



## Memorandum

May 5, 2016

TO: *MF* Marco Foster, MS473 54  
THRU: *TRM* T. Madden / K. Klingman, NB82-230  
FROM: *PF* P. Fuller / S. Beadle, NB 82-66  
SUBJECT: C8 549  
SR99, AWV Replacement North Access Connection  
F.A. Project No: STPF-0099(122)  
**CHANGE ORDER 125**  
**EN6, EN3A & EN3B Ductbank Changes**

Attached for your review, approval and further processing is HQ executed *Change Order #125, EN6, EN3A & EN3B Ductbank Changes*" for the subject project. The Change Order Checklist is attached (*Attachment A*).

### Description of the Change

This Change Order compensates the Contractor for added work and extended overhead associated with new work. This change order adds new ductbanks EN6, EN3A and EN3B and also adds a new vault M-1 where the new ductbanks connect.

#### **EN6 Ductbank:**

Adds new ductbank EN6 from station EN6 260+00.00 to 262+20.20 as shown on plan sheets UPAL1, UPT3, UP1, UP9, UP16, UPR2-UPR3, UPR7, UPR10A, UPD10, and UPD28. This work consists of excavation and shoring, procuring ductbank materials and installing them, placing high strength FTB, forming materials, setting forms and stripping, placing low strength FTB, chipping overpour at existing V-834, coring at V-834, soil export and disposal, vactroring, dewatering the excavation area, 2ft overexcavation of trench and placing quarry spalls and bedding, importing quarry spalls and bedding, supporting existing utilities which involves crossing live ductbanks at Harrison St. vicinity and supporting existing foundations, mobilization and demobilization of equipment, survey and cleanup.

#### **EN3A and EN3B Ductbanks:**

Adds new ductbank EN3A from station EN3A 238+00.00 to 238+50.03 and adds new ductbank EN3B from station EN3B 239+00.00 to 239+43.37 as shown on plan sheets UPAL1, UPT3, UP1, UP9, UP16, UPR1, UPR9 and UPD10. This work consists of excavation and shoring, procuring ductbank materials and installing them, placing high strength FTB, forming materials, setting forms and stripping, placing low strength FTB, soil export and disposal, vactroring, dewatering the excavation area, supporting existing utilities and existing foundations, mobilization and demobilization of equipment, survey and cleanup.

Marco Foster  
C8 549 CO125  
May 5, 2016  
Page 2 of 3

**M-1 Vault:**

Adds the installation of the new M-1 vault at Station H-Line 97+07.27, (27.67' LT) as shown on UPN2, UP9, UP16, UPD19A, and UPD19B. This work consists of excavation, soil export and disposal, vactroring, dewatering the excavation area, 2 ft. vault overexcavation and placing quarry spalls and bedding, importing quarry spalls and bedding, supporting in place vault V-XX5, removing C-XX3 vault and replace in kind, installing shoring system and procuring shoring materials, loading and unloading shoring system, setting the vault, mudding the vault, constructing a custom riser, removing shoring and backfilling, purchasing and placing CDF for backfilling, supporting existing utilities, mobilization and demobilization of equipment, survey and cleanup. The procurement and the shoring design of the M-1 Vault is included in CO150.

**Development of the Change**

In RFI#365, transite ductbank was detailed for removal and its associated vault. The removal needed to occur in order to construct new Vault V-XX5 and ductbank ED3. This existing ductbank contained a 120/208V power source that was removed by Seattle City Light (SCL) weeks prior to this removal work. Upon further investigation, the Contractor noted that the vault scheduled to be removed was intended to be the future power service (588- M-1) for the City of Seattle Illumination system on Harrison St. from Taylor to SR99 and on 6<sup>th</sup> Ave. from Harrison St. to Mercer St.

WSDOT initially introduced a simple design involving 2-3 inch conduits which would connect V-834 to a new Type 6 vault in order to maintain a power source for city owned facilities. SCL responded on September 14, 2015 that new facilities to be owned and maintained by SCL would have to be constructed to Network standards to safely provide lighting service and other required loads in the vicinity. SCL confirmed on October 21, 2015 that a much larger ductbank cross section would be needed to run a secondary service to power street lighting and traffic signals. Upgrades required by SCL to meet current standards and future demands contributed to this significant cost increase. This added work is paid for by SCL. We received signed final plans from SCL on December 23, 2015 with all new ductbanks EN6, EN3A, EN3B and M-1 vault. Work did not begin until agreement was reached on the negotiated pricing.

**Schedule Analysis**

The Contractor claimed this added work would require an additional 40 working days. The work to construct the ductbank and vault are on the critical path and it is all new added work. We performed an independent analysis of the added work and we agreed with the Contractor's assessment. All of the work included in this change order is on the critical path of the approved schedule (*Attachment D*).

**Approvals**

- PE Approval—Patrick Fuller gave approval on 4/29/2016 (*Attachment B*).
- Region Approval—Tom Madden gave approval on 5/3/2016 (*Attachment B*).
- HQ Approval—Marco Foster gave approval on 5/2/2016 (*Attachment B*).
- FHWA Approval—Anthony Sarhan gave approval on 5/2/2016 (*Attachment B*).
- Program Management—Mario Mathisen gave approval on 5/3/2016 (*Attachment B*).

Marco Foster  
C8549 CO125  
May 5, 2016  
Page 3 of 3

- Engineer of Record—Monica Moravec signed plan sheets 12/22/20159 (*See change order plans*)
- City Funding Approval-Jon Gray approved direct costs on 3/4/2016 and approved extended overhead costs on 3/17/2016. (*See Attachment B*).

**Entitlement & Price**

The Contractor will be reimbursed for the added work as stated in the change order. This change results in a significant amount of added work to the Contract. . The Contractor had to mobilize and demobilize their electrical subcontractor multiple times to build the new ductbank. (*See Estimate – Attachment C*).

**Contract Time**

This change order is adding 40 working days to the Contract. The added work was on the critical path. There are no changes to contract interim completion dates as a result of this change order.

PF: jp  
Attachments  
cc: File 8549 3(125)

**WASHINGTON STATE  
DEPARTMENT OF TRANSPORTATION  
CHANGE ORDER**

**DATE:** 04/29/16  
**Page** 1 of 23

**CONTRACT NO:** 008549                   **FEDERAL AID NO:** STPF-0099 (122)  
**CONTRACT TITLE:** SR 99, ALASKAN WAY VIADUCT - REPLACEMENT NORTH ACC  
**CHANGE ORDER NO:** 125 M-1, EN6, EN3A, EN3B DUCTBANK CHG

**PRIME CONTRACTOR:** [REDACTED]                   **GUY F. ATKINSON CONSTRUCTION, LLC.**  
707 SOUTH GRADY WAY STE 500

**ORIGINAL**

RENTON

WA 98057-3224

(X) Ordered by Engineer under the terms of Section 1-04.4 of the Standard Specifications

( ) Change proposed by Contractor

<b>ENDORSED BY:</b>  <u>B. D. -15, Vice President</u> <b>CONTRACTOR</b> <u>4/29/16</u> <b>DATE</b>	<b>SURETY CONSENT:</b>  <b>ATTORNEY IN FACT</b>  <b>DATE</b>
---	--

**ORIGINAL CONTRACT AMOUNT:** 41,640,622.60  
**CURRENT CONTRACT AMOUNT:** 46,763,885.99  
**ESTIMATED NET CHANGE THIS ORDER:** 1,204,577.86  
**ESTIMATED CONTRACT TOTAL AFTER CHANGE:** 47,968,463.85

Approval Required:           ( ) Region           ( ) Olympia Service Center           ( ) Local Agency

<input checked="" type="checkbox"/> APPROVAL RECOMMENDED <u>Patricia Jank</u> <b>PROJECT ENGINEER</b> <u>5/6/16</u> <b>DATE</b>	<input type="checkbox"/> EXECUTED <u>Guy F. Atkinson</u> <b>STATE CONSTRUCTION ENGINEER</b> <u>5/8/2016</u> <b>DATE</b>
<input checked="" type="checkbox"/> APPROVAL RECOMMENDED <b>REGIONAL ADMIN:</b> <u>Thomas Ray Marshall</u> <b>BY:</b> <u>5-6-2016</u> <b>DATE</b>	<input type="checkbox"/> EXECUTED <b>OTHER APPROVAL WHEN REQUIRED</b> <u>Anthony Sanham</u> <b>SIGNATURE</b> <u>FHWA</u> <b>REPRESENTING</b>

**WASHINGTON STATE  
DEPARTMENT OF TRANSPORTATION  
CHANGE ORDER**

DATE: 04/29/16  
Page 2 of 23

**CONTRACT NO: 008549**

**CHANGE ORDER NO: 125**

All work, materials, and measurements to be in accordance with the provisions of the Standard Specifications and Special Provisions for the type of construction involved.

This contract is revised as follows:

**DESCRIPTION**

The change order compensates the Contractor for added work and extended overhead associated with new work. This change order adds new ductbanks EN6, EN3A and EN3B and also adds a new vault M-1 where the new ductbanks connect.

**EN6 Ductbank:**

Adds new ductbank EN6 from station EN6 260+00.00 to 262+20.20 as shown on plans sheets UPAL1, UPT3, UP1, UP9, UP16, UPR2-UPR3, UPR7, UPR10A, UPD10, and UPD28. This work consists of excavation and shoring, procuring ductbank materials and installing them, placing high strength FTB, forming materials, setting forms and stripping, placing low strength FTB, chipping overpour at existing V-834, coring at V-834, dirt export and disposal, vactroring, dewatering the excavation area, 2ft overexcavation of trench and placing quarrying spalls and bedding, importing quarry spalls and bedding, supporting existing utilities which involves crossing live ductbanks at Harrison St. vicinity and supporting existing foundations, mobilization and demobilization of equipment, survey and cleanup.

**EN3A and EN3A Ductbanks:**

Adds new ductbank EN3A from station EN3A 238+00.00 to 238+50.03 and adds new ductbank EN3B from station EN3B 239+00.00 to 239+43.37 as shown on plan sheets UPAL1, UPT3, UP1, UP9, UP16, UPR1, UPR9, and UPD10. This work consists of excavation and shoring, procuring ductbank materials and installing them, placing high strength FTB, forming materials, setting forms and stripping, placing low strength FTB, dirt export and disposal, vactroring, dewatering the excavation area, supporting existing utilities and existing foundations, mobilization and demobilization of equipment, survey and cleanup.

**M-1 Vault:**

Adds the installation of the new M-1 vault at Station H-Line 97+07.27, (27.67' LT) as shown on UPN2, UP9, UP16, UPD19A, and UPD19B. The procurement and the shoring design of the M-1 Vault is included in CO150. This work consists of excavation, dirt export and disposal, vactroring, dewatering the excavation area, 2 ft. vault overexcavation and placing quarry spalls and bedding, importing quarry spalls and bedding, supporting in place vault V-XX5, removing C-XX3 vault and replace in kind, installing shoring system and procuring shoring materials, loading and unloading shoring system, setting the vault, mudding the vault, constructing a custom riser, removing shoring and backfilling, purchasing and placing CDF for backfilling, supporting existing utilities, mobilization and demobilization of equipment, survey and cleanup.

This change order revises the following plan sheets UPN2, UPAL1, UPT3, UP1, UP9, UPR1UPR3, UPR7-UPR10, UPR12, UPD10, UPD28 and adds the following new

**WASHINGTON STATE  
DEPARTMENT OF TRANSPORTATION  
CHANGE ORDER**

DATE: 04/29/16  
Page 3 of 23

**CONTRACT NO:** 008549

**CHANGE ORDER NO:** 125

plan sheets UP16, UPR10A, UPD19A, UPD19B.

**MATERIALS**

All materials incorporated into the project shall meet the requirements of all the Contract Documents.

**MEASUREMENT**

Measurement of the new lump sum item, "CO125 M-1, EN6, EN3A, EN3B Ductbank Changes", shall be in accordance with Standard Specification 1-09.1, Measurement of Quantities of Lump Sum Items.

**PAYMENT**

This change order creates a new lump sum item, "CO125 M-1, EN6, EN3A, EN3B Ductbank Changes" in the amount of \$1,204,577.86. This amount shall be full payment for all labor, equipment and materials to perform the work as described above, including but not limited to engineering, planning, scheduling, and overhead for the added work per Section 1-09.1 of the Standard Specifications.

**CONTRACT TIME**

There are 40 working days added to the contract time as a result of this change order. No changes to contract interim milestones are made as a result of this change order.

**WASHINGTON STATE  
DEPARTMENT OF TRANSPORTATION  
CHANGE ORDER**

DATE: 04/29/16  
Page 4 of 23

CONTRACT NO: 008549				CHANGE ORDER NO: 125			
ITEM NO	GROUP NO	STD ITEM	ITEM DESCRIPTION	UNIT MEASURE	UNIT PRICE	EST QTY CHANGE	EST AMT CHANGE
1168	08		CO125 M-1, EN6, EN3A, EN3B DUCTBANK CHANG	L.S.	0.00	0.00	1,204,577.86

-----  
1,204,577.86

=====

SEATTLE CITY LIGHT VAULT/HANDHOLE SCHEDULE

**CHANGE ORDER NO. 123**

VAULT NAME	OWNER	VAULT TYPE	DRAWING	VAULT DETAIL AND SHEET NO	ALIGNMENT	STATION AND OFFSET	NOTES	CONTRACT
V-XX1	SCL	712-LA	UP1, UP7	1-UPD13	6TH	CNTR: 110+35.00, 6.58' LT INSTALL LONG DIRECTION OF VAULT PARALLEL TO 6TH	INSTALL REBAR INSERTS PER DETAIL 1/UPD12	
V-XX2	SCL	712-LA	UP1, UP7	2-UPD13	6TH	CNTR: 110+98.00, 14.42' LT INSTALL LONG DIRECTION OF VAULT PARALLEL TO 6TH	INSTALL REBAR INSERTS PER DETAIL 1/UPD12	
V-XX3	SCL	712-LA	UP1, UP8	3-UPD14	6TH	CNTR: 112+13.00, 19.08' LT INSTALL LONG DIRECTION OF VAULT PARALLEL TO 6TH	INSTALL REBAR INSERTS PER DETAIL 1/UPD12	
V-XX4	SCL	712-LA	UP1, UP8	4-UPD14	6TH	CNTR: 112+30.00, 15.42' LT INSTALL LONG DIRECTION OF VAULT PARALLEL TO 6TH	INSTALL REBAR INSERTS PER DETAIL 1/UPD12	
V-XX5	SCL	712-LA	UP1, UP9	5-UPD15	H	CNTR: 97+05.06, 15.92' LT INSTALL LONG DIRECTION OF VAULT PARALLEL TO H	INSTALL REBAR INSERTS PER DETAIL 1/UPD12	
V-XX6	SCL	712-LA	UP1	6-UPD15	6TH	CNTR: 113+84.94, 8.42' RT INSTALL LONG DIRECTION OF VAULT PARALLEL TO 6TH	INSTALL REBAR INSERTS PER DETAIL 1/UPD12	
V-XX7	SCL	712-LA	UP3, UP11	7-UPD16	H	CNTR: 99+23.22, 1.00' LT INSTALL LONG DIRECTION OF VAULT PARALLEL TO H	INSTALL REBAR INSERTS PER DETAIL 1/UPD12	
V-XX8	SCL	712-LA	UP3, UP11	8-UPD16	H	CNTR: 98+95.13, 1.00' LT INSTALL LONG DIRECTION OF VAULT PARALLEL TO H	INSTALL REBAR INSERTS PER DETAIL 1/UPD12	
V-XX9	SCL	712-LA	UP3, UP12	9-UPD17	H	CNTR: 101+45.0D, 15.92' LT INSTALL LONG DIRECTION OF VAULT PARALLEL TO H	INSTALL REBAR INSERTS PER DETAIL 1/UPD12	
V-X10	SCL	712-LA	UP5, UP13	10-UPD17	H	CNTR: 104+14.00, 9.08' LT INSTALL LONG DIRECTION OF VAULT PARALLEL TO H	INSTALL REBAR INSERTS PER DETAIL 1/UPD12	
V-X11	SCL	712-LA	UP5, UP13	11-UPD18	H	CNTR: 104+40.00, 17.42' LT INSTALL LONG DIRECTION OF VAULT PARALLEL TO H	INSTALL REBAR INSERTS PER DETAIL 1/UPD12	
V-X12	SCL	814-8-CLX	UP5, UP15	12-UPD18	R	CNTR: 104+10.00, 4.00' LT INSTALL LONG DIRECTION OF VAULT PARALLEL TO R	INSTALL REBAR INSERTS PER DETAIL 1/UPD12	
V-X13 - NOT USED								
V-X14	SCL	577-LA	UP5, UP14	14-UPD19	H	CNTR: 105+50.00, 26.00' LT INSTALL LONG DIRECTION OF VAULT PARALLEL TO H	INSTALL REBAR INSERTS PER DETAIL 1/UPD12	
V-X15 - NOT USED								
V-X16	SCL	814-8-CLX	UP1, UP10	16-UPD19	H	CNTR: 95+29.76, 29.00' LT INSTALL LONG DIRECTION OF VAULT PARALLEL TO H	INSTALL REBAR INSERTS PER DETAIL 1/UPD12	
M-1	SCL	818-9 PANEL	UP1	1-UPD19B	H	CNTR: 97+07.27, 27.67' LT INSTALL LONG DIRECTION OF VAULT PARALLEL TO H	PANEL VAULT PER TYPICAL DETAIL 1/UPD19A	
0578M009	SCL	EXIST.	UP1	20-UPD20	H	EXIST. (96+25.9±, 17.4' RT±)	DOWEL NEW DUCT BANK TO VAULT, SEE NOTE 2	
0578M011	SCL	EXIST.	UP1	21-UPD21	H	EXIST. (94+14.2±, 13.5' RT±)	DOWEL NEW DUCT BANK TO VAULT, SEE NOTE 2	
0578M016	SCL	EXIST.	UP1	22-UPD22	H	EXIST. (95+57.7±, 26.4' RT±)	DOWEL NEW DUCT BANK TO VAULT, SEE NOTE 2	
0578M030	SCL	EXIST.	UP1	23-UPD23	H	EXIST. (95+87.2±, 24.9' RT±)	DOWEL NEW DUCT BANK TO VAULT, SEE NOTE 2	
0588V325	SCL	EXIST.	UP3, UP11	24-UPD24	H	EXIST. (99+49.7±, 22.3' RT±)	DOWEL NEW DUCT BANK TO VAULT, SEE NOTE 2	
0588M09	SCL	EXIST.	UP6	25-UPD25	6TH	EXIST. (108+74.1±, 11.7' RT±)	DOWEL NEW DUCT BANK TO VAULT, SEE NOTE 2	
0588M020	SCL	EXIST.	UP3, UP11	26-UPD26	H	EXIST. (98+74.6±, 16.5' RT±)	DOWEL NEW DUCT BANK TO VAULT, SEE NOTE 2	
0578M028	SCL	EXIST.	UP1, UP7	27-UPD27	6TH	EXIST. (111+13.4±, 20.2' RT±)	DOWEL NEW DUCT BANK TO VAULT, SEE NOTE 2	
0588V834-0578V834-	SCL	EXIST.	UP1	28-UPD28	6TH	EXIST. (110+89.5±, 6.2' RT±)	DOWEL NEW DUCT BANK TO VAULT, SEE NOTE 2	
C-XX1	SCL	444-LA	UP1, UP7	1-UPD29	6TH	CNTR: 111+24.00, 36.00' LT INSTALL HANDHOLE PARALLEL TO 6TH		
C-XX2	SCL	444-LA	UP1, UP8	2-UPD29	6TH	CNTR: 112+31.00, 38.0D' LT INSTALL HANDHOLE PARALLEL TO 6TH		
C-XX3	SCL	444-LA	UP1, UP9	3-UPD29	H	CNTR: 97+19.75, 40.00' LT INSTALL HANDHOLE PARALLEL TO H	PRIOR TO INSTALLATION OF THIS HANDHOLE, CONTRACTOR SHALL LAYOUT THE CURB AND CURB RAMP ALIGNMENTS TO ENSURE THE HANDHOLE IS NOT INSTALLED WITHIN THE CURB RAMP	
C-XX4	SCL	444-LA	UP3, UP11	4-UPD29	H	CNTR: 98+86.00, 24.50' RT INSTALL HANDHOLE PARALLEL TO H		
C-XX5	SCL	444-LA	UP3, UP12	5-UPD30	H	CNTR: 101+15.00, 25.00' LT INSTALL HANDHOLE PARALLEL TO H		
C-XX6	SCL	444-LA	UP5, UP14	6-UPD30	H	CNTR: 105+30.50, 25.00' LT INSTALL HANDHOLE PARALLEL TO H		
C-XX7	SCL	444-LA	UP5	7-UPD30	D	CNTR: 108+10.00, 39.75' RT INSTALL HANDHOLE PARALLEL TO D		

**NOTE:**

1. STATION AND OFFSET SHOWN IS CENTER OF POLE.
2. CONDUITS TO POLE AND CONDUIT RISERS SHALL NOT BE INSTALLED UNTIL POLE HAS BEEN SET.

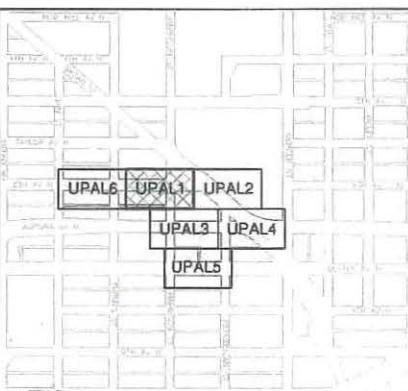
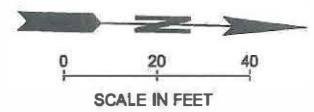
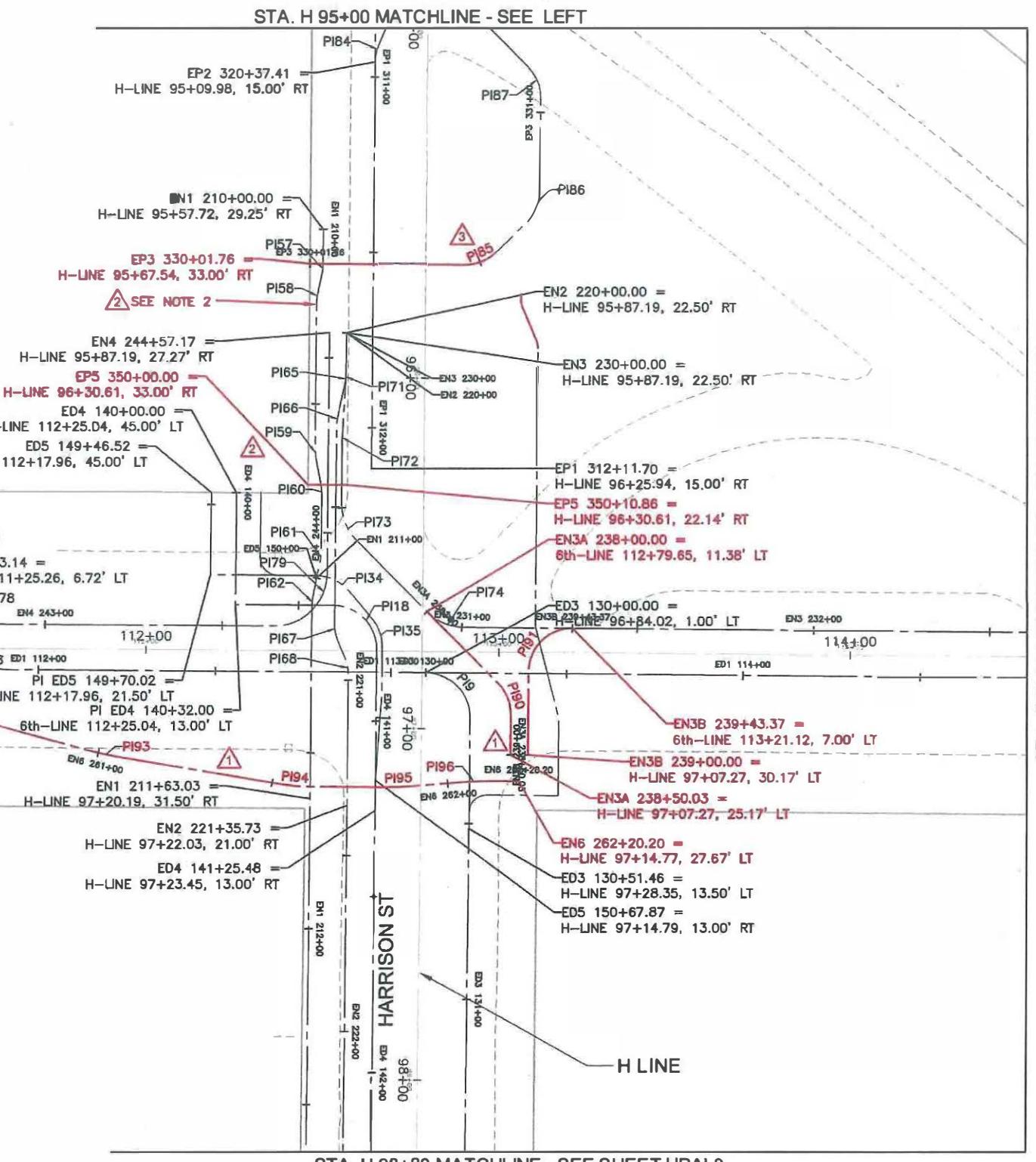
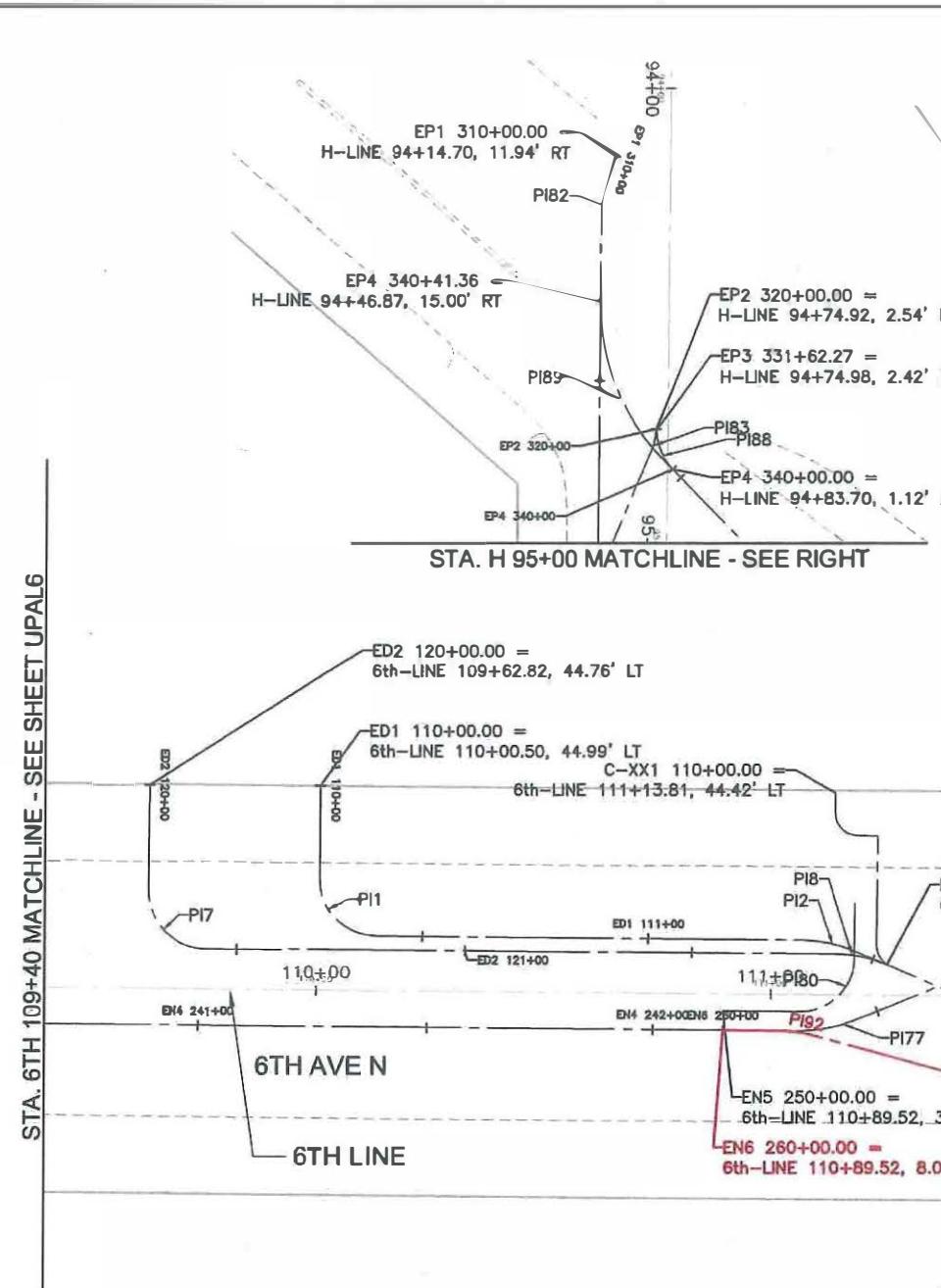


**Know whars below.  
Call before you dig.**

Determina lo que esta **bajo tierra**.  
**Llama antes de excavar.**

## SEATTLE CITY LIGHT TERMINATION POLE SCHEDULE

TERMINATION POLE NAME	OWNER	TYPE	DRAWING	RISER DETAIL AND SHEET NO	ALIGNMENT	STATION/OFFSET	NOTES
TP-01	SCL	DIST.	UP5, UP13	1-UPD31	H	104+17.00, 25.00' RT	NEW POLE TO BE PROVIDED AND INSTALLED BY OTHERS (SCL), NEW CONDUIT RISERS
TP-02	SCL	DIST.	UP5, UP13	2-UPD31	H	104+10.00, 25.00' LT	NEW POLE TO BE PROVIDED AND INSTALLED BY OTHERS (SCL), NEW CONDUIT RISERS
TP-03	SCL	DIST.	UP5, UP14	3-UPD31	H	EXIST. (105+71.31±, 25.10' LT±)	EXIST. POLE, NEW CONDUIT RISERS
TP-04	SCL	DIST.	UP5, UP15	4-UP031	D	112+75.00±, 40.00± RT 	NEW POLE TO BE PROVIDED AND INSTALLED BY OTHERS (SCL), NEW CONDUIT RISERS. POLE LOCATION APPROXIMATE. 
TP-05	SCL	DIST.	UP4	5-UPD31	R	EXIST. (101+68.6±, 91.8' LT±)	EXIST. POLE, NEW CONDUIT RISERS, TRANSFORMERS TO BE REMOVED BY OTHERS (SCL)
TP-06	SCL	DIST.	UP5	6-UPD31	R	EXIST. (104+66.2±, 23.6' RT±)	EXIST. POLE, NEW CONDUIT RISERS



SHEET KEY

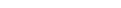
#### **GENERAL NOTES:**

1. REFER TO SHEETS UPT1 - UPT3 FOR POWER ALIGNMENT TABLES.
  2. THE CONTRACTOR SHALL FIELD ADJUST THE EN1 DUCT BANK, AS NEEDED, TO FIT BETWEEN THE SUBSTATION WALL FOOTING AND VAULT 0528A03D.

SHEET 6 OF 23

**CHANGE ORDER NO. 125**

**CONTRACT** 8529

FILE NAME X:\110000-110250\110159 (Alaskan Way Viaduct North Access)\CADD\Design003-MWNA-CPA1.dwg										PLAN REF. NO. UPAL 1			
TIME	4:35am	REGION NO.		STATE	FED.AID PROJ.NO.								
DATE	Dec-21-15	10	WASH										
PLOTTED BY	J.LINEHAN												
DESIGNED BY	C.PARK												
ENTERED BY	J.LINEHAN	CO-147: EP3 RELOCATION		12/17/2015	CDP								
CHECKED BY	S.BARTLETT	CO-133: EN3 RELOCATION		12/17/2015	CDP								
PROJ. ENGR.	S. BEADLE	CO-125: NEW VAULT M-1		12/17/2015	CDP								
REGIONAL ADM.	T. TREPANIER			REVISION	DATE	BY							
											 Consulting Engineers 1601 Fifth Avenue, Suite 1600, Seattle, Washington 98101-3665 (206) 622-5822 Fax (206) 622-8130	 Washington State Department of Transportation	SR 99 <b>ALASKAN WAY VIADUCT-REPLACEMENT NORTH ACCESS CONNECTION</b> POWER ALIGNMENT PLAN

SHEET 7 OF 23  
 CHANGE ORDER NO. 125  
 CONTRACT 8549

P.I. TABLE										
PI #	ALIGNMENT NAME	P.I. NORTHING	P.I. EASTING	BEARING IN	BEARING OUT	DELTA	RADIUS	TANGENT	LENGTH	
PI62	EN1	130543.33	567652.33	S77°20'33.00"E	S88°33'32.80"E	011°12'59.80"	11.67	1.15	2.28	
PI63	EN1	130538.89	567828.74	S88°33'32.80"E	N80°11'37.00"E	011°14'50.20"	11.67	1.15	2.29	
PI64	EN1	130540.20	567836.32	N80°11'37.00"E	S88°33'23.00"E	011°15'00.00"	11.67	1.15	2.29	
PI65	EN2	130553.89	567588.91	S88°35'33.00"E	S77°20'33.00"E	011°15'00.00"	11.67	1.15	2.29	
PI66	EN2	130551.08	567601.41	S77°20'33.00"E	S88°35'33.00"E	011°15'00.00"	11.67	1.15	2.29	
PI67	EN2	130549.60	567661.57	S88°35'33.00"E	N68°56'37.00"E	022°27'50.00"	11.67	2.32	4.58	
PI68	EN2	130553.36	567671.33	N68°56'37.00"E	S88°33'23.00"E	022°30'00.00"	11.67	2.32	4.58	
PI69	EN2	130549.26	567833.99	S88°33'23.00"E	S77°18'23.00"E	011°15'00.00"	11.67	1.15	2.29	
PI70	EN2	130541.94	567866.49	S77°18'23.00"E	S88°33'23.00"E	011°15'00.00"	11.67	1.15	2.29	
PI71	EN3	130553.90	567588.56	S88°35'33.00"E	S85°35'33.00"E	003°00'00.00"	30.00	0.79	1.57	
PI72	EN3	130552.58	567605.70	S85°35'33.00"E	S88°35'33.00"E	003°00'00.00"	30.00	0.79	1.57	
PI73	EN3	130551.96	567630.83	S88°35'33.00"E	N46°24'27.00"E	045°00'00.00"	15.00	6.21	11.78	
PI74	EN3	130580.24	567660.53	N46°24'27.00"E	N01°28'09.06"E	044°56'17.94"	15.00	6.20	11.76	
PI75	EN3	130839.19	567667.17	N01°28'09.06"E	N29°01'16.48"E	027°33'07.42"	100.00	24.52	48.09	
PI76	EN3	130943.91	567725.27	N29°01'16.48"E	N42°15'58.59"W	071°17'15.08"	15.00	10.76	18.66	
PI77	EN4	130408.40	567671.21	N01°26'30.20"E	N21°03'29.80"W	022°30'00.00"	30.00	5.97	11.78	
PI78	EN4	130444.98	567657.12	N21°03'29.80"W	N01°26'30.20"E	022°30'00.00"	30.00	5.97	11.78	
PI79	EN4	130547.38	567659.70	N01°26'30.20"E	N88°35'33.00"W	090°02'03.20"	15.00	15.01	23.57	
PI80	EN5	130414.20	567667.10	N01°26'30.20"E	N88°33'29.80"W	090°00'00.00"	11.67	11.67	18.33	
PI82	EP1	130565.71	567413.32	S70°48'20.75"E	S88°35'33.00"E	017°47'12.25"	12.50	1.96	3.88	
PI83	EP2	130576.86	567466.77	S88°35'33.00"E	S66°05'33.00"E	022°30'00.00"	12.50	2.49	4.91	
PI84	EP2	130563.66	567496.54	S66°05'33.00"E	S88°35'33.00"E	022°30'00.00"	12.50	2.49	4.91	
PI85	EP3	130593.26	567557.33	N01°24'27.00"E	N43°35'33.00"W	045°00'00.00"	12.50	5.18	9.82	
PI86	EP3	130609.78	567541.60	N43°35'33.00"W	N88°35'33.00"W	045°00'00.00"	12.50	5.18	9.82	
PI87	EP3	130610.68	567504.99	N88°35'33.00"W	S46°24'27.00"W	045°00'00.00"	12.50	5.18	9.82	
PI88	EP3	130576.91	567469.52	S46°24'27.00"W	N88°34'21.93"W	045°01'11.07"	12.50	5.18	9.82	
PI89	EP4	130564.64	567456.64	S46°24'27.00"W	N88°35'33.00"W	045°00'00.00"	50.00	20.71	39.27	
PI90	EN3A	130599.31	567680.56	N46°24'27.00"E	S88°33'23.00"E	045°02'10.00"	12.50	5.18	9.83	
PI91	EN3B	130604.80	567661.16	N88°33'23.00"W	N01°28'09.06"E	090°01'32.06"	12.50	12.51	19.64	
PI92	EN6	130401.87	567671.04	N01°26'30.20"E	N16°26'30.20"E	015°00'00.00"	30.00	3.95	7.85	
PI93	EN6	130483.28	567695.07	N16°26'30.20"E	N10°34'48.12"E	005°51'42.12"	100.00	5.12	10.23	
PI94	EN6	130537.62	567705.22	N10°34'48.12"E	N01°26'37.00"E	009°08'11.04"	50.00	3.99	7.97	
PI95	EN6	130567.19	567705.96	N01°26'37.00"E	N03°33'23.00"W	005°00'00.00"	100.00	4.37	8.73	
PI96	EN6	130590.09	567704.54	N03°33'23.00"W	N01°26'37.00"E	005°00'00.00"	100.00	4.37	8.73	

FILE NAME X:\110000-110250\110159 (Alaskan Way Viaduct North Access)\CADD\Design\003-MWNA-CPT1.dwg

TIME 4:35am  
 DATE Dec-21-15  
 PLOTTED BY J.LINEHAN  
 DESIGNED BY C.PARK  
 ENTERED BY J.LINEHAN  
 CHECKED BY S.BARTLETT  
 PROJ. ENGR. S. BEADLE  
 REGIONAL ADM. T. TREPANIER

CO-147: EP3 RELOCATION  
 CO-125: NEW VAULT M-1

REVISION  
 DATE  
 BY

CDP  
 CDP  
 CDP

CONTRACT NO.  
 LOCATION NO.  
 XL-3687

P.E. STAMP BOX  
 12/21/15



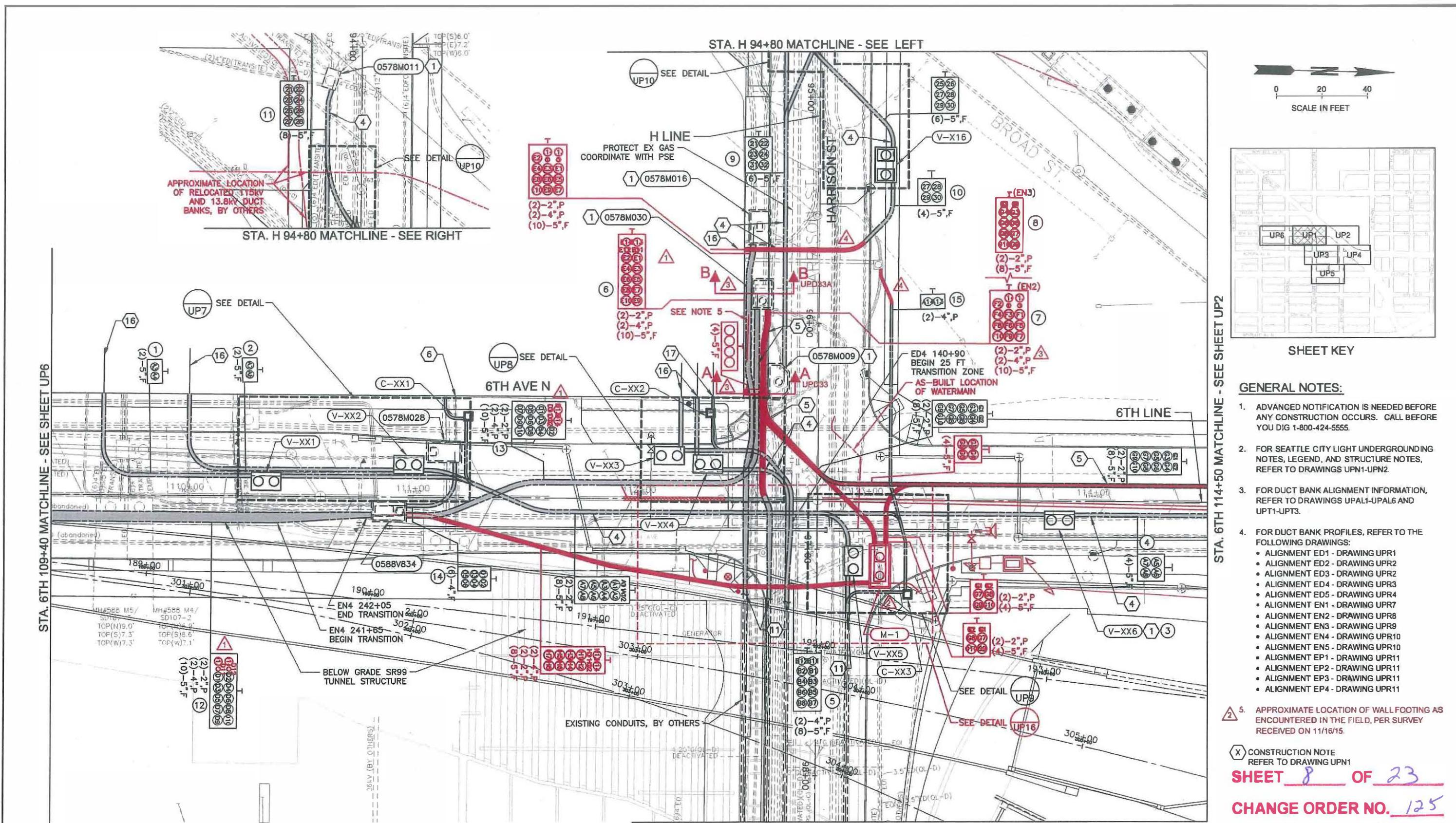
k p ff Consulting Engineers  
 1601 Fifth Avenue, Suite 1600  
 Seattle, Washington 98101-3665  
 (206) 622-5822 Fax (206) 622-8130

SR 99  
 ALASKAN WAY VIADUCT-REPLACEMENT  
 NORTH ACCESS CONNECTION  
 Washington State Department of Transportation  
 POWER ALIGNMENT TABLES

PLAN REF. NO.  
 UPT3  
 SHEET 203 OF 770 SHEETS

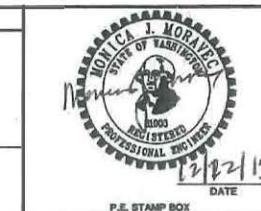
#### GENERAL NOTES:

1. REFER TO SHEETS UPAL1 - UPAL6 FOR POWER ALIGNMENT PLANS.
2. P.I. NORTHINGS/EASTINGS ARE BASED ON PROJECT COORDINATES. REFER TO ALIGNMENT AND RIGHT OF WAY PLANS FOR PROJECT DATUM AND HORIZONTAL CONTROL.



FILE NAME	X:\110000-110250\110159 (Alaskan Way Viaduct North Access)\CADD\Design\004-MWNA-CP01.dwg				
TIME	4:36am				
DATE	Dec-21-15				
PLOTTED BY	J.LINEHAN	⚠ CO-147: EP3 RELOCATION		12/17/2015	CDP
DESIGNED BY	C.PARK	⚠ CO-133: EN3 RELOCATION		12/17/2015	CDP
ENTERED BY	J.LINEHAN	⚠ CO-125: NEW VAULT M-1		12/17/2015	CDP
CHECKED BY	S.BARTLETT	⚠ RFI 64 (BASED ON RFI 37 RESPONSE)			
PROJ. ENGR.	S. BEADLE	AD1- REPLACEMENT SHEET - BACKGROUND UTILITIES DARKENED			10/25/2013 JDC
REGIONAL ADM.	T. TREPANIER	REVISION		DATE	BY

ATE	FED.AID PROJ.NO.
ASH	
I	
3	
O.	LOCATION NO.
	<b>XL-3687</b>



**k p f f** Consulting Engineers  
1601 Fifth Avenue, Suite 1600  
Seattle, Washington 98101-3665  
(206) 622-5822 Fax (206) 622-8

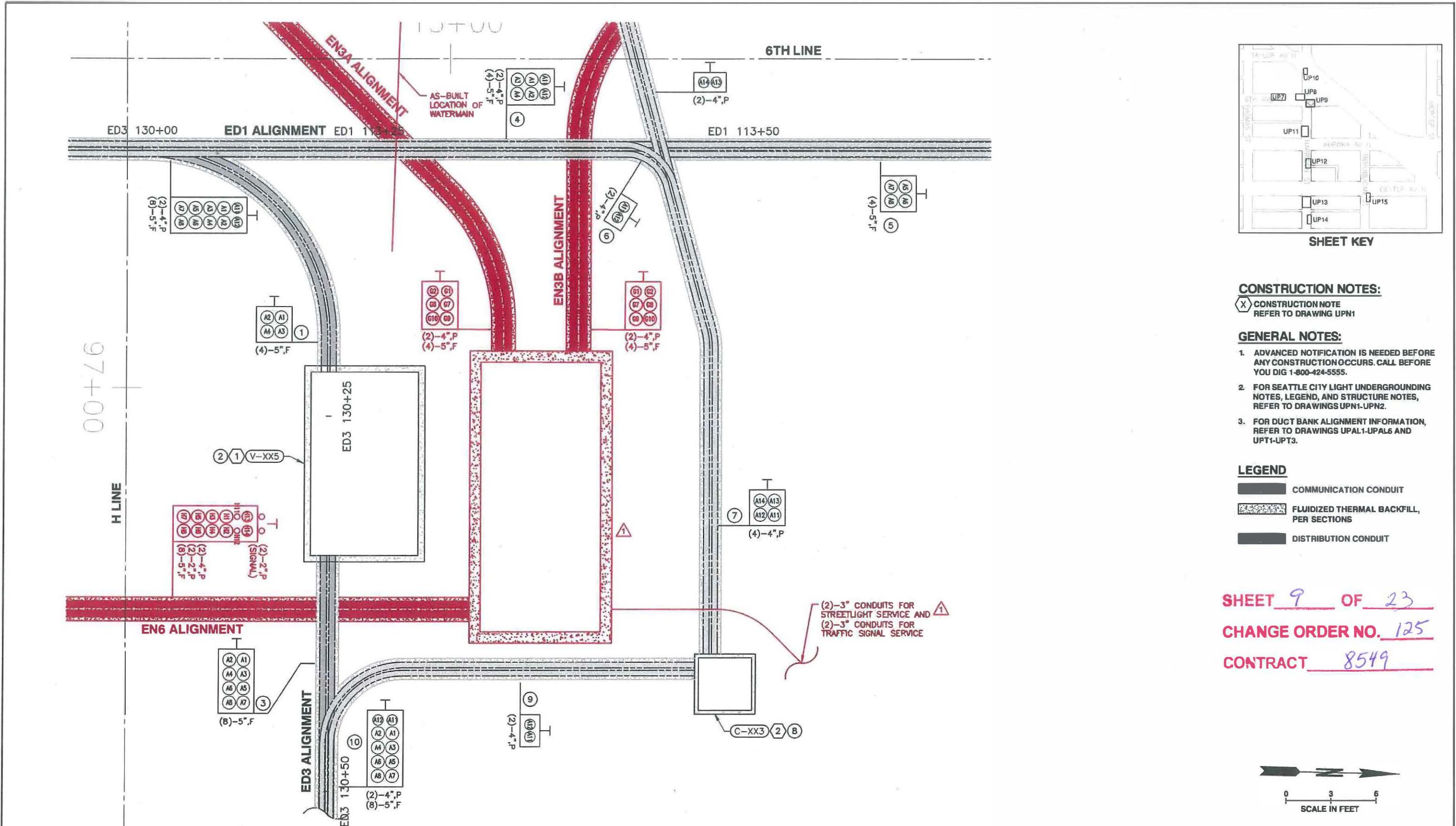


SR 99  
**ALASKAN WAY VIADUCT-REPLACEMENT  
NORTH ACCESS CONNECTION**

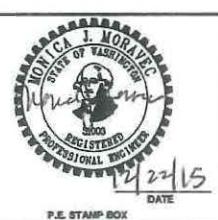
POWER PLAN

PLAN REF. NO.  
**UP1**

SHEET  
204  
OF  
**770**  
SHEETS



FILE NAME X:\110000\110250\110159 (Alaskan Way Viaduct North Access)\CADD\Design\004-MWNA-CP02.dwg									
TIME	4:37am	DATE	Dec-21-15	REGION NO.	10	STATE	WASH	FED.AID PROJ.NO.	
PLOTTED BY	J.LINEHAN	DESIGNED BY	S.ZURFLUH	JOB NUMBER	13A003	CONTRACT NO.		LOCATION NO.	
ENTERED BY	J.LINEHAN	CHECKED BY	C.PARK	REVISION	12/17/2015	CDP		DATE	BY
PROJ. ENGR.	S. BEADLE	REGIONAL ADM.	T. TREPANIER	A1 CO-125: NEW VAULT M-1					

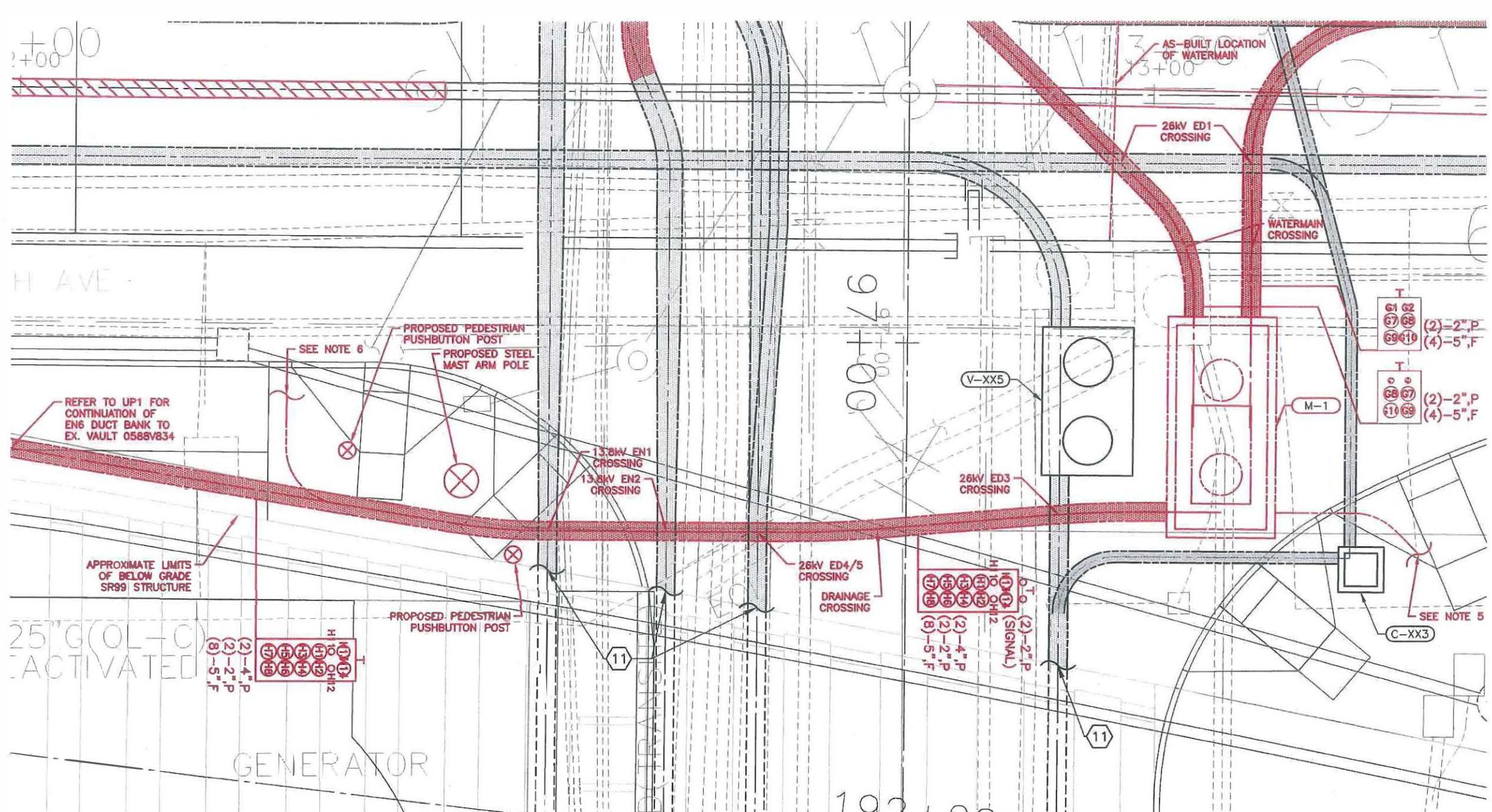
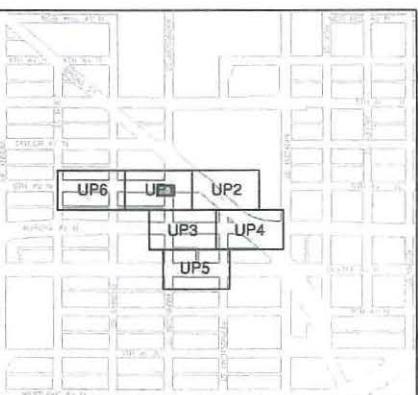
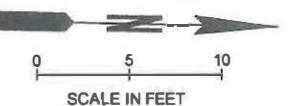


**kpf** Consulting Engineers  
1601 Fifth Avenue, Suite 1600  
Seattle, Washington 98101-3665  
(206) 622-5822 Fax (206) 622-8130



**SR 99**  
**ALASKAN WAY VIADUCT-REPLACEMENT**  
**NORTH ACCESS CONNECTION**  
**ENLARGED POWER PLAN**

PLAN REF. NO.  
**UP9**  
SHEET  
**212**  
OF  
**770**  
SHEETS

CHANGE ORDER NO. 125CONTRACT 8549

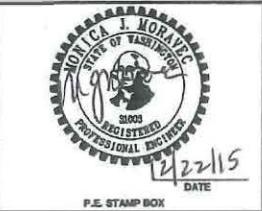
CONSTRUCTION NOTE  
REFER TO DRAWING UPN1

NEW SHEET

FILE NAME X:\110000-110250\110159 (Alaskan Way Viaduct North Access)\CADD\Design\004-MWNA-CP01.dwg

TIME	4:38am			
DATE	Dec-21-15			
PLOTTED BY	K.BOSTON			
DESIGNED BY	C.PARK			
ENTERED BY	K.BOSTON			
CHECKED BY	S.BARTLETT			
PROJ. ENGR.	S. BEADLE			
REGIONAL ADM.	T. TREPANIER			

REGION NO.	STATE	FED. AID PROJ. NO.
10	WASH	13A003
JOB NUMBER		
CONTRACT NO.		XL-3687
LOCATION NO.		122-15
P.E. STAMP BOX		

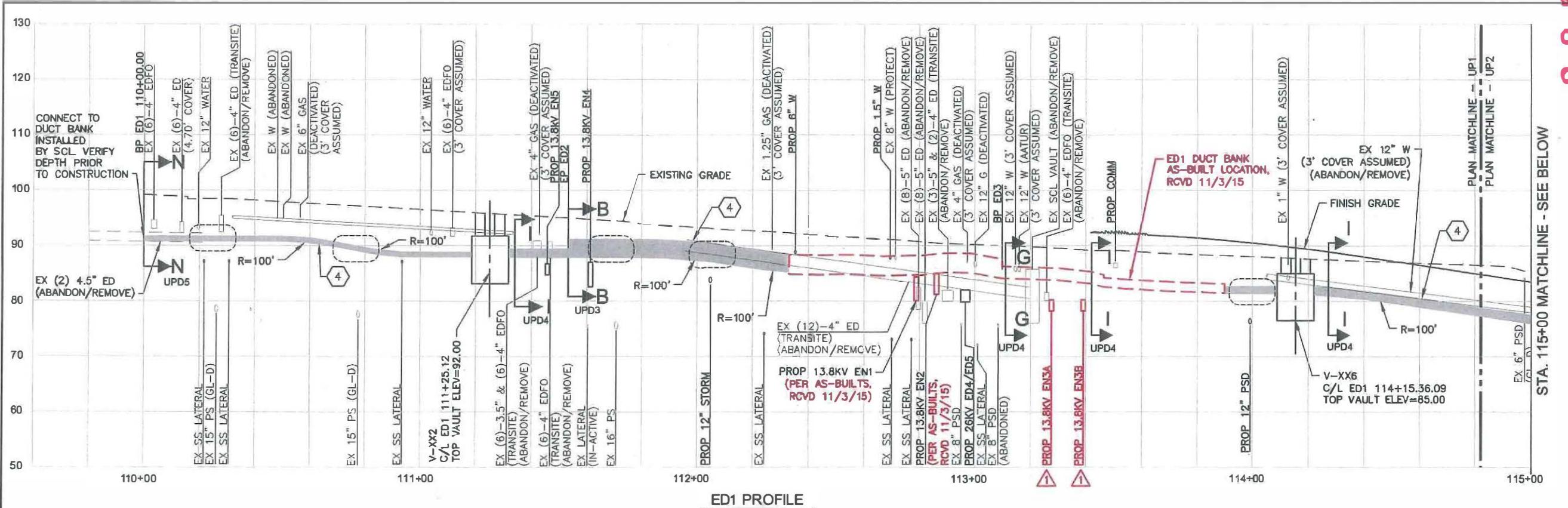


**kpf** Consulting Engineers  
1601 Fifth Avenue, Suite 1600  
Seattle, Washington 98101-3665  
(206) 622-5822 Fax (206) 622-8130



**SR 99**  
**ALASKAN WAY VIADUCT-REPLACEMENT**  
**NORTH ACCESS CONNECTION**  
ENLARGED POWER PLAN

PLAN REF. NO.  
**UP16**  
SHEET  
**218A**  
OF  
**770**  
SHEETS



ED1 PROFILE

## **GENERAL NOTES:**

- ADVANCED NOTIFICATION IS NEEDED BEFORE ANY CONSTRUCTION OCCURS. CALL BEFORE YOU DIG 1-800-424-5555.**

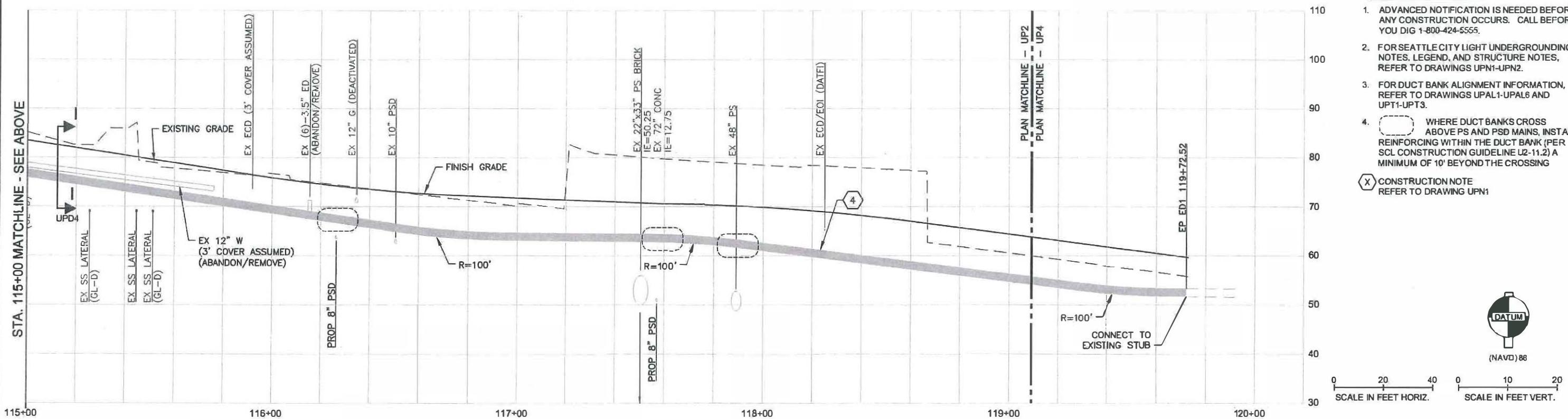
**FOR SEATTLE CITY LIGHT UNDERGROUNDING NOTES, LEGEND, AND STRUCTURE NOTES, REFER TO DRAWINGS UPN1-UPN2.**

**FOR DUCT BANK ALIGNMENT INFORMATION, REFER TO DRAWINGS UPAL1-UPAL6 AND UPT1-UPT3.**

**WHERE DUCT BANKS CROSS ABOVE PS AND PSD MAINS, INSTALL REINFORCING WITHIN THE DUCT BANK (PER SCL CONSTRUCTION GUIDELINE U2-11.2) A MINIMUM OF 10' BEYOND THE CROSSING**



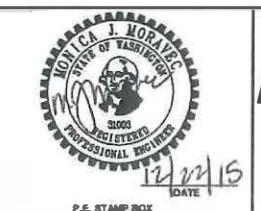
AVB)BR



ED1 PROFILE

FILE NAME	X:\110000-110250\110159 (Alaskan Way Viaduct North Access)\CADD\Design\005-MWNA-CPR1.dwg
TIME	4:39am
DATE	Dec-21-15
PLOTTED BY	J.LINEHAN
DESIGNED BY	C.PARK
ENTERED BY	J.LINEHAN
CHECKED BY	S.BARTLETT
PROJ. ENGR.	S. BEADLE
REGIONAL ADM.	T. TREPANIER
	ACO-125: NEW VULT M-1
	REVISION

			REGION NO.	STATE	FED.AID PROJ.
			10	WASH	
			JOB NUMBER:		
			13A003		
			CONTRACT NO.		LOCATION NO.
			12/17/2015 CDP		XL-3687
			DATE	BY	



**k p f f** Consulting Engineers  
1601 Fifth Avenue, Suite 1600  
Seattle, Washington 98101-3665  
(206) 622-5822 Fax (206) 622-8130



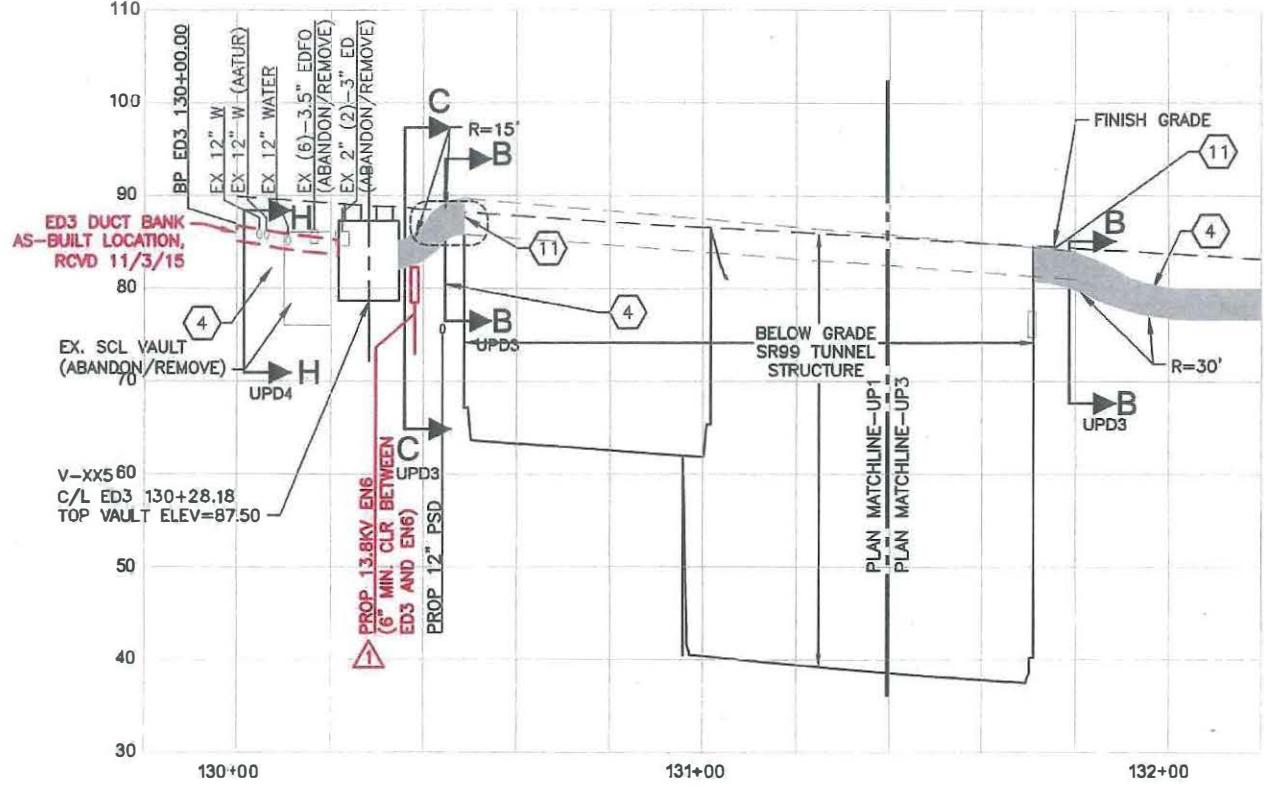
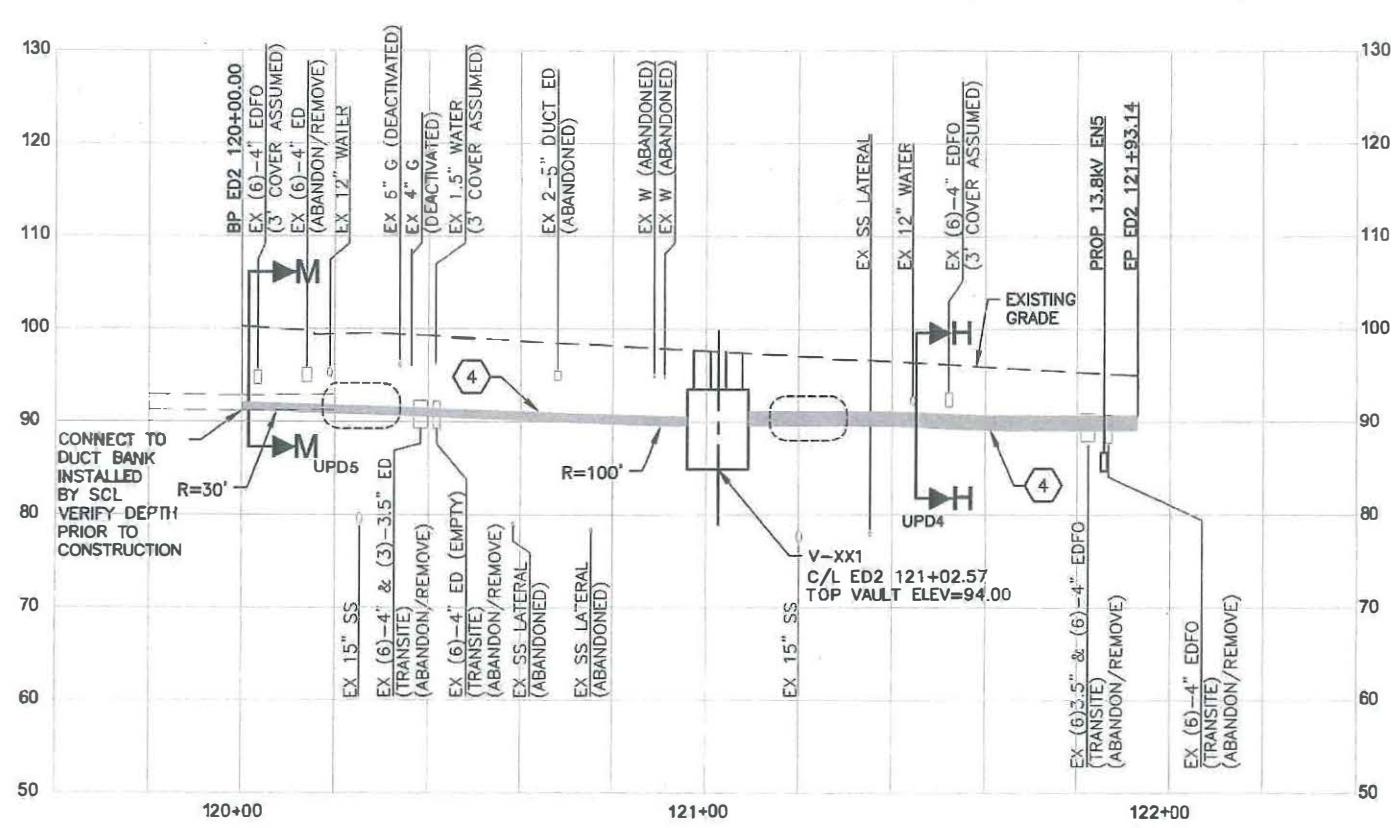
**Washington State  
Department of  
Transportation**

**SR 99**  
**ALASKAN WAY VIADUCT-REPLACEMENT**  
**NORTH ACCESS CONNECTION**

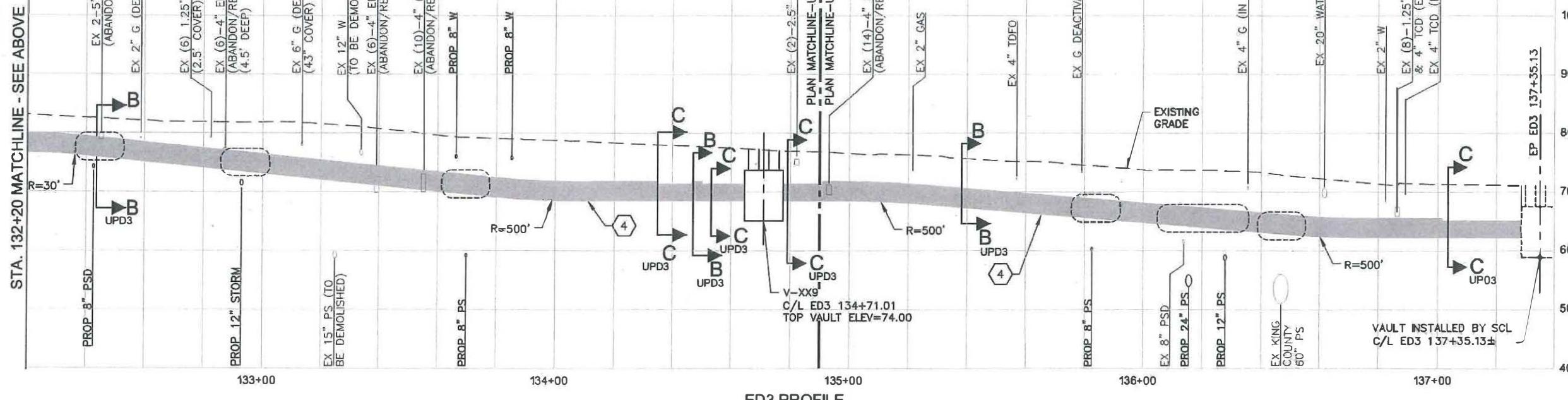
## POWER PROFILE

JAH REF. NO.  
JPR1

SHEET  
219  
OF  
770  
SHEETS



STA. 132+20 MATCHLINE - SEE BELOW



**SHEET 12 OF 23**  
**CHANGE ORDER NO. 125**  
**CONTRACT 8549**

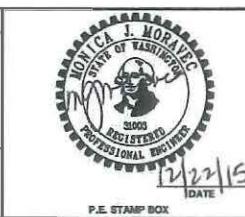
- GENERAL NOTES:**
- ADVANCED NOTIFICATION IS NEEDED BEFORE ANY CONSTRUCTION OCCURS. CALL BEFORE YOU DIG 1-800-424-5555.
  - FOR SEATTLE CITY LIGHT UNDERGROUNDING NOTES, LEGEND, AND STRUCTURE NOTES, REFER TO DRAWINGS UPN1-UPN2.
  - FOR DUCT BANK ALIGNMENT INFORMATION, REFER TO DRAWINGS UPAL1-UPAL6 AND UPT1-UPT3.
  - WHERE DUCT BANKS CROSS ABOVE PS AND PSD MAINS, INSTALL REINFORCING WITHIN THE DUCT BANK (PER SCL CONSTRUCTION GUIDELINE U2-11.2) A MINIMUM OF 10' BEYOND THE CROSSING



(NAVD) 88

SCALE IN FEET HORIZ.      SCALE IN FEET VERT.

FILE NAME X:\110000-110250\110159 (Alaskan Way Viaduct North Access)\CADD\Design\005-MWNA-CPR1.dwg									
TIME	4:39pm		DATE	Dec-21-15		REGION NO.	STATE	FED.AID PROJ.NO.	
PLOTTED BY	J.LINEHAN		DESIGNED BY	C.PARK		JOB NUMBER	10 WASH		
ENTERED BY	J.LINEHAN		CHECKED BY	S.BARTLETT		PROJ. ENGR.	S. BEADLE	CO-125: NEW VAULT M-1	
REGIONAL ADM.	T. TREPANIER		REVISION	12/17/2015 CDP		DATE	BY		



**k p f** Consulting Engineers  
1601 Fifth Avenue, Suite 1600  
Seattle, Washington 98101-3665  
(206) 622-5822 Fax (206) 622-8130



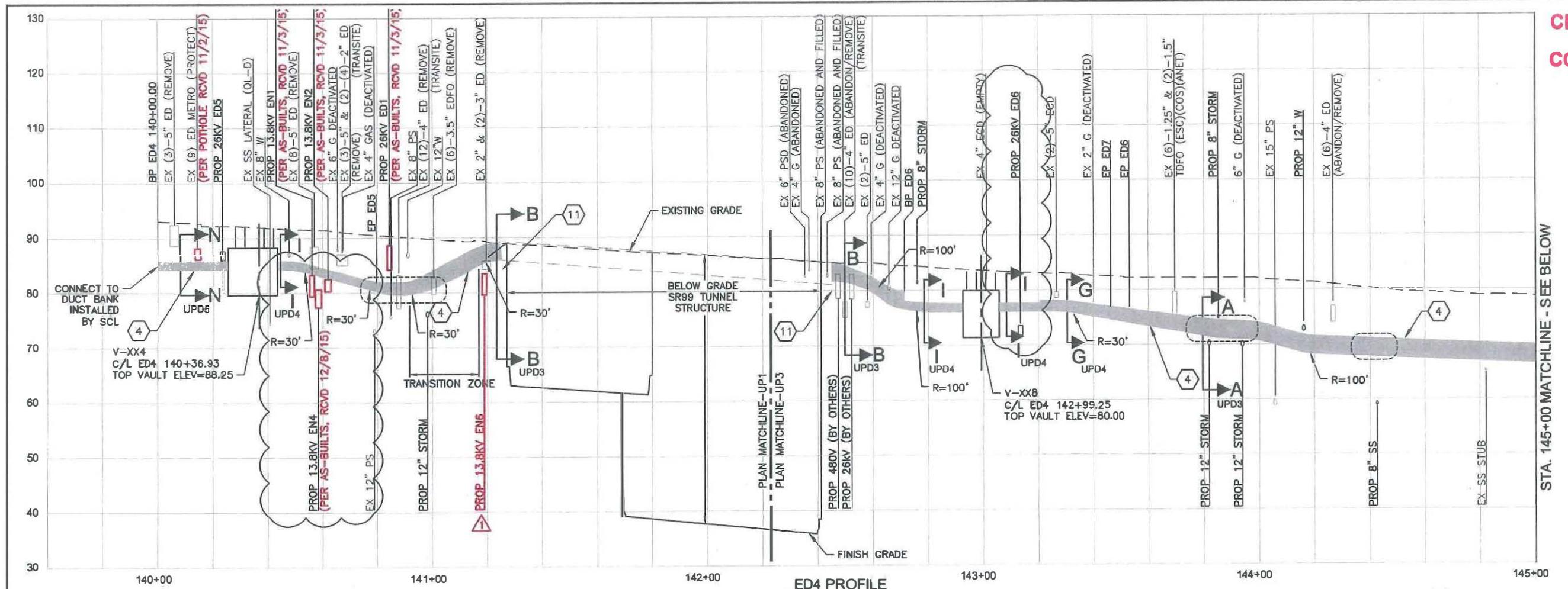
**SR 99**  
**ALASKAN WAY VIADUCT-REPLACEMENT**  
**NORTH ACCESS CONNECTION**

**POWER PROFILE**

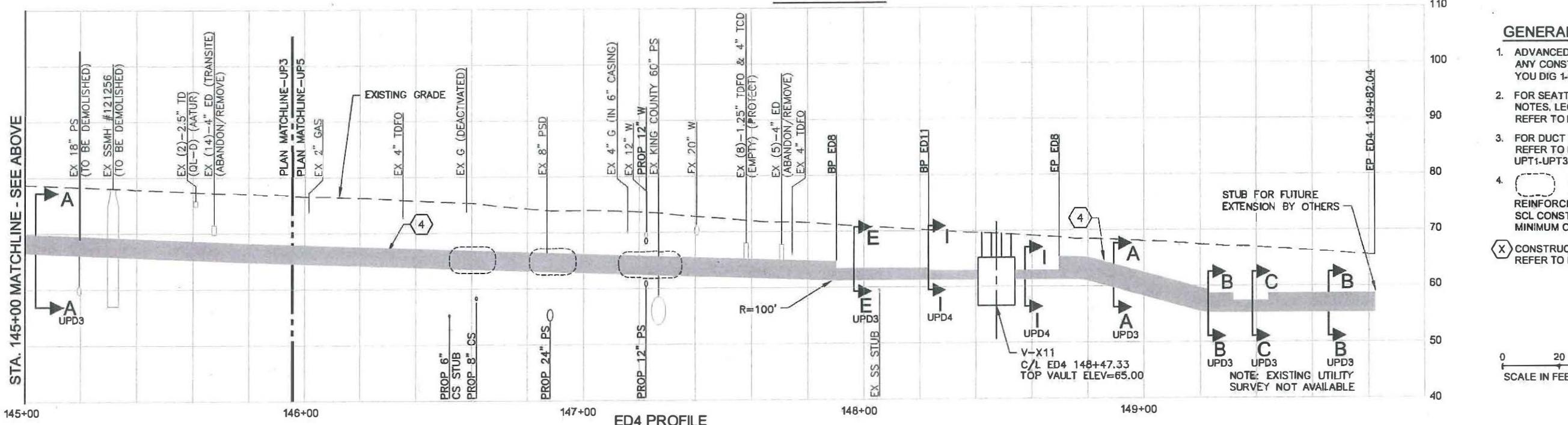
PLAN REF. NO.  
**UPR2**  
SHEET 220 OF 770 SHEETS

CHANGE ORDER NO. 125

**CONTRACT** 8549



ED4 PROFILE



ED4 PROFILE

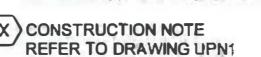
## **GENERAL NOTES:**

- ADVANCED NOTIFICATION IS NEEDED BEFORE ANY CONSTRUCTION OCCURS. CALL BEFORE YOU DIG 1-800-424-5555.**

**FOR SEATTLE CITY LIGHT UNDERGROUNDING NOTES, LEGEND, AND STRUCTURE NOTES, REFER TO DRAWINGS UPN1-UPN2.**

**FOR DUCT BANK ALIGNMENT INFORMATION, REFER TO DRAWINGS UPAL1-UPAL6 AND UPT1-UPT3.**

**WHERE DUCT BANKS CROSS ABOVE PS AND PSD MAINS, INSTALL REINFORCING WITHIN THE DUCT BANK (PER SCL CONSTRUCTION GUIDELINE U2-11.2) A MINIMUM OF 10' BEYOND THE CROSSING**



**SCALE IN FEET HORIZ.**      **SCALE IN FEET VERT.**

FILE NAME X:\110000-110250\110159 (Alaskan Way Viaduct North Access)\CADD\Design\005-MWNA-CPR1.dwg

TIME	4:40am	REVISION		DATE	
DATE	Dec-21-15				
PLOTTED BY	J.LINEHAN				
DESIGNED BY	C.PARK				
ENTERED BY	J.LINEHAN				
CHECKED BY	S.BARTLETT	CO-125: NEW VAULT M-1		12/17/2015	CDP
PROJ. ENGR.	S. BEADLE	AD1. ED4 PROFILE UPDATE		11/04/2013	CDP
REGIONAL ADM.	T. TREPANIER				

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
JOB NUMBER		
<b>13A003</b>		
CONTRACT NO.		LOCATION NO.
		<b>XL-3687</b>



**KPTI Consulting Engineers**  
1601 Fifth Avenue, Suite 1600  
Seattle, Washington 98101-3665  
(206) 622-5822 Fax (206) 622-8130

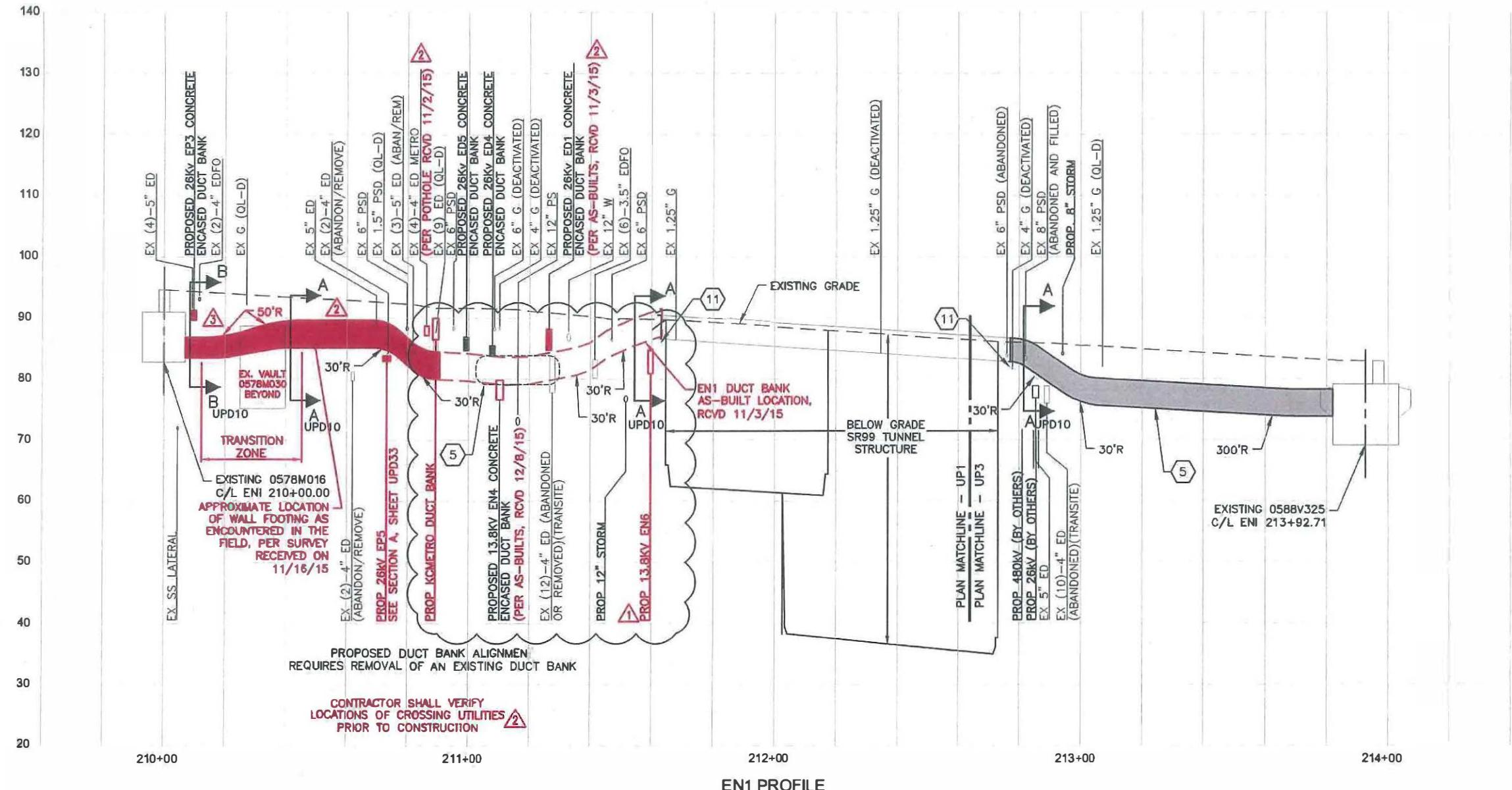


**SR 99**  
**ALASKAN WAY VIADUCT-REPLACEMENT**  
**NORTH ACCESS CONNECTION**

## POWER PROFILE

N REF. NO.  
**PR3**  
SHEET  
221  
OF  
**770**  
SHEETS

SHEET 14 OF 23  
 CHANGE ORDER NO. 125  
 CONTRACT 8549



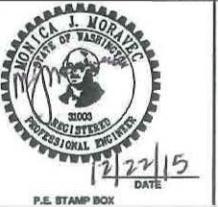
- GENERAL NOTES:**
- ADVANCED NOTIFICATION IS NEEDED BEFORE ANY CONSTRUCTION OCCURS. CALL BEFORE YOU DIG 1-800-424-6555.
  - FOR SEATTLE CITY LIGHT UNDERGROUND NOTES, LEGEND, AND STRUCTURE NOTES, REFER TO DRAWINGS UPN1-UPN2.
  - FOR DUCT BANK ALIGNMENT INFORMATION, REFER TO DRAWINGS UPAL1-UPAL6 AND UPT1-UPT3.
  - WHERE DUCT BANKS CROSS ABOVE PS AND PSD MAINS, INSTALL REINFORCING WITHIN THE DUCT BANK (PER SCL CONSTRUCTION GUIDELINE U2-11.2)A MINIMUM OF 10' BEYOND THE CROSSING
- (X)** CONSTRUCTION NOTE  
REFER TO DRAWING UPN1

0 20 40 0 10 20  
SCALE IN FEET HORIZ. SCALE IN FEET VERT.



(NAVD) 88

FILENAME X:\110000-110250\110159 (Alaskan Way Viaduct North Access)\CADD\Design\005-MWNA-CPR1.dwg									
TIME 4:40am					REGION NO. 10	STATE WASH	FED. AID PROJ. NO.		
DATE Dec-21-15							JOB NUMBER 13A003		
PLOTTED BY J.LINNEHAN							CONTRACT NO.		
DESIGNED BY C.PARK	CO 147: EP3 RELOCATION		12/17/2015	CDP			LOCATION NO.		
ENTERED BY J.LINNEHAN	CO-133: EN3 RELOCATION		12/17/2015	CDP					
CHECKED BY S.BARTLETT	CO-125: NEW VAULT M-1		12/17/2015	CDP					
PROJ. ENGR. S. BEADLE	AD1. EN1 PROFILE UPDATE		11/04/2013	CDP					
REGIONAL ADM. T. TREPANIER									



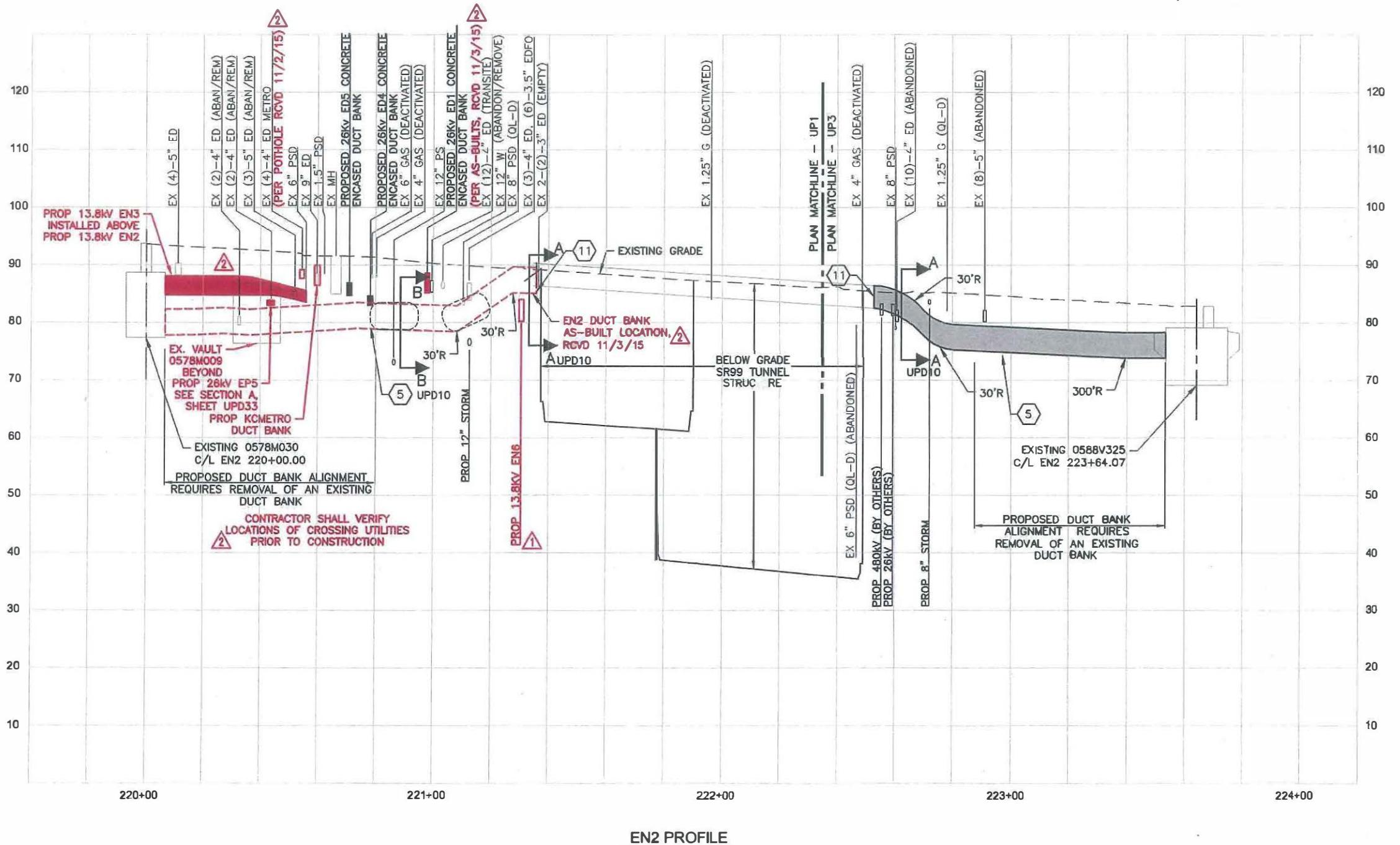
kpf Consulting Engineers  
1601 Fifth Avenue, Suite 1600  
Seattle, Washington 98101-3665  
(206) 622-5822 Fax (206) 622-8130  
P.E. STAMP BOX 11/21/15 DATE



SR 99  
ALASKAN WAY VIADUCT-REPLACEMENT  
NORTH ACCESS CONNECTION  
POWER PROFILE

PLAN REF. NO. UPR7  
SHEET 225 OF 770 SHEETS

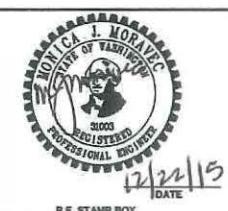
SHEET 15 OF 23  
CHANGE ORDER NO. 125  
CONTRACT 8549



## EN2 PROFILE

FILE NAME	X:\110000-110250\110159 (Alaskan Way Viaduct North Access)\CADD\Design\005-MWNA-CPR1.dwg	
TIME	4:40am	
DATE	Dec-21-15	
PLOTTED BY	J.LINEHAN	
DESIGNED BY	C.PARK	
ENTERED BY	J.LINEHAN	
CHECKED BY	S.BARTLETT	CO-133: EN3 RELOCATION
PROJ. ENGR.	S. BEADLE	CO-125: NEW VAULT M-1
REGIONAL ADM.	T. TREPANIER	REVISION

		REGION NO.	STATE	FED.AID PROJ.NO.
		10	WASH	
		JOB NUMBER		
		<b>13A003</b>		
<b>12/17/2015</b>	<b>CDP</b>	CONTRACT NO.		LOCATION NO.
<b>12/17/2015</b>	<b>CDP</b>			<b>XL-3687</b>
<b>DATE</b>	<b>BY</b>			



**KPFI Consulting Engineers**  
1601 Fifth Avenue, Suite 1600  
Seattle, Washington 98101-3665  
(206) 622-5822 Fax (206) 622-8130

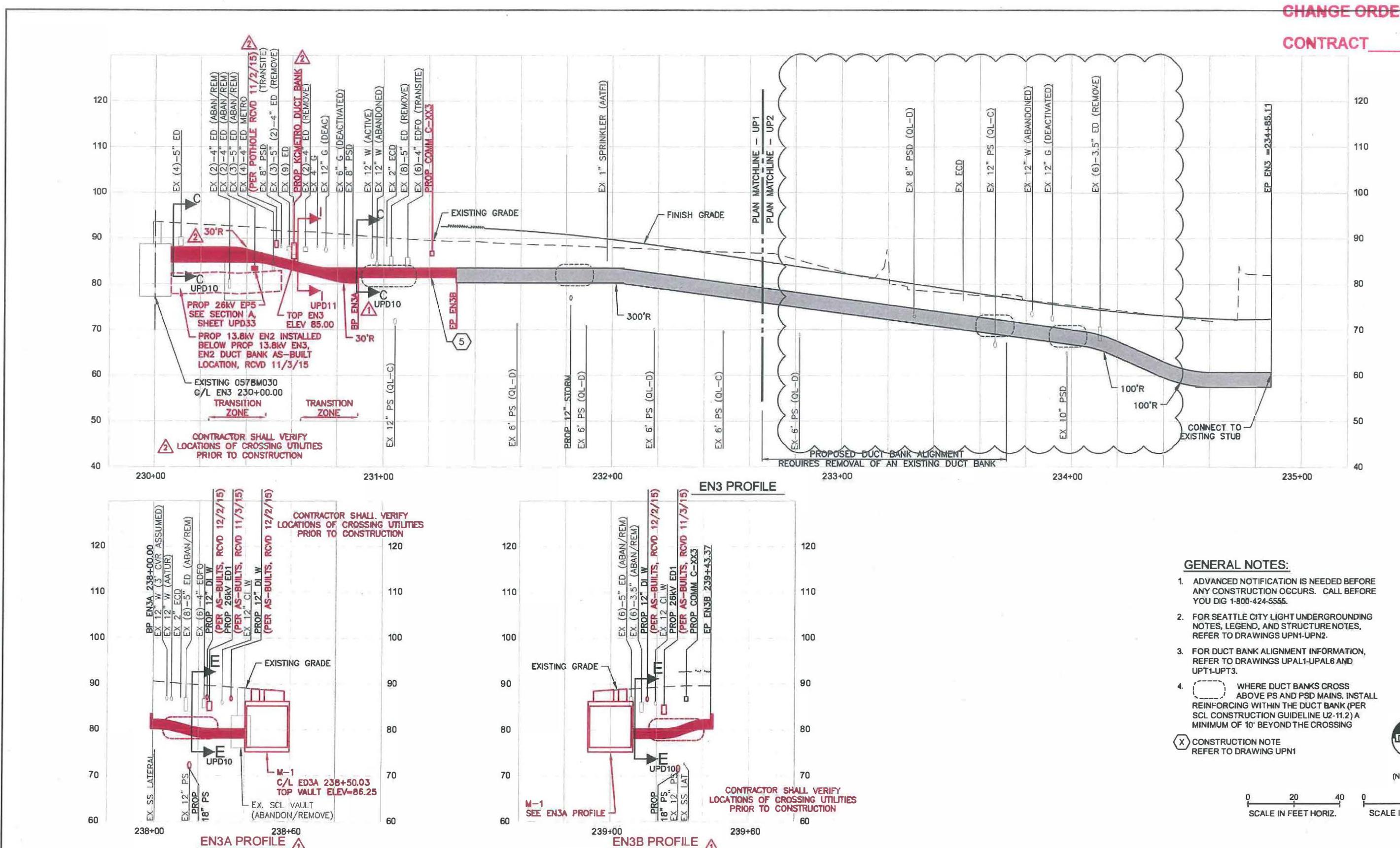


**SR 99**  
**ALASKAN WAY VIADUCT-REPLACEMENT**  
**NORTH ACCESS CONNECTION**

#### POWER PROFILE

LAN REF. NO.  
**JPR8**

---



FILENAME X:\10000-110250\110159 (Alaskan Way Viaduct North Access)\CADD\Design\005-MWNA-CPR1.dwg

TIME	4:40am
DATE	Dec-21-15
PLOTTED BY	J.LINEHAN
DESIGNED BY	C.PARK
ENTERED BY	J.LINEHAN
CHECKED BY	S.BARTLETT
PROJ. ENGR.	S. BEADLE
REGIONAL ADM.	T. TREPANIER

REVISION

DATE

BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
		JOB NUMBER
		13A003
		CONTRACT NO.
		LOCATION NO.
		XL-3687



kpf

Consulting Engineers  
1601 Fifth Avenue, Suite 1600  
Seattle, Washington 98101-3665  
(206) 622-5822 Fax (206) 622-8130

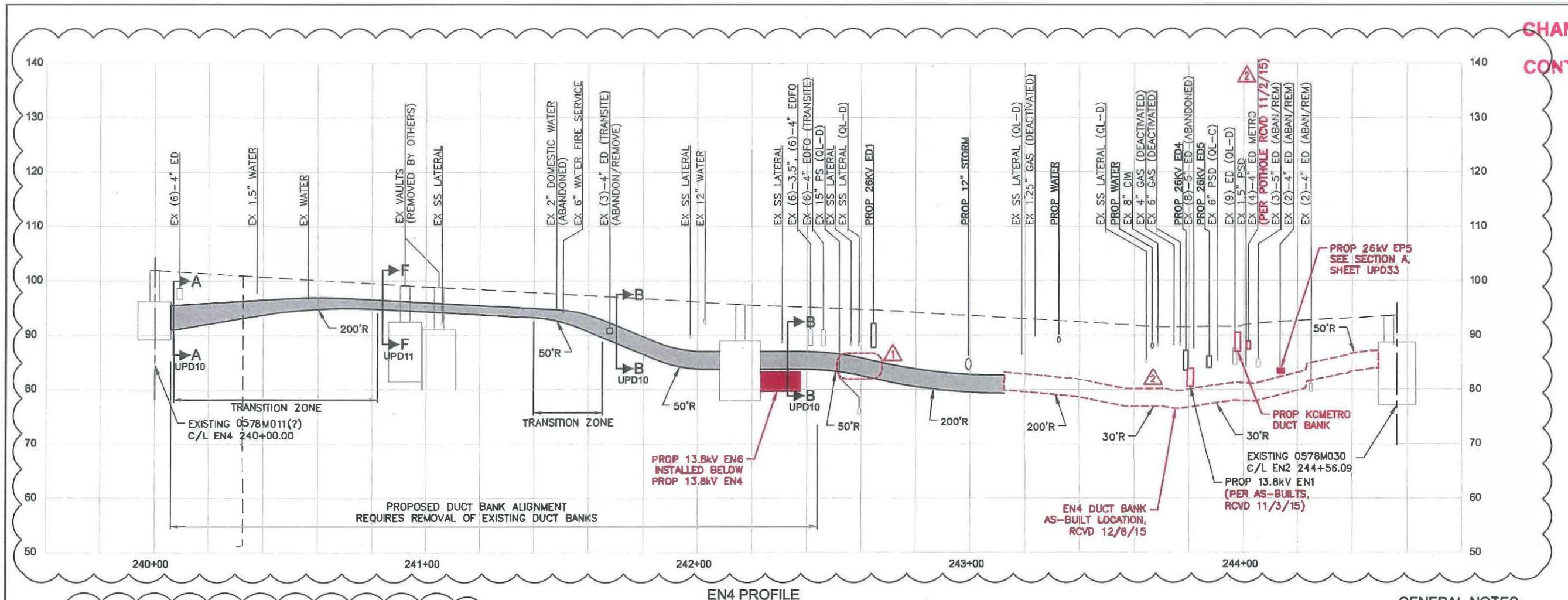


SR 99  
ALASKAN WAY VIADUCT-REPLACEMENT  
NORTH ACCESS CONNECTION

POWER PROFILE

PLAN REF. NO.	UPR9
SHEET	227 OF 770 SHEETS

CHANGE ORDER NO. 125  
CONTRACT 8549



EN4 PROFILE

## GENERAL NOTES:

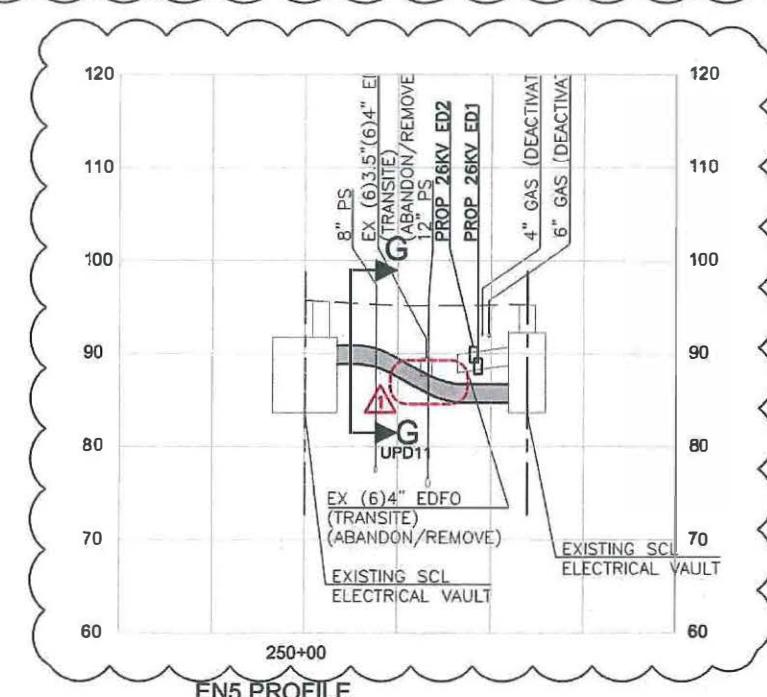
- ADVANCED NOTIFICATION IS NEEDED BEFORE ANY CONSTRUCTION OCCURS. CALL BEFORE YOU DIG 1-800-424-5555.
- FOR SEATTLE CITY LIGHT UNDERGROUNDING NOTES, LEGEND, AND STRUCTURE NOTES, REFER TO DRAWINGS UPN1-UPN2.
- FOR DUCT BANK ALIGNMENT INFORMATION, REFER TO DRAWINGS UPAL1-UPAL6 AND UPT1-UPT3.
- WHERE DUCT BANKS CROSS ABOVE PS AND PSD MAINS, INSTALL REINFORCING WITHIN THE DUCT BANK (PER SCL CONSTRUCTION GUIDELINE U2-11.2) A MINIMUM OF 10' BEYOND THE CROSSING

CONSTRUCTION NOTE  
REFER TO DRAWING UPN1



(NAVD) 88

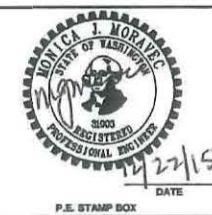
SCALE IN FEET HORIZ. 0 20 40 0 10 20  
SCALE IN FEET VERT.



EN5 PROFILE

FILE NAME X:\110000-110250\110159 (Alaskan Way Viaduct North Access)\CADD\Design\005-MWNA-CPR1.dwg									
TIME 4:40am									
DATE Dec-21-15									
PLOTTED BY J.LINEHAN									
DESIGNED BY C.PARK									
ENTERED BY J.LINEHAN	CO-133: EN3 RELOCATION	12/17/2015	CDP						
CHECKED BY S.BARTLETT	CO-125: NEW VAULT M-1	12/17/2015	CDP						
PROJ. ENGR. S. BEADLE	AD1. EN4 PROFILE ADDED, EN5 PROFILE UPDATE	11/04/2013	CDP						
REGIONAL ADM. T. TREPANIER	REVISION								
	DATE								
	BY								

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	
		JOB NUMBER
		13A003
		CONTRACT NO.
		LOCATION NO.
		XL-3687
		P.E. STAMP BOX
		12/22/15
		DATE



kpff

Consulting Engineers  
1601 Fifth Avenue, Suite 1600  
Seattle, Washington 98101-3665  
(206) 622-5822 Fax (206) 622-8130

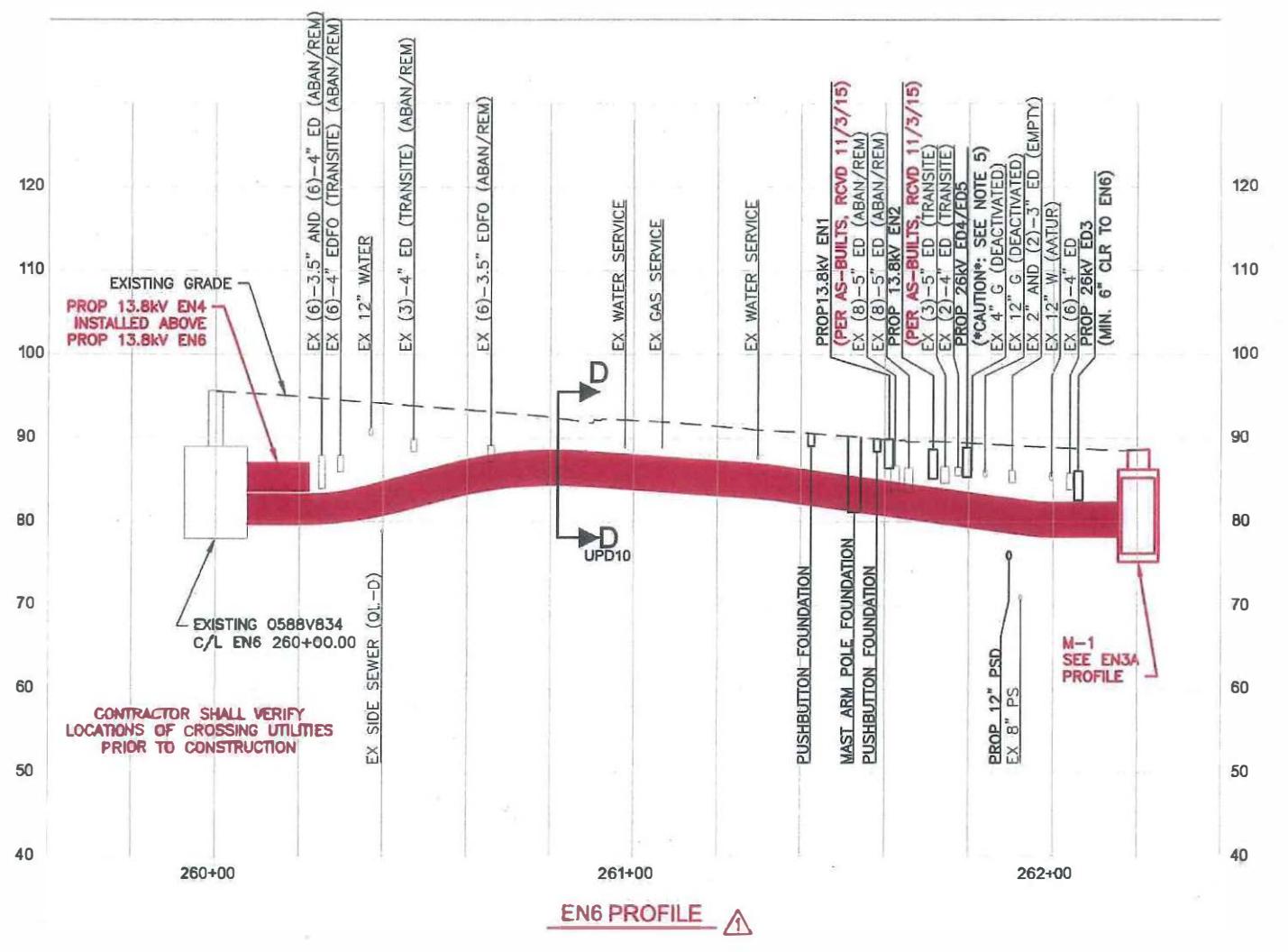


SR 99  
ALASKAN WAY VIADUCT-REPLACEMENT  
NORTH ACCESS CONNECTION

POWER PROFILE

PLAN REF. NO.  
UPR10  
SHEET 228  
OF 770  
LETS

SHEET 18 OF 23  
 CHANGE ORDER NO. 125  
 CONTRACT 8549



EN6 PROFILE

**GENERAL NOTES:**

- ADVANCED NOTIFICATION IS NEEDED BEFORE ANY CONSTRUCTION OCCURS. CALL BEFORE YOU DIG 1-800-424-5555.
- FOR SEATTLE CITY LIGHT UNDERGROUNDING NOTES, LEGEND, AND STRUCTURE NOTES, REFER TO DRAWINGS UPN1-UPN2.
- FOR DUCT BANK ALIGNMENT INFORMATION, REFER TO DRAWINGS UPAL1-UPAL6 AND UPT1-UPT3.
- WHERE DUCT BANKS CROSS ABOVE PS AND PSD MAINS, INSTALL REINFORCING WITHIN THE DUCT BANK (PER SCL CONSTRUCTION GUIDELINE U2-11.2)A MINIMUM OF 10' BEYOND THE CROSSING
- THE ED4/5 DUCT BANK HAS BEEN IDENTIFIED BY SCL TO BE AN ENERGIZED DUCT BANK. CONTRACTOR SHALL COORDINATE WITH SCL TO IDENTIFY OTHER ENERGIZED FACILITIES IN THE VICINITY, AND TO SUPPORT EXISTING DUCT BANKS TO REMAIN.

CONSTRUCTION NOTE  
 REFER TO DRAWING UPN1



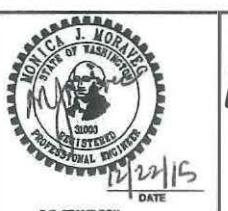
(NAVD)88

0 20 40 0 10 20  
 SCALE IN FEET HORIZ. SCALE IN FEET VERT.

NEW SHEET

FILE NAME	X:\110000-110250\110159 (Alaskan Way Viaduct North Access)\CADDIDesign\005-MWNA-CPR1.dwg
TIME	4:40am
DATE	Dec-21-15
PLOTTED BY	K.BOSTON
DESIGNED BY	C.PARK
ENTERED BY	K.BOSTON
CHECKED BY	S.BARTLETT
PROJ. ENGR.	S. BEADLE
REGIONAL ADM.	T. TREPANIER

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	13A003
JOB NUMBER		
CONTRACT NO.		
LOCATION NO.		XL-3687
REVISION		12/17/2015
DATE		CDP
BY		

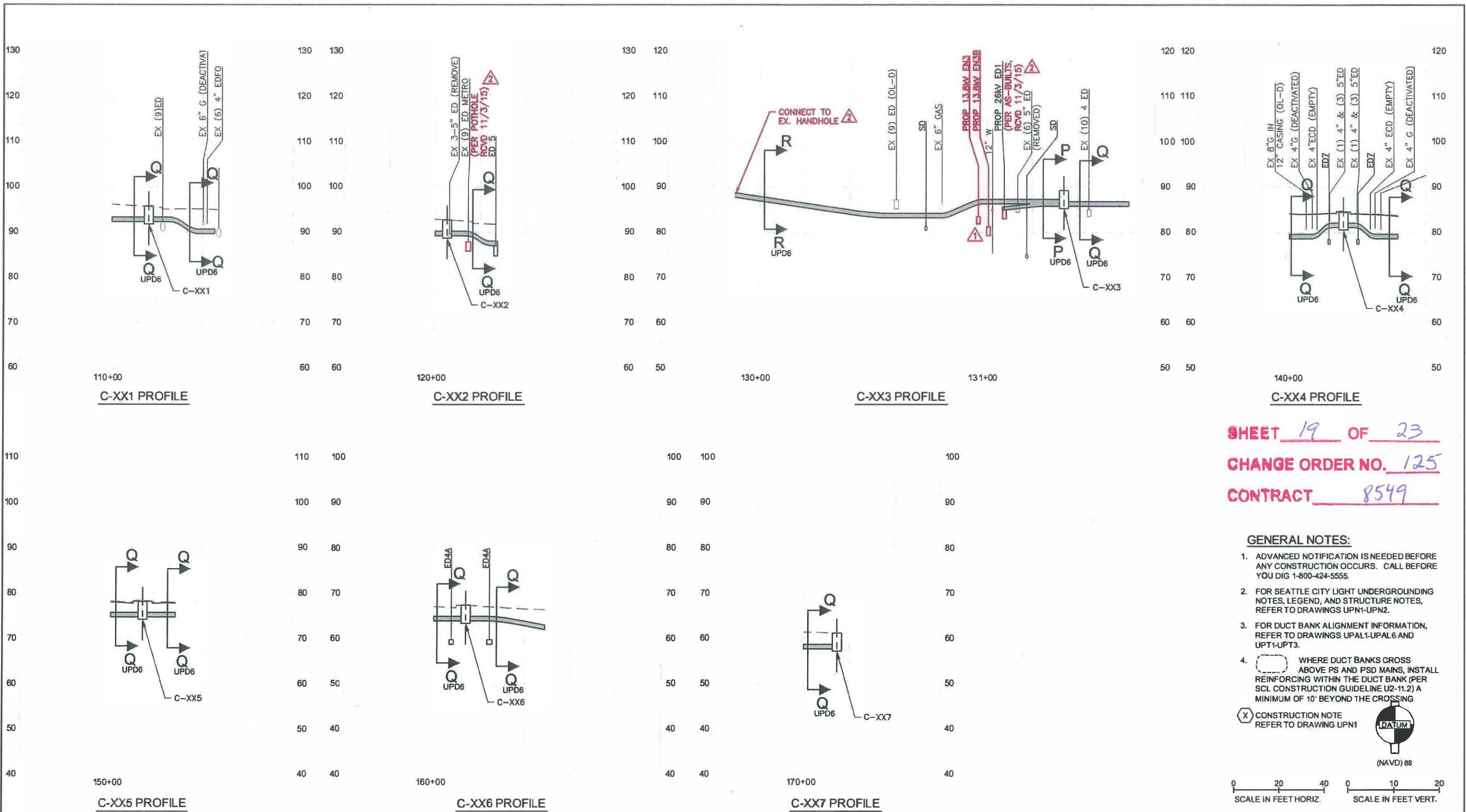


**kpf** Consulting Engineers  
 1601 Fifth Avenue, Suite 1600  
 Seattle, Washington 98101-3665  
 (206) 622-5822 Fax (206) 622-8130  
 P.E. STAMP BOX  
 12/21/15

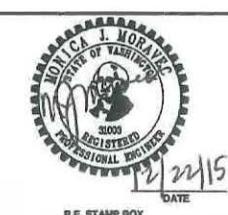


**SR 99**  
**ALASKAN WAY VIADUCT-REPLACEMENT**  
**NORTH ACCESS CONNECTION**  
**POWER PROFILE**

PLAN REF. NO.  
 UPR10A  
 SHEET  
 228A  
 OF  
 770  
 SHEETS



FILE NAME		X:\110000-110250\110159 (Alaskan Way Viaduct North Access)\CADD\Design\005-MWNA-CPR1.dwg	
TIME	4:41am	REGION NO.	STATE
DATE	Dec-21-15	JOB NUMBER	10 WASH
PLOTTED BY	J.LINEHAN	CONTRACT NO.	13A003
DESIGNED BY	C.PARK	LOCATION NO.	XL-3687
ENTERED BY	J.LINEHAN	P.E. STAMP BOX	2/2/15
CHECKED BY	S.BARTLETT	DATE	2/2/15
PROJ. ENGR.	S. BEADLE	BY	
REGIONAL ADM.	T. TREPANIER	REVISION	



**kpf** Consulting Engineers  
1601 Fifth Avenue, Suite 1600  
Seattle, Washington 98101-3665  
(206) 622-5822 Fax (206) 622-8130

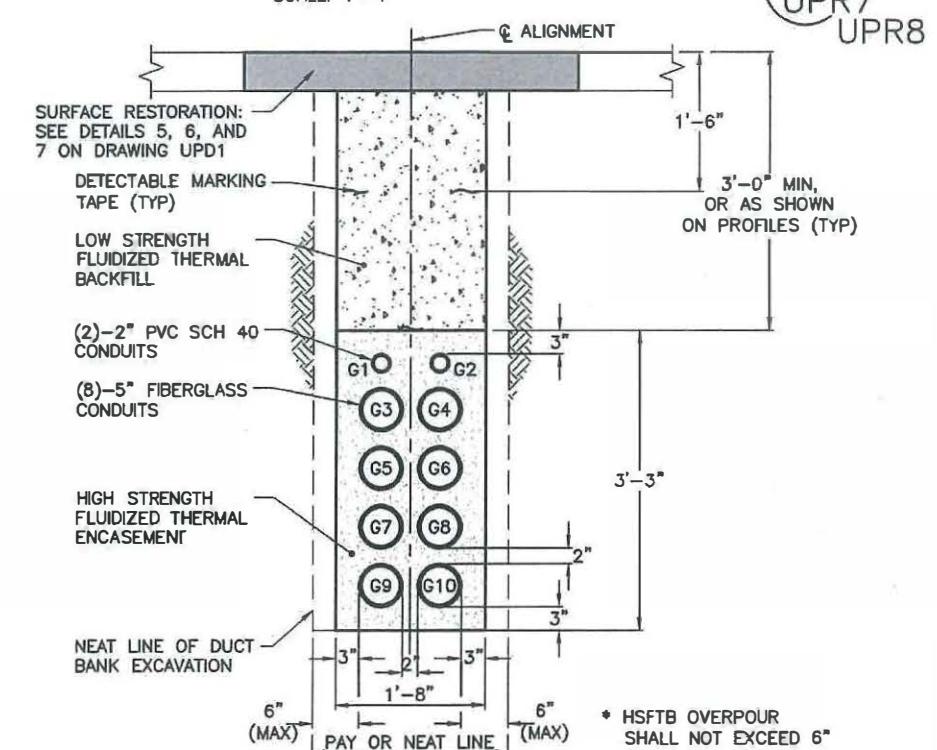
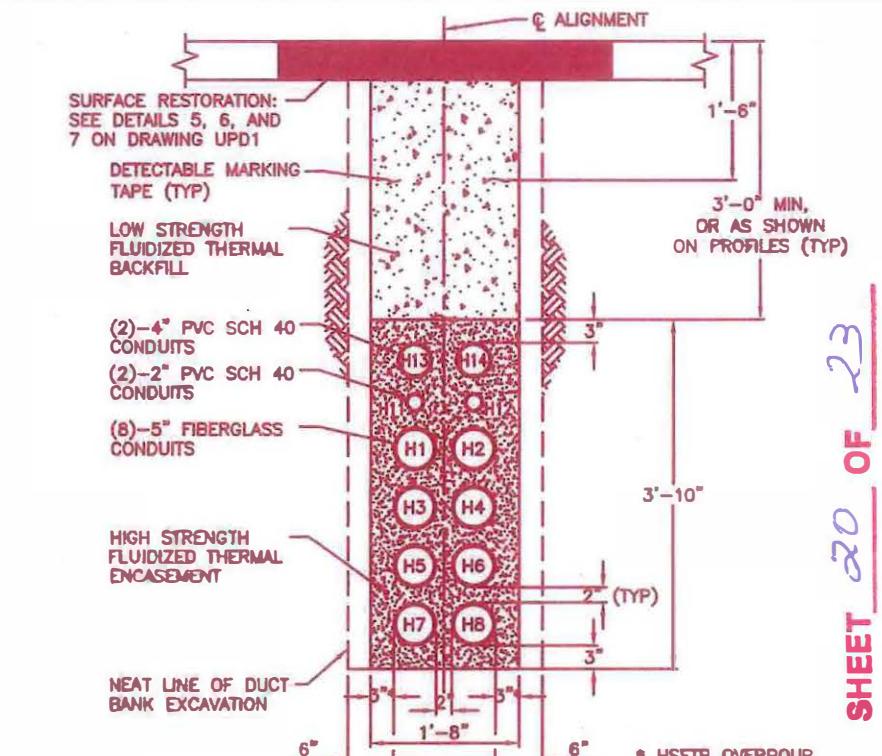
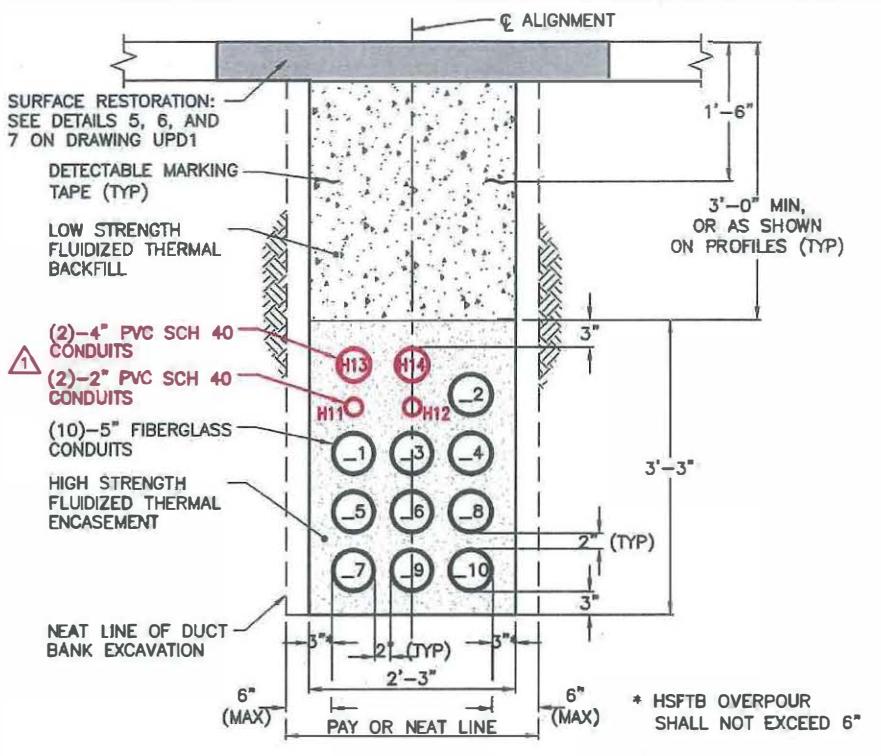
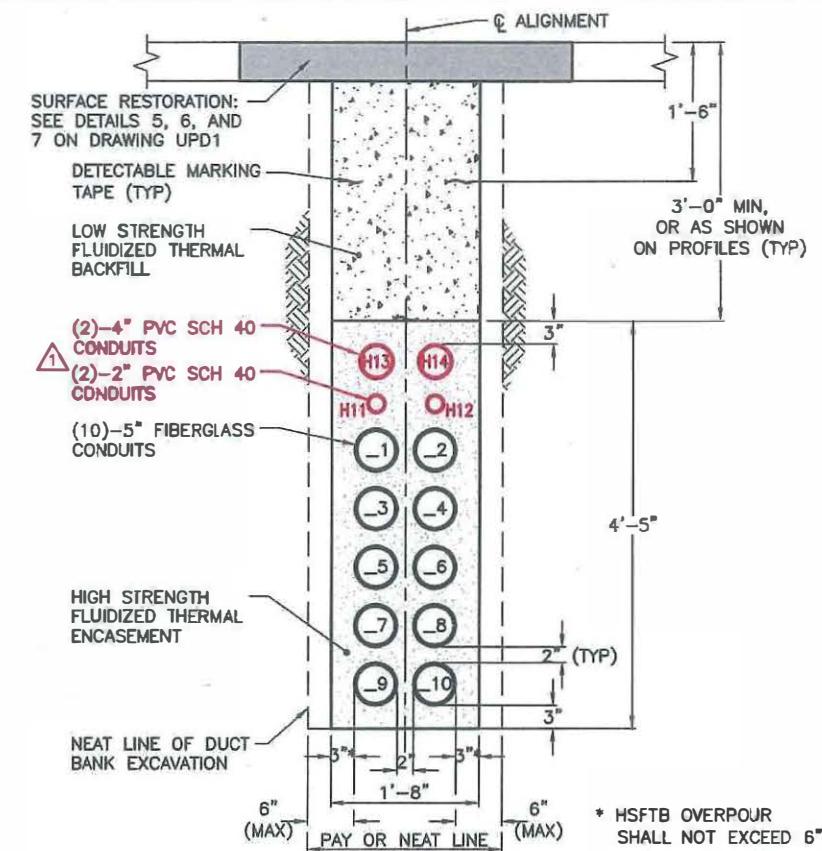


**SR 99**  
**ALASKAN WAY VIADUCT-REPLACEMENT**  
**NORTH ACCESS CONNECTION**

PLAN REF. NO.  
**UPR12**

SHEET 230 OF 770 SHEETS

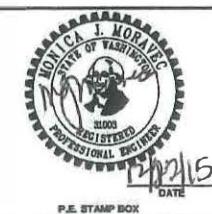
**POWER PROFILE**



13.8kV DISTRIBUTION DUCT BANK SECTION F  
SCALE: 1"=1'  
UPR7 UPR8

FILE NAME		X:\110000-110250\110159 (Alaskan Way Viaduct North Access)\CADD\Design\003-MWNA-CPD1.dwg	
TIME	4:42am	DATE	Dec-21-15
PLOTTED BY	J.LINEHAN	DESIGNED BY	C.PARK
ENTERED BY	J.LINEHAN	CHECKED BY	S.BARTLETT
PROJ. ENGR.	S. BEADLE	REGIONAL ADM.	T. TREPANIER
CO-125: NEW VAULT M-1		12/17/2015 CDP	
RFI 64 (BASED ON RFI 37 RESPONSE)		REVISION	DATE BY

REGION NO. 10	STATE WASH	FED.AID PROJ.NO. 13A003
JOB NUMBER 13A003		CONTRACT NO. XL-3687
LOCATION NO. XL-3687		
P.E. STAMP BOX MAY 15		



**kpf** Consulting Engineers  
1601 Fifth Avenue, Suite 1600  
Seattle, Washington 98101-3665  
(206) 622-5822 Fax (206) 622-8130



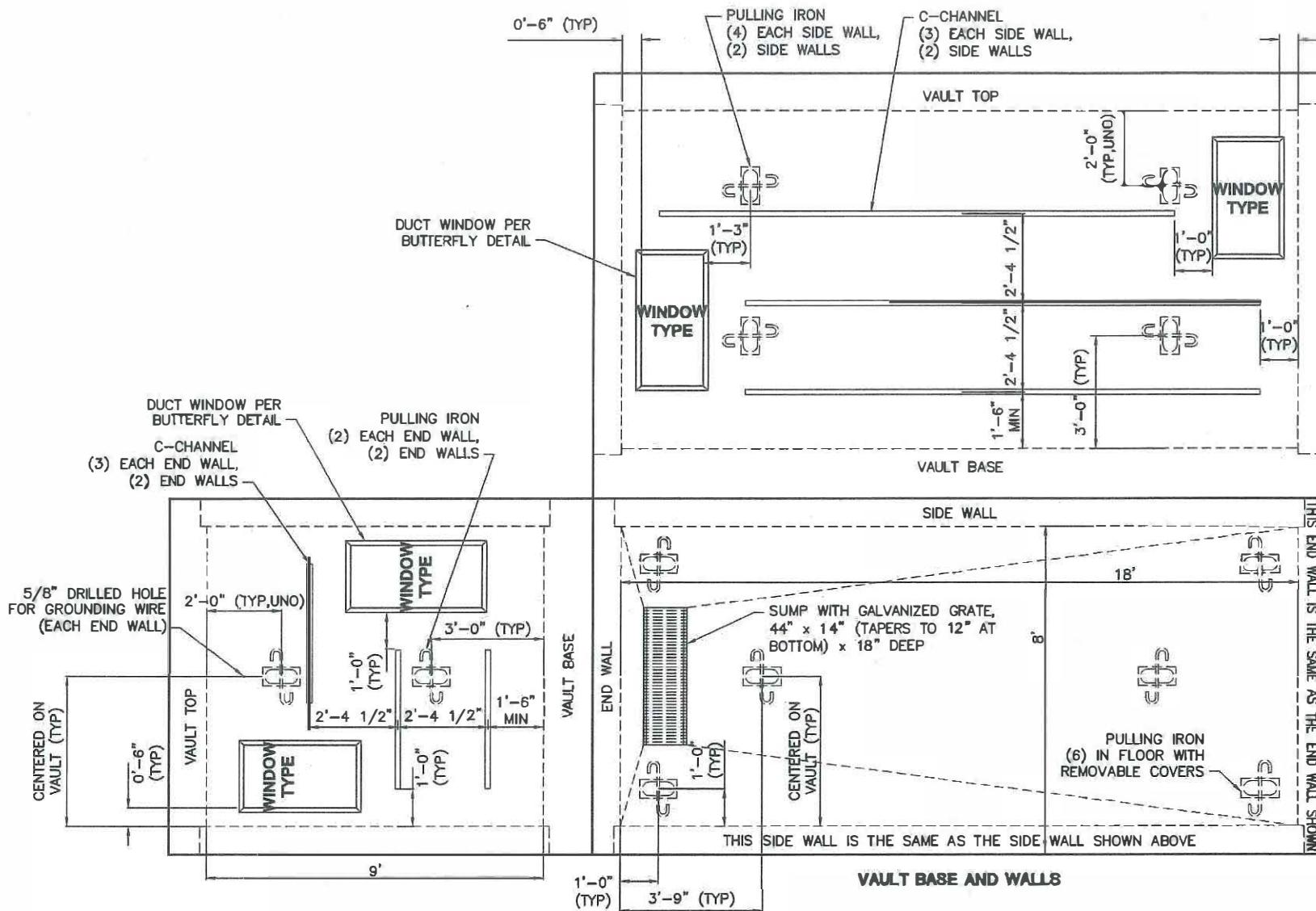
SR 99  
ALASKAN WAY VIADUCT-REPLACEMENT  
NORTH ACCESS CONNECTION  
POWER DETAILS

PLAN REF. NO.  
UPD10  
SHEET 240 OF 770 SHEETS

SHEET 20 OF 23

CHANGE ORDER NO. 125

CONTRACT 8549

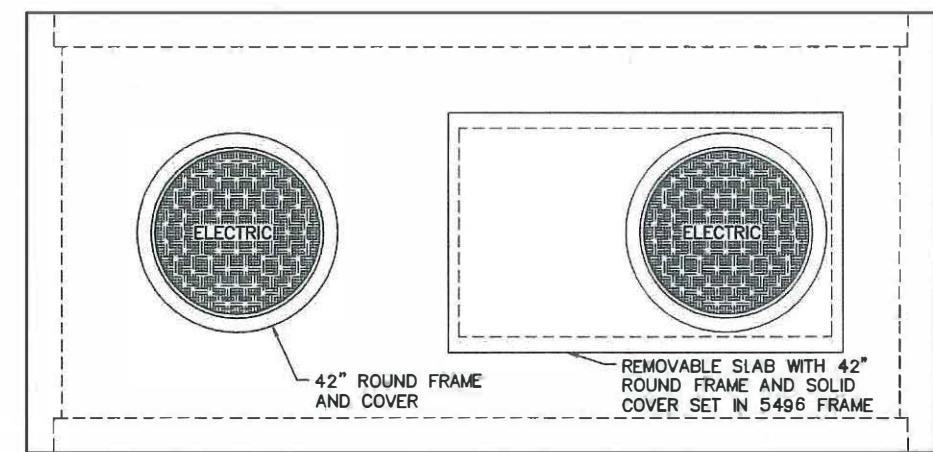
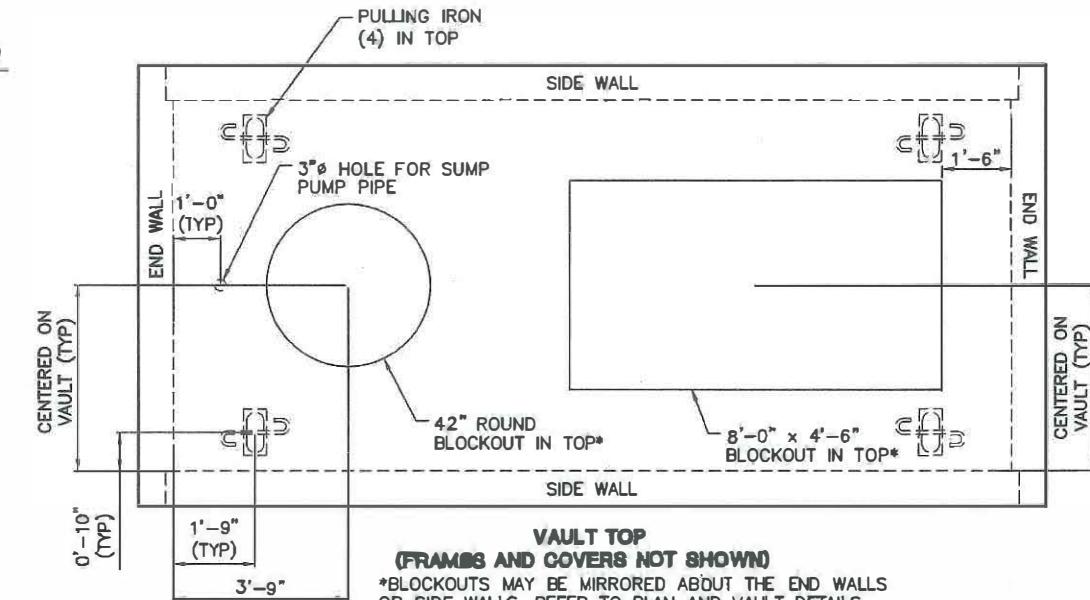


SCL 818 PANEL VAULT TYPICAL DETAIL 1

SCALE: 1"=2'

**NOTES**

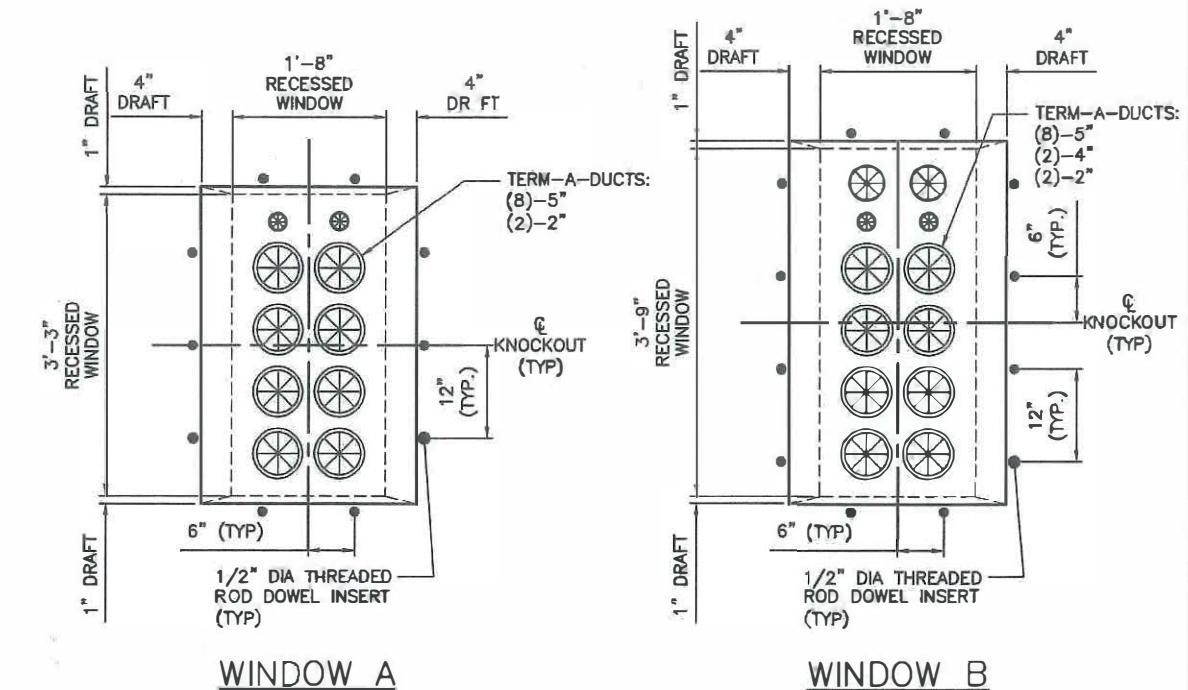
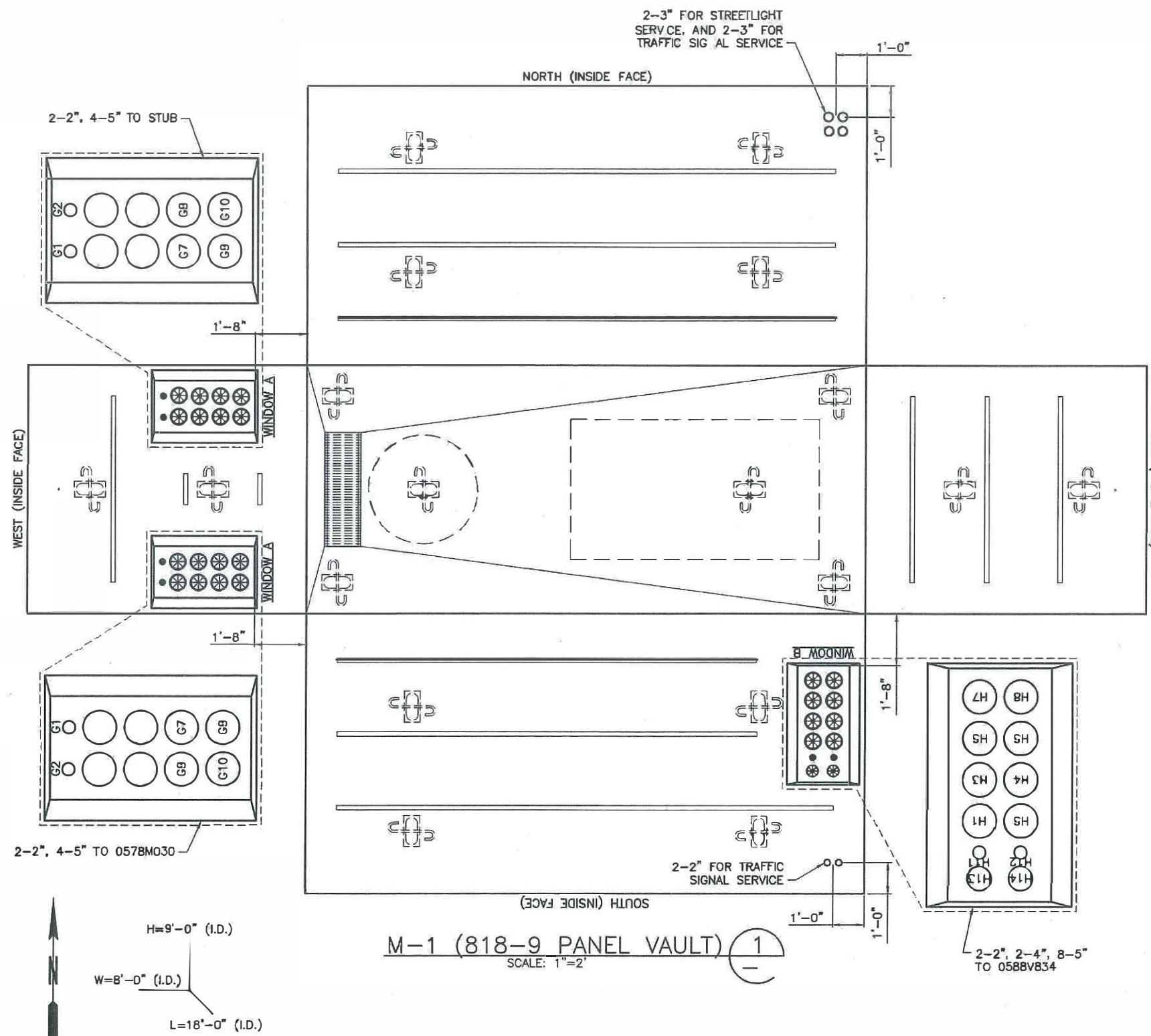
- REF TO BUTTERFLY DETAILS AND PLANS FOR CONDUITS REQUIRED AT EACH VAULT. THE VAULT BUTTERFLY DETAILS WILL INDICATE THE VAULT OR FEATURE THAT THE CONDUITS COME FROM.
- BYPASSING SCL COMMUNICATION CONDUITS SHALL NOT BE INSTALLED ABOVE THE VAULT LID, UNLESS SPECIFICALLY NOTED, AS THIS WOULD PREVENT FUTURE REMOVAL OF THE VAULT LID. REFER TO THE PLANS FOR COMMUNICATION CONDUIT BYPASS ROUTING.
- PROVIDE PULLING IRONS RATED FOR A MINIMUM OF 20K MAXIMUM WORKING TENSION AND 40K ULTIMATE STRENGTH.
- MULTISECTION VAULTS SHALL INCORPORATE EITHER SHIPLAP OR TONGUE AND GROOVE JOINTS UTILIZING SILICONE, POLYMERIC, OR ELASTOMERIC SEALANTS.
- VAULTS SHALL BE DESIGNED TO WITHSTAND EXTERNAL LOADINGS AS REQUIRED IN THE PROJECT SPECIFICATIONS AND SCL MATERIAL STANDARDS.
- VAULT ACCESS COVER SHALL BE ROUND 42" DIAMETER FRAME AND COVER LABELED "ELECTRIC."
- PULLING IRONS SHOWN FIGURATIVELY. VAULT MANUFACTURER SHALL ROTATE PULLING IRONS AS NEEDED BASED ON THEIR STRUCTURAL CALCULATIONS.
- VAULT GROUNDING: VAULT GROUNDING SHALL CONFORM WITH SCL CONSTRUCTION GUIDELINES/STANDARDS NVH-80 AND 0461.10.



**SHEET 21 OF 23**  
**CHANGE ORDER NO. 125**  
**CONTRACT 8549**

**⚠ NEW SHEET**

FILE NAME	X:\110000-110250\110159 (Alaskan Way Viaduct North Access)\CADD\Design003-MWNA-CPD2.dwg	REGION NO.	10	STATE	WASH	FED.AID PROJ.NO.		CONSULTING ENGINEERS	SR 99	ALASKAN WAY VIADUCT-REPLACEMENT	NORTH ACCESS CONNECTION	PLAN REF. NO.	
TIME	4:42am	JOB NUMBER	13A003	CONTRACT NO.		LOCATION NO.			1601 Fifth Avenue, Suite 1600 Seattle, Washington 98101-3665 (206) 622-5822 Fax (206) 622-8130	DATE	UPD19A		
DATE	Dec-21-15	REVISION	12/17/2015	CDP		DATE	4/21/15	BY		POWER DETAILS	249A OF 770 SHEETS		
PLotted BY	K.BOSTON	checked by	S.BARTLETT	PROJ. ENGR.	S. BEADLE	Regional Adm.	T. TREPANIER	CO-125: NEW VAULT M-1	12/17/2015	CDP	REVISION	DATE	BY



**SHEET 22 OF 23**  
**CHANGE ORDER NO. 125**  
**CONTRACT 8549**

PRIOR TO M-1 VAULT INSTALLATION,  
 CONTRACTOR SHALL VERIFY LOCATION  
 OF ED3 AND ED4/5 DUCT BANKS TO  
 CONFIRM THE EN6 PROFILE, PER  
 DRAWING UPR10A

△ NEW SHEET

FILE NAME X:\110000\110250\110159 (Alaskan Way Viaduct North Access)\CADD\Design\003-MWNA-CPD2.dwg

TIME 4:42am

DATE Dec-21-15

PLotted BY K.BOSTON

DESIGNED BY C.PARK

ENTERED BY K.BOSTON

CHECKED BY S.BARTLETT

PROJ. ENGR. S. BEADLE

REGIONAL ADM. T. TREPANIER

CO-125: NEW VAULT M-1

REVISION

12/17/2015

CDP

DATE

BY

REGION NO.

10

STATE

WASH

FED.AID PROJ.NO.

STATE

JOB NUMBER

13A003

CONTRACT NO.

LOCATION NO.

XL-3687

P.E. STAMP BOX



kpf

Consulting Engineers  
1601 Fifth Avenue, Suite 1600  
Seattle, Washington 98101-3665  
(206) 622-5822 Fax (206) 622-8130



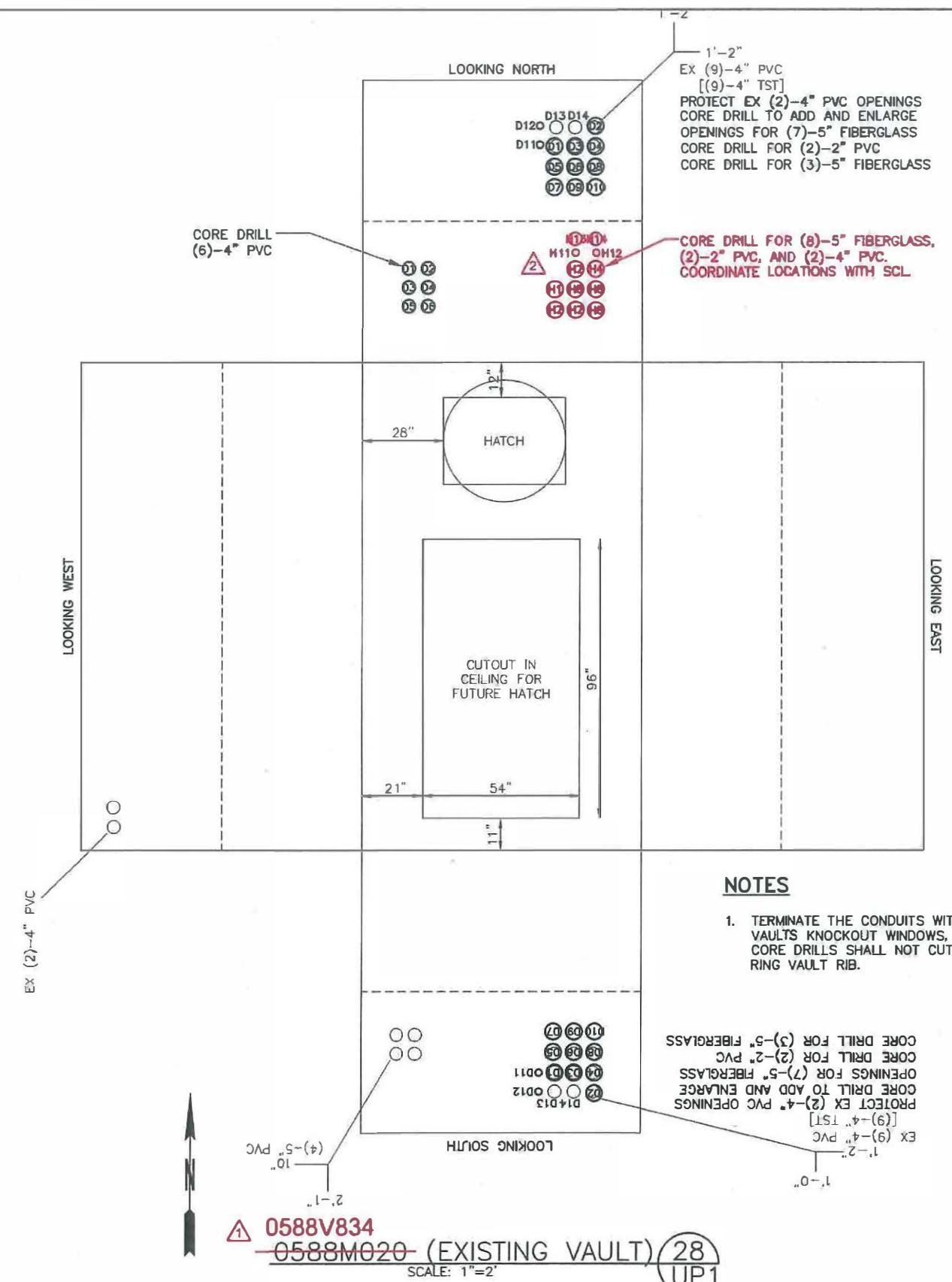
SR 99  
ALASKAN WAY VIADUCT-REPLACEMENT  
NORTH ACCESS CONNECTION

POWER DETAILS

PLAN REF. NO.  
UPD19B

Sheet 249B  
of 770  
Sheets

SHEET 23 OF 23  
CHANGE ORDER NO. 125  
CONTRACT 8549



## NOTES

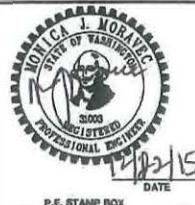
1. TERMINATE THE CONDUITS WITHIN THE VAULTS KNOCKOUT WINDOWS, IF POSSIBLE. CORE DRILLS SHALL NOT CUT INTO THE RING VAULT RIB.

0588V83

**① 0588V834**  
~~0588M020~~ (EXISTING VAULT) 28  
SCALE: 1" = 2'

FILE NAME X:\110000-110250\110159 (Alaskan Way Viaduct North Access)\CADD\Design\003-MWNA-CPD3.dwg

FILE NAME: X:\110000\110230\110105\Alaskan Way Viaduct North Alcove\CAD\Designs\13A003-MWVNA-CFD3.dwg						FED.AID PROJ.NO.	
TIME	4:43am				REGION NO.	STATE	
DATE	Dec-21-15				10	WASH	
PLOTTED BY	J.LINEHAN				JOB NUMBER		
DESIGNED BY	C.PARK				13A003		
ENTERED BY	J.LINEHAN				CONTRACT NO.		
CHECKED BY	S.BARTLETT	2	CO-125: NEW VAULT M-1	12/17/2015	CDP	LOCATION NO.	
PROJ. ENGR.	S. BEADLE	1	RFI-46	07/30/2014	CDP	XL-3687	
REGIONAL ADM	T. TREPANIER		REVISION	DATE	BY		



**k p f f** Consulting Engineers  
1601 Fifth Avenue, Suite 1600  
Seattle, Washington 98101-3665  
(206) 622-5822 Fax (206) 622-8131



**SR 99**  
**ALASKAN WAY VIADUCT-REPLACEMENT**  
**NORTH ACCESS CONNECTION**

#### POWER DETAILS

LAN REF. NO.  
**UPD28**

---

**1 SHEET  
258  
OF  
770  
SHEETS**