

GENERAL NOTES:

SPECIFICATIONS: CONNECTICUT DEPARTMENT OF TRANSPORTATION FORM 818 (2020) AND SPECIAL PROVISIONS.

DESIGN SPECIFICATIONS: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR HIGHWAY BRIDGES (AASHTO-2017), WITH THE INTERIM SPECIFICATIONS UP TO AND INCLUDING 2019, AS SUPPLEMENTED BY THE CONNECTICUT DEPARTMENT OF TRANSPORTATION BRIDGE DESIGN MANUAL (2003) INCLUDING CURRENT CHANGES DATED (12/2019).

MATERIAL STRENGTHS:

CONCRETE:
 CLASS PCC03340 CONCRETE $f_c = 3,000$ PSI (MIN.)
 CLASS PCC04460 CONCRETE $f_c = 4,000$ PSI (MIN.)
 CLASS PCC04462 CONCRETE $f_c = 4,000$ PSI (MIN.)

THE SPECIFIED CONCRETE STRENGTH USED IN DESIGN, f_c , OF THE CONCRETE COMPONENTS IS NOTED ABOVE. THE MINIMUM COMPRESSIVE STRENGTH OF THE CONCRETE IN THE CONSTRUCTED COMPONENTS SHALL CONFORM TO THE REQUIREMENTS OF SECTIONS 6.01 - "CONCRETE FOR STRUCTURES" AND M.03 - "PORTLAND CEMENT CONCRETE".

REINFORCEMENT:
 (ASTM A615 GRADE 60) $F_y = 60,000$ PSI

STRUCTURAL STEEL:
 (AASHTO M270, GRADE 50) $F_y = 50,000$ PSI

LIVE LOAD: HL-93

FUTURE PAVING ALLOWANCE: NONE

STRUCTURAL STEEL: SEE STRUCTURE SHEET NOTES FOR DESIGNATIONS AND REQUIREMENTS.

ILLUMINATION: SEE ILLUMINATION PLANS, SUBSET 9.

BITUMINOUS CONCRETE OVERLAY: THIS SHALL CONSIST OF TWO LIFTS. THE FIRST SHALL BE BITUMINOUS CONCRETE - S0.25 (1" THICK) AND THE SECOND SHALL BE BITUMINOUS CONCRETE - S0.50 (2" THICK).

DIMENSIONS: ALL DIMENSIONS SHOWN ON THE PLANS ARE IN FEET AND INCHES EXCEPT IF NOTED OTHERWISE. ALL ELEVATIONS ARE GIVEN IN FEET. WHEN DECIMAL DIMENSIONS ARE GIVEN TO LESS THAN THREE DECIMAL PLACES, THE OMITTED DIGITS SHALL BE ASSUMED TO BE ZEROS.

EXISTING DIMENSIONS: DIMENSIONS OF THE EXISTING STRUCTURE SHOWN ON THESE PLANS ARE FOR GENERAL REFERENCE ONLY. THEY HAVE BEEN TAKEN FROM THE ORIGINAL DESIGN DRAWINGS 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.

PAINTING NOTES:

PAINT: PAINT SHALL CONFORM TO THE REQUIREMENTS OF THE SPECIAL PROVISION, ABRASIVE BLAST CLEANING AND FIELD PAINTING OF BEAM ENDS (SITE NO. X). THE COLOR OF THE TOPCOAT MATERIAL ON THE STRUCTURAL STEEL SHALL BE DETERMINED BY THE ENGINEER AND MATCH THE EXISTING AS CLOSE AS POSSIBLE PER SITE.

NEW STRUCTURAL STEEL SHALL BE SHOP PAINTED AND PAID FOR UNDER THE ITEM "STRUCTURAL STEEL".

FOR PORTIONS OF EXISTING STEEL MEMBERS NOTED ON THE PLANS AT NEW CONNECTIONS OR CONNECTION PLATES, CLEANING AND PAINTING SHALL BE PAID FOR UNDER THE ITEM "LOCALIZED PAINT REMOVAL AND FIELD PAINTING OF EXISTING STEEL".

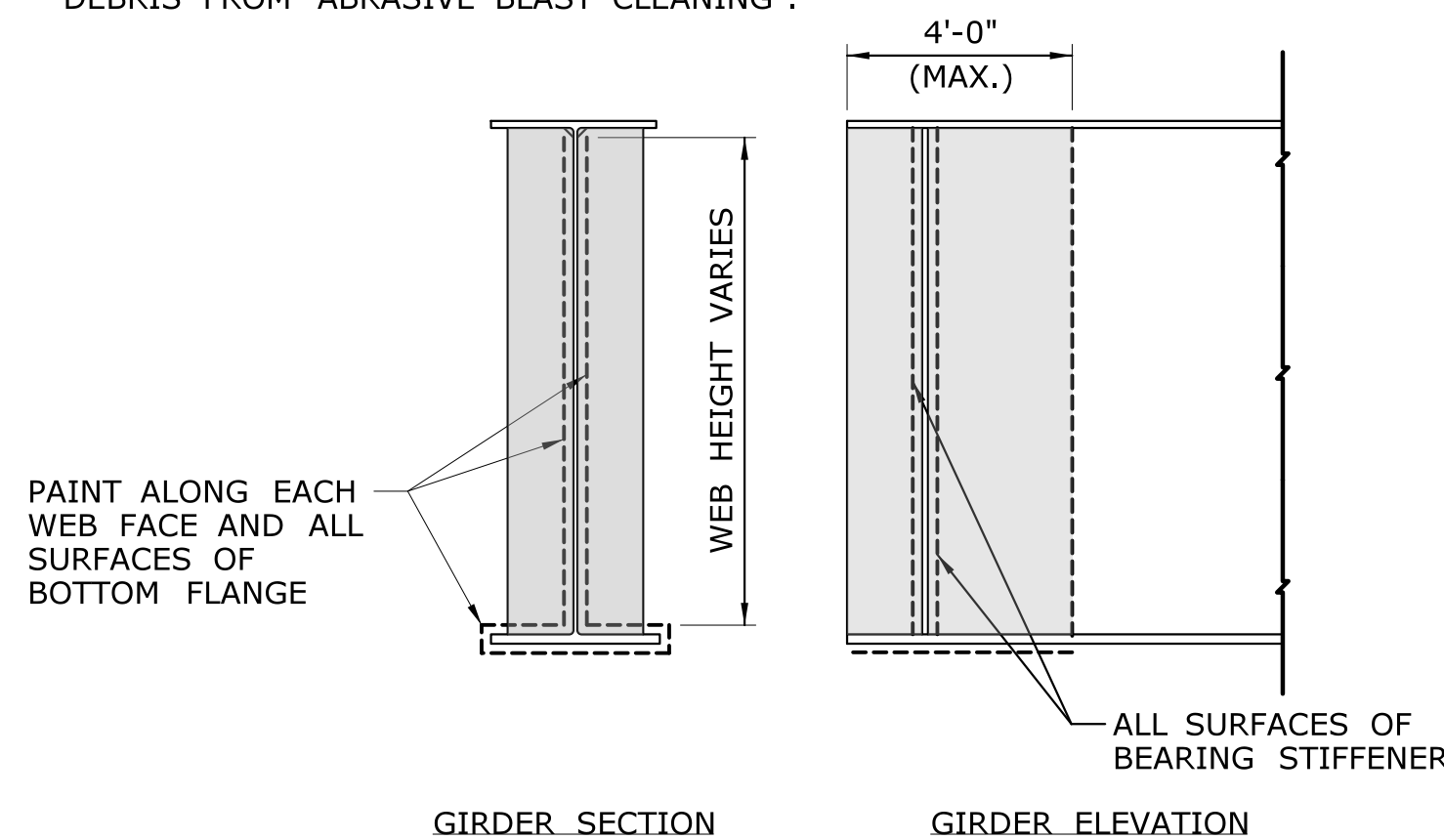
THE FOLLOWING QUANTITIES ARE ESTIMATED FOR THE PAINTING OF STEEL BEAM ENDS DUE TO THE REPLACEMENT OF THE EXISTING BRIDGE BEARINGS ON THE FOLLOWING BRIDGES:

BRIDGE 00377:	1005 SF
BRIDGE 00381:	825 SF

THE LIMITS OF PAYMENT ARE ILLUSTRATED BELOW AND SHALL BE PAID UNDER THE ITEM "ABRASIVE BLAST CLEANING AND FIELD PAINTING OF BEAM ENDS (SITE NO. X)".

THE CONTAINMENT SYSTEM SHALL BE DESIGNED BY THE CONTRACTOR AND REVIEWED BY THE ENGINEER IN ACCORDANCE WITH THE SPECIAL PROVISION "CLASS 1 CONTAINMENT AND COLLECTION OF SURFACE DEBRIS (SITE NO. X)". CLASS 1 CONTAINMENT SHALL BE PROVIDED TO CONTAIN DEBRIS RESULTING FROM THE REMOVAL OF LOCATIONS IN THE PREPARATION OF STEEL SURFACES FOR PAINTING.

DISPOSAL OF THE PAINT FROM THE EXISTING BEAMS SHALL BE PAID UNDER THE ITEM "DISPOSAL OF LEAD DEBRIS FROM ABRASIVE BLAST CLEANING".



CONCRETE NOTES:

REMAIN-IN-PLACE FORMS: THE USE OF REMAIN-IN-PLACE FORMS IS NOT ALLOWED.

COMPOSITE CONSTRUCTION: NO TEMPORARY INTERMEDIATE SUPPORTS SHALL BE USED DURING THE PLACING AND SETTING OF NEW CONCRETE DECK SLAB. TEMPORARY SUPPORTS MAY BE USED FOR STRUCTURAL STEEL ERECTION ONLY. CONSTRUCTION LOADS AND DEAD LOADS WILL BE PERMITTED WHEN DIRECTED BY THE ENGINEER BUT ONLY WHEN THE CONCRETE HAS REACHED A STRENGTH OF $f_c = 3,500$ PSI. LIVE LOADS (TRAFFIC) WILL BE PERMITTED ON THE STRUCTURE AFTER THE CONCRETE HAS REACHED A STRENGTH OF $f_c = 4,000$ PSI.

THE FOLLOWING PAY ITEMS AND CONCRETE CLASSES ARE REQUIRED FOR CAST-IN-PLACE BRIDGE COMPONENTS:

ITEM	BRIDGE COMPONENTS	PCC CLASS
BARRIER WALL CONCRETE	MEDIAN TRANSITION BLOCKS	PCC03340
COLUMN AND CAP CONCRETE	RECONSTRUCTION OF ABUTMENT SEATS, ABUTMENT BACKWALLS, CHEEKWALLS	PCC04460
BRIDGE DECK CONCRETE	BRIDGE DECK	PCC04462
PARAPET CONCRETE	42" F-SHAPE CONCRETE PARAPET	PCC04462

JOINT SEAL: SEE SPECIAL PROVISIONS.

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

CONCRETE COVER: ALL REINFORCEMENT SHALL HAVE TWO INCHES COVER UNLESS DIMENSIONED OTHERWISE.

REINFORCEMENT: ALL REINFORCEMENT SHALL BE ASTM A615 GRADE 60.

GALVANIZED REINFORCING BARS: ALL REINFORCEMENT IN THE SUPERSTRUCTURE INCLUDING THE CONCRETE DECK SLAB AND THE PARAPETS SHALL BE GALVANIZED AFTER FABRICATION, TO THE REQUIREMENTS OF ASTM A767, CLASS 1, INCLUDING SUPPLEMENTAL REQUIREMENTS. THE COST OF FURNISHING AND PLACING THIS REINFORCEMENT SHALL BE INCLUDED IN THE PAY ITEM FOR "DEFORMED STEEL BARS - GALVANIZED".

SPLICE LENGTHS: THE SPLICE LENGTH FOR THE TRANSVERSE REINFORCEMENT SHALL BE AS SHOWN IN THE LAP SPLICE DETAIL. THE SPLICE LENGTH FOR THE LONGITUDINAL REINFORCEMENT IN THE SLAB AND MEDIAN BARRIER SHALL BE AS FOLLOWS.

BAR SIZE:	SPLICE LENGTH:
#4	1'-5"
#5	1'-9"
#6	2'-2"
#8	3'-6"

CLOSED CELL ELASTOMER: THE COST OF FURNISHING AND INSTALLING CLOSED CELL ELASTOMER SHALL BE INCLUDED IN THE COST OF THE ITEM "PARAPET CONCRETE" WHERE APPLICABLE. THE COST OF CLOSED CELL ELASTOMER ALONG THE BACKWALLS SHALL BE PAID UNDER THE ITEM "1" CLOSED CELL ELASTOMER".

CONSTRUCTION JOINTS: CONSTRUCTION JOINTS, OTHER THAN THOSE SHOWN ON THE PLANS, WILL NOT BE PERMITTED WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.

BRIDGE PARAPETS: ALL NEW BRIDGE PARAPETS SHALL BE 42" HIGH F-SHAPE CONCRETE BRIDGE PARAPET. THIS PARAPET HAS BEEN EVALUATED AT TEST LEVEL 4 (TL-4) AND COMPLIES WITH MASH 2016. PENETRATING SEALER COMPOUND SHALL BE APPLIED TO ALL EXPOSED FACES OF THE NEW PARAPETS.

STRUCTURAL STEEL GENERAL NOTES:

STRUCTURAL STEEL (LOW ALLOY) SHALL CONFORM TO AASHTO M270, GRADE 50 T2.

WELDING DETAILS, PROCEDURES AND TESTING METHODS SHALL CONFORM TO THE ANSI/AASHTO/AWS D1.5-(2015) - BRIDGE WELDING CODE, UNLESS OTHERWISE NOTED ON THE PLANS.

FIELD SPLICES WILL NOT BE ALLOWED EXCEPT WITH THE WRITTEN PERMISSION OF THE ENGINEER PRIOR TO THE SUBMISSION OF SHOP PLANS. IF ALLOWED, THESE SPLICES SHALL BE DESIGNED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER. THE COST OF THESE SPLICES, INCLUDING THE COST OF DESIGN, SHALL BE AT NO EXTRA EXPENSE TO THE STATE.

ALL WEB TO FLANGE, WEB TO BEARING STIFFENER AND BEARING STIFFENER TO FLANGE FILLET WELDS SHALL BE INSPECTED BY THE MAGNETIC PARTICLE METHOD.

MULTIPLE PASS WELDS, INSPECTED BY THE MAGNETIC PARTICLE METHOD SHALL HAVE EACH PASS OR LAYER INSPECTED AND ACCEPTED BEFORE PROCEEDING TO THE NEXT PASS OR LAYER, AS DETERMINED BY THE ENGINEER.

SHOP WEB SPLICES SHALL BE LOCATED WITHIN THE MIDDLE THIRD OF THE SPAN.

SHOP FLANGE SPLICES SHALL BE LOCATED A MINIMUM OF SIX INCHES FROM WEB SPLICES.

FLANGE OR WEB SPLICES SHALL BE LOCATED A MINIMUM OF SIX INCHES FROM STIFFENERS AND CONNECTION PLATES.

BEARING STIFFENERS AND THE ENDS OF GIRDERS SHALL BE VERTICAL AFTER THE APPLICATION OF FULL DEAD LOADS.

THE STRUCTURAL STEEL FABRICATORS SHALL BE CERTIFIED UNDER THE AISC CERTIFICATION PROGRAM CATEGORY AS NOTED BELOW:

BRIDGE 00377:	CATEGORY SBR OR CTP - BRIDGE FABRICATOR SIMPLE OR BRIDGE COMPONENT QMS
BRIDGE 00381:	CATEGORY SBR OR CTP - BRIDGE FABRICATOR SIMPLE OR BRIDGE COMPONENT QMS

THE CONTRACTOR SHALL TAKE THE PROPER PRECAUTIONS TO ENSURE THE STABILITY OF ALL STRUCTURAL ELEMENTS UNTIL THE TOTAL STRUCTURE IS IN BEING.

PEENING NOTES: PEENING OF END PLATE COVER WELDS SHALL USE THE ULTRASONIC PEENING METHODS. ALL BOTTOM COVER PLATE END WELD IN ALL GIRDERS TO BE PEENED. ALL PEENED AREAS SHALL BE PAINTED, AND INCLUDED IN THE ITEM "LOCALIZED PAINT REMOVAL AND FIELD PAINTING OF EXISTING STEEL".

GENERAL SCOPE OF WORK:

BRIDGE 00381:

- REMOVE EXISTING MEDIAN SLAB, BITUMINOUS CONCRETE OVERLAY, MEMBRANE WATERPROOFING, AND EXISTING GIRDER 7.
- MODIFY SUBSTRUCTURE FOR PROPOSED MEDIAN DECK SLABS.
- INSTALL TEMPORARY BOLSTERS AND TEMPORARY BACKWALL FILLER FOR TEMPORARY DECK AT THE MEDIAN.
- INSTALL PROPOSED GIRDERS 7 AND 7A AND CONSTRUCT TEMPORARY DECK AT EXISTING MEDIAN.
- REMOVE EXISTING BEAM BEARINGS AND REPLACE WITH PROPOSED ELASTOMERIC BEARINGS. MODIFY PEDESTALS AS REQUIRED TO ACHIEVE THE PROPOSED FINISH GRADE ELEVATIONS.
- SPOT PAINT EXISTING GIRDER ENDS AT THE BEARINGS.
- CONSTRUCT KEEPER BLOCKS ON BRIDGE ABUTMENTS SEATS.
- RECONSTRUCT THE EXISTING EASTBOUND AND WESTBOUND BRIDGE DECKS, MEMBRANE WATERPROOFING AND BITUMINOUS OVERLAY, AND CONSTRUCT 42" F-SHAPE CONCRETE BRIDGE PARAPETS.
- INSTALL R-B 350 GUIDERAIL TO THE LEADING AND TRAILING PARAPET ENDS.
- INSTALL NEW ASPHALTIC PLUG EXPANSION DECK JOINTS AT BOTH ABUTMENTS AND SEAL PARAPET JOINTS.
- REMOVE TEMPORARY DECK AND CONSTRUCT NEW MEDIAN DECK SLAB WITH 42" F-SHAPE CONCRETE PARAPETS.
- APPLY CONCRETE SEALANT TO 42" F-SHAPE CONCRETE PARAPETS.

BRIDGE 00377:

- REMOVE EXISTING MEDIAN SLAB, BITUMINOUS CONCRETE OVERLAY, MEMBRANE WATERPROOFING, AND EXISTING GIRDER 7.
- MODIFY SUBSTRUCTURE FOR PROPOSED MEDIAN DECK SLABS.
- INSTALL TEMPORARY BOLSTERS AND TEMPORARY BACKWALL FILLER FOR TEMPORARY DECK AT THE MEDIAN.
- INSTALL PROPOSED GIRDERS 7 AND 7A AND CONSTRUCT TEMPORARY DECK AT EXISTING MEDIAN.
- REMOVE EXISTING BEAM BEARINGS AND REPLACE WITH PROPOSED ELASTOMERIC BEARINGS. MODIFY PEDESTALS AS REQUIRED TO ACHIEVE THE PROPOSED FINISH GRADE ELEVATIONS.
- SPOT PAINT EXISTING GIRDER ENDS AT THE BEARINGS.
- PEENING OF EXISTING GIRDER BOTTOM COVER PLATE WELDS.
- CONSTRUCT KEEPER BLOCKS ON BRIDGE ABUTMENTS SEATS.
- RECONSTRUCT THE EXISTING EASTBOUND AND WESTBOUND BRIDGE DECKS, MEMBRANE WATERPROOFING AND BITUMINOUS OVERLAY, AND CONSTRUCT 42" F-SHAPE CONCRETE BRIDGE PARAPETS.
- INSTALL R-B 350 GUIDERAIL TO THE LEADING AND TRAILING PARAPET ENDS.
- INSTALL NEW ASPHALTIC PLUG EXPANSION DECK JOINTS AT BOTH ABUTMENTS AND SEAL PARAPET JOINTS.
- REMOVE TEMPORARY DECK AND CONSTRUCT NEW MEDIAN DECK SLAB WITH 42" F-SHAPE CONCRETE BRIDGE PARAPETS.
- PERFORM PEENING TREATMENT TO EXISTING GIRDER COVER PLATE END WELDS
- APPLY CONCRETE SEALANT TO 42" F-SHAPE CONCRETE PARAPETS.

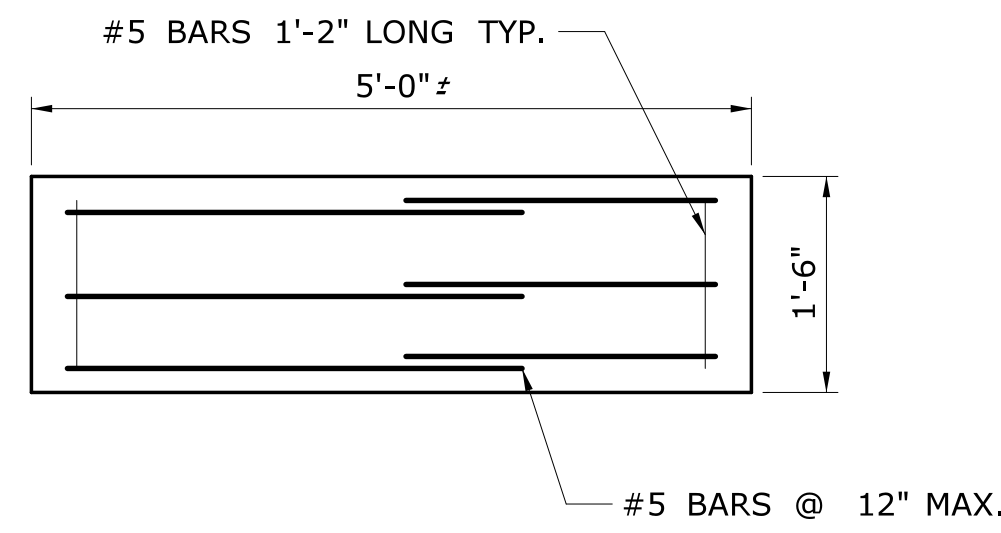
DESIGNED BY:
 CDM SMITH
 77 HARTLAND STREET
 SUITE 201
 EAST HARTFORD, CT 06108

ADDENDUM NO. 3

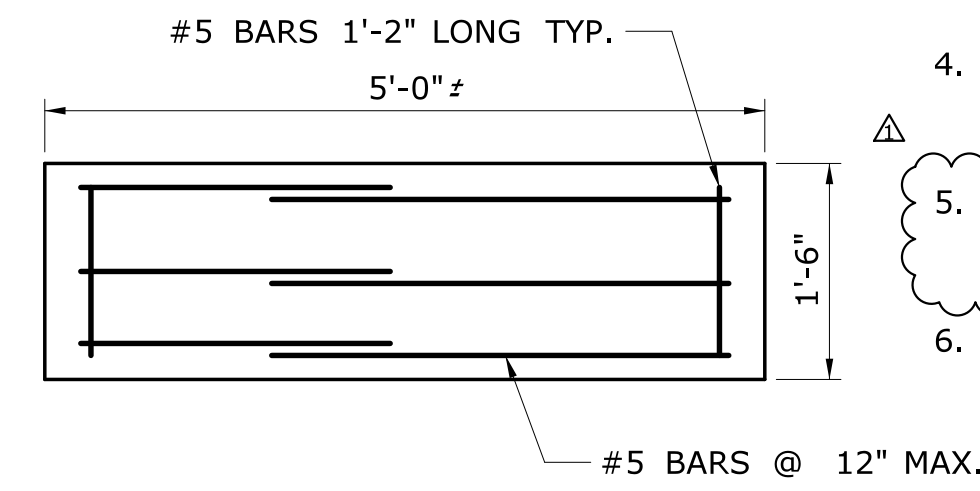
1.06.21	UPDATED CONCRETE ITEMS AND COMPONENTS	05.03.A3	DESIGNER/DRAFTER: JCF	<p>STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION</p>		PROJECT TITLE: RESURFACING, BRIDGE AND SAFETY IMPROVEMENTS ON ROUTE 2	TOWN: TOWNS OF HARTFORD, EAST HARTFORD, WETHERSFIELD AND GLASTONBURY	PROJECT NO. 42-317
			CHECKED BY: MPE				DRAWING TITLE: BRIDGE GENERAL NOTES	DRAWING NO. S-02
REV.	DATE	REVISION DESCRIPTION	SHEET NO.				Plotted Date: 1/6/2021	File name: ... \SB_MSH_0042_0317_S-02_A3.dgn

TRANSITION BLOCK NOTES

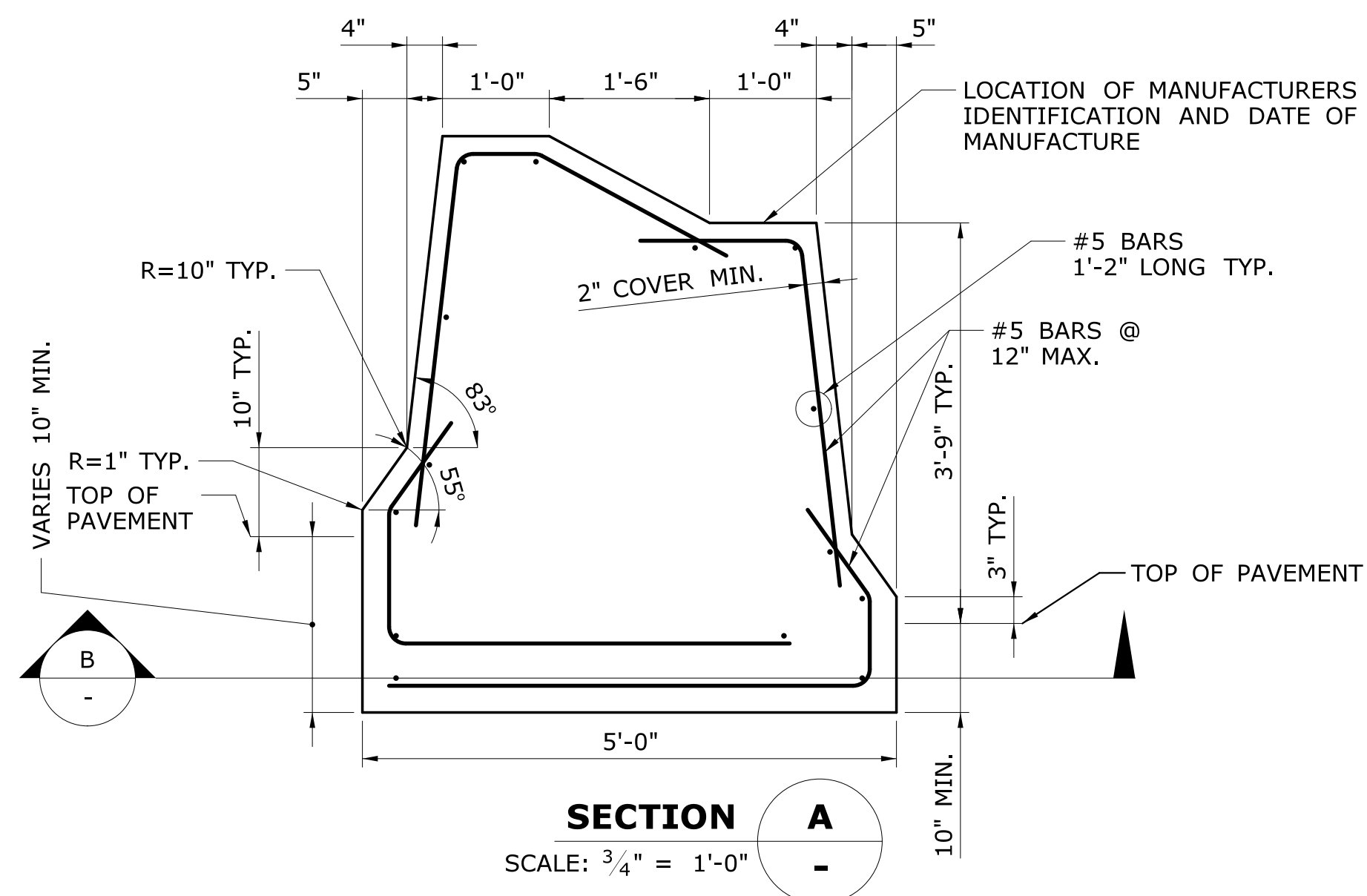
1. THE CONCRETE TRANSITION BLOCK SHALL BE CLASS PCC03340 "BARRIER WALL CONCRETE."
2. ALL REINFORCEMENT SHALL HAVE A 2" (MIN.) COVER. REINFORCEMENT SHALL BE GALVANIZED AND CONFORM TO ASTM A615, GRADE 60.
3. 1/2" CLOSED CELL BACKER ROD SHALL BE INSTALLED ALONG THE TRAFFIC FACE BETWEEN THE HIGHWAY MEDIAN AND TRANSITION BLOCK, AND BETWEEN THE TRANSITION BLOCK AND THE BRIDGE SPLIT MEDIAN BARRIER. THE CLOSED CELL BACKER ROD IS INCIDENTAL TO THE ITEM "BARRIER WALL CONCRETE."
4. THE CONTRACTOR SHALL VERIFY A MINIMUM EMBEDMENT DEPTH OF 10-INCHES BE PROVIDED AND THAT THE SLOPED TRAFFIC FACE OF THE BARRIER IS FLUSH WITH THE HIGHWAY CONCRETE MEDIAN AND BRIDGE SPLIT MEDIAN BARRIER.
5. THE COST OF CONSTRUCTING THE CONCRETE TRANSITION BLOCKS, INCLUDING THE CONCRETE, CLOSED CELL BACKER ROD, AND REINFORCING, SHALL BE PAID FOR UNDER THE ITEMS "BARRIER WALL CONCRETE" AND "DEFORMED STEEL BARS - GALVANIZED."
6. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR THE TRANSITION BLOCKS TO ENSURE SMOOTH TRANSITIONS OF SLOPED SURFACES.



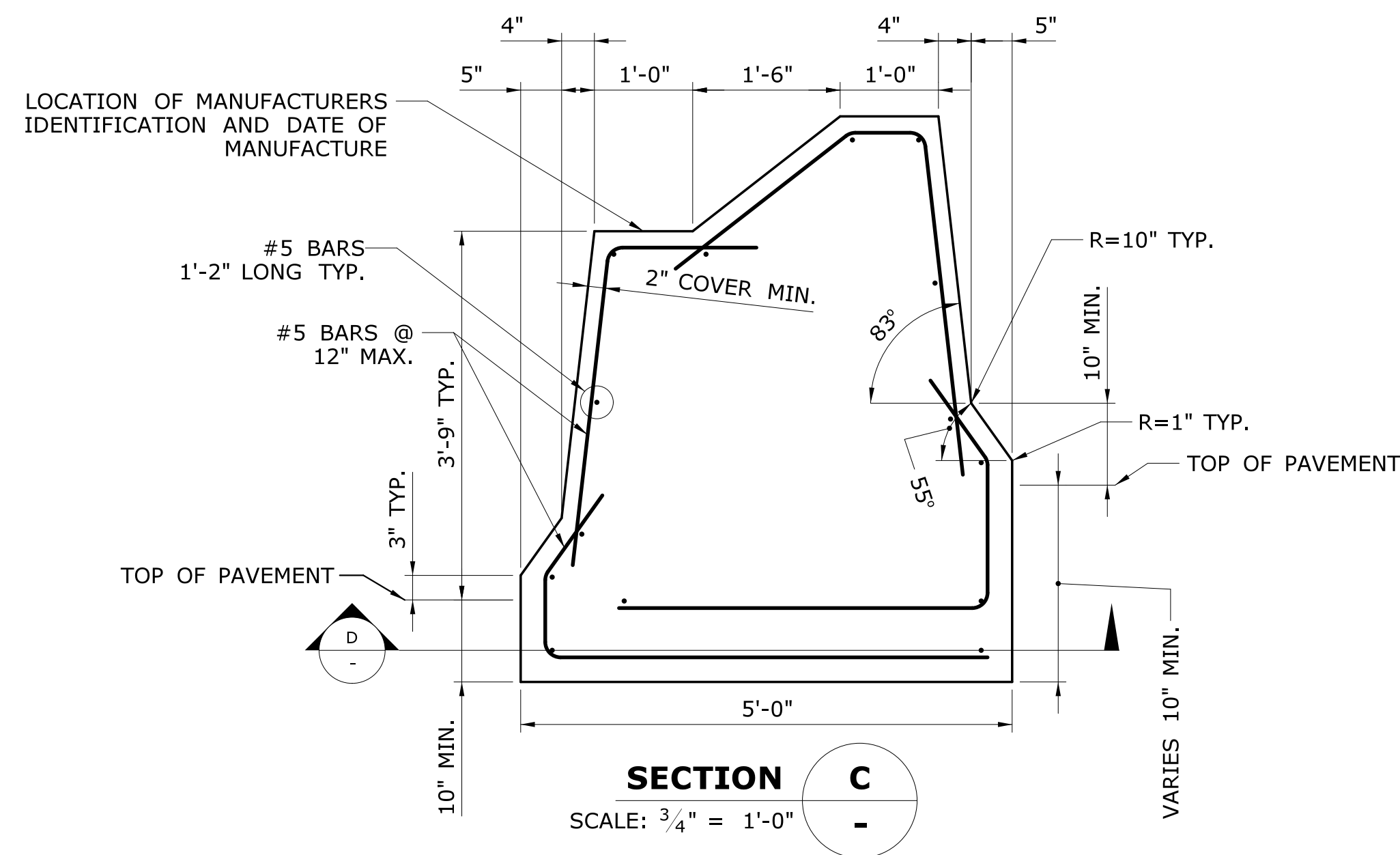
SECTION B
SCALE: 3/4" = 1'-0"



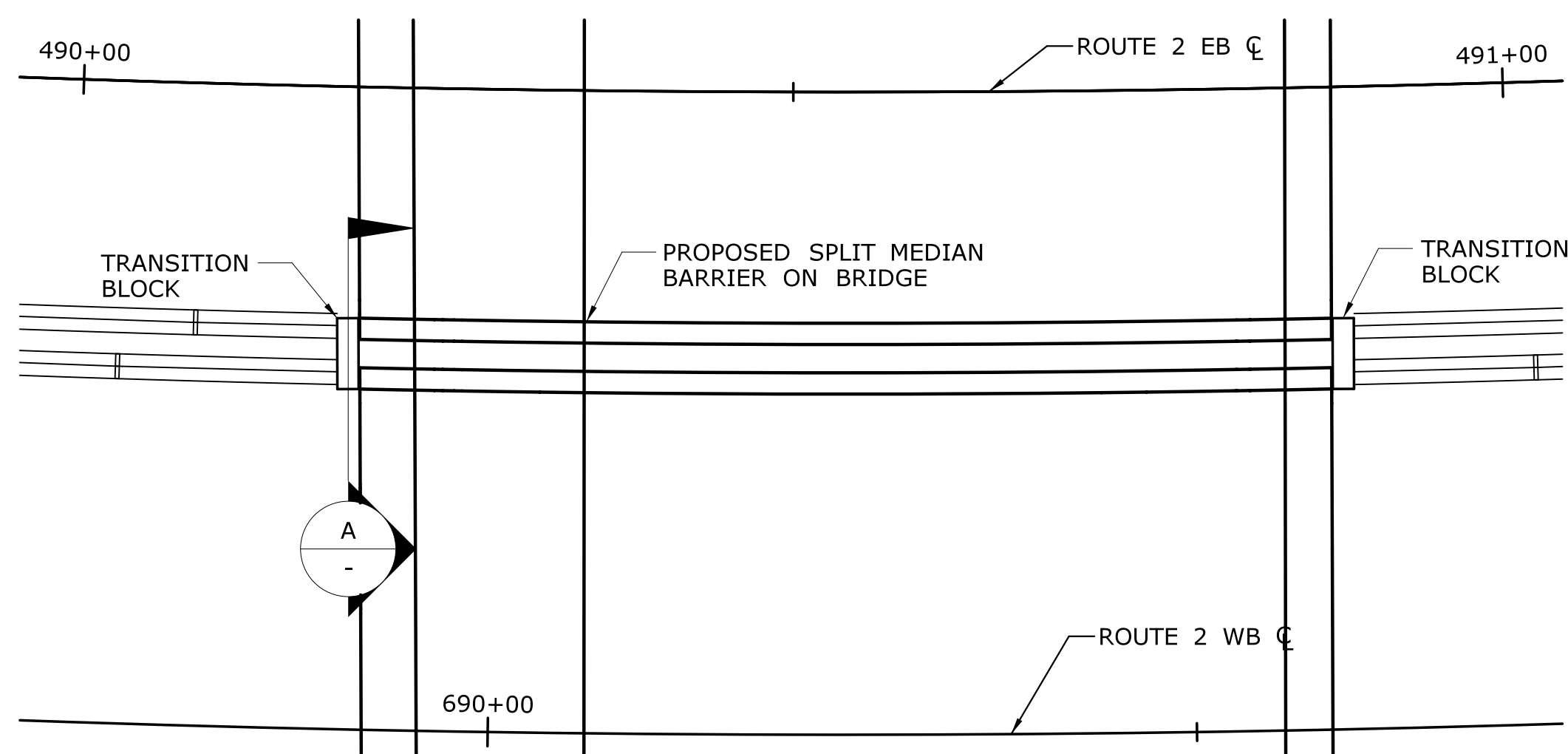
SECTION D
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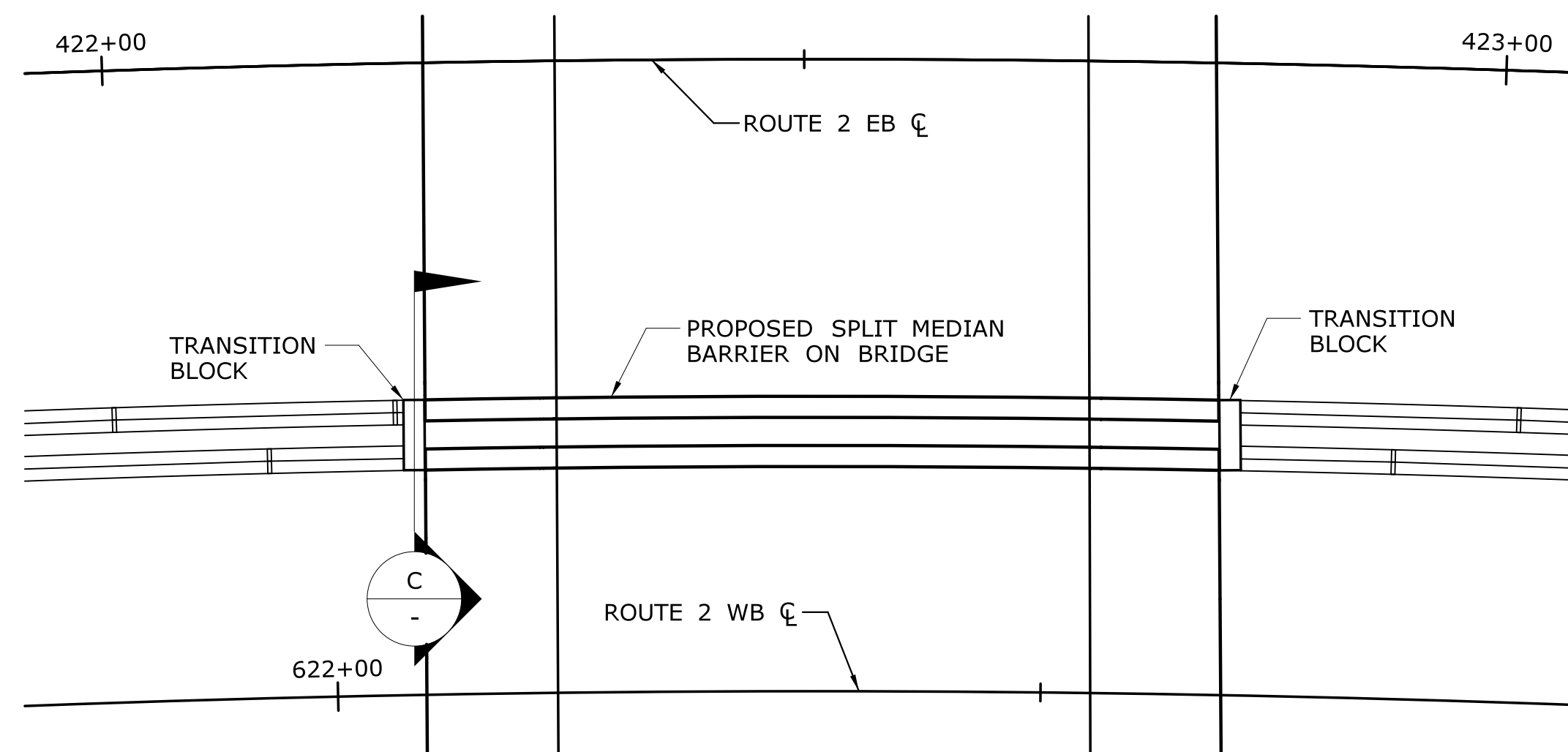
SECTION A
SCALE: 3/4" = 1'-0"



SECTION C
SCALE: 3/4" = 1'-0"



TRANSITION BLOCK BR. 00377
SCALE: 1" = 10'



TRANSITION BLOCK BR. 00381
SCALE: 1" = 10'

ADDENDUM NO. 3

12/31/2020	TRANSITION BLOCK NOTES	05.43.A3	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.
DESIGNER/DRAFTER:	WGS/JCF	CHECKED BY:	MPE
SCALE AS NOTED			
REV.	DATE	REVISION DESCRIPTION	SHEET NO.
			Plotted Date: 12/30/2020

DESIGNER/DRAFTER: WGS/JCF
CHECKED BY: MPE
SCALE AS NOTED

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Signature/Block: [Professional Engineer Seal]

PROJECT TITLE: RESURFACING, BRIDGE AND SAFETY IMPROVEMENTS ON ROUTE 2

TOWN: TOWNS OF HARTFORD, EAST HARTFORD, WETHERSFIELD AND GLASTONBURY

DRAWING TITLE: MISCELLANEOUS DETAILS

PROJECT NO. 42-317
DRAWING NO. S-42
SHEET NO. 05.43.A3