

ITEM 521 - BRIDGE TIMBER, AS PER PLAN

THE TIMBER SHALL BE OF A GRADE AND TYPE WITH AN ALLOWABLE EXTREME FIBER STRESS IN BENDING OF A MINIMUM OF 1200 PSI. THE TIMBER MATERIAL SHALL BE REDWOOD NO. 1 OR SELECT STRUCTURAL; DOUGLAS FIR-LARCH NO. 1, DENSE NO. 1, SELECT STRUCTURAL, OR DENSE SELECT STRUCTURAL; EASTERN HEMLOCK SELECT STRUCTURAL OR WESTERN HEMLOCK SELECT STRUCTURAL. THE SAME SPECIES SHALL BE USED FOR ALL THE TIMBER MEMBERS REQUIRED. THE WOOD SHALL BE SEASONED, SOUND, AND FREE FROM DECAY AND INSECT ATTACK, WITH NO LOUSE AND OR CLUSTER KNOTS. THE END OF THE TIMBERS SHALL BE SAWED SQUARED WITH THE AXIS OF THE TIMBER. THE TIMBER MEMBERS SHALL ALSO CONFORM TO 711.26 OF THE ODOT CMS. THE WOOD SHALL BE PRESSURE TREATED WITH A WOOD PRESERVATIVE TREATMENT IN ACCORDANCE WITH THE AMERICAN WOOD PRESERVERS ASSOCIATION (AWPA) STANDARD CI-74. THE PRESERVATIVE SOLUTION SHALL BE WATER-BORNE PRESERVATIVE CONFORMING TO CHROMATED COPPER ARSENATE (CCA), TYPE C, CONFORMING TO AASHTO M133. THE RETENTION OF THE PRESERVATIVE BY THE TIMBER SHALL NOT BE LESS THAN 0.6 POUNDS PER CUBIC FOOT. INSPECTION OF THE PRESERVATIVE TREATMENT SHALL BE IN ACCORDANCE WITH SECTION 712.06 OF THE ODOT CMS.

HARDWOOD SHIMMING SHALL BE USED AS NEEDED TO MAINTAIN THE POSITIONING OF THE TIMBER MEMBERS AGAINST THE INTERIOR FLANGE FACE OF THE HPI2X53 MEMBERS

ALL EQUIPMENT, MATERIALS (INCLUDING SHIMS), AND LABOR REQUIRED TO INSTALL THE TIMBER SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 521-BRIDGE TIMBER, AS PER PLAN.

ITEM 606-GUARDRAIL, TYPE 5

THE LOCATIONS OF GUARDRAIL RUNS ARE SUBJECT TO ADJUSTMENTS TO ASSURE THAT THE PLANNED INSTALLATION WILL AFFORD MAXIMUM PROTECTION FOR TRAFFIC. THE INTENT IS TO UPGRADE AND REPLACE GUARDRAIL, GENERALLY AT EXISTING LOCATIONS. THE ENGINEER SHALL BE SATISFIED THAT ALL INSTALLATIONS WILL AFFORD MAXIMUM PROTECTION FOR TRAFFIC.

NO HAZARD SHALL BE LEFT UNPROTECTED EXCEPT FOR THE ACTUAL TIME NECESSARY TO REMOVE THE EXISTING GUARDRAIL, PREPARE THE SITE, AND INSTALL NEW GUARDRAIL IN A CONTINUOUS OPERATION. THE REMOVAL OF ALL GUARDRAIL SHALL BE AS DIRECTED BY THE ENGINEER. NO GUARDRAIL SHALL BE REMOVED UNTIL THE REPLACEMENT MATERIAL IS ON THE SITE AND READY FOR INSTALLATION. INSTALLATION OF THE NEW RAIL SHALL BEGIN IMMEDIATELY AFTER THE REMOVAL OPERATION HAS TAKEN PLACE. THE MAXIMUM GAP LENGTH IN ANY RAIL RUN SHALL BE 50 FEET. NO GAPS WILL BE LEFT OPEN AT THE END OF THE WORK PERIOD. BARRELS MAY NOT BE SUBSTITUTED FOR GUARDRAIL. FAILURE TO COMPLY WITH THESE REQUIREMENTS SHALL BE DEEMED SUFFICIENT CAUSE TO ORDER WORK SUSPENDED ON THIS PROJECT UNTIL SUCH TIME THAT THE ENGINEER IS ASSURED COMPLIANCE.

THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 606-GUARDRAIL, TYPE 5

125 L.F.

ITEM 606-GUARDRAIL, TYPE 5, AS PER PLAN

THE LOCATIONS OF GUARDRAIL RUNS ARE SUBJECT TO ADJUSTMENTS TO ASSURE THAT THE PLANNED INSTALLATION WILL AFFORD MAXIMUM PROTECTION FOR TRAFFIC. THE INTENT IS TO UPGRADE AND REPLACE GUARDRAIL, GENERALLY AT EXISTING LOCATIONS. THE ENGINEER SHALL BE SATISFIED THAT ALL INSTALLATIONS WILL AFFORD MAXIMUM PROTECTION FOR TRAFFIC.

IN AREAS WHERE GUARDRAIL POSTS ARE UNABLE TO BE INSTALLED DUE TO INTERFERENCE WITH THE TIE-BACK RETAINING STRUCTURE THE BLOCKOUTS MAY BE CONNECTED TO THE EXISTING RETAINING STRUCTURE PILES. THESE LOCATIONS WILL BE DETERMINED BY THE ENGINEER.

THE CONTRACTOR SHALL DETERMINE THE LOCATION AND DEPTH BELOW GRADE OF ANY TIE BARS IN THE VICINITY OF THE PROPOSED WORK PRIOR TO GUARDRAIL INSTALLATION TO INSURE THE TIE BARS ARE NOT DISTURBED.

ALL EQUIPMENT, MATERIALS, AND LABOR REQUIRED TO PERFORM THE ABOVE WORK SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 606-GUARDRAIL, TYPE 5, AS PER PLAN.

THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 606-GUARDRAIL, TYPE 5, AS PER PLAN

150 L.F.

CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL

WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED AND PUNCHED. THE CONNECTION SHALL BE MADE USING A "W-BEAM RAIL SPLICE" AS SHOWN ON STANDARD CONSTRUCTION DRAWING GR-1.1M. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

ITEM 863-STRUCTURAL STEEL, MISC.: RETAINING WALL STEEL

ALL STRUCTURAL STEEL SHALL BE ASTM A36-YIELD STRENGTH 36,000 PSI

THE REQUIRED LENGTH OF THE HPI2X53 SPACERS, TO INSURE THAT THE TIMBER LAGGING IS INSTALLED PLUM, SHALL BE DETERMINED BY THE CONTRACTOR. AN ASSUMED LENGTH OF ONE FOOT PER SPACER IS USED FOR ESTIMATED QUANTITY PURPOSES.

THE REQUIRED WIDTH OF THE 3/4" STEEL PLATES SHALL EQUAL THE REQUIRED LENGTH OF THE HPI2X53 SPACERS. AN ASSUMED WIDTH OF ONE FOOT PER PLATE IS USED FOR ESTIMATED QUANTITY PURPOSES.

ALL EQUIPMENT, MATERIALS, AND LABOR, REQUIRED TO INSTALL THE HPI2X53 BEAMS, HPI2X53 SPACERS, AND 3/4" PLATES SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 863-STRUCTURAL STEEL, MISC.: RETAINING WALL STEEL.

ITEM 605-6" SHALLOW PIPE UNDERDRAIN WITH FILTER WRAP

THE PIPE MATERIAL FOR THIS ITEM SHALL CONFORM TO 605.02, ROCK CUT UNDERDRAINS, IN THE ODOT CMS.

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GENERAL NOTES

LAKE COUNTY  
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