

WORK INVOLVING RAILROADS

ALL WORK WITHIN OR DIRECTLY ADJACENT TO THE RAILROAD R/W SHALL BE SUBJECT TO APPROVAL OF THE RAILROAD COMPANIES AND TO INSPECTION AT ALL TIMES BY THEIR PROPERLY DESIGNATED REPRESENTATIVE. SAFETY AND CONTINUITY OF OPERATIONS OF THE RAILROADS SHALL BE A MAJOR IMPORTANCE TO THE CONTRACTOR. THE SAFETY OF THE RAILROAD TRAFFIC, PERSONNEL AND PROPERTY SHALL AT ALL TIMES BE PROTECTED AND SAFEGUARDED. EACH RAILROAD COMPANY SHALL BE GIVEN ADVANCE NOTICE, IN WRITING, OF THE CONTRACTOR'S PLANNED OPERATIONS WITHIN RAILROAD RIGHT-OF-WAY PER THE NOTIFICATION REQUIREMENTS OF THAT RAILROAD. THE CONTRACTOR SHALL SUBMIT FOR APPROVAL TO THE APPROPRIATE RAILROAD COMPANY PLANS AND DETAILS OF PROPOSED WORK HAVING THE POTENTIAL TO AFFECT RAILROAD OPERATIONS. NO SUCH WORK SHALL BE COMMENCED OR PROSECUTED WITHOUT THE RAILROAD'S PRIOR APPROVAL. APPROVAL OF SUCH WORK SHALL NOT BE CONSTRUED AS A RELEASE FROM RESPONSIBILITY OR LIABILITY FOR ANY DAMAGE THE RAILROAD MAY SUFFER.

THE CONTRACTOR SHALL NOT AT ANY TIME PERMIT EQUIPMENT IN HIS USE TO ENTER UPON OR FOUL THE RAILROAD COMPANY'S TRACKS EXCEPT WHEN SUCH EQUIPMENT IS PROTECTED BY THE AUTHORIZED EMPLOYEES OF THE RAILROAD COMPANY.

CONSTRUCTION CLEARANCES:

A TEMPORARY VERTICAL CONSTRUCTION CLEARANCE OF 22 FEET, MEASURED VERTICALLY FROM A POINT LEVEL WITH THE TOP OF THE HIGHEST RAIL AND 6 FEET HORIZONTALLY FROM THE CENTERLINE OF THE TRACK, SHALL BE MAINTAINED AT ALL TIMES.

A MINIMUM HORIZONTAL CLEARANCE OF 13'-0" FROM CENTERLINE OF TANGENT TRACK OR 14'-0" FROM CENTERLINE OF CURVED TRACK SHALL BE MAINTAINED AT ALL TIMES. ADDITIONAL HORIZONTAL CLEARANCE MAY BE REQUIRED IN SPECIAL CASES TO BE SAFE FOR OPERATING CONDITIONS. THIS ADDITIONAL CLEARANCE WILL BE DETERMINED BY THE RAILROAD ENGINEER.

ALL PROPOSED TEMPORARY CLEARANCES WHICH ARE LESS THAN THOSE LISTED ABOVE MUST BE SUBMITTED TO RAILROAD ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION AND MUST ALSO BE AUTHORIZED BY THE REGULATORY BODY OF THE STATE IF LESS THAN THE LEGALLY PRESCRIBED CLEARANCES. EXISTING SUBSTANDARD CLEARANCES SHALL NOT BE REDUCED AT ANY TIME DURING CONSTRUCTION WITHOUT WRITTEN APPROVAL FROM THE RAILROAD.

PLANS AND CALCULATIONS COVERING ANY FALSEWORK, SHORING, EXCAVATION SUPPORTS, ETC., ADJACENT TO RAILROAD TRACKS SHOULD BE CERTIFIED TO BE COMPLETE AND SATISFACTORY BY THE SUBMITTING PUBLIC AGENCY PRIOR TO BEING SUBMITTED TO THE RAILROADS CHIEF ENGINEER OF BRIDGES AND STRUCTURES FOR REVIEW. FOUR (4) COPIES OF PLANS AND CALCULATIONS SHOULD BE SUBMITTED. A MINIMUM OF 50 DAYS SHOULD BE ALLOWED FOR THE RAILROAD'S REVIEW OF SUCH PLANS. NO EXCAVATION WILL BE ALLOWED UNTIL THE PLANS AND CALCULATIONS ARE REVIEWED AND APPROVED BY THE RAILROADS CHIEF ENGINEER OF BRIDGES AND STRUCTURES.

ALL WASTE MATERIALS GENERATED BY THIS PROJECT, INCLUDING WASHING WITH CLEANING SOLVENTS, BLASTING, SCRAPING, BRUSHING, ETC., SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE CONTAINED, COLLECTED AND PROPERLY DISPOSED OF BY THE CONTRACTOR. THE CONTRACTOR AGREES TO FULLY COMPLY WITH ALL FEDERAL, STATE, AND LOCAL ENVIRONMENTAL LAWS, REGULATIONS, STATUTES AND ORDINANCES AT ALL TIMES.

WORK INVOLVING THE CSXT RAILROAD

MEANS & METHODS OF PERFORMING THE WORK SHALL CONFORM TO CSXT CONSTRUCTION SUBMISSION CRITERIA. TO ENSURE THAT THE CONTRACTORS ARE FULLY AWARE OF THE REQUIREMENTS FOR WORKING WITHIN CSXT RIGHT-OF-WAY, THIS DOCUMENT IS TO BE INCLUDED IN THE PROJECT DOCUMENTS. THE CONTRACTOR MUST NOT USE THE CSXT RIGHT OF WAY FOR STORAGE OF MATERIALS OR EQUIPMENT DURING CONSTRUCTION. THE CSXT RIGHT OF WAY MUST REMAIN CLEAR AT ALL TIMES. THE CONTRACTOR MUST PLAN AND PERFORM THE WORK IN A MANNER SUCH THAT THE CSXT TRACKS AT THE PROJECT LOCATION REMAIN FULLY CAPABLE OF CARRYING RAIL TRAFFIC THROUGHOUT THE WORK PERIOD AND RAIL

WORK INVOLVING THE CSXT RAILROAD (CONT.)

TRAFFIC IS NOT DELAYED OR OTHERWISE IMPACTED DUE TO THE WORK BEING PERFORMED.

A 'MEANS & METHODS' WORK PLAN, DEVELOPED IN ACCORDANCE WITH THE CSXT CONSTRUCTION SUBMISSION CRITERIA, SHALL BE SUBMITTED TO THE DESIGNATED CSXT CONSTRUCTION ENGINEERING REPRESENTATIVE FOR ALL WORK ON/OVER/UNDER CSXT TRACKS OR RIGHT-OF-WAY OR OTHER WORK WHICH PRESENTS THE POTENTIAL TO AFFECT CSXT PROPERTY OR OPERATIONS.

ALL WASTE MATERIALS GENERATED BY THIS PROJECT, INCLUDING WASHING WITH WATER, CLEANING SOLVENTS, BLASTING, SCRAPING, BRUSHING AND PAINTING OPERATIONS, SHALL BE THE RESPONSIBILITY OF THE STATE OR ITS CONTRACTOR AND SHALL BE CONTAINED, COLLECTED AND PROPERLY DISPOSED OF BY THE STATE OR ITS CONTRACTOR. THE STATE AND ITS CONTRACTOR AGREE TO FULLY COMPLY WITH ALL FEDERAL, STATE, AND LOCAL ENVIRONMENTAL LAWS, REGULATIONS, STATUTES AND ORDINANCES AT ALL TIMES.

THE MATERIALS REMOVED DURING THE SURFACE PREPARATION MUST NOT IMPACT THE SURROUNDING AREA INCLUDING GROUND, WATER, OR AIR. MATERIALS MUST NOT BE STORED ON CSXT PROPERTY.

CONTROL OF THE PAINT OVERSPRAY AND VAPORS DURING APPLICATION. THE WORK MUST BE DONE COMPLYING WITH APPROPRIATE REGULATIONS AND OVERSPRAY CONTROLLED TO PREVENT DAMAGE TO ADJACENT PROPERTY AND VEHICLES IN THE AREA.

DEMOLITION DEBRIS SHIELD SHALL BE INSTALLED PRIOR TO THE DECK DEMOLITION AND SHALL INCLUDE THE DECK OVERHANG PORTION WITH PARAPETS.

CONSTRUCTION DEBRIS AND CLEANING SLURRY MUST BE CONTAINED AND DISPOSED OF OFF CSXT RIGHT-OF-WAY.

THE CONTRACTOR WILL BE REQUIRED TO INSTALL A GEOTEXTILE FABRIC BALLAST PROTECTION SYSTEM TO PREVENT REMOVAL DEBRIS AND FINES FROM FOULING TRACK BALLAST. THE GEOTEXTILE BALLAST PROTECTION SYSTEM SHALL BE INSTALLED AND MAINTAINED BY THE CONTRACTOR TO THE SATISFACTION OF THE DESIGNATED CSXT CONSTRUCTION ENGINEERING REPRESENTATIVE.

A WORK SITE SAFETY PLAN THAT INCLUDES A RECOGNITION TO KEEP ALL PERSONNEL FROM FOULING CSXT RAIL OPERATIONS, A FALL PROTECTION PLAN DESCRIBING THE MEASURES TO BE TAKEN WHEN REQUIRED AND A FIRE PREVENTION PLAN SHALL BE PRESENTED AND ACCEPTED BY CSXT FOR WORK ON OR OVER CSX PROPERTY.

ALL PRECEDURES TO BE SUBMITTED TO MR. DAVID CLARK, CSXT DIRECTOR CONSTRUCTION ENGINEERING, DAVID_CLARK@CSX.COM, OR THE DESIGNATED CSXT CONSTRUCTION ENGINEERING REPRESENTATIVE.

SUBMITTALS REQUIRE UP TO 30 DAYS FOR REVIEW AND COMMENT/APPROVAL. RESUBMITTALS MAY ALSO REQUIRE UP TO 30 DAYS FOR REVIEW AND COMMENT/APPROVAL.

TO CONTRACTOR SHALL BE FULLY AWARE OF THE REQUIREMENTS FOR WORKING WITHIN CSXT RIGHT-OF-WAY AND SHALL ADHERE TO THE FOLLOWING SECTIONS FROM THE CSXT PUBLIC PROJECTS INFORMATION MANUAL:

- A) CONSTRUCTION SUBMISSION CRITERIA
- B) SPECIAL PROVISIONS
- C) INSURANCE REQUIREMENTS
- D) SOIL AND WATER MANAGEMENT POLICY

WORK INVOLVING NORFOLK SOUTHERN RAILWAY

ALL WORK TO BE PERFORMED ON, OVER, UNDER, OR ADJACENT TO THE RAILROAD RIGHT-OF-WAY SHALL COMPLY WITH THE NORFOLK SOUTHERN RAILWAY COMPANY ("RAILROAD", "NSR" OR "NS") PUBLIC PROJECTS MANUAL (APPENDIX E, SPECIAL PROVISIONS FOR THE PROTECTION OF RAILWAY INTERESTS, AND APPENDIX H1, OVERHEAD GRADE SEPARATION DESIGN CRITERIA). WHEN IN CONFLICT WITH OTHER PROJECT SPECIFICATIONS, THE MOST STRINGENT ONE SHALL APPLY.

WORK INVOLVING NORFOLK SOUTHERN RAILWAY (CONT.)

"ONE CALL" SERVICES DO NOT LOCATE BURIED RAILROAD SIGNAL AND COMMUNICATIONS LINES. THE CONTRACTOR SHALL CONTACT THE RAILROAD'S REPRESENTATIVE 2 DAYS IN ADVANCE OF WORK AT THOSE PLACES WHERE EXCAVATION, PILE DRIVING, OR HEAVY LOADS MAY DAMAGE THE RAILROAD'S UNDERGROUND FACILITIES. UPON REQUEST FROM THE CONTRACTOR OR SPONSOR, RAILROAD FORCES WILL LOCATE AND PAINT MARK OR FLAG THE RAILROAD'S UNDERGROUND FACILITIES. THE CONTRACTOR SHALL AVOID EXCAVATION OR OTHER DISTURBANCE OF THESE FACILITIES. IF DISTURBANCE OR EXCAVATION IS REQUIRED NEAR A BURIED RAILROAD FACILITY, THE CONTRACTOR SHALL COORDINATE WITH THE RAILROAD TO HAVE THE FACILITY POTHoles MANUALLY WITH CAREFUL HAND EXCAVATION. THE FACILITY SHALL BE PROTECTED BY THE CONTRACTOR DURING THE COURSE OF THE DISTURBANCE UNDER THE SUPERVISION AND DIRECTION OF THE RAILROAD'S REPRESENTATIVE. (SEE NS PUBLIC PROJECTS MANUAL, APPENDIX E, SECTION 3.D.).

ALL UTILITY INSTALLATIONS OR RELOCATIONS THAT ARE REQUIRED IN CONJUNCTION WITH THIS PROJECT CAN BE INSTALLED OR RELOCATED AS PART OF THE PROJECT PROVIDED THE CONSTRUCTION IS PERFORMED BY THE PROJECT CONTRACTOR OR PROJECT CONTRACTOR'S SUB-CONTRACTOR. HOWEVER, THE UTILITY MUST SUBMIT AN APPLICATION FOR THE INSTALLATION OR RELOCATION TO RAILPROS FOR APPROPRIATE HANDLING FOR LICENSE AGREEMENT FOR APPLICABLE FEES. FOR UTILITY APPLICATIONS GO TO: WWW.NSCORP.COM > REAL ESTATE > NS SERVICES > WIRE, PIPELINE, & FIBER OPTIC PROJECTS > RAILPROS. NOTE: LICENSE AGREEMENT MUST BE EXECUTED PRIOR TO UTILITY BEING INSTALLED OR RELOCATED.

THE CONTRACTOR SHALL NOT COMMENCE ANY WORK ON RAILROAD RIGHTS-OF-WAY UNTIL HE HAS COMPLIED WITH THE CONDITIONS PRESENTED ON NS PUBLIC PROJECTS MANUAL (SEE APPENDIX E, NORFOLK SOUTHERN - SPECIAL PROVISIONS FOR PROTECTION OF RAILWAY INTERESTS).

THE CONTRACTOR SHALL SO ARRANGE AND CONDUCT HIS WORK THAT THERE WILL BE NO INTERFERENCE WITH RAILROAD'S OPERATIONS. WHENEVER WORK IS LIABLE TO AFFECT THE OPERATIONS OR SAFETY OF TRAINS, THE METHODS OF DOING SUCH WORK SHALL FIRST BE SUBMITTED TO THE RAILROAD ENGINEER FOR APPROVAL, BUT SUCH APPROVAL SHALL NOT RELIEVE THE CONTRACTOR FROM ANY LIABILITY.

THE RAILROAD WILL BE PROVIDED AS-BUILT DRAWINGS SHOWING THE ACTUAL CLEARANCE AS CONSTRUCTED. DEPTH, SIZE, AND LOCATION OF ALL FOUNDATION COMPONENTS SHALL BE SHOWN ON THE DRAWINGS. (SEE NS PUBLIC PROJECTS MANUAL, APPENDIX H1, AND SECTION 8A).

THE FOLLOWING IS CONTACT INFORMATION FOR NORFOLK SOUTHERN RAILROAD:

MR. E.W. CHAMBERS
SENIOR ENGINEER PUBLIC IMPROVEMENTS
NORFOLK SOUTHERN CORPORATION
650 WEST PEACHTREE STREET, NW
BOX 45
ATLANTA, GA 30308
TELEPHONE: (470) 463-6307
EMAIL: ELDRIDGE.CHAMBERS@NSCORP.COM

ITEM SPECIAL - RAILROAD FLAGGING (NORFOLK SOUTHERN)

FLAGGING FOR WORK ON RAILROAD RIGHT-OF-WAY SHALL BE COORDINATED, OBTAINED, AND PAID FOR BY THE CONTRACTOR. FLAGGING SHALL BE PROVIDED BY THE CONTRACTOR WHENEVER REQUIRED BY THE NORFOLK SOUTHERN SPECIAL PROVISIONS FOR THE PROTECTION OF RAILWAY INTERESTS (SECTION 7.A.2). NORFOLK SOUTHERN SHALL APPROVE THE FLAGGING SERVICE PROVIDER AND THEIR STAFF.

NORFOLK SOUTHERN HAS THE SOLE AUTHORITY TO DETERMINE THE NEED FOR PROTECTIVE SERVICES TO PROTECT ITS OPERATIONS. IN GENERAL, THE REQUIREMENTS OF SUCH SERVICES WILL BE WHENEVER THE CONTRACTOR'S PERSONNEL OR EQUIPMENT ARE, OR ARE LIKELY TO BE, WORKING ON THE RAILROAD'S RIGHT-OF-WAY, OR ACROSS, OVER, ADJACENT TO, OR UNDER A TRACK, OR WHEN SUCH WORK HAS DISTURBED,

ITEM SPECIAL - RAILROAD FLAGGING (NORFOLK SOUTHERN) (CONT.)

OR IS LIKELY TO DISTURB, A RAILROAD STRUCTURE OR THE RAILROAD ROADBED OR SURFACE AND ALIGNMENT OF ANY TRACK TO SUCH EXTENT THAT THE MOVEMENT OF TRAINS MUST BE CONTROLLED BY FLAGGING.

THE CONTRACTOR SHALL SUBMIT SIGNED DAILY TIMESHEETS FOR ALL FLAGGING OPERATIONS TO THE ENGINEER AT INTERVALS TO BE APPROVED BY THE ENGINEER.

THE TOTAL DAYS IN THE ESTIMATED QUANTITIES IS BASED UPON AN ESTIMATE OF TOTAL FLAGGING DAYS NEEDED TO COMPLETE THE PLANNED WORK.

ONLY CERTIFIED FLAGGING PROVIDERS ARE ACCEPTABLE BY NORFOLK SOUTHERN AND INCLUDE:

NATIONAL RAILROAD SAFETY SERVICES, INC.
7395 KINGSGATE WAY
WEST CHESTER, OH 45069
TIM SHEPHERD: 877-984-6777
<https://www.nrssinc.net>

RAILPROS
1320 GREENWAY DR., STE 490
IRVING, TX 75038
D.J. EZELL: 682-540-4033
<https://railpros.com/contact-field-services>

RAILROAD CONSULTANTS, PLLC
534 UPTOWN SQUARE
MURFREESBORO, TN 37129
JONATHAN PARKER: 615-691-0653
<https://www.railroad-consultants.com>

PAYMENT PER DAY FOR ITEM SPECIAL RAILROAD FLAGGING (NORFOLK SOUTHERN) SHALL INCLUDE ALL COSTS FOR PROVIDING REQUIRED FLAGGING SERVICE FOR THE DAYS USED, INCLUDING, BUT NOT LIMITED TO, ALL LABOR, EQUIPMENT, AND TRAVEL EXPENSES. PAYMENT ALSO INCLUDES ANY CONTRACTOR OVERHEAD FOR COORDINATING, SCHEDULING, AND ADMINISTERING THE CONTRACT WITH THE FLAGGING SERVICE. C&MS TABLE 104.02-2 DOES NOT APPLY TO REDUCTIONS IN THIS CONTRACT ITEM.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO COMPLETE THIS ITEM OF WORK:

ITEM SPECIAL RAILROAD FLAGGING (NORFOLK SOUTHERN) 400 DAY

ABBREVIATIONS

ABUT. - ABUTMENT	MAX. - MAXIMUM
APPR. - APPROACH	M.O.T. - MAINTENANCE OF TRAFFIC
APPROX. - APPROXIMATE	MIN. - MINIMUM
BOT. - BOTTOM	N.F. - NEAR FACE
BRG. - BEARING	O/O - OUT TO OUT
C/C - CENTER TO CENTER	PB - PORTABLE BARRIER
C.J. - CONSTRUCTION JOINT	P.E.J.F. - PREFORMED EXPANSION JOINT FILLER
COL. - COLUMN	R.A. - REAR ABUTMENT
CONC. - CONCRETE	REINF. - REINFORCING
CONST. - CONSTRUCTION	RT. - RIGHT
C.P.P. - CORRUGATED PLASTIC PIPE	SCD - STANDARD CONSTRUCTION DRAWING
DIA. - DIAMETER	SER. - SERIES
EL. - ELEV. - ELEVATION	SPA. - SPACING
E.W. - EACH WAY	STA. - STATION
EX. - EXIST. - EXISTING	T & B - TOP AND BOTTOM
EXP. - EXPANSION	TYP. - TYPICAL
EQ. SPA. - EQUAL SPACE	T/T - TOE TO TOE
E.F. - EACH FACE	U.N.O. - UNLESS NOTED OTHERWISE
F.A. - FORWARD ABUTMENT	VAR. - VARIES
F.F. - FAR FACE	V.C. - VERTICAL CURVE
F/F - FACE TO FACE	VERT. - VERTICAL
FTG. - FOOTING	
FWD. - FORWARD	
H.M.W.M. - HIGH MOLECULAR WEIGHT METHACRYLATE	

SN	4306384
DESIGN AGENCY	
DESIGNER	SJR
CHECKER	LAW
REVIEWER	JDH 08-31-21
PROJECT ID	98564
SUBSET	7 52
SHEET	73 128