHES. THE SEEDBED MUST BE PREPARED TO ALLOW GOOD SOIL TO SEED CONTACT, WITH THE SOIL NOT TOO SOFT AND NOT TOO COMPACT. ADEQUATE SOIL MOISTURE MUST BE PRESENT TO ACCOMPLISH THIS. IF SURFACE IS POWDER DRY OR STICKY WET, POSTPONE OPERATIONS UNTIL MOISTURE CHANGES TO A FAVORABLE CONDITION. IF SEEDING IS ACCOMPLISHED WITHIN 24 HOURS OF FINAL GRADING, ADDITIONAL SCARIFICATION IS GENERALLY NOT NEEDED, ESPECIALLY ON DITCH OR STREAM BANKS. REMOVE ALL STONES AND OTHER DEBRIS FROM THE SURFACE THAT ARE GREATER THAN 4 INCHES, OR THAT WILL INTERFERE WITH FUTURE MOWING OR MAINTENANCE.
- SOIL AMENDMENTS SHOULD BE INCORPORATED INTO THE UPPER 2 INCHES OF SOIL WHEN FEASIBLE. THE SOIL SHOULD BE TESTED TO DETERMINE THE AMOUNTS OF AMENDMENTS NEEDED. APPLY GROUND AGRICULTURAL LIMESTONE TO ATTAIN A pH OF 6.0 IN THE UPPER 2 INCHES OF SOIL. IF SOIL MUST BE FERTILIZED BEFORE RESULTS OF A SOIL TEST CAN BE OBTAINED TO DETERMINE FERTILIZER NEEDS, A DESIGN FERTILIZER MIX AND APPLICATION RATES WILL BE SPECIFIED BASED ON SOIL TEST RESULTS. A LOW PHOSPHORUS FERTILIZER SHOULD BE USED DUE TO THE RECEIVING WATERS BEING IMPAIRED FOR TOTAL PHOSPHORUS. IF MANURE IS USED, APPLY A QUANTITY TO MEET THE NUTRIENTS OF THE ABOVE FERTILIZER. THIS REQUIRES AN APPROPRIATE MANURE ANALYSIS PRIOR TO APPLYING TO THE SITE. DO NOT USE MANURE ON SITES TO BE PLANTED WITH BIRDSFOOT TREFLOIL OR IN THE PATH OF CONCENTRATED WATER FLOW.
- COVERAGE OF UNIFORM PERENNIAL VEGETATION MUST BE AT LEAST 80% TO ACHIEVE FINAL STABILIZATION.
- PURE LIVE SEED, OR (PLS) REFERS TO THE AMOUNT OF LIVE SEED IN A LOT OF BULK SEED. INFORMATION ON THE SEED BAG LABEL INCLUDES THE TYPE OF SEED, SUPPLIER, TEST DATE, SOURCE OF SEED, PURITY, AND GERMINATION. PURITY IS THE PERCENTAGE OF PURE SEED. GERMINATION IS THE PERCENTAGE OF PURE SEED THAT WILL PRODUCE NORMAL PLANTS WHEN PLANTED UNDER FAVORABLE CONDITIONS. TO COMPUTE PURE LIVE SEED MULTIPLY THE "GERMINATION PERCENT" TIMES THE "PURITY" AND DIVIDE THAT BY 100 TO GET PURE LIVE SEED. %PLS = (%GERMINATION X %PURITY)/100
- TIME OF SEEDING: THE OPTIMUM TIMING FOR THE GENERAL SEED MIXTURE IS EARLY SPRING. PERMANENT SEEDINGS MAY BE DONE AT ANY TIME OF THE YEAR IF PROPERLY MULCHED AND ADEQUATE MOISTURE IS PROVIDED. PORTIONS OF THE SEEDING MAY FAIL DUE TO DROUGHT AND HEAT. THESE AREAS MAY NEED RESEEDING IN LATE SUMMER/FALL OR THE FOLLOWING SPRING.
- METHOD OF SEEDING: BROADCASTING, DRILLING, CULTIPACK TYPE SEEDING, OR HYDROSEEDING ARE ACCEPTABLE METHODS. PROPER SOIL TO SEED CONTACT IS KEY TO SUCCESSFUL SEEDINGS.
- MULCHING: MULCHING IS ESSENTIAL TO OBTAIN A UNIFORM STAND OF SEEDED PLANTS. OPTIMUM BENEFITS OF MULCHING NEW SEEDINGS ARE OBTAINED WITH THE USE OF SMALL GRAIN STRAW APPLIED AT A RATE OF 2 TONS PER ACRE, AND ANCHORED WITH A NETTING, TACKIFIER, OR CRIMPING METHOD.
- IRRIGATION: WATERING MAY BE ESSENTIAL TO ESTABLISH A NEW SEEDING WHEN A DROUGHT CONDITION OCCURS SHORTLY AFTER A NEW SEEDING EMERGES. IRRIGATION IS A SPECIALIZED PRACTICE AND CARE MUST BE TAKEN NOT TO EXCEED THE APPLICATION RATE FOR THE SOIL OR SUBSOIL. WHEN DISCONNECTING IRRIGATION PIPE, BE SURE PIPES ARE DRAINED IN A SAFE MANNER, NOT CREATING AN EROSION CONCERN.
- SEED MIXES ARE SUBJECT TO COMMERCIAL AVAILABILITY AND A COMMERCIAL EQUIVALENT MAY BE PROPOSED IF APPROVED BY OWNER AND ENGINEER. THE NEW YORK STANDARDS AND SPECIFICATIONS, PAGES 4.42-4.47 HAVE ALTERNATIVE SEED MIXES.

Temporary and Permanent Seed Mix - Mix #1		
Seed	Variety	Rate in lbs/acre (PLS)
Creeping red fescue	Ensylva, Penlawn, Boreal	10
Perennial ryegrass	Pennfine, Linn	10
*This mix is used extensively for shaded areas.		

Temporary and Permanent Seed Mix - Mix #6		
Seed	Variety	Rate in lbs/acre (PLS)
Creeping red fescue	Ensylva, Penlawn, Boreal	20
Perennial ryegrass	Pennfine, Linn	5
Chewings fescue	Common	20
Red clover	Common	10
*General purpose erosion control mix. Not to be used for a turf planning or playgrounds		

Hoffman Falls Wind Project

Madison County, New York

General Notes - 2

ISSUE FOR CONSTRUCTION

DATE: 04/15/2026
 SHEET: C721

REV: 1