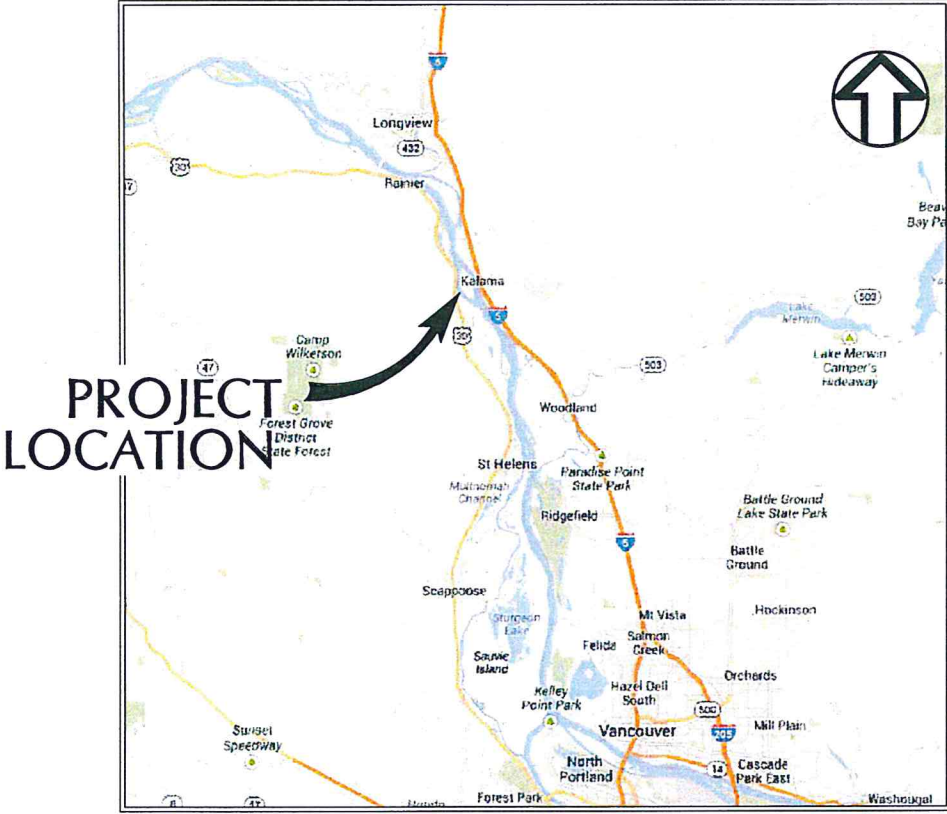


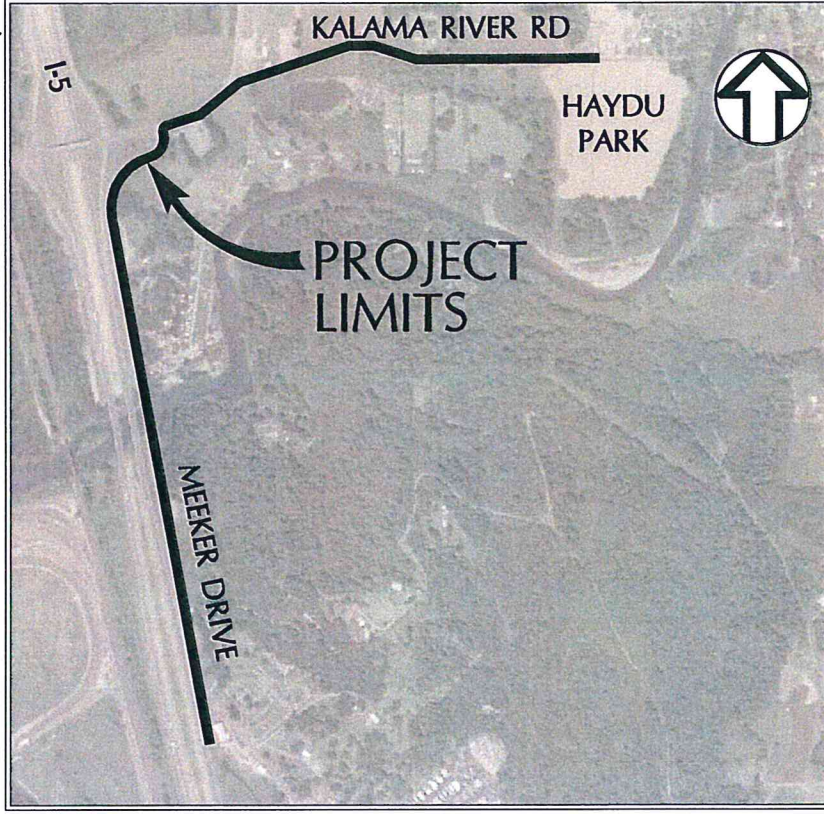
# PORT OF KALAMA

## EAST PORT REGIONAL FORCEMAIN

OCTOBER, 2014  
60% SUBMITTAL



**LOCATION MAP**  
NOT TO SCALE



**PROJECT SITE MAP**  
NOT TO SCALE

**INDEX TO DRAWINGS**

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- C2 GENERAL NOTES, ABBREVIATIONS & LEGEND
- C3 PLAN & PROFILE INDEX I
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- C6 6" DIA FORCEMAIN PLAN & PROFILE II
- C7 6" DIA FORCEMAIN PLAN & PROFILE III
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- C9 KALAMA RIVER BRIDGE CROSSING I
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- C14 SAG DRAIN PLAN & PROFILES
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- C16 PIGGING STATION 1 MECHANICAL PLAN
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- C18 TYPICAL SECTIONS
- C19 FORCEMAIN DETAILS I
- C20 FORCEMAIN DETAILS II
- C21 KALAMA RIVER BRIDGE CROSSING DETAILS I
- C22 EROSION CONTROL NOTES & DETAILS

\* NOT INCLUDED IN THIS SUBMITTAL

AIR RELEASE VALVES



NO.	REVISION	BY	DATE

DRAWN BY: JW  
 CHECKED BY: TS/CK  
 DATE: XX

ONE INCH AT FULL SCALE  
 ONE INCH AT FULL SCALE  
 IF NOT ONE INCH ADJUST  
 SCALE ACCORDINGLY

COVER SHEET & INDEX

3601 102nd Ave NE  
Bellevue, WA 98004  
206.465.1111

DATE: 10/2014

PROJECT NO: 1374A

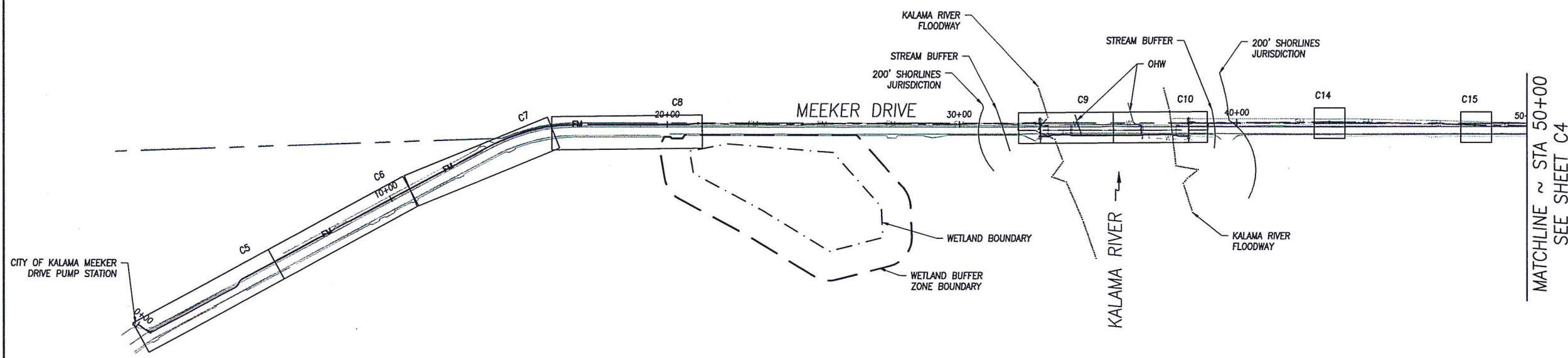
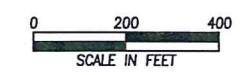
EAST PORT  
REGIONAL FORCEMAIN



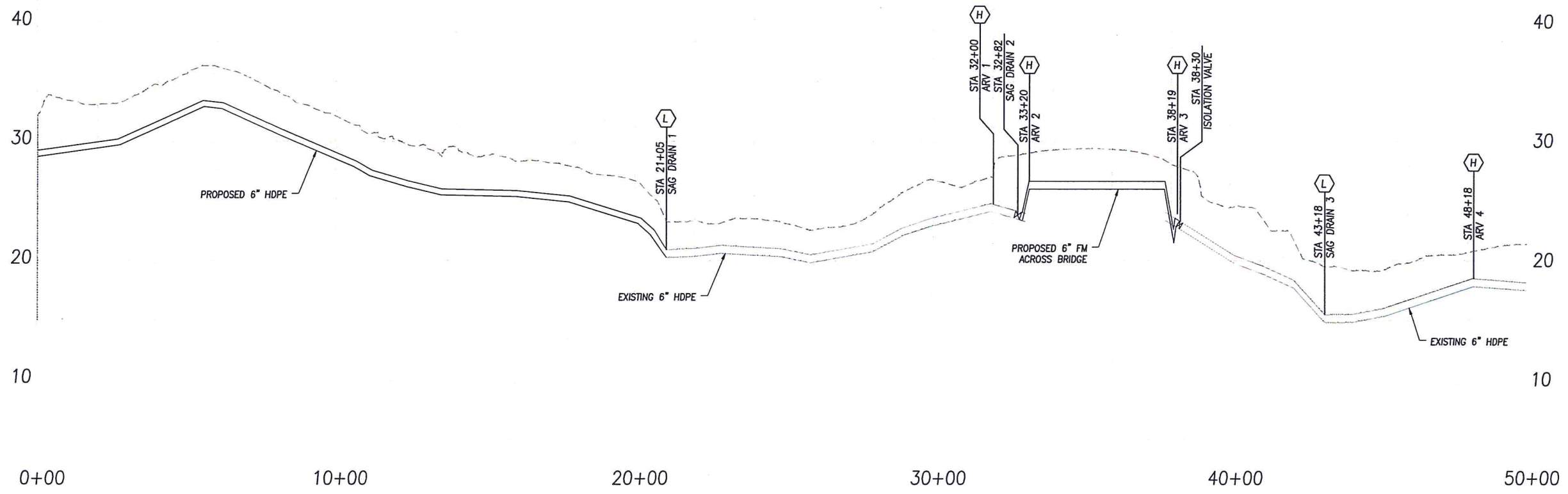
DRAWING NO:

C1

1 OF 21



PLAN



PROFILE

SCALE: 1" = 200' HORIZ  
1" = 5' VERT

NO.	REVISION	BY	DATE

DESIGNED BY: JW  
DRAWN BY: TS/CK  
CHECKED BY: XX

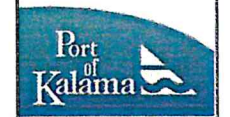
ONE INCH AT FULL SCALE  
IF NOT IN INCH LIST  
SCALE ACCORDINGLY

PLAN & PROFILE INDEX I

**wallis engineering**  
WALLIS ENGINEERING, INC. 8000  
 2314 W. 10th Street, Suite 200  
 Everett, WA 98201

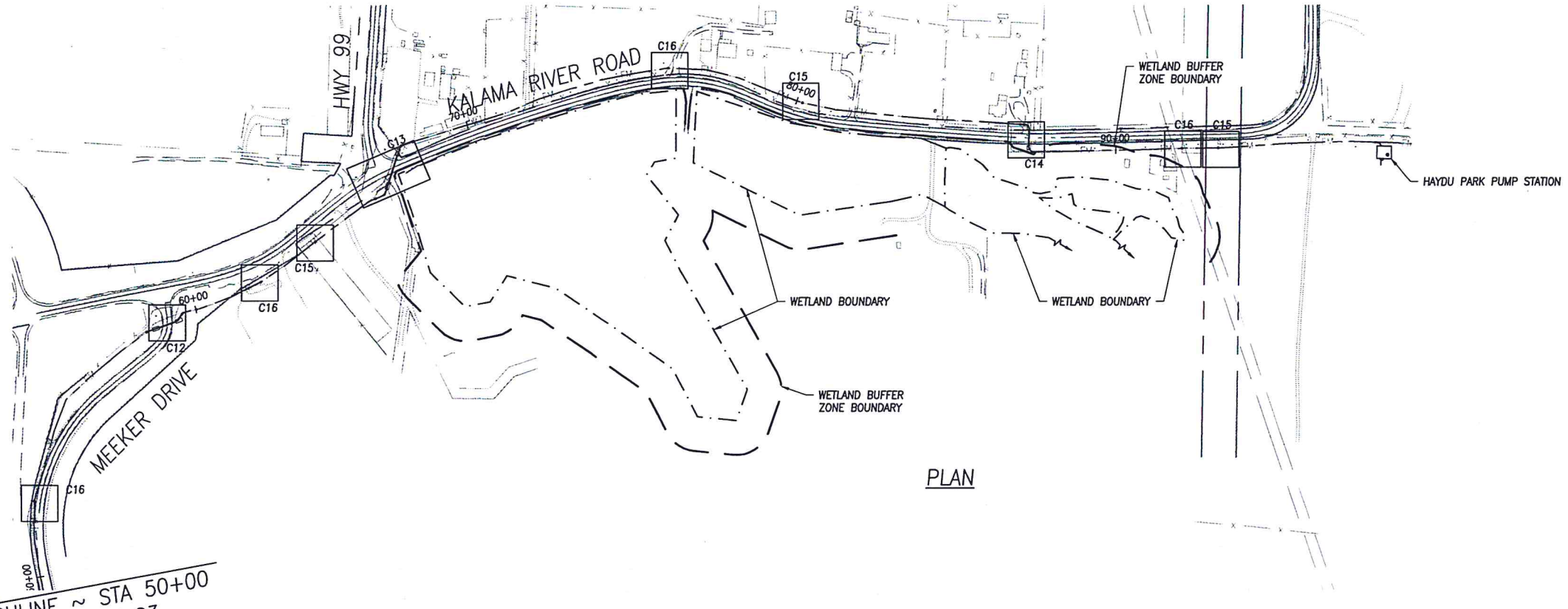
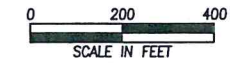
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 DATE: 10/2014

EAST PORT  
REGIONAL FORCEMAIN



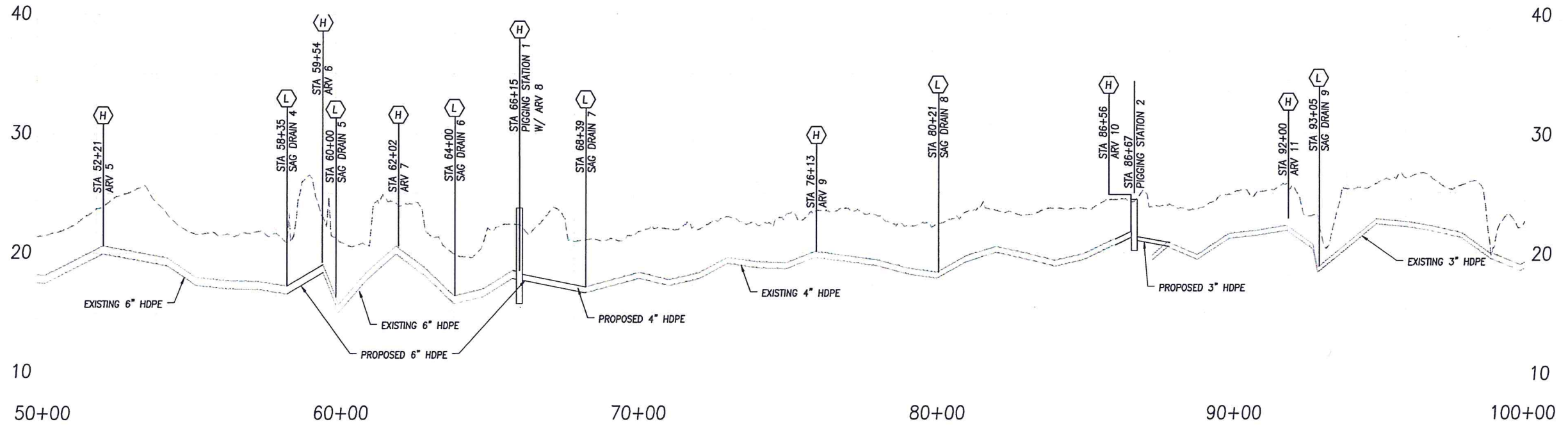
DRAWING NO:

C3



PLAN

MATCHLINE ~ STA 50+00  
SEE SHEET C3



PROFILE  
SCALE: 1" = 200' HORIZ  
1" = 5' VERT

NO.	REVISION	DATE	BY

DESIGNED BY: JW  
DRAWN BY: TS/CK  
REV: XX

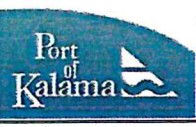
ONE INCH AT FULL SCALE  
IF NOT ONE INCH ADJUST  
SCALE ACCORDINGLY

PLAN & PROFILE INDEX II

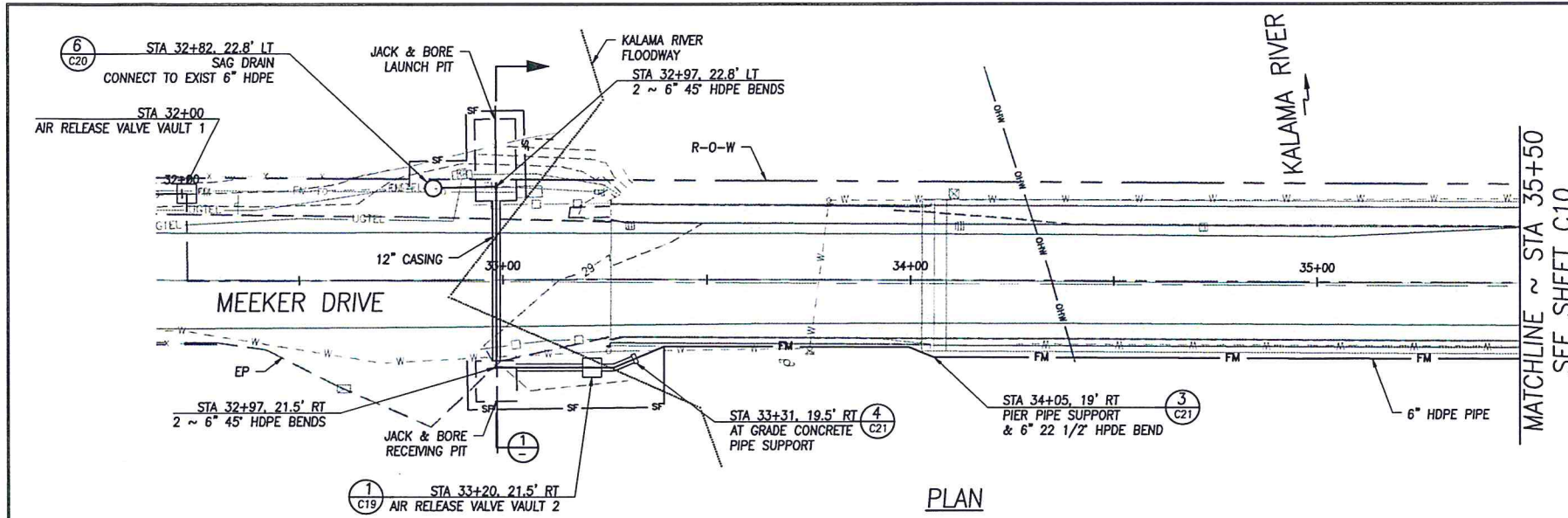
**wallis engineering**  
2315 W. 15th Avenue, Suite 200  
Burien, WA 98148  
360.465.2014

PROJECT NO: 1374A  
DATE: 10/2014

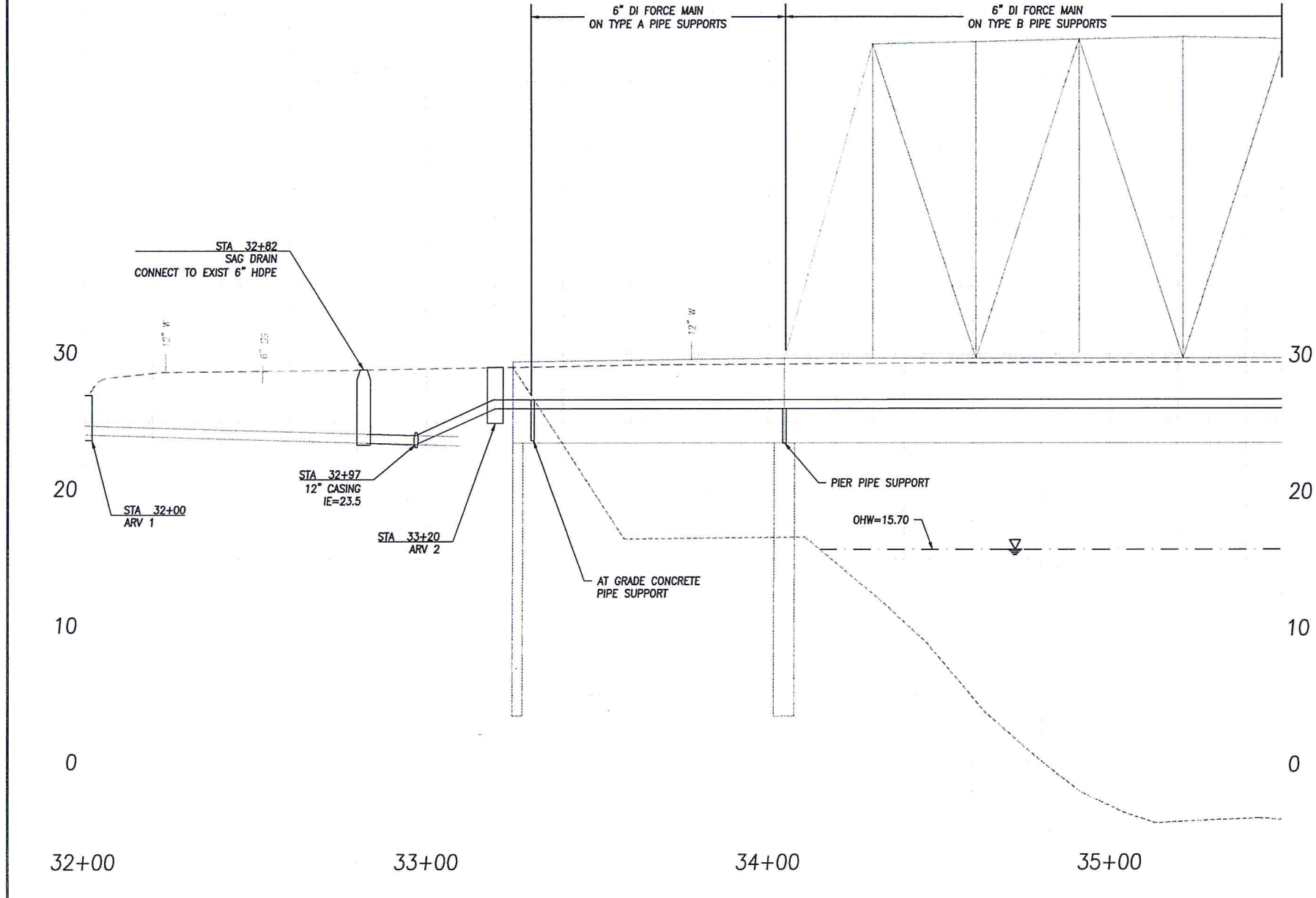
EAST PORT  
REGIONAL FORCEMAIN



DRAWING NO:  
**C4**  
4 OF 21

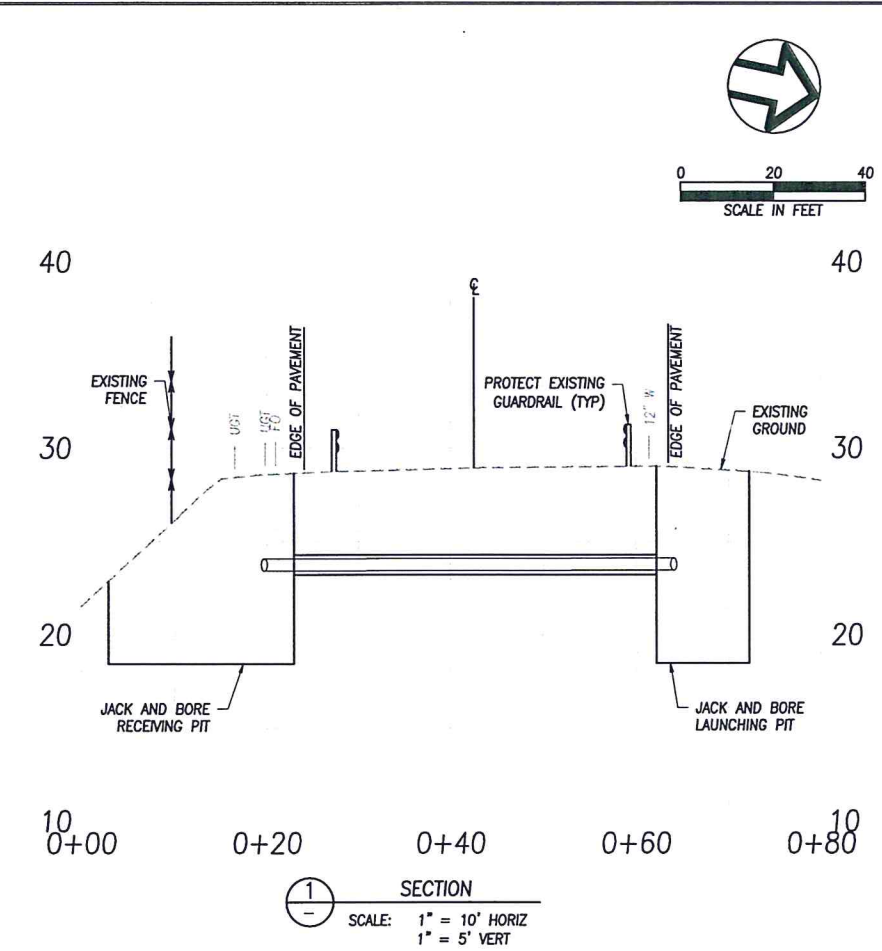


PLAN



PROFILE

SCALE: 1" = 20' HORIZ  
1" = 5' VERT



SECTION  
SCALE: 1" = 10' HORIZ  
1" = 5' VERT



NO.	REVISION	DATE	BY

DESIGNED BY	JW
CHECKED BY	TS/CK
DATE	XX

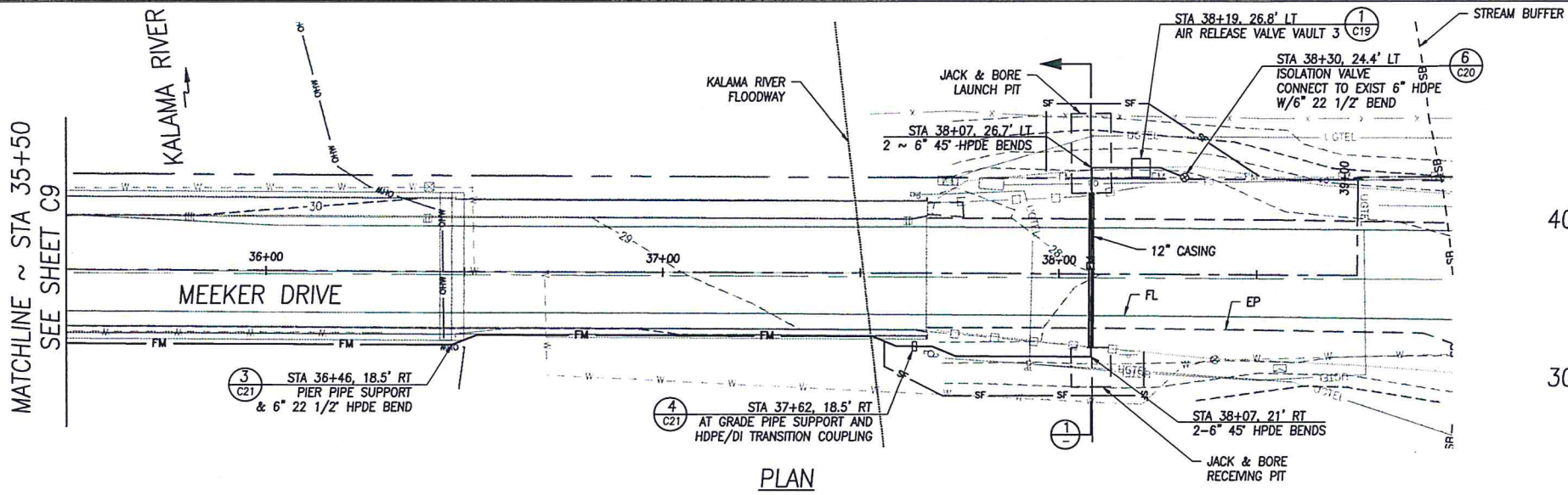
ONE INCH AT FULL SCALE.  
IF NOT ONE INCH ADJUST  
SCALE ACCORDINGLY

**KALAMA RIVER BRIDGE  
CROSSING I**

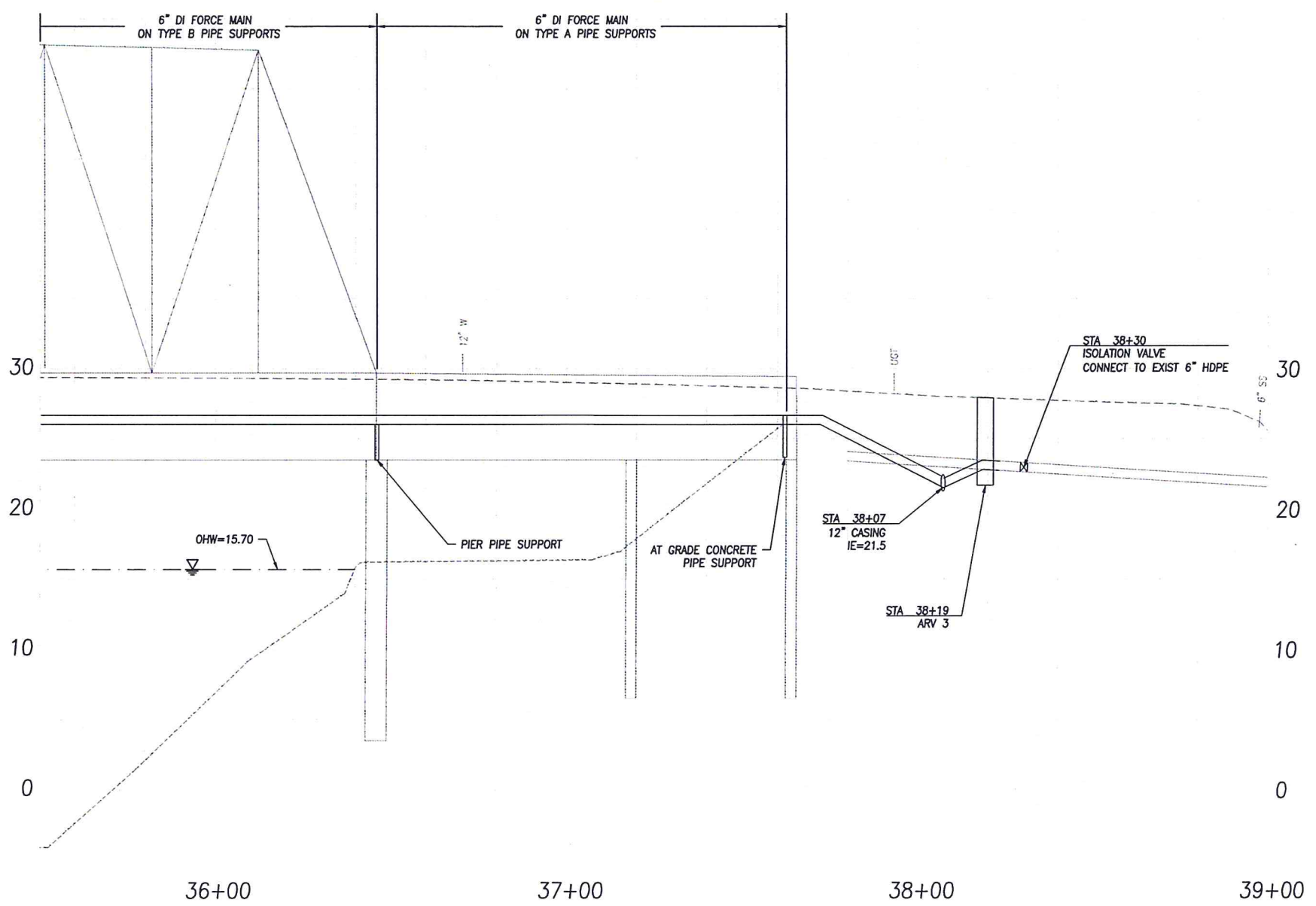
**wallis engineering**  
PROJECT NO: 1374A  
DATE: 10/2014

**EAST PORT  
REGIONAL FORCEMAIN**

DRAWING NO:  
**C9**  
9 OF 21

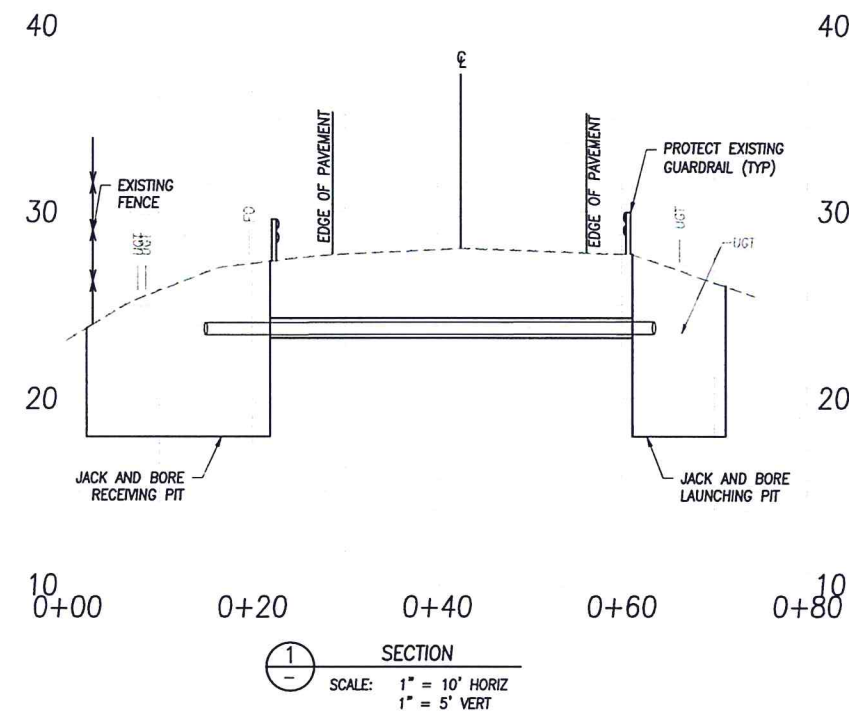


PLAN

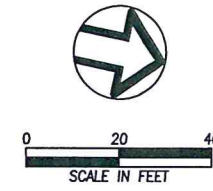


PROFILE

SCALE: 1" = 20' HORIZ  
1" = 5' VERT



SECTION  
SCALE: 1" = 10' HORIZ  
1" = 5' VERT



MATCHLINE ~ STA 35+50  
SEE SHEET C9

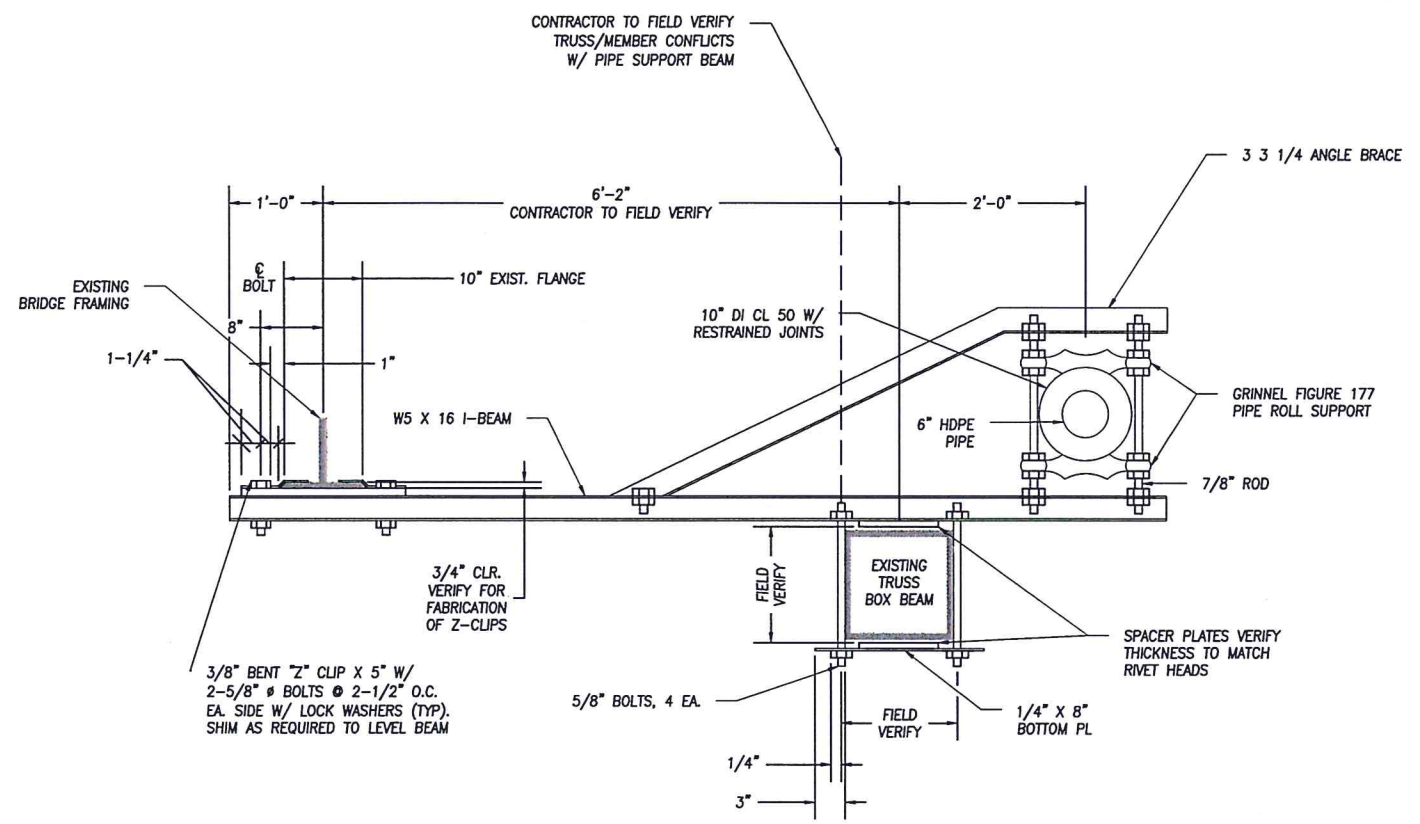
NO.	REVISION	DATE	BY

**KALAMA RIVER BRIDGE II  
CROSSING II**

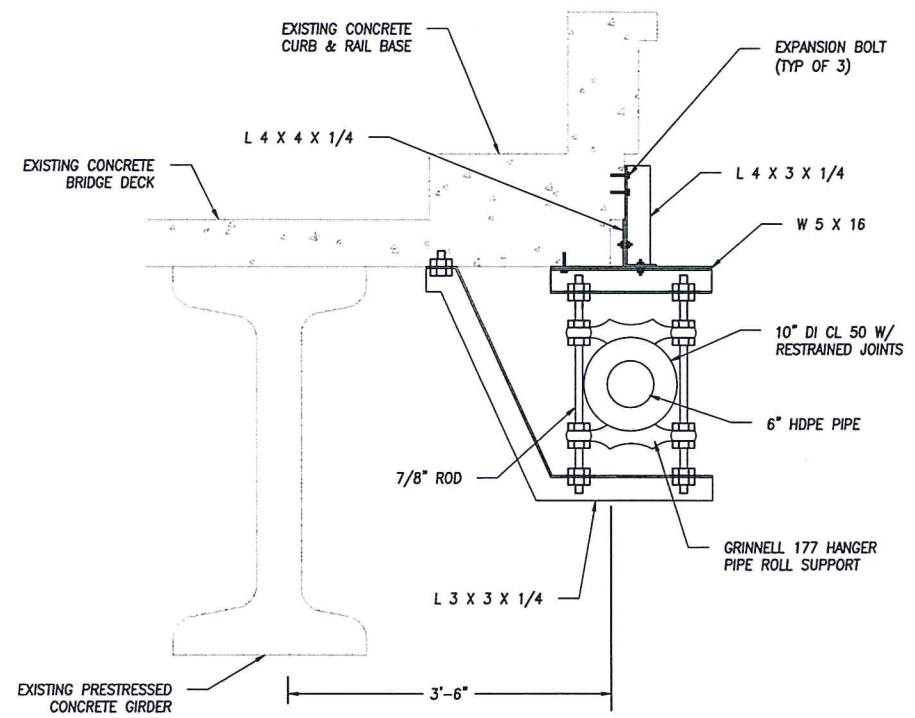
**wallis engineering**  
PROJECT NO: 1374A  
DATE: 10/2014

**EAST PORT  
REGIONAL FORCEMAIN**

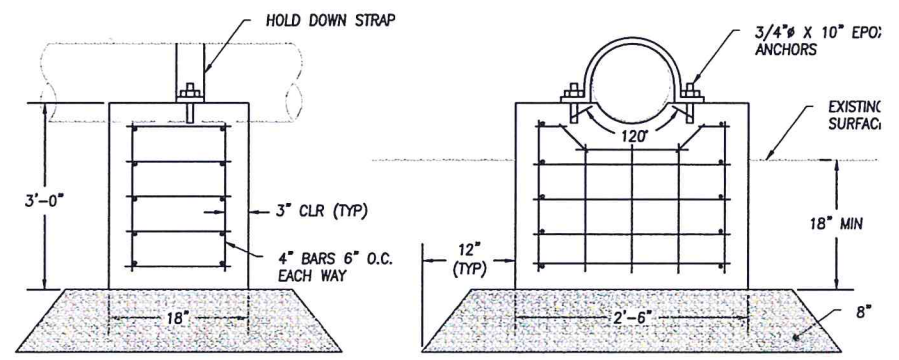
DRAWING NO:  
**C10**  
10 OF 21



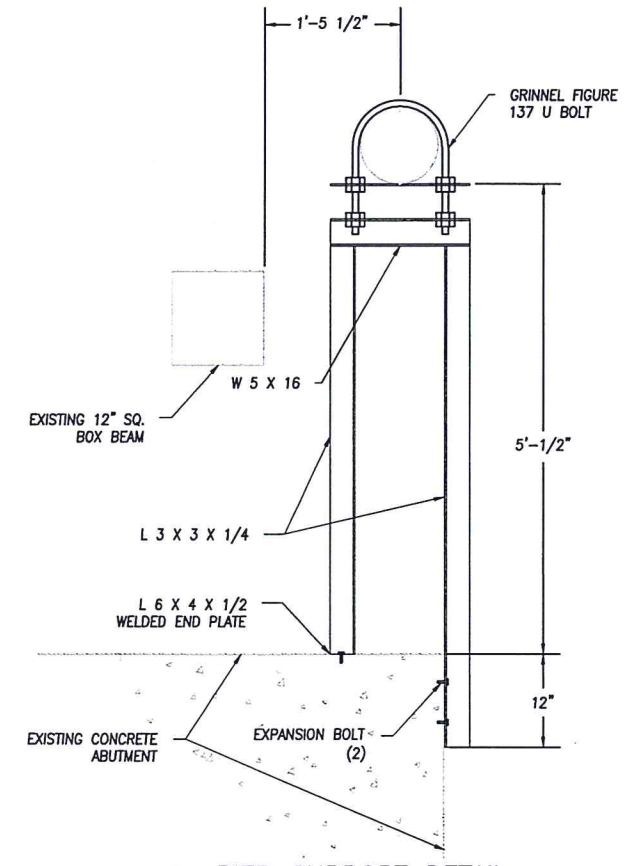
① STEEL BRIDGE TRUSS CONNECTION  
SCALE: 1" = 1'



② CONCRETE BRIDGE RAIL BASE CONNECTION  
VIEW LOOK NORTH  
SCALE: 1" = 1'



③ AT GRADE PIPE SUPPORT DETAIL  
SCALE: 1" = 1'



④ PIER SUPPORT DETAIL  
SCALE: 1" = 1'

NO.	REVISION	BY	DATE

KALAMA RIVER BRIDGE  
CROSSING DETAILS I

**wallis engineering**  
11517 1st Street, Suite 200  
Everett, WA 98201  
206.499.7101

PROJECT NO: 1374A  
DATE: 10/2014

EAST PORT  
REGIONAL FORCEMAIN



DRAWING NO:

C21