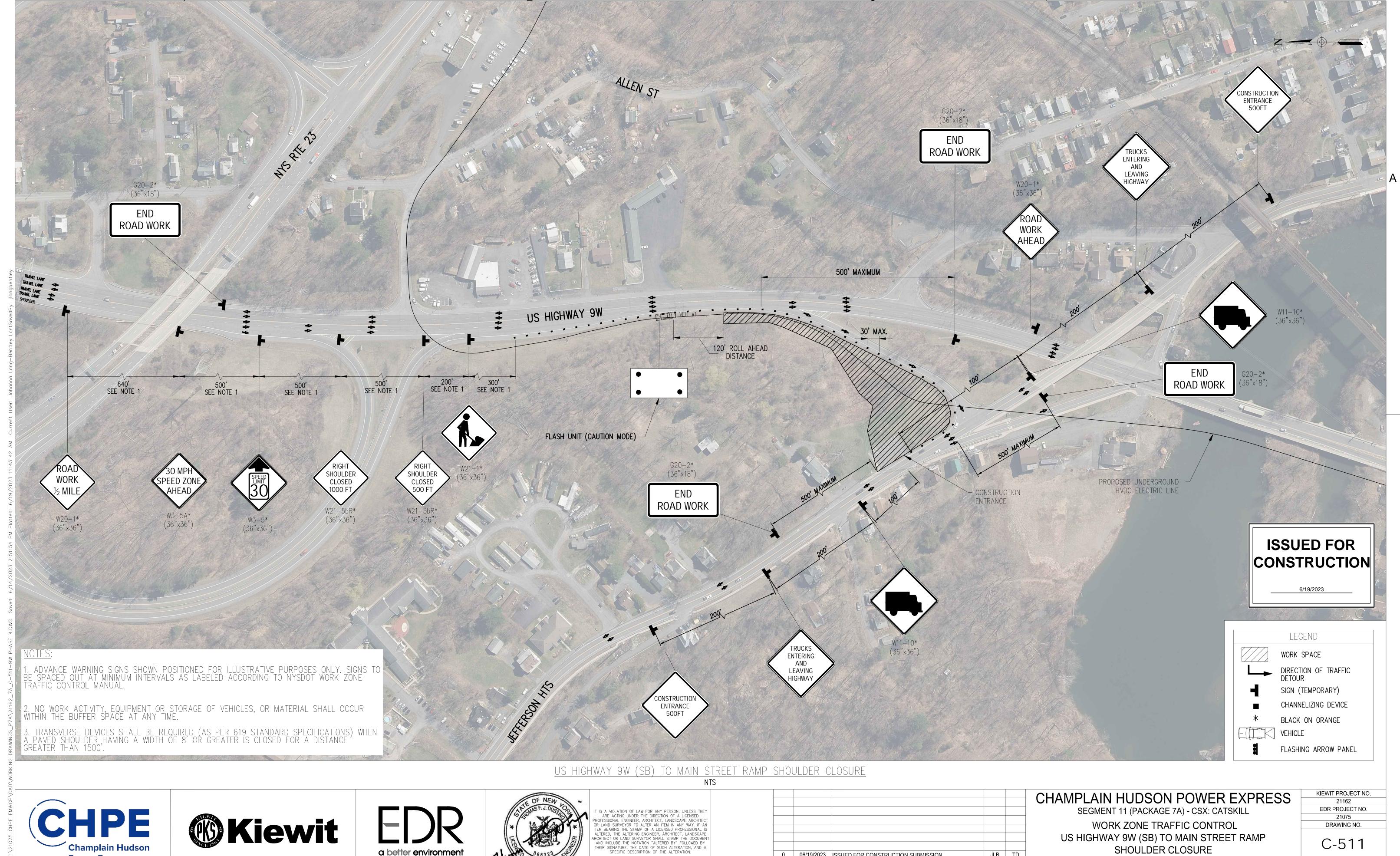


**B**510



a better environment

SHOULDER CLOSURE

AS SHOWN DATE

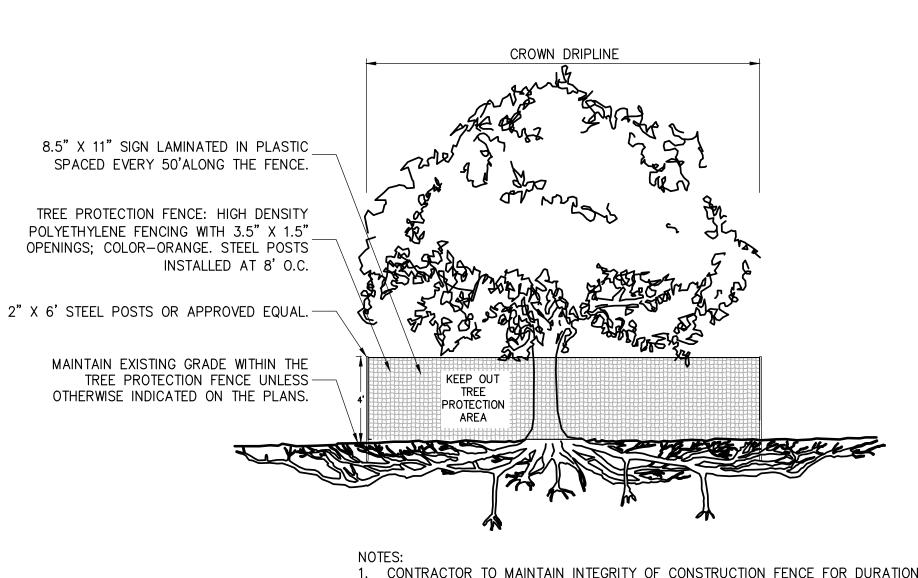
DB APP DRAWN BY: SH DESIGNED BY: SH APPROVED BY: TD SCALE REV. NO.

JLB TD

06/19/2023 ISSUED FOR CONSTRUCTION SUBMISSION

SUBMITTAL / REVISION DESCRIPTION

**Power Express** 

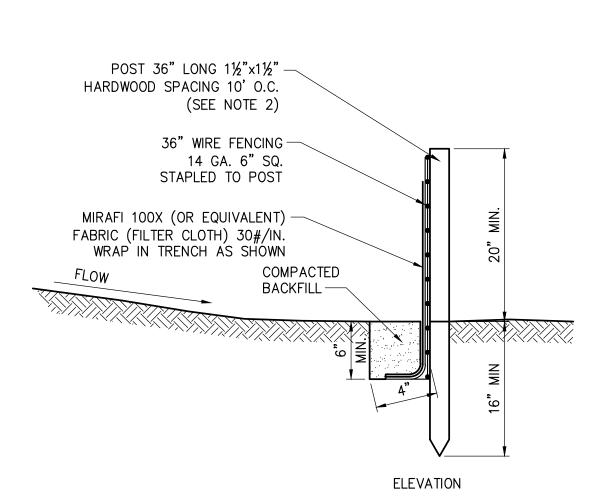


1. CONTRACTOR TO MAINTAIN INTEGRITY OF CONSTRUCTION FENCE FOR DURATION OF PROJECT. 2. NO PRUNING SHALL BE PERFORMED EXCEPT BY APPROVED ARBORIST.

3. NO EQUIPMENT SHALL OPERATE INSIDE THE PROTECTIVE FENCING INCLUDING DURING FENCE INSTALLATION AND REMOVAL.

4. SEE EROSION CONTROL PLANS FOR LOCATIONS OF TREE PROTECTION AREAS.

TREE PROTECTION



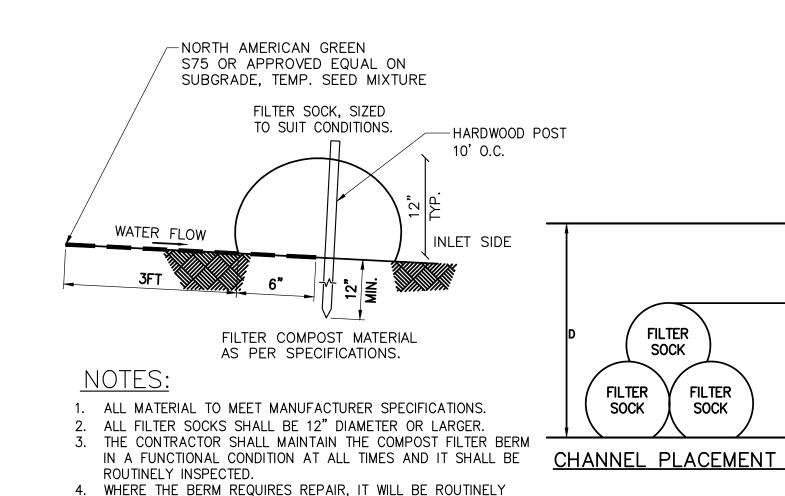
SILT FENCE

SCALE: N.T.S.

- 1. TIE FABRIC TO WIRE FENCE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
- 2. IF EXTRA STRENGTH FABRIC (GREATER THAN 50#/INCH) IS USED, WIRE CAN BE DELETED IF POST SPACING IS REDUCED TO 6' O.C.
- UP THE SLOPE 2'.

3. AT THE ENDS OF THE FENCING THE FIRST 20' SHALL BE TURNED

- POSTS SHOULD BE INCLINED TOWARD THE DIRECTION FLOW CAME FROM.
- 5. OVERLAP FABRIC A MINIMUM OF 6" AND FOLDED AT JOINTS. ATTACH FILTER FABRIC TO STAKES ALLOWING EXTENSION INTO TRENCH AS SHOWN; SECURE TO STAKES AS NOTED.
- THE MAXIMUM AREA OF RUNOFF PER 100LF. OF FENCE SHALL NOT EXCEED 0.25 ACRES.
- MAINTENANCE SHALL BE PERFORMED AS NECESSARY. THE FENCING SHALL BE CHECKED AFTER EVERY STORM TO ENSURE THEIR PROPER FUNCTIONING.
- WHEN FENCE IS NO LONGER NEEDED, THE ACCUMULATED SILT, THE POSTS AND FABRIC SHALL BE REMOVED AND TRENCH BACK FILLED WITH TOPSOIL AND SEEDED.
- 9. FENCING SHOULD BE PLACED AS SHOWN ON THE DRAWING OR IF NOT SHOWN, 10' BEYOND THE TOE OF THE SLOPE AND AT A SPACING IN ACCORDANCE WITH THE TABLE.
- 10. EXCAVATE TRENCH AS PER DETAIL AND SET POSTS AT 10' O.C.
- 11. BACKFILL WITH COMPACTED, EXCAVATED SOIL FROM TRENCH.



REPAIRED. 5. THE CONTRACTOR SHALL REMOVE SEDIMENTS COLLECTED AT THE BASE OF THE BERM WHEN THEY REACH 1/3 OF THE EXPOSED HEIGHT OF THE BERM, OR AS DIRECTED BY THE

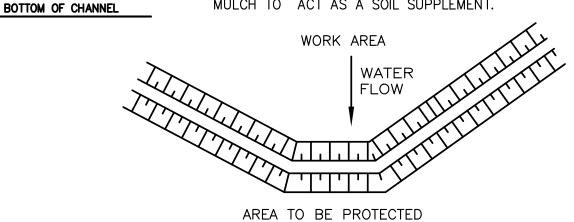
- 6. THE COMPOST FILTER BERM WILL BE REMOVED ON SITE WHEN NO LONGER REQUIRED, AS DETERMINED BY THE OWNERS.
- 7. INSTALL PERPENDICULAR TO FLOW.

MAINTENANCE NOTES:

TOP OF CHANNEL/BANK

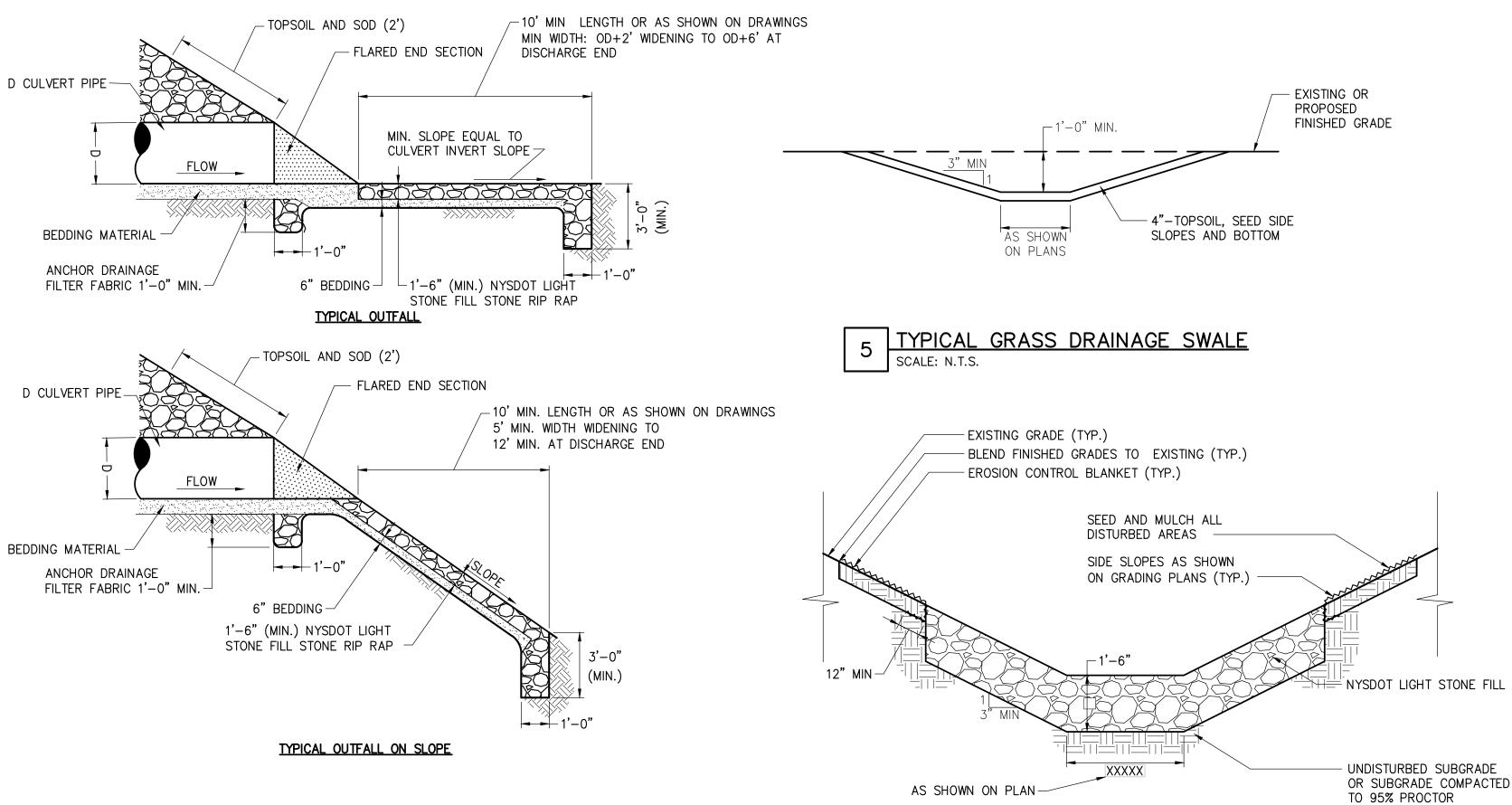
1. TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER

- 2. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES  $\frac{1}{3}$  OF THE EXPOSED HEIGHT OF THE PRACTICE AND DISPOSED OF IN ACCORDANCE WITH THE SWPPP.
- 3. SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED IN THE MANNER REQUIRED BY THE MANUFACTURER OR REPLACED WITHIN 24 HOURS OF INSPECTION NOTIFICATION.
- FILTER SOCK SHALL BE PLACED PERPENDICULAR TO THE FLOW BIODEGRADABLE FILTER SOCKS SHALL BE REPLACED ACROSS THE ENTIRE WIDTH OF AFTER 6 MONTHS; PHOTO-DEGRADABLE FILTER SOCKS AFTER 1 YEAR. POLY-PROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO THE
  - MANUFACTURER'S RECOMMENDATIONS. 5. UPON STABILIZATION OF THE AREA CONTRIBUTORY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK SHALL BE REMOVED. FOR REMOVAL THE MESH CAN BE CUT AND COMPOST SPREAD AS AN ADDITIONAL MULCH TO ACT AS A SOIL SUPPLEMENT.



AT GRADE PLACEMENT

COMPOST FILTER SOCK DETAIL

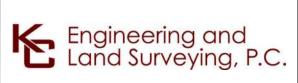


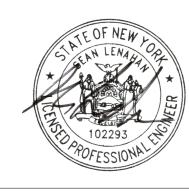
TYPICAL CULVERT OUTFALL RIP RAP



**Power Express** 







IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED. THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

	00/40/0000				-	S	EGMENT 11 (F	PAC	SON POV KAGE 7A) - CS IMENT CON	SX: (	CATSKIL
	06/19/2023	ISSUED FOR CONSTRUCTION SUBMISSION	SL	JL							
No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP	DRAWN BY:	BL	DESIGNED BY:	SL	APPROVED BY:	JL	SCALE REV. NO.

CHAMPLAIN HUDSON POWER EXPRESS SEGMENT 11 (PACKAGE 7A) - CSX: CATSKILL

**EROSION AND SEDIMENT CONTROL DETAILS** 

STONE-LINED DRAINAGE CHANNEL

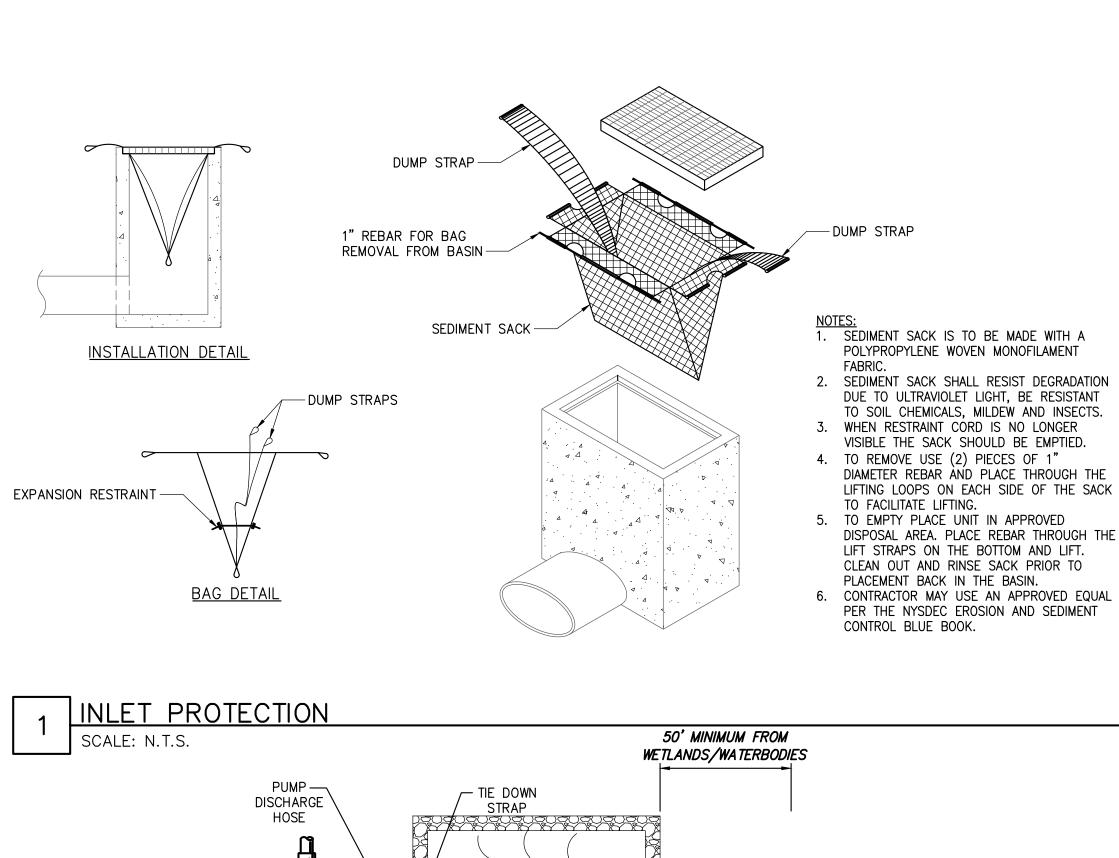
KIEWIT PROJECT NO. 21162 KC PROJECT NO. 120174 DRAWING NO.

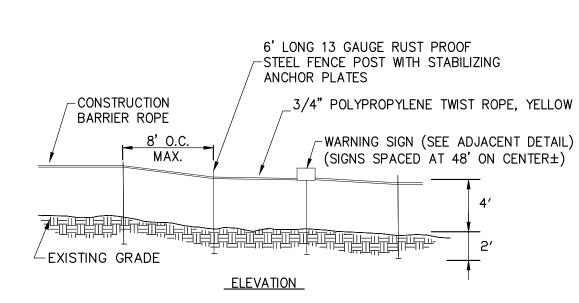
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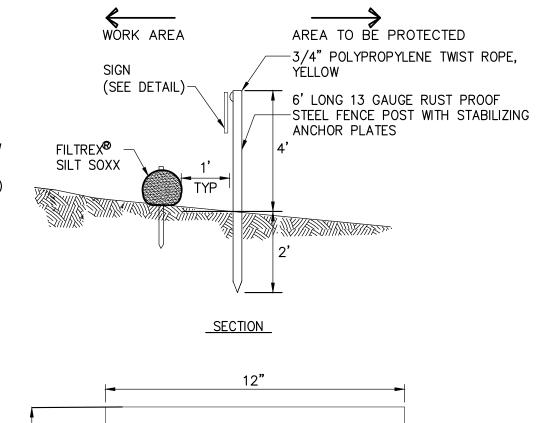
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06/19/2023





- 1. CONSTRUCTION BARRIER FENCE SHALL BE INSTALLED IN THE LOCATIONS SHOWN ON THE PLANS PRIOR TO BEGINNING ANY WORK ADJACENT TO THESE AREAS.
- 2. THE CONTRACTOR SHALL INSTALL AT THE BEGINNING OF THE CONTRACT, AND MAINTAIN THROUGHOUT ITS DURATION.



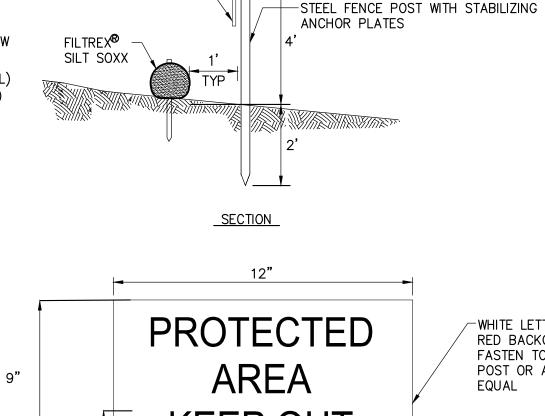
-WHITE LETTERING ON RED BACKGROUND. FASTEN TO FENCE AREA POST OR APPROVED EQUAL **KEEP OUT** 

WARNING SIGN DETAIL (OR APPROVED EQUAL)

WETLAND PROTECTION FENCE

SCALE: N.T.S.

PAVEMENT



-UNDERNEATH ROLL OVERLAP DIRECTION UPPER ROLL -

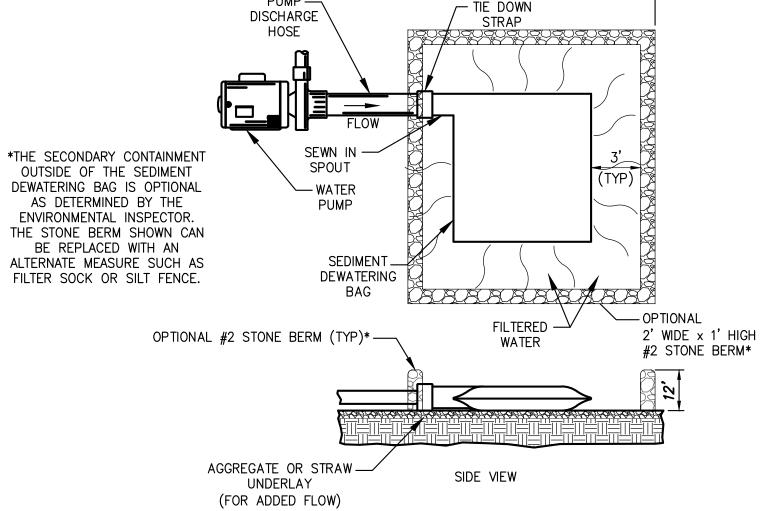
1. EROSION CONTROL BLANKETS TO BE INSTALLED ON SLOPES 3:1 OR GREATER (TYP.)

- 2. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: DO NOT SEED PREPARED AREA. INSTALL WITH PAPER SIDE DOWN. INSTALL ACCORDING TO MANUFACTURERS INSTRUCTIONS.
- 3. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP x 6" WIDETRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
- 4. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
- ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET

5. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" OVERLAP DEPENDING ON BLANKET TYPE. TO

- 6. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPING AREA APPROXIMATELY 12" APART ACROSS ENTIRE BLANKET WIDTH.
- 7. TO PROPERLY SECURE THE BLANKETS IN LOOSE SOIL CONDITIONS, THE USE OF STAPLES OR STAKES GREATER THAN 6" MAY BE

EROSION CONTROL BANK STABILIZATION DETAIL



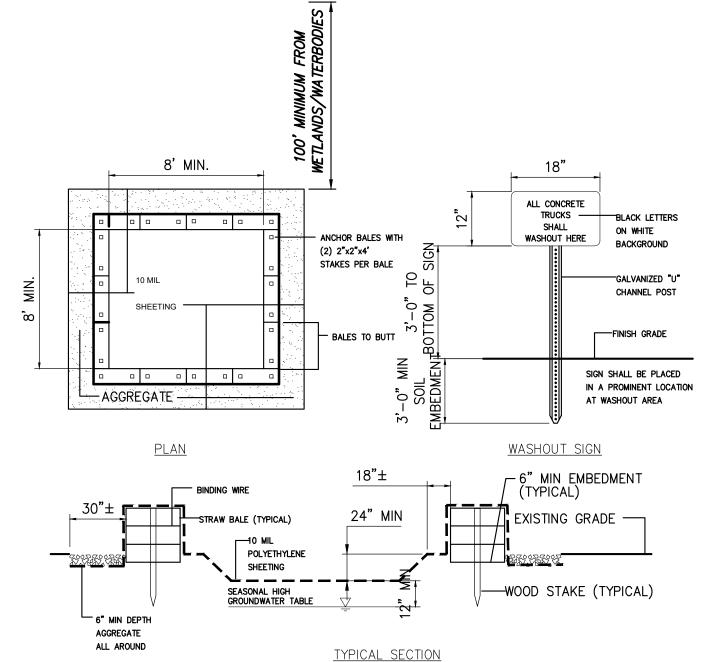
NOTE: THE SEDIMENT DEWATERING BAG WILL BE MANUFACTURED IN THE U.S.A. FROM A NONWOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING **SPECIFICATIONS:** 

# SEDIMENT DEWATERING BAG SPECIFICATIONS

<u>9252.11                              </u>	0, 2011 10, 1110110	_				
Mechanical Properties	Test Method	Units	MARV			
Grab Tensile Strength	ASTM D 4632	kN (lbs)	0.9 (205) x 0.9 (205)			
Grab Tensile Elongation	ASTM D 4632	%	50 x 50			
Puncture Strength	ASTM D 4833	kN (lbs)	0.58 (130)			
Mullen Burst Strength	ASTM D 3786	kPa (psi)	2618 (380)			
Trapezoid Tear Strength	ASTM D 4533	kN (lbs)	0.36 (80) X 0.36 (80)			
UV Resistence	ASTM D 4355	%	70			
Apparent Opening Size	ASTM D 4751	Mm (US Std Sieve)	0.180 (80)			
Flow Rate	ASTM D 4491	1/min/m² (gal/min/ft²)	3866 (95)			
Permittivity	ASTM D 4491	Sec <sup>-1</sup>	1.2			

SEDIMENT DEWATERING BAG SCALE: N.T.S.

- 1. STONE SIZE-USE AASHTO M43 SIZE 3 COARSE AGGREGATE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
- 2. LENGTH NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
- 3. THICKNESS NOT LESS THAN 12".
- WIDTH TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ACCESS TO SITE.
- 5. WOVEN GEOTEXTILE FABRIC WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
- 6. EXISTING ROAD SIDE DRAINAGE SHALL BE MAINTAINED.
- 7. SURFACE WATER ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
- 8. MAINTENANCE-THE ACCESS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT OR STONE SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
- 9. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- 10. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.



MAINTENANCE NOTES:

1. ALL CONCRETE WASHOUT FACILITIES SHALL BE INSPECTED DAILY. DAMAGED OR LEAKING FACILITATES SHALL BE DEACTIVATED AND REPAIRED OR REPLACED IMMEDIATELY. EXCESS RAINWATER THAT HAS ACCUMULATED OVER HARDENED CONCRETE SHALL BE PUMPED TO A STABILIZED AREA SUCH AS A GRASS

FILTER STRIP. ACCUMULATED HARDENED MATERIAL SHALL BE REMOVED WHEN 75% OF THE STORAGE CAPACITY OF THE STRUCTURE IS FILLED. ANY EXCESS WASH WATER SHALL BE PUMPED INTO A CONTAINMENT VESSEL AND PROPERLY

DISPOSED OF OFF SITE. DISPOSAL OF THE HARDENED MATERIAL SHALL BE OFF-SITE IN A CONSTRUCTION/DEMOLITION

4. THE PLASTIC LINER SHALL BE REPLACED WITH EACH CLEANING OF THE WASHOUT FACILITY. 5. INSPECT THE PROJECT SITE FREQUENTLY TO

ENSURE THAT NO CONCRETE DISCHARGES ARE TAKING PLACE IN NON-DESIGNATED AREAS. 6. LOCATION(S) TO BE DETERMINED IN THE FIELD

AS SHOWN DATE

0 SH.NO.

BY THE OWNER'S REPRESENTATIVE 7. CONCRETE WASHOUTS SHALL NOT BE

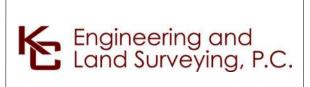
LOCATED WITHIN 200' OF ANY KNOWN WELL.

CONCRETE WASHOUT AREA



**Power Express** 







PER PLAN OR 50' MIN.

<u>PROFILE</u>

PLAN VIEW

STABILIZED CONSTRUCTION ACCESS

WOVEN GEOTEXTILE

- EXISTING GROUND

-12" MIN.

20'

**EXISTING** 

PAVEMEN<sup>-</sup>

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					CHAMPLAIN HUDSON POWER EX SEGMENT 11 (PACKAGE 7A) - CSX: CATSKI
					EROSION AND SEDIMENT CONTROL DET
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No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP	DRAWN BY: BL DESIGNED BY: SL APPROVED BY: JL REV. NO.

# CHAMPLAIN HUDSON POWER EXPRESS SEGMENT 11 (PACKAGE 7A) - CSX: CATSKILL

**EROSION AND SEDIMENT CONTROL DETAILS** 

KIEWIT PROJECT NO. 21162 KC PROJECT NO. 120174 DRAWING NO.

C-602

06/19/2023

### **DEWATERING PROCEDURES:**

TRAPPED WATER WITHIN THE TRENCH SHALL BE DISCHARGED INTO A PORTABLE SEDIMENT TANK OR SEDIMENT FILTER BAGS LOCATED AWAY FROM THE WATERBODY TO PREVENT SILT-LADEN WATER FROM FLOWING INTO THE WATERBODY.

#### DAM AND PUMP CROSSING PROCEDURES:

BEFORE THE INITIATION OF ANY IN-STREAM ACTIVITIES, ALL MATERIAL ASSOCIATED WITH THE DAM AND PUMP SITE SET-UP MUST BE ON-HAND. THESE MATERIALS INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:

- A) WATER BARRIERS
- B) DOWNSTREAM SPLASH PLATE
- C) PUMPS (PRIMARY AND SECONDARY) AND HOSES
- D) FUEL FOR PUMPS (STORED AT LEAST ONE HUNDRED (100) FEET FROM WATERBODY)
- E) SPILL PREVENTION AND CONTROL MATERIALS (INCLUDING SECONDARY CONTAINMENT FOR PUMPS LOCATED WITHIN ONE HUNDRED (100) FEET OF WETLAND OR

ONCE THE NECESSARY MATERIALS ARE ON-LOCATION, SITE SET-UP MAY BEGIN. THE FIRST STEP IS TO SELECT AN APPROPRIATE LOCATION FOR THE PUMP INTAKE HOSE(S) TO BE POSITIONED. DEPENDING UPON THE CHANNEL CHARACTERISTICS, EITHER A NATURALLY OCCURRING DEEP SPOT OR CHANNEL WILL BE SELECTED AS A "SUMP" OR A SUMP MAY NEED TO BE CREATED TO PROVIDE SUFFICIENT WATER DEPTH FOR THE SCREENED HOSE INTAKE(S). IF A NATURAL SUMP IS NOT AVAILABLE FOR THE INTAKE HOSE, AN IN-STREAM SUMP WILL BE CREATED BY EXCAVATING WITHIN THE STREAM CHANNEL AND SURROUNDING THE EXCAVATION USING SANDBAGS.

#### THE FOLLOWING BMPS SHALL BE IMPLEMENTED AT THE INTAKE OR SUMP SITE:

- A) ALL EQUIPMENT, MATERIAL, AND CONSTRUCTION PERSONNEL NECESSARY FOR THE CROSSING SHALL BE ON- SITE BEFORE SET-UP BEGINS
- B) UPON COMPLETION OF THE WATERBODY CROSSING ANY SANDBAGS UTILIZED FOR A SUMP SHALL BE REMOVED AND THE STREAM CHANNEL RESTORED TO PRE-CONSTRUCTION CONDITION
- C) THE SUMP SHALL BE OF SUFFICIENT DEPTH TO PREVENT THE ENTRAINMENT OF EXCESSIVE AMOUNTS OF SEDIMENT INTO THE SUMP INTAKE, HOSE AND PUMP

DURING THE ASSEMBLY OF THE UPSTREAM AND DOWNSTREAM WATER BARRIERS, THE PUMPING NETWORK SHALL BE SETUP TO BEGIN THE TRANSFER OF WATER AROUND THE CONSTRUCTION WORK AREA.

THE PUMP INTAKE AND DISCHARGE HOSES SHALL BE APPROPRIATELY PLACED AND OF SUFFICIENT LENGTH, BASED UPON SITE-SPECIFIC CONDITIONS. THE INTAKE HOSE SHALL BE SCREENED TO PREVENT THE ENTRAINMENT OF FISH. DISCHARGE HOSES SHALL BE PROVIDED WITH SUPPORT OVER THE DITCH-LINE AS NEEDED TO PREVENT EXCESSIVE SAGGING AND REDUCTION OF PUMPING CAPACITY.

THE NUMBER AND SIZES OF PUMPS TO BE USED AT ANY CROSSING SHALL BE DEPENDENT UPON THE VOLUME OF WATER FLOWING AT THE TIME THE CROSSING IS MADE.

#### BMPS TO BE IMPLEMENTED DURING PUMP SET-UP INCLUDE:

- D) PUMPS SHALL BE FUELED PRIOR TO PLACING THEM IN POSITION
- E) IF IT IS NECESSARY TO REFUEL DURING THE PUMP OPERATION, EXTRA CARE SHALL BE TAKEN TO AVOID SPILLAGE AND SPILL CONTROL MATERIALS WILL BE READILY AVAILABLE ON SITE
- F) SECONDARY CONTAINMENT SHALL BE PLACED UNDER THE PUMPS AS AN ADDITIONAL PRECAUTIONARY MEASURE TO PROTECT AGAINST ACCIDENTAL LEAKAGE OR
- G) FUEL FOR FILLING THE PUMPS SHALL NOT BE STORED WITHIN ONE HUNDRED (100) FEET OF THE WATERBODY
- H) THE INTAKE HOSE SHALL BE SCREENED TO PREVENT THE ENTRAINMENT OF FISH
- THE END OF THE DISCHARGE HOSE SHALL BE MOUNTED UPON A SPLASH PLATE OR SIMILAR DEVICE OR IN A MANNER THAT WILL DISSIPATE THE ENERGY OF THE DISCHARGING WATER AND REDUCE OR ELIMINATE STREAMBED SCOUR
- J) IF HOSES CROSS THE TEMPORARY ACCESS ROAD, THEY SHALL BE PROTECTED FROM TRAVELING EQUIPMENT
- K) PUMP(S) SHALL BE OF SUFFICIENT CAPACITY TO TRANSFER TWICE THE CAPACITY OF THE ENTIRE STREAMFLOW AROUND THE CONSTRUCTION WORK AREA
- L) RESERVE OR BACKUP PUMP(S) SHALL BE KEPT ON SITE AT ALL TIMES.

### WATER BARRIER INSTALLATION:

BETWEEN THE PUMP HOSE INTAKE OR SUMP HOLE AREA AND THE TRENCH, AS WELL AS DOWNSTREAM OF THE TRENCH, DAMS OF RELATIVELY IMPERVIOUS MATERIAL SHALL BE INSTALLED. THE UPSTREAM DAM SHALL BE COMPLETED FIRST. EVERY REASONABLE EFFORT SHALL BE MADE TO CONSTRUCT THE DAMS AS WATER TIGHT AS POSSIBLE.

# THE FOLLOWING BMPS WILL BE IMPLEMENTED DURING WATER BARRIER INSTALLATION:

-APPROX. STREAM BOTTOM

(FIELD CONDITIONS MAY VARY)

SANDBAG COFFERDAM DETAIL

SAND BAGS SHALL BE FILTER FABRIC TYPE AND BE DOUBLE BAGGED.

- A) DAMS SHALL BE CONSTRUCTED OF EITHER SANDBAGS, WATER BLADDERS, STEEL PLATES, PORTA-DAMS OR EQUIVALENT OR "JERSEY BARRIERS" AND PLASTIC
- SHEETING OR A COMBINATION THEREOF B) THE DAMS SHALL BE CONSTRUCTED OF SUFFICIENT HEIGHT TO ALLOW ADEQUATE FREEBOARD UNDER REASONABLY EXPECTED WATER LEVELS OR FLOWS AND
- PROVIDE FOR SOME IMPOUNDMENT OF WATER C) PRIOR TO COMPLETION OF THE DAMS, THE PUMP(S) MUST BE STARTED IN ORDER TO PROVIDE DOWNSTREAM FLOW OF WATER AROUND THE CONSTRUCTION WORK
- THE RATE OF PUMPING SHALL BE MONITORED TO MINIMIZE DRAINING OF THE INTAKE SUMP AND THE RESULTING CESSATION IN FLOW. ALTERNATIVELY, PUMPING SHALL BE MONITORED AND INCREASED AS NECESSARY TO PREVENT OVERTOPPING OF THE DAMS.

SANDBAG COFFERDAM CREST - 1' WIDE (MIN.)

EXCAVATION AREA

BOULDERS WILL BE ENCOUNTERED ON STREAM BOTTOM.

CONSTRUCT COFFERDAM AROUND BOULDERS, UNLESS

BOULDER REMOVAL AGREED UPON BY ENGINEER.

-STAKE DOWN ELEVATE PLYWOOD TO SERVE AS SPLASH PLATE. HOSE STONE PILE OR OTHER SOLID MATERIAL MAY BE USED IN LIEU OF THE PLYWOOD.

DEWATERING ENERGY DISSIPATOR OUTLET DETAIL
SCALE: N.T.S.

-FILTER SOCK OR HAY BALES

SPOIL PILE

10' FROM TOP

OF BANK

\_\_\_\_\_

**EROSION AND SEDIMENTATION** 

STRAW BALES OR SAND BAGS TO BE PLACED DURING NO

CONSTRUCTION ACTIVITY

ENERGY DISSIPATOR AT THE END OF DISCHARGE

(SEE DEWATERING ENERGY DISSIPATOR OUTLET DETAIL)

THE END OF THE DAY

CONTROL TO BE PLACED ACROSS THE EQUIPMENT CROSSING AT

TRENCH PLUG -

(IF NECESS\AR\Y)

— SANDBAG

- FILTER

SOCK

KEEP EQUIPMENT

CROSSING FREE OF MUD/SOIL

STREA

BANK

COFFERDAM

\_\_INTAKE HOSE

EQUIPMENT CROSSING WOOD MAT BRIDGE

WHEN SHOWN ON THE PLAN=AND PROFILE DRAWINGS

OPEN PIPELINE TRENCH —

-SPARE PUMP

-SPILL CONTAINMENT

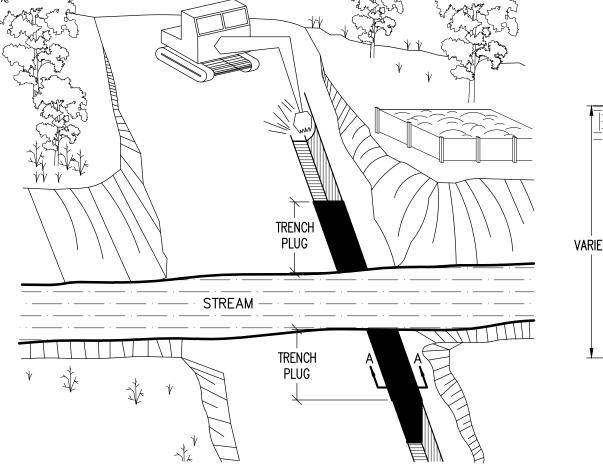
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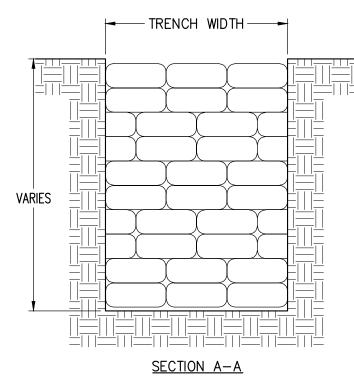
- SCHEDULE CONSTRUCTION DURING LOW FLOW PERIOD, IF POSSIBLE. SET UP PUMP AND HOSE AS SHOWN, OR USE PRACTICAL ALTERNATIVES. PUMP SHOULD HAVE TWICE THE PUMPING CAPACITY OR ANTICIPATED FLOW. HAVE STANDBY PUMP ON SITE. DEPENDING ON STREAM FLOW, DIG SUMP HOLE TO CONCENTRATE WATER AT INTAKE.
- 3. INSTALL UPSTREAM DAM COMPOSED OF SANDBAGS, METAL PLATING OR A COMBINATION OF BOTH. INSTALL DOWNSTREAM DAM, IF REQUIRED, TO KEEP STREAM BED DRY.
- 4. AFTER DAMS ARE IN PLACE, IT MAY BE NECESSARY TO USE ADDITIONAL PUMPS TO HANDLE STREAM FLOW.
- 5. EXCAVATE TRENCH AND LOWER IN PIPE UNDER HOSE. MOVE HOSE AS REQUIRED OR DISCONNECT, IF TEMPORARY FLOW BLOCKAGE IS ACCEPTABLE. BACKFILL TRENCH.
- DISMANTLE DOWNSTREAM DAM, THEN UPSTREAM DAM. KEEP PUMP RUNNING TO MAINTAIN STREAM FLOW.
- 7. RESTORE STREAM BANKS AND APPROACHES FOR A MINIMUM DISTANCE OF AT LEAST 50 FEET FROM THE STREAM EDGES AND PERMANTENTLY STABLIZE WITHIN 1 DAY OF INITIAL RESTORATION.

DAM AND PUMP AROUND STREAM CROSSING

- DISCHARGE

HOSE





TRENCH PLUG DETAIL

SAND BAGS SHALL BE FILTER FABRIC TYPE AND BE DOUBLE BAGGED PORTADAM, BY PORTADAM, INC. SHALL BE CONSIDERED ACCEPTABLE SUBSTITUTE TO SAND BAGS.

**Power Express** 



PORTADAM, BY PORTADAM, INC. SHALL BE CONSIDERED ACCEPTABLE SUBSTITUTE TO SAND BAGS.





IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED OR LAND SURVEYOR TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

06/19/2023 ISSUED FOR CONSTRUCTION SUBMISSION SL JL DB APP DRAWN BY: BL DESIGNED BY: SL APPROVED BY: JL REV. NO. SUBMITTAL / REVISION DESCRIPTION

CHAMPLAIN HUDSON POWER EXPRESS SEGMENT 11 (PACKAGE 7A) - CSX: CATSKILL

**EROSION AND SEDIMENT CONTROL DETAILS** 

KIEWIT PROJECT NO. 21162 KC PROJECT NO. 120174 DRAWING NO.

AS SHOWN DATI

**C-603**