

RECEIVED

OCT 28 2017

Change Record

Contract Number 008625	Contract Title SR 520 West Approach Bridge North Project	Federal Aid Number BR-NHPP-0520(053)
Change Order Number 116	Change Description RSUP Lighting Mod	Date Oct 11, 2017
Region Northwest Region	Project Engineer Stephen Strand	Phone Number (206) 770-3565
Prime Contractor / Design-Builder Flatiron West, Inc.		

- Ordered by Engineer under the terms of Section 1-04.4 of the Standard Specifications or the RFP
- Change proposed by Contractor / Design-Builder

Evolution & Description Of Change

Description of the Change

The Contract Illumination plans detail conduit and wire runs to be installed behind the north kick plate of the Regional Shared Use Path (RSUP), and the Architectural plan sheets detail lighting to be integrated into the handrail. Neither of these plans detail how the two connect. After reviewing the Contractor's inquiry regarding wiring details and connection to the handrail, and also evaluating the overall RSUP lighting system, WSDOT pursued lighting design changes to address the following issues:

- Reduction of the RSUP light source reflected by the concrete traffic barrier to minimize the perceived lighting when viewed from the lake or neighborhoods north of the highway;
- Removal of LED light fixtures from the handrail to avoid possible vandalism since the conduit and wiring would likely be visible when routing from the kick plate to handrail, and
- Re-design of the RSUP lighting such that conduit and wiring can be installed in a concealed fashion to improve aesthetics, ensure safety to the RSUP users, and deter vandalism.

The design changes maintain the same lighting criteria applied to the SR 520 Floating Bridge RSUP for both safety lighting at conflict points and continuous wayfinding lighting along the RSUP, also similar to the I-90 floating bridge. This WSDOT initiated change order revises the RSUP lighting plans to reflect the above modifications, including changes to the Illumination Details, Br. Railing Type Decorative Ped. plans, and the Architectural plan sheets to redesign the hand railing and include the lighting within the RSUP kick plate.

Evolution of the Change

As construction of the WABN project progressed, WSDOT became increasingly aware of the lighting sensitivities of neighboring communities. The proposed lighting system design changes reflect WSDOT's shared concern with minimizing facility lighting effects on neighboring communities while providing safe and navigable passage for bicyclists and pedestrians on the RSUP. In addition, while reviewing the existing lighting design in detail, concern grew over the durability of the RSUP lighting components, especially with exposed conduit and wiring along the handrail that may be prone to vandalism.

On April 27, 2016, the Contractor notified WSDOT during the weekly electrical meeting that the Contract Illumination Plans for the RSUP lighting do not detail the connection between the junction boxes behind the kick plate and the handrail.

On May 24, 2016, WSDOT Project office and the Engineer of Record visited the Floating Bridge and Landings (FB&L) project site to coordinate lighting designs between both projects. WSDOT Project office coordinated with the FB&L project office and the City of Seattle to evaluate alternative designs. It was determined that the best option would be to install the lighting within the RSUP handrail kick plate, requiring a redesign of the RSUP handrail and lighting components.

This change order was then initiated to make the above revisions, and change approvals were obtained as noted above. To avoid potential schedule delays, WSDOT directed the Contractor to proceed with these changes on August 23, 2016, in advance of the executed change order.

The Contractor began preparing shop drawings and submittals for the modified RSUP railing and lighting in October 2016 based on plan sheets provided in WSDOT's direction to proceed. While preparing the shop drawings and submittals, it was discovered that further modifications would be required to meet minimum lighting requirements. As a result of submittal S.169.003 Decorative Pedestrian Handrail revisions 1-4 and RFI 771 Decorative Ped Handrail LED Count, the following additional modifications were made to the RSUP railing and illumination:

- 50 custom junction boxes with toe plate lighting were added to the RSUP.
- Gaskets were added to the toe plate LED lighting fixtures.
- Modifications were made to the angle the LED fixtures are mounted at.

On November 4, 2016, the Contractor submitted FWJ SL#0306, notifying WSDOT that the railing fabrication subcontractor and suppliers were being delayed by the lack of a final design for the Decorative Bridge Railing Pedestrian Handrail. The Contractor notified WSDOT that they would continue to complete shop drawings and begin procurement of materials and fabrication of handrail as the design was being finalized.

On March 3, 2017, WSDOT approved revision 4 of submittal S.169.003 Decorative Pedestrian Handrail, and the Contractor continued material procurement and fabrication of the RSUP railing and lighting as modified in this change order.

Contract Number 008625	Contract Title SR 520 West Approach Bridge North Project	Change Order Number 116										
<p>Basis of Cost & Justification:</p> <p>In accordance with Standard Specifications 1-04.4, the Contractor is entitled to compensation for the additional cost of the labor, material and equipment as a result of this change. The total negotiated lump-sum cost of this change order is \$620,000. The lump sum amount covers the following items:</p> <ul style="list-style-type: none"> - The cost difference between the railing mounted lighting and the kick plate mounted lighting. - Design changes to the RSUP illumination pushed the railing construction work past the WABN open to traffic date. That resulted in the RSUP railing and illumination being constructed from the 14-foot wide RSUP path instead of from a closed bridge. - Multiple design changes impacted the fabrication of the RSUP railing. Design changes were made during the shop drawing and submittal process requiring additional CADD and engineering along with creating inefficiencies in the fabrication of the railing itself. <p>The Engineer's Independent Estimate was based on information provided by industry sources and historical cost data. See Attachment B.</p>												
<p>Contract Time:</p> <p>Contract time is not affected by this change order.</p>												
<p>Prior Approvals:</p> <table> <tr> <td>PE Change Approval: Brian Dobbins/Stephen Strand</td> <td>Multiple (See Attachment A)</td> </tr> <tr> <td>Region Change Approval: Dave Becher</td> <td>Multiple (See Attachment A)</td> </tr> <tr> <td>HQ Change Approval: Derek Case/Dewayne Matlock</td> <td>Multiple (See Attachment A)</td> </tr> <tr> <td>FHWA Change Approval: Jeff Horton</td> <td>9/25/2017</td> </tr> <tr> <td>Program Funding Concurrence: Janet Buoy</td> <td>9/25/2017</td> </tr> </table>			PE Change Approval: Brian Dobbins/Stephen Strand	Multiple (See Attachment A)	Region Change Approval: Dave Becher	Multiple (See Attachment A)	HQ Change Approval: Derek Case/Dewayne Matlock	Multiple (See Attachment A)	FHWA Change Approval: Jeff Horton	9/25/2017	Program Funding Concurrence: Janet Buoy	9/25/2017
PE Change Approval: Brian Dobbins/Stephen Strand	Multiple (See Attachment A)											
Region Change Approval: Dave Becher	Multiple (See Attachment A)											
HQ Change Approval: Derek Case/Dewayne Matlock	Multiple (See Attachment A)											
FHWA Change Approval: Jeff Horton	9/25/2017											
Program Funding Concurrence: Janet Buoy	9/25/2017											
<p>List Attachments:</p> <ul style="list-style-type: none"> CCIS Change Order Document (54 pages) Change Order Checklist (2 pages) Change Approval Emails (Attachment A) Engineer's Estimate (Attachment B) 												

Distribution By: Project Office

- Copy of Change Records & Change Order w/Backup - Project Engineer
- Copy of ONLY Change Order - Prime Contractor / Design-Builder
- Electronic Copy of Change Records & Change Order w/Backup - State Construction Office
- Original of Change Records & Change Order w/Backup - Region Construction Office
- Region
- Original of Change Records & Change Order w/Backup - State Construction Office



Cont. #: <u>8625</u> Cont. Title: <u>SR 520 West Approach Bridge North (WARN)</u>		If yes, State Construction Office Approval Required.
C.O. #: <u>116</u> C.O. Title: <u>RSUP Lighting Mod</u>		
I. Executed by the State Construction Office		
1. Cost or credit equal to or exceeding \$500,000. *1, *3		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2. Change in the contract documents beyond the scope, intent or termini of the original contract. *2		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3. Any proposed revision or deletion of work that affects the condition of award requirements. (Must be coded "CO" in CCIS, Includes changes to goal or commitment)		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
4. Change in contract time greater than 30 working days, or a change in contract time not related to any change order. *1		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
II. Executed by the Region		
5. Determination of impacts and/or overhead.		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
6. Change to Contract Provisions or Standard Plans.		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
7. Material or product substitution. (Excludes materials associated with Std. Specification Sections 6-07, 8-01, 8-02, 8-12, 8-18 & 8-20)		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
8. Structural design change in the roadway section. (Requires concurrence from designer)		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
9. Determination of changed condition. (Section 1-04.7 of the Standard Specifications)		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
10. Settlement of a claim. (Section 1-09.11(2) of the Standard Specifications)		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
11. Repair of damage regarding "acts of God" or "acts of the public enemy or of government authorities". (Section 1-07.13 of the Standard Specification)		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
12. Structural change to structures		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Approvals obtained:

Project Engineer: Stephen Strand Date: 9/22/2017

Region: Dave Becher Date: 9/22/2017

State Construction Office: Derek Case Date: 9/25/2017

Other (Local Agency, FHWA, Surety, etc.): Jeff Horton Date: 9/25/2017

To be completed by the Project Engineer :

CO Reason(s) (See "2008 Codes and Definitions" on State Construction Office web page): AP-07, PM, DS

Change Order Prepared By: Skye Fitzpatrick Date: 5/24/2017

Is this project under full FHWA stewardship oversight (Project Of Division Interest)? *1 Yes No

To be completed by the Region :

Is the change eligible for Federal participation where applicable? Yes No

Change Order Reviewed by: Jon Danks Date: 10/12/2017

*1 Change (Cost or Credit) greater than \$200,000 or greater than 30 days on Projects of Division Interest (PODI) requires FHWA approval. (see Construction Manual - Chapter 1-00.10, Chapter SS 1-04.4, and State Construction Office web page)

*2 Per RCW 47.28.050, any change beyond \$7,500 that is beyond the original scope shall go through the competitive bidding process.

*3 Engineering error changes over \$500,000 requires reporting (See reporting instructions & template on State Construction Office web page)

This form represents the minimum information required by the State Construction Office. If you wish to supplement this information, you may do so on a separate sheet of paper.



SR 520 Corridor Program: Change Order Page 2 - Checklist Supplement

Cont. #:

C.O. #:

To be completed by the Project Engineer:

Does this change order require coordination with other SR 520 Projects / Program Areas? Yes No

Coordination has taken place with:

Contract Project (identify your project):

Pontoon	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Name: <input type="text" value="N/A"/>	Date: <input type="text"/>
Pontoon Mitigation	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Name: <input type="text" value="N/A"/>	Date: <input type="text"/>
Pontoon Moorage	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Name: <input type="text" value="N/A"/>	Date: <input type="text"/>
Eastside HOV	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Name: <input type="text" value="N/A"/>	Date: <input type="text"/>
Evans Creek	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Name: <input type="text" value="N/A"/>	Date: <input type="text"/>
FB&L	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Name: <input type="text" value="N/A"/>	Date: <input type="text"/>
WCB	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Name: <input type="text" value="N/A"/>	Date: <input type="text"/>
WABN	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Name: <input type="text" value="N/A"/>	Date: <input type="text"/>

Identified risk has been entered into the SR 520 Risk Management Database: Yes No N/A

Risk ID Number (if pending, identify as Pending):

Project Risk ID No.:	<input type="text" value="WN.CNS.900.01"/>
Project Risk ID No.:	<input type="text" value="N/A"/>
Project Risk ID No.:	<input type="text" value="N/A"/>

To be coordinated with Program Finance, Budget and Controls Group:

Program Funding Concurrence? Yes No Funding Concurrence Obtained on: Date:

Is Sales Tax Included in CO Cost? Yes No Is sales tax deferred? Yes No

Max Payment Curve Changes discussed with: Date:

Third Party Agreements discussed with: Date:

Coordination with Others:

Design / Technical Lead: Name: Date:

Maintenance: Name: Date:

Environmental Commitments: Name: Date:

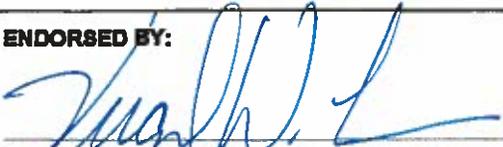
**WASHINGTON STATE
DEPARTMENT OF TRANSPORTATION
CHANGE ORDER**

DATE: 09/25/17
Page 1 of 54

CONTRACT NO: 008625 FEDERAL AID NO: ER-NHPP-0520 (053)
 CONTRACT TITLE: SR 520, MONTLAKE TO EVERGREEN PT. BRIDGE WEST APPR
 CHANGE ORDER NO: 116 RSUP LIGHTING MOD

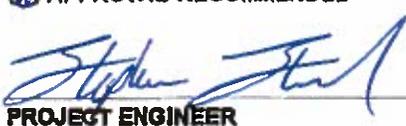
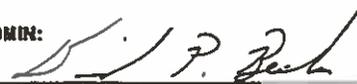
PRIME CONTRACTOR: SW0178155 FLATIRON WEST, INC
 18702 NORTH CREEK PARKWAY #202
 BOTHELL WA 98011-8019

- Ordered by Engineer under the terms of Section 1-04.4 of the Standard Specifications
 Change proposed by Contractor

ENDORSED BY:  CONTRACTOR 9/25/17 DATE	SURETY CONSENT: ATTORNEY IN FACT DATE
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ORIGINAL CONTRACT AMOUNT: 199,537,370.50
 CURRENT CONTRACT AMOUNT: 210,124,024.55
 ESTIMATED NET CHANGE THIS ORDER: 620,000.00
 ESTIMATED CONTRACT TOTAL AFTER CHANGE: 210,744,024.55

Approval Required: Region Olympia Service Center Local Agency

<input checked="" type="checkbox"/> APPROVAL RECOMMENDED  PROJECT ENGINEER 9/28/17 DATE	<input type="checkbox"/> EXECUTED EXECUTED:  STATE CONSTRUCTION ENGINEER 10/23/2017 DATE
<input checked="" type="checkbox"/> APPROVAL RECOMMENDED REGIONAL ADMIN:  BY: SR 520 Director of Construction 10/19/17 DATE	<input type="checkbox"/> EXECUTED OTHER APPROVAL WHEN REQUIRED  SIGNATURE Jeff Horton - FHWA Area Engineer 10/19/2017 DATE FHWA REPRESENTING

**WASHINGTON STATE
DEPARTMENT OF TRANSPORTATION
CHANGE ORDER**

DATE: 09/25/17
Page 2 of 54

CONTRACT NO: 008625	CHANGE ORDER NO: 116
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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:

This change order makes the following modifications to the illumination system for the Regional Shared Use Path (RSUP):

- Delete Light Emitting Diode (LED) Luminaires installed inside of the RSUP Railing,
- Add linear LED luminaires in the raceway of the RSUP railing,
- Modify the RSUP illumination conduit and junction box layout along with modifications to the connections required to accommodate the new faceplate mounted linear LED luminaires.

Materials:

Contract Provisions Volume 2 of 2, Special Provisions Division 8 Illumination, Traffic Signal Systems, Intelligent Transportation Systems, and Electrical, Section 8-20.2 Materials, Subsection Bridge Railing Type Decorative Pedestrian Integral LED Luminaires is modified as follows:

Delete:

"Bridge Railing Type Decorative Pedestrian Integral LED Luminaires
The luminaires in the Bridge Railing Type Decorative Pedestrian integral LED luminaire system shall conform to the following requirements:

Type	Linear Class II with inline fuse
Color Temperature	ANSI 3000 to 4000K
Voltage	ND24V (Non-Dimming) AC
Lamp Watts per linear foot	7.5 maximum
Average Horizontal Light Level	1.0 foot-candles minimum
Uniformity Ratio	4:1 maximum
Transformer Type	Remote Low Voltage Multiple Output with NEMA 3R outdoor rated enclosure
Input Voltage	277V

"

And replace with the following:

"Bridge Railing Type Decorative Pedestrian Integral LED Luminaires
The luminaires in the Bridge Railing Type Decorative Pedestrian integral LED luminaire system shall conform to the following requirements:

Color Temperature	ANSI 3000 to 4000K
Voltage	ND24V (Non-Dimming) AC
Transformer Type	Remote Low Voltage Multiple Output with NEMA 3R outdoor rated enclosure
Input Voltage	277V

**WASHINGTON STATE
DEPARTMENT OF TRANSPORTATION
CHANGE ORDER**

DATE: 09/25/17
Page 3 of 54

CONTRACT NO: 008625

CHANGE ORDER NO: 116

"

Contract Provisions Volume 2 of 2, Special Provisions Division 8 Illumination, Traffic Signal Systems, Intelligent Transportation Systems, and Electrical, Section 8-20.2(1) Equipment List and Drawings is modified as follows:

Delete:

"Bridge Railing Type Decorative Pedestrian Integral LED Luminaire System
In addition to submitting the Request for Approval of Material (RAM) and the associated supplemental data (catalog cuts, product specifications, shop drawings, wiring diagrams, etc.) as required by this Section, the Contractor shall also submit the following to the Project Engineer for approval:

1. Design data indicating conformance with the specified performance requirements and design criteria, including supporting analysis data, prepared in accordance with Section 6-01.9.
2. Photometric data and details of the integration of the integral LED luminaire system into the railing assembly."

And replace with the following:

"Bridge Railing Type Decorative Pedestrian Integral LED Luminaire System
The Contractor shall submit the Request for Approval of Material (RAM) and the associated supplemental data (catalog cuts, product specifications, shop drawings, wiring diagrams, etc.) to the Project Engineer for approval."

Delete:

"Site Furniture Bench Integral LED Luminaire System
In addition to submitting the Request for Approval of Material (RAM) and the associated supplemental data (catalog cuts, product specifications, shop drawings, wiring diagrams, etc.) as required by this Section, the Contractor shall also submit the following to the Project Engineer for approval:

1. Design data indicating conformance with the specified performance requirements and design criteria, including supporting analysis data, prepared in accordance with Section 6-01.9.
2. Photometric data and details of the integration of the integral LED luminaire system into the bench assembly."

And replace with the following:

"Site Furniture Bench Integral LED Luminaire System
The Contractor shall submit the Request for Approval of Material (RAM) and the associated supplemental data (catalog cuts, product specifications, shop drawings, wiring diagrams, etc.) to the Project Engineer for approval."

**WASHINGTON STATE
DEPARTMENT OF TRANSPORTATION
CHANGE ORDER**

DATE: 09/25/17
Page 4 of 54

CONTRACT NO: 008625

CHANGE ORDER NO: 116

Construction Criteria:

Contract Provisions Volume 2 of 2, Special Provisions Division 8
Illumination, Traffic Signal Systems, Intelligent Transportation Systems, and
Electrical, Section 8-20.3 Construction Requirements is modified as follows:

Delete:

"Bridge Railing Type Decorative Pedestrian Integral LED Luminaire System
The integral LED luminaire system shall be included in the full-size mock-up
sections of Bridge Railing Type Decorative Pedestrian as specified in Section
6-06.3(2) .

The Contractor shall orient the integral LED luminaires as required to direct
the light solely onto the Regional Shared Use Path without any light escaping
onto the vehicular bridge deck or beyond the outside edge of the railing."

And replace with the following:

"Bridge Railing Type Decorative Pedestrian Integral LED Luminaire System
The integral LED luminaire system shall be included in the full-size mock-up
sections of Bridge Railing Type Decorative Pedestrian as specified in Section
6-06.3(2) ."

Contract Plans Volume 3 of 10 is modified as follows:

Delete the following Plan sheet:

- Plan sheet WR45 titled "Bridge Railing Type Moment Slab Ped. Details"

And replace with the following included as page 8 of this change order.

Contract Plans Volume 4 of 10 is modified as follows:

Delete the following Plan sheets:

- IIN02 titled "Illumination General Notes & Legend"
- IIN03 titled "Illumination Removal Notes"
- ILO2 titled "Illumination Plan"
- IID07 titled "Illumination Details"
- IID11 titled "Illumination Details"
- IID12 titled "Illumination Details"
- IID13 titled "Illumination Details"
- IID41 titled "Illumination Details"

And replace with pages 9 through 16 of this change order.

Add:

- Plans sheet IID13a, IID13b and IID13c all titled " Illumination Details"

**WASHINGTON STATE
DEPARTMENT OF TRANSPORTATION
CHANGE ORDER**

DATE: 09/25/17
Page 5 of 54

CONTRACT NO: 008625

CHANGE ORDER NO: 116

See pages 17 through 19 of this change order for added plan sheets.

Contract Plans Volume 9 of 10 is modified as follows:

Delete the following Plan sheets:

- BA567 titled "Br. Railing Type Decorative Ped. Typical Details 1"
- BA568 titled "Br. Railing Type Decorative Ped. Typical Details 2"
- BA569 titled "Br. Railing Type Decorative Ped. Typical Details 3"
- BA570 titled "Br. Railing Type Decorative Ped. Pier 1 Details"
- BA571 titled "Br. Railing Type Decorative Ped. Piers 9, 18, 27, 34 Details"
- BA572 titled "Br. Railing Type Decorative Ped. Pier 41 Details"
- BA573 titled "Br. Railing Type Decorative Ped. Pier 42 Details"
- BA574 titled "Br. Railing Type Decorative Ped. Expansion Details"
- BA575 titled "Br. Railing Type Decorative Ped. Belvedere Details 1"
- BA576 titled "Br. Railing Type Decorative Ped. Belvedere Details 2"
- BA577 titled "Br. Railing Type Decorative Ped. Belvedere Details 3"
- BA614 titled "Belvedere Framing Plan and Notes"

And replace with pages 20 through 31 of this change order.

Add plan sheets:

- BA567a titled "Br. Railing Type Decorative Ped. Typical Details 1"
- BA568a titled "Br. Railing Type Decorative Ped. Typical Details 2"
- BA575a titled "Br. Railing Type Decorative Ped. Belvedere Details 1"

See pages 32 through 34 of this change order for added plan sheets.

Contract Plans Volume 10 of 10 is modified as follows:

Delete the following Plan sheets:

- T1.00 titled "Index Sheet"
- G1.00 titled "Symbols Legend and Abbreviations"
- A2.00 titled "Typical Railing Layout at Spans 10-12"
- A2.01 titled "Railing Layout at Spans 1 & 17-19"
- A2.02 titled "Floating Bridge Transition Span"
- A2.03 titled "Typical Railing Plan and Elevations"
- A2.04 titled "Pedestrian Belvedere Pier 10 Plans and Elevations (Pier 24 SIM) "
- A2.05 titled "Equipment Platform Belvedere Piers 16, 28, 36"
- A2.06 titled "Equipment Platform Belvedere Pier 21"
- A3.00 titled "Typical Railing Types"
- A3.01 titled "Section at Typical Railing"
- A3.02 titled "Typical Railing Details"
- A3.04 titled "Railing Lighting & Connection Details"
- A3.05 titled "Pedestrian Belvedere Details"
- A3.06 titled "Pedestrian Belvedere Railing Sections"
- A3.08 titled "Bench Details"

**WASHINGTON STATE
DEPARTMENT OF TRANSPORTATION
CHANGE ORDER**

DATE: 09/25/17
Page 6 of 54

CONTRACT NO: 008625

CHANGE ORDER NO: 116

- A3.09 titled "Equipment Platform Belvedere at Signbridge Monotube - Piers 16, 28, 36
- A3.13 titled "Railing at West Abutment"

And replace with pages 35 through 52 of this change order.

Add plan sheets:

- A3.06A titled "Ped Belvedere Railing & Lighting Details"
 - A3.06B titled "Belvedere Wiring Raceway Details"
- See pages 53 through 54 of this change order for added plan sheets.

Measurement and Payment:

The new pay item, "CO#116 RSUP Lighting Mod", in the Lump Sum amount of \$620,000, shall be full payment for all additional costs for equipment, labor, tools, materials, engineering, indirect, overhead, and other costs realized by Flatiron West, Inc. and its subcontractors, consultants, and suppliers.

Time:

Contract time will not be affected by this change order.

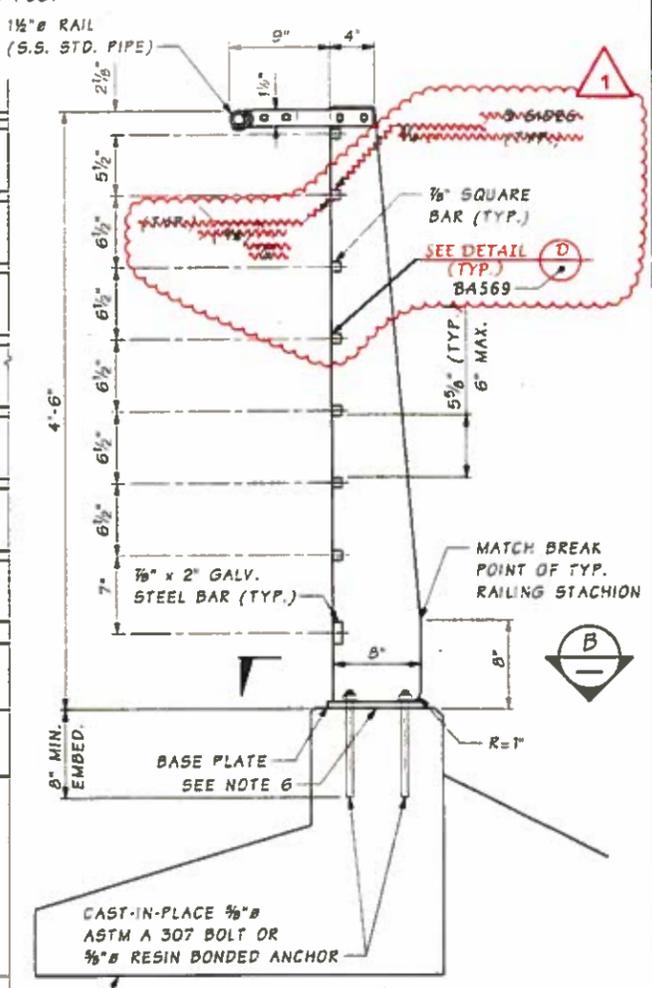
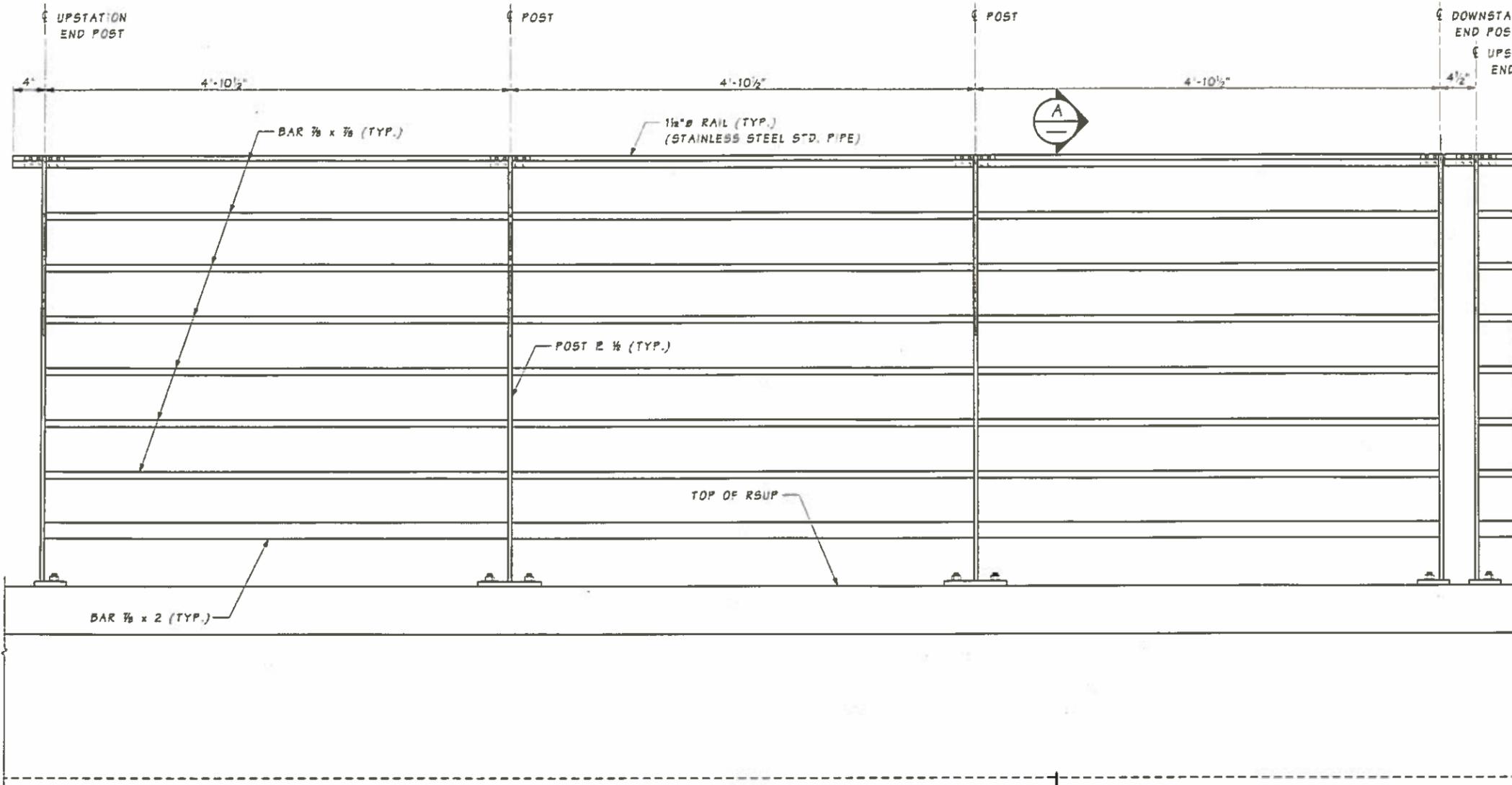
**WASHINGTON STATE
DEPARTMENT OF TRANSPORTATION
CHANGE ORDER**

DATE: 09/25/17
Page 7 of 54

CONTRACT NO: 008625	CHANGE ORDER NO: 116
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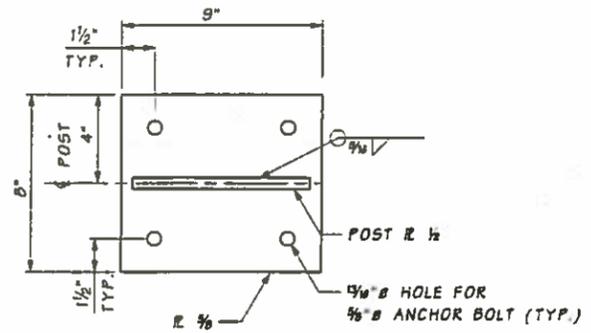
ITEM NO	GROUP NO	STD ITEM	ITEM DESCRIPTION	UNIT MEASURE	UNIT PRICE	EST QTY CHANGE	EST AMT CHANGE
1119	01		CO#116 RSUP LIGHTING MOD	L.S.	248,000.00	1.00	248,000.00
1119	02		CO#116 RSUP LIGHTING MOD	L.S.	372,000.00	1.00	372,000.00

620,000.00

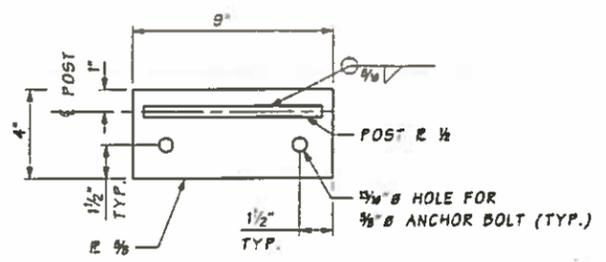


ELEVATION
(LOOKING SOUTH)

SECTION A
TYPICAL AT
FIXED PANELS



SECTION B
AT INTERIOR POSTS



SECTION B
AT END POSTS

NOTES:

1. SEE ARCHITECTURAL PLANS AND BRIDGE PLANS FOR ADDITIONAL DETAILS.
2. EXCEPT FOR COMPONENTS IDENTIFIED AS STAINLESS STEEL (S.S.), ALL STEEL PLATES AND BARS SHALL BE ASTM A 572 GRADE 50 AND GALVANIZED ACCORDING TO AASHTO M111. ANCHOR BOLTS SHALL BE GALVANIZED ACCORDING TO AASHTO M252. CONTRACTOR SHALL FABRICATE, AND GALVANIZE IN A MANNER THAT CONTROLS DISTORTION OF THE STEEL COMPONENTS AND OF THE ASSEMBLED RAILING.
3. SCREWS AND COUNTERSUNK SCREWS SHALL BE STAINLESS STEEL MACHINE SCREWS. THREADS SHALL BE COATED WITH MARINE GRADE ANTI-SEIZE COMPOUND.
4. CONTRACTOR SHALL REPAIR ALL STEEL SURFACES WITH DAMAGED GALVANIZING AFTER WELDING WITH THREE COATS OF PAINT CONFORMING TO STD. SPEC. SECTION 9-08.1(2)B APPLIED IN ACCORDANCE WITH STD. SPEC. SECTION 6-07.3(9)I.
5. INSTALL POSTS NORMAL TO TOP OF RSUP.
6. SHIM AS REQ'D TO PLUMB POST W/FULL WIDTH GALVANIZED SHIMS.

SR 520 FILE NO. 7051 SHEET WR45 Projectwise Vault

Bridge Design Engr.		Supervisor		REGION NO.	STATE	FED. AND PROJ. NO.	SHEET NO.	TOTAL SHEETS
BOTT, P.		JELLIN, A.		10	WASH		556	1797
Designed By		Checked By		JOB NUMBER				
JELLIN, A.		AKESSON, B.		13A012				
Detailed By		DATE		REVISION		BY APPD		
AUDAR, M.		6/22/16		COM#116 - RSUP LIGHTING MOD		VS GSK		
Bridge Projects Engr.		DATE		REVISION		BY APPD		
Prelim. Plan By		DATE		REVISION		BY APPD		
Architect/Specialist		DATE		REVISION		BY APPD		



HDR
ENGINEERING INC.
8-18-16

Washington State
Department of Transportation
PARSONS BRINCKERHOFF **Parametrix**

Contract 8625
Change Order #116
Page 8 of 54

BRIDGE RAILING TYPE
MOMENT SLAB PED. DETAILS

SHEET NO.
WR45
SHEET 556 OF 1797 SHEETS

GENERAL NOTES (CONTINUATION FROM ILN01)

- 15. SEE ARCHITECTURAL PLANS FOR PEDESTRIAN WAY FINDING LUMINAIRE DETAILS.
- 16. ALL CONDUITS ATTACHED TO STRUCTURE SHALL BE SUPPORTED EVERY 5' UNLESS OTHERWISE NOTED OR APPROVED BY ENGINEER.
- 17. ALL CONDUITS BETWEEN TUB GIRDER AND I-GIRDER ENTERING A JUNCTION BOX SHALL BE INSTALLED WITH EXPANSION AND DEFLECTION FITTING TO ALLOW ±4" LONGITUDINAL MOVEMENT EITHER DIRECTION AND DEFLECTION FITTING. SEE BRIDGE PLAN SHEET BA 608 AND OTHER BRIDGE SHEETS FOR TYPICAL DETAIL.
- 18. ALL HOLES CREATED UPON REMOVAL OF CONDUIT IN NEMA JUNCTION BOX SHALL BE REPAIRED WITH NEMA 4X REPAIR KIT.
- 19. WIRE NOTES 58-79, 129-139 AND 150-159 ARE NOTE USED.

CONSTRUCTION NOTES

- 1 FURNISH AND INSTALL ELBOW MOUNT TYPE 1 LIGHTING STANDARD WITH SINGLE MAST ARM AND COBRA HEAD HPS LUMINAIRE. SEE BRIDGE AND RETAINING WALL PLANS FOR FOUNDATION AND MOUNTING DETAILS. SEE STANDARD PLANS J-28.10-01 AND J-28.70-01 FOR DETAILS.
- 2 FURNISH AND INSTALL ELBOW MOUNT TYPE 1 LIGHTING STANDARD WITH DUAL MAST ARM AND COBRA HEAD HPS LUMINAIRE. SEE BRIDGE AND RETAINING WALL PLANS FOR FOUNDATION AND MOUNTING DETAILS. SEE STANDARD PLANS J-28.10-01 AND J-28.70-01 FOR DETAILS.
- 3 FURNISH AND INSTALL TYPE 1 LIGHTING STANDARD WITH SINGLE MAST ARM AND COBRA HEAD HPS LUMINAIRE ON TRAFFIC BARRIER. SEE BRIDGE AND RETAINING WALL PLANS FOR FOUNDATION AND MOUNTING DETAILS. SEE STANDARD PLANS J-28.10-01 AND J-28.70-01 FOR DETAILS.
- 4 FURNISH AND INSTALL WSDOT TYPE 1 LIGHT STANDARD WITH SINGLE MAST ARM AND COBRA HEAD HPS LUMINAIRE. SEE STANDARD PLANS J-28.10-01, J-28.70-01 AND J-28.40-01 FOR DETAILS.
- 5 FURNISH AND INSTALL WSDOT TYPE 1 LIGHT STANDARD WITH DUAL MAST ARM AND COBRA HEAD HPS LUMINAIRE ON TRAFFIC BARRIER. SEE BRIDGE AND RETAINING WALL PLANS FOR FOUNDATION AND MOUNTING DETAILS. SEE STANDARD PLANS J-28.10-01, J-28.70-01 AND J-28.40-01 FOR DETAILS.
- 6 FURNISH AND INSTALL WSDOT TYPE 1 LIGHT STANDARD WITH DUAL MAST ARM AND COBRA HEAD HPS LUMINAIRE. SEE STANDARD PLANS J-28.10-01, J-28.70-01 AND J-28.40-01 FOR DETAILS.
- 7 MAINTAIN AND PROTECT EXISTING LUMINAIRE.
- 8 FURNISH AND INSTALL 6"(D) X 13.5"(W) HOUSE SIDE SHIELD FOR THE SPECIFIED LUMINAIRE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
- 9 FURNISH AND INSTALL UNDERDECK LUMINAIRE TO RETAINING WALL.
- 10 FURNISH AND INSTALL 180° RED LED PIER LIGHT ON BRIDGE COLUMN. SEE SHEET ILD17, ILD18 FOR DETAILS.
- 11 FURNISH AND INSTALL 360° GREEN LED NAVIGATION LIGHT ON BRIDGE CENTERED OVER THE NAVIGATION CHANNEL. SEE SHEET ILD19 FOR DETAILS.
- 12 FURNISH AND INSTALL NEMA 4X 8"(L)X8"(W)X6"(D) JUNCTION BOX FLUSH WITH SURFACE OF WALL. SEE BRIDGE PLANS FOR DETAILS.

- 13 FURNISH AND INSTALL NEMA 4X 24"(L)X6"(W)X6"(D) JUNCTION BOX AND CONDUIT IN BRIDGE RAILING RACEWAY.
- 14 FURNISH AND INSTALL NEMA 4X JUNCTION BOX ON EXISTING PIER CAP. SEE STANDARD PLANS J-40.39-01 AND J-40.39-00 FOR DETAILS.
- 15 FURNISH AND INSTALL SURFACE MOUNT NEMA 4X 26"(L)X18"(W)X8"(D) JUNCTION BOX ON EXISTING STRUCTURE. SEE STANDARD PLANS J-40.39-01 FOR DETAILS.
- 16 FURNISH AND INSTALL CONDUIT IN TRAFFIC BARRIER. SEE STANDARD PLANS J-60.11-00 AND J-60.12-00 FOR DETAILS. SEE BCS PLANS FOR ADDITIONAL CONDUIT IN TRAFFIC BARRIER.
- 17 FURNISH AND INSTALL NEMA 4X 24"(L)X8"(W)X8"(D) JUNCTION BOX BOTTOM ACCESS. SEE PLANS FOR QUANTITY AND SHEET ILD25, 30 FOR DETAILS. SEE STANDARD PLANS J-40.39-00 FOR DETAILS.
- 18 FURNISH AND INSTALL NEMA 4X 12"(L)X12"(W)X12"(D) JUNCTION BOX. SEE SHEET ILD23, 29, 34, 39 FOR GROUNDING AND BONDING DETAILS. SEE STANDARD PLANS AND J-40.39-00 FOR DETAILS.
- 19 FURNISH AND INSTALL NEMA 4X 8"(L)X8"(W)X6"(D) JUNCTION BOX. SEE SHEET ILD19 FOR DETAILS.
- 20 FURNISH AND INSTALL NEMA 4X 32"(L)X24"(W)X12"(D) JUNCTION BOX SIDE ACCESS. SEE STANDARD PLANS J-40.39-01 FOR DETAILS.
- 21 FURNISH AND INSTALL NEMA 4X 24"(L)X16"(W)X8"(D) JUNCTION BOX BOTTOM ACCESS. SEE SHEET ILD20, 21, 26, 27, 31, 32, 36, 37 FOR DETAILS. SEE STANDARD PLANS J-40.39-00 FOR DETAILS.
- 22 FURNISH AND INSTALL NEMA 4X 30"(L)X24"(W)X12"(D) JUNCTION BOX ON THE BRIDGE ABUTMENT. SEE PLANS FOR QUANTITY AND SHEET ILD20 FOR DETAILS. SEE STANDARD PLANS J-40.39-00 FOR DETAILS. **COORDINATE THE LOCATION OF JUNCTION BOX ON RETAINING WALL 3 WITH ENGINEER.**
- 23 FURNISH AND INSTALL NEMA 4X 18"(L)X8"(W)X8"(D) JUNCTION BOX IN TRAFFIC BARRIER. SEE BRIDGE PLANS FOR DETAILS.
- 24 FURNISH AND INSTALL WSDOT STANDARD TYPE 1 JUNCTION BOX. SEE STANDARD PLAN J-40.10-03 FOR DETAILS.
- 25 FURNISH AND INSTALL WSDOT STANDARD TYPE 2 JUNCTION BOX. SEE STANDARD PLAN J-40.10-03 FOR DETAILS.
- 26 FURNISH AND INSTALL WSDOT STANDARD TYPE 8 JUNCTION BOX. SEE STANDARD PLAN J-40.30-03 FOR DETAILS.
- 27 FURNISH AND INSTALL SURFACE MOUNT NEMA 4X 18"(L)X12"(W)X8"(D) JUNCTION BOX ON EXISTING STRUCTURE. SEE STANDARD PLANS J-40.39-00 FOR DETAILS.
- 28 FURNISH AND INSTALL SLIP RESISTANT LID FOR JUNCTION BOX. SEE STANDARD PLANS J-40.10-03 AND J-40.30-03 FOR DETAILS.
- 29 FURNISH AND INSTALL NEMA 4X 8"(L)X8"(W)X6"(D) JUNCTION BOX ON OUTSIDE OF EXISTING BARRIER.
- 30 FURNISH AND INSTALL CONDUIT UNDER TUB GIRDER TO CONNECT TO LIGHTING CONTROL CABINET ON PLATFORM. SEE SHEET ILD20, 21, 31, 32 FOR DETAILS. SEE ITS PLANS AND STANDARD PLAN J-60.13-00 FOR DETAILS.
- 31 FURNISH AND INSTALL CONDUIT UNDER TUB GIRDER TO CONNECT TO XFMR ON PLATFORM. SEE SHEET ILD20, 21, 26, 27, 31, 32, 36, 37 FOR DETAILS. SEE ITS PLANS AND STANDARD PLAN J-60.13-00 FOR DETAILS.
- 32 FURNISH AND INSTALL CONDUIT TO TRANSITION FROM TRAFFIC BARRIER TO BRIDGE DECK, PIER DIAPHRAGM AND PIER. SEE SHEET ILD17, 18, 19 FOR DETAILS.
- 33 FURNISH AND INSTALL CONDUITS UNDER THE BRIDGE DECK BETWEEN TUB GIRDER AND I-GIRDER. SEE SHEET ILD25, 30 FOR DETAILS. SEE BRIDGE PLAN FOR DETAILS.
- 34 FURNISH AND INSTALL CONDUIT UNDER BRIDGE DECK TO CONNECT TO NAVIGATION CHANNEL LIGHT. SEE STANDARD PLAN J-60.13-00 FOR DETAILS.
- 35 FURNISH AND INSTALL CONDUIT FROM JUNCTION BOX AT GRADE TO WALL AND JUNCTION BOX IN TRAFFIC BARRIER. SEE SHEET ILD41 FOR DETAILS.

- 36 FURNISH AND INSTALL EXPANSION/DEFLECTION FITTINGS AT ALL EXPANSION JOINTS. SEE SHEET ILD08, 09 FOR CONDUITS UNDER BRIDGE DECK. SEE BRIDGE PLANS FOR CONDUIT IN BARRIER. SEE STANDARD PLANS J-60.11-00 AND J-60.12-00 FOR DETAILS.
- 37 FURNISH AND INSTALL CONDUIT DEFLECTION FITTING. SEE BRIDGE PLANS FOR DETAILS. FOR LOCATIONS NOT SHOWN ON BRIDGE PLANS SEE STANDARD PLANS J-60.11-00 AND J-60.12-00 FOR DETAILS.
- 38 ROUTE CONDUIT FROM THE JUNCTION BOX IN TRAFFIC BARRIER TO THE JUNCTION BOX IN GRADE. SEE STANDARD PLANS J-60.11-00 AND J-60.12-00 FOR DETAILS.
- 39 FURNISH AND INSTALL CONDUITS ACROSS ROADWAY. USE AN APPROVED JACKING OR DRILLING METHOD.
- 40 LOCATE AND INTERCEPT EXISTING CONDUIT AND EXTEND TO JUNCTION BOX.
- 41 COORDINATE CONDUIT INSTALLATION WITH THE CONSTRUCTION OF RETAINING WALL.
- 42 FURNISH AND INSTALL SURFACE MOUNT CONDUIT ON EXISTING STRUCTURE. SEE STANDARD PLANS J-60.13-00 FOR DETAILS.
- 43 SEE ITS PLANS FOR ADDITIONAL CONDUIT AND DETAILS.
- 44 SEE BRIDGE CONTROL SYSTEM PLANS FOR CONDUIT CONTINUATION.
- 45 ROUTE CONDUIT FROM TRAFFIC BARRIER TO PIER DIAPHRAGM. SEE SHEET ILD19 FOR DETAILS.
- 46 ROUTE CONDUIT FROM GRADE TO SURFACE MOUNT JUNCTION BOX ON STRUCTURE.
- 47 FURNISH AND INSTALL CONDUIT AND CONNECT TO EXISTING JUNCTION BOX.
- 48 FURNISH AND INSTALL CONDUIT IN WALL TO UNDERDECK FIXTURE. SEE BRIDGE PLANS FOR ADDITIONAL DETAILS.
- 49 ATTACH CONDUIT OUTSIDE OF EXISTING TRAFFIC BARRIER AND ROUTE CONDUIT FROM OUTSIDE OF BARRIER, TO PIER CAP, OUTSIDE OF BARRIER AND EXISTING JB.
- 50 SPLICE CONDUCTORS TO EXISTING CONDUCTORS IN EXISTING JUNCTION BOX.
- 51 LOCATE AND INTERCEPT BOTH EXISTING CONDUITS AND EXTEND BOTH CONDUITS TO THE JUNCTION BOX.
- 52 SEE TEMPORARY 13.8KV RELOCATION PLAN SERIES EL FOR CONDUIT AND JUNCTION BOX DETAILS.
- 53 FURNISH AND INSTALL UTILITY HANGERS. SEE BRIDGE PLANS FOR ADDITIONAL DETAILS.
- 54 FURNISH AND INSTALL WSDOT TYPE E SERVICE CABINET. SEE STANDARD PLANS J-10.10-01, J-10.22-00 AND J-60.05-00 FOR DETAILS.
- 55 FURNISH AND INSTALL WSDOT TYPE E MODIFIED SERVICE CABINET. SEE SHEET ILD05, 06 FOR DETAILS.
- 56 ITS STEP DOWN XFMR CABINET. SEE ITS PLANS FOR ITS XFMR DETAILS.
- 57 FURNISH AND INSTALL WSDOT LIGHTING CONTROL CABINET. SEE SHEET ILD14, 15 FOR PEDESTRIAN LIGHTING CONTROL CABINET DETAILS. SEE SHEET ILD16 FOR NAVIGATION LIGHTING CONTROL CABINET DETAILS. SEE STANDARD PLANS J-10.10-01 AND J-60.05-00 FOR DETAILS.
- 58 INTERCEPT CONDUIT INSTALLED BY OTHERS. FURNISH AND INSTALL CONDUIT TO CONNECT TO RSUP LIGHTING. CONDUIT SUPPORTS AND ATTACHMENT DETAILS SHALL BE APPROVED BY ENGINEER.
- 59 REPLACE EXISTING ITS XFMR CABINET AS NOTED IN ITS PLANS. SEE ITS PLANS FOR DETAILS.
- 60 FURNISH AND INSTALL NAVIGATION LIGHTING CABINET. SEE SHEET ILD16 FOR CABINET DETAILS.
- 61 CONSTRUCT STEEL LIGHT STANDARD FOUNDATION TYPE B. SEE WSDOT STD. PLAN J-28.30-02. TOP OF FOUNDATION SHALL MATCH FINISHED GRADE BETWEEN TRAFFIC BARRIER.
- 62 BCS CABINET. SEE BCS PLAN SERIES CS FOR ADDITIONAL DETAILS.

FILE NAME		TIME		REGION NO.		STATE		FED.AID PROJ.NO.		WASHINGTON STATE PROFESSIONAL ENGINEER		Washington State Department of Transportation		Contract 8625 Change Order #116 Page 9 of 54		PLAN REF. NO. ILN02	
DATE		PLOTTED BY		10		WASH				8/23/16		PARSONS BRINCKERHOFF		Parametrix		SHEET 575 OF 1797 SHEETS	
DESIGNED BY		ENTERED BY		CHECKED BY		PROJ. ENGR.		REGIONAL ADM.		REVISION		DATE		BY			
M. KUNDURU		M. KUNDURU		J. YANG D. SIMS		D. EDWARDS		J. MEREDITH		CO#116 - RSUP LIGHTING MOD		6/24/16		MK			
				CO#49 ITS - NEMABEACON LAYOUT MOD		2/10/15				CO#103 - CONDUIT MOD WEST ABUTMENT		04/29/16		MK			
				CO#16 - JUNCTION BOX DIMENSIONS													

CONSTRUCTION NOTES (CONTINUATION FROM ILN02)

- 63 FURNISH AND INSTALL NEW CONDUCTORS FROM SCL XFMR TO WSDOT SERVICE CABINET. SCL TO MAKE FINAL SECONDARY CONNECTIONS ON SCL XFMR. SEE UTILITY PLAN SERIES UE FOR ADDITIONAL DETAILS.
- 64 CONCRETE UTILITY TRANSFORMER PAD. FOR ADDITIONAL DETAILS SEE UTILITY PLAN SERIES UE.
- 65 CONDUIT TO SCL VAULT. SEE UTILITY PLAN SERIES UE FOR ADDITIONAL DETAILS.
- 66 SCL TO INSTALL TRANSFORMER. SEE UTILITY PLAN SERIES UE FOR ADDITIONAL DETAILS.
- 67 FURNISH AND INSTALL RSUP LED LUMINAIRE POWER ASSEMBLY IN NEMA 4X JUNCTION BOX.
- 68 FURNISH AND INSTALL CONDUIT, CONDUCTORS AND JUNCTION BOX FOR A TOTAL OF 153 RSUP LED FIXTURE BETWEEN STATION WDXV ~~30+00~~ ²³⁺⁴⁵ WDXV 45+75 FROM CABINET LC1. SEE SHEET ILD11, 13 FOR TYPICAL CIRCUIT LAYOUT AND CONDUIT ROUTING. SEE ARCHITECTURAL SHEETS FOR LUMINAIRE AND 1" CONDUIT ROUTING DETAILS.
- 69 FURNISH AND INSTALL CONDUIT, CONDUCTORS AND JUNCTION BOX FOR A TOTAL OF ~~122~~ ¹²⁴ RSUP LED FIXTURE BETWEEN STATION ML91+25 - ML108+97 FROM CABINET LC2. SEE SHEET ILD12, 13 FOR TYPICAL CIRCUIT LAYOUT AND CONDUIT ROUTING. SEE ARCHITECTURAL SHEETS FOR LUMINAIRE AND 1" CONDUIT ROUTING DETAILS.
- 70 FURNISH AND INSTALL CONDUIT, CONDUCTORS AND JUNCTION BOX FOR A TOTAL OF ~~144~~ ¹⁴⁶ RSUP LED FIXTURE BETWEEN STATION ML108+97 - ML130+17 FROM CABINET LC3. SEE SHEET ILD12, 13 FOR TYPICAL CIRCUIT LAYOUT AND CONDUIT ROUTING. SEE ARCHITECTURAL SHEETS FOR LUMINAIRE AND 1" CONDUIT ROUTING DETAILS.
- 71 FURNISH AND INSTALL CONDUIT, CONDUCTORS AND JUNCTION BOX FOR A TOTAL OF 12 RSUP LED FIXTURE BETWEEN STATION ML130+17 - A 139+00 FROM ELECTRICAL SHED. SEE SHEET ILD12, 13 FOR TYPICAL CIRCUIT LAYOUT AND CONDUIT ROUTING. SEE ARCHITECTURAL SHEETS FOR LUMINAIRE AND 1" CONDUIT ROUTING DETAILS.
- 72 CONSTRUCT STEEL LIGHT STANDARD FOUNDATION TYPE A. SEE WSDOT STD. PLAN J-28.30-02.
- 73 CONSTRUCT STEEL LIGHT STANDARD FOUNDATION TYPE B. SEE WSDOT STD. PLAN J-28.30-02.
- 74 CONSTRUCT SPECIAL STEEL LIGHT STANDARD FOUNDATION. SEE RETAINING WALL PLAN SERIES WR FOR DETAILS.
- 75 FURNISH AND INSTALL CONDUIT IN FOSTER ISLAND. CONDUIT TRENCH AND LOCATION SHALL AVOID PRE CLEARED FOUNDATION LOCATIONS ON FOSTER ISLAND.
- 76 FURNISH AND INSTALL 480-120/240V STEP DOWN NAVIGATION XFMR CABINET. SEE SHEET ILD40 FOR CABINET DETAILS.
- 77 FURNISH AND INSTALL BRONZE GROUND CLAMP WITH BRONZE U-BOLT, WASHER AND SET SCREWS ATTACHED TO CONDUIT TYPICAL.
- 78 FURNISH AND INSTALL 2 PIECE BRONZE GROUND CLAMP ATTACHED TO JUNCTION BOX TYPICAL. MAINTAIN NEMA 4X RATING FOR JUNCTION BOX.
- 79 FURNISH AND INSTALL 2 PIECE BRONZE GROUND CLAMP ATTACHED TO CONDUIT MOUNTING PLATE TYPICAL.
- 80 FURNISH AND INSTALL #4 AWG INSULATED STRANDED CONDUCTOR CONNECTED BETWEEN BRONZE GROUND CLAMP CONNECTOR ATTACHED TO CONDUIT AND BRONZE GROUND CLAMP CONNECTOR ATTACHED TO JUNCTION BOX OR CONDUIT MOUNTING PLATE TYPICAL.
- 81 FURNISH AND INSTALL NEMA 4X 8"X12"X18" JUNCTION BOX ATTACHED TO WALL SEE STD. PLAN J-40.39-00 FOR DETAILS.
- 82 FURNISH AND INSTALL NEMA 4X 12"X12"X12" JUNCTION BOX. JUNCTION BOX ATTACHMENT FLANGE SHALL BE AT BOTTOM. SEE STD. PLAN J-40.39-00 FOR DETAILS.
- 83 SEE PIER 28 GROUNDING AND BONDING PLAN ON PLATFORM FOR ADDITIONAL CONDUITS IN PIER. SEE SHEET ILD34 FOR DETAILS.
- 84 SEE PIER 36 GROUNDING AND BONDING PLAN ON PLATFORM FOR ADDITIONAL CONDUITS IN PIER. SEE SHEET ILD39 FOR DETAILS.
- 85 FURNISH AND INSTALL S.S. CHANNEL SUPPORT. 5' MAX. SPACING TYPICAL. SEE STD. PLAN J-60.13-00 FOR DETAILS.

- 86 FURNISH AND INSTALL #4/0 19-STRAND CONCENTRIC CABLE FLASH WELDED TO STEEL ROD ON ONE SIDE AND EXOTHERMICALLY CONNECTED TO #4/0 XHHW COPPER ON OTHER SIDE.
- 87 FURNISH AND INSTALL EXOTHERMIC WELD CONNECTION.
- 88 FURNISH AND INSTALL GROUND ROD. SEE STD. PLAN J-60.05-00 FOR DETAILS.
- 89 FURNISH AND INSTALL CONDUIT A MIN. OF 5' EMBEDDED IN CONCRETE. SEAL CONDUIT END EMBEDDED IN CONCRETE BEFORE CONCRETE POUR.
- 90 FURNISH AND INSTALL TYPE LL CONDUIT OUTLET BODY. MATCH CONDUIT SIZE.
- 91 FURNISH AND INSTALL TYPE LB CONDUIT OUTLET BODY. MATCH CONDUIT SIZE.
- 92 FURNISH AND INSTALL TYPE LR CONDUIT OUTLET BODY. MATCH CONDUIT SIZE.
- 93 FURNISH AND INSTALL TYPE C CONDUIT OUTLET BODY. MATCH CONDUIT SIZE.
- 94 FURNISH AND INSTALL LIQUID TIGHT S.S. FLEXIBLE METAL CONDUIT AND CONNECTORS. LIQUID TIGHT S.S. FLEXIBLE METAL CONDUIT TO ALLOW MAXIMUM SEISMIC DISPLACEMENT, MCE FOR BEARING INSTALLED BY CONTRACTOR. SEE BRIDGE PLANS FOR MAXIMUM SEISMIC DISPLACEMENT, MCE FOR LEAD RUBBER BEARING AND TRIPLE FRICTION PENDULUM BEARING DATA TABLE.
- 95 FURNISH AND INSTALL 3/32" S.S. WIRE ROPE, CLAMP AND APPURTENANCE ATTACHED TO DIAPHRAGM TO SUPPORT FLEX CONDUIT.
- 96 FURNISH AND INSTALL SUPPORT GRIP ATTACHED TO LIQUID TIGHT FLEXIBLE METAL CONDUIT AND S.S. WIRE ROPE.
- 97 FURNISH AND INSTALL 12"(L)X12"(W)X8"(D) JUNCTION BOX. COIL 3' SLACK IN JUNCTION BOX.
- 98 FURNISH AND INSTALL #4/0 XHHW CONDUCTOR.
- 99 FURNISH AND INSTALL CONDUIT ATTACHED TO DIAPHRAGM.
- 100 ATTACH CONDUIT TO UNDERSIDE OF EXISTING BRIDGE OVERHANG USING STAINLESS STEEL CHANNEL SUPPORTS IN ACCORDANCE WITH WSDOT STANDARD PLAN J-60.13-00. STACK MULTIPLE CHANNEL SUPPORTS AND WARP CONDUIT(S) AS NECESSARY TO PASS OVER EXISTING CONDUITS. TYPICAL AT ALL POINTS OF CONDUIT CROSSINGS.
- 101 COORDINATE PLACEMENT OF CONDUIT AND JUNCTION BOXES ON EXISTING STRUCTURE TO AVOID CONFLICTS WITH EXISTING STRUCTURE MOUNTED EQUIPMENT AND PROPOSED ITS AND SIGNAL IMPROVEMENTS. SEE SHEETS TT04 AND SG03.

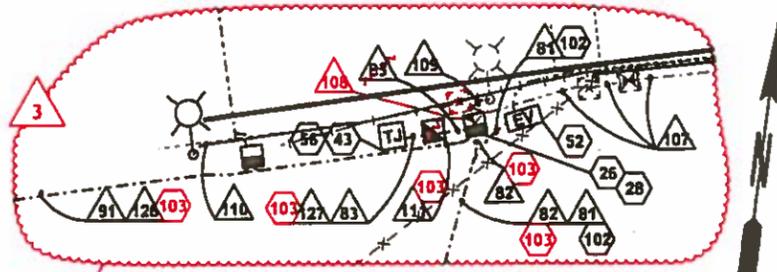
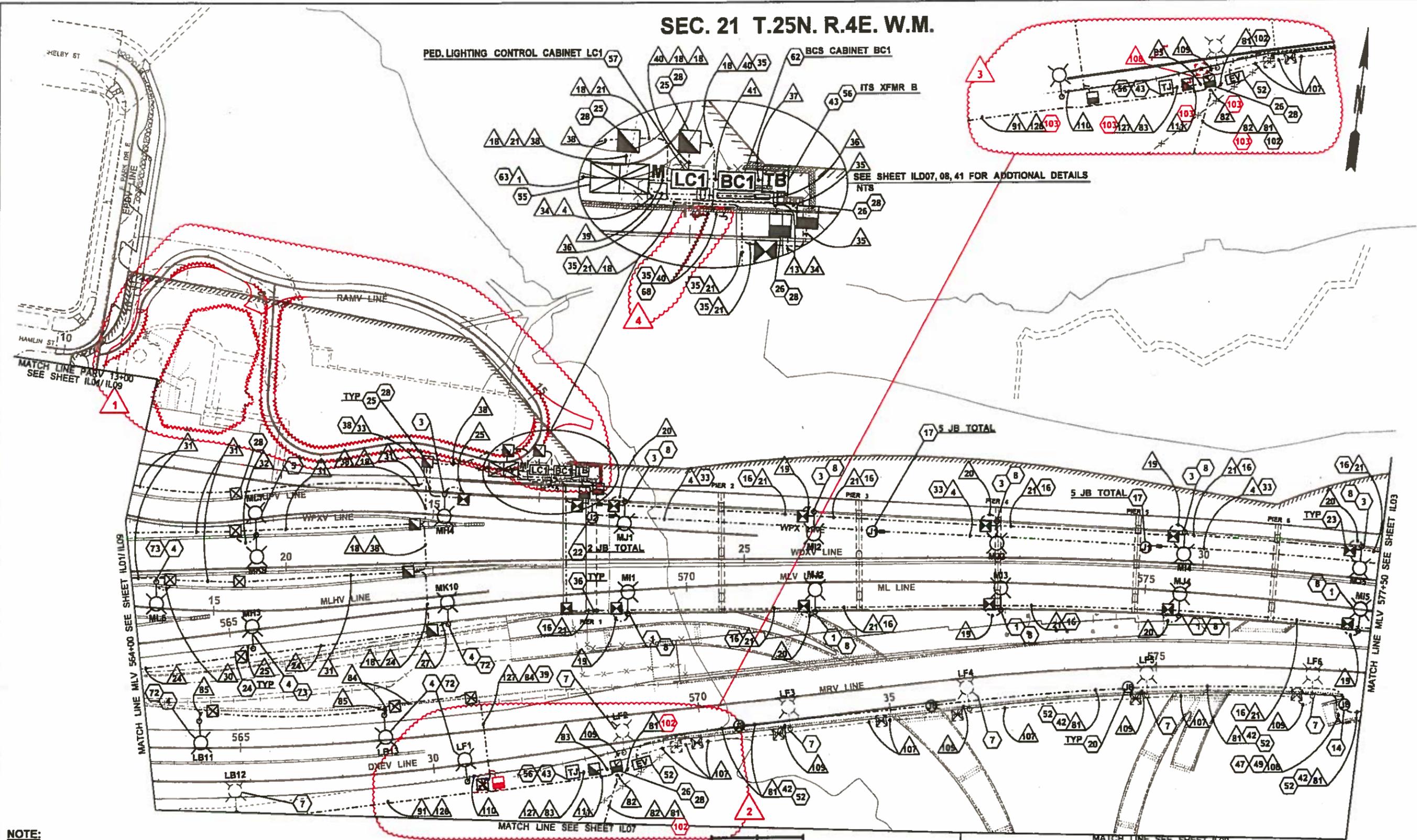
REMOVAL NOTES

- R1 REMOVE EXISTING LIGHT STANDARD, FOUNDATION, CONDUIT AND CONDUCTORS TO NEAREST JUNCTION BOX. REMOVE COBRA HEAD FIXTURE AND DELIVER TO SIGNAL MAINTENANCE SHOP IN ACCORDANCE WITH SPECIAL PROVISIONS.
- R2 REMOVE EXISTING BARRIER MOUNTED LIGHT STANDARD, ELBOW, CONDUIT AND CONDUCTORS TO NEAREST JUNCTION BOX. SAW OFF BOLTS FLUSH WITH THE SURFACE OF THE BARRIER. CAP CONDUIT. REMOVE COBRA HEAD FIXTURE AND DELIVER TO SIGNAL MAINTENANCE SHOP IN ACCORDANCE WITH SPECIAL PROVISIONS.
- R3 REMOVE EXISTING BARRIER/WALL MOUNTED LIGHT STANDARD, CONDUIT AND CONDUCTORS TO NEAREST JUNCTION BOX. SAW OFF BOLTS FLUSH WITH THE SURFACE OF THE BARRIER. CAP CONDUIT. REMOVE COBRA HEAD FIXTURE AND DELIVER TO SIGNAL MAINTENANCE SHOP IN ACCORDANCE WITH SPECIAL PROVISIONS.
- R4 REMOVE EXISTING SURFACE MOUNT JUNCTION BOX AND ALL ASSOCIATED ATTACHMENT HARDWARE. CUT LEFT OVER BOLTS FLUSH AND SEAL ANY HOLES LEFT FROM THE REMOVAL.

- R5 REMOVE EXISTING JUNCTION BOX AND BACKFILL VOID.
- R6 REMOVE ALL EXISTING SURFACE MOUNT ROADWAY ILLUMINATION CONDUIT, CONDUCTORS AND ALL ASSOCIATED ATTACHMENT HARDWARE. CUT LEFT OVER BOLTS FLUSH AND SEAL ANY HOLES LEFT FROM THE REMOVAL.
- R7 REMOVE EXISTING JUNCTION BOX. SEE ILLUMINATION PLANS FOR INSTALLING JUNCTION BOX.
- R8 REMOVE ALL EXISTING ILLUMINATION CONDUCTORS AND ABANDON EXISTING CONDUIT IN PLACE. REMOVE CONDUIT ELBOWS ON EITHER END OF ABANDONED CONDUIT.
- R9 REMOVE ALL EXISTING ROADWAY ILLUMINATION CONDUCTORS.
- R10 REMOVE EXISTING SIGN LIGHTS. REMOVE CONDUIT AND CONDUCTORS.
- R11 REMOVE THE EXISTING SERVICE CABINET AND FOUNDATION AFTER ALL POWER FEEDS FROM EXISTING SERVICE IS TRANSFERRED TO SERVICE CABINET AT STA. FXV 22+00 (APPROXIMATELY). REMOVE ALL CONDUIT AND CONDUCTORS. REMOVE POWER CONNECTION, COORDINATE POWER DISCONNECT AND METER REMOVAL WITH THE UTILITY COMPANY THROUGH ENGINEER. BACKFILL VOID. SEE SITE PREPARATION PLANS FOR FENCE REMOVAL DETAILS. SEE UTILITY PLANS FOR REMOVAL OF TRANSFORMER AND SWITCHGEAR.
- R12 DISCONNECT EXISTING CONDUCTORS IN JUNCTION BOX AND LEAVE SUFFICIENT SLACK FOR FUTURE CONNECTION. SEE IL SERIES PLANS FOR ADDITIONAL DETAILS.
- R13 REMOVE EXISTING NAVIGATION LIGHTING FEEDER FROM SUA 658B TO NAVIGATION LIGHTING XFMR. REMOVE NAVIGATION LIGHT POWER CONTROL CIRCUIT CONDUIT AND CONDUCTORS.
- R14 REMOVE EXISTING UNDERDECK FIXTURE AND ALL ASSOCIATED ATTACHMENT HARDWARE. CUT LEFT OVER BOLTS FLUSH AND SEAL ANY HOLES LEFT FROM THE REMOVAL. DELIVER REMOVED UNDERDECK FIXTURE TO SIGNAL MAINTENANCE SHOP IN ACCORDANCE WITH SPECIAL PROVISIONS.
- R15 REMOVE EXISTING SERVICE CABINET AND FOUNDATION. DELIVER TO SIGNAL MAINTENANCE SHOP IN ACCORDANCE WITH SPECIAL PROVISIONS.
- R16 REMOVE ALL EXISTING ILLUMINATION AND ITS TRANSFORMER FEEDER CONDUCTORS. ABANDON EXISTING CONDUIT IN PLACE. REMOVE CONDUIT ELBOWS ON EITHER END OF ABANDONED CONDUIT.
- R17 REMOVE EXISTING ROADWAY ILLUMINATION CONDUIT AND CONDUCTORS. CUT EXISTING CONDUIT AND FLUSH WITH THE FACE OF BARRIER. SEAL CONDUIT AND MAKE IT WATER TIGHT.
- R18 REMOVE EXISTING ILLUMINATION CONDUCTORS TO SERVICE PANEL IN SHED BELOW BRIDGE DECK.
- R20 REMOVE EXISTING ITS FEEDER CONDUCTORS.
- R21 REMOVE EXISTING ITS FEEDER CONDUCTORS AND ABANDON EXISTING CONDUIT IN PLACE. REMOVE CONDUIT ELBOWS ON EITHER END OF ABANDONED CONDUIT.
- R22 REMOVE ALL EXISTING SURFACE MOUNT CONDUIT, ROADWAY ILLUMINATION AND ITS FEEDER CONDUCTORS AND ALL ASSOCIATED ATTACHMENT HARDWARE. CUT AND LEFT OVER BOLTS FLUSH AND SEAL ANY HOLES LEFT FROM THE REMOVAL.
- R23 NOTIFY WSDOT TWO WEEKS BEFORE REMOVAL OF FOUNTAIN LIGHT, CONDUIT AND CONDUCTORS. WSDOT TO DISCONNECT POWER TO FOUNTAIN LIGHT FROM EXISTING NAVIGATION LIGHTING CIRCUIT. CONTRACTOR SHALL REMOVE CONDUIT AND CONDUCTOR FROM CAGE UNDER EXISTING PIER 13 TO FOUNTAIN LIGHTS.
- R24 REMOVE EXISTING FOUNTAIN LIGHT.
- R25 REMOVE EXISTING ILLUMINATION AND ITS TRANSFORMER FEEDER CONDUCTORS.
- R26 REMOVE EXISTING CONDUIT AND ALL ASSOCIATED ATTACHMENT HARDWARE. CUT LEFT OVER BOLTS FLUSH AND SEAL ANY HOLES LEFT FROM THE REMOVAL.

FILE NAME: PW:\Program\Design-Bld-Build\Contract_008625_WABN\02.0_Contract Documents\2.05_Contract Plans\2.05.02_As-Built\As-Built DGN\1\041576_C8625_P1_ILN_03_R1.dgn				REGION NO. STATE		FED.AID PROJ.NO.								Contract 8625 Change Order #116 Page 10 of 54		PLAN REV. NO. ILN03	
TIME: 7:40:56 AM	DATE: 9/28/2016	PLOTTED BY: schicv	DESIGNED BY: M. KUNDURU	ENTERED BY: M. KUNDURU	10 WASH												
CHECKED BY: J. YANG/D. SIMS	PROJ. ENGR. D. EDWARDS	REGIONAL ADM. J. MEREDITH	REVISION		DATE	BY							ILLUMINATION REMOVAL NOTES				

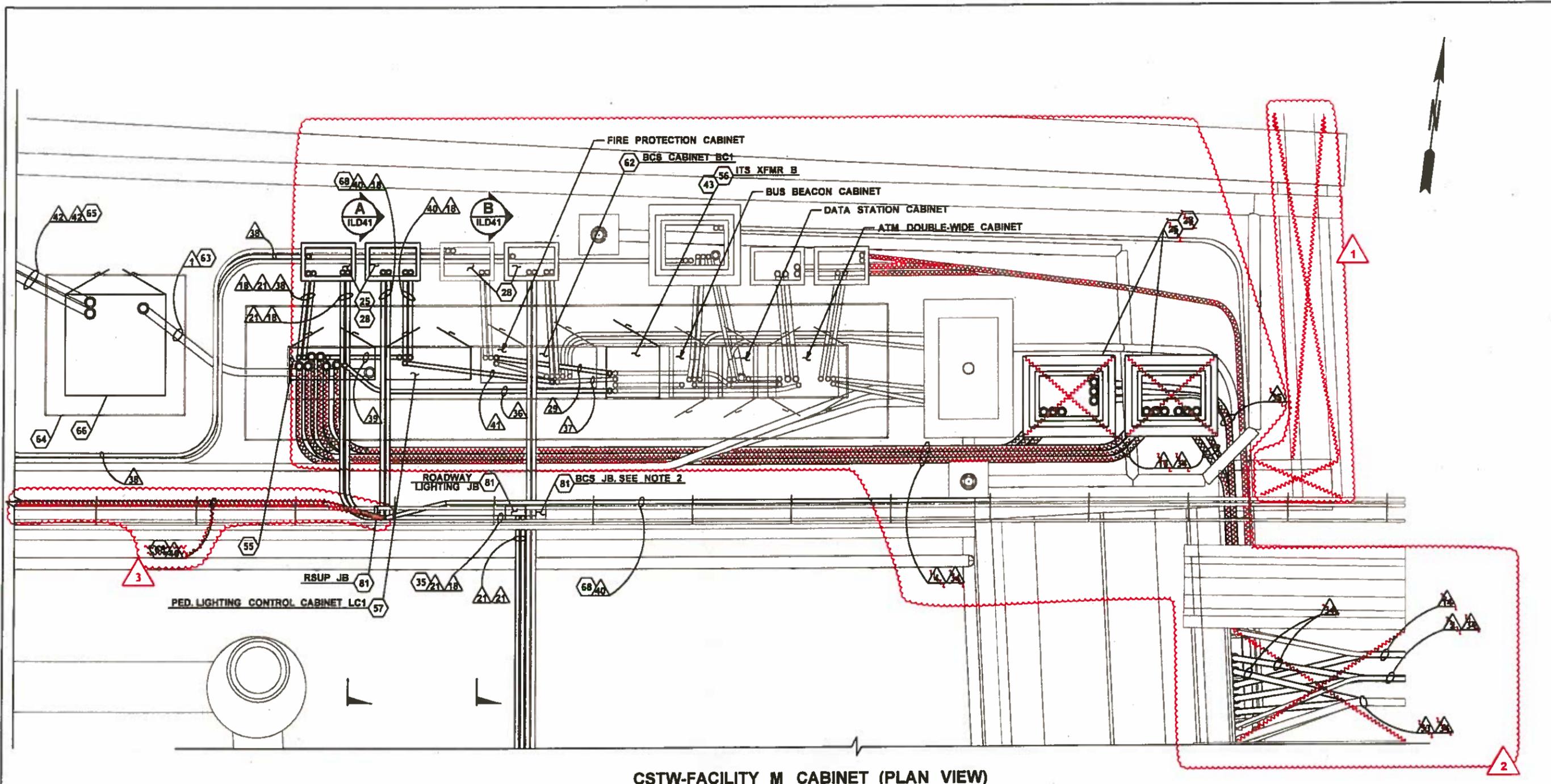
SEC. 21 T.25N. R.4E. W.M.



NOTE:
SEE SHEET ILN01 - ILN05 FOR ILLUMINATION LEGEND, ABBREVIATIONS, GENERAL NOTES, CONSTRUCTION AND WIRE NOTES.

0 50 100
SCALE IN FEET

FILE NAME PW:\Program\Design-Bld-Build\Contract_008625_WABN02.0_Contract_Documents\2.05_Contract_Plans\2.05.02_As-Built\As-Built_DGN\W04589_C8625_PS_IL_02_R1.dgn		FED.AID PROJ.NO.					Contract 8625 Change Order #116 Page 11 of 54	PLAN REF. NO. IL02
TIME 6:58:43 AM	DATE 9/23/2016	REGION NO. 10	STATE WASH					
PLOTTED BY schlec	DESIGNED BY M. KUNDURU	ENTERED BY M. KUNDURU	CHECKED BY J. YANGD. SIMS	PROJ. ENGR. D. EDWARDS	REGIONAL ADM. J. MEREDITH	ILLUMINATION PLAN		
CO#116 - RSUP LIGHTING MOD 9/20/16 MK CO#50 ELECTRICAL - LANDSIDE MODS 8/12/15 KM CO#49 ITS - NEMABEACON LAYOUT MOD 8/12/15 KM CO#115 AS-BUILT REVISIONS 8/12/15 KM		REVISION	DATE	BY				



CSTW-FACILITY M CABINET (PLAN VIEW)

NOTES:

- 1. SEE SHEET ILN01 - ILN05 FOR ILLUMINATION LEGEND, ABBREVIATIONS, GENERAL NOTES, CONSTRUCTION AND WIRE NOTES.
- 2. ALL CONDUITS SHOWN WITH CONSTRUCTION AND WIRE NOTES ARE FOR WSDOT ILLUMINATION FEEDER ONLY. ALL OTHER CONDUITS ARE SHOWN IN LIGHT SHADED COLOR ON THIS SHEET. SEE UTILITY, FIRE PROTECTION, ITS AND BCS PLANS FOR CONDUITS AND EQUIPMENT DETAILS.

3. SEE ILD07a FOR ADDITIONAL DETAILS.

- ADDITIONAL

FILE NAME	PW:\Program\Design-Bld-Build\Contract 08625 WABN02.0 Contract Documents\2.05 Contract Plans\2.05.02 As-Built\As-Built DGN\slV04603 C8625 PE JLD_07_R1.dgn		
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DATE	9/23/2016	STATE	WASH
DESIGNED BY	M. KUNDURU	JOB NUMBER	13A012
ENTERED BY	M. KUNDURU	CONTRACT NO.	
CHECKED BY	J. YANGD. SIMS	LOCATION NO.	
PROJ. ENGR.	D. EDWARDS		
REGIONAL ADM.	J. MEREDITH		
REVISION	DATE	BY	
▲ CO#116 - RSUP LIGHTING MOD	9/20/16	MK	
▲ CO#103 - CONDUIT MOD WEST ABUTMENT	04/29/16	KM	
▲ CO#81 - DELETE FACILITY M	03/15/16	AML	

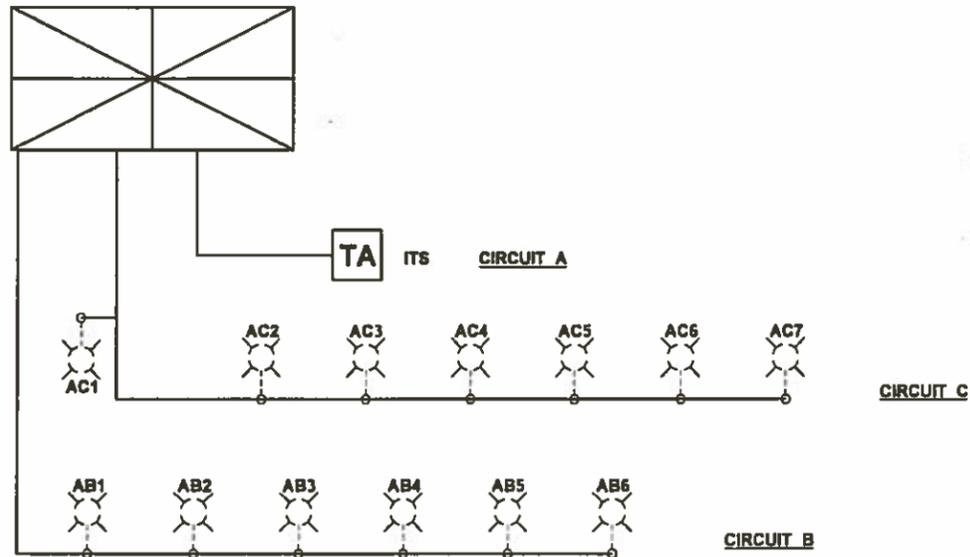


Contract 8625
Change Order #116
Page 12 of 54

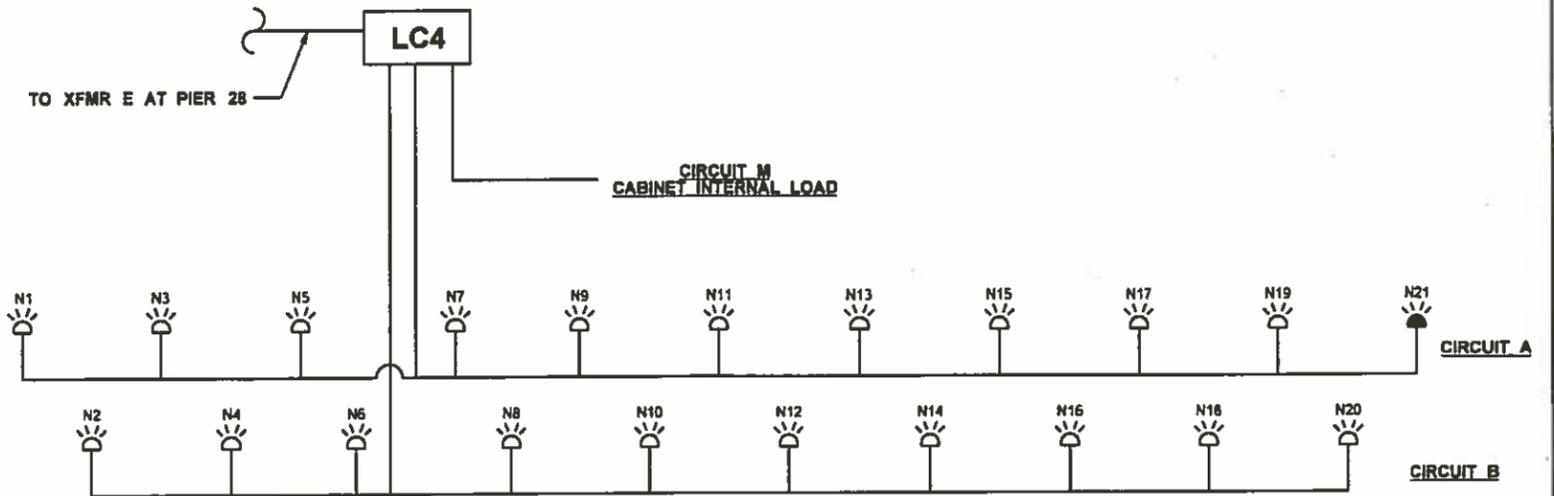
ILLUMINATION DETAILS

PLAN REF. NO.
ILD07
SHEET
603
OF
1797
SHEETS

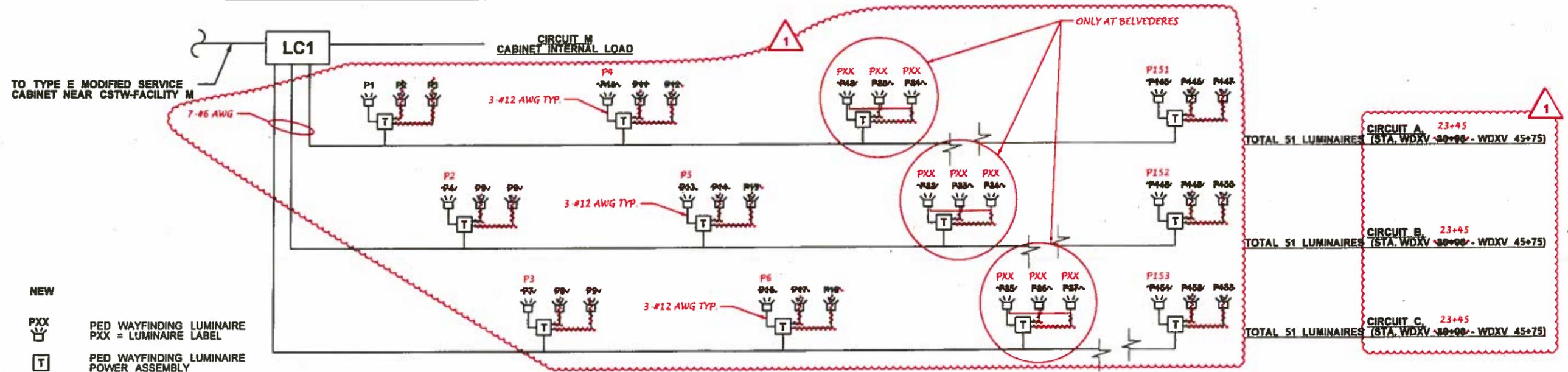
**WSDOT TYPE E SERVICE CABINET (240/480V)
NEAR ARBORETUM**



**NAVIGATION LIGHTING
SUBPANEL LC4 (120V) AT PIER 28**



**PEDESTRIAN LIGHTING CONTROL
CABINET LC1 (277/480V) NEAR CSTW - FACILITY M**



LEGEND

EXISTING	NEW	
WA	PXX	PED WAYFINDING LUMINAIRE PXX = LUMINAIRE LABEL
WA	T	PED WAYFINDING LUMINAIRE POWER ASSEMBLY

NOTE:

- SEE SHEET ILN01-02 FOR ADDITIONAL ILLUMINATION LEGEND ABBREVIATIONS AND GENERAL NOTES.
- 3-#12 AWG WIRING SHALL BE INSTALLED FROM PED. WAYFINDING LUMINAIRE POWER ASSEMBLY TO PED. WAYFINDING LUMINAIRE AT ALL LOCATIONS UNLESS OTHERWISE NOTED.

FILE NAME	PW:\Program\Design-Bld-Build\Contract_008625_WABN02.0_Contract Documents\2.05_Contract Plans\2.05.02_As-Built\As-Built DGN's\V041607_C8625_PS_ILD_11_R1.dgn		
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DATE	9/23/2016	10	WASH
PLOTTED BY	schleccv	JOB NUMBER	13A012
DESIGNED BY	M. HUYNHM. KUNDURU	CONTRACT NO.	
ENTERED BY	M. KUNDURU	LOCATION NO.	
CHECKED BY	J. YANG D. SIMS		
PROJ. ENGR.	D. EDWARDS		
REGIONAL ADM.	J. MEREDITH		

CO#116 - RSUP LIGHTING MOD 9/20/16 MK

FED.AID PROJ.NO.

HR ENGINEERING INC.

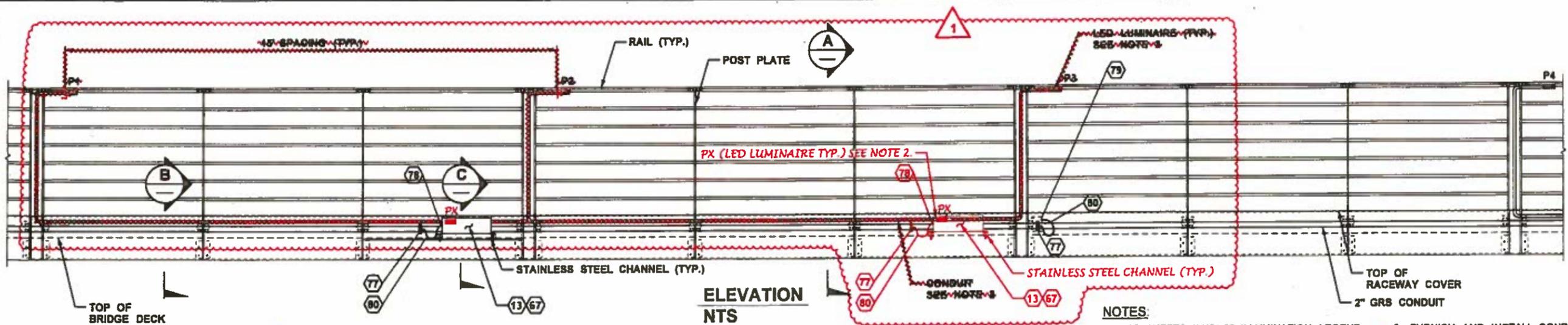


Washington State
Department of Transportation
PARSONS BRINCKERHOFF Parametrix

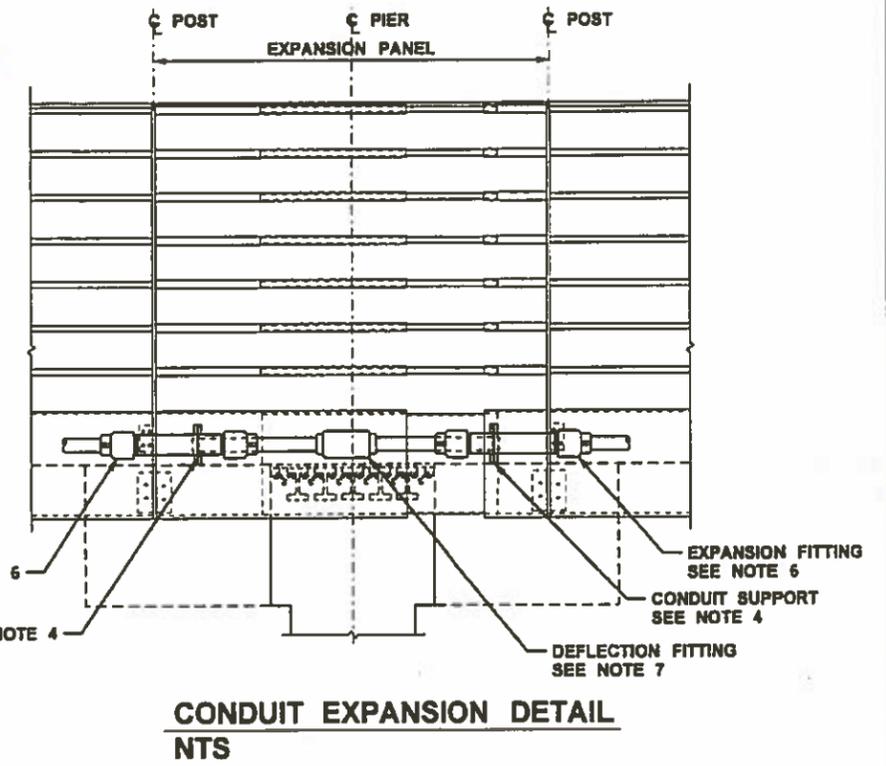
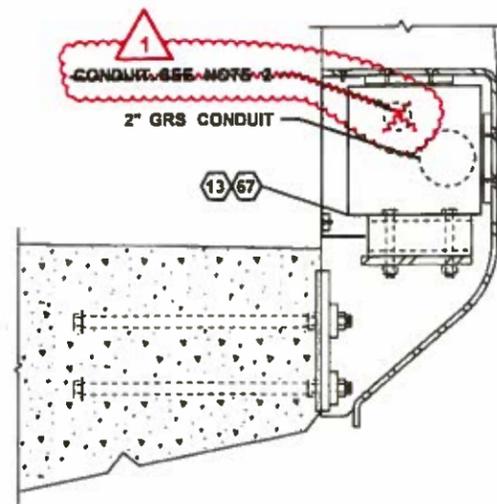
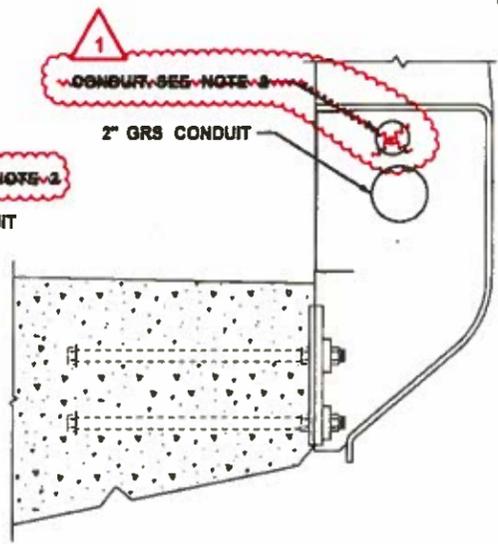
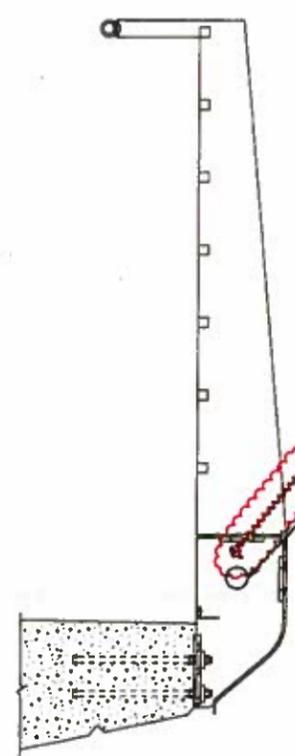
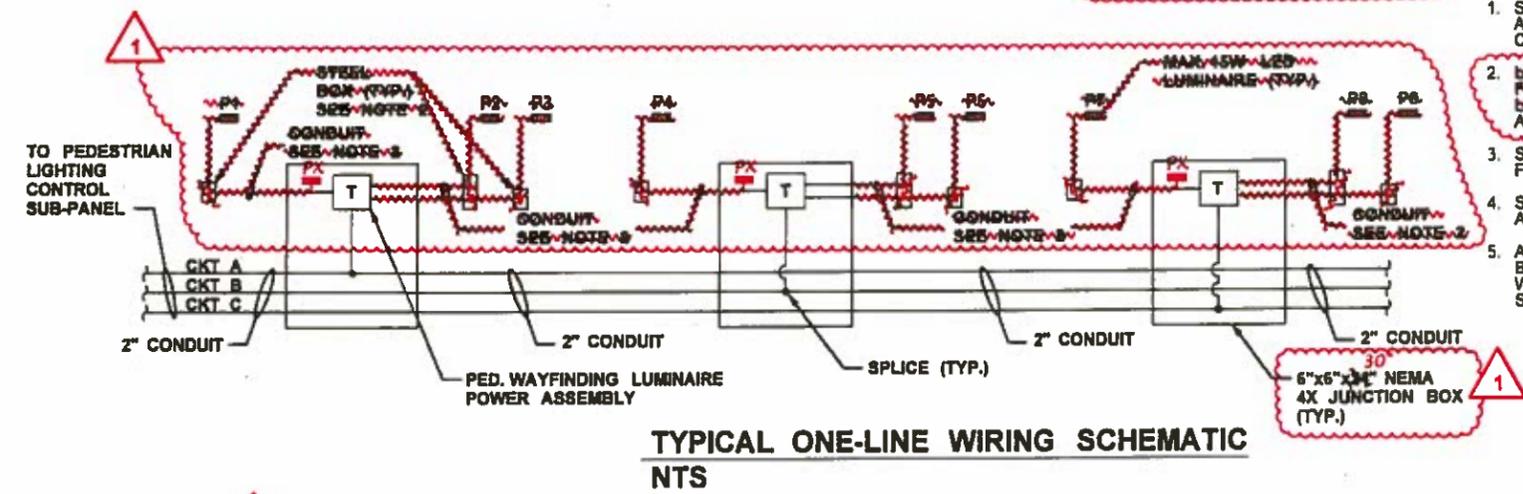
Contract 8625
Change Order #116
Page 13 of 54

ILLUMINATION DETAILS

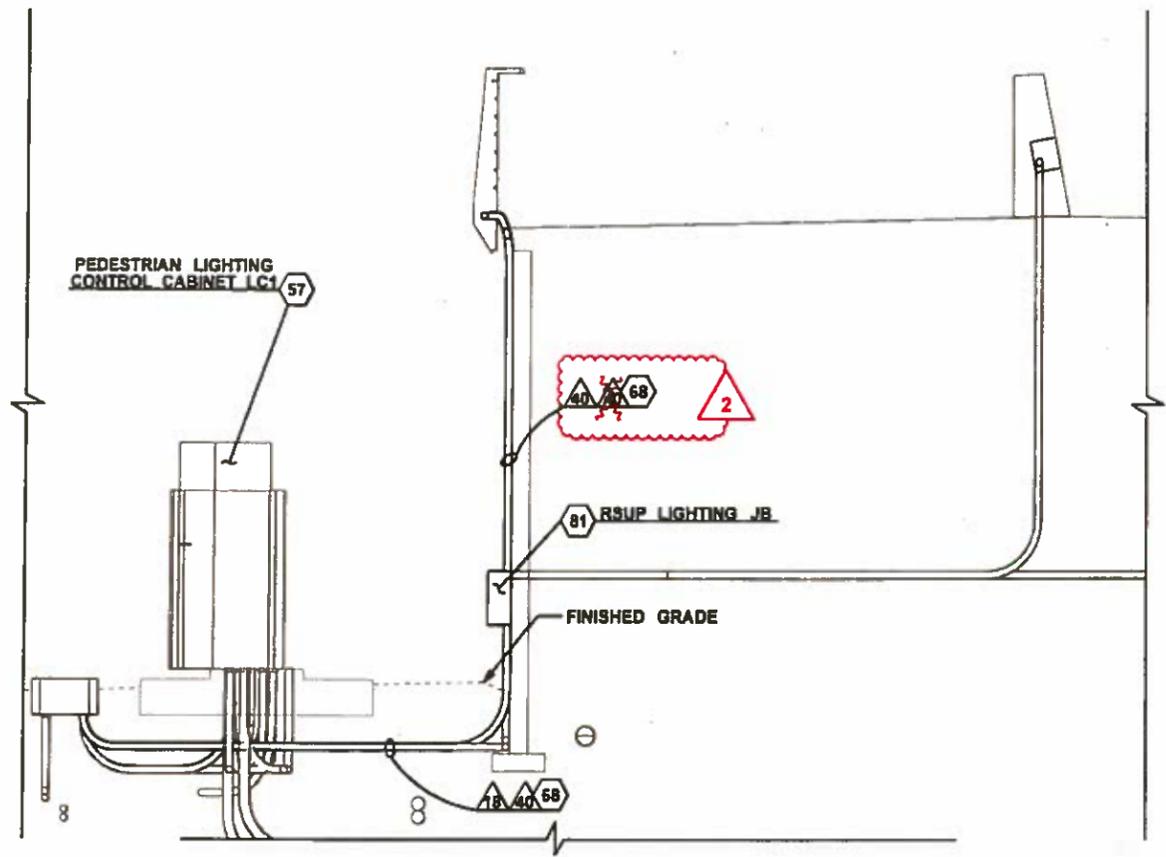
PLAN REF. NO.
ILD11
SHEET
607
OF
1797
SHEETS



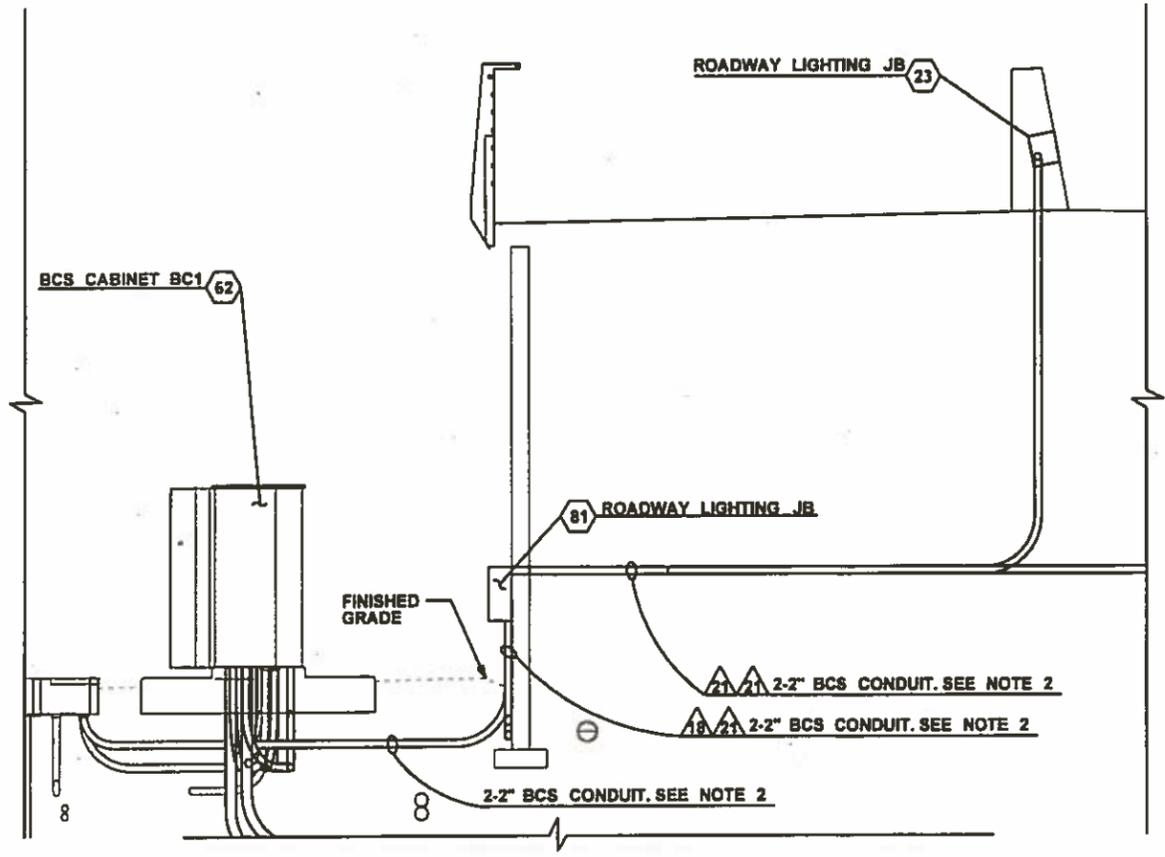
- NOTES:**
- SEE SHEETS ILN01-03 ILLUMINATION LEGEND, ABBREVIATION, GENERAL NOTES AND CONSTRUCTION NOTES.
 - LUMINAIRE AND CONDUIT ROUTING DETAILS FROM POWER ASSEMBLY IN 10 TO LED LUMINAIRE ARE FOR REFERENCE ONLY. SEE ARCHITECTURAL PLANS FOR DETAILS.
 - SEE ARCHITECTURAL AND BRIDGE PLANS FOR RAILING DETAILS.
 - SEE BRIDGE PLANS FOR CONDUIT AND JB ATTACHMENT DETAILS.
 - ALL CONDUITS AND JUNCTION BOX SHALL BE BONDED AND GROUNDED IN ACCORDANCE WITH WSDOT STANDARD SPECIFICATIONS SECTION 8-20.3(9) AND AS NOTED ON PLANS.
 - FURNISH AND INSTALL CONDUIT EXPANSION FITTING TO ALLOW FOR FOLLOWING MOVEMENT.
 - A. PIER 1: ±12" MIN. LONGITUDINAL MOVEMENT.
 - B. PIER 9, 18, 27 & 34: 16" MIN. LONGITUDINAL OPENING MOVEMENT AND 8" MIN. LONGITUDINAL CLOSING MOVEMENT.
 - C. PIER 41: ±20" MIN. LONGITUDINAL MOVEMENT.
 - FURNISH AND INSTALL DEFLECTION FITTING.



FILE NAME	TIME	DATE	PLOTTED BY	DESIGNED BY	ENTERED BY	CHECKED BY	PROJ. ENGR.	REGIONAL ADM.	REVISION	DATE	BY	REGION NO.	STATE	FED.AID PROJ.NO.	LOCATION NO.	HDR ENGINEERING INC.	PROF. ENGINEER	DATE	Washington State Department of Transportation	PARSONS BRINCKERHOFF	Parametrix	Contract 8625 Change Order #116 Page 15 of 54	PLAN REF. NO. ILD13	SHEET 609 OF 1797 SHEETS
	2:21:10 PM	8/15/2016	schiccv	M. KUNDURU	M. VYPLEL	J.YANG/D. SIMS	D. EDWARDS	J. MEREDITH	CO#116 - RSUP LIGHTING MOD	6/22/16	MK	10	WASH					8/23/16				ILLUMINATION DETAILS		



RSUP CONDUIT SECTION A
NT8 (ILD07)

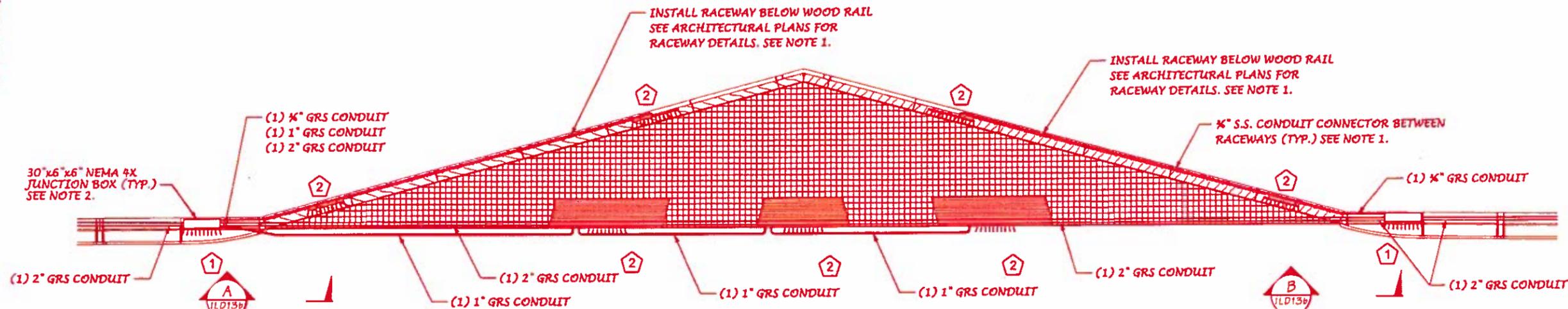


ROADWAY LIGHTING CONDUIT SECTION B
NT8 (ILD07)

NOTES:

- 1. SEE SHEET ILN01 - ILN05 FOR ILLUMINATION LEGEND, ABBREVIATIONS, GENERAL NOTES, CONSTRUCTION AND WIRE NOTES.
- 2. ALL CONDUITS SHOWN WITH CONSTRUCTION AND WIRE NOTES ARE FOR WSDOT ILLUMINATION/FEEDER ONLY. ALL OTHER CONDUITS ARE SHOWN IN LIGHT SHADED COLOR ON THIS SHEET. SEE UTILITY, FIRE PROTECTION, ITS AND BCS PLANS FOR CONDUITS AND EQUIPMENT DETAILS. **NOT ALL CONDUITS AND JUNCTION BOXES ARE SHOWN.**

FILE NAME: PW:\Program\Design-Bid-Build\Contract 008625 WABN02.0 Contract Documents\2.05 Contract Plans\2.05.02 As-Built\As-Built DGN\slV04637_C8625_PS_ILD_41_R1.dgn		REGION NO. 10	STATE WASH	FED.AID PROJ.NO.			Contract 8625 Change Order #116 Page 16 of 54	PLAN REF. NO. ILD41
TIME: 7:04:16 AM	DATE: 9/23/2016	JOB NUMBER: 13A012	CONTRACT NO.	LOCATION NO.				
DESIGNED BY: M. KUNDURU	ENTERED BY: M. KUNDURU	CO#116 - RSUP LIGHTING MOD	9/20/16	MK	DATE: 9/29/16 BY: KM	Department of Transportation	ILLUMINATION DETAILS	SHEET 637 OF 1797 SHEETS
CHECKED BY: J.YANG & D. SIMS	PROJ. ENGR. D. EDWARDS	CO#103 - CONDUIT MOD WEST ABUTMENT	04/29/16	KM				



BELVEDERE AT PIER 10 & 24 (PLAN VIEW)

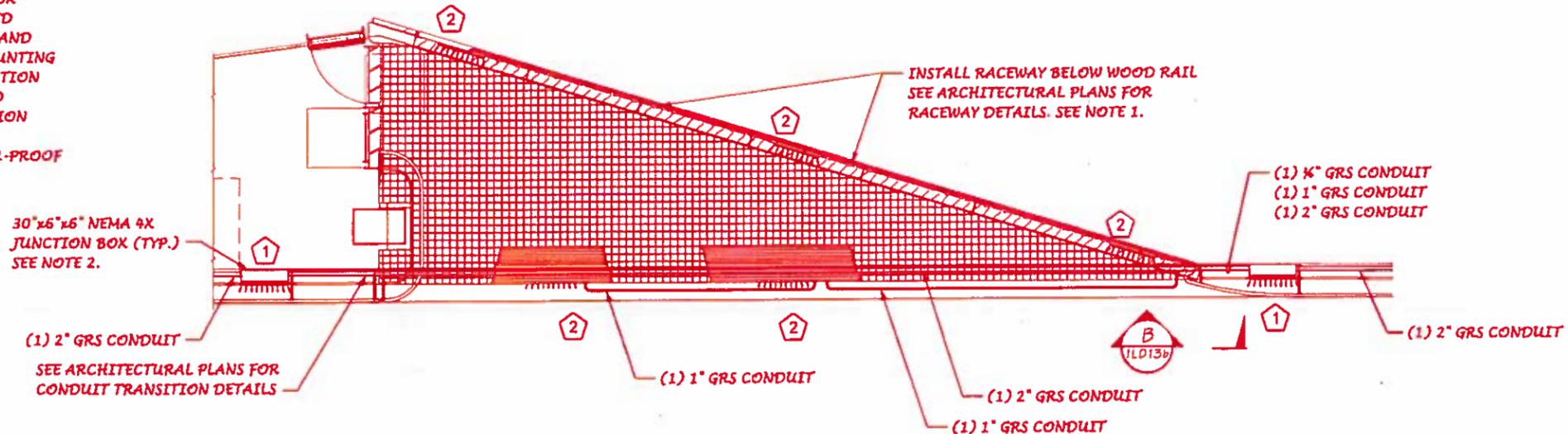
NTS

KEYS:

- ① BW, PASSO 12" LED STEPLIGHT WITH S.S. FACEPLATE
- ② WINONA LED WINLINE SURFACE LINEAR WET 107W, 2-FT SECTION, 100-DEGREE BEAM SPREAD, 35K, WITH ADJUSTABLE MOUNT

NOTES:

1. BOND AND GROUND ALL METAL CONDUITS AND RACEWAYS IN ACCORDANCE WITH NEC. ALL REMOVABLE PARTS OF THE METAL RACEWAY SHALL BE BONDED AND GROUNDED PER NEC USING A GROUNDING STUD WELDED TO THE REMOVABLE PARTS OF THE RACEWAY. REFER TO THE ARCHITECTURAL PLANS FOR STUD LOCATIONS.
2. INSTALL THE LIGHT FIXTURE AS AN INTEGRAL PART OF THE JUNCTION BOX INSIDE THE TOE PLATE. STAINLESS STEEL COVER PLATE SHALL BE PROVIDED AND ATTACHED TO THE OUTSIDE OF THE TOE PLATE. THE JUNCTION BOX AND LIGHT FIXTURE SHALL MAINTAIN ITS OWN ENVIRONMENTAL RATING. MOUNTING THE LIGHT FIXTURE TO THE JUNCTION BOX SHALL NOT RESULT IN REDUCTION OF THE ENVIRONMENTAL RATING. COORDINATE WITH THE ENGINEER AND SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO MATERIAL FABRICATION AND INSTALLATION.
3. ALL RACEWAYS AND LIGHT FIXTURES SHALL BE INSTALLED USING TAMPER-PROOF FASTENERS FOR VANDALISM PROTECTION.
4. SEE SHEET ILN01-02 FOR ILLUMINATION LEGEND, ABBREVIATIONS AND GENERAL NOTES.

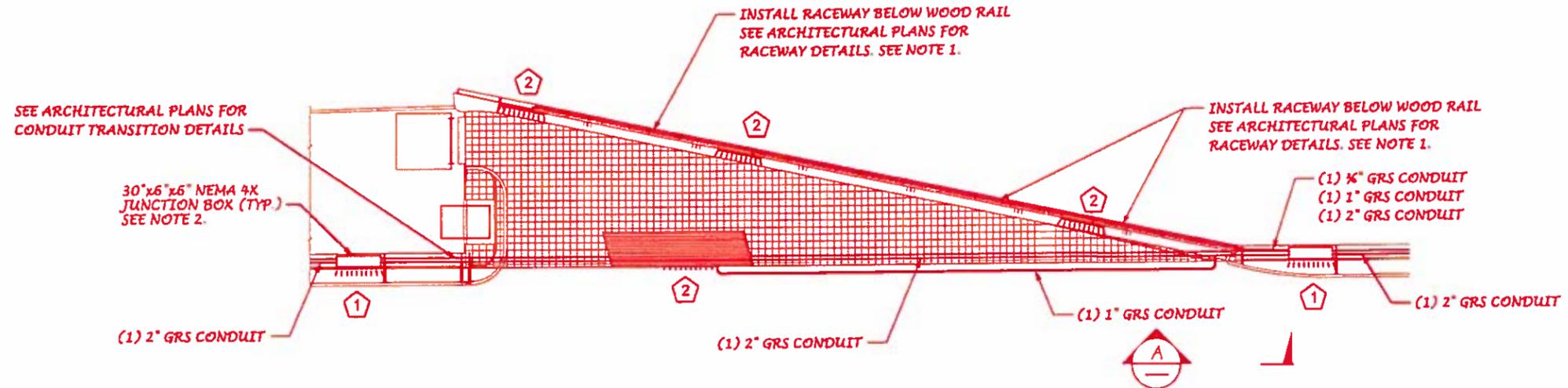


EQUIPMENT PLATFORM BELVEDERE AT PIER 16, 28 & 36 (PLAN VIEW)

NTS

FILE NAME	TIME 2:36:14 PM	DATE 8/15/2016	PLOTTED BY echicev	DESIGNED BY M. KUNDURU	ENTERED BY M. VYPLEL	CHECKED BY J. YANGD. SIMS	PROJ. ENGR. D. EDWARDS	REGIONAL ADM. J. MEREDITH	REVISION	DATE	BY	REGION NO. 10	STATE WASH	FED.AID PROJ.NO.	LOCATION NO.
									CO#116 - RSUP LIGHTING MOD	6/22/16	ZY	JOB NUMBER 13A012	CONTRACT NO.		

					Contract 8625 Change Order #116 Page 17 of 54	PLAN REF. NO. ILD13a
					ILLUMINATION DETAILS	

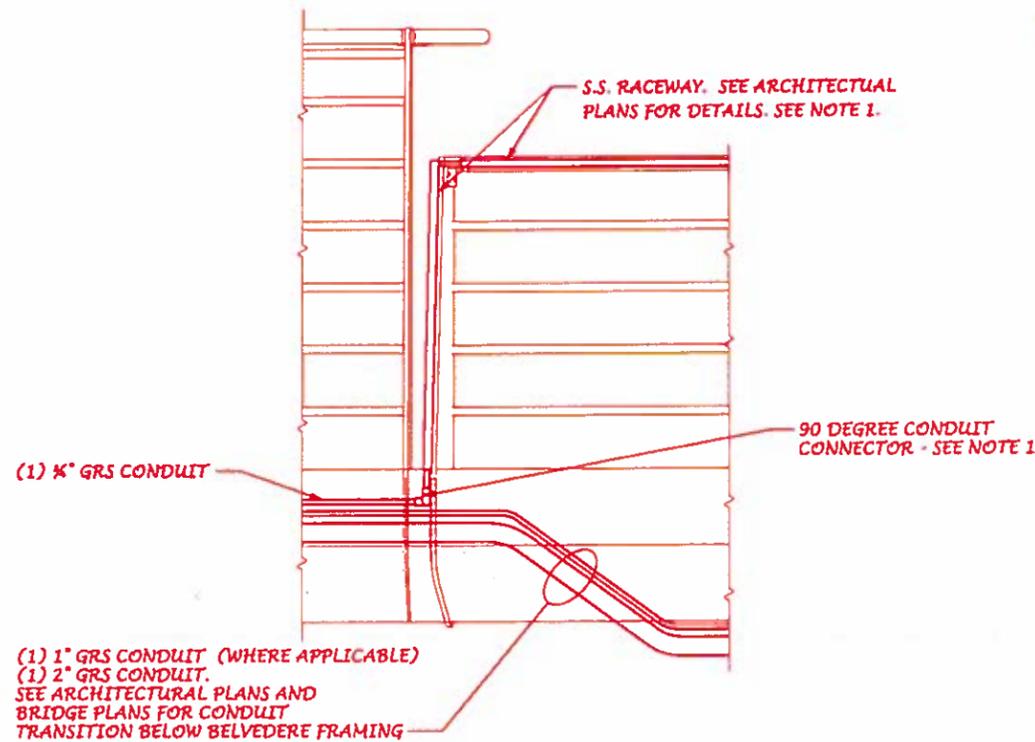


BELVEDERE AT PIER 21 (PLAN VIEW)

NTS

KEYS:

- ① 8W, PASSO 12" LED STEPLIGHT WITH S.S. FACEPLATE
- ② WINONA LED WINLINE SURFACE LINEAR WET 107W, 2-FT SECTION, 100-DEGREE BEAM SPREAD, 35K, WITH ADJUSTABLE MOUNT



SECTION A

NTS

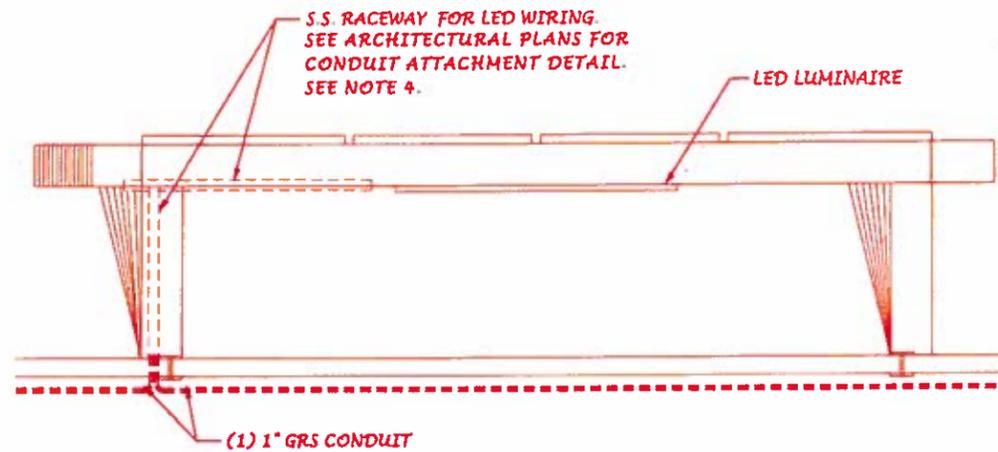
COVER PLATE NOT SHOWN FOR CLARITY, SEE ARCHITECTURAL PLANS.

NOTES:

1. BOND AND GROUND ALL METAL CONDUITS AND RACEWAYS IN ACCORDANCE WITH NEC. ALL REMOVABLE PARTS OF THE METAL RACEWAY SHALL BE BONDED AND GROUNDED PER NEC USING A GROUNDING STUD WELDED TO THE REMOVABLE PARTS OF THE RACEWAY. REFER TO THE ARCHITECTURAL PLANS FOR STUD LOCATIONS.
2. INSTALL THE LIGHT FIXTURE AS AN INTEGRAL PART OF THE JUNCTION BOX INSIDE THE TOE PLATE. STAINLESS STEEL COVER PLATE SHALL BE PROVIDED AND ATTACHED TO THE OUTSIDE OF THE TOE PLATE. THE JUNCTION BOX AND LIGHT FIXTURE SHALL MAINTAIN ITS OWN ENVIRONMENTAL RATING. MOUNTING THE LIGHT FIXTURE TO THE JUNCTION BOX SHALL NOT RESULT IN REDUCTION OF THE ENVIRONMENTAL RATING. COORDINATE WITH THE ENGINEER AND SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO MATERIAL FABRICATION AND INSTALLATION.
3. ALL RACEWAYS AND LIGHT FIXTURES SHALL BE INSTALLED USING TAMPER-PROOF FASTENERS FOR VANDALISM PROTECTION.
4. SEE SHEET ILN01-02 FOR ILLUMINATION LEGEND, ABBREVIATIONS AND GENERAL NOTES.

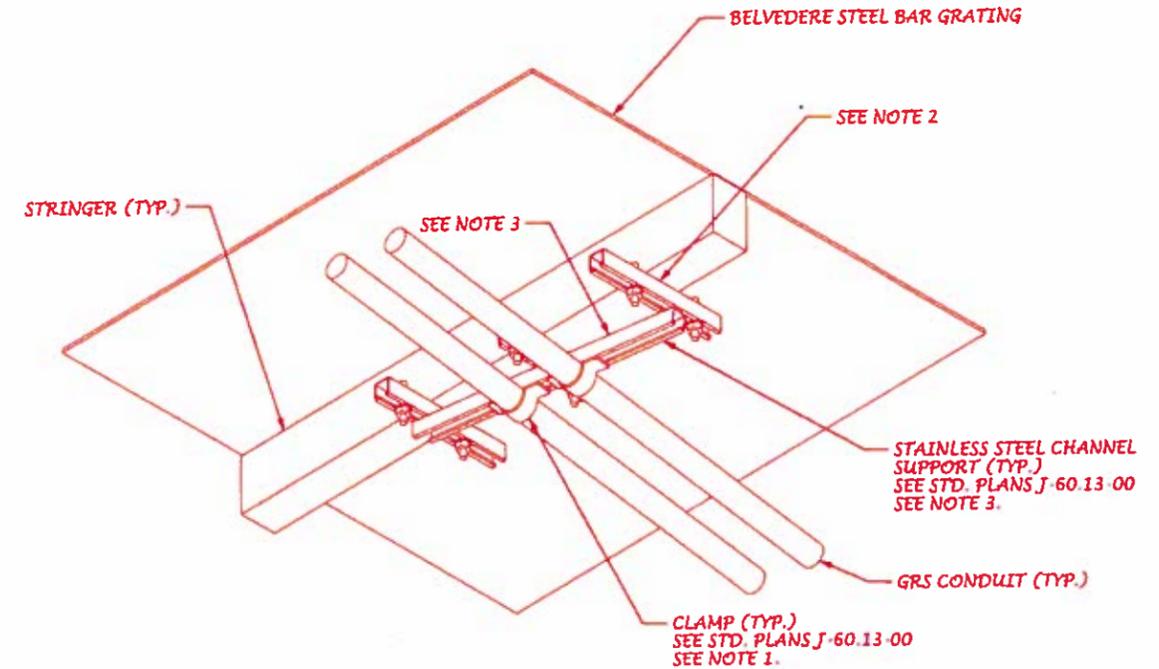


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DATE		PLOTTED BY		10		WASH												609b	
DESIGNED BY		ENTERED BY		JOB NUMBER						1797		SHEETS							
CHECKED BY		PROJ. ENGR.		13A012						DATE		BY		ILLUMINATION DETAILS					
REGIONAL ADM.		REVISION		CONTRACT NO.		LOCATION NO.				DATE		BY							
J. MEREDITH		A CO#116 - RSUP LIGHTING MOD		6/22/16		ZY				8/23/16									



CONDUIT MOUNTING BELOW BENCH

NTS



CONDUIT MOUNTING BELOW BELVEDERE STEEL BAR GRATING

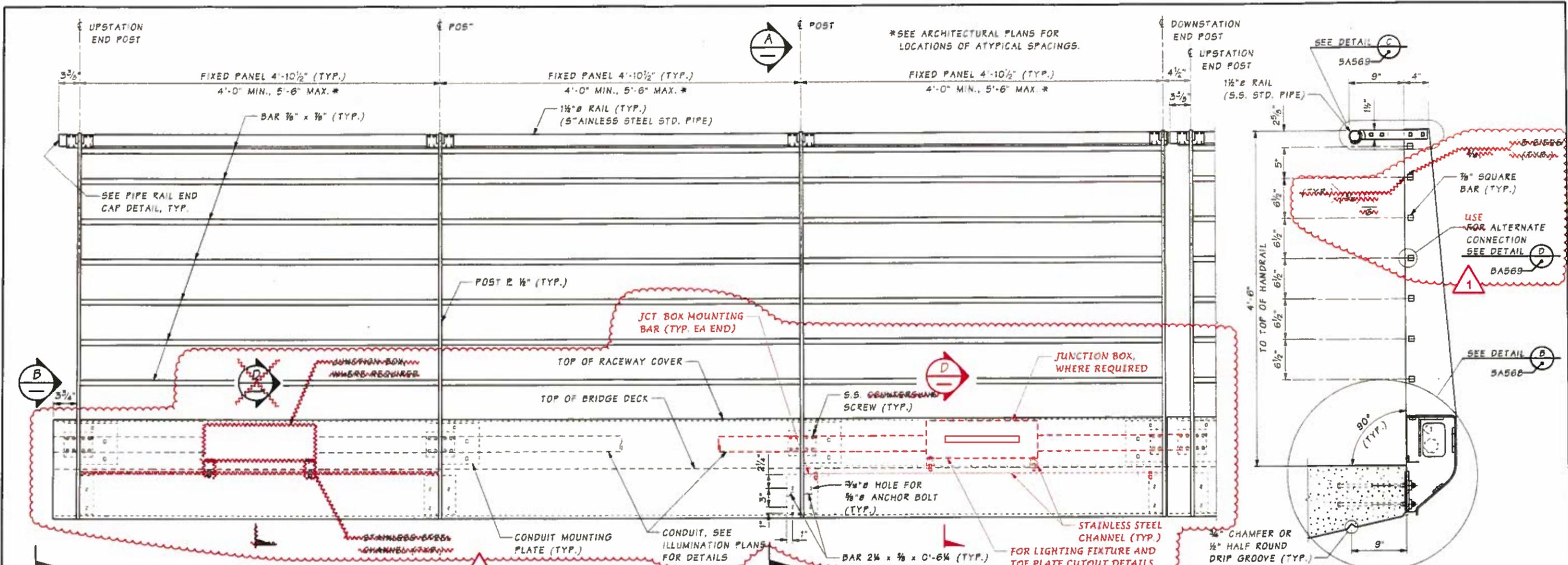
NTS

NOTES:

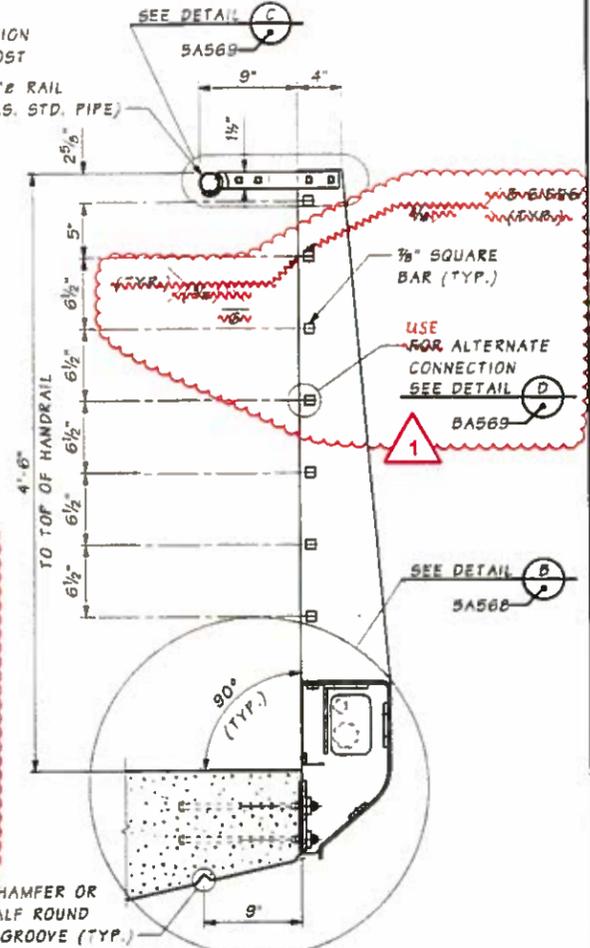
1. SECURE ALL CONDUITS BELOW STEEL BAR GRATING STAINLESS STEEL CHANNEL SUPPORT. SEE STANDARD PLAN J-60.13-00 5'-0" MAXIMUM SPACING.
2. SEE BRIDGE PLAN BA620 FOR CONDUIT SUPPORT TO STRINGERS.
3. ADJUST CHANNEL SUPPORT TO ALIGN WITH CONDUIT.
4. BOND AND GROUND ALL METAL CONDUITS AND RACEWAYS IN ACCORDANCE WITH NEC. ALL REMOVABLE PARTS OF THE METAL RACEWAY SHALL BE BONDED AND GROUNDED PER NEC USING A GROUNDING STUD WELDED TO THE REMOVABLE PARTS OF THE RACEWAY. REFER TO THE ARCHITECTURAL PLANS FOR STUD LOCATIONS.
5. ALL RACEWAYS AND LIGHT FIXTURES SHALL BE INSTALLED USING TAMPER-PROOF FASTENERS FOR VANDALISM PROTECTION.
6. SEE SHEET ILN01-02 FOR ILLUMINATION LEGEND, ABBREVIATIONS AND GENERAL NOTES.



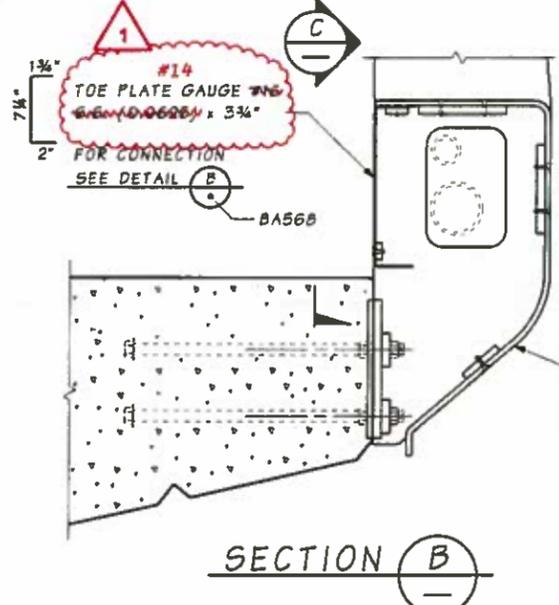
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DESIGNED BY		ENTERED BY		13A012		CONTRACT NO.		LOCATION NO.				ILLUMINATION DETAILS		1797			
CHECKED BY		PROJ. ENGR.		DATE		BY		REVISION		DATE		BY		SHEETS			
J.YANG/D. SIMS		D. EDWARDS		6/22/16		ZY		CO#116 - RSUP LIGHTING MOD		6/22/16		ZY		1797			
J. MEREDITH		J. MEREDITH						REVISION						SHEETS			



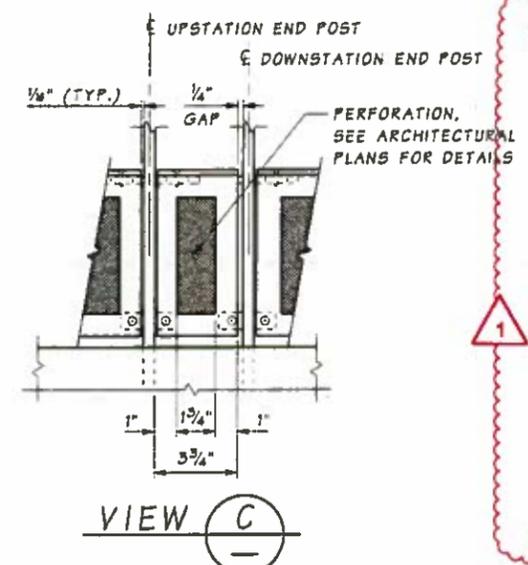
ELEVATION
(LOOKING SOUTH)



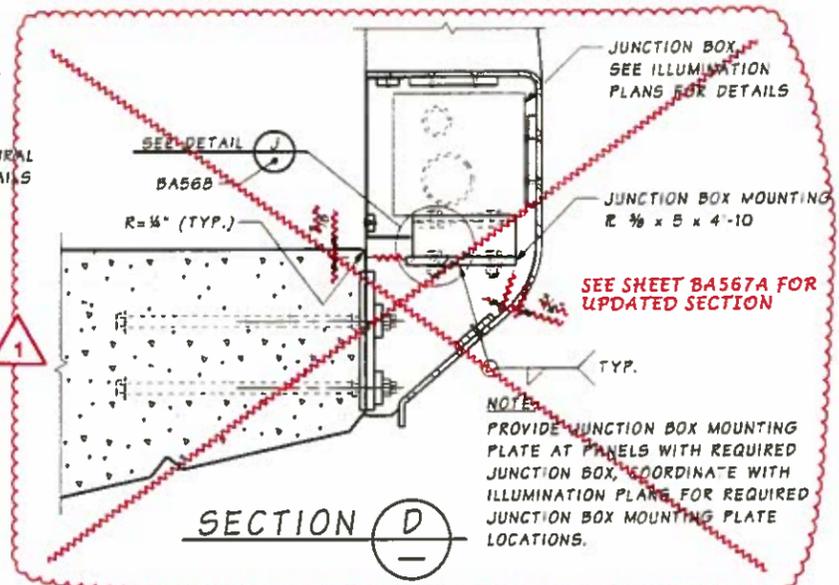
SECTION A
TYPICAL AT
FIXED PANELS



SECTION B



VIEW C



SECTION D

- NOTES:**
- SEE ARCHITECTURAL PLANS FOR ADDITIONAL DETAILS.
 - EXCEPT FOR COMPONENTS IDENTIFIED AS STAINLESS STEEL (S.S.), ALL STEEL PLATES AND BARS SHALL BE A57M A572 GR. 50 AND GALVANIZED ACCORDING TO AASHTO M318. CONTRACTOR SHALL FABRICATE AND GALVANIZE IN A MANNER THAT CONTROLS DISTORTION OF THE STEEL COMPONENTS AND OF THE ASSEMBLED RAILING. ANCHOR BOLTS SHALL COMPLY WITH STD. SPECIFICATION SECTION 9-06.5(1) AND SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M252.
 - ALL SCREWS SHALL BE STAINLESS STEEL. THREADS SHALL BE COATED WITH MARINE GRADE ANTI-SEIZE COMPOUND.
 - FOR REPAIR OF GALVANIZED SURFACES, SEE SPECIAL PROVISIONS.
 - INSTALL POSTS NORMAL TO GRADE.
 - FOR RAILING AND ANCHOR BOLT INSTALLATION, SEE SPECIAL PROVISIONS.

BA567,
BA571 (SIM.),
BA572 (SIM.),
BA573 (SIM.)

SR 520 FILE NO. 7051 SHEET BA567
ProjectWise Vault

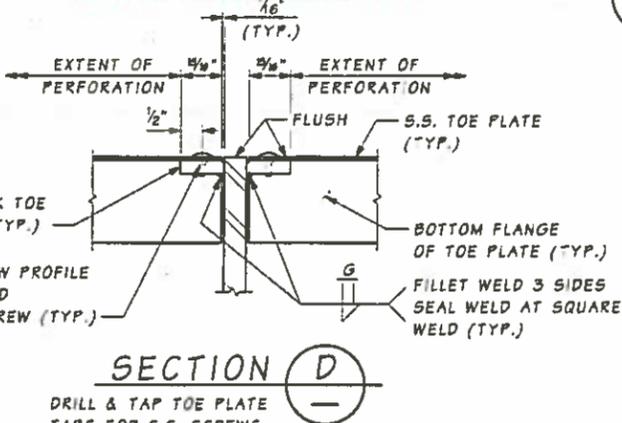
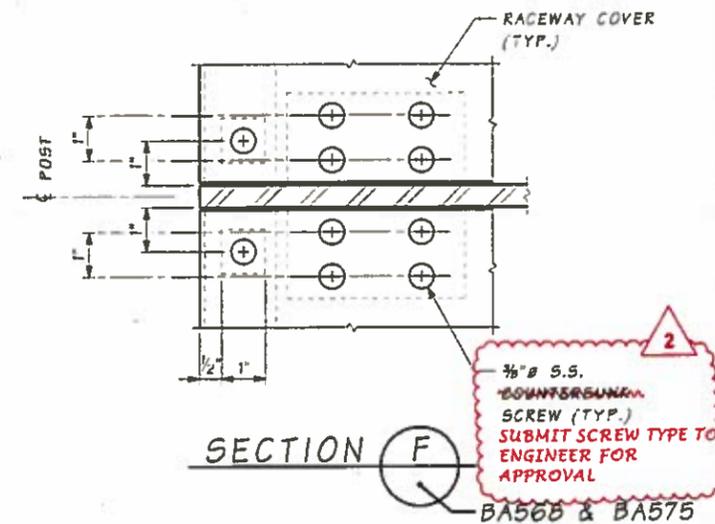
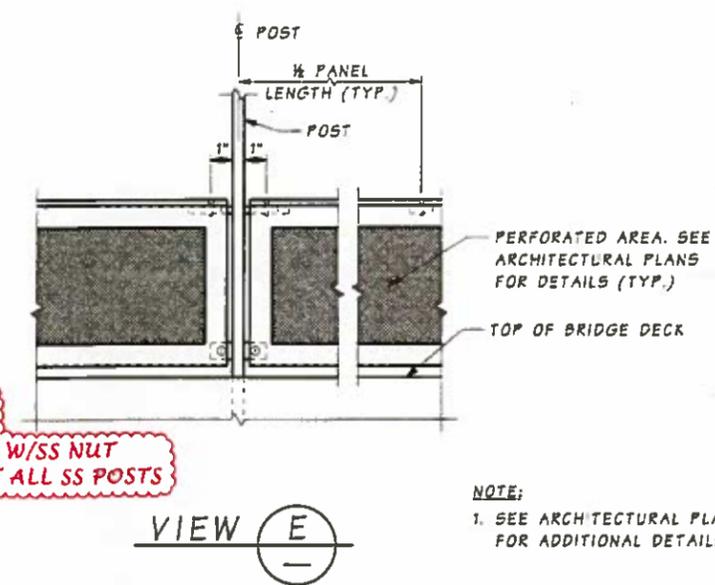
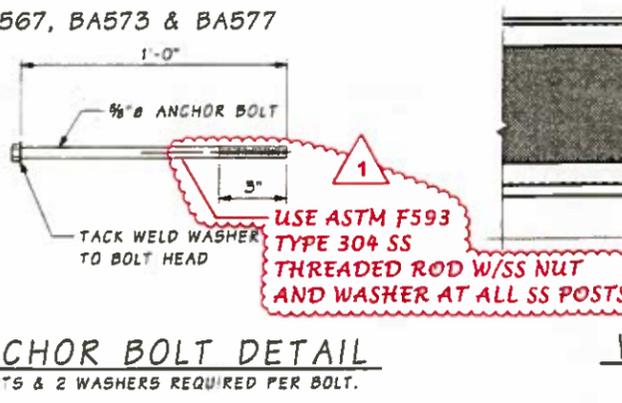
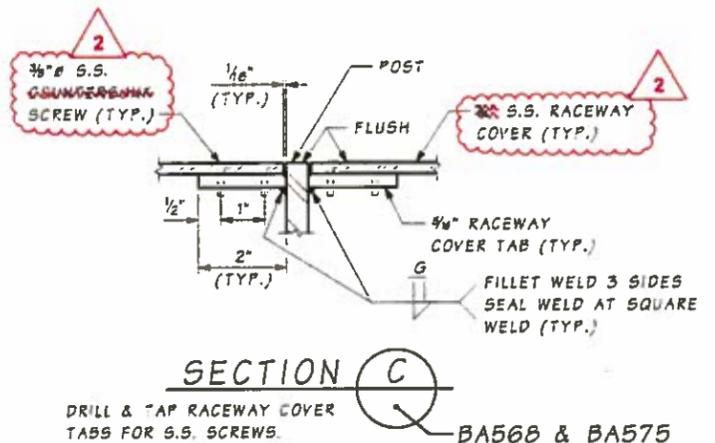
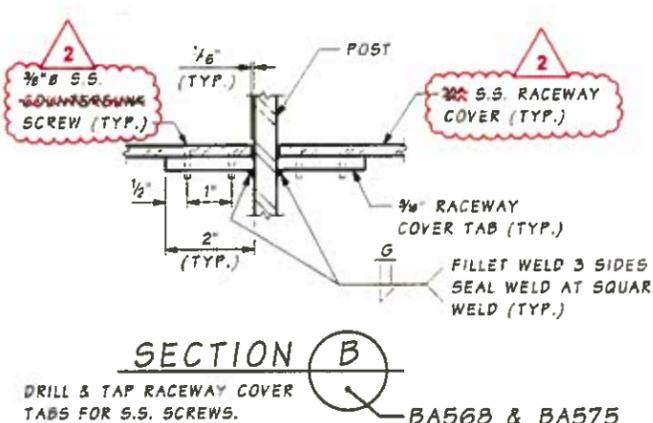
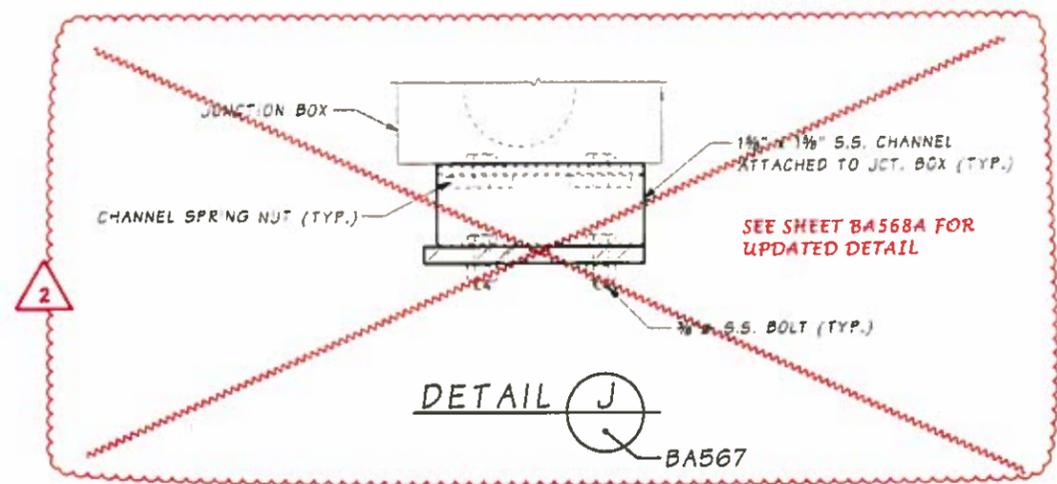
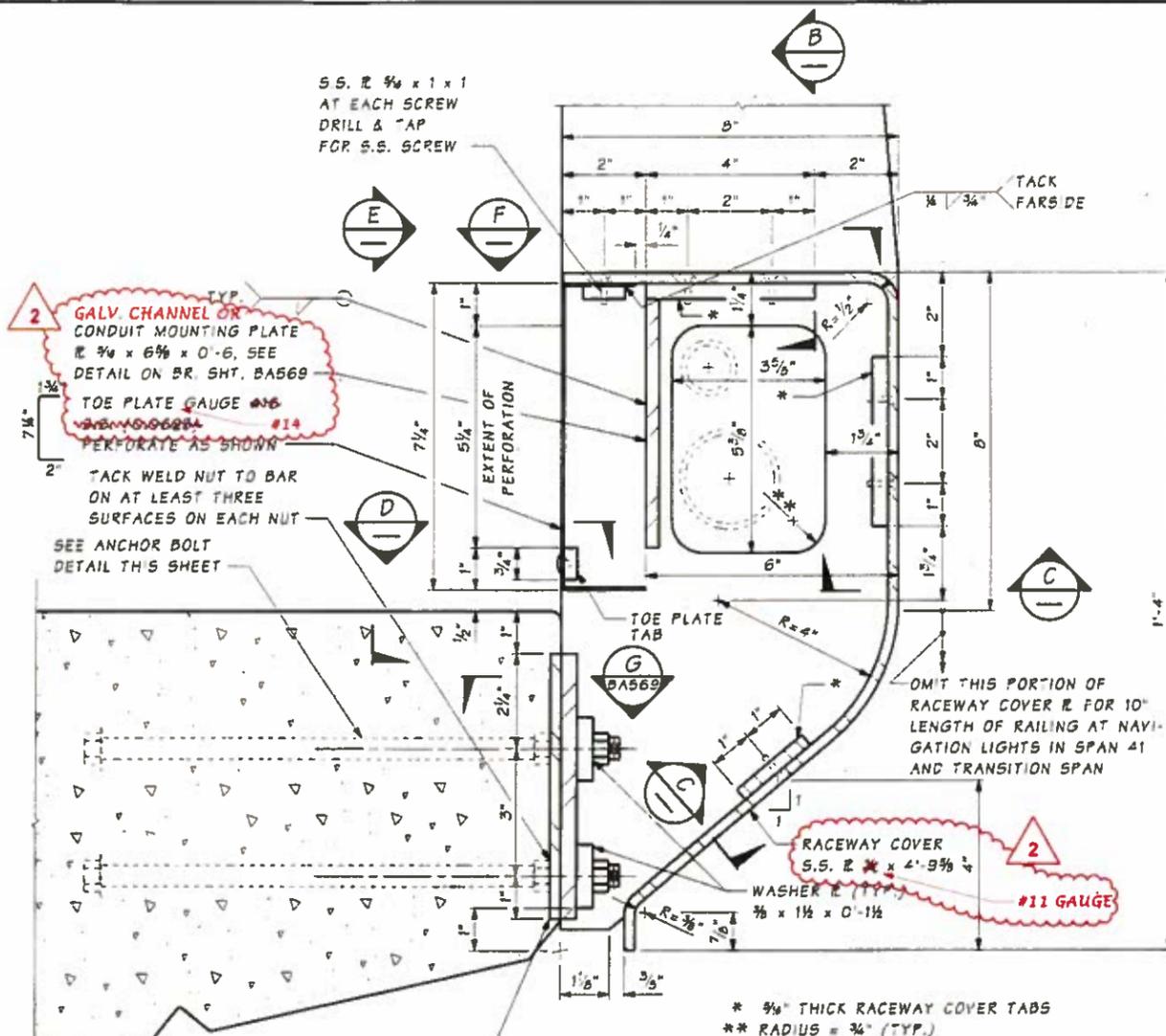
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Supervisor	BOTT, P.	10	WASH			1503	1797
Designed By	BARBER, M.	JOB NUMBER					
Checked By	KNUTSON, G.	13A012					
Detailed By	AUDAR, M.						
Bridge Projects Engr.							
Prelim. Plan By	6/22/16	CO#116 - RSUP LIGHTING MOD	VS	GGK			
Architect/Specialist	DATE	REVISION	BY	APPD			



Contract 8625
Change Order #116
Page 20 of 54

BR. RAILING TYPE DECORATIVE PED.
TYPICAL DETAILS 1

BRIDGE SHEET NO. BA567
SHEET 1503 OF 1797 SHEETS



NOTE:
1. SEE ARCHITECTURAL PLANS FOR ADDITIONAL DETAILS.

SR 520 FILE NO. 7051 SHEET BA568
Projectwise Vault

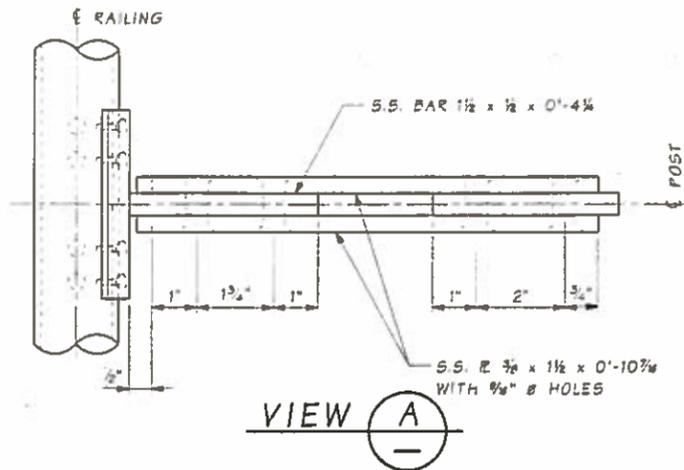
Bridge Design Engr.		REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor	BOTT, P	10	WASH		1504	1797
Designed By	BARBER, M.	JOB NUMBER				
Checked By	KNUTSON, G.	13A012				
Detailed By	AUDAR, M.	DATE	REVISION	BY	APPD	
Bridge Projects Engr.	6/22/16	2	CO#116 - RSUP LIGHTING MOD	VS	GKK	
Prelim. Plan By	02/12/15	1	CO#82-RAIL MOD @ EXPAN JOINTS	AS	GKK	
Architect/Specialist						



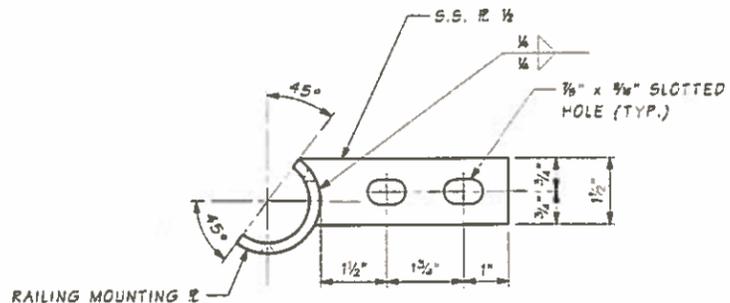
Contract 8625
Change Order #116
Page 21 of 54

BR. RAILING TYPE DECORATIVE PED. TYPICAL DETAILS 2

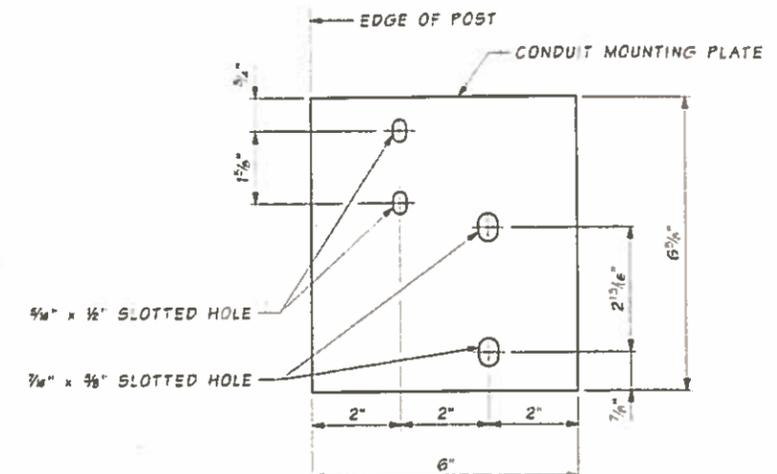
BRIDGE SHEET NO. BA568
SHEET 1504 OF 1797 SHEETS



VIEW A
SHOWN AT INTERIOR POST. END POST SIMILAR.

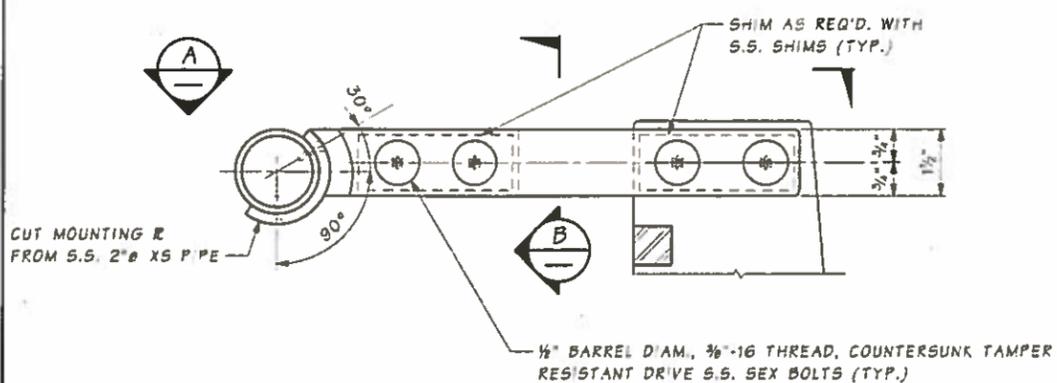


RAILING MOUNTING ASSEMBLY DETAIL

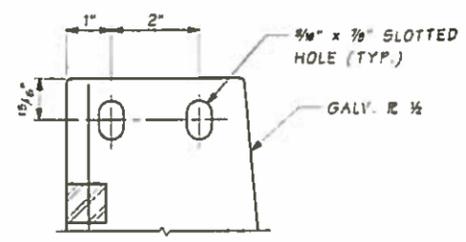


CONDUIT MOUNTING PLATE DETAIL

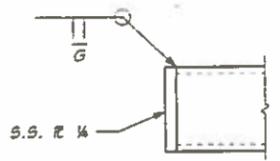
OPPOSITE HAND AT DOWNSTATION END POST (TYP.)



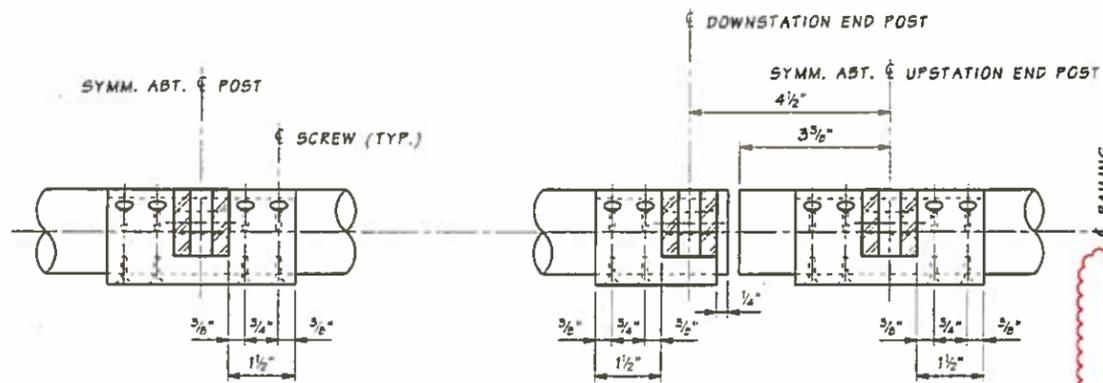
DETAIL C
BA567



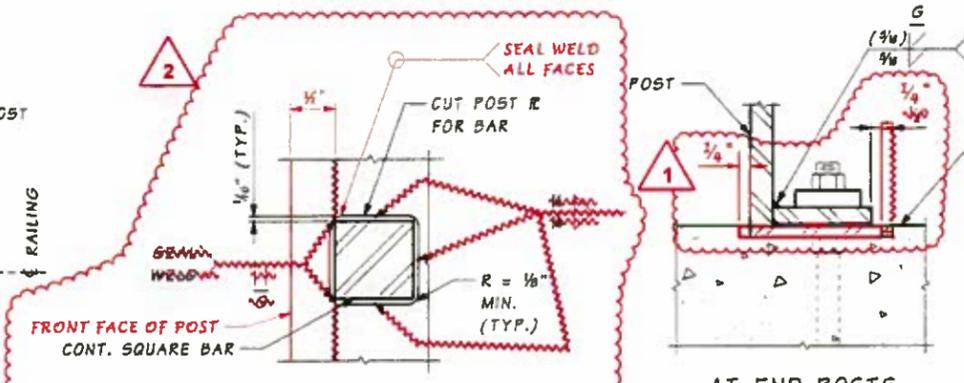
TOP OF POST DETAIL



TYPICAL PIPE RAIL END CAP DETAIL

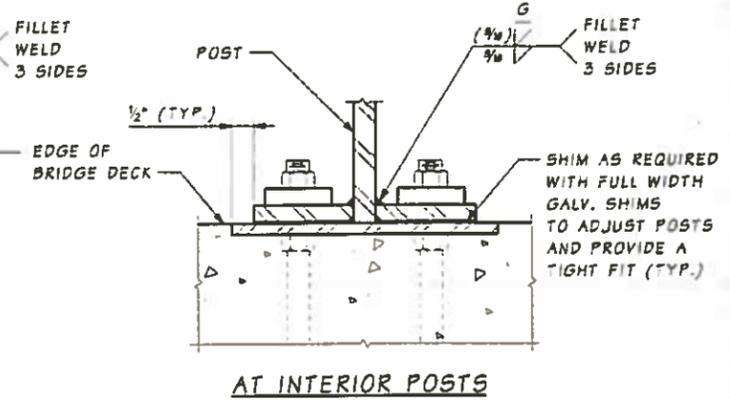


SECTION B



NOTE: THIS DETAIL SHALL BE USED AT ALL INTERIOR POSTS INSTEAD OF TYPICAL BAR TO POST R CONNECTION SHOWN ON BA567. ELEVATIONS & SECTIONS

DETAIL D
BA567, BA573
BA575, BA576, BA577



SECTION G
BA568

SHEET BA569
PROJECT: VOLT

Bridge Design Engr.									
Supervisor	BOTT, P.								
Designed By	BARBER, M.								
Checked By	KNUTSON, G.								
Detailed By	AUDAR, M.	6/24/15	CO#116 - RSUP LIGHTING MOD	VS	GKG	10	WASH		
Bridge Projects Engr.		4/1/16	CO#94 - ANCHOR CLUSTER	AS	GKG		JOB NUMBER	15A012	
Prelim. Plan By			BEARING PAD MOD						
Architect/Specialist		DATE	REVISION	BY	APPD				

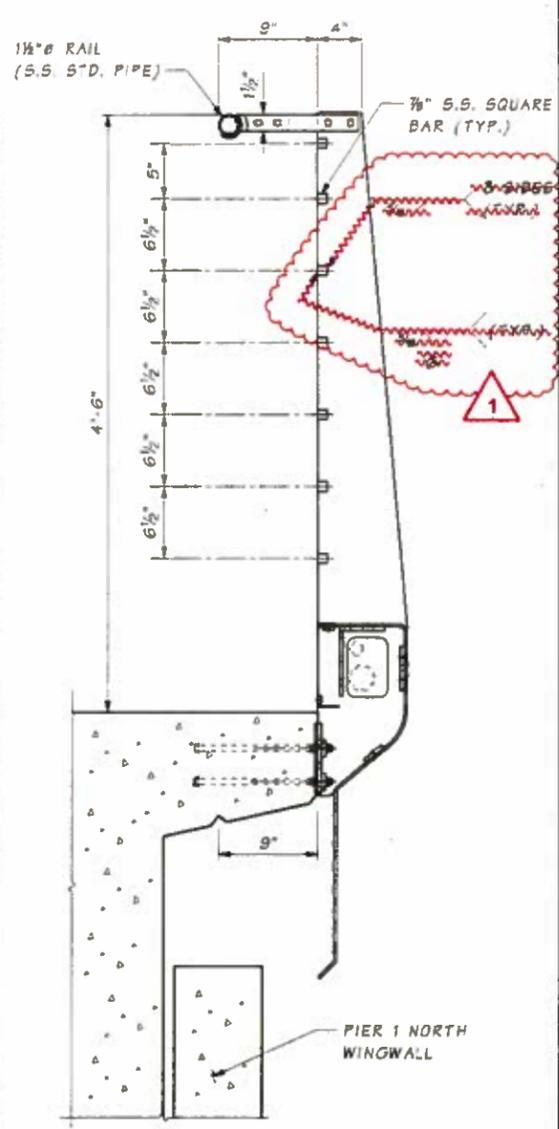
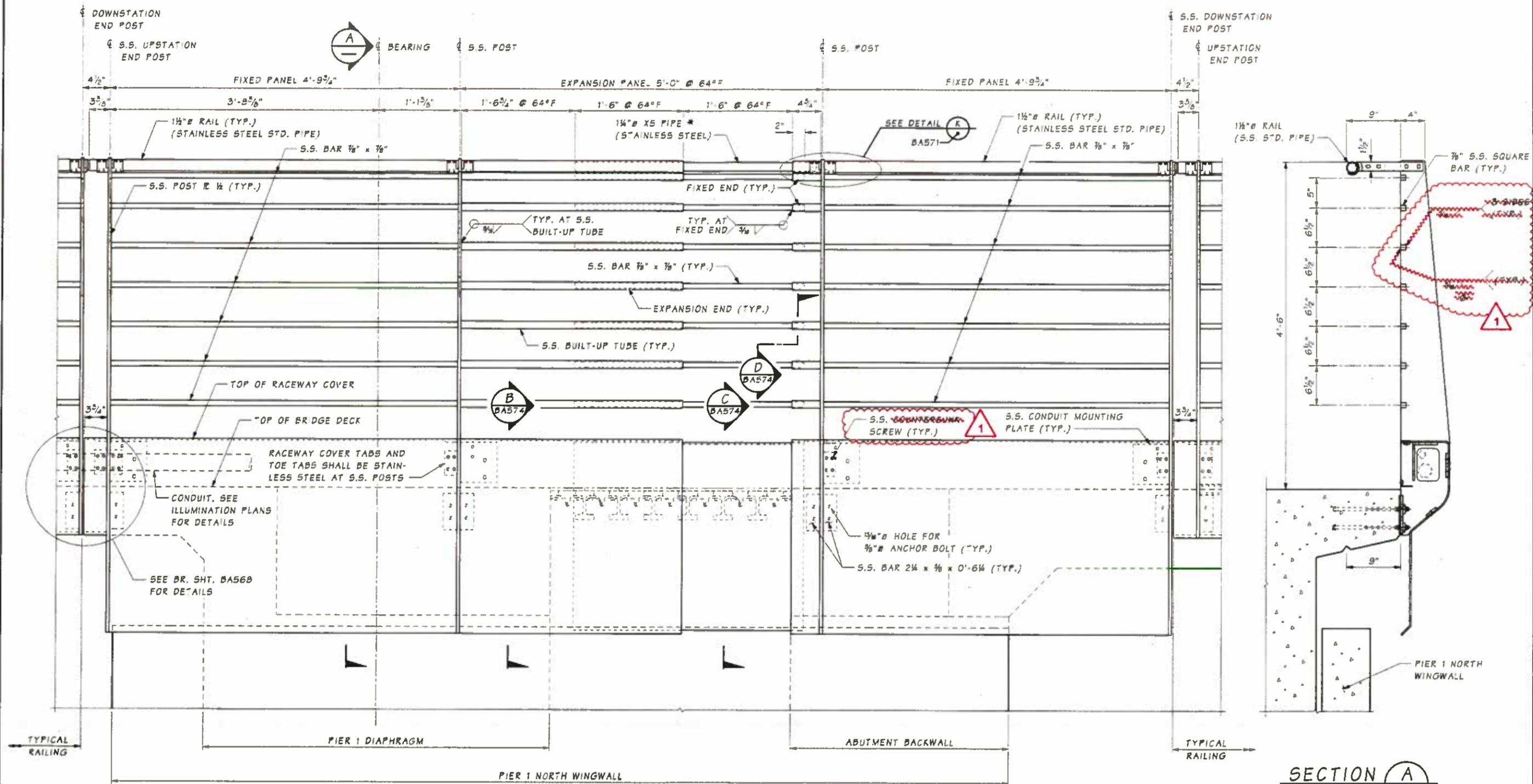


3-18-16



Contract 8625
Change Order #116
Page 22 of 54
BR. RAILING TYPE DECORATIVE PED.
TYPICAL DETAILS 3

BRIDGE SHEET NO.
BA569
SHEET 1505 OF 1797 SHEETS



SECTION A
 PIER 1 SHOWN.
 FOR INFORMATION
 NOT SHOWN
 SEE SECTION A
 SIM.

ELEVATION
 AT PIER 1
 (LOOKING SOUTH)

* MILL O.D. OF 1 1/4\"/>

SR 520 FILE NO. 7051 SHEET BA570
 Projectwise Vault

Bridge Design Engr.							
Supervisor	BOTT, P.						
Designed By	BARBER, M.						
Checked By	KNUTSON, G.						
Detailled By	AUDAR, M.						
Bridge Projects Engr.							
Prim. Plan By	6/22/16	CO116 - RSUP LIGHTING MOD	VS	GGK			
Architect/Specialist		REVISION	BY	APPD			

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 8-18-16

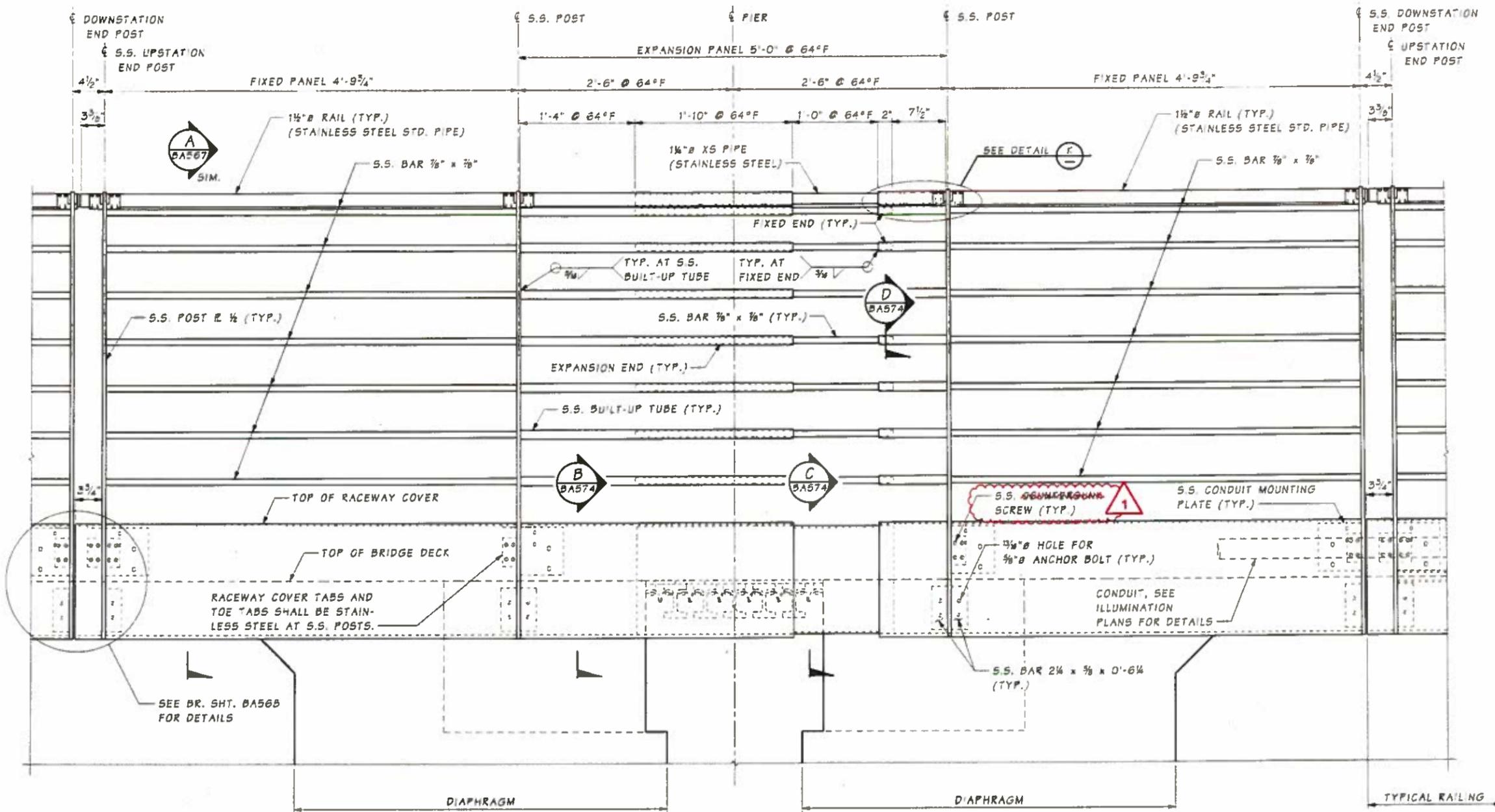
Washington State
 Department of Transportation

Parametrix

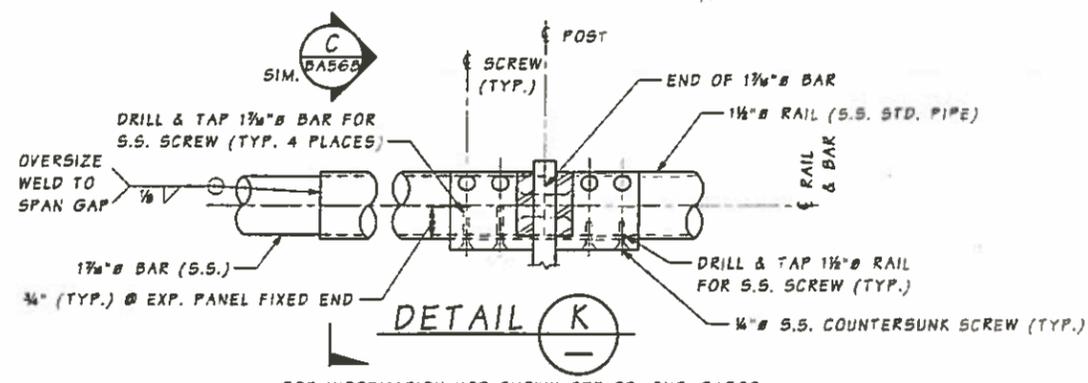
Contract 8625
 Change Order #116
 Page 23 of 54

BR. RAILING TYPE DECORATIVE PED.
 PIER 1 DETAILS

BRIDGE SHEET NO. BA570
 SHEET 1506 OF 1797



ELEVATION
AT PIERS 9, 18, 27, 34
(LOOKING SOUTH)



* MILL O.D. OF 1 1/4\"/>

SHEET BA571
 FILE NO. 7051
 Projectwise Vault

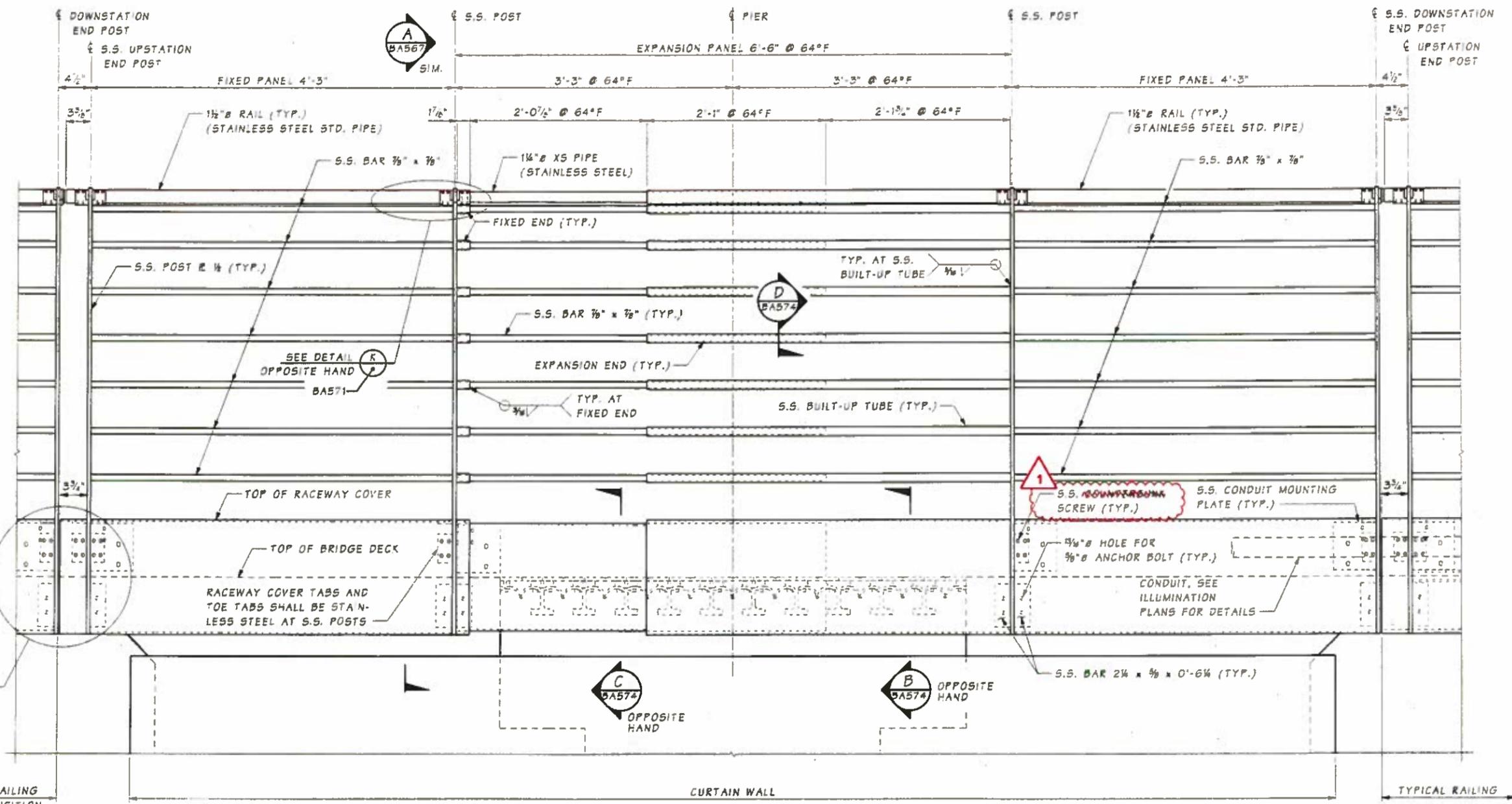
Bridge Design Engr.							
Supervisor	BOTT, P.						
Designed By	BARBER, M.						
Checked By	KNUTSON, G.						
Detalled By	AUDAR, M.						
Bridge Projects Engr.							
Projm. Plan By	6/22/16	COM116 - RSUP LIGHTING MOD	VS	GKK			
Architect/Specialist	DATE	REVISION	BY	APPD			



Contract 8625
 Change Order #116
 Page 24 of 54

BR. RAILING TYPE DECORATIVE PED.
PIERS 9, 18, 27, 34 DETAILS

BRIDGE SHEET NO.	BA571
SHEET OF	1507 OF 1797



ELEVATION
AT PIER 41
(LOOKING SOUTH)

* MILL O.D. OF 1 1/4" X 5 PIPE TO ALLOW SMOOTH SLIDING INSIDE 1 1/2" STD. PIPE RAIL MAINTAIN 0.136" MIN. WALL THICKNESS FOR 1 1/4" X 5 PIPE.

SR 520, FILE NO 7051, SHEET BA572, Projectwise Vault

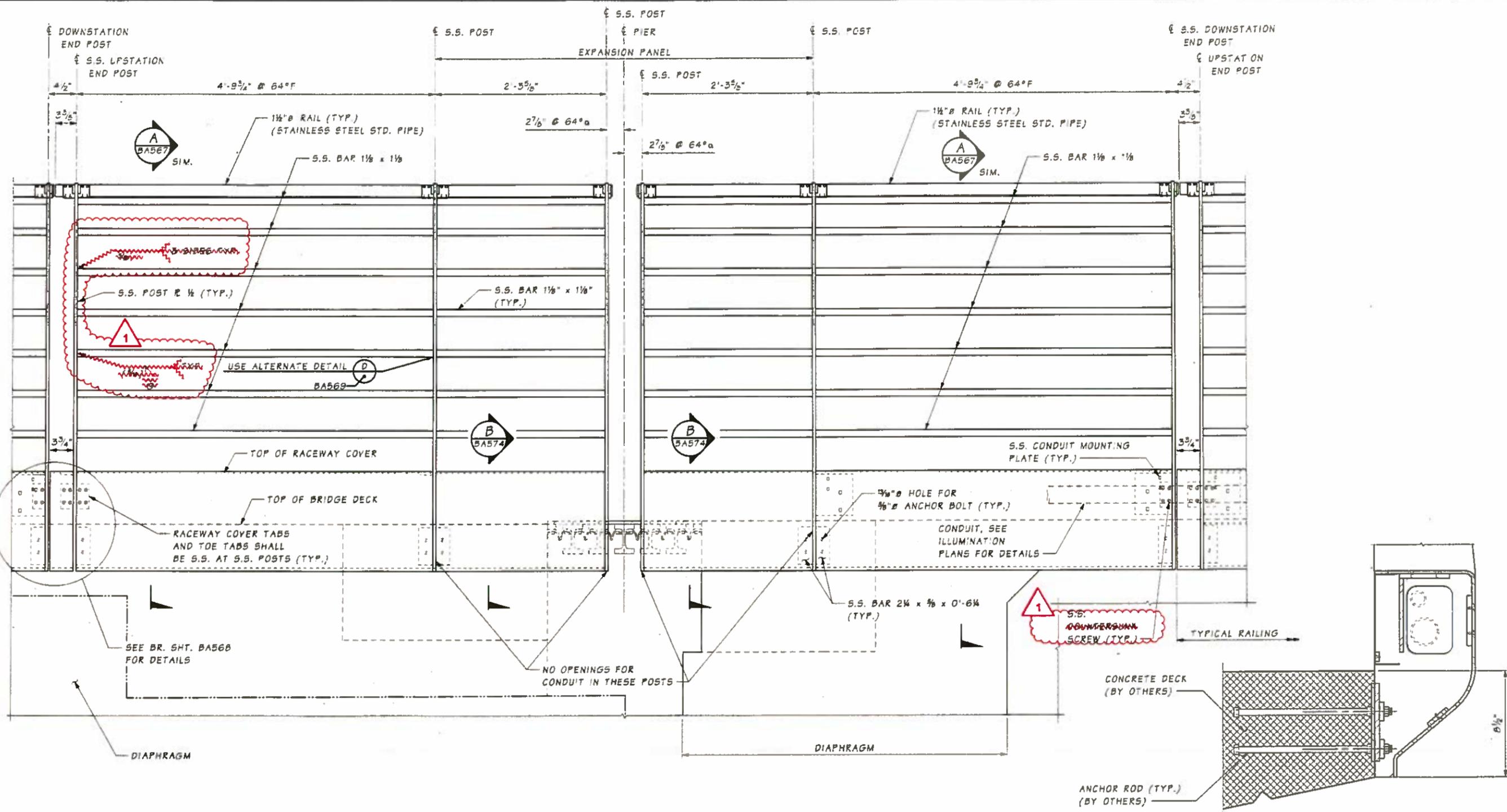
Bridge Design Engr.				REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor	BOTT, P.			10	WASH		1505	1797
Designed By	BARBER, M.			JOB NUMBER				
Checked By	KNUTSON, G.			15A012				
Detailed By	AUDAR, M.							
Bridge Projects Engr.								
Prelim. Plan By	6/22/16	COM#116 - RSUP LIGHTING MOD	VS	GGK				
Architect/Specialist	DATE	REVISION	BY	APP'D				



Contract 8625
Change Order #116
Page 25 of 54

BR. RAILING TYPE DECORATIVE PED.
PIER 41 DETAILS

BRIDGE SHEET NO. BA572
SHEET 1508 OF 1797



α DIMENSION VARIES OVER HEIGHT OF RAILING WHEN LAKE AT ELEVATIONS OTHER THAN NHMLL ELEV. 18.72

ELEVATION
PIER 42
(LOOKING SOUTH)

RAILING ATTACHMENT ON TRANSITION SPAN
(WHERE BRIDGE DECK CONSTRUCTED BY OTHERS)
FOR INFORMATION NOT SHOWN, SEE DETAIL "B" ON BR. SHT. BA568.

SHEET NO. 7051 SHEET BA573

Bridge Design Engr.								
Supervisor	BOTT, P.							
Designed By	BARBER, M.							
Checked By	KNUTSON, G.							
Detailed By	AUDAR, M.							
Bridge Projects Engr.								
Prelim. Plan By	6/22/16	Δ	CO#116	RSUP LIGHTING MOD	VS	GGK		
Architect/Specifier	DATE		REVISION		BY	APPO		

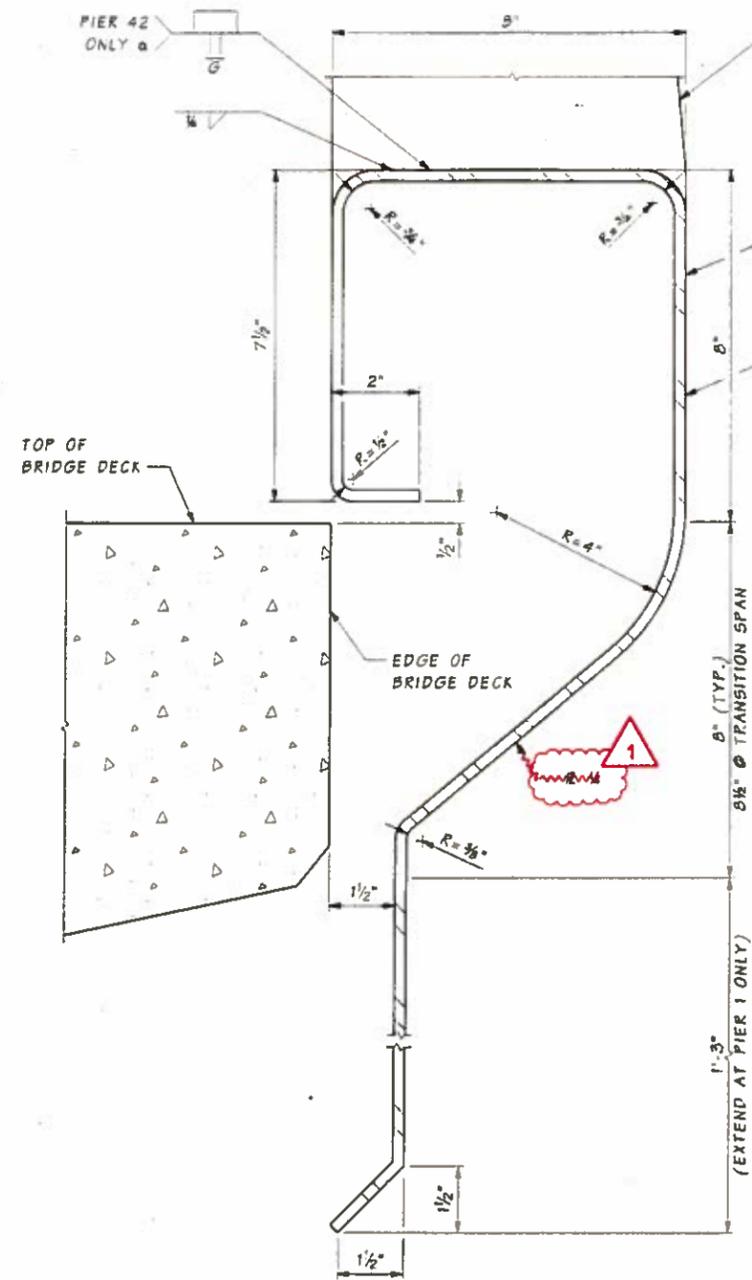


Contract 8625
Change Order #116
Page 26 of 54

BRIDGE SHEET NO. BA573
SHEET 1509 OF 1797 SHEETS

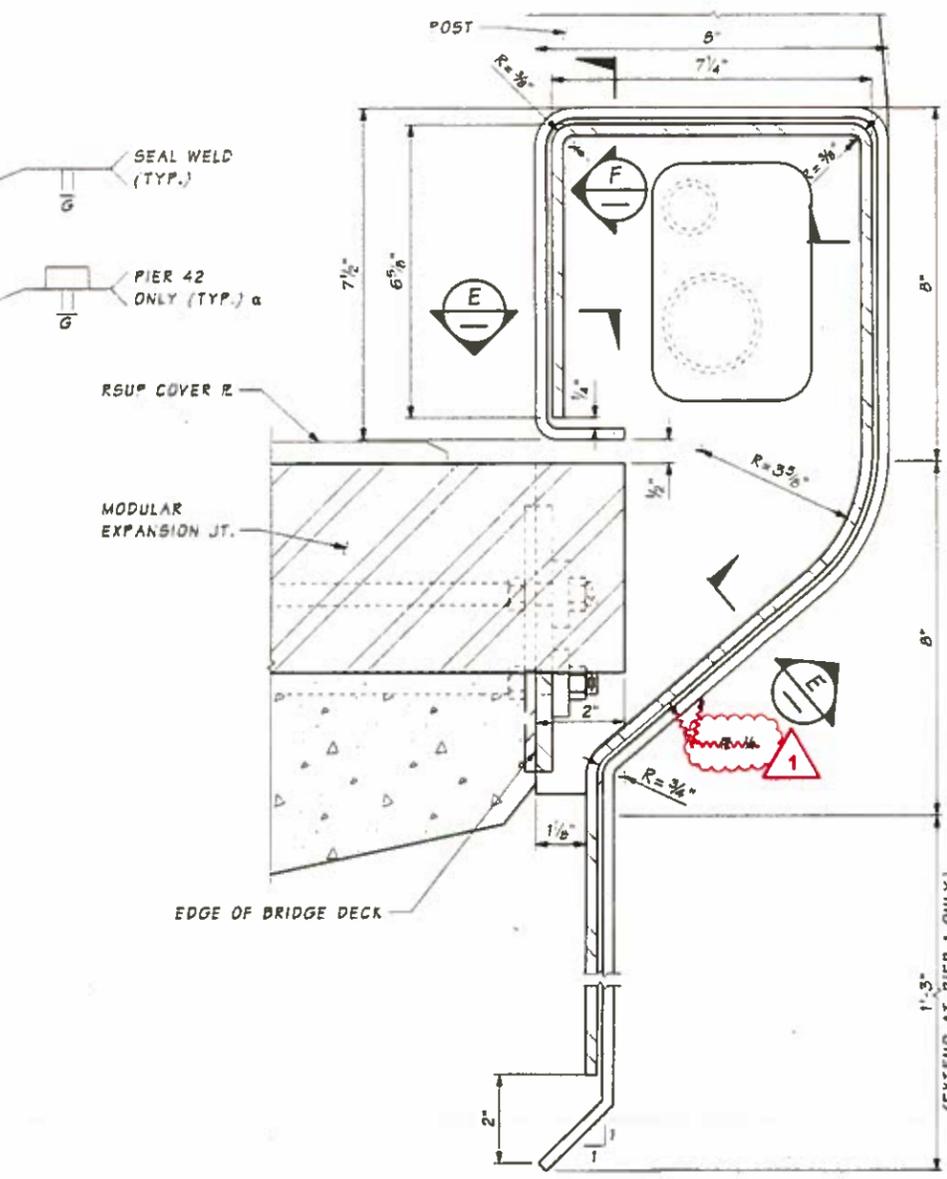
BR. RAILING TYPE DECORATIVE PED. PIER 42 DETAILS

SR 520 FILE NO. 7051 SHEET BA574
Projectwise Vault



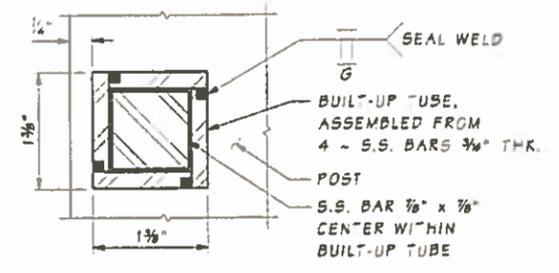
SECTION B
BA570, BA571, BA572, BA573

a WELD OCCURS EACH SIDE OF POST AT INTERIOR POSTS

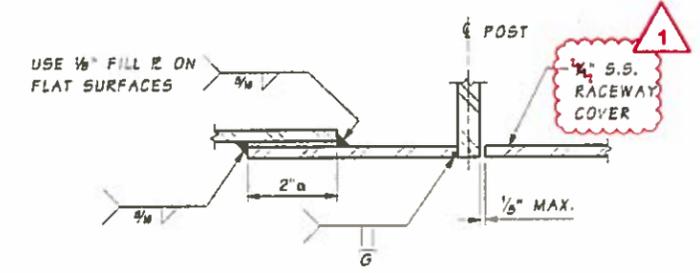


SECTION C
BA570, BA571, BA572

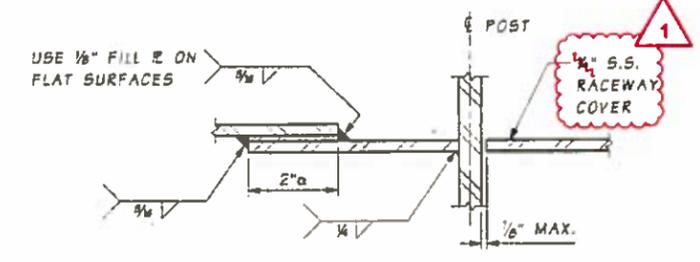
FOR DIMENSIONS AND INFORMATION NOT SHOWN SEE BR. SHT. BA568



SECTION D
BA570, BA571, BA572



SECTION E



SECTION F
a 1 1/4" @ PIER 41

Bridge Design Engr.		REGION NO.		STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor	BOTT, P.	10	WASH			1510	1797
Designed By	BARBER, M.	JOB NUMBER					
Checked By	KNUTSON, G.	13A012					
Detailed By	AUDAR, M.						
Bridge Projects Engr.		DATE	REVISION	BY	APP'D		
Prelim. Plan By	6/22/16	COM#116 - RSUP LIGHTING MOD	VS	GKK			
Architect/Specialist							



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8-18-16

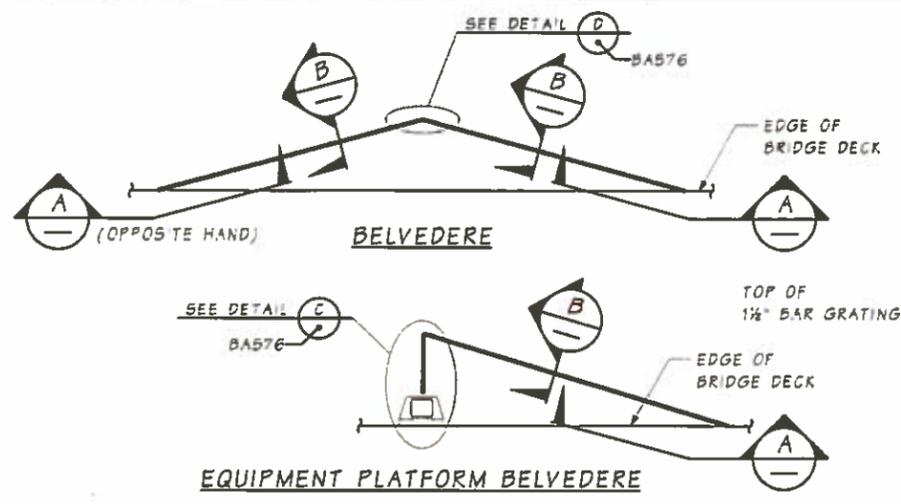
Washington State
Department of Transportation

PARSONS BRINCKERHOFF **Parametrix**

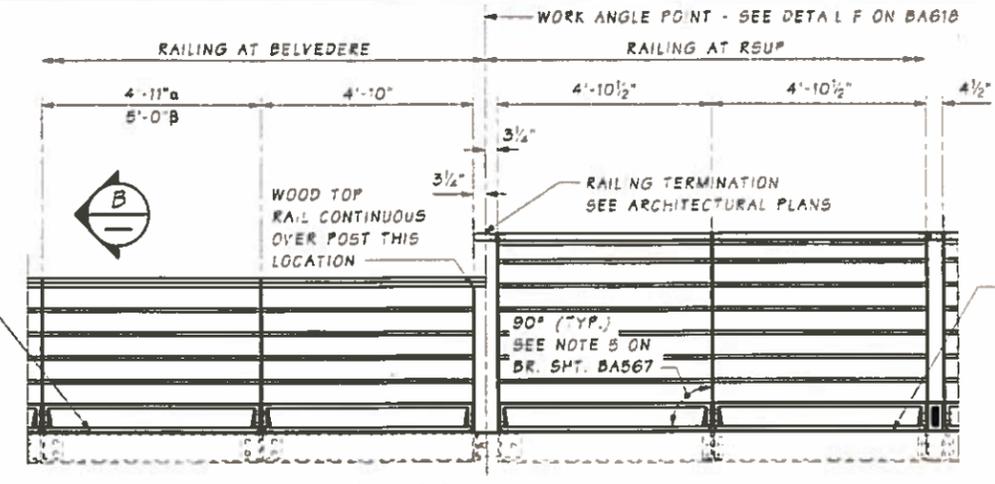
Contract 8625
Change Order #116
Page 27 of 54

BR. RAILING TYPE DECORATIVE PED.
EXPANSION DETAILS

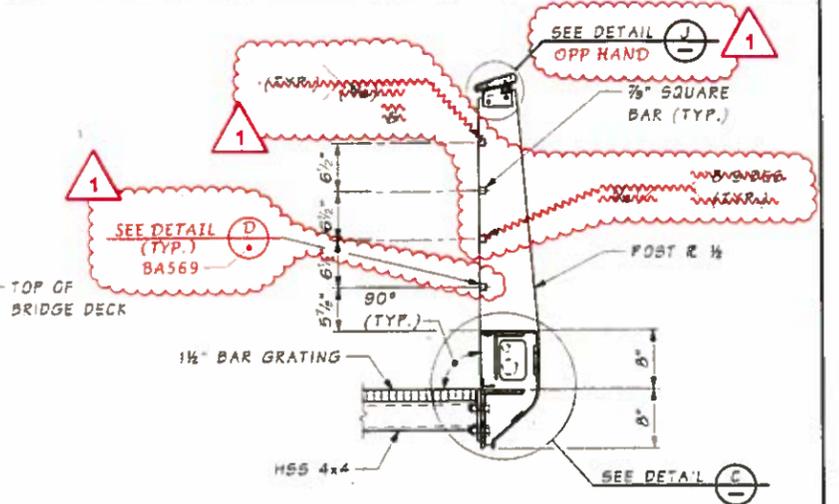
BRIDGE SHEET NO.
BA574
SHEET
1510
OF
1797
SHEETS



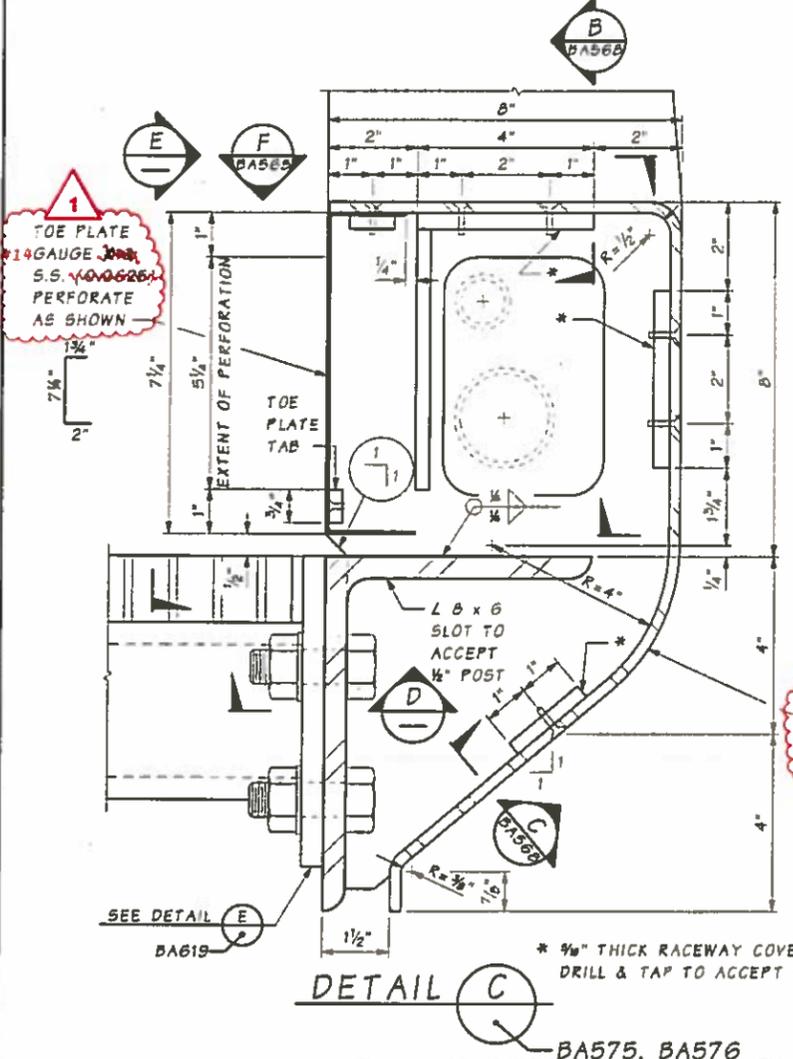
BELVEDERE KEY MAPS



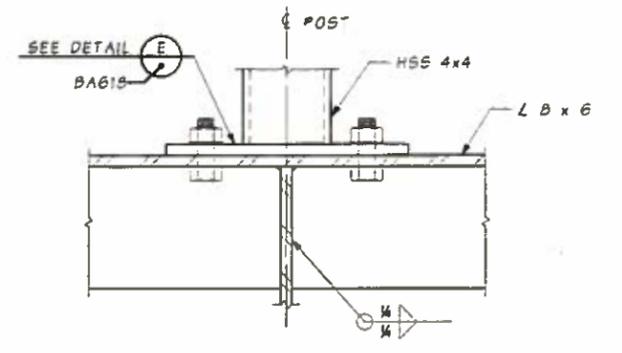
DEVELOPED ELEVATION (LOOKING NORTH)



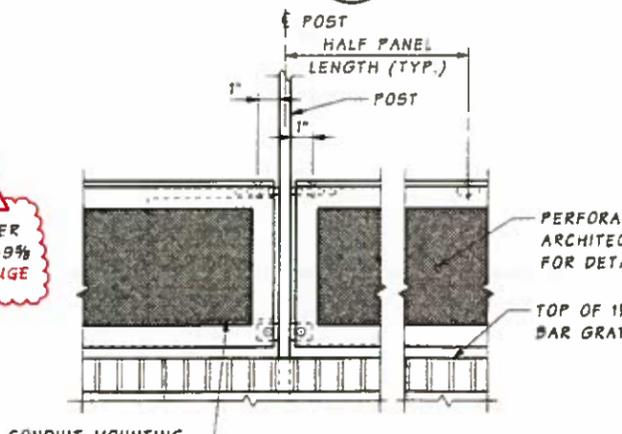
SECTION B



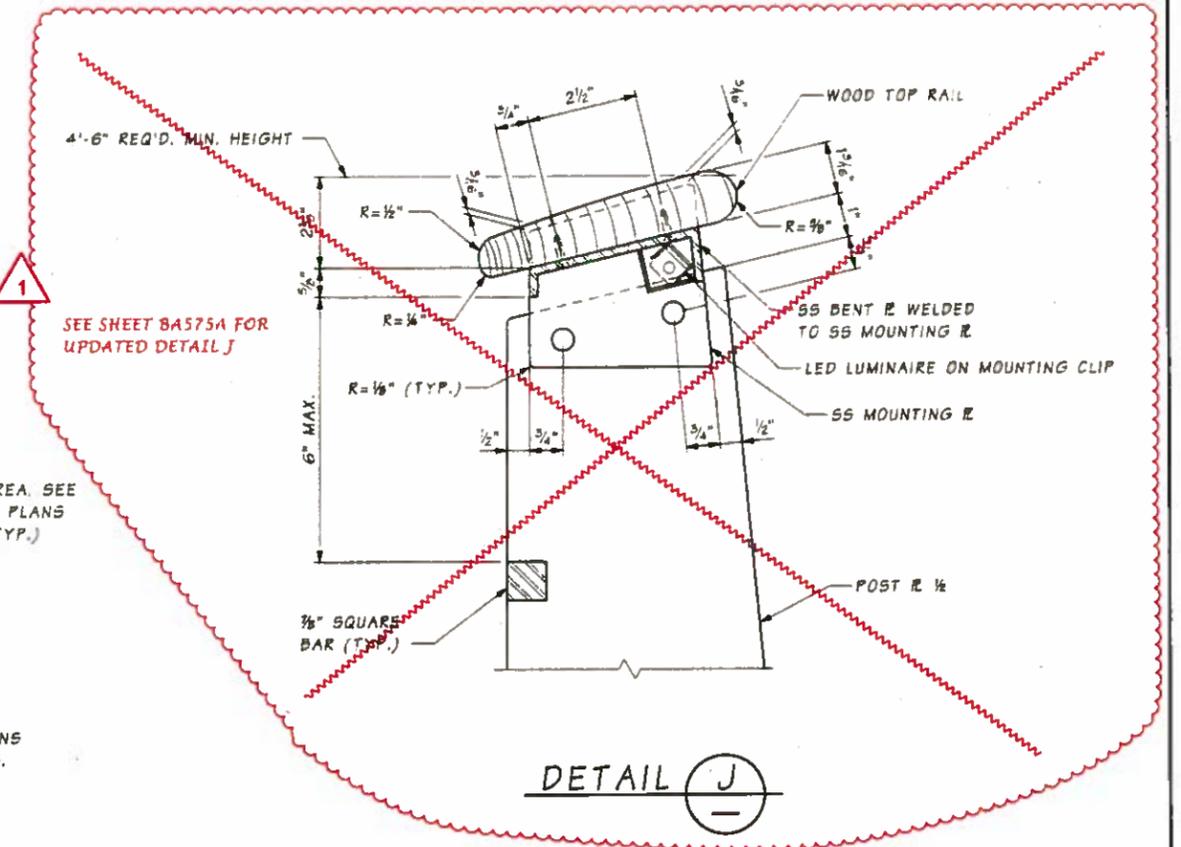
DETAIL C



SECTION D



VIEW E



DETAIL J

FOR DIMENSIONS AND INFORMATION NOT SHOWN SEE BR. SHT. BA568

NOTE: SEE ARCHITECTURAL PLANS FOR ADDITIONAL DETAILS.

SR 520 FILE NO 7051 SHEET BA575
Projectwise Vault

Bridge Design Engr.									
Supervisor	BOTT, P.								
Designed By	BARBER, M.								
Checked By	KNUTSON, G.								
Detailed By	AUDAR, M.								
Bridge Projects Engr.									
Prelim. Plan By	6/22/16	CO#116 - RSUP LIGHTING MOD	VS	GKK					
Architect/Engineer									
DATE		REVISION		BY	APPD				



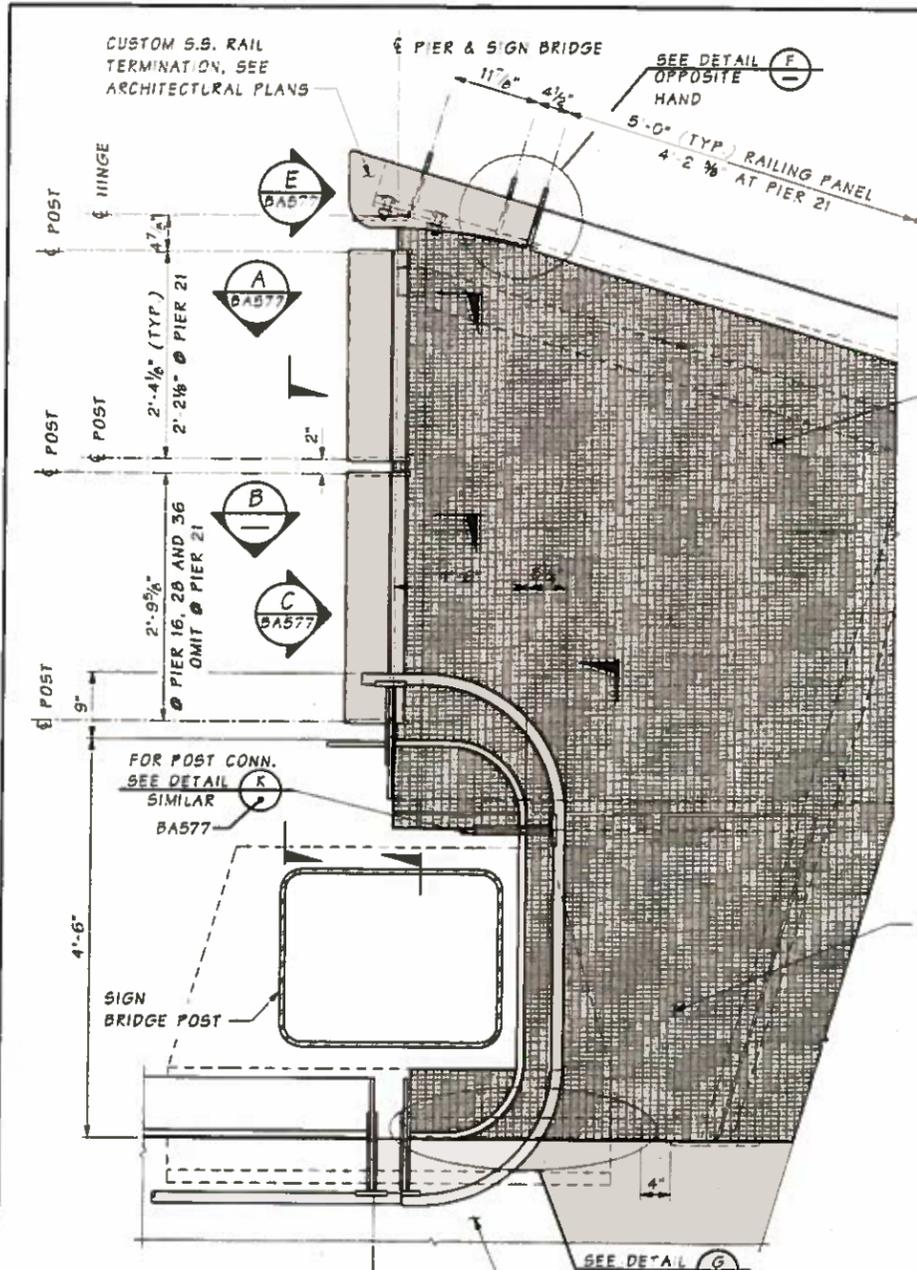
HDR
ENGINEERING INC.
2-18-16

Washington State
Department of Transportation
PARSONS BRINCKERHOFF Parametrix

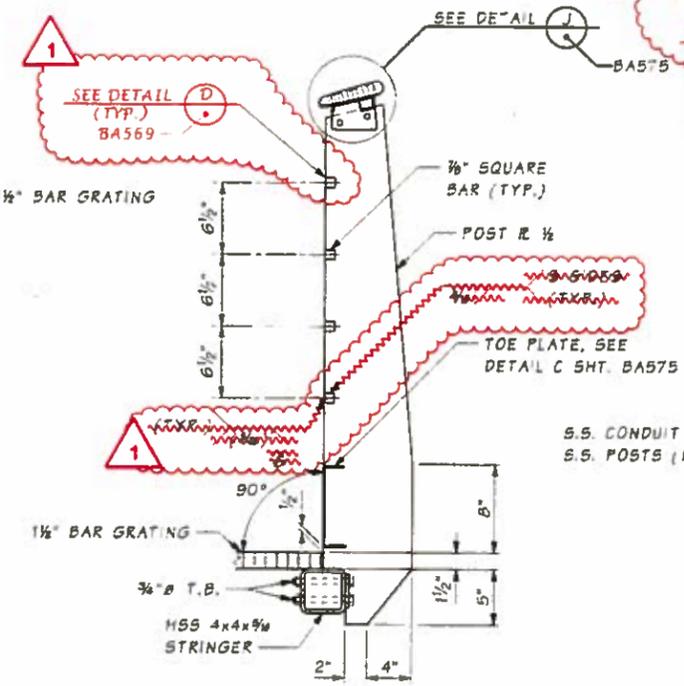
Contract 8625
Change Order #116
Page 28 of 54
BR. RAILING TYPE DECORATIVE PED.
BELVEDERE DETAILS 1

BRIDGE SHEET NO.
BA575
SHEET
1511
OF
1797
SHEETS

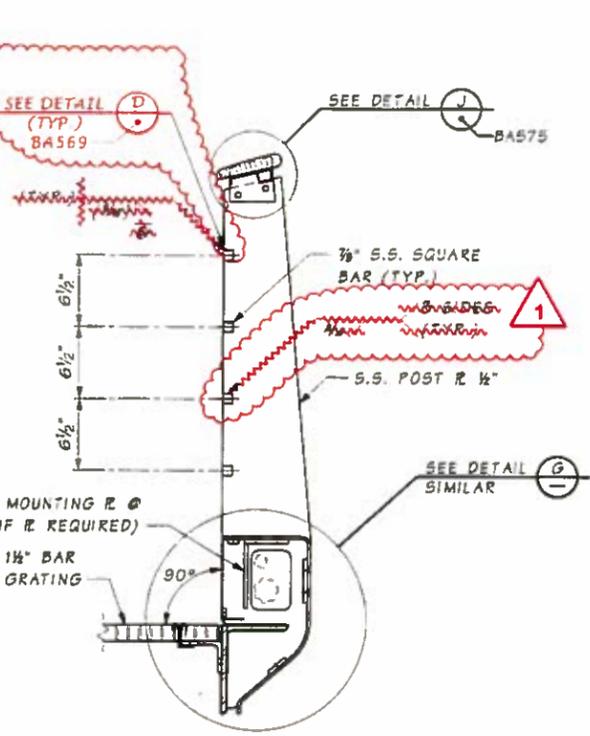
SR 520 FILE NO. 7051 SHEET BA576
 Projectwise Vault



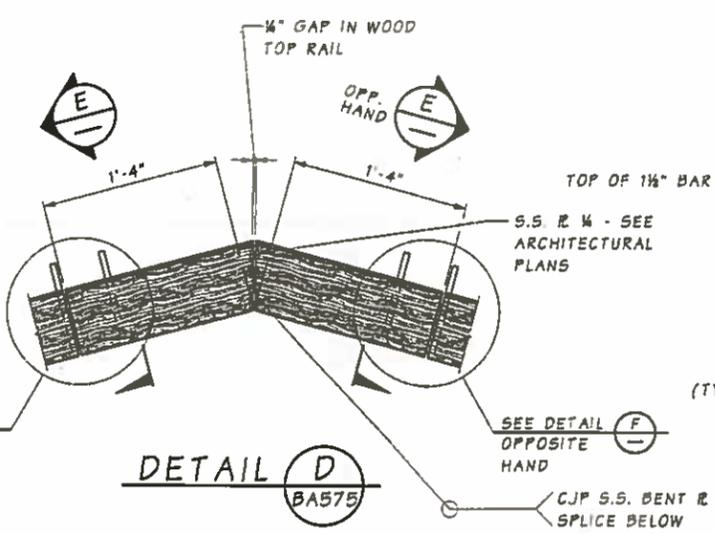
DETAIL C
LADDER NOT SHOWN
BA575



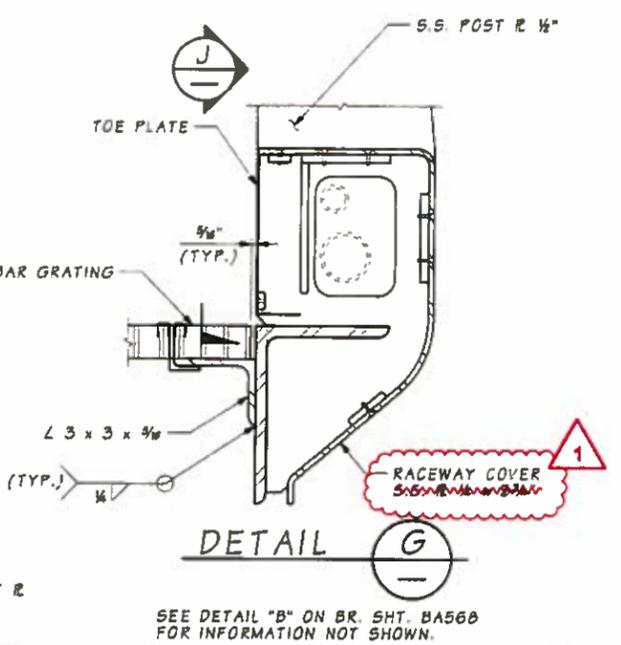
SECTION B



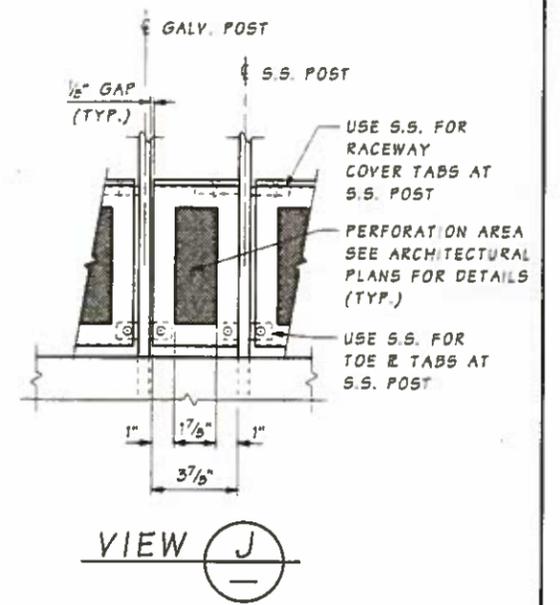
SECTION E



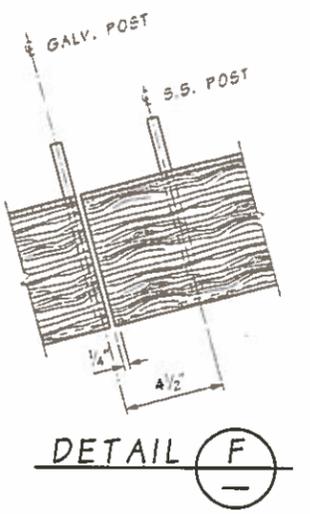
DETAIL D
BA575



DETAIL G



VIEW J



Bridge Design Engr.							
Supervisor	BOTT, P.						
Designed By	BARBER, M.						
Checked By	KNUTSON, G.						
Detailled By	AUDAR, M.						
Bridge Projects Engr.							
Pratt. Plan By	6/22/16	CO#116 - RSUP LIGHTING MOD	VS	GKK			
Architect/Specialist	DATE	REVISION	BY	APPD			
					10	WASH	
					JOB NUMBER 13A012		
					1512	1797	



HDR
 ENGINEERING INC.
 8-18-16

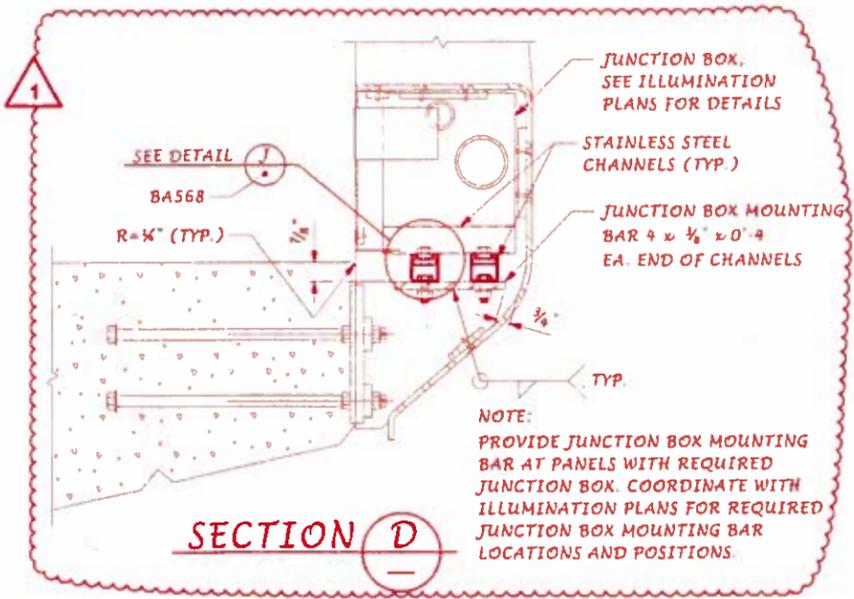
Washington State
 Department of Transportation

PARSONS BRINCKERHOFF
 Parametrix

Contract 8625
 Change Order #116
 Page 29 of 54

BR. RAILING TYPE DECORATIVE PED.
 BELVEDERE DETAILS 2

BRIDGE SHEET NO. BA576
 SHEET 1512 OF 1797 SHEETS



Bridge Design Engr.									
Supervisor	BOTT, P.			REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS	
Designed By	BARBER, M.			10	WASH				
Checked By	KNUTSON, G.			JOB NUMBER			1503	1797	
Detailed By	AJDAR, M.			15AD12					
Bridge Project Engr.									
Prelim. Plan By		6/22/16	Δ CO#116 - RSUP LIGHTING MOD	VS	GGK				
Architect/Specialist		DATE	REVISION	BY	APP'D				



HDR
ENGINEERING INC.
8-18-16

Washington State
Department of Transportation

PARSONS BRINCKERHOFF

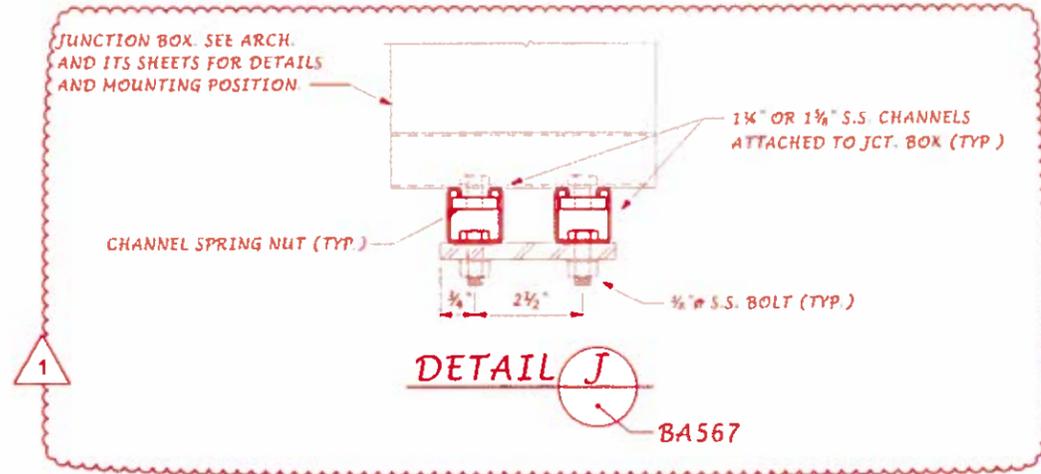
Parametrix

Contract 8625
Change Order #116
Page 32 of 54

BR. RAILING TYPE DECORATIVE PED.
TYPICAL DETAILS 1

BRIDGE SHEET NO.
BA567a
SHEET 1503a OF 1797a SHEETS

SH 520 FILE NO. 7051 SHEET BA568a
 ProjectWise Vault



Bridge Design Engr.				REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor	BOTT, P.			10	WASH		1504	1797
Designed By	BARBER, M.			JOB NUMBER				
Checked By	KNUTSON, G.			13AD12				
Detailed By	AUDAR, M.							
Bridge Projects Engr.								
Presm. Plan By	6/22/16	CO#116 - RSUP LIGHTING MOD	VS	GGK				
Architect/Specialist	DATE	REVISION	BY	APP'D				



HDR
ENGINEERING INC.

8-18-16



Washington State
Department of Transportation

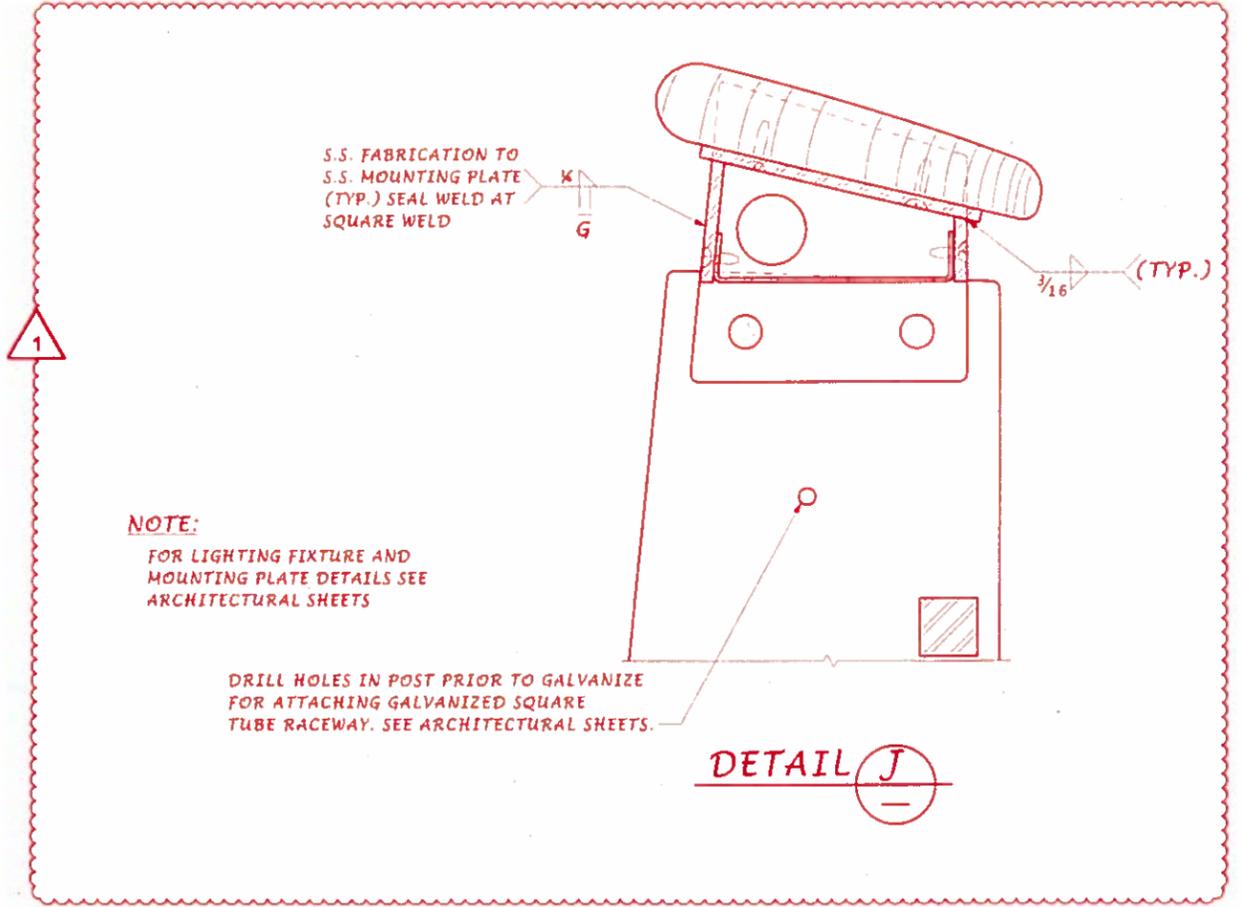
PARSONS
BRINCKERHOFF

Parametrix

Contract 8625
 Change Order #116
 Page 33 of 54

BR. RAILING TYPE DECORATIVE PED.
TYPICAL DETAILS 2

BRIDGE SHEET NO.
BA568a
SHEET 1504a OF 1797a SHEETS



Bridge Design Engr.									
Supervisor	BOTT, P.			REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS	
Designed By	BARBER, M.			10	WASH				
Checked By	KNUTSON, G.			JOB NUMBER			1511	1797	
Detailed By	AUDAR, M.			13A012					
Bridge Projects Engr.									
Prelim. Plan By		6/22/16	△ CO#116	RSUP LIGHTING MOD	VS	GGK			
Architect/Specialist		DATE	REVISION	BY	APPD				



Contract 8625
Change Order #116
Page 34 of 54

BR. RAILING TYPE DECORATIVE PED.
BELVEDERE DETAILS 1

BRIDGE SHEET NO.	BA575a
SHEET OF SHEETS	1511a OF 1797

MONTLAKE TO EVERGREEN POINT BRIDGE WEST APPROACH BRIDGE NORTH

SHEET NO.	TITLE
G1.00	SYMBOLS LEGEND AND ABBREVIATIONS
A1.00	BRIDGE KEY PLAN
A1.01	ENLARGED BRIDGE KEY PLAN
A1.02	ENLARGED BRIDGE KEY PLAN
A1.03	ENLARGED BRIDGE KEY PLAN
A2.00	TYPICAL RAILING LAYOUT AT SPANS 10-12
A2.01	RAILING LAYOUT AT SPANS 1 & 17-19
A2.02	FLOATING BRIDGE TRANSITION SPAN
A2.03	TYPICAL RAILING PLAN AND ELEVATIONS
A2.04	PEDESTRIAN BELVEDERE - PIER 10 PLANS AND ELEVATIONS (PIER 24 SIM)
A2.05	EQUIPMENT PLATFORM BELVEDERE PIERS 16,28, 36
A2.06	EQUIPMENT PLATFORM BELVEDERE PIER 21
A2.07	EQUIPMENT PLATFORM & SCREEN
A2.08	PATH FINISHING KEY PLAN

SHEET NO.	TITLE
A3.00	TYPICAL RAILING TYPES
A3.01	SECTION AT TYPICAL RAILING
A3.02	TYPICAL RAILING DETAILS
A3.04	RAILING LIGHTING & CONNECTION DETAILS
A3.05	PEDESTRIAN BELVEDERE DETAILS
A3.06	PEDESTRIAN BELVEDERE RAILING SECTIONS
A3.06A	PED BELVEDERE RAILING & LIGHTING DETAILS
A3.06B	BELVEDERE WIRING RACEWAY DETAILS
A3.07	BENCHES AT BELVEDERES
A3.08	BENCH DETAILS
A3.09	EQUIPMENT PLATFORM BELVEDERE AT SIGNBRIDGE MONOTUBE-PIERS 16,28,36
A3.10	EQUIPMENT PLATFORM ACCESS LADDER @ PIERS 16,28, 36
A3.11	EQUIPMENT PLATFORM BELVEDERE AT SIGNBRIDGE MONOTUBE @ PIER 21
A3.12	EQUIPMENT PLATFORM BELVEDERE DETAILS
A3.13	RAILING AT WEST ABUTMENT
A3.14	RSUP PATH TEXTURING @ PIERS 10 & 24
A3.15	RSUP PATH PATH TEXTURING @ PIERS 16, 21, 28 & 36
A4.00	RAILING MOCKUPS
A4.01	CONCRETE TEXTURE PATTERN ON TEST SLAB

SR 520 FILE NO. SHEET T1.00 ProjectWise Vault:

INDEX SHEET		REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor	- A. HART	10	WASH			
Designed By	- B. KENNY					
Checked By	- C. LUNDMAN					
Detailed By	- B. KENNY					
Project Engr.	- D. EDWARDS	8/12/16		CO#116 - RSUP LIGHTING MOD	BK	
Regional Adm.	- J. MEREDITH	DATE	REVISION	BY	APPD	



Contract 8625
Change Order #116
Page 35 of 54

INDEX SHEET

BRIDGE SHEET NO. T1.00
SHEET 1627 OF 1797 SHEETS

ABBREVIATIONS:



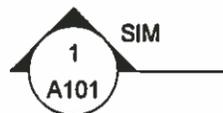
NORTH ARROW



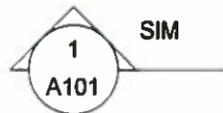
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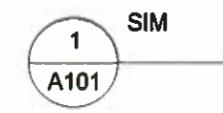
EXTERIOR ELEVATION



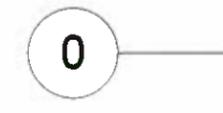
BUILDING SECTION



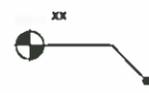
WALL SECTION



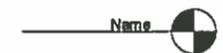
DETAIL



GRID BUBBLE



SPOT ELEVATION



LEVEL



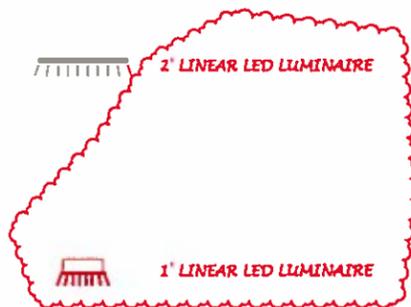
PEDESTRIAN MARKINGS



LIGHT FIXTURE TAG



RAILING TYPE



EXTERIOR MATERIAL TAG



REVISION TAG

<p>ADDL AASHTO</p> <p>ADJ AFF AL ANOD APPROX ARCH ASPH AT AVE AVG BLDG BF BOT BR BTWN</p> <p>CAB CB CJ CL CLR C-C CLR COL CONC COND CONN CONST CONT CONTR CORR CTR CU FT CU YD C/W C&G</p> <p>DEMO DIAM DISP DTL DWG DWGS DWY</p> <p>EA EL ELEV ENCL EOC EQ EX EXP EXT</p>	<p>AT ADDITIONAL AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS ADJUST ABOVE FINISHED FLOOR ALUMINUM ANODIZED APPROXIMATE ARCHITECTURAL ASPHALT ALUMINUM THRESHOLD AVENUE AVERAGE BUILDING BOTTOM FACE BOTTOM BRICK BETWEEN</p> <p>CABINET CATCH BASIN CONTROL JOINT CENTER LINE CLEAR CENTER TO CENTER CLEARANCE COLUMN CONCRETE CONDITION CONNECT CONSTRUCTION CONTINUOUS CONTRACTOR CORRIDOR CENTER CUBIC FEET CUBIC YARD COMPLETE WITH CURB AND GUTTER</p> <p>DEMOLITION DIAMETER DISPENSER DETAIL DRAWING DRAWINGS DRIVEWAY</p> <p>EACH ELEVATION ELEVATOR ENCLOSURE END OF CURB EQUAL EXISTING EXPANSION EXTERIOR</p>	<p>FB FDN FT FG FF FLR FN FT</p> <p>GA GALV GEN GR GND</p> <p>HORIZ HT</p> <p>IN INSUL INT</p> <p>JT</p> <p>LED LT LF LVW</p> <p>MAX MECH MEMB MEZZ MFR MIN MISC MTD</p> <p>NIC NOM NRH NTS NO.</p> <p>OC OD OF OPER OPNG OPP ORIG O/</p> <p>PAV PB PL PLAM PLWD PS PTD</p>	<p>FLOATING BRIDGE FOUNDATION FEET FINISH GRADE FINISH FLOOR FLOOR FINISH FOOT</p> <p>GAUGE GALVANIZED GENERAL GRADE GROUND</p> <p>HORIZONTAL HEIGHT</p> <p>INCH/INCHES INSULATION INTERIOR</p> <p>JOINT</p> <p>LIGHT-EMITTING DIODE LEFT LINEAL FEET LOW VOLTAGE WIRING</p> <p>MAXIMUM MECHANICAL MEMBRANE MEZZANINE MANUFACTURER MINIMUM MISCELLANEOUS MOUNTED</p> <p>NOT IN CONTRACT NOMINAL NON REMOVABLE HINGE PINS NOT TO SCALE NUMBER</p> <p>ON CENTER OUTSIDE DIAMETER OUTSIDE FACE OPERABLE OPENING OPPOSITE ORIGINAL OVER</p> <p>PAVEMENT PANIC BAR PLATE PLASTIC LAMINATE PLYWOOD PRESSED STEEL PAINTED</p>	<p>LBS PREFIN PREMAN PROP PSI PT QTY</p> <p>R RD RECEPT REF REINF RELOC REM R&R REPL REQ'D RET RSUP RT RWL</p> <p>SBO SCHED SEC SF SHT SIM SL SPECS SQ SST STD STL STOR STRUC</p> <p>TBD TEMP TF TH TOC TS TYP</p> <p>UNO U/S V/VAR VERT VIF</p> <p>WABN W WD WGVP W/O WS</p>	<p>POUNDS PREFINISHED PREMANUFACTURED PROPOSED POUNDS PER SQUARE INCH PAINT QUANTITY</p> <p>RADIUS ROOF DRAIN RECEPTACLE REFER/REFERENCE REINFORCE RELOCATE REMOVE REMOVE AND REPLACE REPLACE REQUIRED RETIRE(D) REGIONAL SHARED USE PATH RIGHT RAIN WATER LEADER</p> <p>SUPPLIED BY OWNER SCHEDULE SECTION SQUARE FOOTAGE SHEET SIMILAR SLOPE SPECIFICATIONS SQUARE STAINLESS STEEL STANDARD STEEL STORAGE STRUCTURAL</p> <p>TO BE DETERMINED TEMPORARY TOP FACE THRESHOLD TOP OF CURB TUBE STEEL TYPICAL</p> <p>UNLESS NOTED OTHERWISE UNDER SIDE VARIABLE VERTICAL VERIFY IN FIELD</p> <p>WEST APPROACH BRIDGE NORTH WITH WOOD WIRED GLASS VIEW PANEL WITHOUT WEATHER STRIPPING</p>
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SYMBOLS LEGEND AND ABBREVIATIONS

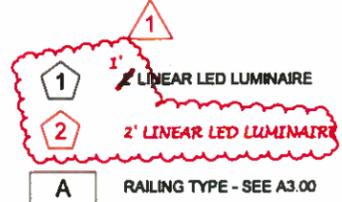
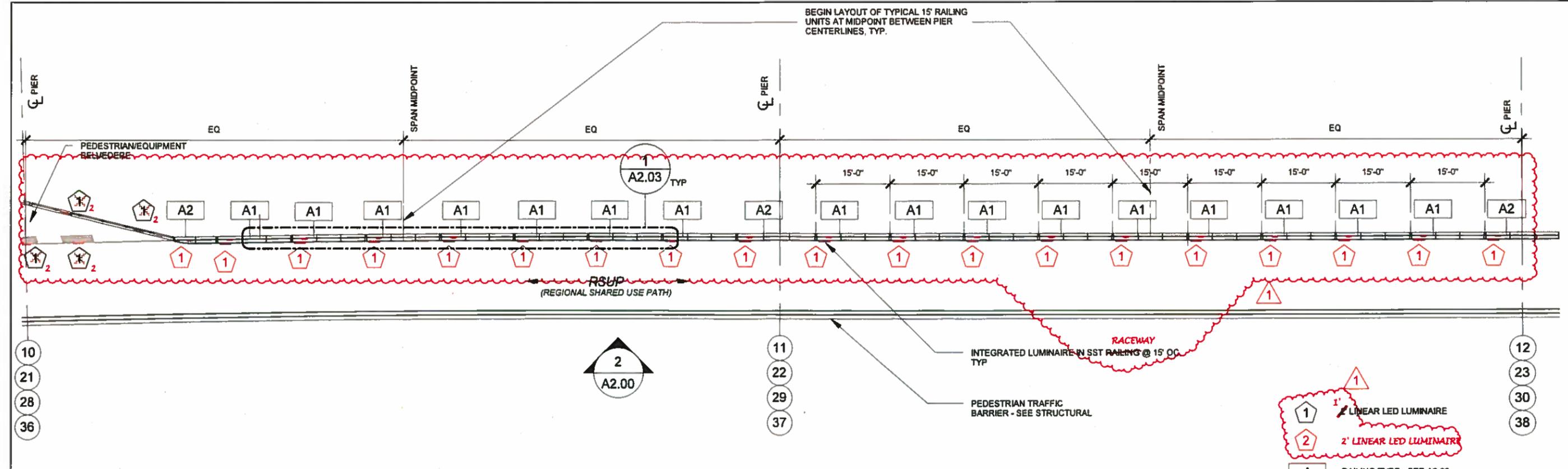
Supervisor	- A. HART	REGION NO.	10	STATE	WASH	FED. AID PROJ. NO.		SHEET NO.		TOTAL SHEETS	
Designed By	- B. KENNY	JOB NUMBER	13A012								
Checked By	- D. LUNDMAN	DATE	8/12/16	REVISION	CO#118 - RSUP LIGHTING MOD	BY	BK	APPD			
Detailed By	- B. KENNY										
Project Engr.	- D. EDWARDS										
Regional Adm.	- J. MEREDITH										



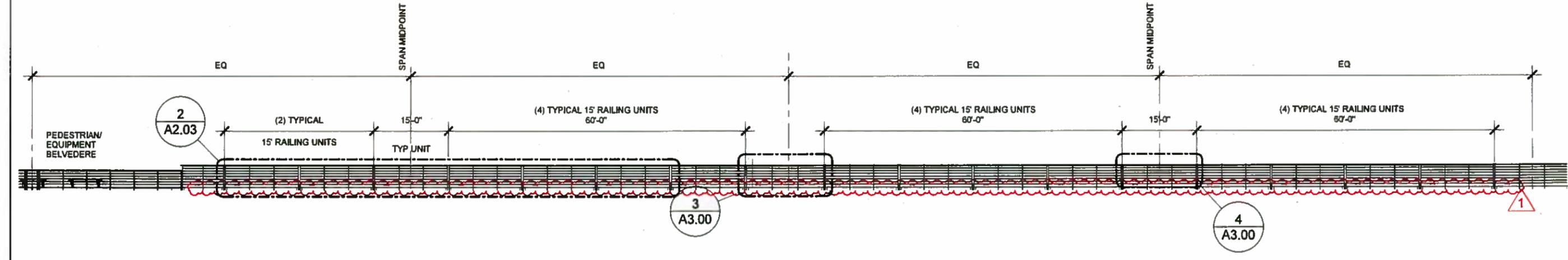
Contract 8625
Change Order #116
Page 36 of 54

SYMBOLS LEGEND AND ABBREVIATIONS

BRIDGE SHEET NO. G1.00
SHEET 1628 OF 1797 SHEETS



1 RAILING SPACING PLAN - TYPICAL SPAN
1" = 20'-0"



2 RAILING LAYOUT SOUTH
1" = 20'-0"

TYPICAL RAILING LAYOUT AT SPANS 10-12				REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor	- A. HART			10	WASH			
Designed By	- B. KENNY							
Checked By	- D. LUNDMAN							
Detailed By	- B. KENNY							
Project Engr.	- D. EDWARDS	8/12/16	CO#116 - RSUP LIGHTING MOD					
Regional Adm.	- J. MEREDITH							

7888 REGISTERED ARCHITECT

Alan Hart
STATE OF WASHINGTON

HDR ENGINEERING INC.

Washington State
Department of Transportation

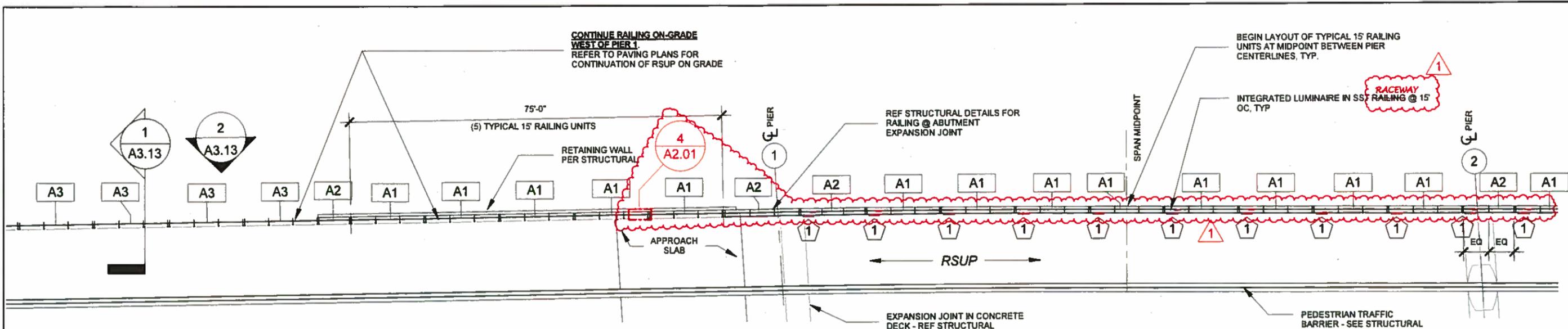
Contract 8625
Change Order #116
Page 37 of 54

BRIDGE SHEET NO.
A2.00

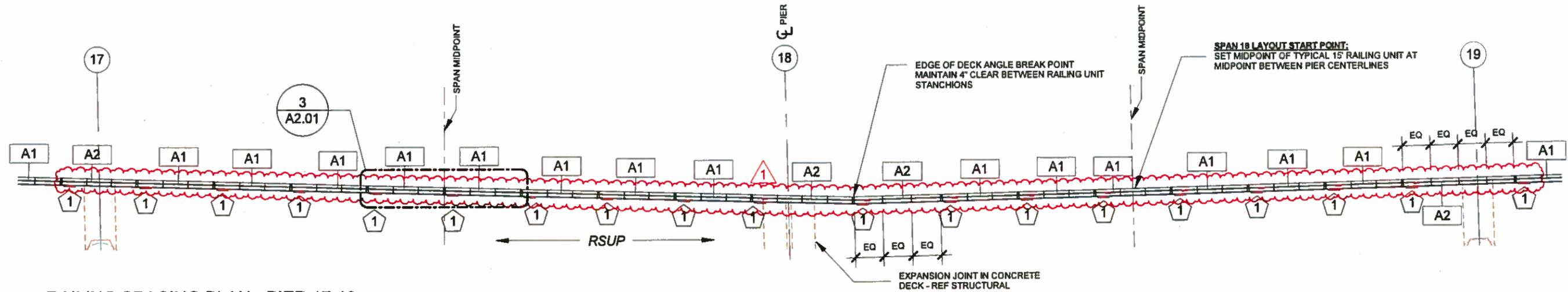
SHEET
1633
OF
1797
SHEETS

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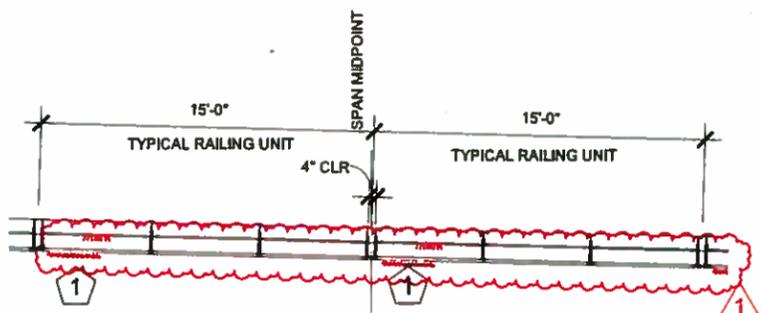
SR_520 FILE NO. SHEET A2.00 ProjectWise Vault



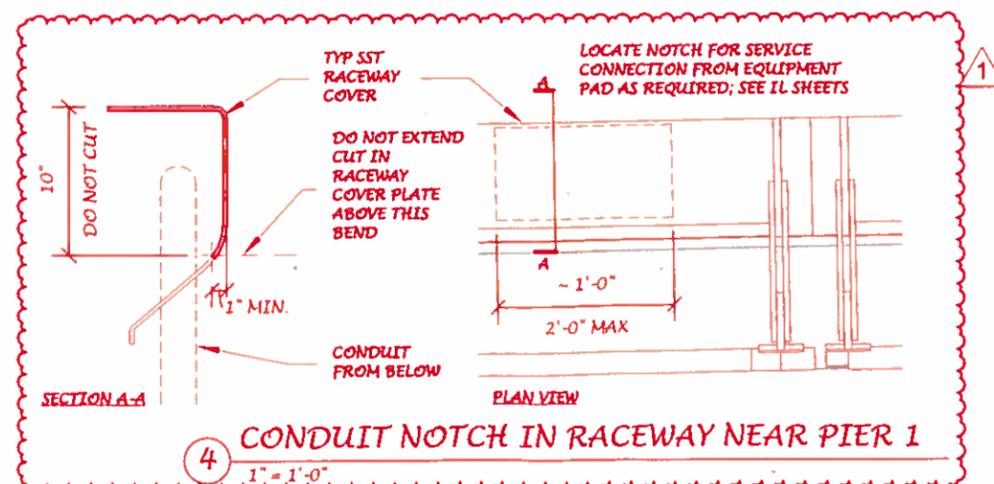
1 RAILING SPACING PLAN - PIER 1
1" = 20'-0"



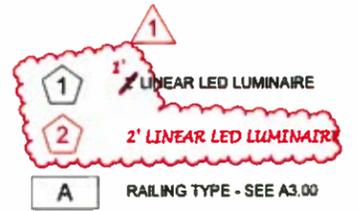
2 RAILING SPACING PLAN - PIER 17-19
1" = 20'-0"



3 SPAN 17 MIDPOINT
1/8" = 1'-0"



4 CONDUIT NOTCH IN RACEWAY NEAR PIER 1
1" = 1'-0"



SR 520 FILE NO. SHEET A2.01
Project/Misc Vault:

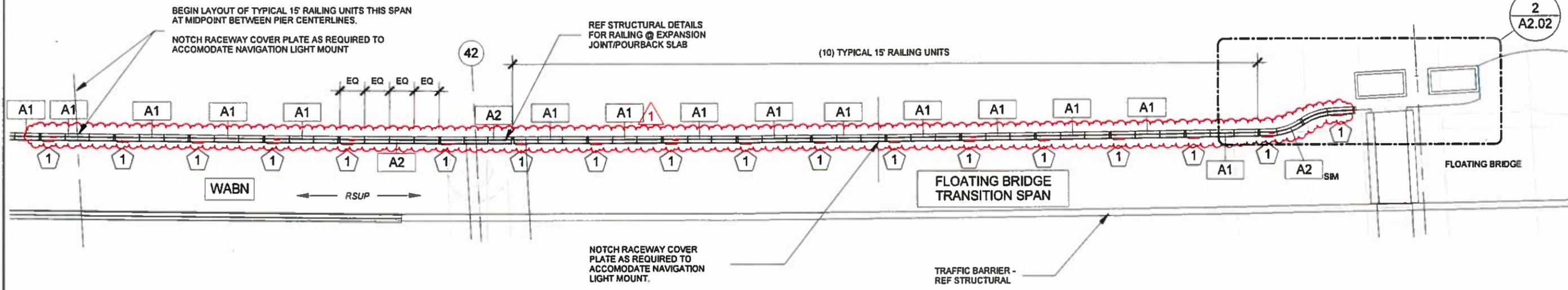
RAILING LAYOUT AT SPANS 1 & 17-19				REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor	- A. HART			10	WASH			
Designed By	- B. KENNY							
Checked By	- D. LUNDMAN							
Detailed By	- B. KENNY							
Project Engr.	- D. EDWARDS	8/12/16	CO#116 - RSUP LIGHTING MOD	BK				
Regional Adm.	- J. MEREDITH	DATE	REVISION	BY	APPD			



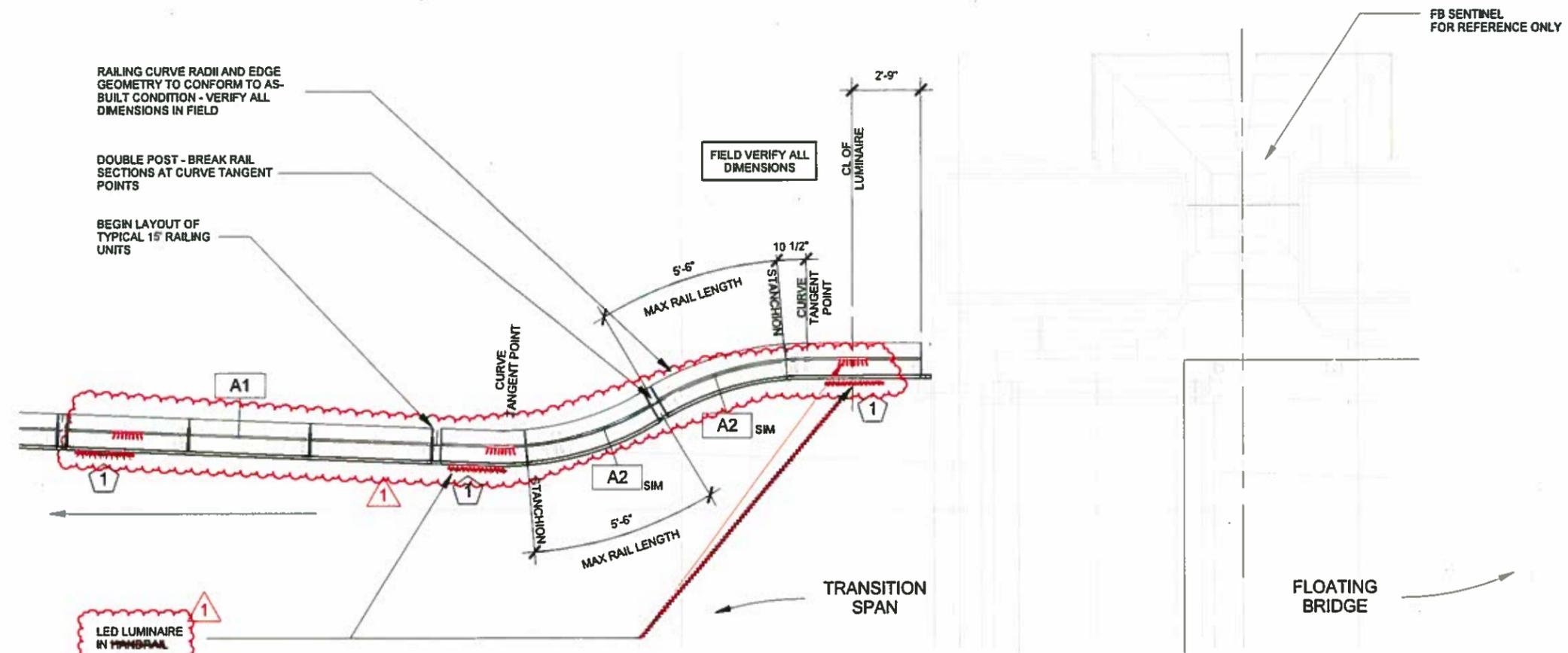
Contract 8625
Change Order #116
Page 38 of 54

RAILING LAYOUT AT SPANS 1 & 17-19

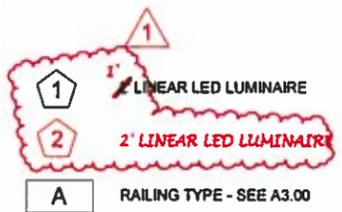
BRIDGE SHEET NO. A2.01
SHEET 1634 OF 1797 SHEETS



1 RAILING SPACING PLAN - FLOATING BRIDGE TRANSITION SPAN
1" = 20'-0"



2 WABN RAIL TERMINATION @ FB SENTINEL
3/16" = 1'-0"



A1 - TYPICAL 15' RAILING UNIT
A2 - INFILL RAILING
A3 - RAILING ON-GRADE

NOTES
1. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL RAILING DETAILS

SR 520
ProjectWise Vault:
FILE NO. SHEET A2.02

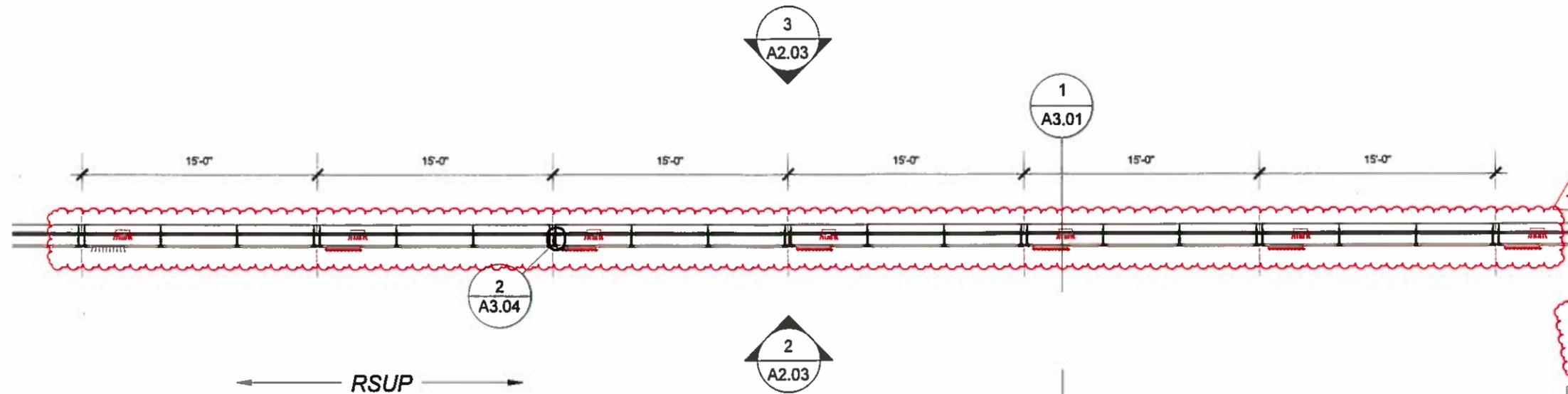
Supervisor		DESIGNED BY		CHECKED BY		DATE		REVISION		BY		APP'D	
- A. HART		- B. KENNY		- D. LUNDMAN		8/12/16		COR#116 - RSUP LIGHTING MOD		BK			
- J. MEREDITH													



Contract 8625
Change Order #116
Page 39 of 54

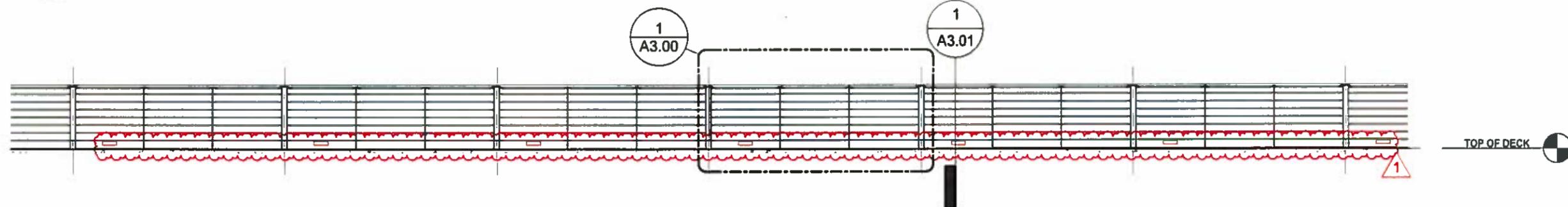
FLOATING BRIDGE TRANSITION SPAN

BRIDGE SHEET NO. A2.02
SHEET 1835 OF 1797 SHEETS

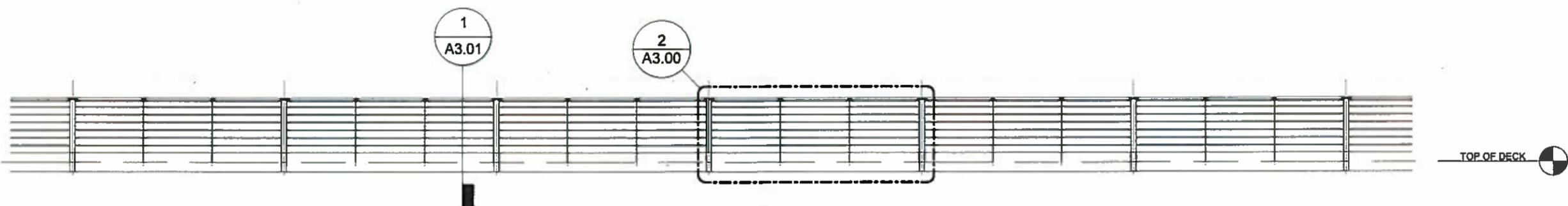


- 1 LINEAR LED LUMINAIRE
- 2 2' LINEAR LED LUMINAIRE
- A RAILING TYPE - SEE A3.00
- A1 - TYPICAL 15' RAILING UNIT
- A2 - INFILL RAILING
- A3 - RAILING ON-GRADE

1 PLAN - TYPICAL A1 RAILING UNITS
1/8" = 1'-0"



2 TYPICAL A1 RAILING ELEVATION - SOUTH
1/8" = 1'-0"



3 TYPICAL A1 RAILING ELEVATION - NORTH
1/8" = 1'-0"

SR 520 FILE NO. SHEET A2.03 ProjectWise Vault

TYPICAL RAILING PLAN AND ELEVATIONS		REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor	- A. HART	10	WASH			
Designed By	- B. KENNY					
Checked By	- D. LUNDMAN					
Detailled By	- B. KENNY					
Project Engr.	- D. EDWARDS	8/12/16				
Regional Adm.	- J. MEREDITH	DATE	REVISION	BY	APP'D	

7888 REGISTERED ARCHITECT

 Alan Hart
 STATE OF WASHINGTON

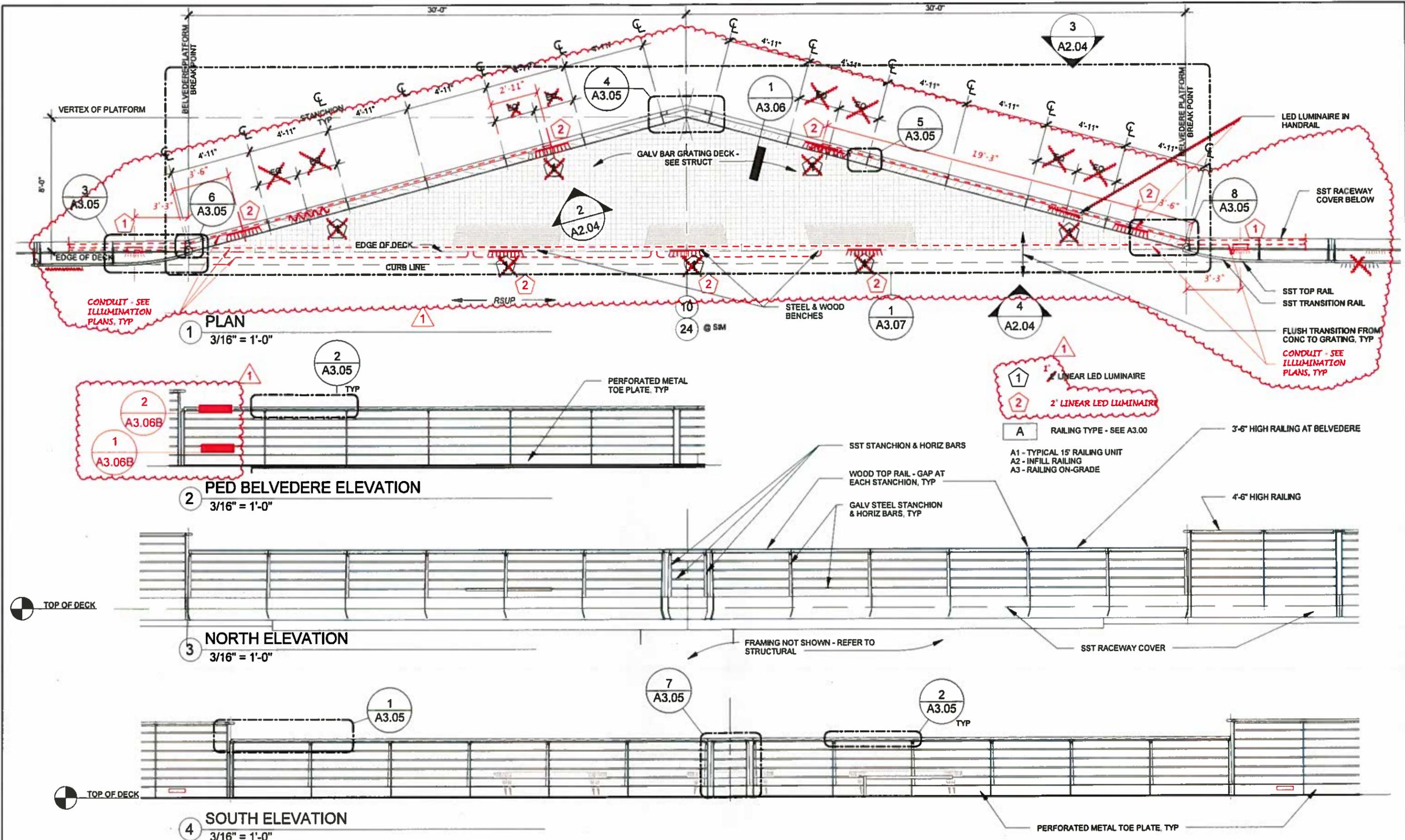
Washington State
 Department of Transportation

Contract 8625
 Change Order #116
 Page 40 of 54

TYPICAL RAILING PLAN AND ELEVATIONS

BRIDGE SHEET NO. A2.03
 SHEET 1636 OF 1797 SHEETS

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SR 520 FILE NO. SHEET A2.04 ProjectWise Vault:

SUPERVISOR		REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
- A. HART		10	WASH			
DESIGNED BY		JOB NUMBER				
- B. KENNY		13A012				
CHECKED BY		DATE	REVISION	BY	APPD	
- D. LUNDMAN		8/12/16	CO#118 - RSUP LIGHTING MOD	BK		
DETAILED BY						
- B. KENNY						
PROJECT ENGR.						
- D. EDWARDS						
REGIONAL ADM.						
- J. MEREDITH						

7888 REGISTERED ARCHITECT
Alan Hart
 Alan Hart
 STATE OF WASHINGTON

HDR
 ENGINEERING INC.

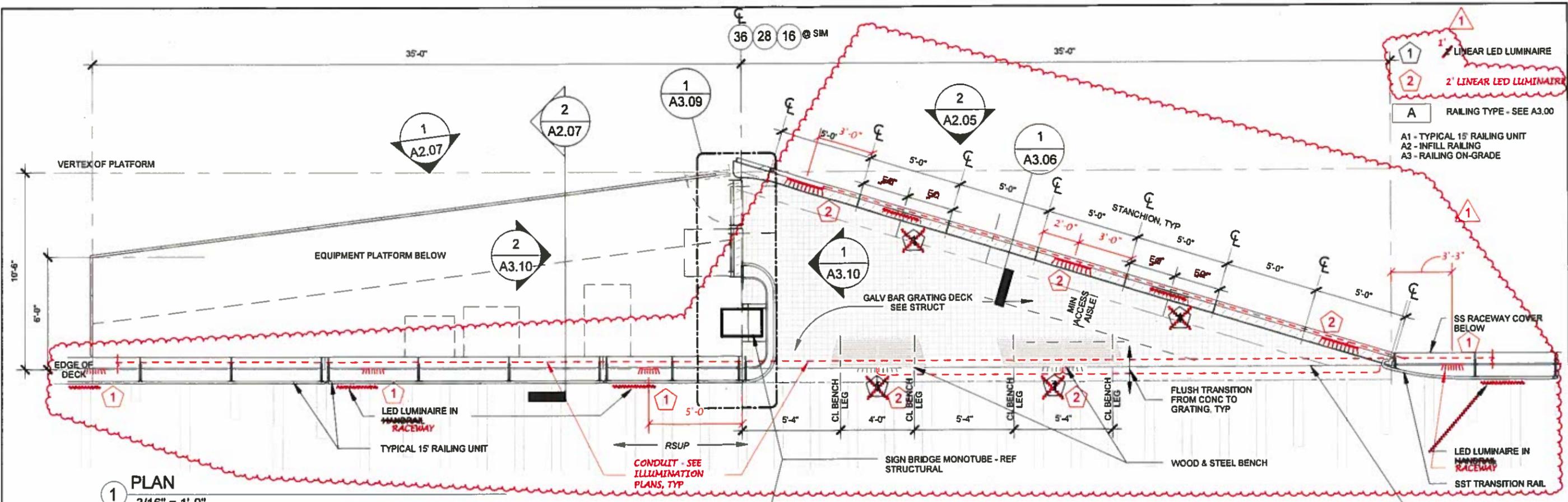
Washington State
 Department of Transportation

VIA

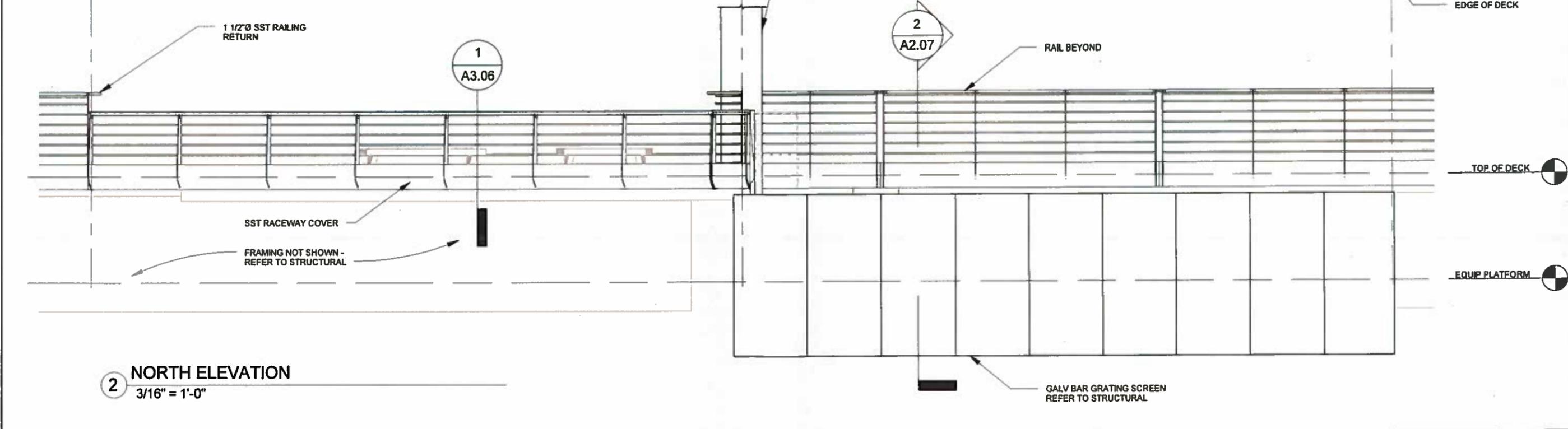
Contract 8625
 Change Order #116
 Page 41 of 54

PEDESTRIAN BELVEDERE - PIER 10 PLANS AND ELEVATIONS (PIER 24 SIM)

WISDOT SHEET NO. A2.04
 SHEET 1637 OF 1797 SHEETS



1 PLAN
3/16" = 1'-0"



2 NORTH ELEVATION
3/16" = 1'-0"

A RAILING TYPE - SEE A3.00
A1 - TYPICAL 15' RAILING UNIT
A2 - INFILL RAILING
A3 - RAILING ON-GRADE

SR 520 FILE NO. SHEET A2.05
ProjectWise Vault:

EQUIPMENT PLATFORM BELVEDERE PIERS 16,28, 36		REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor	- A. HART	10	WASH			
Designed By	- B. KENNY					
Checked By	- D. LUNDMAN					
Detalled By	- B. KENNY					
Project Engr.	- D. EDWARDS	8/12/16		CO#116 - RSUP LIGHTING MOD	BK	
Regional Adm.	- J. MEREDITH	DATE	REVISION	BY	APPD	



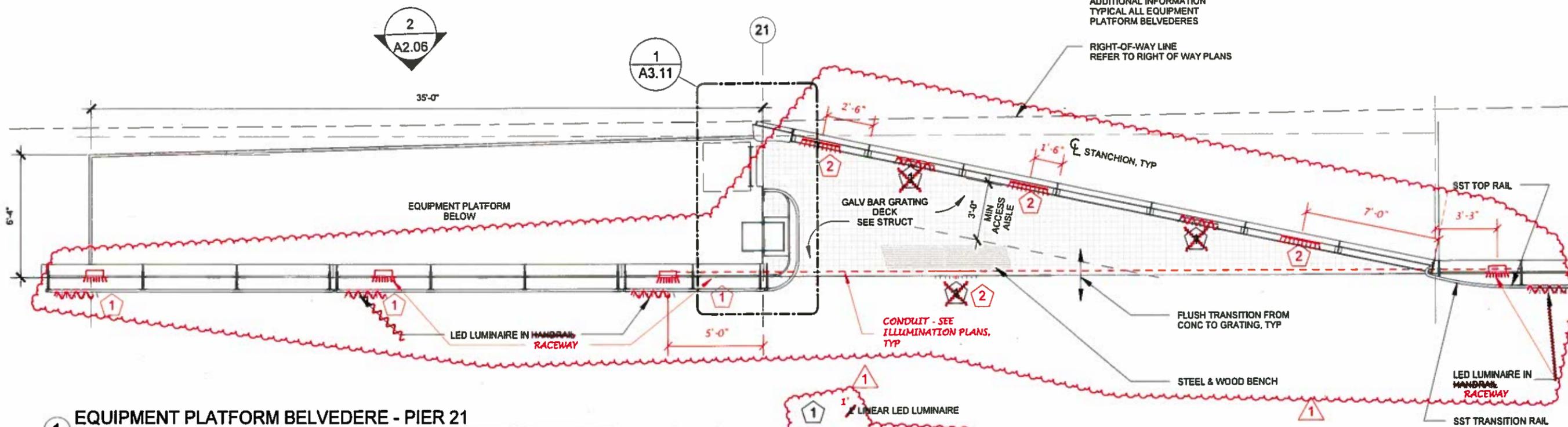
Contract 8625
Change Order #116
Page 42 of 54

EQUIPMENT PLATFORM BELVEDERE
PIERS 16,28, 36

BRIDGE SHEET NO. A2.05
SHEET 1638 OF 1797 SHEETS

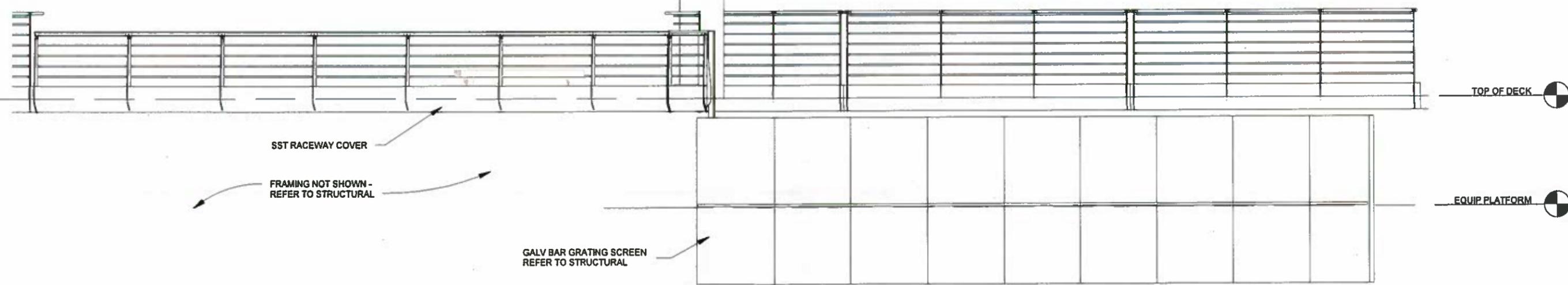
NOTE:
SEE SHEET A2.05 FOR
ADDITIONAL INFORMATION
TYPICAL ALL EQUIPMENT
PLATFORM BELVEDERES

RIGHT-OF-WAY LINE
REFER TO RIGHT OF WAY PLANS



1 EQUIPMENT PLATFORM BELVEDERE - PIER 21
3/16" = 1'-0"

- 1 1' LINEAR LED LUMINAIRE
- 2 2' LINEAR LED LUMINAIRE
- A RAILING TYPE - SEE A3.00
- A1 - TYPICAL 15' RAILING UNIT
- A2 - INFILL RAILING
- A3 - RAILING ON-GRADE



2 ELEVATION - UTILITY PLATFORM BELVEDERE - PIER 21
3/16" = 1'-0"

EQUIPMENT PLATFORM BELVEDERE PIER 21		REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor	- A. HART	10	WASH			
Designed By	- B. KENNY					
Checked By	- D. LUNDMAN					
Detalled By	- B. KENNY					
Project Engr	- D. EDWARDS	8/12/16		CO#116 - RSUP LIGHTING MOD	BK	
Regional Adm.	- J. MEREDITH	DATE	REVISION	BY	APPD	



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Contract 8625
Change Order #116
Page 43 of 54

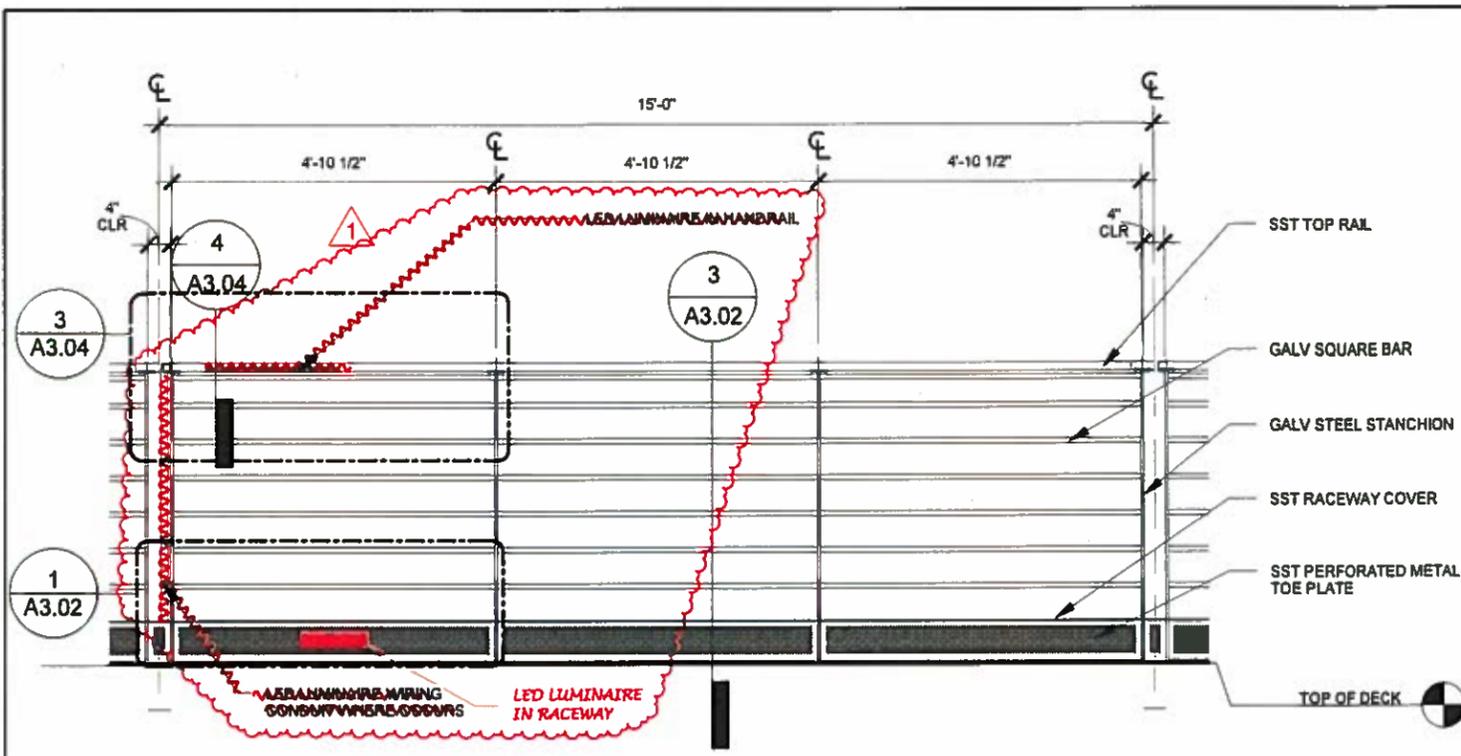
EQUIPMENT PLATFORM BELVEDERE
PIER 21

BRIDGE SHEET NO.
A2.06
SHEET 1639
OF 1797
SHEETS

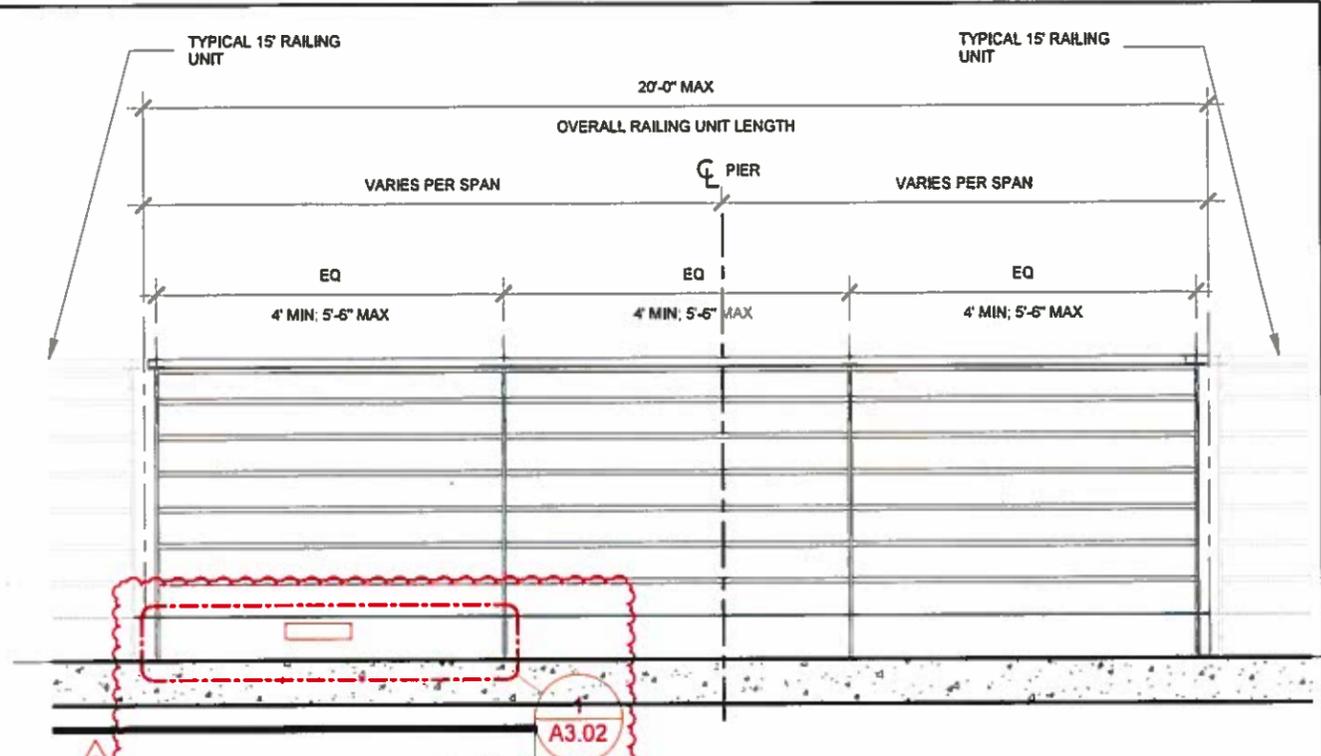
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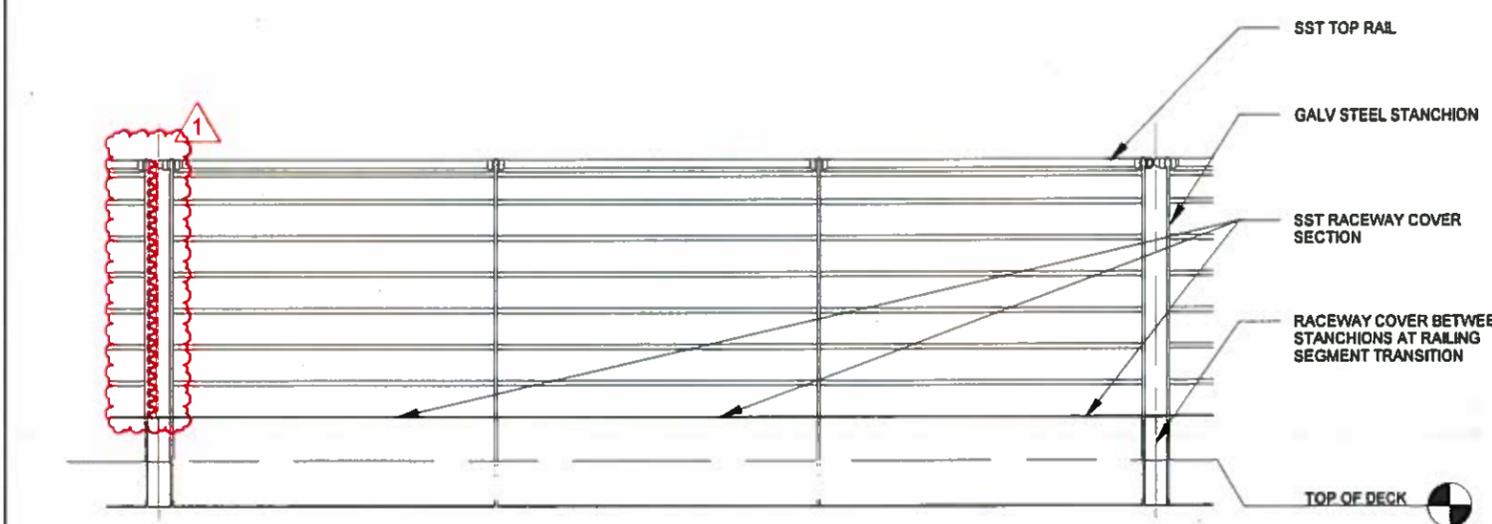
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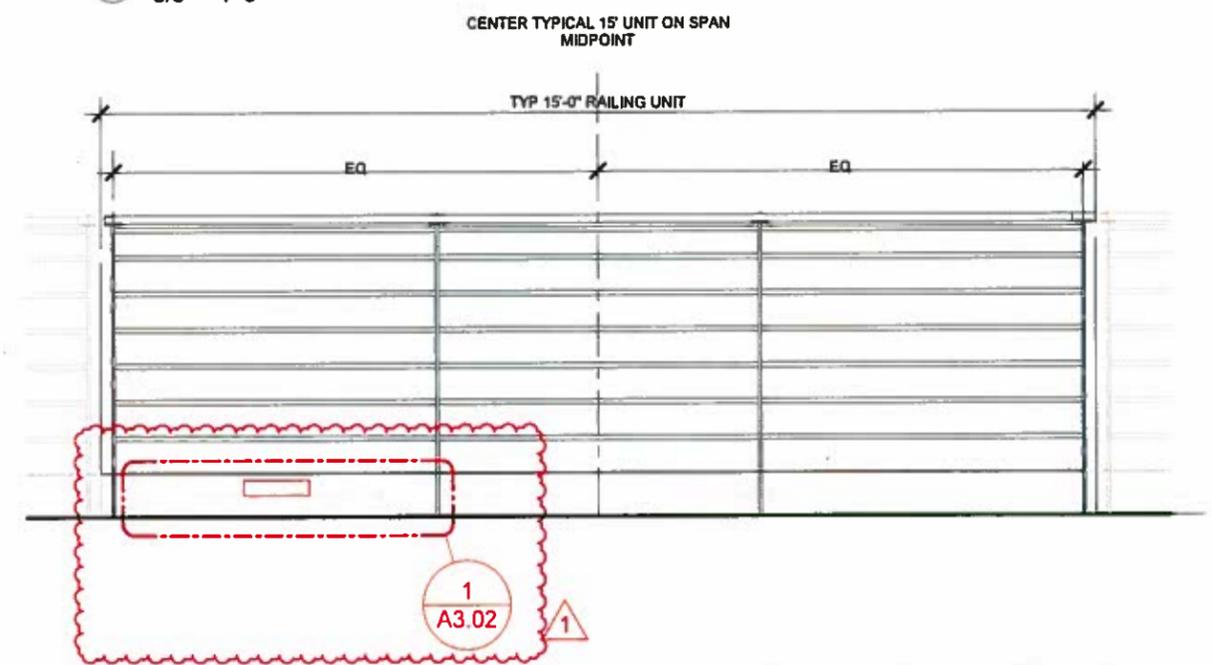
1 A1 TYPICAL 15' RAILING UNIT - SOUTH ELEVATION
3/8" = 1'-0"



3 A2 INFILL RAILING UNIT AT PIER CL - SOUTH ELEVATION
3/8" = 1'-0"



2 A1 TYPICAL 15' RAILING UNIT - NORTH ELEVATION
3/8" = 1'-0"



4 RAILING LAYOUT STARTPOINT AT MID-SPAN, TYP - SOUTH ELEVATION
3/8" = 1'-0"

NOTES
1. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL RAILING DETAILS

SR 520 FILE NO. SHEET A3.00
ProjectWise Vault:

TYPICAL RAILING TYPES		REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor	- A. HART	10	WASH			
Designed By	- B. KENNY					
Checked By	- D. LUNDMAN					
Detalled By	- B. KENNY					
Project Engr.	- D. EDWARDS	8/12/16	CO#116 - RSUP LIGHTING MOD	BK		
Regional Adm.	- J. MEREDITH	DATE	REVISION	BY	APPD	



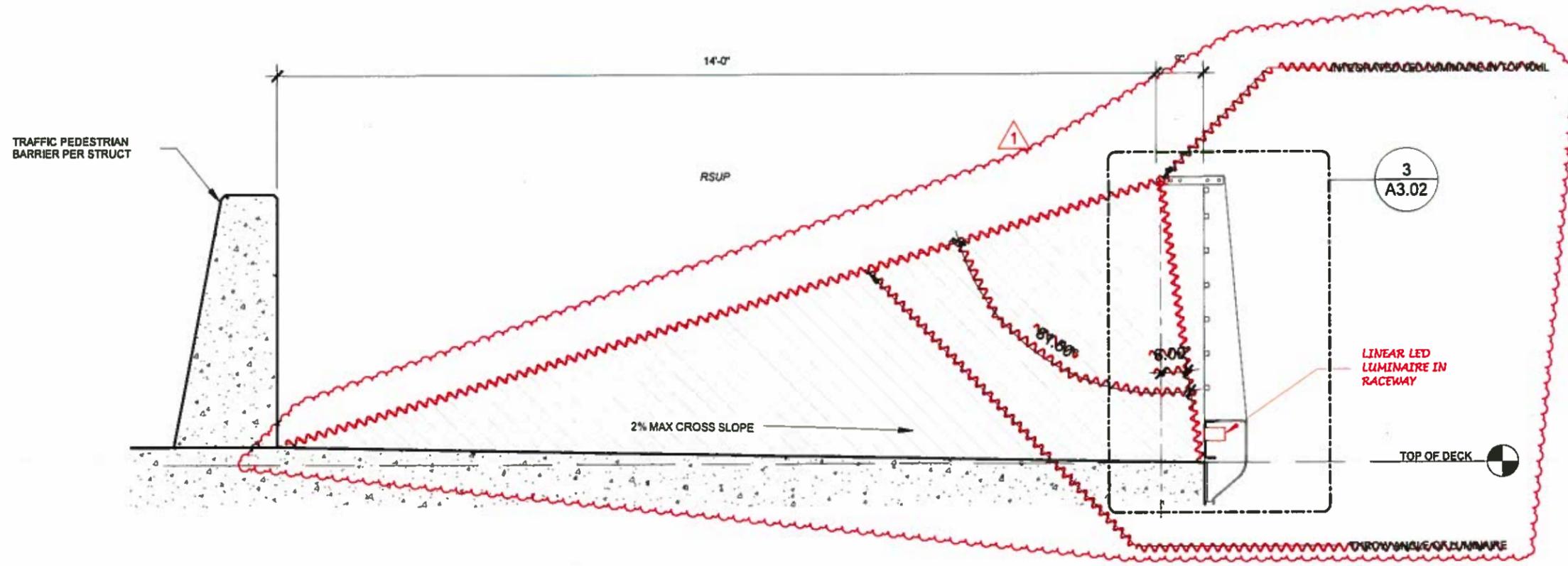
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Contract 8625
Change Order #116
Page 44 of 54

TYPICAL RAILING TYPES

BRIDGE SHEET NO. A3.00
SHEET 1642 OF 1797 SHEETS

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1 TYPICAL SECTION AT RSUP RAILING
1/2" = 1'-0"

SR 520 FILE NO. SHEET A3.01
ProjectWise Vault:

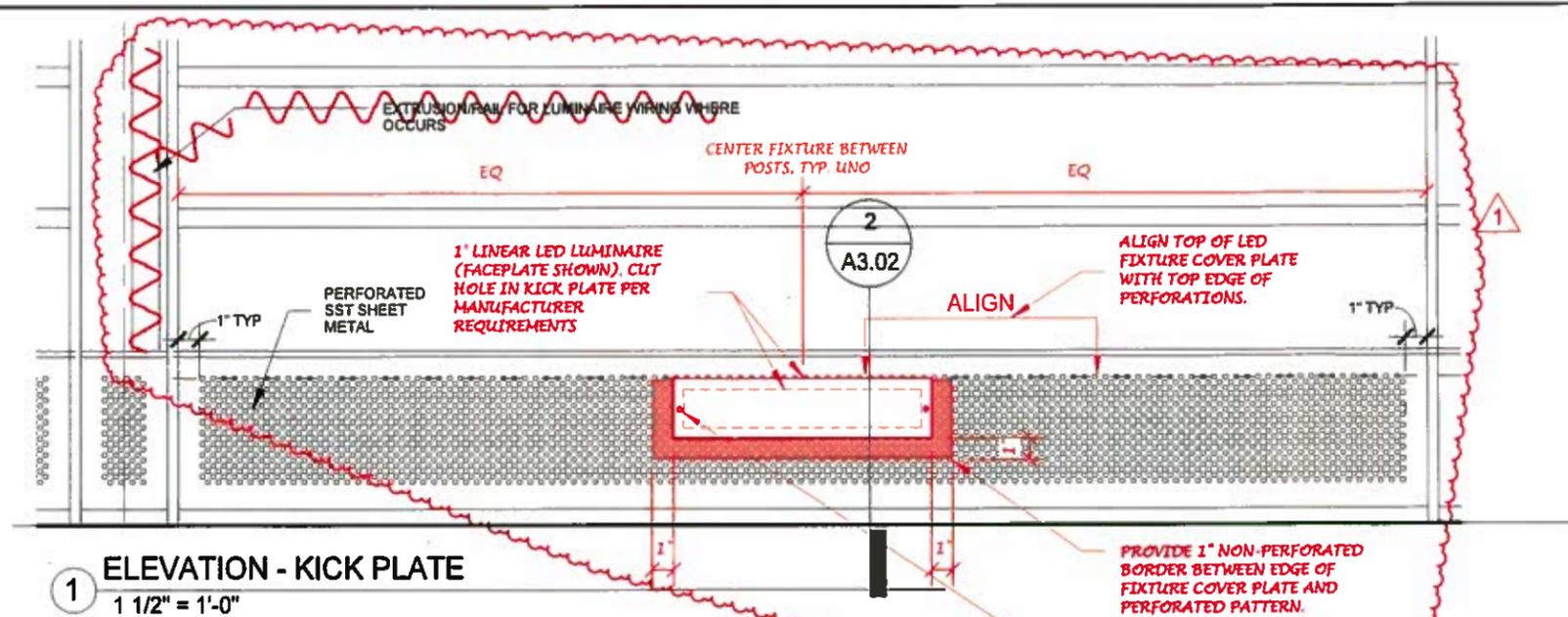
SECTION AT TYPICAL RAILING		REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor	- A. HART	10	WASH			
Designed By	- B. KENNY					
Checked By	- D. LUNDMAN					
Detailled By	- B. KENNY					
Project Engr.	- D. EDWARDS	8/12/16		CO#116 - RSUP LIGHTING MOD	BK	
Regional Adm.	- J. MEREDITH	DATE	REVISION	BY	APPD	



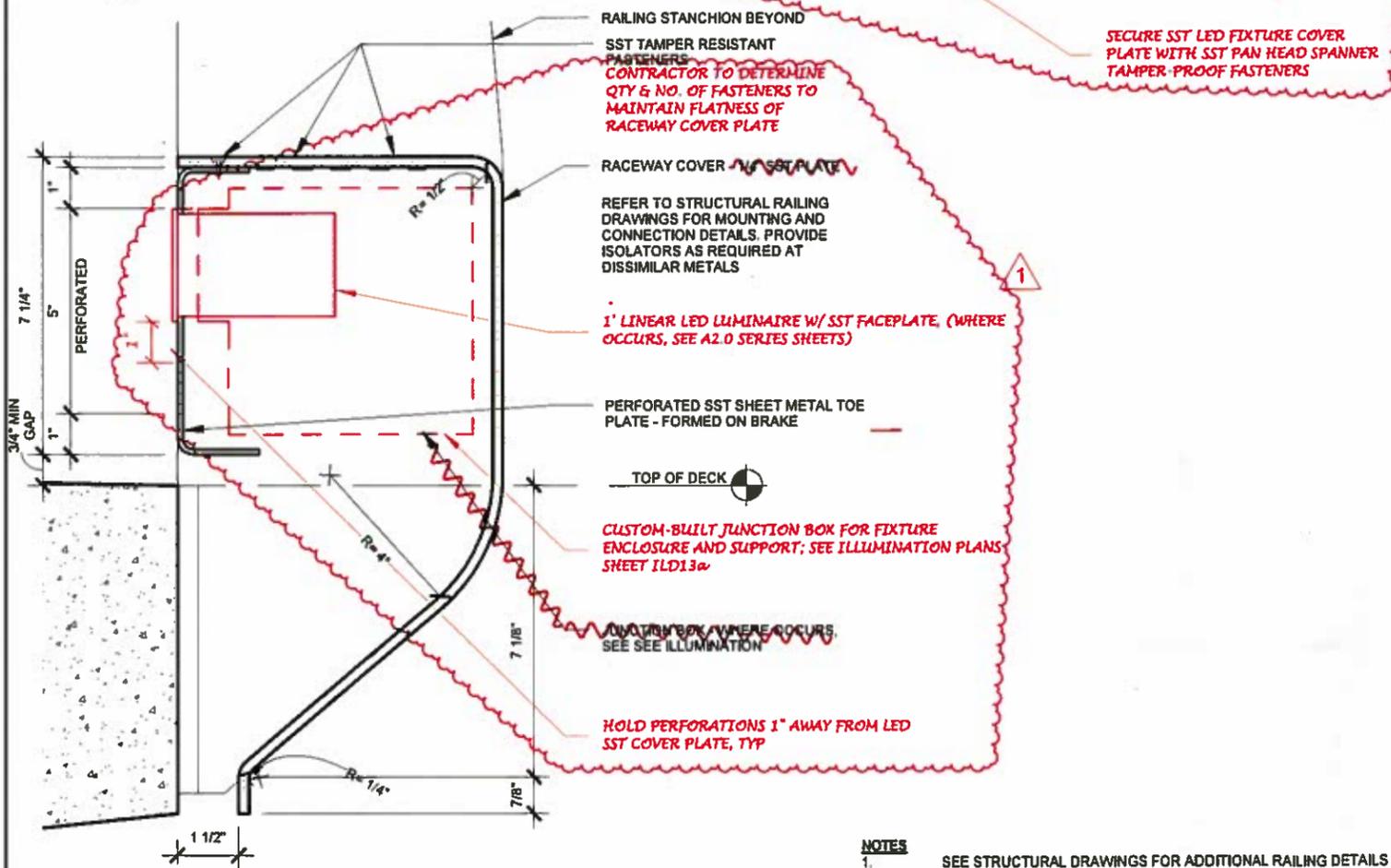
Contract 8625
Change Order #116
Page 45 of 54

SECTION AT TYPICAL RAILING

BRIDGE SHEET NO. A3.01
SHEET 1643 OF 1797 SHEETS

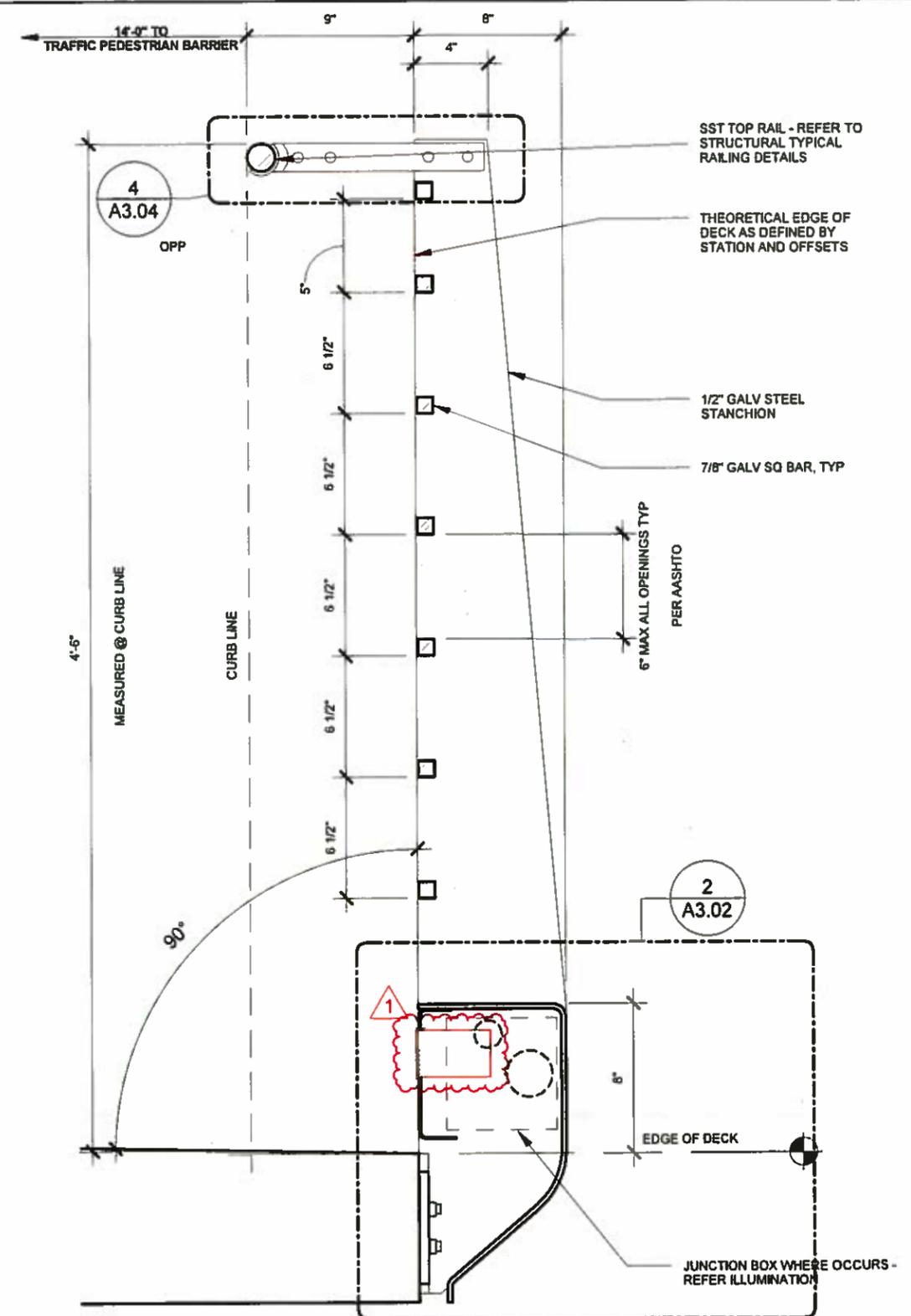


1 ELEVATION - KICK PLATE
1 1/2" = 1'-0"



2 RACEWAY AT TYPICAL RAILING
3" = 1'-0"

NOTES
1. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL RAILING DETAILS



3 TYP RAILING SECTION
1 1/2" = 1'-0"

SR 520 FILE NO. SHEET A3.02
ProjectWise Vault:

TYPICAL RAILING DETAILS		REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor	- A. HART	10	WASH			
Designed By	- B. KENNY					
Checked By	- D. LUNDMAN					
Detailed By	- B. KENNY					
Project Engr.	- D. EDWARDS	8/13/16		CO#116 - RSUP LIGHTING MOD	BK	
Regional Adm.	- J. MEREDITH	DATE	REVISION	BY	APPD	

7888 REGISTERED ARCHITECT

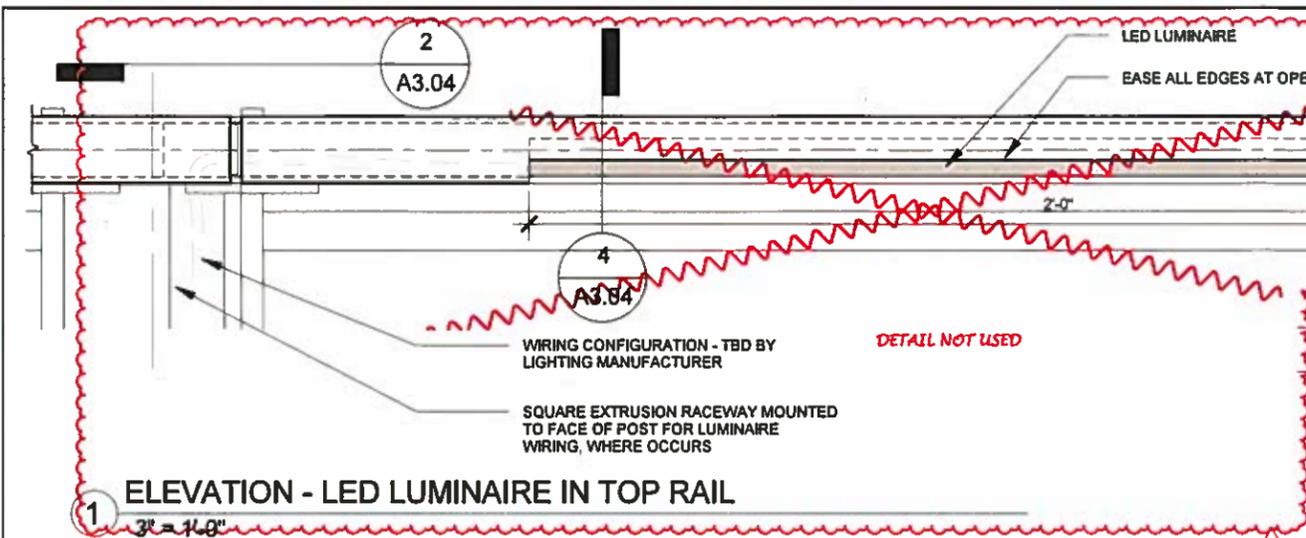
 Alan Hart
 STATE OF WASHINGTON

 HDR ENGINEERING INC.

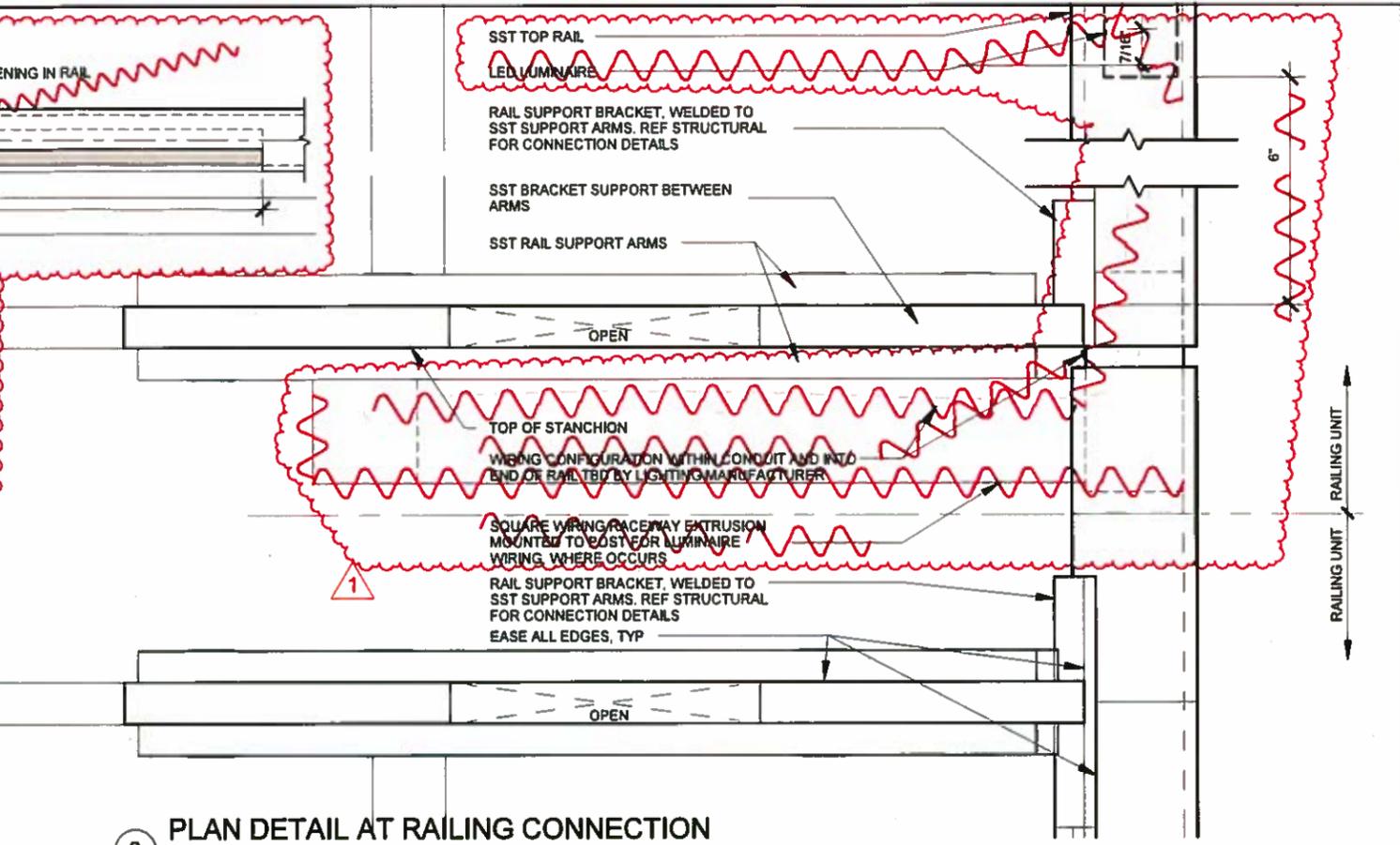
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Contract 8625
 Change Order #116
 Page 46 of 54
 TYPICAL RAILING DETAILS

BRIDGE SHEET NO. A3.02
 SHEET 1644 OF 1797 SHEETS

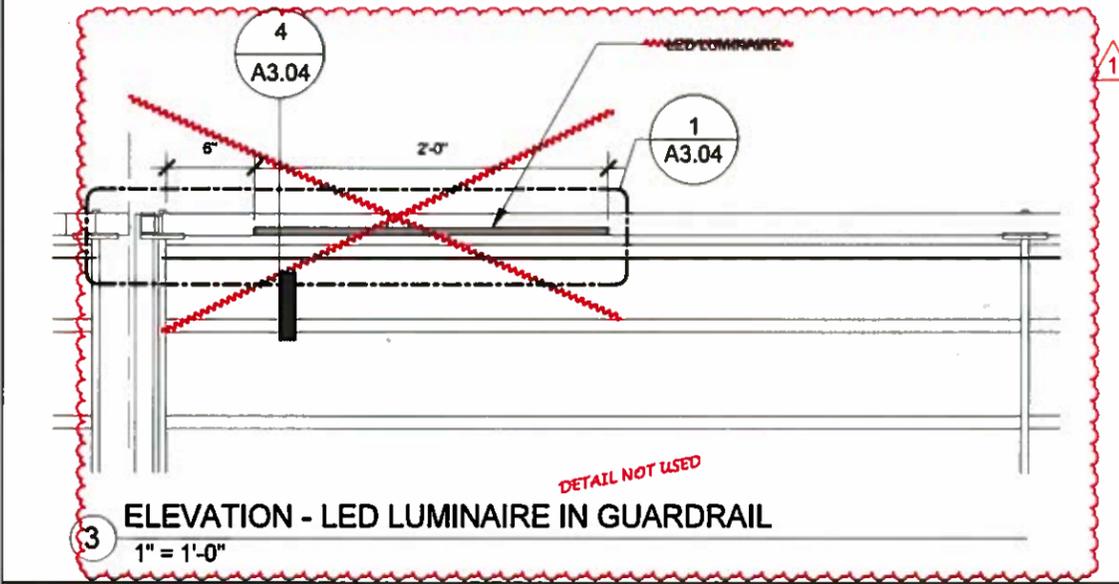


1 ELEVATION - LED LUMINAIRE IN TOP RAIL
3" = 1'-0"

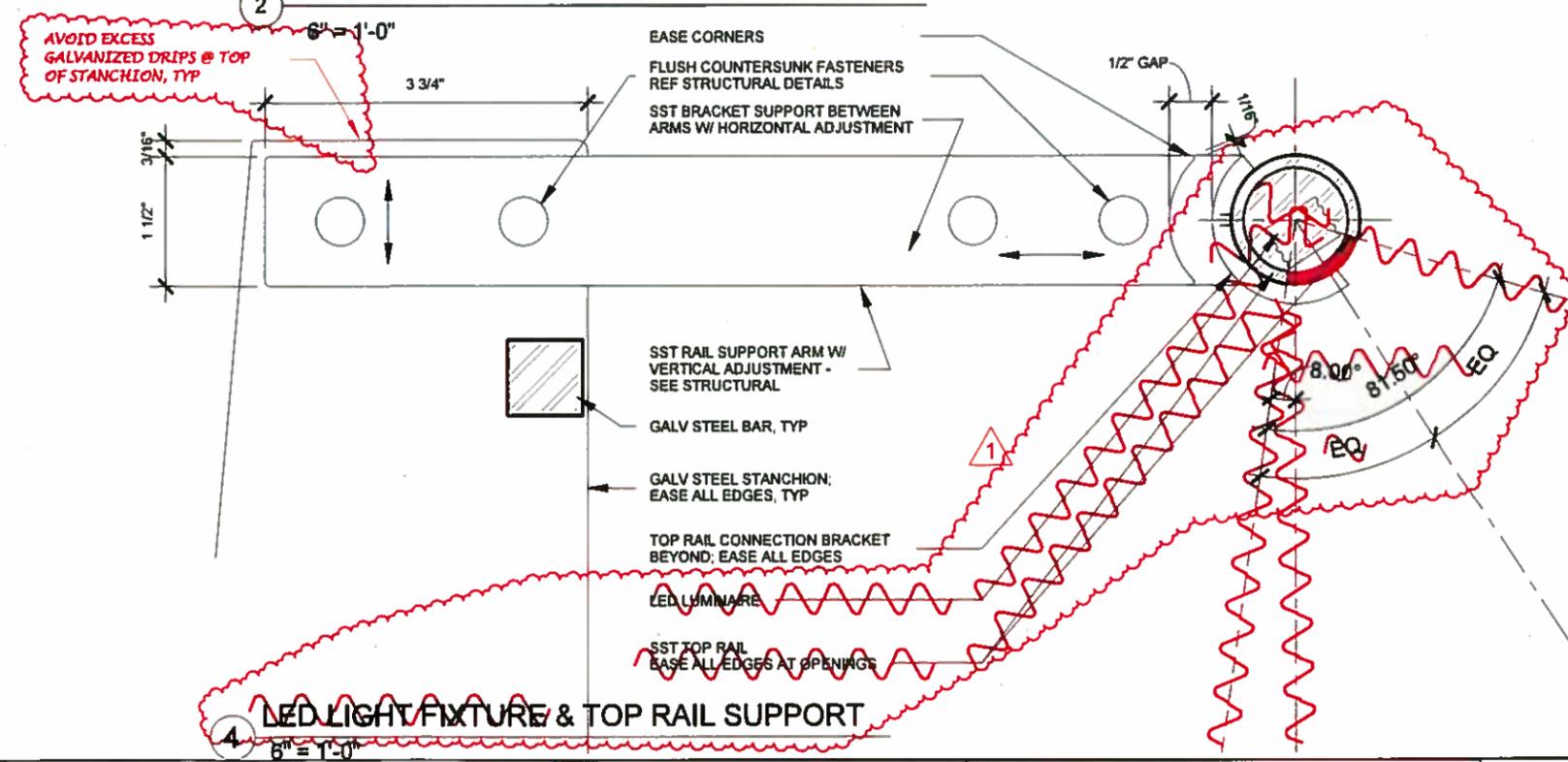


2 PLAN DETAIL AT RAILING CONNECTION

- NOTES**
- SEE STRUCTURAL FOR ADDITIONAL RAILING DETAILS.
 - PROVIDE A COMPLETE FUNCTIONING RAILING-INTEGRAL L.E.D. ELECTRICAL SYSTEM AND FIXTURES AS SHOWN AND CONFORM WITH CONTRACT PROVISIONS.
 - L.E.D. LUMINAIRE TYPE SHALL BE LINEAR WITH CLASS II INLINE FUSE.
 - L.E.D. LIGHT COLOR TEMPERATURE RANGE SHALL BE 3000 TO 4000K.
 - L.E.D. LUMINAIRE MAXIMUM WATTAGE PER LINEAL FOOT SHALL BE 7.5.
 - LIGHT BEAM SHALL BE ORIENTED ONTO ROADWAY AND SHALL NOT DIRECT OR ORIENT ANY LIGHT TO ROADWAY OR BEYOND OUTSIDE EDGE OF RAILING.
 - MINIMUM AVERAGE HORIZONTAL LIGHT LEVEL SHALL BE 1.0 FOOT CANDLES.
 - MAXIMUM UNIFORMITY RATIO SHALL BE 1.5.
 - L.E.D. LUMINAIRE VOLTAGE SHALL BE 120V (NON-DIMMING) AC.
 - L.E.D. TRANSFORMER TYPE SHALL BE REMOTE LOW VOLTAGE MULTIPLE OUTPUT WITH NEMA 3R OUTDOOR RATED ENCLOSURE.
 - L.E.D. TRANSFORMER INPUT SHALL BE 277V.
 - CONDUIT FROM L.E.D. TRANSFORMER SHALL BE RIGID GALVANIZED STEEL.
 - ALL EXPOSED CONDUIT AND FITTINGS BETWEEN THE RACEWAY AND LED LUMINAIRE SHALL BE STAINLESS STEEL.



3 ELEVATION - LED LUMINAIRE IN GUARDRAIL
1" = 1'-0"



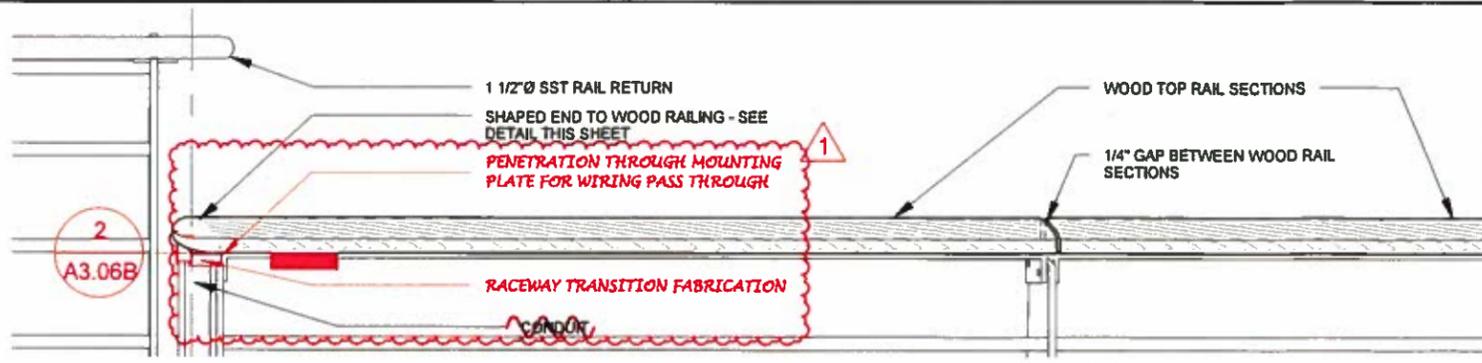
4 LED LIGHT FIXTURE & TOP RAIL SUPPORT
6" = 1'-0"

RAILING LIGHTING & CONNECTION DETAILS		REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor	- A. HART	10	WASH			
Designed By	- B. KENNY					
Checked By	- D. LUNDMAN					
Detailed By	- B. KENNY					
Project Engr.	- D. EDWARDS	8/12/16	CO#116 - RSUP LIGHTING MOD	BK		
Regional Adm.	- J. MEREDITH	DATE	REVISION	BY	APPD	

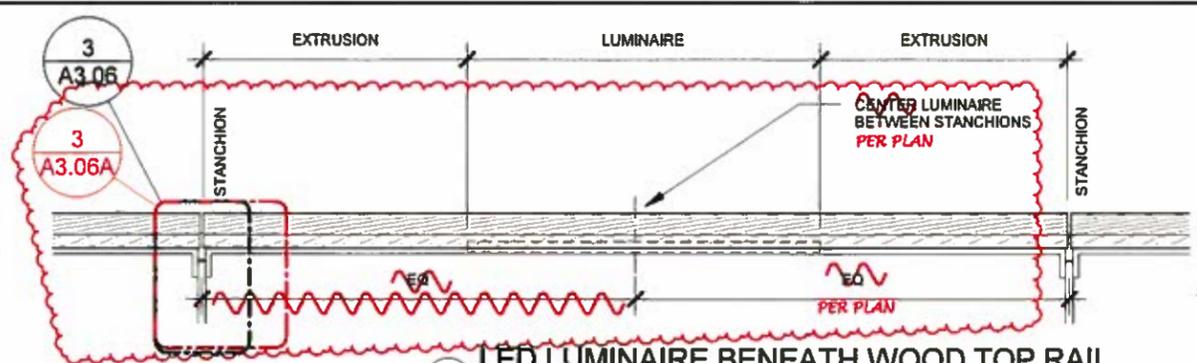


Contract 8625
Change Order #116
Page 47 of 54

BRIDGE SHEET NO. A3.04
SHEET 1645 OF 1797 SHEETS

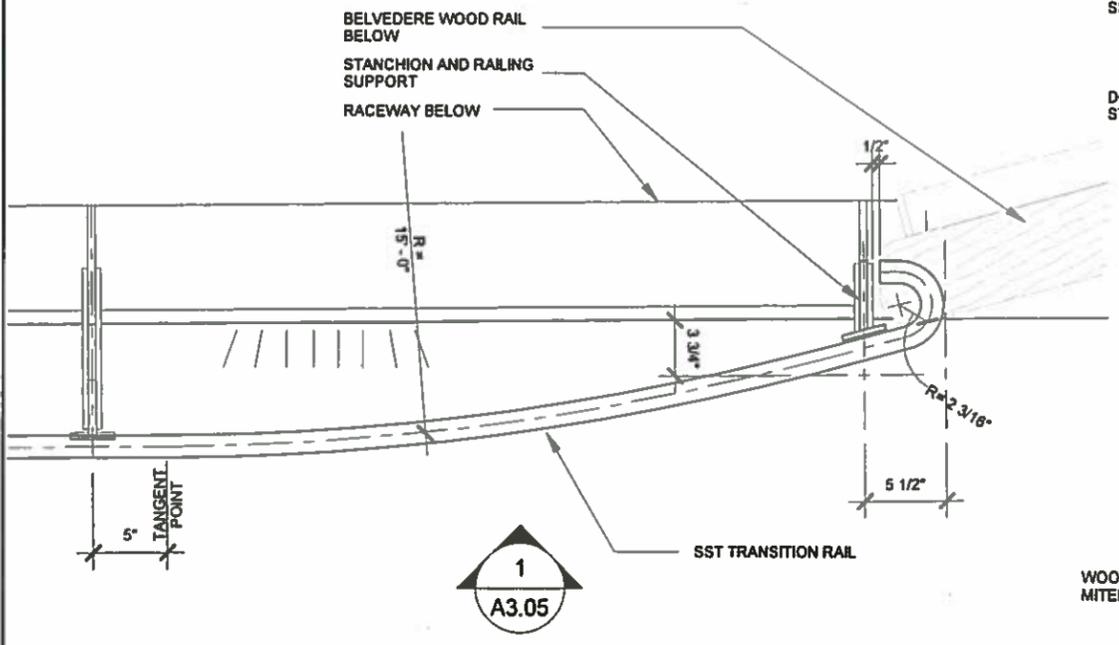


1 SOUTH ELEVATION - RAILING RETURN
1" = 1'-0"

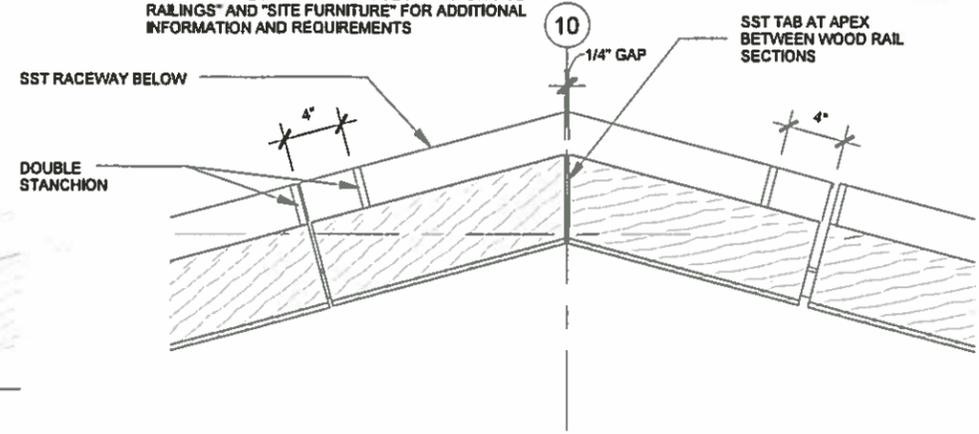


2 LED LUMINAIRE BENEATH WOOD TOP RAIL
1" = 1'-0"

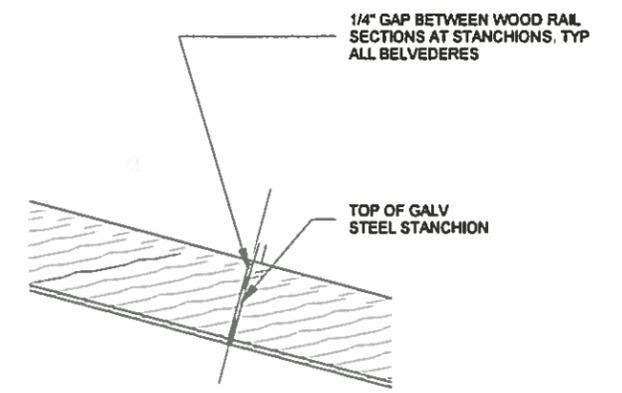
NOTES
1. SEE STRUCTURAL FOR ADDITIONAL RAILING DETAILS REFER TO SPECIAL PROVISION SECTIONS "BRIDGE RAILINGS" AND "SITE FURNITURE" FOR ADDITIONAL INFORMATION AND REQUIREMENTS
2.



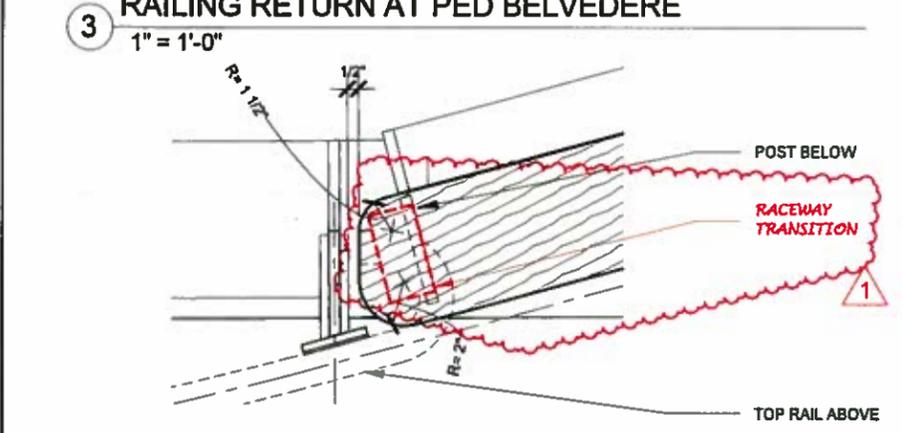
3 RAILING RETURN AT PED BELVEDERE
1" = 1'-0"



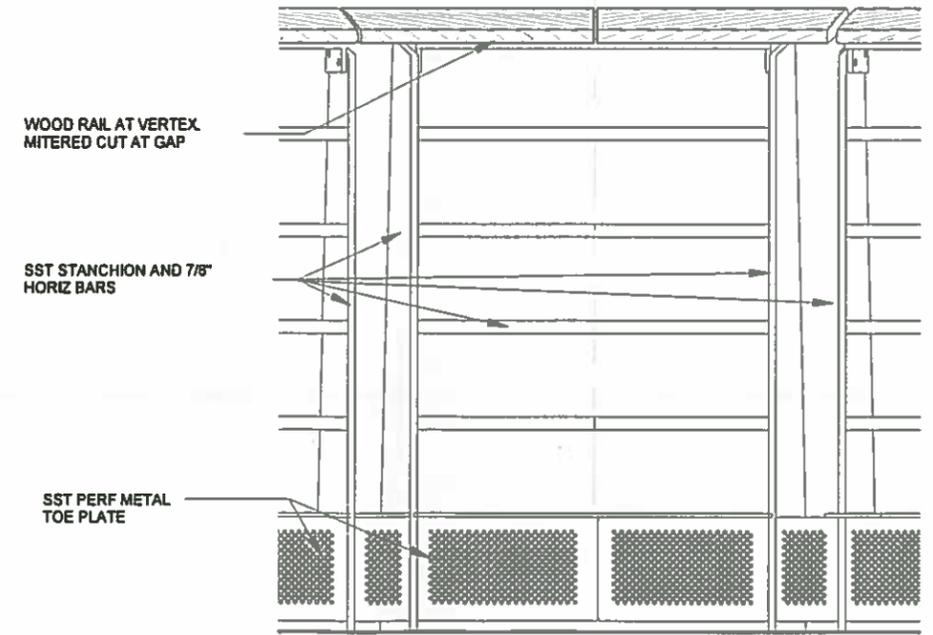
4 PLAN - WOOD RAIL TERMINATION AT BELVEDERE VERTEX
1" = 1'-0"



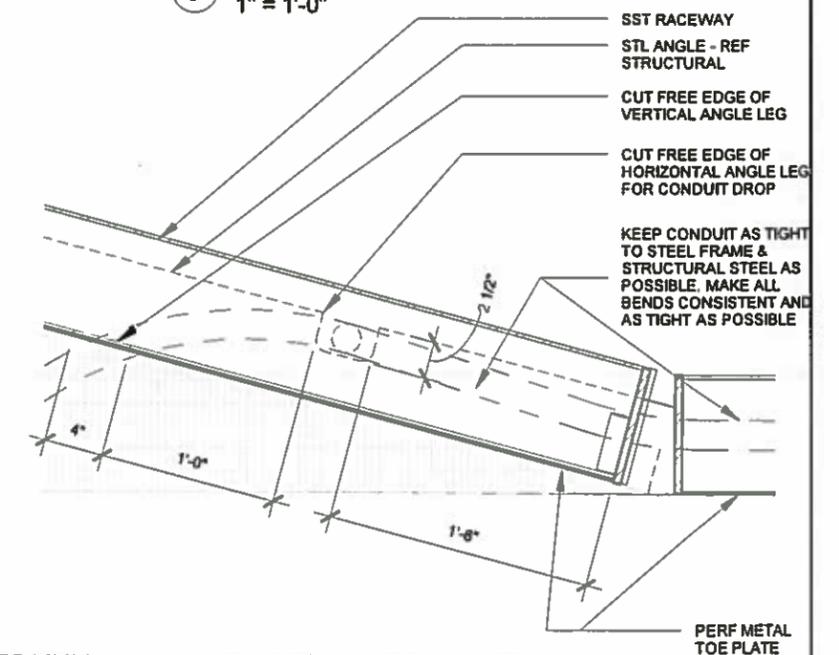
5 TOP RAIL AT STANCHION, TYP
1" = 1'-0"



6 WOOD RAIL TERMINATION
1 1/2" = 1'-0"



7 ELEVATION - SST RAILING AT BELVEDERE VERTEX
1" = 1'-0"



8 RACEWAY TRANSITION
1" = 1'-0"

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SR 520 FILE NO. SHEET A3.05
ProjectWise Vault:

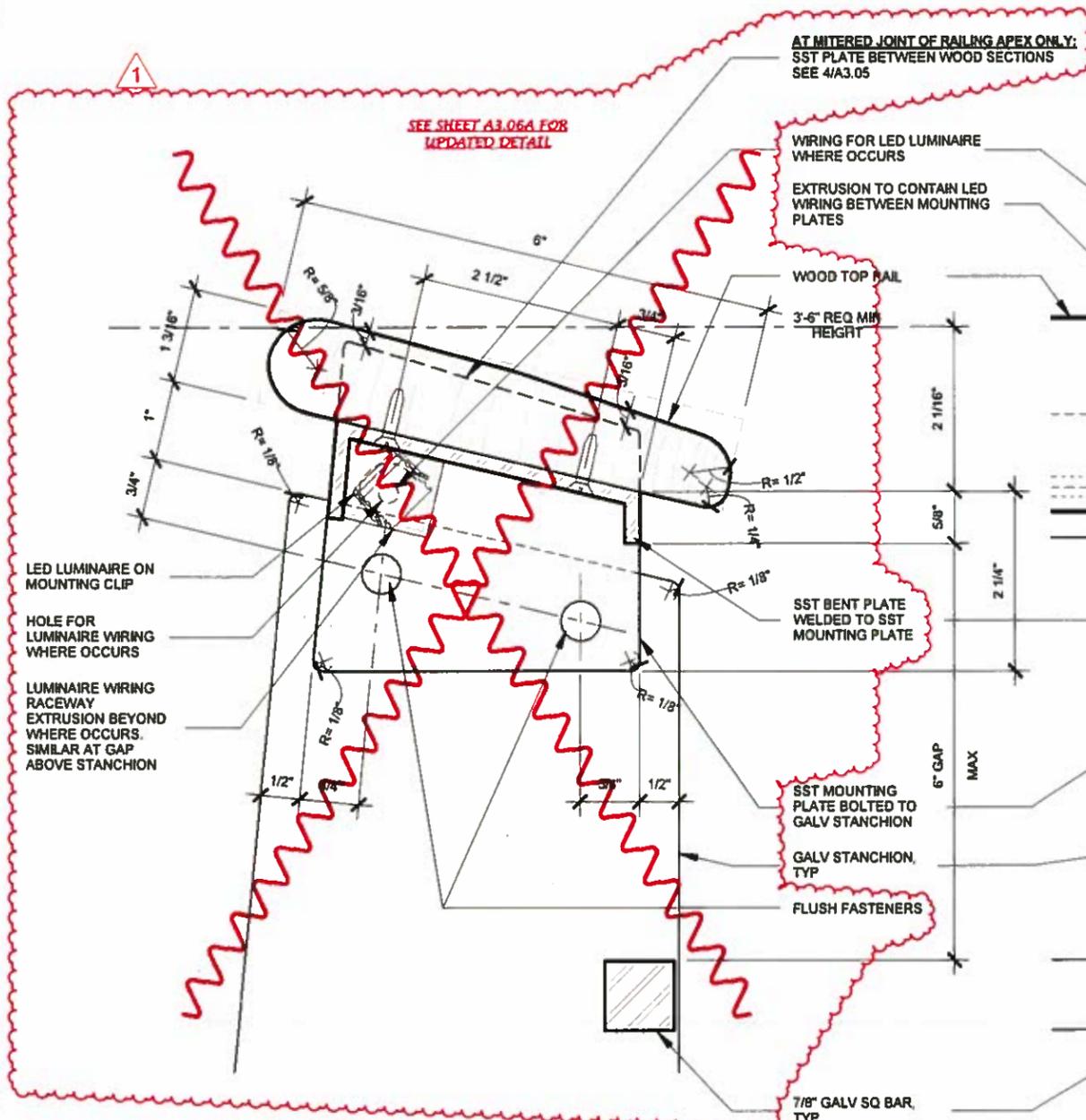
SUPERVISOR		DESIGNED BY		CHECKED BY		DETAILED BY		PROJECT ENGR.		REGIONAL ADM.	
A. HART		B. KENNY		D. LUNDMAN		B. KENNY		D. EDWARDS		J. MEREDITH	
DATE	REVISION	BY	APPD	JOB NUMBER		REASON NO.		STATE		FED. AID PROJ. NO.	
8/12/18	CO#116 - RSUP LIGHTING MOD	BK		13A012		10		WASH			



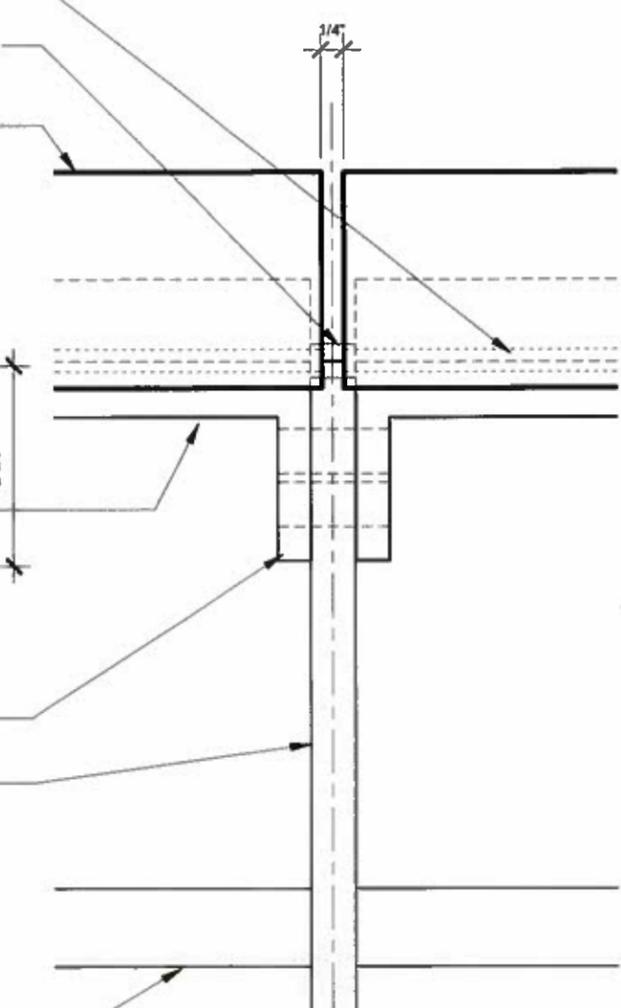
Contract 8625
Change Order #116
Page 48 of 54

BRIDGE SHEET NO. A3.05
SHEET 1646 OF 1797 SHEETS

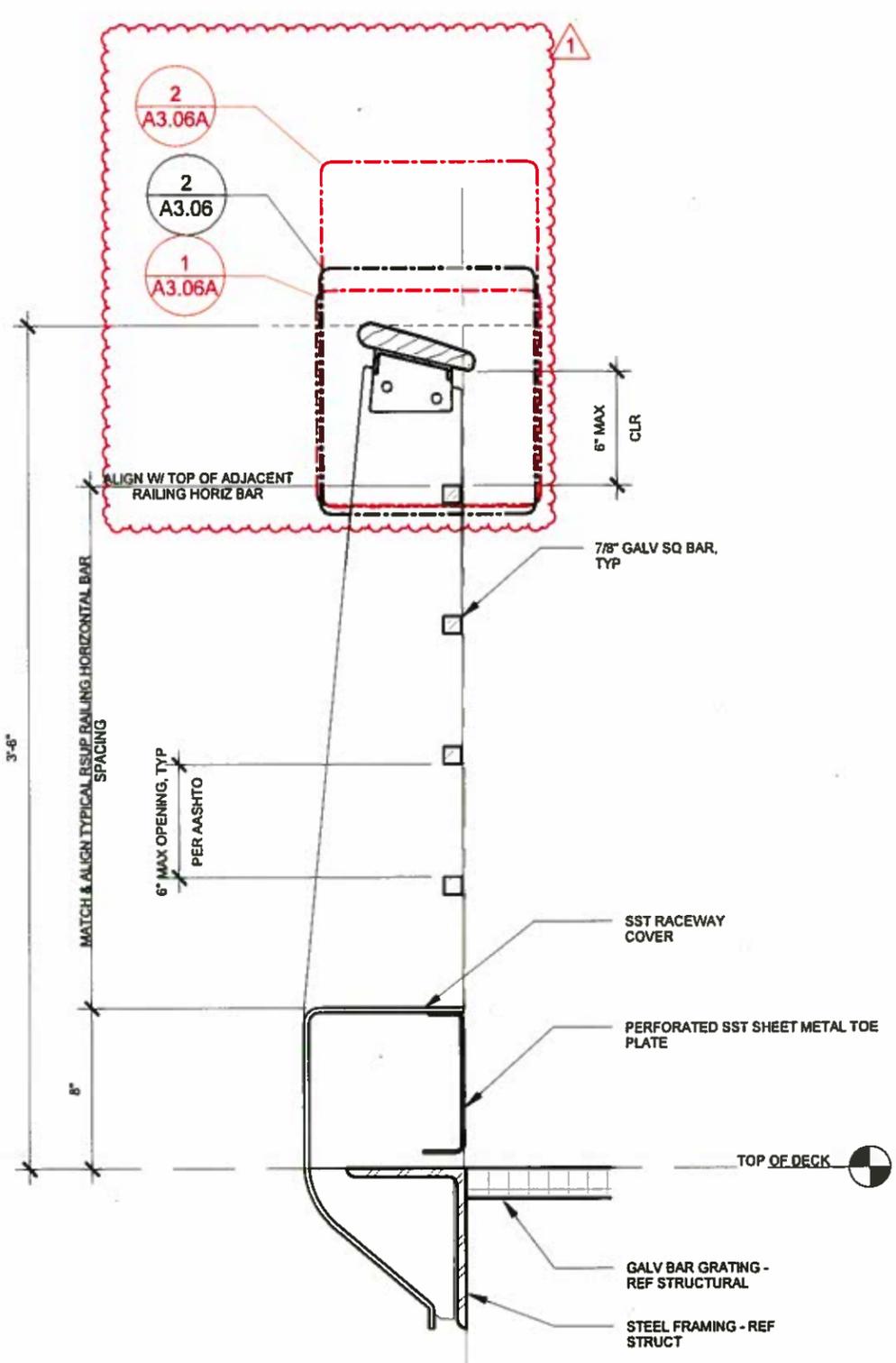
PEDESTRIAN BELVEDERE DETAILS



2 WOOD TOP RAIL ON ADJUSTABLE MOUNTING PLATE
6" = 1'-0"



3 DETAIL ELEVATION OF WOOD RAIL
6" = 1'-0"



1 RAILING SECTION AT BELVEDERE
1 1/2" = 1'-0"

NOTES
1. SEE STRUCTURAL FOR ADDITIONAL RAILING DETAILS
2. REFER TO SPECIAL PROVISION SECTIONS "BRIDGE RAILINGS" AND "SITE FURNITURE" FOR ADDITIONAL INFORMATION AND REQUIREMENTS

SR 520 FILE NO. SHEET A3.06
ProjectWise Vault:

PEDESTRIAN BELVEDERE RAILING SECTIONS		REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor	- A. HART	10	WASH			
Designed By	- B. KENNY					
Checked By	- D. LUNDMAN					
Detalled By	- B. KENNY					
Project Engr.	- D. EDWARDS	8/12/18	CO#116 - RSUP LIGHTING MOD	BK		
Regional Adm.	- J. MEREDITH	DATE	REVISION	BY	APP'D	



VIA

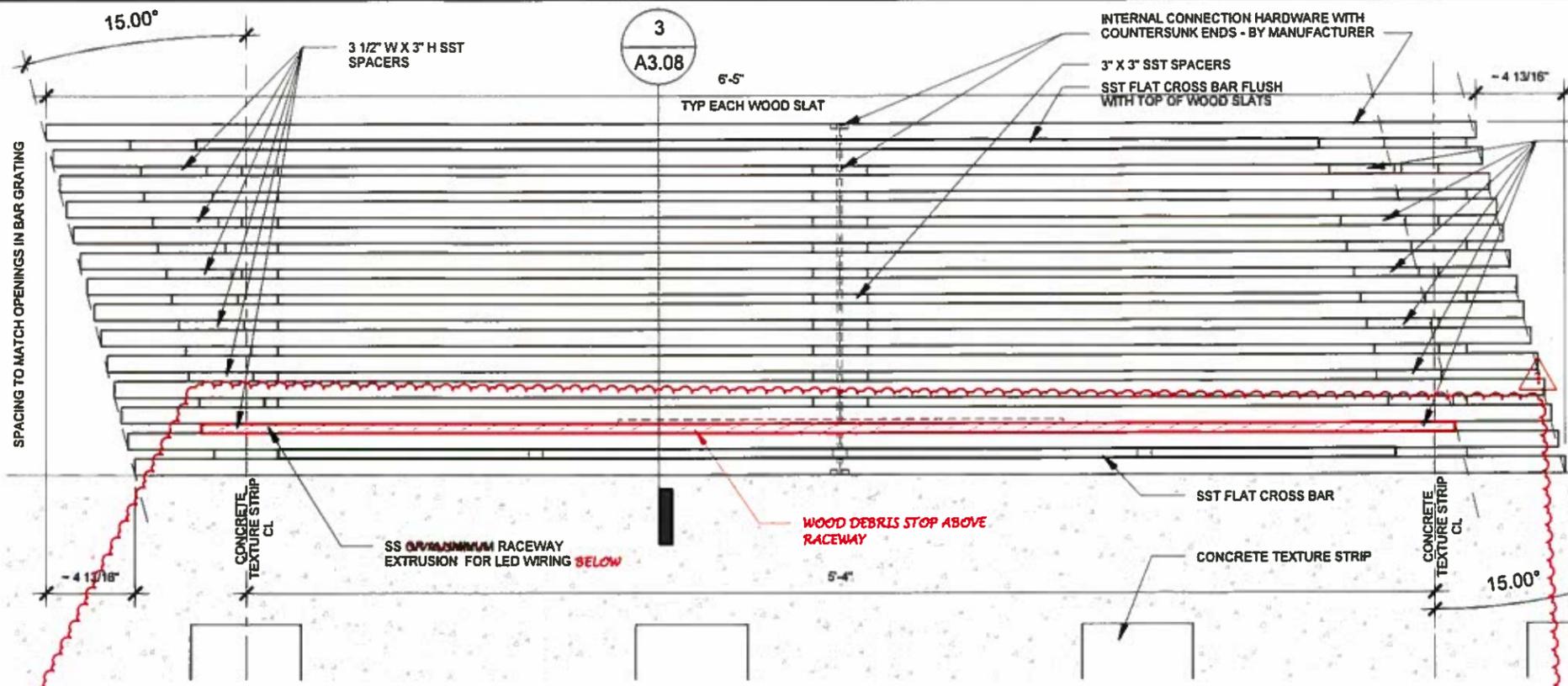
Contract 8625
Change Order #116
Page 49 of 54

PEDESTRIAN BELVEDERE RAILING SECTIONS

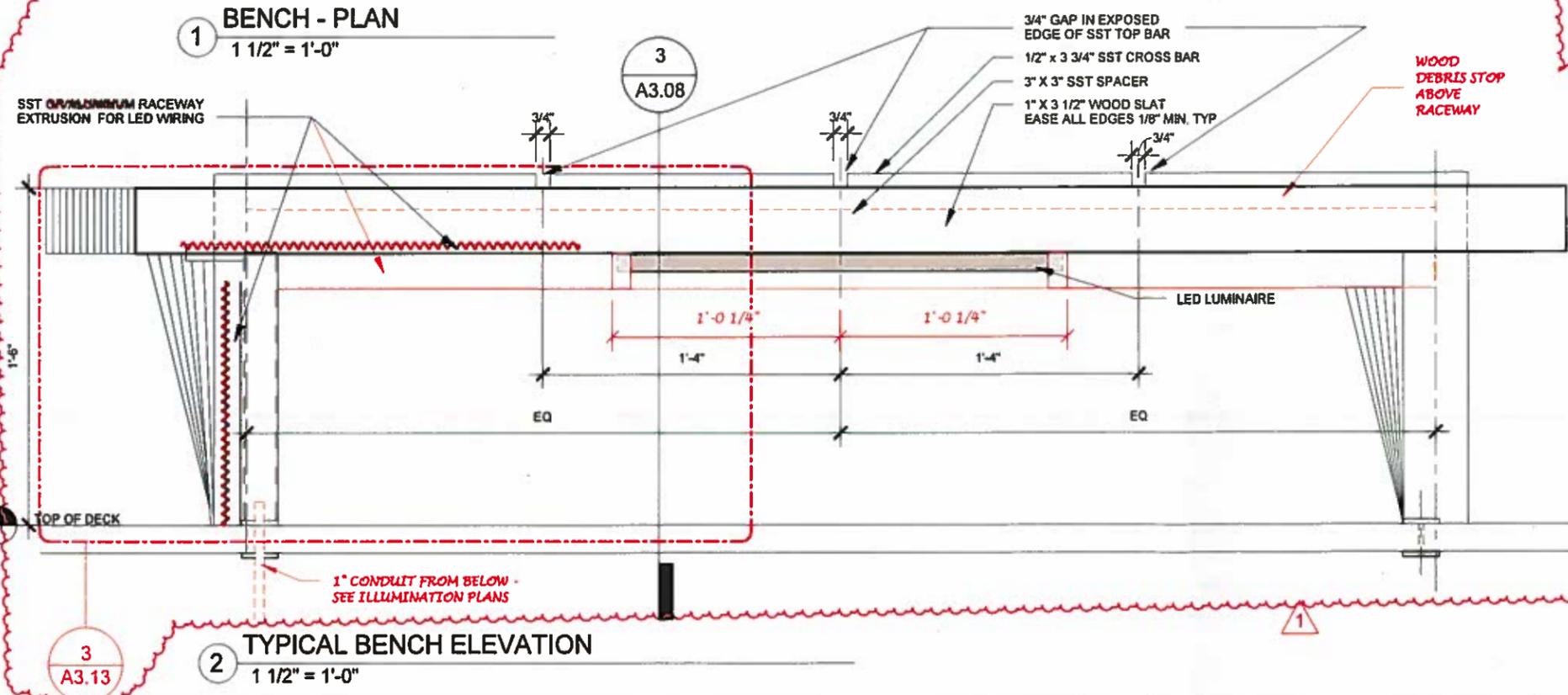
BRIDGE SHEET NO. A3.06
SHEET 1647 OF 1797 SHEETS

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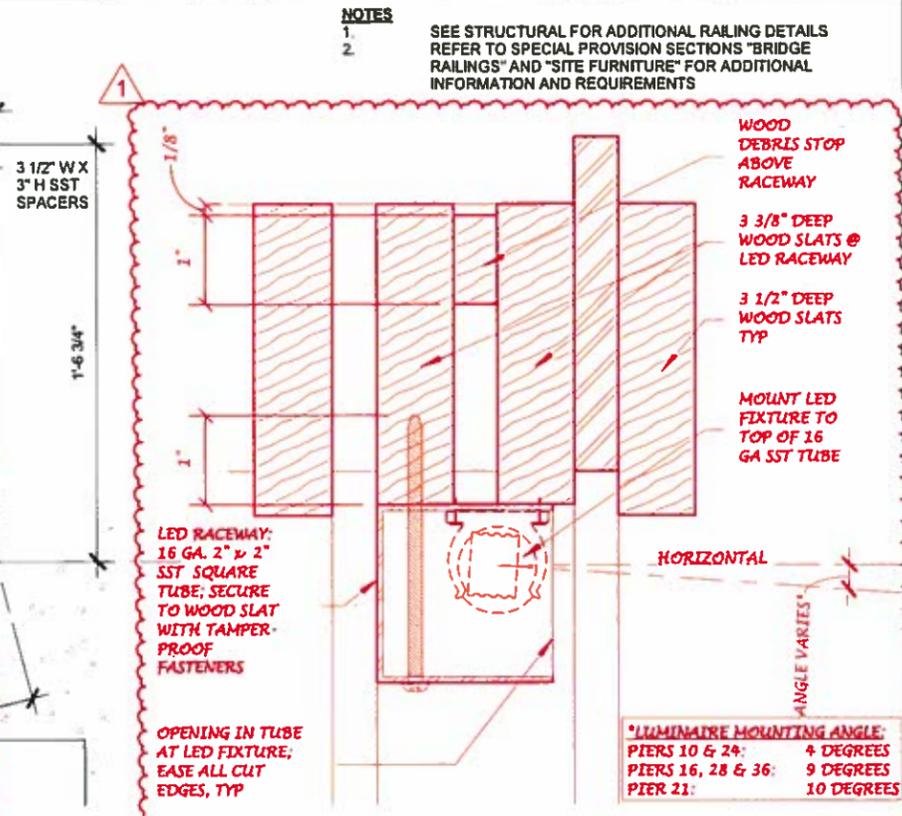
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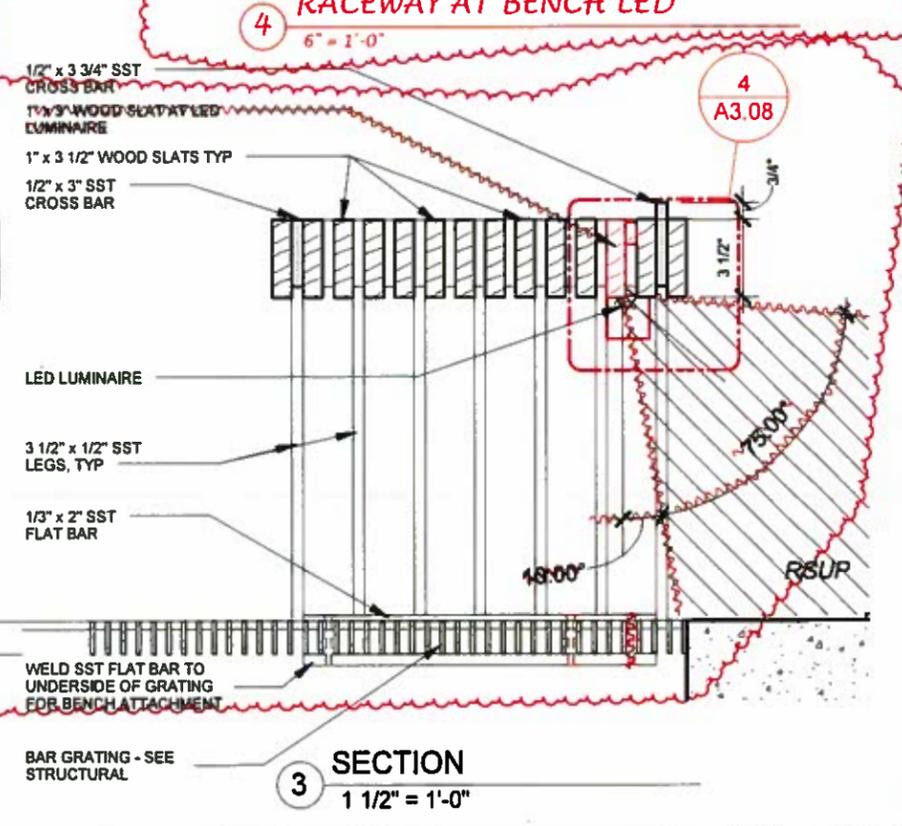
1 BENCH - PLAN
1 1/2" = 1'-0"



2 TYPICAL BENCH ELEVATION
1 1/2" = 1'-0"



4 RACEWAY AT BENCH LED
6" = 1'-0"



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

NOTES
1. SEE STRUCTURAL FOR ADDITIONAL RAILING DETAILS REFER TO SPECIAL PROVISION SECTIONS "BRIDGE RAILINGS" AND "SITE FURNITURE" FOR ADDITIONAL INFORMATION AND REQUIREMENTS
2.

SR 520 FILE NO. SHEET A3.08
ProjectWise Vault

BENCH DETAILS		REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor	- A. HART	10	WASH			
Designed By	- B. KENNY					
Checked By	- D. LUNDMAN					
Detailed By	- B. KENNY					
Project Engr.	- D. EDWARDS	M/12/16		CO#116 - RSUP LIGHTING MOD	BK	
Regional Adm.	- J. MEREDITH	DATE	REVISION	BY	APPD	



VIA

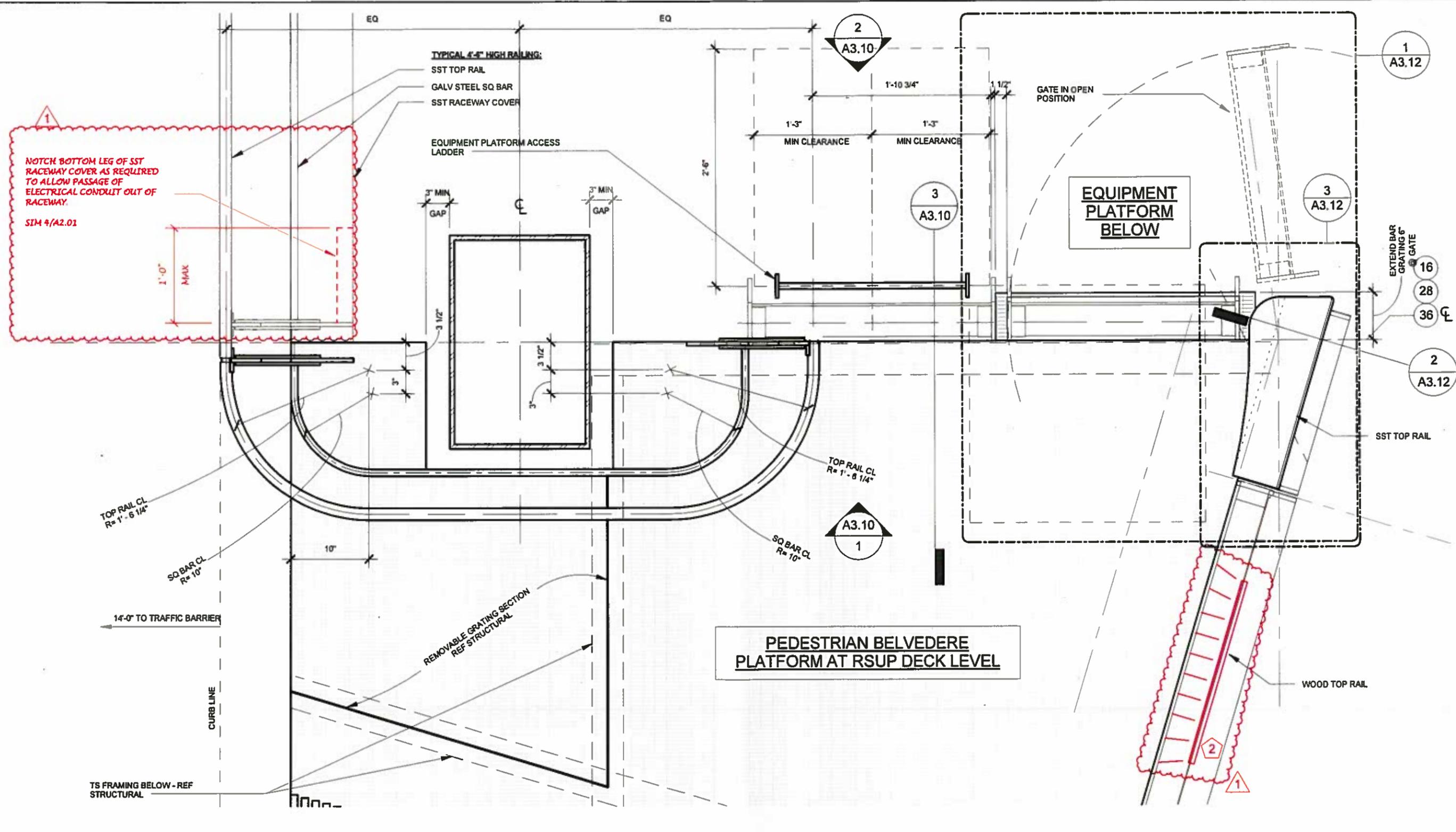
Contract 8625
Change Order #116
Page 50 of 54

BRIDGE SHEET NO. A3.08
SHEET 1649 OF 1797 SHEETS

BENCH DETAILS

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- NOTES**
- SEE STRUCTURAL DRAWINGS FOR ADDITIONAL RAILING & EQUIPMENT PLATFORM DETAILS
 - LADDER TO MEET REQUIREMENTS OF OSHA AND ANSI A14.3-2002

1 GATE & RAILING - PIER 36
1" = 1'-0"

EQUIPMENT PLATFORM BELVEDERE AT SIGNBRIDGE		REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor	- A. HART	10	WASH			
Designed By	- B. KENNY					
Checked By	- D. LUNDMAN					
Detailed By	- B. KENNY					
Project Engr.	- D. EDWARDS	8/12/16		CO#116 - RSUP LIGHTING MOD	BK	
Regional Adm.	- J. MEREDITH	DATE	REVISION	BY	APPD	

7888	REGISTERED ARCHITECT	HR	ENGINEERING INC.

	Washington State Department of Transportation

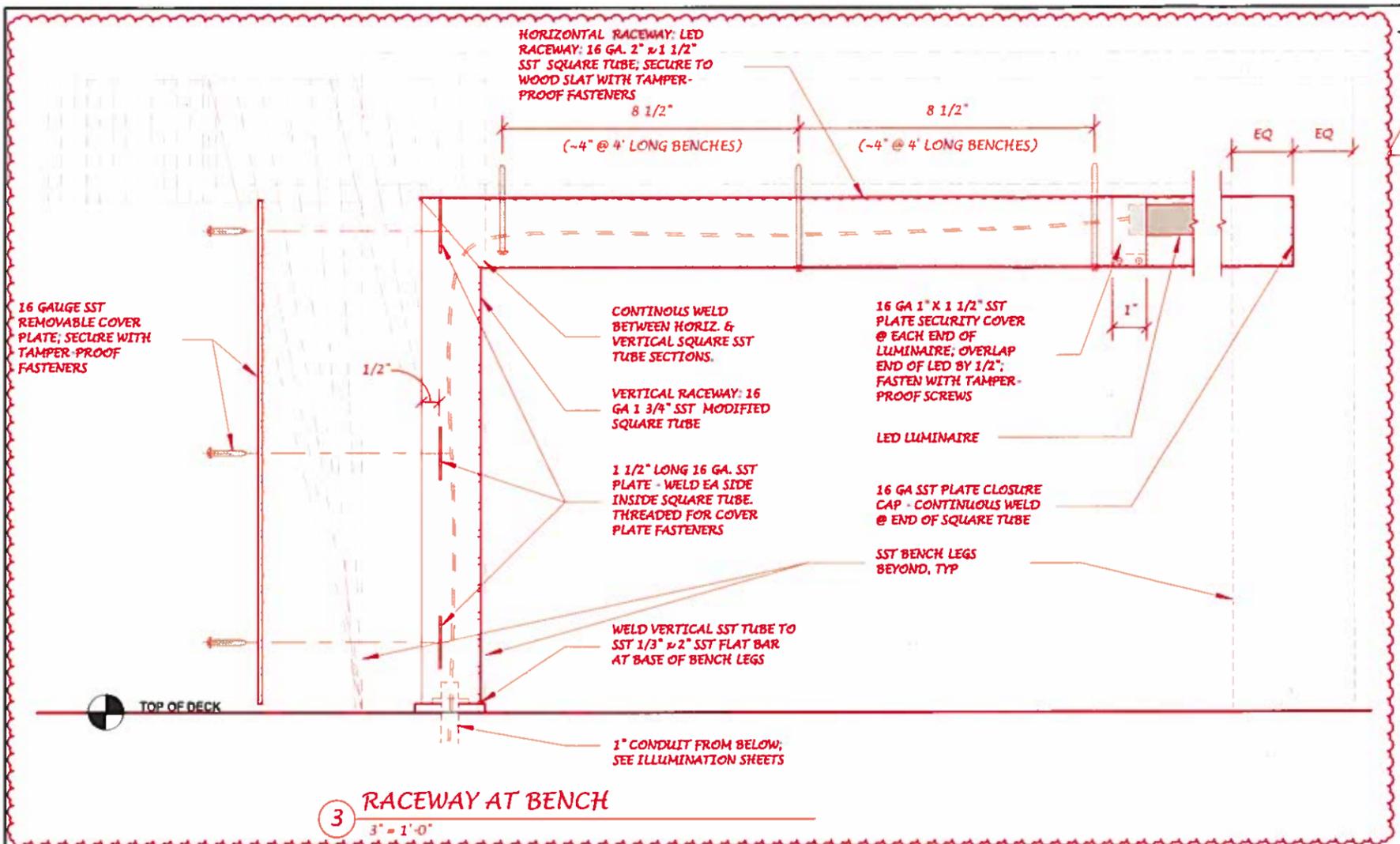
Contract 8625 Change Order #116 Page 51 of 54	
EQUIPMENT PLATFORM BELVEDERE AT SIGNBRIDGE MONOTUBE-PIERS 16,28,36	

BRIDGE SHEET NO.	A3.09
SHEET	1650
OF	1797
SHEETS	

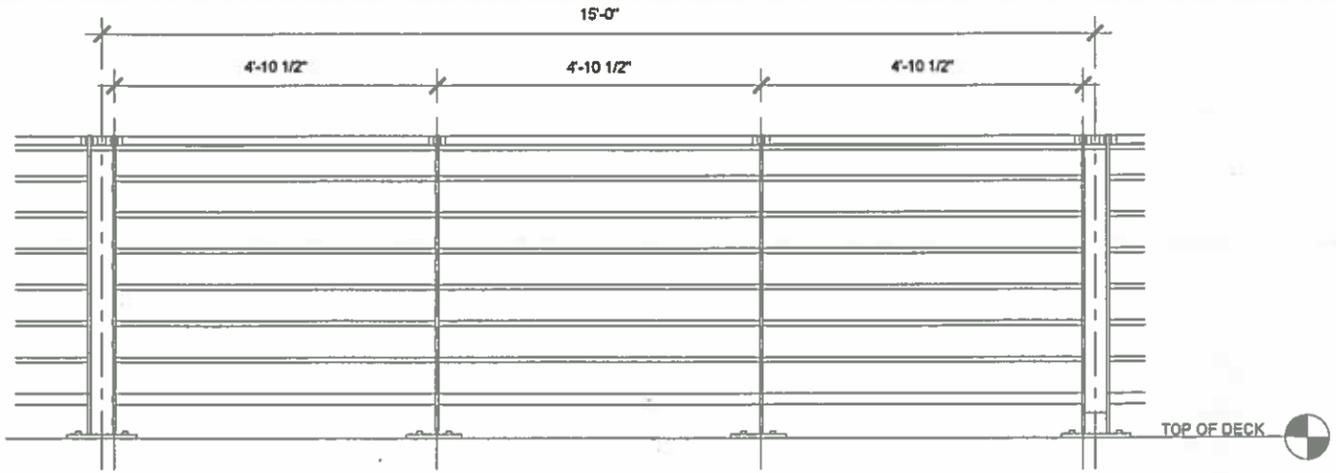
C:\Users\blenny\Documents\5005 WASH - CENTRAL Revit 2015_bkenny@via-architecture.com.rvt

SR 520 PROJECTWISE VAULT: FILE NO. SHEET A3.09

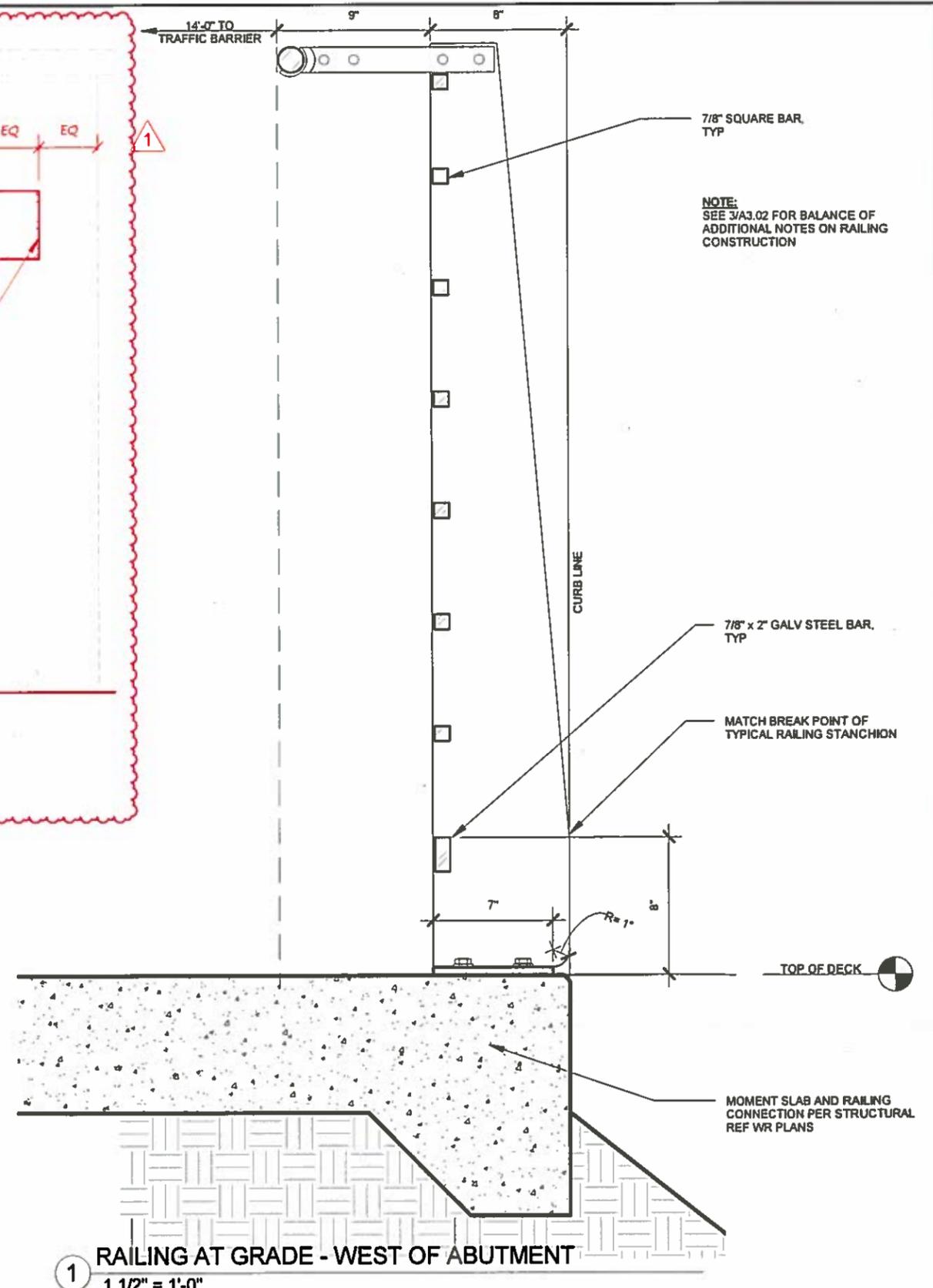
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3 RACEWAY AT BENCH
3" = 1'-0"



2 A3 RAILING UNIT - NORTH ELEVATION
3/8" = 1'-0"



1 RAILING AT GRADE - WEST OF ABUTMENT
1 1/2" = 1'-0"

NOTE:
SEE 3/A3.02 FOR BALANCE OF
ADDITIONAL NOTES ON RAILING
CONSTRUCTION

RAILING AT WEST ABUTMENT		REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor	- A. HART	10	WASH			
Designed By	- B. KENNY					
Checked By	- D. LUNDMAN					
Detailled By	- B. KENNY					
Project Engr.	- D. EDWARDS	8/12/16	CO#116 - RSUP LIGHTING MOD	BK		
Regional Adm.	- J. MEREDITH	DATE	REVISION	BY	APPD	



VIA

Contract 8625
Change Order #116
Page 52 of 54

RAILING AT WEST ABUTMENT

SHEET NO. A3.13
SHEET 1654 OF 1797 SHEETS

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SR 520 FILE NO. SHEET A3.13 ProjectWise Vault

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NOTES:
ALL REMOVABLE PARTS OF THE METAL RACEWAY SHALL BE BONDED AND GROUNDED PER NEC USING A GROUNDING STUD WELDED TO THE REMOVABLE PARTS OF THE RACEWAY. NOT ALL GROUNDING STUDS ARE SHOWN

HOLE THROUGH MOUNTING PLATES FOR 3/4" CONDUIT PASS THROUGH; VERIFY DIAMETER

1/4" THICK SST FABRICATED SHAPE - WELDED TO SST MOUNTING PLATE

1/2" BARREL DIAM. COUNTERSUNK TAMPER RESISTANT DRIVE S.S. HEX BOLTS (TYP) FASTENERS

AT MITERED JOINT OF RAILING APEX ONLY: SST PLATE BETWEEN WOOD SECTIONS SEE 4/A3.05

WOOD TOP RAIL; SECURE W/ TAMPER-PROOF PAN HEAD SCREWS

3/4" CONDUIT CONNECTOR BETWEEN SST PLATE SECTIONS

16 GAUGE S.S. BENT PLATE LED WIRING RACEWAY; SECURE WITH TAMPER-PROOF FASTENERS

3/8" SST MOUNTING PLATE BOLTED TO GALV STANCHION

GALV STANCHION, TYP

7/8" GALV SQ BAR, TYP

SST PLATE WOOD RAIL SUPPORT

LED FIXTURE ON ADJUSTABLE MOUNT. FASTEN TO SST BENT PLATE W/ TAMPER-PROOF SCREWS

HOLE FOR LED WIRING; FIELD DRILL FOR WIRING AS REQUIRED BY MANUFACTURER

16 GAUGE S.S. BENT PLATE LED WIRING RACEWAY; SECURE WITH TAMPER-PROOF FASTENERS

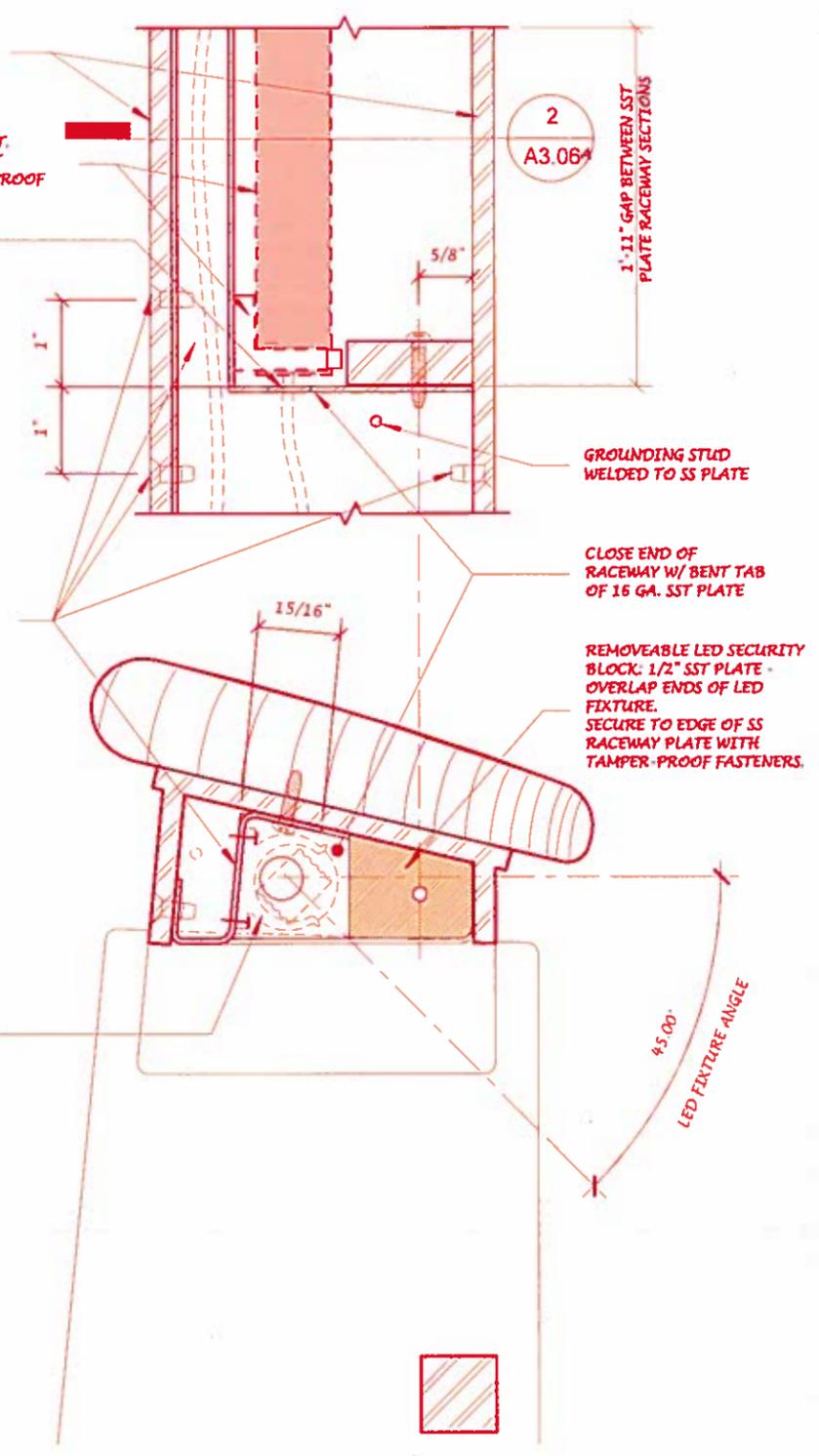
LED FIXTURE ON ADJUSTABLE MOUNT. FASTEN TO SST BENT PLATE W/ TAMPER-PROOF SCREWS

14" O.C. TO NEXT COUNTERSUNK FASTENER; CONTINUE 14" O.C. EQUAL SPACING, TYP

1 WOOD TOP RAIL ON ADJUSTABLE MOUNTING PLATE
6" = 1'-0"

3 DETAIL ELEVATION OF WOOD RAIL
6" = 1'-0"

2 WOOD TOP RAIL - LED RACEWAY
6" = 1'-0"



SR 520 FILE NO. SHEET A3.06A
Project/Misc Vault:

PED BELVEDERE RAILING & LIGHTING DETAILS				REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor	- A. HART			10	WASH			
Designed By	- B. KENNY							
Checked By	- D. LUNDMAN							
Detailed By	- B. KENNY							
Project Engr.	- D. EDWARDS	8/12/16	CO#116 - RSUP LIGHTING MOD	BK				
Regional Adm.	- J. MEREDITH	DATE	REVISION	BY	APPD			



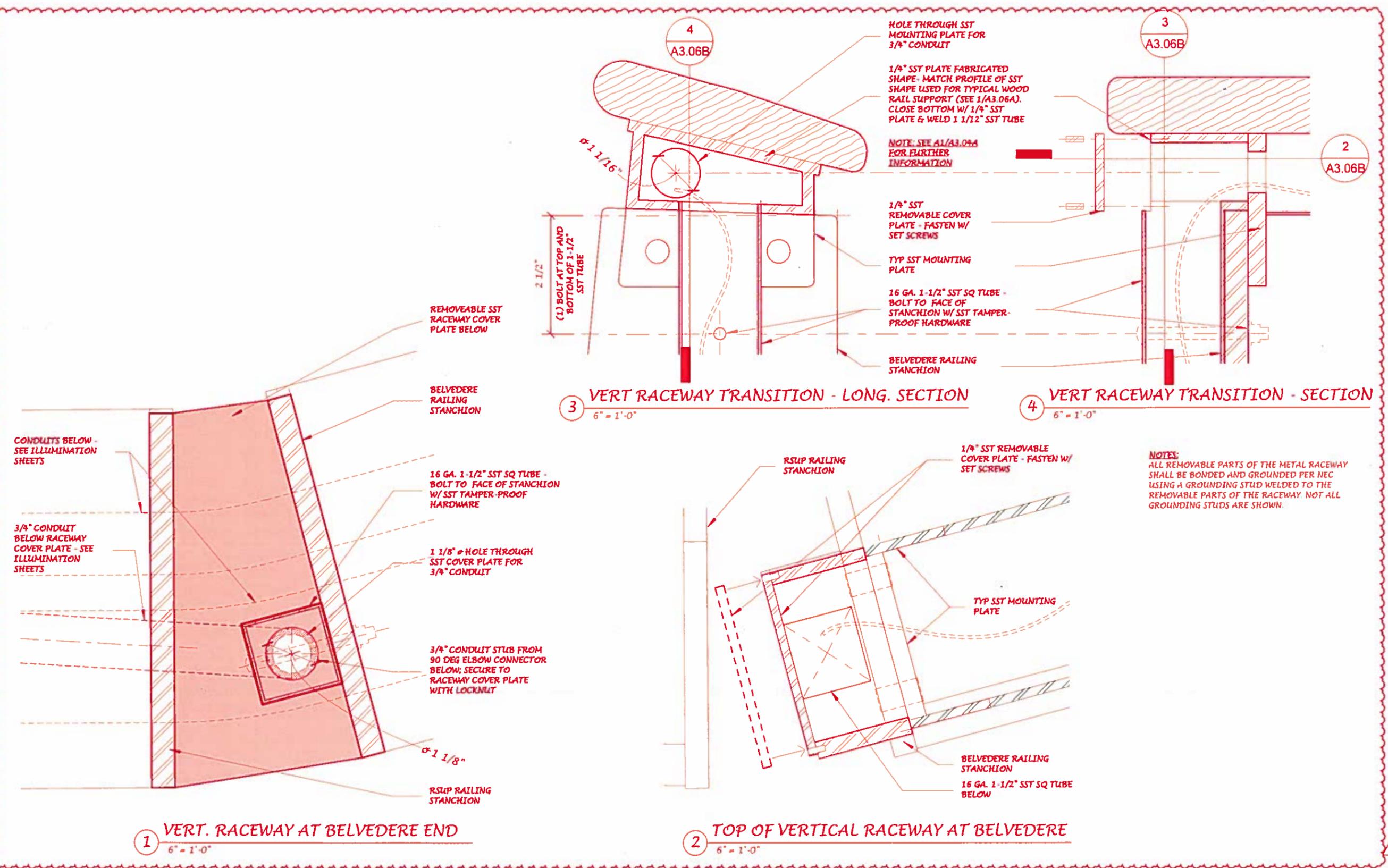
Contract 8625
Change Order #116
Page 53 of 54

PED BELVEDERE RAILING & LIGHTING
DETAILS

BRIDGE SHEET NO. A3.06A
SHEET 1797 OF 1797 SHEETS

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SR 520 FILE NO. SHEET A3.06B
ProjectWise Vault:



NOTES:
ALL REMOVABLE PARTS OF THE METAL RACEWAY SHALL BE BONDED AND GROUNDED PER NEC USING A GROUNDING STUD WELDED TO THE REMOVABLE PARTS OF THE RACEWAY. NOT ALL GROUNDING STUDS ARE SHOWN.

BELVEDERE WIRING RACEWAY DETAILS				REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor	- A. HART			10	WASH			
Designed By	- B. KENNY							
Checked By	- D. LUNDMAN							
Detalled By	- B. KENNY							
Project Engr.	- D. EDWARDS	8/12/16	CO#116 - RSUP LIGHTING MOD	BK				
Regional Adm.	- J. MEREDITH	DATE	REVISION	BY	APPD			



Contract 8625
Change Order #116
Page 54 of 54

BELVEDERE WIRING RACEWAY DETAILS

BRIDGE SHEET NO. A3.06B
SHEET OF 1797 SHEETS