
 Rev: 07/25/22	CIVIL MANHOLES	1458
		Sheet 1 of 1

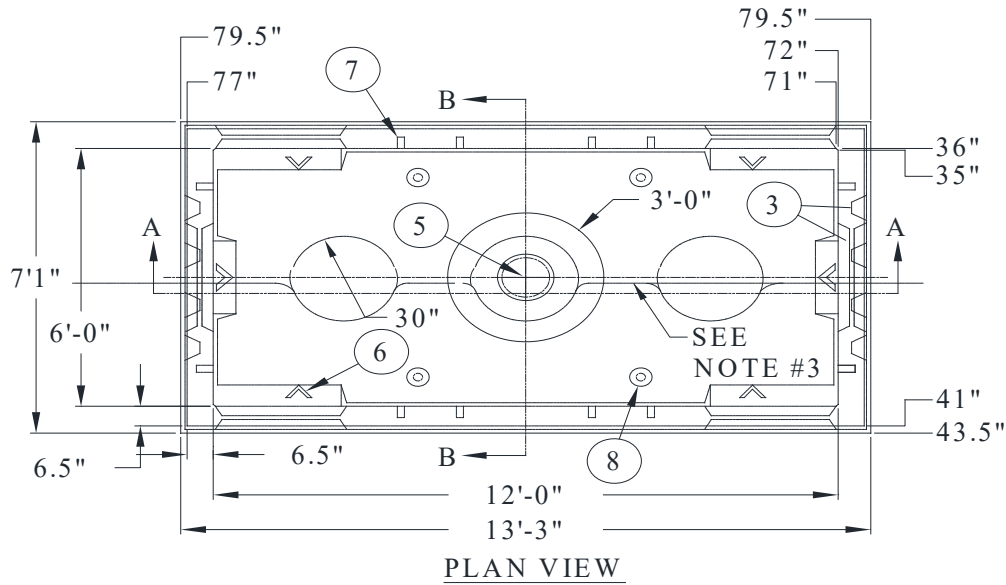
1458

MANHOLES

CONTAINS

- 1458-06A MH 6FT X 12FT - 2 FT MAX BURIAL DEPTH**
- 1458-06B MH 6FT X 12FT - 2 FT MAX BURIAL DEPTH**
- 1458-07A MH 6FT X 12FT W/CS - 2 FT MAX BURIAL DEPTH**
- 1458-07B MH 6FT X 12FT W/CS - 2 FT MAX BURIAL DEPTH**
- 1458-12A MH 12FT X 12FT - 2 FT MAX BURIAL DEPTH**
- 1458-12B MH 12FT X 12FT - 2 FT MAX BURIAL DEPTH**
- 1458-13A MH 12FT X 12FT W/CS - 2 FT MAX BURIAL DEPTH**
- 1458-13B MH 12FT X 12FT W/CS - 2 FT MAX BURIAL DEPTH**
- 1458-18A MH 6FT X 12FT - 5FT MAX BURIAL DEPTH**
- 1458-18B MH 6FT X 12FT - 5FT MAX BURIAL DEPTH**
- 1458-18C MH 6FT X 12FT - 5FT MAX BURIAL DEPTH**
- 1458-19A MH 6FT X 12FT W/CS 5FT - MAX BURIAL DEPTH**
- 1458-19B MH 6FT X 12FT W/CS 5FT - MAX BURIAL DEPTH**
- 1458-19C MH 6FT X 12FT W/CS 5FT - MAX BURIAL DEPTH**
- 1458-24A MH 12FT X 12FT - 5FT MAX BURIAL DEPTH**
- 1458-24B MH 12FT X 12FT - 5FT MAX BURIAL DEPTH**
- 1458-24C MH 12FT X 12FT - 5FT MAX BURIAL DEPTH**

1458-06A	CIVIL	
Sheet 1 of 2	MANHOLES	Rev.: 08/01/20
MANHOLES 6- FT X 12- FT		

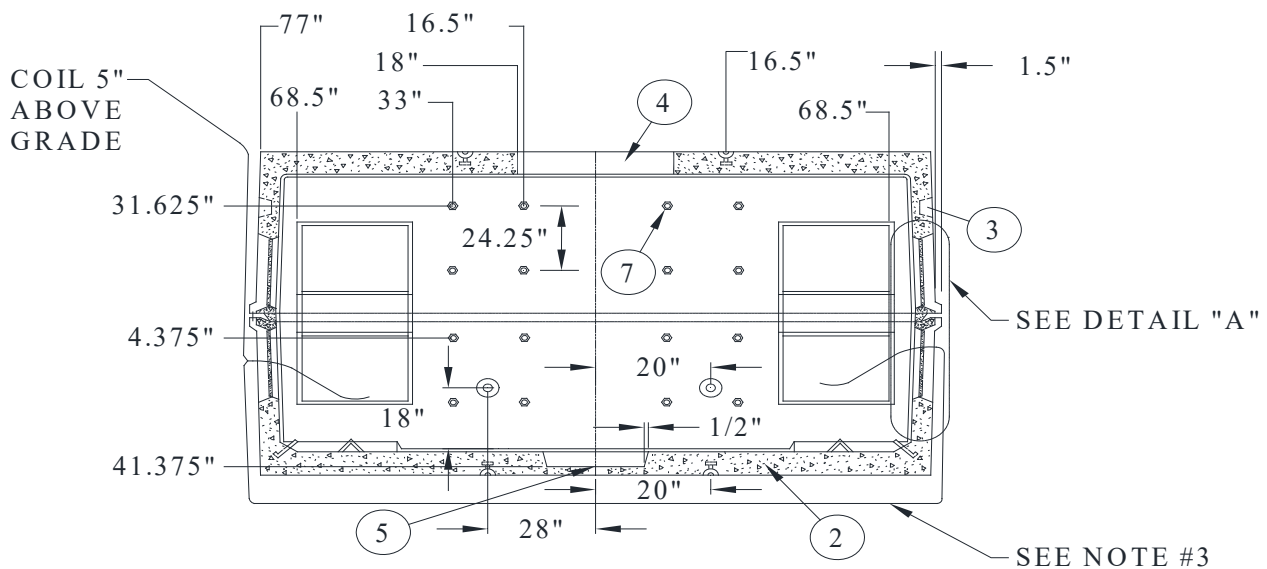


PLAN VIEW

1458-06-07

NOTE:

1. INSTALL 60'-70' OF 4/0 TINNED BARE CU WIRE MAKING 3 COILS IN BOTTOM OF EXCAVATION . BRING WIRE THROUGH A HOLE DRILLED AT OPPOSITE ENDS OF MANHOLE WITH 3'+/-2" LEFT IN MANHOLE AT ONE END. EXTEND ONE END ABOVE GRADE.
2. MAKE 3 COILS OF 4/0 TINNED BARE CU WIRE UNDER BOTTOM OF MANHOLE.
3. MANHOLE NECK SHALL BE A MAXIMUM OF 30" TALL.

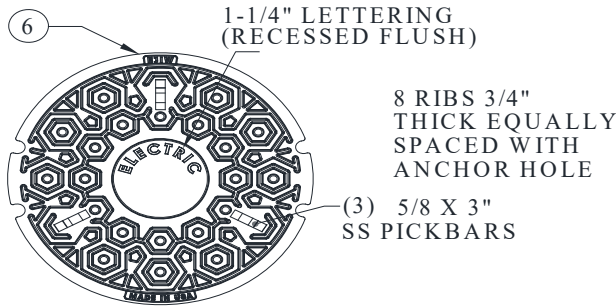


SECTION "A"

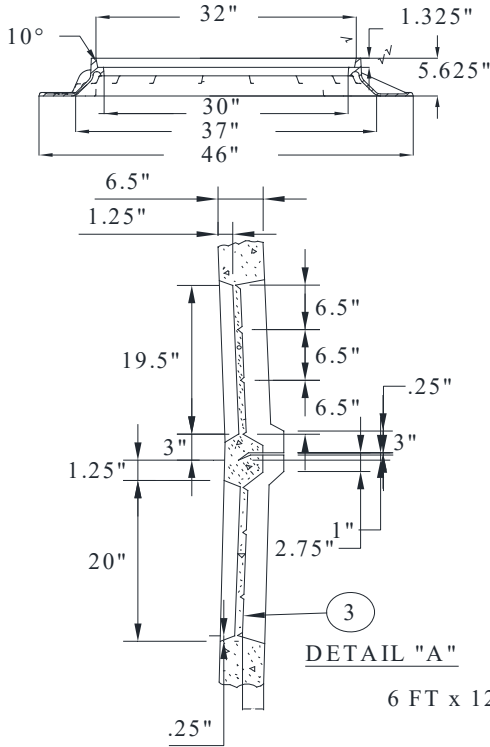
6 FT x 12 FT x 7 FT (PART 1 OF 2)

NOTES:

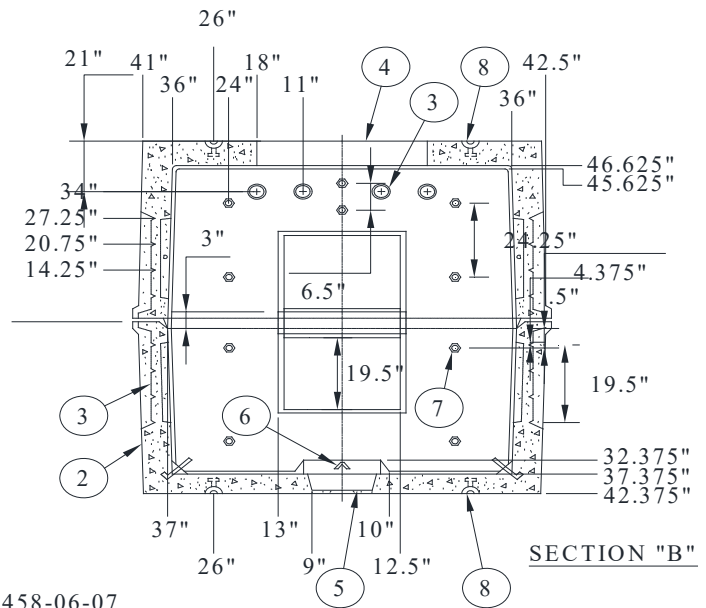
1. MIN. EXCAVATION SIZE: 8'-10"x14'-10"x DEPTH REQ'D.
2. DESIGNED FOR H-20 BRIDGE LOADING.
3. INSTALL 60'-70' OF 4/0 TINNED BARE CU WIRE MAKING 3 COILS IN BOTTOM OF EXCAVATION . BRING WIRE THROUGH A HOLE DRILLED AT OPPOSITE ENDS OF MANHOLE WITH 3'+/-2" LEFT IN MANHOLE AT ONE END. EXTEND ONE END ABOVE GRADE.
4. FINISHED SUMP TO BE 13" BY 18" DEEP.
5. BOTTOM 6" OF SUMP TO BE FILLED WITH PEA GRAVEL.
6. MANHOLE NECK SHALL BE A MAXIMUM OF 30".




COVER-M55A DUCTILE IRON MARKED ELECTRIC
NOTE: RING AND COVER SEAT TO BE MACHINED.
BOTH DUCTILE IRON M55 30"

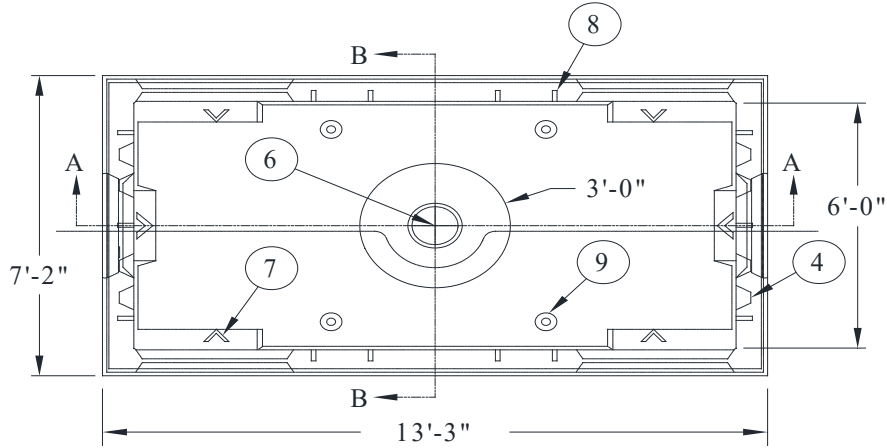


- (1) TOP SECTION WEIGHT APPROX. 14,000 LBS.
- (2) BOTTOM SECTION WEIGHT APPROX. 13,500 LBS.
- (3) KNOCKOUTS AS REQ'D.
- (4) 36" MANHOLE OPENING
- (5) SUMP 13"Ø BY 4" DEEP (1) REQ'D. (SEE NOTE 4 & 5 BELOW)
- (6) PULL IRONS (6) REQ'D.
- (7) INSERT 1/2" (52) REQ'D.
- (8) 2-TON RISS HANDLING ANCHOR (12) REQ'D.



1458-06-07
6 FT x 12 FT x 7 FT (PART 2 OF 2)

1458-07A	CIVIL	
Sheet 1 of 2	MANHOLES	
	MANHOLES 6- FT X 12- FT W/CENTER SECTION	Rev.: 08/01/20



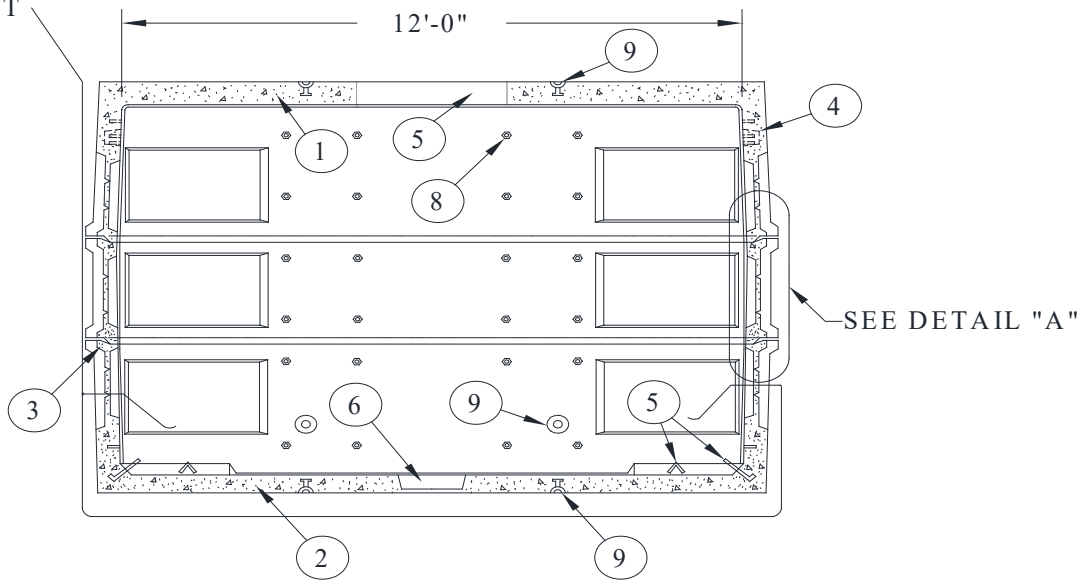
PLAN VIEW

NOTE:

1. INSTALL 70'-80' OF 4/0 TINNED BARE CU WIRE MAKING 3 COILS IN BOTTOM OF EXCAVATION . BRING WIRE THROUGH A HOLE DRILLED AT OPPOSITE ENDS OF MANHOLE WITH 3'+/-2" LEFT IN MANHOLE AT ONE END. EXTEND ONE END ABOVE GRADE.
2. MANHOLE NECK SHALL BE A MAXIMUM OF 30".

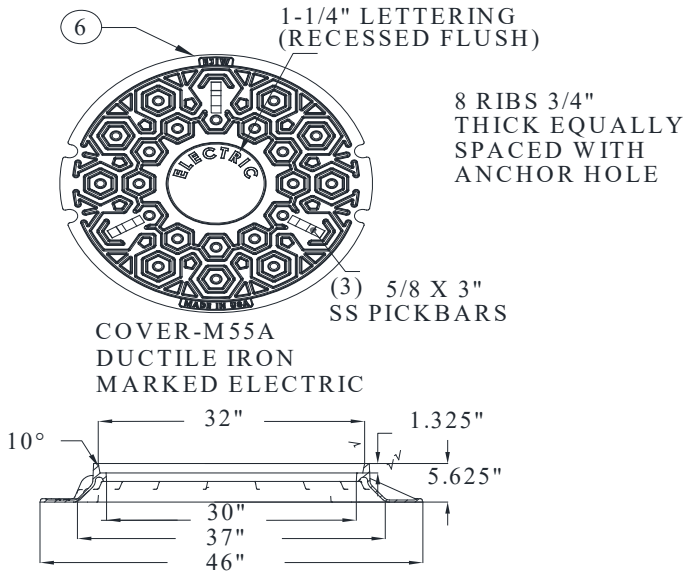
COIL 5" ABOVE GRADE FOR CONNECTION TO GROUND MAT

1458-06-07

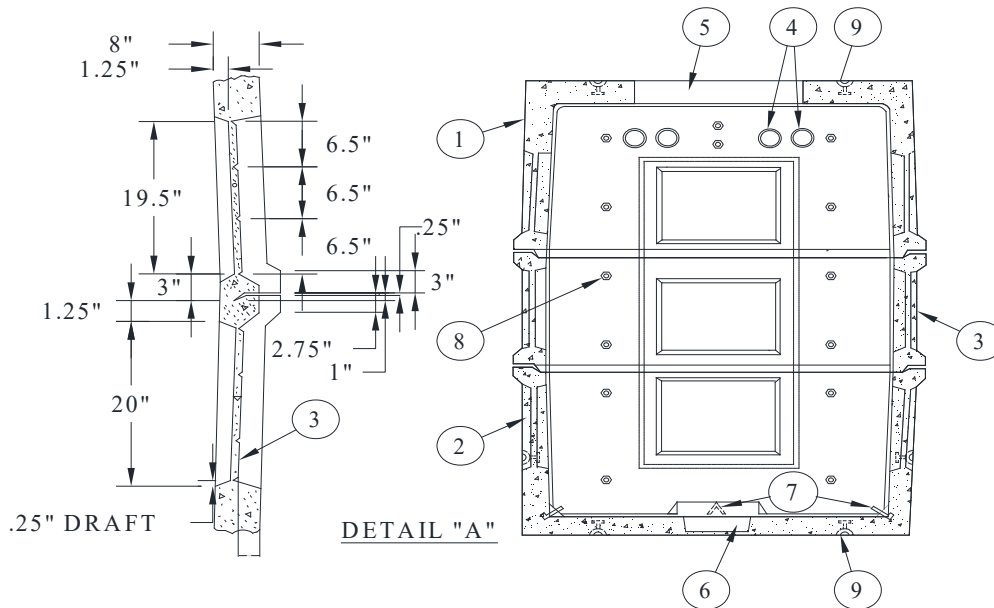


SECTION "A"

6 FT x 12 FT WITH CENTER SECTION FT (PART 1 OF 2)



- NOTE:**
1. RING AND COVER SEAT TO BE MACHINED. RING DUCTILE IRON M55 30".
 2. MANHOLE NECK SHALL BE A MAXIMUM OF 30".



- 1 TOP SECTION WEIGHT 13,955 LBS.
- 2 BOTTOM SECTION WEIGHT 13,212 LBS.
- 3 CENTER SECTION
- 4 VENT KNOCKOUT 6" (8) REQ'D.
- 5 36" MANHOLE OPENING
- 6 SUMP 13" BY 4" DEEP (1) REQ'D. (SEE NOTE 4 & 5 BELOW)
- 7 PULL IRONS (6) REQ'D.
- 8 INSERT 1/2" (76) REQ'D.
- 9 2-TON RISS HANDLING ANCHOR (12) REQ'D.

NOTES:
 1. MIN. EXCAVATION SIZE: 8'-10"x14'-10"x DEPTH REQ'D.

2. DESIGNED FOR H-20 BRIDGE LOADING

3. INSTALL 70'-80' OF 4/0 TINNED BARE CU WIRE IN 3 COILS IN BOTTOM OF EXCAVATION. BRING WIRE THROUGH A HOLE DRILLED AT OPPOSITE ENDS OF MANHOLE WITH 3'± 2" LEFT IN MANHOLE AT ONE END. EXTEND ONE END ABOVE GRADE.

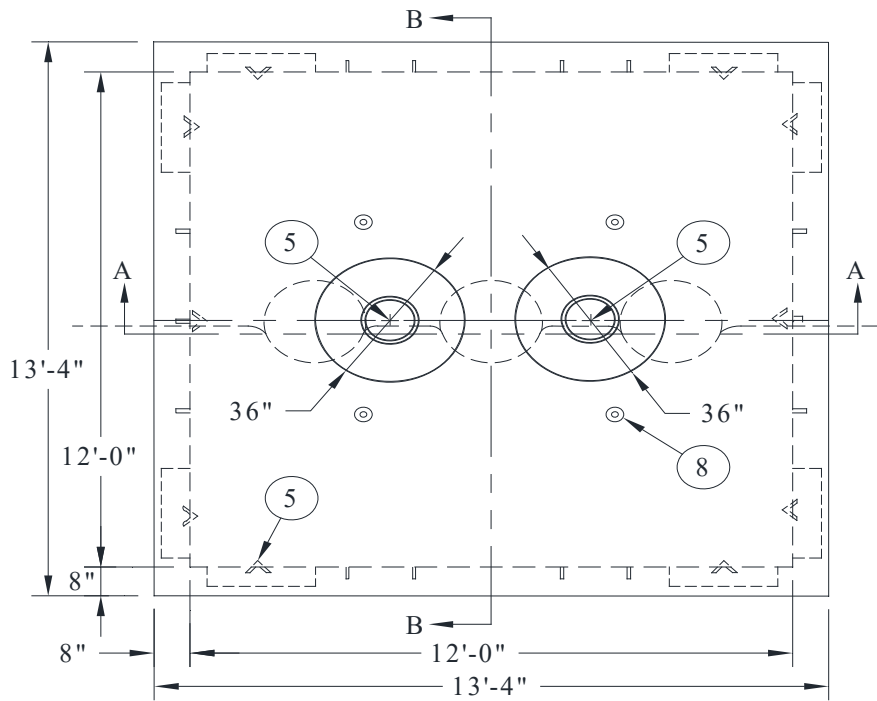
4. FINISHED SUMP TO BE 13" BY 18" DEEP.

5. BOTTOM 6" OF SUMP TO BE FILLED WITH PEA GRAVEL.

6. MAKE 3 COILS OF 4/0 TINNED BARE CU WIRE UNDER BOTTOM OF MANHOLE.

1458-07-07
 6 FT x 12 FT WITH CENTER SECTION (PART 2 OF 2)

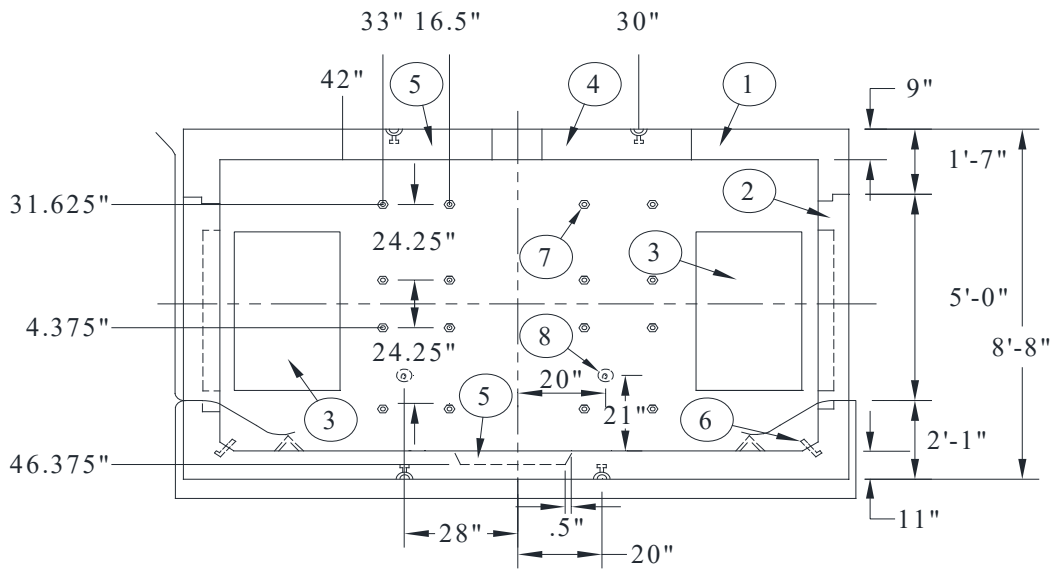
CIVIL
 MANHOLES
MANHOLES 12-FT X 12-FT



PLAN VIEW


NOTE:

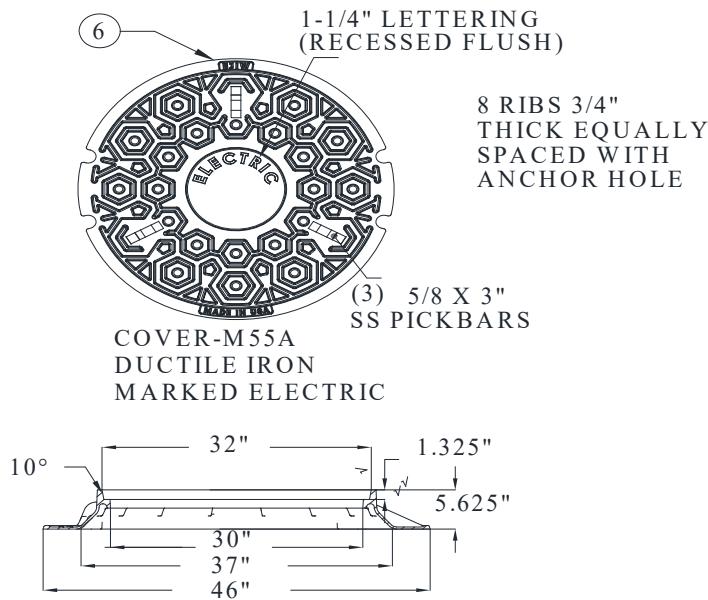
1. INSTALL 60'-70' OF 4/0 TINNED BARE CU WIRE MAKING 3 COILS IN BOTTOM OF EXCAVATION . BRING WIRE THROUGH A HOLE DRILLED AT OPPOSITE ENDS OF MANHOLE WITH 3'+/-2" LEFT IN MANHOLE AT ONE END. EXTEND ONE END ABOVE GRADE.
- 2.MANHOLE NECK SHALL BE A MAXIMUM OF 30".



SECTION "A"

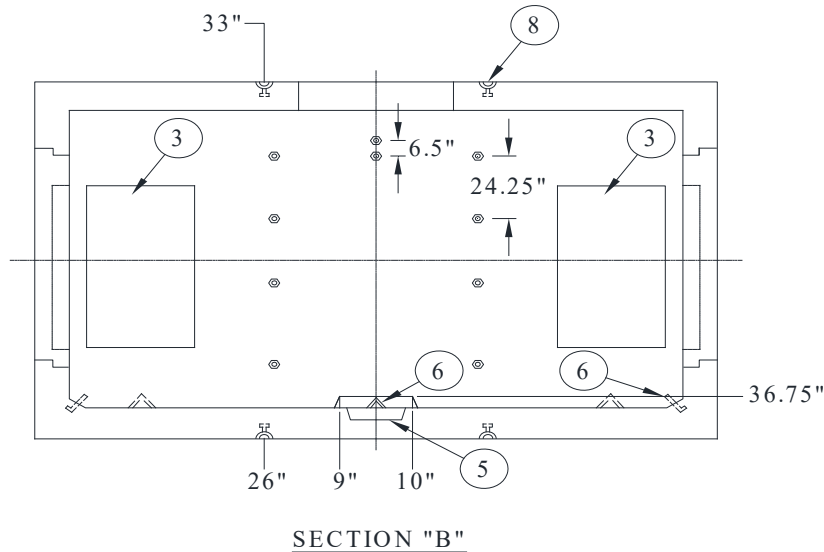
1458-12-07
 12 FT x 12 FT x 7 FT (PART 1 OF 2)

	CIVIL MANHOLES MANHOLES 12- FT X 12- FT	1458-12B
	Rev: 08/01/20	



- NOTE:
1. RING AND COVER SEAT TO BE MACHINED. RING DUCTILE IRON M55 30".
 2. MANHOLE NECK SHALL BE A MAXIMUM OF 30".

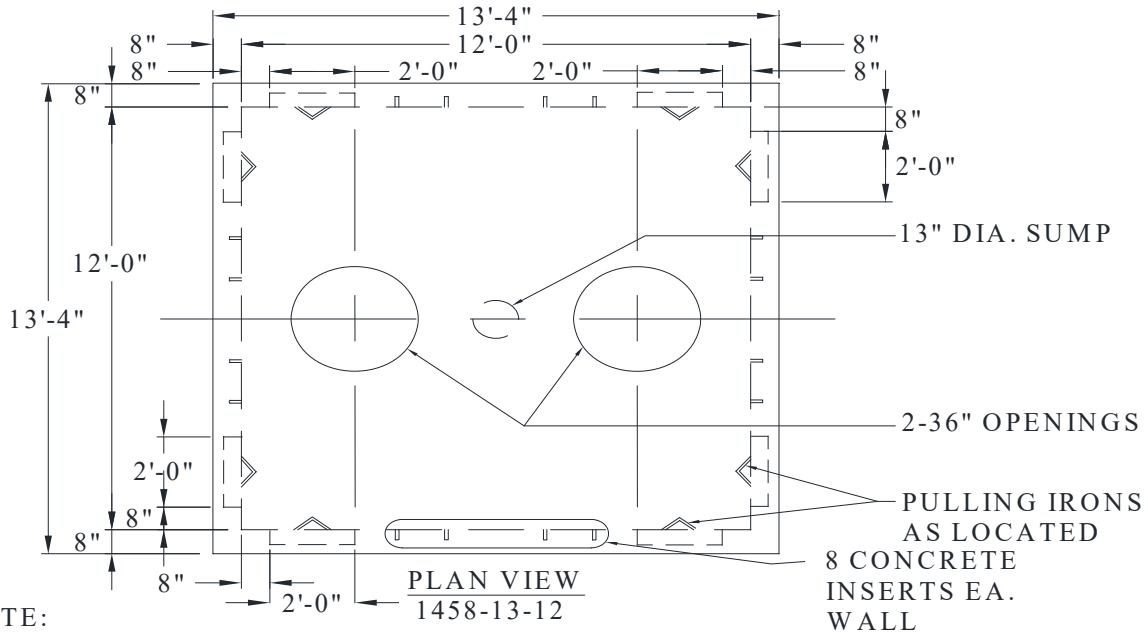
- 1 TOP SECTION WEIGHT APPROX. 26,000 LBS. EACH
- 2 BOTTOM SECTION WEIGHT APPROX. 30,000 LBS.
- 3 KNOCKOUTS AS REQ'D.
- 4 36" MANHOLE OPENING
- 5 SUMP 13" BY 4" DEEP (1) REQ'D. (SEE NOTE 4 & 5 BELOW)
- 6 PULL IRONS (8) REQ'D.
- 7 INSERT 1/2" (64) REQ'D.
- 8 2-TON RISS HANDLING ANCHOR (12) REQ'D.
- 9 MANHOLE NECK SHALL BE A MAXIMUM OF 24"



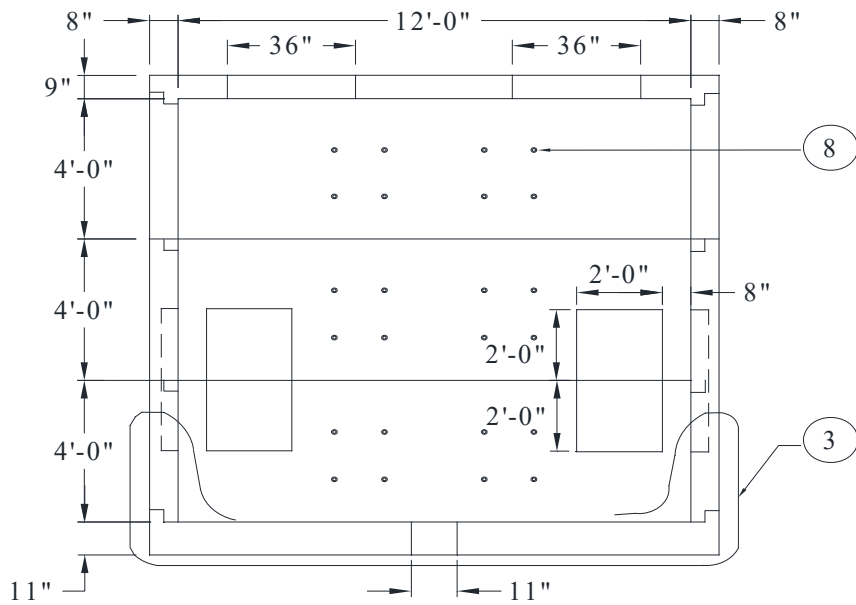
- NOTES:
1. MIN. EXCAVATION SIZE: 14'-10"x14'-10"x DEPTH REQ'D.
 2. DESIGNED FOR H-20 BRIDGE LOADING
 3. INSTALL 60'-70' OF 4/0 TINNED BARE CU WIRE IN 3 COILS IN BOTTOM OF EXCAVATION. BRING WIRE THROUGH A HOLE DRILLED AT OPPOSITE ENDS OF MANHOLE WITH 3'± 2" LEFT IN MANHOLE AT ONE END. EXTEND ONE END ABOVE GRADE.
 4. FINISHED SUMP TO BE 13"Ø BY 18" DEEP.
 5. BOTTOM 6" OF SUMP TO BE FILLED WITH PEA GRAVEL.


1458-12-07
 12 FT x 12 FT x 7 FT (PART 2 OF 2)

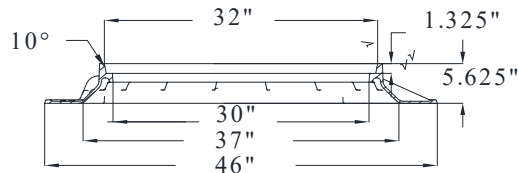
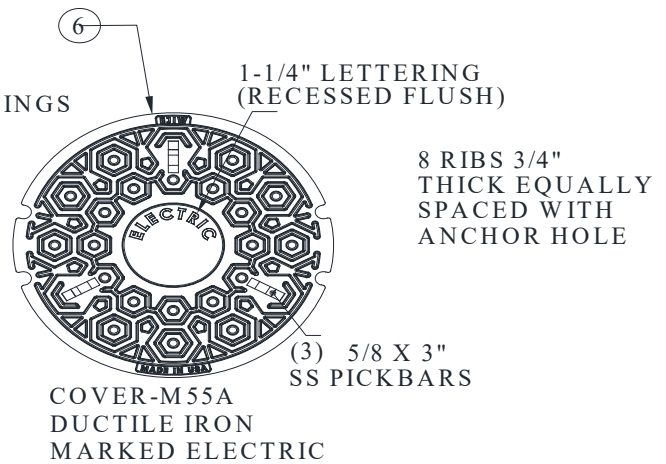
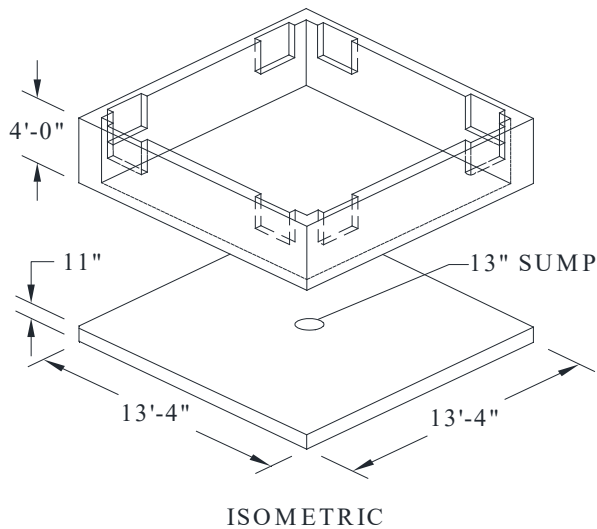
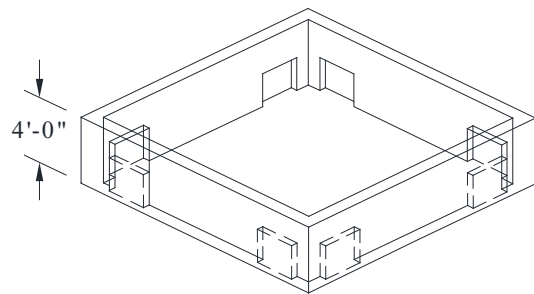
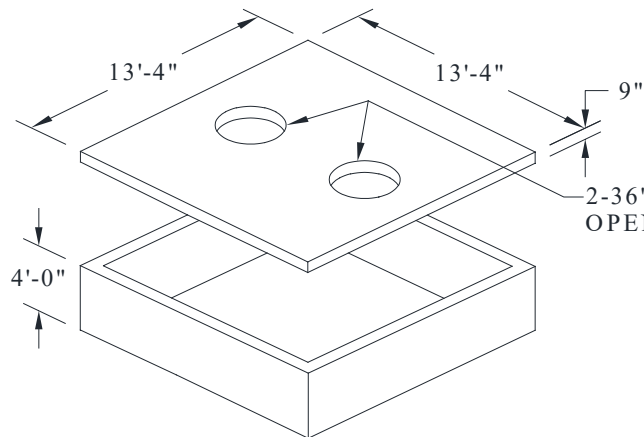
CIVIL
 MANHOLES
 MANHOLES 12-FT X 12-FT



- NOTE:
1. INSTALL 70'-80' OF 4/0 TINNED BARE CU WIRE MAKING 3 COILS IN BOTTOM OF EXCAVATION. BRING WIRE THROUGH A HOLE DRILLED AT OPPOSITE ENDS OF MANHOLE WITH 3'+/-2" LEFT IN MANHOLE AT EACH END. EXTEND ONE END OF WIRE ABOVE GRADE.
 2. MANHOLE NECK SHALL BE A MAXIMUM OF 30".



 Rev: 08/01/20	CIVIL MANHOLES MANHOLES 12- FT X 12- FT	1458-13B Sheet 2 of 2

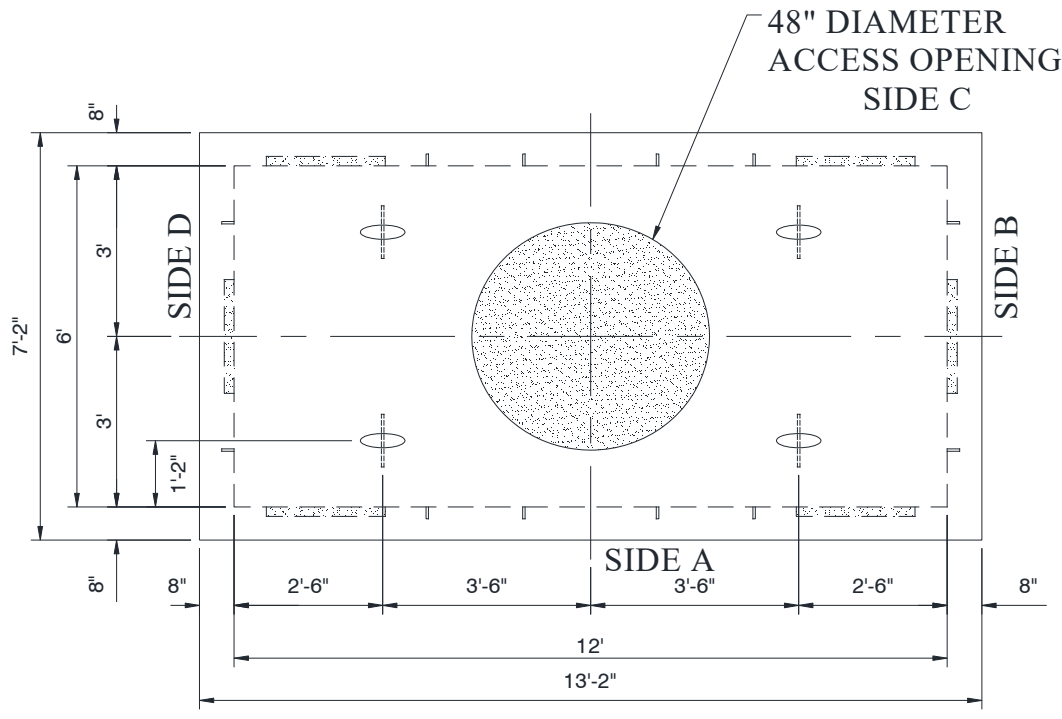


- NOTE:**
1. RING AND COVER SEAT TO BE MACHINED. RING DUCTILE IRON M55 30"
 2. MANHOLE NECK SHALL BE A MAXIMUM OF 30".

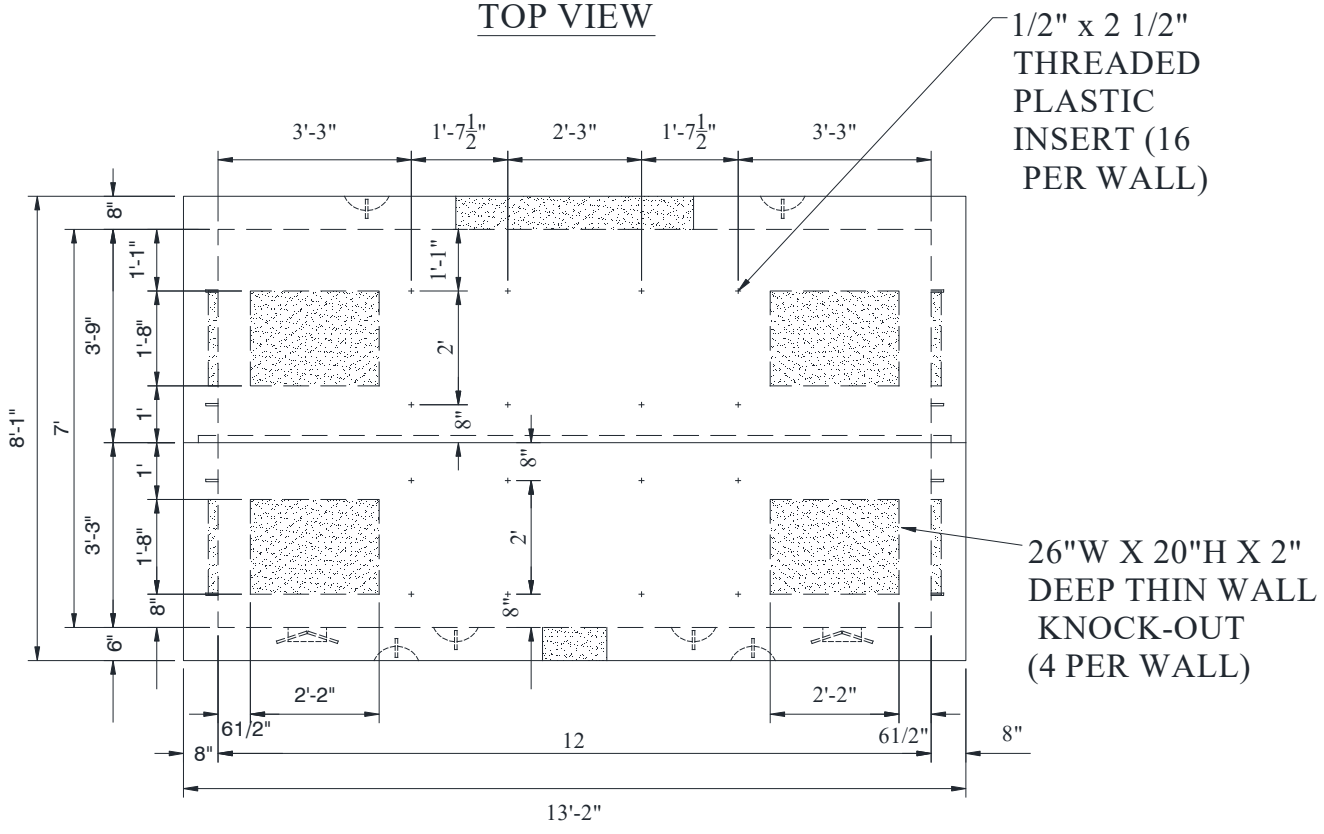
NOTES:

1. MIN. EXCAVATION SIZE: 16'-6"x16'-6"x DEPTH REQ'D.
2. MANUFACTURER TO DESIGN FOR H-20 LOADING.
3. INSTALL 70'-80' OF 4/0 TINNED BARE CU WIRE IN 3 COILS IN BOTTOM OF EXCAVATION. BRING WIRE THROUGH A HOLE DRILLED AT OPPOSITE ENDS OF MANHOLE WITH 3± 2" LEFT IN MANHOLE AT ONE END. EXTEND ONE END OF WIRE ABOVE GRADE.
4. FINISHED SUMP TO BE 13" BY 18" DEEP.
5. BOTTOM 6" OF SUMP TO BE FILLED WITH PEA GRAVEL.
6. MANHOLE NECK SHALL BE A MAXIMUM 30".

1458-13-12
12 FT x 12 FT x 12 FT (PART 2 OF 2)



TOP VIEW





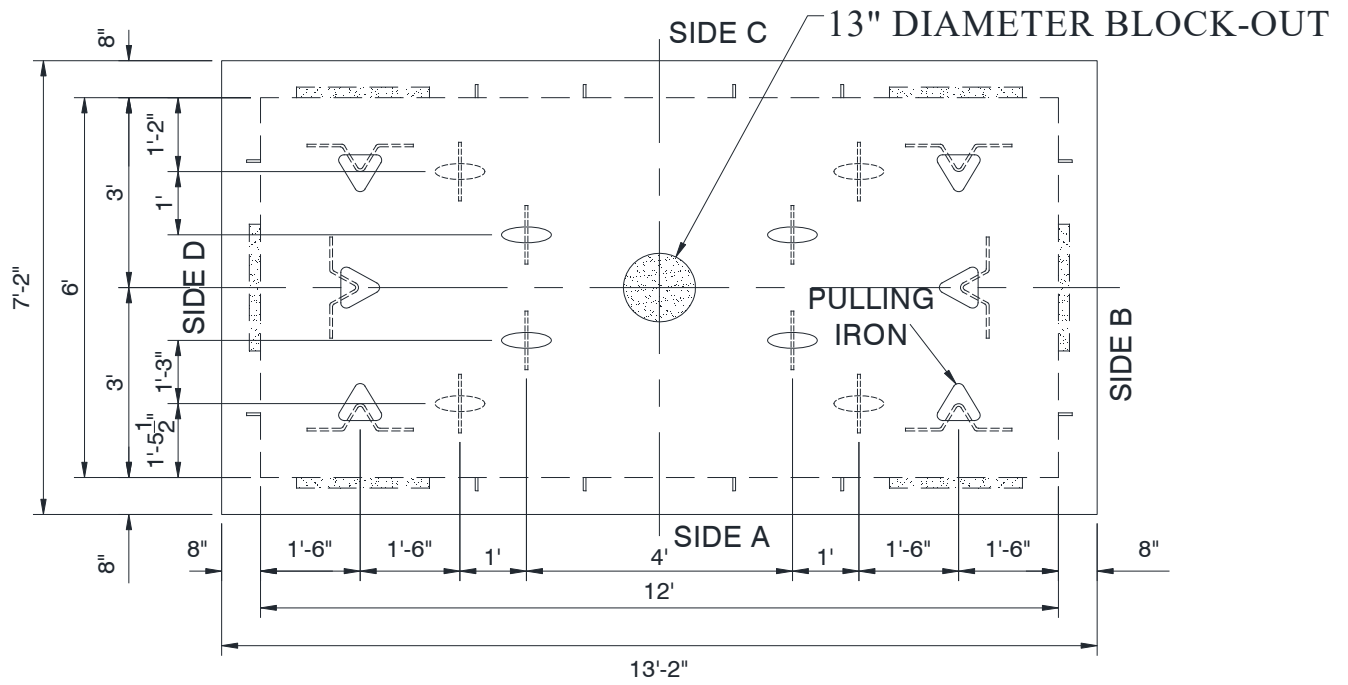
Rev: 07/25/22

CIVIL MANHOLES

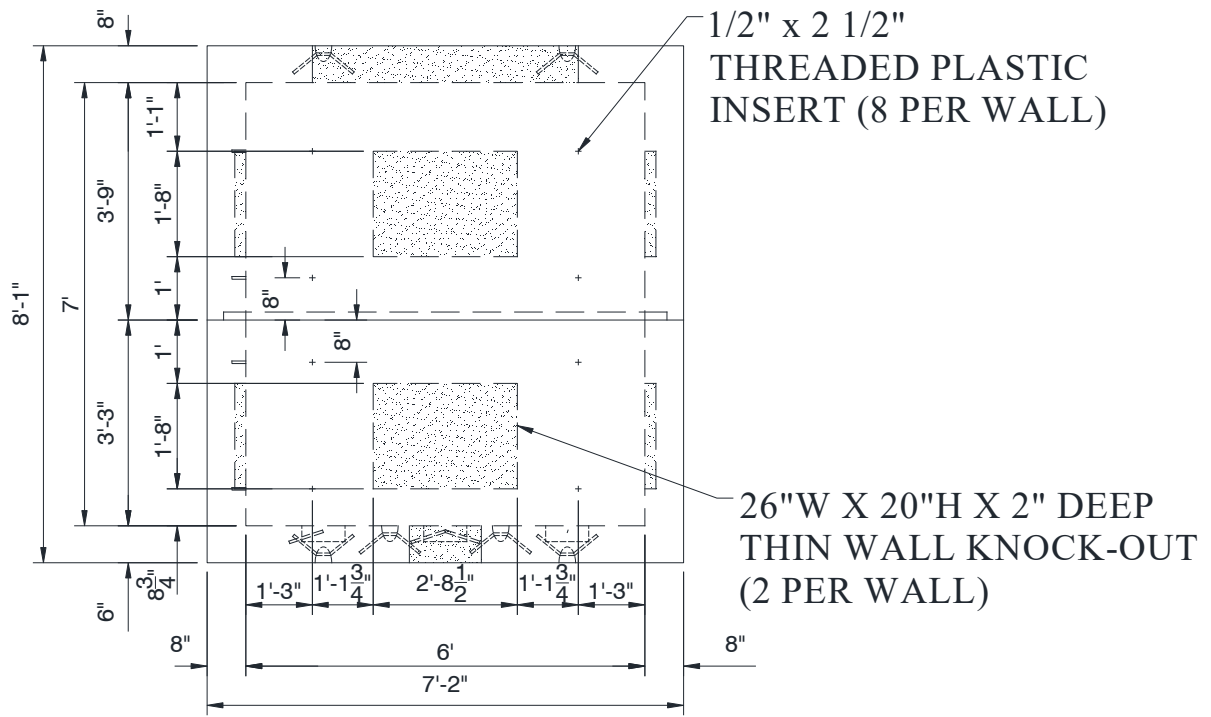
MANHOLES 6- FT X 12- FT - 5FT MAX BURIAL DEPTH

1458-18B


Sheet 2 of 3

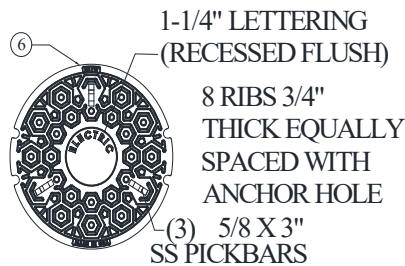
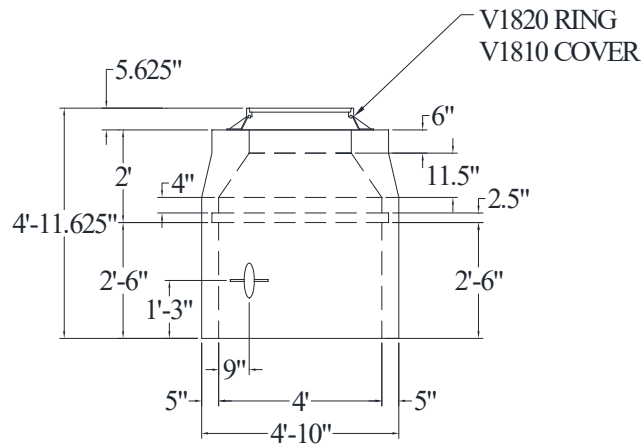


BOTTOM VIEW

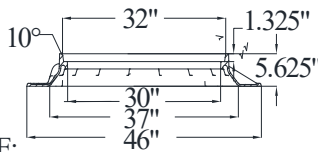


SIDE B & D

1458-18C	CIVIL	
Sheet 3 of 3	MANHOLES	Rev.: 08/01/20
MANHOLES 6- FT X 12- FT - 5FT MAX BURIAL DEPTH		



COVER-M55A DUCTILE IRON
MARKED ELECTRIC



NOTE:
RING AND COVER SEAT TO BE MACHINED. RING DUCTILE IRON M55
30"

NOTES:

1. RATED FOR USE WITH A BURIAL DEPTH NO GREATER THAN 5 FEET BELOW GRADE TO THE TOP OF THE VAULT.
2. DESIGN FOR HS-20 LOADING.
3. INSTALL 60'-70' OF 4/0 TINNED BARE CU WIRE IN THE BOTTOM OF THE EXCAVATION. BRING THE WIRE THROUGH A HOLE DRILLED AT OPPOSITE ENDS OF THE MANHOLE WITH 3' ± LEFT IN THE MANHOLE AT EACH END. EXTEND ONE END ABOVE GRADE.
4. FINISHED SUMP TO BE 13" BY 18" DEEP.
5. BOTTOM 6" OF SUMP TO BE FILLED WITH PEA GRAVEL.
6. MAKE 3 COILS OF 4/0 TINNED BARE CU WIRE UNDER THE BOTTOM OF THE MANHOLE.
7. MANHOLE NECK SHALL BE A MAXIMUM OF 30".

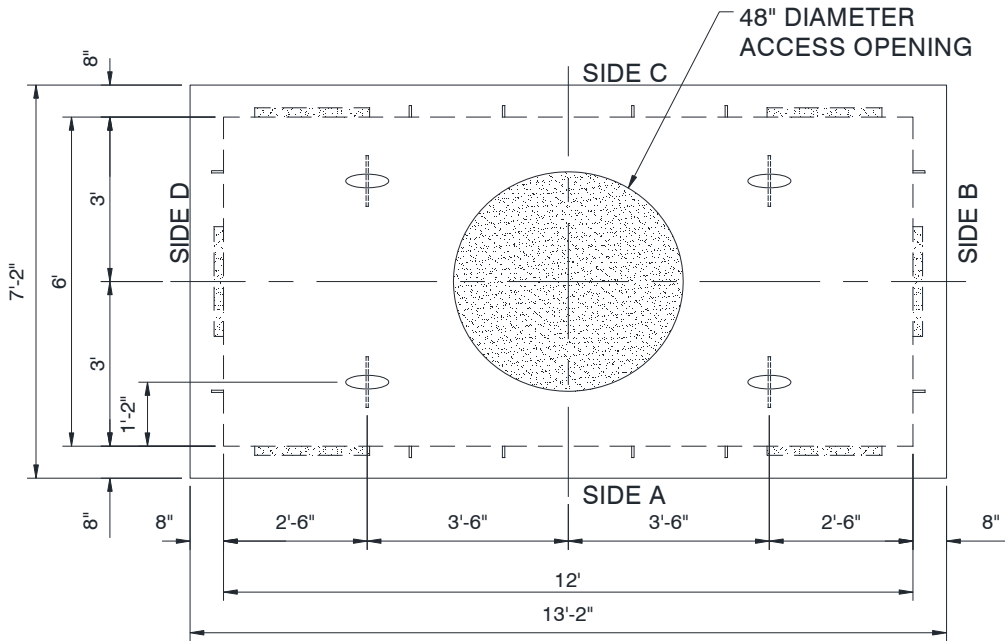


Rev: 07/25/22

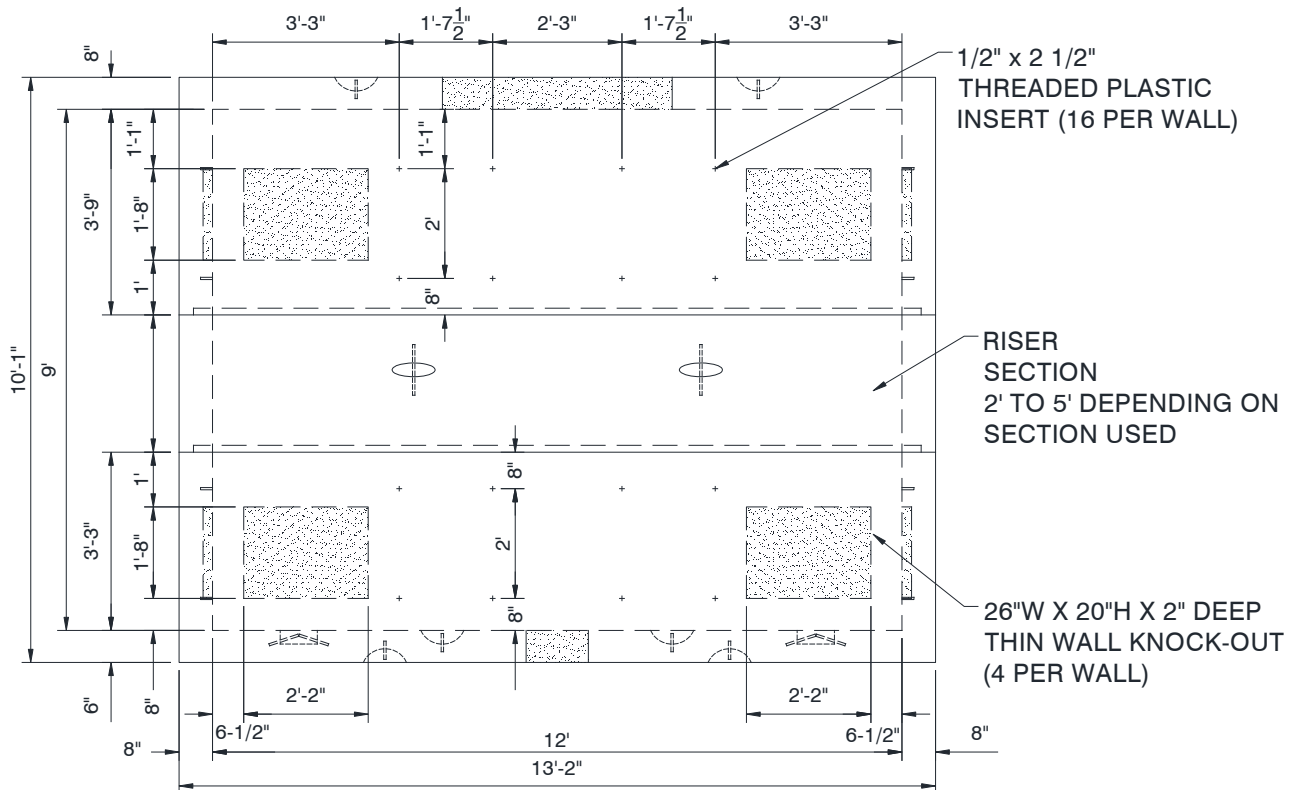
CIVIL
MANHOLES
MANHOLES 6- FT X 12- FT W/CS - 5FT MAX BURIAL DEPTH

1458-19A

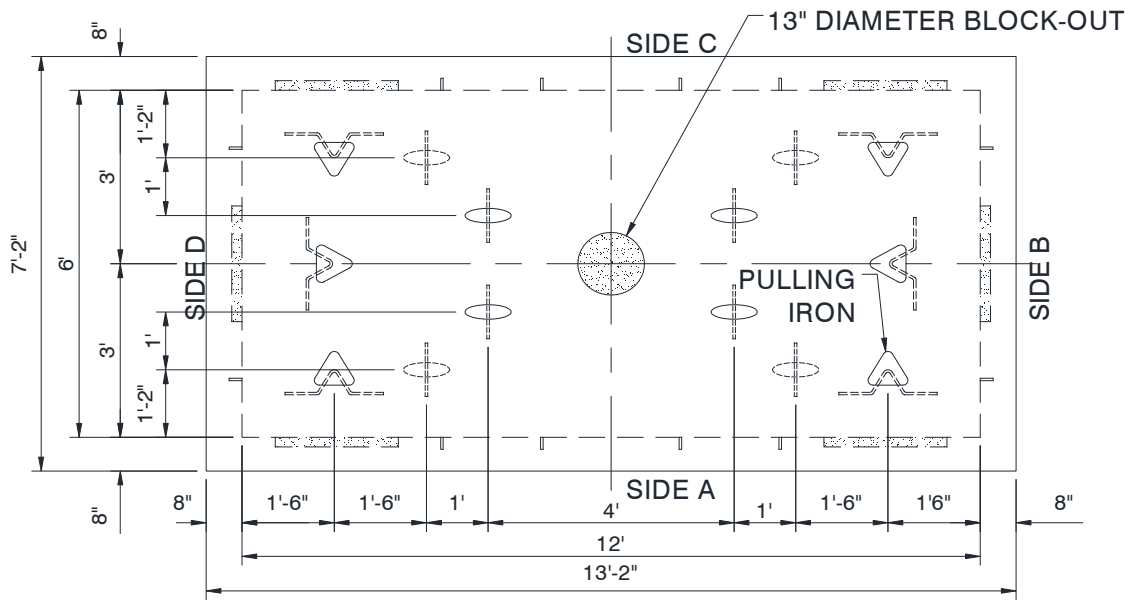
Sheet 1 of 3



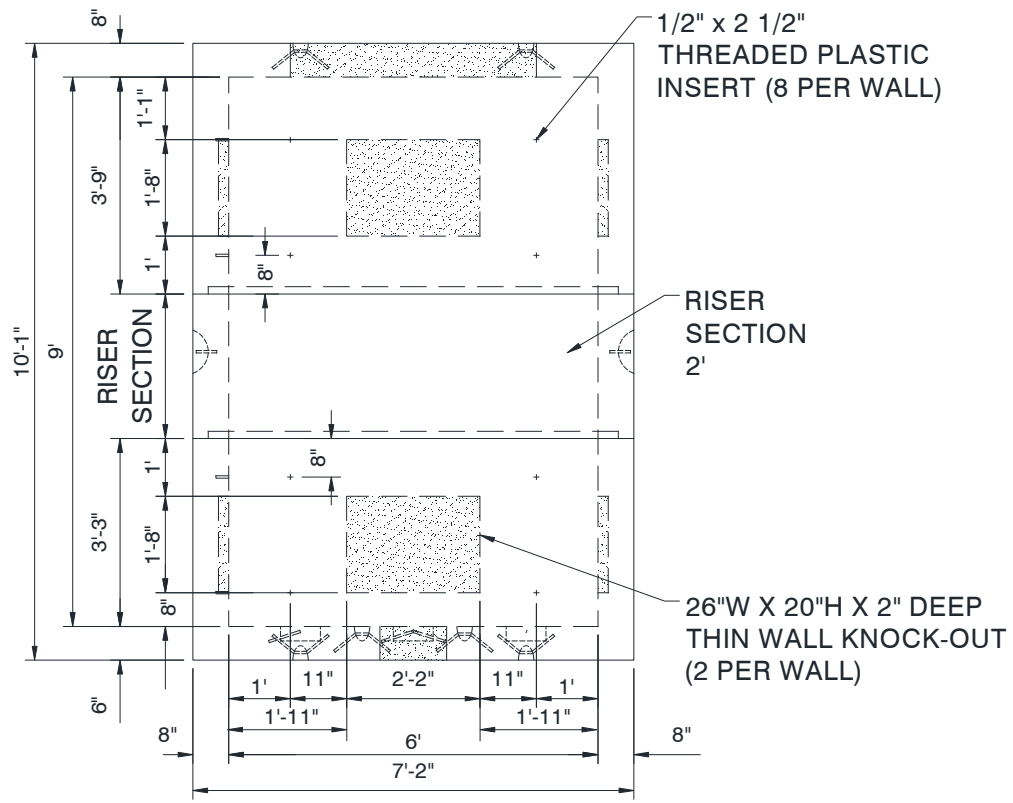
TOP VIEW



SIDE A & C



BOTTOM VIEW



SIDE B & D



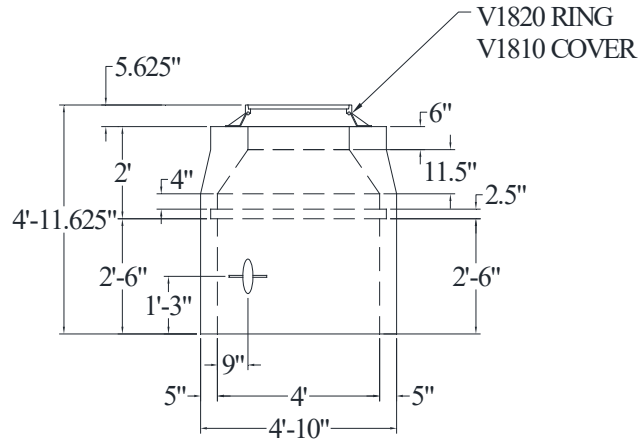
Rev: 08/01/20

CIVIL
MANHOLES

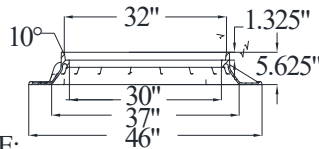
MANHOLES 6- FT X 12- FT W/CS - 5FT MAX BURIAL DEPTH

1458-19C

Sheet 3 of 3



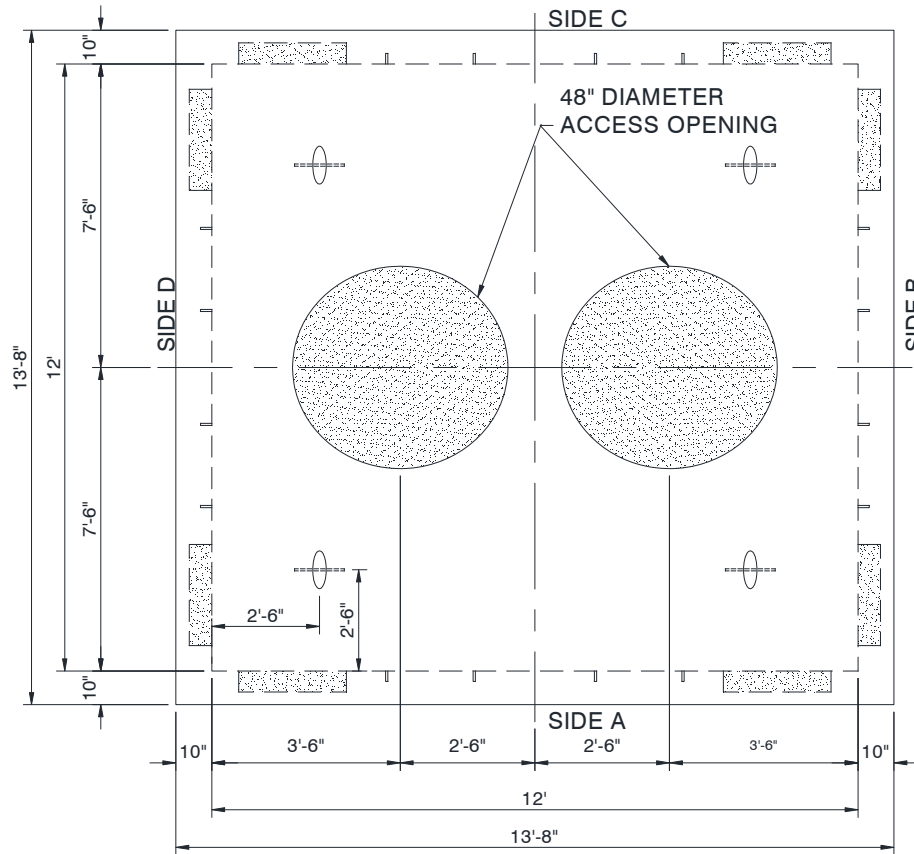
COVER-M55A DUCTILE IRON
MARKED ELECTRIC



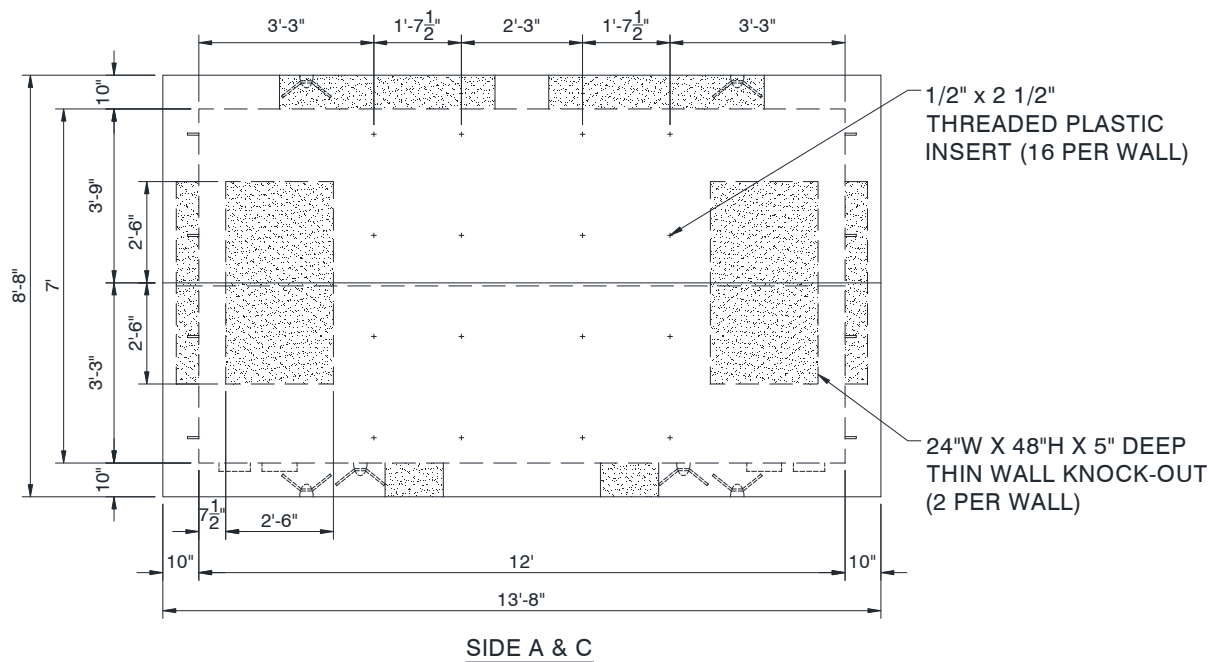
NOTE:
RING AND COVER SEAT TO BE
MACHINED. RING DUCTILE IRON M55
30"

NOTES:

1. RATED FOR USE WITH A BURIAL DEPTH NO GREATER THAN 5 FEET BELOW GRADE TO THE TOP OF THE VAULT.
2. DESIGN FOR HS-20 LOADING.
3. INSTALL 60'-70' OF 4/0 TINNED BARE CU WIRE IN THE BOTTOM OF THE EXCAVATION. BRING THE WIRE THROUGH A HOLE DRILLED AT OPPOSITE ENDS OF THE MANHOLE WITH 3' ± LEFT IN THE MANHOLE AT EACH END. EXTEND ONE END ABOVE GRADE.
4. FINISHED SUMP TO BE 13" BY 18" DEEP.
5. BOTTOM 6" OF SUMP TO BE FILLED WITH PEA GRAVEL.
6. MAKE 3 COILS OF 4/0 TINNED BARE CU WIRE UNDER THE BOTTOM OF THE MANHOLE.
7. MANHOLE NECK SHALL BE A MAXIMUM OF 30".



TOP VIEW





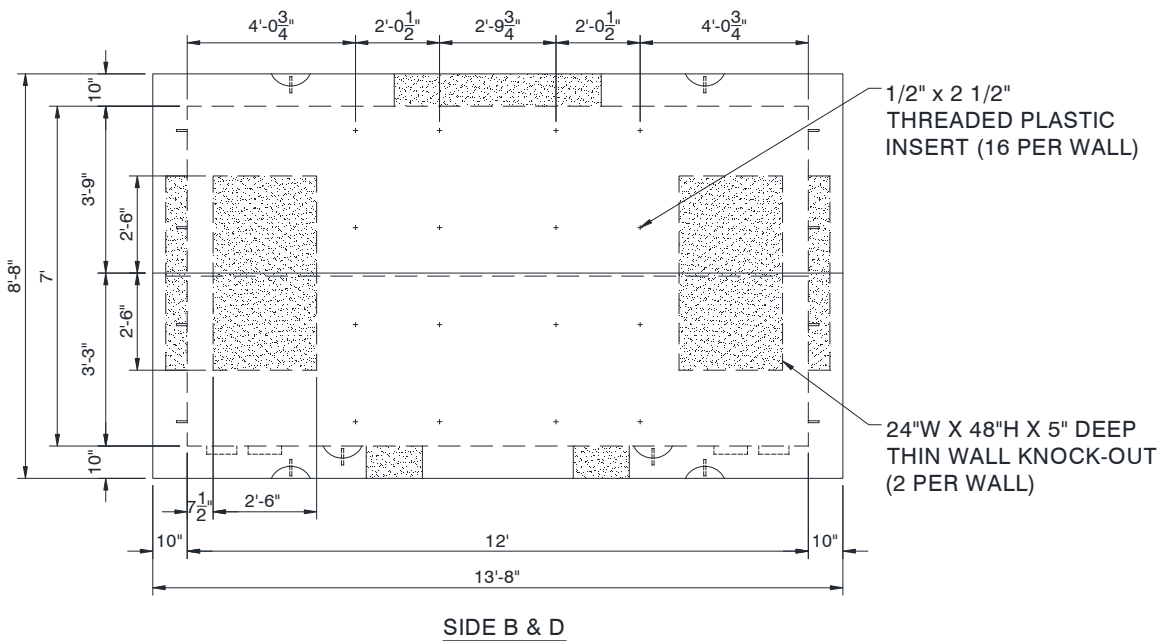
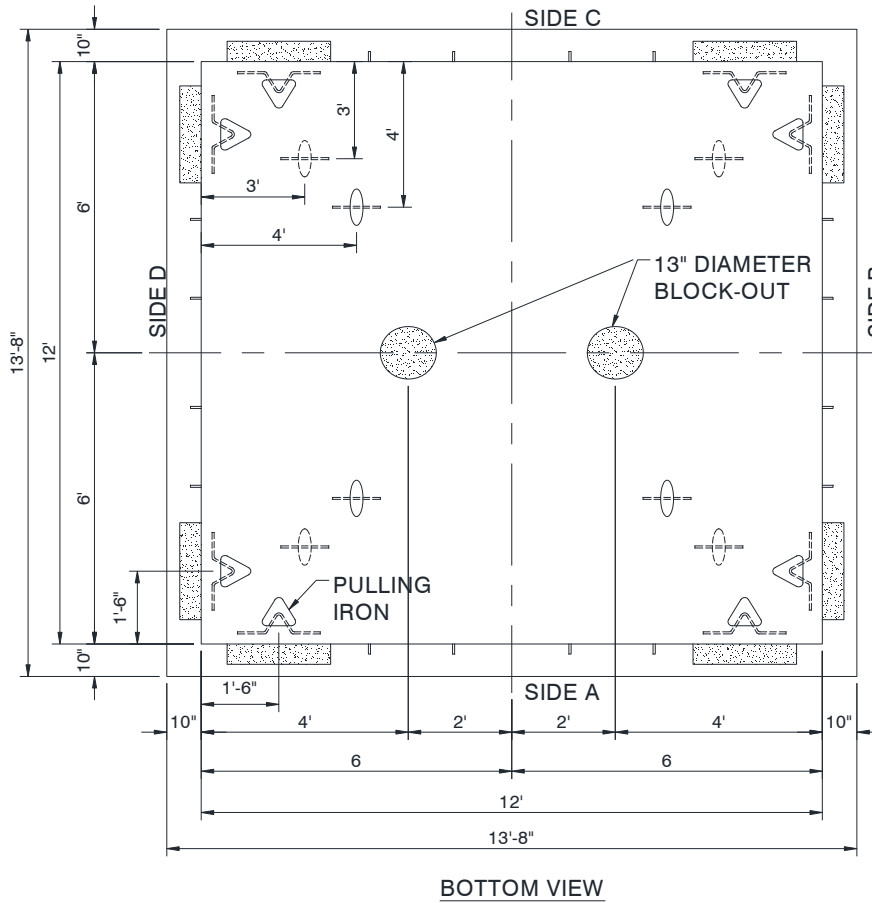
Rev: 08/01/20


CIVIL MANHOLES

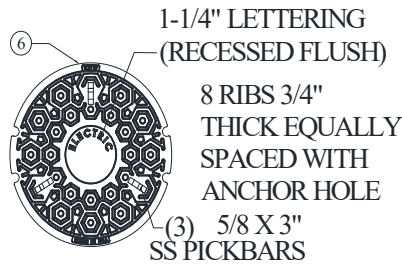
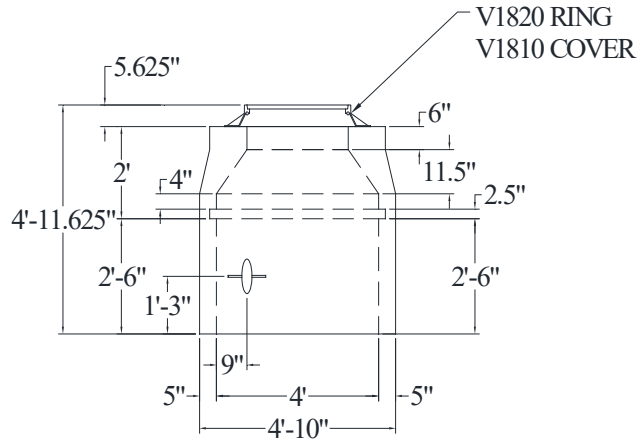
MANHOLES 12- FT X 12- FT - 5FT MAX BURIAL DEPTH

1458-24B

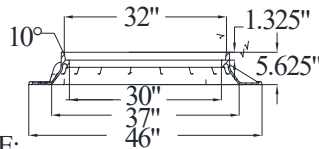
Sheet 2 of 3



1458-24C	CIVIL	
Sheet 3 of 3	MANHOLES	Rev.: 08/01/20
	MANHOLES 12- FT X 12- FT - 5FT MAX BURIAL DEPTH	



COVER-M55A DUCTILE IRON
MARKED ELECTRIC



NOTE:
RING AND COVER SEAT TO BE
MACHINED. RING DUCTILE IRON M55
30"

NOTES:

1. RATED FOR USE WITH A BURIAL DEPTH NO GREATER THAN THAN 5 FEET BELOW GRADE TO THE TOP OF THE VAULT.
2. DESIGN FOR HS-20 LOADING.
3. INSTALL 60'-70' OF 4/0 TINNED BARE CU WIRE IN THE BOTTOM OF THE EXCAVATION. BRING THE WIRE THROUGH A HOLE DRILLED AT OPPOSITE ENDS OF THE MANHOLE WITH 3' ± LEFT IN THE MANHOLE AT EACH END. EXTEND ONE END ABOVE GRADE.
4. FINISHED SUMP TO BE 13" BY 18" DEEP.
5. BOTTOM 6" OF SUMP TO BE FILLED WITH PEA GRAVEL.
6. MAKE 3 COILS OF 4/0 TINNED BARE CU WIRE UNDER THE BOTTOM OF THE MANHOLE.
7. MANHOLE NECK SHALL BE A MAXIMUM OF 30".