

HAMPTON ROADS SANITATION DISTRICT



PROJECT TITLE

(LOCATION: CITY/COUNTY & STATE)

DATE (MONTH & YEAR)

LEGEND
(ON SEPARATE PAGE FOR
LARGE PROJECTS)

VICINITY
MAP

MAP SCALE

LOCATION
MAP

MAP SCALE

INDEX TO DRAWINGS
(ON SEPARATE PAGE FOR
LARGE PROJECTS)

RESERVE SPACE FOR DRAWING
ADDITION OF: CONTRACTOR, NAME &
OTHER INFORMATION AS REQUIRED
(PIPE MANUFACTURER, ETC.)

ENGINEER'S NAME/LOGO/CONTACT

VERTICAL DATUM:

ENGINEER'S
SEAL



STANDARD DESIGN DETAIL

STANDARD COVER SHEET

DRAWING NO.
100

SHEET
1 OF 1

DATE
1/2020



STANDARD DESIGN DETAIL

EASEMENT PLAT

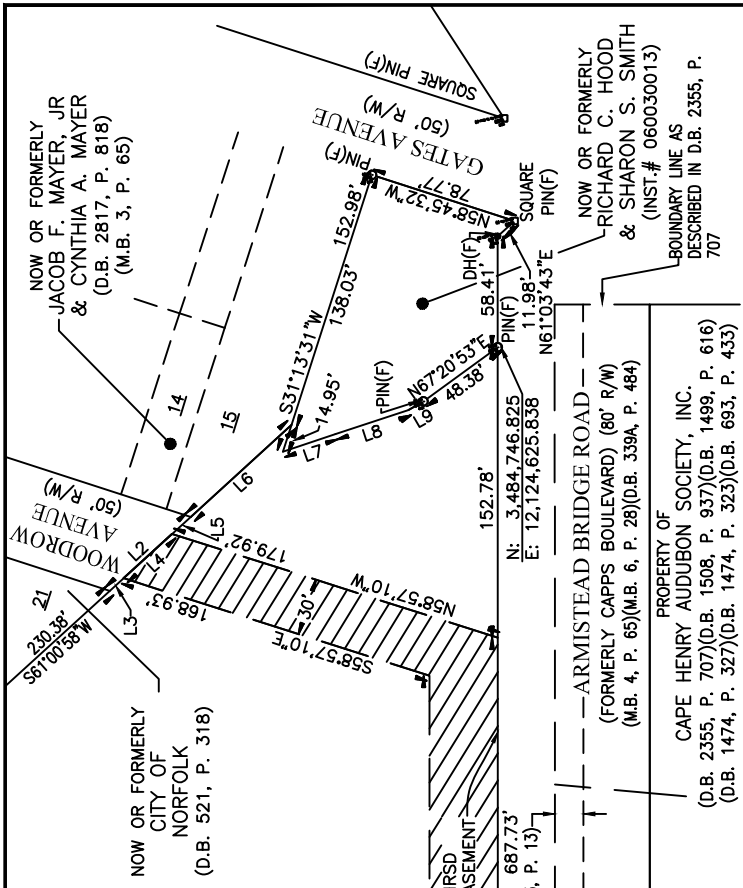
DRAWING NO.
101
SHEET
1 OF 1
DATE
1/2020

PROJECT PARCEL NO. 005
 PROPERTY OF: CITY OF NORFOLK
 ACCOUNT # 79082410
 GPN # 1428459047
 TAX PLATE # 574
 GIS MAP # 631; 661

AREA TABLE		
	SQ. FT.	ACRES
TOTAL PARCEL	231,300±	5.3±
VARIABLE WIDTH HRSD PERMANENT UTILITY EASEMENT TO BE ACQUIRED	21,968	0.504
RESIDUAL PARCEL	209,332±	4.8±

NOW OR FORMERLY
 SOUTHERN RAILWAY COMPANY
 (D.B. 2904, P. 562) (D.B. 295C, P. 361) (ORD.# 9691) (M.B. 4, P. 65) (M.B. 13, P. 80)

PROPERTY OF
 CITY OF NORFOLK
 (D.B. 379, P. 425)
 (M.B. 4, P. 65)



- NOTES:
1. THIS PLAT WAS PREPARED WITHOUT BENEFIT OF A TITLE REPORT AND THEREFORE MAY NOT SHOW ALL EASEMENTS OR PROPERTY REFERENCES THAT AFFECT THIS PROPERTY.
 2. MERIDIAN SOURCE: VIRGINIA COORDINATE SYSTEM OF 1983 (SOUTH ZONE) NAD83 (1993) HARN. COORDINATE VALUES ARE SHOWN IN U.S. SURVEY FEET.
 3. THIS SURVEY DOES NOT CONSTITUTE A BOUNDARY SURVEY AND THEREFORE PARCEL AREAS SHOWN ARE APPROXIMATE AND TAKEN FROM PLATS AND DEEDS OF RECORD.

LINE TABLE			
LINE NO.	BEARING	DISTANCE	BEARING
L1	S71°29'50"E	36.15'	S60°58'26"W
L2	S60°54'34"W	57.74'	S84°46'04"W
L3	S60°54'34"W	9.86'	S85°11'37"E
L4	S60°54'34"W	34.59'	S73°12'17"W
L5	S60°54'34"W	13.29'	

12/08/10	02/16/11
CLIENT	ADDED 50' NS STRIP
COMMENT	& HRSD EASEMENT
REVISIONS	3

— DENOTES AREA OF VARIABLE WIDTH HRSD PERMANENT UTILITY EASEMENT TO BE ACQUIRED



PLAT SHOWING
 VARIABLE WIDTH PERMANENT UTILITY EASEMENT
 TO BE ACQUIRED FROM
 CITY OF NORFOLK
 BY
 FOR
 HAMPTON ROADS SANITATION DISTRICT
 SOUTH TRUNK SEWER SECTIONS B&C
 REPLACEMENT
 NORFOLK, VIRGINIA
 SEPTEMBER 23, 2010
 SCALE: 1"=60'



SHEET 1 OF 1

PAINT SAFETY YELLOW
TYP. ALL BOLLARDS

6" ϕ , SCHEDULE 80
STEEL PIPE FILLED
WITH CONCRETE

FINISHED GRADE

POURED CONCRETE
(3,500 P.S.I.)

#5 BAR, 12" LONG
THROUGH PIPE

1" ROUNDING OF CONCRETE

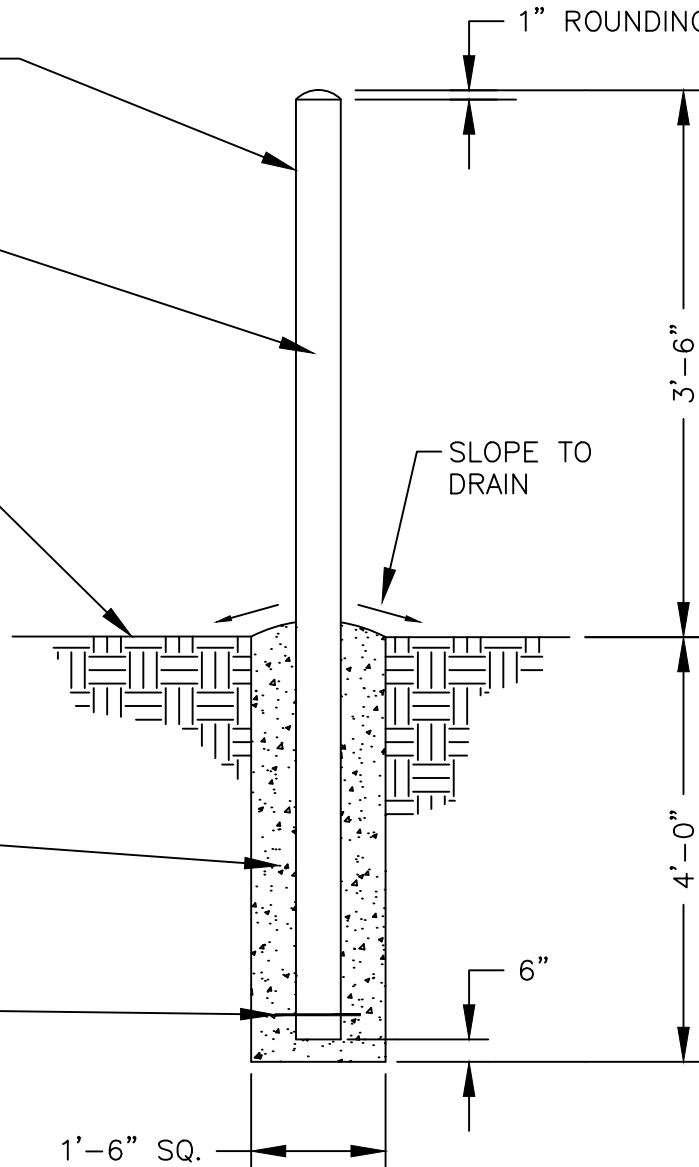
SLOPE TO
DRAIN

3'-6"

4'-0"

6"

1'-6" SQ.



NOT TO SCALE



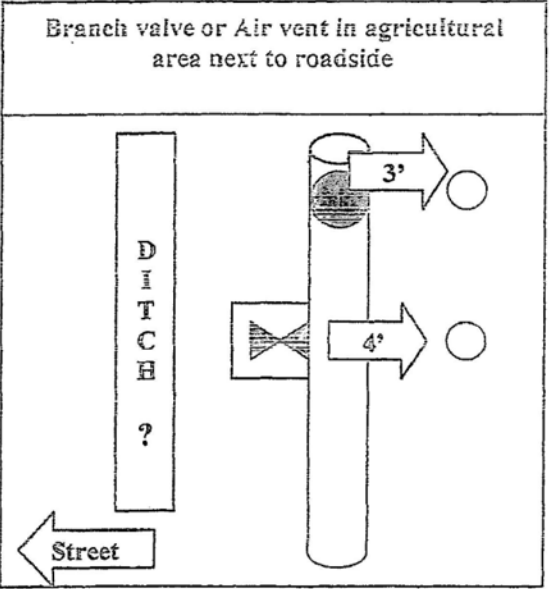
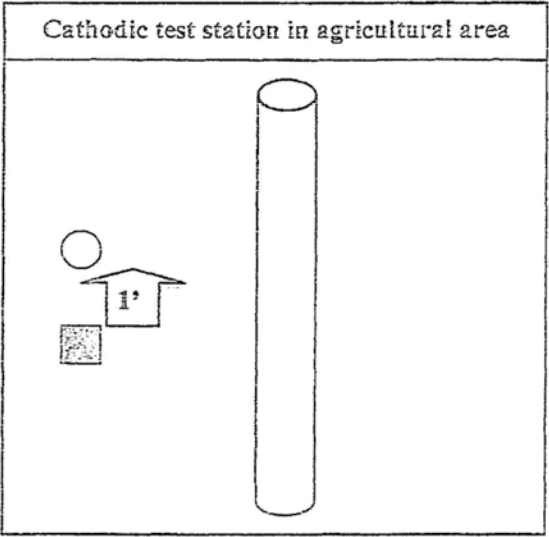
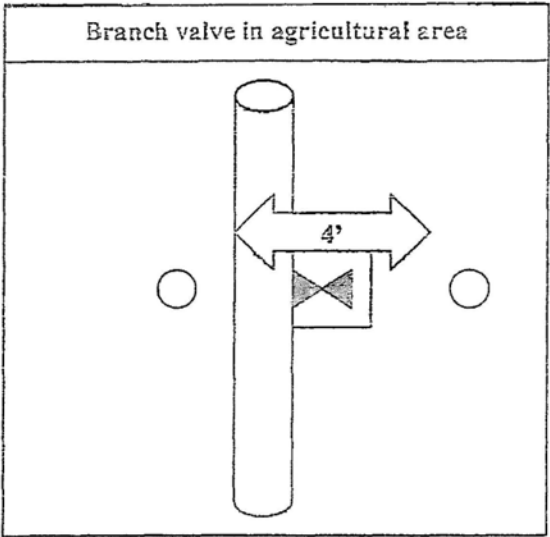
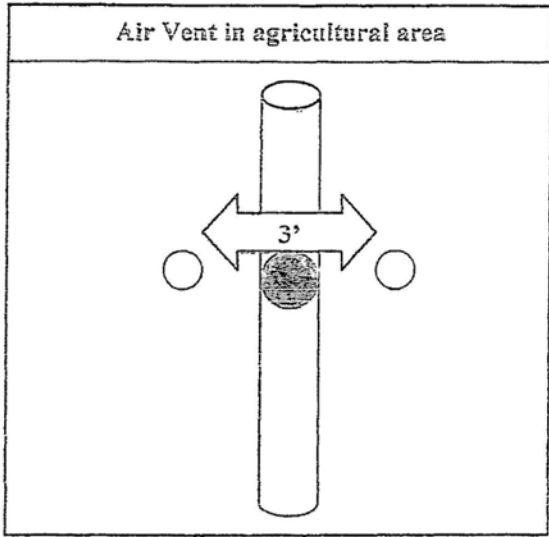
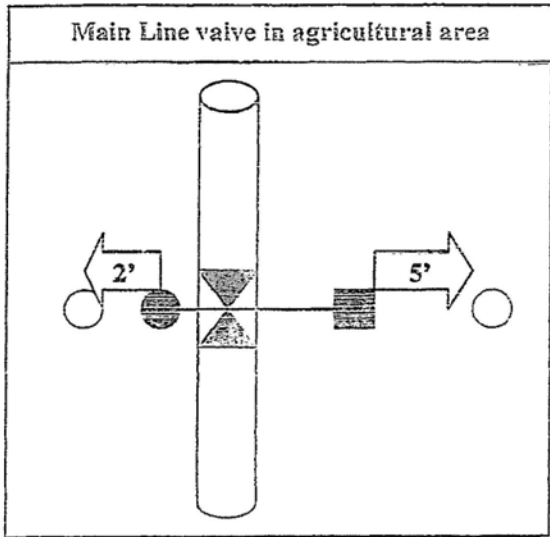
STANDARD DESIGN DETAIL

EXTERIOR BOLLARD DETAIL

DRAWING NO.
102

SHEET
1 OF 1

DATE
1/2020



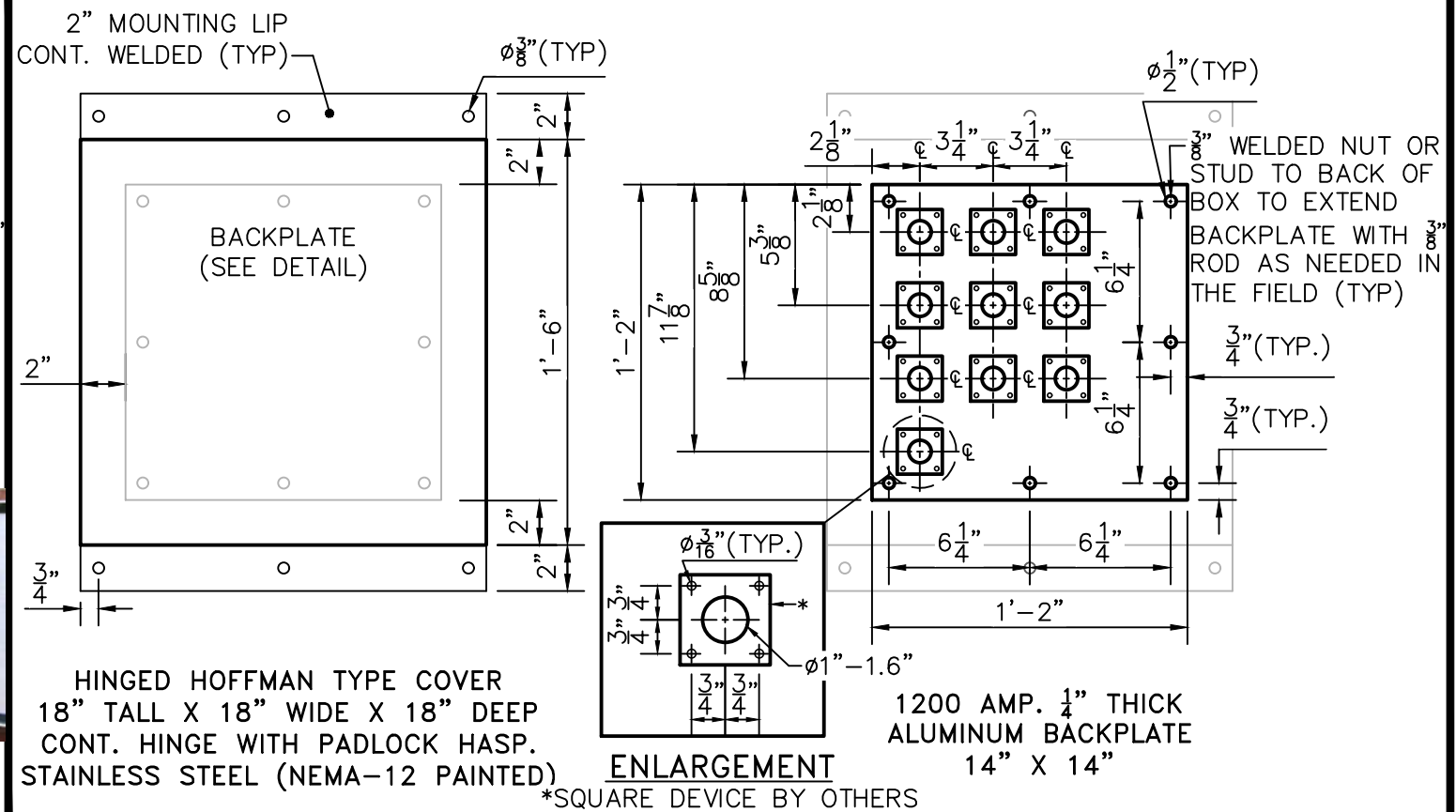
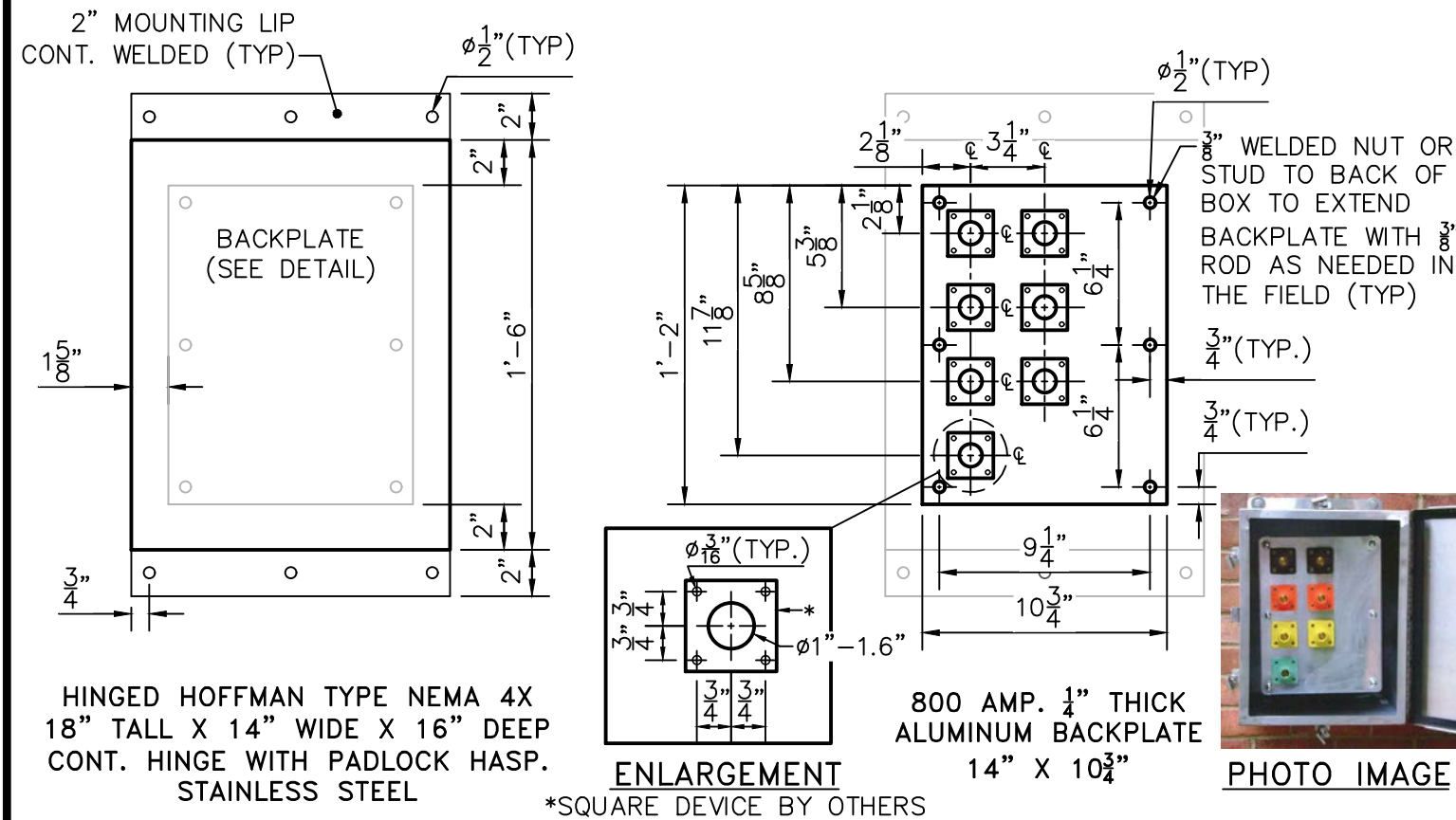
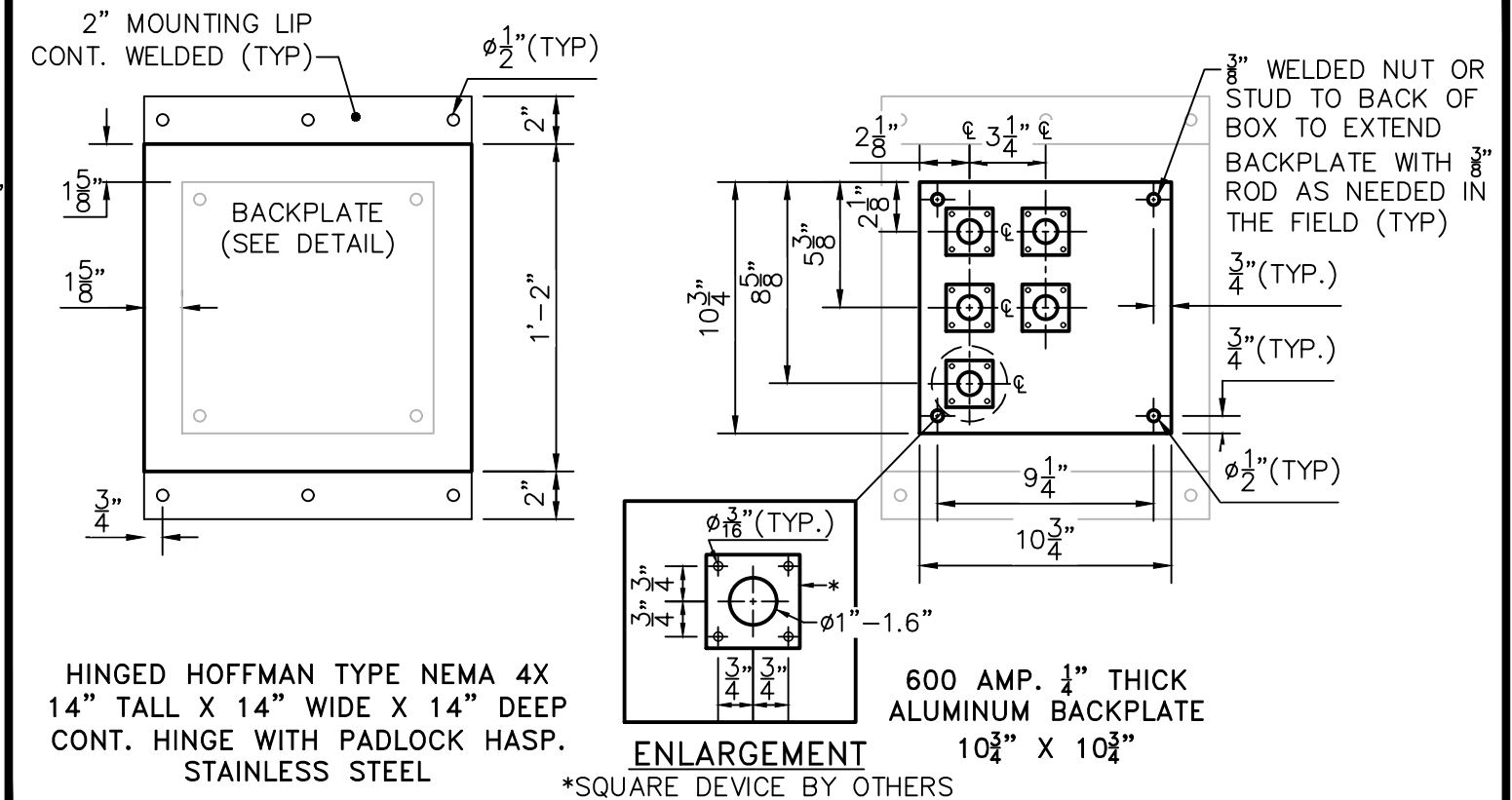
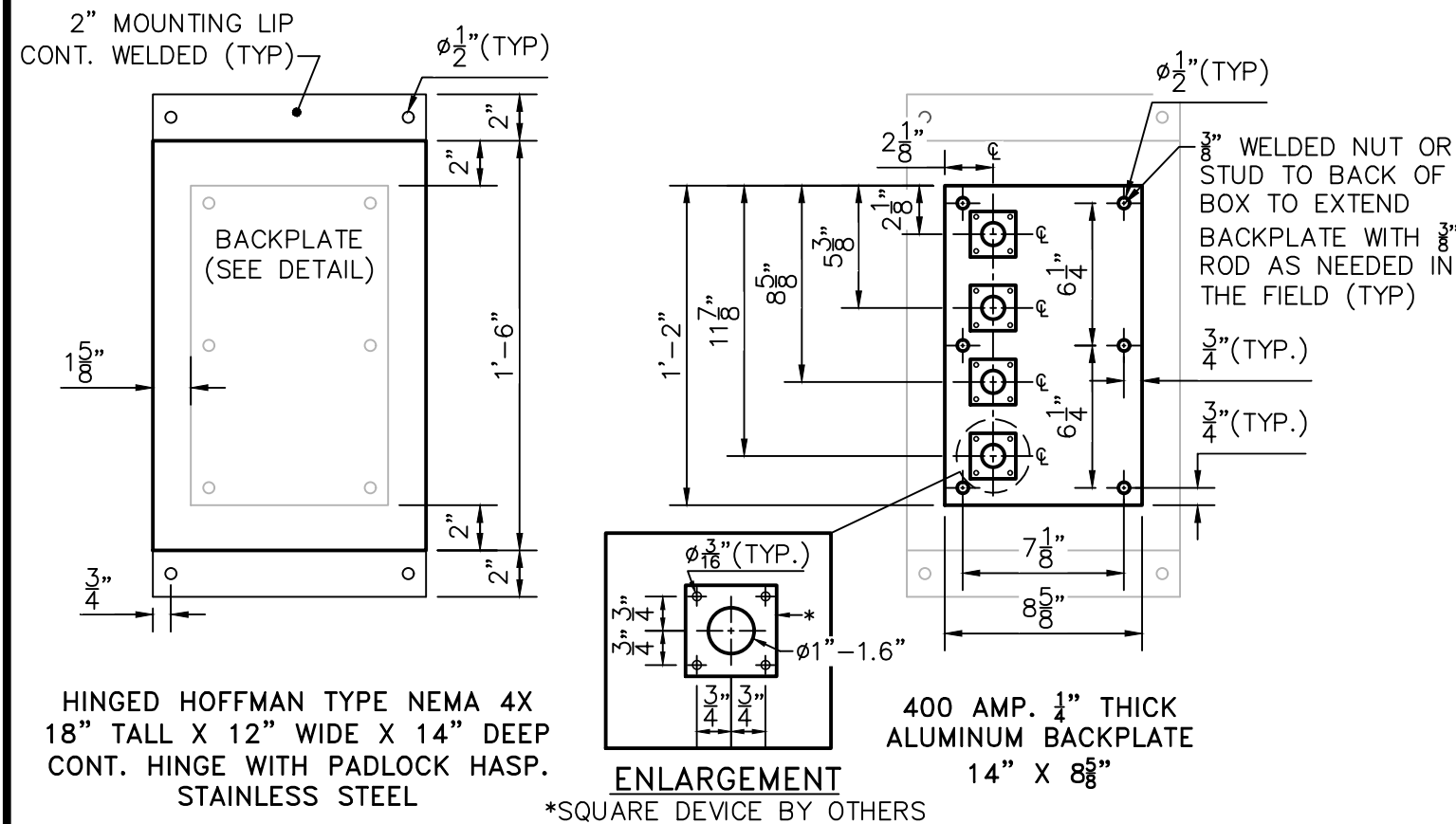
All measurements from center of casting



STANDARD DESIGN DETAIL

BOLLARD LOCATION DETAIL

DRAWING NO. 103
SHEET 1 OF 1
DATE 1/2020



NOTES:

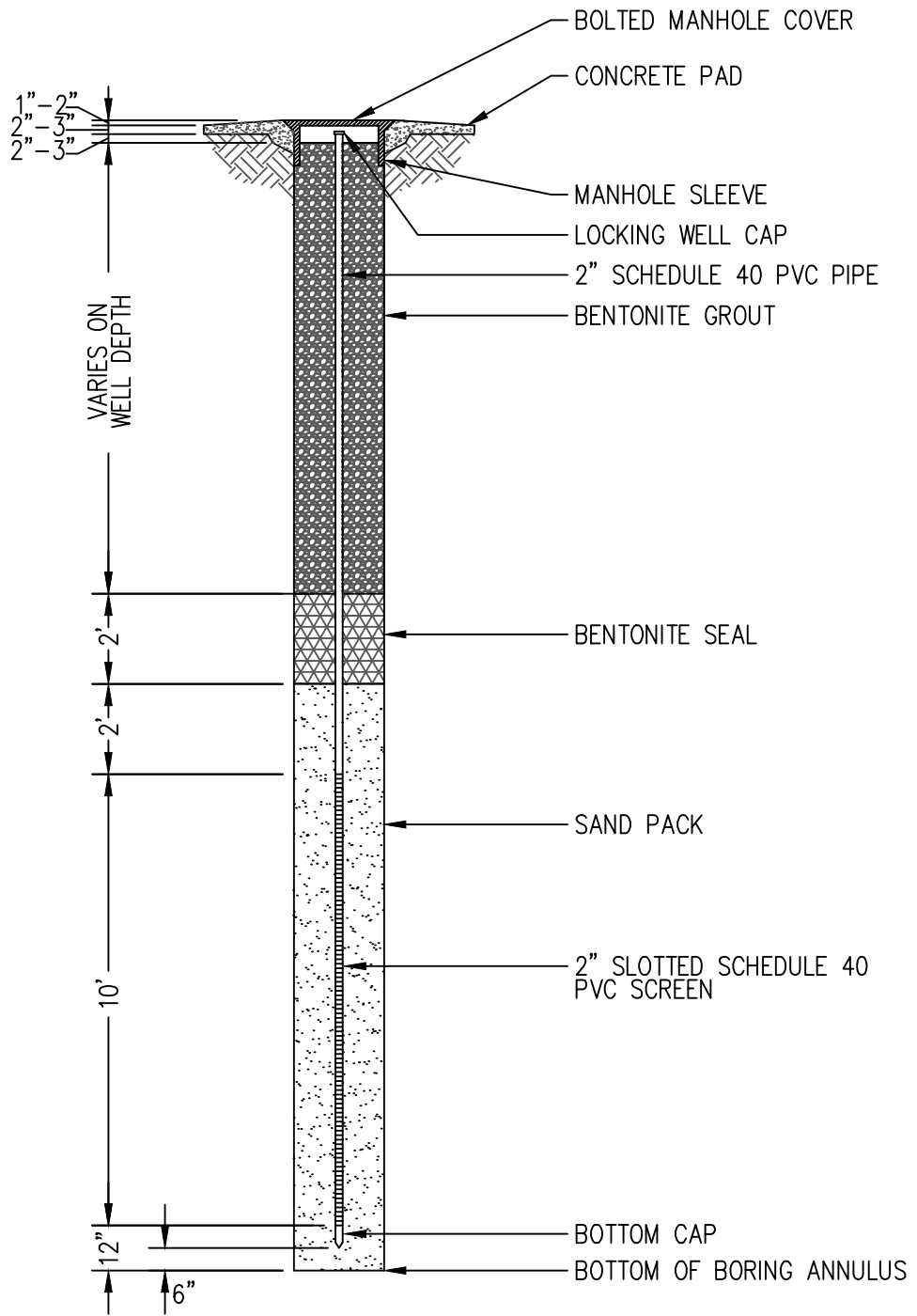
1. TYPICAL DIMENSIONS SHOWN FOR VARIOUS SERVICE SIZES. BOX MUST BE FIELD VERIFIED PRIOR TO FABRICATION AND INSTALLATION.



STANDARD DESIGN DETAIL

LOAD TEST HINGED BANK BOX

DRAWING NO.	104
SHEET	1 OF 1
DATE	1/2020



*SEE PAGE 2 FOR DETAIL NOTES

NOT TO SCALE


	STANDARD DESIGN DETAIL	DRAWING NO. 105A
	FLUSH-MOUNT GROUNDWATER MONITORING WELL	SHEET 1 OF 2
		DATE 1/2020

WELL DEPTH (FT)	PVC PIPING DIAMETER	SCREEN LENGTH* (FT)	SLOTING SIZE	RISER PIPE LENGTH (FT)	FILTER SAND MEDIA	SEALING MEDIA	SURFACE FINISHING
12	0.75 ID	9	0.010	2.5	#2	BENTONITE GROUT/NEAT CEMENT	FLUSH MOUNT CASING
17	0.75 ID	13	0.010	3.5	#2	BENTONITE GROUT/NEAT CEMENT	FLUSH MOUNT CASING

*SCREENS LENGTHS COME IN 3FT AND 5FT SECTIONS

NOTES:

1. ONCE THE SCREEN INTERVAL IS INSTALLED, A MINIMUM OF 2 FEET OF SAND SHOULD BE PLACED ABOVE THE SCREEN. ONCE INSTALLED, A MINIMUM OF ONE FOOT THICK SEAL OF BENTONITE SLURRY OR NEAT CEMENT GROUT SHOULD BE PLACED.
2. AT FINAL SURFACE GRADE, THE MONITORING WELL SHALL BE PROTECTED WITH FLUSH MOUNT RISER CASING.
3. UPON COMPLETION OF WELL INSTALLATION, THE CONTRACTOR WILL DEVELOP THE WELL TO REMOVE SILT FROM WITHIN THE SCREEN INTERVAL.

	STANDARD DESIGN DETAIL	DRAWING NO. 105B
		SHEET 2 OF 2
	FLUSH-MOUNT GROUNDWATER MONITORING WELL	DATE 1/2020

LOCATION SKETCH

NOT TO SCALE

"STATION NAME" PUMP STATION

#XXX



Station Location

VICINITY MAP

SCALE: 1"= 1 MILE

SITE ADDRESS: XXXXXXXXXXXX

HORIZONTAL CONTROL:

VIRGINIA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE
NORTH AMERICAN DATUM 1983/1996 CORS ADJUSTMENT (US SURVEY FOOT)

NORTH (FT): X,XXX,XXX.XX EAST (FT): XX,XXX,XXX.XX
NORTH (m): X,XXX,XXX.XXX EAST (m): X,XXX,XXX.XXX
LATITUDE: XX°XX'XX.XXXXX" N LONGITUDE: XX°XX'XX.XXXXX" W
SCALE FACTOR: X.XXXXXXXXXX CONVERGENCE: X°XX'XX.XXXXX"

DESCRIPTION:

TO REACH THE DISK FROM XXXXXXXX

VERTICAL CONTROL:

NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)
U.S. SURVEY FEET (DIFFERENTIAL LEVELING)
ELEVATION XX.XX'

DATE ESTABLISHED: _____
GPS DATE: XX/XX/XXXX
DATE RECOVERED: _____



2389 G AVENUE, NEWPORT NEWS, VA 23602



STANDARD DESIGN DETAIL

RECOVERY SHEET TEMPLATE

DRAWING NO.

106

SHEET

1 OF 1

DATE

1/2020