2

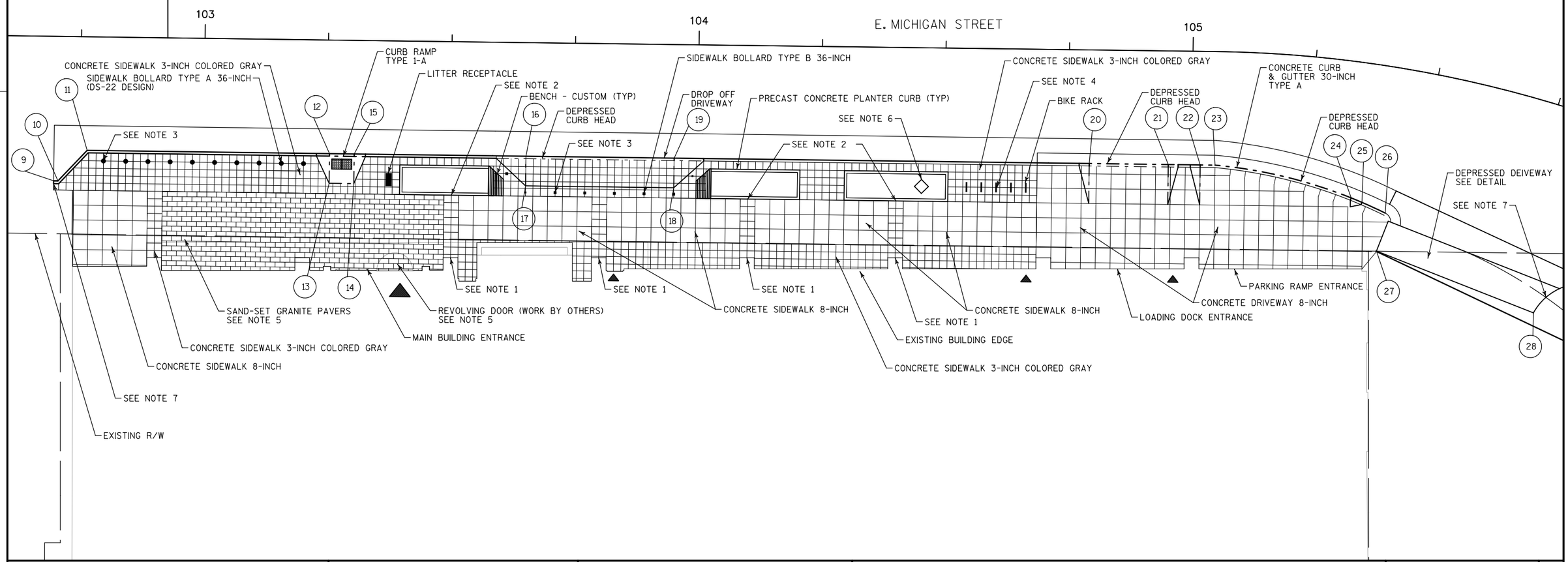
POINT NUMBER	STATION	OFFSET
9	+69.73	29.26' RT
10	+70.60	29.25' RT
11	+76.42	23.00' RT
12	+25.50	23.00' RT
13	+25.50	29.00' RT
14	+30.50	29.00' RT
15	+30.50	23.00' RT
16	+65.24	23.00' RT
17	+65.24	29.00' RT
18	+95.24	29.00' RT
19	+95.26	23.00' RT
20	+79.28	23.00' RT
21	+95.28	23.00' RT
22	+01.74	23.00' RT
23	+04.77	23.00' RT
24	+35.93	27.51' RT
25	+38.51	28.10' RT
26	+44.15	29.49' RT
27	+43.64	37.36' RT
28	+83.65	41.64' RT

NOTES

1. CONCRETE SIDEWALK 3-INCH GRAY BANDS SHALL BE LOCATED ON CENTER OF BUILDING COLUMNS. FIELD LOCATE EDGES TO ALIGN WITH THREE FOOT WIDE COLUMNS.
2. LOCATE PRECAST CONCRETE CURB PLANTER ON CENTER TO BUILDING COLUMNS.
3. SIDEWALK BOLLARD TYPE A 36-INCH (DS-22 DESIGN) AND SIDEWALK BOLLARD TYPE B 36-INCH SHALL BE LOCATED ON CENTER ALONG TOOLED JOINT LINES AS SHOWN ON THE PLANS. FIELD VERIFY DISTANCES PRIOR TO BOLLARD PLACEMENT TO ENSURE BOLLARDS FALL ON JOINTS AS SHOWN ON PLANS.
4. BIKE RACKS AND LITTER RECEPTACLE SHALL BE LOCATED ON CENTER EQUIDISTANT BETWEEN TOOLED JOINTS AS SHOWN ON PLANS.
5. GRANITE PAVER INSTALLATION SHALL BEGIN ALONG NORTH EDGE AND WORK SOUTH. GRANITE PAVERS INSIDE REVOLVING DOOR WILL BE PLACED BY OTHERS. COORDINATE PLACEMENT OF GRANITE PAVERS WITH IRGENS AND THEIR CONTRACTOR. GRANITE PAVERS SHALL BE INSTALLED IN RUNNING BOND PATTERN AS SHOWN ON PLANS TO MATCH INTERIOR OF BUILDING. FIELD VERIFY PRIOR TO INSTALLATION.
6. IRRIGATION SYSTEM SHALL BE PROVIDED FOR THREE PLANTERS SHOWN ON THIS SHEET. IRRIGATION SCHEMATIC DETAILS PROVIDED ON SHEET 13. FINAL DESIGN SHALL BE COMPLETED BY CONTRACTOR FOR SUBMITTAL TO THE ENGINEER FOR APPROVAL PRIOR TO COMMENCING CONSTRUCTION. WATER TAP SHALL BE STUBBED INTO ROADWAY AND CAPPED FOR FUTURE CONNECTION BY OTHERS.
7. PROPOSED PAVEMENT, CURB, CURB AND GUTTER, AND SIDEWALK SHALL MATCH EXISTING. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

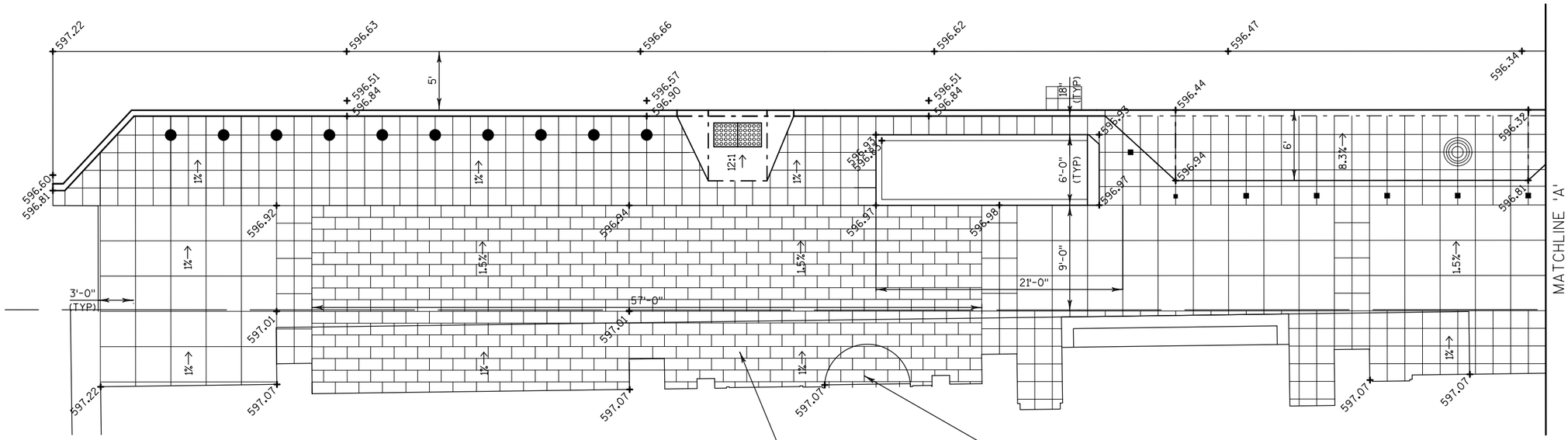
LEGEND

▲ PROPOSED BUILDING DOOR/ENTRANCE



2

PROJECT NO: 1301-13-71	HWY: LOCAL ROADS	COUNTY: MILWAUKEE	SITE PLAN DETAILS OVERVIEW	SHEET 13A	E



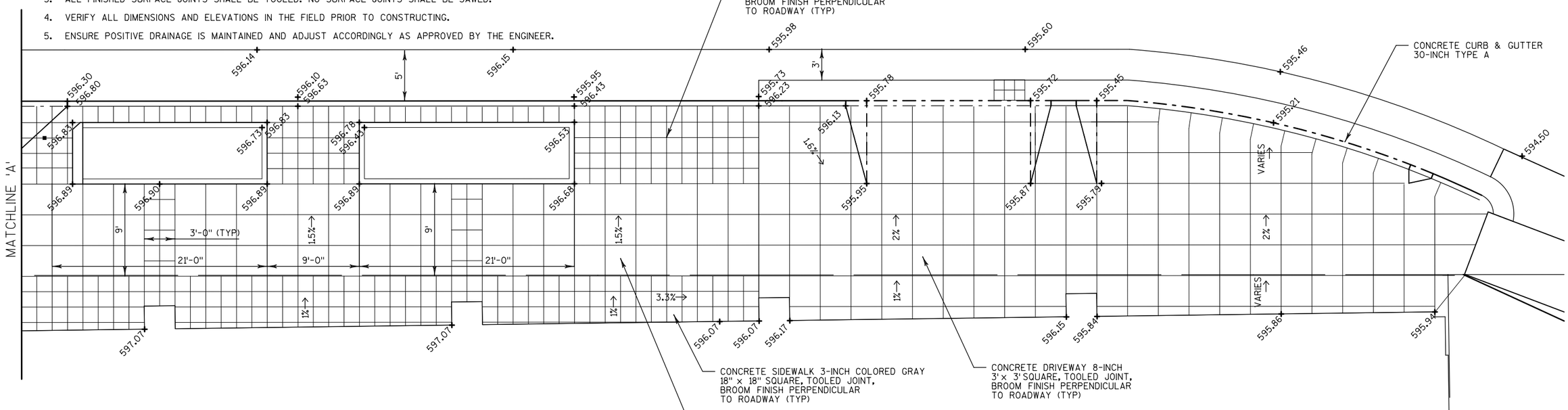
SAND-SET GRANITE PAVER
1' × 2' RECTANGLE, RUNNING BOND,
1" SAND SETTLING BED.

COORDINATE GRANITE PAVER INSTALLATION
WITH IRGENS INSIDE REVOLVING DOOR

NOTES

1. GRANITE PAVERS INSIDE REVOLVING DOOR WILL BE INSTALLED BY OTHERS. COORDINATE WITH IRGENS AND THEIR DESIGNATED CONTRACTOR PRIOR TO BEGINNING PAVER INSTALLATION.
2. PLACE A TEAR-AWAY BOND BREAKER AND EPOXY SEALANT ALONG ENTIRE BUILDING EDGE WHERE GRANITE PAVERS AND CONCRETE WILL ABUT THE BUILDING. COORDINATE MATERIAL AND DIMENSIONS WITH IRGENS.
3. ALL FINISHED SURFACE JOINTS SHALL BE TOOLED. NO SURFACE JOINTS SHALL BE SAWED.
4. VERIFY ALL DIMENSIONS AND ELEVATIONS IN THE FIELD PRIOR TO CONSTRUCTING.
5. ENSURE POSITIVE DRAINAGE IS MAINTAINED AND ADJUST ACCORDINGLY AS APPROVED BY THE ENGINEER.

CONCRETE SIDEWALK 3-INCH COLORED GRAY
18" × 18" SQUARE, TOOLED JOINT,
BROOM FINISH PERPENDICULAR
TO ROADWAY (TYP)



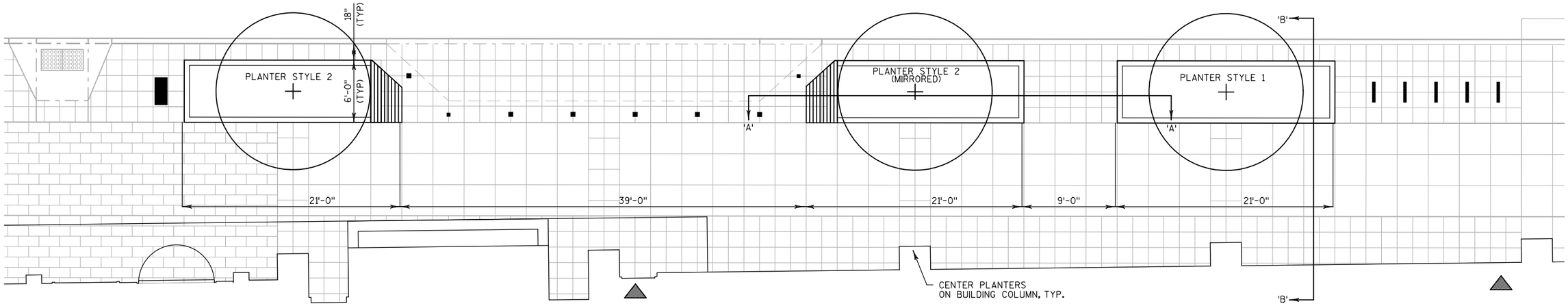
CONCRETE CURB & GUTTER
30-INCH TYPE A

CONCRETE SIDEWALK 3-INCH COLORED GRAY
18" × 18" SQUARE, TOOLED JOINT,
BROOM FINISH PERPENDICULAR
TO ROADWAY (TYP)

CONCRETE SIDEWALK 8-INCH
3' × 3' SQUARE, TOOLED JOINT,
BROOM FINISH PERPENDICULAR
TO ROADWAY (TYP)

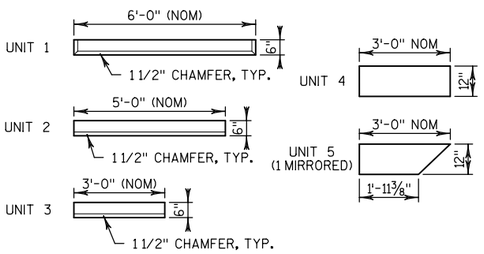
CONCRETE DRIVEWAY 8-INCH
3' × 3' SQUARE, TOOLED JOINT,
BROOM FINISH PERPENDICULAR
TO ROADWAY (TYP)

PROJECT NO: 1301-13-71	HWY: LOCAL ROADS	COUNTY: MILWAUKEE	JOINT DETAILS	SHEET 15A	E

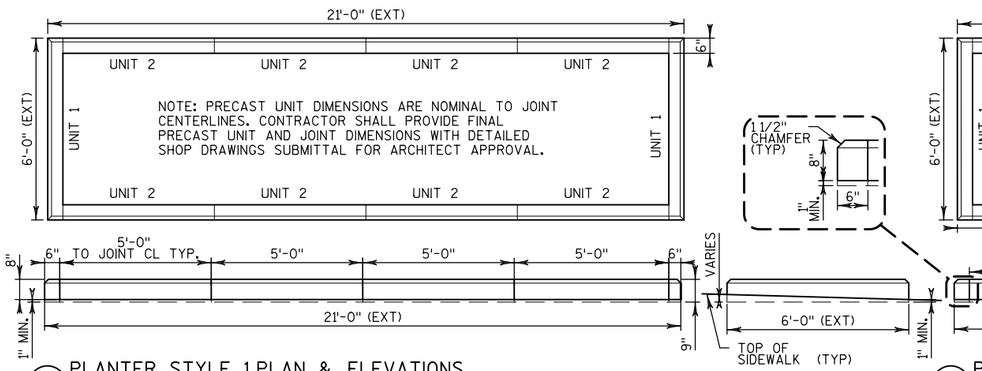


PLANTER LAYOUT PLAN

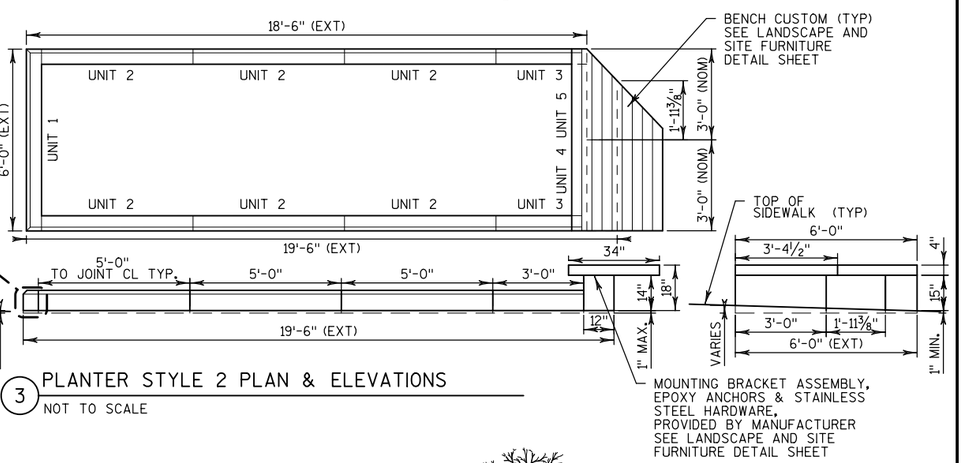
SCALE: 1" = 20'-0"



1 PRECAST CONCRETE PLANTER UNIT SIZES (PLAN VIEW)
NOT TO SCALE



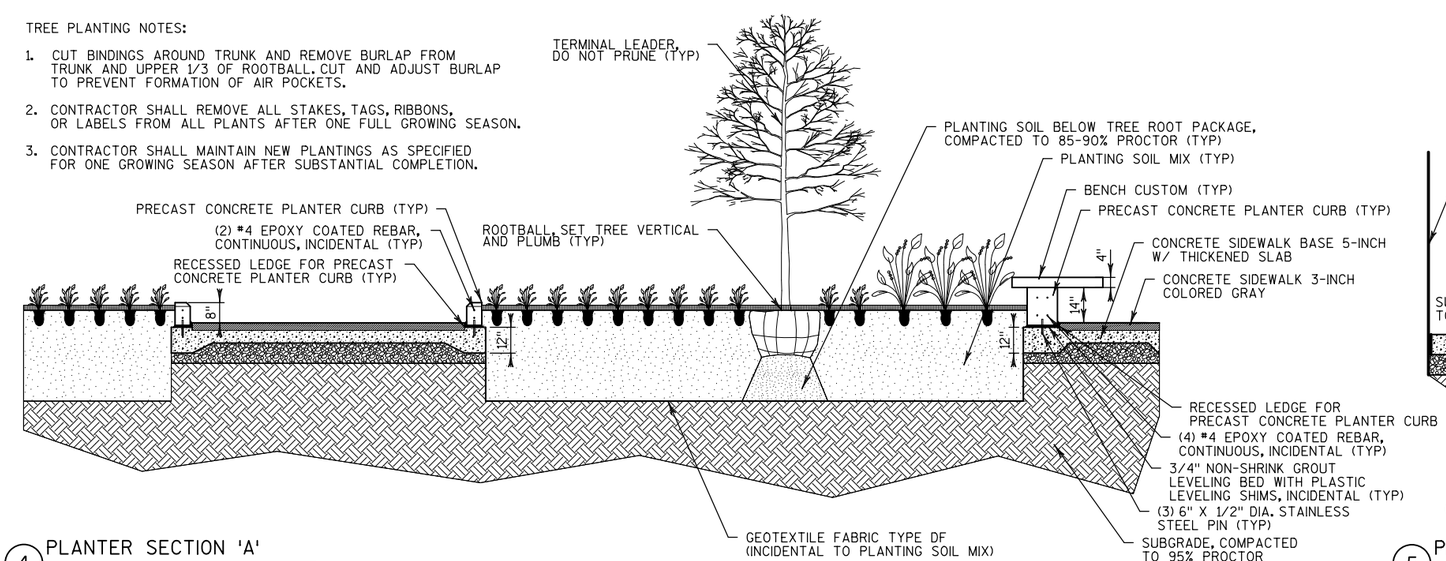
2 PLANTER STYLE 1 PLAN & ELEVATIONS
NOT TO SCALE



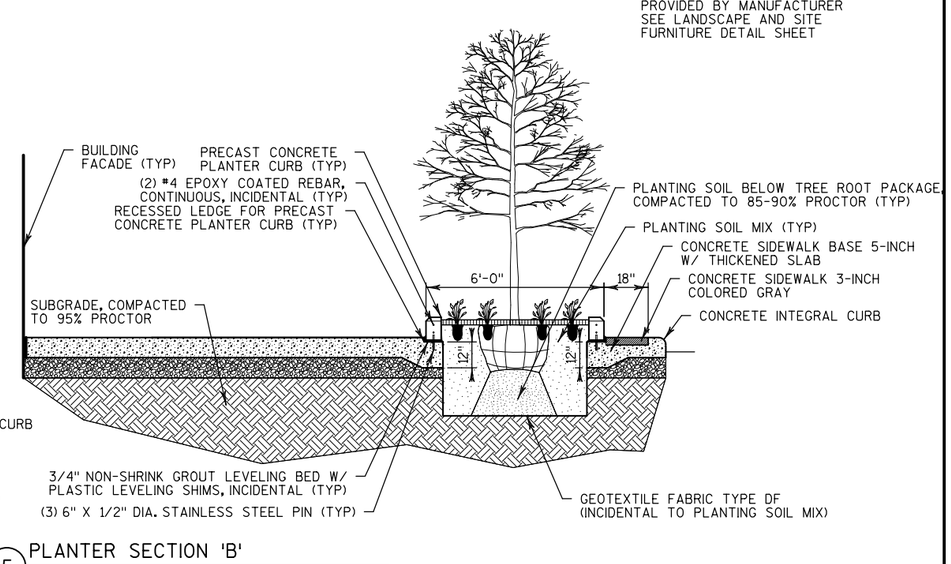
3 PLANTER STYLE 2 PLAN & ELEVATIONS
NOT TO SCALE

TREE PLANTING NOTES:

1. CUT BINDINGS AROUND TRUNK AND REMOVE BURLAP FROM TRUNK AND UPPER 1/3 OF ROOTBALL. CUT AND ADJUST BURLAP TO PREVENT FORMATION OF AIR POCKETS.
2. CONTRACTOR SHALL REMOVE ALL STAKES, TAGS, RIBBONS, OR LABELS FROM ALL PLANTS AFTER ONE FULL GROWING SEASON.
3. CONTRACTOR SHALL MAINTAIN NEW PLANTINGS AS SPECIFIED FOR ONE GROWING SEASON AFTER SUBSTANTIAL COMPLETION.



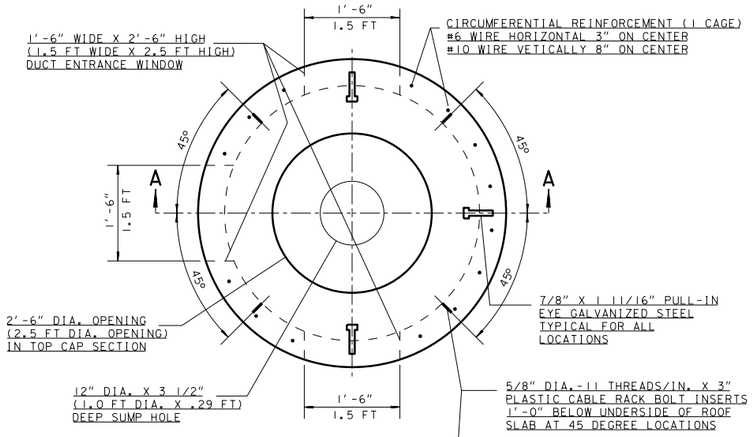
4 PLANTER SECTION 'A'
NOT TO SCALE



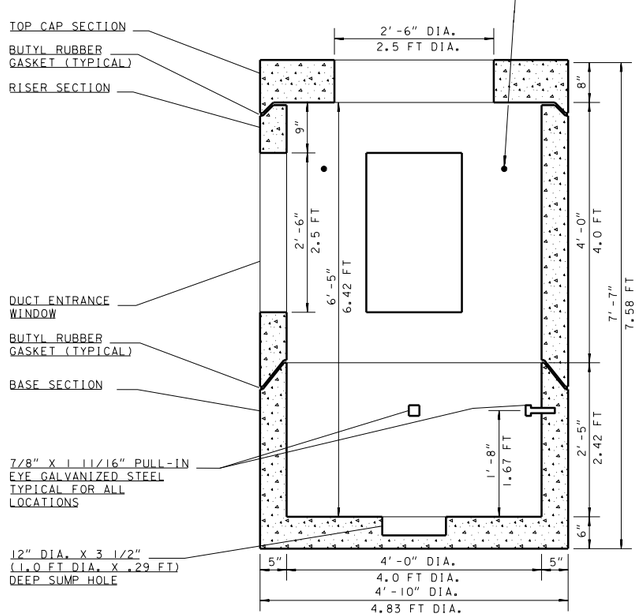
5 PLANTER SECTION 'B'
NOT TO SCALE

PROJECT NO: 1301-13-71	HWY: LOCAL ROADS	COUNTY: MILWAUKEE	PLANTER DETAILS	SHEET 18A	E

2



TOP VIEW



NOTES:
THE JOINTS MAY BE EITHER "BELL UP" OR "SPIGOT UP", THE NUMBER OF PULL-IN IRONS AND CABLE RACK BOLT INSERTS MAY VARY BY ORDER.

REINFORCING IN THE FLOOR & TOP CAP SECTION SHALL CONFORM TO ASTM SPECIFICATION C-478.

SIZE, LOCATION, SHAPE AND NUMBER OF KNOCK-OUT AREA AND THE SIZE, LOCATION, SHAPE AND NUMBER OF WINDOWS MAY VARY. (3 WINDOWS SHOWN). UNIT PRICE OF MANHOLE SHALL NOT VARY FOR NUMBER OF OPENINGS.

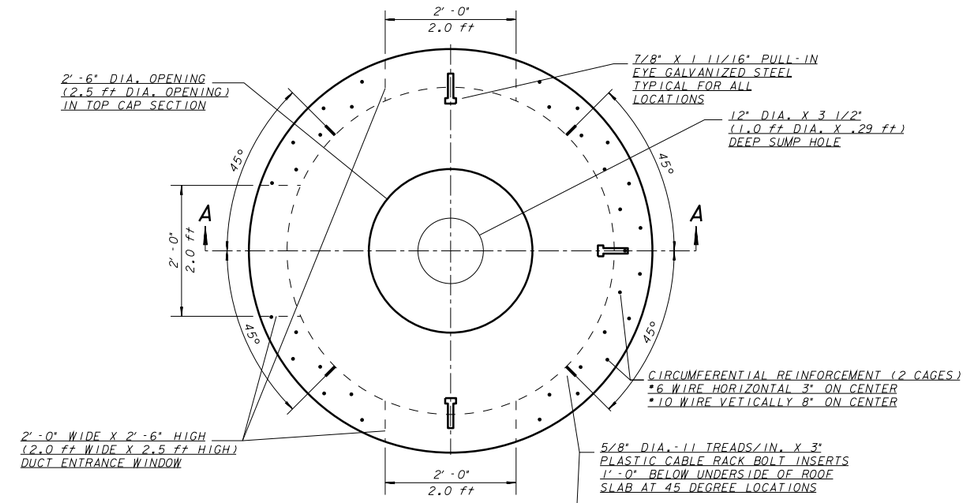
3 WINDOW OPENING
4' DIA. X 6'-5" HEADROOM
PRECAST CONCRETE MANHOLE

SECTION VIEW "A-A"

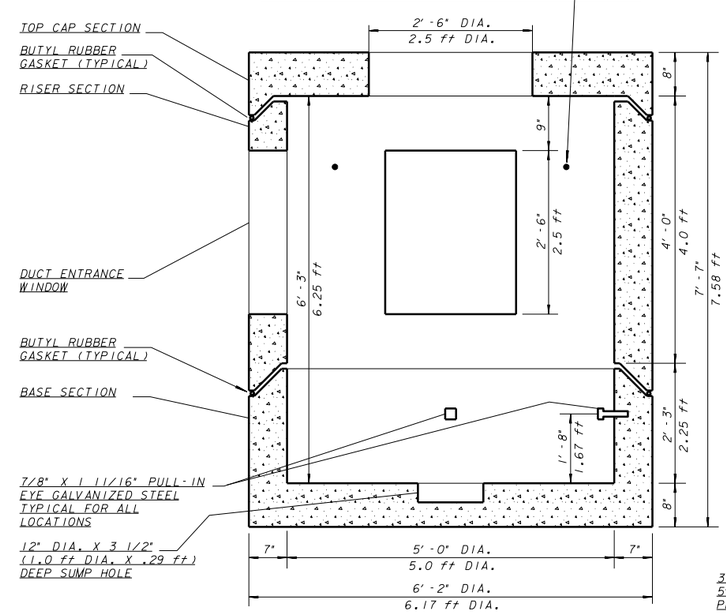
N.T.S.

4' DIAMETER MANHOLE TYPE TES DETAIL

2



TOP VIEW



NOTES:
THE JOINTS MAY BE EITHER "BELL UP" OR "SPIGOT UP", THE NUMBER OF PULL-IN IRONS AND CABLE RACK BOLT INSERTS MAY VARY BY ORDER.

REINFORCING IN THE FLOOR & TOP CAP SECTION SHALL CONFORM TO ASTM SPECIFICATION C-478.

SIZE, LOCATION, SHAPE AND NUMBER OF KNOCK-OUT AREA AND THE SIZE, LOCATION, SHAPE AND NUMBER OF WINDOWS MAY VARY. (3 WINDOWS SHOWN). UNIT PRICE OF MANHOLE SHALL NOT VARY FOR NUMBER OF OPENINGS.

3 WINDOW OPENING
5' OR 6' DIA. X 6'-3" HEADROOM
PRECAST CONCRETE MANHOLE

SECTION VIEW "A-A"

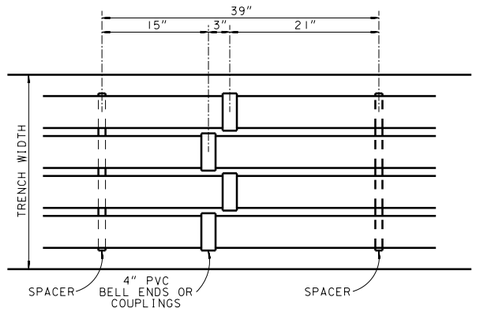
N.T.S.

5' DIAMETER MANHOLE TYPE TES DETAIL

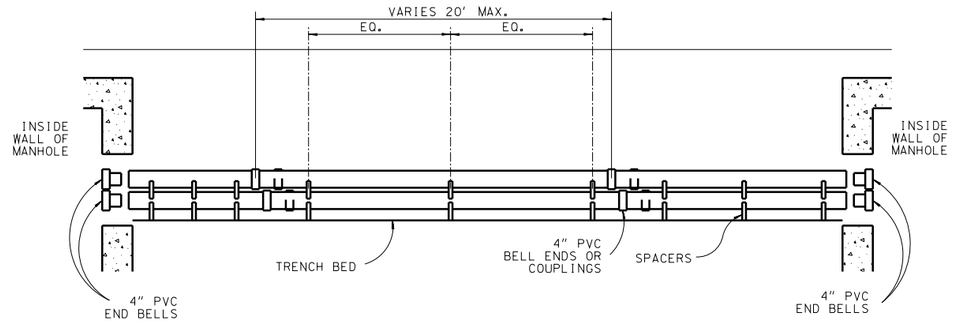
SHEET 1 OF 6

STATE PROJECT NUMBER	HWY:	COUNTY: MILWAUKEE		SCALE FEET 0' 40'	SHEET NO: 26A	E

PLOT DATE: 09-18-15

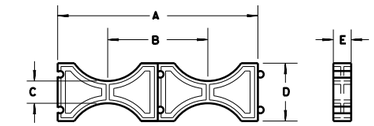


PLAN VIEW
N.T.S.



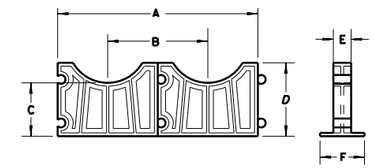
SECTION VIEW
N.T.S.

COND.	3"	4"
A	10"	11 1/2"
B	5"	5 5/8"
C	1 1/2"	1 1/2"
D	3 1/2"	3 1/2"
E	1"	1"



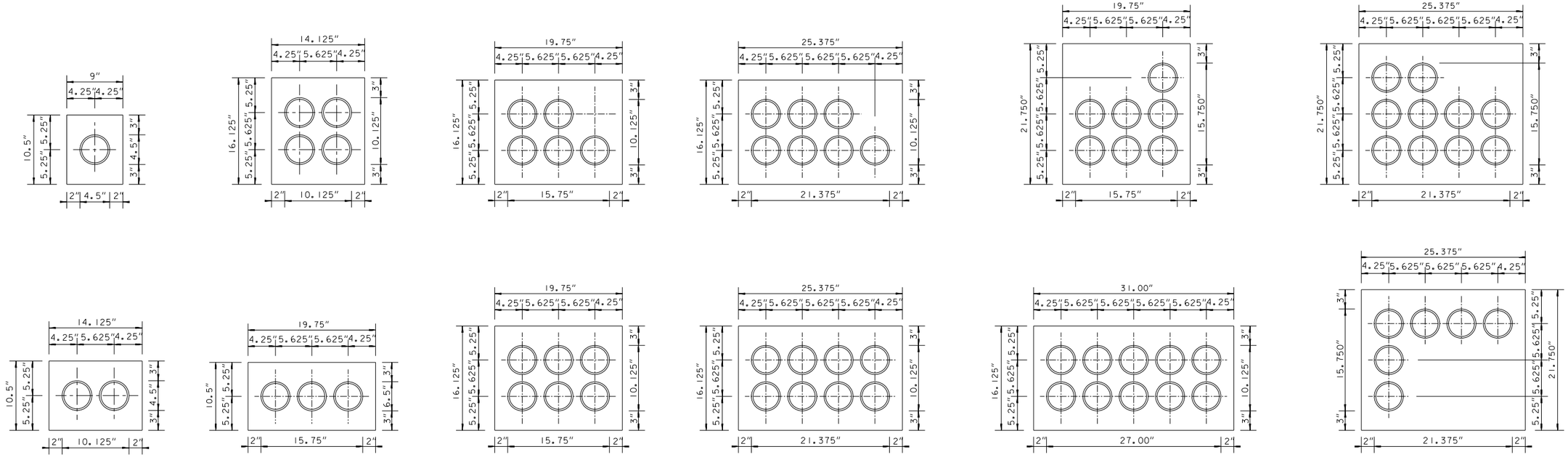
INTERMEDIATE SPACER

COND.	3"	4"
A	10"	11 1/2"
B	5"	5 5/8"
C	3"	3"
D	3 5/8"	4 1/2"
E	1"	1"
F	2 1/2"	2 1/2"



BASE SPACER

INTERMEDIATE AND BASE SPACER DETAIL

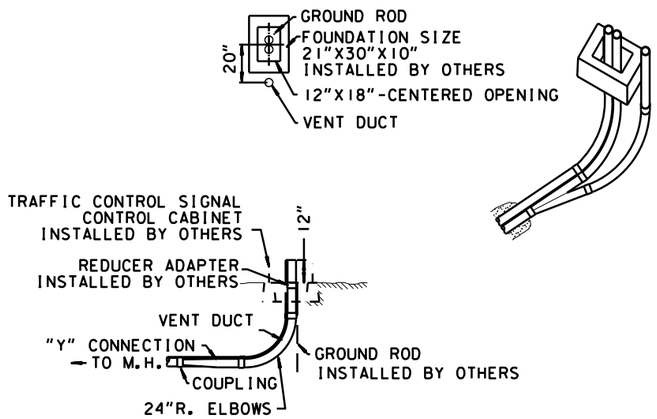


CROSS SECTION VIEW
N.T.S.

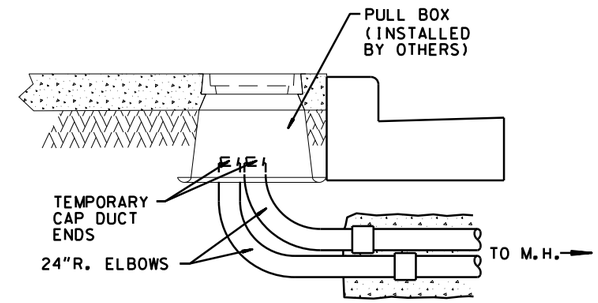
SHEET 2 OF 6

STATE PROJECT NUMBER 1301-13-71	HWY: LOCAL ROADS	COUNTY: MILWAUKEE	CITY UG CONDUIT (TES) DETAILS	SCALE FEET 0' 40'	SHEET NO: 27A	E

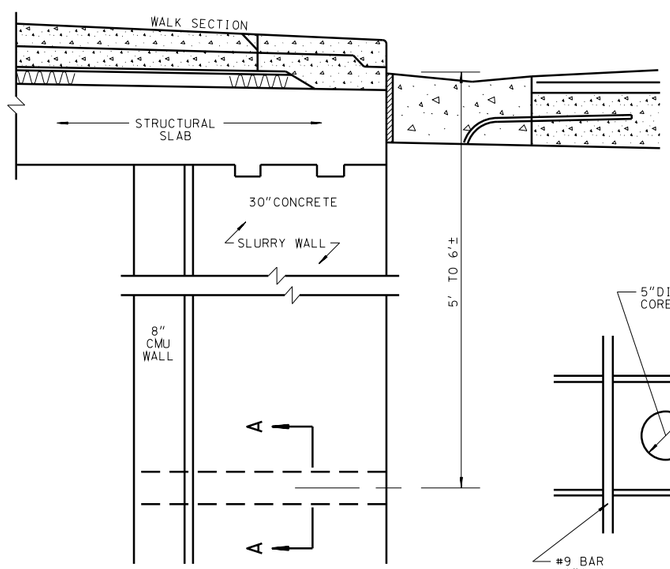
PLOT DATE: 09-18-15



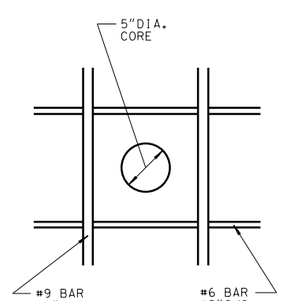
TRAFFIC CONTROL CABINET INSTALLATION DETAILS



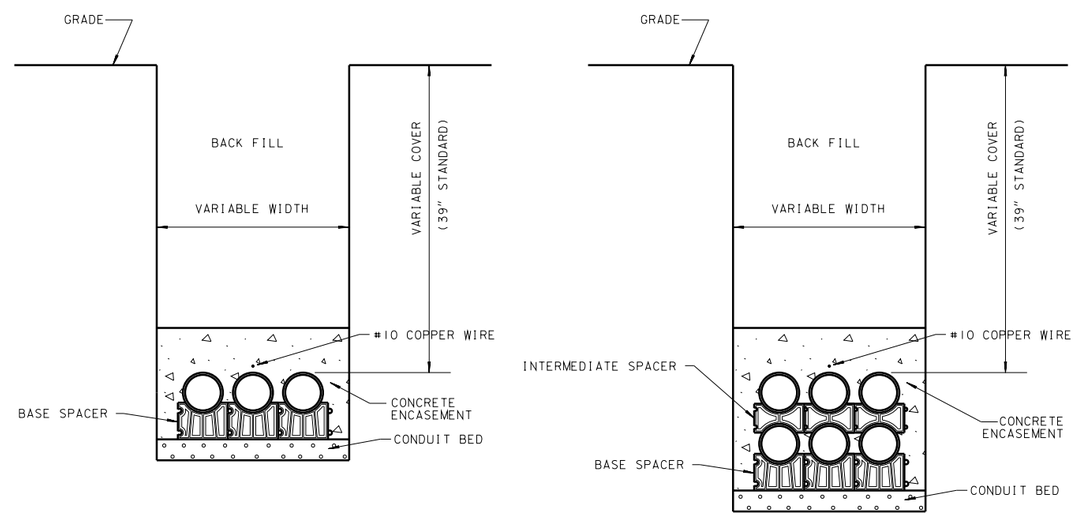
STREET LIGHTING POLYMER CONC. VAULT



TYPICAL SLURRY WALL SECTION
(ALONG N. CASS ST. - US BANK BLDG.)
LOOKING NORTH



TYPICAL SECTION
A-A

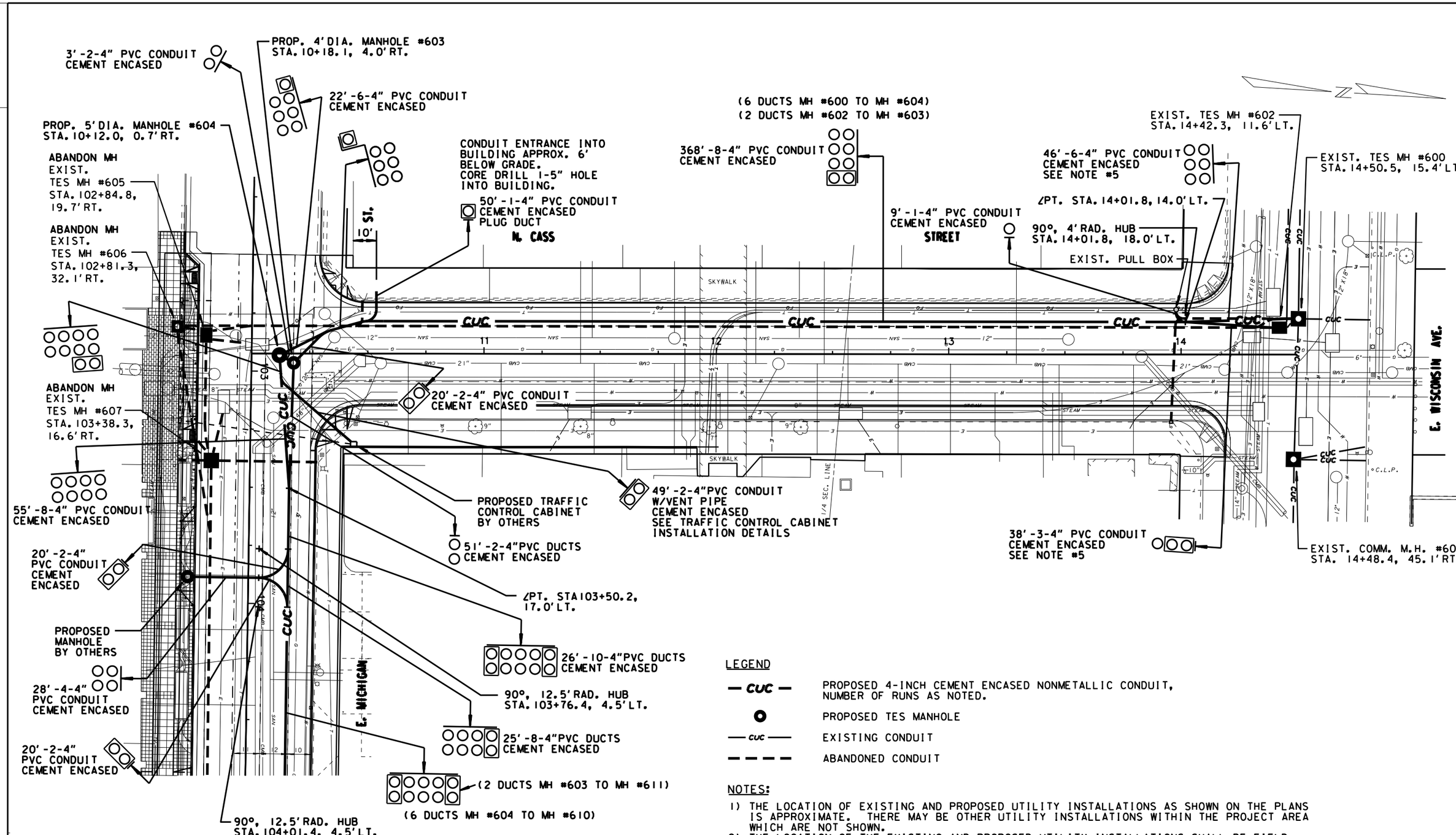


CROSS SECTION VIEW, TYP.
N.T.S.

SHEET 3 OF 6

STATE PROJECT NUMBER	HWY:	COUNTY: MILWAUKEE		SCALE FEET 0' 40'	SHEET NO: 28A	E

PLOT DATE: 09-18-15



LEGEND

— CUC —	PROPOSED 4-INCH CEMENT ENCASED NONMETALLIC CONDUIT, NUMBER OF RUNS AS NOTED.
⊙	PROPOSED TES MANHOLE
— CUC —	EXISTING CONDUIT
— — — —	ABANDONED CONDUIT

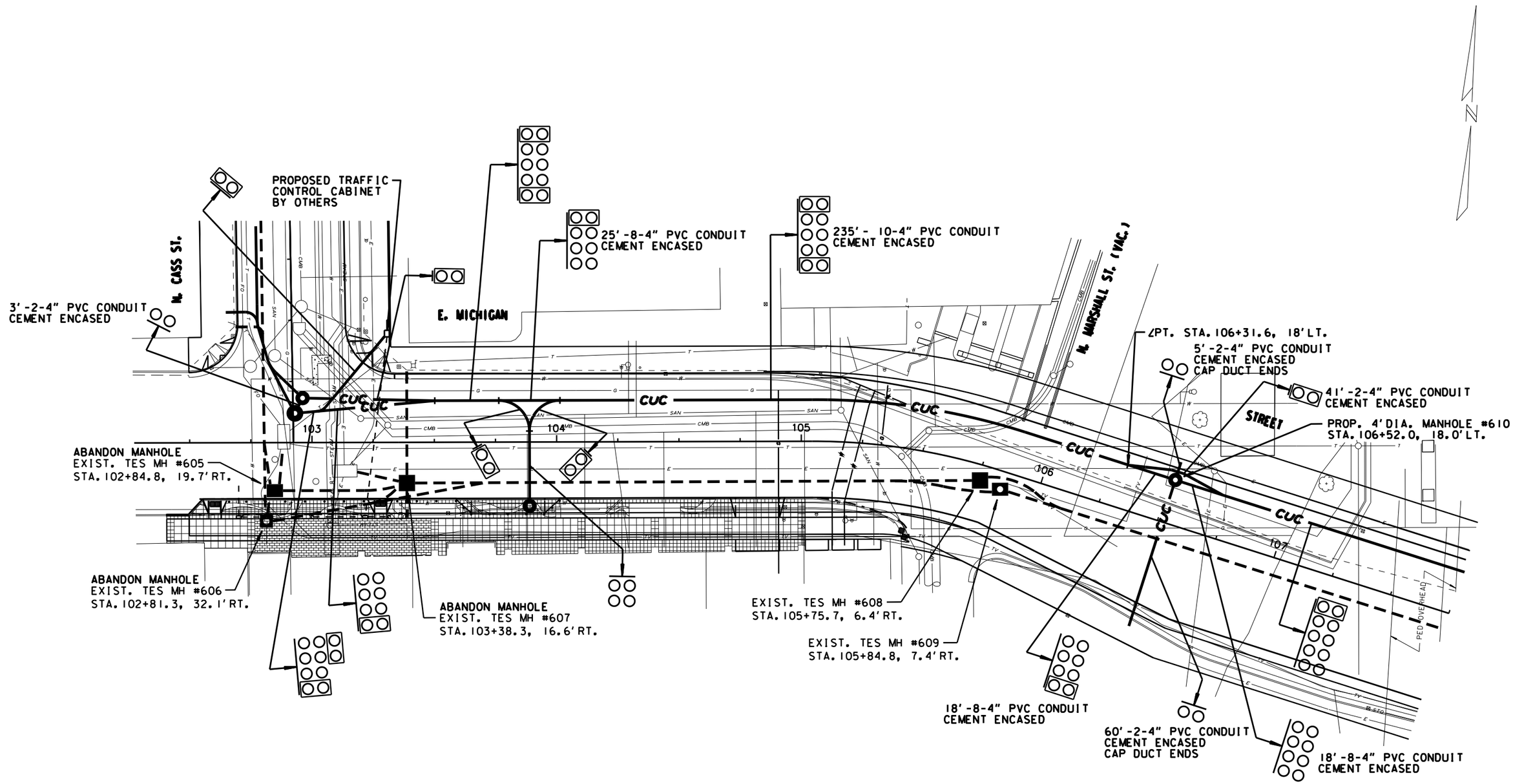
NOTES:

1) THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS IS APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.
2) THE LOCATION OF THE EXISTING AND PROPOSED UTILITY INSTALLATIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR.
3) DIMENSIONS SHOWN ARE TO CENTER OF MANHOLE, DUCT PACKAGE OR UTILITY.
4) MAINTAIN A STANDARD DEPTH OF 39-INCHES BETWEEN FINISHED GRADE AND TOP OF CONDUIT.
5) REMOVE ABANDONED CONDUIT FROM THE MANHOLE WALL AND BEYOND AS NEEDED. INSTALL THE PROPOSED CONDUIT INTO THE MANHOLE AT THE SAME LOCATION OF THE ABANDONED CONDUIT.

SHEET 4 OF 6

STATE PROJECT NUMBER 1301-13-71	HWY: LOCAL ROADS	COUNTY: MILWAUKEE	CITY UG CONDUIT (TES)	SCALE FEET	SHEET NO: 29A	E

PLOT DATE: 09-18-15



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2) THE LOCATION OF THE EXISTING AND PROPOSED UTILITY INSTALLATIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR.
3) DIMENSIONS SHOWN ARE TO CENTER OF MANHOLE, DUCT PACKAGE OR UTILITY.
4) MAINTAIN A STANDARD DEPTH OF 39-INCHES BETWEEN FINISHED GRADE AND TOP OF CONDUIT.
5) REMOVE ABANDONED CONDUIT FROM THE MANHOLE WALL AND BEYOND AS NEEDED. INSTALL THE PROPOSED CONDUIT INTO THE MANHOLE AT THE SAME LOCATION OF THE ABANDONED CONDUIT.

LEGEND

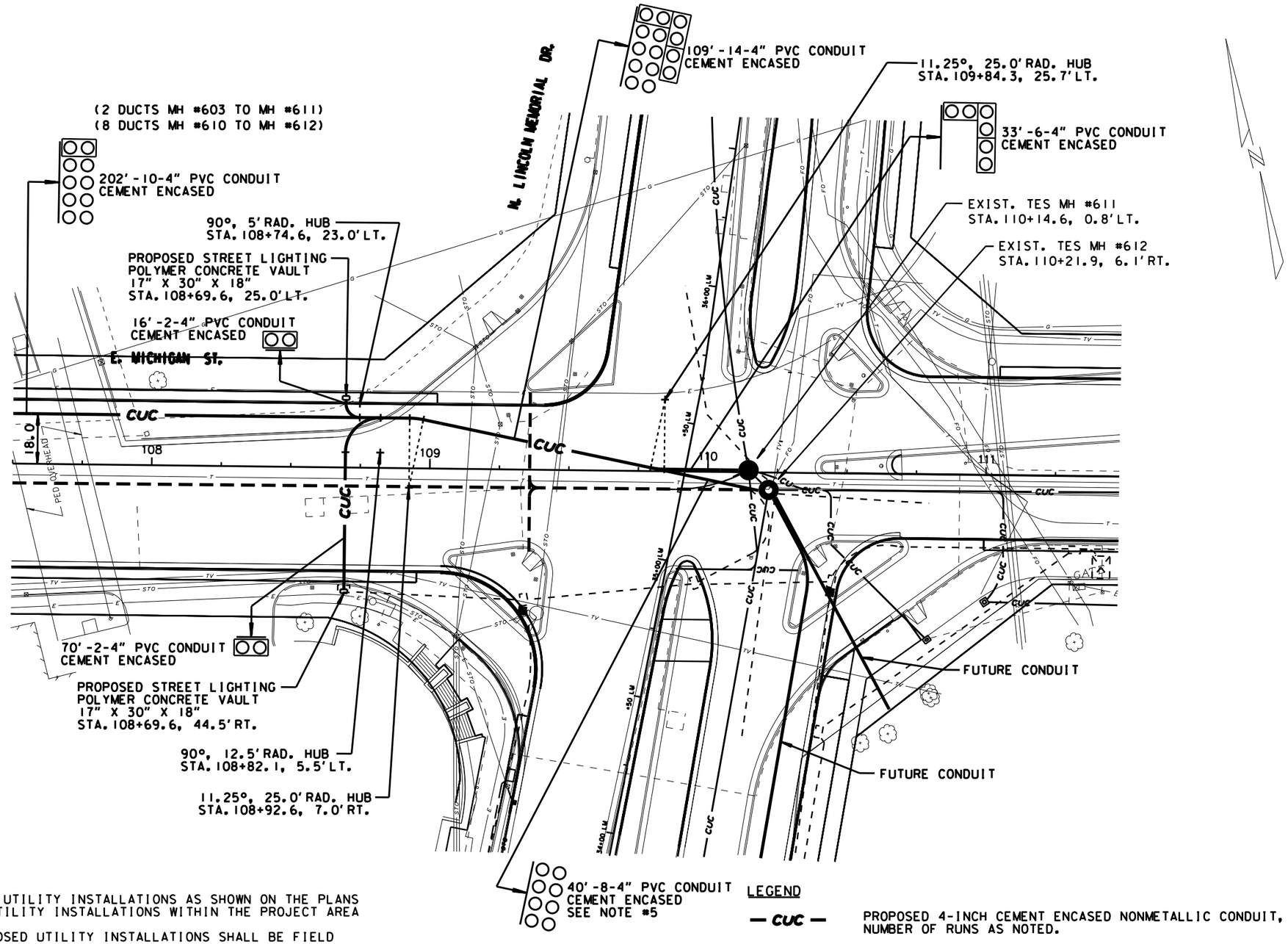
— CUC —	PROPOSED 4-INCH CEMENT ENCASED NONMETALLIC CONDUIT, NUMBER OF RUNS AS NOTED.
●	PROPOSED TES MANHOLE
— CUC —	EXISTING CONDUIT
— — —	ABANDONED CONDUIT

SHEET 5 OF 6

STATE PROJECT NUMBER	HWY:	COUNTY: MILWAUKEE	CITY UG CONDUIT (TES)	SCALE FEET	SHEET NO: 30A	E

PLOT DATE: 09-18-15

2



NOTES:

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2) THE LOCATION OF THE EXISTING AND PROPOSED UTILITY INSTALLATIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR.
3) DIMENSIONS SHOWN ARE TO CENTER OF MANHOLE, DUCT PACKAGE OR UTILITY.
4) MAINTAIN A STANDARD DEPTH OF 39-INCHES BETWEEN FINISHED GRADE AND TOP OF CONDUIT.
5) REMOVE ABANDONED CONDUIT FROM THE MANHOLE WALL AND BEYOND AS NEEDED. INSTALL THE PROPOSED CONDUIT INTO THE MANHOLE AT THE SAME LOCATION OF THE ABANDONED CONDUIT.

LEGEND

— CUC —	PROPOSED 4-INCH CEMENT ENCASED NONMETALLIC CONDUIT, NUMBER OF RUNS AS NOTED.
	PROPOSED TES MANHOLE
—— CUC ——	EXISTING CONDUIT
— — — —	ABANDONED CONDUIT

SHEET 6 OF 6

STATE PROJECT NUMBER 1301-13-71	HWY: LOCAL ROADS	COUNTY: MILWAUKEE	CITY UG CONDUIT (TES)	SCALE FEET	SHEET NO: 31A	E

PLOT DATE: 09-18-15

3

REMOVAL ITEMS

204.0100	REMOVING PAVEMENT	SY	**251**
204.0150	REMOVING CURB & GUTTER	LF	**280**
204.0155	REMOVING CONCRETE SIDEWALK	SY	**331**

EARTHWORK

205.0100	EXCAVATION COMMON	CY	**180**

BASE AGGREGATE ITEMS

211.0500	PREPARE FOUNDATION FOR BASE AGGREGATE	STA	**3**
213.0100	FINISHING ROADWAY	EACH	**1**
305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	**116**
305.0110	BASE AGGREGATE DENSE 1 1/4-INCH	TON	**53**

ROADWAY MISCELLANEOUS ITEMS

415.0080	CONCRETE PAVEMENT 8-INCH	SY	**138**
416.0180	CONCRETE DRIVEWAY 8-INCH	SY	**192**
601.0409	CONCRETE CURB & GUTTER 30-INCH TYPE A	LF	**78**
602.0515	CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA	SF	**8**
690.0250	SAWING CONCRETE	LF	**367**
SPV.0165.01	CONCRETE SIDEWALK 3-INCH COLORED GRAY	SF	**1,869**
SPV.0165.02	CONCRETE PAVEMENT 8-INCH COLORED RED	SF	**140**
SPV.0165.03	SAND-SET GRANITE PAVER	SF	**880**
SPV.0165.04	CONCRETE SIDEWALK BASE 5-INCH	SF	**2,635**
SPV.0165.05	CONCRETE SIDEWALK 8-INCH	SF	**1,305**

MOBILIZATION

619.1000	MOBILIZATION	LS	**1**

EROSION CONROL ITEMS

628.7010	INLET PROTECTION TYPE B	EACH	**4**

TRAFFIC CONTROL ITEMS

643.0100	TRAFFIC CONTROL	EACH	**1**
643.0300	TRAFFIC CONTROL DRUMS	DAY	**6,076**
643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	**1,258**
643.0715	TRAFFIC CONTROL WARNING LIGHTS TYPE C	DAY	**838**
643.0410	TRAFFIC CONTROL BARRICADES TYPE I	DAY	**834**
643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	**629**
643.0900	TRAFFIC CONTROL SIGNS	DAY	**1,445**

PAVEMENT MARKING ITEMS

646.0103	PAVEMENT MARKING PAINT 4-INCH	LF	**2,270**
646.0159	REMOVING PAVEMENT MARKINGS	LF	**4,095**
647.0553	PAVEMENT MARKING STOP LINE PAINT 12-INCH	LF	**140**
647.0766	PAVEMENT MARKINGS CROSSWALK PAINT 6-INCH	LF	**300**
649.0100	TEMPORARY PAVEMENT MARKING 4-INCH	LF	**4,555**

SURVEY

SPV.0105.02	SURVEY PROJECT	LS	**1**

LANDSCAPING EARTHWORK

SPV.0035.01	PLANTING SOIL MIX	CY	**32**
SPV.0105.03	IRRIGATION SYSTEM	LS	**1**
SPV.0180.01	SHREDDED HARDWOOD BARK MULCH 2"	SY	**32**

LANDSCAPE PLANTINGS

SPV.0060.09	TREE TAXODIUM DISTICHUM 'MICKELSON'	EACH	**3**
SPV.0060.10	ORNAMENTAL GRASS, CALAMAGROSTIS ACUTIFLORA 'KARL FOERSTER'	EACH	**6**
SPV.0060.11	ORNAMENTAL GRASS, CAREX FLACCA 'BLUE SEDGE'	EACH	**116**
SPV.0060.12	ORNAMENTAL GRASS, SPOROBOLUS HETEROLEPIS 'TARA'	EACH	**48**
SPV.0060.13	PERENNIALS, HEMEROCALLIS 'HAPPY RETURNS'	EACH	**21**
SPV.0060.14	PERENNIALS, HOSTA 'GOLDEN TIARA'	EACH	**43**
SPV.0060.15	PERENNIALS, SALVIA NEMOROSA 'WESUWE'	EACH	**22**
SPV.0060.16	BULB, ALLIUM 'PURPLE SENSATION'	EACH	**8**
SPV.0060.17	BULB, ALLIUM 'SUMMER BEAUTY'	EACH	**48**
SPV.0060.18	BULB, NARCISSUS 'ALL SPRING MIX'	EACH	**606**

CITY UTILITIES

204.0250	ABANDON MANHOLES	EACH	**3**
652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	**50**
652.0235	CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH	LF	**140**
652.0615	CONDUIT SPECIAL 3-INCH	LF	**150**
SPV.0060.19	STREET LIGHTING POLYMER CONCRETE VAULT 13-INCH X 24-INCH X 18-INCH	EACH	**2**
SPV.0060.20	STREET LIGHTING POLYMER CONCRETE VAULT 17-INCH X 30-INCH X 18-INCH	EACH	**3**
SPV.0060.21	4' DIAMETER MANHOLE TYPE TES	EACH	**1**
SPV.0060.22	5' DIAMETER MANHOLE TYPE TES	EACH	**1**
SPV.0060.23	CORED HOLE 5-INCH DIAMETER	EACH	**1**
SPV.0060.24	INSTALLING CONDUIT INTO EXISTING MANHOLE	EACH	**5**
SPV.0060.25	INSTALL TRAFFIC SIGNAL BASE	EACH	**3**
SPV.0090.01	14-DUCT CONDUIT CEMENT ENCASED 4-INCH RIGID NONMETALLIC CONDUIT DB-60	LF	**109**
SPV.0090.02	10-DUCT CONDUIT CEMENT ENCASED 4-INCH RIGID NONMETALLIC CONDUIT DB-60	LF	**463**
SPV.0090.03	8-DUCT CONDUIT CEMENT ENCASED 4-INCH RIGID NONMETALLIC CONDUIT DB-60	LF	**524**
SPV.0090.04	6-DUCT CONDUIT CEMENT ENCASED 4-INCH RIGID NONMETALLIC CONDUIT DB-60	LF	**101**
SPV.0090.05	4-DUCT CONDUIT CEMENT ENCASED 4-INCH RIGID NONMETALLIC CONDUIT DB-60	LF	**28**
SPV.0090.06	3-DUCT CONDUIT CEMENT ENCASED 4-INCH RIGID NONMETALLIC CONDUIT DB-60	LF	**38**
SPV.0090.07	2-DUCT CONDUIT CEMENT ENCASED 4-INCH RIGID NONMETALLIC CONDUIT DB-60	LF	**352**
SPV.0090.08	1-DUCT CONDUIT CEMENT ENCASED 4-INCH RIGID NONMETALLIC CONDUIT DB-60	LF	**59**

SURFACE TREATMENTS

SPV.0060.01	PRECAST CONCRETE PLANTER CURB, UNIT 1	EACH	**4**
SPV.0060.02	PRECAST CONCRETE PLANTER CURB, UNIT 2	EACH	**20**
SPV.0060.03	PRECAST CONCRETE PLANTER CURB, UNIT 3	EACH	**4**
SPV.0060.04	PRECAST CONCRETE PLANTER CURB, UNIT 4	EACH	**2**
SPV.0060.05	PRECAST CONCRETE PLANTER CURB, UNIT 5	EACH	**2**

SITE FURNITURE

SPV.0060.06	BENCH - CUSTOM	EACH	**2**
SPV.0060.07	BIKE RACK	EACH	**5**
SPV.0060.08	LITTER RECEPTACLE	EACH	**1**

BOLLARDS

SPV.0060.26	SIDEWALK BOLLARD TYPE B 36-INCH	EACH	**8**

BOLLARDS-ALTERNATE BID

SPV.0105.01	SIDEWALK BOLLARD TYPE A 36-INCH (DS-22 DESIGN)	LS	**1**

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