

GENERAL NOTES

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2001, AND ITS LATEST REVISIONS.
2. GUARDRAIL DETAIL SHEETS ARE PROVIDED AS A GENERAL GUIDE TO GUARDRAIL IMPROVEMENTS. SPECIFIC LOCATIONS OF CONSTRUCTION AND TREATMENT METHODS SHALL BE FIELD LOCATED AND APPROVED BY THE ENGINEER.
3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MINIMIZE DAMAGE TO THE EXISTING PAVEMENT AND PAVEMENT MARKINGS. THE CONTRACTOR, AT NO ADDITIONAL COMPENSATION, SHALL REPAIR ALL PAVEMENT AND PAVEMENT MARKINGS DAMAGED DURING CONSTRUCTION.
4. AS DIRECTED BY THE ENGINEER, DRAINAGE SWALES, VERTICAL GRANITE CURBS, AND GRANITE SLOPE EDGING SHALL BE SWEEPED AND THE COLLECTED DEBRIS DISPOSED OF BY THE CONTRACTOR. PAYMENT SHALL BE UNDER ITEM 608.31, "POWER BROOM RENTAL, TYPE II."
5. ITEM 203.99 "SHOULDER BERM REMOVAL", HAS BEEN INCLUDED AS AN ESTIMATED QUANTITY TO BE USED IN NECESSARY LOCATIONS, OR AS DIRECTED BY THE ENGINEER. THE PLAN QUANTITY REPRESENTS BERM REMOVAL FOR 75% OF THE RETAINED STEEL BEAM GUARDRAIL LENGTH. ITEM 203.99 WILL BE PAID ONLY IN RETAINED GUARDRAIL AREAS AS DIRECTED BY THE ENGINEER

STEEL BEAM GUARDRAIL NOTES

1. WHERE GUARDRAIL BEAM UNITS ARE DAMAGED AND GUARDRAIL POSTS AND OFFSET BLOCKS ARE NOT DAMAGED, THE GUARDRAIL BEAM UNITS SHALL BE REMOVED AND DISPOSED OF. NEW GUARDRAIL BEAM UNITS SHALL BE ATTACHED TO THE EXISTING POSTS AND OFFSET BLOCKS. THIS WORK SHALL BE PAID FOR UNDER ITEM 621.77, "REPLACE GUARDRAIL BEAM UNIT."
2. WHERE GUARDRAIL POSTS AND / OR OFFSET BLOCKS ARE DAMAGED, THE GUARDRAIL BEAM UNITS, POSTS, OFFSET BLOCKS AND CURBING SHALL BE REMOVED AND DISPOSED OF. NEW STEEL POSTS, SYNTHETIC OFFSET BLOCKS AND STEEL BEAM GUARDRAIL SHALL BE INSTALLED. THE OFFSET BLOCK CHOSEN SHALL BE ONE OF THE OFFSET BLOCKS APPEARING ON THE APPROVED PRODUCTS LIST ON FILE WITH THE AGENCY'S MATERIALS AND RESEARCH SECTION. REMOVAL AND DISPOSAL SHALL BE PAID FOR UNDER ITEM 621.80, "REMOVAL AND DISPOSAL OF GUARDRAIL." INSTALLATION OF NEW GUARDRAIL, POSTS AND OFFSET BLOCKS SHALL BE PAID FOR UNDER ITEM 621.20, "STEEL BEAM GUARDRAIL (GALVANIZED)." IF CURBING IS NEEDED, NEW 4" BITUMINOUS CONCRETE CURB SHALL BE PAID FOR UNDER ITEM 616.31, "BITUMINOUS CONCRETE CURB, TYPE B."
3. ALL SECTIONS OF GUARDRAIL SHALL BE FITTED WITH NEW GUARDRAIL DELINEATORS IN ACCORDANCE WITH VTRANS STANDARD G-1 AT 7.6 METER INTERVALS (EACH FIFTH POST). DELINEATORS PLACED ON EXISTING GUARDRAIL SHALL BE PAID FOR UNDER ITEM 676.15, "REMOVE AND REPLACE REFLECTOR UNITS". DELINEATORS PLACED ON NEW GUARDRAIL SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCIDENTAL TO THE GUARDRAIL PAY ITEM.

GUARDRAIL TERMINAL SECTION NOTES

1. WHERE CALLED FOR IN THE PLANS OR AS DIRECTED BY THE ENGINEER A MANUFACTURED TERMINAL SECTION (MTS) SHALL BE INSTALLED ON THE LEADING END OF GUARDRAIL. THE MTS SHALL BE IN ACCORDANCE WITH APPLICABLE VTRANS SPECIFICATIONS. PAYMENT FOR THIS WORK SHALL BE MADE UNDER ITEM 621.505, "MANUFACTURED TERMINAL SECTION" OF THE TYPE SPECIFIED.
2. WHERE AN MTS IS TO BE CONSTRUCTED, THE AREA SHALL BE GRADED IN ACCORDANCE WITH VTRANS STANDARD G-19. ALL EXISTING TOPSOIL SHALL BE STRIPPED FROM THE EXISTING SLOPE IN THE AREA OF A PROPOSED MTS AND STOCKPILED. A PLATFORM FOR THE MTS SHALL BE CONSTRUCTED AND THE SLOPE GRADED USING EARTH BORROW. THE PLATFORM SHALL BE TOPPED WITH 150 mm OF AGGREGATE SHOULDERS. ALL EXPOSED SIDE SLOPES SHALL BE TOPSOILED USING STOCKPILED TOPSOIL, SEEDED, FERTILIZED, AND MULCHED WITHIN 48 HOURS. PAYMENT FOR EXCAVATION OF THE TOPSOIL SHALL BE PAID UNDER ITEM 203.15 "COMMON EXCAVATION." PAYMENT FOR EARTH BORROW SHALL BE PAID UNDER ITEM 203.30 "EARTH BORROW." PAYMENT FOR AGGREGATE SHOULDERS SHALL BE MADE UNDER ITEM 402.11, "AGGREGATE SHOULDERS, TRUCK MEASUREMENT (MOD. - COLD PLANE GRINDINGS) OR 402.11, "AGGREGATE SHOULDERS, TRUCK MEASUREMENT". PLACEMENT OF THE STOCKPILED TOPSOIL SHALL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED INCIDENTAL TO ITEM 203.15, "COMMON EXCAVATION." SEED, FERTILIZER AND MULCH SHALL BE PAID FOR UNDER APPROPRIATE CONTRACT ITEMS.
3. WHERE CALLED FOR IN THE PLANS OR AS DIRECTED BY THE ENGINEER A TRAILING END TERMINAL SHALL BE INSTALLED ON THE TRAILING END OF GUARDRAIL. THE TRAILING END TERMINAL SHALL BE CONSTRUCTED IN ACCORDANCE WITH APPLICABLE VTRANS STANDARDS AND SPECIFICATIONS. PAYMENT FOR THIS WORK SHALL BE PAID UNDER ITEM 621.52, "TRAILING END TERMINAL."

BITUMINOUS CONCRETE CURB, TYPE B AND BITUMINOUS GUTTERS NOTES

1. WHERE NEW BITUMINOUS CONCRETE CURBING IS TO BE PLACED, THE CONTRACTOR SHALL SAWCUT EXISTING BITUMINOUS CONCRETE PAVEMENT 300mm FROM THE PROPOSED FACE OF GUARDRAIL POSTS. THE EXISTING ASPHALT FILLET AND BITUMINOUS CONCRETE PAVEMENT SHALL BE REMOVED TO THE NEAT LINE OF THE SAW CUT. WHERE GUARDRAIL IS TO BE REMOVED PAYMENT FOR THIS WORK SHALL BE CONSIDERED INCIDENTAL TO ITEM 621.80, "REMOVAL AND DISPOSAL OF GUARDRAIL".
2. WHERE NEW STEEL BEAM GUARDRAIL AND BITUMINOUS CONCRETE CURB ARE INSTALLED ADJACENT TO AN EXISTING DROP INLET (DI) THE CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE OF STORM WATER INTO THE EXISTING DI. AT THE DIRECTION OF THE ENGINEER, THE CONTRACTOR SHALL MOVE OR MODIFY EXISTING DI'S. THIS WORK SHALL BE PAID UNDER ITEMS 604.412, "REHABILITATING DI, CB OR MH CLASS I", ITEM 604.415, "REHABILITATING DI, CB OR MH CLASS II" AND ITEM 604.418, "REHABILITATING DI, CB OR MH CLASS III".
3. PREPARATION OF EXISTING SUBBASE AND REPLACEMENT OF BITUMINOUS CONCRETE PAVEMENT TO THE NEAT LINE OF THE SAW CUT SHALL BE PAID FOR UNDER ITEM 616.47, "BITUMINOUS CONCRETE GUTTERS AND TRAFFIC ISLANDS". ALL BITUMINOUS CONCRETE CURB SHALL BE BACKED WITH ITEM 402.11, "AGGREGATE SHOULDERS, TRUCK MEASUREMENT (MOD. - COLD PLANE GRINDINGS)" OR 402.11, "AGGREGATE SHOULDERS, TRUCK MEASUREMENT".
4. ALL OTHER WORK DEEMED NECESSARY TO INSTALL NEW BITUMINOUS CONCRETE CURBS SHALL BE CONSIDERED INCIDENTAL TO ITEM 616.31, "BITUMINOUS CONCRETE CURB, TYPE B".
5. WHERE BITUMINOUS CONCRETE GUTTERS ARE ENCOUNTERED, THEY SHALL BE EXCAVATED 200 mm DEEP, 150 mm OF SUBBASE OF DENSE GRADED CRUSHED STONE SHALL BE PLACED AND SHAPED, AND THE GUTTERS SHALL BE PAVED WITH 50 mm OF BITUMINOUS CONCRETE PAVEMENT. EXCAVATION SHALL BE PAID FOR UNDER ITEM 203.15, "COMMON EXCAVATION". SUBBASE OF DENSE GRADED CRUSHED STONE SHALL BE PAID FOR UNDER ITEM 301.35, "SUBBASE OF DENSE GRADED CRUSHED STONE". PAVEMENT SHALL MEET SPECIFICATION FOR MEDIUM DUTY BITUMINOUS CONCRETE PAVEMENT AND SHALL BE PAID FOR UNDER ITEM 616.47, "BITUMINOUS CONCRETE GUTTERS AND TRAFFIC ISLANDS".

TREATED TIMBER CURB NOTES

1. ALL TREATED TIMBER CURB THAT IS NOT CALLED FOR REMOVAL SHALL BE JOINTLY INSPECTED BY THE CONTRACTOR AND THE ENGINEER. AT THE DISCRETION OF THE ENGINEER, DEFICIENT AREAS OF TREATED TIMBER CURB SHALL BE REMOVED AND REPLACED. TREATED TIMBER CURB SHALL BE REMOVED BY SAWCUTTING THE PAVEMENT 300 mm FROM THE FACE OF POST. THE SAWCUT PAVEMENT, TIMBER CURB AND CONNECTION BRACKETS SHALL BE REMOVED AS SHOWN IN TREATED TIMBER CURB REMOVAL DETAIL ON SHEET 7. PAYMENT FOR THIS WORK SHALL BE MADE UNDER ITEM 616.41, "REMOVAL OF EXISTING CURB".
2. INSTALLATION OF NEW TREATED TIMBER CURB AND BITUMINOUS CONCRETE FILLET SHALL BE PAID FOR UNDER ITEM 616.35, "TREATED TIMBER CURB". AGGREGATE SHOULDER MATERIAL SHALL BE PLACED BEHIND THE NEW TREATED TIMBER CURB. AGGREGATE SHOULDERS SHALL BE PAID FOR UNDER ITEM 402.11, "AGGREGATE SHOULDERS, TRUCK MEASUREMENT" OR ITEM 402.11, "AGGREGATE SHOULDERS, TRUCK MEASUREMENT (MOD. - COLD PLANE GRINDINGS)". THE WORK SHALL BE COMPLETED IN ACCORDANCE WITH SECTION 616 OF THE SPECIFICATIONS AND IN ACCORDANCE WITH THE DETAIL FOR TREATED TIMBER CURB INSTALLATION ON SHEET 7.

CABLE GUARDRAIL NOTES

1. WHERE CALLED FOR IN THE PLANS OR AS DIRECTED BY THE ENGINEER, DAMAGED CABLE GUARDRAIL, POSTS AND TREATED TIMBER CURB SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. PAYMENT FOR REMOVAL AND DISPOSAL OF CABLE GUARDRAIL, POSTS AND CURB SHALL BE MADE UNDER ITEM 621.80, "REMOVAL AND DISPOSAL OF GUARDRAIL".
2. WHERE CALLED FOR IN THE PLANS OR AS DIRECTED BY THE ENGINEER, CABLE GUARDRAIL SHALL BE REPAIRED. REPAIR OF CABLE GUARDRAIL SHALL INCLUDE REPLACEMENT OF DAMAGED OR DEFORMED GUARDRAIL POSTS, REPLACEMENT OF DAMAGED OR MISSING J-BOLTS ON EXISTING REMAINING GUARDRAIL POSTS, AND RETENSIONING OF CABLE RAIL. REMOVAL AND DISPOSAL OF DAMAGED GUARDRAIL POSTS AND SUPPLYING AND INSTALLING NEW GUARDRAIL POSTS SHALL BE PAID FOR UNDER ITEM 621.76, "REPLACE GUARDRAIL POST ASSEMBLY". RETENSIONING CABLE GUARDRAIL SHALL BE PAID FOR UNDER ITEM 621.65, "ANCHOR FOR CABLE RAIL (MOD.)". SUPPLYING AND INSTALLING NEW J-BOLTS SHALL BE CONSIDERED INCIDENTAL TO RETENSIONING CABLE RAIL.
3. ALL CABLE GUARDRAIL THAT HAS BEEN REPAIRED SHALL RECEIVE NEW REFLECTIVE SHEETING ON EXISTING REFLECTOR UNITS. THE EXISTING REFLECTOR UNIT SHALL BE CLEANED FREE OF DEBRIS, DRIED, AND NEW SELF ADHESIVE SHEETING SHALL BE APPLIED OVER THE TOP OF THE EXISTING REFLECTOR UNIT. THE SHEETING SHALL BE TYPE VII, VII, OR IX FOR MEDIAN RAIL AND TYPE III OR GREATER FOR OUTSIDE RAIL. THE CLEANING OF EXISTING REFLECTOR UNITS AND THE SUPPLYING AND INSTALLATION OF NEW SHEETING SHALL BE PAID FOR UNDER ITEM 676.15, "REMOVE AND REPLACE REFLECTOR UNITS (MOD.)". IF THE EXISTING REFLECTOR UNIT IS MISSING, A NEW REFLECTOR UNIT SHALL BE INSTALLED UNDER ITEM 676.15, "REMOVE AND REPLACE REFLECTOR UNITS".

REMOVING AND RESETTING CURB

1. WHERE CALLED FOR IN THE PLANS "REMOVING AND RESETTING CURB" WILL MEAN "GRANITE SLOPE EDGING" OR "VERTICAL GRANITE CURB". THIS WORK SHALL BE COMPLETED IN ACCORDANCE WITH SECTION 616 OF THE SPECIFICATIONS.
2. THE CURBING TO BE REMOVED SHALL BE BY SAW CUTTING (NOT WHEEL CUTTING) THE PAVEMENT, 600 MM MEASURED HORIZONTALLY FROM THE TOP OF THE CURB TO THE ROADWAY, 50 MM IN DEPTH.
3. ALL WORK AND MATERIALS TO REMOVE AND RESET CURB INCLUDING SAW CUTTING, EXCAVATION, SUBBASE MATERIAL, AND PLACING NEW PAVEMENT WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE CONSIDERED INCIDENTAL TO ITEM 616.40 "REMOVING AND RESETTING CURB".

SEEDING FORMULA RURAL AREAS

% MASS	kg/ha	NAME	PUR %	GERM %
37.5	26.0	CREeping RED FESCUE	98	85
37.5	26.0	TALL FESCUE	95	90
5.0	4.0	RED TOP	95	90
15.0	10.0	BIRDSFOOT TREFOIL	98	85
5.0	4.0	ANNUAL RYE GRASS	95	85
100.0	70.0			

GENERAL NOTES

SEED MIXTURE: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY MASS 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 560 kg/ha. (HYDRO SEEDERS MAY USE 19-19-19 FORMULA).

AGRICULTURAL LIMESTONE: TO BE APPLIED AT THE RATE OF 4.5 Ton/ha, OR AS DIRECTED BY THE ENGINEER.

HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 4.5 Ton/ha, OR AS DIRECTED BY THE ENGINEER.

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

PERFORMANCE-GRADED ASPHALT BINDER

1. ALL BITUMINOUS MATERIAL USED ON THIS PROJECT SHALL BE PG 58-28.

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