



CITY OF ANN ARBOR PROJECT MANAGEMENT

BROADWAY / N. DIVISION / DETROIT STREET PLANTER WALL AND SIDEWALK REPAIR

CITY OF ANN ARBOR FILE NO. 2015-024
ITB No. 4432

PROJECT LOCATION

SHEET INDEX

- 1 TITLE SHEET
- 2 MAINTENANCE OF TRAFFIC
- 3 REMOVAL PLAN
- 4-6 SIDEWALK DETAILS
- 7-8 WALL DETAILS



NOTES:

THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE CITY OF ANN ARBOR PUBLIC SERVICES DEPARTMENT STANDARD SPECIFICATIONS WHICH ARE INCLUDED BY REFERENCE.

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 THUS 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 CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.

THE IMPROVEMENTS COVERED BY THESE PLANS SHALL BE PERFORMED IN ACCORDANCE WITH THE MICHIGAN DEPARTMENT OF TRANSPORTATION 2012 STANDARD SPECIFICATIONS FOR CONSTRUCTION (INCLUDING REFERENCED M.D.O.T. PUBLICATIONS) WHERE NOTED, AND THIS PROJECT'S CONTRACT DOCUMENTS.

THE PROPOSED IMPROVEMENTS COVERED BY THESE PLANS ARE DESIGNED IN ACCORDANCE WITH THE 2004 A.A.S.H.T.O. "PLANNING, DESIGN, AND OPERATION OF PEDESTRIAN FACILITIES" AND THE TRAFFIC CONTROL IN ACCORDANCE WITH THE 2011 "MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES".


ALL EXPOSED CONCRETE WALL CORNERS SHOWN SQUARE ON THE PLANS SHALL BE BEVELED WITH 1" TRIANGULAR MOLDINGS EXCEPT AS OTHERWISE NOTED.

UNLESS OTHERWISE SHOWN ON THE PLANS, PROVIDE MINIMUM CONCRETE CLEAR COVER FOR REINFORCEMENT ACCORDING TO THE FOLLOWING:
 CONCRETE CAST AGAINST EARTH 3 IN.
 ALL OTHER UNLESS SHOWN ON PLANS 2 IN.

THE DESIGN OF THE STRUCTURAL MEMBERS IS BASED ON MATERIAL OF THE FOLLOWING GRADES AND STRESSES:

CONCRETE GRADE S2 $f'_c = 3,500$ PSI
 STEEL REINFORCEMENT $f_y = 60,000$ PSI

CONTRACT FOR:
 REPLACEMENT OF APPROXIMATELY 15-FT OF REINFORCED CONCRETE RETAINING WALL AND 300-SYD OF SIDEWALK AND SIDEWALK RAMPS, AND ASSOCIATED GRADING AND MAINTENANCE OF TRAFFIC.

 PROJECT MANAGEMENT SERVICE UNIT	
MICHAEL NEARING, P.E. - MI LICENSE No. 38748 PROJECT ENGINEER _____ DATE	ENGINEER'S SEAL
PREPARED UNDER THE SUPERVISION OF VINCENT GUADAGNI, P.E. - MI LICENSE No. 40036 PROJECT MANAGER _____ DATE	ENGINEER'S SEAL



REV.	DESCRIPTION	DATE	DRAWN	CHECKED
1	PLANTER WALL REPAIR-TITLE SHEET	03/17/16	VOC	CEW

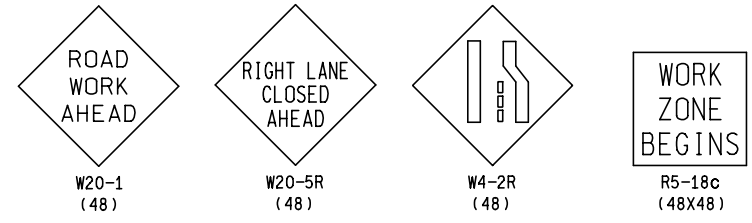
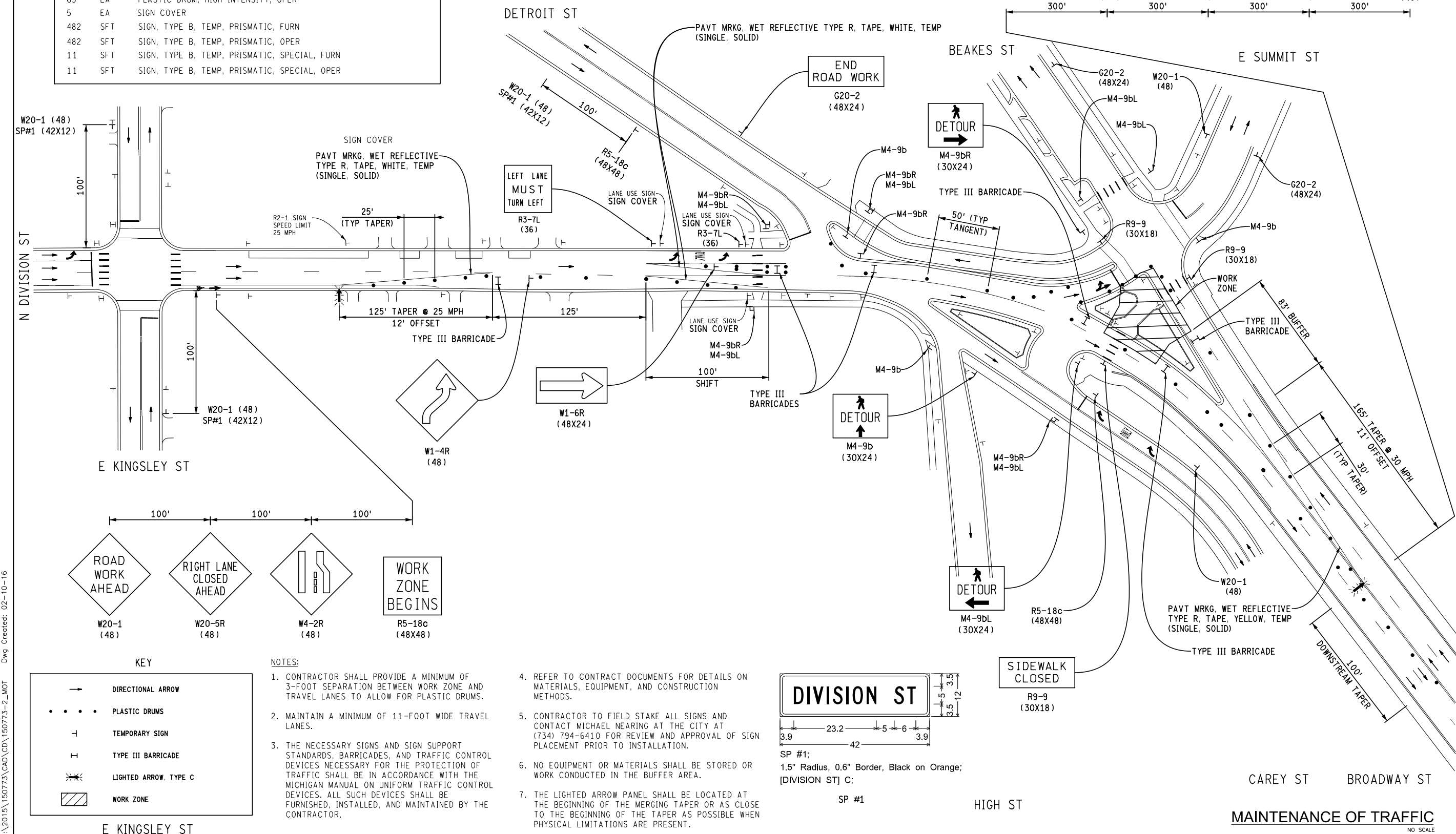
CITY OF ANN ARBOR
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 ANN ARBOR, MI 48106-8647
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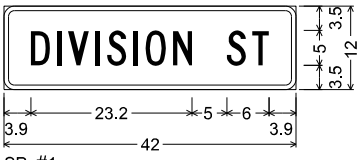
PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
 BROADWAY / N. DIVISION / DETROIT STREET
 PLANTER WALL AND SIDEWALK REPAIR
 TITLE SHEET
 SHEET No. 1 OF 8
 DRAWING No. 2015024-C1

MAINTENANCE OF TRAFFIC QUANTITIES

1	LSUM	MINOR TRAFFIC DEVICES
10	EA	BARRICADE, TYPE III, HIGH INTENSITY, DOUBLE SIDED, LIGHTED, FURN
10	EA	BARRICADE, TYPE III, HIGH INTENSITY, DOUBLE SIDED, LIGHTED, OPER
2	EA	LIGHTED ARROW, TYPE C, FURN
2	EA	LIGHTED ARROW, TYPE C, OPER
325	FT	PAVT MRKG, WET REFLECTICE TYPE R, TAPE, WHITE, TEMP
165	FT	PAVT MRKG, WET REFLECTICE TYPE R, TAPE, YELLOW, TEMP
65	EA	PLASTIC DRUM, HIGH INTENSITY, FURN
65	EA	PLASTIC DRUM, HIGH INTENSITY, OPER
5	EA	SIGN COVER
482	SFT	SIGN, TYPE B, TEMP, PRISMATIC, FURN
482	SFT	SIGN, TYPE B, TEMP, PRISMATIC, OPER
11	SFT	SIGN, TYPE B, TEMP, PRISMATIC, SPECIAL, FURN
11	SFT	SIGN, TYPE B, TEMP, PRISMATIC, SPECIAL, OPER



- NOTES:**
- CONTRACTOR SHALL PROVIDE A MINIMUM OF 3-FOOT SEPARATION BETWEEN WORK ZONE AND TRAVEL LANES TO ALLOW FOR PLASTIC DRUMS.
 - MAINTAIN A MINIMUM OF 11-FOOT WIDE TRAVEL LANES.
 - THE NECESSARY SIGNS AND SIGN SUPPORT STANDARDS, BARRICADES, AND TRAFFIC CONTROL DEVICES NECESSARY FOR THE PROTECTION OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. ALL SUCH DEVICES SHALL BE FURNISHED, INSTALLED, AND MAINTAINED BY THE CONTRACTOR.
 - REFER TO CONTRACT DOCUMENTS FOR DETAILS ON MATERIALS, EQUIPMENT, AND CONSTRUCTION METHODS.
 - CONTRACTOR TO FIELD STAKE ALL SIGNS AND CONTACT MICHAEL NEARING AT THE CITY AT (734) 794-6410 FOR REVIEW AND APPROVAL OF SIGN PLACEMENT PRIOR TO INSTALLATION.
 - NO EQUIPMENT OR MATERIALS SHALL BE STORED OR WORK CONDUCTED IN THE BUFFER AREA.
 - THE LIGHTED ARROW PANEL SHALL BE LOCATED AT THE BEGINNING OF THE MERGING TAPER OR AS CLOSE TO THE BEGINNING OF THE TAPER AS POSSIBLE WHEN PHYSICAL LIMITATIONS ARE PRESENT.



SP #1;
1.5" Radius, 0.6" Border, Black on Orange;
[DIVISION ST] C;

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

CEW									
VOC									
03/17/16									
PLANTER WALL REPAIR-MAINT. OF TRAFFIC									
1									
REV.									
DESCRIPTION									
DATE									
DRAWN									
CHECKED									

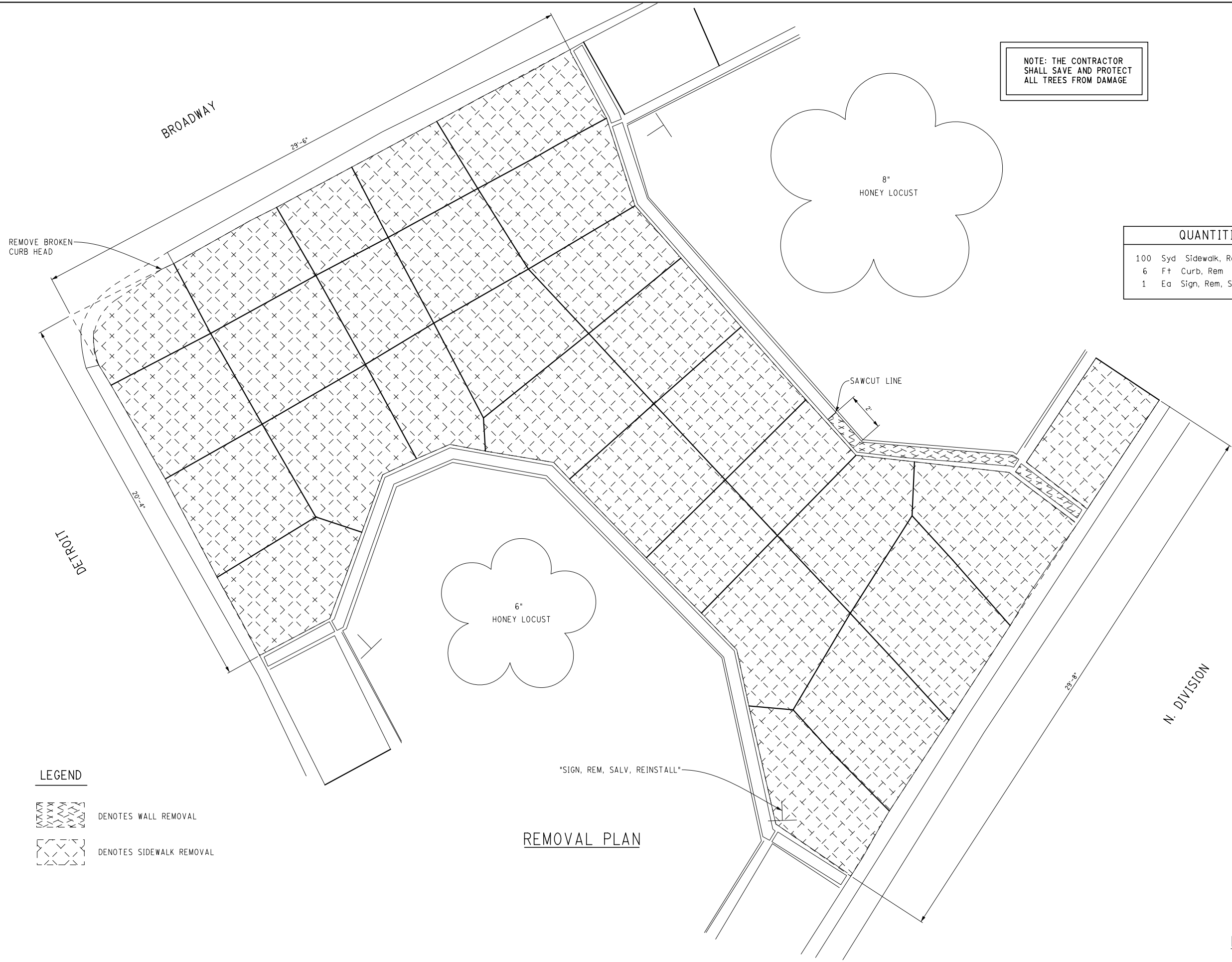
CITY OF ANN ARBOR
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ANN ARBOR, MI 48104-0487
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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
BROADWAY / N. DIVISION / DETROIT STREET
PLANTER WALL AND SIDEWALK REPAIR
MAINTENANCE OF TRAFFIC

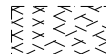

DRAWING No. 2015024-MT1

SHEET No. 2 OF 8

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LEGEND

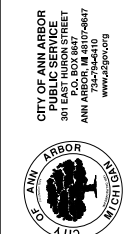
-  DENOTES WALL REMOVAL
-  DENOTES SIDEWALK REMOVAL

NOTE: THE CONTRACTOR SHALL SAVE AND PROTECT ALL TREES FROM DAMAGE

QUANTITIES	
100	Syd Sidewalk, Rem
6	Ft Curb, Rem
1	Ea Sign, Rem, Salv, Reinstall



REV.	DESCRIPTION	DATE	DRAWN	CHECKED
1	PLANTER WALL REPAIR-REMOVAL	03/17/16	VCC	CEW



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 BROADWAY / N. DIVISION / DETROIT STREET
 PLANTER WALL AND SIDEWALK REPAIR
 SIDEWALK REMOVAL PLAN

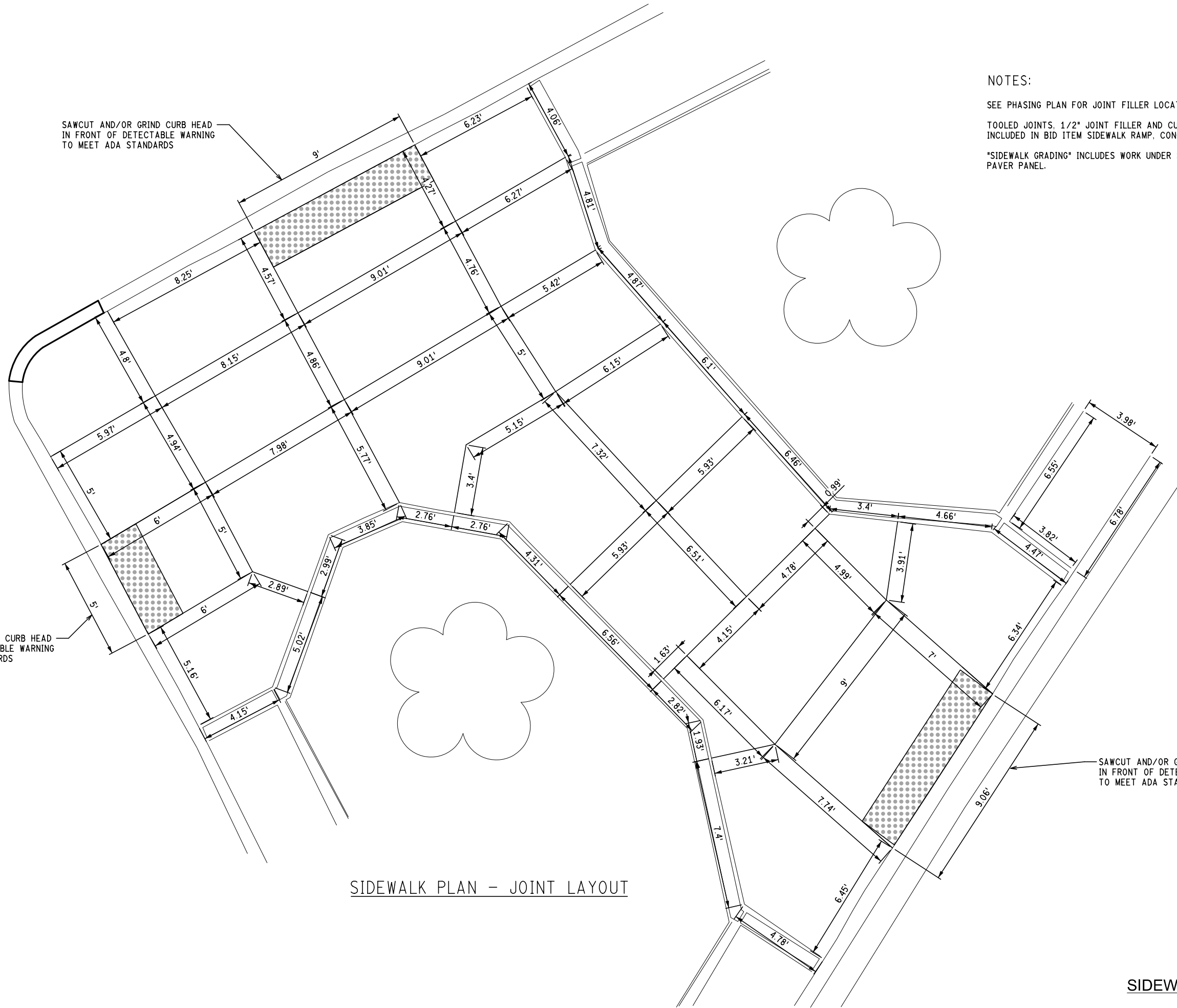
DRAWING No. 2015024-REM1

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SAWCUT AND/OR GRIND CURB HEAD
IN FRONT OF DETECTABLE WARNING
TO MEET ADA STANDARDS

SAWCUT AND/OR GRIND CURB HEAD
IN FRONT OF DETECTABLE WARNING
TO MEET ADA STANDARDS

SAWCUT AND/OR GRIND CURB HEAD
IN FRONT OF DETECTABLE WARNING
TO MEET ADA STANDARDS



NOTES:

SEE PHASING PLAN FOR JOINT FILLER LOCATIONS.

TOOLED JOINTS, 1/2" JOINT FILLER AND CURB GRINDING ARE INCLUDED IN BID ITEM SIDEWALK RAMP, CONC. 6 INCH. MODIFIED.

SIDEWALK GRADING INCLUDES WORK UNDER SIDEWALK, WALL AND PAVER PANEL.

SIDEWALK PLAN - JOINT LAYOUT

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

CEW					
VDC					
02/25/16					
PLANTER WALL REPAIR-JOINT LAYOUT					
1					
REV.				DATE	CHECKED

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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
BROADWAY / N. DIVISION / DETROIT STREET
PLANTER WALL AND SIDEWALK REPAIR
SIDEWALK LAYOUT PLAN

DRAWING No. 2015024-SW1

SHEET No. 4 OF 8



REV.	DESCRIPTION	DATE	DRAWN	CHECKED
1	PLANTER WALL REPAIR-GRADING PLAN	03/17/16		

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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR

PROJECT DESCRIPTION
 BROADWAY / N. DIVISION / DETROIT STREET
 PLANTER WALL AND SIDEWALK REPAIR
 SIDEWALK GRADING PLAN

DRAWING No. 2015024-SW2

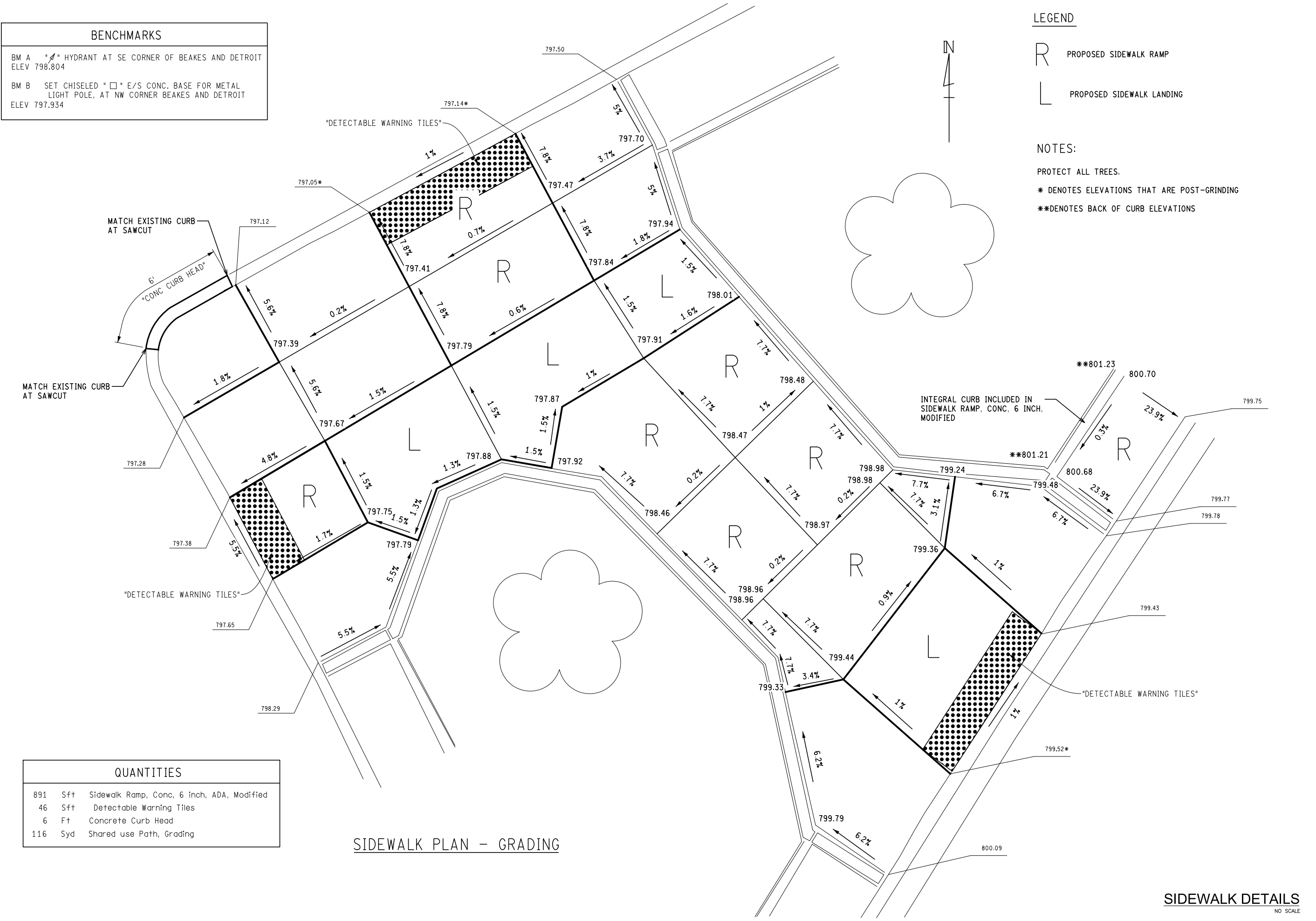
BENCHMARKS	
BM A	4" HYDRANT AT SE CORNER OF BEAKES AND DETROIT ELEV 798.804
BM B	SET CHISELED "E/S CONC. BASE FOR METAL LIGHT POLE, AT NW CORNER BEAKES AND DETROIT ELEV 797.934

- LEGEND**
- R PROPOSED SIDEWALK RAMP
 - L PROPOSED SIDEWALK LANDING

- NOTES:**
- PROTECT ALL TREES.
 - * DENOTES ELEVATIONS THAT ARE POST-GRINDING
 - **DENOTES BACK OF CURB ELEVATIONS

QUANTITIES		
891	Sft	Sidewalk Ramp, Conc, 6 inch, ADA, Modified
46	Sft	Detectable Warning Tiles
6	Ft	Concrete Curb Head
116	Syd	Shared use Path, Grading

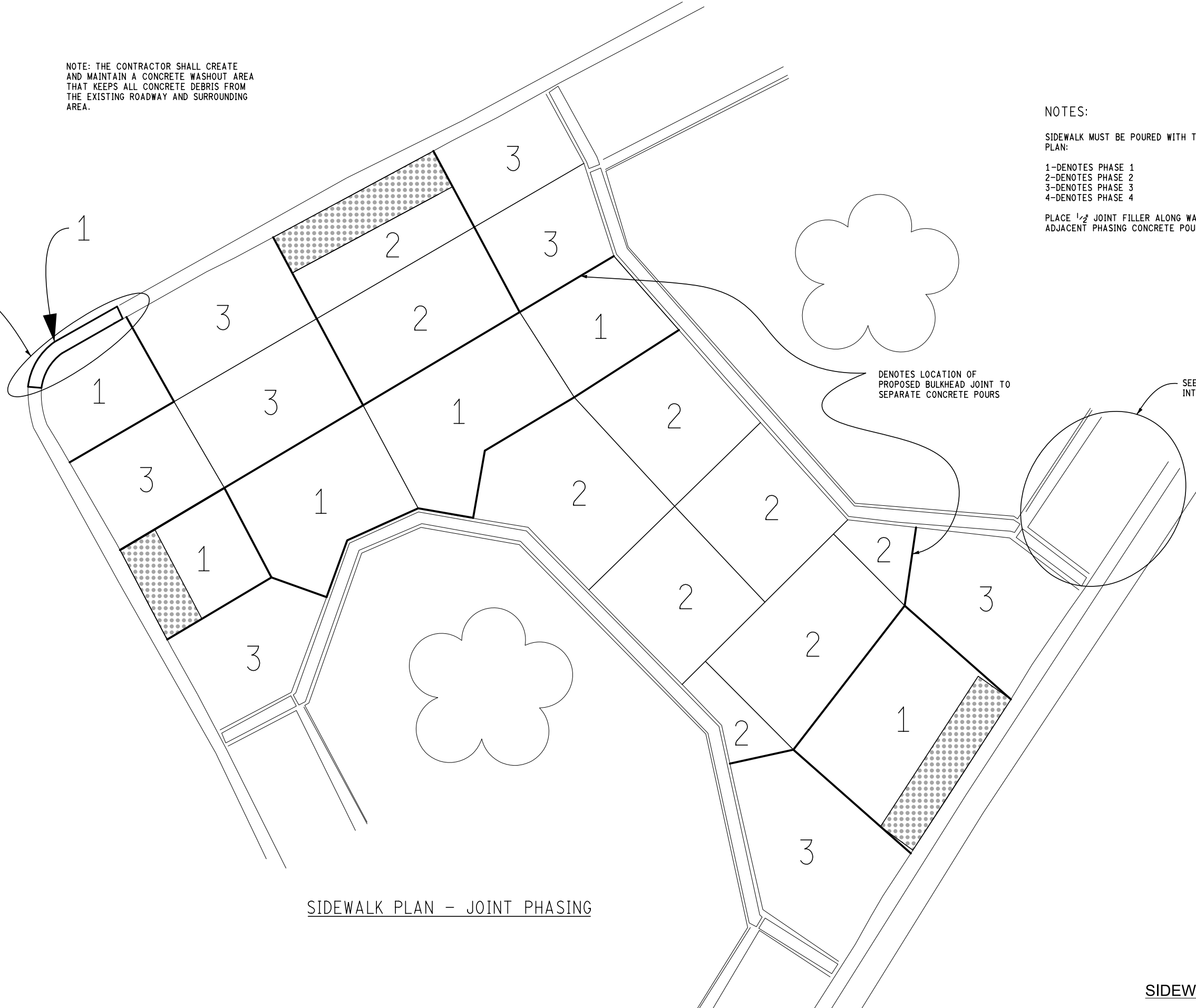
SIDEWALK PLAN - GRADING



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NOTE: THE CONTRACTOR SHALL CREATE AND MAINTAIN A CONCRETE WASHOUT AREA THAT KEEPS ALL CONCRETE DEBRIS FROM THE EXISTING ROADWAY AND SURROUNDING AREA.

SEE CURB REPAIR DETAILS



DENOTES LOCATION OF PROPOSED BULKHEAD JOINT TO SEPARATE CONCRETE POURS

SEE PAVER PANEL WITH INTEGRAL CURB DETAILS

NOTES:

SIDEWALK MUST BE POURED WITH THE FOLLOWING PHASING PLAN:

- 1-DENOTES PHASE 1
- 2-DENOTES PHASE 2
- 3-DENOTES PHASE 3
- 4-DENOTES PHASE 4

PLACE 1/2" JOINT FILLER ALONG WALL, IN BETWEEN ADJACENT PHASING CONCRETE POURS, AND BACK OF CURB.

SIDEWALK PLAN - JOINT PHASING

SIDEWALK DETAILS
NO SCALE



REV.	DESCRIPTION	DATE	DRAWN	CHECKED
1	PLANTER WALL REPAIR-JOINT PHASING	03/17/16	VDC	CEW

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PROJECT MANAGEMENT - PUBLIC SERVICES - CITY OF ANN ARBOR
BROADWAY / N. DIVISION / DETROIT STREET
PLANTER WALL AND SIDEWALK REPAIR
SIDEWALK JOINT PHASING PLAN

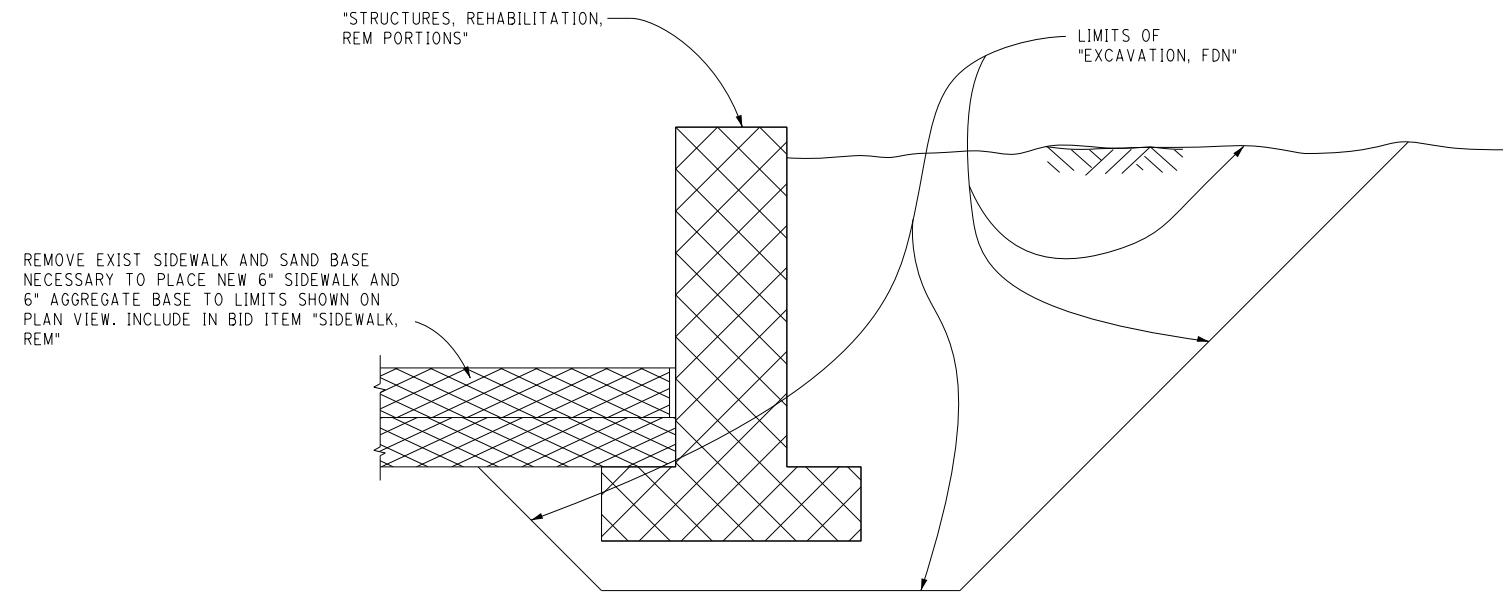
DRAWING No. 2015024-SW3

1	PLANTER WALL REPAIR-WALL DETAILS	03/17/16	CEW	CHECKED
			VDG	DRAWN
			DATE	
			REV.	

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 PLANTER WALL AND SIDEWALK REPAIR
 WALL DETAILS

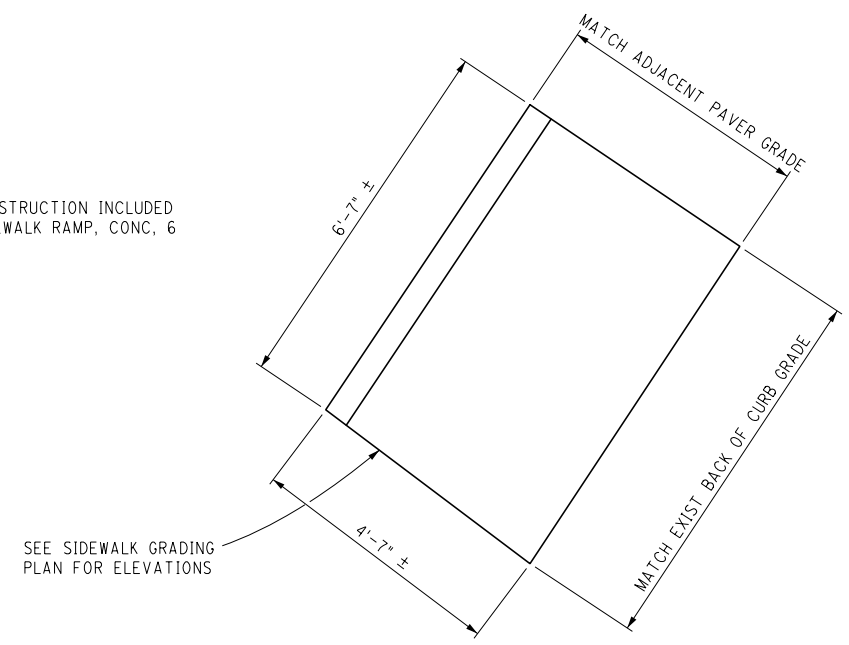
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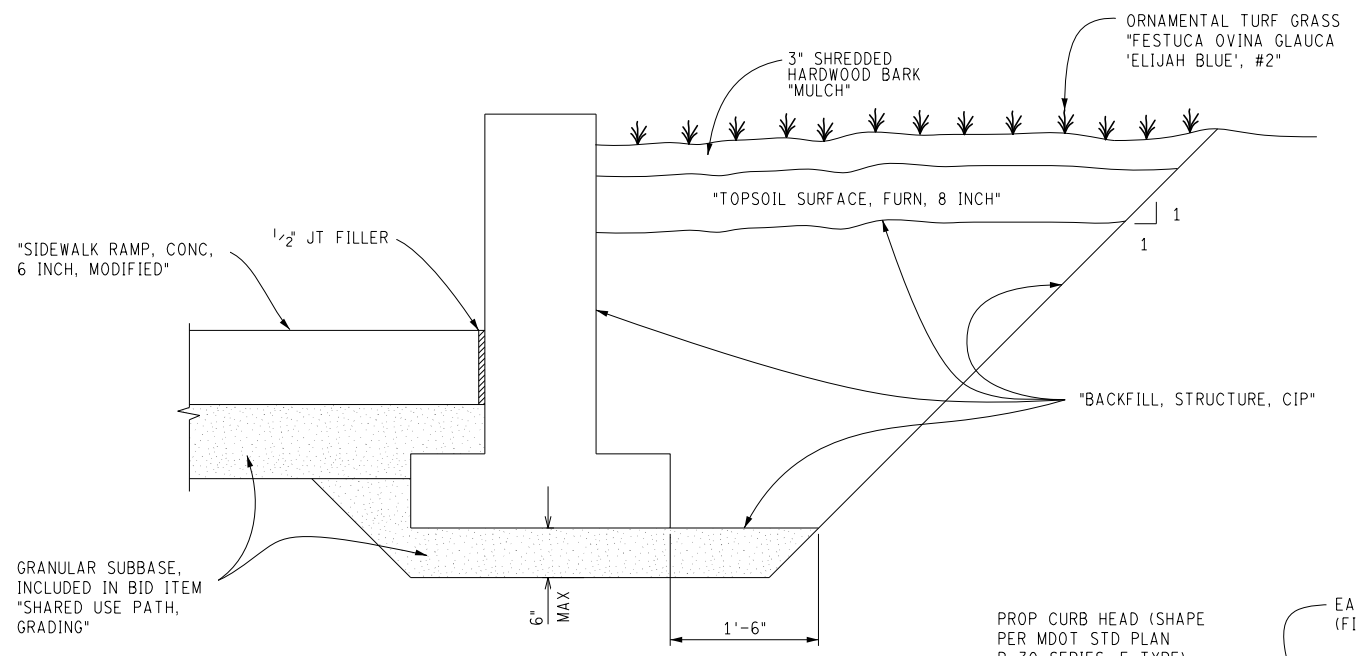
WALL REMOVAL SECTION

REMOVE EXIST SIDEWALK AND SAND BASE NECESSARY TO PLACE NEW 6" SIDEWALK AND 6" AGGREGATE BASE TO LIMITS SHOWN ON PLAN VIEW. INCLUDE IN BID ITEM "SIDEWALK, REM"

NOTE: PANEL CONSTRUCTION INCLUDED IN BID ITEM "SIDEWALK RAMP, CONC, 6 INCH, MODIFIED"



PAVER PLAN

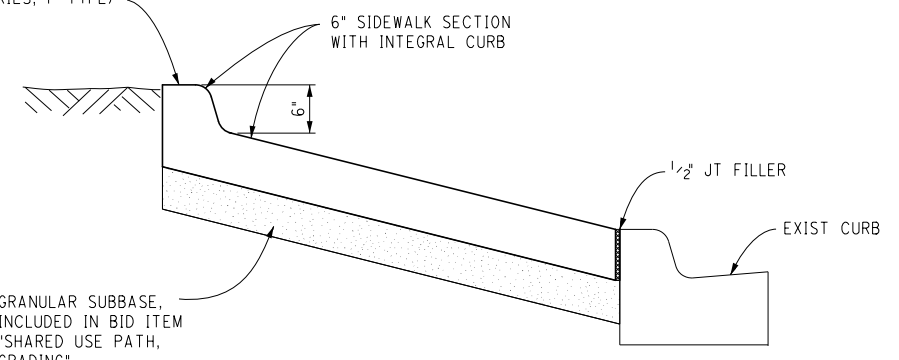


WALL BACKFILL SECTION

"SIDEWALK RAMP, CONC, 6 INCH, MODIFIED"

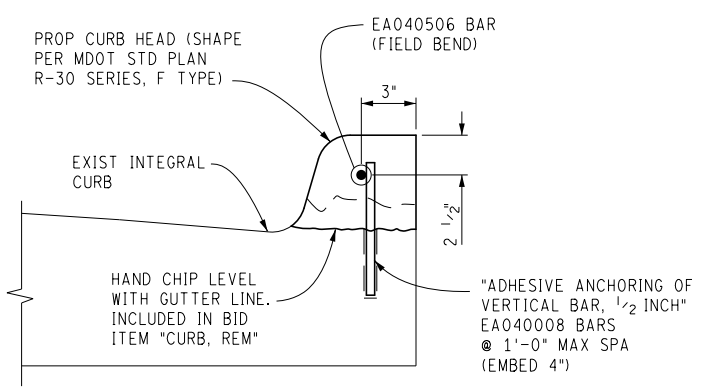
GRANULAR SUBBASE, INCLUDED IN BID ITEM "SHARED USE PATH, GRADING"

CURB CAST INTEGRAL WITH PAVER (SHAPE PER MDOT STD PLAN R-30 SERIES, F TYPE)



PAVER SECTION

PAVER PANEL WITH INTEGRAL CURB DETAILS

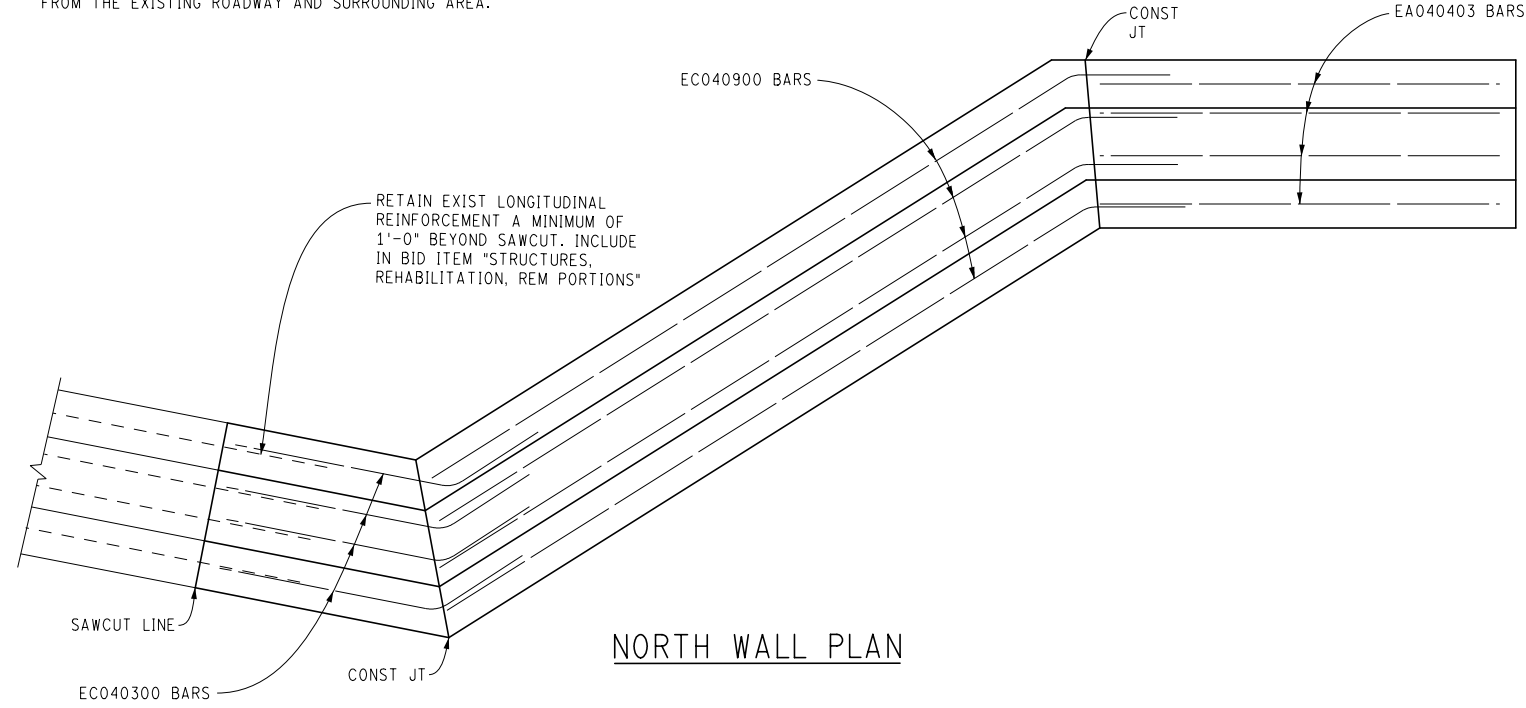


CURB REPAIR DETAIL

WORK AND MATERIALS TO CONSTRUCT NEW CURB PORTION, INCLUDING ANCHORING, REINFORCING AND FORMING IS INCLUDED IN THE BID ITEM "CONC CURB HEAD"

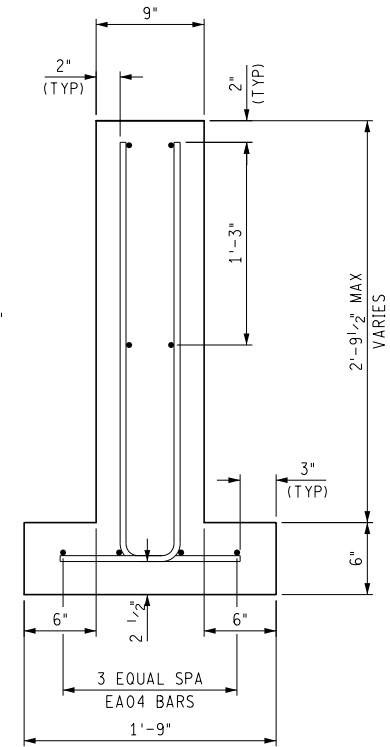
QUANTITIES		
14	CYD	EXCAVATION, FDN
13	CYD	BACKFILL, STRUCTURE, CIP
1	LSUM	STRUCTURES, REHABILITATION, REM PORTIONS
7	CYD	CONC, GRADE S2
161	LB	REINFORCEMENT, STEEL, EPOXY COATED
30	EA	FESTUCA OVINA GLAUCA 'ELIJAH BLUE', #2
15	SYD	MULCH
15	SYD	TOPSOIL SURFACE, FURN, 8 INCH

NOTE: THE CONTRACTOR SHALL CREATE AND MAINTAIN A CONCRETE WASHOUT AREA THAT KEEPS ALL CONCRETE DEBRIS FROM THE EXISTING ROADWAY AND SURROUNDING AREA.

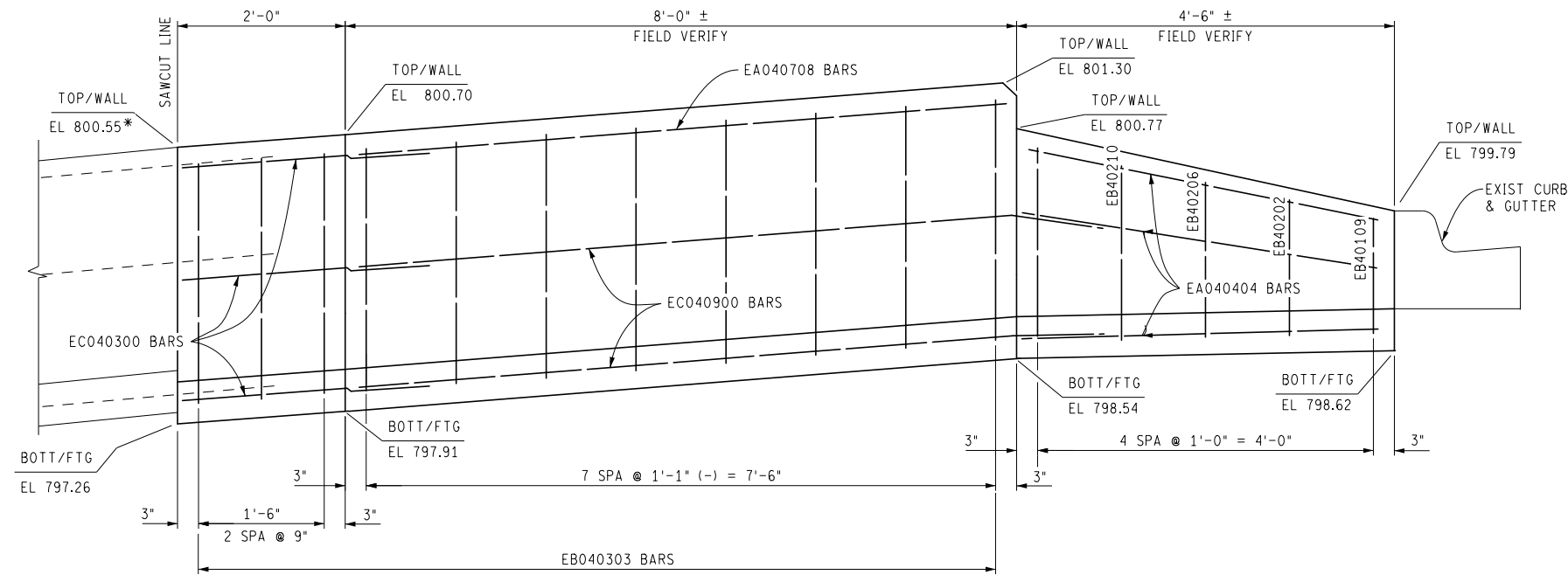


NORTH WALL PLAN

NOTE: WALL CONSTRUCTION INCLUDED IN BID ITEMS "CONC. GRADE S2" AND "REINFORCEMENT, STEEL, EPOXY COATED"



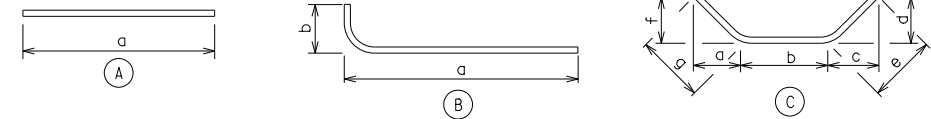
TYPICAL NORTH WALL SECTION



NORTH WALL ELEVATION

* FIELD VERIFY - MATCH EXISTING ELEVATION AT SAWCUT LINE

STEEL REINFORCEMENT TABLE								
BAR DESIGNATION	BAR DIMENSIONS					BAR SIZE	QUANTITY	TOTAL WEIGHT (LBS)
	a	b	c	d	e			
EC40900		8'-0"	10 1/8"	6 3/8"	1'-0"	4	6	36
EC40300		2'-0"	8 3/4"	8 1/4"	1'-0"	4	8	16
EA40404	4'-4"					4	8	24
EB40303	2'-4"	11"				4	24	53
EB40210	1'-11"	11"				4	2	4
EB40206	1'-7"	11"				4	2	4
EB40202	1'-3"	11"				4	2	3
EB40109	10"	11"				4	2	3
EA040708	7'-8"					4	2	11
EA040506	5'-6"					4	1	4
EA040008	8"					4	6	3
TOTAL WEIGHT							161	



WALL DETAILS
NO SCALE

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REV.	DESCRIPTION	DATE	DRAWN	CHECKED
1	PLANTER WALL REPAIR-WALL DETAILS	03/17/16		

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