

**GENERAL NOTES**

**GENERAL:** THESE DRAWINGS PROVIDE INFORMATION FOR THE DESIGNER AND ARE NOT INTENDED FOR USE AS CONSTRUCTION DRAWINGS. THE PROJECT PLANS FOR EACH STRUCTURE WILL SHOW SPAN LENGTHS, ROADWAY WIDTHS, SKEW, CURVE AND SUPERELEVATION (IF ANY), ELEVATIONS, SLAB REINFORCEMENT DETAILS IN PLAN AND CROSS SECTIONS, ESTIMATED QUANTITIES, CONCRETE SEALING LIMITS, SEISMIC PEDESTAL DETAILS, REINFORCING STEEL LIST AND OTHER NECESSARY DETAILS AND SPECIAL NOTES.

THE DETAILS SHOWN ARE TYPICAL FOR THE AVERAGE STEEL BEAM AND SHALLOW STEEL GIRDER BRIDGE ABUTMENTS SUPPORTED ON PILES, ON NEWLY COMPACTED EMBANKMENT, OR ON BEDROCK. (IF THE TOP SURFACE OF BEDROCK IS NEAR THE BRIDGE SEAT ELEVATION THESE DETAILS WILL NOT APPLY.)

FOR DEEP GIRDER BRIDGES OR SUPERELEVATED BEAM BRIDGES, THE BACKWALLS, WINGWALLS AND WINGWALL FOOTINGS MAY REQUIRE WIDENING AND/OR ADDITIONAL REINFORCING. WINGWALL FOOTINGS MAY REQUIRE AN ADDITIONAL ROW OF PILES.

**DESIGN DATA:**  
 CONCRETE - COMPRESSIVE STRENGTH 4000 PSI (SUBSTRUCTURE)

REINFORCING STEEL - CMS 709.00 GRADE 60, MINIMUM YIELD STRENGTH 60 KSI.

**SEISMIC PEDESTALS:**  
 THE DESIGN CONFORMS TO THE "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1996, INCLUDING THE 1997, 1998 AND 1999 INTERIM SPECIFICATIONS AND THE ODOT BRIDGE DESIGN MANUAL.

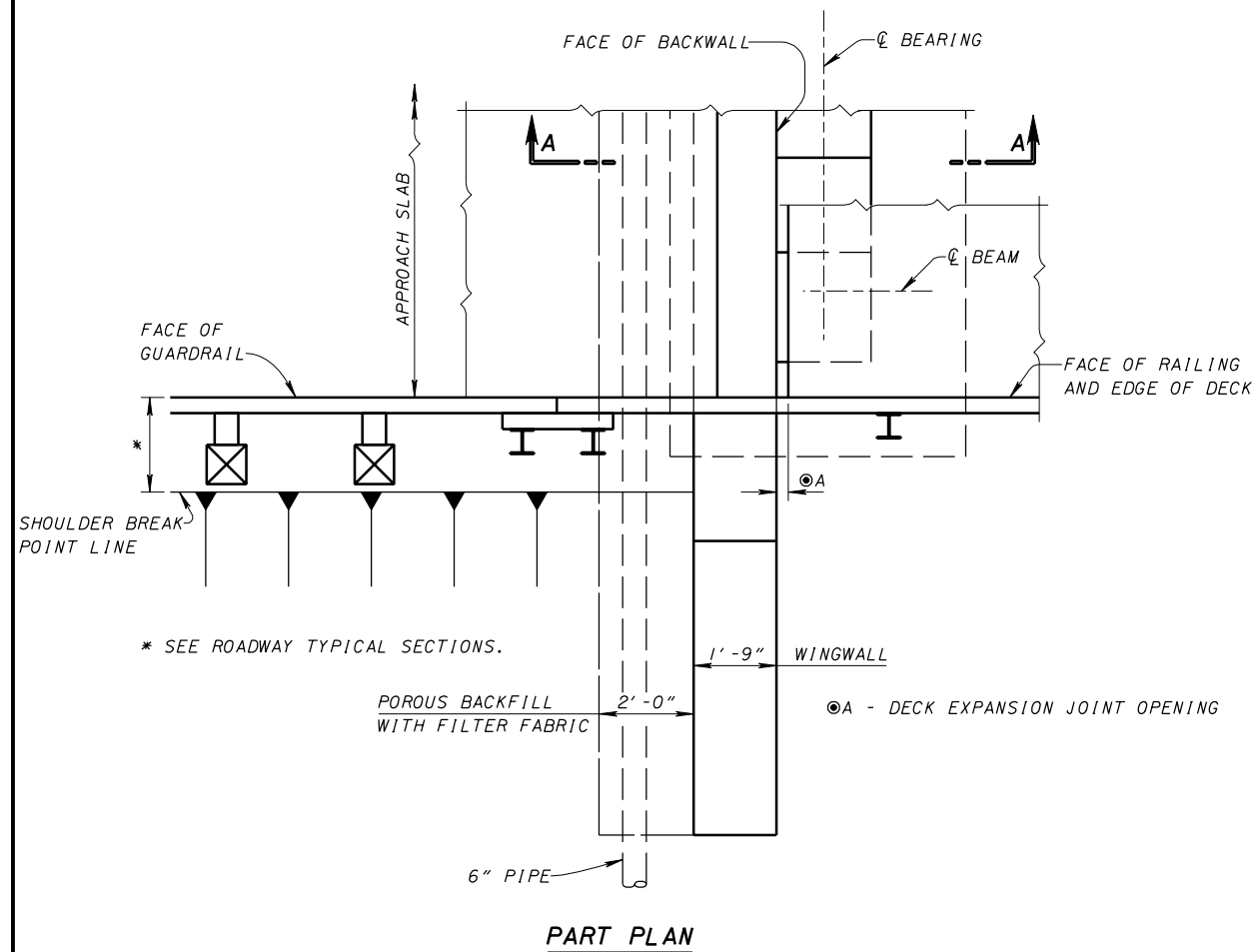
**SEISMIC PEDESTALS: <CONTINUED>**

TABLE A ON SHEET 5 OF 5 PROVIDES THE MAXIMUM ALLOWABLE SEISMIC LOAD PER PEDESTAL VERSUS PEDESTAL HEIGHT. DESIGN SEISMIC LOAD (SHOWN AS  $V_u$  IN TABLE A) SHALL BE CALCULATED AS 0.2 TIMES THE TOTAL FACTORED DEAD LOAD AT THE ABUTMENT (INCLUDING FUTURE WEARING SURFACE) DIVIDED BY THE COSINE OF THE SKEW ANGLE. CALCULATED LOADS EXCEEDING THOSE SHOWN IN TABLE A WILL REQUIRE ADDITIONAL PEDESTALS. THE MAXIMUM RESISTANCE PROVIDED IN ONE DIRECTION BY MULTIPLE PEDESTALS IS EQUAL TO THE SUM OF THE INDIVIDUAL CAPACITIES OF EACH PEDESTAL IN THE SAME DIRECTION.

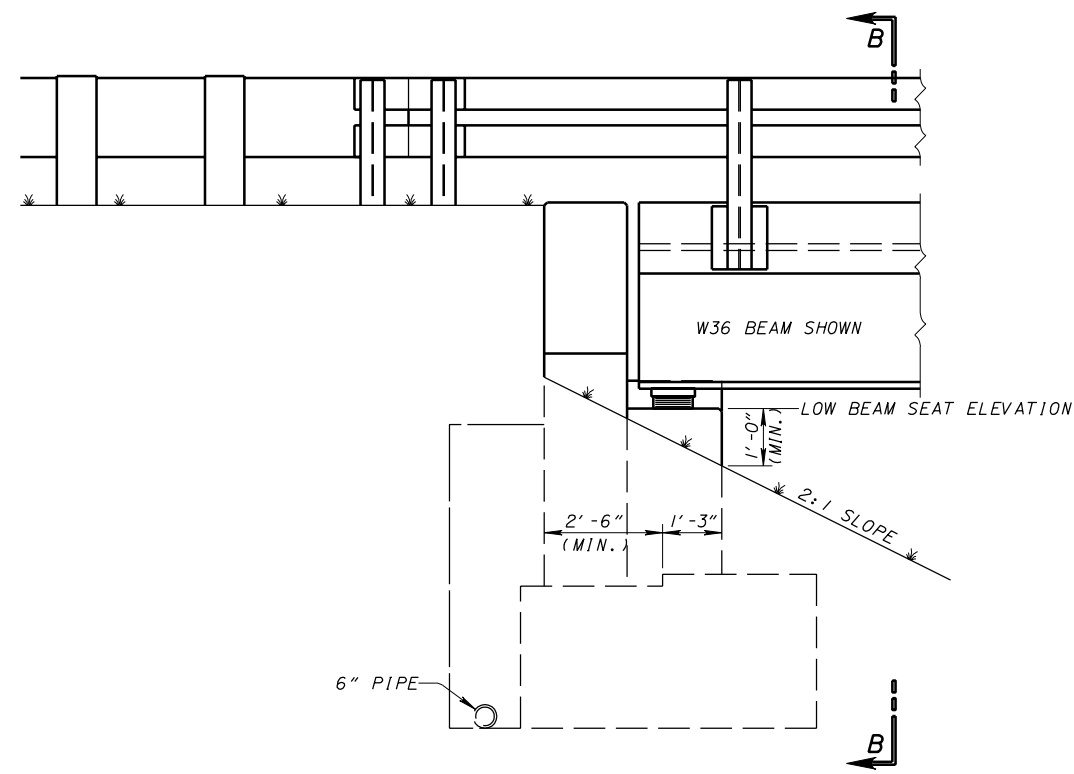
A MINIMUM OF TWO PEDESTALS ARE ALWAYS REQUIRED AND SHALL BE PLACED ON THE INSIDE OF EACH FASCIA BEAM. ANY ADDITIONAL PEDESTALS SHALL BE PLACED IN PAIRS IN ORDER TO RESIST LATERAL LOADS IN BOTH DIRECTIONS. ADDITIONAL PEDESTALS FOR RESTRAINT DURING PART-WIDTH CONSTRUCTION SHALL NOT BE USED.

PEDESTALS ARE REQUIRED FOR ALL BEARING TYPES, BOTH EXPANSION AND FIXED, UNLESS THE BEARING, ITS INDIVIDUAL COMPONENTS AND ITS ATTACHMENT TO BOTH THE SUPERSTRUCTURE AND SUBSTRUCTURE ARE SPECIFICALLY DESIGNED FOR THE DESIGN SEISMIC LOAD.

THE DESIGNER SHALL DETERMINE IF THE STANDARD END CROSS-FRAMES WILL CLEAR THE PEDESTALS. IF NOT, THE CROSSFRAME LAYOUT SHALL BE MODIFIED TO CLEAR THE PEDESTALS BY PLAN DETAILS.



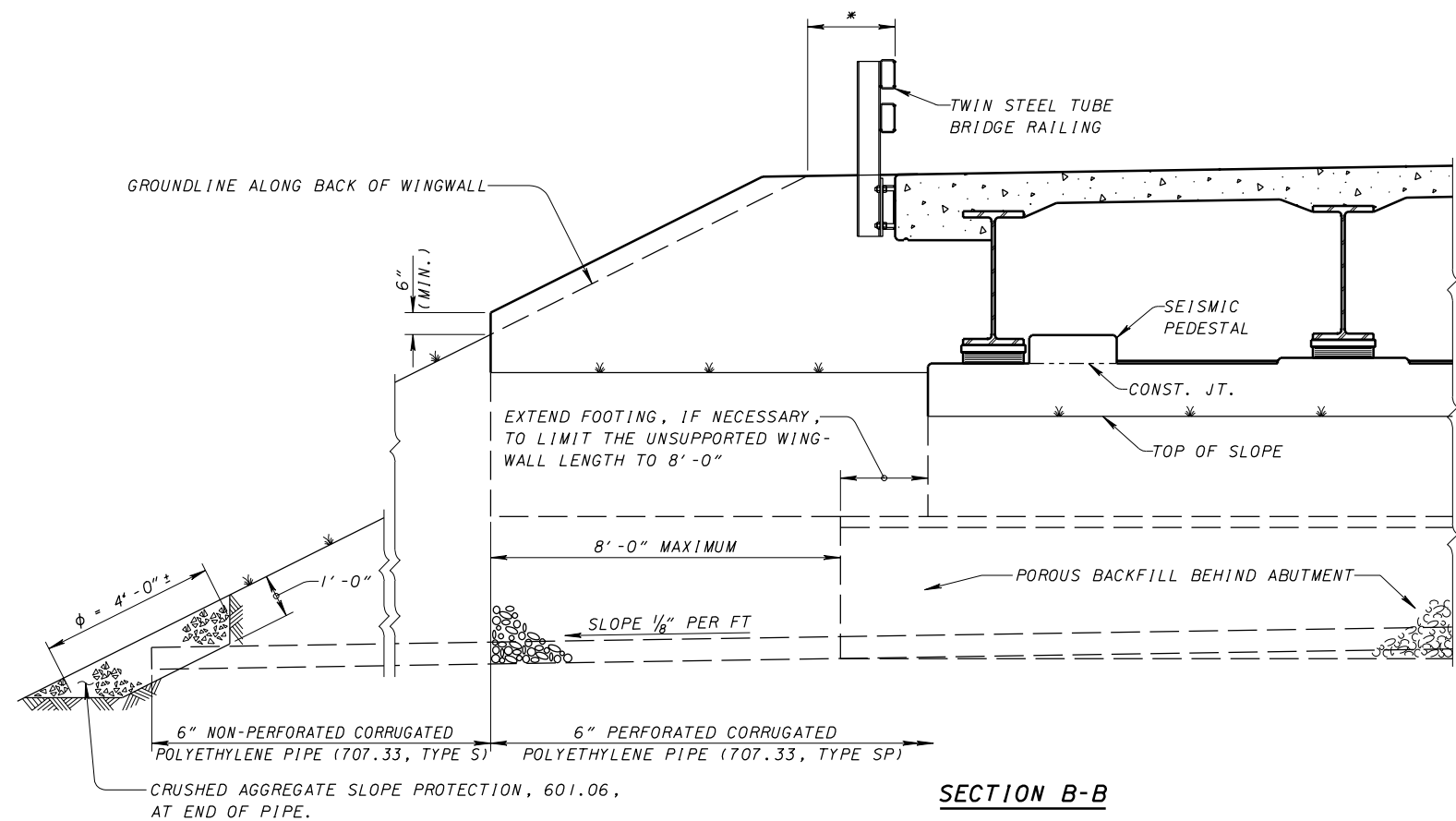
**PART PLAN**



**ELEVATION**

SEE SHEET 4/5 FOR SECTION A-A.

SEE SHEET 5/5 FOR PEDESTAL DETAILS.



**SECTION B-B**

DESIGN AGENCY: OFFICE OF STRUCTURAL ENGINEERING  
 STATE OF OHIO DEPARTMENT OF TRANSPORTATION: 03-20-95 DATE  
 ADMINISTRATOR: [Signature]  
 REVISED: A-1-69  
 CHECKED: NAA/SDS MPB/LMW  
 DESIGNED: CPD/SAM  
 DRAWN: SAM  
 REVISIONS: 04-20-01, 07-19-02  
 STANDARD: TYPICAL ABUTMENT DETAILS FOR STEEL BEAM AND GIRDER BRIDGES  
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