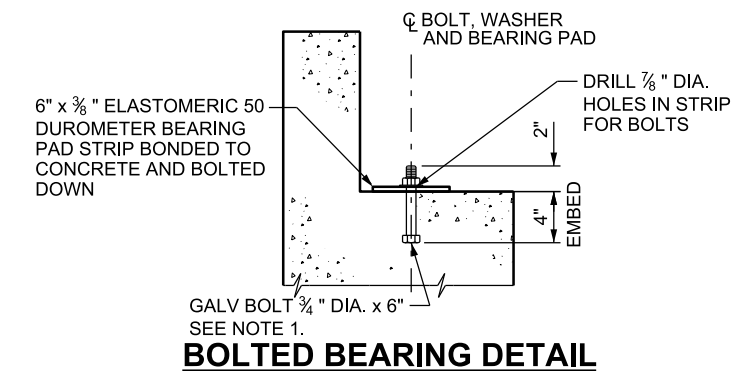
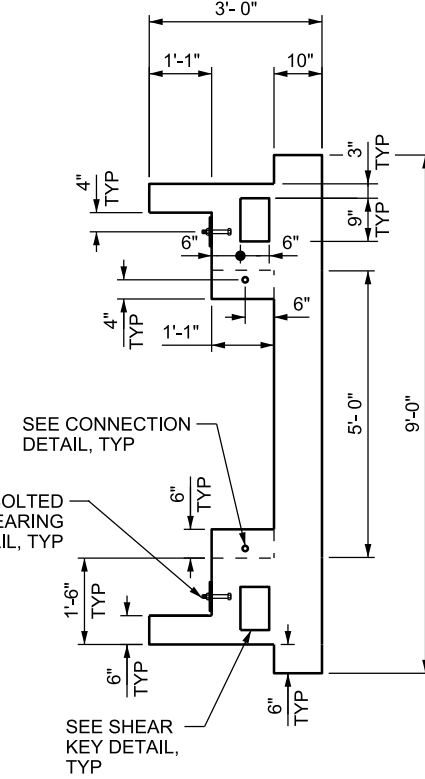
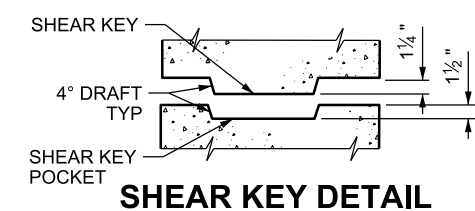


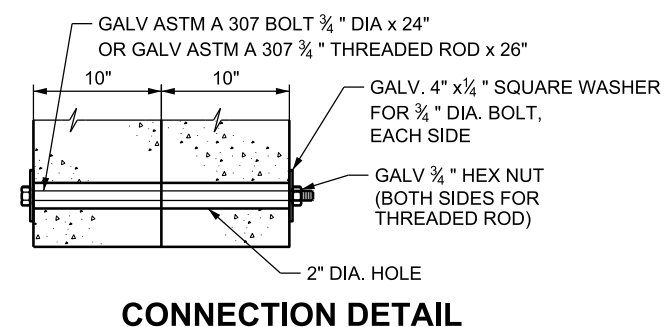
8'-0" END UNIT



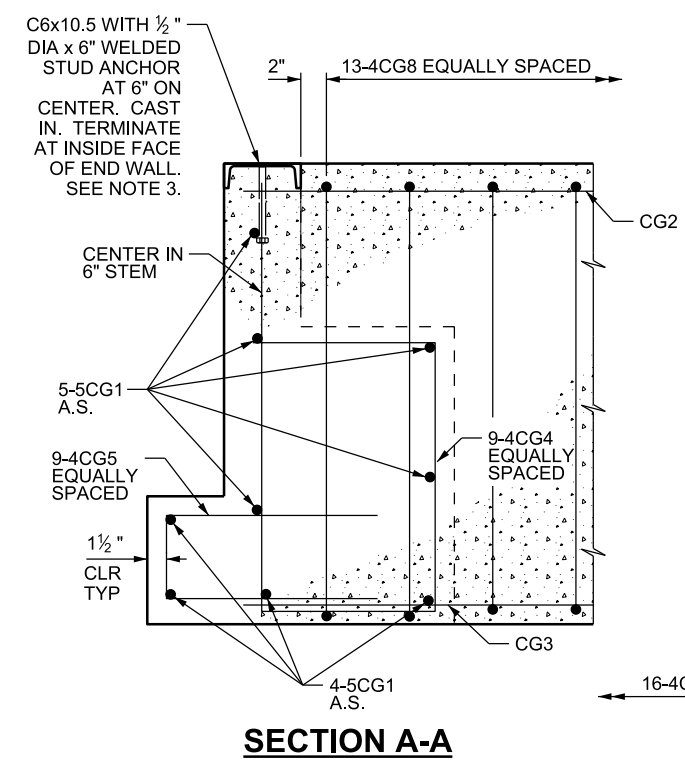
BOLTED BEARING DETAIL



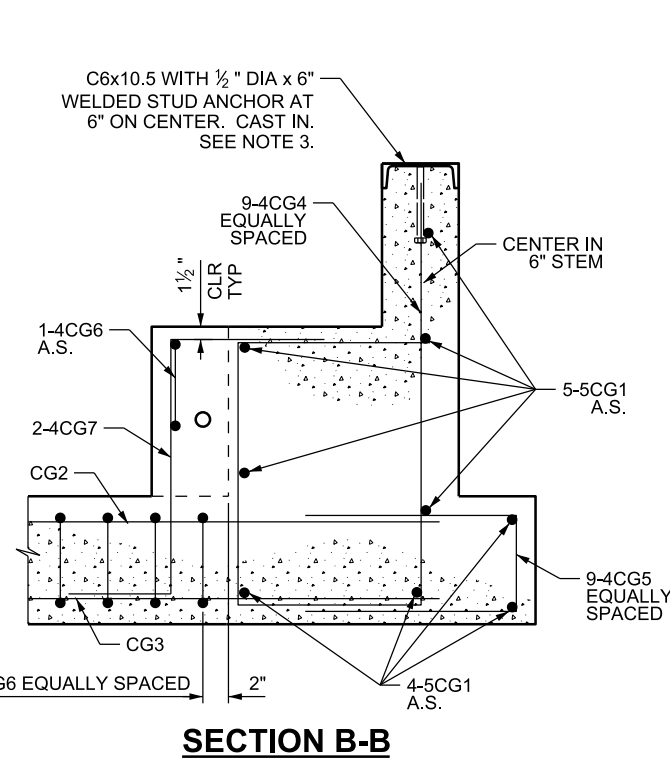
SHEAR KEY DETAIL



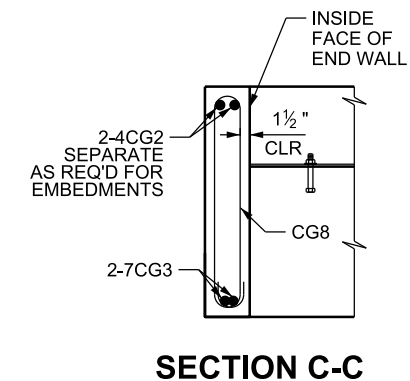
CONNECTION DETAIL



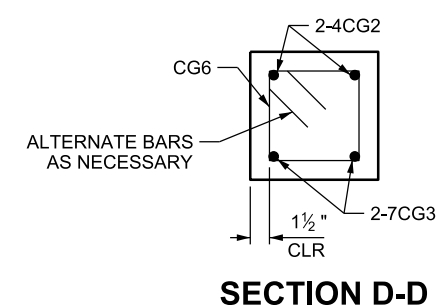
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

REINFORCING STEEL SCHEDULE FOR END UNIT

MARK	LOCATION	SIZE	REQ'D	LENGTH	TOTAL	SKETCH	MARK	LOCATION	SIZE	REQ'D	LENGTH	TOTAL	SKETCH	
CG1	CATTLE GUARD	5	18	7'-8"	138'-0"		CG6	CATTLE GUARD	4	16	3'-1"	49'-4"		
CG2	CATTLE GUARD	4	4	7'-8"	30'-8"		CG7	CATTLE GUARD	4	4	3'-6"	14'-0"		
CG3	CATTLE GUARD	7	4	7'-8"	30'-8"		CG8	CATTLE GUARD	4	13	6'-10"	88'-10"		
CG4	CATTLE GUARD	4	18	6'-8"	120'-0"									
CG5	CATTLE GUARD	4	18	3'-5"	61'-6"									

STRUCTURAL STEEL PER UNIT

ITEM	REQ'D	SIZE	LENGTH
CHANNEL	2	C6x10.5	7'-5"
STUD ANCHOR	30	1/2" DIA	0'-6"

- NOTES:**
- FERRULE LOOP INSERTS SIZED FOR A BOLT OF EQUIVALENT DIAMETER TO THAT SHOWN MAY BE USED INSTEAD OF EMBEDDED BOLTS. FABRICATOR TO INCLUDE ASSOCIATED BOLT, OR EYE BOLT, OF LENGTH APPROPRIATE FOR FERRULE.
 - PROVIDE EMBEDDED LIFTING DEVICES CAPABLE OF SUPPORTING 20,000 LB MINIMUM TO LIFT THE PRECAST CATTLE GUARD UNIT INTO ITS FINAL POSITION.
 - WEEPHOLES ARE PERMITTED IN THE CHANNEL SECTION TO RELEASE ENTRAPPED AIR.

SUPPLEMENTAL DRAWING

REVISIONS

NO.	DATE	APPR.	REMARKS
2	2/28/19	JWC	REINSED LENGTH OF CG8 BAR
1	10/25/18	JWC	COMPLETE REVISION TO CATTLE GUARD

UTAH DEPARTMENT OF TRANSPORTATION
STANDARD DRAWINGS FOR ROAD AND BRIDGE CONSTRUCTION
SALT LAKE CITY, UTAH

RECOMMENDED FOR APPROVAL:

DATE: FEB. 28, 2019

CHAIRMAN STANDARDS COM APPROVED:

DATE: FEB. 28, 2019

DEPUTY DIRECTOR:

8'-0" PRECAST CONCRETE CATTLE GUARD END UNIT

STANDARD DRAWING TITLE

STD. DWG. NO. **SW 1B**

04-MAR-2019 DGN File: L:\Standard Drawings\Impervial\2017 Approved\Supplemental Issues\SuppApproved Feb - 2019\Backup\SW01B.dgn