

REVISIONS		
REV. NO.	DESCRIPTION	DATE

GENERAL NOTES - BRIDGE "A" (CONTINUED)

TYPICAL FORMLINER AND CONCRETE FINISH:

THE EXPOSED CONCRETE SURFACES OF THE RETAINING WALLS, ABUTMENTS, PIERS AND WING WALLS SHALL HAVE A TEXTURED SURFACE TREATMENT AS INDICATED IN THE PLANS. ~~THE SURFACE TREATMENT SHALL BE AN AGED ASHLAR STONE PATTERN WITH A 0.5" MINIMUM TO 1.00" MAXIMUM RELIEF FROM THE OUTERMOST FACE OF THE SIMULATED STONE FINISH TO THE BASE OF THE SIMULATED MORTAR JOINT LINE. SIMULATED MORTAR JOINT LINES SHALL HAVE A 0.75" NOMINAL WIDTH, SEE 'DETAIL A' (THIS SHEET).~~

ONCE THE FINISH TEXTURE AND MANUFACTURER(S) HAVE BEEN APPROVED BY THE ENGINEER, THE CONCRETE FINISH TREATMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND SPECIFICATIONS. ANY ADDITIONAL MANUFACTURER'S REQUIREMENTS NECESSARY TO OBTAIN FULL WARRANTY SHALL ALSO APPLY.

ALL EXPOSED SURFACES OF THE 42" VERTICAL FACED PARAPET, PEDESTRIAN RAIL CONCRETE POSTS, ABUTMENTS, WING WALLS, CAST IN PLACE RETAINING WALLS, MSE RETAINING WALLS, PIERS, SLOPE WALLS AND EXTERIOR AND BOTTOM FACES OF P.C. CONCRETE FASCIA BEAMS SHALL BE FINISHED WITH A CLASS 7 PAINT FINISH IN ACCORDANCE WITH SECTION 509 OF THE STANDARD SPECIFICATIONS. CLASS 7 PAINT FINISH SHALL CONSIST OF FEDERAL STANDARD 595 COLORS FS 30324 AND FS 30475.

THE CONTRACTOR SHALL SUBMIT THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND PRODUCT DATA FOR THE TEXTURE SURFACE TREATMENTS. SHOP DRAWINGS SHALL INDICATE FORMLINER LAYOUT INCLUDING FORM FACING JOINTS, FORM JOINT SEALANT DETAILS AND TERMINATION DETAILS AS WELL AS RUSTICATION, REVEAL AND CHAMFER STRIPS. LOCATION AND PATTERNS OF FORM TIES AND ANY OTHER ITEMS THAT MAY VISUALLY AFFECT CAST-IN-PLACE OR PRE-CAST CONCRETE SHALL BE INCLUDED.

THE CONTRACTOR SHALL PROVIDE THE ENGINEER, FOR APPROVAL, A SAMPLE PANEL OF THE ASHLAR STONE PATTERN SURFACE TREATMENT(S). THE SAMPLE PANELS SHALL BE 18" X 18" WITH SURFACE TREATMENTS. FOLLOWING APPROVAL OF THE SAMPLE PANELS, THE CONTRACTOR SHALL PROVIDED ONE FULL SCALE MOCK-UP PANEL OF EACH SURFACE TREATMENT USING PROPOSED MATERIALS, METHODS AND WORKMANSHIP. THE PANELS SHALL BE APPROVED BY THE ENGINEER ON THE SITE. THE MOCK-UP PANELS SHALL BE A MINIMUM OF 50 SQUARE FEET IN SIZE AND MAY BE INCORPORATED INTO THE ACTUAL STRUCTURE WHERE/IF APPLICABLE.

THE MOCK-UP PANEL SHALL INCORPORATE PROPOSED CONCRETE MIX, FORM WORK, TIES, FORMLINER, FORM RELEASE AGENTS, PLACEMENT RATE, FORM PRESSURES, JOINT SEALER, VIBRATING AND FORM STRIPPING PRACTICES.

FOR CAST-IN-PLACE WORK, THE MOCK-UP PANEL SHALL INCLUDE ONE (1)-VERTICAL EXPANSION JOINT, ONE (1)-VERTICAL CONSTRUCTION JOINT, ONE (1)-VERTICAL FORMLINER BUTT JOINT, ONE (1)-HORIZONTAL FORMLINER BUTT JOINT AND THE PROPOSED END TREATMENT FOR THE TOP, BOTTOM AND SIDES OF THE RETAINING WALLS AND WING WALLS. PATCHING AND REPAIR PROCEDURES FOR SPALLED CONCRETE AND VOIDS CAUSED BY HONEYCOMBING OR BUG HOLES SHALL BE PERFORMED ON THE MOCK-UP PANELS.

THE MOCK-UPS SHALL BE ACCEPTED BY THE ENGINEER PRIOR TO BEGINNING FORM WORK FOR THE PROJECT. THE ACCEPTED MOCK-UPS WILL BE THE STANDARD FOR TECHNICAL AND AESTHETIC MERIT. FOLLOWING ACCEPTANCE OF THE MOCK-UP PANELS FOR FORMLINER AND REPAIR WORK, ALL PORTIONS OF THE PANELS SHALL HAVE AN ODOT CLASS 7 PAINT FINISH AS REQUIRED ABOVE. THE COLOR AND FINISH AS DESCRIBED ABOVE SHALL BE SUBJECT TO APPROVAL BY THE ENGINEER.

FORM WORK SHALL BE DESIGNED BY THE CONTRACTOR TO COMPLY WITH ALL REQUIREMENTS BY THE FORMLINER MANUFACTURER. IN ADDITION, ALL REQUIREMENTS OF THE FORMLINER MANUFACTURER FOR HANDLING AND INSTALLATION OF THE FORMLINERS, APPLICATION OF RELEASE AGENTS, PLACEMENT OF CONCRETE, VIBRATING OF CONCRETE AND REMOVAL OF FORMS SHALL BE FOLLOWED. FORMLINER BUTT JOINT(S) SHALL BE CAREFULLY ALIGNED TO PROVIDE A SURFACE FREE FROM VISIBLE SEAM LINES.

PRIOR TO CONCRETE PLACEMENT IN THE CASE OF CAST-IN-PLACE RETAINING WALLS OR WINGS, THE ENGINEER SHALL VERIFY THE LINES, FORMLINER PANEL PATTERNS AND ARTWORK PATTERNS. AFTER STRIPPING OF THE FORMS, THE ENGINEER APPROVED COLORS AND FINISHES SHALL BE APPLIED TO THE RETAINING WALLS, ABUTMENT, WING WALLS AND PIERS TO MATCH THE APPROVED COLOR AND FINISHES FROM THE MOCK-UP PANEL(S) IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

ANTI-GRAFFITI COATING SYSTEM:

AN ANTI-GRAFFITI COATING SYSTEM SHALL BE APPLIED IN ACCORDANCE WITH THE SPECIAL PROVISION FOR ANTI-GRAFFITI COATING SYSTEMS. THE FINISH SHALL INCORPORATE THE ODOT APPROVED CONCRETE PAINT AND STAIN COLORS FOR THE AESTHETIC THEME OF THIS CONSTRUCTION PROJECT. THE COATING SYSTEM SHALL BE APPLIED TO THE FOLLOWING EXPOSED CONCRETE SURFACES:

- MSE RETAINING WALLS RW-1 AND RW-2.
- ABUTMENTS INCLUDING FRONT FACES/WALLS, BACK WALLS AND CAST IN PLACE WING/RETAINING WALLS.
- SLOPE WALLS.
- PIERS INCLUDING BOTH FACES AND ALL SIDE/UNDER SURFACES.
- CONCRETE PARAPETS AND RAIL POSTS.
- EDGE OF BRIDGE DECK AND EXTERIOR SOFFIT.
- EXTERIOR FACE OF FASCIA BEAMS.

FOR THE FRONT, SIDE FACES OF THE ABUTMENTS AND ALL FACES OF PIERS, THE ANTI-GRAFFITI COATING QUANTITY WAS CALCULATED STARTING 2'-0" FROM THE TOP OF THE FOOTINGS.

THE ANTI-GRAFFITI FINISH AND ALL COSTS ASSOCIATED INCLUDING MATERIAL, LABOR AND INCIDENTALS SHALL BE INCLUDED IN THE PRICE BID PER SQUARE YARD OF "(SP) GRAFFITI TREATMENT"

PERFORATED PIPE UNDERDRAIN:

ITEM "6" PERFORATED PIPE UNDERDRAIN-ROUND" INCLUDES 71.0 FEET FOR PERFORATED PIPE AT ABUTMENT NO. 1, AND 133.0 FEET AT ABUTMENT NO. 2. THE INSTALLATION OF THE PERFORATED PIPE AND COVER MATERIAL SHALL BE AS SHOWN IN THE PLANS AND ON SHEET NO. B014 AND B015.

ALL COSTS OF THE PERFORATED PIPE UNDERDRAIN INSTALLATION INCLUDING MATERIAL LABOR, EQUIPMENT, AND INCIDENTALS SHALL BE INCLUDED IN THE PRICE BID PER FOOT OF "6" PERFORATED PIPE UNDERDRAIN-ROUND".

NON-PERFORATED PIPE UNDERDRAIN:

ITEM "6" NON-PERFORATED PIPE UNDERDRAIN-ROUND" INCLUDES 64.0 FEET FOR NON-PERFORATED PIPE AT ABUTMENT NO. 1, AND 100.0 AT ABUTMENT NO. 2. THE INSTALLATION OF THE NON-PERFORATED PIPE AND COVER MATERIAL SHALL BE AS SHOWN IN THE PLANS AND ON SHEET NO. B014 AND B015.

ALL COSTS OF THE NON-PERFORATED PIPE UNDERDRAIN INSTALLATION INCLUDING MATERIAL LABOR, EQUIPMENT, AND INCIDENTALS SHALL BE INCLUDED IN THE PRICE BID PER FOOT OF "6" NON-PERFORATED PIPE UNDERDRAIN-ROUND".

GENERAL NOTES - BRIDGE "A" (CONTINUED)

SPECIAL INLET DRAINS

PROVIDE AND INSTALL INLET DRAINS AND DOWN SPOUTS IN ACCORDANCE WITH THE PLANS, SECTION 611, AND SUBSECTION 725.04 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION. MANUFACTURED INLET DRAIN ASSEMBLIES SUCH AS THOSE PRODUCED BY *NEENAH FOUNDRY* OR *EAST JORDAN IRON WORKS* MEETING THE DIMENSIONS AND SPECIFICATIONS SHOWN AND NOTED IN THE PLANS MAY BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

CONTACT INFORMATION:

- NEENAH FOUNDRY COMPANY: 1-800-558-5075 (Main Office), 1-800-619-6756 (Regional Office)
- EAST JORDAN IRON WORKS, INC.: 1-800-874-4100 (Main Office), 1-580-389-5010 (Regional Office)

ALL COSTS OF INLET DRAINS, DOWN SPOUTS, FITTINGS, ANCHOR BOLTS AND ATTACHMENTS INCLUDING SHIPPING, PLACEMENT, MATERIALS, LABOR, EQUIPMENT AND INCIDENTALS REQUIRED FOR THEIR INSTALLATION, COMPLETE IN PLACE, SHALL BE INCLUDED IN THE PRICE BID PER POUND OF "STRUCTURAL STEEL".

BNSF RAILWAY COMPANY NOTES

NOTIFICATION OF WORK:

THE CONTRACTOR IS REQUIRED TO GIVE THE BNSF RAILWAY COMPANY AT LEAST 10 WORKING DAYS ADVANCE NOTICE, IN WRITING, BEFORE ANY WORK IS STARTED ON THE SITE. TO AVOID HAZARDS, THE BNSF RAILWAY COMPANY MAY HAVE A REPRESENTATIVE PRESENT, IF DEEMED NECESSARY, FOR THE PURPOSE OF INSPECTION AND THE ISSUANCE OF ANY APPROPRIATE INSTRUCTIONS FOR RAILWAY OPERATIONS DURING THE BRIDGE REPLACEMENT ON SH-33 IN LOGAN COUNTY AS IT RELATES TO THE BNSF RAILWAY COMPANY'S PROPERTY. (AARDOT 012 036S, MILEPOST 352.44)

THE CONTRACTOR SHALL NOTIFY:

ISSACC MOUTON BNSF ROADMASTER BNSF RAILWAY COMPANY 7233 SOUTH AIR DEPOT BLVD OKLAHOMA CITY, OK 73135 PHONE: 405-670-7688 EMAIL: ISSACC.MOUTON@BNSF.COM	MS. KAMIE YOUNG MANAGER PUBLIC PROJECTS BNSF RAILWAY COMPANY 4515 KANSAS AVENUE KANSAS CITY, KANSAS 66106 PHONE: 913-551-4484 EMAIL: KAMALAH.YOUNG@BNSF.COM
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FLAGGING AND INSURANCE:

FLAGGING AND INSURANCE SHALL BE PROVIDED AS SPECIFIED IN SECTION 107 OF THE STANDARD SPECIFICATIONS AND IN THE SPECIAL PROVISIONS FOR RAILROAD FLAGGING (SEE PROPOSAL FOR SPECIAL PROVISIONS) AND WHAT IS STATED IN THE BNSF RAILWAY COMPANY CONTRACTOR'S GENERAL CONSTRUCTION AGREEMENT, EXHIBITS C AND C-1. BNSF RAILWAY COMPANY, AT THEIR DISCRETION, SHALL PROVIDE FLAGGING FOR THE RAILWAY DURING CONSTRUCTION OPERATIONS.

THE CONTRACTOR IS REQUIRED TO REIMBURSE BNSF RAILWAY COMPANY FOR FLAGGING SERVICES PROVIDED.

THE CONTRACTOR SHALL ALSO FURNISH SATISFACTORY EVIDENCE TO THE STATE OF OKLAHOMA THAT THEY HAVE PROVIDED INSURANCE OF THE KINDS AND AMOUNTS AS SPECIFIED IN THE SPECIAL PROVISIONS FOR RAILROAD INSURANCE AND IN THE BNSF RAILWAY CONTRACTOR'S GENERAL CONSTRUCTION AGREEMENT, EXHIBITS C AND C-1.

~~THE CONTRACTOR WILL BE REQUIRED TO ENTER INTO A CONTRACTOR'S GENERAL CONSTRUCTION AGREEMENT, EXHIBITS C AND C-1, WITH THE BNSF RAILWAY COMPANY BEFORE THEY WILL BE ALLOWED ON THE RAILROAD'S RIGHT-OF-WAY.~~

PRE-WORK MEETING:

PRIOR TO WORKING ON THE BNSF RAILWAY COMPANY'S RIGHT-OF-WAY OR IN THE VICINITY OF THEIR TRACKS, YOU MUST CONTACT THE LOCAL ROADMASTER FOR THE BNSF RAILWAY COMPANY TO COORDINATE YOUR WORK. IT IS VITAL THAT YOU HAVE CONTACT WITH THE BNSF RAILWAY COMPANY ROADMASTER PRIOR TO GETTING ON THE RAILROAD'S PROPERTY.

COORDINATION WITH RAILROAD:

THE CONTRACTOR SHALL CONDUCT CONSTRUCTION OPERATIONS IN A MANNER WHICH WILL NOT DELAY OR INTERFERE WITH TRAIN OPERATIONS. CONSTRUCTION ACTIVITY WITHIN 25 (TWENTY-FIVE) FEET OF ACTIVE TRACKS WILL REQUIRE A FLAGMAN TO BE PROVIDED BY THE BNSF RAILROAD COMPANY AT THE CONTRACTOR'S EXPENSE.

THE CONTRACTOR SHALL GIVE WRITTEN NOTICE TO THE BNSF RAILWAY COMPANY ROADMASTER, A MINIMUM OF 30 (THIRTY) CALENDAR DAYS IN ADVANCE OF WHEN FLAGGING IS REQUIRED.

SPECIAL PERMISSION MUST BE OBTAINED FROM THE BNSF RAILWAY COMPANY BEFORE MOVING ANY EQUIPMENT OR OTHER OBJECT WHICH COULD MAKE THE TRACK IMPASSABLE IF IT FELL WITHIN THE AREA SHOWN ON THE CONSTRUCTION CLEARANCE DIAGRAM.

RAILROAD FLAGGERS, PROTECTIVE SERVICES, AND PROTECTIVE DEVICES WILL BE REQUIRED, BUT NOT LIMITED TO, EVENTS WHEN:

THE CONTRACTOR WORK ACTIVITIES ARE WITHIN 25 (TWENTY-FIVE) FEET OF THE TRACK, MEASURED FROM THE TRACK CENTERLINE.

ACTIVITIES ARE OVER OR UNDER THE TRACK.

CRANES OR SIMILAR EQUIPMENT WILL BE POSITIONED WHERE THEY COULD FOUL THE TRACK IF THEY TIPPED OVER OR EXPERIENCED SOME OTHER CATASTROPHIC EVENT.

IN THE OPINION OF THE BNSF RAILWAY COMPANY REPRESENTATIVE:

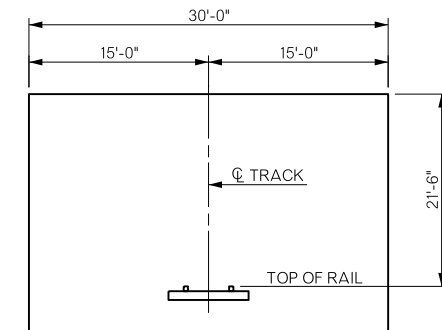
- IT IS NECESSARY TO SAFEGUARD THE BNSF RAILWAY COMPANY PROPERTY, EMPLOYEES, TRAINS, ENGINES, AND FACILITIES.
- WHEN ANY EXCAVATION IS PERFORMED BELOW THE BOTTOM OF THE ELEVATIONS AND TRACK OR OTHER BNSF RAILWAY COMPANY FACILITIES MAY BE SUBJECT TO MOVEMENT OR SETTLEMENT.
- WHEN WORK IN ANY WAY INTERFERES WITH SAFE OPERATION OF TRAINS AND TIMETABLE SPEEDS.
- WHEN ANY HAZARD IS PRESENTED TO RAILROAD TRACK, SIGNALS, COMMUNICATIONS, ELECTRICAL, OR OTHER FACILITIES EITHER DUE TO PERSON, MATERIAL, EQUIPMENT, OR BLASTING IN THE AREA.

BNSF RAILWAY COMPANY NOTES (CONTINUED)

PROTECTION OF RAILROAD UNDER BRIDGE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING THE RAILROAD TRACK BED DURING ALL CONSTRUCTION OPERATIONS. PRIOR TO ANY WORK BEING STARTED, A PROPOSED METHOD OF PREVENTING DEBRIS FROM FALLING ON THE RAILROAD TRACK BED SHALL BE SUBMITTED TO THE RAILROAD REPRESENTATIVE FOR HIS APPROVAL. ALLOW FOUR WEEKS FOR BNSF RAILWAY COMPANY TO REVIEW.

THE CONTRACTOR SHALL NOT BE PERMITTED TO LEAVE ANY WORKER SCAFFOLDING IN PLACE IN WORKING POSITION. AT THE END OF EACH WORKDAY, THE SCAFFOLDING SHALL BE REMOVED AND SET A SAFE DISTANCE FROM ANY OPERATING RAILWAY LINE. SCAFFOLDING SHALL AT ALL TIMES MAINTAIN THE MINIMUM CLEARANCE AS SHOWN ON THE "FALSEWORK DIAGRAM" BELOW.



FALSEWORK DIAGRAM

CLEARANCE OF FALSEWORK REQUIRED BY RAILROAD FOR OPERATION DURING CONSTRUCTION

ON CURVES, ADD 1½ INCHES PER DEGREE OF TRACK CURVATURE TO THE HORIZONTAL CLEARANCE DISTANCE.

HORIZONTAL DIMENSIONS SHOWN ARE MEASURED AT RIGHT ANGLES TO CL OF RAILROAD TRACK.

VERTICAL DIMENSION SHOWN IS PERPENDICULAR TO PLANE OF TOP OF RAILS.

NO CONSTRUCTION ACTIVITIES OR OTHER OBSTRUCTIONS CAN OCCUR, OR BE PLACED WITHIN THESE CLEARANCE LIMITS WITHOUT PREAPPROVAL OR THE BNSF RAILWAY COMPANY PERMISSION.

CLEARANCES SHOWN ARE A MINIMUM. DEFLECTIONS OF FALSEWORK/SCAFFOLDING SHALL BE INCLUDED IN CLEARANCE CALCULATIONS. NO MATERIAL, FORM WORK, SCAFFOLDING, OR OTHER PHYSICAL OBSTRUCTIONS MAY BE LEFT IN PLACE WITHIN THE CLEARANCE ZONE SHOWN.

DEMOLITION OF STRUCTURES OVER RAILROAD:

ALL DEMOLITION PLANS FOR REMOVAL OF STRUCTURES OVER RAILROAD LINES SHALL BE REVIEWED AND APPROVED BY THE BNSF RAILWAY COMPANY BEFORE ANY REMOVAL MAY BEGIN. THE CONTRACTOR SHALL ALLOW A MINIMUM OF FOUR WEEKS FOR REVIEW BY THE BNSF RAILWAY COMPANY.

DEMOLITION OF STRUCTURES WILL BE PERFORMED IN ACCORDANCE WITH THE RAILWAY'S "INSTRUCTIONS FOR PREPARATION OF DEMOLITION PLANS FOR STRUCTURES OVER THE BNSF RAILROAD."

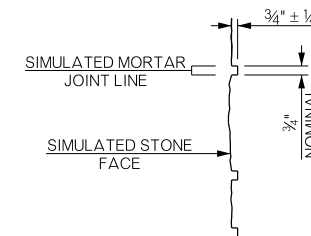
EROSION CONTROL AND DRAINAGE:

THE CONTRACTOR WILL INSTALL, MAINTAIN, AND REMOVE ALL EROSION CONTROL MEASURES DEEMED NECESSARY WITHIN THE RAILROAD RIGHT OF WAY.

THE CONTRACTOR WILL MAINTAIN THE RAILROAD DRAINAGE AT ALL TIMES WHEN WORKING WITHIN THE RAILROAD RIGHT OF WAY.

RAIL TRAFFIC:

THE BNSF RAILWAY COMPANY HAS 31 TRAINS PER DAY AT 45 MPH, ON THE RED ROCK SUBDIVISION. RAIL TRAFFIC IS FOR INFORMATION PURPOSES ONLY. ACTUAL RAIL TRAFFIC MAY VARY.



DETAIL 'A' ASHLAR STONE PATTERN RELIEF

SEE "TYPICAL FORMLINER AND CONCRETE FINISH", THIS SHEET.

BRIDGE "A" SH-33 OVER COTTONWOOD CREEK GENERAL NOTES AND SUMMARY OF PAY QUANTITIES (BRIDGE) (SHEET 2 OF 4)	LOGAN COUNTY		Design	GT	11/15	
			Detail	MAP	11/15	
			Check			
			Squad	PEARSON		
		Engr:	HERNANDEZ			
STATE OF OKLAHOMA	DEPARTMENT OF TRANSPORTATION					
	JOB/PIECE NO.	21860(O4)			SHEET NO. AB02	