GENERAL NOTES

SPECIFICATIONS: CONNECTICUT DEPARTMENT OF TRANSPORTATION FORM 817 (2016), SUPPLEMENTAL SPECIFICATIONS DATED JANUARY 2018, AND SPECIAL PROVISIONS.

DESIGN SPECIFICATIONS: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS - 7TH EDITION UP TO AND INCLUDING 2016 INTERIMS, AND AS SUPPLEMENTED BY THE CONNECTICUT DEPARTMENT OF TRANSPORTATION BRIDGE DESIGN MANUAL (2003), UP TO AND INCLUDING 2011 REVISIONS.

ALLOWABLE DESIGN STRESSES:

CLASS "S" CONCRETE	BASED ON	f'c =	4,000 PSI (28 DAYS)
PARTIAL DEPTH PATCH	BASED ON	f'c =	3,000 PSI (3 DAYS)
			1,000 PSI (1 HOUR)

CONCRETE STRENGTH: THE SPECIFIED CONCRETE STRENGTH, f'c, USED IN DESIGN OF CONCRETE COMPONENTS ARE NOTED ABOVE. THE MINIMUM COMPRESSIVE STRENGTH OF CONCRETE FOR THE CONSTRUCTED COMPONENTS SHALL CONFORM TO THE REQUIREMENTS OF FORM 817 SECTION 6.01 - CONCRETE FOR STRUCTURES.

REINFORCEMENT
(ASTM A615 GRADE 60)..... Fy = 60 KSI

STRUCTURAL STEEL
(AASHTO M270, GRADE 50)..... Fy = 50 KSI

LIVE LOAD: HL-93

SALVAGE: BRONZE PLATES ACQUIRED FROM THE BEARING REPLACEMENT AT BRIDGE NOS. 01211 AND 01213. CONTRACTOR SHALL COORDINATE DELIVERY OF THE SALVAGED MATERIAL WITH THE DISTRICT.

PAINT: PAINT SHALL CONFORM TO THE REQUIREMENTS OF THE SPECIAL PROVISION, "ABRASIVE BLAST CLEANING & FIELD PAINTING OF BEAM ENDS". THE COLOR OF THE TOPCOAT MATERIAL ON THE STRUCTURAL STEEL SHALL CONFORM TO FEDERAL STANDARD 595B COLOR NO. FS 36463 (GRAY).

BITUMINOUS CONCRETE OVERLAY: THIS SHALL CONSIST OF TWO LIFTS. FOR A $2\frac{1}{2}$" OVERLAY, THE FIRST LIFT SHALL BE HMA S0.25 ($\frac{3}{4}$" THICK) AND THE SECOND SHALL BE PMA S0.5 ($1\frac{3}{4}$" THICK). FOR A 3" OVERLAY, THE FIRST LIFT SHALL BE HMA S0.25 (1" THICK) AND THE SECOND SHALL BE PMA S0.5 (2" THICK).

DIMENSIONS: WHEN DIMENSIONS ARE GIVEN TO LESS THAN THREE DECIMAL PLACES, THE OMITTED DIGITS SHALL BE ASSUMED TO BE ZERO.

EXISTING DIMENSIONS: DIMENSIONS, ANGLES, AND ELEVATIONS OF THE EXISTING STRUCTURE SHOWN ON THESE PLANS ARE FOR GENERAL REFERENCE ONLY. THEY HAVE BEEN TAKEN FROM THE RECORD PLANS AND ARE NOT GUARANTEED. THE CONTRACTOR SHALL TAKE ALL FIELD MEASUREMENTS NECESSARY TO ASSURE PROPER FIT OF THE FINISHED WORK AND SHALL ASSUME FULL RESPONSIBILITY FOR THEIR ACCURACY. WHEN SHOP DRAWINGS BASED ON FIELD MEASUREMENTS ARE SUBMITTED FOR APPROVAL, THE FIELD MEASUREMENTS SHALL ALSO BE SUBMITTED FOR REFERENCE BY THE REVIEWER.

TEMPORARY STRUCTURES: WORK PLATFORMS, DEBRIS CONTAINMENT SYSTEM, ETC., SHALL NOT AFFECT CLEARANCES FOR VEHICULAR TRAFFIC AND SHALL NOT INTRUDE INTO RAILROAD CLEARANCE ENVELOPES.

TRAFFIC: ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE SPECIAL PROVISIONS, "MAINTENANCE AND PROTECTION OF TRAFFIC" & "PROSECUTION AND PROGRESS".

REINFORCEMENT: ALL REINFORCEMENT SHALL BE ASTM A615.

JOINT SEAL: THE COST OF FURNISHING AND INSTALLING JOINT SEAL SHALL BE INCLUDED IN THE COST OF THE ITEM "ASPHALTIC PLUG EXPANSION JOINT SYSTEM".

RECORD PLANS: PLANS FOR THE EXISTING BRIDGES ARE AVAILABLE AT THE CONNECTICUT DEPARTMENT OF TRANSPORTATION PLAN ROOM, 160 PASCONE PLACE, NEWINGTON.

CONCRETE NOTES

EXPOSED EDGES: EXPOSED EDGES OF CONCRETE SHALL BE BEVELED 1" X 1" UNLESS DIMENSIONED OTHERWISE.

CONCRETE COVER: ALL REINFORCEMENT SHALL HAVE 2" MIN. COVER UNLESS DIMENSIONED OTHERWISE.

REINFORCEMENT: ALL REINFORCEMENT SHALL BE ASTM A615 GRADE 60.

CLASS "S" CONCRETE: CLASS "S" CONCRETE SHALL BE USED FOR REPAIRS TO THE EXPOSED SURFACES OF ABUTMENTS, WINGWALLS, PIERS, AND UNDERSIDE OF DECKS, AS DIRECTED BY THE ENGINEER.

PARTIAL DEPTH PATCH: PARTIAL DEPTH PATCH SHALL BE USED FOR REPAIRS TO THE TOP OF CONCRETE DECKS UPON REMOVAL OF THE EXISTING WEARING SURFACE, AS IDENTIFIED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.

WELDED STEEL WIRE FABRIC (WWF): ALL WWF SHALL BE EPOXY COATED AND CONFORM TO THE REQUIREMENTS OF ASTM A 185 (AASHTO M 55). THE TYPE OF WELDED STEEL WIRE FABRIC SHALL BE APPROVED BY THE ENGINEER.

EMBEDDED GALVANIC ANODES: EMBEDDED GALVANIC ANODES SHALL BE INSTALLED IN "CLASS 'S' CONCRETE" AND AS DIRECTED BY THE ENGINEER.

CONCRETE BEARING PAD REPAIRS: REPAIRS TO CONCRETE BEARING PADS AND TO AREAS IN THE VICINITY OF THE BEARING PADS ARE NOT EXPECTED TO INVOLVE JACKING OF THE SUPERSTRUCTURE IF AND WHERE REQUIRED UNLESS SPECIFICALLY NOTED ON THE PLANS. DURING CONSTRUCTION, THE ENGINEER WILL EVALUATE THE CONDITION OF ANY BEARING PADS THAT REQUIRE REPAIR AND MAY REQUIRE ADDITIONAL METHODS OF REPAIR. ANY ADDITIONAL REQUIRED REPAIR THAT IS NOT NOTED IN THE PLANS OR SPECIFICATIONS WILL BE CONSIDERED AS EXTRA WORK.

DEBRIS REMOVAL: ANY DEBRIS THAT EXISTS ON TOP OF THE PIER CAPS OR BRIDGE SEAT SHALL BE REMOVED BY THE CONTRACTOR AND DISPOSED OF SAFELY AS DIRECTED BY THE ENGINEER. THE COST FOR PERFORMING THE DEBRIS REMOVAL SHALL BE PAID UNDER THE ITEM "REMOVE DIRT AND DEBRIS".

EXISTING CONDITIONS:

THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT DUE TO THE NATURE OF REHABILITATION PROJECTS, THE EXACT EXTENT OF REHABILITATION WORK CANNOT ALWAYS BE ACCURATELY DETERMINED PRIOR TO THE COMMENCEMENT OF WORK. THESE PLANS HAVE BEEN PREPARED BASED ON LIMITED FIELD INVESTIGATIONS AND BRIDGE INSPECTION REPORTS AVAILABLE AT THE TIME. THE ACTUAL FIELD CONDITIONS MAY VARY AND MAY REQUIRE MODIFICATIONS TO CONSTRUCTION DETAILS AND WORK QUANTITIES. THE CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH FIELD CONDITIONS AND AS DIRECTED BY THE ENGINEER.

DRAINAGE PIPES: ANY DRAINAGE PIPES THAT ARE ATTACHED TO THE CONCRETE SHALL BE PROTECTED. IF THESE DRAIN PIPES ARE LIKELY TO INTERFERE WITH THE CONCRETE REPAIRS, THEY SHALL BE TEMPORARILY RELOCATED AND MAINTAINED UNTIL THE REPAIRS ARE COMPLETE. ONCE THE REPAIRS ARE COMPLETE, THEY WILL BE REATTACHED TO THE CONCRETE SURFACE AS DIRECTED BY THE ENGINEER. THE COST OF PERFORMING THIS WORK IS NOT MEASURED FOR PAYMENT, RATHER SHALL BE INCLUDED IN THE GENERAL COST OF THE WORK.

EXPANSION BEARING NOTES:

1. FURNISHING AND INSTALLING ELASTOMERIC BEARING PADS SHALL BE PAID FOR UNDER THE ITEM "BEARING REPLACEMENT WITH ELASTOMERIC BEARING PADS". ELASTOMER SHALL BE GRADE 3 VIRGIN NEOPRENE WITH SHORE 'A' DUROMETER HARDNESS = 60.
2. STEEL LAMINAE USED IN THE ELASTOMERIC BEARING SHALL CONFORM TO AASHTO M270, GRADE 36 AND SHALL BE INCLUDED IN THE COST OF THE ITEM "BEARING REPLACEMENT WITH ELASTOMERIC BEARING PADS".
3. LOAD PLATES SHALL CONFORM TO AASHTO M270, GRADE 50T2. THE LOAD PLATE SHALL BE HOT-BONDED TO THE ELASTOMERIC BEARING PAD DURING VULCANIZATION. THE COST OF THE VULCANIZED LOAD PLATE SHALL BE INCLUDED IN THE COST OF THE ITEM "BEARING REPLACEMENT WITH ELASTOMERIC BEARING PADS".
4. SOLE PLATES SHALL CONFORM TO AASHTO M270, GRADE 50T2 AND SHALL BE INCLUDED IN THE COST OF THE ITEM "BEARING REPLACEMENT WITH ELASTOMERIC BEARING PADS".
5. SOLE PLATES SHALL BE BEVELED TO MATCH THE SLOPE OF THE STRINGER SO THAT THE BOTTOM SURFACE OF THE PLATE IS LEVEL AFTER APPLICATION OF FULL DEAD LOAD.
6. BOLTED CONNECTIONS SHALL BE SLIP-CRITICAL CONNECTIONS WITH SURFACE PREPARATION IN ACCORDANCE WITH AASHTO SPECIFICATION FOR CLASS "C" CONDITIONS AND SHALL BE INCLUDED IN THE COST OF THE ITEM "BEARING REPLACEMENT WITH ELASTOMERIC BEARING PADS".
7. BOLTS, NUTS, WASHERS AND BEVELED WASHERS SHALL MEET THE REQUIREMENTS OF ASTM A325, TYPE 1 HIGH STRENGTH BOLTS, AND SHALL BE INCLUDED IN THE COST OF THE ITEM "BEARING REPLACEMENT WITH ELASTOMERIC BEARING PADS".
8. WELDING DETAILS, PROCEDURES, AND TESTING METHODS SHALL CONFORM TO ANSI/AASHTO/AWS D1.5: 2015, BRIDGE WELDING CODE.
9. ELASTOMERIC BEARINGS SHALL BE INSTALLED WHEN THE BRIDGE SUPERSTRUCTURE SURFACE TEMPERATURE IS WITHIN THE RANGE OF 40° TO 80° F AND WHEN THE AMBIENT AIR TEMPERATURE IS WITHIN THIS RANGE FOR AT LEAST TWO HOURS. CENTERLINE FOR BEARING PAD AND SOLE PLATE SHALL BE INSTALLED AT THE CENTERLINE OF BEARINGS. IF BEARINGS ARE INSTALLED OUTSIDE THIS TEMPERATURE RANGE, BEARINGS WILL HAVE TO BE RESET AT A LATER DATE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE STATE.
10. IN NO CASE SHALL THE ELASTOMER OR VULCANIZED BOND BE SUBJECTED TO TEMPERATURE HIGHER THAN 400° F.
11. THE EXPOSED SURFACES OF THE ELASTOMERIC BEARING SHALL NOT BE PAINTED.
12. BEARING DESIGN METHOD: ELASTOMERIC BEARING DESIGN IS BASED ON THE PROVISIONS OF AASHTO SECTION 14 METHOD B.
13. BEARING DESIGN SERVICE LOADS: SEE BEARING REPAIR DRAWING FOR EACH SITE'S SERVICE I LIMIT STATE GIRDER REACTIONS TABLE. THIS INFORMATION IS PROVIDED IN PART FOR THE LOAD TESTING AS DESCRIBED IN THE SPECIAL PROVISION "BEARING REPLACEMENT WITH ELASTOMERIC BEARING PADS" AND FOR THE CONTRACTOR'S REFERENCE IN DESIGNING THE REQUIRED SYSTEM FOR JACKING OF BEAMS.
14. COST OF JACKING OF BEAMS FOR REPLACING BEARINGS SHALL BE PAID FOR UNDER THE ITEM, "JACKING EXISTING SUPERSTRUCTURE (SITE NO. X).
15. CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE UTILITY COMPANIES TWO WEEKS PRIOR TO JACKING OF THE BRIDGES.

PROJECT REFERENCE INFORMATION TABLE

SITE NO.	BRIDGE NO.	REFERENCE PROJECT NO.	MAP FILE NO.	DATE
1	00897	34-94	M226-01, 244-01	1958, 1987
2	00898	34-94	M226-01, 430-01	1958, 1991
3	01210	96-74, 34-252	M231-01, 430-01	1958, 1991
4	01211	96-74, 174-122	M231-01, 244-01	1958, 1987
5	01212	96-74, 34-252	M231-01, 430-01	1958, 1991
6	01213	96-74, 174-168	M231-01, 265-06	1958, 1989
7	00505	96-74	M231-01	1958
8	01206	96-74	M231-01	1958
9	01207	96-74	M231-01	1958
10	01208	96-74	M231-01	1958
11	01214	96-74	M231-01	1958

TABLE OF QUANTITIES

ITEM	UNIT	TOTAL QUANTITY
REMOVE DIRT AND DEBRIS	EA	6
PMA S0.5	TON	635
HMA S0.25	TON	300
JOINT CRACK SEALING OF BITUMINOUS CONCRETE PAVEMENT	L.F.	2,600
MATERIAL FOR TACK COAT	GAL	60
REMOVAL OF EXISTING WEARING SURFACE	S.Y.	5,850
JACKING EXISTING SUPERSTRUCTURE (SITE NO. 6)	L.S.	1
JACKING EXISTING SUPERSTRUCTURE (SITE NO. 4)	L.S.	1
CLEAN EXISTING SCUPPERS	EA.	3
ASPHALTIC PLUG EXPANSION JOINT SYSTEM	C.F.	600
BEARING REPLACEMENT WITH ELASTOMERIC BEARING PADS	EA.	27
CLASS 'S' CONCRETE	C.F.	600
PARTIAL DEPTH PATCH	C.F.	700
ABRASIVE BLAST CLEANING AND FIELD PAINTING OF BEAM ENDS (SITE NO. 1)	L.S.	1
ABRASIVE BLAST CLEANING AND FIELD PAINTING OF BEAM ENDS (SITE NO. 2)	L.S.	1
ABRASIVE BLAST CLEANING AND FIELD PAINTING OF BEAM ENDS (SITE NO. 4)	L.S.	1
ABRASIVE BLAST CLEANING AND FIELD PAINTING OF BEAM ENDS (SITE NO. 6)	L.S.	1
CLASS 1 CONTAINMENT AND COLLECTION OF SURFACE PREPARATION DEBRIS (SITE NO. 1)	L.S.	1
CLASS 1 CONTAINMENT AND COLLECTION OF SURFACE PREPARATION DEBRIS (SITE NO. 2)	L.S.	1
BEARING REPAIR	EA.	40
CLASS 1 CONTAINMENT AND COLLECTION OF SURFACE PREPARATION DEBRIS (SITE NO. 6)	L.S.	1
CLASS 1 CONTAINMENT AND COLLECTION OF SURFACE PREPARATION DEBRIS (SITE NO. 4)	L.S.	1
EMBEDDED GALVANIC ANODES	EA.	1,500
MEMBRANE WATERPROOFING (WOVEN GLASS FABRIC)	S.Y.	5,850
CONCRETE HAUNCH REMOVAL	L.F.	6,250
FIRE SUPPRESSION STANDPIPE SYSTEM (SITE NO. 1)	L.S.	1
FIRE SUPPRESSION STANDPIPE SYSTEM (SITE NO. 2)	L.S.	1

NOTICE TO BRIDGE INSPECTORS

THE DEPARTMENT'S BRIDGE SAFETY PROCEDURES REQUIRE THIS BRIDGE TO BE INSPECTED FOR, BUT NOT LIMITED TO, ALL APPROPRIATE COMPONENTS INDICATED IN THE GOVERNING MANUALS FOR BRIDGE INSPECTION. ATTENTION MUST BE GIVEN TO INSPECTING THE FOLLOWING SPECIAL COMPONENTS AND DETAILS. (THE LISTING OF COMPONENTS FOR SPECIFIC ATTENTION SHALL NOT BE CONSTRUED TO REDUCE THE IMPORTANCE OF INSPECTION OF ANY OTHER COMPONENT OF THE STRUCTURE.) THE FREQUENCY OF INSPECTION OF THIS STRUCTURE SHALL BE IN ACCORDANCE WITH THE GOVERNING MANUALS FOR BRIDGE INSPECTION, UNLESS OTHERWISE DIRECTED BY THE MANAGER OF BRIDGE SAFETY AND EVALUATION.

COMPONENTS OR DETAILS	BRIDGE SHEET REFERENCE
NONE	

CONCRETE DISTRIBUTION

SUPERSTRUCTURE	726 C.F.
SUBSTRUCTURE	574 C.F.
FOOTINGS	0 C.F.
TOTAL	1,300 C.F.

INSPECTION OF FIELD WELDS

METHOD	UNIT	QUANTITY
ULTRASONIC	IN	X
MAGNETIC PARTICLE	FT	X

PENETRATING SEALER PROTECTIVE COMPOUND:

WITHIN PROJECT LIMITS, PENETRATING SEALER PROTECTIVE COMPOUND SHALL BE APPLIED TO NEW AND EXISTING CONCRETE ELEMENTS OF STATE OWNED BRIDGES IN CONFORMANCE WITH THE NOTICE TO CONTRACTOR AND SPECIAL PROVISION "PENETRATING SEALER PROTECTIVE COMPOUND." THE LOCATIONS WHERE THIS ITEM SHALL BE APPLIED ARE NOT SHOWN IN THE PLANS, BUT RATHER, ARE DESCRIBED IN DETAIL IN THE LIKE NAMED NOTICE TO CONTRACTOR "PENETRATING SEALER PROTECTIVE COMPOUND."

DESIGNED BY:
BL Companies
BL COMPANIES, INC.
355 RESEARCH PARKWAY
MERIDEN, CT 06450

STATE OF CONNECTICUT — CHAD E. PERKOSKI — No. 29084 — LICENSED PROFESSIONAL ENGINEER

Chad Perkoski
2018.10.02
15:59:48-04'00'

ADDENDUM NO. 2

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
1	10/02/18	PENETRATING SEALER PROTECTIVE COMPOUND	09.02.A2

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 10/2/2018

DESIGNER/DRAFTER: K.LIVENGOOD
CHECKED BY: C.PERKOSKI
SCALE AS NOTED

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\SB_MSH_0096_0200_GEN_A2.dgn

SIGNATURE/BLOCK: STATE OF CONNECTICUT — CHAD E. PERKOSKI — No. 29084 — LICENSED PROFESSIONAL ENGINEER; BL Companies, BL COMPANIES, INC. 355 RESEARCH PARKWAY MERIDEN, CT 06450

PROJECT TITLE:
I-84 RESURFACING, BRIDGE REHABILITATION, AND SAFETY IMPROVEMENTS

TOWN: **NEWTOWN**

DRAWING TITLE: **GENERAL NOTES**

PROJECT NO. **96-200**
DRAWING NO. **S-1**
SHEET NO. **09.02.A2**