

**NOTES**

- APPROXIMATE WETLAND AND OTHER RESOURCE LOCATIONS HAVE BEEN IDENTIFIED. SEE PROJECT LAYOUT SHEETS FOR LOCATIONS. THE PROJECT SHALL BE CONSTRUCTED AS DESIGNED AND WITHIN THE LIMITS ESTABLISHED BY THE CROSS SECTIONS. IF IT IS DEEMED NECESSARY BY THE CONTRACTOR TO WORK BEYOND THOSE LIMITS, IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ACQUIRE ANY NECESSARY STATE AND FEDERAL PERMITS.
- COLD PLANING SHALL BE COMPLETED ACCORDING TO THE TYPICAL OR AS OTHERWISE NOTED ON THE PLANS.
- PRIOR TO RECLAIMING, ANY EXISTING SHOULDER MATERIAL DEEMED UNSUITABLE BY THE ENGINEER SHALL BE EXCAVATED TO THE DEPTH OF RECLAIMING OR AS DIRECTED BY THE ENGINEER. EXCAVATED MATERIAL WILL BE SPREAD ON THE ADJACENT SLOPES OR REMOVED FROM THE PROJECT AS DIRECTED BY THE ENGINEER. THIS WORK WILL BE PAID FOR USING THE APPROPRIATE RENTAL ITEM(S). THE METHOD OF REMOVAL AND THE USE OF RENTAL ITEM(S) SHALL BE APPROVED BY THE ENGINEER PRIOR TO ANY WORK BEING DONE. MATERIAL REMOVED SHALL BE REPLACED WITH ITEM 301.28 SUBBASE OF CRUSHED GRAVEL, FINE GRADED. AN ADDITIONAL QUANTITY OF 301.28 SUBBASE OF CRUSHED GRAVEL, FINE GRADED HAS BEEN INCLUDED TO CORRECT SUPERELEVATION AND GRADATION DEFICIENCIES WITHIN THE RECLAIMED SECTION.
- DURING THE FIRST RECLAIM PASS, WATER SHALL BE USED AS A STABILIZING AGENT AND FOR COMPACTION FOR THE RECLAIMED STABILIZED BASE AS DIRECTED BY THE ENGINEER. PAYMENT SHALL BE CONSIDERED INCIDENTAL TO ITEM 310.20 RECLAIMED STABILIZED BASE. THE FIRST RECLAIM PASS SHALL BE PERFORMED OVER THE FULL WIDTH OF THE EXISTING ROADWAY. THIS WORK SHALL BE PAID UNDER ITEM 310.20 "RECLAIMED STABILIZED BASE". THE SECOND PASS SHALL BE PERFORMED FULL WIDTH PER THE TYPICAL SECTION. THIS WORK SHALL BE PAID UNDER ITEM 900.675 SPECIAL PROVISION (RECLAIMED STABILIZED BASE, ~~PORTLAND CEMENT~~).  
**(SECOND PASS)**
- FOR THE PURPOSES OF QUANTITY CALCULATION, THE FOLLOWING ASSUMPTIONS HAVE BEEN MADE: ITEM 900.675 SPECIAL PROVISION (COLD MIXED RECYCLED BITUMINOUS PAVEMENT, PORTLAND CEMENT) WILL REQUIRE 3% BY WEIGHT OF ITEM 900.683 SPECIAL PROVISION (EMULSIFIED ASPHALT, COLD MIX WITH CEMENT); ~~ITEM 900.680 SPECIAL PROVISION (PORTLAND CEMENT FOR BASE STABILIZATION) WAS ESTIMATED AT 4% BY WEIGHT OF ITEM 900.675 SPECIAL PROVISION (RECLAIMED STABILIZED BASE, PORTLAND CEMENT);~~ ITEM 900.680 SPECIAL PROVISION (PORTLAND CEMENT FOR COLD MIXED RECYCLING) WAS ESTIMATED AT 1% BY WEIGHT OF ITEM 900.675 SPECIAL PROVISION (COLD MIXED RECYCLED BITUMINOUS PAVEMENT, PORTLAND CEMENT); AND ITEM 900.683 SPECIAL PROVISION (FOG SEAL SURFACE TREATMENT) WAS ESTIMATED AT AN APPLICATION RATE OF 0.15 GAL/SY.
- SUPERPAVE BITUMINOUS CONCRETE PAVEMENT TOLERANCE = +/-1/4" (TOTAL PAVEMENT THICKNESS), COLD MIXED RECYCLED BITUMINOUS PAVEMENT TOLERANCE = +/-1/4" (TOTAL BASE COURSE THICKNESS). SUBBASE OF CRUSHED GRAVEL, FINE GRADED TOLERANCE = +/- 1" (TOTAL SUBBASE THICKNESS).
- EMULSIFIED ASPHALT TYPE CRS-IH OR RS-IH SHALL BE APPLIED AS A TACK COAT ON ALL EXISTING OR COLD PLANED PAVEMENT SURFACES AT THE RATE OF 0.08 GAL/SY, 0.060 GAL/SY ON ALL COLD MIX PAVEMENT SURFACES, AND BETWEEN ALL COURSES OF BITUMINOUS CONCRETE PAVEMENT AT THE RATE OF 0.040 GAL/SY. PAYMENT WILL BE UNDER ITEM 900.683, "SPECIAL PROVISION (EMULSIFIED ASPHALT) (RS-IH OR CRS-IH)".
- THE WEARING COURSE SHALL BE TYPE IVS SUPERPAVE BITUMINOUS CONCRETE PAVEMENT, THE INTERMEDIATE COURSE SHALL BE TYPE IIS SUPERPAVE BITUMINOUS CONCRETE PAVEMENT, AND THE BASE COURSE SHALL BE SPECIAL PROVISION (COLD MIXED RECYCLED BITUMINOUS PAVEMENT, PORTLAND CEMENT). ALL ASPHALT CEMENT USED IN THE SUPERPAVE BITUMINOUS CONCRETE PAVEMENT SHALL BE AS SPECIFIED IN SUBSECTION 490.03(b).
- ALL EDGES OF PAVEMENT SHALL BE BACKED UP TO FULL HEIGHT WITH AGGREGATE SHOULDER MATERIAL AS DIRECTED BY THE ENGINEER AND WILL BE PAID FOR UNDER ITEM 402.13 AGGREGATE SHOULDERS, RAP.
- ALL PAVED AND GRAVEL DRIVES SHALL RECEIVE A PAVED APRON OF 4' AND ALL FIELD ACCESSES SHALL RECEIVE A 2' PAVED APRON UNLESS OTHERWISE SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER. ANY AND ALL REQUIRED EXCAVATION IN DRIVE AREAS SHALL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE NEW BITUMINOUS SURFACE SHALL BE CONSTRUCTED AS DIRECTED AND WILL BE PAID FOR UNDER ITEM 900.675, "SPECIAL PROVISION (HAND-PLACED BITUMINOUS CONCRETE MATERIAL, DRIVES)".
- ITEM 613.10 STONE FILL, TYPE I; ITEM 651.40 GRUBBING MATERIAL (6"); ITEM 653.20 TEMPORARY EROSION MATTING; AND ITEM 608.25 ALL PURPOSE EXCAVATOR RENTAL, TYPE I HAVE BEEN INCLUDED FOR AREAS WITH PROPOSED SIDE SLOPES STEEPER THAN 1:1.5 AND TO PROVIDE FOR REPAIR OF EXISTING STONE LINED DRAINAGE OUTLETS OR WASHOUTS LOCATED ALONG THE ROADWAY SIDE SLOPES AS DIRECTED BY THE ENGINEER. AN ESTIMATED QUANTITY OF ITEM 649.31 GEOTEXTILE UNDER STONE FILL HAS BEEN INCLUDED TO BE USED AS DIRECTED BY THE ENGINEER.
- ESTIMATED QUANTITIES OF ITEM 649.51 GEOTEXTILE FOR SILT FENCE AND ITEM 653.60 EROSION LOG SHALL BE USED AT LOCATIONS DETERMINED BY THE ENGINEER. FOR ESTIMATING PURPOSES, IT WAS ASSUMED THAT THESE ITEMS WOULD BE PLACED APPROXIMATELY ALONG THE TOE-OF-SLOPE AT ALL STONE FILL INSTALLATIONS WITH SILT FENCE TO BE USED WHERE EXCAVATION IS IN CLOSE PROXIMITY TO ACTIVE WATER COURSES. EROSION LOGS TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
- ITEM 651.40 GRUBBING MATERIAL (2") AND ITEM 653.20 TEMPORARY EROSION MATTING HAVE BEEN INCLUDED FOR AREAS WITH PROPOSED SIDE SLOPES STEEPER THAN 1:2 BUT FLATTER THAN 1:1.5 AS DIRECTED BY THE ENGINEER.
- PIPE INLET AND OUTLET AREAS OF DITCH CLEANING THROUGHOUT THE PROJECT SHALL BE PERFORMED AT LOCATIONS SPECIFIED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. PAYMENT SHALL BE MADE UNDER THE APPROPRIATE RENTAL ITEM(S).
- DAMAGE TO ANY DROP INLETS, CROSS-CULVERTS, OR OTHER DRAINAGE FEATURES SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST TO THE STATE.
- AN ESTIMATED QUANTITY OF ITEM 619.17 YIELDING MARKER POSTS HAS BEEN INCLUDED TO DELINEATE PIPE INLETS, PIPE OUTLETS AND DROP INLETS LOCATED OUTSIDE OF THE PAVEMENT SURFACE OR AS DIRECTED BY THE ENGINEER.
- THE PROPOSED GUARDRAIL SHALL BE INSTALLED IN A LOCATION THAT MAXIMIZES THE DISTANCE FROM THE CENTER OF THE ROAD TO THE FACE OF THE GUARDRAIL. 3'-7" OF BACKING IS REQUIRED BEHIND THE FACE OF GUARDRAIL WITH 6'-0" POSTS. IF THIS CANNOT BE OBTAINED, 8'-0" POSTS SHALL BE USED.
- ESTIMATED QUANTITIES OF ITEMS 608.25, "ALL PURPOSE EXCAVATOR RENTAL, TYPE I", 608.37, "TRUCK RENTAL", AND 608.40, "LOADER RENTAL, TYPE I" HAVE BEEN INCLUDED FOR THE PROVISION OF CONSTRUCTING GUARDRAIL END SECTIONS WITH EXCAVATED DITCHING MATERIAL AND THE REMOVAL OF BUILT UP EXCESS SHOULDER MATERIAL. AN ESTIMATED QUANTITY OF ITEM 203.30, "EARTH BORROW" HAS BEEN INCLUDED FOR USE WITH THE GUARDRAIL END SECTIONS. 25 CY OF ITEM 203.30, "EARTH BORROW" HAS BEEN ESTIMATED FOR EACH NEW END SECTION. GUARDRAIL END SECTIONS SHALL BE CAPPED WITH AN ESTIMATED 3 INCH DEPTH OF ITEM 651.35, "TOPSOIL" UNLESS OTHERWISE DIRECTED BY THE ENGINEER. THE QUANTITIES INCLUDED REFLECT 5 CY OF ITEM 651.35, "TOPSOIL" FOR EACH NEW GUARDRAIL END SECTION. ITEM 653.20, "TEMPORARY EROSION MATTING" SHALL BE PLACED ON SLOPES GREATER THAN 1:6 CREATED BY THE GUARDRAIL END SECTIONS. THE QUANTITIES INCLUDED REFLECT 25 SY OF ITEM 653.20, "TEMPORARY EROSION MATTING" FOR EACH NEW GUARDRAIL END SECTION. PRIOR TO THE PLACEMENT OF TEMPORARY EROSION MATTING, THE AREA SHALL BE TOPSOILED AND SEEDED USING ITEM 651.35, "TOPSOIL", ITEM 651.15, "SEED", ITEM 651.18 "FERTILIZER", AND ITEM 651.20 "AGRICULTURAL LIMESTONE".
- WHEN FINISHED GRADE HAS BEEN MET, THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL SIGNS BEING RETAINED ARE IN CONFORMANCE WITH VTRANS STANDARD E-121 AS DIRECTED BY THE ENGINEER.

**NOTES (CONT'D)**

- THE QUANTITY FOR ITEM 900.680 SPECIAL PROVISION (MATERIAL TRANSER VEHICLE, COLD MIXED RECYCLED BITUMINOUS PAVEMENT) WAS DETERMINED USING A UNIT WEIGHT FACTOR OF 2.0 TONS/CY.
- THE CONTRACTOR SHALL BE AWARE THAT AN UNDERGROUND FIBER OPTIC FACILITY EXISTS ALONG VT. ROUTE 107. THE LOCATION SHOWN ON THE PLANS IS APPROXIMATE, AND THE POTENTIAL EXISTS FOR CONFLICTS WITH THE FIBER OPTIC AND THE PROPOSED UNDERDRAIN AT VARIOUS LOCATIONS THROUGHOUT THE PROJECT. THE CONTRACTOR IS ADVISED THAT, PRIOR TO CONSTRUCTION, ALL PROPOSED UNDERDRAIN LOCATIONS SHALL BE FIELD VERIFIED WITH THE ENGINEER AND RELOCATED AS NECESSARY TO ELIMINATE ANY CONFLICTS WITH THE FIBER OPTIC FACILITY. PAYMENT WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT ITEMS.
- ITEM 201.10 CLEARING AND GRUBBING HAS BEEN INCLUDED TO REMOVE ANY VEGETATION, PARTIAL AND FULL TREE REMOVAL, THINNING AND TRIMMING FOR SIGNS, AND ANY ASSOCIATED GRUBBING WITHIN THE ASSUMED 3 ROD RIGHT OF WAY OR GREATER IF NECESSARY WHEN RIGHT OF WAY HAS BEEN CONFIRMED BEYOND THE ASSUMED 3 RODS. THE ENGINEER MAY EXCLUDE REMOVAL IN SOME AREAS WHERE DEEMED NECESSARY AND APPROPRIATE OR NECESSITATED BY PERMIT REQUIREMENTS PER THE CONSTRUCTION ENVIRONMENTAL ENGINEER. THINNING AND TRIMMING SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 201.
- ALL EQUIPMENT, REQUIREMENTS, AND PROVISIONS OF CONTRACT ITEMS 900.620 SPECIAL PROVISION (GNSS CONSTRUCTION INSPECTION EQUIPMENT), 900.645 SPECIAL PROVISION (GPS MACHINE CONTROL GRADING), 900.645 SPECIAL PROVISION (INTELLIGENT COMPACTION FOR SUBBASE/RSB), 900.645 SPECIAL PROVISION (INTELLIGENT COMPACTION FOR BITUMINOUS CONCRETE), AND 900.645 SPECIAL PROVISION (THERMAL PROFILING EQUIPMENT FOR BITUMINOUS MATERIAL) SHALL BE AVAILABLE AND BE UTILIZED BY THE CONTRACTOR FOR THE ENTIRE DURATION OF THE CONTRACT.

**GENERAL NOTES**

- SEED 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 FORMULAS 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 AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

**SEEDING FORMULA**

RATE: DOUBLE IF HYDROSEEDING

% WT.	LBS./A.	NAME	PUR %	GERM %
38	32	CREEPING RED FESCUE	98	90
29	24	SPARTAN HARD FESCUE	95	85
15	12	AZAY SHEEP'S FESCUE	95	87
15	12	ANNUAL RYE GRASS	95	90
3	--	INERTS	--	--
100.0	80.0			

**RECOMMENDED ORDER OF OPERATIONS FOR RECLAIMED STABILIZED BASE WITH PORTLAND CEMENT PAVEMENT REHABILITATION**

STEP	DESCRIPTION	PAYMENT ITEM(S)
1	INSTALL DRAINAGE PIPES, DRAINAGE STRUCTURES, AND UNDERDRAIN	ITEM 604.18 PRECAST REINFORCED CONCRETE DROP INLET WITH CAST IRON GRATE, ITEM 605.10 6 INCH UNDERDRAIN PIPE.
2	COLD PLANE EXISTING BITUMINOUS CONCRETE PAVEMENT 4"	ITEM 210.10 COLD PLANING, BITUMINOUS PAVEMENT
3	REPAIR EXISTING SHOULDERS AND COMPLETE UNDERCUTS AS DIRECTED BY THE ENGINEER	ITEM 203.15 COMMON EXCAVATION ITEM 301.28 SUBBASE OF CRUSHED GRAVEL, FINE GRADED ITEM 301.35 SUBBASE OF DENSE GRADED CRUSHED STONE ITEM 649.11 GEOTEXTILE FOR ROADBED SEPARATOR
4	RECLAIM EXISTING ROADBED 8" FROM TOP OF SLOPE TO TOP OF SLOPE USING WATER FOR STABILIZATION AND COMPACTION	ITEM 310.20 RECLAIMED STABILIZED BASE (SEE NOTE 4)
5	CORRECT SUPERELEVATION DEFICIENCIES	ITEM 301.28 SUBBASE OF CRUSHED GRAVEL, FINE GRADED (SEE NOTE 3)
6	RECLAIM AREAS OF SUPERELEVATION CORRECTION 8" AS DIRECTED BY THE ENGINEER.	INCIDENTAL TO ITEM 310.20 RECLAIMED STABILIZED BASE <b>SECOND PASS</b>
7	PLACE PORTLAND CEMENT ON ROADBED SURFACE AND RECLAIM ROADBED 8", CURE, MICROCRACK, AND APPLY FOG SEAL SURFACE TREATMENT <b>RECLAIM SECOND PASS</b>	ITEM 900.675 SPECIAL PROVISION (RECLAIMED STABILIZED BASE, <del>PORTLAND CEMENT</del> ), <del>ITEM 900.680 SPECIAL PROVISION (PORTLAND CEMENT FOR BASE STABILIZATION), AND ITEM 900.683 SPECIAL PROVISION (FOG SEAL SURFACE TREATMENT)</del>
8	PLACE 2 1/2" COLD MIXED RECYCLED ASPHALT SURFACE WITH PORTLAND CEMENT AND USE EMULSIFIED ASPHALT AS A LIQUID BINDER <b>2 1/2" - 3"</b>	ITEM 900.675 SPECIAL PROVISION (COLD MIXED RECYCLED BITUMINOUS PAVEMENT, PORTLAND CEMENT), ITEM 900.680 SPECIAL PROVISION (PORTLAND CEMENT FOR COLD MIXED RECYCLING) AND ITEM 900.683 SPECIAL PROVISION (EMULSIFIED ASPHALT, COLD MIX WITH CEMENT)
9	PLACE <del>3"</del> TYPE IIS INTERMEDIATE COURSE	ITEM 490.30 SUPERPAVE BITUMINOUS CONCRETE PAVEMENT
10	PLACE 1 1/2" TYPE IVS WEARING COURSE <b>PLACE 1 3/4" TYPE III BINDER COURSE</b>	ITEM 490.30 SUPERPAVE BITUMINOUS CONCRETE PAVEMENT

NOTE:

- THIS LIST OF PROCEDURES FOR REHABILITATING THE EXISTING ROADBED IS PRESENTED FOR INFORMATIONAL PURPOSES ONLY AND SHALL NOT BE CONSIDERED ALL INCLUSIVE. THE CONTRACTOR SHALL PREPARE THEIR OWN SCHEDULE OF OPERATIONS TO COMPLETE THE PROPOSED WORK IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS WHILE UTILIZING THE APPROPRIATE PAY ITEMS AS SHOWN IN THE PLANS AS DIRECTED BY THE ENGINEER.

<b>PROJECT TYPICAL SHEET #2</b>	PROJECT NAME: STOCKBRIDGE-BETHEL
	PROJECT NUMBER: STP 2910(I)
	FILE NAME: z10b214_typ_02.dgn PROJECT LEADER: D.E.G. DESIGNED BY: L.M.B.