

2 of 2

B-26922

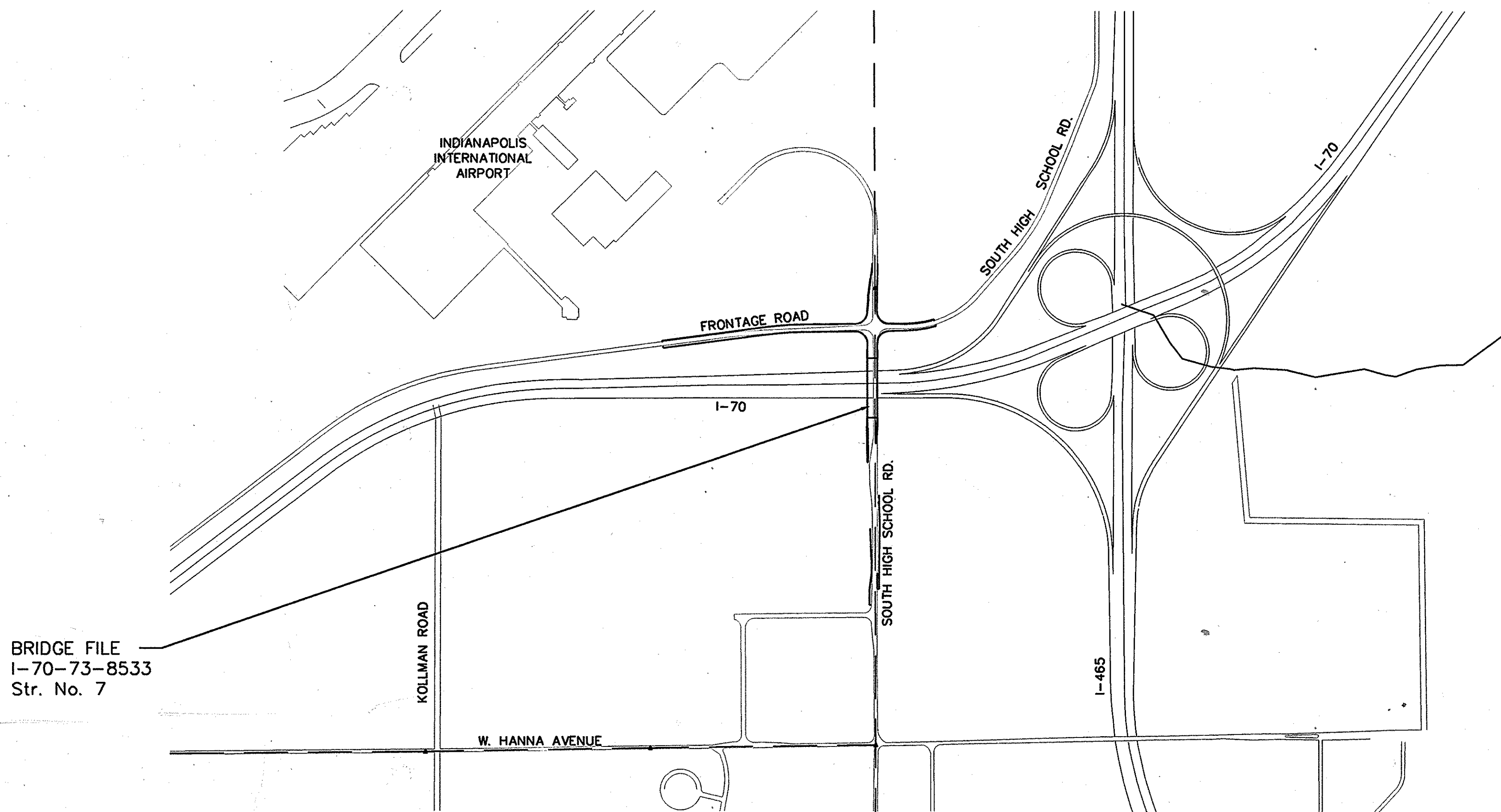
|             |              |
|-------------|--------------|
| PROJECT     | DESIGNATION  |
| IM-70-3 ( ) | 9910310      |
| CONTRACT    | BRIDGE FILE  |
| B-26922     | I-70-73-8533 |

| INDEX        |                                                     |                                               |      |                       |
|--------------|-----------------------------------------------------|-----------------------------------------------|------|-----------------------|
| STRUCTURE    | TYPE                                                | SPAN AND SKEW                                 | OVER | STATION               |
| I-70-73-8533 | COMPOSITE PRESTRESSED CONCRETE BULB TEE BEAM BRIDGE | 116'-6, 78'-9, 78'-9, 83'-0<br>SKEW 0°51' LT. | I-70 | 50+00.00<br>Line "HS" |
| SHEET NO.    | SUBJECT                                             |                                               |      |                       |
| 1            | INDEX AND TITLE SHEET                               |                                               |      |                       |
| 2            | BLANK SHEET                                         |                                               |      |                       |
| 3-5          | SOIL BORINGS                                        |                                               |      |                       |
| 6            | LAYOUT                                              |                                               |      |                       |
| 7            | PHASE 1 & 2 CONSTRUCTION                            |                                               |      |                       |
| 8            | GENERAL PLAN                                        |                                               |      |                       |
| 9-13         | BENT NO. 1 & 5 DETAILS                              |                                               |      |                       |
| 14-15        | BENT NO. 2, 3 & 4 DETAILS                           |                                               |      |                       |
| 16           | FRAMING PLAN                                        |                                               |      |                       |
| 17-20        | BEAM DETAILS                                        |                                               |      |                       |
| 21-28        | SUPERSTRUCTURE DETAILS                              |                                               |      |                       |
| 29           | APPROACH DETAILS                                    |                                               |      |                       |
| 30           | BRIDGE SUMMARY                                      |                                               |      |                       |

INDIANA  
DEPARTMENT OF  
TRANSPORTATION

BRIDGE PLANS  
FOR SPANS OVER 20 FEET  
ROUTE: HIGH SCHOOL ROAD  
PROJECT NO. IM-70-3 ( ) P.E.  
IM-70-3 ( ) R/W  
IM-70-3 ( ) CONST.

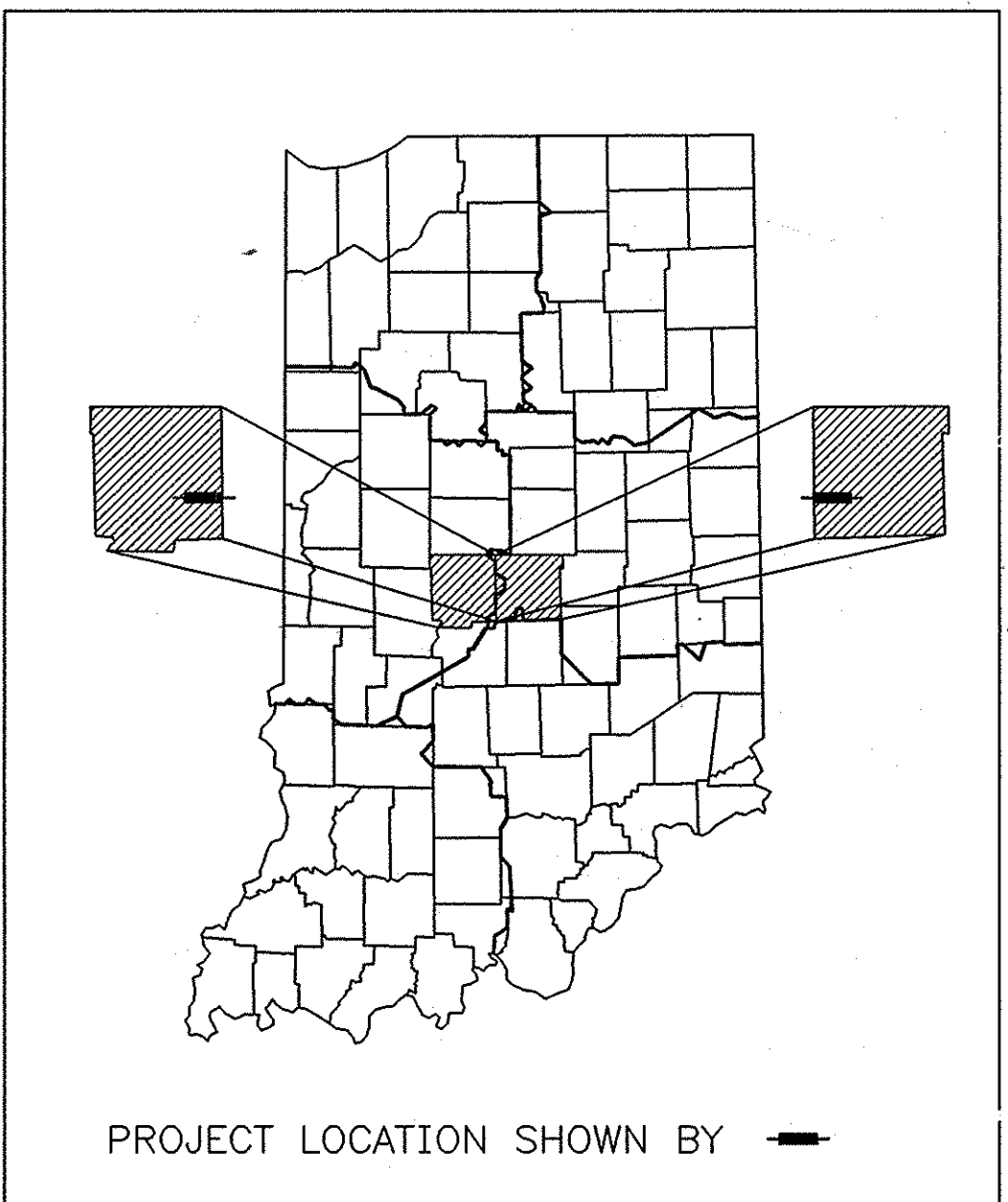
BEGINNING AT A POINT ON HIGH SCHOOL ROAD APPROXIMATELY 2750 FEET NORTH OF THE SOUTH SECTION LINE OF SECTION 25 AND EXTENDING SOUTH A DISTANCE OF 1650 FEET TO A POINT ON HIGH SCHOOL ROAD APPROXIMATELY 1100 FEET NORTH OF THE SOUTH SECTION LINE OF SECTION 25, ALL BEING IN SECTIONS 25 & 26, T15N, R2E, DECATUR TOWNSHIP, MARION COUNTY, INDIANA.



BRIDGE FILE  
I-70-73-8533  
Str. No. 7

VICINITY MAP  
DECATUR TOWNSHIP - MARION COUNTY

| TRAFFIC DATA              | HIGH SCHOOL ROAD              |
|---------------------------|-------------------------------|
| A.A.D.T. (2003)           | 7800 V.P.D.                   |
| A.A.D.T. (2023)           | 9310 V.P.D.                   |
| D.H.V. (2023)             | 931 V.P.H.                    |
| TRUCKS                    | 39% (S)/61% (N)<br>15% D.H.V. |
| ESAL'S                    |                               |
| DESIGN DATA               |                               |
| DESIGN SPEED              | 45 M.P.H.                     |
| PROJECT DESIGN CRITERIA   | RECONSTRUCTION (NON-FREEWAY)  |
| FUNCTIONAL CLASSIFICATION | PRINCIPAL ARTERIAL            |
| RURAL/URBAN               | URBAN (INTERMEDIATE)          |
| TERRAIN                   | LEVEL                         |
| ACCESS CONTROL            | NONE                          |



|                  |             |
|------------------|-------------|
| BRIDGE LENGTH :  | 0.068 Miles |
| ROADWAY LENGTH : | 0.00 Miles  |
| TOTAL LENGTH :   | 0.068 Miles |
| MAX. GRADE :     | +4.6 %      |

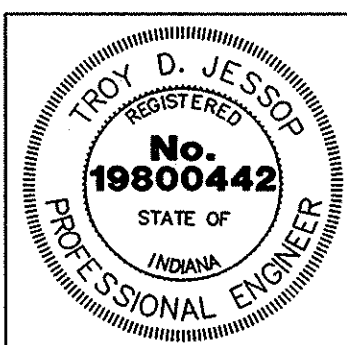


INDIANA DEPARTMENT OF TRANSPORTATION  
STANDARD SPECIFICATIONS DATED 1999  
TO BE USED WITH THESE PLANS

| REVISIONS |                                |
|-----------|--------------------------------|
| DATE      | SHEET NO.                      |
| 6-17-03   | 1, 6, 8, 15, 20, 26-30 Revised |
| 9-28-03   | 1, 9A, 10A, 11A, 13A, 13B      |

FEDERAL HIGHWAY ADMINISTRATION  
U.S. DEPT. OF TRANSPORTATION  
APPROVED: \_\_\_\_\_ DATE \_\_\_\_\_  
DIVISION ADMINISTRATOR

PLANS  
PREPARED BY: R.W. ARMSTRONG & ASSOC, INC. 317-786-0461  
PHONE NUMBER  
CERTIFIED BY: *Troy D. Jessop* 5-13-03 DATE  
APPROVED: *Phyllis W. Kleck* 6/10/2003 DATE  
FOR LETTING: CHIEF, DIVISION OF DESIGN



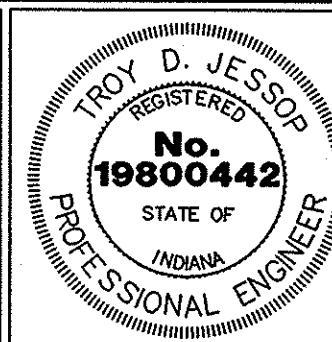
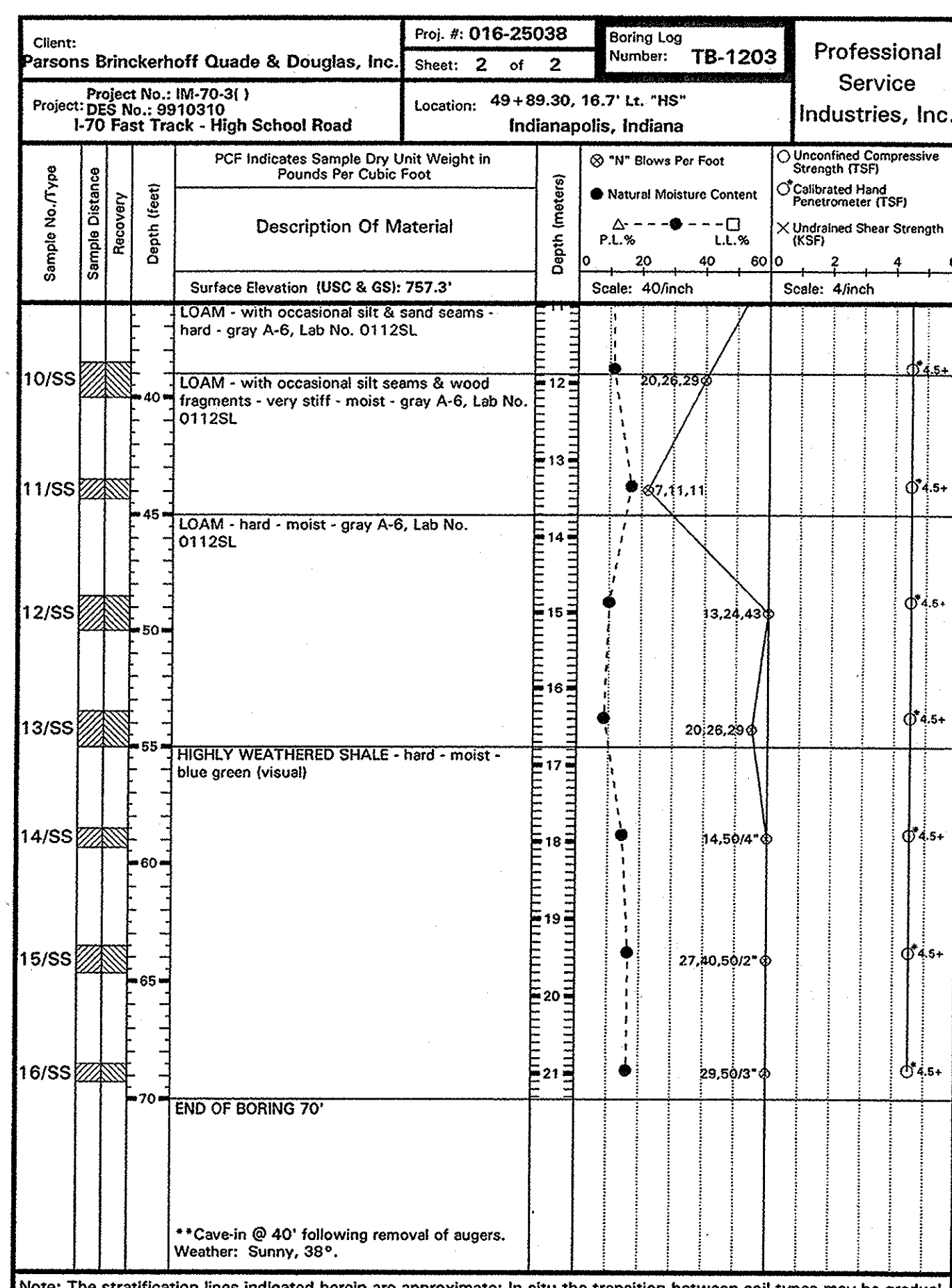
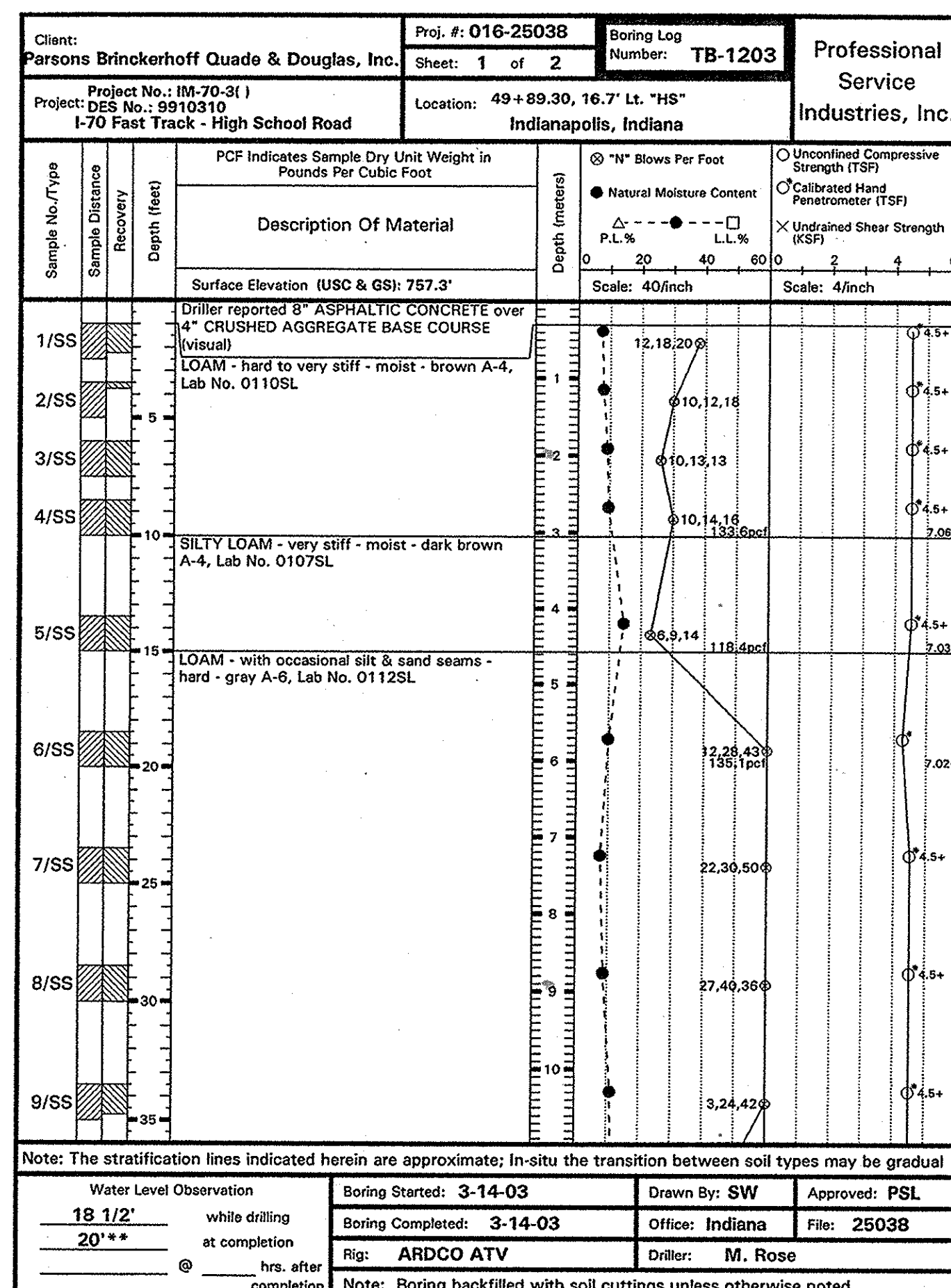
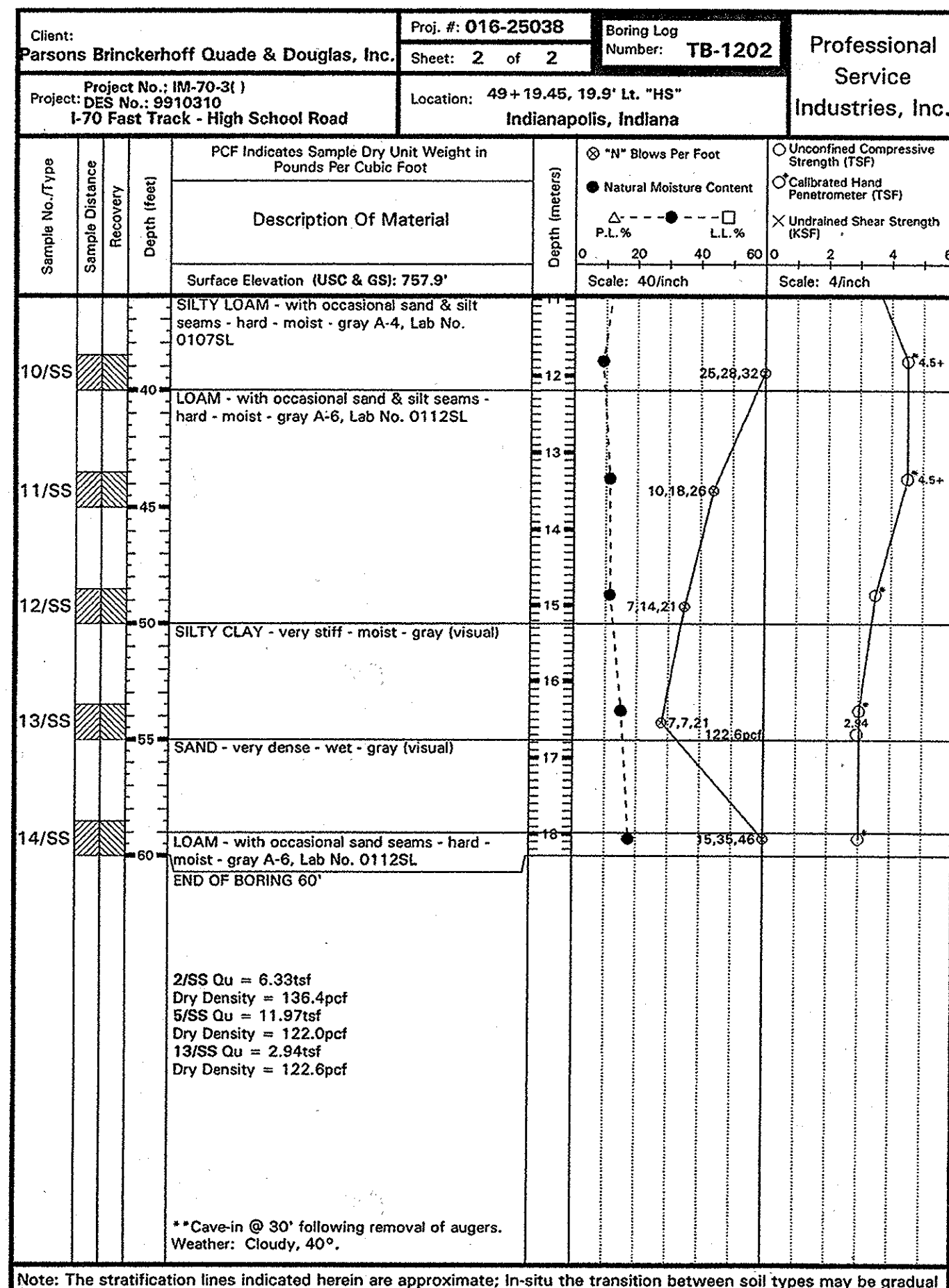
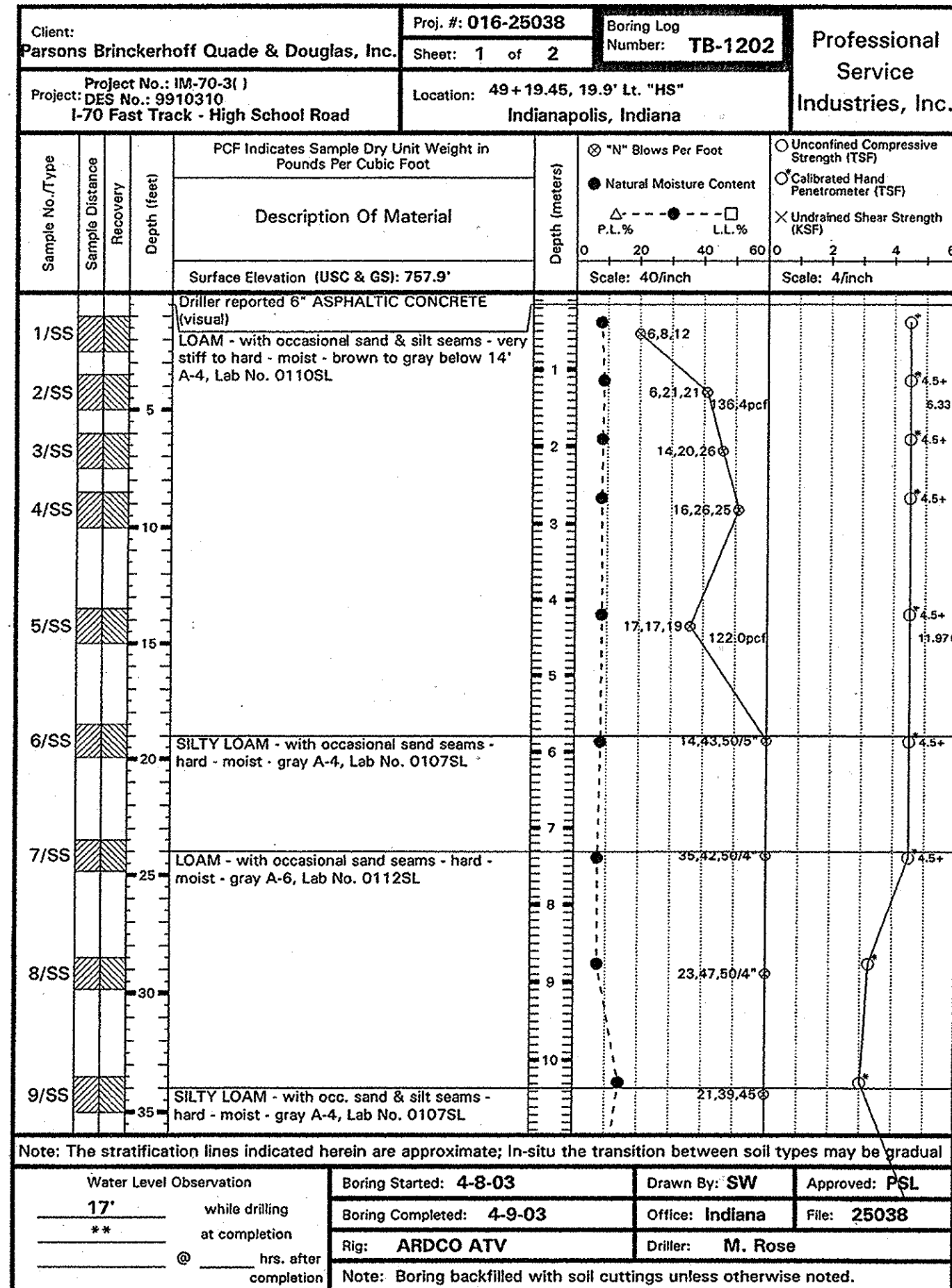
|             |              |
|-------------|--------------|
| BRIDGE FILE | I-70-73-8533 |
| DESIGNATION | 9910310      |
| SHEETS      | 1 of 30      |
| CONTRACT    | B-26922      |
| PROJECT     | IM-70-3 ( )  |

XREFERENCES  
FILE NAME : P:\Design\Bridges\8533\Plans\70-TIT-8533.dwg  
MRD\INT : 13-MAY-03, 15:21:16 / SJM









RECOMMENDED FOR APPROVAL: *Tup Jap* 5-13-03  
DESIGN ENGINEER DATE

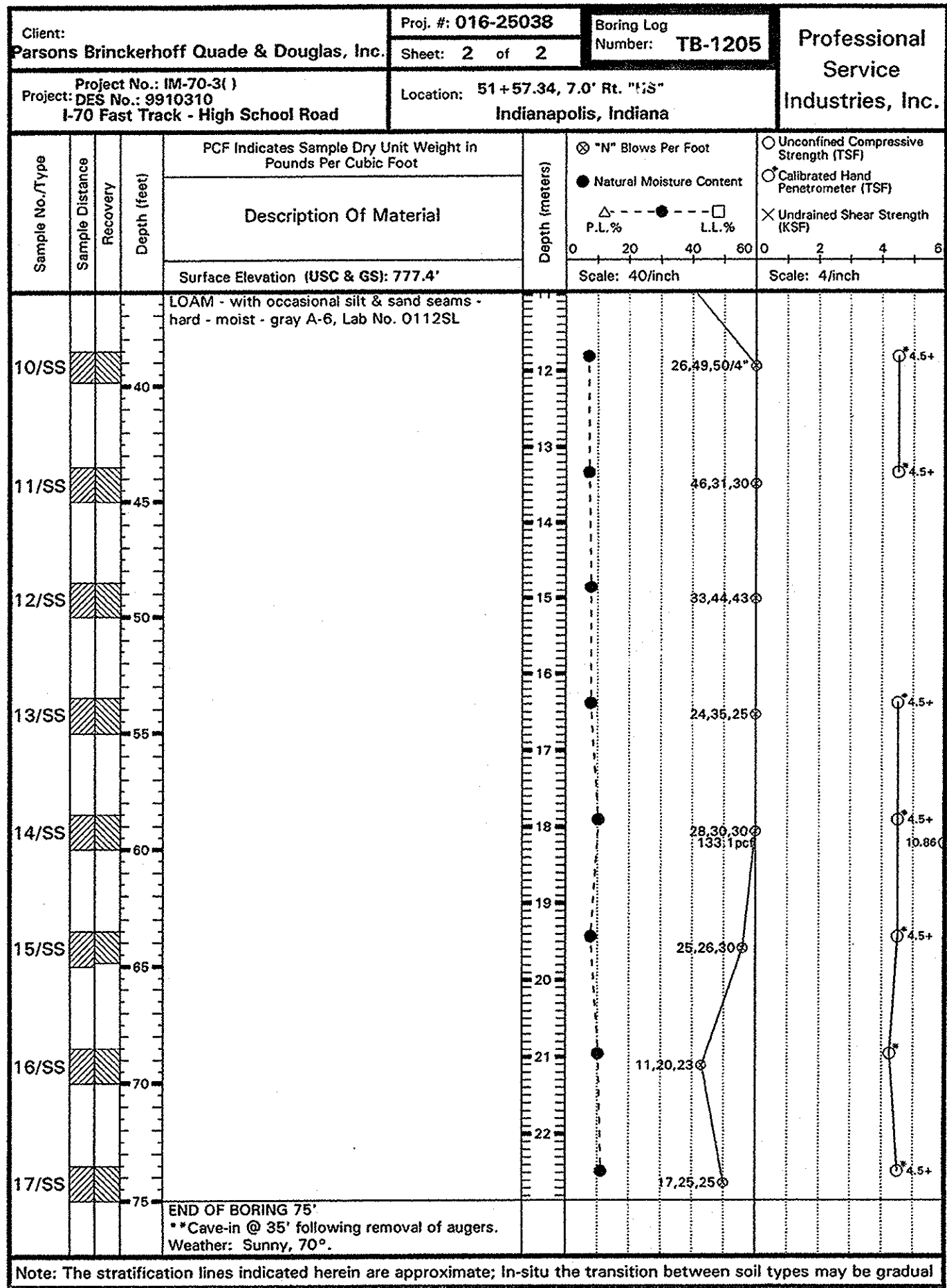
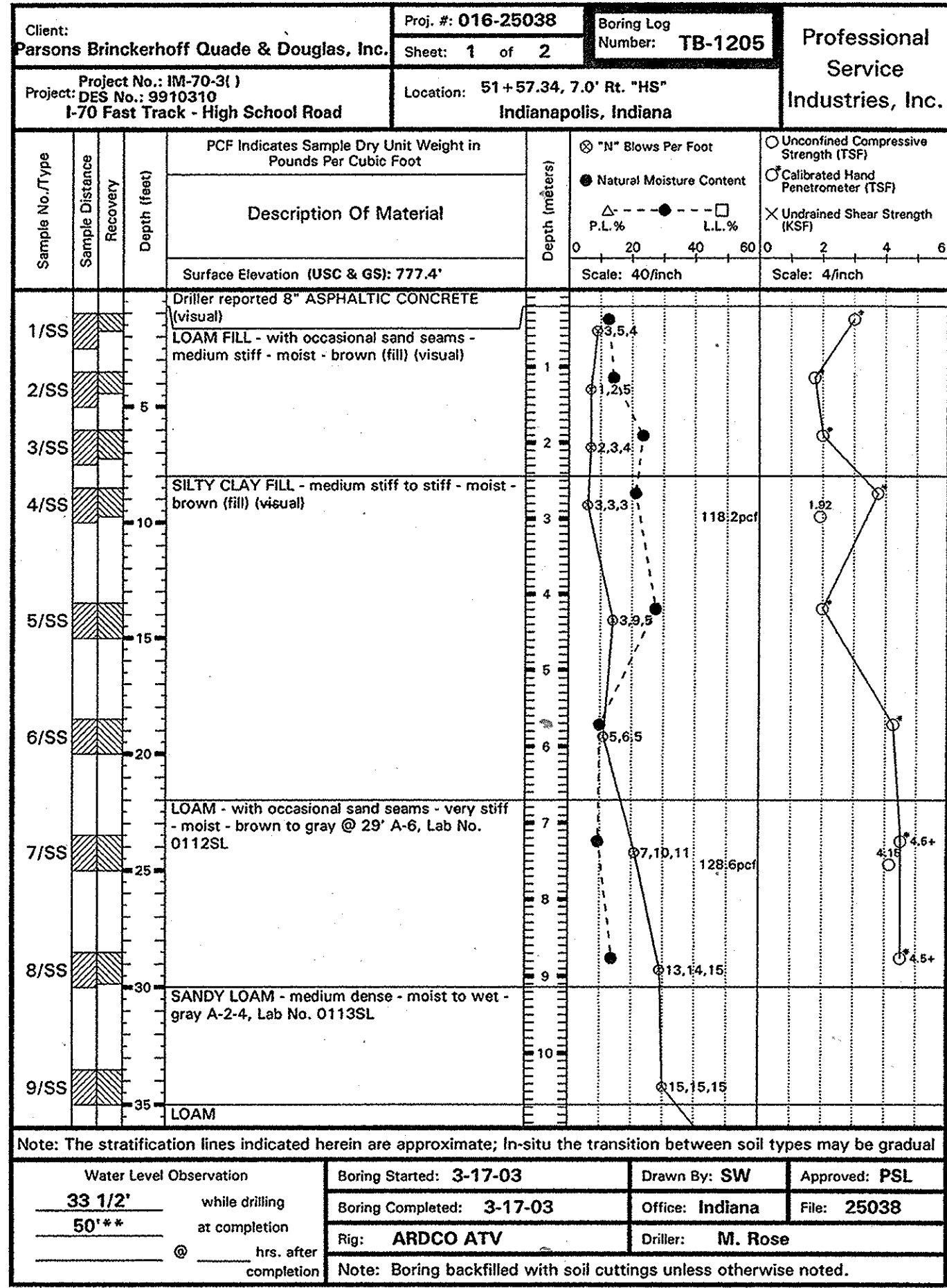
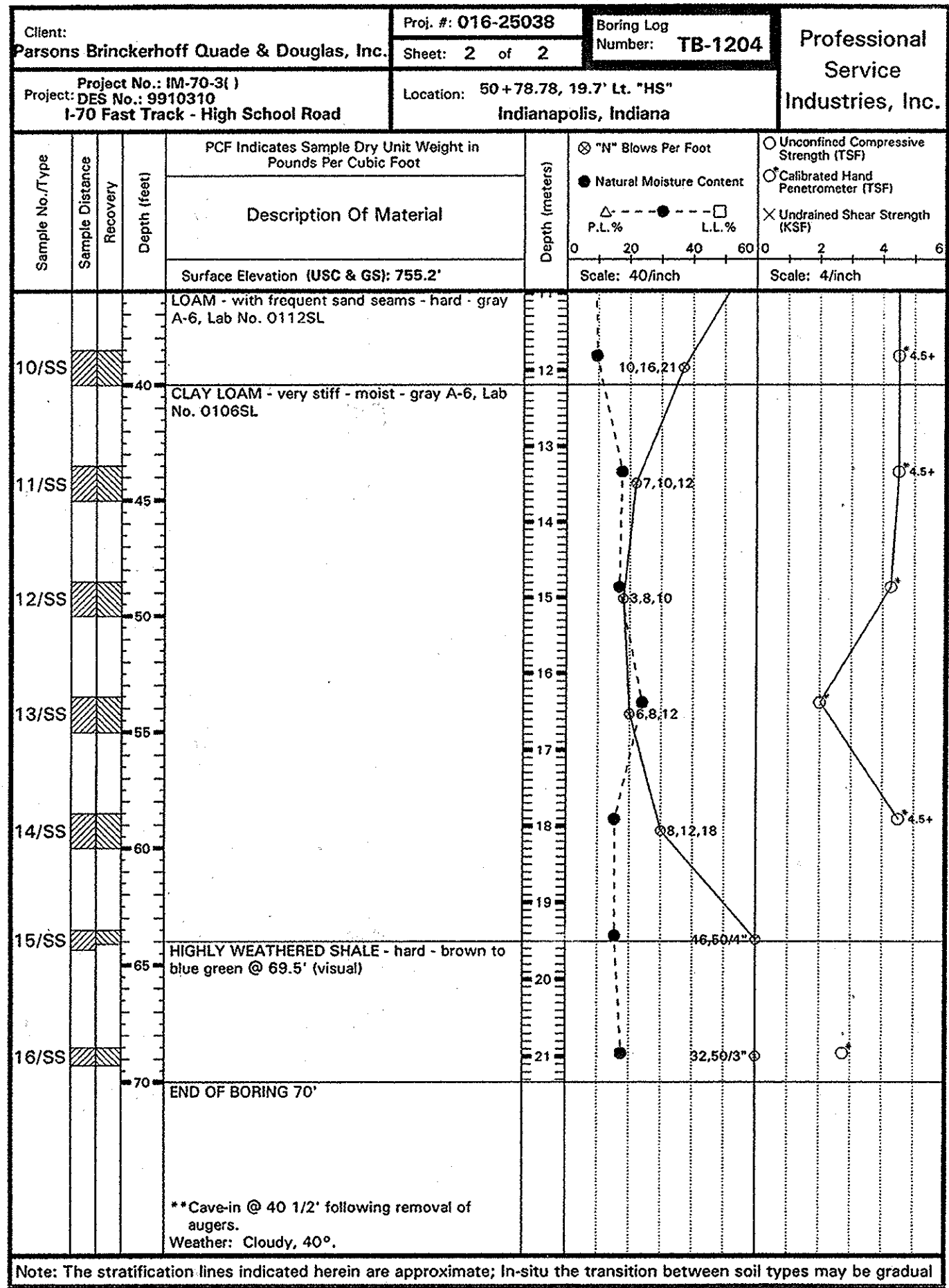
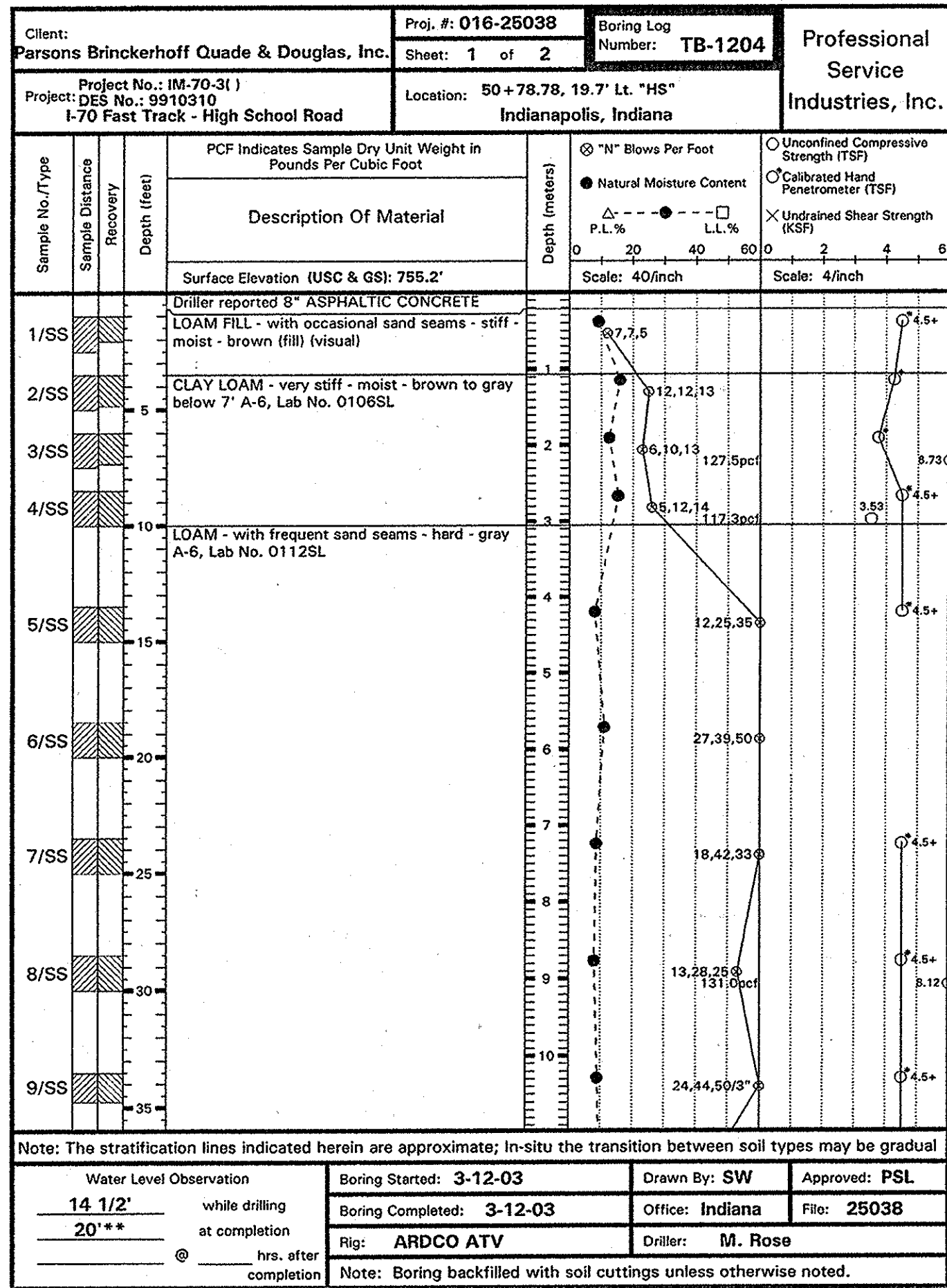
DESIGNED: TDJ DRAWN: SJM  
CHECKED: MHZ CHECKED: TDJ

INDIANA  
DEPARTMENT OF TRANSPORTATION

SOIL BORINGS

|              |              |
|--------------|--------------|
| SCALE        | BRIDGE FILE  |
| 3/8" = 1'-0" | I-70-73-8533 |
| UNLESS NOTED | DESIGNATION  |
|              | 9910310      |
| SURVEY BOOK  | SHEETS       |
|              | 4 of 30      |
| CONTRACT     | PROJECT      |
| B-26922      | IM-70-3 ( )  |

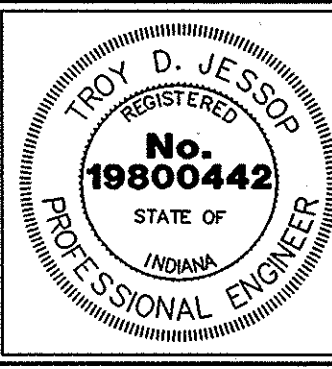




| Location                      | Bent No.1                                  | Bent Nos. 2,3&4 | Bent No.5 |
|-------------------------------|--------------------------------------------|-----------------|-----------|
| Design Load (Tons)            | 110                                        | 110             | 110       |
| Factor of Safety              | 2                                          | 2               | 2         |
| Factored Design Loads (Tons)  | 220                                        | 220             | 220       |
| Friction in Scour Zone (Tons) | N/A                                        | N/A             | N/A       |
| Down Drag Friction (Tons)     | N/A                                        | N/A             | N/A       |
| Ultimate Load (Tons)          | 220                                        | 220             | 220       |
| Testing Method                | by PDA, Standard Specifications 701.06 (c) |                 |           |

Note:  
1 PDA Test Pile is Required at Bent No.1 and 1 PDA Test Pile is Required at Either Bent No.2, Bent No.3 or Bent No.4.

REFERENCES: TITLE: P:\Design\Bridges\8533\Plans\8533-SOIL BORINGS-3.dwg  
FILE NAME: 13-MAY-03, 13:59:59 / LDW  
MRD\INT



RECOMMENDED FOR APPROVAL: TDP TDP 5-13-03  
DESIGN ENGINEER DATE

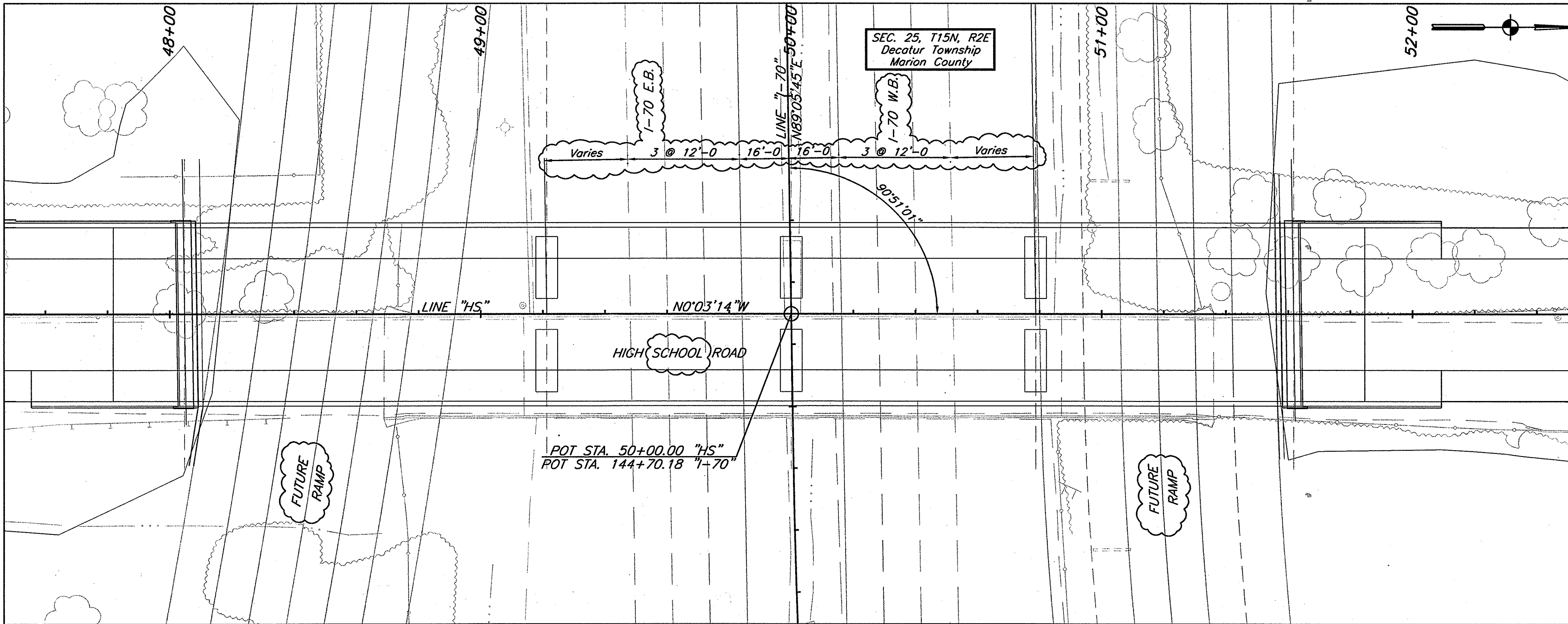
DESIGNED: TDJ DRAWN: SJM  
CHECKED: MHZ CHECKED: TDJ

INDIANA  
DEPARTMENT OF TRANSPORTATION

SOIL BORINGS

| SCALE        | BRIDGE FILE  |
|--------------|--------------|
| 3/8" = 1'-0" | I-70-73-8533 |
| UNLESS NOTED | DESIGNATION  |
|              | 9910310      |
| SURVEY BOOK  | SHEETS       |
|              | 5 of 30      |
| CONTRACT     | PROJECT      |
| B-26922      | IM-70-3 ( )  |

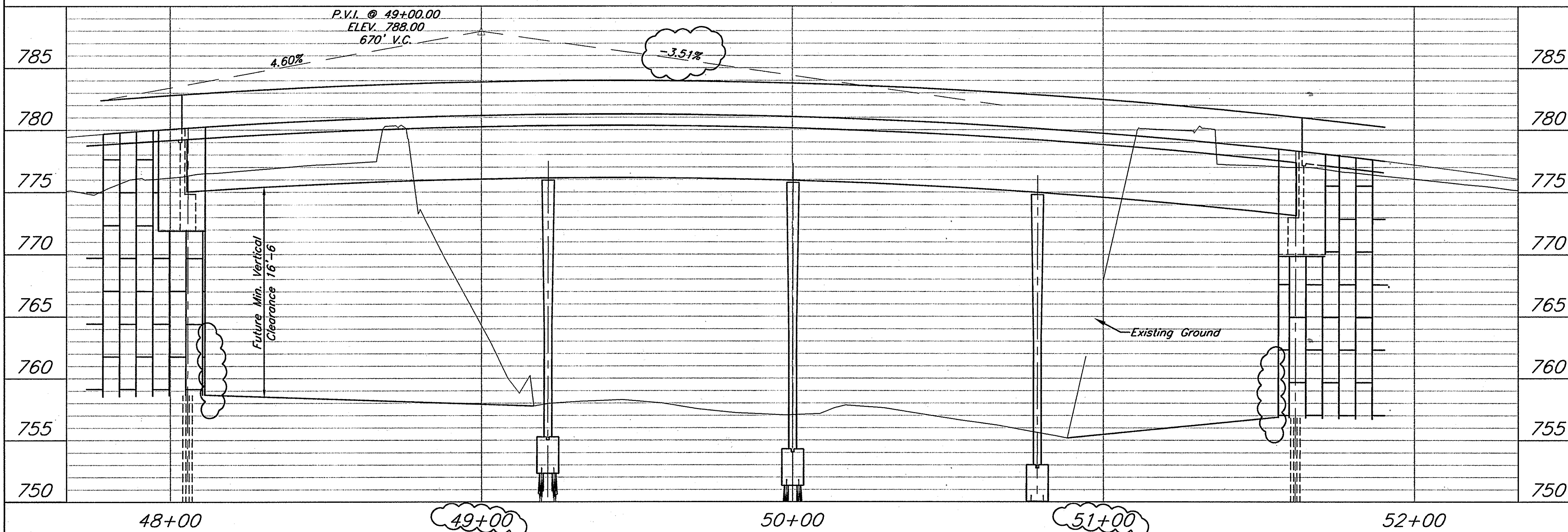




**UTILITIES**  
 "SEE ROAD PLANS, CONTRACT B-26922"  
 Project No. IM-70-3 ( )

**PRESENT STRUCTURE**  
 4 span R.C. Girder & Continuous Steel Beam Bridge.

**EARTHWORK SUMMARY**  
 Foundation Excavation, Unclassified 150.0 cys.



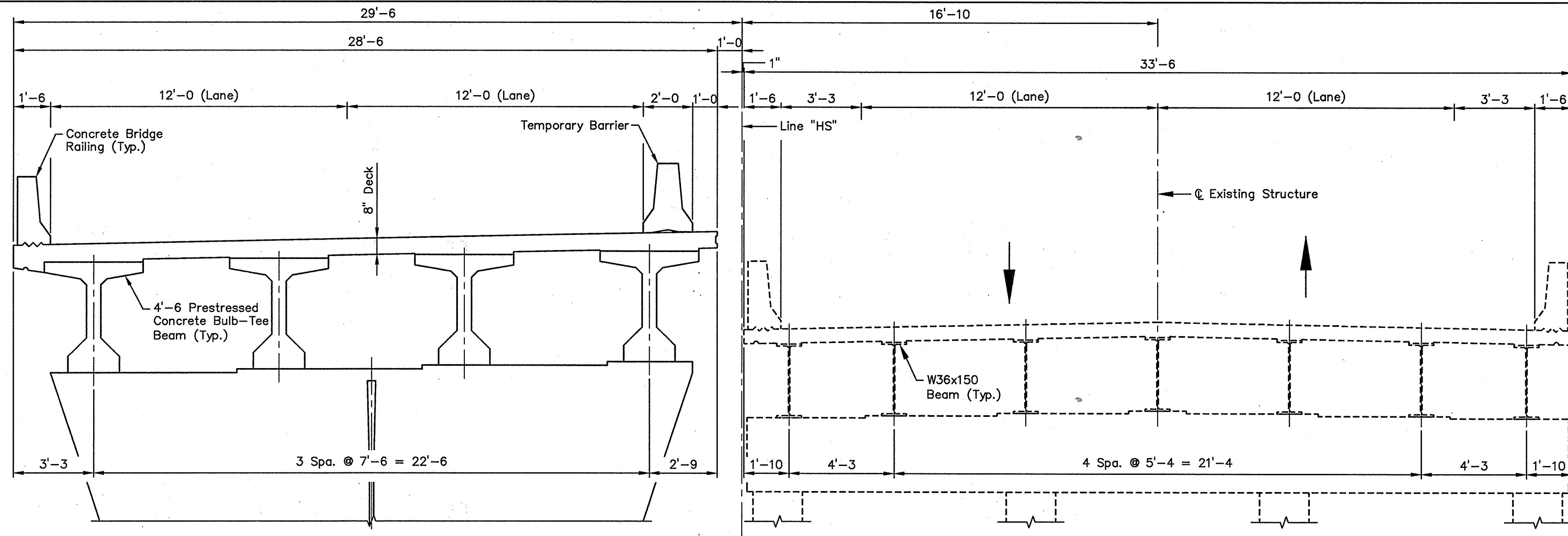
NOTE:  
 For Survey Notes, See Road Plans, Contract B-26922

**CONTINUOUS COMPOSITE PRESTRESSED  
 CONCRETE BULB-TEE BEAM BRIDGE**  
 4 SPANS: 116'-6, 78'-9, 78'-9, 83'-0  
 SKEW: 0°51'01" Lt., 56'-0 CLEAR ROADWAY,  
 OVER I-70 ON HIGH SCHOOL ROAD IN MARION COUNTY

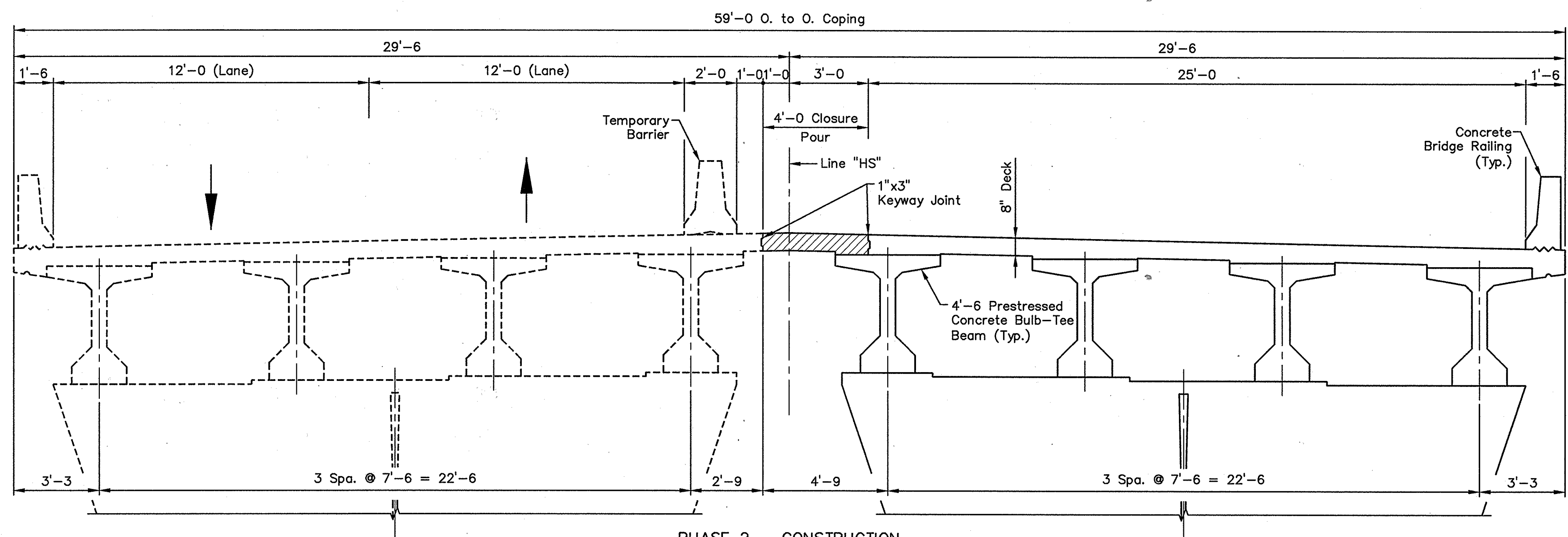
|                                                         |  |                                                                        |                                         |  |                              |                                  |
|---------------------------------------------------------|--|------------------------------------------------------------------------|-----------------------------------------|--|------------------------------|----------------------------------|
| Revision $\Delta$ 6/17/03 Clouded areas show revisions. |  | RECOMMENDED FOR APPROVAL <i>T.D.J.</i> 6-17-03<br>DESIGN ENGINEER DATE | INDIANA<br>DEPARTMENT OF TRANSPORTATION |  | HORIZONTAL SCALE<br>1" = 20' | BRIDGE FILE<br>I-70-73-8533      |
|                                                         |  | DESIGNED: MP DRAWN: SJM<br>CHECKED: TDJ CHECKED: MP                    | LAYOUT                                  |  | VERTICAL SCALE<br>1" = 5'    | DESIGNATION<br>9910310           |
|                                                         |  |                                                                        |                                         |  | SURVEY BOOK<br>6 of 30       | SHEETS<br>PROJECT<br>IM-70-3 ( ) |

REFERENCES : PL-PR-TIT, hm8eop 05-08-03, HGHTOPD, San Sewer, Line-HS;  
 FILE NAME : P:\Design\Bridges\8533\Plans\8533-LAYOUT.dwg  
 MRD\INT : 12-JUN-03, 12:38:11 / SJM





**PHASE 1 - CONSTRUCTION**  
 1. Traffic to Remain on Existing Structure  
 2. Construct the South Bound of Proposed Bridge as Shown

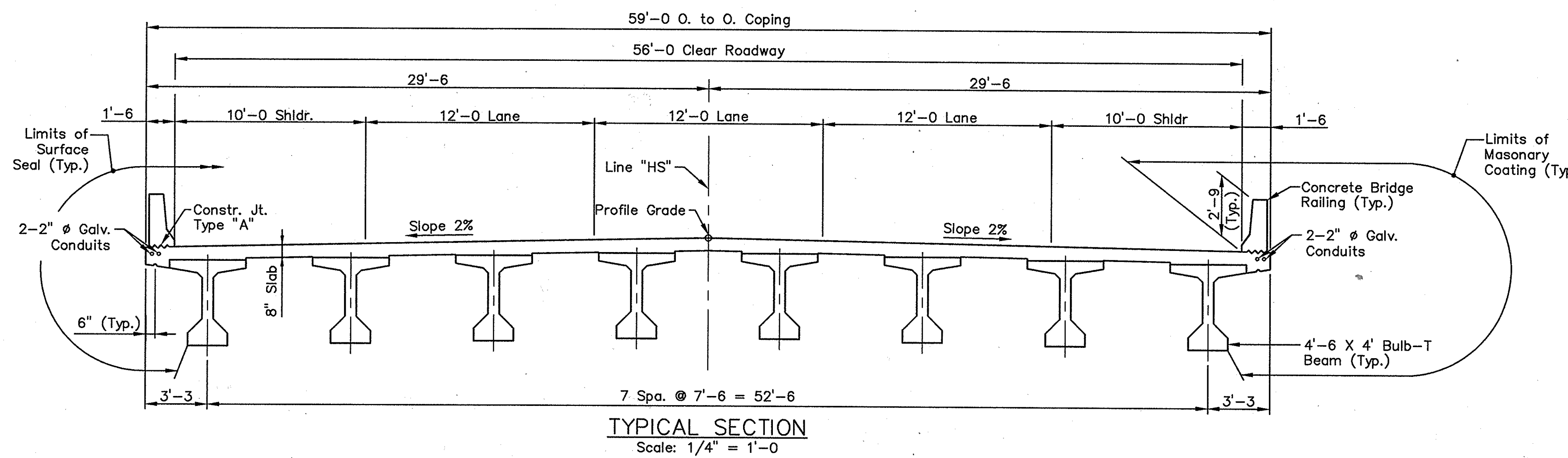
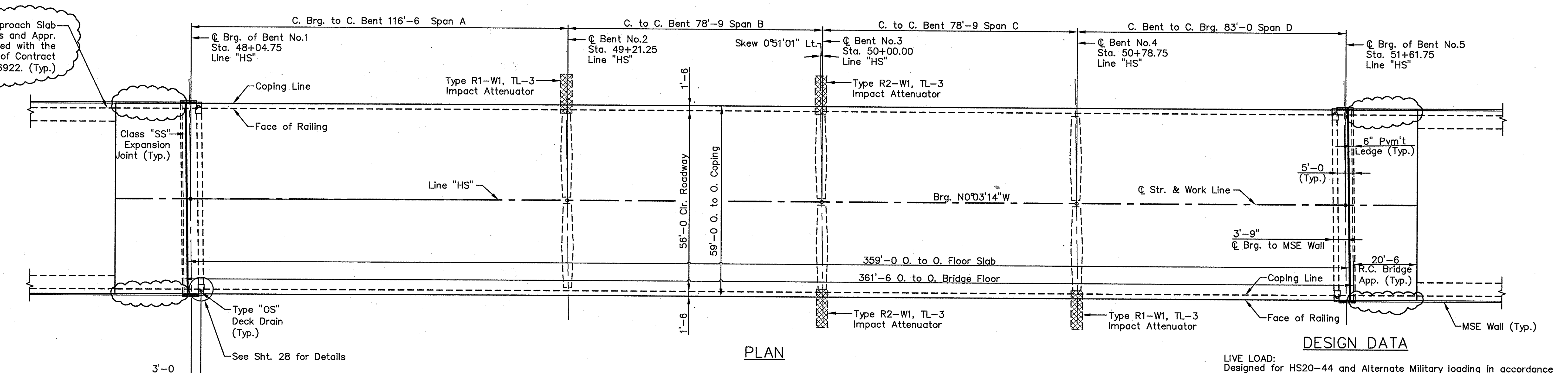
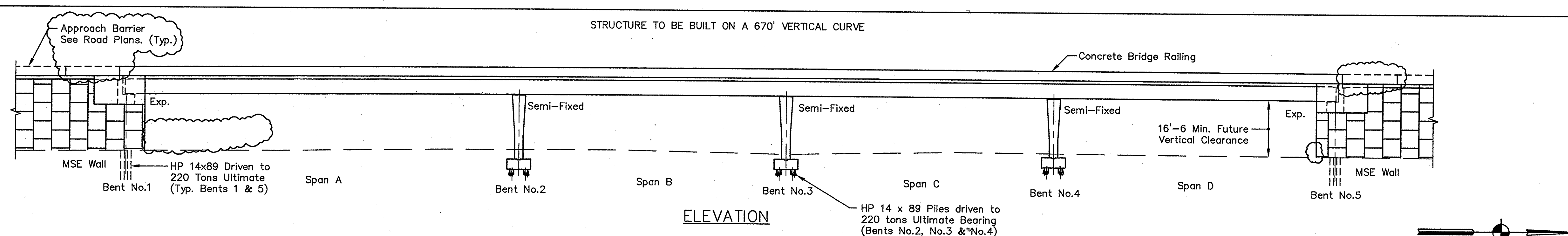


**PHASE 2 - CONSTRUCTION**  
 1. Traffic to be Moved to South Bound of New Structure  
 2. Remove Existing Structure  
 3. Construct the North Bound of Proposed Bridge as Shown  
 4. Complete Closure Pour

**NOTE:**  
 See Sheet 27 for Additional Information on the Closure Pour

|                                                        |                                                         |  |                                                                                 |                                                                         |                                       |                                                       |
|--------------------------------------------------------|---------------------------------------------------------|--|---------------------------------------------------------------------------------|-------------------------------------------------------------------------|---------------------------------------|-------------------------------------------------------|
| REFERENCES<br>FILE NAME<br>: 13-MAY-03, 06:52:06 / LDW | TITLE:<br>: P:\Design\Bridges\8533\Plans\8533-CONST.dwg |  | RECOMMENDED FOR APPROVAL<br><i>T. J. Jessop</i> 5-13-03<br>DESIGN ENGINEER DATE | INDIANA<br>DEPARTMENT OF TRANSPORTATION<br><br>PHASE 1 & 2-CONSTRUCTION | SCALE<br>3/8" = 1'-0"<br>UNLESS NOTED | BRIDGE FILE<br>I-70-73-8533<br>DESIGNATION<br>9910310 |
|                                                        |                                                         |  | DESIGNED: TDJ DRAWN: LDW                                                        |                                                                         | SURVEY BOOK                           | SHEETS<br>7 of 30                                     |
|                                                        |                                                         |  | CHECKED: MHZ CHECKED: TDJ                                                       |                                                                         | CONTRACT<br>B-26922                   | PROJECT<br>IM-70-3 ( )                                |
|                                                        |                                                         |  |                                                                                 |                                                                         |                                       |                                                       |





**DESIGN DATA**

LIVE LOAD: Designed for HS20-44 and Alternate Military loading in accordance with the 1996 A.A.S.H.T.O. Specifications and all subsequent interims.

DEAD LOAD: Actual loads plus 35 psf Allowance for future wearing surfaces. Plus 15 psf for permanent metal forms.

**ALLOWABLE DESIGN STRESSES**

|                              |                    |
|------------------------------|--------------------|
| QC/QA Concrete               | $f_c = 4,000$ psi  |
| Class "C" Concrete           | $f_c = 4,000$ psi  |
| Class "A" Concrete           | $f_c = 3,500$ psi  |
| Class "B" Concrete           | $f_c = 3,000$ psi  |
| Reinforcing Steel (Grade 60) | $f_y = 60,000$ psi |

**GENERAL NOTES**

Reinforcing steel covering to be 2 1/2 inches in top and 1 inch min. in bottom of floor slab, 3 inches in footings except bottom steel which shall be 4 inches, and 2 inches in all other parts unless noted.

Surface seal exposed face of wingwalls, top of bridge deck, copings, underside of copings to outside beams, outside face of exterior beams and top of R.C. bridge approaches. Surface seal to be paid for as a lump sum item. Estimated quantity 34635 Sft.

Masonry coating shall conform to color No. 27778 (Ivory) of Federal Color Standard No. 595a.

Masonry coat exposed faces of interior bents and wingwalls, end bents, collision walls, copings, underside of copings to outside of beams, and outside face of exterior beams. To be applied after Surface Seal.

For Class "SS" Joint, Expansion Length = 178'-6"

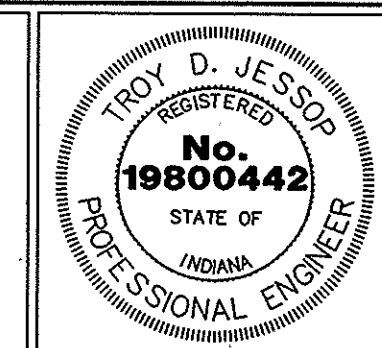
**CONTINUOUS COMPOSITE PRESTRESSED CONCRETE BULB-TEE BEAM BRIDGE**

4 SPANS: 116'-6, 78'-9, 78'-9, 83'-0

SKEW: 0°51'01" Lt., 56'-0 CLEAR ROADWAY,

OVER I-70 ON HIGH SCHOOL ROAD IN MARION COUNTY

Revision  $\Delta$  6/17/03 Clouded areas show revisions.



RECOMMENDED FOR APPROVAL *Troy D. Jessop* 6-17-03 DATE

DESIGNED: TDJ DRAWN: SJM

CHECKED: MHZ CHECKED: TDJ

INDIANA  
DEPARTMENT OF TRANSPORTATION

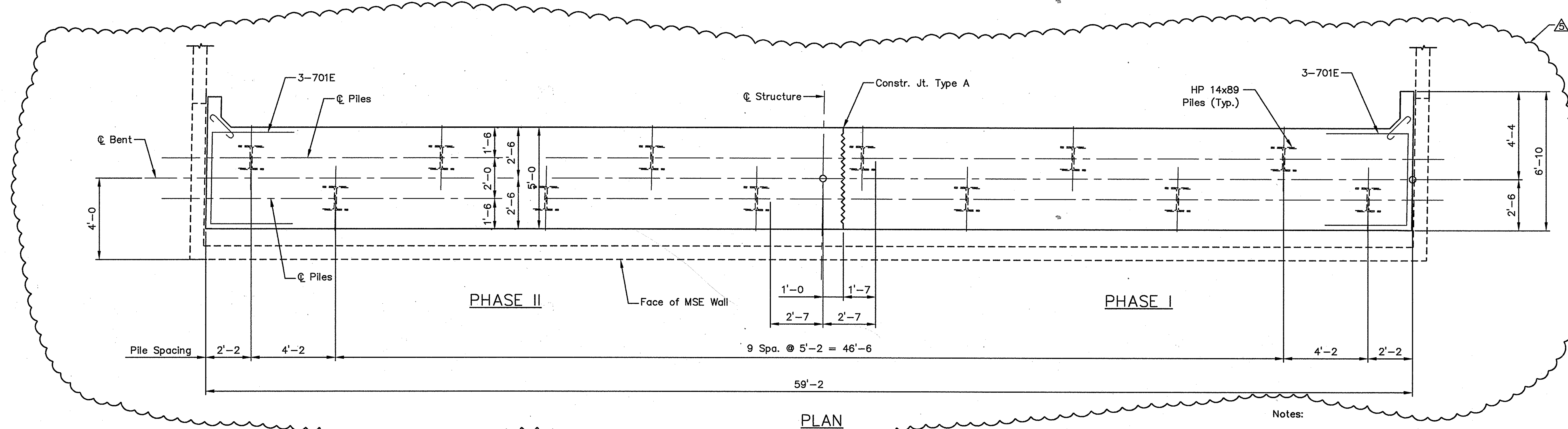
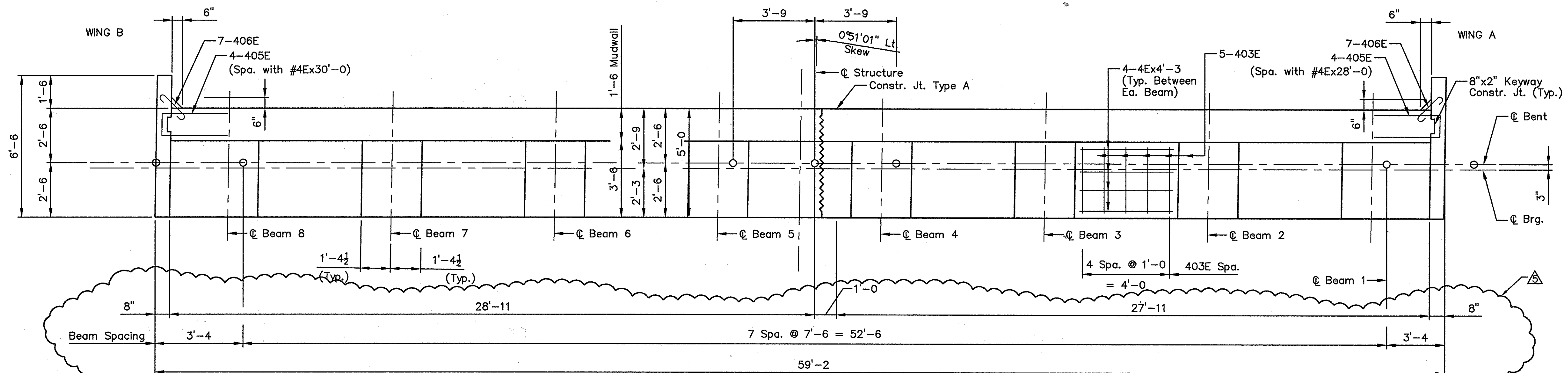
GENERAL PLAN

|                       |                             |
|-----------------------|-----------------------------|
| SCALE<br>1/16" = 1'-0 | BRIDGE FILE<br>I-70-73-8533 |
|                       | DESIGNATION<br>9910310      |
| SURVEY BOOK           | SHEETS<br>8 of 30           |
| CONTRACT<br>B-26922   | PROJECT<br>IM-70-3 ( )      |

REFERENCES: TITLE: P:\Design\Bridges\8533\Plans\8533-GENPLAN.dwg  
FILE NAME: 27-MAY-03, 14:53:26 / SJM



BENT NO.1



Notes:

For Reinforcing Bar Notes, see Standard Drawing E703-BRST-01.

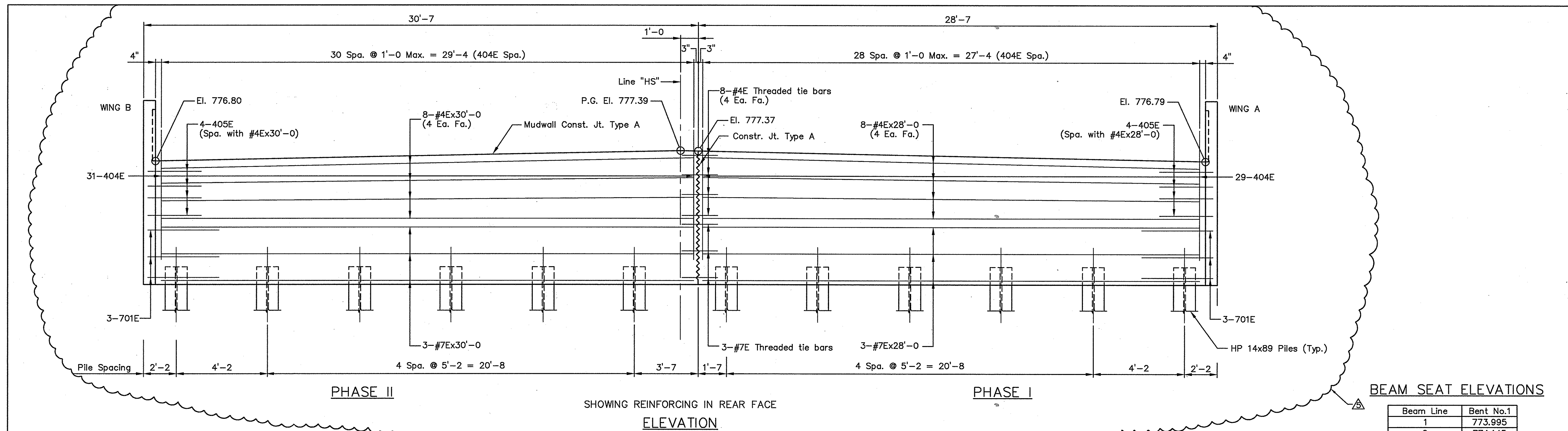
For wingwall details, bar bending diagrams and Bill of Materials, see Sht. 13.

For section details, see Sheet 13.

|                           |  |                                                                             |                                                                   |                                    |                                                                         |
|---------------------------|--|-----------------------------------------------------------------------------|-------------------------------------------------------------------|------------------------------------|-------------------------------------------------------------------------|
| Revision $\Delta$ 9/25/03 |  | RECOMMENDED FOR APPROVAL <i>Troy Jessop</i> 9/25/03<br>DESIGN ENGINEER DATE | INDIANA<br>DEPARTMENT OF TRANSPORTATION<br><br>BENT NO. 1 DETAILS | SCALE<br>3/8" = 1'-0               | BRIDGE FILE<br>1-70-73-8533                                             |
|                           |  | DESIGNED: BWB DRAWN: LDW<br>CHECKED: TDJ CHECKED: TDJ                       |                                                                   | SURVEY BOOK<br>CONTRACT<br>B-26922 | DESIGNATION<br>9910310<br>SHEETS<br>9-A of 30<br>PROJECT<br>IM-70-3 ( ) |

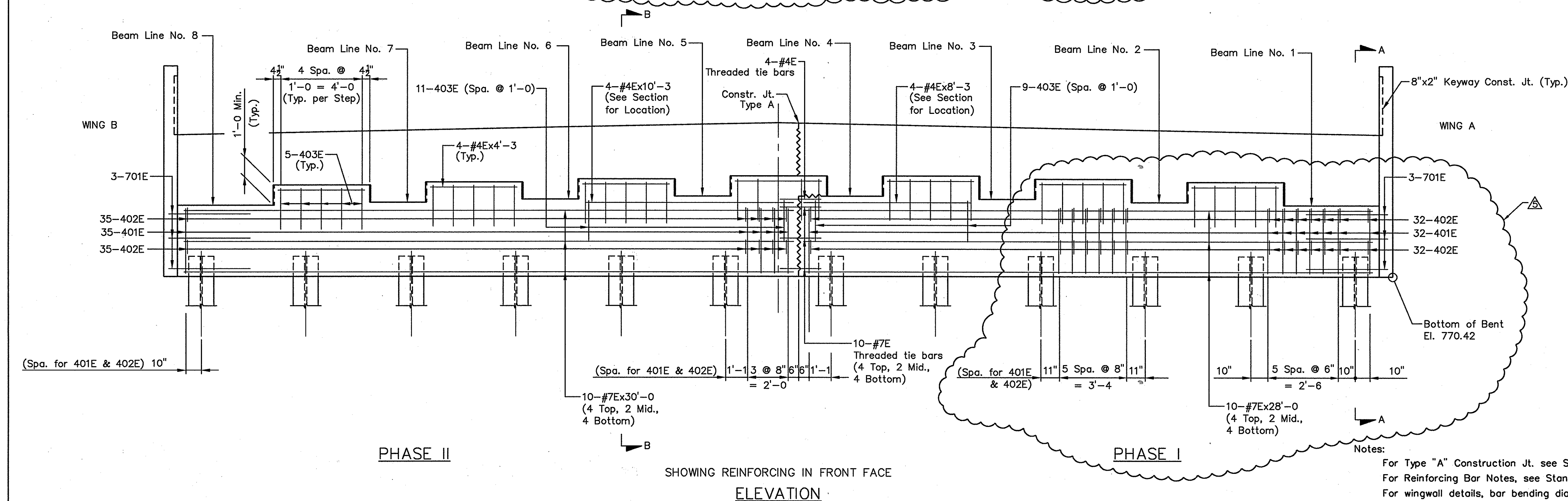
REFERENCES  
FILE NAME : P:\Design\Bridges\8533\Plane\8533-BENT1-REV.dwg / Layout1  
MRD\INT : 26-SEP-03, 09:46:12 / SModsen





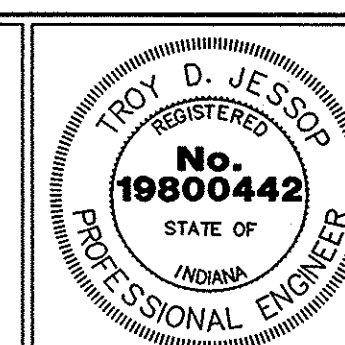
**BEAM SEAT ELEVATIONS**

| Beam Line | Bent No.1 |
|-----------|-----------|
| 1         | 773.995   |
| 2         | 774.145   |
| 3         | 774.295   |
| 4         | 774.450   |
| 5         | 774.450   |
| 6         | 774.305   |
| 7         | 774.155   |
| 8         | 774.005   |



Notes:  
 For Type "A" Construction Jt. see Standard Drawing E702-CJTA-01  
 For Reinforcing Bar Notes, see Standard Drawing E703-BRST-01.  
 For wingwall details, bar bending diagrams and Bill of Materials, see Sht. 13.  
 For Sections A-A & B-B, see Sht. 13.

Revision **9/25/03**



RECOMMENDED FOR APPROVAL: *Troy J. Slop* 9/25/03  
 DESIGN ENGINEER DATE  
 DESIGNED: BWB DRAWN: LDW  
 CHECKED: TDJ CHECKED: TDJ

**INDIANA**  
**DEPARTMENT OF TRANSPORTATION**  
**BENT NO.1 DETAILS**

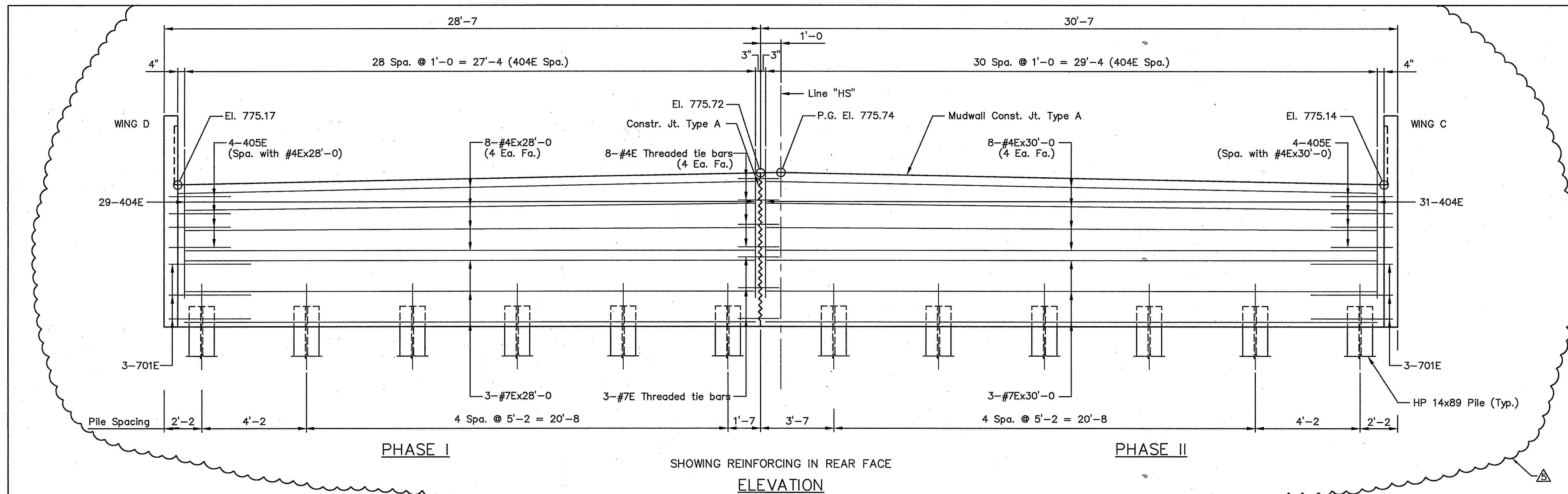
|                       |                             |
|-----------------------|-----------------------------|
| SCALE<br>3/8" = 1'-0" | BRIDGE FILE<br>I-70-73-8533 |
|                       | DESIGNATION<br>9910310      |
| SURVEY BOOK           | SHEETS<br>10-A of 30        |
| CONTRACT<br>B-26922   | PROJECT<br>IM-70-3 ( )      |

REFERENCES: TITLE: P:\Design\Bridges\8533\Plans\8533-BENT1-2-REV.dwg / Layout1  
 FILE NAME: 26-SEP-03, 09:46:46 / SMadsen  
 MRD\INT



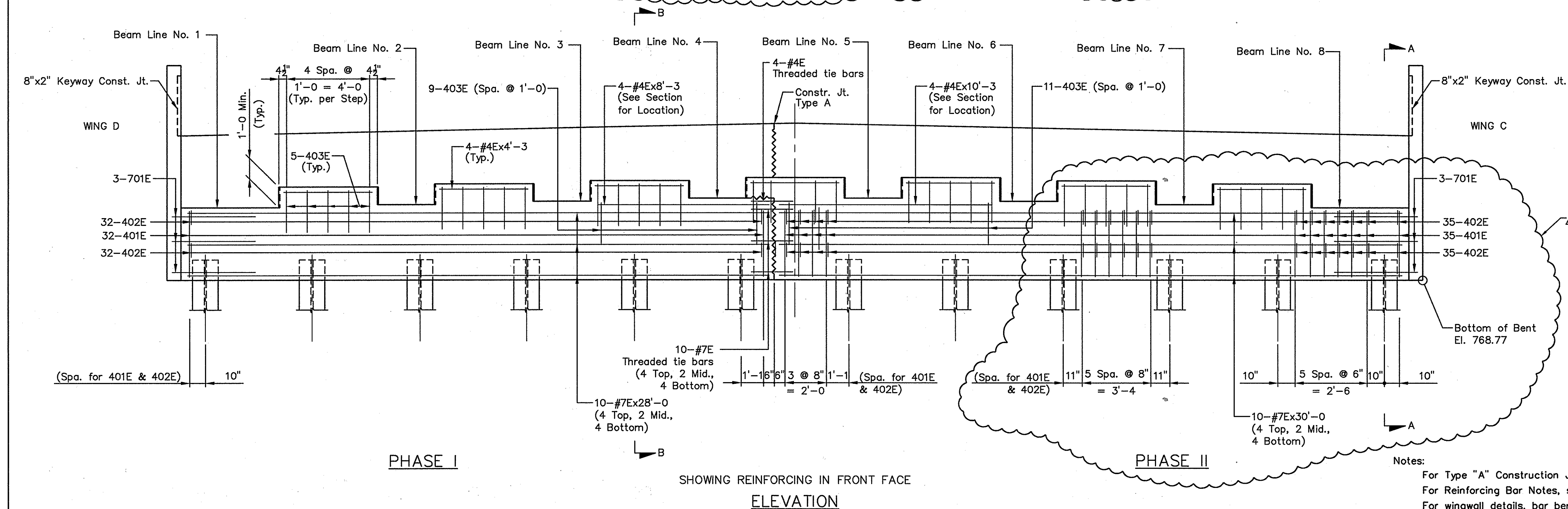






# BEAM SEAT ELEVATIONS

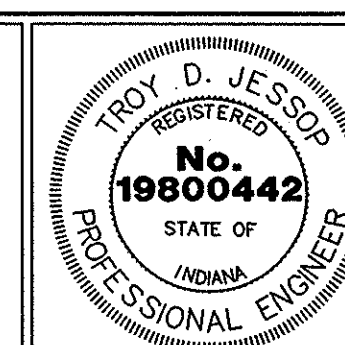
| Beam Line | Bent No.5 |
|-----------|-----------|
| 1         | 772.380   |
| 2         | 772.525   |
| 3         | 772.670   |
| 4         | 772.820   |
| 5         | 772.815   |
| 6         | 772.665   |
| 7         | 772.510   |
| 8         | 772.360   |



## Notes:

For Type "A" Construction Jt. see Standard Drawing E702-CJTA-01  
 For Reinforcing Bar Notes, see Standard Drawing E703-BRST-01.  
 For wingwall details, bar bending diagrams and Bill of Materials, see Sht. 13.  
 For Sections A-A & B-B, see Sht. 13.

Revision 9/25/03



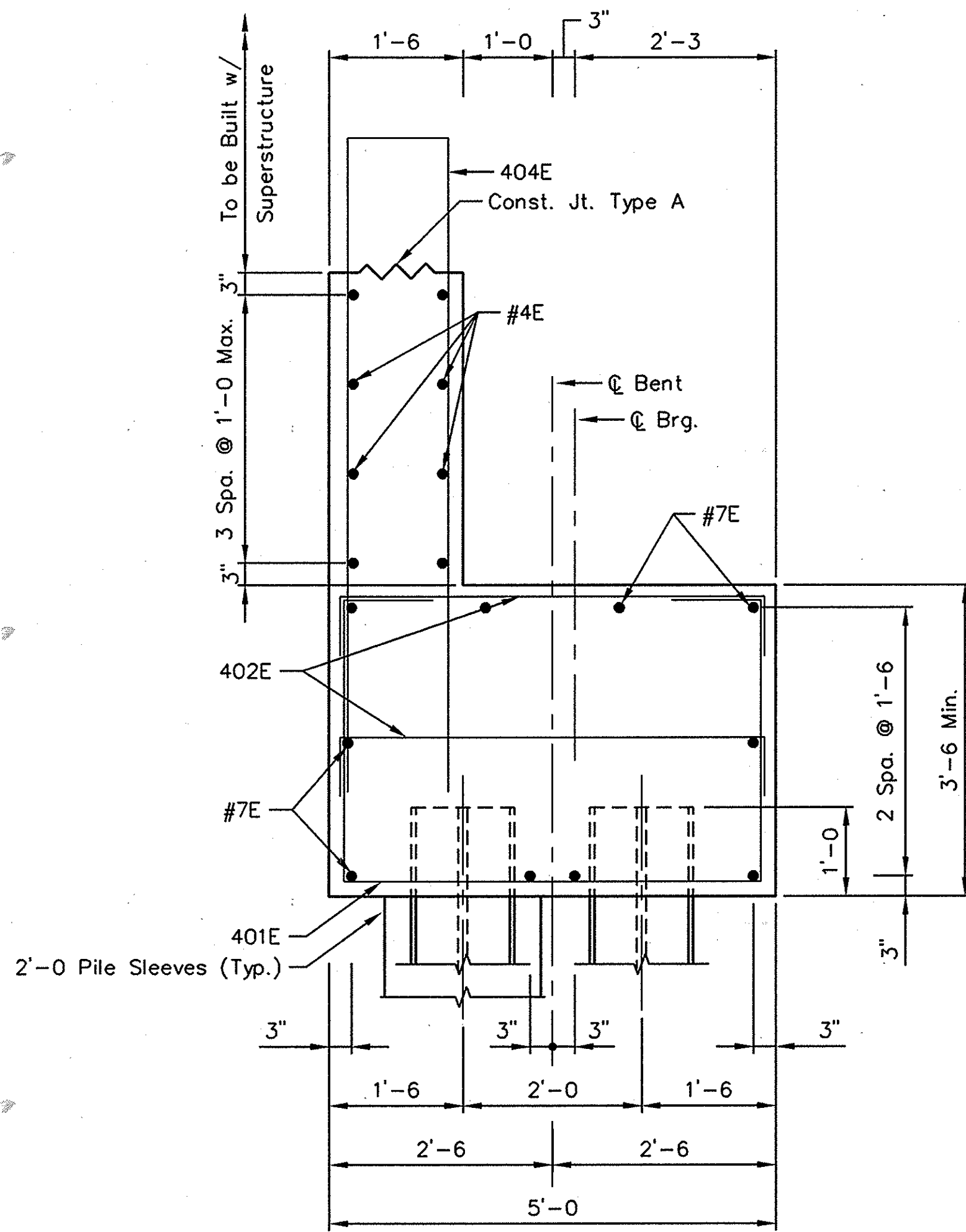
RECOMMENDED FOR APPROVAL *Troy J. Slop* 9/25/03  
 DESIGN ENGINEER DATE  
 DESIGNED: BWB DRAWN: LDW  
 CHECKED: TDJ CHECKED: TDJ

INDIANA  
 DEPARTMENT OF TRANSPORTATION  
 BENT NO.5 DETAILS

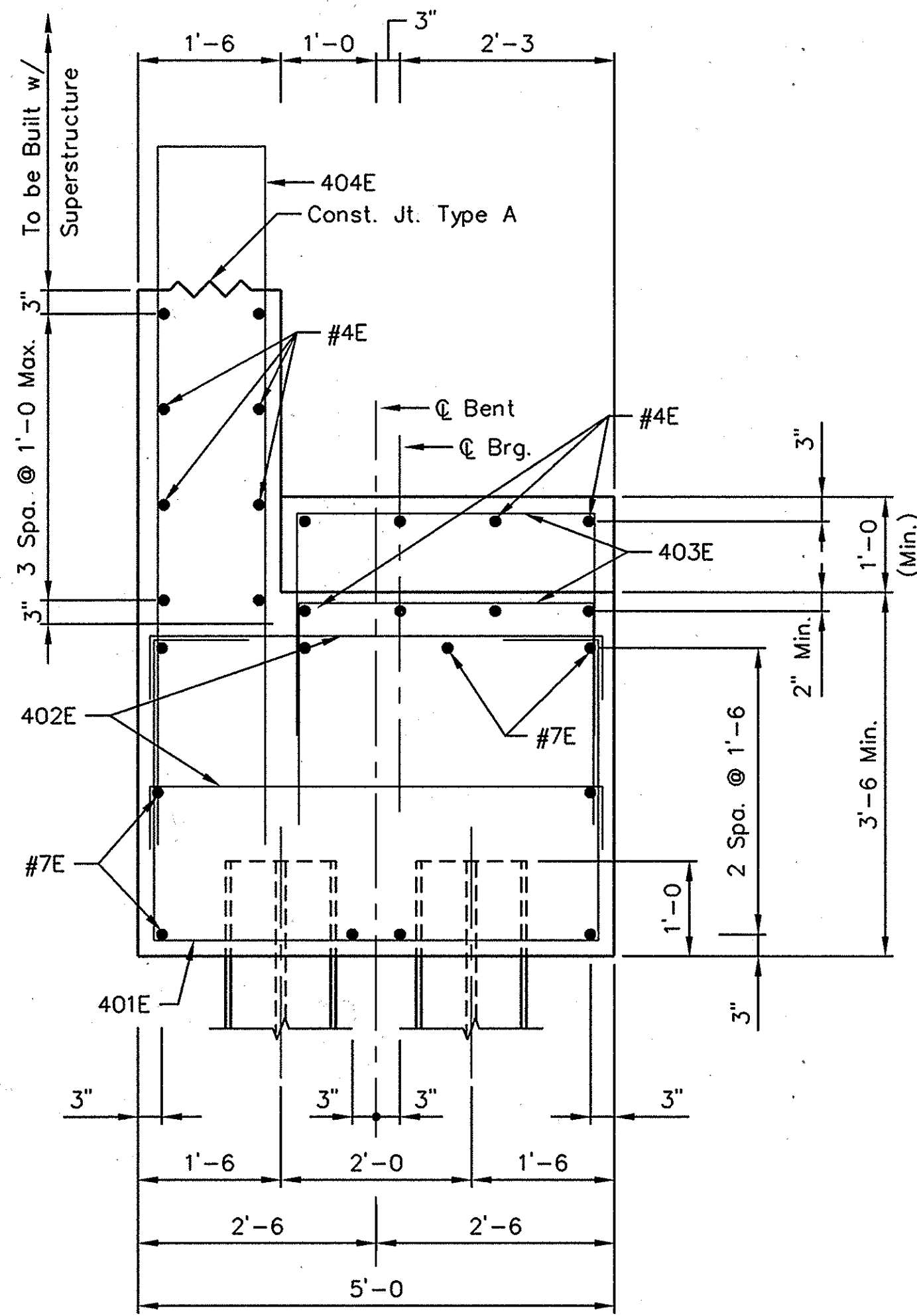
|                       |                             |
|-----------------------|-----------------------------|
| SCALE<br>3/8" = 1'-0" | BRIDGE FILE<br>I-70-73-8533 |
|                       | DESIGNATION<br>9910310      |
| SURVEY BOOK           | SHEETS<br>12-A of 30        |
| CONTRACT<br>B-26922   | PROJECT<br>IM-70-3 ( )      |

REFERENCES : - TITLE;  
 FILE NAME : P:\Design\Bridges\8533\Plans\8533-BENTS-2-REV.dwg / Layout1  
 MOD/INT : 26-SEP-03, 09:48:28 / SMadsen

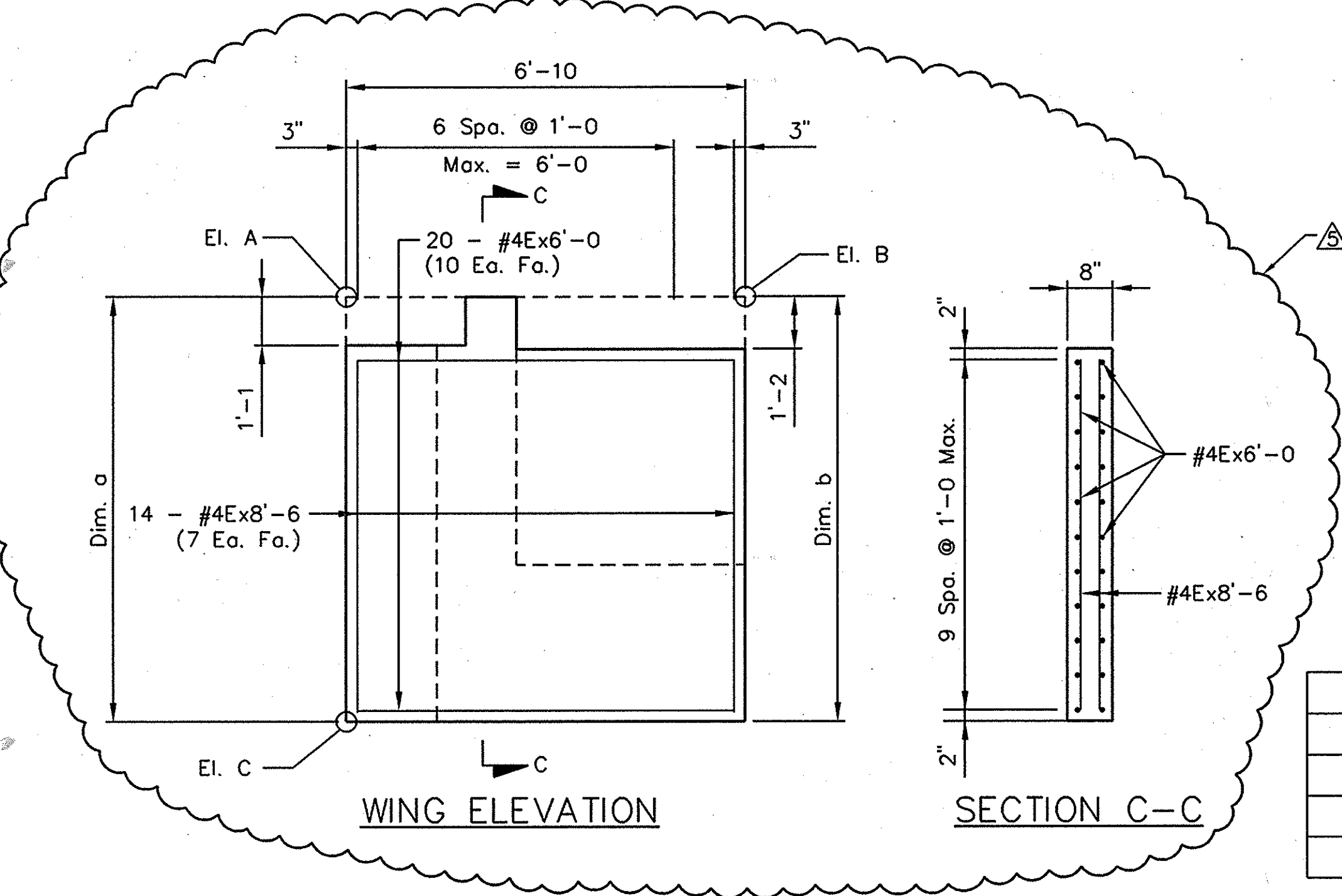
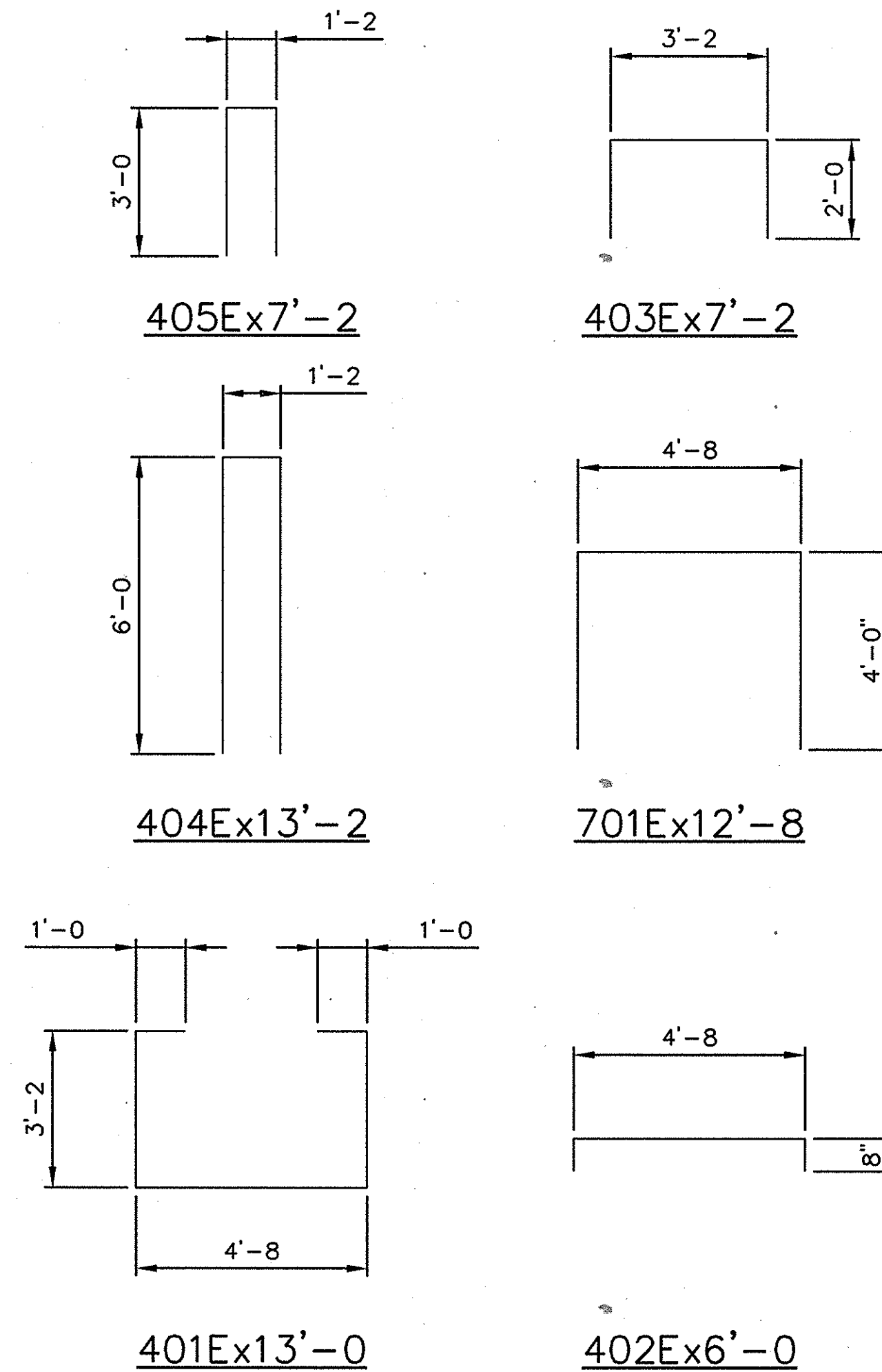




SECTION A-A  
Scale: 3/4" = 1'-0"



SECTION B-B  
Scale: 3/4" = 1'-0"



|        | El. A  | El. B  | El. C  | Dim. a   | Dim. b   |
|--------|--------|--------|--------|----------|----------|
| Wing A | 779.47 | 779.58 | 770.42 | 9'-0 3/8 | 9'-1 1/8 |
| Wing B | 779.48 | 779.60 | 770.42 | 9'-0 3/8 | 9'-2 1/8 |
| Wing C | 777.77 | 777.95 | 768.77 | 9'-0     | 9'-2 1/8 |
| Wing D | 777.80 | 777.97 | 768.77 | 9'-0 3/8 | 9'-2 3/8 |

Notes:  
For Reinforcing Bar Notes, see Std. Dwg. E-703-BRST-01  
For Type "A" Constr. Jt., see Std. Dwg. E-702-CJTA-01  
For Additional Detail, see Sheets 9-12.  
All Reinforcing steel to be epoxy coated.  
For Additional Pile Sleeving Details, see Sheet 28.

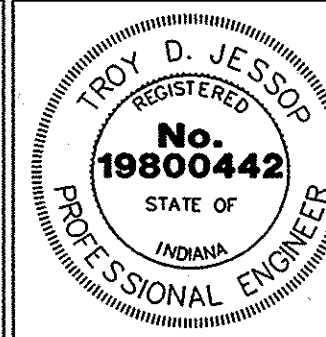
| BILL OF MATERIALS<br>BENT NO. 1<br>PHASE I |             |         |              |
|--------------------------------------------|-------------|---------|--------------|
| EPOXY COATED REINFORCING STEEL             |             |         |              |
| SIZE OR MARK                               | No. OF BARS | LENGTH  | WEIGHT (LBS) |
| 701E                                       | 3           | 12' - 8 | 78           |
| #7E                                        | 10          | 28' - 0 | 572          |
| Total #7E                                  |             |         | 650          |
| 401E                                       | 32          | 13' - 0 | 278          |
| 402E                                       | 64          | 6' - 0  | 257          |
| 403E                                       | 26          | 7' - 2  | 124          |
| 404E                                       | 29          | 13' - 2 | 255          |
| 405E                                       | 4           | 7' - 2  | 19           |
| 406E                                       | 7           | 2' - 6  | 12           |
| #4E                                        | 8           | 28' - 0 | 150          |
| #4E                                        | 14          | 8' - 6  | 79           |
| #4E                                        | 4           | 8' - 3  | 22           |
| #4E                                        | 20          | 6' - 0  | 80           |
| #4E                                        | 12          | 4' - 3  | 34           |
| Total #4E                                  |             |         | 1310         |
| Total E.C. Reinf. Steel                    |             |         | 1960         |
| #7E Th. Tie Bar Ass.                       |             |         | 10 Each      |
| #4E Th. Tie Bar Ass.                       |             |         | 12 Each      |
| CONCRETE                                   |             |         |              |
| Concrete Class "A"                         |             |         |              |
| Phase I                                    |             |         | 27.8 Cys     |
|                                            |             |         |              |
| MISCELLANEOUS                              |             |         |              |
| HP 14x89                                   |             |         | 324.1 Lft.   |
| 2'-0 Pile Sleeves                          |             |         | 119.2 Lft.   |
| Surface Seal*                              |             |         | 40 Sft.      |
| Masonry Coat*                              |             |         | 40 Sft.      |
| Pile Tips                                  |             |         | 6 Each       |
| * Estimated Quantity                       |             |         |              |

| BILL OF MATERIALS<br>BENT NO. 1<br>PHASE II |                |         |                 |
|---------------------------------------------|----------------|---------|-----------------|
| EPOXY COATED REINFORCING STEEL              |                |         |                 |
| SIZE OR<br>MARK                             | No. OF<br>BARS | LENGTH  | WEIGHT<br>(LBS) |
| 701E                                        | 3              | 12' - 8 | 78              |
| #7E                                         | 10             | 30' - 0 | 613             |
| Total #7E                                   |                |         | 691             |
|                                             |                |         |                 |
| 401E                                        | 35             | 13' - 0 | 304             |
| 402E                                        | 70             | 6' - 0  | 281             |
| 403E                                        | 28             | 7' - 2  | 134             |
| 404E                                        | 31             | 13' - 2 | 273             |
| 405E                                        | 4              | 7' - 2  | 19              |
| 406E                                        | 7              | 2' - 6  | 12              |
| #4E                                         | 8              | 30' - 0 | 160             |
| #4E                                         | 4              | 10' - 3 | 27              |
| #4E                                         | 14             | 8' - 6  | 79              |
| #4E                                         | 20             | 6' - 0  | 80              |
| #4E                                         | 16             | 4' - 3  | 45              |
| Total #4E                                   |                |         | 1415            |
| Total E.C. Reinf. Steel                     |                |         | 2106            |
|                                             |                |         |                 |
| CONCRETE                                    |                |         |                 |
| Concrete Class "A"                          |                |         |                 |
| Phase II                                    |                |         | 30.2 Cys        |
|                                             |                |         |                 |
| MISCELLANEOUS                               |                |         |                 |
| HP 14x89                                    |                |         | 324.1 Lft.      |
| 2'-0 Pile Sleeves                           |                |         | 119.2 Lft.      |
| Surface Seal*                               |                |         | 40 Sft.         |
| Masonry Coat*                               |                |         | 40 Sft.         |
| Pile Tips                                   |                |         | 6 Each          |
| * Estimated Quantity                        |                |         |                 |

| BILL OF MATERIALS<br>BENT NO. 5<br>PHASE I |                |          |                 |  |
|--------------------------------------------|----------------|----------|-----------------|--|
| EPOXY COATED REINFORCING STEEL             |                |          |                 |  |
| SIZE OR<br>MARK                            | No. OF<br>BARS | LENGTH   | WEIGHT<br>(LBS) |  |
| 701E                                       | 3              | 12' - 8" | 78              |  |
| #7E                                        | 10             | 28' - 0" | 572             |  |
| Total #7E                                  |                |          | 650             |  |
|                                            |                |          |                 |  |
| 401E                                       | 32             | 13' - 0" | 278             |  |
| 402E                                       | 64             | 6' - 0"  | 257             |  |
| 403E                                       | 26             | 7' - 2"  | 124             |  |
| 404E                                       | 29             | 13' - 2" | 255             |  |
| 405E                                       | 4              | 7' - 2"  | 19              |  |
| 406E                                       | 7              | 2' - 6"  | 12              |  |
| #4E                                        | 8              | 28' - 0" | 150             |  |
| #4E                                        | 14             | 8' - 6"  | 79              |  |
| #4E                                        | 4              | 8' - 3"  | 22              |  |
| #4E                                        | 20             | 6' - 0"  | 80              |  |
| #4E                                        | 12             | 4' - 3"  | 34              |  |
| Total #4E                                  |                |          | 1310            |  |
|                                            |                |          |                 |  |
| Total E.C. Reinf. Steel                    |                |          | 1960            |  |
| #7E Th. Tie Bar Ass.                       |                |          | 10 Each         |  |
| #4E Th. Tie Bar Ass.                       |                |          | 12 Each         |  |
| CONCRETE                                   |                |          |                 |  |
| Concrete Class "A"                         |                |          |                 |  |
| Phase I                                    |                |          | 27.8 Cys        |  |
|                                            |                |          |                 |  |
| MISCELLANEOUS                              |                |          |                 |  |
| HP 14x89                                   |                |          | 223 Lft.        |  |
| 2' - 0 Pile Sleeves                        |                |          | 117.3 Lft.      |  |
| Surface Seal*                              |                |          | 40 Sft.         |  |
| Masonry Coat*                              |                |          | 40 Sft.         |  |
| Pile Tips                                  |                |          | 6 Each          |  |
| * Estimated Quantity                       |                |          |                 |  |

| BILL OF MATERIALS<br>BENT NO. 5<br>PHASE II |                |         |                 |
|---------------------------------------------|----------------|---------|-----------------|
| EPOXY COATED REINFORCING STEEL              |                |         |                 |
| SIZE OR<br>MARK                             | No. OF<br>BARS | LENGTH  | WEIGHT<br>(LBS) |
| 701E                                        | 3              | 12' - 8 | 78              |
| #7E                                         | 10             | 30' - 0 | 613             |
| Total #7E                                   |                |         | 691             |
|                                             |                |         |                 |
| 401E                                        | 35             | 13' - 0 | 304             |
| 402E                                        | 70             | 6' - 0  | 281             |
| 403E                                        | 28             | 7' - 2  | 134             |
| 404E                                        | 31             | 13' - 2 | 273             |
| 405E                                        | 4              | 7' - 2  | 19              |
| 406E                                        | 7              | 2' - 6  | 12              |
| #4E                                         | 8              | 30' - 0 | 160             |
| #4E                                         | 4              | 10' - 3 | 27              |
| #4E                                         | 14             | 8' - 6  | 79              |
| #4E                                         | 20             | 6' - 0  | 80              |
| #4E                                         | 16             | 4' - 3  | 45              |
| Total #4E                                   |                |         | 1415            |
|                                             |                |         |                 |
| Total E.C. Reinf. Steel                     |                |         | 2106            |
|                                             |                |         |                 |
|                                             |                |         |                 |
|                                             |                |         |                 |
| CONCRETE                                    |                |         |                 |
| Concrete Class "A"                          |                |         |                 |
| Phase II                                    |                |         | 30.2 Cys        |
|                                             |                |         |                 |
|                                             |                |         |                 |
| MISCELLANEOUS                               |                |         |                 |
| HP 14x89                                    |                |         | 223 Lft.        |
| 2'-0 Pile Sleeves                           |                |         | 117.3 Lft.      |
| Surface Seal*                               |                |         | 40 Sft.         |
| Masonry Coat*                               |                |         | 40 Sft.         |
| Pile Tips                                   |                |         | 6 Each          |
| * Estimated Quantity                        |                |         |                 |

Revision 9/25/03



RECOMMENDED FOR APPROVAL

*Troy Jessop*  
DESIGN ENGINEER

9/25/03  
DATE

DESIGNED: BWB

DRAWN: LDW

CHECKED: TDJ

CHECKED: TDJ

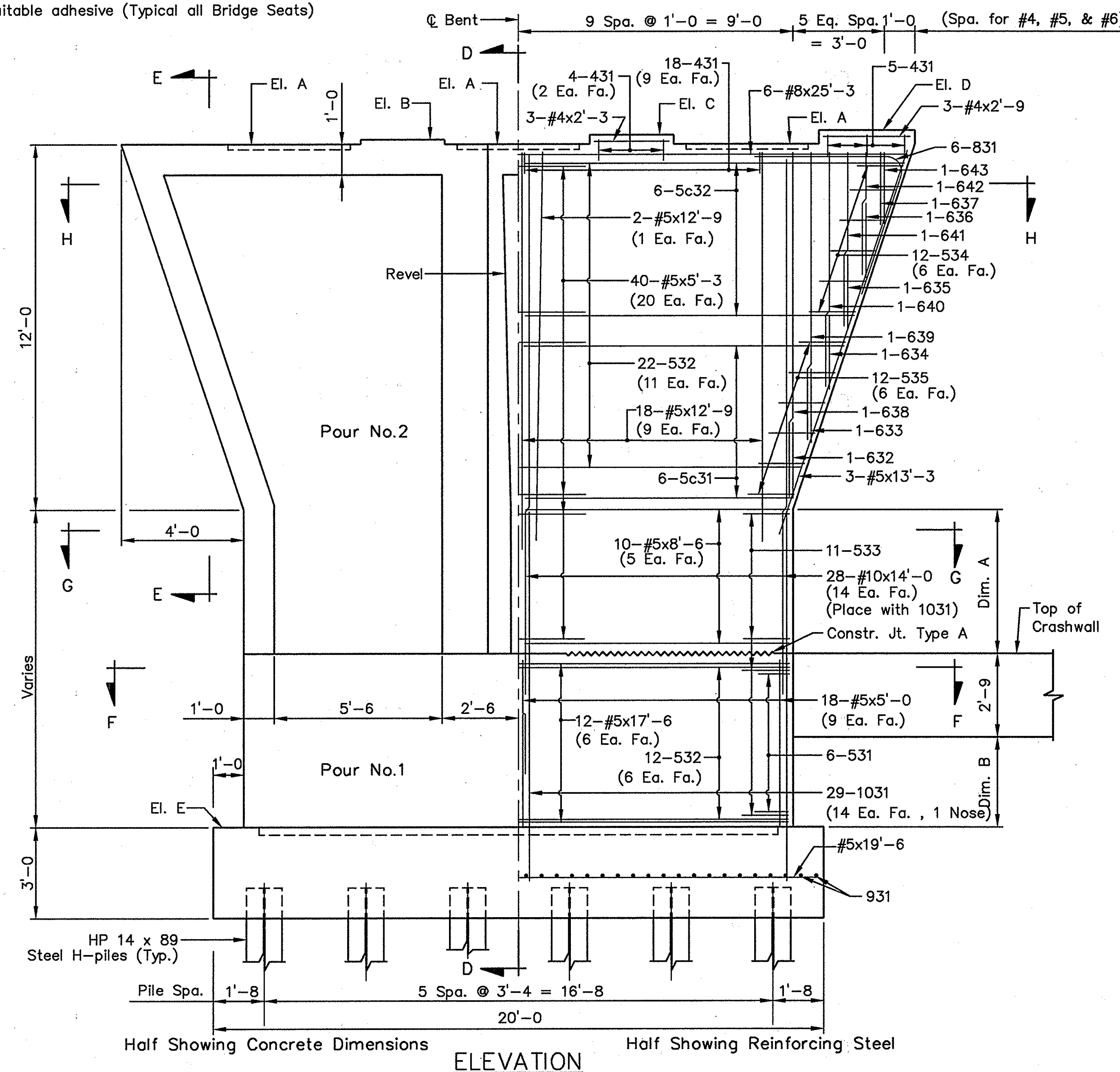
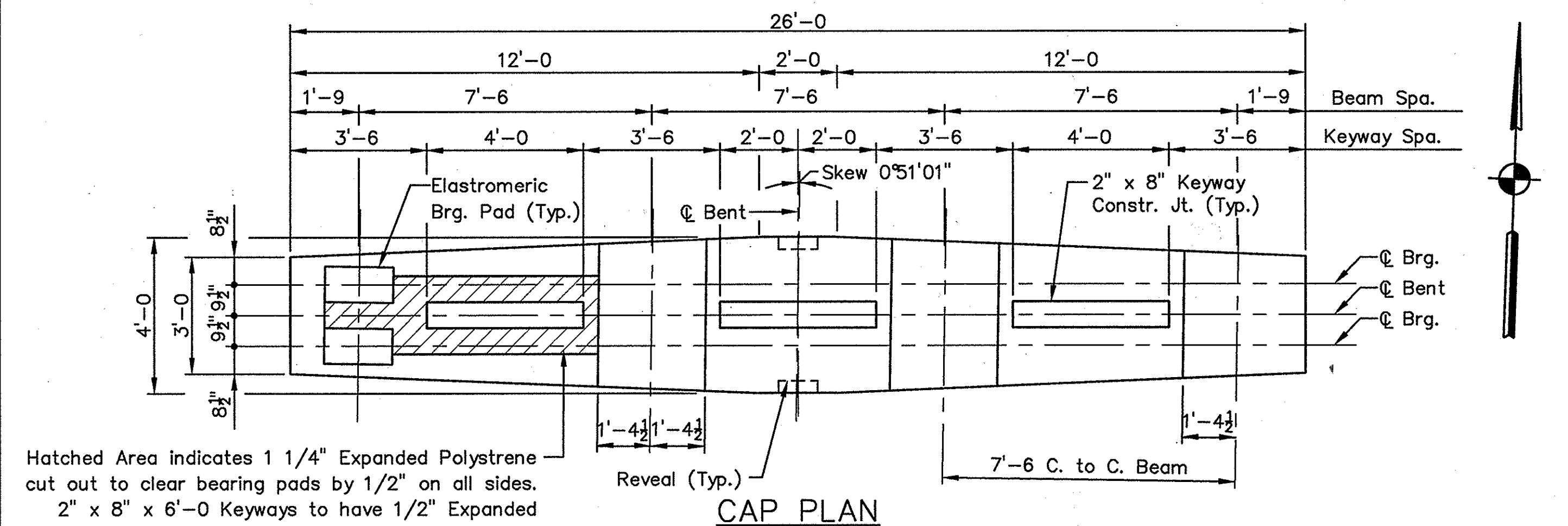
INDIANA  
DEPARTMENT OF TRANSPORTATION

BENT DETAILS

|                       |                             |
|-----------------------|-----------------------------|
| SCALE<br>3/8" = 1'-0" | BRIDGE FILE<br>I-70-73-8533 |
|                       | DESIGNATION<br>9910310      |
| SURVEY BOOK           | SHEETS<br>13-A of 30        |
| CONTRACT<br>B-26922   | PROJECT<br>IM-70-3 ( )      |

REFERENCES : TITLE:  
FILE NAME : P:\Design\Bridges\8533\Plans\8533-BENT-DETAILS-REV.dwg / Layout1  
MRD\INT : 26-SEP-03, 09:36:38 / Smdsen

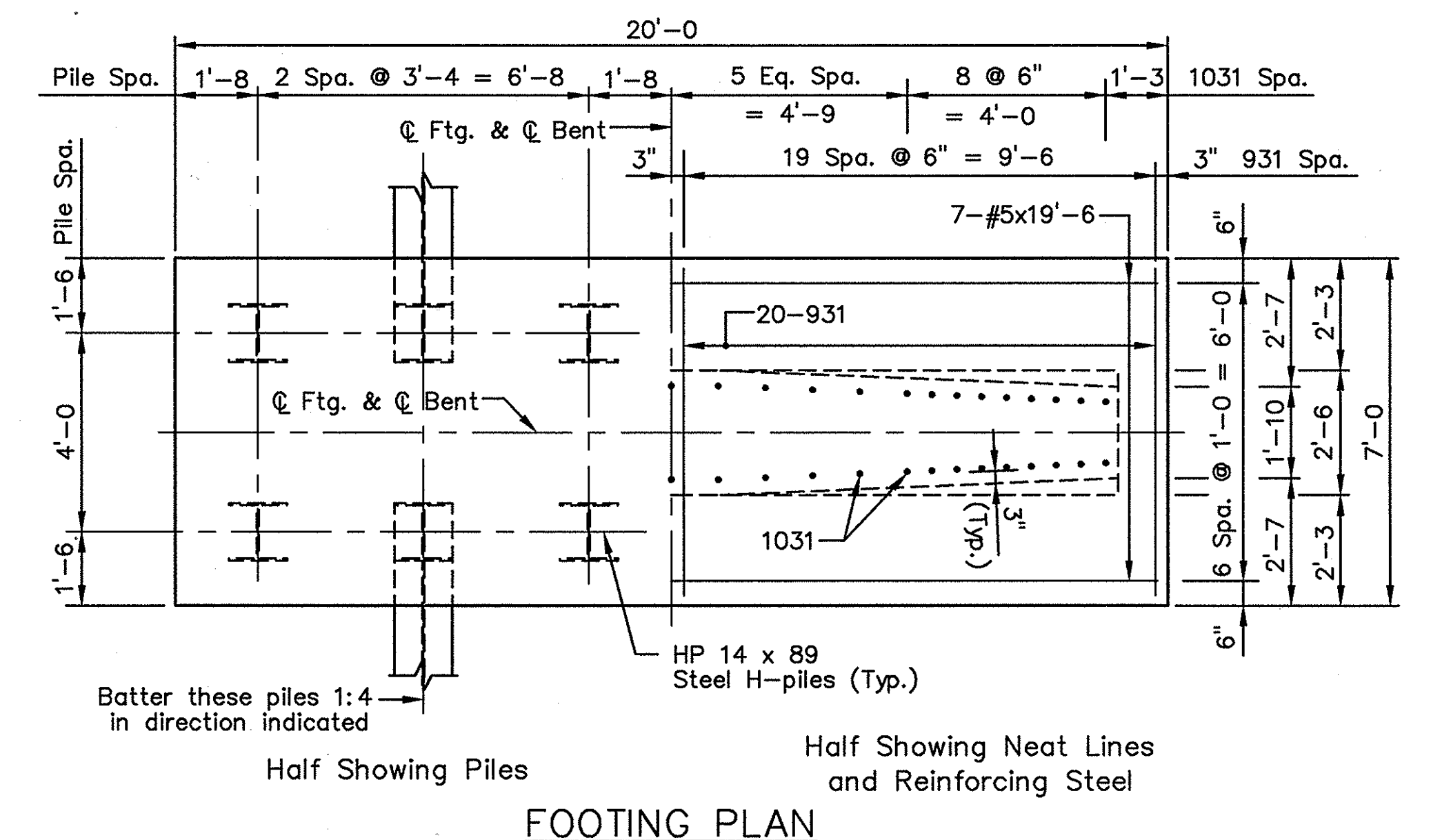
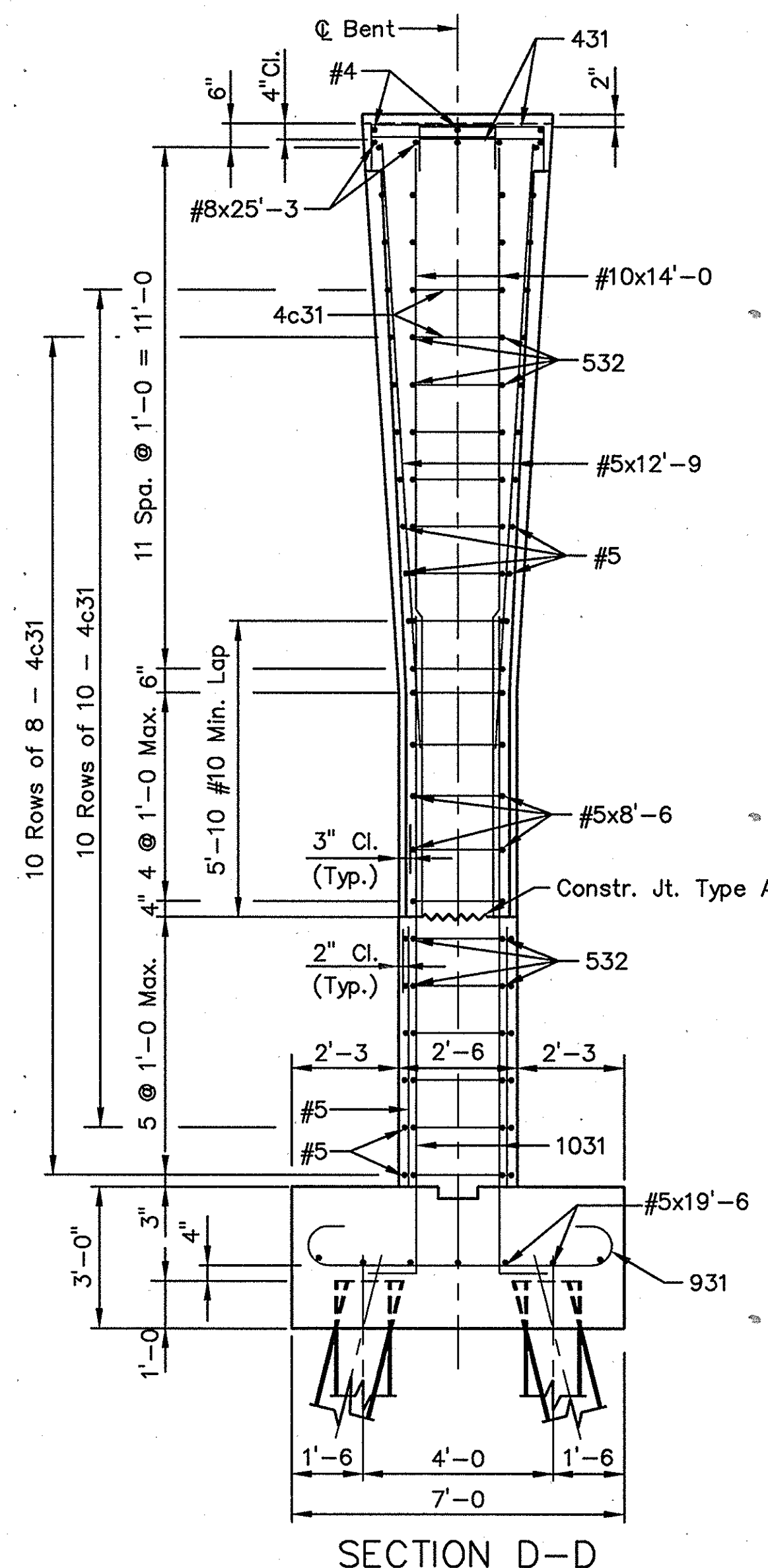
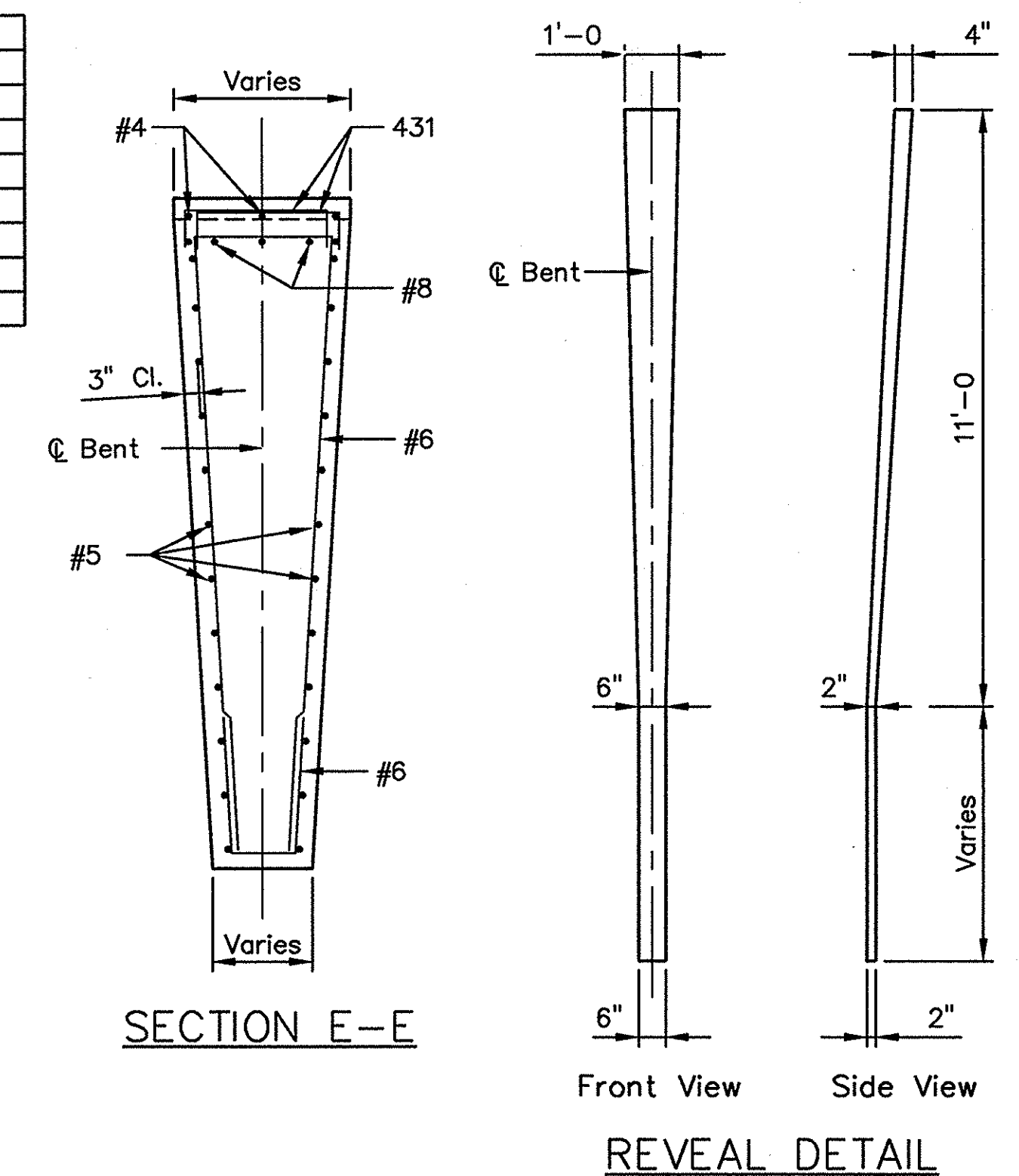


BENT ELEVATIONS

| Location        | El. A            | El. B            | El. C            | El. D            | El. E   |
|-----------------|------------------|------------------|------------------|------------------|---------|
| Bent 2 Phase I  | 775.260 (Beam 1) | 775.410 (Beam 2) | 775.560 (Beam 3) | 775.710 (Beam 4) | 755.320 |
| Bent 2 Phase II | 775.260 (Beam 8) | 775.410 (Beam 7) | 775.560 (Beam 6) | 775.710 (Beam 5) | 755.320 |
| Bent 3 Phase I  | 775.120 (Beam 1) | 775.270 (Beam 2) | 775.420 (Beam 3) | 775.570 (Beam 4) | 754.330 |
| Bent 3 Phase II | 775.115 (Beam 8) | 775.265 (Beam 7) | 775.415 (Beam 6) | 775.565 (Beam 5) | 754.330 |
| Bent 4 Phase I  | 774.240 (Beam 1) | 774.390 (Beam 2) | 774.535 (Beam 3) | 774.685 (Beam 4) | 753.050 |
| Bent 4 Phase II | 774.225 (Beam 8) | 774.380 (Beam 7) | 774.530 (Beam 6) | 774.680 (Beam 5) | 753.050 |

BENT DIMENSIONS

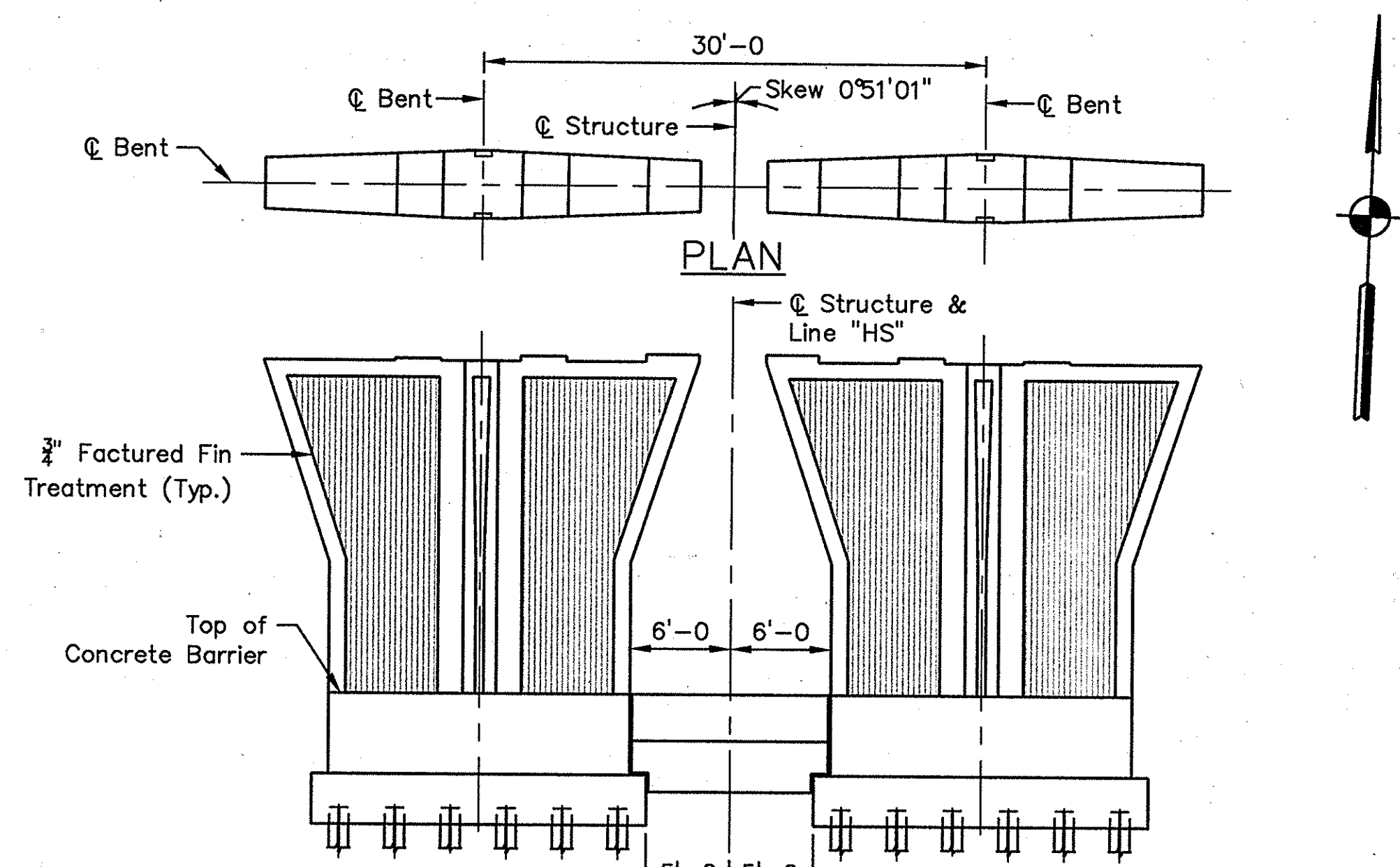
| Location        | Dim. A             | Dim. B             |
|-----------------|--------------------|--------------------|
| Bent 2 Phase I  | 2'-6 $\frac{1}{2}$ | 2'-7 $\frac{1}{2}$ |
| Bent 2 Phase II | 2'-6               | 2'-8 $\frac{1}{2}$ |
|                 |                    |                    |
| Bent 3 Phase I  | 3'-2 $\frac{3}{4}$ | 2'-9 $\frac{3}{4}$ |
| Bent 3 Phase II | 3'-2 $\frac{3}{4}$ | 2'-9 $\frac{3}{4}$ |
|                 |                    |                    |
| Bent 4 Phase I  | 3'-7 $\frac{7}{8}$ | 2'-9 $\frac{7}{8}$ |
| Bent 4 Phase II | 3'-9 $\frac{1}{2}$ | 2'-7 $\frac{1}{2}$ |



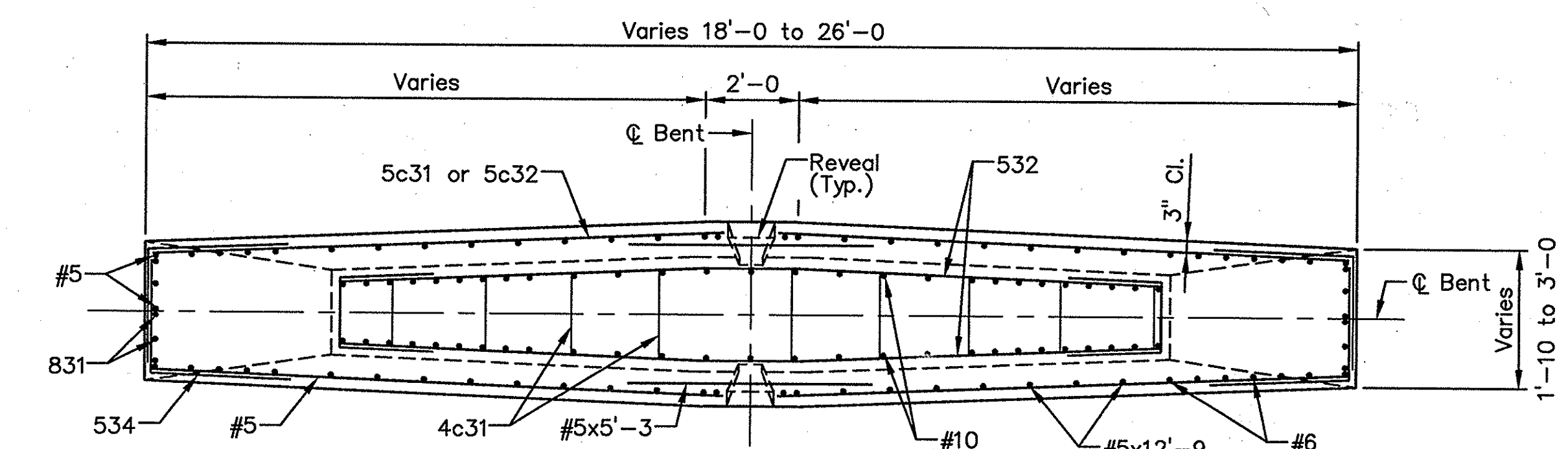
**Notes:**

For Reinforcing Bar Notes, see Standard Drawing E703-BRST-01.  
For addition details, bar bending diagrams and Bill of Materials, see Sht. 15.  
For Bearing Details, see Sht. 20.  
For Sections F-F, G-G, and H-H see Sht. 15.

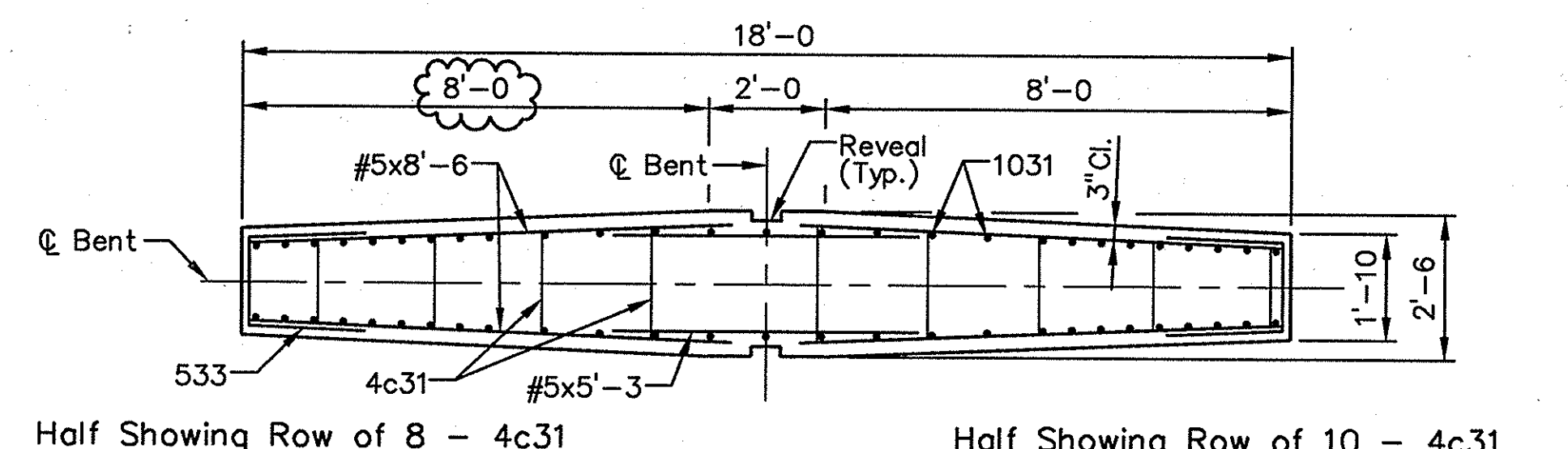




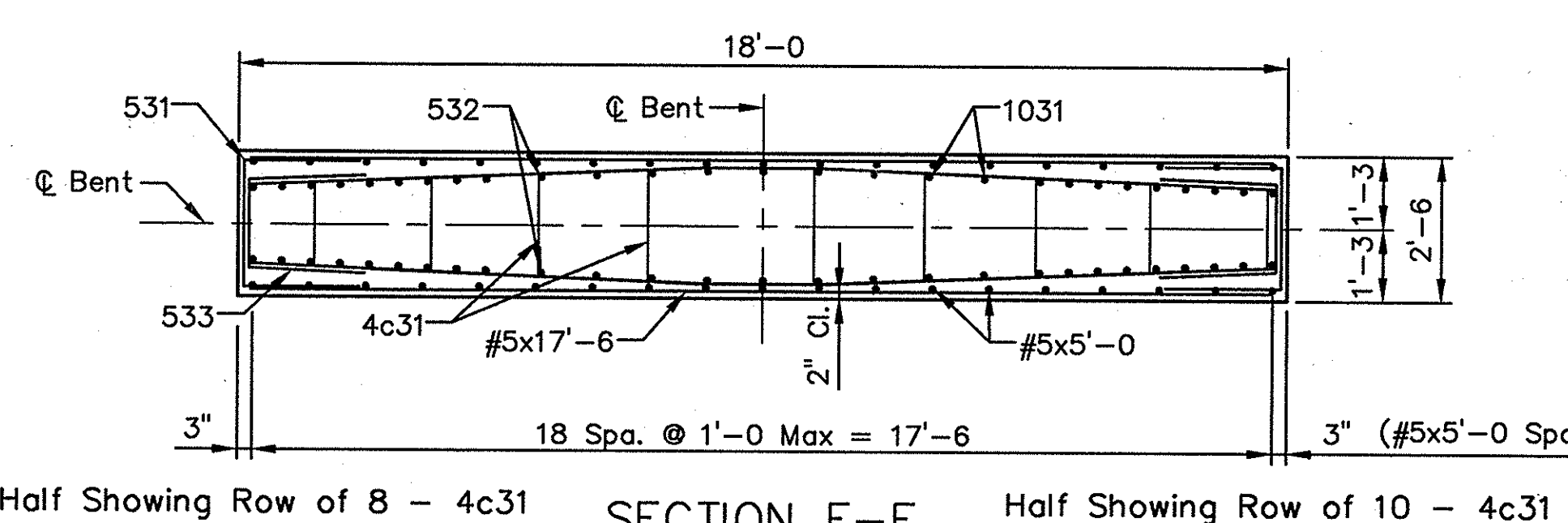
Bent 2 Phase I  
Bent 2 Phase II  
Bent 2 Shown, Bents No.3 & 4 Same



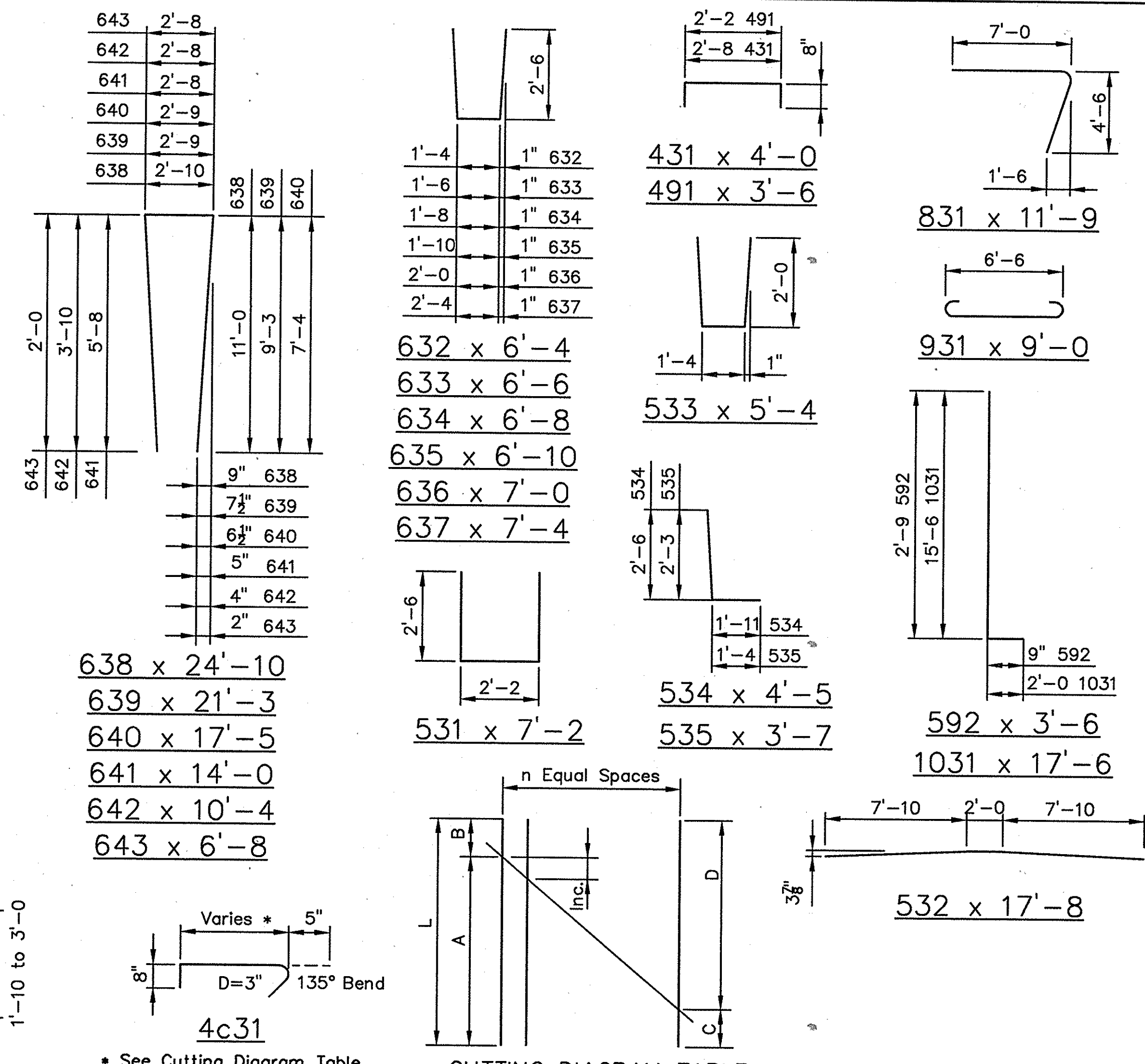
SECTION H-H



SECTION G-G

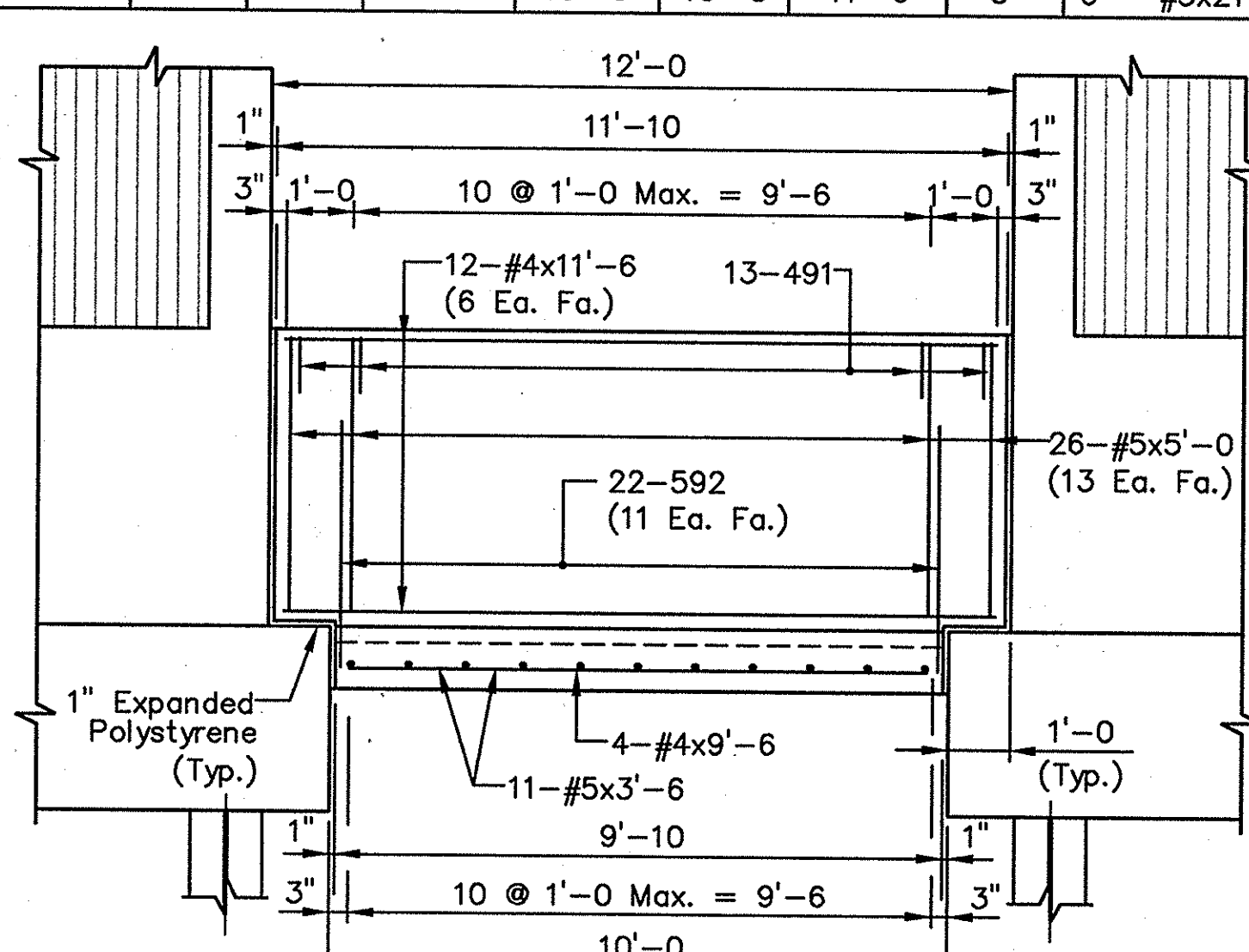


SECTION F-F

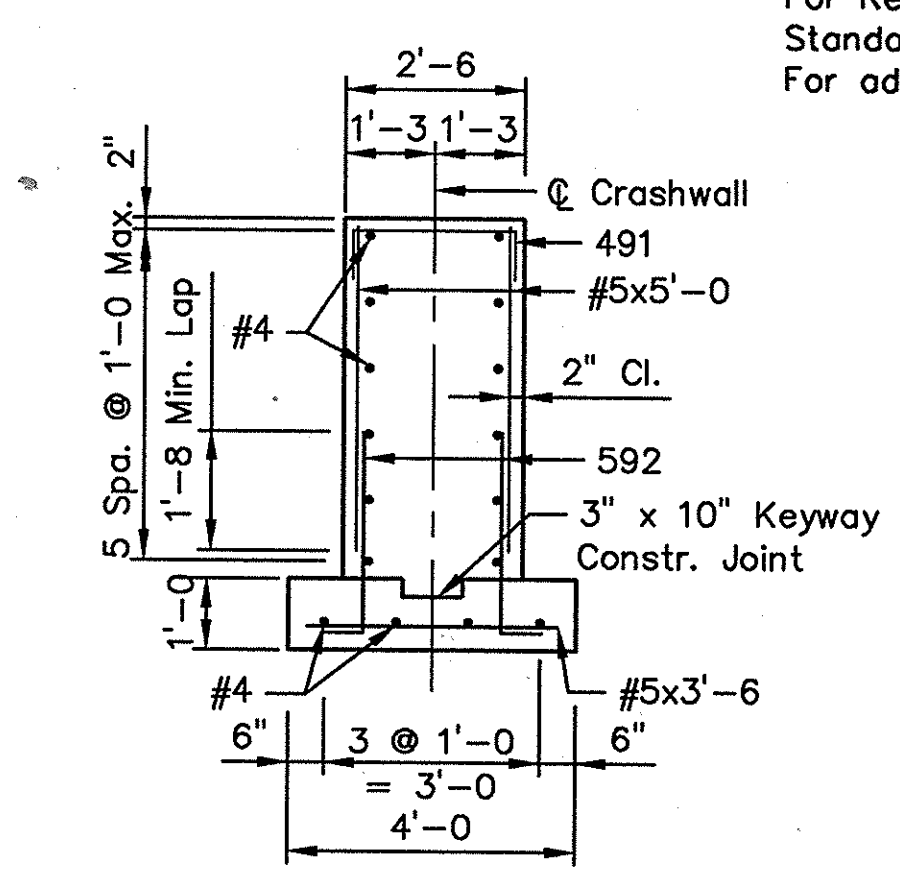


\* See Cutting Diagram Table

| SIZE & MARK | L      | n | A      | B      | C      | D      | Inc. | DESCRIPTION               |
|-------------|--------|---|--------|--------|--------|--------|------|---------------------------|
| 4c31        | 5'-6"  | 8 | 3'-1"  | 2'-5"  | 2'-5"  | 3'-1"  | 1"   | 9 - #4x5'-6 cuts 18 bars  |
| 5c31        | 18'-3" | 5 | 9'-9"  | 8'-6"  | 8'-6"  | 9'-9"  | 3"   | 6 - #5x18'-3 cuts 12 bars |
| 5c32        | 21'-9" | 5 | 11'-6" | 10'-3" | 10'-3" | 11'-6" | 3"   | 6 - #5x21'-9 cuts 12 bars |



COLLISION WALL DETAIL



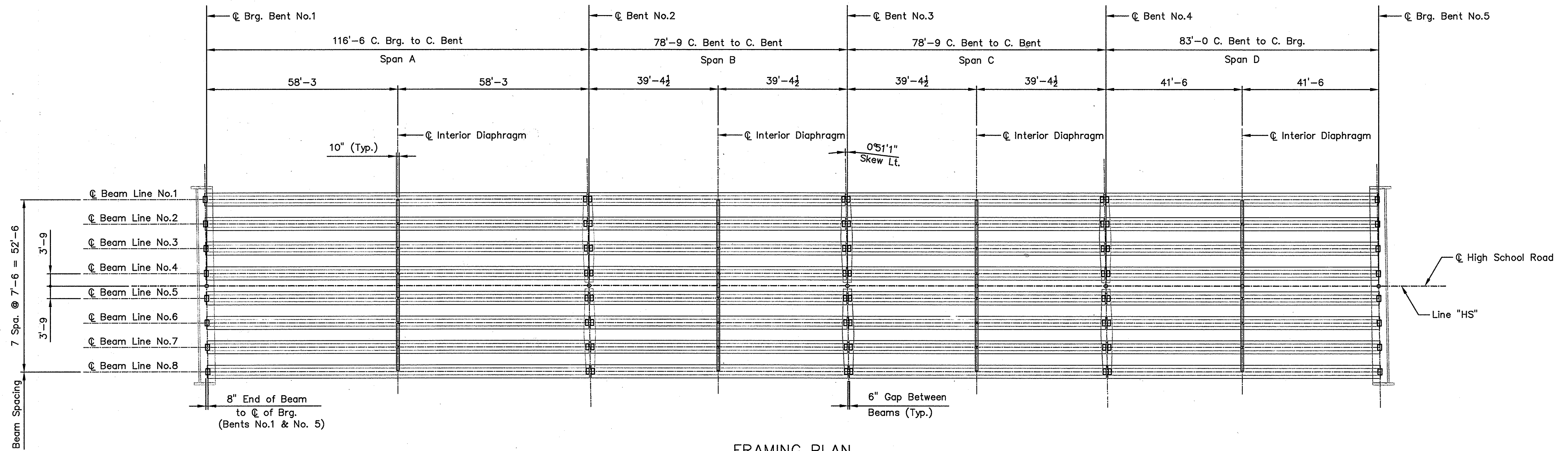
TYPICAL SECTION THRU WALL

Notes:  
For Reinforcing Bar Notes, see  
Standard Drawing E703-BRST-01.  
For addition details, see Sht. 14.

| BILL OF MATERIALS<br>BENT NO.2 PHASE I<br>(BENT NO.2 PHASE II, BENT NO.3<br>& NO.4, PHASE I & II<br>SAME UNLESS NOTED) |             |        |              | BILL OF MATERIALS<br>CONTINUED |           |           |  |
|------------------------------------------------------------------------------------------------------------------------|-------------|--------|--------------|--------------------------------|-----------|-----------|--|
| REINFORCING STEEL                                                                                                      |             |        |              | CONCRETE                       |           |           |  |
| SIZE OR MARK                                                                                                           | No. OF BARS | LENGTH | WEIGHT (LBS) | Substructure Bent No.2         |           |           |  |
|                                                                                                                        |             |        |              | Phase I                        | Pour No.1 | 9.0 Cys.  |  |
|                                                                                                                        |             |        |              | Phase II                       | Pour No.2 | 33.2 Cys. |  |
|                                                                                                                        |             |        |              | Phase I                        | Pour No.1 | 9.1 Cys.  |  |
|                                                                                                                        |             |        |              | Phase II                       | Pour No.2 | 33.1 Cys. |  |
|                                                                                                                        |             |        |              | Total in Bent No.2             |           |           |  |
|                                                                                                                        |             |        |              |                                |           |           |  |
|                                                                                                                        |             |        |              | Substructure Bent No.3         |           |           |  |
|                                                                                                                        |             |        |              | Phase I                        | Pour No.1 | 9.3 Cys.  |  |
|                                                                                                                        |             |        |              | Phase II                       | Pour No.2 | 34.2 Cys. |  |
|                                                                                                                        |             |        |              | Phase I                        | Pour No.1 | 9.3 Cys.  |  |
|                                                                                                                        |             |        |              | Phase II                       | Pour No.2 | 34.2 Cys. |  |
|                                                                                                                        |             |        |              | Total in Bent No.3             |           |           |  |
|                                                                                                                        |             |        |              |                                |           |           |  |
|                                                                                                                        |             |        |              | Substructure Bent No.4         |           |           |  |
|                                                                                                                        |             |        |              | Phase I                        | Pour No.1 | 9.2 Cys.  |  |
|                                                                                                                        |             |        |              | Phase II                       | Pour No.2 | 34.7 Cys. |  |
|                                                                                                                        |             |        |              | Phase I                        | Pour No.1 | 9.0 Cys.  |  |
|                                                                                                                        |             |        |              | Phase II                       | Pour No.2 | 35.0 Cys. |  |
|                                                                                                                        |             |        |              | Total in Bent No.4             |           |           |  |
|                                                                                                                        |             |        |              |                                |           |           |  |
|                                                                                                                        |             |        |              | Class "B" in Footing           |           |           |  |
|                                                                                                                        |             |        |              |                                |           |           |  |
|                                                                                                                        |             |        |              | MISCELLANEOUS                  |           |           |  |
|                                                                                                                        |             |        |              | Steel H-Piles, HP14x89         |           |           |  |
|                                                                                                                        |             |        |              | Bent No.2, Phase I & II        |           |           |  |
|                                                                                                                        |             |        |              |                                |           |           |  |
|                                                                                                                        |             |        |              | Bent No.3, Phase I & II        |           |           |  |
|                                                                                                                        |             |        |              |                                |           |           |  |
|                                                                                                                        |             |        |              | Bent No.4, Phase I & II        |           |           |  |
|                                                                                                                        |             |        |              |                                |           |           |  |
|                                                                                                                        |             |        |              | Pile Tip                       |           |           |  |
|                                                                                                                        |             |        |              |                                |           |           |  |
|                                                                                                                        |             |        |              | Structural Backfill, Cys.      |           |           |  |
|                                                                                                                        |             |        |              | Bent No.2                      |           |           |  |
|                                                                                                                        |             |        |              |                                |           |           |  |
|                                                                                                                        |             |        |              | Bent No.3                      |           |           |  |
|                                                                                                                        |             |        |              |                                |           |           |  |
|                                                                                                                        |             |        |              | Bent No.4                      |           |           |  |
|                                                                                                                        |             |        |              |                                |           |           |  |
|                                                                                                                        |             |        |              | Total Structural Backfill      |           |           |  |
|                                                                                                                        |             |        |              |                                |           |           |  |
|                                                                                                                        |             |        |              | Masonry Coating (Est.)         |           |           |  |
|                                                                                                                        |             |        |              |                                |           |           |  |
|                                                                                                                        |             |        |              | Bent No.2                      |           |           |  |
|                                                                                                                        |             |        |              |                                |           |           |  |
|                                                                                                                        |             |        |              | Bent No.3                      |           |           |  |
|                                                                                                                        |             |        |              |                                |           |           |  |
|                                                                                                                        |             |        |              | Bent No.4                      |           |           |  |
|                                                                                                                        |             |        |              |                                |           |           |  |
|                                                                                                                        |             |        |              | Total Reinf. Steel             |           |           |  |
|                                                                                                                        |             |        |              |                                |           |           |  |
|                                                                                                                        |             |        |              | Total Masonry Coating (Est.)   |           |           |  |
|                                                                                                                        |             |        |              |                                |           |           |  |

| BILL OF MATERIALS<br>COLLISION WALL<br>BENT NO.2<br>(BENT NO.3 & NO.4 SAME<br>UNLESS NOTED) |                |        |                 |
|---------------------------------------------------------------------------------------------|----------------|--------|-----------------|
| REINFORCING STEEL                                                                           |                |        |                 |
| SIZE OR<br>MARK                                                                             | No. OF<br>BARS | LENGTH | WEIGHT<br>(LBS) |
| 592                                                                                         | 22             | 3' -6  |                 |
| #5                                                                                          | 26             | 5' -0  |                 |
| #5                                                                                          | 11             | 3' -6  |                 |
| Total #5                                                                                    |                |        | 256             |
| 491                                                                                         | 13             | 3' -6  |                 |
| #4                                                                                          | 12             | 11' -6 |                 |
| #4                                                                                          | 4              | 9' -6  |                 |
| Total #4                                                                                    |                |        | 148             |
| Total Reinf. Steel                                                                          |                |        | 404             |
| CONCRETE                                                                                    |                |        |                 |
| Conc. Class "A" in Substr.                                                                  |                |        |                 |
| Bent No.2                                                                                   |                |        | 5.9 Cys.        |
| Bent No.3                                                                                   |                |        | 6.1 Cys.        |
| Bent No.4                                                                                   |                |        | 6.0 Cys.        |
| Total Conc. Class "A"                                                                       |                |        | 18.0 Cys.       |
| Conc. Class "B" in Footing                                                                  |                |        | 1.5 Cys.        |
| MISCELLANEOUS                                                                               |                |        |                 |
| Masonry Coating (Est.)                                                                      |                |        | 95 Sft.         |





FRAMING PLAN

GENERAL BEAM NOTES

Beams shall be cast a minimum of 15 days before the deck is poured. Top of beams are to be scored transversely at about 3" centers with a pointed tool.

Beams to be supported at bearing points while stored and while transporting to job site.

For 4'-6" Prestressed Concrete Bulb Tee Beam details, see Shts. 17-20.

Screed data will be furnished upon request.

The top reinforcing in the deck shall be securely tied down to the deck forms and/or the beams to prevent lifting during concrete placement.

Suitable Restraint must be Provided at all times During Storage, Transportation and Lifting to Resist Lateral Loads.

Beams Must be Maintained Vertically at all Times, Failure to do so could Result in Sudden Failure of the Beam.

For Interior Diaphragm Details, see Sheet 28.

DESIGN DATA

Prestressing steel shall be 1/2"  $\phi$  special low-relaxation strand (area = 0.167 sq. in.) with a ultimate tensile strength of 270,000 psi.

Initial tension per strand to be 33,800 Lbs.

Concrete Design Strength to be 7000 psi @ 28 days.

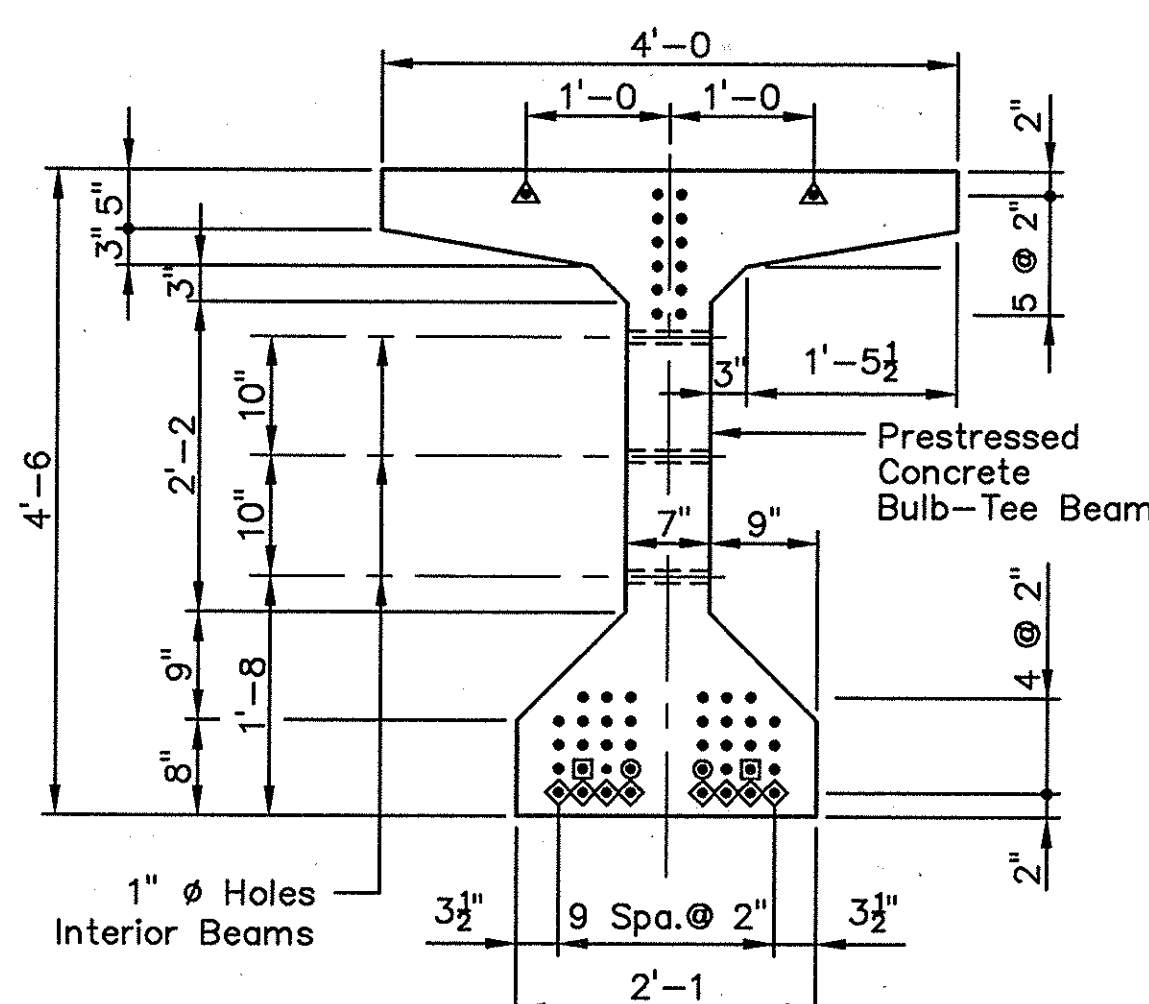
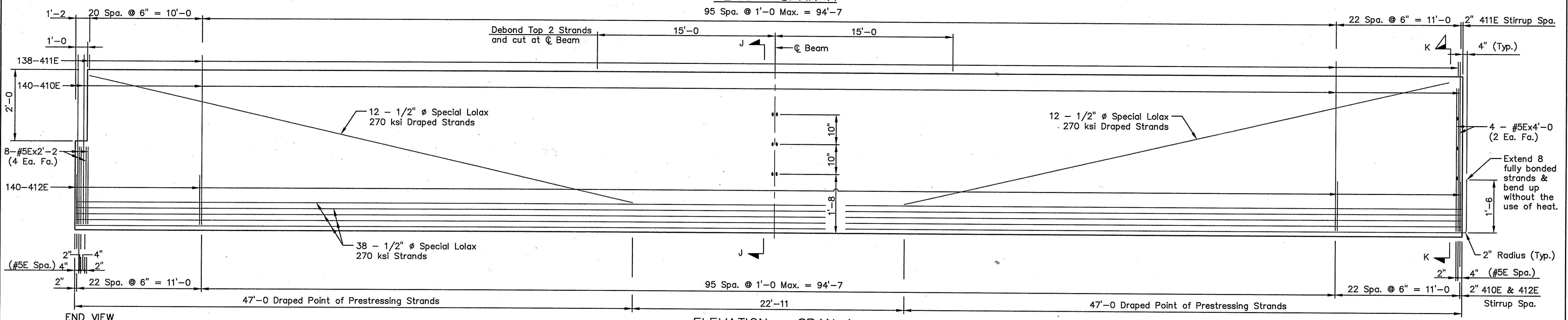
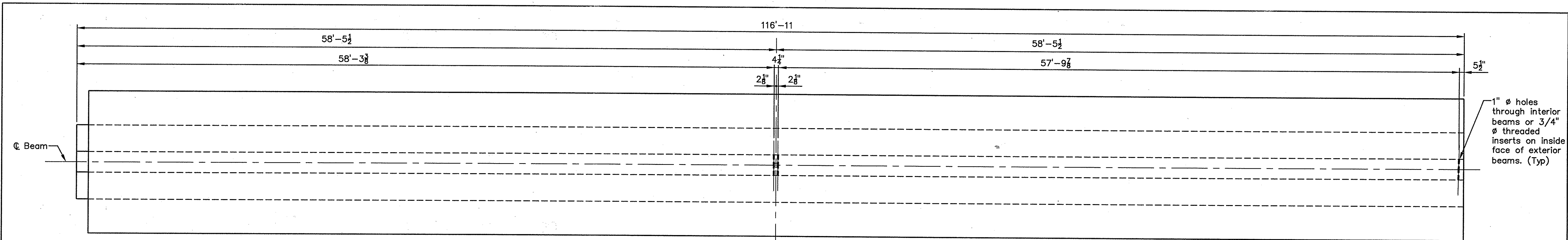
Concrete Design Strength to be 6000 psi or more before prestressing force is applied.

$f_y$  = 60,000 psi for Reinforcing Steel in beams.

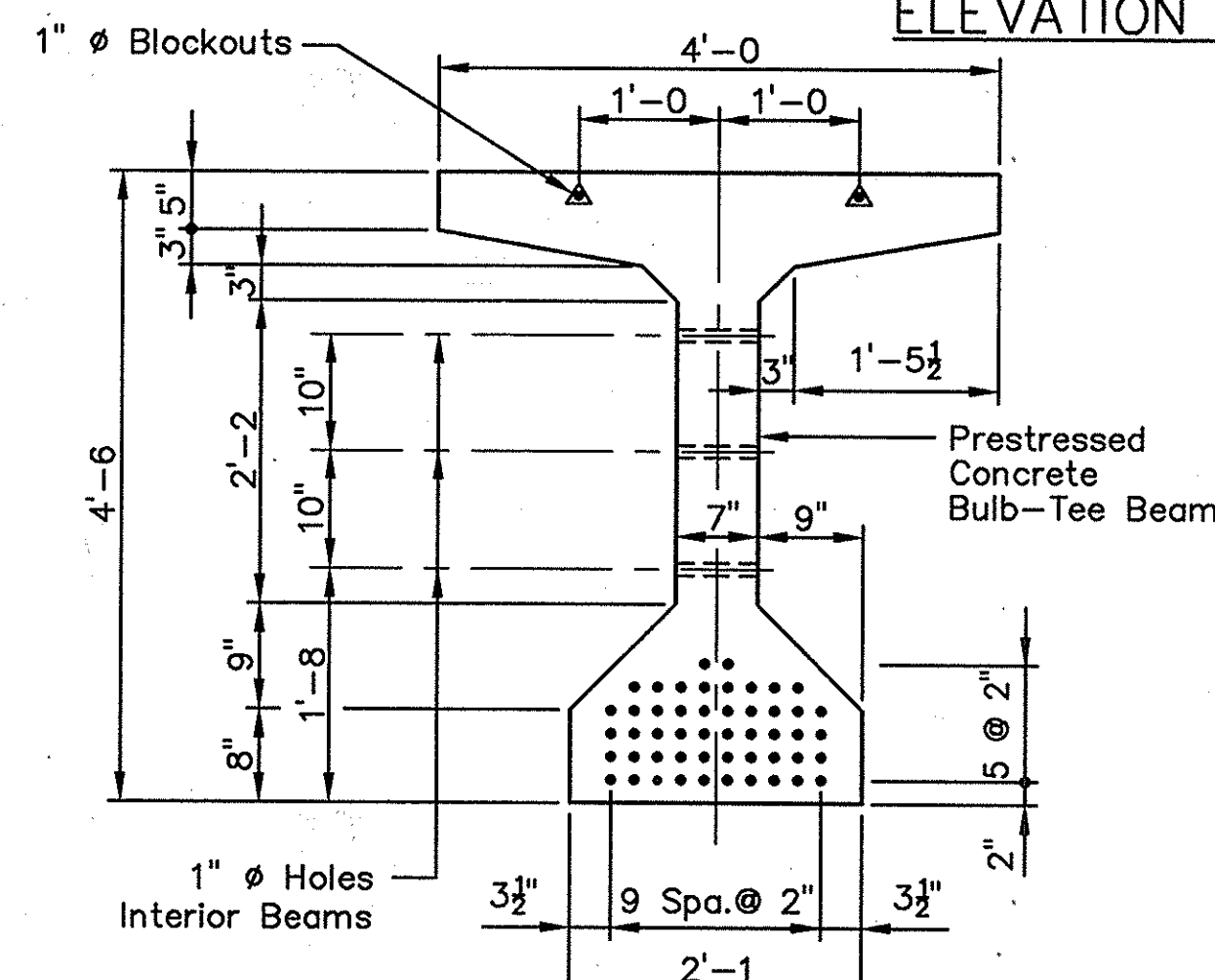
|  |                                                                              |                                         |                     |                        |                             |
|--|------------------------------------------------------------------------------|-----------------------------------------|---------------------|------------------------|-----------------------------|
|  | RECOMMENDED FOR APPROVAL<br><i>T. Jessop</i> 5-13-03<br>DESIGN ENGINEER DATE | INDIANA<br>DEPARTMENT OF TRANSPORTATION |                     | SCALE<br>1/16" = 1'-0" | BRIDGE FILE<br>I-70-73-8533 |
|  | DESIGNED: BWB DRAWN: LDW                                                     |                                         |                     | DESIGNATION<br>9910310 |                             |
|  | CHECKED: TDJ CHECKED: TDJ                                                    | FRAMING PLAN                            |                     | SURVEY BOOK            | SHEETS<br>16 of 30          |
|  |                                                                              |                                         | CONTRACT<br>B-26922 | PROJECT<br>IM-70-3 ( ) |                             |

XREFERENCES : TITLE:  
FILE NAME : P:\Design\Bridges\8533\Plans\8533-FRAMPLAN.dwg  
MRD\INT : 13-MAY-03, 08:09:52 / LDW



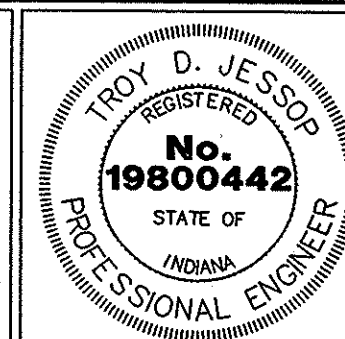


- ◇ - Extended Strands Interior Piers
  - - Debond 4'-6 From End
  - - Debond 7'-6 From End
  - △ - Debond 15'-0 Either Side of  $\phi$  and cut After Erection
- 52 - 1/2"  $\phi$  Strands  
Area = .167 in



NOTES:  
For General Beam Notes and Design Data, see Sheet 16.  
For additional details, see Sheet 20.

REFERENCES : TITLE:  
FILE NAME : P:\Design\Bridges\8533\Plans\8533-BEAM-A.dwg  
MRD\INT : 13-MAY-03, 08:45:03 / LDW

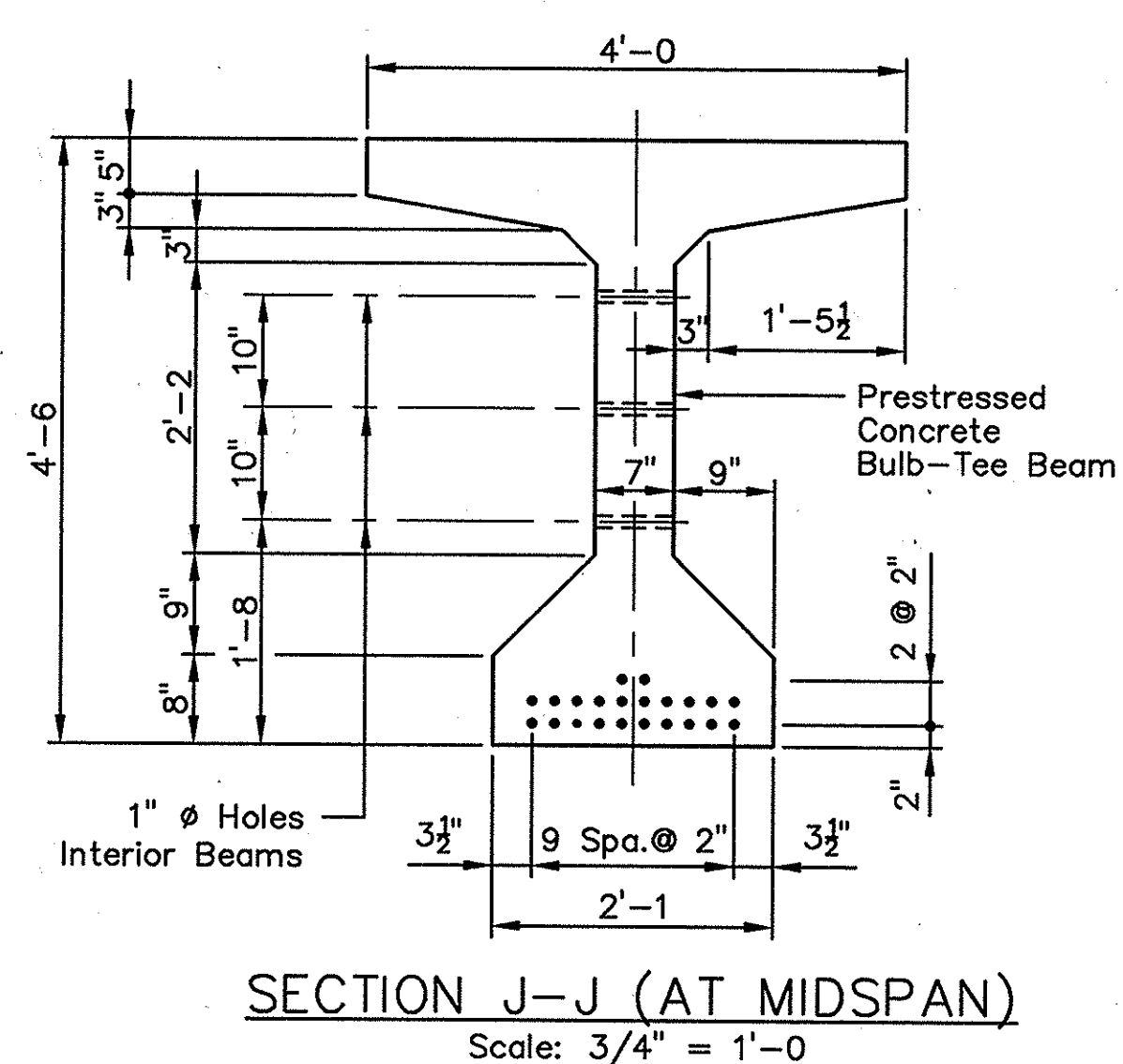
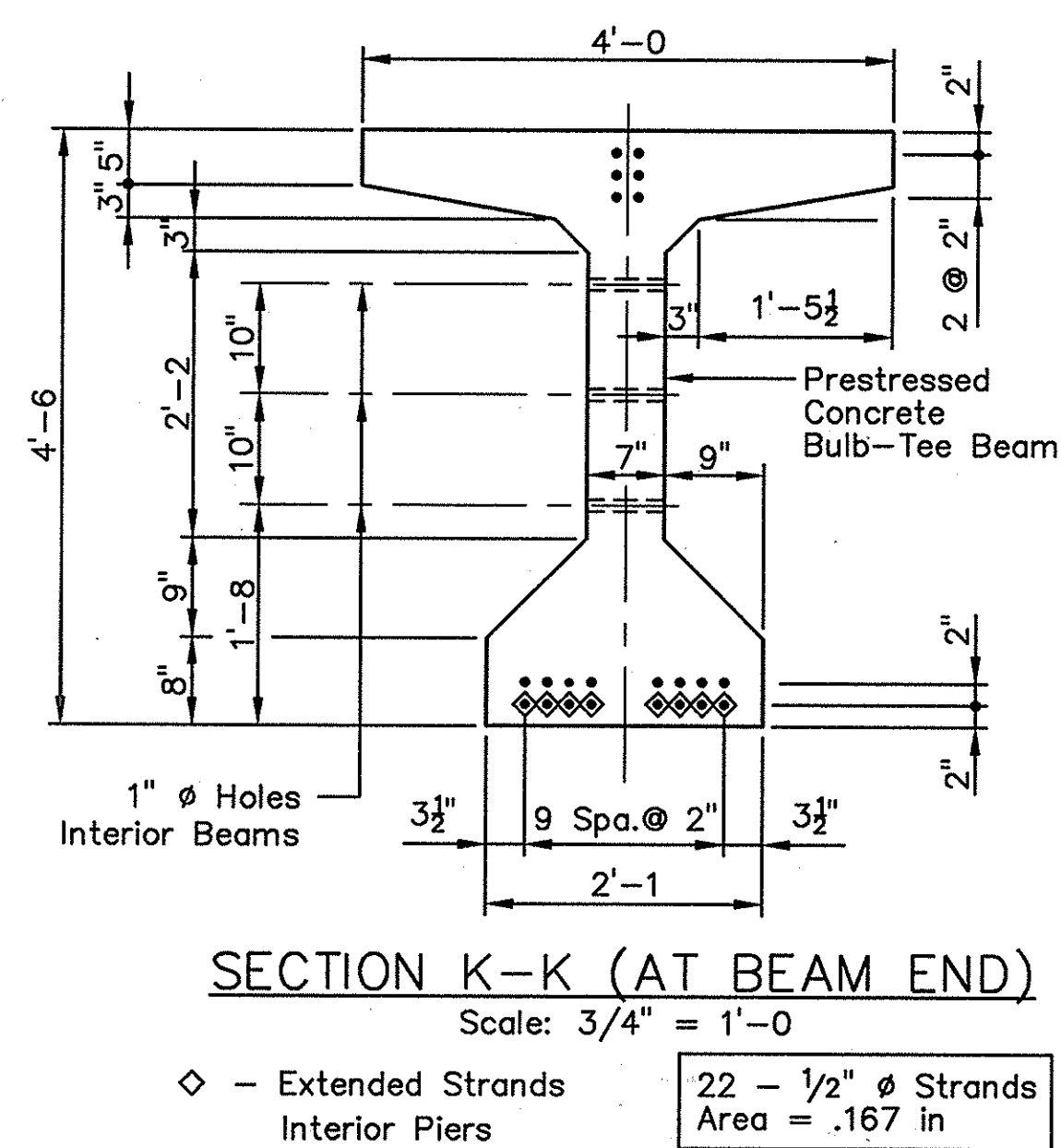
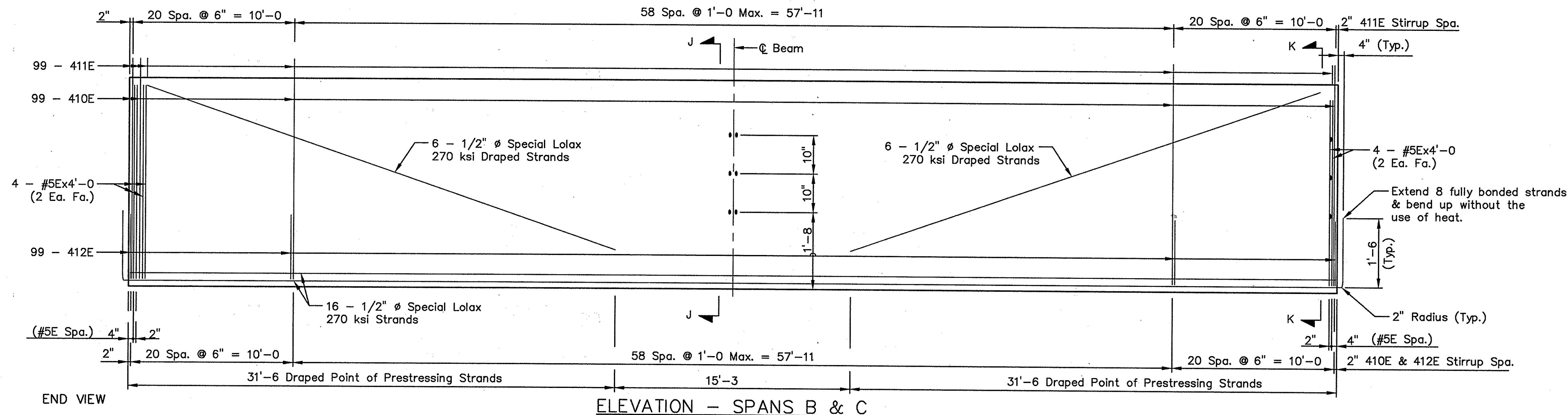
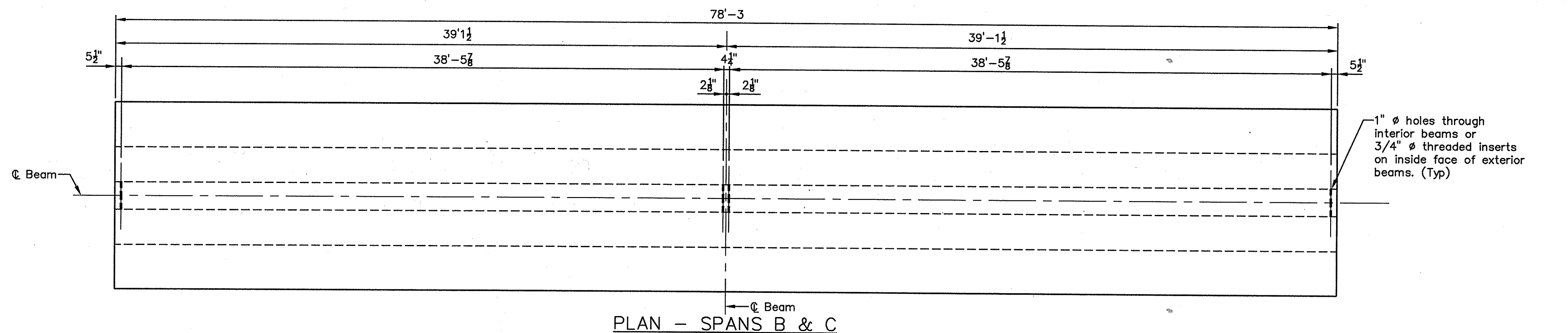


RECOMMENDED FOR APPROVAL  
DESIGN ENGINEER  
DATE: 5-13-03  
DESIGNED: TDJ DRAWN: LDW  
CHECKED: BWB CHECKED: TDJ

INDIANA  
DEPARTMENT OF TRANSPORTATION  
BEAM DETAILS

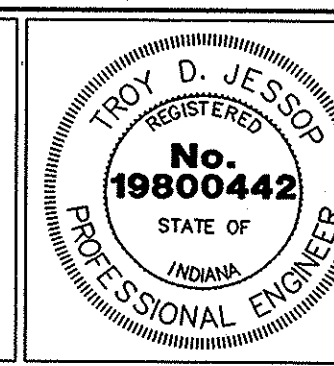
| SCALE              | BRIDGE FILE  |
|--------------------|--------------|
| 1/4" = 1'-0 Horiz. | I-70-73-8533 |
| 3/4" = 1'-0 Vert.  | DESIGNATION  |
| UNLESS NOTED       | 9910310      |
| SURVEY BOOK        | SHEETS       |
|                    | 17 of 30     |
| CONTRACT           | PROJECT      |
| B-26922            | IM-70-3 ( )  |





NOTES:  
For General Beam Notes and Design Data, see Sheet 16.  
For additional details, see Sheet 20.

REFERENCES : TITLE :  
FILE NAME : P:\Design\Bridges\8533\Plans\8533-BEAM-B&C.dwg  
MRD\INT : 13-MAY-03, 08:51:35 / LDW

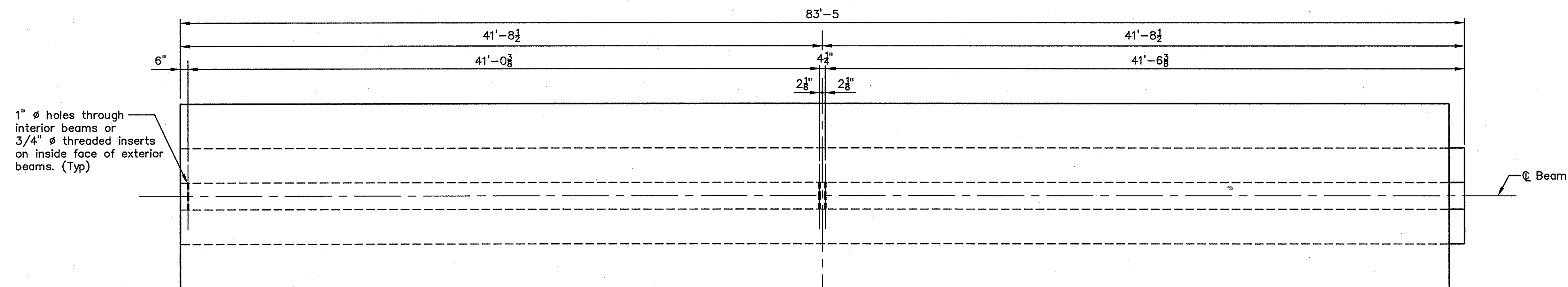


RECOMMENDED FOR APPROVAL: *T.D.J.* 5-13-03  
DESIGN ENGINEER DATE  
DESIGNED: TDJ DRAWN: LDW  
CHECKED: BWB CHECKED: TDJ

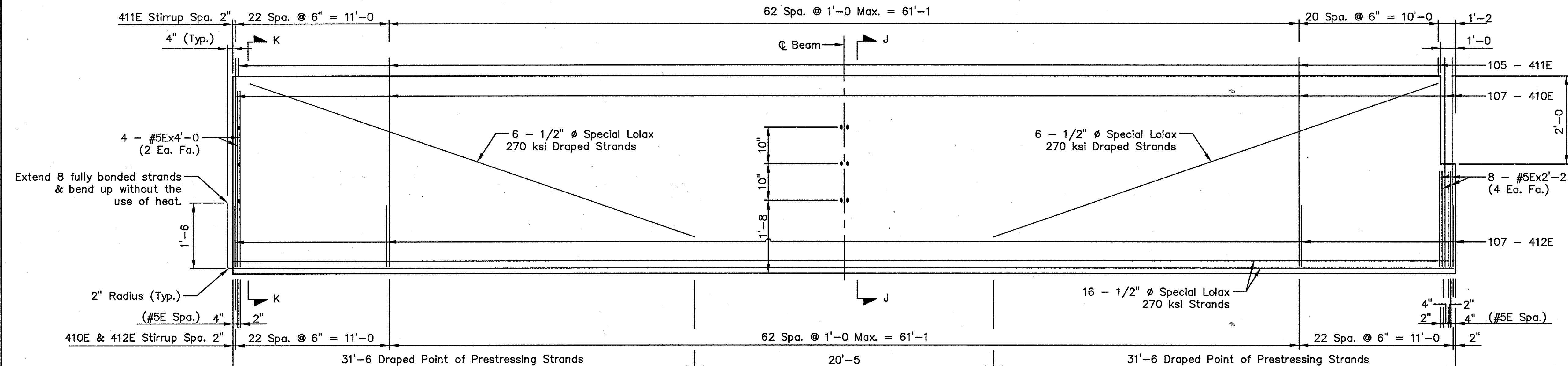
INDIANA  
DEPARTMENT OF TRANSPORTATION  
BEAM DETAILS

|                     |              |
|---------------------|--------------|
| SCALE               | BRIDGE FILE  |
| 1/4" = 1'-0" Horiz. | I-70-73-8533 |
| 3/4" = 1'-0" Vert.  | DESIGNATION  |
| UNLESS NOTED        | 9910310      |
| SURVEY BOOK         | SHEETS       |
| CONTRACT            | 18 of 30     |
| B-26922             | PROJECT      |
|                     | IM-70-3 ( )  |

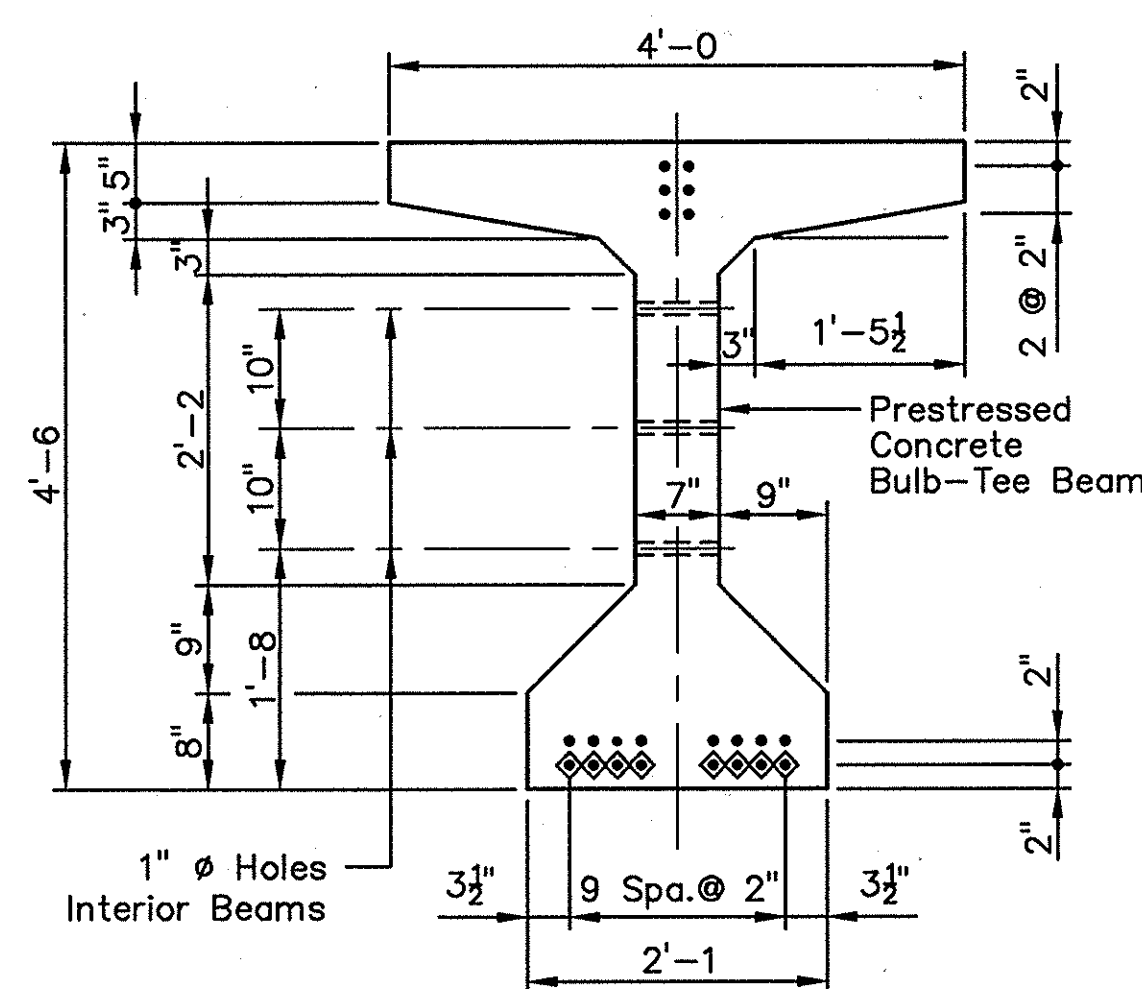




PLAN - SPAN D



ELEVATION - SPAN D

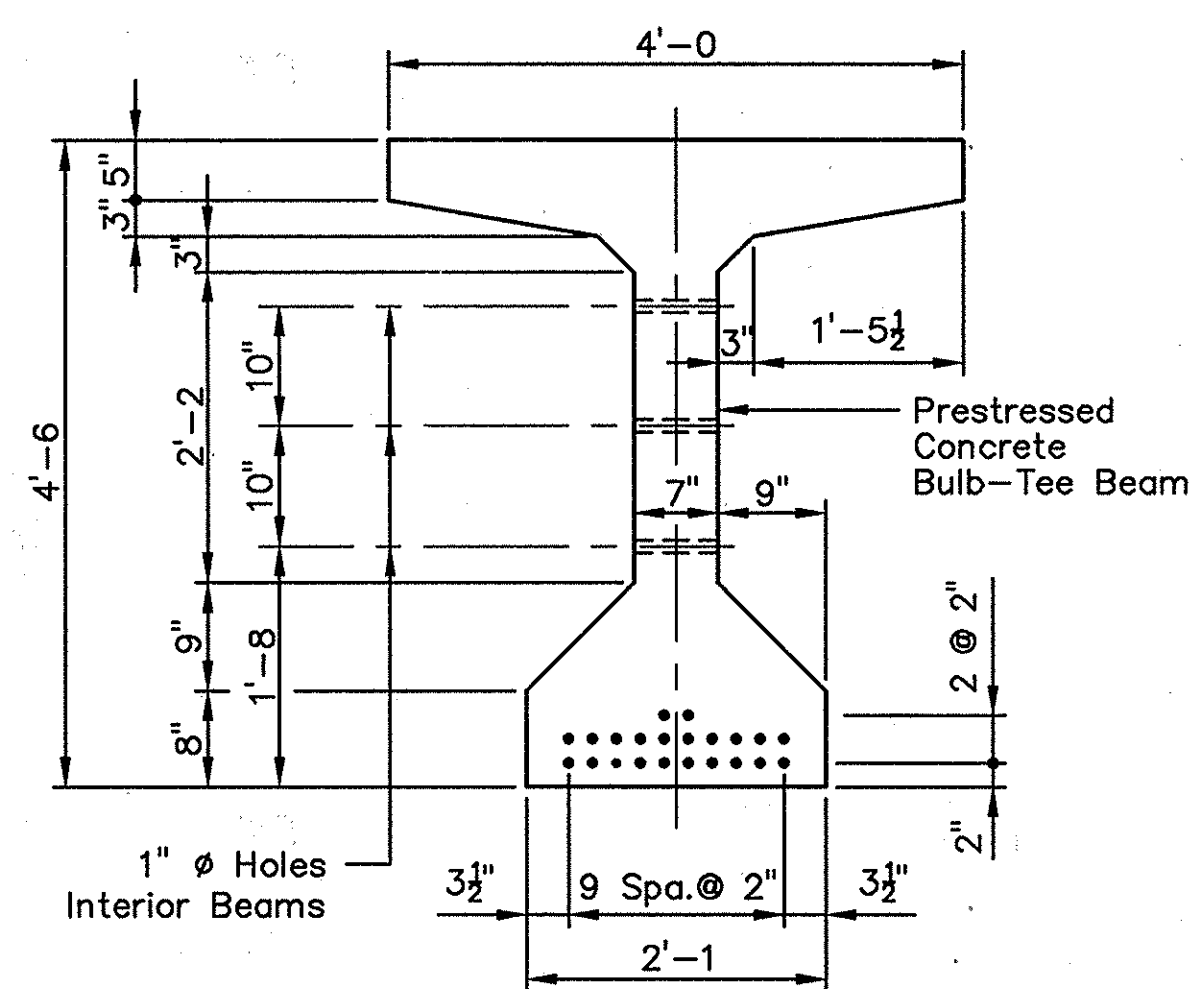


SECTION K-K (AT BEAM END)

Scale: 3/4" = 1'-0"

◇ - Extended Strands  
Interior Piers

22 - 1/2" Ø Strands  
Area = .167 in

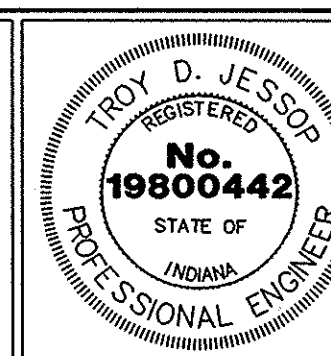


SECTION J-J (AT MIDSPAN)

Scale: 3/4" = 1'-0"

NOTES:  
For General Beam Notes and Design Data, see Sheet 16.  
For additional details, see Sheet 20.

REFERENCES  
FILE NAME : P:\Design\Bridges\8533\Plans\8533-BEAM-D.dwg  
MRD\INT : 13-MAY-03, 09:55:58 / LDW



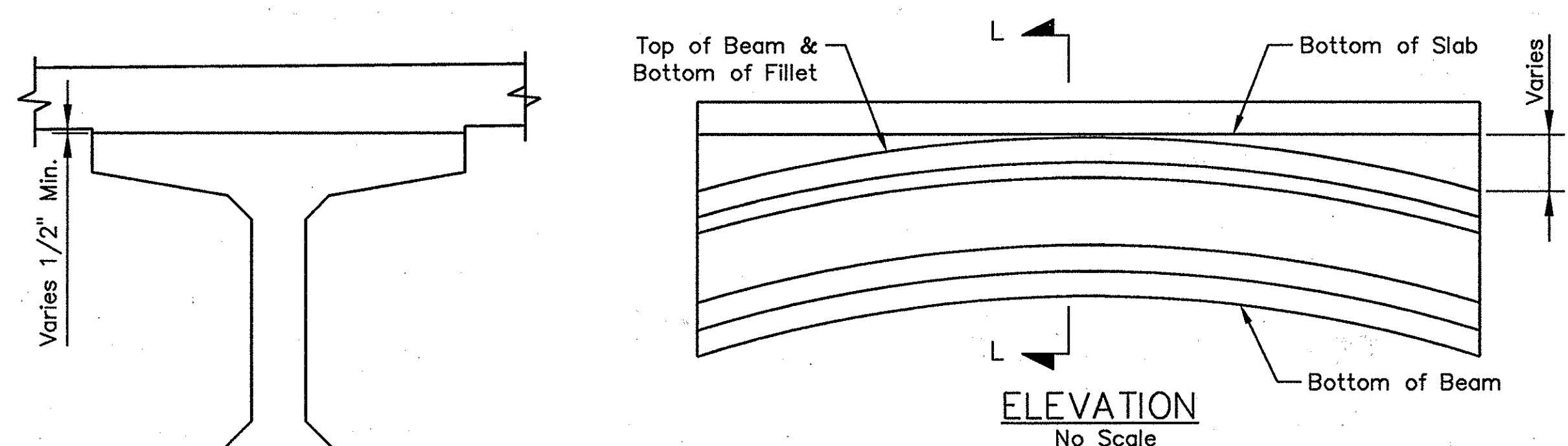
RECOMMENDED FOR APPROVAL  
DESIGNED: TDJ DRAWN: LDW  
CHECKED: BWB CHECKED: TDJ

INDIANA  
DEPARTMENT OF TRANSPORTATION

BEAM DETAILS

| SCALE               | BRIDGE FILE  |
|---------------------|--------------|
| 1/4" = 1'-0" Horiz. | I-70-73-8533 |
| 3/4" = 1'-0" Vert.  | DESIGNATION  |
| UNLESS NOTED        | 9910310      |
| SURVEY BOOK         | SHEETS       |
|                     | 19 of 30     |
| CONTRACT            | PROJECT      |
| B-26922             | IM-70-3 ( )  |



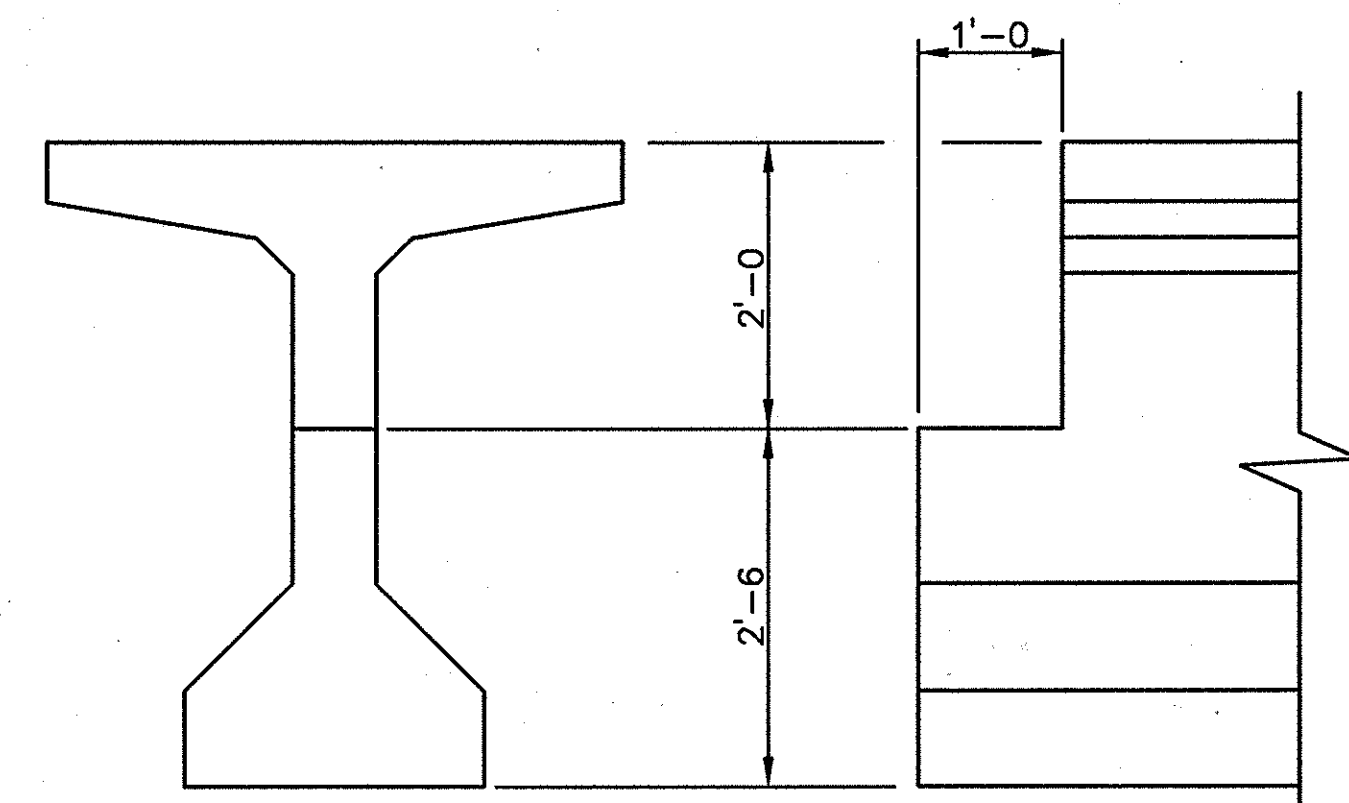


SECTION L-L  
No Scale

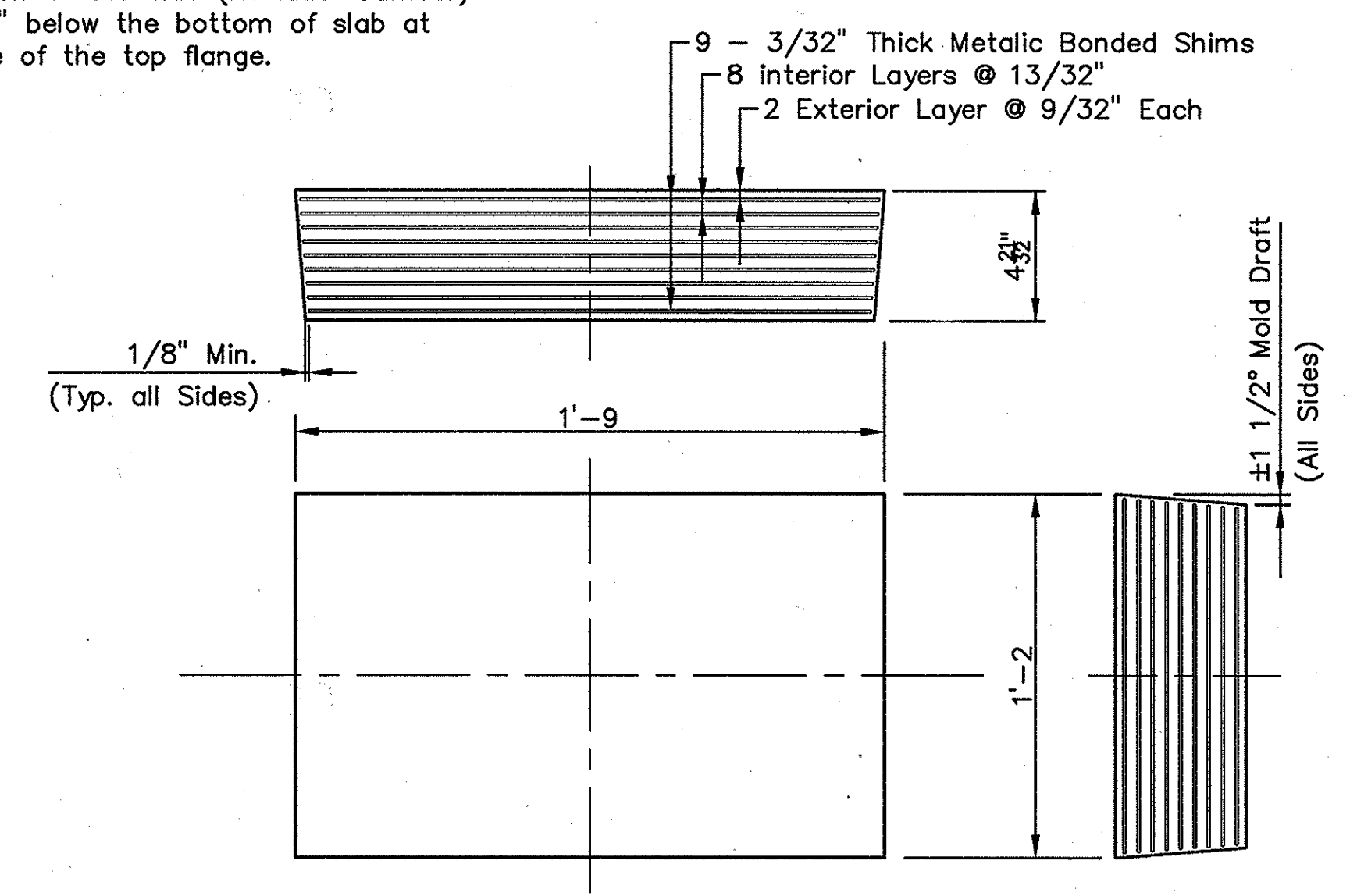
|                         | SPAN A  | SPAN B  | SPAN C  | SPAN D  |
|-------------------------|---------|---------|---------|---------|
| Anticipated Beam Camber | -4 5/8" | -1 1/8" | -1 1/8" | -1 1/4" |
| Dead Load Deflection    | 2 3/8"  | 3/8"    | 3/8"    | 7/8"    |
| Residual Camber         | -2 1/4" | -3/4"   | -3/4"   | -3/8"   |

(Negative Denotes Upward)

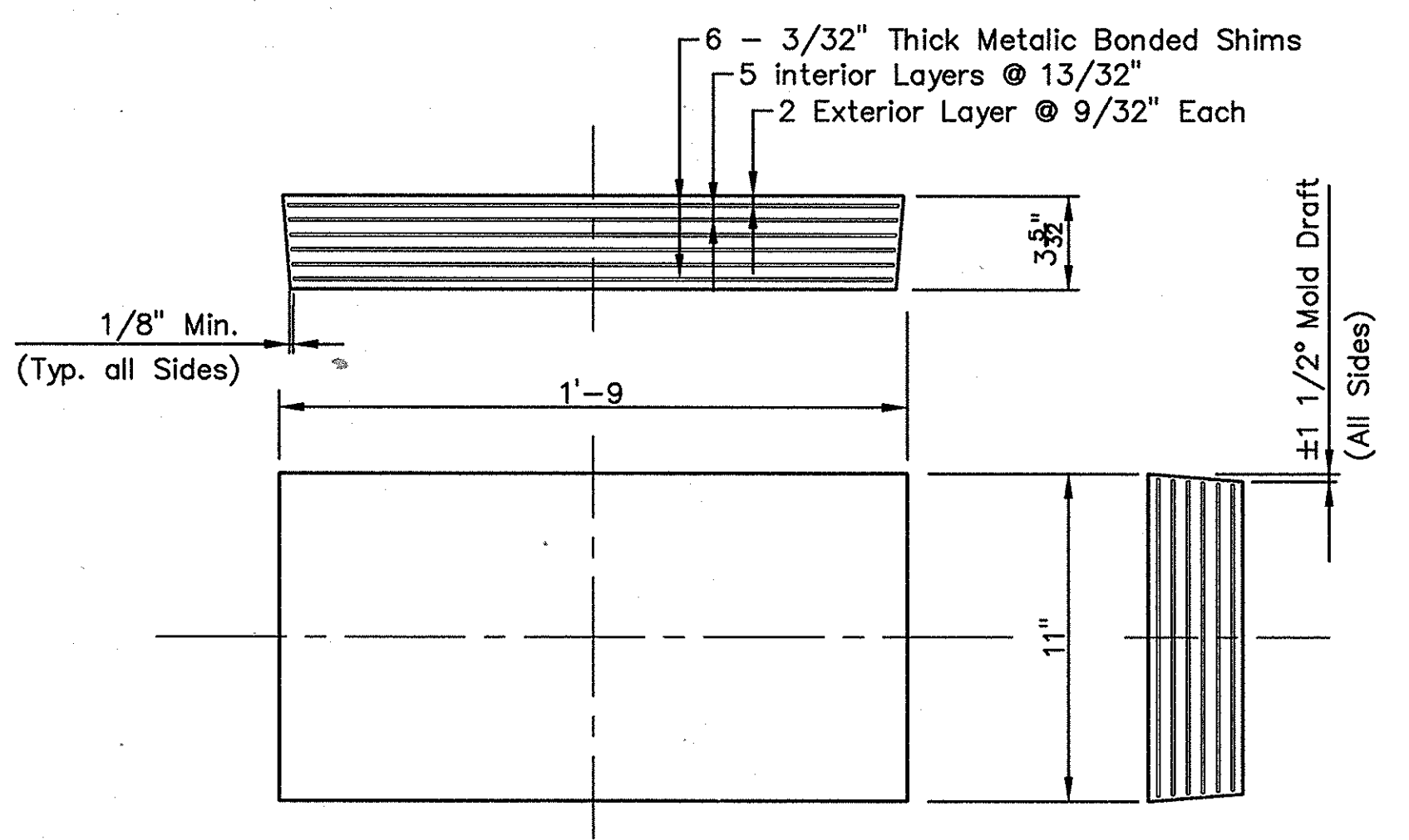
Bridge seat elevations were calculated using anticipated beam camber and dead load deflection of the slab (Residual Camber) with the top of the beam 1/2" below the bottom of slab at centerline of span on low edge of the top flange.



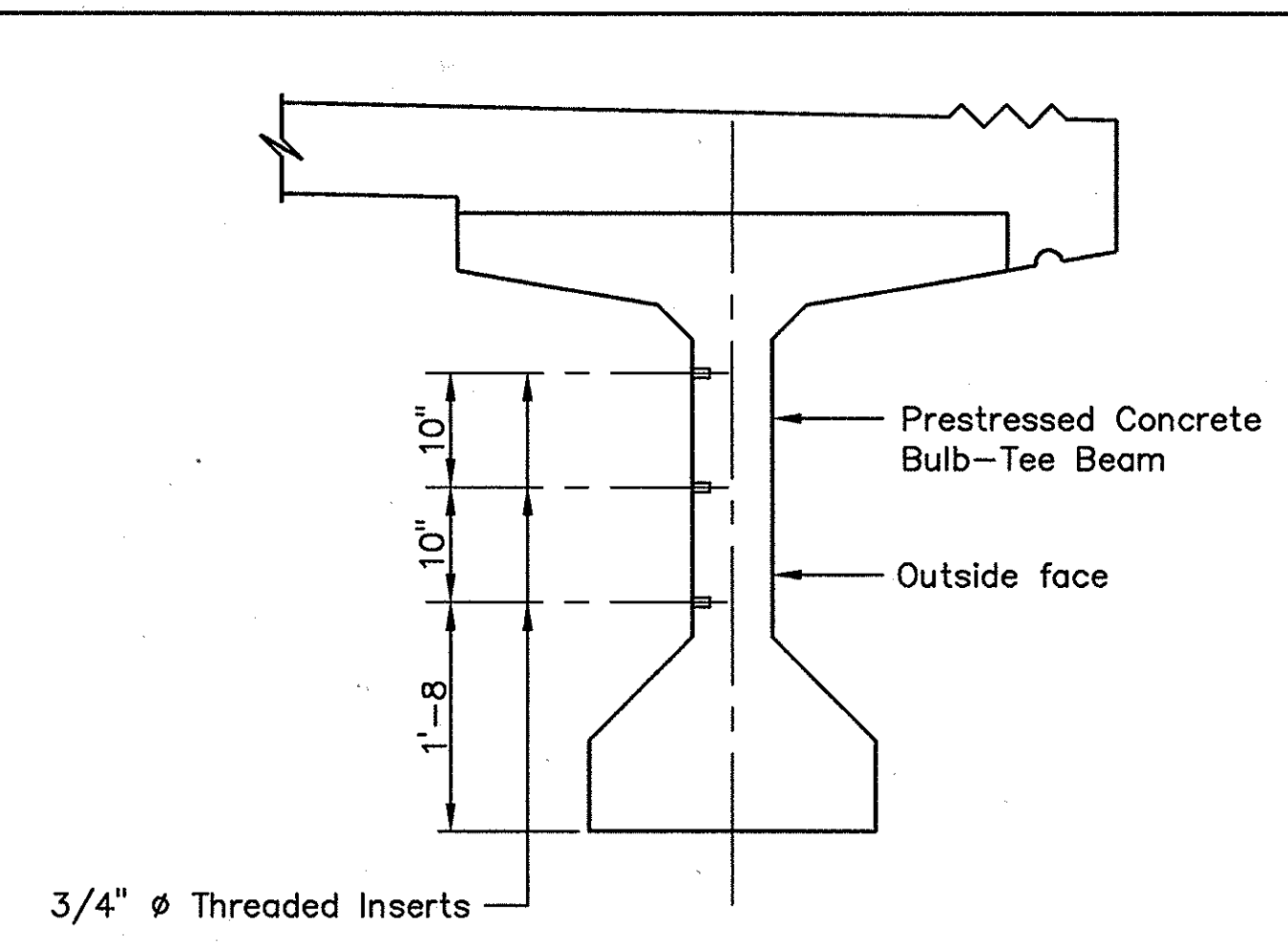
END OF BEAM NOTCH DETAIL



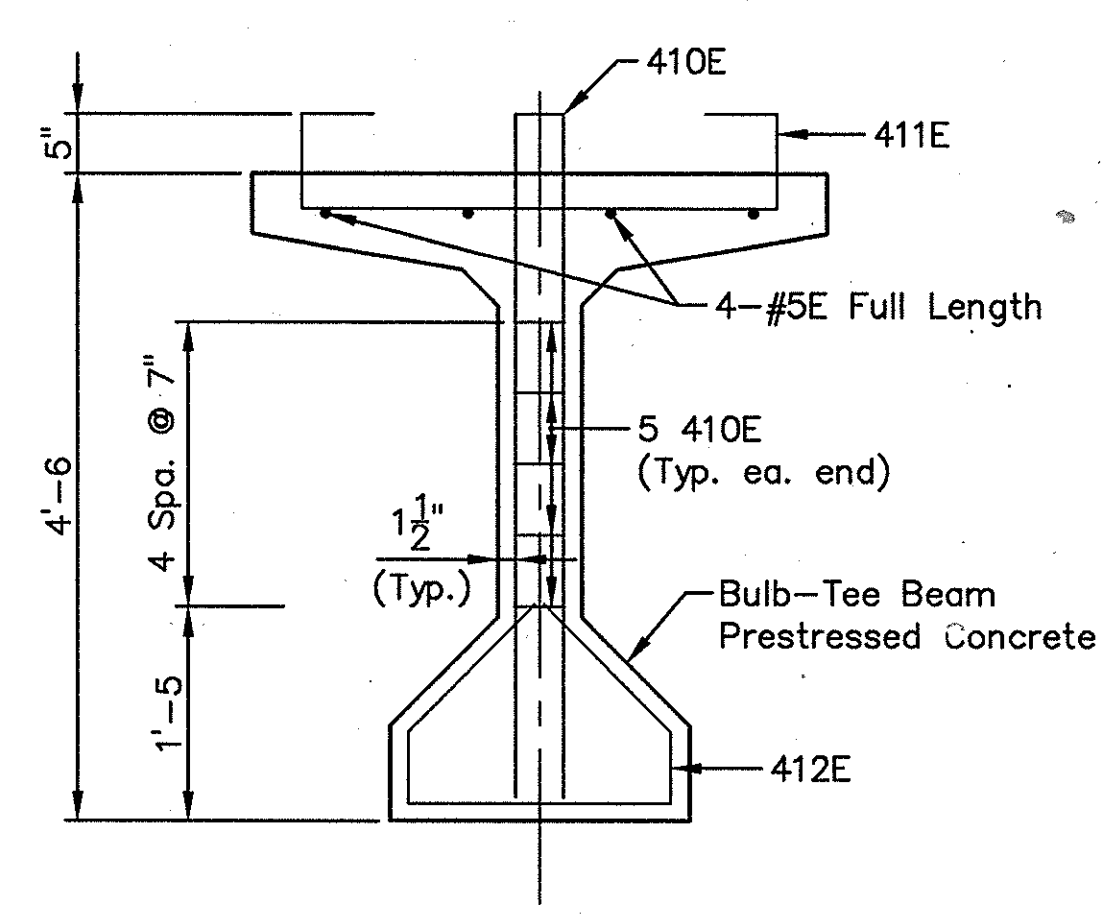
ELASTOMERIC BEARING PAD DETAIL  
BENTS NO.1 & NO.5  
Scale: 3" = 1'-0"  
Durometer hardness shall be 55 ± 5



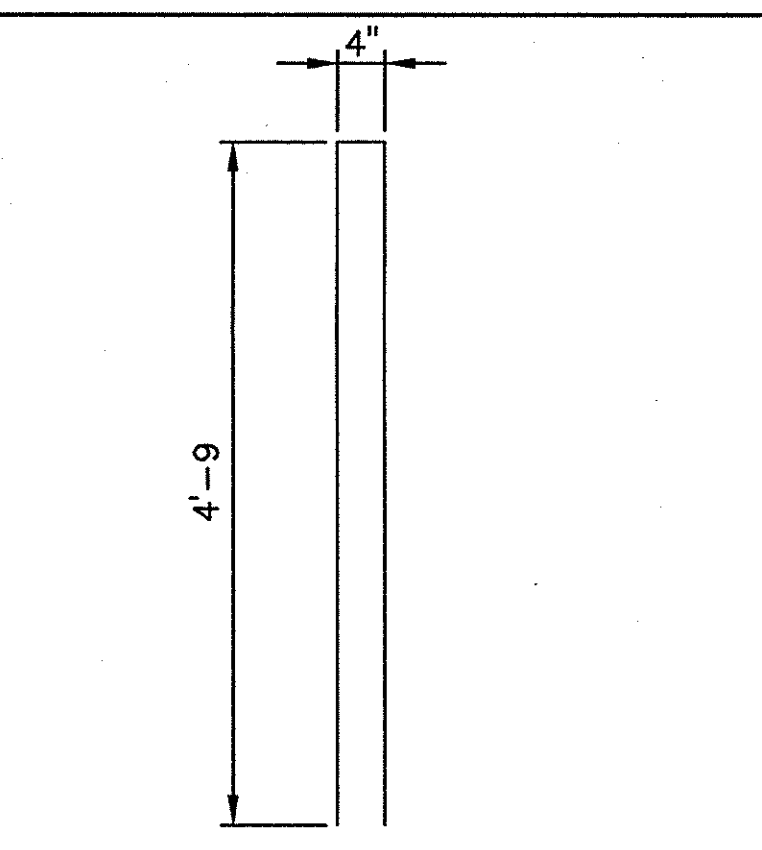
ELASTOMERIC BEARING PAD DETAIL  
BENTS NO.2, NO.3 & NO.4  
Scale: 3" = 1'-0"  
Durometer hardness shall be 55 ± 5



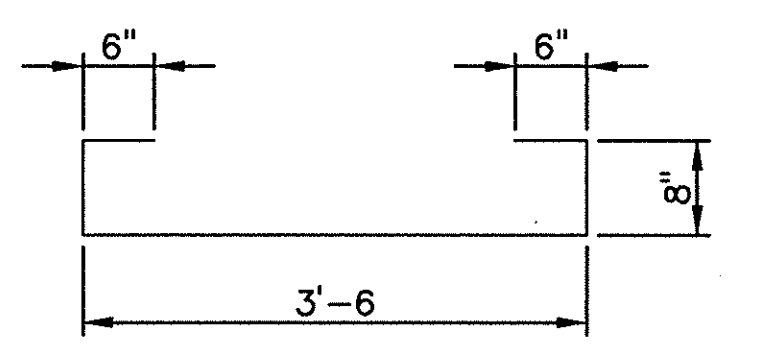
SECTION AT EXT. BEAM



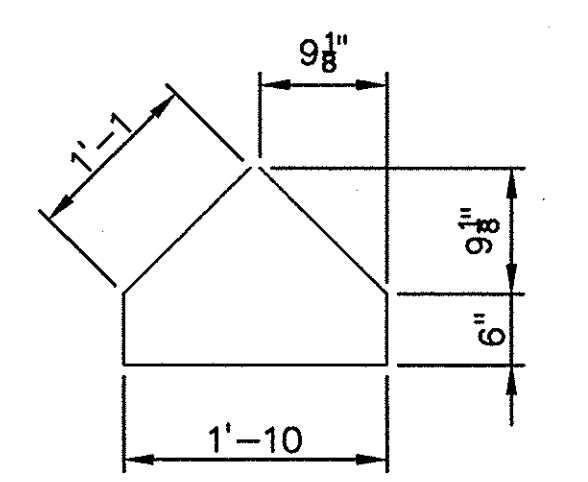
REINFORCING SECTION



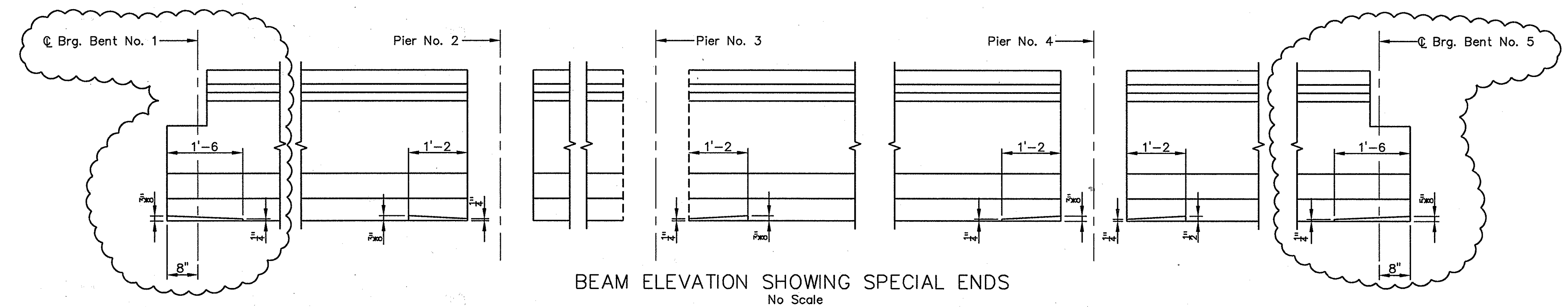
410E x 9'-10



411E x 5'-10

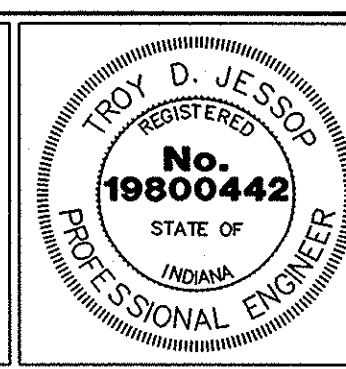


412 x 5'-0



BEAM ELEVATION SHOWING SPECIAL ENDS  
No Scale

Revision 6/17/03 Clouded areas show revisions.



RECOMMENDED FOR APPROVAL  
DESIGNED: TDJ DRAWN: LDW  
CHECKED: BWB CHECKED: TDJ

INDIANA  
DEPARTMENT OF TRANSPORTATION  
BEAM DETAILS

|                                       |                                                       |
|---------------------------------------|-------------------------------------------------------|
| SCALE<br>3/4" = 1'-0"<br>UNLESS NOTED | BRIDGE FILE<br>I-70-73-8533<br>DESIGNATION<br>9910310 |
| SURVEY BOOK                           | SHEETS<br>20 of 30                                    |
| CONTRACT<br>B-26922                   | PROJECT<br>IM-70-3 ( )                                |

REFERENCES: TITLE; FILE NAME: P:\Design\Bridges\8533\Plans\8533-BEAM-DET-REV.dwg; MRD\INT: 12-JUN-03, 14:31:50 / SJM





For Typical Section, see Sht. 25.  
For additional details, see Sheets 27-28.  
For Reinforcing Bar Notes, see Standard Drawing E703-BRST-01.  
The contractor will have the option of using permanent metal forms for the concrete bridge deck in lieu of removable forms in this contract.  
Reinforcing steel covering shall be 2 1/2" min. in top and 1" min. in bottom of floor slab and 2" min. in all other parts, unless noted.  
The designation "E" with the bar size indicates that the reinforcing steel is to be epoxy coated.  
Screed data will be furnished upon request.  
The top reinforcing in the deck shall be securely tied down to the deck forms and/or the beams to prevent lifting during concrete placement.  
Suitable restraint shall be provided to prevent the rotation of the outside beams from construction load such as finishing machine, forms, etc.

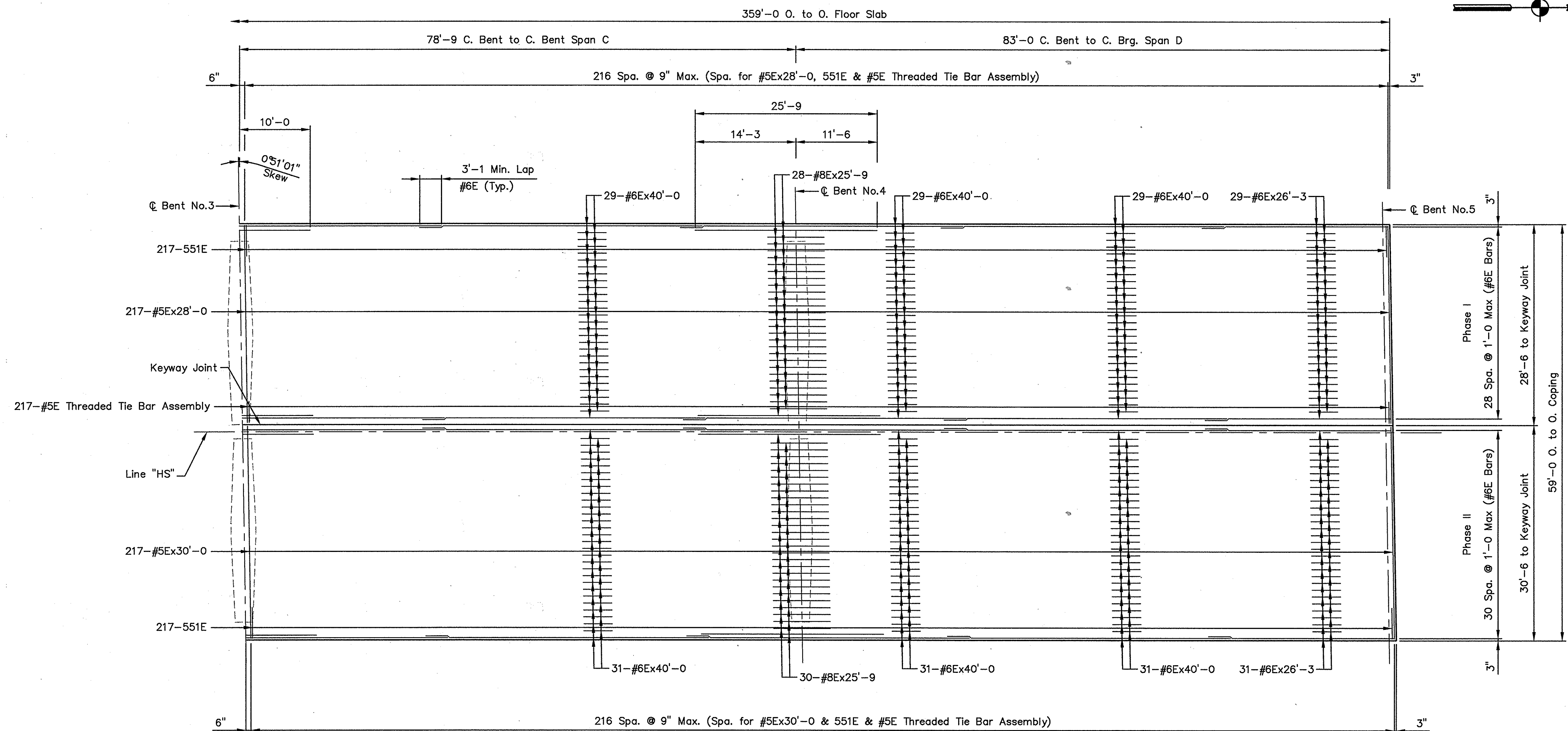
|  |                                                                                       |                                                                           |                                         |                                       |                                                       |
|--|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------|-----------------------------------------|---------------------------------------|-------------------------------------------------------|
|  |  | RECOMMENDED FOR APPROVAL <u>T.P. T.P. 5-13-03</u><br>DESIGN ENGINEER DATE | INDIANA<br>DEPARTMENT OF TRANSPORTATION | SCALE<br>1/8" = 1'-0"<br>UNLESS NOTED | BRIDGE FILE<br>1-70-73-8533<br>DESIGNATION<br>9910310 |
|  |                                                                                       | DESIGNED: <u>TDJ</u> DRAWN: <u>LDW</u>                                    | SUPERSTRUCTURE DETAILS                  | SURVEY BOOK                           | SHEETS<br>21 of 30                                    |
|  |                                                                                       | CHECKED: <u>BWB</u> CHECKED: <u>TDJ</u>                                   |                                         | CONTRACT<br>B-26922                   | PROJECT<br>IM-70-3 ( )                                |
|  |                                                                                       |                                                                           |                                         |                                       |                                                       |

```

XREFERENCES      : _TITLE;
FILE NAME        : P:\Design\Bridges\8533\Plans\8533-SUPSTR1.dwg
MRD\INT          : 13-MAY-03, 09:05:27 / LDW

```



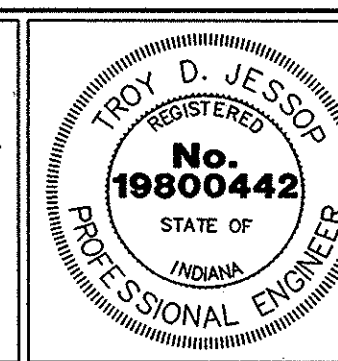


PLAN - SPANS C & D  
Showing Top Steel

NOTES:

For Superstructure Detail Notes, see Sheet 21

XREFERENCES : - TITLE:  
FILE NAME : P:\Design\Bridges\8533\Plane\8533-SUPSTR2.dwg  
MRD\INT : 13-MAY-03, 09:08:04 / LDW



|                          |                        |                 |      |
|--------------------------|------------------------|-----------------|------|
| RECOMMENDED FOR APPROVAL | <i>Top Top</i> 5-13-03 | DESIGN ENGINEER | DATE |
| DESIGNED: TDJ            | DRAWN: LDW             |                 |      |
| CHECKED: BWB             | CHECKED: TDJ           |                 |      |

INDIANA  
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS

|              |              |
|--------------|--------------|
| SCALE        | BRIDGE FILE  |
| 1/8" = 1'-0  | 1-70-73-8533 |
| UNLESS NOTED | DESIGNATION  |
|              | 9910310      |
| SURVEY BOOK  | SHEETS       |
|              | 22 of 30     |
| CONTRACT     | PROJECT      |
| B-26922      | IM-70-3 ( )  |





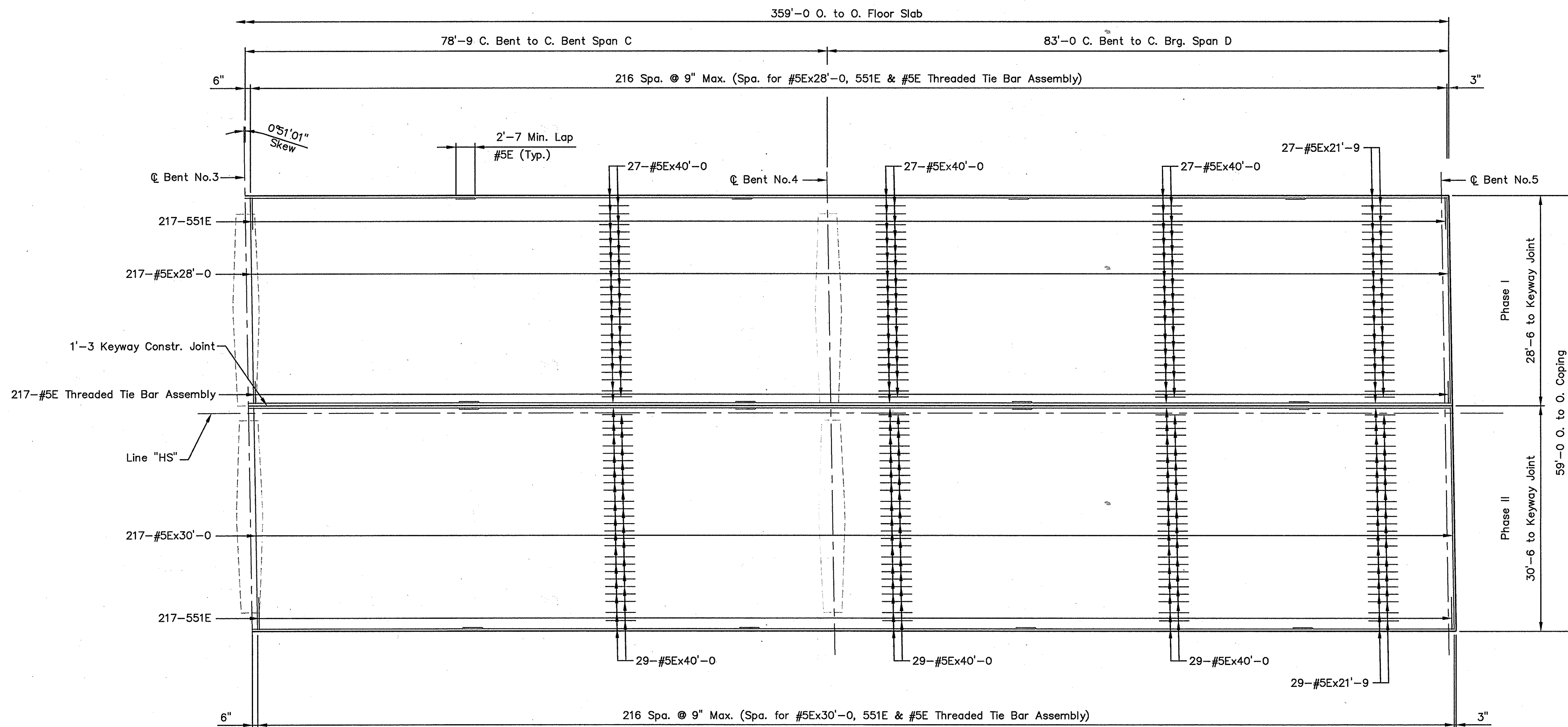
For Superstructure Detail Notes, see Sheet 21

```

XREFERENCES      : _TITLE;
FILE NAME       : P:\Design\Bridges\8533\Plans\8533-SUPSTR3.dwg
MRD\INT        : 13-MAY-03, 09:10:01 / LDW

```





PLAN - SPANS C & D  
Showing Bottom Steel

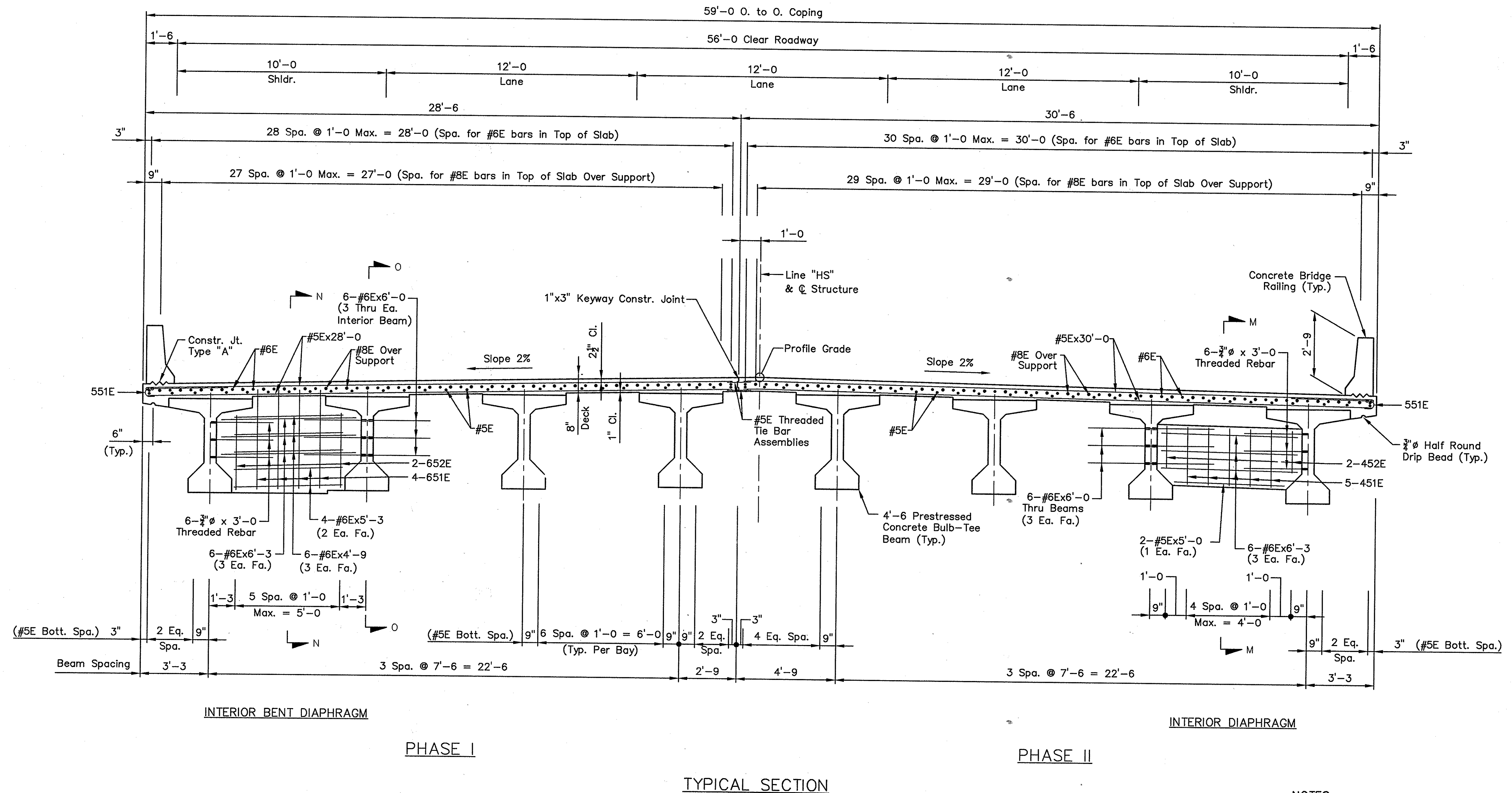
NOTES:

For Superstructure Detail Notes, see Sheet 21

|                           |                                                                           |                                         |  |                                       |                                                       |
|---------------------------|---------------------------------------------------------------------------|-----------------------------------------|--|---------------------------------------|-------------------------------------------------------|
|                           | RECOMMENDED FOR APPROVAL<br><i>T.D.J.</i> 5-13-03<br>DESIGN ENGINEER DATE | INDIANA<br>DEPARTMENT OF TRANSPORTATION |  | SCALE<br>1/8" = 1'-0"<br>UNLESS NOTED | BRIDGE FILE<br>I-70-73-8533<br>DESIGNATION<br>9910310 |
|                           | DESIGNED: TDJ DRAWN: LDW                                                  | SUPERSTRUCTURE DETAILS                  |  | SURVEY BOOK                           | SHEETS                                                |
|                           | 24                                                                        |                                         |  | of 30                                 |                                                       |
|                           | CONTRACT<br>B-26922                                                       |                                         |  | PROJECT<br>IM-70-3 ( )                |                                                       |
| CHECKED: BWB CHECKED: TDJ |                                                                           |                                         |  |                                       |                                                       |

REFERENCES : \_TITLE:  
FILE NAME : P:\Design\Bridges\8533\Plans\8533-SUPSTR4.dwg  
MRO\INT : 13-MAY-03, 09:12:09 / LDW





NOTES:

For Bill of Materials, Bar Bending Diagrams, Sections M-M, N-N & O-O see Sheet 28.

For Additional Details, see Sheets 21-24.

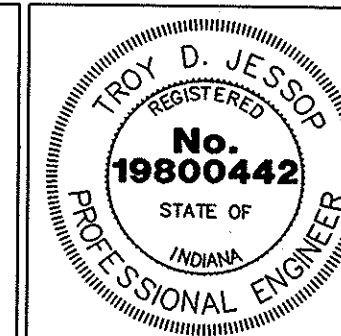
For Construction Joint Type IA, see Standard Drawing E 610-BRJT-01.

For Reinforcing Bar Notes, see Standard Drawing E703-BRST-01.

The designation "E" with the bar size indicates that the reinforcing steel is to be epoxy coated.

REFERENCES  
FILE NAME  
MRD\INT

TITLE:  
P:\Design\Bridges\8533\Plans\8533-SUPSTR5.dwg  
13-MAY-03, 13:45:21 / LDW



RECOMMENDED FOR APPROVAL  
DESIGNED: TDJ  
CHECKED: BWB

DESIGN ENGINEER  
DRAWN: LDW  
CHECKED: TDJ

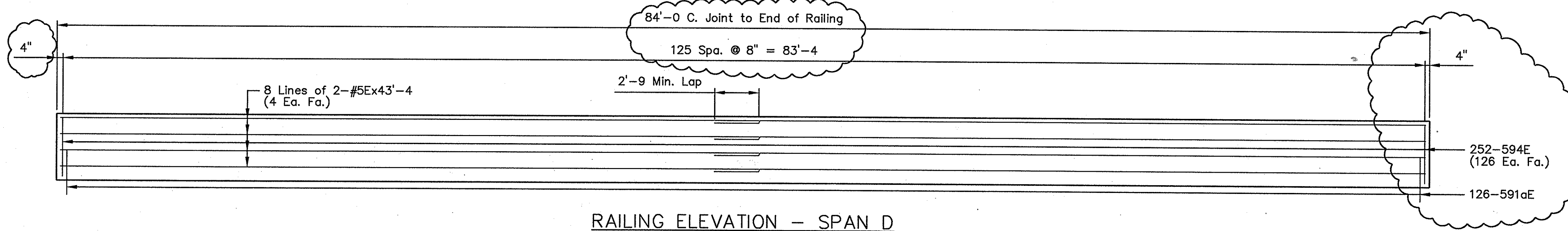
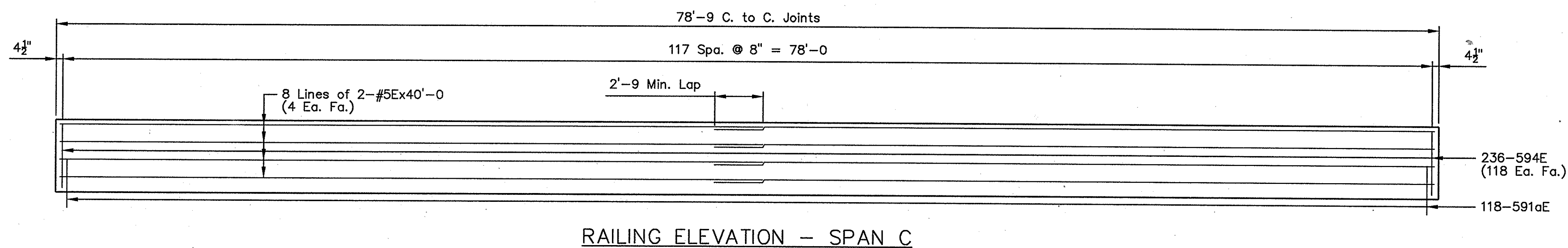
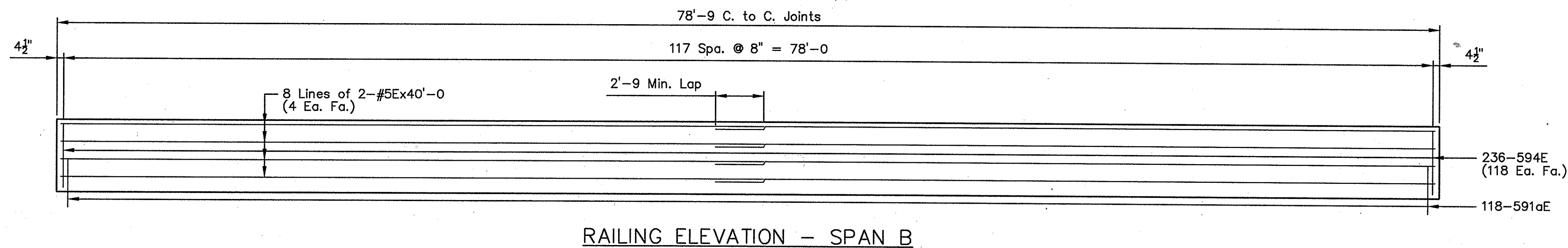
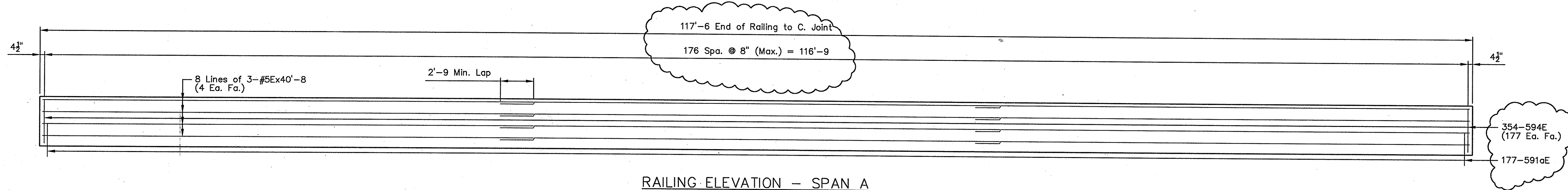
DATE  
5-13-03

INDIANA  
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS

|                                       |                                                       |
|---------------------------------------|-------------------------------------------------------|
| SCALE<br>1/2" = 1'-0"<br>UNLESS NOTED | BRIDGE FILE<br>I-70-73-8533<br>DESIGNATION<br>9910310 |
| SURVEY BOOK                           | SHEETS<br>25 of 30                                    |
| CONTRACT<br>B-26922                   | PROJECT<br>IM-70-3 ( )                                |

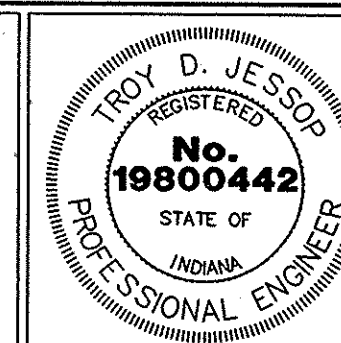




Notes:  
 For Reinforcing Bar Notes, see Standard Drawing E703-BRST-01.  
 All reinforcing steel to be epoxy coated.  
 See Standard Drawing E-706-RCBR-01 for additional details.  
 See Standard Drawing E-706-CBRT-01 for Concrete Bridge Railing on The Mudwall Details.

Revision  $\Delta$  6/17/03 Clouded areas show revisions.

REFERENCES : TITLE:  
 FILE NAME : P:\Design\Bridges\8533\Plans\8533-SUPSTR6Rev.dwg  
 MRD\INT : 12-JUN-03, 14:50:54 / SJM

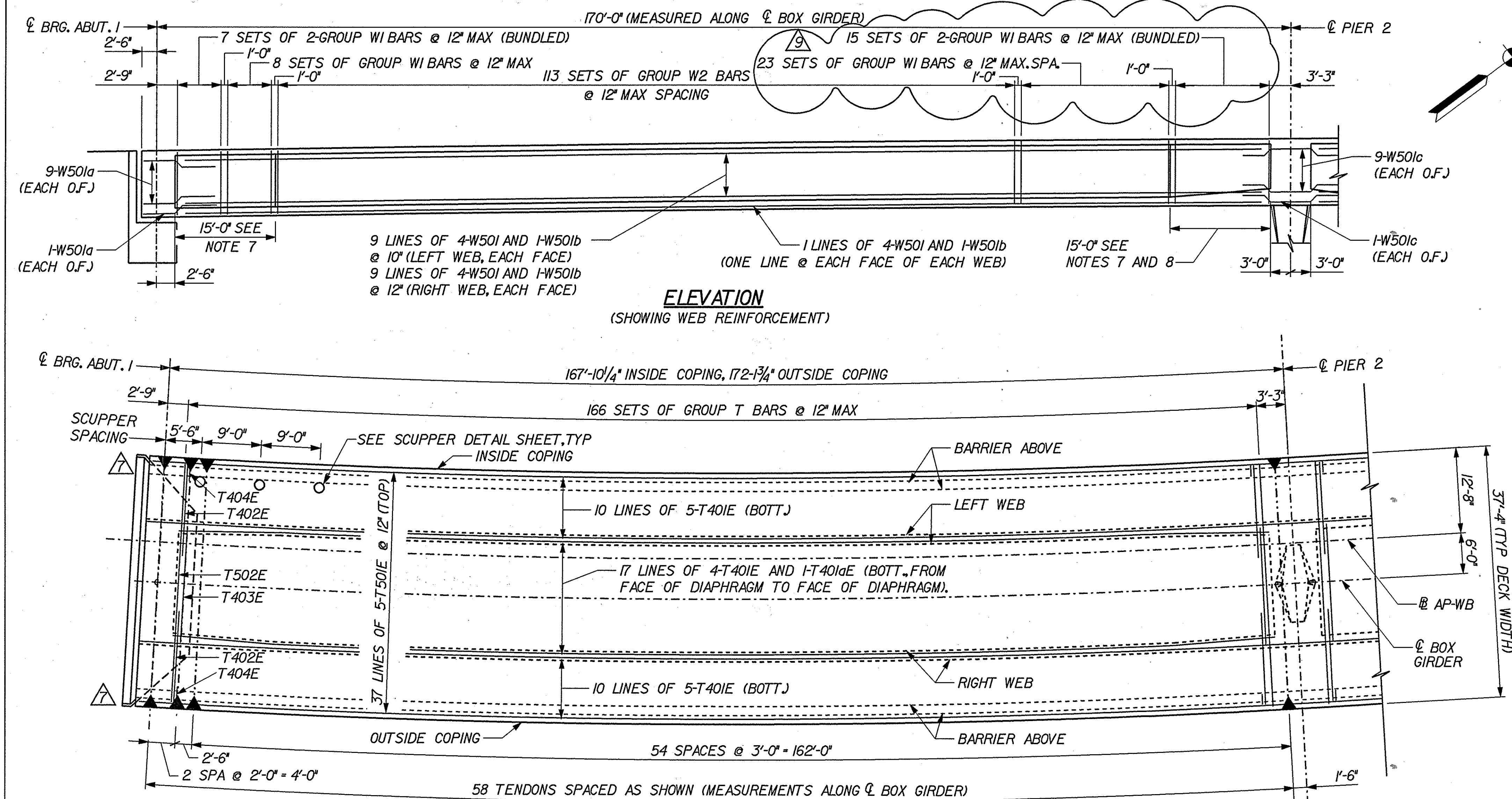


RECOMMENDED FOR APPROVAL *Troy D. Jessop* 6-17-03  
 DESIGN ENGINEER DATE  
 DESIGNED: TDJ DRAWN: LDW  
 CHECKED: BWB CHECKED: TDJ

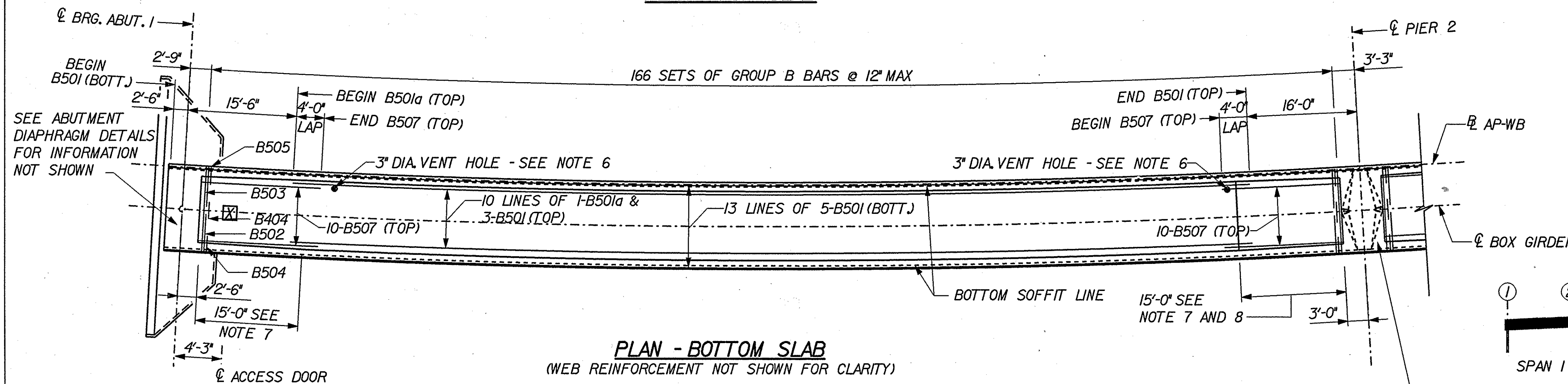
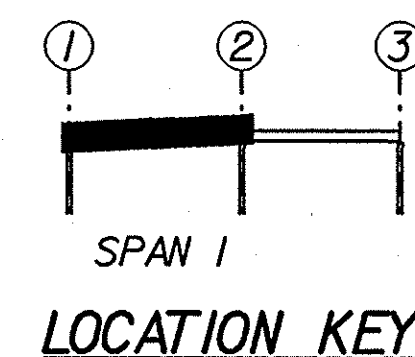
INDIANA  
 DEPARTMENT OF TRANSPORTATION  
 SUPERSTRUCTURE DETAILS

|                    |              |
|--------------------|--------------|
| SCALE              | BRIDGE FILE  |
| Horiz. 1/4" = 1'-0 | I-70-73-8533 |
| Vert. 1/2" = 1'-0  | DESIGNATION  |
| UNLESS NOTED       | 9910310      |
| SURVEY BOOK        | SHEETS       |
|                    | 26 of 30     |
| CONTRACT           | PROJECT      |
| B-26922            | IM-70-3 ( )  |





PLAN - TOP SLAB

PLAN - BOTTOM SLAB  
(WEB REINFORCEMENT NOT SHOWN FOR CLARITY)SEE PIER DIAPHRAGM DETAILS  
FOR INFORMATION NOT SHOWN

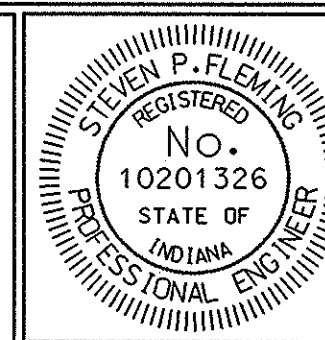
- 3/13/03 ENTIRE SHEET REPLACED.  
3/31/03 BILL OF MATERIALS UPDATED.  
9/19/03 TAPER REMOVED.  
6/30/04 NOTE CHANGE TO 2'-0" AND WEB BARS UPDATED.

| BILL OF MATERIALS<br>REINFORCING STEEL GRADE 60 |             |               |              |
|-------------------------------------------------|-------------|---------------|--------------|
| Size And Mark                                   | No. Of Bars | Length (Feet) | Weight (lbs) |
| GROUP T BARS                                    |             |               |              |
| GROUP W2 BARS                                   |             |               |              |
| W602E                                           | 113         | 13'-3"        | 2242         |
| W603E                                           | 113         | 12'-8"        | 2143         |
| W604E                                           | 113         | 13'-3"        | 2242         |
| W605E                                           | 113         | 13'-9 3/4"    | 2337         |
| GROUP W1 BARS                                   |             |               |              |
| W802E                                           | 60          | 13'-5 1/4"    | 2137         |
| W803E                                           | 60          | 13'-5 1/4"    | 2043         |
| W804E                                           | 75          | 14'-4 1/2"    | 2671         |
| W805E                                           | 75          | 14'-6"        | 2785         |
| TOTAL EPOXY COATED REINF.                       |             |               | 18600        |
| W401                                            | 40          | 2'-9 3/4"     | 77           |
| W402                                            | 40          | 1'-11 5/8"    | 54           |
| LONGITUDINAL BARS                               |             |               |              |
| W501                                            | 160         | 40'-0"        | 6751         |
| W501a                                           | 20          | 7'-6"         | 158          |
| W501b                                           | 40          | 14'-4"        | 605          |
| W501c                                           | 20          | 10'-6"        | 222          |
| TOTAL PLAIN REINF.                              |             |               | 7866         |
| CONCRETE C SUPERSTR. MOD.                       |             |               | 463 CYS      |
| MISCELLANEOUS                                   |             |               |              |
| BRIDGE DECK OVERLAY                             |             |               | 688 SYS      |
| MASONRY COATING                                 |             |               |              |
| (ESTIMATED QUANTITY - 9131 SF)                  |             |               | 1 LSUM       |

| BILL OF MATERIALS<br>REINFORCING STEEL GRADE 60 |             |               |              |
|-------------------------------------------------|-------------|---------------|--------------|
| Size And Mark                                   | No. Of Bars | Length (Feet) | Weight (lbs) |
| GROUP T BARS                                    |             |               |              |
| T402E                                           | 166         | 15'-3 5/8"    | 1728         |
| T402E                                           | 166         | 15'-3 5/8"    | 1728         |
| T403E                                           | 166         | 13'-6"        | 1525         |
| T404E                                           | 166         | 4'-0 1/4"     | 455          |
| T404E                                           | 166         | 4'-0 1/4"     | 455          |
| T502E                                           | 166         | 37'-1"        | 6494         |
| LONGITUDINAL BARS                               |             |               |              |
| T401E                                           | 168         | 40'-0"        | 4573         |
| T401aE                                          | 17          | 14'-4"        | 166          |
| T501E                                           | 185         | 40'-0"        | 7806         |
| TOTAL EPOXY COATED REINF.                       |             |               | 24930        |
| GROUP B BARS                                    |             |               |              |
| B401                                            | 166         | 2'-0"         | 226          |
| B502                                            | 166         | 10'-8"        | 1868         |
| B503                                            | 166         | 10'-8"        | 1868         |
| B504                                            | 166         | 4'-6"         | 788          |
| B505                                            | 166         | 4'-6"         | 788          |
| B506                                            | 166         | 12'-0"        | 2101         |
| LONGITUDINAL BARS                               |             |               |              |
| B501                                            | 95          | 40'-0"        | 4008         |
| B501a                                           | 10          | 24'-3 8/8"    | 257          |
| B507                                            | 20          | 17'-0"        | 359          |
| TOTAL REGULAR REINF.                            |             |               | 12263        |

## NOTES:

- FOR TRANSVERSE POST-TENSIONING DETAILS, SEE DWG NO. SD-17.
- FOR LONGITUDINAL POST-TENSIONING DETAILS, SEE WEB TENDON LAYOUT.
- SEE BARRIER DETAILS FOR INFORMATION NOT SHOWN.
- LW. = LEFT WEB  
RW. = RIGHT WEB  
O.F. = OUTSIDE FACE
- ALL DISTANCES MEASURED ALONG  $\bar{Q}$  BOX GIRDER UNLESS NOTED OTHERWISE
- 3" DIAMETER HOLE SHALL BE PLACED TO MISS REINFORCEMENT WITHIN 18" OF  $\bar{Q}$  LEFT INTERIOR WEB AND 18'-6" FROM  $\bar{Q}$  OF ABUTMENT 1 AND  $\bar{Q}$  PIER 2.
- WEB THICKNESS VARIES FROM 1'-6" AT FACE OF DIAPHRAGM TO 1'-2" AT 15'-0" FROM FACE OF DIAPHRAGM.
- BOTTOM SLAB THICKNESS VARIES: TOP OF BOTTOM SLAB VARIES FROM 2'-0" ABOVE WORKING POINT (@ FACE OF DIAPHRAGM) TO 1'-4" ABOVE WORKING POINT (@ 15'-0" FROM FACE OF DIAPHRAGM). BOTTOM OF BOTTOM SLAB UNCHANGED.
- SEE TYPICAL REINFORCING FOR BAR BEND DIAGRAMS AND LOCATION OF W401 AND W402 BARS.
- ☒ DENOTES ACCESS DOOR - SEE MISCELLANEOUS DETAILS 1 FOR ADDITIONAL INFORMATION



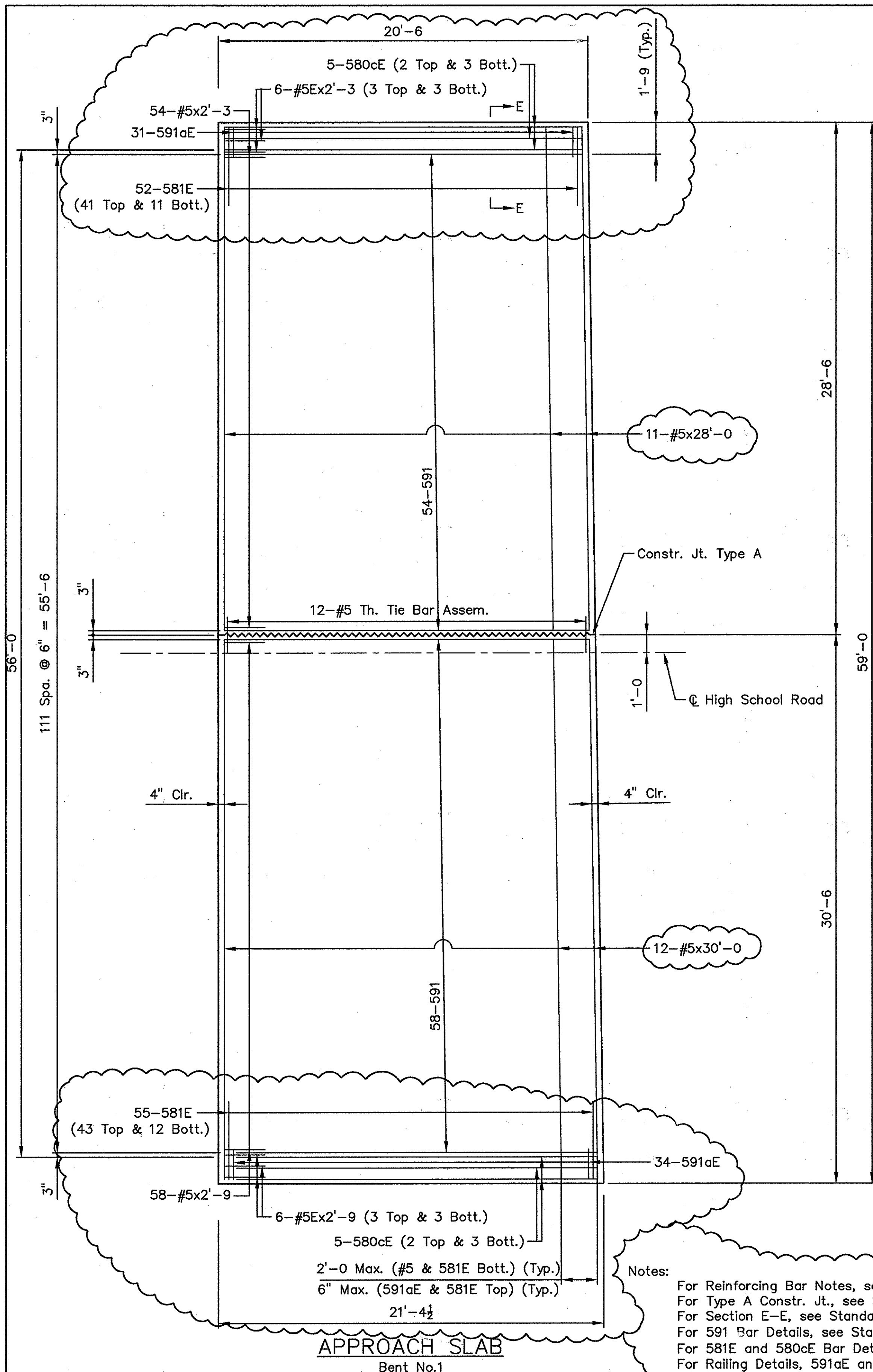
|                          |                |          |      |
|--------------------------|----------------|----------|------|
| RECOMMENDED FOR APPROVAL | Steven Fleming | 6-30-04  | DATE |
| DESIGNED:                | MG             | DRAWN:   | KAB  |
| CHECKED:                 | TK             | CHECKED: | PJP  |

INDIANA  
DEPARTMENT OF TRANSPORTATION

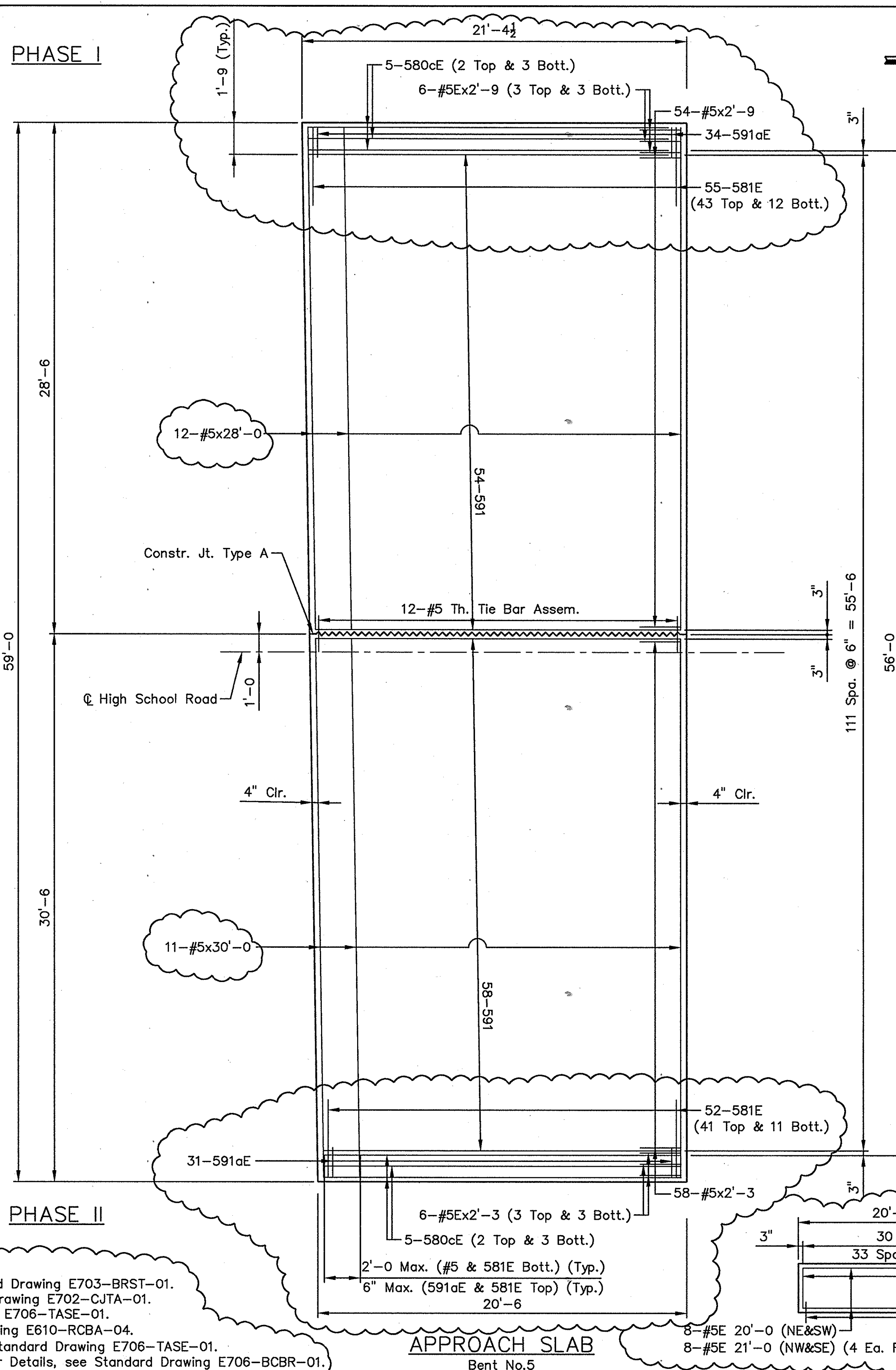
AP-WB SUPERSTRUCTURE DETAILS  
SLAB PLAN - SPAN 1

|                              |                             |
|------------------------------|-----------------------------|
| HORIZONTAL SCALE<br>1" = 10' | BRIDGE FILE<br>I-70-89-8516 |
| VERTICAL SCALE<br>1" = 10'   | DESIGNATION<br>0200572      |
| SURVEY BOOK                  | DWG. NO.<br>SD-03           |
| CONTRACT<br>B-26880          | SHEET NO.<br>28-B of 54     |
|                              | PROJECT<br>IM70-3 ( )       |





# PHASE I



# PHASE II

## APPROACH SLAB

Bent No. 5

## RAILING DETAIL

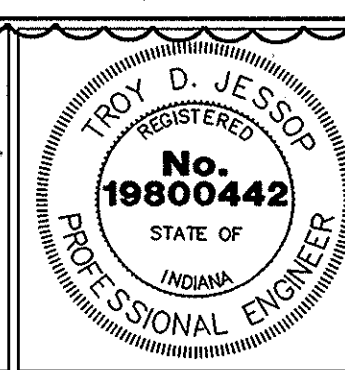
## BILL OF MATERIALS APPROACH SLABS PHASE I

| (Two Approaches)                 |             |        |              |
|----------------------------------|-------------|--------|--------------|
| REINFORCING STEEL                |             |        |              |
| SIZE OR MARK                     | No. OF BARS | LENGTH | WEIGHT (LBS) |
| 591                              | 108         | 20' -7 | 2319         |
| #5                               | 23          | 28' -0 | 672          |
| #5                               | 54          | 2' -9  | 155          |
| #5                               | 54          | 2' -3  | 127          |
| Total #5                         |             |        | 3273         |
| Total Reinf. Steel               |             |        | 3273         |
| EPOXY COATED REINFORCING STEEL   |             |        |              |
| 591aE                            | 65          | 5' -6  | 373          |
| 580cE                            | 10          | 16' -7 | 173          |
| 581E                             | 107         | 4' -10 | 540          |
| 594E                             | 130         | 3' -0  | 407          |
| #5E                              | 8           | 21' -0 | 175          |
| #5E                              | 8           | 20' -0 | 167          |
| #5E                              | 6           | 2' -9  | 17           |
| #5E                              | 6           | 2' -3  | 14           |
| Total E.C. Reinf. Steel          |             |        | 1866         |
| #5 Th. Tie Bar Assem.            |             |        | 24 Each      |
| MISCELLANEOUS                    |             |        |              |
| Concrete Railing, Class "C"      |             |        | 4 Cys.       |
| Reinf. Conc. Bridge Approach 12" |             |        | 134 Sys.     |
| Subbase for Conc. Pavement 6"    |             |        | 22.3 Cys.    |
| Surface Seal                     |             |        | 1395 Sft.    |
| Masonry Coating                  |             |        | 268 Sft.     |

## BILL OF MATERIALS APPROACH SLABS PHASE II

| (Two Approaches)                 |             |        |              |
|----------------------------------|-------------|--------|--------------|
| REINFORCING STEEL                |             |        |              |
| SIZE OR MARK                     | No. OF BARS | LENGTH | WEIGHT (LBS) |
| 591                              | 116         | 20' -7 | 2490         |
| #5                               | 23          | 30' -0 | 720          |
| #5                               | 58          | 2' -9  | 167          |
| #5                               | 58          | 2' -3  | 136          |
| Total #5                         |             |        | 3513         |
| Total Reinf. Steel               |             |        | 3513         |
| EPOXY COATED REINFORCING STEEL   |             |        |              |
| 591aE                            | 65          | 5' -6  | 373          |
| 580cE                            | 10          | 16' -7 | 173          |
| 581E                             | 107         | 4' -10 | 540          |
| 594E                             | 130         | 3' -0  | 407          |
| #5E                              | 8           | 21' -0 | 175          |
| #5E                              | 8           | 20' -0 | 167          |
| #5E                              | 6           | 2' -9  | 17           |
| #5E                              | 6           | 2' -3  | 14           |
| Total E.C. Reinf. Steel          |             |        | 1866         |
| MISCELLANEOUS                    |             |        |              |
| Concrete Railing, Class "C"      |             |        | 4 Cys.       |
| Reinf. Conc. Bridge Approach 12" |             |        | 143 Sys.     |
| Subbase for Conc. Pavement 6"    |             |        | 23.8 Cys.    |
| Surface Seal                     |             |        | 1480 Sft.    |
| Masonry Coating                  |             |        | 268 Sft.     |
| Estimated Quantity               |             |        |              |

Revision 6/17/03 Clouded areas show revisions.



|                          |                       |              |
|--------------------------|-----------------------|--------------|
| RECOMMENDED FOR APPROVAL | <i>Troy D. Jessop</i> | 6-17-03      |
| DESIGNED:                | BWB                   | DRAWN: LDW   |
| CHECKED:                 | TDJ                   | CHECKED: TDJ |

INDIANA  
DEPARTMENT OF TRANSPORTATION  
APPROACH DETAILS

| SCALE        | BRIDGE FILE  |
|--------------|--------------|
| 1/4" = 1'-0" | I-70-73-8533 |
|              | DESIGNATION  |
|              | 9910310      |
| SURVEY BOOK  | SHEETS       |
|              | 29 of 30     |
| CONTRACT     | PROJECT      |
| B-26922      | IM-70-3 ( )  |

REFERENCES: TITLE: P:\Design\Bridges\8533\Plans\8533-APPRODRev.dwg  
FILE NAME: 12-JUN-03, 15:36:03 / SUM

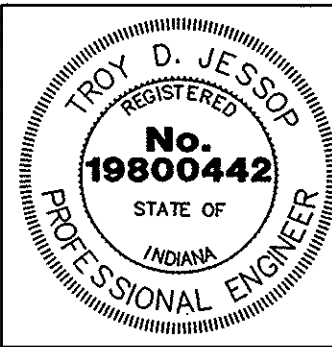


| SUMMARY OF BRIDGE QUANTITIES |          |          |            |          |                   |                                |                          |                                    |                                |                                |                                      |                               |                     |                     |                  |                 |          |      |     |          |      |          |                              |                         |                                               |                               |                  |                       |                     |                  |                         |                        |                          |                           |                                  |            |                          |  |
|------------------------------|----------|----------|------------|----------|-------------------|--------------------------------|--------------------------|------------------------------------|--------------------------------|--------------------------------|--------------------------------------|-------------------------------|---------------------|---------------------|------------------|-----------------|----------|------|-----|----------|------|----------|------------------------------|-------------------------|-----------------------------------------------|-------------------------------|------------------|-----------------------|---------------------|------------------|-------------------------|------------------------|--------------------------|---------------------------|----------------------------------|------------|--------------------------|--|
| ITEM                         | CONCRETE |          |            |          |                   | CONCRETE<br>RAILING<br>CLASS C | REINF.<br>STEEL<br>TOTAL | EPOXY<br>COATED<br>REINF.<br>STEEL | PLAIN<br>THR. TIE<br>BAR ASSY. | EPOXY<br>THR. TIE<br>BAR ASSY. | PILES                                |                               |                     |                     |                  |                 |          |      |     |          |      |          | RAILING<br>TRAN.<br>TYPE TBC | CAST IRON<br>DRAIN PIPE | CAST IRON,<br>GRATES,<br>BASINS<br>& FITTINGS | EXP.<br>JOINT<br>CLASS<br>S-S | CONC.STR.MEMBERS | BARRIER<br>DELINEATOR | *MASONRY<br>COATING | *SURFACE<br>SEAL | STRUCT.<br>BACK<br>FILL | SUBBASE<br>FOR<br>PCCP | CONC.<br>P.VMT.<br>12 in | END BENT<br>DRAIN<br>6 in | AGG. FOR<br>END BENT<br>BACKFILL | GEOTEXTILE | GALV.<br>CONDUIT<br>2" ø |  |
|                              | CLASS C  | CLASS A  | CLASS B    |          | QC/QA<br>SUPERSTR |                                |                          |                                    |                                |                                |                                      |                               |                     |                     |                  |                 |          |      |     |          |      |          |                              |                         |                                               |                               | BULB T<br>4.5x4  |                       |                     |                  |                         |                        |                          |                           |                                  |            |                          |  |
|                              | SUPERSTR | SUBSTR   | ABOVE FTG. | IN FTG.  |                   |                                |                          |                                    |                                |                                | 14" REINF. CONC.<br>STEEL SHELL ENC. | 14" CONC. STEEL<br>SHELL ENC. | 24" PILE<br>SLEEVES | STEEL SHELL<br>TIPS | HP14x89<br>STEEL | STEEL H<br>TIPS |          |      |     |          |      |          |                              |                         |                                               |                               |                  |                       |                     |                  |                         |                        |                          |                           |                                  |            |                          |  |
|                              | Cu. Yds. | Cu. Yds. | Cu. Yds.   | Cu. Yds. | Cu. Yds.          | LIN. FT.                       | Cu. Yds.                 | LBS.                               | LBS.                           | EACH                           | EACH                                 | NO.                           | LIN. FT.            | NO.                 | LIN. FT.         | NO.             | LIN. FT. | EACH | NO. | LIN. FT. | EACH | LIN. FT. | LBS.                         | LBS.                    | LIN. FT.                                      | LIN. FT.                      | EACH             | SQ. FT.               | SQ. FT.             | CU. YDS.         | CU. YDS.                | SQ. YDS.               | LIN. FT.                 | CU. YDS.                  | SQ. YDS.                         | LIN. FT.   |                          |  |
| SUBSTRUCTURE                 |          |          |            |          |                   |                                |                          |                                    |                                |                                |                                      |                               |                     |                     |                  |                 |          |      |     |          |      |          |                              |                         |                                               |                               |                  |                       |                     |                  |                         |                        |                          |                           |                                  |            |                          |  |
| BENT NO. 1                   |          |          |            |          |                   |                                |                          |                                    |                                |                                |                                      |                               |                     |                     |                  |                 |          |      |     |          |      |          |                              |                         |                                               |                               |                  |                       |                     |                  |                         |                        |                          |                           |                                  |            |                          |  |
| PHASE I                      |          | 27.8     |            |          |                   |                                |                          |                                    | 1960                           |                                | 22                                   |                               |                     |                     |                  | 6               | 119.2    |      | 6   | 324.1    | 6    |          |                              |                         |                                               |                               |                  |                       | 40                  | 40               |                         |                        |                          | 50.0                      | 27.4                             | 37.5       |                          |  |
| PHASE II                     |          | 30.2     |            |          |                   |                                |                          |                                    | 2106                           |                                |                                      |                               |                     |                     |                  | 6               | 119.2    |      | 6   | 324.1    | 6    |          |                              |                         |                                               |                               |                  |                       | 40                  | 40               |                         |                        |                          | 52.5                      | 29.3                             | 40.0       |                          |  |
| BENT NO. 2                   |          |          |            |          |                   |                                |                          |                                    |                                |                                |                                      |                               |                     |                     |                  |                 |          |      |     |          |      |          |                              |                         |                                               |                               |                  |                       |                     |                  |                         |                        |                          |                           |                                  |            |                          |  |
| PHASE I                      |          | 42.2     |            | 15.6     |                   |                                |                          |                                    | 13215                          |                                |                                      |                               |                     |                     |                  |                 |          |      | 12  | 587      | 12   |          |                              |                         |                                               |                               |                  |                       | 991                 |                  |                         | 22.5                   |                          |                           |                                  |            |                          |  |
| PHASE II                     |          | 42.2     |            | 15.6     |                   |                                |                          |                                    | 13215                          |                                |                                      |                               |                     |                     |                  |                 |          |      | 12  | 587      | 12   |          |                              |                         |                                               |                               |                  |                       | 990                 |                  |                         | 22.9                   |                          |                           |                                  |            |                          |  |
| BENT NO. 3                   |          |          |            |          |                   |                                |                          |                                    |                                |                                |                                      |                               |                     |                     |                  |                 |          |      |     |          |      |          |                              |                         |                                               |                               |                  |                       |                     |                  |                         |                        |                          |                           |                                  |            |                          |  |
| PHASE I                      |          | 43.5     |            | 15.6     |                   |                                |                          |                                    | 13215                          |                                |                                      |                               |                     |                     |                  |                 |          |      | 12  | 534      | 12   |          |                              |                         |                                               |                               |                  |                       | 1029                |                  |                         | 24.0                   |                          |                           |                                  |            |                          |  |
| PHASE II                     |          | 43.5     |            | 15.6     |                   |                                |                          |                                    | 13215                          |                                |                                      |                               |                     |                     |                  |                 |          |      | 12  | 534      | 12   |          |                              |                         |                                               |                               |                  |                       | 1029                |                  |                         | 24.0                   |                          |                           |                                  |            |                          |  |
| BENT NO. 4                   |          |          |            |          |                   |                                |                          |                                    |                                |                                |                                      |                               |                     |                     |                  |                 |          |      |     |          |      |          |                              |                         |                                               |                               |                  |                       |                     |                  |                         |                        |                          |                           |                                  |            |                          |  |
| PHASE I                      |          | 43.9     |            | 15.6     |                   |                                |                          |                                    | 13215                          |                                |                                      |                               |                     |                     |                  |                 |          |      | 12  | 413      | 12   |          |                              |                         |                                               |                               |                  |                       | 1052                |                  |                         | 23.7                   |                          |                           |                                  |            |                          |  |
| PHASE II                     |          | 44.0     |            | 15.6     |                   |                                |                          |                                    | 13215                          |                                |                                      |                               |                     |                     |                  |                 |          |      | 12  | 413      | 12   |          |                              |                         |                                               |                               |                  |                       | 1061                |                  |                         | 22.3                   |                          |                           |                                  |            |                          |  |
| BENT NO. 5                   |          |          |            |          |                   |                                |                          |                                    |                                |                                |                                      |                               |                     |                     |                  |                 |          |      |     |          |      |          |                              |                         |                                               |                               |                  |                       |                     |                  |                         |                        |                          |                           |                                  |            |                          |  |
| PHASE I                      |          | 27.8     |            |          |                   |                                |                          |                                    | 1960                           |                                | 22                                   |                               |                     |                     |                  | 6               | 117.3    |      | 6   | 223      | 6    |          |                              |                         |                                               |                               |                  |                       | 40                  | 40               |                         |                        |                          | 50.0                      | 27.4                             | 37.5       |                          |  |
| PHASE II                     |          | 30.2     |            |          |                   |                                |                          |                                    | 2106                           |                                |                                      |                               |                     |                     |                  | 6               | 117.3    |      | 6   | 223      | 6    |          |                              |                         |                                               |                               |                  |                       | 40                  | 40               |                         |                        |                          | 52.5                      | 29.3                             | 40.0       |                          |  |
| SUPERSTRUCTURE               |          |          |            |          |                   |                                |                          |                                    |                                |                                |                                      |                               |                     |                     |                  |                 |          |      |     |          |      |          |                              |                         |                                               |                               |                  |                       |                     |                  |                         |                        |                          |                           |                                  |            |                          |  |
| PHASE I                      | 22.3     |          |            |          | 306.1             |                                | 34.7                     |                                    | 83667                          |                                | 990                                  |                               |                     |                     |                  |                 |          |      |     |          |      |          |                              | 1013                    | 644                                           | 57                            | 1427.3           | 10                    | 5206                | 15440            |                         |                        |                          |                           |                                  |            | 1154                     |  |
| PHASE II                     | 25.7     |          |            |          | 331.0             |                                | 34.7                     |                                    | 89506                          |                                |                                      |                               |                     |                     |                  |                 |          |      |     |          |      |          |                              | 1013                    | 644                                           | 61                            | 1427.3           | 10                    | 5206                | 16160            |                         |                        |                          |                           |                                  |            | 1154                     |  |
| APPROACH SLABS               |          |          |            |          |                   |                                |                          |                                    |                                |                                |                                      |                               |                     |                     |                  |                 |          |      |     |          |      |          |                              |                         |                                               |                               |                  |                       |                     |                  |                         |                        |                          |                           |                                  |            |                          |  |
| PHASE I                      |          |          |            |          |                   |                                | 4.0                      | 3273                               | 1866                           | 24                             |                                      |                               |                     |                     |                  |                 |          |      |     |          |      |          |                              |                         |                                               |                               |                  |                       | 268                 | 1395             |                         | 22.3                   | 134.0                    |                           |                                  |            |                          |  |
| PHASE II                     |          |          |            |          |                   |                                | 4.0                      | 3513                               | 1866                           |                                |                                      |                               |                     |                     |                  |                 |          |      |     |          |      |          |                              |                         |                                               |                               |                  |                       | 268                 | 1480             |                         | 23.8                   | 143.0                    |                           |                                  |            |                          |  |
| COLLISION WALL               |          |          |            |          |                   |                                |                          |                                    |                                |                                |                                      |                               |                     |                     |                  |                 |          |      |     |          |      |          |                              |                         |                                               |                               |                  |                       |                     |                  |                         |                        |                          |                           |                                  |            |                          |  |
| BENT NO. 2                   |          | 5.9      |            | 1.5      |                   |                                |                          | 404                                |                                |                                |                                      |                               |                     |                     |                  |                 |          |      |     |          |      |          |                              |                         |                                               |                               |                  |                       | 95                  |                  |                         |                        |                          |                           |                                  |            |                          |  |
| BENT NO. 3                   |          | 6.1      |            | 1.5      |                   |                                |                          | 404                                |                                |                                |                                      |                               |                     |                     |                  |                 |          |      |     |          |      |          |                              |                         |                                               |                               |                  |                       | 95                  |                  |                         |                        |                          |                           |                                  |            |                          |  |
| BENT NO. 4                   |          | 6.0      |            | 1.5      |                   |                                |                          | 404                                |                                |                                |                                      |                               |                     |                     |                  |                 |          |      |     |          |      |          |                              |                         |                                               |                               |                  |                       | 95                  |                  |                         |                        |                          |                           |                                  |            |                          |  |
| TOTALS                       | 48       | 393.3    |            | 98.1     | 637.1             |                                | 77.4                     | 87288                              | 185037                         | 24                             | 1034                                 |                               |                     |                     |                  | 24              | 473      |      | 96  | 4162.2   | 96   |          | 2026                         | 1288                    | 118                                           | 2854.6                        | 20               | 17545                 | 34635               | 139.4            | 46.1                    | 277.0                  | 205                      | 113.4                     | 155                              | 2308       |                          |  |

\*ESTIMATED QUANTITIES

| THREADED TIE BAR ASSEMBLIES |    |      |      |       |      |       |
|-----------------------------|----|------|------|-------|------|-------|
| LOCATION                    | #8 | #7   | #6   | #5    | #4   | TOTAL |
| BENT NO. 1                  |    | 10-E |      |       | 12-E | 22-E  |
| BENT NO. 5                  |    | 10-E |      |       | 12-E | 22-E  |
| SUPERSTRUCTURE              |    |      | 16-E | 974-E |      | 990-E |
| APPROACHES                  |    |      |      | 24-P  |      | 24-P  |

Revision  6/17/03 Clouded areas show revisions.



|                          |                                                                                       |          |      |
|--------------------------|---------------------------------------------------------------------------------------|----------|------|
| RECOMMENDED FOR APPROVAL |  | 6-17-03  | DATE |
| DESIGNED:                | BWB                                                                                   | DRAWN:   | LDW  |
| CHECKED:                 | TDJ                                                                                   | CHECKED: | TDJ  |

INDIANA  
DEPARTMENT OF TRANSPORTATION  
  
BRIDGE SUMMARY

|                                   |                                                       |
|-----------------------------------|-------------------------------------------------------|
| SCALE<br>NO SCALE<br>UNLESS NOTED | BRIDGE FILE<br>I-70-73-8533<br>DESIGNATION<br>9910310 |
| SURVEY BOOK                       | SHEETS<br>30 of 30                                    |
| CONTRACT<br>B-26922               | PROJECT<br>IM-70-3 ( )                                |

XREFERENCES : \_TITLE:  
FILE NAME : P:\Design\Bridges\8533\Plans\8533-BSUM.dwg  
MRO\INT : 15-MAY-03, 15:24:37 / SJM