

END BENT 1

BENT 1

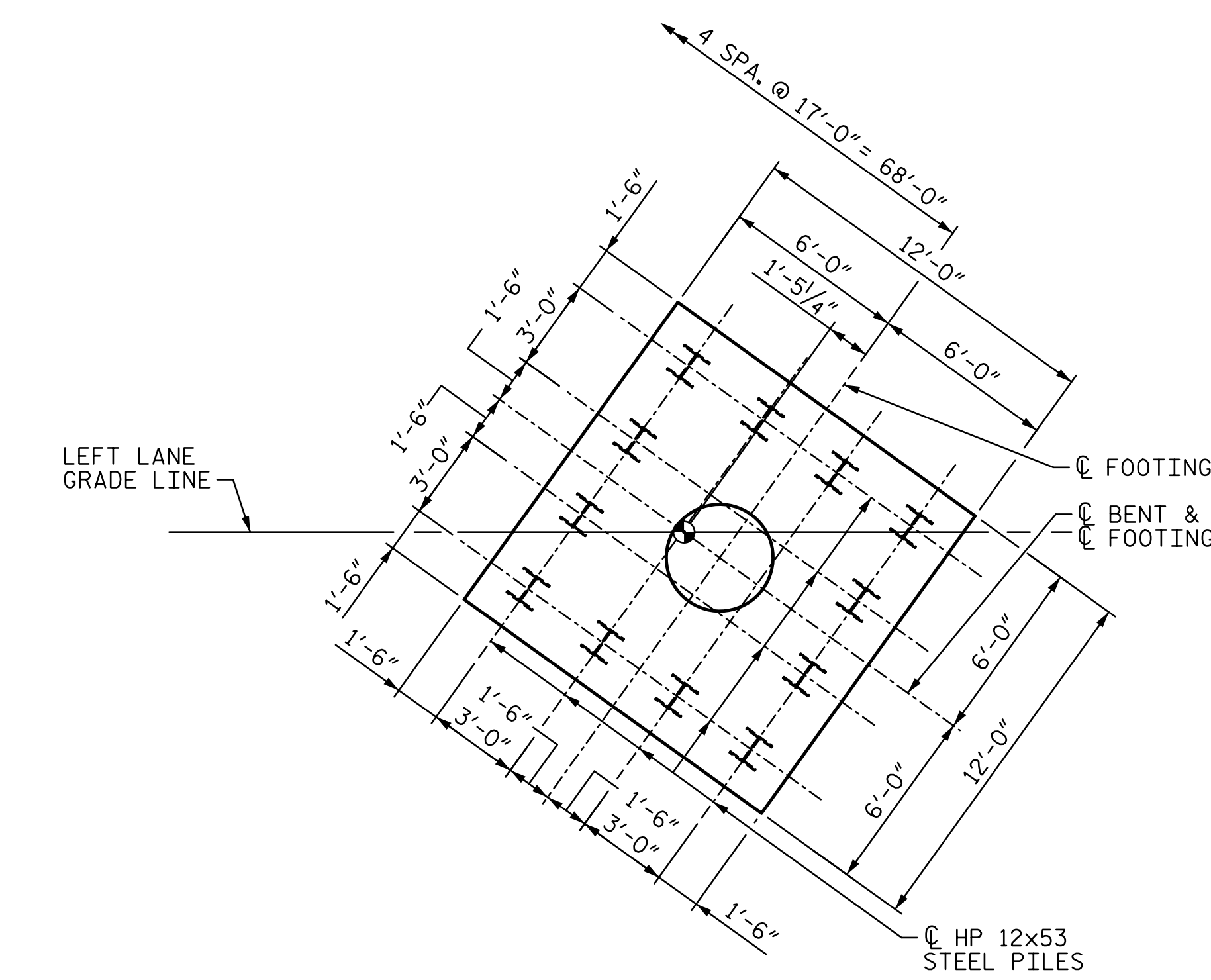
BENT 2

BENT 3

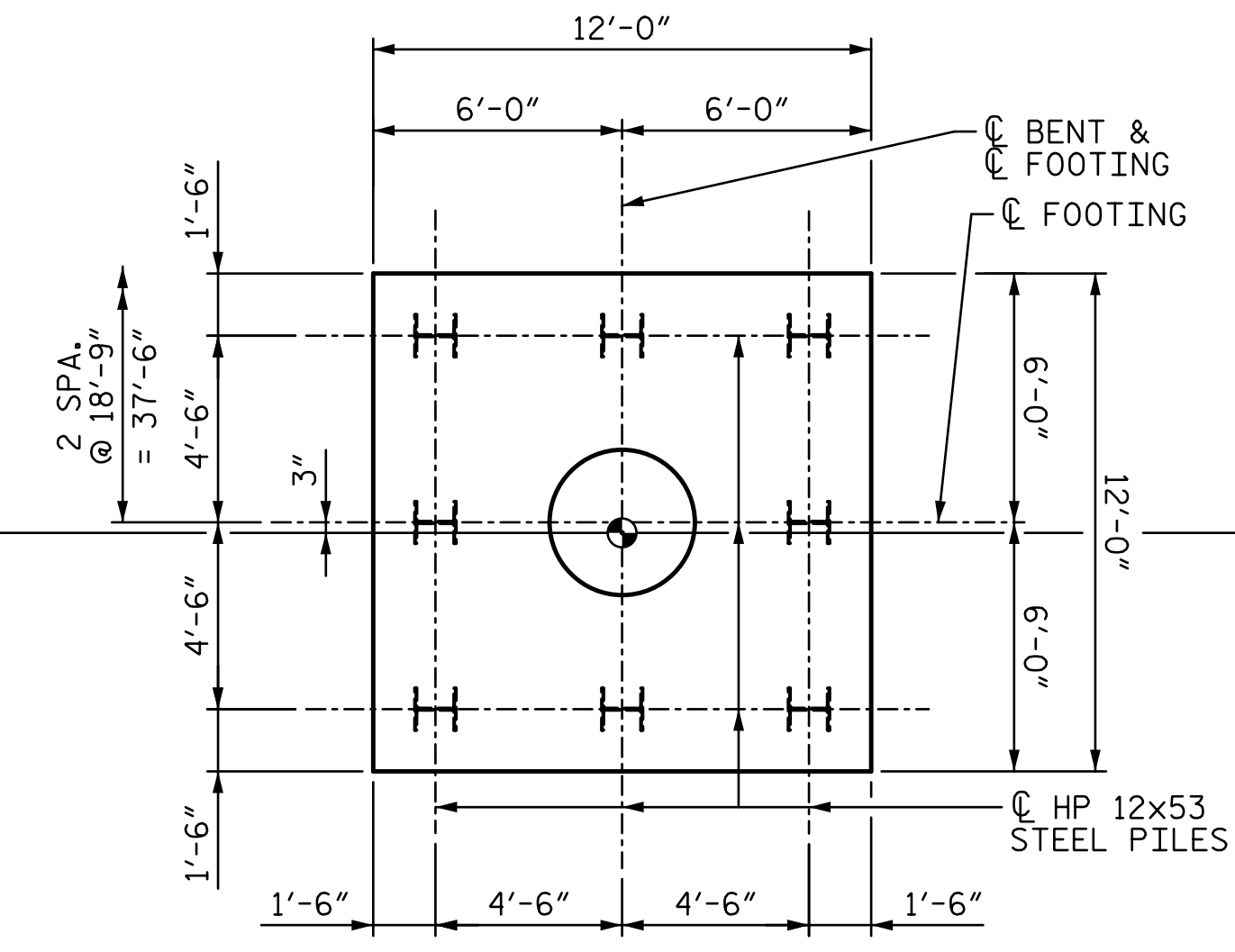
END BENT 2

FOUNDATION LAYOUT

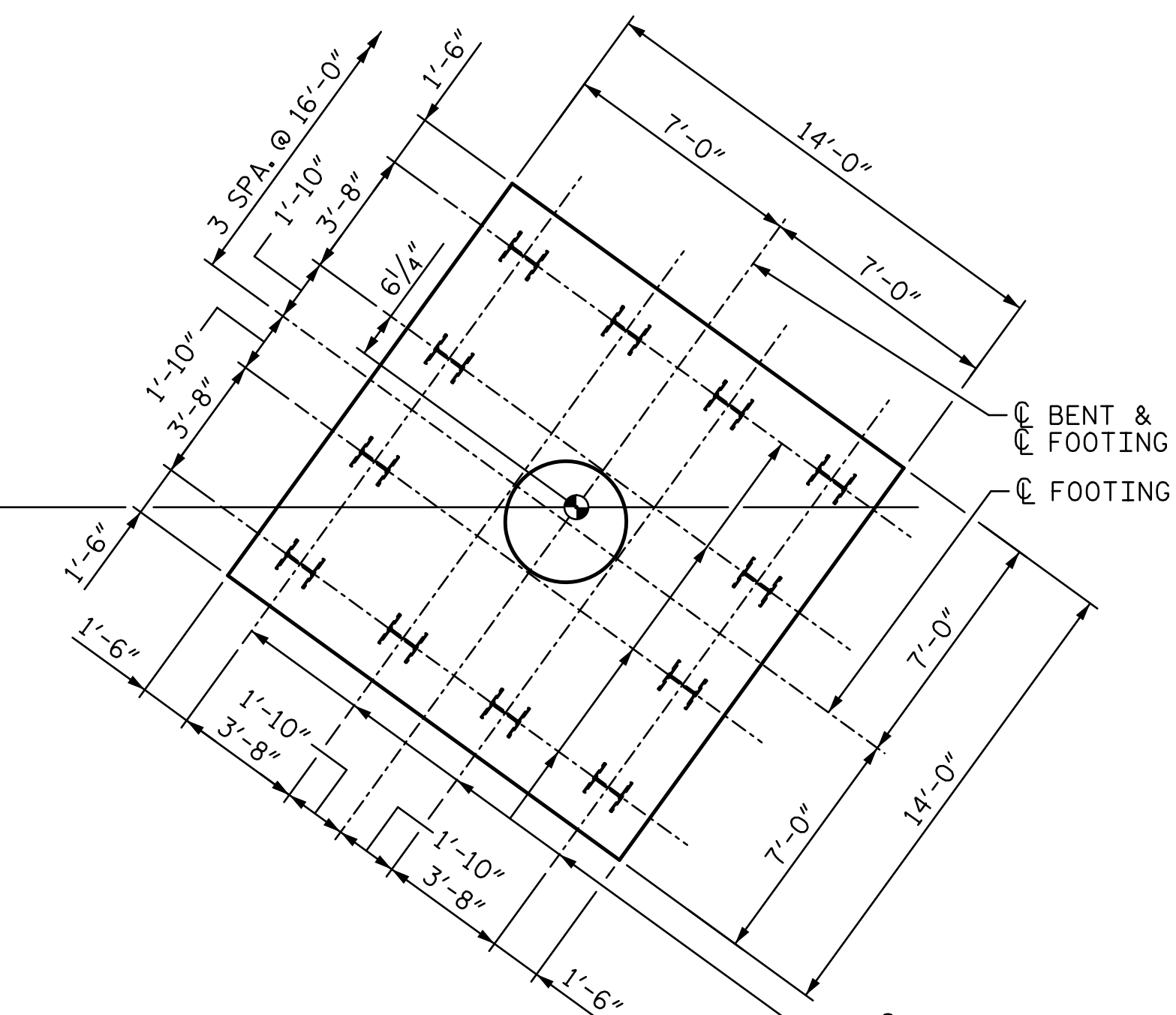
(DIMENSIONS LOCATING PILES ARE SHOWN TO THE PILE CENTERLINE AT THE BOTTOM OF CAP/FOOTING)



DETAIL A



DETAIL B



DETAIL C

NOTES:

- FOR PILES, SEE GEOTECHNICAL SPECIAL PROVISIONS AND SECTION 450 OF THE STANDARD SPECIFICATIONS.
- PILES AT END BENT 1 ARE DESIGNED FOR A FACTORED RESISTANCE OF 125 TONS PER PILE.
- DRIVE PILES AT END BENT 1 TO A REQUIRED DRIVING RESISTANCE OF 210 TONS PER PILE.
- PILES AT BENT 1 ARE DESIGNED FOR A FACTORED RESISTANCE OF 70 TONS PER PILE.
- DRIVE PILES AT BENT 1 TO A REQUIRED DRIVING RESISTANCE OF 120 TONS PER PILE.
- PILES AT BENT 2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 100 TONS PER PILE.
- DRIVE PILES AT BENT 2 TO A REQUIRED DRIVING RESISTANCE OF 170 TONS PER PILE.
- PILES AT BENT 3 ARE DESIGNED FOR A FACTORED RESISTANCE OF 80 TONS PER PILE.
- DRIVE PILES AT BENT 3 TO A REQUIRED DRIVING RESISTANCE OF 135 TONS PER PILE.
- PILES AT END BENT 2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 125 TONS PER PILE.
- DRIVE PILES AT END BENT 2 TO A REQUIRED DRIVING RESISTANCE OF 210 TONS PER PILE.
- STEEL H-PILE POINTS ARE REQUIRED FOR STEEL H-PILES AT END BENT 2. FOR STEEL PILE POINTS, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.
- IT HAS BEEN ESTIMATED THAT A HAMMER WITH AN EQUIVALENT RATED ENERGY IN THE RANGE OF 30,000 TO 45,000 FT-LBS PER BLOW WILL BE REQUIRED TO DRIVE PILES AT THE END BENTS AND INTERIOR BENTS. THIS ESTIMATED ENERGY RANGE DOES NOT RELEASE THE CONTRACTOR FROM PROVIDING DRIVING EQUIPMENT IN ACCORDANCE WITH SUBARTICLE 450-3(D)(2) OF THE STANDARD SPECIFICATIONS.
- TESTING PILES WITH THE PDA DURING DRIVING, RESTRIKING OR REDRIVING MAY BE REQUIRED. THE ENGINEER WILL DETERMINE THE NEED FOR PDA TESTING. FOR PDA TESTING, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.
- CONSTRUCT MSE RETAINING WALL AT END BENT 1 AND MSE RETAINING WALL AT END BENT 2 BEFORE INSTALLING FOUNDATIONS FOR END BENT 1 AND END BENT 2.
- INSTALL A 16 GAGE 24-INCH DIAMETER CORRUGATED STEEL PIPE FOR EACH END BENT PILE LOCATION THROUGH THE WALL BACKFILL ZONE DURING MSE WALL CONSTRUCTION. DRIVE END BENT PILES AT END BENT 1 AND 2 THROUGH THE PIPES AFTER COMPLETION OF BOTH THE MSE WALLS AND WAITING PERIODS AND FILL THE PIPES WITH SAND BEFORE END BENT CAP CONSTRUCTION.
- OBSERVE A 1 MONTH WAITING PERIOD AFTER CONSTRUCTING MSE RETAINING WALL AT END BENT 1 TO THE BOTTOM OF CAP ELEVATION BEFORE BEGINNING END BENT CONSTRUCTION.
- OBSERVE A 2 MONTH WAITING PERIOD AFTER CONSTRUCTING MSE RETAINING WALL AT END BENT 2 TO THE BOTTOM OF CAP ELEVATION BEFORE BEGINNING END BENT CONSTRUCTION.

PROJECT NO. R-2707C
CLEVELAND COUNTY
 STATION: 596+50.98 -L-
23+68.80 -Y13-
 SHEET 2 OF 3

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
GENERAL DRAWING
FOUNDATION LAYOUT

(SITE 6L)

DocuSigned by:
Kevin Bailey
12/13/2016

DocuSigned by:
Tony R. Laws, Jr.
12/13/2016

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

STV ENGINEERS, INC.
900 West Trade St., Suite 715
Charlotte, NC 28202
NC License Number F-0991

REVISIONS				SHEET NO.
NO.	BY:	DATE:	NO.	DATE:
1			3	
2			4	

TOTAL SHEETS
56

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DRAWN BY: VMW DATE: 10-16 DESIGN ENGINEER OF RECORD: K. BAILEY DATE: 10-16
 CHECKED BY: TJT DATE: 10-16