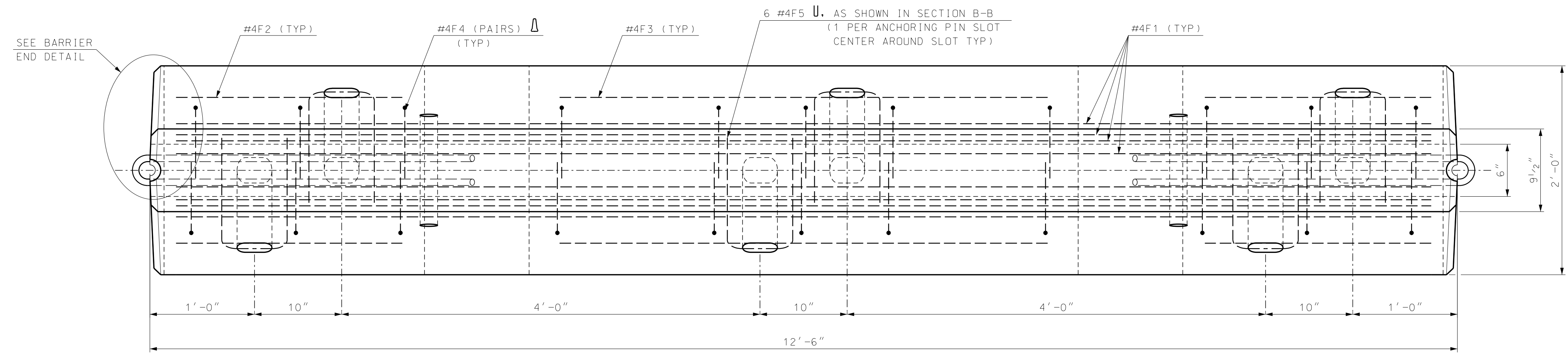


BARRIER END DETAIL

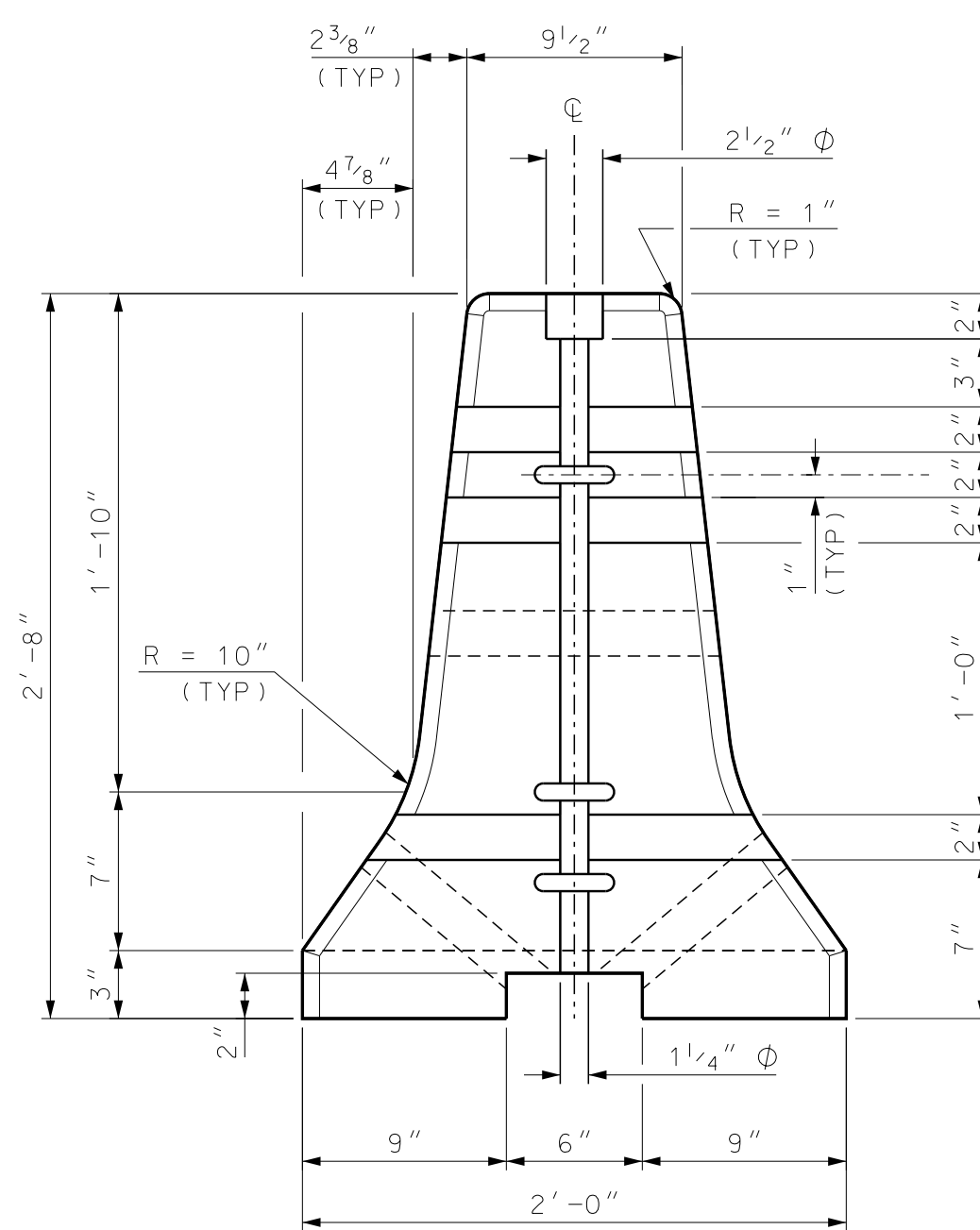
SCALE: 3" = 1'-0"



PLAN

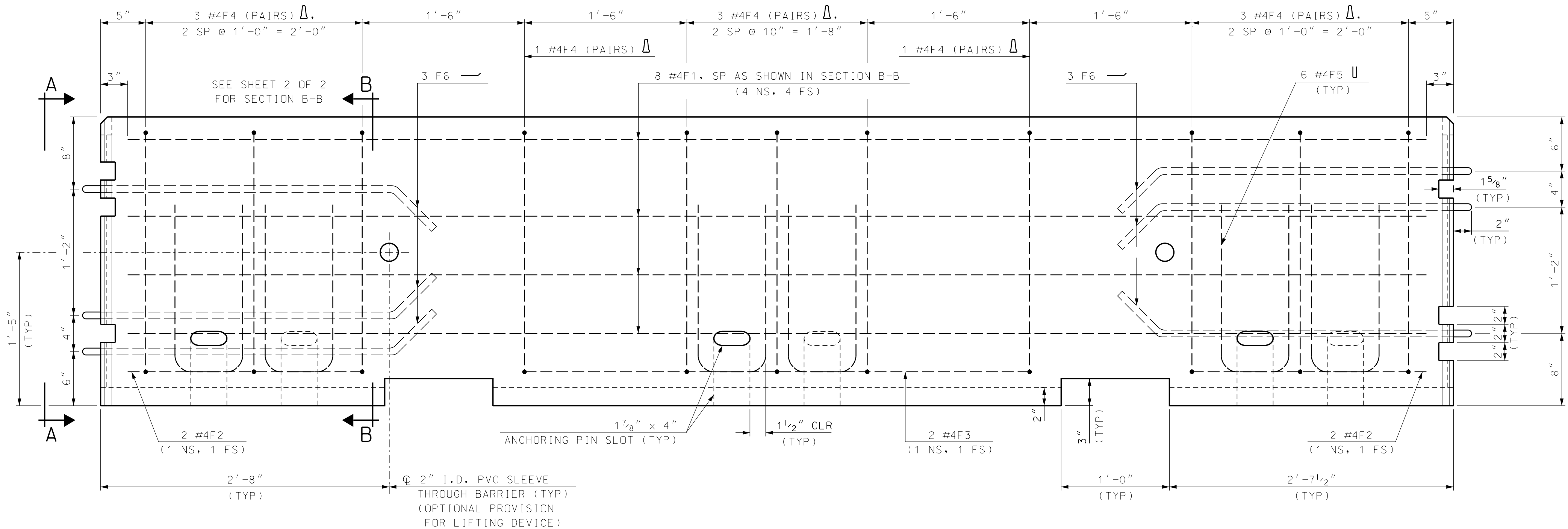
SCALE: 1 1/2" = 1'-0"

SEE SHEET 2 OF 2 FOR REBAR SCHEDULE AND BENDING DIAGRAMS



VIEW A-A

SCALE: 1 1/2" = 1'-0"



ELEVATION

SCALE: 1 1/2" = 1'-0"

GENERAL NOTES

1. THE PORTABLE CONCRETE BARRIER DETAILS, AS SHOWN ON THIS SHEET, ARE IN COMPLIANCE WITH THE REQUIREMENTS OF MANUAL FOR ASSESSING SAFETY HARDWARE (MASH 16). (ROADSIDE SAFETY RESEARCH PROGRAM POOLED FUND STUDY NO TPF-5 (114) MAY 2017). THE FREE-STANDING BARRIER HAS BEEN TL-3 CRASH TESTED WITH A 5.28' DYNAMIC DEFLECTION.
2. CONCRETE BARRIER SHALL BE FURNISHED BY THE CONTRACTOR AND PAID AS ITEM 606.417 - PORTABLE CONCRETE BARRIER FOR TRAFFIC CONTROL. CONNECTIONS TO EXISTING BARRIERS, WHEN REQUIRED, SHALL BE SUBSIDIARY TO ITEM 606.417.
3. THE CONTRACTOR SHALL FURNISH AND INSTALL APPROVED RETROREFLECTIVE DELINEATORS AT 25-FOOT INTERVALS ALONG THE TOP AND/OR ONE FOOT DOWN THE SIDE OF THE PORTABLE CONCRETE BARRIER, SUBSIDIARY TO ITEM 606.417. MECHANICALLY CONNECT DELINEATOR TO PORTABLE CONCRETE BARRIER. THE COLOR OF DELINEATORS SHALL, IN ALL CASES, CONFORM TO THE COLOR OF EDGE LINE MARKINGS. DELINEATORS SUPPLEMENT, BUT DO NOT REPLACE, THE NEED FOR RETROREFLECTIVE SOLID EDGE LINE MARKINGS.
4. UNPROTECTED OPENINGS IN PORTABLE CONCRETE BARRIER WILL NOT BE PERMITTED, UNLESS SPECIFICALLY AUTHORIZED BY THE ENGINEER.
5. A 10:1 OR FLATTER FORESLOPE (SUBSIDIARY TO ITEM 606.417) SHALL BE PROVIDED IN ADVANCE OF ALL PORTABLE CONCRETE BARRIER SYSTEMS WITHIN THE CLEAR ZONE FOR ATTENUATION. REFER TO MOST CURRENT EDITION OF THE ROADSIDE DESIGN GUIDE AASHTO ADOPTED BY THE DEPARTMENT, FOR CLEAR ZONE WIDTHS AND ADDITIONAL INFORMATION.
6. WHEN PORTABLE CONCRETE BARRIER IS INSTALLED ON BOTH SIDES OF TRAFFIC, THE BEGINNINGS OF THE BARRIER SHALL BE STAGGERED BY AT LEAST 50 FEET.
7. PLACE RETROREFLECTORIZED DRUMS OR BARRICADES IN ACCORDANCE WITH THE MUTCD IN ADVANCE OF PORTABLE CONCRETE BARRIER TO WARN AND ALERT DRIVERS.
8. ANCHOR PIN DETAILS CAN BE PROVIDED IF REQUIRED OR DIRECTED.
9. TEMPORARY LIGHTING SHALL BE PAID UNDER ITEM 670.10X.
10. ADEQUATE PROTECTION SHALL BE MEASURES AS DESCRIBED IN THE MOST CURRENT EDITION OF THE ROADSIDE DESIGN GUIDE AS ADOPTED BY THE DEPARTMENT. PLACING GRANULAR MATERIAL AT THE END(S) OF THE BARRIER SHALL NOT BE CONSIDERED ADEQUATE PROTECTION.

MATERIAL NOTES

1. BARRIERS SHALL BE LIGHT COLORED CLASS AAA CONCRETE HAVING A MINIMUM 28 DAY COMPRESSION STRENGTH OF 5,000 PSI. BARRIERS SHALL HAVE A SMOOTH UNIFORM SURFACE FREE OF DEFECTS AND IRREGULARITIES. CASTING DATE SHALL BE SHOWN ON BARRIER. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 3/4" UNLESS OTHERWISE NOTED.
2. ALL REINFORCING STEEL SHALL BE AASHTO M31 (ASTM-A615) GRADE 60. REINFORCEMENT SHOWN IS THE MINIMUM REQUIRED. ALL REINFORCING STEEL SHALL HAVE A MINIMUM 1 1/2" CLEAR COVER UNLESS OTHERWISE NOTED.
3. EACH BARRIER UNIT SHALL INCLUDE ONE LINKING PIN.
4. LIFTING OPTIONS SHOWN ARE ADVISORY ONLY. IT SHALL BE THE CONTRACTORS' RESPONSIBILITY TO PROVIDE ADEQUATE LIFTING POINTS ON EACH BARRIER.
5. DELINEATORS SHALL BE ATTACHED TO THE BARRIER USING BOLTS AND ANCHORS OR OTHER APPROVED MECHANICAL CONNECTION, AS SHOWN ON STANDARD NO. DL-1.

BARRIER WEIGHT APPROXIMATELY = 2.84 TONS/UNIT

GUARDRAIL STANDARD
PORTABLE CONCRETE BARRIER
(1 OF 2)