

\* AS-BUILTS \*

| STATE  | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | BH-099-3(16)/68945  | 2007 | A1        | 34           |

### INDEX OF SHEETS

| SHEET NO. | DESCRIPTION            |
|-----------|------------------------|
| A1        | TITLE SHEET            |
| A2        | ESTIMATE OF QUANTITIES |
| BI-BI9    | BRIDGE PLANS           |
| CI-C9     | JACKING PLANS          |
| DI-D4     | TRAFFIC CONTROL PLAN   |

THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT:

A-1, I-20.13, I-21.01, M-01.00, M-13.01,  
S-00.10, S-05.01, S-20.10, S-30.03

### TIDAL DATA

|             |
|-------------|
| EHW - 14.6' |
| EHT - 12.7' |
| MHW - 9.1'  |
| ELW - -4.0' |

### DESIGN DESIGNATION

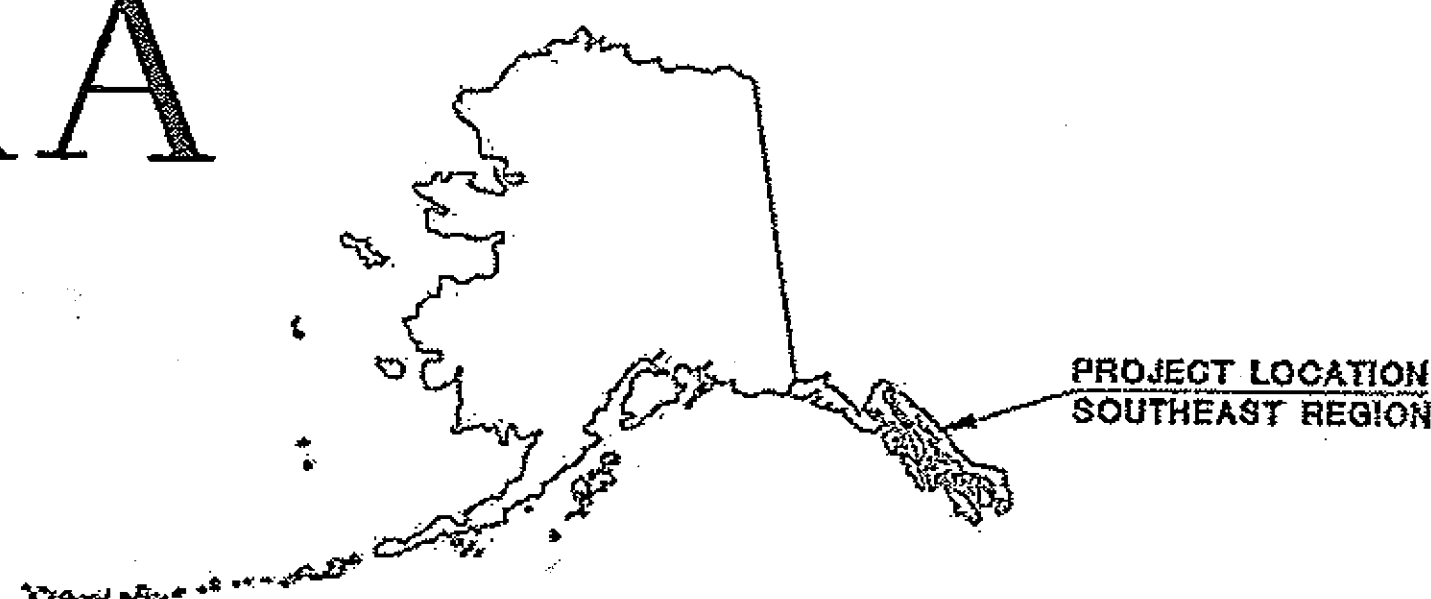
| ITEM              | 2003  | 2023      |
|-------------------|-------|-----------|
| A.D.T.            | 5,560 | 6,780     |
| D.H.V.            | 560   | 680       |
| V. (MPH)          | 35    | 35        |
| P.H.F.            | 0.9   | 0.9       |
| DIRECTIONAL DIST. | 55/45 | 55/45     |
| % TRUCKS          | 5.5   | 5.5       |
| EAL               | -     | 1,000,000 |
| TURNING VEHICLE - | WB50  |           |
| VEHICLE LOADING - | HS20  |           |

### As - Built Plans

Project Engineer: Todd Fleming  
Contractor: Swalling Construction  
Start date: 7-11-08  
End date: 10-31-08

# STATE OF ALASKA

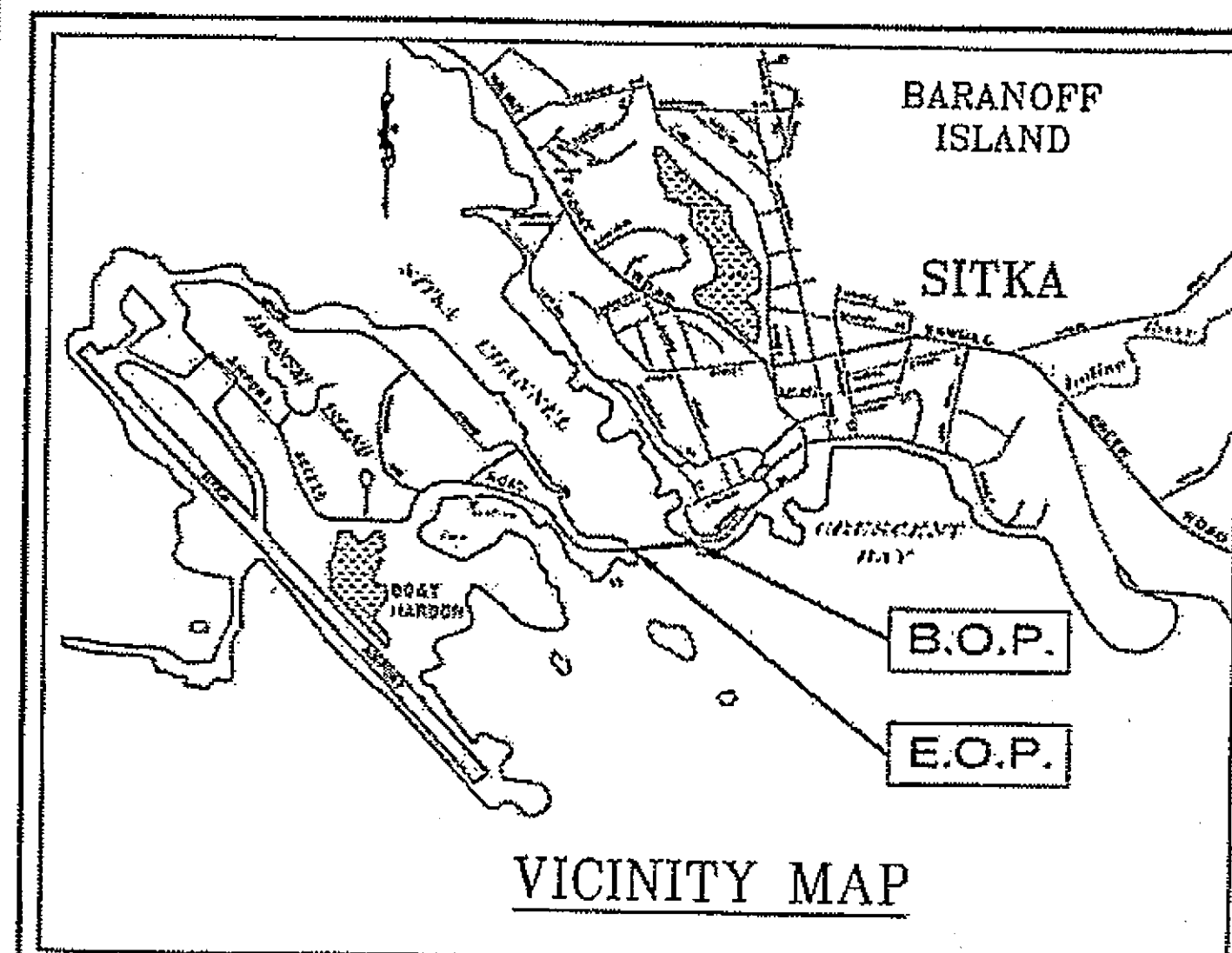
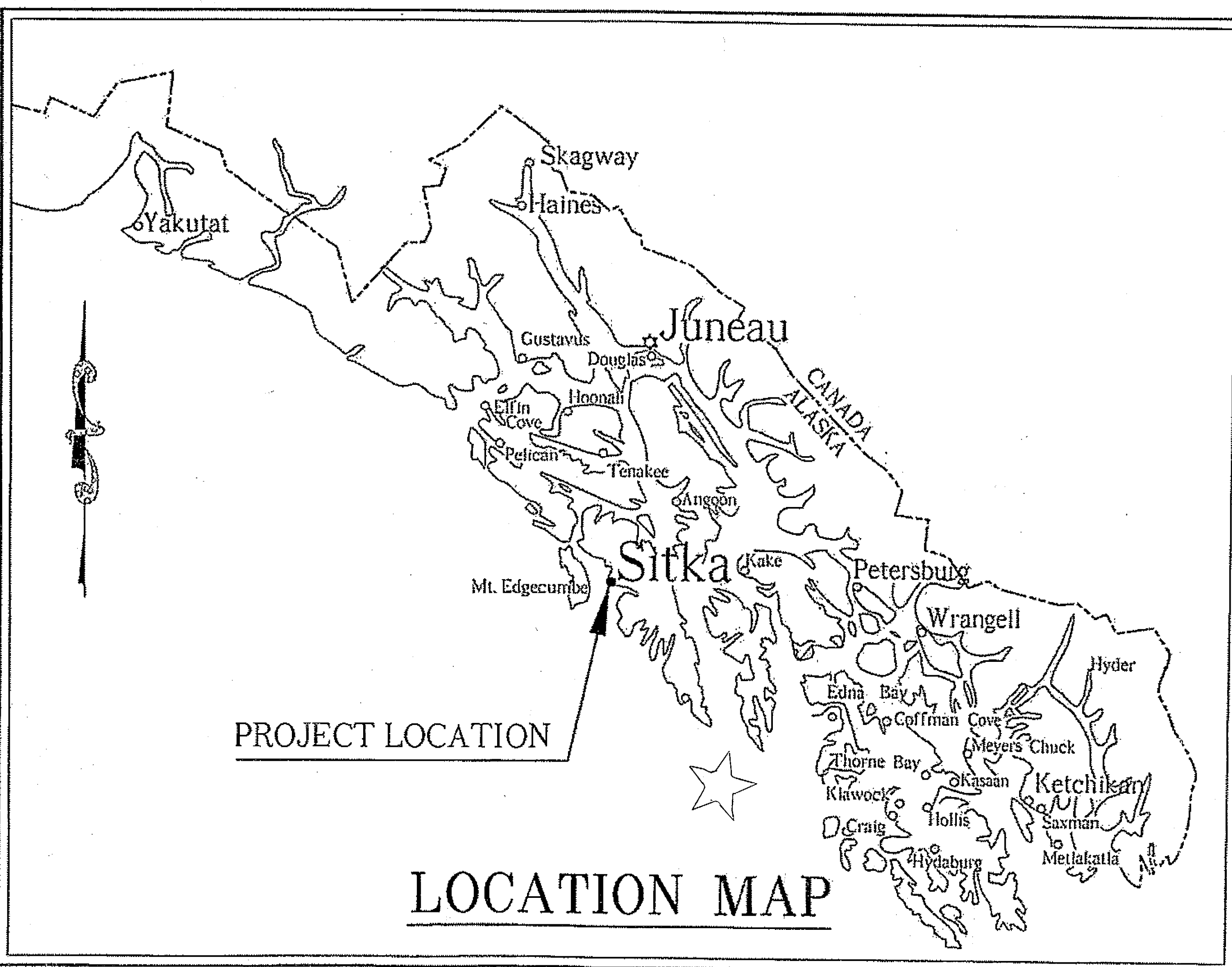
## DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES



### PROPOSED BRIDGE PROJECT

## SITKA HARBOR BRIDGE BEARING REPLACEMENT

PROJECT NO. BH-099-3(16)/68945



STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES  
SOUTHEAST REGION

RECOMMENDED FOR APPROVAL:

*For Approval* FOR DATE 7/31/07

APPROVED: Jack D. Beedle, P.E.

PRE-CONSTRUCTION ENGINEER

*Malcolm A. Menzies* DATE 7/31/07

Malcolm A. Menzies, P.E., L.S.

DIRECTOR

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

APPROVED: Loren K. Gehring, P.E.

CONSTRUCTION PROJECT MANAGER

| STATE  | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | BH-099-3(15)/68945  | 2007 | A2        | 34           |

# DEPARTMENT FURNISHED ITEMS

| REBAR                                                                        |              |                                                                            |                           |                             |
|------------------------------------------------------------------------------|--------------|----------------------------------------------------------------------------|---------------------------|-----------------------------|
| REQ'D. QTY.                                                                  | FURN'D. QTY. | FURNISHED ITEM DESC.                                                       | FURNISHED ITEM SIZE       | FURNISHED COMMENTS          |
| 48                                                                           | 49           | Pier 2 Dowel Rebar (P608)                                                  | #6 Bar                    |                             |
| 14                                                                           | 14           | Pier 3 Horizontal Rebar (Embedded in Concrete)                             | #6 Bar                    | Field Bend Rebar into Place |
| 48                                                                           | 49           | Pier 3 Dowel Rebar (P608)                                                  | #6 Bar                    |                             |
| 14                                                                           | 14           | Piers 5 & 6 Horizontal Rebar (Embedded in Concrete)                        | #6 Bar                    | Field Bend Rebar into Place |
| 96                                                                           | 98           | Piers 5 & 6 Dowel Rebar (T608)                                             | #6 Bar                    |                             |
| JACKING POSTS                                                                |              |                                                                            |                           |                             |
| REQ'D. QTY.                                                                  | FURN'D. QTY. | FURNISHED ITEM DESC.                                                       | FURNISHED ITEM SIZE       | FURNISHED COMMENTS          |
| 2                                                                            | 2            | Pier 2 Jacking Posts (Furn. lath. 23'-5 1/2" Est. req'd. lath. 22'-5 1/2") | HSS 16x16x3/8             | 1'-0" +/- too long          |
| 2                                                                            | 2            | Pier 2 Jacking Post Steel Bottom Plate (attached to Jacking Post)          | P 2"x1'-6"x2'-2"          |                             |
| 2                                                                            | 2            | Pier 2 Jacking Post Steel Bottom Cruciform Long Plate (attached)           | P 1 1/2"x2'-1"x1'-4"      |                             |
| 4                                                                            | 4            | Pier 2 Jacking Post Steel Bottom Cruciform Short Plate (attached)          | P 1 1/2"x7/4"x1'-4"       |                             |
| 2                                                                            | 2            | Pier 2 Jacking Post Steel Top Plate                                        | P 2"x1'-6"x1'-6"          |                             |
| 2                                                                            | 2            | Pier 2 Jacking Post Steel Bottom Cruciform Section Long Plate              | P 1 1/2"x1'-5"x1'-4"      |                             |
| 4                                                                            | 4            | Pier 2 Jacking Post Steel Bottom Cruciform Section Short Plate             | P 1 1/2"x7/4"x1'-4"       |                             |
| 6                                                                            | 10           | Pier 2 Jacking Post Bracing Plate                                          | P 1"x1'-2"x2'-2"          |                             |
| 8                                                                            | 8            | H.S. Threaded Rod for Steel Bottom Plate                                   | 1/2"x2'-3" Long           |                             |
| 24                                                                           | 55           | H.S. Threaded Rod for Steel Bracing Plate                                  | 1"x2'-0" Long             |                             |
| ELASTOMERIC BEARINGS                                                         |              |                                                                            |                           |                             |
| REQ'D. QTY.                                                                  | FURN'D. QTY. | FURNISHED ITEM DESC.                                                       | FURNISHED ITEM SIZE       | FURNISHED COMMENTS          |
| 4                                                                            | 4            | Abutment 1 & 8 Elastomeric Bearing Pad                                     | Pad 6"x2'-6"x1'-10"       |                             |
| 4                                                                            | 4            | Abutment 1 & 8 Steel Top Plate (attached to Elastomeric Bearing Pad)       | P 3/2"x2'-6"x2'-2"        |                             |
| 32                                                                           | 32           | Abutment 1 & 8 Steel H.S. Screw (A449)                                     | 1"x3" Long                | Abutment Side               |
| 32                                                                           | 32           | Abutment 1 & 8 Washer (F436)                                               | Std. Washer               |                             |
| 28                                                                           | 28           | Abutment 1 & 8 H.S. Bolt (A449)                                            | 1 3/8"x7" Long            | Channel Side                |
| 28                                                                           | 28           | Abutment 1 & 8 Washer (F436)                                               | Std. Washer               |                             |
| 28                                                                           | 28           | Abutment 1 & 8 Heavy Hex Nut (A563)                                        | Std. Nut                  |                             |
| 4                                                                            | 4            | Pier 2 & 3 Elastomeric Bearing Pad                                         | Pad 10"x2'-6"x2'-8"       |                             |
| 4                                                                            | 4            | Pier 2 & 3 Steel Top Plate (attached to Elastomeric Bearing Pad)           | P 5"x2'-6"x3'-4"          |                             |
| 16                                                                           | 16           | Pier 2 & 3 H.S. Bolt (A449)                                                | 1"x5 1/2" Long            | Abutment Side               |
| 16                                                                           | 16           | Pier 2 & 3 Washer (F436)                                                   | Std. Washer               |                             |
| 16                                                                           | 16           | Pier 2 & 3 Heavy Hex Nut (A563)                                            | Std. Nut                  |                             |
| 16                                                                           | 16           | Pier 2 & 3 H.S. Bolt (A449)                                                | 1"x7 1/2" Long            | Channel Side                |
| 16                                                                           | 16           | Pier 2 & 3 Washer (F436)                                                   | Std. Washer               |                             |
| 16                                                                           | 16           | Pier 2 & 3 Heavy Hex Nut (A563)                                            | Std. Nut                  |                             |
| 4                                                                            | 4            | Pier 4 & 7 Elastomeric Bearing Pad                                         | Pad 10"x1'-4"x2'-0"       |                             |
| 4                                                                            | 4            | Pier 4 & 7 Steel Top Plate (attached to Elastomeric Bearing Pad)           | P 1"x1'-1"x2'-8"          |                             |
| 4                                                                            | 4            | Pier 4 & 7 Steel Bottom Plate (attached to Elastomeric Bearing Pad)        | P 1"x1'-1"x2'-8"          |                             |
| 32                                                                           | 64           | Pier 4 & 7 Washer (F436)                                                   | Std. Washer               |                             |
| 32                                                                           | 64           | Pier 4 & 7 Heavy Hex Nut (A563)                                            | Std. Nut                  |                             |
| 4                                                                            | 4            | Pier 5 & 6 Elastomeric Bearing Pad                                         | Pad 10"x2'-6"x3'-6"       |                             |
| 4                                                                            | 4            | Pier 5 & 6 Steel Top Plate (attached to Elastomeric Bearing Pad)           | P 5 1/2"x2'-6"x4'-2"      |                             |
| 28                                                                           | 28           | Pier 5 & 6 H.S. Bolt (A325)                                                | 1 3/8"x7" Long            | Abutment Side               |
| 28                                                                           | 28           | Pier 5 & 6 Washer (F436)                                                   | Std. Washer               |                             |
| 28                                                                           | 28           | Pier 5 & 6 Heavy Hex Nut (A563)                                            | Std. Nut                  |                             |
| 28                                                                           | 28           | Pier 5 & 6 H.S. Bolt (A325)                                                | 1 3/8"x9 1/16" Long       | Channel Side                |
| 28                                                                           | 28           | Pier 5 & 6 Washer (F436)                                                   | Std. Washer               |                             |
| 28                                                                           | 28           | Pier 5 & 6 Heavy Hex Nut (A563)                                            | Std. Nut                  |                             |
| MISCELLANEOUS ITEMS - FURNISHED TO CONTRACTOR, BUT NOT USED IN THIS CONTRACT |              |                                                                            |                           |                             |
| REQ'D. QTY.                                                                  | FURN'D. QTY. | FURNISHED ITEM DESC.                                                       | FURNISHED ITEM SIZE       | FURNISHED COMMENTS          |
| 0                                                                            | 8            | Pier 3 Jacking Posts Bracing Plate                                         | P 1"x1'-2"x2'-0"          | Furnished, but not used     |
| 0                                                                            | 4            | Pier 4 & 7 Bottom Plate (Bolted to Bearing)                                | P 1 1/2"x1'-10"x2'-8"     | Furnished, but not used     |
| 0                                                                            | 8            | Pier 4 & 7 Triangular Vertical Side Plate (attached to Bottom Plate)       | P 1 1/2"x2'-0"x1'-10 1/2" | Furnished, but not used     |
| 0                                                                            | 8            | Pier 4 & 7 Vertical Stiffener Plate (attached to Triangular Side Plate)    | P 1/2"x4"x1'-7 1/2"       | Furnished, but not used     |
| 0                                                                            | 8            | Pier 4 & 7 Diagonal Stiffener Plate (attached to Triangular Side Plate)    | P 1/2"x4"x2'-1 1/2"       | Furnished, but not used     |
| 0                                                                            | 8            | Pier 4 & 7 Bottom Vertical Plate (attached to Bottom Horiz. Plate)         | P 1 1/2"x6"x9"            | Furnished, but not used     |
| 0                                                                            | 4            | Pier 4 & 7 Bottom Horizontal Plate (Bolted to Pier)                        | P 1 1/2"x7"x3'-8"         | Furnished, but not used     |
| 0                                                                            | 4            | Pier 4 & 7 Bearing Pin (A668, Grade 6)                                     | 2"x2'-9 1/2" Long         | Furnished, but not used     |
| 0                                                                            | 20           | Pier 4 & 7 Drill and Bond Anchor Rod (A307)                                | 1 1/4"x2'-6" Long         | Furnished, but not used     |
| 0                                                                            | 66           | Pier 4 & 7 H.S. Bolt (A325)                                                | 1 3/8"x4" Long            | Furnished, but not used     |

For information only. Verify all items, sizes and quantities listed.

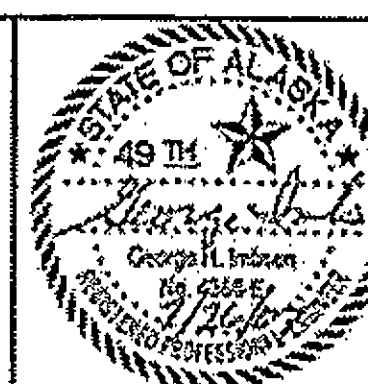
# ESTIMATE OF QUANTITIES

| ITEM NO. | PAY ITEM                                     | PAY UNIT       | QUANTITY     |
|----------|----------------------------------------------|----------------|--------------|
| 202(1)   | Removal of Structures and Obstructions       | Lump Sum       | All Required |
| 501(1)   | Class A Concrete                             | Lump Sum       | All Required |
| 501(8)   | Concrete Price Adjustment                    | Contingent Sum | All Required |
| 501(9)   | Drill and Bond Dowels                        | Lump Sum       | All Required |
| 503(1)   | Reinforcing Steel                            | Lump Sum       | All Required |
| 504(1)   | Structural Steel                             | Lump Sum       | All Required |
| 513(1)   | Field Painting of Steel Structures           | Lump Sum       | All Required |
| 514(1)   | Bearing Replacement or Rehabilitation        | Lump Sum       | All Required |
| 640(1)   | Mobilization and Demobilization              | Lump Sum       | All Required |
| 640(4)   | Worker Meals and Lodging, or Per Diem        | Lump Sum       | All Required |
| 641(1)   | Erosion and Pollution Control Administration | Lump Sum       | All Required |
| 641(2)   | Temporary Erosion and Pollution Control      | Contingent Sum | All Required |
| 641(3)   | Temporary Erosion and Pollution Control      | Lump Sum       | All Required |
| 643(2)   | Traffic Maintenance                          | Lump Sum       | All Required |
| 643(3)   | Permanent Construction Signs                 | Lump Sum       | All Required |
| 643(15)  | Flagging                                     | Contingent Sum | All Required |
| 643(25)  | Traffic Control                              | Contingent Sum | All Required |
| 646(1)   | CPM Scheduling                               | Lump Sum       | All Required |
| 660(7)   | Temporary Signal System Complete             | Lump Sum       | All Required |

|                           |                         |
|---------------------------|-------------------------|
| DESIGNED BY: Larry Owen   | CHECKED: George Imbison |
| DRAWN BY: Cathy Anderson  | CHECKED: Larry Owen     |
| QUANTITIES BY: Larry Owen | CHECKED: George Imbison |

# BEARING REPLACEMENT

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
BRIDGE SECTION



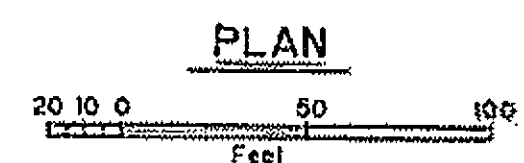
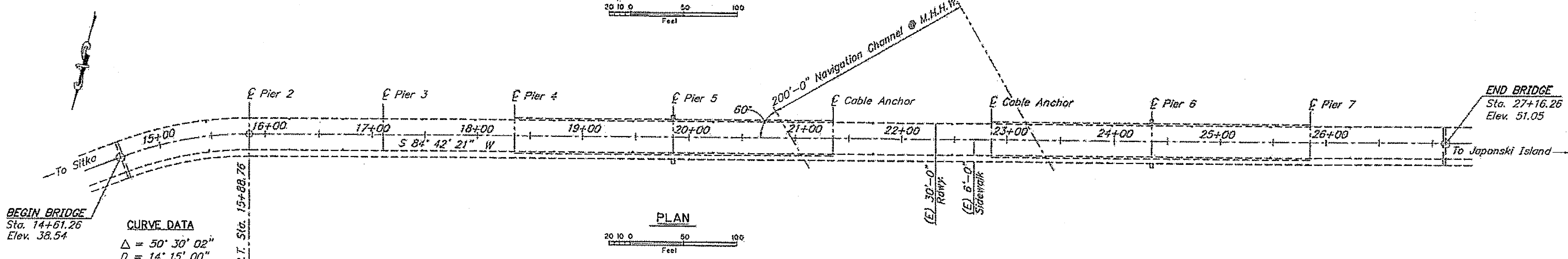
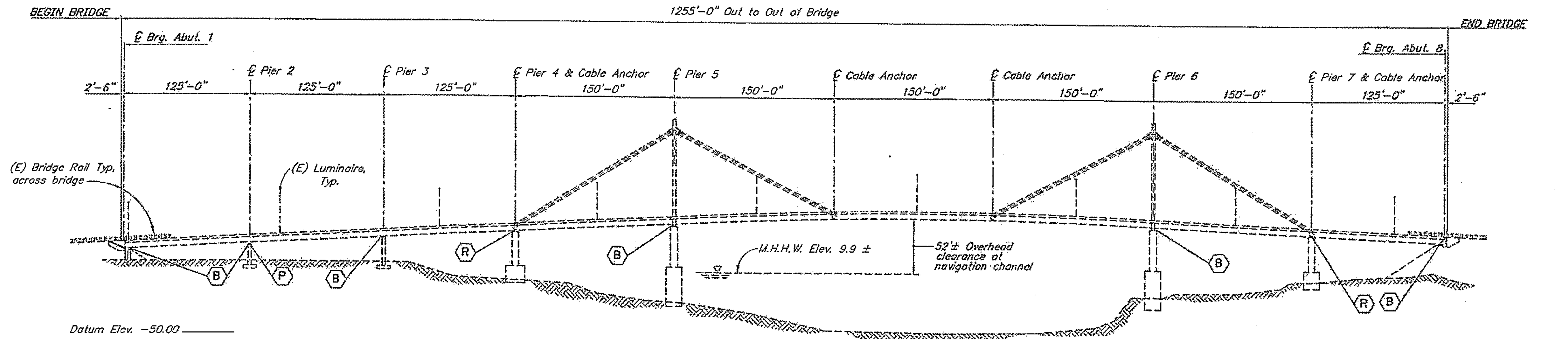
SITKA HARBOR BRIDGE  
ROUTE  
ESTIMATE OF QUANTITIES



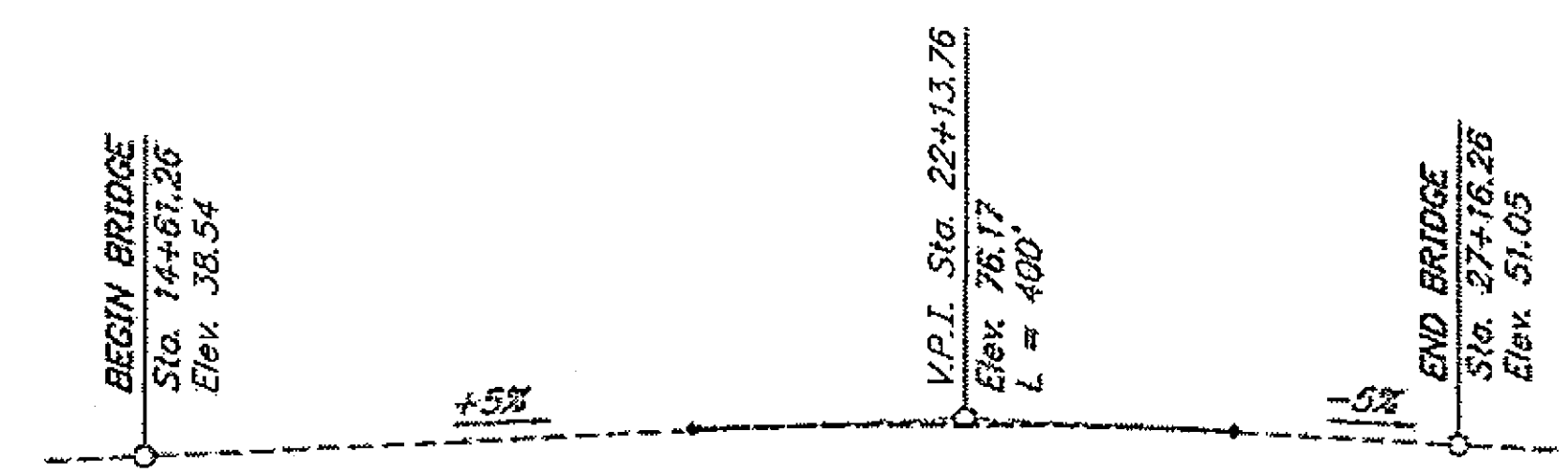
BRIDGE NO. 245  
DWG. NO. A2

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
Proj. Eng. *[Signature]* Date 11-3-08

| STATE  | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | BH-099-306/68945    | 2007 | BI        | 34           |



**CURVE DATA**  
 $\Delta = 50^\circ 30' 02''$   
 $D = 14^\circ 15' 00''$   
 $L = 354.39'$   
 $R = 402.08'$   
 $T = 189.64'$   
 $S = 4\%$



**EXISTING GRADE DATA**  
 No Scale

## BEARING REPLACEMENT

| BRIDGE DRAWING INDEX                        |          |
|---------------------------------------------|----------|
| TITLE                                       | DWG. NO. |
| GENERAL LAYOUT                              | 1        |
| TYPICAL SECTION                             | 2        |
| ABUTMENTS                                   | 3        |
| PIER 2                                      | 4        |
| PIER 3                                      | 5        |
| PIERS 4 & 7                                 | 6        |
| PIERS 5 & 6                                 | 7        |
| BEARING DETAILS - ABUTMENTS 1 & 8           | 8        |
| BEARING DETAILS - PIERS 2 & 3               | 9        |
| BEARING DETAILS 1 - PIERS 4 & 7             | 10       |
| BEARING DETAILS 2 - PIERS 4 & 7             | 11       |
| BEARING DETAILS - PIERS 5 & 6               | 12       |
| JACKING POST - PIER 2                       | 13       |
| JACKING POST DETAILS - PIER 2               | 14       |
| EXISTING JACKING POST - PIER 3              | 15       |
| EXISTING JACKING POST DETAILS - PIER 3      | 16       |
| EXISTING JACKING POST - PIERS 5 & 6         | 17       |
| EXISTING JACKING POST DETAILS - PIERS 5 & 6 | 18       |
| JACKING STIFFENERS                          | 19       |

**LEGEND**  
 (B) - Bearing Replacement  
 (P) - Install Jacking Post  
 (R) - Bearing Rehabilitation  
 (E) = Existing  
 --- = Existing  
 — = Denotes this contract

Elevations, Bearings and Dimensions are based on "AS-BUILT" plans. Verify all controlling field dimensions before ordering or fabricating any material.

|                               |                     |                                        |                                  |
|-------------------------------|---------------------|----------------------------------------|----------------------------------|
| DESIGNED BY: Rob Miller       | CHECKED: Larry Owen | LAYOUT BY: Rob Miller                  | CHECKED BY: Larry Owen           |
| DRAWN BY: C. Anderson         | CHECKED: Rob Miller | SPECIFICATIONS BY: Rob Miller          | P S & E COMPARED: George Imbison |
| QUANTITIES BY: George Imbison | CHECKED: Rob Miller | APPROVAL RECOMMENDED BY: Richard Pratt |                                  |

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 BRIDGE SECTION



**SITKA HARBOR BRIDGE**  
 HARBOR DRIVE  
 GENERAL LAYOUT

BRIDGE NO. 245  
 DWG. NO. 1

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| STATE  | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | BH-099-3(16)/68945  | 2007 | B2        | 34           |

#### GENERAL NOTES

Design:..... AASHTO Standard Specifications for Highway Bridges, 17th Edition, 2002, with the latest Interim Specifications.

Seismic:..... Per USGS data  
Acceleration Coefficient,  $A = 0.30g$   
Liquefaction Potential = Low  
AASHTO 90% probability of not being exceeded in 50 years.

Concrete:..... Class "A"  $f'_c = 4000$  psi

Reinforcing  
Steel:..... A706, Grade 60,  $F_y = 60,000$  psi

Structural  
Steel:..... ASTM A709, Grade 50  
unless otherwise noted on the plans.

Galvanize all structural steel after shop fabrication unless otherwise noted.

#### ESTIMATE OF BRIDGE QUANTITIES

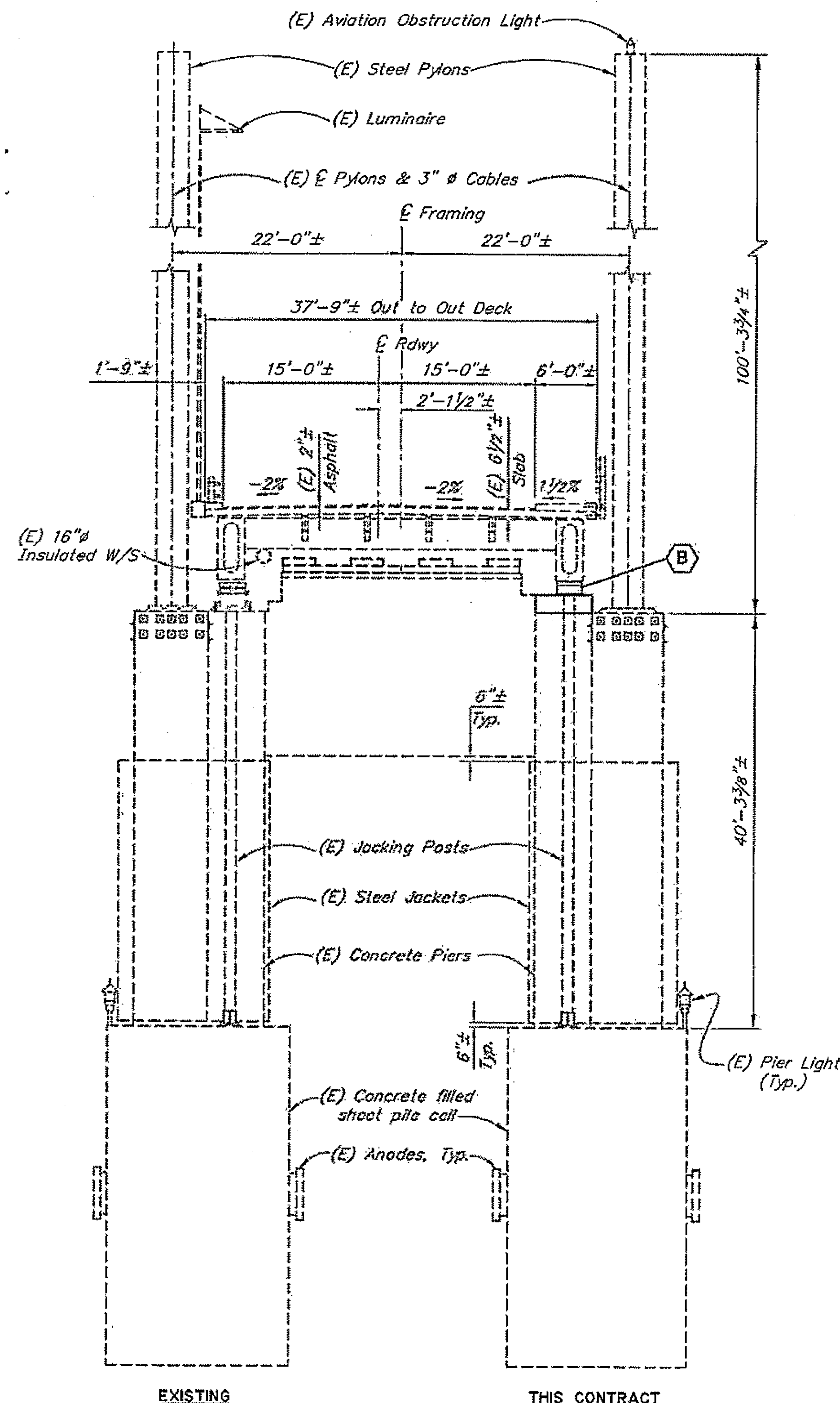
| ITEM NO. | ITEM                                  | PAY UNIT | ESTIMATING UNIT | SUBST.       | SUPERST.     | TOTAL        |
|----------|---------------------------------------|----------|-----------------|--------------|--------------|--------------|
| 202(1)   | Removal of Structures & Obstructions  | LS       | LS              | All Required | All Required | All Required |
| 501(1)   | Class A Concrete                      | LS       | CY              | 41           | -            | 41           |
| 501(9)   | Drill & Band Dowels                   | LS       | EA              | 264          | -            | 264          |
| 503(1)   | Reinforcing Steel                     | LS       | LBS             | 4870         | -            | 4870         |
| 504(1)   | Structural Steel                      | LS       | LBS             | 12,400       | 11,100       | 23,500       |
| 513(1)   | Field Painting of Steel Structures    | LS       | LS              | All Required | All Required | All Required |
| 514(1)   | Bearing Replacement or Rehabilitation | LS       | EA              | -            | 16           | 16           |

Item numbers are for reference only. Quantities shown are not necessarily the pay quantities nor the total quantity of the particular item.

#### BEARING MOVEMENT TABLE

| LOCATION   | Movement for each 10° change in Temperature for existing Bearings | Movement for each 10° change in Temperature for Bearings this contract |
|------------|-------------------------------------------------------------------|------------------------------------------------------------------------|
| Abutment 1 | 0                                                                 | 5/32"                                                                  |
| Pier 2     | 3/32"                                                             | 1/32"                                                                  |
| Pier 3     | 3/16"                                                             | 1/16"                                                                  |
| Pier 4     | 1/8"                                                              | 9/32" (*5/32")                                                         |
| Pier 5     | 0                                                                 | 3/16"                                                                  |
| Pier 6     | 3/8"                                                              | 3/16"                                                                  |
| Pier 7     | 1/2"                                                              | 9/32" (*1/32")                                                         |
| Abutment 8 | 0                                                                 | 1/16"                                                                  |

\* At end of hanging span  
Install bearings in specified sequence.



TYPICAL SECTION  
(PIERS 5 & 6 SHOWN)

120 4 8 32  
in. Feet

#### LEGEND

- (B) - Bearing Replacement
- (E) = Existing
- = Existing
- = Denotes this contract.

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
Proj. Eng. *[Signature]* Date 11-3-08

Elevations, Bearings and Dimensions are based on "AS-BUILT" plans. Verify all controlling field dimensions before ordering or fabricating any material.

|                                      |                                  |
|--------------------------------------|----------------------------------|
| DESIGNED BY: <i>Robert W. Miller</i> | CHECKED: <i>Larry M. Owen</i>    |
| DRAWN BY: <i>Cathy Anderson</i>      | CHECKED: <i>Robert W. Miller</i> |
| QUANTITIES BY: <i>George Imboden</i> | CHECKED: <i>Robert W. Miller</i> |

#### BEARING REPLACEMENT

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
BRIDGE SECTION



SITKA HARBOR BRIDGE  
HARBOR DRIVE  
TYPICAL SECTION



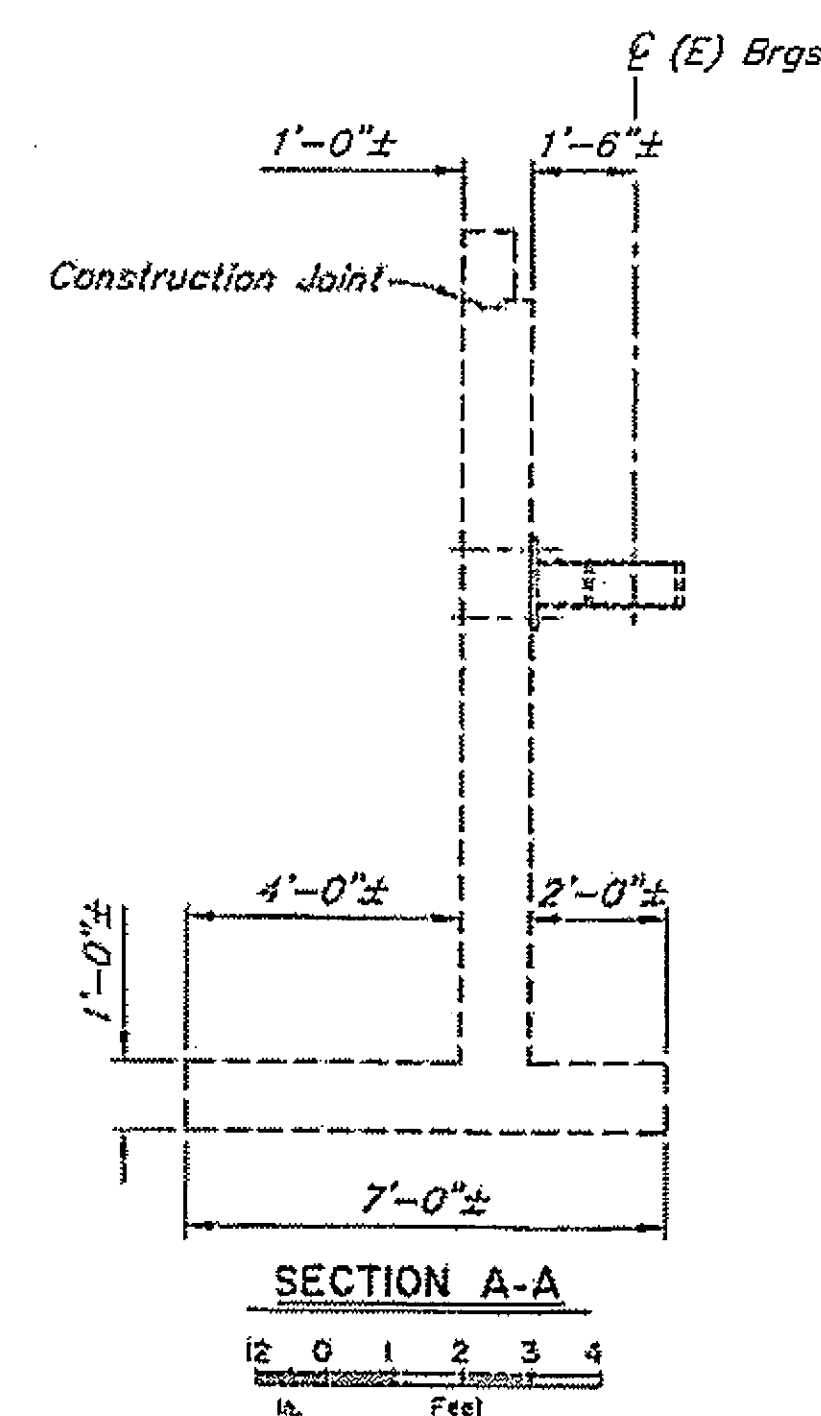
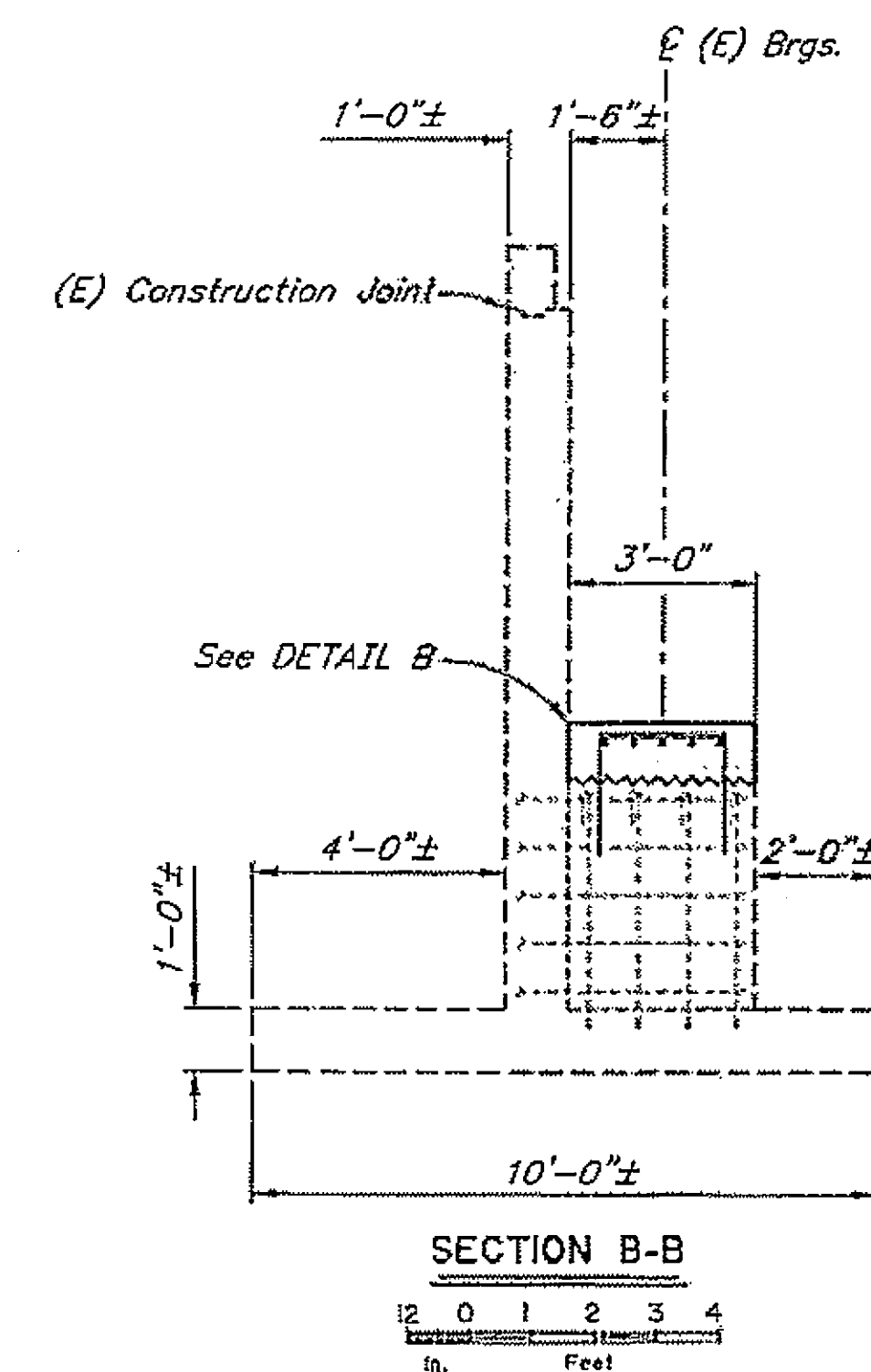
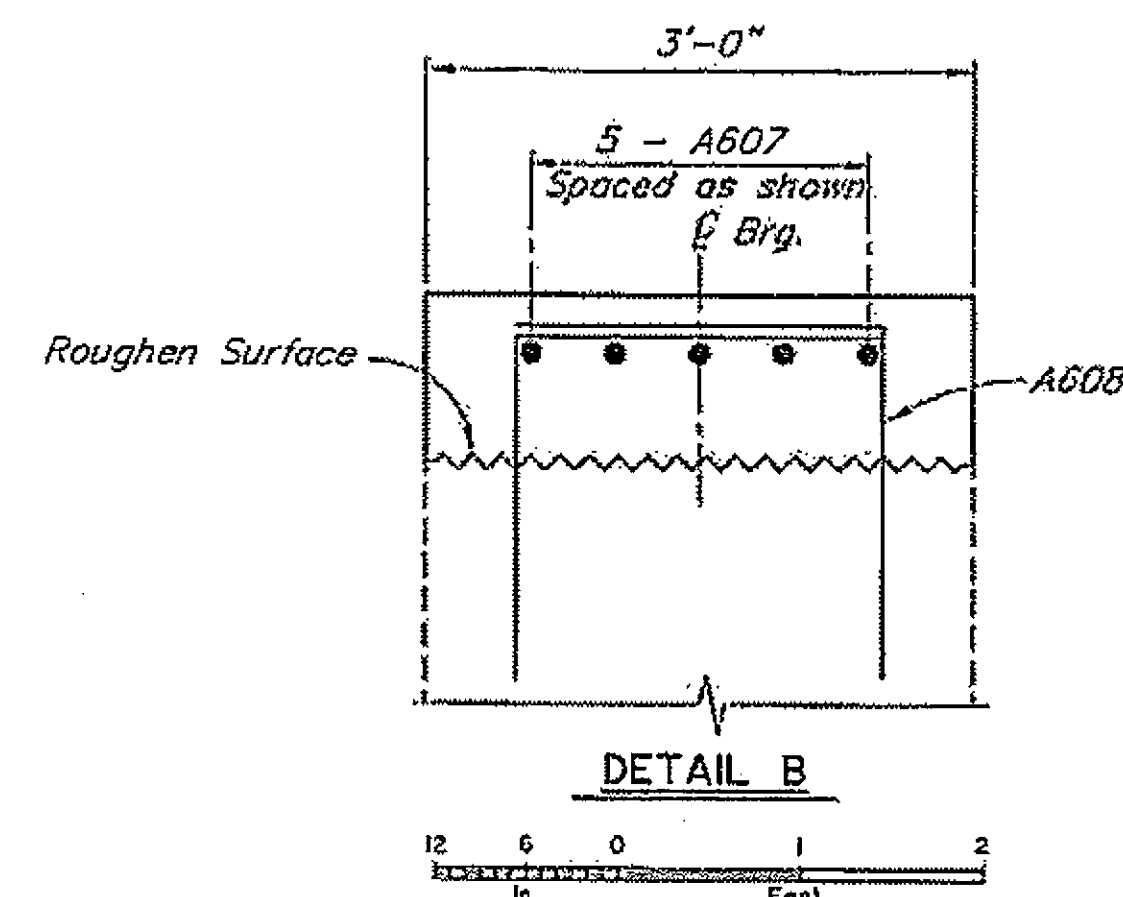
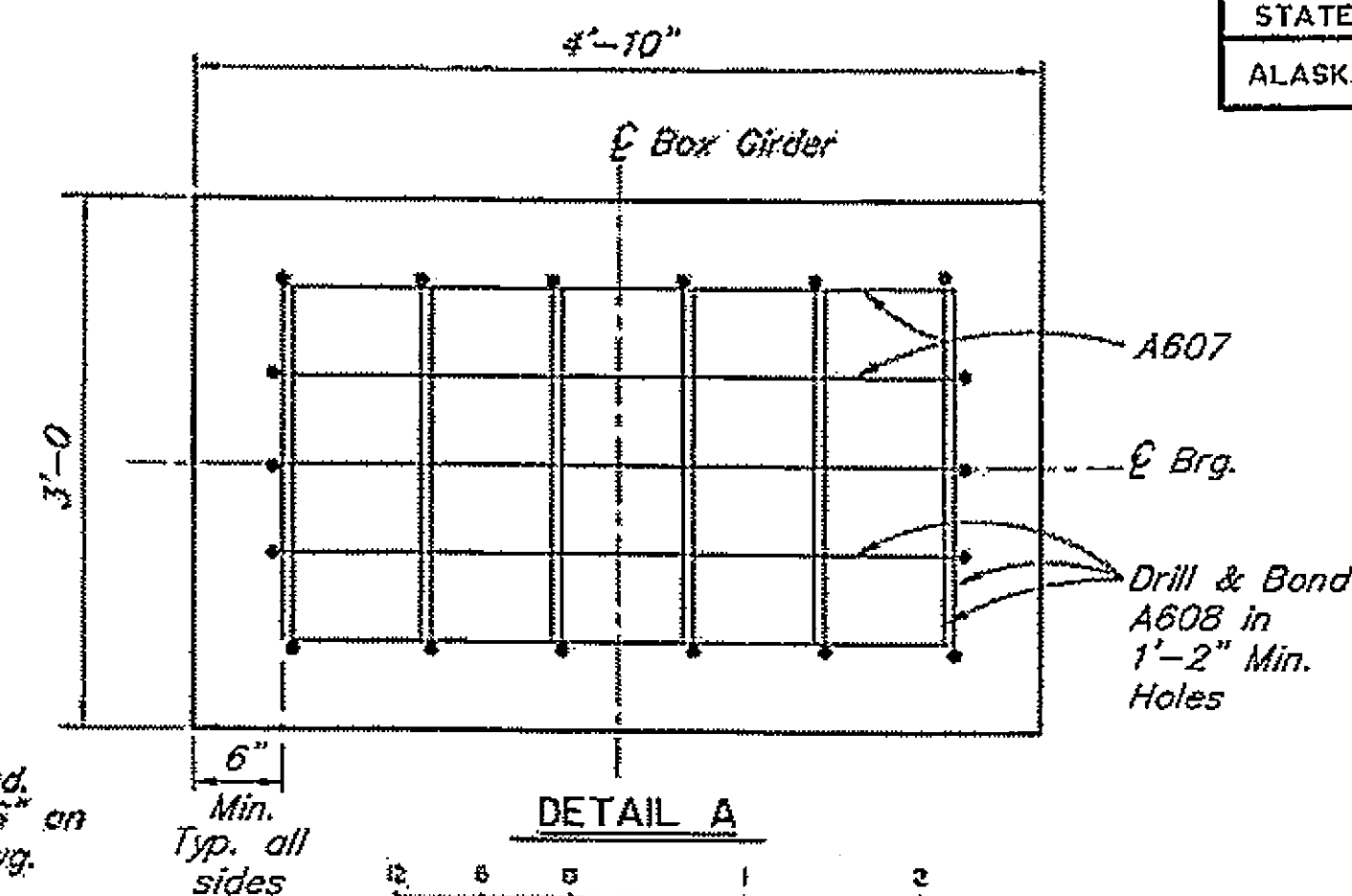
BRIDGE NO. 245  
DWG. NO. 2

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| STATE  | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | BH-099-3116/68945   | 2007 | B3        | 34           |

| REINFORCING STEEL<br>ONE ABUTMENT |      |     |        |       |
|-----------------------------------|------|-----|--------|-------|
| MARK                              | SIZE | NO. | LENGTH | TYPE  |
| A607                              | 6    | 10  | 4'-6"  | -     |
| A608                              | 6    | 36  | 3'-9"  | Bent  |
| BENDING DIAGRAM                   |      |     |        |       |
|                                   |      |     | 2'-0"  |       |
|                                   |      |     | A608   | 1'-9" |



Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
Proj. Eng. [Signature] Date 11-2-08

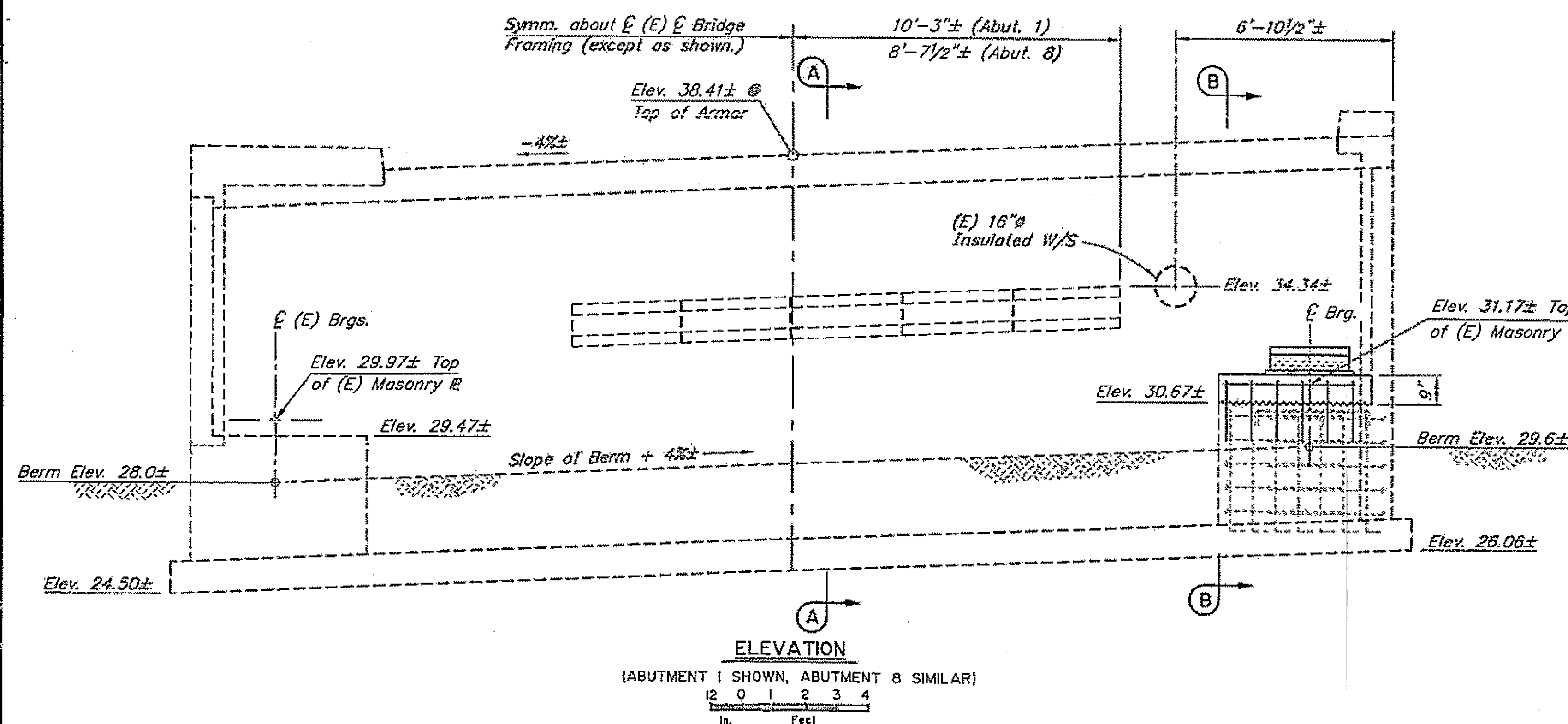
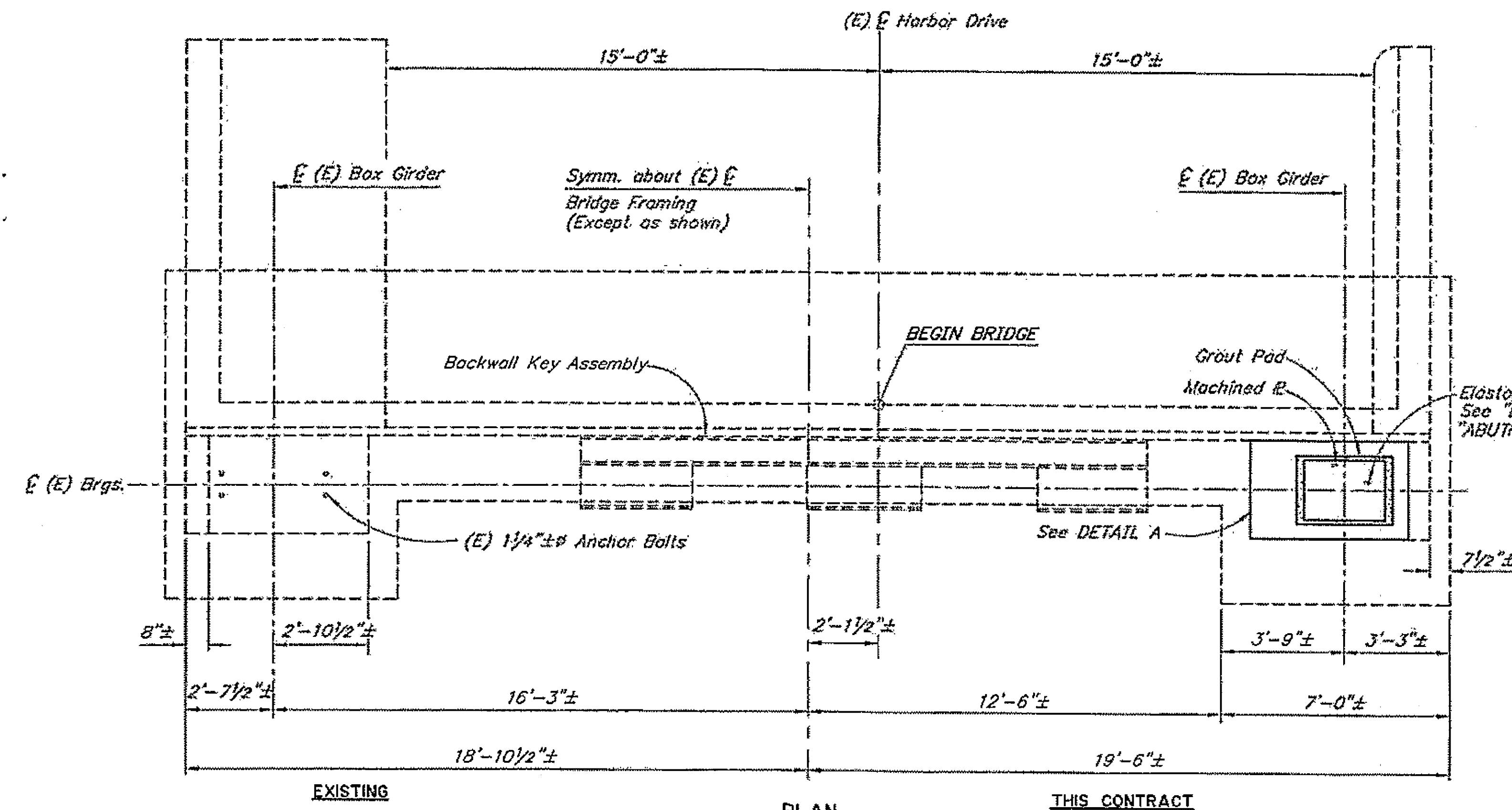
#### LEGEND

(E) = Existing

--- = Existing

— = Denotes this contract

Elevations, Bearings and Dimensions are based on "AS-BUILT" plans. Verify all controlling field dimensions before ordering or fabricating any material.



|                              |                     |
|------------------------------|---------------------|
| DESIGNED BY: Rob Miller      | CHECKED: Larry Owen |
| DRAWN BY: Cathy Anderson     | CHECKED: Rob Miller |
| QUANTITIES BY: George Imeson | CHECKED: Rob Miller |

## BEARING REPLACEMENT

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
BRIDGE SECTION



SITKA HARBOR BRIDGE  
HARBOR DRIVE  
ABUTMENTS



BRIDGE NO. 245  
DWG. NO. 3

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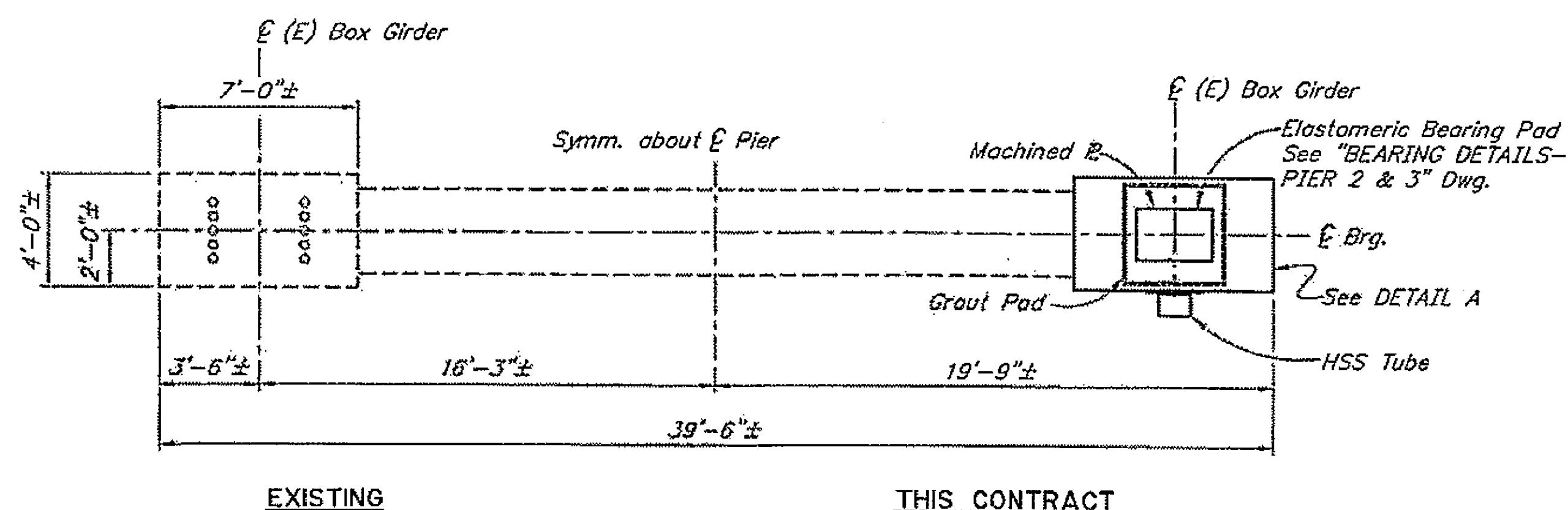
| STATE  | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | 8H-099-31(6)/68945  | 2007 | B4        | 34           |

REINFORCING STEEL  
PIER 2

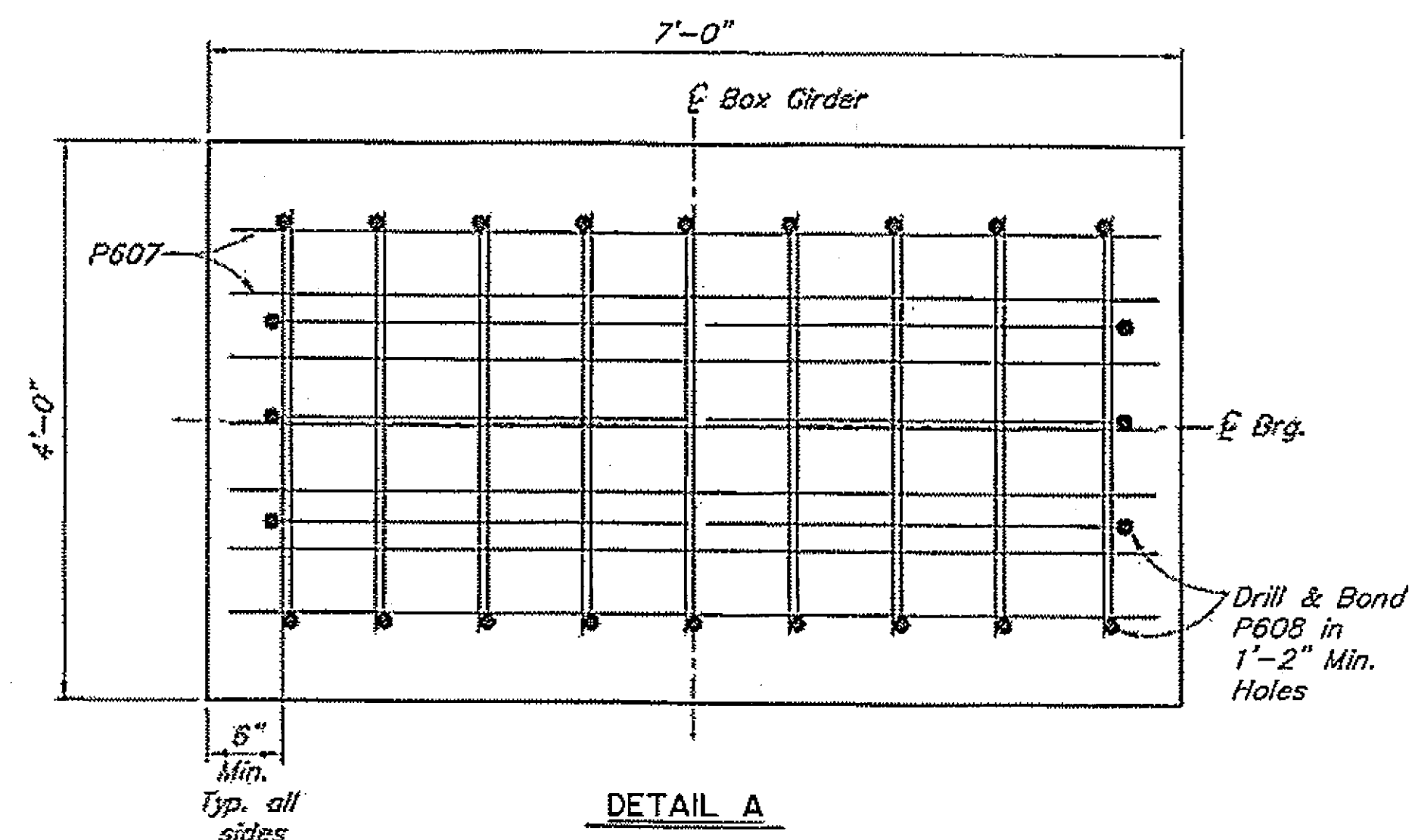
| MARK | SIZE | NO. | LENGTH | TYPE |
|------|------|-----|--------|------|
| P607 | 6    | 14  | 6'-8"  | -    |
| P608 | 6    | 48  | 5'-0"  | Bent |

BENDING DIAGRAM

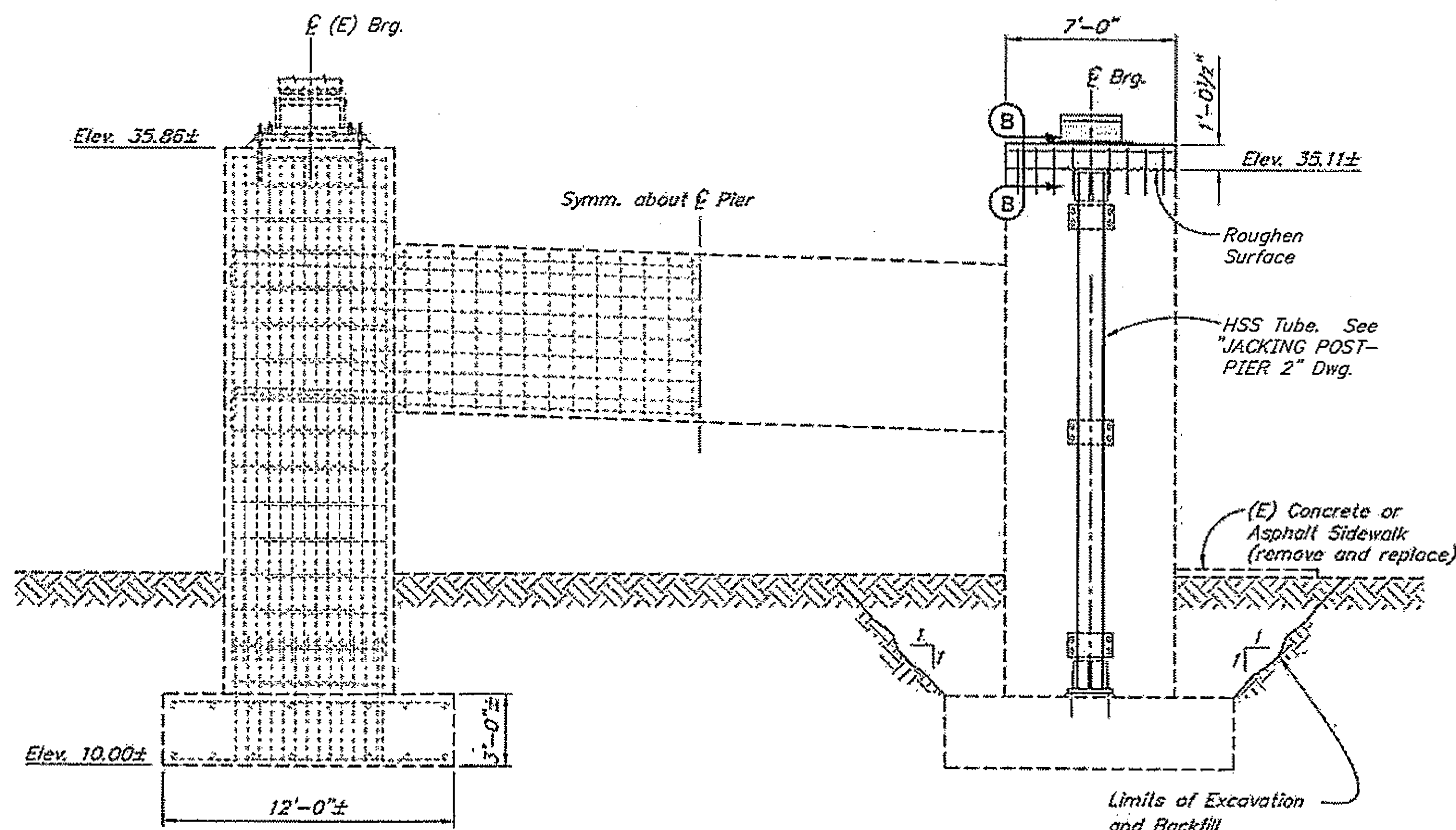
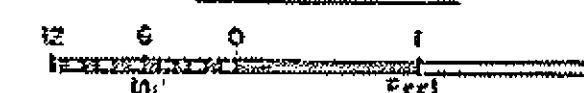
3'-0"  
2'-0"  
P608



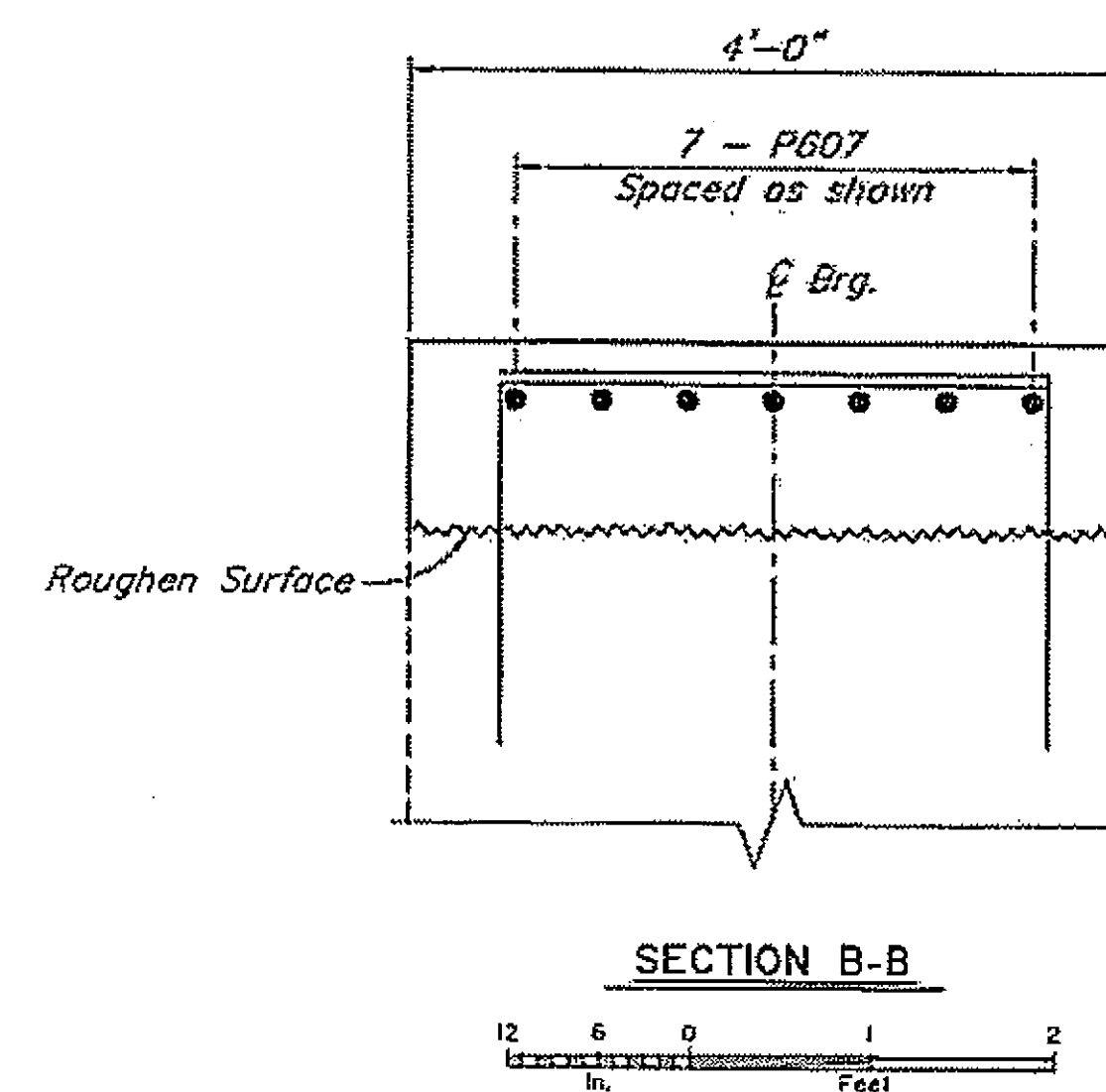
PLAN



DETAIL A



ELEVATION



SECTION B-B



Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
Proj. Eng. *[Signature]* Date 11-3-08

LEGEND

- (E) = Existing
- = Existing
- = Denotes this contract
- \*\* = Department Furnished

Elevations, Bearings and Dimensions are based on "AS-BUILT" plans. Verify all controlling field dimensions before ordering or fabricating any material.

|                                      |                                  |
|--------------------------------------|----------------------------------|
| DESIGNED BY: <i>Robert W. Miller</i> | CHECKED: <i>Larry M. Owen</i>    |
| DRAWN BY: <i>Cathy Anderson</i>      | CHECKED: <i>Robert W. Miller</i> |
| QUANTITIES BY: <i>George Imbison</i> | CHECKED: <i>Robert W. Miller</i> |

BEARING REPLACEMENT

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
BRIDGE SECTION



SITKA HARBOR BRIDGE  
HARBOR DRIVE  
PIER 2



BRIDGE NO. 245  
DWG. NO. 4

| STATE  | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | BH-099-3161/68945   | 2007 | B5        | 34           |

| REINFORCING STEEL<br>PIER 3 |      |     |        |      |
|-----------------------------|------|-----|--------|------|
| MARK                        | SIZE | NO. | LENGTH | TYPE |
| R608                        | 6    | 48  | 5'-0"  | Bent |
| BENDING DIAGRAM             |      |     |        |      |
|                             |      |     |        |      |

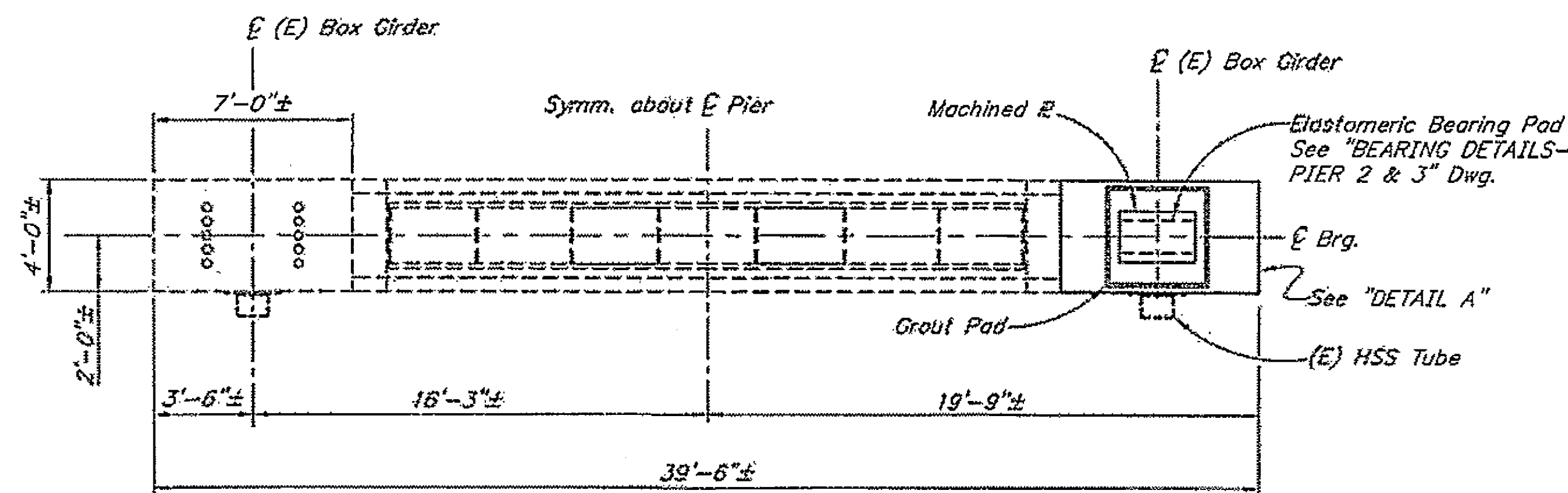
\*\*

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
 Proj. Eng. *[Signature]* Date 11-3-08

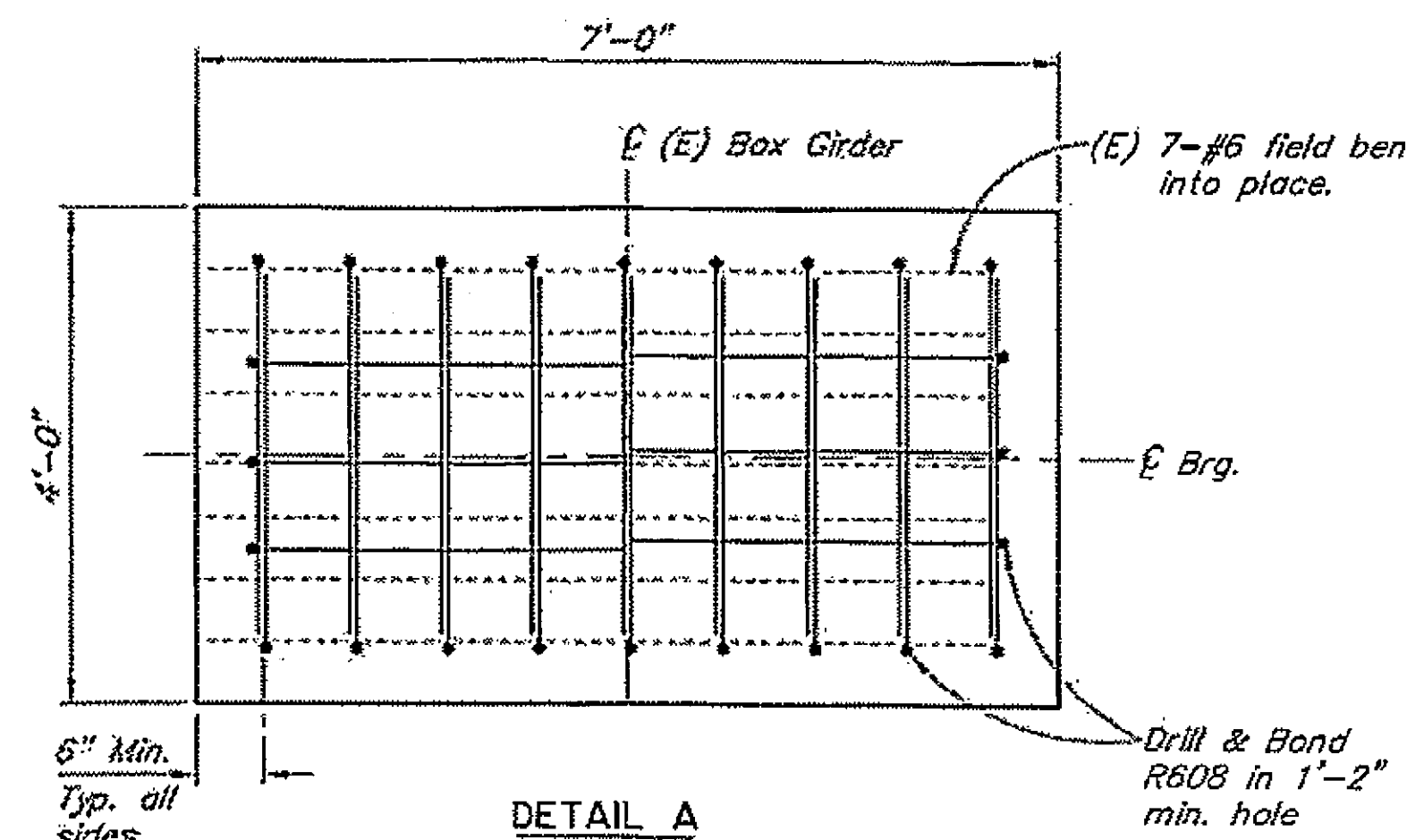
#### LEGEND

- (E) = Existing
- = Existing
- = Denotes this contract
- \*\* = Department Furnished

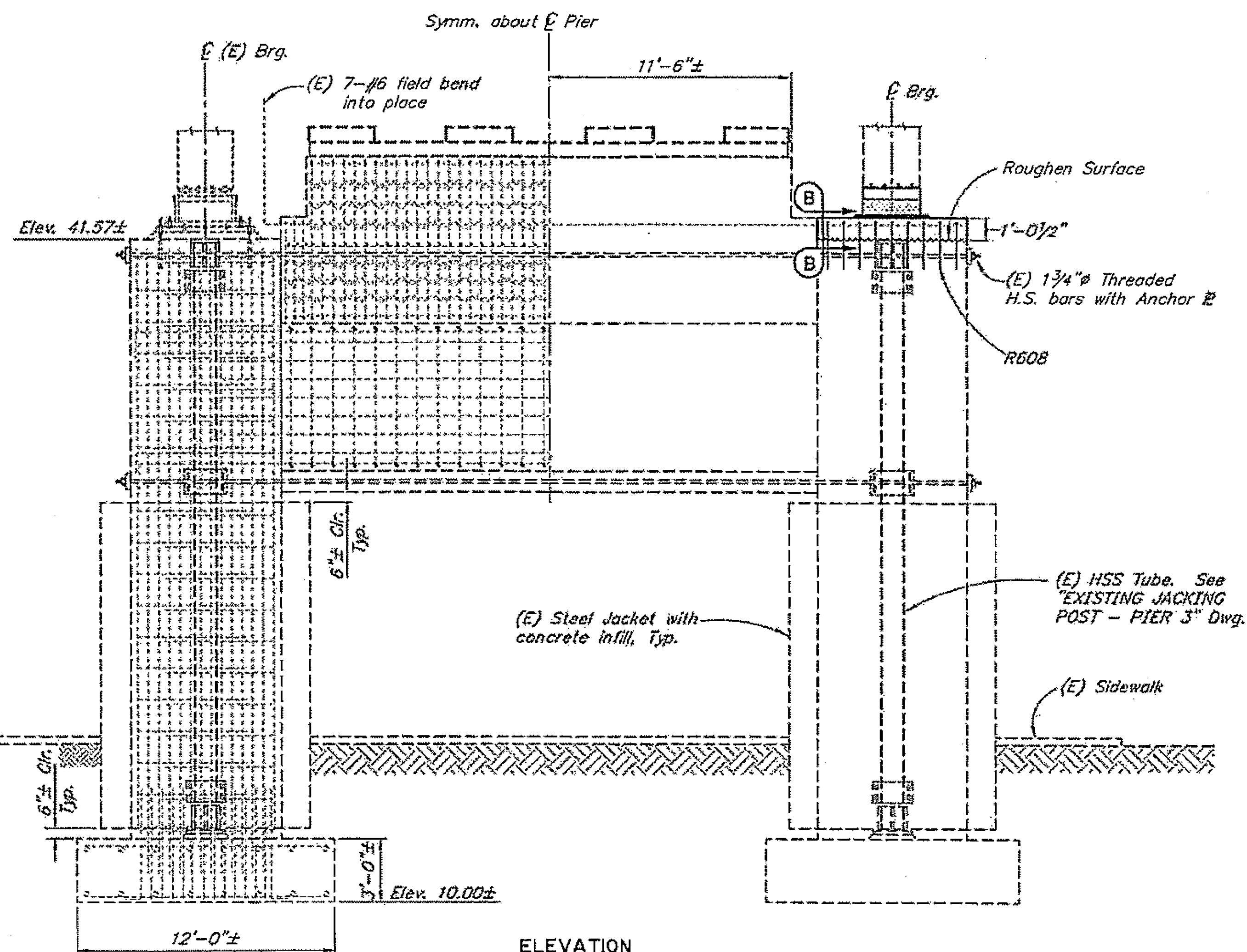
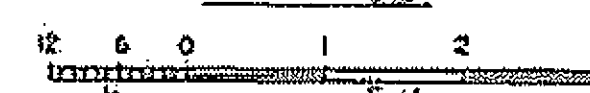
Elevations, Bearings and Dimensions are based on "AS-BUILT" plans. Verify all controlling field dimensions before ordering or fabricating any material.



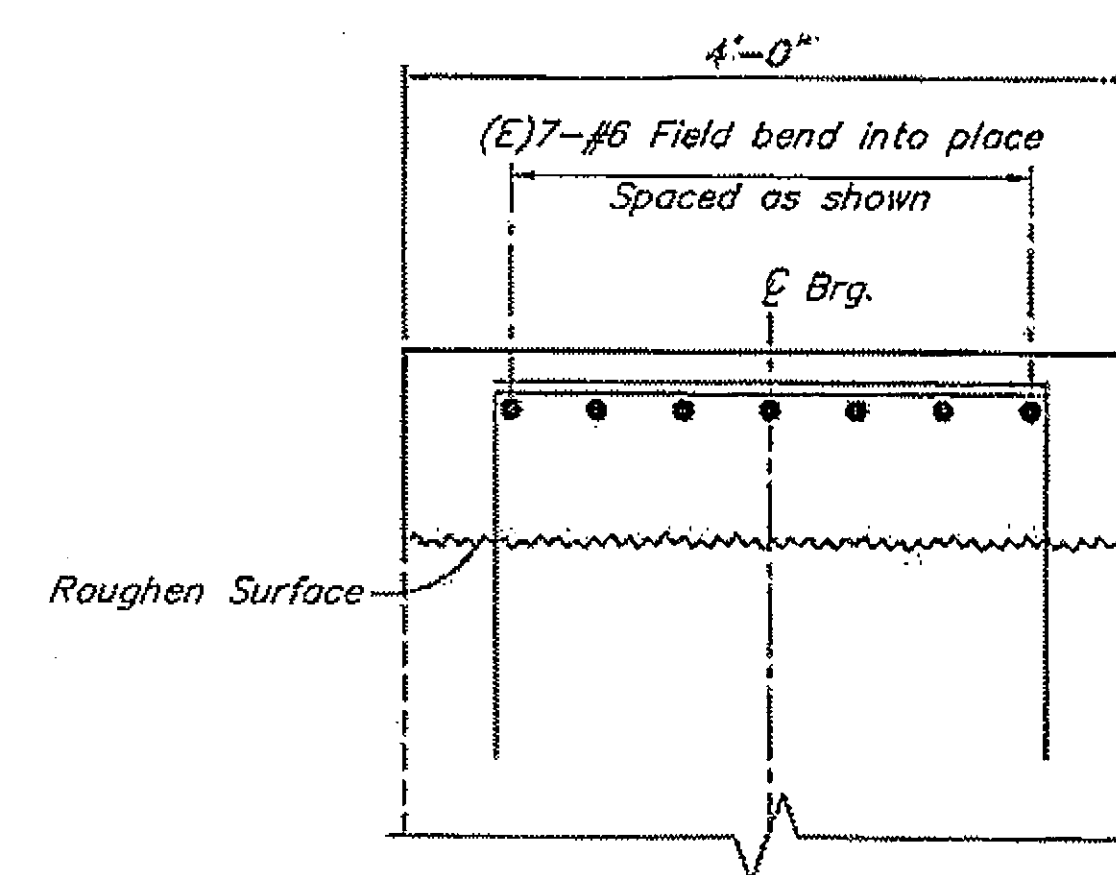
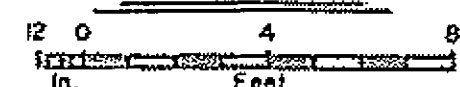
EXISTING PLAN THIS CONTRACT



DETAIL A



ELEVATION



SECTION B-B



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|                                      |                                  |
|--------------------------------------|----------------------------------|
| DESIGNED BY: <i>Robert W. Miller</i> | CHECKED: <i>Larry Owen</i>       |
| DRAWN BY: <i>Cathy Anderson</i>      | CHECKED: <i>Robert W. Miller</i> |
| QUANTITIES BY: <i>George Imbsen</i>  | CHECKED: <i>Robert W. Miller</i> |

## BEARING REPLACEMENT

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 BRIDGE SECTION

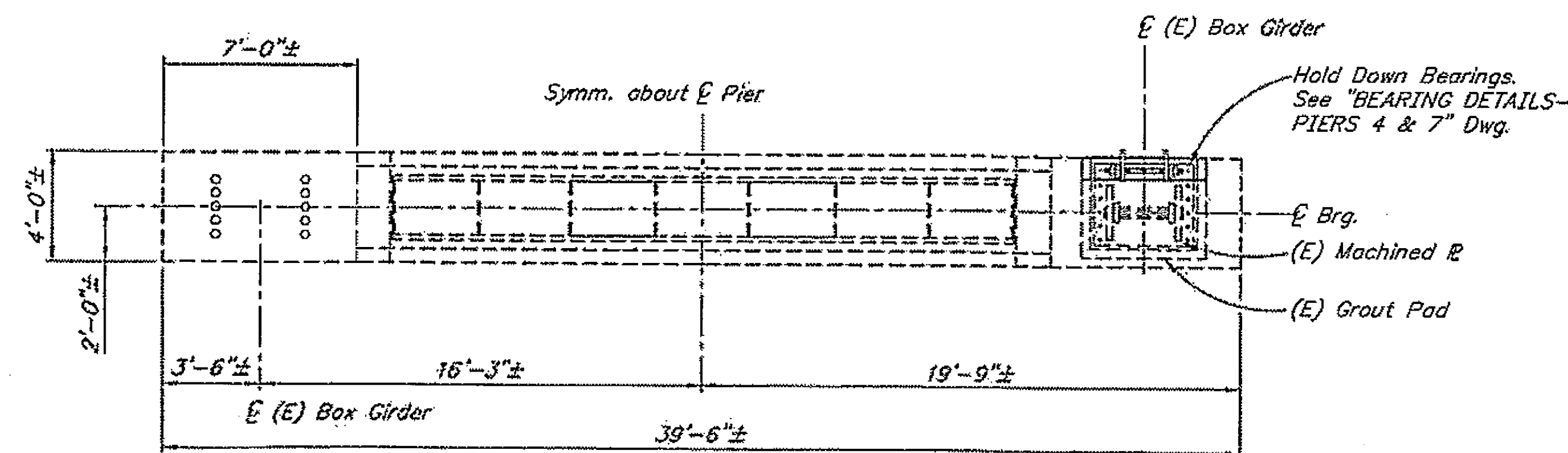


SITKA HARBOR BRIDGE  
 HARBOR DRIVE  
 PIER 3

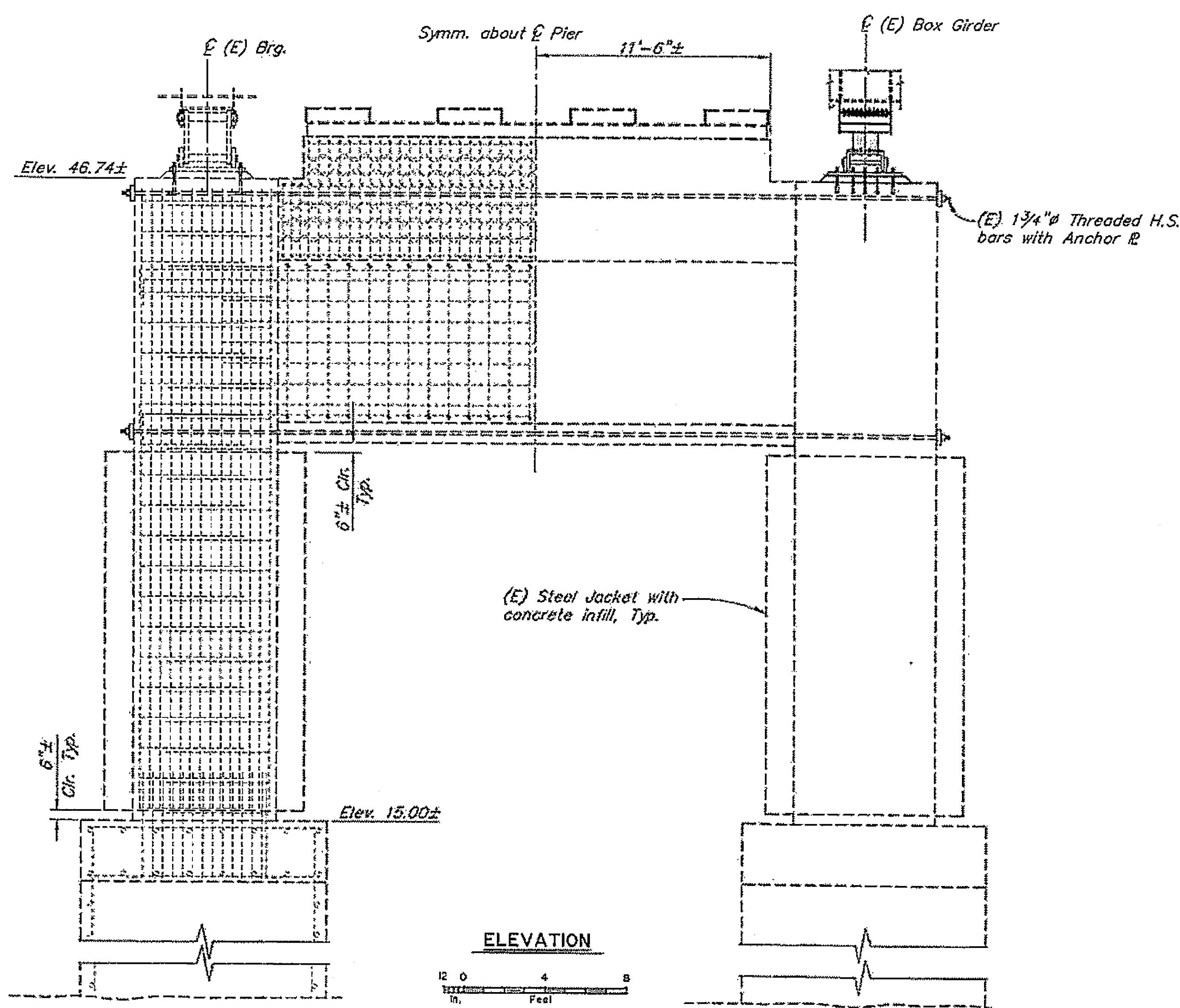
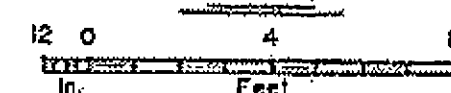


BRIDGE NO. 245  
 DWG. NO. 5

| STATE  | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | 6H-099-3(16)/68945  | 2007 | B6        | 34           |



EXISTING PLAN THIS CONTRACT



ELEVATION



Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
Proj. Eng. *[Signature]* Date 11-3-08

#### LEGEND

- (E) = Existing
- = Existing
- = Denotes this contract

Elevations, Bearings and Dimensions are based on "AS-BUILT" plans. Verify all controlling field dimensions before ordering or fabricating any material.

|                                         |                                     |
|-----------------------------------------|-------------------------------------|
| DESIGNED BY:<br><i>Robert W. Miller</i> | CHECKED:<br><i>Larry M. Owen</i>    |
| DRAWN BY:<br><i>Cathy Anderson</i>      | CHECKED:<br><i>Robert W. Miller</i> |
| QUANTITIES BY:<br><i>George Imboden</i> | CHECKED:<br><i>Robert W. Miller</i> |

## BEARING REPLACEMENT

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
BRIDGE SECTION



SITKA HARBOR BRIDGE  
HARBOR DRIVE  
PIERS 4 & 7



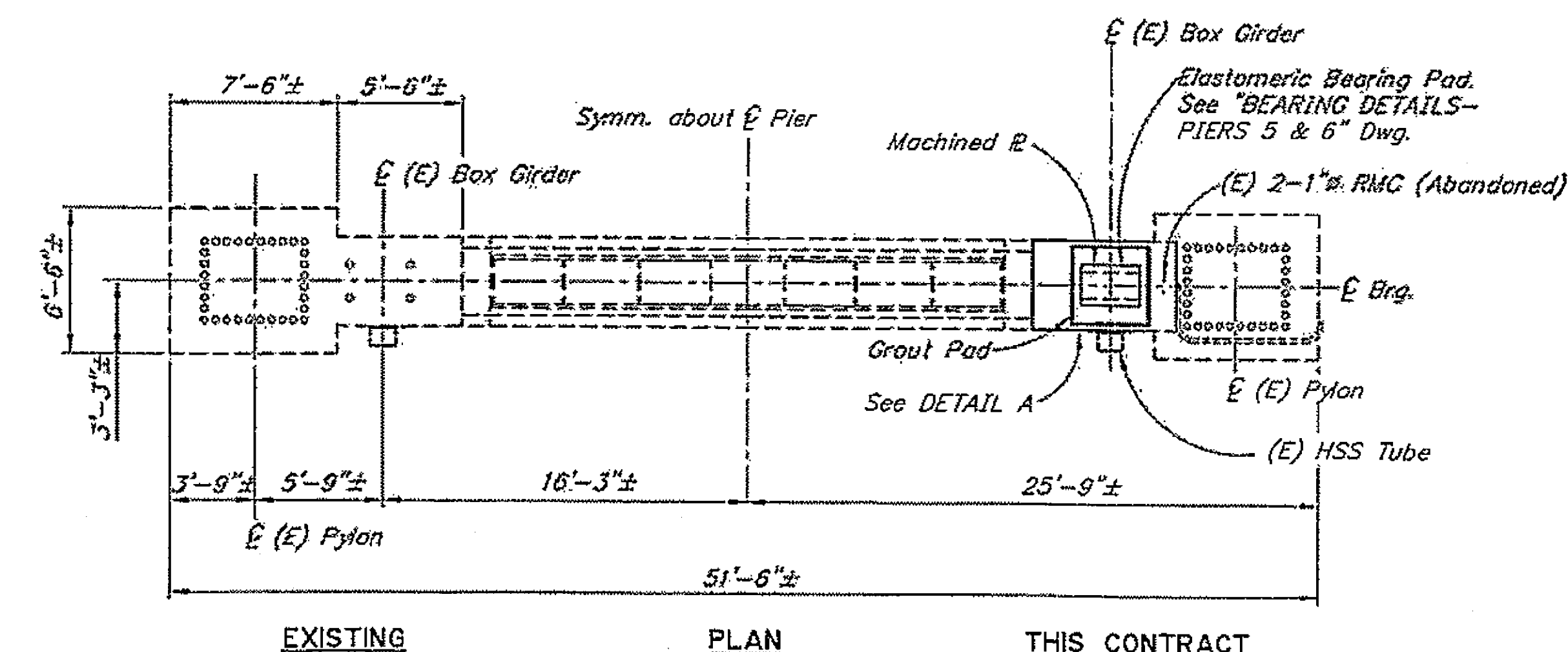
BRIDGE NO. 245  
DWG. NO. 6

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| STATE  | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | BH-099-3161/68945   | 2007 | 87        | 36           |

| REINFORCING STEEL<br>ONE PIER |      |     |        |      |
|-------------------------------|------|-----|--------|------|
| MARK                          | SIZE | NO. | LENGTH | TYPE |
| ** T608                       | 6    | 48  | 5'-0"  | Bent |
| BENDING DIAGRAM               |      |     |        |      |
|                               |      |     |        |      |

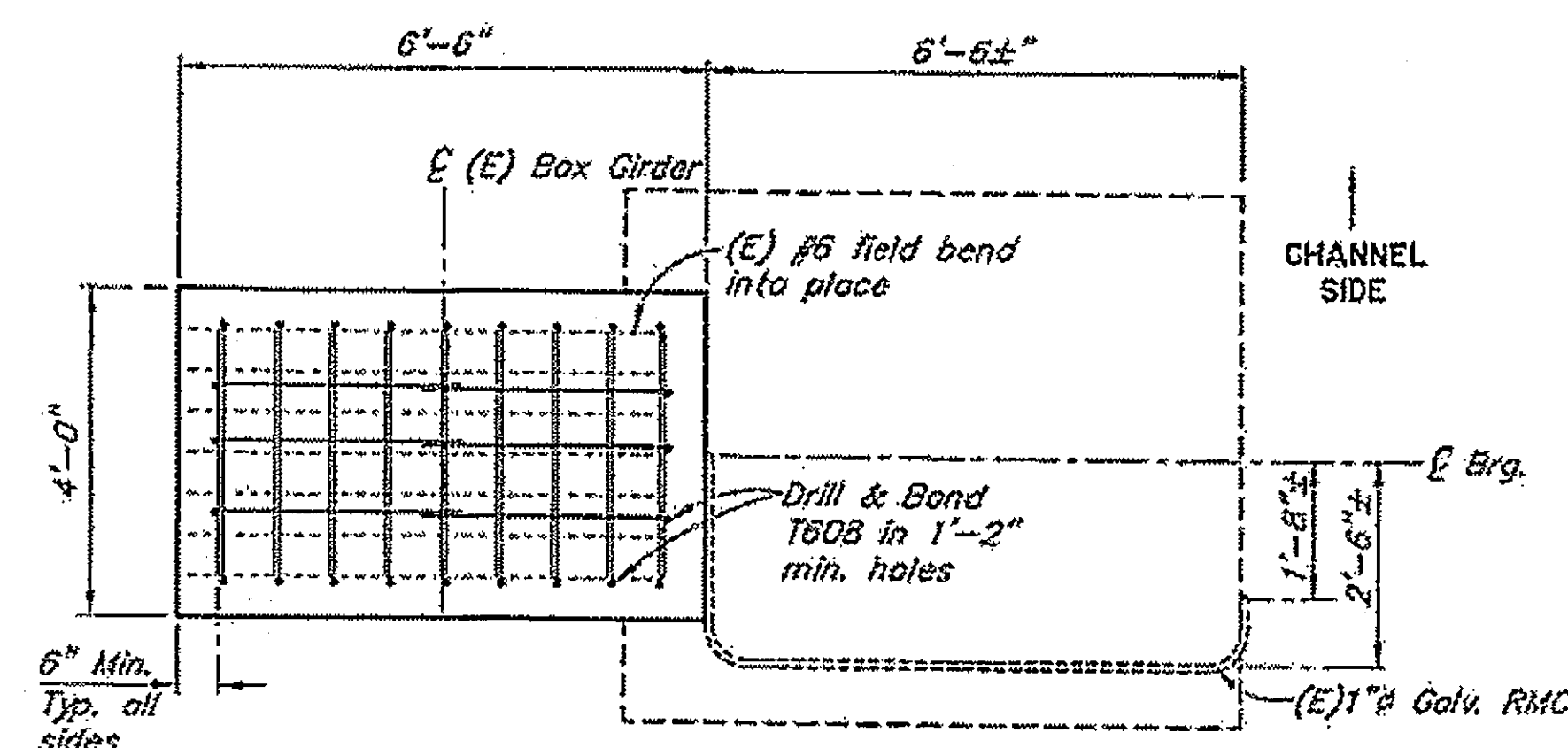
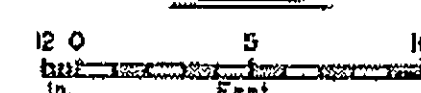
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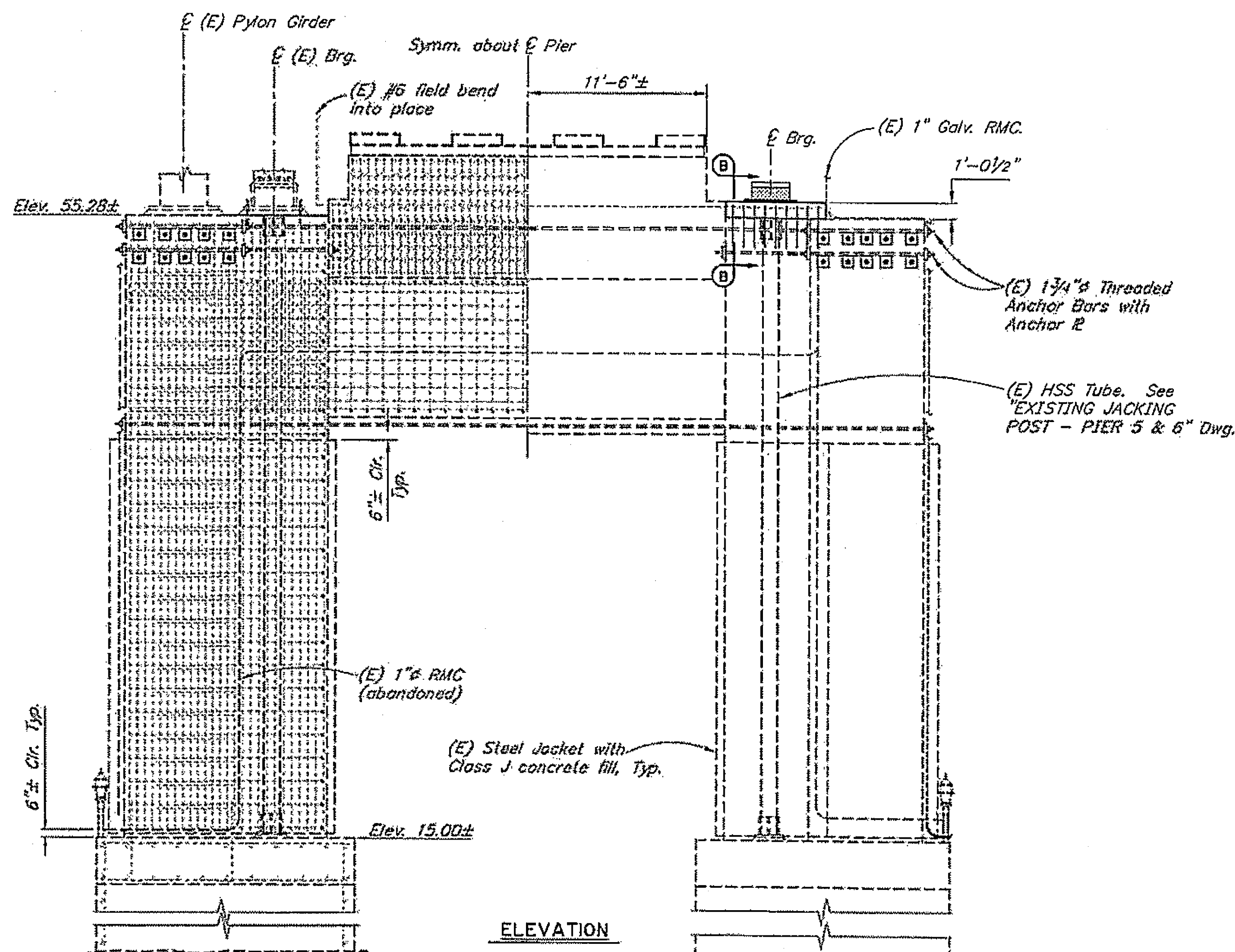
EXISTING

PLAN

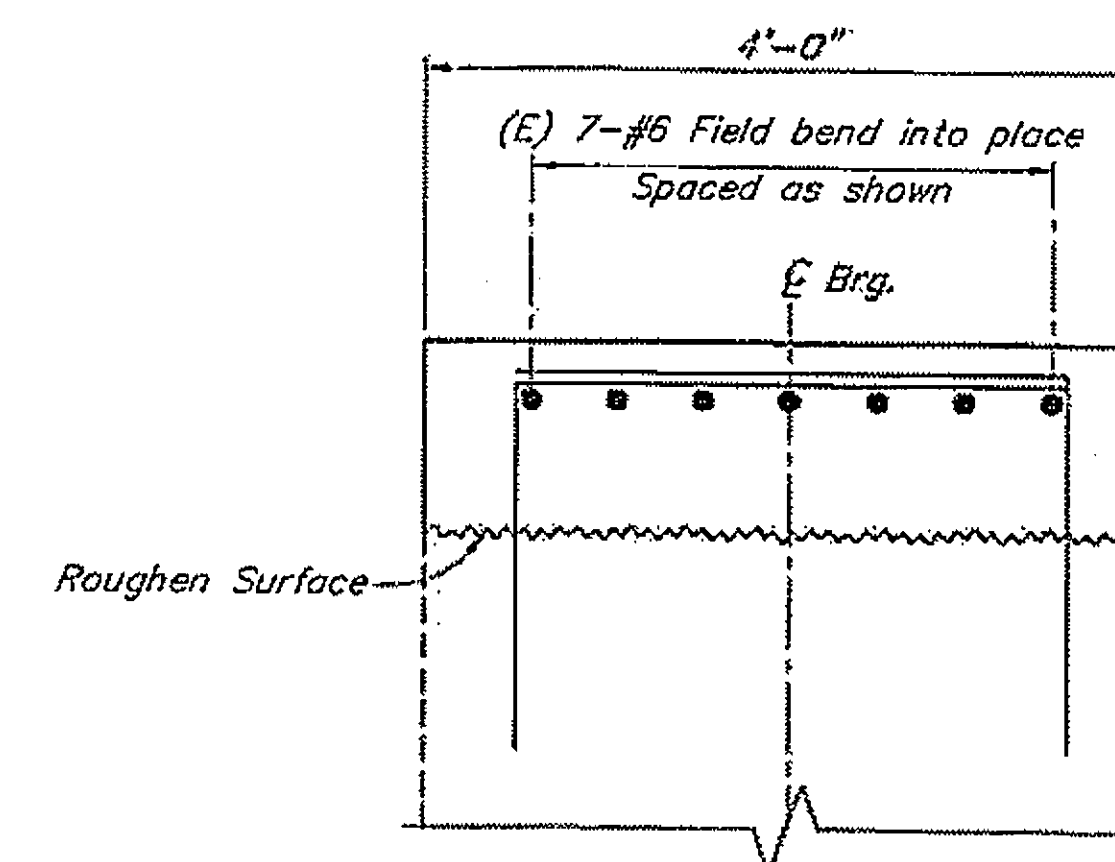
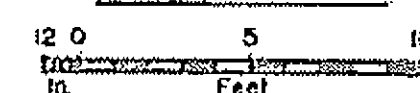
THIS CONTRACT



DETAIL A



ELEVATION



SECTION B-B



Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
Proj. Eng. *[Signature]* Date 11-2-07

# LEGEND

- (E) = Existing
- = Existing
- = Denotes this contract
- \*\* = Department Furnished

Elevations, Bearings and Dimensions are based on "AS-BUILT" plans. Verify all controlling field dimensions before ordering or fabricating any material.

|                                      |                                  |
|--------------------------------------|----------------------------------|
| DESIGNED BY: <i>Robert W. Miller</i> | CHECKED: <i>Larry M. Owen</i>    |
| DRAWN BY: <i>Cathy Anderson</i>      | CHECKED: <i>Robert W. Miller</i> |
| QUANTITIES BY: <i>George Imbsen</i>  | CHECKED: <i>Robert W. Miller</i> |

## BEARING REPLACEMENT

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
BRIDGE SECTION



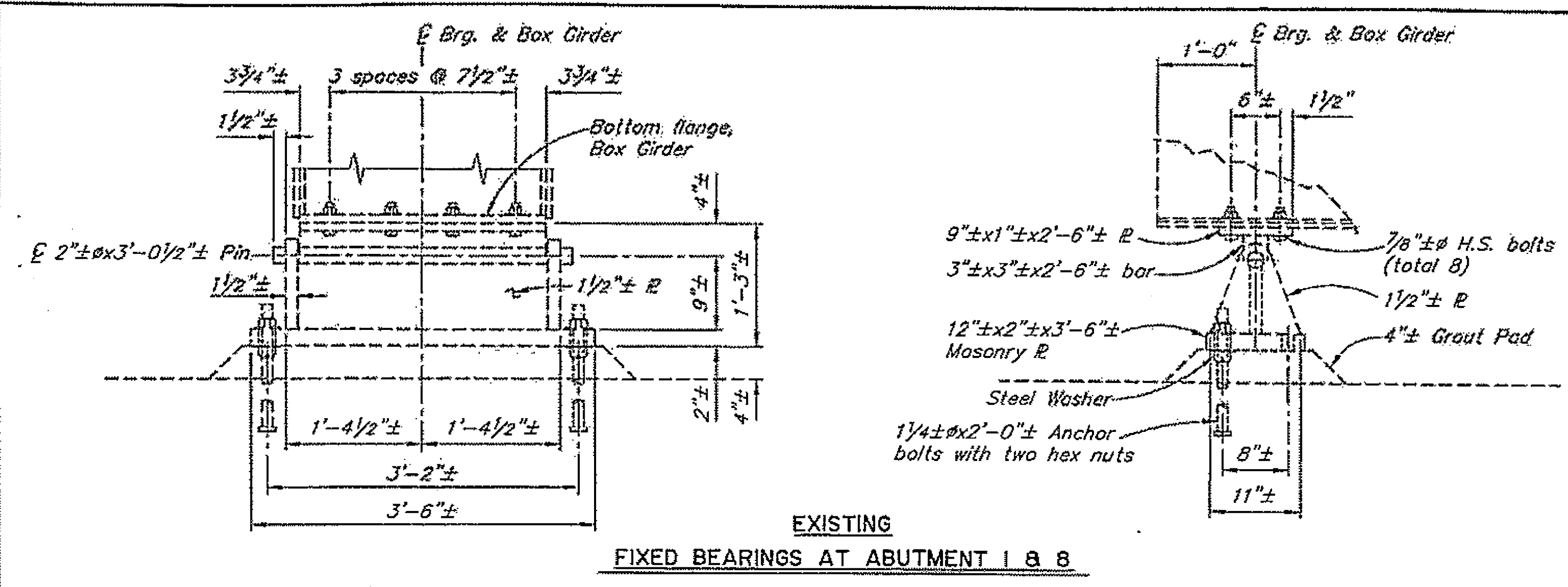
SITKA HARBOR BRIDGE  
HARBOR DRIVE  
PIERS 5 & 6



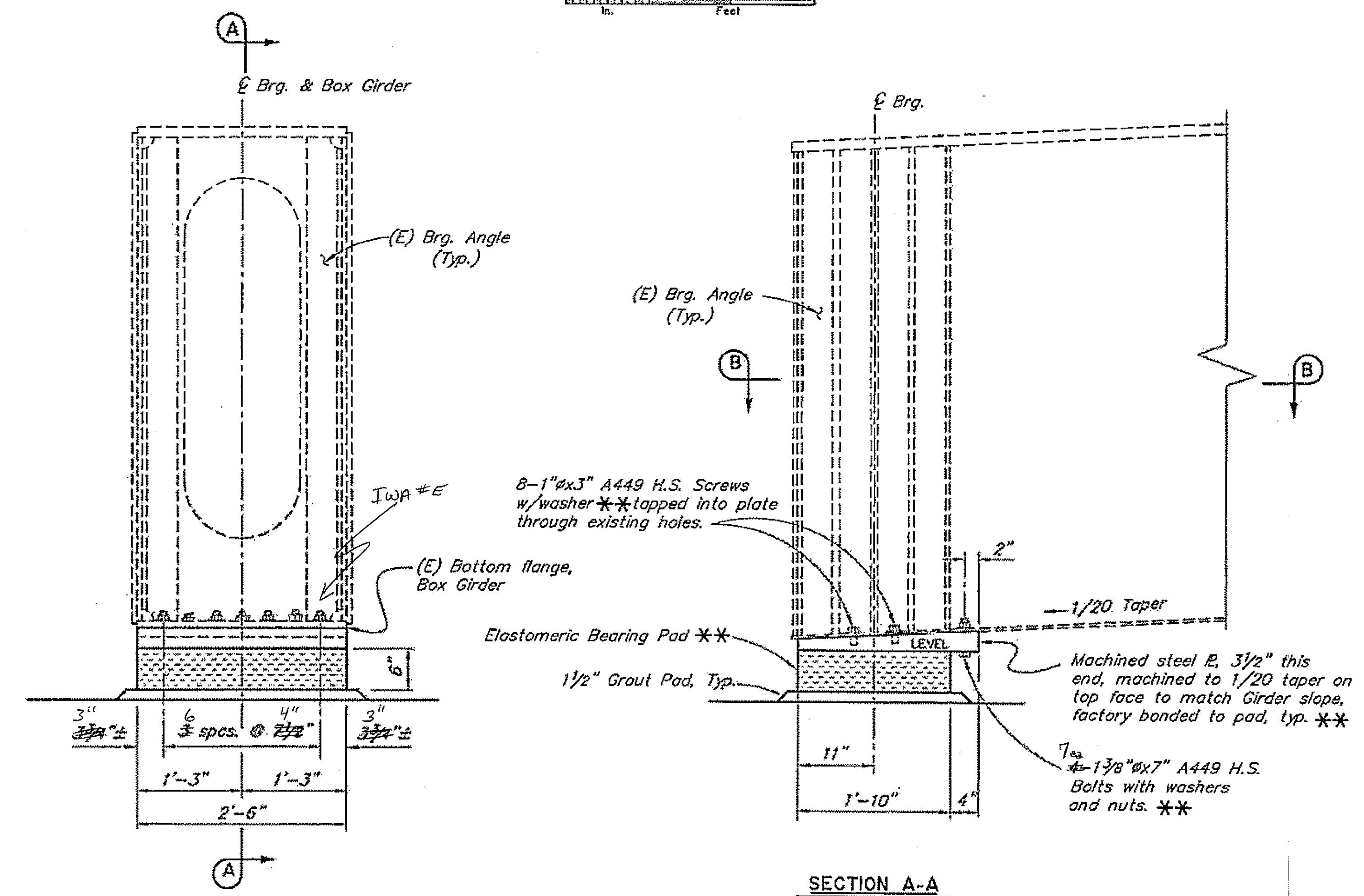
BRIDGE NO. 245  
DWS. NO. 7

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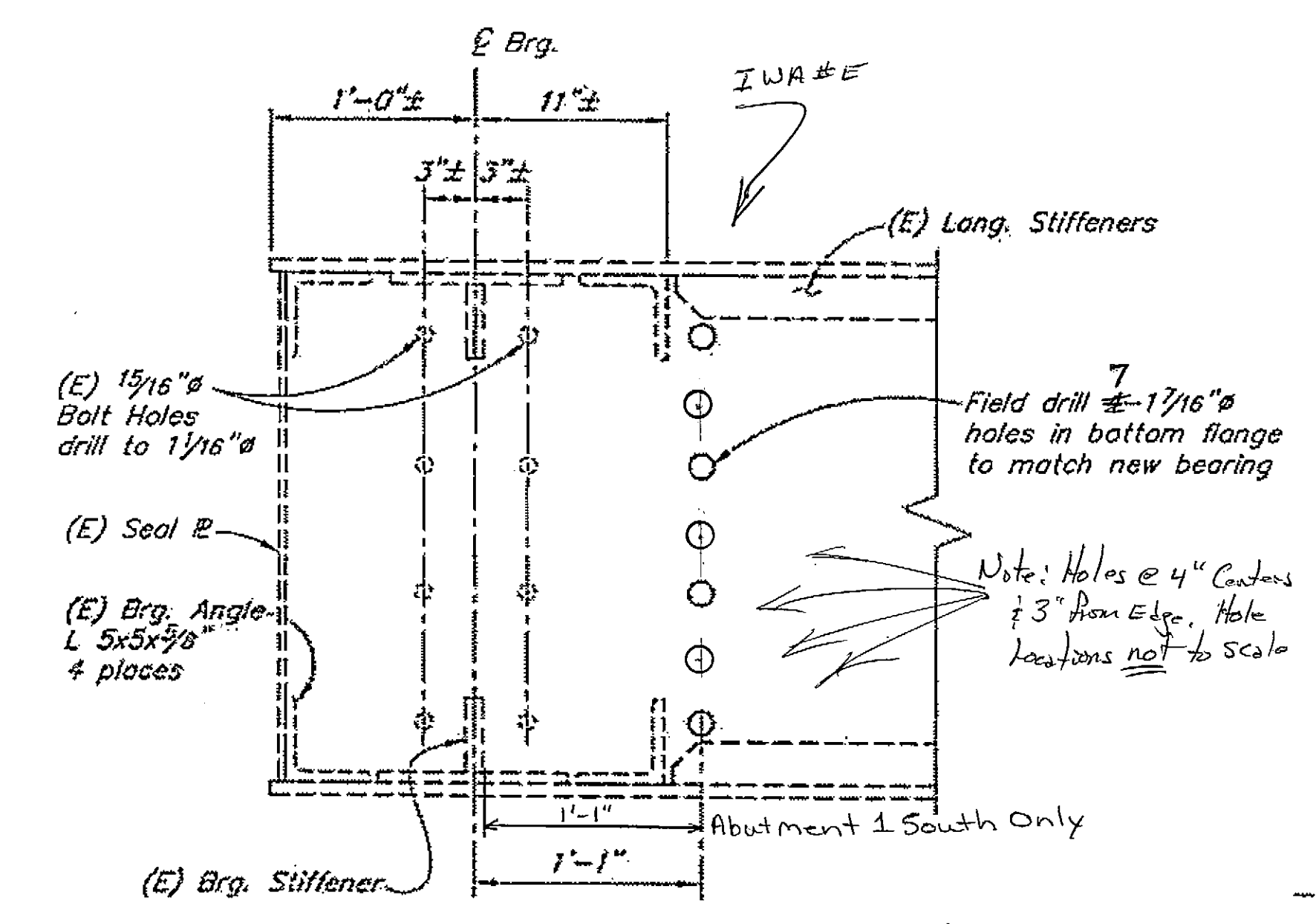
| STATE  | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | BH-099-3161/68945   | 2007 | 88        | 34           |



EXISTING  
FIXED BEARINGS AT ABUTMENT 1 & 8



SECTION A-A



SECTION B-B

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
Proj. Eng. *[Signature]* Date 11-3-08

LEGEND

- (E) = Existing
- = Existing
- = Denotes this contract
- \*\* = Department Furnished

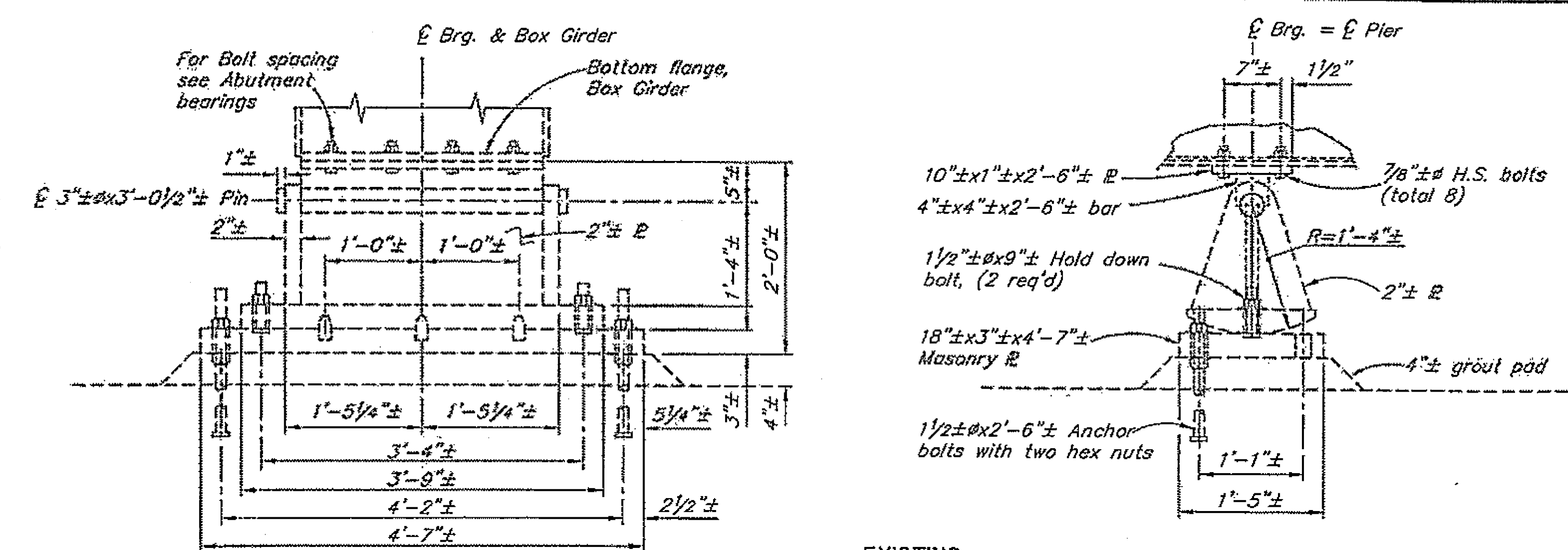
Elevations, Bearings and Dimensions are based on "AS-BUILT" plans. Verify all controlling field dimensions before ordering or fabricating any material.

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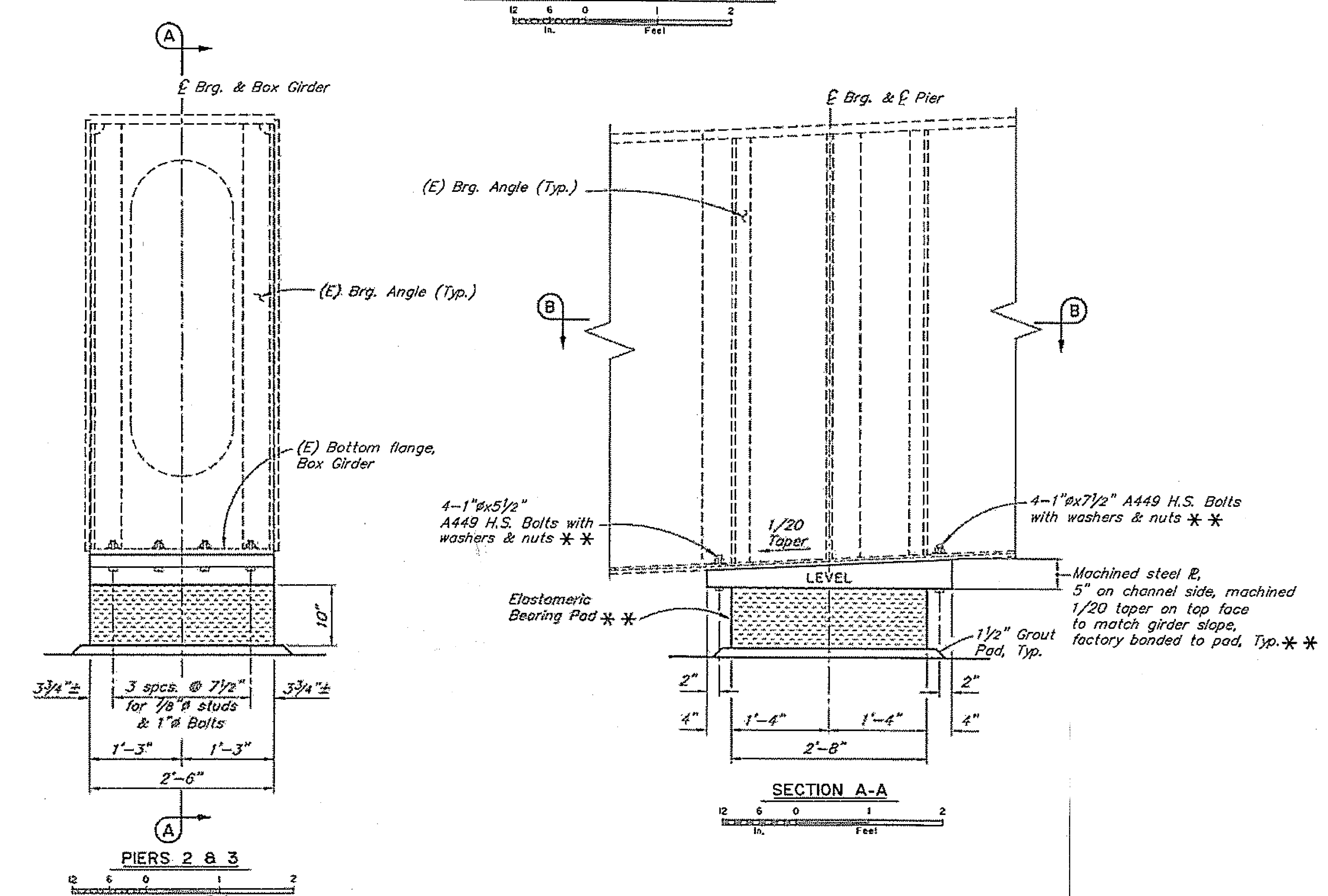
|                                         |                                     |
|-----------------------------------------|-------------------------------------|
| DESIGNED BY:<br><i>Robert W. Miller</i> | CHECKED:<br><i>George Imboden</i>   |
| DRAWN BY:<br><i>Cathy Anderson</i>      | CHECKED:<br><i>Robert W. Miller</i> |
| QUANTITIES BY:<br><i>George Imboden</i> | CHECKED:<br><i>Robert W. Miller</i> |

|                            |                                                                                            |  |                                                                                            |                                  |
|----------------------------|--------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------|----------------------------------|
| <b>BEARING REPLACEMENT</b> | STATE OF ALASKA<br>DEPARTMENT OF TRANSPORTATION<br>AND PUBLIC FACILITIES<br>BRIDGE SECTION |  | <b>SITKA HARBOR BRIDGE</b><br>HARBOR DRIVE<br><b>BEARING DETAILS - ABUTMENTS 1 &amp; 8</b> | <br>BRIDGE NO. 245<br>DWG. NO. 8 |
|----------------------------|--------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------|----------------------------------|

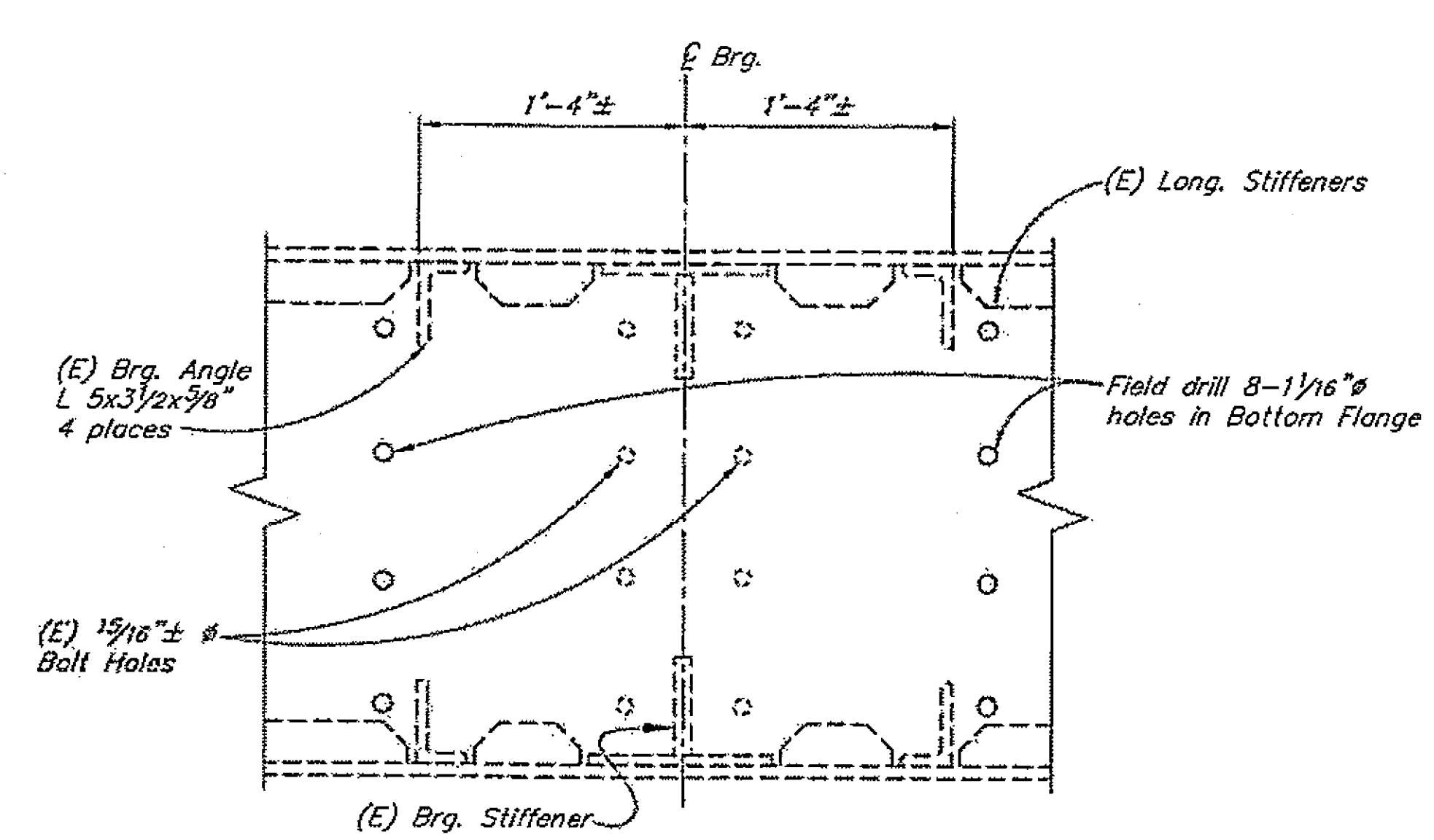
| STATE  | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | BH-099-3(16)/68945  | 2007 | 89        | 34           |



EXISTING  
FIXED BEARINGS AT PIERS 2 & 3



SECTION A-A



SECTION B-B

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
Proj. Eng. *[Signature]* Date 11-3-07

LEGEND

- (E) = Existing
- = Existing
- = Denotes this contract
- \* \* = Department Furnished

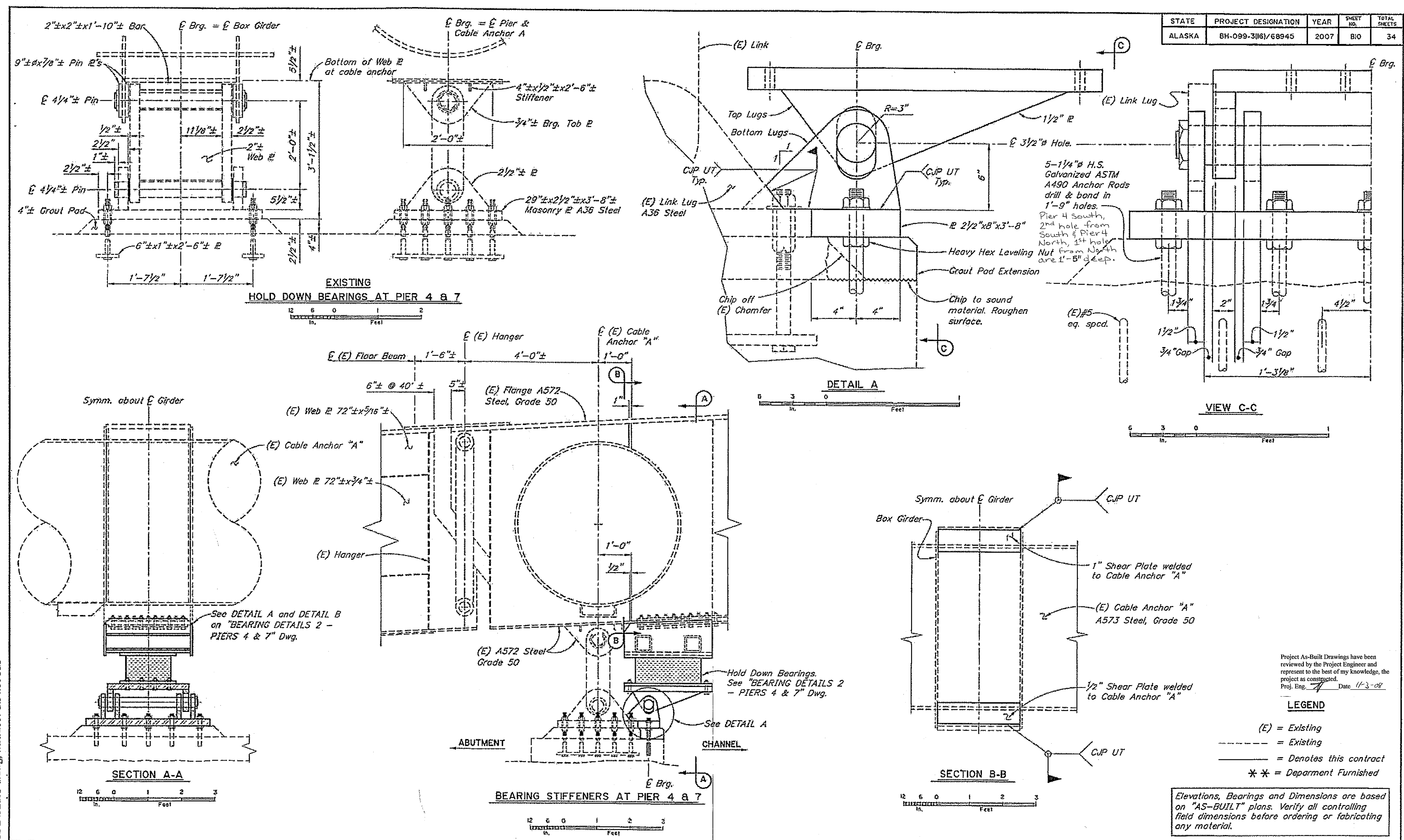
Elevations, Bearings and Dimensions are based on "AS-BUILT" plans. Verify all controlling field dimensions before ordering or fabricating any material.

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|                                         |                                     |                                                                                            |  |                                                                      |  |                              |
|-----------------------------------------|-------------------------------------|--------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------|--|------------------------------|
| DESIGNED BY:<br><i>Robert W. Miller</i> | CHECKED:<br><i>George Imbison</i>   | STATE OF ALASKA<br>DEPARTMENT OF TRANSPORTATION<br>AND PUBLIC FACILITIES<br>BRIDGE SECTION |  | SITKA HARBOR BRIDGE<br>HARBOR DRIVE<br>BEARING DETAILS - PIERS 2 & 3 |  | BRIDGE NO. 245<br>DWG. NO. 9 |
| DRAWN BY:<br><i>Cathy Anderson</i>      | CHECKED:<br><i>Robert W. Miller</i> |                                                                                            |  |                                                                      |  |                              |
| QUANTITIES BY:<br><i>George Imbison</i> | CHECKED:<br><i>Robert W. Miller</i> |                                                                                            |  |                                                                      |  |                              |

BEARING REPLACEMENT

| STATE  | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | BH-099-316/68945    | 2007 | B10       | 34           |



Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
 Proj. Eng. *[Signature]* Date 11-3-08

**LEGEND**  
 (E) = Existing  
 --- = Existing  
 --- = Denotes this contract  
 \*\* = Department Furnished

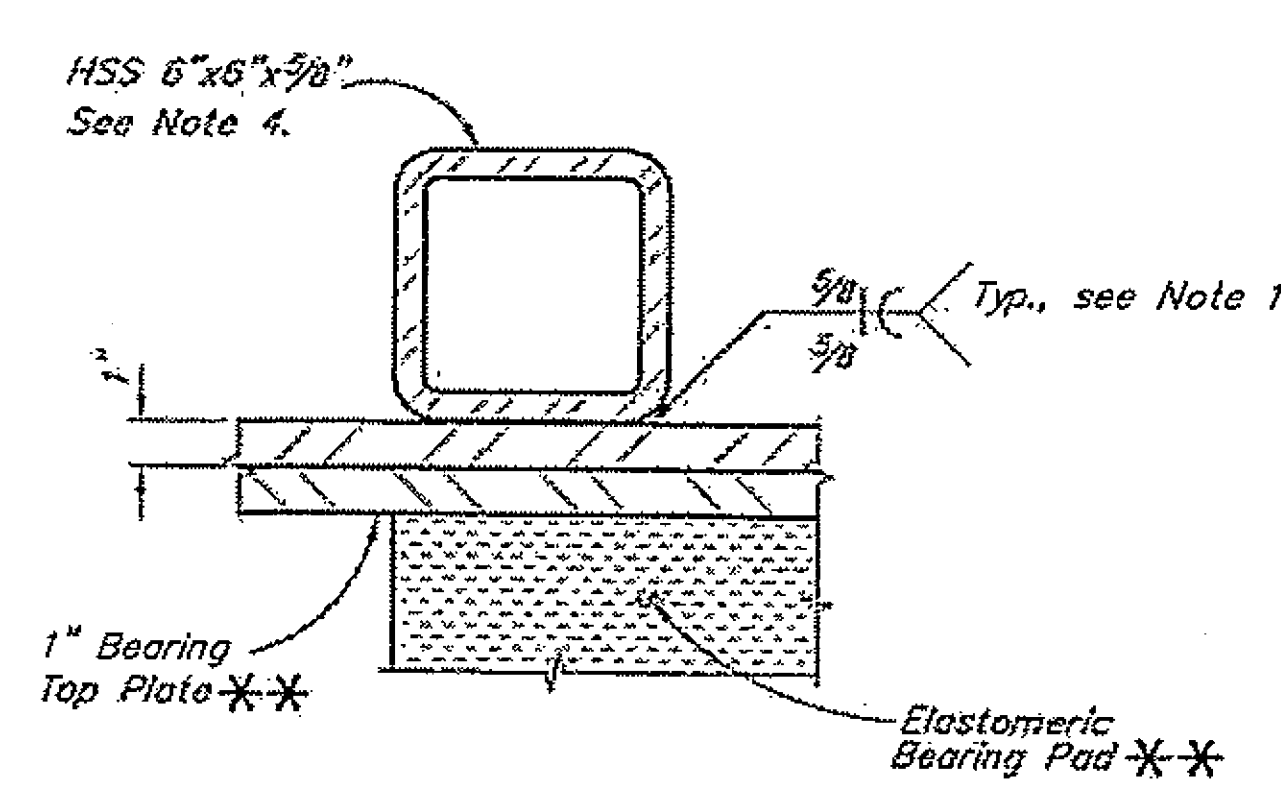
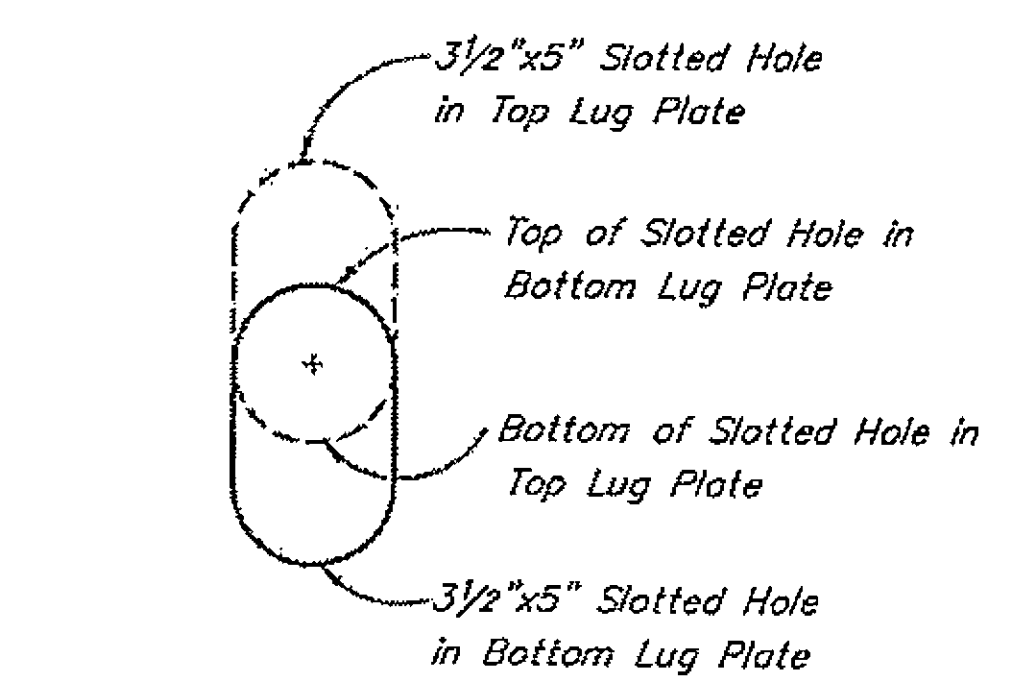
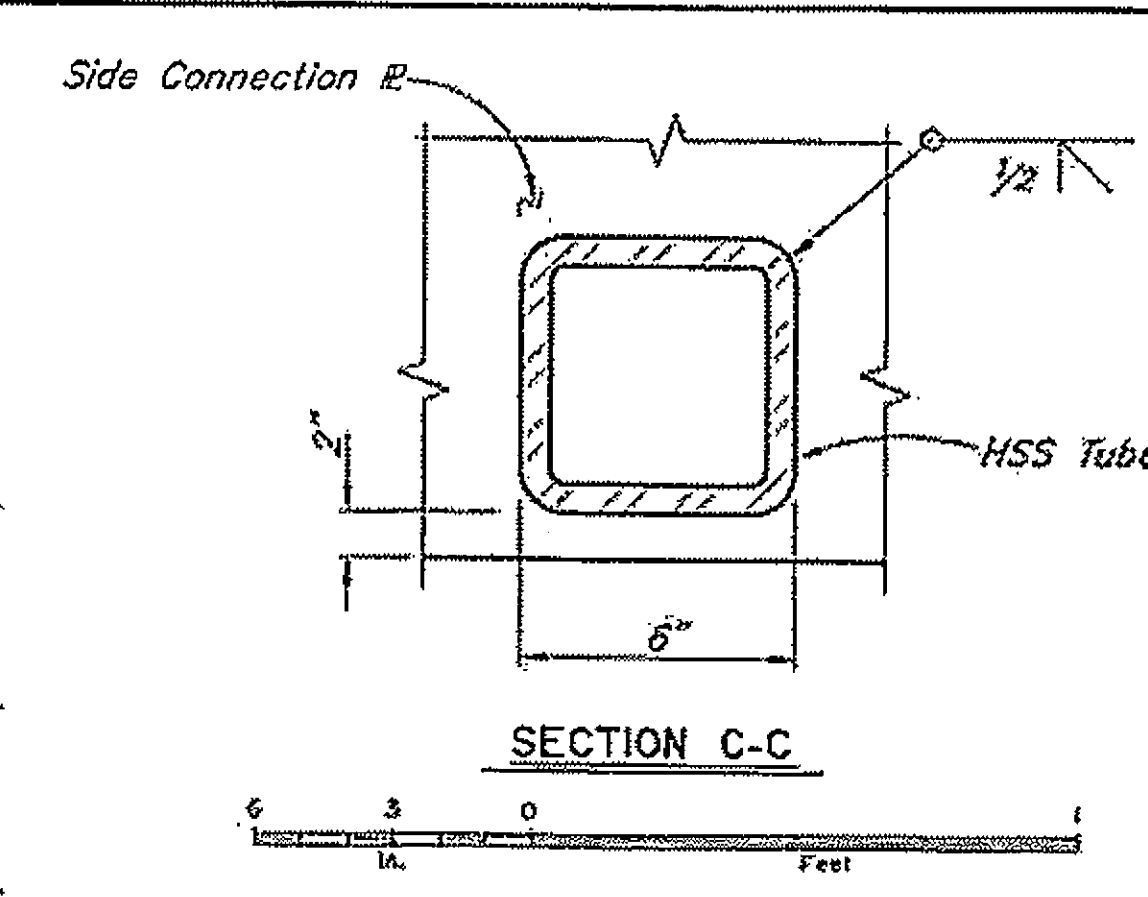
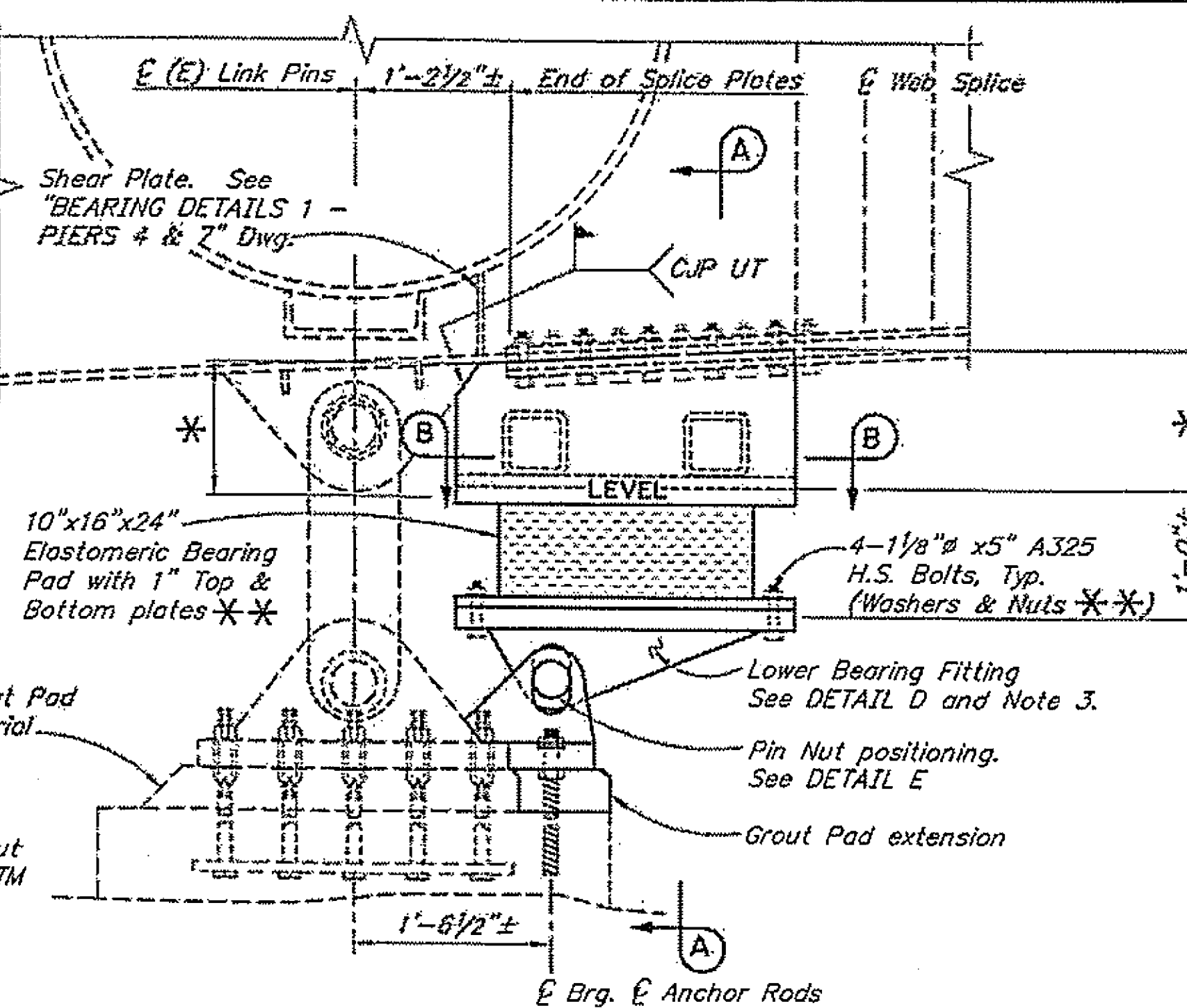
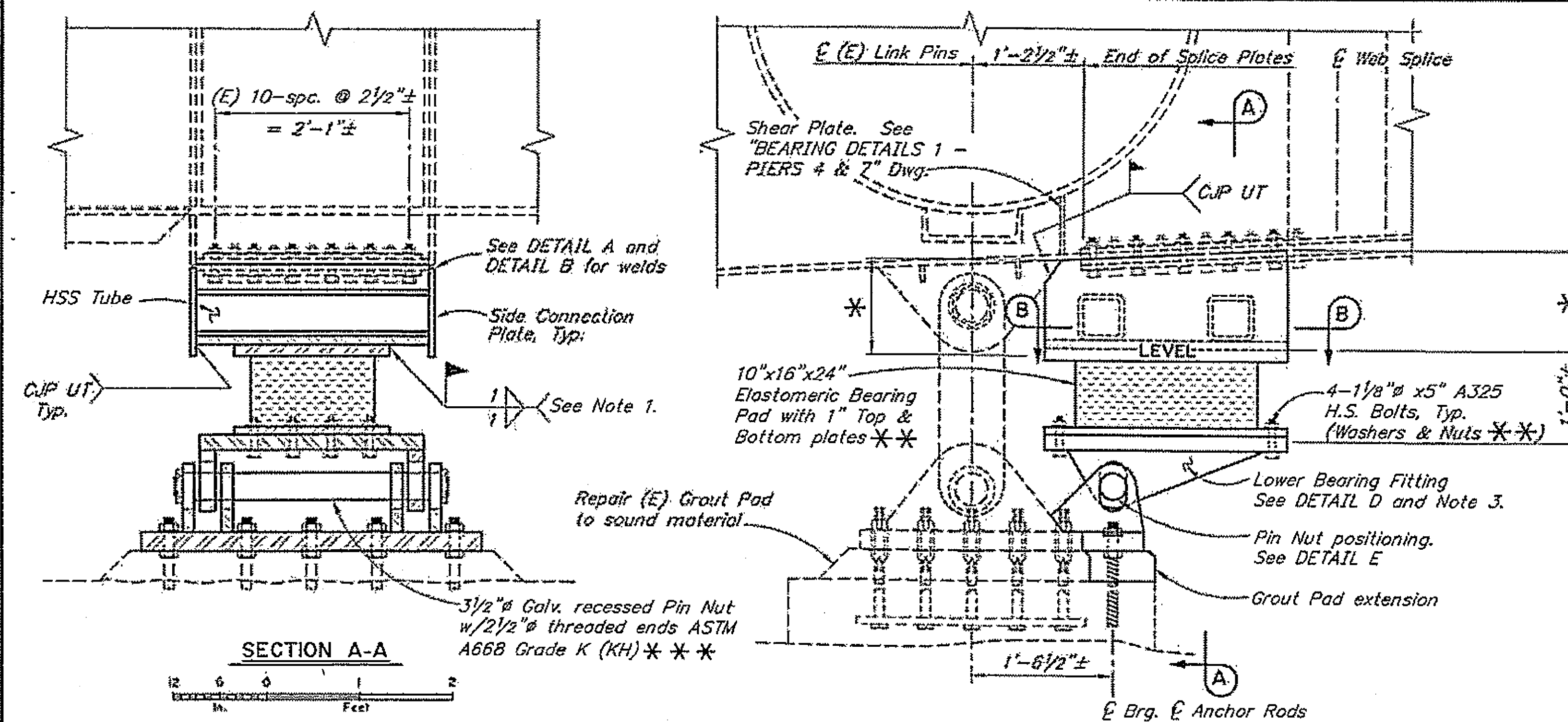
Elevations, Bearings and Dimensions are based on "AS-BUILT" plans. Verify all controlling field dimensions before ordering or fabricating any material.

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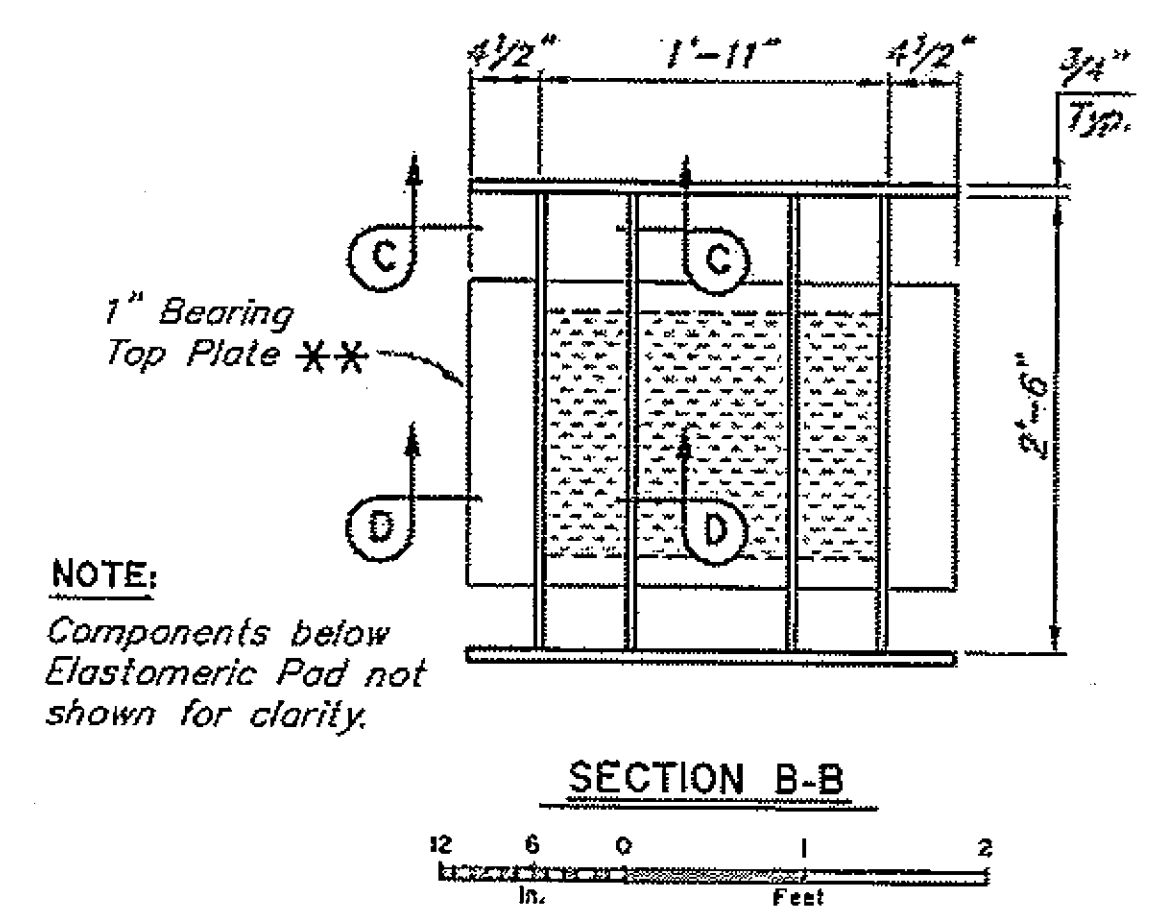
|                                         |                                     |
|-----------------------------------------|-------------------------------------|
| DESIGNED BY:<br><i>Robert W. Miller</i> | CHECKED:<br><i>George Imbsen</i>    |
| DRAWN BY:<br><i>Cathy Anderson</i>      | CHECKED:<br><i>George Imbsen</i>    |
| QUANTITIES BY: <i>George Imbsen</i>     | CHECKED:<br><i>Robert W. Miller</i> |

|                            |                                                                                            |  |                                                                        |                               |
|----------------------------|--------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------|-------------------------------|
| <b>BEARING REPLACEMENT</b> | STATE OF ALASKA<br>DEPARTMENT OF TRANSPORTATION<br>AND PUBLIC FACILITIES<br>BRIDGE SECTION |  | SITKA HARBOR BRIDGE<br>HARBOR DRIVE<br>BEARING DETAILS 1 - PIERS 4 & 7 |                               |
|                            |                                                                                            |  |                                                                        | BRIDGE NO. 245<br>DWG. NO. 10 |

| STATE  | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | BH-099-3(16)/68945  | 2007 | BH        |              |

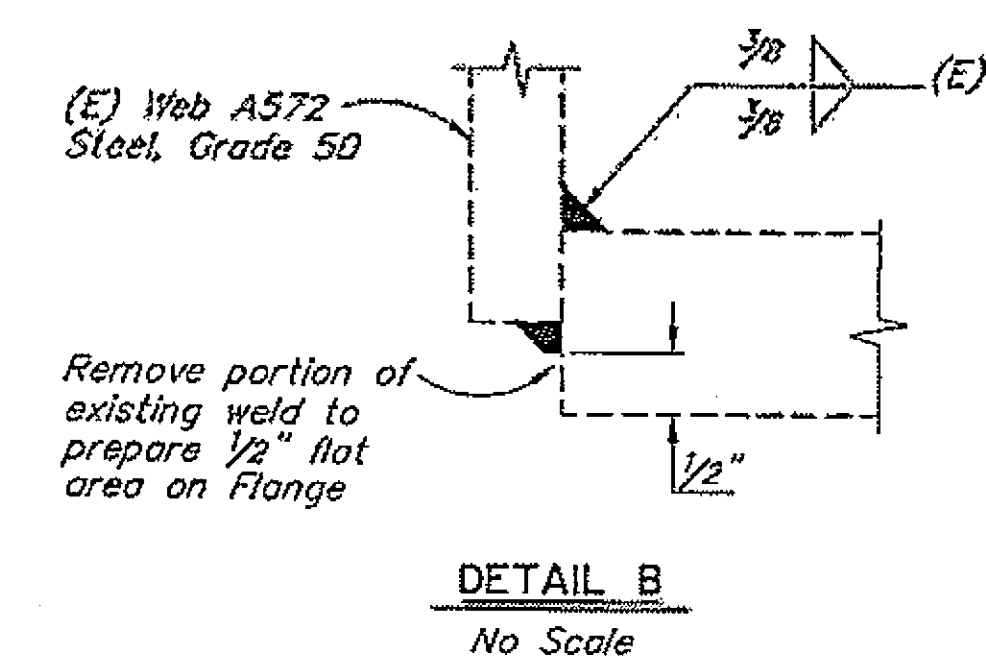
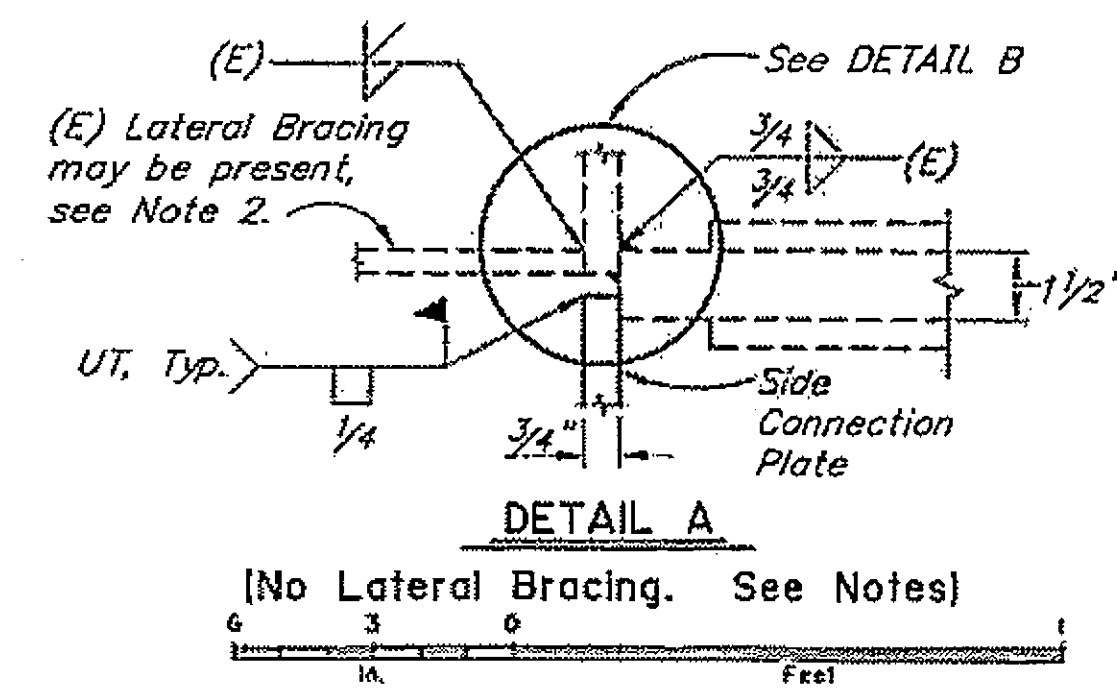
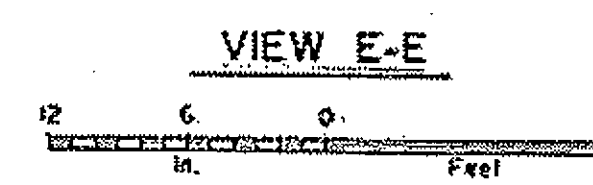
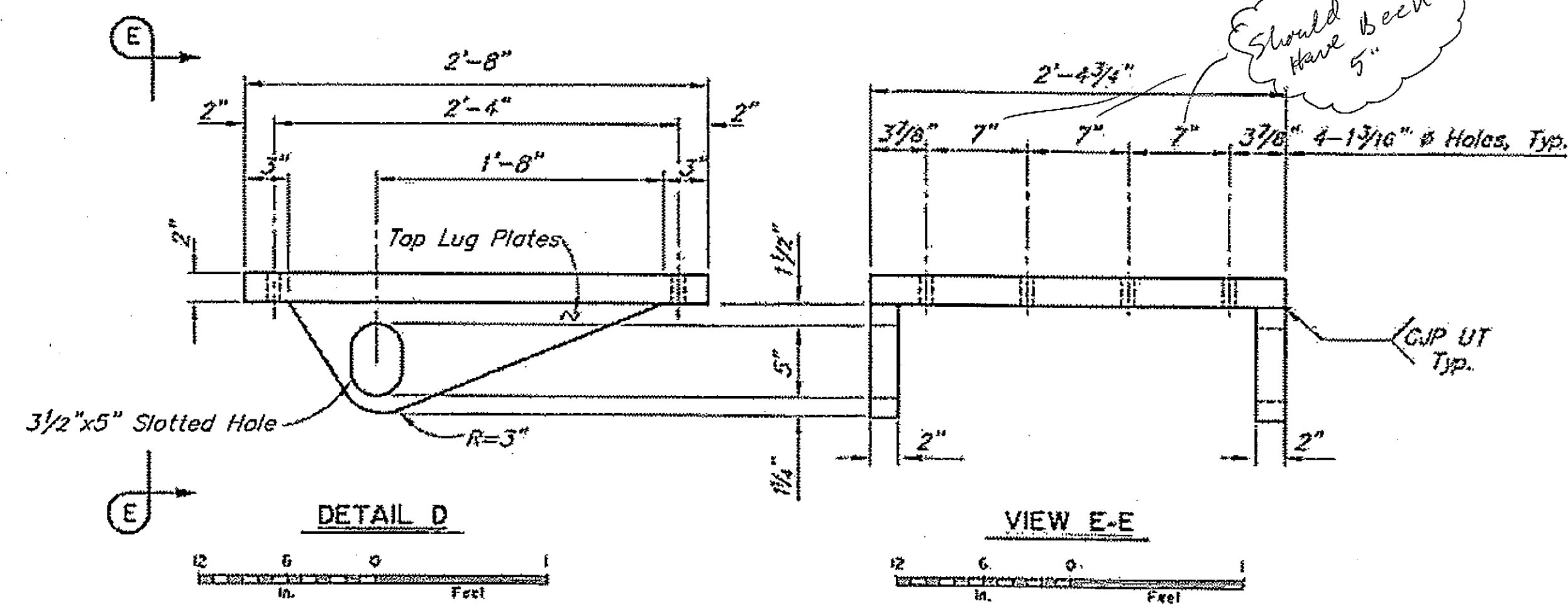


- NOTES:**
- Keep temperature of steel adjacent to the elastomeric pad below 250° F. Use crayons to monitor steel temperature adjacent to elastomeric pads.
  - Original contract As-Built drawing of 1978 Drawing No's. 2236 & 2240 show location where Lateral Bracing is present and details of Lateral Bracing.
  - Fabricate Lower Bearing Fitting from A709 Grade HPS 70W steel.
  - Use A500 Grade C for HSS Tube.



**NOTE:**  
Components below Elastomeric Pad not shown for clarity.

- LEGEND:**
- (E) = Existing
  - = Existing
  - = Denotes this contract
  - \* = Field Measure. (Determine this dimension so that the new 3/2" Pin Nut is on the bottom of the slotted holes in the top lug plates and on top of slotted holes in the bottom lugs when the (E) link is plumb. See DETAIL F.
  - \*\* = Department Furnished
  - \*\*\* = Tolerance between pin and hole after galvanizing between .015" and .025".



Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
Proj. Eng. *[Signature]* Date 11-3-08

Elevations, Bearings and Dimensions are based on "AS-BUILT" plans. Verify all controlling field dimensions before ordering or fabricating any material.

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|                                        |                                  |
|----------------------------------------|----------------------------------|
| DESIGNED BY:<br><i>Robert Miller</i>   | CHECKED:<br><i>George Imbise</i> |
| DRAWN BY:<br><i>Cathy Anderson</i>     | CHECKED:<br><i>George Imbise</i> |
| QUANTITIES BY:<br><i>George Imbise</i> | CHECKED:<br><i>Robert Miller</i> |

**BEARING REPLACEMENT**

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
BRIDGE SECTION

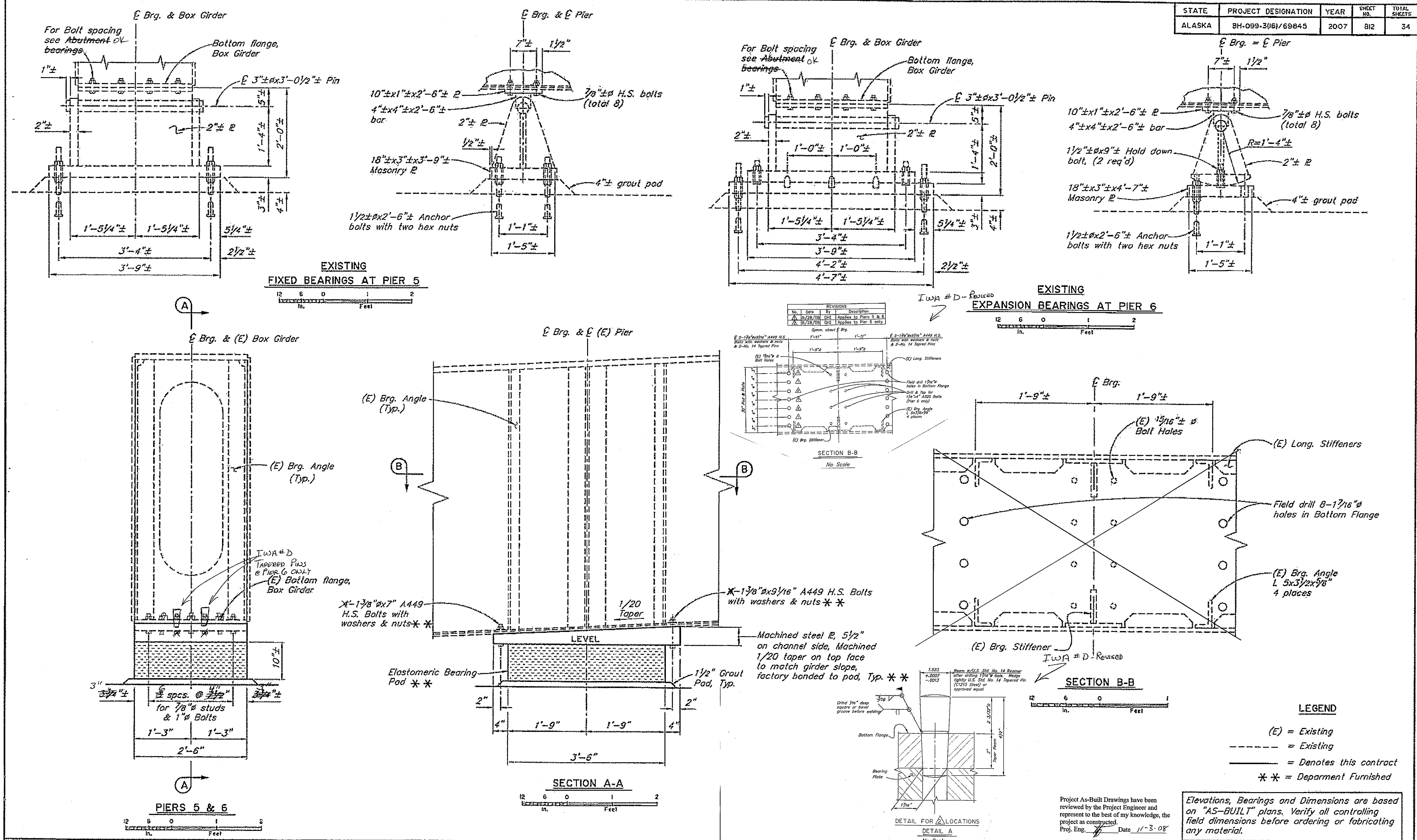
**SITKA HARBOR BRIDGE**

HARBOR DRIVE

**BEARING DETAILS 2 - PIERS 4 & 7**

BRIDGE NO. 245  
DWG. NO. II

| STATE  | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | BH-099-3(16)/69845  | 2007 | 812       | 34           |

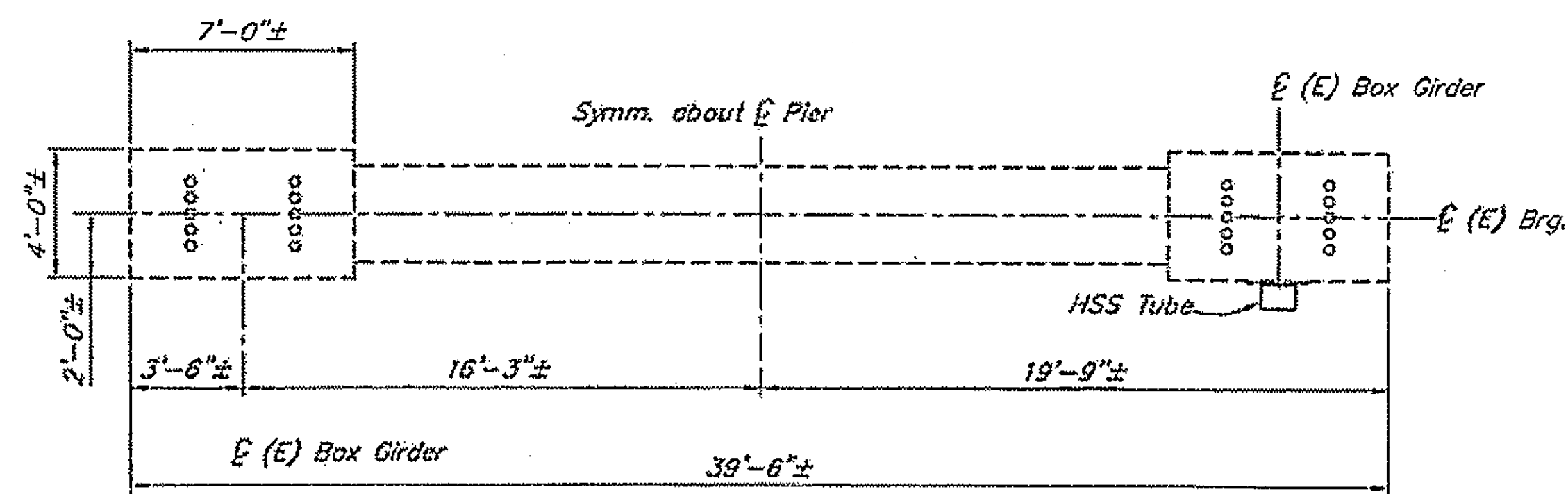


|                                  |                            |                                                                                            |                                                                      |                               |
|----------------------------------|----------------------------|--------------------------------------------------------------------------------------------|----------------------------------------------------------------------|-------------------------------|
| DESIGNED BY:<br>Rob Miller       | CHECKED:<br>George Imbison | STATE OF ALASKA<br>DEPARTMENT OF TRANSPORTATION<br>AND PUBLIC FACILITIES<br>BRIDGE SECTION | SITKA HARBOR BRIDGE<br>HARBOR DRIVE<br>BEARING DETAILS - PIERS 5 & 6 | BRIDGE NO. 245<br>DWG. NO. 12 |
| DRAWN BY:<br>C. Anderson         | CHECKED:<br>Rob Miller     |                                                                                            |                                                                      |                               |
| QUANTITIES BY:<br>George Imbison | CHECKED:<br>Rob Miller     |                                                                                            |                                                                      |                               |

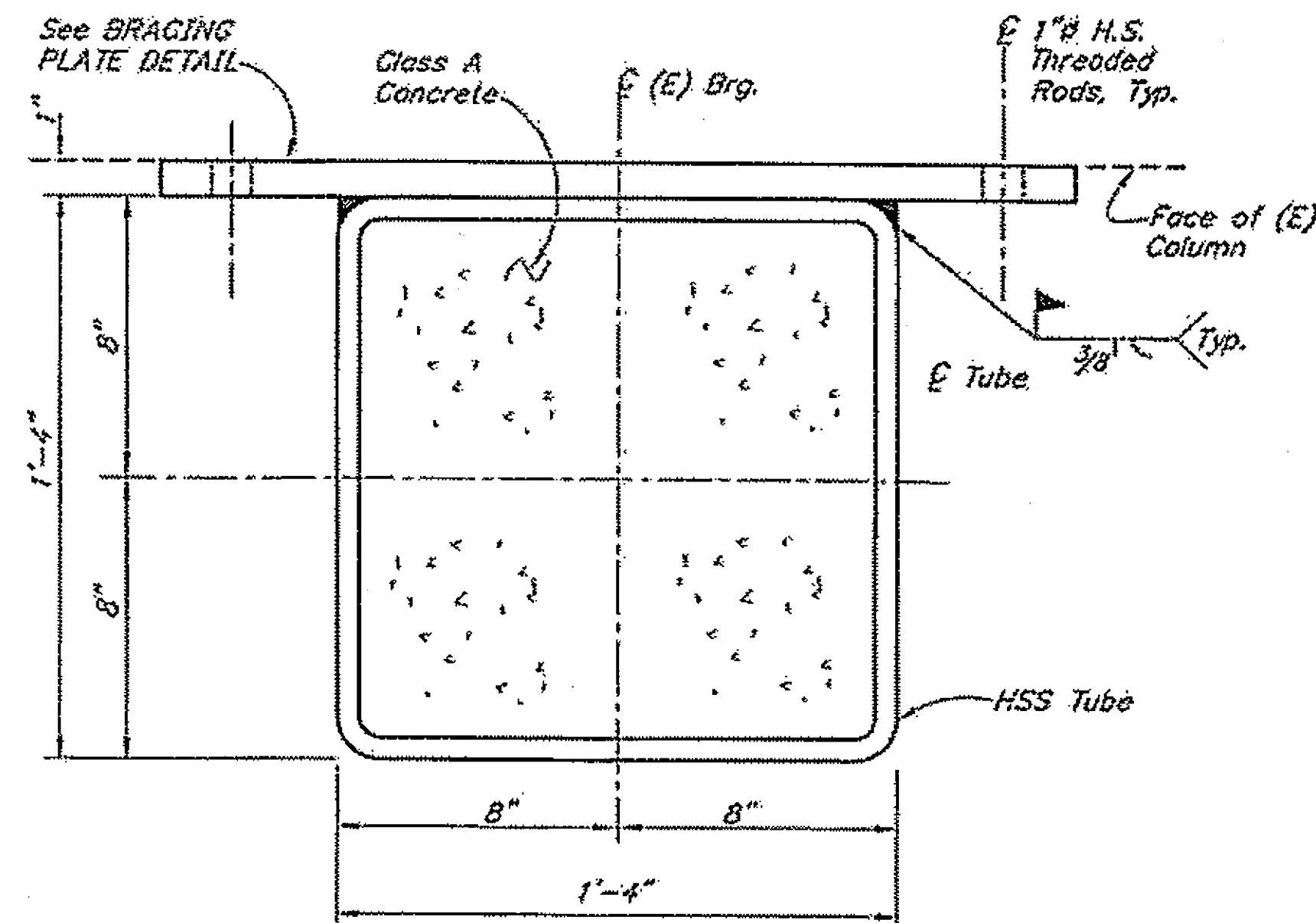
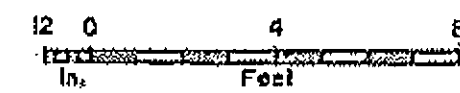
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| STATE  | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | BH-099-3(16)/69845  | 2007 | B13       | 34           |

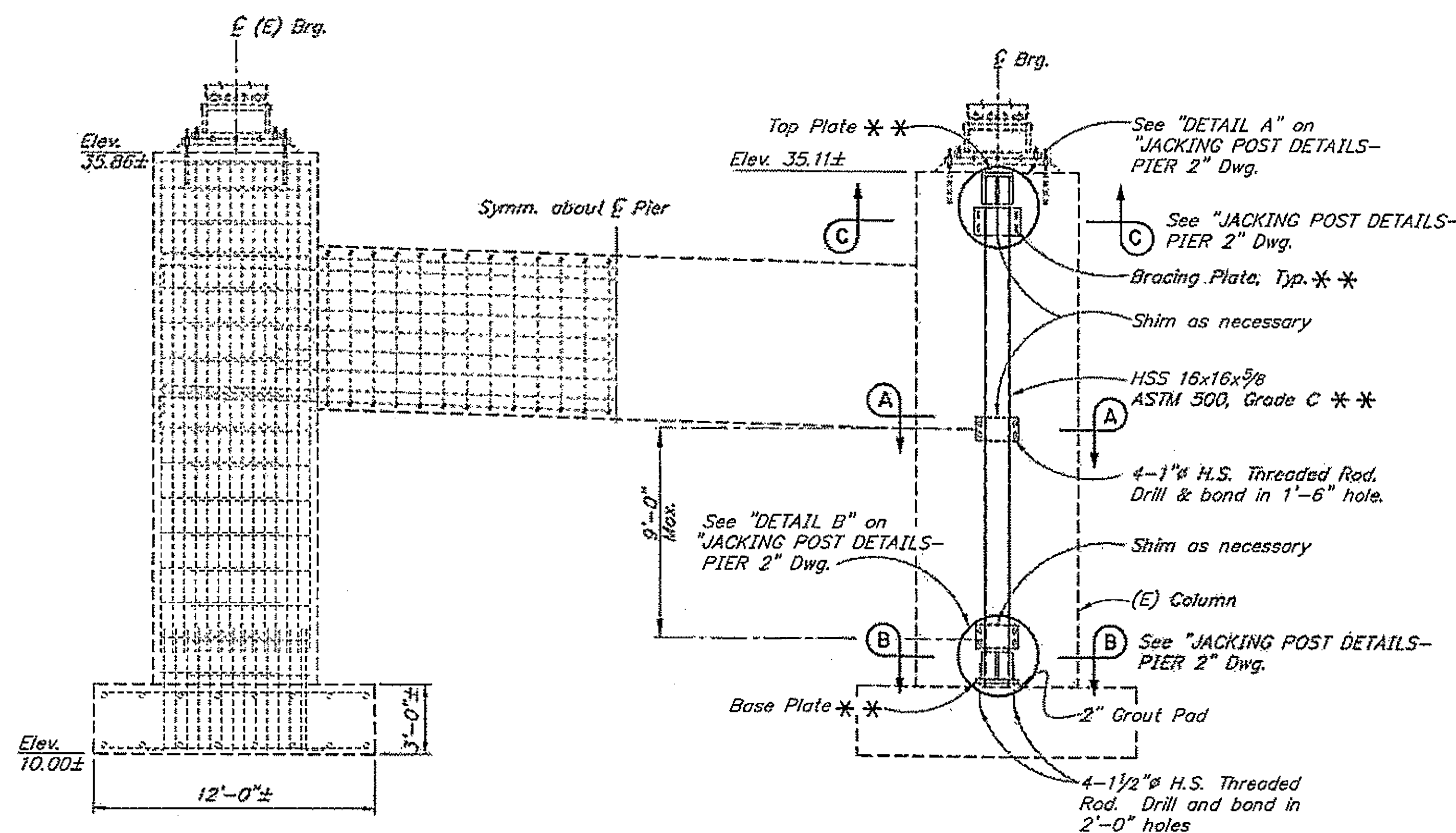
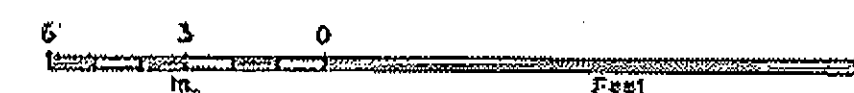
- NOTES:
1. Bearing replacement and seismic retrofit details not shown for clarity.
  2. Install tube on channel side of column.
  3. Provide 9000 psi. grout for grout pad.
  4. Do not allow jack to bear directly on top of (E) column at any time. Typical all Jacking Posts.
  5. Pier 2 Jacking Post furnished length is 23'-5 1/2". Verify required length and modify post to required length.



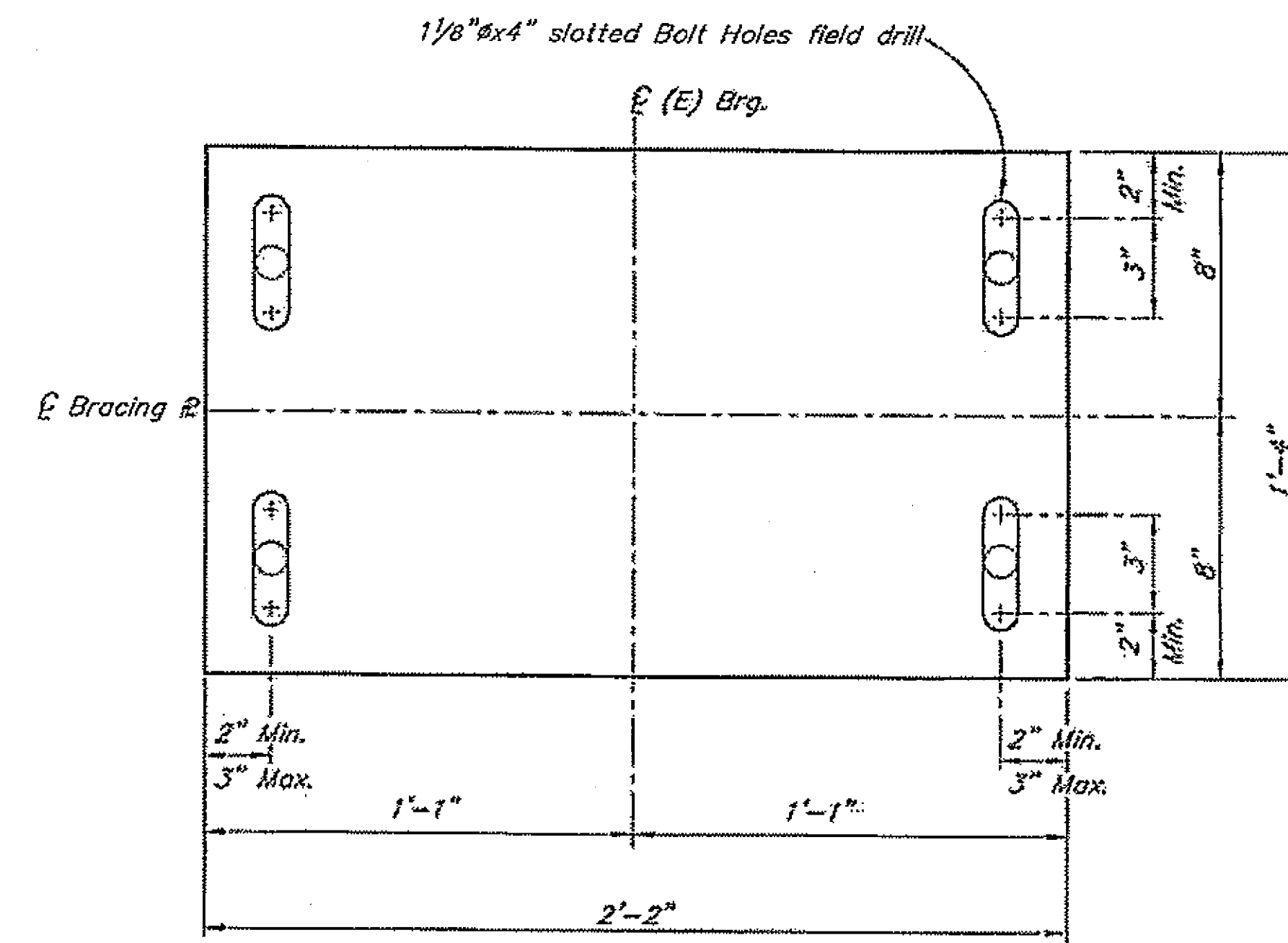
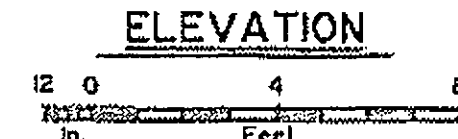
EXISTING PLAN THIS CONTRACT



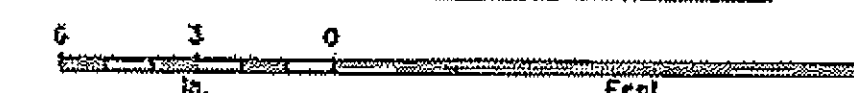
SECTION A-A



EXISTING ELEVATION THIS CONTRACT



BRACING PLATE DETAIL



LEGEND

- (E) = Existing
- = Existing
- = Denotes this contract
- \* \* = Department Furnished

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
Proj. Eng. Date 11-3-08

Elevations, Bearings and Dimensions are based on "AS-BUILT" plans. Verify all controlling field dimensions before ordering or fabricating any material.

|                           |                     |
|---------------------------|---------------------|
| DESIGNED BY: Larry Owen   | CHECKED: Rob Miller |
| Larry M. Owen             | Robert W. Miller    |
| DRAWN BY: C. Anderson     | CHECKED: Larry Owen |
| Cathy Anderson            | Larry M. Owen       |
| QUANTITIES BY: Larry Owen | CHECKED: Rob Miller |
| Larry M. Owen             | Robert W. Miller    |

BEARING REPLACEMENT

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
BRIDGE SECTION



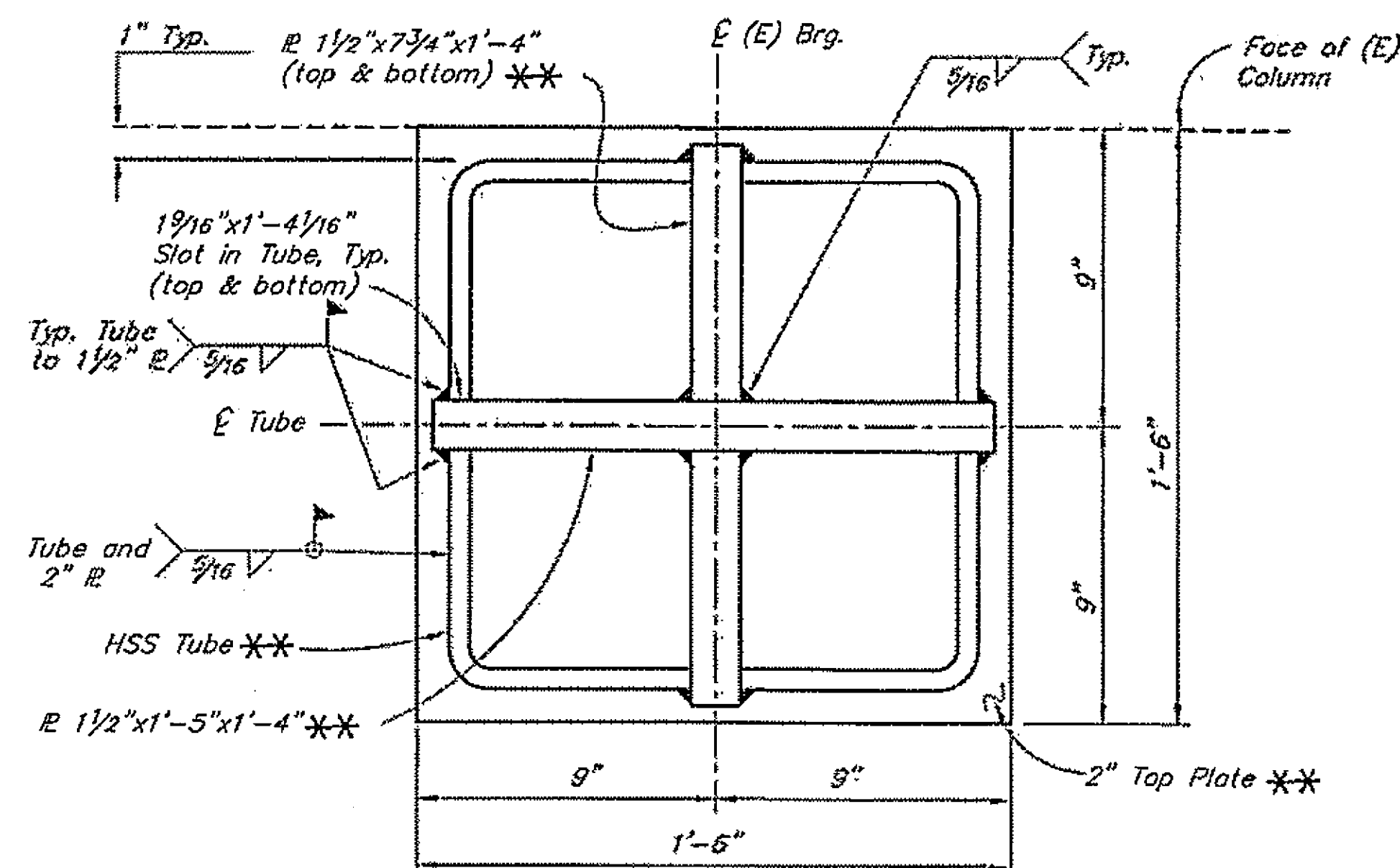
SITKA HARBOR BRIDGE  
HARBOR DRIVE  
JACKING POST - PIER 2



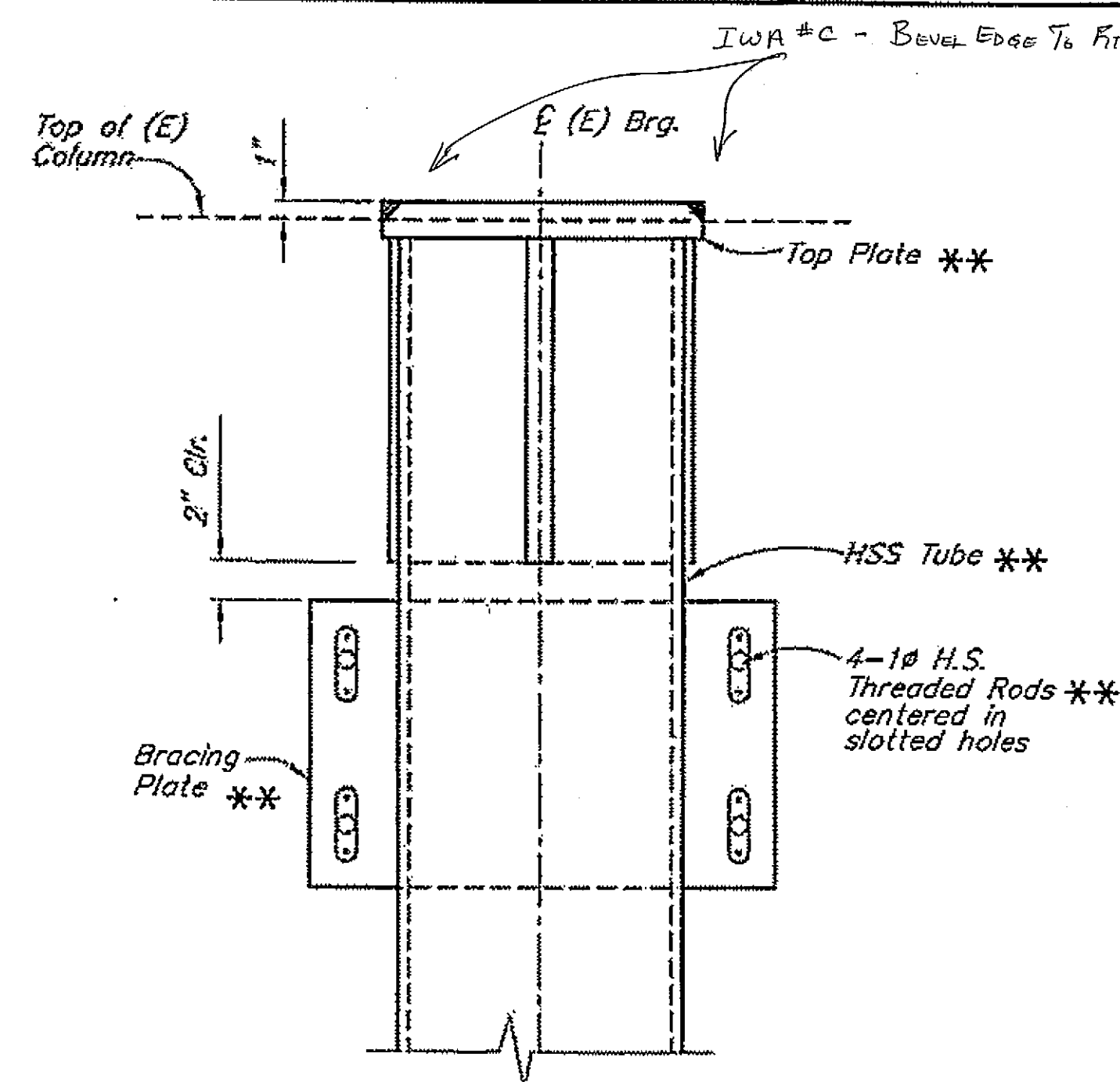
BRIDGE NO. 245  
DWG. NO. 13

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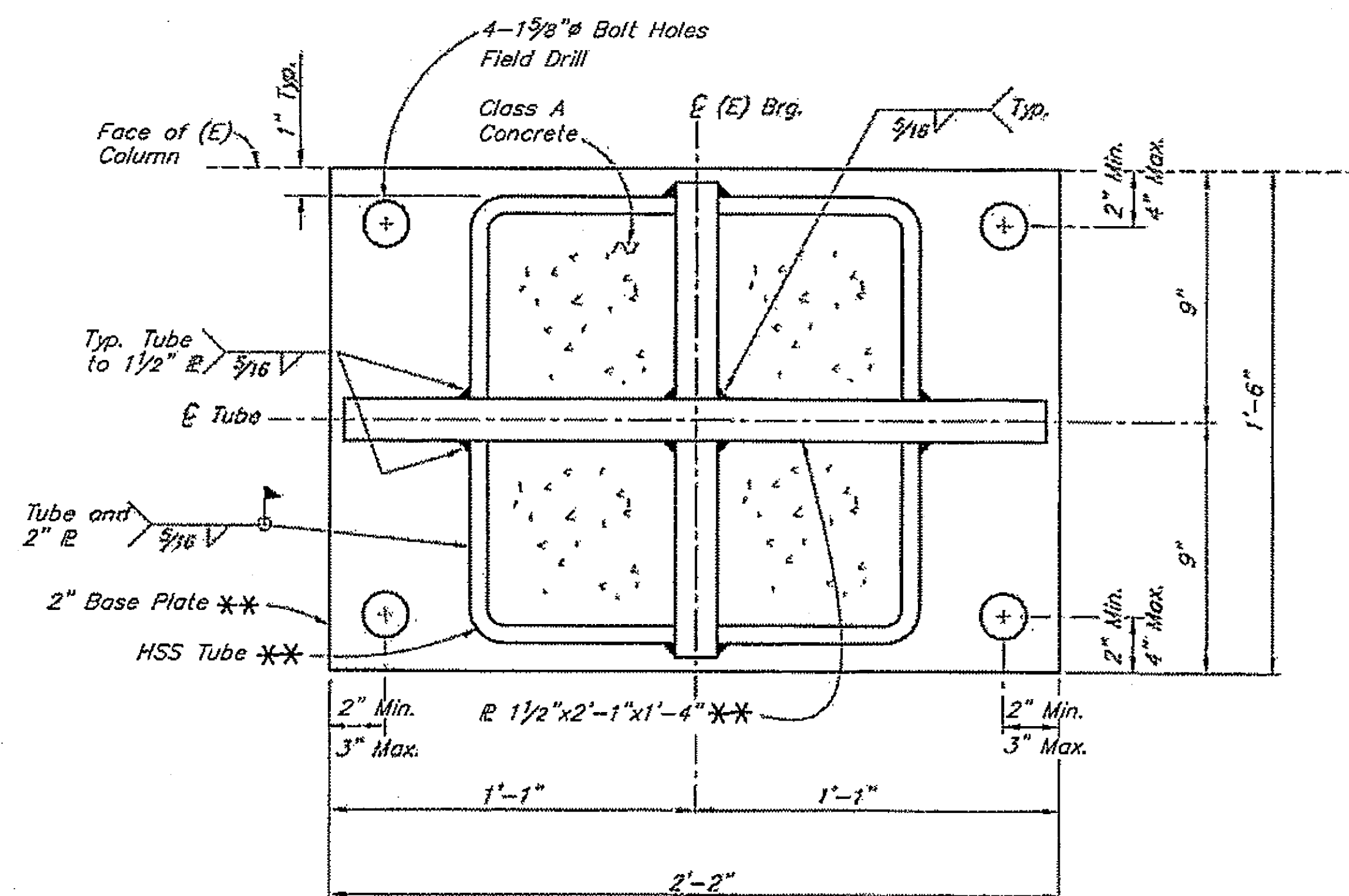
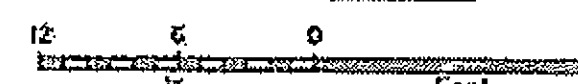
| STATE  | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | BH-099-3(16)/69845  | 2007 | 814       | 34           |



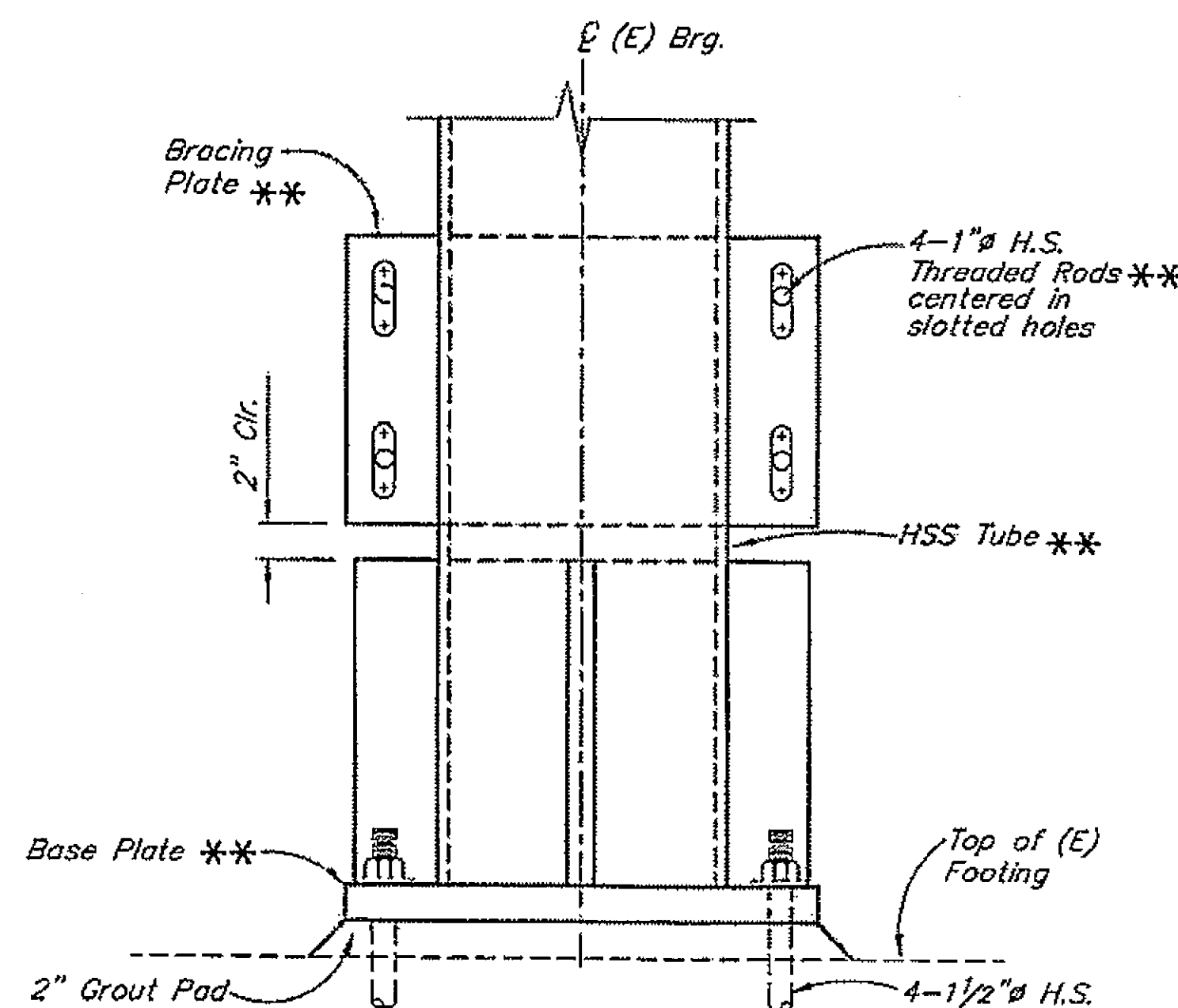
SECTION C-C



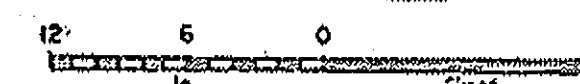
DETAIL A



SECTION B-B



DETAIL B



LEGEND

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- = Existing
- = Denotes this contract
- \*\* = Department Furnished

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Proj. Eng. *[Signature]* Date 11-3-08

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|                           |                         |
|---------------------------|-------------------------|
| DESIGNED BY: Larry Owen   | CHECKED: Rob Miller     |
| <i>Larry M. Owen</i>      | <i>Robert W. Miller</i> |
| DRAWN BY: G. Anderson     | CHECKED: Larry Owen     |
| <i>Cathy Anderson</i>     | <i>Larry M. Owen</i>    |
| QUANTITIES BY: Larry Owen | CHECKED: Rob Miller     |
| <i>Larry M. Owen</i>      | <i>Robert W. Miller</i> |

BEARING REPLACEMENT

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
BRIDGE SECTION



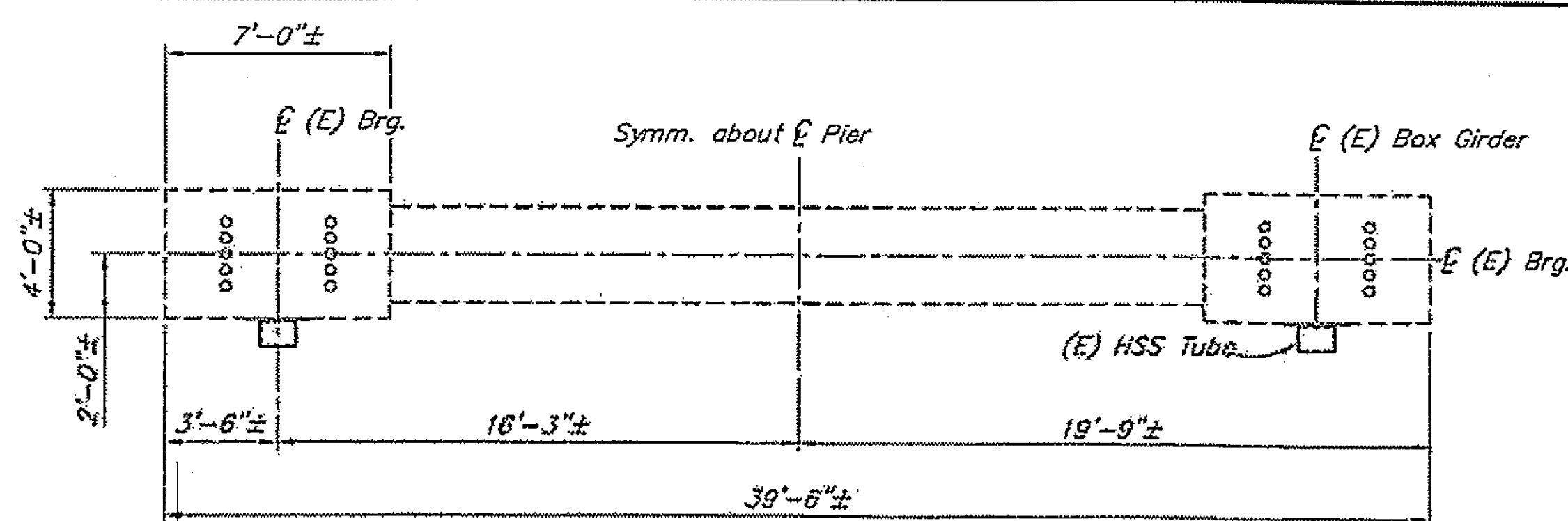
SITKA HARBOR BRIDGE  
HARBOR DRIVE  
JACKING POST DETAILS-PIER 2



BRIDGE NO. 245  
DWG. NO. 14

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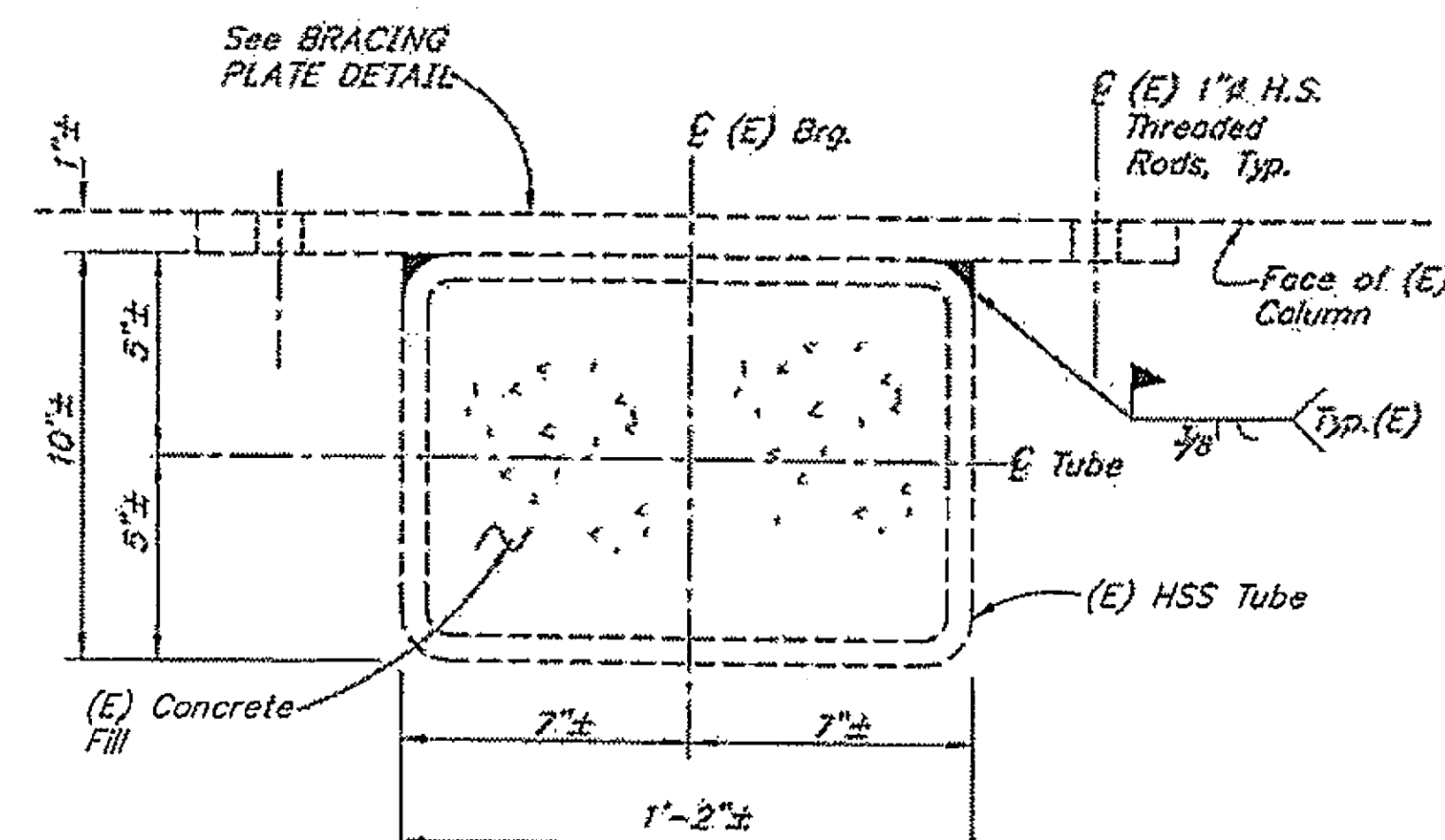
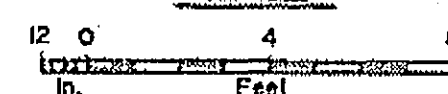
| STATE  | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | BH-099-316/169845   | 2007 | BIS       | 34           |



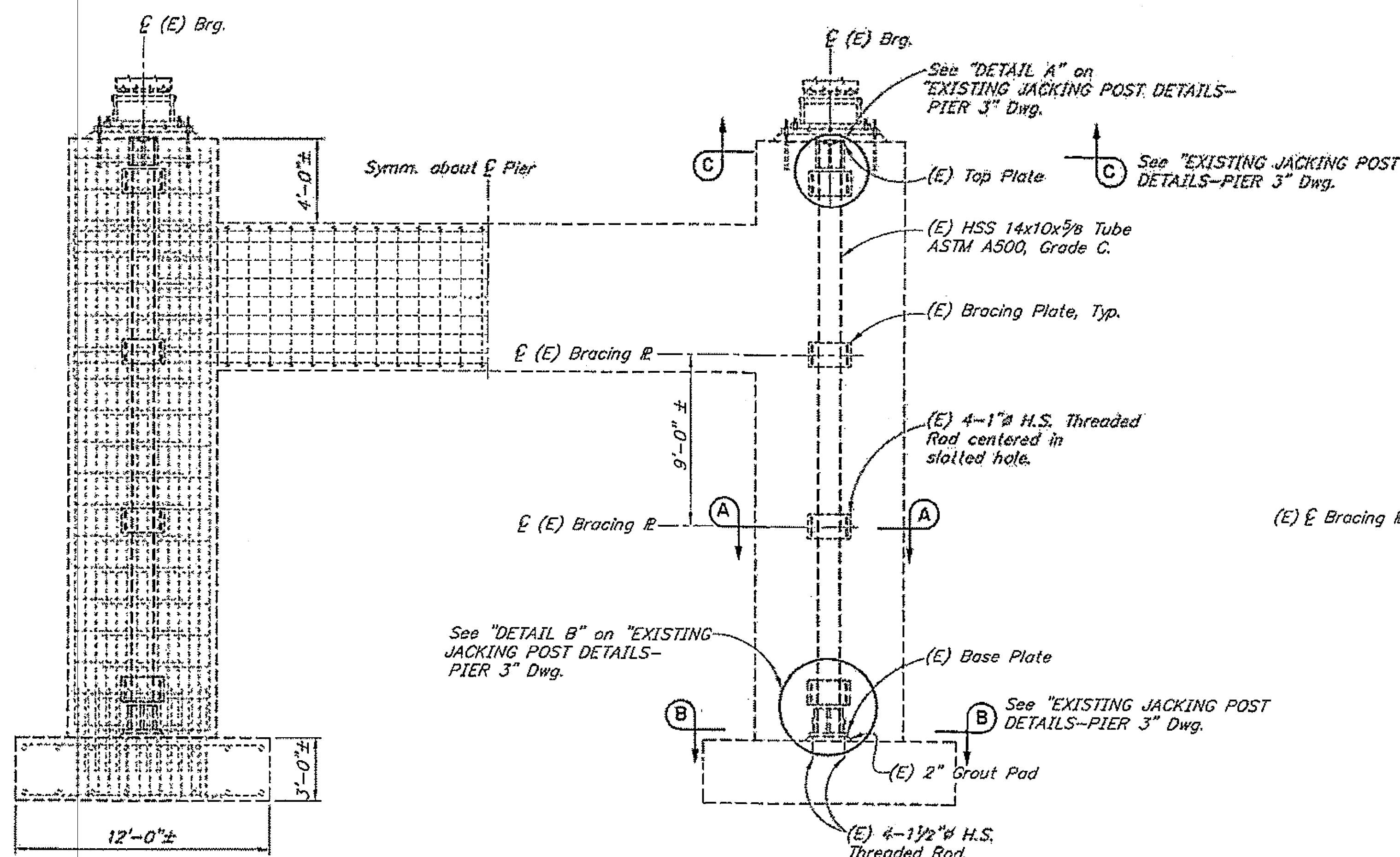
EXISTING

PLAN

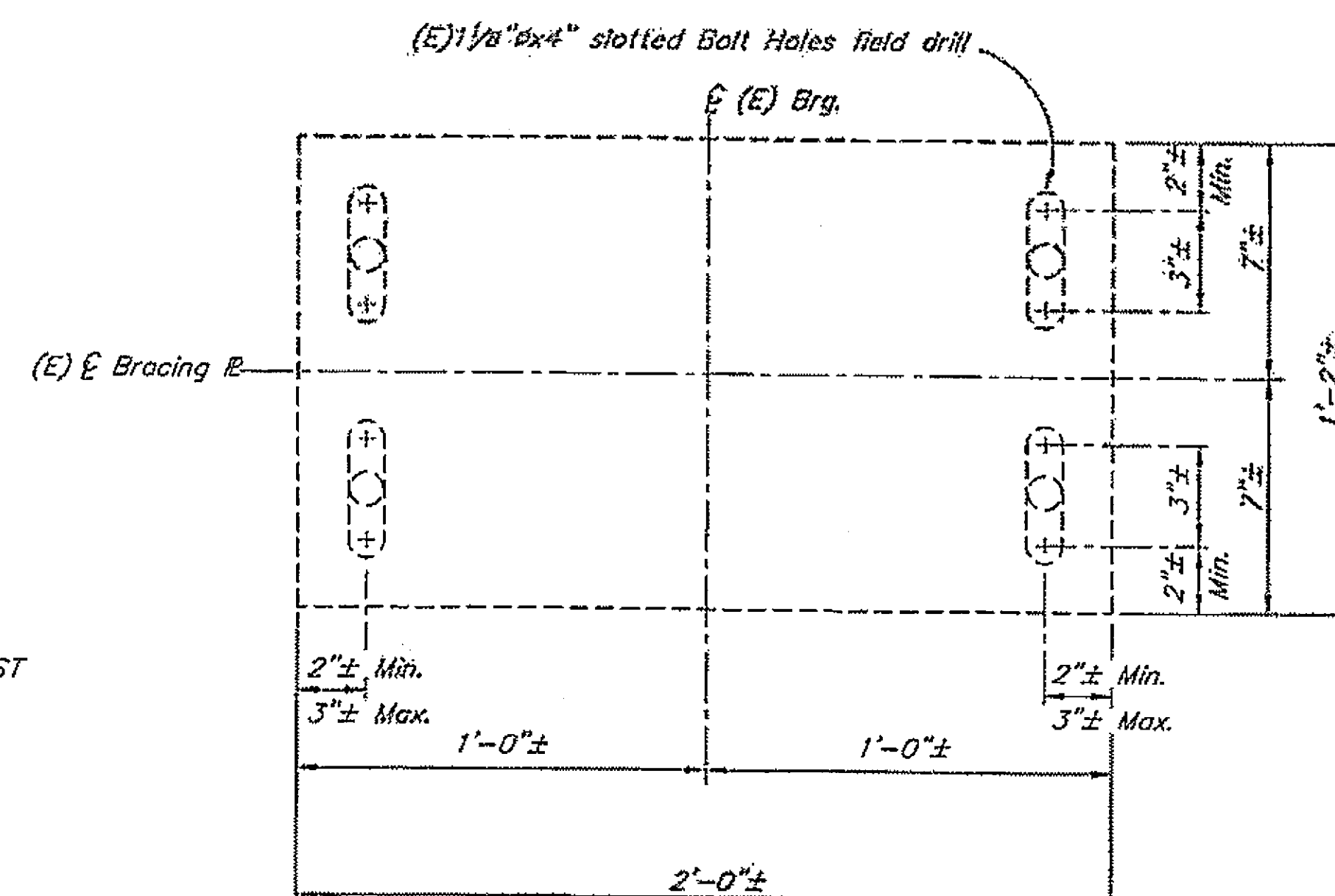
THIS CONTRACT



SECTION A-A



ELEVATION



BRACING PLATE DETAIL



NOTE:  
Existing construction shown for information only.

LEGEND

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— = Denotes this contract

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|                           |                     |
|---------------------------|---------------------|
| DESIGNED BY: Larry Owen   | CHECKED: Rob Miller |
| DRAWN BY: G. Anderson     | CHECKED: Larry Owen |
| QUANTITIES BY: Larry Owen | CHECKED: Rob Miller |

**BEARING REPLACEMENT**

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
BRIDGE SECTION



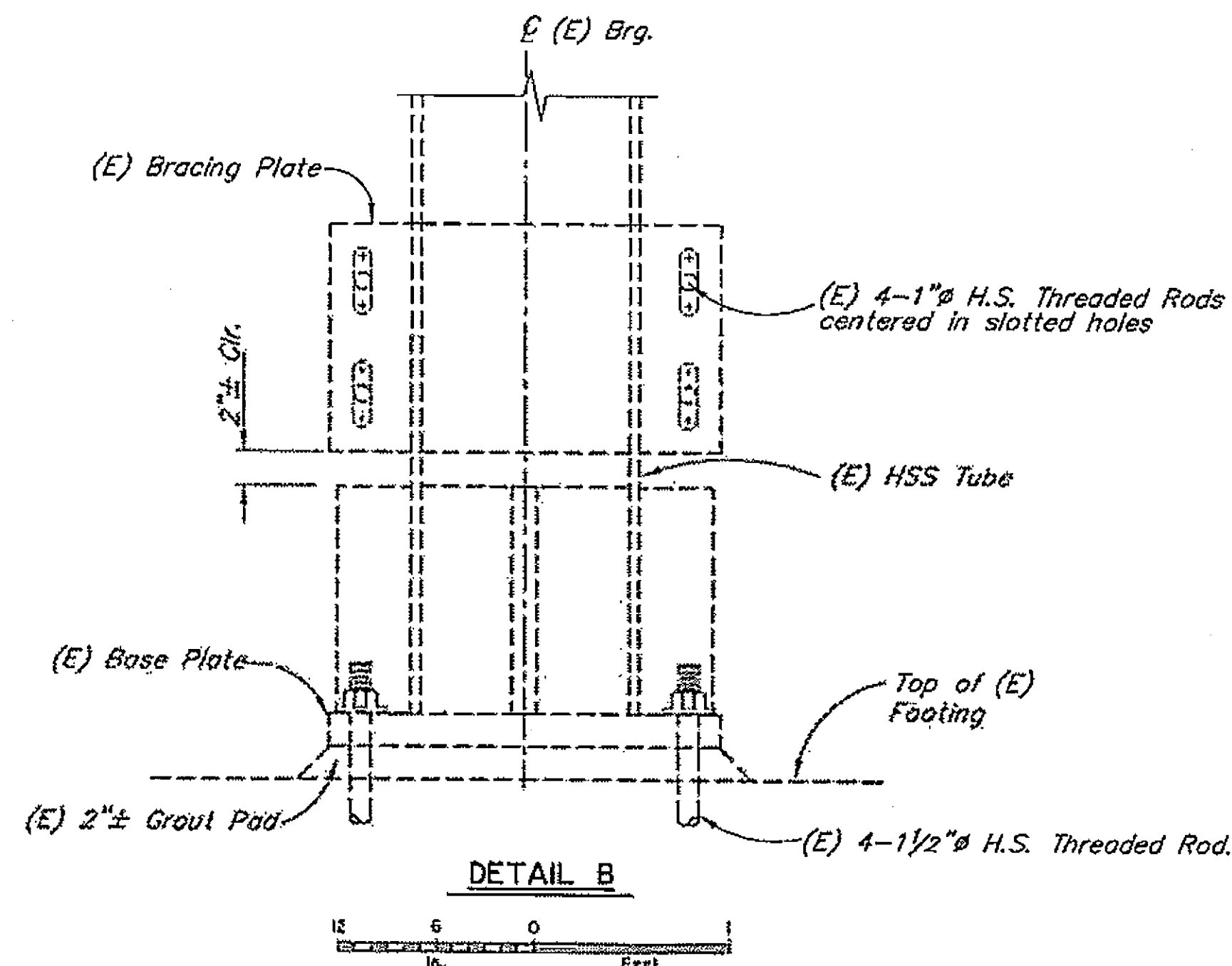
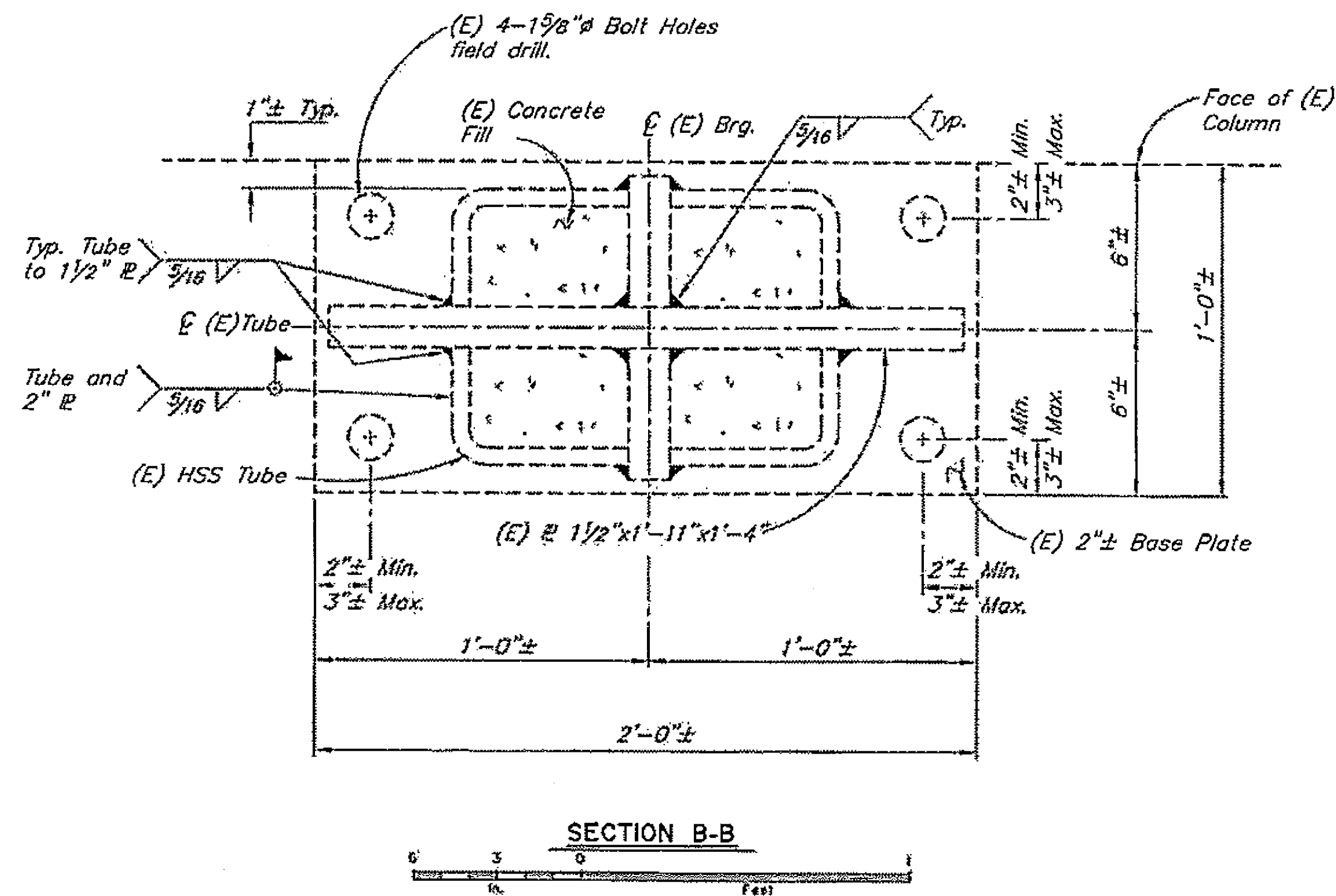
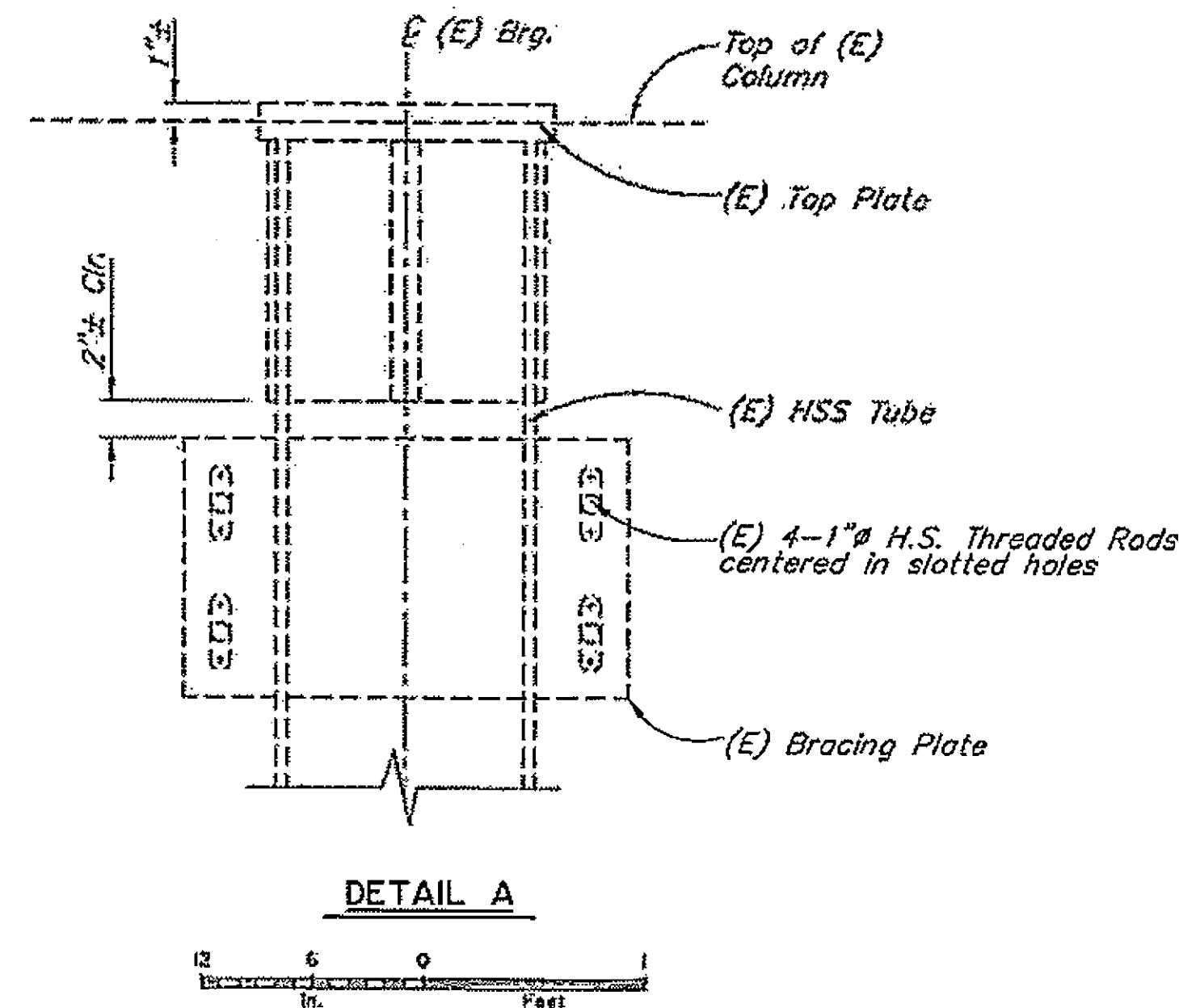
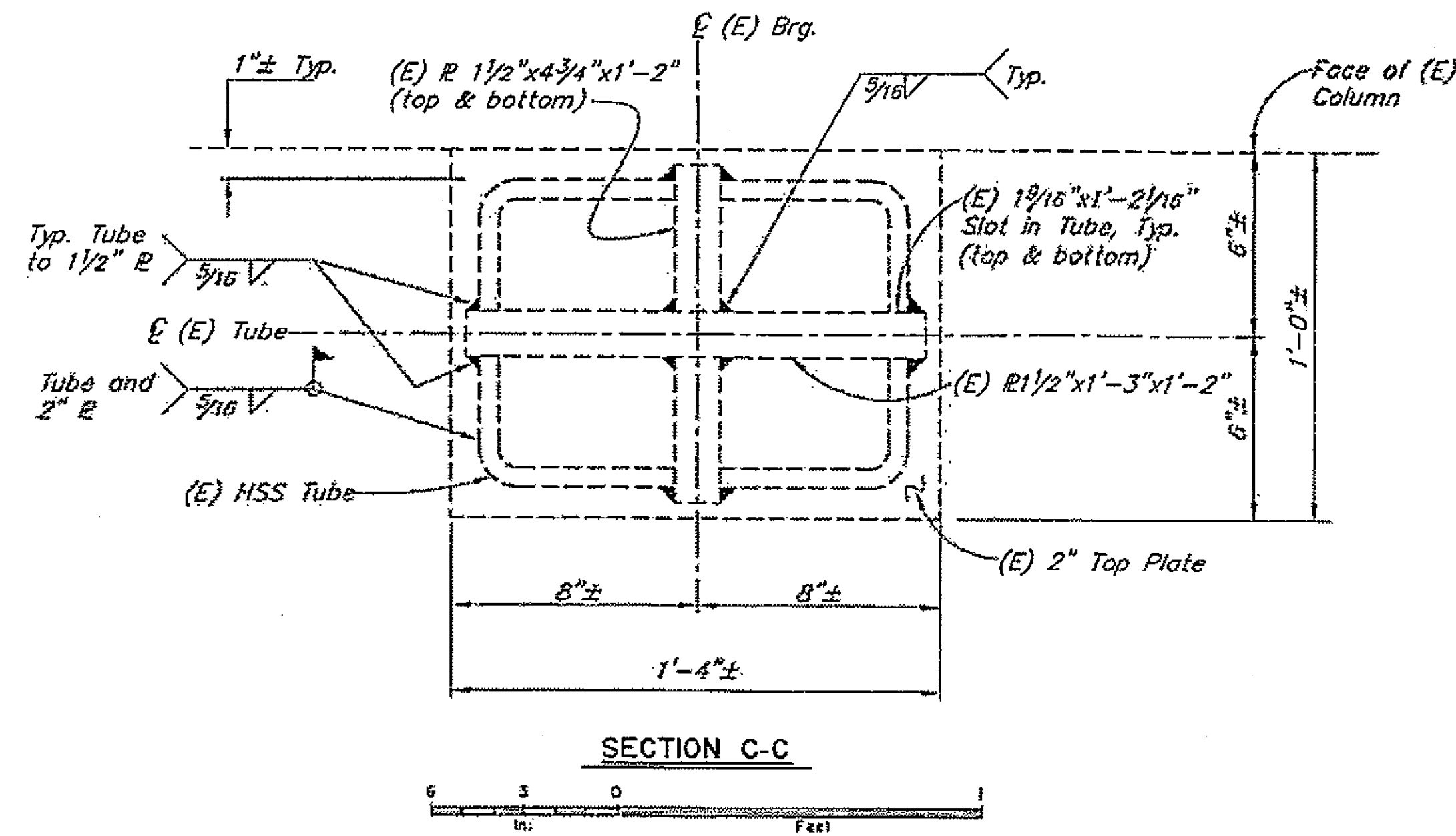
**SITKA HARBOR BRIDGE**  
HARBOR DRIVE  
**EXISTING JACKING POST - PIER 3**



BRIDGE NO. 245  
DWG. NO. 15

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| STATE  | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | BH-099-3161/69845   | 2007 | B16       | 34           |



**NOTES:**  
Existing construction shown for information only.

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Proj. Eng. *[Signature]* Date 11-2-08

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|                           |                         |
|---------------------------|-------------------------|
| DESIGNED BY: Larry Owen   | CHECKED: Rob Miller     |
| <i>Larry M. Owen</i>      | <i>Robert W. Miller</i> |
| DRAWN BY: C. Anderson     | CHECKED: Larry Owen     |
| <i>Cathy Anderson</i>     | <i>Larry M. Owen</i>    |
| QUANTITIES BY: Larry Owen | CHECKED: Rob Miller     |
| <i>Larry M. Owen</i>      | <i>Robert W. Miller</i> |

**BEARING REPLACEMENT**

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
BRIDGE SECTION

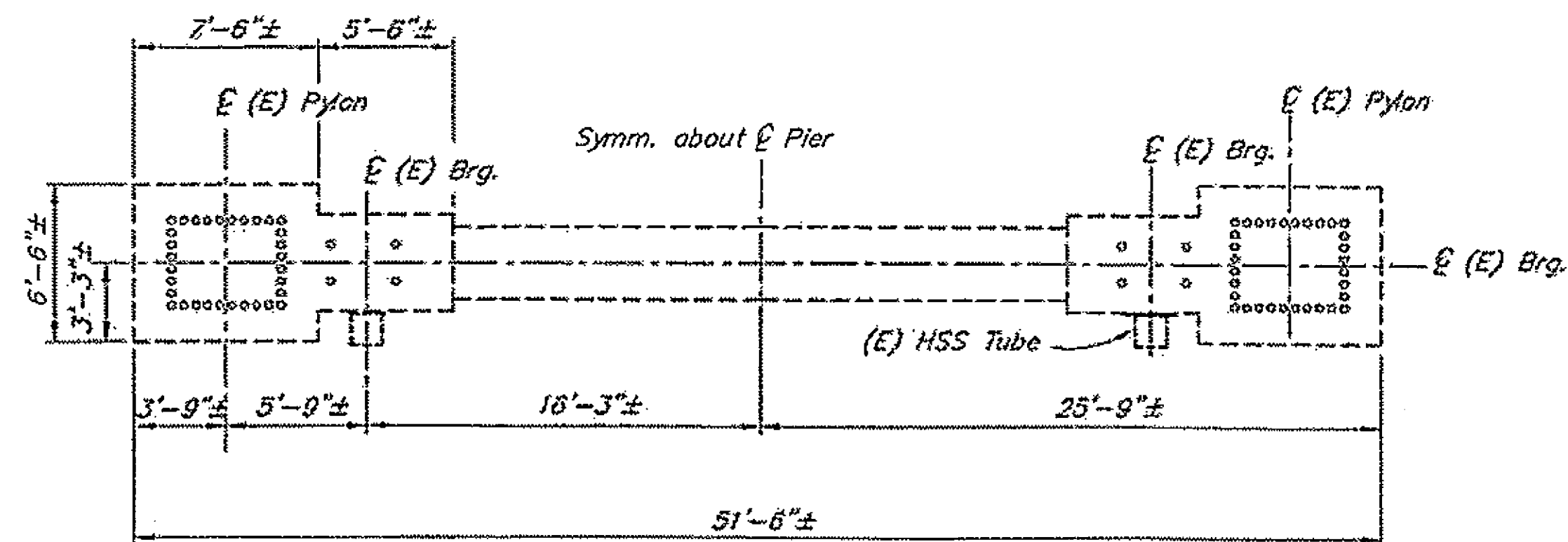


**SITKA HARBOR BRIDGE**  
HARBOR DRIVE  
**EXISTING JACKING POST DETAILS-PIER 3**



BRIDGE NO. 245  
DWG. NO. 16

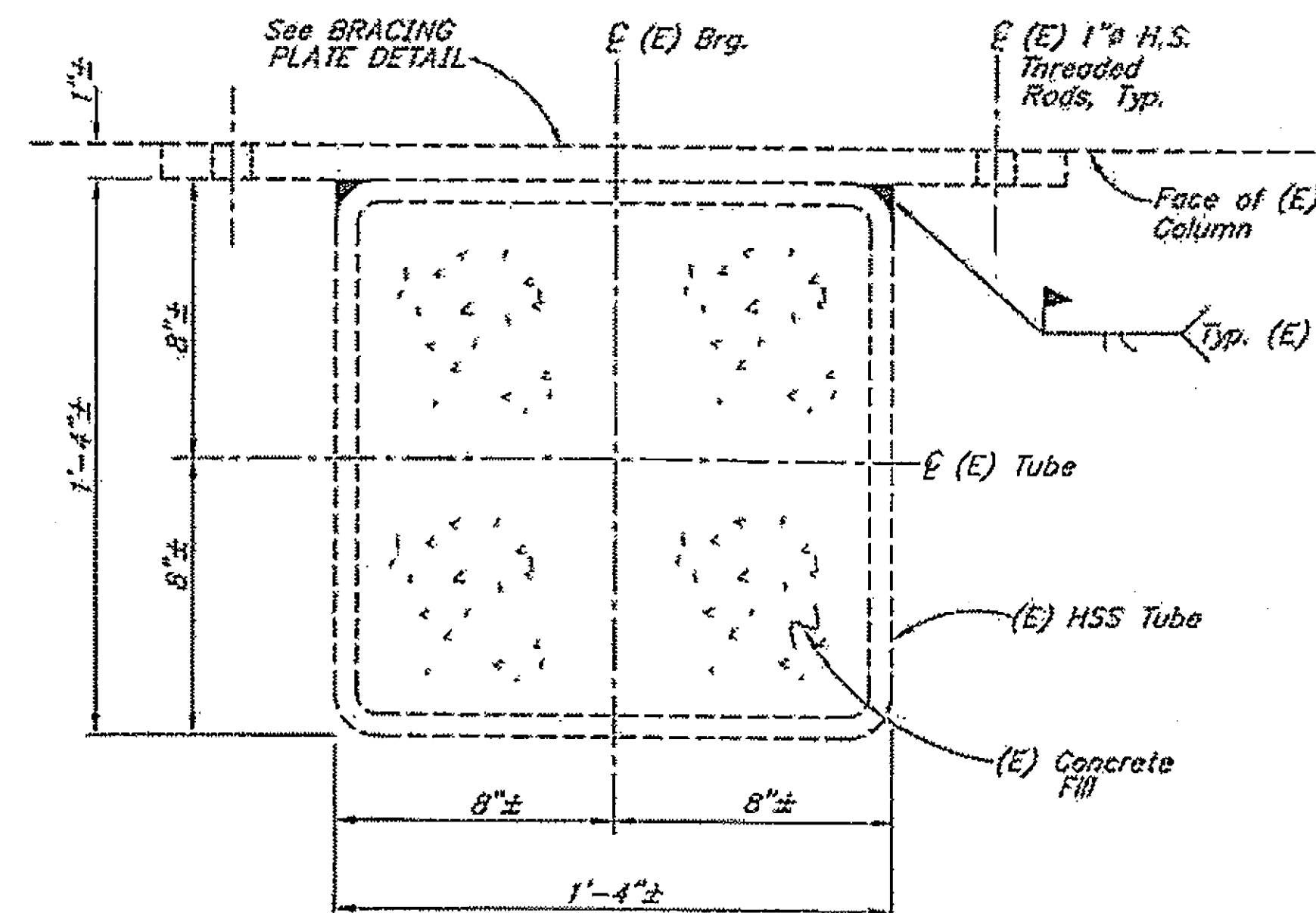
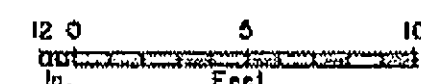
| STATE  | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | BH-099-31161/69845  | 2007 | B17       | 34           |



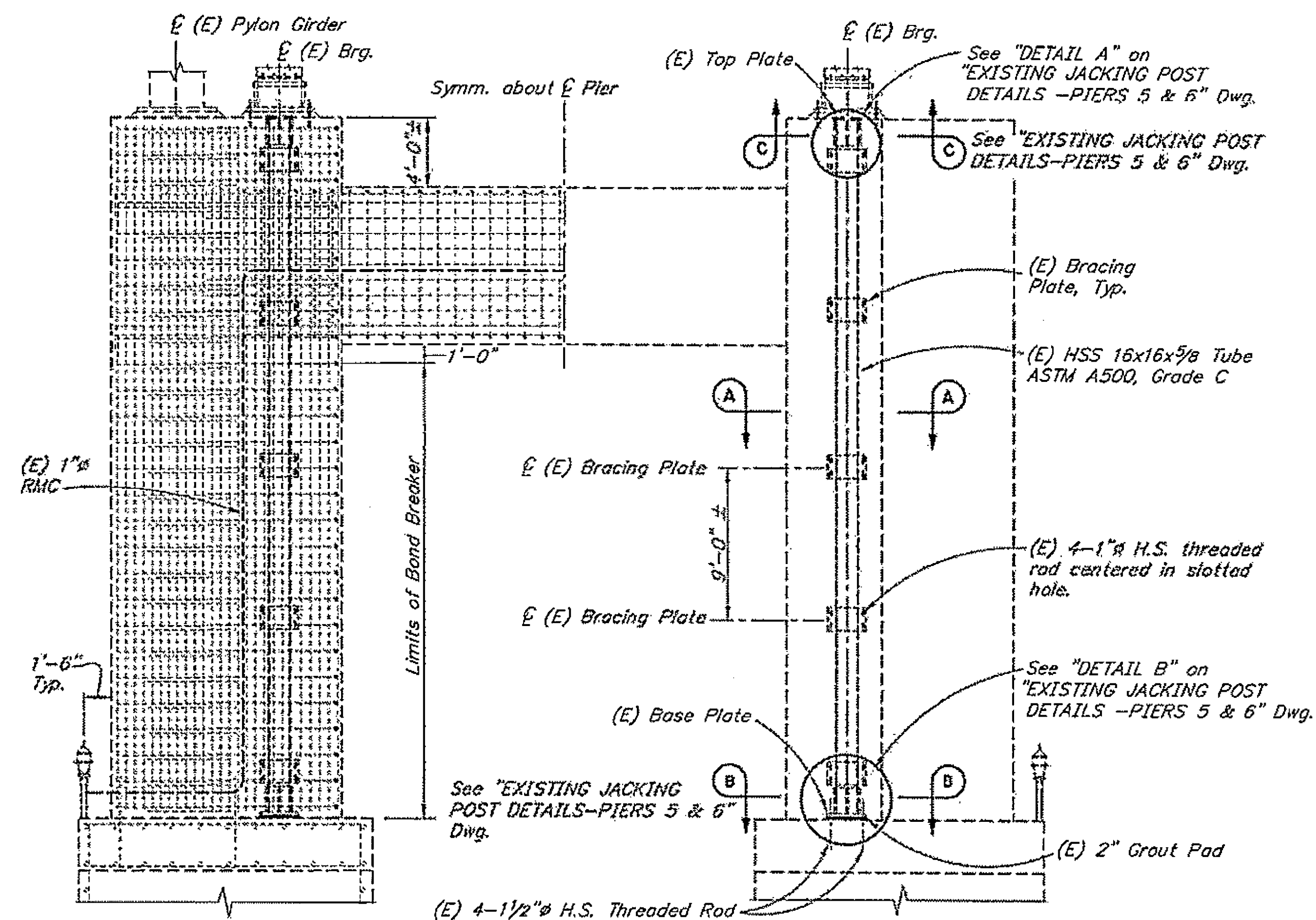
EXISTING

PLAN

THIS CONTRACT



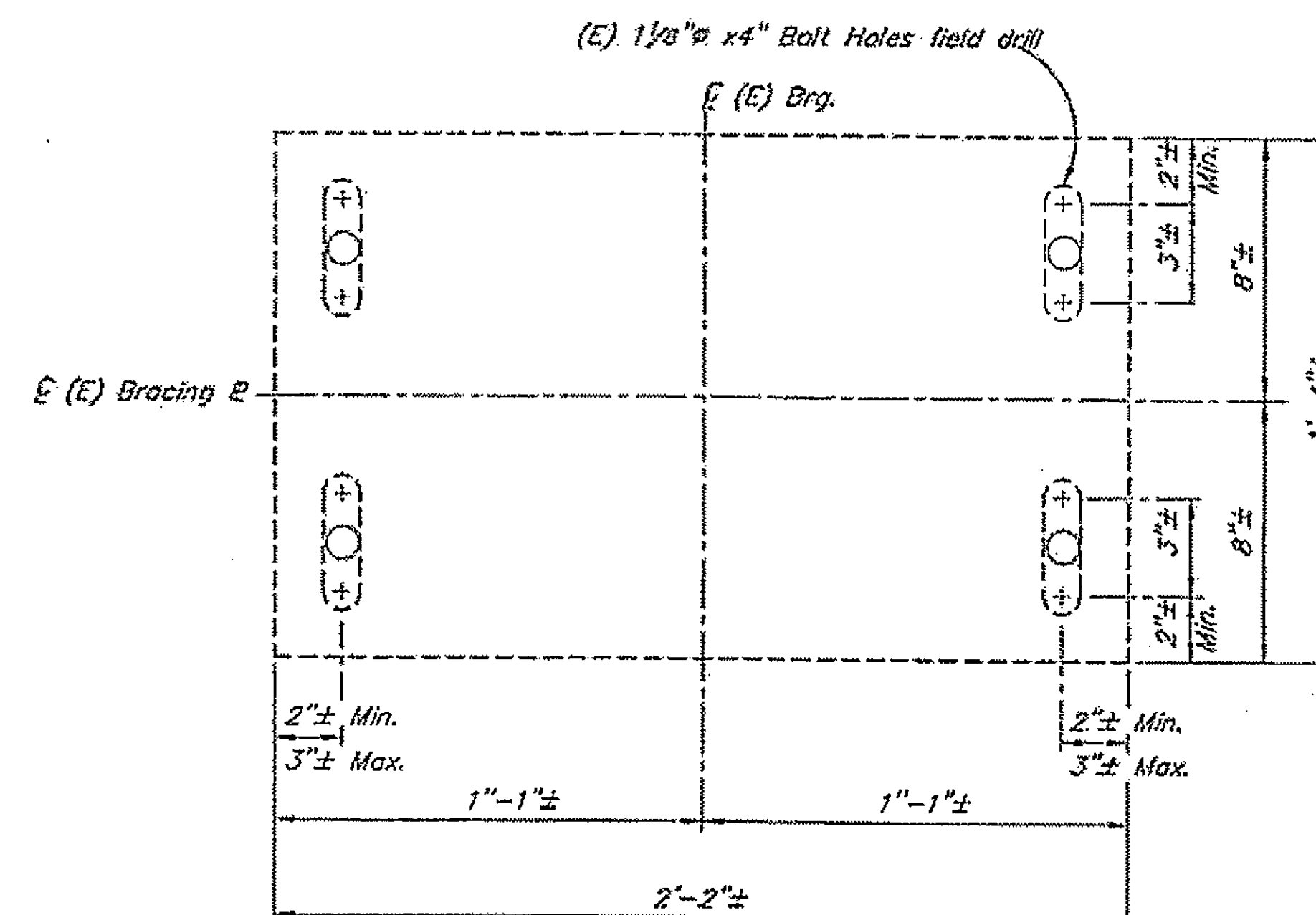
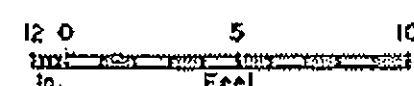
SECTION A-A



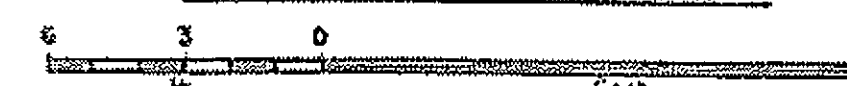
EXISTING

ELEVATION

THIS CONTRACT



BRACING PLATE DETAIL



#### NOTES:

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#### LEGEND

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| <i>Cathy Anderson</i>     | <i>Larry M. Owen</i>    |
| QUANTITIES BY: Larry Owen | CHECKED: Rob Miller     |
| <i>Larry M. Owen</i>      | <i>Robert W. Miller</i> |

**BEARING REPLACEMENT**

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
BRIDGE SECTION



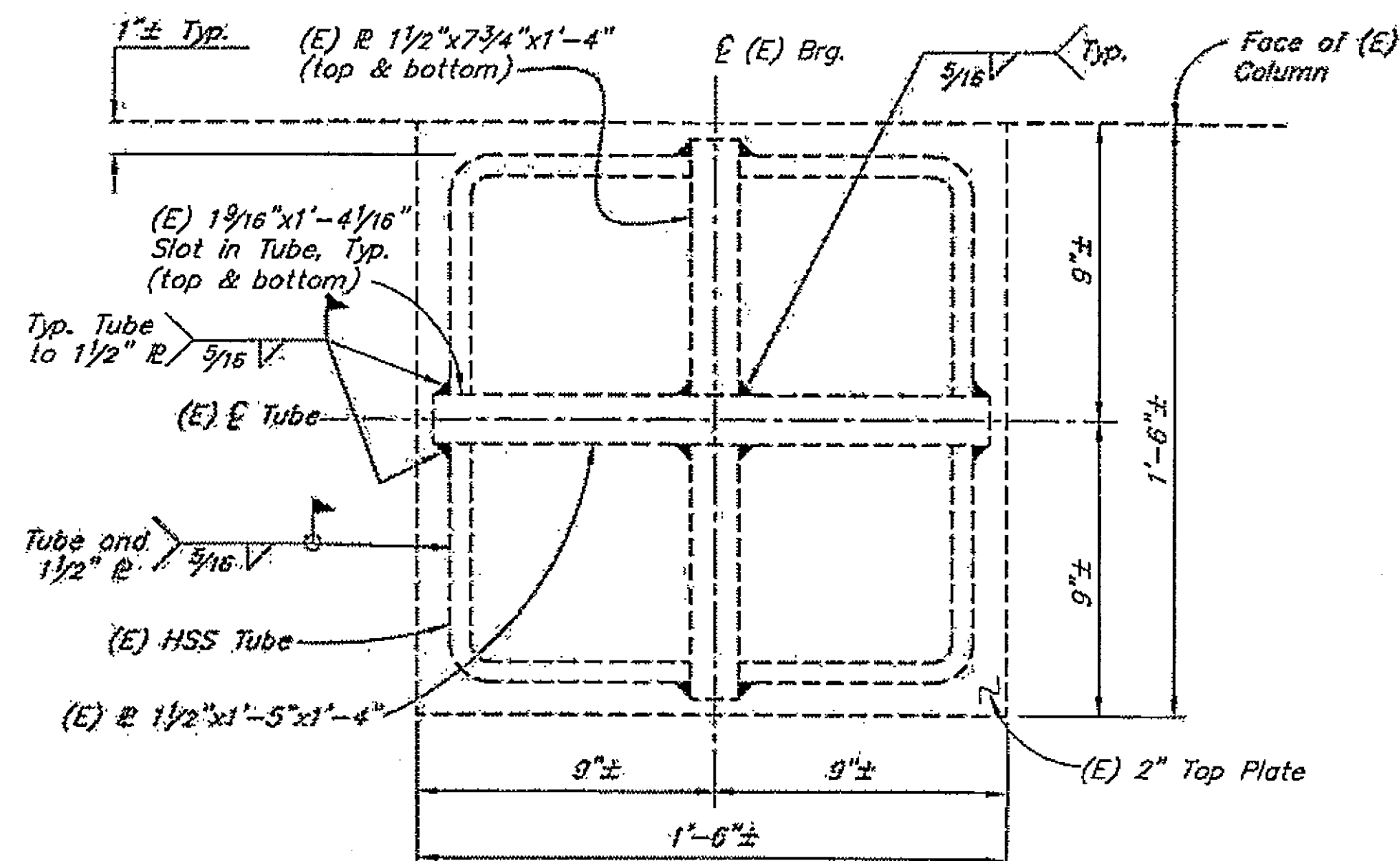
**SITKA HARBOR BRIDGE**  
HARBOR DRIVE  
**EXISTING JACKING POST - PIERS 5 & 6**



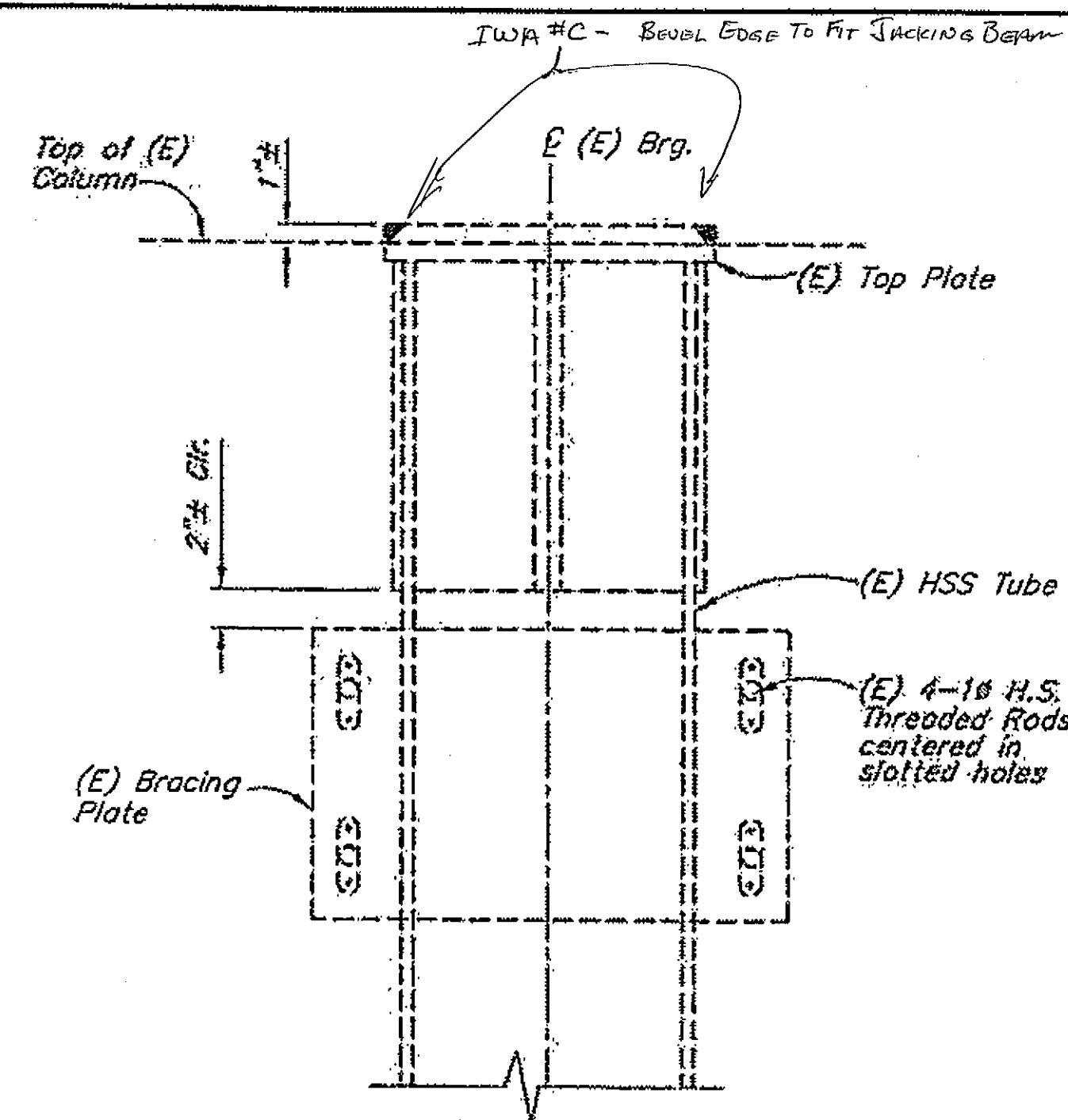
BRIDGE NO. 245  
DWG. NO. 17

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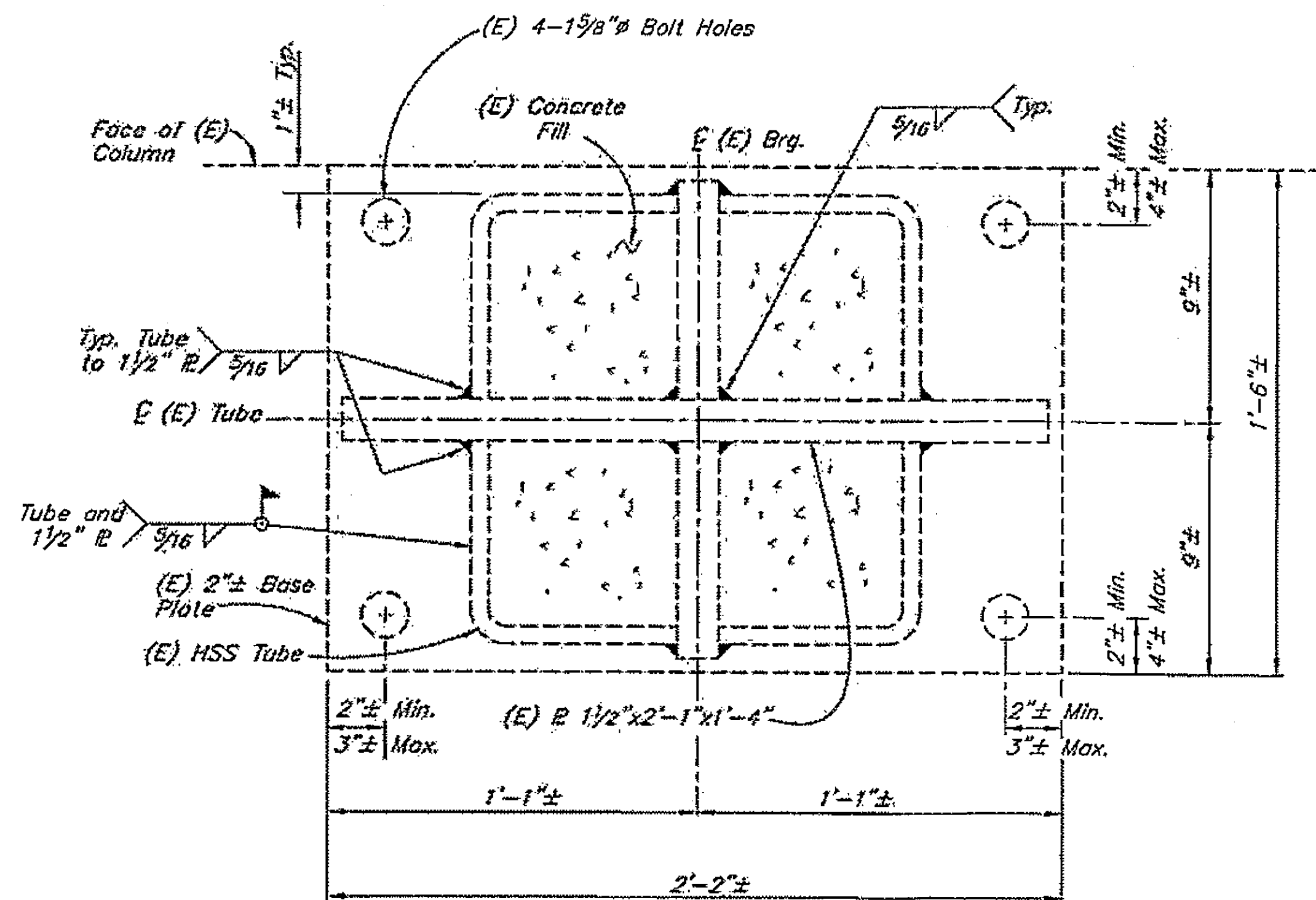
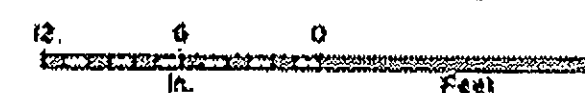
| STATE  | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | BH-099-3(16)/69845  | 2007 | 818       | 34           |



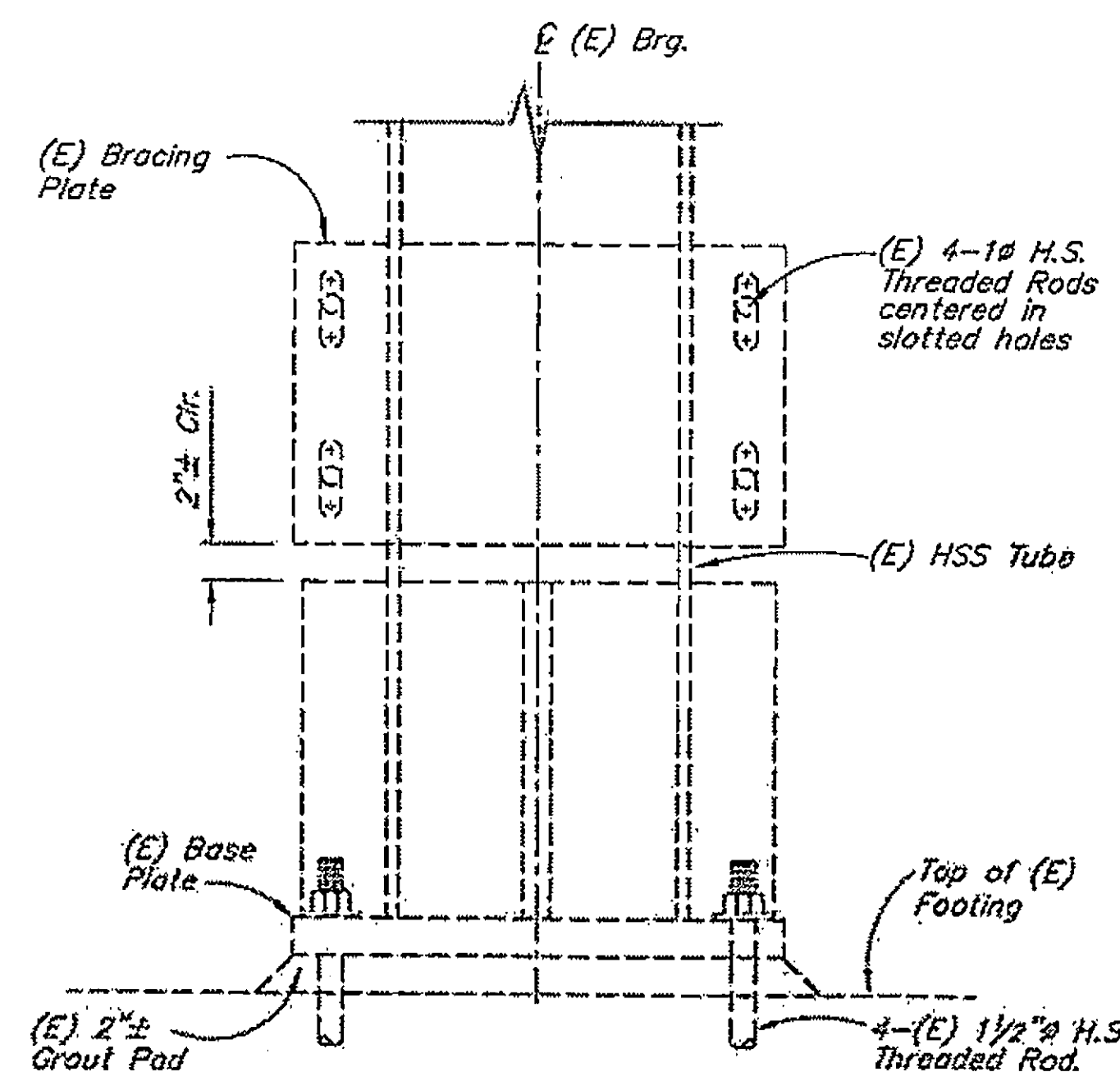
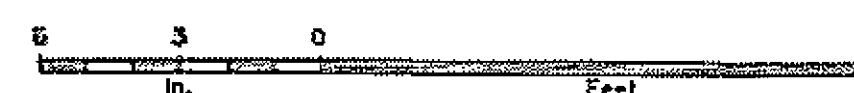
SECTION C-C



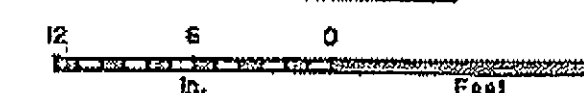
DETAIL A



SECTION B-B



DETAIL B



#### NOTES:

Existing construction shown for information only.

#### LEGEND

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 ——— = Denotes this contract

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 Proj. Eng. *[Signature]* Date 11-2-08

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| DRAWN BY: <i>Cathy Anderson</i>  | CHECKED: <i>Larry Owen</i>       |
| QUANTITIES BY: <i>Larry Owen</i> | CHECKED: <i>Robert W. Miller</i> |

### BEARING REPLACEMENT

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 BRIDGE SECTION



SITKA HARBOR BRIDGE  
 HARBOR DRIVE  
 EXISTING JACKING POST DETAILS  
 PIERS 5 & 6



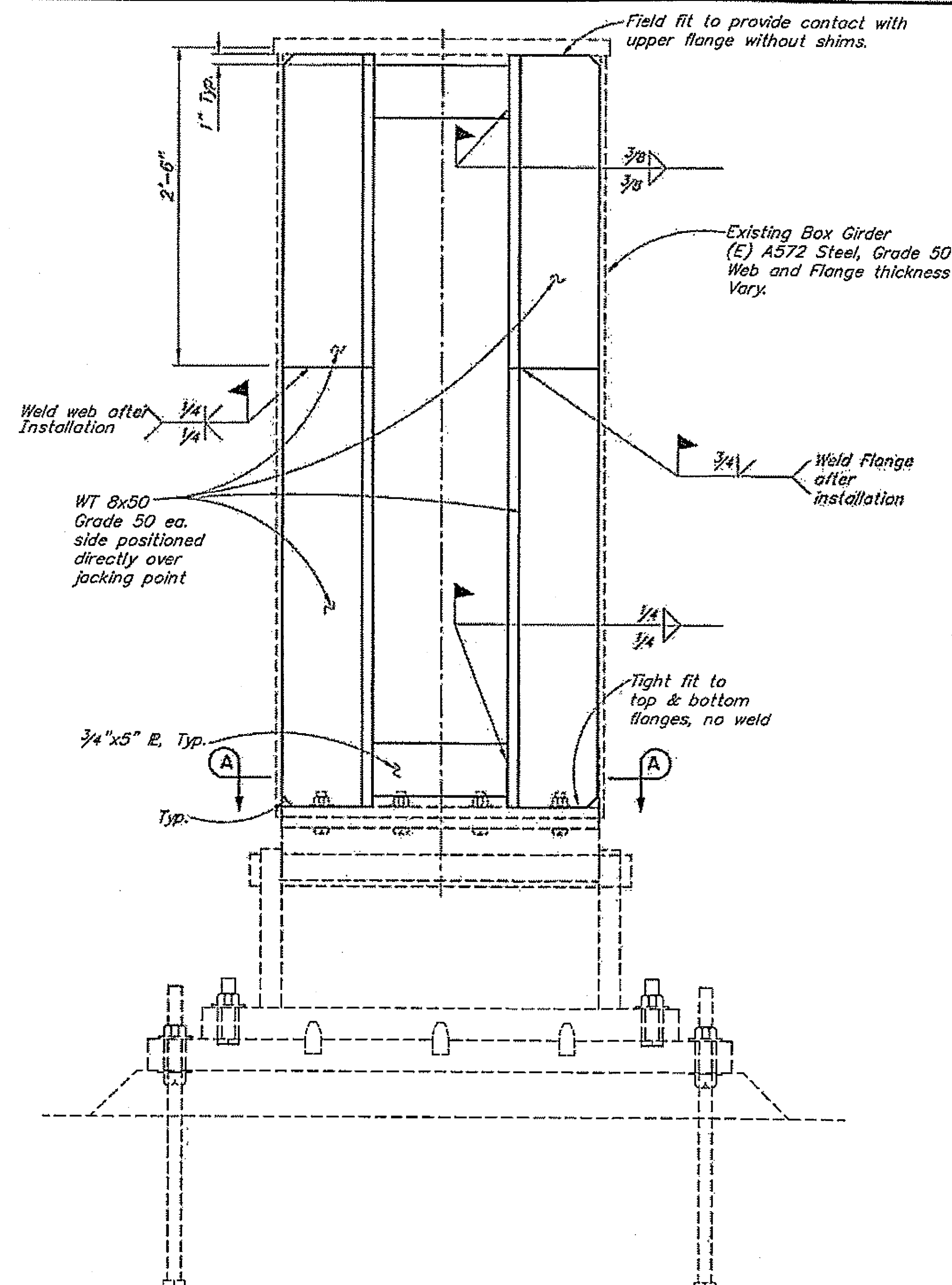
BRIDGE NO. 245  
 DWG. NO. 18

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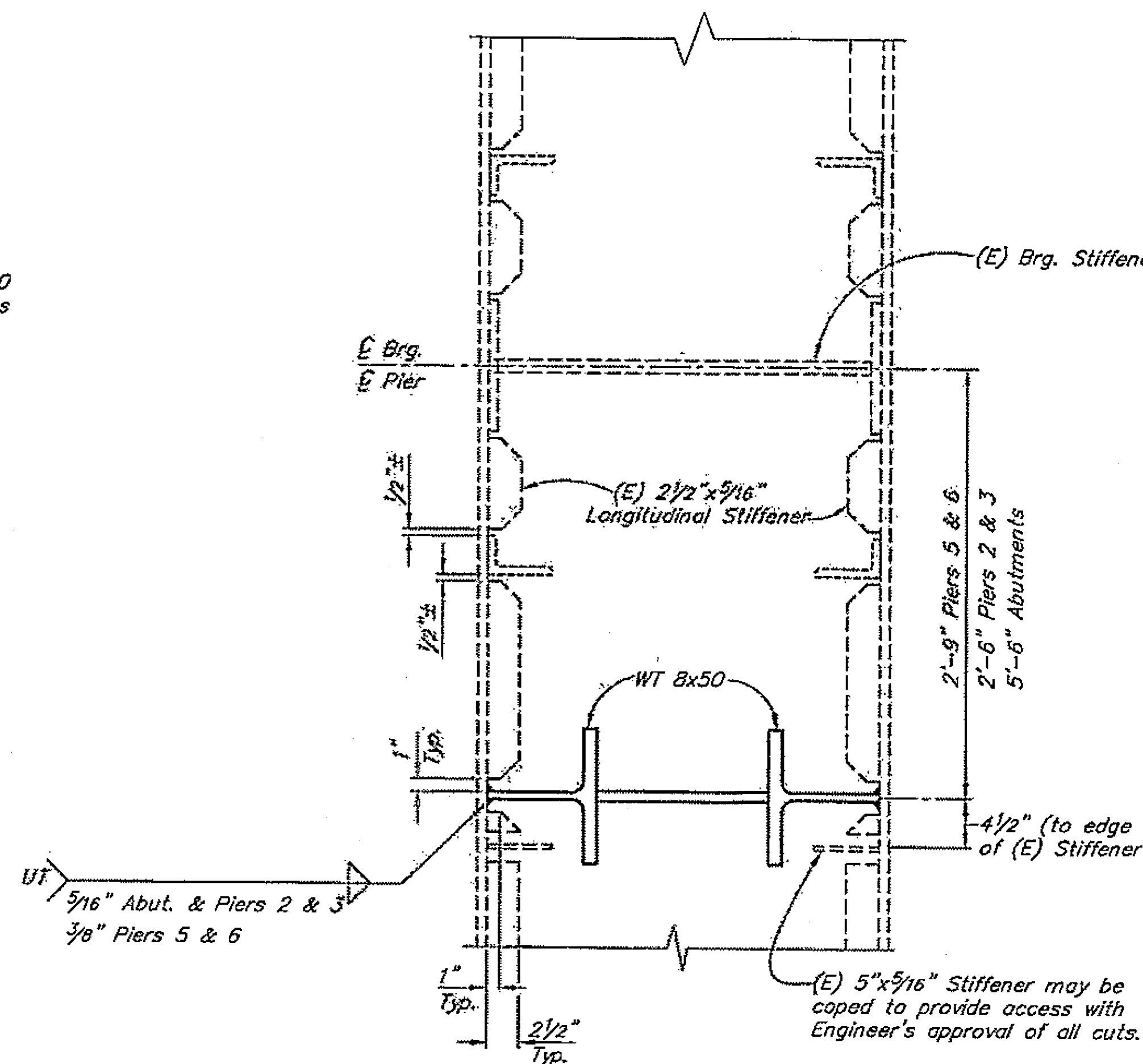
| STATE  | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|--------|---------------------|------|-----------|--------------|
| ALASKA | BH-099-3161/68845   | 2007 | BI9       | 34           |

# NOTES:

1. Bearing replacement and seismic retrofit details not shown for clarity.
2. WT 8x50 may be field fabricated from plate stock. Provide submittal.



BOX GIRDER SECTION AT JACKING POINT



SECTION A-A



# LEGEND

- (E) = Existing
- = Existing
- = Denotes this contract

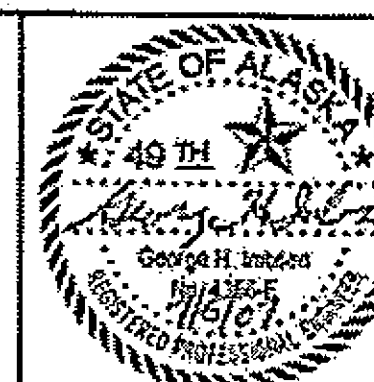
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Proj. Eng. *[Signature]* Date 11-3-08

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|                                      |                                  |
|--------------------------------------|----------------------------------|
| DESIGNED BY: <i>George Imbison</i>   | CHECKED: <i>Robert W. Miller</i> |
| DRAWN BY: <i>Cathy Anderson</i>      | CHECKED: <i>George Imbison</i>   |
| QUANTITIES BY: <i>George Imbison</i> | CHECKED: <i>Robert W. Miller</i> |

## BEARING REPLACEMENT

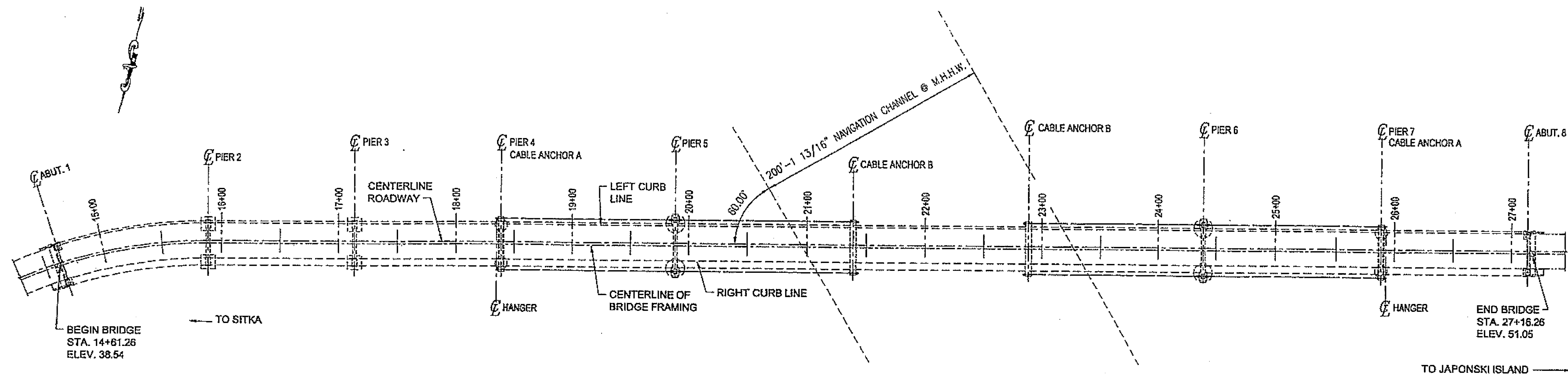
STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
BRIDGE SECTION



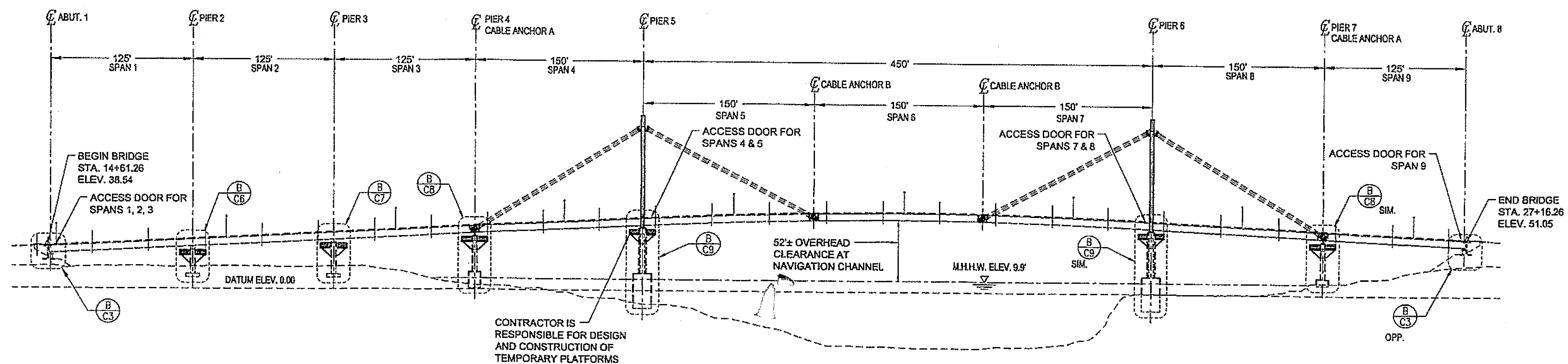
SITKA HARBOR BRIDGE  
HARBOR DRIVE  
JACKING STIFFENERS



BRIDGE NO. 245  
DWG. NO. 19



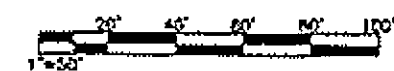
**PLAN - SITKA HARBOR BRIDGE**



**ELEVATION - SITKA HARBOR BRIDGE**

REFER TO SHEETS C2 & B2 FOR GENERAL NOTES AND SPECIFICATIONS, WORK THESE SHEETS WITH SHEETS B1 - B19

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
Proj. Eng. *[Signature]* Date 11-3-00



**DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS**

| APPENDIX NUMBER     |         |                     |
|---------------------|---------|---------------------|
| ATTACHMENT NUMBER   |         |                     |
| RECORD OF REVISIONS |         |                     |
| NO.                 | DATE    | DESCRIPTION         |
| A                   | 2-10-05 | ISSUED FOR REVIEW   |
| B                   | 3-16-06 | RE-USED FOR REQUEST |
| C                   | 7-23-07 | FINAL               |

**PLAN LEGEND**

PLAN DEVELOPED BY:  
SMITH & MONROE & GRAY ENGINEERS, INC.



CHECKED BY: J.M.

DESIGNED BY: J.M.

DRAWN BY: J.W.N.T.

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

**SITKA HARBOR BRIDGE**

**BEARING REPLACEMENT PLAN  
GENERAL ARRANGEMENT**

PROJECT DESIGNATION  
**BH-099-3(16)/68945**

| STATE         | YEAR         |
|---------------|--------------|
| <b>ALASKA</b> | <b>2007</b>  |
| SHEET NUMBER  | TOTAL SHEETS |
| <b>C1</b>     | <b>34</b>    |

GENERAL SPECIFICATIONS

1. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE AASHTO STD. SPEC. FOR HIGHWAY BRIDGES (2002 EDITION). THESE DRAWINGS AND AKDOT CONTRACT DRAWINGS AND SPECIFICATIONS. IN THE EVENT OF CONFLICT, THE ENGINEER SHALL BE NOTIFIED. THE MORE STRINGENT WILL GENERALLY APPLY.
2. DIMENSIONS AND ELEVATIONS OF EXISTING STRUCTURES ARE GIVEN FOR REFERENCE ONLY. FIELD VERIFY ALL DIMENSIONS AND ELEVATIONS.
3. CARE MUST BE TAKEN DURING EXCAVATION TO AVOID CONFLICT WITH UNDERGROUND UTILITIES.
4. DURING EXCAVATION IF ANY SOFT SPOTS OR UNUSUAL SOIL CONDITIONS ARE ENCOUNTERED THE ENGINEER SHALL BE NOTIFIED. REMOVE AND REPLACE WITH SUITABLE MATERIAL AS DIRECTED BY THE ENGINEER.
5. SAW CUT, EXISTING SIDEWALK @ PIER 2 IS TO BE REPLACED.
6. MATCH EXISTING SURROUNDING LANDSCAPING AND OTHER IMPROVEMENTS WITH A SMOOTH TRANSITION IN GRADING, AND TO AVOID ANY ABRUPT OR APPARENT CHANGES IN GRADES OR CROSS SLOPES, LOW SPOTS, OR HAZARDOUS CONDITIONS.

SEE GENERAL NOTES SHEET No. B2

BEARING REPLACEMENT SCHEDULE \*

1. ESTABLISH AMBIENT TEMPERATURE FOR ALL BEARING PAD SUPPORT INSTALLATIONS. MONITOR TEMPERATURE CONTINUOUSLY DURING PROJECT.
2. ERECT SCAFFOLDS AT PIERS 4 & 7 (NO JACKING REQUIRED AT PIERS 4 & 7).
3. ERECT SCAFFOLDS AT PIERS 5 & 6.
4. WELD BOX GIRDER STIFFENERS AT INSIDE OF PIERS 4 & 7 (ACCESS AT PIERS 5 & 6)
5. WELD BOX GIRDER STIFFENERS AND DRILL BOX GIRDER AT PIERS 5 & 6.
6. ATTACH ELASTOMERIC REACTION BLOCKS AT PIERS 4 & 7 (MAY NEED TO BE PLACED AND TACKED, THEN REMOVED FOR FINISH WELDS, THEN RE-INSTALLED. PLATES MAY NEED COOLING BETWEEN PASSES).
7. JACK BRIDGE AT PIER 6 AND REPLACE BEARINGS PER GENERAL JACKING NOTES.
8. JACK BRIDGE AT PIER 5 AND REPLACE BEARINGS PER GENERAL JACKING NOTES.
9. WELD BOX GIRDERS STIFFENERS AND DRILL BOX GIRDER AT ABUTMENTS 1 & 8.
10. WELD BOX GIRDER STIFFENERS AND DRILL BOX GIRDER AT PIERS 2 & 3.
11. ERECT SCAFFOLDING AT PIER 3.
12. JACK BRIDGE AT PIER 3 AND REPLACE BEARINGS PER GENERAL JACKING NOTES.
13. ERECT SCAFFOLDING AT PIER 2.
14. ERECT JACKING SUPPORT COLUMNS AT PIER 2.
15. JACK BRIDGE AT PIER 2 AND REPLACE BEARINGS PER GENERAL JACKING NOTES.
16. EXCAVATE, FORM AND POUR FOOTING PADS FOR JACKS AT ABUTMENTS 1 & 8.
17. ATTACH TEMPORARY LONGITUDINAL RESTRAINTS AT SPAN 7 (ABUT. 8 & PIER 7)
18. JACK BRIDGE AT ABUTMENT 8 AND REPLACE BEARINGS PER GENERAL JACKING NOTES.
19. JACK BRIDGE AT ABUTMENT 1 AND REPLACE BEARINGS PER GENERAL JACKING NOTES.
20. REMOVE LONGITUDINAL STIFFENER BLOCKS AT PIER 7 & 8.

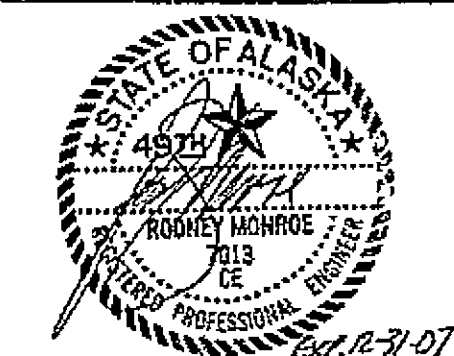
\* CONTRACTOR MAY SUBMIT ALTERNATE SCHEDULE FOR APPROVAL.

REFERENCE DRAWINGS

- SHT.S C8 & B6
- SHT.S C9 & B7
- SHT. B10
- SHT.S B12 & B19
- SHT.S C8, B10, & B11
- SHT.S C5, C9
- SHT.S C5, C9
- SHT.S C1, B8, & B19
- SHT.S C6, C7, B9, & B19
- SHT.S C7 & B5
- SHT.S C5 & C7
- SHT.S C6 & B4
- SHT.S C6, B4, & B13
- SHT.S C5, C6, B4, & B13
- SHT.S C3, C4, & B3
- SHT.S C3 & B3
- SHT.S C3 & C5
- SHT.S C3 & C5
- SHT.S C3 & C6

| BEARING REPLACEMENT PLAN |                                            |        |
|--------------------------|--------------------------------------------|--------|
| SHEET NO.                | DESCRIPTION                                | STATUS |
| C1                       | GENERAL ARRANGEMENT                        | REV. B |
| C2                       | GENERAL NOTES, SPECIFICATIONS AND SCHEDULE | REV. B |
| C3                       | TEMPORARY FOOTINGS AT ABUTMENTS            | REV. B |
| C4                       | SECTIONS AND DETAILS                       | REV. B |
| C5                       | MODIFICATIONS AT PIER 2                    | REV. B |
| C6                       | MODIFICATIONS AT PIER 2                    | REV. B |
| C7                       | MODIFICATIONS AT PIERS 3                   | REV. B |
| C8                       | MODIFICATIONS AT PIERS 4 & 7               | REV. B |
| C9                       | MODIFICATIONS AT PIERS 5 & 6               | REV. B |

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



CHECKED BY: J.M.  
DESIGNED BY: J.M.  
DRAWN BY: J.W., N.T.

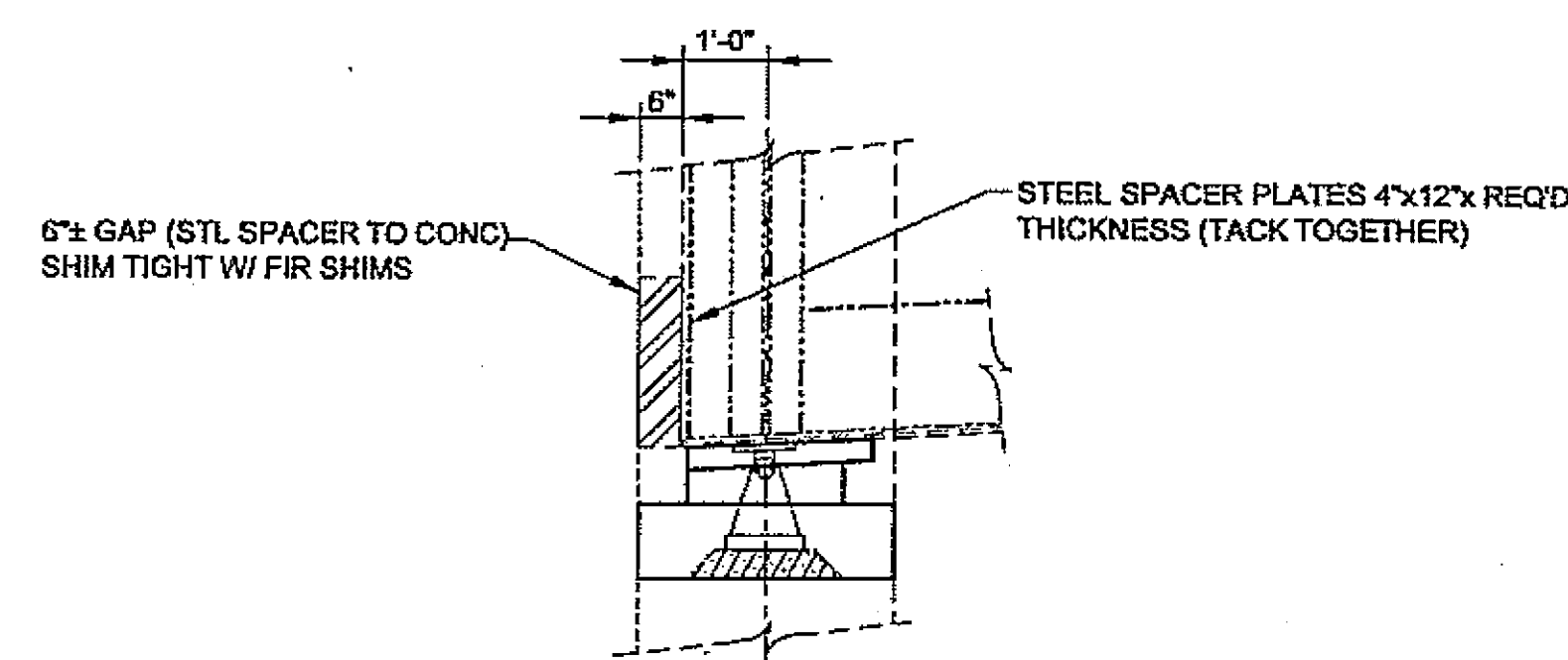
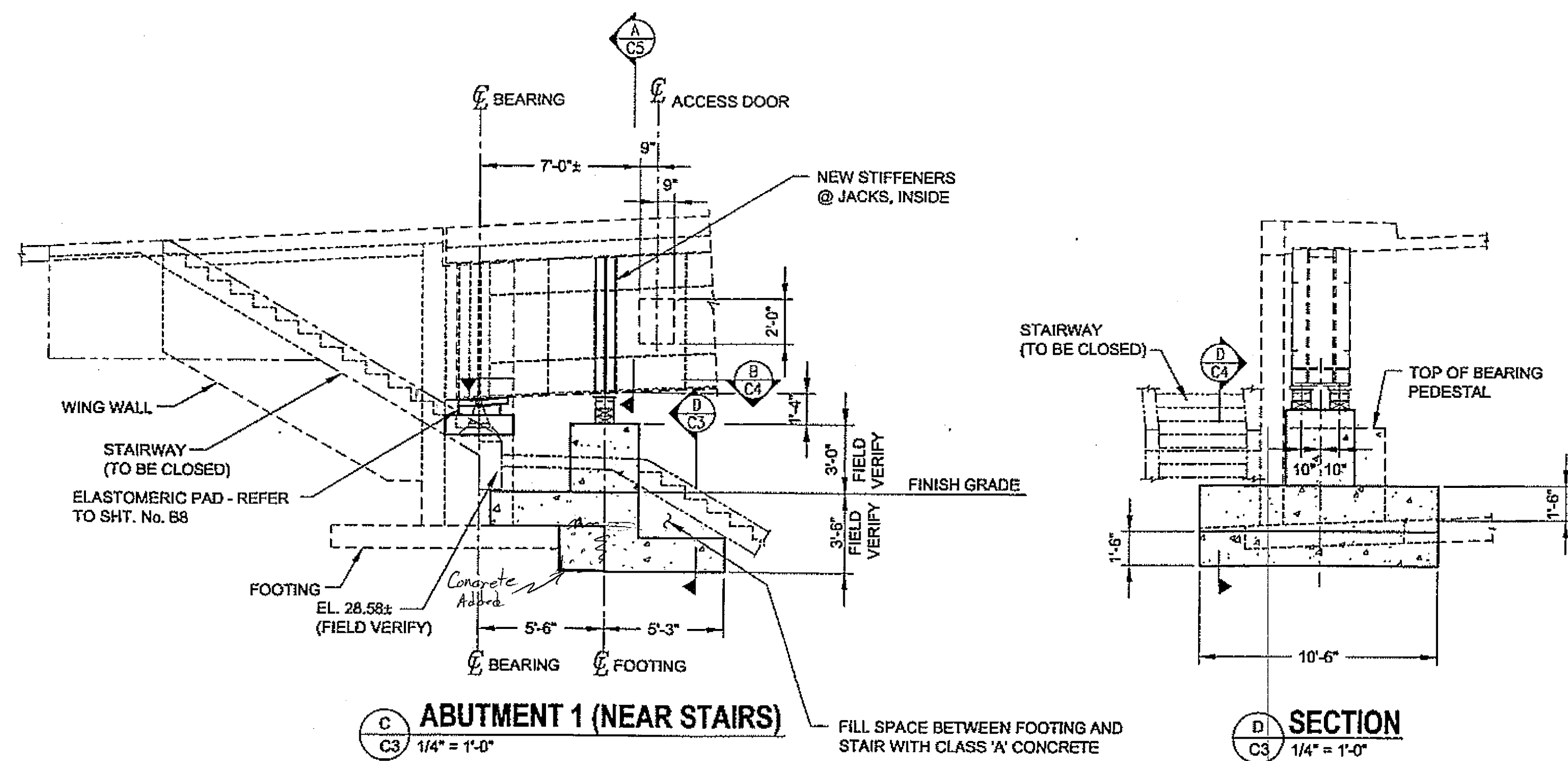
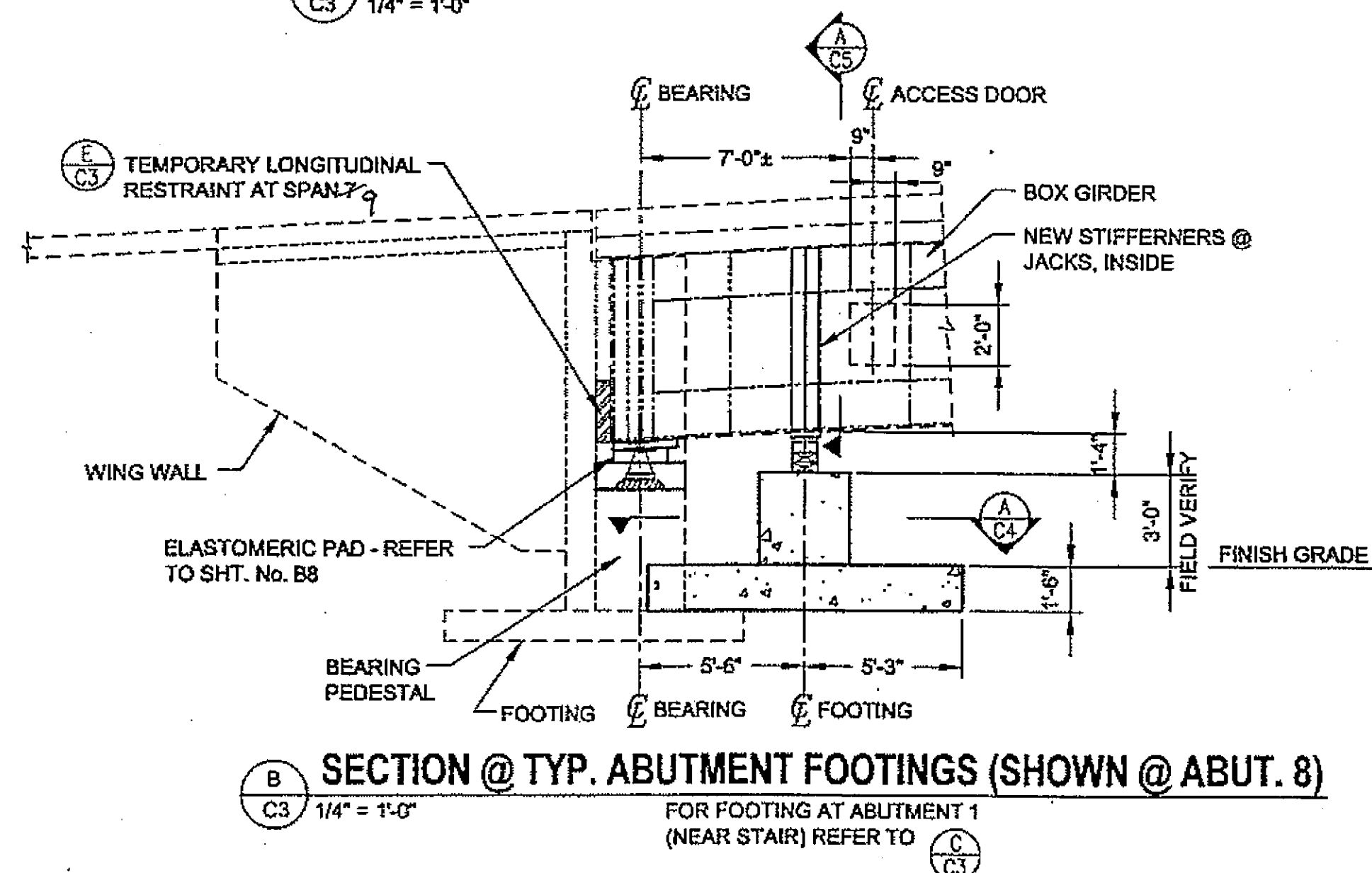
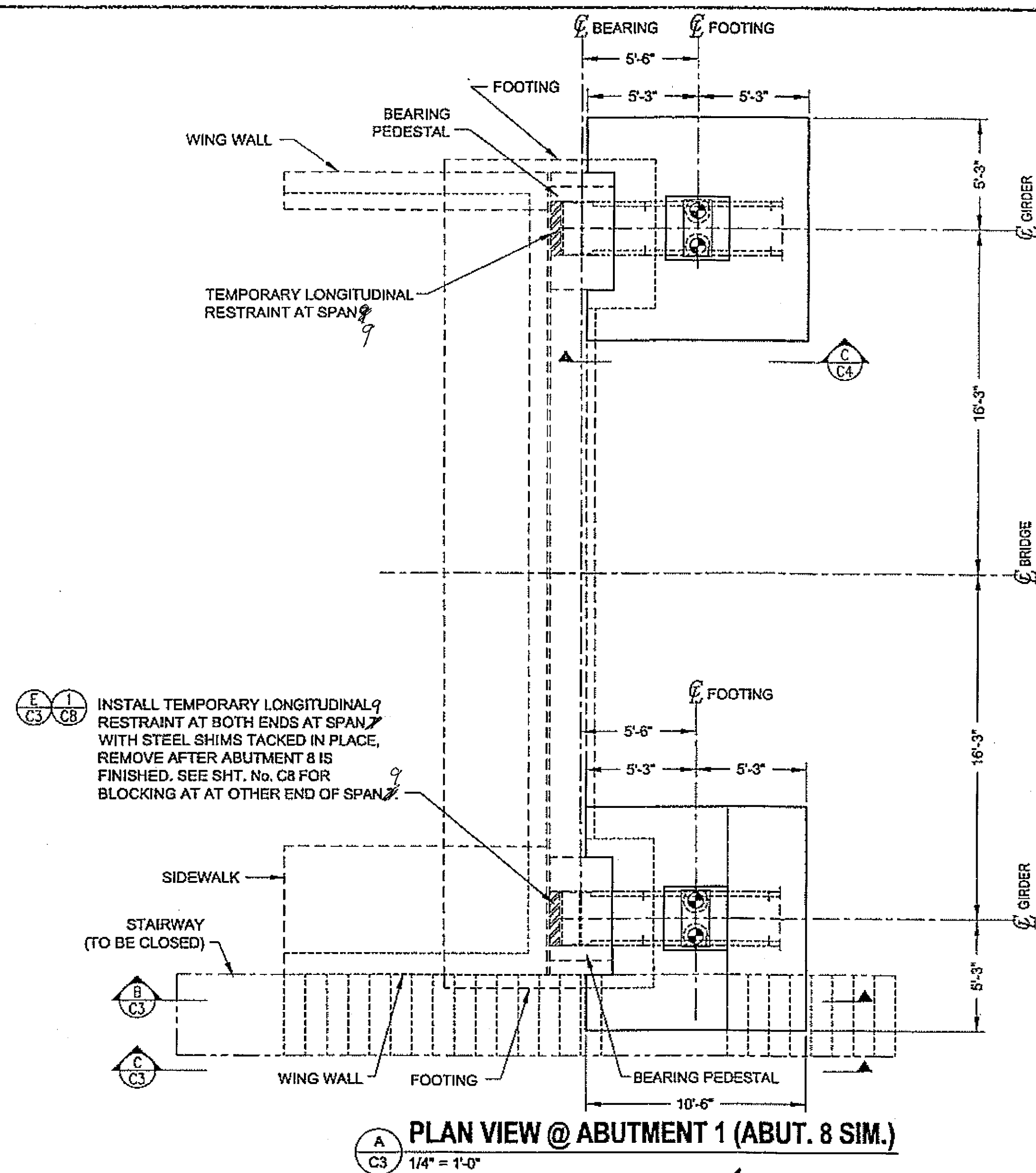
PROJECT: Q:\0404127 STATE OF ALASKA\SITKA HARBOR BRIDGE\PHASE 0\DRAWINGS\0345\_8\_2-0\_NOTES.DWG  
T&E: SHT-2 March 16, 2006

| REVISIONS |         |                     | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|-----------|---------|---------------------|---------------------|------|-----------|--------------|
| NO.       | DATE    | DESCRIPTION         | BH-099-3(16)/68945  | 2007 | C2        | 34           |
| 6         | 3/16/06 | REVISED PER REQUEST |                     |      |           |              |
| C         | 7/23/07 | FINAL               |                     |      |           |              |

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
Proj. Eng. *[Signature]* Date 11-3-08

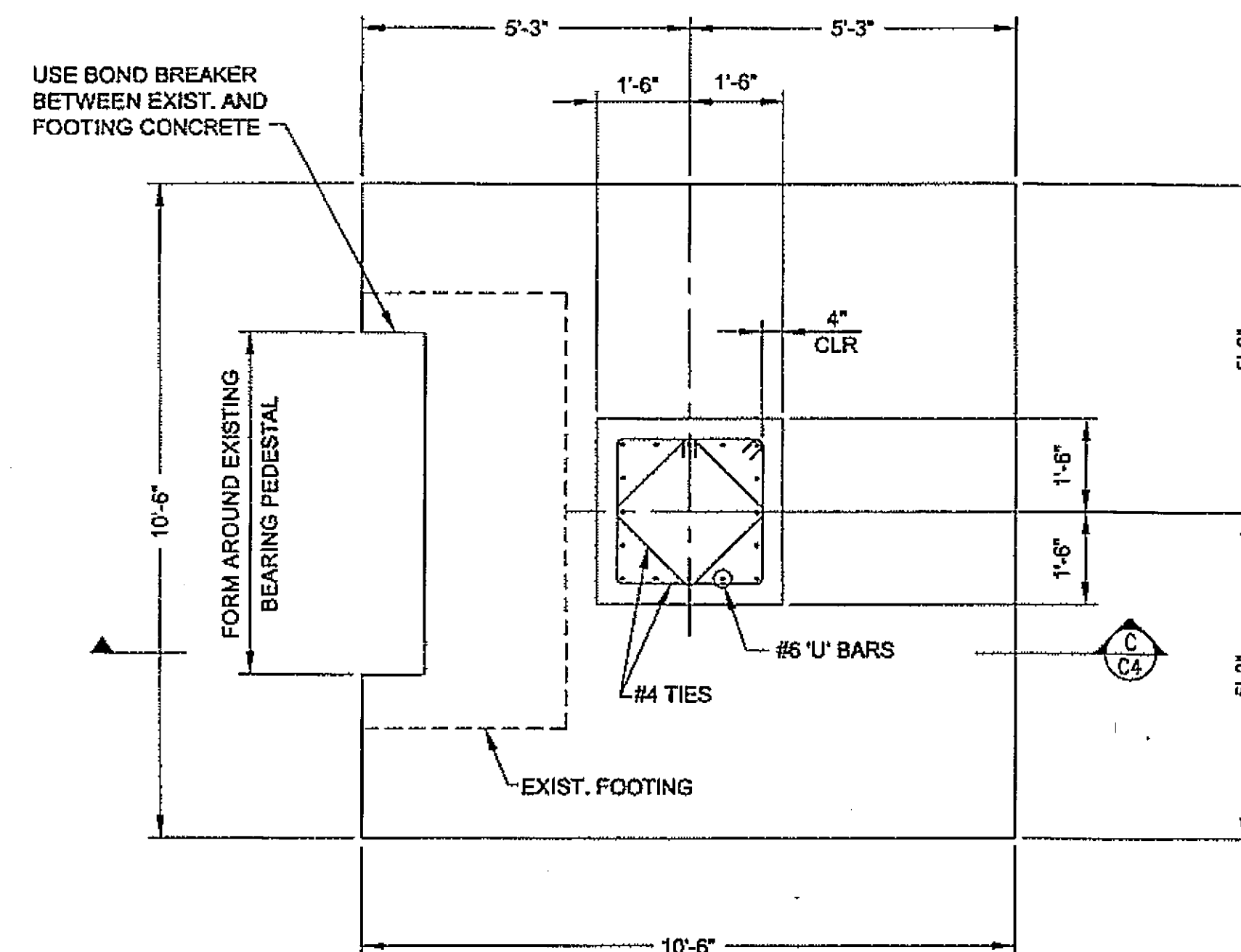
STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
& PUBLIC FACILITIES  
DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION  
**SITKA HARBOR BRIDGE**

**BEARING REPLACEMENT PLAN  
GENERAL NOTES,  
SPECIFICATIONS & SCHEDULE**

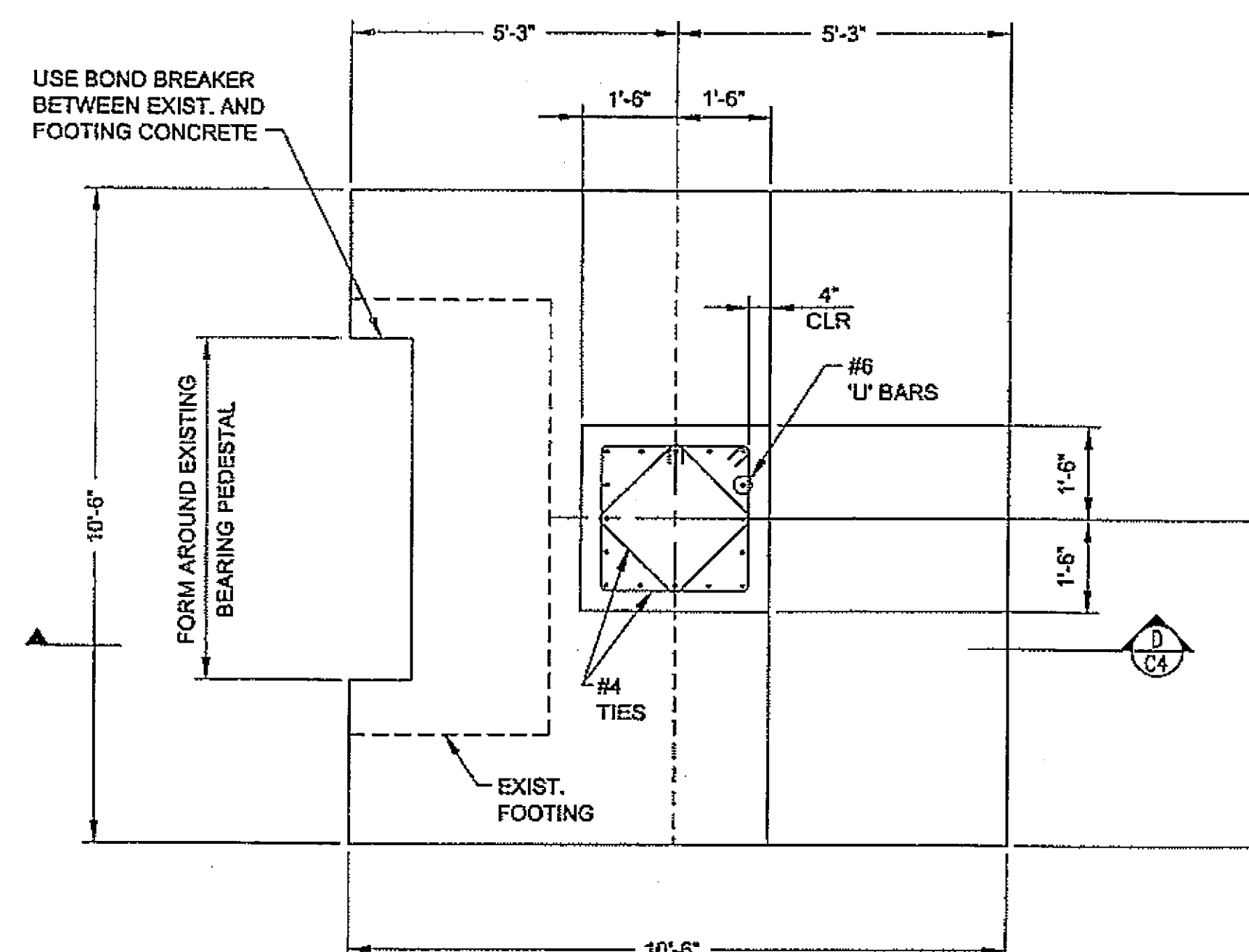


DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

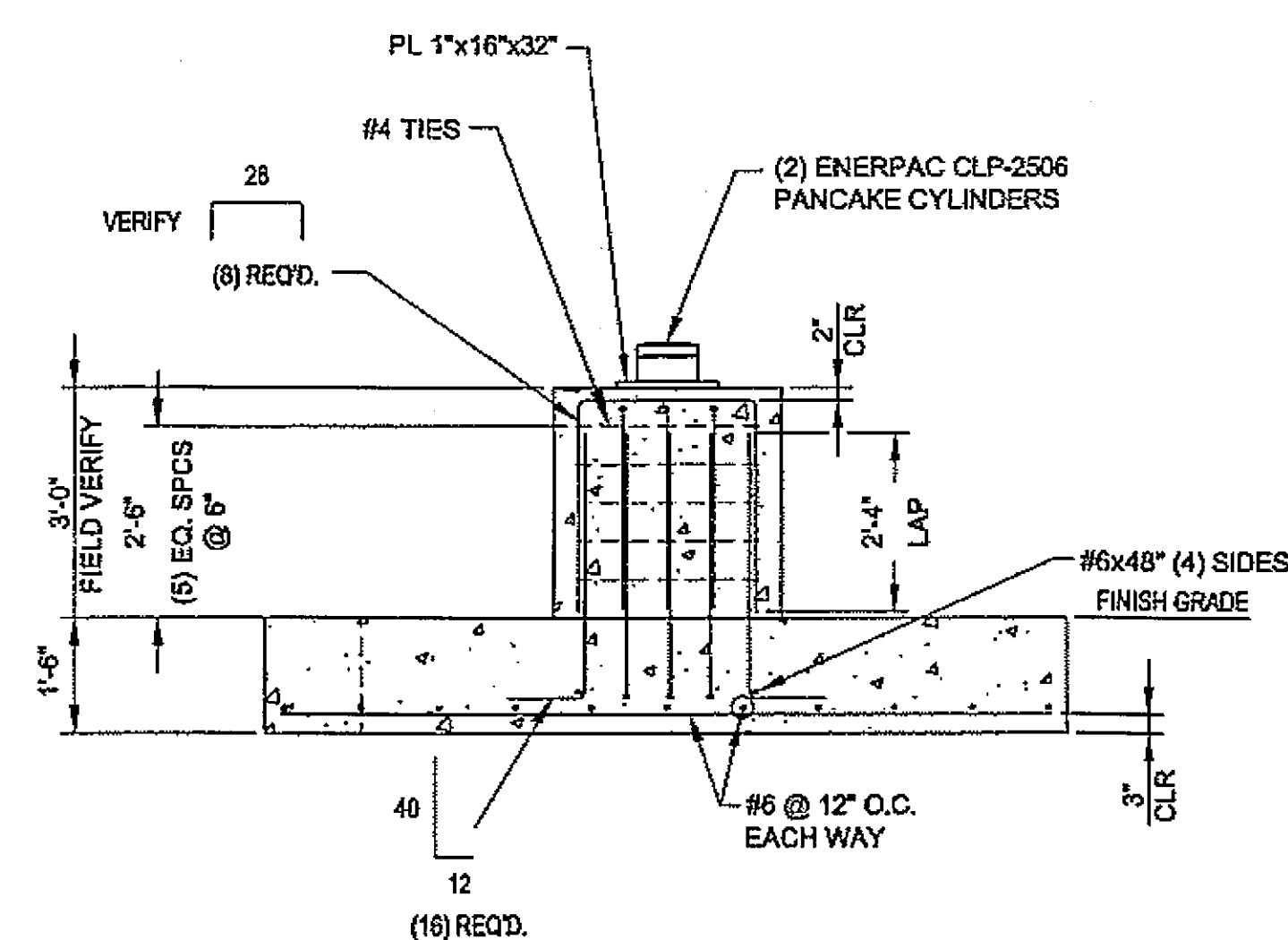
|                                                                                                              |  |                                                                                                                                                                 |  |
|--------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|                                                                                                              |  | STATE OF ALASKA<br>DEPARTMENT OF TRANSPORTATION<br>& PUBLIC FACILITIES<br>DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION<br><b>SITKA HARBOR BRIDGE</b> |  |
| CHECKED BY: J.M.<br>DESIGNED BY: J.M.<br>DRAWN BY: J.W. N.T.<br>DATE: 11-3-08<br>PROJECT: BH-099-3(16)/68945 |  | <b>BEARING REPLACEMENT PLAN</b><br><b>TEMPORARY FOOTING AT</b><br><b>ABUTMENTS 1 &amp; 8</b>                                                                    |  |
| PROJECT DESIGNATION: BH-099-3(16)/68945<br>YEAR: 2007<br>SHEET NO: C3<br>TOTAL SHEETS: 34                    |  | PROJECT DESIGNATION: BH-099-3(16)/68945<br>YEAR: 2007<br>SHEET NO: C3<br>TOTAL SHEETS: 34                                                                       |  |



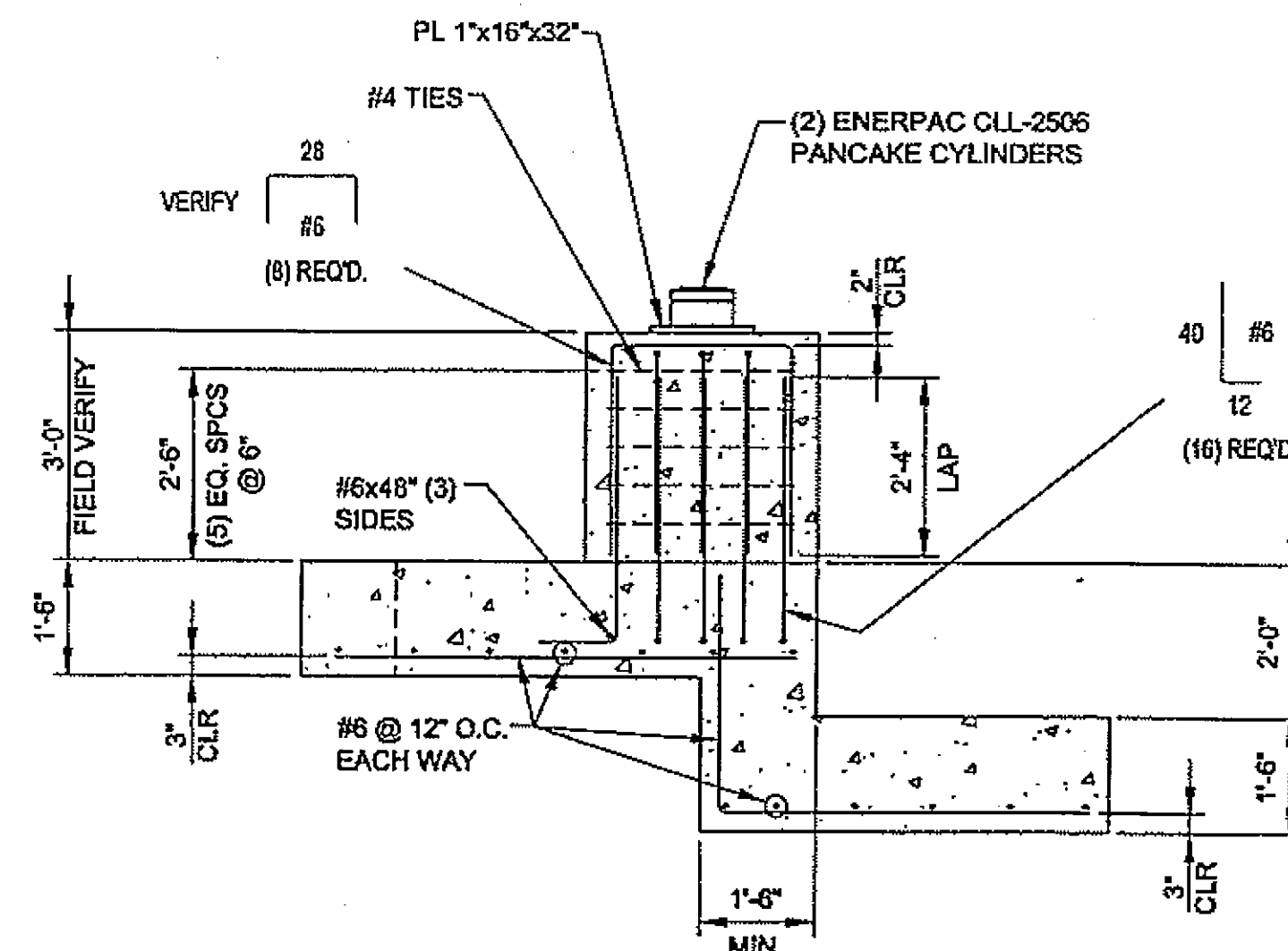
**A PLAN - FOOTING @ ABUTMENTS**  
C4 1/2" = 1'-0"



**B PLAN - FOOTING @ ABUT. 1 (NEAR STAIRS)**  
C4 1/2" = 1'-0"



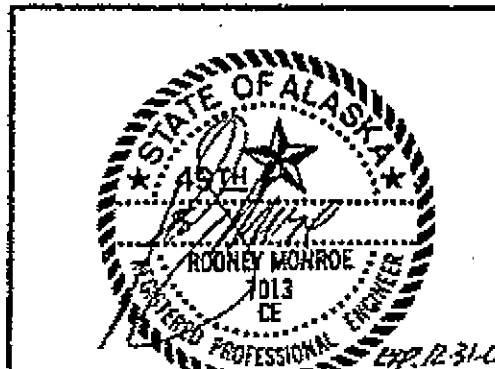
**C FOOTING @ ABUTMENTS**  
C4 1/2" = 1'-0"



**D FOOTING @ ABUT. 1 (NEAR STAIRS)**  
C4 1/2" = 1'-0"

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
Proj. Eng. *[Signature]* Date 11-2-08

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



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

**SITKA HARBOR BRIDGE**

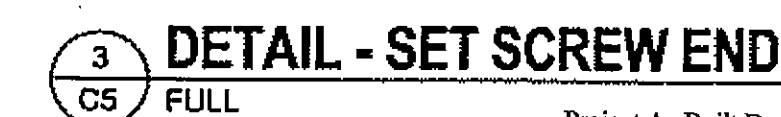
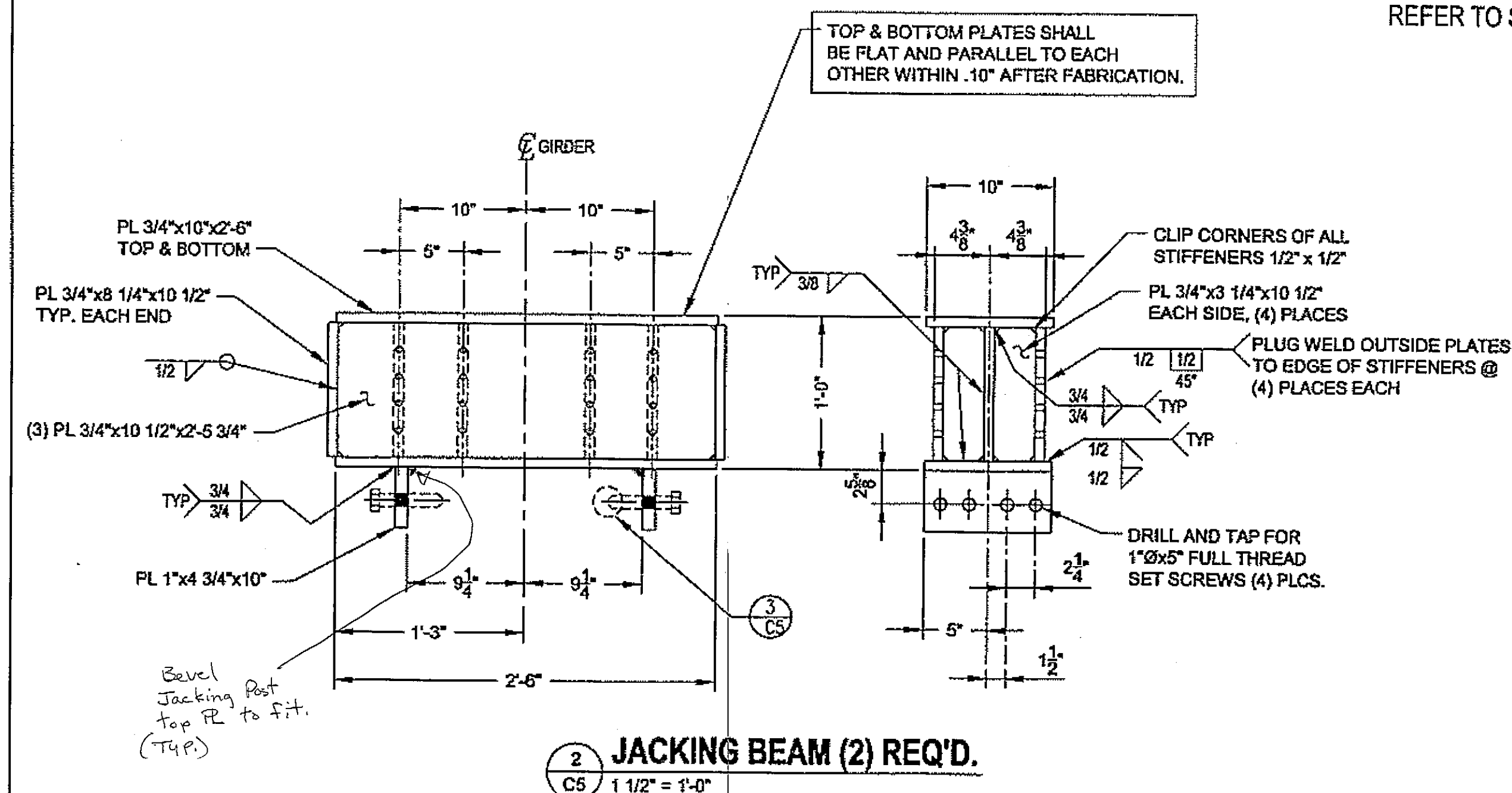
**BEARING REPLACEMENT PLAN  
TEMPORARY FOOTING AT  
ABUTMENTS**

|              |                |                               |                     |      |           |              |
|--------------|----------------|-------------------------------|---------------------|------|-----------|--------------|
| CHECKED BY:  | J.M.           | REVISIONS                     | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
| DESIGNED BY: | J.W. N.T.      | NO. DATE DESCRIPTION          | BH-099-3(16)/68945  | 2007 | C4        | 34           |
| DRAWN BY:    | J.W. N.T.      | 1 2/16/05 REVISED PER REQUEST |                     |      |           |              |
| DATE:        | March 16, 2005 | 2 7/23/07 FINAL               |                     |      |           |              |



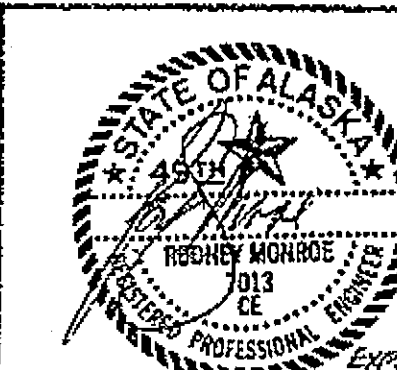
REFER TO SHEETS C2 & B2 FOR GENERAL NOTES AND SPECIFICATIONS

1. VERIFY THAT STIFFENERS ARE WELDED INSIDE BOX GIRDER, BOX GIRDER IS DRILLED FOR NEW PAD.
2. SET JACKING BEAM ON TOP OF COLUMN, TIGHTEN SET SCREWS AND CENTER BEAM ON COLUMN. (EXC @ ABUTMENTS 1 & 8)
3. PLACE SHIM PLATES ON JACKING BEAM AS NEEDED TO ALLOW JACKS (WITH TOP EXTENDED 1") AND 2" TOP PLATE TO CONTACT UNDERSIDE OF BOX BEAM.
4. CONFIRM THAT THE JACKING BEAM, SHIM PACK, AND JACKS ARE PLUMB. NOTIFY ENGINEER IF NOT PLUMB.
5. (2) JACKS AT EACH SIDE OF BRIDGE TO BE PLUMBED TOGETHER FOR EQUAL LOAD.
6. REMOVE NUTS AT BASE OF EXISTING BEARINGS.
7. JACK BOTH SIDES OF BRIDGE SIMULTANEOUSLY TO 3/8".
8. LOCK OFF JACKS.
9. MEASURE BRIDGE POSITION BEFORE AND AFTER JACKING. USE SHIMS AT NEW LATERAL SEISMIC RESTRAINTS TO FIX BRIDGE AGAINST LATERAL MOVEMENT. MONITOR POSITION WITH DIAL GAUGES. NOTIFY ENGINEER IF MOVEMENT EXCEEDS 1/8".
10. IF JACKING COLUMNS SETTLES, NOTIFY ENGINEER PRIOR TO JACKING BRIDGE BACK TO 3/8" ABOVE ORIGINAL POSITION AND LOCK-OFF JACKS.
11. REMOVE EXISTING BEARING, ROUGHEN CONCRETE SURFACE, BUILD NEW CONCRETE BASE PER SHEETS B3 - B7.
12. INSTALL NEW BEARING PAD PER SHEETS B8 - B12.
13. BUILD GROUT DAM 2" LARGER IN ALL DIRECTIONS THAN ELASTOMERIC PAD. BEVEL OUTER EDGE OF GROUT AT 1:1 SLOPE.
14. POUR GROUT IN FORM AND SCREED TO 3/8" FROM FACE OF PAD.
15. APPLY BONDING AGENT TO TOP OF GROUT PER AKDOT "STANDARD SPECS FOR HIGHWAY CONSTRUCTION" SECTION 504, AASHTO M-235 ADHESIVE.
16. VERIFY THAT AMBIENT TEMPERATURE INSIDE BOX GIRDER IS WITHIN 20 DEGREES FAHRENHEIT OF AGREED-UPON INSTALLATION TEMPERATURE.  
*80% MIN. 7 Days*
17. AFTER CURE OF GROUT & CONCRETE TO ~~75%~~ *80%* STRENGTH, LOWER BRIDGE AND STRIP GROUT FORMS.
18. REMOVE JACKING EQUIPMENT, PATCH PAINT TO MATCH EXISTING.



Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
Proj. Eng. [Signature] Date 11-3-08

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



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

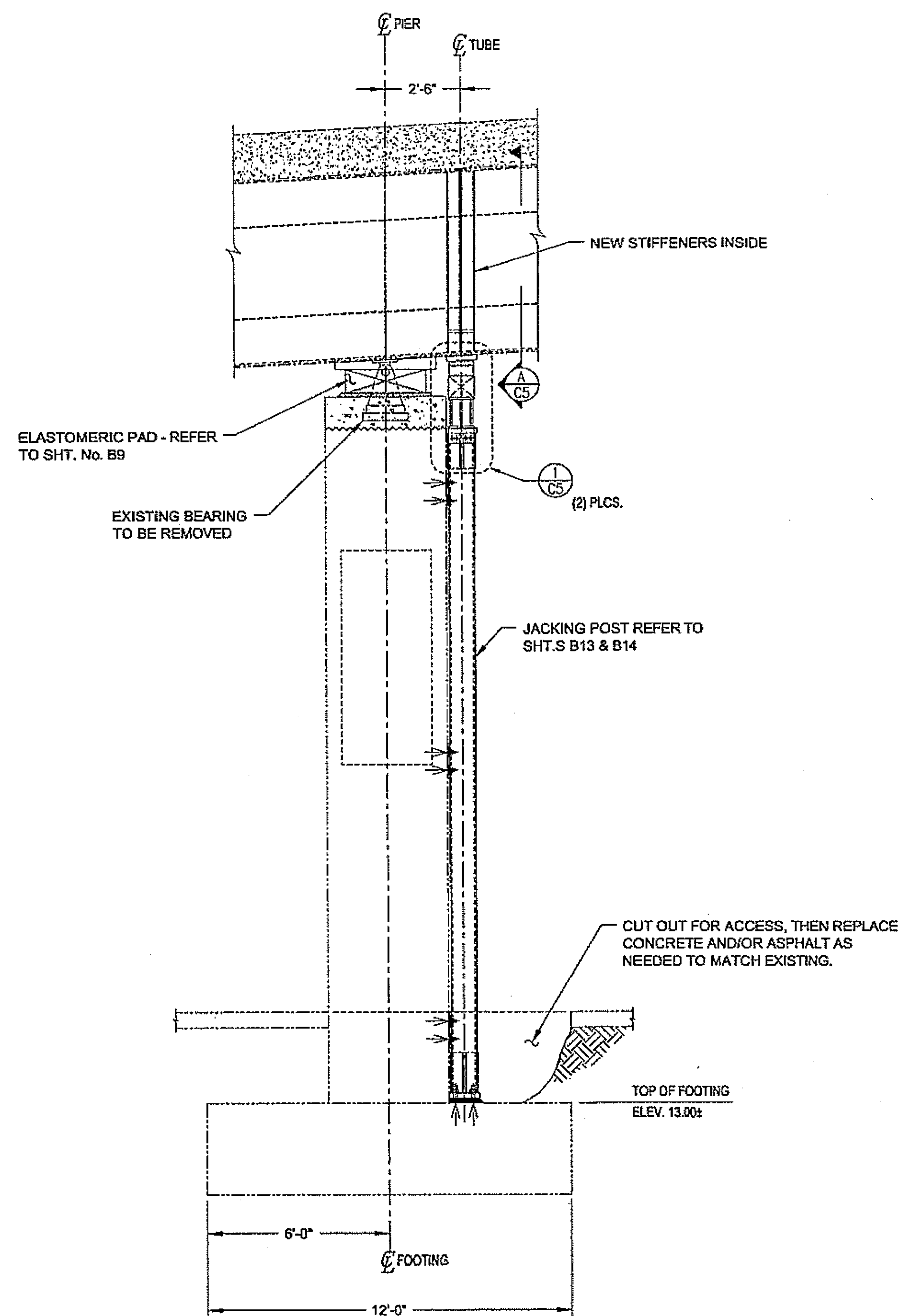
SITKA HARBOR BRIDGE

## BEARING REPLACEMENT PLAN SECTIONS & DETAILS

|                                                                                                 |          |                               |
|-------------------------------------------------------------------------------------------------|----------|-------------------------------|
| CHECKED BY:                                                                                     | J.M.     | <b>SECTIONS &amp; DETAILS</b> |
| DESIGNED BY:                                                                                    | J.M.     |                               |
| DRAWN BY:                                                                                       | J.W.N.T. |                               |
| PLOT - CHD#04127 STATE OF ALASKA SITKA HARBOR BIDDING PHASE BID DRAWINGS S945-B_8B SECTIONS DWG |          |                               |
| TAB                                                                                             | SHT-E    | March 16, 2006                |

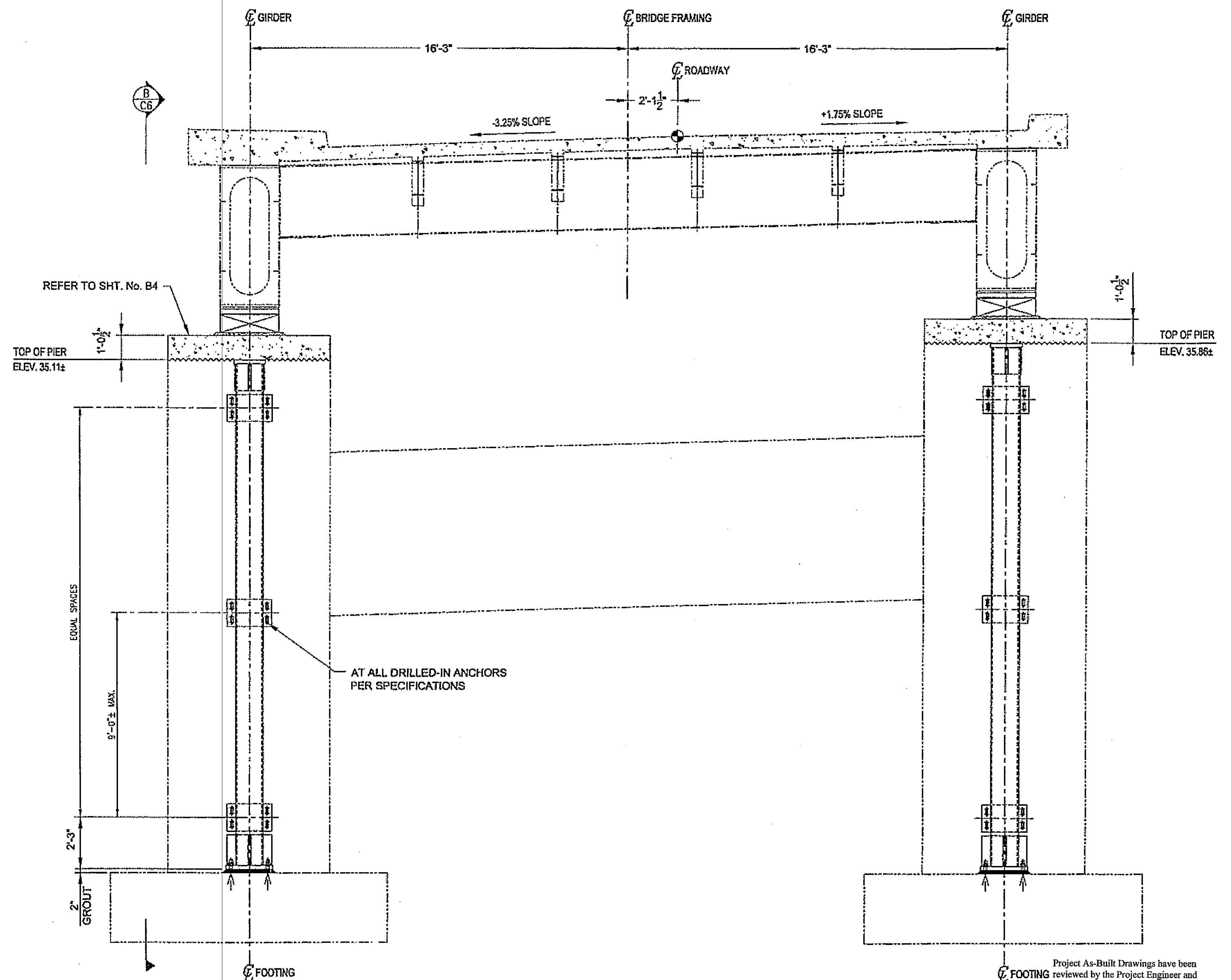
| REVISIONS |         |                     | PROJECT NO.                      | SHEET NO. | DATE           |
|-----------|---------|---------------------|----------------------------------|-----------|----------------|
| NO.       | DATE    | DESCRIPTION         | <b>BH-099-3(16)/68945 • 2007</b> | <b>C5</b> | <b>3/16/07</b> |
| 1         | 3/16/07 | REVISED PER REQUEST |                                  |           |                |
| 2         | 3/16/07 |                     |                                  |           |                |



**8 SIDE VIEW - PIER 2**  
C6 3/8" = 1'-0"

MAX. DESIGN LOAD AT JACKS = 680K AT PIERS 2 & 3

REFER TO SHEETS C2 & B2 FOR GENERAL NOTES AND SPECIFICATIONS



**A ELEVATION - PIER 2**  
C6 3/8" = 1'-0"

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
Proj. Eng. *[Signature]* Date 11-3-08

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

|                                                                         |  |                                                                                                                                     |  |
|-------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------|--|
|                                                                         |  | STATE OF ALASKA<br>DEPARTMENT OF TRANSPORTATION<br>& PUBLIC FACILITIES<br>DESIGN & ENGINEERING SERVICES DIVISION - SOUTHEAST REGION |  |
| <b>SITKA HARBOR BRIDGE</b>                                              |  |                                                                                                                                     |  |
| <b>BEARING REPLACEMENT PLAN<br/>MODIFICATIONS AT PIER 2</b>             |  |                                                                                                                                     |  |
| CHECKED BY: J.M.<br>DESIGNED BY: J.M.<br>DRAWN BY: J.W., N.T.<br>SHT. 6 |  | PROJECT DESIGNATION: BH-099-3(16)/68945<br>YEAR: 2007<br>SHEET NO.: C6<br>TOTAL SHEETS: 34                                          |  |



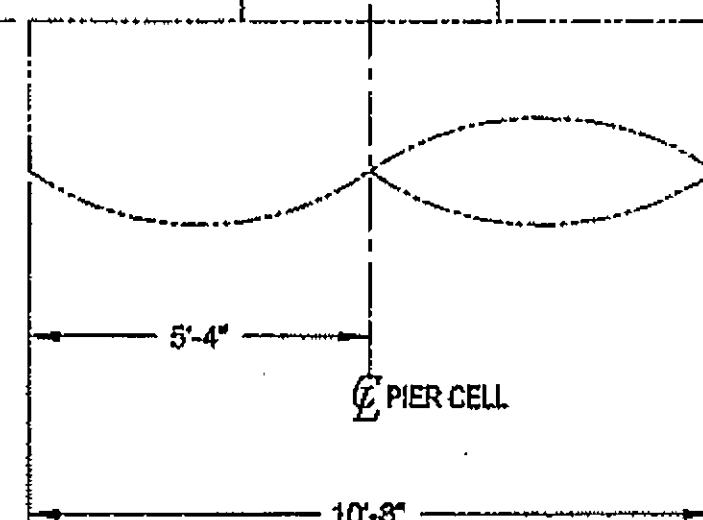
TEMPORARY LONGITUDINAL RESTRAINT AT SPAN 7 FOR JACKING AT ABUTMENT 8 (SEE NOTE SHT. No. C3)

HOLD DOWN BEARING. REFER TO SHT. S B10 & B11

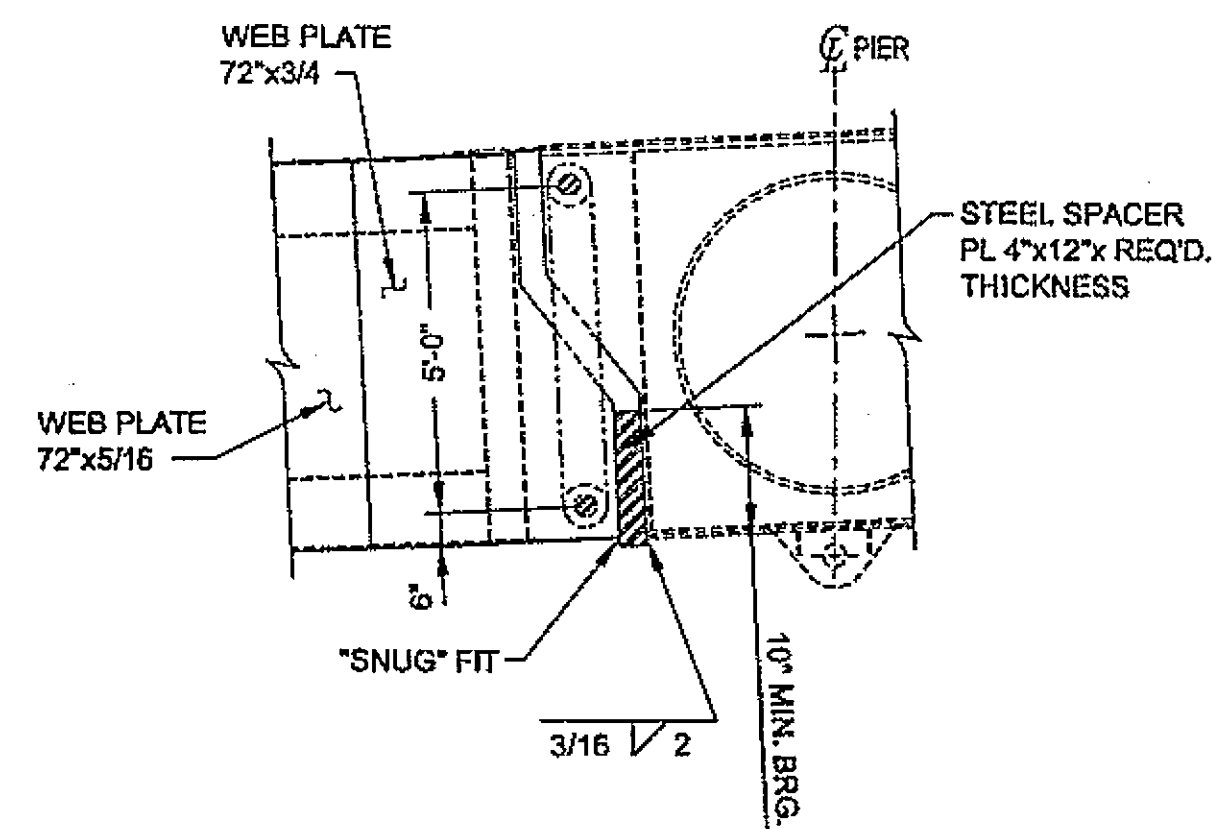
1'-6 1/2"

BEARING

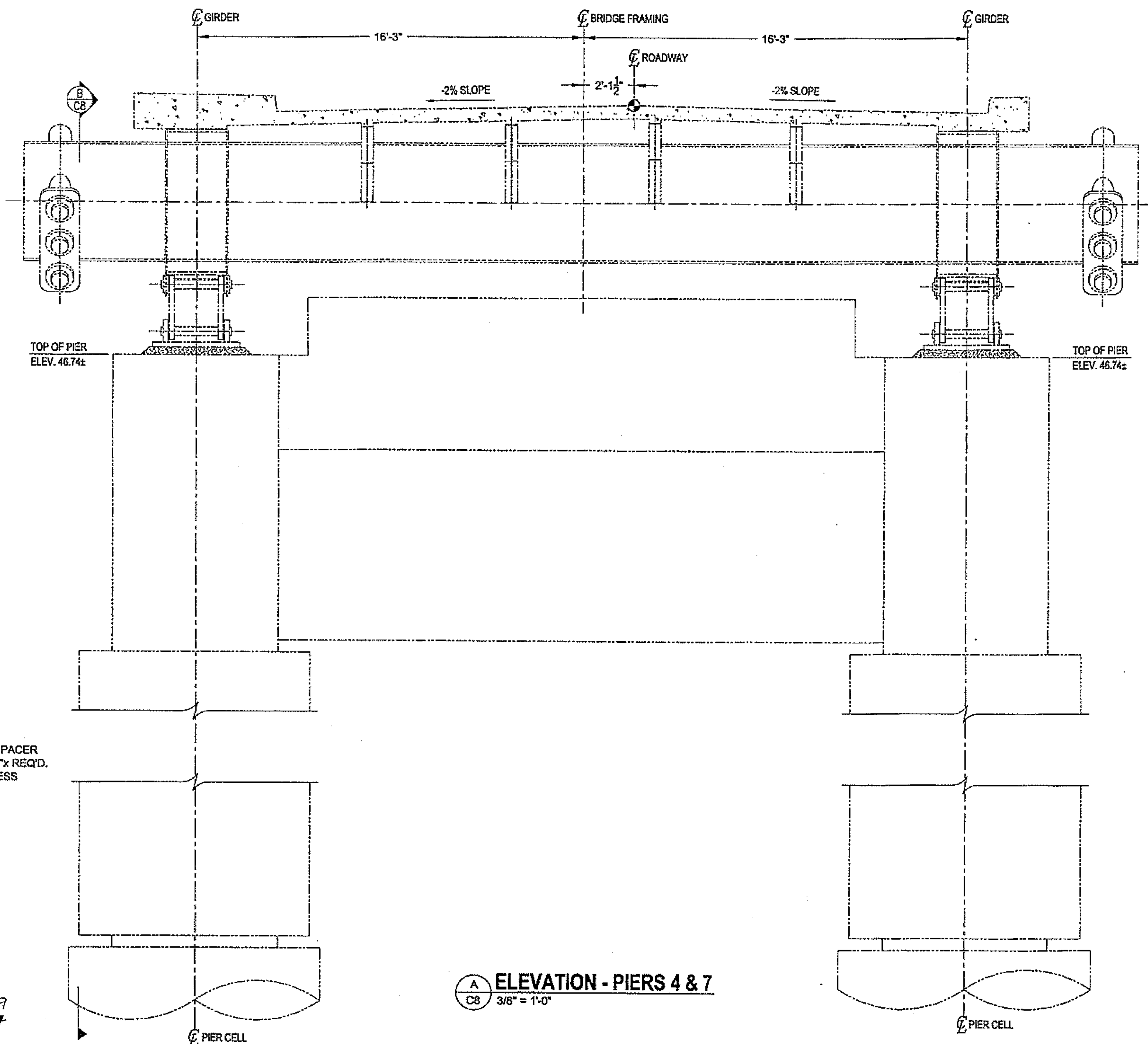
TOP OF PIER CELL  
ELEV. 15.00±



**B SIDE VIEW - PIERS 4 & 7**  
3/8" = 1'-0"



**1 LONGITUDINAL RESTRAINT @ SPAN 7  
C8 3/8" = 1'-0" DETAIL (AT PIER 7)**



**A ELEVATION - PIERS 4 & 7**  
C8 3/8" = 1'-0"

NO JACKING REQUIRED AT PIERS 4 & 7

REFER TO SHEETS C2 & B2 FOR GENERAL NOTES AND SPECIFICATIONS

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

Proj. Eng. *[Signature]* Date 11-3-28

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: J.M.  
DESIGNED BY: J.M.  
DRAWN BY: J.M., N.T.

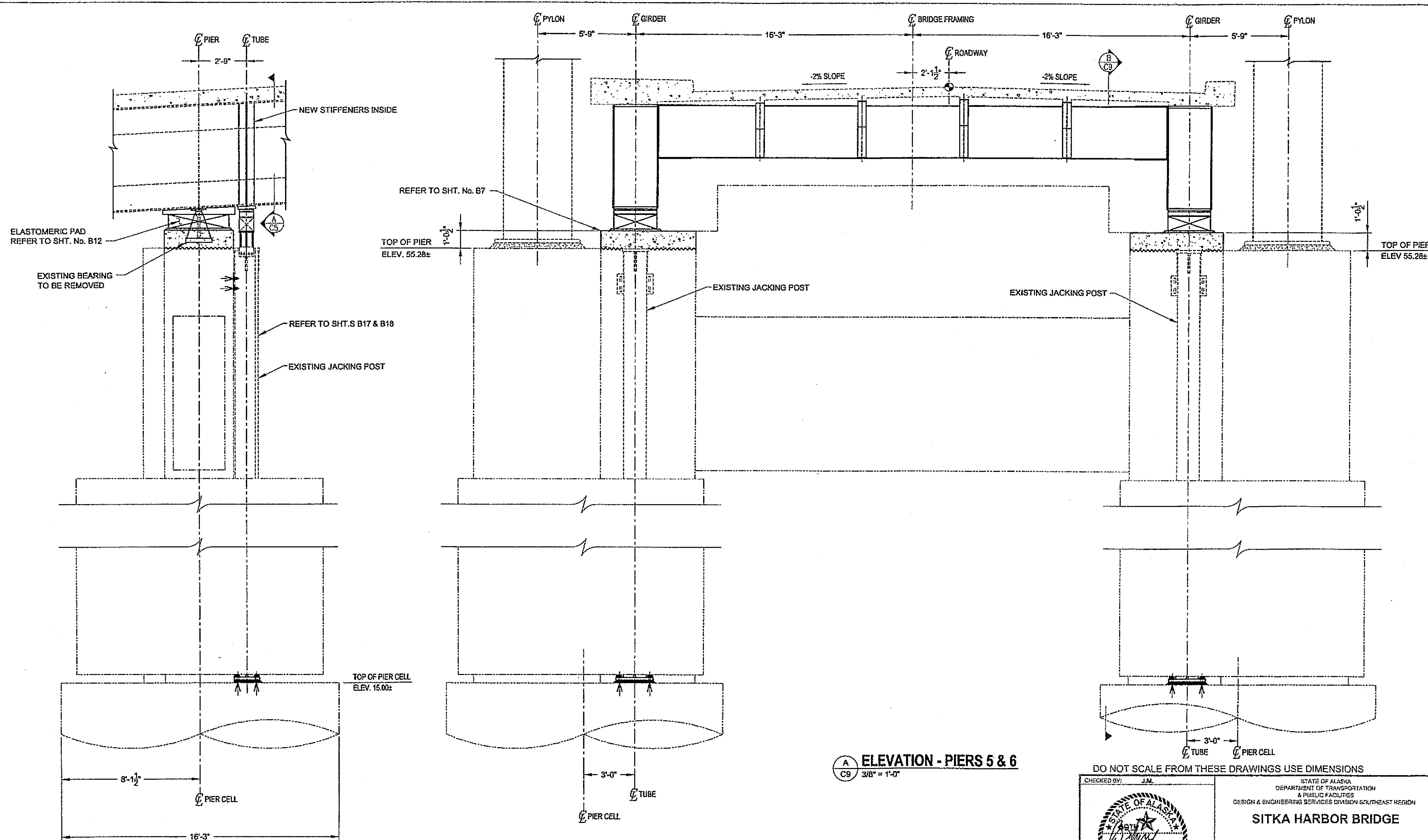
STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
& PUBLIC FACILITIES  
DESIGN & ENGINEERING SERVICES DIVISION/SOUTHEAST REGION

**SITKA HARBOR BRIDGE**

**BEARING REPLACEMENT PLAN  
MODIFICATIONS AT PIER 4 & 7**

Q-14 Q 10/18/12 STATE OF ALASKA SITKA HARBOR BRIDGE PHASE B DRAWINGS 39/2, B, S-2, SECTIONS.DWG  
LAB SHT-5 March 16, 2015

| NO. | DATE    | DESCRIPTION         | PROJECT DESIGNATION | YEAR | SHEET NO. | TOTAL SHEETS |
|-----|---------|---------------------|---------------------|------|-----------|--------------|
| B   | 7/23/07 | REVISED PER REQUEST | BH-099-3(16)/68945  | 2007 | C8        | 34           |



**B SIDE VIEW - PIERS 5 & 6**  
3/8" = 1'-0"

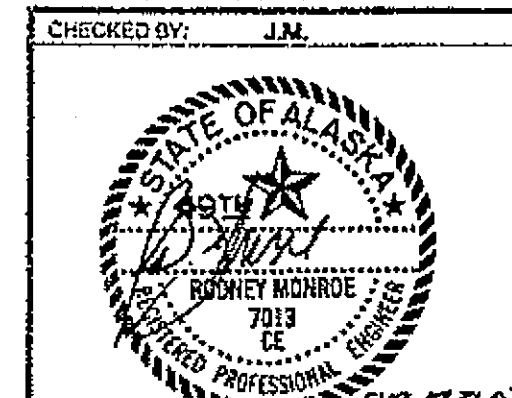
**A ELEVATION - PIERS 5 & 6**  
3/8" = 1'-0"

MAX. DESIGN LOAD AT JACKS = 920K AT PIERS 5 & 6

REFER TO SHEETS C2 & B2 FOR GENERAL NOTES AND SPECIFICATIONS

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
Proj. Eng. *[Signature]* Date 11-3-08

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



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

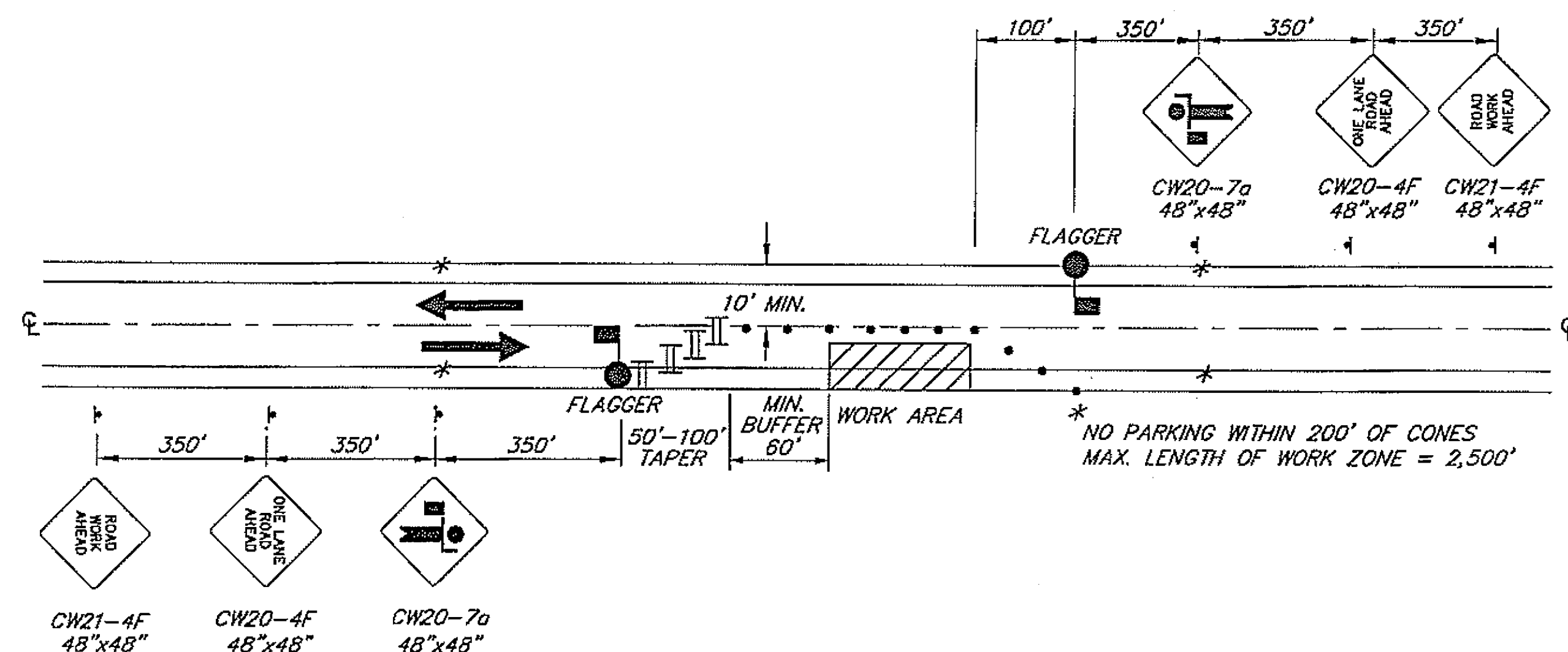
**SITKA HARBOR BRIDGE**

**BEARING REPLACEMENT PLAN  
MODIFICATIONS AT PIER 5 & 6**

|                     |                                         |                                 |               |                  |
|---------------------|-----------------------------------------|---------------------------------|---------------|------------------|
| DESIGNED BY: J.M.   | PROJECT DESIGNATION: BH-099-3(16)/68945 | YEAR: 2007                      | SHEET NO.: C9 | TOTAL SHEETS: 34 |
| DRAWN BY: J.W. N.T. |                                         |                                 |               |                  |
| DATE: 3/16/06       |                                         |                                 |               |                  |
| REVISIONS:          |                                         |                                 |               |                  |
| NO. 1               | DATE 3/16/06                            | DESCRIPTION REVISED PER REQUEST |               |                  |
| NO. 2               | DATE 7/21/07                            | FINISH                          |               |                  |

## TRAFFIC CONTROL NOTES

- IT IS THE INTENT OF THIS TRAFFIC CONTROL PLAN (TCP) TO ILLUSTRATE SOME, NOT ALL, OF THE TRAFFIC CONTROL SETUPS WHICH WILL BE REQUIRED ON THIS PROJECT. PLANS FOR CONFIGURATIONS NOT COVERED BY THE TCP SHALL BE CREATED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL. WHERE APPROPRIATE, THEY SHALL INCORPORATE APPLICABLE PORTIONS OF DETAILS ON THESE SHEETS.
- A MINIMUM OF ONE LANE SHALL BE MAINTAINED AT ALL TIMES, THROUGH ALL WORK AREAS.
- TEMPORARY DRIVING LANES SHALL HAVE A MINIMUM WIDTH OF 10'.
- CONSTRUCTION SIGNING SHALL BE IN PLACE ONLY WHEN THE CONDITIONS EXIST FOR WHICH THE SIGNS ARE INTENDED.
- FLOOD LIGHTS SHALL BE PROVIDED FOR FLAGGER STATIONS DURING NIGHT OPERATIONS.
- A SINGLE FLAGGER MAY BE APPROVED BY THE ENGINEER IF THE ENTIRE WORK AREA IS LESS THAN 350' AND VISIBLE FROM THE FLAGGER STATION.
- CHANNELIZATION DEVICES IF USED AT NIGHT SHALL BE LIT IN ACCORDANCE WITH THE ALASKA TRAFFIC MANUAL.
- PERMANENT CONSTRUCTION SIGNING SHALL BE ERECTED AT THE BRIDGE IF WORK AT THE SITE LASTS LONGER THAN TWO WEEKS.
- THE CONTRACTOR SHALL PROTECT PEDESTRIANS FROM FUMES, DUST, DEBRIS, OR WATER THAT ARE THE RESULT OF THIS CONSTRUCTION ACTIVITY.
- BICYCLE AND PEDESTRIAN TRAFFIC SHALL BE ACCOMMODATED ON THE BRIDGE SUCH THAT THEY ARE SAFELY ROUTED ACROSS THE BRIDGE DURING CONSTRUCTION. IF REQUIRED, ADDITIONAL TRAFFIC CONTROL DEVICES FOR BICYCLE TRAFFIC AND ANY ADDITIONAL DEVICES, INCLUDING FLAGGING, NOT SHOWN IN THIS SETUP SHALL BE SUBSIDIARY TO ITEM 643(2), TRAFFIC MAINTENANCE.
- WARNING LIGHTS SHALL BE USED TO MARK BARRICADES, PORTABLE BARRIERS OR ANY OTHER CHANNELIZING DEVICE AT NIGHT AS DIRECTED BY THE ENGINEER. THE FIRST DEVICE FACING THE DIRECTION OF TRAFFIC SHALL BE EQUIPPED WITH A FLASHING WARNING LIGHT, ALL OTHERS SHALL BE EQUIPPED WITH STEADY-BURN WARNING LIGHTS.



**TWO LANE ROAD - SINGLE LANE CLOSURE  
DOUBLE FLAGGER**

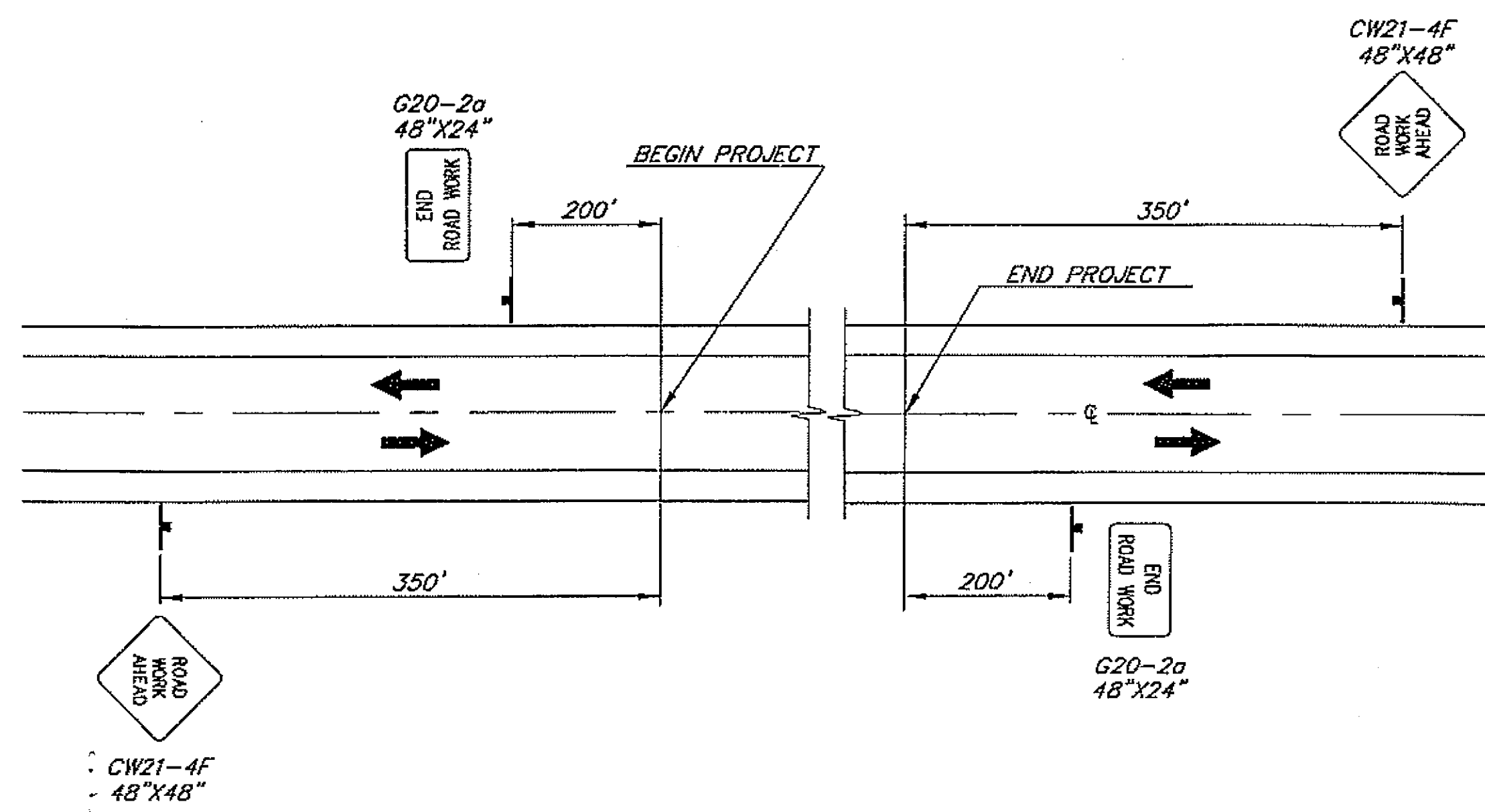
## LEGEND

- ..... SIGN
- ..... CONE
- ..... DRUM
- ..... TYPE III BARRICADE
- ..... FLAGGING STATION
- ..... HI-LEVEL WARNING DEVICE

NO PARKING WITHIN 200' OF CONES

$L = \frac{WS}{45}$  (45 MPH OR >)  
 $L = \frac{WS}{60}$  (40 MPH OR <)  
 WHERE:  
 L = LENGTH OF TAPER (FT)  
 W = WIDTH OF OFFSET (FT)  
 S = SPEED (MPH)

| TCP TABLE SETUP        |                    |                                 |
|------------------------|--------------------|---------------------------------|
| SPEED (MILES PER HOUR) | BUFFER/LENGTH (ft) | CONE/DRUM SPACING ON TAPER (ft) |
| 25                     | 155                | 25                              |
| 30                     | 200                | 30                              |
| 35                     | 250                | 35                              |
| 40                     | 305                | 40                              |
| 45                     | 360                | 45                              |
| 50                     | 425                | 50                              |
| 55                     | 495                | 55                              |
| 60                     | 570                | 60                              |



**PERMANENT CONSTRUCTION SIGNING**

PATH: C:\511\68945\TR\TCP2.dwg  
 Mon, 30/Jul/07 11:53AM djfagnant  
 PLOT:  
 PSPACE 1=1(F) OR WSPACE 1=1(F)  
 TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

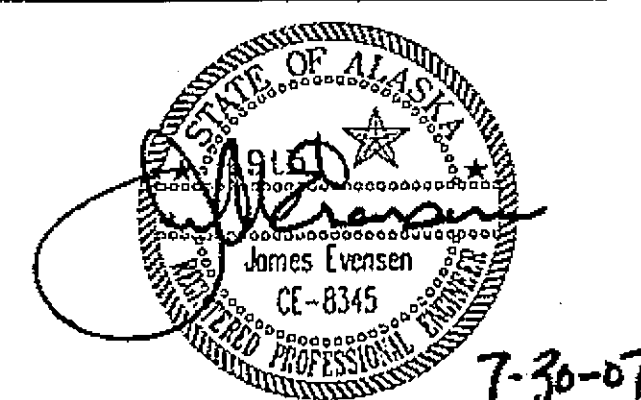
RECORD OF REVISIONS

| No. | DATE | DESCRIPTION |
|-----|------|-------------|
|     |      |             |
|     |      |             |

SIT-HARBOR BRIDGE  
 BEARING REPLACEMENT  
 PROJECT NO. 68945

**Traffic Control Plan**

DESIGNED BY: D. FAGNANT



CHECKED BY: C. MOREHOUSE

DRAWN/REVISED BY: D. STEVENS

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 SOUTHEAST REGION

SIT-HARBOR BRIDGE  
 BEARING REPLACEMENT

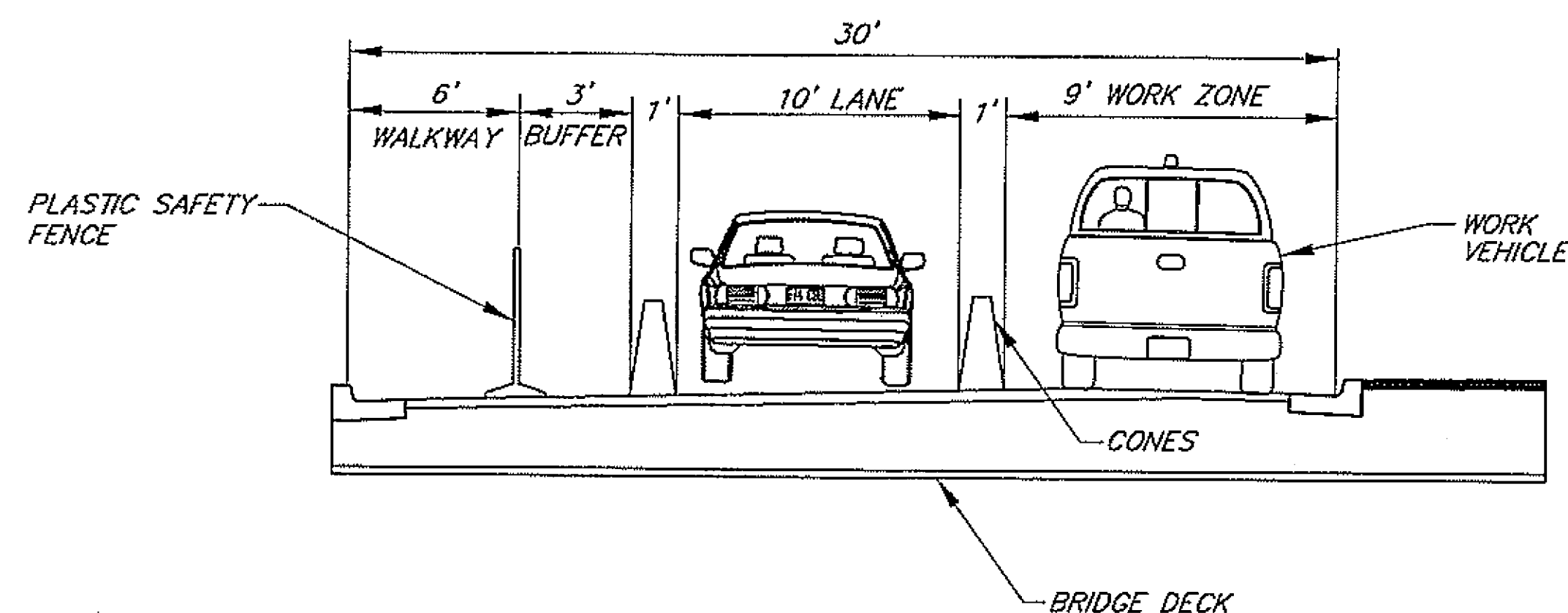
**Traffic  
Control Plan**

PROJECT DESIGNATION NUMBER

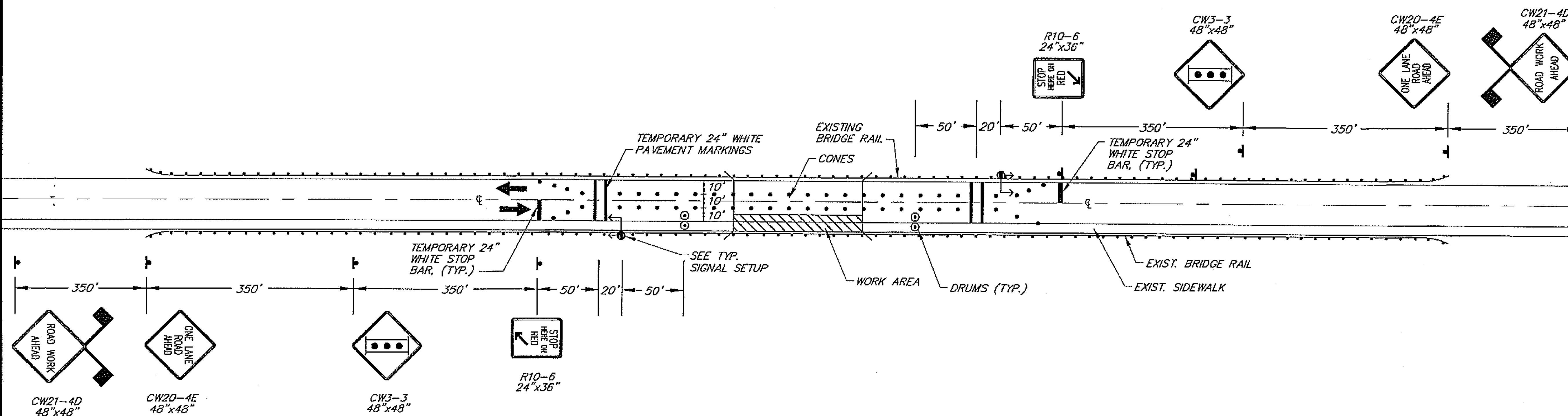
BH-099-3(17) ~ 68945

| STATE        | YEAR         |
|--------------|--------------|
| ALASKA       | 2007         |
| SHEET NUMBER | TOTAL SHEETS |
| D1           | 34           |

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
 Proj. Eng. *[Signature]* Date 11-3-08



**TYPICAL SECTION  
RIGHT SIDE CONSTRUCTION**



**RIGHT SIDE OF BRIDGE SIGNAL CONTROL**

**LEGEND**

- TEMPORARY SIGNAL
- CONSTRUCTION SIGN
- CONES
- PORTABLE WATER FILLED BARRIER
- HIGH LEVEL WARNING DEVICE
- WORK AREA

**NOTES**

1. IF FLAGGERS ARE USED INSTEAD OF A TRAFFIC SIGNAL, INSTALL CW20-7a (FLAGGER) 48" x 48" SIGNS IN PLACE OF THE CW3-3 (SIGNAL AHEAD) SIGNS.
2. FOR THE SITKA HARBOR BRIDGE, THE TEMPORARY SIGNAL SHALL BE PLACED ON EITHER END OF THE WORK ZONE, NOT AT EITHER END OF BRIDGE.
3. THE CONTRACTOR SHALL PROVIDE EMERGENCY VEHICLES WITH ACCESS THROUGH THE PROJECT AT ALL TIMES.
4. WORK ZONE LENGTH SHALL BE AT LEAST THE LENGTH OF THE TWO SPANS ADJACENT TO THE BEARINGS BEING REPLACED, BUT SHALL NOT EXCEED 600 FEET.
5. SEE PEDESTRIAN ACCESS DETAIL, SHEET D3 FOR RIGHT SIDE SIGNAL CONTROL.

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
Proj. Eng. Date 11-3-08

PATH: O:\SIT\68945\TR\TCP2.dwg  
Mon, 30/Jul/07 12:42PM djfagnant  
PLOT:  
PSPACE 1=1(F) OR MSPACE 1=1(F)  
TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

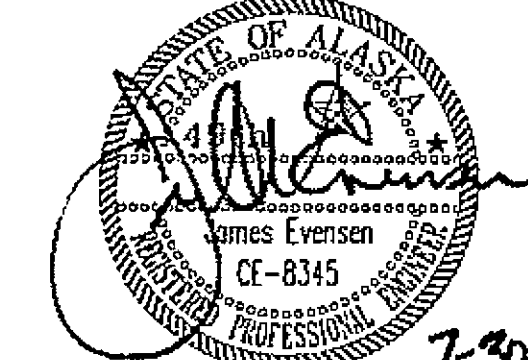
RECORD OF REVISIONS

| No. | DATE | DESCRIPTION |
|-----|------|-------------|
|     |      |             |
|     |      |             |

SIT-HARBOR BRIDGE  
BEARING REPLACEMENT  
PROJECT NO. 68945

**Traffic Control Plan**

DESIGNED BY: D. FAGNANT



CHECKED BY: C. MOREHOUSE

DRAWN/REVISED BY: D. STEVENS

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
& PUBLIC FACILITIES  
SOUTHEAST REGION

SIT-HARBOR BRIDGE  
BEARING REPLACEMENT

**Traffic  
Control Plan**

PROJECT DESIGNATION NUMBER

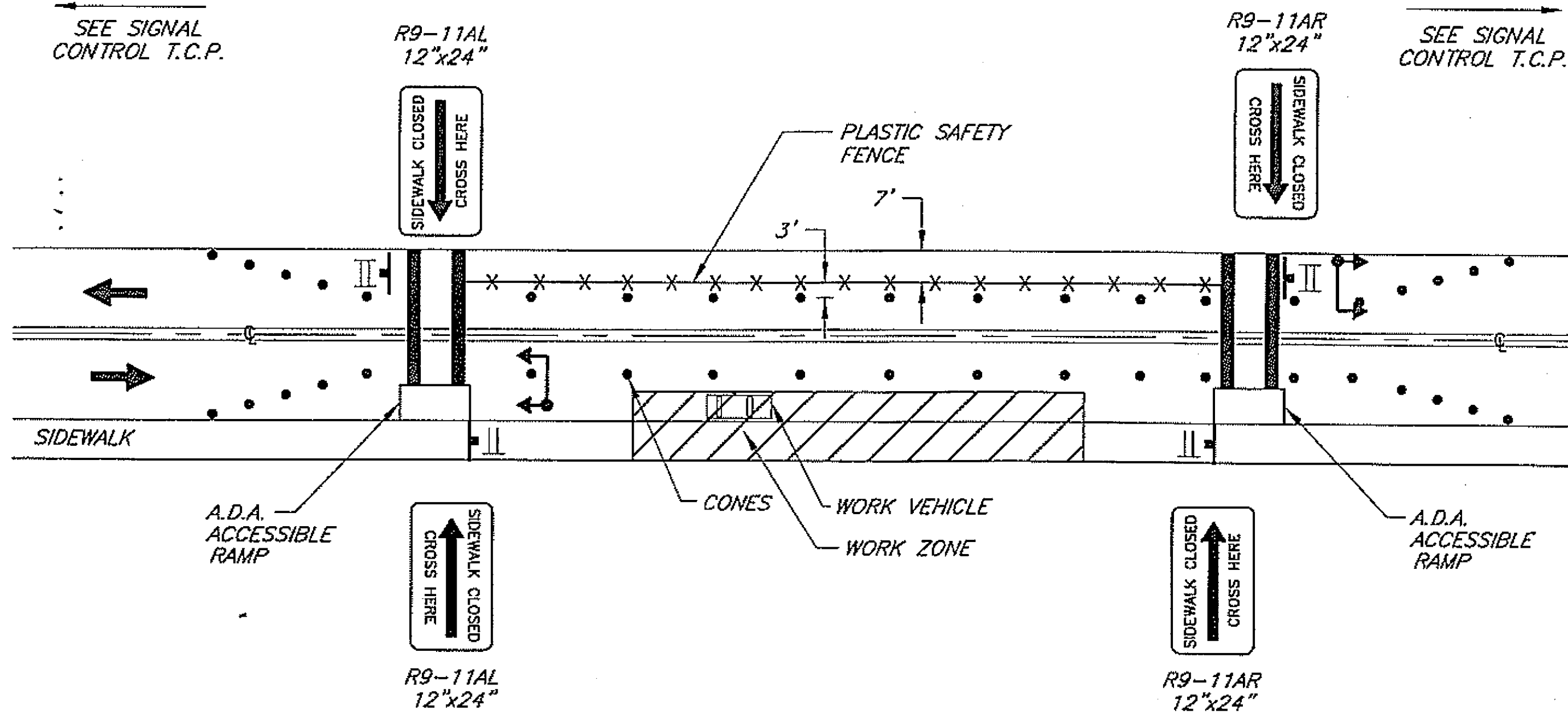
BH-099-3(17) - 68945

STATE YEAR

ALASKA 2007

SHEET NUMBER TOTAL SHEETS

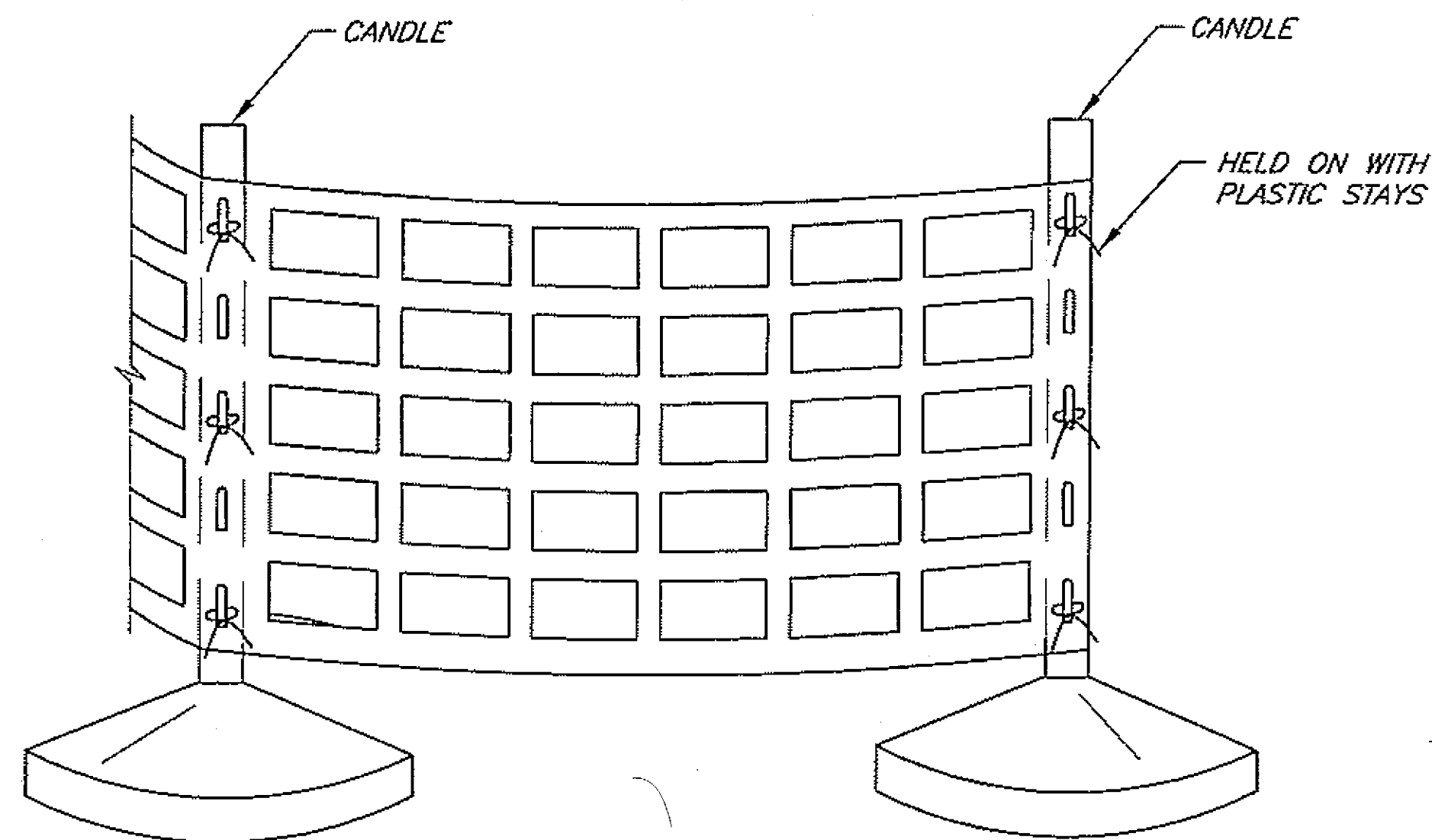
D2 34



PEDESTRIAN ACCESS DETAIL

NOTES

1. LANE WIDTH SHALL BE MEASURED FROM FACE OF CURB TO THE EDGE OF THE CONES OR BARRICADES (NOT THE CENTER OF CONES OR BARRICADES).
2. PEDESTRIAN ACCESS WIDTH SHALL BE MEASURED FROM THE FENCE TO THE EDGE OF THE DRUMS OR BARRICADES.
3. A.D.A. ACCESSIBILITY SHALL BE APPROVED BY THE ENGINEER PRIOR TO ANY TRAFFIC CONTROL ITEM BEING ACCEPTED FOR PAYMENT.
4. PEDESTRIAN SAFETY FENCE AND INSTALLATION DETAILS SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION. DETAILS SHOWN ON THIS DRAWING ARE FOR INFORMATION ONLY. THE CONTRACTOR MAY PROPOSE A SIMILAR SYSTEM FOR PEDESTRIAN SAFETY.



TYPICAL PLASTIC SAFETY FENCE

N.T.S.

LEGEND

- ..... SIGN
- ..... CONE
- ..... DRUM
- ..... TYPE II BARRICADE
- ..... FLAGGING STATION
- ..... TRAFFIC SIGNAL

NO PARKING WITHIN 200' OF CONES

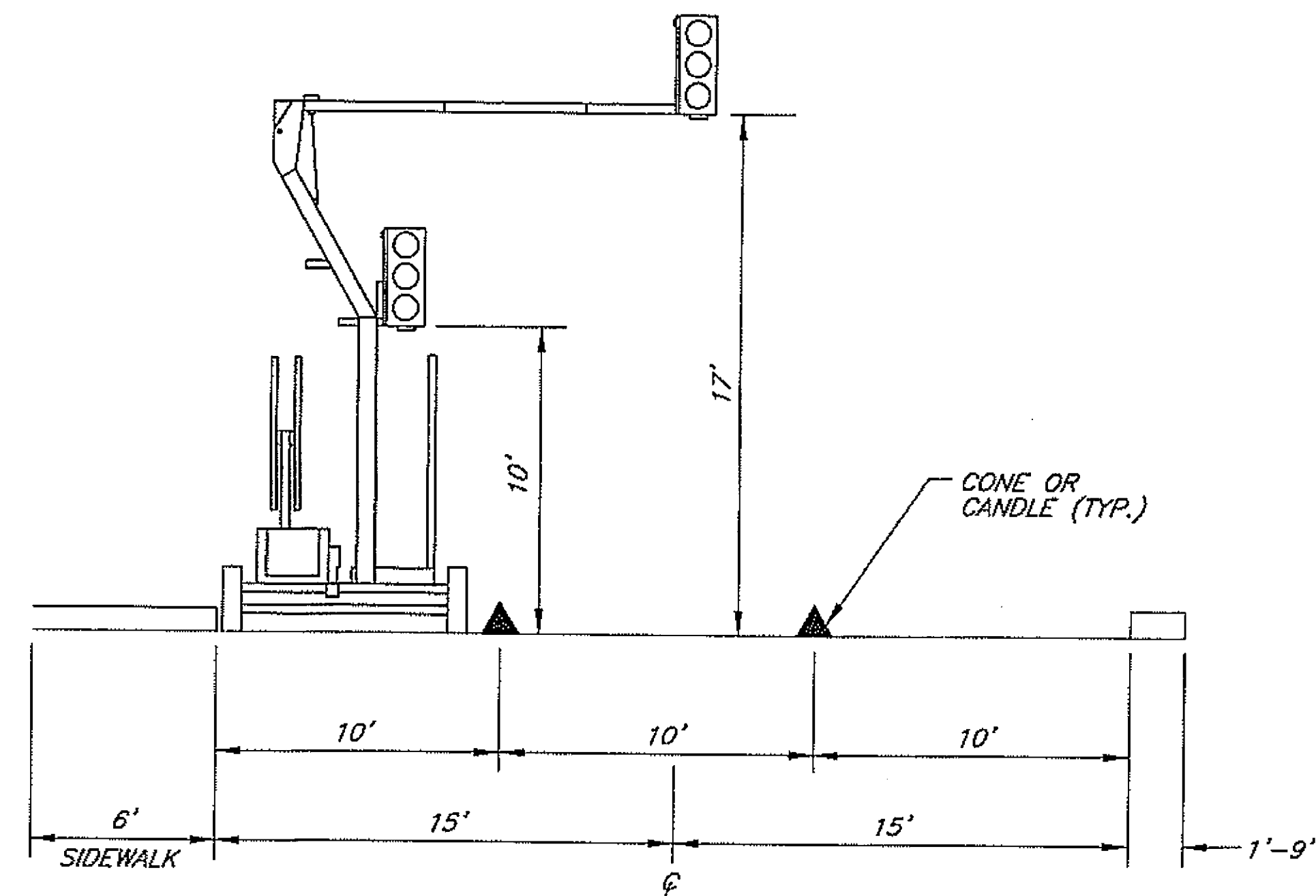
$$L = \frac{WS}{45} \text{ (45 MPH OR >)}$$

$$L = \frac{WS}{60} \text{ (40 MPH OR <)}$$

WHERE:  
 L = LENGTH OF TAPER (FT)  
 W = WIDTH OF OFFSET (FT)  
 S = SPEED (MPH)

TCP TABLE SETUP

| SPEED (MILES PER HOUR) | BUFFER/LENGTH (ft) | CONE/DRUM SPACING ON TAPER (ft) |
|------------------------|--------------------|---------------------------------|
| 25                     | 155                | 25                              |
| 30                     | 200                | 30                              |
| 35                     | 250                | 35                              |
| 40                     | 305                | 40                              |
| 45                     | 360                | 45                              |
| 50                     | 425                | 50                              |
| 55                     | 495                | 55                              |
| 60                     | 570                | 60                              |



TYPICAL TEMPORARY SIGNAL SETUP

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 PLOT: PSPACE 1=1(F) OR MSPACE 1=1(F)  
 TAB: TYPICALS

ADDENDUM NUMBER

ATTACHMENT NUMBER

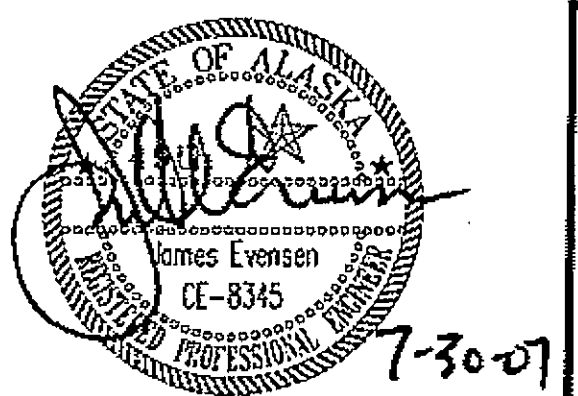
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|     |      |             |
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SIT-HARBOR BRIDGE  
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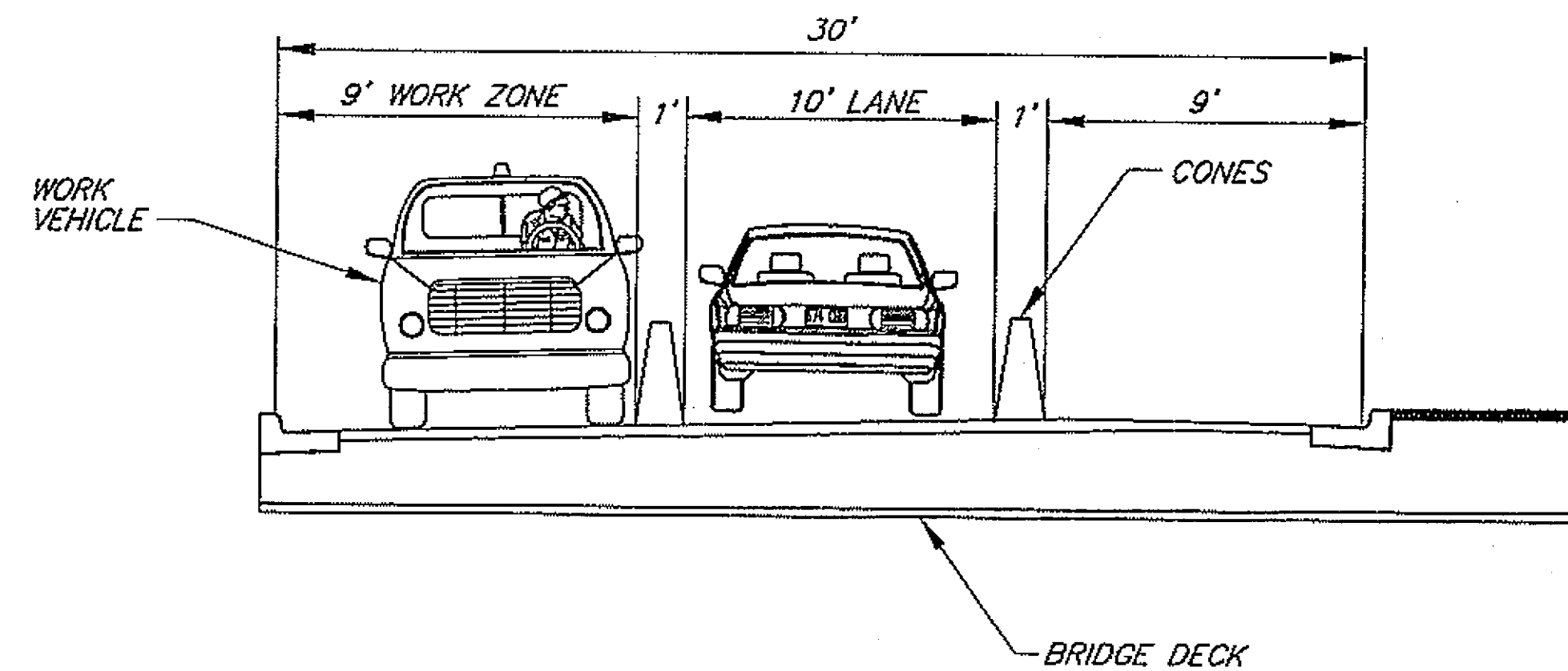
Traffic  
 Control Plan

PROJECT DESIGNATION NUMBER

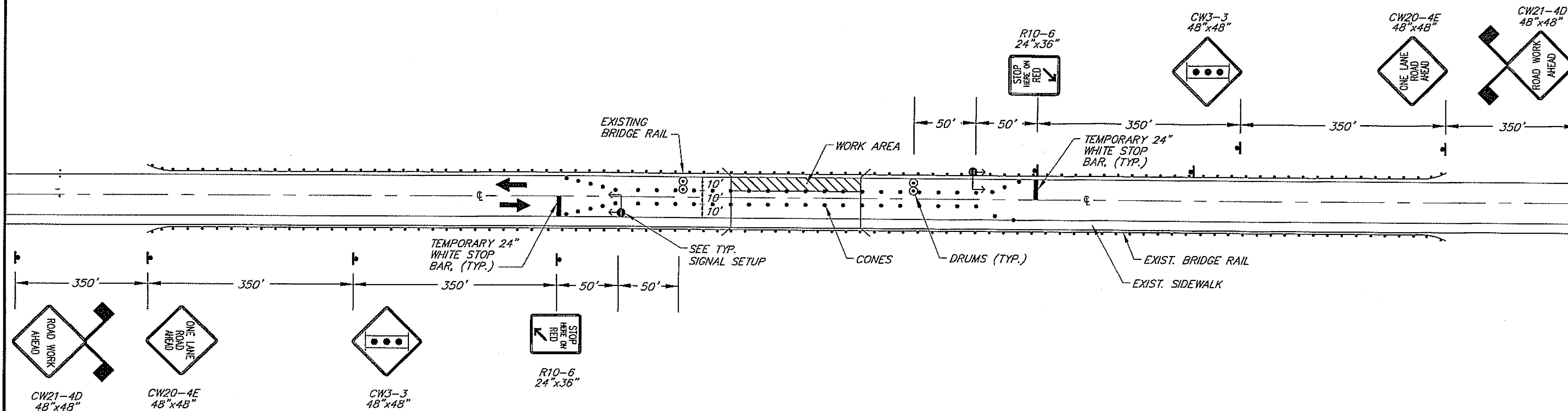
BH-099-3(17) ~ 68945

| STATE        | YEAR         |
|--------------|--------------|
| ALASKA       | 2007         |
| SHEET NUMBER | TOTAL SHEETS |
| D3           | 34           |

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.  
 Proj. Eng. [Signature] Date 11-2-09



**TYPICAL SECTION  
LEFT SIDE CONSTRUCTION**



**LEFT SIDE OF BRIDGE SIGNAL CONTROL**

**LEGEND**

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- CONSTRUCTION SIGN
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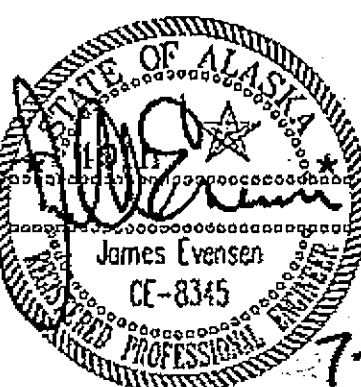
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SIT-HARBOR BRIDGE  
BEARING REPLACEMENT  
PROJECT NO. 68945

**Traffic Control Plan**

DESIGNED BY: D. FAGNANT



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STATE OF ALASKA  
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SIT-HARBOR BRIDGE  
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PROJECT DESIGNATION NUMBER

BH-099-3(17) ~ 68945

| STATE        | YEAR         |
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| SHEET NUMBER | TOTAL SHEETS |
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