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Caltrans

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

BORDER LAST REVISED 8/1/2016

NAME OF FILE: \$REQUEST

TO ACCOMPANY CONTRACT
PLANS DATED

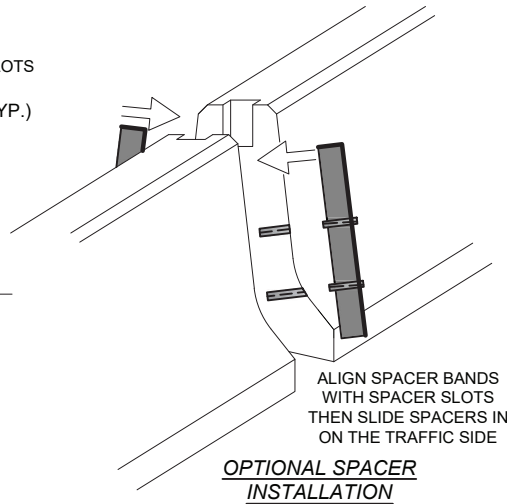
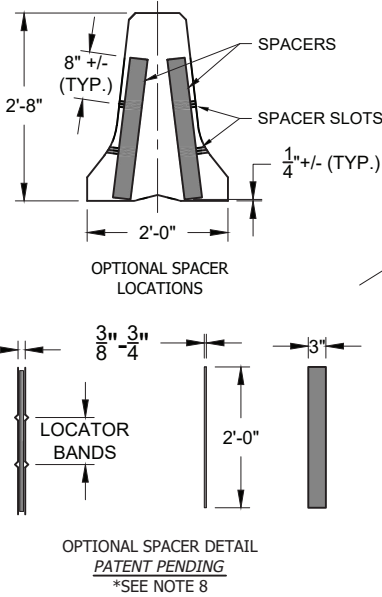
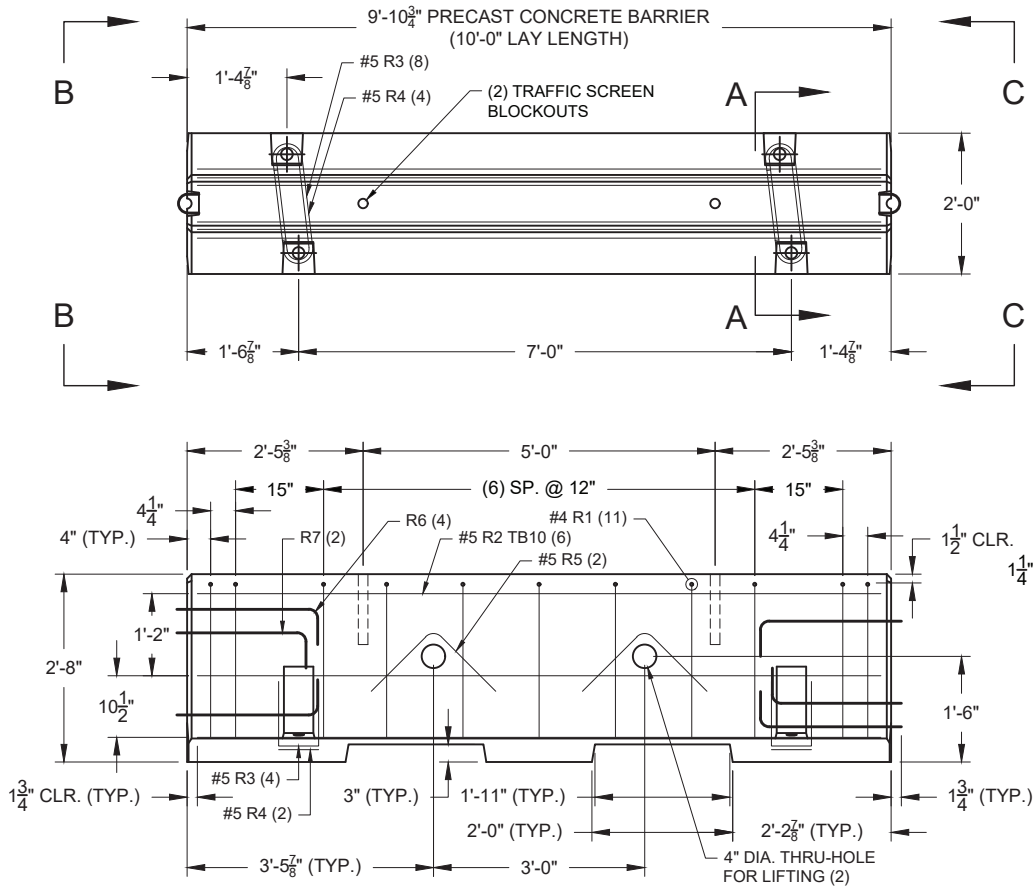
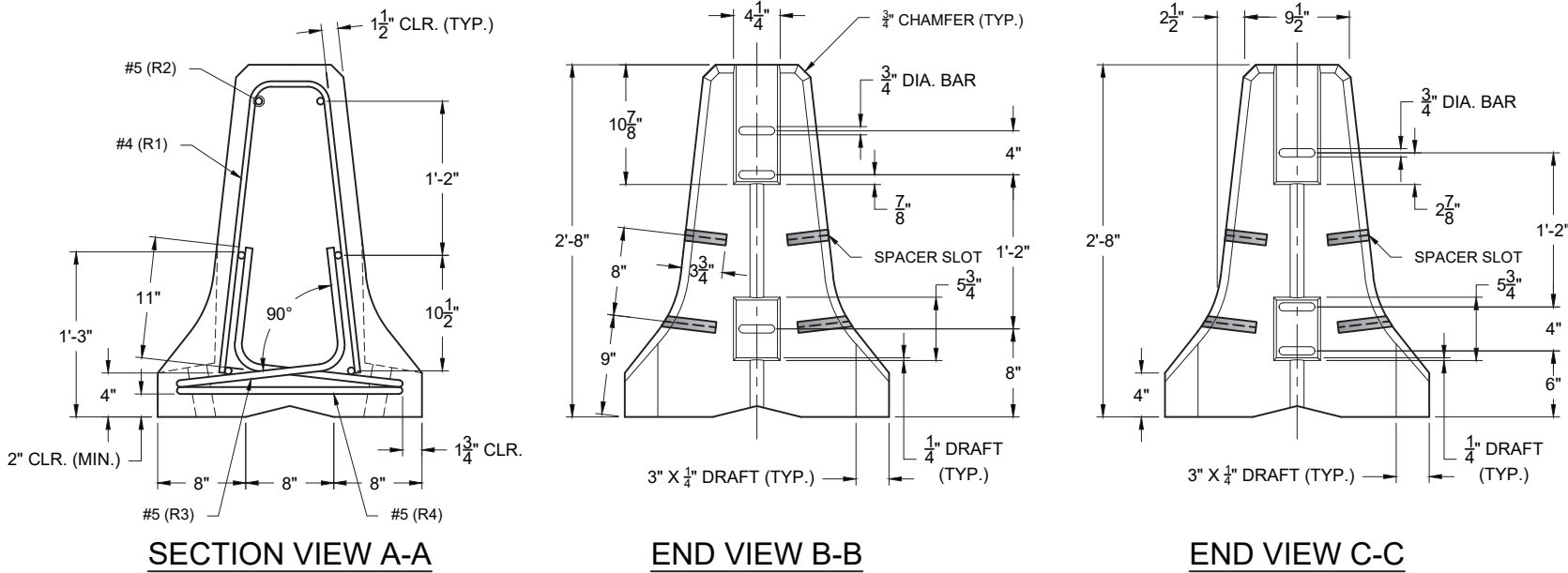
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

DATE THIS PLAN APPROVED

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John B. Henkels IV
REGISTERED CIVIL ENGINEER



NOTES:

1. MINIMUM CONCRETE STRENGTH 5,000 PSI (34.5MPa).
2. REINFORCING DEFORMED BARS COMPLYING WITH ASTM A706/A706M GRADE 60. WELDED WIRE REINFORCEMENT MAY BE USED AND SHALL COMPLY WITH ASTM A1064/A1064M.
3. STEEL BAR LOOPS COMPLYING WITH ASTM A36/A36M.
4. CONNECTING PINS ARE ROUND BARS COMPLYING WITH ASTM A36/A36M A MINIMUM LENGTH OF 24".
5. DESIGN MEETS THE REQUIREMENT OF MASH TL-3.
6. IDENTIFICATION WILL INCLUDE MANUFACTURER'S NAME, MONTH AND YEAR. IF REQUIRED, LOT NUMBERS MAY BE INCLUDED.
7. SEE SHEETS TBD-1 AND TBD-2 FOR REINFORCING, TRAFFIC SCREEN, AND LOOP DETAILS.
8. OPTIONAL LIMITING SPACERS ARE PROPRIETARY AND ARE AVAILABLE FROM THE MANUFACTURER.
9. LON FOR 30' BARRIER SECTION IS 210' - LON FOR 20' BARRIER SECTION AND 10' BARRIER SECTION IS 200'.
10. SEE CALTRANS APPROVED LIST FOR USE OF TEMPORARY CRASH CUSHIONS.

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APPROX. WT. = 4,630 LBS.

PRO-CAST PRODUCTS, INC. PO BOX 602 Highland, CA 92346		PRO-CAST 10' RIGID TL3 MASH BARRIER (ProMASH 10)	
Revision 13 - APR. 29, 2026		TB10	SHEET 3 OF 6
UNIT 3342		PROJECT NUMBER & PHASE	NO SCALE

UNIT 3342

PROJECT NUMBER & PHASE

00000000001

APPROVED PLAN FOR CALTRANS USE

TO ACCOMPANY CONTRACT
PLANS DATED

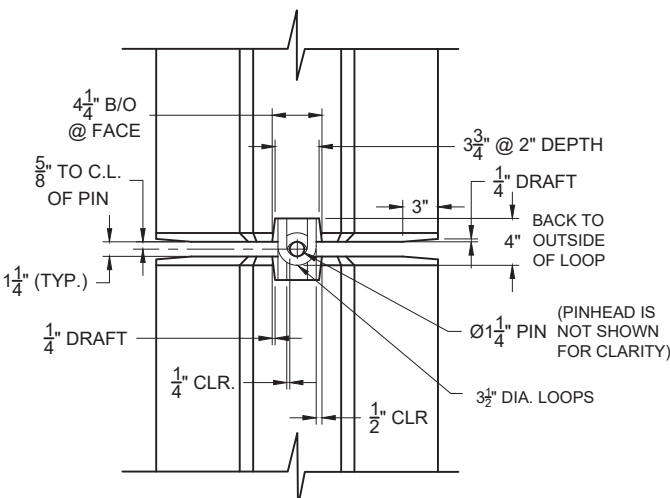
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

DATE THIS PLAN APPROVED

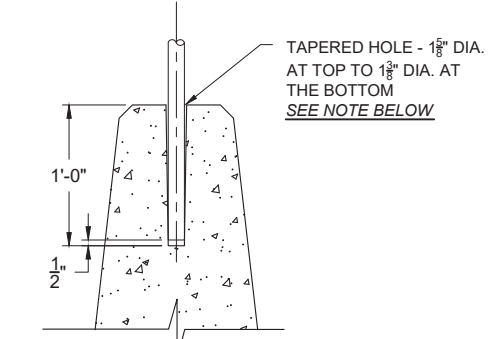
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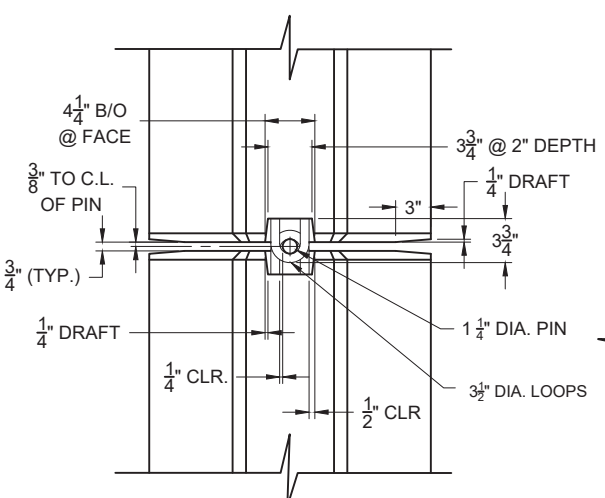
REGISTERED PROFESSIONAL ENGINEER
No. 49172
Exp. 9/30/26
CIVIL



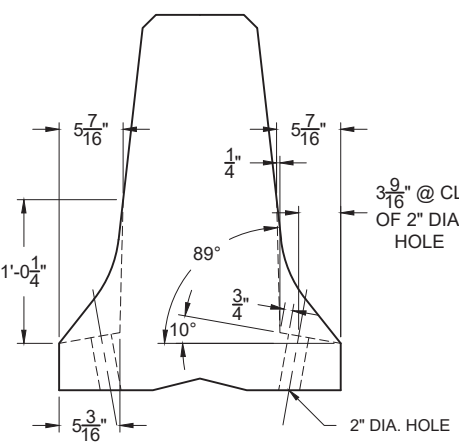
PLAN VIEW FOR
TB10 & TB20
SEE LOOP DETAIL ON SHT. TBD-2



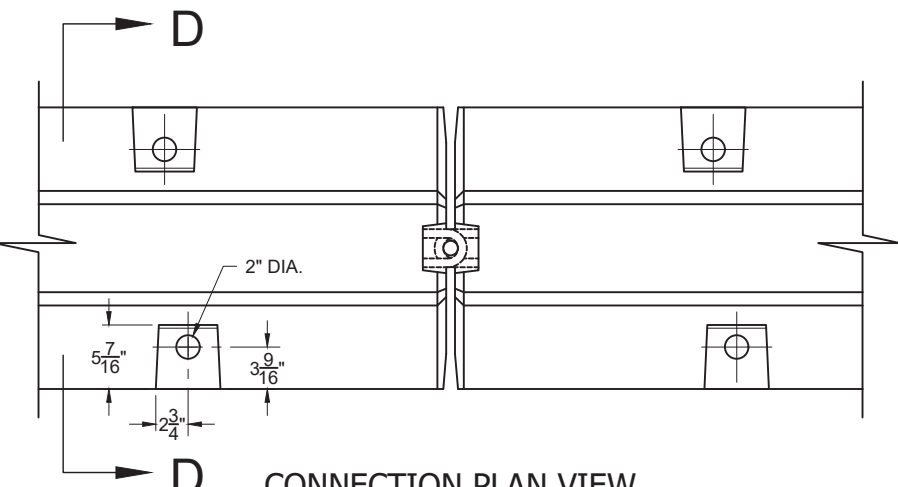
TRAFFIC SCREEN
BLOCKOUT DETAIL
1 1/2" DIA. STRAIGHT HOLES X 12"
DEEP MAY BE USED IN LIEU OF
THE TAPERED HOLES



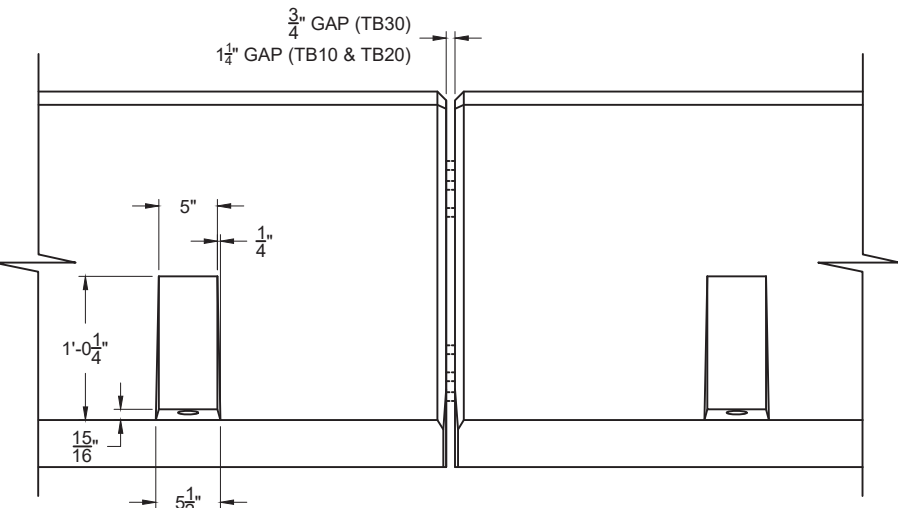
PLAN VIEW
FOR TB30
SEE LOOP DETAIL ON SHT. TBD-2



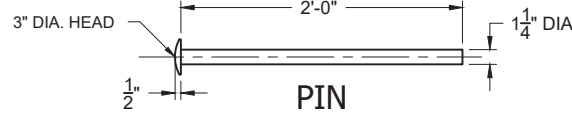
SECTION D-D



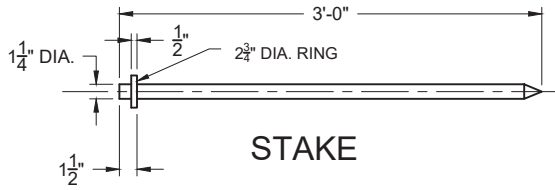
CONNECTION PLAN VIEW



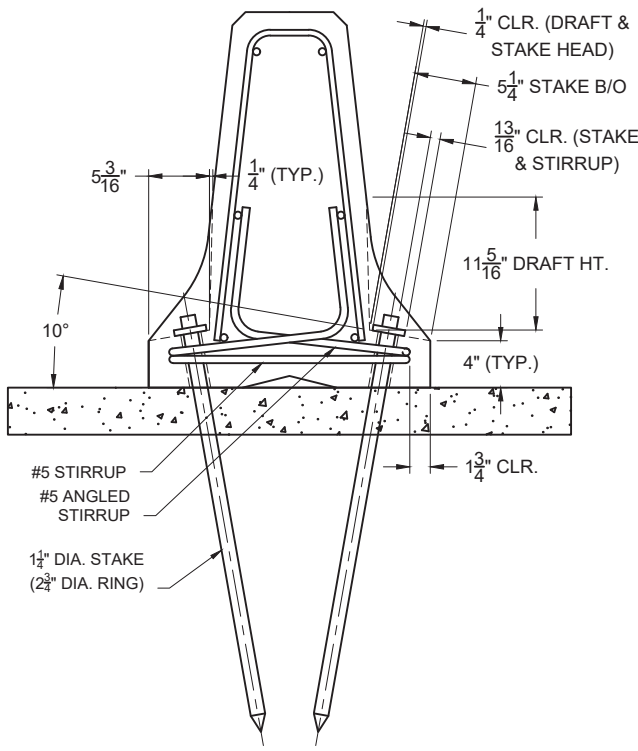
CONNECTION ELEVATION



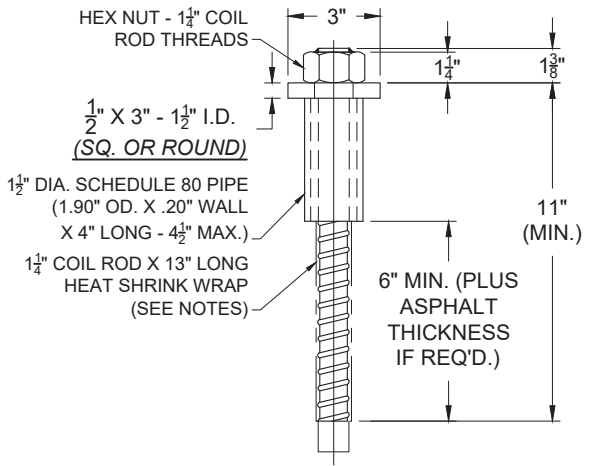
PIN



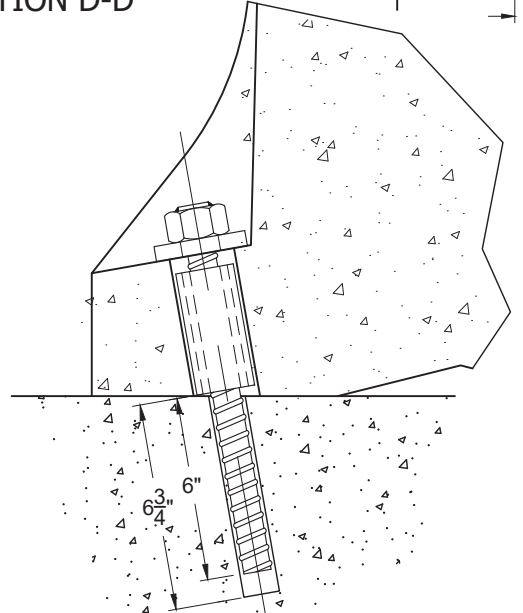
STAKE



STAKING DETAIL



ANCHOR BOLT
ASSEMBLY



ANCHOR BOLT
ASSEMBLY

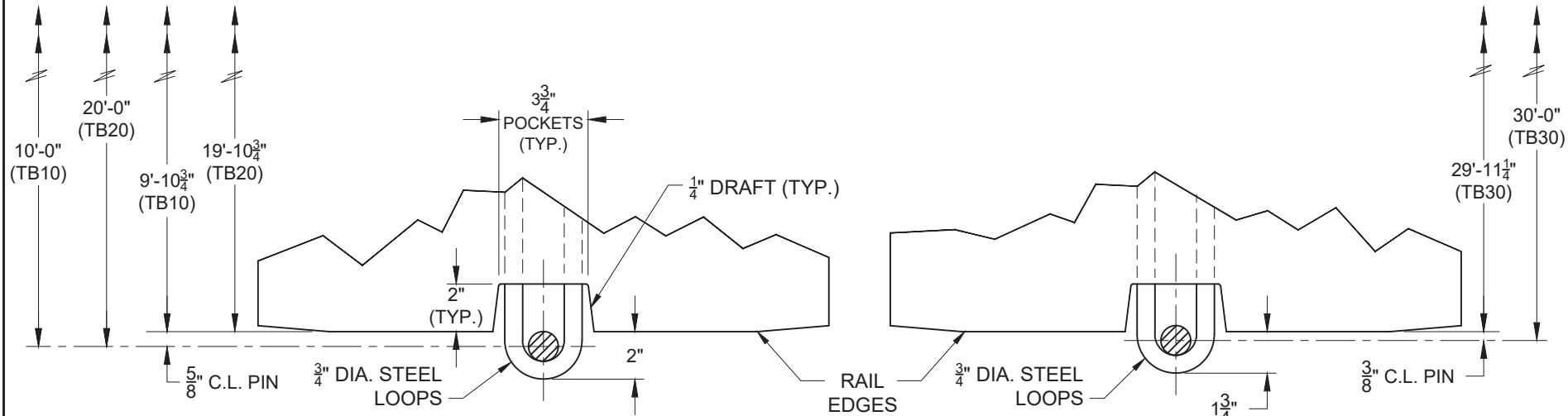
EXISTING CONCRETE

NOTES:
HEAT SHRINK WRAP IS USED FOR SHORT TERM APPLICATIONS.
WHEN BOLTS ARE NEEDED FOR LONGER TERM APPLICATIONS,
(ONE YEAR OR LONGER) THE SHRINK WRAP SLEEVES MUST BE
REMOVED PRIOR TO INSTALLATION.

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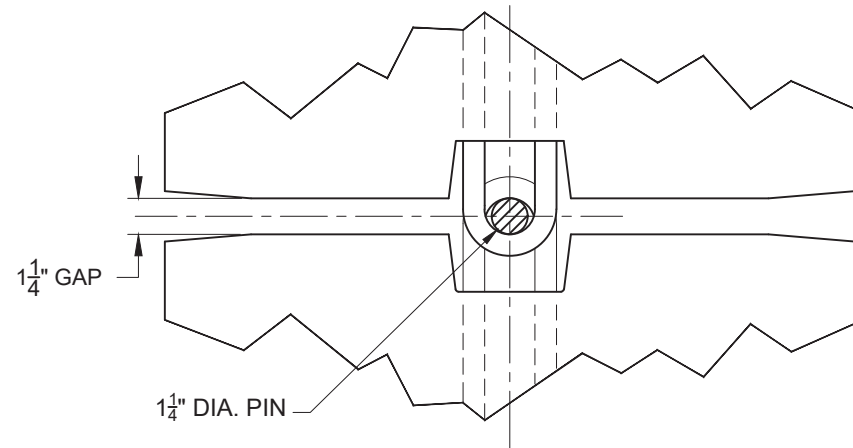
PRO-CAST PRODUCTS, INC. PO BOX 602 Highland, CA 92346		PRO-CAST RIGID TL3 MASH BARRIER DETAILS (ProMASH Details)	
Revision 13 - APR. 29, 2026		TBD-1	SHEET 4 OF 6
UNIT 3342		PROJECT NUMBER & PHASE	NO SCALE

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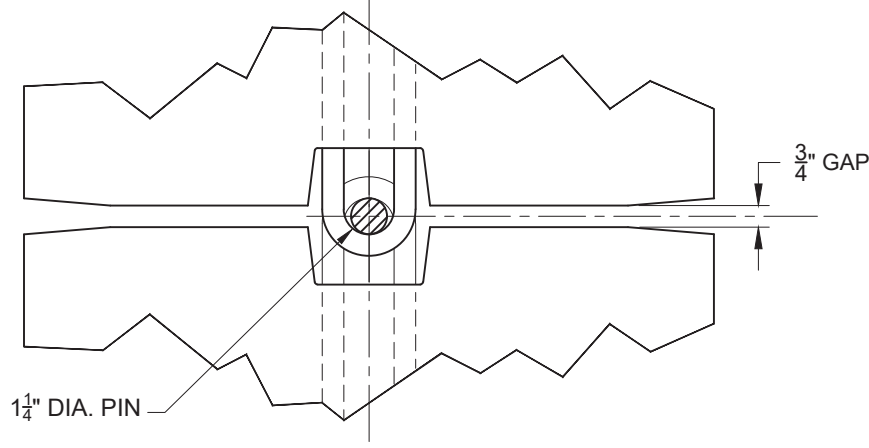


LOOP DETAIL FOR
TB10 & TB20
("R6" OR "R7")

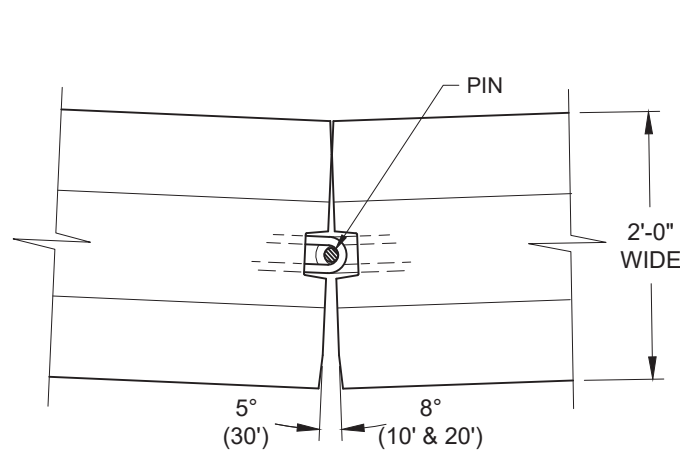
LOOP DETAIL
FOR TB30
("R6" OR "R7")



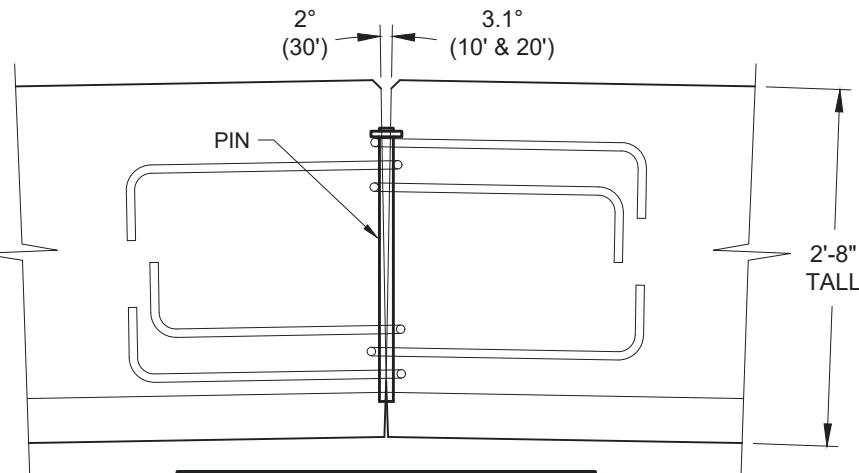
LOOP CONNECTION
FOR TB10 & TB20



LOOP CONNECTION
FOR TB30



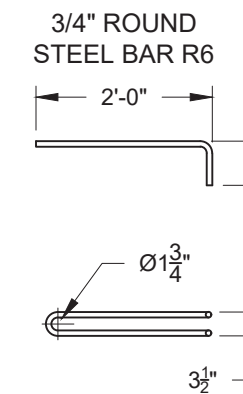
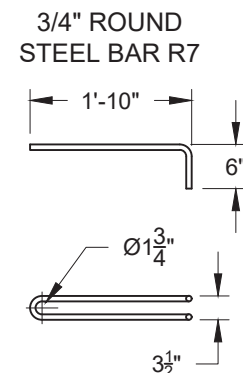
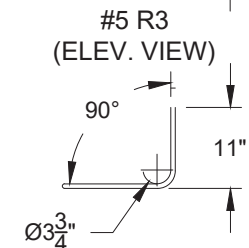
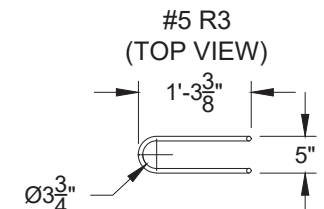
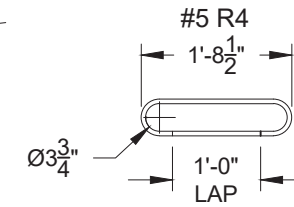
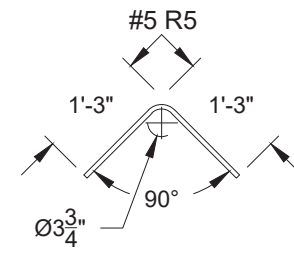
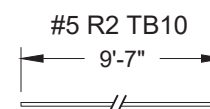
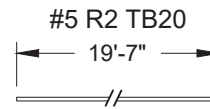
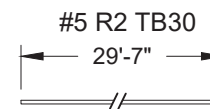
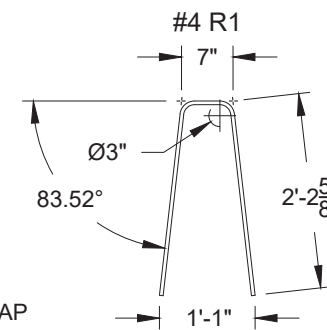
PLAN VIEW - MINIMUM RADIUS	
30'-0"	500'
20'-0"	210'
10'-0"	100'



ELEV. VIEW - VERTICAL ROTATION	
30'-0"	850'
20'-0"	345'
10'-0"	170'

TO ACCOMPANY CONTRACT
PLANS DATED _____

REINFORCING SCHEDULE QUANTITIES			
"R"	TB30	TB20	TB10
R1	(35)	(22)	(11)
R2 TB30	(6)		
R2 TB20		(6)	
R2 TB10			(6)
R3	(8)	(6)	(4)
R4	(4)	(3)	(2)
R5	(2)	(2)	(2)
R6	(4)	(4)	(4)
R7	(2)	(2)	(2)



REINFORCING AND LOOP DETAILS

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Revision 13 – APR. 29, 2026		TBD-2	SHEET 5 OF 6
UNIT 3342		PROJECT NUMBER & PHASE	NO SCALE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

DATE THIS PLAN APPROVED _____

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John B. Henkels IV
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REGISTERED PROFESSIONAL ENGINEER
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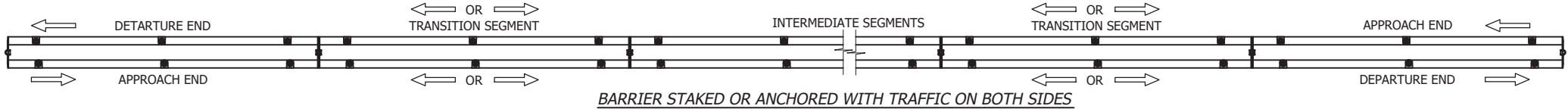
APPROVED PLAN FOR CALTRANS USE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

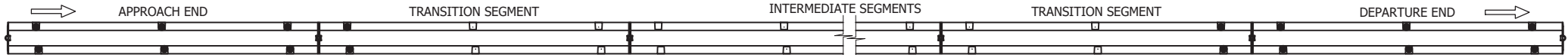
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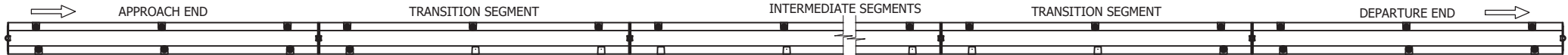
John B. Henkels IV
REGISTERED CIVIL ENGINEER



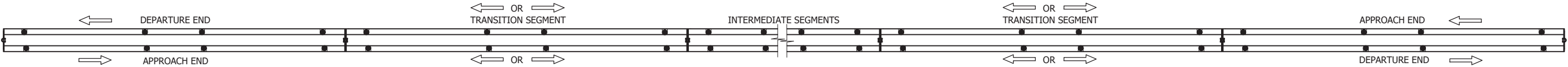
BARRIER STAKED OR ANCHORED WITH TRAFFIC ON BOTH SIDES



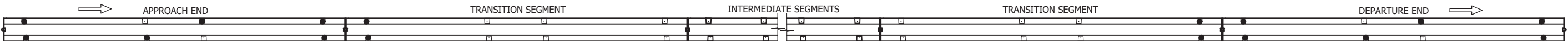
BARRIER FREESTANDING WITH TRAFFIC ON ONE SIDE



BARRIER STAKED OR ANCHORED WITH TRAFFIC ON ONE SIDE
20-FT. LONG MASH BARRIERS



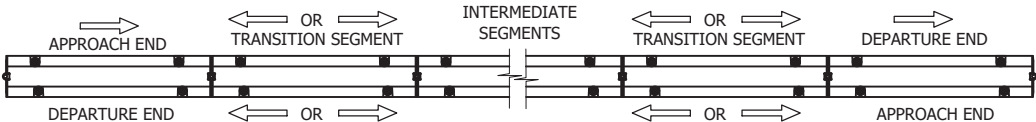
BARRIER STAKED OR ANCHORED WITH TRAFFIC ON BOTH SIDES



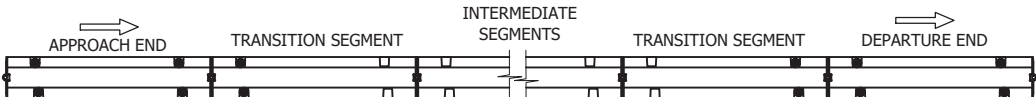
BARRIER FREESTANDING WITH TRAFFIC ON ONE SIDE



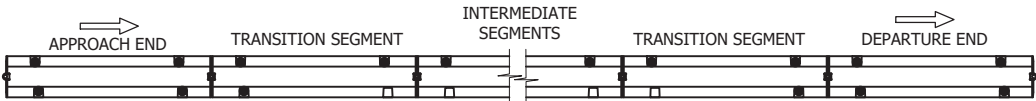
BARRIER STAKED OR ANCHORED WITH TRAFFIC ON ONE SIDE
30-FT. LONG MASH BARRIERS



BARRIER STAKED OR ANCHORED WITH TRAFFIC ON BOTH SIDES



BARRIER FREESTANDING WITH TRAFFIC ON ONE SIDE



BARRIER STAKED OR ANCHORED WITH TRAFFIC ON ONE SIDE
10-FT. LONG MASH BARRIERS

- NOTES:**
1. STAKED TEMPORARY BARRIER SYSTEMS MUST BE SUPPORTED BY A MINIMUM 4" THICK ASPHALT CONCRETE OR EXISTING ASPHALT CONCRETE PAVEMENT.
- LEGEND:**
- STAKE OR ANCHOR.
 - ➡ DIRECTION OF TRAFFIC.

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PRO-CAST PRODUCTS, INC. PO BOX 602 Highland, CA 92346		PRO-CAST RIGID TL3 MASH BARRIER DETAILS (ProMASH Details)	
Revision 13 – APR. 29, 2026		TBD-3	SHEET 6 OF 6
UNIT 3342		PROJECT NUMBER & PHASE	NO SCALE