# New England Clean Power Link

TDI New England

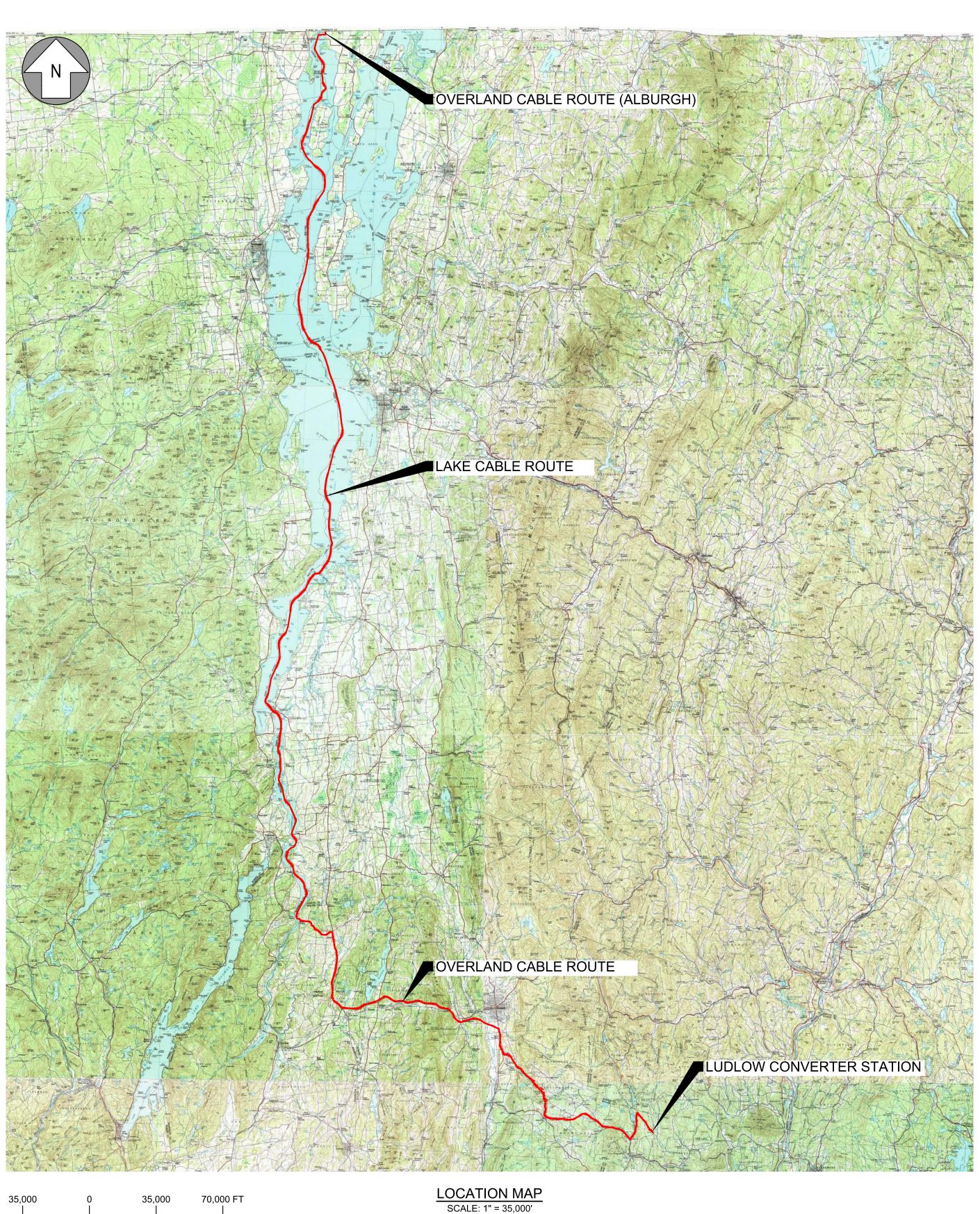
## OVERLAND ROUTE SEGMENT

## **VERMONT COUNTIES**

GRAND ISLE
CHITTENDEN
ADDISON
RUTLAND
WINDSOR

## **OVERLAND TOWNS**

ALBURGH
BENSON
WEST HAVEN
FAIR HAVEN
CASTLETON
IRA
WEST RUTLAND
RUTLAND
CLARENDON
SHREWSBURY
WALLINGFORD
MOUNT HOLLY
LUDLOW
CAVENDISH



SCALE: 1" = 35,000'

## APPLICANT / DEVELOPER:



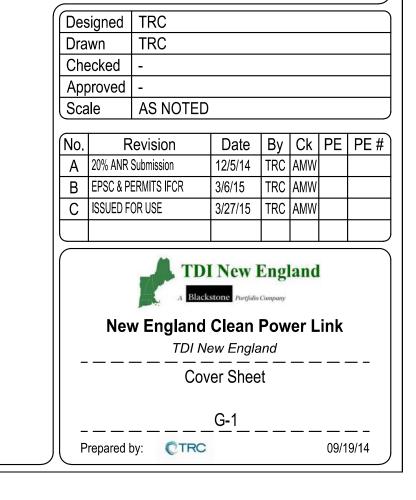
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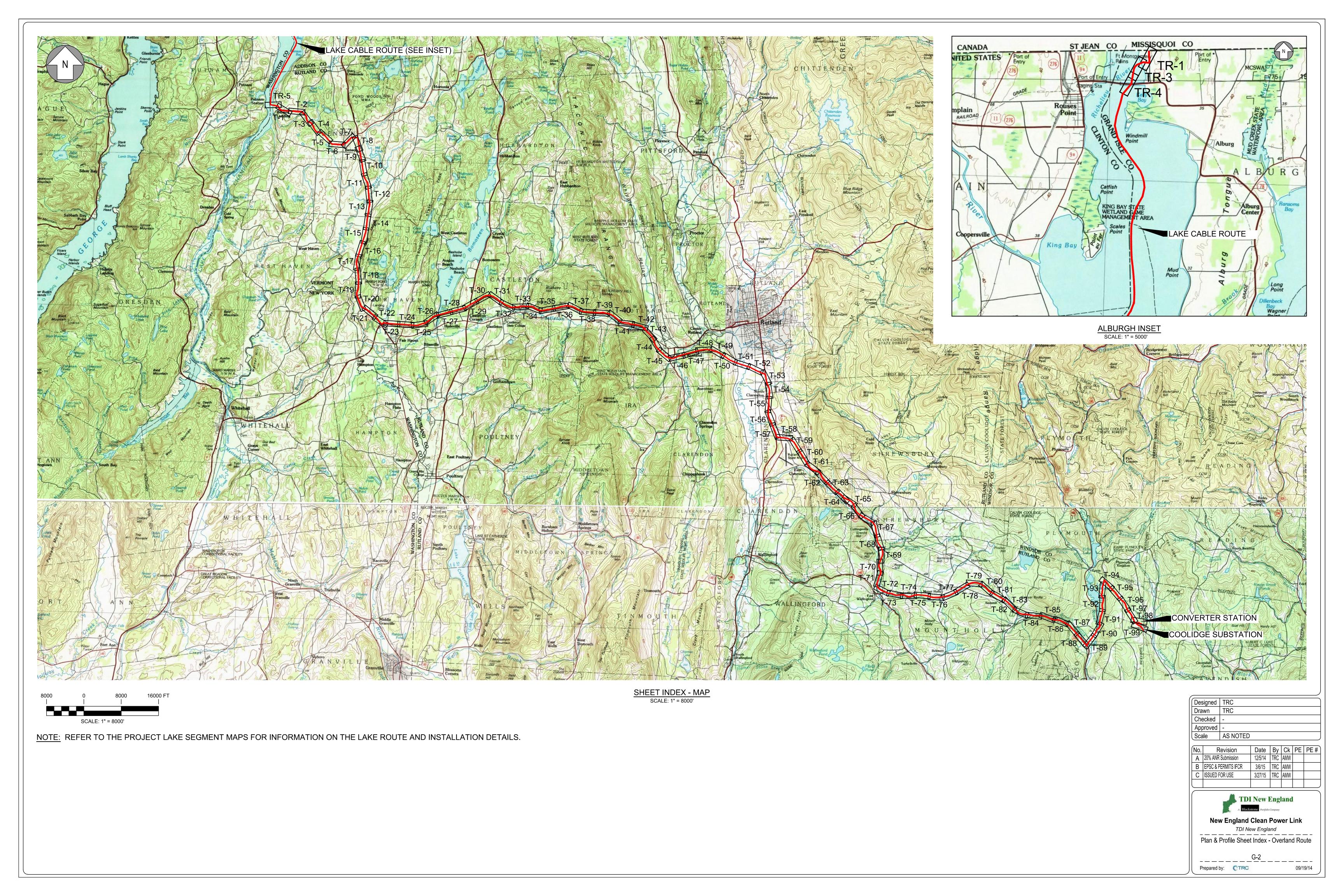
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NOT FOR CONSTRUCTION



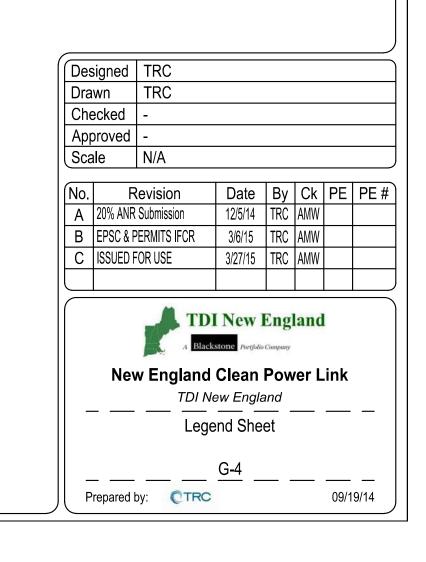


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OVERLAND ROUTE STA 2160+00 TO 2190+00 T-13 PLAN & PROFILE - OVERLAND ROUTE STA 360+00 TO 390+00 T-74 PLAN & PROFILE - OVERLAND ROUTE STA 2190+00 TO 2220+00 T-75 PLAN & PROFILE - OVERLAND ROUTE STA 2220+00 TO 2250+00 T-14 PLAN & PROFILE - OVERLAND ROUTE STA 390+00 TO 420+00 T-15 PLAN & PROFILE - OVERLAND ROUTE STA 420+00 TO 450+00 T-76 PLAN & PROFILE - OVERLAND ROUTE STA 2250+00 TO 2280+00 T-16 PLAN & PROFILE - OVERLAND ROUTE STA 450+00 TO 480+00 T-77 PLAN & PROFILE - OVERLAND ROUTE STA 2280+00 TO 2310+00 T-17 PLAN & PROFILE - OVERLAND ROUTE STA 480+00 TO 510+00 T-78 PLAN & PROFILE - OVERLAND ROUTE STA 2310+00 TO 2340+00 T-79 PLAN & PROFILE - OVERLAND ROUTE STA 2340+00 TO 2370+00 T-18 PLAN & PROFILE - OVERLAND ROUTE STA 510+00 TO 540+00 T-19 PLAN & PROFILE - OVERLAND ROUTE STA 540+00 TO 570+00 T-80 PLAN & PROFILE - OVERLAND ROUTE STA 2370+00 TO 2400+00 T-20 PLAN & PROFILE - OVERLAND ROUTE STA 570+00 TO 600+00 T-81 PLAN & PROFILE - OVERLAND ROUTE STA 2400+00 TO 2430+00 T-21 PLAN & PROFILE - OVERLAND ROUTE STA 600+00 TO 630+00 T-82 PLAN & PROFILE - OVERLAND ROUTE STA 2430+00 TO 2460+00 T-22 PLAN & PROFILE - OVERLAND ROUTE STA 630+00 TO 660+00 T-83 PLAN & PROFILE - OVERLAND ROUTE STA 2460+00 TO 2490+00 T-23 PLAN & PROFILE - OVERLAND ROUTE STA 660+00 TO 690+00 T-84 PLAN & PROFILE - OVERLAND ROUTE STA 2490+00 TO 2520+00 T-24 PLAN & PROFILE - OVERLAND ROUTE STA 690+00 TO 720+00 T-85 PLAN & PROFILE - OVERLAND ROUTE STA 2520+00 TO 2550+00 T-25 PLAN & PROFILE - OVERLAND ROUTE STA 720+00 TO 750+00 T-86 PLAN & PROFILE - OVERLAND ROUTE STA 2550+00 TO 2580+00 T-26 PLAN & PROFILE - OVERLAND ROUTE STA 750+00 TO 780+00 T-87 PLAN & PROFILE - OVERLAND ROUTE STA 2580+00 TO 2610+00 T-27 PLAN & PROFILE - OVERLAND ROUTE STA 780+00 TO 810+00 T-88 PLAN & PROFILE - OVERLAND ROUTE STA 2610+00 TO 2640+00 T-28 PLAN & PROFILE - OVERLAND ROUTE STA 810+00 TO 840+00 T-89 PLAN & PROFILE - OVERLAND ROUTE STA 2640+00 TO 2670+00 T-29 PLAN & PROFILE - OVERLAND ROUTE STA 840+00 TO 870+00 T-90 PLAN & PROFILE - OVERLAND ROUTE STA 2670+00 TO 2700+00 T-30 PLAN & PROFILE - OVERLAND ROUTE STA 870+00 TO 900+00 T-91 PLAN & PROFILE - OVERLAND ROUTE STA 2700+00 TO 2730+00 T-31 PLAN & PROFILE - OVERLAND ROUTE STA 900+00 TO 930+00 T-92 PLAN & PROFILE - OVERLAND ROUTE STA 2730+00 TO 2760+00 T-32 PLAN & PROFILE - OVERLAND ROUTE STA 930+00 TO 960+00 T-93 PLAN & PROFILE - OVERLAND ROUTE STA 2760+00 TO 2790+00 T-94 PLAN & PROFILE - OVERLAND ROUTE STA 2790+00 TO 2820+00 T-33 PLAN & PROFILE - OVERLAND ROUTE STA 960+00 TO 990+00 T-95 PLAN & PROFILE - OVERLAND ROUTE STA 2820+00 TO 2850+00 T-34 PLAN & PROFILE - OVERLAND ROUTE STA 990+00 TO 1020+00 T-35 PLAN & PROFILE - OVERLAND ROUTE STA 1020+00 TO 1050+00 T-96 PLAN & PROFILE - OVERLAND ROUTE STA 2850+00 TO 2880+00 T-36 PLAN & PROFILE - OVERLAND ROUTE STA 1050+00 TO 1080+00 T-97 PLAN & PROFILE - OVERLAND ROUTE STA 2880+00 TO 2920+00 T-37 PLAN & PROFILE - OVERLAND ROUTE STA 1080+00 TO 1110+00 T-98 PLAN & PROFILE - OVERLAND ROUTE - LUDLOW CONVERTER STATION T-38 PLAN & PROFILE - 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CL-1 CONSTRUCTION LAYDOWN AREA

Designed TRC Drawn TRC Checked Approved | -Scale AS NOTED No. | Revision | Date | By | Ck | PE | PE # A 20% ANR Submission | 12/5/14 | TRC | AMW | B | EPSC & PERMITS IFCR | 3/6/15 | TRC | AMW | C ISSUED FOR USE 3/27/15 TRC AMW **TDI New England** New England Clean Power Link TDI New England Plan & Profile Sheet Index - Overland Route \_\_\_\_G-3 

#### **ABBREVIATIONS** EPSC **EROSION PREVENTION & SEDIMENT CONTROL** EPSC SPECIALIST ON-SITE ENVIRONMENTAL MONITOR HDD HORIZONTAL DIRECTIONAL DRILL J&B JACK & BORE LOD LIMIT OF DISTURBANCE OSPC ON-SITE PLAN COORDINATOR PPC PERMANENT PROJECT CORRIDOR R.O.W. RIGHT-OF-WAY <u>LEGEND</u> STATE BOUNDARY TOWN BOUNDARY —— — R.O.W. / PARCEL — — *110* — 2' CONTOUR **EXISTING TREELINE** V-AL-W-2 EXISTING WETLAND APPROX. WETLAND — 50' WETLAND BUFFER — 50' RECEIVING WATER BUFFER EXISTING STREAM EDGE OF WATER ---- FEMA 100 YR FLOOD EXISTING BUILDING = = = EXISTING CULVERT EXISTING UG UTILITY EXISTING UTILITY POLE EXISTING HYDRANT EXISTING MANHOLE EXISTING CATCH BASIN EXISTING GUARDRAIL EXISTING STOCKADE FENCE -0--0-EXISTING CHAINLINK FENCE MILEPOST MARKER CABLE ROUTE J&B CABLE ROUTE HDD CABLE ROUTE **\*\*\*\*** J&B STAGING AREA HDD STAGING AREA SPLICE PIT SPLICE MANHOLE TRANSITION VAULT 12' WIDE PERMANENT PROJECT CORRIDOR TEMPORARY WORK SPACE RTE POTENTIAL ROOSTING TREE NATURAL COMMUNITY DEER WINTERING AREA



#### CONSTRUCTION EPSC NOTES:

- THE PROJECT LIMIT OF DISTURBANCE (LOD) INCLUDES THE TEMPORARY WORK SPACE, HORIZONTAL DIRECTIONAL DRILL, AND JACK & BORE STAGING AREAS.
- PERIMETER CONTROLS (E.G., SILT FENCE) SHALL BE INSTALLED ON THE DOWNSLOPE SIDE OF AREAS WHERE THERE IS POTENTIAL FOR SOIL EROSION AND/OR SEDIMENT RUNOFF. IN SOME AREAS WHERE THE GROUND SURFACE IS LEVEL AND THERE ARE NO PATHWAYS (E.G., DITCHES OR RUTS) THAT COULD TRANSPORT RUNOFF FROM THE PROJECT AREA, INSTALLATION OF PERIMETER CONTROLS MAY NOT BE NECESSARY PER APPROVAL BY THE ON-SITE PLAN COORDINATOR (OSPC).
- 3. CONTRACTOR SHALL INSTALL, MAINTAIN, AND OPERATE ALL CHANNELS, SUMPS, AND OTHER TEMPORARY DIVERSION AND PROTECTIVE WORKS NEEDED TO DIVERT STREAM FLOW AND OTHER SURFACE WATER THROUGH OR AROUND THE CONSTRUCTION SITE. CONTROL OF SURFACE WATER SHALL BE CONTINUOUS DURING THE PERIOD THAT DAMAGE TO CONSTRUCTION WORK COULD OCCUR.
- 4. OPEN EXCAVATIONS SHALL BE DEWATERED AND KEPT FREE OF STANDING WATER AND MUDDY CONDITIONS AS NECESSARY FOR THE PROPER EXECUTION OF THE WORK. THE CONTRACTOR SHALL FURNISH, INSTALL, OPERATE, AND MAINTAIN ALL DRAINS, SUMPS AND OTHER EQUIPMENT REQUIRED TO PROPERLY DEWATER THE SITE. DEWATERING SYSTEMS THAT CAUSE A LOSS OF SOIL FINES WILL NOT BE PERMITTED.
- 5. MAXIMUM CONCURRENT EARTH DISTURBANCE IS 40 ACRES.
- 6. TOTAL DURATION OF EXPOSED SOIL IS 14 DAYS MAXIMUM WITHIN THE MAINLINE AND 21 DAYS WITHIN THE CONVERTER STATION SITE. SEE NOTE 1 OF "TEMPORARY AND FINAL STABILIZATION NOTES" FOR EXCEPTIONS.
- 7. PRIOR TO STUMPING AND GRUBBING, LOGGING ACTIVITIES SHALL BE CONDUCTED IN ACCORDANCE WITH ACCEPTABLE MANAGEMENT PRACTICES FOR MAINTAINING WATER QUALITY ON LOGGING JOBS IN VERMONT (AMPS, 2011). CONSTRUCTION MATS AND MAT BRIDGES SHALL BE IN PLACE IN WETLANDS AND STREAM CROSSINGS PRIOR TO ACCESS BY ANY TREE CLEARING EQUIPMENT, OR ACCESS THROUGH WETLAND UNDER DRY OR FROZEN CONDITIONS.
- 3. STUMPING AND GRUBBING ACTIVITIES SHALL BE CONDUCTED IN ACCORDANCE WITH THE PROJECTS CONSTRUCTION STORMWATER DISCHARGE PERMIT AND EPSC PLAN. NO STUMPING/GRUBBING IN WETLANDS, CLASS II WETLAND BUFFERS, RARE THREATENED AND ENDANGERED (RTE) PLANT SPECIES LOCATIONS, OR SIGNIFICANT COMMUNITIES WITH EXCEPTION OF WHERE SHOWN ON PLANS.
- . EPSC MEASURES SHALL BE INSTALLED PURSUANT TO THE CONSTRUCTION PHASE STORMWATER DISCHARGE PERMIT FOR THE PROJECT, THE EPSC PLAN, THE VERMONT STANDARDS AND SPECIFICATIONS FOR EROSION PREVENTION AND SEDIMENT CONTROL (2006, AMENDED 2008), VERMONT EROSION PREVENTION AND SEDIMENT CONTROL FIELD GUIDE (2006), AND OTHER RELEVANT PROJECT PERMITS.
- 10. CONSTRUCTION DEMARCATION AND PERIMETER CONTROLS SHALL COMPLY WITH THE FOLLOWING:

#### CONSTRUCTION DEMARCATION: (SEE TYPICAL DETAILS)

- a. CONSTRUCTION DEMARCATION TO BE INSTALLED ALONG PERIMETER OF LIMITS OF DISTURBANCE, BUT NOT ACROSS ACTIVE ACCESS POINTS AND ROUTES.
- b. WITHIN 50 FEET OF A MAPPED RESOURCE AREA, DEMARCATION SHALL
- INCLUDE:ONE ROW OF STAKED (OR STAPLED) 3 INCH (MIN.) ORANGE BARRIER
- MESH TAPE OR ROPE,
- ORANGE CONSTRUCTION FENCE,ORANGE SNOW FENCE, OR
- OTHER INTERCHANGEABLE AND/OR DEC APPROVED MEASURE.
  THIS REQUIREMENT IS APPLICABLE IN AREAS MAPPED AS 50' RECEIVING
  WATER BUFFER AND, IF APPLICABLE, AREAS WITHIN 50 FEET OF OPEN
  WATER OBSERVED IN WETLANDS AS DIRECTED BY OSPC, EPSC SPECIALIST,
  OR DELEGATE.
- c. WHEN GREATER THAN 50 FEET FROM A MAPPED WATER RESOURCE AREA, DEMARCATION SHALL INCLUDE:
- ORANGE FLAGGING TIED TO TREES OR STAKES,
- ONE ROW OF STAKED (OR STAPLED) 3 INCH (MIN.) ORANGE BARRIER MESH TAPE OR ROPE, OR
- OTHER INTERCHANGEABLE AND/OR DEC APPROVED MEASURE.

  FLAGGING TIED TO TREES OR STAKES SHALL BE SPACED NO MORE THAN 50 FEET APART.

#### PERIMETER CONTROLS: (SEE TYPICAL DETAILS)

- a. PERIMETER CONTROLS ARE TO BE INSTALLED ON THE DOWNSLOPE SIDE OF AREAS OF DISTURBANCE WHERE THERE IS POTENTIAL FOR SEDIMENT RUNOFF AND/OR SOIL EROSION, BUT THEY ARE NOT TO CROSS ACTIVE ACCESS POINTS AND ROUTES (E.G., ROADS) OR FLOW PATHS (E.G., STREAMS).
- b. <u>WITHIN 50 FEET OF A MAPPED WATER RESOURCE AREA, PERIMETER CONTROLS SHALL INCLUDE:</u>
- REINFORCED SILT FENCE TO BE REINFORCED WITH WIRE MESH,
   STAKED HAYBALES, STAKED FIBER ROLLS, OR WOOD CHIP BERMS,
- STONE BERMS, OR
- OTHER INTERCHANGEABLE AND/OR DEC APPROVED MEASURE.
   THIS REQUIREMENT IS APPLICABLE IN AREAS MAPPED AS 50' RECEIVING
   WATER BUFFER AND, IF APPLICABLE, AREAS WITHIN 50 FEET OF OPEN
   WATER OBSERVED IN WETLANDS AS DIRECTED BY OSPC, EPSC SPECIALIST,
- c. WHEN GREATER THAN 50 FEET FROM A MAPPED WATER RESOURCE AREA,
- PERIMETER CONTROLS SHALL INCLUDE:
- SILT FENCE (NON-REINFORCED),
  STAKED FIBER ROLLS, OR

OR DELEGATE.

- OTHER INTERCHANGEABLE AND/OR DEC APPROVED MEASURE.
- 11. CONSTRUCTION DEMARCATION AND PERIMETER CONTROLS SHALL BE INSTALLED PRIOR TO EARTH DISTURBING ACTIVITIES WITHIN THAT AREA, WITH THE EXCEPTION OF THOSE LAND DISTURBING ACTIVITIES THAT ARE NECESSARY TO INSTALL THESE MEASURES.
- 12. RESOURCE AREAS (E.G., WETLANDS, STREAMS, BUFFERS, RTE PLANT SPECIES, ARCHEOLOGICALLY SENSITIVE AREAS, ETC.) SHALL BE FLAGGED PRIOR TO ANY TREE CLEARING OR CONSTRUCTION RELATED ACTIVITIES WITHIN CLOSE PROXIMITY TO THESE AREAS.
- 13. PROJECT AREAS THAT ARE BORDERED BY ROADWAYS ON ONE SIDE MAY NOT HAVE RESOURCE AREAS FLAGGED ON THE OTHER (NON-PROJECT) SIDE OF THE ROAD.
- 14. CONSTRUCTION WITHIN RESOURCE AREA BOUNDARIES SHALL BE CONDUCTED PURSUANT TO THE EPSC PLAN AND APPLICABLE ENVIRONMENTAL PERMIT CONDITIONS.
- 15. ACCESS THROUGH WETLANDS REQUIRES USE OF CONSTRUCTION MATS PER THE EPSC PLAN OR WITH LOW GROUND PRESSURE EQUIPMENT DURING PERIODS OF DRY OR FROZEN GROUND CONDITIONS AS DETERMINED BY THE OSPC. IN SOME INSTANCES, EQUIPMENT MAY OPERATE IN WETLAND AREAS WITHOUT THE USE OF MATS IN THE PERMANENT PROJECT CORRIDOR FOLLOWING TOPSOIL REMOVAL AND SEGREGATION IN ACCORDANCE WITH ENVIRONMENTAL PERMIT CONDITIONS (E.G., VERMONT WETLAND PERMIT).

- 16. VEGETATED BUFFERS SHALL BE MAINTAINED FOR WATER BODIES (E.G., WETLANDS AND STREAMS) PURSUANT TO THE EPSC PLAN AND APPLICABLE ENVIRONMENTAL PERMIT CONDITIONS.
- 17. ALL OTHER VEGETATION (OUTSIDE BUFFER AREAS AND RESOURCE AREAS) SHALL BE PROTECTED AND MAINTAINED TO THE EXTENT PRACTICABLE.
- 18. ACCESS ROUTES, LAYDOWN/STAGING AREAS, AND WORK SPACES ARE SHOWN ON THE EPSC PLAN. ANY OTHER ACCESS ROUTES, LAYDOWN/STAGING AREAS, AND/OR WORK SPACES MUST BE AUTHORIZED BY THE OSPC AND THE OWNER PRIOR TO THEIR USE.
- 19. WHERE THERE ARE EXISTING CULVERTS WITHIN TEMPORARY ACCESS ROUTES, PROTECTION (E.G., STONE ON FABRIC OR CONSTRUCTION MATS) MAY BE REQUIRED TO MAINTAIN THEIR INTEGRITY.
- 20. ANY STONE AND/OR GEOTEXTILE FABRIC THAT IS USED TO PROVIDE A STABILIZED SURFACE IN ACCESS ROUTES, LAYDOWN/STAGING AREAS, WORK SPACES, ETC., DURING CONSTRUCTION MUST BE REMOVED AND ANY EXPOSED SOIL STABILIZED ONCE AREAS ARE NO LONGER NEEDED.
- 21. FLAGGING AND SIGNAGE (E.G., "NO ACCESS") SHALL BE PLACED AT THOSE LOCATIONS WHERE OFF-RIGHT-OF-WAY ACCESS MAY INADVERTANTLY BE USED (E.G., EXISTING FARM ROADS) BUT THAT ARE OTHERWISE NOT APPROVED FOR PROJECT ACCESS.
- 22. AREAS OF DISTURBANCE THAT SLOPE TOWARDS BORDERING ROADSIDES SHALL HAVE AN APPROPRIATE SEDIMENT BARRIER (E.G., SILT FENCE) SPANNING THE EDGE OF DISTURBANCE TO MINIMIZE WASH-OFF OF SEDIMENT INTO ROADWAYS OR ROADSIDE DITCHES.
- 23. STABILIZED CONSTRUCTION ENTRANCES ARE REQUIRED AT ALL ACCESS ROAD LOCATIONS WHERE THE ACCESS ROAD ADJOINS A PAVED SURFACE OR ACTIVELY USED UNPAVED SURFACE (E.G., DIRT ROAD WITH HOUSES) WHERE TRACKING OF MATERIAL IS A POTENTIAL. STABILIZED CONSTRUCTION ENTRANCES SHALL BE MAINTAINED REGULARLY TO CONTROL TRACKING OF MATERIAL ONTO ROADWAYS.
- 24. CONDUCT ROUTINE SWEEPING OF ROADWAYS AS NEEDED.
- 25. BLASTING SHALL BE CONDUCTED PURSUANT TO THE PROJECT'S BLASTING PLAN.
- 26. IN AREAS WHERE HORIZONTAL DIRECTIONAL DRILLING (HDD) IS TO OCCUR, EPSC MEASURES ARE TO BE INSTALLED PER THIS EPSC PLAN. CONTRACTOR TO BE RESPONSIBLE FOR LEGAL DISPOSAL OF ALL WASTE MATERIALS.
- 27. IN ADVANCE OF FORECASTED RAINFALL OR SNOWMELT, EPSC MEASURES SHALL BE INSPECTED AND REPAIRED, AS NEEDED.
- 28. TO THE EXTENT PRACTICABLE, SURFACE FLOW SHALL BE DIVERTED AWAY FROM EXPOSED SOILS.
- 29. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH A SEDIMENT TRAPPING DEVICE AND DISCHARGED IN A MANNER THAT DOES NOT RESULT IN IMPACTS TO WATER QUALITY OR CONTRIBUTE TO EROSION. DEWATERING ACTIVITIES OUTSIDE OF THE ROW ARE TO FOLLOW THE PROJECT'S DEWATERING PLAN WITH PRIOR APPROVAL BY THE OSPC AND LANDOWNER.
- 30. SEDIMENT REMOVED FROM SEDIMENT CONTROL PRACTICES SHALL BE DISPOSED OF IN AN UPLAND AREA AND OUTSIDE WETLAND AND STREAM BUFFERS, WITH STABILIZATION VIA SEED AND MULCH FOLLOWING DISPOSAL OF MATERIAL.
- 31. DUST CONTROL SHALL BE HANDLED VIA WATER OR CALCIUM CHLORIDE APPLICATION TO ROADWAYS AND OTHER AREAS WHERE DUST MAY BE

#### PRE-CONSTRUCTION AND PERMITTING NOTES:

- 1. A PRE-CONSTRUCTION CONFERENCE WITH THE VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION (VT DEC), THE ON-SITE PLAN COORDINATOR (OSPC), AND THE EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) SPECIALIST SHALL BE HELD PRIOR TO INITIATING CONSTRUCTION ACTIVITIES.
- 2. THE NAME AND DAYTIME PHONE NUMBER OF THE OSPC SHALL BE PROVIDED IN WRITING TO VT DEC PRIOR TO THE START OF CONSTRUCTION.
- 3. THE NAME, ADDRESS, DAYTIME PHONE NUMBER, AND BASIC QUALIFICATIONS OF THE EPSC SPECIALIST SHALL BE PROVIDED IN WRITING TO VT DEC PRIOR TO THE START OF CONSTRUCTION.
- 4. ALL PARTIES ASSOCIATED WITH CONSTRUCTION ACTIVITIES WHO MEET EITHER OF THE FOLLOWING TWO CRITERIA OF "PRINCIPAL OPERATOR" MUST OBTAIN COVERAGE AS A CO-PERMITTEE UNDER THE CONSTRUCTION STORMWATER DISCHARGE PERMIT FOR THE PROJECT PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES BY THAT OPERATOR:
  - a. THE PARTY HAS OPERATIONAL CONTROL OVER CONSTRUCTION PLANS AND SPECIFICATIONS, INCLUDING BUT NOT LIMITED TO THE ABILITY TO MAKE MODIFICATIONS TO THOSE PLANS AND SPECIFICATIONS; OR
  - b. THE PARTY HAS CONTINUOUS DAY-TO-DAY OPERATIONAL CONTROL OF THOSE ACTIVITIES AT THE PROJECT THAT ARE NECESSARY TO ENSURE COMPLIANCE WITH THE EPSC PLAN FOR THE SITE OR OTHER PERMIT CONDITIONS (E.G., THEY ARE AUTHORIZED TO DIRECT WORKERS AT A SITE TO CARRY OUT ACTIVITIES REQUIRED BY THE EPSC PLAN OR COMPLY WITH OTHER PERMIT CONDITIONS).
- 5. THE NOTICE OF AUTHORIZATION (NOA) ISSUED BY VT DEC SHALL BE POSTED IN A LOCATION THAT IS VISIBLE TO THE PUBLIC (E.G., NEAR THE CONSTRUCTION ENTRANCE OR AT THE JOB TRAILER).
- 6. A COPY OF THE EPSC PLAN SHALL BE MAINTAINED ON-SITE DURING NORMAL WORKING HOURS FROM THE DATE OF COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO THE DATE OF FINAL STABILIZATION. THE EPSC PLAN SHALL BE MADE AVAILABLE TO VT DEC UPON REQUEST.
- 7. PERMISSION MUST BE GRANTED BY VT DEC PRIOR TO USE OF ANY SUPPORT ACTIVITIES THAT MAY OCCUR OUTSIDE OF THE APPROVED PROJECT BOUNDARIES (E.G., USE OF WASTE OR BORROW AREAS) THAT HAVE NOT BEEN PREVIOUSLY APPROVED.

#### TEMPORARY AND FINAL STABILIZATION NOTES:

- 1. DURING REGULAR CONSTRUCTION SEASON (APRIL 15 TO OCTOBER 15), ALL AREAS OF EARTH DISTURBANCE MUST BE STABILIZED WITHIN 14 DAYS OF INITIAL DISTURBANCE WITH EXCEPTIONS (SEE "CONSTRUCTION EPSC NOTES" #6). AFTER THIS INITIAL 14-DAY PERIOD, ALL AREAS OF DISTURBED EARTH MUST BE STABILIZED BY THE END OF EACH WORK DAY, WITH THE FOLLOWING EXCEPTIONS:
  - a. WORK IS TO CONTINUE IN THAT AREA WITHIN THE NEXT 24 HOURS AND THERE IS NO PRECIPITATION FORECAST FOR THE NEXT 24 HOURS.
  - b. WORK IS OCCURRING IN A SELF-CONTAINED EXCAVATION (I.E., NO OUTLET FOR STORMWATER) WITH A DEPTH OF 2 FEET OR GREATER (E.G., UNDERGROUND LINE INSTALLATION).
- 2. DURING WINTER CONSTRUCTION SEASON (OCTOBER 15 TO APRIL 15), ALL AREAS OF DISTURBED EARTH MUST BE STABILIZED BY THE END OF EACH WORK DAY, WITH THE FOLLOWING EXCEPTIONS:
  - a. WORK IS TO CONTINUE IN THAT AREA WITHIN THE NEXT 24 HOURS AND

- THERE IS NO PRECIPITATION FORECAST FOR THE NEXT 24 HOURS.
- b. WORK IS OCCURRING IN A SELF-CONTAINED EXCAVATION (I.E., NO OUTLET FOR STORMWATER) WITH A DEPTH OF 2 FEET OR GREATER (E.G., UNDERGROUND LINE INSTALLATION).
- 3. TEMPORARY STABILIZATION OF EXPOSED SOILS SHALL GENERALLY BE ACHIEVED BY MULCH (E.G., HAY/STRAW, COMPOST, WOOD CHIPS, WOOD STUMP GRINDINGS, AND/OR EROSION CONTROL MIX), SEED AND MULCH, AND/OR HYDROSEEDING WITH MULCH TACKIFIER TO PROVIDE COMPLETE COVER AT LEAST UNTIL PERMANENT STABILIZATION.
- 4. PERMANENT STABILIZATION OF EXPOSED SOILS SHALL BE ACHIEVED BY 70% VEGETATIVE COVER, STONE, ASPHALT, BEDROCK, OR OTHER PERMANENT MATERIAL (E.G., WOOD CHIPS) THAT PROVIDES COMPLETE COVER.
- 5. STEEP SIDESLOPES (>3:1) SHALL BE PERMANENTLY STABILIZED WITH STONE OR SEED/ROLLED EROSION CONTROL PRODUCT (RECP). SIDESLOPES <3:1 MAY BE STABILIZED WITH SEED AND MULCH AND/OR HYDROSEEDING (OR BONDED FIBER MATRIX) WITH MULCH TACKIFIER. NOTE: 70 PERCENT VEGETATIVE COVER MUST BE REACHED TO ATTAIN PERMANENT STABILIZATION.
- 6. AREAS THAT HAVE REACHED TEMPORARY OR FINAL STABILIZATION SHALL NOT BE CONSIDERED PART OF TOTAL AREA OF EARTH DISTURBANCE.
- 7. APPROPRIATE SEED MIX SHALL BE APPLIED TO DESIGNATED AREAS PER THE EPSC PLAN'S SEED SPECIFICATIONS. SEEDING PRIOR TO WINTER MUST BE COMPLETED BY SEPTEMBER 15 UNLESS WEATHER PERMITS SEED APPLICATION AND GERMINATION AFTER SEPTEMBER 15.
- 8. AREAS TO BE STABILIZED FOR WINTER THAT DO NOT HAVE ESTABLISHED VEGETATION BY OCTOBER 15 SHALL BE STABILIZED BY ANCHORED MULCH AT THE WINTER APPLICATION RATE OR OTHER APPROVED STABILIZATION MEASURES (E.G., ROLLED EROSION CONTROL PRODUCT). DORMANT SEEDING WITH WINTER RYE MAY BE APPLIED TO ACCOMMODATE EARLY SPRING GERMINATION.
- 9. ALL TEMPORARY EPSC MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY EPSC MEASURES ARE NO LONGER NEEDED.

#### WINTER CONSTRUCTION NOTES:

- 1. WINTER CONSTRUCTION SEASON IS DEFINED BY VT DEC AS OCTOBER 15 TO APRIL 15.
- 2. THE FOLLOWING WINTER CONSTRUCTION CONDITIONS APPLY TO THOSE CONSTRUCTION ACTIVITIES INVOLVING EARTH DISTURBANCE BETWEEN OCTOBER 15 AND APRIL 15:
  - a. FOR AREAS STABILIZED BY VEGETATION, SEED SHALL BE APPLIED NO LATER THAN SEPTEMBER 15 UNLESS WEATHER PERMITS SEED APPLICATION AND GERMINATION AFTER SEPTEMBER 15.
  - b. MULCH SHALL BE APPLIED AT DOUBLE THE REGULAR CONSTRUCTION SEASON RATE OR ROUGHLY 2 INCHES OF MULCH WITH 80 TO 90% COVER. MULCH SHALL BE TRACKED IN OR STABILIZED WITH NETTING.
  - c. ENLARGE ACCESS POINTS AS NEEDED TO PROVIDE SPACE FOR SNOW STOCKPILING.
  - d. LIMITS OF DISTURBANCE SHALL BE MOVED OR REPLACED TO REFLECT BOUNDARY OF WINTER WORK.
  - e. CLEARED SNOW SHALL BE PLACED DOWN GRADIENT OF ALL AREAS OF DISTURBANCE.
  - f. SNOW SHALL NOT BE PLACED IN STORMWATER TREATMENT STRUCTURES (E.G., BASINS).
  - g. A MINIMUM 25-FOOT BUFFER FROM PERIMETER CONTROLS (E.G., SILT FENCE) SHALL BE MAINTAINED TO ALLOW FOR SNOW CLEARING AND MAINTENANCE.
  - h. FOR AREAS OF DISTURBANCE WITHIN 50 FEET OF RECEIVING WATERS, SILT FENCE SHALL BE REINFORCED OR ELSE REPLACED WITH PERIMETER DIKES, SWALES, OR OTHER PRACTICES RESISTANT TO THE FORCES OF SNOW LOADS.
  - i. DRAINAGE STRUCTURES ARE TO BE KEPT OPEN AND FREE OF SNOW AND ICE DAMS.
  - EPSC MEASURES THAT REQUIRE SOIL DISTURBANCE TO INSTALL (E.G., SILT FENCE) SHALL BE INSTALLED PRIOR TO GROUND FREEZING.
  - k. SNOW AND ICE SHALL BE REMOVED TO LESS THAN 1 INCH THICKNESS PRIOR TO STABILIZATION.
  - I. A 10 TO 20-FOOT WIDE STONE PAD SHALL BE USED IN AREAS WHERE CONSTRUCTION VEHICLE TRAFFIC IS ANTICIPATED (E.G., AROUND THE PERIMETER OF A BUILDING).
  - m. TO ENSURE COVER OF DISTURBED SOIL IN ADVANCE OF A SNOWMELT EVENT, AREAS OF DISTURBED SOIL SHALL BE STABILIZED AT THE END OF EACH WORKDAY. UNLESS:
  - i. WORK IS TO CONTINUE WITHIN THE AREA WITHIN THE NEXT 24 HOURS AND THERE IS NO PRECIPITATION FORECAST FOR THE NEXT 24 HOURS OR
  - ii. WORK IS OCCURRING IN A SELF-CONTAINED EXCAVATION (I.E., NO OUTLET) WITH A DEPTH OF 2 FEET OR GREATER (E.G., UTILITY TRENCHES).

#### ADDITIONAL ENVIRONMENTAL NOTES:

- IMPACTS TO CLASS II WETLANDS AND THEIR 50-FOOT BUFFERS ARE SUBJECT TO SPECIFIC AUTHORIZATIONS AND CONDITIONS OF THE INDIVIDUAL VERMONT WETLAND PERMIT.
- 2. IMPACTS TO ALL JURISDICTIONAL WATERS OF THE U.S. (INCLUDING STREAMS, RIVERS, WETLANDS, ETC.) ARE SUBJECT TO SPECIFIC AUTHORIZATIONS AND CONDITIONS OF THE INDIVIDUAL DEPARTMENT OF THE ARMY (USACE) SECTION 404 AND SECTION 10 PERMITS, THE RELATED VT DEC SECTION 401 WATER QUALITY CERTIFICATION, AND ANY OTHER APPLICABLE PERMITS.
- 3. CONSTRUCTION MATS ARE TO BE INSTALLED IN WETLANDS TO PROVIDE STABLE AREAS FOR EQUIPMENT ACCESS, EQUIPMENT AND MATERIAL STAGING, AND SOIL STOCKPILING EXCEPT AS PROVIDED FOR IN PROJECT WETLAND PERMITS. SOIL STOCKPILING MAY BE ALSO OCCUR ON GEOSYNTHETIC FABRIC IN ACCORDANCE WITH PROJECT ENVIRONMENTAL PERMITS.
- 4. IN RESOURCE AREAS, MINIMIZE DURATION THAT MATS ARE IN PLACE TO EXTENT POSSIBLE.
- 5. CONSTRUCTION MATS THAT BECOME COVERED WITH SOIL AND/OR CONSTRUCTION DEBRIS SHALL BE CLEANED AND THE MATERIALS REMOVED AND DISPOSED OF IN AN UPLAND LOCATION. THE MATERIAL SHOULD NOT BE SCRAPED OR SHOVELED INTO THE RESOURCE AREA.
- 6. CONSTRUCTION MATS THAT BECOME IMBEDDED MUST BE RESET OR LAYERED TO PREVENT MUD FROM COVERING THEM OR WATER PASSING OVER THEM.
- 7. CONSTRUCTION MATS SHALL BE CLEANED BEFORE TRANSPORT FROM AN AREA

- OF PRE-EXISTING INVASIVE PLANT SPECIES POPULATIONS TO ANOTHER WETLAND LOCATION TO REMOVE SOIL AND ANY INVASIVE PLANT SPECIES, SEED STOCK OR PLANT MATERIAL. CLEANING METHODS INCLUDE BUT ARE NOT LIMITED TO SHAKING OR DROPPING MATS IN A CONTROLLED MANNER WITH MACHINERY TO KNOCK OFF ATTACHED SOIL AND DEBRIS, SPRAYING WITH WATER OR AIR, AND SWEEPING.
- 8. CONSTRUCTION MAT BRIDGES OR STONE ON FABRIC ARE TO BE USED FOR STREAM AND DITCH CROSSINGS REGARDLESS OF WHETHER OR NOT THERE IS ACTIVE FLOW.
- 9. TREE AND BRUSH DEBRIS FROM INITIAL TREE CLEARING SHALL BE DISPOSED OF IN A MANNER WHICH DOES NOT HAVE THE EFFECT OF PLACING FILL IN WETLAND, WATERS, OR BUFFERS, AND DOES NOT IMPEDE NATURAL HYDROLOGY. IF WETLANDS ARE LARGE IN SIZE AND DEBRIS REMOVAL IS DIFFICULT, BUCK UP LOGS AND REDUCE SLASH/TOP SIZE BY CUTTING - IF FLOW PATHS ARE APPARENT WITHIN THE WETLAND, ORIENT DEBRIS PARALLEL WITH FLOW DIRECTION.
- 10. ANY STUMPS AND/OR OTHER WOODY DEBRIS THAT IS DISPOSED OF OFF-SITE SHALL BE PLACED IN UPLAND LOCATIONS.
- 11. DISTURBANCE AND CONSTRUCTION ACTIVITIES ASSOCIATED WITH APPROVED TEMPORARY STREAM CROSSINGS MUST BE COMPLETED AND STABILIZED AS SOON AS PRACTICABLE. STREAM CROSSINGS SHALL BE PERFORMED ACCORDING TO THE FOLLOWING GUIDELINES:
  - a. STREAM CROSSINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE ENVIRONMENTAL PERMITS AND THE APPROVED EPSC STREAM CROSSING DETAILS. EPSC MEASURES SHALL BE IMPLEMENTED PRIOR TO EARTH DISTURBING ACTIVITIES AT STREAM CROSSINGS TO MINIMIZE DISCHARGE OF SEDIMENT TO RECEIVING WATERS.
- b. MATERIALS EXCAVATED FROM STREAM CHANNELS SHALL BE SEGREGATED AND STOCKPILED ON GEOSYNTHETIC OR SIMILAR PRODUCT SEPARATELY FROM TOPSOIL AND SUBSURFACE SPOIL MATERIALS. UPON COMPLETION OF CABLE INSTALLATION, STREAM CHANNEL AND STREAM BANK SUBSTRATE PROFILES (SOIL HORIZONS) SHALL BE RESTORED TO THE MAXIMUM EXTENT PRACTICABLE.
- c. FOLLOWING COMPLETION OF WORK AND REMOVAL OF MATTING AND TEMPORARY BRIDGES, STREAM BANK STABILIZATION SHALL BE ACHIEVED WITH ROLLED EROSION CONTROL BLANKETS.
- d. APPLICATION OF RIPRAP FOR BANK STABILIZATION MUST COMPLY WITH THE USACE PERMIT TERMS AND CONDITIONS AND VT DEC RIVER MANAGEMENT APPROVAL. UNLESS OTHERWISE SPECIFIED, THE USE OF RIPRAP WILL BE LIMITED TO AREAS WHERE EXISTING RIPRAPPED BANKS ARE DISTURBED OR WHERE FLOW CONDITIONS PRECLUDE EFFECTIVE VEGETATIVE STABILIZATION TECHNIQUES SUCH AS SEEDING AND RECP.
- 12. TEMPORARY TRENCHBREAKERS ARE TO BE INSTALLED WHERE POTENTIAL FOR FLOW TO A DOWNSLOPE WATER RESOURCE AREA IS TO BE MINIMIZED OR AVOIDED AND TO PREVENT CHANNELIZATION OF FLOW AT ANY TIME (E.G., BEFORE CABLES ARE INSTALLED).
- 13. TRENCH EXCAVATION IN WETLANDS SHALL INVOLVE SEGREGATING TOPSOIL FROM SUBSOIL IN SEPARATE STOCKPILES. STOCKPILING OF SOIL IN A WETLAND SHALL BE ON GEOSYNTHETIC FABRIC OR CONSTRUCTION MATS. NO STOCKPILING OF SOIL DIRECTLY ON WETLAND GROUND SURFACE.
- 14. WHEN BACK-FILLING, SOILS SHALL BE REPLACED IN THE ORDER IN WHICH THEY WERE EXCAVATED, WITH TOPSOIL AS THE UPPERMOST LAYER. BACK-FILL AND COMPACT SUBSOIL TO DEPTH OF ADJACENT NATIVE AND UNDISTURBED SUBSOIL/TOPSOIL INTERFACE. REPLACE TOPSOIL AS UPPER LAYER AND BLEND TO EXISTING GRADE OF UNDISTURBED SOILS. DISPOSE OF EXCESS SUBSOIL AT A SUITABLE LOCATION AS APPROVED BY THE OSPC.
- 15. EXPOSED SOILS SHALL BE SEEDED AND MULCHED AS SOON AS POSSIBLE FOLLOWING CONSTRUCTION ACTIVITIES IN THAT AREA. SEED MIX SHALL BE COMPRISED OF NATIVE MATERIAL PER THE SEEDING SPECIFICATION DETAILS. MULCH SHALL NOT CONTAIN ANY MATERIALS OR SEED THAT ARE NOT NATIVE TO THE WETLANDS.
- 16. RESTORE TEMPORARY IMPACT AREAS IN WETLANDS TO APPROXIMATE PRE-CONSTRUCTION CONDITIONS TO EXTENT FEASIBLE AND IN ACCORDANCE WITH PERMITS.

#### ON-SITE PLAN COORDINATOR (OSPC) NOTES:

DISCHARGE PERMIT, AND

- 1. THE OSPC DESIGNATED TO THE PROJECT (AND HIS/HER DESIGNEE) SHALL:
  - a. REVIEW VT DEC'S "ON-SITE PLAN COORDINATOR MANUAL",
  - b. BE ON-SITE ON A DAILY BASIS (OR HAVE A DESIGNEE THAT IS ON SITE WHEN HE/SHE CANNOT BE),
  - c. BE DIRECTLY RESPONSIBLE FOR ON-SITE IMPLEMENTATION OF THE EPSC
- d. BE KNOWLEDGEABLE IN THE PRINCIPLES AND PRACTICES OF EPSC,
- e. POSSESS THE SKILLS TO ASSESS CONDITIONS AT THE CONSTRUCTION SITE THAT COULD IMPACT STORMWATER QUALITY,
- f. POSSESS THE SKILLS TO ASSESS THE EFFECTIVENESS OF EPSC MEASURES SELECTED TO CONTROL THE QUALITY OF STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITY,
- g. POSSESS THE SKILLS AND EQUIPMENT TO CONDUCT TURBIDITY MONITORING PURSUANT TO THE CONSTRUCTION STORMWATER
- h. HAVE THE AUTHORITY TO STOP AND/OR MODIFY CONSTRUCTION ACTIVITIES AS NECESSARY TO COMPLY WITH THE EPSC PLAN AND THE CONSTRUCTION STORMWATER DISCHARGE PERMIT.
- 2. ALL PROPOSED CHANGES TO THE EPSC PLAN MUST BE APPROVED BY THE OSPC OR HIS/HER DESIGNEE, THE PLAN DESIGNER OR A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC) PRIOR TO IMPLEMENTATION, AND BE CONSIDERED MINOR AMMENDMENTS AS DEFINED IN THE OSPC HANDBOOK. ALL MINOR AMMENDMENTS ARE TO BE RECORDED USING THE MINOR AMMENDMENT RECORD FORM AND MARKED ON THE MASTER OSPC PLAN SET. ALL MODIFICATIONS THAT FALL OUTSIDE OF THE MINOR AMMENDMENT DEFINITION MUST BE APPROVED BY VT-DEC.
- 3. DURING THE REGULAR CONSTRUCTION SEASON (APRIL 15 TO OCT 15), THE OSPC OR HIS/HER DESIGNEE SHALL CONDUCT INSPECTIONS AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HRS FOLLOWING A STORM EVENT RESULTING IN DISCHARGE OF STORMWATER FROM THE CONSTRUCTION SITE.
- DURING THE WINTER CONSTRUCTION SEASON (OCT 15 TO APRIL 15), THE OSPC OR HIS/HER DESIGNEE SHALL CONDUCT INSPECTIONS ON A DAILY BASIS DURING ACTIVE EARTHWORK.
- 5. THE OSPC AND HIS/HER DESIGNEE(S) SHALL FOLLOW TURBIDITY MONITORING PROTOCOLS OUTLINED IN VT DEC'S "MONITORING OF TURBIDITY IN STORMWATER RUNOFF FROM CONSTRUCTION ACTIVITIES" MANUAL.
- 6. INSPECTIONS CONDUCTED BY THE OSPC OR HIS/HER DESIGNEE SHALL COVER ALL AREAS OF THE SITE THAT ARE BEING ACTIVELY DISTURBED BY CONSTRUCTION OR CONSTRUCTION-RELATED ACTIVITIES, INCLUDING AREAS THAT HAVE BEEN TEMPORARILY STABILIZED.

- 7. OSPC INSPECTIONS SHALL BE DOCUMENTED USING THE VT DEC INSPECTION REPORT FORM OR A VT DEC-ACCEPTED INSPECTION REPORT FORM.
- 8. OSPC INSPECTION REPORTS SHALL BE MAINTAINED ON-SITE FOR THE DURATION OF THE PROJECT AND MADE AVAILABLE TO VT DEC UPON REQUEST.

#### EPSC SPECIALIST OVERSIGHT NOTES:

- 1. THE EPSC SPECIALIST DESIGNATED TO THE PROJECT SHALL:
  - a. BE RESPONSILE FOR PERFORMING ENVIRONMENTAL INSPECTIONS AND REPORTING AT A FREQUENCY PURSUANT TO THE CONSTRUCTION STORMWATER DISCHARGE PERMIT ISSUED FOR THE PROJECT,
  - b. BE RESPONSIBLE FOR ASSESSING THE SITE TO ENSURE COMPLIANCE WITH THE EPSC PLAN AND DIRECTING CORRECTIVE ACTION AS NEEDED,
  - c. NOTIFY THE OSPC WHEN CHANGES IN PRACTICE ARE NEEDED TO COMPLY WITH THE EPSC PLAN, AND
- d. DETERMINE/CONFIRM/REPORT THAT APPROPRIATE EPSC PLAN MODIFICATIONS ARE BEING MADE AND RECORDED, AS NECESSARY,
- 2. THE EPSC SPECIALIST SHALL NOT BE THE OSPC.
- 3. EPSC SPECIALIST INSPECTIONS SHALL BE DOCUMENTED USING AN INSPECTION REPORT FORM THAT HAS BEEN APPROVED IN WRITING BY VT DEC.
- 4. EPSC SPECIALIST INSPECTIONS SHALL INCLUDE A REVIEW OF THE OSPC'S INSPECTION REPORTS
- 5. EPSC SPECIALIST INSPECTION REPORTS SHALL BE SUBMITTED TO VT DEC AT A FREQUENCY PURSUANT TO THE CONSTRUCTION STORMWATER DISCHARGE PERMIT, AS WELL AS BEING MAINTAINED ON-SITE FOR THE DURATION OF THE PROJECT AND MADE AVAILABLE TO VT DEC UPON REQUEST.

#### RELEVANT VT DEC DEFINITIONS (GP 3-9020, APPENDIX C):

"COMMENCEMENT OF CONSTRUCTION ACTIVITIES" - THE INITIAL DISTURBANCE OF SOILS ASSOCIATED WITH CLEARING, GRADING, OR EXCAVATING ACTIVITIES OR OTHER CONSTRUCTION-RELATED ACTIVITIES (E.G., STOCKPILING OF FILL MATERIAL).

"CONSTRUCTION AND CONSTRUCTION-RELATED ACTIVITIES" - ALL CLEARING, GRADING, EXCAVATION, AND STOCKPILING ACTIVITIES THAT WILL RESULT IN THE DISTURBANCE OF ONE OR MORE ACRE OF LAND AREA. EARTH DISTURBANCE THAT IS A NORMAL PART OF THE LONG-TERM USE OR MAINTENANCE OF A PROPERTY IS NOT COVERED BY [THE PERMIT] (E.G., MINING OPERATIONS, DIRT ROAD REGRADING, ROUTINE ROAD RESURFACING).

"CONSTRUCTION SITE" - THE LAND OR WATER AREA WHERE ANY FACILITY OR ACTIVITY IS PHYSICALLY LOCATED OR CONDUCTED, INCLUDING ADJACENT LAND USED IN CONNECTION WITH THE FACILITY OR ACTIVITY OR THE AREA OF EARTH DISTURBANCE DIRECTLY ASSOCIATED WITH THE PERMITTED ACTIVITY.

"DISTURBED EARTH" - ANY SOIL ON A CONSTRUCTION SITE OR ASSOCIATED SUPPORT ACTIVITIES (E.G., STAGING AREA, BORROW AREA, DISPOSAL SITE FOR EXCESS FILL) THAT IS EXPOSED TO EROSIVE EFFECTS OF WIND, RAIN, OR RUNOFF DUE TO CONSTRUCTION OR CONSTRUCTION RELATED ACTIVITIES.

"FINAL STABILIZATION" - ALL SOIL DISTURBING ACTIVITIES AT THE SITE HAVE BEEN

1. A UNIFORM (E.G.,, EVENLY DISTRIBUTED, WITHOUT LARGE BARE AREAS)
PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 70 PERCENT OF THE NATIVE
BACKGROUND VEGETATIVE COVER FOR THE AREA HAS BEEN ESTABLISHED ON
ALL UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES,

COMPLETED AND EITHER OF THE TWO FOLLOWING CRITERIA ARE MET:

2. EQUIVALENT FINAL STABILIZATION MEASURES (SUCH AS THE USE OF GRAVEL, RIPRAP, GABIONS, OR GEOTEXTILES) HAVE BEEN EMPLOYED.

"STORMWATER" - STORMWATER RUNOFF, SNOWMELT RUNOFF, AND SURFACE RUNOFF AND DRAINAGE.

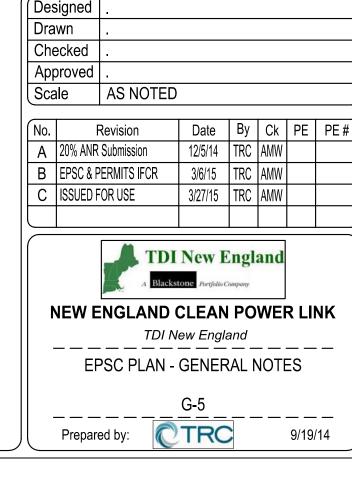
"STORMWATER DISCHARGE-RELATED ACTIVITIES" - ACTIVITIES THAT CAUSE, CONTRIBUTE TO, OR RESULT IN STORMWATER POINT SOURCE POLLUTANT DISCHARGES, INCLUDING BUT NOT LIMITED TO: EXCAVATION, SITE DEVELOPMENT, GRADING AND OTHER SURFACE DISTURBANCE ACTIVITIES; AND MEASURES TO CONTROL STORMWATER INCLUDING THE SITING, CONSTRUCTION AND OPERATION OF BMPS TO CONTROL, REDUCE OR PREVENT STORMWATER POLLUTION.

"TEMPORARY STABILIZATION" - PROTECTING SOILS IN AREAS WHERE ADDITIONAL SOIL DISTURBANCE ACTIVITIES FROM EROSION BY RAINFALL, RUNOFF, OR WIND, WITH A SURFACE COVER, INCLUDING, BUT NOT LIMITED TO, ESTABLISHMENT OF GROUND VEGETATION, APPLICATION OF MULCH, ROLLED EROSION CONTROL PRODUCTS, GRAVELLING OR PAVING.

"VEGETATED BUFFER" - ANY UNDISTURBED AREA BETWEEN A CONSTRUCTION SITE AND A RECEIVING WATER THAT CONSISTS OF A NATURAL VEGETATED GROUND SURFACE (E.G., TREES, SHRUBS, DUFF LAYER, GRASSES AND OTHER GROUND PLANTS). THIS DOES NOT INCLUDE LAWNS OR ANY AREA OF CONCENTRATED FLOW

(E.G., DITCHES, SWALES).

"WATERS OF THE STATE" - ALL RIVERS, STREAMS, CREEKS, BROOKS, RESERVOIRS, PONDS, LAKES, SPRINGS, AND ALL BODIES OF SURFACE WATERS, ARTIFICIAL OR NATURAL, WHICH ARE CONTAINED WITHIN, FLOW THROUGH OR BORDER UPON THE STATE OF VERMONT OR ANY PORTION OF IT.



#### **GENERAL NOTES**

CONDUCTED DURING AUGUST 2014.

- ALL COORDINATES AND ELEVATIONS ARE STATED IN FEET UNLESS OTHERWISE
- ALL SURVEY DATA AND GEO-REFERENCED DATA REFERENCES THE VERMONT

MAINE USING AERIAL SURVEY (LIDAR) TECHNIQUES. THE SURVEY WAS

- STATE PLANE COORDINATE SYSTEM. HORIZONTAL DATUM: VERMONT STATE PLANE, NAD83, US SURVEY FEET
- VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM, 1988 (NAVD88), FEET TOPOGRAPHIC SURVEY PERFORMED BY ENCOMPASS SERVICES, BRUNSWICK,
- PROPERTY BOUNDARIES ARE BASED ON PUBLICLY AVAILABLE TAX MAPS AND VTRANS PROPERTY MAPS: AS SUCH. PROPERTY AND R.O.W. BOUNDARIES MAY REQUIRE ADJUSTMENT. PROPERTY LIMITS AND R.O.W. BOUNDARIES WILL BE VERIFIED AND UPDATED DURING THE DETAILED DESIGN PHASE OF THE PROJECT.
- MILEPOSTS INDICATED ALONG THE PROJECT ROUTE ARE PROVIDED FOR GENERAL REFERENCE AND ARE NOT TIED TO THE INDICATED CABLE ALIGNMENT. AS SUCH, MILEPOSTS SHOULD NOT BE USED FOR PROJECT ESTIMATING OR QUANTITY TAKE-OFFS. STATIONING ALONG THE CABLE IS ASSOCIATED WITH THE SPECIFIC CABLE ALIGNMENT. THE STATIONING IS THE DISTANCE ALONG A HORIZONTAL PLANE AND DOES NOT ACCOUNT FOR VERTICAL DEVIATIONS DUE TO TOPOGRAPHY OR INSTALLATION METHODS.
- ENVIRONMENTAL RESOURCES SHOWN HEREIN ARE BASED ON THE NATURAL RESOURCE MAP SERIES PREPARED AND PROVIDED BY VHB AND TRC. REFER TO VHB/TRC NATURAL RESOURCE MAP SERIES FOR ADDITIONAL NATURAL RESOURCES AND ENVIRONMENTAL FEATURES.
- THESE DOCUMENTS HAVE BEEN PREPARED FOR THE PURPOSE OF CONVEYING CONCEPT LEVEL PROJECT ROUTING, DESIGN AND CONSTRUCTION DETAILS NECESSARY FOR PUBLIC AND REGULATORY REVIEW AND PERMITTING. TO THE GREATEST EXTENT POSSIBLE, THESE PROJECT CONCEPTS HAVE BEEN DEVELOPED TO DEPICT LIKELY. FEASIBLE CONSTRUCTION TECHNIQUES. PROJECT ROUTES AND SUITABLE MATERIALS.
- THE ROUTE AND DETAILS PRESENTED ARE SUBJECT TO REVISION BASED ON PUBLIC AND REGULATORY COMMENT: AS SUCH, CONCEPTS PRESENTED HEREIN MAY BE MODIFIED TO ADDRESS SPECIFIC CONCERNS EXPRESSED BY VARIOUS
- DETAILED ENGINEERING AND CONSTRUCTION WILL BE PERFORMED BY A DESIGN-BUILD CONTRACTOR AFTER RECEIPT OF APPLICABLE PERMITS. THE DETAILED DESIGN WILL BE DEVELOPED IN ACCORDANCE WITH THE GUIDANCE AND DIRECTION CONTAINED WITHIN THE ISSUED PERMITS, DIRECTIVES AND OWNER'S CONTRACT.
- IO. NO CONSTRUCTION MAY TAKE PLACE WITHOUT OWNER'S APPROVAL OR PROPER COORDINATION WITH REGULATORY AGENTS AND ENTITIES HAVING A MATERIAL INTEREST IN THE WORK.
- 11. PERMIT AND REGULATORY REQUIREMENTS THAT ARE IN CONFLICT WITH REQUIREMENTS OF THIS DOCUMENT SHALL TAKE PRECEDENCE OVER DETAILS AND NOTATION PRESENTED HEREIN.
- 12. PROJECT DRAWINGS, SPECIFICATIONS, CALCULATIONS AND RELATED DESIGN DOCUMENTS SHALL BE DEVELOPED UNDER THE DIRECT OVERSIGHT OF PROFESSIONAL ENGINEERS LICENSED TO PRACTICE IN THE STATE OF VERMONT FINISHED DESIGN PRODUCTS AND DOCUMENTS SHALL BEAR THE STAMP AND SIGNATURE OF THE ENGINEER IN RESPONSIBLE CHARGE OF THAT PORTION OF THE WORK.
- 13. THE TYPICAL ROUTE SEGMENT WORK SEQUENCE WILL INCLUDE:
- A. LAND OWNER NOTIFICATION, ROUTE SURVEY, UTILITY LOCATING.
- B. ENVIRONMENTAL CONTROLS, GEOTECHNICAL INVESTIGATION, CLEARING. C. TRENCH EXCAVATION, HORIZONTAL DIRECTIONAL DRILLS WITH ASSOCIATED SOIL STOCKPILING.
- D. CABLE LAYING, BACKFILL AND COMPACT, INCLUDING PROTECTIVE PLATE AND WARNING TAPE INSTALLATION.
- E. CABLE SPLICING.
- F. SITE RESTORATION AND RE-SURFACING.

ACTIVITIES A THROUGH F ARE PRESENTED IN A GENERAL CHRONOLOGIC SEQUENCE. WITHIN LIMITATIONS ALLOWED UNDER THE APPROVED PROJECT PERMITS, AS A RESULT OF SPECIFIC SCHEDULING RESTRICTIONS AND OTHER FACTORS, SOME ACTIVITIES MAY BE PERFORMED CONCURRENT WITH OR PRECEDE THE SEQUENCE PRESENTED.

14. THE TDI-NE PROPERTY AT THE LISTED LOCATIONS MAY BE USED FOR CONSTRUCTION STAGING AND STORAGE AREAS. LIMITS ON CLEARING, WETLAND DISTURBANCE, AND OTHER PERMIT RESTRICTIONS APPLY TO EACH PROPERTY.

ALBURG, VT 55 BAY RD. BENSON, VT

LUDLOW, VT

113 STONY POINT RD. 148 STONY POINT RD. 278 NELSON RD.

2 ACRES TOTAL

40 ACRES

- AND ADJACENT PARCEL 15. THERE ARE EXISTING TELEPHONE AND OTHER UTILITIES ALONG THE PROJECT ROUTE WITHIN THE ROAD RIGHTS-OF-WAY THAT HAVE NOT BEEN LOCATED. IDENTIFIED UTILITY OWNERS HAVE BEEN CONTACTED, AND AS-BUILT LOCATIONS HAVE BEEN REQUESTED. UNDERGROUND TELEPHONE UTILITIES ARE KNOWN TO EXIST IN THE TOWN OF BENSON AND ELSEWHERE. UNDERGROUND UTILITIES WILL BE ADDED TO THE PROJECT MAPS AS INFORMATION IS MADE AVAILABLE.
- 16. EXISTING OVERHEAD ELECTRIC DISTRIBUTION FIBER OPTIC AND CABLE UTILITIES ARE NOT SHOWN ON THE PLAN AND PROFILE DRAWINGS. MULTIPLE UTILITY POLES WITHIN THE PROJECT CORRIDOR WILL REQUIRE RELOCATION. THOSE EXISTING POLES IN THE IMMEDIATE VICINITY OF THE PROJECT ROUTE ARE NOTED IN THE PROFILE VIEW.
- 17. DESIGN AND CONSTRUCTION WORK ALONG RAILROAD TRACKS SHALL COMPLY WITH REQUIREMENTS OF THE AMERICAN RAILWAY ENGINEERING AND MAINTENANCE-OF-WAY ASSOCIATION (AREMA) REQUIREMENTS (LATEST EDITION) UNLESS MORE STRINGENT STATE OR OPERATING RAILROAD REQUIREMENTS EXIST. THE MOST STRINGENT REQUIREMENT SHALL PREVAIL.
- 8. WITHIN THIS DOCUMENT "PROVIDE" IS DEFINED TO INCLUDE THE FURNISHING. INSTALLATION, MAINTENANCE AND FINAL DESCRIPTION OF THE INDICATED WORK

#### SAFETY NOTES

- SMOKING IS PROHIBITED ON THE PROJECT SITE EXCEPT WITHIN DESIGNATED SMOKING AREAS.
- PROVIDE SANITARY FACILITIES AT EACH WORK SITE AS REQUIRED BY STATE OR UNION REQUIREMENTS.
- OPEN FLAMES, BURNING AND GRINDING IS PROHIBITED UNLESS PERMITTED BY LOCAL FIRE OFFICIALS.
- EACH CONSTRUCTION VEHICLE SHALL HAVE AT LEAST ONE A, B, C FIRE

UTILITY LOCATING SERVICE FOR A DIG-SAFE CLEARANCE.

UTILITY LOCATION, DEPTH AND ORIENTATION.

- EXTINGUISHER AND A SUITABLE CLASS II FIRST AID KIT. EACH WORK SITE SHALL HAVE AT LEAST ONE ANSI COMPLIANT CLASS III UNITIZED
- FIRST AID KIT.

NO EXCAVATION SHALL TAKE PLACE PRIOR TO CONTACTING THE APPROPRIATE

- MECHANICAL EXCAVATION USING POWER EQUIPMENT SHALL APPROACH NO CLOSER THAN TWO (2) FEET FROM MARKED UNDERGROUND UTILITIES UNTIL THE ACTUAL LOCATION OF THE UTILITY HAS BEEN VERIFIED BY EXPOSING IT. UTILITIES SUBJECT TO THIS REQUIREMENT INCLUDE BUT ARE NOT LIMITED TO GAS LINES, LIQUID FUEL, WATER, ELECTRIC, TELEPHONE, DATA LINES (FIBER OR COPPER), SANITARY SEWER, STORM DRAINS AND OTHERS. MARKED UTILITIES
- ROAD OR LANE CLOSINGS AND ALL TRAFFIC CONTROL PLANS SHALL BE SUBJECT TO APPROVAL OF TOWN OR STATE ROAD OFFICIALS. PROPOSED CONTROL PLANS SHALL BE SUBMITTED TO THE TOWN OR STATE ROAD OFFICIALS FOR REVIEW AND APPROVAL WELL AHEAD OF THE PLANNED WORK.

SHALL BE EXPOSED BY HAND DIGGING OR VACUUM EXCAVATION TO VERIFY THE

#### SAFETY NOTES (CONTINUED)

- 9. CONSTRUCTION VEHICLES SHALL OBSERVE AND COMPLY WITH ESTABLISHED SAFETY REQUIREMENTS INCLUDING POSTED SPEED LIMITS.
- 10. AN OPERATING RAILROAD TRACK IS CONSIDERED FOULED WHEN ANY OBJECT OR OPERATION IS BROUGHT WITHIN FIFTEEN (15) FEET OF THE CENTERLINE OF THE TRACKS OR FOUR (4) FEET FROM COMMUNICATIONS OR SIGNAL LINES. ADDITIONALLY ANY EQUIPMENT, TRUCKS, CRANES OR MATERIALS THAT IN THE EVENT OF FAILURE COULD FOUL THE TRACK, SIGNAL, OR COMMUNICATIONS LINE.
- 11. DURING TRAIN MOVEMENT, EQUIPMENT SHALL BE MOVED AT LEAST FIFTEEN (15) FEET FROM THE TRACKS AND SHUT-OFF. SUSPENDED LOADS ON CRANES, BACKHOES, AND/OR EXCAVATORS SHALL BE GROUNDED.

#### GENERAL WORK REQUIREMENTS

- 1. INDICATED UNDERGROUND UTILITIES ARE SHOWN IN THEIR APPROXIMATE LOCATIONS BASED ON RECORD DOCUMENTS PROVIDED BY THE UTILITY OWNER, OR FROM FIELD OBSERVATIONS. NOT ALL UTILITIES IN THE VICINITY OF THE WORK HAVE BEEN IDENTIFIED.
- 2. PRIOR TO THE START OF THE WORK, THE CONTRACTOR SHALL ESTABLISH SAFETY AND ENVIRONMENTAL CONTROLS AS REQUIRED BY FEDERAL, STATE, AND LOCAL REGULATIONS AND PERMITS. CONTROLS SHALL BE MAINTAINED THROUGHOUT THE PROJECT, REMOVED AT THE COMPLETION OF THE WORK AND THE SITE RESTORED TO ITS ORIGINAL CONDITION, UNLESS OTHERWISE DIRECTED.
- 3. NO WORK SHALL TAKE PLACE ON, EQUIPMENT OR PERSONNEL ACCESS. PROPERTY OUTSIDE THE ESTABLISHED WORK ZONES OR RIGHTS-OF-WAY.
- 4. FARM FENCES, STONE WALLS, MAILBOXES, AND SIMILAR IMPROVEMENTS WITHIN THE R.O.W. DISTURBED BY THE CONSTRUCTION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT THE COMPLETION OF THE WORK.
- 5. THE PERMANENT PROJECT CORRIDOR (PPC) REPRESENTS THE AREA ABOVE AND ADJACENT TO THE CABLE THAT WILL BE MAINTAINED FREE OF DEEP-ROOTED VEGETATION. THE PPC IS GENERALLY 12 FT. WIDE. THE PPC MAY BE CENTERED ON THE CABLE TRENCH OR, IN RESTRICTED AREAS, EXTEND TO THE EDGE OF THE R.O.W.
- 6. UNLESS OTHERWISE INDICATED, THE LIMIT OF DISTURBANCE SHALL EXTEND FROM THE EDGE OF PAVEMENT TO 25 FEET BEYOND THE PLANNED TRENCH CENTERLINE OR EDGE OF R.O.W., WHICHEVER IS LESS.
- 7. A WATER LINE AT PROJECT MILE POST 132.5 (APPROXIMATELY) WAS INSTALLED PRIOR TO THE CONSTRUCTION OF ROUTE 103. THE EXACT LOCATION OF THE LINE, ITS MATERIAL AND DEPTH ARE UNKNOWN. THE CONTRACTOR SHALL COORDINATE WITH THE WATERLINE OWNER TO IDENTIFY THE SPECIFIC INSTALLATION MATERIALS AND LOCATION. THE CONTRACTOR SHALL DESIGN A MEANS TO LIMIT THE DURATION OF ANY WATER SYSTEM INTERRUPTION AND REPLACE THE EXISTING WATERLINE WITH A NEW LINE, COMPLETE AND READY FOR USE. THE NEW LINE SHALL INCLUDE SHUT-OFF VALVES ON EACH SIDE OF THE ROAD CROSSING AND BE HOUSED WITHIN A NON-CORROSIVE SLEEVE HAVING AN INSIDE DIAMETER (I.D.) OF NOT LESS THAN TWO TIMES THE EXISTING WATERLINE OUTSIDE DIAMETER (O.D.). THE NEW WATERLINE SHALL HAVE AN I.D. GREATER THAN OR EQUAL TO THE EXISTING WATERLINE.
- 8. SEVERAL PRIVATE WATERLINES EXTEND ACROSS NORTH LAKE, GLENN AND HULETT HILL ROADS. THE LOCATION AND NUMBER OF THE PRIVATE WATERLINES IS UNKNOWN. THE CONTRACTOR SHALL COORDINATE WITH THE LOCAL LAND OWNERS TO IDENTIFY WHERE THE LINES MAY BE LOCATED. NEW WATERLINES SHALL BE INSTALLED FROM EDGE OF THE R.O.W. TO EDGE OF THE R.O.W AND CONNECTED TO THE EXISTING WATER SYSTEM ON EACH END. THE NEW WATERLINE SEGMENT SHALL BE INSTALLED WITHIN HDPE SLEEVES HAVING AN I.D. OF NOT LESS THAN TWICE THE EXISTING PIPE O.D. EACH NEW INSTALLATION SHALL INCLUDE A TRACE WIRE DIRECTLY OVER THE HDPE SLEEVE. THE NEW WATERLINE AND SLEEVE SHALL BE BURIED NOT LESS THAN 6 FEET BELOW THE FINISHED GRADE UNLESS OTHERWISE DIRECTED. FOR PRICING PURPOSES, THE CONTRACTOR SHALL ASSUME A TOTAL OF 18 PRIVATE WATERLINES REQUIRE REPLACEMENT FROM MILE POST (MP) 98.4 THROUGH 102.1
- 9. EXISTING PRIVATE DWELLINGS IN SHREWSBURY (VICINITY OF MP 136.3-136.5) HAVE DEEDED ACCESS TO A NATURAL SPRING NORTH OF THE EXISTING RAILROAD TRACKS. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE WATER SOURCE. IN ADDITION. EXISTING PIPING CONDUCTING THE SPRING WATER ACROSS THE PROJECT R.O.W. SHALL BE REPLACED WITH NEW PIPING WITHIN AN HDPE SLEEVE. THE SLEEVE I.D. SHALL BE NOT LESS THAN TWO TIMES THE EXISTING PIPE O.D. THE NEW PIPING SHALL BE CONNECTED TO THE EXISTING PIPING AT BOTH EDGES OF THE ESTABLISHED
- 10. UNLESS OTHERWISE INDICATED OR DIRECTED, DRAINAGE CULVERTS SHALL BE CROSSED IN ACCORDANCE WITH THE DETAILS PROVIDED ON SHEET TD-2. DRAINAGE CULVERTS ARE THOSE THAT DO NOT CARRY MAPPED STREAMS OR

#### MULCH AND SEEDING SPECIFICATIONS

MULCH MATERIAL AND APPLICATION				
MULCH MATERIAL	QUALITY STANDARDS	PER 1,000 SQ-FT	PER ACRE	DEPTH OF APPLICATION
WOOD CHIPS OR SHAVINGS	AIR DRIED, FREE OF OBJECTIONABLE MATERIAL	500 - 900 LBS	10 - 20 TONS	2" - 7"
WOOD FIBER CELLULOSE (PARTIALLY DIGESTED WOOD FIBERS)	MADE FROM NATURAL WOOD USUALLY WITH GREEN DYE AND DISPERSING AGENT	50 LBS	2,000 LBS	N/A
GRAVEL, CRUSHED STONE OR SLAG	WASHED; SIZE 2B OR 3A - 1 1/2"	9 CY	405 CY	3"
HAY OR STRAW	AIR-DRIED; FREE OF UNDESIRABLE SEEDS AND COARSE MATERIALS	90 - 100 LBS, 2-3 BALES	2 TONS (100-120 BALES)	COVER ABOUT 90% SURFACE
COMPOST	UP TO 3" PIECES, MODERATELY TO HIGHLY STABLE	3 - 9 CY	3 - 9 CY	1-3"
EROSION CONTROL MIX	WELL-GRADED MIXTURE OF PARTICLE SIZES. ORGANIC CONTENT BETWEEN 80-100% DRY WEIGHT. PARTICLE SIZE SHALL PASS 6" SCREEN (100%)	*SLOPES 3(HZ.):1(VERT.) = 2 INCH DEPTH PLUS ADDITIONAL ½ INCH DEPTH PER 20 FT. OF SLOPE UP TO 100 FT. **SLOPES BETWEEN 3 (HZ.):1(VERT.) AND 2(HZ.):1(VERT.) = 4 INCH DEPTH PLUS ADDITIONAL ½ INCH PER 20 FT. OF SLOPE UP TO 100 FT. ***SLOPES STEEPER THAN 2(HZ.:1(VERT.) APPLICABILITY TO SPECIFIC SITE AND MULCH DEPTH TO BE REVIEWED AND APPROVED PRIOR TO USE BY OPSC OR EPSC SPECIALIST		

- APPLY TACKIFIER AS NEEDED TO MINIMIZE POTENTIAL FOR MULCH TO BLOW AWAY.
- 2. MULCH MUST NOT CONTAIN INVASIVE PLANT SPECIES (SEEDS OR SEEDLINGS).
- 3. TACKIFIER MAY BE WATER, NETTING, OR SIMILAR.
- 4. OTHER THAN EROSION CONTROL MIX, MULCH IS NOT TO BE INSTALLED ON SLOPES >3::1

TEMPORARY SEEDING MIX						
TYPE	SEASON	RATE (LBS/ACRE)				
RYEGRASS (ANNUAL OR PERENNIAL)	APRIL 15 - SEPTEMBER 15	20				
"AROOSTOOK" WINTER RYE	SEPTEMBER 15 - APRIL 15	90				
PERMANENT SEEDING MIX*						
TYPE	SEASON	RATE (LBS/ACRE)				
BIRDSFOOT TREFOIL(1)**	APRIL 15 - SEPTEMBER 15	5				
COMMON WHITE CLOVER (1)**	APRIL 15 - SEPTEMBER 15	8				
TALL FESCUE (2)	APRIL 15 - SEPTEMBER 15	10				
REDTOP (3)	APRIL 15 - SEPTEMBER 15	2				

\*PERMANENT SEEDING MIX IS A COMBINATION OF BIRDSFOOT TREFOIL OR COMMON WHITE CLOVER PLUS TALL FESCUE PLUS REDTOP OR RYEGRASS (PERENNIAL). I.E. PERMANENT SEEDING MIX = (1) + (2) + (3). (SEE PAGE 4.27 OF THE VERMONT STANDARDS AND SPECIFICATIONS FOR EROSION PREVENTION AND SEDIMENT CONTROL.) \*\* ADD INOCULANT IMMEDIATELY PRIOR TO SEEDING

RYEGRASS (PERENNIAL) | APRIL 15 - SEPTEMBER 15

RIPARIAN AND WETLAND SEEDING MIX				
TYPE	SEASON	RATE (LBS/ACRE)		
"WET MEADOW AND ETENTION BASIN"* OR APPROVED EQUAL	APRIL 15 -SEPTEMBER 15	35		

SEED SPECIFIED IS FROM VERMONT WETLAND PLANT SUPPLY AND COMPOSED OF THE FOLLOWING SPECIES: PANICUM VIRGATUM, ELYMUS VIRGINICUS, FESTUCA RUBRA, CAREX VULPINOIDEA, CAREX SCOPARIA, SCIRPUS CYPERINUS, SCIRPUS ATROVIRENS, BIDENS CERNUA, EUPATORIUM PERFOLIATUM, EUPATORIADELPHUS MACULATUS, JUNCUS EFFUSUS, ONOCLEA SENSIBILIS, VERBENA HASTATA, SYMPHYOTRICHUM NOVAE-ANGLIAEA

UPLAND NATURAL COMMUNITY MIX					
TYPE	TYPE SEASON RATE (LBS/A				
"VERMONT CONSERVATION AND WILDLIFE"* OR APPROVED EQUIVALENT	APRIL 15 -SEPTEMBER 15	25			

\*SEED SPECIFIED IS, IN PART, FROM VERMONT WETLAND PLANT SUPPLY AND COMPOSED OF THE FOLLOWING SPECIES: ELYMUS VIRGINICUS, FESTUCA RUBRA, SCHIZACHYRIUM SCOPARIUM, ANDROPOGON GERARDII, PANICUM CLANDESTINUM, SORGHASTRUM NUTANS, ASCLEPIA SYRIACA, VERBENA HASTATA, EUPATORIUM FISTULOSUM, EUTHAMIA GRAMINIFOLIA, SOLIDAGO JUNCEA, SYMPHYOTRICHUM NOVAE-ANGLIAE. NOTE: SEE MIX SHOULD EXCLUDE BOTH CHAMAECRISTA FASCICULATA AND HELIOPSIS HELIANTHOIDES, WHICH ARE BOTH COMMONLY INCLUDED IN THIS COMMERCIAL MIX.

#### DRY AND FROZEN GROUND EVALUATION

THE DRY AND FROZEN GROUND EVALUATION IS REQUIRED TO DETERMINE IF ACCESS VIA, OR CONSTRUCTION OPERATION WITHIN A PARTICULAR WETLAND OR TEMPORARY WATER CROSSING CAN BE DONE WITHOUT THE USE OF TIMBER MATS. ACCESS TO WORK AREAS BY WAY OF A WETLAND, OR ACROSS STREAMS WITHOUT THE USE OF TIMBER MATS IS PROHIBITED, UNLESS A DRY AND FROZEN GROUND EVALUATION HAS BEEN CONDUCTED BY QUALIFIED PERSONNEL, I. E. THE ON-SITE PLAN COORDINATOR (OPSC) OR EPSC SPECIALIST (HEREAFTER REFERRED TO AS THE "SPECIALIST") AND THEY FIND CONDITIONS SUITABLE FOR

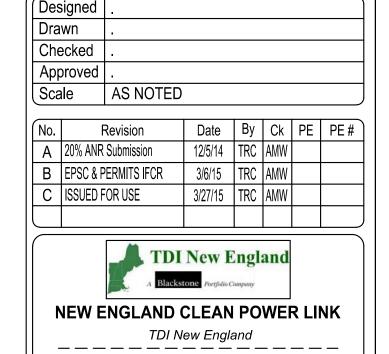
UNDER NO CIRCUMSTANCES SHALL THIS EVALUATION OVERRIDE SPECIFIC WETLAND PERMIT CONDITIONS WITHOUT WRITTEN AUTHORIZATION OF THE APPLICABLE REGULATORY AGENCY.

- THE DRY AND FROZEN GROUND EVALUATION SHALL BE CONDUCTED FOLLOWING THE STEPS OUTLINED.
- STEP 1: THE SPECIALISTS WILL EVALUATE THE WETLAND OR WATER FOR PRESENCE OF ONE OR MORE OF THE FOLLOWING CHARACTERISTICS:
  - A. FROZEN GROUND
  - B. DRY GROUND, WITH: LOW TO NO SURFACE FLOW, AND/OR
  - UNSATURATED SURFACE SOIL CONDITIONS C. SOILS THAT ARE NOT SUSCEPTIBLE TO EXCESSIVE RUTTING, MIXING OF SURFACE AND SUBSURFACE SOIL LAYERS, AND/OR MOVEMENT AND RE-DEPOSITION OF SOILS WITHIN THE WETLAND TO AN EXTENT THAT WOULD REQUIRE RESTORATION OF CONTOURS AND/OR
- HYDROLOGY OF THE WETLAND. STEP 2: THE SPECIALIST WILL EVALUATE THE PROPOSED WORK ACTIVITIES TO DETERMINE POTENTIAL FOR IMPACT TO THE WETLAND. IN CONSULTATION WITH THE CONTRACTOR, THE EVALUATION WILL

  - A. NATURE OF PROPOSED ACCESS, B. TYPE OF EQUIPMENT TO BE USED (E.G. TRACKED VEHICLES VS.
  - RUBBER TIRED VEHICLES). C. DURATION OF ACTIVITIES TO OCCUR WITHIN THE WETLAND,
  - D. ESTIMATED NUMBER OF PASSES BY EQUIPMENT THROUGH THE WETLAND, AND

E. FORECASTED WEATHER CONDITIONS THAT MAY OCCUR AT THE TIME

- OF THE ACCESS THROUGH THE WETLAND. STEP 3: THE SPECIALIST MAY AUTHORIZE ACCESS THROUGH THE WETLAND PROVIDED THAT THE EVALUATION HAS DETERMINE THAT TEMPORARY OR PERMANENT IMPACTS TO THE WETLAND WILL NOT OCCUR. SUCH IMPACTS INCLUDE. BUT ARE NOT LIMITED TO: A. EXCESSIVE SOIL RUTTING SUCH THAT THE RUTS ARE 6 INCHES OR
  - GREATER IN DEPTH B. DAMAGE TO VEGETATION ROOT SYSTEMS BEYOND THE CAPACITY
- FOR NATURAL REVEGETATION STEP 4: THE SPECIALIST MUST BE PRESENT AT THE TIME OF ACCESS THROUGH THE WETLAND TO CONFIRM APPROVAL, MONITOR ACTIVITIES, AND STOP WORK IF IT IS DETERMINED THAT UNDESIRABLE IMPACTS MAY OCCUR
- (OR ARE OCCURRING). STEP 5: ÀFTER ACCESS IS COMPLETE, WETLAND SOILS WILL NATURALLY REGENERATE VEGETATION FROM EXISTING ROOT AND SEED STOCK. IN AREAS WHERE THE WETLAND GRADES COULD RESULT IN EROSION (E.G. HILLSLOPE SEEPS), ANNUAL RYE SEED MAY BE CAST OVER DISTURBED SOIL TO PROVIDE TEMPORARY STABILIZATION UNTIL VEGETATION HAS BEEN RE-ESTABLISHED.



EPSC PLAN - GENERAL NOTES

TRC

Prepared by:

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9/19/14