



CITY OF ANN ARBOR PUBLIC WORKS

STREET LIGHTING REPLACEMENT - KERRYTOWN MARKET AND LIBERTY STREET

ITB No. 4494

NOTES:

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 53, THE CONTRACTOR SHALL CALL 811 OR 1-800-482-7171 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS, PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

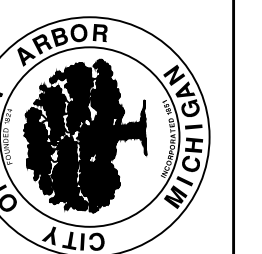
THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS, TELEPHONE, ELECTRICAL POWER, CABLE TV AND FIBER OPTIC LINES ARE APPROXIMATE. THE CITY OF ANN ARBOR, THE UNIVERSITY OF MICHIGAN, AND FTCH ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.

THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE 1994 EDITION OF THE CITY OF ANN ARBOR PUBLIC SERVICES DEPARTMENT STANDARD SPECIFICATIONS, ITS DETAILS, WHICH ARE INCLUDED BY REFERENCE, 2012 MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION, AND THIS PROJECT'S CONTRACT DOCUMENTS. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT.



REV.	DATE	DRAWN	CHECKED	DESCRIPTION
1.	04-07-2017	SRT / JANI	JANI	ISSUED FOR BID

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48107-8647
734-794-6410
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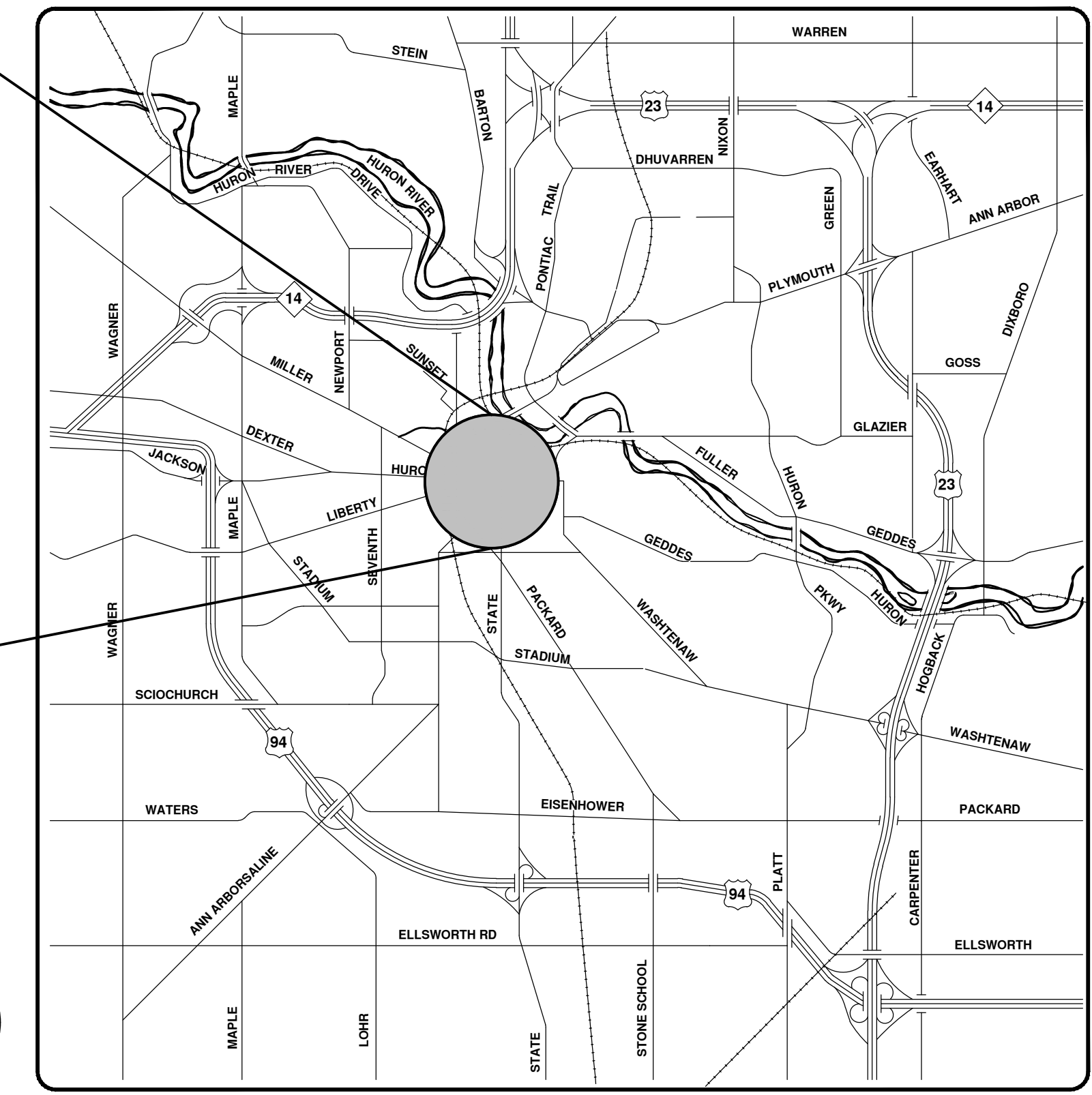
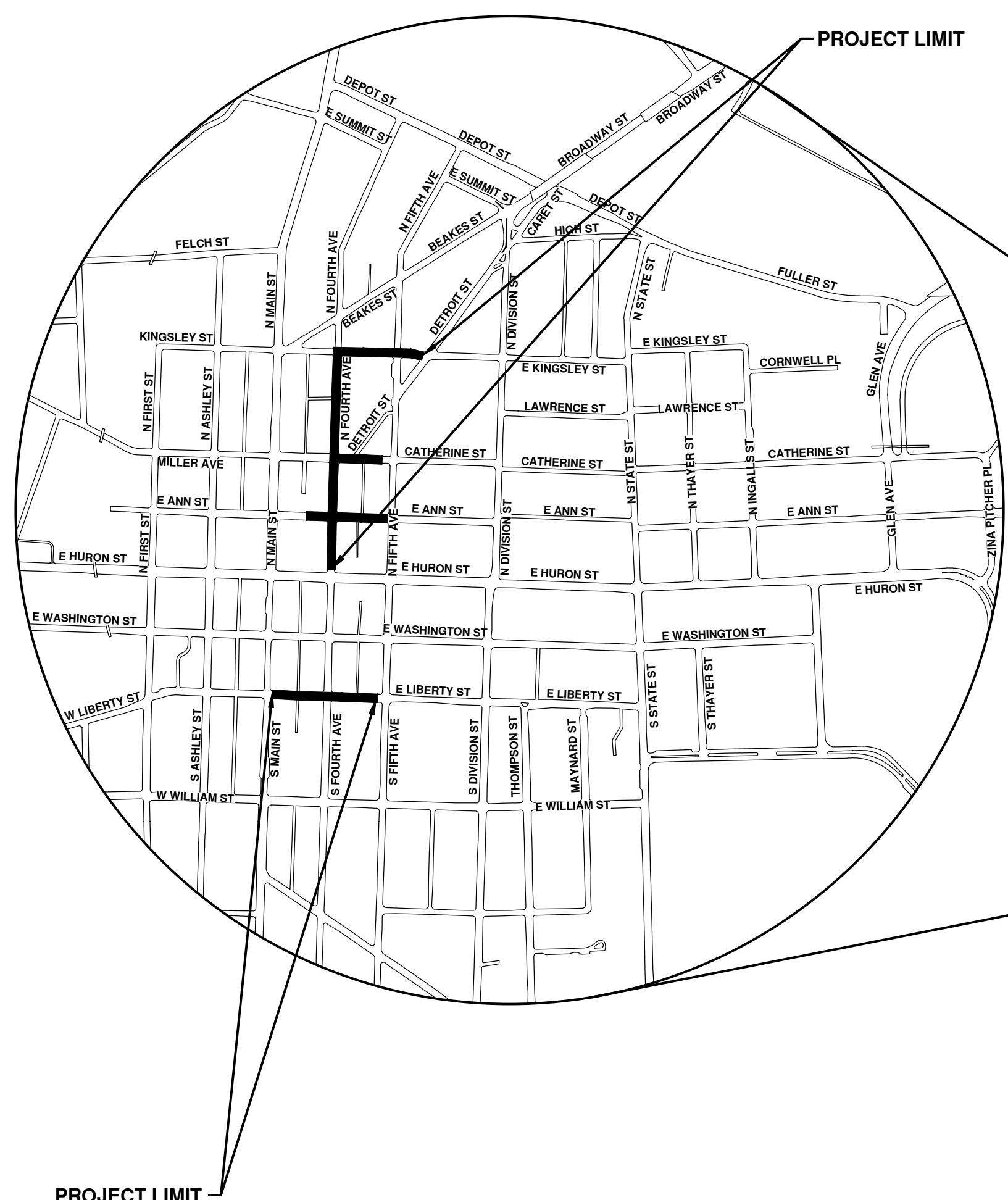
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
STREET LIGHTING REPLACEMENT -
KERRYTOWN MARKET AND LIBERTY STREETS
COVER SHEET

ENGINEER'S SEAL
CHRIS ELENBAAS, P.E. - MI LICENSE No. 56730
PUBLIC WORKS ENGINEER
04/07/2017
DATE

ENGINEER'S SEAL
JAMES A. MILOCH, P.E., LEED AP - MI LICENSE No. 42092
FTCH PROJECT MANAGER
04/07/2017
DATE

SCALE PLAN:
DRAWING No.
2017-026-G1

SHEET No.
1 OF 30



SHEET LIST TABLE		SHEET LIST TABLE	
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4	DETAIL SHEET 2	20	E LIBERTY ST, ELECTRIC DEMOLITION AND NEW WORK PLAN
5	E LIBERTY ST, REMOVAL AND CONSTRUCTION PLAN	21	S FOURTH AVE, ELECTRIC DEMOLITION AND NEW WORK PLAN
6	E LIBERTY ST, REMOVAL AND CONSTRUCTION PLAN	22	N FOURTH AVE, ELECTRIC DEMOLITION AND NEW WORK PLAN
7	S FOURTH AVE, REMOVAL AND CONSTRUCTION PLAN	23	N FOURTH AVE, ELECTRIC DEMOLITION AND NEW WORK PLAN
8	N FOURTH AVE, REMOVAL AND CONSTRUCTION PLAN	24	N FOURTH AVE, ELECTRIC DEMOLITION AND NEW WORK PLAN
9	N FOURTH AVE, REMOVAL AND CONSTRUCTION PLAN	25	N FOURTH AVE, ELECTRIC DEMOLITION AND NEW WORK PLAN
10	N FOURTH AVE, REMOVAL AND CONSTRUCTION PLAN	26	E ANN ST, ELECTRIC DEMOLITION AND NEW WORK PLAN
11	N FOURTH AVE, REMOVAL AND CONSTRUCTION PLAN	27	E ANN ST, ELECTRIC DEMOLITION AND NEW WORK PLAN
12	E ANN ST, REMOVAL AND CONSTRUCTION PLAN	28	CATHERINE ST, ELECTRIC DEMOLITION AND NEW WORK PLAN
13	E ANN ST, REMOVAL AND CONSTRUCTION PLAN	29	E KINGSLEY ST, ELECTRIC DEMOLITION AND NEW WORK PLAN
14	CATHERINE ST, REMOVAL AND CONSTRUCTION PLAN	30	E KINGSLEY ST, ELECTRIC DEMOLITION AND NEW WORK PLAN
15	E KINGSLEY ST, REMOVAL AND CONSTRUCTION PLAN		

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CONSTRUCTION NOTES

- ALL WORK SHALL CONFORM TO THE LATEST REVISIONS OF THE CITY OF ANN ARBOR STANDARD SPECIFICATIONS AND THE MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) 2012 STANDARD SPECIFICATIONS FOR CONSTRUCTION AS APPLICABLE.
- DRIVEWAYS AND ENTRANCES TO BUILDINGS, REAL PROPERTY, AND THE LIKE SHALL NOT BE BLOCKED EXCEPT FOR SHORT DURATIONS AND ONLY WHEN APPROVED BY THE ENGINEER. VEHICULAR AND PEDESTRIAN ACCESS SHALL BE MAINTAINED AT ALL TIMES.
- LOCATION AND DEPTH OF EXISTING UTILITIES AND SERVICE LEADS AS DEPICTED ON THE PLANS ARE APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AND ARE TO BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO PERFORMING THE WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXCAVATE AHEAD AND DETERMINE THE PRECISE HORIZONTAL AND VERTICAL LOCATION OF THESE UTILITIES. THE CONTRACTOR SHALL REPORT IN WRITING ANY CONFLICTS SO THAT THE ENGINEER MAY DETERMINE AN APPROPRIATE COURSE OF ACTION. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE RELATED CONTRACT ITEMS OF WORK. ANY DAMAGE TO UTILITIES IS THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AS NECESSARY.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ANY DELAYS, DAMAGES, COSTS AND/OR CHARGES INCURRED DUE TO AND/OR BY REASON OF ANY UTILITY, STRUCTURE, FEATURES AND/OR SITE CONDITION, WHETHER SHOWN ON THE PLANS OR NOT. THE CONTRACTOR SHALL REPAIR AND/OR REPLACE, AT ITS SOLE EXPENSE, TO AS GOOD OR BETTER CONDITION, ANY AND ALL UTILITIES, STRUCTURES, FEATURES AND/OR SITE CONDITIONS WHICH ARE IMPACTED BY REASON OF THE WORK, OR INJURED BY ITS OPERATIONS, OR DURING THE OPERATIONS OF ITS SUBCONTRACTORS OR SUPPLIERS.
- NO EXTRA PAYMENTS OR ADJUSTMENTS TO UNIT PRICES WILL BE MADE FOR DAMAGES, DELAYS, COSTS AND/OR CHARGES DUE TO EXISTING UTILITIES, STRUCTURES, FEATURES AND/OR SITE CONDITIONS NOT SHOWN OR BEING INCORRECTLY SHOWN OR REPRESENTED ON THE PLANS.
- DURING NON-WORKING HOURS ANY OPEN TRENCH, EXCAVATION SHALL BE PROPERLY SECURED WITH PROTECTIVE FENCING AND TEMPORARY COVER. TEMPORARY COVER(S) OVER SANITARY CHAMBERS SHALL BE CAPABLE OF WITHSTANDING THE WEIGHT OF A HUMAN. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE ITEM OF WORK "GENERAL CONDITIONS".
- SIGNIFICANT TREES EXIST IN ALL AREAS WITHIN THE PROJECT LIMITS. ALL TREES SHALL BE PRESERVED AND PROTECTED AS SHOWN ON THE DRAWINGS AND AS INDICATED IN THE SPECIFICATIONS, UNLESS OTHERWISE SHOWN FOR REMOVAL.
- THE CONTRACTOR SHALL BACKFILL TRENCHES OR EXCAVATIONS IN ACCORDANCE WITH TRENCH DETAIL(S) SPECIFIED ON PLANS. THIS WORK WILL NOT BE CONSIDERED ADDITIONAL AND SHALL BE INCLUDED IN THE APPROPRIATE ITEM OF WORK.
- THE CONTRACTOR SHALL MAINTAIN ALL VEHICLE AND PEDESTRIAN ACCESS THROUGHOUT THE COURSE OF CONSTRUCTION.
- ALL CASTINGS AND FITTINGS REMOVED DURING CONSTRUCTION ARE THE PROPERTY OF THE CITY OF ANN ARBOR. THE CONTRACTOR, WITHIN 48 HOURS, SHALL DELIVER THEM TO THE CITY OF ANN ARBOR W.R. WHEELER SERVICE CENTER LOCATED AT 4251 STONE SCHOOL ROAD. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE RELATED ITEMS OF WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTINUOUS MAINTENANCE OF THE TEMPORARY TRAFFIC CONTROL DEVICES AND SOIL EROSION CONTROL MEASURES WITHIN THE CONSTRUCTION AREA AND APPROACHES TO PROJECT SITE, UNTIL THE FINAL COMPLETION OF THE PROJECT. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE RELATED ITEMS OF WORK.
- THE LOCATION OF MATERIAL STOCK PILES AND ON-SITE STAGING AREAS TO BE APPROVED BY THE ENGINEER. ANY MATERIALS STOCKPILED OR STORED SHALL NOT CREATE AN EROSION PROBLEM, INTERFERE WITH DRAINAGE, OR CREATE INSUFFICIENT SIGHT DISTANCE.
- EXISTING STREET NAME, GUIDE, REGULATORY SIGNS, MAILBOXES, BIKE HOOPS, ETC., WHICH CONFLICT WITH THE PROPOSED CONSTRUCTION SHALL BE REMOVED PRIOR TO CONSTRUCTION, STORED IN A MANNER WHICH WILL PREVENT DAMAGE, AND RE-SET IN LOCATIONS AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE ITEM OF WORK "GENERAL CONDITIONS."

DESCRIPTION OF SITE AND EXPECTED BEHAVIOR:

STREET LIGHT REPLACEMENT WORK STRETCHES FROM LIBERTY ST TO KERRYTOWN MARKET. THE FOLLOWING STREETS ARE INCLUDED IN THE PROJECT: E LIBERTY ST, S FOURTH AVE, N FOURTH AVE, E ANN ST, CATHERINE ST AND E KINGSLEY ST. SOME OF THE EXISTING LIGHT POLES ARE PLACED ON A RECTANGULAR FOUNDATION AND SOME ARE PLACED ON A CIRCULAR FOUNDATION; ALL NEW FOUNDATIONS ARE CYLINDRICAL. THE AREA AROUND THE LIGHT POLES ARE MIX OF GRASS, BRICK, AND CONCRETE.

THE CONTRACTOR IS EXPECTED TO WORK IN A HARMONIOUS MANNER WITH THE CITY OF ANN ARBOR AND THE PUBLIC IN GENERAL.

MAINTENANCE OF TRAFFIC

- ALL MOT DEVICES SHALL CONFIRM TO MMUTCD
- CONTRACTOR TO USE SHOULDER CLOSURE AND PARKING LANE CLOSURES TO PERFORM WORK, PAID FOR AS PART OF TEMPORARY TRAFFIC CONTROL (LSUM).
- ALL FLAGGING OPERATIONS SHALL BE PAID FOR AS PART OF TEMPORARY TRAFFIC CONTROL (LSUM).
- CONTRACTOR SHALL COORDINATE WITH THE CITY OF ANN ARBOR AND REPUBLIC PARKING SYSTEM (734-761-7235) ABOUT WORK IN THE AREA.

BENCHMARKS

- BENCHMARK A** ELEVATION: 852.93
ARROW ON HYDRANT, NORTHWEST CORNER OF LIBERTY STREET AND FIFTH AVENUE
- BENCHMARK B** ELEVATION: 846.55
ARROW ON HYDRANT, SOUTHWEST CORNER OF LIBERTY AND FOURTH STREETS
- BENCHMARK C** ELEVATION: 841.21
PAINTED SQUARE ON SOUTH SIDE OF CONCRETE BASE FOR STRAIN POLE, NORTHEAST CORNER OF LIBERTY AND MAIN STREETS
- BENCHMARK D** ELEVATION: 835.73
SSE FLANGE BOLTON HYDRANT, SOUTHWEST CORNER OF ANN STREET AND FOURTH AVENUE
- BENCHMARK E** ELEVATION: 827.13
EAST FLANGE BOLT ON HYDRANT, AT 303 DETROIT STREET, EAST SIDE OF FOURTH AVENUE, 100 FEET NORTH OF CATHERINE STREET
- BENCHMARK F** ELEVATION: 820.47
MAP SPIKE IN SOUTH SIDE OF UTILITY POLE, NORTHEAST CORNER OF FOURTH AVENUE AND KINGSLEY STREET
- BENCHMARK G** ELEVATION: 823.29
COTTON SPINDLE IN SOUTH SIDE OF UTILITY POLE, SOUTHEAST CORNER OF KINGSLEY STREET AND FIFTH AVENUE
- BENCHMARK H** ELEVATION: 835.92
NORTHWEST BOLT ON METAL LIGHT POLE/STRAIN POLE, NORTHEAST CORNER OF FIFTH AVENUE AND CATHERINE STREET

MISCELLANEOUS QUANTITIES

THE FOLLOWING ITEMS OF WORK SHALL BE DONE AS THEY APPLY THROUGHOUT THE PROJECT. THESE ITEMS ARE NOT DETAILED OR INCLUDED ON THE PLAN AND PROFILE SHEETS.

1	LSUM	GENERAL CONDITIONS, MAX \$50,000
1	LSUM	AUDIO VISUAL TAPE COVERAGE
1	LSUM	PROJECT SUPERVISION, MAX \$10,000
1	LSUM	NO PARKING SIGN
1	LSUM	TEMPORARY TRAFFIC CONTROL

PERMITS REQUIRED TO BE OBTAINED BY THE CONTRACTOR PRIOR TO THE BEGINNING OF CONSTRUCTION.

PERMIT	ISSUING AUTHORITY
LANE CLOSURE PERMIT*	CITY OF ANN ARBOR PROJECT MANAGEMENT UNIT
GRADING/SOIL EROSION & SEDIMENTATION CONTROL PERMIT*	CITY OF ANN ARBOR CUSTOMER SERVICE
RIGHT-OF-WAY PERMIT*	CITY OF ANN ARBOR CUSTOMER SERVICE
* NO COST TO CONTRACTOR	

CONTACT INFORMATION

PUBLIC UTILITIES	OWNER	CONTACT
WATER	CITY OF ANN ARBOR FIELD OPERATIONS SERVICE UNIT W.R. WHEELER SERVICE CENTER 4251 STONE SCHOOL ROAD ANN ARBOR, MI 48108	DAN WOODEN (734) 794-6350
SANITARY		PAT MAINO (734) 794-6350
STORM		PAT MAINO (734) 794-6350
FORESTRY		MATT WALDSMITH (734) 794-6350
SIGNS SIGNALS STREET LIGHTS		CHUCK FOJTIK (734) 794-6361
PRIVATE UTILITIES	OWNER	CONTACT
GAS	DTE ENERGY 3150 E. MICHIGAN AVE, YPSILANTI TOWNSHIP, MI 48198	ROBERT CZAPIEWSKI (734) 544-7818
ELECTRIC	DTE ENERGY WESTERN WAYNE SERVICE CENTER 8001 HAGGERTY ROAD BELLEVILLE, MI 48111	CLAY COMBEE (734) 397-4112
CABLE	COMCAST 27800 FRANKLIN ROAD SOUTHFIELD, MI 48034	RON SUTHERLAND (313) 999-8300
PHONE	AT&T 550 S. MAPLE ROAD ANN ARBOR, MI 48103	(734) 996-2135
FIBER OPTIC	MCI 2800 N. GLENFILLE ROAD RICHARDSON, TX 75082	DEAN BOYERS (972) 729-6016



DATE	DRAWN	CHECKED
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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
STREET LIGHTING REPLACEMENT - KERRYTOWN MARKET AND LIBERTY STREETS
NOTES, LEGEND AND CONTACTS

SCALE PLAN:
DRAWING No.
2017-026-N1

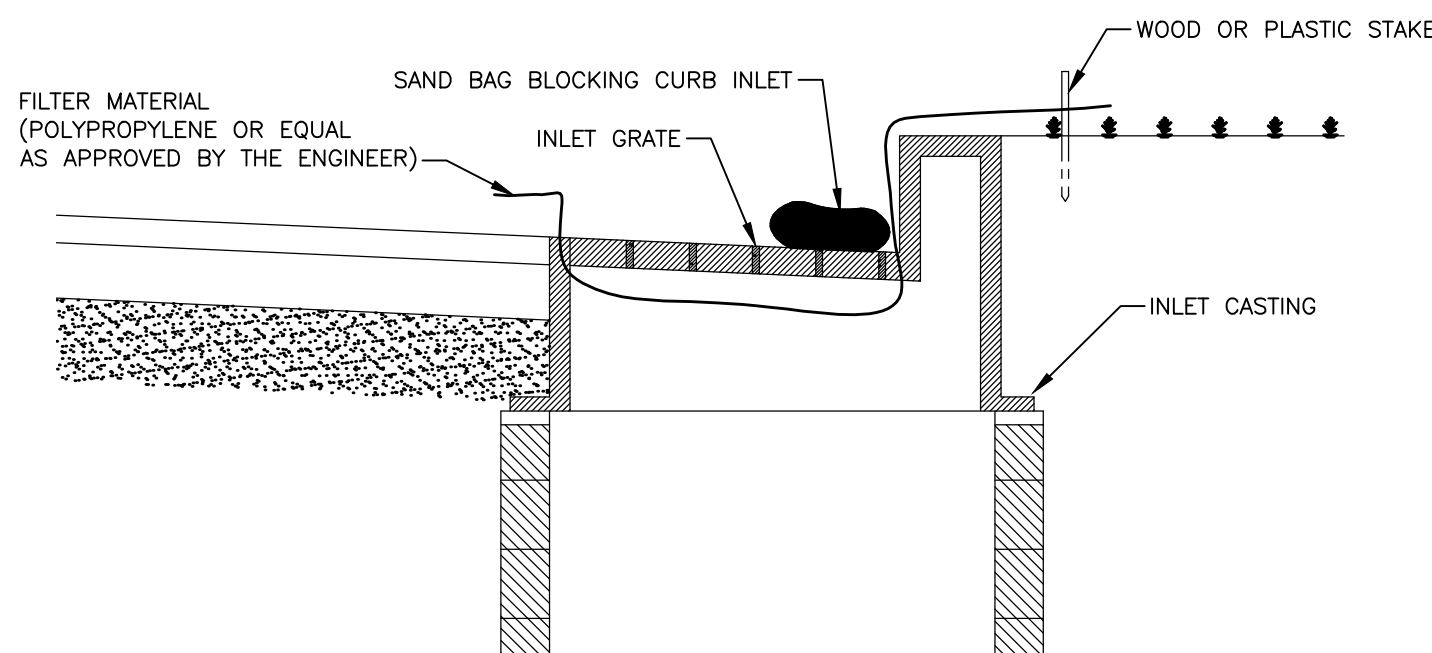
MDEQ SOIL EROSION AND SEDIMENTATION CONTROL MEASURES

KEY	DETAIL	CHARACTERISTICS
56		Manufactured filter bag inserted under casting. Collects sediment at catch basin inlet.



SOIL EROSION CONTROL NOTES

- ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE CITY OF ANN ARBOR REQUIREMENTS AND PROJECT SPECIFICATIONS. TO BE PAID FOR AS "GENERAL CONDITIONS".
- CONTRACTOR SHALL INSERT FILTER BAG ON AN INLET THAT IS ALONG THE FLOW OF DRAINAGE IN THE VICINITY OF THE WORK AREA.
- ANY EROSION OR SEDIMENT FROM WORK ON THIS SITE SHALL BE CONTAINED ON THE SITE AND NOT ALLOWED TO COLLECT ON ANY INLETS IN THE VICINITY OF THE WORK AREA.
- CONTRACTOR SHALL APPLY TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES AS REQUIRED AND AS DIRECTED ON THESE PLANS. CONTRACTOR SHALL REMOVE TEMPORARY MEASURES AS SOON AS WORK IN THE AREA IS COMPLETED.



INLET FILTER DETAIL

NO SCALE

NOTE:

- PAID FOR AS PART OF "GENERAL CONDITIONS".
- REFERENCE, ANN ARBOR CITY DETAIL "SD-EC-1".

TOPOGRAPHY -- PLAN

	SHRUBS		PROPOSED FENCE (PROTECTIVE, SAFETY, CONSTRUCTION)
	CONIFEROUS TREE		GRAVEL SURFACE
	DECIDUOUS TREE		PAVED SURFACE
	HEDGE EDGE OF WOODS		EXISTING CURB & GUTTER
	WETLANDS		PROPOSED CURB & GUTTER
	EXISTING DITCH		CONCRETE MONUMENT
	PROPOSED DITCH		PROPERTY IRON
	EDGE OF WATER		SET PROPERTY IRON
	LIGHT		LOT LINE (AS PLATTED)
	GUY ANCHOR		PROPERTY HOOK (COMMON PROPERTY OWNERSHIP)
	UTILITY POLE		TITLE LINE / PROPERTY LINE
	SIGN		ROW LINE
	GUARD RAIL		SECTION LINE
	EXISTING FENCE		BENCH MARK
	SILT FENCE		SECTION CORNER
	REGULATORY FLOODWAY		CENTER OF SECTION
	100-YEAR FLOODWAY		QUARTER CORNER
	CLEARING LIMITS		SOIL TYPE BOUNDARY

EXISTING UTILITIES

	8" SAN.		SANITARY SEWER & MANHOLE
	12" STM.		STORM SEWER & MANHOLE
			CATCH BASIN CURB TYPE
			CATCH BASIN LAWN TYPE
			TELEPHONE PEDESTAL
			PIPE-ONLY CULVERT
			FLARED END SECTION CULVERT
			HEADWALL CULVERT

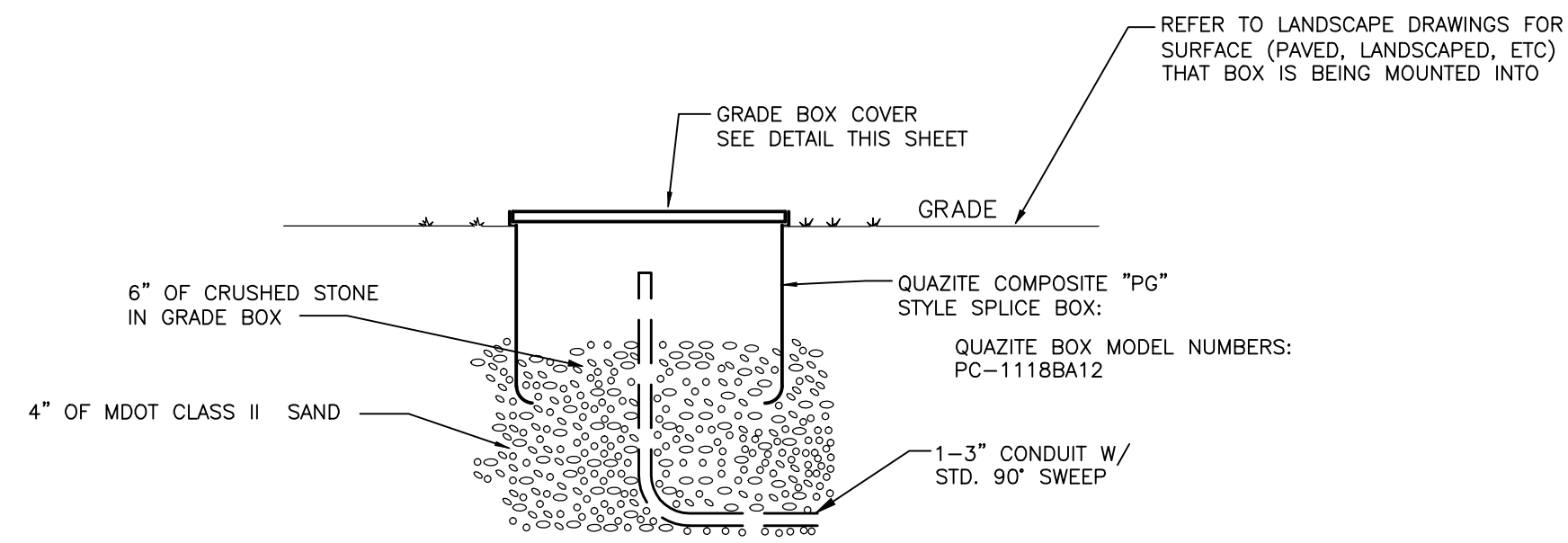
PROPOSED UTILITIES

	8" SAN.		SANITARY SEWER & MANHOLE
			STANDARD SEWER CLEANOUT
	832.56		MAX. ELEVATION OF LOT LEAD AT PROPERTY LINE
	12" STM.		STORM SEWER & MANHOLE
			CATCH BASIN
			PLUG
	12" CSP		PIPE-ONLY CULVERT
	12" CSP		FLARED END SECTION CULVERT
	12" CSP		HEADWALL CULVERT
			LATERAL BYPASS PUMP DISCHARGE CASING PIPE
			AGGREGATE COVER

MISCELLANEOUS

	EASEMENT CENTERLINE
	EASEMENT LINE
	SURVEY LINE STATIONING
	TRAVERSE POINT
	SOIL BORING LOCATION
	855.00 PROPOSED PAVEMENT/GUTTER ELEVATION
	PROPOSED PAVEMENT MARKING (PAINTING)
	PROPOSED BARRIER FREE PARKING
	SILT FENCE

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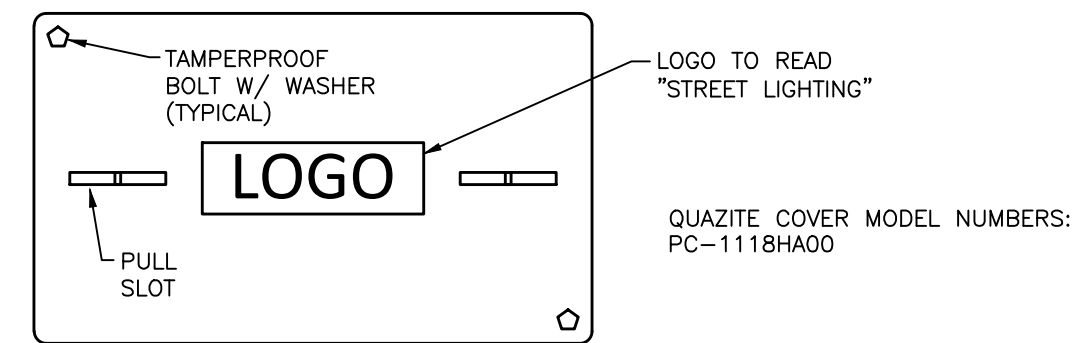
SLOT BOX FOR CONDUIT ENTRY

TYPICAL FLUSH GRADE BOX (HAND HOLE) DETAIL

NO SCALE

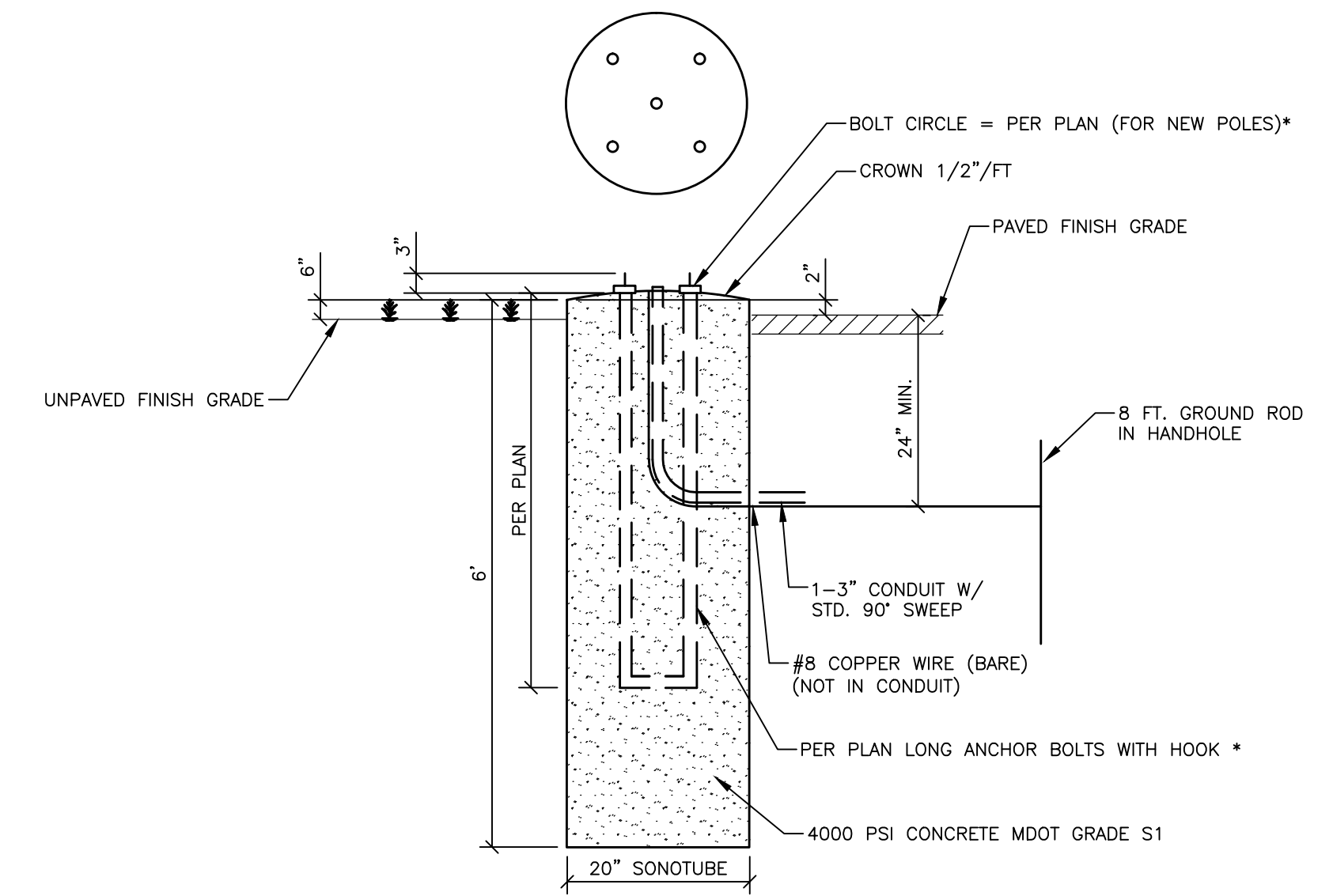
NOTES:

1. GRADE BOXES TO BE USED FOR PULL POINTS, SPLICES, CONDUIT NODES, ETC.
2. NEW HANDHOLES ARE PAID FOR AS "HANDHOLE". ADJUSTMENTS TO GRADE ARE INCLUDED IN THE WORK FOR "HANDHOLE".
3. EXISTING HANDHOLES THAT REQUIRE ADJUSTMENT SHALL BE PAID FOR AS "ADJUST".
4. REFER TO ELECTRICAL DRAWINGS FOR CONDUIT AND WIRING REQUIREMENTS.



TYPICAL FLUSH GRADE BOX (HAND HOLE) COVER DETAIL

NO SCALE



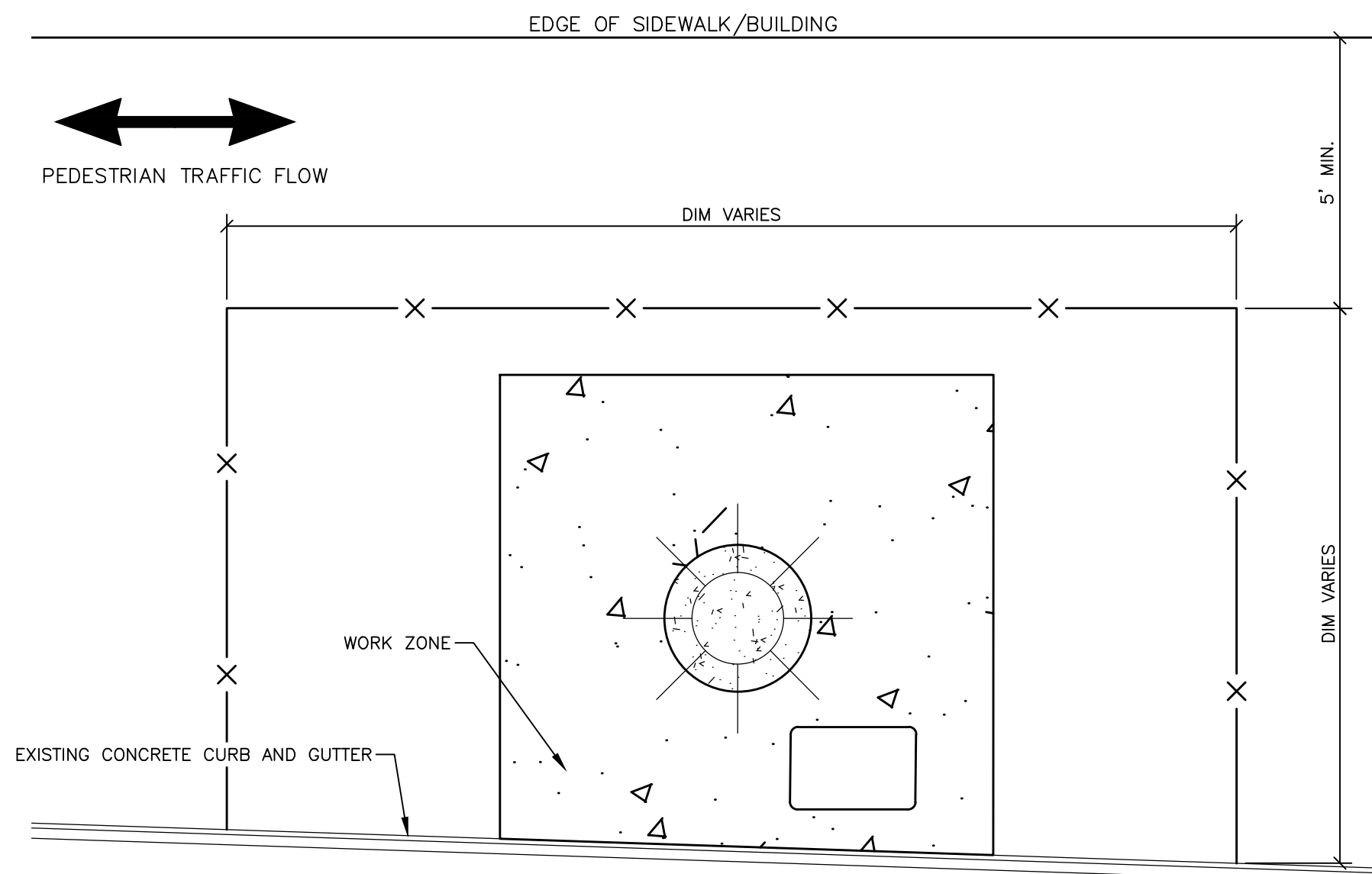
TYPICAL CONCRETE BASE DETAIL

NO SCALE

NOTE:

1. HOLE TO BE AUGERED. MINIMIZE DISTURBANCE OF IN-SITU SOILS DURING AUGERING.
2. CONTRACTOR TO PROVIDE PREFABRICATED ANCHOR BOLT BUILD-UP.
3. THE CITY WILL INSPECT THE AUGERED HOLE AND THE ANCHOR BOLT BUILD-UP AND PROVIDE WRITTEN APPROVAL PRIOR TO THE PLACEMENT OF CONCRETE.
4. NO WATER IS TO BE IN HOLE AT TIME OF CONCRETE PLACEMENT.
5. CONCRETE SHALL BE VIBRATED DURING PLACEMENT.
6. CONTRACTOR WILL PROVIDE NECESSARY CONDUIT FOR ENTRY. PAID FOR AT THE CONTRACT UNIT PRICE FOR 2" CONDUIT.
7. COPPER CLAD GROUND ROD (1 REQUIRED) TO BE 5/8" DIA. x 8'-0". LOCATE IN HANDHOLE.
8. CONDUIT TO EXTEND 1-2" ABOVE BASE. CABLES TO EXTEND 6" OUTSIDE OF HANDHOLE.
9. SHIMS TO BE 1/2" MIN., PER D.E. SPEC.
10. GROUND CABLE SHALL BE #6 SOFT BARE COPPER WIRE WELDED TO GROUND ROD WITH 24" SLACK ABOVE FOUNDATION TOP. THE NEUTRAL AT THE POLE IS TO BE CONNECTED TO THIS GROUND CABLE.
11. ELECTRICAL CONTRACTOR SHALL VERIFY EXACT ANCHOR BOLT PATTERN WITH FIXTURE/POLE MANUFACTURER PRIOR TO POURING CONCRETE BASE. ARRANGE ANCHOR BOLTS AS REQUIRED FOR PROPER ORIENTATION OF RECEPTACLE AND BANNER ARMS.
12. PAID FOR AS "POLE FOUNDATIONS".
13. REFERENCE, ANN ARBOR CITY DETAIL "SD-SL-1".

* UNLESS OTHERWISE NOTED ON THE PLANS OR CONTRACT DOCUMENTS.

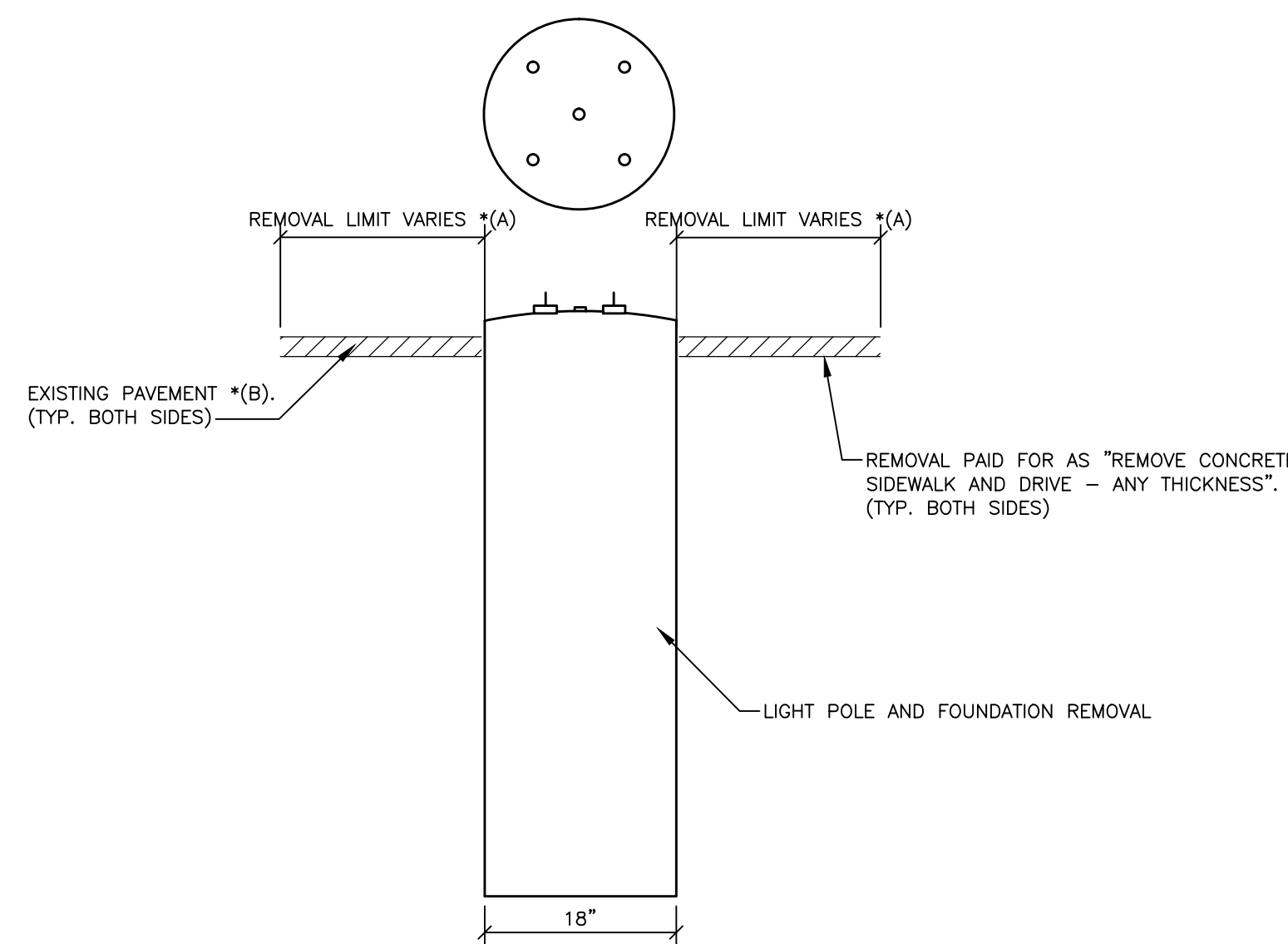


TEMPORARY CONSTRUCTION FENCING

NO SCALE

NOTE:

1. CONTRACTOR SHALL PROTECT WORK ZONE FROM PEDESTRIANS USING 6' TALL CHAIN LINK TEMPORARY CONSTRUCTION FENCE.
2. CONTRACTOR SHALL MAINTAIN PEDESTRIAN TRAFFIC ALL TIMES.
3. FENCE WORK ZONE LIMITS ARE TO BE APPROVED BY THE ENGINEER.
4. PAID FOR AS PART OF "TEMPORARY TRAFFIC CONTROL".

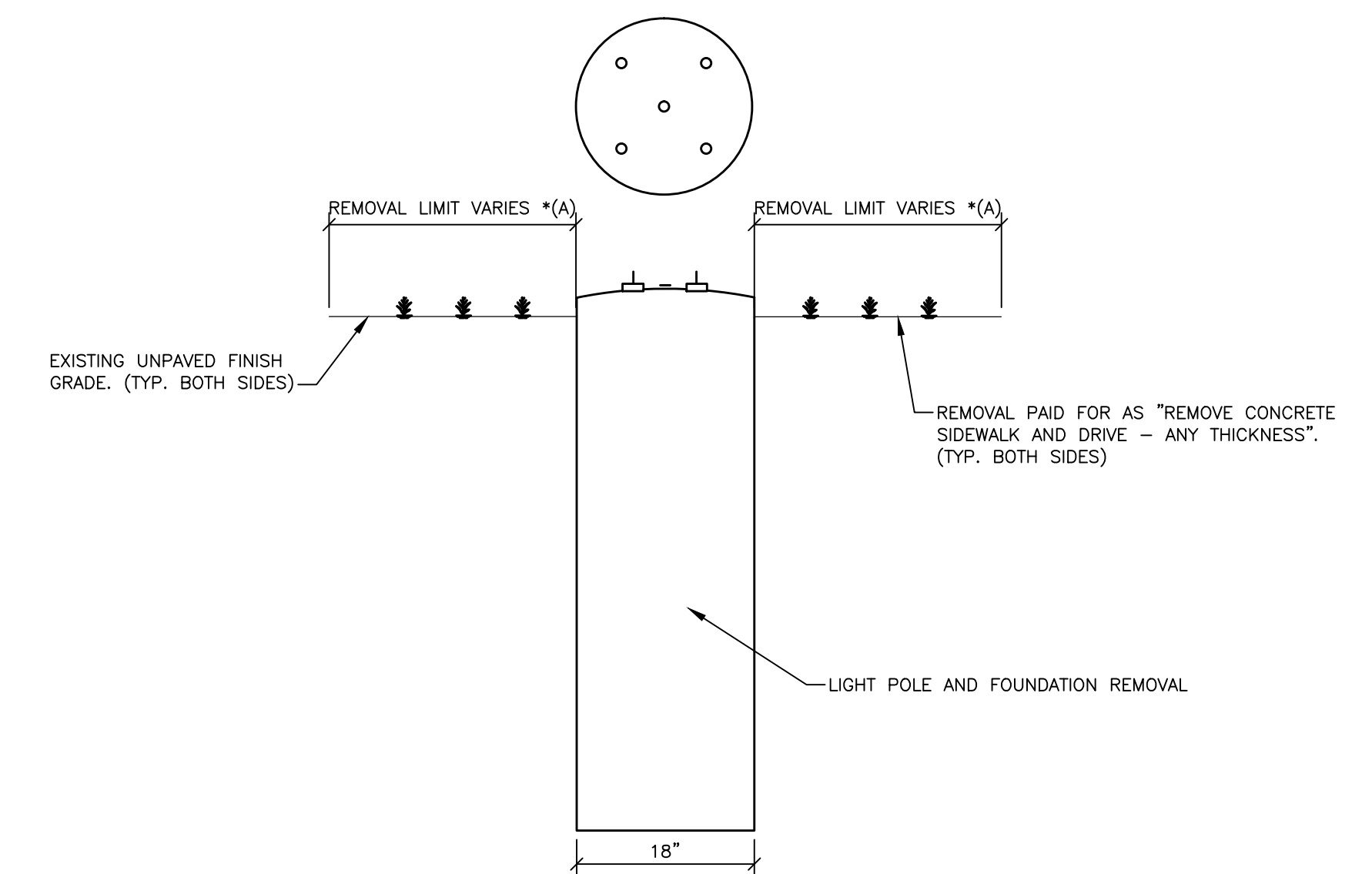


1 EXISTING DETAIL

NO SCALE

***NOTE:**

- A. SEE PLAN SHEET
- B. REMOVE, SALVAGE AND PROTECT ALL PAVERS/BRICKS



2 EXISTING DETAIL

NO SCALE

***NOTE:**

- A. SEE PLAN SHEET



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1.	04-07-2017	ISSUED FOR BID
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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
STREET LIGHTING REPLACEMENT -
KERRYTOWN MARKET AND LIBERTY STREETS
DETAIL SHEET 1

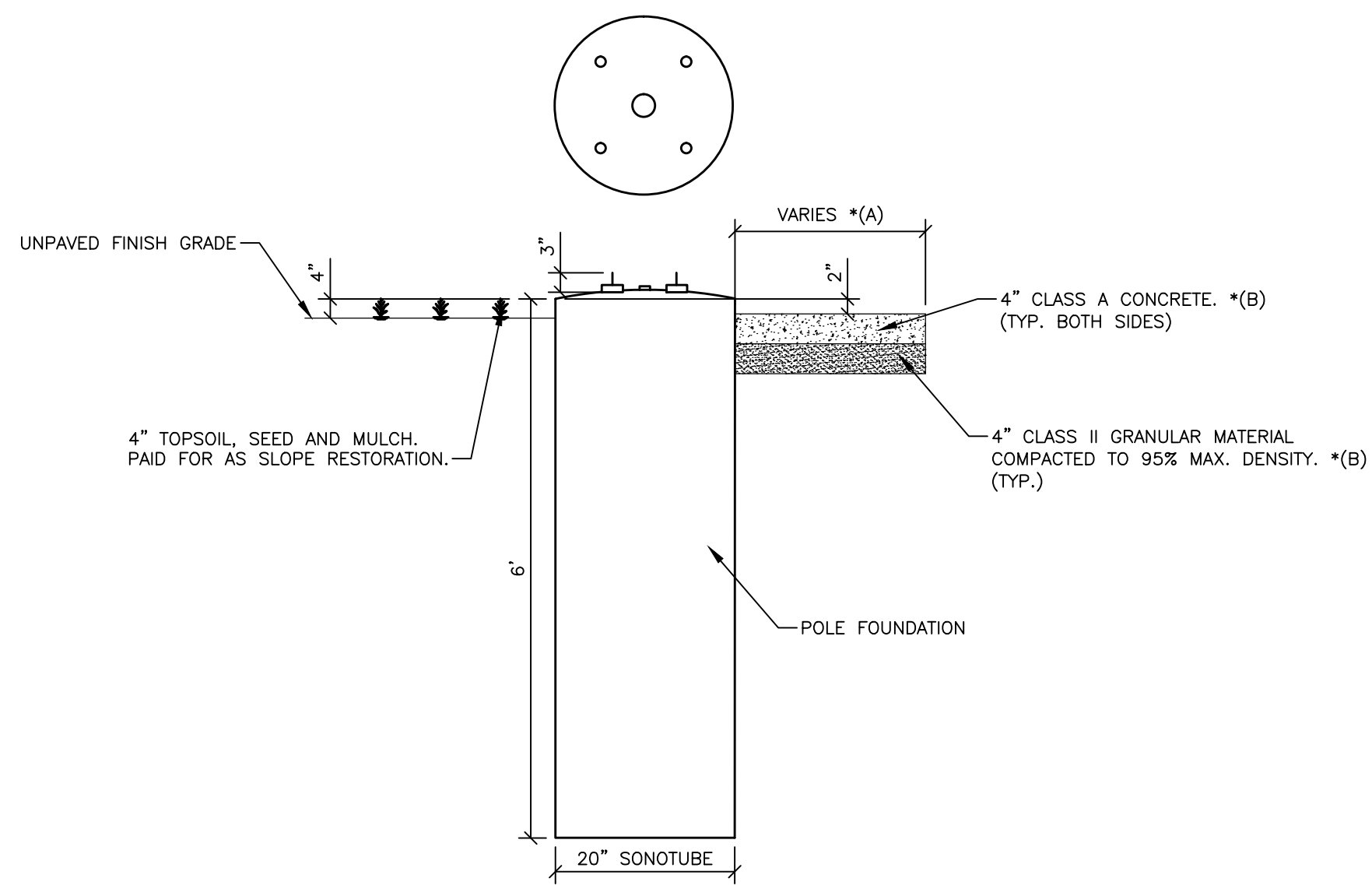
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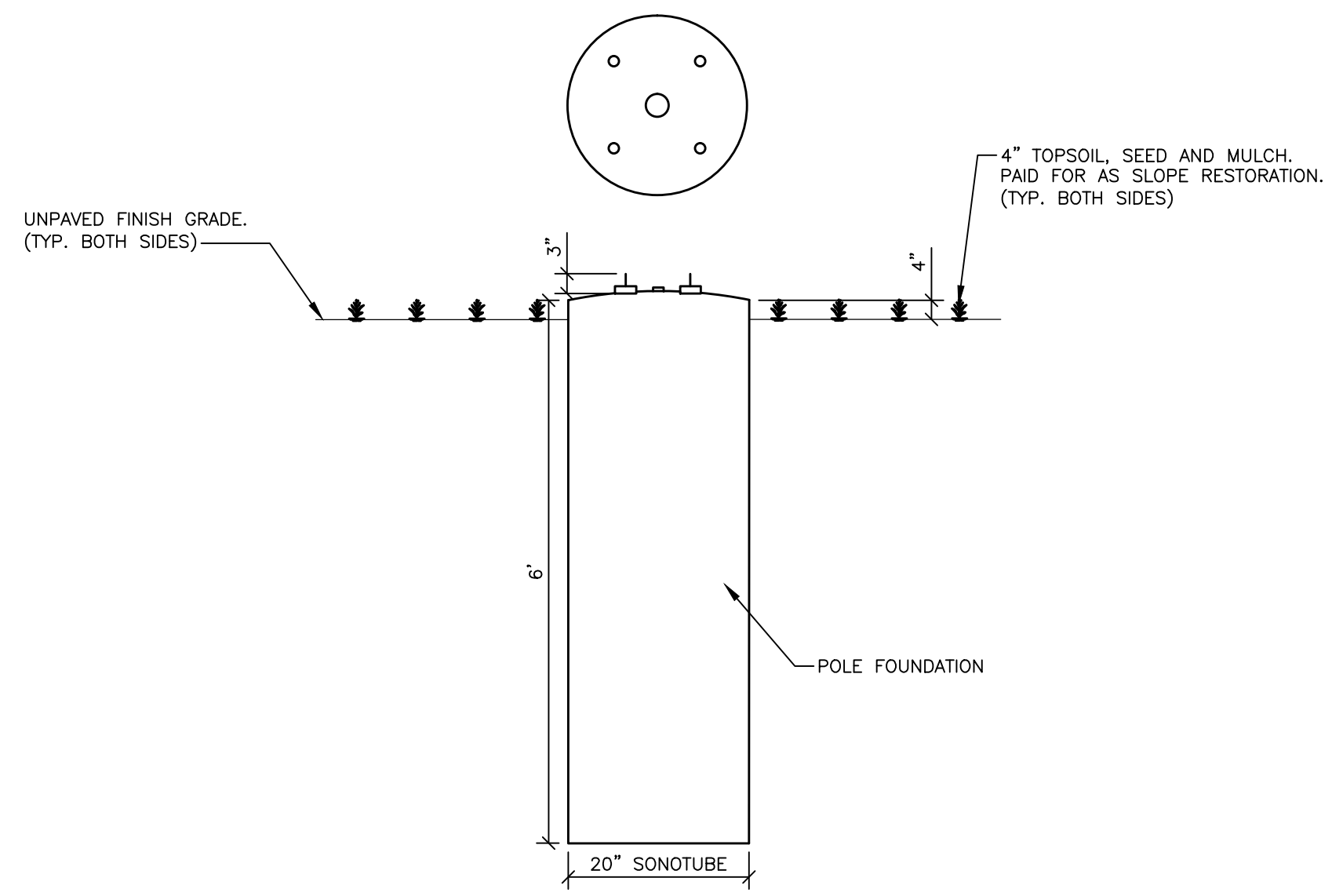


PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
STREET LIGHTING REPLACEMENT -
KERRYTOWN MARKET AND LIBERTY STREETS
DETAIL SHEET 2

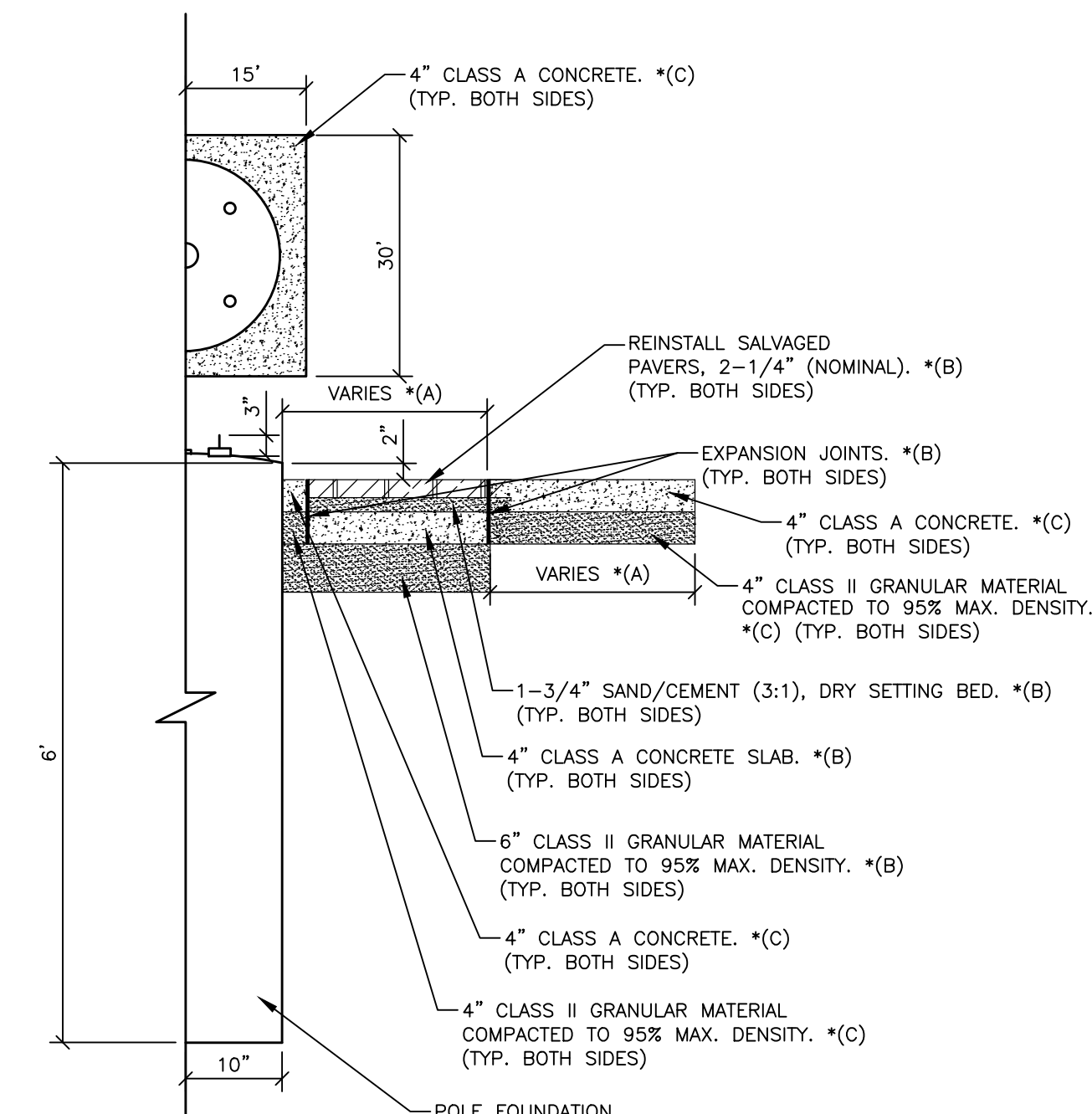


A PROPOSED DETAIL
C4 NO SCALE

*NOTE:
A. SEE PLAN SHEET.
B. PAID FOR AS "4-INCH CONCRETE SIDEWALK, RAMP, OR DRIVE".

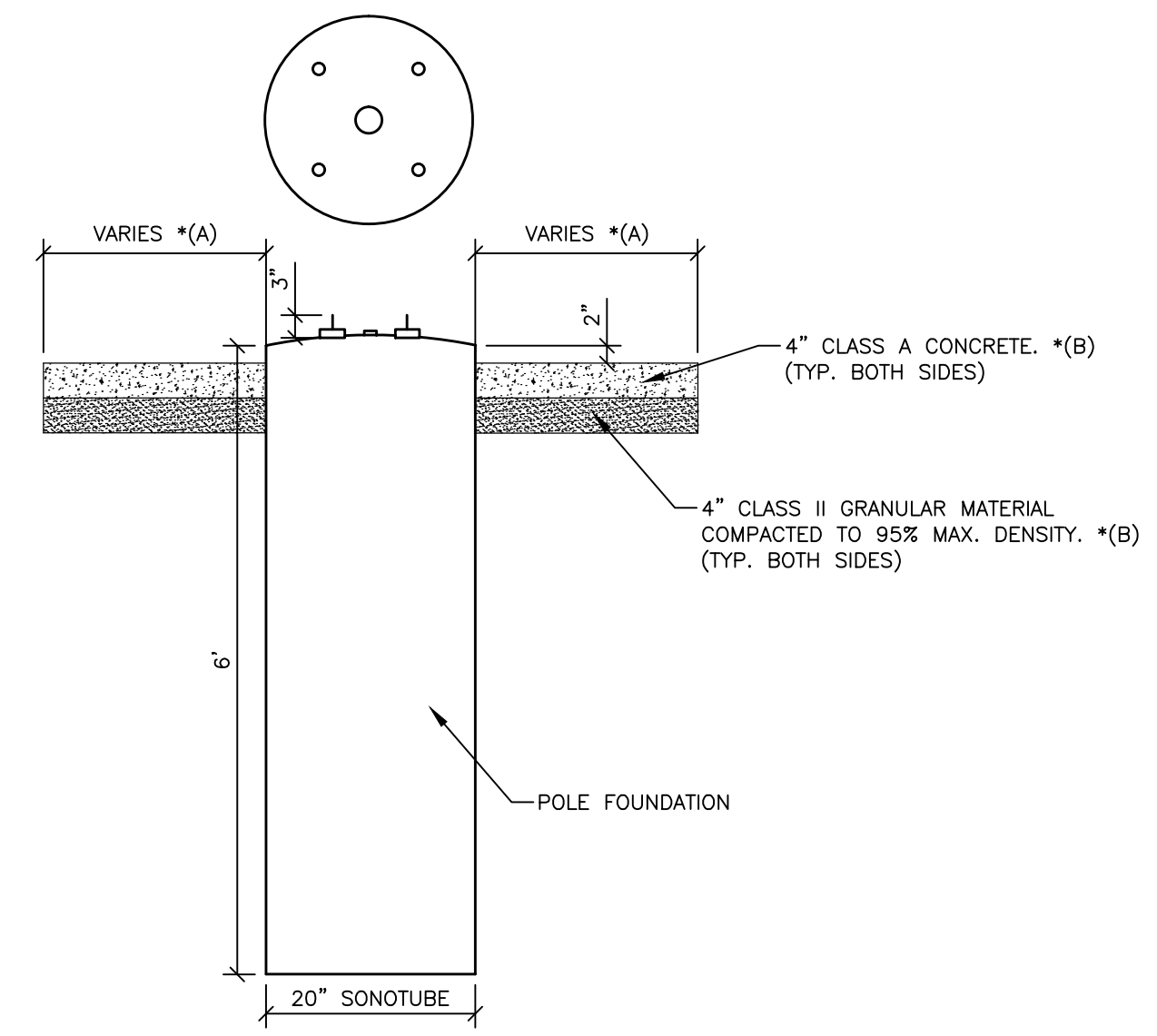


B PROPOSED DETAIL
C4 NO SCALE



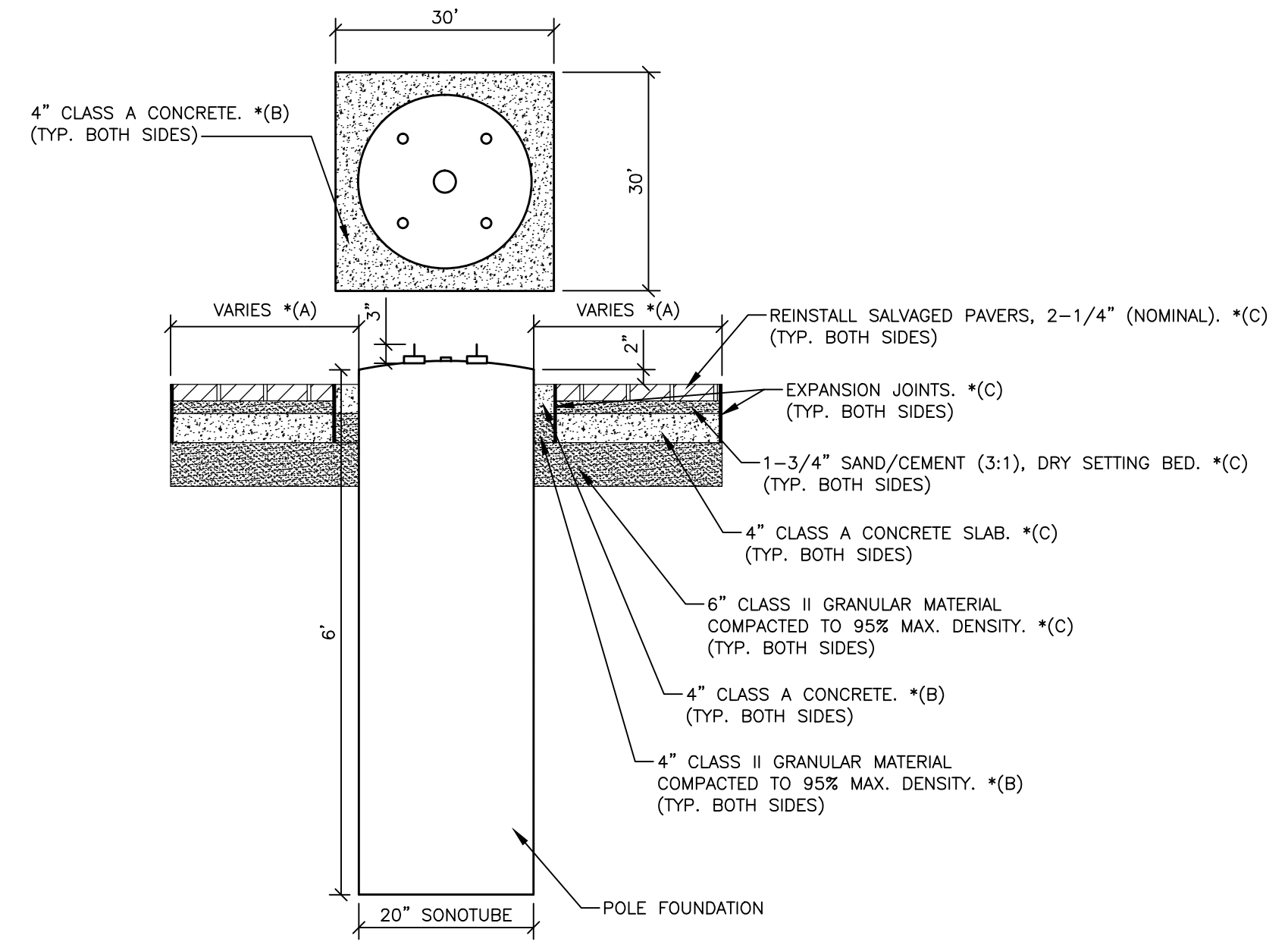
C PROPOSED HALF DETAIL
C4 NO SCALE

*NOTE:
A. SEE PLAN SHEET.
B. PAID FOR AS "SIDEWALK UNIT PAVER".
C. PAID FOR AS "4-INCH CONCRETE SIDEWALK, RAMP, OR DRIVE".



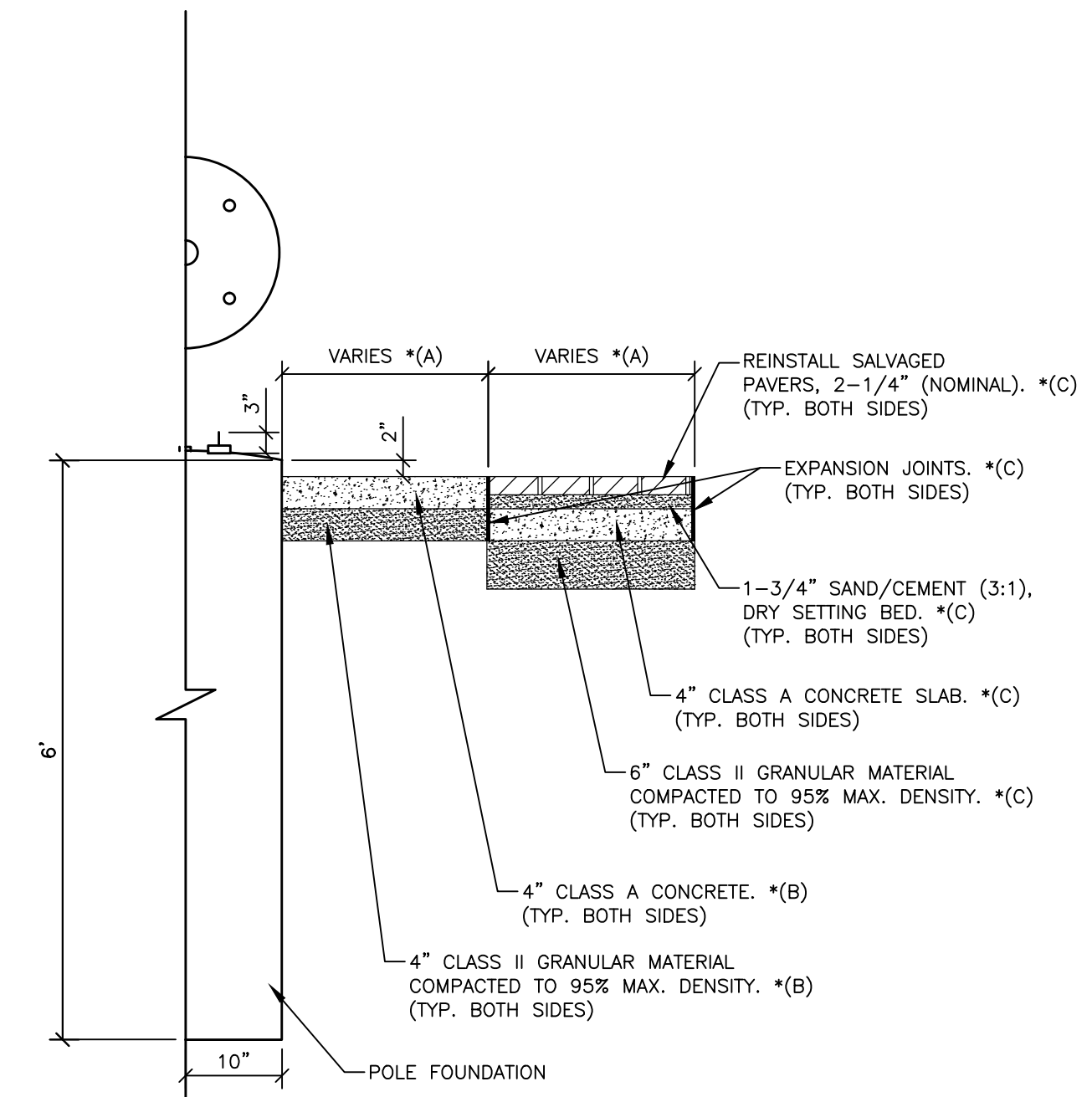
D PROPOSED DETAIL
C4 NO SCALE

*NOTE:
A. SEE PLAN SHEET.
B. PAID FOR AS "4-INCH CONCRETE SIDEWALK, RAMP, OR DRIVE".



E PROPOSED DETAIL
C4 NO SCALE

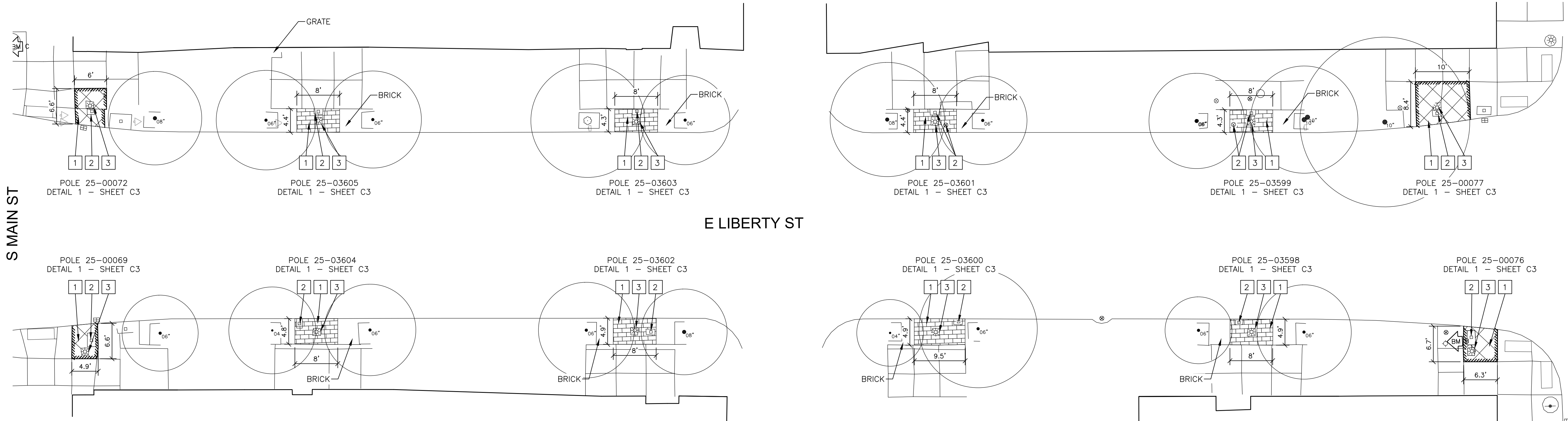
*NOTE:
A. SEE PLAN SHEET.
B. PAID FOR AS "4-INCH CONCRETE SIDEWALK, RAMP, OR DRIVE".
C. PAID FOR AS "SIDEWALK UNIT PAVERS".



F PROPOSED HALF DETAIL
C4 NO SCALE

*NOTE:
A. SEE PLAN SHEET.
B. PAID FOR AS "SIDEWALK UNIT PAVER".
C. PAID FOR AS "4-INCH CONCRETE SIDEWALK, RAMP, OR DRIVE".

Z:\2017\170031\CAD\CD\C005170031_Liberty1_Removal and Construction.dwg Dwg Created: 7-Apr-17 - standard (reduced).ctb - Plot Date: 7-Apr-17

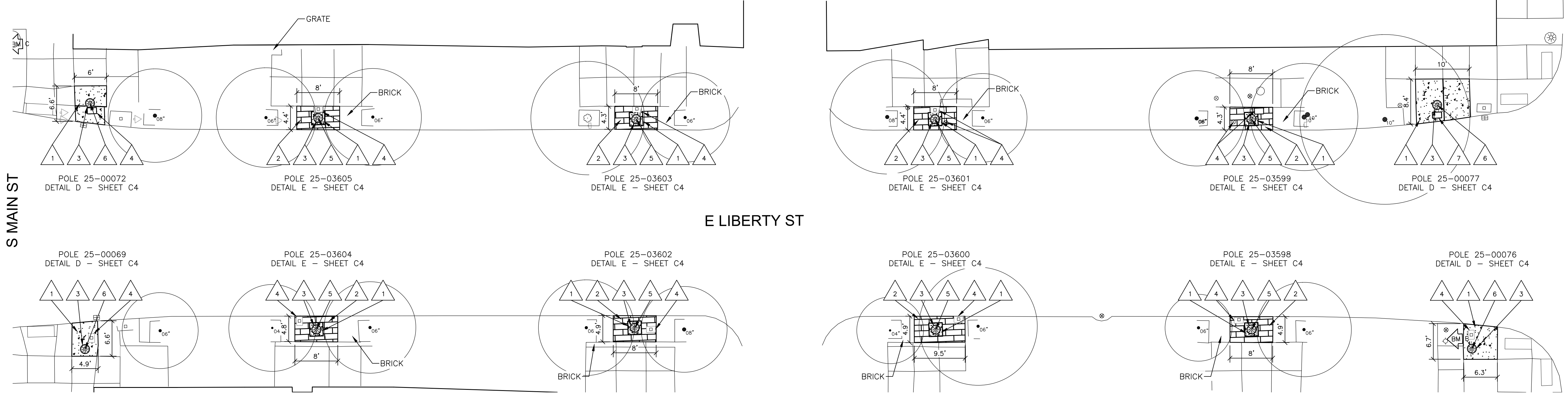
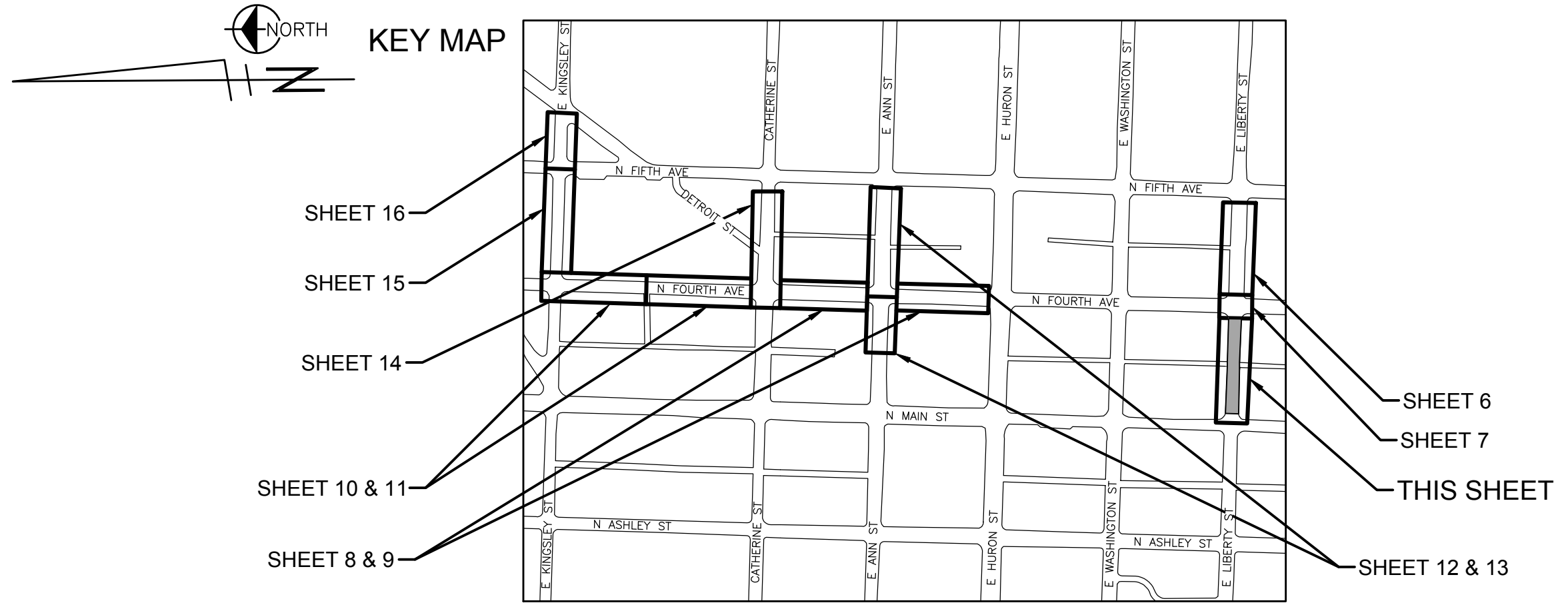
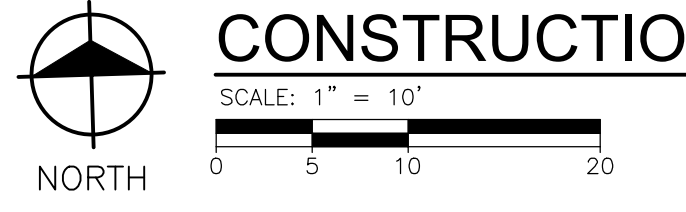
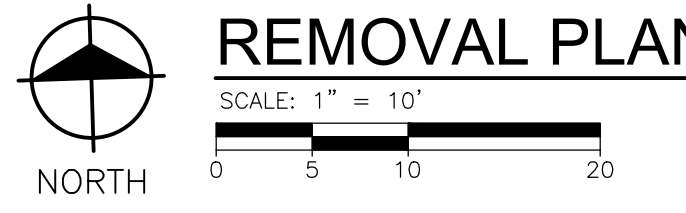


REMOVAL KEYS & QUANTITIES

KEY	DESCRIPTION	QUANTITY	UNIT
1	REMOVE CONCRETE SIDEWALK AND DRIVE - ANY THICKNESS	441.0	SFT
2	PROTECT PAID FOR AS "GENERAL CONDITIONS"	14.0	EA
3	LIGHT POLE AND FOUNDATION, REMOVAL	12.0	EA

CONSTRUCTION KEYS & QUANTITIES

KEY	DESCRIPTION	QUANTITY	UNIT
1	4 - INCH CONCRETE SIDEWALK, RAMP, OR DRIVE	240.0	SFT
2	SIDEWALK UNIT PAVERS	239.0	SFT
3	POLE FOUNDATION	12.0	EA
4	ADJUST	13.0	EA
5	LIGHT POLE, OC	8.0	EA
6	LIGHT POLE, OD	4.0	EA
7	NEW HANDHOLE	1.0	EA



811
Know what's below.
Call before you dig.

04-07-2017
SR / JAM / JAM /
DRAWN / CHECKED

ISSUED FOR BID
1. REV.

DESCRIPTION

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PUBLIC SERVICE
301 EAST HURON STREET
ANN ARBOR, MI 48107-8847
734-794-6410
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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
STREET LIGHTING REPLACEMENT -
KERRYTOWN MARKET AND LIBERTY STREETS
E LIBERTY ST, REMOVAL AND CONSTRUCTION PLAN

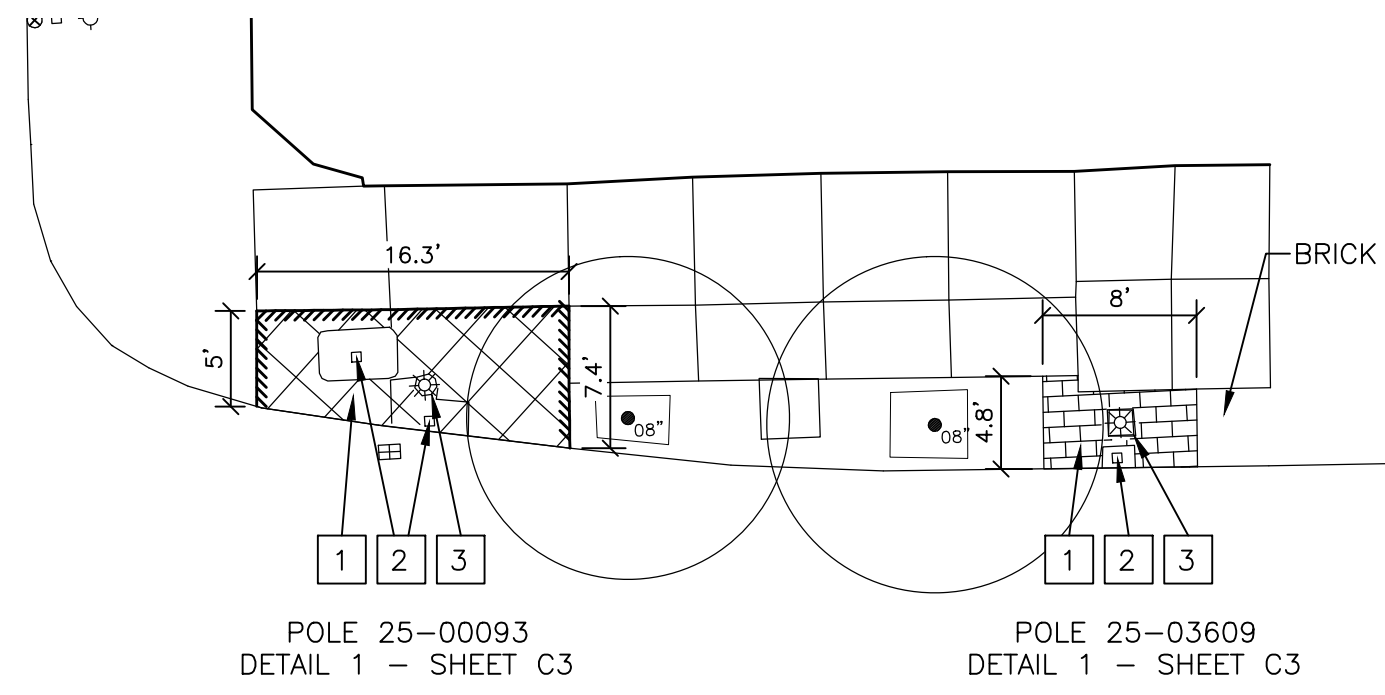
SCALE PLAN:
DRAWING No.
2017-026-C1

SHEET No.

5 OF 30

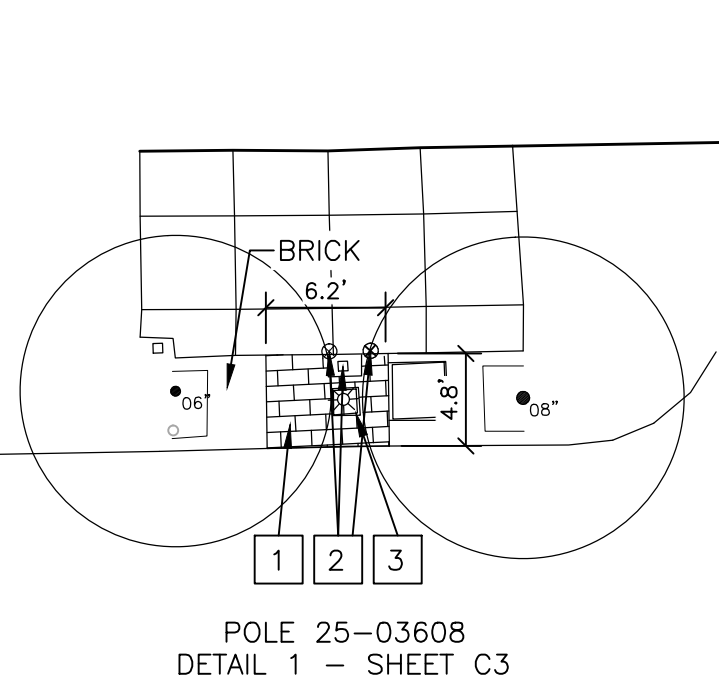
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S FOURTH AVE

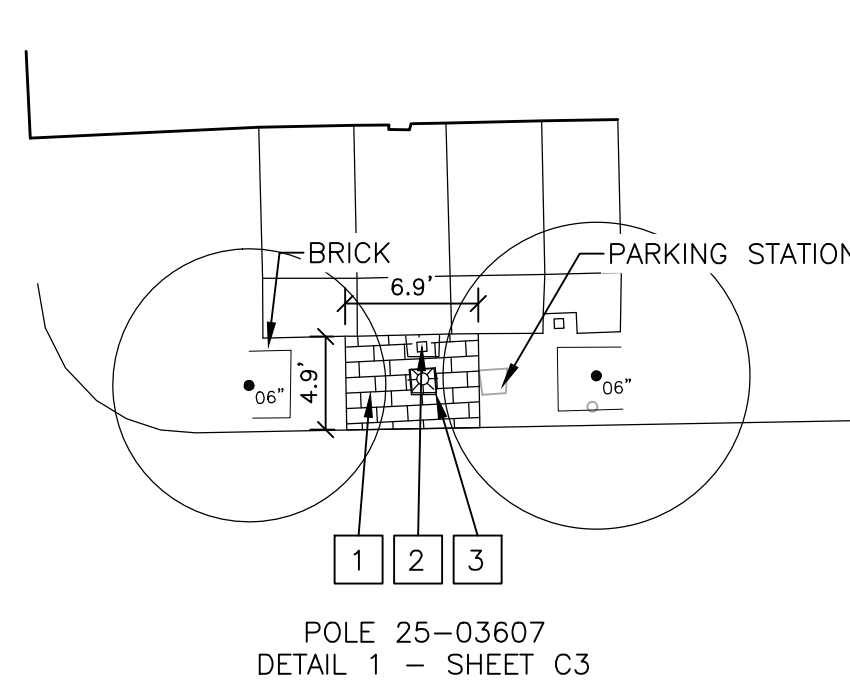


POLE 25-00093
DETAIL 1 - SHEET C3

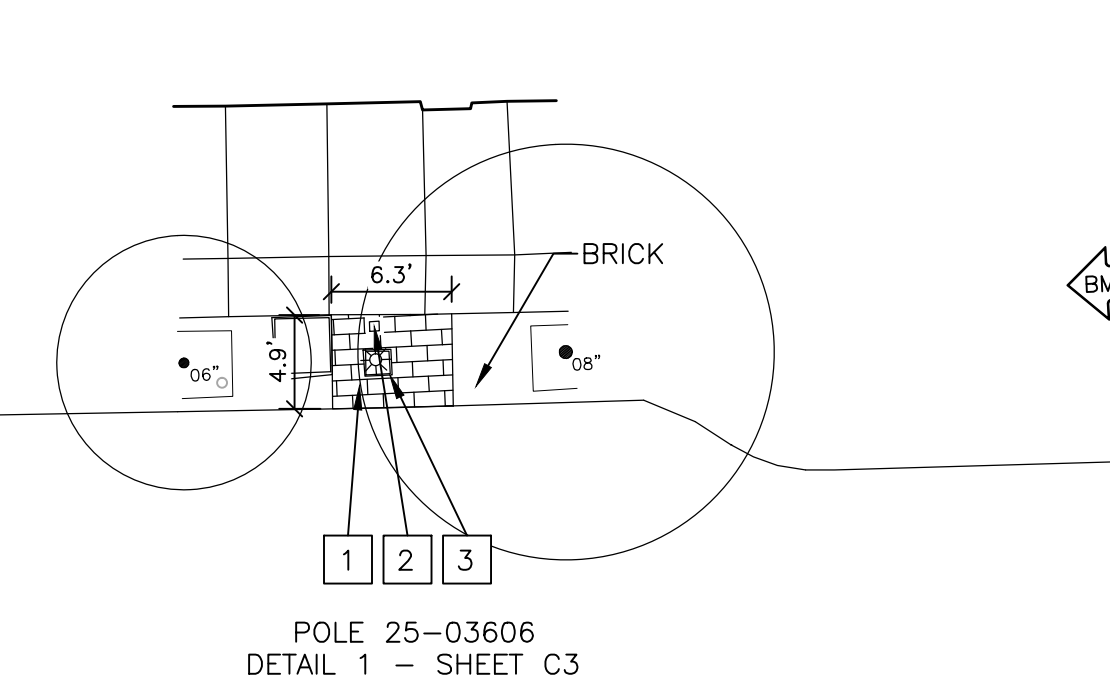
POLE 25-03609
DETAIL 1 - SHEET C3



POLE 25-03608
DETAIL 1 - SHEET C3



POLE 25-03607
DETAIL 1 - SHEET C3



POLE 25-03606
DETAIL 1 - SHEET C3

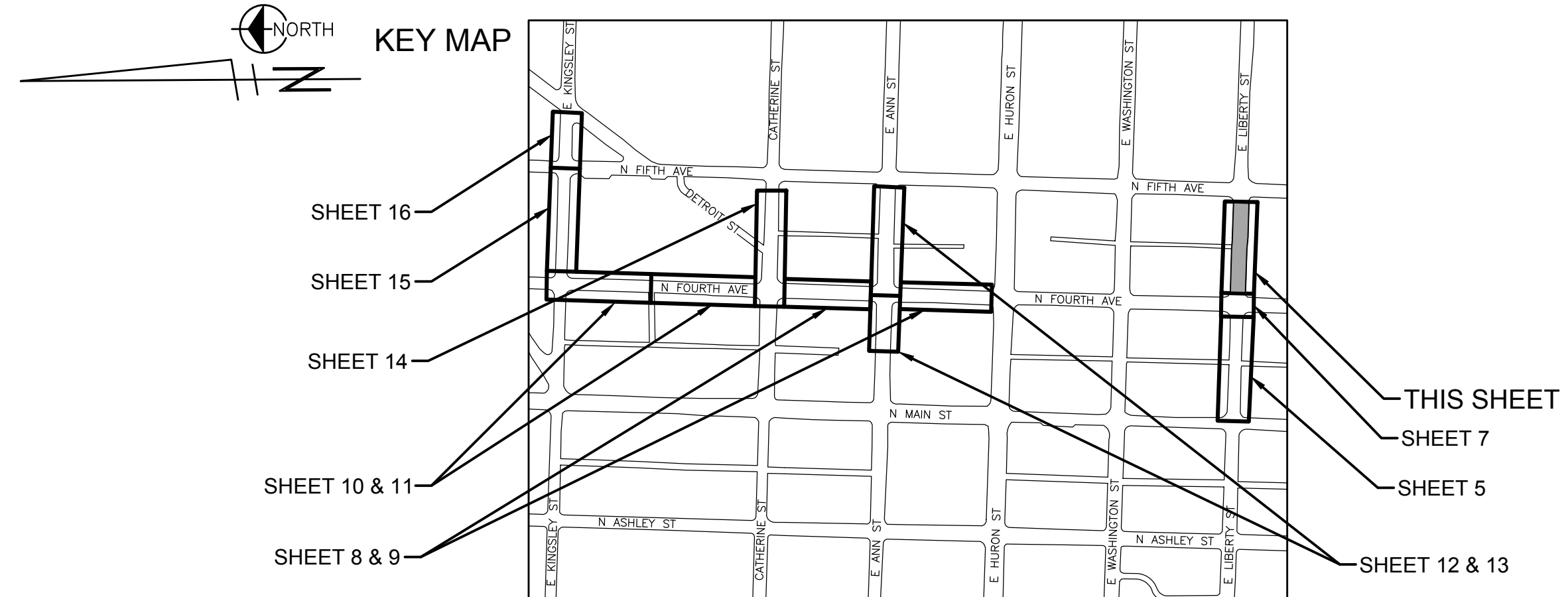
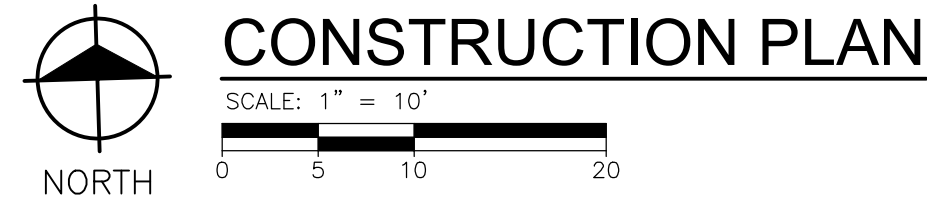
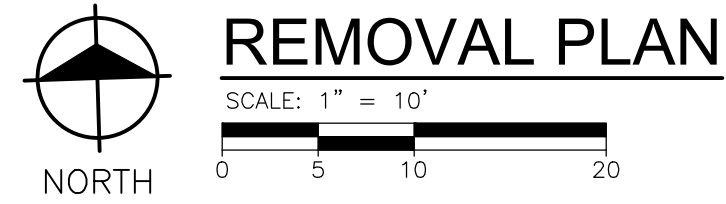
S FIFTH AVE

REMOVAL KEYS & QUANTITIES

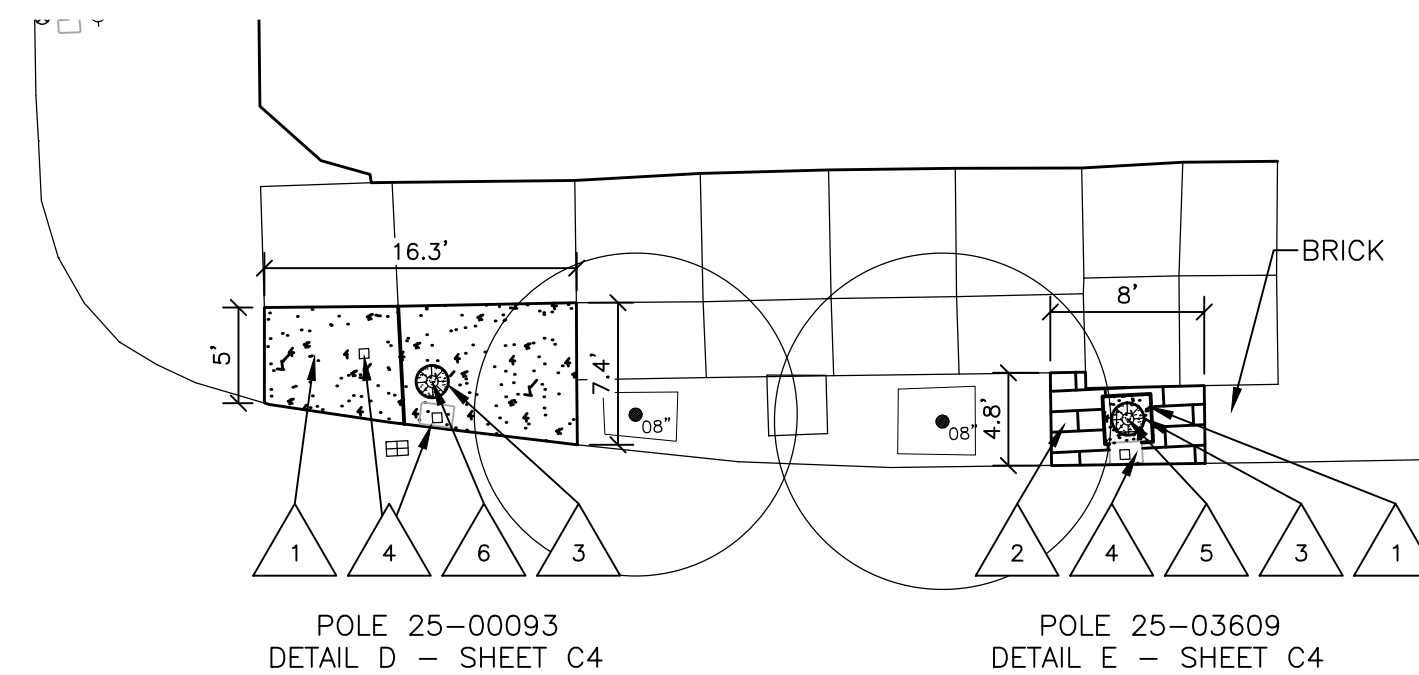
KEY	DESCRIPTION	QUANTITY	UNIT
1	REMOVE CONCRETE SIDEWALK AND DRIVE - ANY THICKNESS	205.0	SFT
2	PROTECT PAID FOR AS "GENERAL CONDITIONS"	8.0	EA
3	LIGHT POLE AND FOUNDATION, REMOVAL	5.0	EA

CONSTRUCTION KEYS & QUANTITIES

KEY	DESCRIPTION	QUANTITY	UNIT
1	4 - INCH CONCRETE SIDEWALK, RAMP, OR DRIVE	127.0	SFT
2	SIDEWALK UNIT PAVERS	97.0	SFT
3	POLE FOUNDATION	5.0	EA
4	ADJUST	6.0	EA
5	LIGHT POLE, OC	4.0	EA
6	LIGHT POLE, OD	1.0	EA

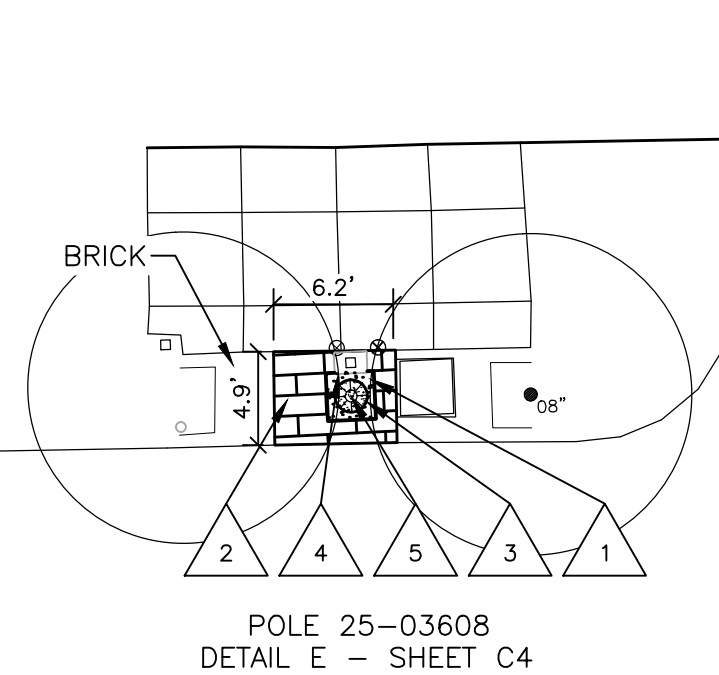


S FOURTH AVE

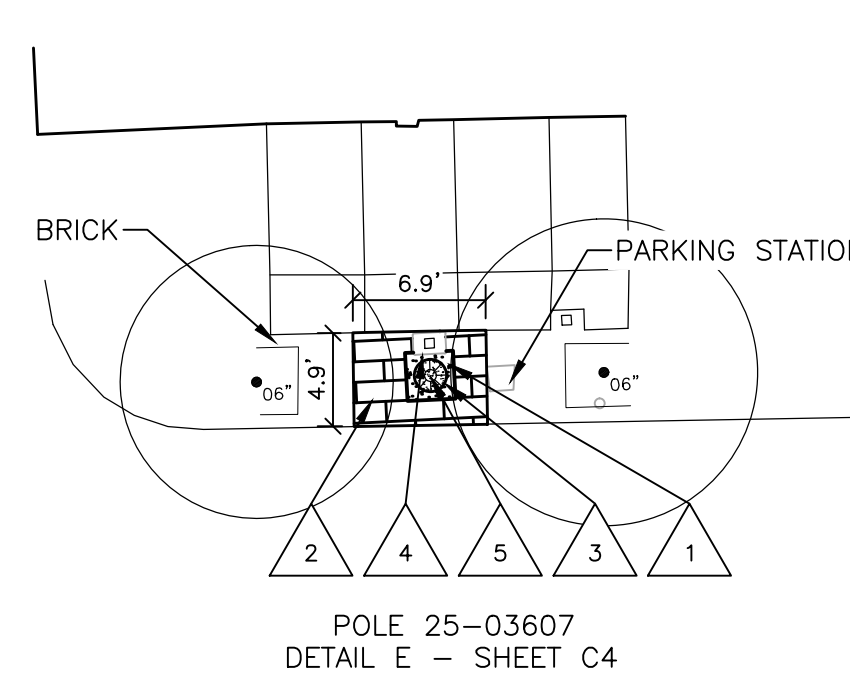


POLE 25-00093
DETAIL D - SHEET C4

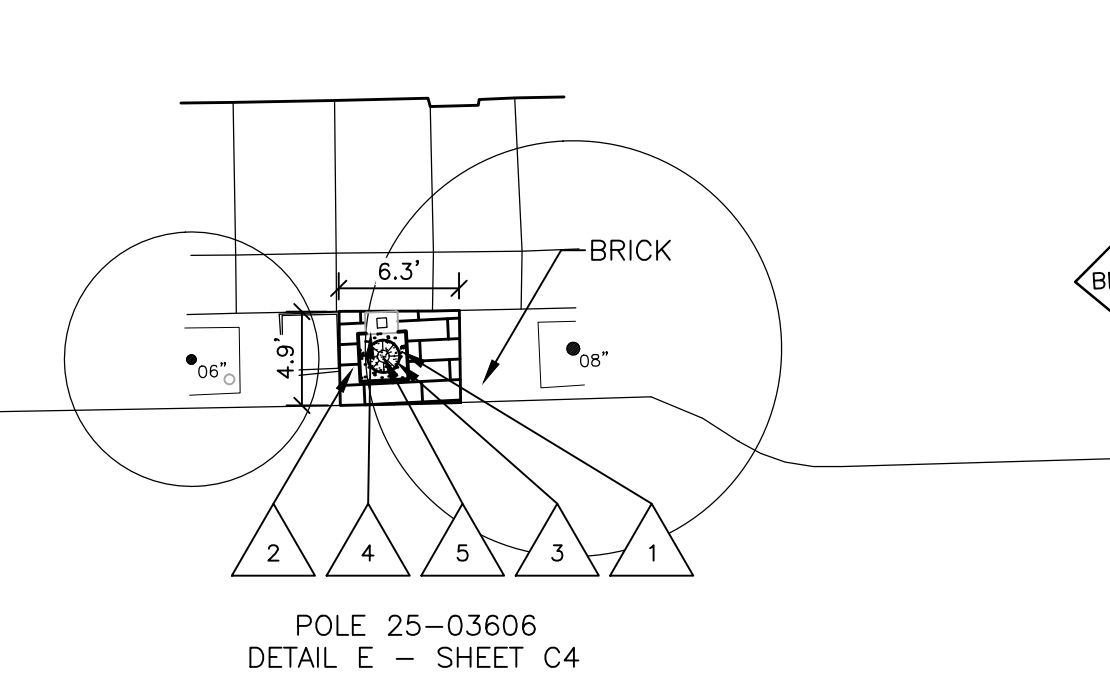
POLE 25-03609
DETAIL E - SHEET C4



POLE 25-03608
DETAIL E - SHEET C4



POLE 25-03607
DETAIL E - SHEET C4



POLE 25-03606
DETAIL E - SHEET C4

S FIFTH AVE

REV.	DESCRIPTION	DATE	DRAWN	CHECKED
1.	ISSUED FOR BID	04-07-2017	JANI	JANI

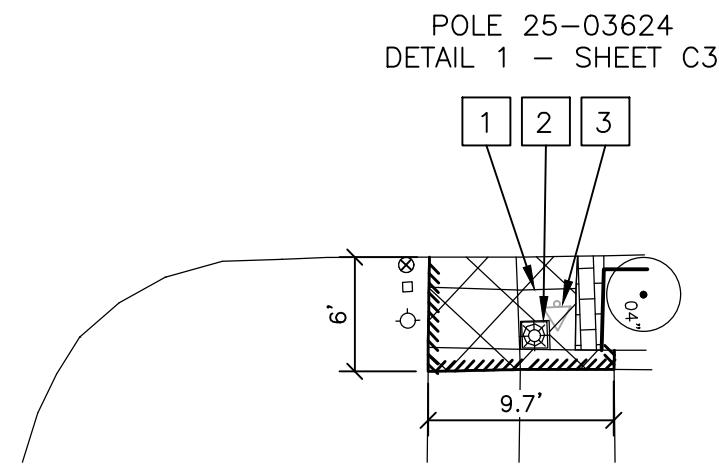
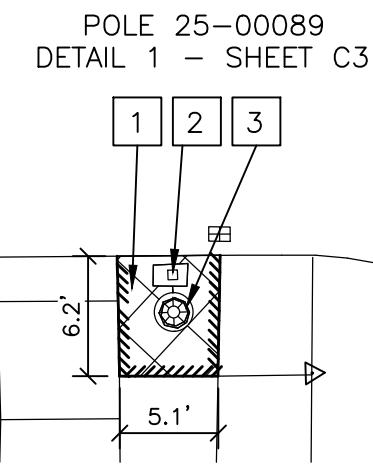
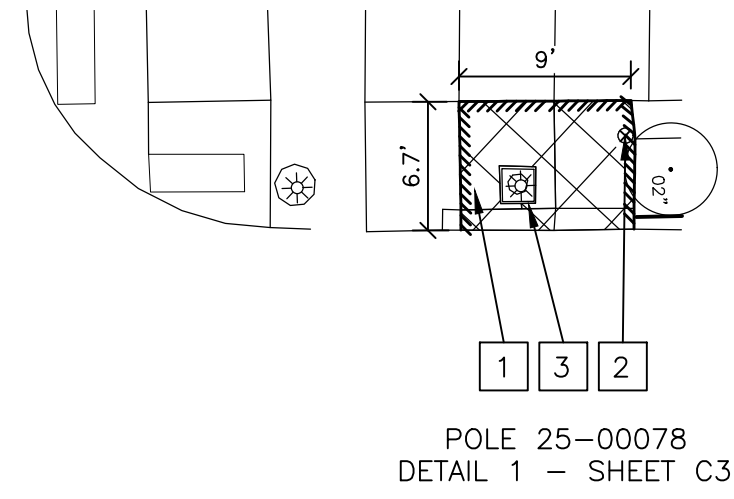
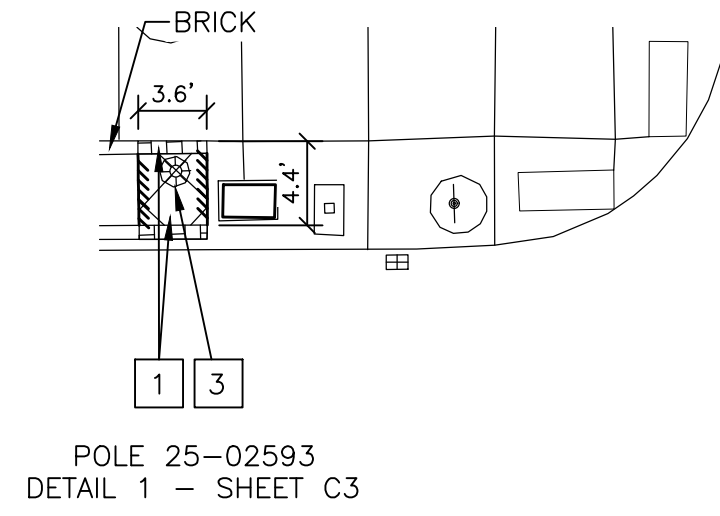
CITY OF ANN ARBOR
PUBLIC SERVICE
301 EAST HURON STREET
ANN ARBOR, MI 48107-8647
734-794-6410
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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
STREET LIGHTING REPLACEMENT -
KERRYTOWN MARKET AND LIBERTY STREETS
E LIBERTY ST, REMOVAL AND CONSTRUCTION PLAN

SCALE PLAN:
DRAWING No.
2017-026-C2

SHEET No. **6 OF 30**

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S FOURTH AVE

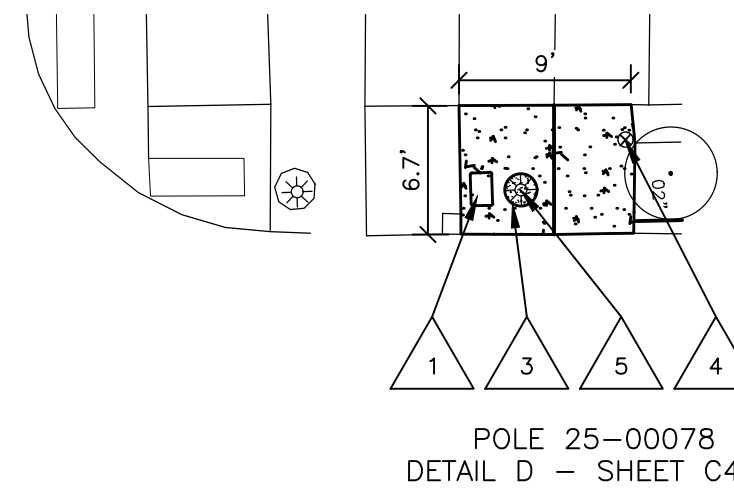
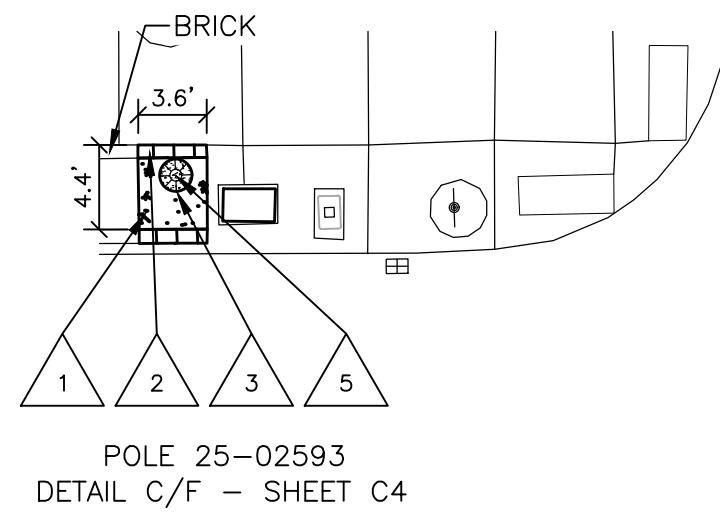
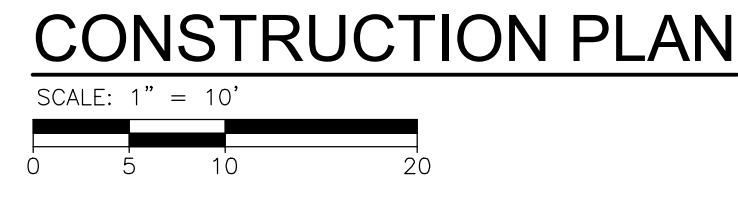
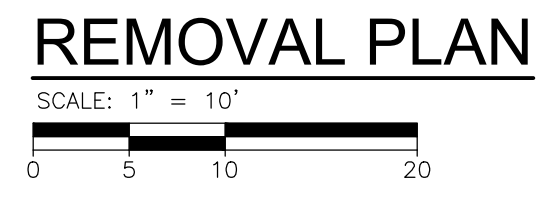
E LIBERTY ST

REMOVAL KEYS & QUANTITIES

KEY	DESCRIPTION	QUANTITY	UNIT
1	REMOVE CONCRETE SIDEWALK AND DRIVE - ANY THICKNESS	158.0	SFT
2	PROTECT - PAID FOR AS "GENERAL CONDITIONS"	3.0	EA
3	LIGHT POLE AND FOUNDATION, REMOVAL	4.0	EA
4	SIGN, REMOVE, SALVAGE AND REINSTALL - PAID FOR AS "GENERAL CONDITIONS"	1.0	EA

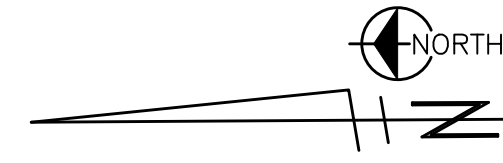
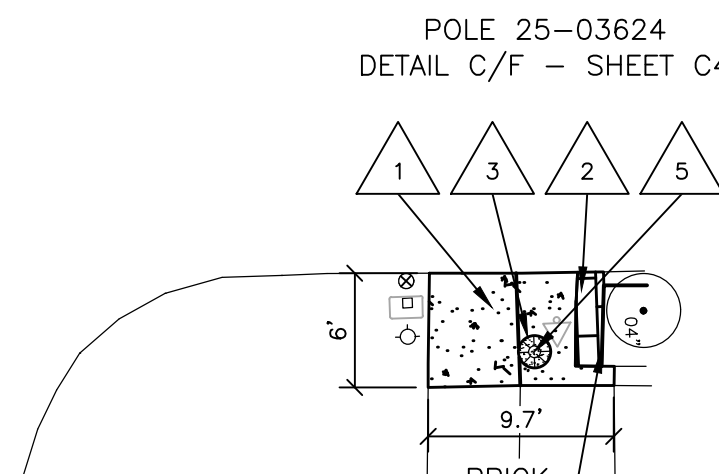
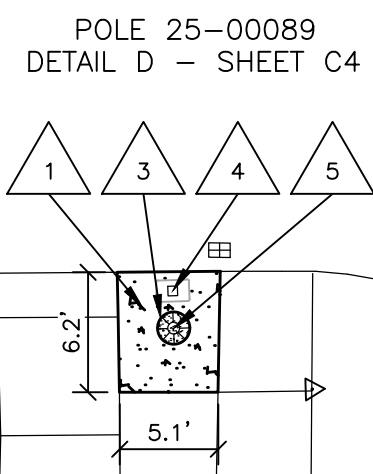
CONSTRUCTION KEYS & QUANTITIES

KEY	DESCRIPTION	QUANTITY	UNIT
1	4 - INCH CONCRETE SIDEWALK, RAMP, OR DRIVE	155.0	SFT
2	SIDEWALK UNIT PAVERS	12.0	SFT
3	POLE FOUNDATION	4.0	EA
4	ADJUST	2.0	EA
5	LIGHT POLE, OD	4.0	EA
6	NEW HANDHOLE	1.0	EA

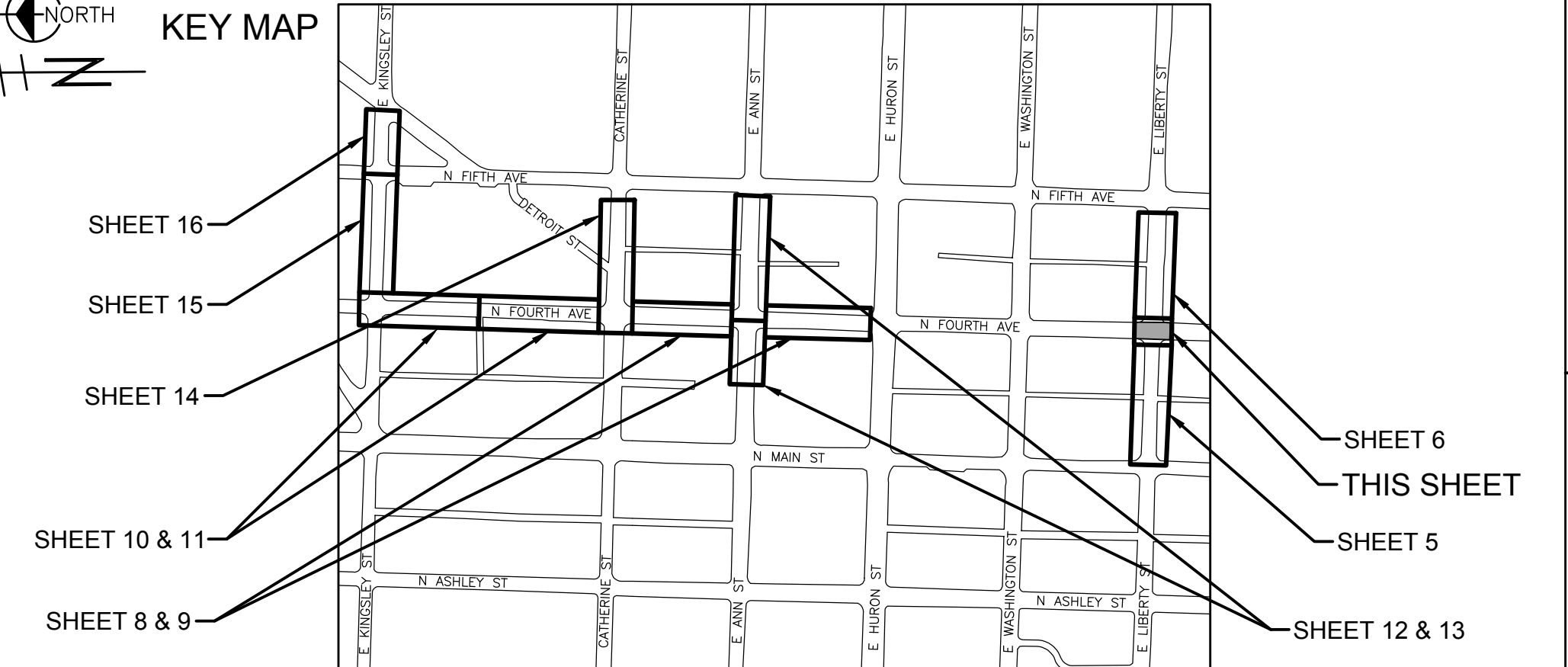


S FOURTH AVE

E LIBERTY ST



KEY MAP



REV.	DESCRIPTION	DATE	DRAWN	CHECKED
1.	ISSUED FOR BID	04-07-2017	SJR / JANI	JANI

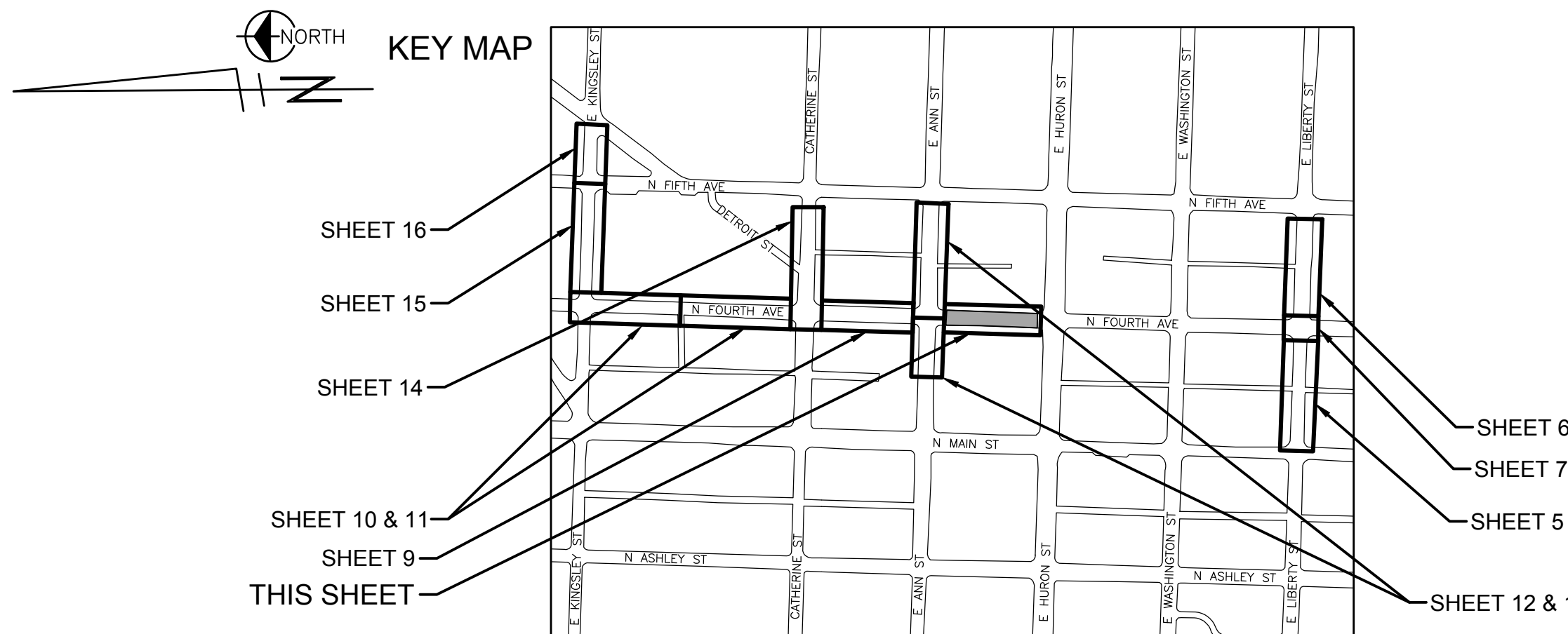
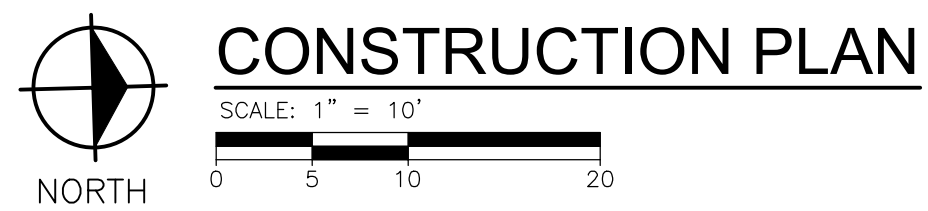
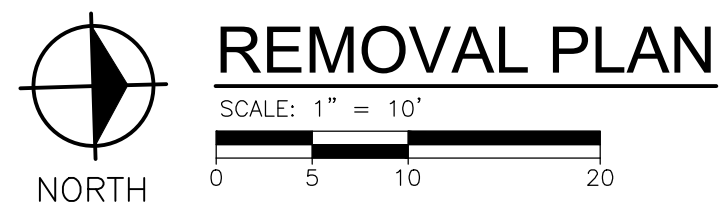
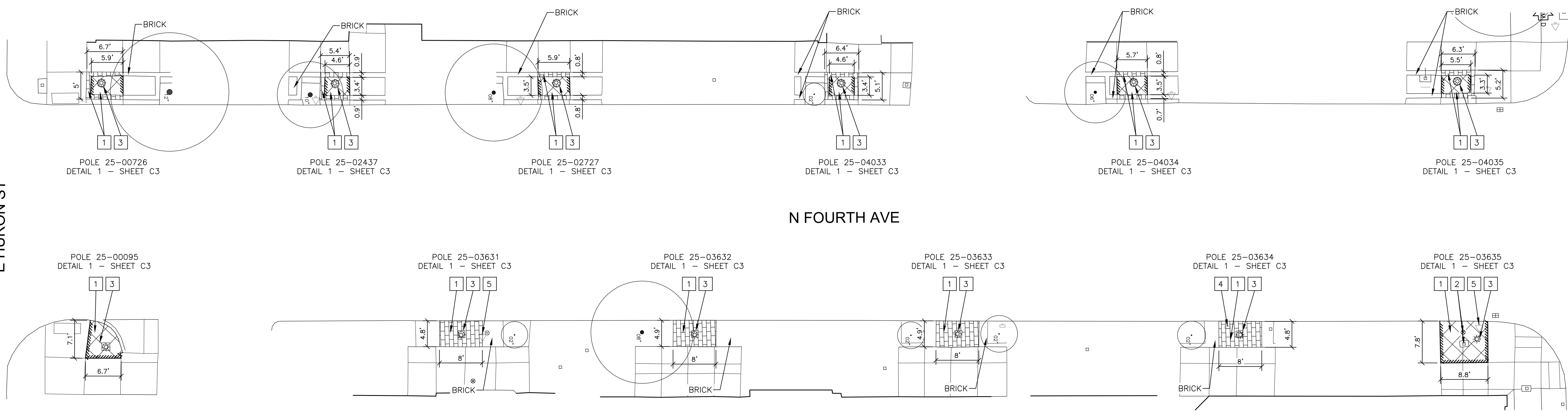
CITY OF ANN ARBOR
PUBLIC SERVICE
301 EAST HURON STREET
ANN ARBOR, MI 48107-8647
734-794-6410
www.a2gov.org

PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
STREET LIGHTING REPLACEMENT -
KERRYTOWN MARKET AND LIBERTY STREETS
S FOURTH AVE, REMOVAL AND CONSTRUCTION PLAN

SCALE PLAN:
DRAWING No.
2017-026-C3

E HURON ST

E HURON ST

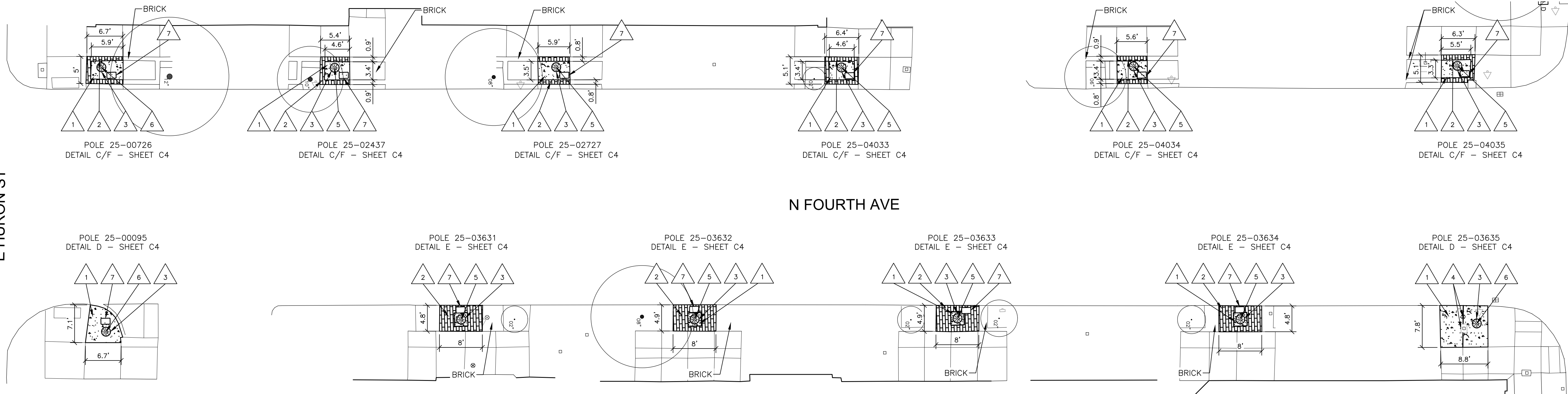


REMOVAL KEYS & QUANTITIES

KEY	DESCRIPTION	QUANTITY	UNIT
1	REMOVE CONCRETE SIDEWALK AND DRIVE - ANY THICKNESS	423.0	SFT
2	PROTECT - PAID FOR AS "GENERAL CONDITIONS"	2.0	EA
3	LIGHT POLE AND FOUNDATION, REMOVAL	12.0	EA
4	PARKING METER REMOVE, SALVAGE & REINSTALL	1.0	EA
5	SIGN REMOVE, SALVAGE & REINSTALL - PAID FOR AS "GENERAL CONDITIONS"	2.0	EA

CONSTRUCTION KEYS & QUANTITIES

KEY	DESCRIPTION	QUANTITY	UNIT
1	4 - INCH CONCRETE SIDEWALK, RAMP OR DRIVE	242.0	SFT
2	SIDEWALK UNIT PAVER	201.0	SFT
3	POLE FOUNDATION	12.0	EA
4	ADJUST	2.0	EA
5	LIGHT POLE, OA	9.0	EA
6	LIGHT POLE, OB	3.0	EA
7	NEW HANDHOLE	11.0	EA



E ANN ST

E ANN ST



REV.	DESCRIPTION	DATE	DRAWN	CHECKED
1.	ISSUED FOR BID	04-07-2017	JANI	JANI

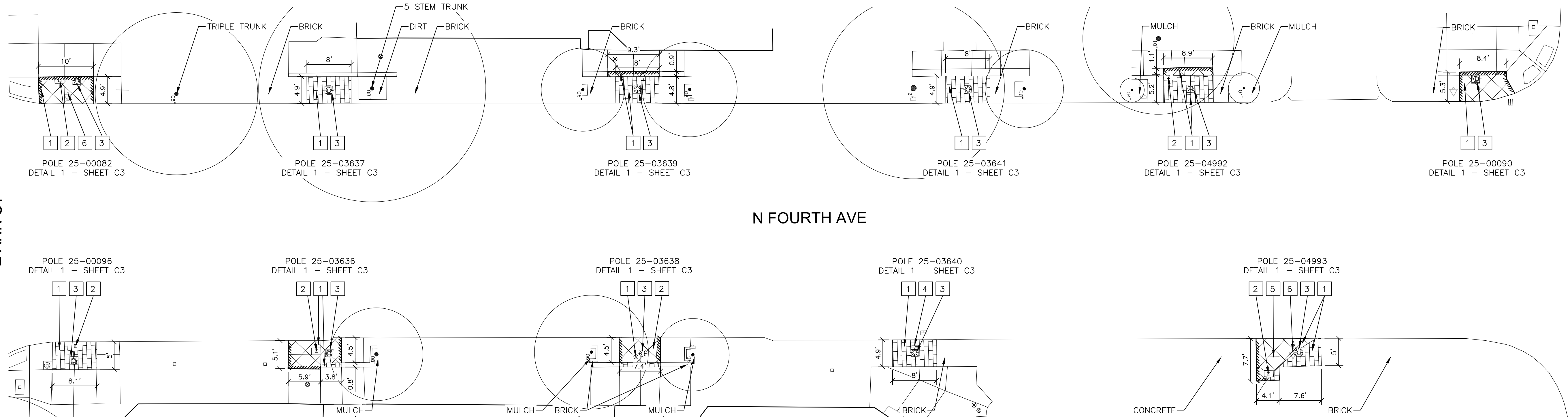
CITY OF ANN ARBOR
PUBLIC SERVICE
301 EAST HURON STREET
ANN ARBOR, MI 48107-8647
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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
STREET LIGHTING REPLACEMENT -
KERRYTOWN MARKET AND LIBERTY STREETS
N FOURTH AVE, REMOVAL AND CONSTRUCTION PLAN

Z:\2017\170031\CAD\CD\C009170031_Fourth2_Removal and Construction.dwg Dwg Created: 7-Apr-17 - standard (reduced).ctb - Plot Date: 7-Apr-17

E ANN ST



N FOURTH AVE

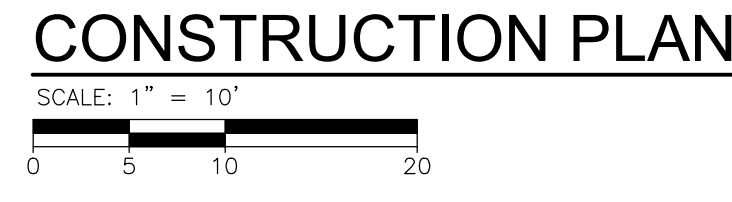
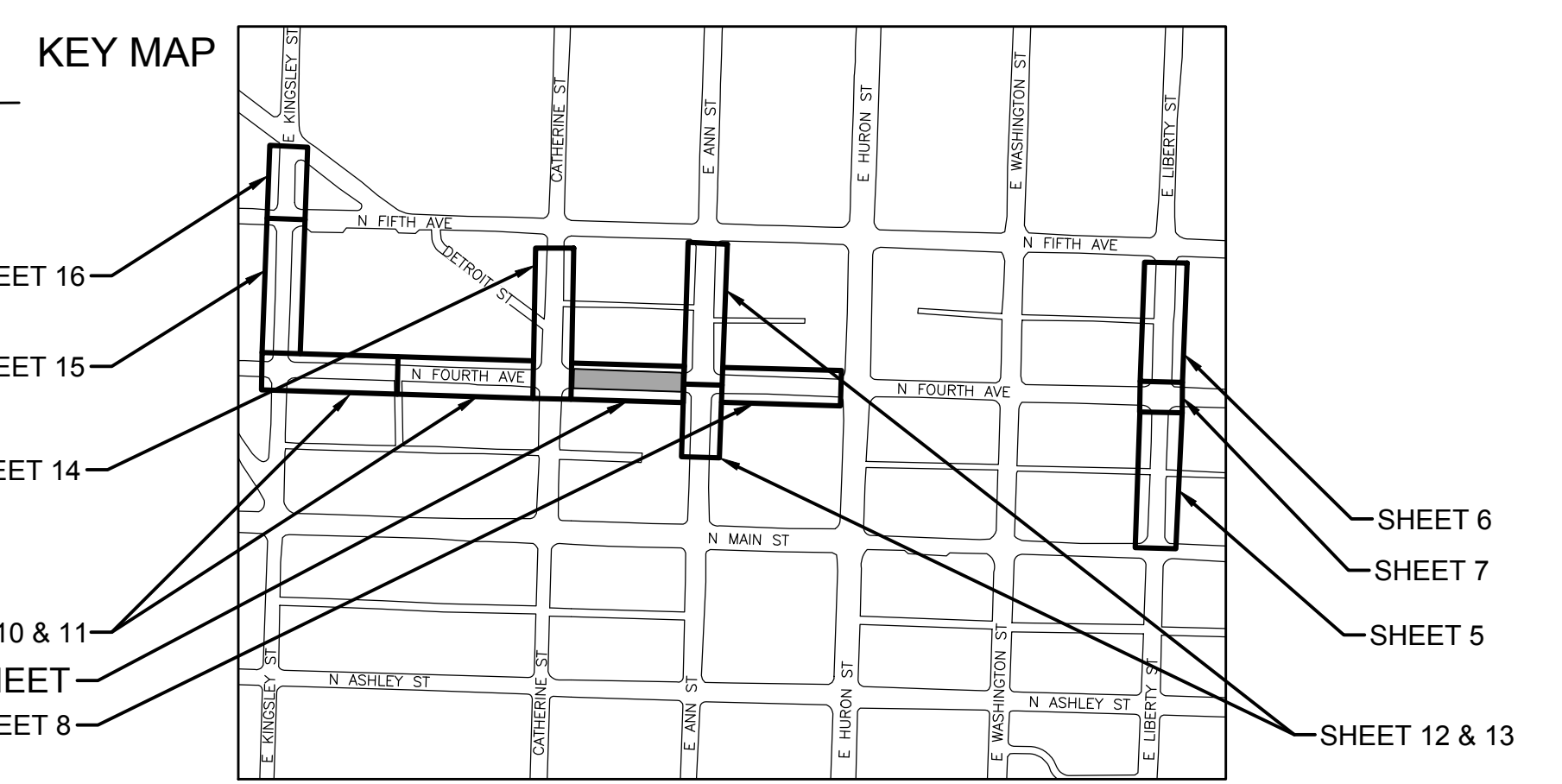
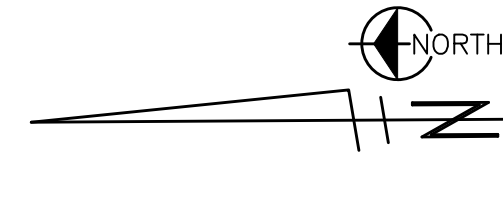
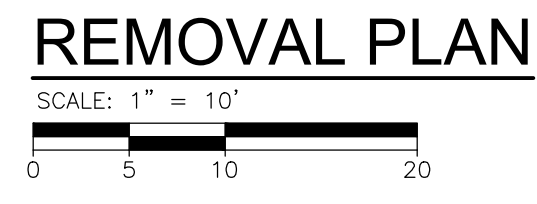
CATHERINE ST

REMOVAL KEYS & QUANTITIES

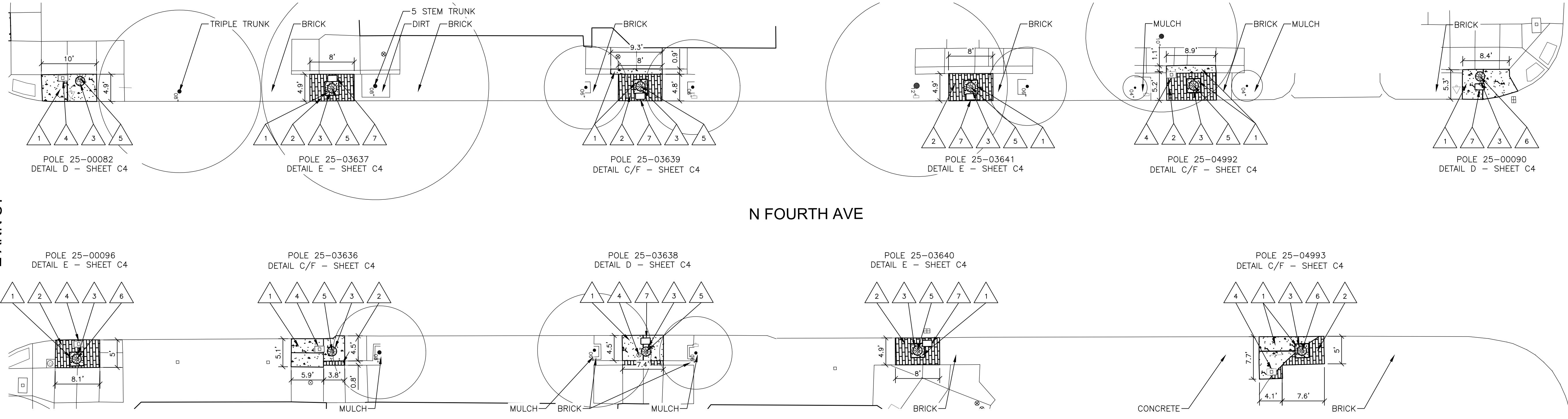
KEY	DESCRIPTION	QUANTITY	UNIT
1	REMOVE CONCRETE SIDEWALK AND DRIVE - ANY THICKNESS	477.0	SFT
2	PROTECT - PAID FOR AS "GENERAL CONDITIONS"	6.0	EA
3	LIGHT POLE AND FOUNDATION, REMOVAL	11.0	EA
4	PARKING METER REMOVE, SALVAGE & REINSTALL	1.0	EA
5	BIKE RACK REMOVE, SALVAGE & REINSTALL - PAID FOR AS "GENERAL CONDITIONS"	1.0	EA
6	SIGN REMOVE, SALVAGE AND REINSTALL - PAID FOR AS "GENERAL CONDITION"	2.0	EA

CONSTRUCTION KEYS & QUANTITIES

KEY	DESCRIPTION	QUANTITY	UNIT
1	4-INCH CONCRETE SIDEWALK, RAMP, OR DRIVE	280.0	SFT
2	SIDEWALK UNIT PAVER	222.0	SFT
3	POLE FOUNDATION	11.0	EA
4	ADJUST	6.0	EA
5	LIGHT POLE, OA	8.0	EA
6	LIGHT POLE, OB	3.0	EA
7	NEW HANDHOLE	6.0	EA



E ANN ST

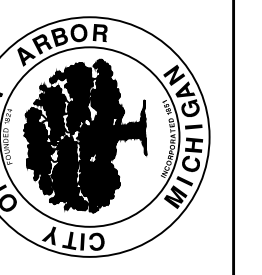


N FOURTH AVE



REV.	DESCRIPTION	DATE	DRAWN	CHECKED
1.	ISSUED FOR BID	04-07-2017	JANI	JANI

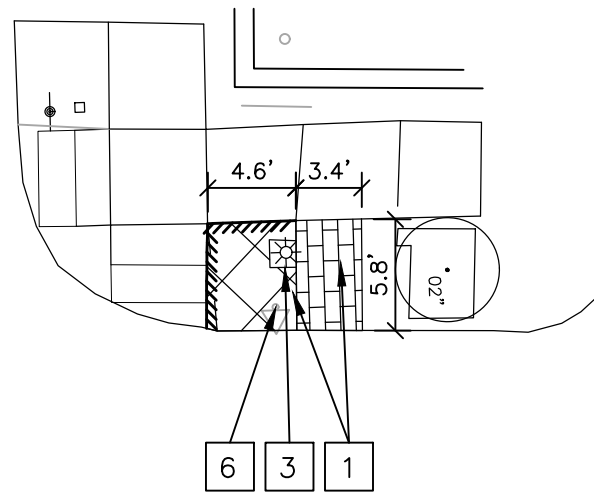
CITY OF ANN ARBOR
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734-794-6410
www.a2gov.org



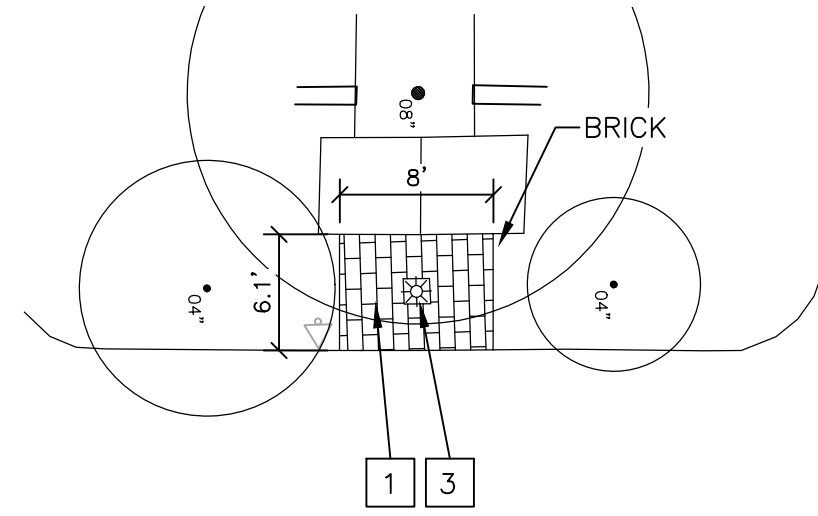
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
STREET LIGHTING REPLACEMENT -
KERRYTOWN MARKET AND LIBERTY STREETS
N FOURTH AVE, REMOVAL AND CONSTRUCTION PLAN

SCALE PLAN:
DRAWING No.
2017-026-C5

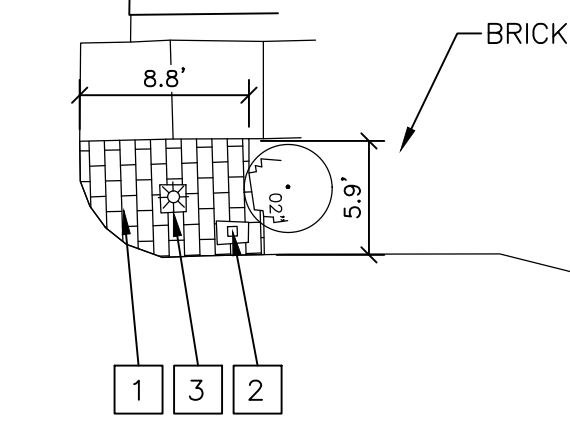
CATHERINE ST



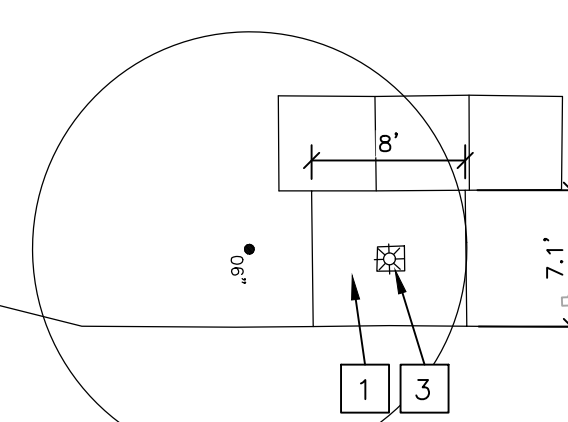
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DETAIL 1 - SHEET C3



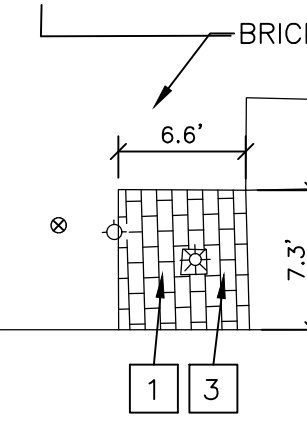
POLE 25-04785
DETAIL 1 - SHEET C3



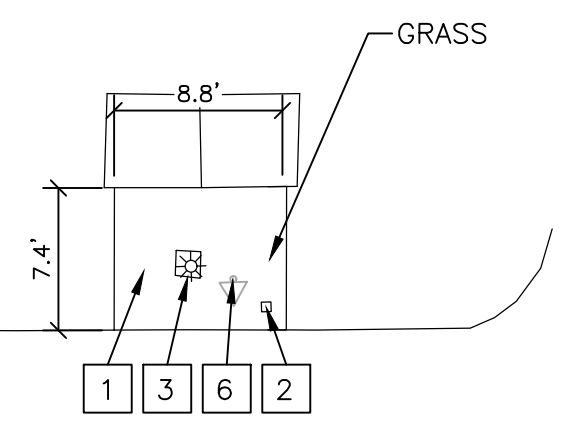
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DETAIL 1 - SHEET C3



POLE 25-04789
DETAIL 2 - SHEET C3

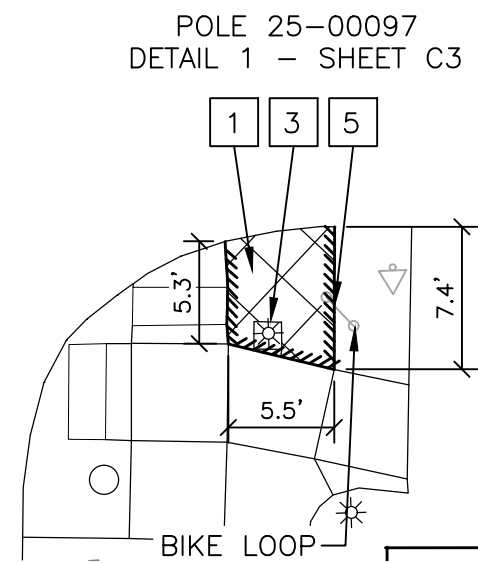


POLE 25-04791
DETAIL 1 - SHEET C3

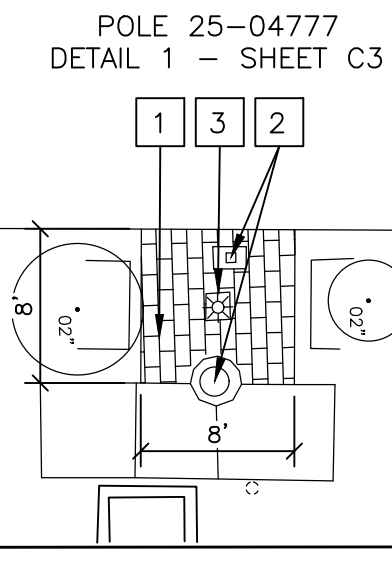


POLE 25-04793
DETAIL 2 - SHEET C3

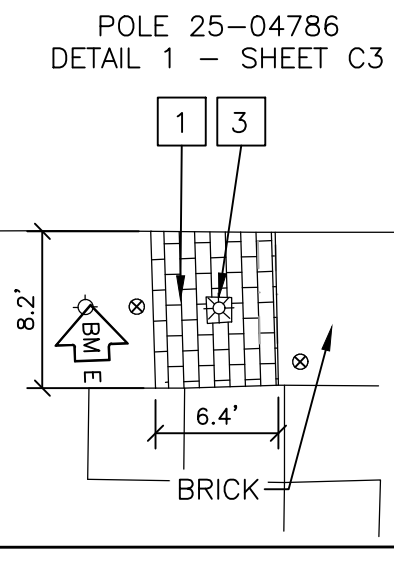
N FOURTH AVE



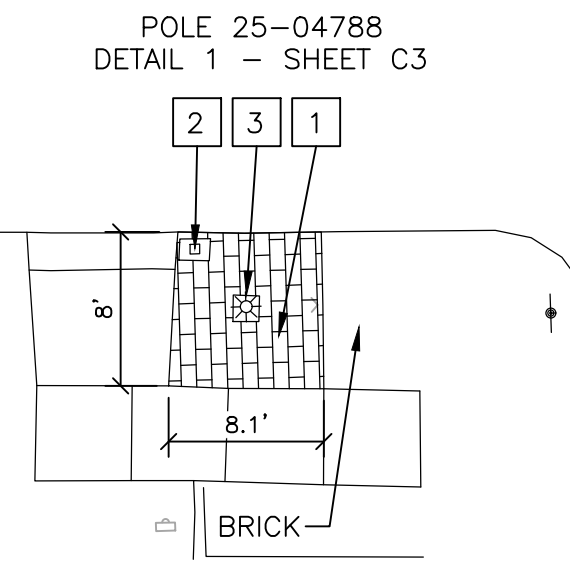
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DETAIL 1 - SHEET C3



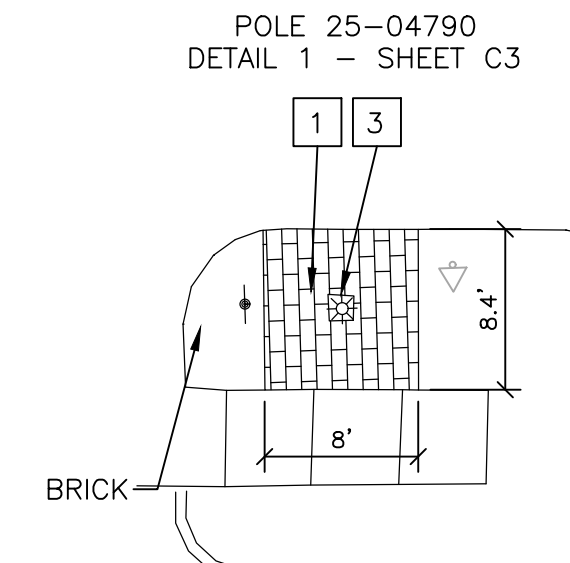
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DETAIL 1 - SHEET C3



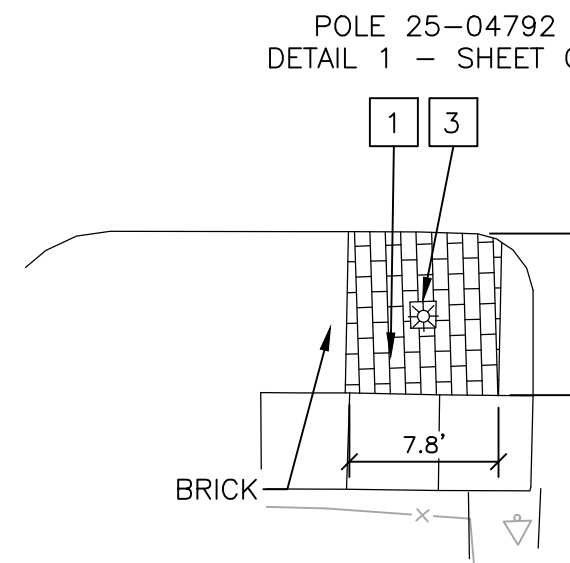
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DETAIL 1 - SHEET C3



POLE 25-04788
DETAIL 1 - SHEET C3



POLE 25-04790
DETAIL 1 - SHEET C3



POLE 25-04792
DETAIL 1 - SHEET C3

REMOVAL KEYS & QUANTITIES

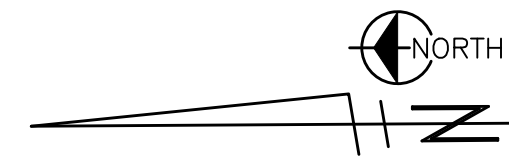
KEY	DESCRIPTION	QUANTITY	UNIT
1	REMOVE CONCRETE SIDEWALK AND DRIVE - ANY THICKNESS	618.0	SFT
2	PROTECT - PAID FOR AS "GENERAL CONDITIONS"	4.0	EA
3	LIGHT POLE AND FOUNDATION, REMOVAL	12.0	EA
4	BIKE RACK REMOVE, SALVAGE & REINSTALL - PAID FOR AS "GENERAL CONDITIONS"	1.0	EA
5	SIGN REMOVE, SALVAGE & REINSTALL - PAID FOR AS "GENERAL CONDITIONS"	1.0	EA

CONSTRUCTION KEYS & QUANTITIES

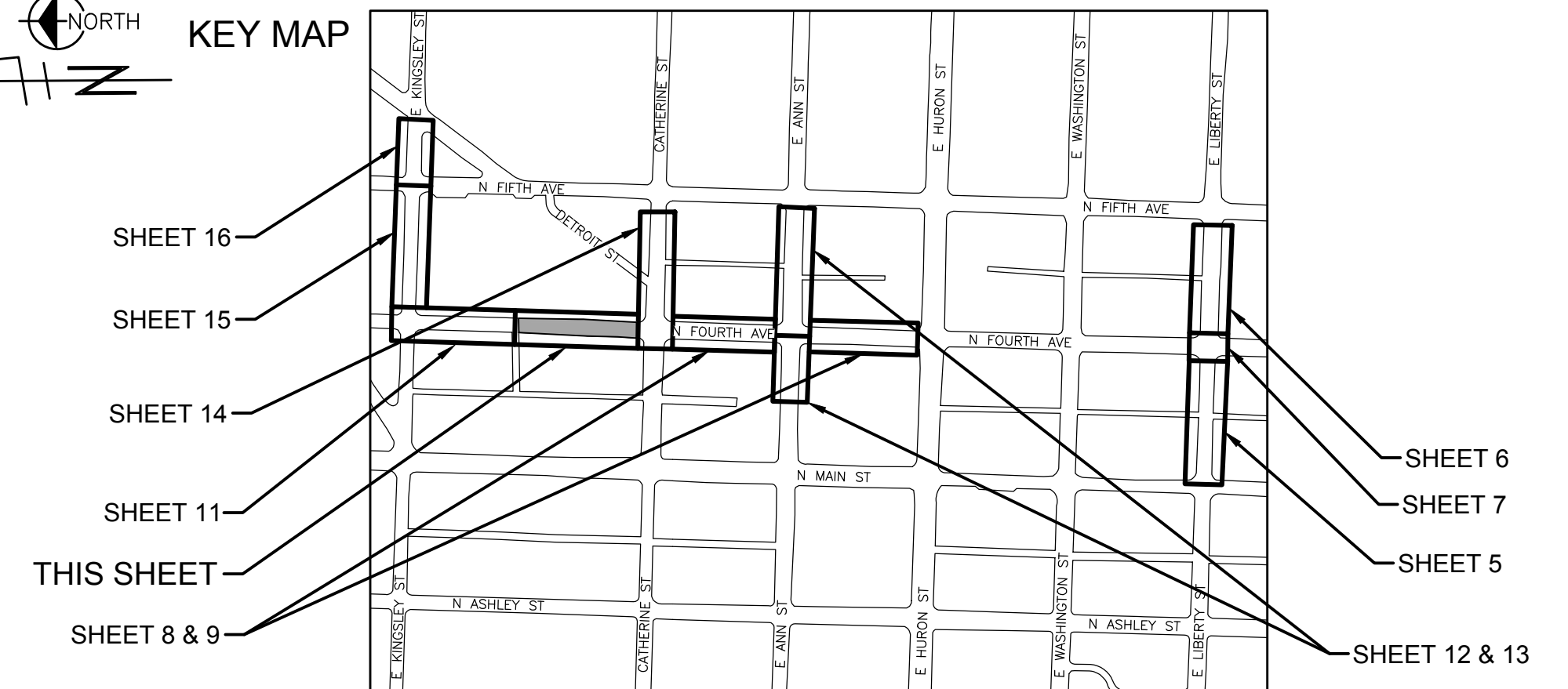
KEY	DESCRIPTION	QUANTITY	UNIT
1	4-INCH CONCRETE SIDEWALK, RAMP, OR DRIVE	113.0	SFT
2	SIDEWALK UNIT PAVERS	413.0	SFT
3	POLE FOUNDATION	12.0	EA
4	ADJUST	4.0	EA
5	LIGHT POLE, OA	10.0	EA
6	LIGHT POLE, OB	2.0	EA
7	SLOPE RESTORATION	14.0	SYD
8	NEW HANDHOLE	8.0	EA



REMOVAL PLAN
SCALE: 1" = 10'
0 5 10 20

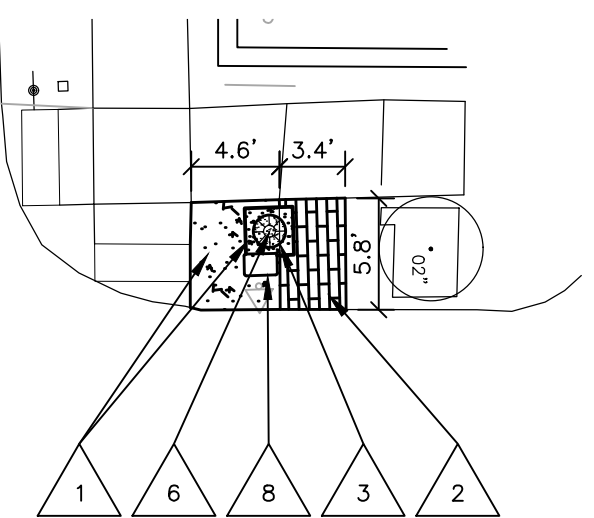


KEY MAP

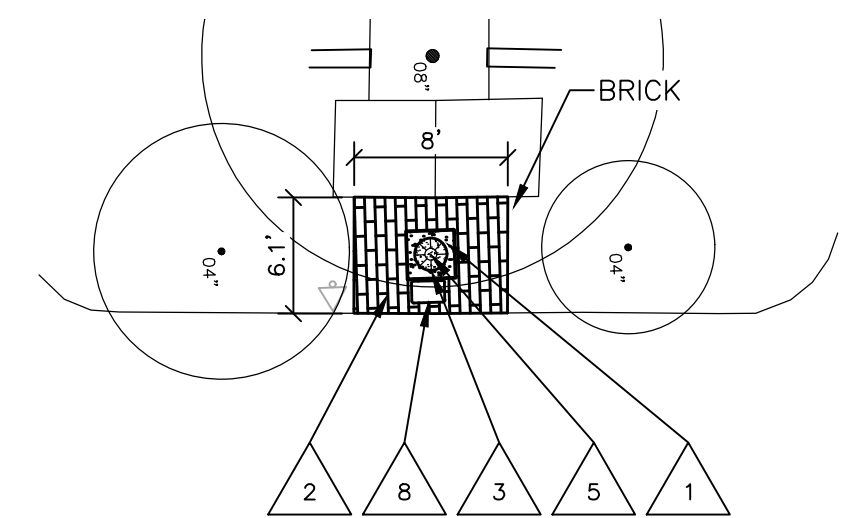


CONSTRUCTION PLAN
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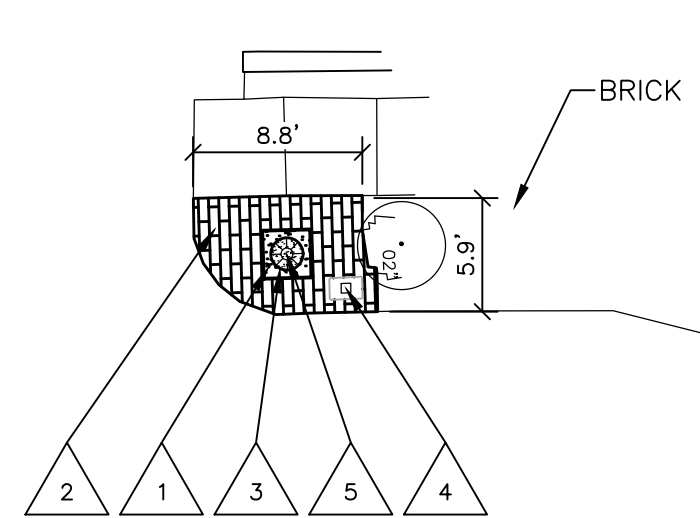
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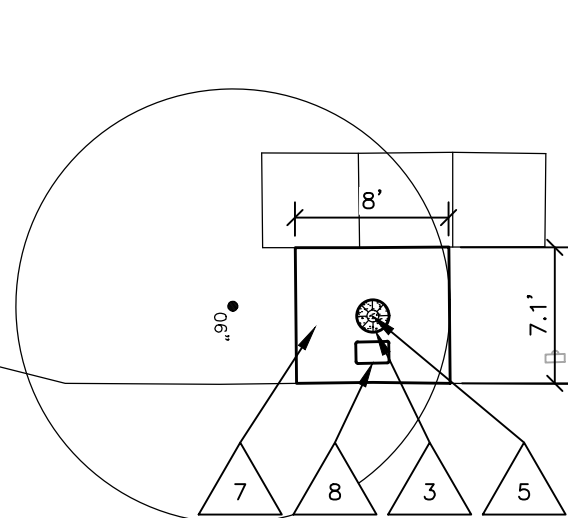
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DETAIL C/F - SHEET C4



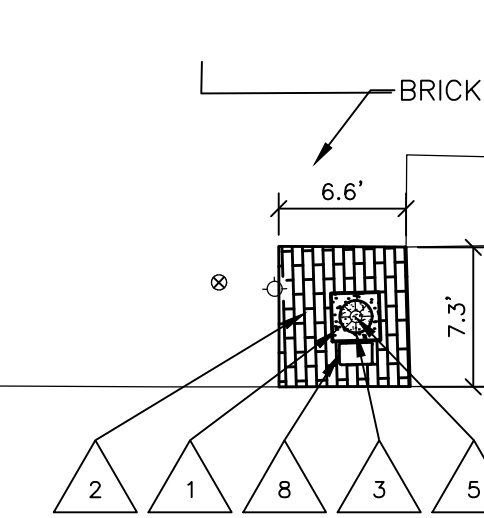
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DETAIL E - SHEET C4



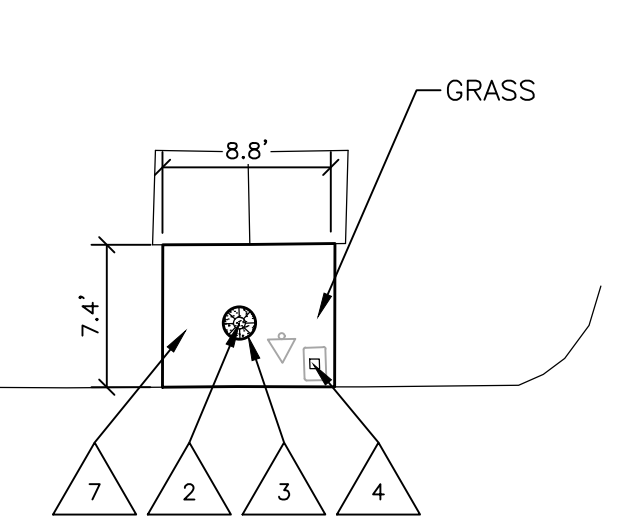
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DETAIL E - SHEET C4



POLE 25-04789
DETAIL B - SHEET C4

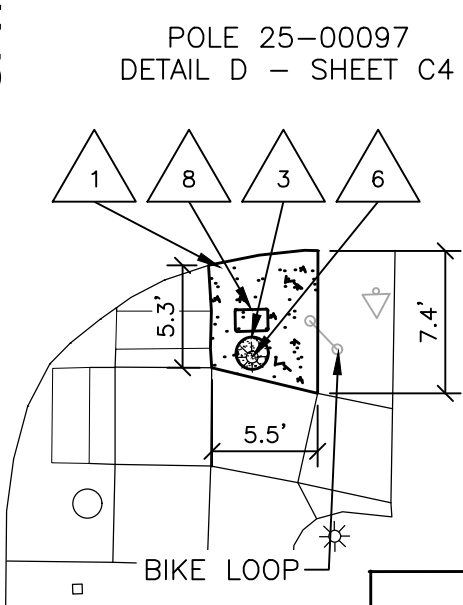


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DETAIL E - SHEET C4

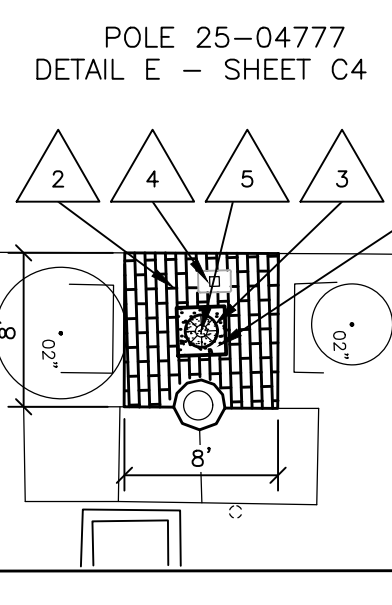


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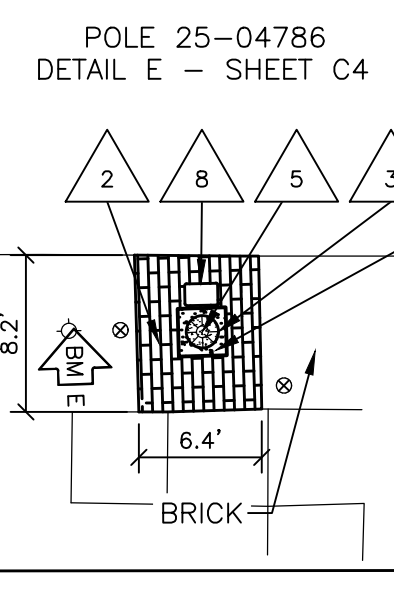
N FOURTH AVE



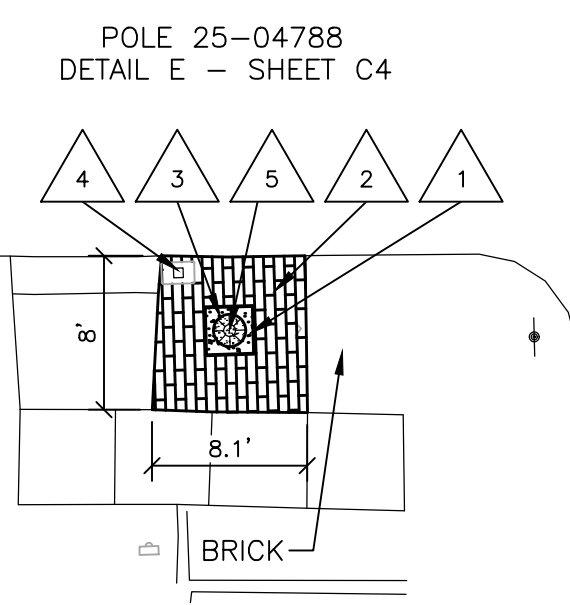
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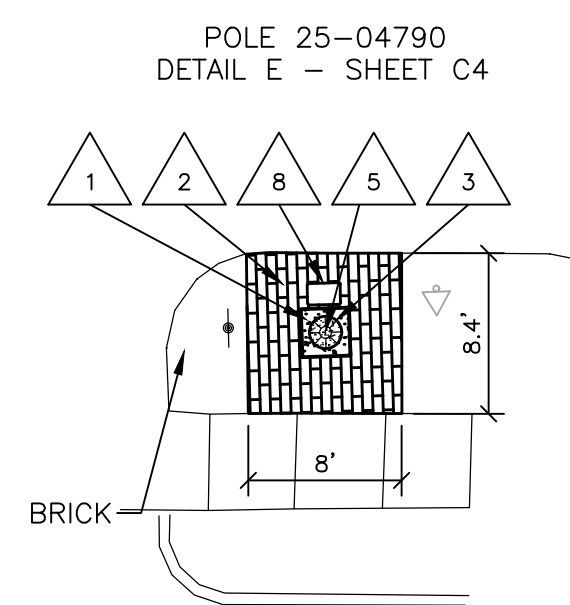
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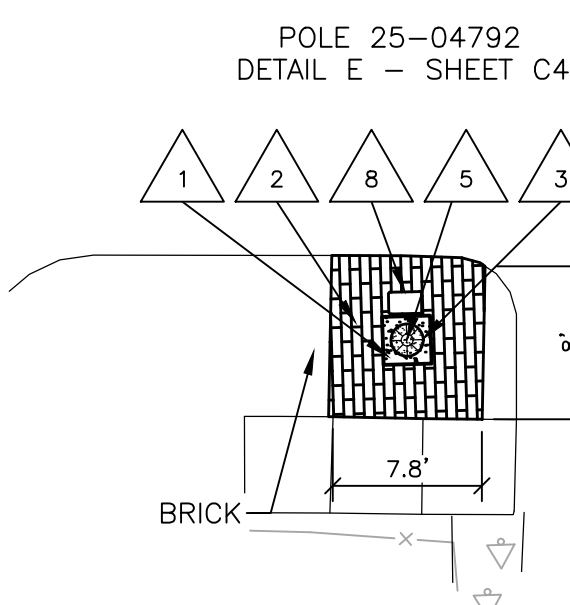
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POLE 25-04788
DETAIL E - SHEET C4



POLE 25-04790
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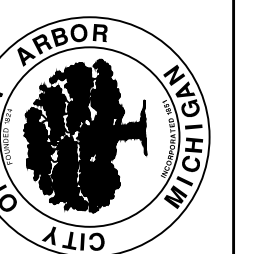


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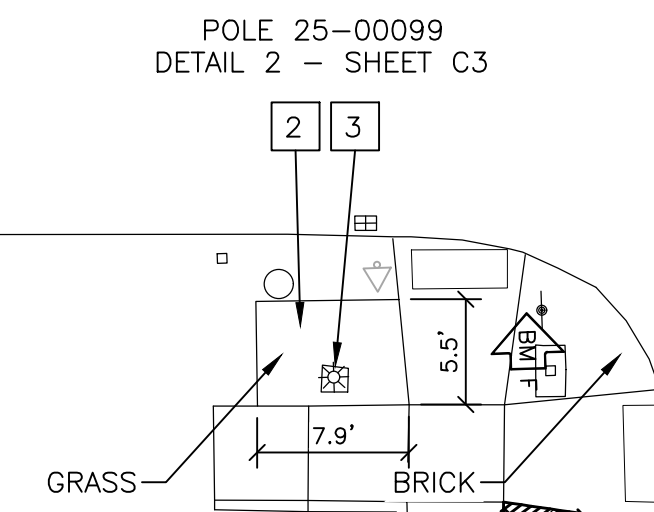
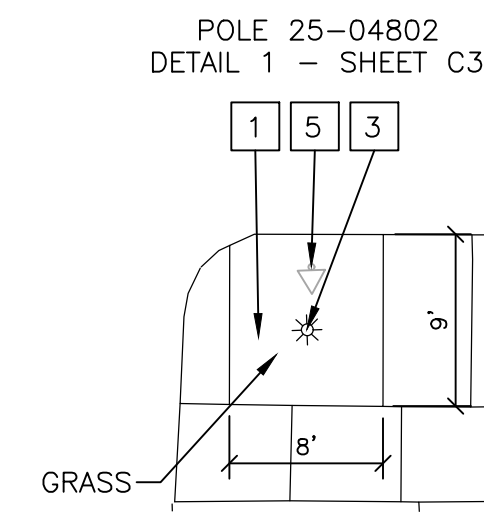
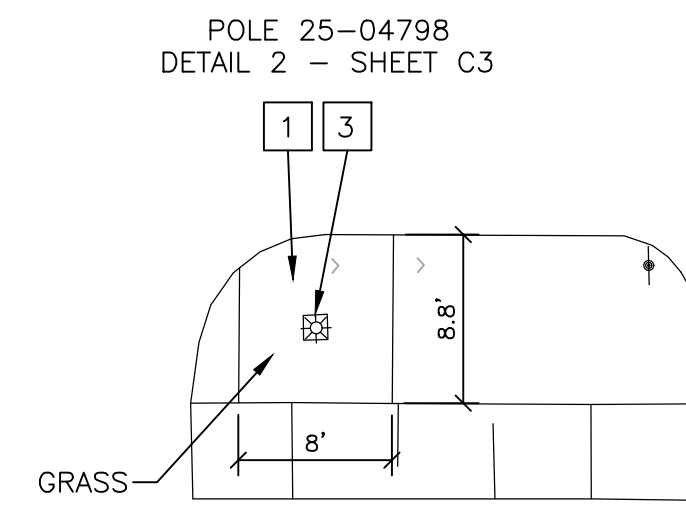
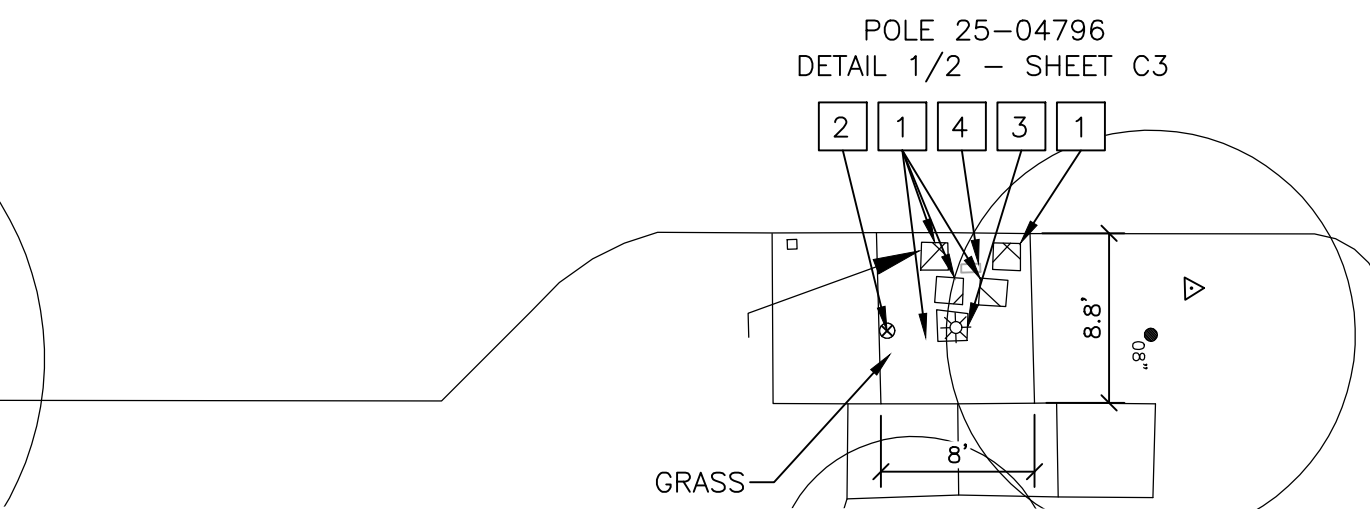
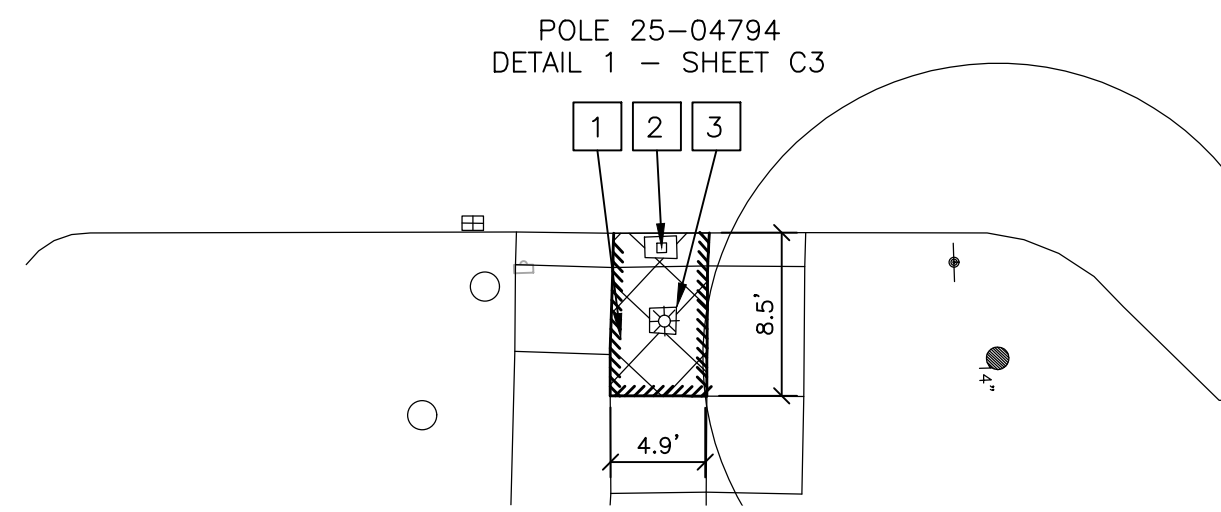
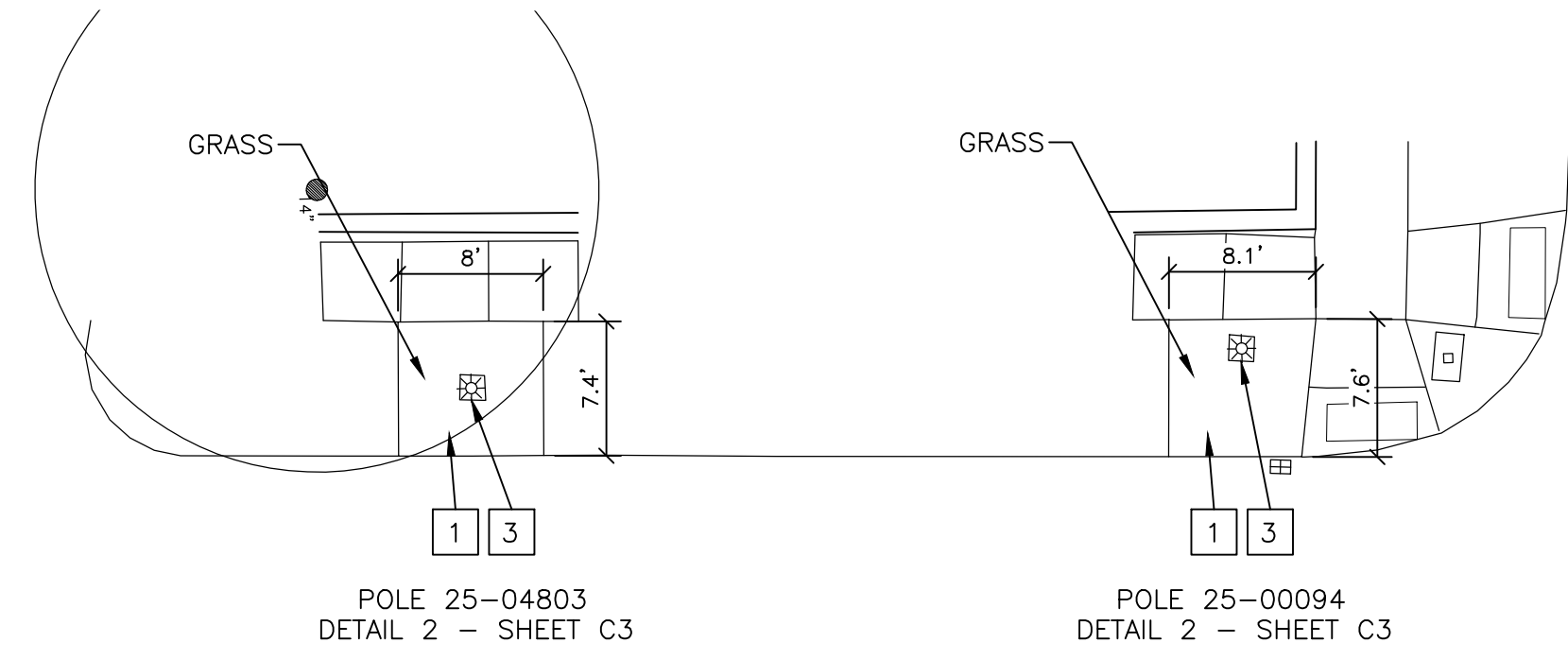
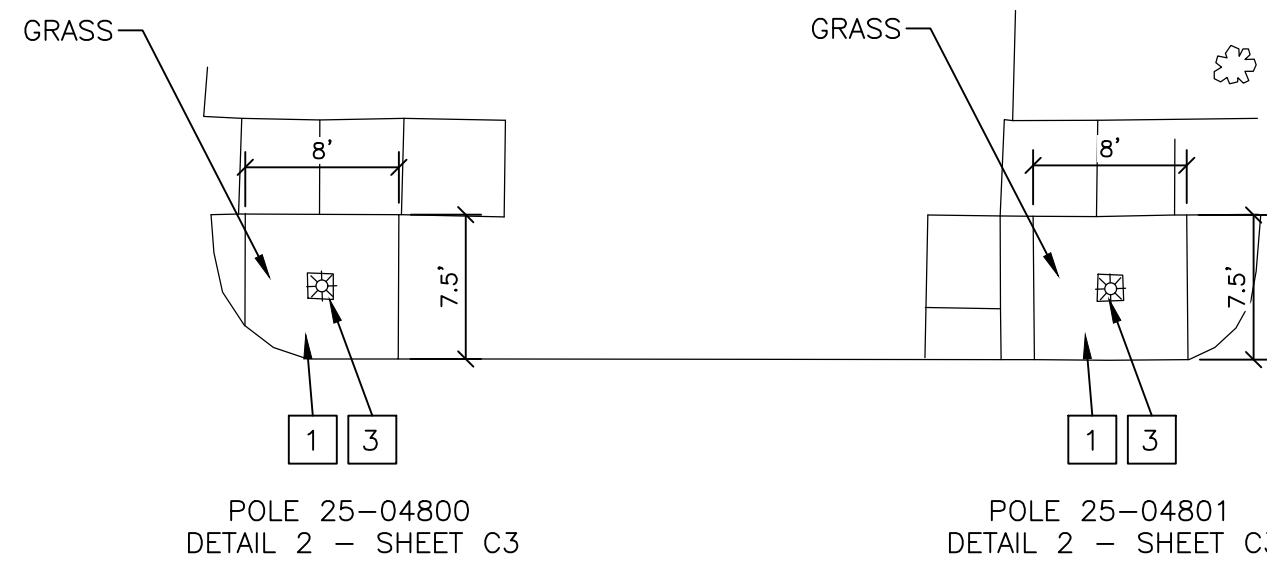
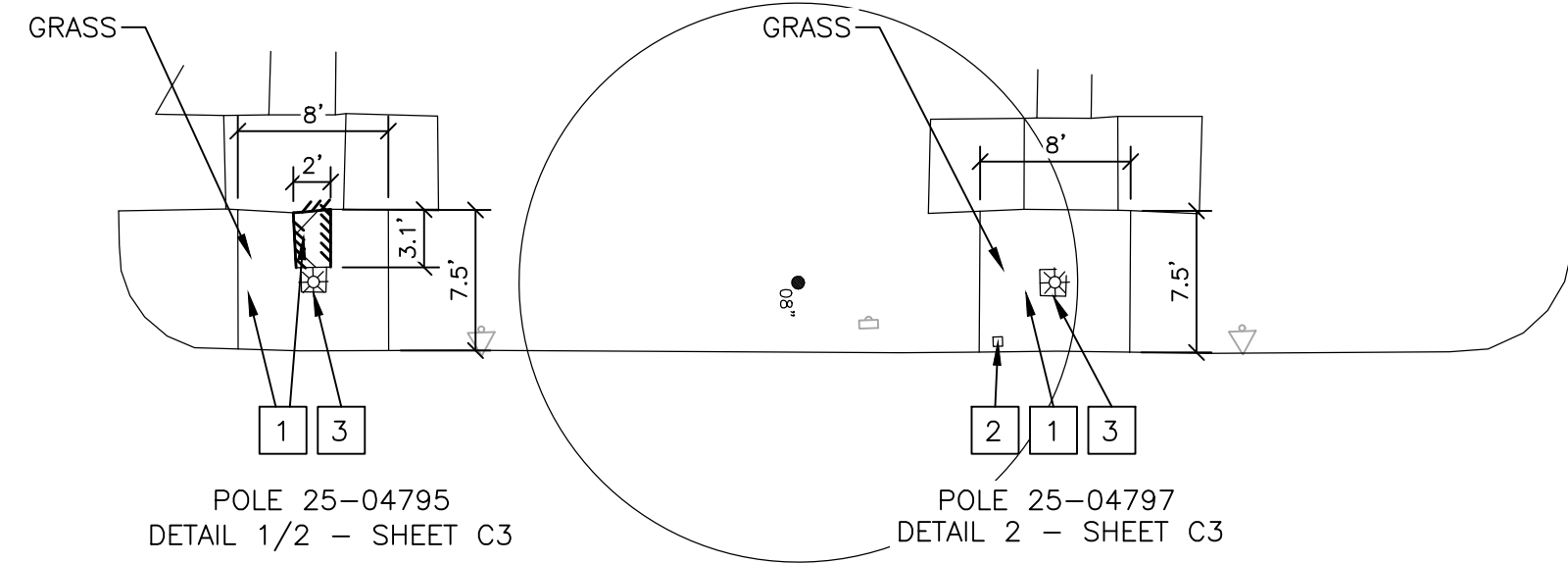
REV.	DESCRIPTION	DATE	DRAWN	CHECKED
1.	ISSUED FOR BID	04-07-2017	JANI	JANI

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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
STREET LIGHTING REPLACEMENT -
KERRYTOWN MARKET AND LIBERTY STREETS
N FOURTH AVE, REMOVAL AND CONSTRUCTION PLAN

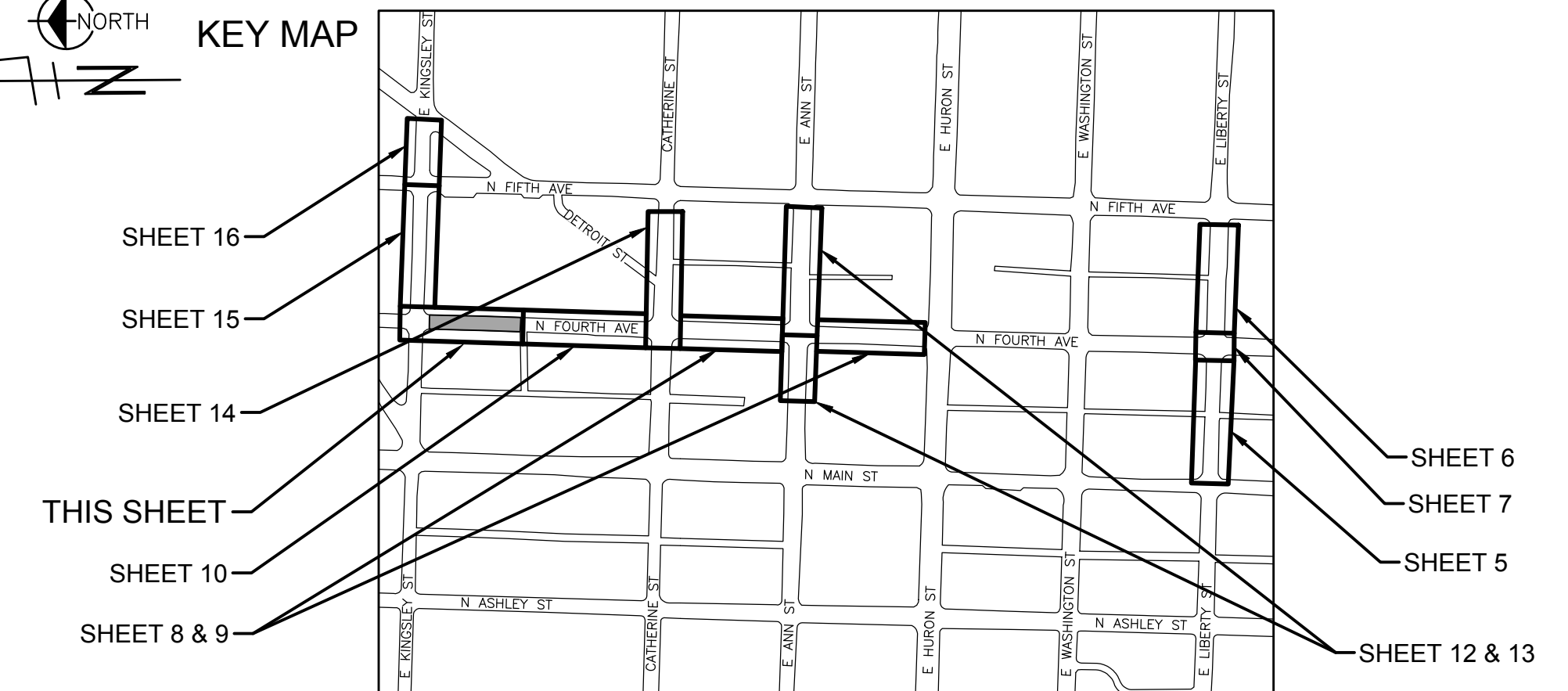
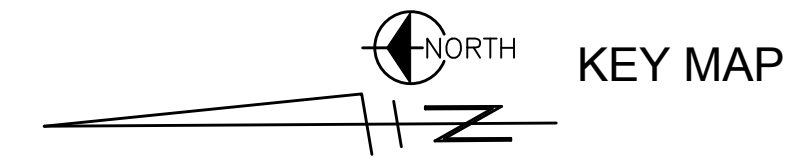
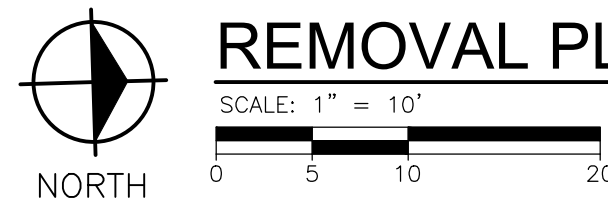
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N FOURTH AVE

E KINGSLEY ST

CONSTRUCTION PLAN

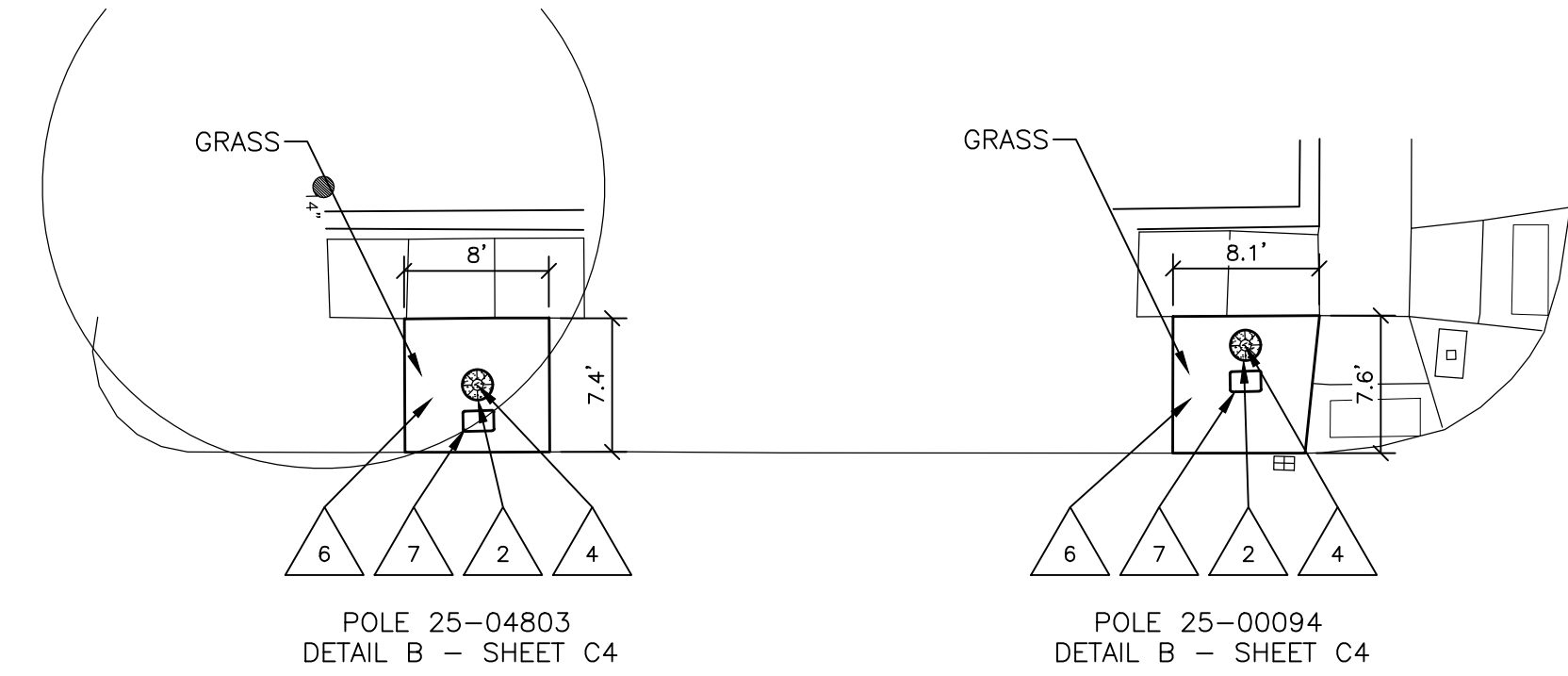
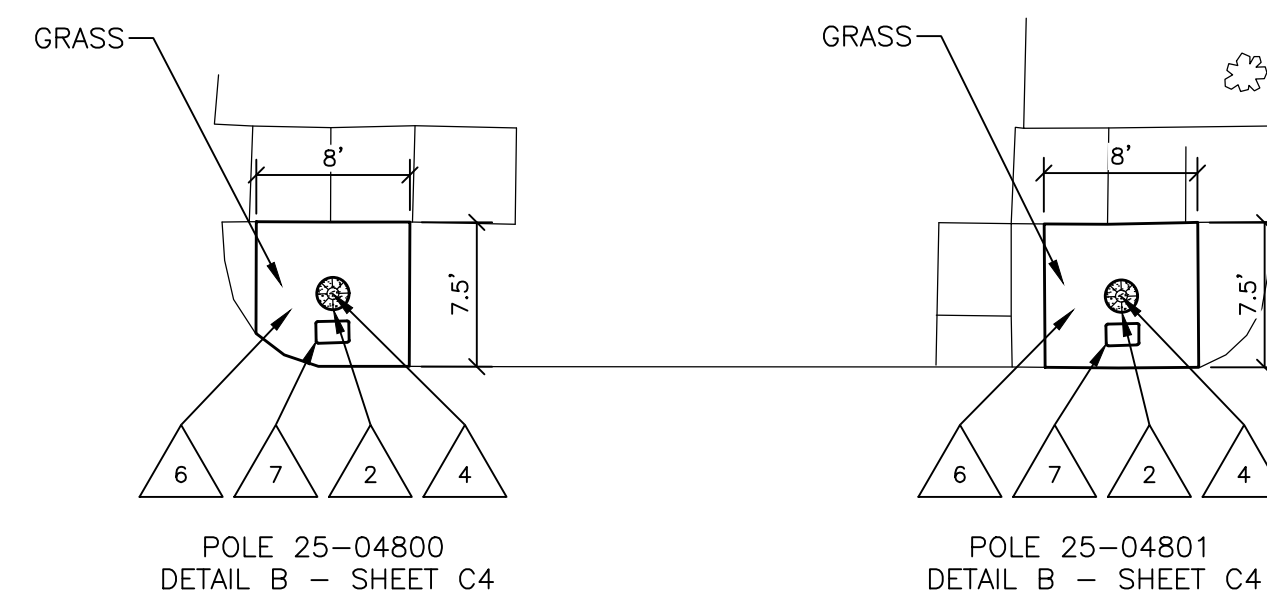
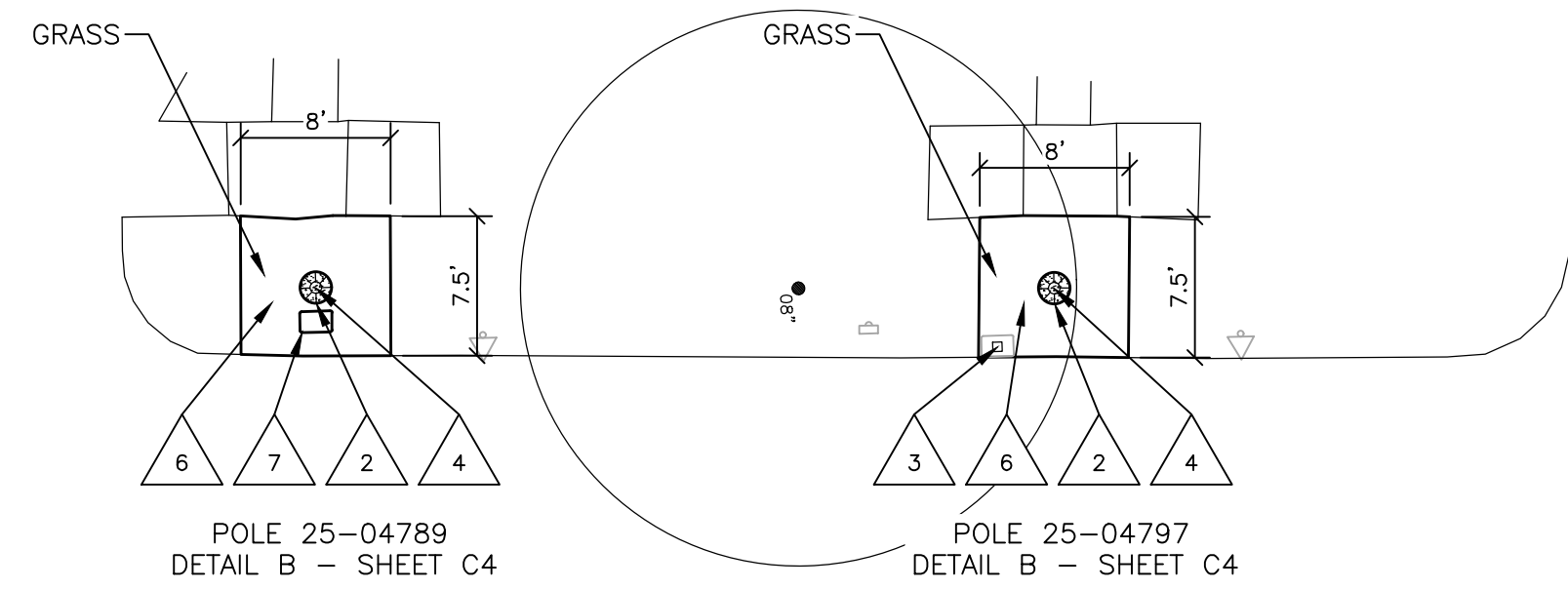
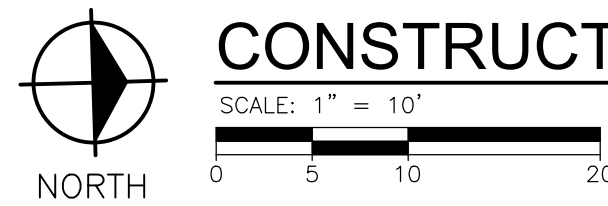


REMOVAL KEYS & QUANTITIES

KEY	DESCRIPTION	QUANTITY	UNIT
1	REMOVE CONCRETE SIDEWALK AND DRIVE - ANY THICKNESS	646.0	SFT
2	PROTECT - PAID FOR AS "GENERAL CONDITIONS"	3.0	EA
3	LIGHT POLE AND FOUNDATION, REMOVAL	11.0	EA
4	PARKING METER REMOVE, SALVAGE & REINSTALL	1.0	EA
5	SIGN REMOVE, SALVAGE & REINSTALL - PAID FOR AS "GENERAL CONDITIONS"	1.0	EA

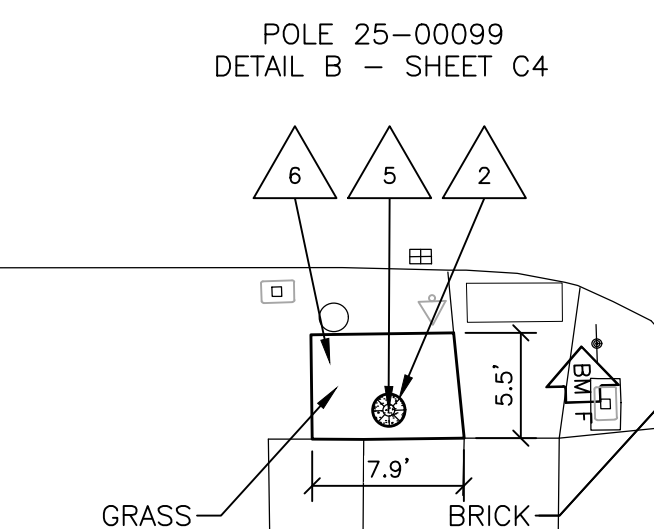
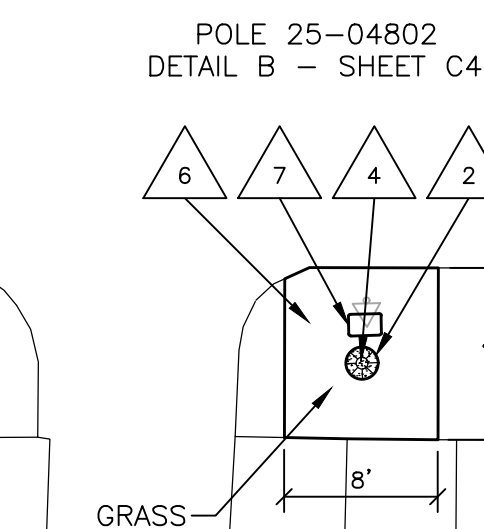
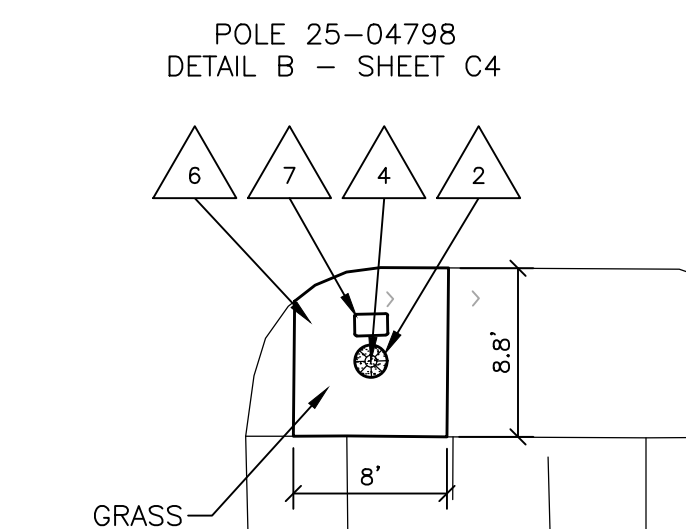
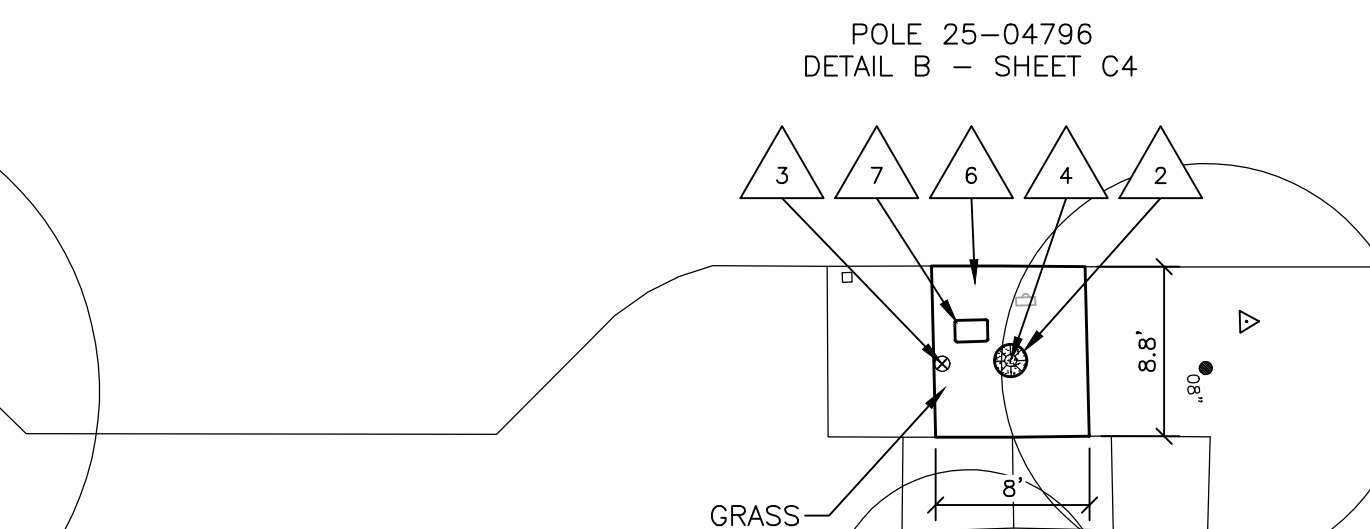
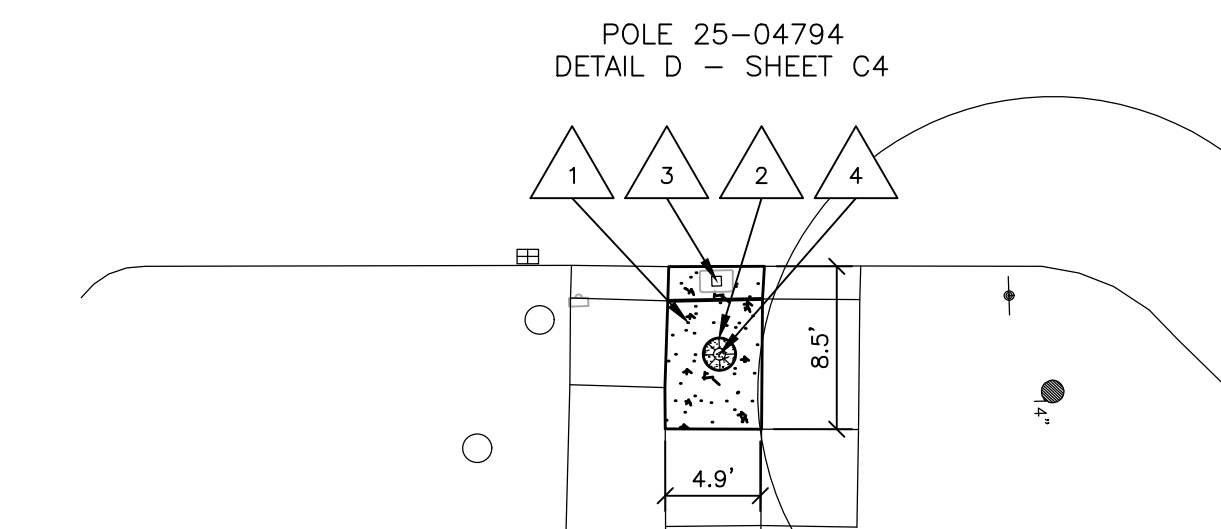
CONSTRUCTION KEYS & QUANTITIES

KEY	DESCRIPTION	QUANTITY	UNIT
1	4-INCH CONCRETE SIDEWALK, RAMP, OR DRIVE	43.0	SFT
2	POLE FOUNDATION	11.0	EA
3	ADJUST	3.0	EA
4	LIGHT POLE, OA	9.0	EA
5	LIGHT POLE, OB	2.0	EA
6	SLOPE RESTORATION	68.0	SYD
7	NEW HANDHOLE	8.0	EA



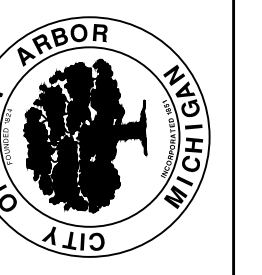
N FOURTH AVE

E KINGSLEY ST



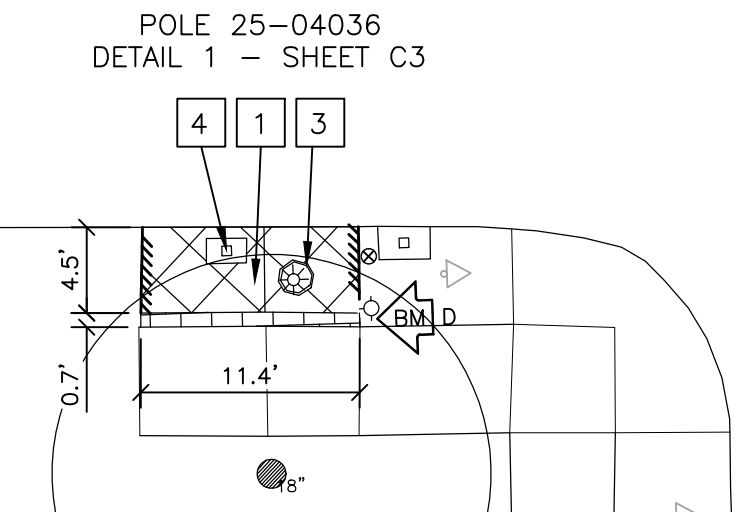
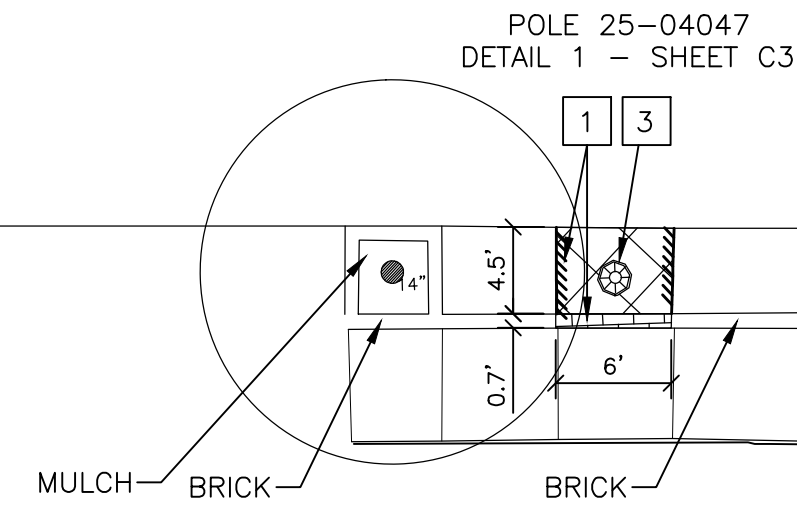
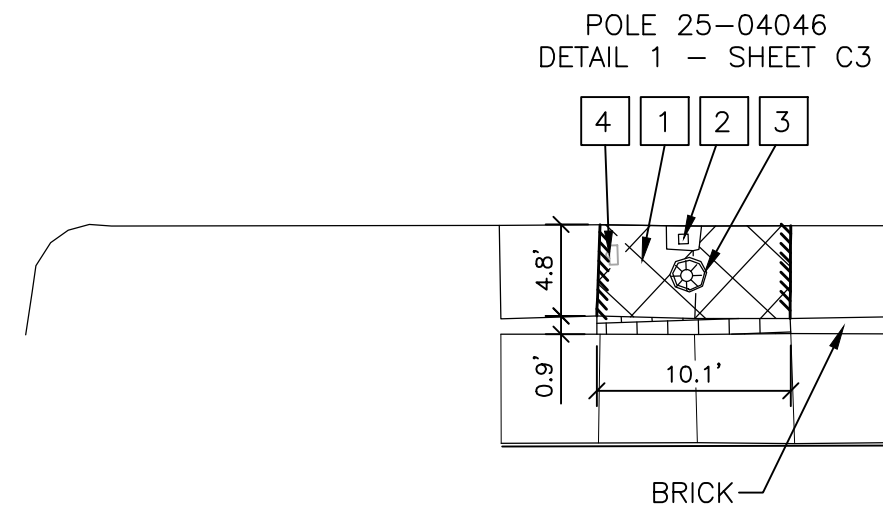
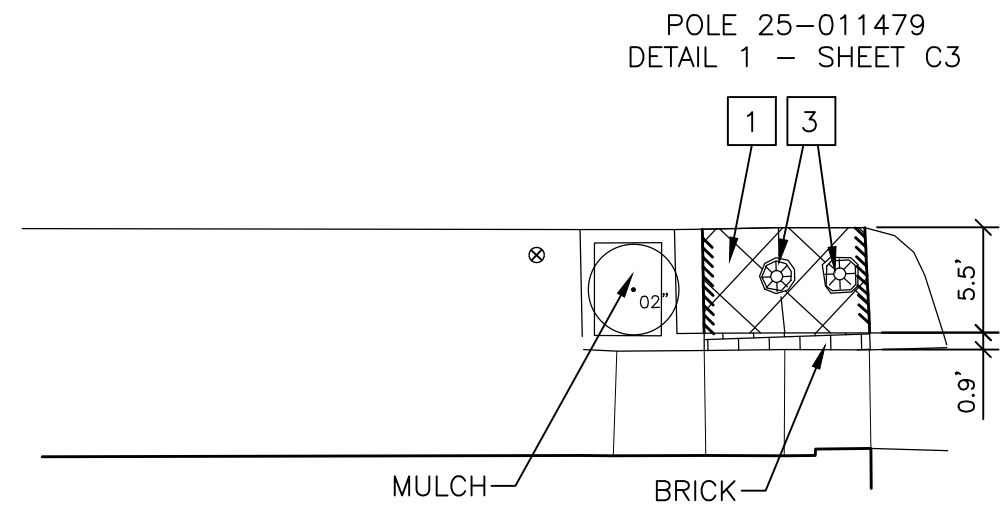
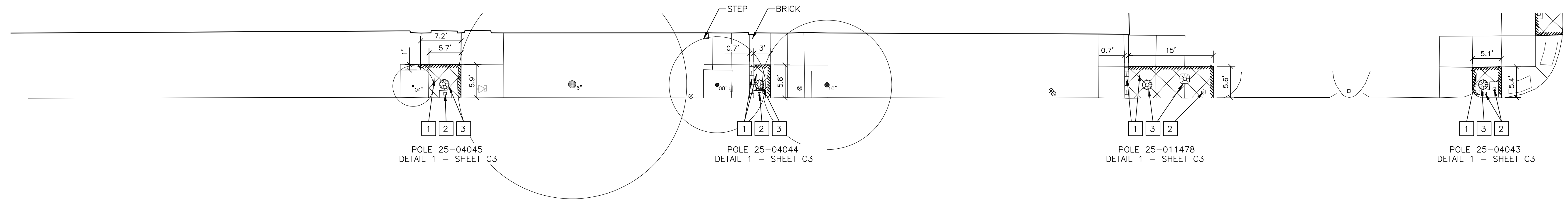
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1.	ISSUED FOR BID	04-07-2017	SRT / JANI / JANI	

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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
STREET LIGHTING REPLACEMENT -
KERRYTOWN MARKET AND LIBERTY STREETS
N FOURTH AVE, REMOVAL AND CONSTRUCTION PLAN
SCALE PLAN:
DRAWING No.
2017-026-C7

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REMOVAL KEYS & QUANTITIES

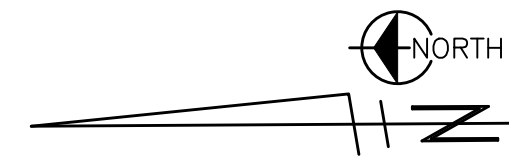
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1	REMOVE CONCRETE SIDEWALK AND DRIVE-ANY THICKNESS	349.0	SFT
2	PROTECT - PAID FOR AS "GENERAL CONDITIONS"	7.0	EA
3	LIGHT POLE AND FOUNDATION, REMOVAL	10.0	EA

CONSTRUCTION KEYS & QUANTITIES

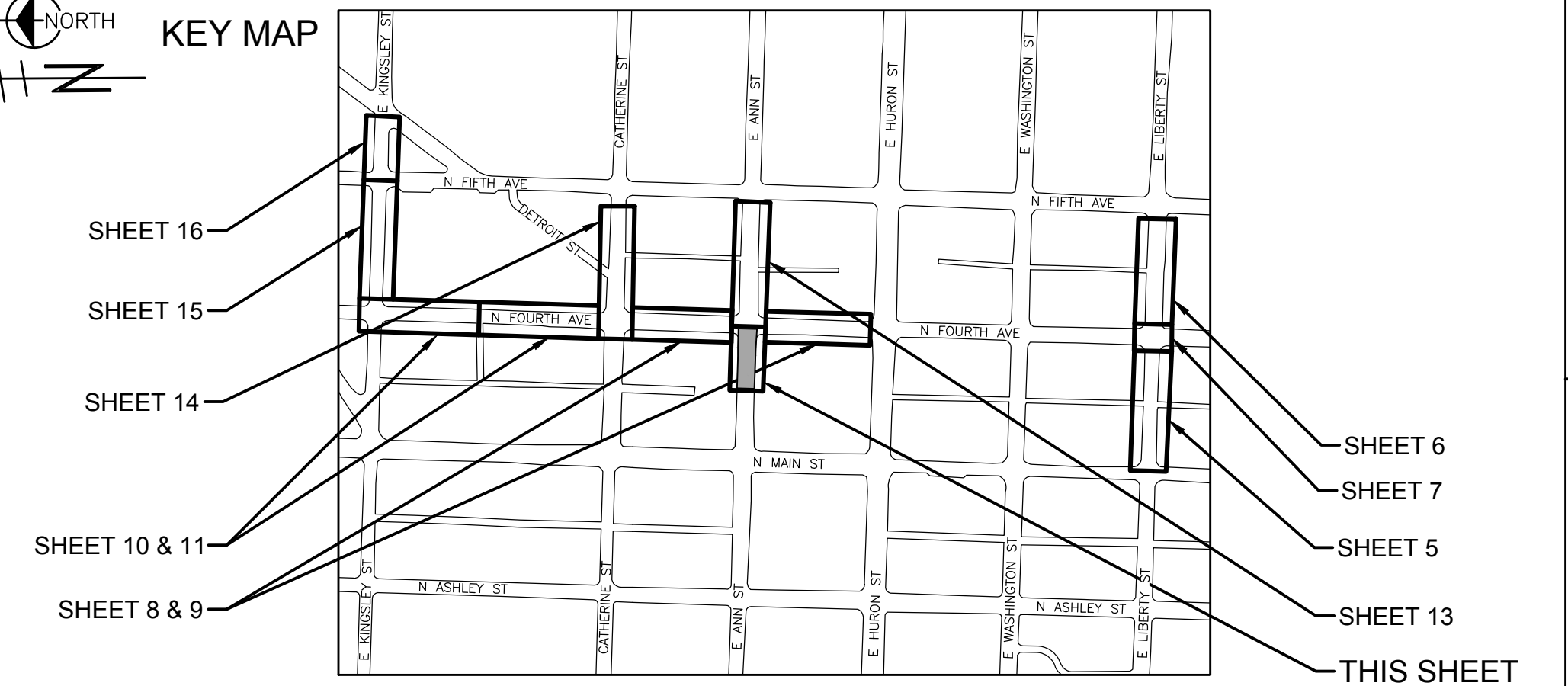
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1	4-INCH CONCRETE SIDEWALK, RAMP, OR DRIVE	336.0	SFT
2	SIDEWALK UNIT PAVER	38.0	SFT
3	POLE FOUNDATION	8.0	EA
4	ADJUST	7.0	EA
5	LIGHT POLE, OA	6.0	EA
6	LIGHT POLE, OB	2.0	EA
7	NEW HANDHOLE	3.0	EA



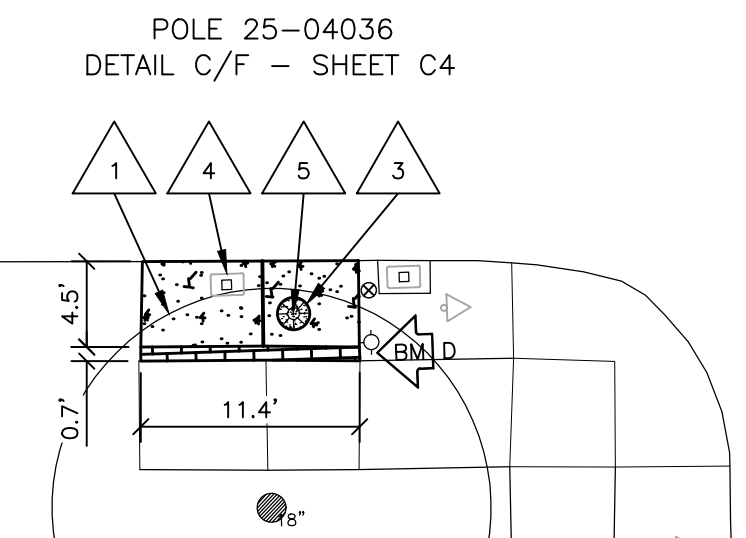
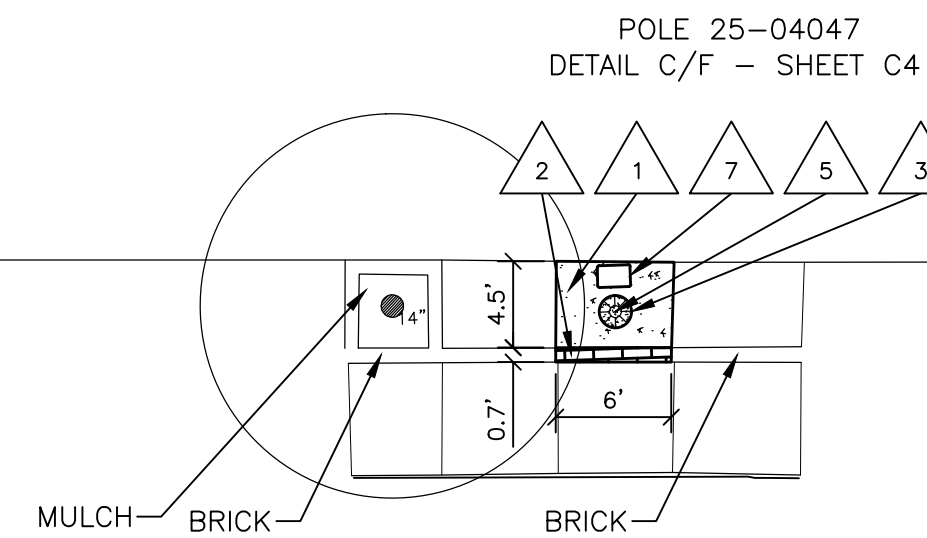
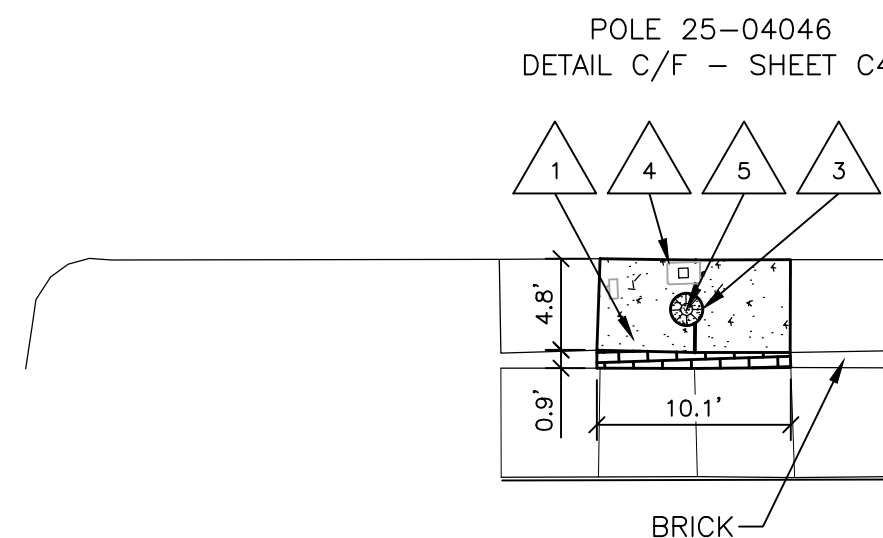
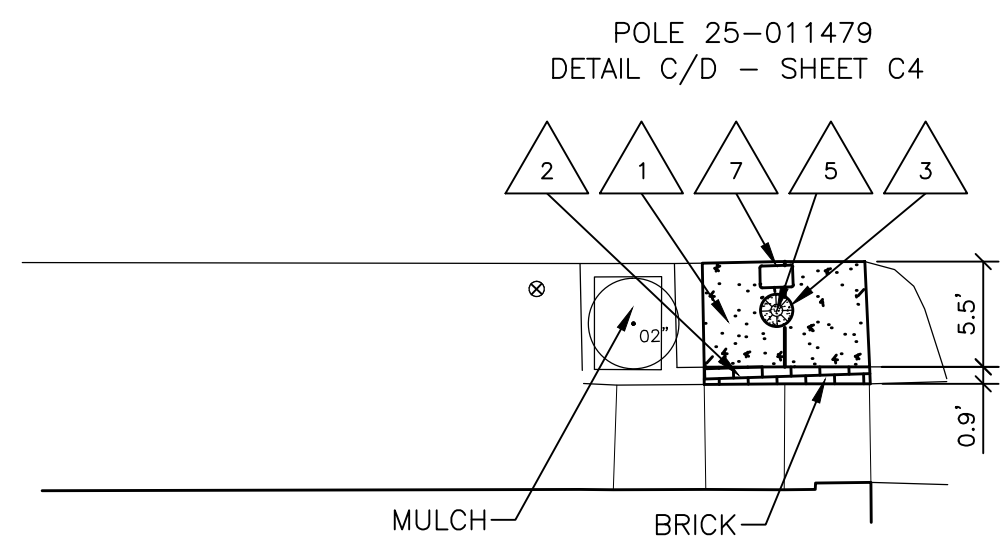
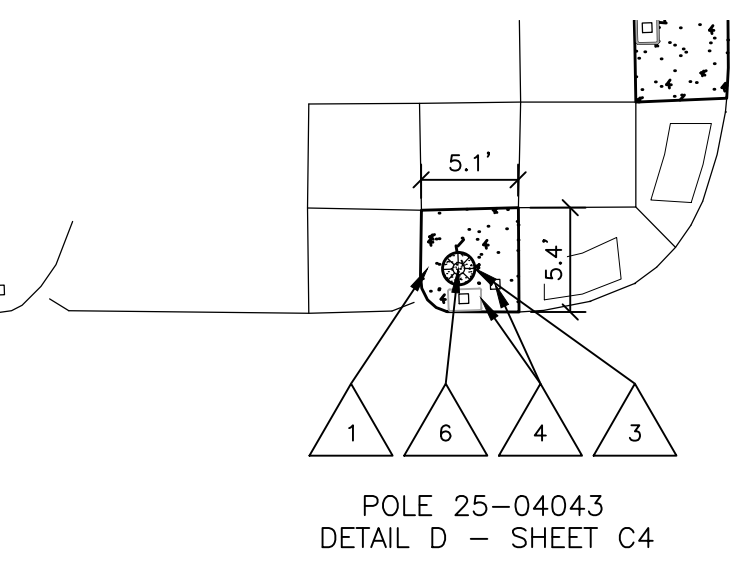
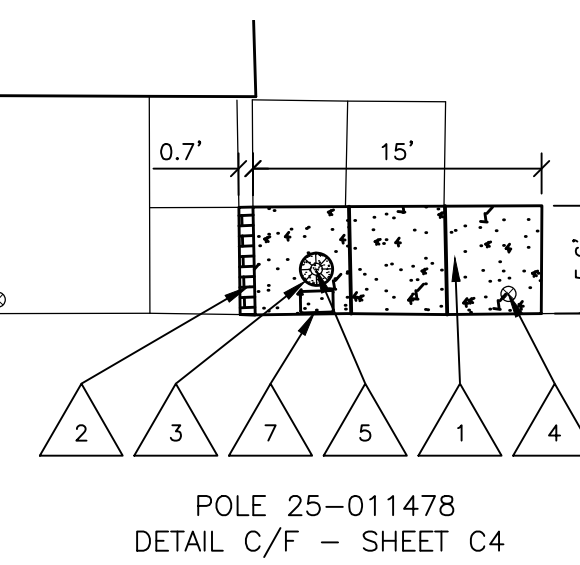
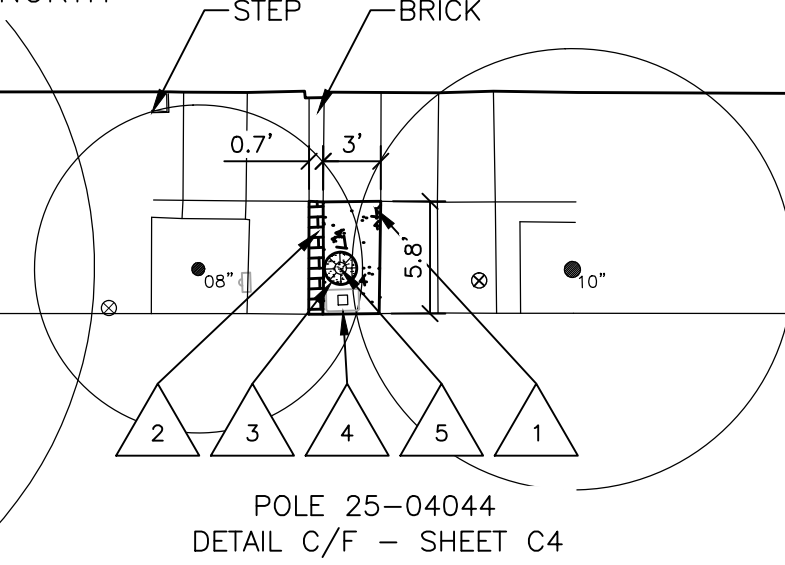
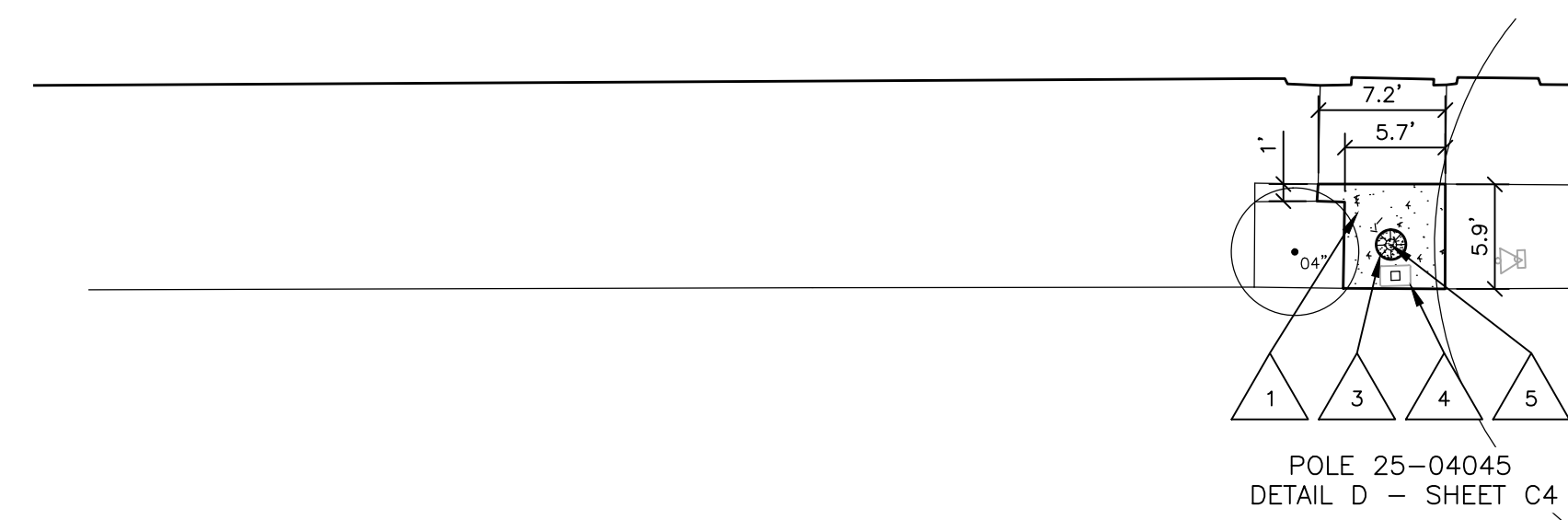
REMOVAL PLAN
SCALE: 1" = 10'
0 5 10 20



KEY MAP



CONSTRUCTION PLAN
SCALE: 1" = 10'
0 5 10 20



N FOURTH AVE

N FOURTH AVE

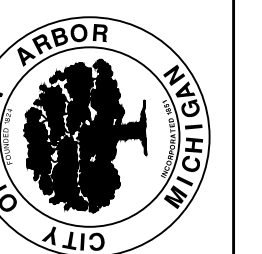
E ANN ST

E ANN ST



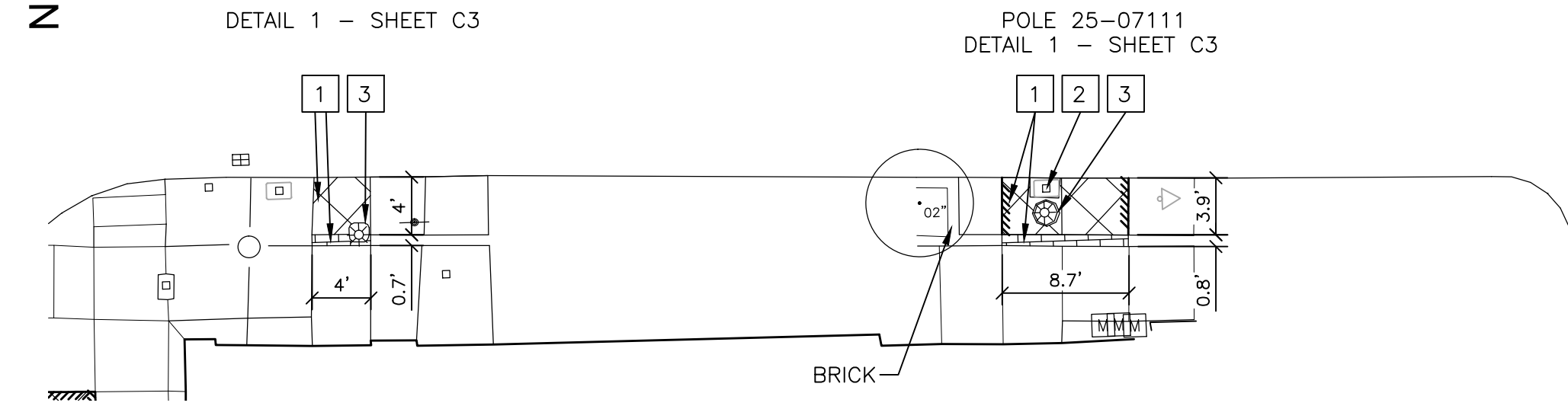
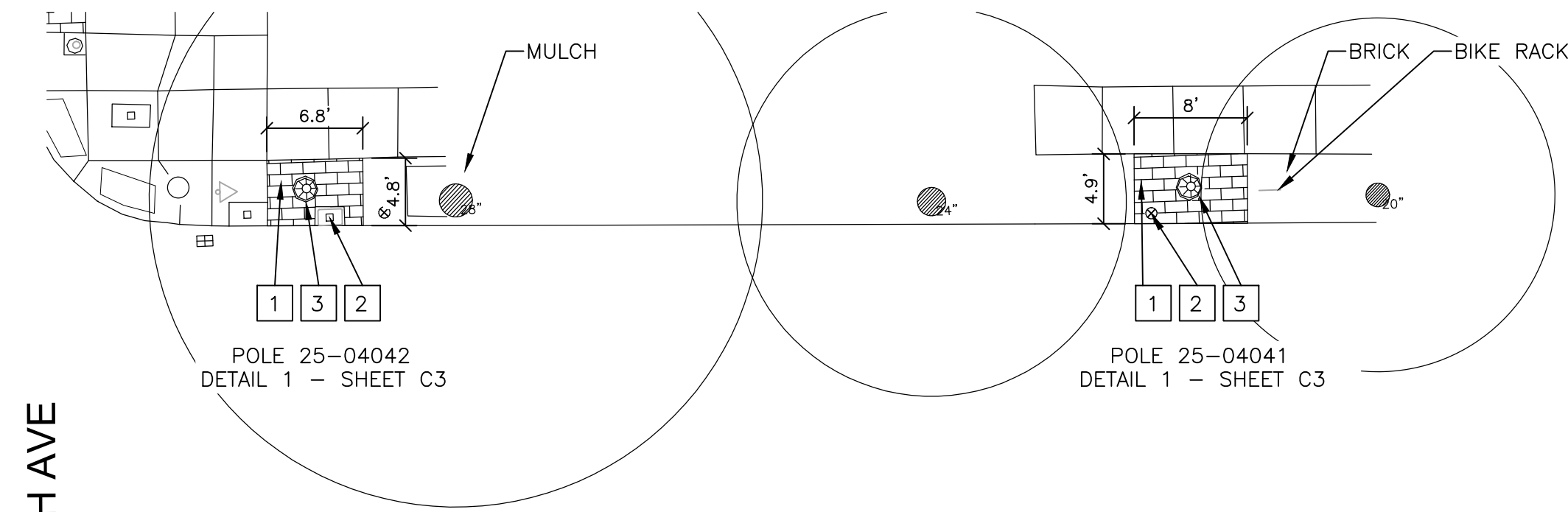
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1.	ISSUED FOR BID	04-07-2017	JANI	JANI

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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
STREET LIGHTING REPLACEMENT -
KERRYTOWN MARKET AND LIBERTY STREETS
E ANN ST, REMOVAL AND CONSTRUCTION PLAN

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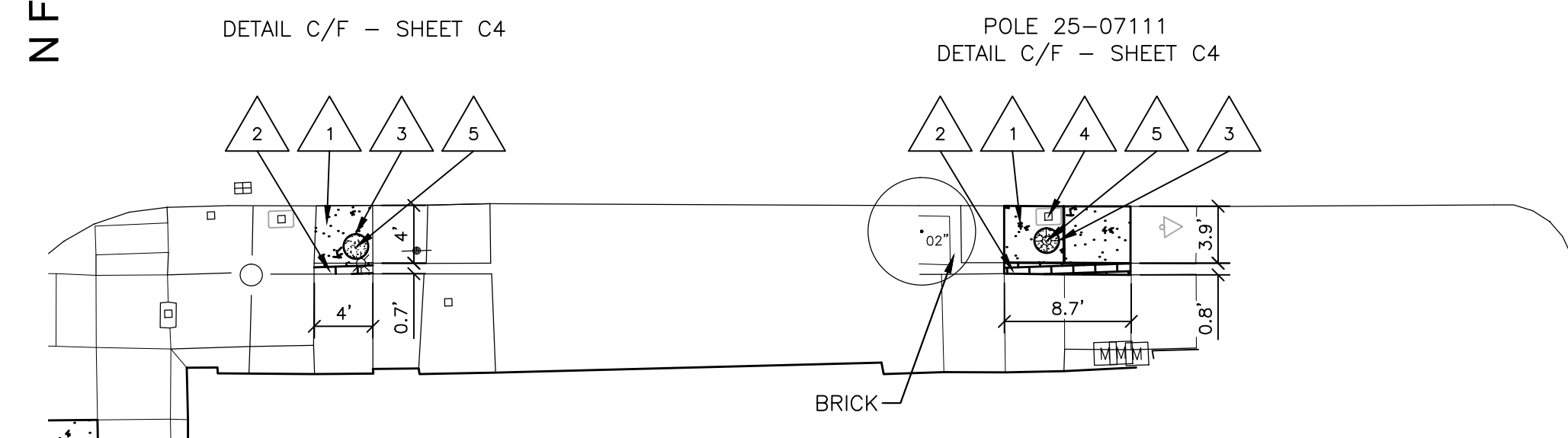
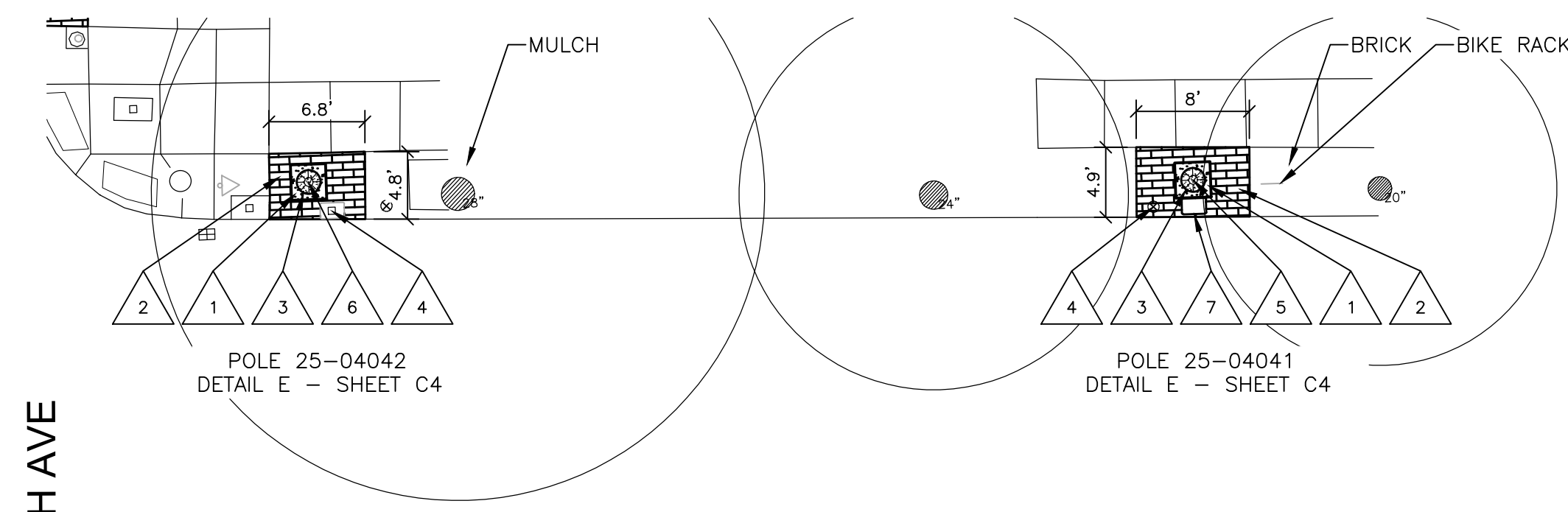
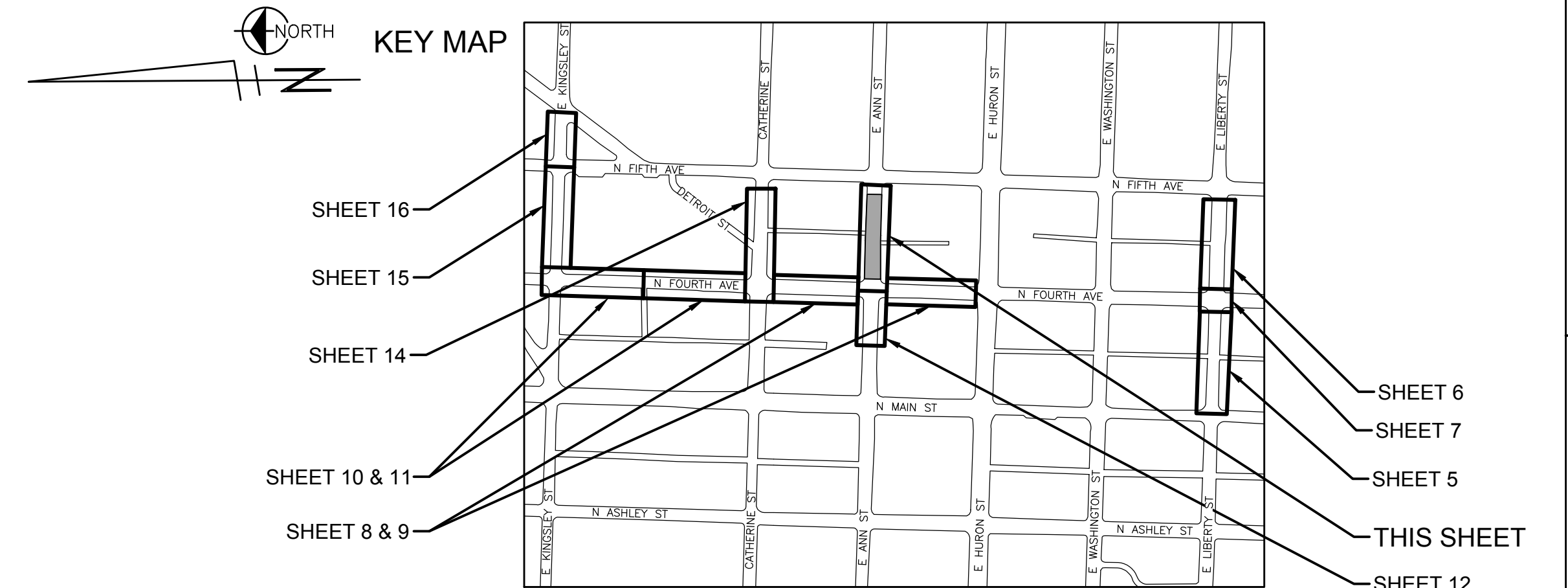
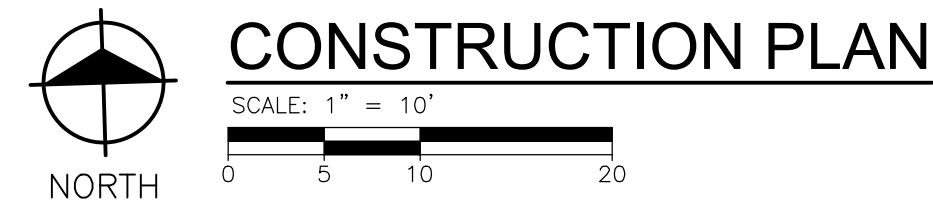
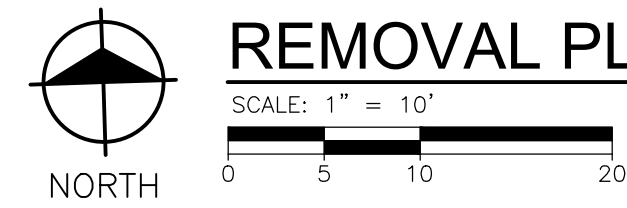


REMOVAL KEYS & QUANTITIES

KEY	DESCRIPTION	QUANTITY	UNIT
1	REMOVE CONCRETE SIDEWALK AND DRIVE - ANY THICKNESS	145.0	SFT
2	PROTECT - PAID FOR AS "GENERAL CONDITIONS"	4.0	EA
3	LIGHT POLE AND FOUNDATION, REMOVAL	5.0	EA

CONSTRUCTION KEYS & QUANTITIES

KEY	DESCRIPTION	QUANTITY	UNIT
1	4-INCH CONCRETE SIDEWALK, RAMP, OR DRIVE	100.0	SFT
2	SIDEWALK UNIT PAVERS	65.0	SFT
3	POLE FOUNDATION	5.0	EA
4	ADJUST	4.0	EA
5	LIGHT POLE, OA	3.0	EA
6	LIGHT POLE, OB	2.0	EA
7	NEW HANDHOLE	1.0	EA



N FOURTH AVE

E ANN ST

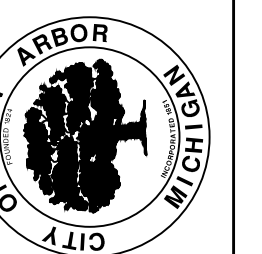
N FOURTH AVE

E ANN ST



REV.	DESCRIPTION	DATE	DRAWN	CHECKED
1.	ISSUED FOR BID	04-07-2017	SRT / JANI / JANI	

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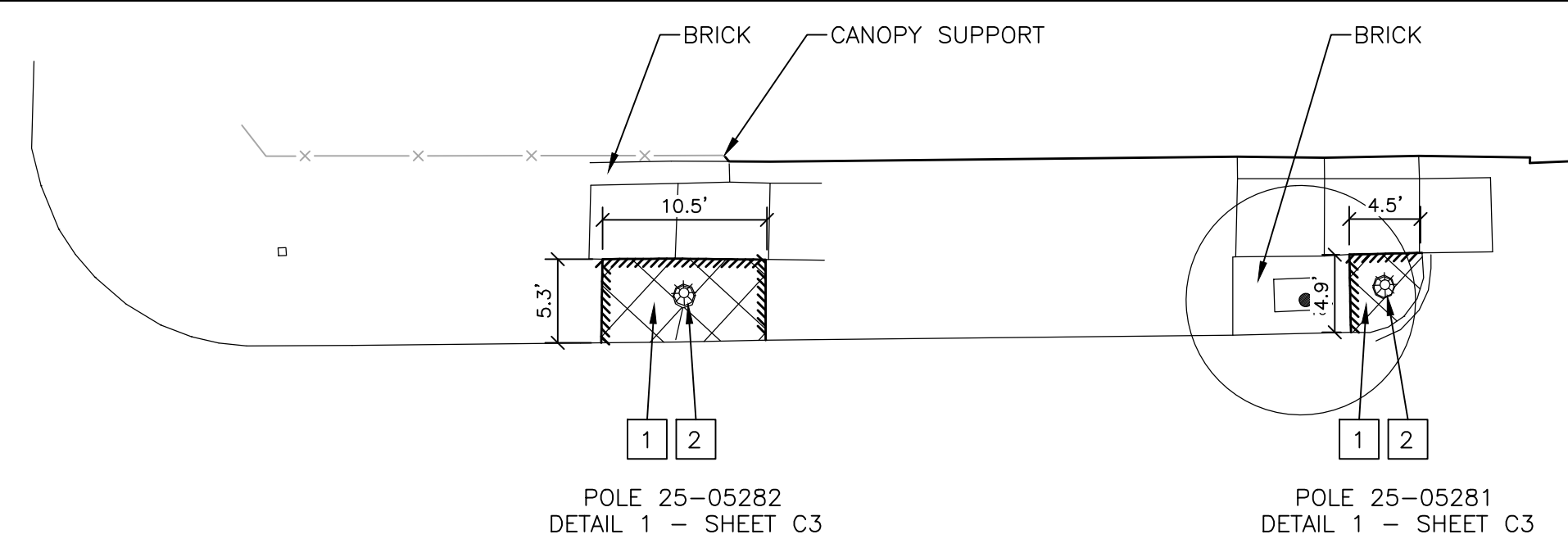
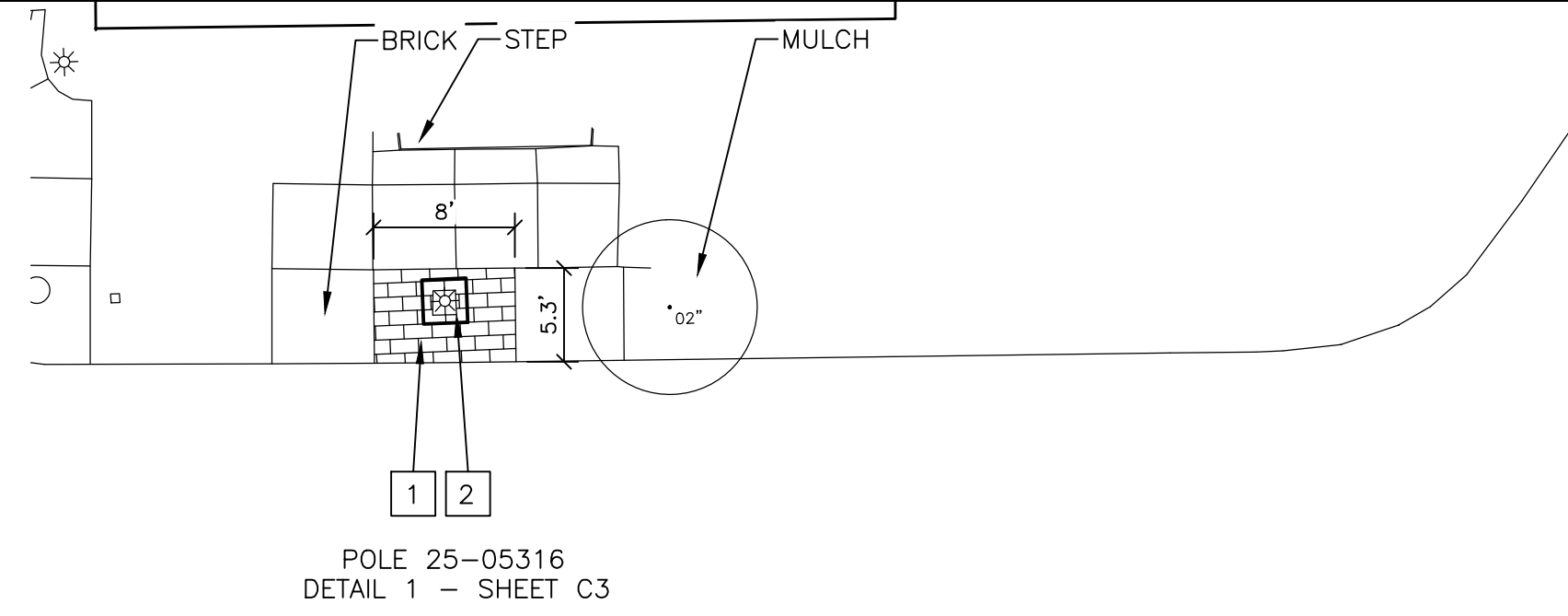


PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
STREET LIGHTING REPLACEMENT -
KERRYTOWN MARKET AND LIBERTY STREETS
E ANN ST, REMOVAL AND CONSTRUCTION PLAN

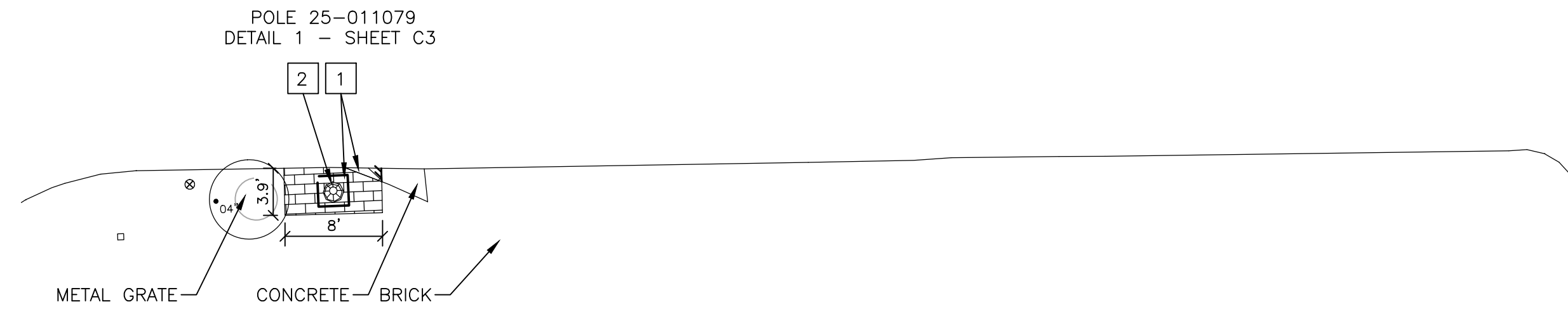
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DRAWING No.
2017-026-C9

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N FOURTH AVE



CATHERINE ST

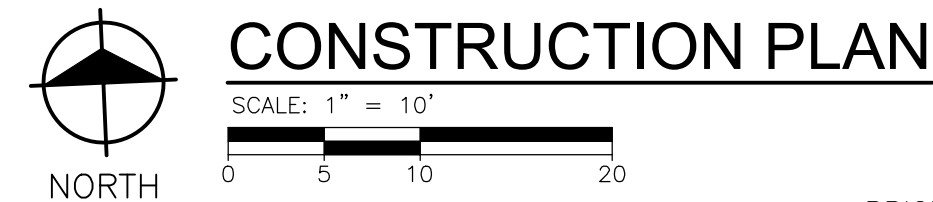
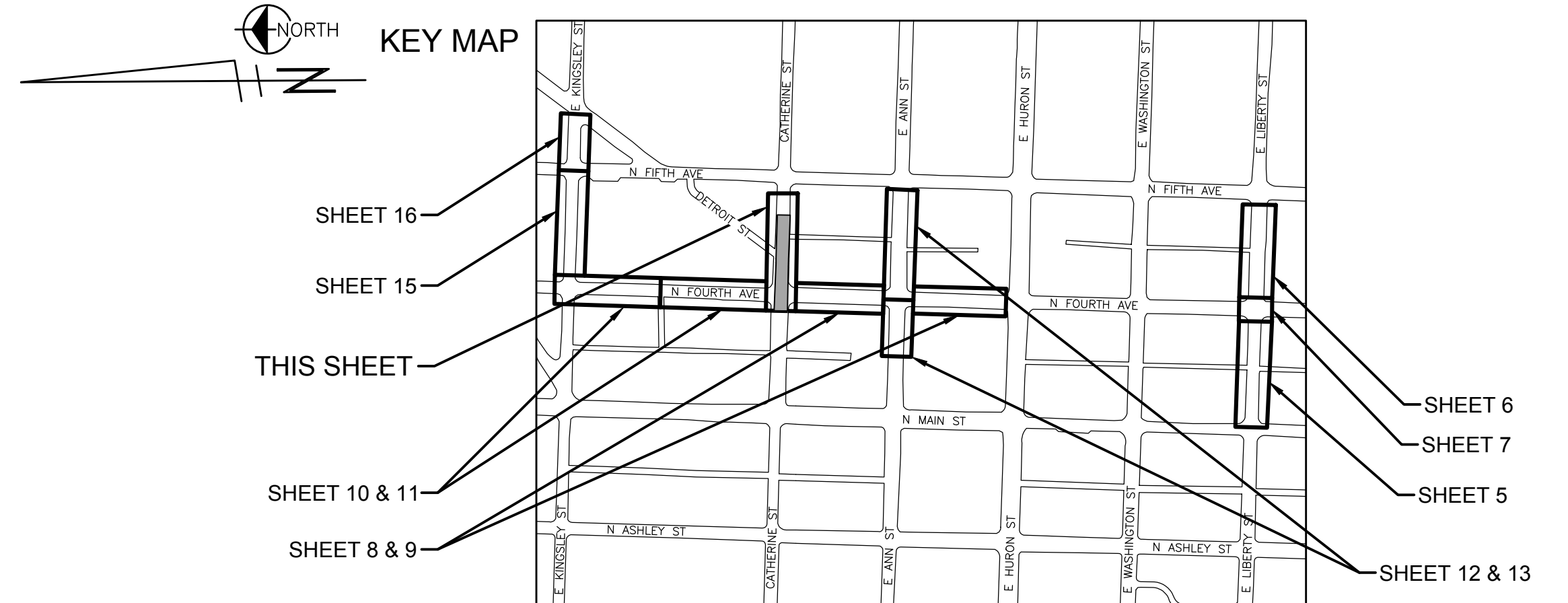
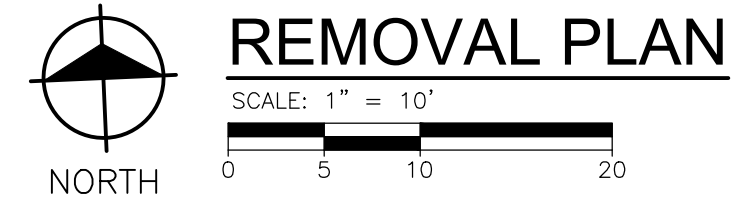


REMOVAL KEYS & QUANTITIES

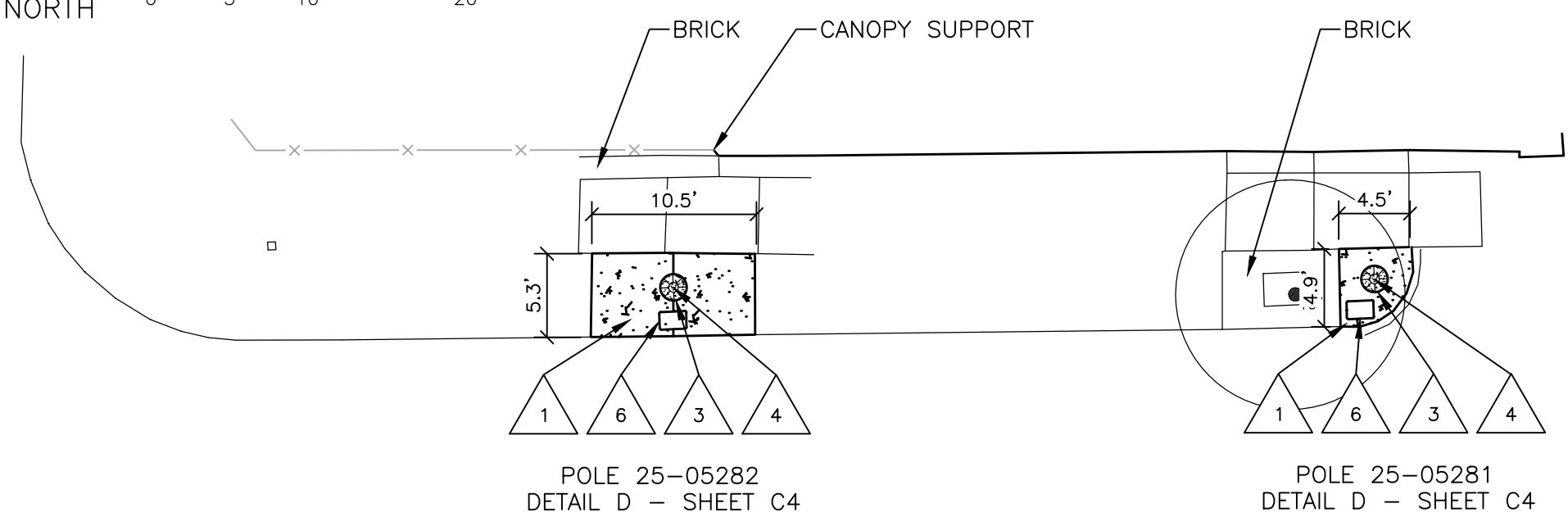
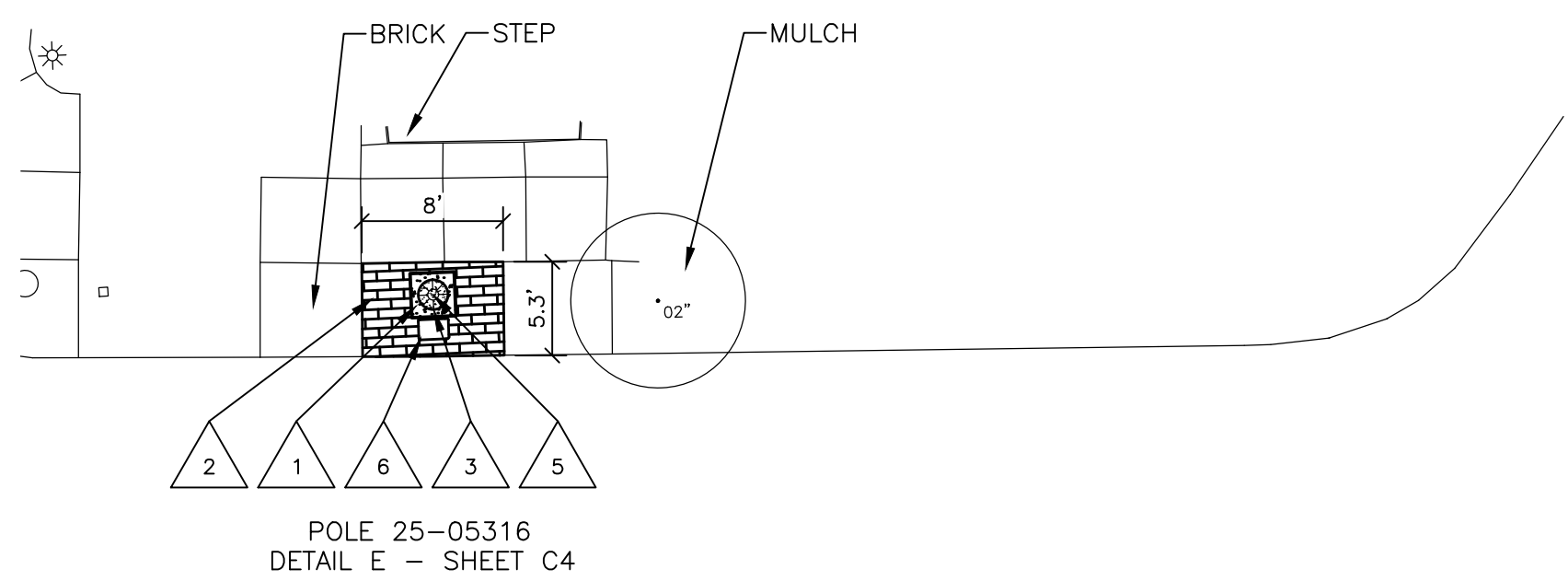
KEY	DESCRIPTION	QUANTITY	UNIT
1	REMOVE CONCRETE SIDEWALK AND DRIVE - ANY THICKNESS	141.0	SFT
2	LIGHT POLE AND FOUNDATION, REMOVAL	4.0	EA

CONSTRUCTION KEYS & QUANTITIES

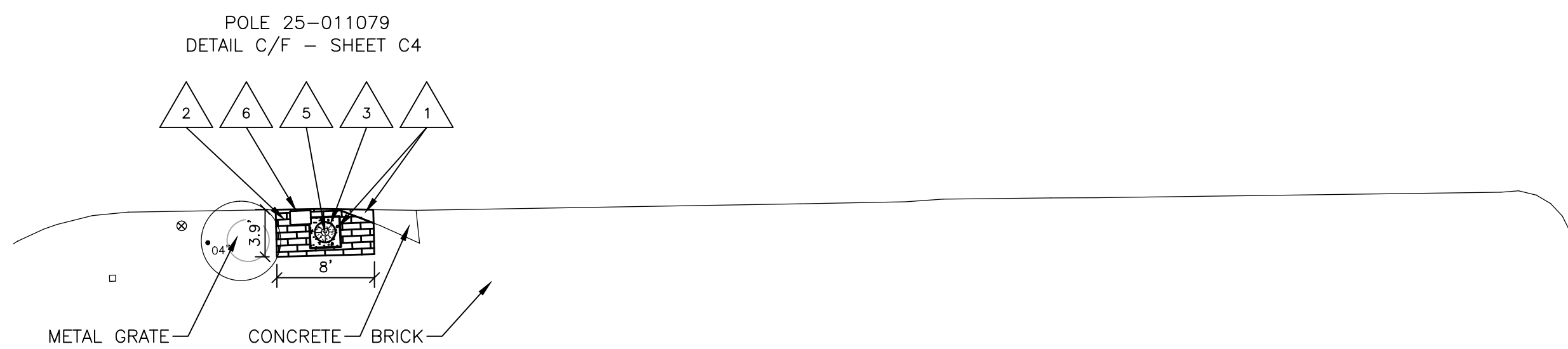
KEY	DESCRIPTION	QUANTITY	UNIT
1	4-INCH CONCRETE SIDEWALK, RAMP, OR DRIVE	89.0	SFT
2	SIDEWALK UNIT PAVER	55.0	SFT
3	POLE FOUNDATION	4.0	EA
4	LIGHT POLE, OA	2.0	EA
5	LIGHT POLE, OB	2.0	EA
6	NEW HANDHOLE	4.0	EA



N FOURTH AVE

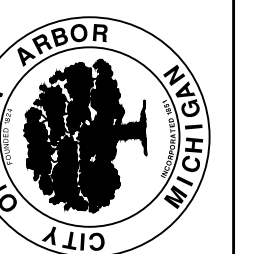


CATHERINE ST



REV.	DESCRIPTION	DATE	DRAWN	CHECKED
1.	ISSUED FOR BID	04-07-2017	JANI	JANI

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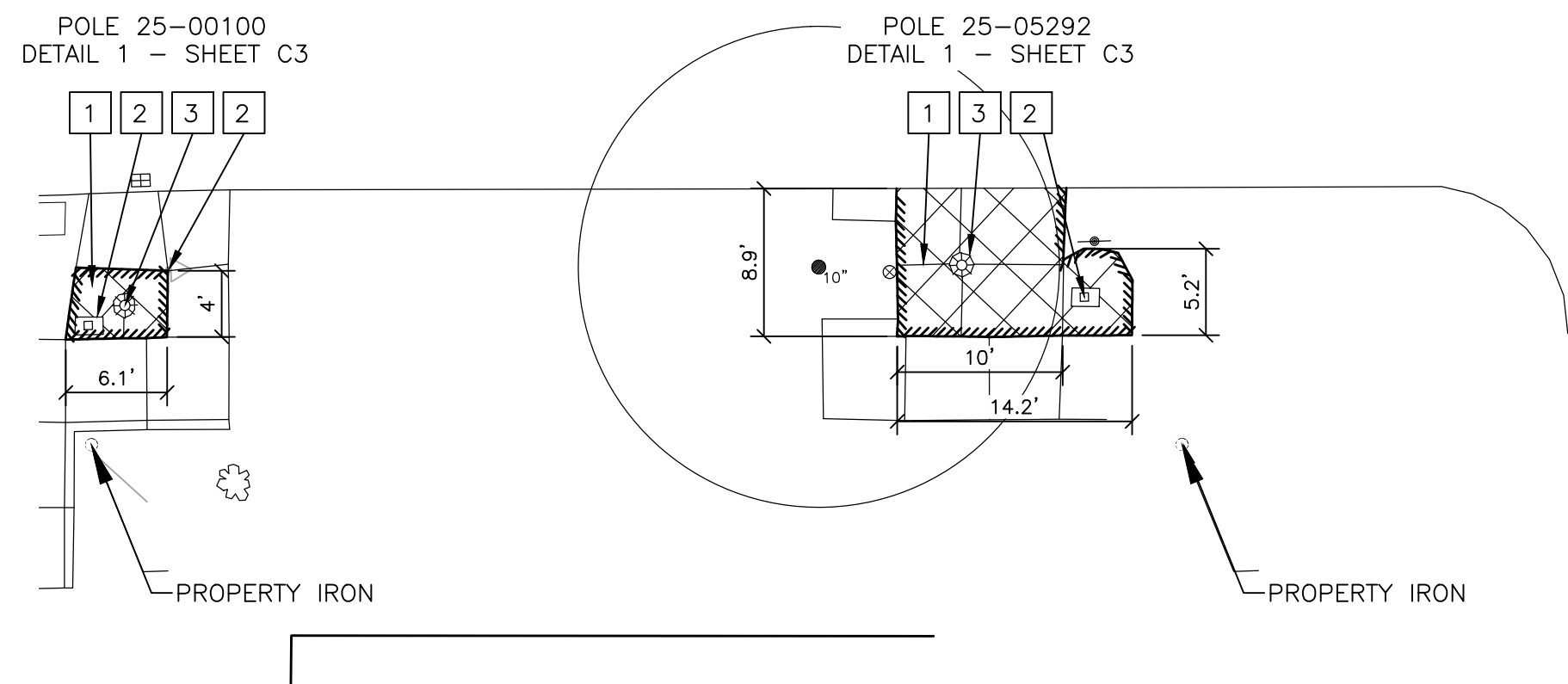


PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
STREET LIGHTING REPLACEMENT -
KERRYTOWN MARKET AND LIBERTY STREETS
CATHERINE ST, REMOVAL AND CONSTRUCTION PLAN

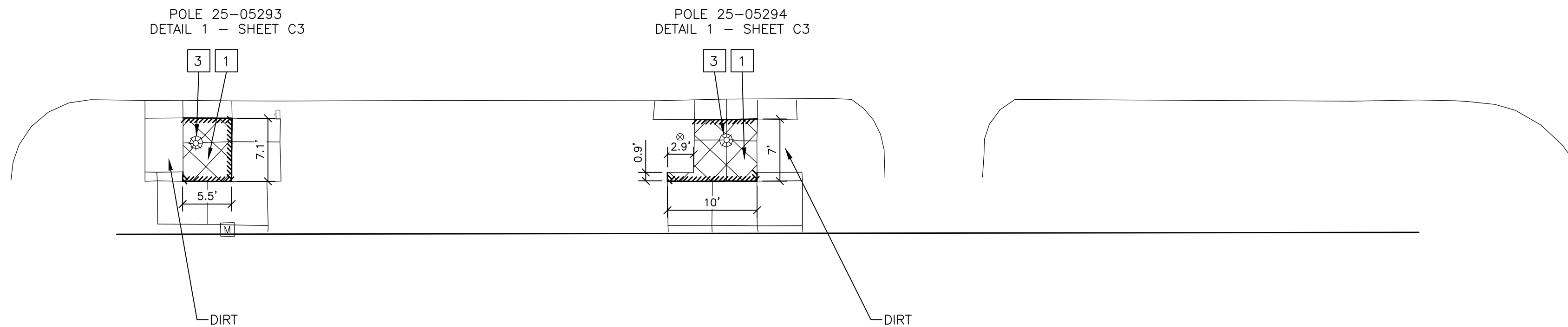
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DRAWING No.
2017-026-C10

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N FOURTH AVE



E KINGSLEY ST

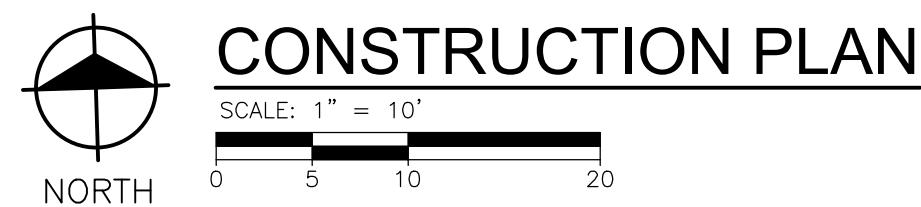
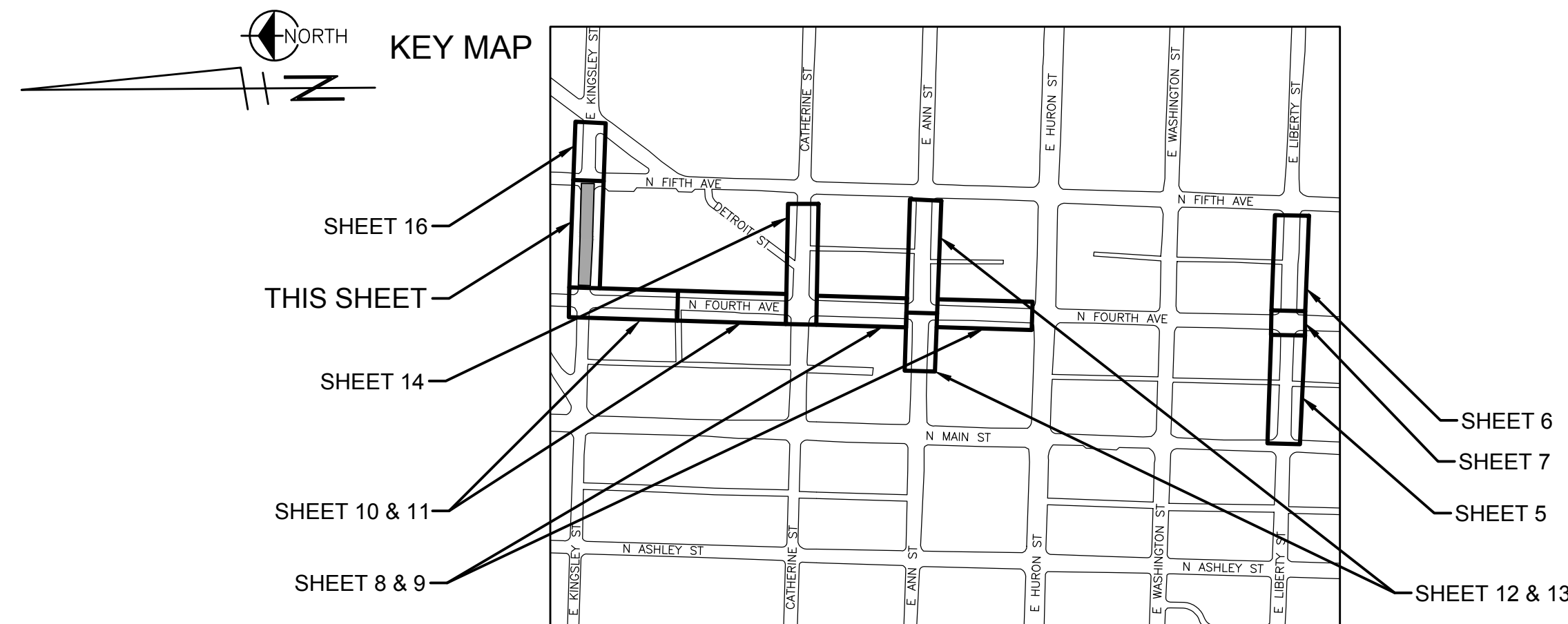
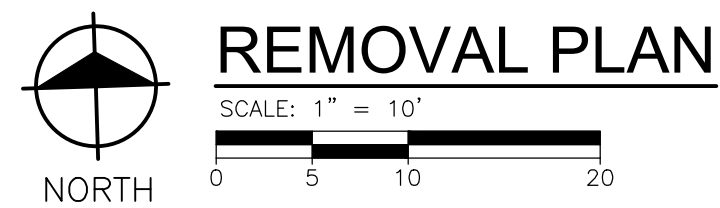


REMOVAL KEYS & QUANTITIES

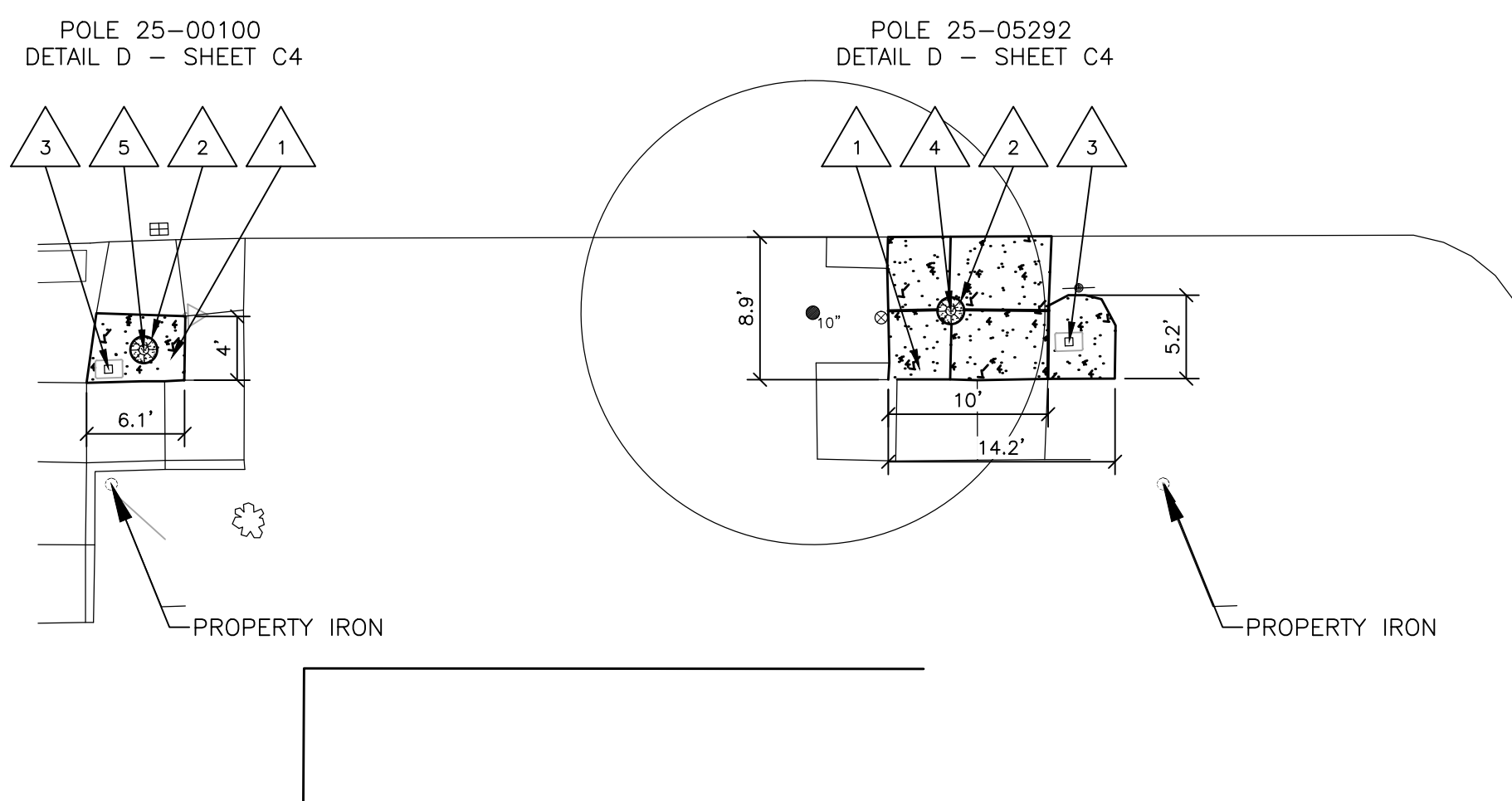
KEY	DESCRIPTION	QUANTITY	UNIT
1	REMOVE CONCRETE SIDEWALK AND DRIVE - ANY THICKNESS	220.0	SFT
2	PROTECT - PAID FOR AS "GENERAL CONDITIONS"	3.0	EA
3	LIGHT POLE AND FOUNDATION, REMOVAL	4.0	EA
4	SIGN, REMOVE, SALVAGE AND REINSTALL - PAID FOR AS "GENERAL CONDITIONS"	1.0	EA

CONSTRUCTION KEY & QUANTITIES

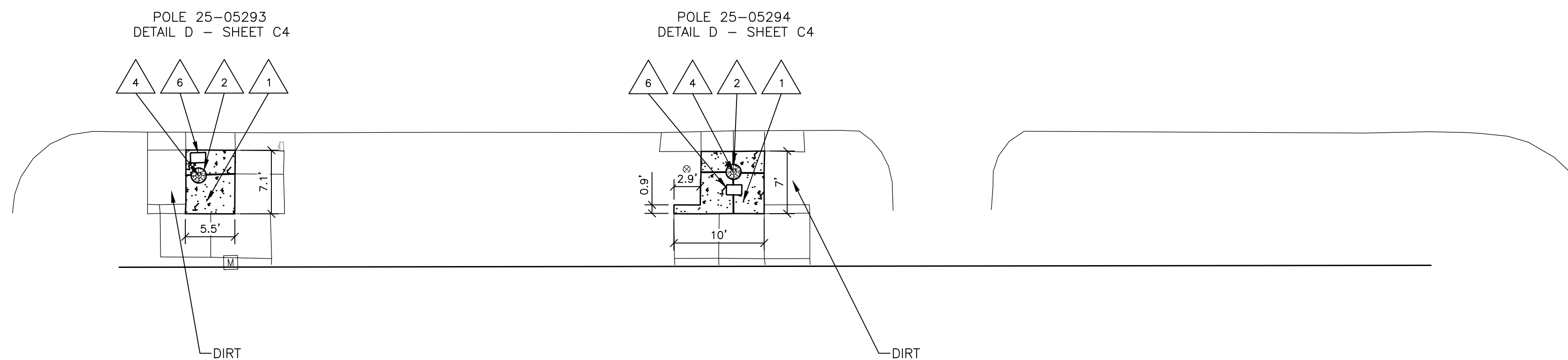
KEY	DESCRIPTION	QUANTITY	UNIT
1	4 - INCH CONCRETE SIDEWALK, RAMP, OR DRIVE	227.0	SFT
2	POLE FOUNDATION	4.0	EA
3	ADJUST	2.0	EA
4	LIGHT POLE, OA	3.0	EA
5	LIGHT POLE, OB	1.0	EA
6	NEW HANDHOLE	2.0	EA



N FOURTH AVE



E KINGSLEY ST



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1.	ISSUED FOR BID	04-07-2017	SRT / JANI	JANI

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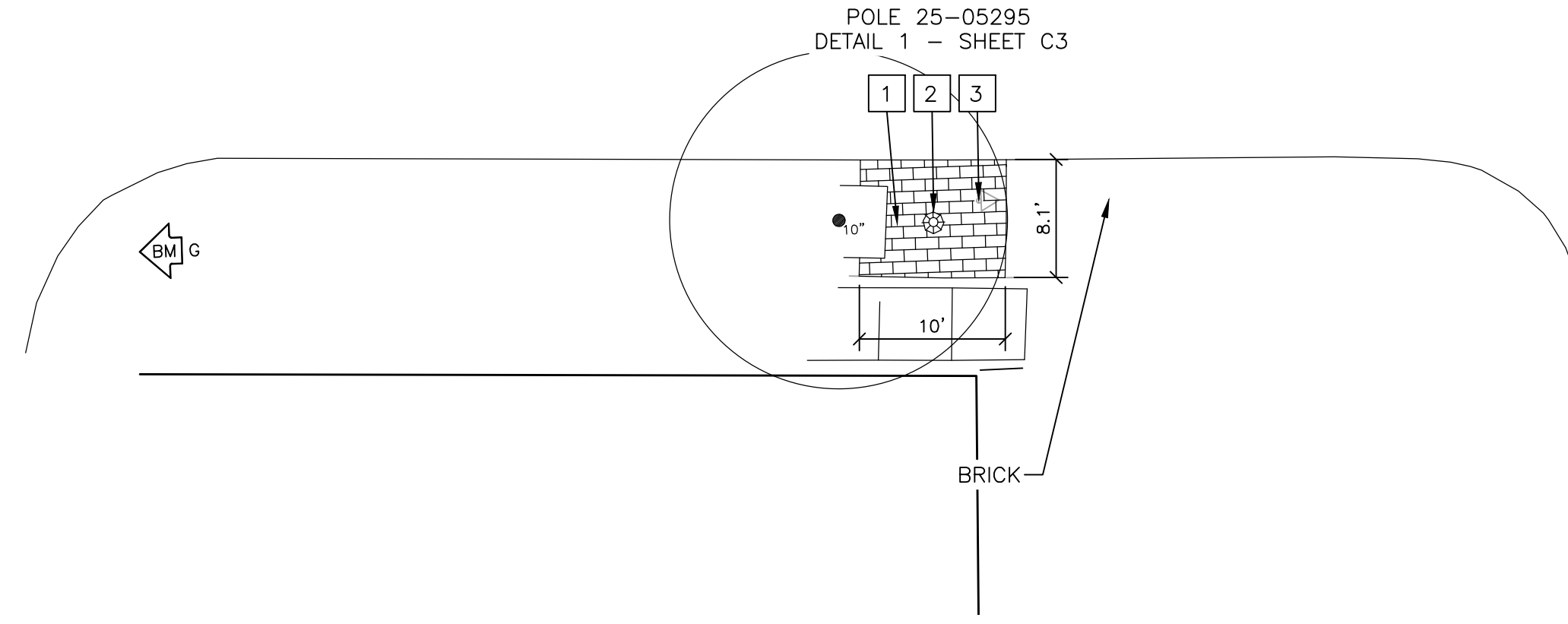


PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
STREET LIGHTING REPLACEMENT -
KERRYTOWN MARKET AND LIBERTY STREETS
E KINGSLEY ST, REMOVAL AND CONSTRUCTION PLAN

SCALE PLAN:
DRAWING No.
2017-026-C11

N FOURTH AVE

E KINGSLEY ST

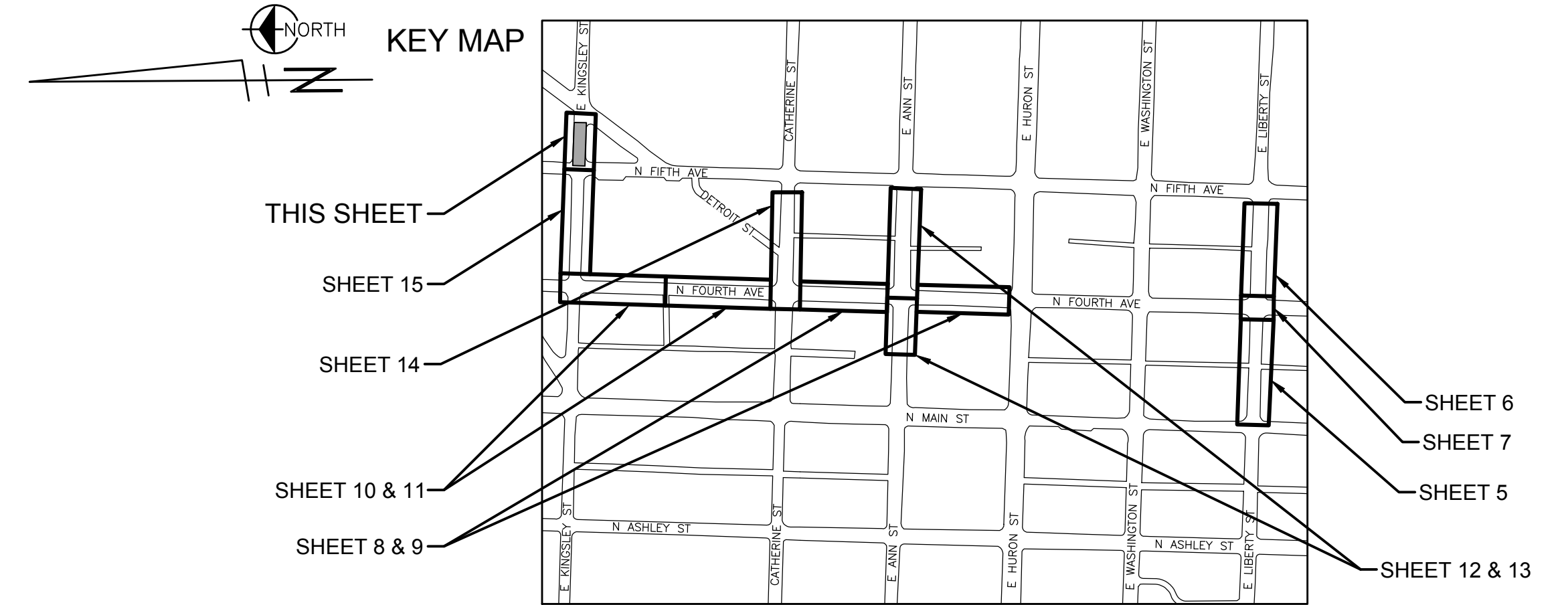
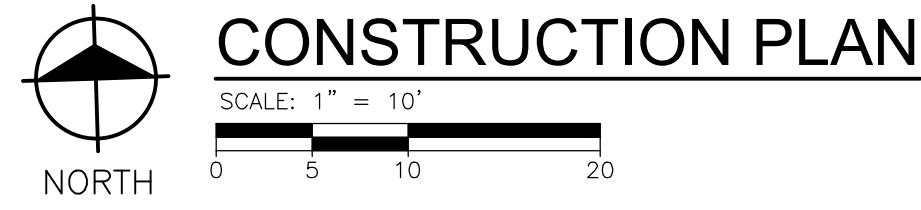
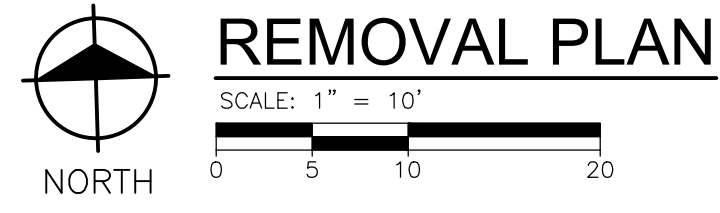


REMOVAL KEYS & QUANTITIES

KEY	DESCRIPTION	QUANTITY	UNIT
1	REMOVE CONCRETE SIDEWALK AND DRIVE - ANY THICKNESS	72.0	SFT
2	LIGHT POLE AND FOUNDATION, REMOVAL	1.0	EA
3	SIGN REMOVE, SALVAGE & REINSTALL - PAID FOR AS "GENERAL CONDITIONS"	1.0	EA

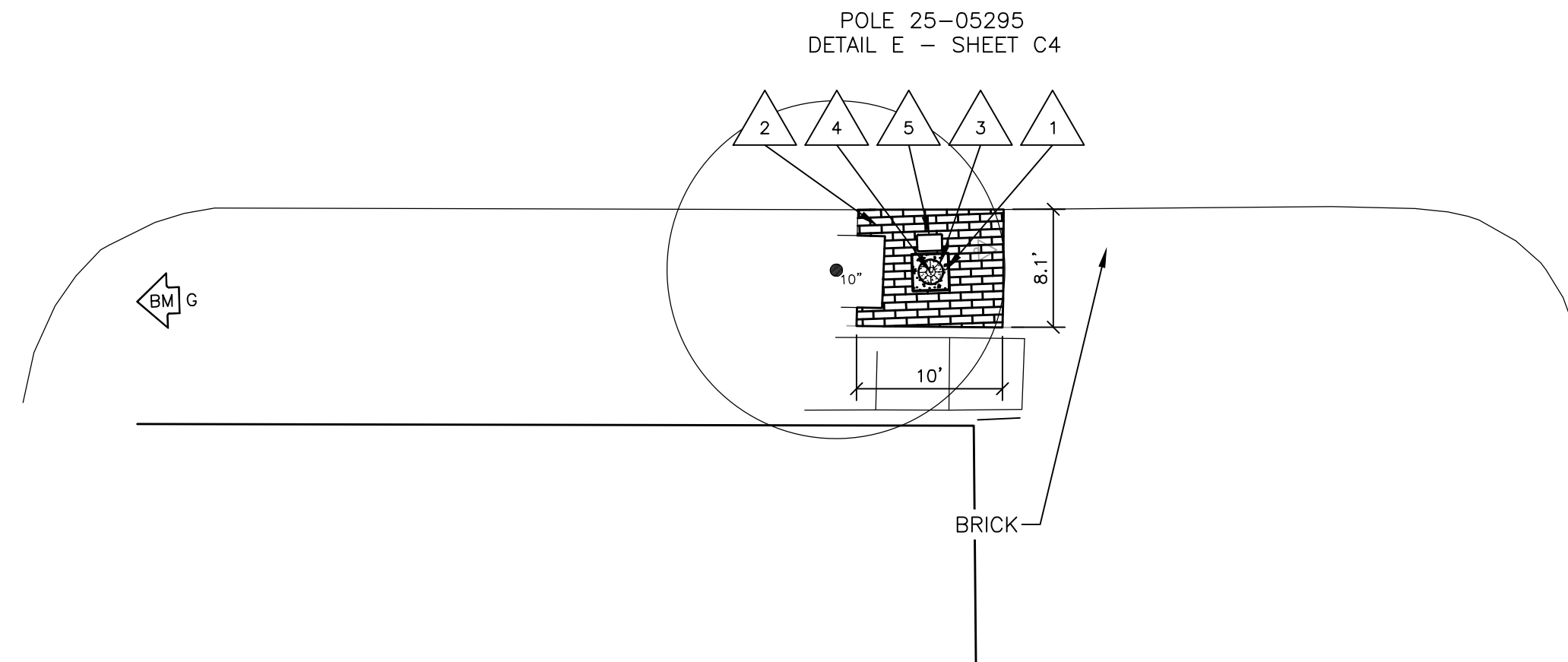
CONSTRUCTION KEYS & QUANTITIES

KEY	DESCRIPTION	QUANTITY	UNIT
1	4-INCH CONCRETE SIDEWALK, RAMP, OR DRIVE	7.0	SFT
2	SIDEWALK UNIT PAVER	64.0	SFT
3	POLE FOUNDATION	1.0	EA
4	LIGHT POLE, OA	1.0	EA
5	NEW HANDHOLE	1.0	EA



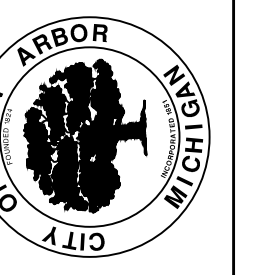
N FOURTH AVE

E KINGSLEY ST



REV.	DESCRIPTION	DATE	DRAWN	CHECKED
1.	ISSUED FOR BID	04-07-2017	SRT / JANI	JANI

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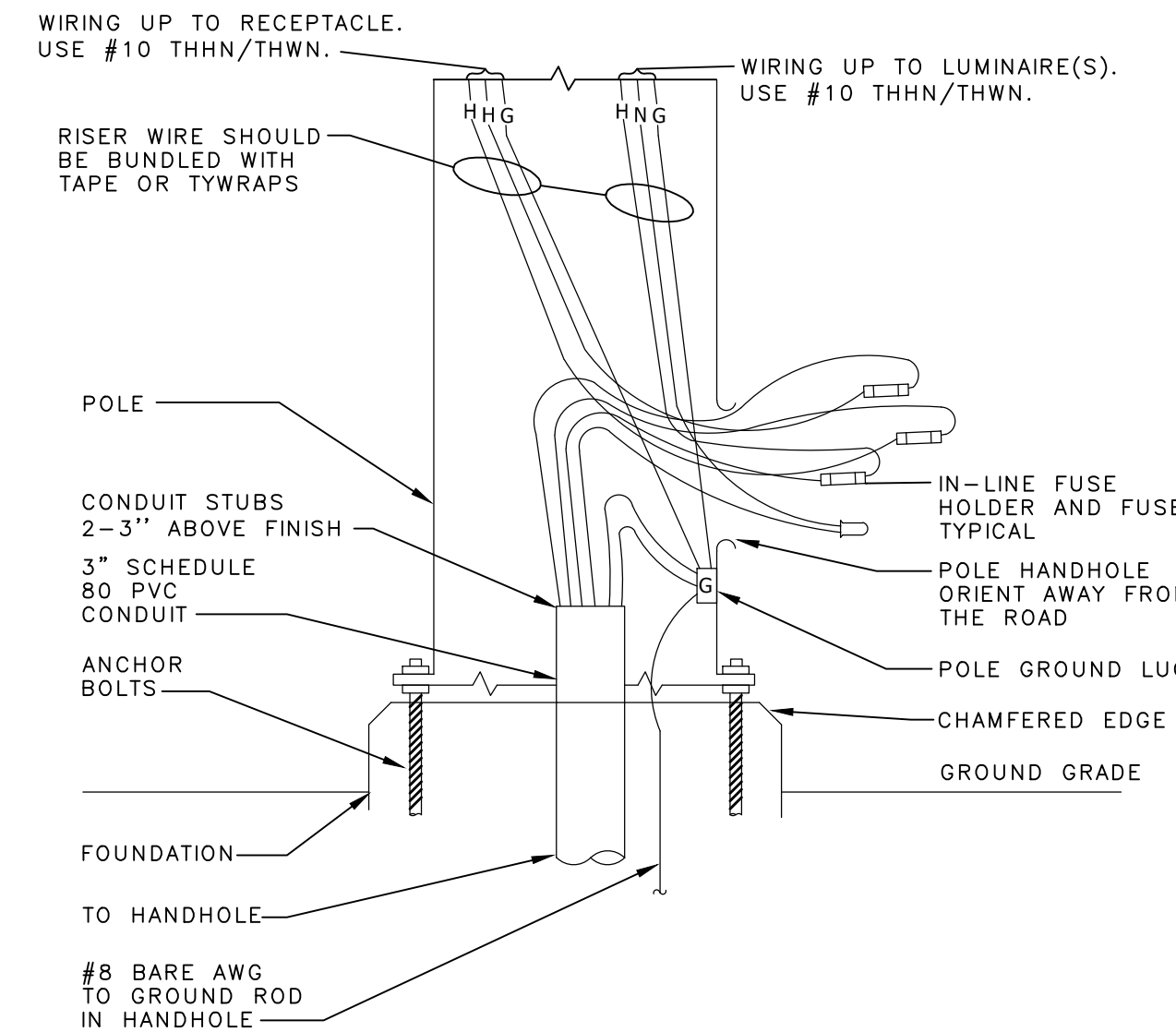


PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
STREET LIGHTING REPLACEMENT -
KERRYTOWN MARKET AND LIBERTY STREETS
E KINGSLEY ST, REMOVAL AND CONSTRUCTION PLAN
SCALE PLAN:
DRAWING No.
2017-026-C12

LUMINAIRE SCHEDULE							
MARK	DESCRIPTION	MANUF./ CATALOG NO.	OR EQUAL BY	LAMPS	VOLTAGE	INITIAL DELIVERED LUMENS	REMARKS
0A	CITY OF ANN ARBOR STANDARD LUMINAIRE CONSISTING OF ONE 24" DIAMETER GLOBE LUMINAIRE WITH DECORATIVE BAND AND TRIM, DECORATIVE 11'0" POLE WITH WP, GFCI DUPLEX RECEPTACLE (LOCATED 2'0" DOWN FROM TOP) AND BANNER ARMS (8" DOWN FROM TOP AND 8"-0" AFF FROM BOTTOM). KERRYTOWN AREA.	LUMICON: LBOF-2-1-NW-A-8-X-B-X-D. POLES SHALL BE SPRING CITY: 11'2" CENTER CITY STYLE LAMP POST WITH WELDED STEEL ASSEMBLY AND CAST ALUMINUM ORNAMENTATION. CONTACT DORIS ROBBINS AT (248) 476-7676	NO EXCEPTIONS	84.4W INPUT WATTS PER POLE	240V	5738 LUMENS PER POLE	ORIENT BANNER ARMS TOWARDS ROAD. ORIENT RECEPTACLE AND POLE HANDHOLE AWAY FROM ROAD. LUMINAIRE ARE OWNER FURNISHED CONTRACTOR INSTALLED. POLES, WITH BANNER ARMS, POLE HANDHOLES, AND RECEPTACLES ARE CONTRACTOR FURNISHED AND INSTALLED.
0B	SIMILAR TO TYPE "0B" EXCEPT TWO LUMINAIRE PER POLE, ORIENTED 180 DEGREES APART AND NO BANNER ARMS. KERRYTOWN AREA.		NO EXCEPTIONS	168.8 INPUT WATTS PER POLE	240V	11472 LUMENS PER POLE	ORIENT BANNER ARMS TOWARDS ROAD. ORIENT RECEPTACLE AND POLE HANDHOLE AWAY FROM ROAD. ORIENT LUMINAIRE PARALLEL TO THE ROAD. LUMINAIRE ARE OWNER FURNISHED CONTRACTOR INSTALLED. POLES, WITH BANNER ARMS, POLE HANDHOLES, AND RECEPTACLES ARE CONTRACTOR FURNISHED AND INSTALLED.
0C	SIMILAR TO TYPE "0A" EXCEPT FOR THE LIBERTY STREET AREA						
0D	SIMILAR TO THE TYPE "0B" EXCEPT FOR THE LIBERTY STREET AREA						

ELECTRICAL SYMBOL LEGEND		
SYMBOL	DESCRIPTION	REMARKS
⊙	SINGLE POST TOP LUMINAIRE	
⊙⊙	TWIN POST TOP LUMINAIRE	
⊙ 8"	TREE. # INDICATES TRUNK DIAMETER	
AFG	ABOVE FINISHED GRADE	
GFI	GROUND FAULT CIRCUIT INTERRUPTER	
UNO = UNLESS NOTED OTHERWISE		

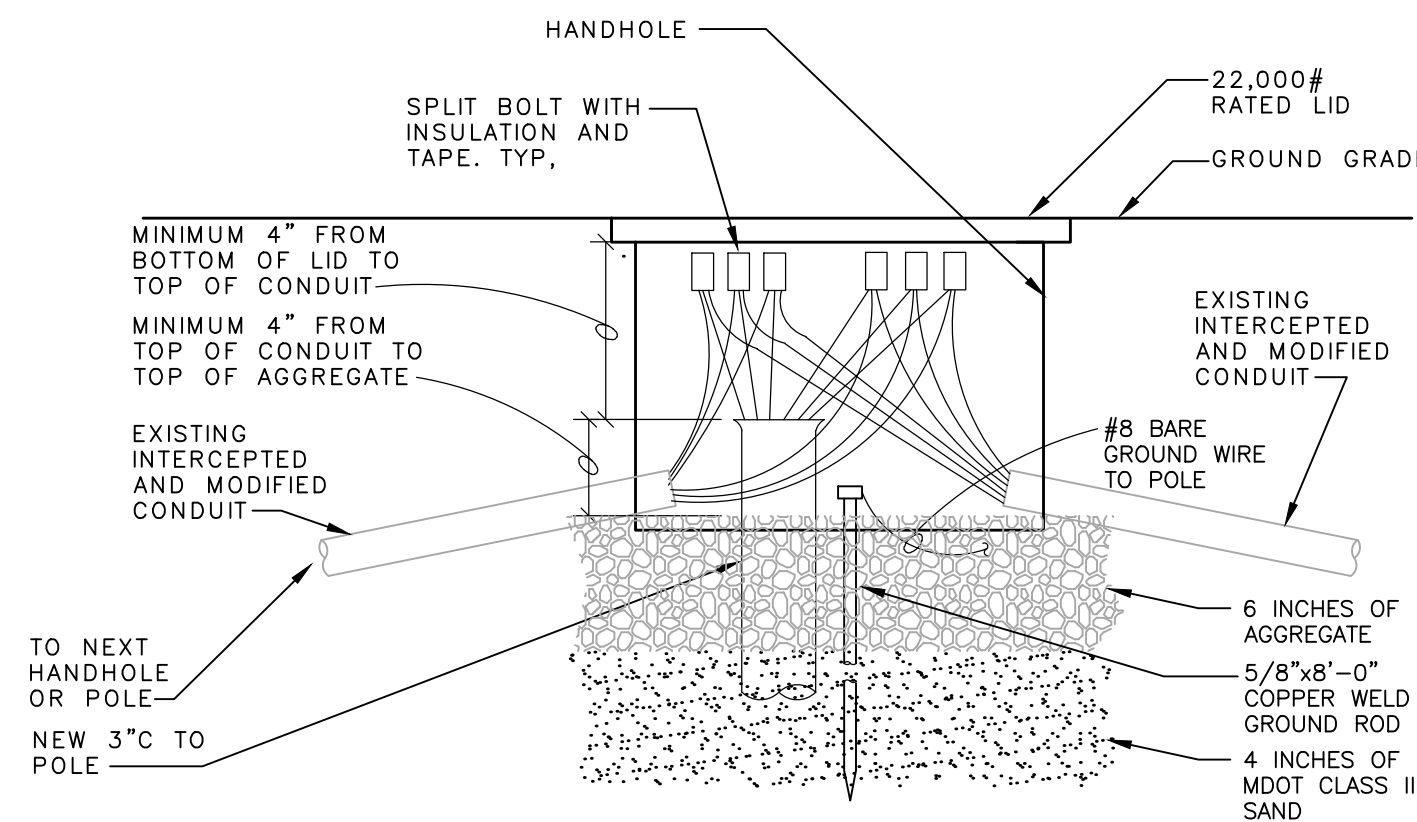
- GENERAL NOTES
- A. CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION SAFETY IN ACCORDANCE WITH THE CITY OF ANN ARBOR AND LOCAL STANDARDS.
 - B. SUBMIT SHOP DRAWINGS TO ENGINEER FOR REVIEW.
 - C. ALL MATERIALS SHALL BE NEW AND CONFORM WITH THE STANDARDS OF UNDERWRITERS LABORATORIES.
 - D. THE INSTALLATION SHALL COMPLY WITH ALL LAWS IN EFFECT, APPLYING TO ELECTRICAL INSTALLATIONS AND WITH THE N.E.C., OSHA AND ALL LOCAL CODES.
 - E. ALL WORK SHALL BE DONE BY LICENSED ELECTRICIANS.
 - F. THE ELECTRICIAN SHALL OBTAIN ALL PERMITS AND PAY ALL NECESSARY FEES.
 - G. ALL WIRING SHALL BE INSTALLED IN CONDUIT AND BE TYPE THHN/THWN.
 - H. PROVIDE AS-BUILT DRAWINGS AT THE COMPLETION OF THE PROJECT INDICATING CONDUIT ROUTING, CONDUCTOR SIZES AND HANDHOLE LOCATIONS.
 - I. THE ELECTRICAL CONTRACTOR SHALL LEAVE THE ENTIRE ELECTRICAL SYSTEM IN PROPER WORKING ORDER. HE SHALL ALSO EXTEND TO THE OWNER ANY GUARANTEE EXTENDED BY THE MANUFACTURER OF EQUIPMENT AND DEVICES INSTALLED AND FURNISHED BY HIM. THE GUARANTEED PERIOD SHALL BE EXTENDED AS OF THE DATE OF SUBSTANTIAL COMPLETION OF HIS WORK, AND ONE YEAR IN LENGTH.
 - J. ELECTRICAL CONTRACTOR IS TO MAKE A FIELD VISIT BEFORE SUBMITTING HIS BID TO THE SITE TO FAMILIARIZE HIMSELF WITH THE EXISTING AREAS.
 - K. COORDINATE AND WORK IN HARMONY WITH OTHER TRADES.
 - L. REFER TO SITE CIVIL DRAWINGS FOR ADDITIONAL SITE INFORMATION AND SITE INTERFERENCES, UTILITIES, ETC. HAND DIG IN AREAS WITH OTHER UTILITIES TO AVOID INTERFERENCE. USE BELOW GRADE ELECTRONIC DETECTION METHODS WHERE NECESSARY TO LOCATE INTERFERENCES. UTILIZE CAUTION TO AVOID INTERFERING WITH OTHER EXISTING UTILITIES. SEE SPECIFICATIONS.
 - M. FIELD CONFIRM EXACT SOURCE OF POWER SERVING ALL SITE LIGHTING FIXTURES.
 - N. CONDUIT ROUTING SHOWN ON PLAN IS CONCEPTUAL ONLY. FIELD VERIFY ACTUAL ROUTING IN FIELD.
 - O. ELECTRICAL CONTRACTOR SHALL PROVIDE CLEAN FILL AND REPAIR LOCATIONS OF ALL AREAS OF EXCAVATION (TO MATCH ADJACENT AREA CONDITIONS).
 - P. REFER TO CIVIL DRAWINGS FOR LOCATION OF POLE MOUNTED LIGHT FIXTURES. FINAL LOCATIONS SHALL BE BASED UPON FIELD CONDITIONS AND EXISTING UTILITIES.
 - Q. ALL CONDUIT SHALL BE SCHEDULE 80 PVC.
 - R. INSTALL WARNING TAPE ABOVE ALL SITE CONDUITS INSTALLED IN EXCAVATED TRENCH.
 - S. ALL SITE CONDUITS SHALL BE LOCATED MINIMUM 24" BELOW GRADE.
 - T. ELECTRICAL INSTALLATION SHALL AVOID INTERFERENCE WITH BOTH NEW AND EXISTING LANDSCAPING, TREES, PLANTINGS, ETC. REFER TO ARCHITECTURAL AND LANDSCAPE DRAWINGS.
 - U. REFER TO DETAIL SHEETS FOR CONCRETE BASE DETAILS.
 - V. EACH POLE SHALL HAVE A GFCI RECEPTACLE, SERVED FROM EXISTING CIRCUITS. THE RECEPTACLES ARE NOT SHOWN ON THE PLANS.
 - W. ALL WORK SHALL BE IN CONFORMANCE WITH THE CITY OF ANN ARBOR SPECIFICATIONS, UNLESS SPECIFICALLY NOTED OTHERWISE.



- POLE WIRING NOTES:**
1. POLE DETAIL DOES NOT REFLECT ACTUAL POLE DESIGN BUT IS SHOWN FOR REFERENCE.
 2. ALL WIRING SHALL BE THHN/THWN.
 3. ALL TERMINATIONS SHALL BE WITH SPLIT BOLTS, SCOTCHFIL ELECTRICAL INSULATION PUTTY AND TAPE.
 4. ALL CONDUITS SHALL HAVE BELLED ENDS.
 5. ALL ELBOWS SHALL BE SWEEPS.
 6. GALVANIZED ANCHOR BOLTS SHALL BE SIZED AND LOCATED PER THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
 7. LOOPS FOR SERVICING #10 CONDUCTORS SHALL EXTEND 12" OUT OF THE POLE HAND HOLE.
 8. FUSE HOLDERS FOR RECEPTACLES AND LUMINAIRE SHALL BE EATON BUSSMANN TRON NO. HFA-HH IN-LINE, WATERPROOF FUSE HOLDERS RATED 250 VOLTS AND 20 AMPS.
 9. FUSES FOR LIGHTING FIXTURES SHALL BE EATON BUSSMANN NO. BAF-5, RATED 5 AMPS.
 10. FUSES FOR POLE RECEPTACLES SHALL BE EATON BUSSMANN NO. FNM-5, RATED 5 AMPS.
 11. DETAIL IS DIAGRAMMATIC AND DOES NOT REFLECT ALL EXISTING CONDITIONS. MODIFY INSTALLATION TO MATCH INTENT CONVEYED IN THIS DETAIL.
 12. COORDINATE BOLT PATTERN AND ORIENTATION WITH MANUFACTURER. IT IS CRITICAL FOR PROPER POLE ORIENTATION.

TYPICAL POLE WIRING DIAGRAM
NO SCALE

- HANDHOLE WIRING NOTES:**
1. POLE DETAIL DOES NOT REFLECT ACTUAL POLE DESIGN BUT IS SHOWN FOR REFERENCE.
 2. ALL WIRING SHALL BE THHN/THWN. PULL BACK EXISTING WIRING TO THE ADJACENT POLE OR HANDHOLE. MAKE ALL RACEWAY MODIFICATIONS AND RE-INSTALL EXISTING CONDUCTORS AND MAKE ALL TERMINATIONS.
 3. ALL TERMINATIONS SHALL BE WITH SPLIT BOLTS, SCOTCHFIL ELECTRICAL INSULATION PUTTY AND TAPE.
 4. ALL CONDUITS SHALL HAVE BELLED ENDS.
 5. ALL ELBOWS SHALL BE SWEEPS.
 6. LOOPS FOR SERVICING #10 CONDUCTORS SHALL EXTEND 12" OUT OF HAND HOLE.
 7. DETAIL IS DIAGRAMMATIC AND DOES NOT REFLECT ALL EXISTING CONDITIONS. MODIFY INSTALLATION TO MATCH INTENT CONVEYED IN THIS DETAIL.



TYPICAL HAND HOLE WIRING DIAGRAM
NO SCALE

- SCHEDULE AND IMPACT TO ADJACENT AREAS**
1. THE PROJECT SUPERVISOR SHALL SCHEDULE AND COORDINATE THE WORK OF ALL PARTIES INVOLVED IN THE PROJECT, INCLUDING UTILITY COMPANIES, TESTING AGENCIES, GOVERNMENTAL AGENCIES, ALL CITY DEPARTMENTS (SUCH AS UTILITIES AND TRANSPORTATION), THE DDA, A N D / O R CITY INSPECTORS.
 2. THE PROJECT SUPERVISOR SHALL COORDINATE AND SCHEDULE BOTH TESTING INSPECTORS AND CITY AND DDA INSPECTORS IN A TIMELY MANNER, TO ASSURE PROPER AND TIMELY TESTING AND INSPECTION OF THE WORK.
 3. THE PROJECT SUPERVISOR SHALL REVIEW THE INSPECTOR'S DAILY REPORTS (IDRS) FOR ACCURACY, AND SHALL SIGN ALL IDRS ON A DAILY BASIS AS THE REPRESENTATIVE OF THE CONTRACTOR.
 4. THE PROJECT SUPERVISOR SHALL SUBMIT TO THE ENGINEER, AN UPDATED, DETAILED SCHEDULE OF THE PROPOSED WORK ON A WEEKLY BASIS, AND AN UPDATE OF ALL PROPOSED CHANGES ON A DAILY BASIS, ALL IN ACCORDANCE WITH THE DETAILED SPECIFICATION FOR PROJECT SCHEDULE CONTAINED ELSEWHERE HEREIN.
 5. THE PROJECT SUPERVISOR SHALL PREPARE A DETAILED SCHEDULE INCLUDING TIMELINES AND LANE CLOSURES.
 6. THE PROJECT SUPERVISOR SHALL SCHEDULE AND CHAIR A WEEKLY PROGRESS MEETING WITH THE ENGINEER AND ALL SUBCONTRACTORS TO DISCUSS THE WORK.
 7. THE CONSTRUCTION MAY ONLY ELIMINATE THE LIGHTING ON ONE SIDE OF THE BLOCK AT A TIME.
 8. THE PARKING SPACES IN THE AREAS OF DEMOLITION SHALL BE BLOCKED OFF FOR SAFETY AND STAGING.

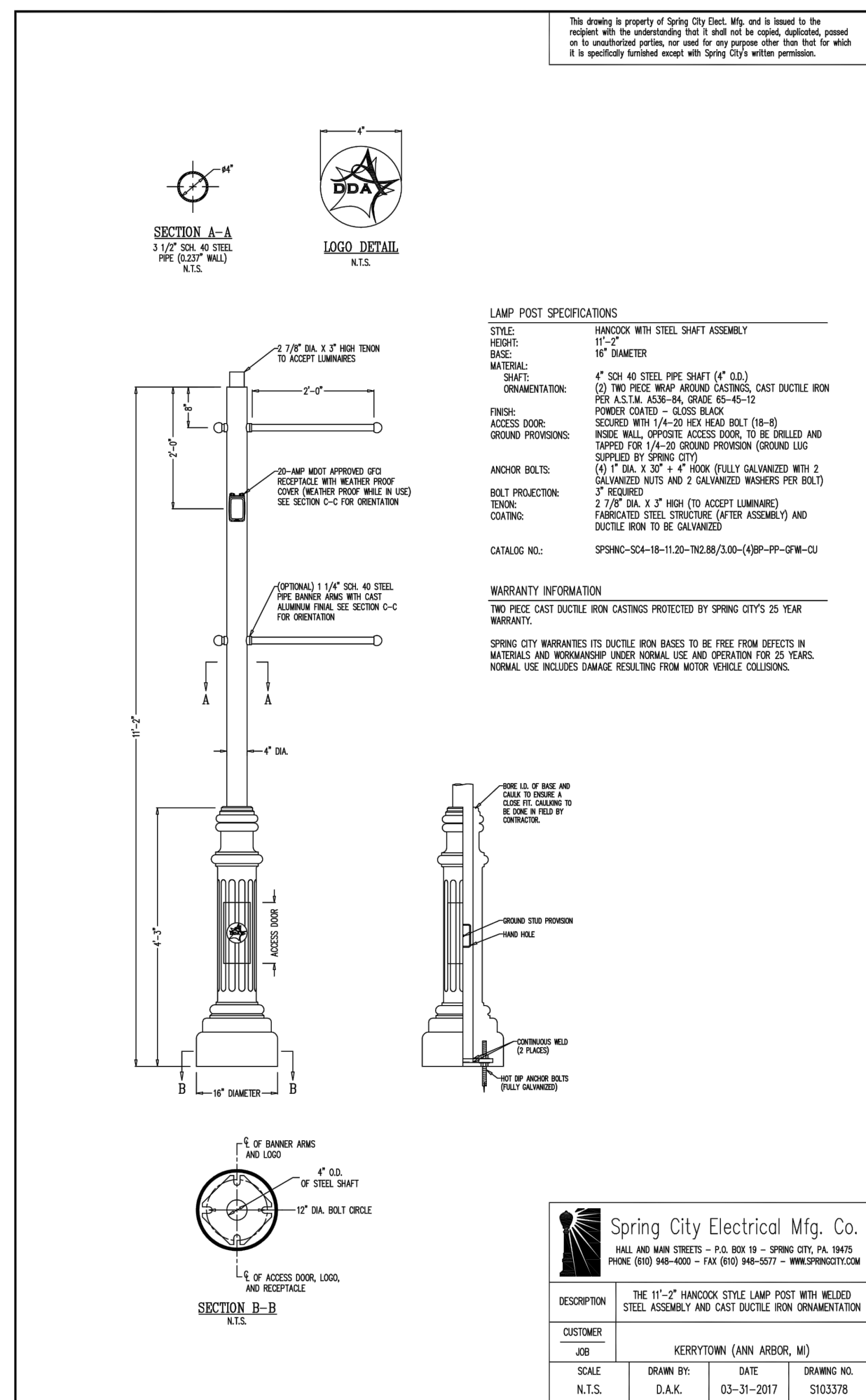
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REV.				

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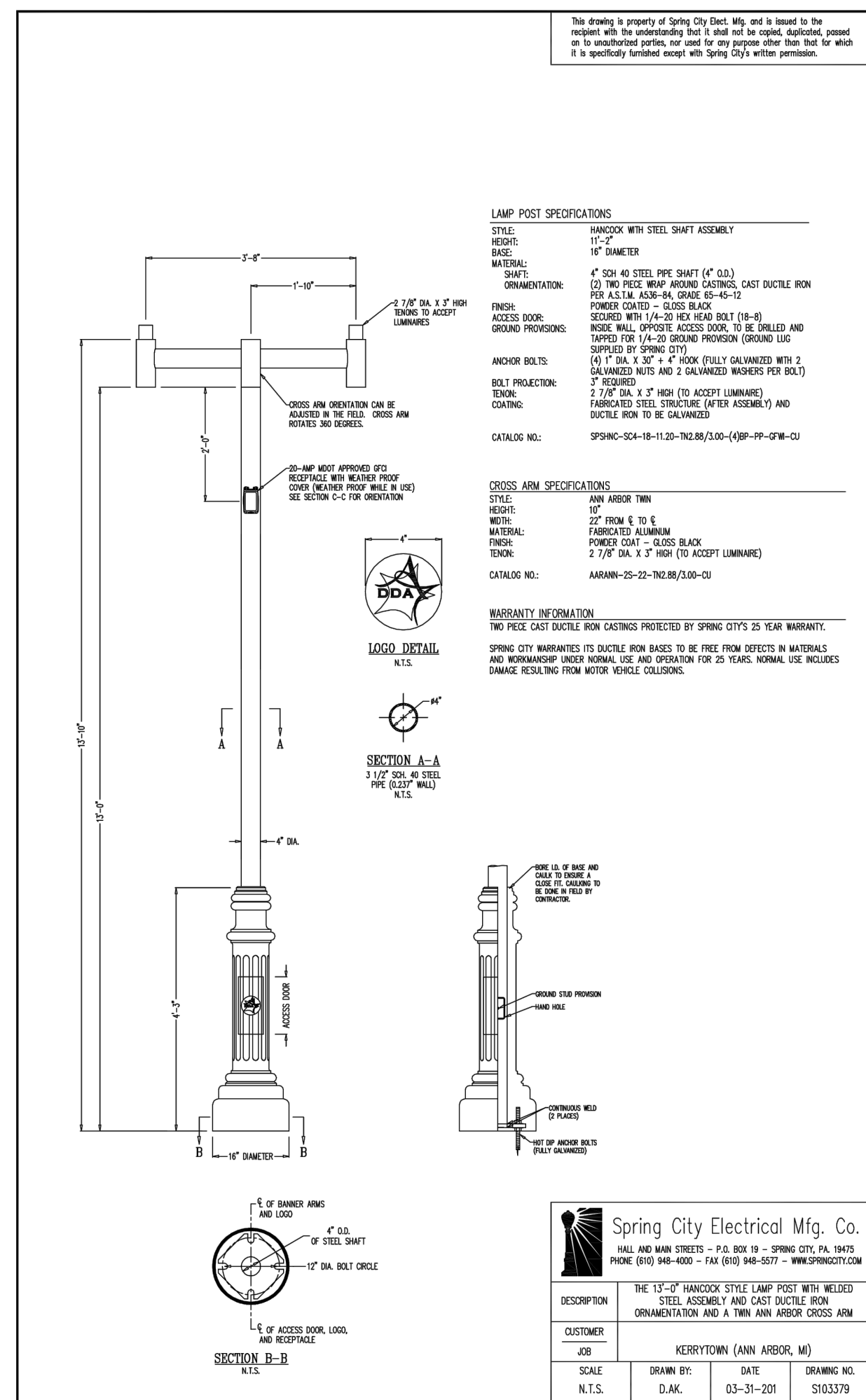
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STREET LIGHTING REPLACEMENT -
KERRYTOWN MARKET AND LIBERTY STREETS
NOTES, LIGHT FIXTURE SCHEDULE AND DETAILS

SCALE PLAN:
DRAWING No.
2017-026-N2

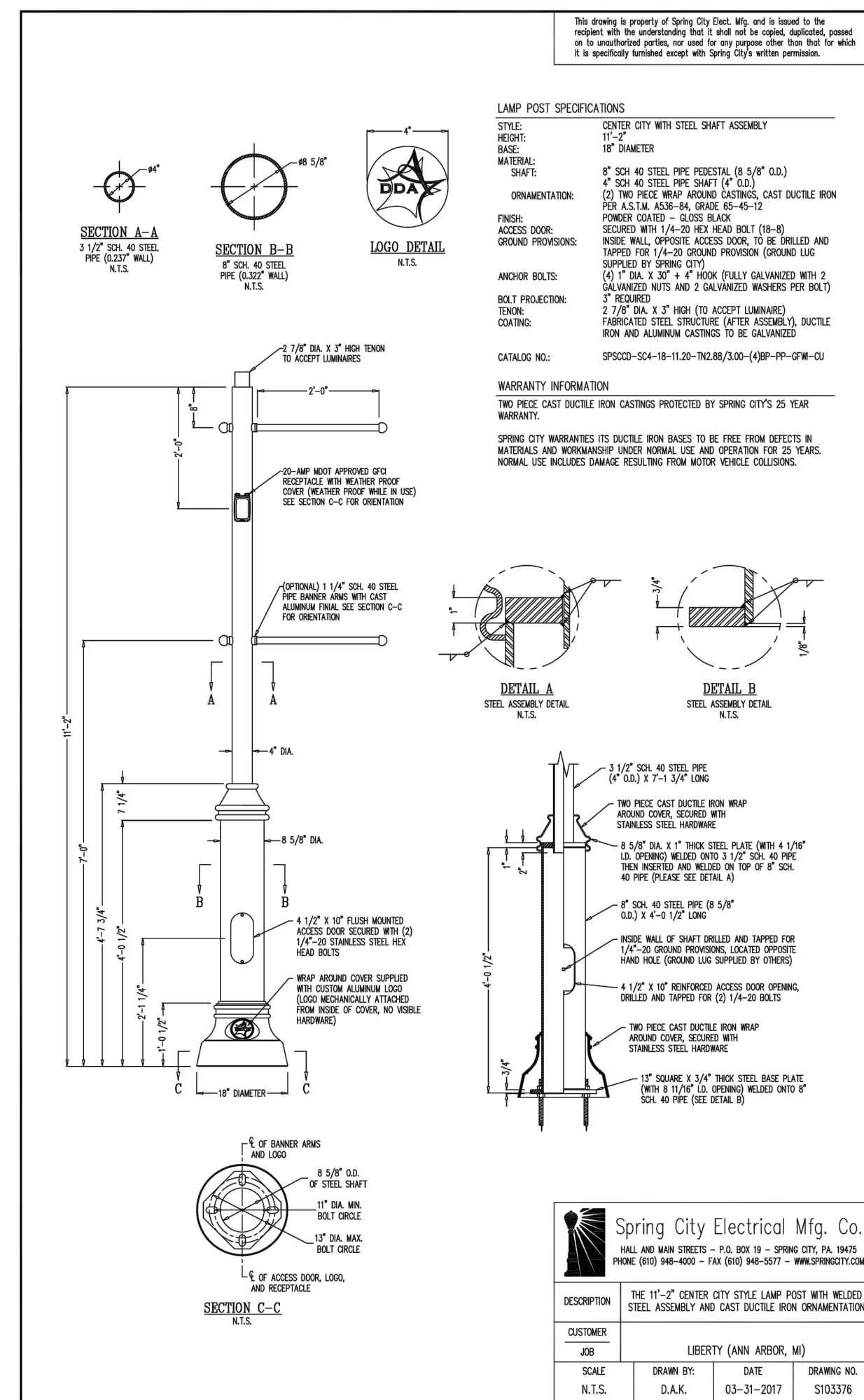
SHEET No.
17 OF 30



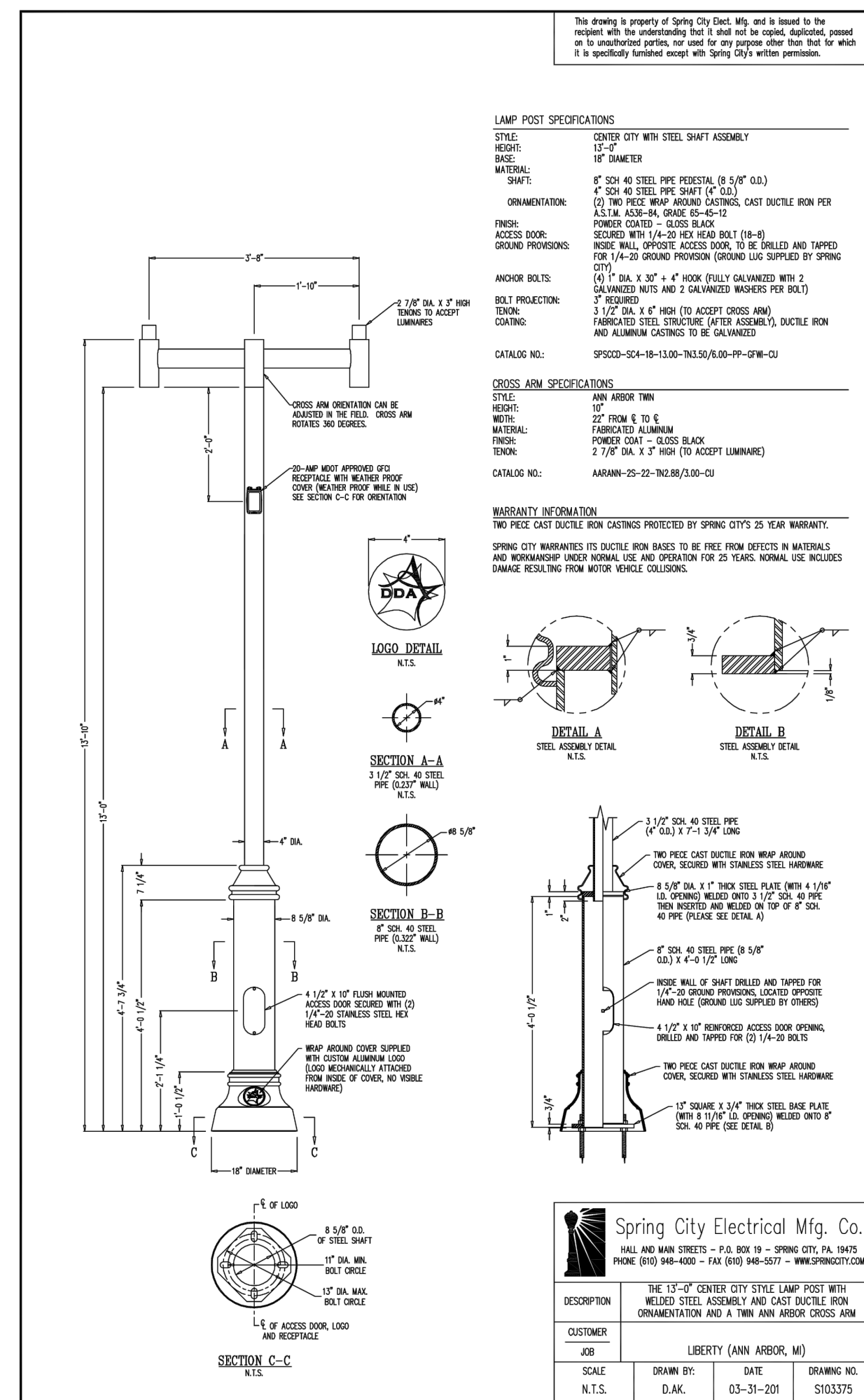
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TYPE "OB" DETAIL
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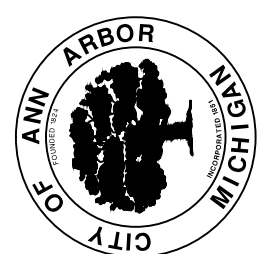


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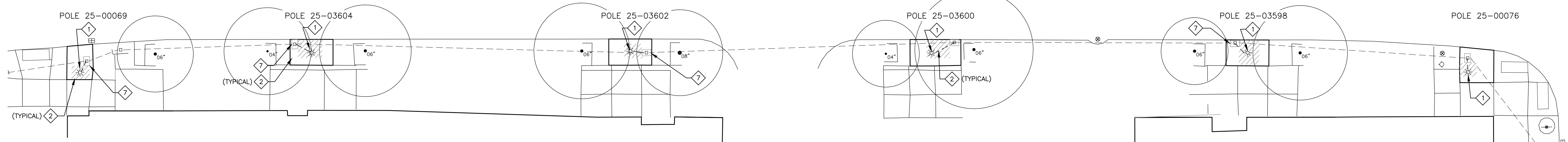
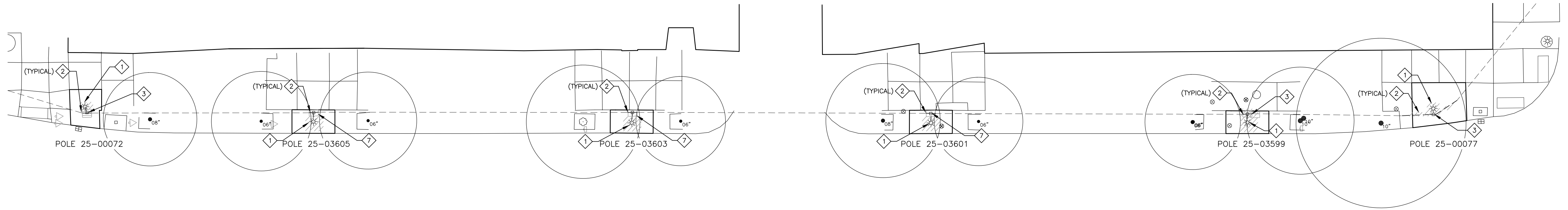
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
STREET LIGHTING REPLACEMENT -
KERRYTOWN MARKET AND LIBERTY STREETS
E LIBERTY ST, ELECTRIC DEMOLITION AND NEW WORK PLAN

SCALE PLAN: [Scale bar]

DRAWING No. 2017-026-E1

SHEET No. 19 OF 30

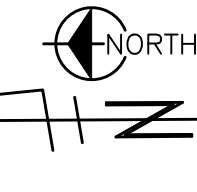
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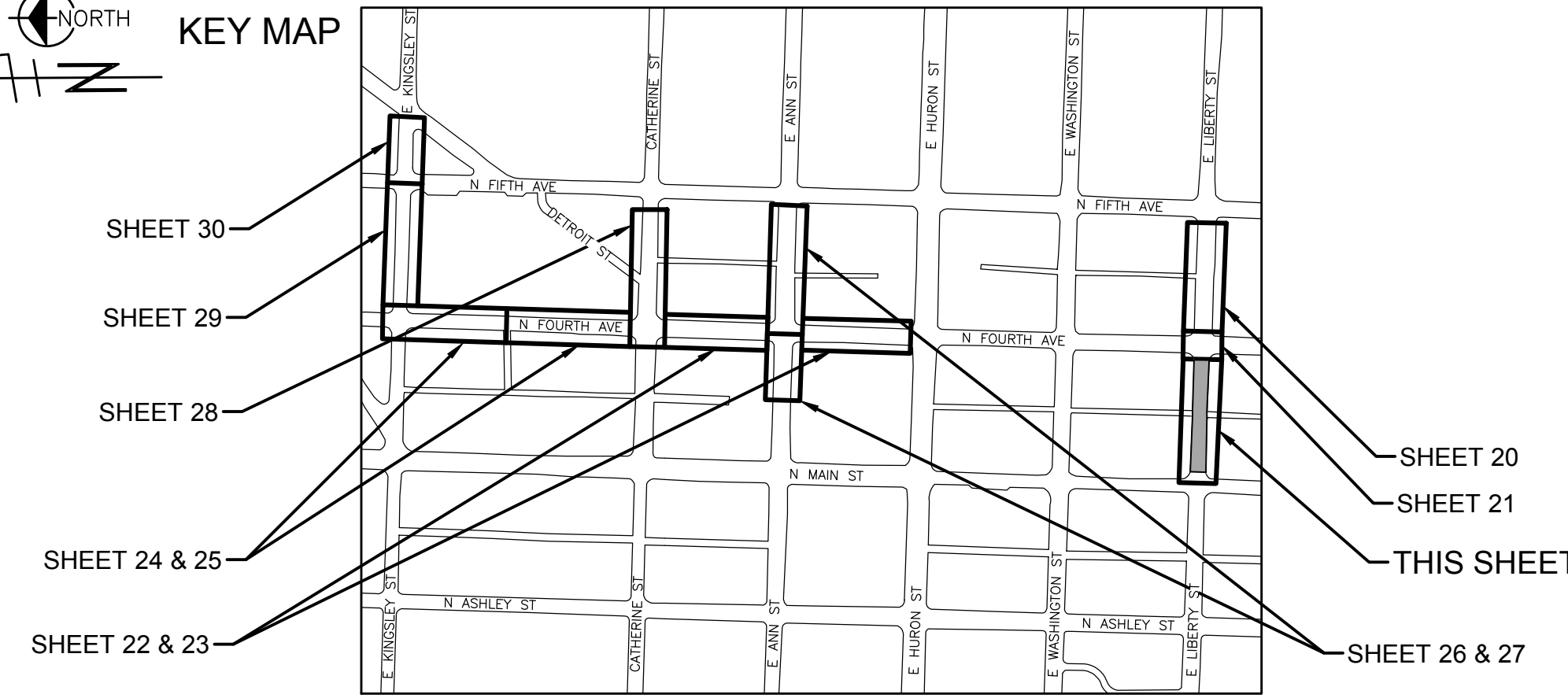
E LIBERTY ST

ELECTRICAL DEMOLITION PLAN

SCALE: 1" = 10'
0 5 10 20



KEY MAP



NOTES

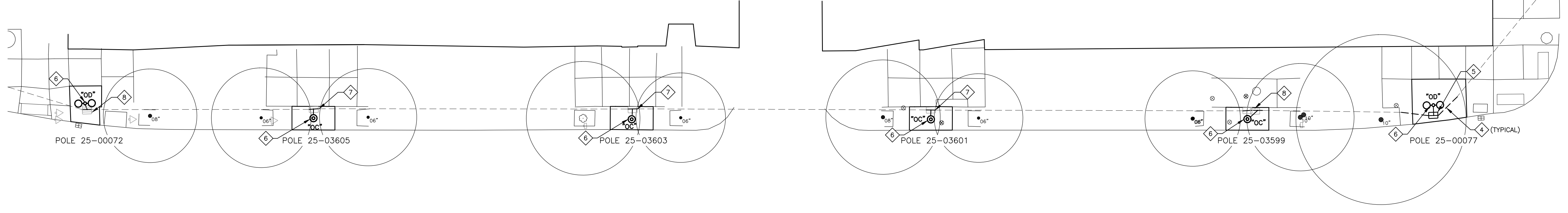
1. REFER TO DRAWING 17 FOR GENERAL ELECTRICAL REQUIREMENTS.
2. REFER TO DRAWINGS 3 AND 4 FOR BASE DETAILS.
3. REFER TO CIVIL DRAWINGS AND SPECIFICATIONS FOR PAY ITEMS AND FINISHED GRADE MATERIAL.
4. NOT ALL KEYNOTES APPLY TO EACH DRAWING.
5. THE INSTALLATION SHALL NOT ALLOW WIRE NUTS. ALL CONNECTIONS NEED TO BE WITH SPLIT BOLTS, SCOTCHFIL ELECTRICAL INSULATION PUTTY AND TAPE.
6. 3" CONDUITS SHALL BE INSTALLED IN THE POLE BASE TO THE HAND HOLE.
7. ALL CONDUITS SHALL BE NMRC SCHEDULE 80. ALL CONDUITS SHALL HAVE BELLED ENDS.
8. ALL WIRE SHALL BE THHN/THWN.
9. THE POLES SHALL UTILIZE GALVANIZED STEEL ANCHOR BOLTS. NO BREAKAWAY BASES ARE REQUIRED.
10. ALL FASTENERS SHALL HAVE ANTI-SEIZE ADDED. FAILURE TO COMPLY WILL RESULT IN RE-STARTING THE INSTALLATION.

KEY NOTES

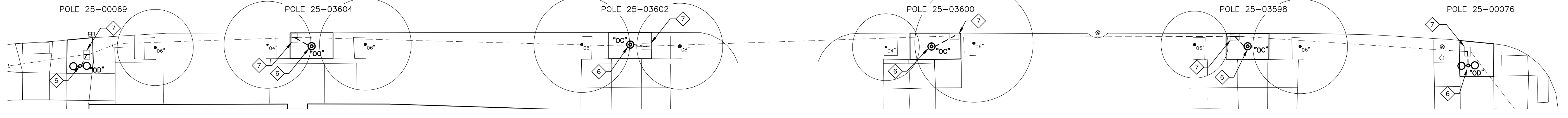
1. DISCONNECT AND REMOVE POLE, LUMINAIRES AND RECEPTACLE.
2. TEMPORARILY REMOVE WIRES AND CUT BACK CONDUITS TO ACCOMMODATE HANDHOLE / POLE REMOVAL.
3. RELOCATE HAND HOLE TO ACCOMMODATE NEW BASE.
4. REVISE CONDUIT ROUTING AND REINSTALL EXISTING CONDUCTORS.
5. NEW HANDHOLE.
6. NEW POLE BASE, POLE, LUMINAIRE AND RECEPTACLE. ALL CONDUCTORS FROM POLE TO HANDHOLE SHALL BE NEW.
7. EXISTING HANDHOLE TO REMAIN. ADJUST HEIGHT AS REQUIRED.
8. RELOCATED HANDHOLE. ADJUST HEIGHT AS REQUIRED.

ELECTRICAL NEW WORK PLAN

SCALE: 1" = 10'
0 5 10 20



E LIBERTY ST



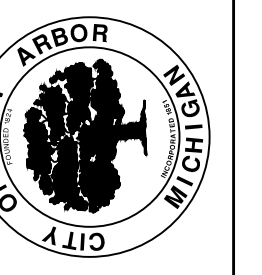
S FOURTH AVE

S FOURTH AVE



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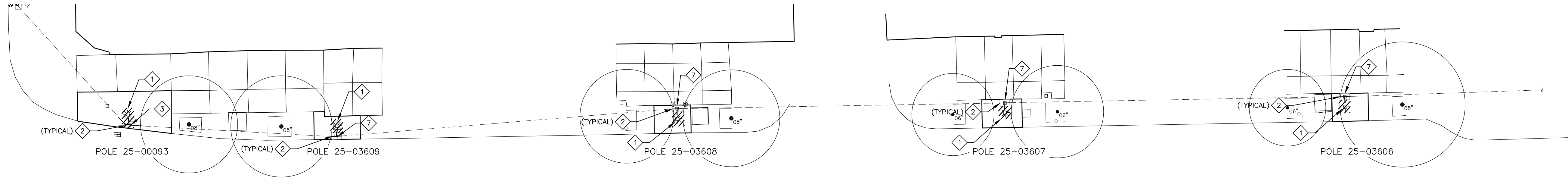
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
STREET LIGHTING REPLACEMENT -
KERRYTOWN MARKET AND LIBERTY STREETS
E LIBERTY ST, ELECTRIC DEMOLITION AND NEW WORK PLAN

SCALE PLAN:
DRAWING No.
2017-026-E1

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S FOURTH AVE

S FOURTH AVE



E LIBERTY ST

NOTES

- REFER TO DRAWING 17 FOR GENERAL ELECTRICAL REQUIREMENTS.
- REFER TO DRAWINGS 3 AND 4 FOR BASE DETAILS.
- REFER TO CIVIL DRAWINGS AND SPECIFICATIONS FOR PAY ITEMS AND FINISHED GRADE MATERIAL.
- NOT ALL KEYNOTES APPLY TO EACH DRAWING.
- THE INSTALLATION SHALL NOT ALLOW WIRE NUTS. ALL CONNECTIONS NEED TO BE WITH SPLIT BOLTS, SCOTCHFIL ELECTRICAL INSULATION PUTTY AND TAPE.
- 3" CONDUITS SHALL BE INSTALLED IN THE POLE BASE TO THE HAND HOLE.
- ALL CONDUITS SHALL BE NMRC SCHEDULE 80. ALL CONDUITS SHALL HAVE BELLED ENDS.
- ALL WIRE SHALL BE THHN/THWN.
- THE POLES SHALL UTILIZE GALVANIZED STEEL ANCHOR BOLTS. NO BREAKAWAY BASES ARE REQUIRED.
- ALL FASTENERS SHALL HAVE ANTI-SEIZE ADDED. FAILURE TO COMPLY WILL RESULT IN RE-STARTING THE INSTALLATION.

KEY NOTES

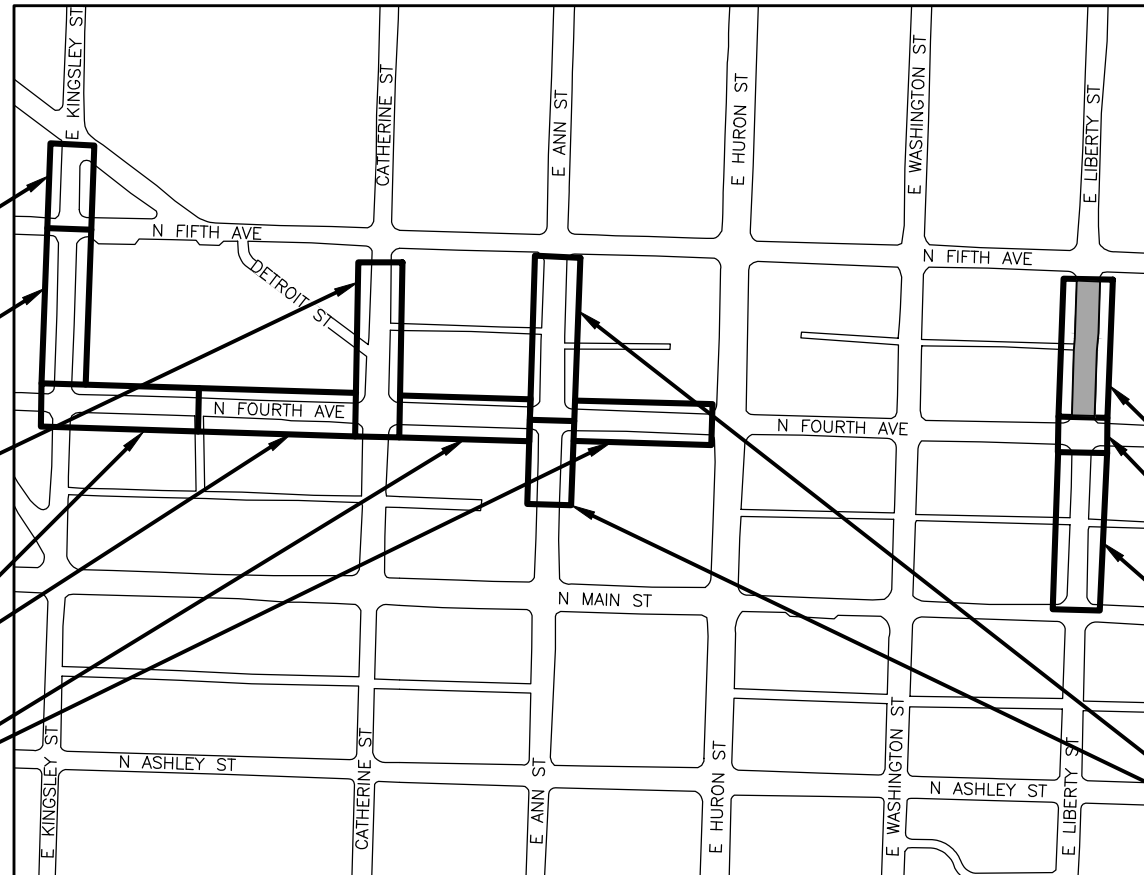
- DISCONNECT AND REMOVE POLE, LUMINAIRES AND RECEPTACLE.
- TEMPORARILY REMOVE WIRES AND CUT BACK CONDUITS TO ACCOMMODATE HANDHOLE / POLE REMOVAL.
- RELOCATE HAND HOLE TO ACCOMMODATE NEW BASE.
- REVISE CONDUIT ROUTING AND REINSTALL EXISTING CONDUCTORS.
- NEW HANDHOLE.
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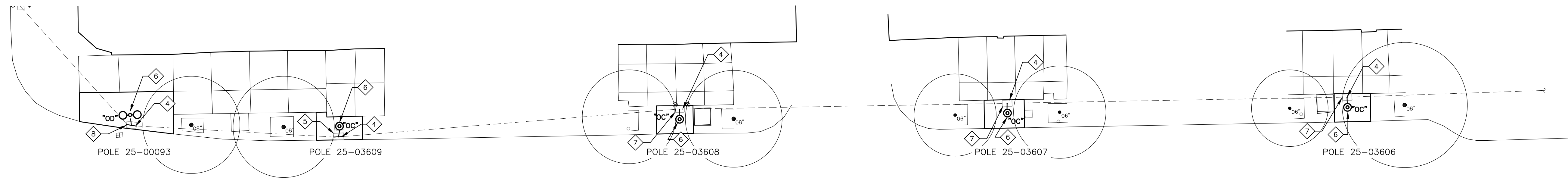
ELECTRICAL DEMOLITION PLAN
SCALE: 1" = 10'
0 5 10 20



KEY MAP



ELECTRICAL NEW WORK PLAN
SCALE: 1" = 10'
0 5 10 20



E LIBERTY ST

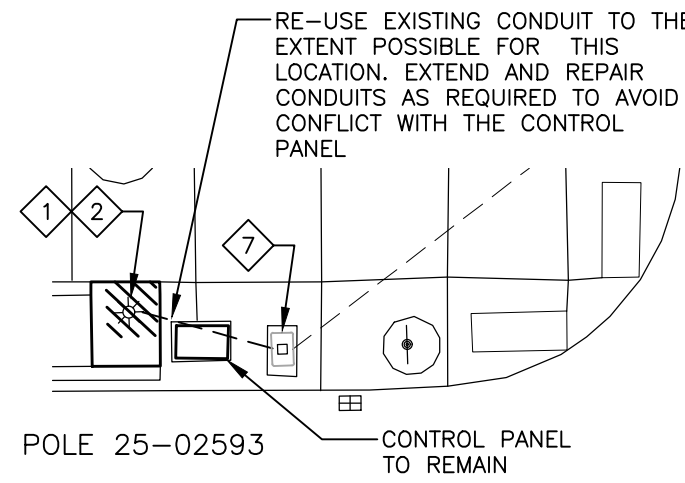


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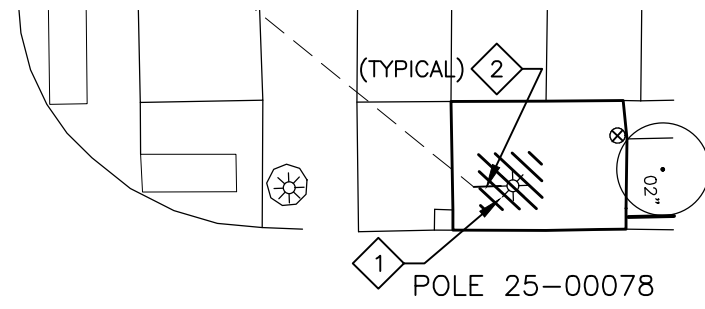
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ANN ARBOR, MI 48107-8647
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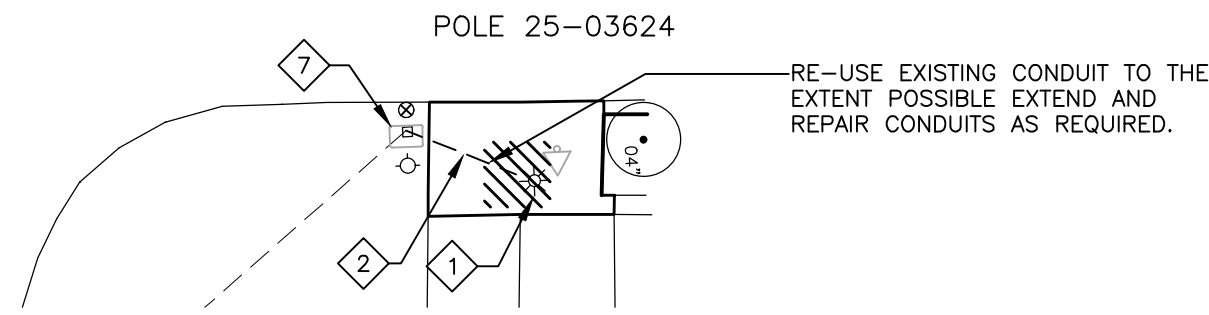
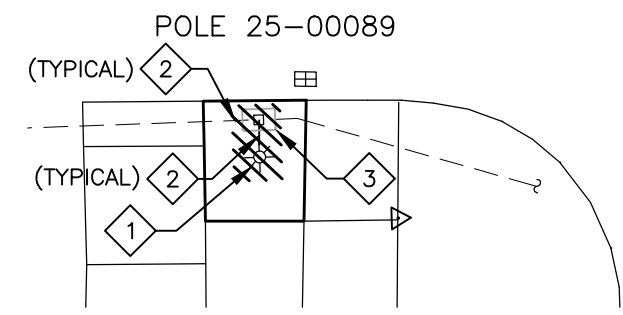
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
STREET LIGHTING REPLACEMENT -
KERRYTOWN MARKET AND LIBERTY STREETS
E LIBERTY ST, ELECTRIC DEMOLITION AND NEW WORK PLAN



E LIBERTY ST



S FOURTH AVE



NOTES

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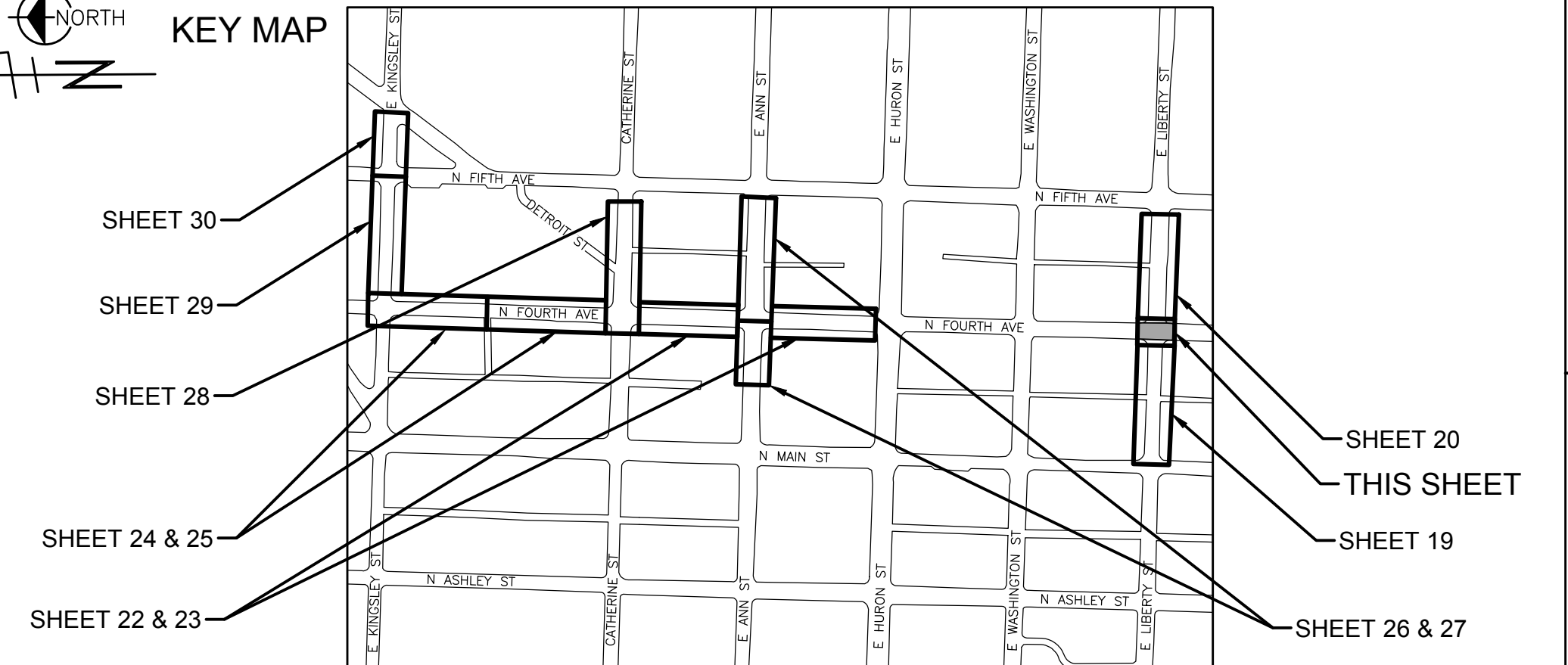
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0 5 10 20

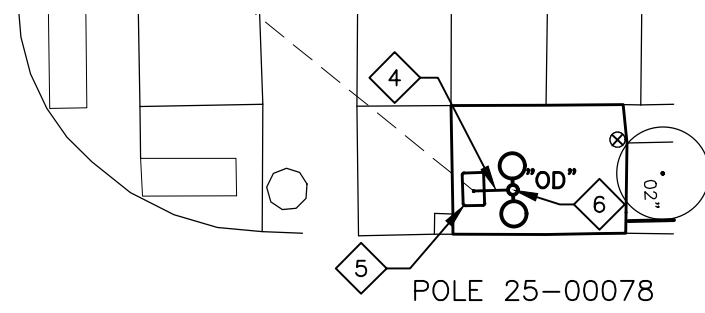
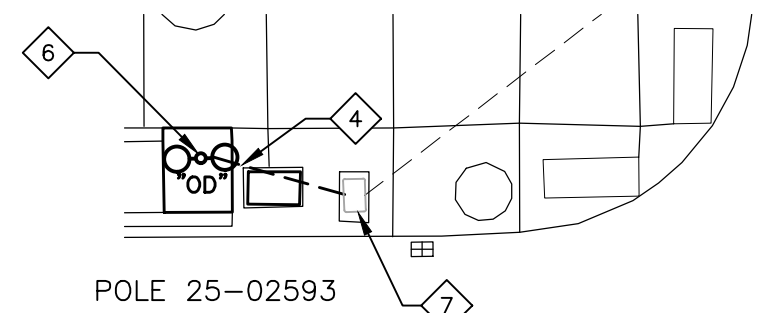


KEY MAP

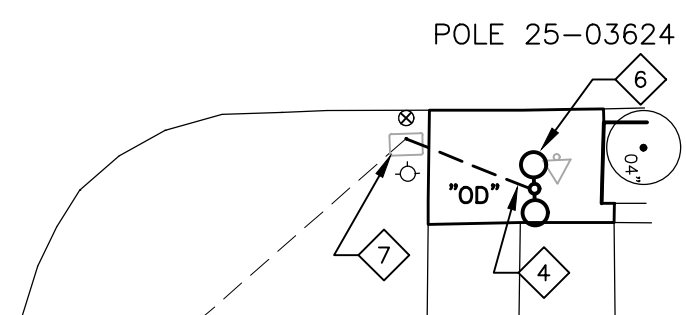
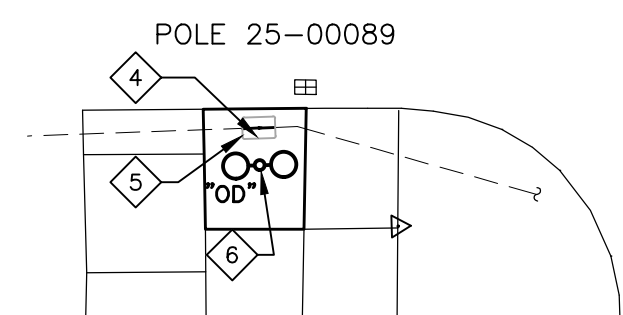


ELECTRICAL NEW WORK PLAN
SCALE: 1" = 10'
0 5 10 20

E LIBERTY ST



S FOURTH AVE



REV.	DATE	DESCRIPTION	DRAWN	CHECKED
1.	04-07-2017	ISSUED FOR BID	SJR / JANI	JANI

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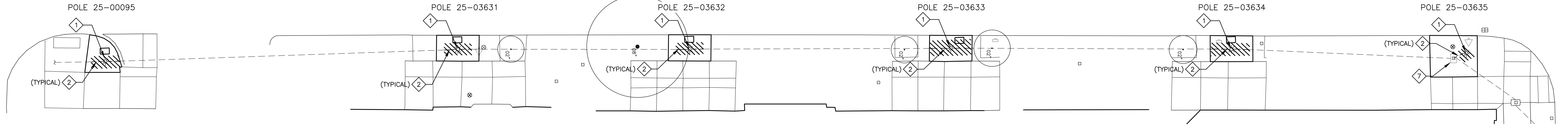
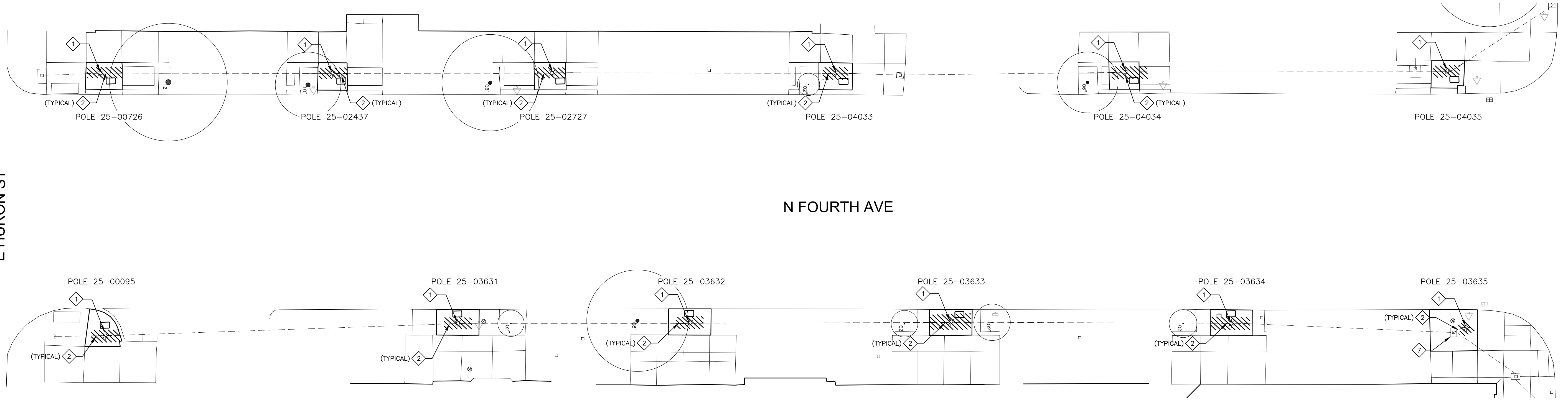
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
STREET LIGHTING REPLACEMENT -
KERRYTOWN MARKET AND LIBERTY STREETS
S FOURTH AVE, ELECTRIC DEMOLITION AND NEW WORK PLAN

SCALE PLAN:
DRAWING No.
2017-026-ES

Z:\2017\170031\CAD\CD\E006170031_Fourth1_Removal and Construction.dwg Dwg Created: 7-Apr-17 - standard.ctb - Plot Date: 7-Apr-17

E HURON ST

E HURON ST



N FOURTH AVE

N FOURTH AVE

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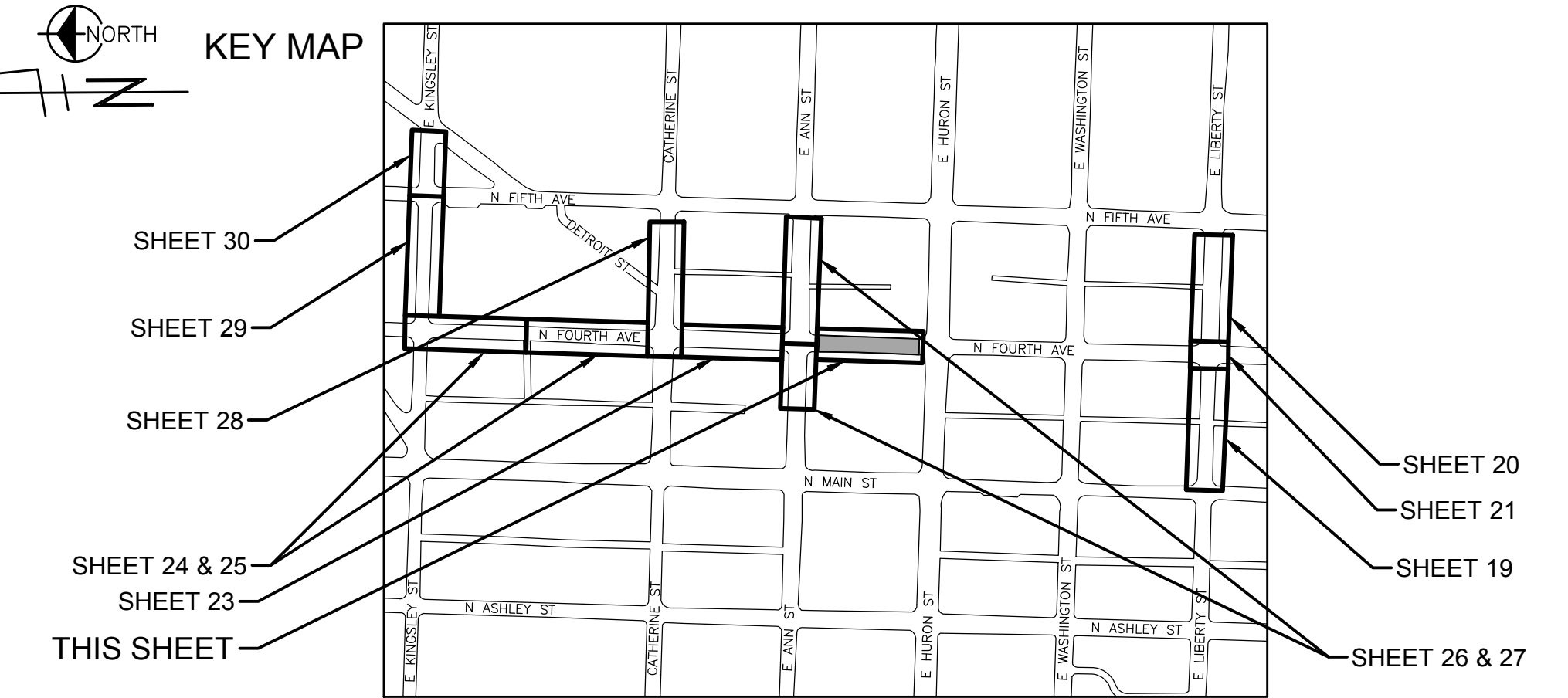
ELECTRICAL DEMOLITION PLAN
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0 5 10 20



ELECTRICAL NEW WORK PLAN
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KEY MAP



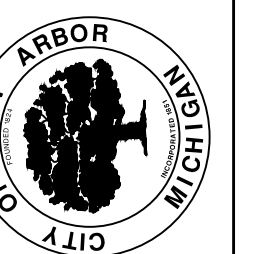
E ANN ST

E ANN ST



REV.	DATE	DRAWN	CHECKED
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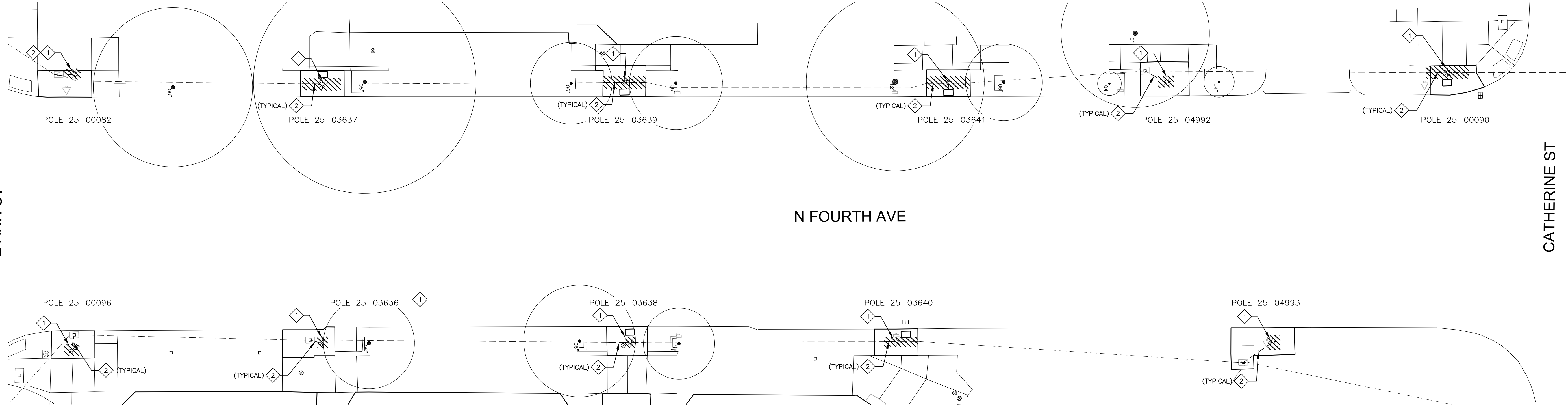
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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
STREET LIGHTING REPLACEMENT -
KERRYTOWN MARKET AND LIBERTY STREETS
N FOURTH AVE, ELECTRIC DEMOLITION AND NEW WORK PLAN

E ANN ST

E ANN ST

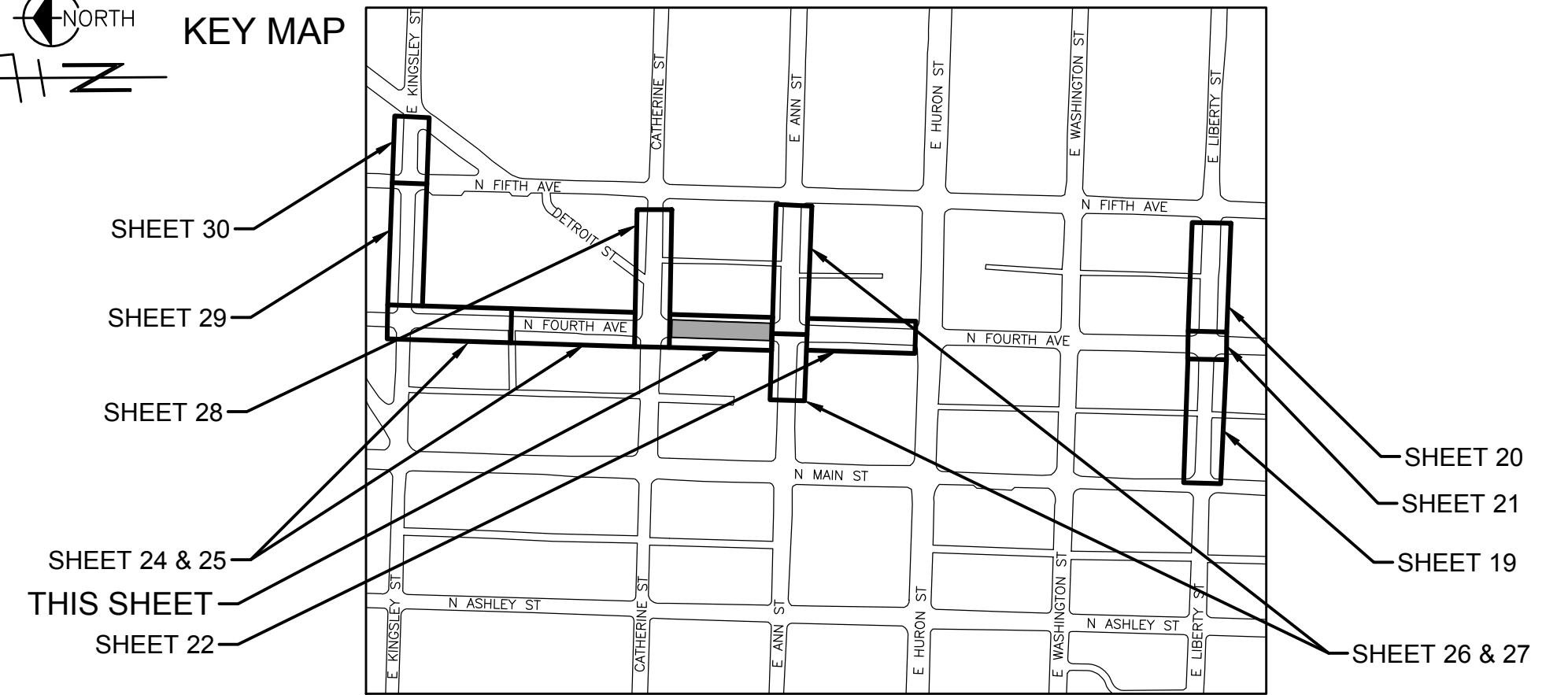


ELECTRICAL DEMOLITION PLAN

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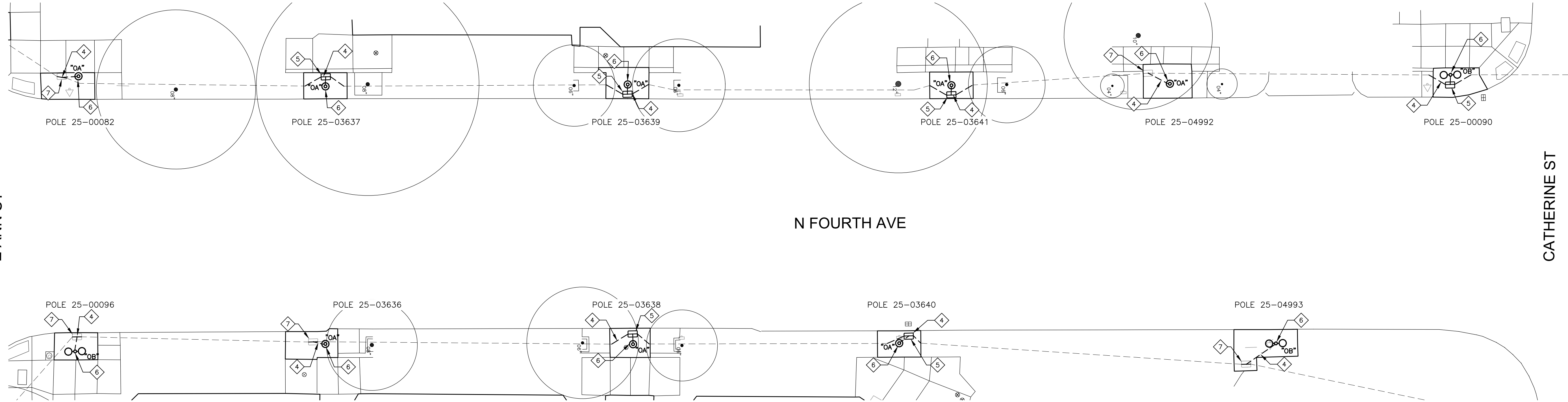
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ELECTRICAL NEW WORK PLAN

SCALE: 1" = 10'
0 5 10 20



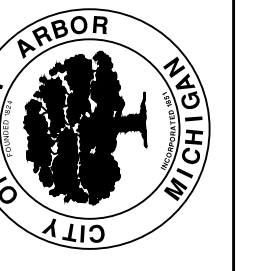
CATHERINE ST

CATHERINE ST



REV.	DATE	DESCRIPTION
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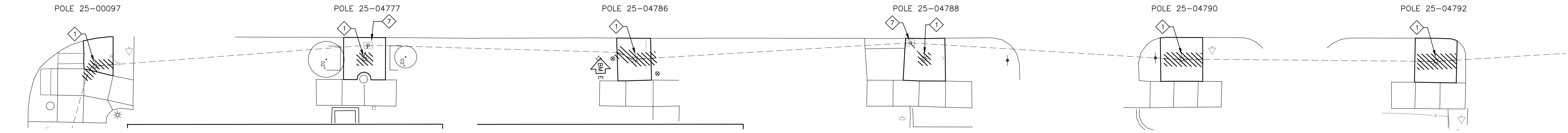
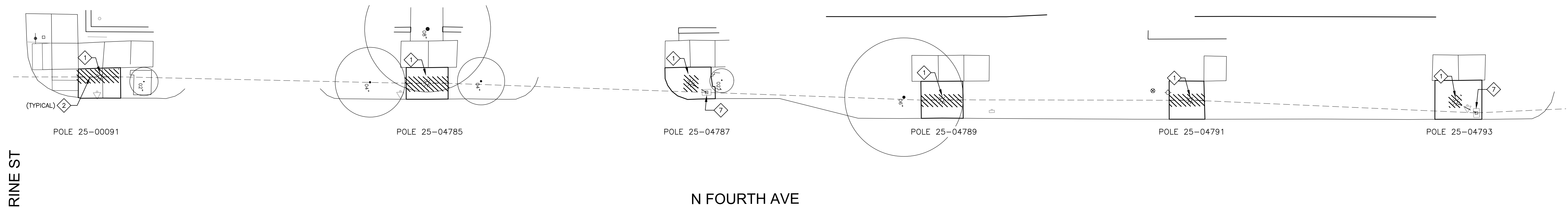
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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
STREET LIGHTING REPLACEMENT -
KERRYTOWN MARKET AND LIBERTY STREETS
N FOURTH AVE, ELECTRIC DEMOLITION AND NEW WORK PLAN

SCALE PLAN:
DRAWING No.
2017-026-ES

CATHERINE ST



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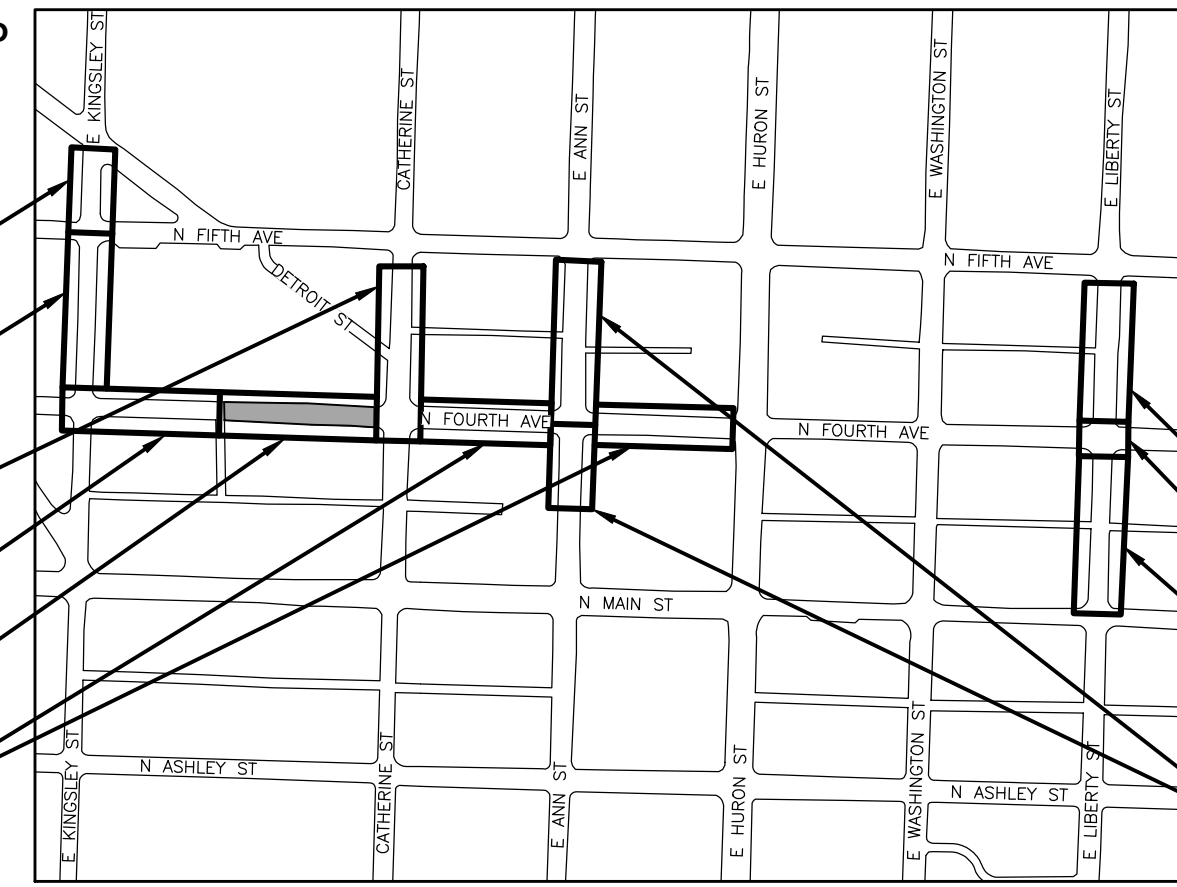
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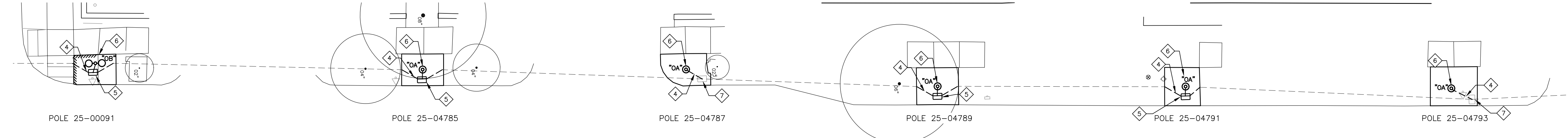
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SCALE: 1" = 10'
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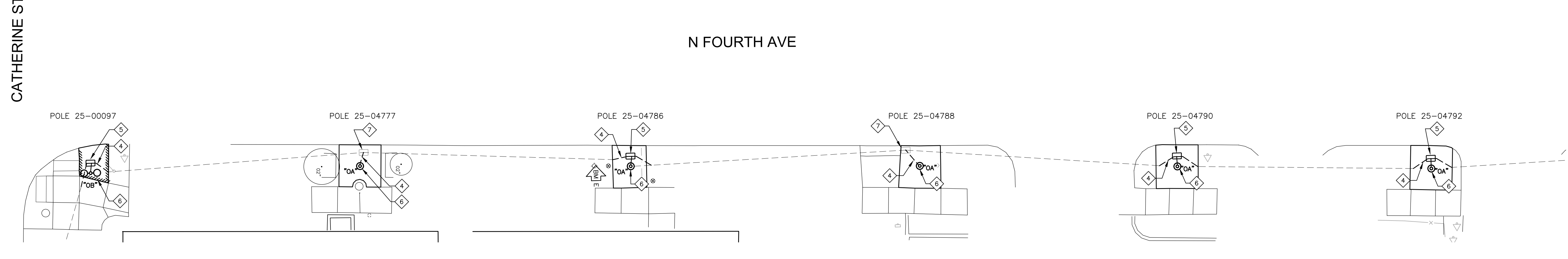
KEY MAP



ELECTRICAL NEW WORK PLAN
SCALE: 1" = 10'
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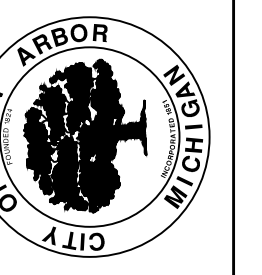


CATHERINE ST



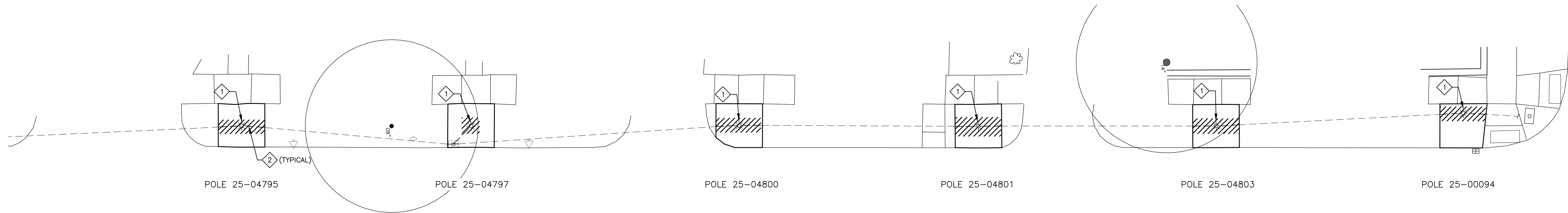
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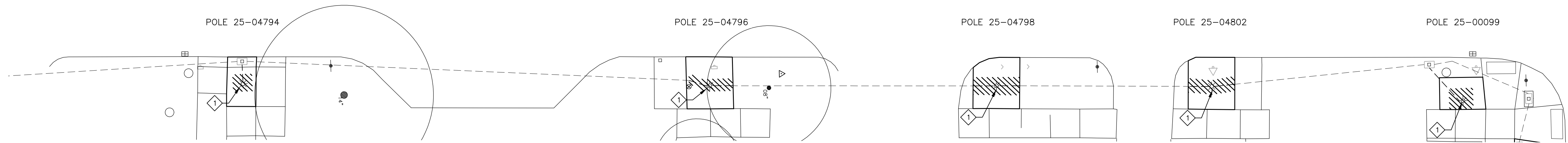


PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
STREET LIGHTING REPLACEMENT -
KERRYTOWN MARKET AND LIBERTY STREETS
N FOURTH AVE, ELECTRIC DEMOLITION AND NEW WORK PLAN

Z:\2017\170031\CAD\CD\E009170031_Fourth4_Removal and Construction.dwg Dwg Created: 7-Apr-17 - standard.ctb - Plot Date: 7-Apr-17



N FOURTH AVE



E KINGSLEY ST

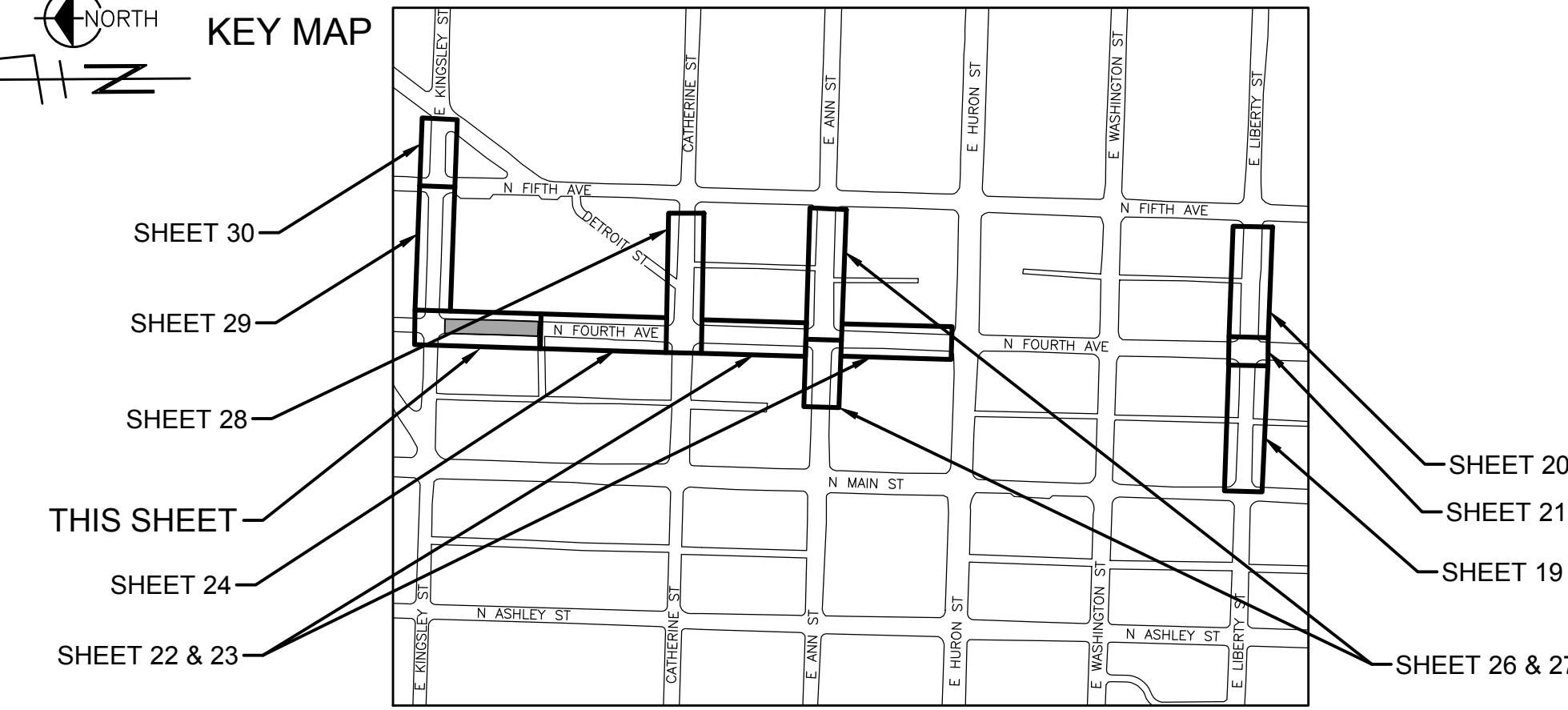


ELECTRICAL DEMOLITION PLAN

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KEY MAP



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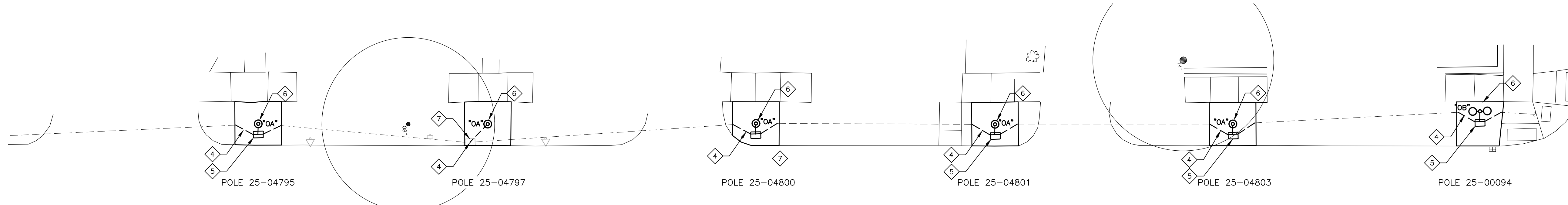
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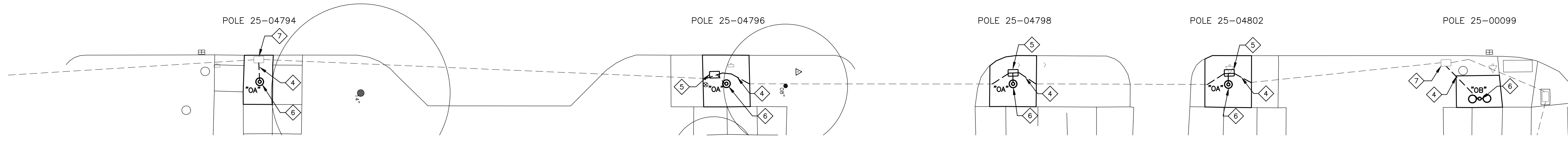
ELECTRICAL NEW WORK PLAN

SCALE: 1" = 10'
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N FOURTH AVE

E KINGSLEY ST



REV.	DESCRIPTION	DATE	DRAWN	CHECKED
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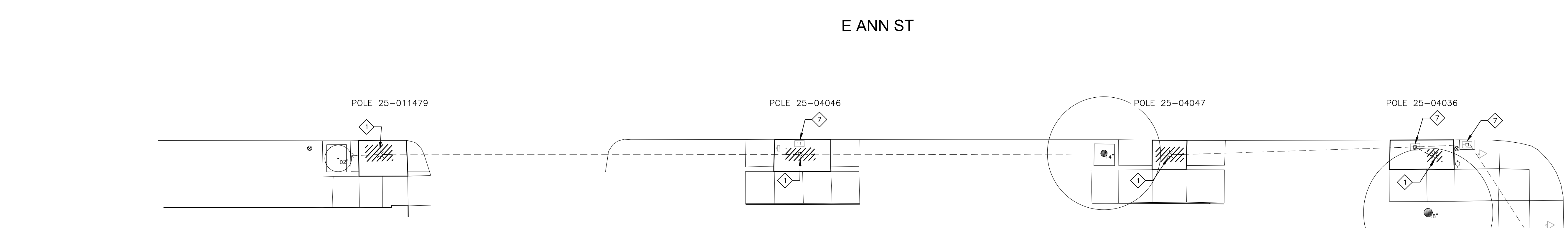
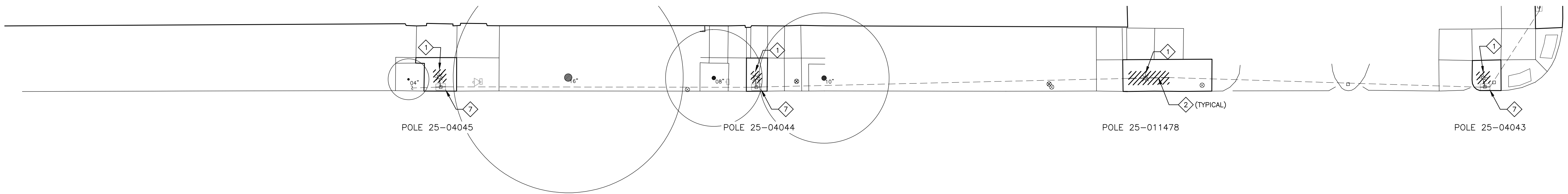
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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
STREET LIGHTING REPLACEMENT -
KERRYTOWN MARKET AND LIBERTY STREETS
N FOURTH AVE, ELECTRIC DEMOLITION AND NEW WORK PLAN

SCALE: 1" = 10'

DRAWING No.
2017-026-E7

SHEET No.
25 OF 30

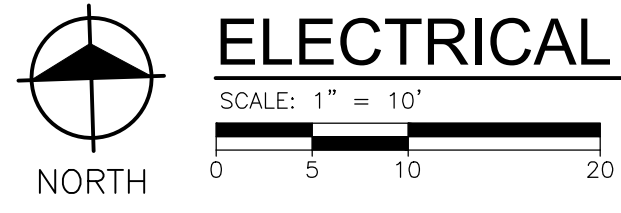


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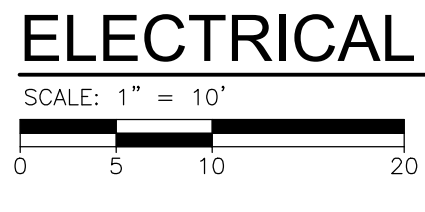
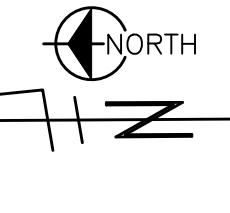
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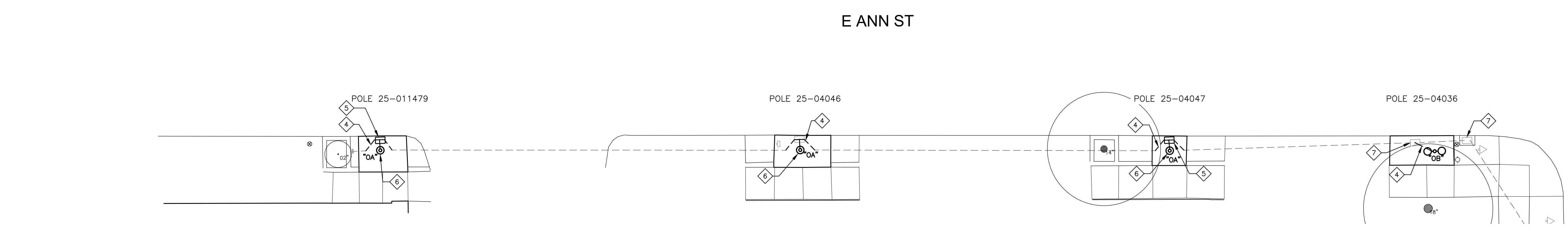
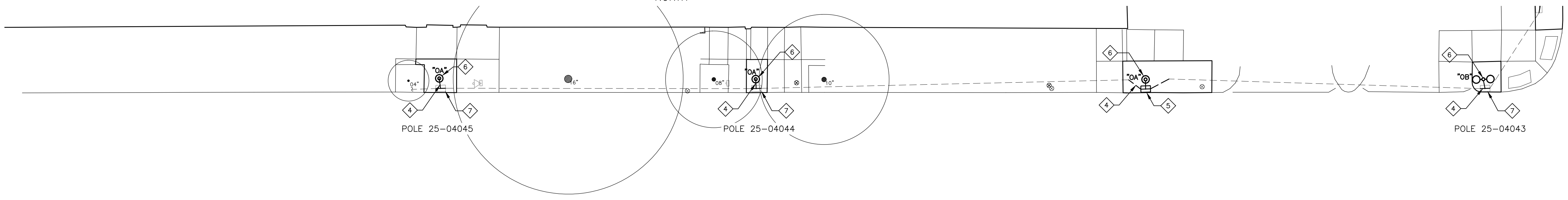
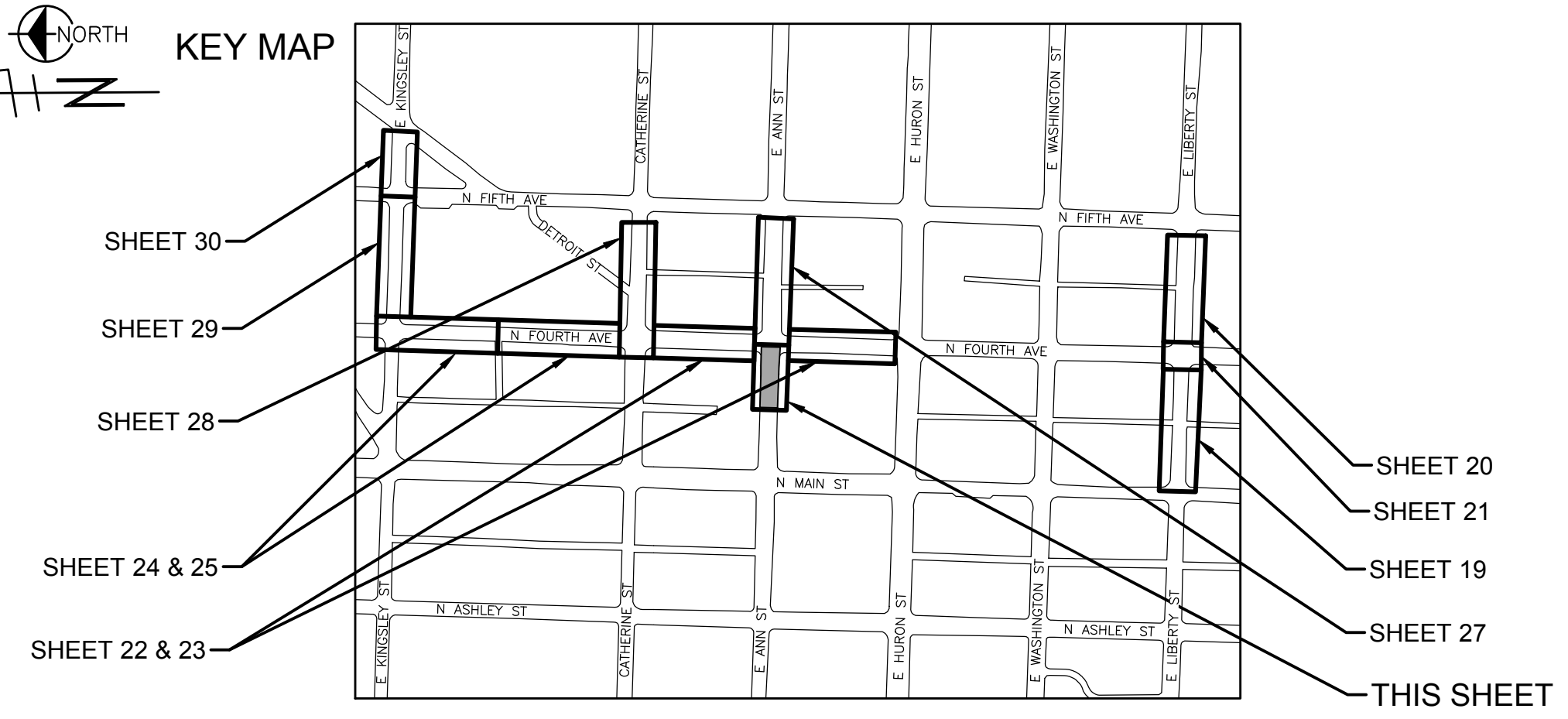
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ELECTRICAL DEMOLITION PLAN



ELECTRICAL NEW WORK PLAN



N FOURTH AVE

N FOURTH AVE

811
Know what's below.
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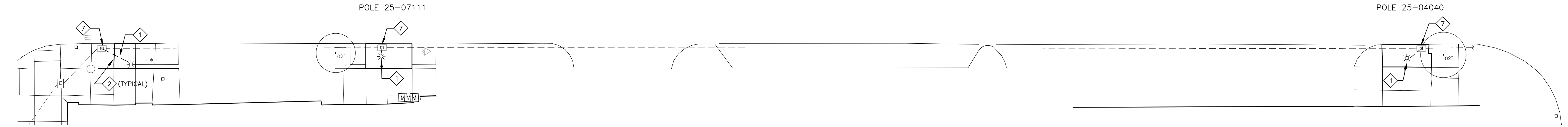
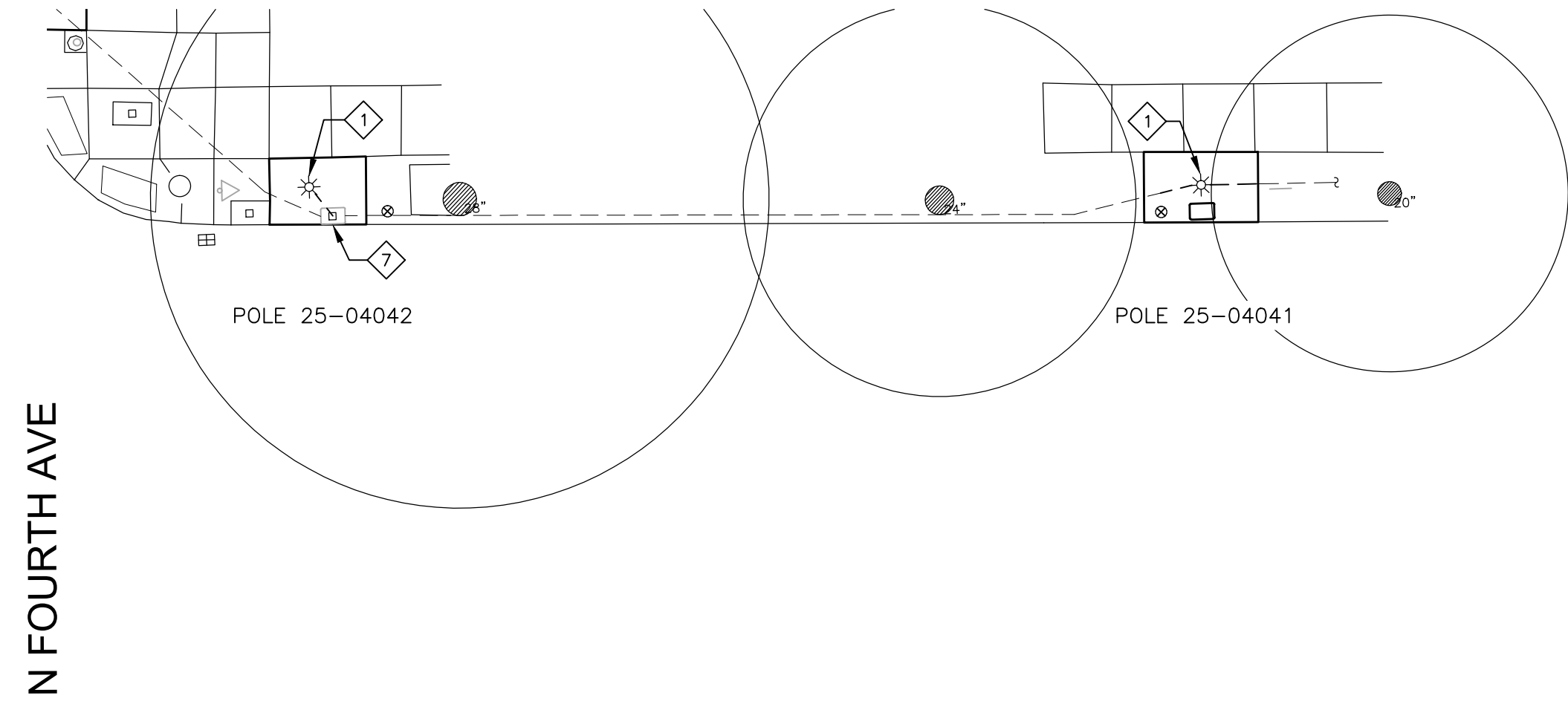
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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
STREET LIGHTING REPLACEMENT -
KERRYTOWN MARKET AND LIBERTY STREETS
E ANN ST, ELECTRIC DEMOLITION AND NEW WORK PLAN

SCALE PLAN:
DRAWING No.
2017-026-EB

SHEET No. **26 OF 30**

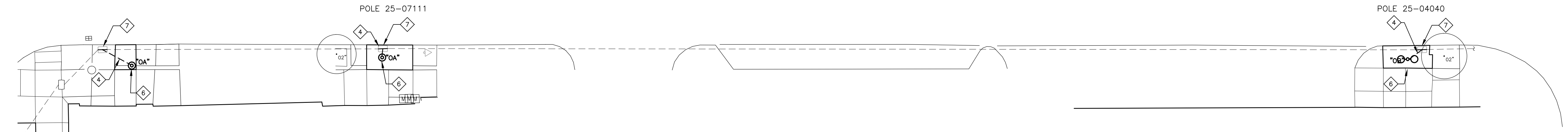
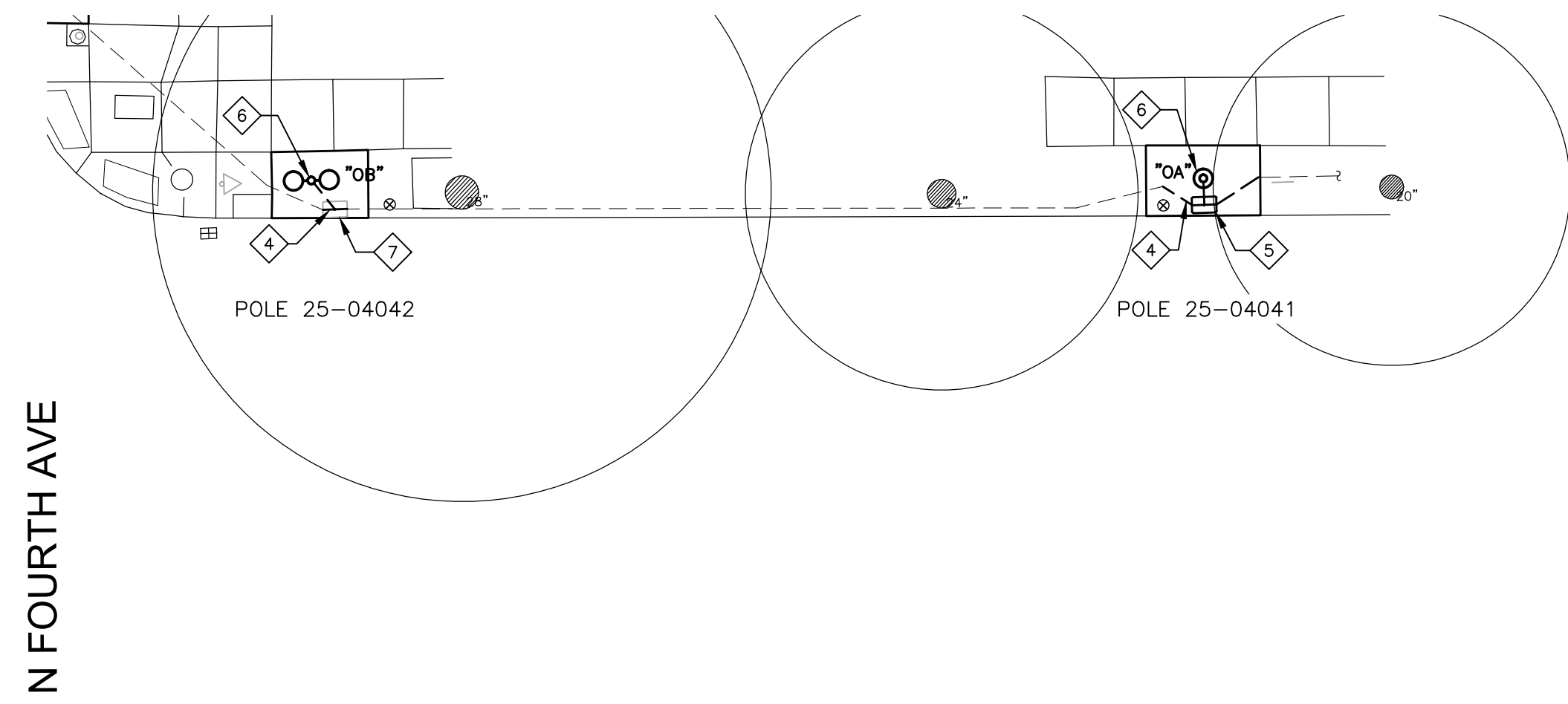


NOTES

1. REFER TO DRAWING 17 FOR GENERAL ELECTRICAL REQUIREMENTS.
2. REFER TO DRAWINGS 3 AND 4 FOR BASE DETAILS.
3. REFER TO CIVIL DRAWINGS AND SPECIFICATIONS FOR PAY ITEMS AND FINISHED GRADE MATERIAL.
4. NOT ALL KEYNOTES APPLY TO EACH DRAWING.
5. THE INSTALLATION SHALL NOT ALLOW WIRE NUTS. ALL CONNECTIONS NEED TO BE WITH SPLIT BOLTS, SCOTCHFIL ELECTRICAL INSULATION PUTTY AND TAPE.
6. 3" CONDUITS SHALL BE INSTALLED IN THE POLE BASE TO THE HAND HOLE.
7. ALL CONDUITS SHALL BE NMRC SCHEDULE 80. ALL CONDUITS SHALL HAVE BELLED ENDS.
8. ALL WIRE SHALL BE THHN/THWN.
9. THE POLES SHALL UTILIZE GALVANIZED STEEL ANCHOR BOLTS. NO BREAKAWAY BASES ARE REQUIRED.
10. ALL FASTENERS SHALL HAVE ANTI-SEIZE ADDED. FAILURE TO COMPLY WILL RESULT IN RE-STARTING THE INSTALLATION.

KEY NOTES

1. DISCONNECT AND REMOVE POLE, LUMINAIRES AND RECEPTACLE.
2. TEMPORARILY REMOVE WIRES AND CUT BACK CONDUITS TO ACCOMMODATE HANDHOLE / POLE REMOVAL.
3. RELOCATE HAND HOLE TO ACCOMMODATE NEW BASE.
4. REVISE CONDUIT ROUTING AND REINSTALL EXISTING CONDUCTORS.
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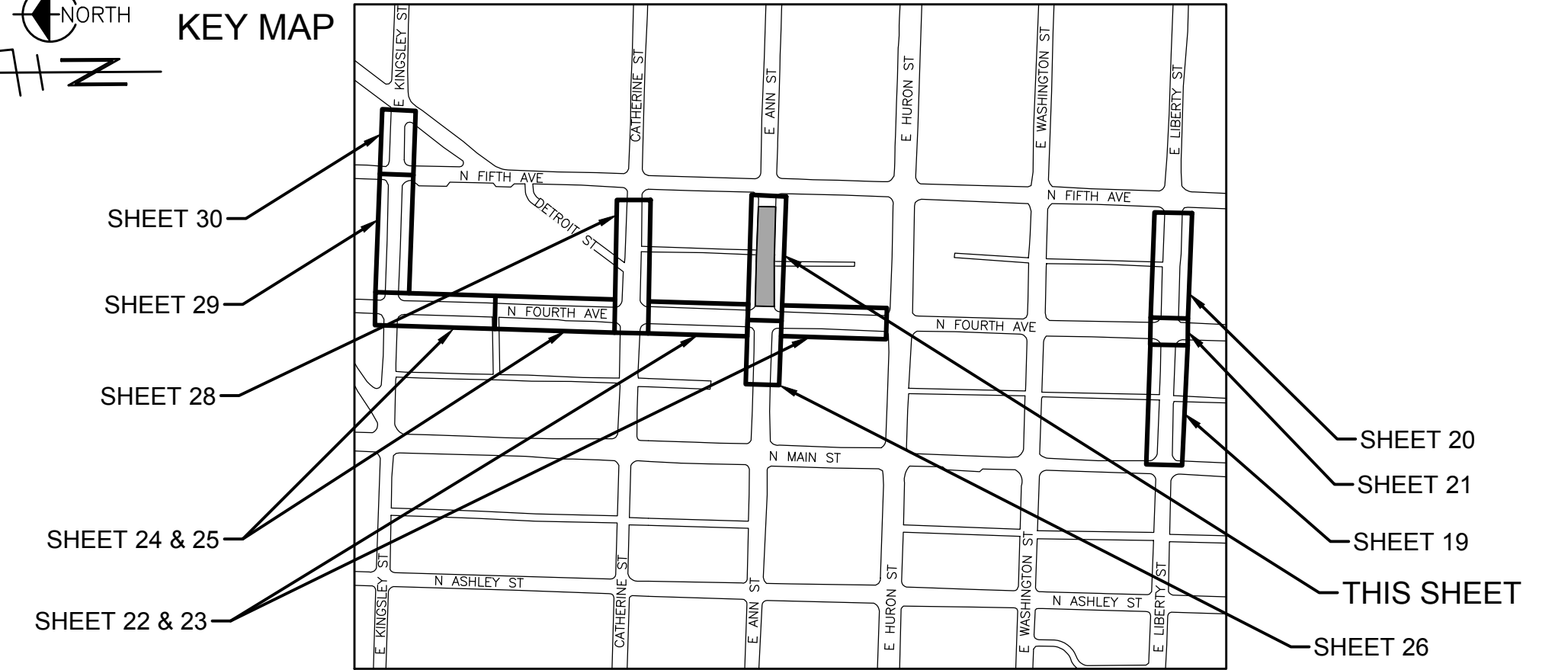


ELECTRICAL DEMOLITION PLAN

SCALE: 1" = 10'
0 5 10 20



KEY MAP



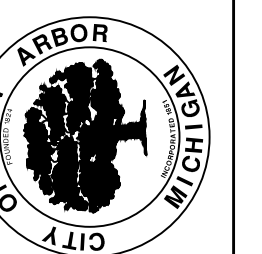
ELECTRICAL NEW WORK PLAN

SCALE: 1" = 10'
0 5 10 20



REV.	DESCRIPTION	DATE	DRAWN	CHECKED
1.	ISSUED FOR BID	04-07-2017	SJR / JANI	JANI

CITY OF ANN ARBOR
PUBLIC SERVICE
301 EAST HURON STREET
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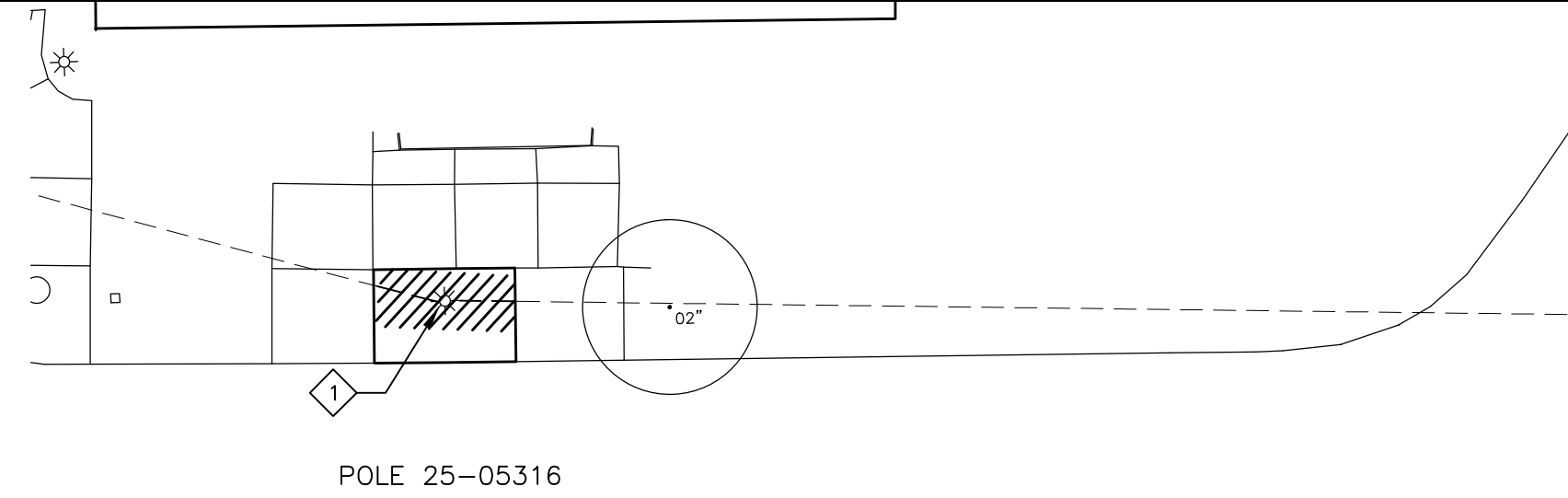
SCALE PLAN:
DRAWING No.
2017-026-ES

N FOURTH AVE

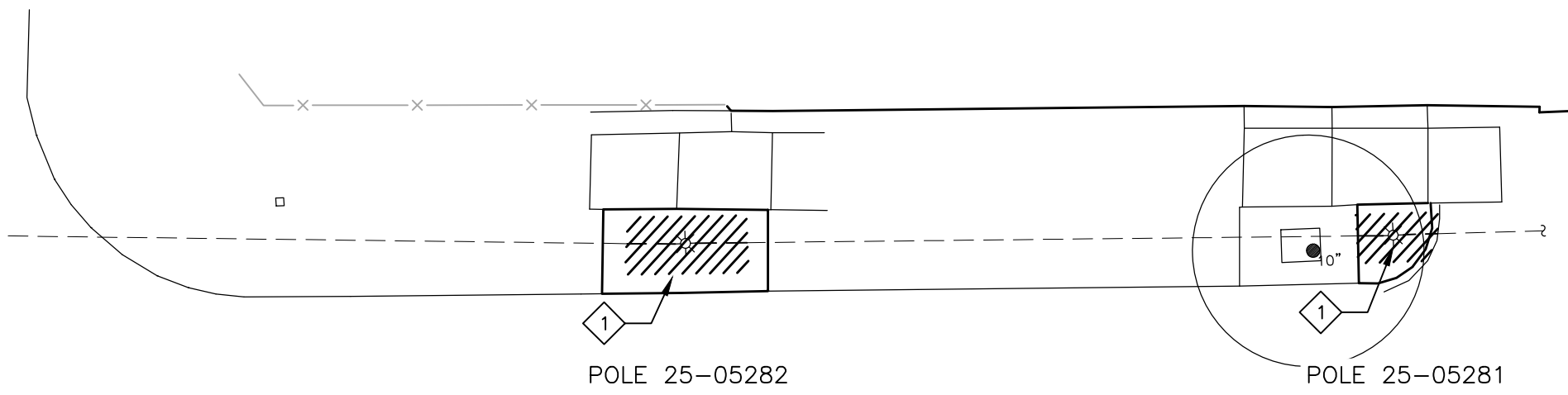
N FOURTH AVE

CATHERINE ST

CATHERINE ST

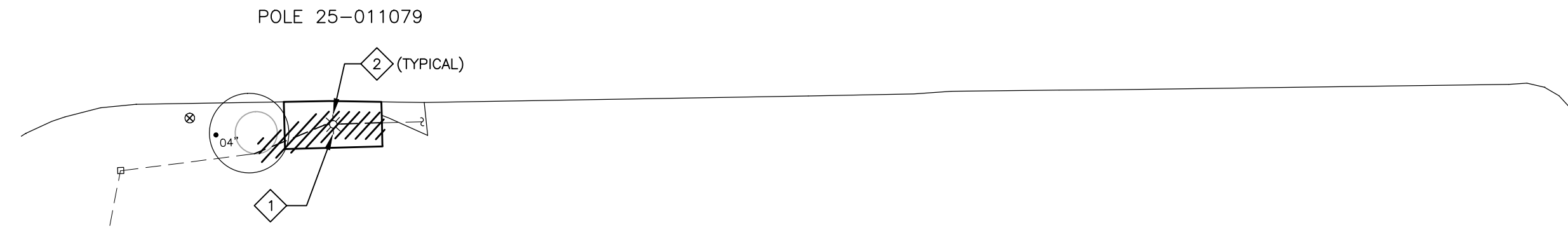


POLE 25-05316



POLE 25-05282

POLE 25-05281



POLE 25-011079

NOTES

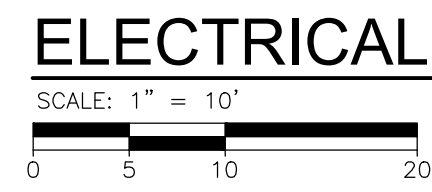
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NORTH



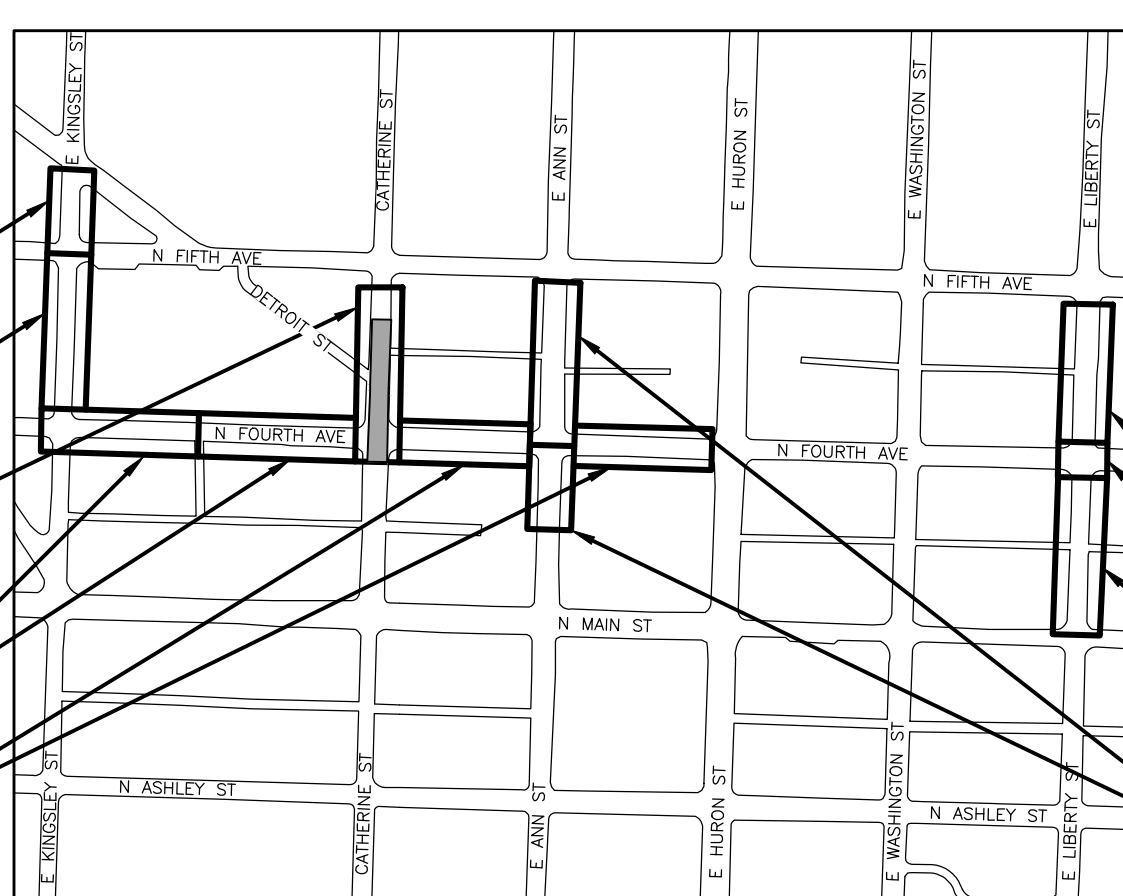
ELECTRICAL DEMOLITION PLAN

SCALE: 1" = 10'

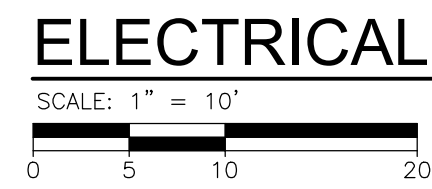


NORTH

KEY MAP

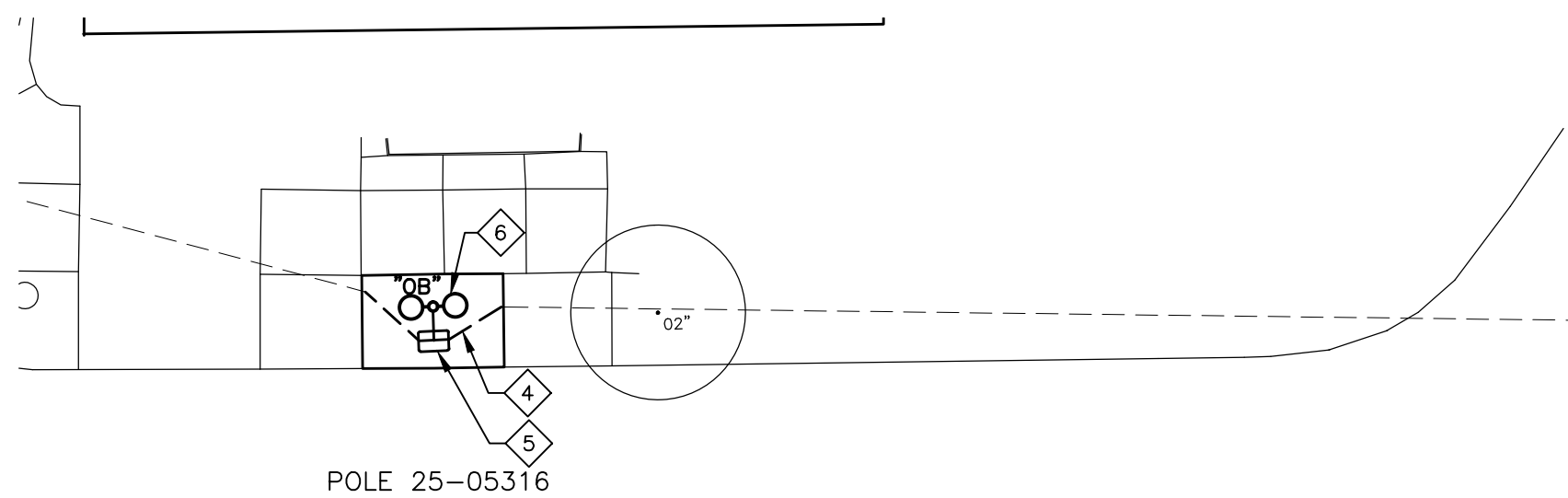


NORTH

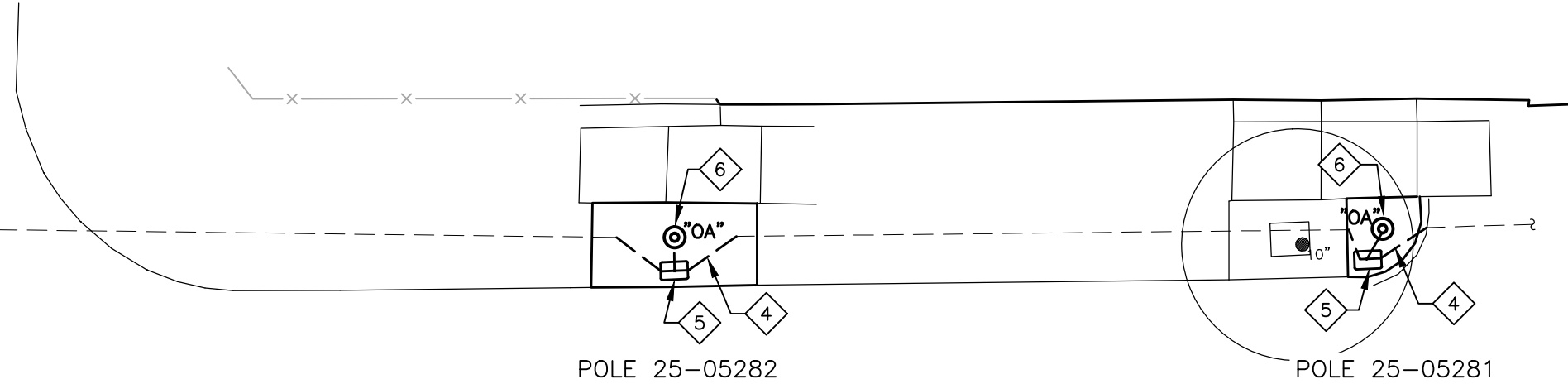


ELECTRICAL NEW WORK PLAN

SCALE: 1" = 10'



POLE 25-05316



POLE 25-05282

POLE 25-05281



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KERRYTOWN MARKET AND LIBERTY STREETS
CATHERINE ST, ELECTRIC DEMOLITION AND NEW WORK PLAN

N FOURTH AVE

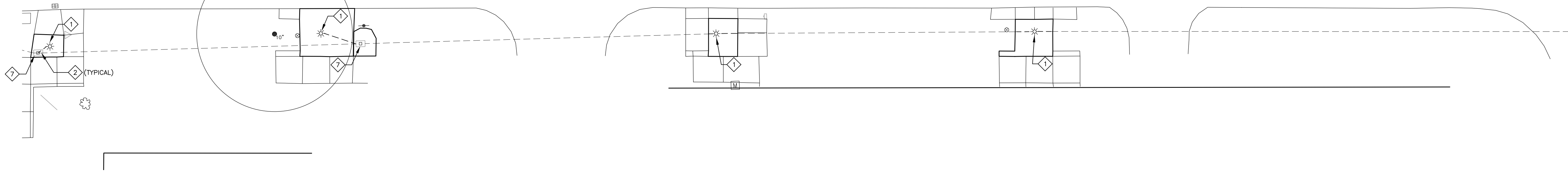
E KINGSLEY ST

POLE 25-00100

POLE 25-05292

POLE 25-05293

POLE 25-05294



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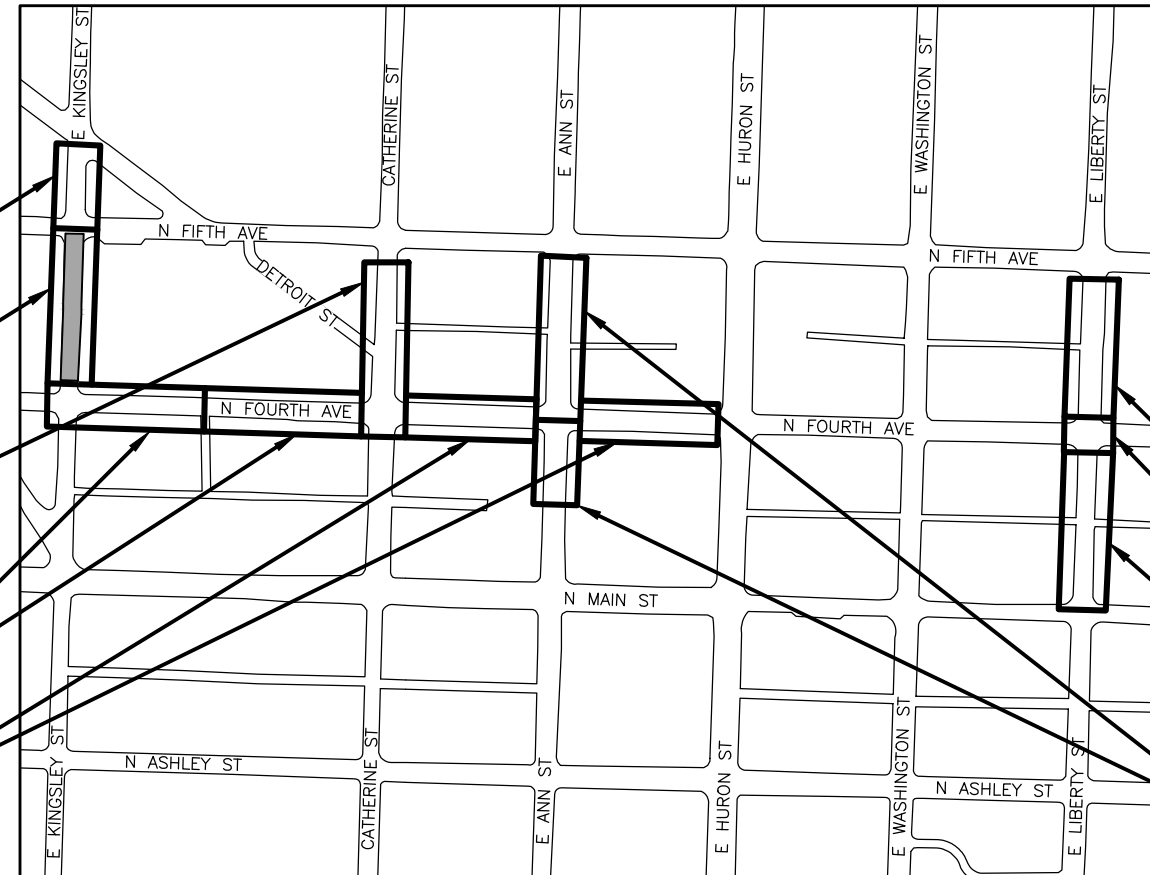


ELECTRICAL DEMOLITION PLAN

SCALE: 1" = 10'
0 5 10 20



KEY MAP



ELECTRICAL NEW WORK PLAN

SCALE: 1" = 10'
0 5 10 20

N FOURTH AVE

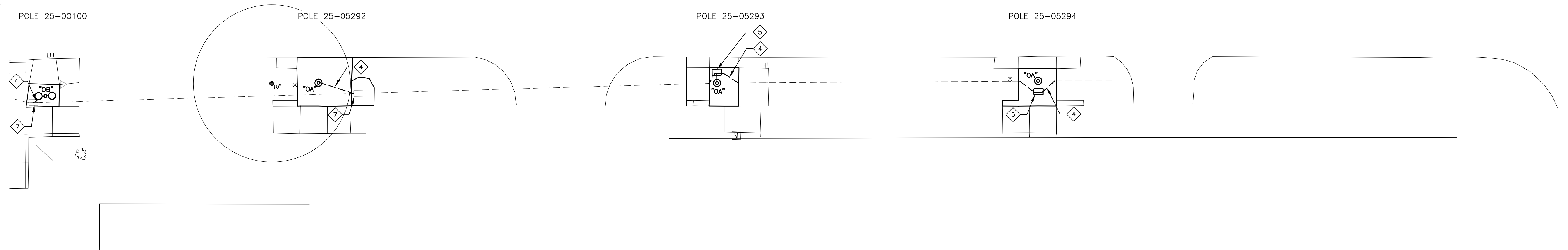
E KINGSLEY ST

POLE 25-00100

POLE 25-05292

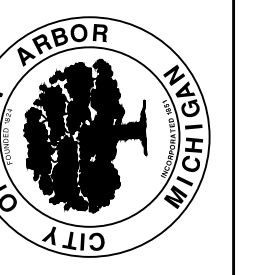
POLE 25-05293

POLE 25-05294



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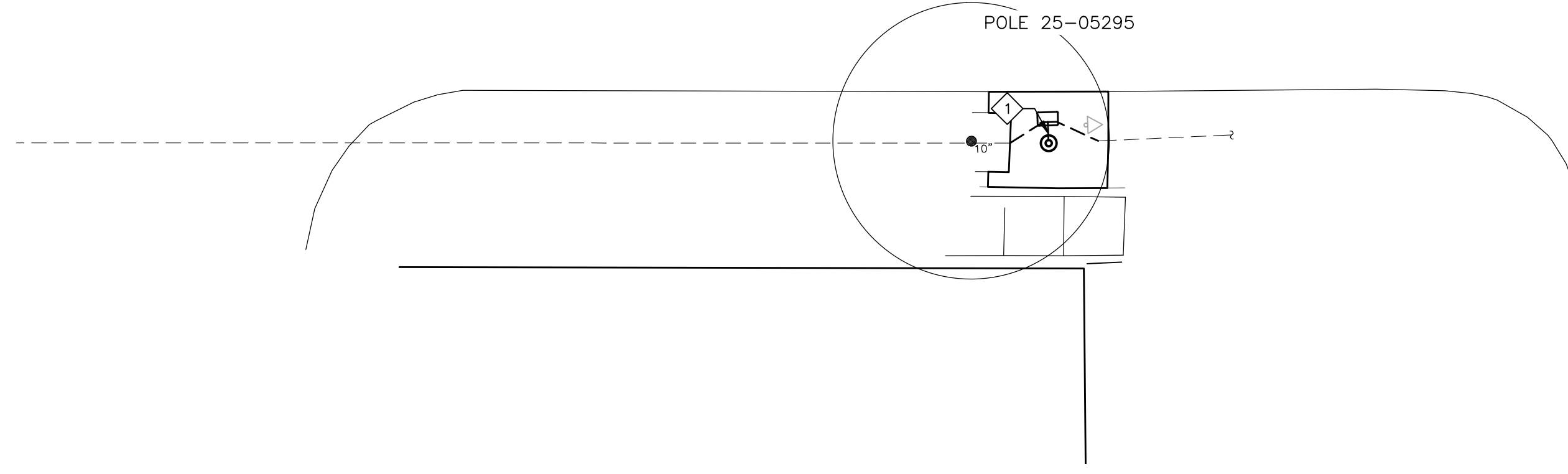


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KERRYTOWN MARKET AND LIBERTY STREETS
E KINGSLEY ST, ELECTRIC DEMOLITION AND NEW WORK PLAN

SCALE PLAN:
DRAWING No.
2017-026-E11

N FOURTH AVE

E KINGSLEY ST



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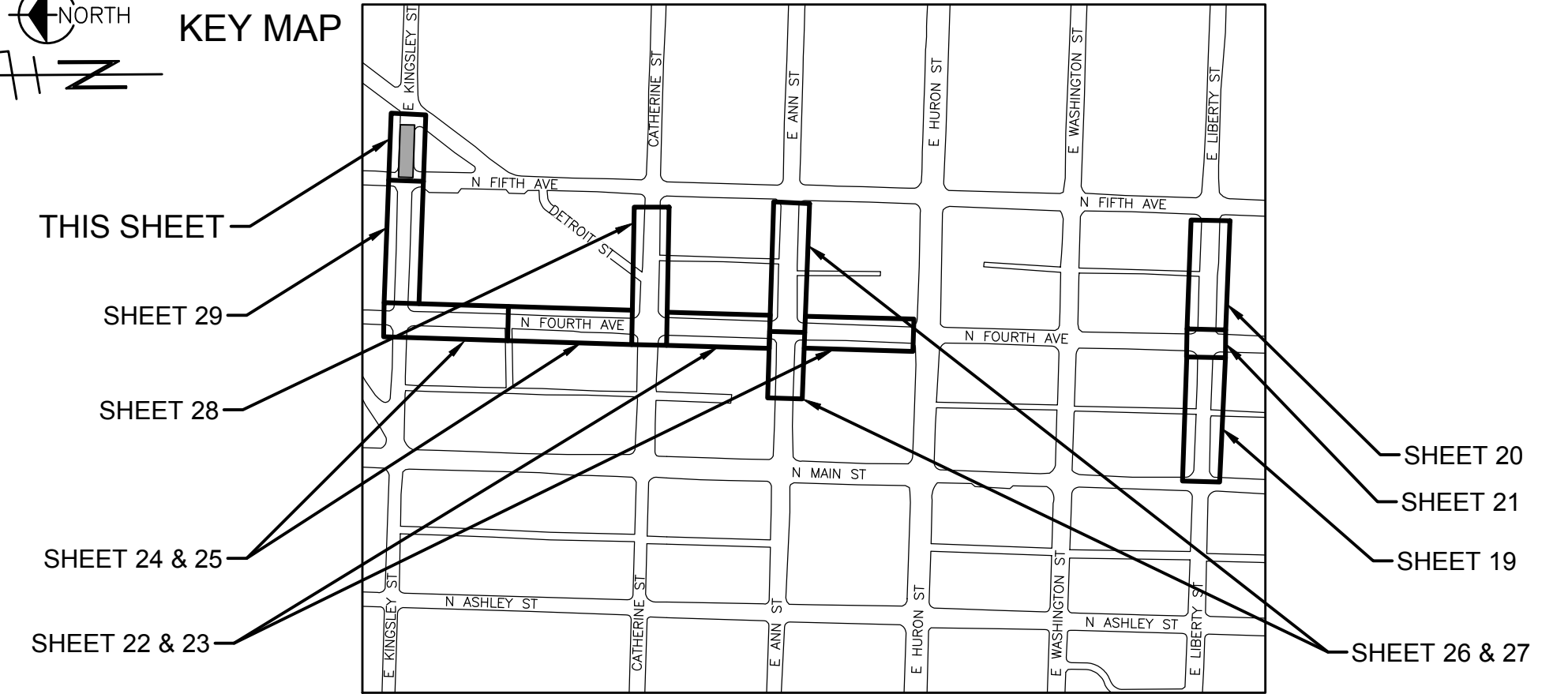
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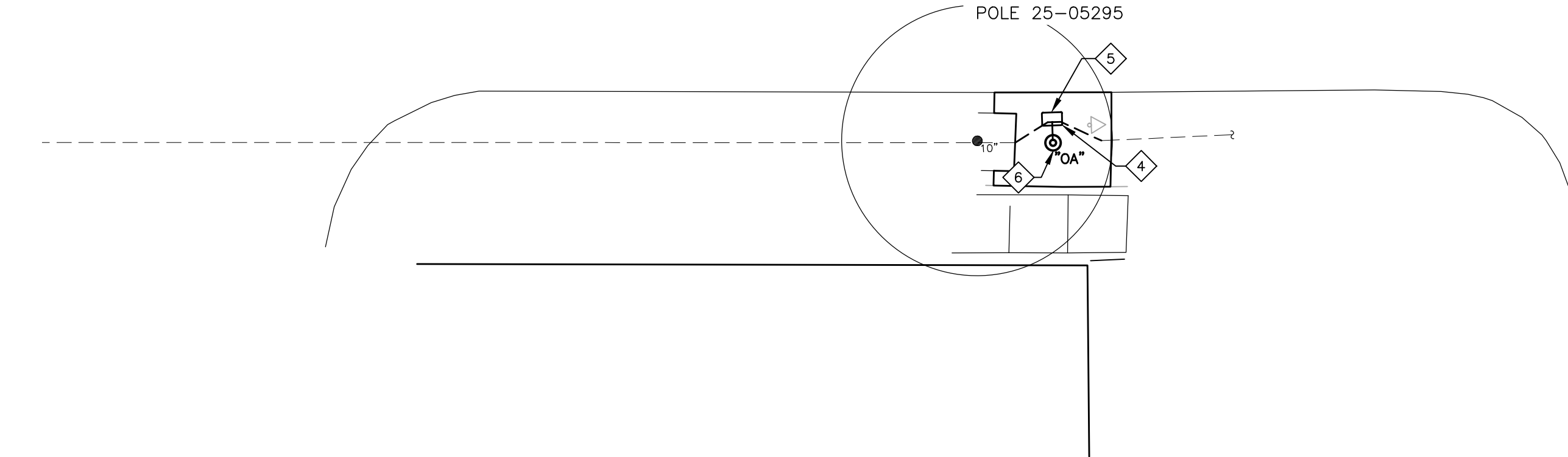
KEY MAP



ELECTRICAL NEW WORK PLAN
SCALE: 1" = 10'
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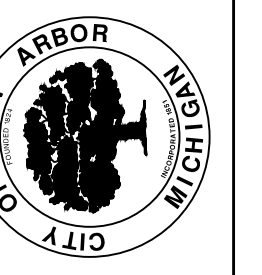
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