

GENERAL NOTES

- ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION (DATED 2006) AND THE LATEST REVISIONS THEREOF.
- NO EXISTING MONUMENTS, BOUNDS, IRON PINS OR PROPERTY CORNERS SHALL BE DISTURBED WITHOUT MAKING PROVISIONS FOR RELOCATION WITH A SURVEYOR LICENSED IN THE STATE OF VERMONT.
- ALL WORK SHALL BE PERFORMED WITHIN THE LIMITS SHOWN ON THE DRAWINGS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DATA COLLECTION AND PREPARATION OF RECORD DRAWINGS.
- THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING EROSION IN ALL AREAS DISTURBED BY THE CONTRACTOR'S ACTIONS. COSTS FOR REQUIRED EROSION CONTROL IN ALL AREAS DISTURBED BY THE CONTRACTOR'S ACTIONS OUTSIDE THE LIMITS OF DISTURBANCE SHOWN ON AND REQUIRED BY THE ENGINEERING DRAWINGS SHALL BE INCIDENTAL TO THE CONTRACT.
- NOT USED
- IF UNFORSEEN HAND EXCAVATION IS REQUIRED BY THE CONTRACTOR, THIS WORK WILL BE PERFORMED IN ACCORDANCE WITH SUBSECTION 204.01 (b).
- FOLD DOWN POLE OR FOLD OVER TOWER TO BE SUPPLIED AND INSTALLED BY THE RWIS EQUIPMENT VENDOR. THE CONTRACTOR SHALL INSTALL THE POLE BASE PLATE OR TOWER BASE PROVIDED BY THE RWIS EQUIPMENT VENDOR PER THE POLE/TOWER MANUFACTURER SPECIFICATIONS.
- RWIS EQUIPMENT VENDOR IS RESPONSIBLE FOR THE INSTALLATION OF ALL SURFACE AND SUB-SURFACE SENSORS IN THE ROADWAY PAVEMENT STRUCTURE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SAW CUTTING, ASSIST WITH "HOLE" WIDENING OF PAVEMENT AS SHOWN ON THE SITE PLAN AND THE RWIS INSTALLATION DETAIL SHEET, AND CLEANING AND DRYING OF THE SAWCUT WITH APPROPRIATE EQUIPMENT AND MATERIALS.
- RWIS EQUIPMENT VENDOR TO PROVIDE AND INSTALL POLE/TOWER AND ATTACHED EQUIPMENT, CONTROL PANELS, CONTROL "CABLES", SENSORS AND SENSOR CABLES, AND PROVIDE EQUIPMENT START UP AND CALIBRATION SERVICES. CONTRACTOR TO PROVIDE MANPOWER AS REQUIRED TO ERECT THE TOWER ON THE FOUNDATION.
- THE CONTRACTOR WILL PROVIDE COORDINATION WITH RWIS EQUIPMENT VENDOR TO FACILITATE PAVEMENT AND SUBSURFACE SENSOR AND ASSOCIATED CABLING INSTALLATION. THE CONTRACTOR TO COORDINATE ALL ROADWAY LANE CLOSURES AND NOTIFICATIONS FOR THE RWIS EQUIPMENT VENDOR DURING INSTALLATION.
- UTILITY TRENCH CONDUIT COVER TO BE 36 INCHES, MINIMUM, TO THE UTILITY PEDESTAL AND 24 INCHES, MINIMUM, ELSEWHERE PER STANDARD E-175. THE TRENCH FOR ALL CONDUIT SHALL BE A MAXIMUM OF 24" WIDE FOR (3) 2" CONDUITS AND A MINIMUM OF 6" WIDE FOR A SINGLE CONDUIT. THE CONTRACTOR SHALL EMPLOY SUITABLE EXCAVATION METHODS TO MINIMIZE THE DISTURBANCE TO THE EXISTING SOIL. ALL UNDERGROUND PVC CONDUIT SHALL BE SCH 40. ALL ABOVEGROUND PVC CONDUIT SHALL BE SCH 80.
- THIRTY-SIX INCH RADIUS CONDUIT SWEEPS ARE TO BE USED AT ALL 90° CHANGES OF DIRECTION EXCEPT WHERE SHOWN OTHERWISE ON THE PLANS. TWELVE INCH SWEEPS ARE THE MINIMUM.
- ALL EXCAVATION REQUIRED TO PLACE FOOTING SHALL BE PAID UNDER ITEM 204.25, STRUCTURE EXCAVATION. PAY LIMITS IN SOIL SHALL BE DEFINED AS 18" OUTSIDE THE EDGE OF THE FOOTING AND 6" BELOW THE INDICATED BOTTOM OF FOOTING. IF OVER EXCAVATION OCCURS, ADDITIONAL COMPACTED GRANULAR FILL MATERIAL SHALL BE CONSIDERED INCIDENTAL.
- FOR FOOTING IN ROCK CUT, ALL OVERBREAKAGE WIDER THAN THE WIDTH OF THE FOOTING AND BELOW THE INDICATED BOTTOM OF FOOTING SHALL BE REPLACED WITH "CONCRETE CLASS B". A MAXIMUM OF 6" AVERAGE WIDTH OR DEPTH OF OVERBREAKAGE SHALL BE PAID FOR AS "STRUCTURE EXCAVATION" AND "CONCRETE CLASS B". ANY ADDITIONAL CONCRETE REQUIRED SHALL BE PLACED AT THE COST OF THE CONTRACTOR. HORIZONTAL ROCK CUT SURFACES SHALL BE MADE LEVEL AND CLEAR OF LAITANCE AND DEBRIS, PRIOR TO PLACEMENT OF FOOTING CONCRETE.
- WEATHER SENSOR POLE, BASE PLATE AND ANCHOR BOLTS OR TRUSS TOWER BASE SHALL BE PROVIDED BY RWIS EQUIPMENT VENDOR AND INSTALLED BY THE CONTRACTOR AS RECOMMENDED BY THE MANUFACTURER. PAYMENT IS INCIDENTAL TO FOUNDATION CONSTRUCTION. RWIS EQUIPMENT VENDOR SHALL SUPPLY SHOP DRAWINGS FOR APPROVAL BY VTRANS AT TIME OF EQUIPMENT PURCHASE.
- ROADWAY CLOSURES ARE RESTRICTED TO BETWEEN 9:00 A.M. AND 3:30 P.M. ALL ROADWAYS MUST BE OPEN TO NORMAL TRAFFIC OUTSIDE THIS PERIOD.
- TOWER BASES MAY BE SUPPLIED IN EITHER A TRIANGULAR SECTION OR A ROUND POLE SECTION. CONTRACTOR IS TO BE AWARE OF WHAT TYPE OF TOWER WILL BE INSTALLED AT EACH LOCATION. FOR TRIANGULAR TOWER SECTION, THE BASE PLATE AND ANCHOR BOLTS MUST BE PLACED AND LEVELED IN CONCRETE SECTION PRIOR TO POURING CONCRETE PIER SECTION. IF THE ROUND TOWER SECTION IS TO BE INSTALLED THE CONTRACTOR MUST EMBED, LEVEL AND SET THE LEVELING PLATE AND ANCHOR BOLTS. ANCHOR BOLTS AND LEVELING PLATE WILL BE SUPPLIED BY THE RWIS EQUIPMENT VENDOR.
- THE CONTRACTOR SHALL PERFORM ALL ELECTRICAL INSTALLATION FROM THE EXISTING UTILITY SERVICE PANEL IN THE FAIR HAVEN WELCOME CENTER TO THE RWIS STATION. THE CONTRACTOR SHALL SUPPLY ALL CONDUIT AND HARDWARE NECESSARY TO PROVIDE SERVICES FROM THE UTILITY SERVICE PANEL ROOM TO THE RWIS STATION.
- ALL ELECTRICAL WORK PERFORMED BY EITHER THE CONTRACTOR OR THE RWIS EQUIPMENT VENDOR SHALL BE PERFORMED BY, OR INSPECTED AND APPROVED BY A LICENSED ELECTRICIAN PRIOR TO ENERGIZING ANY EQUIPMENT. THE RWIS EQUIPMENT VENDOR'S ELECTRICIAN SHALL VERIFY THAT ADEQUATE GROUNDING FOR LIGHTNING PROTECTION FOR THE TOWER AND EQUIPMENT IS INSTALLED. REVIEW AND SIGN-OFF BY VTRANS' RESIDENT ENGINEER WILL BE REQUIRED BEFORE ACCEPTANCE OF THE INSTALLATION.

TRAFFIC CONTROL NOTES - UNDIVIDED HIGHWAY

- WHEN CONSTRUCTION EQUIPMENT IS WORKING WITHIN FIFTEEN (15) FEET OF THE ROADWAY, FLAGGERS OR UNIFORMED TRAFFIC CONTROL OFFICERS (UTO'S) SHALL BE USED TO ASSIST IN CONTROLLING TRAFFIC PER SECTION 630 OF THE SPECIFICATIONS. ITEM FOR PAYMENT FOR TRAFFIC CONTROL ASSISTANCE SHALL BE 630.10.
- TRAFFIC CONTROL DETAILS FOR TEMPORARY LANE CLOSURES WHILE WORKING ON THE ROADWAY OR ADJACENT TO THE ROADWAY SHALL REFER TO STANDARD DETAIL SHEETS E-110 & E-111.
- ALL SIGNS SHALL BE PLACED BEFORE ANY WORK BEGINS OR EQUIPMENT IS PUT ON OR ADJACENT TO THE ROADWAY FOR CONSTRUCTION. SIGNS SHALL BE COVERED OR REMOVED WHEN NOT APPLICABLE, REFER TO STANDARD DETAIL SHEETS E-100, E-101 & E-102 FOR REQUIREMENTS.
- THE CONTRACTOR SHALL HAVE CHANNELIZING DEVICES AND SIGNS IN ACCORDANCE WITH STANDARD DETAIL SHEETS E-100, E-106, E-110 & E-111, FOR TEMPORARY LANE CLOSURES ON THE PROJECT SITE BEFORE STARTING THE PROJECT.
- SINGLE (1) OR TWO (2) LANE CLOSURES ON AN UNDIVIDED HIGHWAY SHALL BE AS PER THE LATEST EDITION OF THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR TYPICAL APPLICATIONS 10 & 13 (TA 10 & TA 13) AND VERMONT STANDARD DETAIL SHEETS E-110 & E-111 WITH SPEED LIMIT REDUCTION REQUIREMENTS. REFER TO STANDARD DETAIL SHEETS E-100 & E-100A FOR MAIN LINE AND SIDE ROAD SIGNAGE, AS REQUIRED.
- EXISTING SPEED LIMIT SIGNS SHALL BE COVERED WHEN REDUCED SPEED SIGNS ARE POSTED.
- CHANNELIZING DEVICES OTHER THAN REFLECTORIZED PLASTIC DRUMS (AS PER STANDARD DETAIL SHEET E-106) WILL NOT BE ALLOWED.
- THE REDUCED "SPEED LIMIT XX" AND OTHER RELATED SIGNS SHALL BE REMOVED OR COVERED WHEN WORK IS NOT IN PROGRESS AND THE ROADWAY IS NOT RESTRICTED.
- "REDUCED SPEED AHEAD" SIGNS MAY BE USED IN LIEU OF "SPEED ZONE AHEAD".
- FOR RELATIVELY SHORT-TERM PROJECTS WITH NO OFFICIAL SPEED ZONE ENACTMENT, THE SPEED LIMIT AND REDUCED SPEED LIMIT SIGNS CAN BE SUBSTITUTED WITH ADVISORY PLAQUES MOUNTED AS SUPPLEMENTAL SIGNS ON OTHER WARNING SIGNS.
- ALL FIXED SIGNS SHALL BE MOUNTED ON NCHRP-350 APPROVED SUPPORTS (I.E. YIELDING STEEL, ALUMINUM OR WOOD) AS SHOWN ON THE APPROPRIATE STANDARD DETAIL SHEETS.
- PORTABLE SIGNS SHALL BE MOUNTED ON NCHRP-350 APPROVED SUPPORTS AND KEPT LEVEL WHEN PLACED ON THE EDGE OF THE ROADWAY AND ALL VEGETATION THAT INTERFERES WITH VISIBILITY OF THE SIGNS SHALL BE REMOVED. PAYMENT FOR PLACEMENT AND MAINTENANCE SHALL BE INCIDENTAL TO OTHER ITEMS. WHEN PORTABLE SIGNS ARE PLACED BEHIND GUARDRAIL, THE BOTTOM OF THE SIGN FACES SHALL BE PLACED ABOVE THE TOP OF THE GUARDRAIL.
- WARNING LIGHTS SHALL NOT BE USED ON CHANNELIZING DEVICES.
- THE NUMBER OF CHANNELIZING DEVICES AND OTHER TRAFFIC CONTROL DEVICES SHOWN ON STANDARD DETAIL SHEETS E-110 & E-111 ARE DETERMINED BASED ON INDIVIDUAL DETOUR CONDITIONS (TAPERS, SPEED LIMITS, LENGTH OF DETOUR CURVE, ETC.) OR AS DIRECTED BY THE ENGINEER.
- NO LONG-TERM LANE CLOSURES (GREATER THAN 6-1/2 CONTINUOUS HOURS IN A DAY) SHALL BE PERMITTED. REFER TO GENERAL CONSTRUCTION NOTE #17.

CONSTRUCTION SEQUENCE

- PRE-CONSTRUCTION: TAPE LIMITS OF CONSTRUCTION AND MEET WITH PROJECT ENGINEER PRIOR TO BEGINNING ANY OTHER SITE WORK. PAYMENT FOR PROJECT DEMARCATION FENCE (PDF) SHALL BE UNDER ITEM 653.55.
- INSTALL SILT FENCE AT ALL LOCATIONS SHOWN ON PLAN OR AS DIRECTED BY THE ENGINEER.
- STOCKPILE TOPSOIL & ROCK AND INSTALL EROSION CONTROL FOR STOCKPILE AS DIRECTED BY THE ENGINEER.
- PROCEED WITH WORK UNIT BY UNIT, LIMITING THE DURATION OF DISTURBANCE AS MUCH AS POSSIBLE.
- BEGIN TURF ESTABLISHMENT PER SECTION 651 OF THE SPECIFICATIONS IMMEDIATELY AFTER GRADING. BASIS OF PAYMENT SHALL BE PER SUBSECTION 651.13. SEE SEEDING FORMULA.
- INSPECT ALL DISTURBED AREAS ON A DAILY BASIS. INSTALL OR MAINTAIN TEMPORARY SILT FENCE, ETC., AS FOUND NECESSARY TO PREVENT EROSION.
- PLACE TOPSOIL, FERTILIZER, LIME, SEED AND MULCH IN A UNIT BY UNIT MANNER.
- MONITOR THE SITE AND MAINTAIN STRUCTURES AS NEEDED UNTIL FULL RE-VEGETATION IS ESTABLISHED. RESEED AS NECESSARY.

TEMPORARY SEEDING

- WHEN PERMANENT SEEDING CANNOT BE INSTALLED BY SEPTEMBER 15, TEMPORARY SEEDING AND MULCHING OF ALL DISTURBED AREAS SHALL BE INSTALLED IMMEDIATELY AND MAINTAINED UNTIL PERMANENT MEASURES CAN BE INSTALLED IN THE FOLLOWING PLANTING SEASON BY THE CONTRACTOR.
- TEMPORARY SEED TO BE WINTER RYE, 2.5 LBS PER 1000 SQ. FT, SEED AND TOPSOIL MIXTURE TO DEPTH OF 1 INCH. UNIFORMLY FERTILIZE, NOT LESS THAN 7 LBS PER 1000 SQ. FT., OF 10-10-10 OR EQUIVALENT. SPREAD SEED UNIFORMLY. FIRM SOIL BY ROLLING OR PACKING; IF NOT FEASIBLE, THEN RAKE LIGHTLY TO COVER SEEDS.
- MULCH ALL DISTURBED AREAS WITH 1-1/2 TO 2-1/2 TONS OF HAY OR STRAW PER ACRE. ANCHOR ON ALL SLOPES 2:1 OR STEEPER AND ON FLATTER SLOPES SUBJECT TO WASH OR WIND. MULCH SHALL MEET SPECIFICATIONS 755.10 (a). PAYMENT FOR MULCH SHALL BE UNDER ITEM 651.25.

SEEDING FORMULA - RURAL AREAS

% WT.	LBS. /A.	NAME	PUR %	GERM %
37.5	22.5	CREEPING RED FESCUE	98	85
37.5	22.5	TALL FESCUE	95	90
5.0	3.0	RED TOP	95	90
15.0	9.0	BIRDSFOOT TREFOIL	98	85
5.0	3.0	ANNUAL RYE GRASS	95	85
100.0	60.0			

SEEDING GENERAL NOTES

SEEDING MIXTURE SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40 % BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS SEED.

SEED: TO BE APPLIED PER SEEDING FORMULA OR AS DIRECTED BY THE ENGINEER.

FERTILIZER: FORMULA 10-20-10, TO BE USED WITH SEED APPLIED AT THE RATE OF 500 LBS/ACRE (HYDRO SEEDERS MAY USE 19-19-19 FORMULA).

AGRICULTURAL LIMESTONE: TO BE APPLIED AT THE RATE OF 2 TONS/ACRE, OR AS DIRECTED BY THE ENGINEER.

HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 2 TONS/ACRE, OR AS DIRECTED BY THE ENGINEER.

TOPSOIL: TO BE USED WITH SEED PER 651.06, OR AS DIRECTED BY THE ENGINEER.

EROSION CONTROL GENERAL NOTES

1. GENERAL

IT IS ANTICIPATED THAT THIS PROJECT WILL DISTURB AN ESTIMATED 0.5 ACRES OF LAND INCLUDING BOTH ONSITE AND CONTIGUOUS WASTE, BORROW, STAGING, AND HAUL ROADS. SHOULD THE AREA OF DISTURBANCE CHANGE AND RESULT IN 1 OR MORE ACRES OF EARTH DISTURBANCE, OR SHOULD THE PROJECT BECOME PART OF A COMMON PLAN OF DEVELOPMENT, THEN THE CONTRACTOR WILL BE RESPONSIBLE FOR ADDITIONAL PERMITTING WITH THE AGENCY OF NATURAL RESOURCES.

EROSION & SEDIMENT CONTROL PRACTICES INCLUDE THE USE OF SILT FENCES. ALL EROSION CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS CONTAINED IN THE VTRANS "LOW RISK SITE HANDBOOK FOR EROSION PREVENTION AND SEDIMENT CONTROL (2006 OR LATEST REVISION)". (REFER TO: [http://www.vtwaterquality.org/stormwater/h/tm/sw\\_esp.htm](http://www.vtwaterquality.org/stormwater/h/tm/sw_esp.htm))

TOPSOIL STOCKPILING: TOPSOIL SHALL BE STRIPPED AND STOCKPILED FOR LATER USE ON CRITICAL AREAS AND ALL OTHER AREAS TO BE SEEDDED. THE STOCKPILE WILL NOT BE COMPACTED AND SHALL BE STABILIZED AGAINST EROSION WITH TEMPORARY SEEDING.

2. STRUCTURAL MEASURES

SILT FENCES ARE TO BE INSTALLED IN THE AREAS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER. THEY ARE INTENDED PRIMARILY TO INTERCEPT RUNOFF AND FILTER SMALL VOLUMES OF "SHEET FLOW" RUNOFF.

3. MAINTENANCE

DURING THE PERIOD OF CONSTRUCTION AND/OR UNTIL VIGOROUS VEGETATIVE GROWTH IS ESTABLISHED:

SEEDDED AREAS WILL BE FERTILIZED AND RE-SEEDDED AS NECESSARY TO ENSURE PROPER VEGETATIVE ESTABLISHMENT.

SILT FENCES WILL BE CHECKED BY THE CONTRACTOR REGULARLY AND AFTER EACH RAINFALL EVENT. NECESSARY REPAIRS WILL BE MADE AT THE CONTRACTOR'S EXPENSE TO CORRECT UNDERMINING OR DETERIORATION OF THE BARRIERS.

FAIR HAVEN

PROJECT:	FAIR HAVEN: RWIS MENDON: RWIS	
FILE NAME:	0100001gnl.dgn	PLOT DATE: 10-AUG-2007
PROJECT LEADER:	D. GRAHAVOC	DRAWN BY: MAL
DESIGNED BY:	BMB	CHECKED BY: MDL
GENERAL NOTES		SHEET 6 OF 12