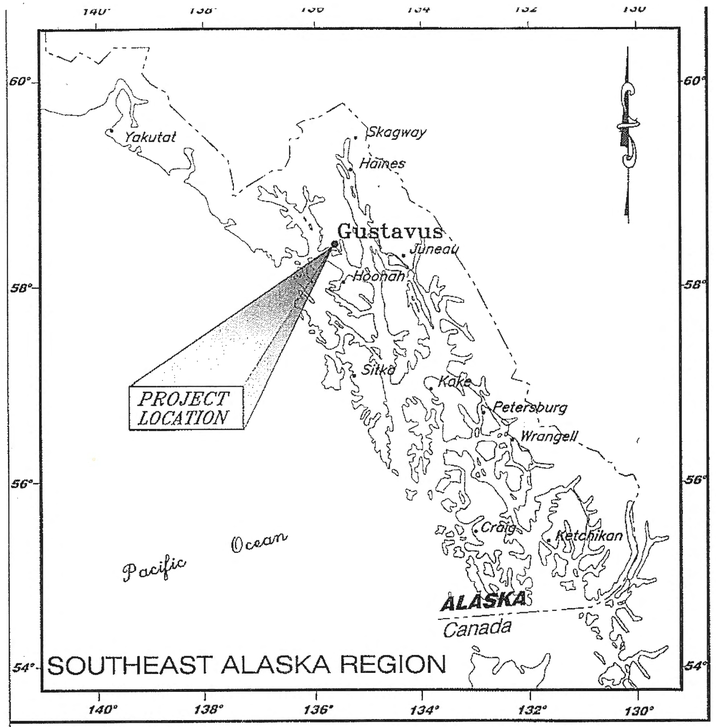

REGIONAL MAP

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION
DESIGN AND CONSTRUCTION DIVISION

A PROJECT AT

GUSTAVUS, ALASKA

GUSTAVUS CAUSEWAY REPLACEMENT

BR-0003(53)

PROJECT NO. 67599

INDEX OF SHEETS

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G01	01	Title Sheet
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G03	03	Survey Control
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G06 – G08	06 – 08	Signs & Anodes
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AP01–AP23	11 – 33	Approach
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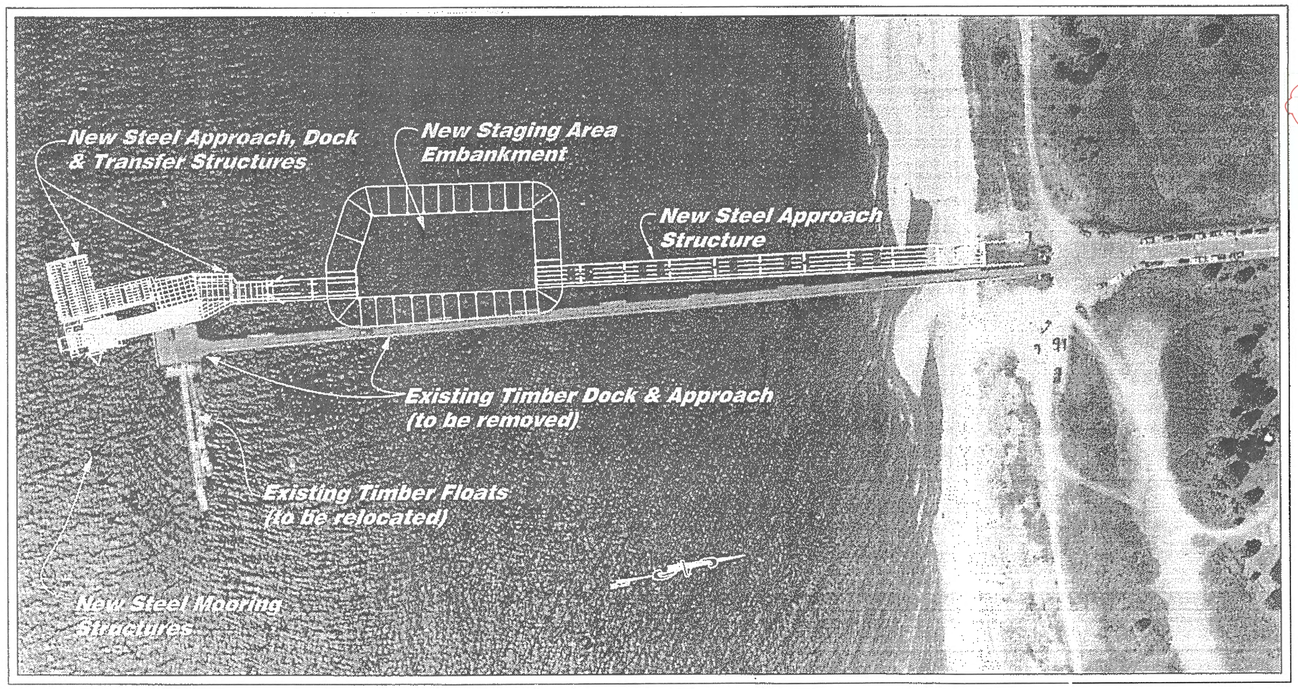
AS-BUILTS
CONTRACTOR: WESTERN MARINE CONSTRUCTION, Inc.
PROJECT ENGINEER: STEVE MIELKE
BEGIN DATE: May 21, 2009
END DATE: OCTOBER 16, 2013

The following Standard Drawings apply to this project:
F-01.01
F-03.01
G-00.01
G-04.06S
G-~~10.00~~ 10.01
~~G-45.01~~
S-05.01
S-~~20.00~~ 20.01
S-30.03 (Soil Embedment)

Note: "For dimensions, details and notes of Jersey Barriers located at Staging Area and Fuel Line Header, refer to Attachment A of Addendum #2."

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.
PE _____ Date 8/21/13



ALASKA DOT&PF
ECONOMIC STIMULUS PROJECTS
PUTTING ALASKANS TO WORK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES
SOUTHEAST REGION

APPROVED Victor W. Winters Date 1-12-09
Regional Preconstruction Engineer
Victor W. E. Winters, P.E.

APPROVED Date 1-12-09
Director, S.E. Region

CERTIFIED TRUE & CORRECT AS-BUILT OF ACTUAL FIELD CONDITION:

_____ Date _____
Construction Project Manager

PROJECT NUMBER:
67599/BR-0003(53)
DATE:
2008
REF: G01
SHEET 01 OF 138

STATE OF ALASKA
49th
John T. Scott
CE-4755
REGISTERED PROFESSIONAL ENGINEER

11-2650

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM	Approach	Dock	E1 & E2	W1	EST. UNIT	ESTIMATE QUANTITY
	BASIC BID						
202(02)	Remove, Relocate and Re-install Harbor Structures, Piles and New Transitions					L.S.	ALL REQUIRED
203(19)	Approach & Staging Area Embankment					L.S.	ALL REQUIRED
304(04)	Sub-base, Grading C					L.S.	ALL REQUIRED
504(01)	Steel Approach, Abuts, Backwalls, Abut Retaining Wall & Transition					L.S.	ALL REQUIRED
504(02)	Steel Dock, Dock Fender & Wave Barrier Framing					L.S.	ALL REQUIRED
504(03)	Transfer Bridge Abutment					L.S.	ALL REQUIRED
504(04)	Transfer Bridge					L.S.	ALL REQUIRED
504(05)	Transfer Ramp & Apron System					L.S.	ALL REQUIRED
504(06)	Transfer Bridge Pontoon, Platforms & Pedestrian Ramps					L.S.	ALL REQUIRED
504(07)	Transfer Bridge Pontoon Restraint Fender Systems					L.S.	ALL REQUIRED
504(08)	Transfer Bridge Pontoon Restraint Fender Dolphins					L.S.	ALL REQUIRED
504(09A)	Mooring Structure E1 & E2 and Fender Systems					L.S.	ALL REQUIRED
504(10A)	Mooring Structure W1 and Fender					L.S.	ALL REQUIRED
504(11A)	Anodes and Cables for Structures					L.S.	ALL REQUIRED
	* See pile driving records for quantities.						
505(01)	36" DIA. X 1/2" WALL PIPE PILES, FURNISHED, CO 27	–	–	–	~~140~~ 180	L.F.	~~140~~ 180
505(02)	36" DIA. X 1/2" WALL PIPE PILES, DRIVEN	–	–	–	1	EACH	1
505(03)	30" DIA. X 1/2" WALL PIPE PILES, FURNISHED, CO27	–	–	~~280~~ 373.3	–	L.F.	~~280~~ 373.30
505(04)	30" DIA. X 1/2" WALL PIPE PILES, DRIVEN	–	–	2	–	EACH	2
505(05)	24" DIA. X 1/2" WALL PIPE PILES, FURNISHED, CO27, 1, 3, 14	~~1346~~ *	~~3335~~ *	–	~~332~~ *	L.F.	~~5013~~ 8641.30
505(06)	24" DIA. X 1/2" WALL PIPE PILES, DRIVEN, CO1, 3, 14, 27	~~11~~ 33	~~25~~ 34	–	2	EACH	~~38~~ 69
505(07)	18" DIA. X 1/2" WALL PIPE PILES, FURNISHED, CO 1, 3, 12, 14, 15, 27	~~4702~~ *	~~2239~~ *	~~630~~ 636.9	–	L.F.	~~7571~~ 9389.50
505(08)	18" DIA. X 1/2" WALL PIPE PILES, DRIVEN, CO 1, 3, 12, 14, 15, 27	~~11~~ 8	~~14~~ 17	4	–	EACH	~~59~~ 29
505(09)	Sheet Piles, Furnished & Driven for Wave Barrier					L.S.	ALL REQUIRED
505(10)	Treated Timber Fender Piles, Furnished, CO 27					L.F.	4845
505(11)	Treated Timber Fender Piles, Driven					EACH	57
640(1)	MOBILIZATION & DEMOBILIZATION					L.S.	ALL REQUIRED
640(4)	WORKER MEALS AND LODGING, or PER DIEM					L.S.	ALL REQUIRED
641(1)	EROSION & POLLUTION CONTROL ADMINISTRATION					L.S.	ALL REQUIRED
641(2)	TEMPORARY EROSION AND POLLUTION CONTROL					C.S.	ALL REQUIRED
642(1)	CONSTRUCTION SURVEYING BY THE CONTRACTOR					L.S.	ALL REQUIRED
644(1)	FIELD OFFICE					L.S.	ALL REQUIRED
644(6)	VEHICLE & SKIFF					L.S.	ALL REQUIRED
645(1)	Training Program for 1 Trainee/Apprentice					MH	500
662(1)	ELECTRICAL POWER & LIGHTING SYSTEM					L.S.	ALL REQUIRED
	ADDITIVE ALTERNATE "A"						
202(01)	Removal of Structures & Obstructions					L.S.	ALL REQUIRED
504(09B)	Mooring Structure E3 & E4 and Fender Systems					L.S.	ALL REQUIRED
504(10B)	Mooring Structure E5 and Fender					L.S.	ALL REQUIRED
504(11B)	Anodes and Cables for Structures					L.S.	ALL REQUIRED

ITEM NO.	ITEM	E3 & E4	E5	EST. UNIT	ESTIMATE QUANTITY
505(1A)	36" DIA. X 1/2" WALL PIPE PILES, FURNISHED, CO 27	–	~~140~~ 200.10	L.F.	~~140~~ 200.10
505(2A)	36" DIA. X 1/2" WALL PIPE PILES, DRIVEN	–	1	EACH	1
505(3A)	30" DIA. X 1/2" WALL PIPE PILES, FURNISHED, CO 27	~~280~~ 373	–	L.F.	~~280~~ 373.0
505(4A)	30" DIA. X 1/2" WALL PIPE PILES, DRIVEN	2	–	EACH	2
505(5A)	24" DIA. X 1/2" WALL PIPE PILES, FURNISHED	–	336	L.F.	336
505(6A)	24" DIA. X 1/2" WALL PIPE PILES, DRIVEN	–	2	EACH	2
505(7A)	18" DIA. X 1/2" WALL PIPE PILES, FURNISHED, CO 27	~~630~~ 636.2	–	L.F.	~~630~~ 636.20
505(8A)	18" DIA. X 1/2" WALL PIPE PILES, DRIVEN	4	–	EACH	4
680(01)	Design and Build New Bulk Fuel System Piping – Dock to Shore Abut of Approach, DELETED CO 3			~~L.S.~~	~~ALL REQUIRED~~

GENERAL NOTES

Specifications: Per Contract Documents for Project No. BR-0003(53) ~ 67599
Construction: Per Contract Documents for Project No. BR-0003(53) ~ 67599
Design Standards: AKDOT/PF & Southeast Region Marine Engineering Design Standards & AISC ASD for Marine Structures and Dock. AASHTO ASD for Approach, Approach Transition and Transfer Bridge.
Design Loads: Mooring and Fender Structures: Side Berth Vessel Berthing @ 30ft-k service
Side Berth Mooring Load @ 50 kips line load
Design Vessels: Petro-Marine Fuel Barge, AML/NSI Mainline Barge
Alaska Marine Highway System – M/V LeConte Class & M/V Fairweather class
Approach and Transition – LL Vehicle: AASHTO HS 20 (two lanes loaded) Pedestrian Walkway: 85 psf
(ADTT < 1, Design Speed < 15 mph and Impact Factor = 0.27, LL Defl = L/1000 max)
– EQ = 0.5 W (Pier bearings provided with restraints)
Transfer Bridge, Ramp & Apron – LL Vehicle: AASHTO HS 20 (one lane)
(ADTT < 1, Design Speed < 15 mph and Impact Factor = 0.27, LL Defl = L/1000 max)
Approach and Transition to Dock – LL Vehicle: Lift Truck with empty forks (Cat 972H)
Dock – LL Vehicle: Lift Truck with 30 k payload + 10 k flat on forks
(See Dock Live Load Layout this sheet)
Dock – Wave Barrier: 75° wave impingement = 7 ft at 5.2 second period
90° wave impingement = 5.5 ft at 4.5 second period
Max wave loading = 10 ft static water height

Materials

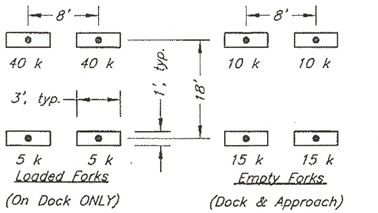
Concrete: All concrete shall be Class A with compressive strength on 4000 psi
Reinforcement: Grade 60, Fy = 60 ksi
Steel Shapes & Plates: W 33, W 40 & W 24 Shapes (Main Members) – ASTM A992 (Gr. 50) unless otherwise noted
W 33, W 36 & W 24 Shapes (Secondary Members) – ASTM A36 (Gr. 36) unless otherwise noted
Transfer Bridge Plates and Stiffeners – ASTM A709 Gr. 50 or ASTM A572 Gr. 50 unless otherwise noted
All other Shapes and Plates – ASTM A36 unless otherwise noted
Tube Sections – ASTM A500 Grade B
Pipe – ASTM A53, Grade B, Type E or S
Stainless Steel – ASTM A 276 Type 316
Charpy Zone 2 impact requirements shall apply where noted on Plans.
Piling: Steel pipe – ASTM A252 Grade 2 with A36 chemistry and mechanical properties
Spiral or straight seamed, at Contractor's option
Size – As noted on Plans and Pile Tables
Steel Ped Grating: Welded bar type, serrated top, thickness & bar spacings as noted on Plans.
Steel Veh Grating: 5 3/16" deep bearing bars HS loading and 50 ksi yield material for Approach & Approach Transition, 36 ksi yield material for Dock, Transfer Bridge and Pontoon Platform.
UHMW: Ultra High Molecular Weight Plastic, ASTM D4020
Hardware: ASTM A325, ASTM F593 316 Alloy
Aluminum Plates & Shapes: ASTM 6061-T6

Protective Coatings:

All steel and weldments: Galvanized after fabrication per Spec's, unless otherwise noted.
Approach: Galvanized after fabrication per Spec's.
Barge/Float/Pontoon: Exterior coating per Spec's, System 1 – See also Bridge Support Pontoon Layout sheet.
Platforms, Weldments, Mooring Structures and Fenders: Galvanized after fabrication per Spec's.
Transfer Bridge: Shop painted during and after fabrication per Spec's, System 5.
Apron: Galvanized after fabrication per Spec's.
Non-Skid Coating For Steel: For portions of galvanized apron and galvanized transition plates subject to pedestrian traffic (and as shown on the plans), blast clean as required after galvanizing and apply 10 mils of spray metallized zinc, followed by 2-3 mils of spray metallized (large particle size) non-skid. [Optionally fabricator may use large particle size steel spray metallizing prior to galvanizing.]
Timber shall be dual creosote ACZA/CCA treated to min 12 pcf retention for creosote.

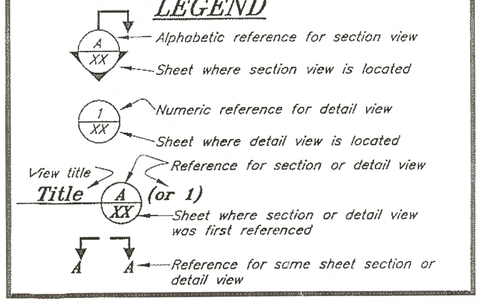
Piling:

Materials & Size: Per above and as per Pile Tables. Timber piles to have 18" min butt diameter.
Pile Tips: Reinforced tips / Drive Shoes Required on all Steel Pipe piling
Coating Requirements: Pipe Piles shall be galvanized from cut-off to 20 feet below existing ground surface minimum.
Timber Piles shall be dual creosote ACZA/CCA treated to min 12 pcf retention for creosote.
Sheet piles shall be bare steel.
Driving Requirements: See Pile Layout Sheets, Tables and Spec's
Piles shall be driven to estimated tip or for sheets or timber piles to min. penetration with a vibratory hammer, unless otherwise noted. Two selected vertical pipe piles shall be initially driven to within 10 feet of estimated tip by vibratory hammer. Final driving for these selected piles shall be accomplished with an impact hammer of the min. specified size and energy after a waiting period of at least 7 days. All other piles to be driven to estimated tip with vibratory hammer. Selected piles driven with impact hammer will be instrumented for dynamic driving analysis, per specifications.



Lift Truck – LL Layout on Dock and Approach

LEGEND



Abbreviations

SS	stainless steel
Typ	typical
o.c.	on center
o-o	out to out
PL	plate
CL	centerline
TS	= HSS
Galv.	galvanized

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.
PE ~~Steve Mick~~ Date 8/21/12

Under the "Estimate of Quantities" *Table add the following:*
"Notes: 1. For the Lump Sum Item 203(19) the following are considered to be included or subsidiary –
On-shore approach embankment:
Embankment materials (as per 203-2.01-6.) = approximately 200 CY
Excavation in existing soils (to key in sub-base) = approximately 70 CY
Excavation for structure in front of abutment seaward = approximately 50 CY
Class 2 riprap slope protection = approximately 60 CY
Fencing = approximately 26 LF
Curbing = approximately 84 LF
Guardrail and posts = approximately 40 LF standard rail and 51 LF of ET-2000 and rail
Sheet Pile retaining wall is subsidiary to Item 504(01)
Signs and posts/foundations are subsidiary to other items of work
Sub-base is to be paid for under Item No. 304(04)
Off-shore staging area embankment:
Embankment materials (as per 203-2.01-6.) below El +12 = approximately 21,500 CY
Embankment materials (as per 203-2.01-6.) above El +12 = approximately ~~11,500~~ 12,700 CY
Class I riprap slope protection = approximately 650 CY
Class III riprap slope protection = approximately 2000 CY
Class IV riprap slope protection = approximately 4500 CY
Fencing = approximately 240 LF
Curbing = approximately 228 LF
Pre-cast barrier sections = 20 EA
Guardrail and posts = approximately 57 LF standard rail, 2 terminal end sections & 2 spade end sections
Geotextile = approximately ~~25,000~~ 25,556 SY (not counting laps on edges and ends)
Electrical items are paid for under Item No. 662(1)
Fuel System is to be paid for under Item 680(01)
Signs and posts/foundations are subsidiary to other items of work
Sub-base is to be paid for under Item No. 304(04)

2. For the Lump Sum Item 304(04) the following are considered to be included or subsidiary –
On-shore approach embankment:
Sub-base Grading C = Approximately 120 CY
Off-shore staging area embankment:
Sub-base Grading C = approximately 1050 CY

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott
CHECKED BY: B. Savikko
DRAWN BY: C. Fuman, W. Hickok
PATH: O:\GUS\67599\MF\PLANSET\01-GENERAL SHEETS\G02 ESTIMATE OF QUANTITIES.DWG
TAB: Fri, 28/Nov/08 01:01PM JTSCOTT

STATE OF ALASKA
49th
John T. Scott
CE-4755
REGISTERED PROFESSIONAL ENGINEER
11-26-08

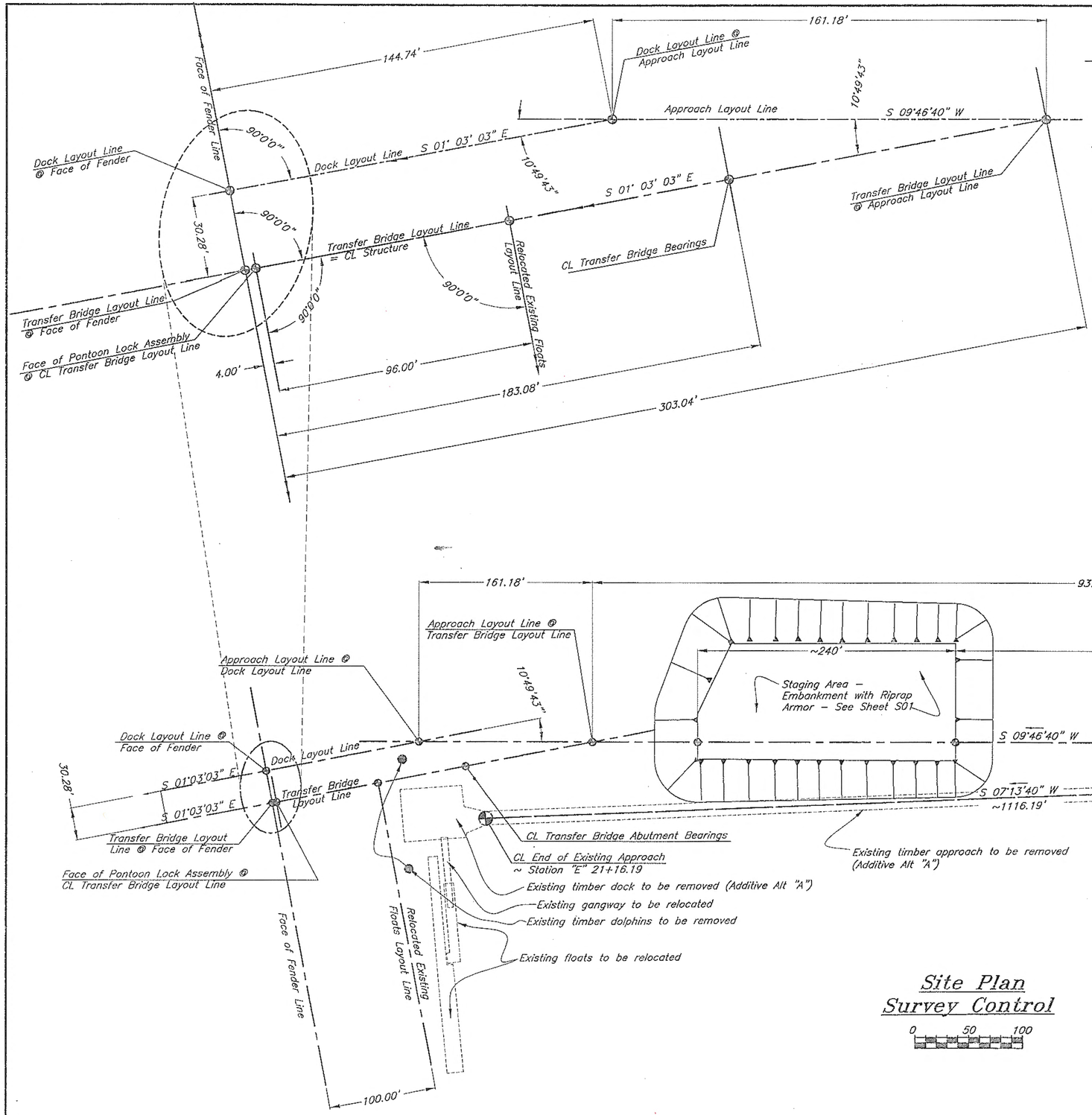
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

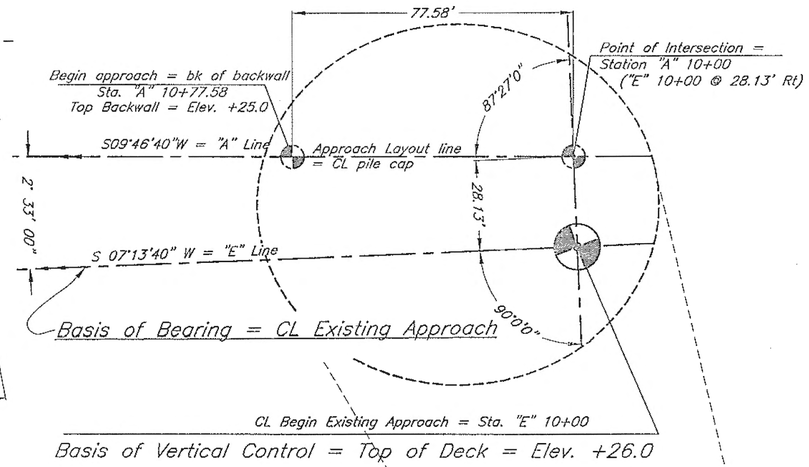
Gustavus Causeway Replacement

Estimate of Quantities
G02

REVISIONS NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-0003(53)/67599	2008	02	138





Site Plan
Survey Control

0 50 100

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.

PE _____ Date 8/21/12

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

STATE OF ALASKA 49th John T. Scott CE-4755 REGISTERED PROFESSIONAL ENGINEER

11-26-08

CHECKED BY: B. Savikko

DRAWN BY: C. Fuman, W. Hickok

Gustavus Causeway Replacement

Survey Control

G03

PATH: O:\GUS\67599\MF\PLANSET\01-GENERAL SHEETS\G03 SURVEY CONTROL.DWG

TAB: Tue, 25/Nov/08 03:55PM JTSCOTT

REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
			BR-0003(53)/67599	2008	03	138

Dock, see Sheet D01

Location Future Ramp Barge Landing

Staging Area – Embankment with Riprap Armor

Steel frame approach w/ open grate deck, see Sheet AP01

Layout line = CL pile cap

Begin approach=back of backwall Elev. = +25.0

Existing dolphins to be removed

Marine structures, see layout Sheet G05

Dock & transfer bridge approach transition, see Sheet AP24

24'x142' transfer bridge

Existing timber dock to be removed (Additive Alt "A")

Existing gangway to be relocated

Relocated existing floats

Existing floats to be relocated

Existing timber approach to be removed (Additive Alt"A")

Existing POL lines to be relocated (Additive Alt"A")

Sheet pile wingwall, typ.

ELW

Site Plan

0 50 100

Note: Several cut-off piling stubs are visible at lower tide stages seaward of the existing abutment toe of slope. These stubs are to remain and are not included in the scope of work under Section 202."

Tidal Data

HTL = +20.0
MHW = +13.7
MLLW = 0.0
ELW (Est.) = -5.0

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.

PE _____ Date 9/21/12

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

STATE OF ALASKA – 49th – John T. Scott CE-4755 – REGISTERED PROFESSIONAL ENGINEER

11-26-08

CHECKED BY: B. Savikko

DRAWN BY: C. Fuman, W. Hickok

Gustavus Causeway Replacement

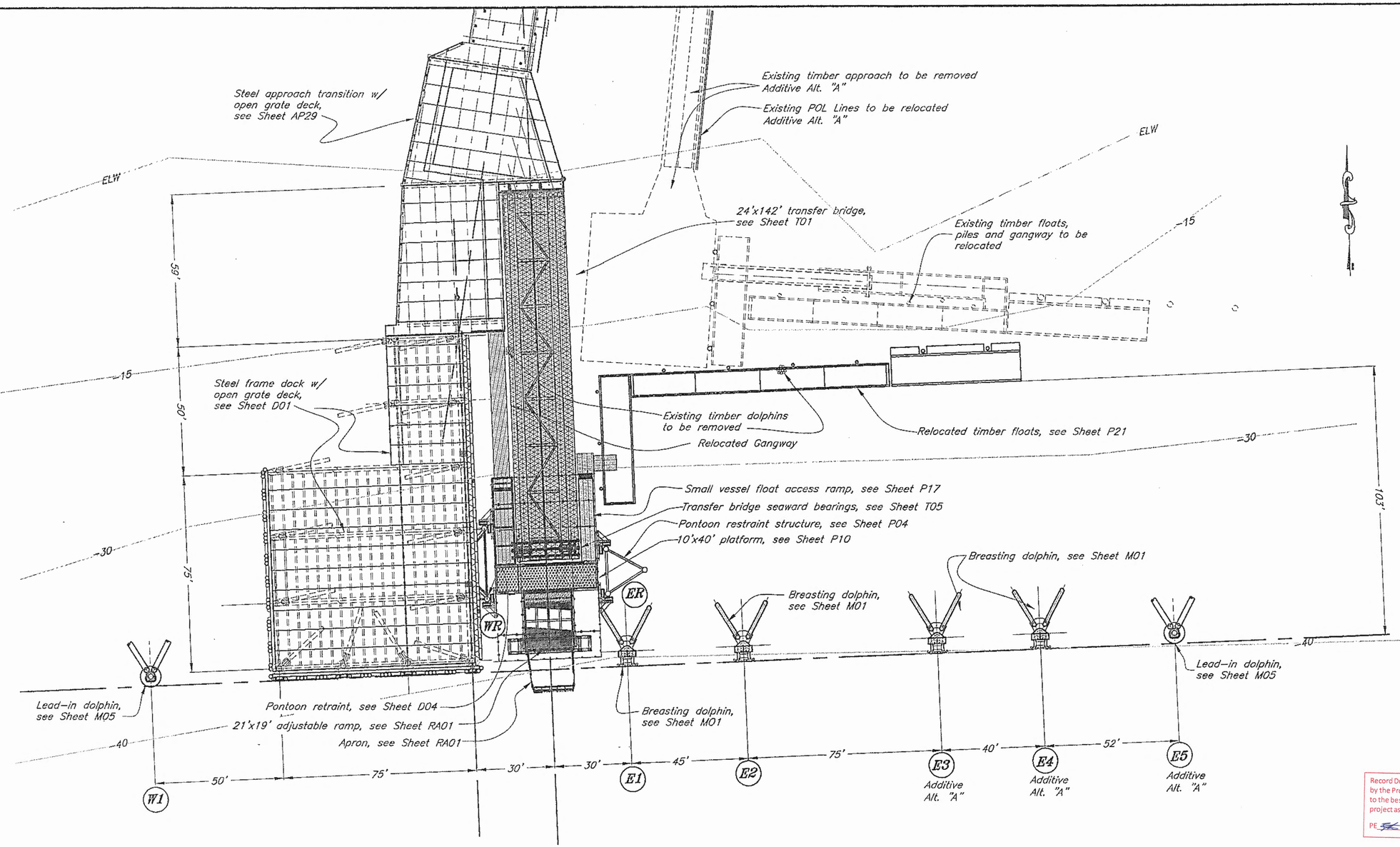
Site Plan
G04

PATH: O:\GUS\67599\MF\PLANSET\01-GENERAL SHEETS\G04 SITE PLAN.DWG

TAB: Tue, 25/Nov/08 03:57PM JTSCOTT

REVISIONS		
NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-0003(53)/67599	2008	04	138



Marine Layout

0 10 20 30 40

Tidal Data
HTL = +20.0
MHW = +13.7
MLLW = 0.0
ELW (Est.) = -5.0

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.

PE ~~Stamp~~ Date 9/21/12

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott

STATE OF ALASKA · 49th · John T. Scott CE-4755 · REGISTERED PROFESSIONAL ENGINEER · 11-26-08

CHECKED BY: B. Sovikko

DRAWN BY: C. Fuman, W. Hickok

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

Marine Site Plan
G05

PATH: O:\GUS\67599\MF\PLANSET\01-GENERAL SHEETS\G05 MARINE SITE PLAN.DWG
TAB: Tue, 25/Nov/08 03:58PM JTSCOTT

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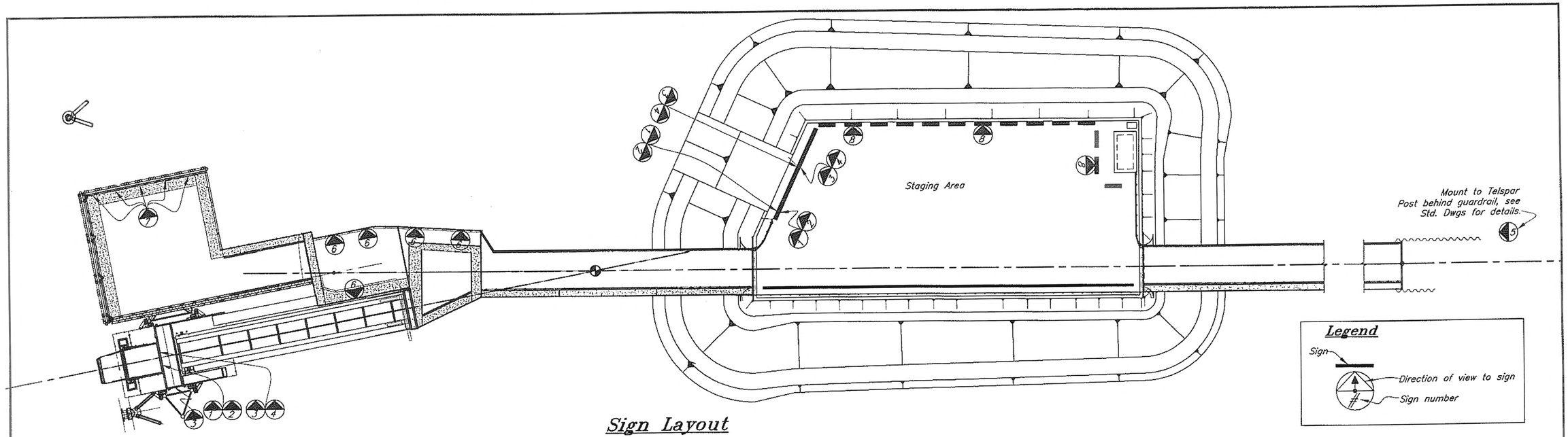
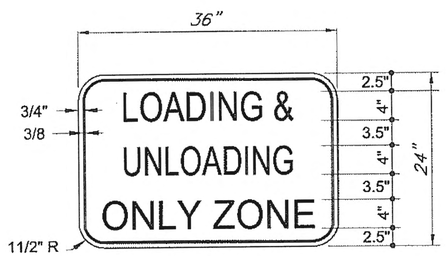
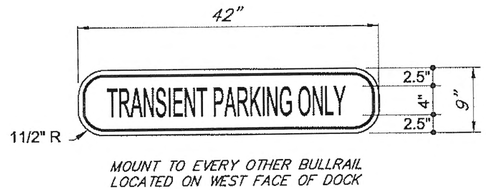
			BR-0003(53)/67599	2008	05	138



Sign Layout

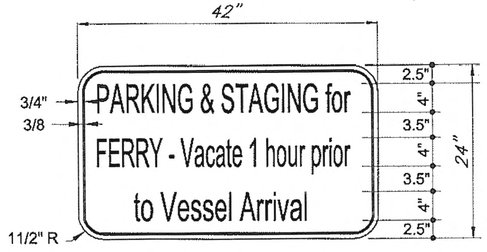


6 SPECIAL SIGN DETAIL
(4 Req'd)



MOUNT TO EVERY OTHER BULLRAIL LOCATED ON WEST FACE OF DOCK

7 SPECIAL SIGN DETAIL
(5 Req'd)



8 SPECIAL SIGN DETAIL
(5 Req'd)

SPECIAL SIGN NOTES:

1. SPECIAL SIGNS 6–9: BORDER, LEGEND AND LETTERING ARE GREEN WITH BACKGROUND WHITE.
2. CENTER TEXT ON ALL SIGNS.
3. SIGNS ARE INCIDENTAL TO OTHER ITEMS OF WORK.
4. MOUNT SIGNS TO FENCE FABRIC (HOG RINGS @ EACH CORNER) OR FENCE POSTS (U-BOLTS AND HARDWARE), AS REQUIRED

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.
PE _____ Date 8/21/12

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott
CHECKED BY: B. Savikko
DRAWN BY: C. Fuman, W. Hickok
PATH: O:\GUS\67599\MF\PLANSET\01-GENERAL SHEETS\G06 SIGN LOCATION.DWG
TAB: Tue, 25/Nov/08 04:00PM JTSCOTT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

Signs & Sign Locations

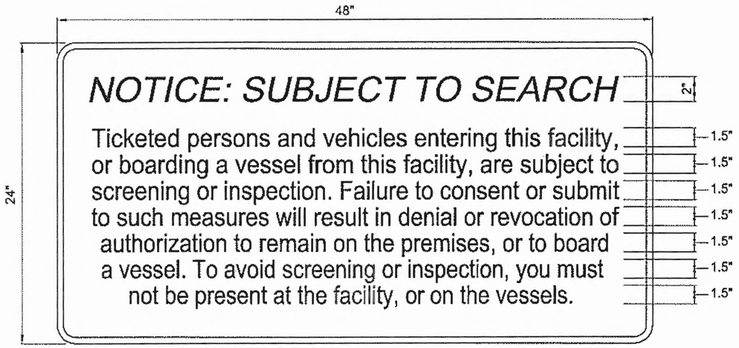
G06

REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			BR-0003(53)/67599	2008	06	138

.080 ALUMINUM PANEL
(WHITE LETTERING ON A RED BACKGROUND)

1 SPECIAL LARGE RESTRICTED AREA SIGN DETAILS

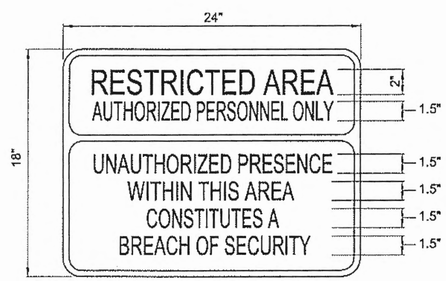
(3 Req'd.)



.080 ALUMINUM PANEL
(WHITE LETTERING ON A RED BACKGROUND)

2 SPECIAL SUBJECT TO SEARCH SIGN DETAILS

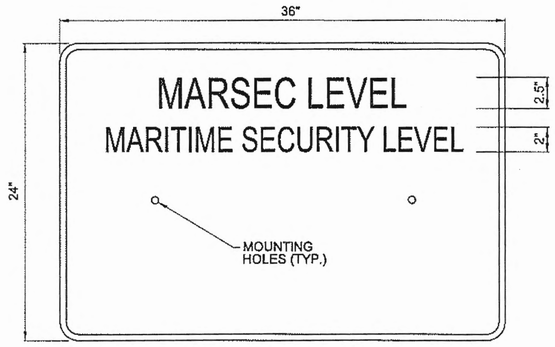
(3 Req'd.)



.080 ALUMINUM PANEL
(WHITE LETTERING ON A RED BACKGROUND)

3 SPECIAL SMALL RESTRICTED AREA SIGN DETAILS

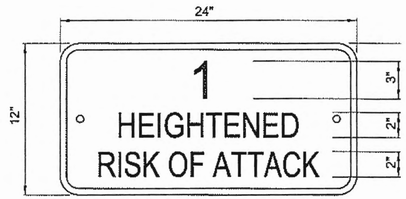
(4 Req'd.)



.080 ALUMINUM PANEL
(WHITE LETTERING ON A GREEN BACKGROUND)

4 MARSEC SIGN DETAILS

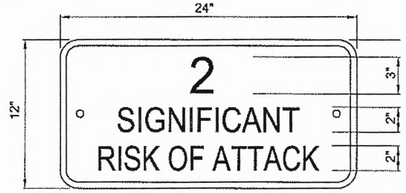
(3 Req'd.)



.040 ALUMINUM PANEL
(BLACK LETTERING ON A YELLOW BACKGROUND)

A

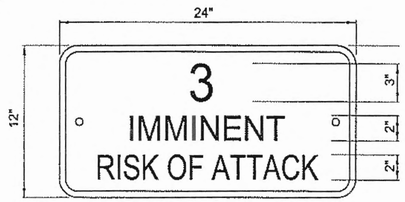
(3 Req'd.)



.040 ALUMINUM PANEL
(BLACK LETTERING ON A ORANGE BACKGROUND)

B

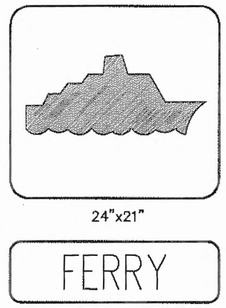
(3 Req'd.)



.040 ALUMINUM PANEL
(WHITE LETTERING ON A RED BACKGROUND)

C

(3 Req'd.)



5 SPECIAL SIGN DETAILS

(1 Req'd.)

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.

PE [signature] Date 8/2/12

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott

STATE OF ALASKA
49th
John T. Scott
CE-4755
REGISTERED PROFESSIONAL ENGINEER
11.26.08

CHECKED BY: B. Savikko

DRAWN BY: C. Fuman, W. Hickok

PATH: O:\GUS\67599\MF\PLANSET\01-GENERAL SHEETS\G07 SIGNS.DWG

TAB: Tue, 25/Nov/08 04:02PM JTSCOTT

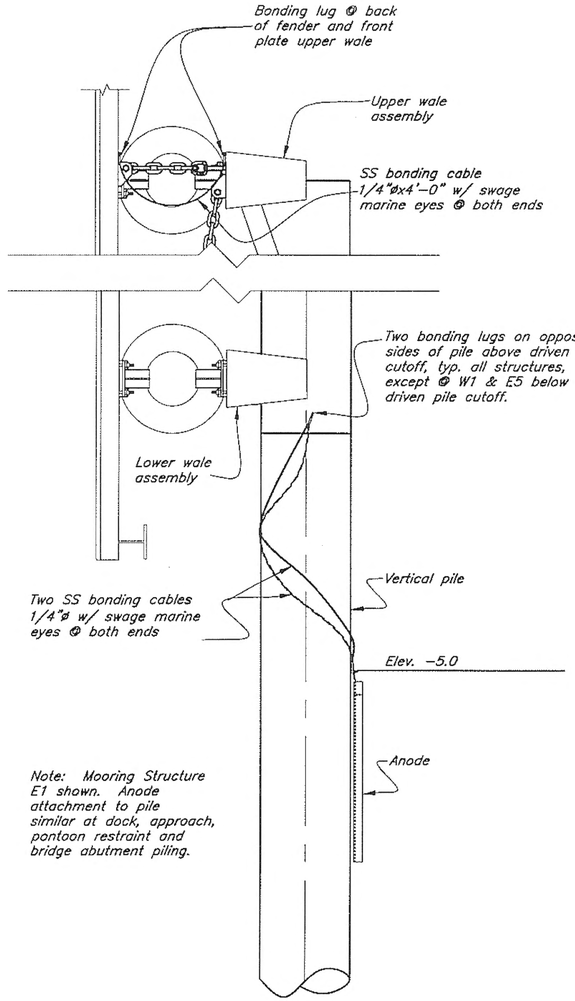
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

Signs

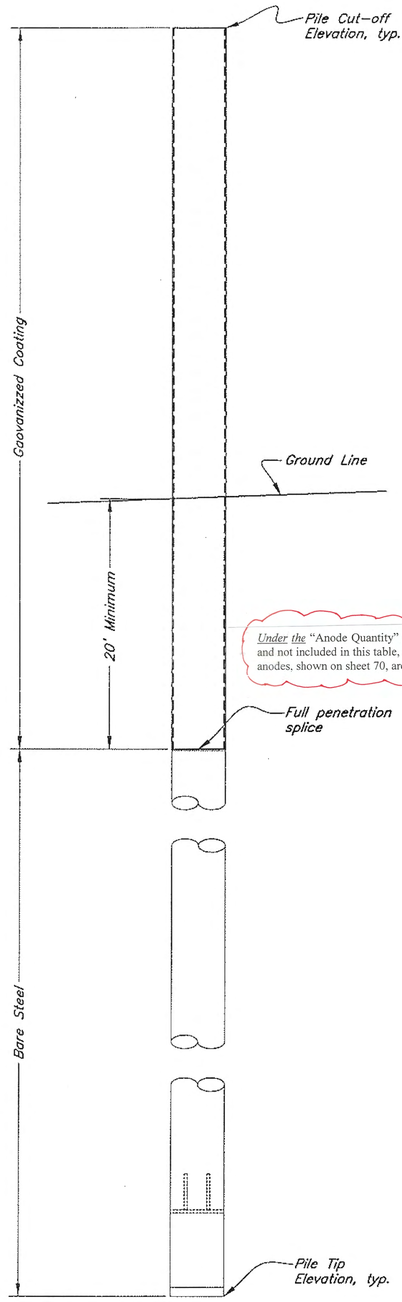
G07

REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			BR-0003(53)/67599	2008	07	138



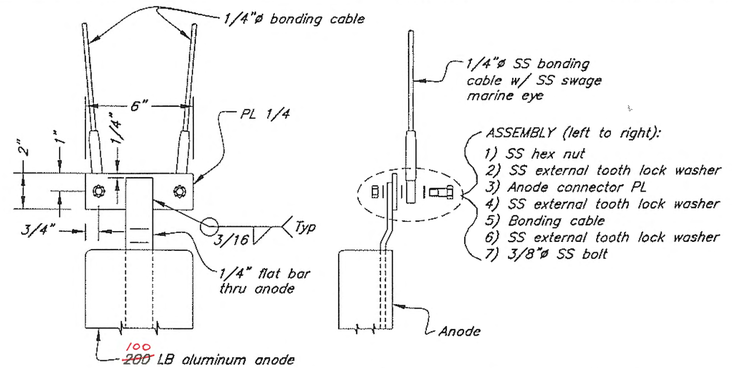
Anode Installation Elevation

Mooring Structure shown



Galvanize Coating - Elevation

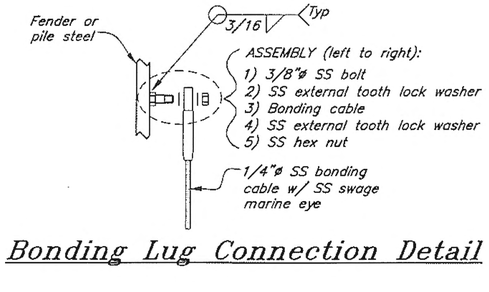
Vertical Pile shown



Anode & Cable Connection Detail

Anode Quantities	
Structure	Number Req'd
Bent 16	5
Bridge Abutment	2
Bent 17	3
Dock	20
Mooring Stuctures	6
Pontoon Restraint ER (East Pile)	1
	37

Under the "Anode Quantity" table add the following: "Note: Wave Barrier 415# anodes, shown on sheet 56 and not included in this table, are also included in the Basic Bid under Item 504(11A). The 37 each 25# Pontoon anodes, shown on sheet 70, are included in the Basic Bid but are subsidiary to Item 504(06)."



Bonding Lug Connection Detail

GENERAL NOTES:

1. Install one 100# anode on each vertical pile at Bent 16 and seaward, except one pile only at ER and omit at WR.
2. Anode connection details may vary from those indicated. Submit alternate details to the engineer for approval.
3. Std swaged fittings for bond cables may be replaced with 1/4" SS plate w/ 9/16"ø hole for direct connection to 1/2"ø bond lugs on piles (cad-weld 1/4" SS cable directly to plate in lieu of swaged fitting & 3/8"ø bolts).
4. Anode materials shall be aluminum alloy conforming to the following minimum requirements:

   Current Capacity = 1,100 amp hours/lb
   Efficiency = 85%
   Min Voltage Potential = 1.1 volts (CU/CU SO4 reference electrode in seawater).

   Nominal dimensions of anodes are 6" wide by 6" thick.
5. Unless otherwise noted, all bond cables, bond lugs, fastener plates and connection hardware shall be stainless steel, Type 316.
6. Repair all field welds and damaged coatings in accordance with Section 504 of the Contract Specifications.

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.
PE _____ Date 8/21/17

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott
CHECKED BY: B. Sovikko
DRAWN BY: C. Furman, W. Hickok

STATE OF ALASKA
49th
John T. Scott 1956
CE-4755
REGISTERED PROFESSIONAL ENGINEER
11-26-08

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

Anodes
G08

PATH: O:\GUS\67599\MF\PLANSET\01-GENERAL SHEETS\G08 ANODES.DWG
TAB: Tue, 25/Nov/08 04:02PM JTSCOTT

REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
			BR-0003(53)/67599	2008	08	138

C.O. # 9, New Item 203(20) Barge Landing Surface Replacement (See Attachments)

Elev −2 | 10' Bench | Elev 0 | Elev +2

5' Class IV Bench | 5' Class IV | 2' Class I | Lower Class I Bench = Elev +22.5 | Top of Class V = Elev. +21 | 1' Class I | Upper Class I Bench = Top of Slope (El +24)

2' Class I & 5' Class IV

Station "A" 18+84.75, 90.67' Rt. @ Elev. +24 | Station "A" 16+77.58, 90.67' Rt. @ Elev. +24

Station "A" 18+90.25, 62.75' Rt. @ Elev. ~+24.33

Note: Fencing, curb and utilities not shown

36'-0" | Concrete Panks | El. +13 | 4:1 | 1.5:1

25'-0" Transition to 2' Class I & 3' Class III | 2' Class I & 5' Class III | 1' Class I & 3' Class III | 110'

Staging Area

Approach Abutment (Bent No. 12) | Bent No. 13 | Bent No. 10 | Approach Abutment (Bent No. 11)

Station "A" 19+17.58, 19.33' Rt. @ Elev. +25 | Lower Class I Bench = Elev +22 | Upper Class I Bench = El +25

Station "A" 19+17.58, 19.33' Lt. @ Elev. +25 | Layout line = CL pile cap | Station "A" 16+77.58, 19.33' Lt. @ Elev. +25 | Upper Class I Bench = Top of Slope (~ El +25)

Lower Class I Bench = Elev +21.5 | Station "A" 16+77.58, 19.33' Rt. @ Elev. +25 | Upper Class I Bench

1' Class I | Top of Class III = Elev. +21 | 3' Class III | 3' Class III Bench

10' Riprap Bench | 5' Class IV Bench | 10' Riprap Bench Elev 0

2' Class I & 5' Class IV

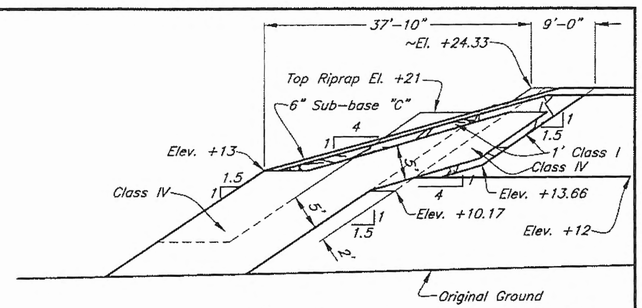
25'-0" Transition to 2' Class I & 5' Class III | 1' Class I & 3' Class III | 2' Class I & 5' Class III

Note: Contours are approximate

Elev −2 | Elev +2

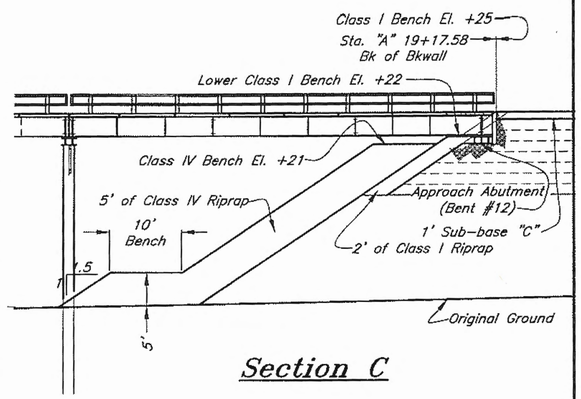
Station "A" 19+17.58 = Bk of Bkwall Bent #12 | Station "A" 16+77.58 = Bk of Bkwall Bent #11

Staging Area Plan

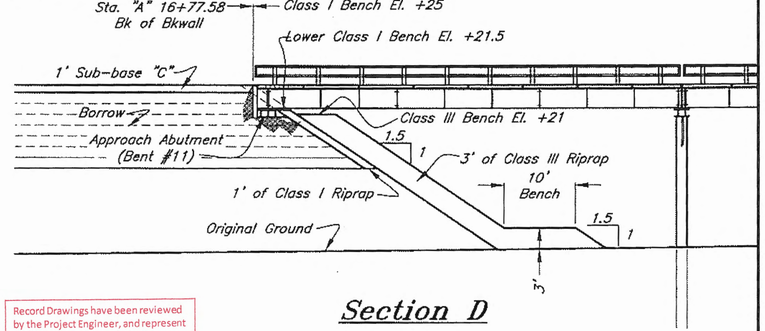


Section B

Note: Geotextiles not shown



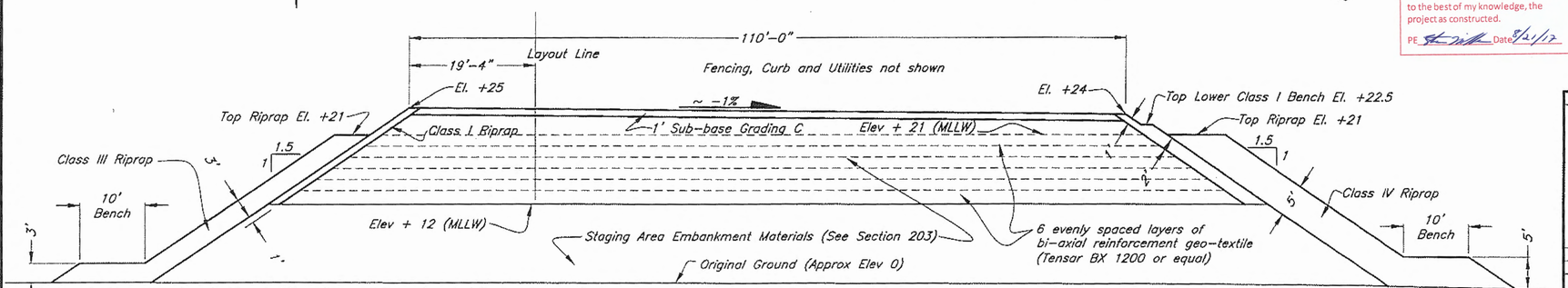
Section C



Section D

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.

PE _____ Date 8/21/12



Note 1. Separation Geo-textile or differential gradation of materials may be required between RipRap, Borrow and Sub-base "C" materials.
2. Separation Geotextiles/differential graded materials not shown and to be incidental.

Section A-A

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott
CHECKED BY: B. Savikko
DRAWN BY: C. Fuman, W. Hickok

STATE OF ALASKA — 49th — John T. Scott — CE-4755 — REGISTERED PROFESSIONAL ENGINEER — 4.26.08

PATH: O:\GUS\67599\MF\PLANSET\02-STAGING AREA\S01 STAGING AREA LAYOUT.DWG
TAB: Tue, 25/Nov/08 04:08PM JTSCOTT

REVISIONS

NO.	DATE	DESCRIPTION

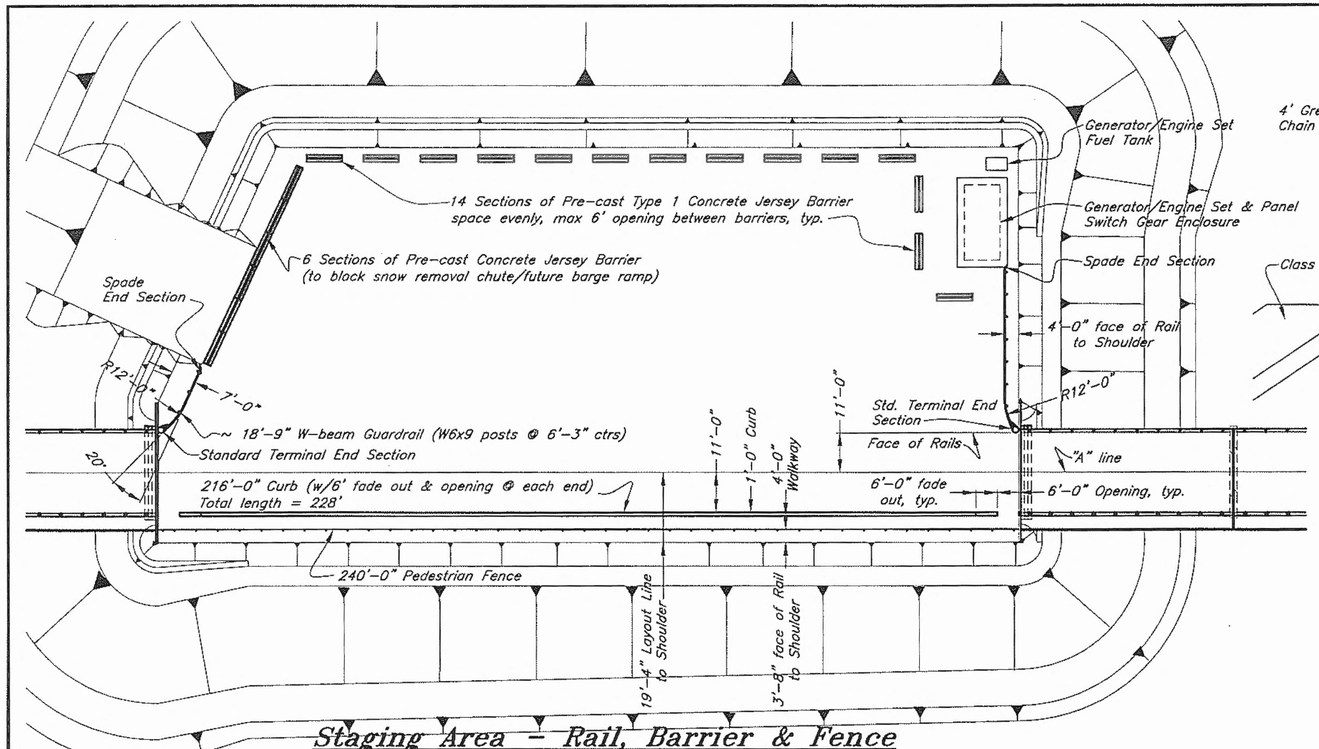
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

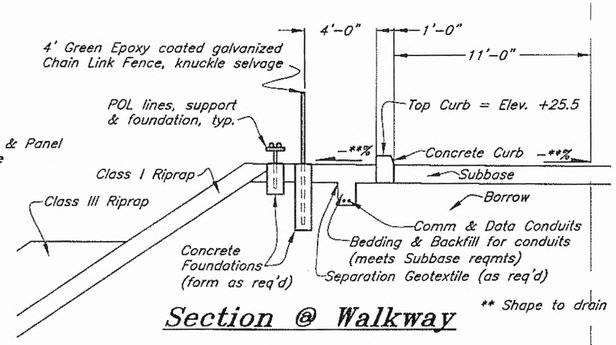
Staging Area Plan

S01

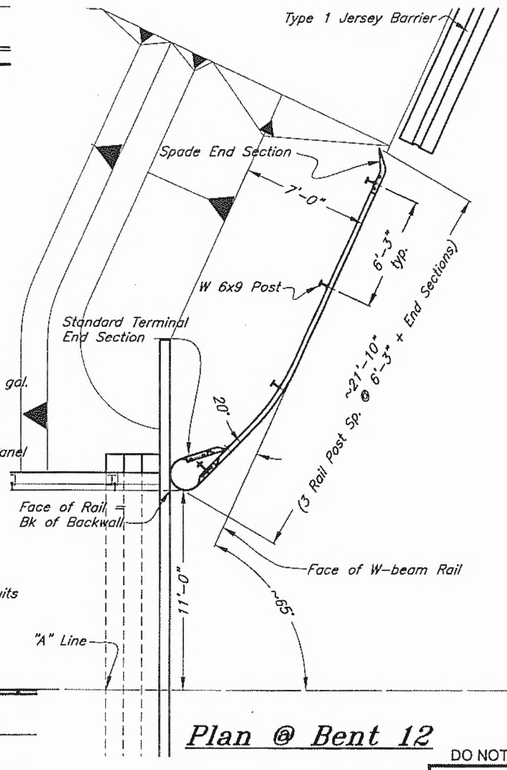
PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-0003(53)/67599	2008	09	138



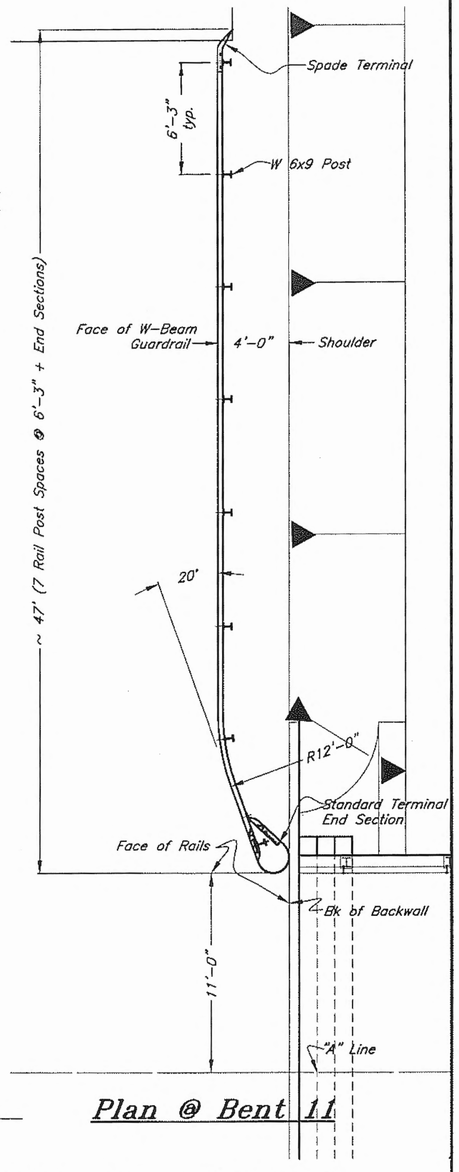
Staging Area - Rail, Barrier & Fence Layout



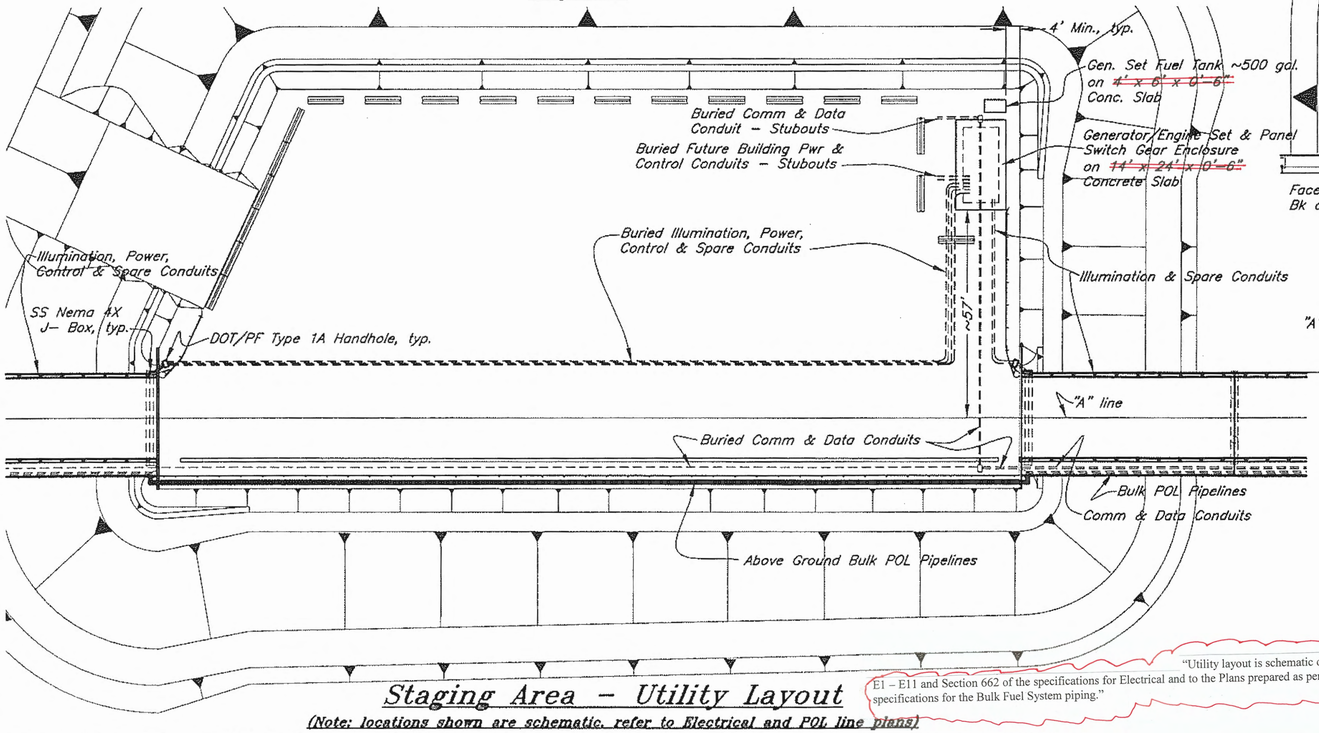
Section @ Walkway



Plan @ Bent 12



Plan @ Bent 11



Staging Area - Utility Layout

(Note: locations shown are schematic, refer to Electrical and POL line plans)

Note: Fence curb rails, jersey barrier, & guard rail are incidental.

"Utility layout is schematic only and See Sheets E1 – E11 and Section 662 of the specifications for Electrical and to the Plans prepared as per Section 680 of the specifications for the Bulk Fuel System piping."

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.
PE S Smith Date 8/4/17

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott
CHECKED BY: B. Savikko
DRAWN BY: C. Fuman, W. Hickok

STATE OF ALASKA — 49th — John I. Scott — CE-4755 — REGISTERED PROFESSIONAL ENGINEER — 11-26-08

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

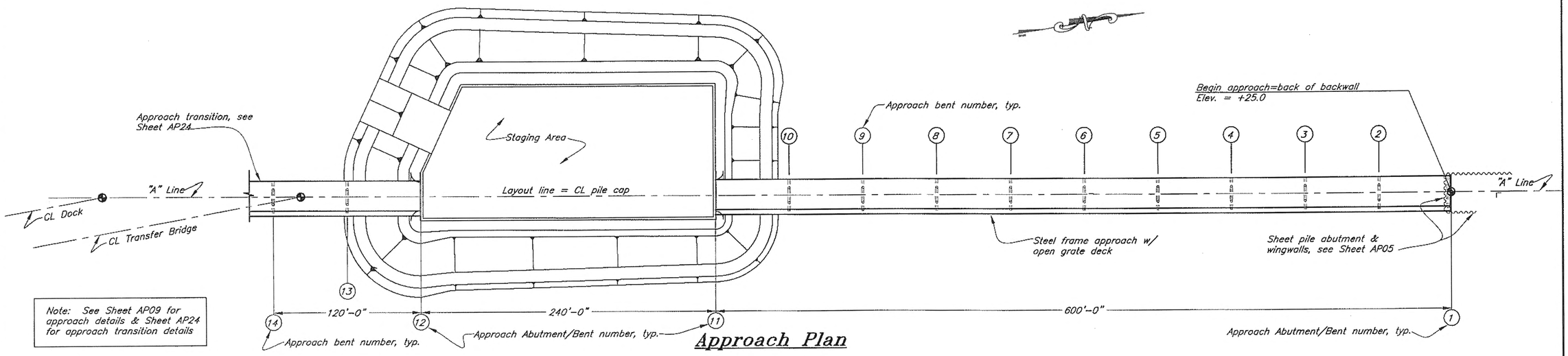
Staging Area Fence & Utility Layout

S02

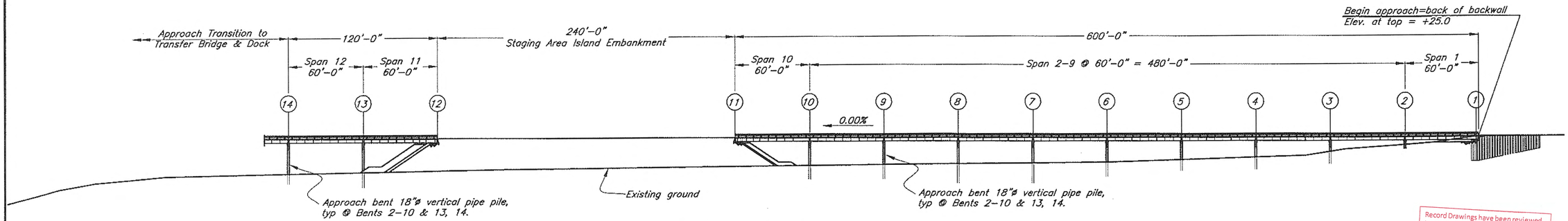
PATH: O:\GUS\67599\MF\PLANSET\02-STAGING AREA\S02 STAGING AREA DETAILS 10-24-08.DWG
TAB: Tue, 25/Nov/08 04:09PM JTSCOTT

REVISIONS NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-0003(53)/67599	2008	10	138



Approach Plan



Sectional Elevation
@ CL Structure

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.
PE _____ Date 5/21/12

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott
CHECKED BY: B. Savikko
DRAWN BY: C. Fuman, W. Hickok
PATH: O:\GUS\67599\MF\PLANSET\03--APPROACH\AP01 APPROACH LAYOUT.DWG
TAB: Tue, 25/Nov/08 04:15PM JTSCOTT

STATE OF ALASKA
John T. Scott CE-4755 49th REGISTERED PROFESSIONAL ENGINEER 11.24.08

REVISIONS

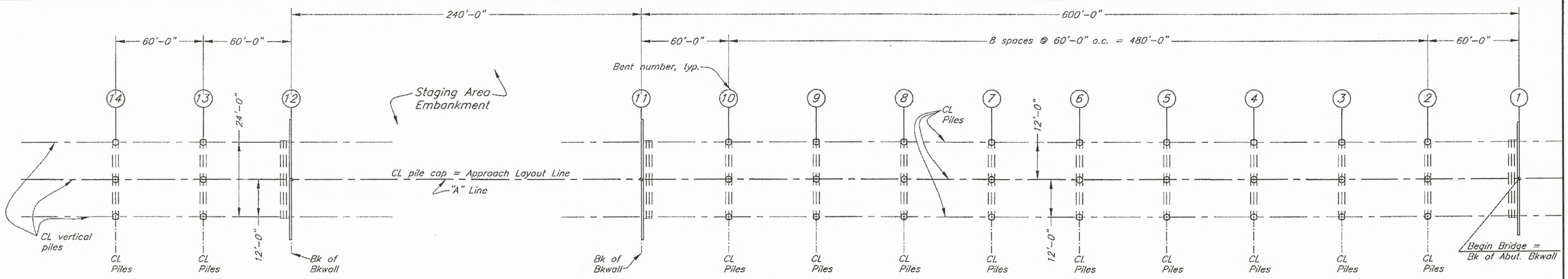
NO.	DATE	DESCRIPTION

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

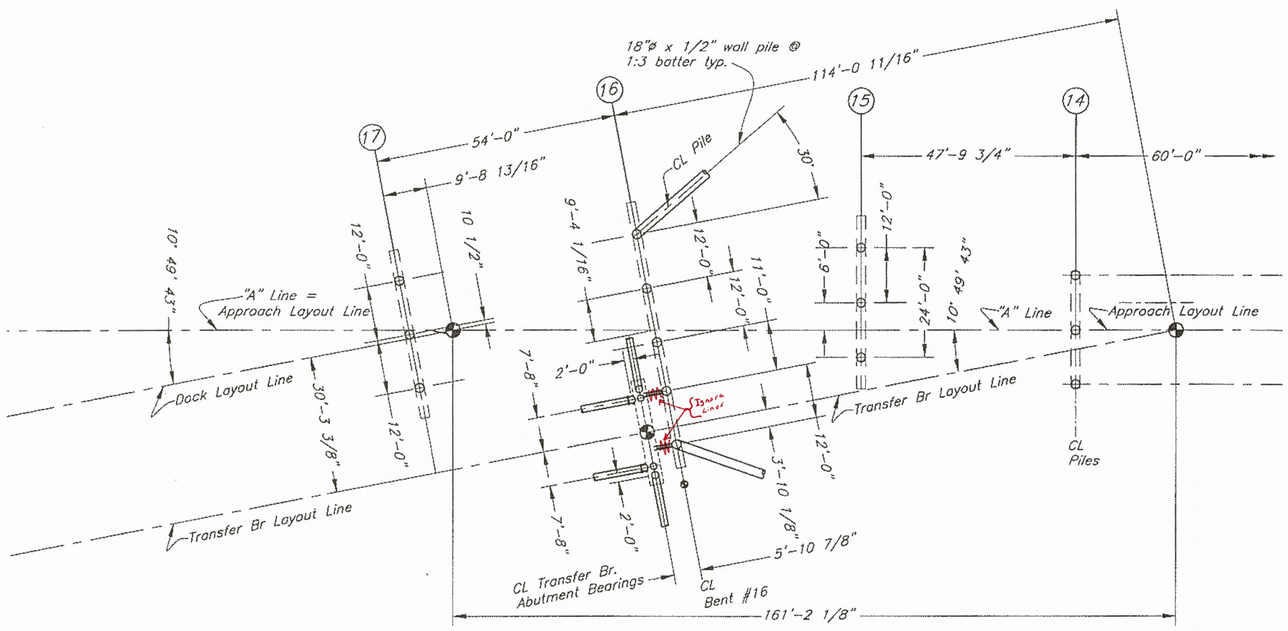
Gustavus Causeway Replacement

Approach Plan & Elevation
AP01

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-0003(53)/67599	2008	11	138



Approach Span Bents 1–14

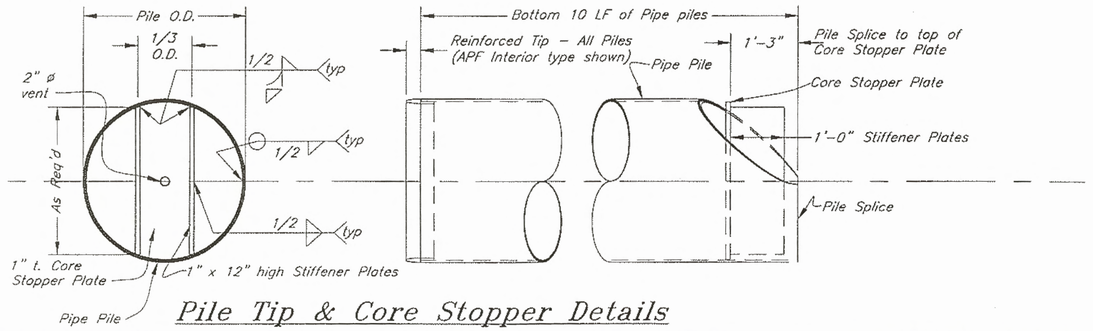


Approach Transition Bents 14–17

PILE TABLE – Approach, Transition & Transfer Br. Abutment											
STRUCTURE & PILE LOCATION	Plugged	ORIENTATION	No. of PILES	DIA. Inches	DESIGN ⑤ CAPACITY (TONS)		ELEVATIONS			EST. LGT.	EST. LGT.
					BEARING	UPLIFT	~ O.G.	CUT-OFF	ESTIMATED TIP	24"ø	18"ø
Approach Abut. Bent #1		None	N/A	N/A	–	–	–	–	–	–	–
Approach Bent #2	Y	Vertical	~~23~~ 24		50	–	13	14.04	-87	204	~~306~~
Approach Bent #3	Y	Vertical	~~23~~ 24		50	–	8	14.04	-92	214	~~321~~
Approach Bent #4	Y	Vertical	~~23~~ 24		50	–	7	14.04	-93	215	~~322~~
Approach Bent #5	Y	Vertical	~~23~~ 24		50	–	5.5	14.04	-94	217	~~326~~
Approach Bent #6	Y	Vertical	~~23~~ 24		50	–	4.5	14.04	-95	220	~~329~~
Approach Bent #7	Y	Vertical	~~23~~ 24		50	–	3.5	14.04	-96	221	~~331~~
Approach Bent #8	Y	Vertical	~~23~~ 24		50	–	2.7	14.04	-97	223	~~335~~
Approach Bent #9	Y	Vertical	~~23~~ 24		50	–	2.3	14.04	-98	225	~~337~~
Approach Bent #10	Y	Vertical	~~23~~ 24		50	–	1.5	14.04	-99	227	~~341~~
Approach Abut. Bent #11		None	N/A	N/A	50	–	–	–	–	–	–
Approach Abut. Bent #12		None	N/A	N/A		–	–	–	–	–	–
Approach Bent #13	Y	Vertical	~~23~~ 24		50	–	-2.5	14.04	-103	235	~~353~~
Approach Bent #14	Y	Vertical	~~23~~ 24		50	–	-3.5	14.04	-104	237	~~356~~
Approach Transition Bent #15	Y	Vertical	3	24	50	–	-4.5	14.04	-105	359	–
Approach Transition Bent #16	Y	Vertical	5	24	50	–	-5	14.04	-105	598	–
	N	Batter 1:3	2	18	50	50	-4.5	21.04	-105	–	267
Approach Transition Bent #17	Y	Vertical	3	24	50	–	-15	14.04	-115	389	–
Transfer Bridge Abutment	Y	Vertical	2	18	50	–	-5	16.61	-105	–	243
Abut Transverse Batters	Y	Batter 1:3	2	18	50	50	-5	19.65	-105	–	262
Abut. Longitudinal Batters	Y	Batter 1:3	2	18	50	50	-10	19.65	-110	–	273
									TOTAL BASIC Furn.	3,784 LF	1,045 LF
									TOTAL BASIC Driven	33 Each	8 Each

Note: 18" dia all 24" dia. piles are 0.469" wall, all pile have

1. All piles 1/2" wall thickness and ~~provided with~~ reinforced tips.
2. Approach Batter piles driven open ended
3. Approach & Tr. Br. Abutment Vertical piles driven with plugged bottom section, see Detail this sheet
4. Tr. Br. Abutment Batter piles driven with plugged bottom section, see Detail this sheet
5. For purposes of Dynamic Pile Driving Analysis Ultimate Capacity = Design Capacity x 2.25



Pile Tip & Core Stopper Details

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.

PE ~~[illegible]~~ Date 9/4/09

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

Approach & Approach Transition Pile Layout

AP02

STATE OF ALASKA 49th John T. Scott CE-4755 REGISTERED PROFESSIONAL ENGINEER 11-26-08

CHECKED BY: B. Savikko

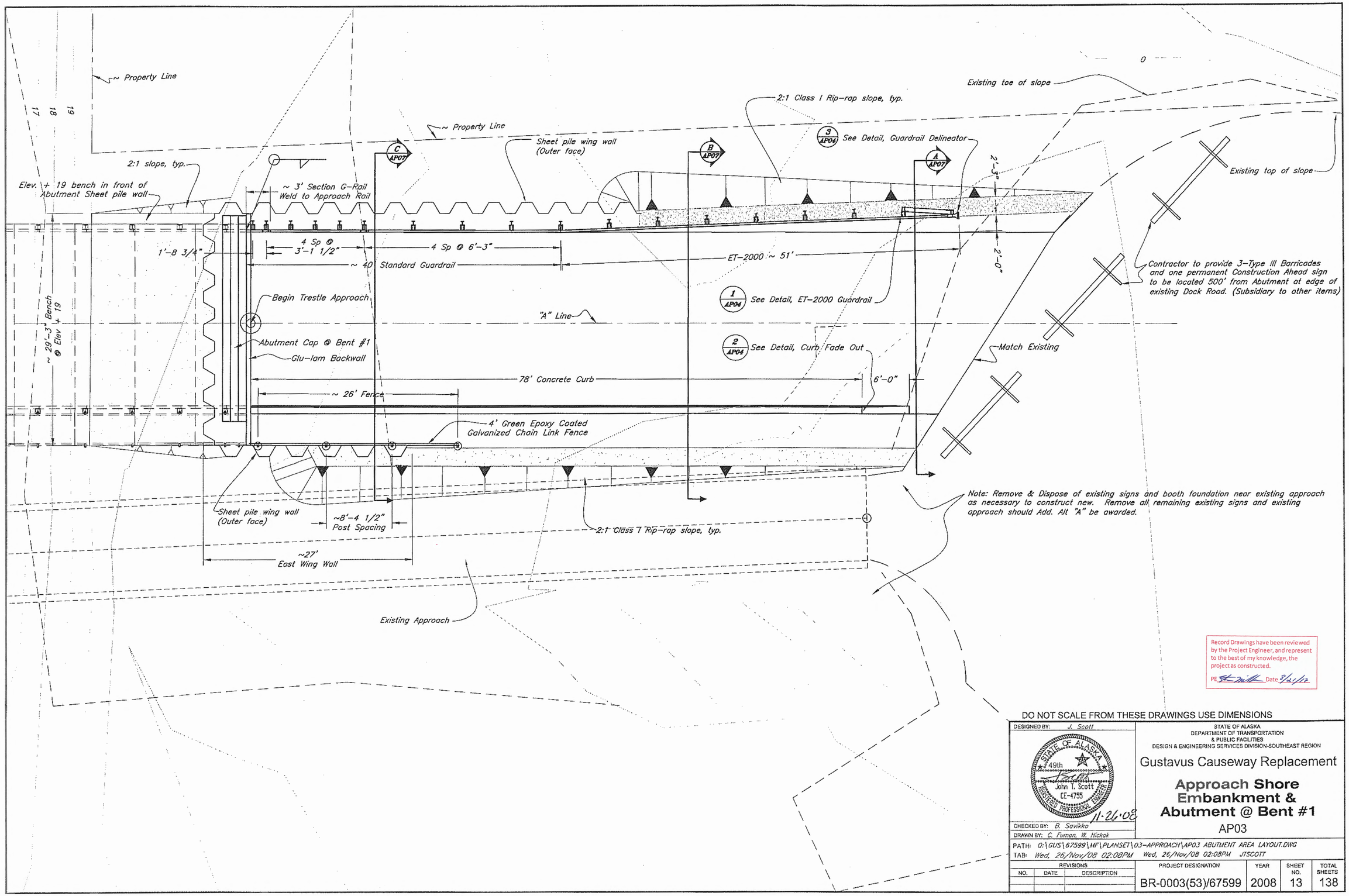
DRAWN BY: C. Furman, W. Hickok

PATH: O:\CUS\67599\MF\PLANSET\03-APPROACH\AP02 PILE LAYOUT APP AND TRANS.DWG

TAB Tue, 25/Nov/08 04:22PM JTSCOTT

REVISIONS		
NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-0003(53)/67599	2008	12	138



Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.

PE _____ Date 8/21/12

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott

STATE OF ALASKA
49th
John T. Scott
CE-4755
REGISTERED PROFESSIONAL ENGINEER
11-26-08

CHECKED BY: B. Savikko

DRAWN BY: C. Furman, W. Hickok

PATH: O:\GUS\67599\MF\PLANSET\03-APPROACH\AP03 ABUTMENT AREA LAYOUT.DWG

TAB: Wed, 26/Nov/08 02:08PM Wed, 26/Nov/08 02:08PM JTSCOTT

REVISIONS		
NO.	DATE	DESCRIPTION

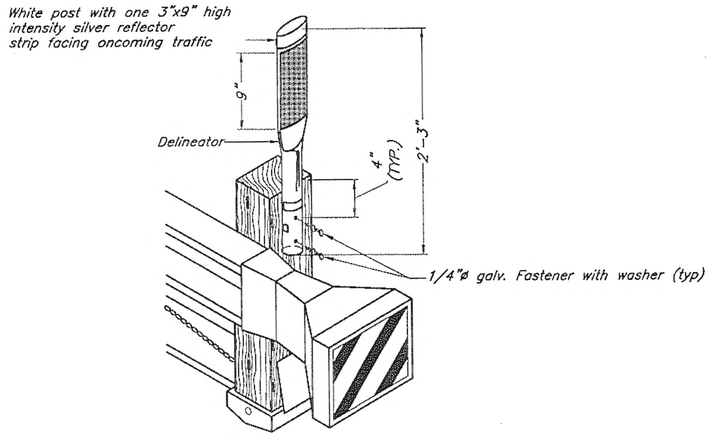
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

Approach Shore Embankment & Abutment @ Bent #1

AP03

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-0003(53)/67599	2008	13	138

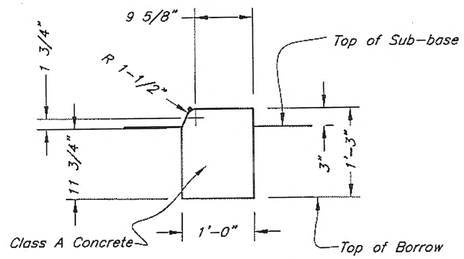


Delineator notes:

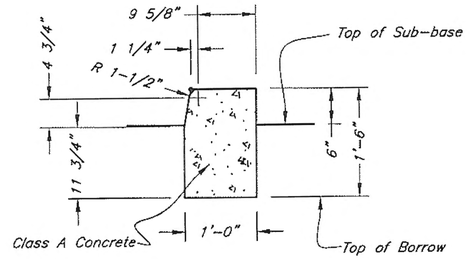
1. Each ET-2000 guardrail end shall have one delineator.
2. Delineator shall have white reflective sheeting.
3. Steel post guardrail shall be pre-drilled prior to securing delineator with self-tapping screws.
4. Delineator shall be incidental

Flexible Guardrail Delineator 3 / AP03

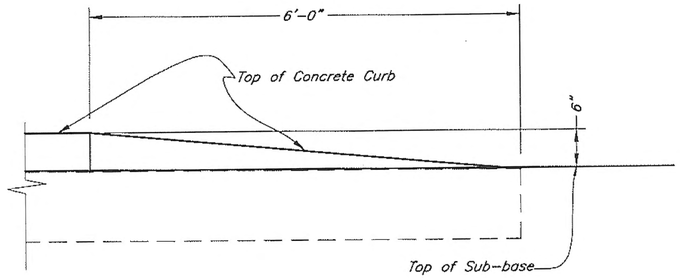
No scale



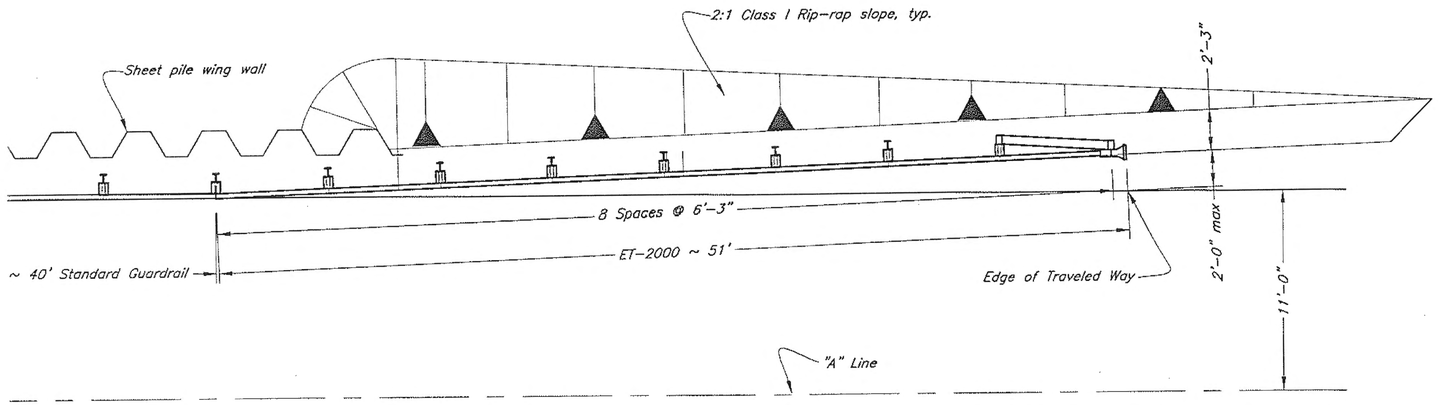
Curb Section @ 1/2 Height



Curb - Typical Section



Curb Fade out Detail 2 / AP03



ET-2000 Layout Detail 1 / AP03

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.

PE _____ Date 8/21/17

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott

STATE OF ALASKA 49th John T. Scott CE-4755 REGISTERED PROFESSIONAL ENGINEER 11.26.08

CHECKED BY: B. Savikko

DRAWN BY: C. Fuman, W. Hickok

PATH: O:\GUS\67599\MF\PLANSET\03-APPROACH\AP04 ABUTMENT AREA DETAILS.DWG

TAB: Wed, 26/Nov/08 02:10PM

Wed, 26/Nov/08 02:10PM JTSCOTT

REVISIONS		
NO.	DATE	DESCRIPTION

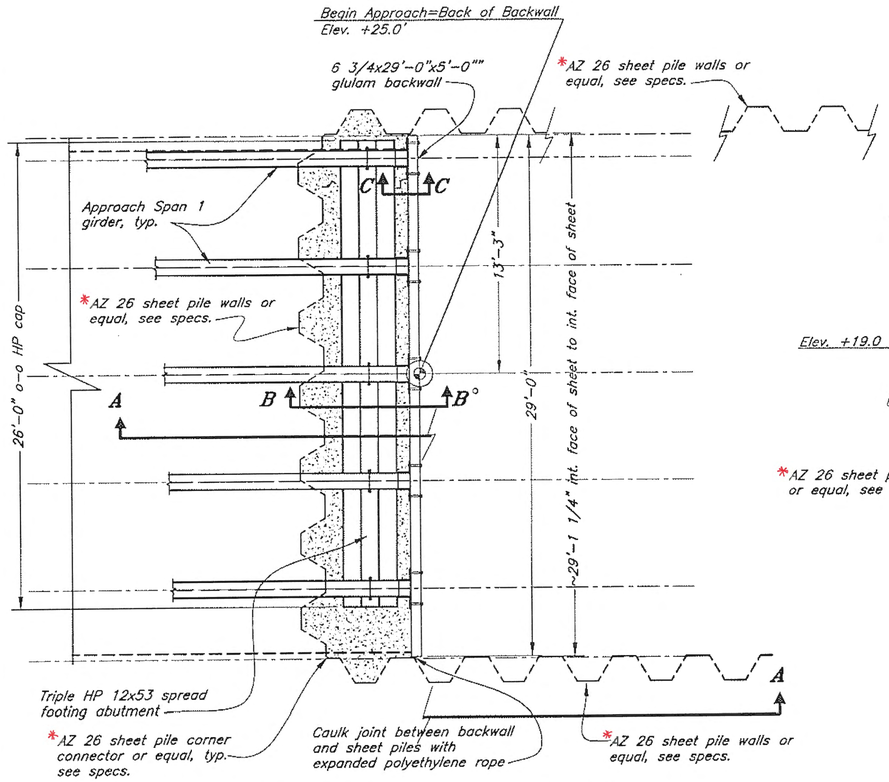
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

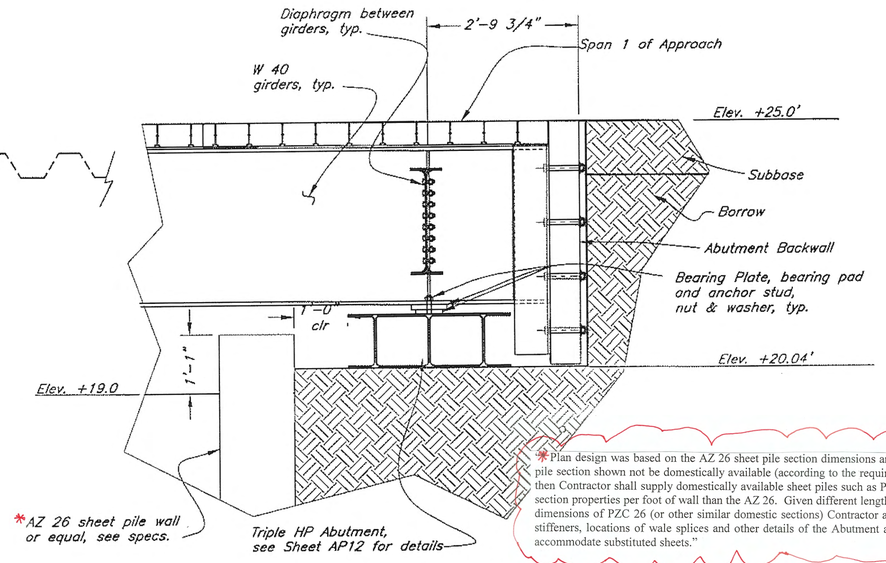
Approach Shore Embankment Details

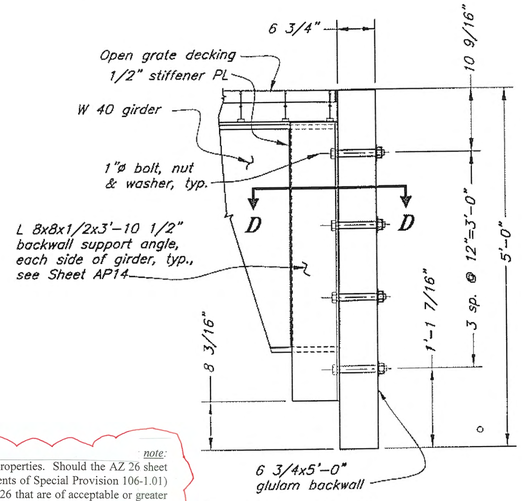
AP04

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-0003(53)/67599	2008	14	138



Abutment Plan – Bent #1

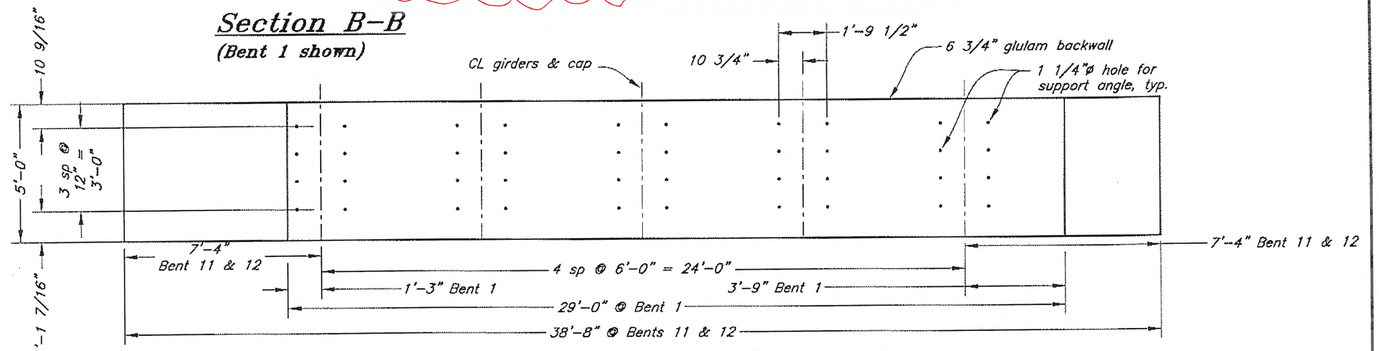




Section C–C
(All Abutments Bents 1, 11 & 12)

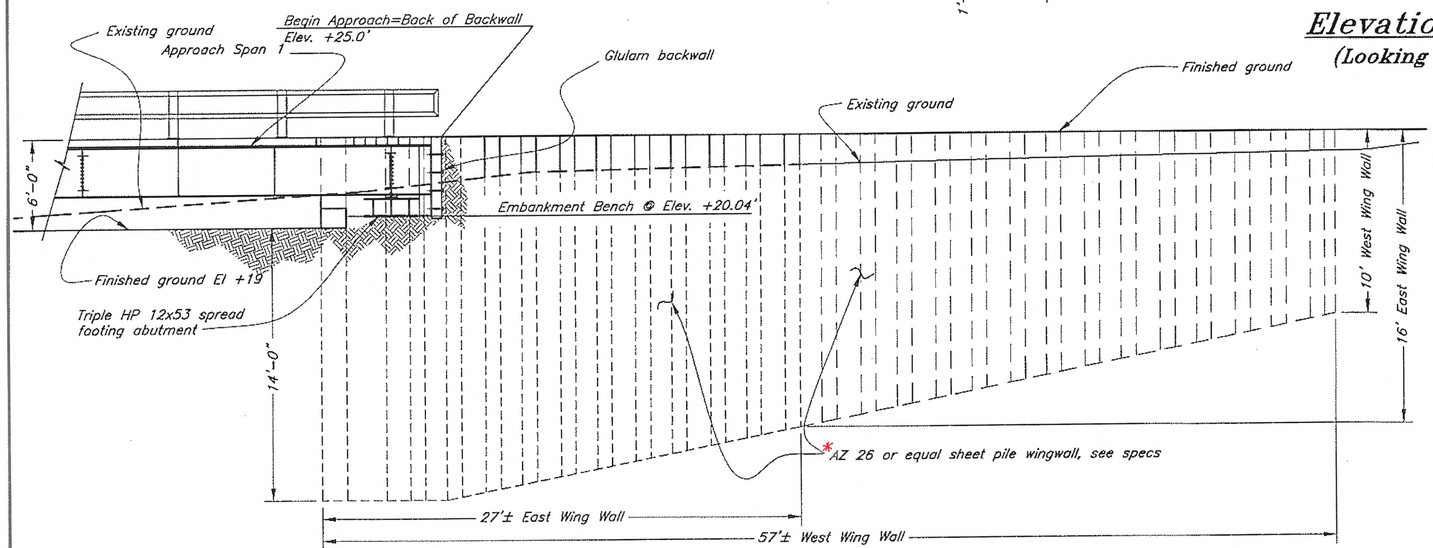
note:
*Plan design was based on the AZ 26 sheet pile section dimensions and properties. Should the AZ 26 sheet pile section shown not be domestically available (according to the requirements of Special Provision 106-1.01) then Contractor shall supply domestically available sheet piles such as PZC 26 that are of acceptable or greater section properties per foot of wall than the AZ 26. Given different length of wall per sheet and depth of section dimensions of PZC 26 (or other similar domestic sections) Contractor and Fabricator(s) shall adjust shapes of stiffeners, locations of wale splices and other details of the Abutment and Abutment Backwall as required to accommodate substituted sheets."

Section B–B
(Bent 1 shown)

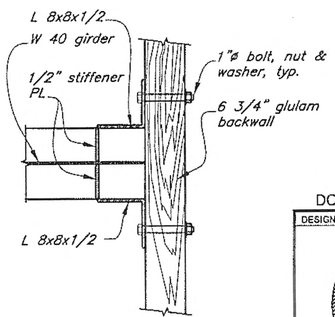


Elevation Abutment Backwall
(Looking North – all abutment bents)

Note: Holes thru abutment backwall necessary to POL and Electrical/Comm conduits not shown.



Sectional Elevation A–A



Section D–D

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.
PE Date 5/21/12

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott
CHECKED BY: B. Savikko
DRAWN BY: C. Fuman, W. Hickok
PATH: O:\GUS\67599\MF\PLANSET\03-APPROACH\AP05 ABUTMENT & BACKWALL.DWG Thu, 04/Dec/08 10:18AM JTSCOTT
TAB: Thu, 04/Dec/08 10:18AM

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

Abutment & Backwall Details

AP05

REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			BR-0003(53)/67599	2008	15	138

Note: "POL and Bulk Fuel Line plan, elevation and detail layout shown here and on Sheet 69 are schematic and Bulk Fuel System Piping shall be constructed in accordance with the Plans and specifications prepared as per Section 680 of the project specifications."

~ Property Line

17 18 19

0

Existing toe of slope

Existing top of slope

Spare Power Conduit

Terminate Spare Power Conduit @ SS Nema 4X J-Box, typ.

DOT/PF Type 1A Handhole, typ.

Begin Trestle Approach

"A" Line

Field Drill Backwall for Buried Comm & Data Conduits, flex connections between backwall and approach structure

Buried Comm & Data Conduits

Buried Comm & Data Conduits

A

A

Comm & Data Conduits

Bulk POL Pipelines

DOT/PF Type 1A Handhole, typ.

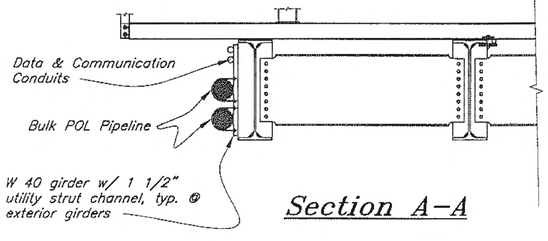
Flanged Flex Splice between approach structure and foundations for Bulk POL Pipelines

Bulk POL Pipelines

Pipeline foundation & Support, typ.

Existing Buried Bulk POL Pipelines

Flanged Flex Splice between new and existing Buried Bulk POL Pipelines



Section A-A

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.

PE SK Scott Date 3/2/12

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott

STATE OF ALASKA 49th John T. Scott CE-4755 REGISTERED PROFESSIONAL ENGINEER 11-26-08

CHECKED BY: B. Sovikko

DRAWN BY: C. Fuman, W. Hickok

PATH: O:\GUS\67599\MF\PLANSET\03-APPROACH\AP06 EMBANKMENT UTILITIES LAYOUT.DWG

TAB: Tue, 25/Nov/08 06:26PM Tue, 25/Nov/08 06:26PM JTSCOTT

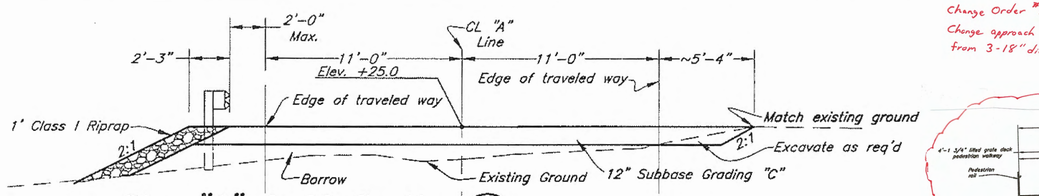
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

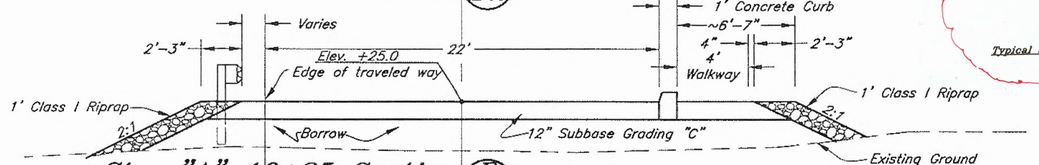
Approach Shore Embankment Utilities Layout

AP06

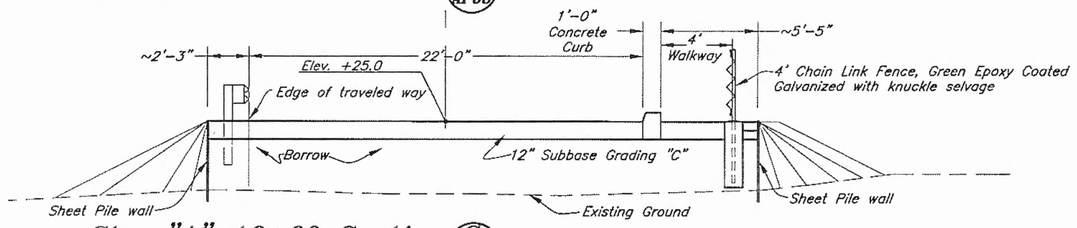
REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			BR-0003(53)/67599	2008	16	138



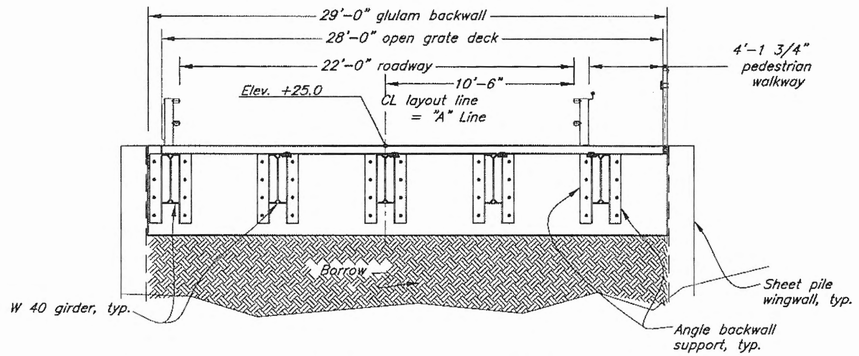
Sta. "A" 9+90 Section (A) AP03



Sta. "A" 10+25 Section (B) AP03

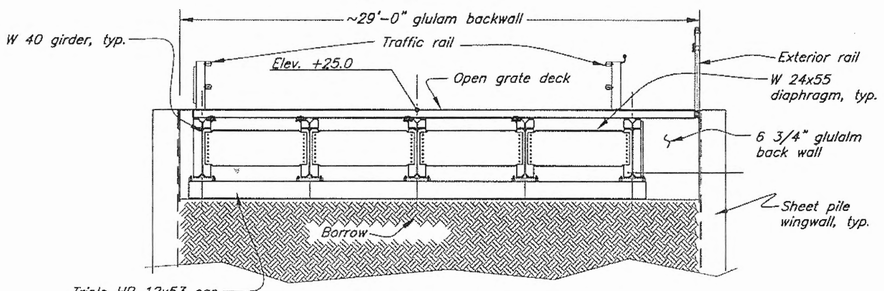


Sta. "A" 10+60 Section (C) AP03



Typ. Section @ Bent #1 Abut. Backwall

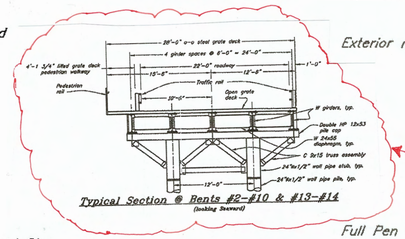
(looking Shoreward)

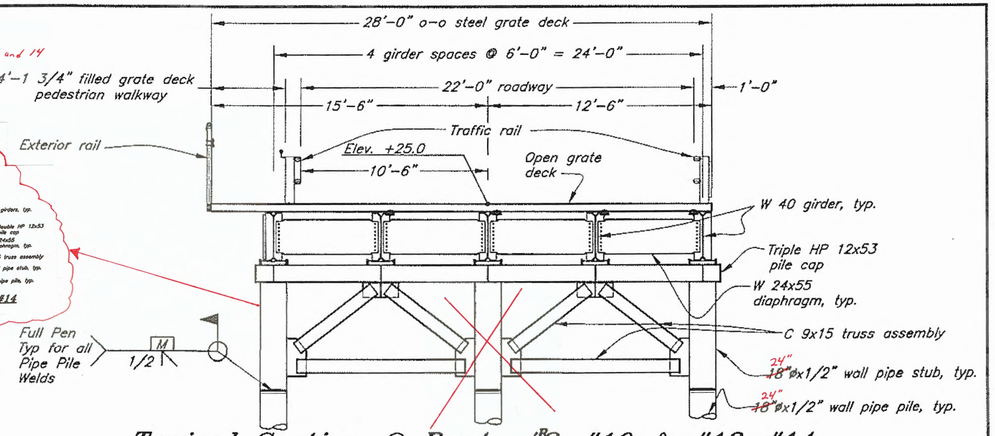


Typical Section @ Bent 1

(looking Shoreward)

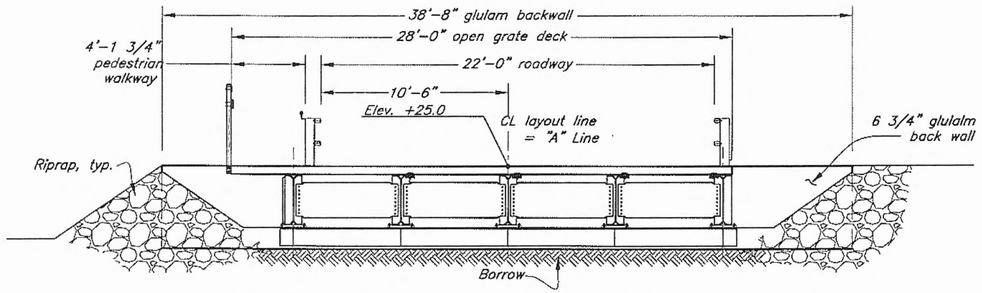
Change Order #1
Change approach piles in bents 2 through 10, 13 and 14 from 3-18" dia pile to 2-24" dia pile.





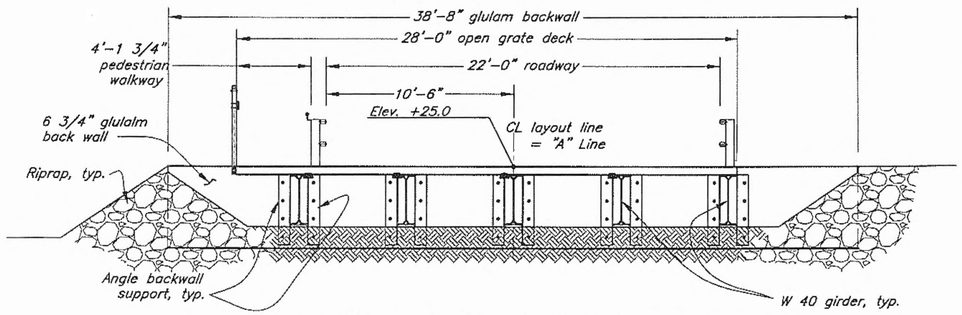
Typical Section @ Bents #2-#10 & #13-#14

(looking Seaward)



Typ. Section @ Bent #11 Abutment Cap

(looking Seaward)



Typ. Section @ Bent #11 Abut. Backwall

(looking Seaward)

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.

PE Date 8/11/17

DESIGNED BY: J. Scott
CHECKED BY: B. Savikko
DRAWN BY: C. Fuman, W. Hickok

STATE OF ALASKA
49th
John T. Scott
CE-4755
REGISTERED PROFESSIONAL ENGINEER
11.26.08

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

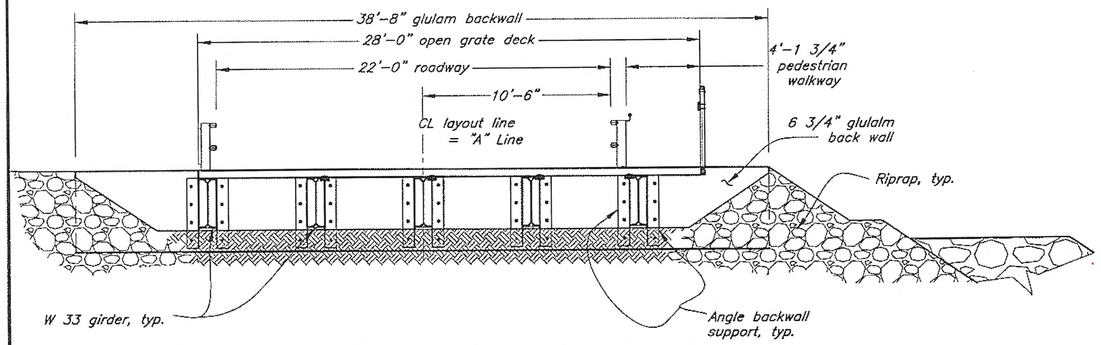
Gustavus Causeway Replacement

Approach Typical Sections

AP07

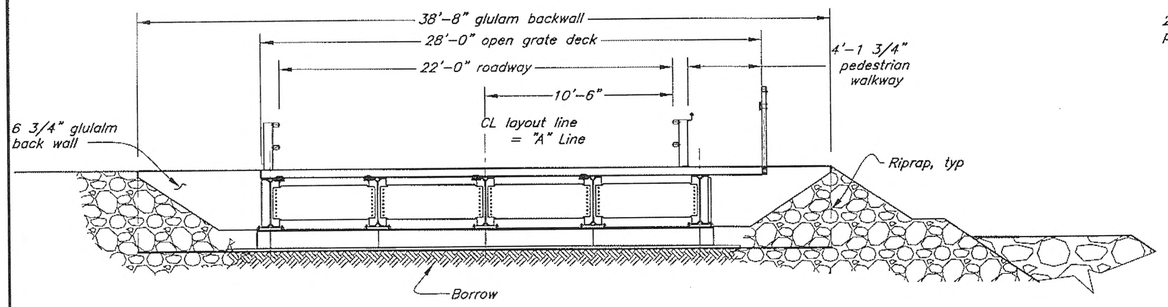
PATH: O:\GUS\67599\MF\PLANSET\03-APPROACH\AP07 TYP SECTIONS.DWG
TAB: Tue, 25/Nov/08 07:00PM JTSCOTT

REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
			BR-0003(53)/67599	2008	17	138



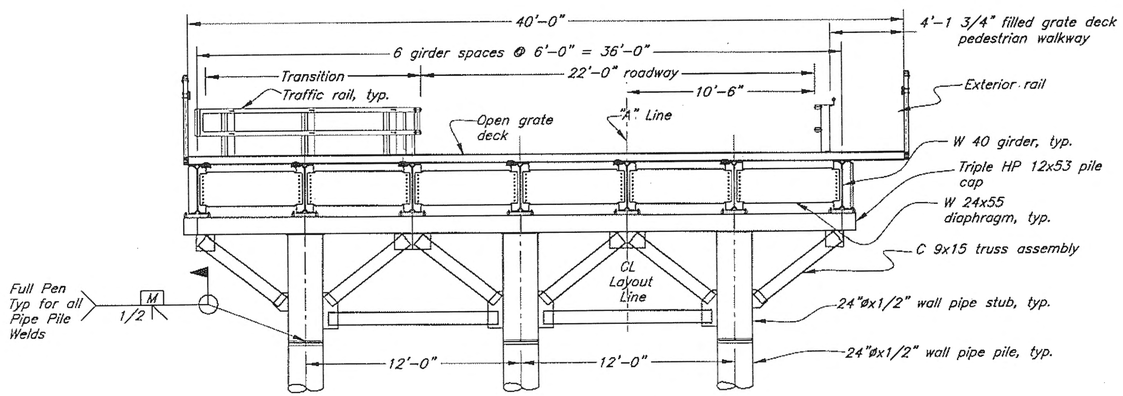
Typ. Section @ Bent #12 Abut. Backwall

(looking Shoreward)



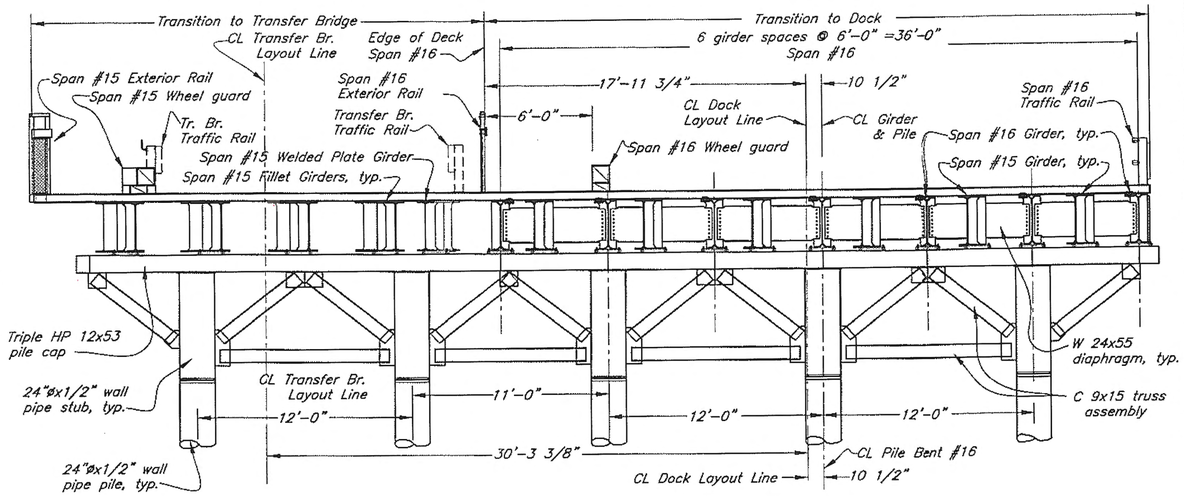
Typ. Section @ Bent #12 Abutment Cap

(looking Shoreward)



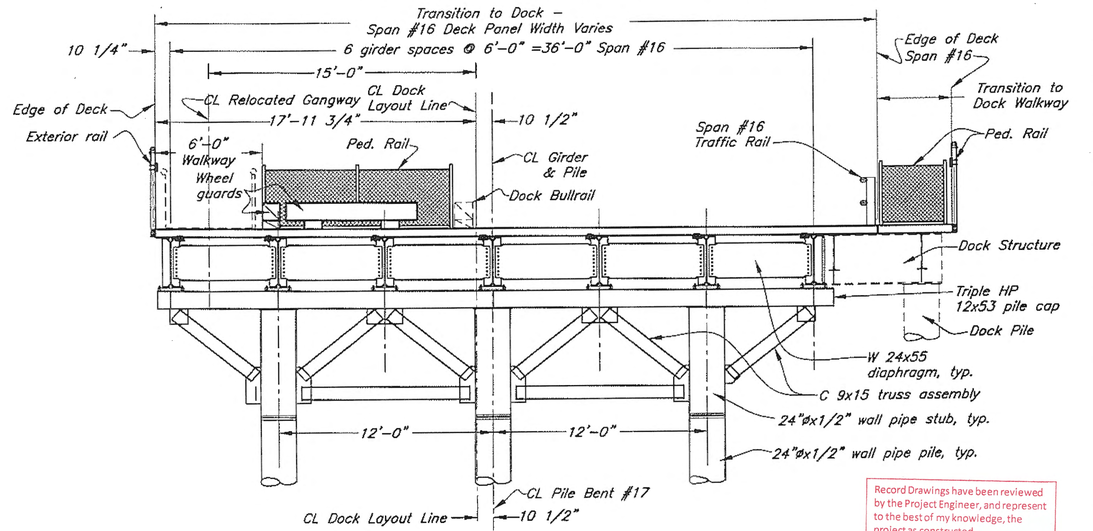
Typical Section @ Bent #15

(looking Shoreward)



Typical Section @ Bent #16

(looking Seaward along CL Transfer Br & CL Dock)



Typical Section @ Bent #17

(looking Seaward along CL Dock)

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.

PE _____ Date 8/21/12

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

STATE OF ALASKA 49th John T. Scott CE-4755 REGISTERED PROFESSIONAL ENGINEER

11-26-08

CHECKED BY: B. Savikko

DRAWN BY: C. Fuman, W. Hickok

PATH: O:\GUS\67599\MF\PLANSET\03-APPROACH\AP08 TYP SECTIONS TRANSITION.DWG

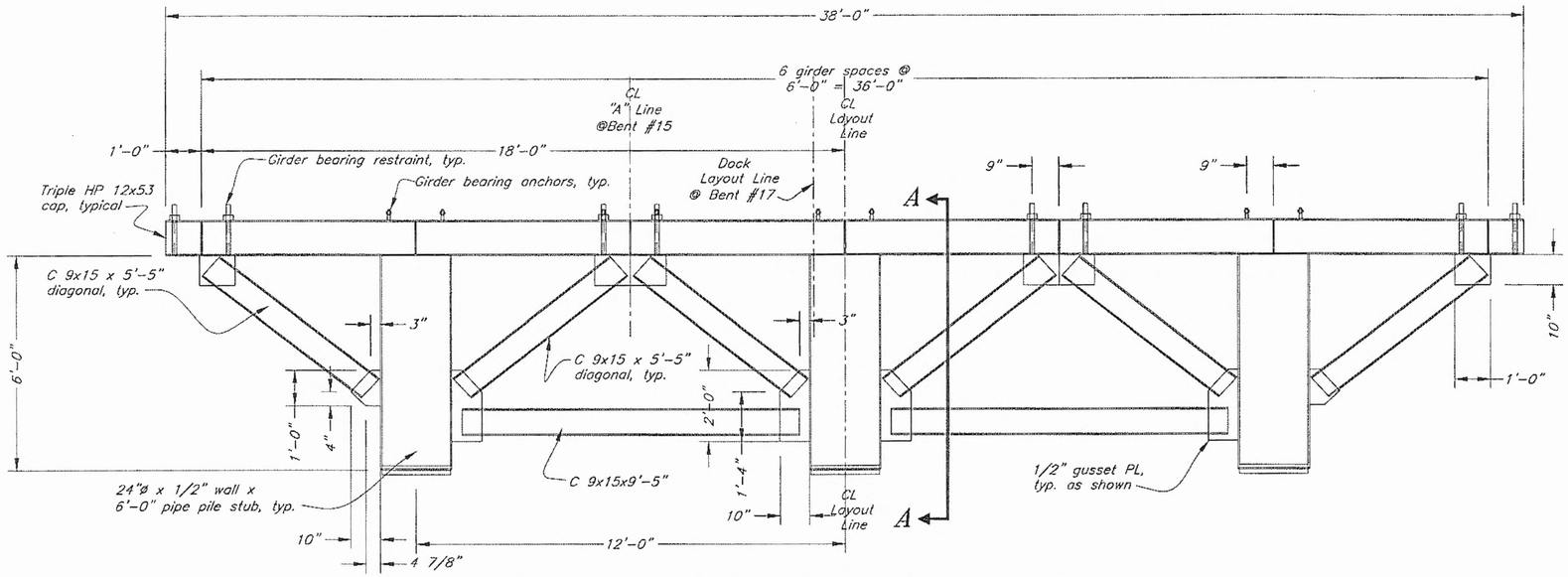
TAB: Tue, 25/Nov/08 06:34PM JTSCOTT

Gustavus Causeway Replacement

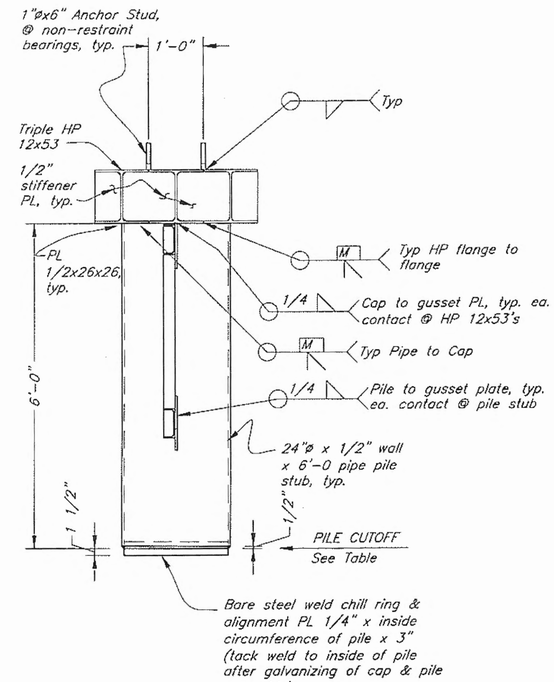
Approach Transition Typical Sections

AP08

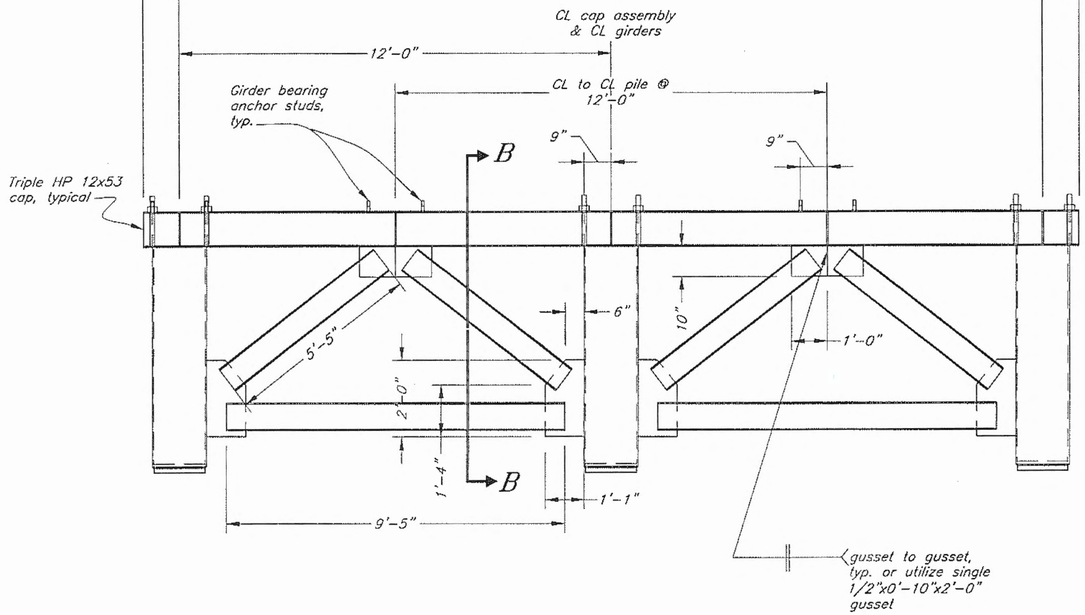
REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			BR-0003(53)/67599	2008	18	138



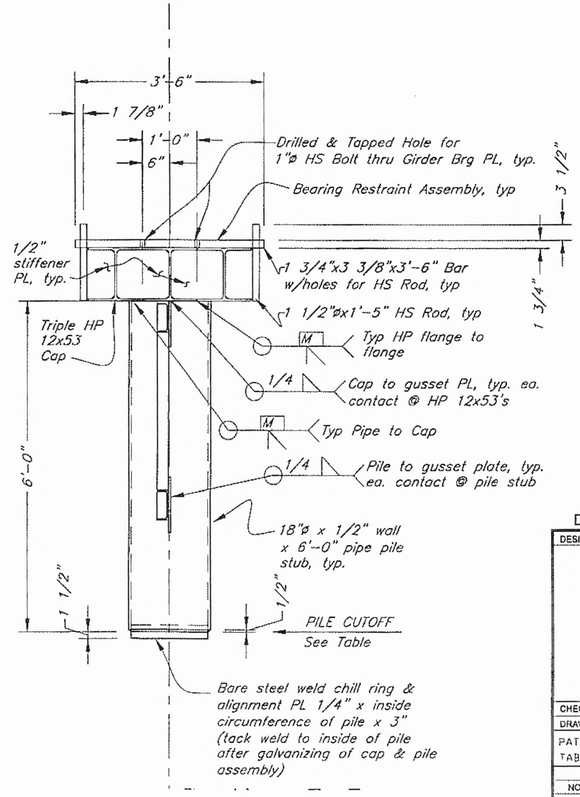
Approach Pier Cap Assembly Elevation Bents 15 & 17



Section A-A



Approach Pier Cap Assembly Elevation Bents 2-10 & 13, 14



Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.

PE [signature] Date 5/21/12

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

Approach Cap Layout & Elevation

AP09

STATE OF ALASKA 49th John T. Scott CE-4755 REGISTERED PROFESSIONAL ENGINEER 11.26.08

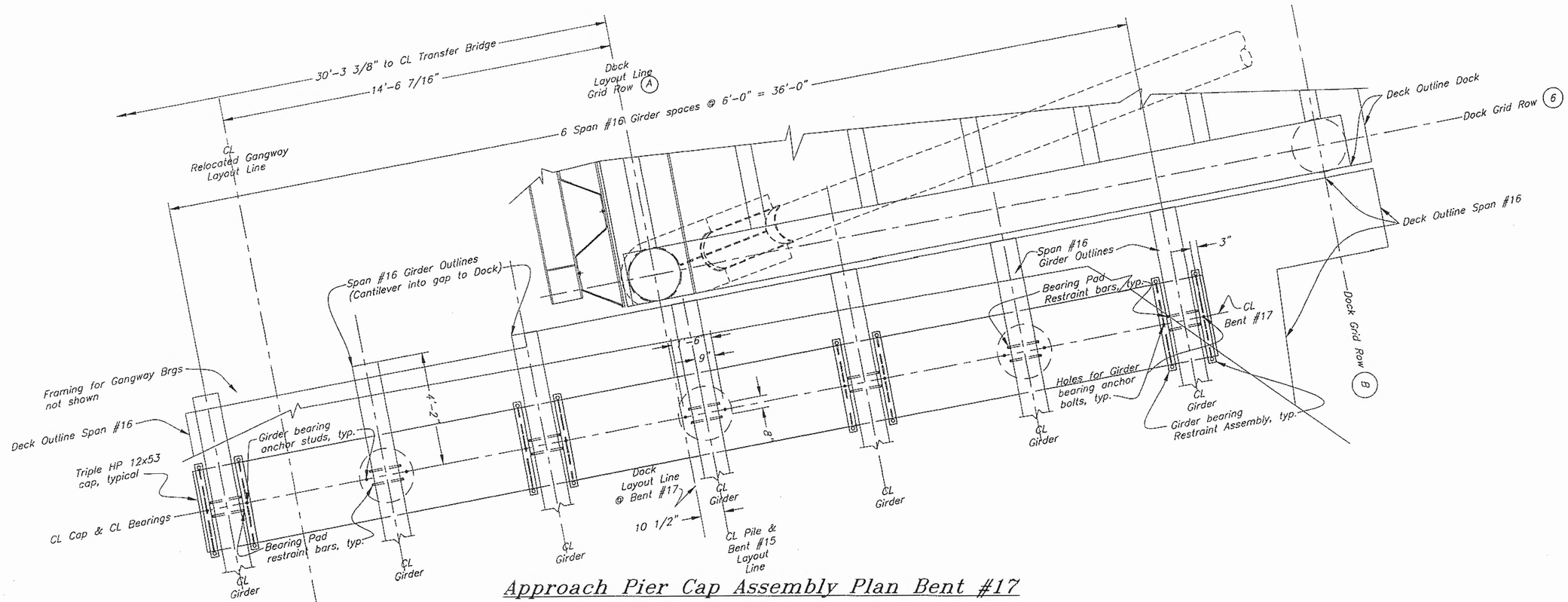
CHECKED BY: B. Sovikko

DRAWN BY: C. Furman, W. Hickok

PATH: O:\GUS\67599\MF\PLANSET\03-APPROACH\AP09 APPROACH CAP & LAYOUT ELEV 2-14.DWG

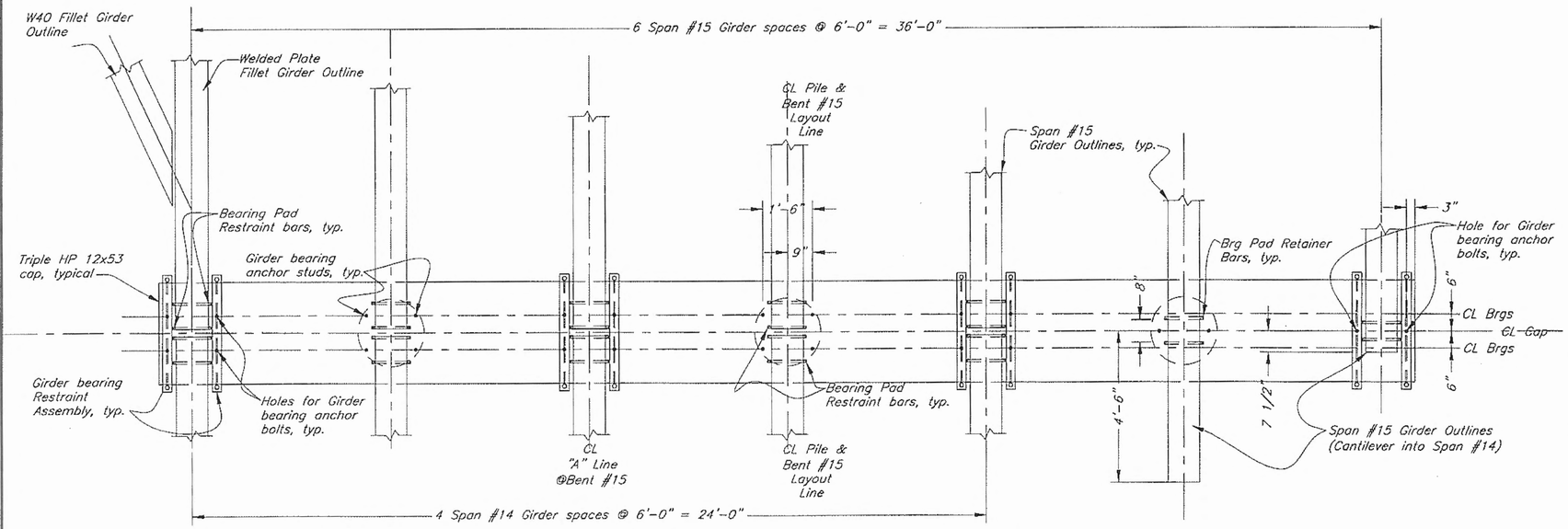
TAB: Tue, 25/Nov/08 06:35PM JTSCOTT

REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			BR-0003(53)/67599	2008	19	138



Approach Pier Cap Assembly Plan Bent #17

(Expansion Bearings for Span #16 Girders)



Approach Pier Cap Assembly Plan Bent #15

(Expansion Bearings for - Span #14 & #15 Girders)

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.

PE Steven Smith Date 8/21/12

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

Approach Cap Layout - Bents #15 & #17

AP10

STATE OF ALASKA 49th John T. Scott CE-4755 REGISTERED PROFESSIONAL ENGINEER 11-26-08

CHECKED BY: B. Sovikko

DRAWN BY: C. Fuman, W. Hickok

PATH: O:\GUS\67599\MF\PLANSET\03-APPROACH\AP10 APPROACH CAP & LAYOUT ELEV 15&17.DW

TAB Tue, 25/Nov/08 06:37PM JTSCOTT

REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
			BR-0003(53)/67599	2008	20	138

61'-0"
30'-3 3/8"
19'-0"
21'-6 11/16"
CL Transfer Br. Layout Line
CL Welded Plate Fillet Girder (Bearings skewed to & at CL of cap)
CL Pile Bent #16 & CL Bearings Span #16 Girders
CL Dock Layout Line
10 1/2"
6 Span #16 girder spaces @ 6'-0" = 36'-0" (Bearings are square with and on South side of cap)
CL Span #16 Girder
6 Span #15 girder @ equal spaces = 30'-6 9/16" (Bearings skewed to and on North side of cap)
4 Span #15 Fillet Girders @ equal spaces = 14'-6 1/4" (Bearings skewed to and at CL cap)
3'-0 1/8"
CL Span #15 Girder @ CL Bearings
1/2" Stiffener Plates, typ.
Anchor Bolts for Bearings, typ.
Triple HP 12x53 pile cap
1'-0"
1'-0"
24"Øx1/2" wall pipe stub, typ.
C 9x15 truss assembly
1/2" Gusset Plates, typ.
7'-0"
12'-0"
11'-0"
12'-0"
12'-0"
CL Pile Bent #16 & CL Bearings Span #16 Girders

Elevation View

CL Transfer Bridge Layout Line
30'-3 3/8"
10 1/2" to CL Pile Bent #16 & CL Bearings Span #16 Girders
Outlines of W 40X167 Fillet Girders Span #15
3'-0 1/8"
6'-0 3/16"
21'-6 11/16"
CL Span #16 Girder
6 Span #16 Girder spaces @ 6'-0" = 36'-0"
Girder bearing Restraint Assembly, typ.
1'-0"
2'-1 3/8"
1'-5 7/16"
4'-1 1/2"
1'-6"
9"
1'-7 11/16"
10 5/16"
1'-6"
9"
90°
CL Dock Layout Line
90°
1'-6"
9"
CL Cap
Brg Pad Retainer Bars, typ.
Hole for Girder bearing anchor bolts, typ.
Girder bearing anchor studs, typ.
CL Brgs
6"
3 13/16"
1'-8 5/16"
1'-1 5/8"
10 1/4"
1'-5 11/16"
3'-3 1/8"
3 eq sp @ 4'-10 11/32" = 14'-7"
2'-10 1/8"
6'-0"
5 eq spaces @ 6'-1 5/16 = 30'-6 9/16"
4'-0"
3 eq fillet girder spaces @ 4'-8 1/2" = 14'-1 1/2"
CL Span #15 Girder
6'-0"
Span #15 Girders @ 6'-0" ctc, typ.
CL "A" Line
CL Pile Layout Bent #16
Outline Welded Plate Fillet Girder Span #15

Note: "For dimensions, details and notes for batter pile chute assembly refer to Attachment B of Addendum #2. Attachment B shows Approach Bent No 16 at the western batter pile, east batter pile chute assembly is opposite hand."

Plan View

Approach Pier Cap Assembly Bent #16

(Rotational Bearings for - Span #15 & #16 Girders)

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.
PE _____ Date 8/4/17

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott
CHECKED BY: B. Savikko
DRAWN BY: C. Fuman, W. Hickok
PATH: O:\GUS\67599\ME\PLANSET\03-APPROACH\AP11 APPROACH CAP & LAYOUT ELEV 16.DWG
TAB: Tue, 25/Nov/08 07:03PM JTSCOTT

STATE OF ALASKA
49th
PE
John T. Scott
CE-4755
REGISTERED PROFESSIONAL ENGINEER
11-26-08

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

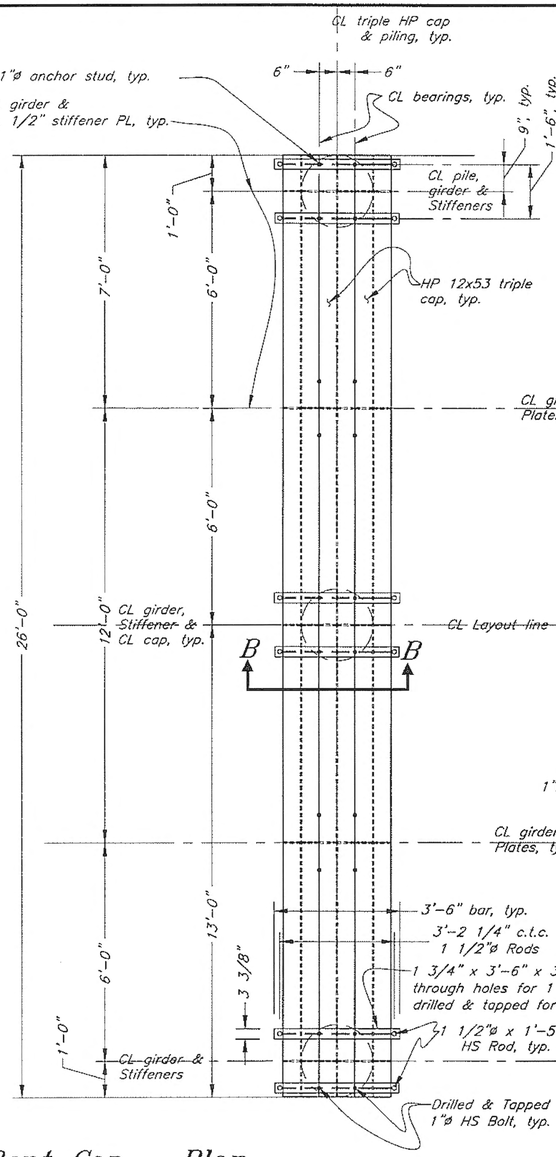
Gustavus Causeway Replacement

Bent # 16
Approach Cap
Plan & Elev.

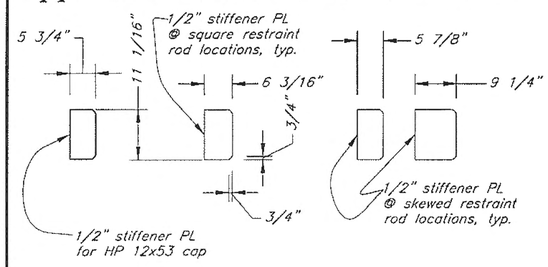
AP11

REVISIONS NO.	DATE	DESCRIPTION

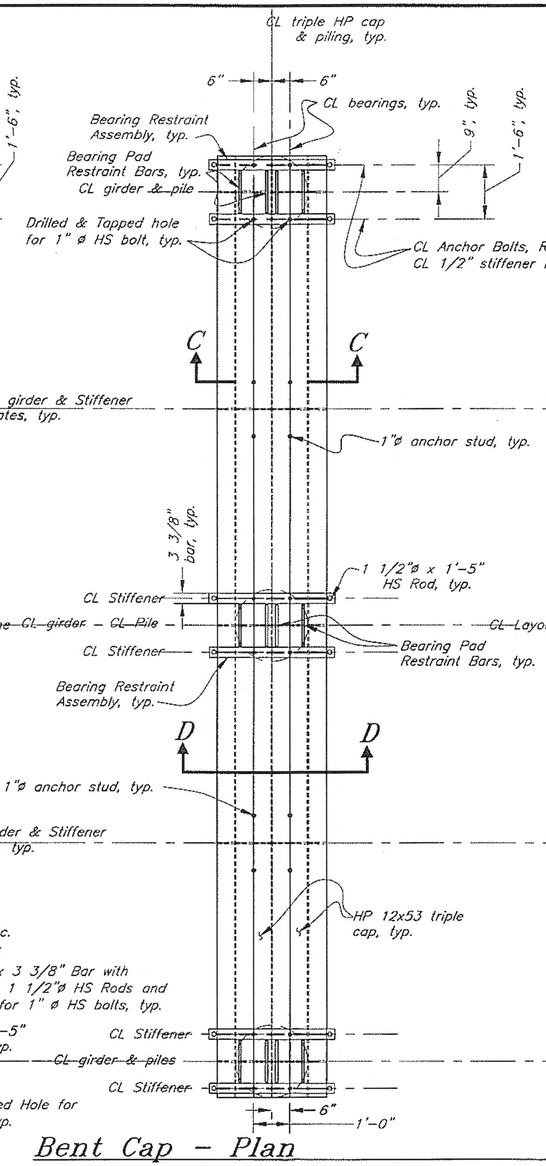
PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-0003(53)/67599	2008	21	138



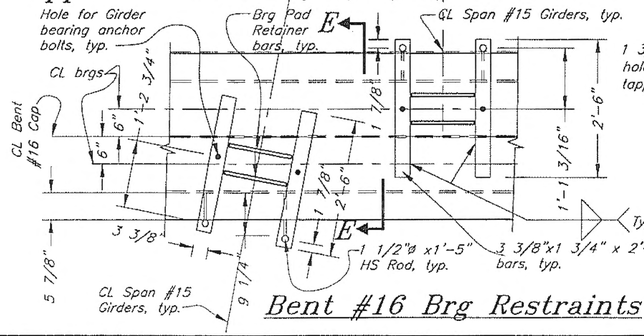
Bent Cap - Plan
Approach Bents 3, 5, 7, 9 & 14



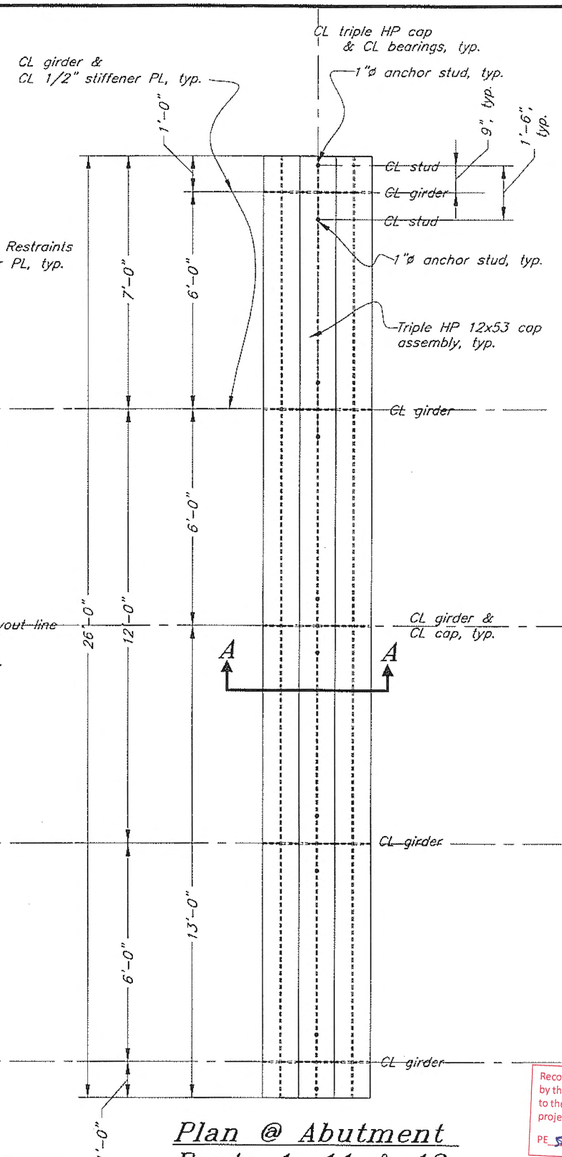
Stiffener Plates



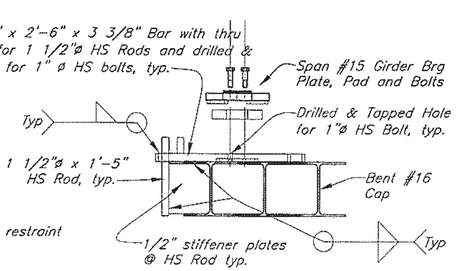
Bent Cap - Plan
Approach Bents 2, 4, 6, 8, 10 & 13



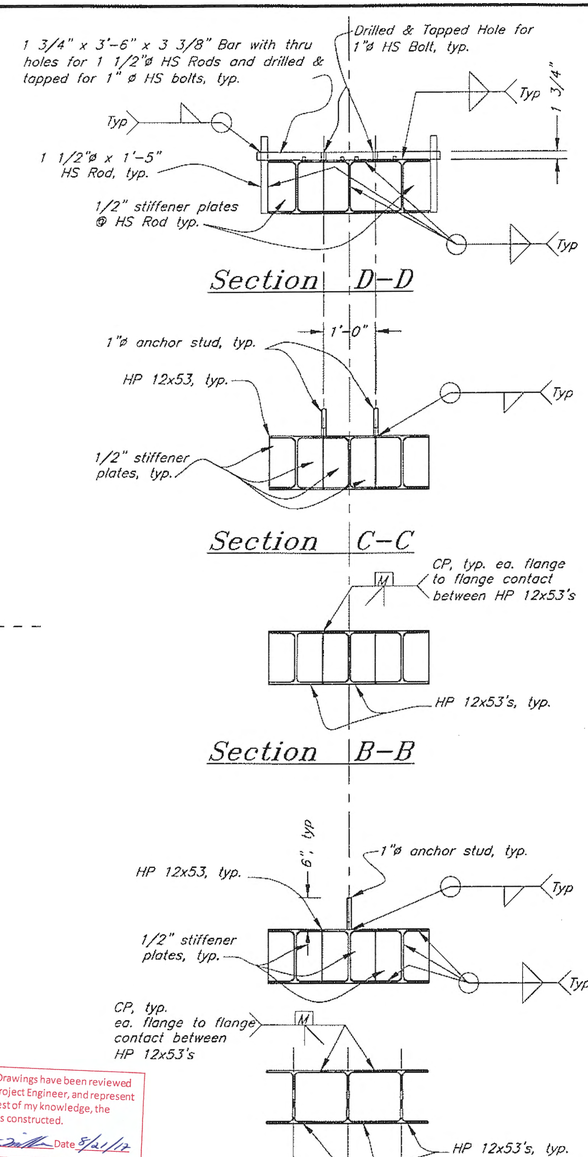
Bent #16 Brg Restraints



Plan @ Abutment
Bents 1, 11 & 12



Section E-E



Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.
PE _____ Date 8/21/12

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott
CHECKED BY: B. Sovikko
DRAWN BY: C. Fuman, W. Hickok

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

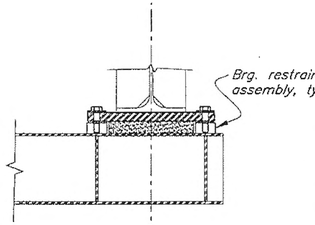
Approach Cap & Bearing Details

AP12

PATH: O:\GUS\67599\MF\PLANSET\03-APPROACH\AP12 APPROACH CAP & BEARING DETAILS.DWG
TAB: Tue, 25/Nov/08 07:05PM JTSCOTT

REVISIONS NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-0003(53)/67599	2008	22	138



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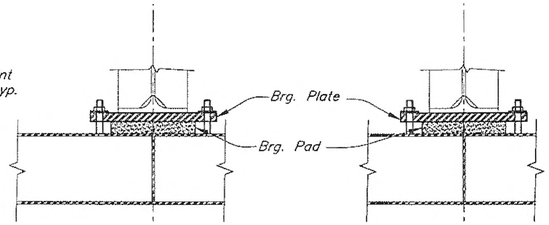
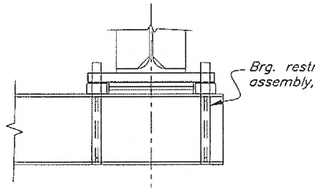
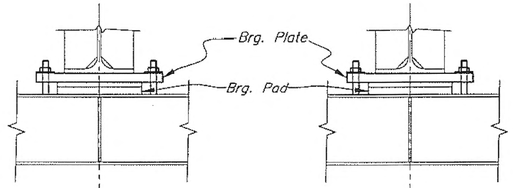


Section G–G

Section G–G

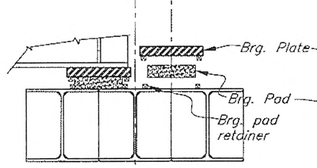


View C–C

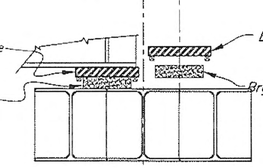


View F–F

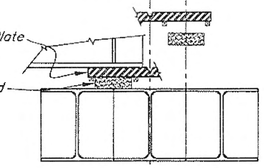
View K–K



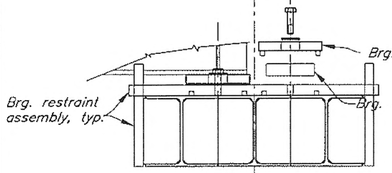
Section A–A



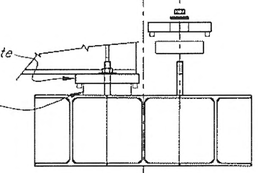
Section H–H



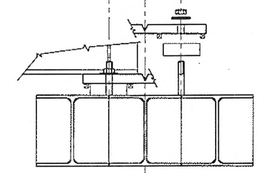
Section J–J



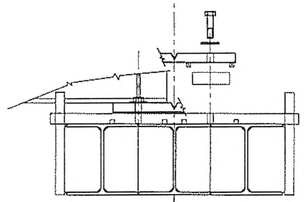
View B–B



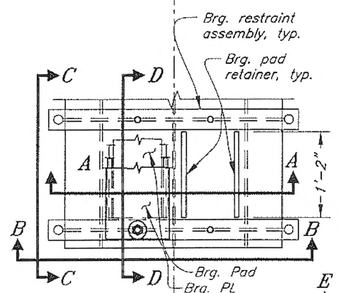
Section E–E



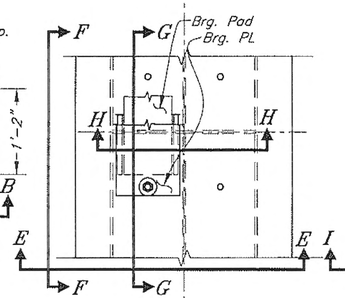
Section I–I



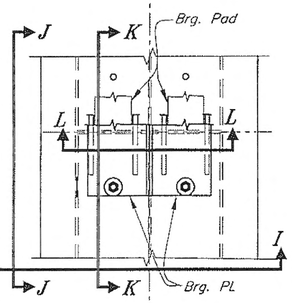
Sectional Elev.



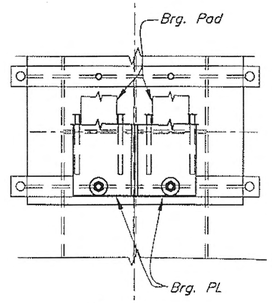
Plan View @ End of Cap
(Bearing Restraint Assembly)



Plan View
(Non–Restrained Bearings)



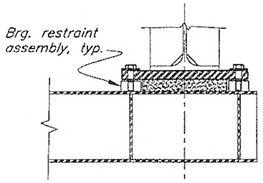
Plan View
(Fixed Brgs Non–Restrained)



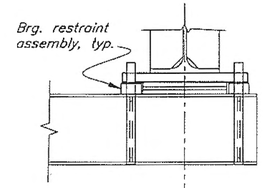
Plan View
(Fixed Brgs Restrained)

Pad Details @ Bents
#2, #4, #6, #8, #10, #13 & #15

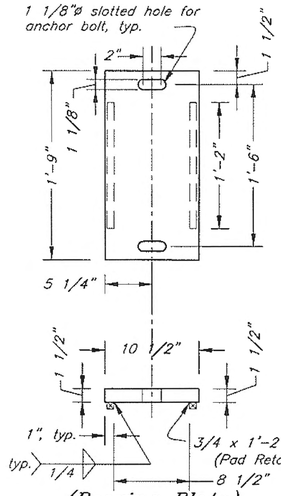
Pad Details @ Bents
#3, #5, #7, #9 & #14



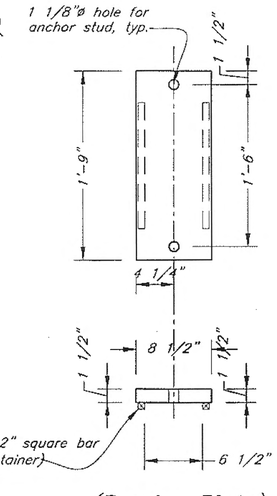
Section @ Center of Brg Pad & PL



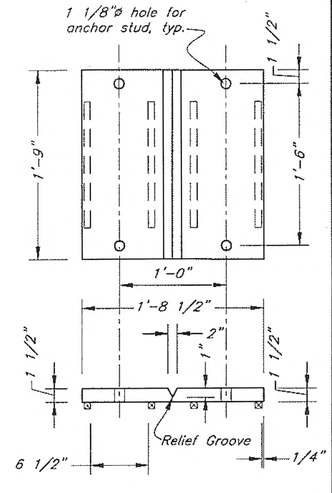
Front Elev.



(Bearing Plate)
Bents #2, #4, #6, #8, #10, #13, #15 & #17

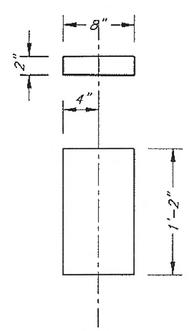


(Bearing Plate)
Bents #1, #11, #12 & #16

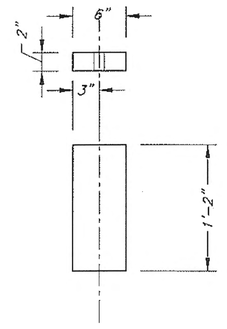


(Bearing Plate)
Bents #3, #5, #7, #9, & #14

Plan & Elevation Views
Approach Bearing Plates



(Bearing Pad)
Bents – #2, #4, #6, #8, #10, #13, #15 & #17



(Bearing Pad)
Bents – #1, #3, #5, #7, #9, #11, #12, #14 & #16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.
PE _____ Date 8/21/12

DESIGNED BY: J. Scott
CHECKED BY: B. Savikko
DRAWN BY: C. Fuman, W. Hickok
PATH: O:\GUS\67599\MF\PLANSET\03-APPROACH\AP13 APPROACH BEARING PLATES & PADS.DWG
TAB: Tue, 25/Nov/08 07:06PM JTSCOTT

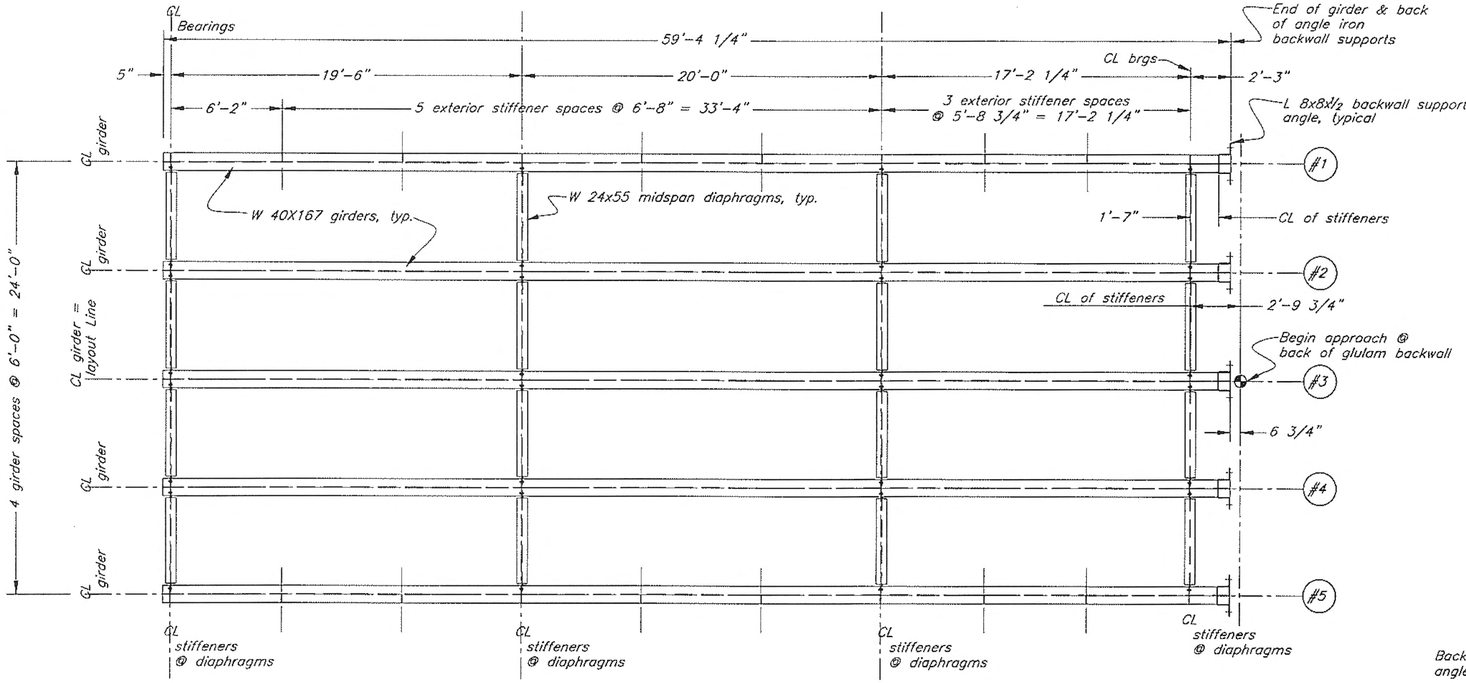
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

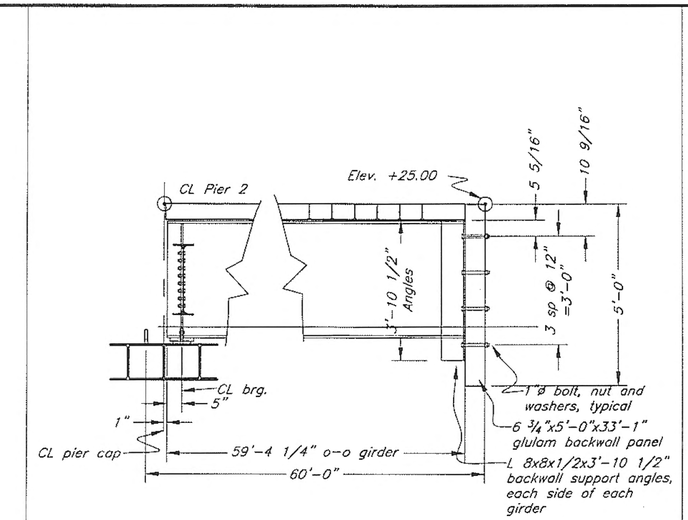
APPROACH BEARING PLATES & PADS

AP13

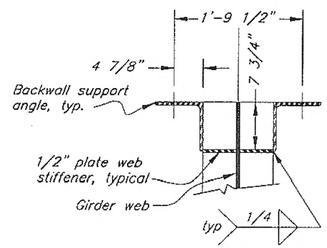
REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			BR-0003(53)/67599	2008	23	138



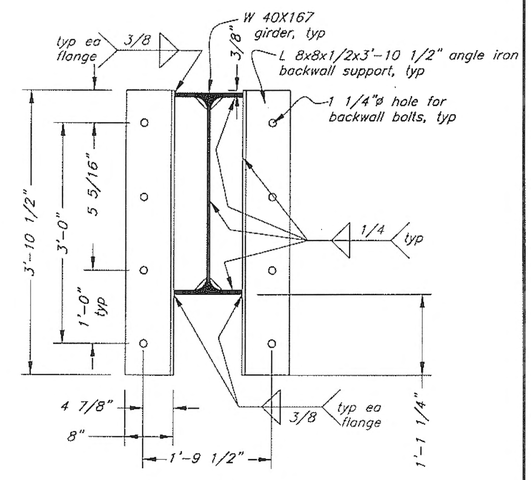
Framing Layout – Span 1 & 11 shown
Span 10 – mirror image



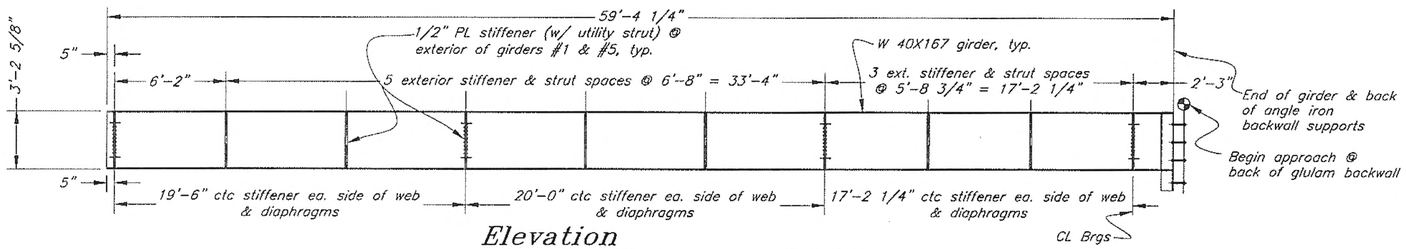
Section thru Span 1



Section @ Mid-height of Web



Section Thru Girder
(looking back at abutment)



Elevation
Girder #5, Span 1 & 11
(Girder #1 opposite hand of Girder #5)

Backwall Support Angle Attachment & Stiffeners

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.
PE _____ Date 8/21/12

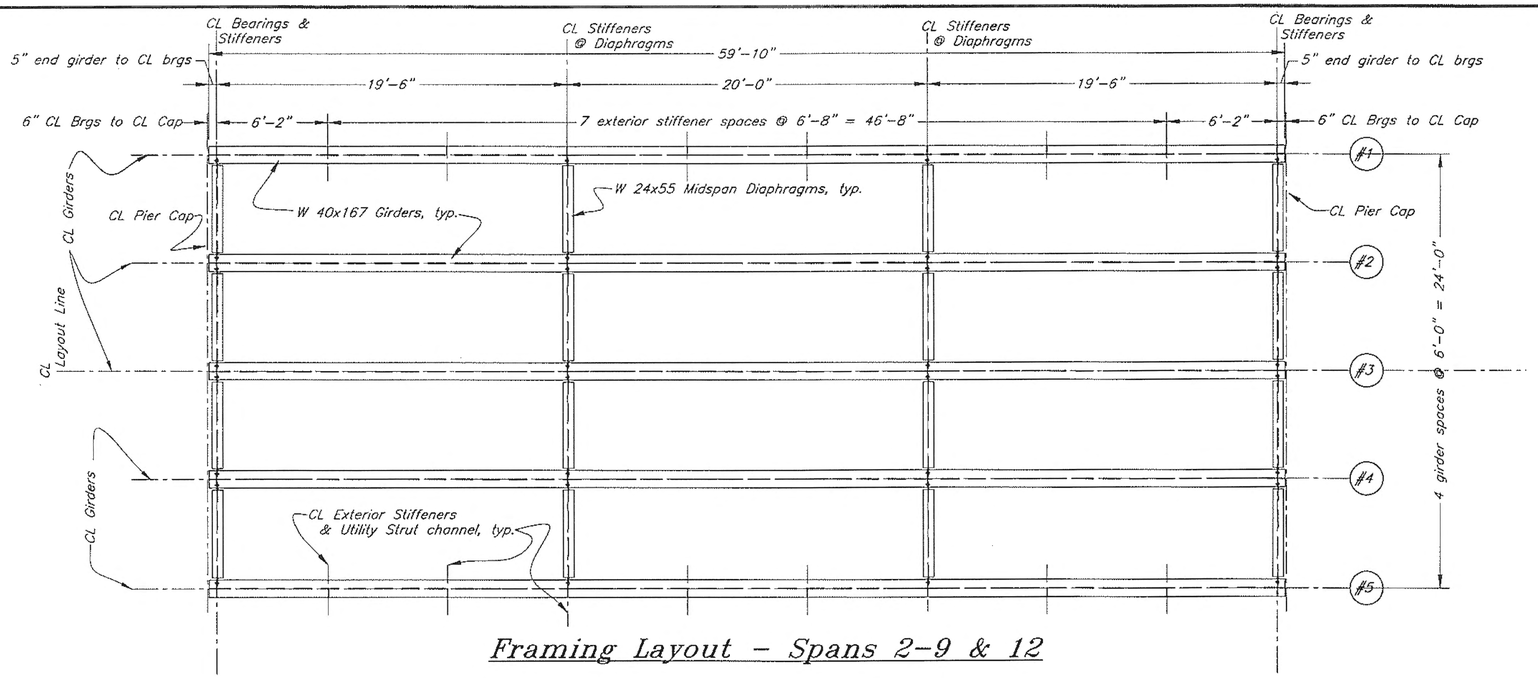
DESIGNED BY: J. Scott
STATE OF ALASKA 49th John T. Scott CE-4755 REGISTERED PROFESSIONAL ENGINEER
11-26-08
CHECKED BY: B. Sowiko
DRAWN BY: C. Fuman, W. Hickok
PATH O:\GUS\67599\MF\PLANSET\03-APPROACH\AP14 APPROACH FRAMING SPAN 1.DWG
TAB Tue, 25/Nov/08 07:43PM JTSCOTT

REVISIONS NO.	DATE	DESCRIPTION

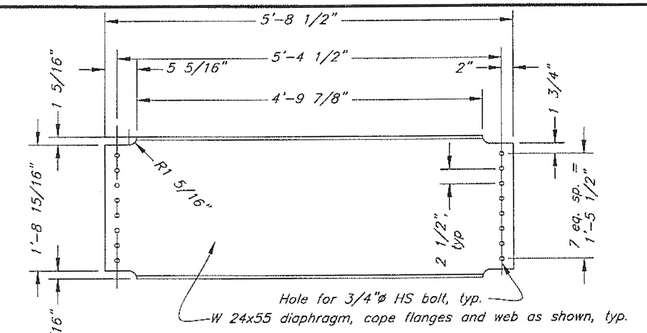
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement
APPROACH FRAMING
SPAN 1 & 11,
Span 10 (mirror image)
AP14

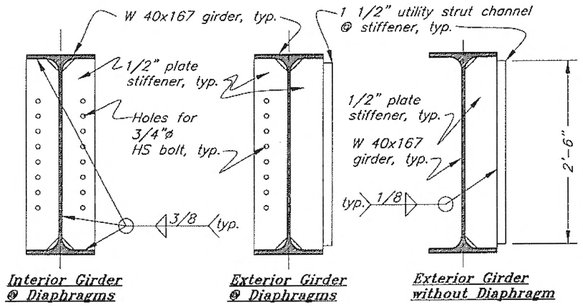
PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-0003(53)/67599	2008	24	138



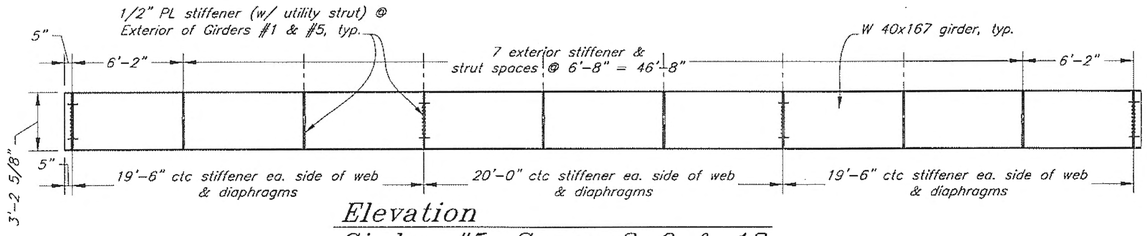
Framing Layout – Spans 2–9 & 12



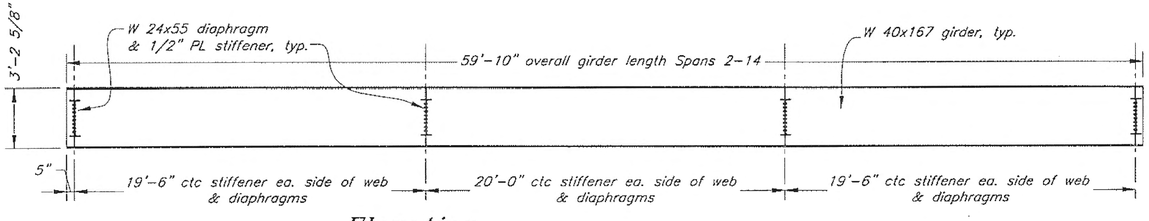
Elevation W 24x55 Diaphgram



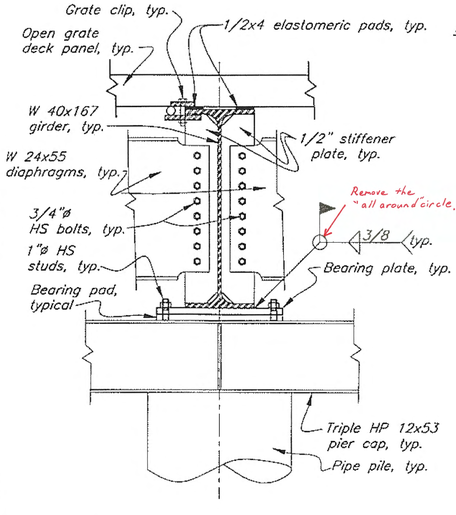
Section Views of W 40x167 Girders



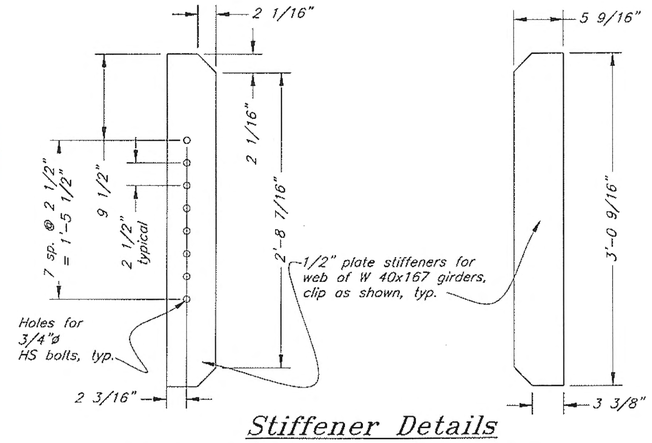
Elevation
Girder #5, Spans 2–9 & 12
(Girder #1 opposite hand of Girder #5)



Elevation
Girders #2 – #4, Spans 2–9 & 12
(Girder #1 opposite hand of Girder #5)



Section View @ Bearings of W 40x167 Girders



Stiffener Details

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.
PE _____ Date 8/21/12

DESIGNED BY: J. Scott
STATE OF ALASKA 49th
John T. Scott CE-4755 REGISTERED PROFESSIONAL ENGINEER
11-24-08
CHECKED BY: B. Savikko
DRAWN BY: C. Fuman, W. Hickok

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

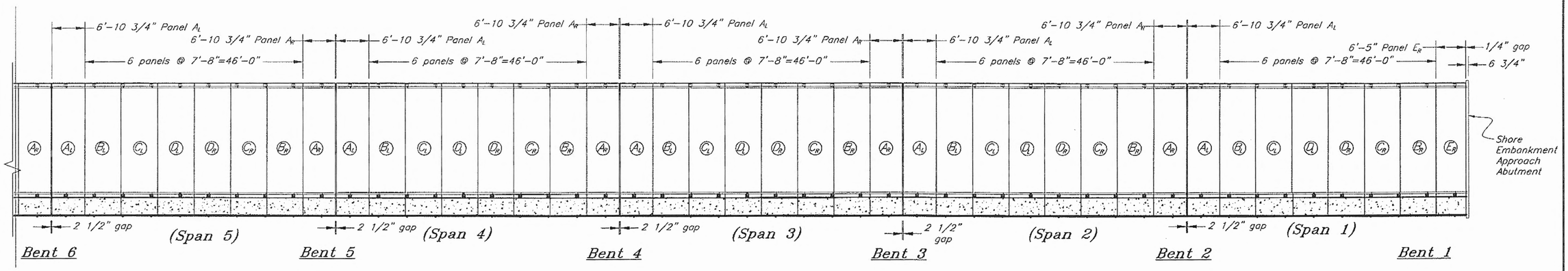
Approach Typical Framing

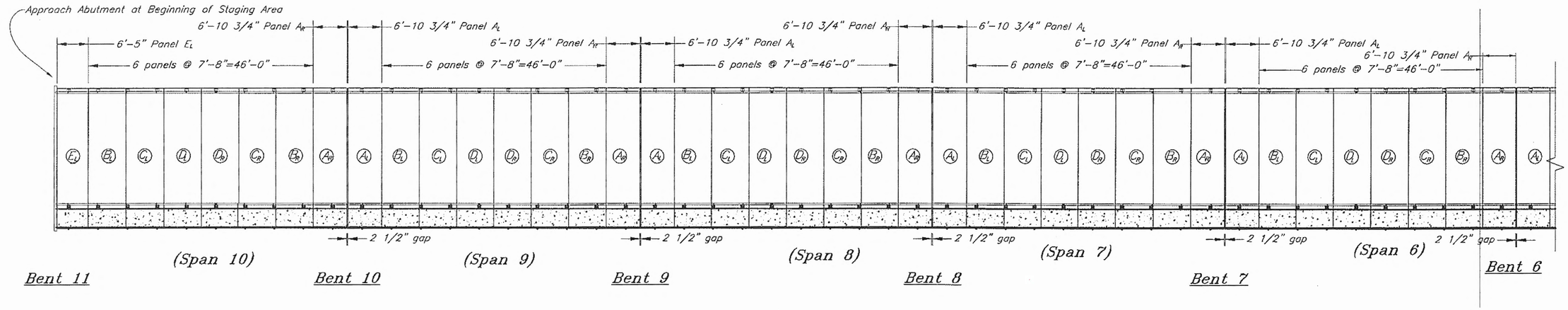
AP15

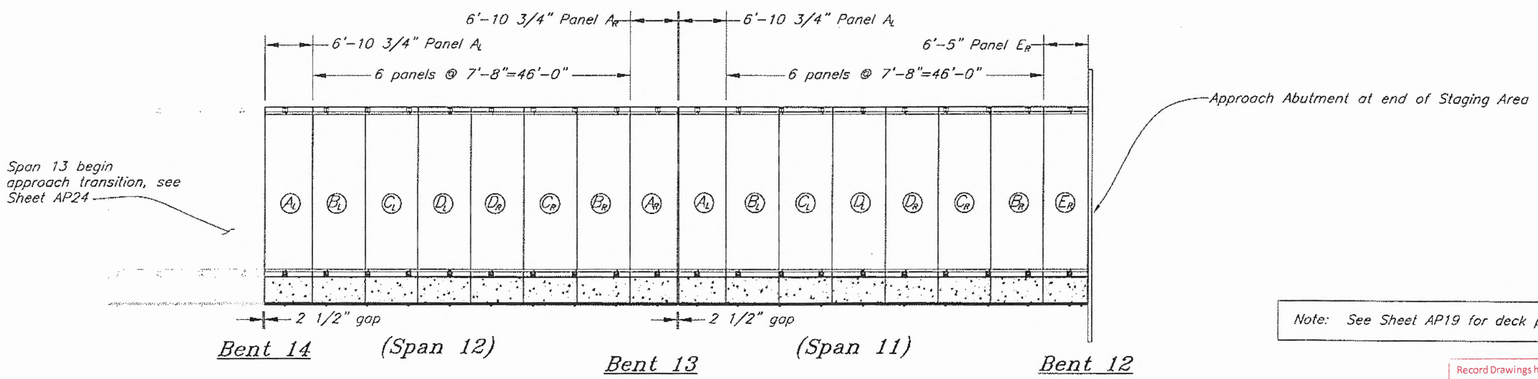
PATH: O:\CUS\67599\MF\PLANSET\03-APPROACH\AP15 APPROACH TYPICAL FRAMING.DWG
TAB: Wed, 26/Nov/08 02:13PM JTSCOTT

REVISIONS NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-0003(53)/67599	2008	25	138







Note: See Sheet AP19 for deck panel details

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.
PE _____ Date 5/4/17

Note:
Grating panels are 5" nominal thickness, galvanized, open grate steel w/ main bearing bars 5.52#/ft @ 7 1/2" centers & 1/4" supplemental cross bars @ 3 3/4" centers & 1/4" @ 1" bent truss bars. Actual thickness = 5 3/16" Fy req'd = 50 ksi

Grate Manufacturers include but are not limited to:
Bailey Bridges, Interlocking Deck Systems Int'l & LB Foster

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott
DRAWN BY: C. Fuman, W. Hickok
CHECKED BY: B. Savikko

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

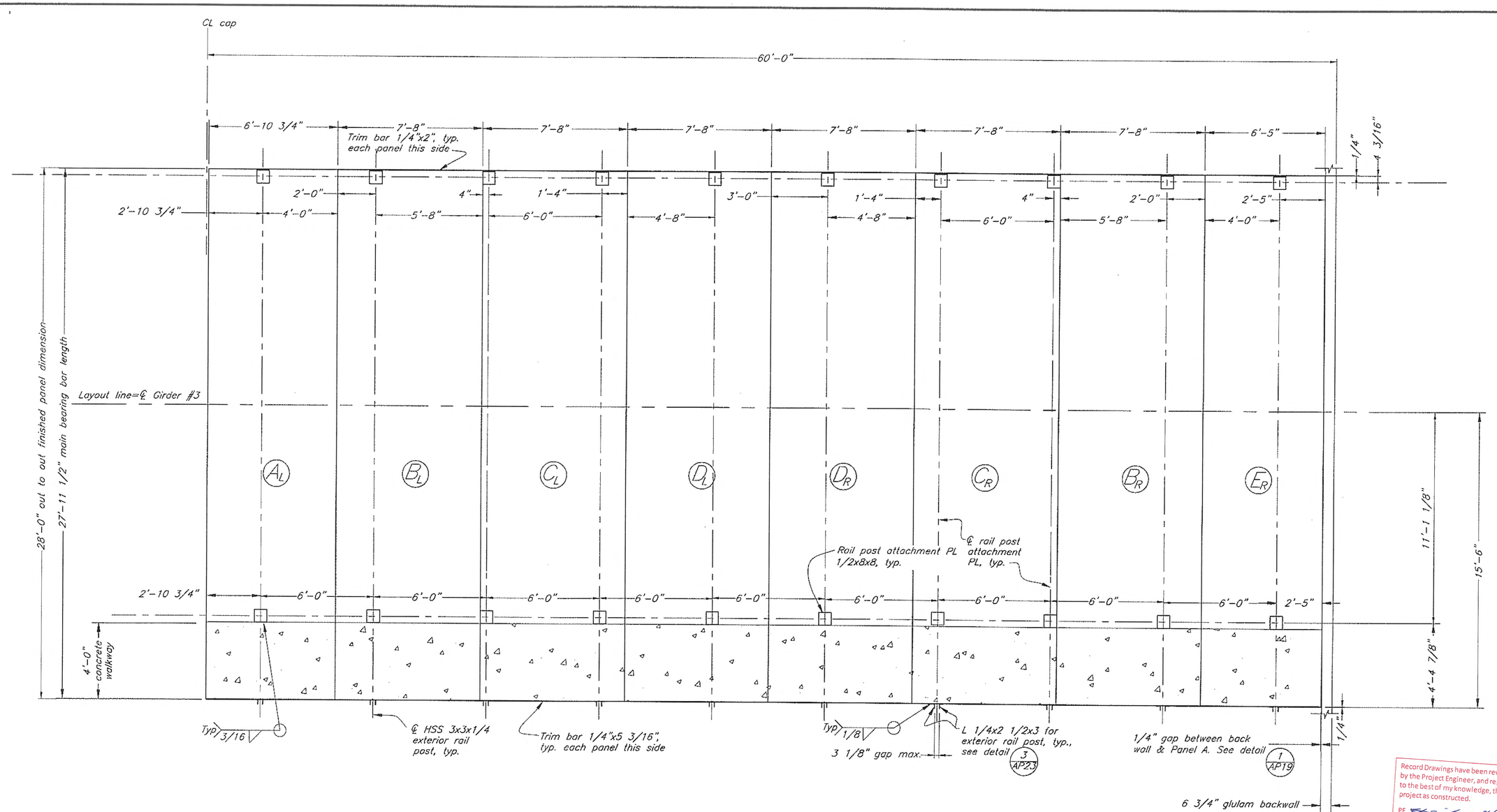
Approach Deck Panel Layout

AP16

PATH: O:\GUS\67599\MF\PLANSET\03-APPROACH\AP16 APPROACH DECK PANEL LAYOUT.DWG
TAB: Tue, 25/Nov/08 08:13PM JTSCOTT

REVISIONS NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-0003(53)/67599	2008	26	138



Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.
PE Date 3/21/12

Note: See Panel Layout Sheet AP16 for Span 10 panel callout

Deck Panel A, B, C, D & E
Span 1 & 11 (shown)
Span 10 – mirror image

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott
CHECKED BY: B. Savikko
DRAWN BY: C. Fuman, W. Hickok
PATH: O:\GUS\67599\MF\PLANSET\03-APPROACH\AP17 APPROACH DECK PANELS SPAN 1.DWG
TAB: Tue, 25/Nov/08 08:14PM JTSCOTT

STATE OF ALASKA
John T. Scott CE-4755 REGISTERED PROFESSIONAL ENGINEER 49th
11-26-08

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

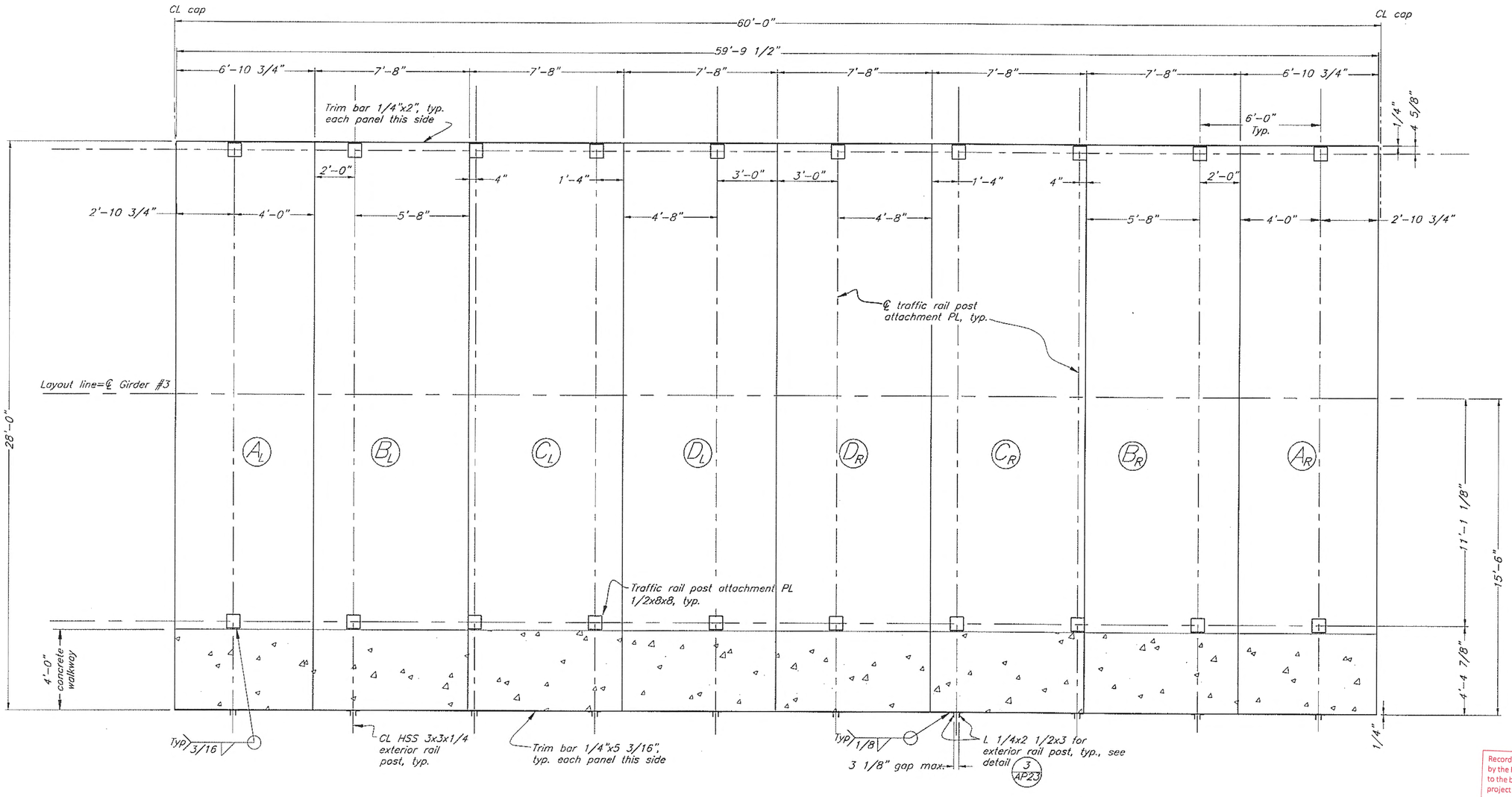
Gustavus Causeway Replacement

Spans 1, 10 & 11 Approach Deck Panels

AP17

REVISIONS NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-0003(53)/67599	2008	27	138



Deck Panels A, B, C, & D
Spans 2-9 & 12

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.

PE Date 8/24/12

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott

STATE OF ALASKA · 49th · John T. Scott 25 · CE-4755 · REGISTERED PROFESSIONAL ENGINEER

11-26-08

CHECKED BY: B. Sovikko

DRAWN BY: C. Fuman, W. Hickok

PATH: O:\GUS\67599\MF\PLANSET\03-APPROACH\AP18 APPROACH DECK PANELS SPAN 2-9 & 12

TAB: Tue, 25/Nov/08 08:15PM JTSCOTT

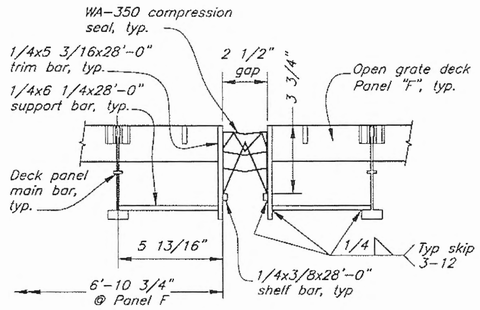
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

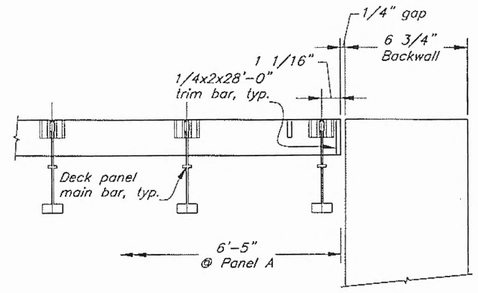
Spans 2-9 & 12 Approach Deck Panels

AP18

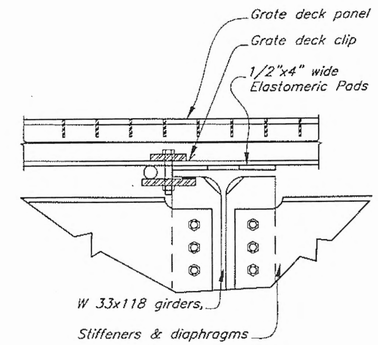
REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			BR-0003(53)/67599	2008	28	138



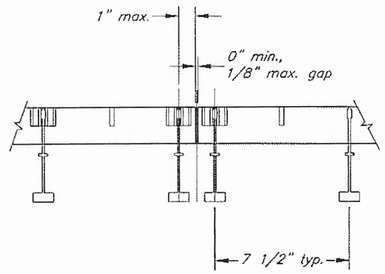
Panel Gap Detail @ Bents



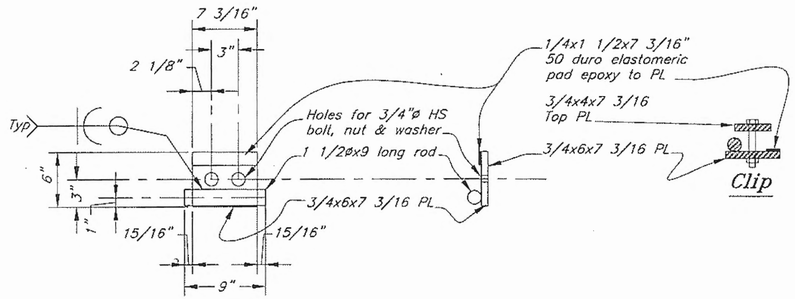
Panel Gap Detail @ Abutment (1 / AP17)



Section

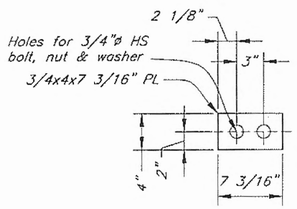


Typical Grating Joint

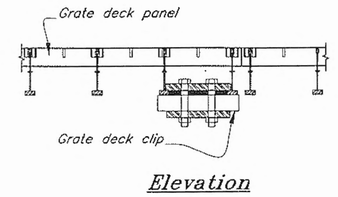


Plan

Clip

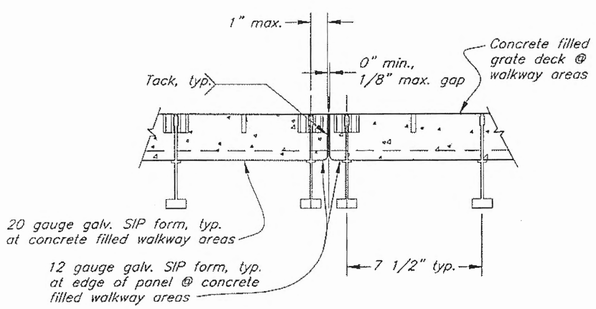


Top Plate



Elevation

Approach & Transition Deck Clip Assemblies



Grating Joint @ Concrete Walkway

Clip Assembly for Grate Decking

(2 clip sets per Girder per Panel)

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.

PE ~~SK~~ Date 3/21/12

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott

STATE OF ALASKA · 49th · John I. Scott · CE-4755 · REGISTERED PROFESSIONAL ENGINEER · 11-24-08

CHECKED BY: B. Savikko

DRAWN BY: C. Fuman, W. Hickok

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

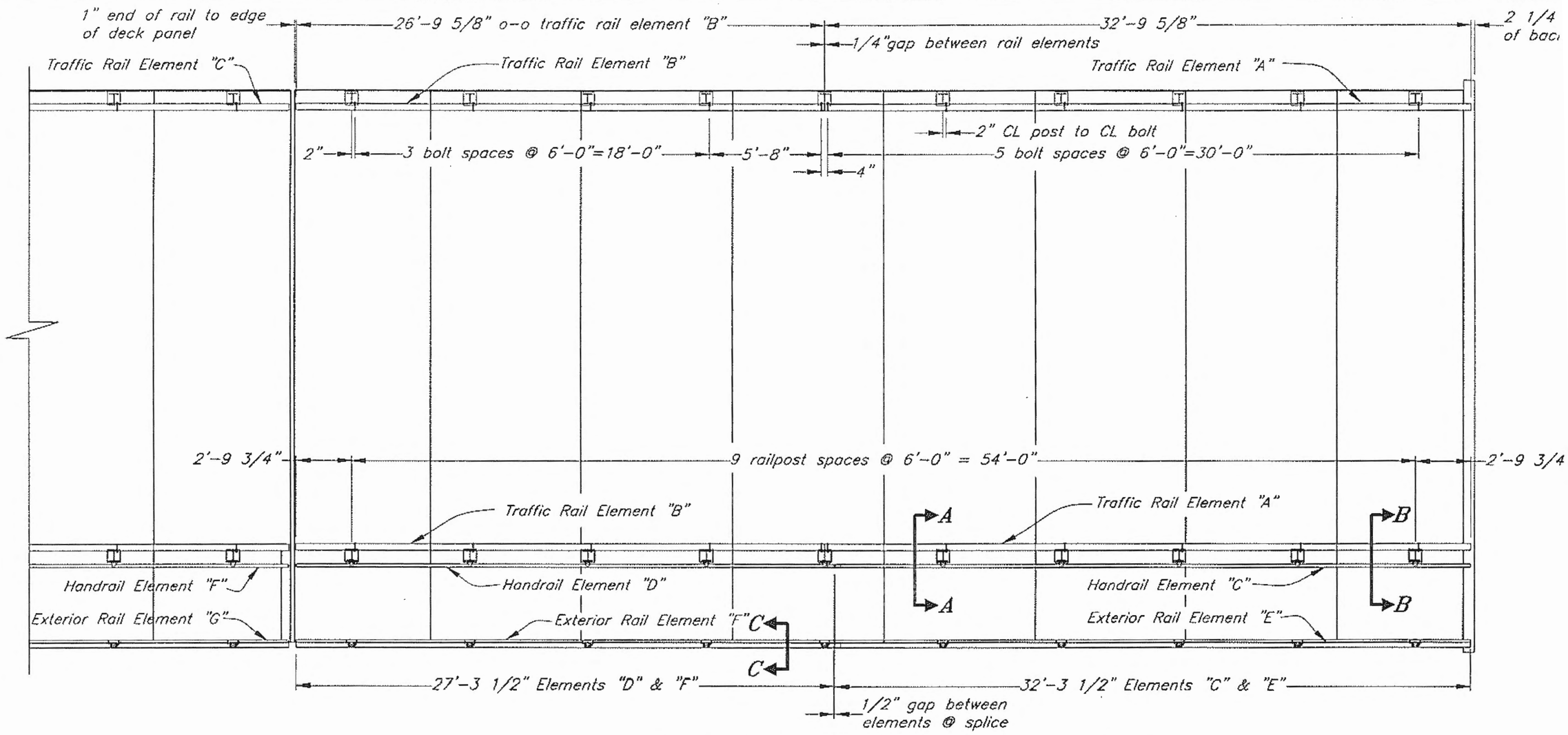
Approach Deck Panel Details

AP19

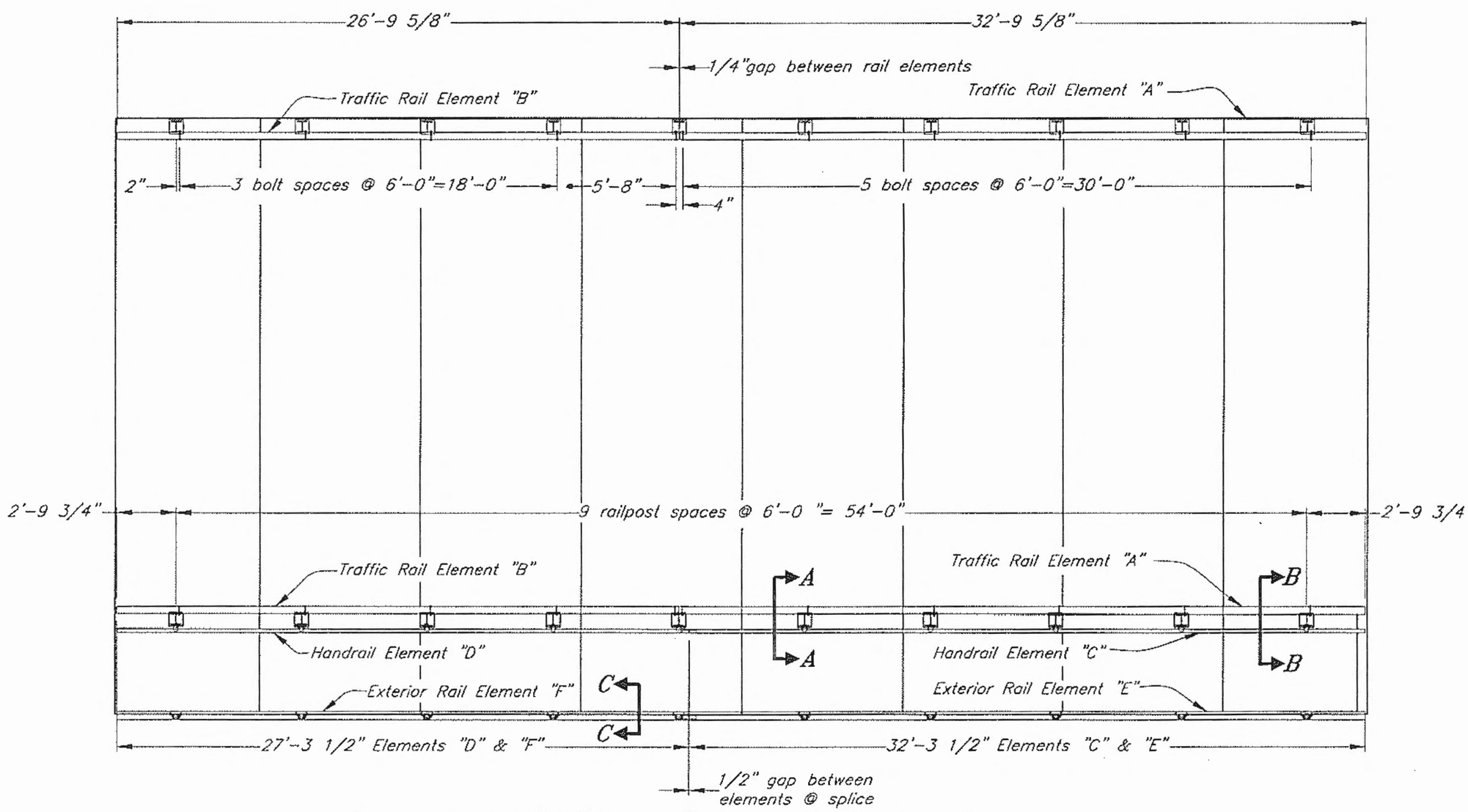
PATH: O:\GUS\67599\MF\PLANSET\03-APPROACH\AP19 APPROACH DECK PANEL DETAILS.DWG

TAB: Wed, 26/Nov/08 02:22PM JTSCOTT

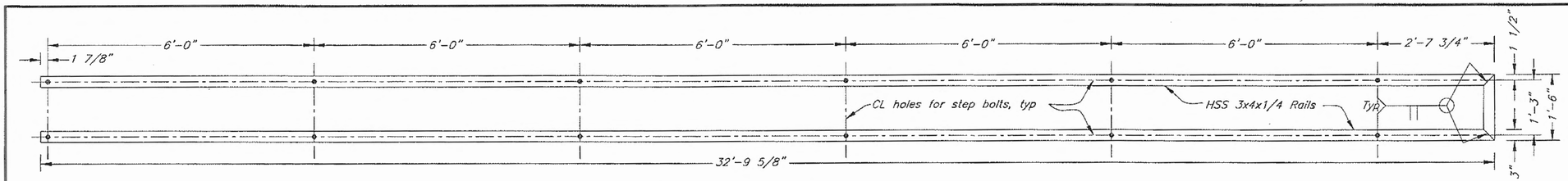
REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			BR-0003(53)/67599	2008	29	138



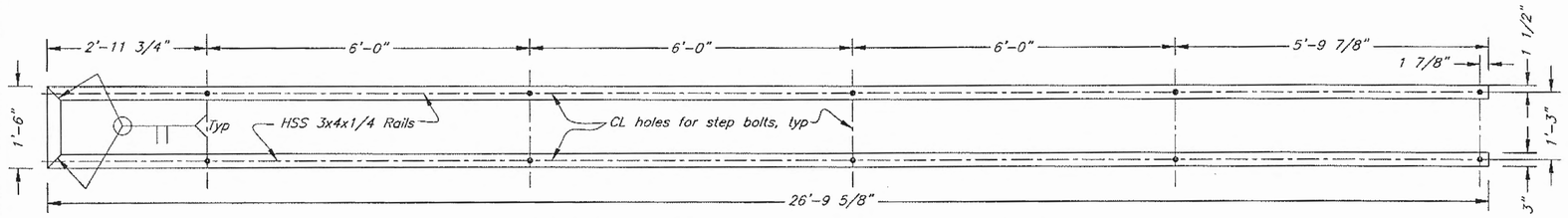
Approach Rails - Span 1 & 11
Span 10 (mirror image @ CL Pier)



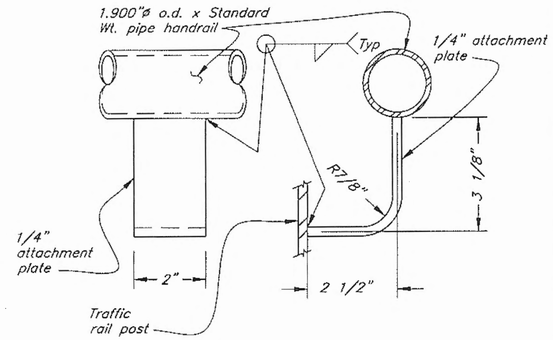
Approach Rails - Spans 2-9 & 12



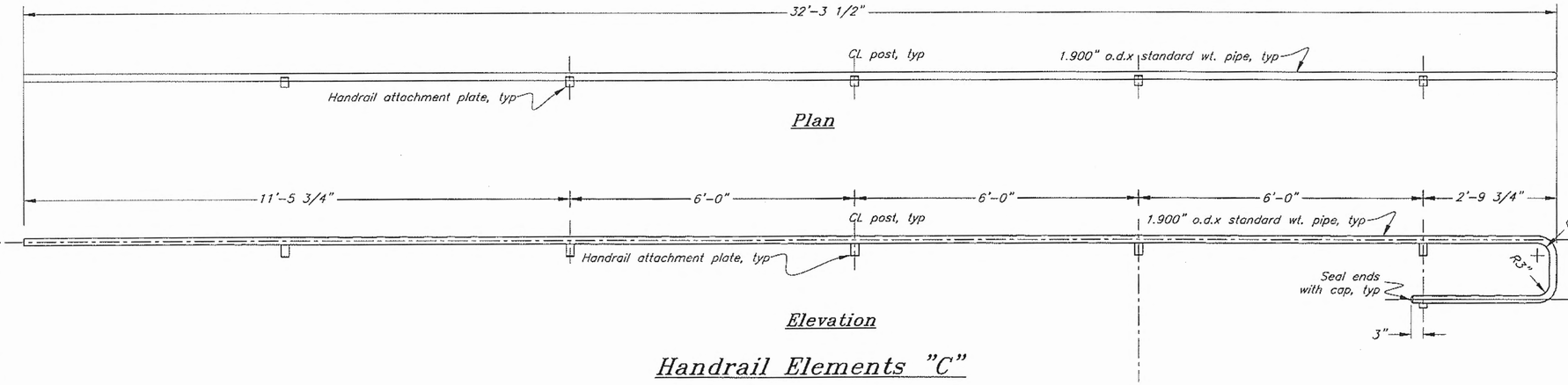
Traffic Rail Elements "A" Elevation



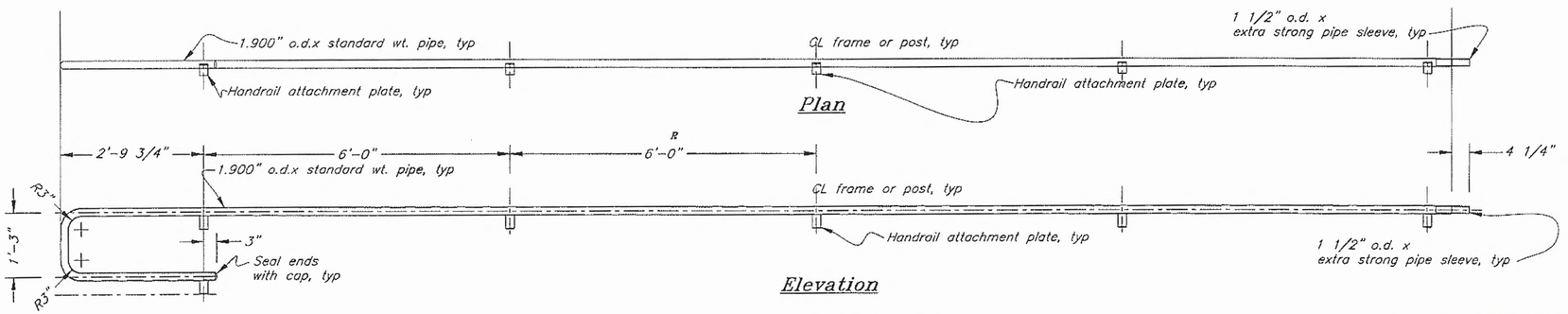
Traffic Rail Elements "B" Elevation



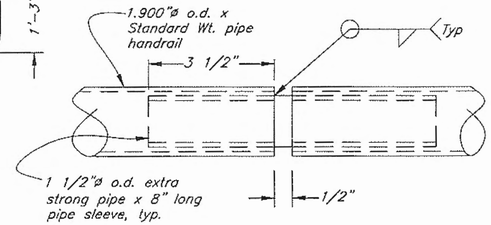
Pedestrian Handrail Attachment Plate



Handrail Elements "C"



Handrail Elements "D"



Handrail Splice Detail

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.
PE Date 8/21/12

DESIGNED BY: J. Scott
CHECKED BY: B. Savikko
DRAWN BY: C. Fuman, W. Hickok
PATH: O:\GUS\67599\MF\PLANSET\03-APPROACH\AP21 RAIL ELEMENTS.DWG
TAB: Tue, 25/Nov/08 08:18PM JTSCOTT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

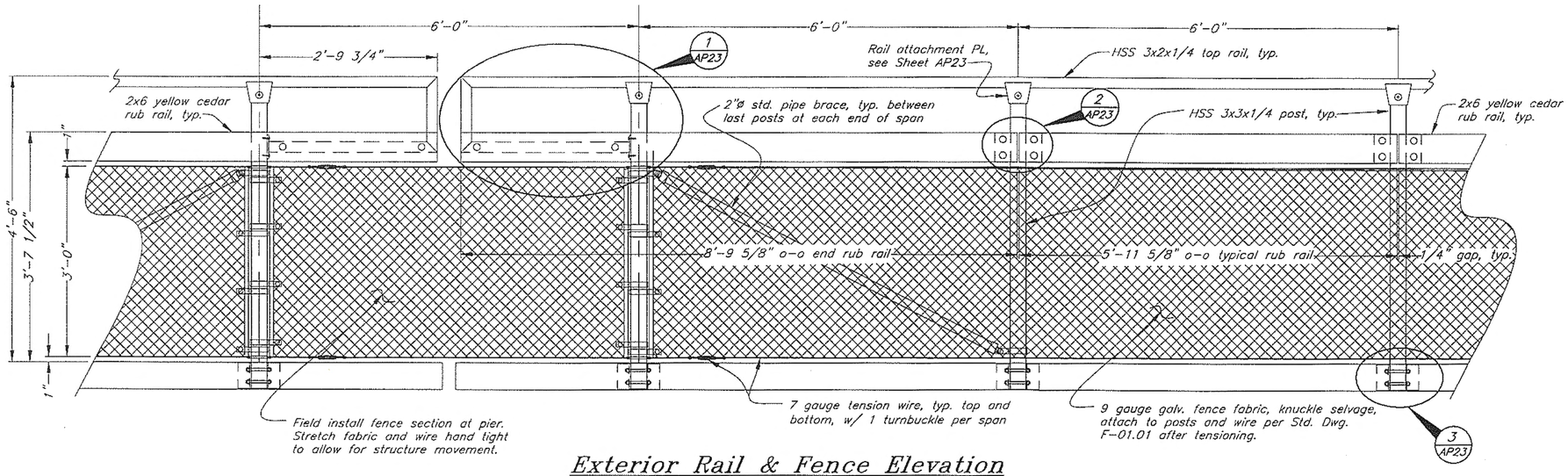
Rail Elements

AP21

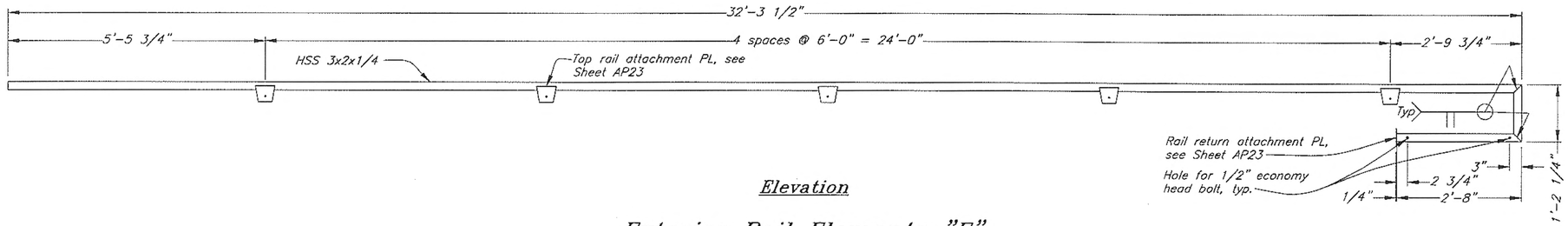
STATE OF ALASKA 49th John T. Scott CE-4755 REGISTERED PROFESSIONAL ENGINEER 11-26-08

REVISIONS NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-0003(53)/67599	2008	31	138

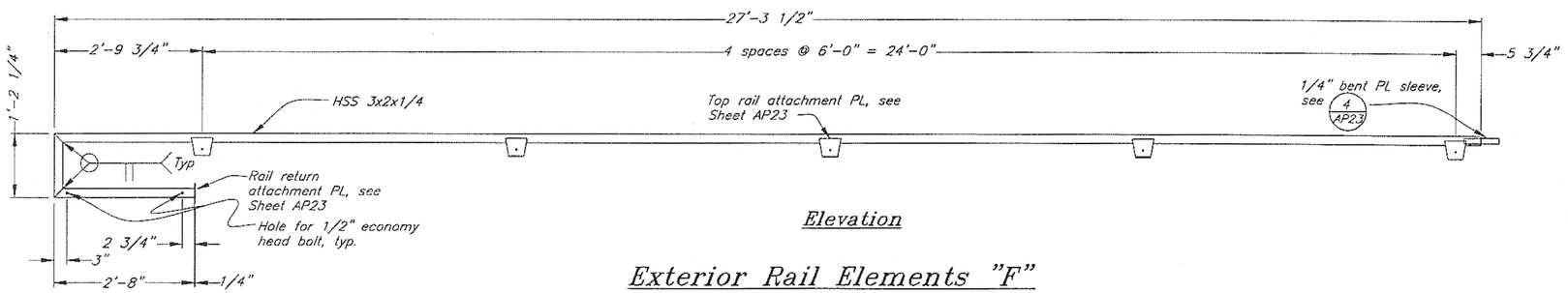


Exterior Rail & Fence Elevation
(from inside)



Elevation

Exterior Rail Elements "E"



Elevation

Exterior Rail Elements "F"

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.

PE _____ Date 5/21/12

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott

STATE OF ALASKA
49th
John T. Scott
CE-4755
REGISTERED PROFESSIONAL ENGINEER
11-26-08

CHECKED BY: B. Savikko

DRAWN BY: C. Fumon, W. Hickok

PATH: O:\GUS\67599\MF\PLANSET\03-APPROACH\AP22 EXTERIOR RAIL ELEMENTS.DWG

TAB: Tue, 25/Nov/08 08:19PM JTSCOTT

REVISIONS

NO.	DATE	DESCRIPTION

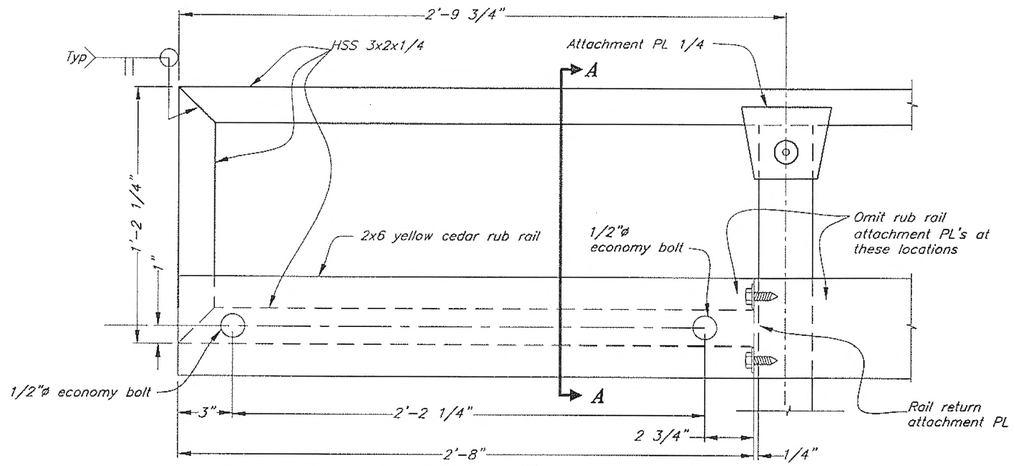
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

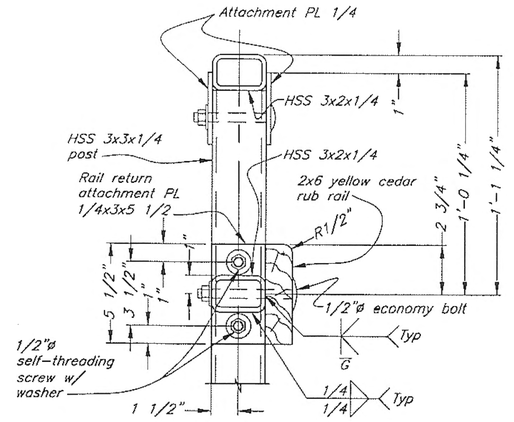
Exterior Rail and Fence

AP22

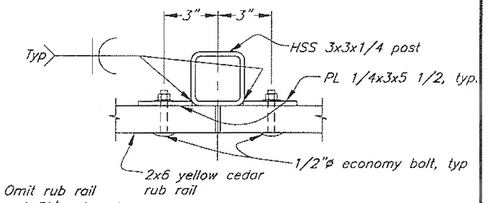
PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-0003(53)/67599	2008	32	138



Detail 1 / Rail Return AP22

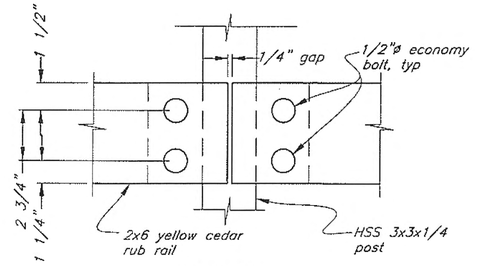


Section A-A / Rail Return



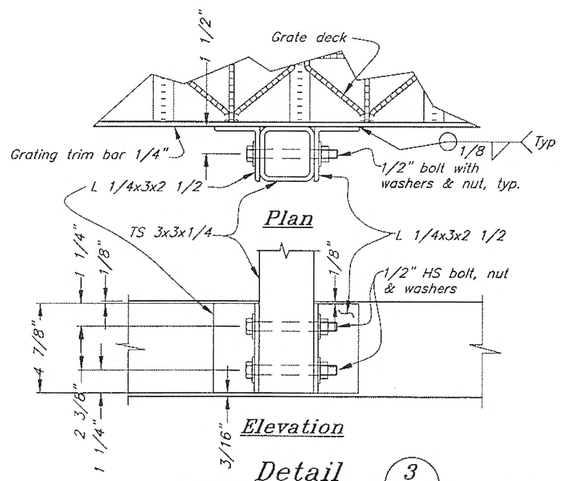
Note: Omit rub rail attachment PL's at end posts w/ lower rail return or where otherwise noted

Plan



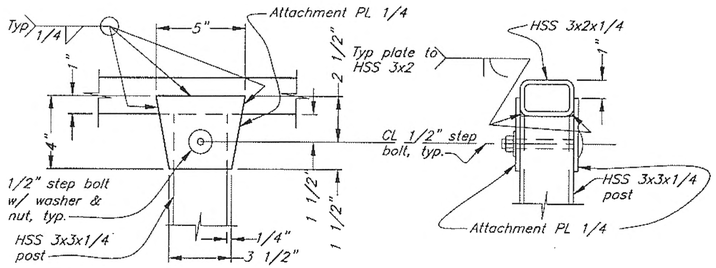
Elevation

Detail 2 / Rub Rail Attachment AP22



Elevation

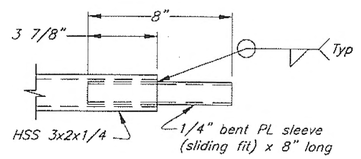
Detail 3 / Post Attachment AP17,AP18,AP22



Front View

Side View

Exterior Rail Attachment Plate



Top Rail Splice Sleeve 4 / AP22

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.

PE Stan Mitt Date 8/21/17

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott
DRAWN BY: C. Fumen, W. Hickok
CHECKED BY: B. Savikko

STATE OF ALASKA
49th
John T. Scott
CE-4755
REGISTERED PROFESSIONAL ENGINEER
11.26.08

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

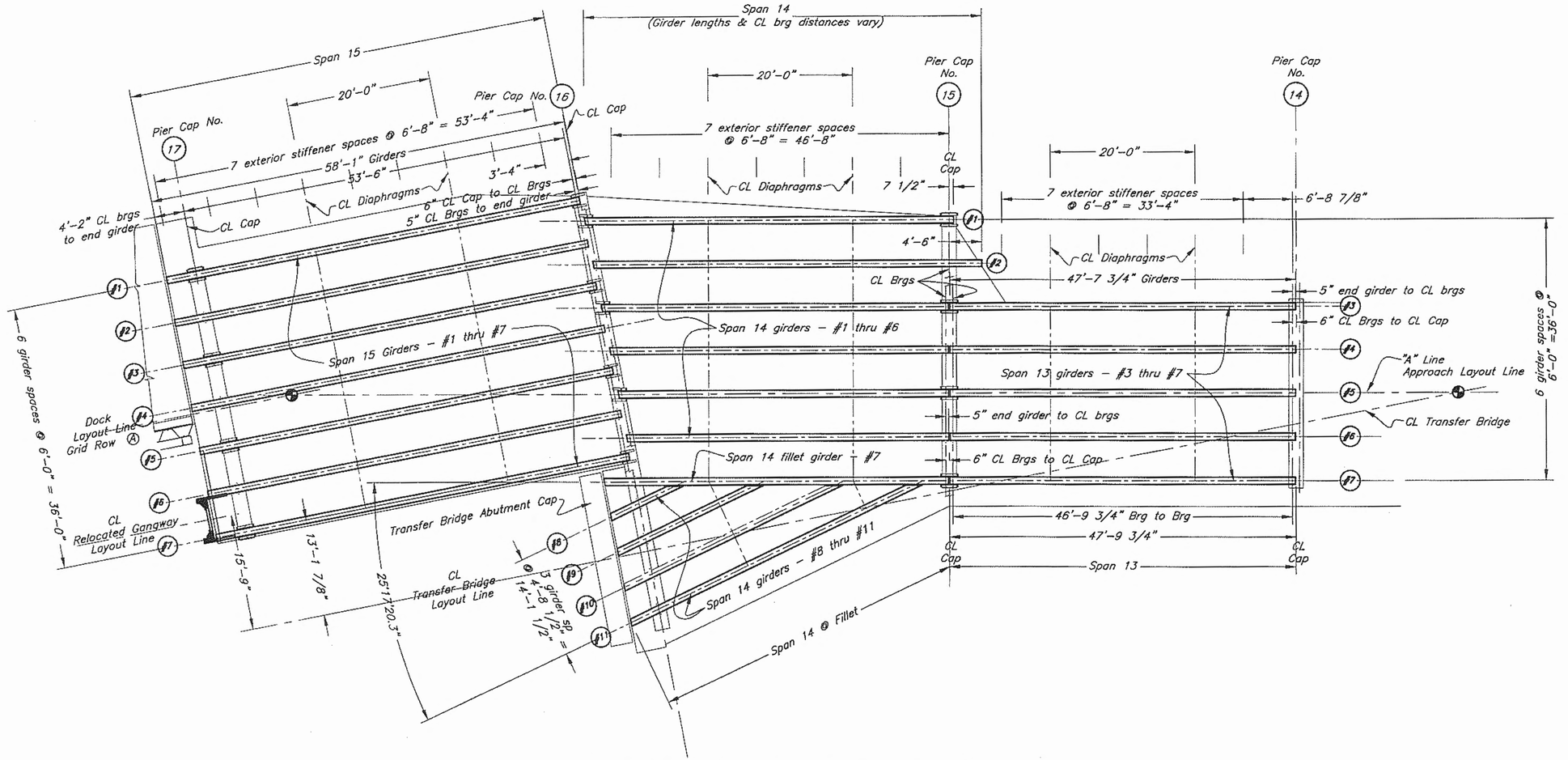
Exterior Rail and Fence Details

AP23

PATH: O:\GUS\67599\MF\PLANSET\03-APPROACH\AP23 EXTERIOR RAIL DETAILS.DWG
TAB: Tue, 25/Nov/08 08:20P.M. JTSCOTT

REVISIONS NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-0003(53)/67599	2008	33	138



Approach Transition Framing Layout

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.

PE _____ Date 5/21/13

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

STATE OF ALASKA 49th John T. Scott CE-4755 REGISTERED PROFESSIONAL ENGINEER

CHECKED BY: B. Savikko 11-26-08

DRAWN BY: C. Fuman, W. Hickok

Gustavus Causeway Replacement

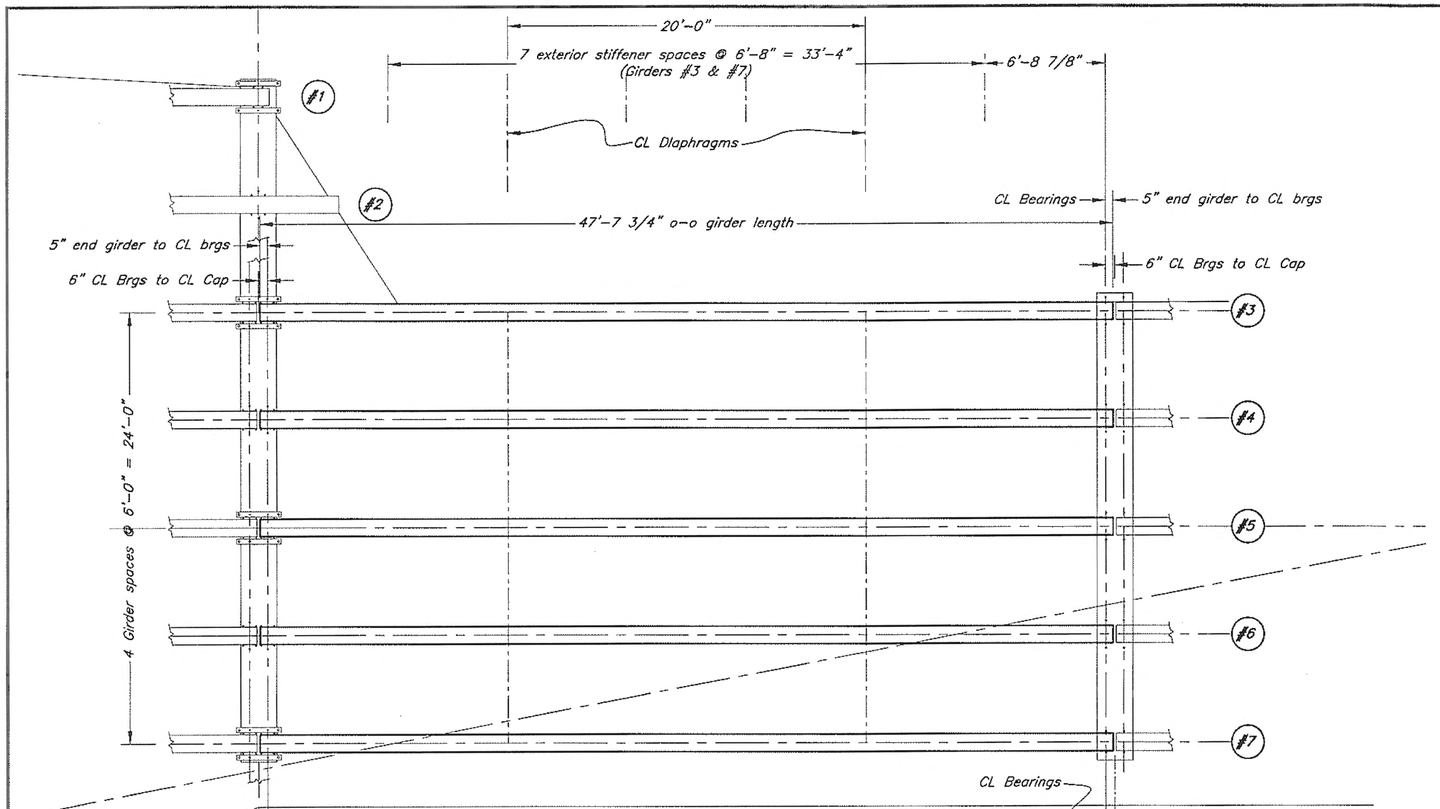
Approach Transition Framing Layout

AP24

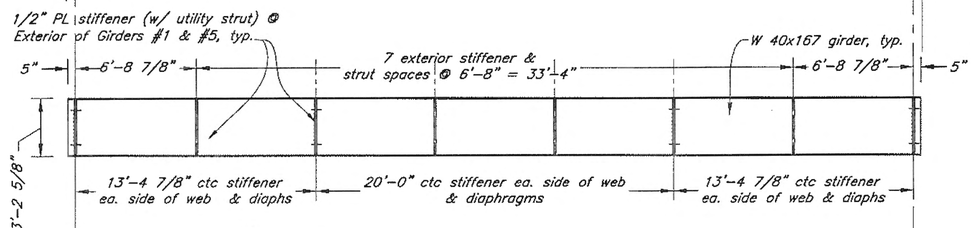
PATH: O:\GUS\67599\MF\PLANSET\03-APPROACH\AP24 TRANSITION FRAMING LAYOUT.DWG

TAB: Tue, 25/Nov/08 08:21PM JTSCOTT

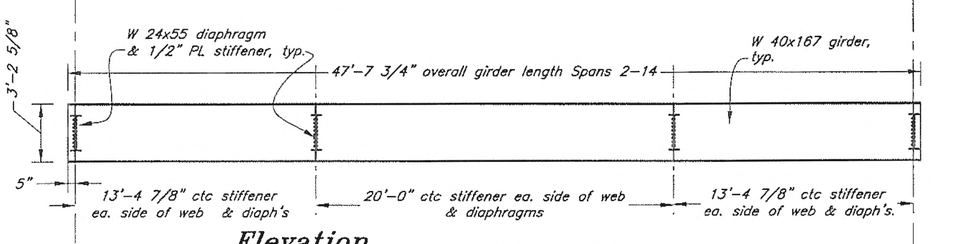
REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
			BR-0003(53)/67599	2008	34	138



Span 13 - Framing Layout



Elevation
Girder #7 @ Span 13
(Girder #3 opposite hand of Girder #7)



Elevation
Girders #4 - #6, Span 13
(Girder #3 opposite hand of Girder #7)

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.

PE Steven Mallot Date 8/21/13

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott

STATE OF ALASKA
49th
Registered
John T. Scott
CE-4755
PROFESSIONAL ENGINEER
11.26.08

CHECKED BY: B. Savikko

DRAWN BY: C. Fuman, W. Hickok

PATH: O:\GUS\67599\MF\PLANSET\03-APPROACH\AP25 TRANSITION FRAMING SPAN 13.DWG

TAB: Wed, 26/Nov/08 10:09AM JTSCOTT

REVISIONS		
NO.	DATE	DESCRIPTION

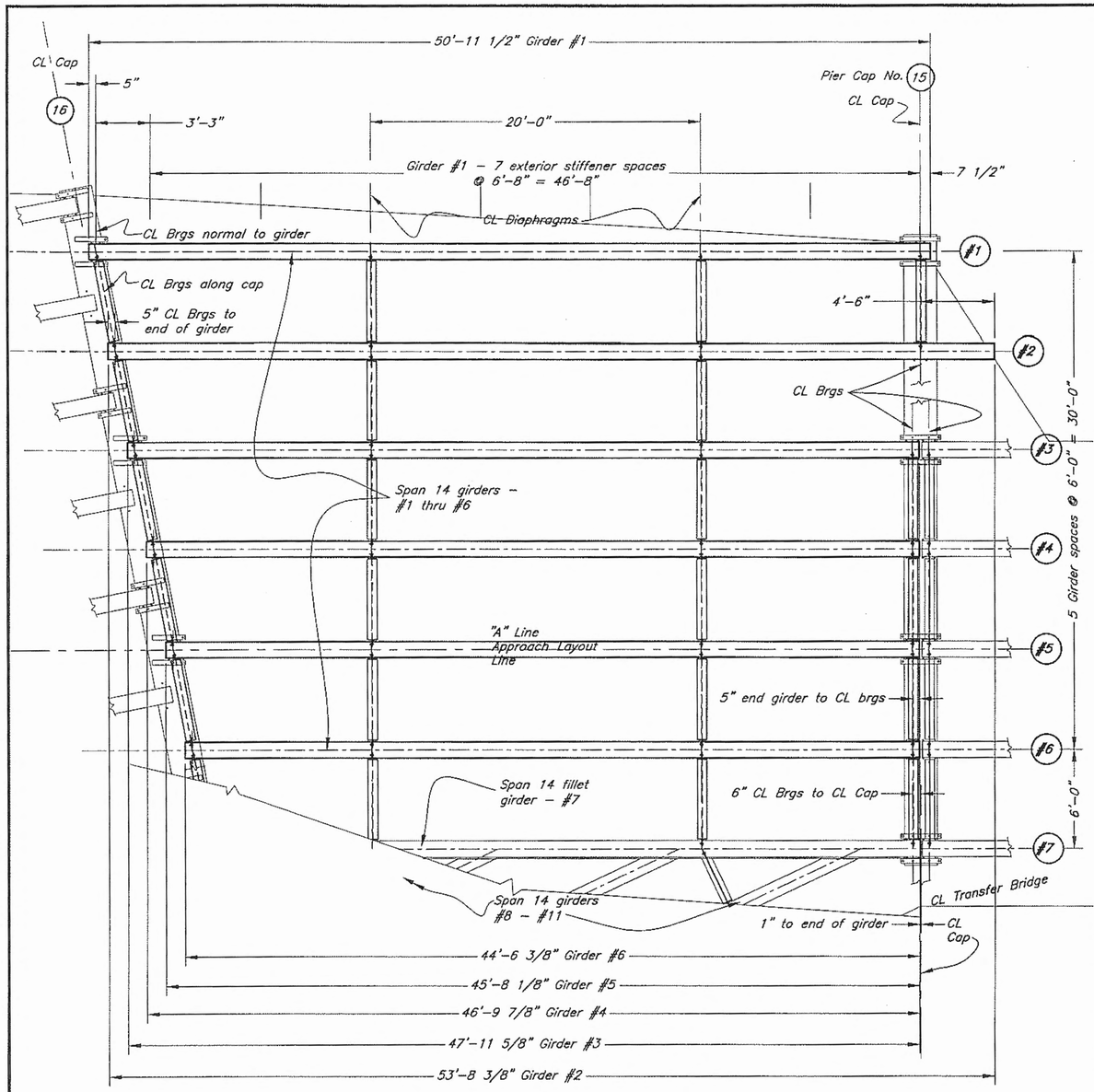
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

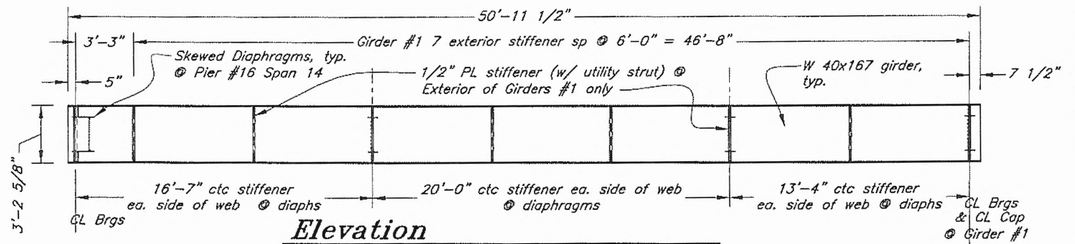
Approach Transition Framing Span 13

AP25

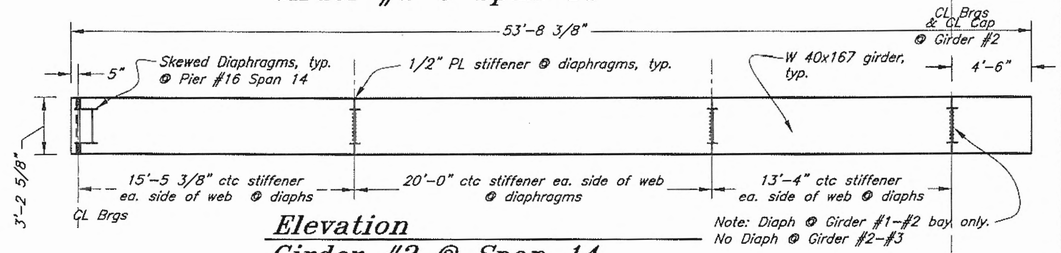
PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-0003(53)/67599	2008	35	138



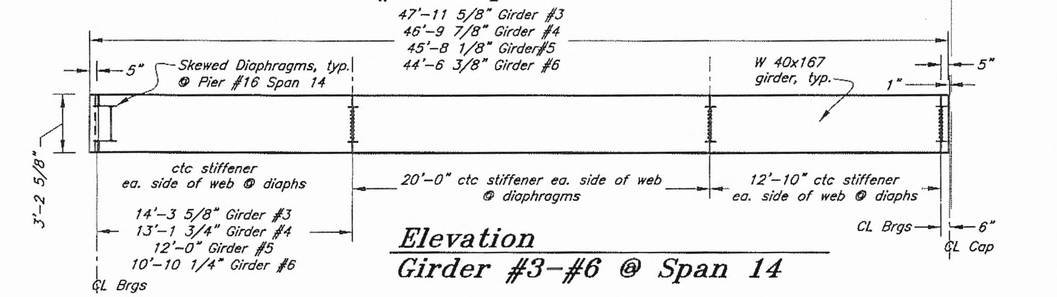
Span 14 - Framing Layout



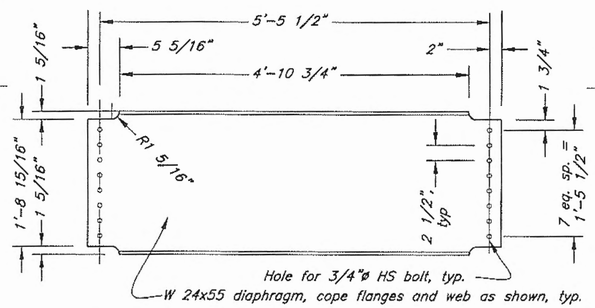
Elevation Girder #1 @ Span 14



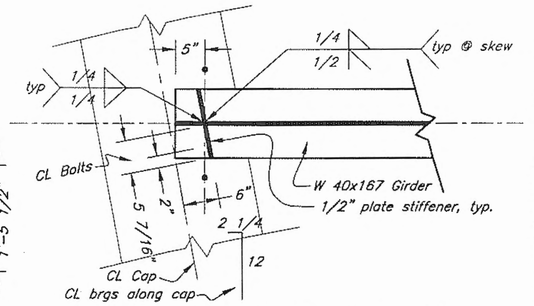
Elevation Girder #2 @ Span 14



Elevation Girder #3-#6 @ Span 14



Elevation Skewed W 24x55 Diaphragm @ Pier 16



Skew Diaph. @ Pier 16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.
PE [signature] Date 8/4/17

DESIGNED BY: J. Scott
CHECKED BY: B. Savikko
DRAWN BY: C. Fuman, W. Hickok
PATH: O:\GUS\67599\MF\PLANSET\03-APPROACH\AP26 TRANSITION FRAMING SPAN 14-1.DWG
TAB: Wed, 26/Nov/08 10:16AM JTSCOTT

STATE OF ALASKA
John T. Scott CE-4755 REGISTERED PROFESSIONAL ENGINEER
11.26.08

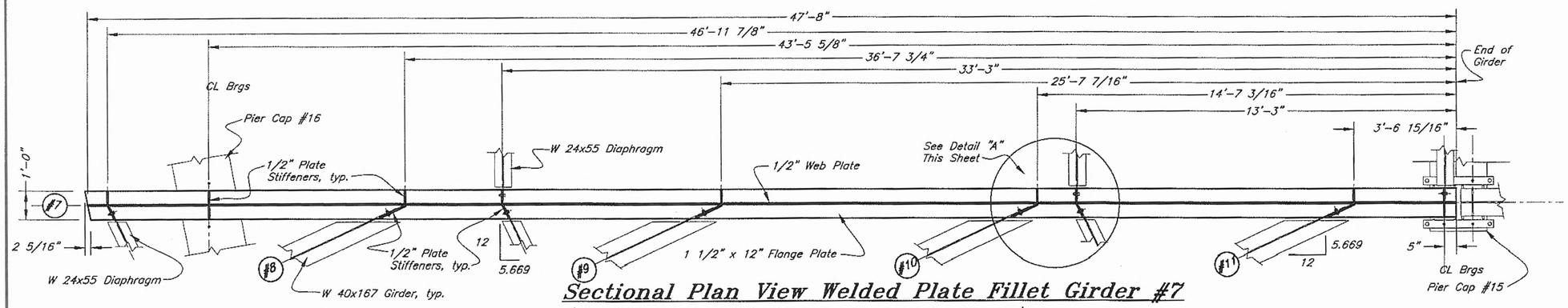
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

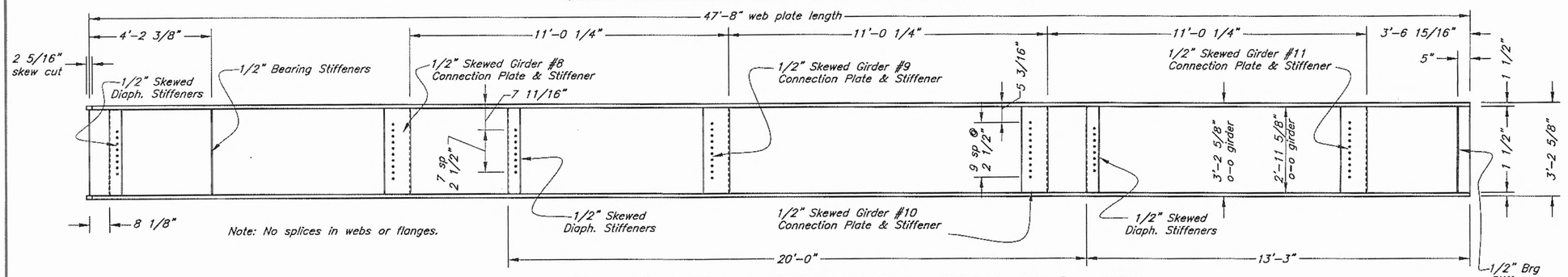
Approach Transition Framing Span 14

AP26

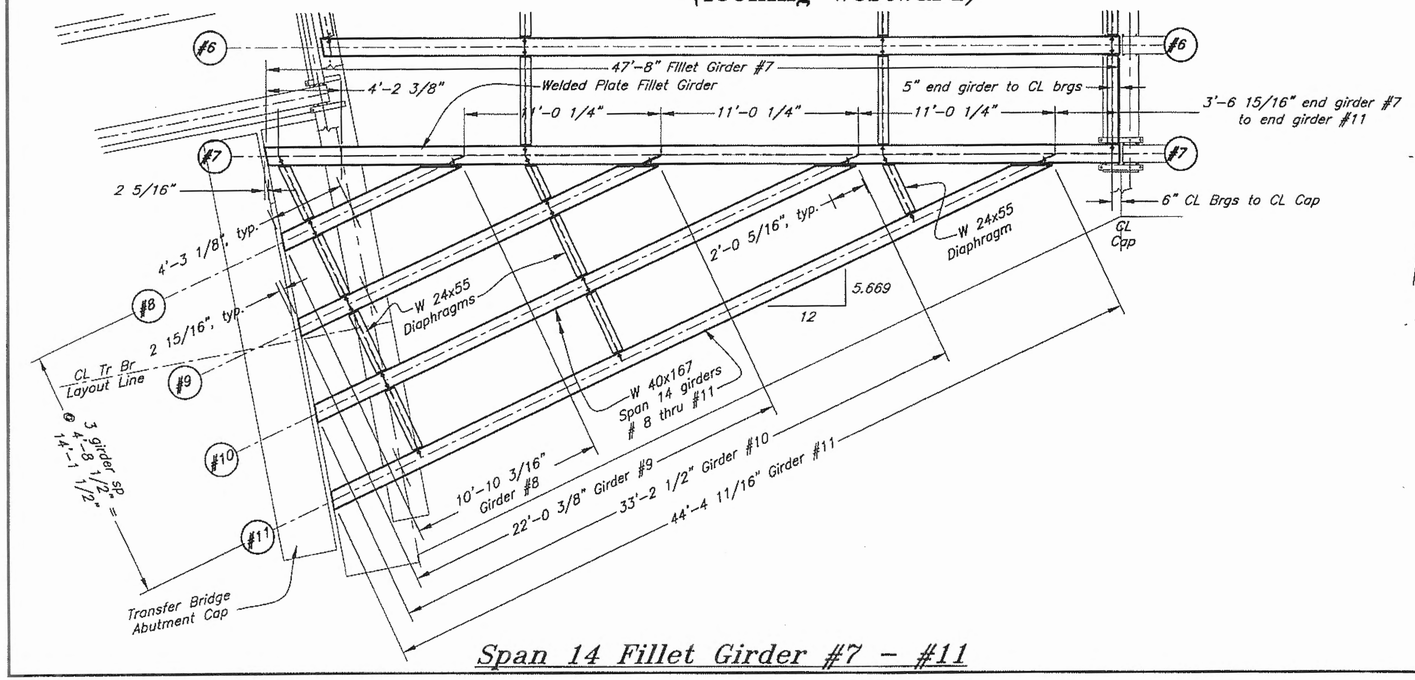
REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			BR-0003(53)/67599	2008	36	138



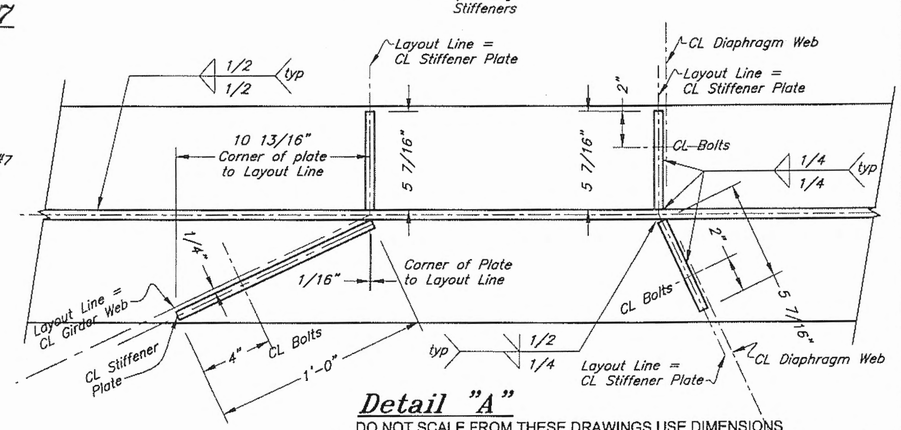
Sectional Plan View Welded Plate Fillet Girder #7
(Section @ mid-height of web plate)



Elevation View Welded Plate Fillet Girder #7
(looking Westward)



Span 14 Fillet Girder #7 - #11



Detail "A"

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.
PE _____ Date 8/21/09

DESIGNED BY: J. Scott
CHECKED BY: B. Savikko
DRAWN BY: C. Fuman, W. Hickok
PATH: O:\GUS\67599\MF\PLANSET\03-APPROACH\AP27 TRANSITION FRAMING SPAN 14-2.DWG
TAB: Wed, 26/Nov/08 10:28AM JTSCOTT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

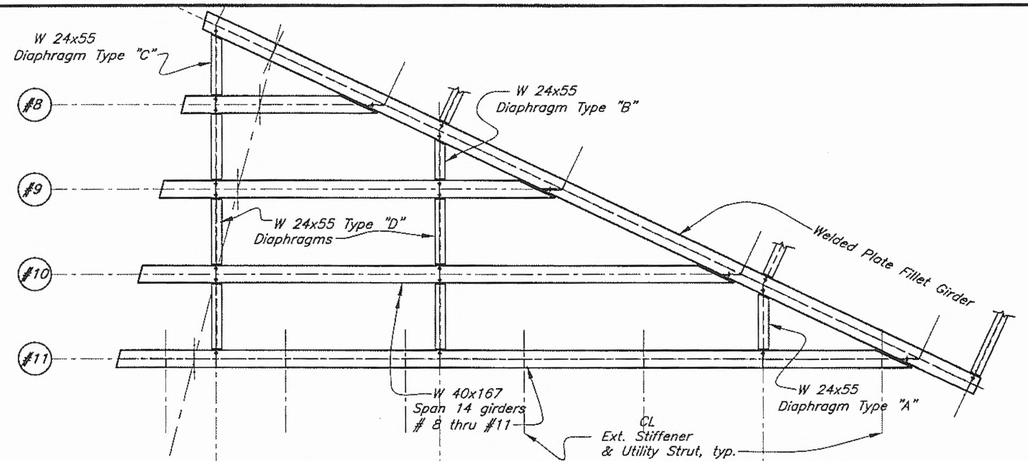
Gustavus Causeway Replacement

Approach Transition Framing Span 14 Fillet

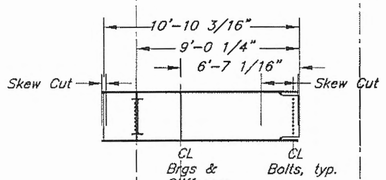
AP27

REVISIONS NO.	DATE	DESCRIPTION

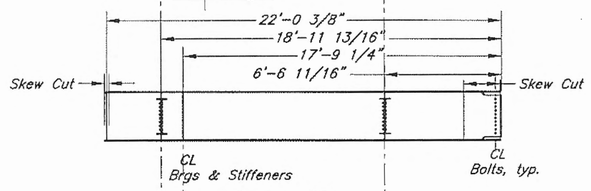
PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-0003(53)/67599	2008	37	138



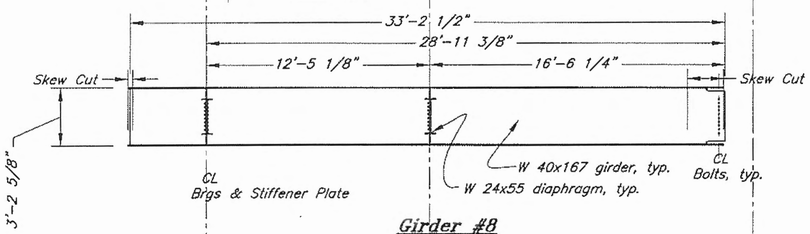
Layout Girders #8 - #11 @ Span 14



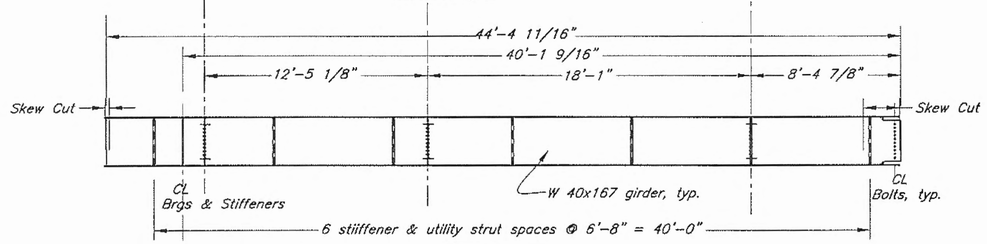
Girder #8



Girder #8

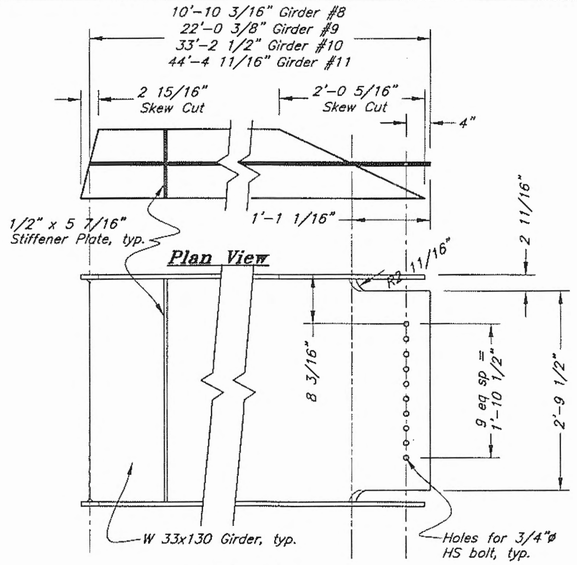


Girder #8



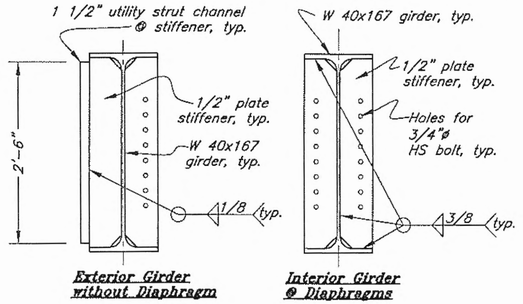
Girder #8

Elevation Girders #8 - #11 @ Span 14



Plan View

Elevation View

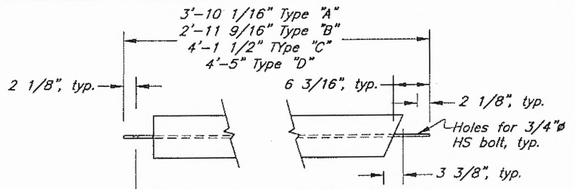


Exterior Girder without Diaphragm

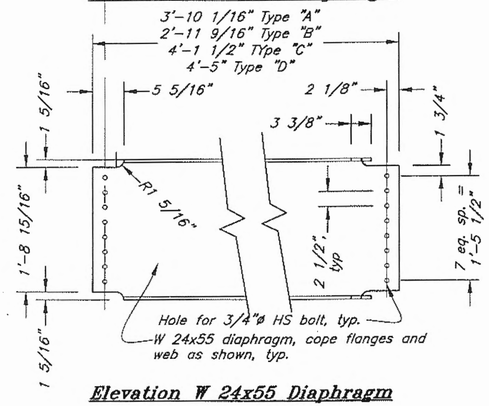
Interior Girder @ Diaphragms

Section Views

Skewed Girders #8 - #11



Plan View W 24x55 Diaphragm



Elevation W 24x55 Diaphragm

W 24x55 Diaphragms between Skewed Girders #8 - #11

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.
PE Date 8/21/17

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

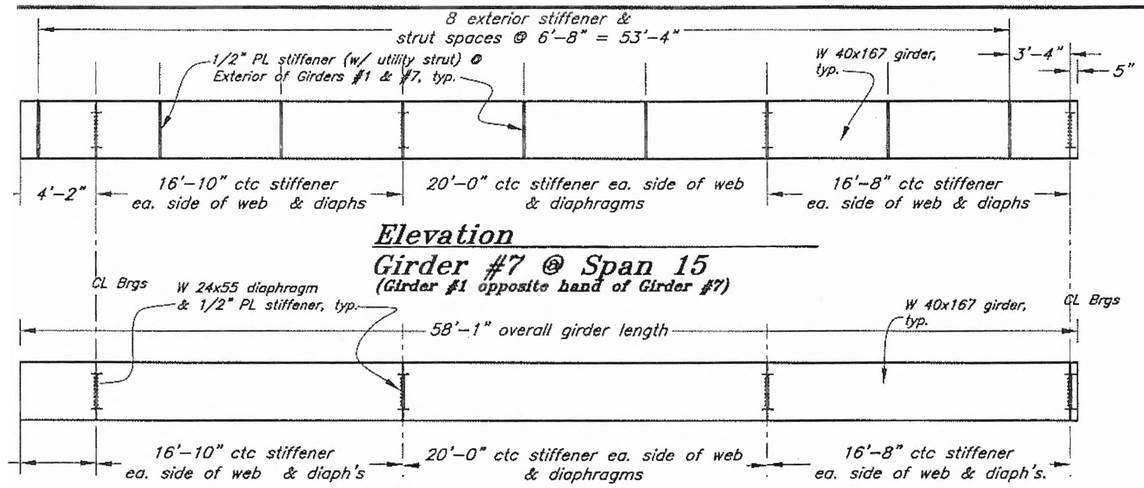
DESIGNED BY: J. Scott
CHECKED BY: B. Savikko
DRAWN BY: C. Fuman, W. Hickok
PATH: O:\GUS\67599\MF\PLANSET\03-APPROACH\AP28 TRANSITION FRAMING SPAN 14-3.DWG
TAB: Wed, 26/Nov/08 02:24PM JTSCOTT

STATE OF ALASKA
JOHN T. SCOTT
CE-4755
REGISTERED PROFESSIONAL ENGINEER
11-26-08

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

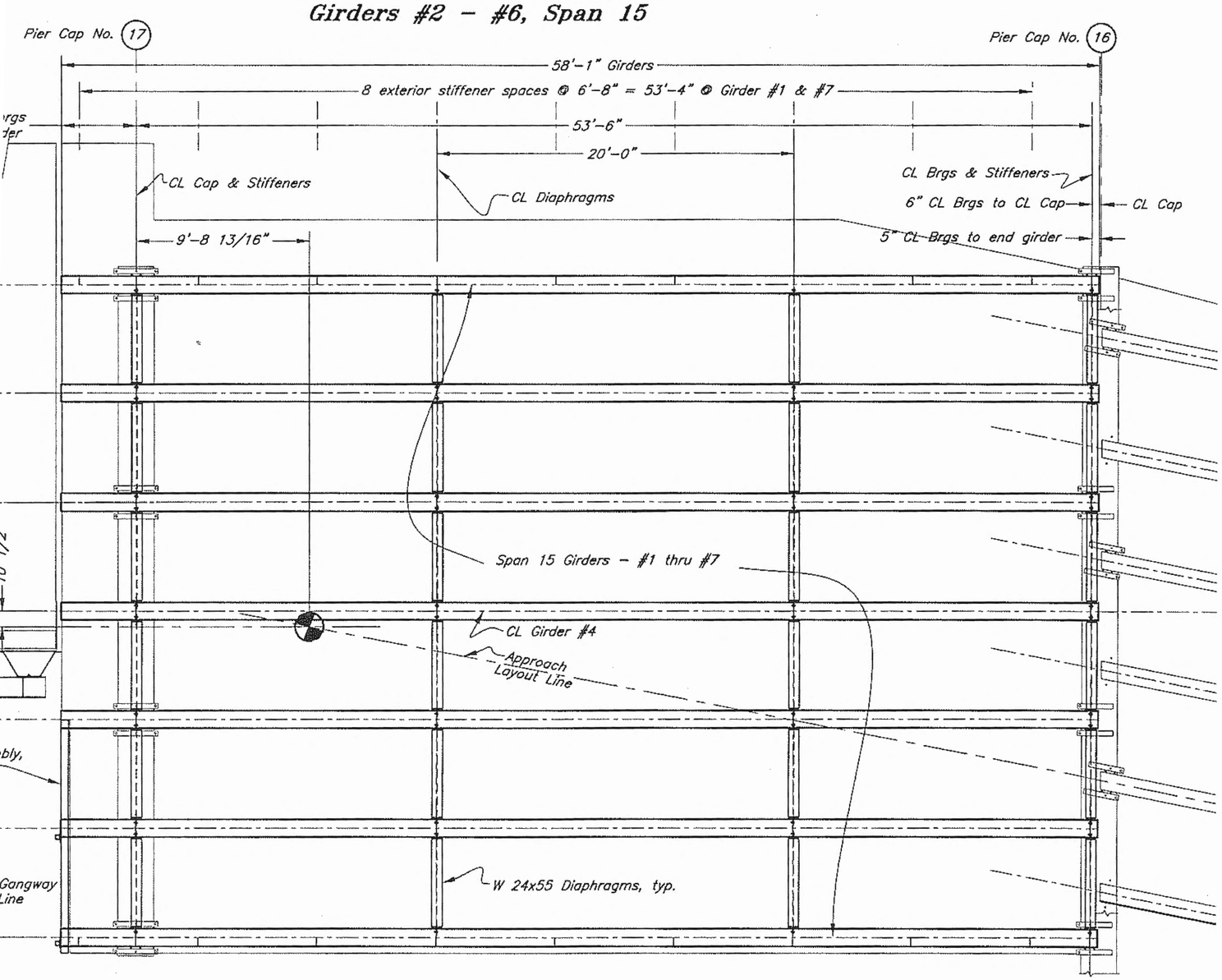
Gustavus Causeway Replacement
Approach Transition Framing Span 14 Details
AP28

REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
			BR-0003(53)/67599	2008	38	138



Elevation
Girder #7 @ Span 15
(Girder #1 opposite hand of Girder #7)

Elevation
Girders #2 – #6, Span 15



Span 15 – Framing Layout

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.

PE ~~Steve Wilk~~ Date 8/21/17

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott

STATE OF ALASKA
49th
John T. Scott
CE-4755
REGISTERED PROFESSIONAL ENGINEER
11-26-08

CHECKED BY: B. Savikko

DRAWN BY: C. Fuman, W. Hickok

PATH: O:\GUS\67599\MF\PLANSET\03-APPROACH\AP29 TRANSITION FRAMING SPAN 15.DWG

TAB: Wed, 26/Nov/08 10:37AM JTSCOTT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

Approach Transition Framing Span 15

AP29

REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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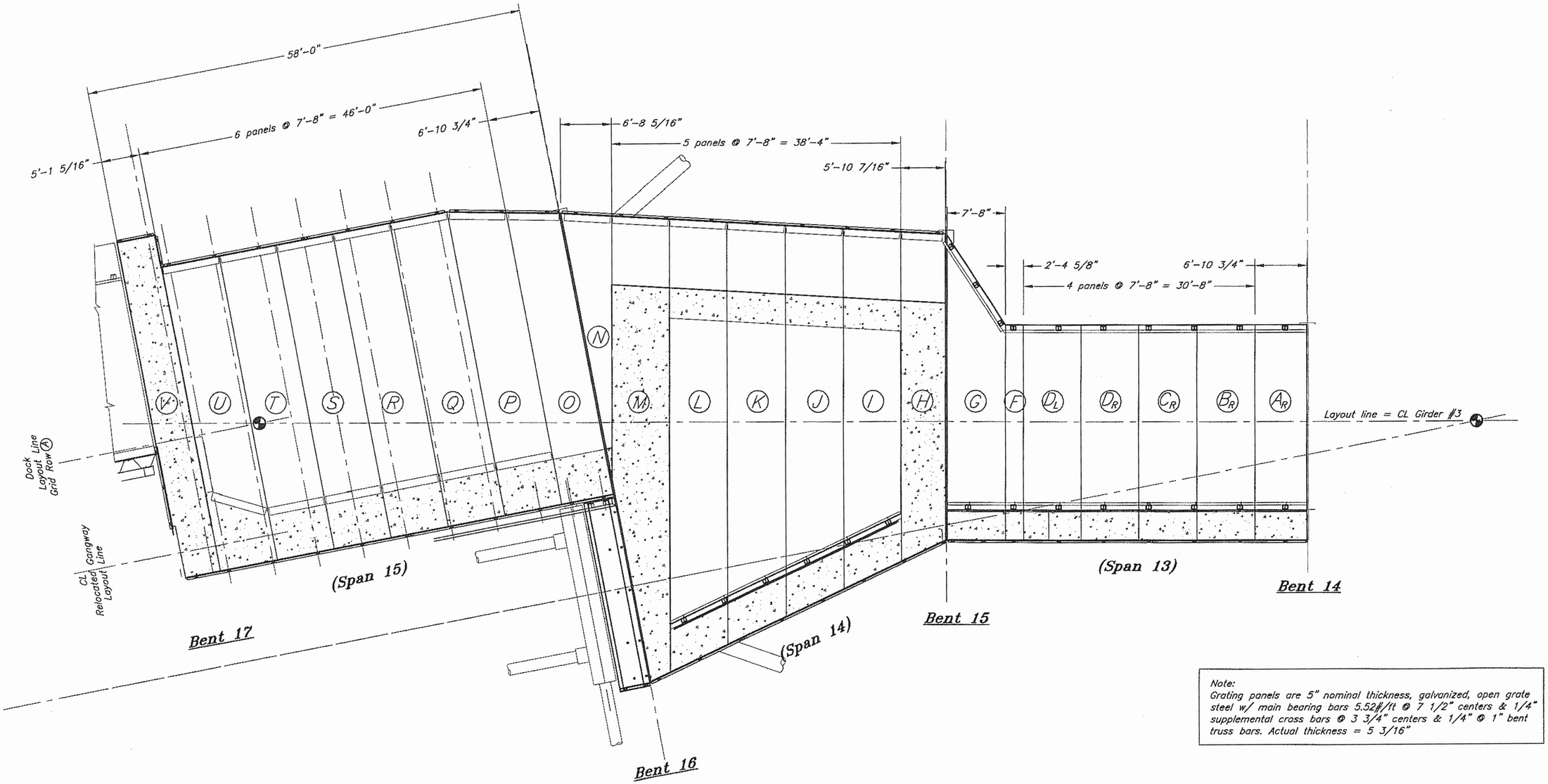

Note:
Grating panels are 5" nominal thickness, galvanized, open grate steel w/ main bearing bars 5.52#/ft @ 7 1/2" centers & 1/4" supplemental cross bars @ 3 3/4" centers & 1/4" @ 1" bent truss bars. Actual thickness = 5 3/16"

Approach Transition Deck Panel Layout
Spans 13, 14, & 15

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.
PE _____ Date 6/2/17

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott
CHECKED BY: B. Savikko
DRAWN BY: C. Fuman, W. Hickok
PATH: O:\GUS\67599\MF\PLANSET\03-APPROACH\AP30-TRANSITION DECK PANEL LAYOUT.DWG
TAB: Wed, 26/Nov/08 10:45AM JTSCOTT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

STATE OF ALASKA 49th John T. Scott CE-4755 REGISTERED PROFESSIONAL ENGINEER 11.26.08

Gustavus Causeway Replacement

Approach Transition Deck Panel Layout

AP30

REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
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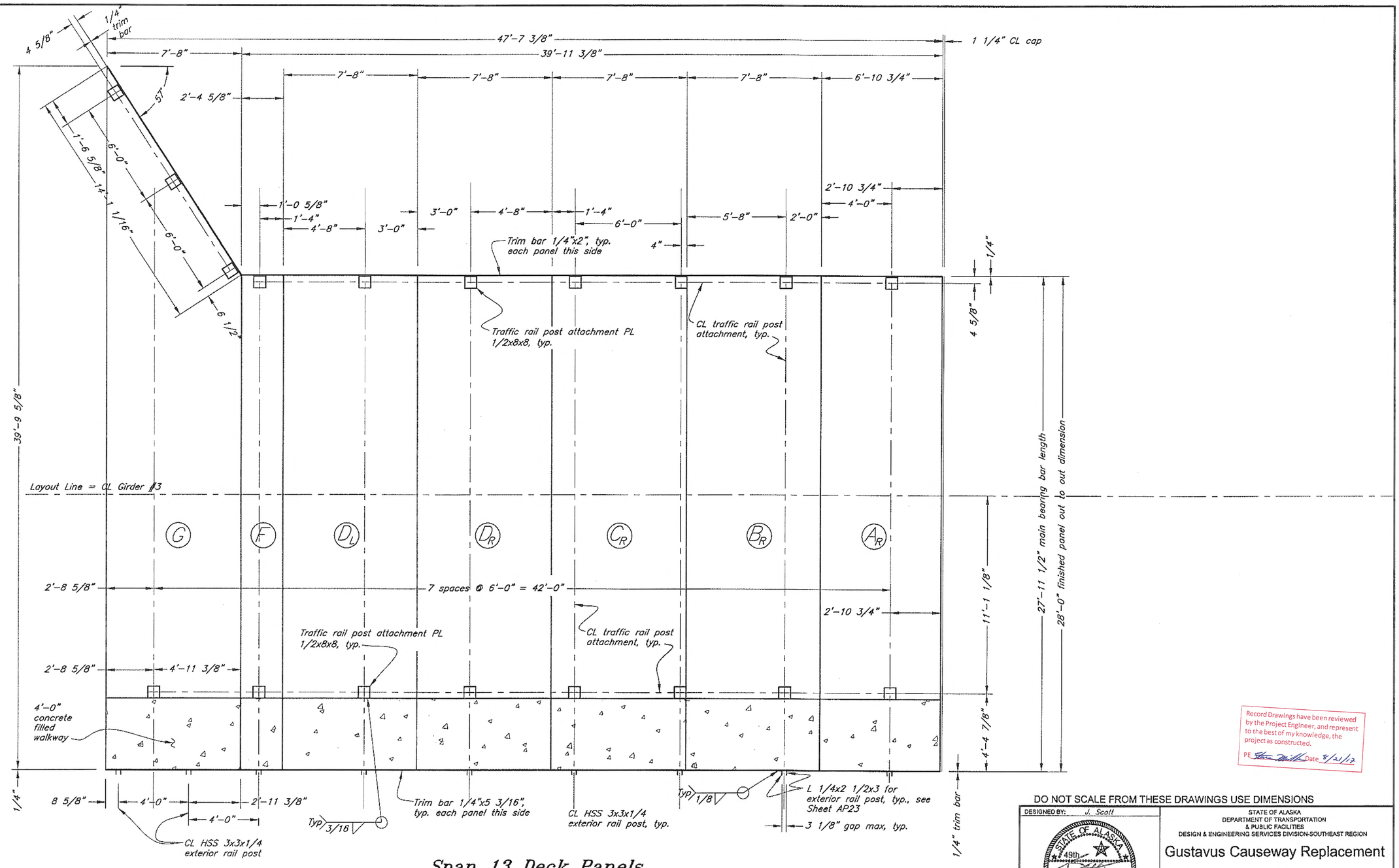

Span 13 Deck Panels
Panels A, B, C, D, F & G

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.
PE Date 3/21/12

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DESIGNED BY: J. Scott
CHECKED BY: B. Savikko
DRAWN BY: C. Fuman, W. Hickok
PATH: Q:\GUS\67599\MF\PLANSET\03-APPROACH\AP31-TRANSITION SPAN 13 DECK PANELS.DWG
TAB: Wed, 26/Nov/08 10:46AM JTSCOTT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

STATE OF ALASKA 49th John T. Scott CE-4755 REGISTERED PROFESSIONAL ENGINEER 11.26.08

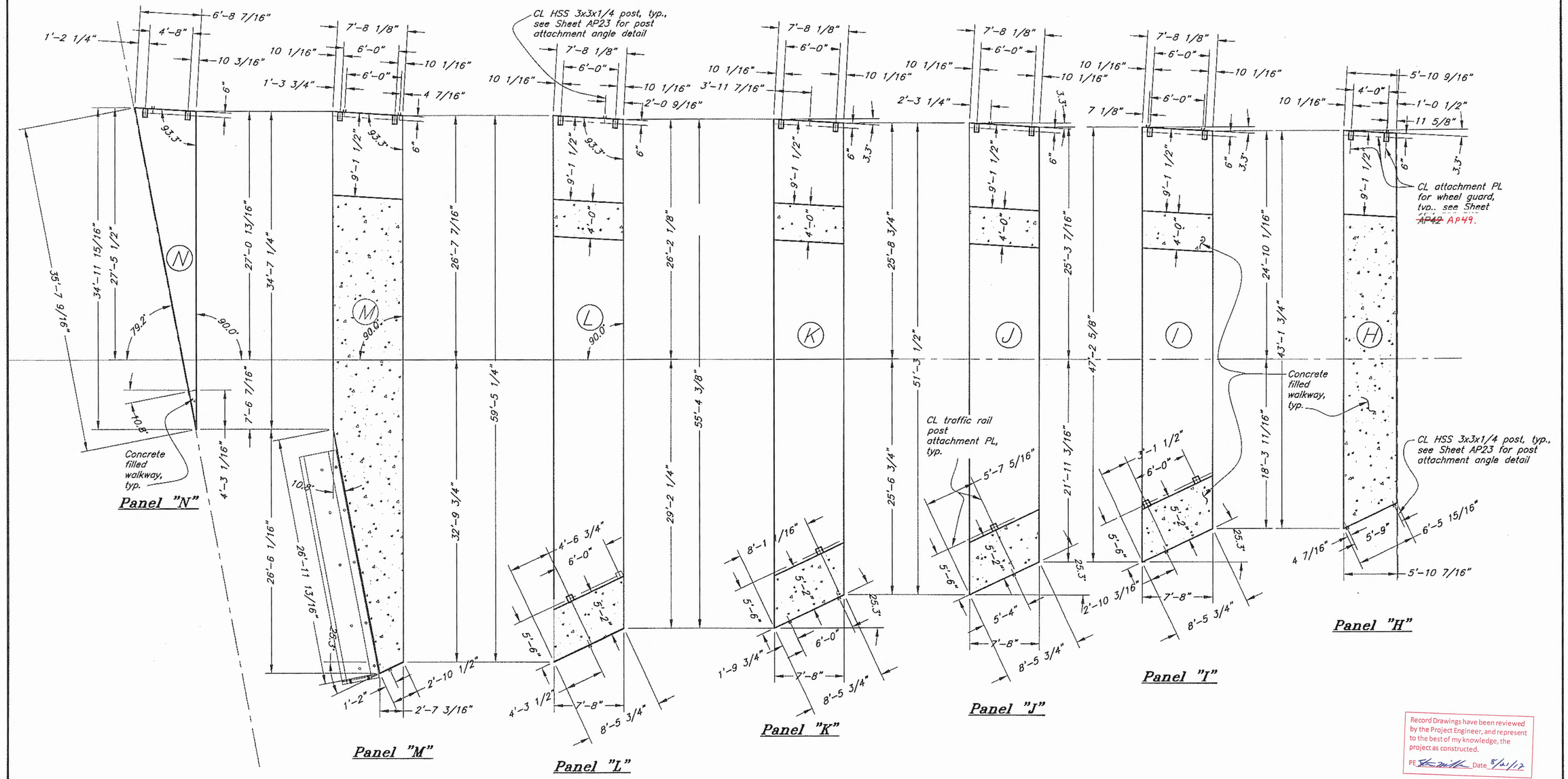
Gustavus Causeway Replacement

Approach Transition Span 13 Deck Panels

AP31

REVISIONS NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-0003(53)/67599	2008	41	138



Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.

PE: _____ Date: 8/21/12

Approach Transition Deck Panels H, I, J, K, L, M & N
Span 14

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

Approach Transition Span 14 Deck Panels

AP32

STATE OF ALASKA — John T. Scott CE-4755 — REGISTERED PROFESSIONAL ENGINEER — 11.26.08

CHECKED BY: B. Savikko

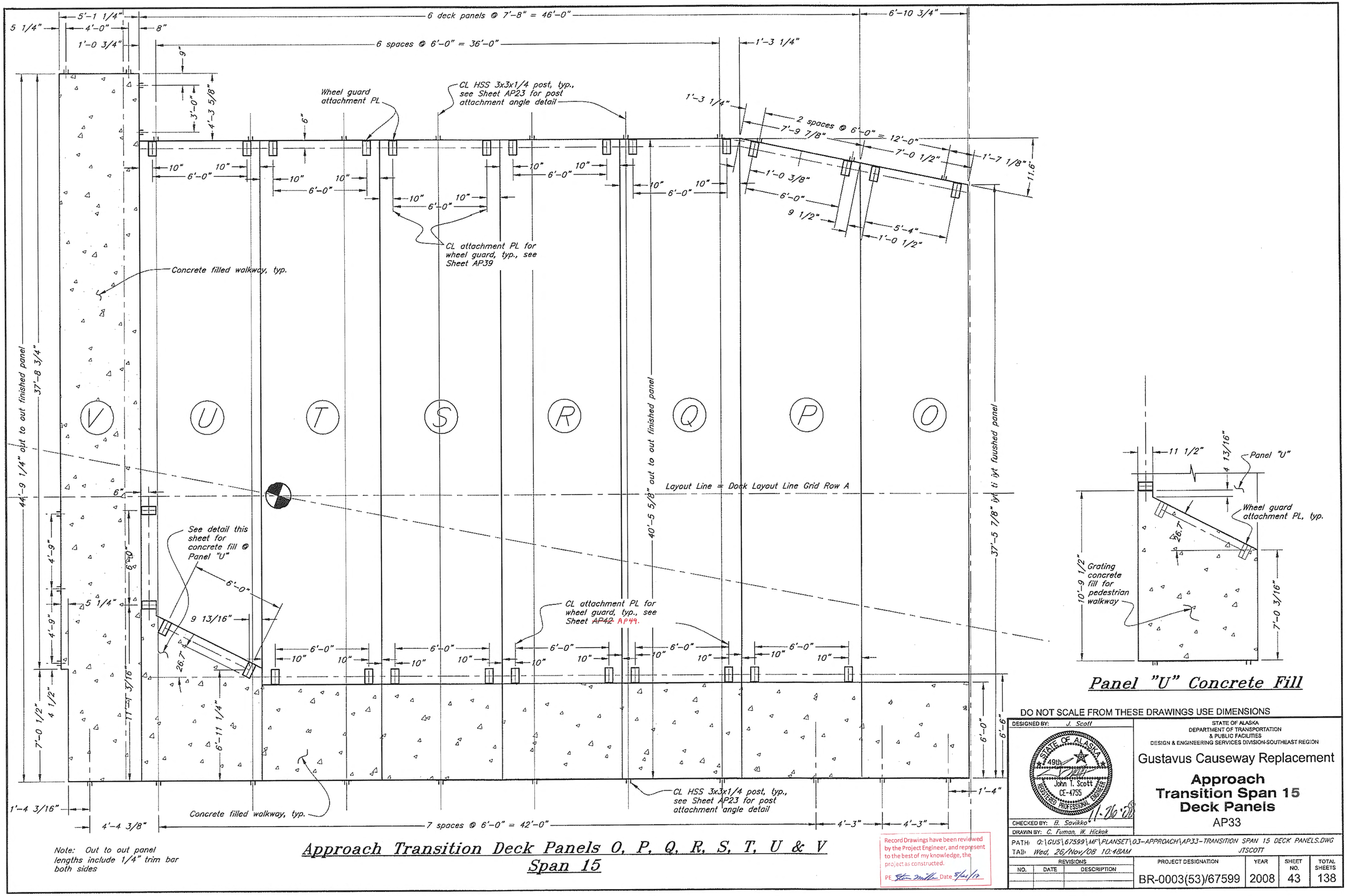
DRAWN BY: C. Fuman, W. Hickok

PATH: Q:\GUS\67599\MF\PLANSET\03-APPROACH\AP32-TRANSITION SPAN 14 DECK PANELS.DWG

TAB: Wed, 26/Nov/08 10:47AM JTSCOTT

REVISIONS		
NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-0003(53)/67599	2008	42	138



Note: Out to out panel lengths include 1/4" trim bar both sides

Approach Transition Deck Panels O, P, Q, R, S, T, U & V
Span 15

Panel "U" Concrete Fill

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DESIGNED BY: J. Scott
CHECKED BY: B. Savikko
DRAWN BY: C. Fuman, W. Hickok

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

Approach Transition Span 15 Deck Panels

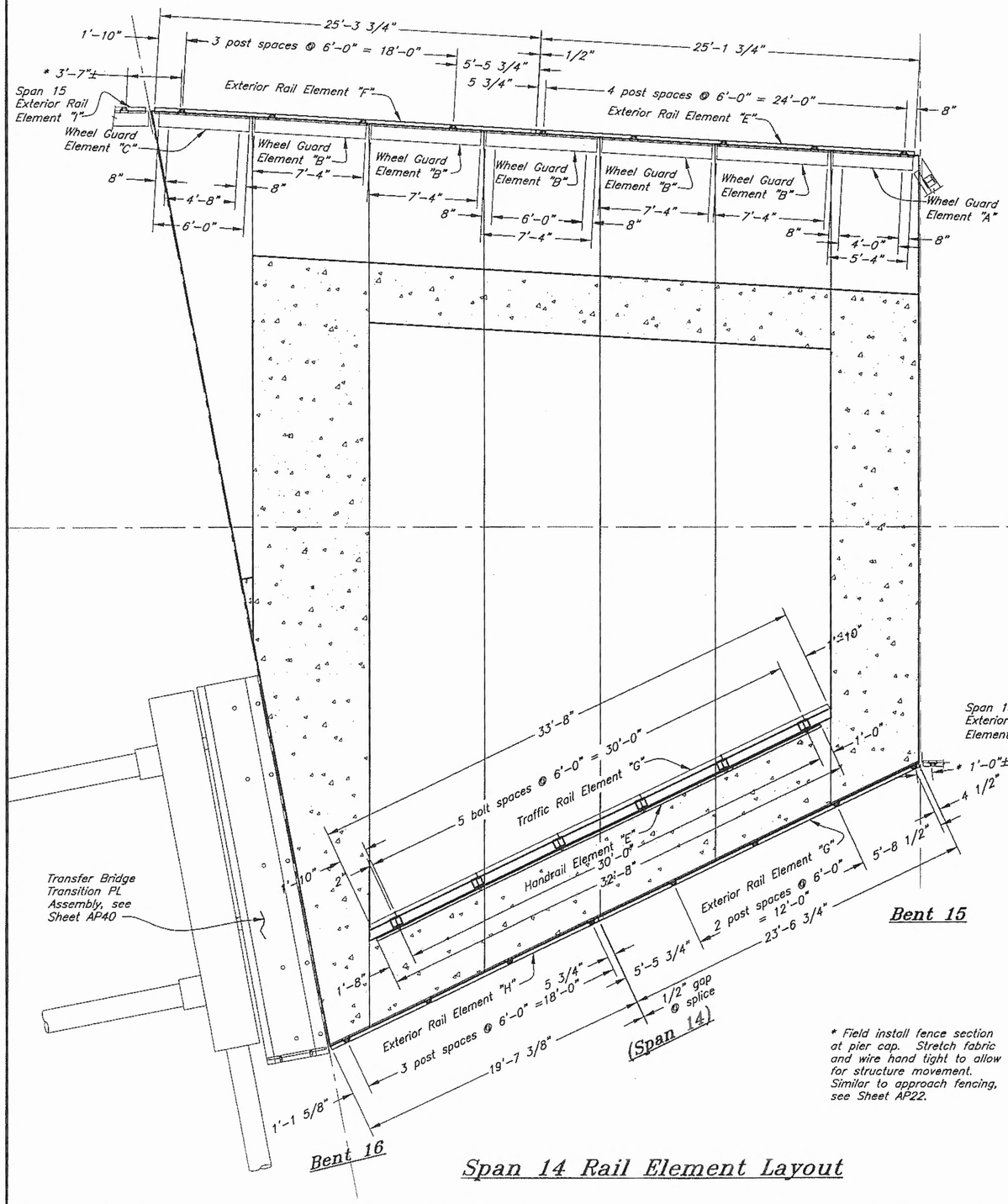
AP33

PATH: Q:\GUS\67599\MF\PLANSET\03-APPROACH\AP33-TRANSITION SPAN 15 DECK PANELS.DWG
TAB: Wed, 26/Nov/08 10:42AM JTSCOTT

REVISIONS		
NO.	DATE	DESCRIPTION

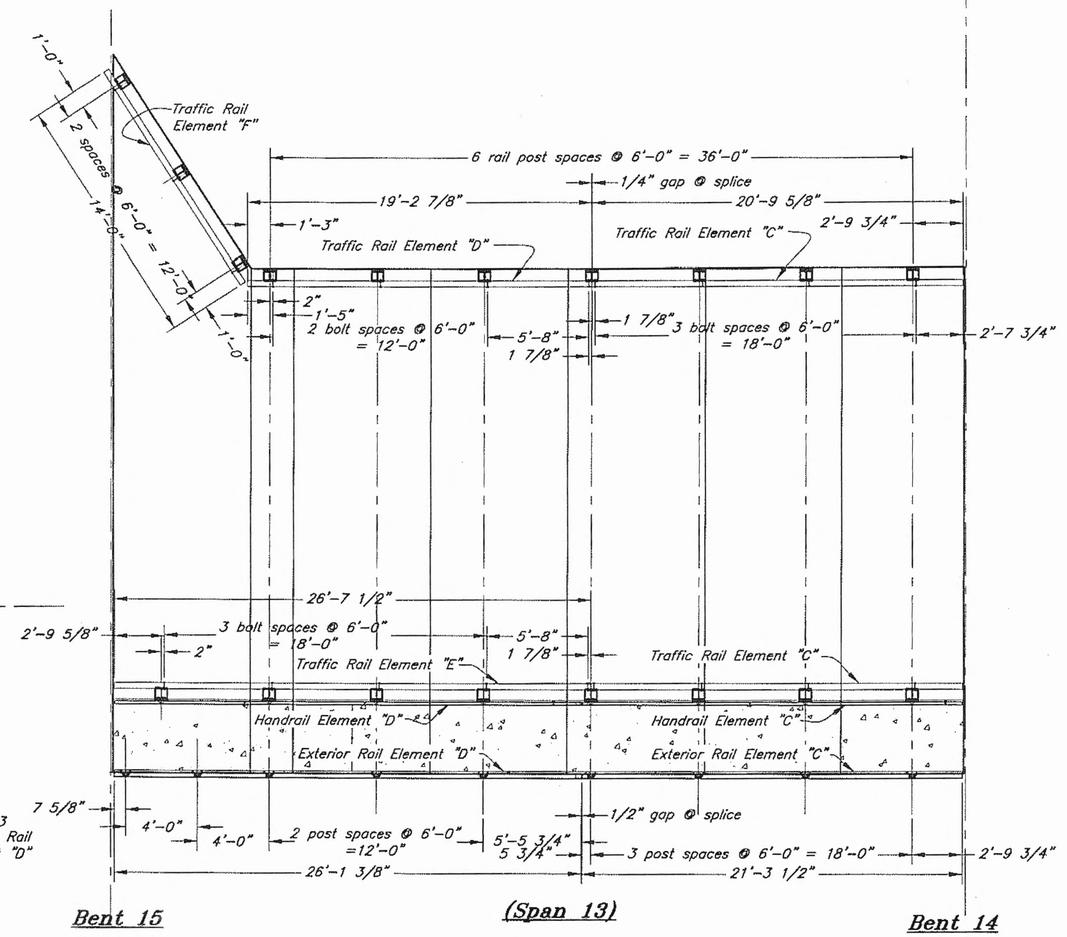
PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-0003(53)/67599	2008	43	138

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.
PE Date 8/24/12



Span 14 Rail Element Layout

* Field install fence section at pier cap. Stretch fabric and wire hand tight to allow for structure movement. Similar to approach fencing, see Sheet AP22.



Span 13 Rail Element Layout

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.

PE ~~Eric Zwiek~~ Date 8/21/12

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DESIGNED BY: J. Scott

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

Approach Transition Spans 13 & 14 Railings

AP34

CHECKED BY: B. Savikko

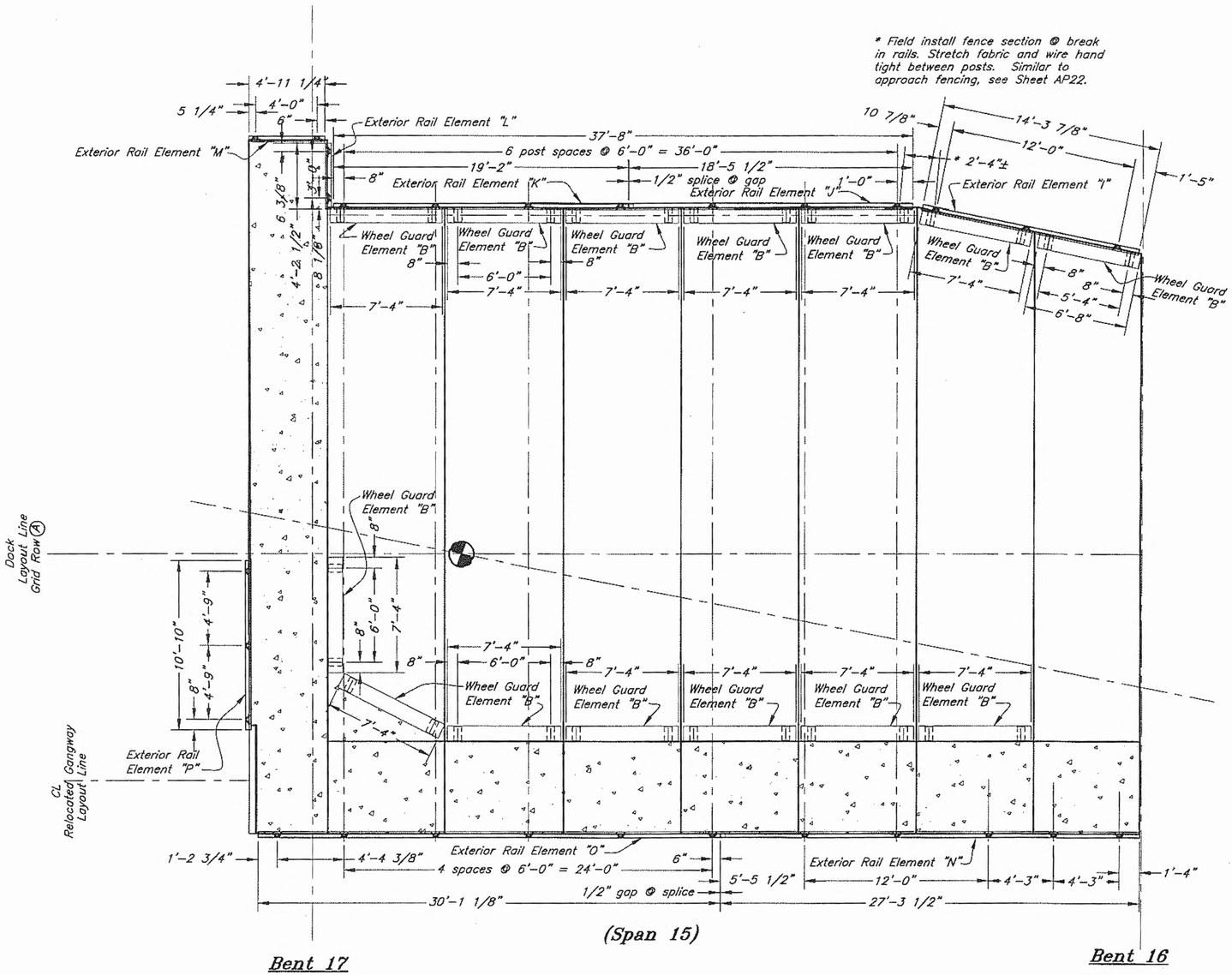
DRAWN BY: C. Fuman, W. Hickok

PATH: O:\GUS\67599\MF\PLANSET\03-APPROACH\AP34-TRANS RAILS SPAN 13-14.DWG

TAB: Wed, 26/Nov/08 10:49AM JTSCOTT

REVISIONS NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-0003(53)/67599	2008	44	138



Span 15 Rail Element Layout

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.
PE Date 8/21/12

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott
CHECKED BY: B. Savikko
DRAWN BY: C. Fuman, W. Hickok

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement
Approach Transition Span 15 Railings
AP35

PATH: O:\GUS\67599\MF\PLANSET\03-APPROACH\AP35-TRANSITION RAILS SPAN 15.DWG
TAB: Wed, 26/Nov/08 10:49AM JTSCOTT

REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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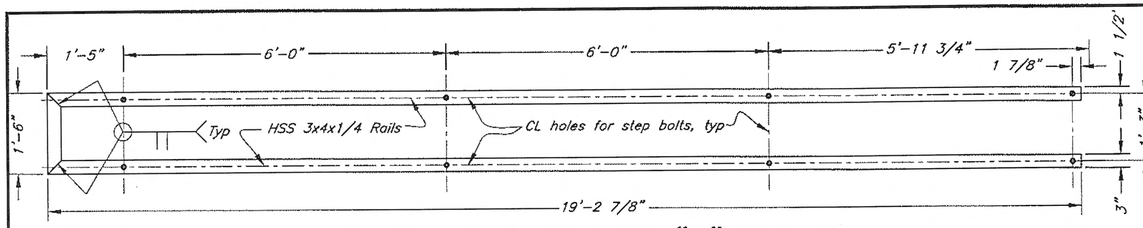
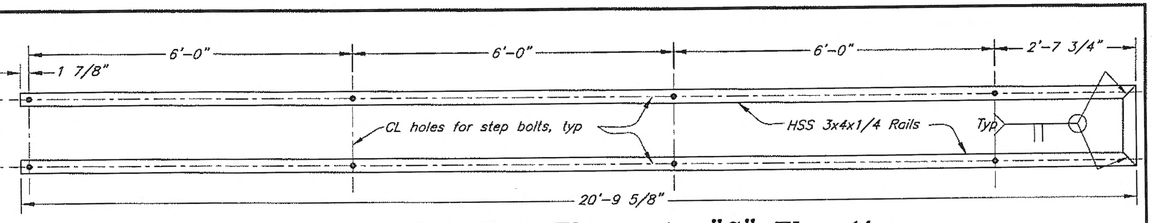
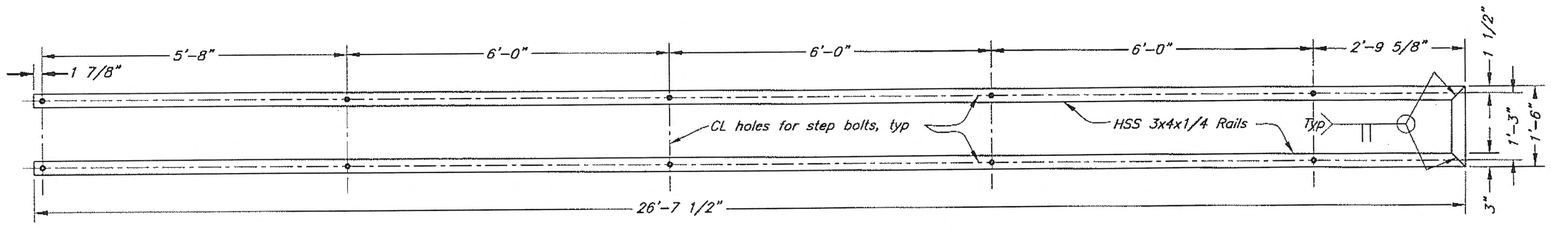


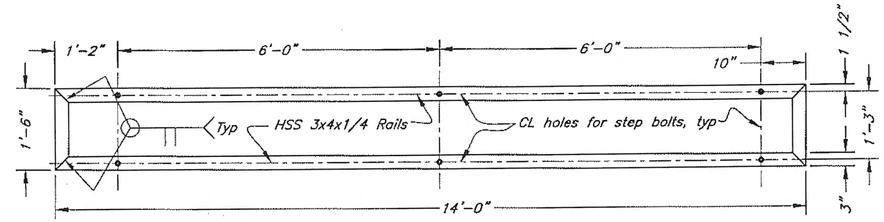
Traffic Rail Element "D" Elevation



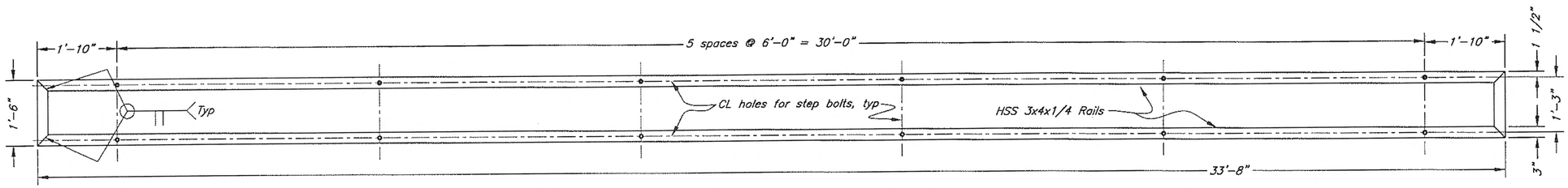
Traffic Rail Elements "C" Elevation



Traffic Rail Element "E" Elevation



Traffic Rail Element "F" Elevation



Traffic Rail Element "G" Elevation

Note: Approach Transition traffic rails are similar to Approach traffic rails. See Sheet AP20 for details.

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.

PE _____ Date 8/4/13

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott

STATE OF ALASKA 49th John T. Scott CE-4755 REGISTERED PROFESSIONAL ENGINEER 11.26.08

CHECKED BY: B. Savikko

DRAWN BY: C. Fuman, W. Hickok

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

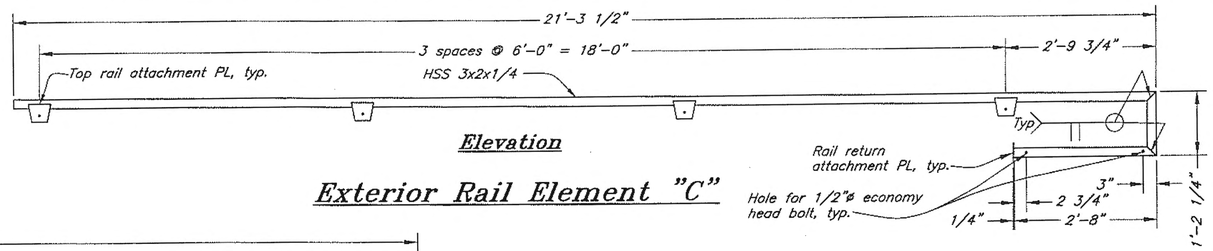
Gustavus Causeway Replacement

Approach Transition Traffic Rail Elements

AP36

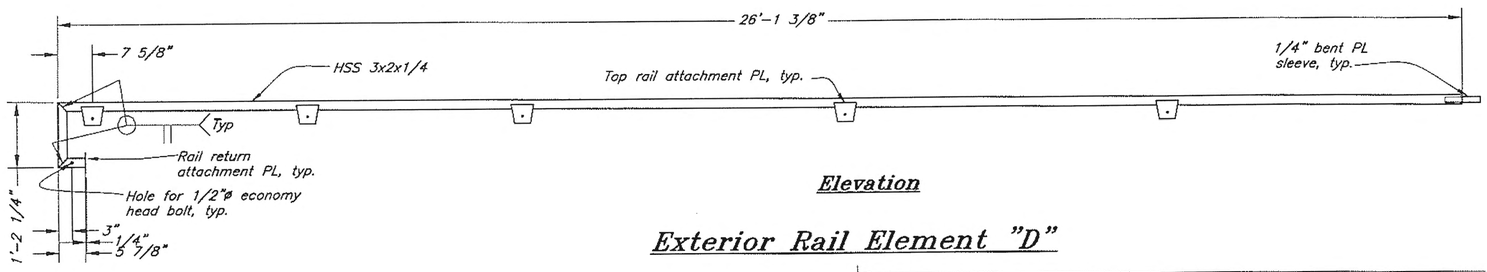
PATH: O:\GUS\67599\MF\PLANSET\03-APPROACH\AP36-TRANSITION TRAFFIC RAIL ELEMENTS.DWG
TAB: Wed, 26/Nov/08 10:50AM JTSCOTT

REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
			BR-0003(53)/67599	2008	46	138



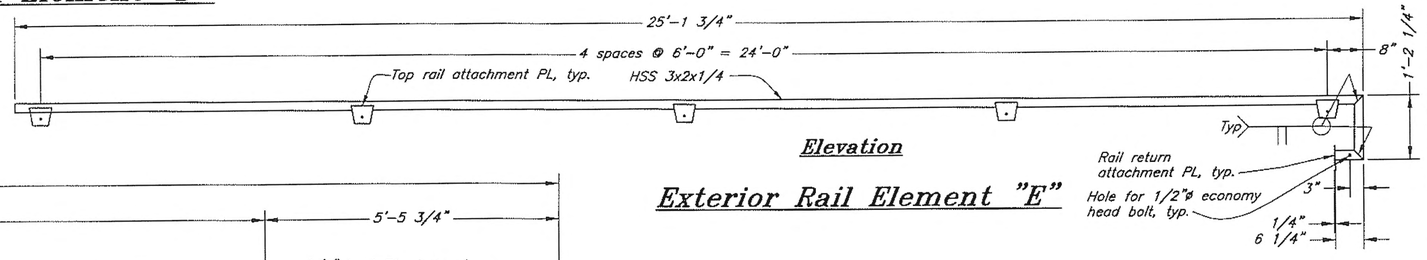
Elevation

Exterior Rail Element "C"



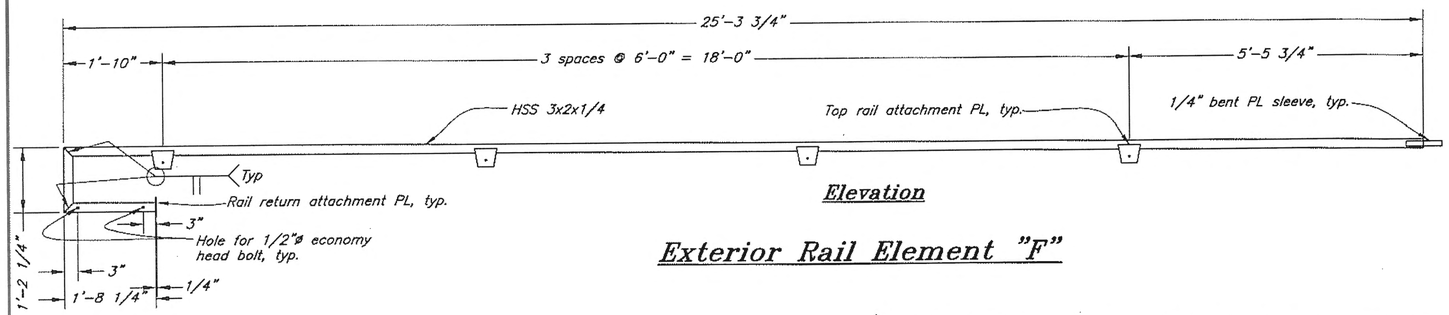
Elevation

Exterior Rail Element "D"



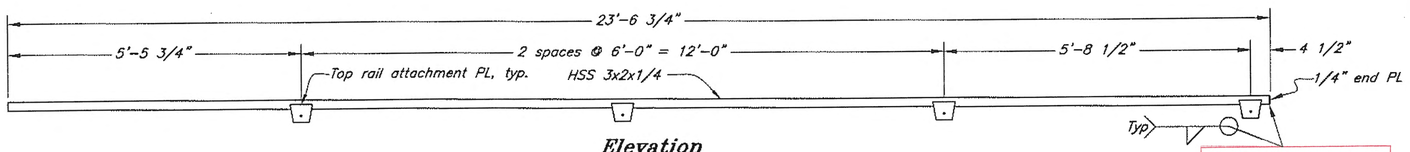
Elevation

Exterior Rail Element "E"



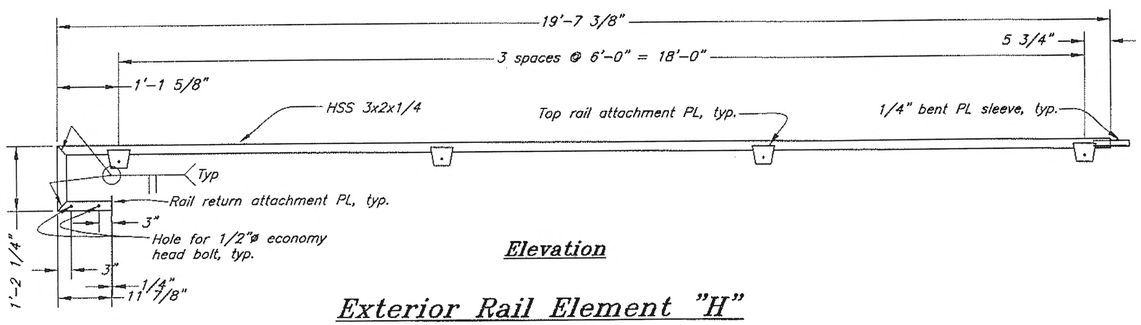
Elevation

Exterior Rail Element "F"



Elevation

Exterior Rail Element "G"



Elevation

Exterior Rail Element "H"

Note: Approach transition exterior rails are similar to approach exterior rails. See Sheets AP22 & AP23 for rub rail, fencing, sleeve, and attachment details.

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.
PE Steve Smith Date 8/2/12

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott
CHECKED BY: B. Sovikko
DRAWN BY: C. Fuman, W. Hickok
PATH: O:\GUS\67599\MF\PLANSET\03-APPROACH\AP37-TRANSITION EXT RAIL ELEMENTS 1.DWG JTSCOTT
TAB: Wed, 26/Nov/08 10:51AM

STATE OF ALASKA
49th
John T. Scott
CE-4755
REGISTERED PROFESSIONAL ENGINEER
11.26.08

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

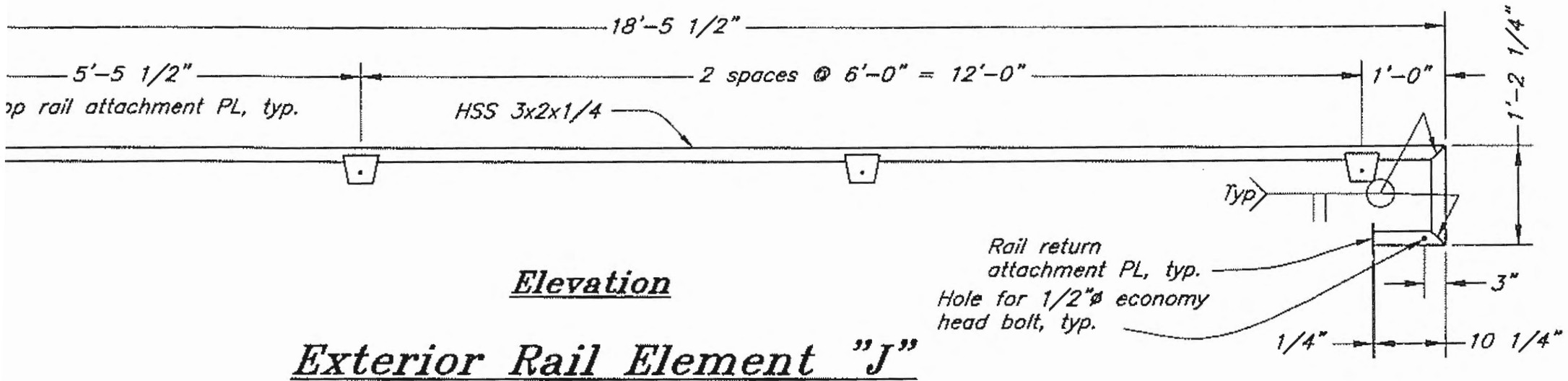
Gustavus Causeway Replacement

Approach Transition Exterior Rail Elements

AP37

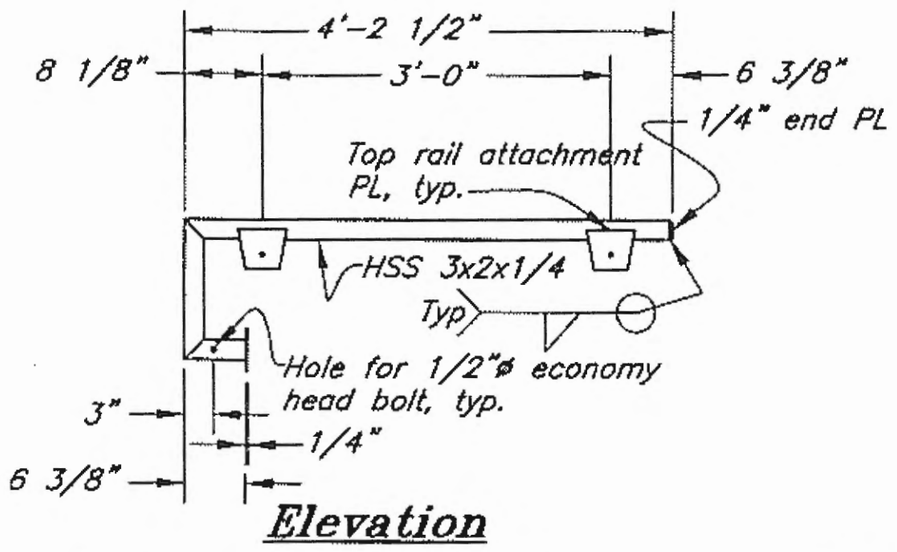
REVISIONS NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-0003(53)/67599	2008	47	138



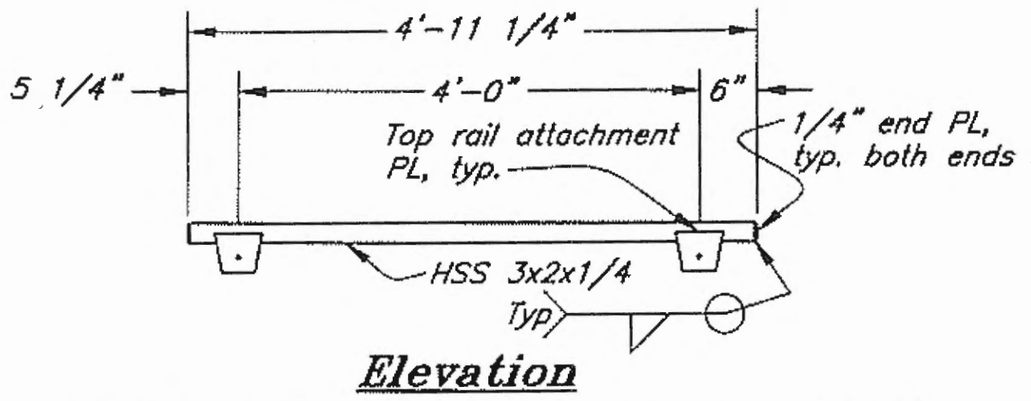
Elevation

Exterior Rail Element "J"



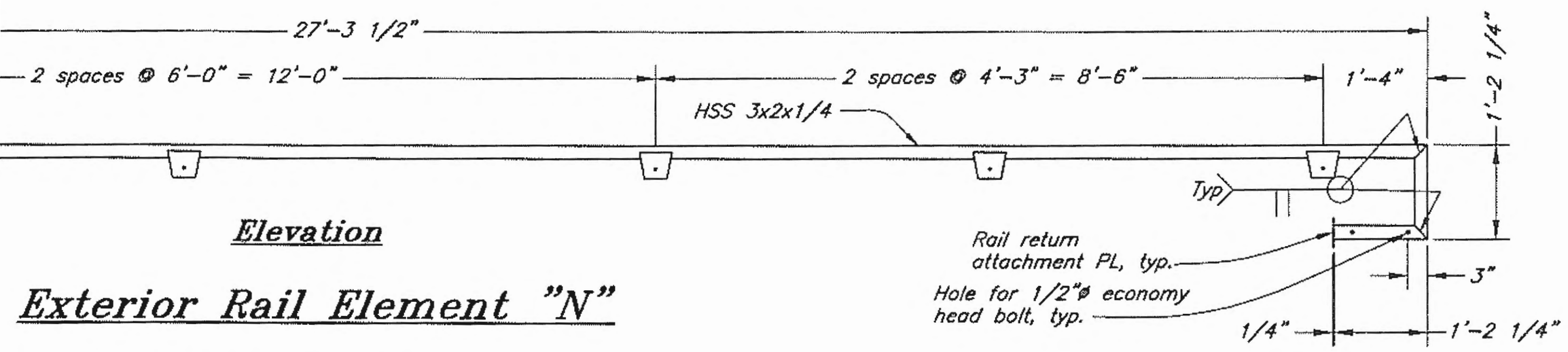
Elevation

Exterior Rail Element "L"



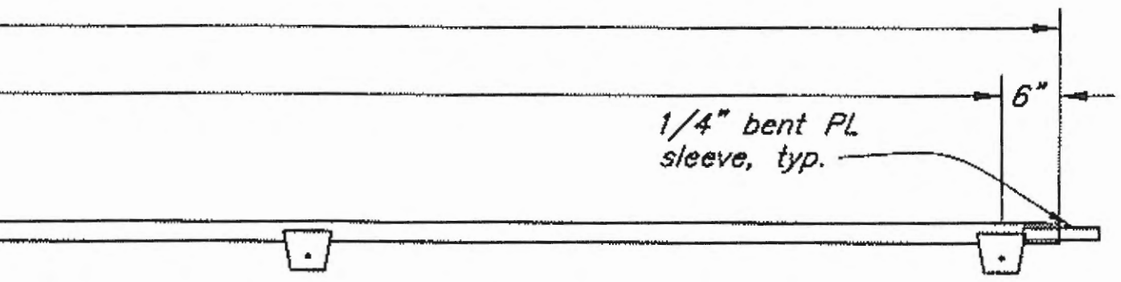
Elevation

Exterior Rail Element "M"



Elevation

Exterior Rail Element "N"



Elevation

Exterior Rail Element "P"

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.

PE Stan Mill Date 8/21/17

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott

STATE OF ALASKA 49th John T. Scott CE-4755 REGISTERED PROFESSIONAL ENGINEER 11-26-08

CHECKED BY: B. Savikko

DRAWN BY: C. Fuman, W. Hickok

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

Approach Transition Exterior Rail Elements 2

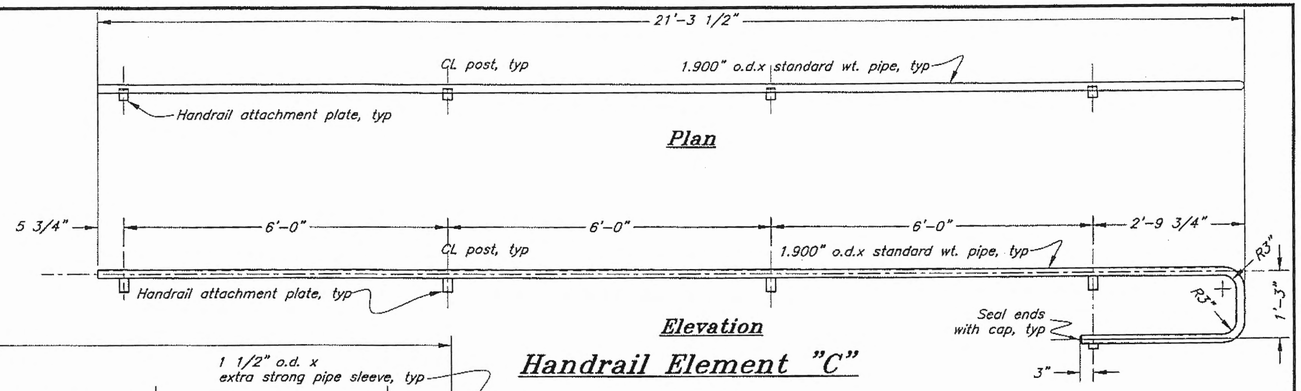
AP38

PATH: O:\GUS\67599\MF\PLANSET\03-APPROACH\AP38-TRANSITION EXT RAILS - 2.DWG

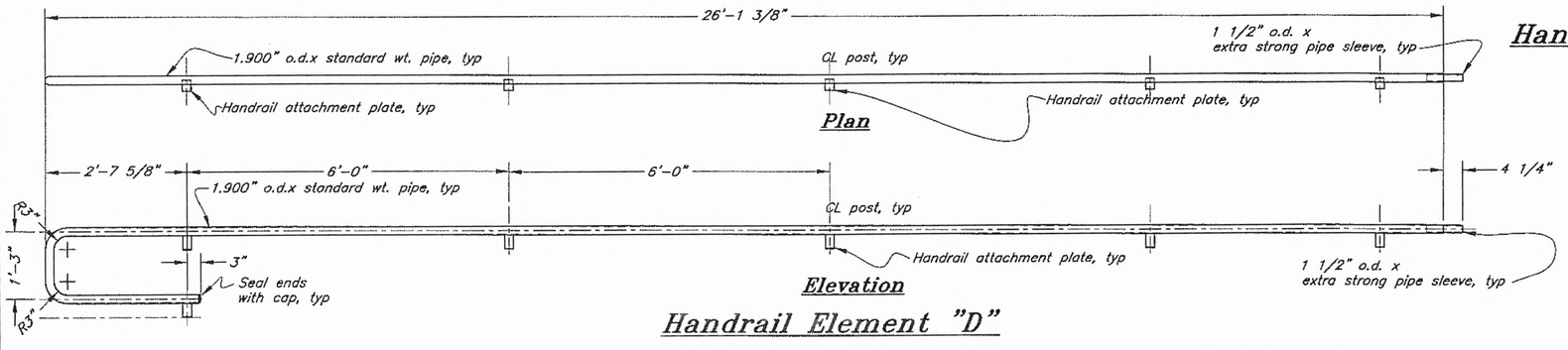
TAB: Wed, 26/Nov/08 10:52AM JTSCOTT

REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
			BR-0003(53)/67599	2008	48	138

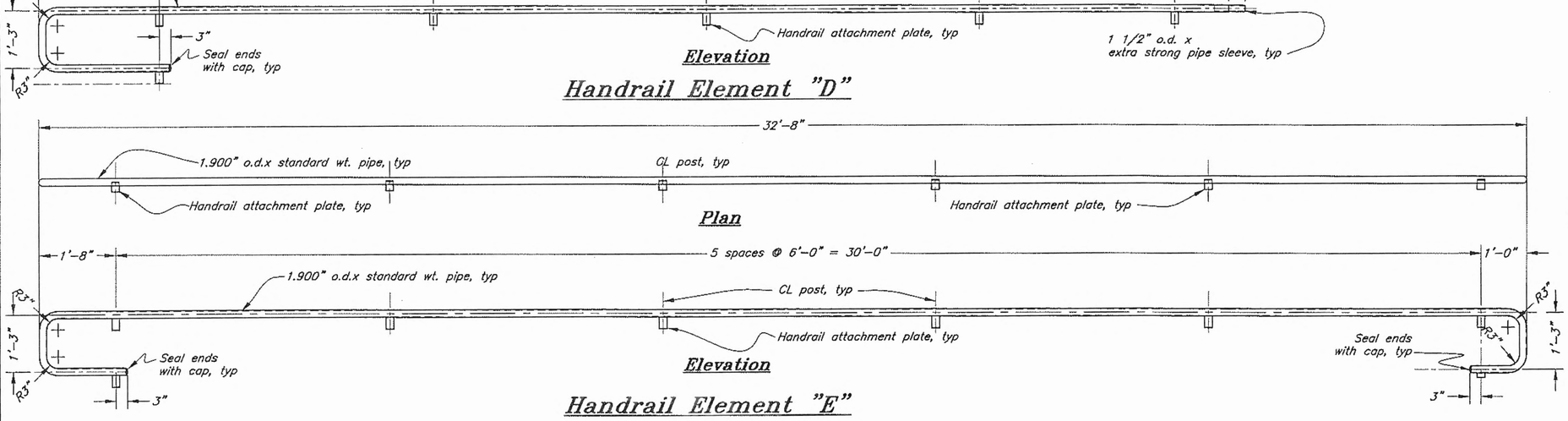
Note: Approach transition handrails are similar to approach handrails. See Sheets AP20 & AP21 for details.



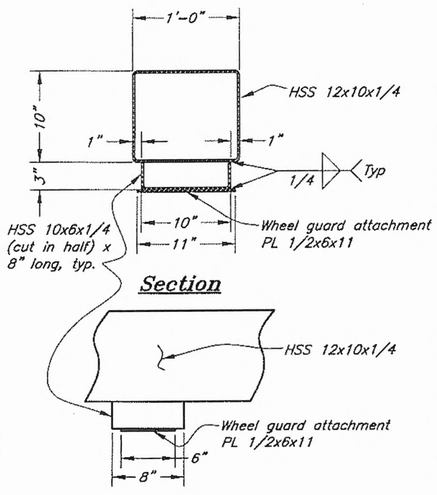
Handrail Element "C"



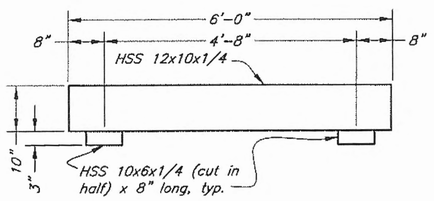
Handrail Element "D"



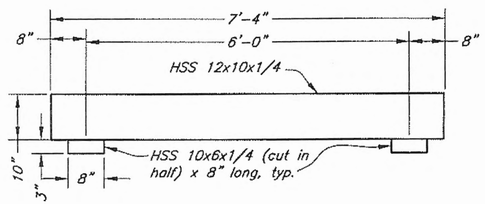
Handrail Element "E"



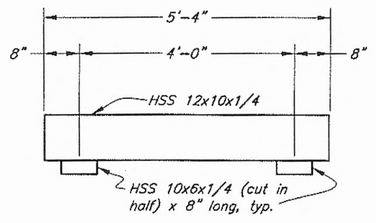
Wheel Guard Detail



Wheel Guard Element "C"



Wheel Guard Elements "B"



Wheel Guard Element "A"

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.

PE Date 5/21/12

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott
CHECKED BY: B. Savikko
DRAWN BY: C. Fuman, W. Hickok
PATH: O:\GUS\67599\MF\PLANSET\03-APPROACH\AP39-TRANSITION HANDRAIL & WHEELGUARDS - JTSCOTT
TAB: Wed, 26/Nov/08 10:55AM

STATE OF ALASKA
John T. Scott
CE-4755
REGISTERED PROFESSIONAL ENGINEER
11-26-08

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

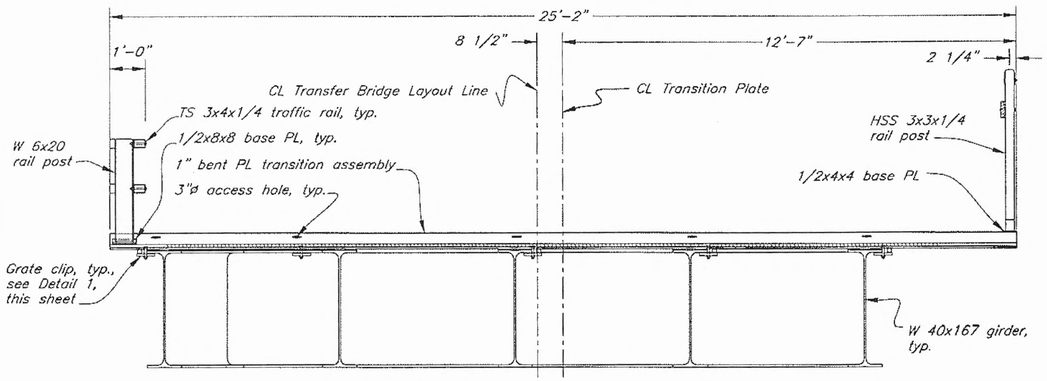
Gustavus Causeway Replacement

Approach Transition Handrail & Wheel Guard Elements

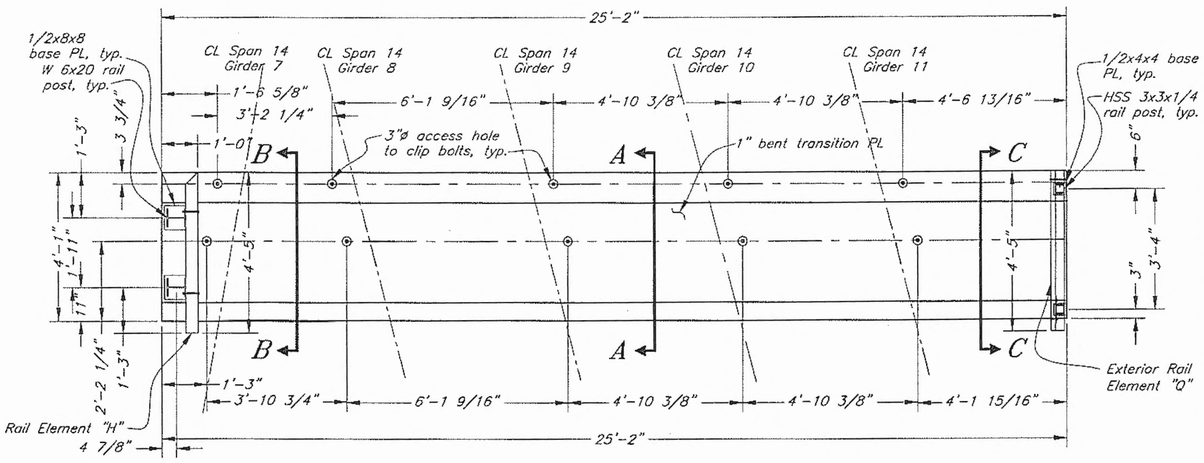
AP39

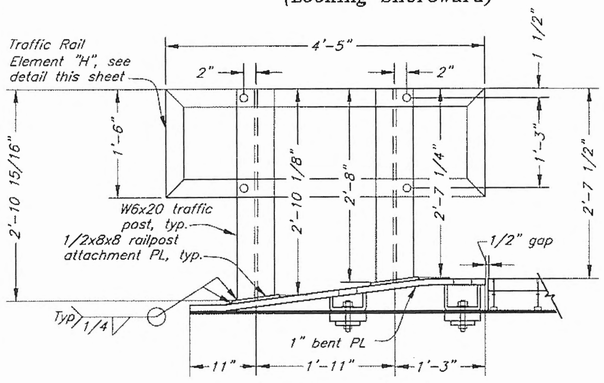
REVISIONS NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-0003(53)/67599	2008	49	138

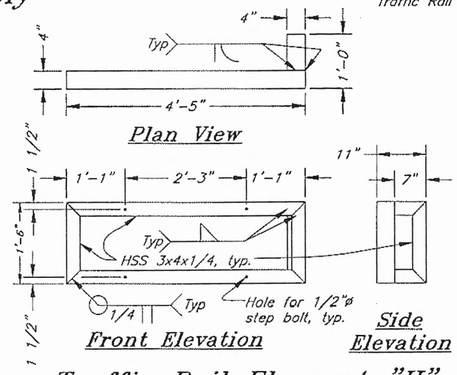


Sectional Elevation
Transition Plate Assembly
(Looking Shoreward)

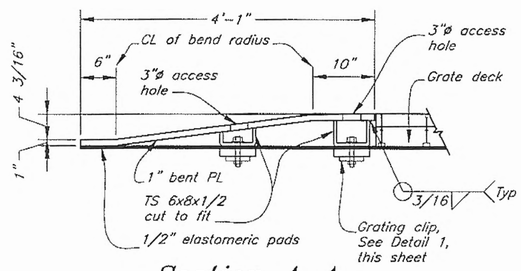




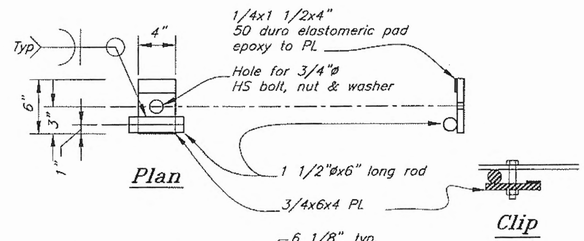
Section B-B

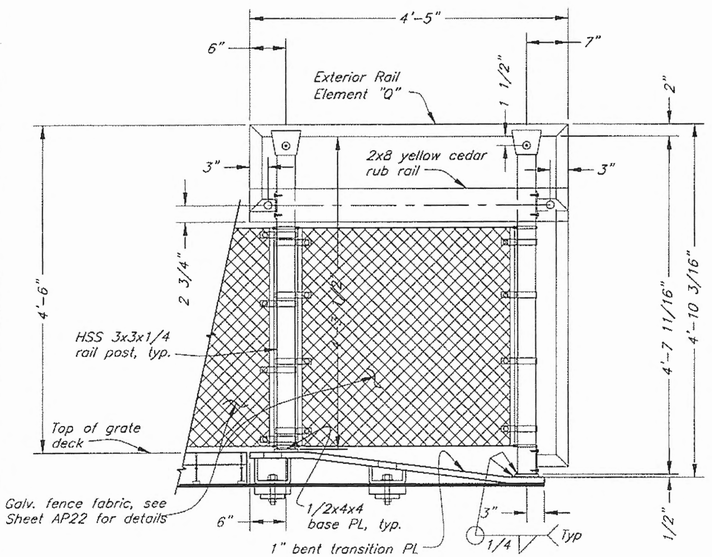


Traffic Rail Element "H"

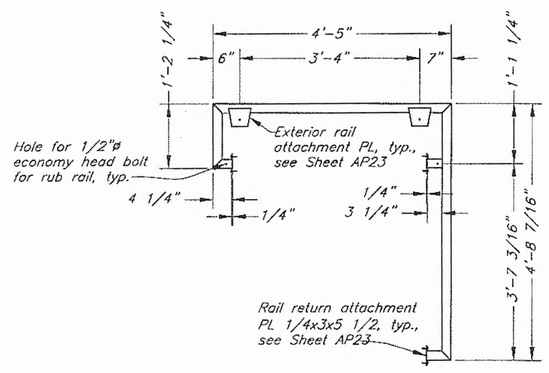


Section A-A

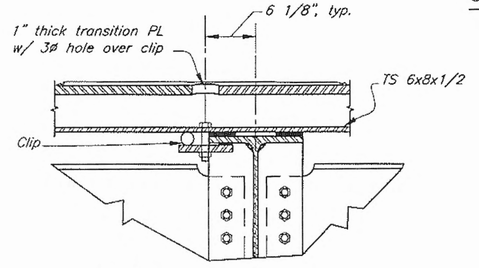




Section C-C



Exterior Rail Element "Q"



Detail 1
Grating Clip Assembly

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.
PE Date 8/21/09

DESIGNED BY: J. Scott
CHECKED BY: B. Savikko
DRAWN BY: C. Fuman, W. Hickok

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

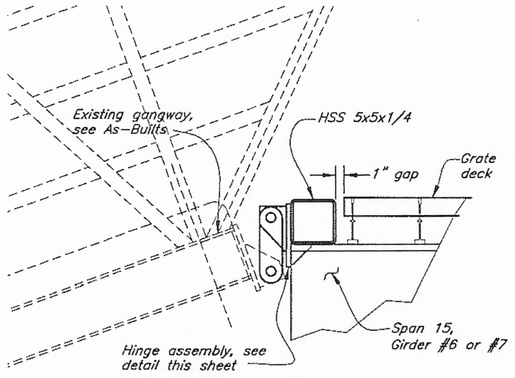
Approach Transition Transition Plate Assembly Details

AP40

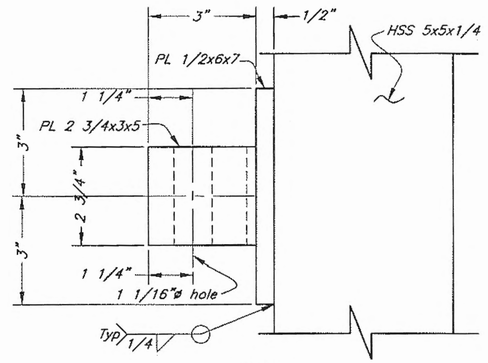
PATH: O:\GUS\67599\MF\PLANSET\03-APPROACH\AP40-TRANSITION PLATE ASSEMBLY.DWG
TAB: Wed, 26/Nov/08 10.59AM JTSCOTT

REVISIONS NO.	DATE	DESCRIPTION

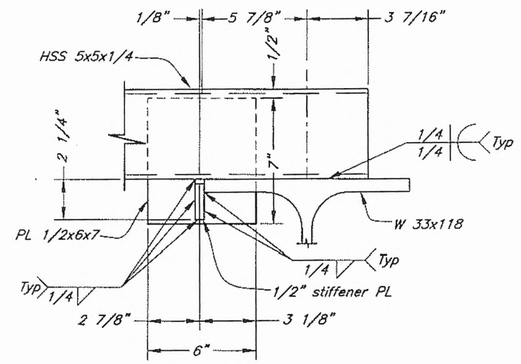
PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-0003(53)/67599	2008	50	138



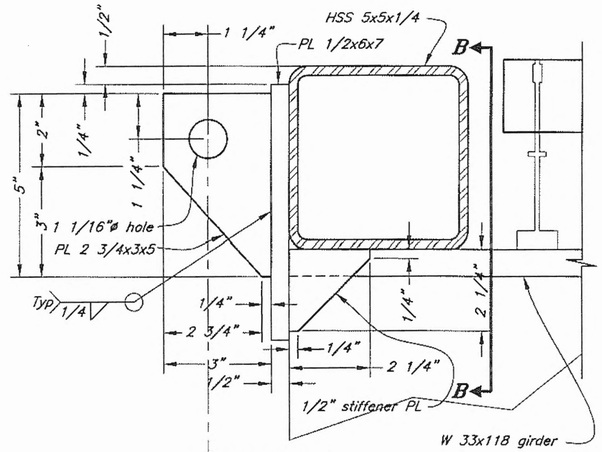
Gangway Hinge Elevation



Plan

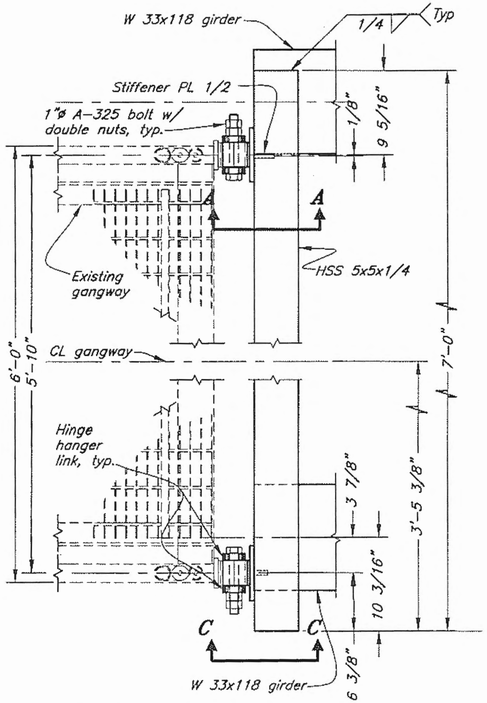


Section B-B

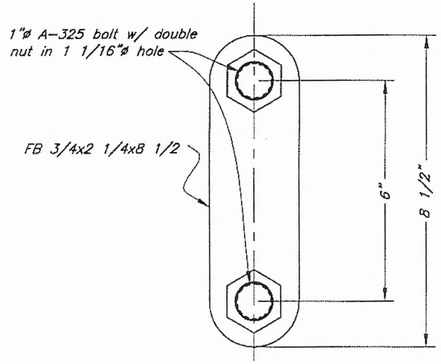


Section A-A

Section C-C



Gangway Hinge Plan



Hinge Hanger Link

Hinge Assembly

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.

PE Steve Smith Date 8/21/12

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

Gangway Hinge Assembly

AP41

STATE OF ALASKA — 49th — John T. Scott — CE-4755 — REGISTERED PROFESSIONAL ENGINEER — 11-26-08

CHECKED BY: B. Sovikko

DRAWN BY: C. Fuman, W. Hickok

PATH: O:\GUS\67599\MF\PLANSET\03-APPROACH\AP41 GANGWAY HINGE ASSEMBLY.DWG

TAB: Wed, 26/Nov/08 11:00AM JTSCOTT

REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			BR-0003(53)/67599	2008	51	138

Grid Row 6
15'-9"
A
A
CL Relocated Gangway
CL Transfer Bridge & Pontoon
Row 5 & 6 27'-0"" long Double W33x118 Cap Assembly, typ.
Grid Row 5
23'-9" long W24x55 Dock Stringers, typ. @ 4'-2" ctrs.
Wave Barrier Sheet Piles, typ.
C.O.#7, New Item 504(1)a) Protective Coatings (added Paint to Wave Barrier Sheet Piles)
C D02
Grid Col. D
Batter Pile & Chute assembly, typ.
C
Row 1 - 4 77'-4 1/2" long Double W33x118 Cap Assembly, typ.
Bolt Splice, typ.
Grid Row 4
B D02
Fender Ladder, typ.
Transfer Pontoon
Wave Waler to West Restraint Assembly, typ.
Grid Row 3
Pontoon West Restraint Dolphin
Transfer Bridge Seaward Bearing Assembly, typ.
Pontoon East Restraint Dolphin
Timber Fender Piles, typ.
Fixed Fender System
6 row spaces @ 25'-0" = 125'-0"
Grid Row 2
Fender Waler, typ.
Pile Chock, typ.
Pontoon Restraint Fender Assembly, typ.
Grid Row 1
Face of Fender Line
Pile Chock, typ.
Fender Waler, typ.
Cylindrical Fender & Support Yoke, typ.
Ladder fender riser, typ.
Timber Fender Piles, typ.
CL Transfer Bridge & Pontoon
Face of Fender Line
4'-8" CL Vertical Piles to face of fender line
Cylindrical Rubber Backed Fender System
CL Dock Vertical Piling
4'-0" face of locks to face of fender line
D
A
3 Column spaces @ 25'-0" = 75'-0"
30'-3 3/8"
Bollard Assembly, typ. @ Grid Row 1, Columns A - D

Dock Framing Layout

Dock Grid Col. A
B
28'-0" Open Grate Deck Panel
4'-0" Conc filled grote Ped walkway
Exterior Railing
Wheel guard
Wheel guard, typ.
22'-0"
Wave Barrier Sheet Piles, typ.
W24x55 Stringers, typ.
Double W33x118 Cap, typ.
+25
Wave Barrier Walers, typ.
EHW
Pile Capital Assembly, typ. (w/Strut gusset plate & Inner waler)
TS 12x12x1/2 Compression Strut (Row 5 & 6)
Batter Pile Assembly, typ.
+10
2 1/2"ø upset end tension rod and turnbuckles one end and clevis at other, typ.
Lower Pile Assembly, typ. (w/Tie plate & Inner waler)
Wave Barrier Leeward Waler, typ.
Wave Barrier Windward Waler, typ.
MLLW = 0.0
Driven Pile Cut-off @ Elev. + 1
ELW
-10
1
2
24"øx1/2" wall vertical pipe piles, typ.
-20
18"øx1/2" wall batter pipe piles, typ.
Ex. Ground
-30

Section A-A

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.
PE Date 3/21/12

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott
CHECKED BY: B. Savikko
DRAWN BY: C. Fuman, W. Hickok
STATE OF ALASKA 49th STATE OF ALASKA John T. Scott CE-4755 REGISTERED PROFESSIONAL ENGINEER 11.26.08

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

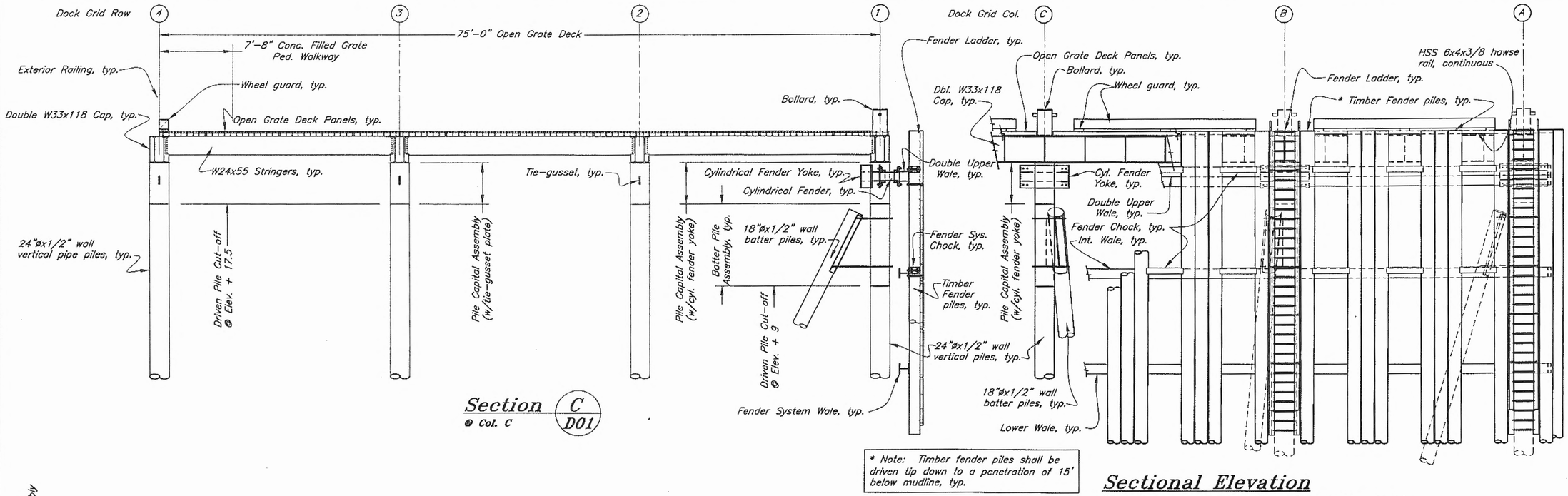
Dock Framing Layout

D01

PATH: O:\GUS\67599\MF\PLANSET\04-DOCK\D01 DOCK FRAMING LAYOUT.DWG
TAB: Wed, 26/Nov/08 11:05AM JTSCOTT

REVISIONS NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-0003(53)/67599	2008	52	138

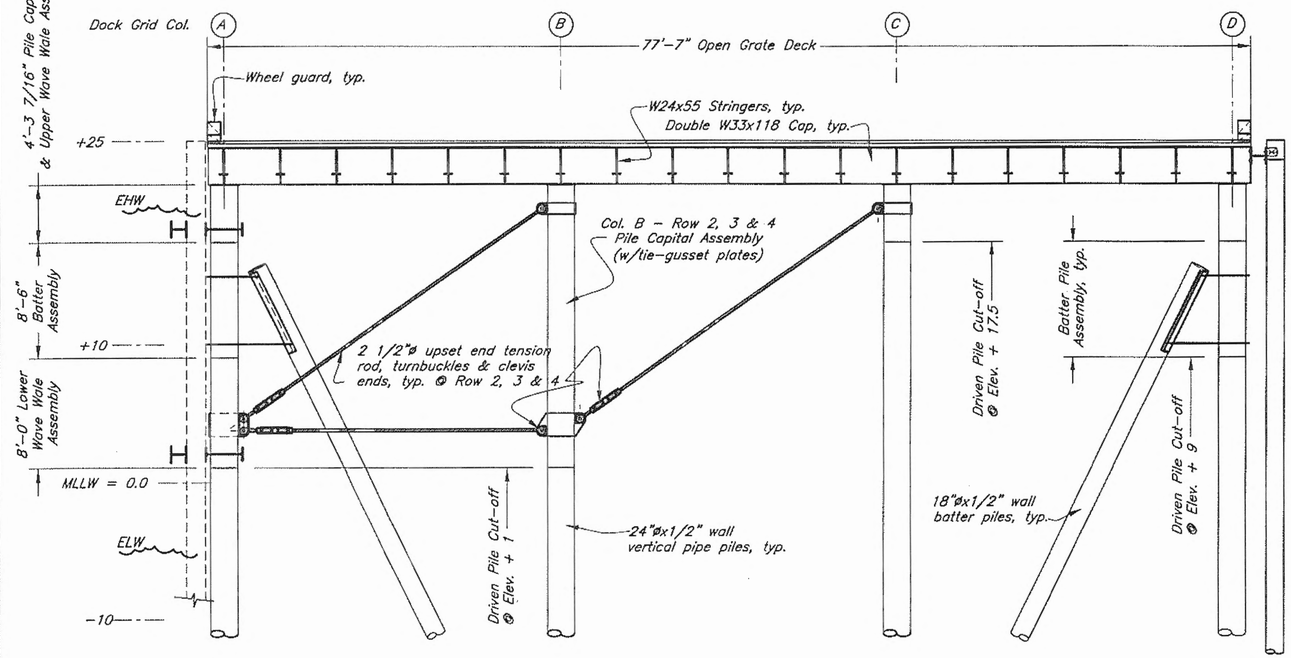


Section C @ Col. C — D01

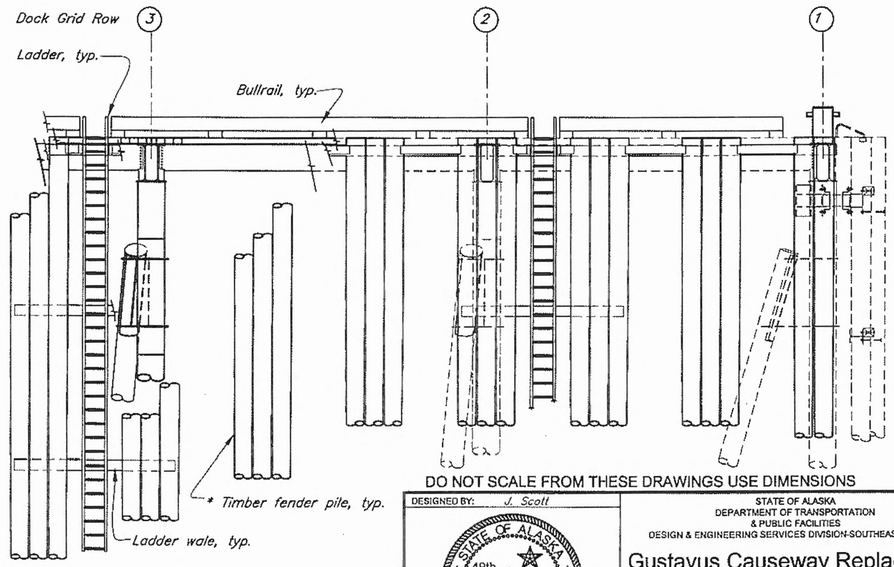
* Note: Timber fender piles shall be driven tip down to a penetration of 15' below mudline, typ.

Sectional Elevation

(@ Grid Row 1 – Face of Fender Line, looking North)



Section B @ Row 2, 3 & 4 — D01



Sectional Elevation

(@ Grid Col. D – Face of Fender Line, looking East)

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.

PE Stan Mark Date 8/2/17

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott

CHECKED BY: B. Savikko

DRAWN BY: C. Fuman, W. Hickok

PATH: O:\GUS\67599\MF\PLANSET\04-DOCK\D02 DOCK TYPICAL SECTIONS.DWG

TAB: Wed, 26/Nov/08 11:06AM JTSCOTT

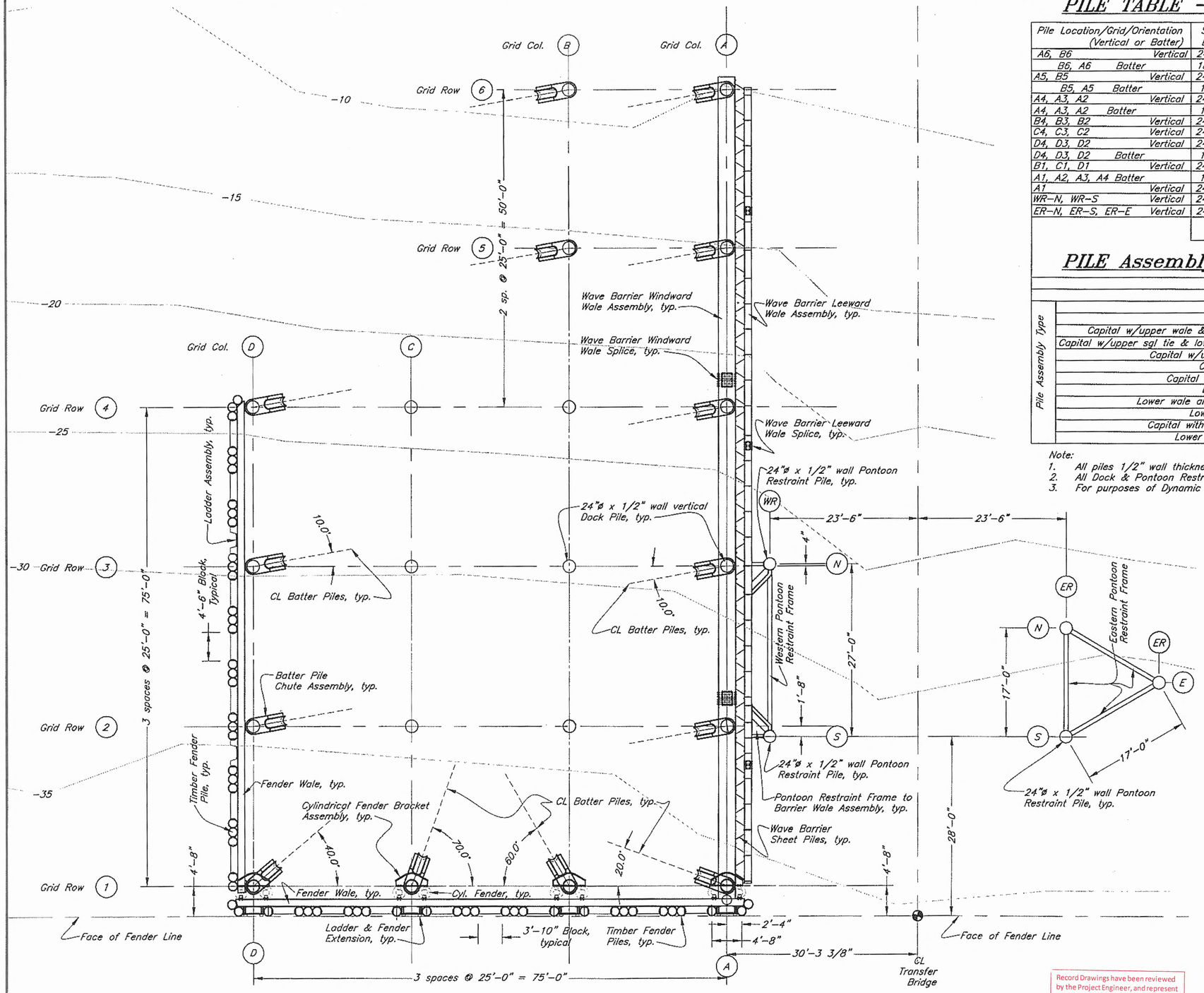
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

Dock Typical Sections

D02

REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
			BR-0003(53)/67599	2008	53	138



Dock and Pontoon Restraint Pile Layout

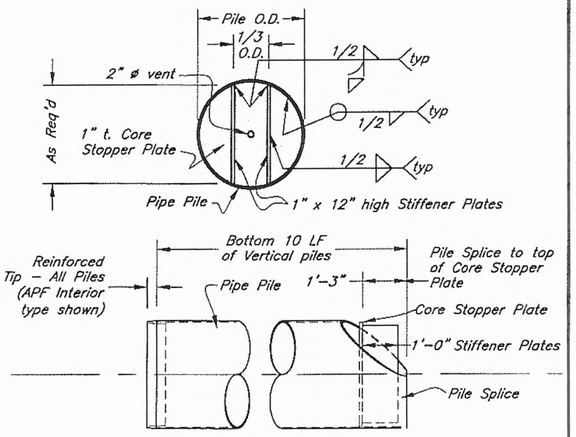
PILE TABLE – Dock and Pontoon Restraints

Pile Location/Grid/Orientation (Vertical or Batter)	Size Dia.	Design ③ Bearing	Design ③ Uplift	Elevations O.G.	Elevations Cut	Furn. Length Tip	Furn. Length 18"ø	Furn. Length 24"ø	Driven 18"ø	Driven 24"ø
A6, B6 Vertical	24"ø	60T	20T	-10	+1	-110	——	222	–	2
B6, A6 Batter	18"ø	50T	40T	-10	+15.67	-110	280	——	2	–
A5, B5 Vertical	24"ø	60T	20T	-15	+1	-115	——	232	–	2
B5, A5 Batter	18"ø	50T	40T	-15	+15.67	-115	292	——	2	–
A4, A3, A2 Vertical	24"ø	60T	20T	-30	+1	-130	——	393	–	3
A4, A3, A2 Batter	18"ø	50T	40T	-30	+15.67	-130	490	——	3	–
B4, B3, B2 Vertical	24"ø	60T	20T	-30	+1	-130	——	393	–	3
C4, C3, C2 Vertical	24"ø	60T	20T	-30	+17.5	-130	——	443	–	3
D4, D3, D2 Vertical	24"ø	60T	20T	-30	+9	-130	——	417	–	3
D4, D3, D2 Batter	18"ø	50T	40T	-30	+15.67	-130	490	——	3	–
B1, C1, D1 Vertical	24"ø	60T	20T	-38	+9	-138	——	441	–	3
A1, A2, A3, A4 Batter	18"ø	50T	40T	-38	+15.67	-138	687	——	4	–
A1 Vertical	24"ø	60T	20T	-38	+1	-138		139	–	1
WR–N, WR–S Vertical	24"ø	50T	50T	-30	+1	-130	——	262	–	2
ER–N, ER–S, ER–E Vertical	24"ø	50T	50T	-30	+1	-129.5	——	393	–	3
BASIC	Total 18"ø x 1/2" wall pipe piles						2,239 LF		14 Ea.	
BID	Total 24"ø x 1/2" wall pipe piles							3,336 LF		25 Ea.

PILE Assembly TABLE – Dock

Pile Assembly Type	Grid Column	Column A						Column B						Col. C				Col. D				Quantity
	Grid Row No.	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	1	2	3	4	
	Plain Capital											■							■	■		5 each
	Capital w/single tie														■	■						3 each
	Capital w/upper wale & upper strut gusset					■																2 each
	Capital w/upper sgl tie & lower dbl opposing tie								■	■												4 each
	Capital w/upper wale and yoke	■																				1 each
	Capital w/upper wale		■	■																		3 each
	Capital w/yoke & single tie				■	■						■							■			3 each
	Batter Pile Assembly	■	■	■	■	■						■							■	■		14 each
	Lower wale and double paired tie																					4 each
	Lower dbl opposing tie					■																1 each
	Capital with strut & tie gusset											■										2 each
	Lower wale and single tie				■																	2 each

Note:
1. All piles 1/2" wall thickness and provided with reinforced tips.
2. All Dock & Pontoon Restraint piles driven with plugged bottom section, see Detail this sheet.
3. For purposes of Dynamic Pile Driving Analysis Ultimate Capacity = Design Capacity x 2.25



Pile Tip & Core Stopper Details

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.
PE Date 8/21/17

DESIGNED BY: J. Scott
CHECKED BY: B. Savikko
DRAWN BY: C. Fuman, W. Hickok
PATH: G:\GUS\67599\MF\PLANSET\04-DOCK\D03 DOCK PILE LAYOUT.DWG
TAB: Wed, 26/Nov/08 11:07AM JTSCOTT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

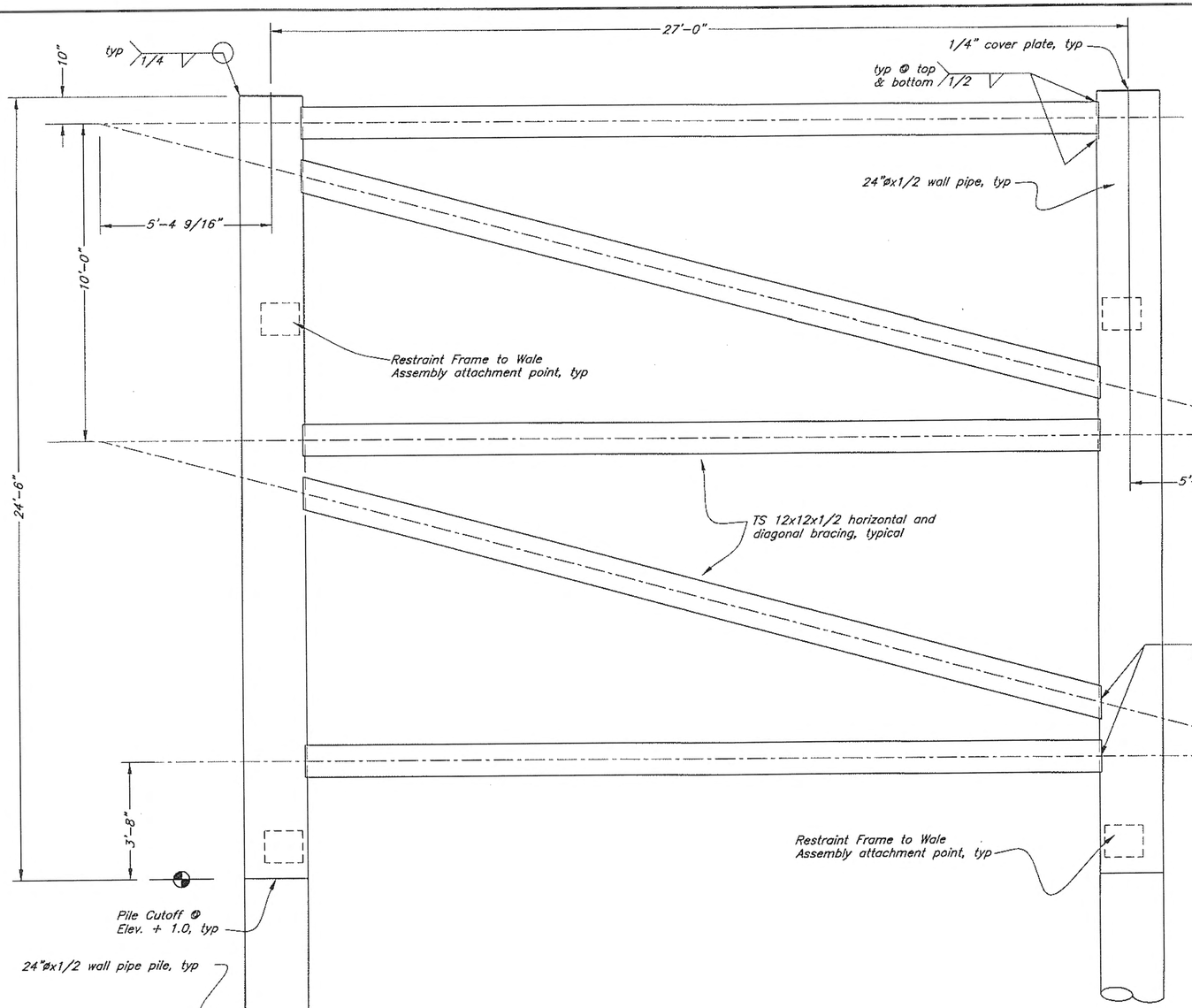
STATE OF ALASKA 49th John T. Scott CE-4755 REGISTERED PROFESSIONAL ENGINEER 11-26-08

Gustavus Causeway Replacement

Dock & Pontoon Restraint Pile Layout

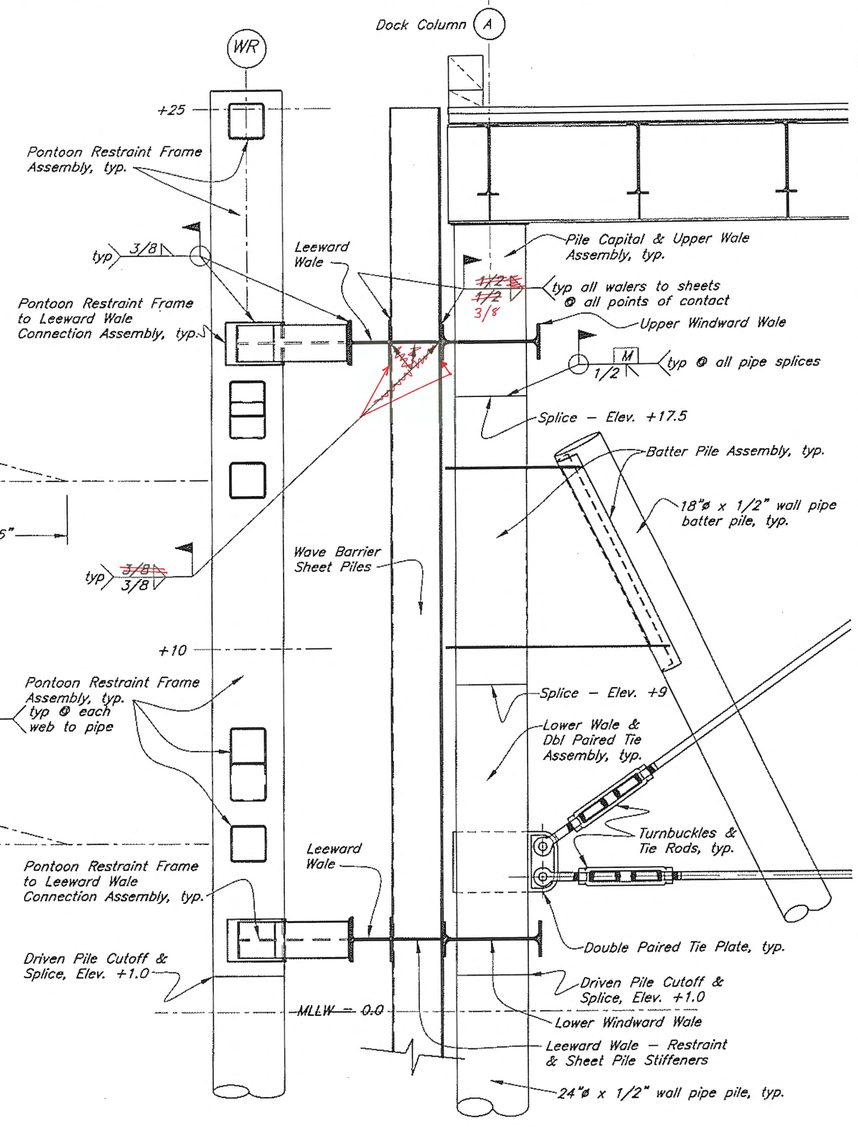
D03

REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			BR-0003(53)/67599	2008	54	138



Elevation – West Pontoon Restraint Frame

(WR shown Looking West)



Section View – Between Restraint Piles

(Looking South)

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.
PE [signature] Date 8/2/17

DESIGNED BY: J. Scott
CHECKED BY: B. Savikko
DRAWN BY: C. Fuman, W. Hickok
PATH: O:\GUS\67599\MF\PLANSET\04-DOCK\D04 DOCK AT RESTRAINT.DWG
TAB: Wed, 26/Nov/08 11:08AM JTSCOTT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

Dock/Pontoon Restraint West Frame

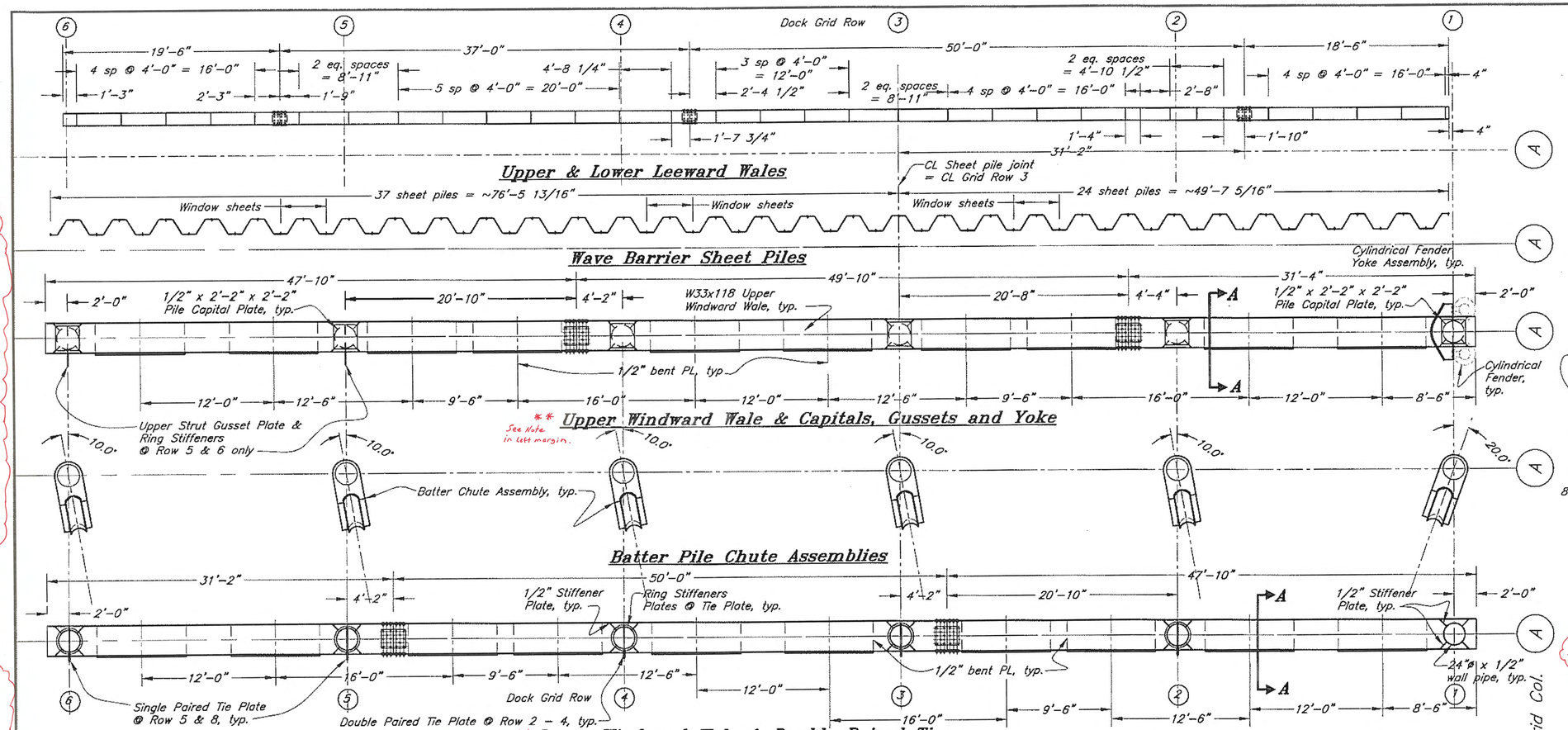
D04

REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			BR-0003(53)/67599	2008	55	138

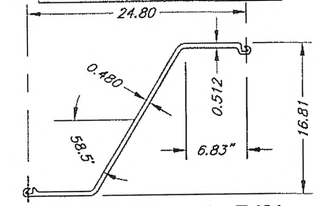
Sheet 56. *Add the following notes to this sheet:* "Leeward wale, leeward wale stiffeners, sheet pile stiffeners and sheet piles shall be bare steel. WR Pontoon Restraint (see Sheet 55), the pontoon restraint frame to leeward wale connection assembly (see Sheet 57), the upper and lower W 33 windward wales, windward wale pipes and all assemblies above pipe pile cutoff elevations (see table Sheet 54) shall be galvanized."

** Note: *Add the following note to* "Upper & Lower Windward Wale": "1/2" thick plate web stiffeners are located top and bottom as shown - opposite each sheet pile joint that contacts the windward walers. 1/4" fillet weld each side of each stiffener to flanges and stiffener to web contact, typical."

Sheet 56. *Under the* "AZ 26 Properties" *table add the following note:* "Plan design was based on the AZ 26 sheet pile section dimensions and properties. Should the AZ 26 sheet pile section shown not be domestically available (according to the requirements of Special Provision 106-1.01) then Contractor shall supply domestically available sheet piles such as PZC 26 that are equal or greater section properties per foot of wall. Given different length of wall per sheet and depth of section dimensions of PZC 26 (or other similar domestic sections) Contractor and Fabricator(s) shall adjust shapes of stiffeners, locations of wale splices and other details of the Wave Barrier or Dock Framing as required to accommodate substituted sheets."

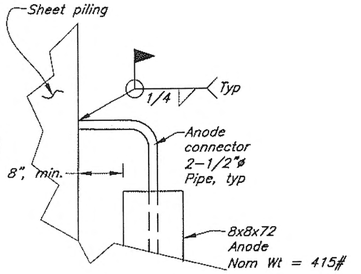


AZ 26 Properties		
Mass lb/ft of single pile	Section Modules in³/ft.	Moment of Inertia in⁴/ft.
65.72	100.1	840.2



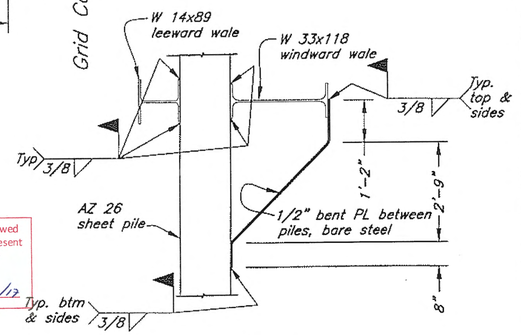
*AZ 26 Sheet Piling

* See Note in left margin.

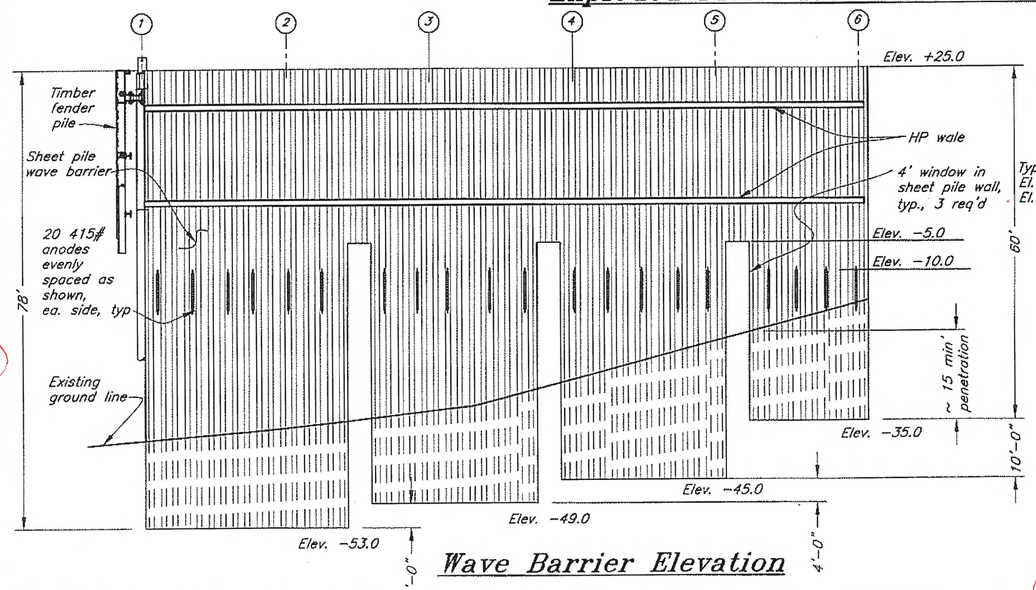


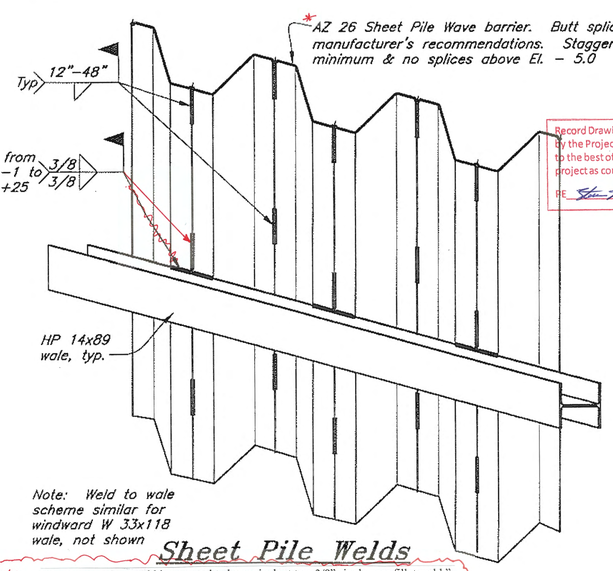
Anode Details

Note: "Section A-A": "1/2" bent Plate shown between windward wale flange and sheet piles is 8'-0" long, typical."



Section A–A





Note: The sheet to sheet weld is assumed to be equivalent to a 3/8" single pass fillet weld."

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.
PE Stan Smith Date 8/21/12

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott
CHECKED BY: B. Savikko
DRAWN BY: C. Fuman, W. Hickok
PATH: O:\GUS\67599\MF\PLANSET\04–DOCK\D05 DOCK WAVE BARRIER PLAN.DWG
TAB: Wed, 26/Nov/08 11:20AM JTSCOTT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

STATE OF ALASKA 49th John T. Scott CE-4755 REGISTERED PROFESSIONAL ENGINEER 11.26.08

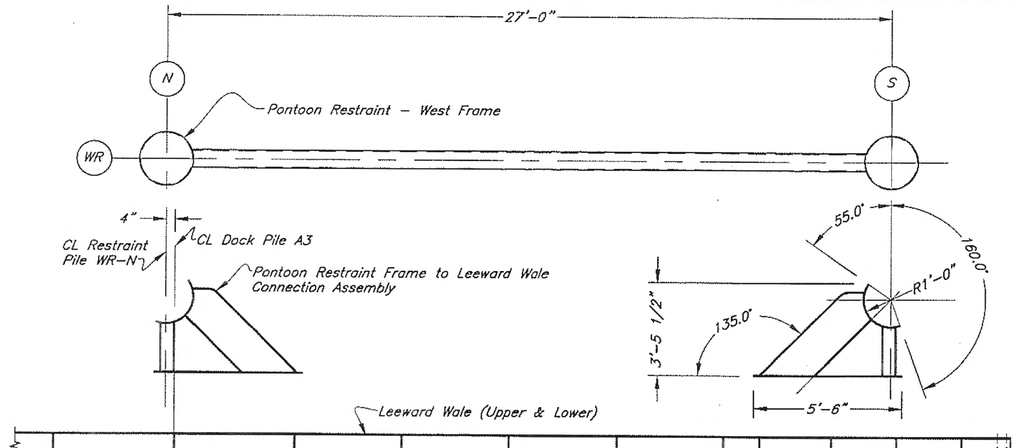
Gustavus Causeway Replacement

Dock/Pontoon West Restraint Wale & Wave Barrier

D05

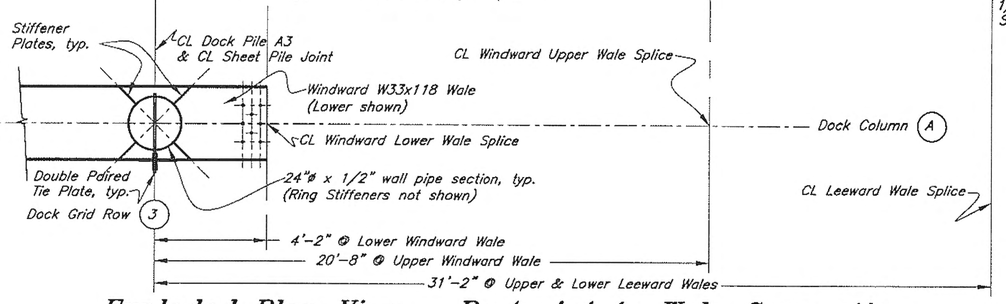
REVISIONS		
NO.	DATE	DESCRIPTION

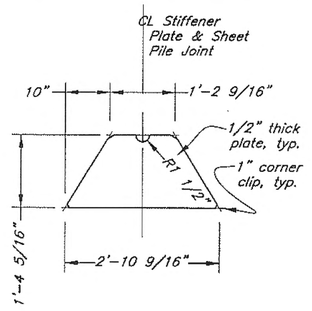
PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-0003(53)/67599	2008	56	138



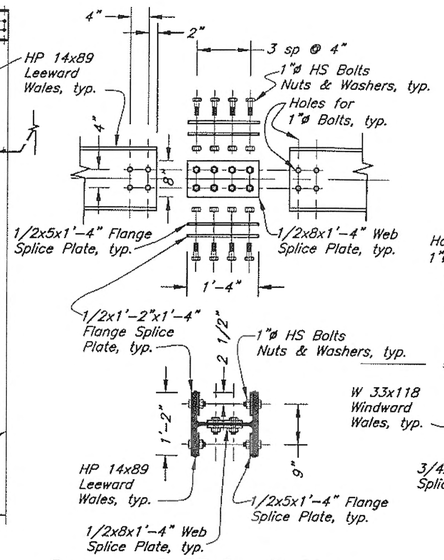
Exploded Plan View – Restraint to Wale Connection

(shown at lower wale connection, upper wale connection similar)

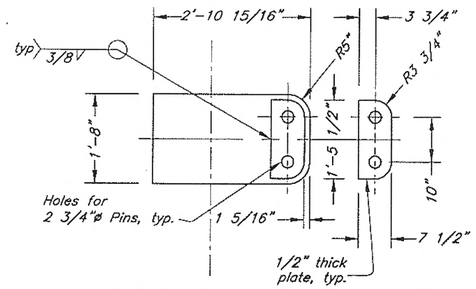




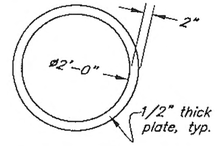
Sheet Pile Stiffeners – Restraint to Wales



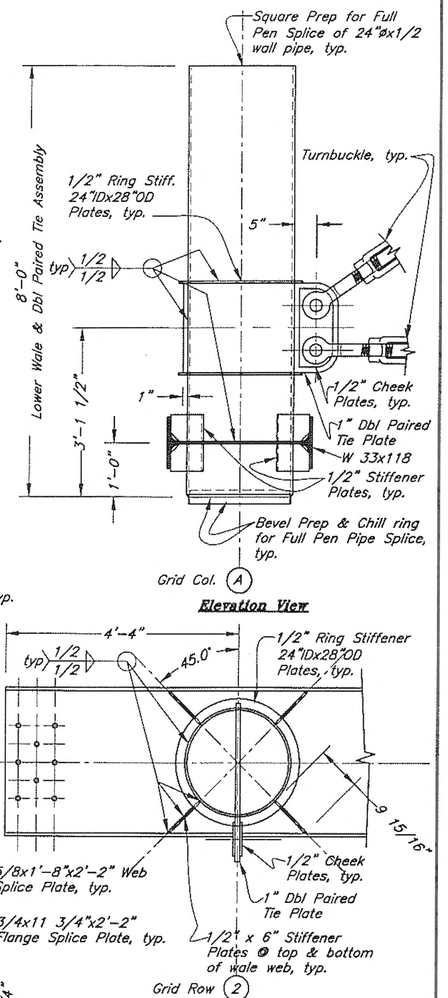
Leeward Wale Splice

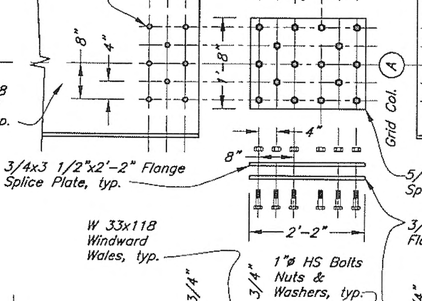


Double Paired Tie Plate



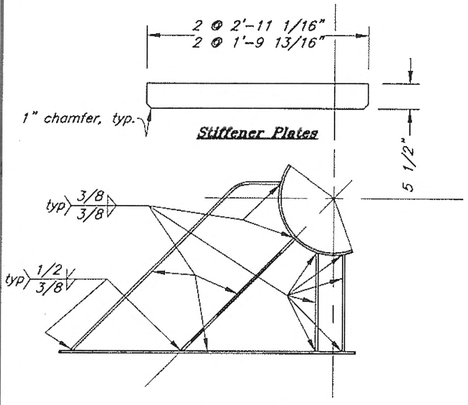
Pile Ring Stiffeners @ Ties & Gussets

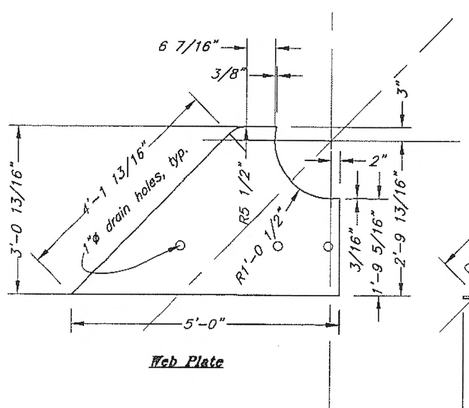


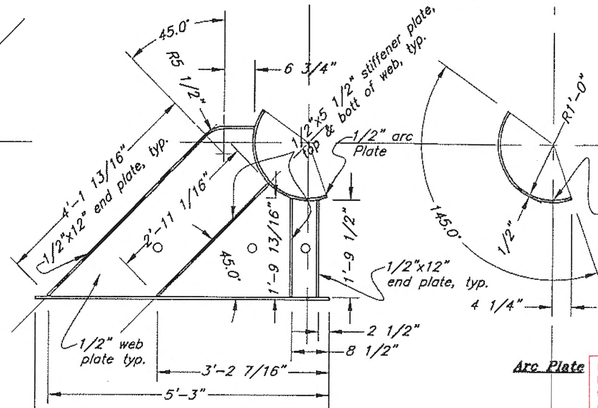


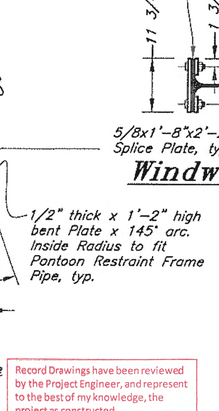
Lower Wale & Double Paired Tie Assembly

Windward Wale Splice









Pontoon Restraint Frame to Leeward Wale Connection Assembly

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.
PE Date 8/21/09

DESIGNED BY: J. Scott
CHECKED BY: B. Savikko
DRAWN BY: C. Fuman, W. Hickok

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

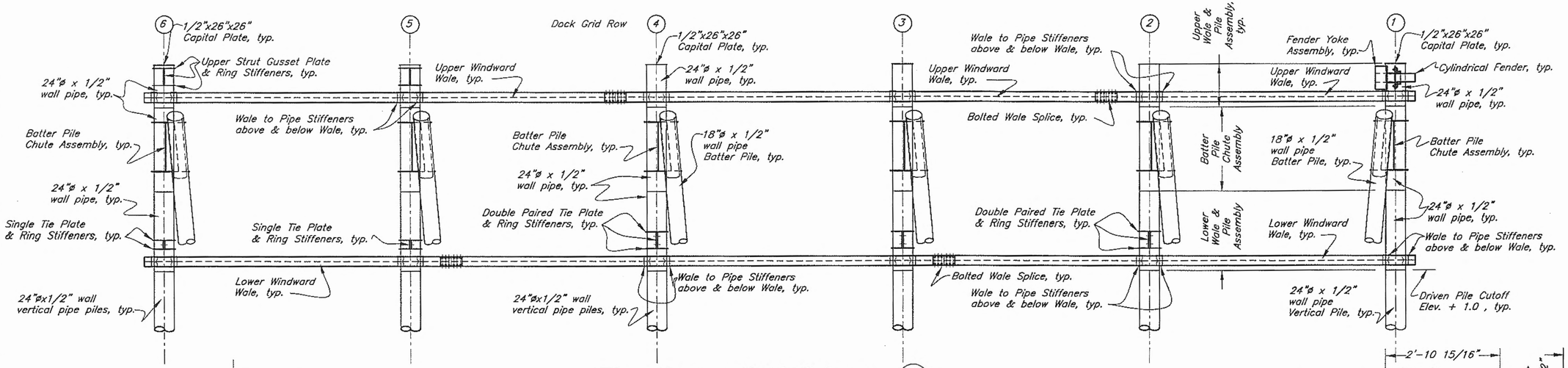
Dock/Pontoon West Restraint Details

D06

PATH: O:\GUS\67599\MF\PLANSET\04-DOCK\D06 DOCK WAVE BARRIER WALES.DWG
TAB: Wed, 26/Nov/08 11:21AM JTSCOTT

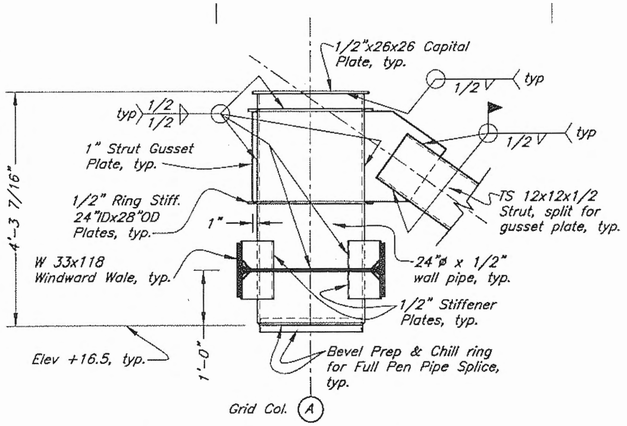
REVISIONS NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-0003(53)/67599	2008	57	138

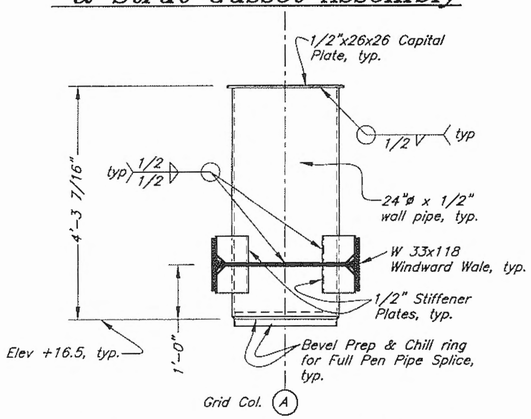


Elevation – Grid Column (A)

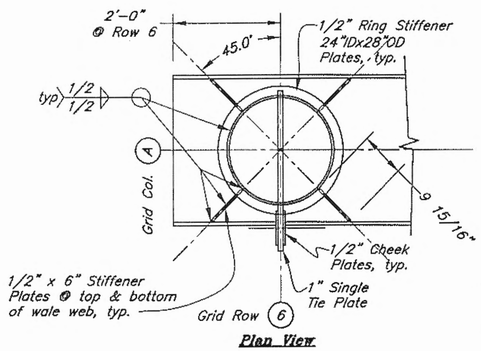
(Looking East –Wave Barrier Sheets not shown)



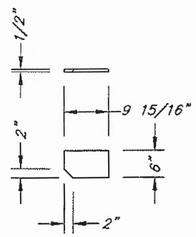
Capital with Upper Wale & Strut Gusset Assembly



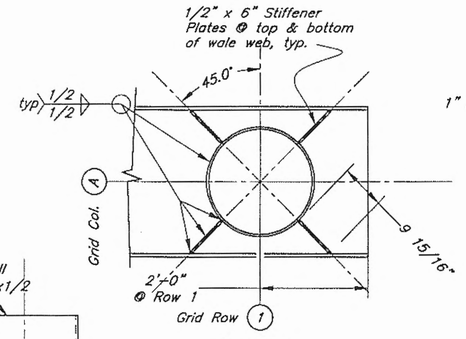
Capital with Upper Wale Assembly



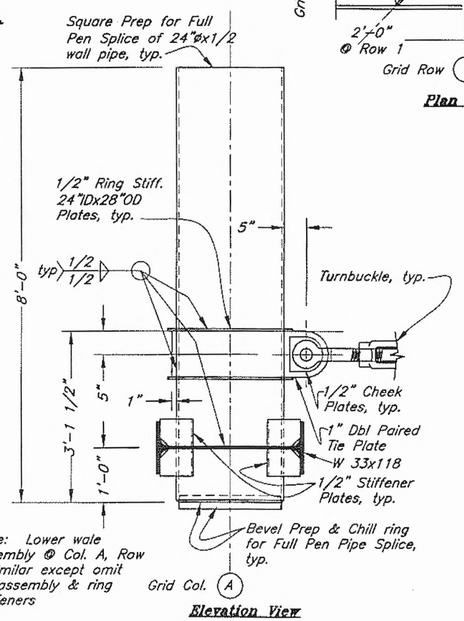
Plan View



Wale to Pipe Stiffeners

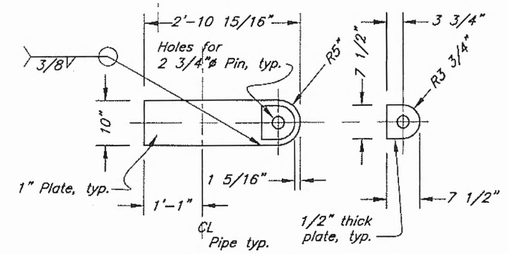


Plan View

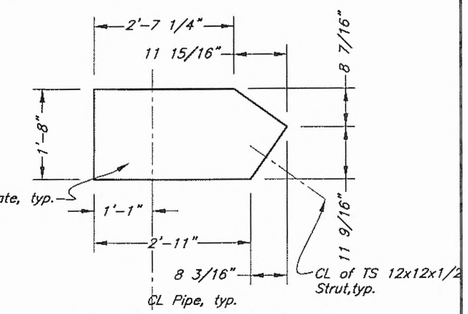


Elevation View

Lower Wale & Single Tie Assembly



Single Tie Plate



Strut Gusset Plate @ Upper Wale

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.
PE Date 3/21/12

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott
CHECKED BY: B. Savikko
DRAWN BY: C. Furman, W. Hickok
PATH: O:\GUS\67599\MF\PLANSET\04-DOCK\D07 DOCK CAPITALS 1.DWG
TAB: Wed, 26/Nov/08 11:23AM JTSCOTT

STATE OF ALASKA 49th — John T. Scott CE-4755 REGISTERED PROFESSIONAL ENGINEER — 11/26/08

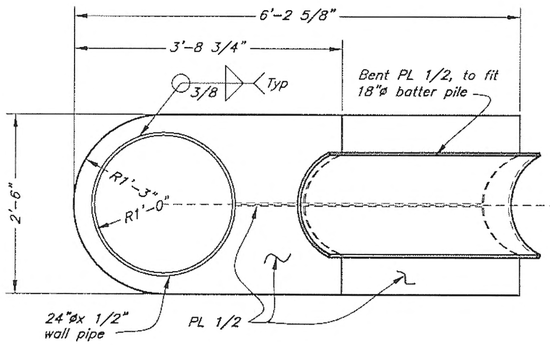
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

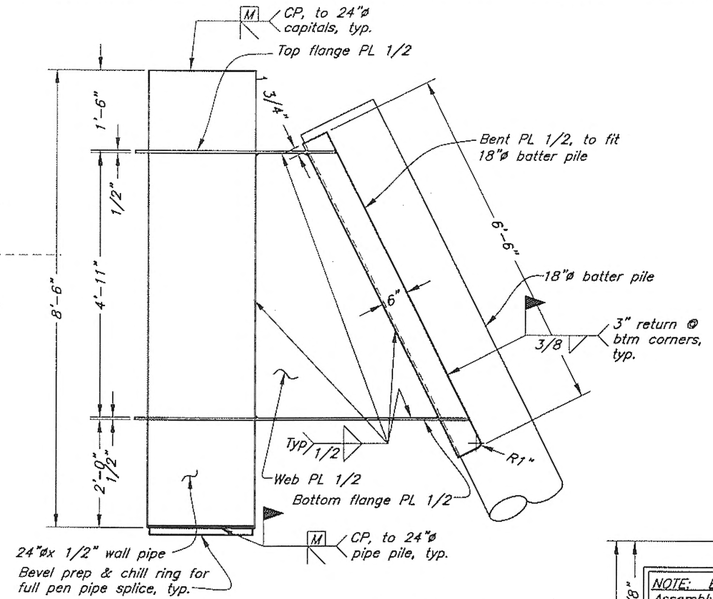
Dock Capitals Assemblies (1)

D07

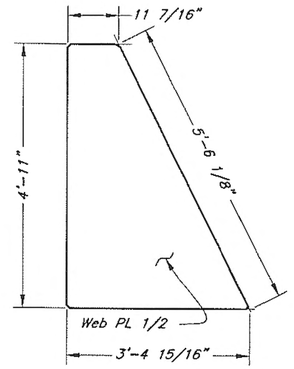
REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			BR-0003(53)/67599	2008	58	138



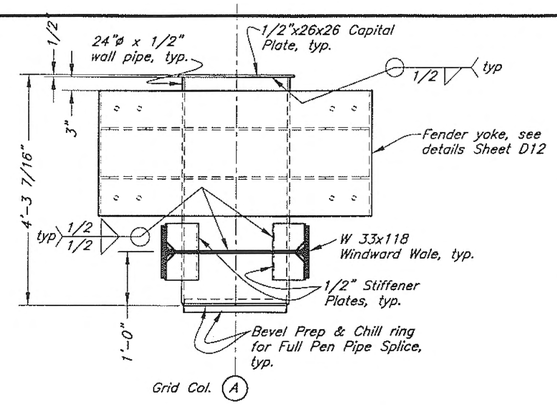
Batter Pile Assembly Plan



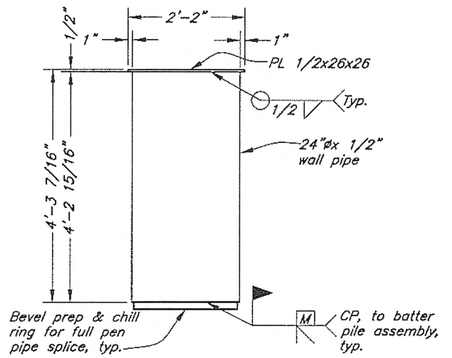
Batter Pile Assembly Elevation



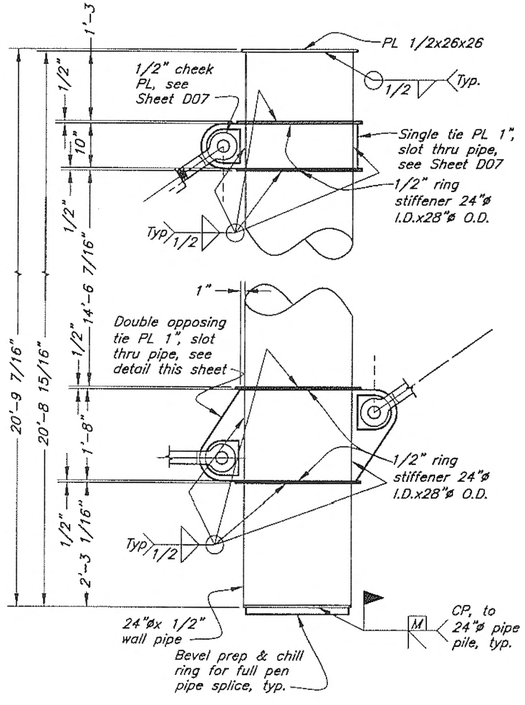
Batter Pile Assembly Web PL



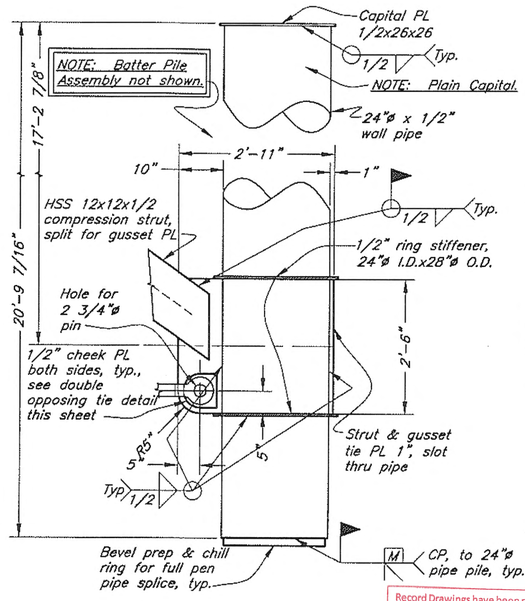
Capital with Upper Wale & Fender Yoke



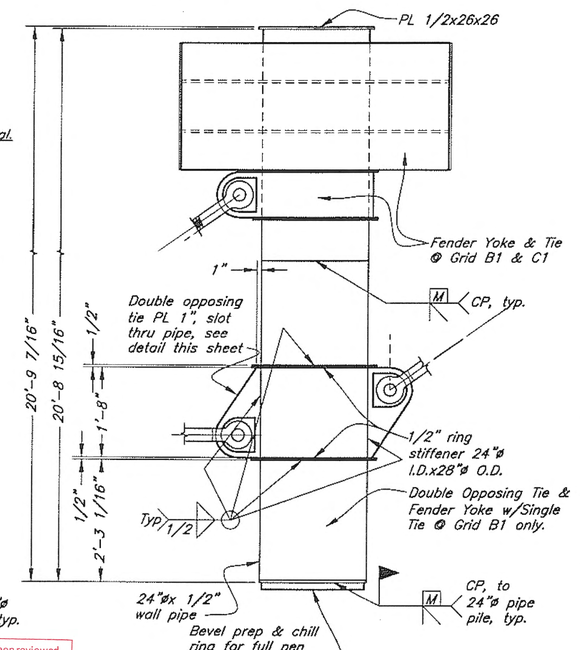
Plain Capital



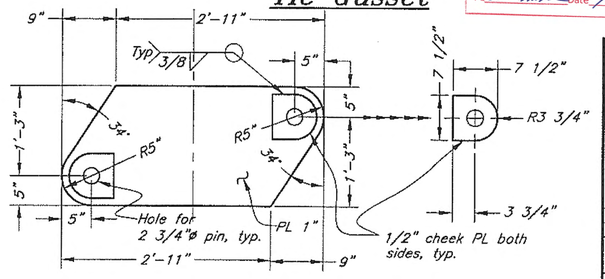
Capital w/ Single & Double Opposing Tie



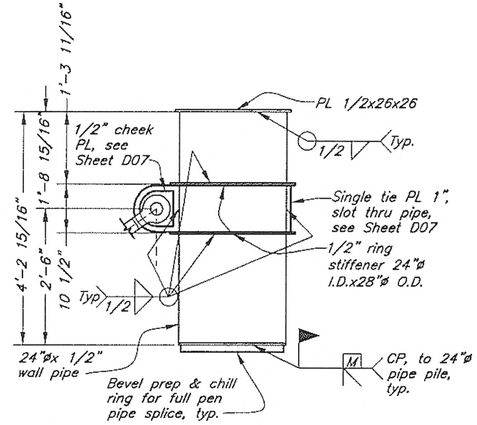
Capital w/ Strut & Tie Gusset



Capital w/ Fender Yoke/Single & Double Opposing Tie



Double Opposing Tie Plate



Capital w/ Single Tie

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.
PE Steve Smith Date 8/21/12

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott
CHECKED BY: B. Saviikko
DRAWN BY: C. Fuman, W. Hickak
PATH: O:\GUS\67599\MF\PLANSET\04-DOCK\D08 DOCK CAPITALS 2.DWG
TAB: Wed, 26/Nov/08 11:24AM JTSCOTT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

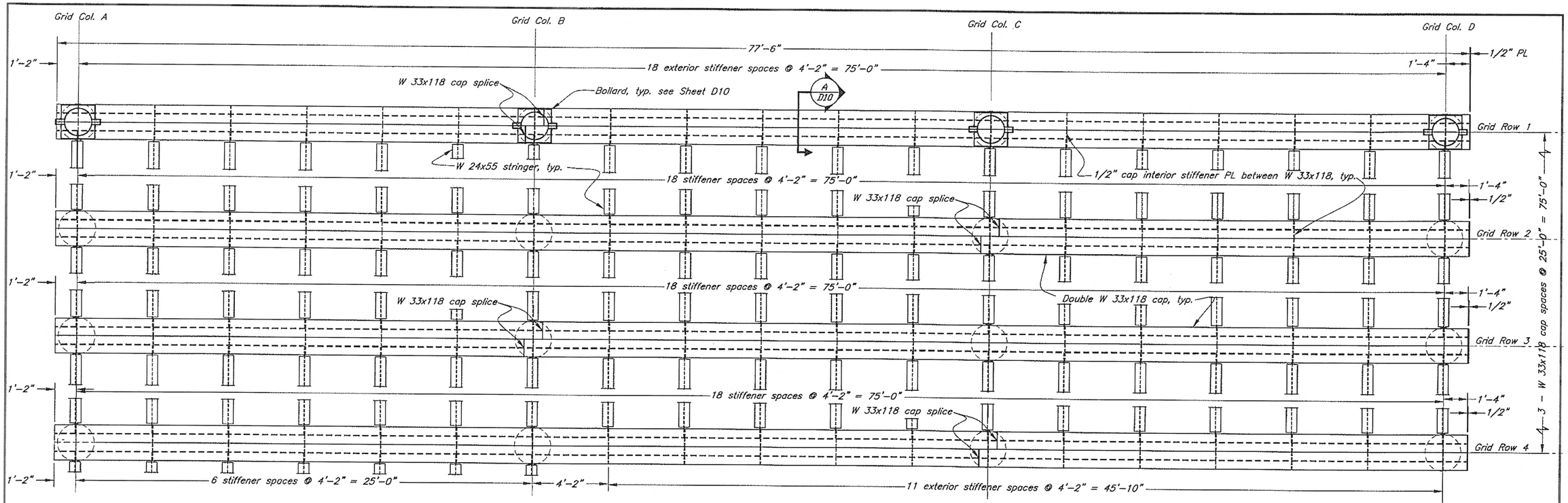
STATE OF ALASKA 49th John T. Scott CE-4755 REGISTERED PROFESSIONAL ENGINEER 11-26-08

Gustavus Causeway Replacement

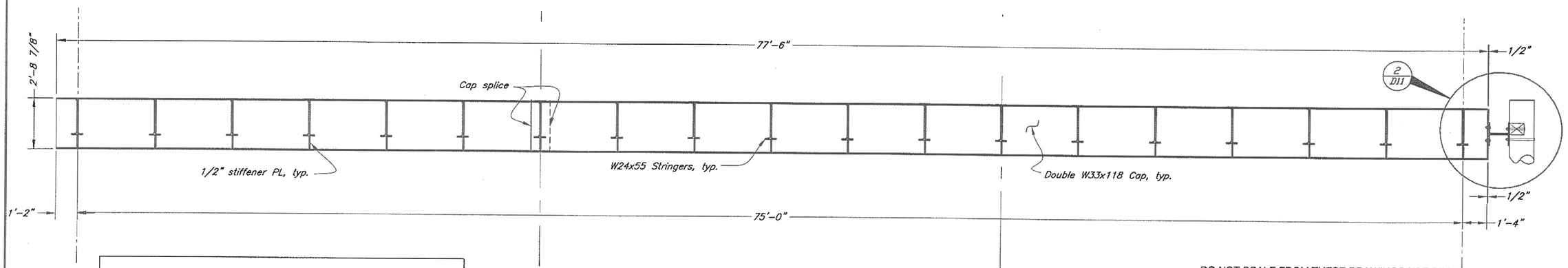
Dock Capital Assemblies (2)

D08

REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			BR-0003(53)/67599	2008	59	138



Dock Framing Plan



Note: Grid Rows 1, 2, & 4 similar except as shown on plan view

Grid Row 3 Cap Elevation

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.

PE Date 8/21/17

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott

STATE OF ALASKA 49th John T. Scott CE-4755 REGISTERED PROFESSIONAL ENGINEER 1.26.08

CHECKED BY: B. Savikko

DRAWN BY: C. Fuman, W. Hickok

PATH: O:\GUS\67599\MF\PLANSET\04-DOCK\D09 DOCK FRAMING PLAN.DWG

TAB: Wed, 26/Nov/08 11:25AM JTSCOTT

REVISIONS

NO.	DATE	DESCRIPTION

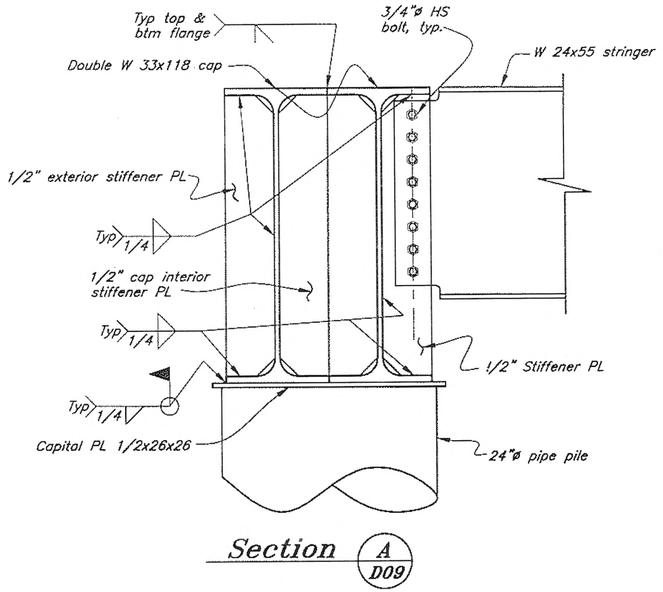
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

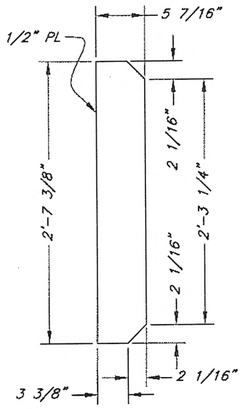
Dock Framing Plan

D09

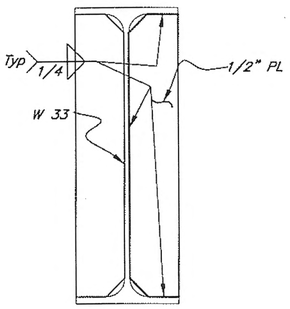
PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-0003(53)/67599	2008	60	138



Section A D09

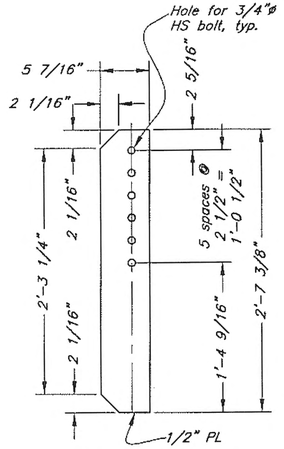


Stiffener PL

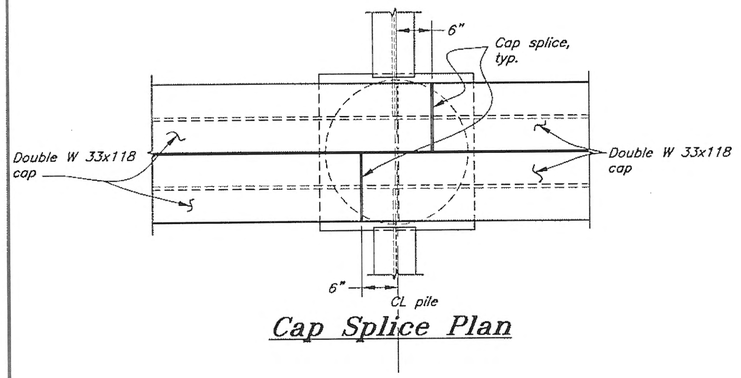


Cap Interior Stiffener PL's (between double W 33's)

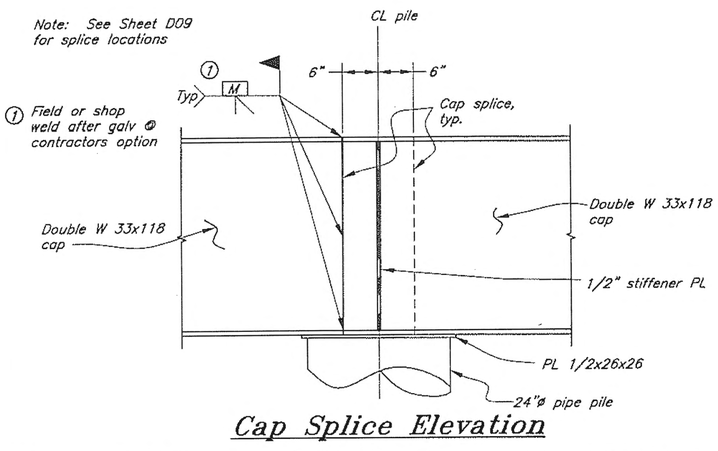
Stiffener Plates



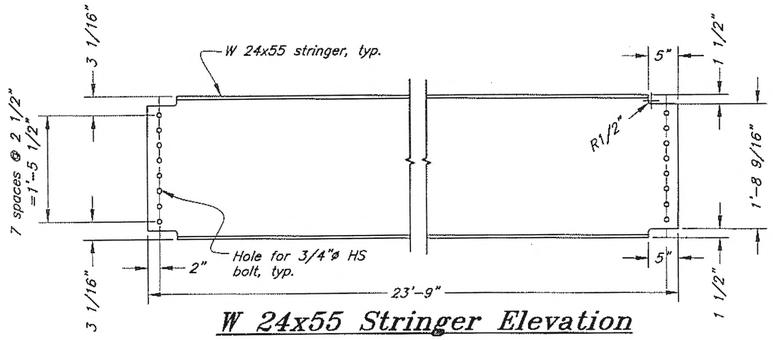
Stiffener Plate @ Stringer Connections



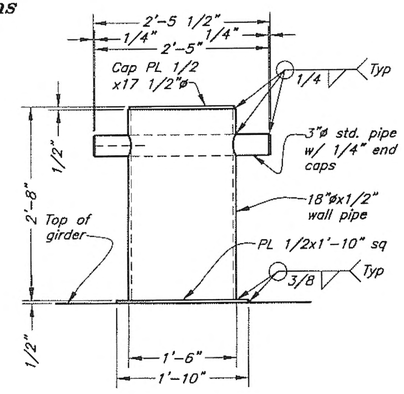
Cap Splice Plan



Cap Splice Elevation



W 24x55 Stringer Elevation



Bollard Elevation

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.
PE Steve Smith Date 8/21/12

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott
CHECKED BY: B. Savikko
DRAWN BY: C. Fuman, W. Hickok
PATH: O:\GUS\67599\MF\PLANSET\04-DOCK\D10 DOCK FRAMING DETAILS.DWG
TAB: Wed, 26/Nov/08 11:26AM JTSCOTT

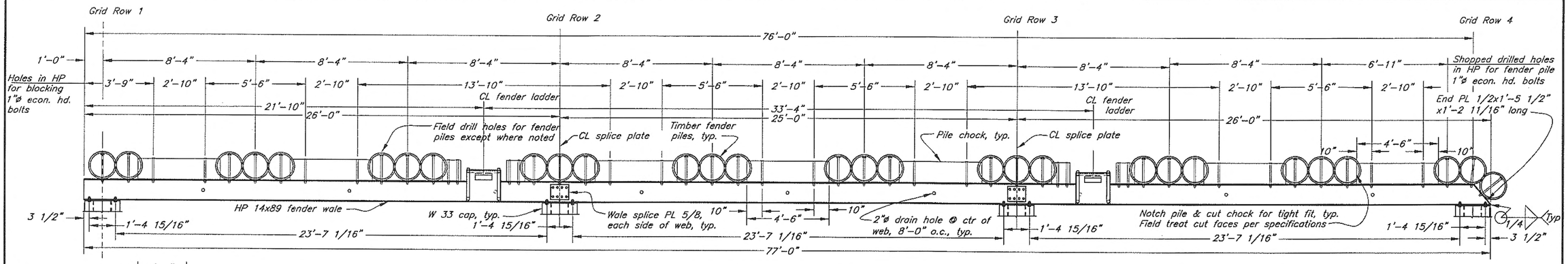
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

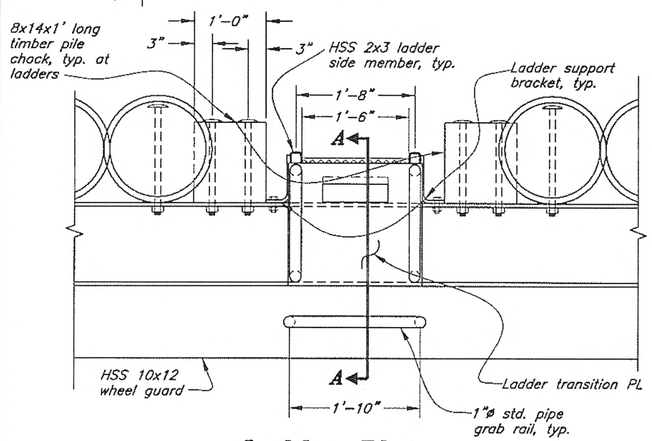
Gustavus Causeway Replacement

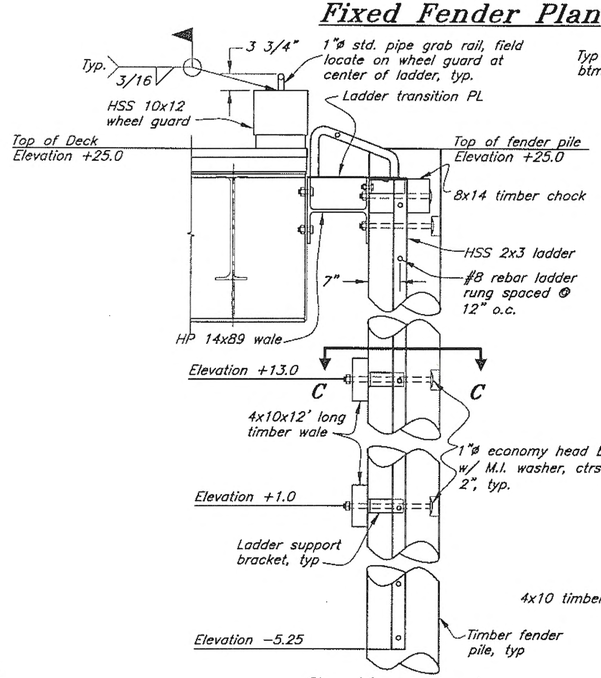
Dock Framing Details

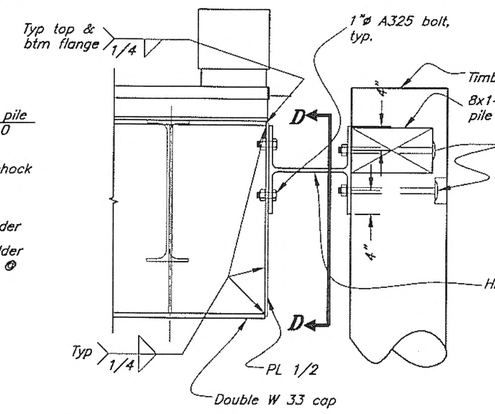
D10

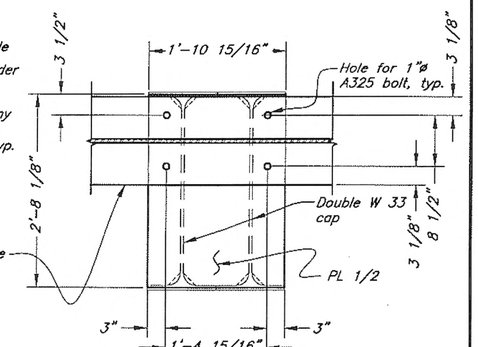
REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			BR-0003(53)/67599	2008	61	138

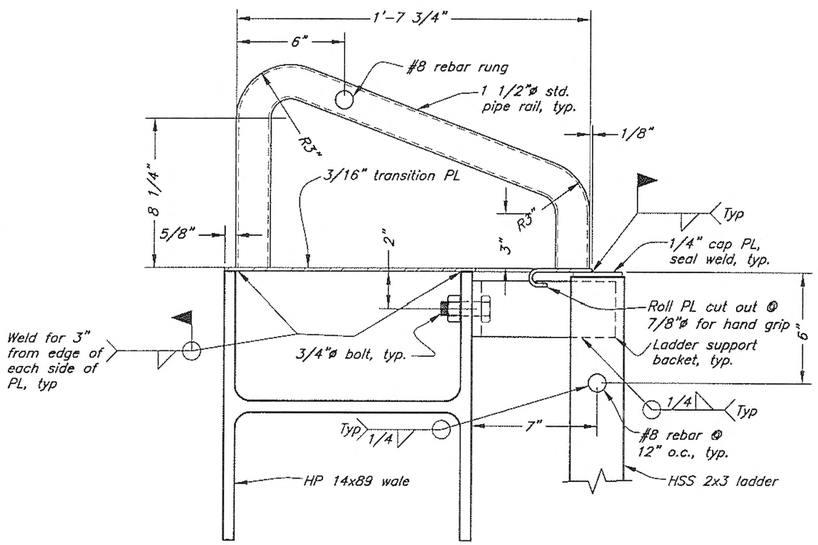


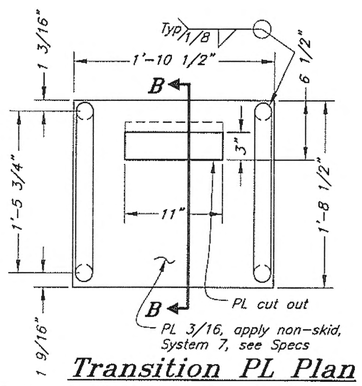


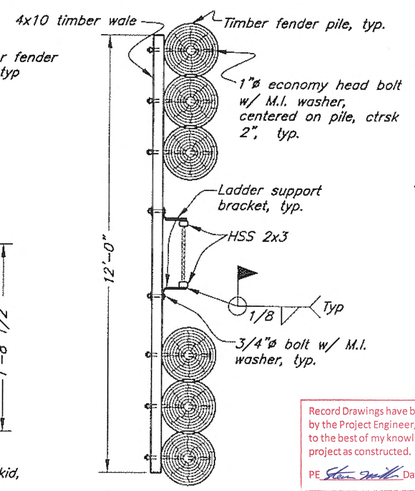


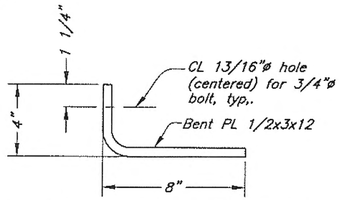


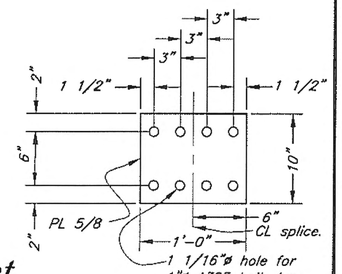












DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.

PE Date 3/21/12

DESIGNED BY: J. Scott

STATE OF ALASKA
49th
John T. Scott
CE-4755
REGISTERED PROFESSIONAL ENGINEER
11.26.08

CHECKED BY: B. Savikko

DRAWN BY: C. Fuman, W. Hickok

PATH: O:\GUS\67599\MF\PLANSET\04-DOCK\D11 DOCK FIXED FENDER.DWG

TAB: Wed, 26/Nov/08 11:27AM JTSCOTT

REVISIONS		
NO.	DATE	DESCRIPTION

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

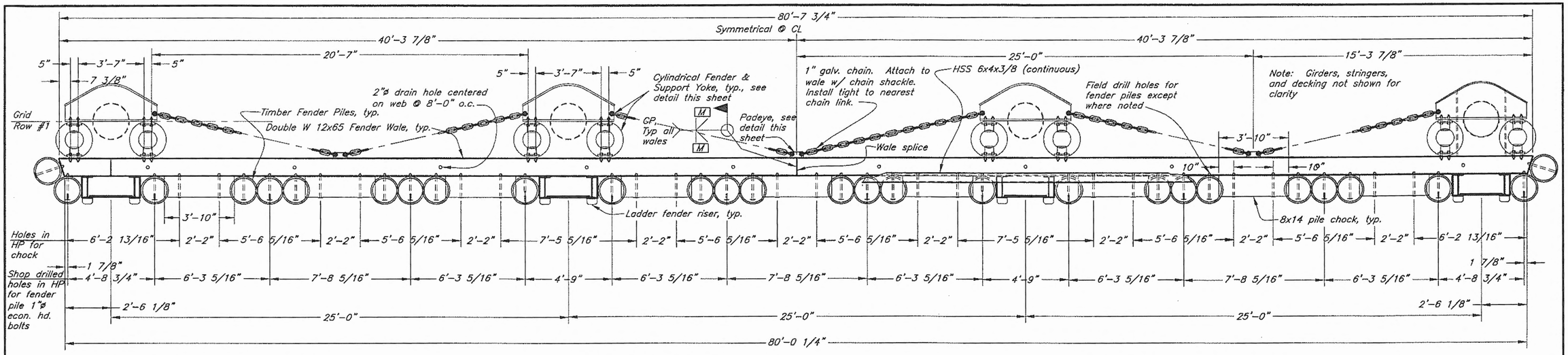
Gustavus Causeway Replacement

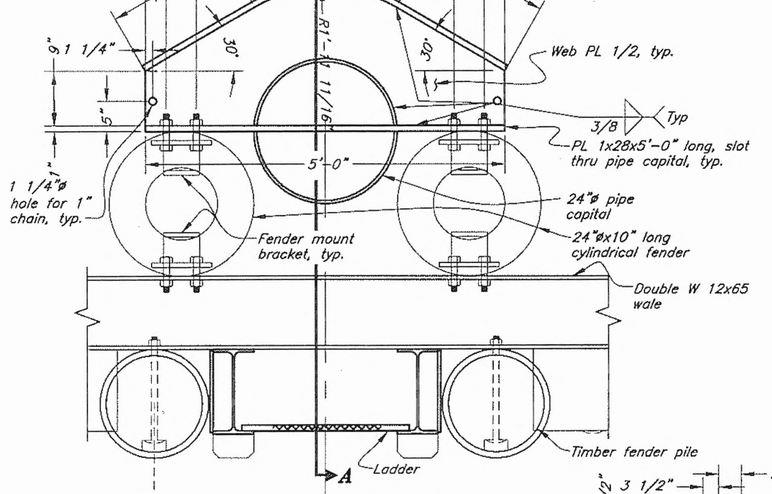
Dock Fixed Fender Details

D11

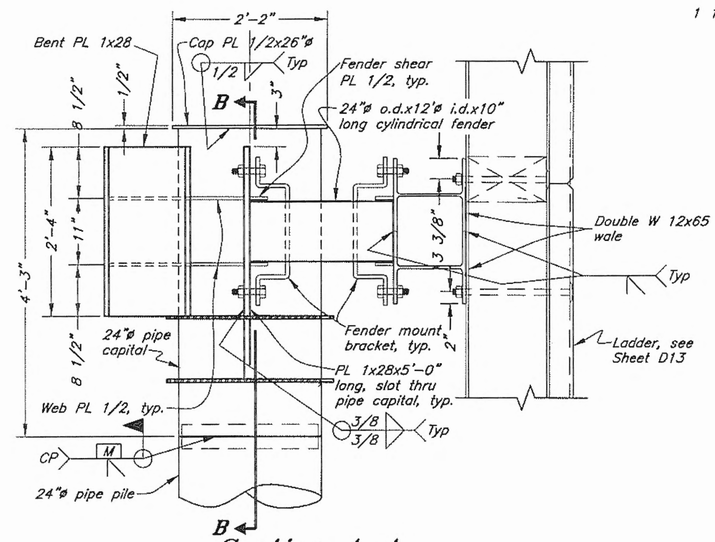
PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-0003(53)/67599	2008	62	138

Grid Row #1 Fender Plan

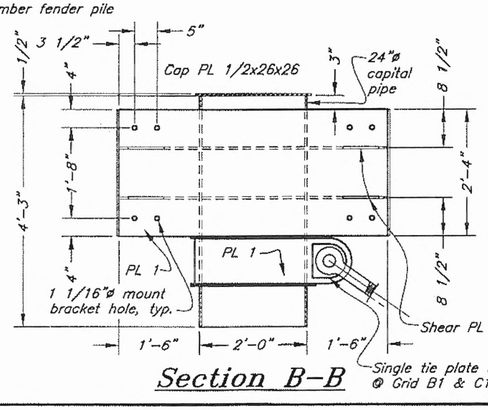




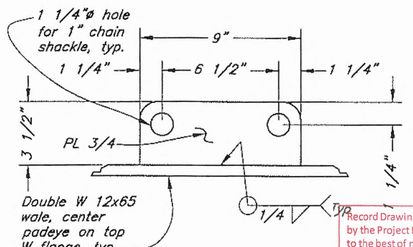
Fender & Fender Yoke Plan



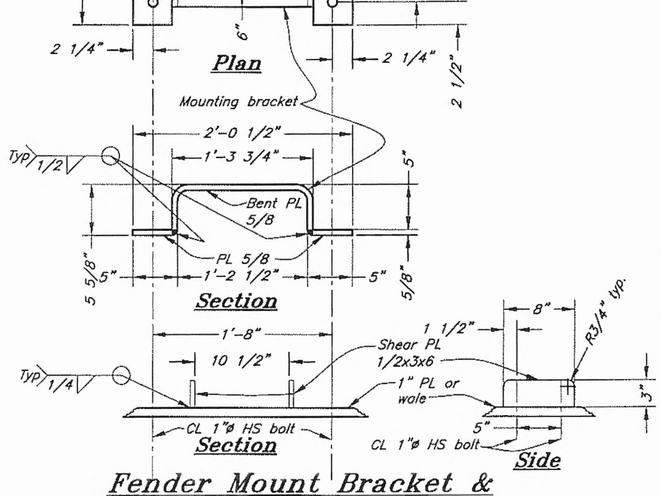
Section A–A
Capital w/ Yoke



Section B–B



Chain Padeye



Fender Mount Bracket & Mounting Details

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.
PE _____ Date 8/21/12

DESIGNED BY:	J. Scott
CHECKED BY:	B. Savikko
DRAWN BY:	C. Fuman, W. Hickok
PATH:	O:\GUS\67599\MF\PLANSET\04-DOCK\D12 DOCK FRONT FENDER.DWG
TAB:	Wed, 26/Nov/08 11:30AM JTSCOTT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

STATE OF ALASKA 49th — John T. Scott CE-4755 REGISTERED PROFESSIONAL ENGINEER — 11.26.08

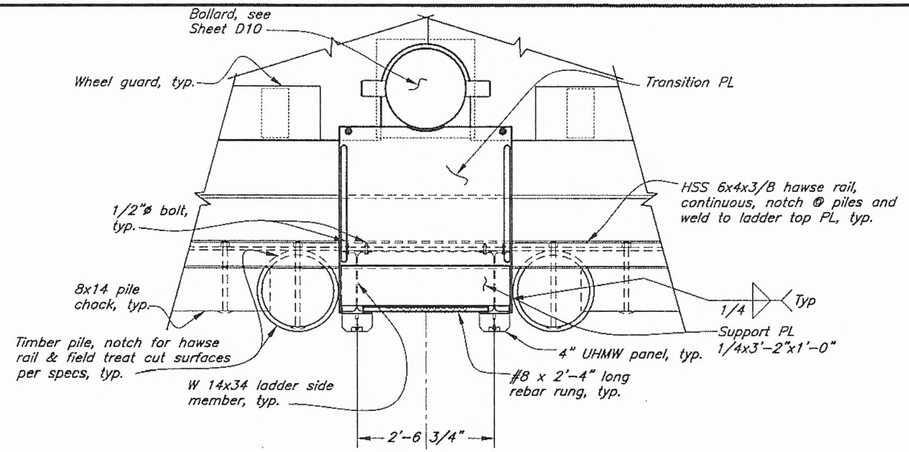
Gustavus Causeway Replacement

Dock Front Fender Details (Grid Row #1)

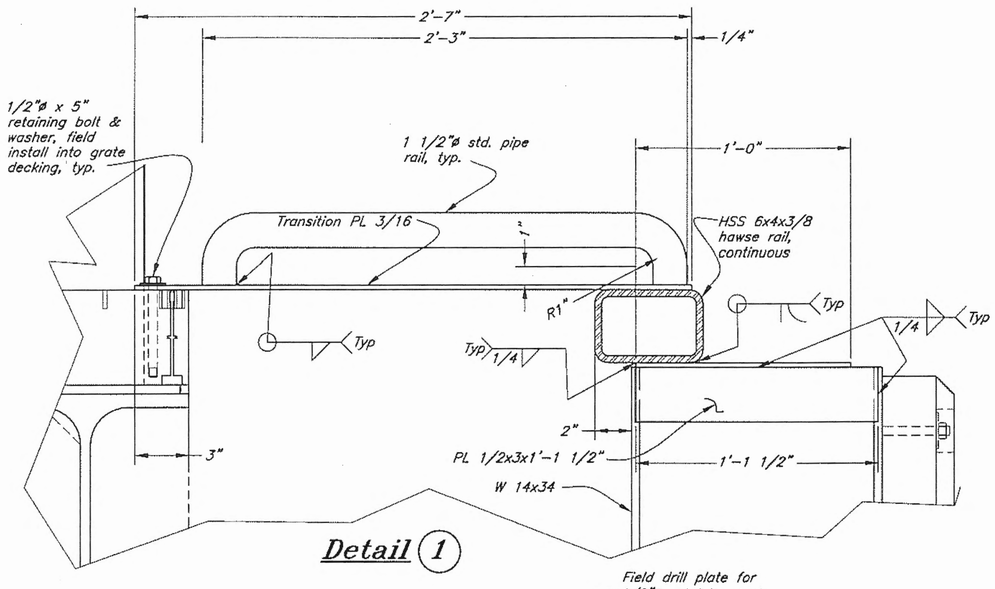
D12

REVISIONS NO.	DATE	DESCRIPTION

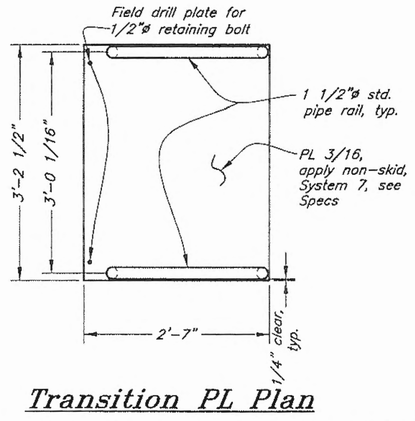
PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-0003(53)/67599	2008	63	138



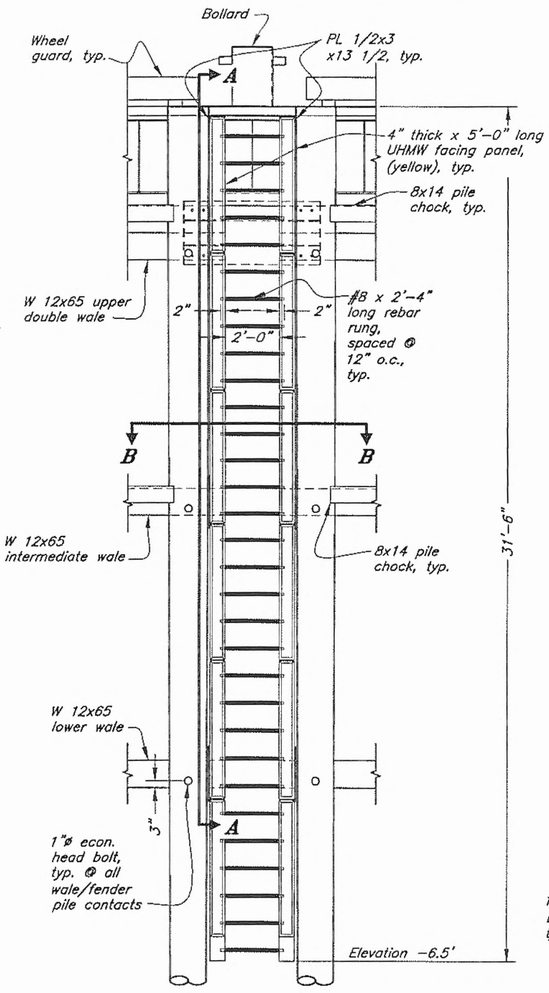
Plan



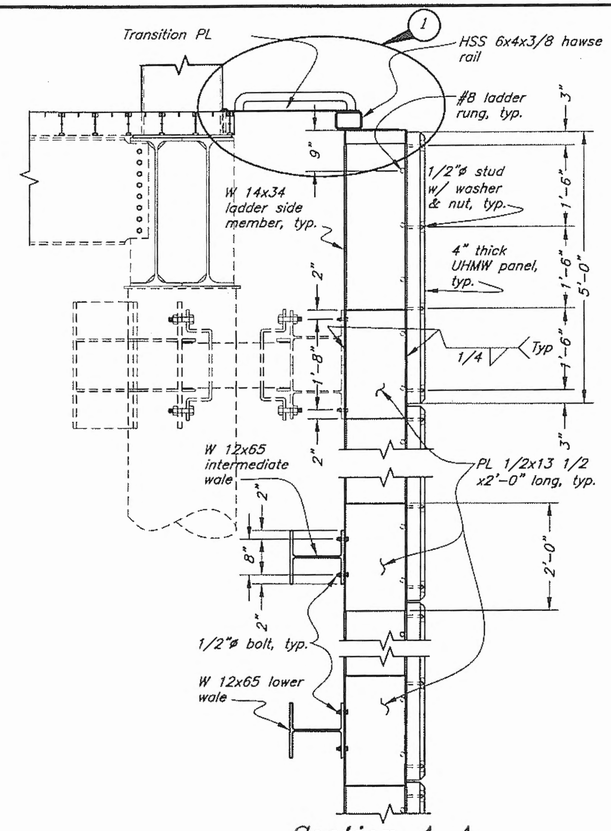
Detail (1)



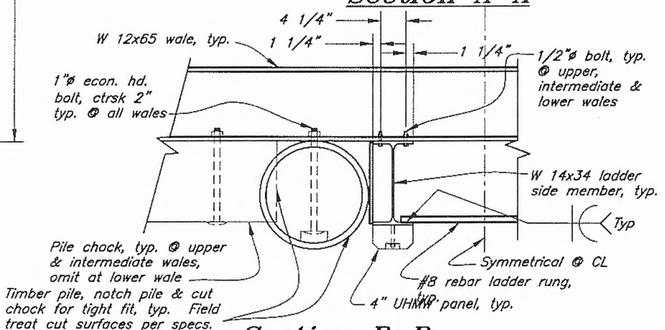
Transition PL Plan



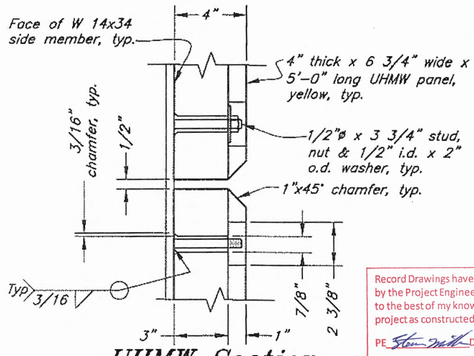
Front Elevation



Section A-A



Section B-B



UHMW Section

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.
PE _____ Date 8/21/17

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott
CHECKED BY: B. Savikko
DRAWN BY: C. Fuman, W. Hickok
PATH: O:\GUS\67599\MF\PLANSET\04-DOCK\D13 DOCK FRONT FENDER LADDER & TP.DWG
TAB: Wed, 26/Nov/08 11:31AM JTSCOTT

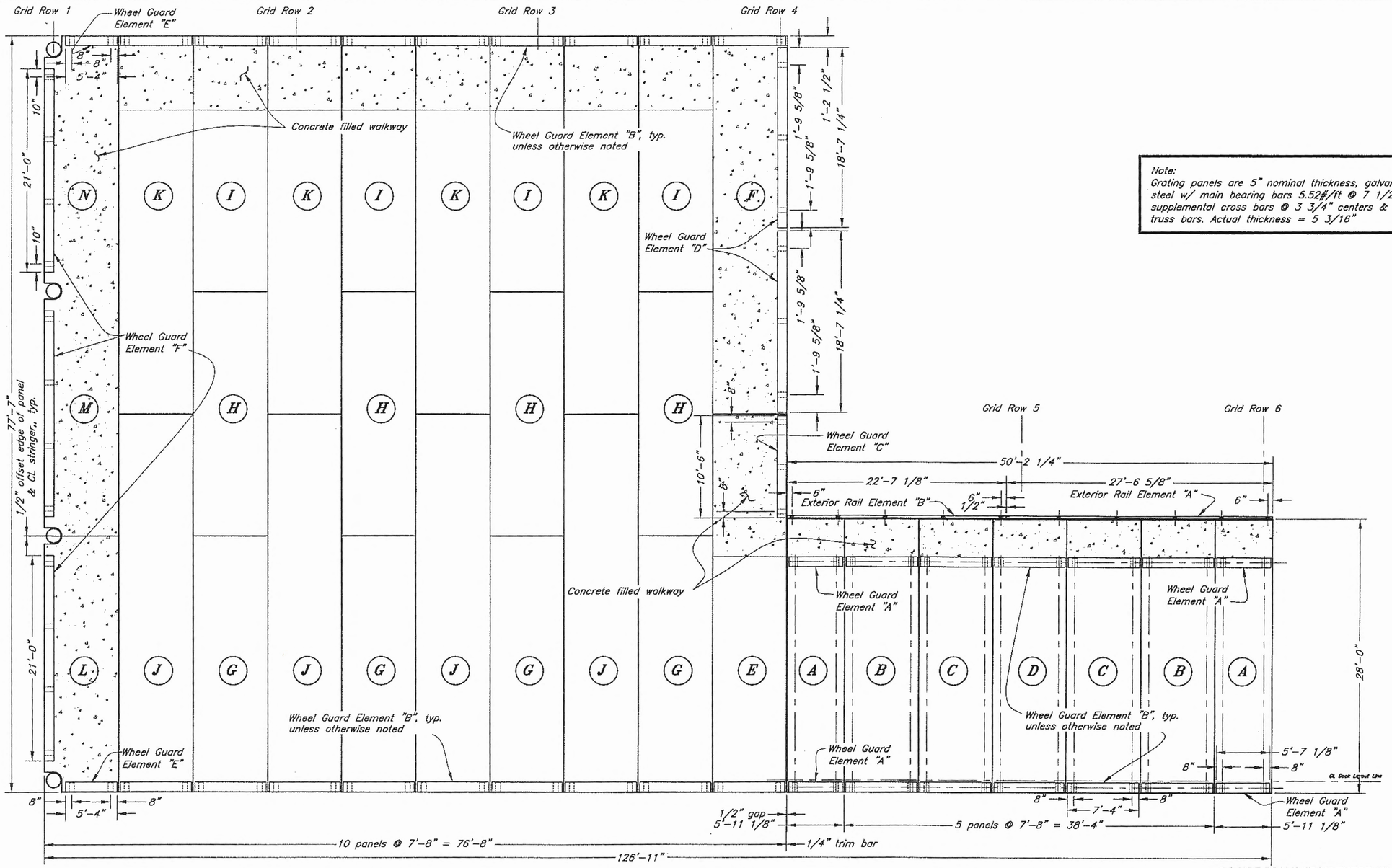
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

STATE OF ALASKA 49th John T. Scott CE-4755 REGISTERED PROFESSIONAL ENGINEER 11/26/08

Gustavus Causeway Replacement
Dock Front Fender Ladder & Transition Plate

D13

REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			BR-0003(53)/67599	2008	64	138



Note:
Grating panels are 5" nominal thickness, galvanized, open grate steel w/ main bearing bars 5.52#/ft @ 7 1/2" centers & 1/4" supplemental cross bars @ 3 3/4" centers & 1/4" @ 1" bent truss bars. Actual thickness = 5 3/16"

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.
PE Date 8/21/12

Dock Deck Panel Layout

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott
CHECKED BY: B. Savikko 11.26.08
DRAWN BY: C. Fumon, W. Hickok
PATH: O:\GUS\67599\MF\PLANSET\04-DOCK\D14 DOCK DECK PANELS LAYOUT.DWG
TAB: Wed, 26/Nov/08 11:32AM JTSCOTT

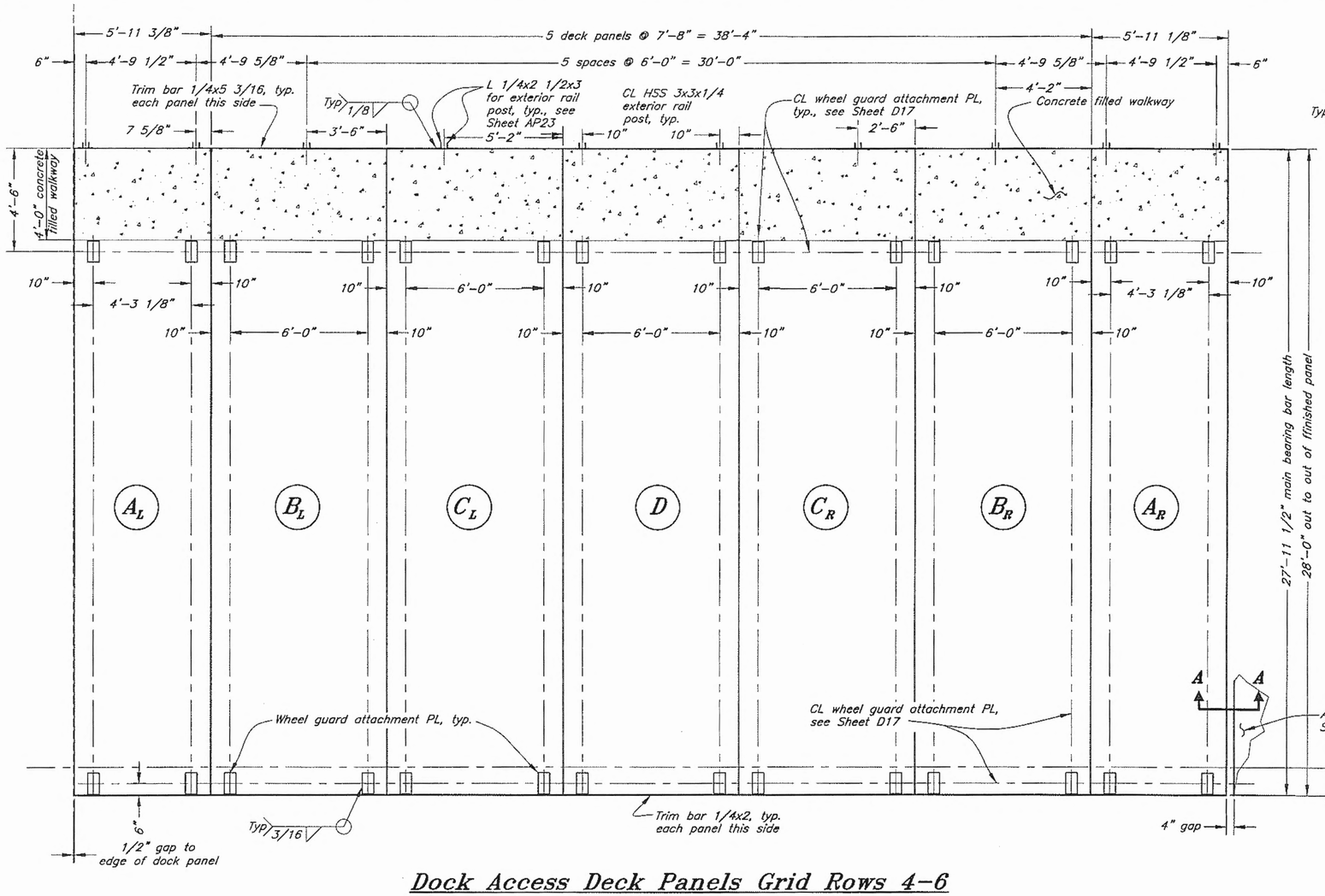
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

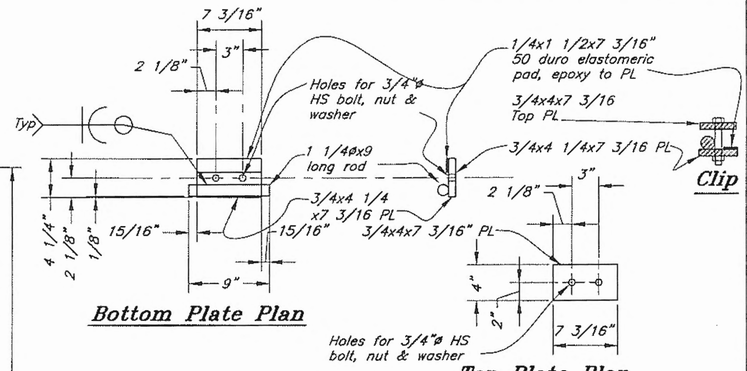
Dock Deck Panel Layout

D14

REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			BR-0003(53)/67599	2008	65	138



Dock Access Deck Panels Grid Rows 4-6

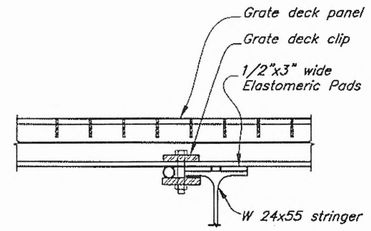


Bottom Plate Plan

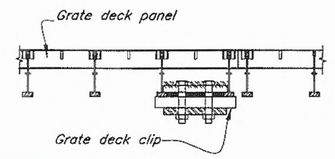
Top Plate Plan

Clip Assembly for Dock Grate Decking

(2 per stringer per Panel, Max Spacing 4'-4 1/2")

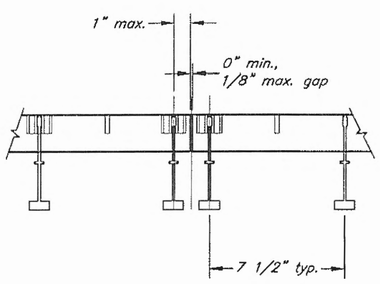


Section

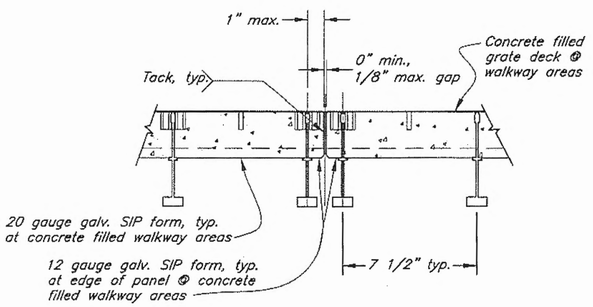


Elevation

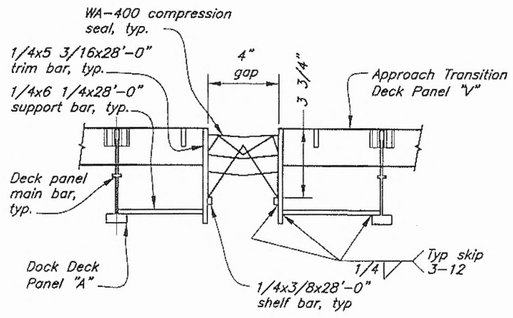
Deck Clip Assemblies



Typical Grating Joint



Grating Joint @ Concrete Walkway



Section A-A
(Gap @ Bent 17)

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.
PE Stan Zwick Date 3/21/12

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott
CHECKED BY: B. Sovikko
DRAWN BY: C. Fuman, W. Hickok
PATH: G:\GUS\67599\MF\PLANSET\04-DOCK\D15 DOCK ACCESS PANELS.DWG
TAB: Wed, 26/Nov/08 11:33AM JTSCOTT

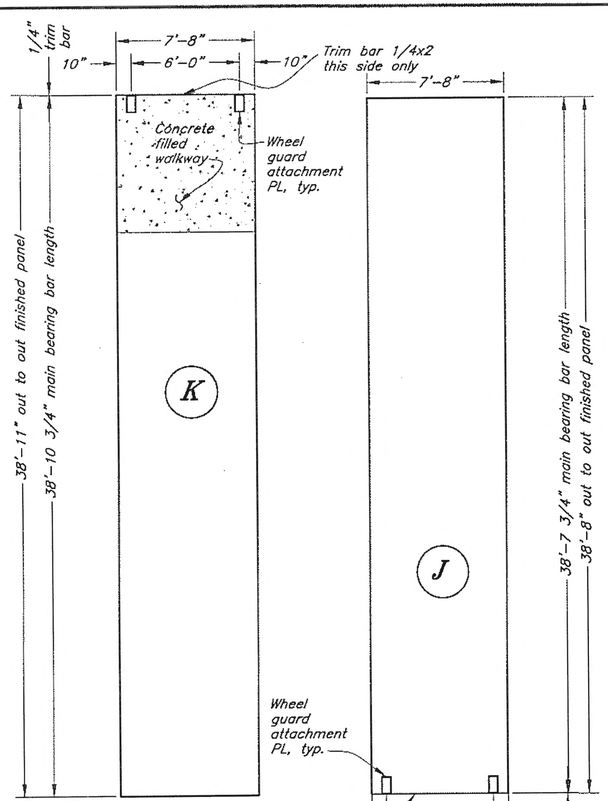
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

Dock Access Deck Panels Grid Rows 4 - 6

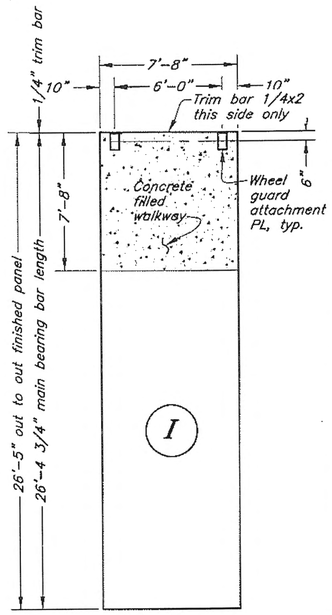
D15

REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			BR-0003(53)/67599	2008	66	138

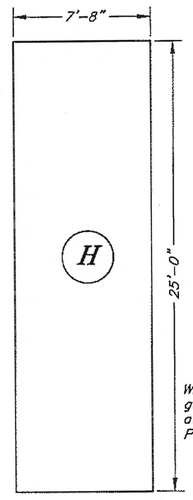


Panel K

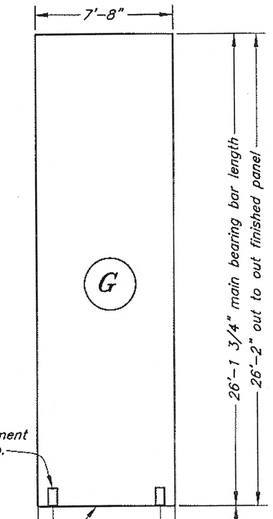
Panel J



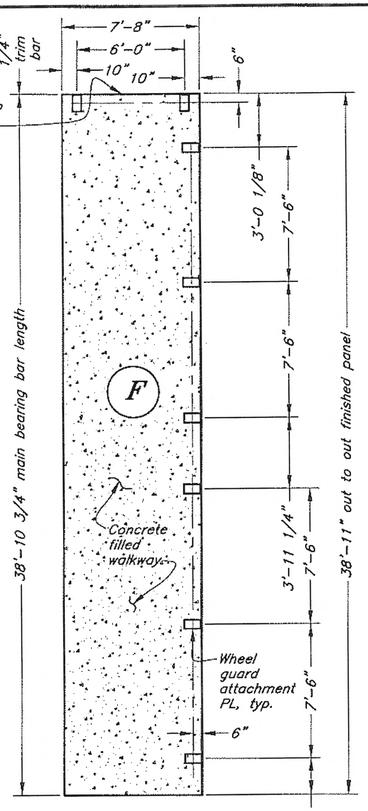
Panel I



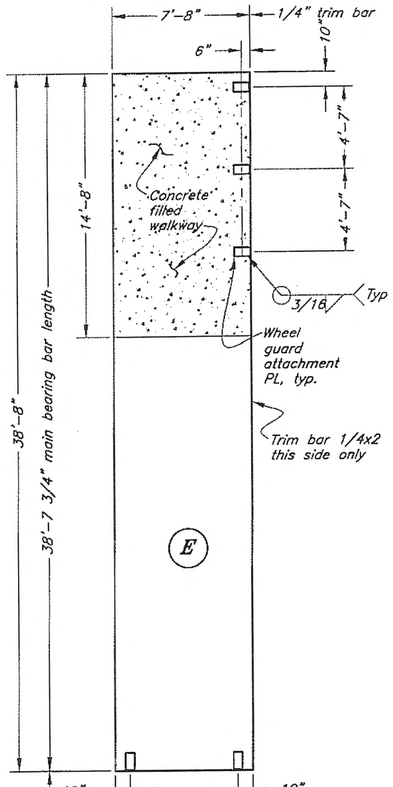
Panel H



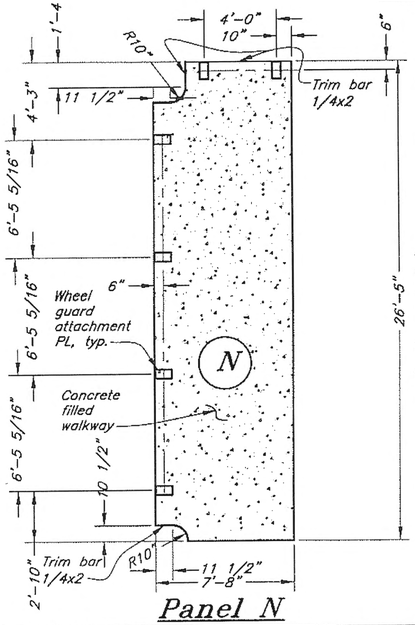
Panel G



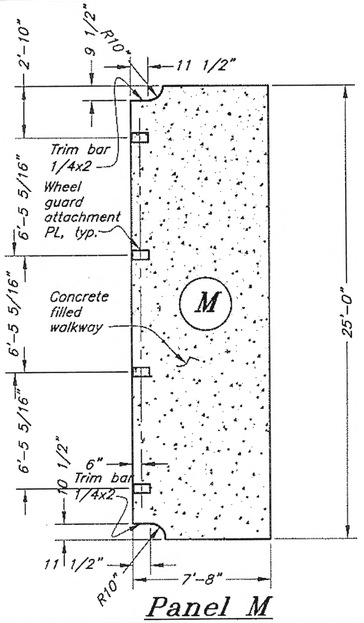
Panel F



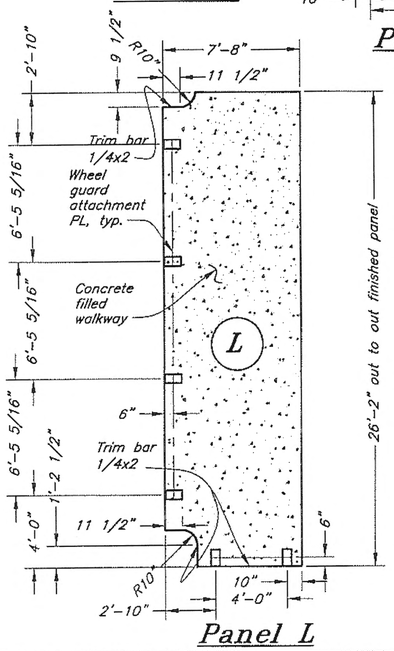
Panel E



Panel N



Panel M



Panel L

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.

PE _____ Date 8/21/12

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott

STATE OF ALASKA
49th
John T. Scott
CE-4755
REGISTERED PROFESSIONAL ENGINEER
11.26.08

CHECKED BY: B. Savikko

DRAWN BY: C. Fuman, W. Hickok

PATH: O:\GUS\67599\MF\PLANSET\04-DOCK\D16 DOCK PANELS.DWG

TAB: Wed, 26/Nov/08 11:34AM JTSCOTT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

Gustavus Causeway Replacement

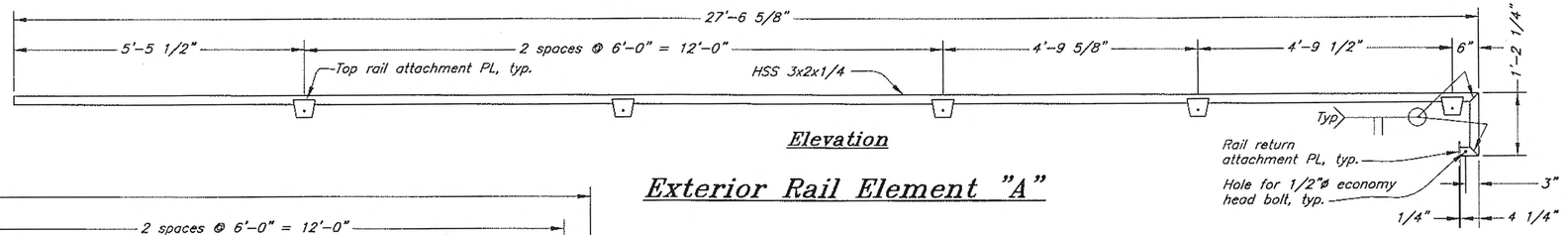
Dock
Deck Panels
Grid Rows 1-4

D16

REVISIONS		
NO.	DATE	DESCRIPTION

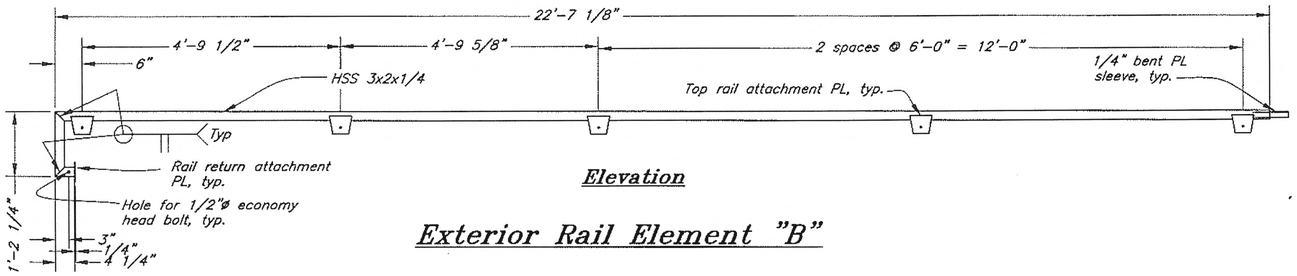
PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-0003(53)/67599	2008	67	138

Note: Dock exterior rails similar to approach exterior rails. See Sheet AP23 for details.



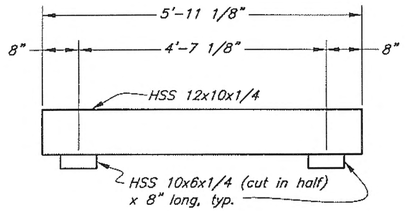
Elevation

Exterior Rail Element "A"



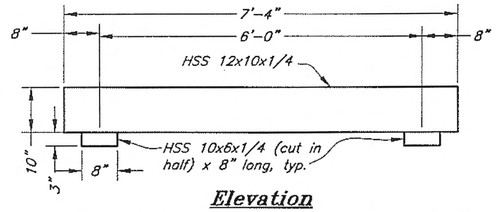
Elevation

Exterior Rail Element "B"



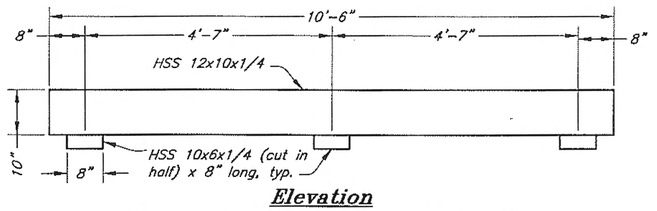
Elevation

Wheel Guard Elements "A"



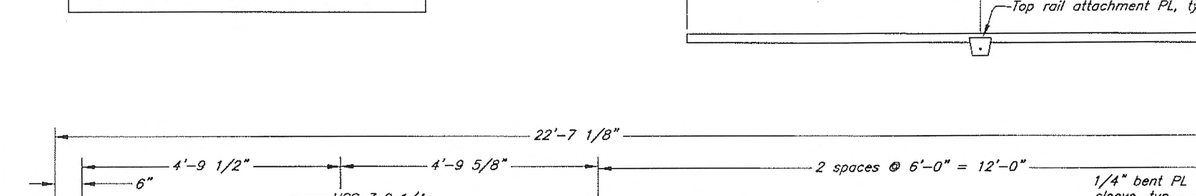
Elevation

Wheel Guard Elements "B"



Elevation

Wheel Guard Elements "C"

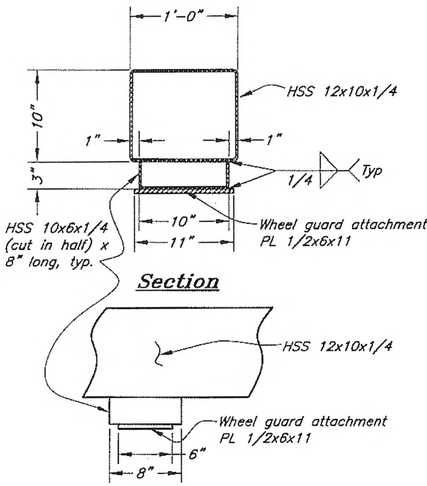


Elevation

Wheel Guard Elements "D"

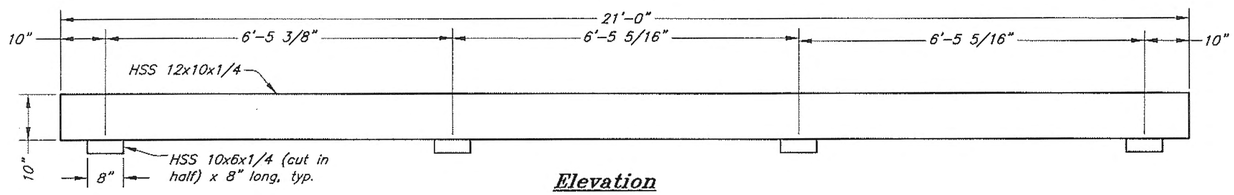
Elevation

Wheel Guard Elements "E"



Elevation

Wheel Guard Detail



Elevation

Wheel Guard Elements "F"

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.
PE Steven Miller Date 3/21/13

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott
CHECKED BY: B. Sawikko
DRAWN BY: C. Fuman, W. Hickok
PATH: O:\GUS\67599\MF\PLANSET\04-DOCK\D17 DOCK RAILS.DWG
TAB: Wed, 26/Nov/08 11:35AM JTSCOTT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

STATE OF ALASKA 49th REGISTERED PROFESSIONAL ENGINEER John T. Scott CE-4755 11.26.08

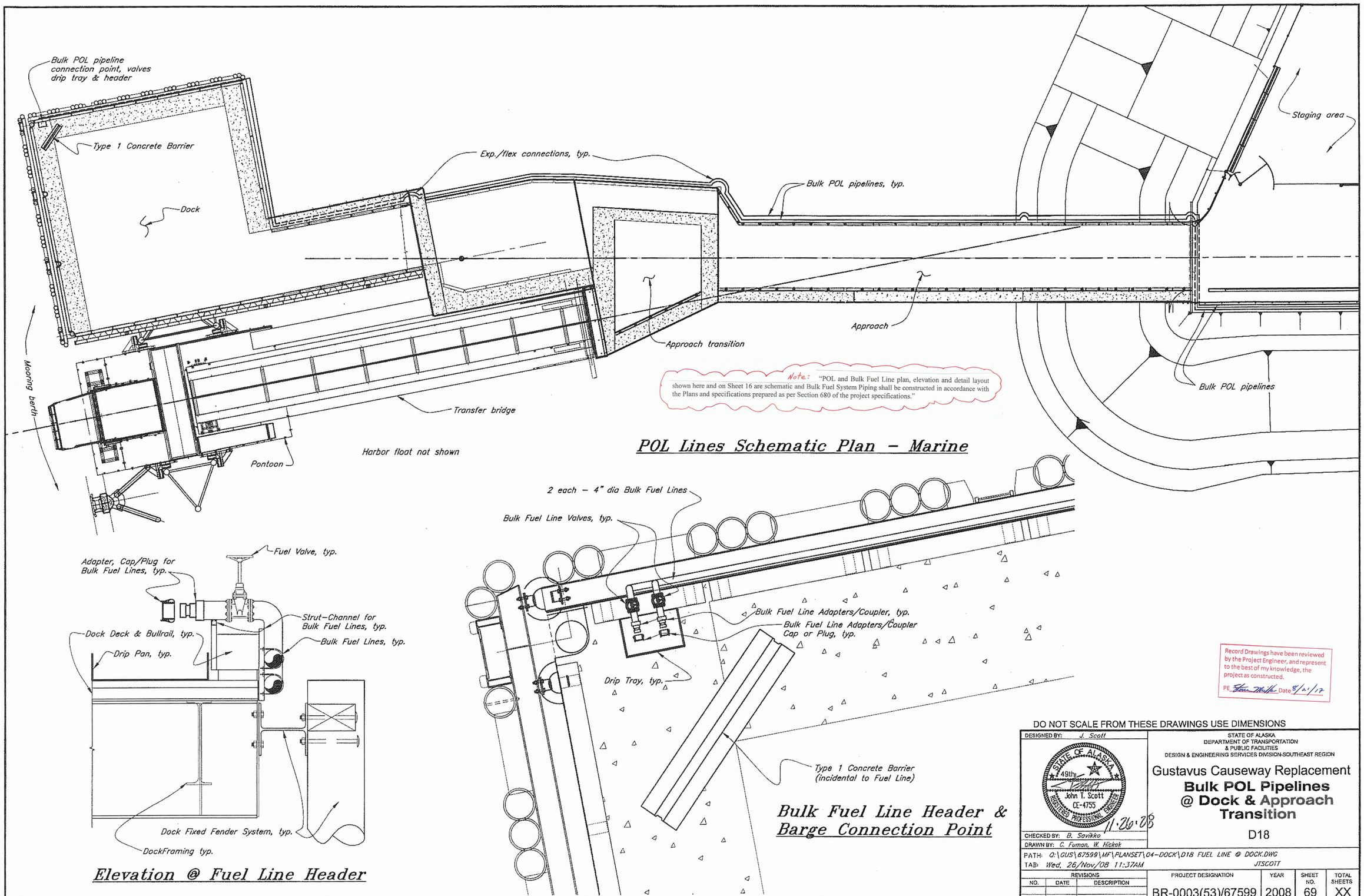
Gustavus Causeway Replacement

Dock Rail Elements

D17

REVISIONS NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-0003(53)/67599	2008	68	138



Note: "POL and Bulk Fuel Line plan, elevation and detail layout shown here and on Sheet 16 are schematic and Bulk Fuel System Piping shall be constructed in accordance with the Plans and specifications prepared as per Section 680 of the project specifications."

POL Lines Schematic Plan – Marine

Elevation @ Fuel Line Header

Bulk Fuel Line Header & Barge Connection Point

Record Drawings have been reviewed by the Project Engineer, and represent to the best of my knowledge, the project as constructed.
PE Steve Miller Date 8/21/17

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DESIGNED BY: J. Scott
CHECKED BY: B. Savikko
DRAWN BY: C. Furman, W. Hickok
PATH: O:\GUS\67599\MF\PLANSET\04-DOCK\D18 FUEL LINE @ DOCK.DWG
TAB: Wed, 26/Nov/08 11:37AM JTSCOTT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION

STATE OF ALASKA 49th John T. Scott CE-4755 REGISTERED PROFESSIONAL ENGINEER 11-26-08

Gustavus Causeway Replacement
Bulk POL Pipelines @ Dock & Approach Transition
D18

REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			BR-0003(53)/67599	2008	69	XX