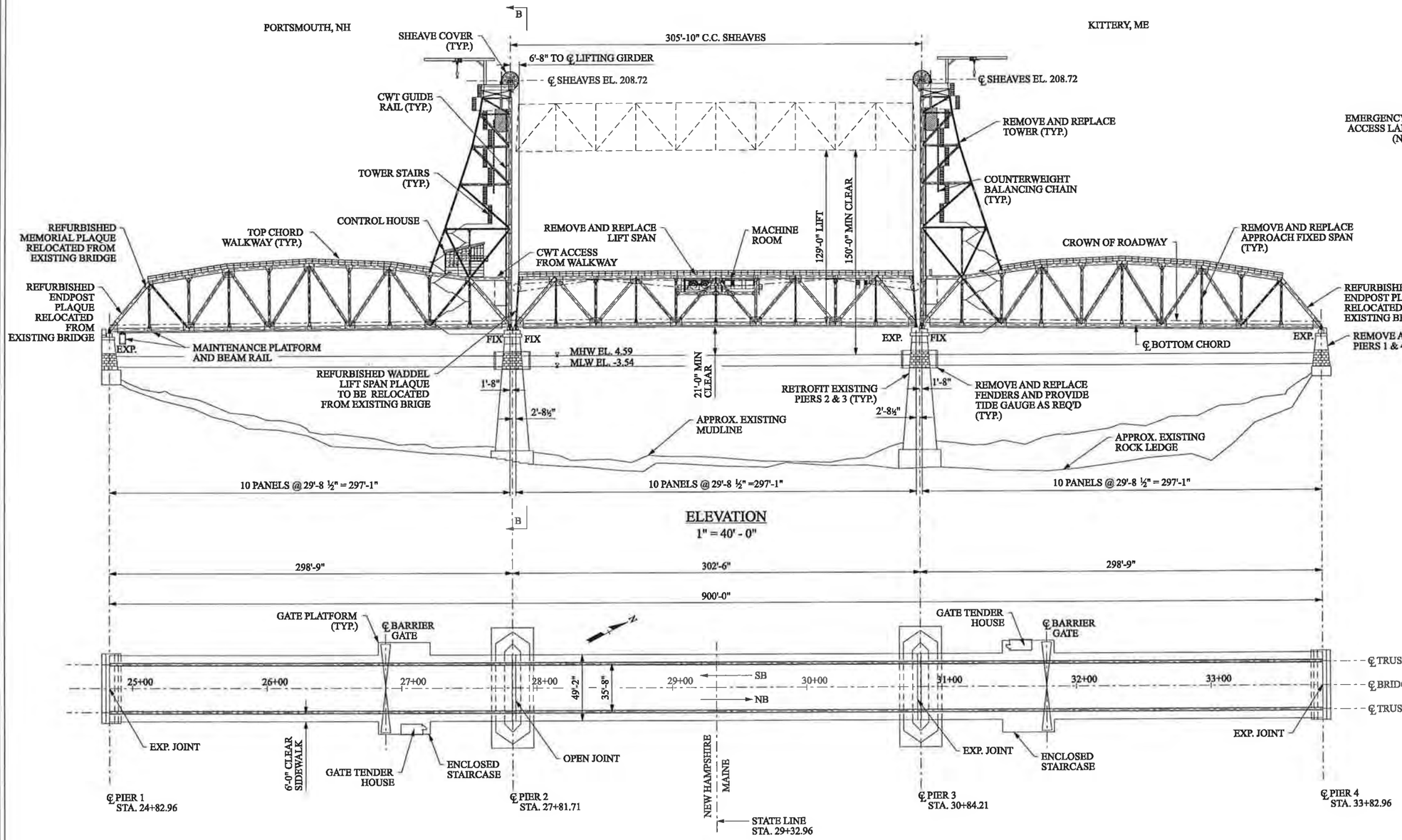
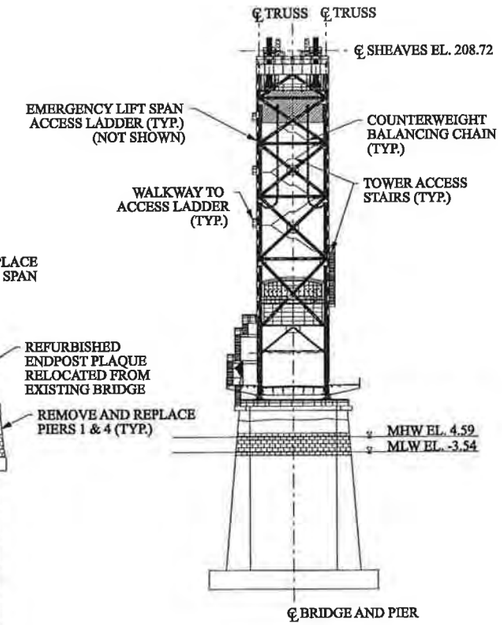


ELEVATION
1" = 40' - 0"



SECTION B-B
1" = 40' - 0"

PLAN
1" = 40' - 0"

NOTES:

1. ALL ELEVATIONS REFER TO NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION TIDAL BENCHMARK AT PORTSMOUTH NAVY SHIPYARD FOR WHICH -3.54 IS MEAN LOW WATER PER NATIONAL GEODETIC VERTICAL DATUM OF 1929.
2. "FIX" AND "EXP." REFER TO FIXED BEARINGS AND EXPANSION BEARINGS RESPECTIVELY.

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
SUPER	S-1	1" = 40' - 0"

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN

TOWN PORTSMOUTH, NH - KITTERY, ME | BRIDGE NO. 247/084 | STATE PROJECT 13678F

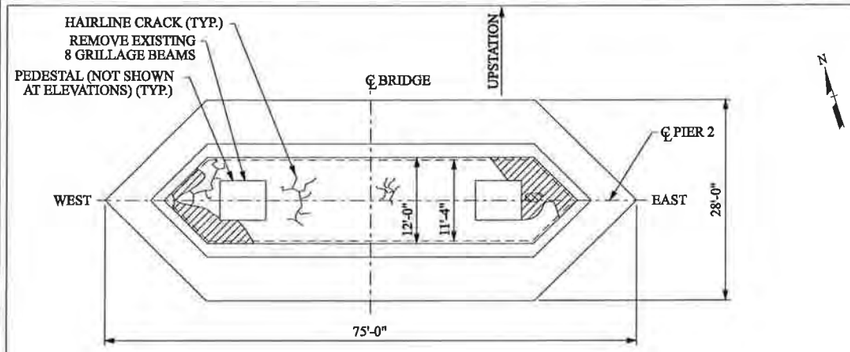
LOCATION U.S. ROUTE 1 OVER PISCATAQUA RIVER

GENERAL PLAN AND ELEVATION

BRIDGE SHEET: S-1 OF S-21

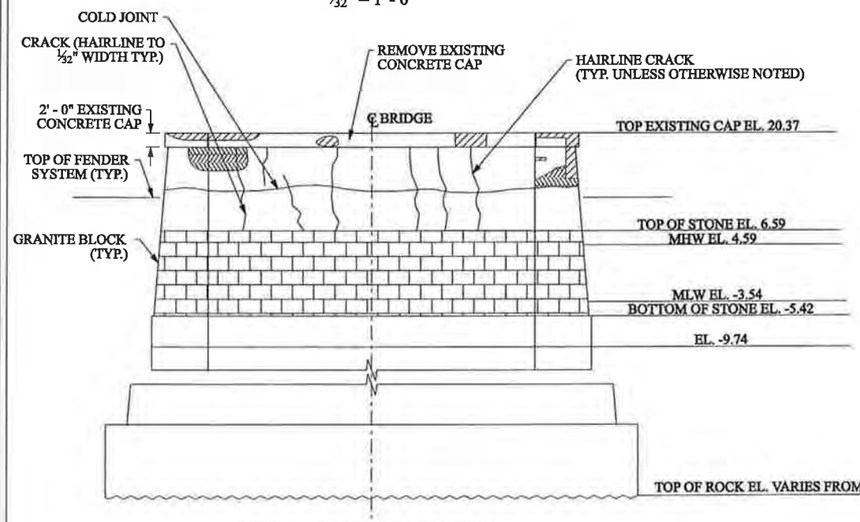
REVISIONS AFTER PROPOSAL	BY	DATE		BY	DATE
DESIGNED	GPS	04/11	CHECKED	XXX	XX/XX
DRAWN	CAD	04/11	CHECKED	XXX	XX/XX
QUANTITIES	XXX	XX/XX	CHECKED	XXX	XX/XX
ISSUE DATE			FEDERAL PROJECT NO.	SHEET NO.	TOTAL SHEETS
REV. DATE			----------	1	44

FILE NUMBER: -



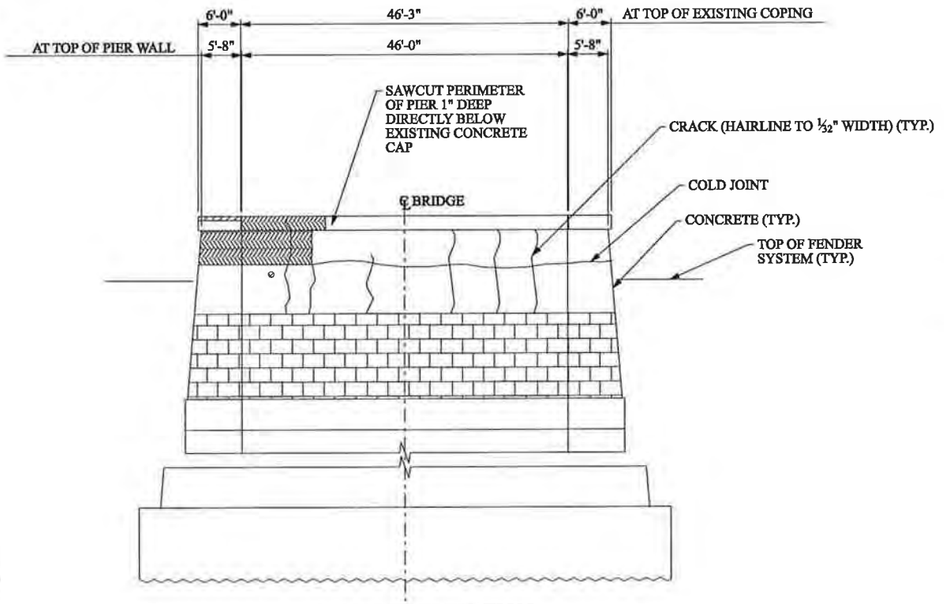
PIER 2 - PLAN

3/32" = 1' - 0"



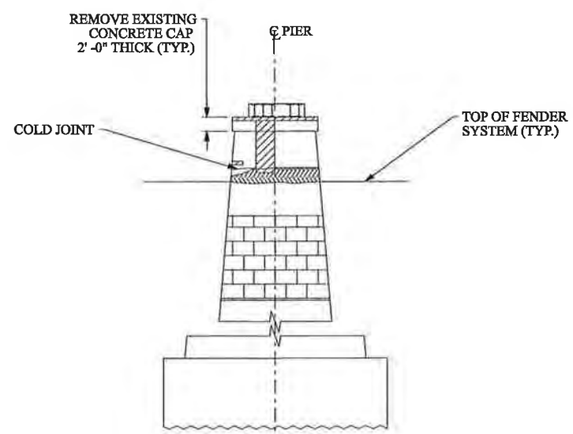
PIER 2 - SOUTH ELEVATION

3/32" = 1' - 0"



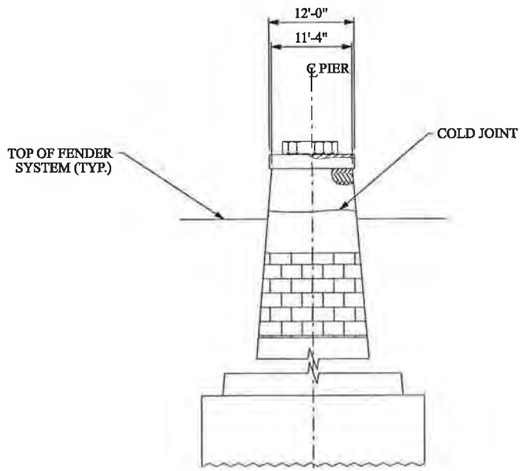
PIER 2 - NORTH ELEVATION

3/32" = 1' - 0"



PIER 2 - EAST END ELEVATION

3/32" = 1' - 0"



PIER 2 - WEST END ELEVATION

3/32" = 1' - 0"

LEGEND

- AREA OF CONCRETE DELAMINATION
- AREA OF CONCRETE SPALL
- AREA OF MAP CRACKING WITH SALT EFFLORESCENCE
- AREA OF SALT EFFLORESCENCE

DEMOLITION & REPAIR NOTES:

1. EXISTING FENDER SYSTEM NOT SHOWN.
2. CONCRETE CRACKS SHALL BE SEALED BY EPOXY INJECTION.
3. AREAS OF SPALLED OR DELAMINATED CONCRETE SHALL BE REMOVED TO SOUND CONCRETE.
4. AREAS OF SPALLED OR DELAMINATED CONCRETE SHALL BE PATCHED WITH EPOXY MODIFIED CONCRETE. CONCRETE PATCHES SHALL BE SMOOTH AND FLUSH WITH THE EXISTING FACE OF PIER.

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
PIER	S-2	3/32" = 1' - 0"

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN

TOWN PORTSMOUTH, NH - KITTERY, ME | BRIDGE NO. 247/084 | STATE PROJECT 13678F

LOCATION U.S. ROUTE 1 OVER PISCATAQUA RIVER

PIER 2 EXISTING PLAN & ELEVATION

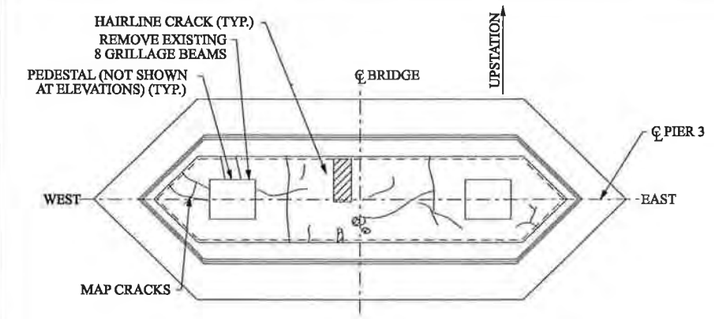
BRIDGE SHEET: S-2 OF S-21

REVISIONS AFTER PROPOSAL	BY	DATE		BY	DATE
DESIGNED	GPS	04/11	CHECKED	XXX	XX/XX
DRAWN	CAD	04/11	CHECKED	XXX	XX/XX
QUANTITIES	XXX	XX/XX	CHECKED	XXX	XX/XX
ISSUE DATE			FEDERAL PROJECT NO.		
REV. DATE			----------		

FILE NUMBER: -

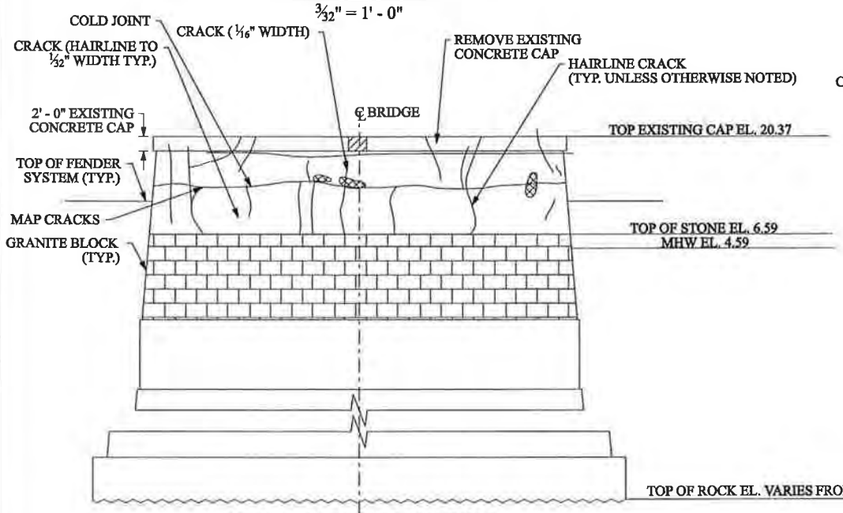
SHEET NO.: 2

TOTAL SHEETS: 44



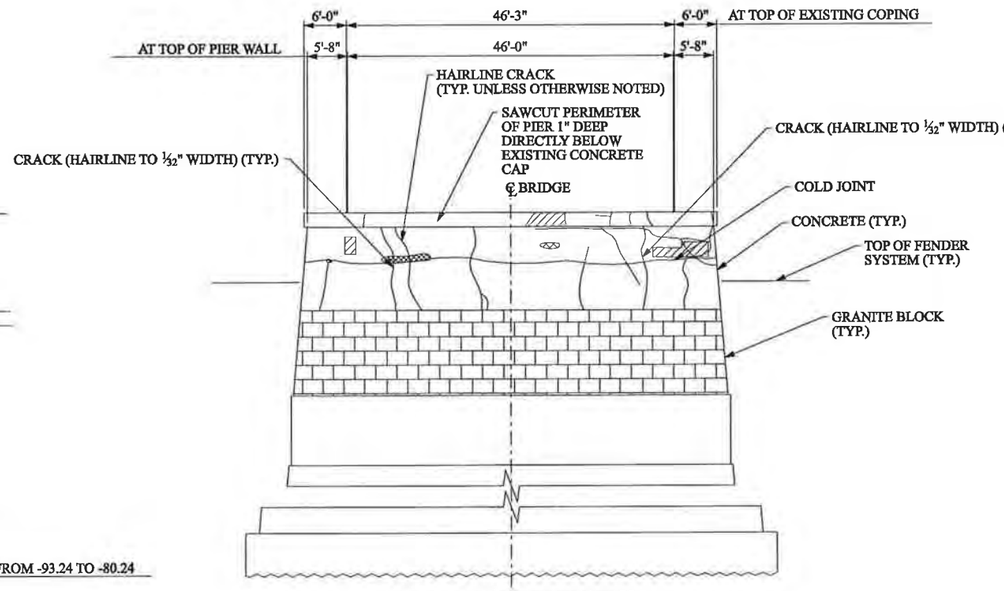
PIER 3 - PLAN

$\frac{3}{32}$" = 1' - 0"



PIER 3 - SOUTH ELEVATION

$\frac{3}{32}$" = 1' - 0"

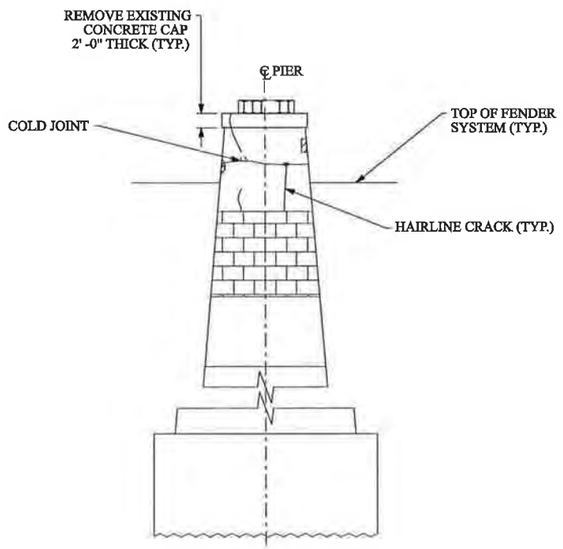


PIER 3 - NORTH ELEVATION

$\frac{3}{32}$" = 1' - 0"

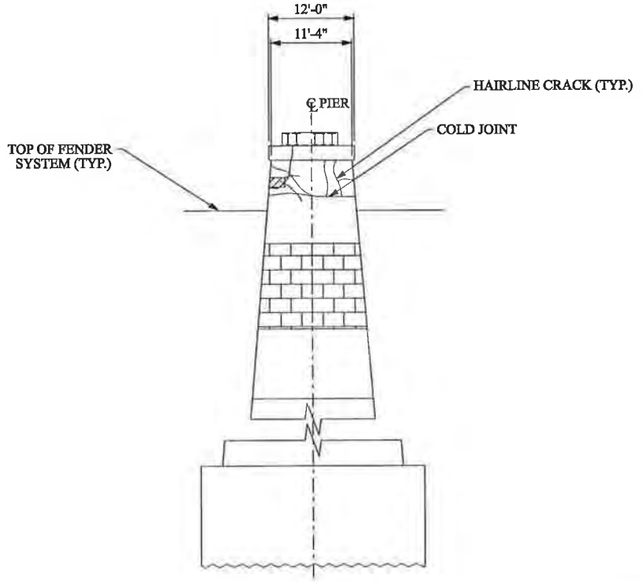
LEGEND

- AREA OF CONCRETE DELAMINATION
- AREA OF CONCRETE SPALL
- AREA OF MAP CRACKING WITH SALT EFFLORESCENCE
- AREA OF SALT EFFLORESCENCE



PIER 3 - EAST END ELEVATION

$\frac{3}{32}$" = 1' - 0"



PIER 3 - WEST END ELEVATION

$\frac{3}{32}$" = 1' - 0"

DEMOLITION & REPAIR NOTES:

1. EXISTING FENDER SYSTEM NOT SHOWN.
2. CONCRETE CRACKS SHALL BE SEALED BY EPOXY INJECTION.
3. AREAS OF SPALLED OR DELAMINATED CONCRETE SHALL BE REMOVED TO SOUND CONCRETE.
4. AREAS OF SPALLED OR DELAMINATED CONCRETE SHALL BE PATCHED WITH EPOXY MODIFIED CONCRETE. CONCRETE PATCHES SHALL BE SMOOTH AND FLUSH WITH THE EXISTING FACE OF PIER.

SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
PIER	S-3	$\frac{3}{32}$" = 1' - 0"

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN

TOWN PORTSMOUTH, NH - KITTERY, ME | BRIDGE NO. 247/084 | STATE PROJECT 13678F

LOCATION U.S. ROUTE 1 OVER PISCATAQUA RIVER

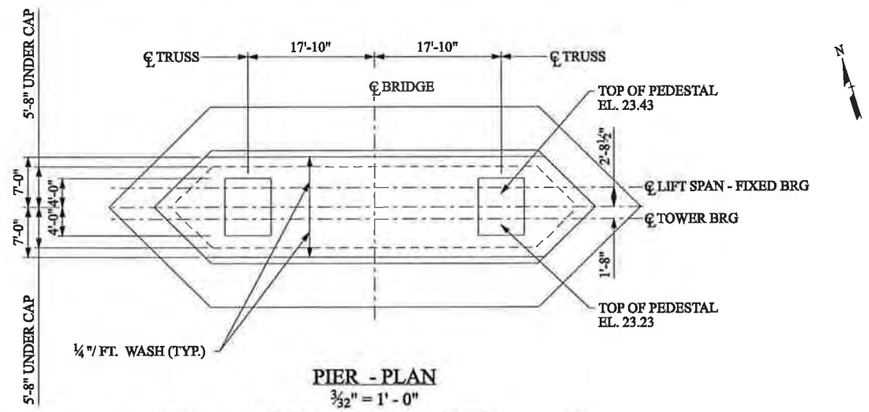
PIER 3 EXISTING PLAN & ELEVATION

BRIDGE SHEET: S-3 OF S-21

FILE NUMBER: -

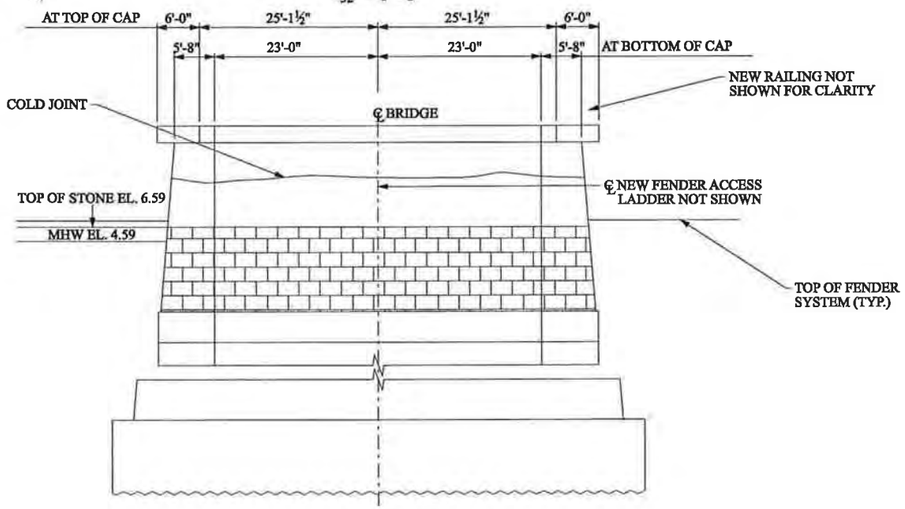
TOTAL SHEETS: 44

REVISIONS AFTER PROPOSAL	BY	DATE		BY	DATE
DESIGNED	GPS	04/11	CHECKED	XXX	XX/XX
DRAWN	CAD	04/11	CHECKED	XXX	XX/XX
QUANTITIES	XXX	XX/XX	CHECKED	XXX	XX/XX
ISSUE DATE			FEDERAL PROJECT NO.		SHEET NO.
REV. DATE			----------		3



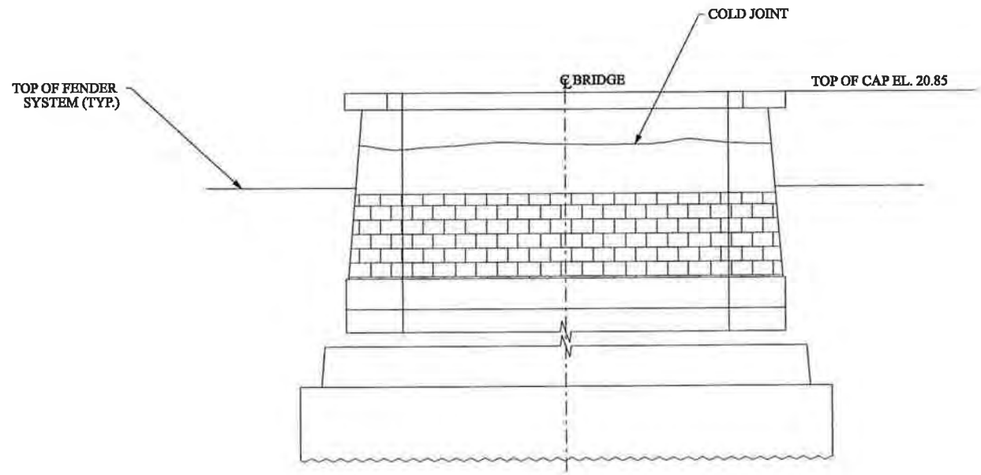
PIER - PLAN

$\frac{3}{32}$" = 1' - 0"



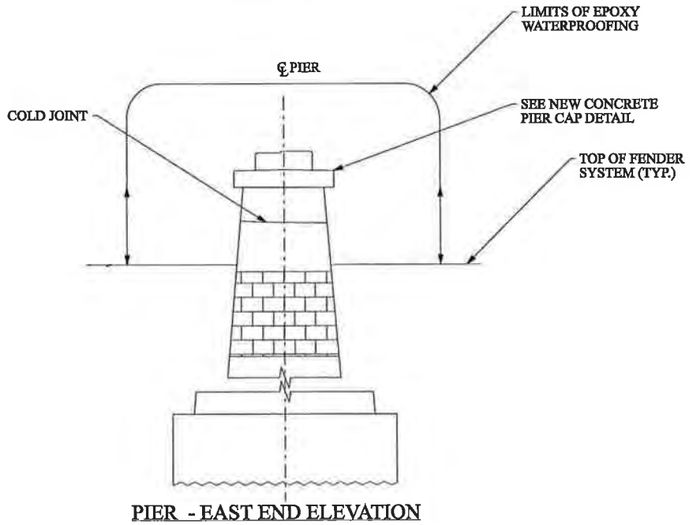
PIER - SOUTH ELEVATION

$\frac{3}{32}$" = 1' - 0"



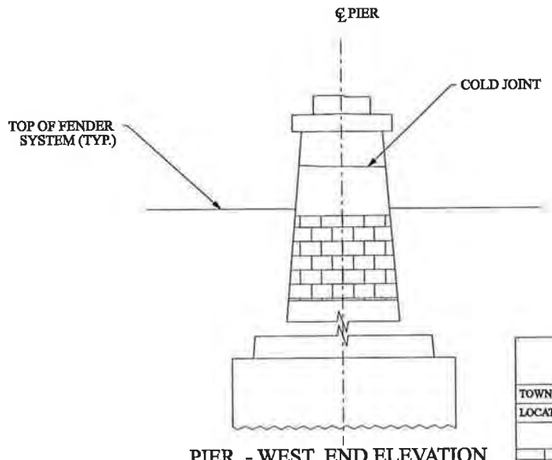
PIER - NORTH ELEVATION

$\frac{3}{32}$" = 1' - 0"



PIER - EAST END ELEVATION

$\frac{3}{32}$" = 1' - 0"



PIER - WEST END ELEVATION

$\frac{3}{32}$" = 1' - 0"

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
PIER	S-4	$\frac{3}{32}$" = 1' - 0"

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN

TOWN PORTSMOUTH, NH - KITTERY, ME BRIDGE NO. 247/084 STATE PROJECT 13678F

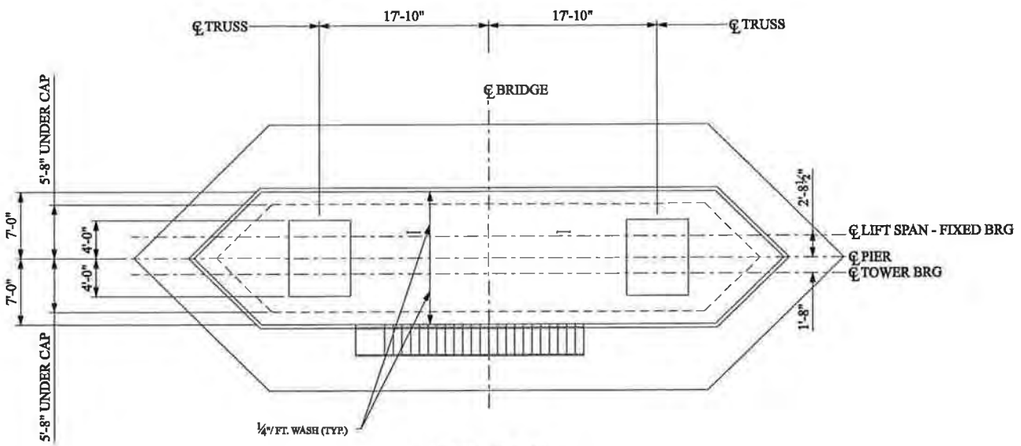
LOCATION U.S. ROUTE 1 OVER PISCATAQUA RIVER

PIER 2 & 3 CONCRETE REPAIR DETAILS

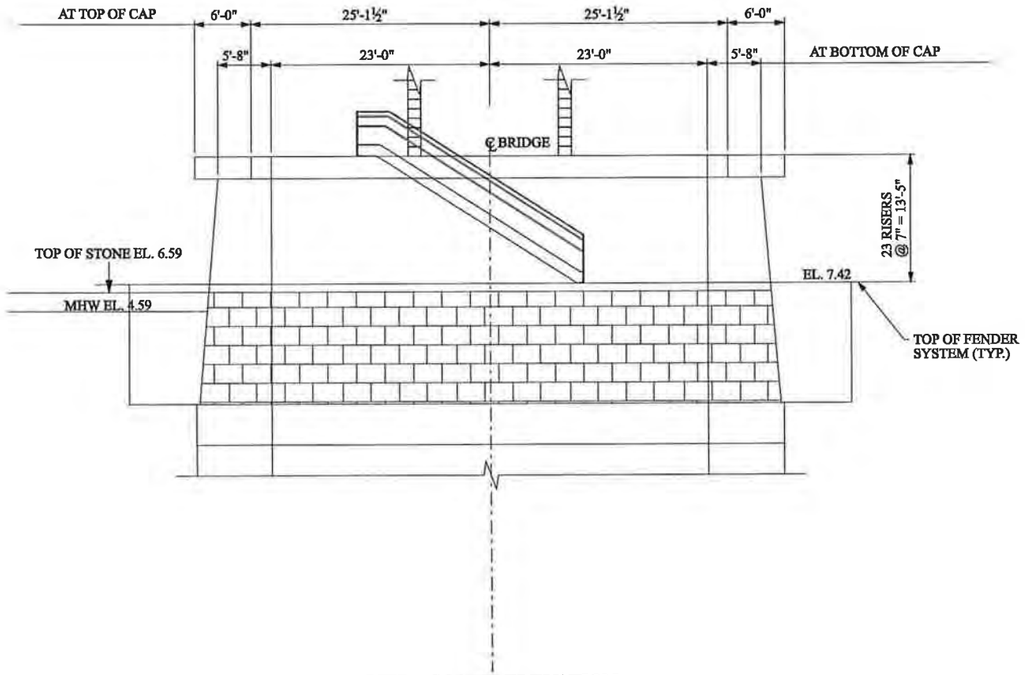
BRIDGE SHEET: S-4 OF S-21

REVISIONS AFTER PROPOSAL			BY	DATE		BY	DATE
		DESIGNED	GPS	04/11	CHECKED	XXX	XX/XX
		DRAWN	CAD	04/11	CHECKED	XXX	XX/XX
		QUANTITIES	XXX	XX/XX	CHECKED	XXX	XX/XX
		ISSUE DATE		FEDERAL PROJECT NO.		SHEET NO.	TOTAL SHEETS
		REV. DATE		----------		4	44

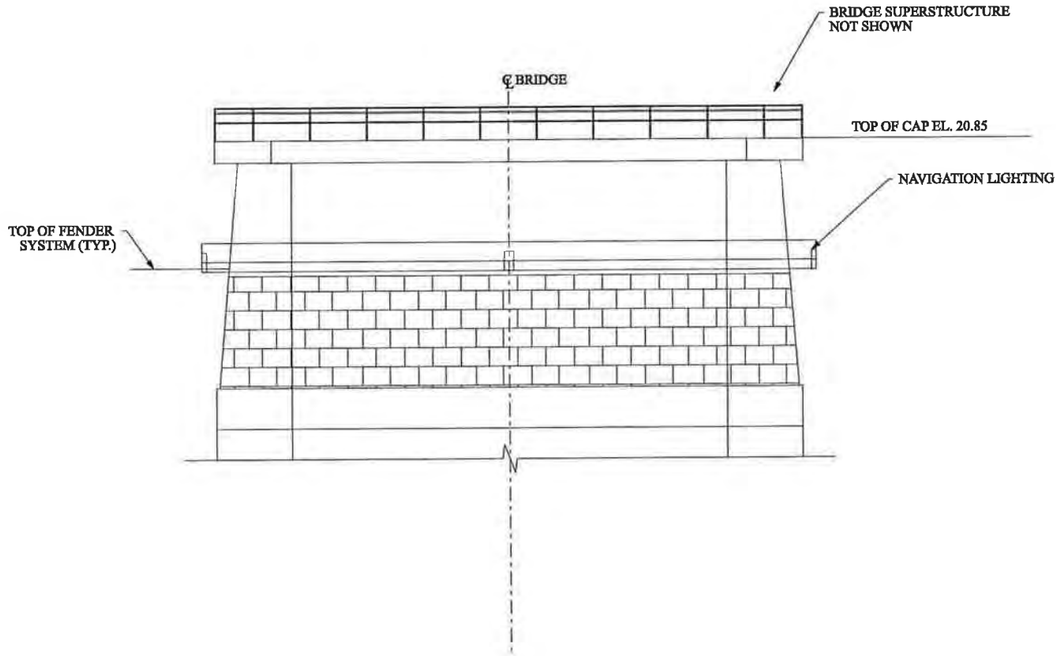
FILE NUMBER: -



PIER - PLAN
⅛" = 1' - 0"



PIER - SOUTH ELEVATION
⅛" = 1' - 0"



PIER - NORTH ELEVATION
⅛" = 1' - 0"

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
PIER	S-04A	⅛" = 1' - 0"

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN

TOWN PORTSMOUTH, NH - KITTERY, ME BRIDGE NO. 247/084 STATE PROJECT 13678F

LOCATION U.S. ROUTE 1 OVER PISCATAQUA RIVER

PIER 2 & 3 CONCRETE REPAIR DETAILS

BRIDGE SHEET: S-4A OF S-21

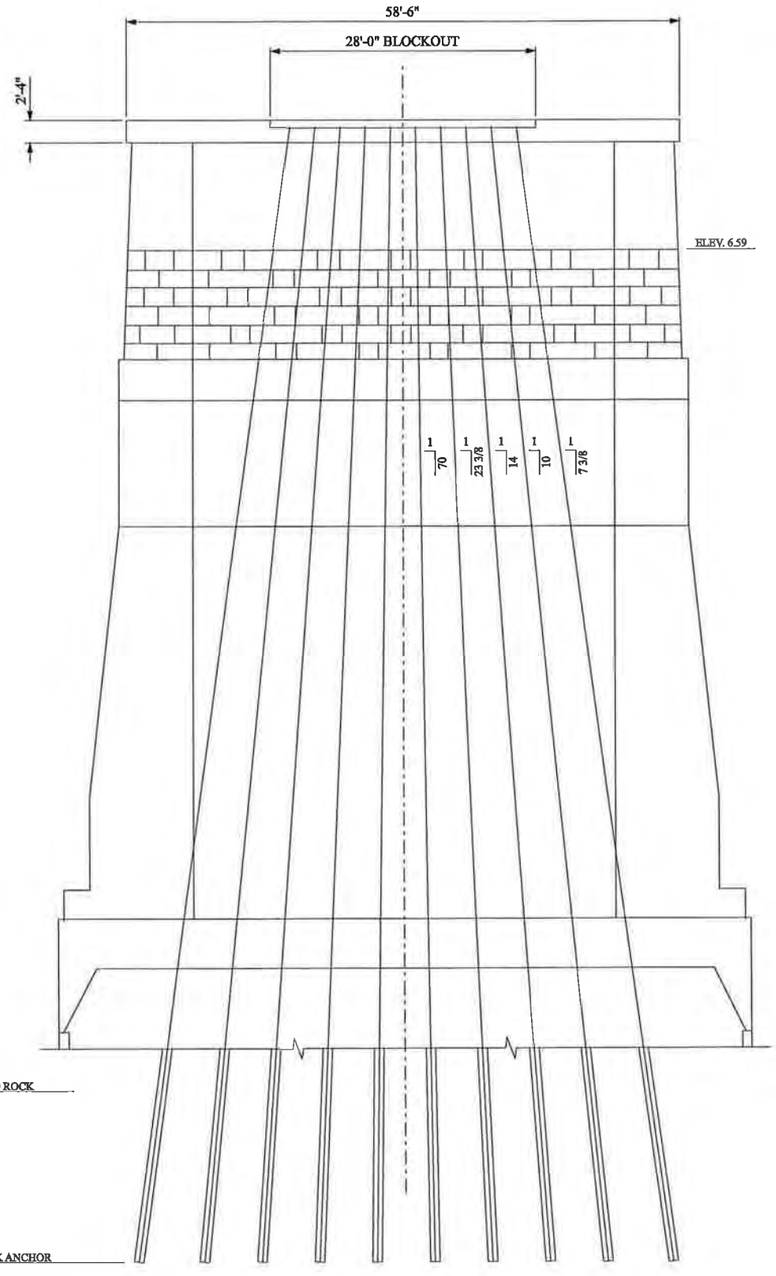
FILE NUMBER: -

REVISIONS AFTER PROPOSAL		BY	DATE		BY	DATE
	DESIGNED	GPS	04/11	CHECKED	XXX	XX/XX
	DRAWN	CAD	04/11	CHECKED	XXX	XX/XX
	QUANTITIES	XXX	XX/XX	CHECKED	XXX	XX/XX
	ISSUE DATE					
	REV. DATE					

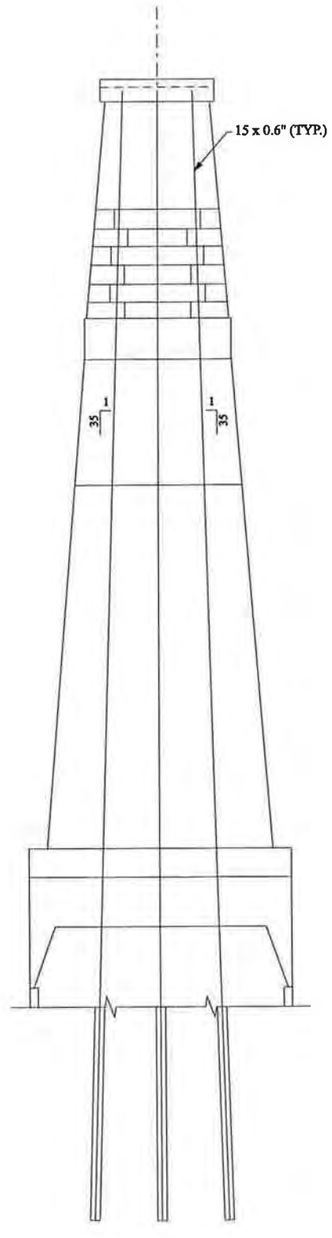
FEDERAL PROJECT NO.: ----------

SHEET NO.: 4A

TOTAL SHEETS: 44



PIER ELEVATION
1/8" = 1'-0"



PIER SIDE ELEVATION
1/8" = 1'-0"

NOTES:
DRILLING OPTIONS FOR 8" DIA. HOLES:
OPTION A:
- REMOVE SUPERSTRUCTURE
- REMOVE EXISTING CAP
- DRILL ON JACK-UP BARGE

OPTION B:
- REMOVE LIFT SPAN COUNTERWEIGHT
- BUILD DRILLING PLATFORM ATTACHED TO EXISTING TOWER
- REPLACE ANY PARTS WHICH NEED TO BE REMOVED FOR DRILLING WITH TEMPORARY BRACING
- DRILL ON PLATFORM

OPTION C:
-REMOVE SUPERSTRUCTURE
-REMOVE EXISTING CAP
-ANCHOR DRILL EQUIPMENT ON TOP OF EXISTING PIER
-DRILL ON PIER

AT CONTRACTOR'S OPTION, EITHER OPTION A, B OR C MAY BE USED. IF OPTION B IS SELECTED, CONTRACTOR SHALL PROVIDE DETAILED PROCEDURE FOR ENGINEER TO REVIEW.

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN

TOWN PORTSMOUTH, NH - KITTERY, ME | BRIDGE NO. 247/084 | STATE PROJECT 13678F
LOCATION U.S. ROUTE 1 OVER PISCATAQUA RIVER

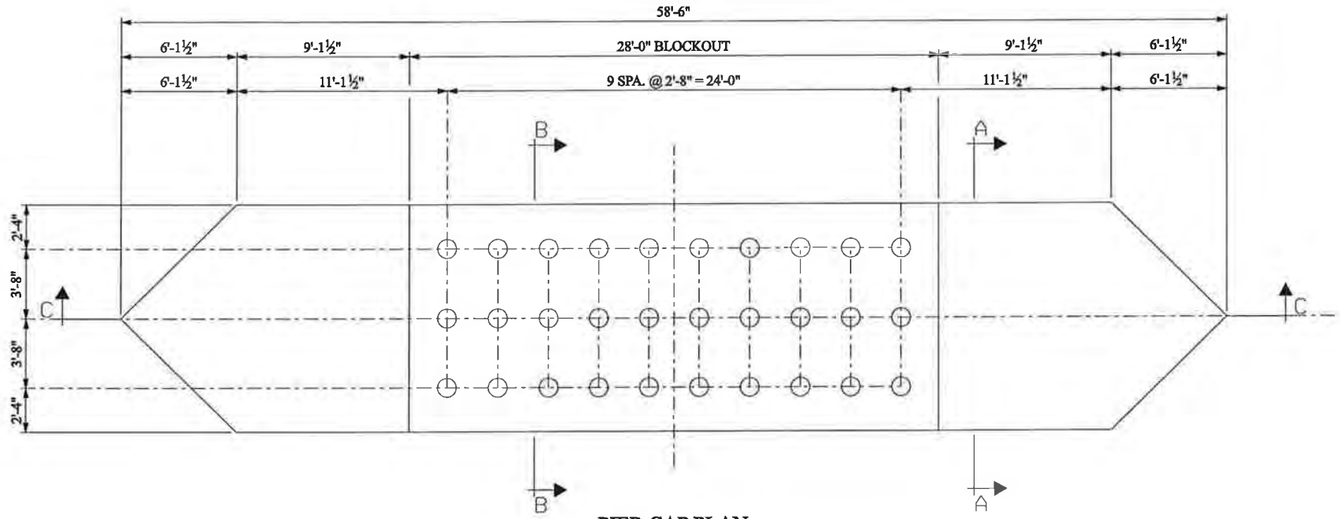
PIER 2 & 3 PIER CAP & PT DETAILS

BRIDGE SHEET: S-5 OF S-21

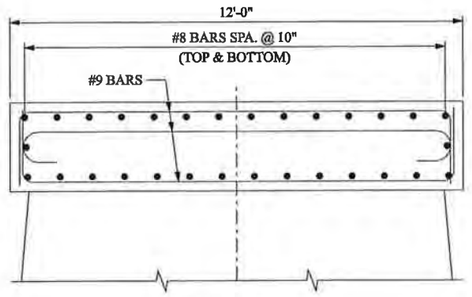
REVISIONS AFTER PROPOSAL	BY	DATE		BY	DATE
DESIGNED	YY	04/11	CHECKED	XXX	XX/XX
DRAWN	MLW	04/11	CHECKED	XXX	XX/XX
QUANTITIES	XXX	XX/XX	CHECKED	XXX	XX/XX
ISSUE DATE			FEDERAL PROJECT NO.		
REV. DATE			----------	SHEET NO. 5	TOTAL SHEETS 44

FILE NUMBER: -

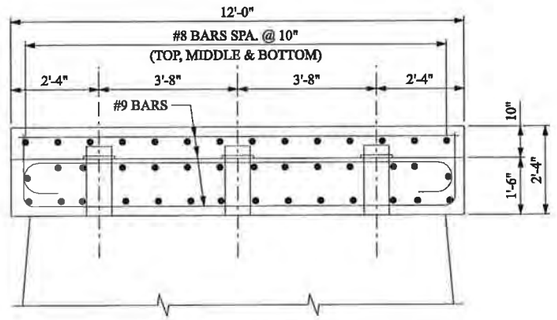
SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
PIER	S-5	1/8" = 1'-0"



PIER CAP PLAN
¼" = 1' - 0"



SECTION A-A
½" = 1' - 0"



SECTION B-B
½" = 1' - 0"

NOTES:

1. REINFORCEMENT SPACING SHALL BE ADJUSTED TO CLEAR ANCHORING DEVICES.

PLAN SHOWING REIFORCING
¼" = 1' - 0"

SECTION C-C
½" = 1' - 0"

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
PIER	S-5a	VARIES

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN

TOWN PORTSMOUTH, NH - KITTERY, ME BRIDGE NO. 247/084 STATE PROJECT 13678F

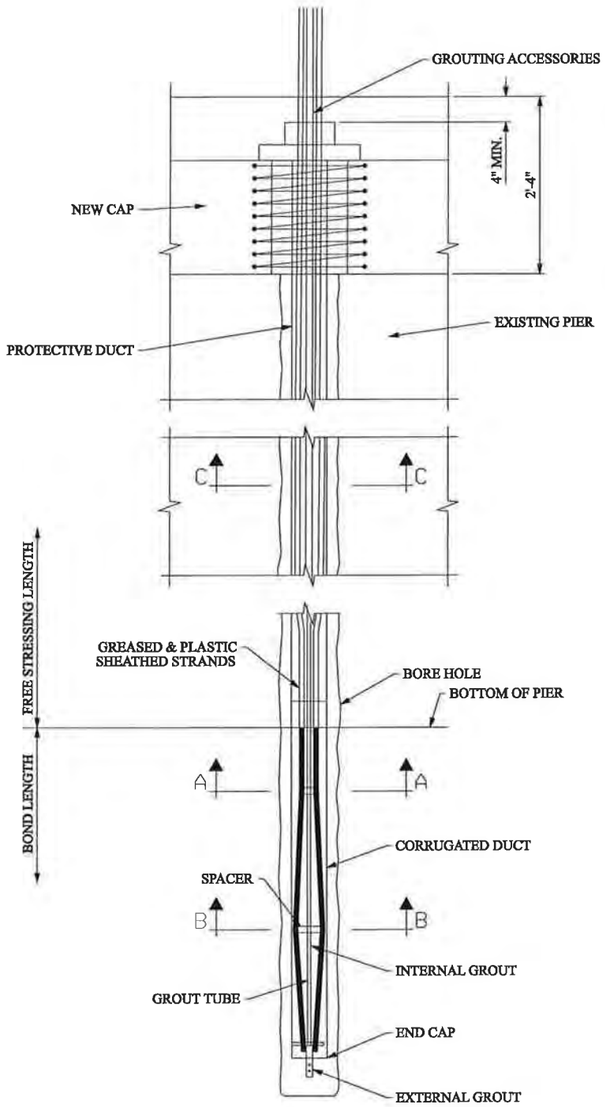
LOCATION U.S. ROUTE 1 OVER PISCATAQUA RIVER

PIER 2 & 3 PIER CAP & PT DETAILS

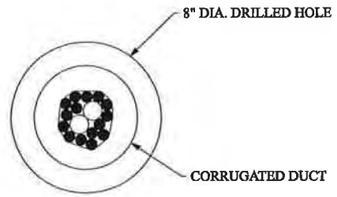
BRIDGE SHEET S-5A OF S-21

REVISIONS AFTER PROPOSAL		BY	DATE		BY	DATE
	DESIGNED	YY	04/11	CHECKED	XXX	XX/XX
	DRAWN	MLW	04/11	CHECKED	XXX	XX/XX
	QUANTITIES	XXX	XX/XX	CHECKED	XXX	XX/XX
	ISSUE DATE		FEDERAL PROJECT NO.		SHEET NO.	TOTAL SHEETS
	REV. DATE		----------		5A	44

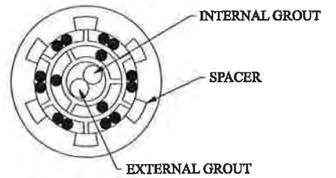
FILE NUMBER -



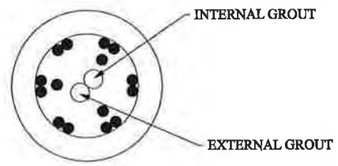
ELEVATION
NTS



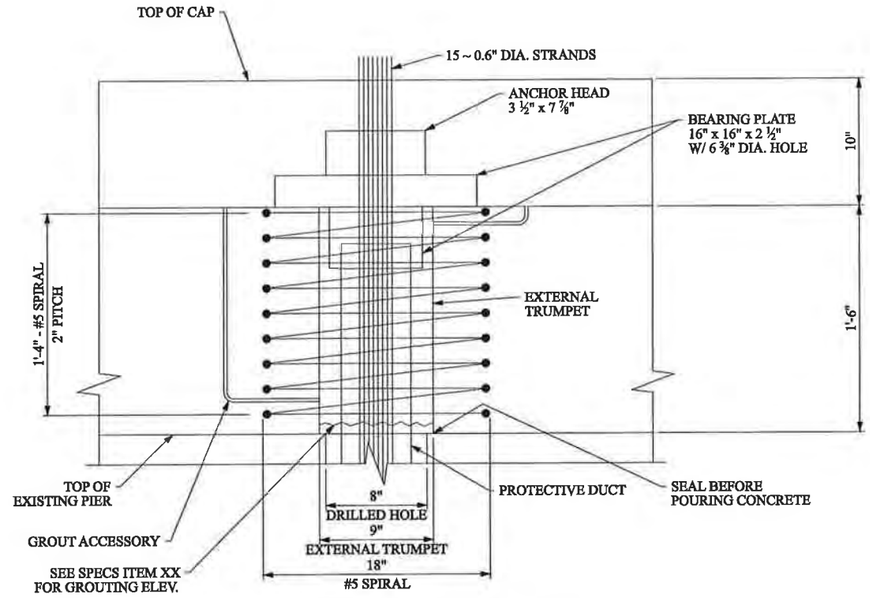
SECTION A-A
NTS



SECTION B-B
NTS



SECTION C-C
NTS



PT ROCK ANCHOR TOP ANCHORAGE DETAIL
NTS

NOTES:

1. STRAND YIELD STRENGTH SHALL BE 270 k.s.i.
2. THE LENGTH OF ROCK ANCHOR IN ROCK SHALL HAVE CORROSION PROTECTION.
3. THE ROCH ANCHOR SHALL BE STRAIGHT, CENTRALIZED AND GROUTED IN EIGHT INCH DIAMETER ANCHOR. CONTRACTOR MAY MODIFY ROCK ANCHOR REQUIREMENTS ONLY AS APPROVED BY THE ENGINEER.
4. PROOF TESTING SHALL BE REQUIRED FOR ALL ROCK ANCHORS. SEE SPECS FOR TESTING PROCEDURE.

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN

TOWN PORTSMOUTH, NH - KITTERY, ME | BRIDGE NO. 247/084 | STATE PROJECT 13678F
LOCATION U.S. ROUTE 1 OVER PISCATAQUA RIVER

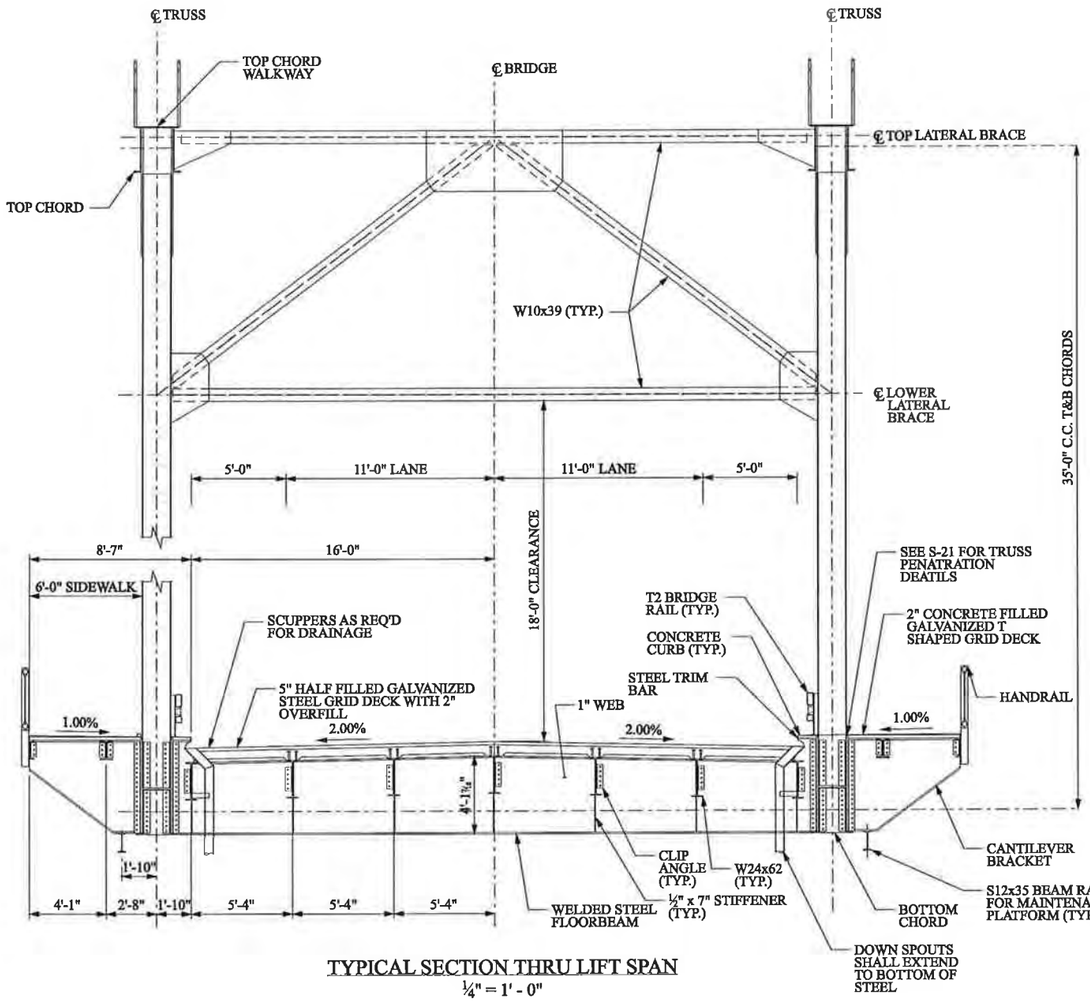
PIER 2 & 3 PIER CAP & PT DETAILS

BRIDGE SHEET: S-6 OF S-21

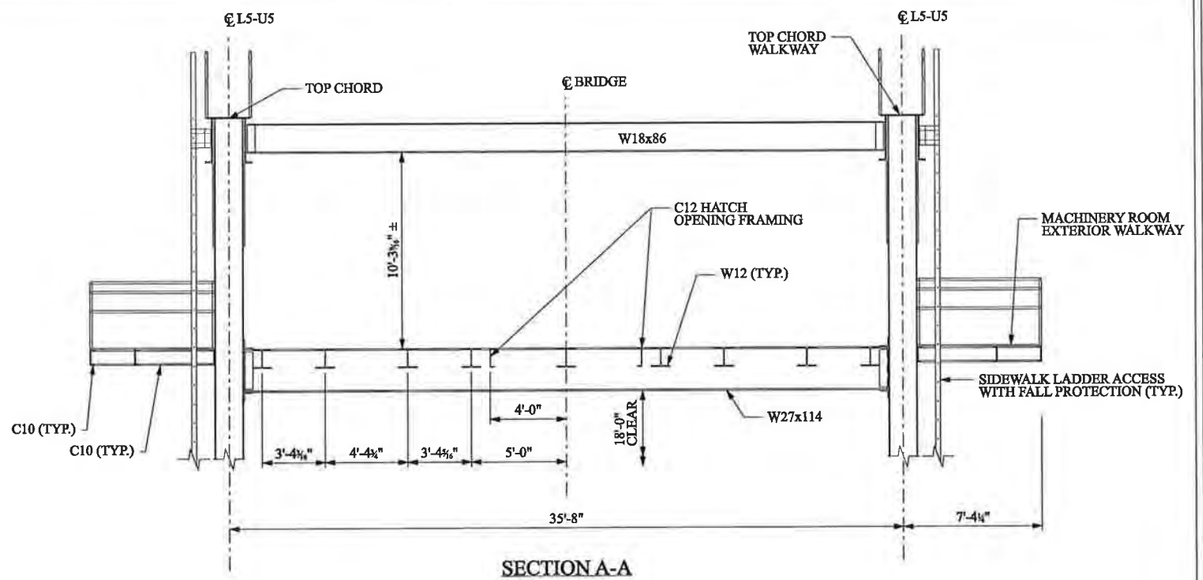
REVISIONS AFTER PROPOSAL		BY	DATE		BY	DATE
	DESIGNED	YY	04/11	CHECKED	XXX	XX/XX
	DRAWN	MLW	04/11	CHECKED	XXX	XX/XX
	QUANTITIES	XXX	XX/XX	CHECKED	XXX	XX/XX
	ISSUE DATE		FEDERAL PROJECT NO.		SHEET NO.	TOTAL SHEETS
	REV. DATE		----------		6	44

FILE NUMBER: -

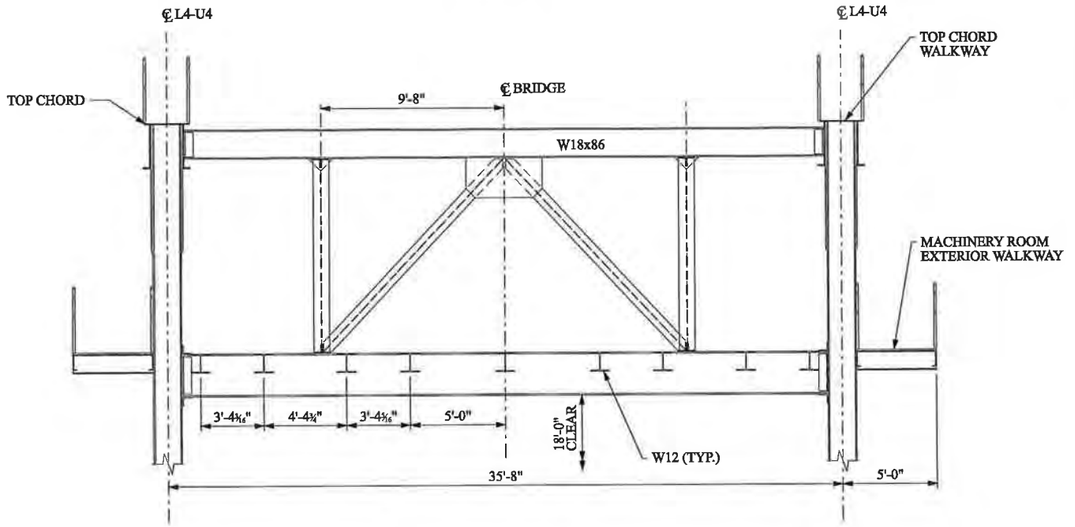
SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
PIER	S-06	NTS



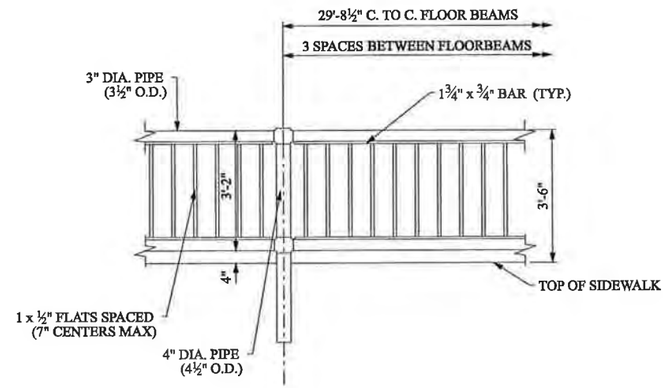
TYPICAL SECTION THRU LIFT SPAN
¼" = 1' - 0"



SECTION A-A
¼" = 1' - 0"



SECTION B-B
¼" = 1' - 0"



HANDRAIL ELEVATION
½" = 1' - 0"

NOTES:

1. SECTIONS A-A AND B-B ARE TAKEN ON SHEET S-11.

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN

TOWN PORTSMOUTH, NH - KITTERY, ME BRIDGE NO. 247/084 STATE PROJECT 13678F

LOCATION U.S. ROUTE 1 OVER PISCATAQUA RIVER

TYPICAL CROSS SECTIONS

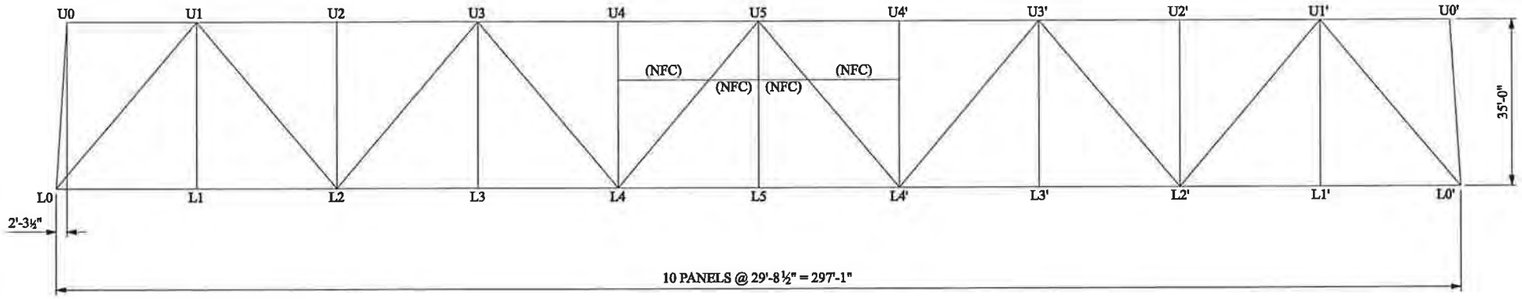
REVISIONS AFTER PROPOSAL		BY	DATE		BY	DATE
	DESIGNED	GPS	04/11	CHECKED	XXX	XX/XX
	DRAWN	CAD	04/11	CHECKED	XXX	XX/XX
	QUANTITIES	XXX	XX/XX	CHECKED	XXX	XX/XX

SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
SUPER	S-7	¼" = 1'-0"

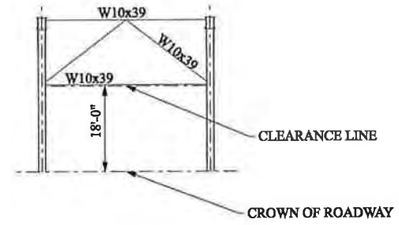
ISSUE DATE	FEDERAL PROJECT NO.	SHEET NO.	TOTAL SHEETS
REV. DATE	----------	7	44

BRIDGE SHEET S-7 OF S-21

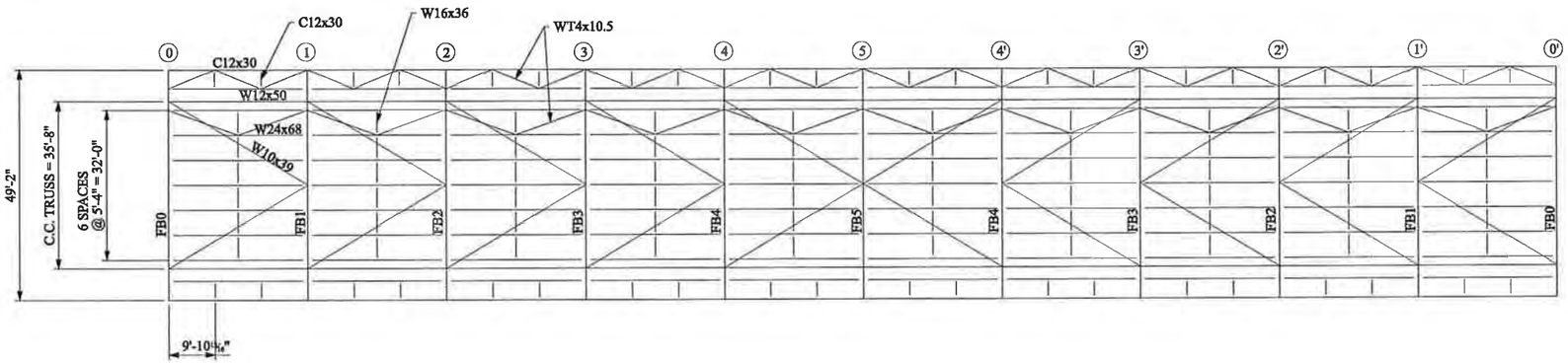
FILE NUMBER -



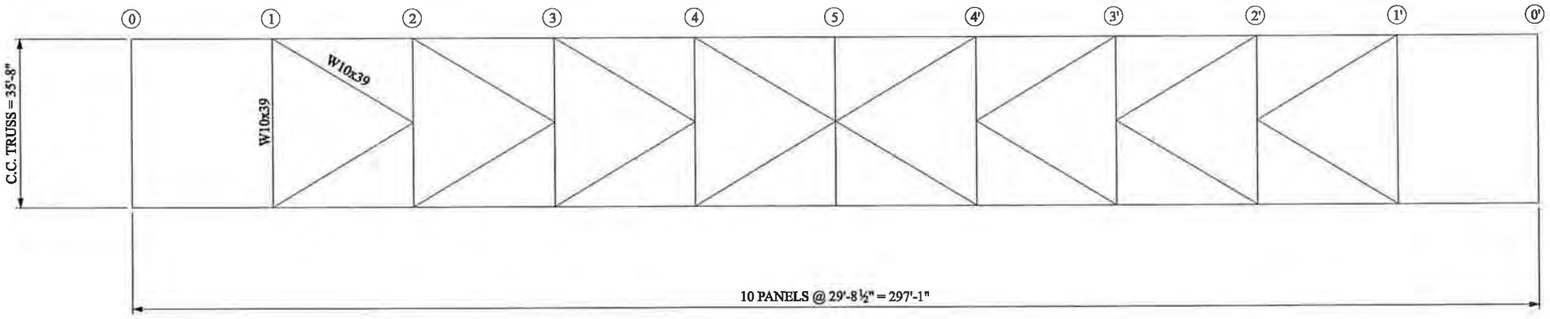
LIFT SPAN TRUSS
1/16" = 1' - 0"



SWAY FRAME AT U1, U2, U3
1/16" = 1' - 0"



LOWER FRAMING PLAN
1/16" = 1' - 0"



UPPER FRAMING PLAN
1/16" = 1' - 0"

NOTES:

1. ALL TRUSS MEMBERS ARE FRACTURE CRITICAL UNLESS NOTED (NFC).
2. ALL FRACTURE CRITICAL MEMBERS MUST SATISFY SUPPLEMENTAL REQUIREMENTS FOR NOTCH TOUGHNESS INCLUDING SPLICE MATERIAL.
3. ALL GUSSET PLATES FOR MAIN TRUSS MEMBERS MUST SATISFY SUPPLEMENTAL REQUIREMENTS FOR NOTCH TOUGHNESS.
4. ALL TRUSS CONNECTIONS SHALL BE DESIGNED AS SLIP-CRITICAL.
5. ALL STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 50.

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
SUPER	S-8	1/16" = 1'-0"

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN

TOWN PORTSMOUTH, NH - KITTERY, ME | BRIDGE NO. 247/084 | STATE PROJECT 13678F

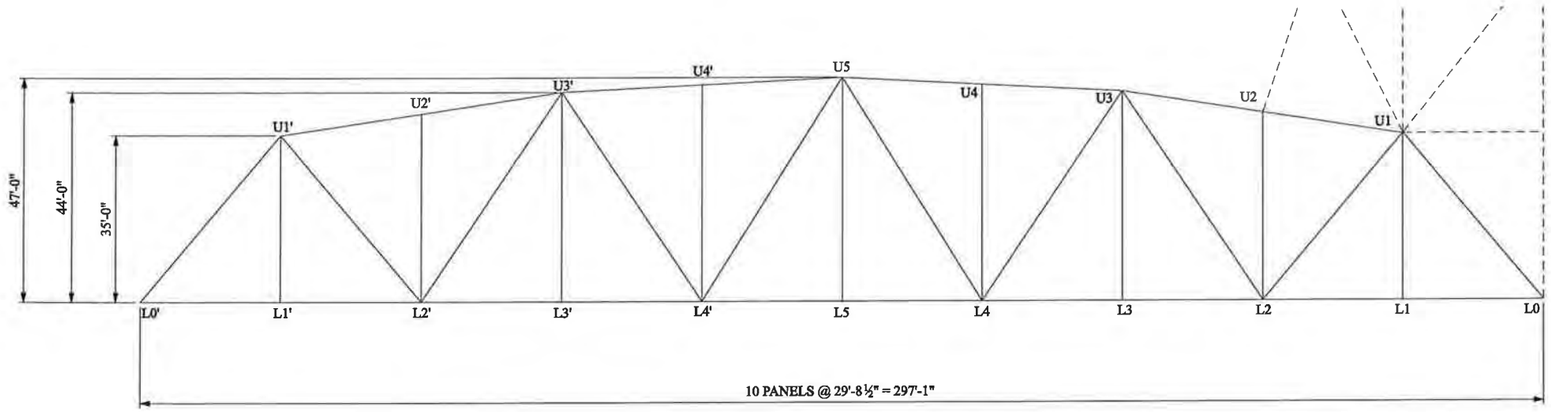
LOCATION U.S. ROUTE 1 OVER PISCATAQUA RIVER

FRAMING PLAN-LIFT SPAN

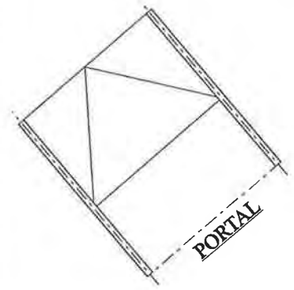
BRIDGE SHEET: S-8 OF S-21

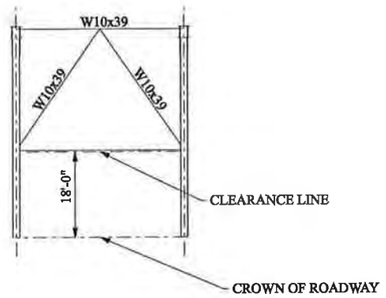
REVISIONS AFTER PROPOSAL		BY	DATE		BY	DATE
	DESIGNED	GPS	04/11	CHECKED	XXX	XX/XX
	DRAWN	CAD	04/11	CHECKED	XXX	XX/XX
	QUANTITIES	XXX	XX/XX	CHECKED	XXX	XX/XX
	ISSUE DATE		FEDERAL PROJECT NO.		SHEET NO.	TOTAL SHEETS
	REV. DATE		----------		8	44

FILE NUMBER: -

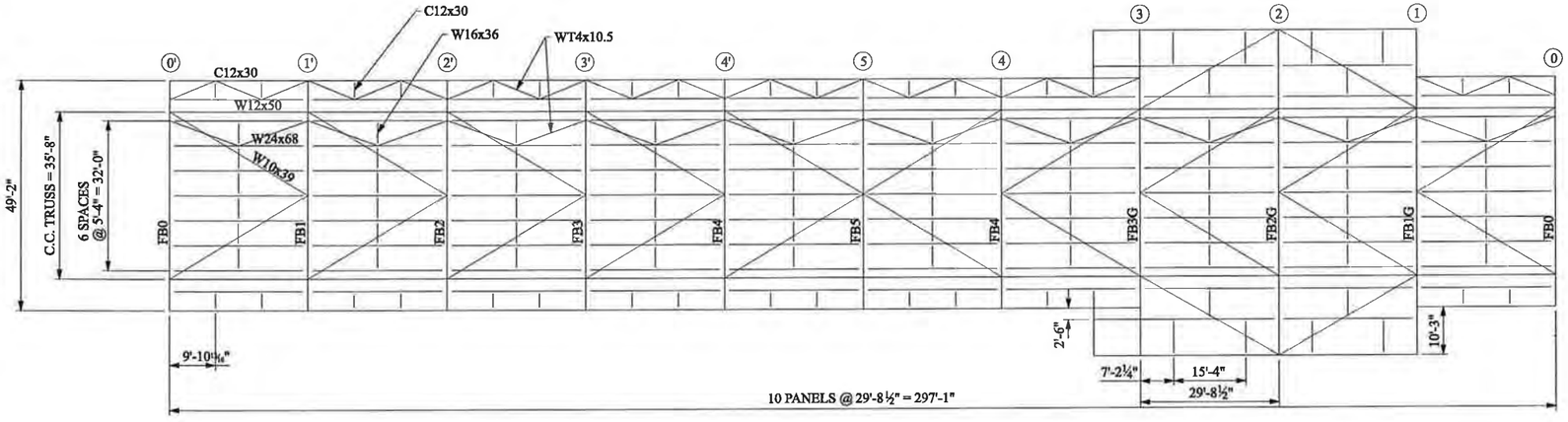


FIXED SPAN TRUSS ELEVATION
1/16" = 1' - 0"

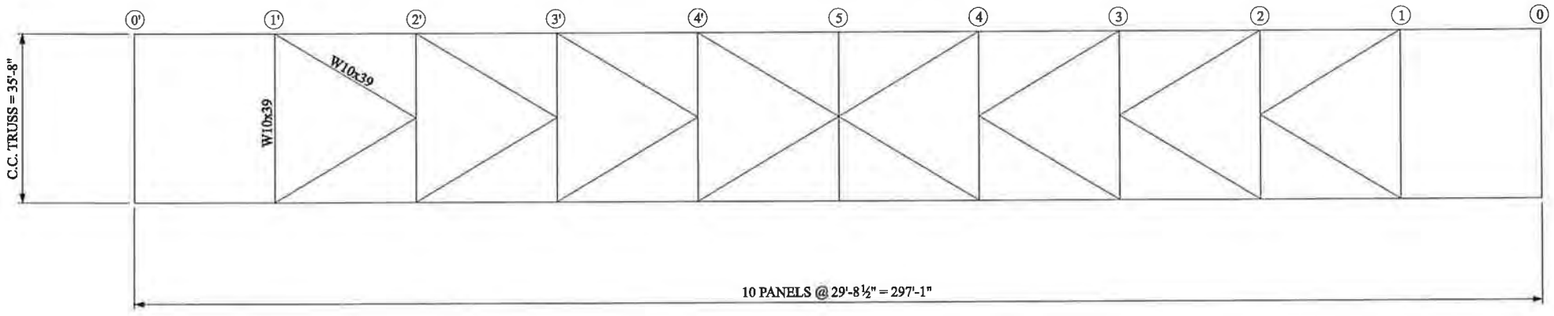




SWAY FRAME AT U1, U2, U3, U4, U5
1/16" = 1' - 0"



LOWER FRAMING PLAN
1/16" = 1' - 0"



UPPER FRAMING PLAN
1/16" = 1' - 0"

NOTES:

1. ALL TRUSS MEMBERS ARE FRACTURE CRITICAL UNLESS NOTED (NFC).
2. ALL FRACTURE CRITICAL MEMBERS MUST SATISFY SUPPLEMENTAL REQUIREMENTS FOR NOTCH TOUGHNESS INCLUDING SPLICE MATERIAL.
3. ALL GUSSET PLATES FOR MAIN TRUSS MEMBERS MUST SATISFY SUPPLEMENTAL REQUIREMENTS FOR NOTCH TOUGHNESS.
4. ALL TRUSS CONNECTIONS SHALL BE DESIGNED AS SLIP-CRITICAL.
5. ALL STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 50.

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
SUPER	S-9	1/16" = 1'-0"

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN

TOWN PORTSMOUTH, NH - KITTERY, ME | BRIDGE NO. 247/084 | STATE PROJECT 13678F

LOCATION U.S. ROUTE 1 OVER PISCATAQUA RIVER

FRAMING PLAN-FIXED SPAN

BRIDGE SHEET: S-9 OF S-21

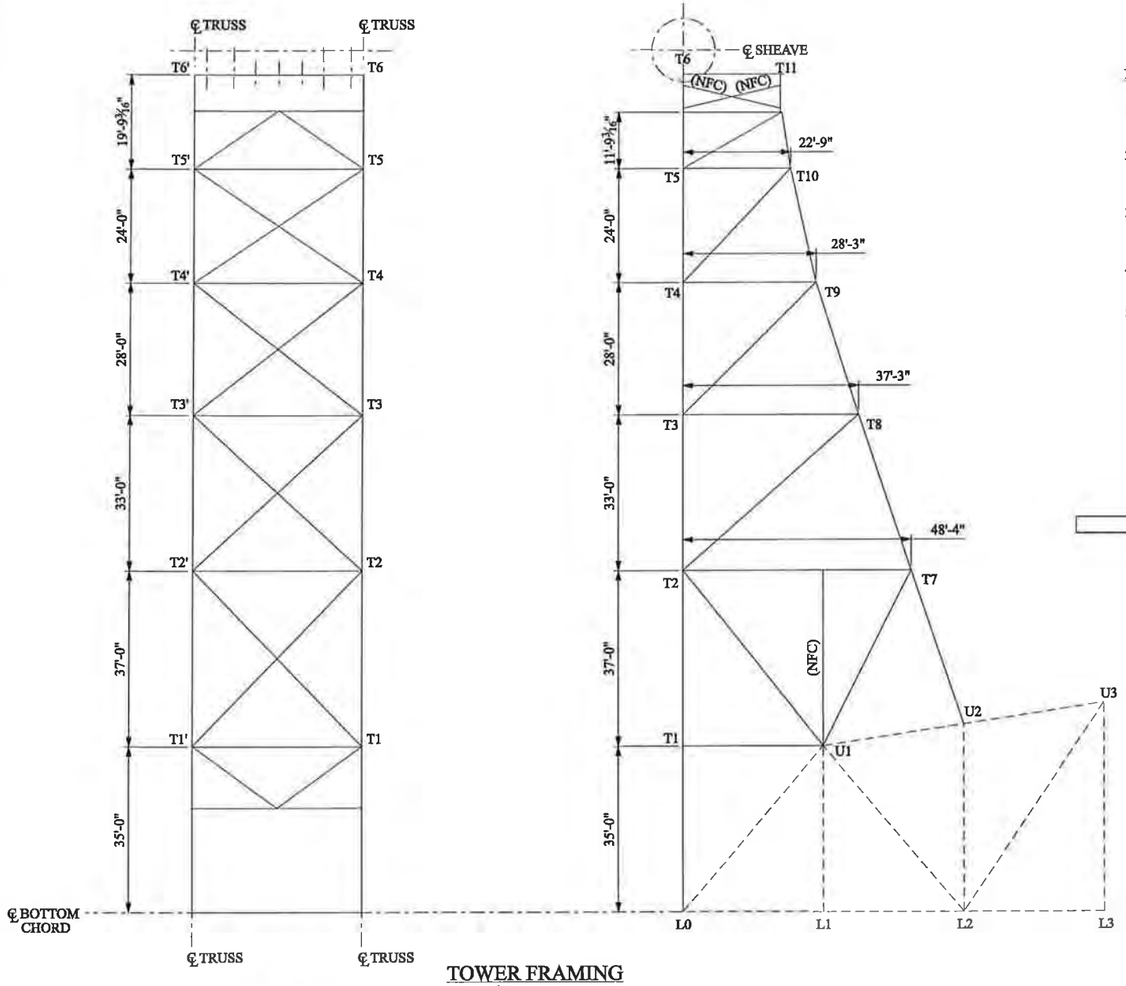
REVISIONS AFTER PROPOSAL	BY	DATE		BY	DATE
	DESIGNED	GPS	04/11	CHECKED	XXX	XX/XX
	DRAWN	CAD	04/11	CHECKED	XXX	XX/XX
	QUANTITIES	XXX	XX/XX	CHECKED	XXX	XX/XX
	ISSUE DATE					
	REV. DATE					

FEDERAL PROJECT NO. ----------

BRIDGE NO. 9

FILE NUMBER -

TOTAL SHEETS 44

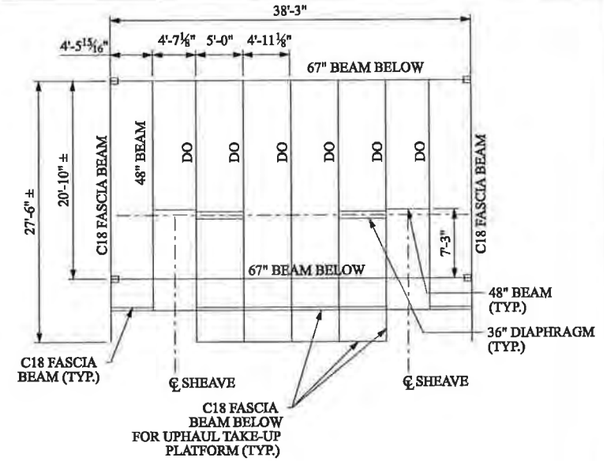


TOWER FRAMING

1/16" = 1'-0"

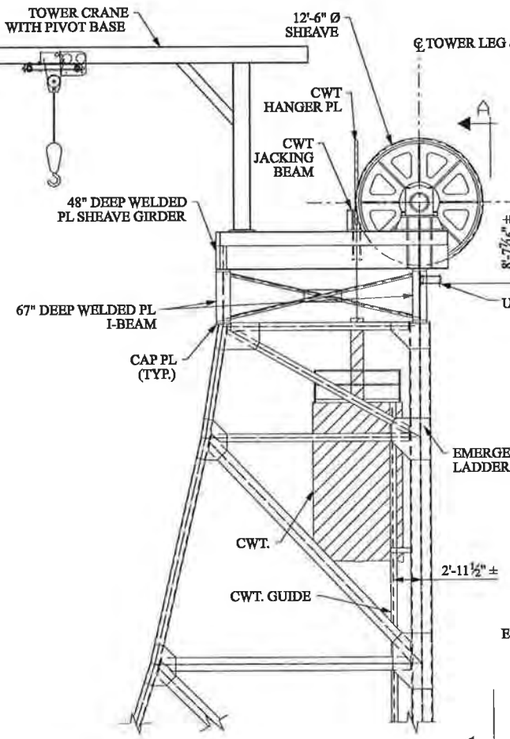
NOTES:

1. ALL TOWER MEMBERS ARE FRACTURE CRITICAL UNLESS NOTED (NFC).
2. ALL FRACTURE CRITICAL MEMBERS MUST SATISFY SUPPLEMENTAL REQUIREMENTS FOR NOTCH TOUGHNESS INCLUDING SPLICE MATERIAL.
3. ALL GUSSET PLATES FOR MAIN TOWER MEMBERS MUST SATISFY SUPPLEMENTAL REQUIREMENTS FOR NOTCH TOUGHNESS.
4. ALL TOWER CONNECTIONS SHALL BE DESIGNED AS SLIP-CRITICAL.
5. ALL STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 50.



TOP OF TOWER FRAMING

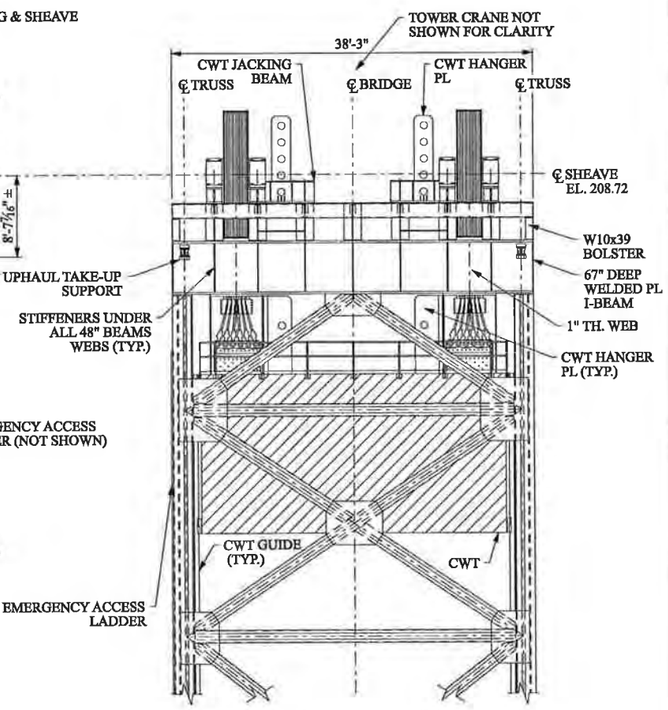
⅛" = 1'-0"



TOP OF TOWER ELEVATION

⅛" = 1'-0"

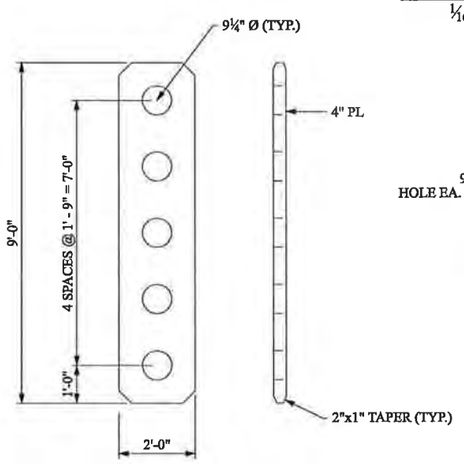
* RAILING, PLATFORMS AND STAIRS NOT SHOWN FOR CLARITY



SECTION A-A

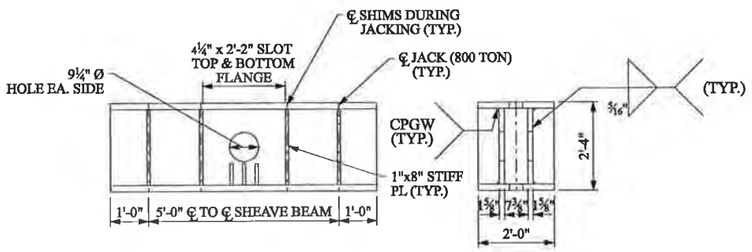
⅛" = 1'-0"

* RAILING, PLATFORMS AND STAIRS NOT SHOWN FOR CLARITY



COUNTERWEIGHT HANGER

½" = 1'-0"

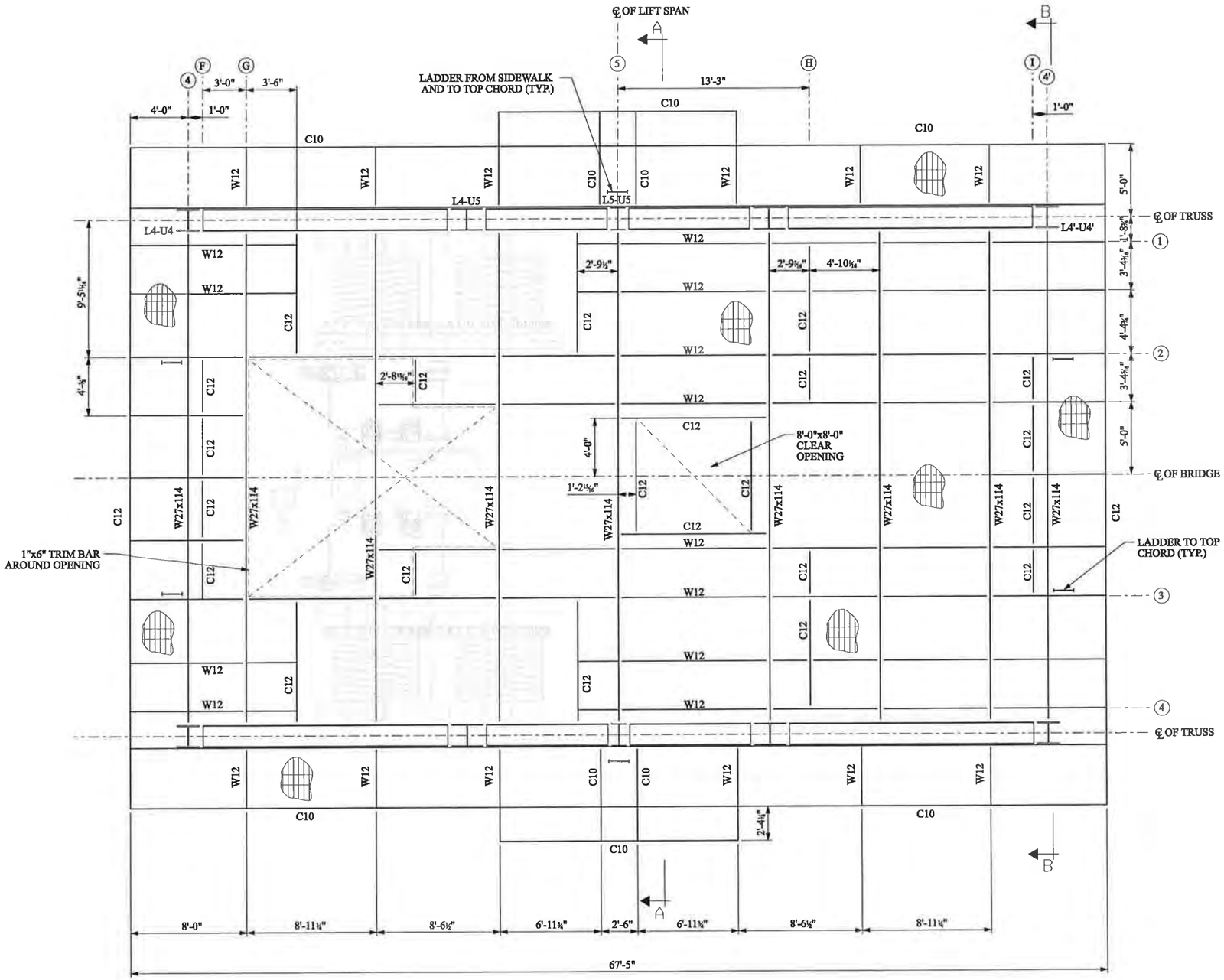


COUNTERWEIGHT JACKING BEAM

½" = 1'-0"

STATE OF NEW HAMPSHIRE							
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN							
TOWN PORTSMOUTH, NH - KITTERY, ME			BRIDGE NO. 247/084		STATE PROJECT 13678F		
LOCATION U.S. ROUTE 1 OVER PISCATAQUA RIVER							
TOWER FRAMING							BRIDGE SHEET S-10 OF S-21
REVISIONS AFTER PROPOSAL			BY	DATE		BY	DATE
		DESIGNED	GPS	04/11	CHECKED	XXX	XX/XX
		DRAWN	CAD	04/11	CHECKED	XXX	XX/XX
		QUANTITIES	XXX	XX/XX	CHECKED	XXX	XX/XX
		ISSUE DATE		FEDERAL PROJECT NO.		SHEET NO.	TOTAL SHEETS
		REV. DATE		----------		10	44

SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
SUPER	S-10	VARIES



MACHINERY ROOM FRAMING PLAN

¼" = 1' - 0"

NOTES:

1. SECTIONS A-A AND B-B ARE LOCATED ON SHEET S-7.

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
SUPER	S-11	¼" = 1' - 0"

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN

TOWN PORTSMOUTH, NH - KITTERY, ME BRIDGE NO. 247/084 STATE PROJECT 13678F

LOCATION U.S. ROUTE 1 OVER PISCATAQUA RIVER

FRAMING PLAN-MACHINERY ROOM

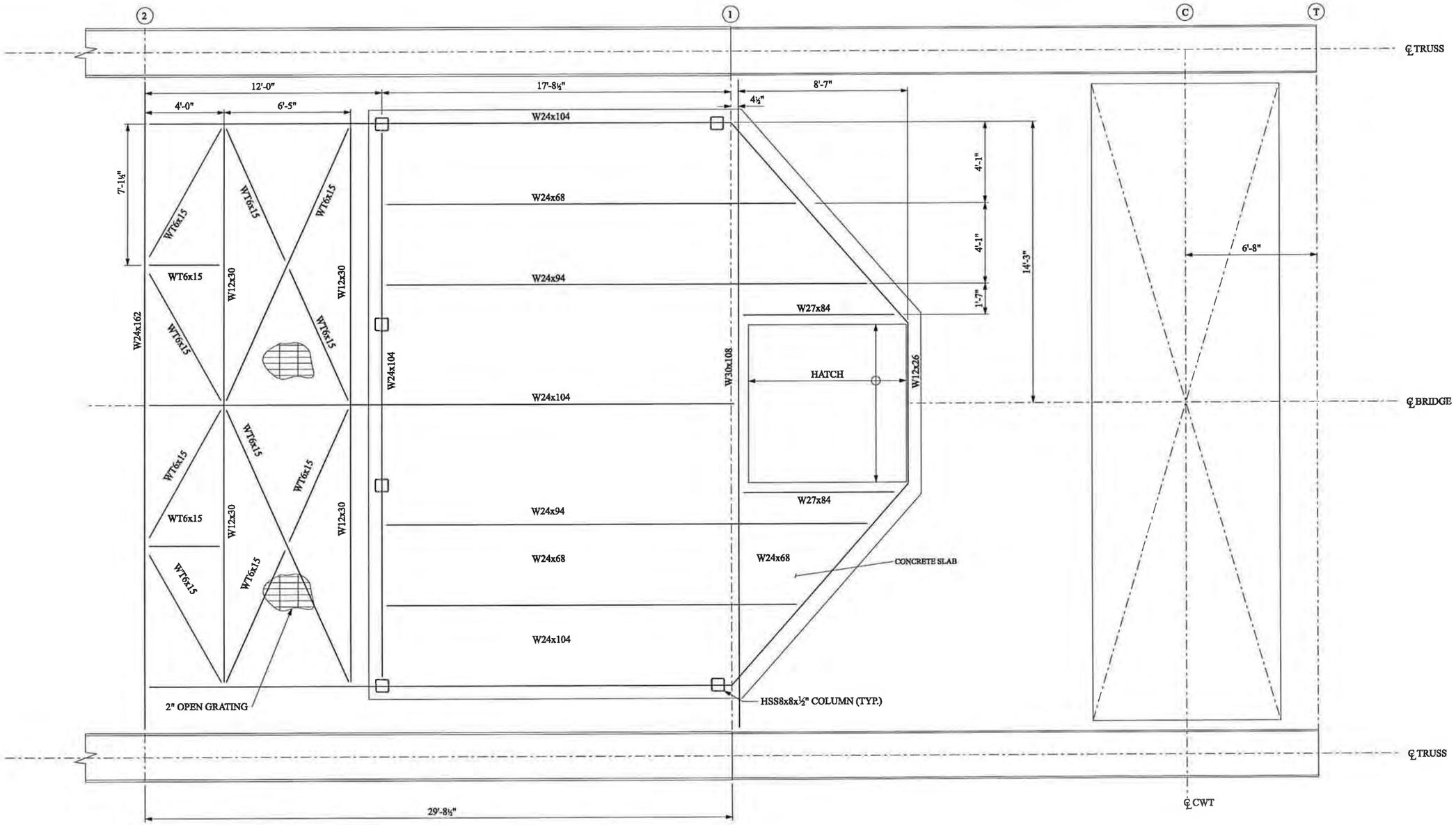
BRIDGE SHEET S-11 OF S-21

REVISIONS AFTER PROPOSAL	BY	DATE

	BY	DATE		BY	DATE
DESIGNED	GPS	04/11	CHECKED	XXX	XX/XX
DRAWN	CAD	04/11	CHECKED	XXX	XX/XX
QUANTITIES	XXX	XX/XX	CHECKED	XXX	XX/XX

ISSUE DATE	FEDERAL PROJECT NO.	SHEET NO.	TOTAL SHEETS
REV. DATE	----------	11	44

FILE NUMBER -



CONTROL HOUSE FLOOR FRAMING PLAN

⅜" = 1' - 0"

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
SUPER	S-12	⅜" = 1' - 0"

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN

TOWN PORTSMOUTH, NH - KITTERY, ME BRIDGE NO. 247/084 STATE PROJECT 13678F

LOCATION U.S. ROUTE 1 OVER PISCATAQUA RIVER

FRAMING PLAN-CONTROL HOUSE FIRST LEVEL

REVISIONS AFTER PROPOSAL

	BY	DATE		BY	DATE
DESIGNED	GPS	04/11	CHECKED	XXX	XX/XX
DRAWN	CAD	04/11	CHECKED	XXX	XX/XX
QUANTITIES	XXX	XX/XX	CHECKED	XXX	XX/XX

ISSUE DATE

REV. DATE

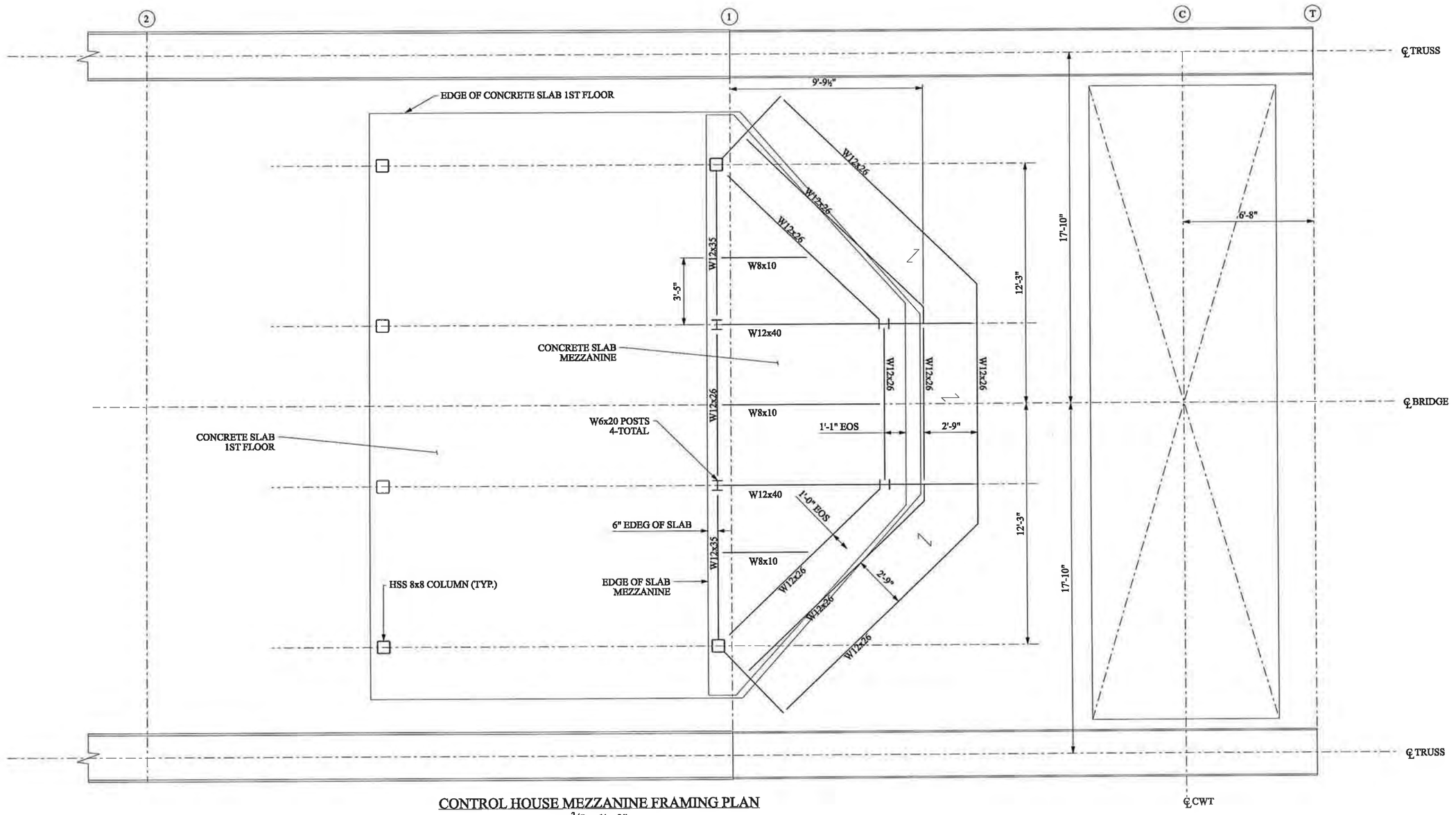
FEDERAL PROJECT NO. ----------

SHEET NO. 12

BRIDGE SHEET S-12 OF S-21

FILE NUMBER -

TOTAL SHEETS 44



CONTROL HOUSE MEZZANINE FRAMING PLAN

3/8" = 1' - 0"

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN

TOWN PORTSMOUTH, NH - KITTERY, ME BRIDGE NO. 247/084 STATE PROJECT 13678F

LOCATION U.S. ROUTE 1 OVER PISCATAQUA RIVER

FRAMING PLAN-CONTROL HOUSE MEZZANINE LEVEL

BRIDGE SHEET S-13 OF S-21

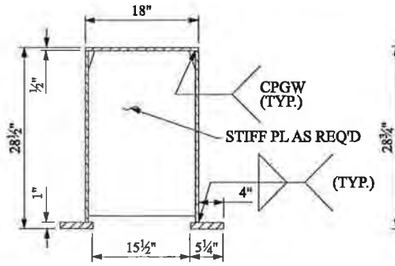
REVISIONS AFTER PROPOSAL		BY	DATE		BY	DATE
	DESIGNED	GPS	04/11	CHECKED	XXX	XX/XX
	DRAWN	CAD	04/11	CHECKED	XXX	XX/XX
	QUANTITIES	XXX	XX/XX	CHECKED	XXX	XX/XX
	ISSUE DATE			FEDERAL PROJECT NO.		
	REV. DATE			----------		

FILE NUMBER -

SHEET NO. 13

TOTAL SHEETS 44

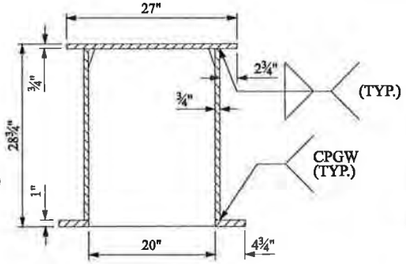
SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
SUPER	S-13	3/8" = 1' - 0"



FIXED TRUSS BOTTOM CHORD

L0-L1, L1-L2, L2-L3, L3-L4, L4-L5

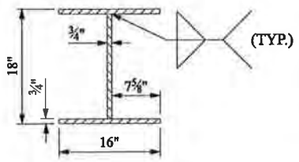
GROSS AREA : 46.5 SQ. IN.



FIXED TRUSS TOP CHORD

L0-U1, U1-U2, U2-U3, U3-U4, U4-U5

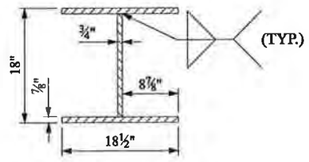
GROSS AREA : 70.2 SQ. IN.



FIXED TRUSS VERTICAL

L1-U1, L3-U3, L5-U5

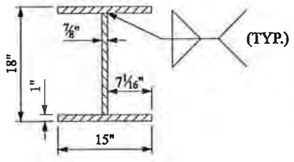
GROSS AREA : 36.4 SQ. IN.



FIXED TRUSS VERTICAL

L2-U2, L4-U4

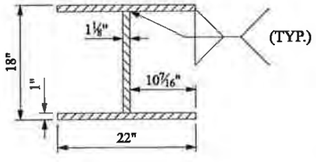
GROSS AREA : 44.6 SQ. IN.



FIXED TRUSS DIAGONAL

U1-L2

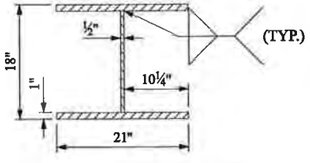
GROSS AREA : 44.0 SQ. IN.



FIXED TRUSS DIAGONAL

L2-U3

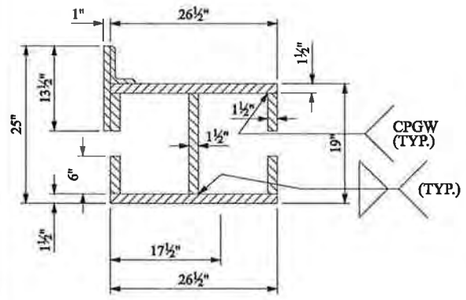
GROSS AREA : 62.0 SQ. IN.



FIXED TRUSS DIAGONAL

U3-L4, L4-U5

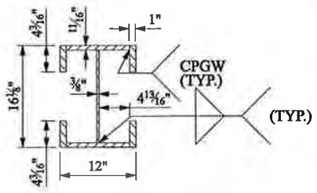
GROSS AREA : 50.0 SQ. IN.



FIXED TRUSS FRONT TOWER LEG

L0-T1, T1-T2, T2-T3, T3-T4, T4-T5, T5-T6

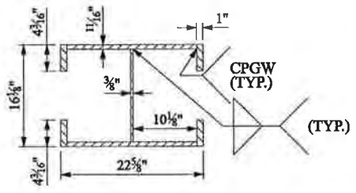
GROSS AREA : 159.7 SQ. IN.



FIXED TRUSS BACK TOWER LEG

U1-T2, U1-T7, U2-T7, T2-T7, T2-T8
T7-T8, T8-T9, T9-T10, T10-T11

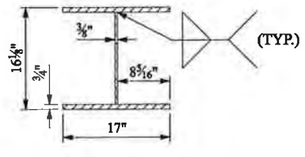
GROSS AREA : 36.0 SQ. IN.



FIXED TRUSS BACK TOWER LEG

U1-TI

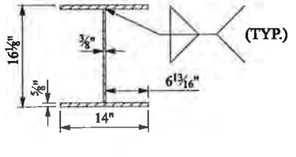
GROSS AREA : 50.7 SQ. IN.



FIXED TRUSS MIDDLE BRACE

T3-T8, T3-T9, T4-T9, T4-T10

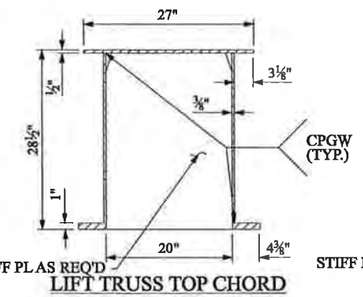
GROSS AREA : 31.0 SQ. IN.



FIXED TRUSS UPPER BRACE

T5-T10, T5-T11

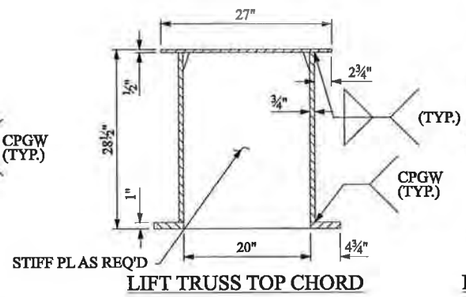
GROSS AREA : 23.1 SQ. IN.



LIFT TRUSS TOP CHORD

U0-U1

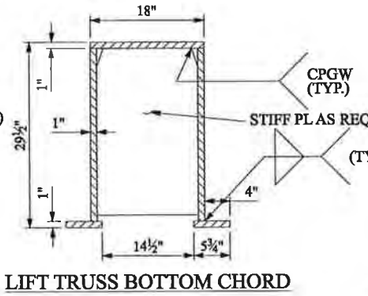
GROSS AREA : 42.5 SQ. IN.



LIFT TRUSS TOP CHORD

L0-U1, U1-U2, U2-U3, U3-U4, U4-U5

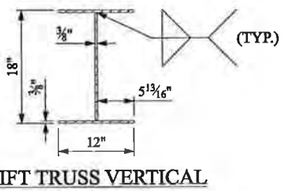
GROSS AREA : 63.5 SQ. IN.



LIFT TRUSS BOTTOM CHORD

L0-L1, L1-L2, L2-L3, L3-L4, L4-L5

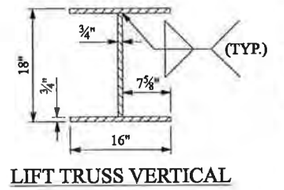
GROSS AREA : 84.5 SQ. IN.



LIFT TRUSS VERTICAL

L1-U1, L3-U3, L5-U5

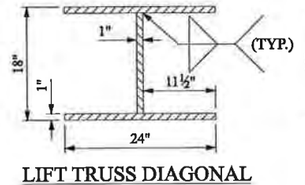
GROSS AREA : 15.5 SQ. IN.



LIFT TRUSS VERTICAL

L2-U2, L4-U4

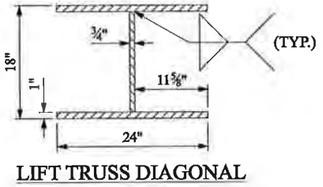
GROSS AREA : 36.4 SQ. IN.



LIFT TRUSS DIAGONAL

U1-L2

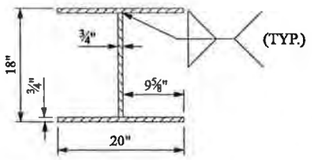
GROSS AREA : 64.0 SQ. IN.



LIFT TRUSS DIAGONAL

L2-U3

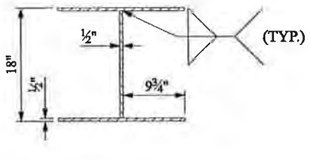
GROSS AREA : 60.0 SQ. IN.



LIFT TRUSS DIAGONAL

U3-L4

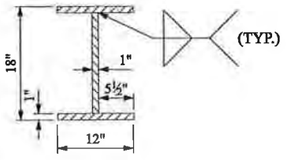
GROSS AREA : 42.4 SQ. IN.



LIFT TRUSS DIAGONAL

L4-U5

GROSS AREA : 28.5 SQ. IN.



LIFT TRUSS ENDPOST

L0-U0

GROSS AREA : 40.0 SQ. IN.

NOTES:

1. ALL STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 50.

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN

TOWN PORTSMOUTH, NH - KITTERY, ME | BRIDGE NO. 247/084 | STATE PROJECT 13678F

LOCATION U.S. ROUTE 1 OVER PISCATAQUA RIVER

TRUSS MEMBER CROSS SECTIONS

BRIDGE SHEET S-14 OF S-21

REVISIONS AFTER PROPOSAL	BY	DATE		BY	DATE
	DESIGNED GPS	04/11	CHECKED	XXX	XX/XX
	DRAWN CAD	04/11	CHECKED	XXX	XX/XX
	QUANTITIES XXX	XX/XX	CHECKED	XXX	XX/XX

ISSUE DATE

REV. DATE

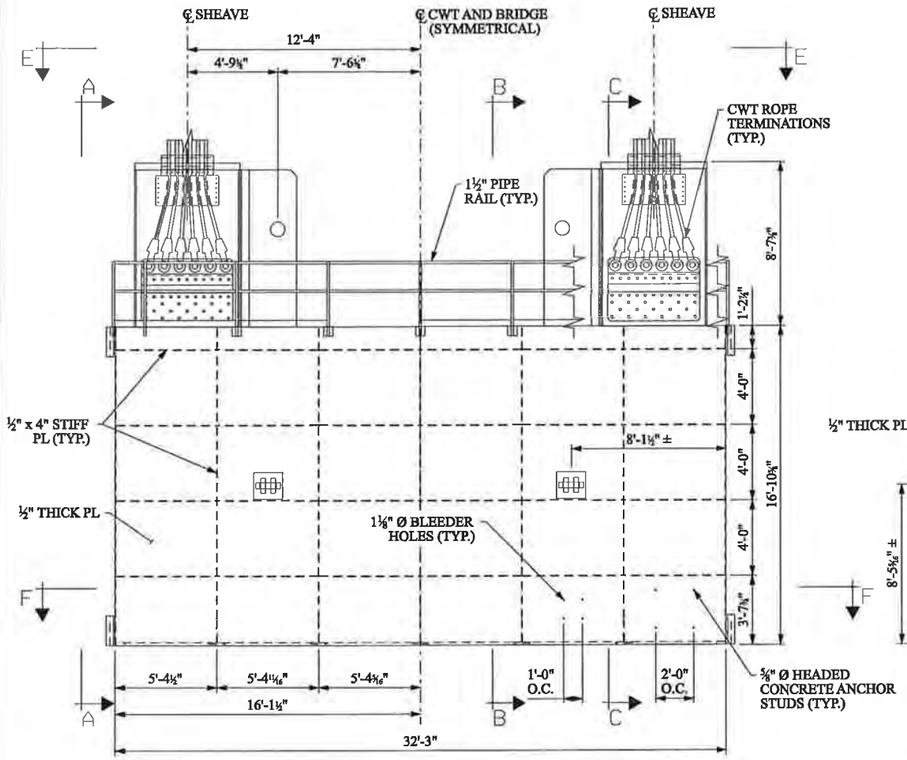
FEDERAL PROJECT NO. ----------

SHEET NO. 14

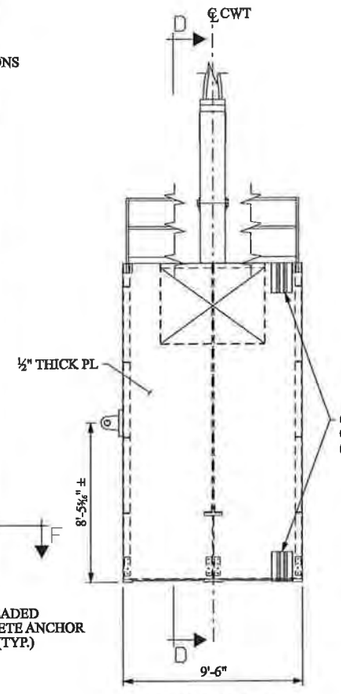
TOTAL SHEETS 44

FILE NUMBER -

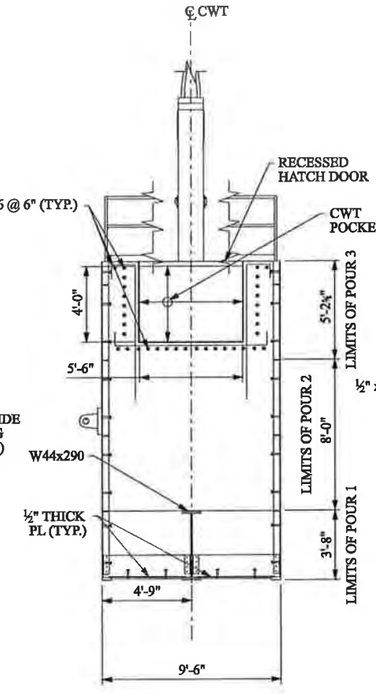
SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
SUPER	S-14	1" = 1'-0"



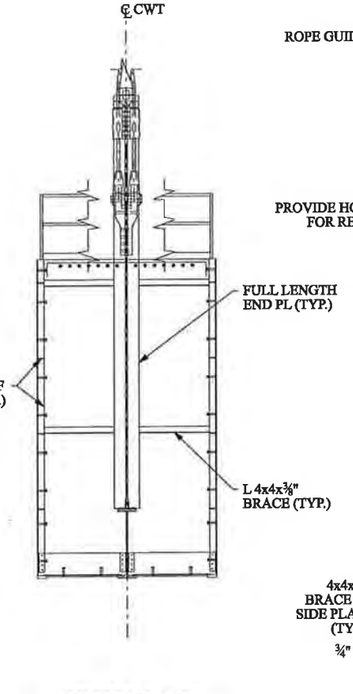
COUNTERWEIGHT ELEVATION
¼" = 1' - 0"



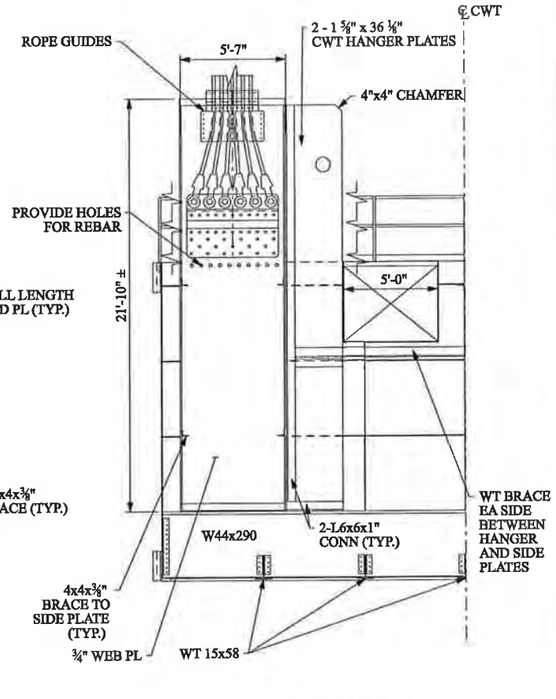
SECTION A-A
¼" = 1' - 0"



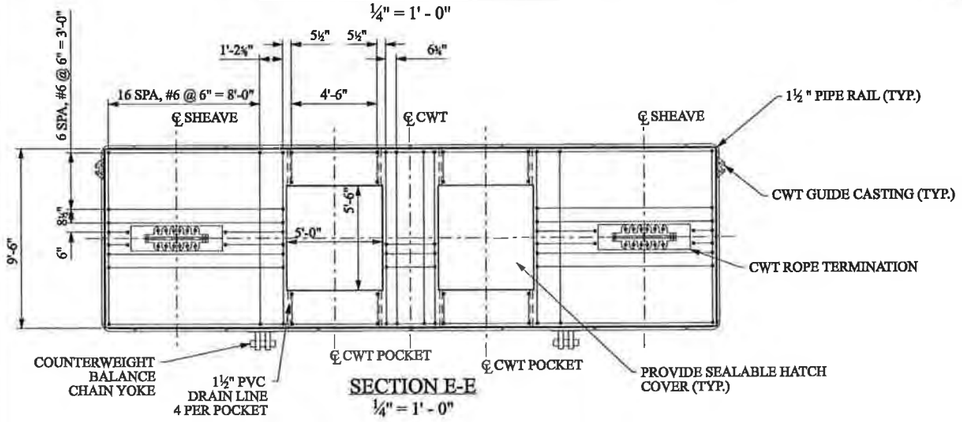
SECTION B-B
¼" = 1' - 0"



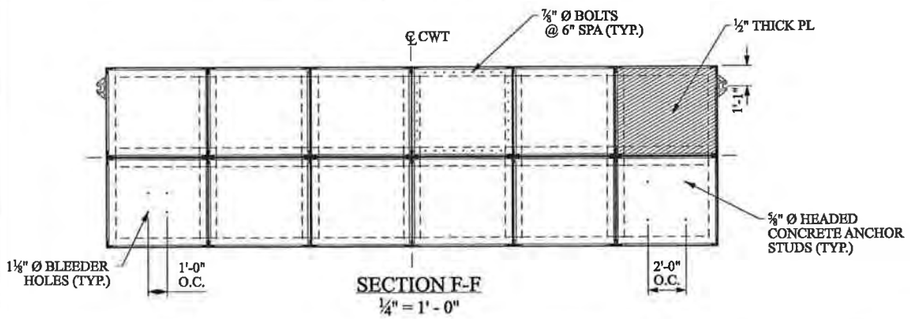
SECTION C-C
¼" = 1' - 0"



HALF SECTION D-D
¼" = 1' - 0"



SECTION E-E
¼" = 1' - 0"



SECTION F-F
¼" = 1' - 0"

NOTES:

1. CONCRETE ANCHORS STUDS AND BLEEDER ARE ON ALL SIDE PLATES OF COUNTERWEIGHT BOX.

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN

TOWN PORTSMOUTH, NH - KITTERY, ME | BRIDGE NO. 247/084 | STATE PROJECT 13678F

LOCATION U.S. ROUTE 1 OVER PISCATAQUA RIVER

COUNTERWEIGHT DETAILS

BRIDGE SHEET S-15 OF S-21

REVISIONS AFTER PROPOSAL	BY	DATE		BY	DATE
	DESIGNED	GPS	04/11	CHECKED	XXX XX/XX
	DRAWN	CAD	04/11	CHECKED	XXX XX/XX
	QUANTITIES	XXX	XX/XX	CHECKED	XXX XX/XX
	ISSUE DATE				
	REV. DATE				

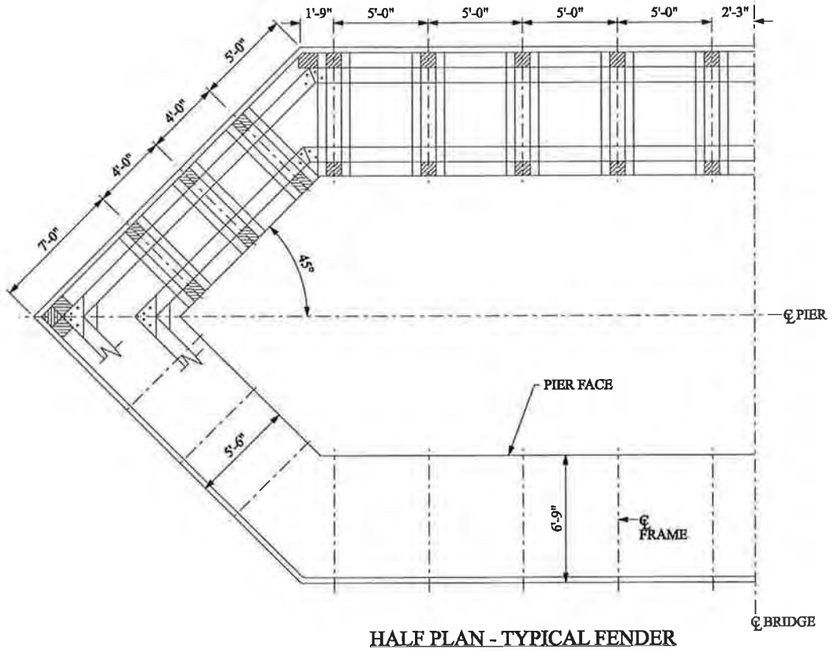
FILE NUMBER -

FEDERAL PROJECT NO. ----------

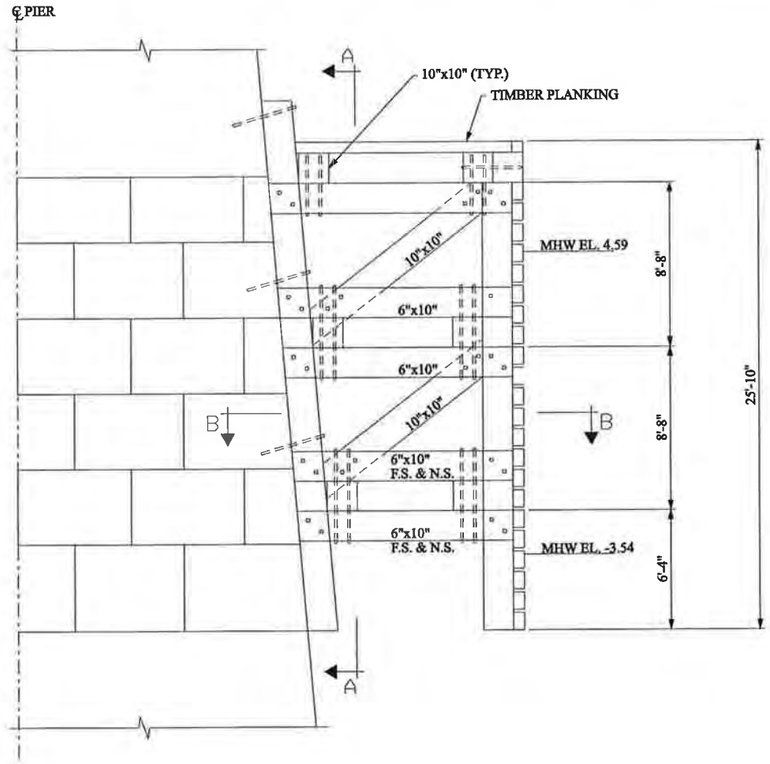
SHEET NO. 15

TOTAL SHEETS 44

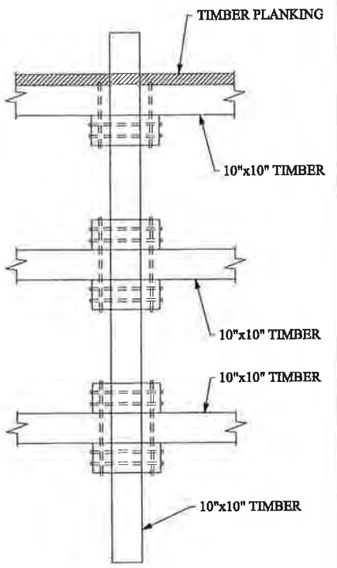
SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
SUPER	S-15	VARIES



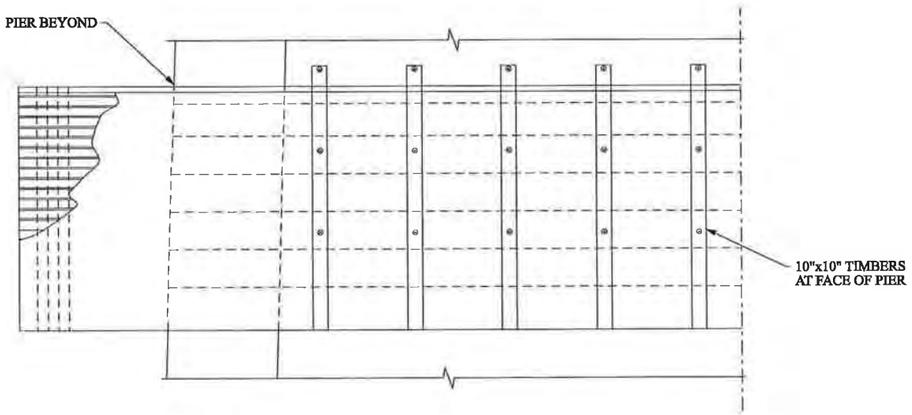
HALF PLAN - TYPICAL FENDER
¼" = 1' - 0"



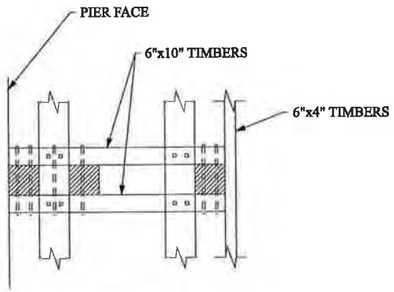
TYPICAL FENDER FRAME
½" = 1' - 0"



SECTION A-A
½" = 1' - 0"



HALF ELEVATION - TYPICAL FENDER
¼" = 1' - 0"



SECTION B-B
½" = 1' - 0"

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN

TOWN PORTSMOUTH, NH - KITTERY, ME BRIDGE NO. 247/084 STATE PROJECT 13678F

LOCATION U.S. ROUTE 1 OVER PISCATAQUA RIVER

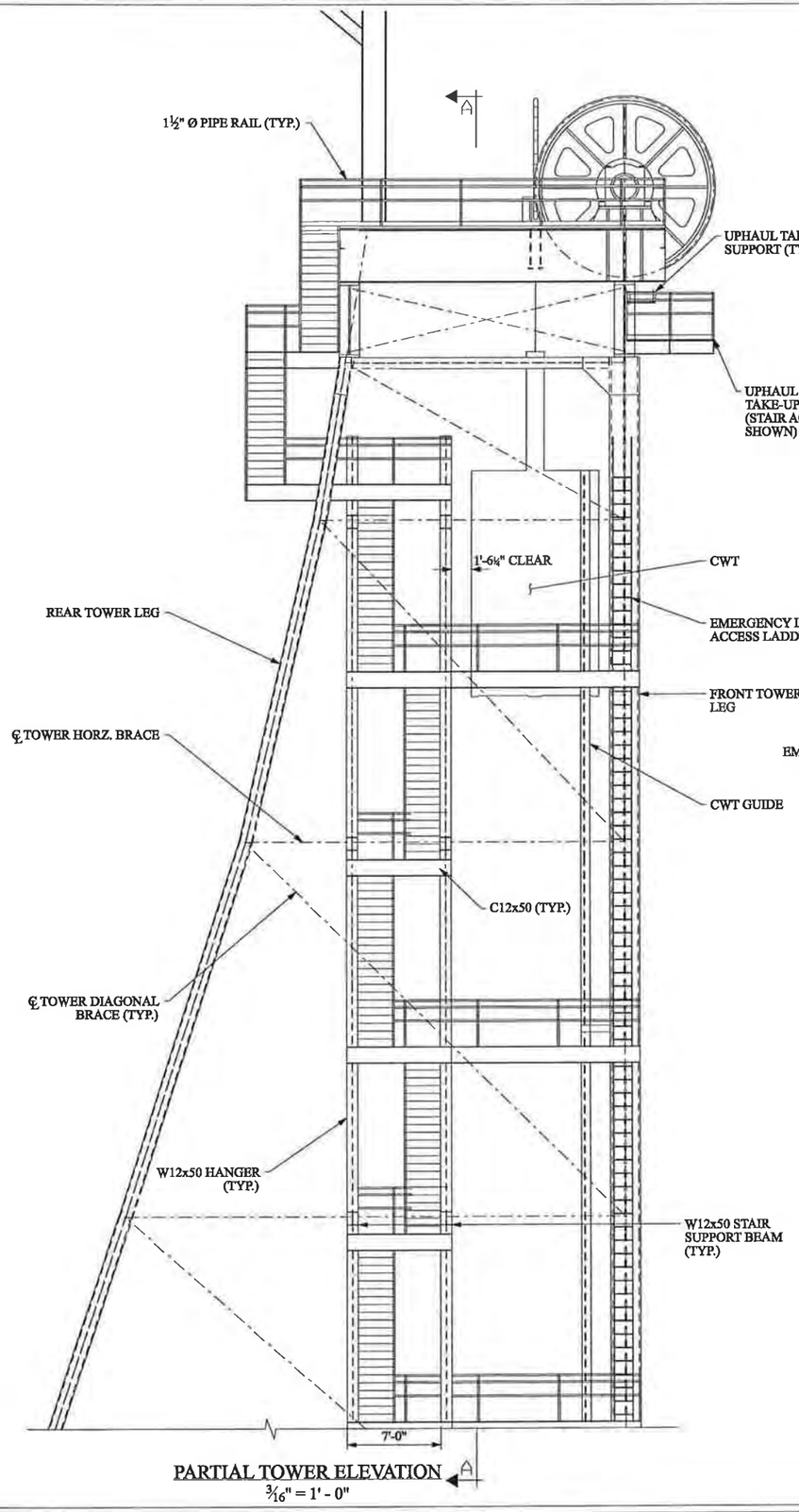
TYPICAL FENDERS

BRIDGE SHEET S-16 OF S-21

REVISIONS AFTER PROPOSAL		BY	DATE		BY	DATE
	DESIGNED	GPS	04/11	CHECKED	XXX	XX/XX
	DRAWN	CAD	04/11	CHECKED	XXX	XX/XX
	QUANTITIES	XXX	XX/XX	CHECKED	XXX	XX/XX
	ISSUB DATE		FEDERAL PROJECT NO.		SHEET NO.	TOTAL SHEETS
	REV. DATE		----------		16	44

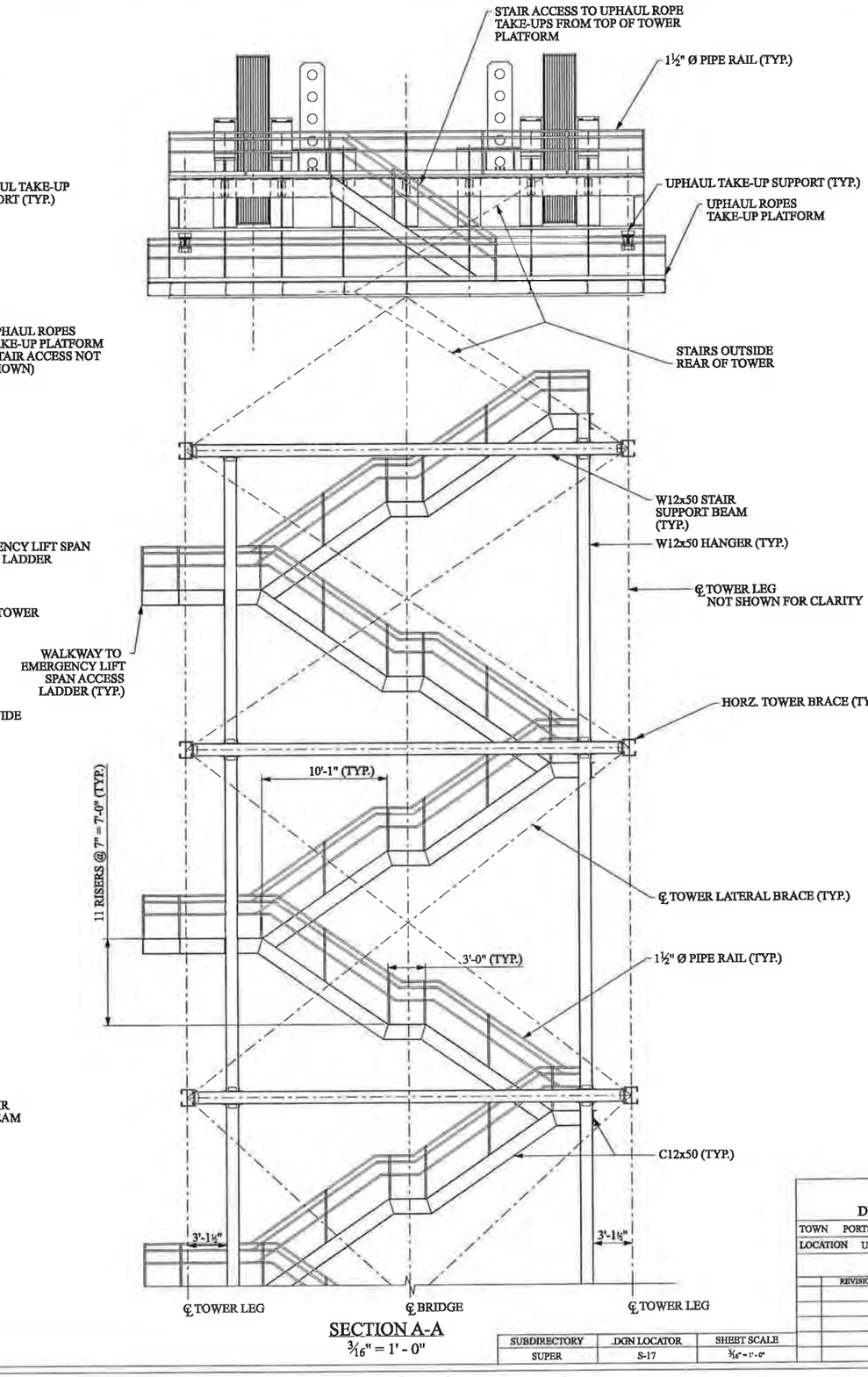
FILE NUMBER -

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
SUPER	S-16	VARIES



PARTIAL TOWER ELEVATION

3/16" = 1' - 0"



SECTION A-A

3/16" = 1' - 0"

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
SUPER	S-17	3/16" = 1'-0"

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN

TOWN PORTSMOUTH, NH - KITTERY, ME BRIDGE NO. 247/084 STATE PROJECT 13678F

LOCATION U.S. ROUTE 1 OVER PISCATAQUA RIVER

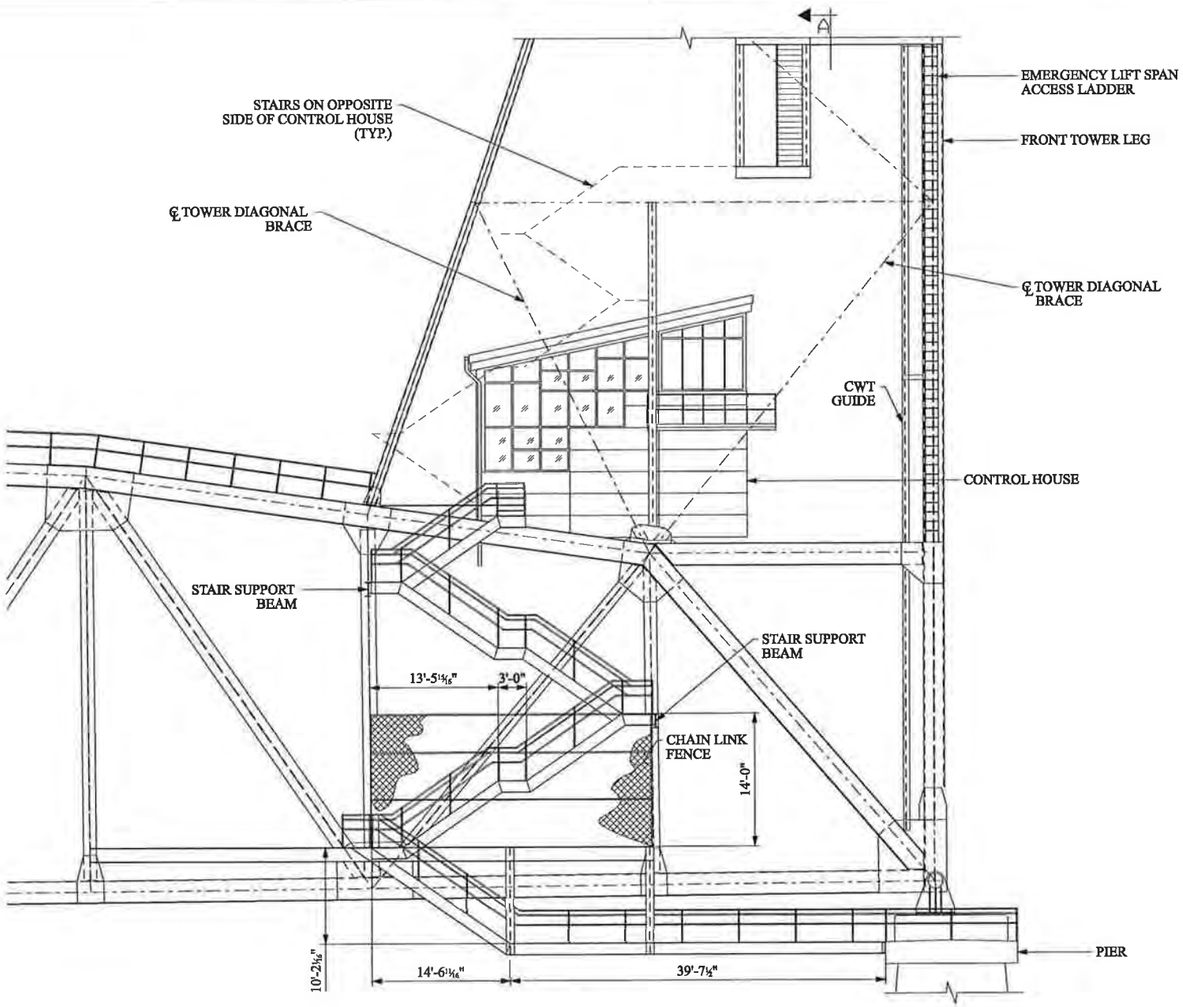
STAIR DETAILS I

BRIDGE SHEET S-17 OF S-21

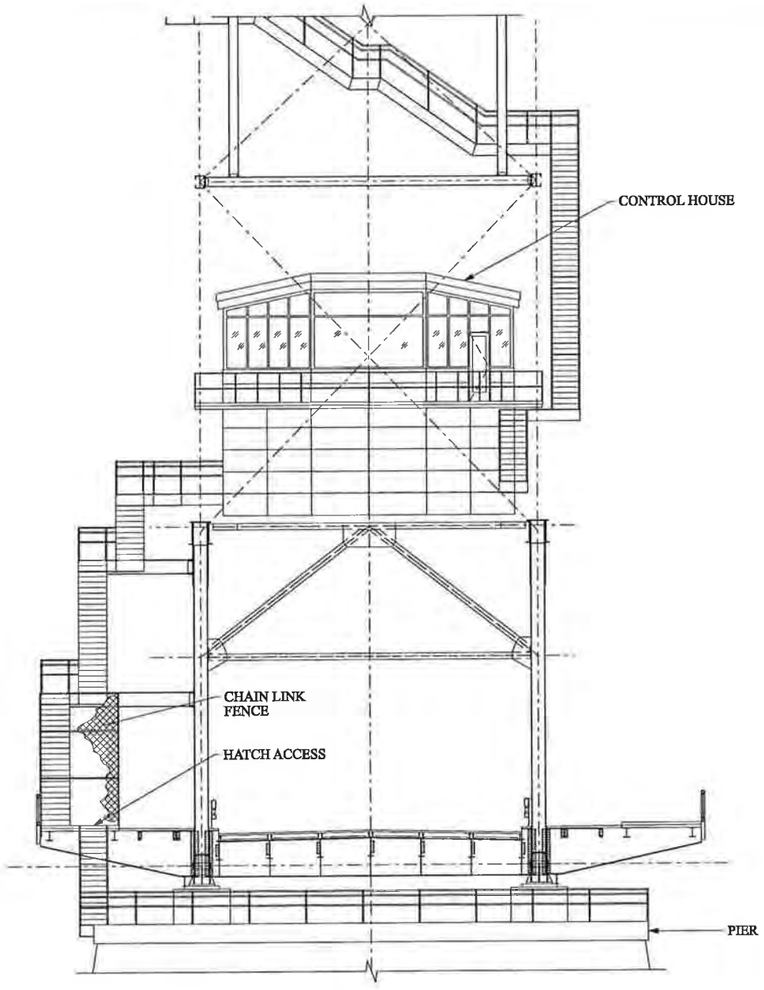
REVISIONS AFTER PROPOSAL		BY	DATE		BY	DATE
	DESIGNED	GPS	04/11	CHECKED	XXX	XX/XX
	DRAWN	CAD	04/11	CHECKED	XXX	XX/XX
	QUANTITIES	XXX	XX/XX	CHECKED	XXX	XX/XX

ISSUE DATE	FEDERAL PROJECT NO.	SHEET NO.	TOTAL SHEETS
REV. DATE	————	17	44

FILE NUMBER -



PARTIAL TOWER ELEVATION
⅛" = 1' - 0"



SECTION A-A
⅛" = 1' - 0"

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
SUPER	S-18	⅛" = 1' - 0"

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN

TOWN PORTSMOUTH, NH - KITTERY, ME BRIDGE NO. 247/084 STATE PROJECT 13678F

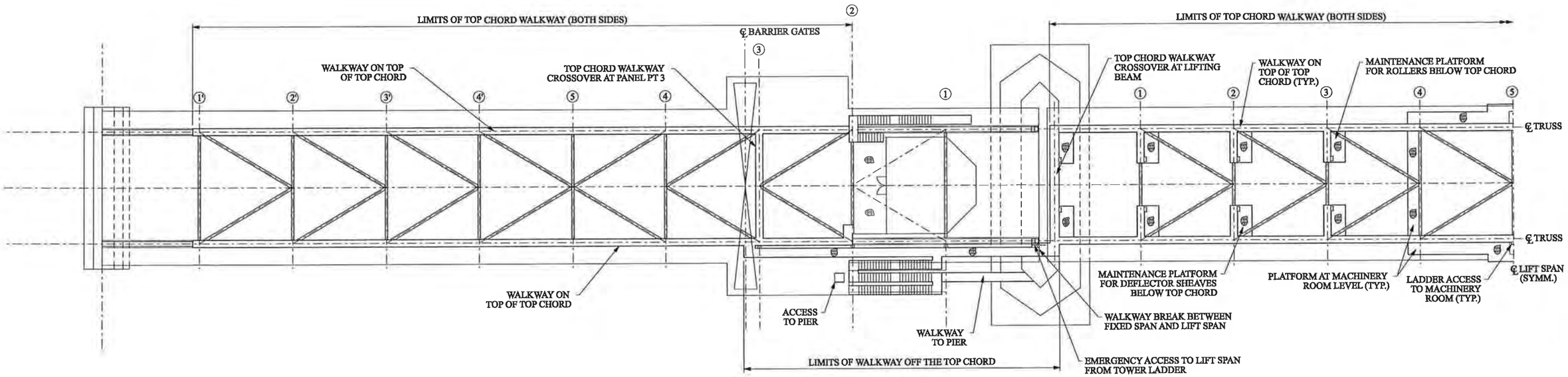
LOCATION U.S. ROUTE 1 OVER PISCATAQUA RIVER

STAIR DETAILS II

BRIDGE SHEET: S-18 OF S-21

FILE NUMBER: -

REVISIONS AFTER PROPOSAL		BY	DATE		BY	DATE
	DESIGNED	XXX	04/11	CHECKED	XXX	XX/XX
	DRAWN	XXX	04/11	CHECKED	XXX	XX/XX
	QUANTITIES	XXX	XX/XX	CHECKED	XXX	XX/XX
	ISSUB DATE		FEDERAL PROJECT NO.		SHEET NO.	TOTAL SHEETS
	REV. DATE		----------		18	44



WALKWAY PLAN
1/16" = 1' - 0"

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
SUPER	S-19	1/16" = 1' - 0"

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN

TOWN PORTSMOUTH, NH - KITTERY, ME BRIDGE NO. 247/084 STATE PROJECT 13678F

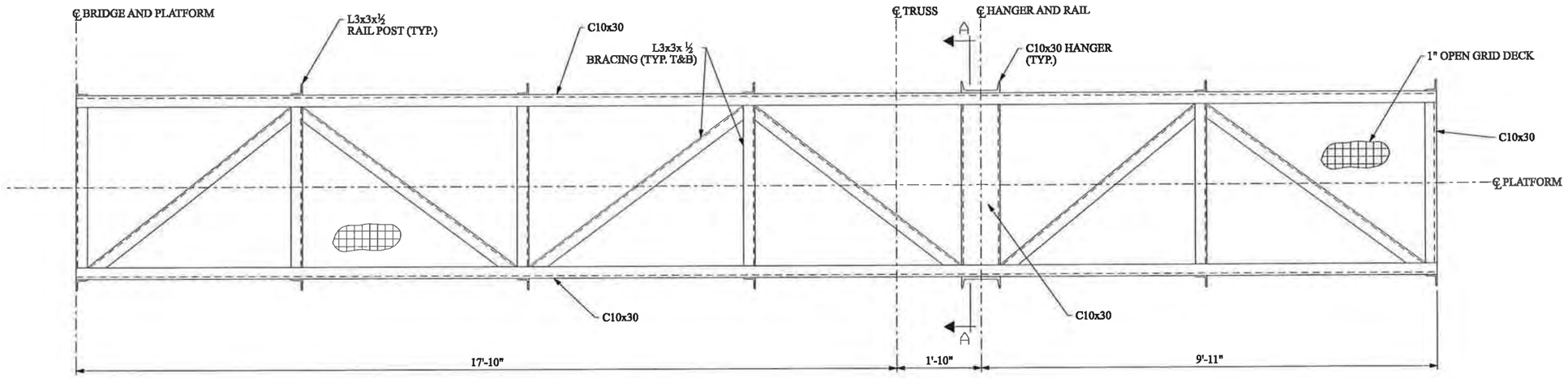
LOCATION U.S. ROUTE 1 OVER PISCATAQUA RIVER

STAIR DETAILS III

BRIDGE SHEET: S-19 OF S-21

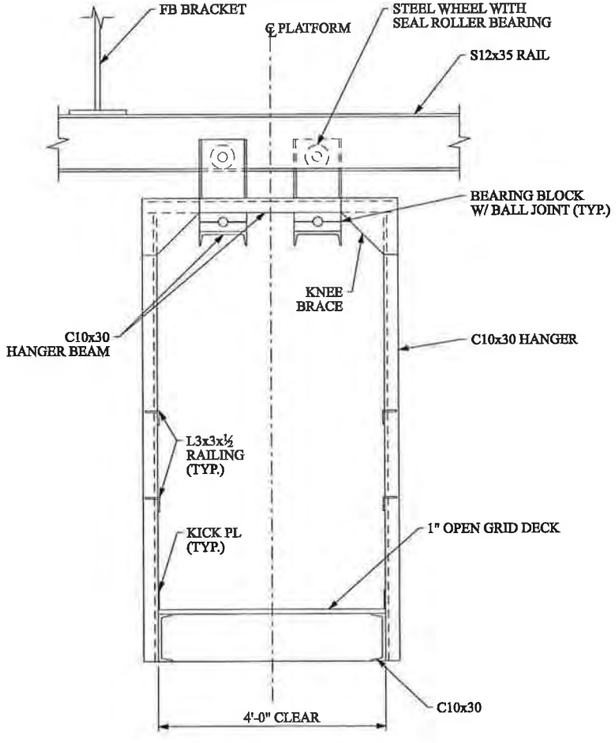
FILE NUMBER: -

REVISIONS AFTER PROPOSAL		BY	DATE		BY	DATE
	DESIGNED	GPS	04/11	CHECKED	XXX	XX/XX
	DRAWN	CAD	04/11	CHECKED	XXX	XX/XX
	QUANTITIES	XXX	XX/XX	CHECKED	XXX	XX/XX
	ISSUE DATE		FEDERAL PROJECT NO.		SHEET NO.	TOTAL SHEETS
	REV. DATE		----------		19	44



PLATFORM HALF PLAN

¾" = 1' - 0"



SECTION A-A

¾" = 1' - 0"

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
SUPER	S-20	¾" = 1'-0"

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN

TOWN PORTSMOUTH, NH - KITTERY, ME BRIDGE NO. 247/084 STATE PROJECT 13678F

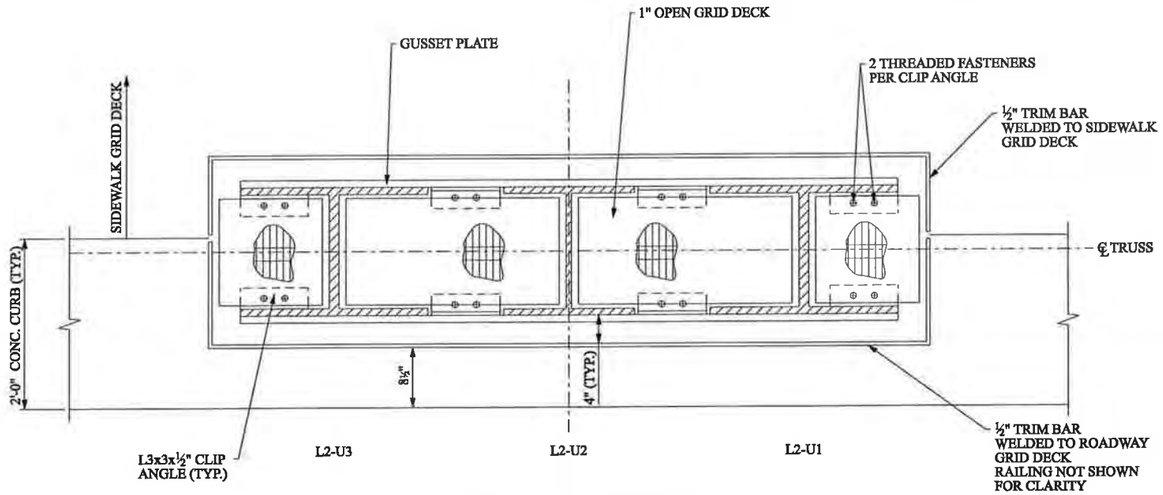
LOCATION U.S. ROUTE 1 OVER PISCATAQUA RIVER

MAINTENANCE PLATFORM

BRIDGE SHEET: S-20 OF S-21

REVISIONS AFTER PROPOSAL	BY	DATE		BY	DATE
DESIGNED	GPS	04/11	CHECKED	XXX	XX/XX
DRAWN	CAD	04/11	CHECKED	XXX	XX/XX
QUANTITIES	XXX	XX/XX	CHECKED	XXX	XX/XX
ISSUE DATE		FEDERAL PROJECT NO.		SHEET NO.	TOTAL SHEETS
REV. DATE		————		20	44

FILE NUMBER: -

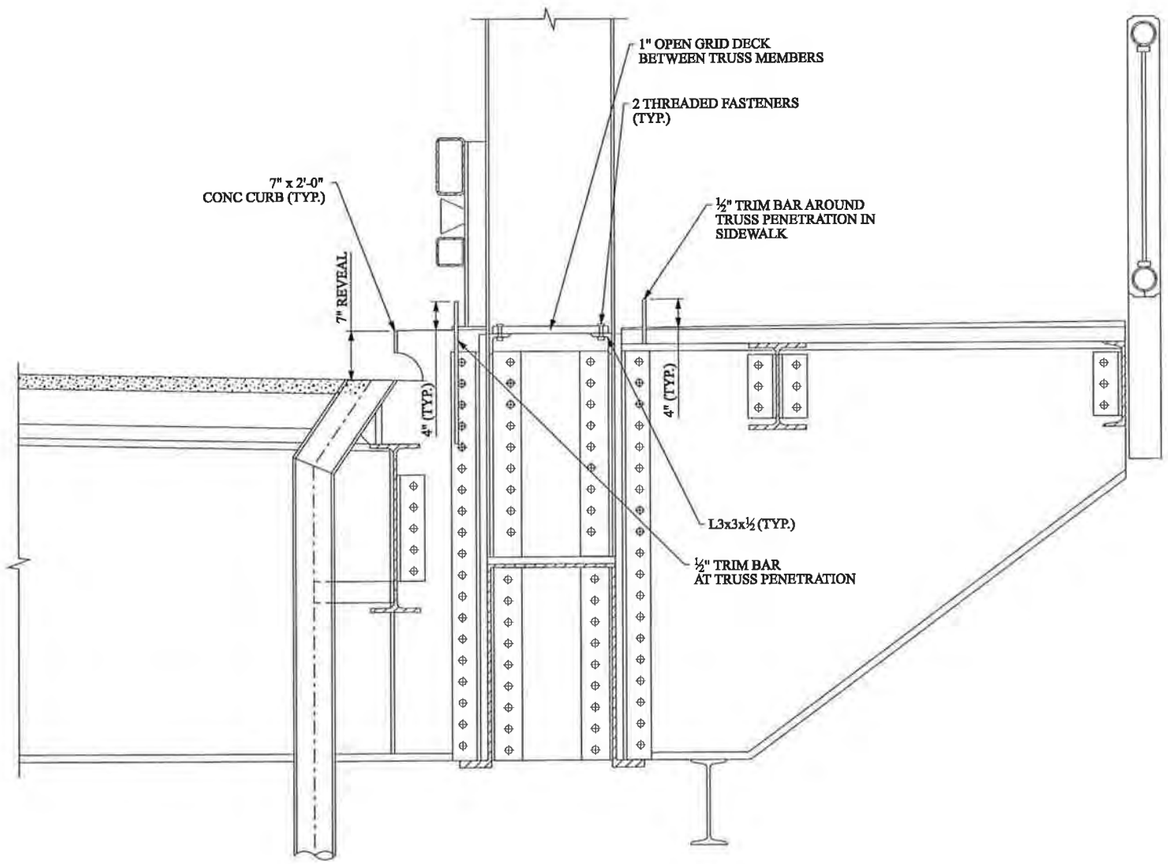


TRUSS PENETRATION PLAN

⅛" = 1' - 0"

NOTES:

1. RAILINGS TO BE LOCATED AROUND TRUSS PENETRATIONS ABOVE TRIM PLATE



TRUSS PENETRATION SECTION

⅛" = 1' - 0"

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
SUPER	S-21	VARIES

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN

TOWN PORTSMOUTH, NH - KITTERY, ME | BRIDGE NO. 247/084 | STATE PROJECT 13678F

LOCATION U.S. ROUTE 1 OVER PISCATAQUA RIVER

TRUSS PENETRATION DETAILS

BRIDGE SHEET: S-21 OF S-21

REVISIONS AFTER PROPOSAL		BY	DATE		BY	DATE
	DESIGNED	GPS	04/11	CHECKED	XXX	XX/XX
	DRAWN	CAD	04/11	CHECKED	XXX	XX/XX
	QUANTITIES	XXX	XX/XX	CHECKED	XXX	XX/XX
	ISSUE DATE		FEDERAL PROJECT NO.		SHEET NO.	TOTAL SHEETS
	REV. DATE		----------		21	44

FILE NUMBER: -