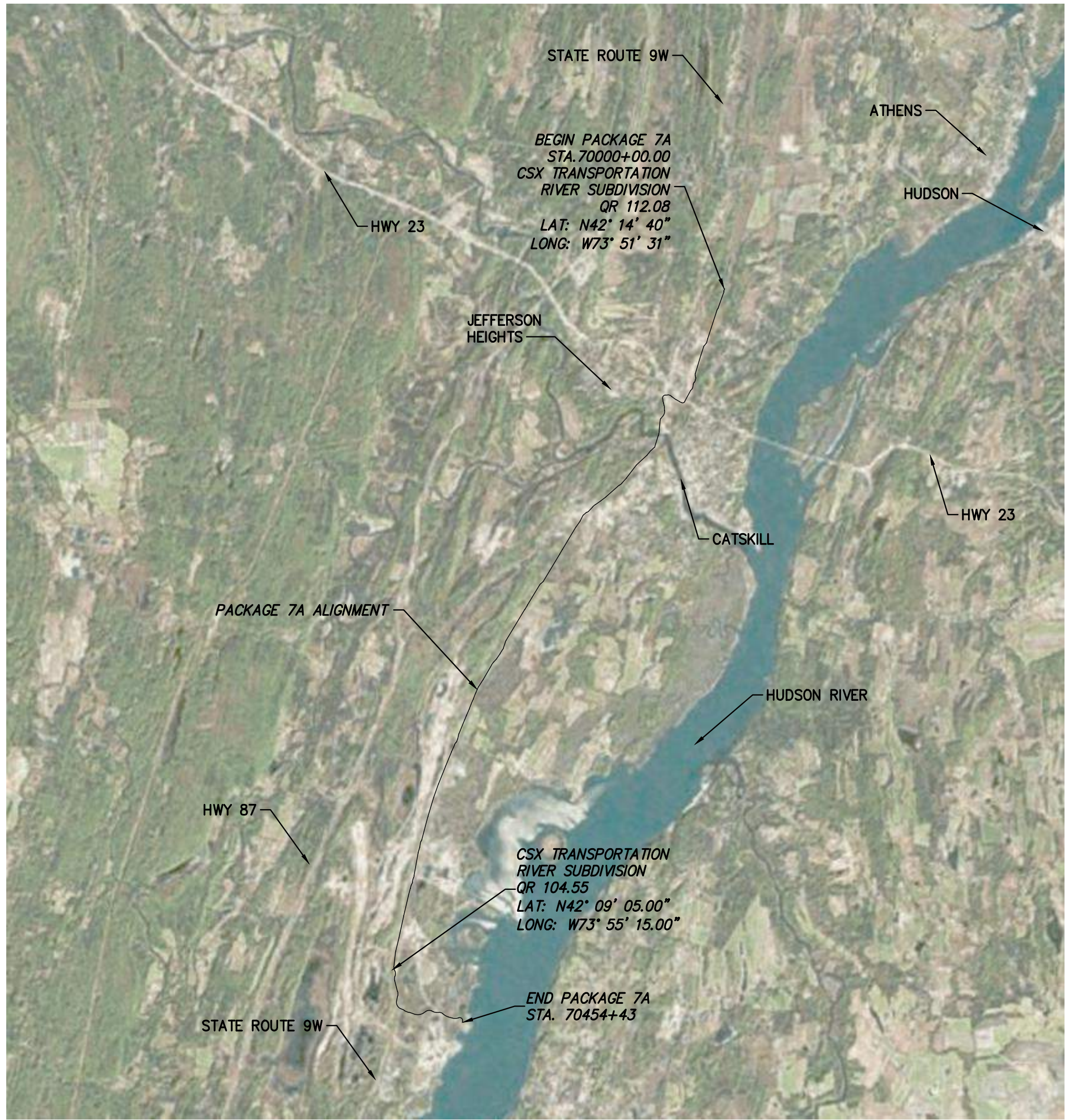


CHAMPLAIN HUDSON POWER EXPRESS

SEGMENT 11 (PACKAGE 7A) CSX: CATSKILL GREENE COUNTY, NEW YORK ISSUED FOR CONSTRUCTION SUBMISSION PLANS



SITE LOCATION MAP
SCALE: 1" = 5000'



TETRA TECH ENGINEERING AND SURVEYING P.C.
(A NEW YORK PROFESSIONAL CORPORATION)



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.

0	06/19/2023	ISSUED FOR CONSTRUCTION SUBMISSION	RB	JL	
No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP	

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

KIEWIT PROJECT NO.	21162
TT PROJECT NO.	204-3701
DRAWING NO.	G-000
DATE	06/19/2023
SH.NO.	OF

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CSX GENERAL NOTES:

1. AUTHORITY OF CSX ENGINEER:

- 1.a. THE CSX REPRESENTATIVE SHALL HAVE FINAL AUTHORITY IN ALL MATTERS AFFECTING THE SAFE MAINTENANCE OF CSX OPERATIONS AND CSX PROPERTY, AND HIS OR HER APPROVAL SHALL BE OBTAINED BY THE CHPE LLC OR ITS CONTRACTOR FOR METHODS OF CONSTRUCTION TO AVOID INTERFERENCE WITH CSX OPERATIONS IN CSX PROPERTY AND ALL OTHER MATTERS CONTEMPLATED BY THE AGREEMENT AND THESE SPECIAL PROVISIONS.

2. INTERFERENCE WITH CSX OPERATION

- 2.a. CHPE LLC OR ITS CONTRACTOR SHALL ARRANGE AND CONDUCT ITS WORK SO THAT THERE WILL BE NO INTERFERENCE WITH CSX OPERATIONS, INCLUDING, BUT NOT LIMITED TO: TRAIN, SIGNAL, TELEPHONE AND TELEGRAPHIC SERVICES, OR DAMAGE TO CSX'S PROPERTY, OR TO POLES, WIRES, AND OTHER FACILITIES OF TENANTS ON CSX'S PROPERTY OR RIGHT-OF-WAY. CHPE LLC OR ITS CONTRACTOR SHALL STORE MATERIALS SO AS TO PREVENT TRESPASSERS FROM CAUSING DAMAGE TO TRAINS, OR CSX PROPERTY. WHENEVER WORK IS LIKELY TO AFFECT THE OPERATIONS OR SAFETY OF TRAINS, AN APPROVAL OF THE METHOD OF WORK BY CSXT OR ITS REPRESENTATIVE SHALL NOT RELIEVE CHPE LLC OR ITS CONTRACTOR FROM LIABILITY IN CONNECTION WITH SUCH WORK.
- 2.b. IF CONDITIONS ARISING FROM OR IN CONNECTION WITH THE PROJECT REQUIRE THAT IMMEDIATE AND UNUSUAL PROVISIONS BE MADE TO PROTECT TRAIN OPERATIONS OR CSX'S PROPERTY, CHPE LLC OR ITS CONTRACTOR SHALL MAKE SUCH PROVISION IN COORDINATION WITH CSXT OR ITS REPRESENTATIVE. IF THE CSX REPRESENTATIVE DETERMINES THAT SUCH PROVISIONS IS INSUFFICIENT, CSX MAY, AT THE EXPENSE OF CHPE LLC OR ITS CONTRACTOR, REQUIRE OR PROVIDE SUCH PROVISION AS MAY BE DEEMED NECESSARY, OR CAUSE THE WORK TO CEASE IMMEDIATELY.
- 2.c. SHOULD WORK ACTIVITIES BE REQUIRED WITHIN CSX PROPERTY OR RIGHT-OF-WAY, THE CONTRACTOR SHALL REQUEST CSX TO LOCATE ANY BURIED UTILITIES OR FACILITIES (AIR LINES, WELLS, ETC.). A WRITTEN REQUEST SHALL BE DELIVERED TO THE CSX REPRESENTATIVE AT LEAST FIVE (5) DAYS IN ADVANCE. THE TRADITIONAL "ONE CALL" UTILITY LOCATE SERVICES ARE NOT RESPONSIBLE FOR LOCATING ANY CSX UNDERGRADE UTILITIES OR FACILITIES. IT IS THE RESPONSIBILITY OF THE CHPE LLC OR ITS CONTRACTOR TO COORDINATE WITH CSXT OR ITS REPRESENTATIVE TO LOCATE ANY UNDERGRADE CSXT UTILITIES OR FACILITIES. "DIG SAFE" PROCEDURES ARE TO BE FOLLOWED CONSISTENT WITH THE EM&CP NARRATIVE REPORT IN ADDITION TO THE ABOVE CSX UTILITY REQUIREMENTS.

3. INSURANCE:

- THE CONTRACTOR SHALL NOT BE PERMITTED TO WORK ON, OR HAVE POTENTIAL TO FOUL, CSX PROPERTY OR RIGHT-OF-WAY UNTIL IT HAS COMPLIED WITH THE FOLLOWING CONDITIONS:
- 3.a. NOTIFY CSX IN WRITING OF THE DATE THAT IT INTENDS TO COMMENCE WORK ON THE PROJECT. SUCH NOTICE MUST BE RECEIVED BY CSX AT LEAST TEN (10) BUSINESS DAYS IN ADVANCE OF THE DATE CHPE LLC OR ITS CONTRACTOR PROPOSES TO BEGIN WORK ON CSX PROPERTY. THE NOTICE MUST REFER TO THIS AGREEMENT BY DATE. IF FLAGGING SERVICE IS REQUIRED, SUCH NOTICE SHALL BE SUBMITTED AT LEAST THIRTY (30) BUSINESS DAYS IN ADVANCE OF THE DATE SCHEDULED TO COMMENCE THE WORK.
- 3.b. OBTAIN AUTHORIZATION FROM THE CSX REPRESENTATIVE TO BEGIN WORK ON CSX PROPERTY. ONCE AUTHORIZATION IS GIVEN, CHPE LLC OR CONTRACTOR SHALL PROVIDE A DETAILED SCHEDULE TO INCLUDE MEANS AND METHODS FOR REVIEW, COMMENT AND/OR APPROVAL PRIOR TO COMMENCEMENT OF WORK. CSX WILL IN TURN PROVIDE DIRECTION REGARDING SPECIFIC CONDITIONS WITH WHICH IT MUST COMPLY.
- 3.c. OBTAIN FROM CSX THE NAMES, ADDRESSES AND TELEPHONE NUMBERS OF CSX'S PERSONNEL WHO MUST RECEIVE NOTICE UNDER PROVISIONS IN THE AGREEMENT. WHERE MORE THAN ONE INDIVIDUAL IS DESIGNATED, THE AREA OF RESPONSIBILITY OF EACH SHALL BE SPECIFIED.

4. WORK FOR THE BENEFIT OF THE CONTRACTOR:

- 4.a. UNLESS OTHERWISE AGREED UPON, CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COSTS AND PERMIT REQUIREMENTS FOR RELOCATION OR MODIFICATION OF EXISTING THIRD PARTY FACILITIES AND MAY REQUIRE AN EM&CP CHANGE.
- 4.b. SHOULD CHPE LLC OR CONTRACTOR DESIRE ANY CHANGES IN ADDITION TO THE ABOVE, THEN IT SHALL MAKE SEPARATE ARRANGEMENTS WITH CSX FOR SUCH CHANGES TO BE ACCOMPLISHED AT THE CHPE LLC OR CONTRACTOR'S EXPENSE.

5. HAUL ACROSS RAILROAD:

- 5.a. IF CHPE LLC OR CONTRACTOR DESIRES ACCESS ACROSS CSX PROPERTY OR TRACKS AT OTHER THAN AN EXISTING AND OPEN PUBLIC ROAD CROSSING IN OR INCIDENT TO CONSTRUCTION OF THE PROJECT, THE CHPE LLC OR CONTRACTOR MUST FIRST OBTAIN THE PERMISSION OF CSX AND SHALL EXECUTE AN AGREEMENT, WHEREIN CHPE LLC OR CONTRACTOR AGREES TO BEAR ALL COSTS AND LIABILITIES RELATED TO SUCH ACCESS.
- 5.b. TEMPORARY CONSTRUCTION HAUL ROADS ACROSS CSX TRACKS WILL REQUIRE A SEPARATE APPLICATION AND PAYMENT TO CSX PROPERTY SERVICES. AGREEMENT EXTENSIONS REQUIRE ADDITIONAL PAYMENT. ACTUAL COST IS VARIABLE AND PROJECT SPECIFIC.
- 5.c. CHPE LLC AND CONTRACTOR SHALL NOT CROSS CSX'S PROPERTY AND TRACKS WITH VEHICLES OR EQUIPMENT OF ANY KIND OR CHARACTER, EXCEPT AT SUCH CROSSING OR CROSSINGS AS MAY BE PERMITTED PURSUANT TO THIS SECTION.

6. COOPERATION AND DELAYS

- 6.a. CHPE LLC OR CONTRACTOR SHALL ARRANGE A SCHEDULE WITH CSX FOR ACCOMPLISHING STAGE CONSTRUCTION INVOLVING WORK BY CSX. IN ARRANGING ITS SCHEDULE, CHPE LLC OR CONTRACTOR SHALL ASCERTAIN, FROM CSX, THE LEAD TIME REQUIRED FOR ASSEMBLING CREWS AND MATERIALS AND SHALL MAKE DUE ALLOWANCE THEREFORE.
- 6.b. CHPE LLC OR CONTRACTOR MAY NOT CHARGE ANY COSTS OR SUBMIT ANY CLAIMS AGAINST CSX FOR HINDRANCE OR DELAY CAUSE BY RAILROAD TRAFFIC; WORK DONE BY CSX OR OTHER DELAY INCIDENT TO OR NECESSARY FOR SAFE MAINTENANCE OF RAILROAD TRAFFIC; OR FOR ANY DELAYS DUE TO COMPLIANCE WITH THESE SPECIAL PROVISIONS.
- 6.c. CHPE LLC AND CONTRACTOR SHALL COOPERATE WITH OTHERS PARTICIPATING IN THE CONSTRUCTION OF THE PROJECT TO THE END THAT ALL WORK MAY BE CARRIED ON TO THE BEST ADVANTAGE.
- 6.d. CHPE LLC AND CONTRACTOR UNDERSTAND AND AGREE THAT CSX DOES NOT ASSUME ANY RESPONSIBILITY FOR WORK PERFORMED BY OTHERS IN CONNECTION WITH THE PROJECT. CHPE LLC AND CONTRACTOR FURTHER UNDERSTAND AND AGREE THAT THEY SHALL HAVE NO CLAIM WHATSOEVER AGAINST CSX FOR ANY INCONVENIENCE, DELAY OR ADDITIONAL COST INCURRED BY CHPE LLC OR CONTRACTOR ON ACCOUNT OF OPERATIONS BY OTHERS.

7. STORAGE OF MATERIALS AND EQUIPMENT:

- 7.a. CHPE LLC AND CONTRACTOR SHALL NOT STORE THEIR MATERIALS OR EQUIPMENT ON CSX'S PROPERTY OR WHERE THEY MAY POTENTIALLY INTERFERE WITH CSX'S OPERATIONS, UNLESS CHPE LLC OR CONTRACTOR HAS RECEIVED CSX REPRESENTATIVE'S PRIOR WRITTEN PERMISSION. CHPE LLC AND CONTRACTOR UNDERSTAND AND AGREE THAT CSX WILL NOT BE LIABLE FOR ANY DAMAGE TO SUCH MATERIALS AND EQUIPMENT FROM ANY CAUSE AND THAT CSX MAY MOVE, OR REQUIRE CHPE LLC OR CONTRACTOR TO MOVE, SUCH MATERIAL AND EQUIPMENT AT CHPE LLC'S OR CONTRACTOR'S SOLE EXPENSE, TO MINIMIZE THE POSSIBILITY OF DAMAGE TO THE RAILROAD TRACKS RESULTING FROM THE UNAUTHORIZED USE OF EQUIPMENT, ALL GRADING OR OTHER CONSTRUCTION EQUIPMENT THAT IS LEFT PARKED NEAR THE TRACKS UNATTENDED BY WATCHMEN SHALL BE IMMOBILIZED TO THE EXTENT FEASIBLE SO THAT IT CANNOT BE MOVED BY UNAUTHORIZED PERSONS.

8. CONSTRUCTION PROCEDURES

GENERAL

- 8.a. CONSTRUCTION WORK ON CSX PROPERTY SHALL BE SUBJECT TO CSX'S INSPECTION AND APPROVAL.
- 8.b. CONSTRUCTION WORK ON CSX PROPERTY SHALL BE IN ACCORD WITH CSX'S CONSTRUCTION SUBMISSION CRITERIA, LATEST EDITION AND CSX'S WRITTEN OUTLINE OF SPECIFIC CONDITIONS AND WITH THESE SPECIAL PROVISIONS.
- 8.c. CONTRACTOR SHALL OBSERVE THE TERMS AND RULES OF THE CSX SAFE WAY MANUAL, WHICH CHPE LLC AND CONTRACTOR SHALL BE REQUIRED TO OBTAIN FROM CSX, AND IN ACCORD WITH ANY OTHER INSTRUCTIONS FURNISHED BY CSX OF CSX'S REPRESENTATIVE. FAILURE TO COMPLY WITH THE TERMS OF THE AGREEMENT AND CSX RULES CAN RESULT IN MANDATORY RAILROAD WORKER PROTECTIVE TRAINING FOR THE CHPE LLC, CONTRACTOR AND ITS SUBCONTRACTORS.

BLASTING

- 8.d. CHPE LLC OR CONTRACTOR SHALL OBTAIN CSX REPRESENTATIVE'S AND CHPE LLC REPRESENTATIVES PRIOR WRITTEN APPROVAL FOR USE OF EXPLOSIVES ON OR ADJACENT TO CSX PROPERTY. IF PERMISSION FOR USE OF EXPLOSIVES IS GRANTED, CHPE LLC OR CONTRACTOR MUST COMPLY WITH THE FOLLOWING CODE:
- 8.d.1. BLASTING SHALL BE DONE WITH LIGHT CHARGES UNDER THE DIRECT SUPERVISION OF A RESPONSIBLE OFFICER OR EMPLOYEE OF CHPE LLC OR CONTRACTOR
- 8.d.2. ELECTRIC DETONATING FUSES SHALL NOT BE USED BECAUSE OF THE POSSIBILITY OF PREMATURE EXPLOSIONS RESULTING FROM OPERATION OF TWO-WAY TRAIN RADIOS.
- 8.d.3. NO BLASTING SHALL BE DONE WITHOUT THE PRESENCE OF AN AUTHORIZED REPRESENTATIVE OF CSX. AT LEAST THIRTY (30) DAYS' ADVANCE NOTICE TO CSX REPRESENTATIVES IS REQUIRED TO ARRANGE FOR THE PRESENCE OF AN AUTHORIZED CSX REPRESENTATIVE AND ANY FLAGGING THAT CSX MAY REQUIRE.
- 8.d.4. CHPE LLC OR CONTRACTOR MUST HAVE AT THE PROJECT SITE ADEQUATE EQUIPMENT, LABOR AND MATERIALS, AND ALLOW SUFFICIENT TIME TO (1) CLEAN UP (AT CHPE LLC'S EXPENSE) DEBRIS RESULTING FROM THE BLASTING WITHOUT ANY DELAY TO TRAINS; AND (2) CORRECT (AT CHPE LLC'S EXPENSE) ANY TRACK MISALIGNMENT OR OTHER DAMAGE TO CSX'S PROPERTY RESULTING FROM THE BLASTING, AS DIRECTED BY CSX REPRESENTATIVE, WITHOUT DELAY TO TRAINS. IF CHPE LLC'S OR CONTRACTOR'S ACTIONS RESULT IN DELAY OF ANY TRAINS, INCLUDING AMTRAK PASSENGER TRAINS, CHPE LLC SHALL BEAR THE ENTIRE COST THEREOF.
- 8.d.5. CHPE LLC AND CONTRACTOR SHALL NOT STORE EXPLOSIVES ON CSX PROPERTY.

9. CSX REPRESENTATIVE WILL

- 9.a. DETERMINE THE APPROXIMATE LOCATION OF TRAINS AND ADVISE CHPE LLC OR CONTRACTOR OF THE APPROXIMATE AMOUNT OF TIME AVAILABLE FOR THE BLASTING OPERATION AND CLEAN-UP.
- 9.b. HAVE THE AUTHORITY TO ORDER DISCONTINUANCE OF BLASTING IF, IN HIS OR HER OPINION, BLASTING IS TOO HAZARDOUS OR IS NOT IN ACCORD WITH THESE SPECIAL PROVISIONS.

10. ENVIRONMENTAL

- 10.a. SOIL EXCAVATION WITHIN CSX PROPERTY IS ANTICIPATED, AND IF SAID SOILS CANNOT REMAIN ON CSX PROPERTY DURING AND AFTER CONSTRUCTION, THEN CSX ENVIRONMENTAL MUST BE CONTACTED AT LEAST THIRTY (30) DAYS IN ADVANCE OF THE WORK IN ORDER TO SCHEDULE SAMPLING, CLASSIFICATION AND DISPOSITION OF MATERIAL. EXCAVATED MATERIAL IS PROHIBITED FROM BEING REMOVED FROM CSX PROPERTY, OR RIGHTS-OF-WAY, WITHOUT EXPRESSED WRITTEN DIRECTION FROM CSX. SHOULD FINAL DISPOSITION REQUIRE DISPOSAL OF EXCAVATED MATERIAL, CSX SHALL HAVE SOLE DISCRETION OF MEANS AND LOCATION OF SAID DISPOSAL. THE MEANS AND LOCATION OF DISPOSAL SHALL BE IN COMPLIANCE WITH THE EM&CP GUIDELINES, CERTIFICATE REQUIREMENTS, AND BEST MANAGEMENT PRACTICES AS APPROVED BY NYS DPS. CHPE LLC WILL BEAR ALL COSTS ASSOCIATED WITH SAMPLING, STAGING AND SUBSEQUENT DISPOSAL IF DEEMED NECESSARY. CONTRACTOR WILL BE REQUIRED TO OBTAIN ALL DISPOSAL TICKETS / DOCUMENTATION AND PROVIDE THE INFORMATION TO THE CSX REPRESENTATIVE. CSX WILL NOT BEAR ANY COSTS ASSOCIATED WITH THIS WORK.
- 10.b. ANY WASTE MATERIALS GENERATED BY THE PROJECT, INCLUDING BUT NOT LIMITED TO WASHING WITH CLEANING SOLVENTS, BLASTING, SCRAPING, BRUSHING AND PAINTING OPERATIONS, SHALL BE THE RESPONSIBILITY OF THE CHPE LLC OR ITS CONTRACTOR AND SHALL BE CONTAINED, COLLECTED AND PROPERLY DISPOSED OF BY THE CHPE LLC OR ITS CONTRACTOR. CHPE LLC AND ITS CONTRACTOR AGREE TO FULLY COMPLY WITH ALL FEDERAL, STATE, AND LOCAL ENVIRONMENTAL LAWS, REGULATIONS, STATUTES AND ORDINANCES AT ALL TIMES IN ACCORDANCE WITH THIS EM&CP.

11. MAINTENANCE OF DITCHES ADJACENT TO CSX TRACKS

- 11.a. CHPE LLC OR CONTRACTOR SHALL MAINTAIN ALL DITCHES AND DRAINAGE STRUCTURES FREE OF SILT OR OTHER OBSTRUCTIONS THAT MAY RESULT FROM THEIR OPERATIONS. IN ADDITION, CHPE LLC OR CONTRACTOR SHALL MAINTAIN ALL CSX PROPERTY OR RIGHT-OF-WAY IMPACTED BY PROJECT OPERATIONS INCLUDING BUT NOT LIMITED TO: ACCESS OR HAUL ROADS, STAGING AREAS, PARKING LOTS IN A MANNER THAT PROVIDES CSX FREE AND CLEAR ACCESS TO FACILITIES, MATERIALS WHILE PROVIDING ACCEPTABLE DRIVING SURFACES FREE OF DRAINAGE IMPACTS OR REDUCED CSX CAPACITY. CHPE LLC OR CONTRACTOR SHALL PROVIDE EROSION CONTROL MEASURES DURING CONSTRUCTION AND USE METHODS THAT ACCORD WITH APPLICABLE STATE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, INCLUDING EITHER (1) SILT FENCE; (2) HAY OR STRAW BARRIER; (3) BERM OF TEMPORARY DITCHES; (4) SEDIMENT BASIN; AGGREGATE CHECKS; AND (6) CHANNEL LINING. ALL SUCH MAINTENANCE AND REPAIR OF DAMAGES DUE TO CHPE LLC'S OR CONTRACTORS OPERATIONS SHALL BE PERFORMED AT CHPE LLC'S EXPENSE.

12. TRACK PROTECTION / INSPECTION SERVICE

- 12.a. CSX HAS SOLE AUTHORITY TO DETERMINE THE NEED FOR TRACK PROTECTION REQUIRED TO PROTECT ITS OPERATIONS AND PROPERTY. IN GENERAL, TRACK PROTECTION WILL BE REQUIRED WHENEVER CHPE LLC OR CONTRACTOR OR THEIR EQUIPMENT ARE, OR ARE LIKELY TO BE, WORKING WITHIN FIFTY (50) FEET OF LIVE TRACK OR OTHER TRACK CLEARANCES SPECIFIED BY CSX, OR OVER TRACKS.
- 12.b. CHPE LLC SHALL REIMBURSE CSX DIRECTLY FOR ALL COSTS OF TRACK PROTECTION THAT IS REQUIRED ON ACCOUNT OF CONSTRUCTION WITHIN CSX PROPERTY SHOWN IN THE PLANS, OR THAT IS COVERED BY AN APPROVED PLAN REVISION, SUPPLEMENTAL AGREEMENT OR CHANGE ORDER.
- 12.c. CHPE LLC OR CONTRACTOR SHALL GIVE A MINIMUM OF THIRTY (30) DAYS' ADVANCE NOTICE TO CSX REPRESENTATIVE FOR ANTICIPATED NEED FOR TRACK PROTECTION. NO WORK SHALL BE UNDERTAKEN UNTIL THE FLAG PERSON(S) IS/ARE AT THE JOB SITE. IF IT IS NECESSARY FOR CSX TO ADVERTISE A FLAGGING JOB FOR BID, IT MAY TAKE UP TO NINETY (90) DAYS TO OBTAIN THIS SERVICE AND CSX SHALL NOT BE LIABLE FOR THE COST OF DELAYS ATTRIBUTED TO OBTAINING SUCH SERVICE.
- 12.d. CSX SHALL HAVE THE RIGHT TO ASSIGN AN INDIVIDUAL TO THE SITE OF THE PROJECT TO PERFORM INSPECTION SERVICE WHENEVER, IN THE OPINION OF CSX REPRESENTATIVE, SUCH INSPECTION MAY BE NECESSARY. CHPE LLC SHALL REIMBURSE CSX FOR THE COSTS INCURRED BY CSX FOR SUCH INSPECTION SERVICE. INSPECTION SERVICE SHALL NOT RELIEVE CHPE LLC OR CONTRACTOR FROM LIABILITY.
- 12.e. CSX SHALL RENDER INVOICES FOR, AND CHPE LLC SHALL PAY FOR, THE ACTUAL PAY RATE OF THE FLAG PERSON(S) AND INSPECTORS USED, PLUS STANDARD ADDITIVES, WHETHER THAT AMOUNT IS ABOVE OR BELOW THE RATE PROVIDED IN THE ESTIMATE. IF THE RATE OF PAY THAT IS TO BE USED FOR INSPECTOR OR FLAGGING SERVICE IS CHANGED BEFORE THE WORK IS STARTED OR DURING THE PROGRESS OF THE WORK, WHETHER BY LAW OR AGREEMENT BETWEEN CSX AND ITS EMPLOYEES, OR IF THE TAX RATES ON LABOR ARE CHANGED, BILLS WILL BE RENDERED BY CSX AND PAID BY CHPE LLC USING THE NEW RATES AND CONTRACTOR SHALL PERFORM THEIR OPERATIONS THAT REQUIRE TRACK PROTECTION OR INSPECTION SERVICE IN SUCH A MANNER AND SEQUENCE THAT THE COST OF SUCH WILL BE AS ECONOMICAL AS POSSIBLE.

13. UTILITY FACILITIES ON CSX PROPERTY

- 13.a. CHPE LLC SHALL ARRANGE, UPON APPROVAL FROM CSX, TO HAVE ANY UTILITY FACILITIES ON OR OVER CSX PROPERTY CHANGED AS MAY BE NECESSARY TO PROVIDE CLEARANCES FOR THE PROPOSED FACILITIES.

14. CLEAN-UP

- 14.a. CHPE LLC OR CONTRACTOR, UPON COMPLETION OF THE PROJECT, SHALL REMOVE AND DISPOSE FROM CSX'S PROPERTY ANY TEMPORARY CONSTRUCTION WORK, ANY TEMPORARY EROSION CONTROL MEASURES USED TO CONTROL DRAINAGE, ALL MACHINERY, EQUIPMENT, SURPLUS MATERIALS, FALSEWORK, RUBBISH, OR TEMPORARY BUILDINGS BELONGING TO CHPE LLC OR CONTRACTOR. CHPE LLC OR CONTRACTOR, UPON COMPLETION OF THE PROJECT, SHALL LEAVE CSX PROPERTY IN KIND OR BETTER CONDITION, SATISFACTORY TO THE CSX REPRESENTATIVE.

15. FAILURE TO COMPLY

- 15.a. IF CHPE LLC OR CONTRACTOR VIOLATE OR FAIL TO COMPLY WITH ANY OF THE REQUIREMENTS OF THESE SPECIAL PROVISIONS, (A) CSX MAY REQUIRE CHPE LLC AND/OR CONTRACTOR TO VACATE CSX PROPERTY; AND (B) CSX MAY WITHHOLD MONIES DUE CHPE LLC AND/OR CONTRACTOR; (C) CSX MAY REQUIRE CHPE LLC TO WITHHOLD MONIES DUE CONTRACTOR; AND (D) CSX MAY CURE SUCH FAILURE AND THE CHPE LLC SHALL REIMBURSE CSX FOR THE COST OF CURING SUCH FAILURE.



TETRA TECH ENGINEERING AND SURVEYING P.C.
(A NEW YORK PROFESSIONAL CORPORATION)

FOR INFORMATION

0	06/19/2023	ISSUED FOR CONSTRUCTION SUBMISSION					RB	JL	
No.	DATE	SUBMITTAL / REVISION DESCRIPTION					DB	APP	

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

DRAWN BY:	RB	DESIGNED BY:	AC	APPROVED BY:	JL	SCALE	AS SHOWN	DATE	06/19/2023
						REV. NO.	0	SH.NO.	OF

KIEWIT PROJECT NO.	21162
TT PROJECT NO.	204-3701
DRAWING NO.	G-003



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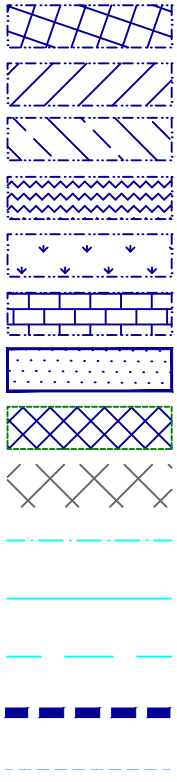
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LEGEND & ABBREVIATIONS

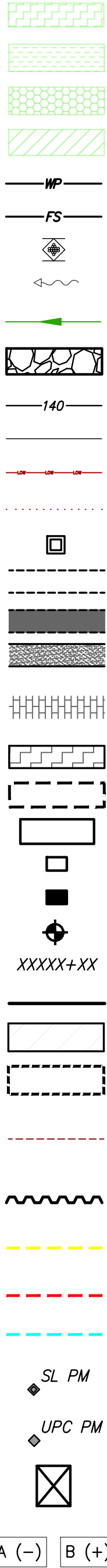
	EXIST. FIBER OPTIC LINE HANDHOLE		EXISTING SIGN
	EXIST. FIBER OPTIC LINE PEDESTAL		EXIST. STRUCTURE POST
	EXIST. FIBER OPTIC LINE DOGHOUSE		EXIST. STRUCTURE MAILBOX
	EXIST. FIBER OPTIC LINE MANHOLE		EXIST. GAS LINE
	EXIST. FIBER OPTIC LINE VAULT		EXIST. UNDERGROUND TELE.
	EXIST. FIBER OPTIC LINE BORE PIT		EXIST. FIBER OPTIC
	EXIST. FIBER OPTIC LOCK BOX		EXIST. OVERHEAD TELE.
	EXIST. GROUND ROD		EXIST. UNDERGROUND ELEC.
	EXIST. FIBER OPTIC MARKER POST		EXIST. OVERHEAD ELEC.
	EXIST. FIBER OPTIC BOX		EXIST. CULVERT
	EXIST. FIBER STORAGE		EXIST. SANITARY SEWER
	EXIST. FIRE HYDRANT		EXIST. STORM SEWER
	EXIST. WATER VALVE		EXIST. POTABLE WATER LINE
	EXIST. WATER MANHOLE		EXIST. FUEL LINE
	EXIST. WATER MARKER		EXIST. RAILROAD TRACK
	EXIST. SANITARY SEWER MANHOLE		CERTIFIED ROUTE PROVIDED BY CHPE KMZ
	EXIST. SANITARY SEWER VENT		RANDALL PREFERRED PROVIDED BY CHPE KMZ
	EXIST. STORM SEWER MANHOLE		EXIST. CONTOUR, INDEX
	EXIST. STORM SEWER CATCH BASIN		EXIST. CONTOUR, DEPRESSION INDEX
	EXIST. CULVERT INVERT		EXIST. CONTOUR, INTERMEDIATE
	EXIST. GAS MANHOLE		EXIST. CONTOUR, DEPRESSION INTERMEDIATE
	EXIST. GAS VALVE		EXIST. SPOT ELEVATION
	EXIST. GAS MARKER		EXIST. DEBRIS
	EXIST. GAS PIPELINE VENT		EXIST. FIELD LINE
	EXIST. LIGHT POLE		EXIST. LANDSCAPE AREA
	EXIST. UTILITY POLE		EXIST. PILE
	EXIST. ELEC. POLE		EXIST. STORAGE AREA
	EXIST. ELEC. TOWER		EXIST. NATURAL BOULDER
	EXIST. TRAFFIC LIGHT		EXIST. NATURAL SHRUB LINE
	EXIST. ELEC. METER		EXIST. NATURAL TREE LINE
	EXIST. ELEC. MANHOLE		EXIST. NATURAL SINGLE TREE/BUSH
	EXIST. ELEC. TRANSFORMER		EXIST. STRUCTURAL BUILDING
	EXIST. ELEC. VAULT		EXIST. PAVED DRIVE
	EXIST. ELEC. HANDHOLE		EXIST. PAVED ROAD
	EXIST. ELEC. PEDESTAL/BOX		EXIST. PAVED SHOULDER
	EXIST. ELEC. MARKER POST		EXIST. PAVED SIDEWALK
	EXIST. ELEC. GUY ANCHOR/WIRE		EXIST. GUARDRAIL
	EXIST. TELE. RISER/BOX		EXIST. TRAIL
	EXIST. TELE. MANHOLE		EXIST. FENCE
	EXIST. TELE. HANDHOLE		EXIST. WALL
	EXIST. TELE. VAULT		EXIST. RETAINING WALL
	EXIST. TELE. PEDESTAL		EXIST. MILEPOST NUMBER
	EXIST. TELE. DOGHOUSE		EXIST. MAPPING BOUNDARY
	EXIST. TELE. MARKER POST		EXIST. GROUND CONTROL
	EXIST. TELE. JUNCTION BOX		EXIST. RIGHT-OF-WAY
	EXIST. TELE. TRAFFIC SIGNAL BOX		EXIST. ABUTTER
	EXIST. CELL TOWER		EXIST. WETLAND FLAG
	EXIST. CABLE BOX		EXIST. WETLANDS
	EXISTING MANHOLE UNKNOWN		EXIST. WATERBODY, STREAM, OR STREAM BANK
	EXISTING UTILITY BOX UNKNOWN		
	EXISTING ANTENNA		

NOTES:

1. LIMIT OF WORK (LOW) – THE BOUNDARY IN WHICH ALL CONSTRUCTION ACTIVITIES, STOCKPILES MATERIAL, EQUIPMENT STORAGE, ACCESS, PARKING, GRADING, LANDSCAPING, RESTORATION, AND ANY OTHER CONSTRUCTION RELATED ACTIVITIES SHALL OCCUR. ADDITIONALLY, THE LOW IS THE BOUNDARY FOR ALL POTENTIAL DISTURBANCE DURING CONSTRUCTION. UNLESS OTHERWISE SPECIFIED, WHEN THE LIMIT OF CLEARING AND GRUBBING IS SHOWN ON THE PLANS, IT SHALL ALSO BE THE LOW. THE LOW INCLUDES THE AREA THAT WOULD BE CONSIDERED THE LIMIT OF DISTURBANCE (LOD).



PEM – PALUSTRINE EMERGENT
PSS – PALUSTRINE SCRUB–SHRUB
PFO – PALUSTRINE FORESTED
PUB – PALUSTRINE UNCONSOLIDATED BOTTOM
L1 – LACUSTRINE LIMNETIC
L2 – LACUSTRINE LITTORAL
NYSDEC FWW 100–FOOT ADJACENT BUFFER AREA
ESTIMATED WETLAND BOUNDARY
ESTIMATED AGRICULTURAL LAND BOUNDARY
FLOODWAY BOUNDARY
1% ANNUAL CHANCE FLOODPLAIN BOUNDARY
0.2% ANNUAL CHANCE FLOODPLAIN BOUNDARY
JD BOUNDARY
APPROX. USACE FEDERAL CHANNEL BOUNDARY (TYP.)



VEG. CLEARING – TYPE I – HAND CUTTING
VEG. CLEARING – TYPE II – MECHANICAL CLEARING
VEG. CLEARING – TYPE III – MOWING
VEG. CLEARING – TYPE IV – MECHANICAL WHOLE–TREE FELLING
PROP. WETLAND PROTECTION FENCE
PROP. COMPOST FILTER SOCK (OR SILT SOCK)
CHECK DAM
SURFACE WATER FLOW
PROP. TEMPORARY SWALE
STABILIZED CONSTRUCTION ENTRANCE (TYP.)
PROP. TEMP MAJOR CONTOUR
PROP. TEMP MINOR CONTOUR
PROP. LIMITS OF WORK/DISTURBANCE
PROP. LIMITS OF CLEARING/LIMITS OF WORK IN CLEARING AREAS
PROP. CONCRETE WASHOUT
PROP. TEMP ACCESS ROAD RTE (EXISTING ROAD OR SURFACE)
PROP. TEMP REFURBISHED ACCESS ROAD
PROP. TEMP ACCESS ROAD OR OFF SITE ACCESS ROAD
PROP. WETLAND OR AGRICULTURAL LAND* WORKING SURFACE (SEE SHEET C–613) (*AGRICULTURAL LANDS MAY USE WETLAND WORKING SURFACE OR OTHER APPROVED MITIGATION METHODS)
PROP. MILLING & RESURFACING
PROP. SPLICE LOCATION
PROP. SPLICE VAULT
PROP. LINK BOX HANDHOLE
PROP. FIBER SPLICE HANDHOLE
PROP. BORING LOCATION
PROP. ALIGNMENT STATIONING
PROP. ALIGNMENT CENTERLINE
PROP. LAYDOWN YARDS, PARKING, STORAGE & MUSTER AREA
PROP. WORK AREAS
7' FOUL ZONE: NO VEHICLES, MATERIALS, DISTURBANCE, PERSONNEL, OR WORK SHALL ENCROACH THE ZONE WITHIN 7FT OF THE NEAREST RAIL WITHOUT CSX COORDINATION AND APPROVAL
PROP. SHORING/SHEETING
PROP. TEMP EASEMENT
PROP. PERM EASEMENT
PROP. TEMP ACCESS EASEMENT
SPLICE LOCATION POLE MARKER
UNDERGROUND POWER CABLE POLE MARKER
PROP. TRANSITION BOX MANHOLE
DC CABLE IDENTIFICATION TAGS. SEE SHEET C–807 FOR MORE DETAILS

APP	APPROVED
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CONC	CONCRETE
DB	DESIGNED BY
DEC	NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DEG	DEGREES
DR	DRIVE
DZ	DEVIATION ZONE
E	EASTING
ELECTRIC	ELECTRIC CABLE
ELEV	ELEVATION
EQNAHD	STATION EQUATION AHEAD
EQNBK	STATION EQUATION BACK
EXIST	EXISTING
FIBER	FIBER OPTIC CABLE
FT	FEET
GAS	GAS PIPE
H	HORIZONTAL
HDD	HORIZONTAL DIRECTIONAL DRILLING
HVDC	HIGH–VOLTAGE DIRECT CURRENT TRANSMISSION LINE
INV	INVERT ELEVATION
LOW	LIMITS OF WORK
LT	LEFT
MAX	MAXIMUM
MIN	MINIMUM
N	NORTHING
NO	NUMBER
NY	NEW YORK
NYDEP	NEW YORK CITY DEPT. OF ENVIRONMENT PROTECTION
NYCDOT	NEW YORK CITY DEPT. OF TRANSPORTATION
NYDRP	NEW YORK CITY DEPT. OF PARKS AND RECREATION
P #	PACKAGE #
PERM	PERMANENT
PROP.	PROPOSED
PVC	POLYVINYL CHLORIDE
PVI	POINT OF VERTICAL INTERSECTION
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
REV	REVISION
ROW	RIGHT–OF–WAY
RT	RIGHT
RTE	ROUTE
SEWER	SANITARY SEWER PIPE
SH	SHEET
ST	STREET
STA	STATION
STORM	STORM DRAIN PIPE
TELECOM	TELECOMMUNICATIONS CABLE
TEMP	TEMPORARY
TR	THERMAL RESISTIVITY
TYP	TYPICAL
V	VERTICAL
WATER	WATERLINE



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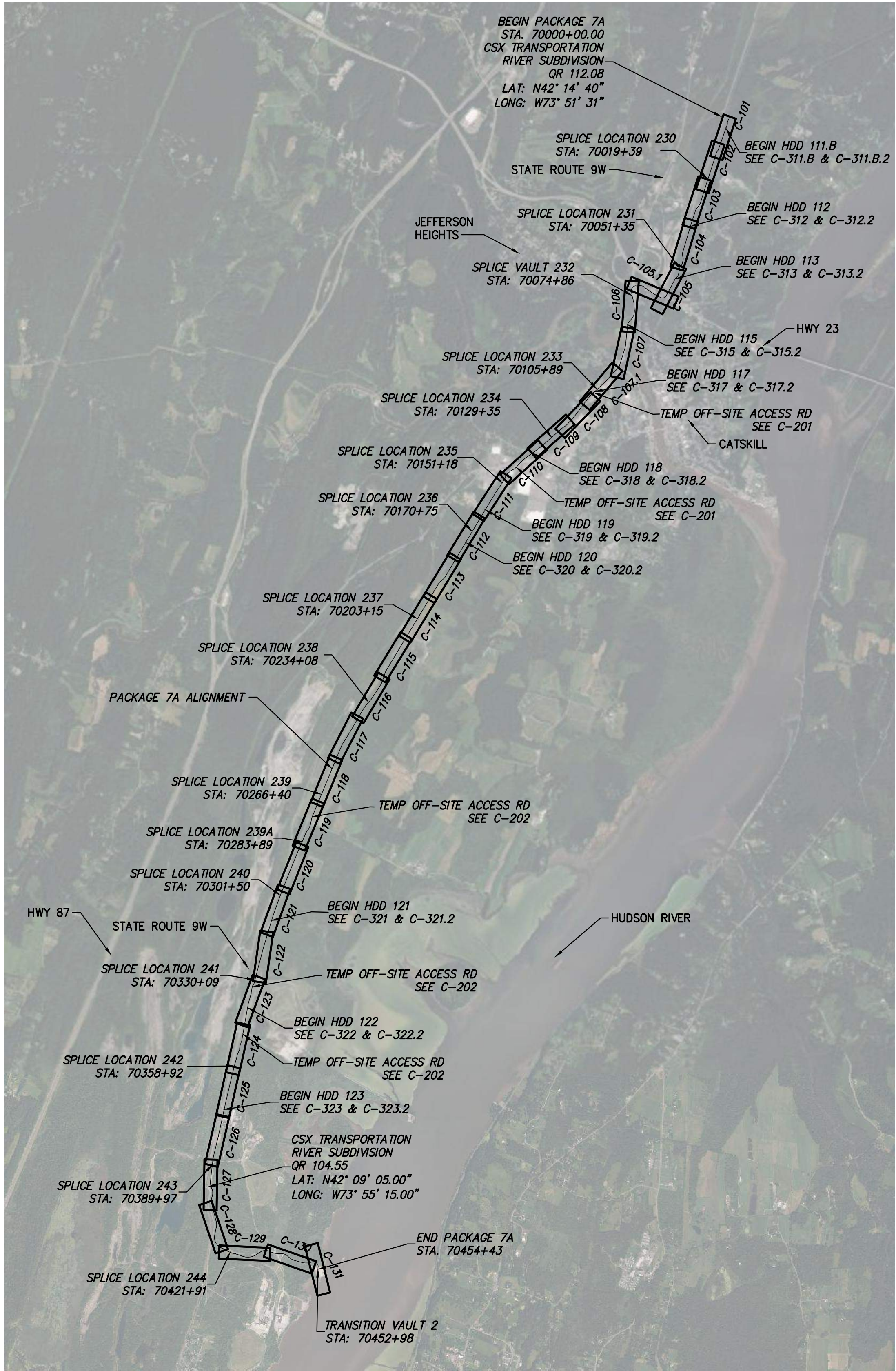
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0	06/19/2023	ISSUED FOR CONSTRUCTION SUBMISSION	RB	JL	
No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP	

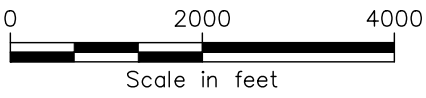
CHAMPLAIN HUDSON POWER EXPRESS
SEGMENT 11 (PACKAGE 7A) - CSX: CATSKILL
LEGEND & ABBREVIATIONS

DRAWN BY:	RB	DESIGNED BY:	AC	APPROVED BY:	JL	SCALE	AS SHOWN	DATE	06/19/2023
						REV. NO.	0	SH.NO.	OF

KIEWIT PROJECT NO.	21162
TT PROJECT NO.	204-3701
DRAWING NO.	G-004



PLAN AND PROFILE KEY MAP
SCALE: 1" = 2500'



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No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP	

CHAMPLAIN HUDSON POWER EXPRESS
SEGMENT 11 (PACKAGE 7A) - CSX: CATSKILL
PLAN AND PROFILE
KEY MAP

DRAWN BY:	RB	DESIGNED BY:	AC	APPROVED BY:	JL	SCALE	AS SHOWN	DATE	06/19/2023
						REV. NO.	0	SH.NO.	OF

KIEWIT PROJECT NO.	21162
TT PROJECT NO.	204-3701
DRAWING NO.	G-005
DATE	06/19/2023
SH.NO.	OF

File: C:\PWORKING\RE\JULIUS14\21162_7A_G-006.DWG Saved: 6/13/2023 2:15:02 PM Plotted: 6/15/2023 4:06:35 PM Current User: Le, Julian LastSavedBy: Mike Wager

SPLICE LOCATION TABLE						
DESCRIPTION	SHEET	STATION	LAT	LONG	NORTHING	EASTING
SPLICE LOCATION 230	C-102	70019+39	42.23952207	-73.86098615	1241467.8	665151.6
SPLICE LOCATION 231	C-105	70051+35	42.23126701	-73.86457524	1238452.5	664202.2
SPLICE VAULT 232	C-106	70074+86	42.22925888	-73.87014896	1237709.5	662698.2
SPLICE LOCATION 233	C-107.1	70105+89	42.22155711	-73.87347307	1234896.4	661818.6
SPLICE LOCATION 234	C-109	70129+35	42.21695356	-73.87947651	1233207.0	660204.8
SPLICE LOCATION 235	C-111	70151+18	42.21302412	-73.88545123	1231763.4	658596.7
SPLICE LOCATION 236	C-112	70170+75	42.20846939	-73.88927164	1230096.3	657573.7
SPLICE LOCATION 237	C-114	70203+15	42.20098932	-73.89568311	1227358.2	655856.1
SPLICE LOCATION 238	C-116	70234+08	42.19372357	-73.90150266	1224699.6	654298.0
SPLICE LOCATION 239	C-118	70266+40	42.18589818	-73.90701596	1221837.6	652823.9
SPLICE LOCATION 239 A	C-119	70283+89	42.18148902	-73.90949288	1220226.3	652163.7
SPLICE LOCATION 240	C-120	70301+50	42.17702576	-73.91198360	1218595.3	651499.9
SPLICE LOCATION 241	C-122	70330+09	42.16953507	-73.91510501	1215859.9	650672.6
SPLICE LOCATION 242	C-124	70358+92	42.16188059	-73.91764135	1213066.0	650004.1
SPLICE LOCATION 243	C-127	70389+97	42.15358558	-73.92024477	1210038.6	649318.8
SPLICE LOCATION 244	C-129	70421+91	42.14565391	-73.91827003	1207152.1	649874.0
TV-2 (CEMENTON)	C-131	70452+97	42.14422871	-73.90793293	1206652.0	652680.7

FIBER SPLICE HANDHOLE TABLE						
DESCRIPTION	SHEET	STATION	LAT	LONG	NORTHING	EASTING
FIBER HANDHOLE 230	C-102	70018+78	42.23967990	-73.86091601	1241525.5	665170.2
FIBER HANDHOLE 231	C-105	70050+75	42.23143034	-73.86453378	1238512.1	664213.0
FIBER HANDHOLE 233	C-107.1	70105+28	42.22166950	-73.87330828	1234937.7	661862.9
FIBER HANDHOLE 234	C-110	70128+75	42.21706266	-73.87930782	1233247.1	660250.2
FIBER HANDHOLE 235	C-111	70150+58	42.21317203	-73.88534921	1231817.5	658624.0
FIBER HANDHOLE 236	C-112	70170+15	42.20861174	-73.88915620	1230148.4	657604.6
FIBER HANDHOLE 237	C-114	70202+55	42.20113083	-73.89556583	1227410.0	655887.5
FIBER HANDHOLE 238	C-116	70233+47	42.19384730	-73.90135339	1224744.9	654338.1
FIBER HANDHOLE 239	C-118	70265+80	42.18605076	-73.90692724	1221893.4	652847.5
FIBER HANDHOLE 239 A	C-118	70283+28	42.18164078	-73.90940179	1220281.8	652188.1
FIBER HANDHOLE 240	C-120	70300+89	42.17717971	-73.91189940	1218651.5	651522.4
FIBER HANDHOLE 241	C-122	70329+49	42.16969547	-73.91504643	1215918.5	650688.1
FIBER HANDHOLE 242	C-125	70358+31	42.16204063	-73.91758100	1213124.5	650020.1
FIBER HANDHOLE 243	C-127	70389+36	42.15375054	-73.92021757	1210098.8	649325.8
FIBER HANDHOLE 244	C-129	70421+31	42.14571882	-73.91847566	1207175.3	649818.0

LINK BOX HANDHOLE TABLE						
DESCRIPTION	SHEET	STATION	LAT	LONG	NORTHING	EASTING
LINK BOX HANDHOLE 230	C-102	70019+40	42.23950849	-73.86094412	1241463.0	665163.0
LINK BOX HANDHOLE 235	C-111	70151+20	42.21300581	-73.88541267	1231756.8	658607.2
LINK BOX HANDHOLE 239	C-118	70266+42	42.18588115	-73.90697536	1221831.5	652834.9
LINK BOX HANDHOLE 243	C-127	70389+98	42.15358650	-73.92029047	1210038.9	649306.4

CO- SEALING NOTE:
THE ELECTRICAL ENGINEER OF RECORD IS SEALING FOR THE ELECTRICAL DESIGN AND ACCEPTABILITY OF THE LOCATIONS OF ELECTRICAL APPURTENANCES DEPICTED ON THIS PLAN SHEET. THE CIVIL ENGINEER OF RECORD IS SEALING FOR THE ACCURACY OF THE LOCATIONS OF ELECTRICAL APPURTENANCES DEPICTED ON THIS PLAN SHEET.



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CHAMPLAIN HUDSON POWER EXPRESS
SEGMENT 11 (PACKAGE 7A) - CSX: CATSKILL
SPLICE LOCATION, FIBER HANDHOLE AND
LINK BOX HANDHOLE TABLES

DRAWN BY:	RB	DESIGNED BY:	AC	APPROVED BY:	JL	SCALE	AS SHOWN	DATE	06/19/2023
						REV. NO.		SH.NO.	OF

KIEWIT PROJECT NO.	21162
TT PROJECT NO.	204-3701
DRAWING NO.	G-006

Chapter 4 – Construction Methods	
Topic	Section of EM&CP
Cable Installation Requirements	4.2
Horizontal Directional Drilling	4.3
Installation and Performance Controls	4.3.1
Buildings and Structures within 100-ft of HDD	4.3.2
Inadvertant Release Contingency Plan and Drilling Fluid Management	4.3.3, Appendix J
Road Crossing Methods	4.3.4
Trenching	4.4
Trenching in Agricultural Lands	4.4.1
Trenching in Roadways	4.4.2
Trenching in Wetlands	4.4.3
Length of Open Trench	4.4.4
Splicing and Jointing	4.4.5
Dewatering Methods	4.4.6
Bedding and Backfilling Methods	4.4.7
Dredging	Note Applicable for this Segment
Converter Station and Substation Requirements	Note Applicable for this Segment
Right of Ways and Easements	4.7
Right of Way Clearing	4.8 (See also Section 8)
Building and Structure Removal	4.9
Access Roads	4.10
Driveway Access During Construction	4.10.1
Access Through Wetlands or Streams	4.10.2
Access Through Agricultural Lands	4.10.3
Drain Lines and Under Drains Within Agricultural Lands	4.10.4
Soil Management Plan	4.11 and Appendix L
Culvert Replacement	4.12
Blasting	4.13
Inadvertent Damage to Utilities	4.14

Note: Table 4 summarizes the construction methods and associated subsections that summarize the measures and standards that will be followed within Segment 11.

Table 4.1 - Segment 11 HDD Locations				
HDD Number	Sheet	Length (linear feet)	Station (Approximate - see Drawings for Details)	Purpose
HDD 111.B	C-101	765	STA 70002+15 to 70009+80	Pond
HDD 112	C-103 to C-104	960	STA 70036+25 to 70045+85	Avoid road crossing and wetland
HDD 113	C-105	610	STA 70055+20 to 70061+30	Avoid railroad and road crossing
HDD 115	C-106 to C-107	1,362	STA 70085+15 to 70098+77	Avoid road crossing and waterbody
HDD 117	C-107.01 to C-108	790	STA 70113+70 to 70121+60	Railroad crossing
HDD 118	C-110	860	STA 70137+20 to 70145+80	Avoid road crossing
HDD 119	C-111 to C-112	840	STA 70160+25 to 70168+65	Avoid waterbody and wetlands
HDD 120	C-112 to C-113	1,470	STA 70172+35 to 70187+05	Avoid waterbody and wetlands
HDD 121	C-121 to C-122	1,740	STA 70311+00 to 70328+40	Avoid wetland and waterbodies and road crossing
HDD 122	C-123 to C-124	1,100	STA 70339+60 to 70350+40	Avoid railroad crossing
HDD 123	C-125 to C-126	850	STA 70372+00 to 70380+50	Avoid Glen Falls Lehigh Cement Co. facility

Table 4.2 - Property Owners within 100 feet of HDD Operations			
HDD #	Parcel Number	Sheet	Location (Approximate – see Drawings for Details)
HDD 111.B	139.00-10-10.1	C-101	STA 70001+57 to 70009+80
HDD 111.B	139.00-10-11	C-101	STA 70001+57 to 70009+80
HDD 112	156.01-4-6	C-103 to C-104	STA 70035+50 to 70045+04
HDD 113	156.10-1-4	C-105	STA 70054+40 to 70060+50
HDD 113	156.10-1-28	C-105	STA 70054+40 to 70060+50
HDD 113	156.09-6-1	C-105	STA 70054+40 to 70060+50
HDD 113	156.09-6-3	C-105	STA 70054+40 to 70060+50
HDD 113	156.01-3-15	C-105	STA 70054+40 to 70060+50
HDD 113	156.09-5-13	C-105	STA 70054+40 to 70060+50
HDD 115	156.13-2-16	C-106 to C-107	STA 70085+34 to 70098+95
HDD 115	156.13-1-6	C-106 to C-107	STA 70085+34 to 70098+95
HDD 115	156.13-1-7	C-106 to C-107	STA 70085+34 to 70098+95
HDD 115	156.13-1-8.1	C-106 to C-107	STA 70084+00 to 70098+75
HDD 115	156.13-1-8.2	C-106 to C-107	STA 70084+00 to 70098+75
HDD 115	156.13-1-9	C-106 to C-107	STA 70084+00 to 70098+75
HDD 115	156.13-1-10	C-106 to C-107	STA 70084+00 to 70098+75
HDD 115	156.13-9-13	C-106 to C-107	STA 70084+00 to 70098+75
HDD 115	156.13-9-12	C-106 to C-107	STA 70084+00 to 70098+75
HDD 115	156.13-9-10	C-106 to C-107	STA 70084+00 to 70098+75
HDD 115	156.13-9-11	C-106 to C-107	STA 70084+00 to 70098+75
HDD 115	156.13-10-16	C-106 to C-107	STA 70084+00 to 70098+75
HDD 115	156.13-10-37	C-106 to C-107	STA 70084+00 to 70098+75
HDD 115	156.13-10-38	C-106 to C-107	STA 70084+00 to 70098+75
HDD 115	156.13-10-21	C-106 to C-107	STA 70084+00 to 70098+75
HDD 115	156.13-10-20	C-106 to C-107	STA 70084+00 to 70098+75
HDD 115	156.13-10-19	C-106 to C-107	STA 70084+00 to 70098+75
HDD 117	155.20-1-40	C-107.01 to C-108	STA 70112+29 to 70120+03
HDD 117	156.17-5-35	C-107.01 to C-108	STA 70112+29 to 70120+03
HDD 117	155.20-2-7.1	C-107.01 to C-108	STA 70112+29 to 70120+03
HDD 117	155.20-2-6	C-107.01 to C-108	STA 70112+29 to 70120+03
HDD 118	171.08-2-1.1	C-110	STA 70137+29 to 70146+17
HDD 118	171.08-1-9	C-110	STA 70137+29 to 70146+17
HDD 118	171.08-9-5	C-110	STA 70137+29 to 70146+17
HDD 118	171.08-9-7	C-110	STA 70137+29 to 70146+17
HDD 118	171.08-9-6	C-110	STA 70137+29 to 70146+17
HDD 118	171.08-9-4	C-110	STA 70137+29 to 70146+17
HDD 118	171.08-9-15	C-110	STA 70137+29 to 70146+17
HDD 118	171.08-9-1	C-110	STA 70137+29 to 70146+17
HDD 118	171.08-7-5	C-110	STA 70137+29 to 70146+17
HDD 118	171.08-7-1	C-110	STA 70137+29 to 70146+17
HDD 119	171.00-4-4	C-111 to C-112	STA 70160+25 to 70168+92
HDD 119	171.00-4-3	C-111 to C-112	STA 70160+25 to 70168+92
HDD 119	171.00-4-46	C-111 to C-112	STA 70160+25 to 70168+92
HDD 120	202.00-1-1.1	C-112 to C-113	STA 70172+35 to 70187+19
HDD 120	202.00-1-1.2	C-112 to C-113	STA 70172+35 to 70187+19
HDD 120	213.00-2-3	C-112 to C-113	STA 70172+35 to 70187+19
HDD 121	187.00-1-5	C-121 to C-122	STA 70311+00 to 70328+25
HDD 121	202.00-1-1.1	C-121 to C-122	STA 70311+00 to 70328+25
HDD 122	187.00-1-5	C-123 to C-124	STA 70338+27 to 70349+57
HDD 122	213.00-2-3	C-123 to C-124	STA 70338+27 to 70349+57
HDD 122	201.00-5-5	C-123 to C-124	STA 70338+27 to 70349+57
HDD 123	213.00-2-3	C-125 to C-126	STA 70370+90 to 70379+50

Table 4.4 - Certificate Condition 140 for Segment 11					
Town	Parcel Number	Station Start	Station End	Owner Type	Type of Easement
Catskill	156.13-10-38	70099+50	70099+56	Private	Permanent

Table 4.5 - Access Roads in Segment 11			
Type of Access Road	Sheet	Location (Approximate – see Drawings for Details)	Sensitive Area Crossed
7A-01-RD	C-105	70059+00	Wetland
7A-02-RTE	C-107.01	70110+00	None
7A-03-RTE	C-110	70137+00	None
7A-04-RTE	C-110, C-111	70144+00 to 70150+00	None
7A-05-RTE	C-114	70209+50	Wetland
7A-06-RD	C-118	70258+00	Wetland
7A-07-RTE	C-119	70277+00	Wetland, stream
7A-08-RD	C-123	70336+00	Agricultural land
7A-09-RTE	C-124	70348+00	None
7A-10-RD	C-126	70381+50	Railroad
7A-11-RTE	C-127	70397+50	None
7A-12-RD	C-127, C-128	70404+00 to 70405+00	None
7A-13-RD	C-128	70408+00	None
7A-14-RTE	C-130, C-131	70440+00 to 70451+00	Wetland

Table 4.5 summarizes the access roads in this package and their associated impacts on environmentally sensitive areas and agricultural lands if applicable. Section 4.8 of the EM&CP summarizes the procedures that will be followed for the construction of all access roads. All access roads will be temporary and restored according to Section 14.2.4 and 14.4.1 of the EM&CP as applicable.

Table 7.1 - Agricultural Land in Segment 11			
Parcel Number	Sheet Number	Location (Approximate – see Drawings for Details)	Anticipated Impacts to Agricultural Activities/Land
171.00-4-49	C-113, C-114	STA 70187+00 to 70202+40	The trench construction will only impact the edge of the agricultural field. The Agricultural Trench Detail on Sheet C-621 will be utilized. Splice location 237 will remain outside of the agricultural field. The HDD work area will utilize all BMPs outlined in Section 7.1 and restoration requirements in Section 14.5 will be followed.

Note: Section 7.1 of the EM&CP summarizes the measures to be followed within agricultural areas. Section 8.2.2 of the EM&CP summarizes the requirements and procedures for any vegetation or tree clearing that may occur within agricultural lands. Table 14.1 in Section 14.5 of the EM&CP summarizes the location where agricultural lands potentially require restoration within Segment 12. Section 14.5 of the EM&CP and describes all cleanup and restoration procedures and methods that will be followed to restore agricultural lands.

Table 7.2 – Recreational Areas				
Recreational Area	Parcel Number	Plan and Profile (Appendix C) Sheet Number	Station (approximate – see Appendix C for details)	Anticipated Impacts to Recreational Area
Catskill SoccerClub, Inc. Holcim Field	187.00-2-8.2	C-118 to C-119	STA 70266+50 to 70276+50	A temporary work area and temporary access will be the only impact to the recreational area and will be graveled or use timber matting. All trenching and splice location 181 will remain outside of the recreation area or as close to the edge of the field as possible. Any grading will follow all BMPs outlined in Section 7.2 and restoration requirements in Section 14.2 will be followed.

CHAMPLAIN HUDSON POWER EXPRESS
SEGMENT 11 (PACKAGE 7A) - CSX: CATSKILL
EM&CP DATA TABLES-SHEET 1 OF 3

KIEWIT PROJECT NO.	21162
TT PROJECT NO.	204-3701
DRAWING NO.	G-010
DATE	06/19/2023
REV.NO.	OF

DRAWN BY:	RB	DESIGNED BY:	AC	APPROVED BY:	JL	SCALE	AS SHOWN	DATE	06/19/2023
No.	DATE	SUBMITTAL / REVISION DESCRIPTION			DB	APP	REV.NO.	0	



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FOR INFORMATION SEE THE ENVIRONMENTAL MANAGEMENT AND CONSTRUCTION PLAN NARRATIVE.

Table 9.3 - FEMA 100-Year Floodplains in Segment 11		
Sheet Number	Station (Approximate – see Drawings for details)	Flood Zone
C-107	STA 70087+00 to 70101+50	Zone AE; Regulatory Floodway
C-130 to C-131	STA 70447+00 to 70455+56	Zone AE

Table 9.4 - Summary of RTE Species Impact Avoidance and Minimization Measures				
ESA Type	Station Start	Station End	Best Management Practices	
ESA 1	70431	70454	(a) The Certificate Holders will complete all construction and site preparation activities within six hundred and sixty (660) feet of an active nest between October 1 and Decmeber31, outside of the breeding season to avoid noise-related disturbance.	
ESA 4	70000	70454	(a) Conduct tree clearing between October 31 and March 31. Tree clearing is not allowed between April 1 and October 30. (b) During the preconstruction survey, the contractors would identify large live or dead trees with peeling bark, including large specimens of shagbark hickory (Carya ovata), with the potential to serve as maternity or roost trees and these would be marked. Potential roost trees identified within the construction limits would be avoided where possible during construction activities.	
ESA 9	70000	70454	(a) Conduct tree clearing between October 31 and March 31. Tree clearing is not allowed between April 1 and October 30. (b) During the preconstruction survey, the contractors would identify large live or dead trees with peeling bark, including large specimens of shagbark hickory (Carya ovata), with the potential to serve as maternity or roost trees and these would be marked. Potential roost trees identified within the construction limits would be avoided where possible during construction activities.	

The Table above summarize the locations, avoidance, minimization measures, and impacts for the federally listed species and state-listed species that may occur on or within the vicinity of this Segment. Appendix T and Section 9.3 of the EM&CP summarizes the habitat descriptions, mitigation and protection measures for threatened and endangered species; rare, threatened and endangered plants; and significant natural communities.

Table 11.1 - Segment 11 Cultural Resources			
Cultural Resource Name	Location	Impact	Protection Measure
Site 904.000089 Greene County Waste Parcel 1	East of RR ROW.	Cable route.	Test or Monitor.
Site 03904.000090 Greene County Waste Parcel 2	East of RR ROW.	Cable route.	Test or Monitor.
NYSM Site 3397	Within Project along both side of Catskill Creek.	Cable installation, HDD pits and work areas, splice locations and work areas, and temporary access roads.	Mostly previously disturbed. None.
Site 03940.001143 Willow Site	West of RR ROW.	Cable route.	Previously determined not eligible. None.
Site 03940.001156 LBD Precontact Site	Southeast of RR ROW.	Cable route.	Site developed. None.
Site 03904.000033 Burget Foundation Site 13	On west side of RR ROW.	Near cable route.	None.
Site 03904.000034 Sax Foundation Site 14	On west side of RR ROW	Near cable route.	None.
Site 03904.000035 Rightmeyer Foundation Site 15	On west side of RR ROW.	Near cable route, and splice turnaround.	Test or Monitor.
Site 03904.000036 Burhan or Acker Foundation Site 17	On west side of RR.	Near cable route.	None.
NYSM 475 Streeke Shelter	West side of tracks, no additional information.	Near cable route.	Test or Monitor.
Site 03904.000037 C.A. Post Foundation Site 20	On west side of RR ROW.	Near cable route.	None.
Site 03904.000030 Embought Rd. Site, Site 8 (Precontact)	On east side of RR ROW.	Near cable route.	Test or Monitor.
Site 03904.000093 ICC Prehistoric Site 1	East of extant access road, Project activities on west side.	Near cable route.	None.
Site 03904.000094 ICC Prehistoric Site 2	East of cable route.	Near cable route.	Test or Monitor.
Site 03904.000042 Martin House Foundation & Barn, Site 32	East of RR ROW.	Near cable route.	None.
Site 03904.000043 Gardiner Cemetery (Site 33)	East of Rte 9W, west of RR ROW.	Along proposed access road.	Site protection measures: additional fencing, signage, and call-outs on construction sheets.

Table 12.2 – NYSDOT Coordination Summary		
Coordinating Parties	Description	Current Status
Certificate Holders, DPS Staff, NYSDOT	All plans and work to be performed in State-owned ROW under NYSDOT's supervision and management.	Ongoing throughout
Certificate Holders, DPS Staff, NYSDOT staff	Certificate Holders shall provide DPS Staff and NYSDOT staff with a preliminary design marked to avoid conflict with potential transportation projects that NYSDOT Staff may seek to undertake in the future and shall offer to consult with NYSDOT Staff concerning any comments it may offer and shall use reasonable efforts to accommodate any NYSDOT concerns.	Prior to filing any Segment EM&CP involving any such state-owned ROW.
Certificate Holders, NYSDOT, Agency crossed by project	Certificate Holders will consult with each transportation department or agency having jurisdiction over any roads, related structures, and components that will be crossed by the Facility or used for direct access to the Construction Zone. If the access road takes direct access from, or lies within the limits of, such roads, the Certificate Holders will notify each relevant transportation department or agency of the approximate date when work will begin.	During preparation of the EM&CP and when work begins.
Certificate Holders, NYSDOT, DPS Staff, NYSEDEC	The Certificate Holders will provide status reports summarizing construction and indicating construction activities and locations scheduled for the next month.	Bi-weekly.

Table 12.3 - Road and Highway Crossings				
Jurisdiction	Road Crossing	Crossing Method (HDD or Open Trench)	Sheet	Location (Approximate, see Drawings for Details)
Local	Browns Crossing Road	Trench	C-103	STA 70029
NYSDOT	State Route 23	HDD 113	C-105	STA 70060
Local	Allen Street	Trench	C-105.1	STA 70068 to 70069
NYSDOT	Maple Ave (9W)	Trench	C-106	STA 70071 to 70073
NYSDOT	Route 9W On-ramp	Trench	C-106	STA 70073
NYSDOT	Route 9W Off-ramp	HDD 115	C-106	STA 70086
Local	Main Street	HDD 115	C-106 to C-107	STA 70087
	Route 9W on-ramp	HDD 115	C-107	STA 70088
Local	Old Main Street	HDD 115	C-107	STA 70089
Local	Bushnell Ave	HDD 115	C-107	STA 70097
Local	West Main Street	Trench	C-107	STA 70100
Local	Willow Street	Trench	C-108	STA 70102
Local	Depot Street	Trench	C-108	STA 70110
Local	Cauterskill Ave	HDD 118	C-110	STA 70138
NYSDOT	West Bridge Street (Route 9W)	HDD 118	C-110	STA 70144
Private	Unnamed Access Road/Driveway	Trench	C-114, C-115	STA 70209
Local	Embought Road	Trench	C-119	STA 70277
Private	Unnamed private driveway	Trench	C-123	STA 70330 to 70332
Private	Unnamed private driveway	Trench	C-123	STA 70335 to 70336
Private	Unnamed private driveway	Trench	C-124	STA 70349
Private	Unnamed private driveway	Trench	C-126	STA 70382
Private	Lehigh Road	Trench	C-127	STA 70398
Town	Alpha Boulevard	Trench	C-128	STA 70419
Town	Alpha Boulevard	Trench	C-130	STA 70438
Private	Unnamed Access Road to Hudson River	Trench	C-130	STA 70441

Table 12.4 - Road Parallel Construction				
Jurisdiction	Parallel Road	Construction Method	Sheet	Approximate Station Location (See Drawings for Details)
Local	Allen Street	C-105.1 to C-106	STA 70069 to 70071	Parallel Trench
NYSDOT	Maple Ave (9W) and Route 9W off-ramp	C-106	STA 70073 to 70086	Parallel Trench
NYSDOT	Maple Street (9W)	C-107	STA 70096 to 70101	Parallel trench and HDD
Private	Unnamed private driveway	C-119 to C-123	STA 70279 to 70330	Parallel trench and HDD
Private	Lehigh Road	C-126, C-127	STA 70378 to 70398	Parallel trench and HDD
NYSDOT	Route 9W	C-127 to C-128	STA 70399 to 70418	Parallel Trench
Town	Alpha Boulevard	C-128 to C-130	STA 70420 to 70438	Parallel Trench
Private	Unnamed Access Road to Hudson River	C-130	STA 70442 to 70448	Parallel Trench

Table 13.3 – Railroad Crossings			
Railroad Owner	Crossing ID	Crossing Type	Approximate Station (Details on Drawings)
CSX	C-105	STA 70057+00	HDD 113
CSX	C-108	STA 70117+00	HDD 117
CSX	C-123 to C-124	STA 70343+00 to 70349+00	HDD 122

Table 13.4 - Segment 11 Parallel Railroad Construction			
Railroad	Sheet	Approximate Crossing Station Location (See Drawings for Details)	Construction Method
CSX	C-101 to C-104	STA 70001+00 to 70056+00	Parallel trench and HDD
CSX	C-107.01 to C-122	STA 70102+00 to 70316+00	Parallel trench and HDD
CSX	C-123 to C-126	STA 70334+00 to 70390+00	Parallel trench and HDD

Table 14 - Restoration Methods	
Land Use Description	Section of EM&CP
Construction Materials and Equipment Staging Locations and Temporary Access Roads	14.2.2
Pavement	14.2.2
Railway Ballast	14.2.3
Recreational Areas	14.2.4
Landscaping	14.3
Streams and Waterbodies	14.4
Access Roads and Laydown Areas within Agricultural Lands	N/A
Drainage Features	N/A
General Agricultural Lands	14.5

Note:
Section 14.0 of the EM&CP describes the cleanup standards and procedures that will be followed throughout this segment once construction is complete. Table 14 summarizes the appropriate subsection with Section 14 that includes the restoration procedure for each type of land use.

EM&CP NOISE SENSITIVE AREAS NOTE
THE NOISE RECEPTORS THAT MAY OCCUR NEAR SEGMENT 11 AT VARIOUS POINTS INCLUDE RESIDENCES AND BUSINESSES. SECTION 10.2 OF THE EM&CP DESCRIBES THE NOISE CONTROL MEASURES THAT WILL BE EMPLOYED THROUGHOUT THIS SEGMENT.

INVASIVE SPECIES
SECTION 9.4 OF THE EM&CP AND APPENDIX N DESCRIBE THE INVASIVE SPECIES MANAGEMENT PLAN FOR THE PROJECT. SECTION 9.4.2 OF THE EM&CP DESCRIBE THE MEASURES TO PREVENT OR CONTROL THE TRANSPORT OF INVASIVE PLANT AND INSECT SPECIES AS WELL AS THE NECESSARY REPORTING REQUIREMENTS TO NYSEDEC REGIONAL FORESTER IF THESE SPECIES ARE ENCOUNTERED. THE EN-VIRONMENTAL INSPECTOR WILL ENSURE THAT MEASURES TO PREVENT AND CONTROL THE SPREAD OF INVASIVES ARE FOLLOWED AND THAT CONSTRUCTION CREWS ARE EDUCATED IN SAID MEASURES. THE ENVIRONMENTAL INSPECTOR WILL NOTIFY CREWS IF AN UPCOMING WORK AREA REQUIRES SAID MEASURES.

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TETRA TECH ENGINEERING AND SURVEYING P.C.
(A NEW YORK PROFESSIONAL CORPORATION)

FOR INFORMATION SEE THE ENVIRONMENTAL MANAGEMENT AND CONSTRUCTION PLAN NARRATIVE.

0	06/19/2023	ISSUED FOR CONSTRUCTION SUBMISSION	RB	JL	
No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP	

CHAMPLAIN HUDSON POWER EXPRESS
SEGMENT 11 (PACKAGE 7A) - CSX: CATSKILL
EM&CP DATA TABLES-SHEET 3 OF 3

KIEWIT PROJECT NO.	21162
TT PROJECT NO.	204-3701
DRAWING NO.	G-012
DATE	06/19/2023
SH.NO.	OF

DRAWN BY:	RB	DESIGNED BY:	AC	APPROVED BY:	JL	SCALE	AS SHOWN	DATE	06/19/2023
						REV. NO.	0	SH.NO.	OF

CLEANUP AND RESTORATION NOTES

PROMPT CLEANUP AND RESTORATION OF ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITY IS A PRIORITY OF THE CONSTRUCTION SCHEDULE AND SEQUENCING. TIMELY CLEANUP AND RESTORATION WILL ASSIST IN MINIMIZING POTENTIAL ENVIRONMENTAL IMPACTS ASSOCIATED WITH THE PROJECT. PROCEDURES FOR CLEANUP AND RESTORATION ARE DESCRIBED IN THE FOLLOWING SECTIONS. IN ACCORDANCE WITH CERTIFICATE CONDITION 48, WITHIN TEN (10) DAYS OF THE COMPLETION OF FINAL RESTORATION ACTIVITIES, THE CERTIFICATE HOLDER WILL NOTIFY THE SECRETARY THAT ALL RESTORATION HAS BEEN COMPLETED IN COMPLIANCE WITH THE CERTIFICATE AND THE ORDER(S) APPROVING THE EM&CP.

CLEANUP STANDARDS AND PRACTICES

FROM THE BMPS', CLEAN-UP, RESTORATION, AND REVEGETATION PROCEDURES WILL BE ONGOING DURING CONSTRUCTION AS EACH SEGMENT IS COMPLETED. DURING CONSTRUCTION, ROAD AND CONSTRUCTION ROWS WILL BE KEPT FREE OF DEBRIS AND DISCARDED MATERIAL TO THE GREATEST EXTENT POSSIBLE. AS CONSTRUCTION CONTINUES, EACH SECTION OF THE ROWS WILL BE THOROUGHLY CLEANED AFTER CONSTRUCTION IS COMPLETED ON THAT PARTICULAR SECTION. VEGETATION TO BE CLEARED WILL BE IDENTIFIED ON A SITE-SPECIFIC BASIS ON THE EM&CP PLAN AND PROFILE DRAWINGS. CLEARED VEGETATION WILL BE DISPOSED OF IN ACCORDANCE WITH THE APPROPRIATE DISPOSAL TECHNIQUES. ALL FABRICATED DEBRIS RESULTING FROM CONSTRUCTION WILL BE DISPOSED OF AT AN APPROVED DISPOSAL SITE IN COMPLIANCE WITH ALL APPROPRIATE ENVIRONMENTAL REGULATIONS. FABRICATED DEBRIS GENERATED DURING CONSTRUCTION INCLUDES PIPING, FENCING, WIRING, AND ANY OTHER MATERIALS USED DURING CONSTRUCTION. ALL TRUCKS LEAVING THE CONSTRUCTION AREA WILL BE LOADED AND COVERED IN ACCORDANCE WITH APPLICABLE REGULATIONS AS NEEDED AS DESCRIBED IN THE SOIL MANAGEMENT PLAN OF THE EM&CP IN APPENDIX L. NO FABRICATED DEBRIS BE BURNED OR BURIED.

RESTORATION AND PLANTING

THE FINAL STAGE OF CONSTRUCTION WILL CONSIST OF RESTORING THE ROW TO ITS ORIGINAL CONDITION AND CHARACTER TO THE EXTENT PRACTICAL, UNLESS DOING SO WOULD INTERFERE WITH THE SAFE OR RELIABLE OPERATION AND MAINTENANCE OF THE PROJECT. RESTORATION ACTIVITIES MAY VARY WITH THE SPECIFIC AREA TO BE RESTORED BUT WILL CONSIST PREDOMINANTLY OF RESTORING TOPOGRAPHY TO ORIGINAL GRADIENTS AND RESEEDING EXCAVATED AREAS OVER THE TRENCH AS IDENTIFIED HEREIN.

SITE PREPARATION FOR REVEGETATION

THE SURFACE OF THE ROAD AND CONSTRUCTION ROWS DISTURBED BY CONSTRUCTION ACTIVITIES WILL BE GRADED TO MATCH THE ORIGINAL TOPOGRAPHIC CONTOURS AND TO BE COMPATIBLE WITH SURROUNDING DRAINAGE PATTERNS WHERE APPROPRIATE OR IN ACCORDANCE WITH THE EM&CP. IT SHOULD BE NOTED THAT SUBCONTRACTORS WILL TYPICALLY LIMIT GRUBBING (THE REMOVAL OF STUMPS AND ROOTS) TO THE FOOTPRINT OF THE EXCAVATED TRENCH AND ACCESS ROADS TO ALLOW RE-SPROUTING AND ASSIST IN THE RECOVERY OF WOODY SPECIES, EXCEPT WHERE REMOVAL IS REQUIRED FOR SAFE CONSTRUCTION. WHERE NEEDED, IT MAY BE NECESSARY TO IMPORT TOPSOIL TO RETURN AN AREA TO GRADE. IMPORTED TOPSOIL WILL FOLLOW CLASSIFICATION AND CHARACTERIZATION MEASURES OUTLINED IN THE SOIL MANAGEMENT PLAN IN APPENDIX L. HDD ENTRY AND EXIT PITS WILL BE BACKFILLED AND THE DISTURBED GROUND SURFACE WILL BE SIMILARLY GRADED. TRENCHES WILL BE BACKFILLED IN ACCORDANCE WITH THE MEASURES OUTLINED IN SECTION 4.4.7 OF THE EM&CP. THE CERTIFICATE HOLDER WILL BE RESPONSIBLE FOR WILL CHECKING ALL CULVERTS AND ASSURE THAT THEY ARE NOT CRUSHED OR BLOCKED DURING CONSTRUCTION AND RESTORATION OF THIS SEGMENT AND, IF A CULVERT IS BLOCKED OR CRUSHED, TAKE IMMEDIATE STEPS TO REPLACE OR REPAIR THE CULVERT IN ACCORDANCE WITH APPLICABLE STATE OR LOCAL STANDARDS.

SEEDING AND PLANTING

SEEDING OPERATIONS WILL COMMENCE ONLY AFTER AN ACCEPTABLE SEEDBED HAS BEEN ESTABLISHED. SEED WILL BE APPLIED BY HAND, CYCLONE SEEDER, DRILL, OR CULTI-PACKER-TYPE SEEDER AT A DEPTH OF 0.25 TO 0.5 INCH. THE SEEDBED WILL BE FIRMED FOLLOWING SEEDING OPERATION WITH A ROLLER OR LIGHT DRAG, EXCEPT WHERE CULTI-PACKER-TYPE SEEDERS OR HYDROSEEDERS ARE USED. THE ENTIRE SEEDED AREA WILL BE WATERED WITH A FINE SPRAY UNTIL A UNIFORM MOISTURE DEPTH OF ONE (1) INCH HAS BEEN ACHIEVED. MULCHING AND ANCHORING OF THE MULCH MAY BE NECESSARY IN SOME AREAS UNLESS A HYDROMULCH/SEED SLURRY IS USED. ON STEEP SLOPES, JUTE NET WILL BE USED TO PROVIDE STABILIZATION. FERTILIZER WILL BE ADDED AT THE APPROPRIATE RATES AFTER SEED IS APPLIED. NO FERTILIZER WILL BE APPLIED IN WETLAND RESOURCE AREAS. SEEDING/MULCHING WILL TAKE PLACE UNDER THE SUPERVISION OF THE ENVIRONMENTAL INSPECTOR.

THE SEED MIXTURE AND RATE OF APPLICATION WILL DEPEND ON THE SOIL TYPE, LAND USE, AVAILABLE MOISTURE, AND SEASON AT THE TIME OF APPLICATION. SEEDBED PREPARATION (FINAL TILLAGE, FERTILIZING, LIMING) AND SEEDING WILL FOLLOW RECOMMENDATIONS AS CONTAINED IN NEW YORK STATE FARMLAND: SEEDING, FERTILIZING AND LIME RECOMMENDATIONS FOR GAS PIPELINE ROW RESTORATION IN FARMLANDS (REVISED 4-27-2011) IF APPLICABLE OR AS SPECIFIED BY THE LANDOWNER. ALL SEED MIXES WILL BE FREE OF INVASIVE SPECIES. ALL SEED BAG TAGS (EITHER ORIGINAL OR SCANNED COPIES) WILL BE PROVIDED TO THE ENVIRONMENTAL INSPECTOR EITHER ORIGINAL TAGS OR SCANNED COPIES. THE SEED MIXTURES WILL FOLLOW THE TECHNICAL SPECIFICATIONS INCLUDED ON THE PLAN AND PROFILE DRAWINGS IN APPENDIX C FOR UPLANDS AND WETLAND BUFFER ZONES. SEEDED AREAS WILL BE MONITORED FOLLOWING RESTORATION UNTIL A MINIMUM VEGETATIVE COVER OF EIGHTY (80) PERCENT IS ACHIEVED.

WHERE TREE OR SHRUB PLANTINGS ARE PRESCRIBED IN THE EM&CP, A POST-CONSTRUCTION SURVIVAL SURVEY WILL BE PERFORMED ONE YEAR AFTER THE PLANTINGS. IF ANY TREE OR SHRUB HAS NOT SURVIVED OR IS IN POOR HEALTH, THE TREE/SHRUB WILL BE REPLACED (BMP DOCUMENT SECTION 11.1.2.5).

VEGETATION THROUGHOUT THE TEMPORARY ROW WILL BE CUT TO GROUND LEVEL AND ROOT SYSTEMS WILL REMAIN INTACT TO ALLOW FOR RESPROUTING FOLLOWING CONSTRUCTION, UNLESS RESPROUTING WOULD INTERFERE WITH THE SAFE AND RELIABLE OPERATION OF THE PROJECT.

IF REQUIRED, ALL TREES OVER TWO (2) INCHES IN DBH OR SHRUBS OVER FOUR (4) FEET IN HEIGHT THAT ARE DAMAGED OR DESTROYED BY ACTIVITIES DURING CONSTRUCTION, OPERATION, OR MAINTENANCE WITHIN ASSOCIATED URBAN, RESIDENTIAL OR LANDSCAPED AREAS, WILL BE REPLACED WITHIN THE FOLLOWING YEAR BY THE CERTIFICATE HOLDERS WITH THE EQUIVALENT TYPE OF TREES OR SHRUBS EXCEPT IF:

- a)EQUIVALENT TYPE REPLACEMENT TREES OR SHRUBS WOULD INTERFERE WITH THE PROPER CLEARING, CONSTRUCTION, OPERATION, OR MAINTENANCE OF THE PROJECT OR WOULD BE INCONSISTENT WITH STATE-INVASIVE SPECIES POLICY; OR
- b)REPLACEMENT WOULD BE CONTRARY TO SOUND ROW MANAGEMENT PRACTICES, OR TO ANY APPROVED LONG-RANGE ROW MANAGEMENT PLAN APPLICABLE TO THE FACILITY OR ADJOINING ROW; OR
- c)THE OWNER OF LAND WHERE THE DAMAGED OR DESTROYED TREES OR SHRUBS WERE LOCATED (OR OTHER RECORDED EASEMENT OR LICENSE HOLDERS WITH THE RIGHT TO CONTROL REPLACEMENT) DECLINES REPLACEMENT.

RESTORATION OF WATERBODIES

UPON COMPLETION OF BACKFILLING OPERATIONS, CLEANUP AND RESTORATION OF THE STREAM CROSSING, BANKS AND BANK APPROACHES (AT LEAST 50 FEET ADJACENT TO EACH BANK) WILL BE COMPLETED WITHIN 24 HOURS. IF NEEDED, STREAM BANKS WILL BE RE-ESTABLISHED TO ORIGINAL GRADE IMMEDIATELY AFTER STREAM BANK WORK IS COMPLETED. THE BANKS WILL THEN BE PERMANENTLY STABILIZED BY SEEDING WITH NATIVE GRASSES, MULCHED AND, IF NEEDED, PLANTED WITH NATIVE OR NATURALIZED SHRUB SEEDLINGS. IF ADDITIONAL STABILIZATION IS NEEDED JUTE NETTING OR EROSION CONTROL BLANKETS WILL BE USED. RESTORATION AND PLANTING DETAILS FOR WATERBODIES ARE FURTHER DETAILED IN SECTION 14.4.1 OF THE EM&CP. MANY DIRECT IMPACTS TO STREAMS AND WATERBODIES ASSOCIATED WITH THIS SEGMENT HAVE BEEN AVOIDED BY CROSSING OVER OR UNDER EXISTING CULVERTS, AND INCORPORATING HDD METHODS. HOWEVER, WHERE IMPACTS TO WATERBODIES DO OCCUR, THE PROCEDURES FOR THE CLEANUP AND RESTORATION OF STREAMS AND WATERBODIES ARE SUMMARIZED IN SECTION 9.1 OF THE EM&CP

RESTORATION OF WETLANDS

DURING THE INITIAL RESTORATION PHASE, ALL CONSTRUCTION DEBRIS WILL BE REMOVED FROM THE RIGHT-OF-WAY. SEGREGATED TOPSOIL WILL BE REPLACED, AND WETLAND CONTOURS AND DRAINAGE PATTERNS WILL BE RESTORED TO APPROXIMATE ORIGINAL CONDITION BY MATCHING THAT WHICH EXISTS IN ADJACENT UNDISTURBED AREAS.

RESTORATION OF THE WETLAND (OTHER THAN THE TRAVEL WAY) WILL BE COMPLETED WITHIN 24 HOURS AFTER BACKFILLING IS COMPLETED. THIS WILL BE DONE FOR A MINIMUM DISTANCE OF 50 FEET FROM THE WETLAND EDGE. RESTORATION OF THE WETLAND WILL INCLUDE BUT IS NOT LIMITED TO FINAL GRADING, SEEDING WITH A NATIVE WETLAND SEED MIX, FERTILIZING, AND MULCHING. HIGH ORGANIC SOILS (AS DETERMINED BY NYSDEC, DPS, OR THE ENVIRONMENTAL INSPECTOR) WILL BE GRADED BACK TO ORIGINAL CONTOURS AND LEFT UNMULCHED AND UNSEEDED TO FACILITATE THE GERMINATION OF NATIVE SEEDS AND SPROUTING OF RHIZOMES FROM THE SEED BANK. FOLLOWING CLEANUP, THE WETLAND WILL BE EVALUATED FOR POSSIBLE VEGETATIVE PLANTINGS. THIS WILL BE DONE IN CONSULTATION WITH THE APPROPRIATE AGENCIES AND IN ACCORDANCE WITH THE EM&CP.

FOR WETLAND RESOURCE AREAS, EMERGENT COMMUNITIES SHOULD BE REVEGETATED WITH AN ERNST FACW WETLAND MEADOW MIX (ERNMX-122) OR EQUIVALENT, AND FOR SHADED SITES WITHIN FORESTED/SHRUB-SHRUB WETLAND COMMUNITIES, DISTURBED AREAS SHOULD BE REVEGETATED WITH ERNST SPECIALIZED WETLAND MIX FOR SHADED AREAS (ERNMX-137) OR EQUIVALENT (SHOWN ON PLAN AND PROFILE DRAWINGS, APPENDIX C).

RESTORATION OF CONSTRUCTION MATERIALS AND EQUIPMENT STAGING LOCATIONS AND TEMPORARY ACCESS ROADS

THE CONSTRUCTION MATERIALS EQUIPMENT STAGING LOCATIONS FOR THIS SEGMENT ARE SUMMARIZED IN SECTION 5.4 TABLE 5.2 OF THE EM&CP AND ARE SHOWN IN THE PLAN AND PROFILE DRAWINGS AND ESCP. THESE AREAS WILL BE RESTORED AS CLOSE AS PRACTICABLE TO PRE-CONSTRUCTION CONDITIONS AND CONTOURS TO THE EXTENT PRACTICABLE.

ALL TEMPORARY FENCING AND EROSION CONTROLS WILL BE REMOVED AND DISPOSED OF IN AN ACCEPTABLE MANNER AT A STATE-APPROVED DISPOSAL FACILITY APPROVED BY DPS STAFF AND THE CERTIFICATE HOLDERS. ALL MOTORIZED CONSTRUCTION EQUIPMENT WILL BE TRANSPORTED TO OFF-SITE FACILITIES. ALL OTHER USABLE CONSTRUCTION EQUIPMENT AND MATERIALS WILL BE COLLECTED, PACKED, AND TRANSPORTED TO OFF-SITE STORAGE FACILITIES OR TO THE NEXT SEGMENT'S STAGING AREA AS NEEDED. ALL UNUSABLE EQUIPMENT AND MATERIALS WILL BE REMOVED FROM THE LAYDOWN YARD AND DISPOSED OF APPROPRIATELY.

PLANT INSPECTION. GUARANTEE AND MAINTENANCE

VEGETATION RESTORATION ALSO INCLUDES THE MAINTENANCE OF PLANTINGS FOR SPECIFIED TIME PERIODS AND THE REPLACEMENT OF UNSUCCESSFUL PLANTINGS. PRIOR TO PLANTING, THE ENVIRONMENTAL INSPECTOR WILL INSPECT ALL PLANTS IN CONTAINERS. PLANTINGS WILL BE PERFORMED BY A QUALIFIED LANDSCAPE OR NURSERY CONTRACTOR. THE ENVIRONMENTAL INSPECTOR WILL ALSO INSPECT ALL PLANTS AFTER COMPETITION OF PLANTING TO ENSURE PROPER PLANTING PROCEDURES AND THE CORRECT PLANT SPECIES WERE USED. ADDITIONALLY, THE ENVIRONMENTAL INSPECTOR WILL CONDUCT A FINAL INSPECTION OF ALL REVEGETATED AREAS AFTER THE END OF THE MONITORING PERIOD TO ENSURE FINAL STABILIZATION. ALL VEGETATION REPLACED WILL HAVE A MINIMUM TWO -YEAR SURVIVAL GUARANTEE (BMP DOCUMENT SECTION 11.2.2). WHERE TREE OR SHRUB PLANTINGS ARE NEEDED, A POST-CONSTRUCTION SURVIVAL SURVEY WILL BE PERFORMED ONE YEAR AFTER THE PLANTINGS. IF ANY TREE OR SHRUB HAS NOT SURVIVED OR IS IN POOR HEALTH, THE TREE/SHRUB WILL BE REPLACED (BMP DOCUMENT SECTION 11.2.1.5).

SWPPP INSPECTIONS WILL BE PERFORMED BY THE ENVIRONMENTAL INSPECTOR ON A WEEKLY BASIS UNTIL ALL DISTURBED AREAS HAVE ACHIEVED THE 80% REVEGETATION REQUIRED FOR FINAL RESTORATION. FOLLOWING FINAL RESTORATION, EROSION AND SEDIMENT CONTROL MEASURES WILL BE REMOVED FROM THE SITE AND DISPOSED OF APPROPRIATELY.

RESTORATION WITHIN NYSDOT ROW

ALL RESTORATION WITHIN THE NYSDOT ROW SHALL BE DONE IN ACCORDANCE WITH THE LATEST VERSION OF THE NYSDOT STANDARD SPECIFICATIONS AND STANDARD SHEET AND ARE INCLUDED IN EM&CP SECTION 14.2.2 (BMP DOCUMENT SECTION 11.2.2).

RESTORATION OF RECREATIONAL AREAS

FOLLOWING CONSTRUCTION, THE CERTIFICATE HOLDERS WILL RESEED THE CONSTRUCTION AREA WITHIN RECREATIONAL AREAS SUCH AS THE CANALS USING THE PROCEDURES AND METHODS SPECIFIED IN THE SECTIONS ABOVE WHERE NEEDED. IF NECESSARY, ADDITIONAL REVEGETATION AND TREE PLANTING MAY BE PERFORMED DEPENDING ON THE IMPACT OF CONSTRUCTION. RECREATIONAL AREAS ARE DESCRIBED IN SECTION 7.2 OF THE EMCP.

ROADWAY RESTORATION (STRIPPING, SIGNAGE, AUDIBLE ROADWAY DELINEATORS)

STRIPPING IMPACTED OR REMOVED FROM CONSTRUCTION WITHIN THE LIMITS OF WORK, INCLUDING AREAS OF MILL AND OVERLAYS TO BE INSTALLED PER EXISTING STRIPPING PATTERNS. CONTRACTOR SHALL INVENTORY ALL STRIPPING PRIOR TO WORK. WORK TO BE COMPLETED IN ACCORDANCE WITH NYSDOT STANDARD SHEETS AND SPECIFICATIONS (SEE 685 SERIES STANDARD SHEETS).

RESTORATION OF ROADWAY

THESE AREAS WILL BE RESTORED AS CLOSE AS PRACTICABLE TO PRE-CONSTRUCTION CONDITIONS AND CONTOURS. TRENCHES WILL BE BACKFILLED PER THE APPROPRIATE DETAIL, FULL WIDTH OF THE TRENCH WILL BE RESTORED TO MATCH THE EXISTING PAVEMENT SECTION, THE FULL WIDTH OF THE TRAVEL LANE TO THE CENTERLINE WILL BE MILLED AND OVERLAYED WITH A TOP COURSE OF ASPHALT. ALL TEMPORARY FENCING AND EROSION CONTROLS WILL BE REMOVED AND DISPOSED ON IN AN ACCEPTABLE MANNER AT A STATE-APPROVED DISPOSAL FACILITY APPROVED BY DPS STAFF AND THE CERTIFICATE HOLDERS.

RESTORATION OF ROADWAY SHOULDER

THESE AREAS WILL BE RESTORED AS CLOSE AS PRACTICABLE TO PRE-CONSTRUCTION CONDITIONS AND CONTOURS. TRENCHES WILL BE BACKFILLED PER THE APPROPRIATE DETAIL, FULL WIDTH OF THE TRENCH WILL BE RESTORED TO MATCH THE EXISTING PAVEMENT SECTION, THE FULL WIDTH OF THE TRAVEL LANE TO THE CENTERLINE WILL BE MILLED AND OVERLAYED WITH A TOP COURSE OF ASPHALT. ALL TEMPORARY FENCING AND EROSION CONTROLS WILL BE REMOVED AND DISPOSED ON IN AN ACCEPTABLE MANNER AT A STATE-APPROVED DISPOSAL FACILITY APPROVED BY DPS STAFF AND THE CERTIFICATE HOLDERS.

PAVEMENT RESTORATION

AS DESCRIBED IN THE BMP DOCUMENT AND CERTIFICATE CONDITIONS, CURBS, SIDEWALKS, AND STREETS DAMAGED BY CONSTRUCTION WILL BE RESTORED TO PRE-EXISTING CONDITION OR BETTER. FURTHER, DISTURBED AREAS, RUTS, AND RILLS ALONG ROADWAYS SHALL BE RESTORED TO ORIGINAL GRADES AND CONDITIONS WITH PERMANENT REVEGETATION AND EROSION CONTROLS APPROPRIATE FOR THOSE LOCATIONS, AS APPROPRIATE.

THE CERTIFICATE HOLDERS WILL CONSULT THE MUNICIPAL ROAD OR HIGHWAY DEPARTMENT AND/OR THE REGIONAL OFFICE OR COUNTY ENGINEER OF THE NYSDOT IN ORDER TO IDENTIFY AND INCORPORATE APPROPRIATE SPECIFICATIONS FOR CURB, SIDEWALK, OR STREET RESTORATION. ALL SURFACE RESTORATION WILL FOLLOW THE SPECIFICATIONS AND DETAILS PROVIDED IN THE PLAN AND PROFILE DRAWINGS (SHEET C-631). GUIDE RAILS WILL BE REMOVED AND REPLACED IN ACCORDANCE WITH NYSDOT STANDARD SHEET 606-01. COUNTY/LOCAL ROADS WILL BE RESTORED UNDER A DIFFERENT COUNTY RESTORATION REQUIREMENT AS SHOWN IN THE PLAN AND PROFILE DRAWINGS (SHEET C-631).

SEED MIXES

- A. GENERAL SEED:
 - 1. PIPELINE MIX W/SWITCHGRASS (ERNMX-102-1)
 - 2. MIX COMPOSITION
 - 33.0% PANICUM VIRGATUM, 'SHAWNEE' (SWITCHGRASS, 'SHAWNEE')
 - 25.0% FESTUCA RUBRA (CREEPING RED FESCUE)
 - 18.0% LOLIUM MULTIFLORUM (ANNUAL RYEGRASS)
 - 16.0% PHEUM PRATENSE, CLIMAX (TIMOTHY, CLIMAX)
 - 5.0% TRIFOLIUM HYBRIDUM (ALSIKE CLOVER)
 - 3.0% AGROSTIS ALBA (REDTOP)
 - 3. APPLIED AT A RATE OF 40 LBS/ACRE.
- B. ADIRONDACK SEED:
 - 1. MIX COMPOSITION
 - 25% VIRGINIA WILD RYE (ELYMUS VIRGINICUS VAR. VIRGINICUS)
 - 25% CANADA WILD RYE (ELYMUS CANADENSIS)
 - 25% AUTUMN BENTGRASS (AGROSTIS PERENNANS)
 - 25% CAMPER LITTLE BLUESTEM (SCHIZACHYRIUM SCOPARIUM)
 - 2. APPLIED AT A RATE OF 40 LBS/ACRE.
- C. SPECIALIZED WETLAND MIX FOR SHADED OBL-FACW AREAS (ERNMX-137)
 - 1. MIX COMPOSITION
 - 35.0% CAREX VULPINOIDEA, PA ECOTYPE (FOX SEDGE, PA ECOTYPE)
 - 20.0% ELYMUS VIRGINICUS, MADISON-NY ECOTYPE (VIRGINIA WILDRYE, MADISON-NY ECOTYPE)
 - 15.0% CAREX SCOPARIA, PA ECOTYPE (BLUNT BROOM SEDGE, PA ECOTYPE)
 - 12.8% CAREX LURIDA, PA ECOTYPE (LURID SEDGE, PA ECOTYPE)
 - 5.0% CAREX LUPULINA, PA ECOTYPE (HOP SEDGE, PA ECOTYPE)
 - 4.0% VERBENA HASTATA, PA ECOTYPE (BLUE VERVAIN, PA ECOTYPE)
 - 2.0% HELIOPSIS HELIANTHOIDES, PA ECOTYPE (OXEYE SUNFLOWER, PA ECOTYPE)
 - 1.0% CAREX INTUMESCENS, PA ECOTYPE (STAR SEDGE, PA ECOTYPE)
 - 1.0% SPARGANIUM AMERICANUM (EASTERN BUR REED)
 - 0.7% IRIS VERSICOLOR (BLUEFLAG)
 - 0.5% BIDENS CERNUA, PA ECOTYPE (NODDING BUR MARIGOLD, PA ECOTYPE)
 - 0.5% CAREX CRINITA, PA ECOTYPE (FRINGED SEDGE, PA ECOTYPE)
 - 0.5% CAREX STIPATA, PA ECOTYPE (AWL SEDGE, PA ECOTYPE)
 - 0.5% EUPATORIUM PERFOLIATUM, PA ECOTYPE (BONESET, PA ECOTYPE)
 - 0.5% SCIRPUS CYPERINUS, PA ECOTYPE (WOOLGRASS, PA ECOTYPE)
 - 0.5% VERNONIA NOVEBORACENSIS, PA ECOTYPE (NEW YORK IRONWEED, PA ECOTYPE)
 - 0.3% LOBELIA SIPHILITICA, PA ECOTYPE (GREAT BLUE LOBELIA, PA ECOTYPE)
 - 0.2% PENTHORUM SEDOIDES, PA ECOTYPE (DITCH STONECROP, PA ECOTYPE)
 - 2. APPLIED AT A RATE OF APPROXIMATELY 20 LBS/ACRE, ALONG WITH THE COVER CROP.
 - 3. COVER CROP SHOULD BE APPLIED AT A RATE OF 60-80 LBS/ACRE. COVER CROP TO BE AN ANNUAL RYE. COVER CROP BASED ON SEASON OF RESTORATION AN ANNUAL RYE THROUGH SPRING AND SUMMER AND WINTER RYE FOR LATE FALL.
- D. FACW WETLAND MEADOW MIX (ERNMX-122)
 - 1. MIX COMPOSITION
 - 21.0% CAREX VULPINOIDEA, PA ECOTYPE (FOX SEDGE, PA ECOTYPE)
 - 20.0% ELYMUS VIRGINICUS, PA ECOTYPE (VIRGINIA WILDRYE, PA ECOTYPE)
 - 16.0% CAREX LURIDA, PA ECOTYPE (LURID SEDGE, PA ECOTYPE)
 - 12.0% CAREX LUPULINA, PA ECOTYPE (HOP SEDGE, PA ECOTYPE)
 - 12.0% CAREX SCOPARIA, PA ECOTYPE (BLUNT BROOM SEDGE, PA ECOTYPE)
 - 3.0% VERBENA HASTATA, PA ECOTYPE (BLUE VERVAIN, PA ECOTYPE)
 - 2.4% ASCLEPIAS INCARNATA, PA ECOTYPE (SWAMP MLKWEED, PA ECOTYPE)
 - 2.0% JUNCUS EFFUSUS (SOFT RUSH)
 - 2.0% ZIZIA AUREA, PA ECOTYPE (GOLDEN ALEXANDERS, PA ECOTYPE)
 - 1.6% ASTER NOVAE-ANGLIAE, PA ECOTYPE (NEW ENGLAND ASTER, PA ECOTYPE)
 - 1.3% CAREX STIPATA, PA ECOTYPE (AWL SEDGE, PA ECOTYPE)
 - 1.0% BIDENS CERNUA, PA ECOTYPE (NODDING BUR MARIGOLD, PA ECOTYPE)
 - 1.0% JUNCUS TENUIS, PA ECOTYPE (PATH RUSH, PA ECOTYPE)
 - 0.8% SOLIDAGO RUGOSA, PA ECOTYPE (WRINKLELEAF GOLDENROD, PA ECOTYPE)
 - 0.6% VERBENA URTICIFOLIA, PA ECOTYPE (WHITE VERVAIN, PA ECOTYPE)
 - 0.5% CAREX CRINITA, PA ECOTYPE (FRINGED SEDGE, PA ECOTYPE)
 - 0.5% EUPATORIUM PERFOLIATUM, PA ECOTYPE (BONESET, PA ECOTYPE)
 - 0.5% HELENIUM AUTUMNALE, PA ECOTYPE (COMMON SNEEZEWED, PA ECOTYPE)
 - 0.5% MIMULUS RINGENS, PA ECOTYPE (SQUARE STEMMED MONKEYFLOWER, PA ECOTYPE)
 - 0.3% LOBELIA SIPHILITICA, PA ECOTYPE (GREAT BLUE LOBELIA, PA ECOTYPE)
 - 0.3% SCIRPUS CYPERINUS, PA ECOTYPE (WOOLGRASS, PA ECOTYPE)
 - 0.2% ALISMA SUBCORDATUM, PA ECOTYPE (MUD PLANTAIN, PA ECOTYPE)
 - 0.2% ASTER PUNICEUS, PA ECOTYPE (PURPLESTEM ASTER, PA ECOTYPE)
 - 0.2% ASTER UMBELLATUS, PA ECOTYPE (FLAT TOPPED WHITE ASTER, PA ECOTYPE)
 - 0.1% PENTHORUM SEDOIDES, PA ECOTYPE (DITCH STONECROP, PA ECOTYPE)
 - 2. APPLIED AT A RATE OF APPROXIMATELY 20 LBS/ACRE, ALONG WITH THE COVER CROP.
 - 3. COVER CROP SHOULD BE APPLIED AT A RATE OF 60-80 LBS/ACRE. COVER CROP TO BE AN ANNUAL RYE. COVER CROP BASED ON SEASON OF RESTORATION AN ANNUAL RYE THROUGH SPRING AND SUMMER AND WINTER RYE FOR LATE FALL.
- E. LAWN MIX: USE AN ERNST SEED MIX, SUCH AS ATHLETIC FIELD MIX OR SIMILAR.

A



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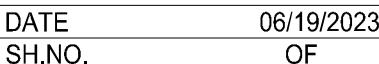
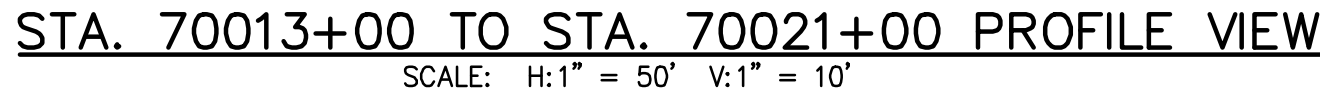
FOR INFORMATION SEE THE ENVIRONMENTAL MANAGEMENT AND CONSTRUCTION PLAN NARRATIVE.

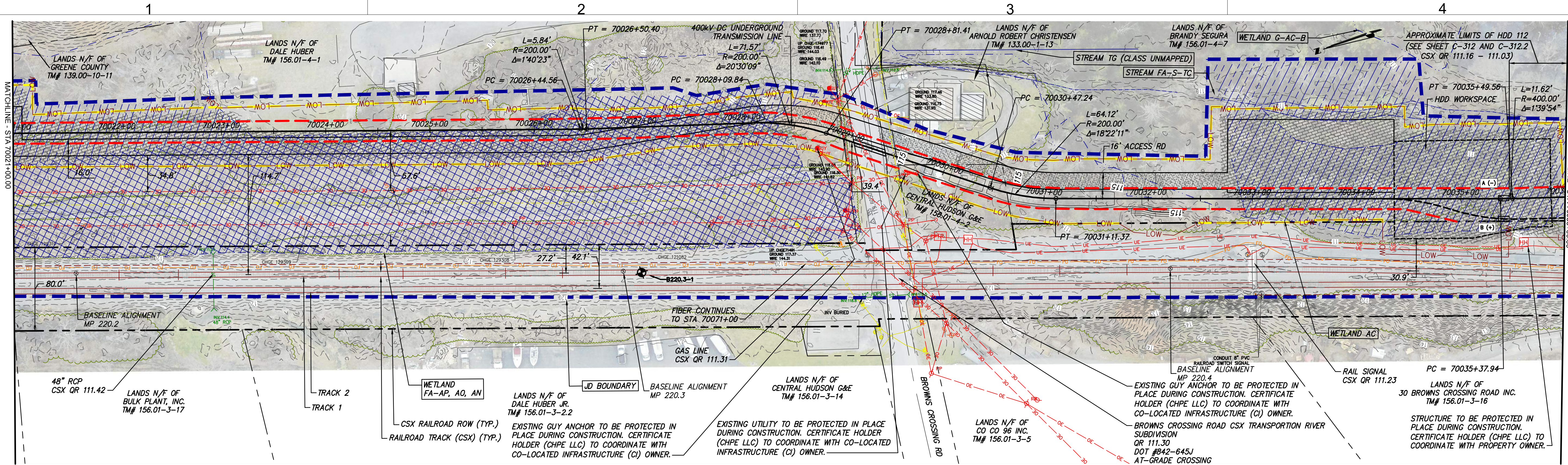
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No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP	

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

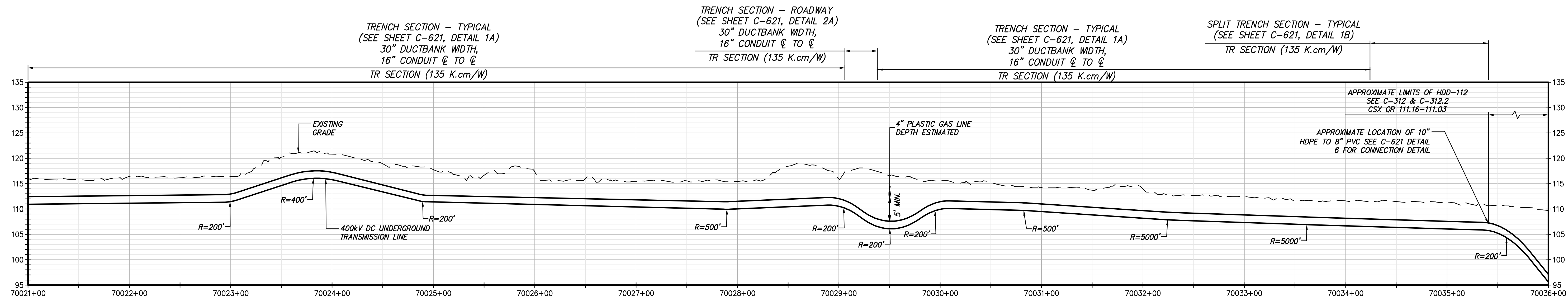
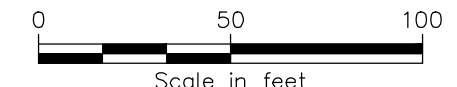
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						REV. NO.	0	SH.NO.	OF

KIEWIT PROJECT NO.	21162
TT PROJECT NO.	204-3701
DRAWING NO.	
G-020	





STA. 70021+00.00 TO STA. 70036+00.00 PLAN VIEW
SCALE: 1" = 50'



STA. 70021+00 TO STA. 70036+00 PROFILE VIEW
SCALE: H:1" = 50' V:1" = 10'



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.

0	06/19/2023	ISSUED FOR CONSTRUCTION SUBMISSION	RB	JL
No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP

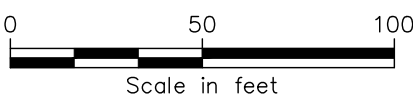
CHAMPLAIN HUDSON POWER EXPRESS
SEGMENT 11 (PACKAGE 7A) - CSX: CATSKILL
STA. 70021+00.00 TO STA. 70036+00.00

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DRAWING NO.	C-103
DATE	06/19/2023
SH.NO.	OF

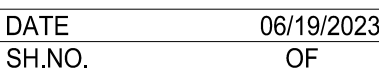
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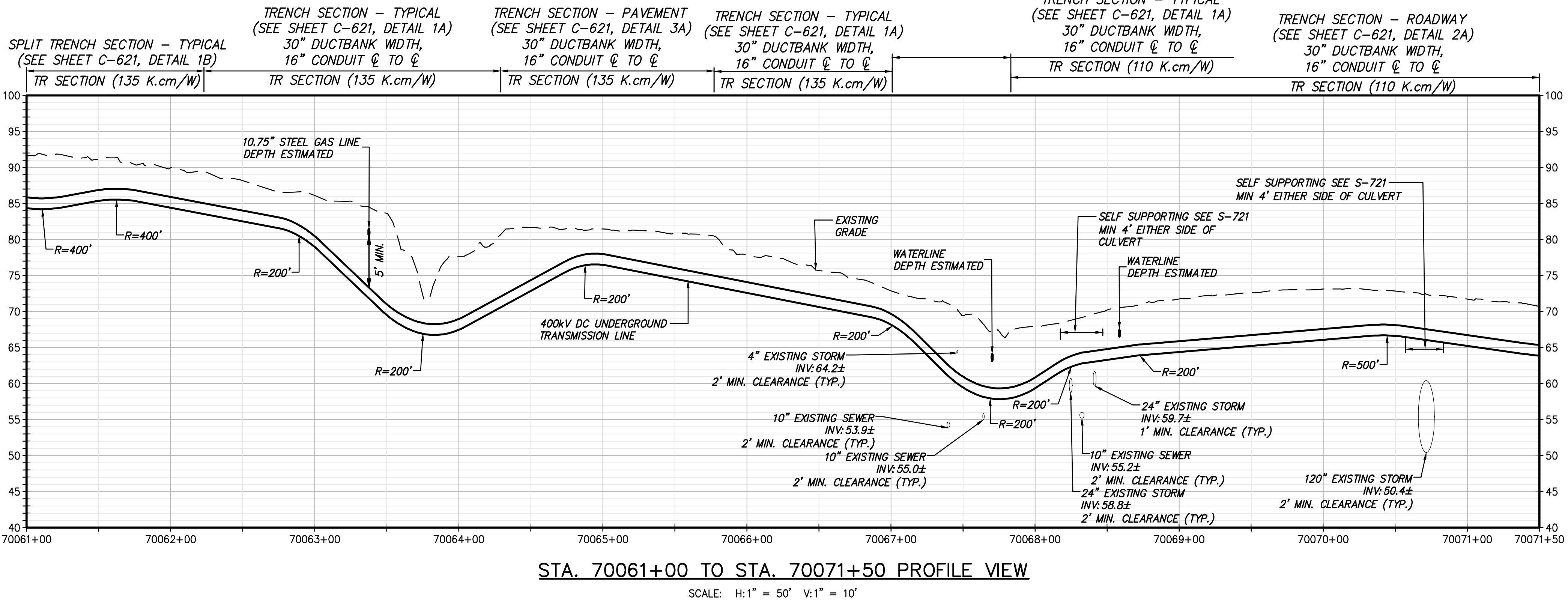
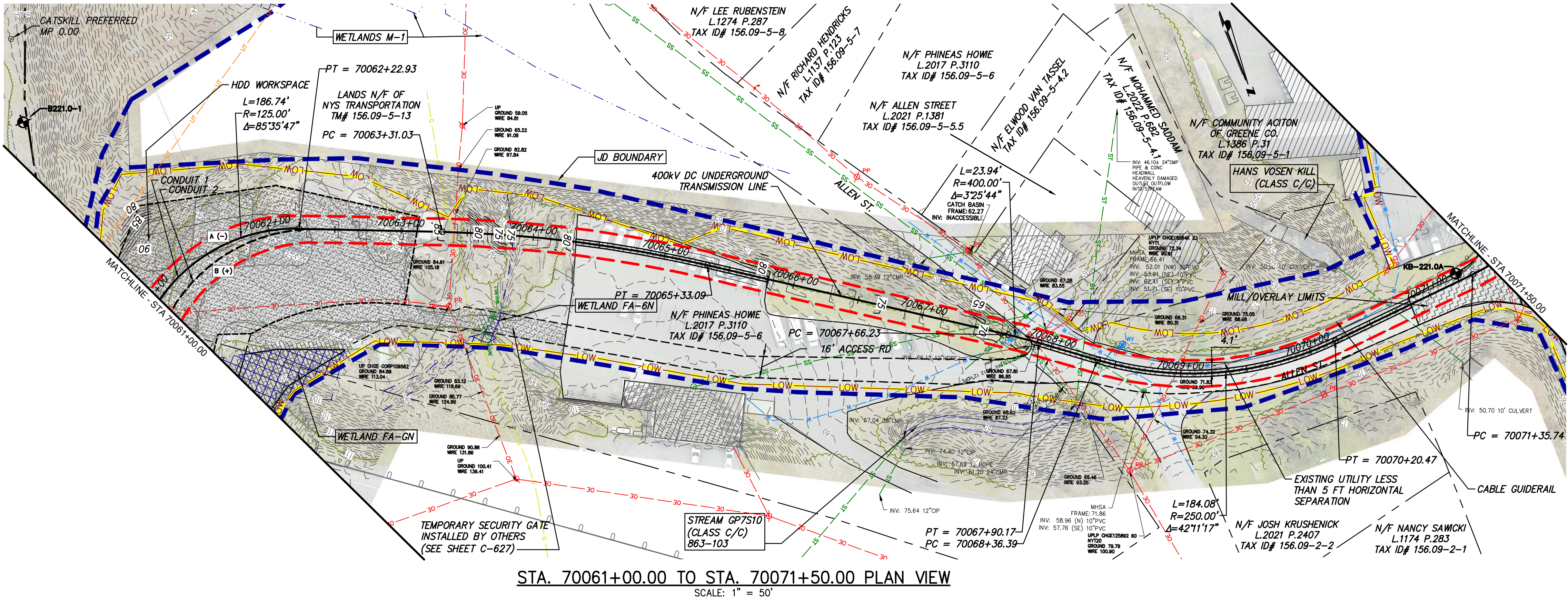


TR SECTION (135 K.cm/W)



SCALE: H:1" = 50' V:1" = 10'





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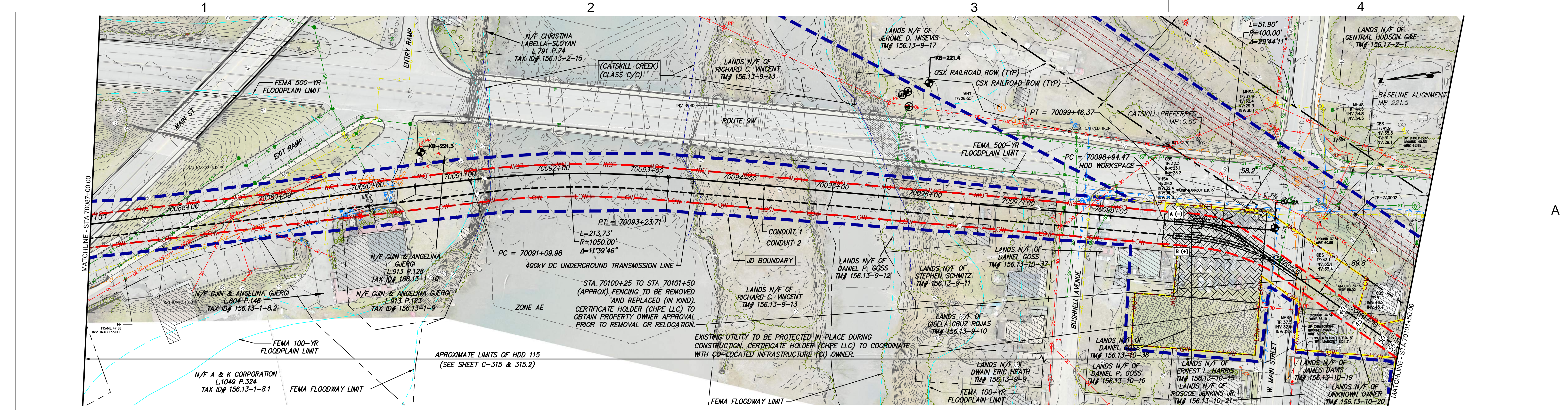
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No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP

CHAMPLAIN HUDSON POWER EXPRESS
SEGMENT 11 (PACKAGE 7A) - CSX: CATSKILL
STA. 70061+00.00 TO STA. 70071+50.00

KIEWIT PROJECT NO.	21162
TT PROJECT NO.	204-3701
DRAWING NO.	C-105.1
DATE	06/19/2023
SH.NO.	OF

DRAWN BY:	RB	DESIGNED BY:	AC	APPROVED BY:	JL	SCALE	AS SHOWN	DATE	06/19/2023
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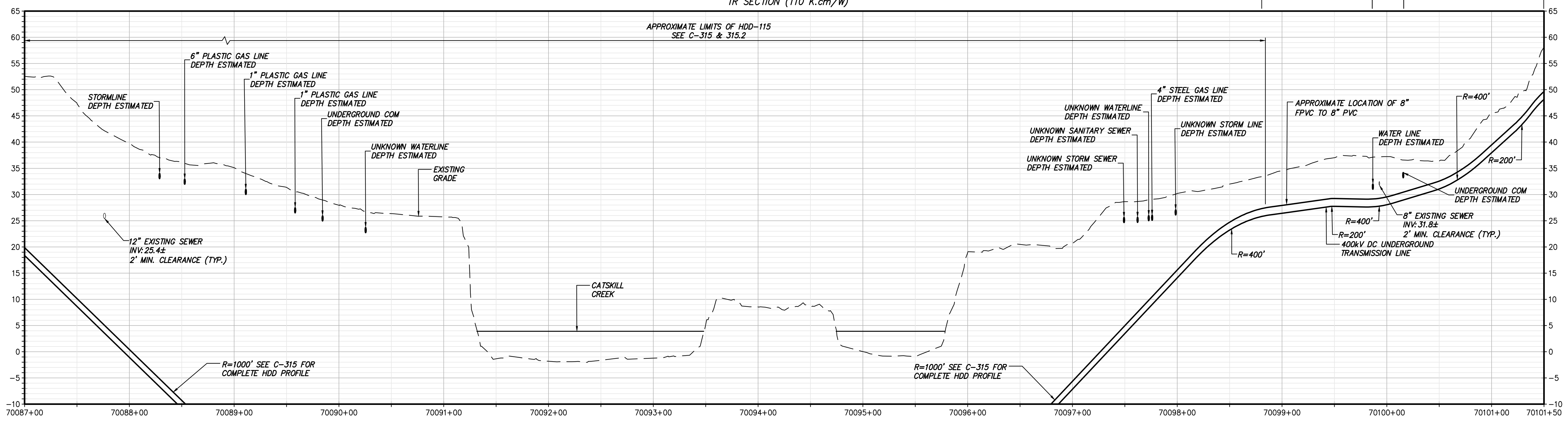


STA. 70087+00.00 TO STA. 70101+50.00 PLAN VIEW
SCALE: 1" = 50'



SPLIT TRENCH SECTION - PAVEMENT
(SEE SHEET C-621, DETAIL 3B)
TR SECTION (110 K.cm/W)

SPLIT TRENCH SECTION - ROADWAY
(SEE SHEET C-621, DETAIL 2B)
TR SECTION (110 K.cm/W)



STA. 70087+00 TO STA. 70101+50 PROFILE VIEW
SCALE: H:1" = 50' V:1" = 10'



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No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP

CHAMPLAIN HUDSON POWER EXPRESS
SEGMENT 11 (PACKAGE 7A) - CSX: CATSKILL
STA. 70087+00.00 TO STA. 70101+50.00

KIEWIT PROJECT NO.	21162
TT PROJECT NO.	204-3701
DRAWING NO.	C-107

DRAWN BY:	RB	DESIGNED BY:	AC	APPROVED BY:	JL	SCALE	AS SHOWN	DATE	06/19/2023
						REV. NO.		SH.NO.	OF