1.1 PROJECT DESCRIPTION

THIS PROJECT CONSISTS OF SLIP LINING OF EXISTING CULVERTS UNDER I-89. THE SLIP LINING WILL USE NEW ALUMINUM PIPES PRESSURE GROUTED INTO PLACE. NEW FULL BEVELED HEADWALLS WILL BE CONSTRUCTED AT THE INLETS TO THE NEW SLIP LINED PIPE. ADDITIONAL WORK INCLUDES PLACEMENT OF STONE FILL AT THE INLETS AND OUTLETS OF THE NEW CULVERT LINER AND POSSIBLY THE FILLING OF VOIDS AROUND THE EXISTING CULVERT.

THE PROJECT IS LOCATED AT FOUR SEPARATE SITES ALONG THE I-89 CORRIDOR FROM HARTFORD TO RANDOLPH. THE CULVERTS ARE LOCATED IN THE TOWN OF HARTFORD AT MILE MARKERS 4.9 AND 5.2, IN THE TOWN OF ROYALTON AT MILE MARKER 17 AND IN THE TOWN OF RANDOLPH AT EXIT 4 ON RAMP D. A TEMPORARY ACCESS ROAD AND STAGING AREA WILL BE CONSTRUCTED FOR EACH SITE AND WILL BE USED FOR THE PURPOSE OF ACCESSING THE EXISTING CULVERT AND PERFORMING THE REQUIRED CONSTRUCTION ACTIVITIES. THE ACCESS ROADS AND STAGING AREAS ARE TO BE REMOVED UPON COMPLETION OF CONSTRUCTION. THIS PROJECT IS EXPECTED TO LAST ONE CONSTRUCTION SEASON.

IT HAS BEEN DETERMINED THAT THE TOTAL AREA OF DISTURBANCE FOR EACH CULVERT WILL BE LESS THAN ONE ACRE OF LAND. SHOULD CHANGES PRIOR TO OR DURING CONSTRUCTION RESULT IN A TOTAL INDIVIDUAL CULVERT SITE DISTURBANCE OF MORE THAN ONE ACRE OR SHOULD THE PROJECT BECOME PART OF A LARGER DEVELOPMENT PLAN THEN THE SELECTED CONTRACTOR WILL BE RESPONSIBLE FOR ADDITIONAL PERMITTING WITH VANR VIA FILING OF THE APPROPRIATE NOTICE OF INTENT UNDER THE CONSTRUCTION GENERAL PERMIT PROCESS.

DUE TO THE PRESENCE OF WETLANDS AT SOME OF THE SITES, AN ASSUMED AREA OF THE WETLANDS HAS BEEN IDENTIFIED IN THE SITE PLANS AS BEING DISTURBED AND THE PROJECT HAS BEEN PERMITTED FOR THAT DISTURBANCE. SHOULD CHANGES PRIOR TO OR DURING CONSTRUCTION RESULT IN ADDITIONAL DISTURBANCE TO THE WETLANDS THEN THE SELECTED CONTRACTOR WILL BE RESPONSIBLE FOR ADDITIONAL PERMITTING WITH THE APPROPRIATE REGULATORY AGENCIES. PREPARATION AND COSTS ASSOCIATED WITH ADDITIONAL PERMITTING SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

1.2 SITE INVENTORY

1.2.1 OFFSITE DRAINAGE CHARACTERISTICS

THIS PROJECT SITE IS LOCATED IN A RURAL, RARELY TRAVELED AREA ALONG THE TOE OF SLOPE OF I-89. THE AREA SURROUNDING THE PROJECT IS STEEP INTERSTATE FILL SLOPES ADJACENT TO MODERATELY SLOPED AREAS WITH ESTABLISHED VEGETATION, INCLUDING GRASSY AREAS AND TREE LINES. MUCH OF THE RUNOFF FROM THE SURROUNDING TERRAIN DRAINS INTO THE SUBJECT WATERWAYS.

1.2.2 DRAINAGE, WATERWAYS, BODIES OF WATER PROXIMITY TO NATURAL OR MAN-MADE WATER FEATURES

THE SUBJECT WATERWAYS AND AREAS OF WETLANDS IDENTIFIED ON THE PLANS ARE THE ONLY WATERWAYS WITHIN THE PROJECT LIMITS. THERE ARE NO OTHER WETLANDS WITHIN THE PROJECT LIMITS, OR SURROUNDING AREA.

1.2.3 TOPOGRAPHY, EXISTING ROADS, BUILDINGS, UTILITIES

THE TOPOGRAPHY OF THE PROJECT AREA CONSISTS OF STEEP INTERSTATE FILL SLOPES AND ROLLING HILLS. THE IS NO EVIDENCE OF BURIED OR OVERHEAD UTILITIES IN THE PROJECT AREA.

1.2.4 VEGETATION

THE PROJECT AREA CONSISTS OF GRASSY AREAS AND TREE LINES. IMPACTS TO VEGETATED AREAS WILL BE LIMITED TO THE SIDE SLOPES OF THE SUBJECT WATERWAYS AND THE AREA OF THE TEMPORARY ACCESS ROAD AND STAGING AREAS. SEVERAL SMALL TREES WILL BE REMOVED AS PART OF THE CLEARING FOR THE ACCESS AND STAGING AREAS. FOLLOWING THE COMPLETION OF CONSTRUCTION, THE TEMPORARY ACCESS ROADS AND STAGING AREAS AND ASSOCIATED FILL WILL BE REMOVED AND THE VEGETATION WILL BE REESTABLISHED USING STANDARD SEED AND MULCH PRACTICES.

1.2.5 SOILS

THE SOIL CONSERVATION SERVICE HAS MAPPED THE SOILS THROUGHOUT WINDSOR AND ORANGE COUNTIES. THE SOIL TYPE IDENTIFIED FOR 189 - BR. NO. 9-1 IS HITCHCOCK SILT LOAM AND IS LISTED AS HIGHLY ERODIBLE LAND. THE SOIL TYPE IDENTIFIED FOR 189 - BR. NO. 9-2 IS HINCKLEY SAND LOAM AND IS LISTED AS POTENTIALLY HIGHLY ERODIBLE LAND. THE SOIL TYPE IDENTIFIED FOR 189 - BR. NO. 20-4 IS HITCHCOCK SILT LOAM AND IS LISTED AS HIGHLY ERODIBLE LAND. THE SOIL TYPE IDENTIFIED FOR 189 - BR. NO. 29-1D IS CABOT STONY SILT LOAM AND IS LISTED AS POTENTIALLY HIGHLY ERODIBLE LAND.

1.2.6 SENSITIVE RESOURCE AREAS

THE SUBJECT WATERWAYS AND THE WETLANDS DELINEATED ON THE PLANS ARE THE ONLY KNOWN RESOURCE AREAS OF SPECIFIC CONCERN THAT HAVE BEEN IDENTIFIED WITHIN THE PROJECT AREA. THE PRIMARY OBJECTIVE FOR THE EROSION PREVENTION AND SEDIMENT CONTROL PLAN WILL BE TO PREVENT THE MOBILIZATION AND TRANSPORT OF SEDIMENT INTO THE SUBJECT WATERWAYS. ALL WORK TO BE COMPLETED IN THE RIVER SHALL BE IN THE DRY. THE SENSITIVE RESOURCE AREAS HAVE BEEN IDENTIFIED ON THE LAYOUT SHEETS FOR EACH CONSTRUCTION SITE.

1.3 RISK EVALUATION

SHOULD CHANGES PRIOR TO OR DURING CONSTRUCTION RESULT IN ONE OR MORE ACRES OF EARTH DISTURBANCE OR SHOULD THE PROJECT BECOME PART OF A LARGER PLAN OF DEVELOPMENT, THEN THE SELECTED CONTRACTOR WILL BE RESPONSIBLE FOR ADDITIONAL PERMITTING WITH VANR VIA FILING OF THE APPROPRIATE NOTICE OF INTENT UNDER THE CONSTRUCTION GENERAL PERMIT PROCESS.

1.4 EROSION PREVENTION AND SEDIMENT CONTROL

THE CONTRACTOR SHALL REFER TO THE VTRANS EROSION PREVENTION AND SEDIMENT CONTROL PLAN CHECKLIST TO DEVELOP THE EPSC PLAN. THE EROSION CONTROL PLANS ARE MEANT AS A GUIDELINE FOR PREVENTING EROSION AND CONTROLLING SEDIMENT TRANSPORT.

1.4.1 MARK SITE BOUNDARIES

PROJECT DEMARCATION FENCE SHALL BE INSTALLED TO DELINEATE THE LIMITS THE CONTRACTOR CAN ACCESS WITH CONSTRUCTION EQUIPMENT. THIS MEASURE LIMITS THE AREA THAT CAN BE DISTURBED AND EXPOSED TO EROSION.

1.4.2 LIMIT DISTURBANCE AREA

THE CONTRACTOR SHALL ESTABLISH THE LIMITS OF CONSTRUCTION ACCORDING TO THE CONTRACT LANGUAGE REQUIREMENTS. ALL EFFORTS SHALL BE MADE TO MINIMIZE EARTH DISTURBANCE.

1.4.3 STABILIZE CONSTRUCTION EXIT

A VEHICLE TRACKING PAD SHALL BE CONSTRUCTED AT ALL ACCESS POINTS BETWEEN CONSTRUCTION ACTIVITIES, INCLUDING STOCKPILE AREAS, AND PUBLIC OR PRIVATE ROADS. VEHICLE TRACKING PAD SHALL BE CONSTRUCTED IN ACCORDANCE APPROVED VTRANS EROSION CONTROL DETAILS.

1.4.4 INSTALL SILT FENCE

SILT FENCE SHALL BE INSTALLED ACCORDING TO THE ACCEPTED EPSC PLAN OR AS NECESSARY. IT SHALL BE NOTED THAT SILT FENCE SHALL BE INSTALLED PRIOR TO ANY UP SLOPE WORK.

1.4.5 DIVERT UPLAND RUNOFF

UPLAND RUNOFF SHALL BE DIVERTED AROUND THE PROJECT AS APPROPRIATE.

1.4.6 SLOW DOWN CHANNELIZED RUNOFF

CHANNELIZED RUNOFF SHALL BE TREATED AS NECESSARY.

1.4.7 CONSTRUCT PERMANENT CONTROLS

STONE FILL SHALL BE PLACED ALONG THE STREAMBEDS OF THE SUBJECT WATERWAYS TO PREVENT EROSION AND SCOUR.

1.4.8 TEMPORARY SOIL STABILIZATION

METHODS MAY INCLUDE SEED, MULCH, SOIL BINDER, OR OTHER METHODS AS APPROVED BY THE ENGINEER. TEMPORARY SOIL STABILIZATION METHODS SHALL BE APPLIED TO EXPOSED EARTH WITHIN 48 HOURS OF EARTH DISTURBANCE. PAYMENT FOR TEMPORARY SOIL STABILIZATION WILL BE MADE UNDER ITEM 900.650, "SPECIAL PROVISION (EROSION PREVENTION AND SEDIMENT CONTROL MEASURES) (N.A.B.I.)".

1.4.9 WINTER STABILIZATION

NOT APPLICABLE

1.4.10 PERMANENT SOIL STABILIZATION

ALL DISTURBED AREAS OUTSIDE THE LIMITS OF THE WATERWAYS SHALL RECEIVE TOPSOIL, SEED AND MULCH TO REESTABLISH GRASS AND VEGETATION. TOPSOILING, SEEDING AND MULCHING SHALL BE IN ACCORDANCE WITH THE SEEDING FORMULA FOR RURAL AREAS AND ASSOCIATED NOTES AS SHOWN ON THE PLANS. PAYMENT FOR TURF ESTABLISHMENT WILL BE MADE UNDER THE SECTION 651 ITEMS IN THE CONTRACT.

1.4.11 DEWATERING ACTIVITIES

ANY NECESSARY DEWATERING SHALL BE PERFORMED AS INDICATED IN THE ACCEPTED EPSC PLAN.

1.4.12 INSPECT YOUR SITE

INSPECTION OF THE SITE SHALL BE BASED ON PERMIT AUTHORIZATION OR SPECIAL PROVISION REQUIREMENTS.

PROJECT NAME:	HARTFORD-SHARON
PROJECT NUMBER:	IM 089-1(55)
FILE NAME: z08a056epscnar.dgn	PLOT DATE: 15-JAN-2009
PROJECT LEADER: E. P. DETRICK	DRAWN BY: R. H. BARNES
DESIGNED BY: A. P. GUYETTE	CHECKED BY: E. P. DETRICK
EPSC NARRATIVE	SHEET 10 OF 20