

# INDEX & PROJECT NOTES SHEET

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**GENERAL**

- 1 ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2011, AND ITS LATEST REVISIONS, THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FIFTH EDITION, DATED 2010 AND ITS LATEST REVISIONS, AND THE AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS THIRD EDITION, DATED 2010 AND ITS LATEST REVISIONS.
- 2 DIMENSIONS, ANGLES, BEARINGS, AND ELEVATIONS OF THE EXISTING BRIDGES SHOWN ON THESE PLANS HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURES AND LIMITED FIELD INVESTIGATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING FIELD MEASUREMENTS OF ALL EXISTING STRUCTURE COMPONENTS TO ASSURE CONSISTENCY WITH THE PROPOSED MODIFICATIONS. ANY DISCREPANCIES IN DIMENSIONS, CHARACTER OR EXTENT OF THE EXISTING FEATURES SHALL BE BROUGHT TO THE ATTENTION OF THE RESIDENT ENGINEER, BEFORE ADVANCING THE WORK. ALL REFERENCE SHEETS WERE SCANNED IN, AND ARE NO LONGER TO SCALE.
- 3 UNLESS OTHERWISE PROVIDED, ALL REMOVED MATERIAL SHALL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF/RECYCLED AS AUTHORIZED BY THE ENGINEER.
- 4 THE PLANS AND PICTURES SHOW THE TYPE OF WORK REQUIRED BUT DO NOT NECESSARILY SHOW ALL WORK NEEDED.
- 5 BRIDGES 97 NORTH AND SOUTH PASS OVER RECREATION PATH AND BRIDGES 98 NORTH AND SOUTH PASS OVER VT-78, THESE FEATURES WILL NEED TO BE PROTECTED FROM CONSTRUCTION ACTIVITIES. THIS WORK WILL BE PAID FOR UNDER ITEM 900.645, "SPECIAL PROVISION (PUBLIC PROTECTION FOR BRIDGE PROJECTS)".
- 6 THE INTENTION OF THESE PLANS IS TO SHOW THE TYPE OF CONCRETE REPAIR WORK NEEDED. QUANTITIES FOR CONCRETE REPAIR HAVE BEEN ESTIMATED BASED ON SITE VISITS.

**PAVEMENT REMOVAL NOTES**

- 7 THE FINAL ONE HALF INCH OF PAVEMENT ON THE BRIDGE DECK AND APPROACH SLABS SHALL BE REMOVED BY LOADER, GRADER, OR EQUIPMENT APPROVED BY THE ENGINEER. USE OF COLD PLANER TO REMOVE BRIDGE AND APPROACH SLAB PAVEMENT SHALL BE INCIDENTAL TO ITEM 529.10 "REMOVAL OF BRIDGE PAVEMENT". THE REMOVAL OF EXISTING SHEET MEMBRANE SHALL BE INCIDENTAL TO ITEM 580.16 SURFACE PREPARATION FOR MEMBRANE.

8 DURING BRIDGE AND APPROACH SLAB PAVEMENT REMOVAL, THE CONTRACTOR SHALL EXERCISE CARE TO ENSURE THAT NO DAMAGE OCCURS TO THE EXISTING PORTLAND CEMENT CONCRETE DECK OR THE APPROACH SLABS. IF THE CONTRACTOR DAMAGES AREAS OF THE DECK OR APPROACH SLABS, THEN THE REQUIRED REPAIRS SHALL BE AS PER SECTION 580 OF THE SPECIFICATION AND WILL BE AT THE CONTRACTOR'S EXPENSE.

9 WHERE TRAFFIC IS TO BE MAINTAINED ON ONE LANE OF A BRIDGE WHILE THE OTHER LANE IS BEING REPAIRED, THE EXISTING PAVEMENT SHALL BE RETAINED TO ENSURE A SMOOTH RIDE AND LESS IMPACT DAMAGE TO THE REPAIRS MADE.

**DECK REPAIR NOTES**

10 AN ESTIMATED QUANTITY OF 3CY HAS BEEN INCLUDED FOR ITEM 580.12 "REPAIR OF CONCRETE SUPERSTRUCTURE SURFACE, CLASS III" FOR ANY AREAS THAT REQUIRE FULL DEPTH REPAIR. THIS SHALL INCLUDE ANY AREAS INDICATED BY POP OUTS ON THE SOFFIT, FASCIA, AND CURBS; OR ANY SECTION OF THE DECK THAT THE ENGINEER DETERMINES TO REQUIRE FULL DEPTH REPAIR AFTER CLASS II REMOVAL.

11 AFTER CLASS II AND CLASS III REMOVAL THE REINFORCING STEEL SHALL BE INSPECTED AND ANY REMAINING RUST SHALL BE CLEANED OFF OF THE BARS BEFORE ANY CONCRETE IS PLACED. ANY SECTIONS OF REINFORCING STEEL ORDERED REMOVED BE THE ENGINEER SHALL BE REMOVED AND REPLACED WITH #5 BARS, CUT TO FIT. AN ESTIMATED QUANTITY OF 1000 LBS OF ITEM 507.11 "REINFORCING STEEL, LEVEL 1" IS INCLUDED FOR THIS PURPOSE.

12 IF THERE IS INSUFFICIENT COMPETENT EXISTING STEEL FOR LAPPING WITH THE NEW STEEL, THE TWO BARS SHALL BE CONNECTED USING MECHANICAL BAR CONNECTORS UNDER ITEM 507.19 "MECHANICAL BAR CONNECTORS", AN ESTIMATED QUANTITY OF 50 MECHANICAL BAR CONNECTORS ARE INCLUDED FOR THIS PURPOSE, INCLUDING 3 CONNECTORS FOR TESTING UNDER SUBSECTION 713.02.

13 A QUANTITY OF 30 FEET OF DRILLING AND GROUTING DOWELS WAS ADDED IN THE EVENT THERE IS NOT ENOUGH REBAR TO LAP SPLICE OR TO USE MECHANICAL BAR CONNECTORS AT THE CURB LINES.

**WATER PROOFING NOTES**

14 FOLLOWING REMOVAL OF BRIDGE PAVEMENT, THE CONCRETE BRIDGE DECK SHALL BE CLEANED AND PREPARED IN ACCORDANCE WITH SUBSECTION 580.04 AND TO THE SATISFACTION OF THE ENGINEER. THIS WORK SHALL BE PAID FOR AS ITEM 580.16 "SURFACE PREPARATION FOR MEMBRANE".

15 ANY AREA OF THE BRIDGE THAT IS DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED AT THE SOLE COST OF THE CONTRACTOR. ANY AREA OF CONCRETE BELOW THE MEMBRANE THAT IS FOUND TO BE UNSOUND SHALL BE IDENTIFIED BY THE CONTRACTOR AND BROUGHT TO THE ATTENTION OF THE ENGINEER. THE ENGINEER SHALL MAKE A DETERMINATION AS TO HOW TO REPAIR THE DETERIORATED PORTION OF THE DECK AND AS TO THE EXTENT OF REPAIRS.

16 UPON APPROVAL OF THE DECK CONDITION BY THE ENGINEER, SHEET MEMBRANE WATERPROOFING, TORCH APPLIED, SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 519. IF THE DECK CANNOT BE WATERPROOFED AND PAVED IN ITS ENTIRETY, IN A CONTINUOUS OPERATION, OR IF TRAFFIC IS TO BE MAINTAINED ON ONE LANE WHILE THE OTHER LANE IS BEING REPAIRED, THE FOLLOWING SHALL APPLY:

- a. THE MEMBRANE SHALL EXTEND 1 +/- FOOT BEYOND THE LANE LINE OF THE REPAIRED LANE SO THAT THE MEMBRANE CAN BE LAPPED ONTO WHEN WATERPROOFING THE SECOND LANE OF WHEN CONSTRUCTION OPERATIONS HAVE RESUMED.
- b. PAVEMENT SHALL BE PLACED ON THE NEWLY INSTALLED MEMBRANE FOR THE ENTIRE LENGTH OF THE BRIDGE PRIOR TO ALLOWING TRAFFIC ONTO THIS LANE.
- c. THAT PART (1 +/-) OF THE MEMBRANE THAT EXTENDS BEYOND THE NECESSARY LANE WIDTH TO MAINTAIN TRAFFIC SHALL BE COVERED WITH RELEASE PAPER AND BITUMINOUS CONCRETE PAVEMENT. WHEN WATERPROOFING THE SECOND LANE, REMOVAL OF THE PAVEMENT ON THE RELEASE PAPER IN ORDER TO OVERLAP THE MEMBRANE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 900.680 "SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY)".

17 WATER REPELLENT, SILANE, SHALL BE APPLIED TO ALL EXPOSED CONCRETE, EXCEPT FOR THE UNDERSIDE OF THE DECK BETWEEN THE DRIP NOTCHES. THIS WORK SHALL BE PAID FOR AS ITEM 514.10 "WATER REPELLENT, SILANE".

**AIR HAMMER REMOVAL NOTES**

18 THE ANGLE BETWEEN THE DECK AND AIR HAMMER AXIS SHALL BE FROM ZERO (0) DEGREES TO FORTY-FIVE (45) DEGREES. AIR HAMMERS USED FOR THE REMOVAL OF UNSOUND AND DETERIORATED CONCRETE SHALL HAVE A MAXIMUM RATING OF THIRTY (30) POUNDS AND SHALL USE CHISEL POINTS ONLY. IF REINFORCING STEEL IS DAMAGED, OR IF CONCRETE IS DEBONDED, DELAMINATED, OR OTHERWISE DAMAGED BEYOND THE DEFINED LIMITS OF REMOVAL BECAUSE OF THE IMPROPER USE OF THE AIR HAMMER, THEN THE CONTACTOR SHALL REPAIR THE DAMAGED AREAS BY REMOVING AND REPLACING THE CONCRETE AND/OR REINFORCING STEEL AT THEIR OWN EXPENSE.

**PAVEMENT NOTES**

19 FOLLOWING INSTALLATION OF SHEET MEMBRANE WATERPROOFING ON THE BRIDGE DECKS; THE BRIDGE DECKS AND AT-GRADE APPROACH SLABS SHALL BE PAVED CURB TO CURB WITH ITEM 900.680 "SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY)".

20 CARE SHALL BE EXERCISED TO SMOOTHLY TRANSITION THE NEW APPROACH SLAB PAVEMENT INTO THE EXISTING PAVEMENT (50' MINIMUM, SEE SHEET 6). ANY COLD PLANING NECESSARY FOR SHAPING BRIDGE APPROACHES ALONG THE EXISTING MAIN LINE SHALL BE PAID FOR UNDER ITEM 210.10 "COLD PLANING, BITUMINOUS PAVEMENT". ANY COLD PLANING ALONG SIDE ROADS SHALL BE DONE AT THE RESIDENT ENGINEER'S DISCRETION.

21 LONGITUDINAL JOINTS IN THE PAVEMENT SHALL BE TAPERED IN ACCORDANCE WITH SECTION 490.

22 EMULSIFIED ASPHALT SHALL BE APPLIED TO TACK CONTACT SURFACES AT A RATE OF 0.025 GAL/SY.

23 TESTING FOR PAVEMENT DENSITY WILL REQUIRE CORES OF THE PAVEMENT ON THE BRIDGE DECK, POSSIBLY RESULTING IN DAMAGE TO THE MEMBRANE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OF ANY DAMAGED MEMBRANE IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS. THE COST FOR THIS WORK SHALL BE INCIDENTAL TO ITEM 900.680 "SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY)".

**CONCRETE NOTES**

24 DUPLICATE PAYMENT WILL NOT BE MADE FOR REPAIR OF CONCRETE SURFACES IN ANY AREA. NO PAYMENT FOR ITEM 580.11 "REPAIR OF CONCRETE SUPERSTRUCTURE SURFACE, CLASS II" SHALL BE MADE WITHIN AREAS OF CLASS III REPAIR. FOR EXAMPLE, IF AN AREA IS ORIGINALLY TO BE REPAIRED AS CLASS II, AND THE ENGINEER ORDERS A CHANGE TO CLASS III DEPTH, THE AREA IN QUESTION WILL BE PAID AS CLASS III.

25 ALL EDGES OF REPAIR AREAS ARE TO BE SAWCUT SQUARE AND TO A MINIMUM DEPTH OF 1". EXCEPT AT THE CURB LINES WHERE THE EDGE WILL BE CHIPPED.

**ENVIRONMENTAL**

26 EROSION CONTROL MEASURES SHALL BE UTILIZED AS REQUIRED AND SHALL BE PER SECTION 105 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION AND THE AGENCY OF NATURAL RESOURCES LOW-RISK HANDBOOK FOR CONSTRUCTION SITES. SEE SUBSECTION 105.23 FOR EROSION CONTROL PLAN REQUIREMENTS. PAYMENT FOR THIS WORK WILL BE CONSIDERED INCIDENTAL TO ALL OTHER CONTRACT ITEMS.

**TRAFFIC CONTROL**

1 A MINIMUM OF ONE WAY TRAFFIC SHALL BE MAINTAINED ON I-89 THROUGH OUT ALL PHASES OF THIS PROJECT. WORK IS TO BE PERFORMED IN ACCORDANCE WITH MUTCD(2011), AND THE APPROPRIATE VTRANS STANDARD DRAWINGS.

2 ALL SIGNS, BARRICADES, AND OTHER TRAFFIC CONTROL DEVICES SHALL BE CLEANED WEEKLY OR AS DIRECTED BY THE RESIDENT ENGINEER. EXISTING PERMANENT SIGNS THAT CONTRADICT TEMPORARY TRAFFIC CONTROL SIGNS SHALL BE REMOVED AND REPLACED OR COVERED FOR THE PERIOD OF TIME THAT THE TRAFFIC CONTROL PLAN IS IMPLEMENTED. COST FOR THIS WORK SHALL BE CONSIDERED INCIDENTAL TO ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE)

3 THE COST FOR ALL ITEMS REQUIRED TO IMPLEMENT THE CONTRACTOR'S TRAFFIC CONTROL PLAN; INCLUDING BUT NOT LIMITED TO TEMPORARY TRAFFIC BARRIER, TEMPORARY PAVEMENT MARKINGS, AND CONSTRUCTION SIGNS, WILL BE INCLUDED UNDER CONTRACT ITEM 900.645, "SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE)".

4 THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF A SITE SPECIFIC TRAFFIC CONTROL PLAN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING THE LOCAL TRAFFIC CONTROL PACKAGE IDENTIFYING THE PROJECT BEFORE, DURING AND AFTER THE CONSTRUCTION PERIOD. THE CONTRACTOR SHALL SUBMIT FOR APPROVAL A DETAILED TRAFFIC CONTROL PLAN TO THE ENGINEER FOR ALL STAGES OF CONSTRUCTION. NO WORK SHALL BEGIN UNTIL THE TRAFFIC CONTROL PLAN HAS BEEN APPROVED. SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS. ALL COST SHALL BE INCLUDED IN ITEM 900.645 "SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE)".

5 THE CONTRACTOR SHALL ADD SIGN G20-5AP TO THE TOP OF ALL TEMPORARY SPEED LIMIT SIGNS AS DETAILED IN THE MUTCD.

6 A MINIMUM OF TWO WAY TRAFFIC SHALL BE MAINTAINED ON VT 78 THROUGH OUT ALL PHASES OF THIS PROJECT. WORK IS TO BE PERFORMED IN ACCORDANCE WITH MUTCD(2011), AND THE APPROPRIATE VTRANS STANDARD DRAWINGS.

PROJECT NAME: SWANTON  
PROJECT NUMBER: IM 089-3(70)

FILE NAME: sl2a276pi.dgn  
PROJECT LEADER: C. CARLSON  
DESIGNED BY: H. SALLS  
INDEX & PROJECT NOTES SHEET

PLOT DATE: 26-MAR-2013  
DRAWN BY: R. PELLETT  
CHECKED BY: H. SALLS  
SHEET 2 OF 31

AS BUILT "REBAR" DETAIL		
LEVEL I	LEVEL II	LEVEL III
TYPE:	TYPE:	TYPE:
GRADE:	GRADE:	GRADE: