

LAFARGE PRIVATE DRIVE (NORTH) WESTBOUND LANE CLOSURE PLAN







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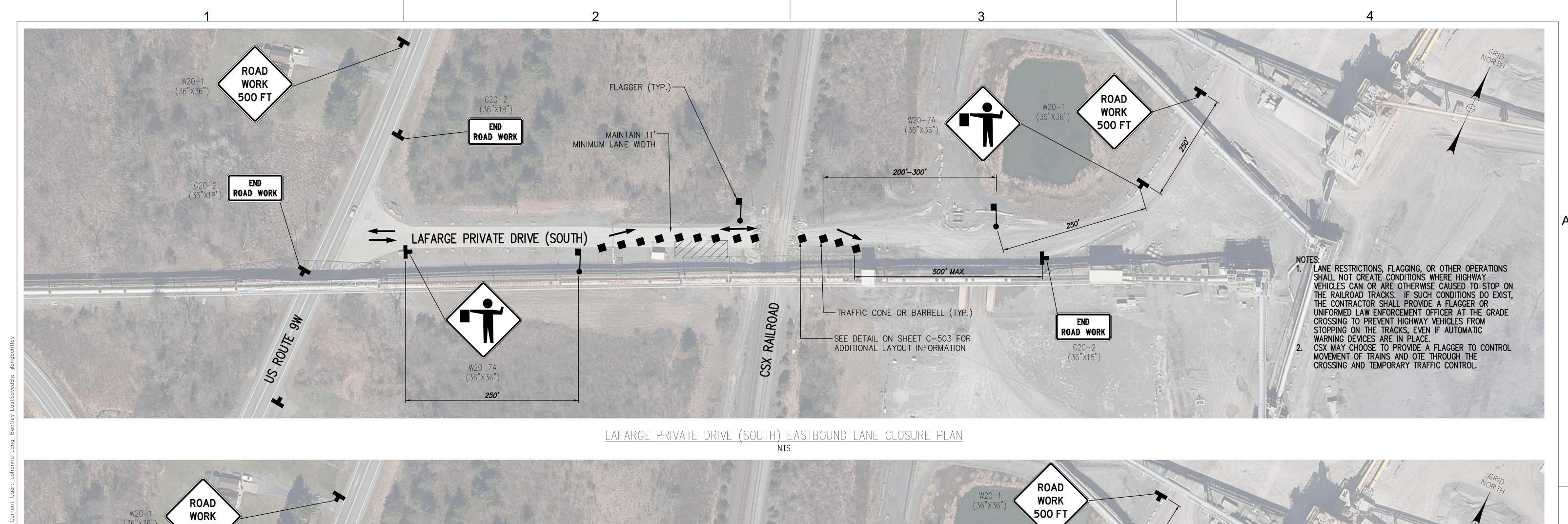
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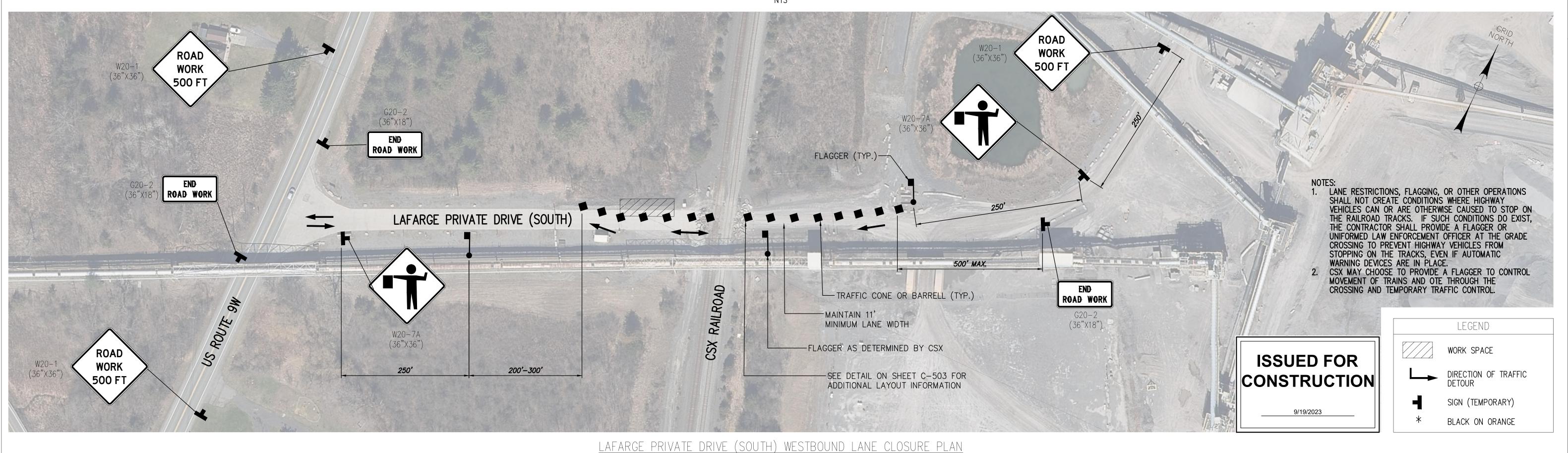
DSON POWER EXPRESS GE 6) - CSX: BETHLEHEM TO CATSKILL NE TRAFFIC CONTROL IVE (NORTH) LANE CLOSURE PLAN

KIEWIT PROJECT NO. 21162 EDR PROJECT NO. 21075 DRAWING NO. **C-505** 

AS SHOWN DATE

09/29/2023













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CHAMPLAIN HUDSON POWER EXPRESS
SEGMENT 10 (PACKAGE 6) - CSX: BETHLEHEM TO CATSKILL
WORK ZONE TRAFFIC CONTROL
LAFARGE PRIVATE DRIVE (SOUTH) LANE CLOSURE PLAN

DESIGNED BY: ZR APPROVED BY: TD SCALE REV. NO.

KIEWIT PROJECT NO.

21162
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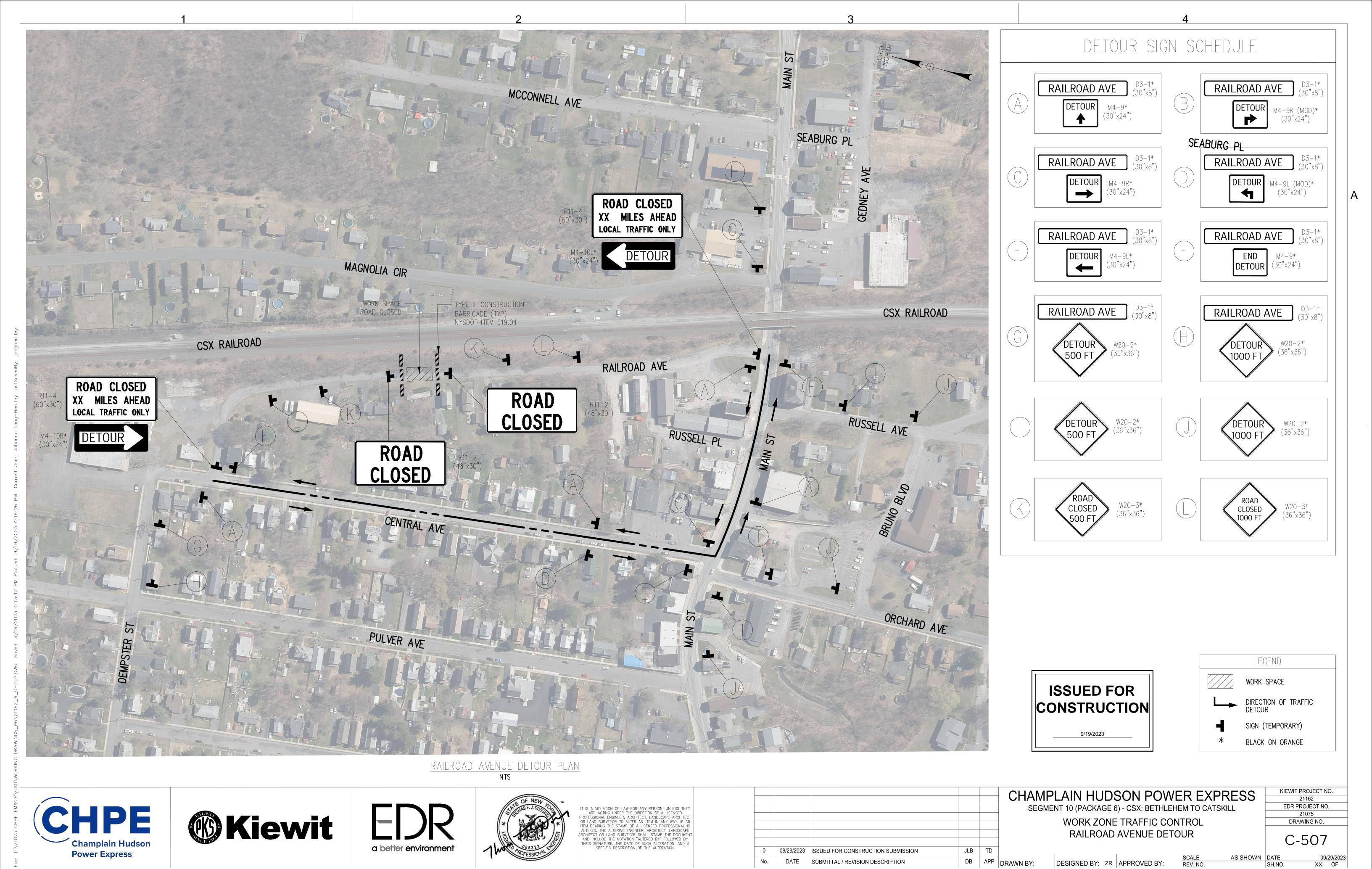
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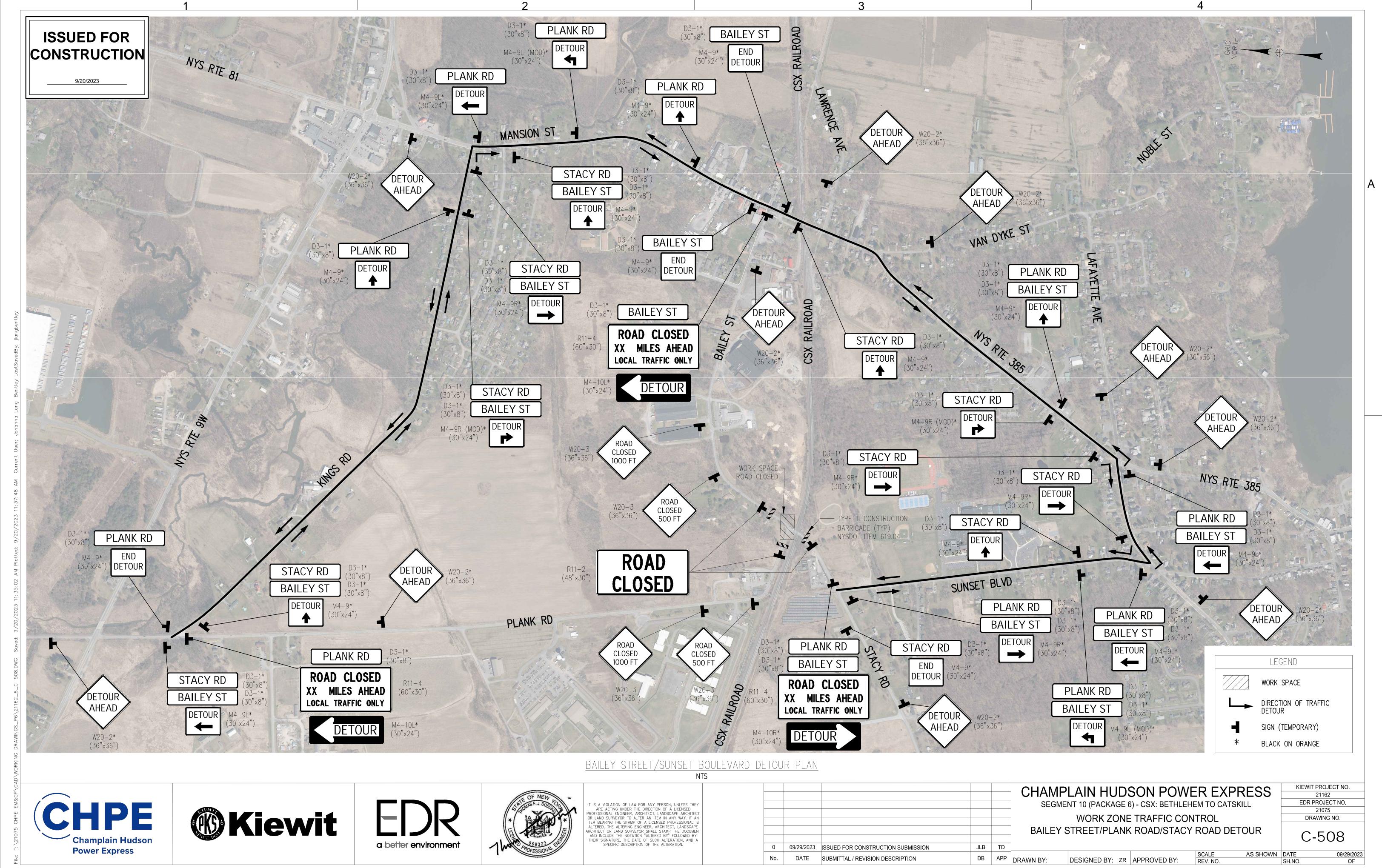
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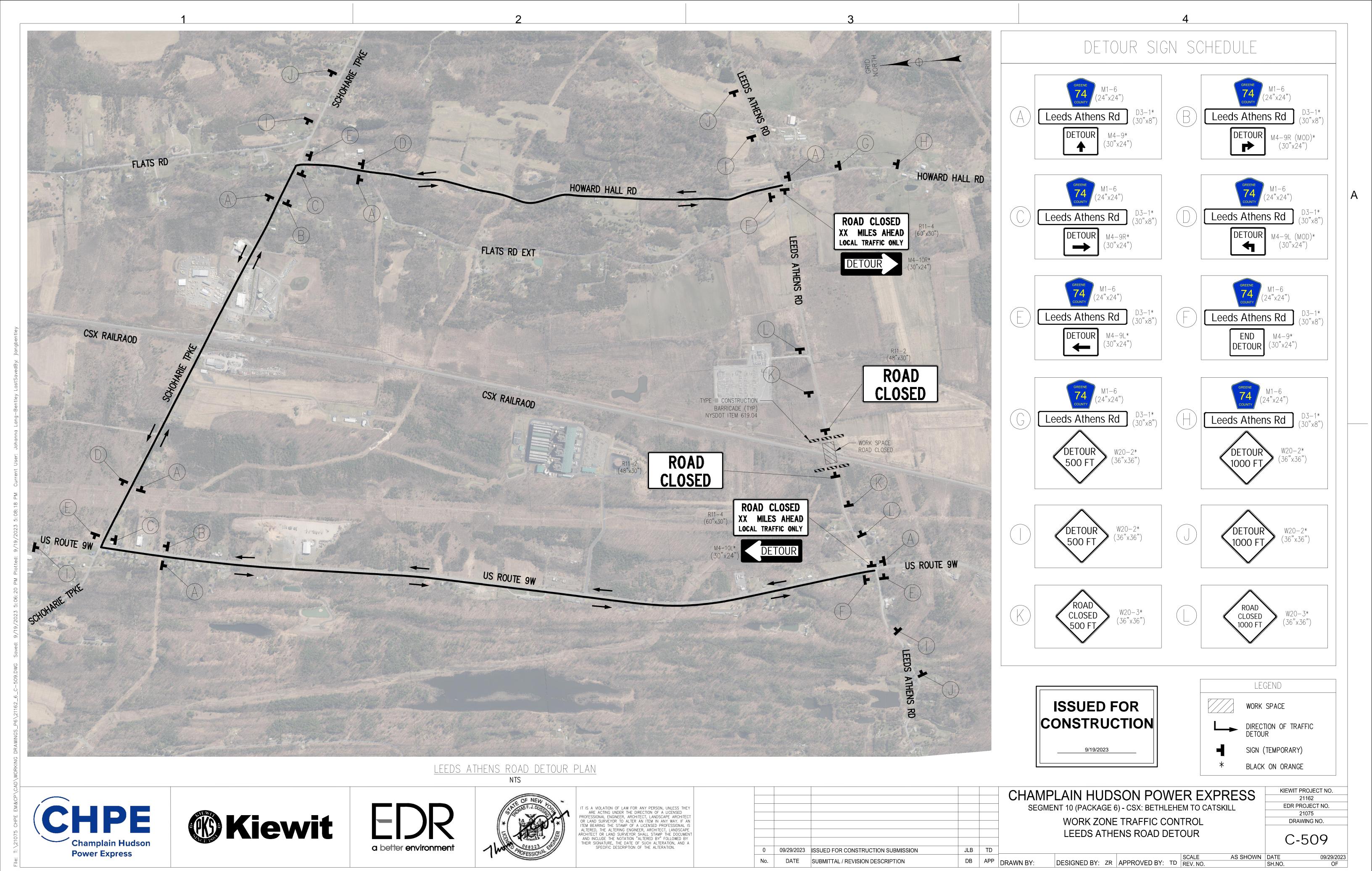
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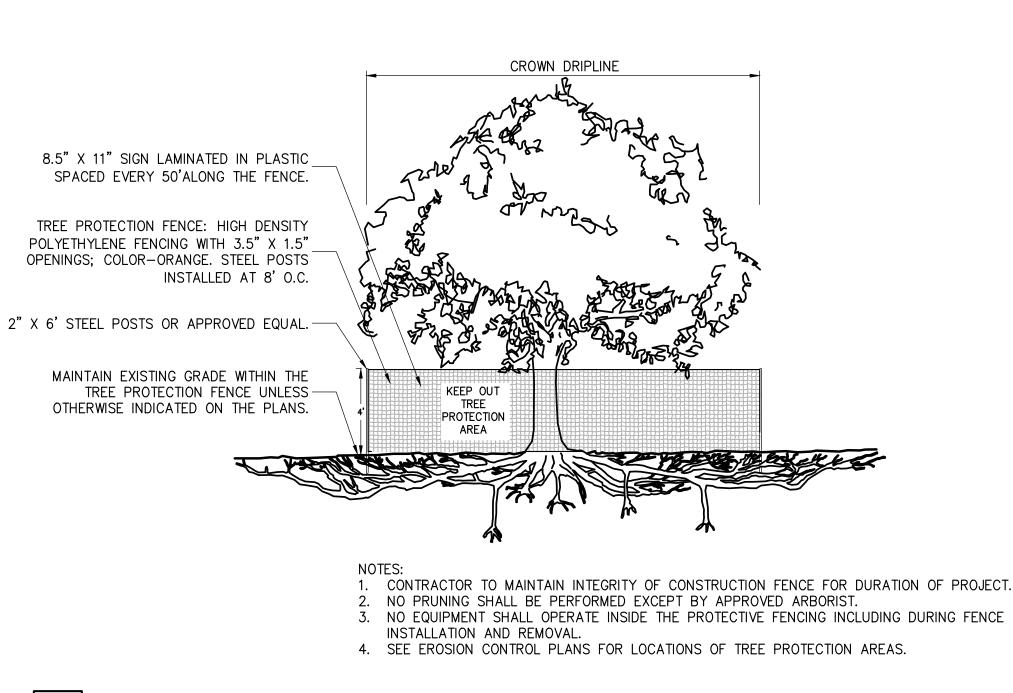
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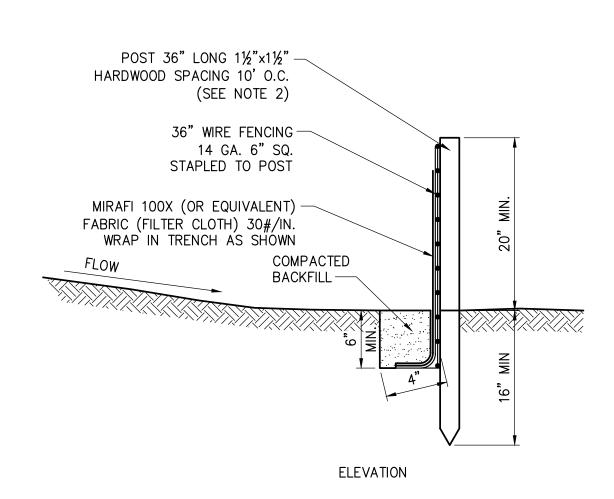
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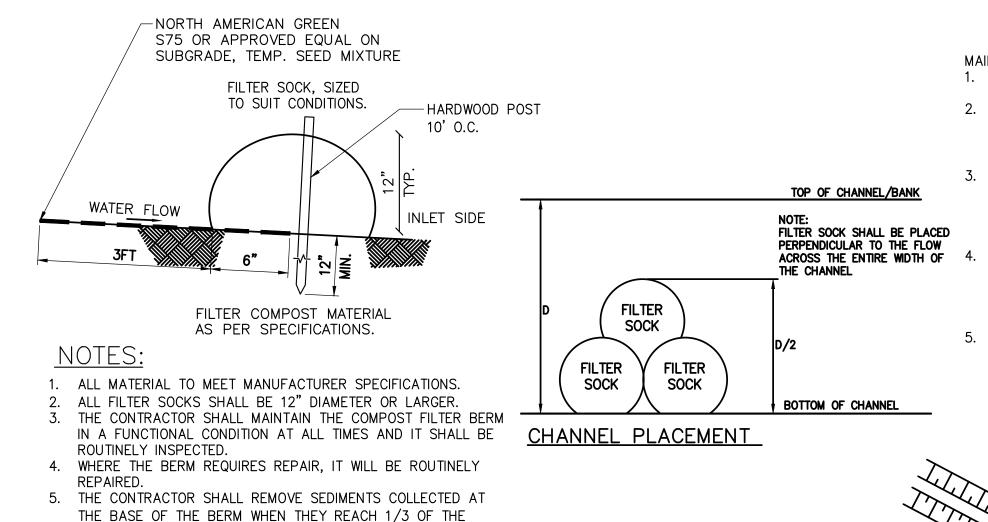


TREE PROTECTION



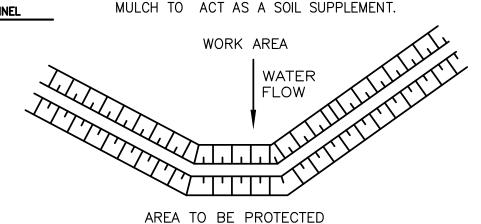
- TIE FABRIC TO WIRE FENCE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
- 2. IF EXTRA STRENGTH FABRIC (GREATER THAN 50#/INCH) IS USED, WIRE CAN BE DELETED IF POST SPACING IS REDUCED TO 6' O.C.
- 3. AT THE ENDS OF THE FENCING THE FIRST 20' SHALL BE TURNED UP THE SLOPE 2'.
- POSTS SHOULD BE INCLINED 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.
- 7. 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.



MAINTENANCE NOTES:

- 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. BIODEGRADABLE FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTO-DEGRADABLE FILTER SOCKS AFTER 1 YEAR. POLY-PROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO THE
- MANUFACTURER'S RECOMMENDATIONS. 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



AT GRADE PLACEMENT

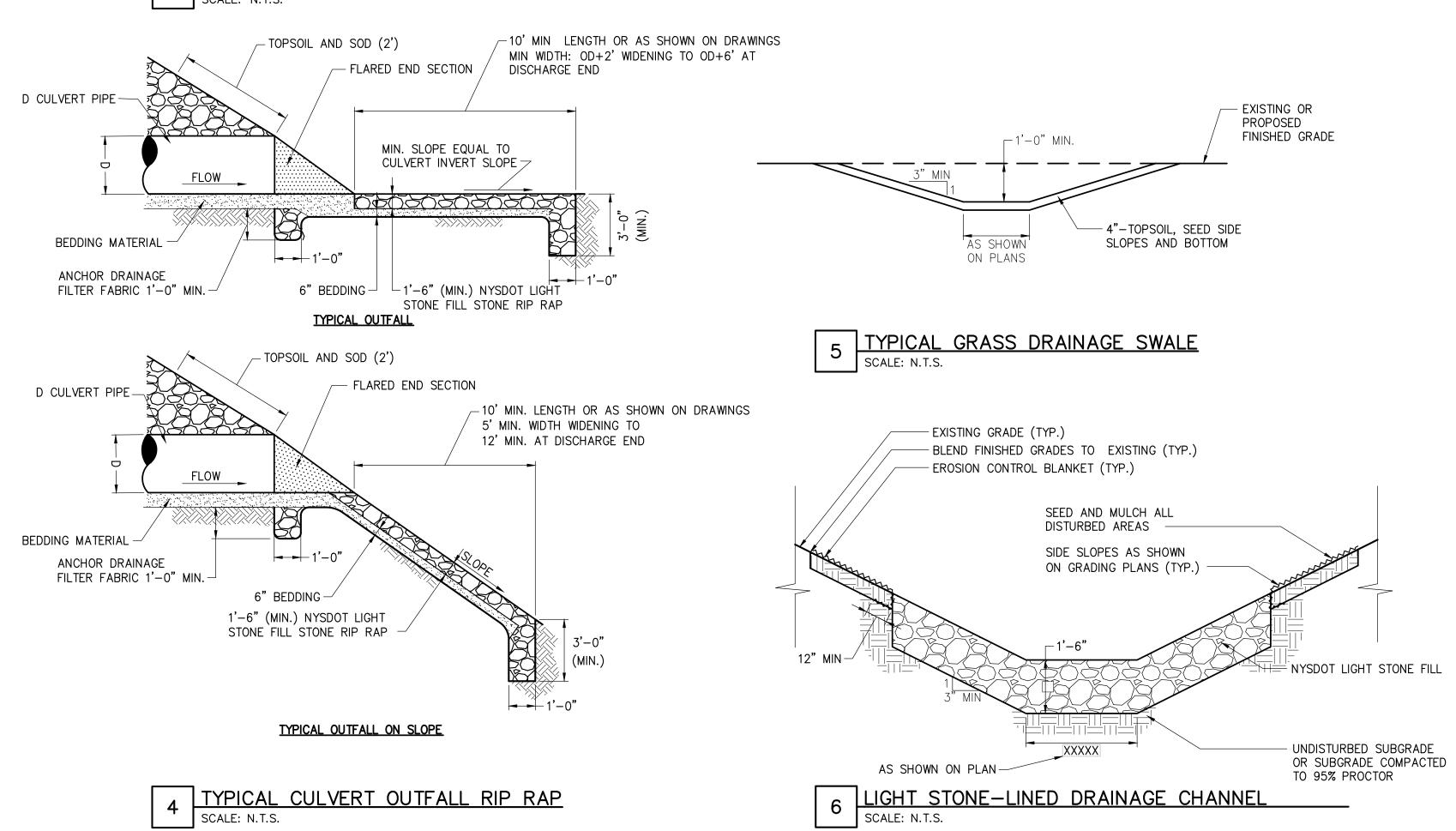
COMPOST FILTER SOCK DETAIL

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.



SCALE: N.T.S.



SILT FENCE A





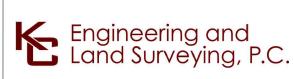
SILT FENCE B

FOLDED JOINTS

FABRIC TO BE

FENCE POST

WRAPPED AROUND





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----------------------------MK NH 09/29/2023 ISSUED FOR CONSTRUCTION SUBMISSION DB APP DRAWN BY SUBMITTAL / REVISION DESCRIPTION

CHAMPLAIN HUDSON POWER EXPRESS SEGMENT 10 (PACKAGE 6) - SELKIRK RAIL YARD BYPASS TO CATSKILL **EROSION AND SEDIMENT CONTROL DETAILS** 

DESIGNED BY: MK | APPROVED BY: NH | REV. NO.

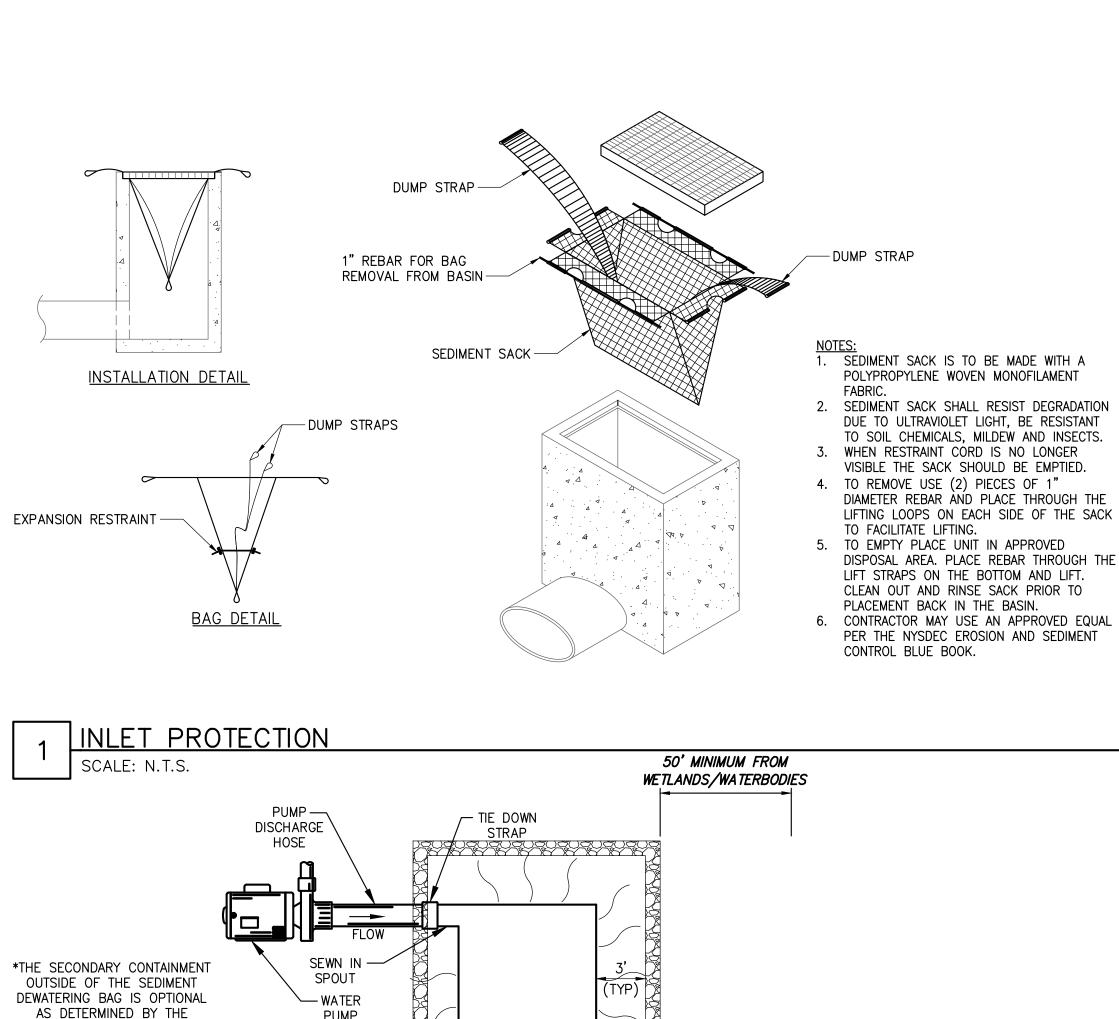
KIEWIT PROJECT NO. 21162 KC PROJECT NO. 120174 DRAWING NO.

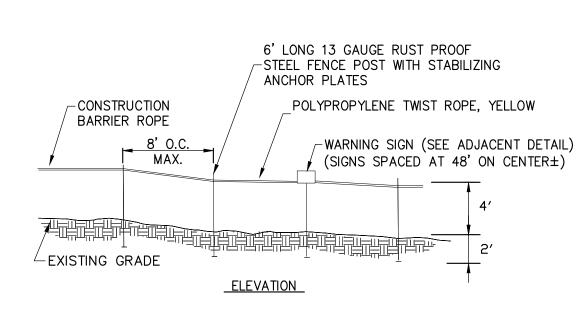
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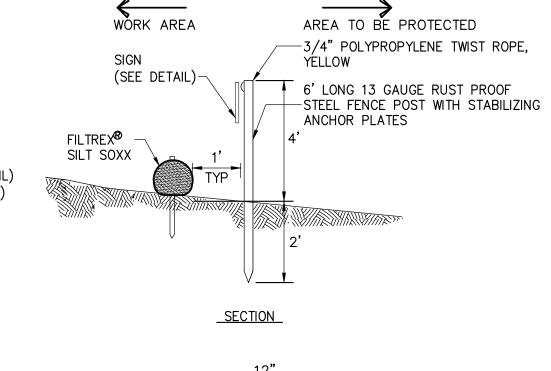
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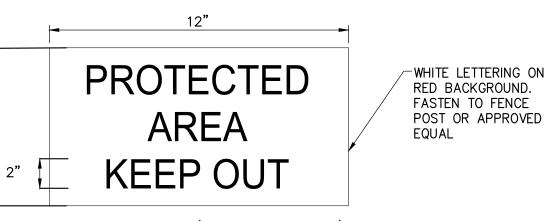




1. CONSTRUCTION BARRIER FENCE SHALL BE INSTALLED IN THE LOCATIONS SHOWN ON THE PLANS PRIOR TO BEGINNING ANY WORK ADJACENT TO THESE AREAS.

2. THE CONTRACTOR SHALL INSTALL AT THE BEGINNING OF THE CONTRACT, AND MAINTAIN THROUGHOUT ITS DURATION.



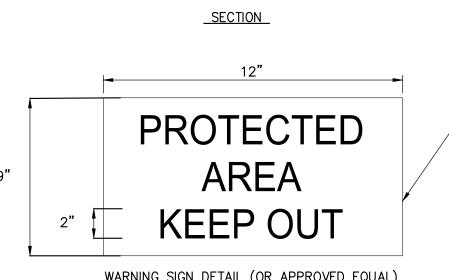


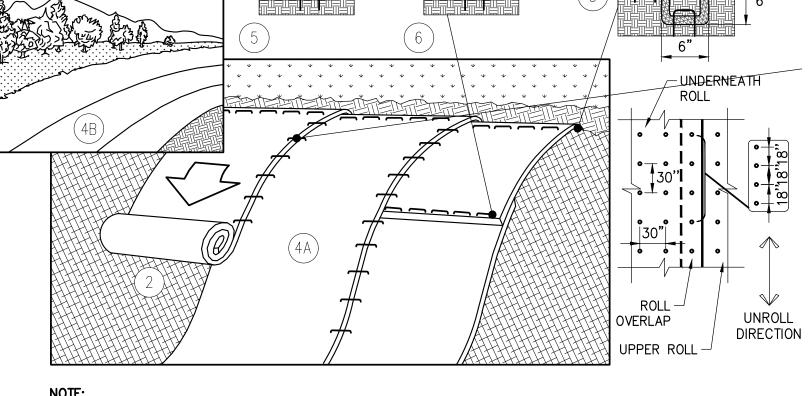


WARNING SIGN DETAIL (OR APPROVED EQUAL)

WETLAND PROTECTION FENCE

SCALE: N.T.S.

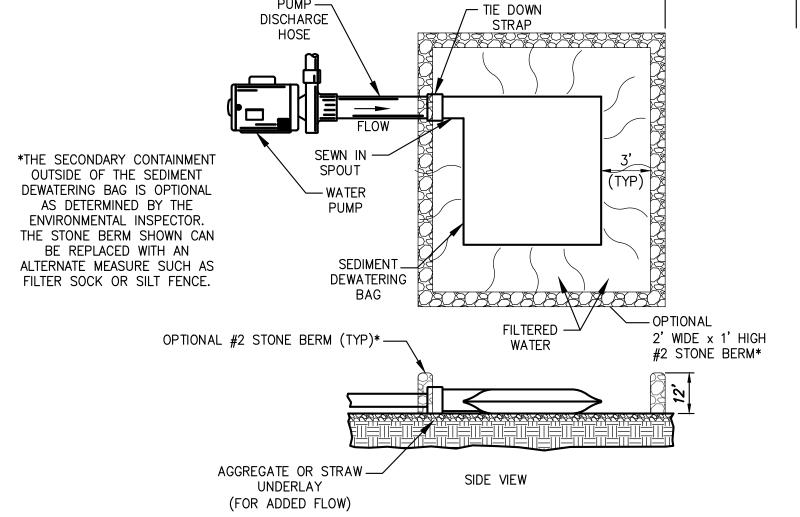




1. EROSION CONTROL BLANKETS TO BE INSTALLED ON SLOPES 3:1 OR GREATER (TYP.)

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

EROSION CONTROL BANK STABILIZATION DETAIL

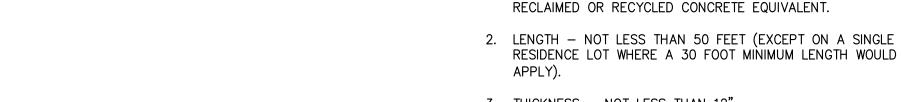


NOTE: THE SEDIMENT DEWATERING BAG WILL BE MANUFACTURED IN THE U.S.A. FROM A NONWOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS:

### SEDIMENT DEWATERING BAG SPECIFICATIONS

•	<u> </u>	0. 2011 1071110110	_	
	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.



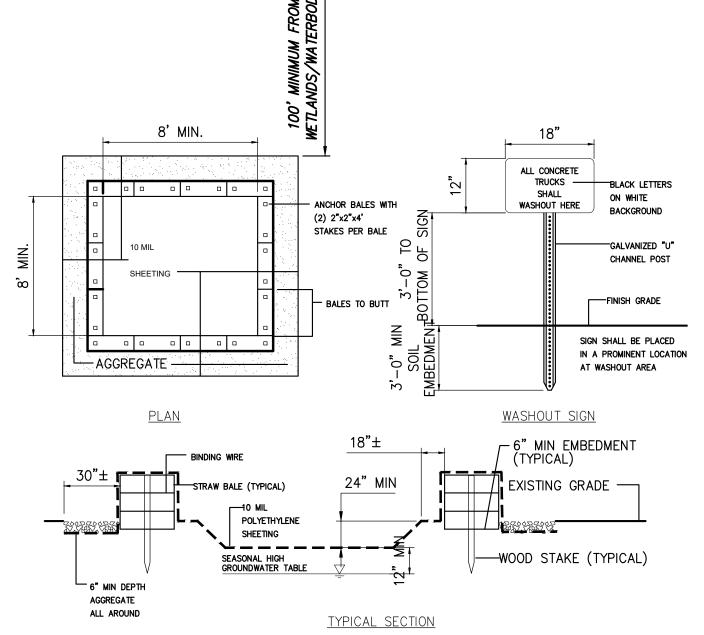
PAVEMENT

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.

1. STONE SIZE-USE AASHTO M43 SIZE 3 COARSE AGGREGATE, OR

- 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

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

LOCATED WITHIN 200' OF ANY KNOWN WELL.

AS SHOWN DATI

0 SH.NO.

STABILIZED CONSTRUCTION ACCESS

PER PLAN OR 50' MIN.

<u>PROFILE</u>

PLAN VIEW

WOVEN GEOTEXTILE

- EXISTING GROUND

-12" MIN.

20'

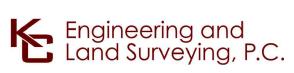
**EXISTING** 

**PAVEMENT** 

CONCRETE WASHOUT AREA SCALE: N.T.S.









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CHAMPLAIN HUDSON POWER EXPRESS EGMENT 10 (PACKAGE 6) - SELKIRK RAIL YARD BYPASS TO CATSKILL **EROSION AND SEDIMENT CONTROL DETAILS** 

DESIGNED BY: MK | APPROVED BY: NH | REV. NO.

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

**C-602** 

9/29/2023

#### **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:

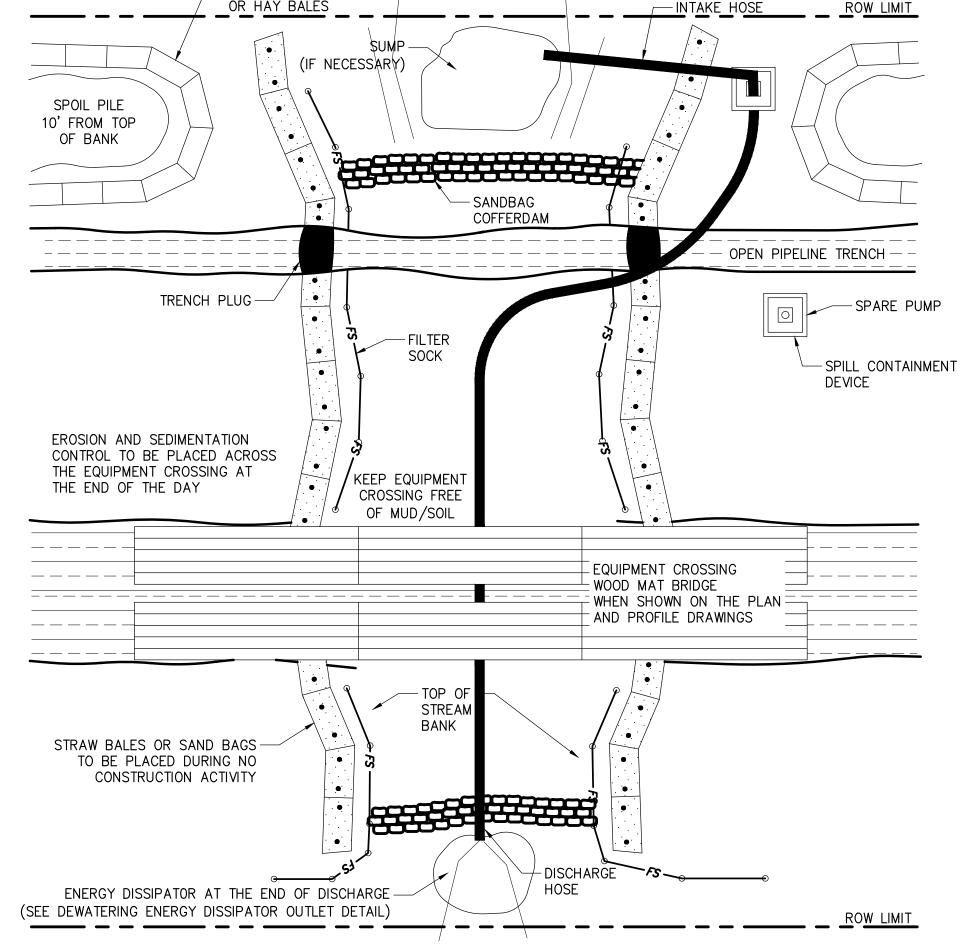
- D) PUMPS SHALL BE FUELED PRIOR TO PLACING THEM IN POSITION
- E) IF IT IS NECESSARY TO REFUEL DURING THE PUMP OPERATION, EXTRA CARE SHALL BE TAKEN TO AVOID SPILLAGE AND SPILL CONTROL MATERIALS WILL BE READILY AVAILABLE ON SITE
- F) SECONDARY CONTAINMENT SHALL BE PLACED UNDER THE PUMPS AS AN ADDITIONAL 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:

- 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.



-FILTER SOCK OR HAY BALES

GENERAL SEQUENCE:

TRENCH

TRENCH PLUG DETAIL

----- STREAM -

- 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.

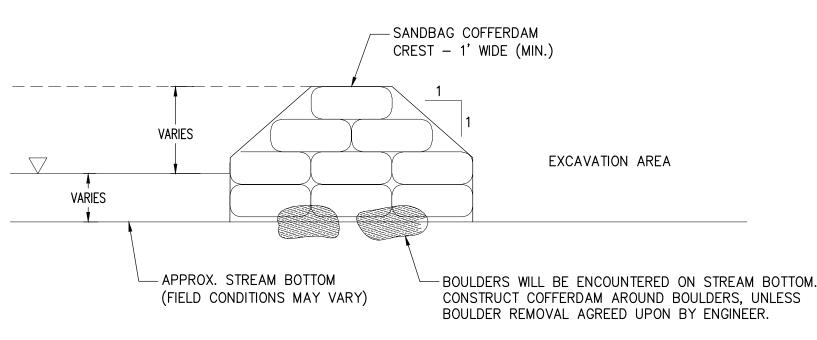
DAM AND PUMP AROUND STREAM CROSSING

ELEVATE PLYWOOD TO SERVE AS SPLASH PLATE.

STONE PILE OR OTHER SOLID MATERIAL MAY BE

USED IN LIEU OF THE PLYWOOD.

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



SANDBAG COFFERDAM DETAIL

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





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----------------09/29/2023 ISSUED FOR CONSTRUCTION SUBMISSION MK NH DB APP DRAWN BY SUBMITTAL / REVISION DESCRIPTION

CHAMPLAIN HUDSON POWER EXPRESS SEGMENT 10 (PACKAGE 6) - SELKIRK RAIL YARD BYPASS TO CATSKILL **EROSION AND SEDIMENT CONTROL DETAILS** 

DESIGNED BY: MK | APPROVED BY: NH | REV. NO

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

SAND BAGS SHALL BE FILTER FABRIC TYPE AND BE DOUBLE BAGGED

VARIES

TRENCH WIDTH ----

SECTION A-A

KC PROJECT NO. 120174 DRAWING NO.

KIEWIT PROJECT NO.

21162

**C-603** 

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**Kiewit** OR LAND SURVEYOR TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL I 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. **Power Express** 

#### APPLICATION NOTES:

- A. THE PRIMARY PURPOSE OF A CHECK DAM IS TO REDUCE EROSION IN A
- CHANNEL BY REDUCING FLOW VELOCITY IN THE CHANNEL B. CHECK DAMS WILL CAPTURE SEDIMENT THAT FALLS OUT OF SUSPENSION BEHIND THE UPSTREAM SIDE OF THE CHECK DAM DUE TO DECREASED
- C. CHECK DAMS ARE NOT INTENDED TO, AND WILL NOT, FILTER SEDIMENT FROM
- D. SLOPES EXCEEDING 10% SHALL INCLUDE A CHANNEL PROTECTIVE LINING. E. AVOID PLACEMENT OF STONE CHECK DAMS WITHIN ROADWAY CLEAR ZONES, INSTEAD CONSIDER SEDIMENT FILTER LOG CHECK DAMS OR PREFABRICATED
- F. CHECK DAMS SHALL BE ANCHORED IN THE CHANNEL BY A CUT OFF TRENCH 1.5 FEET WIDE AND 0.5 FEET DEEP AND LINED WITH FILTER FABRIC TO
- PREVENT SOIL MIGRATION. G. THE UPSTREAM DAM TOE SHALL BE AT EQUAL ELEVATION TO THE DOWN STREAM DAM CREST.

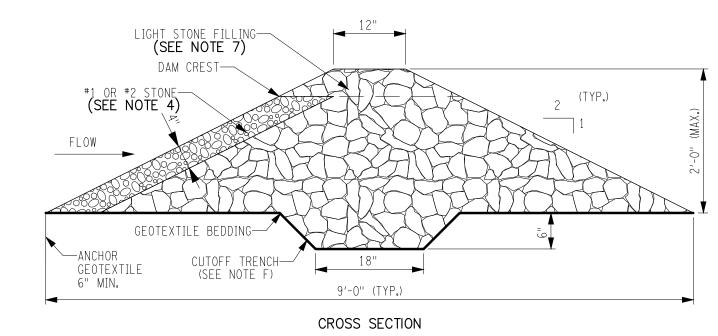
#### GENERAL NOTES:

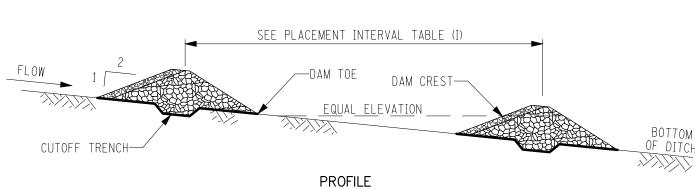
- 1. MAXIMUM DRAINAGE AREA CONTRIBUTING TO TEMPORARY STONE CHECK DAM
- 2. MEASURES SHALL BE INSPECTED EVERY (7) CALENDAR DAYS AND SHOULD BE INSPECTED AFTER EACH RUNOFF EVENT. MEASURES SHALL BE CLEANED AND REPAIRED AS REQUIRED.
- 3. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATION REACHES ONE-HALF OF THE MEASURE HEIGHT. SEDIMENT SHALL BE DISPOSED OF AS UNSUITABLE MATERIAL.
- 4. COARSE AGGREGATE FACING MATERIAL FOR THE STONE CHECK DAM SHALL MEET THE GRADATION REQUIREMENTS OF SIZE DESIGNATION #1 OR #2 OF TABLE 703-4 FROM SECTION 703-02 OF THE NYSDOT STANDARD SPECIFICATIONS. STONE FILLING CORE MATERIAL FOR THE STONE CHECK DAM
- SHALL MEET THE GRADATION REQUIREMENTS OF LIGHT STONE FILLING. 5. THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM SHALL BE PROTECTED
- FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE. 6. DURING INSPECTIONS ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCE BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR
- BLOCKAGE FROM DISPLACED STONE. 7. REFER TO SECTION 733-21 OF THE NYSDOT STANDARD SPECIFICATIONS FOR LIGHT STONE FILL GRADATION.

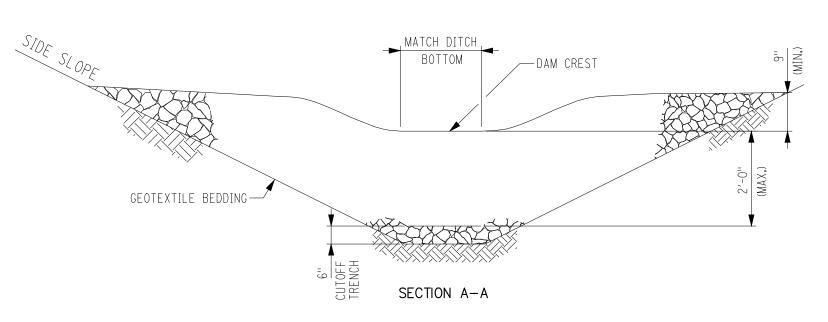
STONE CHECK	DAM PLACEMENT INTERVAL *
DITCH SLOPE	PLACEMENT INTERVAL (I) (BASED ON 2' HEIGHT)
1 %	200′
2 %	100′
3 %	66′
4 %	50′
5 %	40′
6 %	33′
8 %	25′
10 %	20′

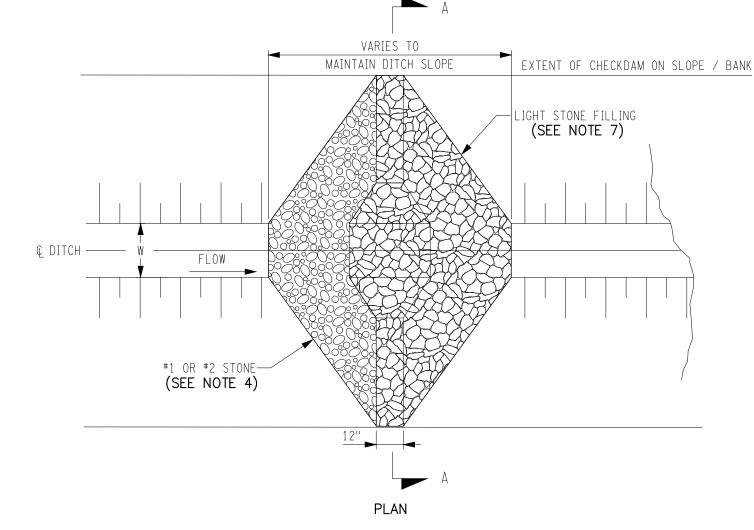
TEMPORARY CHEC	CK DAM VOLUMES			
DITCH SIDE SLOPE	VOLUME (CY)			
1:2	3.45 CY ±			
1:3	4.25 CY ±			
1 : 4	5.43 CY ±			
1:6	7.81 CY ±			

BASED ON V SHAPED DITCH SECTION FOR TRAPEZOIDAL DITCH, ADD 1.70 CUBIC YARD / YARD OF DITCH WIDTH

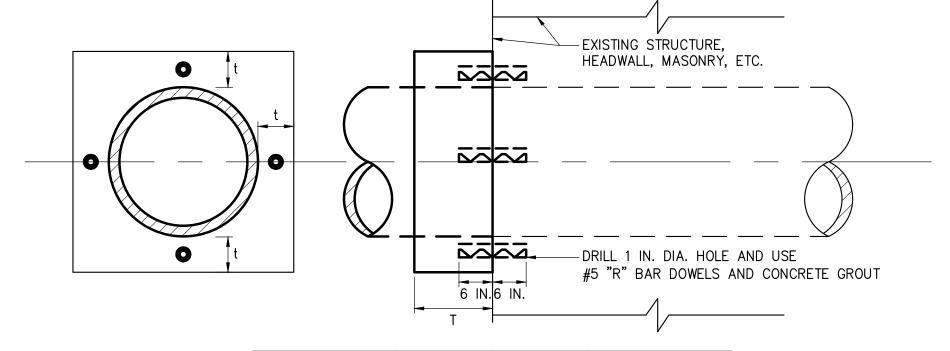








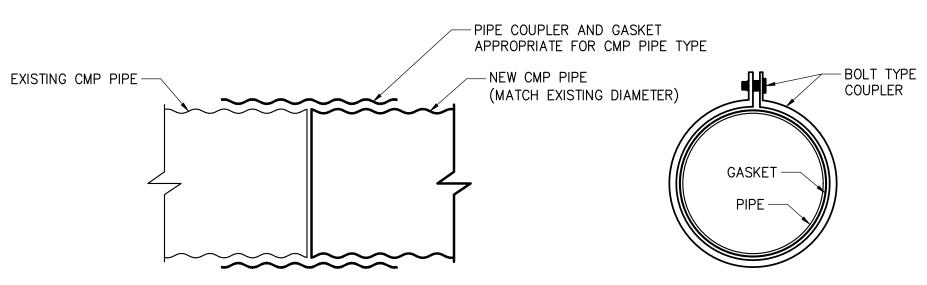
TEMPORARY CHECK DAM DETAIL



INSIDE DIA. IN.	"t" IN.	"T" IN.	NO. DOWLES REQUIRED *
THRU 19	9	12	4
20 – 29	9	12	4
30 – 39	9	12	6
40 – 49	9	12	8
50 - 59	12	18	8
60 - 69	12	18	8
70 – 79	12	18	10
80 – 89	12	18	12

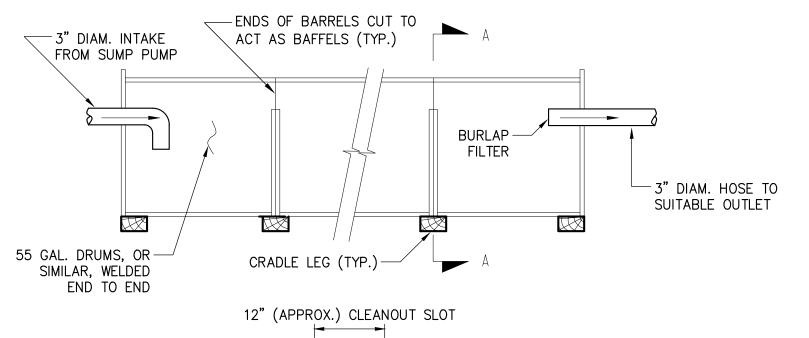
\* SPACE EVENLY AROUND PIPE AS INDICATED.

## CONCRETE COLLARS FOR PIPE EXTENSIONS



CORRUGATED METAL PIPE EXTENSIONS

# PIPE EXTENSION DETAIL



2" X 4" CRADLE

- CUT OUT (INTERIOR

APPROX. 3/4 DIAM. OF BARREL END TO ACT AS BAFFLE

WALLS ONLY)

**CONSTRUCTION SPECIFICATIONS** 

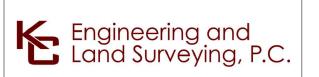
1. CLEAN OUT THE SEDIMENT TANK WHEN ONE THIRD (1/3) FILLED WITH SILT.

- 2. STEEL DRUMS ARE USED AS AN EXAMPLE DUE TO THEIR READY AVAILABILITY. ANY TANKS MAY BE USED, PROVIDING THAT THE VOLUME REQUIREMENTS ARE
- 3. ALL SEDIMENT COLLECTED IN THE TANK SHALL BE DISPOSED OF IN A SEDIMENT TRAPPING DEVICE OR AS APPROVED BY THE INSPECTOR.

PORTABLE SEDIMENT TANK









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SECTION A-A

CHAMPLAIN HUDSON POWER EXPRESS NT 10 (PACKAGE 6) - SELKIRK RAIL YARD BYPASS TO CATSKILL **EROSION AND SEDIMENT CONTROL DETAILS** 

DESIGNED BY: MK APPROVED BY: NH REV. NO.

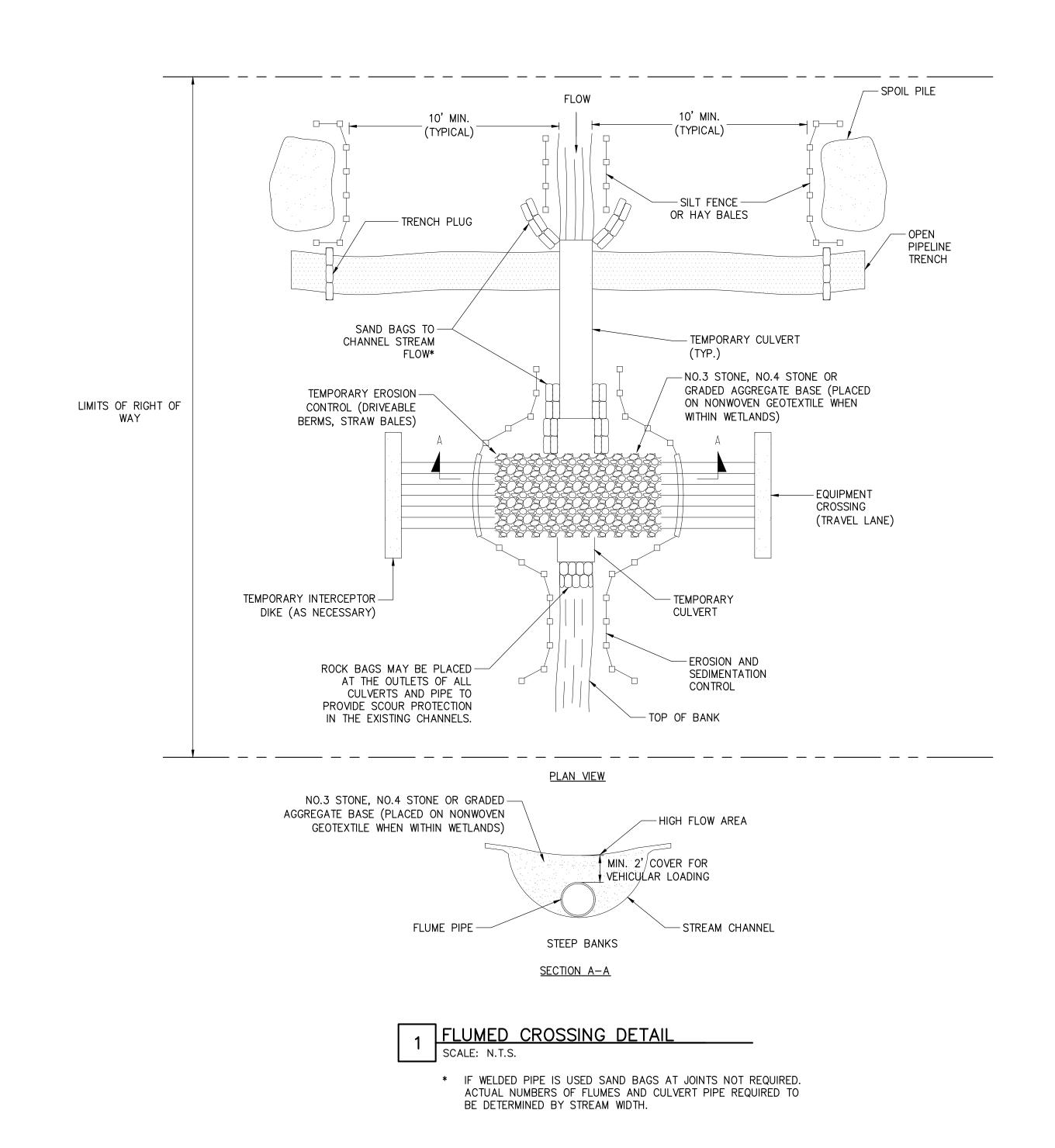
KIEWIT PROJECT NO. 21162 KC PROJECT NO. 120174 DRAWING NO.

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9/29/2023

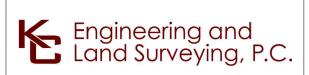
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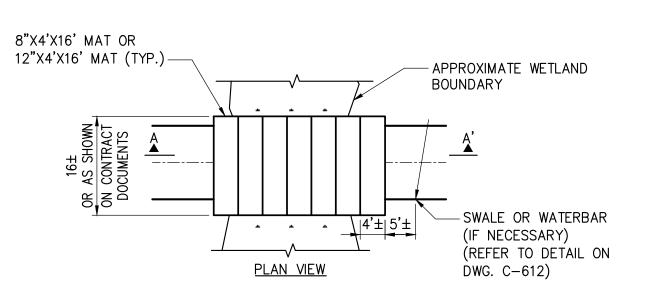
CHAMPLAIN HUDSON POWER EXPRESS	
SEGMENT 10 (PACKAGE 6) - SELKIRK RAIL YARD BYPASS TO CATSKILL	
EROSION AND SEDIMENT CONTROL DETAILS	

DESIGNED BY: MK APPROVED BY: NH REV. NO.

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

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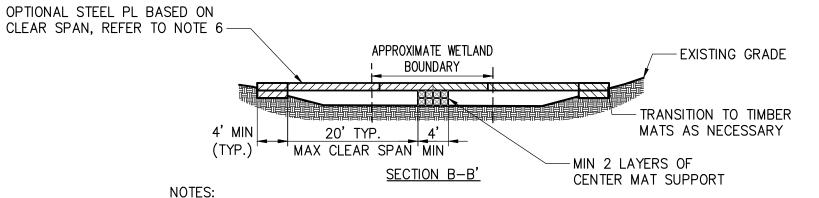
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WATERWAY FLOW REFER TO NOTE 6 -APPROXIMATE WETLAND BOUNDARY -TIMBER MAT -SWALE OR WATERBAR (IF NECESSARY) (REFER TO DETAIL ON <u>PLAN VIEW</u> DWG. C-612)

8"X4'X16' MAT OR 12"X4'X16' MAT (TYP.)— EXISTING GRADE — ! APPROXIMATE WETLAND ! BOUNDARY - TRANSITION TO TIMBER MATS AS NECESSARY SECTION A-A'

- 1. TIMBER MATS SHOULD BE INSTALLED IN WETLANDS AND OTHER AREAS IF NECESSARY TO PREVENT RUTTING.
- 2. FOR CROSSINGS WITH LARGER SPANS THE CONTRACTOR SHALL CONSULT WITH THE TEMPORARY STRUCTURES AND CONSTRUCTION DEVICES ENGINEER.
- 3. TIMBER MAT SURFACE SHOULD BE LEVEL TO PREVENT EQUIPMENT AND VEHICLES FROM SLIDING OFF DURING MUDDY OR ICING CONDITIONS, AND PREVENT TIMBERS FROM BREAKING. 4. SEDIMENT TRACKED ONTO TIMBER MATTING SHOULD BE REMOVED AS NECESSARY TO PREVENT SEDIMENT FROM ENTERING WETLAND DURING RAIN EVENTS. SEDIMENT SHOULD BE
- REMOVED TO A STABILIZED SOIL STOCKPILE OR OTHER APPROVED LOCATION. 5. PERIMETER EROSION AND SEDIMENT CONTROLS ARE REQUIRED TO BE INSTALLED PRIOR TO
- PLACING TIMBER MATTING. 6. UNLESS PERMITTED FROM REMOVAL, STUMPS WITHIN THE WETLAND SHOULD REMAIN. THIS
- MAY REQUIRE ADDITIONAL TIMBERS TO BRIDGE ABOVE. 7. UPON REMOVAL OF TIMBER MATTING ALL SPLINTERED WOOD SHOULD BE REMOVED. IF
- EXPOSED SOILS ARE PRESENT STRAW MULCH SHOULD BE APPLIED.
- 8. ALL EQUIPMENTS SHOULD MAINTAIN A MINIMUM OF 2 FT SETBACK FROM EDGE OF THE MATS WHILE CROSSING.
- 9. SINGLE OR MULTIPLE LAYERS OF MATS SHALL BE PLACED BASED ON EXISTING SOIL CONDITIONS.



- 1. IN-STREAM EXCAVATION SHOULD BE COMPLETED IN ACCORDANCE WITH "TEMPORARY ACCESS WATERWAY CROSSING" ON PAGE 2.32 OF THE 2016 NYSDEC STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL (OR NEWEST VERSION) AND IN ACCORDANCE WITH SECTION 9.1 WATER BODIES IN THE PROJECT EM&CP.
- 2. THE CONSTRUCTION OF ANY CROSSING SHOULD NOT CAUSE A SIGNIFICANT WATER LEVEL DIFFERENCE BETWEEN THE UPSTREAM AND DOWNSTREAM WATER SURFACE ELEVATIONS. FISH SPAWNING OR MIGRATION DATES CAN VARY ACROSS NEW YORK, AND RESTRICTIONS IMPOSED BY THE NYSDEC MY VARY AND MUST BE VERIFIED. REFER TO CERTIFICATE OF CONDITIONS.
- 3. ALL FILL MATERIALS ASSOCIATED WITH THE ROADWAY APPROACH SHOULD BE LIMITED TO A MAXIMUM HEIGHT OF 2 FT ABOVE THE EXISTING FLOOD PLAIN ELEVATION.
- 4. A WATER DIVERTING STRUCTURE SUCH AS A SWALE OR WATER BAR SHOULD BE CONSTRUCTED (ACROSS THE ROADWAY ON BOTH ROADWAY APPROACHES) 50 FEET (MAXIMUM) ON EITHER SIDE OF THE WATERWAY CROSSING. THIS WILL PREVENT ROADWAY SURFACE RUNOFF FROM DIRECTLY ENTERING THE WATERWAY. THE 50 FEET MEASURED IS MEASURED FROM THE TOP OF THE WATERWAY BANK. IF THE ROADWAY APPROACH IS CONSTRUCTED WITH A REVERSE GRADE AWAY FROM THE WATERWAY, A SEPARATE DIVERTING STRUCTURE IS NOT REQUIRED.
- 5. ALL EQUIPMENTS SHOULD MAINTAIN A MINIMUM OF 2 FT SETBACK FROM EDGE OF THE MATS WHILE CROSSING.
- CONTRACTOR SHALL CONSULT WITH TEMPORARY STRUCTURES AND CONSTRUCTION DEVICES ENGINEER FOR APPROPRIATE MATTING SIZES AND LENGTHS AND REQUIRED SOIL BEARING PRESSURES.



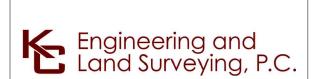
TIMBER MATTING (WETLAND CROSSING)

**GENERAL NOTES:** 

- 1. TIMBER SHALL BE SELECT STRUCTURAL MIXED OAK WITH A MINIMUM BENDING STRESS OF 1250 PSI OR BETTER.
- CONTRACTOR TO VERIFY ALL DIMENSIONS AND SITE CONDITIONS PRIOR TO COMMENCING WORK. ANY ERRORS, OMISSIONS, OR UNUSUAL CONDITIONS ARE TO BE REPORTED TO THE TEMPORARY STRUCTURES AND CONSTRUCTION DEVICES ENGINEER









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CHAMPLAIN HUDSON POWER EXPRESS ENT 10 (PACKAGE 6) - SELKIRK RAIL YARD BYPASS TO CATSKILL WETLAND CROSSING DETAILS

DESIGNED BY: LY APPROVED BY: LZ REV. NO.

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

C-611

AS SHOWN DATE

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