

CONTRACT NO. TS-163

MULLER ROAD BRIDGE REPLACEMENT  
PW-6458 FEMA 4020 DR NY

TOWN OF SHANDAKEN ULSTER COUNTY NEW YORK

TOWN OFFICIALS

ROBERT A. STANLEY, TOWN SUPERVISOR

TOWN COUNCIL  
TIMOTHY MALLORY  
FAYE STORMS  
PETER DISCIAFANI  
GAEL ALBA

JOYCE GRANT, TOWN CLERK  
ERIC HOFMEISTER, HIGHWAY SUPERINTENDENT

FEBRUARY 2016

BRINNIER AND LARIOS, P. C.  
PROFESSIONAL ENGINEERS AND LAND SURVEYORS

67 MAIDEN LANE  
KINGSTON, NEW YORK  
(845) 338-7622

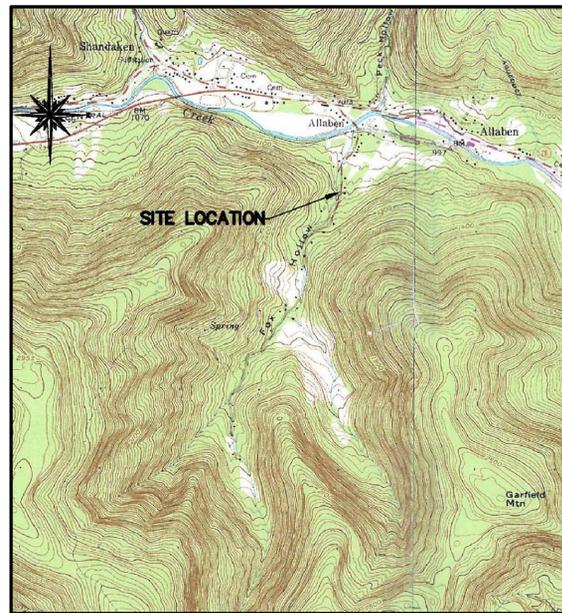
Unauthorized alteration or addition to a plan  
bearing a licensed engineer's seal is a  
violation of section 7209, subdivision 2, of the  
New York State Education Law.



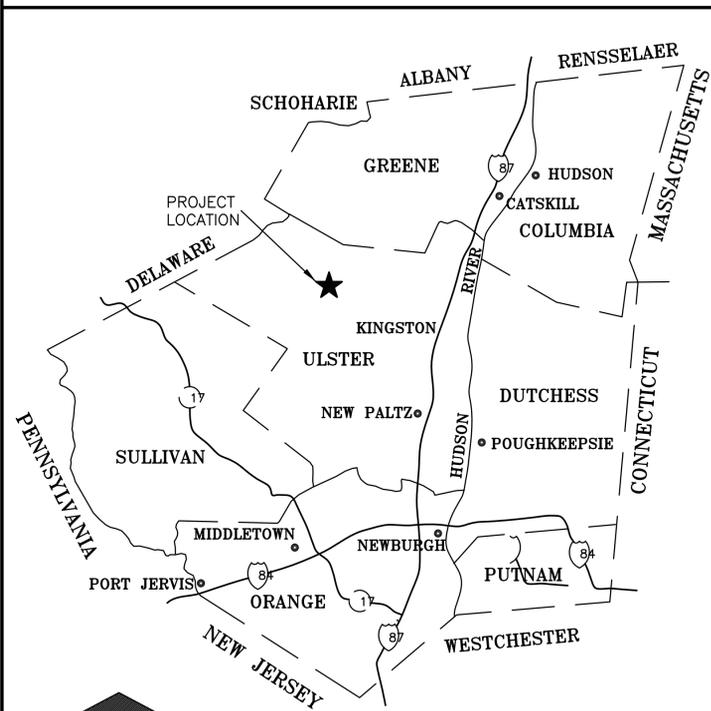
JOHN STINEMIRE, P.E., CONSULTING ENGINEER  
15 RAILROAD AVENUE KINGSTON, NEW YORK 12401 845-331-8806

SHEET INDEX

SHEET NO.	DESCRIPTION
C1.	EXISTING CONDITIONS
C2.	DEMOLITION AND STREAM PROTECTION PLANS
C3.	SITE PLAN
S1.	FOUNDATION PLAN AND STRUCTURAL NOTES
S2.	BRIDGE FRAMING PLAN
S3.	PRECAST DECK PANEL PLAN
S4.	SECTIONS AND DETAILS
S5.	DETAILS
S6.	GUIDE RAIL PLAN
S7.	GUIDE RAIL DETAILS
S8.	ALTERNATE BID #1 FOUNDATION PLAN
S9.	ALTERNATE BID #1 SECTION AND DETAILS



LOCATION MAP  
PHONICIA AND SHANDAKEN QUADRANGLE  
7.5 MINUTE USGS TOPOGRAPHIC MAP  
SCALE: 1" = 2000'



GENERAL LOCATION MAP



Know what's below.  
Call before you dig.

M.M. JUNE 2012

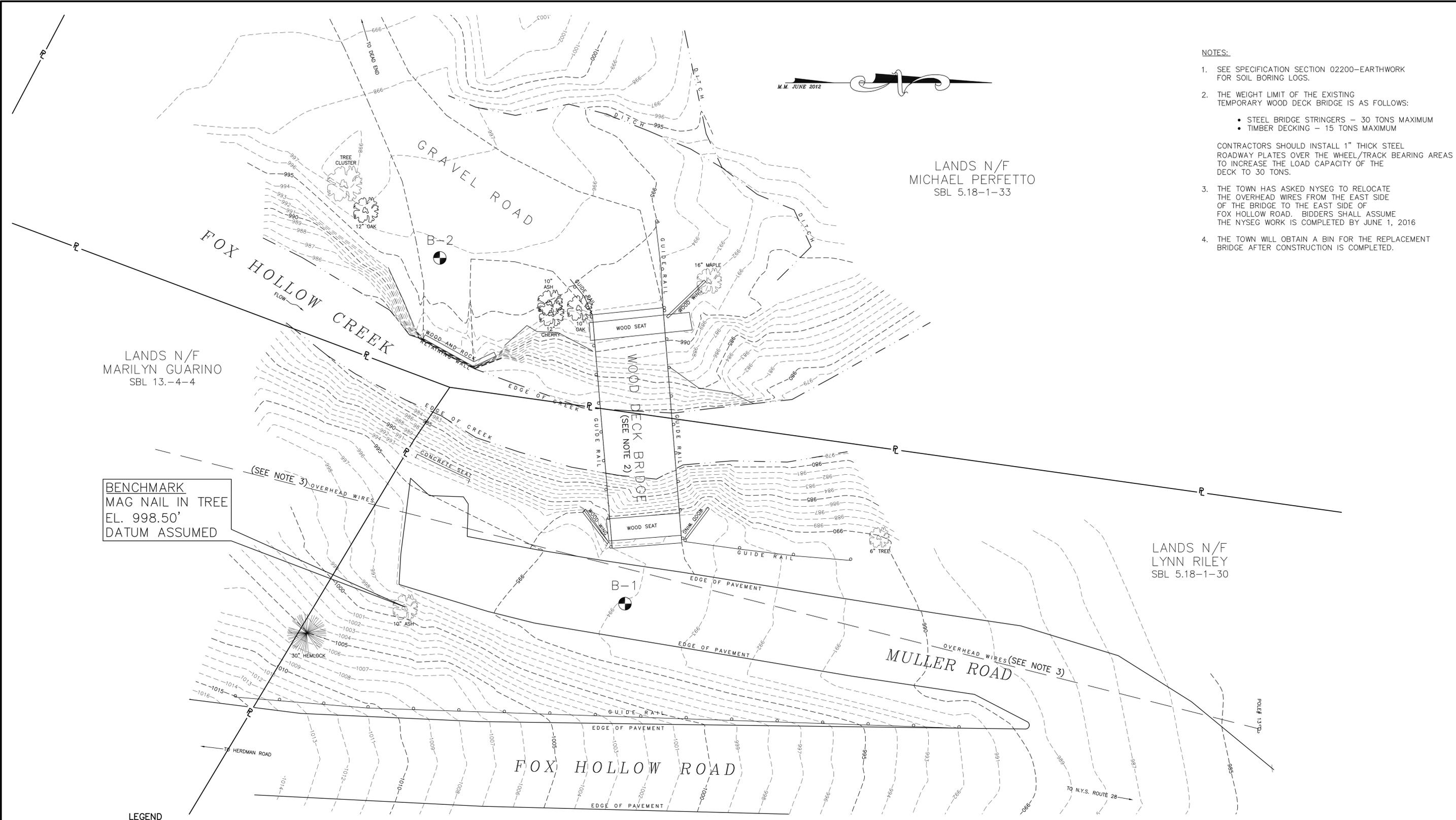
- NOTES:
- SEE SPECIFICATION SECTION 02200-EARTHWORK FOR SOIL BORING LOGS.
  - THE WEIGHT LIMIT OF THE EXISTING TEMPORARY WOOD DECK BRIDGE IS AS FOLLOWS:
    - STEEL BRIDGE STRINGERS - 30 TONS MAXIMUM
    - TIMBER DECKING - 15 TONS MAXIMUM
  - CONTRACTORS SHOULD INSTALL 1" THICK STEEL ROADWAY PLATES OVER THE WHEEL/TRACK BEARING AREAS TO INCREASE THE LOAD CAPACITY OF THE DECK TO 30 TONS.
  - THE TOWN HAS ASKED NYSEG TO RELOCATE THE OVERHEAD WIRES FROM THE EAST SIDE OF THE BRIDGE TO THE EAST SIDE OF FOX HOLLOW ROAD. BIDDERS SHALL ASSUME THE NYSEG WORK IS COMPLETED BY JUNE 1, 2016
  - THE TOWN WILL OBTAIN A BIN FOR THE REPLACEMENT BRIDGE AFTER CONSTRUCTION IS COMPLETED.

LANDS N/F  
MICHAEL PERFETTO  
SBL 5.18-1-33

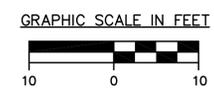
LANDS N/F  
MARILYN GUARINO  
SBL 13.-4-4

LANDS N/F  
LYNN RILEY  
SBL 5.18-1-30

BENCHMARK  
MAG NAIL IN TREE  
EL. 998.50'  
DATUM ASSUMED



EXISTING CONDITIONS  
SCALE: 1" = 10'



- LEGEND
- - - - - 995 - - - - - EXISTING CONTOUR (MAJOR)
  - - - - - 998 - - - - - EXISTING CONTOUR (MINOR)
  - P — EXISTING PROPERTY LINE
  - 🌳 TREE
  - - - - - EDGE OF STREAM
  - - - - - EXISTING OVERHEAD UTILITY LINES
  - - - - - GRAVEL ROAD

NOTE: The location of existing underground utilities are shown in an approximate way only and have not been independently verified by the owner or its representative. The contractor shall determine the exact location of all existing utilities before commencing work, and agrees to be fully responsible for any and all damages which might be occasioned by the contractor's failure to exactly locate and preserve any and all underground utilities.

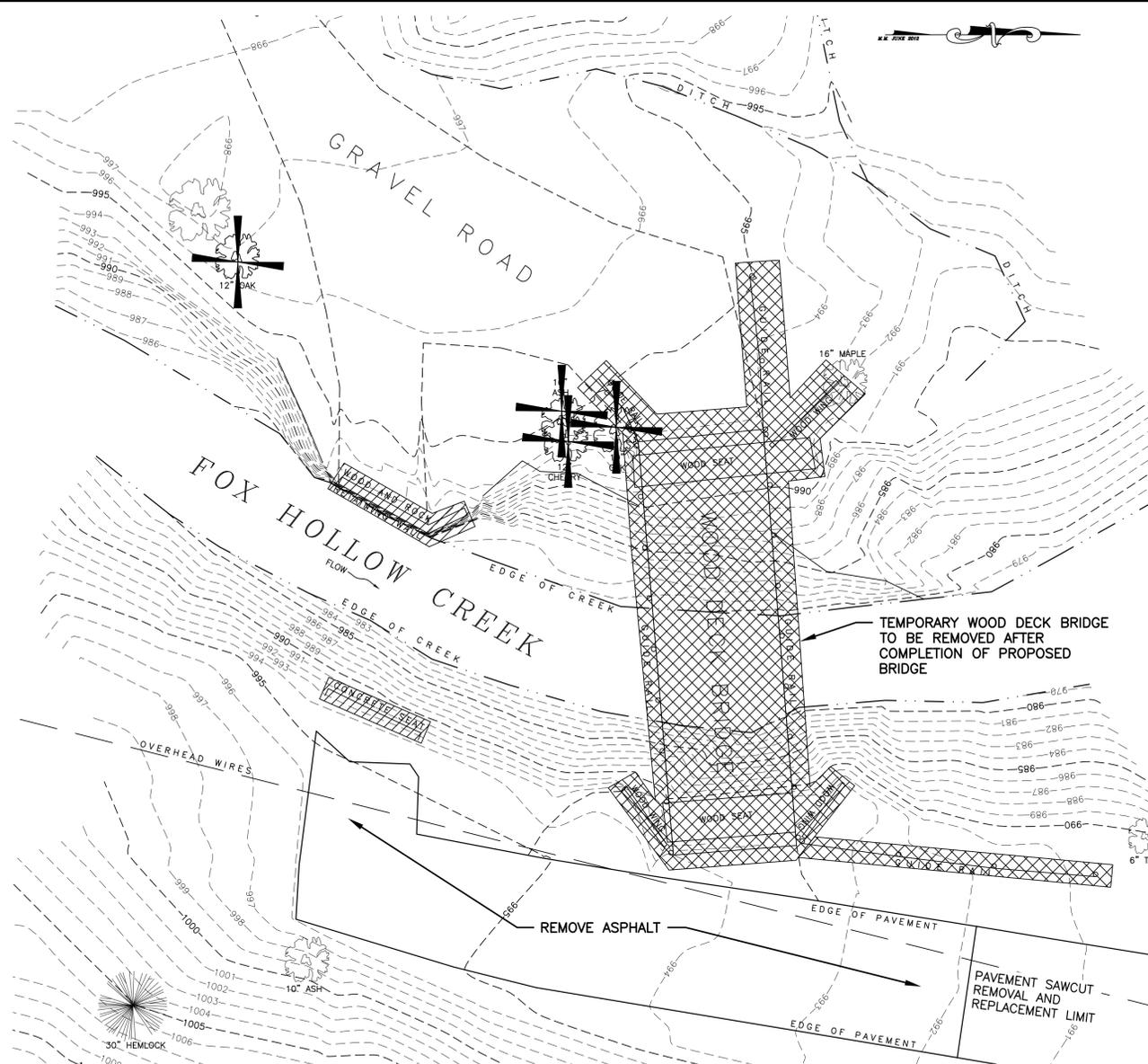
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EXISTING CONDITIONS  
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TOWN OF SHANDAKEN		ULSTER COUNTY NEW YORK	
DATE	REVISION	RECORD	
BRINNIER & LARIOS, P.C. ENGINEERS & LAND SURVEYORS 67 MAIDEN LANE KINGSTON, N.Y.			SHEET NO. C1
SCALE 1" = 10'	DATE FEB. 2016	DWG RJS	CHK DML



**DEMOLITION PLAN**  
(AFTER COMPLETION OF PROPOSED BRIDGE)

SCALE: 1" = 10'

**DEMOLITION NOTES:**

- REMOVE FOR SALVAGE AND DELIVER TO THE TOWN HIGHWAY GRAVEL BANK ON ROUTE 42 THE FOLLOWING ITEMS:
  - GUIDE RAILING
  - TEMPORARY WOOD DECK BRIDGE
  - W BEAMS
- STREAM PROTECTION MEASURES SHALL BE IN PLACE AND PROPERLY FUNCTIONING PRIOR TO DEMOLITION OF EXISTING BRIDGE ABUTMENTS.

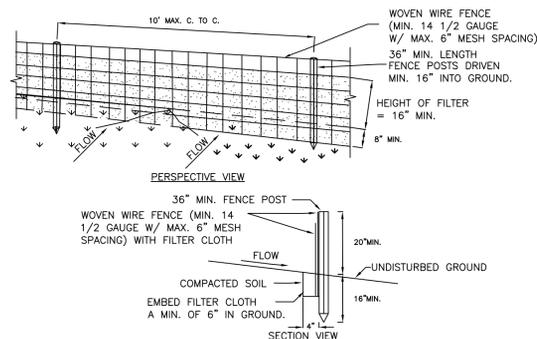
**LEGEND**

- 995--- EXISTING CONTOUR (MAJOR)
- 998--- EXISTING CONTOUR (MINOR)
- (Tree Symbol) TREE
- - - - - EDGE OF STREAM
- EXISTING OVERHEAD UTILITY LINES
- GRAVEL ROAD
- (X Symbol) TREE REMOVAL
- (Cross-hatched Area) TO BE DEMOLISHED AND SALVAGED
- (Diagonal-hatched Area) TO BE DEMOLISHED

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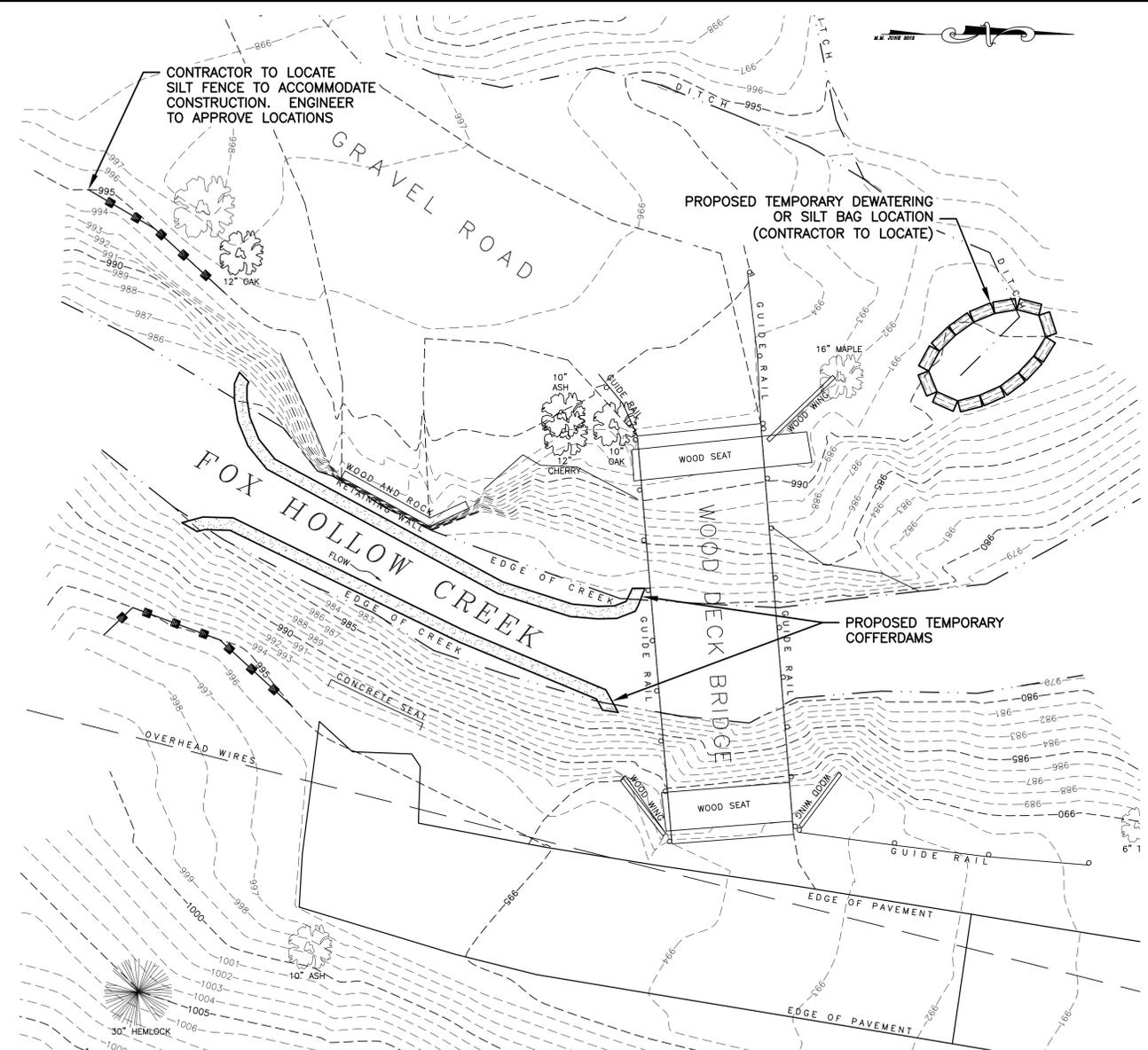
GRAPHIC SCALE IN FEET



**CONSTRUCTION SPECIFICATIONS**

- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
- FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 12 1/2 GAUGE, 6" MAXIMUM MESH OPENING.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
- PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.
- SILT FENCE LOCATIONS AS DEPICTED ON PLANS ARE ILLUSTRATIVE. CONTRACTOR SHALL EXERCISE DILIGENCE WHEN INSTALLING SILT FENCE TO CAPTURE ALL SEDIMENT LADEN RUNOFF.

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**STREAM PROTECTION PLAN**

SCALE: 1" = 10'

**STREAM PROTECTION NOTES:**

- A. THE STREAM PROTECTION PLAN INVOLVES THE CONSTRUCTION OF TEMPORARY EARTHEN COFFERDAMS TO ISOLATE THE WORK AREA. THE PURPOSE OF THE TEMPORARY COFFERDAMS IS TO ALLOW THE STREAM TO FLOW PAST THE WORK AREA AND TO CONTAIN THE SEDIMENT AND SOIL FROM THE CONSTRUCTION ACTIVITIES WITH LITTLE OR NO IMPACT TO THE STREAM. THE GENERAL SEQUENCE OF THE OPERATION WILL BE AS FOLLOWS:
- INSTALL SILT FENCE ALONG THE PERIMETER OF THE AREA TO BE DISTURBED.
  - INSTALL THE TEMPORARY COFFERDAM ON ONE SIDE OF THE STREAM PRIOR TO COMMENCING THE ABUTMENT DEMOLITION AND CONSTRUCTION WORK. AFTER WORK ON ONE ABUTMENT IS COMPLETED, REMOVE AND REPOSITION THE TEMPORARY COFFERDAM TO THE OTHER SIDE OF THE STREAM.
  - IN STREAM EXCAVATION, IN-STREAM EXCAVATION SHALL BE LIMITED TO ONLY THAT NECESSARY TO ALLOW INSTALLATION AND MAINTENANCE OF THE TEMPORARY COFFERDAM.
  - INSPECTION AND MAINTENANCE. PERIODICALLY INSPECT THE TEMPORARY COFFERDAM TO INSURE ITS INTEGRITY AND FUNCTIONALITY. REPAIR AS NECESSARY.

- B. CONTRACTOR SHALL SUBMIT DETAILS OF THEIR STREAM PROTECTION PLAN FOR APPROVAL.
- C. ALL WORK TO BE DONE IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF NYSDEC AND USACE ENVIRONMENTAL PERMITS.
- REMOVAL. WHEN THE CONSTRUCTION WORK IS COMPLETED, THE TEMPORARY COFFERDAM MATERIALS SHALL BE REMOVED. ALL REMOVED MATERIALS SHALL BE TAKEN OFF-SITE AND NOT PLACED IN THE WATERWAY FLOODPLAIN.
  - DEWATERING. REMOVAL OF WATER FROM WITHIN THE COFFERDAM AREA SHALL BE ACCOMPLISHED USING A PUMP(S). THE PUMP(S) SHALL BE DISCHARGED IN A CONTROLLED MANNER TO A FIELD LOCATED ADJACENT PONDING AREA TO ALLOW REMOVAL OF SEDIMENT AND SUSPENDED SOLIDS BEFORE THE WATER RE-ENTERS THE STREAM. DISCHARGING THE PUMP DIRECTLY TO THE STREAM IS PROHIBITED.
  - PLACEMENT OF CONCRETE MATERIALS OR DISCHARGE OF CONCRETE WASH WATERS DIRECTLY INTO THE STREAM IS PROHIBITED.

**LEGEND**

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- 998--- EXISTING CONTOUR (MINOR)
- (Tree Symbol) TREE
- - - - - EDGE OF STREAM
- EXISTING OVERHEAD UTILITY LINES
- GRAVEL ROAD
- (Dashed Line with Squares) PROPOSED SILT FENCE

GRAPHIC SCALE IN FEET



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**DEMOLITION AND STREAM PROTECTION PLANS**  
CONTRACT NO. TS-163

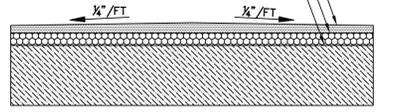
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TOWN OF SHANDAKEN		ULSTER COUNTY NEW YORK	
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SCALE	DATE	DWG	SHEET NO.
1" = 10'	FEB. 2016	RJS	C2
	CHK	DML	

M.M. JUNE 2012

SIGN NO.	ADVANCE SIGN SCHEDULE	NO. REQ.
(A)	W5-3 ONE LANE BRIDGE	2
(B)	OM3-L	1
(C)	OM3-R	1
(D)	W1-1R	1

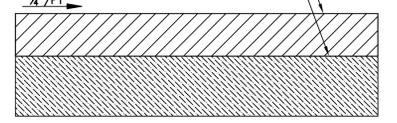
ALL SIGNS CONVENTIONAL ROAD SIZE

1 1/2" TYPE 6F TOP, ITEM NO. 402.128102  
 3 1/2" NYSOT TYPE 3 BINDER COURSE ITEM 402.258902  
 12" NYSOT ITEM 08034.11 TYPE 2 SUBBASE COURSE

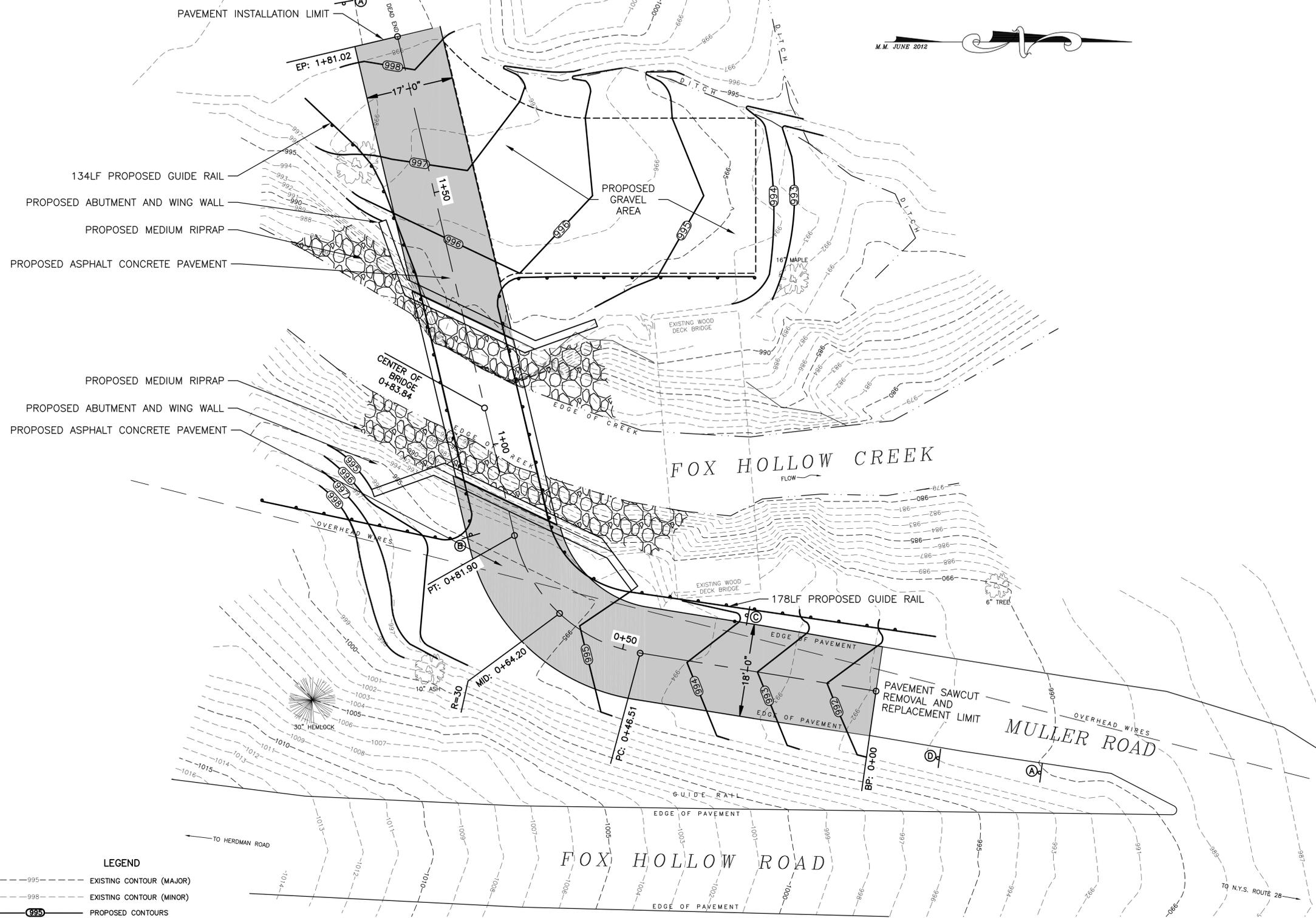


ASPHALT CONCRETE REPLACEMENT  
NOT TO SCALE

6" WEARING COURSE TYPE 2 SUBBASE NYSOT ITEM 08034.11  
 12" NYSOT ITEM 08034.11 TYPE 2 SUBBASE COURSE

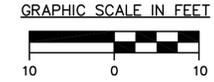


GRAVEL REPLACEMENT  
NOT TO SCALE



- LEGEND**
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  - 998 --- EXISTING CONTOUR (MINOR)
  - 995 --- PROPOSED CONTOURS
  - 🌳 TREE
  - - - - - EDGE OF STREAM
  - - - - - EXISTING OVERHEAD UTILITY LINES
  - — — — — PROPOSED GUIDE RAIL
  - ▬▬▬▬▬ PROPOSED ASPHALT CONCRETE PAVEMENT
  - ▨▨▨▨▨ PROPOSED RIPRAP
  - ⊙ PROPOSED TRAFFIC SIGN

**SITE PLAN**  
SCALE: 1" = 10'



**SITE PLAN**  
CONTRACT NO. TS-163

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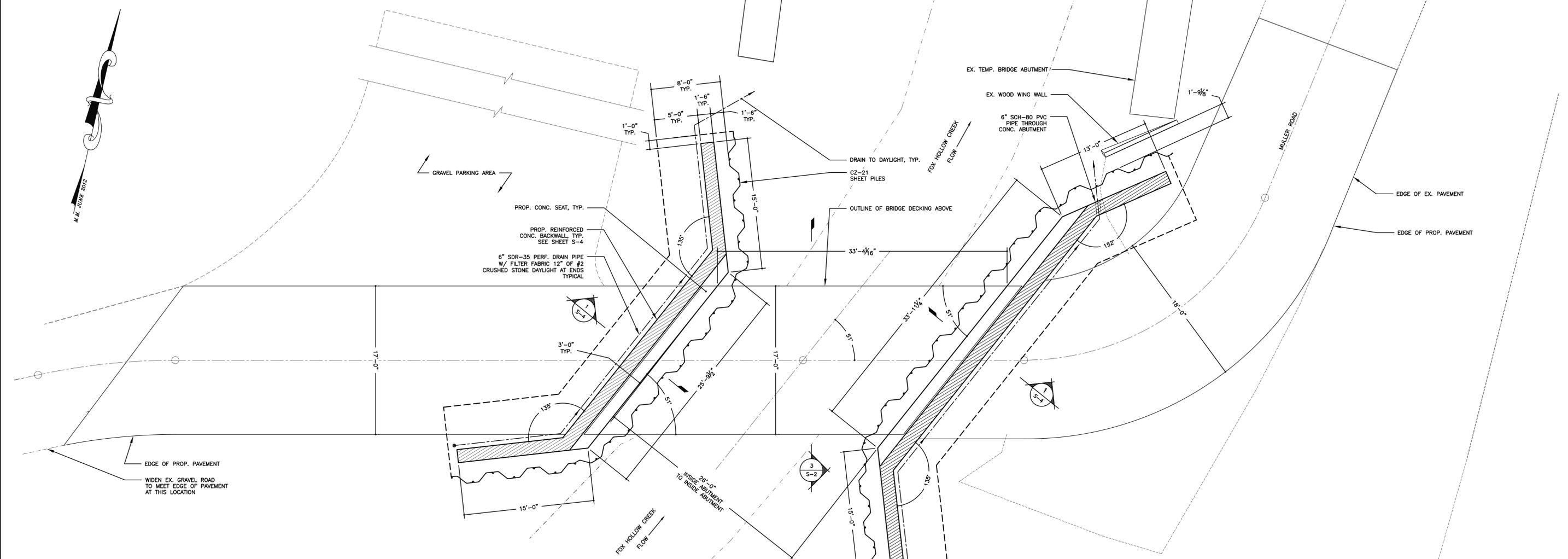
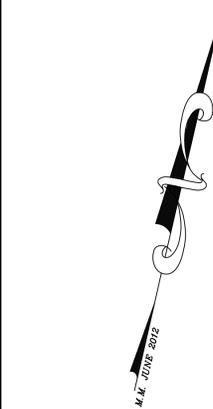


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1" = 10'	FEB. 2016
DWG	CHK
RJS	DML
SHEET NO.	C3



### STRUCTURAL NOTES

**GENERAL NOTES:**

- ALL DIMENSIONS SHALL BE VERIFIED IN FIELD BY CONTRACTOR WITH ALL DISCREPANCIES REPORTED TO THE ENGINEER.
- DO NOT CHANGE SIZE NOR SPACING OF STRUCTURAL ELEMENTS.
- DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
- THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY.
- CONTRACTOR SHALL DETERMINE EXACT LOCATION OF EXISTING UTILITIES, IF ANY, BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE UNDERGROUND UTILITIES.
- INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE OWNER PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH ACTION SHALL REQUIRE APPROVAL.
- EACH CONTRACTOR SHALL COOPERATE WITH THE OWNER'S REPRESENTATIVE, AND COORDINATE HIS WORK WITH THE WORK OF OTHERS.
- VERIFY SIZE AND LOCATION OF OPENINGS. FOR DIMENSIONS AND OPENINGS NOT SHOWN, SEE MECHANICAL, ELECTRICAL, AND ARCHITECTURAL DRAWINGS.

**DESIGN DATA:**  
STRUCTURAL DESIGN HAS BEEN PERFORMED IN ACCORDANCE WITH THE FOLLOWING CODES AND STANDARDS:

- AISC, MANUAL OF STEEL CONSTRUCTION, ALLOWABLE STRESS DESIGN, 9TH ED.
- TRAFFIC LOADS  
H20 TRUCK LOADING IN ACCORDANCE WITH AASHTO STANDARDS
- DEAD LOADS  
CONCRETE FLOOR: = 12.5 PSF PER INCH THICKNESS OF CONC. x 7" = 87.50 PSF  
PAVEMENT = 25 PSF.  
FUTURE WEARING COURSE = 25 PSF.

**ABBREVIATIONS**

A.B.	ANCHOR BOLT
A.O.B.E.	AS ORDERED BY ENGINEER
B.P.	BASE PLATE
COLS.	COLUMNS
do.	DITTO
E.O.	EVERY OTHER
E.W.	EACH WAY
EXP.	EXPANSION
FDN.	FOUNDATION
F.G.	FINISHED GRADE
HDR.	HEADER
HSS	HOLLOW STRUCTURAL SHAPE (A.I.S.C.)
JT.	JOINT
LLV	LONG LEG VERTICAL
PAF	POWDER ACTUATED FASTENER
P.C.	PRE-CAST
PERF.	PERFORATED
PL.	PLATE
R/C	REINFORCED CONCRETE
REINF.	REINFORCEMENT
S.L.	SELF-LEVELING
SLV	SHORT LEG VERTICAL
S.O.G.	SLAB ON GRADE
STL	STEEL
T/FTG.	TOP OF FOOTING
T/WALL	TOP OF WALL
T&S.	TEMPERATURE AND SHRINKAGE
U.N.O.	UNLESS NOTED OTHERWISE
W.C.J.	WALL CONTROL JOINT

1 FOUNDATION PLAN  
S-1 SCALE: 3/16" = 1'-0"

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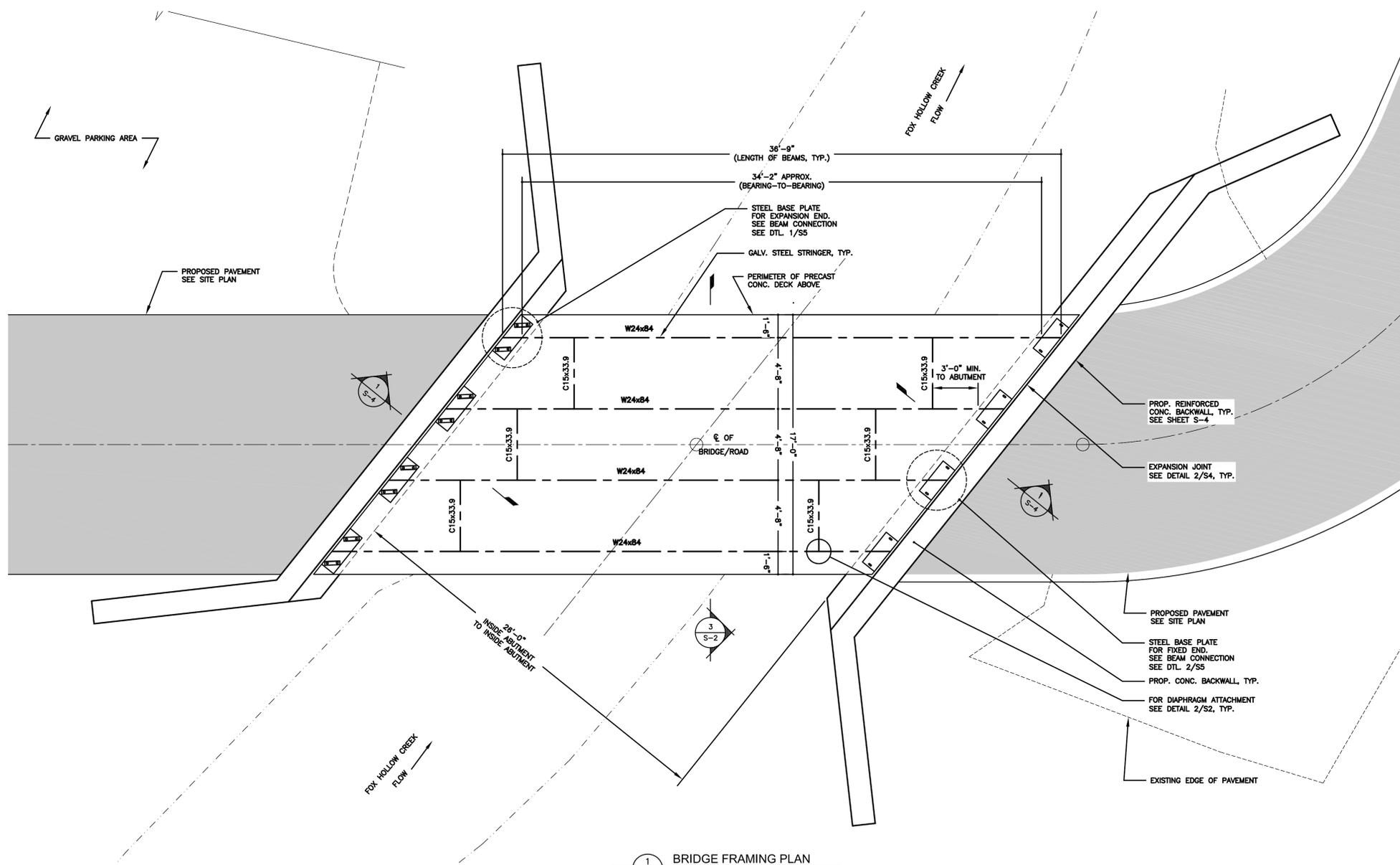


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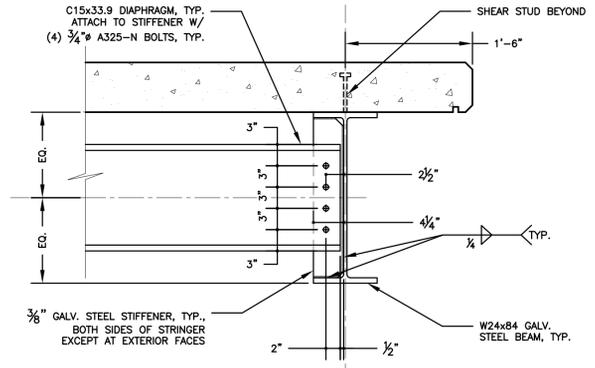
### FOUNDATION PLAN & STRUCTURAL NOTES CONTRACT NO. TS-163

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	CHK	JES	

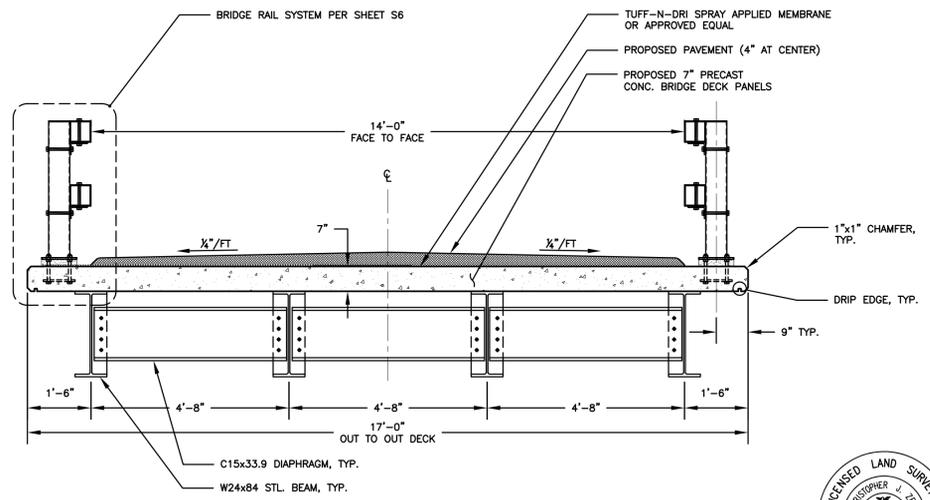
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1 BRIDGE FRAMING PLAN  
SCALE: 1/4" = 1'-0"



2 DIAPHRAGM CONNECTION DETAIL  
SCALE: 1" = 1'-0"



3 SECTION  
SCALE: 1/2" = 1'-0"

NOTE: ALL DESIGN DIMENSIONS NOTED ON PLANS ARE BASED ON FABRICATION AND INSTALLATION OF STRUCTURAL ELEMENTS AT AN AMBIENT TEMPERATURE OF 68 DEGREES FAHRENHEIT

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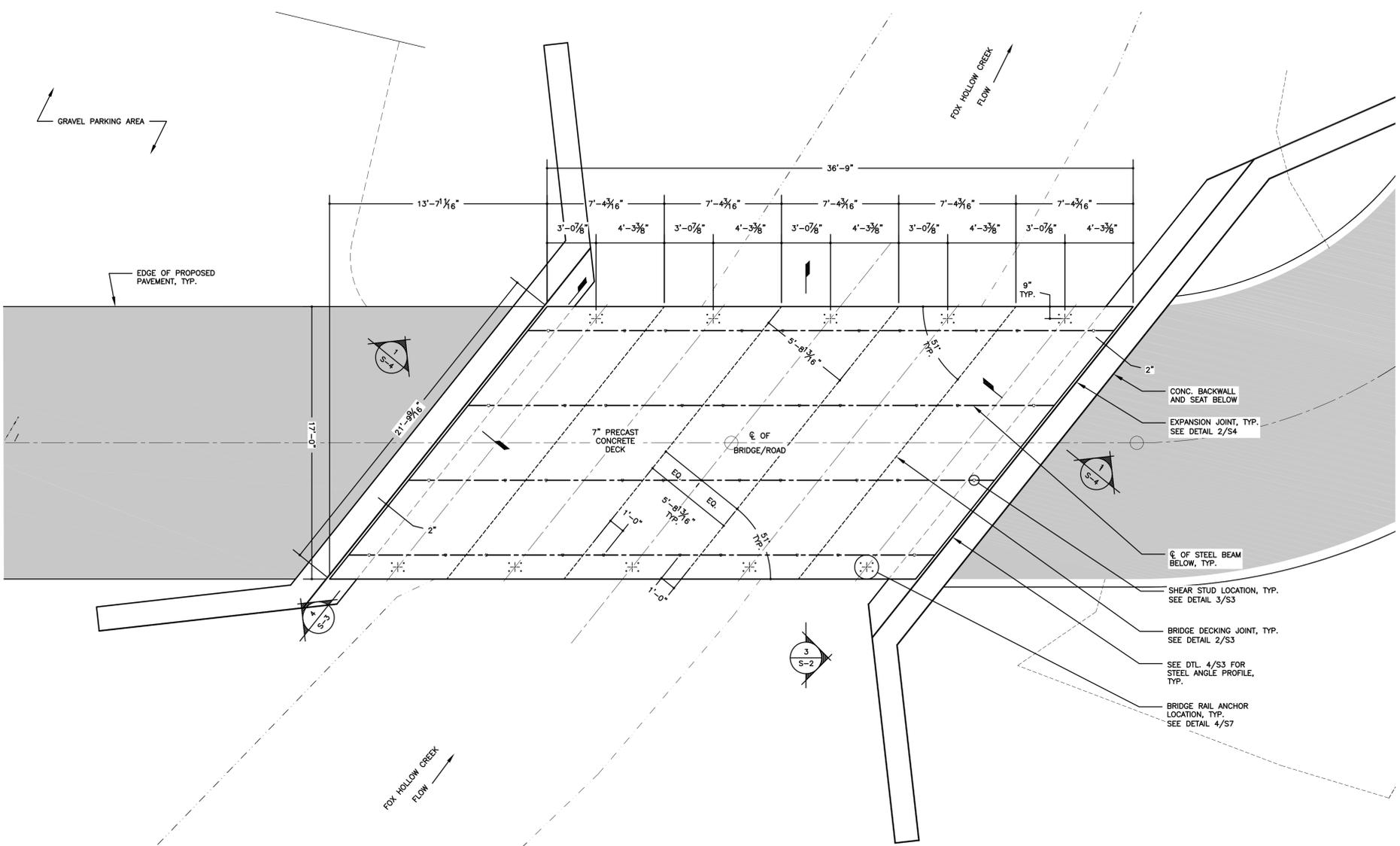
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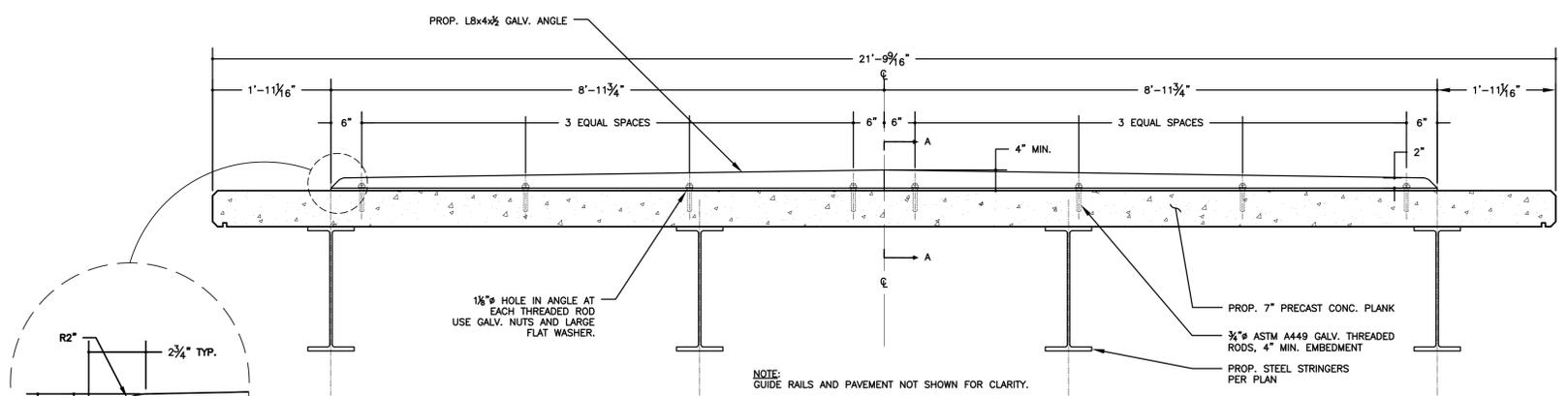
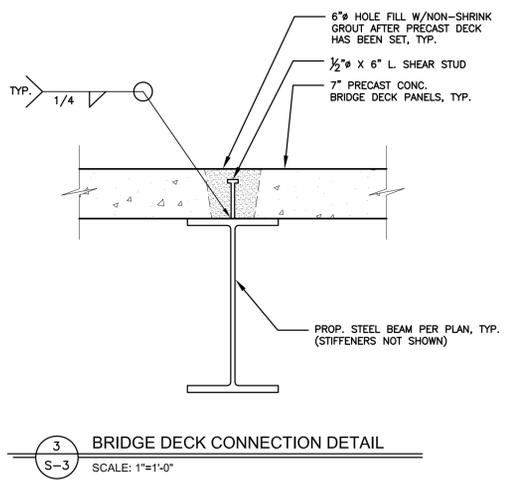
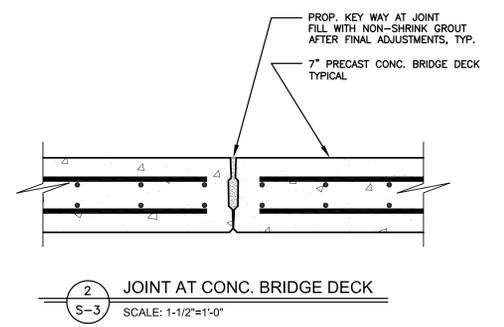
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BRIDGE FRAMING PLAN  
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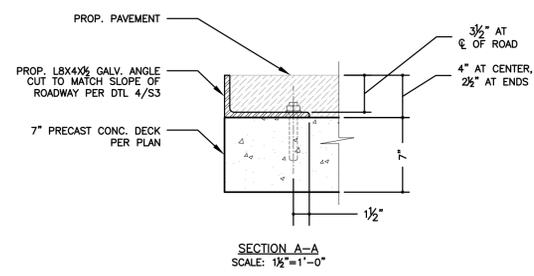
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		JES	



**1 PRECAST CONC. PANEL DECK PLAN**  
SCALE: 1/4" = 1'-0"



**4 STEEL ANGLE DETAIL**  
SCALE: 3/4" = 1'-0"



**PRECAST DECK PANEL PLAN**  
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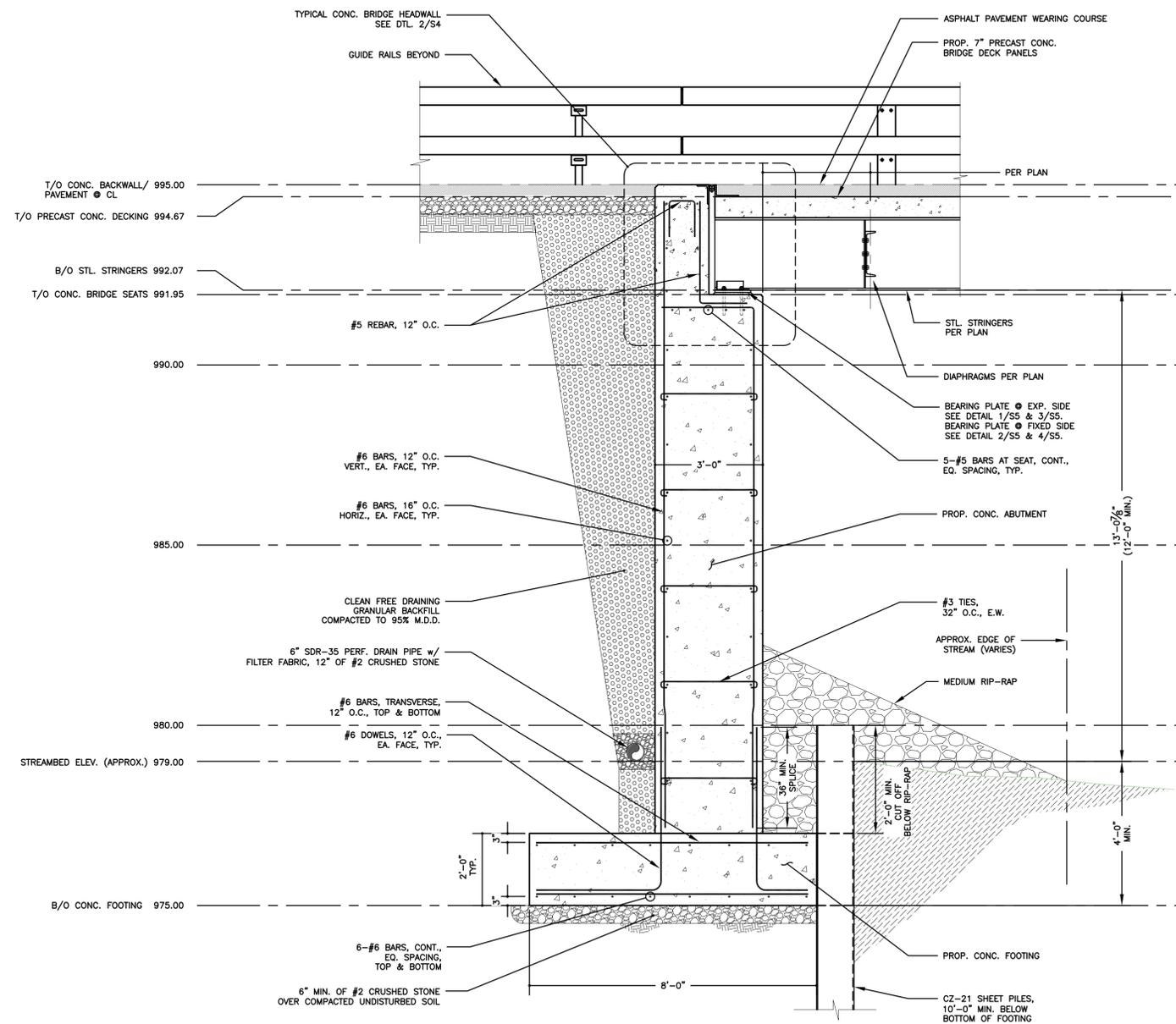
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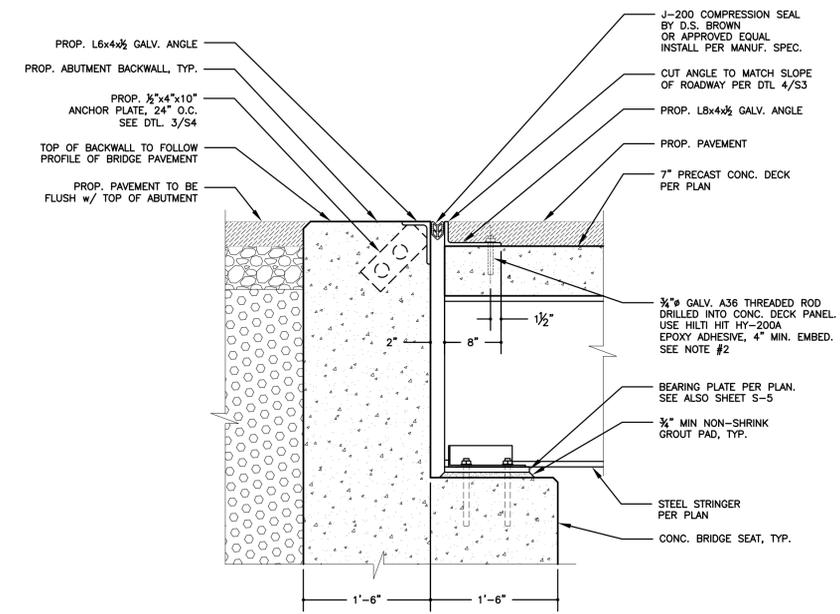


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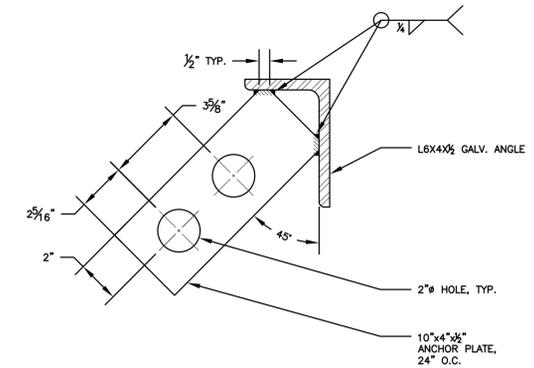
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1 TYPICAL BRIDGE ABUTMENT SECTION  
S-4 SCALE: 1/2" = 1'-0"



2 TYPICAL BRIDGE BACKWALL SECTION  
S-4 SCALE: 1-1/2" = 1'-0"



3 ANCHOR PLATE DETAIL  
S-4 SCALE: 3" = 1'-0"

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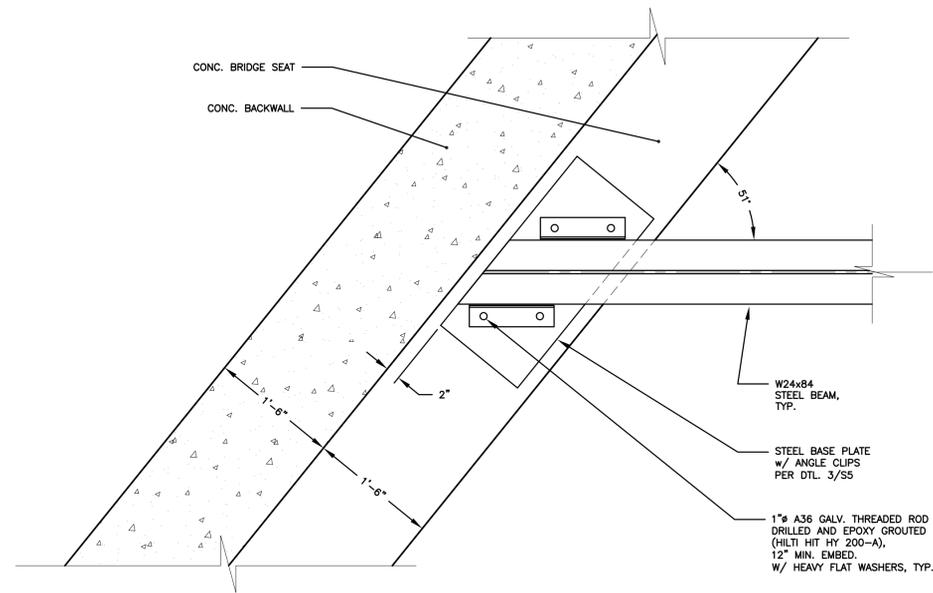
JOHN STINEMIRE, P.E., CONSULTING ENGINEER  
15 RAILROAD AVENUE KINGSTON, NEW YORK 12401 845-331-8806



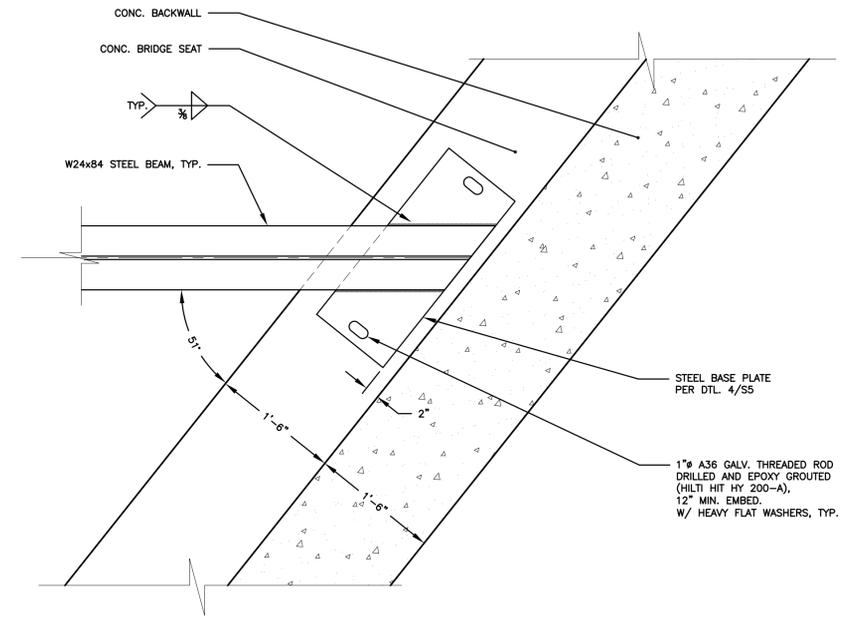
Unauthorized alteration or addition to a plan bearing a licensed engineer's seal is a violation of section 7209, subdivision 2, of the New York State Education Law.

SECTIONS & DETAILS  
CONTRACT NO. TS-163

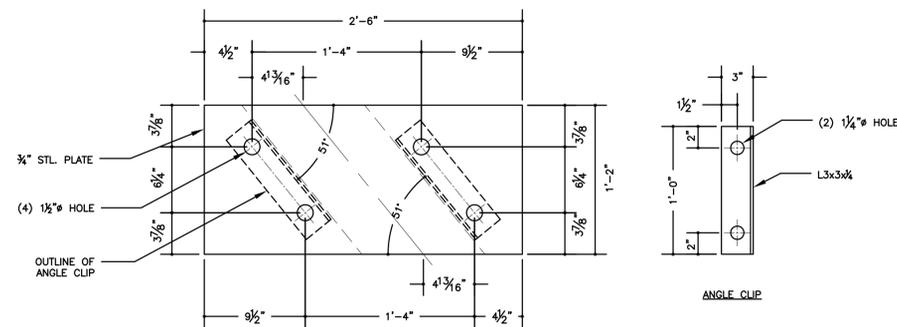
MULLER ROAD BRIDGE REPLACEMENT PW-6458		FEMA 4020 DR NY	
TOWN OF SHANDAKEN		ULSTER COUNTY NEW YORK	
DATE	REVISION RECORD	BRINNIER & LARIOS, P.C. ENGINEERS & LAND SURVEYORS 67 MAIDEN LANE KINGSTON, N.Y.	
SCALE	DATE	DWG	CHEK
AS SHOWN	FEB. 2016	JH	JES
			SHEET NO. S4



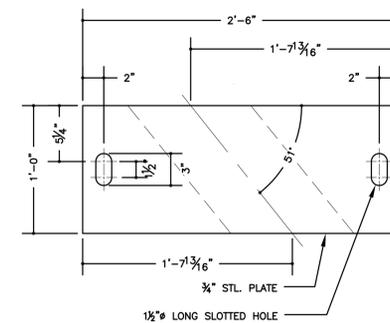
1 STEEL BEAM CONNECTION DETAIL  
S-5 SCALE: 1" = 1'-0" (EXPANSION SIDE)



2 STEEL BEAM CONNECTION DETAIL  
S-5 SCALE: 1" = 1'-0" (FIXED SIDE)



3 BASE PLATE DETAIL (EXPANSION SIDE)  
S-5 SCALE: 1-1/2" = 1'-0"



4 BASE PLATE DETAIL (FIXED SIDE)  
S-5 SCALE: 1-1/2" = 1'-0"

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JOHN STINEMIRE, P.E., CONSULTING ENGINEER  
15 RAILROAD AVENUE KINGSTON, NEW YORK 12401 845-331-8806

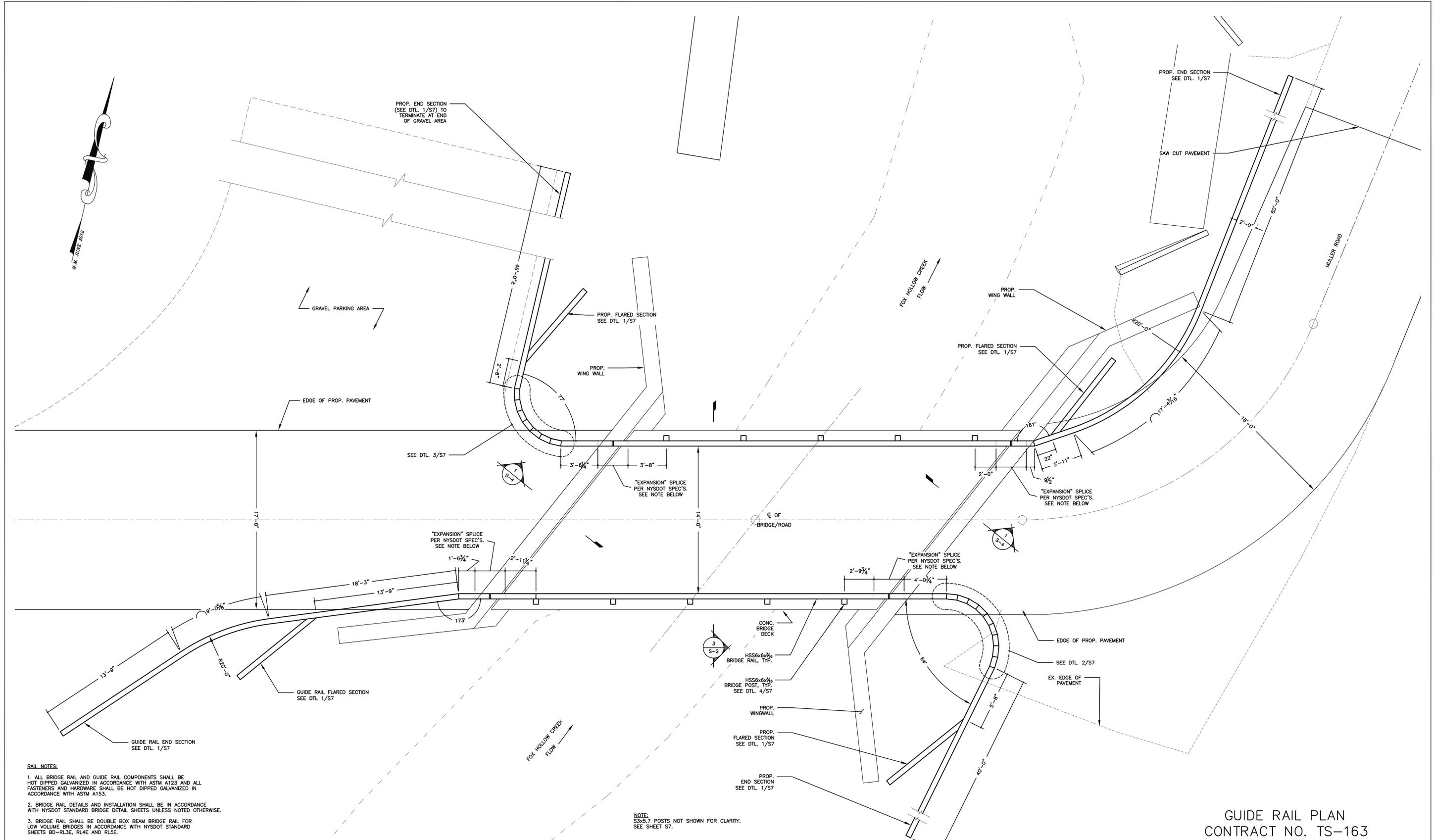


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DETAILS  
CONTRACT NO. TS-163

MULLER ROAD BRIDGE REPLACEMENT  
PW-6458 FEMA 4020 DR NY

TOWN OF SHANDAKEN		ULSTER COUNTY		NEW YORK
DATE	REVISION	RECORD	BRINNIER & LARIOS, P.C. ENGINEERS & LAND SURVEYORS 67 MAIDEN LANE KINGSTON, N.Y.	
SCALE	DATE	DATE	DATE	SHEET NO.
AS SHOWN	FEB. 2016	JH	JES	S5



- RAIL NOTES:**
1. ALL BRIDGE RAIL AND GUIDE RAIL COMPONENTS SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123 AND ALL FASTENERS AND HARDWARE SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153.
  2. BRIDGE RAIL DETAILS AND INSTALLATION SHALL BE IN ACCORDANCE WITH NYSOT STANDARD BRIDGE DETAIL SHEETS UNLESS NOTED OTHERWISE.
  3. BRIDGE RAIL SHALL BE DOUBLE BOX BEAM BRIDGE RAIL FOR LOW VOLUME BRIDGES IN ACCORDANCE WITH NYSOT STANDARD SHEETS BR-RL3E, RL4E AND RL5E.
  4. GUIDE RAIL FROM THE BRIDGE TRANSITION RAIL TO THE END SECTION SHALL BE BOX BEAM GUIDE RAIL WITH A TYPE 'IA' END ASSEMBLY CONSISTENT WITH NYSOT STANDARD SHEET NUMBER 606-04 SHEET 1 THRU 4.

NOTE:  
S3x5.7 POSTS NOT SHOWN FOR CLARITY.  
SEE SHEET S7.

1  
S-6  
GUIDE RAIL PLAN  
SCALE: 1/4" = 1'-0"

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15 RAILROAD AVENUE KINGSTON, NEW YORK 12401 845-331-8806

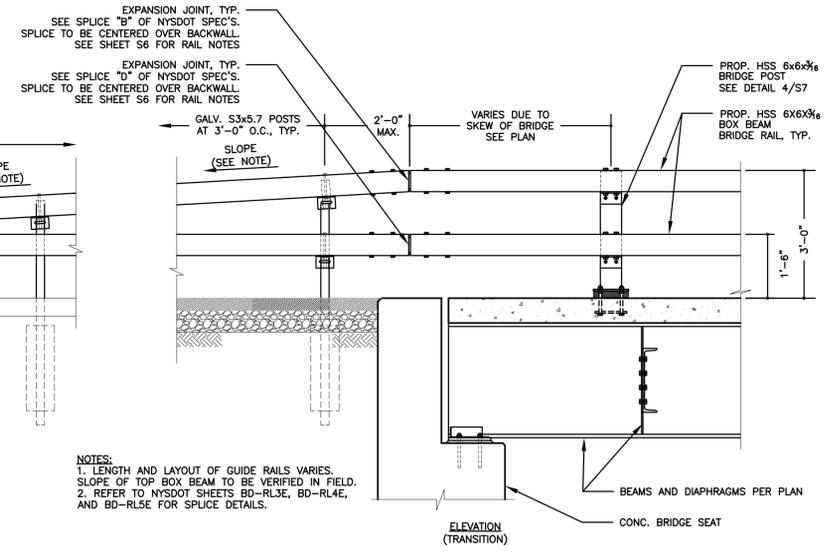
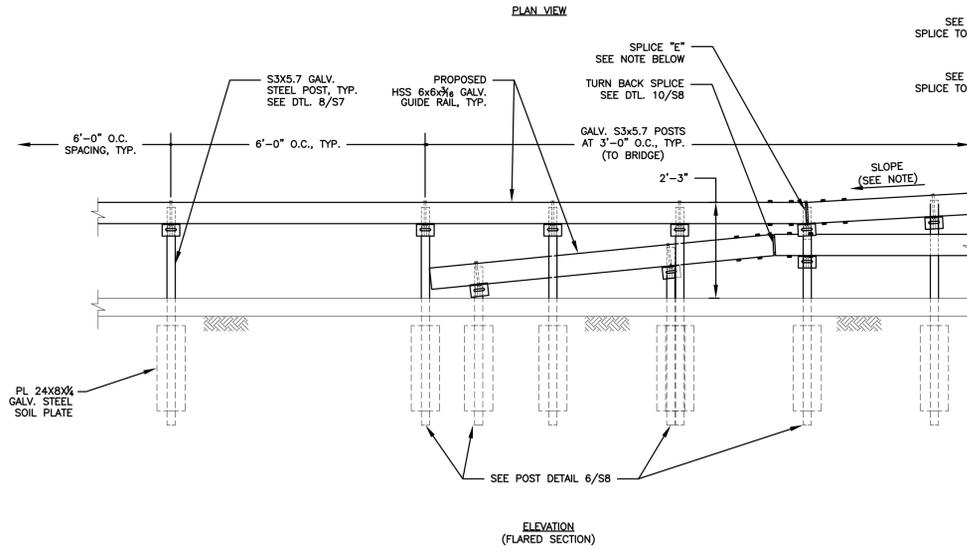
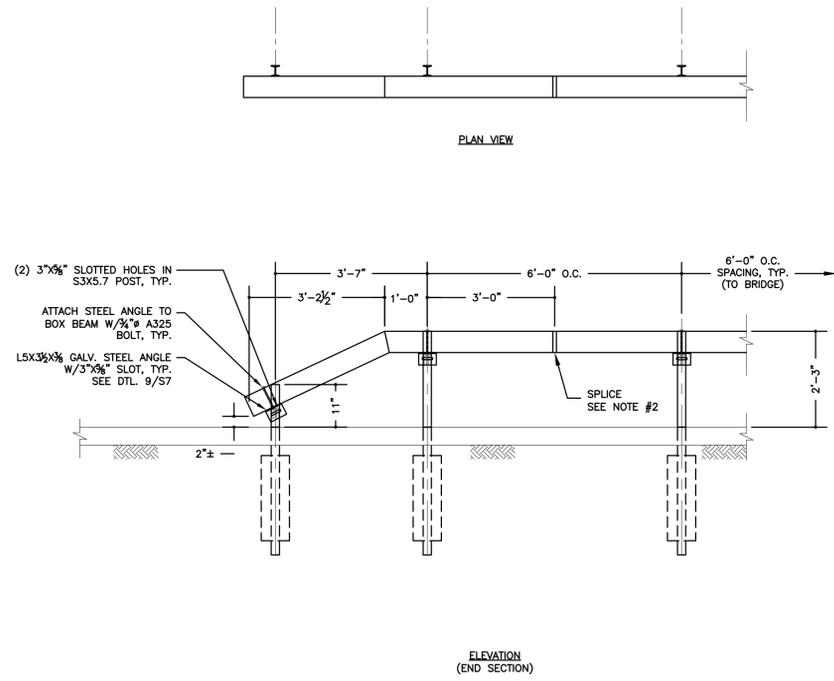


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GUIDE RAIL PLAN  
CONTRACT NO. TS-163

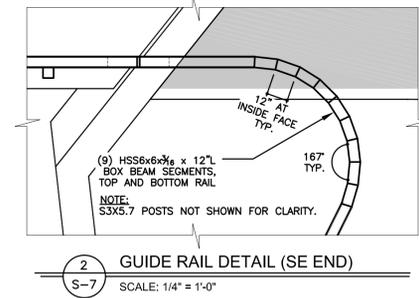
MULLER ROAD BRIDGE REPLACEMENT PW-6458		FEMA 4020 DR NY	
TOWN OF SHANDAKEN		ULSTER COUNTY NEW YORK	
DATE	REVISION RECORD	BRINNIER & LARIOS, P.C. ENGINEERS & LAND SURVEYORS 67 MAIDEN LANE KINGSTON, N.Y.	
SCALE	DATE	DATE	SHEET NO.
AS SHOWN	FEB. 2016	FEB. 2016	S6
	DWG	CHK	
	JH	JES	

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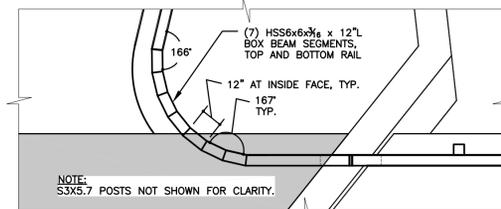


NOTES:  
 1. LENGTH AND LAYOUT OF GUIDE RAILS VARIES. SLOPE OF TOP BOX BEAM TO BE VERIFIED IN FIELD.  
 2. REFER TO NYSDOT SHEETS BD-RL3E, BD-RL4E, AND BD-RL5E FOR SPLICE DETAILS.

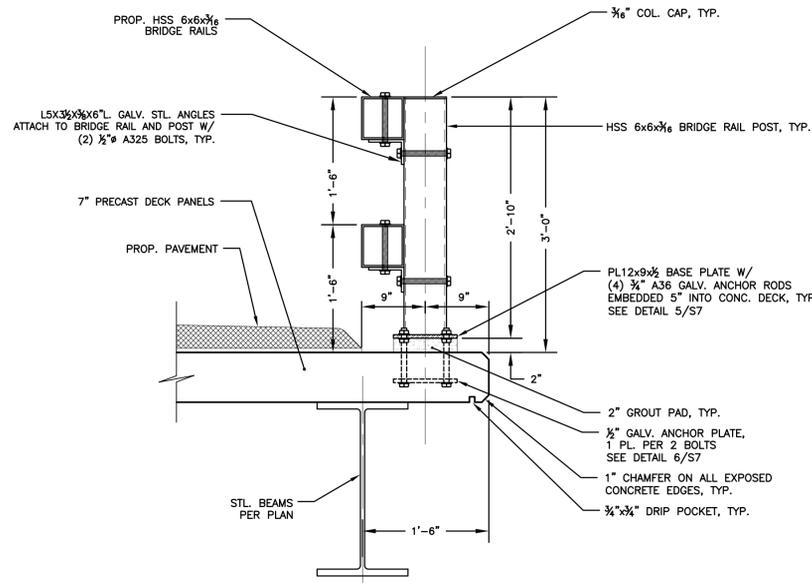
1 TYPICAL GUIDE RAIL ASSEMBLY  
 SCALE: 1/2" = 1'-0"



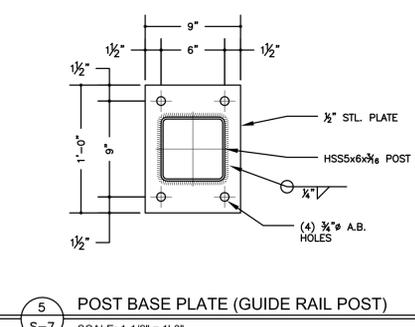
2 GUIDE RAIL DETAIL (SE END)  
 SCALE: 1/4" = 1'-0"



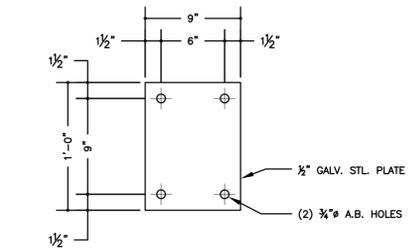
3 GUIDE RAIL DETAIL (NW END)  
 SCALE: 1/4" = 1'-0"



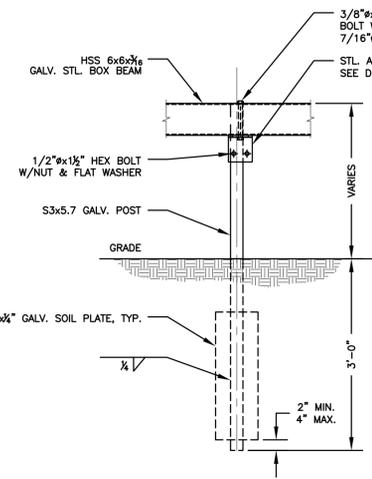
4 BOX BEAM BRIDGE RAIL DETAIL  
 SCALE: 1" = 1'-0"



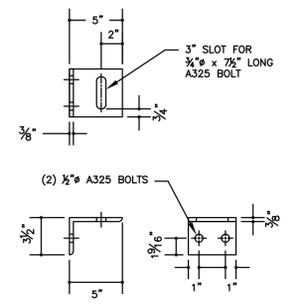
5 POST BASE PLATE (GUIDE RAIL POST)  
 SCALE: 1-1/2" = 1'-0"



6 ANCHOR PLATE (GUIDE RAIL POST)  
 SCALE: 1-1/2" = 1'-0"



8 UNIVERSAL POST DETAIL  
 SCALE: 3/4" = 1'-0"



9 GALV. STL. ANGLE BRACKET DETAIL  
 SCALE: 1-1/2" = 1'-0"

GUIDE RAIL DETAILS  
 CONTRACT NO. TS-163

MULLER ROAD BRIDGE REPLACEMENT  
 PW-6458 FEMA 4020 DR NY

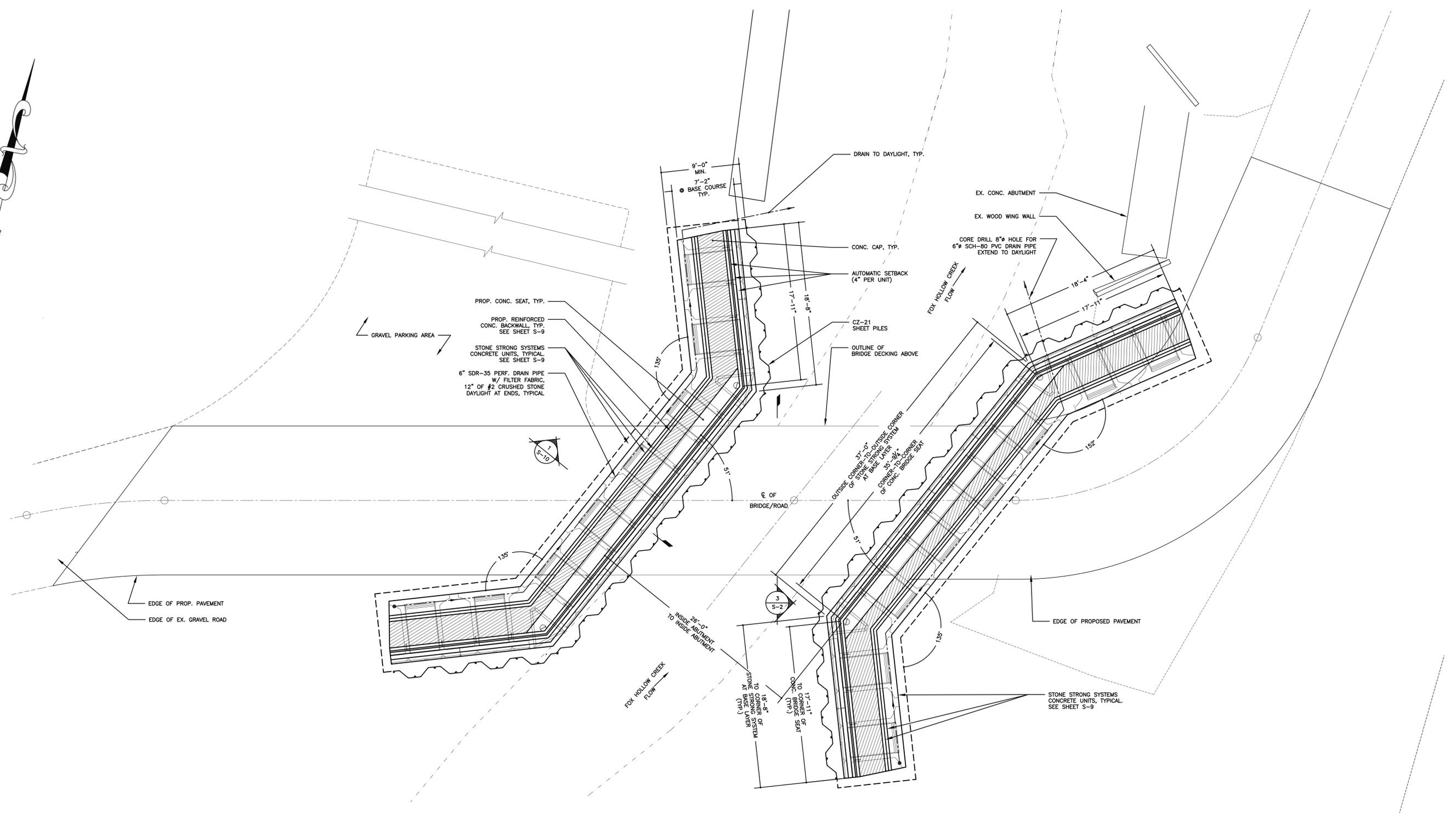
TOWN OF SHANDAKEN		ULSTER COUNTY	NEW YORK
DATE	REVISION RECORD	BRINNIER & LARIOS, P.C. ENGINEERS & LAND SURVEYORS 67 MAIDEN LANE KINGSTON, N.Y.	
SCALE	DATE	CHECKED	SHEET NO.
AS SHOWN	FEB. 2016	JH	S7



JOHN STINEMIRE, P.E., CONSULTING ENGINEER  
 15 RAILROAD AVENUE KINGSTON, NEW YORK 12401 845-331-8806

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1  
S-8 ALTERNATE BID #1 FOUNDATION PLAN  
SCALE: 3/16" = 1'-0"

ALTERNATE BID #1  
FOUNDATION PLAN  
CONTRACT NO. TS-163

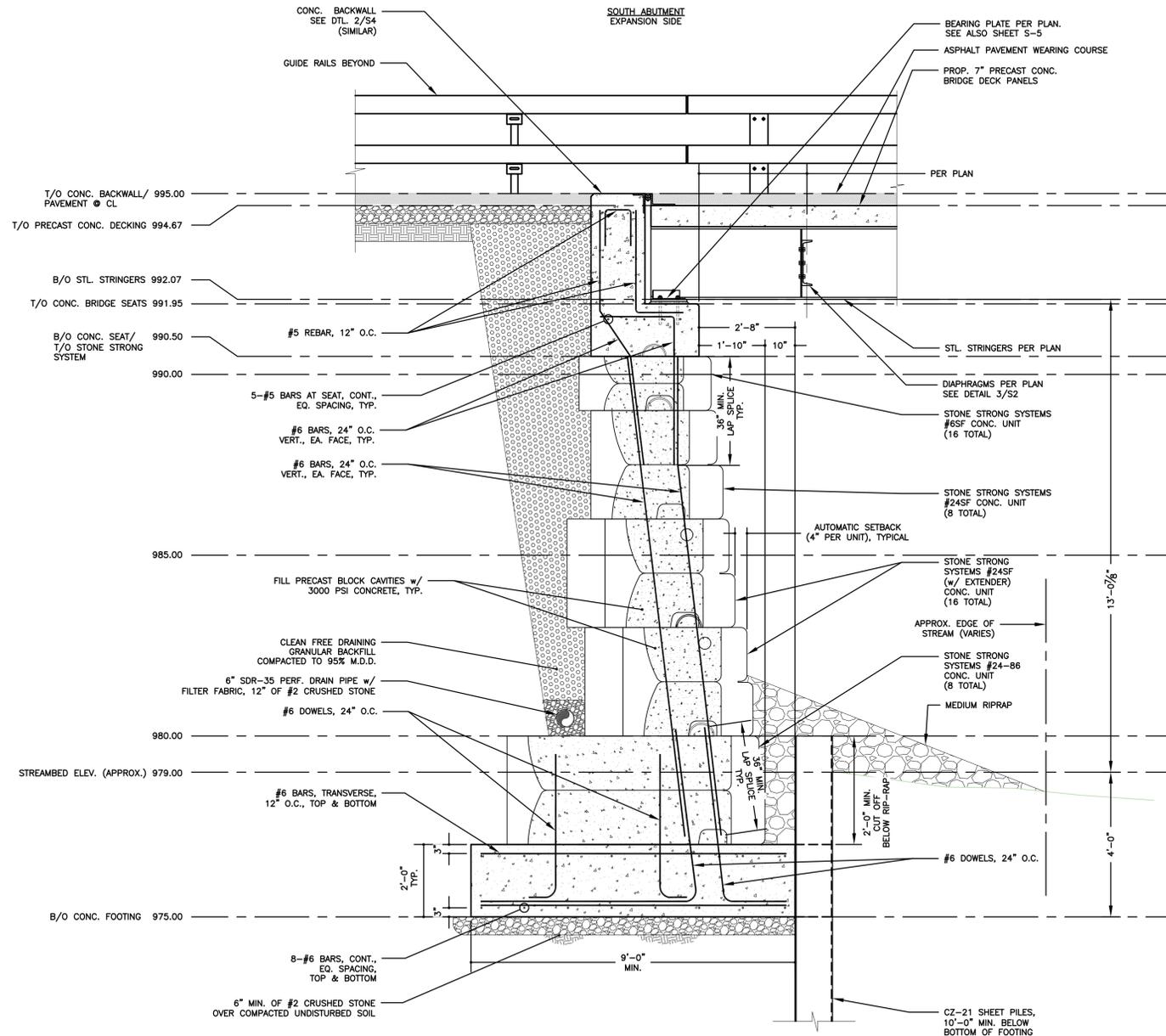
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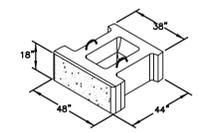


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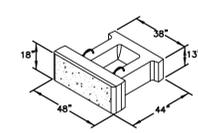
MULLER ROAD BRIDGE REPLACEMENT PW-6458		FEMA 4020 DR NY	
TOWN OF SHANDAKEN		ULSTER COUNTY NEW YORK	
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SCALE	DATE	DATE	SHEET NO.
AS SHOWN	FEB. 2016	FEB. 2016	S8
	DWG	CHK	
	JH	JES	



1 BRIDGE ABUTMENT SECTIONS (ALTERNATE)  
S-9 SCALE: 1/2" = 1'-0"

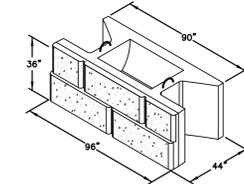


STONE STRONG 6SF UNIT  
NOT TO SCALE

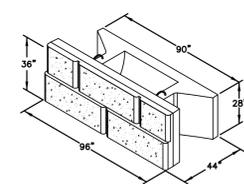


STONE STRONG 6SF TOP UNIT  
NOT TO SCALE

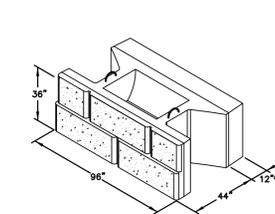
NOTES:  
CHISELLED GRANITE STYLE HAS 4 DIFFERENT FACE PATTERNS ON 24SF BLOCKS.  
INSTALL A, B, C, & D PATTERNS AT RANDOM IN WALL.



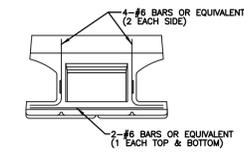
STONE STRONG 24SF UNIT  
CHISELLED GRANITE FACE  
NOT TO SCALE



STONE STRONG 24SF TOP UNIT  
CHISELLED GRANITE FACE  
NOT TO SCALE

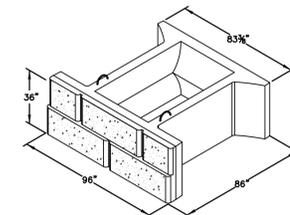


STONE STRONG 24SF UNIT w/ MASS EXTENDER  
NOT TO SCALE

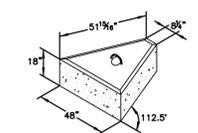


\*OR AS INDICATED  
ON LAYOUT/ELEVATION

NOTES:  
CHISELLED GRANITE STYLE HAS 4 DIFFERENT FACE PATTERNS ON 24-86 BLOCKS.  
INSTALL A, B, C, & D PATTERNS AT RANDOM IN WALL.



STONE STRONG 24-86 UNIT  
NOT TO SCALE



STONE STRONG 45° CORNER UNIT  
NOT TO SCALE

2 STONE STRONG COMPONENTS  
S-9 N.T.S.

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ALTERNATE BID #1  
SECTION & DETAILS  
CONTRACT NO. TS-163

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TOWN OF SHANDAKEN		ULSTER COUNTY NEW YORK	
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SCALE	DATE	DATE	SHEET NO.
AS SHOWN	FEB. 2016	JH	S9
	CHK	JES	