

PIER 1: NEED TO PRE-EXCAVATE TO LOCATE 4' DIA. CULVERT, 7' DEEP, AND REMOVE ANY LARGE ROCKS ETC. INTERFERING WITH SHEETS. CUT OFF 6.5' EACH SIDE OF CORNER TO MISS CULVERT. OUTSIDE OF WALER IS APPROX. 30" FROM CULVERT (18" TO OUTSIDE OF SHEETS). USE INTERLOCK PLAY IN SHEETS TO MAKE UP 45-DEG. CORNERS.

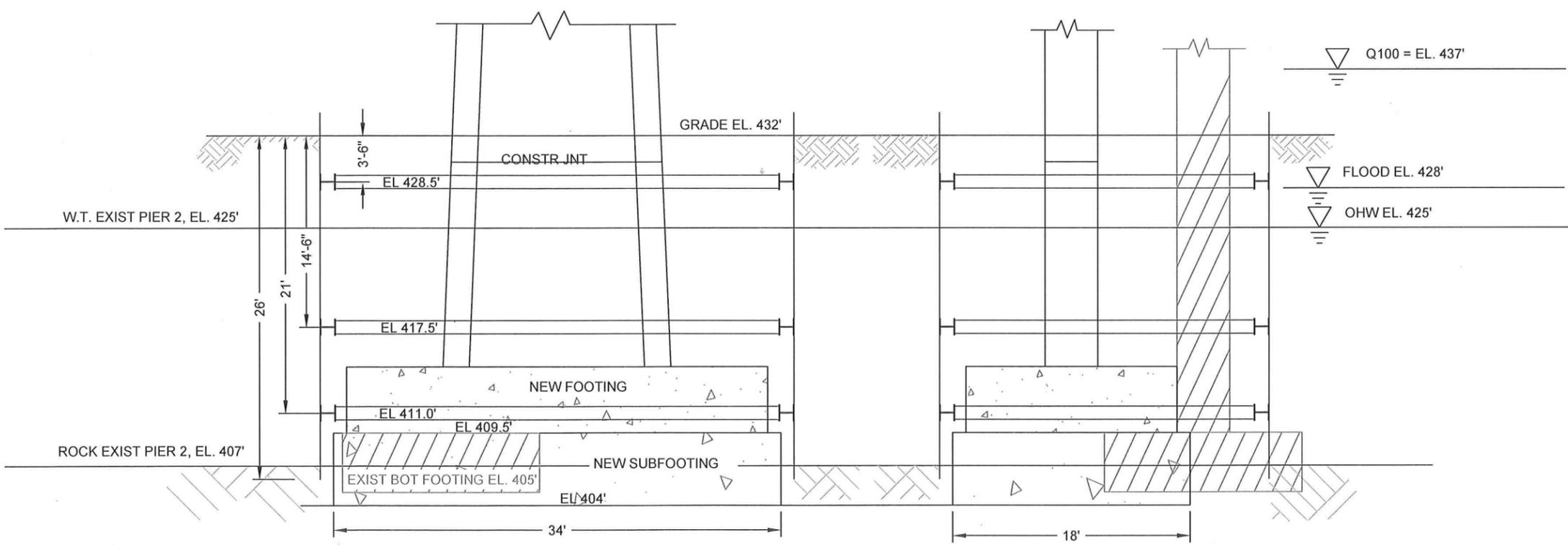
CONSTRUCTION SEQUENCE:

- LOCATE WATER MAIN AND ELECTRICAL LINE.
- DRIVE SHEETING TO REFUSAL AT BEDROCK.
- EXCAVATE INSIDE COFFERDAM USING EXCAVATOR AND CRANE WITH CLAMSHELL OR SCALE PAN. DEWATER AS NEEDED.
- IF WATER FLOW INTO THE COFFERDAM BECOMES TOO GREAT TO PUMP, EXCAVATE IN THE WET AND INSTALL A CONCRETE TREMIE SEAL AS A SUBFOOTING (SEPARATE SUBMITTAL TO BE PROVIDED).
- INSTALL WALER LINES AS EXCAVATION PROCEEDS BELOW THEIR LEVEL.
- AFTER POURING SUBFOOTING, REMOVE THE BOTTOM WALER LINE AND BRACES FROM THREE SIDES NEXT TO SUBFOOTING. NEED TO BRACE FROM LONG WALL ON RIVER SIDE TO SUBFOOTING AS SHOWN.
- AFTER POURING FOOTING AND PIER STEM, BACKFILL AND REMOVE COFFERDAM COMPONENTS IN SEQUENCE.

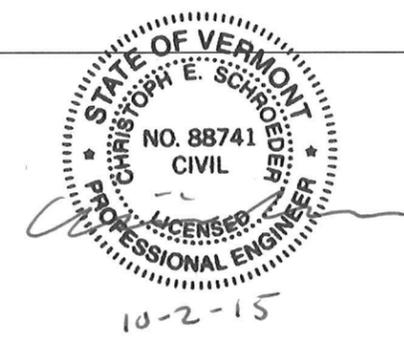
NOTES:

- EQUIPMENT USED:
 CAT 324 OR 329 EXCAVATORS
 LINK-BELT 138 HSL 80-TON CRANE
 ICE 418 VIBRATORY HAMMER
 CLAMSHELL BUCKET
- INSTALL COFFERDAMS AND CONSTRUCT NEW PIERS WHILE TRAFFIC IS ON EXISTING BRIDGE.
- DO NOT CONSTRUCT TOP HALF OF PIERS UNTIL AFTER EXISTING BRIDGE IS REMOVED.
- DEMOLISH EXISTING PIERS TO 2' BELOW GRADE.
- DEWATER INTO A FILTER BAG OR SETTLING BASIN. PROVIDE FILTER AT SUMPS TO PREVENT PUMPING OF SOIL FINES.

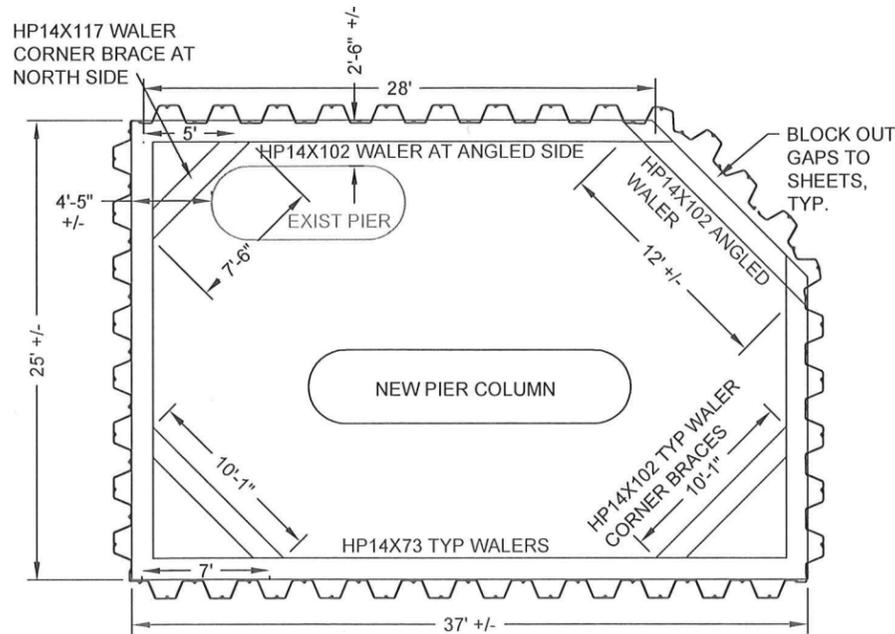
PIER 1: LOCATE AND PRE-EXCAVATE TO EXISTING WATER MAIN BEFORE DRIVING SHEETS



PIER 1 (AT EXISTING PIER 2)



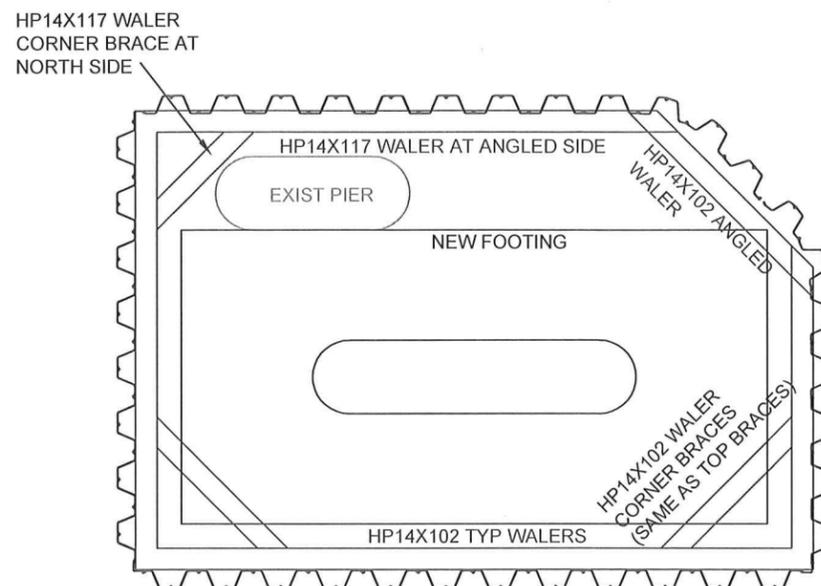
SHEET 1 OF 2	
REV:	TITLE:
10-2-15: GEOMETRY AND CONNECTIONS	BRIDGE 46A PIER 1 COFFERDAM
PROJECT:	WATERBURY IM 089-2 (43)
SCALE:	DATE:
1" = 10'	AUG. 25, 2015
BECK & BELLUCCI, INC. FRANKLIN, NEW HAMPSHIRE	



TOP WATER LINE, EL. 428.5'

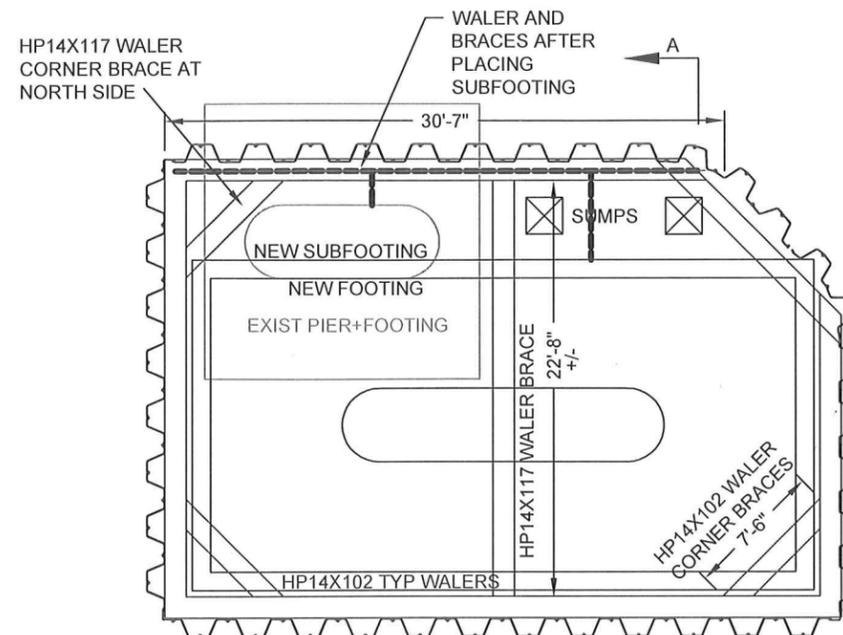
NOTE:

AT PIER 1 COFFERDAM, LOCATE EXISTING WATER AND ELECTRICAL LINES PRIOR TO STARTING COFFERDAM.



MIDDLE WATER LINE, EL. 417.5'

PIER 1 (AT EXISTING PIER 2)



BOTTOM WATER LINE, EL. 411.0'

NOTE:

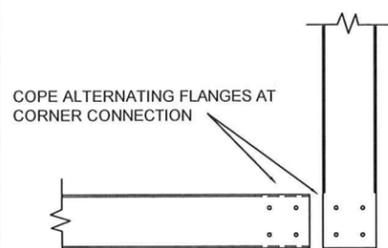
ON 3 SIDES, POUR SUBFOOTING UP TO SHEETS.

AFTER PLACING SUBFOOTING, BRACE SHEETING ON 4TH SIDE FROM SUBFOOTING TO WALER. SEE SEC. A-A.

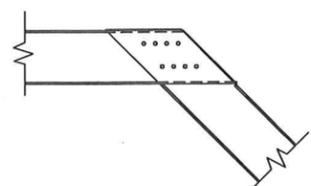
AFTER BRACING, BOTTOM OF SHEETS IS SUPPORTED BY SUBFOOTING AND BRACES AT 4TH WALL. REMOVE LOWER WALER AND BRACES FROM 3 SIDES.



10-2-15

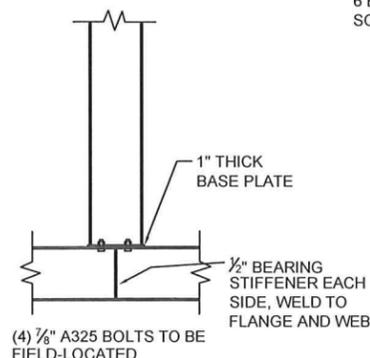


(4) 7/8" A325 BOLTS TO BE FIELD-LOCATED. KEEP 3" MIN EDGE AND BOLT SPACING. TYP. WALER CORNER CONNECTIONS



7/8" A325 BOLTS TO BE FIELD-LOCATED. (4 BOLTS) TOP, (6) MID, (8) BOT WALER

WALER CONNECTIONS AT CLIPPED CORNER



BOTTOM WALER CROSS-BRACE

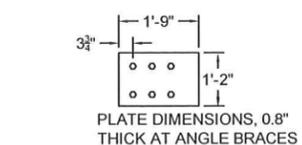


PLATE DIMENSIONS, 0.8" THICK AT ANGLE BRACES

6 BOLTS IN THE FOLLOWING BRACES: SOUTH (FULL LENGTH) SIDE AT TOP

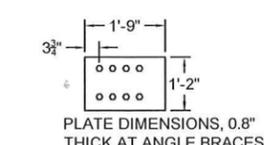
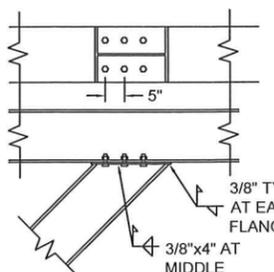
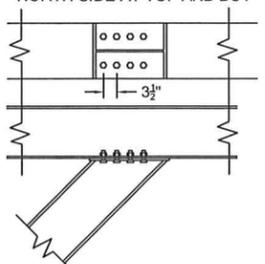


PLATE DIMENSIONS, 0.8" THICK AT ANGLE BRACES

(8) BOLTS: SOUTH SIDE AT MID AND BOT NORTH SIDE AT TOP AND BOT



7/8" A325 BOLTS, IN BEARING TYPE CONNECTIONS. MAY PRE-DRILL HOLES IN PLATE. FIELD-LOCATE WALER HOLES.

TYP. 45-DEGREE WALER KNEE BRACES

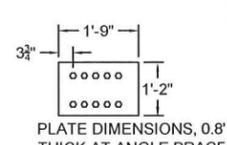
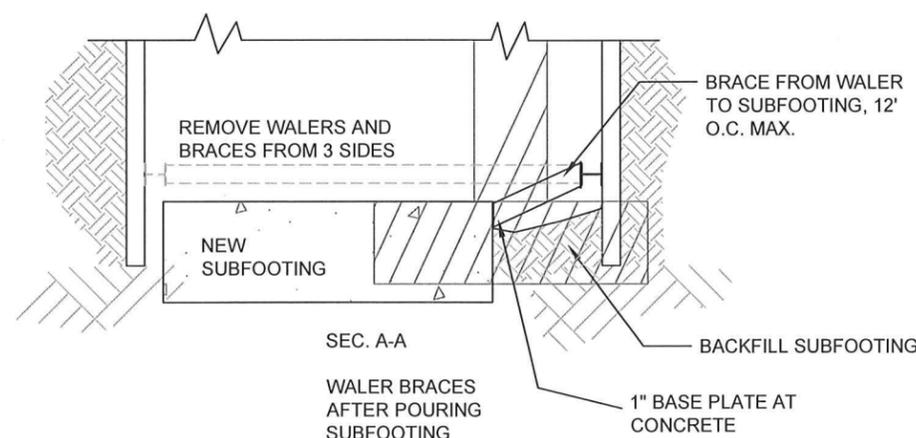
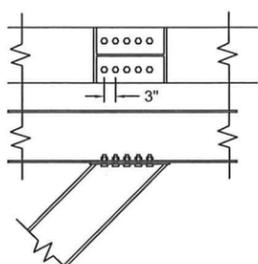


PLATE DIMENSIONS, 0.8" THICK AT ANGLE BRACE

(10) BOLTS: NORTH SIDE AT MID



SEC. A-A

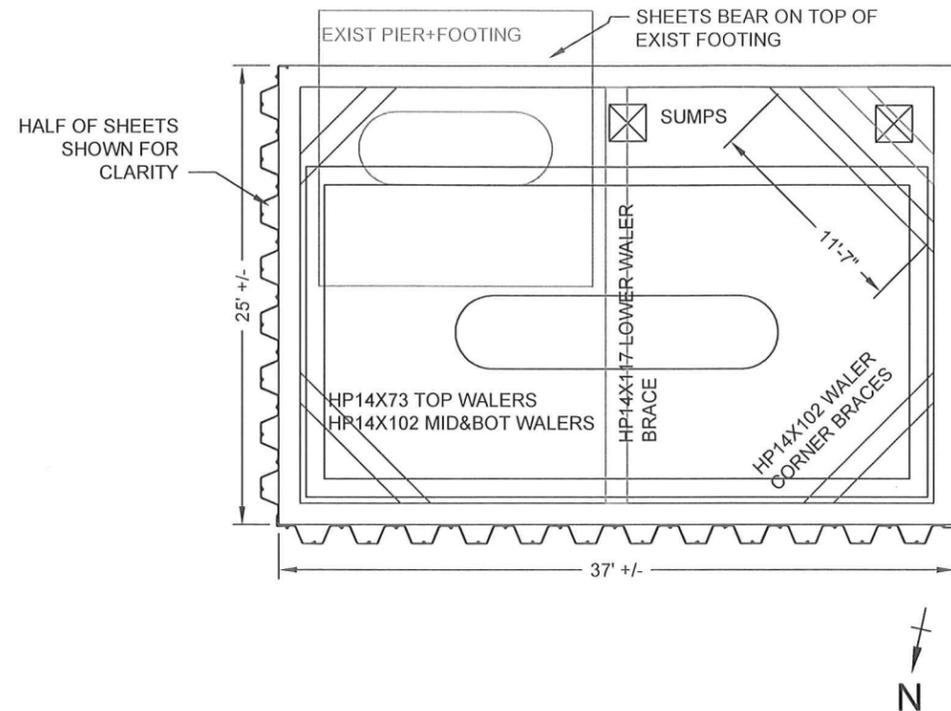
WALER BRACES AFTER POURING SUBFOOTING

1" BASE PLATE AT CONCRETE

SHEET 2 OF 2

REV: 10-2-15: GEOMETRY AND CONNECTIONS

TITLE: BRIDGE 46A PIER 1 COFFERDAM	
PROJECT: WATERBURY IM 089-2 (43)	DATE: AUG. 25, 2015
SCALE: 1" = 10'	DATE: AUG. 25, 2015
BECK & BELLUCCI, INC. FRANKLIN, NEW HAMPSHIRE	



CONSTRUCTION SEQUENCE:

DRIVE SHEETING TO REFUSAL AT BEDROCK.

EXCAVATE INSIDE COFFERDAM USING EXCAVATOR AND CRANE WITH CLAMSHELL OR SCALE PAN. DEWATER AS NEEDED.

IF WATER FLOW INTO THE COFFERDAM BECOMES TOO GREAT TO PUMP, EXCAVATE IN THE WET AND INSTALL A CONCRETE TREMIE SEAL AS A SUBFOOTING (SEPARATE SUBMITTAL TO BE PROVIDED).

INSTALL WALER LINES AS EXCAVATION PROCEEDS BELOW THEIR LEVEL.

AFTER POURING SUBFOOTING, REMOVE THE BOTTOM WALER LINE AND BRACES FROM THREE SIDES NEXT TO SUBFOOTING. NEED TO BRACE FROM LONG WALL ON RIVER SIDE TO SUBFOOTING AS SHOWN.

AFTER POURING FOOTING AND PIER STEM, BACKFILL AND REMOVE COFFERDAM COMPONENTS IN SEQUENCE.

NOTES:

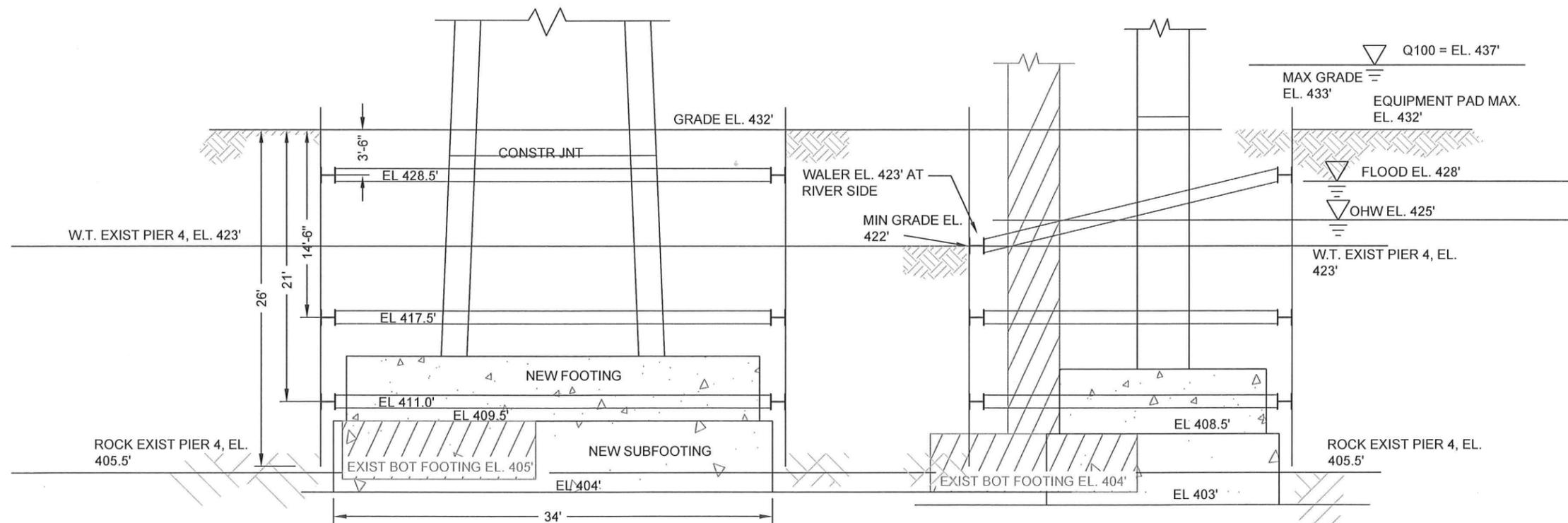
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DO NOT CONSTRUCT TOP HALF OF PIERS UNTIL AFTER EXISTING BRIDGE IS REMOVED.

DEMOLISH EXISTING PIERS TO 2' BELOW GRADE.

DEWATER INTO A FILTER BAG OR SETTLING BASIN. PROVIDE FILTER AT SUMPS TO PREVENT PUMPING OF SOIL FINES.

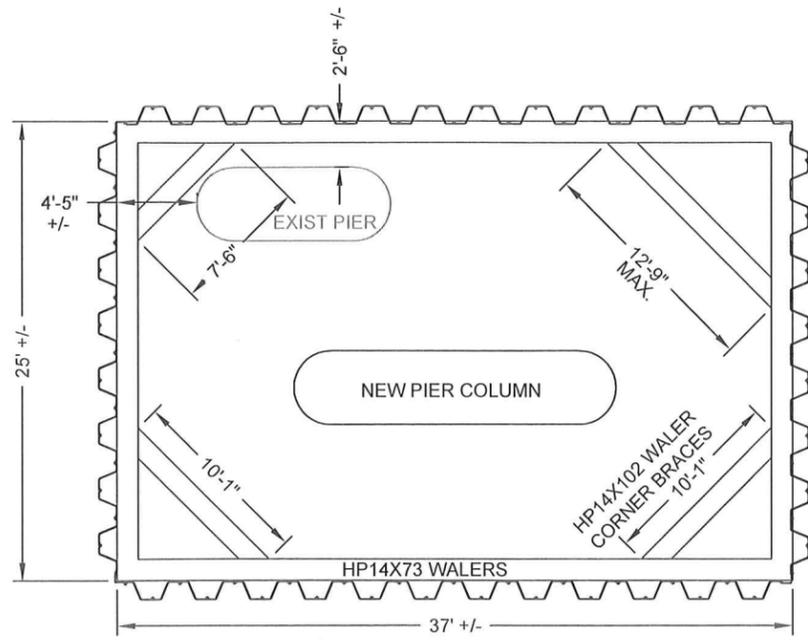


PIER 2 (AT EXISTING PIER 4)



10-2-15

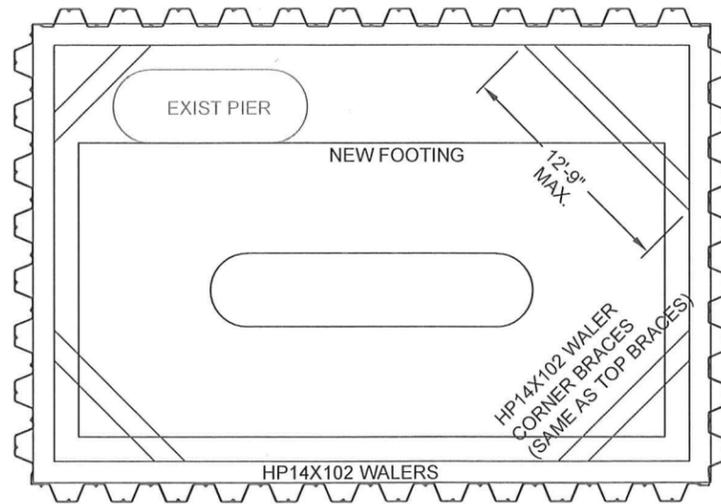
SHEET 1 OF 2	
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10-2-15: GEOMETRY AND CONNECTIONS	BRIDGE 46A PIER 2 COFFERDAM
	PROJECT: WATERBURY IM 089-2 (43)
SCALE:	DATE:
1" = 10'	AUG. 25, 2015
BECK & BELLUCCI, INC. FRANKLIN, NEW HAMPSHIRE	



TOP WALER LINE, EL. 428.5'

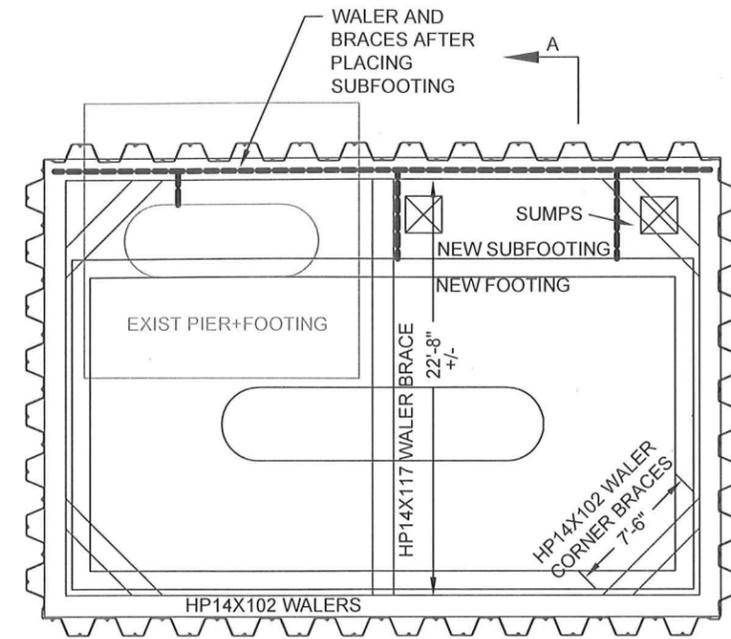
NOTE:

AT PIER 2 COFFERDAM, LOCATE RIVER SIDE WALER AT EL 423' AND SLOPE SIDEWALL WALERS TO FIT.



MIDDLE WALER LINE, EL. 417.5'

PIER 2 (AT EXISTING PIER 4)



BOTTOM WALER LINE, EL. 411.0'

NOTE:

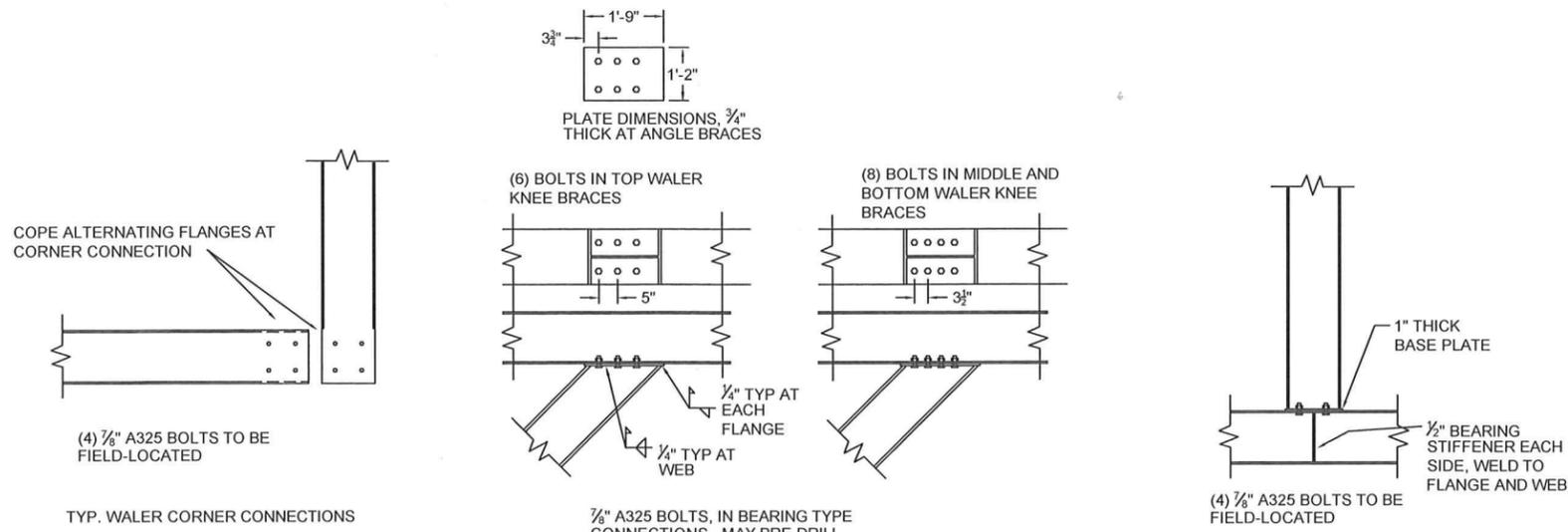
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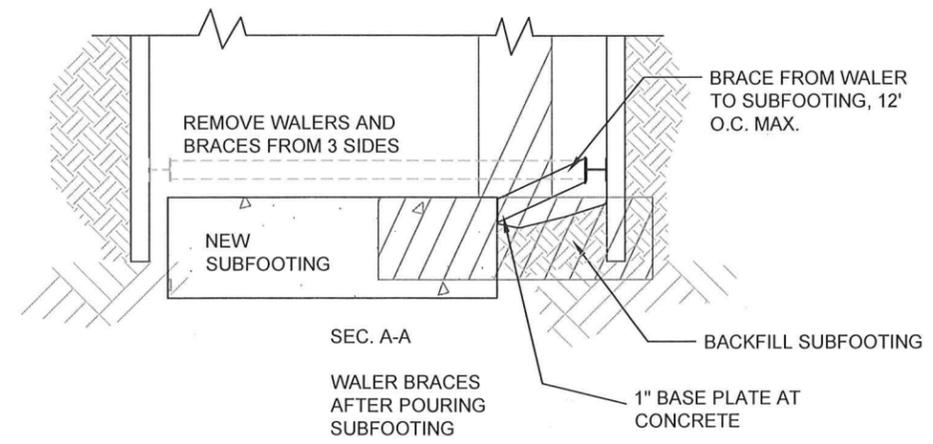
10-2-15



TYP. 45-DEGREE WALER CORNER BRACES

CONNECTION DETAILS

1/4" = 1'-0"



SEC. A-A

WALER BRACES AFTER POURING SUBFOOTING

1" BASE PLATE AT CONCRETE

REV: 10-2-15: GEOMETRY AND CONNECTIONS	TITLE: BRIDGE 46A PIER 2 COFFERDAM	
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