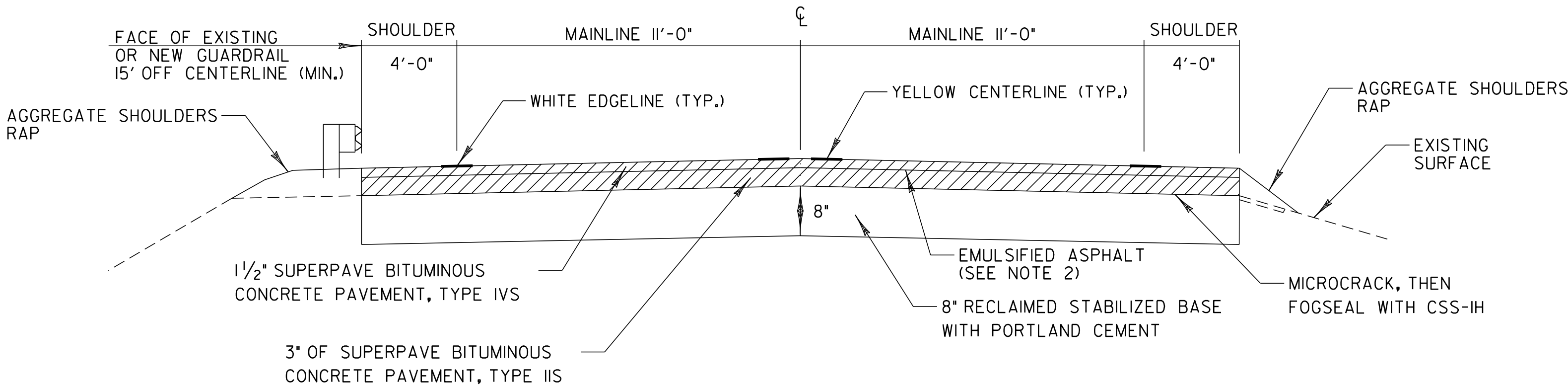




RECLAIMED STABILIZED BASE TYPICAL SECTION

WORCESTER
STA. 212+42.00 TO 414+63.92
ELMORE
STA. 0+00.00 TO STA. 183+60.60

TYPICAL ORDER OF OPERATIONS FOR RECLAIMED STABILIZED BASE WITH PORTLAND CEMENT PAVEMENT REHABILITATION		
STEP	DESCRIPTION	PAYMENT ITEM(S)
1	REPAIR EXISTING SHOULDERS AS DIRECTED BY THE RESIDENT ENGINEER	ITEM 301.28 "SUBBASE OF CRUSHED GRAVEL, FINE GRADED"
2	RECLAIM EXISTING ROADBED 8" USING WATER FOR STABILIZATION AND COMPACTION	ITEM 310.20 "RECLAIMED STABILIZED BASE"
3	CORRECT SUPERELEVATION DEFICIENCIES	ITEM 301.28 "SUBBASE OF CRUSHED GRAVEL, FINE GRADED"
4	PLACE PORTLAND CEMENT ON ROADBED SURFACE AND RECLAIM ROADBED 8", CURE, MICROCRACK, AND APPLY FOG SEAL SURFACE TREATMENT	ITEM 900.675 "SPECIAL PROVISION (RECLAIMED STABILIZED BASE, PORTLAND CEMENT)", ITEM 900.680 "SPECIAL PROVISION (PORTLAND CEMENT FOR BASE STABILIZATION)" AND ITEM 900.683 "SPECIAL PROVISION (FOG SEAL SURFACE TREATMENT)"
5	PLACE 3" TYPE IIS BASE COURSE	ITEM 490.30 "SUPERPAVE BITUMINOUS CONCRETE PAVEMENT"
6	PLACE 1 1/2" TYPE IVS WEARING COURSE	ITEM 490.30 "SUPERPAVE BITUMINOUS CONCRETE PAVEMENT"

NOTE:

1. 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 UTILIZING THE APPROPRIATE PAY ITEMS AS SHOWN IN THE PLANS AS DIRECTED BY THE RESIDENT 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 LB/A			

GENERAL NOTES

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

SEED ITEM 651.15: TO BE APPLIED PER SEEDING FORMULAS OR AS DIRECTED BY THE RESIDENT ENGINEER.

FERTILIZER ITEM 651.18: 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 ITEM 651.20: TO BE APPLIED AT THE RATE OF 2 TONS/ACRE, OR AS DIRECTED BY THE RESIDENT ENGINEER.

HAY MULCH ITEM 651.25: TO BE PLACED ON THE EARTH SLOPES AT THE RATE OF 2 TONS/ACRE, OR AS DIRECTED BY THE RESIDENT ENGINEER.

TOPSOIL ITEM 651.35: TO BE USED WITH SEED AS INDICATED ON THE PLANS, OR AS DIRECTED BY THE RESIDENT ENGINEER.

NOTES:

- THE WEARING COURSE SHALL BE TYPE IVS SUPERPAVE BITUMINOUS CONCRETE PAVEMENT. THE BASE COURSE SHALL BE TYPE IIS SUPERPAVE BITUMINOUS CONCRETE PAVEMENT. THE LEVELING COURSE SHALL BE TYPE IVS SUPERPAVE BITUMINOUS CONCRETE PAVEMENT WHERE REQUIRED OR AS DIRECTED BY THE RESIDENT ENGINEER. ALL ASPHALT CEMENT USED IN THE SUPERPAVE BITUMINOUS CONCRETE PAVEMENT SHALL BE AS SPECIFIED IN SECTION 490 OF THE GENERAL SPECIAL PROVISIONS.
- EMULSIFIED ASPHALT SHALL BE APPLIED ON ALL EXISTING PAVEMENT SURFACES AND BETWEEN ALL COURSES OF PAVEMENT NOT INCLUDING RECLAIMED SURFACES AT THE RATE OF 0.025 GAL/SY OR AS DIRECTED BY THE RESIDENT ENGINEER. PAYMENT WILL BE UNDER ITEM 404.65, "EMULSIFIED ASPHALT".
- SUPERPAVE BITUMINOUS CONCRETE PAVEMENT TOLERANCE = +/- 1/4 INCH (TOTAL PAVEMENT THICKNESS EXCLUDING LEVELING).
- PRIOR TO RECLAIMING, ANY EXISTING SHOULDER MATERIAL DEEMED UNSUITABLE BY THE RESIDENT ENGINEER WILL BE EXCAVATED TO THE DEPTH OF RECLAIMING OR AS DIRECTED BY THE RESIDENT ENGINEER. EXCAVATED MATERIAL WILL BE SPREAD ON THE ADJACENT SLOPES OR REMOVED FROM THE PROJECT AS DIRECTED BY THE RESIDENT ENGINEER. THIS WORK WILL BE PAID FOR USING THE APPROPRIATE RENTAL ITEMS. THE METHOD OF REMOVAL AND THE USE OF RENTAL ITEMS SHALL BE APPROVED BY THE RESIDENT ENGINEER. PRIOR TO ANY WORK BEING DONE, MATERIAL REMOVAL SHALL BE REPLACED WITH ITEM 301.40 "SUBBASE, RAP". AN ADDITIONAL QUANTITY OF 301.40 SUBBASE, RAP HAS BEEN INCLUDED TO CORRECT SUPPERELEVATION AND GRADATION DEFICIENCIES WITHIN THE RECLAIMED SECTION. AN ESTIMATED THICKNESS OF 2" HAS BEEN INCLUDED FOR THE ENTIRE RECLAIMED SURFACE AREA. THE COST ASSOCIATED WITH PROVIDING COLD PLANE GRINDINGS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 301.40 "SUBBASE, RAP".
- COLD PLANING SHALL BE COMPLETED ACCORDING TO THE TYPICAL OR AS OTHERWISE NOTED ON THE PLANS. A FULL DEPTH BUTT JOINT SHALL BE CONSTRUCTED AT THE BEGINNING AND END OF THE PROJECT, ALL SIDE ROAD APPROACHES AS DENOTED ON THE PROJECT PLANS OR AS OTHERWISE DIRECTED BY THE RESIDENT ENGINEER. SAWCUTTING WILL NOT BE PAID FOR SEPARATELY. IT SHALL BE CONSIDERED INCIDENTAL TO ITEM 210.10 "COLD PLANING, BITUMINOUS PAVEMENT".
- ALL DRIVES SHALL RECEIVE A PAVED APRON OF 4' OR AS DIRECTED BY THE RESIDENT ENGINEER. ANY AND ALL REQUIRED EXCAVATION IN DRIVE AREAS SHALL BE INCIDENTAL TO ITEM 900.675 "SPECIAL PROVISION (HAND-PLACED BITUMINOUS CONCRETE MATERIAL, DRIVES)". 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)".
- 3'-7" OF BACKING IS REQUIRED BEHIND THE FACE OF GUARDRAIL WITH 6 FOOT POSTS. IF THIS CAN NOT BE OBTAINED THEN 8 FOOT POSTS SHALL BE USED. THESE ITEMS SHALL BE PAID UNDER ITEM 621.20 "STEEL BEAM GUARDRAIL, GALVANIZED" AND ITEM 621.205 "STEEL BEAM GUARDRAIL, GALVANIZED W/8 FEET POSTS".
- A QUANTITY FOR ITEM 604.412, "REHAB DI, CB OR MH CLASS I" HAS BEEN INCLUDED IN THE QUANTITIES TO BE USED AS DIRECTED BY THE RESIDENT ENGINEER. ALL DI'S SHALL BE RAISED OR REHABILITATED SUCH THAT THE NEW GRATE ELEVATION IS LEVEL WITH THE SURROUNDING TERRAIN.
- ALL EDGES OF PAVEMENT WITHIN THE COLD PLANE SECTION SHALL BE BACKED UP TO FULL HEIGHT WITH COLD PLANE GRINDINGS AS DIRECTED BY RESIDENT ENGINEER AND WILL BE PAID FOR UNDER ITEM 402.13 "AGGREGATE SHOULDERS, RAP". ADDITIONAL MATERIAL REQUIRED AFTER THE COLD PLANE GRINDINGS HAVE BEEN USED WILL BE PAID FOR UNDER ITEM 402.12 "AGGREGATE SHOULDERS".
- ESTIMATED QUANTITIES OF ITEM 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 MTS. GUARDRAIL END SECTIONS SHALL BE CAPPED WITH AN ESTIMATED 3 INCH DEPTH OF ITEM 402.12, "AGGREGATE SHOULDERS" UNLESS OTHERWISE DIRECTED BY THE RESIDENT ENGINEER. THE QUANTITIES INCLUDED REFLECT 5 TONS OF ITEM 402.12, "AGGREGATE SHOULDERS" 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" AND ITEM 651.15, "SEED".
- STABILIZING AGENT FOR THE ITEM 900.675 "SPECIAL PROVISION (RECLAIMED STABILIZED BASE)" WILL BE PORTLAND CEMENT. PAYMENT WILL BE MADE UNDER ITEM 900.680 "SPECIAL PROVISION (PORTLAND CEMENT FOR BASE STABILIZATION)".
- ESTIMATED QUANTITY FOR ITEM 619.17 "YIELDING MARKER POSTS" HAS BEEN INCLUDED TO DELINEATE PIPE INLETS, PIPE OUTLETS AND DROP INLETS LOCATED OUTSIDE THE PAVEMENT SURFACES OR AS DIRECTED BY THE RESIDENT ENGINEER.
- STEEL BEAM GUARDRAIL WITH STEEL POSTS SHALL BE USED ON THIS PROJECT.
- IN AREAS WHERE A UTILITY POLE OR SIMILAR OBJECT IS LOCATED WITHIN 4 FEET BEHIND GUARDRAIL, A REDUCED POST SPACING SHALL BE USED. THE REDUCED SPACING IS DETAILED ON SHEET 5.
- A QUANTITY HAS BEEN ESTIMATED FOR ITEM 201.31 "THINNING AND TRIMMING FOR SIGNS".
- A QUANTITY HAS BEEN ESTIMATED FOR ITEM 617.10 "RELOCATE MAILBOX, SINGLE SUPPORT".
- A QUANTITY HAS BEEN ESTIMATED FOR ITEM 605.10 "6 INCH UNDERDRAIN PIPE", ITEM 605.20 "6 INCH UNDERDRAIN CARRIER PIPE" AND ITEM 605.95 "UNDERDRAIN FLUSHING BASIN" TO BE USED AS DIRECTED BY THE RESIDENT ENGINEER. UNDERDRAIN SHALL BE INSTALLED PRIOR TO THE FINAL RECLAIM PASS.

PROJECT
TYPICAL
SHEET 1

PROJECT NAME: WORCESTER-ELMORE
PROJECT NUMBER: STP 2209(1)S

FILE NAME: 99c170.dgn
PROJECT LEADER: CDL
DESIGNED BY: CDL
PLOT FILE: 99c170_3.1
PLOT DATE: 23-SEP-2011 15:24
DRAWN BY: SJL
CHECKED BY: EPD
SHEET 3 OF 36

DETAILS ARE NOT TO SCALE