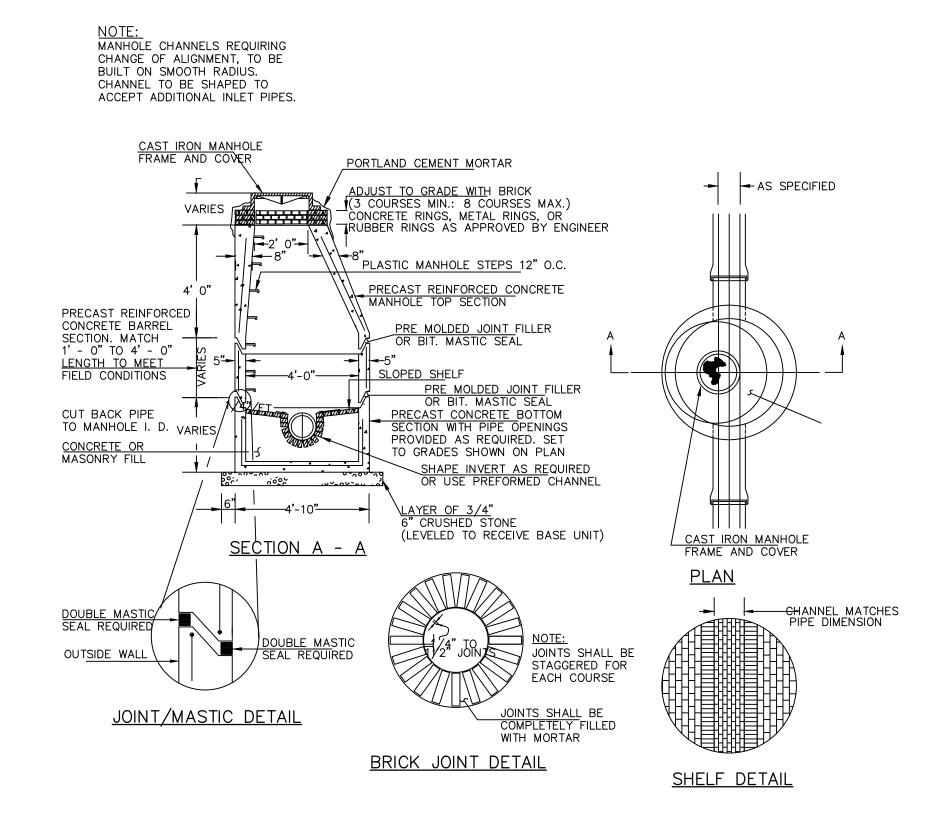
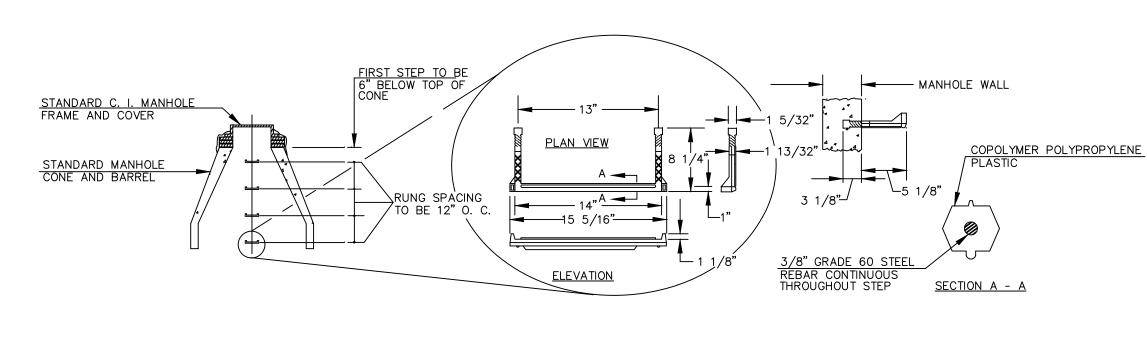


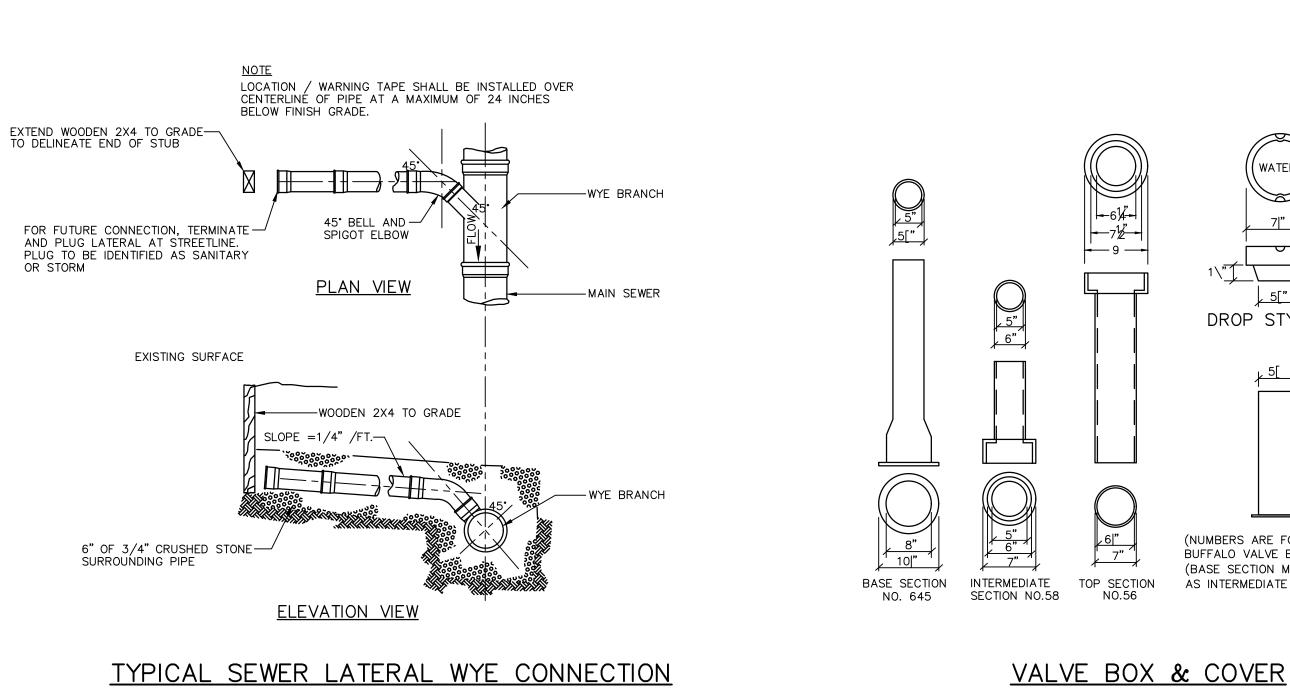
TYPICAL "A" CAST IRON MANHOLE COVER AND FRAME



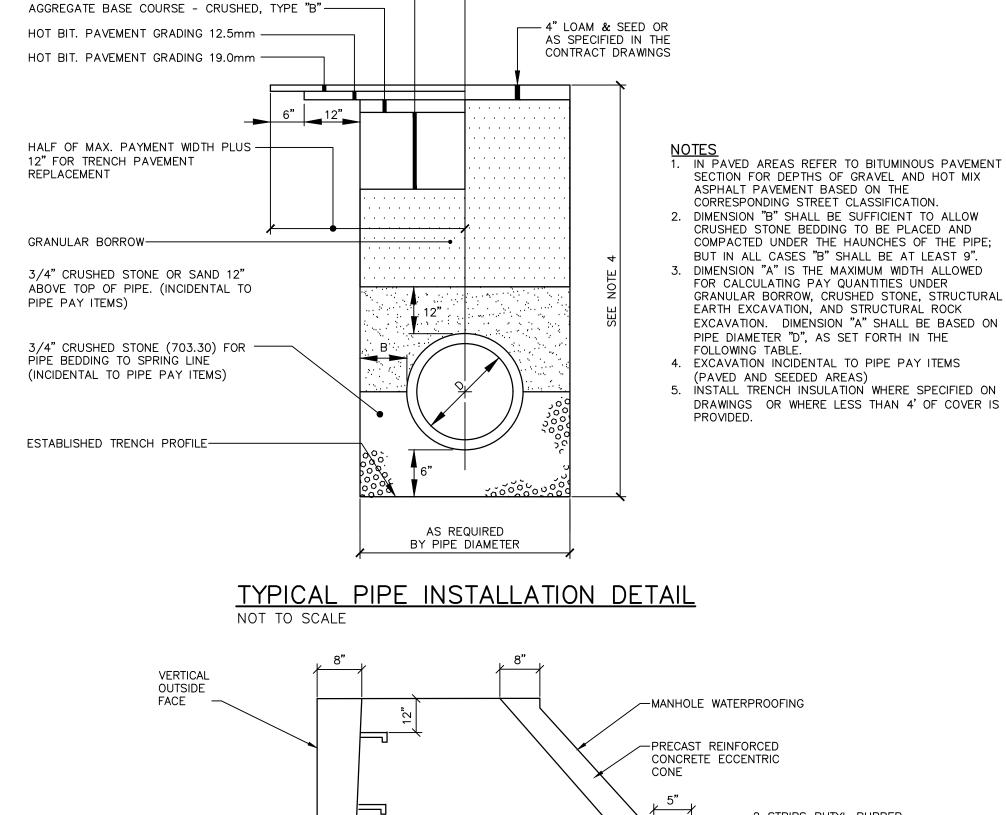
PRECAST CONCRETE MANHOLE TYPE "A"



PLASTIC MANHOLE STEPS



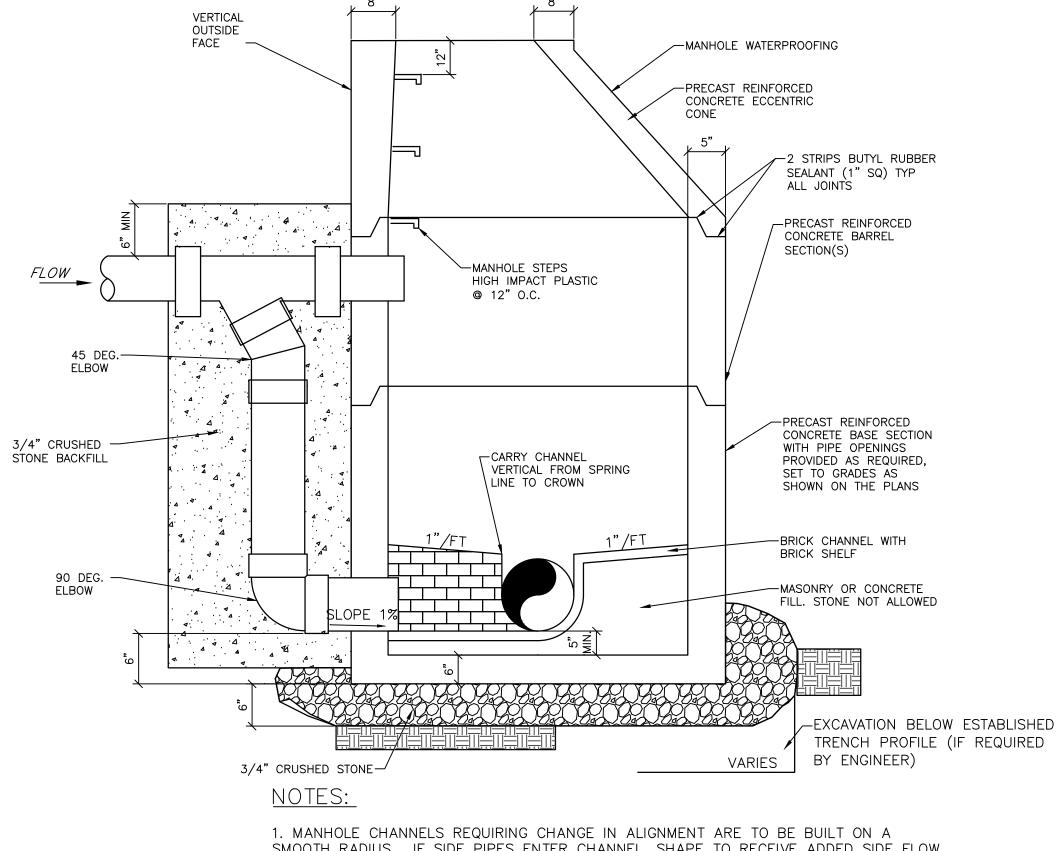
TYPICAL SEWER LATERAL WYE CONNECTION NOT TO SCALE



PAVED AREAS —

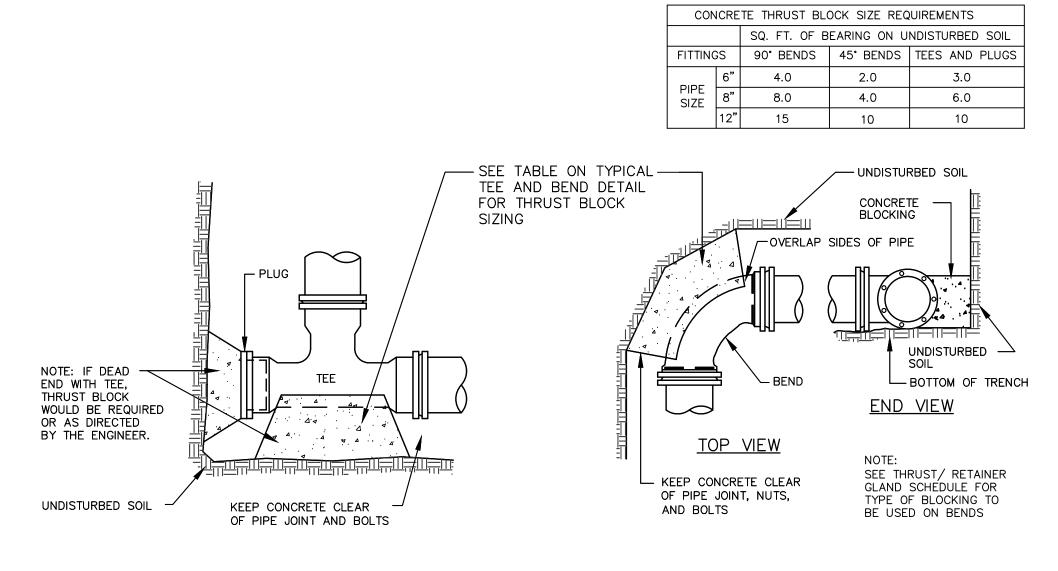
AGGREGATE SUBBASE COURSE - GRAVEL, TYPE "D" ------

───── UNPAVED AREAS



SMOOTH RADIUS. IF SIDE PIPES ENTER CHANNEL, SHAPE TO RECEIVE ADDED SIDE FLOW. 2. USE FLAT SLAB TOP MANHOLE WHEN THE DIFFERENCE BETWEEN INVERT AND RIM IS LESS THAN 6'-0" AND WHEN MANHOLE DIAMETER IS GREATER THAN 4'-0". 3. ALL BACKFILL WITHIN 3 FEET OF STRUCTURE SHALL BE SELECT FILL PLACED IN 8" MAXIMUM LIFTS.

## OUTSIDE DROP SANITARY MANHOLE DETAIL



TEE & BEND BLOCKING
NOT TO SCALE

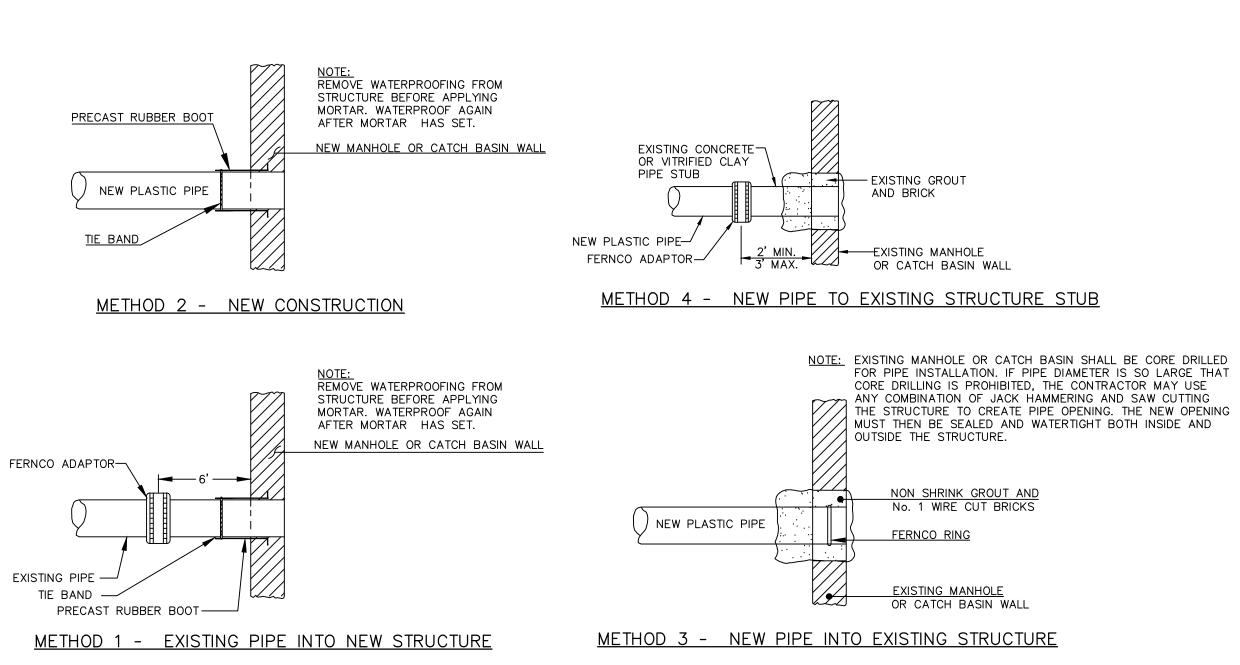
(WATER )—6

DROP STYLE COVER

(NUMBERS ARE FOR 5|"

BUFFALO VALVE BOXES) (BASE SECTION MAY BE USED

AS INTERMEDIATE SECTION)



NO. 38Y-5106-T42C

NO. 38Y-5106-BL 11,600 LBS.

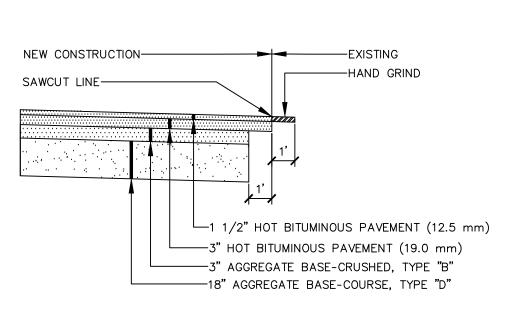
OPTIONAL TOP SECTIONS

PSE CODE #7907110 SLAB WT. = 3,400 LBS. TOP WT. = 9,100 LBS.

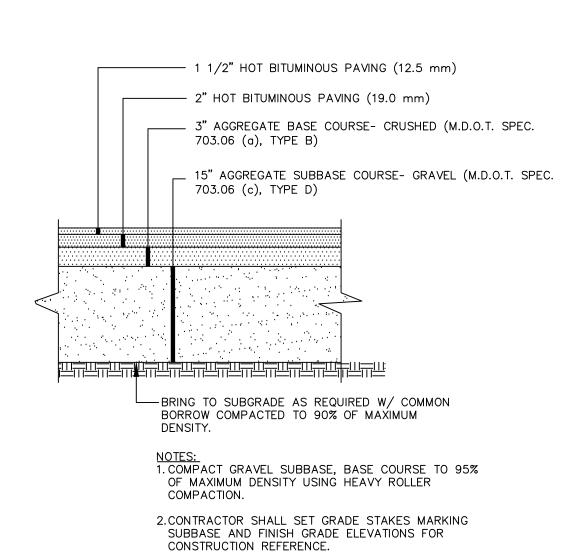
DIAMOND PLATE COVERS

10,900 LBS.



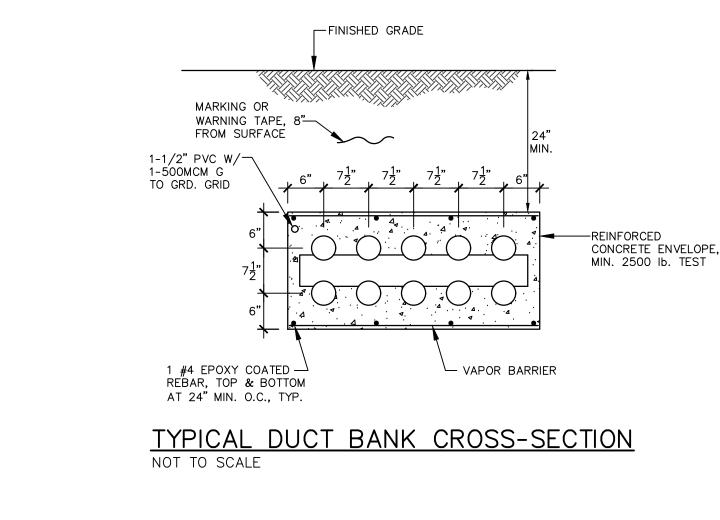


PAVEMENT BUTT JOINT (LOCAL STREET)



TYPICAL ROADWAY SECTION (LOCAL STREET)

\_42" DIA. ACCESS



NEW CONSTRUCTION————

EXISTING

└─2" HOT BITUMINOUS PAVEMENT (12.5 mm)

3" HOT BITUMINOUS PAVEMENT (19.0 mm)

-----3" AGGREGATE BASE-CRUSHED, TYPE "B"

PAVEMENT BUTT JOINT (CONGRESS STREET)

3" AGGREGATE BASE COURSE- CRUSHED (M.D.O.T. SPEC.

18" AGGREGATE SUBBASE COURSE- GRAVEL (M.D.O.T. SPEC.

NOTES: 1. COMPACT GRAVEL SUBBASE, BASE COURSE TO 95% OF MAXIMUM DENSITY USING HEAVY ROLLER

CONTRACTOR SHALL SET GRADE STAKES MARKING SUBBASE AND FINISH GRADE ELEVATIONS FOR CONSTRUCTION REFERENCE.

———— 2" HOT BITUMINOUS PAVING (12.5 mm)

TYPICAL ROADWAY SECTION - CONGRESS STREET
NOT TO SCALE

BORROW COMPACTED TO 90% OF MAXIMUM

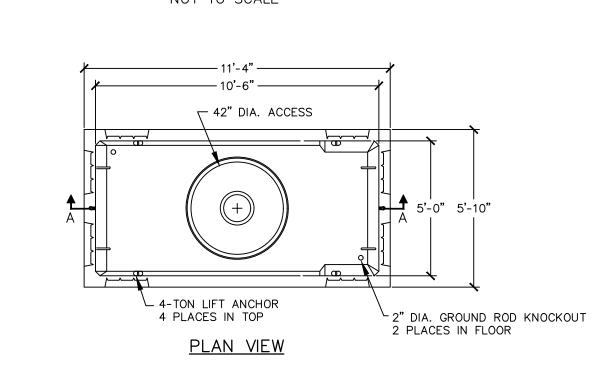
———— 3" HOT BITUMINOUS PAVING (19.0 mm)

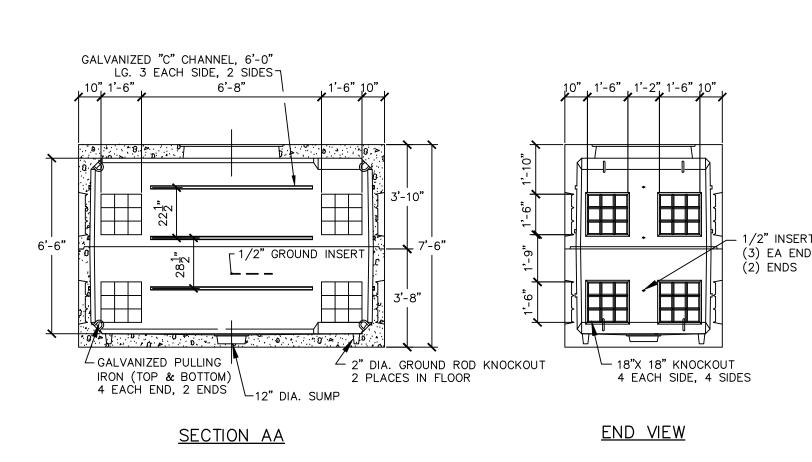
703.06 (a), TYPE B)

703.06 (c), TYPE D)

—18" AGGREGATE BASE-COURSE, TYPE "D"

----HAND GRIND





**ELECTRICAL & TELECOMMUNICATIONS MANHOLE** 

VAULT ASSEMBLY

PSE CODE #7906902

SLAB WT. = 4,000 LBS.

NOTE:

1. BASIS OF DESIGN IS 3GY MANHOLE BY
OLD CASTLE PRECAST MANHOLES SHALL
MEET UTILITY OWNERS SPECIFICATIONS.

		<u>DIMENSIONS</u> S, CMP, &	_	<u>YLENE</u>	<u>PIPE</u>
D	Α	В	С	VOL. B	ASE /100'
				UNSHEETED	O. D. SOCKET
8"	3'- 0"	1'- 1 1/2"	0'- 1/2"	7.358	10 3/8"
10"	3'- 0"	1'- 0 3/8"	0'- 0 5/8"	7.658	12 1/2" 14 1/2"
12" 14"	3'- 0" 3'- 0"	0'- 11 3/8" 0'- 10 3/8"	0'- 0 5/8" 0'- 0 5/8"	7.932 8.178	16 3/4"
16"	3'- 0"	0'- 9 1/4"	0- 0 3/6	8.447	19"
18"	3'- 0"	0'- 8 1/4"	0'- 0 3/4"	8.663	21 1/8"
20"	3'- 0"	0'- 7 3/8"	0'- 0 3/4"	8.815	23 3/8"
24"	3'- 1 3/4"	0'- 6"	0'- 0 7/8"	9.633	27 3/4"
27"	3'- 5 1/4"	0'- 6"	0'- 1 1/8"	10.959	31 1/8"
30"	3'- 8 1/4"	0'- 6" 0'- 6"	0'- 1 1/8"	12.156	34 1/2"
33"	<u>3'- 11 3/4"</u>	0'- 6"	0'- 1 3/8"	13.513	38 1/8"
36"	4'- 2 3/4"	0'- 6"	0'- 1 3/8"	14.910	
<u>TA</u>		OF UNSHEETED			
	BLE OF I		<u>S</u>		
	BLE OF I	DIMENSION:	<u>S</u>		ASE /100'
RE D	BLE OF I	DIMENSION: CONCRETE	<u>S</u> TE PIPE	UNSHEETED	O. D. BELL
D 12"	BLE OF INFORCEI  A  3'- 0"	DIMENSION:  CONCRE  B  O'- 10"	<u>S</u> TE PIPE C 0'-2"	UNSHEETED 8.319	0. D. BELL 20 1/4"
D 12" 15"	BLE OF [ INFORCE] A 3'- 0" 3'- 0"	DIMENSION:  DIMENSION:  B  0'- 10"  0'- 8 1/4"	S TE PIPE C 0'-2" 0'- 2 1/4"	UNSHEETED 8.319 8.626	0. D. BELL 20 1/4" 24 1/8"
D 12" 15" 18"	BLE OF [ INFORCE] A 3'- 0" 3'- 0" 3'- 0"	DIMENSION:  DIMENSION:  B  0'- 10"  0'- 8 1/4"  0'- 6 1/2"	S TE PIPE C O'-2" O'- 2 1/4" O'- 2 1/2"	UNSHEETED 8.319 8.626 8.925	0. D. BELL 20 1/4" 24 1/8" 28"
D 12" 15" 18" 21"	BLE OF [ INFORCE] A 3'- 0" 3'- 0" 3'- 0" 3'- 0"	DIMENSION:  DIMENSION:  B  0'- 10"  0'- 8 1/4"  0'- 6 1/2"  0'- 6"	S TE PIPE C 0'-2" 0'-2 1/4" 0'-2 1/2" 0'-2 3/4"	UNSHEETED 8.319 8.626 8.925 9.266	0 D. BELL 20 1/4" 24 1/8" 28" 31 7/8"
D 12" 15" 18" 21" 24"	BLE OF [ INFORCE] A 3'- 0" 3'- 0" 3'- 0" 3'- 0 1/2" 3'- 6"	DIMENSION:  DIMENSION:  B  0'- 10"  0'- 8 1/4"  0'- 6 1/2"  0'- 6"  0'- 6"	S TE PIPE C O'-2" O'- 2 1/4" O'- 2 1/2" O'-2 3/4" O'- 3"	UNSHEETED 8.319 8.626 8.925 9.266 11.233	0. D. BELL 20 1/4" 24 1/8" 28"
D 12" 15" 18" 21" 24" 27"	BLE OF [ INFORCE] A  3'- 0" 3'- 0" 3'- 0" 3'- 6" 3'- 6" 3'- 9 1/2"	DIMENSION:    B     0'- 10"     0'- 8 1/4"     0'- 6 1/2"     0'- 6"     0'- 6"     0'- 6"     0'- 6"	S TE PIPE C O'-2" O'- 2 1/4" O'- 2 1/2" O'-2 3/4" O'- 3"	UNSHEETED 8.319 8.626 8.925 9.266 11.233 12.655	0 D. BELL 20 1/4" 24 1/8" 28" 31 7/8"
D 12" 15" 18" 21" 24" 27" 30"	BLE OF [INFORCE]  A  3'- 0" 3'- 0" 3'- 0" 3'- 6" 3'- 6" 3'- 9 1/2" 4'- 1"	DIMENSION:    B     0'- 10"     0'- 8 1/4"     0'- 6 1/2"     0'- 6"     0'- 6"     0'- 6"     0'- 6"     0'- 6"	S TE PIPE C O'-2" O'- 2 1/4" O'- 2 1/2" O'- 3 1/4" O'- 3 1/4" O'- 3 1/2"	UNSHEETED 8.319 8.626 8.925 9.266 11.233 12.655 14.120	0 D. BELL 20 1/4" 24 1/8" 28" 31 7/8"
D 12" 15" 18" 21" 24" 27" 30" 33"	BLE OF [  A  3'- 0"  3'- 0"  3'- 0"  3'- 0"  3'- 6"  3'- 6"  3'- 9 1/2"  4'- 1"  4'- 4 1/2"	DIMENSION:  DOMENSION:  B  O'- 10"  O'- 8 1/4"  O'- 6 1/2"  O'- 6"	S TE PIPE C O'-2" O'- 2 1/4" O'- 2 1/2" O'-2 3/4" O'- 3"	UNSHEETED 8.319 8.626 8.925 9.266 11.233 12.655 14.120 15.722	0 D. BELL 20 1/4" 24 1/8" 28" 31 7/8"
D 12" 15" 18" 21" 24" 27" 30"	BLE OF [  A  3'- 0"  3'- 0"  3'- 0"  3'- 0"  3'- 6"  3'- 6"  3'- 9 1/2"  4'- 1"  4'- 4 1/2"	DIMENSION:    B     O'- 10"     O'- 8 1/4"     O'- 6 1/2"     O'- 6"     O'-	S TE PIPE C O'-2" O'- 2 1/4" O'- 2 1/2" O'- 3 1/4" O'- 3 1/4" O'- 3 1/2" O'- 3 3/4" O'- 4"	UNSHEETED 8.319 8.626 8.925 9.266 11.233 12.655 14.120	0 D. BELL 20 1/4" 24 1/8" 28" 31 7/8"
D 12" 15" 18" 21" 24" 27" 30" 33" 36"	A  3'- 0" 3'- 0" 3'- 0" 3'- 0" 3'- 6" 3'- 6" 3'- 9 1/2" 4'- 1" 4'- 4 1/2" 4'- 8" 5'- 3" 5'- 10"	DIMENSION:    B	S TE PIPE C 0'-2" 0'-2 1/4" 0'-2 1/2" 0'-2 3/4" 0'-3" 0'-3 1/2" 0'-3 1/2" 0'-3 3/4" 0'-4 1/2" 0'-5"	UNSHEETED 8.319 8.626 8.925 9.266 11.233 12.655 14.120 15.722 17.338	0 D. BELL 20 1/4" 24 1/8" 28" 31 7/8"
PED 12" 15" 18" 21" 24" 27" 30" 33" 36" 42" 48" 54"	A  3'- 0" 3'- 0" 3'- 0" 3'- 0" 3'- 6" 3'- 6" 3'- 6" 3'- 9 1/2" 4'- 1" 4'- 4 1/2" 4'- 8" 5'- 3" 5'- 10" 6'- 5"	DIMENSIONS  CONCRE  B  0'- 10" 0'- 8 1/4" 0'- 6 1/2" 0'- 6" 0'- 6" 0'- 6" 0'- 6" 0'- 6" 0'- 6" 0'- 6" 0'- 6" 0'- 6" 0'- 6" 0'- 6"	S TE PIPE C 0'-2" 0'-2 1/4" 0'-2 1/2" 0'-2 3/4" 0'-3" 0'-3" 0'-3 1/4" 0'-3 1/2" 0'-3 3/4" 0'-4" 0'-4" 0'-5" 0'-5"	UNSHEETED 8.319 8.626 8.925 9.266 11.233 12.655 14.120 15.722 17.338 20.726 24.463 28.404	0 D. BELL 20 1/4" 24 1/8" 28" 31 7/8"
D 12" 15" 18" 21" 24" 27" 30" 33" 36" 42" 48" 54" 60"	A  3'- 0" 3'- 0" 3'- 0" 3'- 0" 3'- 0 1/2" 3'- 6" 3'- 9 1/2" 4'- 1" 4'- 4 1/2" 4'- 8" 5'- 3" 5'- 10" 6'- 5" 7'- 0"	DIMENSIONS  CONCRE  B  0'- 10" 0'- 8 1/4" 0'- 6 1/2" 0'- 6" 0'- 6" 0'- 6" 0'- 6" 0'- 6" 0'- 6" 0'- 6" 0'- 6" 0'- 6" 0'- 6" 0'- 6" 0'- 6"	S TE PIPE C 0'-2" 0'-2 1/4" 0'-2 1/2" 0'-2 3/4" 0'-3" 0'-3 1/4" 0'-3 1/2" 0'-3 3/4" 0'-4" 0'-4" 0'-5" 0'-5" 0'-5"	UNSHEETED 8.319 8.626 8.925 9.266 11.233 12.655 14.120 15.722 17.338 20.726 24.463 28.404 32.607	0 D. BELL 20 1/4" 24 1/8" 28" 31 7/8"
D 12" 15" 18" 21" 24" 27" 30" 33" 36" 42" 48" 54" 60" 66"	A  3'- 0" 3'- 0" 3'- 0" 3'- 0" 3'- 0" 3'- 6" 3'- 6" 3'- 9 1/2" 4'- 1" 4'- 4 1/2" 4'- 8" 5'- 3" 5'- 3" 5'- 10" 6'- 5" 7'- 0"	DIMENSIONS  CONCRE  B  0'- 10" 0'- 8 1/4" 0'- 6 1/2" 0'- 6" 0'- 6" 0'- 6" 0'- 6" 0'- 6" 0'- 6" 0'- 6" 0'- 6" 0'- 6" 0'- 6" 0'- 6" 0'- 6"	S TE PIPE C 0'-2" 0'-2 1/4" 0'-2 1/2" 0'-2 3/4" 0'-3" 0'-3 1/2" 0'-3 1/2" 0'-3 3/4" 0'-4" 0'-4" 0'-5" 0'-5" 0'-6" 0'-6"	UNSHEETED 8.319 8.626 8.925 9.266 11.233 12.655 14.120 15.722 17.338 20.726 24.463 28.404 32.607 37.074	0 D. BELL 20 1/4" 24 1/8" 28" 31 7/8"
D 12" 15" 18" 21" 24" 27" 30" 33" 36" 42" 48" 54" 60"	A  3'- 0" 3'- 0" 3'- 0" 3'- 0" 3'- 0 1/2" 3'- 6" 3'- 9 1/2" 4'- 1" 4'- 4 1/2" 4'- 8" 5'- 3" 5'- 10" 6'- 5" 7'- 0"	DIMENSIONS  CONCRE  B  0'- 10" 0'- 8 1/4" 0'- 6 1/2" 0'- 6" 0'- 6" 0'- 6" 0'- 6" 0'- 6" 0'- 6" 0'- 6" 0'- 6" 0'- 6" 0'- 6" 0'- 6"	S TE PIPE C 0'-2" 0'-2 1/4" 0'-2 1/2" 0'-2 3/4" 0'-3" 0'-3 1/4" 0'-3 1/2" 0'-3 3/4" 0'-4" 0'-4" 0'-5" 0'-5" 0'-5"	UNSHEETED 8.319 8.626 8.925 9.266 11.233 12.655 14.120 15.722 17.338 20.726 24.463 28.404 32.607	0 D. BELL 20 1/4" 24 1/8" 28" 31 7/8"

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**CONSULTANTS** 

22 Bramhall Street

CIVIL/ LANDSCAPE ARCHITECT Sebago Technics Inc. 75 John Roberts Road, Suite 1A, South Portland, ME 04106

STRUCTURAL ENG/ BUILDING ENVELOPE CONSULTANT Simpson Gumpertz & Heger Inc. 41 Seyon Street, Building 1, Suite 500, Waltham, MA 02453 MEPFP ENGINEER/CODE/LOW VOLTAGE

AKF Group LLC 99 Bedford Street, 2nd Floor, Boston, MA 02111 CONSTRUCTION MANAGER TURNER CONSTRUCTION 2 Seaport Lane, Suite 200, Boston, MA 02210

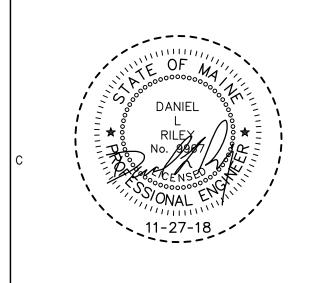
ELEVATOR CONSULTANT VDA (Van Deusen & Associates) 101 Summer Street, 4th Floor, Boston, MA 02110 COST ESTIMATOR

D.G. Jones International 3 Baldwin Green Common, Suite 202, Woburn, MA 01801 MEDICAL EQUIPMENT PLANNING Mitchell Planning 630 Dundee Road, Suite 340, Northbrook IL 60062

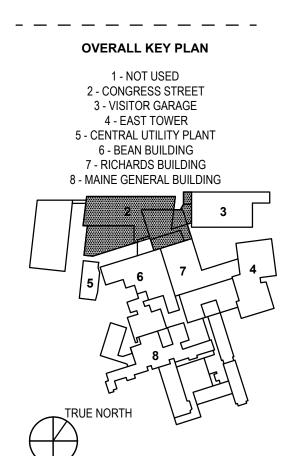
PROJECT TITLE **Congress Street** Building

22 Bramhall Street

Portland ME 04102



_	KEY PLANS
	PROJECT KEY PLAN
	SECTOR SECTOR VISITORS GARAGE  BEAN BUILDING



**RESUBMIT TO CITY** NOVEMBER 27, 2018

ISSUE 152189.000 MAL/MAM

TITLE **DETAILS CONGRESS STREET EXPANSION** 

C30-03

SHEET NUMBER

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