

## CB-11486		CURB AND GUTTER CONC. DET F4 CB-215 CB-216 X Y CB-219	SEE SHEET 1400
S 12, SC 21	208+00 209+00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CB-217 CB-218 CB-220 12" RCP ST	212+00 213+00 5 6 H 7 12 12 12 12 12 12 12 12 12 12 12 12 12
CB-1374	PED 14ROW ROLL ROLL ROLL ROLL ROLL ROLL ROLL R	CAUTION - CRITICAL UNDERFORMS UTILITY 12" RCP ST 12" RCP ST 12" RCP ST 12" RCP ST 14 RAMABLE MATERIAL	ALIGNMENT CL CAUTION - CRITICAL NON-LEGAL UNDERGROUND UTILITY OF

ROAD	CONSTRUCTION	PLAN

- NOTES:

 NOTES:
- EXISTING STORM STRUCTURES THAT ARE TO BE TAPPED WITH A PROPOSED STORM SEWER ARE INDICATED IN THE STRUCTURE TABLE AS ST-###.
 THE "SI" INDICATES STRUCTURE TAP AND THE NUMBER (###) INDICATES THE EXISTING STORM STRUCTURE WHICH IS BEING TAPPED.
- 3. WHERE PIPES ARE DESIGNATED FOR REMOVAL, THEY ARE TO BE REMOVED TO AN EXISTING STRUCTURE WHICH WILL REMAIN IN PLACE. THE PIPE OPENING IN THE STRUCTURE SHALL BE REPAIRED/BULK HEADED WITH BRICK AND MORTAR AS APPROVED BY THE ENGINEER.
- 4. MDDT SOIL EROSION CONTROL MEASURE 29 IS INDICATED IN THE TOP PORTION OF THE SHEET FOR EXISTING STORM STRUCTURES WHICH ARE TO BE PROTECTED. SOIL RROSION CONTROL MEASURE 29 SHALL ALSO BE APPLIED TO EACH PROPOSED STORM CATCH BASIN WHICH IS INDICATED IN THE STRUCTURE TABLE AS GE—##.
- 5. WHERE CATCH BASIN RIM ELEVATIONS ARE INDICATED ON THESE PLANS, THE ELEVATION LISTED REPRESENTS THE EDGE OF PAVEMENT ELEVATION
- 6. FOR ADDITIONAL CURB RADIUS INFORMATION AND DETAILED INTERSECTION GRADING, REFER TO THE DETAILED INTERSECTION GRADING SHEETS.

MAINLINE QUANTITIES -	· THIS SHE	ET
	JN 201292	
	CAT 0001	
ITEM	QUANTITY	UNIT
Dr Structure, Rem	6	EA
Sewer, Rem, Less Than 24 inch	415	FT
Sidewalk, Rem	490	SYD
Pavt, Rem, Modified	4427	SYD
Tree Rem, 6 inch to 18 inch	4	EA
Tree Rem, 19 inch to 36 inch	2	EA
Clearing	0.5	ACRE
Embankment, Cip	90	CYD
Excavation, Earth	1417	CYD
Aggregate Base, 6 inch	703	SYD
Aggregate Base, 12 inch	4516	SYD
Sewer, Cl A, 12 inch, Tr Det B	592	FT
Sewer Bulkhead, 12 inch	2	EA
Dr Structure Cover, Adj, Case 1	10	EA
Dr Structure Cover, Type B	9	EA
Dr Structure Cover, Type K	10	EA
Dr Structure, 24 inch dia	5	EA
Dr Structure, 48 inch dia	4	EA
Dr Structure, Adj, Add Depth	1	FT
Dr Structure, Tap, 12 inch	5	EA
Underdrain, Subgrade, 6 inch	1600	FT
Hand Patching	1	TON
Hma, 3E1	663	TON
Hma, 4E1	442	TON
Hma, 5E1	331	TON
Hma Approach	130	TON
Driveway, Nonreinf Conc, 6 inch	26	SYD
Driveway, Nonreinf Conc, 9 inch	122	SYD
Curb And Gutter, Conc, Det F4	1665	FT
Detectable Warning Surface	16	FT
Curb Ramp Opening, Conc	23	FT
Sidewalk Ramp, Conc, 6 inch	917	SFT
Sidewalk, Conc, 4 inch	7549	SFT
Turf Establishment, Performance	3055	SYD

PROPOSED DRAINAGE STRUCTURES								
STR NO	STATION	OFFSET	SIZE	RIM	COVER TYPE	PIPE DIRECTION, SIZE, AND INVERT	DISTANCE TO DOWN STREAM STR	
CB-212	207+00.00	24.3' R	24"	754.20	к	NE 12" 750.30	35.98° ST-1375	
CB-213	207+05.02	21.2' L	24"	753.91	к	E 12" 748.70	34.98° ST-EX41486	
ST-1375	207+21.90	4.2' L		******		SW 12" 749.95 NE 42" 748.00	25.72" ST-EX41486	
ST-EX41486	207+39.98	22.5' L			*****	W 12" 748.45 NE 42" 747.65 SW 42" 747.65	6.23' ST-EX1061	
CB-215	209+89.47	21.2' L	24"	751.79	к	E 12" 745.81	6.94° CB-216	
CB-216	209+96.41	21.2' L	48"	751.78	к	E 12" 745.70 W 12" 745.70	74.89° CB-219	
CB-219	210+71.31	21.2' L	48"	752.21	к	N 12" 745.20 W 12" 745.20	11.87' ST-1376	
ST-1376	210+71.91	33.1' L			~~	W 42" 743.29 N 60" 743.29 S 12" 745.00	31.47'	
CB-214	208+12.02	21.4' R	24"	752.92	к	E 12" 747.80	184.39' CB-217	
CB-217	209+96.41	21.2' R	48"	751.78	к	W 12" 746.70 E 12" 746.30	6.94' CB-218	
CB-218	210+03.35	21.2' R	48"	751.78	к	W 12" 746.25 E 12" 746.25	37.56° ST-40062	
ST-40062	210+40.52	26.7' R	٧,	**********	*****	W 12" 746.05 E 24" 746.05	15.71° ST-40229	
ST-40229	210+56.17	25.3' R	\.	****		W 24" 745.44 E 36" 743.69 E 12" 748.59	83.40° ST-1384	
CB-220	210+82.64	21.2' R	24"	752.36	к	W 12" 748.75	26.79' ST-40229	

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CITY OF FLINT
SOUTH SAGINAW STREET
FLINT, MI 48502
ATHERTON ROAD
N PLAN AND REMOVAL SHEET 15 CITY (SOUTH SFLINT,

ISSUED FOR: DATE: BY: GI PLANS 10/25/18 JJS FINAL REVIEW 2/25/19 JJS FINAL PLANS 4/19/19 JJS

JOB NO. COF1065.01F

1101

137

210+26	R	202	132	
211+78	R	302	27	

STA

HOUSE

DRIVEWAY QUANTITIES - THIS SHEET DRIVEWAY, NONREINF CONC, 6 INCH (SYD)

PAVT, REM, MODIFIED

DRIVEWAY, NONREINF CONC, 9 INCH (SYD)

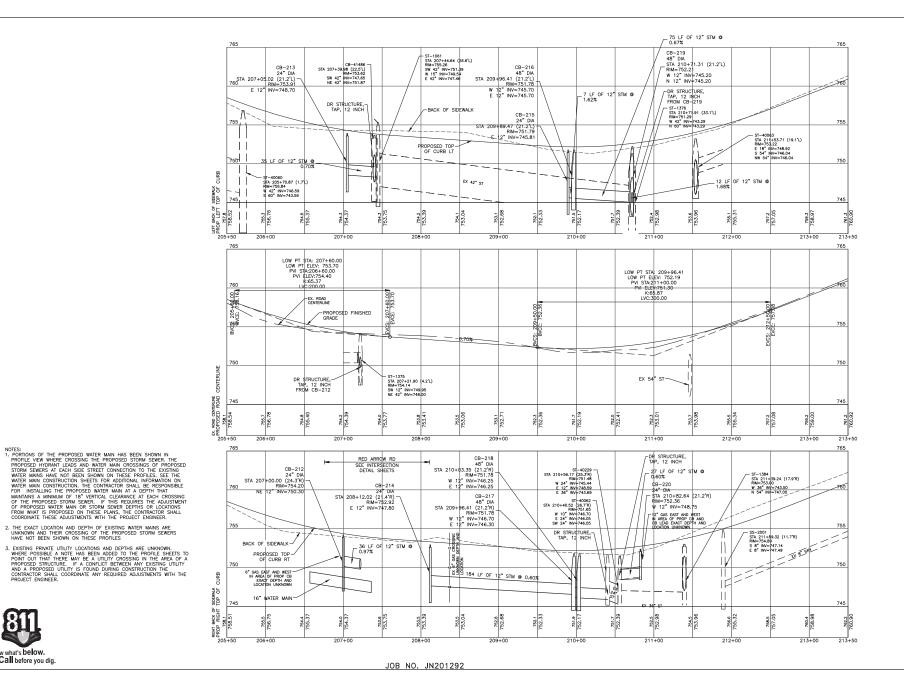
122

AGGREGATE BASE, 6 INCH (SYD)

122

26

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



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CITY OF FLINT
SOUTH SAGINAW STREET
FLINT, MI 48502
ATHERTON ROAD
ATHERTON PROPILE 15

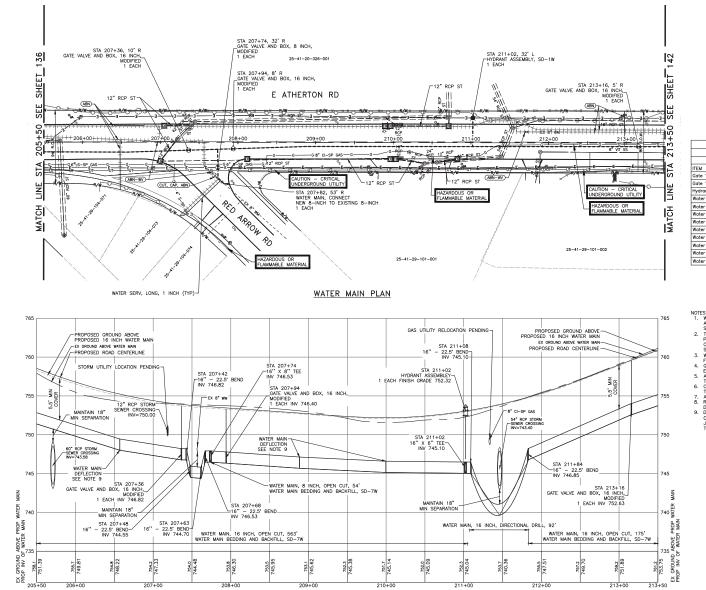
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ISSUED FOR: DATE: BY: GI PLANS 10/25/18 JJS FINAL REVIEW 2/25/19 JJS FINAL PLANS 4/19/19 JJS

JOB NO. COF1065.01F

138

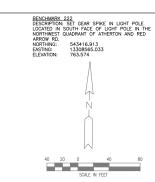
FIELD BOOK 4/18/2019



WATER MAIN PROFILE

JOB NO. JN201292

HELD BOOK INFORMATION:-WAI PLAN & PROFILE SHEET



QUANTITIES THIS SHEET		
	JN 201292	
	CAT 0003	
ITEM	QUANTITY	UNIT
Gate Valve and Box, 8 inch, Modified	1	EA
Gate Valve and Box, 16 inch, Modified	3	EA
Hydrant Assembly, SD-1W	1	EA
Water Main Bedding and Backfill, SD-7W	792	FT
Water Main, 16 inch, Direction Drill	92	FT
Water Main, 8 inch, Open Cut	54	FT
Water Main, 16 inch, Open Cut	738	FT
Water Main, 8 inch, Cut and Plug, Modified	1	EA
Water Main, Connect New 8 inch to Existing 8 inch	1	EA
Water Main, Rem	17	FT
Water Serv, Long, 1 inch	4	EA
Water Structure, Abandon	3	EA

NOTES:

1. WATER MAIN SHALL BE TESTED IN ACCORDANCE WITH AWMA C600—10, AND CHLORINATED IN ACCORDANCE WITH THE LATEST THE CITY OF FLINT STANDARDS AND THE WATER MAIN SPECIAL PROVISIONS. ALL TESTING SHALL BE OBSERVED AND MONITORED BY FLINT.

2. THE CONTRACTOR SHALL BUSINLE, AS A MINIMAN, 2" COMPORATIONS ON THE PRESSURE THE CONTRACTOR SHALL ENGINE THE CORPORATIONS AND COPPER LINES UPON ASSES. THE CONTRACTOR SHALL ENGINE THE CORPORATIONS AND COPPER LINES UPON ASSES. THE SHALL AND SHALL HAVE AT LESST 10" OF HORIZONIAL SEPARATION AND 10" VERTICAL FROM ANY SANTARY OR STORM SEWER.

3. WATER MAN SHALL HAVE AT LESST 10" OF HORIZONIAL SEPARATION AND 10" VERTICAL FROM ANY SANTARY OR STORM SEWER.

5. A MINIMUM OF 5.5—FEET OF COVER SHALL HAVE ONE PIPE LENGTH ADDED PRIOR TO EDDING WITH HYDRAID AND ASSESSMENT AND ASSESSMENT AND ASSESSMENT AND ASSESSMENT AND ASSESSMENT ASSESSMENT AND ASSESSMENT A

CONTRACTOR SHALL FIELD VERIFY ALL EXISTING WATER MAIN SIZE AND LOCATIONS PRIOR

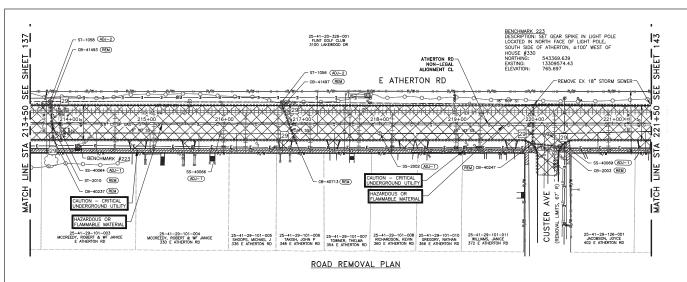
CONTROCTOR SHALL FIELD VERIFY ALL EXISTING WATER MAIN SIZE AND LOCATIONS PRIOR TO CONNECTION. TO CONNECTION CONNECTION TO CONNECTION THE CONTROL OF CONTROL ON CONTROL OF CONTROL ON CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTROL OF CONTRO

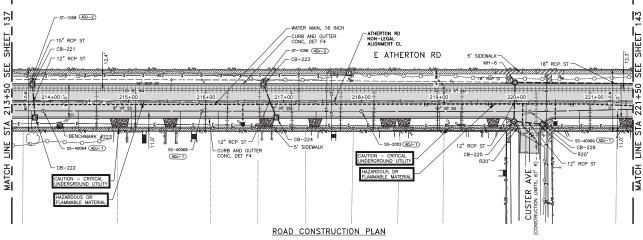
Know what's below. Call before you dig. CITY OF FLINT
SOUTH SAGINAM STREET
FLINT, MI 48502
ATHERTON ROAD
WM PLAN & PROFILE SHEET 15 15 SOUTH SFLINT, 1101

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ISSUED FOR: DATE: BY: GI PLANS 10/25/18 JJS FINAL REVIEW 2/25/19 JJS FINAL PLANS 4/19/19 JJS

COF1065.01F 139





	DRIVEWAY QUANTITIES - THIS SHEET									
STA	SIDE	HOUSE #	PAVT, REM, MODIFIED (SYD)	DRIVEWAY, NONREINF CONC, 6 INCH (SYD)	DRIVEWAY, NONREINF CONC, 9 INCH (SYD)	AGGREGATE BASE, 6 INCH (SYD)				
214+87	R	330	26	26	0	26				
215+54	R	330	19	19	0	19				
216+78	R	348	20	19	0	19				
217+40	R	354	15	17	0	17				
218+35	R	360	23	23	0	23				
218+54	R	366	18	18	0	18				
219+69	R	372	17	16	0	16				
221+40	R	410	19	19	0	19				

NOTES:

1. WHERE STRUCTURE ADJ-1, ADJ-2, ADJ-3, ADJ-5 AND ADJ-6 ARE INDICATED ON THE PLANS, NUMBERS 1, 2, 3, 5 AND 6 CORRESPOND TO CITY
OF FLINT CASTING DETAIL NUMBERS OF-1, CF-2, CF-3, CF-5, CF-6 RESPECTIVELY. THE STRUCTURES ARE TO BE ADJUSTED TO FINAL GRADE
WITH NEW STRUCTURE FRAMES AND COVERS AS INDICATED ON THE LEGEND SHEET AND THE CITY OF FLINT CASTING DETAILS SHEET. CASTINGS
OF-1, CF-2, CF-6 ARE PAD FOR A SPAY TIEM 'DR STRUCTURE COVER, TYPE B'. CASTINGS CF-3 ARE PAD FOR APY TIEM 'DR STRUCTURE
COVER, TYPE K'. CASTING CF-5 IS PAID FOR AS 'DR STRUCTURE COVER, TYPE G'. ALL OTHER STRUCTURE COVER TYPES WILL REFER TO MODI
STANDARD PLANS.

- EXISTING STORM STRUCTURES THAT ARE TO BE TAPPED WITH A PROPOSED STORM SEWER ARE INDICATED IN THE STRUCTURE TABLE AS ST—###.
 THE "ST" INDICATES STRUCTURE TAP AND THE NUMBER (###) INDICATES THE EXISTING STORM STRUCTURE WHICH IS BEING TAPPED.
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- 4. MDDT SOIL EROSION CONTROL MEASURE 29 IS INDICATED IN THE TOP PORTION OF THE SHEET FOR EXISTING STORM STRUCTURES WHICH ARE TO BE PROTECTED. SOIL EROSION CONTROL MEASURE 29 SHALL ALSO BE APPLIED TO EACH PROPOSED STORM CATCH BASIN WHICH IS INDICATED IN THE STRUCTURE TABLE AS CO. #=#.
- 5. WHERE CATCH BASIN RIM ELEVATIONS ARE INDICATED ON THESE PLANS, THE ELEVATION LISTED REPRESENTS THE EDGE OF PAVEMENT ELEVATION.
- 6. FOR ADDITIONAL CURB RADIUS INFORMATION AND DETAILED INTERSECTION GRADING, REFER TO THE DETAILED INTERSECTION GRADING SHEETS.



MAINLINE QUANTITIES -	THIS SHE	ET
	JN 201292	
	CAT 0001	
ITFM	QUANTITY	UNIT
Dr Structure, Rem	7	EA
Sewer, Rem, Less Than 24 inch	184	FT
Sidewalk, Rem	459	SYD
Pavt, Rem, Modified	4135	SYD
Tree Rem. 6 inch to 18 inch	4	EA
Tree Rem, 19 inch to 36 inch	2	EA
Clearing	0.5	ACRE
Embankment, Cip	90	CYD
Excavation, Earth	1469	CYD
Aggregate Base, 6 inch	705	SYD
Aggregate Base, 12 inch	4248	SYD
Sewer, Cl A, 12 inch, Tr Det B	181	FT
Sewer, CI E, 15 inch, Tr Det B	6	FT
Sewer, Cl A, 15 inch, Tr Det B	7	FT
Sewer, Cl A, 18 inch, Tr Det B	150	FT
Sewer Bulkhead, 12 inch	1	EA
Dr Structure Cover, Adj, Case 1	6	EA
Dr Structure Cover, Type B	7	EA
Dr Structure Cover, Type K	6	EA
Dr Structure, 24 inch dia	3	EA
Dr Structure, 48 inch dia	4	EA
Dr Structure, Adj, Add Depth	1	FT
Dr Structure, Tap, 15 inch	2	EA
Underdrain, Subgrade, 6 inch	1600	FT
Hand Patching	1	TON
Hma, 3E1	663	TON
Hma, 4E1	442	TON
Hma, 5E1	331	TON
Hma Approach	30	TON
Driveway, Nonreinf Conc, 6 inch	158	SYD
Curb And Gutter, Conc, Det F4	1640	FT
Detectable Warning Surface	27	FT
Curb Ramp Opening, Conc	46	FT
Sidewalk Ramp, Conc, 6 inch	1097	SFT
Sidewalk, Conc, 4 inch	7038	SFT
Turf Establishment, Performance	2683	SYD

PROPOSED DRAINAGE STRUCTURES									
STR NO	STATION	OFFSET	SIZE	RIM	COVER TYPE	PIPE DIRECTION, SIZE, AND INVERT	DISTANCE TO DOWN STREAM STR		
ST-1058	213+75.47	27.9' L	- 1			W 18" 757.26 E 18" 757.64 S 15" 757.49	186.88' ST-1059		
CB-221	213+76.43	21.2' L	48"	761.53	к	S 12" 757.60 N 15" 757.60	6.72' ST-1058		
CB-222	213+79.85	21.2' R	24"	761.66	к	N 12" 757.90	42.64' CB-221		
CB-223	216+74.01	21.2' L	48"	771.05	к	S 12" 766.30 N 15" 766.30	5.69'		
ST-1056	216+74.18	26.9' L	14.		***************************************	S 15" 766.19	4.4		
CB-224	216+90.51	21.2' R	24"	771.35	к	N 12" 766.60	45.59° CB-223		
CB-225	219+96.71	26.2' R	48"	772.66	к	E 12" 767.20 N 12" 767.20	50.27' MH-6		
MH-6	219+97.90	24.1' L	48"	772.79	В	W 18" 765.25 S 12" 766.90 E 18" 765.25	323.74' ST-1056		
CB-226	220+33.58	29.7' R	24"	772.51	к	W 12" 767.50	37.04' CB-225		



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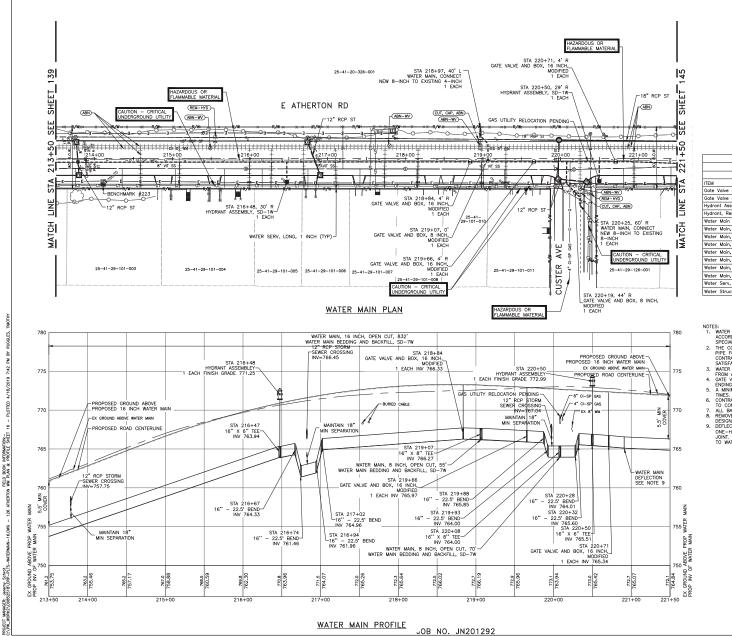
SHEET

OF FLINT SAGINAW STREET , MI 48502 CITY SOUTH FLINT, ATHERTON 1101

ISSUED FOR: DATE: BY: GI PLANS 10/25/18 JJS FINAL REVIEW 2/25/19 JJS FINAL PLANS 4/19/19 JJS

COF1065.01F 140

FELD BOOK INFORMATION:— _WORKZ\DOBSZS18\CRP-PLTS-PROFILE.DWG - PROF 16 - PLOTTED 4/18/2019 7:40 PM BY RUGGLES, TAMOTHY



BENCHMARK 223
DESCRIPTION: SET GEAR SPIKE IN LIGHT POLE LOCATED IN NORTH FACE OF LIGHT POLE, SOUTH SIDE OF ATHERTON, +/- 100' WEST OF HOUSE #330 NORTHING: EASTING: ELEVATION: 543369.639 13309574.426 765.697

QUANTITIES THIS SHEET		
	JN 201292	
	CAT 0003	
ITEM	QUANTITY	UNIT
Gate Valve and Box, 8 inch, Modified	1	EA
Gate Valve and Box, 16 inch, Modified	2	EA
Hydrant Assembly, SD-1W	2	EA
Hydrant, Rem, Modified	2	EA
Water Main Bedding and Backfill, SD-7W	957	FT
Water Main, 8 inch, Open Cut	125	FT
Water Main, 16 inch, Open Cut	832	FT
Water Main, 4 inch, Cut and Plug, Modified	1	EA
Water Main, 8 inch, Cut and Plug, Modified	1	EA
Water Main, Connect New 8 inch to Existing 4 inch	1	EA
Water Main, Connect New 8 inch to Existing 8 inch	1	EA
Water Main, Rem	33	FT
Water Serv, Long, 1 inch	11	EA
Water Structure, Abandon	4	EA

NOTES

1. MOTES

Know what's below.

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16

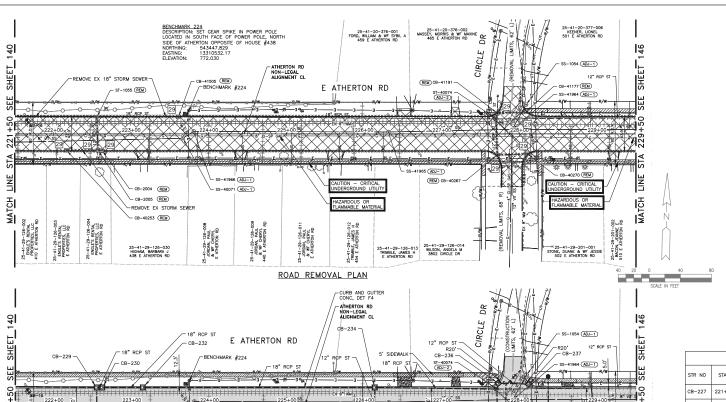
CITY OF FLINT
SOUTH SAGINAM STREET
FLINT, MI 48502
ATHERTON ROAD
WM PLAN & PROFILE SHEET 16 SOUTH SFLINT,

ISSUED FOR: DATE: BY: GI PLANS 10/25/18 JJS FINAL REVIEW 2/25/19 JJS FINAL PLANS 4/19/19 JJS

1101

COF1065.01F 142

Call before you dig.



SIDEWALK-

CURB AND GUTTER-CONC, DET F4

ROAD CONSTRUCTION PLAN

MAINLINE QUANTITIES -	- THIS SHE	<u>Eľ</u>
	JN 201292	
	CAT 0001	
ITEM	QUANTITY	UN
Dr Structure, Rem	9	E/
Sewer, Rem, Less Than 24 inch	832	FI
Sidewalk, Rem	537	SY
Pavt, Rem, Modified	4176	SY
Tree Rem, 6 inch to 18 inch	1	E/
Tree Rem, 19 inch to 36 inch	1	EA
Clearing	0.2	ACF
Embankment, Cip	90	CY
Excavation, Earth	1455	CY
Aggregate Base, 6 inch	675	SY
Aggregate Base, 12 inch	4336	SY
Sewer, Cl E, 12 inch, Tr Det B	122	FI
Sewer, Cl A, 12 inch, Tr Det B	169	FI
Sewer, Cl A, 18 inch, Tr Det B	607	FI
Dr Structure Cover, Adj, Case 1	6	E
Dr Structure Cover, Type B	6	EA
Dr Structure Cover, Type K	12	E
Dr Structure, 24 inch dia	6	EA
Dr Structure, 48 inch dia	6	E
Dr Structure, Adj, Add Depth	1	FI
Dr Structure, Tap, 12 inch	2	E
Dr Structure, Tap, 18 inch	1	EA
Underdrain, Subgrade, 6 inch	1600	FT
Hand Patching	1	TO
Hma, 3E1	663	TO
Hma, 4E1	442	TO
Hma, 5E1	332	TO
Hma Approach	62	TO
Driveway, Nonreinf Conc, 6 inch	117	SY
Curb And Gutter, Conc, Det F4	1675	FI
Detectable Warning Surface	39	FI
Curb Ramp Opening, Conc	55	FI
Sidewalk Ramp, Conc, 6 inch	1375	SF
Sidewalk, Conc, 4 inch	6698	SF
Turf Establishment, Performance	2571	SY

	<u>P</u>	ROPOSI	ED D	RAINAG	E STRU	CTURES	
STR NO	STATION	OFFSET	SIZE	RIM	COVER TYPE	PIPE DIRECTION, SIZE, AND INVERT	DISTANCE TO DOWN STREAM STR
CB-227	221+79.91	21.2' R	24"	771.37	к	E 12" 767.75	74.92' CB-228
CB-229	222+54.83	21.2' L	48"	771.23	к	E 18" 766.30 S 12" 767.05 W 18" 766.30	256.94' MH-6
CB-228	222+54.83	21.2' R	48"	771.23	к	N 12" 767.35 W 12" 767.35 E 12" 767.35	42.50' CB-229
CB-231	222+61.81	21.4' R	24"	771.23	к	W 12" 767.40	6.98° CB-228
CB-230	222+61.91	21.2' L	48"	771.23	к	E 18" 766.35 W 18" 766.35	7.08° CB-229
CB-232	223+14.18	21.3' L	24"	771.33	к	W 18" 766.55 E 18" 766.55	52.27' CB-230
CB-233	226+12.29	21.2' R	24"	773.89	к	N 12" 770.06	42.50° CB-234
CB-234	226+12.87	21.2' L	48"	773.90	к	W 18" 767.68 S 12" 769.80 E 18" 767.68	298.69' CB-232
ST-40074	227+70.21	19.2' L				E 12" 771.50 S 12" 771.50 N 12" 771.50 W 18" 768.28	157.35' CB-234
CB-235	227+70.83	26.6' R	48"	775.29	к	E 12" 771.80 N 12" 771.80	45.83' ST-40074
CB-236	227+71.75	26.8' L	48"	775.30	к	E 12" 771.60 S 12" 771.60	7.78' ST-40074
CB-238	228+10.70	25.7' R	24"	775.69	к	W 12" 772.10	39.90' CB-235
CB-237	228+11.27	25.6' L	24"	775.33	к	W 12" 771.80	39.52' CB-236

STA	SIDE	HOUSE #	PAVT, REM, MODIFIED (SYD)	DRIVEWAY, NONREINF CONC, 6 INCH (SYD)	DRIVEWAY, NONREINF CONC, 9 INCH (SYD)	AGGREGAT BASE, 6 INCH (SYE	
223+15	R	438	20	13	0	13	
224+41	R	440	17	17	0	17	

DRIVEWAY QUANTITIES - THIS SHEET

CB-227

- CB-231

CR-228

12" RCP ST

SS-41966 (ADJ-1)

- SS-40071 (ADJ-1)

- WATER MAIN, 16 INCH

CAUTION - CRITICAL UNDERGROUND UTILITY

LINE

MATCH

STA	SIDE	#	MODIFIED (SYD)	NONREINF CONC, 6 INCH (SYD)	NONREINF CONC, 9 INCH (SYD)	BASE, 6 INCH (SYD
223+15	R	438	20	13	0	13
224+41	R	440	17	17	0	17
225+64	R	454	25	25	0	25
226+51	L	459	19	25	0	25
227+18	L	465	14	14	0	14
228+62	L	501	8	8	0	8
229+21	R	510	15	15	0	15

NOTES:

1. WIFES STRUCTURE ADJ-1, ADJ-2, ADJ-3, ADJ-5 AND ADJ-6 ARE INDICATED ON THE PLANS, NUMBERS 1, 2, 3, 5 AND 6 CORRESPOND TO CITY OF FLINT CASTING DETAIL NUMBERS OF-1, CF-2, CF-3, CF-5, CF-6 RESPECTIVELY. THE STRUCTURES ARE TO BE ADJUSTED TO FINAL GRADE WITH NEW STRUCTURE FRAMES AND COVERS AS INDICATED ON THE LEGEND SHEET AND THE CITY OF FLUIT CASTING DETAILS SHEET. CASTING CF-1, CF-2, CF-6 ARE PAD FOR AS A FILE WID STRUCTURE COVER, TYPE 8. CASTINGS CF-3 ARE PAD FOR AS API TIEM D'R STRUCTURE COVER, TYPE 8. CASTING CF-5 IS PAID FOR AS "OR STRUCTURE COVER, TYPE 6". ALL OTHER STRUCTURE COVER TYPES WILL REFER TO MODI STRAIDARD PLANS.

SS-41965 (ADJ-1)

CB-235 -

- EXISTING STORM STRUCTURES THAT ARE TO BE TAPPED WITH A PROPOSED STORM SEWER ARE INDICATED IN THE STRUCTURE TABLE AS ST-###. THE "ST" INDICATES STRUCTURE TAP AND THE NUMBER (###) INDICATES THE EXISTING STORM STRUCTURE WHICH IS BEING TAPPED.
- 3. WHERE PIPES ARE DESIGNATED FOR REMOVAL, THEY ARE TO BE REMOVED TO AN EXISTING STRUCTURE WHICH WILL REMAIN IN PLACE. THE PIPE OPENING IN THE STRUCTURE SHALL BE REPAIRED/BULK HEADED WITH BRICK AND MORTAR AS APPROVED BY THE ENGINEER.
- 4. MDOT SOIL EROSION CONTROL MEASURE 29 IS INDICATED IN THE TOP PORTION OF THE SHEET FOR EXISTING STORM STRUCTURES WHICH ARE TO BE PROTECTED. SOIL EROSION CONTROL MEASURE 29 SHALL ALSO BE APPLIED TO EACH PROPOSED STORM CATCH BASIN WHICH IS INDICATED IN THE STRUCTURE TABLE AS CB =##.
- 5. WHERE CATCH BASIN RIM ELEVATIONS ARE INDICATED ON THESE PLANS, THE ELEVATION LISTED REPRESENTS THE EDGE OF PAVEMENT ELEVATION.
- 6. FOR ADDITIONAL CURB RADIUS INFORMATION AND DETAILED INTERSECTION GRADING. REFER TO THE DETAILED INTERSECTION GRADING SHEETS.

Know what's below. Call before you dig.

MATCH

- 12" RCP ST

HAZARDOUS OR FLAMMABLE MATERI

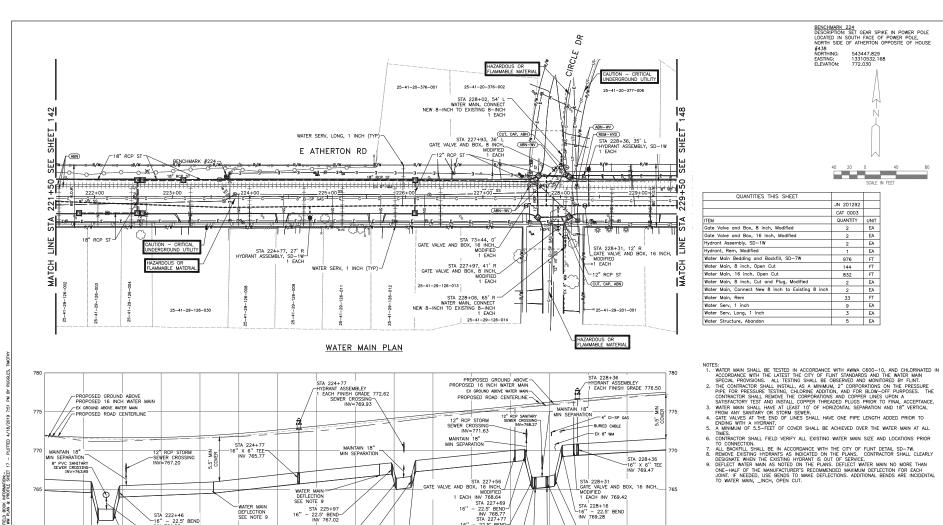
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CITY OF FLINT	1101 SOUTH SAGINAW STREET	FLINT, MI 48502	ATHERTON ROAD	ATHERTON PLAN AND REMOVAL SHEET 17

555 S. Sagnere Flet, M. 46502 810,235,2565

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FROJECT MANAGER, Jefferty Schrot C:\PW_MORK2\D0822518\CRP-PLTS-PROFILEDWG — PROF 17 — PLOTTED 4/18/2019 7:49 PM BY RUGGLES, TMOTHY



STA 227+69 16" - 22.5 BEND-INV 768.77 STA 227+77

WATER MAIN, 8 INCH, OPEN CUT, 80'-WATER MAIN BEDDING AND BACKFILL, SD-7W

227+0

22.5 BEND-INV 765.15

WATER MAIN, 8 INCH, OPEN CUT, 64' WATER MAIN BEDDING AND BACKFILL, SD-7W

STA 227+82 16" X 8" TEE-INV 765.17

228+00

STA 228+16

-16" - 22.5 BEND INV 769.28

STA 228+07 16" - 22.5" BEND INV 765.46 STA 227+97 16" X 8" TEE INV 765.27

760

MAIN

BOVE P

GROUND A

770.077

229+00

Know what's below.

Call before you dig.

WATER MAIN PROFILE NO. JN201292

22.5 BEND INV 767.33

STA 225+97 - 22.5' BEND-INV 767.02

16"

225+00

STA 226+02

22.5° BEND INV 765.04

STA 226+22

WATER MAIN, 16 INCH, OPEN CUT, 832' WATER MAIN BEDDING AND BACKFILL, SD-7W

DEFLECTION SEE NOTE 9

224+00

φ

760

MAIN

WATER 755

PROP

ABOVE F GROUND ABO OP INV OF W

772.1

STA 222+10 22.5° BEND INV 764.63

STA 222+19 - 22.5° BEND-INV 761.07

222+00

16" - 22.5 BEND _INV 764.06

___MAINTAIN 18" ___MIN SEPARATION

STA 222+39 -16" - 22.5" BEND INV 761.06

223+00

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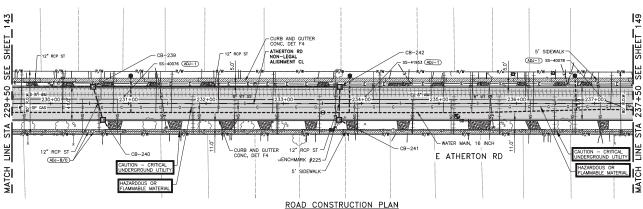
13 CITY OF FLINT
SOUTH SAGINAM STREET
FLINT, MI 48502
ATHERTON ROAD
WM PLAN & PROFILE SHEET 17

CITY SOUTH FLINT, 1101

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NOTES:

1. SHERE STRUCTURE ADI-1, ADI-2, ADI-3, ADI-5, AND ADI-6 ARE INDICATED ON THE PLANS, NUMBERS 1, 2, 3, 5 AND 6 CORRESPOND TO CITY

1. OF FLINT CASTING DETAIL NUMBERS CF-1, CF-2, CF-3, CF-5, CF-6, RESPECTIVELY. THE STRUCTURES ARE TO BE ADJUSTED TO FINAL GRADE

WITH NEW STRUCTURE FRAMES AND COVERS AS INDICATED ON THE LEGENDS SHEET. ADE THE CITY OF FLINT CASTINGS HOUSE

CF-1, CF-2, CF-6 ARE PAID FOR AS PAY ITEM "OR STRUCTURE COVER, TYPE B". CASTINGS CF-3 ARE PAID FOR AS PAY ITEM "OR STRUCTURE COVER, TYPE B".

CASTINGS CF-3 ARE PAID FOR AS "OR STRUCTURE COVER, TYPE G". ALL OTHER STRUCTURE COVER TYPES WILL REFER TO MODITION.

- EXISTING STORM STRUCTURES THAT ARE TO BE TAPPED WITH A PROPOSED STORM SEWER ARE INDICATED IN THE STRUCTURE TABLE AS ST-###.
 THE "ST" INDICATES STRUCTURE TAP AND THE NUMBER (###) INDICATES THE EXISTING STORM STRUCTURE WHICH IS BEING TAPPED.
- 3. WHERE PIPES ARE DESIGNATED FOR REMOVAL, THEY ARE TO BE REMOVED TO AN EXISTING STRUCTURE WHICH WILL REMAIN IN PLACE. THE PIPE OPENING IN THE STRUCTURE SHALL BE REPAIRED/BULK HEADED WITH BRICK AND WORTAR AS APPROVED BY THE ENGINEER.
- 4. MDOT SOIL EROSION CONTROL MEASURE 29 IS INDICATED IN THE TOP PORTION OF THE SHEET FOR EXISTING STORM STRUCTURES WHICH ARE TO BE PROTECTED. SOIL EROSION CONTROL MEASURE 29 SHALL ALSO BE APPLIED TO EACH PROPOSED STORM CATCH BASIN WHICH IS INDICATED IN THE STRUCTURE TRABLE AS 06—##.
- 5. WHERE CATCH BASIN RIM ELEVATIONS ARE INDICATED ON THESE PLANS, THE ELEVATION LISTED REPRESENTS THE EDGE OF PAVEMENT ELEVATION.
- 6. FOR ADDITIONAL CLIEB RADIUS INFORMATION AND DETAILED INTERSECTION GRADING REFER TO THE DETAILED INTERSECTION GRADING SHEETS.

	PROPOSED DRAINAGE STRUCTURES								
STR NO	STATION	OFFSET	SIZE	RIM	COVER TYPE	PIPE DIRECTION, SIZE, AND INVERT	DISTANCE TO DOWN STREAM STR		
CB-239	230+54.51	21.5' L	48"	777.61	к	W 12" 773.85 E 12" 773.85 S 12" 773.85	284.30' ST-40074		
CB-240	230+67.15	21.2' R	24"	777.67	к	N 12" 774.10	44.55° CB-239		
CB-241	233+71.14	21.2' R	24"	778.90	к	N 12" 775.40	42.46' CB-242		
CB-242	233+72.22	21.2' L	48"	778.90	к	W 12" 775.05 S 12" 775.15	317.71° CB-239		

BENCHMARK 225
DESORPTION: SET GEAR SPIKE IN LIGHT POLE
LOCATED IN NORTH FACE OF LIGHT POLE, SOUTH
SIDE OF ATHERTON AT HOUSE #552
NORTHING: 454367.506
EASTING: 13311524.85
ELEVATION: 780.037



MAINLINE QUANTITIES		<u>EI</u>
	JN 201292	
	CAT 0001	
ITEM	QUANTITY	UNIT
Dr Structure, Rem	4	EA
Sewer, Rem, Less Than 24 inch	85	FT
Sidewalk, Rem	898	SYD
Pavt, Rem, Modified	4193	SYD
Embankment, Cip	90	CYD
Excavation, Earth	1483	CYD
Aggregate Base, 6 inch	816	SYD
Aggregate Base, 12 inch	4175	SYD
Sewer, Cl E, 12 inch, Tr Det B	87	FT
Dr Structure Cover, Adj, Case 1	3	EA
Dr Structure Cover, Type B	3	EA
Dr Structure Cover, Type K	4	EA
Dr Structure, 24 inch dia	2	EA
Dr Structure, 48 inch dia	2	EA
Dr Structure, Adj, Add Depth	1	FT
Underdrain, Subgrade, 6 inch	1600	FT
Hand Patching	1	TON
Hma, 3E1	663	TON
Hma, 4E1	442	TON
Hma, 5E1	331	TON
Driveway, Nonreinf Conc, 6 inch	283	SYD
Curb And Gutter, Conc, Det F4	1600	FT
Sidewalk Ramp, Conc, 6 inch	1639	SFT
Sidewalk, Conc, 4 inch	6487	SFT
Turf Establishment, Performance	1856	SYD

DRIVEWAY QUANTITIES - THIS SHEET									
STA SI		HOUSE #	PAVT, REM, MODIFIED (SYD)	DRIVEWAY, NONREINF CONC, 6 INCH (SYD)	DRIVEWAY, NONREINF CONC, 9 INCH (SYD)	AGGREGATE BASE, 6 INCH (SYD)			
229+76	L	505	7	7	0	7			
230+22	L	507	6	6	0	6			
230+73	L	509	6	6	0	6			
230+83	R	522	21	20	0	20			
231+30	L	513	6	6	0	6			
231+60	R	534	20	20	0	20			
232+02	L	519	9	8	0	8			
232+27	R	540	21	20	0	20			
232+75	R	546	19	19	0	19			
233+34	R	552	17	17	0	17			
233+51	L	521	7	7	0	7			
233+87	R	602	18	17	0	17			
234+47	L	601	11	11	0	11			
234+54	R	610	18	18	0	18			
234+99	L	605	6	6	0	6			
235+46	R	616	18	34	0	34			
235+56	R	622	18	0	0	0			
235+56	R	622	18	0	0	0			
236+05	L	613	6	6	0	6			
236+19	R	628	19	18	0	18			
236+55	L	617	6	6	0	6			
236+88	L	631	7	7	0	7			
237+11	R	634	17	16	0	16			

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Y OF FLINT
H SAGINAW STREET
T, MI 48502
HERTON ROAD
AND REMOVAL SHEET 18

CITY
1101 SOUTH
FLINT,
ATHER

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OF 1065.01F

SHEET

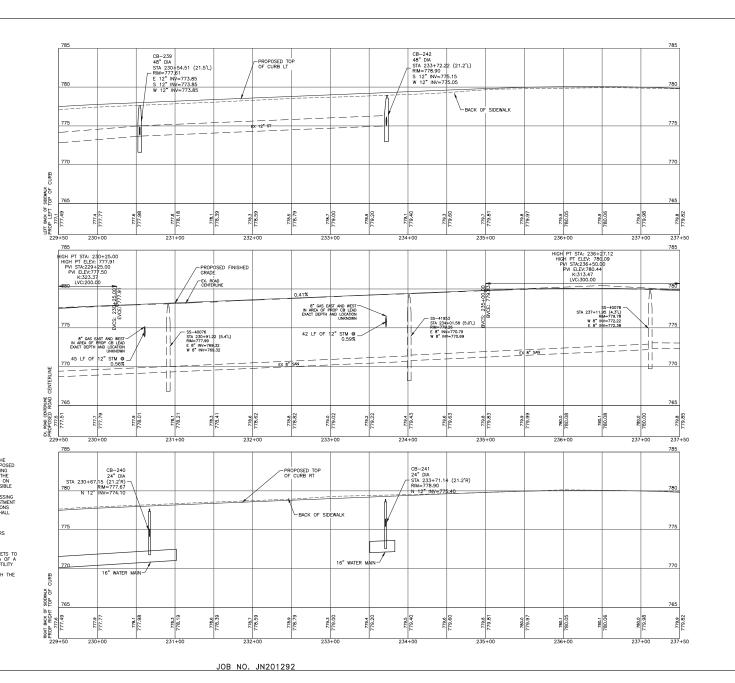
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CITY OF FLINT
SOUTH SAGINAW STREET
FLINT, MI 48502
ATHERTON ROAD
ATHERTON PROFILE 18

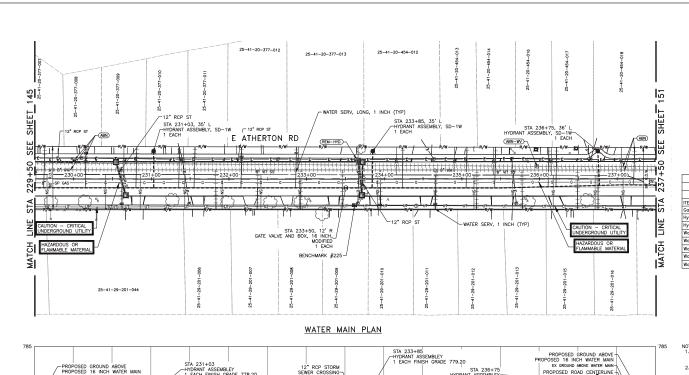
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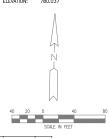
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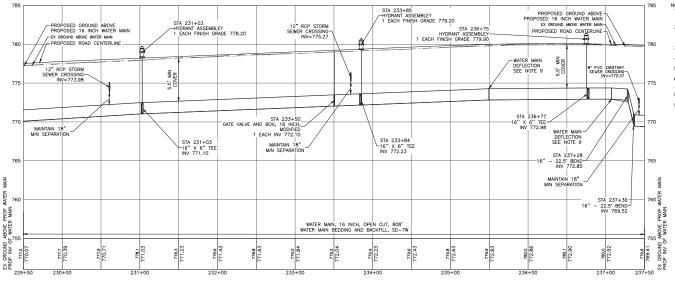
NAGER: Jenemy Schrot (2).00852518\CRP-PLTS-PROFILEDWG - PROF 18 - PLOTTED 4/18/2019 7:58 PM BY RUGGLES, TIMOTHY



BENCHMARK 225
DESCRIPTION: SET GEAR SPIKE IN LIGHT POLE
LOCATED IN NORTH FACE OF LIGHT POLE, SOUT
SIDE OF ATHERTON AT HOUSE #552
NORTHING: 543407.506
EASTING: 13311524.851
ELEVATION: 780.037



QUANTITIES THIS SHEET		
	JN 201292	
	CAT 0003	
ITEM	QUANTITY	UNIT
Gate Valve and Box, 16 inch, Modified	1	EA
Hydrant Assembly, SD-1W	3	EA
Hydrant, Rem, Modified	1	EA
Water Main Bedding and Backfill, SD-7W	808	FT
Water Main, 16 inch, Open Cut	808	FT
Water Serv, 1 inch	8	EA
Water Serv, Long, 1 inch	15	EA
Water Structure, Abandon	1	EA



WATER MAIN PROFILE

- NOTES.

 1. WATER MAIN SHALL BE TESTED IN ACCORDANCE WITH AWAYA C800—10, AND CHLORINATED IN ACCORDANCE WITH THE LATEST THE CITY OF FUNT STANDARDS AND THE WATER MAIN SPECIAL PROVISIONS. ALL TESTING SHALL BE OBSERVED AND MONTORED BY FUNT.

 2. THE CONTRACTOR SHALL INSTALL, AS A MINIUM, 2" CORPORATIONS ON THE PRESSURE PROFE FOR PRESSURE TESTING, CHLORINE ADDITION, AND FOR BLOW—OFF PURPOSES. THE PROFE FOR PRESSURE TESTING, CHLORINE ADDITION, AND FOR BLOW—OFF PURPOSES. THE STANDARD AND THE PROFESSIOR TO THE PRESSURE THE STANDARD AND THE PROFESSIOR TO THE PROFESSIOR TO THE PROFESSIOR THE PROFESSIOR TO THE PROFESSIOR THE PROFESSIOR TO THE PROFESSIOR TH

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FIELD BOOK INFORMATION:--WM PLAN & PROFILE SHEET 18 --

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CITY OF FLINT
SOUTH SAGINAM STREET
FLINT, MI 48502
ATHERTON ROAD
WM PLAN & PROFILE SHEET 18

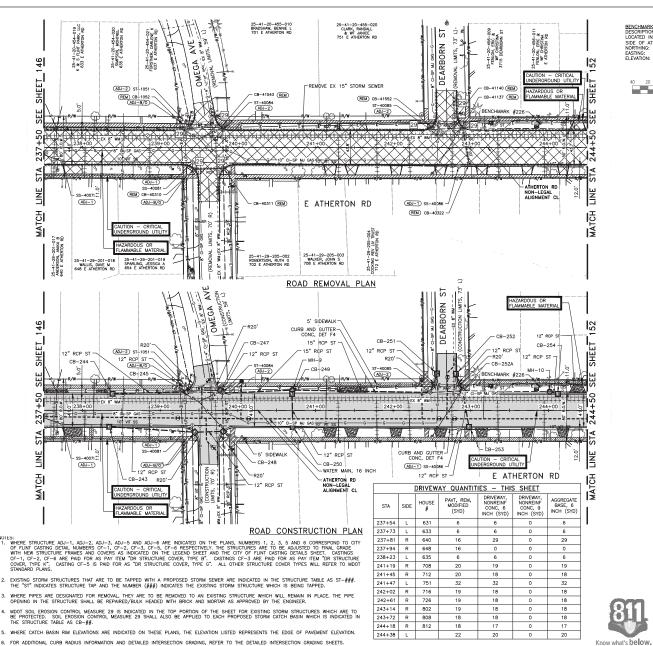
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1101

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18

COF1065.01F 148



BENCHMARK 226
DESCRIPTION: SET GEAR SPIKE IN LIGHT POLE
LOCATED IN SOUTH FACE OF LIGHT POLE, MORTH
SIDE OF ATHERTON OPPOSITE OF HOUSE #808
MECHANICAL STATES AND ACTION OF A STATES AND ACT





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MAINLINE QUANTITIES -	THIS SHE	ET
	JN 201292	
	CAT 0001	
ITEM	QUANTITY	UNIT
Dr Structure, Rem	8	EA
Sewer, Rem, Less Than 24 inch	364	FT
Sidewalk, Rem	719	SYD
Pavt, Rem, Modified	3877	SYD
Embankment, Cip	101	CYD
Excavation, Earth	1804	CYD
Aggregate Base, 6 inch	726	SYD
Aggregate Base, 12 inch	3890	SYD
Sewer, CI E, 12 inch, Tr Det B	197	FT
Sewer, Cl A, 12 inch, Tr Det B	350	FT
Sewer, Cl A, 15 inch, Tr Det B	95	FT
Sewer Bulkhead, 12 inch	2	EA
Dr Structure Cover, Adj, Case 1	6	EA
Dr Structure Cover, Type B	8	EA
Dr Structure Cover, Type K	13	EA
Dr Structure, 24 inch dia	8	EA
Dr Structure, 48 inch dia	7	EA
Dr Structure, Adj, Add Depth	1	FT
Dr Structure, Tap, 12 inch	3	EA
Dr Structure, Tap, 15 inch	2	EA
Underdrain, Subgrade, 6 inch	1500	FT
Hand Patching	1	TON
Hma, 3E1	580	TON
Hma, 4E1	387	TON
Hma, 5E1	290	TON
Hma Approach	93	TON
Driveway, Nonreinf Conc, 6 inch	226	SYD
Curb And Gutter, Conc, Det F4	1500	FT
Detectable Warning Surface	75	FT
Curb Ramp Opening, Conc	106	FT
Sidewalk Ramp, Conc, 6 inch	2485	SFT
Sidewalk, Conc, 4 inch	4705	SFT
Turf Establishment, Performance	1702	SYD

PROPOSED DRAINAGE STRUCTURES									
STR NO	STATION	OFFSET	SIZE	RIM	COVER TYPE	PIPE DIRECTION, SIZE, AND INVERT	DISTANCE TO DOWN STREAM STR		
CB-243	238+34.37	21.2' R	24"	779.02	к	E 12" 775.80	110.47' CB-246		
CB-244	238+38.67	21.2' L	24"	778.99	к	E 12" 773.78	95.78' CB-245		
CB-245	239+34.41	24.0' L	48"	778.61	к	E 12" 772.10 W 12" 773.33	5.89' ST-1051		
ST-1051	239+40.30	23.9' L		~~,,		E 18" 771.40 W 12" 772.06 N 18" 771.25	183.32'		
CB-246	239+44.63	28.1' R	48"	778.55	к	E 12" 775.10 W 12" 775.10	36.61' CB-248		
CB-247	239+77.76	25.5' L	24"	778.51	к	SE 12" 772.40	4.14' ST-40084		
ST-40084	239+80.36	22.3' L		~~	******	E 15" 772.43 S 18" 771.54 NW 12" 772.34	40.07' ST-1051		
CB-248	239+81.19	27.0' R	48"	778.50	к	N 18" 771.97 W 12" 774.87	49.36' ST-40084		
CB-249	240+69.94	21.3' L	48"	778.68	к	S 12" 774.25 N 15" 774.10	4.86' MH-9		
MH-9	240+70.26	26.1' L	48"	779.47	В	E 15" 772.75 W 15" 772.75 S 15" 774.00	89.99'		
CB-250	240+70.59	21.2' R	24"	778.68	к	N 12" 774.70	42.51° CB-249		
ST-40085	242+47.89	23.1' L				E 15" 773.56 N 12" 775.21 W 15" 773.56	177.65' MH-9		
CB-251	242+56.56	47.4' L	24"	779.65	к	S 12" 775.30	25.81' ST-40085		
CB-252	242+80.91	47.0' L	24"	779.47	к	SE 12" 775.30	23.26' CB-252A		
CB-252A	242+89.57	25.4' L	48"	779.59	к	E 12" 774.05 W 15" 773.97 S 12" 774.50 NW 12" 775.10	41.75' ST-40085		
CB-253	242+97.66	21.3' R	24"	779.64	к	N 12" 774.80	47.40° CB-252A		
MH-10	244+01.62	24.1' L	48"	780.50	В	E 12" 774.48 W 12" 774.48 E 12" 776.00	112.16' CB-252A		
CB-254	244+12.25	21.2' L	24"	780.16	к	W 12" 776.10	10.93' MH-10		



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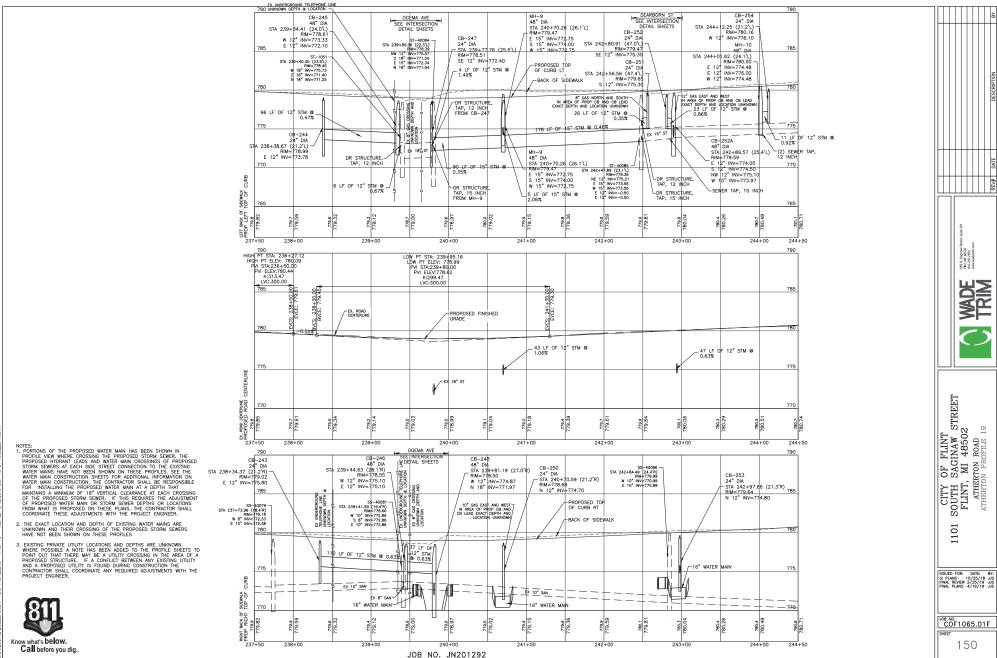


19 OF FLINT SAGINAW STREET , MI 48502 SHEET CITY SOUTH FLINT, ATHERTON

ISSUED FOR: DATE: BY: GI PLANS 10/25/18 JJS FINAL REVIEW 2/25/19 JJS FINAL PLANS 4/19/19 JJS

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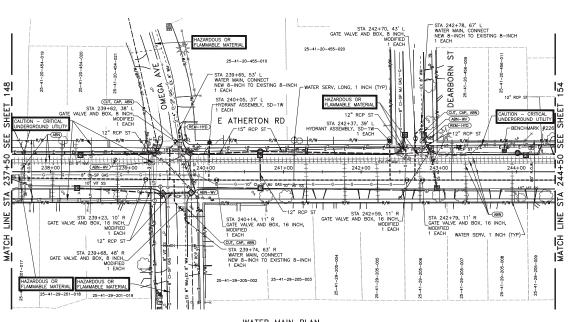
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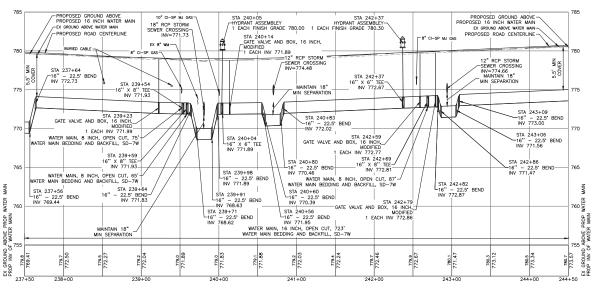
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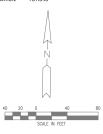
FIELD BOOK 4/18/2019 8



WATER MAIN PLAN



BENCHMARK 228
DESCRIPTION: SET GEAR SPIKE IN LIGHT POLE
LOCATED IN SOUTH FACE OF LIGHT POLE, NORTH
SIDE OF ATHERTON OPPOSITE HOUSE #808
NORTHING: 15312546.300
ELEVATION: 781.343



QUANTITIES THIS SHEET		
	JN 201292	
	CAT 0003	
ITEM	QUANTITY	UNIT
Gate Valve and Box, 8 inch, Modified	3	EA
Gate Valve and Box, 16 inch, Modified	4	EA
Hydrant Assembly, SD-1W	2	EA
Hydrant, Rem, Modified	2	EA
Water Main Bedding and Backfill, SD-7W	950	FT
Water Main, 8 inch, Open Cut	227	FT
Water Main, 16 inch, Open Cut	723	FT
Water Main, 8 inch, Cut and Plug, Modified	3	EA
Water Main, Connect New 8 inch to Existing 8 inch	3	EA
Water Main, Rem	50	FT
Water Serv, 1 inch	8	EA
Water Serv, Long, 1 inch	6	EA
Water Structure, Abandon	6	EA

- NOTES:

 1. WATER MAIN SHALL BE TESTED IN ACCORDANCE WITH AWMA C600—10, AND CHLORINATED IN ACCORDANCE WITH THE LATEST THE CITY OF FLINT STANDARDS AND THE WATER MAIN ACCORDANCE WITH THE LATEST THE CITY OF FLINT STANDARDS AND THE WATER MAIN 2. THE CONTRACTOR SHALL INSTALL AS A MINIMUM, 2" CORPORATIONS ON THE PRESSURE PIPE FOR PRESSURE TESTING, CHLORING ADDITION, AND FOR ELW—OFF PURPOSES. THE CONTRACTOR SHALL REMOVE THE CORPORATIONS AND COPPER LINES UPON A SATISFACTOR TEST AND NSTALL COPPERS THEADED PLUSS PRIOR TO FINAL ACCEPTANCE. AS ATTISFACTOR TEST AND TASHLL COPPERS THE HEADED PLUSS PRIOR TO FINAL CEPTING. FROM ANY SANITARY OF STORM SEWED OF HORIZONTAL SEPARATION AND 18" VERTICAL FROM ANY SANITARY OF STORM SEWED OF LINES SHALL HAVE ONE PIPE LENGTH ADDED PRIOR TO ENDING WITH A HORANTI.



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19 CITY OF FLINT
SOUTH SAGINAM STREET
FLINT, MI 48502
ATHERTON ROAD
WM PLAN & PROFILE SHEET 19 SOUTH SFLINT,

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WATER MAIN PROFILE

DRIVEWAY, NONREINF CONC, 9 INCH (SYD)

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17

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AGGREGATE BASE, 6

INCH (SYD)

19

15

16

16

19

20

16

21

17

27

DRIVEWAY, NONREINF CONC. 6

15

16

16

19

20

16

21

0

27

41

HOUSE

816

902

908

1001

1010

1102

1110

(SYD)

16

17

17

10

20

20

39

21

31

STA SIDE

244+68

245+74 R

246+32 R

246+66 L

247+05 R

249+69 R

251+21 L

251+91 R

252+32 R

245+26 R 820

Sidewalk, Rem	746	SYD
Pavt, Rem, Modified	4710	SYD
Embankment, Cip	90	CYD
Excavation, Earth	1380	CYD
Aggregate Base, 6 inch	794	SYD
Aggregate Base, 12 inch	4632	SYD
Sewer, Cl E, 12 inch, Tr Det B	46	FT
Sewer, Cl A, 12 inch, Tr Det B	350	FT
Sewer Bulkhead, 12 inch	3	EA
Dr Structure Cover, Adj, Case 1	5	EA
Dr Structure Cover, Type B	5	EA
Dr Structure Cover, Type K	10	EA
Dr Structure, 24 inch dia	6	EA
Dr Structure, 48 inch dia	4	EA
Dr Structure, Adj, Add Depth	1	FT
Dr Structure, Tap, 12 inch	5	EA
Underdrain, Subgrade, 6 inch	1600	FT
Hand Patching	1	TON
Hma, 3E1	688	TON
Hma, 4E1	459	TON
Hma, 5E1	344	TON

Detectable Warning Surface

Curb Ramp Opening, Conc

Sidewalk Ramp, Conc, 6 inch Sidewalk, Conc, 4 inch

	PROPOSED DRAINAGE STRUCTURES									
STR NO	STATION	OFFSET	SIZE	RIM	COVER TYPE	PIPE DIRECTION, SIZE, AND INVERT	DISTANCE TO DOWN STREAM STR			
ST-40089	245+29.29	22.9' L			******	W 12" 774.97 NE 12" 775.00 S 12" 776.83	127.58' MH-10			
CB-255	245+32.54	27.6' L	48"	780.85	к	SW 12" 775.10 E 12" 775.10	5.71° ST-40089			
CB-256	245+42.39	21.3' R	24"	780.73	к	N 12" 777.20	46.16° ST-40089			
CB-257	245+69.69	26.6' L	24"	781.04	к	W 12" 775.60	37.17* CB-255			
ST-40092	247+85.88	25.5' R				N 12" 776.20 S 12" 776.20 E 12" 776.75 SE 12" 777.00	130.91'			
CB-258	247+88.69	30.5' R	24"	781.16	к	NW 12" 777.10	5.77' ST-40092			
ST-40095	247+97.41	24.2' L	1.			S 12" 776.66 NE 12" 777.00	50.96' ST-40092			
CB-259	248+00.52	29.9' L	48"	781.72	к	SW 12" 777.10 E 12" 777.10	6.54' ST-40095			
CB-260	248+35.15	28.5' L	24"	781.81	к	W 12" 777.40	34.21' CB-259			
CB-261	248+37.26	21.2' R	24"	782.07	к	W 12" 777.00	51.92' ST-40092			
CB-262	250+51.24	21.9' R	24"	781.44	к	E 12" 776.90	65.86' CB-263			
CB-263	251+17.47	21.8' R	48"	780.38	к	W 12" 776.20 E 12" 775.90	193.87' CB-265			
CB-264	251+54.62	27.4' L	48"	779.73	к	E 12" 775.50	169.04' CB-266			

PROPOSED DRAINAGE STRUCTURES

						S					
NOTES:											
									1, 2, 3, 5 AND		
OF FLIN	IT CASTING	DETAIL NU	MBERS CF-1,	CF-2, CF-	CF-5, CF	-6 RESPECTIVE	ELY. THE S	STRUCTURES AR	E TO BE ADJUS	ITED TO FINAL (GRADE
									CASTING DETA		
CF-1.	CF-2, CF-	6 ARE PAIL	FOR AS PA'	ITEM "DR !	STRUCTURE C	OVER, TYPE I	CASTIN	IGS CF-3 ARE	PAID FOR AS P.	AY ITEM "DR ST	RUCTURE
COVER.	TYPE K".	CASTING O	F-5 IS PAID	FOR AS "DR	STRUCTURE	COVER, TYPE	G". ALL	OTHER STRUCTI	JRE COVER TYP	ES WILL REFER	TO MDOT
STANDA	RD PLANS.										

- EXISTING STORM STRUCTURES THAT ARE TO BE TAPPED WITH A PROPOSED STORM SEWER ARE INDICATED IN THE STRUCTURE TABLE AS ST-###.
 THE "ST" INDICATES STRUCTURE TAP AND THE NUMBER (###) INDICATES THE EXISTING STORM STRUCTURE WHICH IS BEING TAPPED.
- 3. WHERE PIPES ARE DESIGNATED FOR REMOVAL, THEY ARE TO BE REMOVED TO AN EXISTING STRUCTURE WHICH WILL REMAIN IN PLACE. THE PIPE OPENING IN THE STRUCTURE SHALL BE REPAIRED/BULK HEADED WITH BRICK AND MORTAR AS APPROVED BY THE ENGINEER.
- 4. MDDT SOIL EROSION CONTROL MEASURE 29 IS INDICATED IN THE TOP PORTION OF THE SHEET FOR EXISTING STORM STRUCTURES WHICH ARE TO BE PROTECTED. SOIL EROSION CONTROL MEASURE 29 SHALL ALSO BE APPLIED TO EACH PROPOSED STORM CATCH BASIN WHICH IS INDICATED IN THE STRUCTURE TABLE AS GO.##.
- 5. WHERE CATCH BASIN RIM ELEVATIONS ARE INDICATED ON THESE PLANS, THE ELEVATION LISTED REPRESENTS THE EDGE OF PAVEMENT ELEVATION.
- 6. FOR ADDITIONAL CURB RADIUS INFORMATION AND DETAILED INTERSECTION GRADING, REFER TO THE DETAILED INTERSECTION GRADING SHEETS. JOB NO. JN201292

40	20	0		40	8
			-		*******
		SCA	LE IN FE	ET	

MAINLINE QUANTITIES -	THIS SHE	<u>E1</u>
	JN 201292	
	CAT 0001	
ITEM	QUANTITY	UNIT
Dr Structure, Rem	6	EA
Sewer, Rem, Less Than 24 inch	165	FT
Sidewalk, Rem	746	SYD
Pavt, Rem, Modified	4710	SYD
Embankment, Cip	90	CYD
Excavation, Earth	1380	CYD
Aggregate Base, 6 inch	794	SYD
Aggregate Base, 12 inch	4632	SYD
Sewer, CI E, 12 inch, Tr Det B	46	FT
Sewer, Cl A, 12 inch, Tr Det B	350	FT
Sewer Bulkhead, 12 inch	3	EA
Dr Structure Cover, Adj, Case 1	5	EA
Dr Structure Cover, Type B	5	EA
Dr Structure Cover, Type K	10	EA
Dr Structure, 24 inch dia	6	EA
Dr Structure, 48 inch dia	4	EA
Dr Structure, Adj, Add Depth	1	FT
Dr Structure, Tap, 12 inch	5	EA
Underdrain, Subgrade, 6 inch	1600	FT
Hand Patching	1	TON
Hma, 3E1	688	TON
Hma, 4E1	459	TON
Hma, 5E1	344	TON
Hma Approach	127	TON
Driveway, Nonreinf Conc, 6 inch	210	SYD
Driveway, Nonreinf Conc, 9 inch	17	SYD
Curb And Gutter, Conc. Det F4	1700	FT

	* -
_	

FT

SFT

SFT

108

152

3308

5257

555 S. Seginess Fleet, MI 48502 810,235,2555 www.wasdefrin.co.

OF FLINT SAGINAW STREET , MI 48502 20 SHEET CITY SOUTH FLINT, 1101

ISSUED FOR: DATE: BY: GI PLANS 10/25/18 JJS FINAL REVIEW 2/25/19 JJS FINAL PLANS 4/19/19 JJS

COF1065.01F

152

Know what's below. Call before you dig.

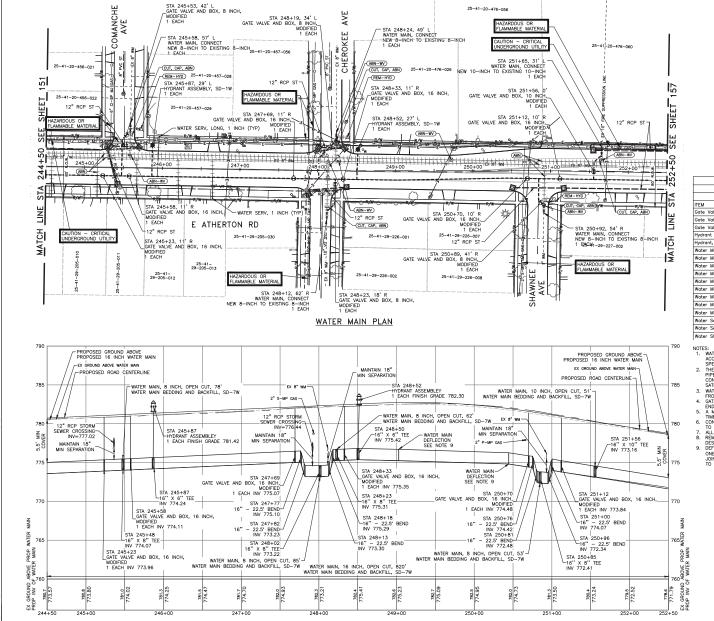
FIELD BOOK 4/18/2019 8

NOTES:

PORTIONS OF THE PROPOSED WATER MAIN HAS BEEN SHOWN IN PROPIEE VERW WHERE CROSSING THE PROPOSED STORM SEWER. THE PROPOSED STORM SEWER THE STORM SEWER STORM SEWER AT EACH SIDE STREET COMMETCION TO THE EXISTING WATER MAINS HAVE NOT BEEN SHOWN ON THESE PROPILES. SEE THE WATER MAIN CONSTRUCTION SHEETS FOR ADDITIONAL INFORMATION ON WATER MAIN CONSTRUCTION, HEC DOWNERCOM SHALE RESPONSION OF MAIN SHAPE AND SHEETS FOR ADDITIONAL INFORMATION ON WATER MAIN CONSTRUCTION, HE CONTRACTOR SHAPE RESPONSION OF THE PROPOSED STORM SEWER. IF THIS REQUIRES THE ADJUSTMENT OF PROPOSED WATER MAIN OR STORM SEWER DEPTHS OR LOCATIONS FROM WHAT IS PROPOSED OF THESE PLANS, THE CONTRACTOR SHALL COORDINATE THESE ADJUSTMENTS WITH THE PROJECT ENGINEER.

THE EXACT LOCATION AND DEPTH OF EXISTING WATER MAINS ARE UNKNOWN AND THEIR CROSSING OF THE PROPOSED STORM SEWERS HAVE NOT BEEN SHOWN ON THESE PROFILES





WATER MAIN PROFILE

JOB NO. JN201292

BENCHMARK 228
DESORPHON: SET GEAR SPIKE IN LIGHT POLE
LOCATED IN SOUTH FACE OF LIGHT POLE, NORTH
SIDE OF ATHERTON OPPOSITE HOUSE #808
NORTHING: 543489,968
EASTING: 13312546.500
ELEVATION: 781.343

QUANTITIES THIS SHEET		
	JN 201292	
	CAT 0003	
ITEM	QUANTITY	UNIT
Gate Valve and Box, 8 inch, Modified	4	EA
Gate Valve and Box, 10 inch, Modified	1	EA
Gate Valve and Box, 16 inch, Modified	6	EA
Hydrant Assembly, SD-1W	2	EA
Hydrant, Rem, Modified	3	EA
Water Main Bedding and Backfill, SD-7W	1149	FT
Water Main, 8 inch, Open Cut	278	FT
Water Main, 10 inch, Open Cut	51	FT
Water Main, 16 inch, Open Cut	820	FT
Water Main, 8 inch, Cut and Plug, Modified	4	EA
Water Main, 10 inch, Cut and Plug, Modified	1	EA
Water Main, Connect New 8 inch to Existing 8 inch	4	EA
Water Main, Connect New 10 inch to Existing 10 inch	1	EA
Water Main, Rem	83	FT
Water Serv, 1 inch	5	EA
Water Serv, Long, 1 inch	1	EA
Water Structure, Abandon	7	EA

- NOTES:

 1. WATER MAIN SHALL BE TESTED IN ACCORDANCE WITH AWMA C600—10, AND CHLORINATED IN ACCORDANCE WITH THE LATEST THE CITY OF FUNT STANDARDS AND THE WATER MAIN SPECIAL PROVISIONS. ALL TESTING SHALL BE OBSERVED AND MONTORED BY CHARLEST AND SPECIAL PROVISIONS. ALL TESTING SHALL BE OBSERVED AND MONTORED BY CHARLEST AND THE PLANSSOR. THE PROVISION OF THE PLANSSOR. THE PLANSSOR THE PLANSSOR. THE PLANSSOR THE PLANSSOR. THE PLANSSOR THE PLANSSOR. THE PLANSSOR THE PLANSSOR THE PLANSSOR. THE PLANSSOR THE PLANSSOR THE PLANSSOR. THE PLANSSOR T
- TIMES.
 6. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING WATER MAIN SIZE AND LOCATIONS PRIOR

CONTRACTOR SHALL FIELD VERIFY ALL EXISTING WATER MAIN SIZE AND LOCATIONS PRIOR
TO CONNECTIONAL, BE IN ACCORDANCE WITH THE CITY OF FILINT GERILL SPI8. REMOVE EXISTING HOPBANTS AS INDICATED ON THE FLANS. CONTRACTOR SHALL CLEARLY
DESIGNATE WHEN THE EXISTING HOPBANT IS COUT OF SERVICE.
 9. DEFLECT WATER MAIN AS NOTED ON THE PLANS. DEFLECT WATER MAIN NO MORE THAN
ONE-HALF OF THE MANUFACTURER'S RECOMMENDED MAXIMUM DEFLECTION FOR EACH
JOINT IF NEEDED, USE BEINST ON MARE DEFLECTIONS. ADDITIONAL BEINDS ARE INCIDENTAL
TO WATER MAIN, _MON, OPEN CUT.

Know what's below. Call before you dig.

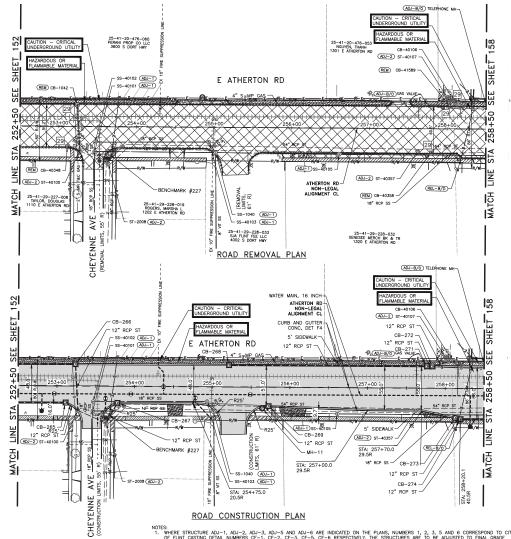
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555 S. Saginara Fleet, M. 46502 810, 235, 2555 www.east-bettim.co

20 CITY OF FLINT
SOUTH SAGINAW STREET
FLINT, MI 48502
ATHERTON ROAD
I WAM PLAN & PROFILE SHEET 20

CITY SOUTH FLINT, 1101

ISSUED FOR: DATE: BY: GI PLANS 10/25/18 JJS FINAL REVIEW 2/25/19 JJS FINAL PLANS 4/19/19 JJS



DRIVEWAY QUANTITIES - THIS SHEET

(SYD)

38

20

HOUSE

1202

R 1320

L 1301

257+90 R 1320

STA SIDE

254+52

254+84

256+05

DRIVEWAY NONREINF CONC, 6

INCH (SYD)

33

0

0

DRIVEWAY, NONREINF CONC, 9

INCH (SYD)

0

0

38

159

AGGREGATE BASE, 6

INCH (SYD

33

0

38

0

159

TESS.

THE STRUCTURE AD.-1, AD.-2, AD.-3, AD.-5, AND AD.-6, ARE INDOATED ON THE PLANS, NUMBERS 1 2, 3 5, AND 6 CORRESPOND TO CITY

FIRST CENTRE OFFICE MARKES OFFI. CF.-2, CF-3, CF-3, CF-6, CF-6, ERSPECTIVES, THE STRUCTURES ARE TO BE ADJUSTED to PINUL ROME

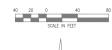
WITH NEW STRUCTURE TRAMES AND COVERS AS INDICATED ON THE LIGEND SHEET AND THE CITY OF FIRST CASTING TO CHAIN CASTING CF-6.

CF-1, CF-2, CF-6, ARE PLAD FOR AS PAY ITEM "OS STRUCTURE COVER, TYPE 6". ALL OTHER STRUCTURE COVER TYPES WILL REFER TO MODITIONAL CASTING CF-5 IS PAID FOR AS PAY THE MAY

STRUCTURE COVER, TYPE K". CASTING CF-5 IS PAID FOR AS "OR STRUCTURE COVER, TYPE 6". ALL OTHER STRUCTURE COVER TYPES WILL REFER TO MODITIONAL CASTING CF-3.

- EXISTING STORM STRUCTURES THAT ARE TO BE TAPPED WITH A PROPOSED STORM SEWER ARE INDICATED IN THE STRUCTURE TABLE AS ST-###.
 THE "ST" INDICATES STRUCTURE TAP AND THE NUMBER (###) INDICATES THE EXISTING STORM STRUCTURE WHICH IS BEING TAPPED.
- 3. WHERE PIPES ARE DESIGNATED FOR REMOVAL, THEY ARE TO BE REMOVED TO AN EXISTING STRUCTURE WHICH WILL REMAIN IN PLACE. THE PIPE OPENING IN THE STRUCTURE SHALL BE REPAIRED/BULK HEADED WITH BRICK AND MORTAR AS APPROVED BY THE ENSINEER.
- 4. MDDT SOIL EROSION CONTROL MEASURE 29 IS INDICATED IN THE TOP PORTION OF THE SHEET FOR EXISTING STORM STRUCTURES WHICH ARE TO BE PROTECTED. SOIL REGISION CONTROL MEASURE 29 SHALL ALSO BE APPLIED TO EACH PROPOSED STORM CATCH BASIN WHICH IS INDICATED IN THE STRUCTURE TABLE AS GO =##.
- 5. WHERE CATCH BASIN RIM ELEVATIONS ARE INDICATED ON THESE PLANS. THE ELEVATION LISTED REPRESENTS THE EDGE OF PAVEMENT ELEVATION.
- 6. FOR ADDITIONAL CURB RADIUS INFORMATION AND DETAILED INTERSECTION GRADING, REFER TO THE DETAILED INTERSECTION GRADING SHEETS.

BENCHMEN. 227
DESCRIPTION: FOUND FAILROAD SPIKE IN LIGHT
POLE LOCATED IN SOUTH FACE OF LIGHT POLE IN
THE SOUTHERST QUADRANT OF CHEYENNE AND
ATHERTOR RD.
NORTHING:
543446.726
EASTING: 13313526.39



MAINLINE QUANTITIES -	- THIS SHE	ET
	JN 201292	
	CAT 0001	
ITEM	QUANTITY	UN
Dr Structure, Rem	4	E/
Sewer, Rem, Less Than 24 inch	99	F
Sidewalk, Rem	600	SY
Pavt, Rem, Modified	4251	SY
Embankment, Cip	67	CY
Excavation, Earth	895	CY
Aggregate Base, 6 inch	639	SY
Aggregate Base, 12 inch	4140	SY
Sewer, CI E, 12 inch, Tr Det B	40	F
Sewer, Cl A, 12 inch, Tr Det B	452	F
Sewer Bulkhead, 12 inch	2	E/
Dr Structure Cover, Adj, Case 1	9	E/
Dr Structure Cover, Type B	10	E/
Dr Structure Cover, Type K	9	E/
Dr Structure, 24 inch dia	2	E/
Dr Structure, 48 inch dia	7	E/
Dr Structure, 84 inch dia	1	E/
Dr Structure, Adj, Add Depth	1	F
Dr Structure, Tap, 12 inch	4	E/
Underdrain, Subgrade, 6 inch	1200	F
Hand Patching	1	TO
Hma, 3E1	632	TO
Hma, 4E1	421	TO
Hma, 5E1	316	TO
Hma Approach	104	TO
Driveway, Nonreinf Conc, 6 inch	33	SY
Driveway, Nonreinf Conc, 9 inch	196	SY
Curb And Gutter, Conc, Det F4	1230	F
Detectable Warning Surface	39	F
Curb Ramp Opening, Conc	58	F
Sidewalk Ramp, Conc, 6 inch	2005	SF
Sidewalk, Conc, 4 inch	4000	SF
Turf Establishment, Performance	537	SY

	PROPOSED DRAINAGE STRUCTURES							
STR NO	STATION	OFFSET	SIZE	RIM	COVER TYPE	PIPE DIRECTION, SIZE, AND INVERT	DISTANCE TO DOWN STREAM STR	
CB-265	253+11.34	21.3' R	48"	777.38	к	SE 12" 772.40 W 12" 772.40	18.83' ST-40100	
CB-266	253+23.66	28.2' L	48"	777.05	к	S 12" 772.50 W 12" 772.50	59.72° ST-40100	
ST-40100	253+27.22	31.4' R	*.			SE 12" 771.67 N 12" 771.67 NW 12" 772.00	39.79° ST-2008	
ST-2008	253+63.64	47.4' R	Α,			NW 12" 771.22 NE 12" 772.00 NE 48" 765.02 S 48" 765.02	31.65' EXBEND 101.73'	
CB-267	253+77.85	21.3' R	48"	776.28	к	SW 12" 772.20	29.74° ST-2008	
CB-268	255+21.51	28.3' L	48"	773.94	к	E 12" 769.33	254.91° CB-271	
MH-11	255+64.36	27.2' R	84"	773.34	В	W 54" 764.43 E 54" 764.43 E 12" 770.20	144.04'	
CB-269	255+72.54	24.3' R	24"	773.21	к	W 12" 770.25	8.69° MH-11	
CB-271	257+76.42	28.3' L	48"	771.21	к	W 12" 768.06 E 12" 768.06	7.03' CB-272	
CB-272	257+83.44	28.3' L	48"	771.22	к	W 12" 768.00 E 12" 768.00	21.32' ST-40107	
ST-40107	258+03.90	34.3' L	1		1	W 12" 767.87 E 12" 767.48	130.64' ST-41597	
CB-273	258+13.15	38.0' R	48"	771.07	К	E 12" 766.10		
CB-274	258+19.98	39.5' R	24"	771.05	к	W 12" 766.15 E 12" 766.10	7.00° CB-273 82.09° CB-275	

Know what's below. Call before you dig.

555 S. Sagnere Flet, M. 46502 810,235,2565

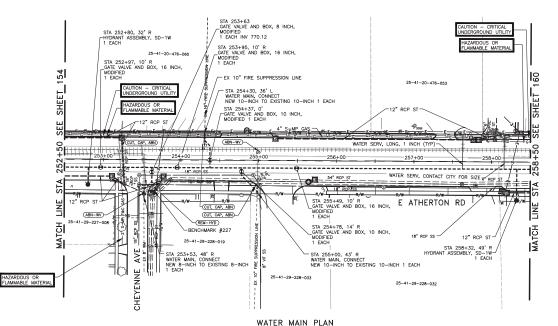
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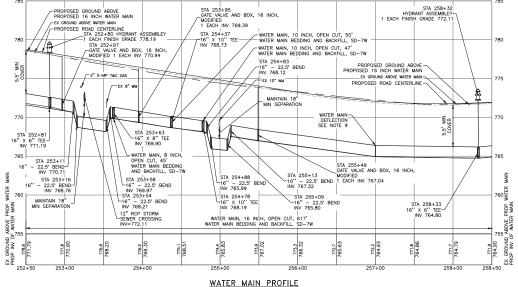
OF FLINT SAGINAW STREET , MI 48502 SHEET CITY SOUTH FLINT,

ISSUED FOR: DATE: BY: GI PLANS 10/25/18 JJS FINAL REVIEW 2/25/19 JJS FINAL PLANS 4/19/19 JJS

1101

COF1065.01F 155





JOB NO. JN201292

BENCHMARK 227 DESCRIPTION: FOUND RAILROAD SPIKE IN LIGHT DESCRIPTION: FOUND RAILROAD SPIKE IN LIGHT POLE IN SOUTH FACE OF LIGHT POLE IN TH SOUTHEAST QUADRANT OF CHEYENNE AND ATHERTON RD. NORTHING: 543446.726 EASTING: 13313526.388 ELEVATION: 776.956

1		The same of the sa	ъ
	5	CALE IN FEET	_
	JN 201292		
	CAT 0003		
	QUANTITY	UNIT	
	1	EA	
	2	EA	
	3	EA	
	2	EA	
		E4	

	CAT 0003	
ITEM	QUANTITY	UNIT
Gate Valve and Box, 8 inch, Modified	1	EA
Gate Valve and Box, 10 inch, Modified	2	EA
Gate Valve and Box, 16 inch, Modified	3	EA
Hydrant Assembly, SD-1W	2	EA
Hydrant, Rem, Modified	1	EA
Water Main Bedding and Backfill, SD-7W	759	FT
Water Main, 8 inch, Open Cut	45	FT
Water Main, 10 inch, Open Cut	97	FT
Water Main, 16 inch, Open Cut	617	FT
Water Main, 8 inch, Cut and Plug, Modified	1	EA
Water Main, 10 inch, Cut and Plug, Modified	2	EA
Water Main, Connect New 8 inch to Existing 8 inch	1	EA
Water Main, Connect New 10 inch to Existing 10 inch	2	EA
Water Main, Rem	50	FT
Water Serv, Long, 1 inch	2	EA

QUANTITIES THIS SHEET

Water Structure, Abandon

- NOTES:

 NOTES:

- TIMES.
 6. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING WATER MAIN SIZE AND LOCATIONS PRIOR

- CONTRACION SHALL HELD VERBY ALL EXISTING WATER MAIN SIZE AND LOCATIONS PROVIDED.
 ALL BONGHLL SHALL BE IN ACCORDANCE WITH THE CITY OF FIJINT DEFAIL SO—TWANS.
 REMOVE EXISTING HYDRAYTIS AS INDICATED ON THE PLANS. CONTRACTOR SHALL CLEARLY DESIGNATE WHEN THE EXISTING HYDRAYTI SO LOUT OF SERVICE.
 DEFLECT WATER MAIN AS NOTED ON THE PLANS. DEFLECT WATER MAIN NO MORE THAN ONE—HALF OF THE MAINLYCHILDRESS RECOMMENDED MAXIMUM DEFLECTION FOR EACH JOINT IF NEEDED, USE BENIST OWNER DEFLECTIONS. ADDITIONAL BENOS ARE INCIDENTAL TO WATER MAIN., LINCH, OPEN CUT.

Know what's below.

555 S. Saginara Fleet, M. 46502 810, 235, 2555 www.east-bettim.co

CITY OF FLINT
SOUTH SAGINAM STREET
FLINT, M 48502
ATHERTON ROAD
WM PLAN & PROFILE SHEET 21 21 CITY C SOUTH S FLINT,

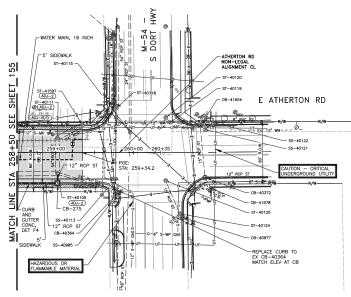
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COF1065.01F 157

Call before you dig.

MAINLINE QUANTITIES -	THIS SHE	ET
	JN 201292	
	CAT 0001	
ITEM	QUANTITY	UNIT
Sidewalk, Rem	111	SYD
Pavt, Rem, Modified	1052	SYD
Embankment, Cip	15	CYD
Excavation, Earth	174	CYD
Aggregate Base, 6 inch	89	SYD
Aggregate Base, 12 inch	1100	SYD
Sewer, Cl A, 12 inch, Tr Det B	63	FT
Dr Structure Cover, Adj, Case 1	3	EA
Dr Structure Cover, Type B	3	EA
Dr Structure Cover, Type K	1	EA
Dr Structure, Adj, Add Depth	1	FT
Dr Structure, Tap, 12 inch	1	EA
Underdrain, Subgrade, 6 inch	260	FT
Hand Patching	1	TON
Hma, 3E1	173	TON
Hma, 4E1	116	TON
Hma, 5E1	87	TON
Hma Approach	21	TON
Curb And Gutter, Conc, Det F4	267	FT
Detectable Warning Surface	16	FT
Curb Ramp Opening, Conc	18	FT
Sidewalk Ramp, Conc, 6 inch	884	SFT
Sidewalk, Conc, 4 inch	393	SFT

ROAD REMOVAL PLAN



DOAD C	ONSTRUCTION	I DI ANI

	PROPOSED DRAINAGE STRUCTURES							
STR NO	STATION	OFFSET	SIZE	RIM	COVER TYPE	PIPE DIRECTION, SIZE, AND INVERT	DISTANCE TO DOWN STREAM STR	
ST-40109	259+02.07	26.6' R	` .	~		N 54" 763.57 W 54" 763.57 E 24" 767.02 S 12" 765.00	45.24' ST-40111	
CB-275	259+02.07	39.5' R	24"	771.52	к	N 12" 765.20 W 12" 765.20	12.90' ST-40109	

	DRIVEWAY QUANTITIES - THIS SHEET								
	STA	SIDE	HOUSE #	PAVT, REM, MODIFIED (SYD)	DRIVEWAY, NONREINF CONC, 6 INCH (SYD)	DRIVEWAY, NONREINF CONC, 9 INCH (SYD)	AGGREGATE BASE, 6 INCH (SYD)		
Г	258+58	R	1330	26	0	0	0		
	259+41	R	1330	24	0	0	0		

NOTES: HERE STRUCTURE ADI-1, ADI-2, ADI-3, ADI-5, AND ADI-6 ARE INDICATED ON THE PLANS, NUMBERS 1, 2, 3, 5 AND 6 CORRESPOND TO CITY

OF THAT CASTRIC DETAIL NUMBERS CF-1, CF-2, CF-3, CF-5, CF-6 RESPECTIVELY. THE STRUCTURES ARE TO BE ADJUSTED TO FINAL CRADS.
WITH NEW STRUCTURE FRAMES AND COVERS AS INDICATED ON THE LEGEND STRUCTURE OF FLINT CASTRICS SHEET. CASTRICS

CF-1, CF-2, CF-6 ARE PAID FOR AS PAY TEM "OR STRUCTURE COVER, TYPE 8". CASTRINGS CF-3 ARE PAID FOR AS PAY TEM "OR STRUCTURE COVER, TYPE 6". ALL OTHER STRUCTURE COVER TYPES WILL REFER TO MODI

STANDARD PLANS.

- EXISTING STORM STRUCTURES THAT ARE TO BE TAPPED WITH A PROPOSED STORM SEWER ARE INDICATED IN THE STRUCTURE TABLE AS ST-###.
 THE "SI" INDICATES STRUCTURE TAP AND THE NUMBER (###) INDICATES THE EXISTING STORM STRUCTURE WHICH IS BEING TAPPED.
- 3. WHERE PIPES ARE DESIGNATED FOR REMOVAL, THEY ARE TO BE REMOVED TO AN EXISTING STRUCTURE WHICH WILL REMAIN IN PLACE. THE PIPE OPENING IN THE STRUCTURE SHALL BE REPAIRED/BULK HEADED WITH BRICK AND MORTAR AS APPROVED BY THE ENGINEER.
- 4. MDOT SOIL EROSION CONTROL MEASURE 29 IS INDICATED IN THE TOP PORTION OF THE SHEET FOR EXISTING STORM STRUCTURES WHICH ARE TO BE PROTECTED. SOIL EROSION CONTROL MEASURE 29 SHALL ALSO BE APPLIED TO EACH PROPOSED STORM CATCH BASIN WHICH IS INDICATED IN THE STRUCTURE TABLE AS COH_##.
- 5. WHERE CATCH BASIN RIM ELEVATIONS ARE INDICATED ON THESE PLANS, THE ELEVATION LISTED REPRESENTS THE EDGE OF PAVEMENT ELEVATION.
- 6. FOR ADDITIONAL CURB RADIUS INFORMATION AND DETAILED INTERSECTION GRADING, REFER TO THE DETAILED INTERSECTION GRADING SHEETS.

Know what's below. Call before you dig.

JOB NO. JN201292

555 S. Sagnraw Street, Suite 201 Flest, M. 465(2 810,235,2555 www.andeldrint.com

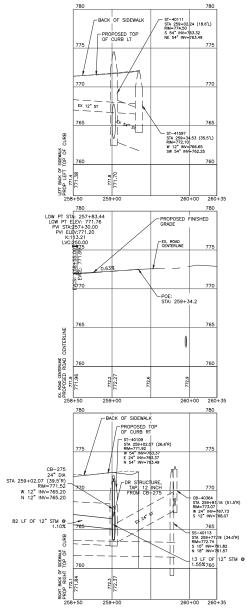


CITY OF FLINT
SOUTH SAGINAW STREET
FLINT, MI 48502
ATHERTON ROAD
ON PLAN AND REMOVAL SHEET 22

INAL PLANS 4/19/19 JJ

OF1065.01F

158



NOTES:

1. PORTIONS OF THE PROPOSED WATER MAIN HAS BEEN SHOWN IN PROFILE VIEW WHERE CROSSING THE PROPOSED STORM SEWER. THE PROPOSED HYDRANT LEADS AND WATER MAIN CROSSINGS OF PROPOSED STORM SEWERS AT EACH SIDE STREET COMPACTION TO THE EXISTING WATER MAIN CONSTRUCTION. SHEETS FOR ADDITIONAL INFORMATION ON WATER MAIN CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING THE PROPOSED WATER MAIN AT A DEPTH THAT MAINTAINS A MINIMUM OF 18 VERTICAL CLEARANCE AT EACH CROSSING OF THE PROPOSED STORM SEWER. IF THIS REQUIRES THE ADJUSTMENT FROM WHAT IS PROPOSED ON THESE PLANS, THE CONTRACTOR SHALL COORDINATE THESE ADJUSTMENT SHOWN OF THE PROPOSED STORM SEWER.

2. THE EXACT LOCATION AND DEPTH OF EXISTING WATER MAINS ARE UNKNOWN AND THEIR CROSSING OF THE PROPOSED STORM SEWERS HAVE NOT BEEN SHOWN ON THESE PROFILES

3. EXISTING PRIVATE UTILITY LOCATIONS AND DEPTHS ARE UNKNOWN. WHERE POSSIBLE A NOTE HAS BEEN ADDED TO THE PROFILE SHEETS TO POINT OUT THAT THERE MAY BE A UTILITY CROSSING IN THE AREA OF A PROPOSED STRUCTURE. IF A CONFLICT BETWEEN ANY EXISTING UTILITY AND A PROPOSED UTILITY IS FOUND DUBRIES, OOKSTRUCTION THE CONTRACTOR SHALL COORDINATE ANY REQUIRED ADJUSTMENTS WITH THE PROJECT ENGINEER.

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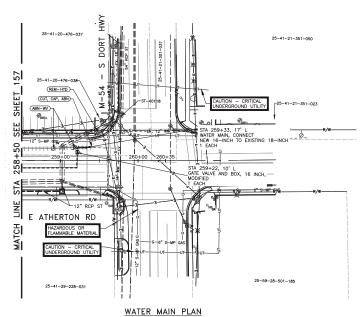
CITY OF FLINT
SOUTH SAGINAW STREET
FLINT, MI 48502
ATHERTON ROAD
ATHERTON PROFILE 22 1101

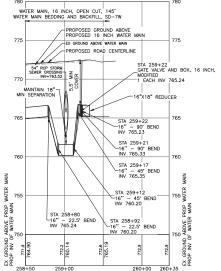
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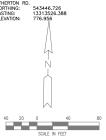




WATER MAIN PROFILE

JOB NO. JN201292

BENCHMARK 2Z7
DESCRIPTION: FOUND RAILROAD SPIKE IN LIGHT
POLE
LCOATED IN SOUTH FACE OF LIGHT POLE IN THI
SOUTHEAST QUADRANT OF CHEYENNE AND
ATHERTON RD.
NORTHING: 543446,726
EASTING: 13313526.388
ELEVATION: 779.956



QUANTITIES THIS SHEET		
	JN 201292	
	CAT 0003	
ITEM	QUANTITY	UNIT
Gate Valve and Box, 16 inch, Modified	1	EA
Hydrant, Rem, Modified	1	EA
Water Main Bedding and Backfill, SD-7W	145	FT
Water Main, 16 inch, Open Cut	145	FT
Water Main, 18 inch, Cut and Plug, Modified	1	EA
Water Main, Connect New 16 inch to Existing 18 inch	1	EA
Water Main, Rem	17	FT
Water Structure, Abandon	2	EA

- NOTES:

 1. WERE MAIN SHALL BE TESTED IN ACCORDANCE WITH AWAY. GROI—10, AND CHLORINATED IN ACCORDANCE WITH THE LAITEST THE COTY OF FLINT STANDARDS AND THE WINTER MAIN SPECIAL PROVISIONS. ALL TESTING SHALL BE OBSERVED AND MONITORED BY FLINT.

 2. THE CONTRACTOR SHALL INSTALL AS A MINIMUM, 2" CORPORATIONS ON THE PRESSURE PIPE FOR PRESSURE TESTING, CHLORING ADDITION, AND FOR BLOW—OFP PURPOSES. THE CONTRACTOR SHALL INSTALL AS A MINIMUM, 2" CORPORATION ON THE PRESSURE SHORT CONTRACTOR SHALL INSTALL AS A MINIMUM. SHORT COPPER THEADED PLUSS PRIOR TO FINAL, ACCEPTANCE, STATEMENT OF THE AND INSTALL COPPER THEADED PLUSS PRIOR TO FINAL, ACCEPTANCE, FROM ANY SANITARY OR STORM SEWER.

 4. GATE WALLES AT THE EXPO OF LINES SHALL HAVE ONE PIPE LENGTH ADDED PRIOR TO SANITARY.

 5. A MINIMUM OF 5.5—FEET OF COVER SHALL BE ACHIEVED OVER THE WATER MAIN AT ALL TIMES.

- 5. A. MINIMUM OF 5.5-FEET OF COVER SHALL BE ACHIEVED UVEN HE MALEA MANDA OF AND THE THE MALEA SHALL FILL VERIFY ALL EXISTING WATER MAIN SIZE AND LOCATION OF AND LOCATION OF AND LOCATION OF THE CITY OF FUNT DETAIL SD-7W.

 8. REMOVE EXISTING HORANTS AS INDICATED ON THE PLANS. CONTRACTOR SHALL CLEARLY DESIGNATE WHEN THE EXISTING HORANTS IS OUT OF SERVICITE MANN NO MORE THAN ON THE WHEN THE EXISTING HORANTS OF THE WASHINGTON ON THE WASHINGTON OF THE WAND THAN THE WASHINGTON ON TH

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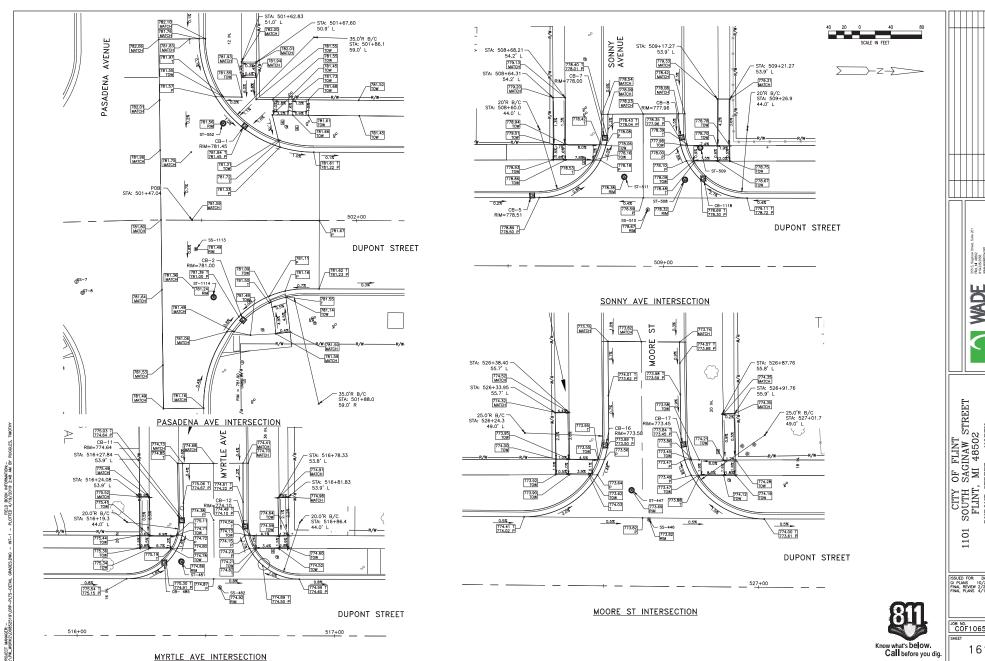
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SOUTH SAGINAM STREET
FLINT, MI 48502
ATHERTON ROAD

WEN PLAN & PROPILE SHEET 22 CITY C SOUTH S FLINT, 1101

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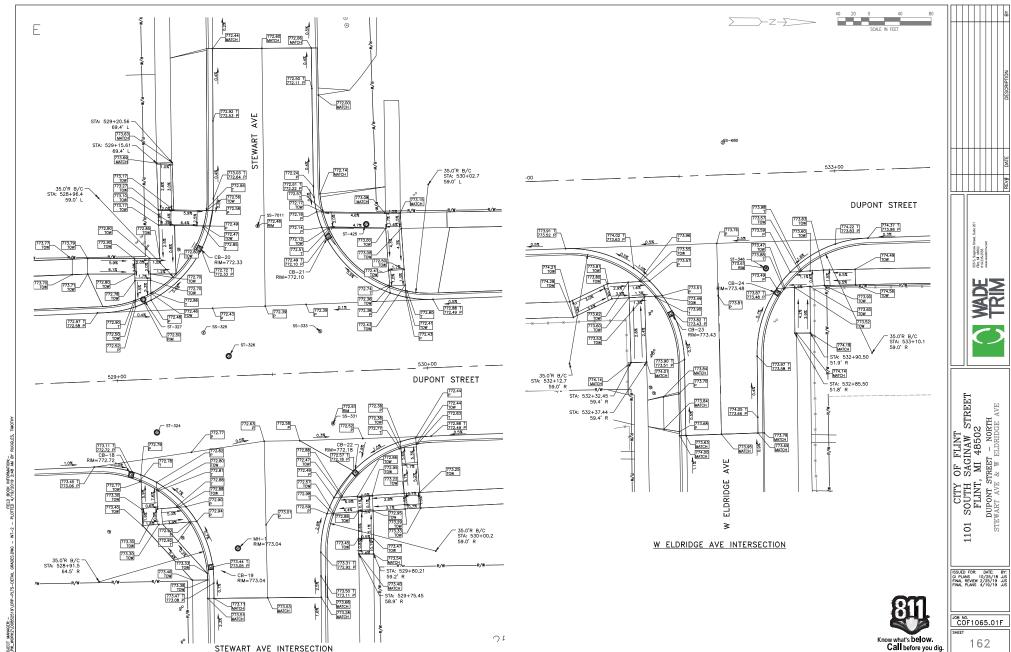
S CITY OF FLINT
SOUTH SAGINAW STREI
FLINT, MI 48502
DUPONT STREET - NORTH
AVE, SONNY AVE, WYRTIE AVE & M

PASADENA

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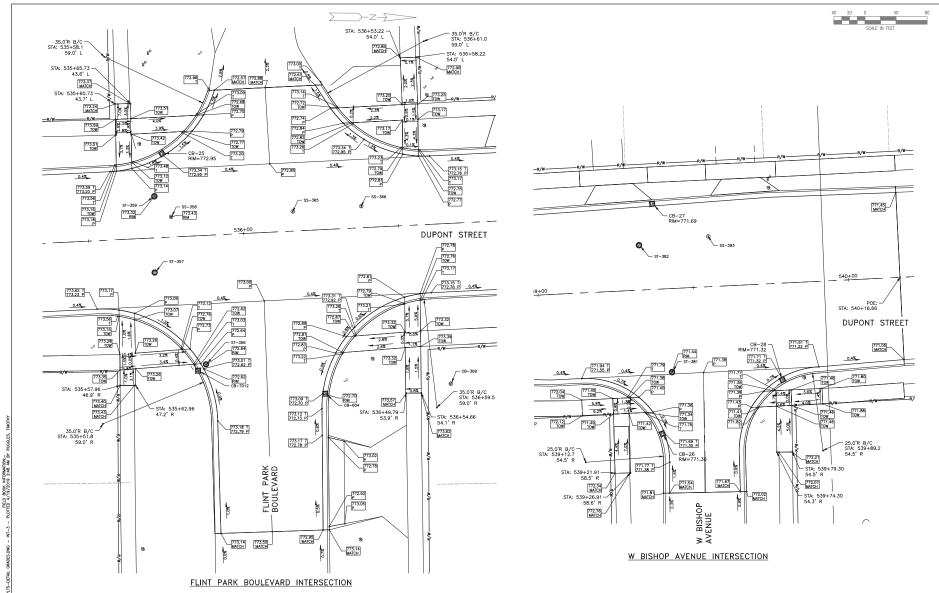
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STEWART AVE INTERSECTION

162



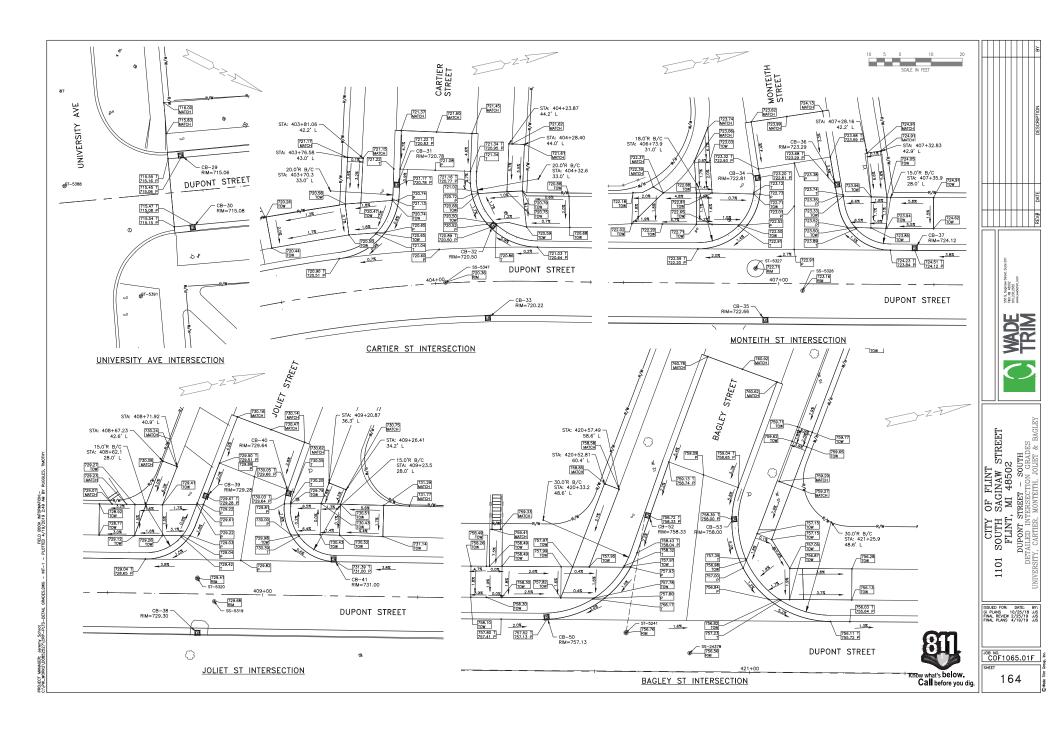
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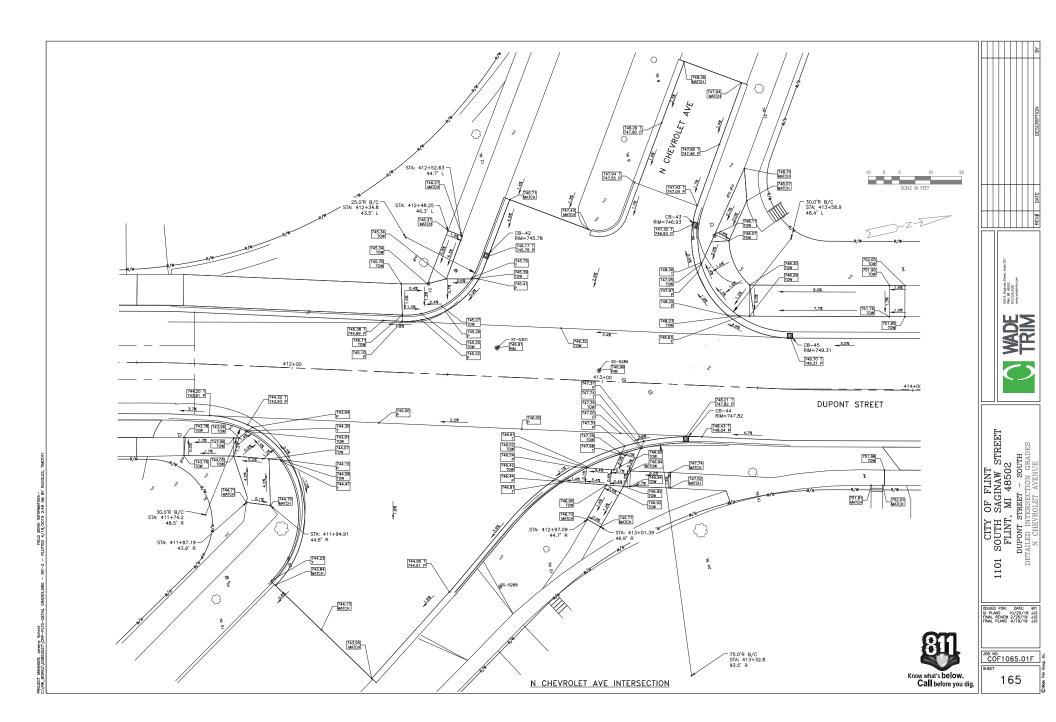
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1101 SOUTH SAGINAW STREET
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DUPONY STREET - NORTHOP
FLINT PARK BOOULEVARD & W BISHOP AVE

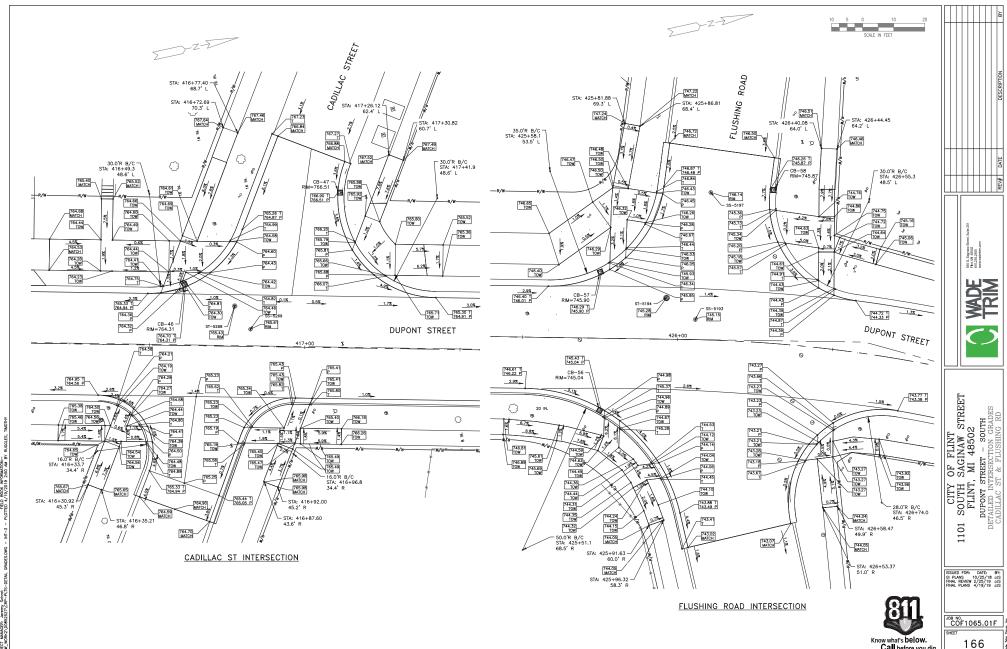
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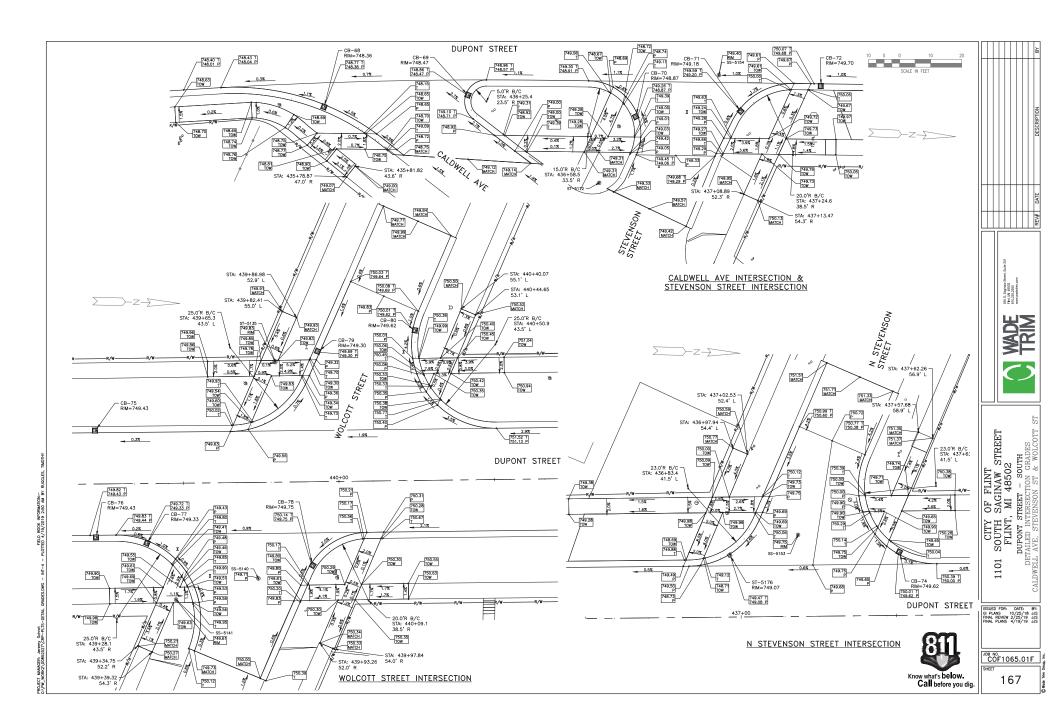
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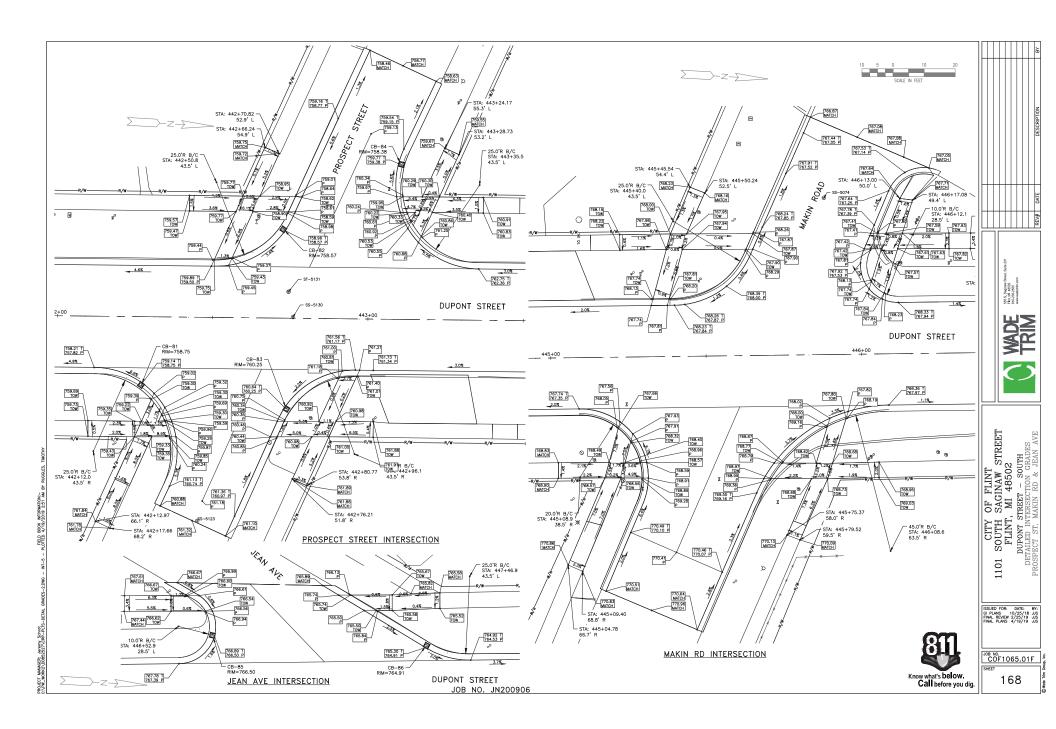


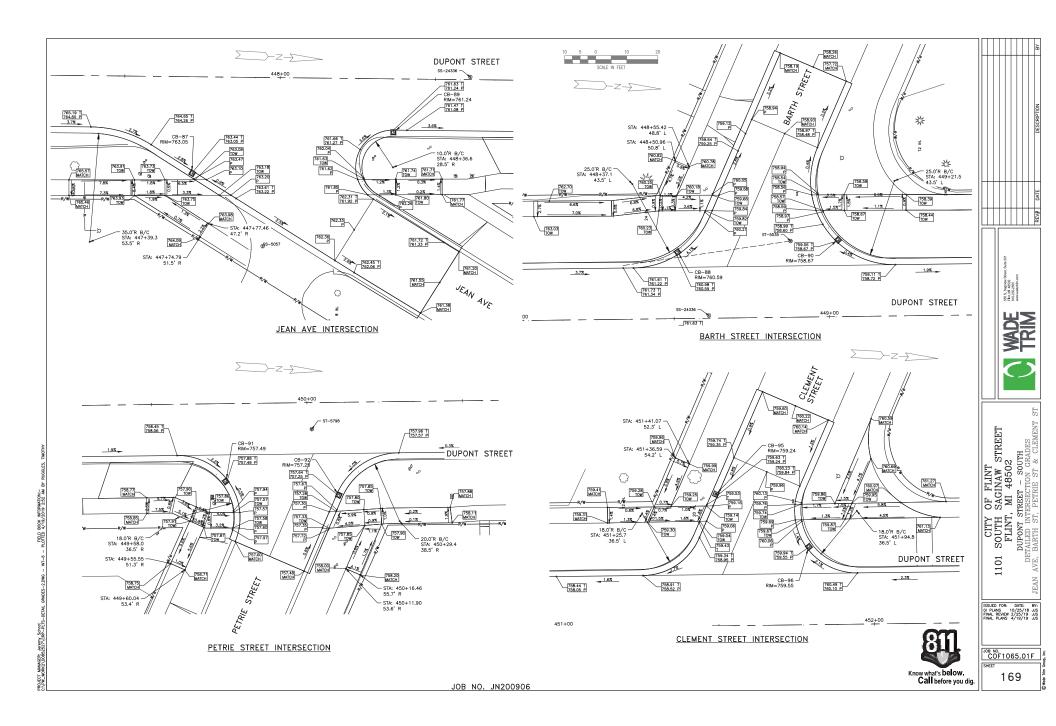


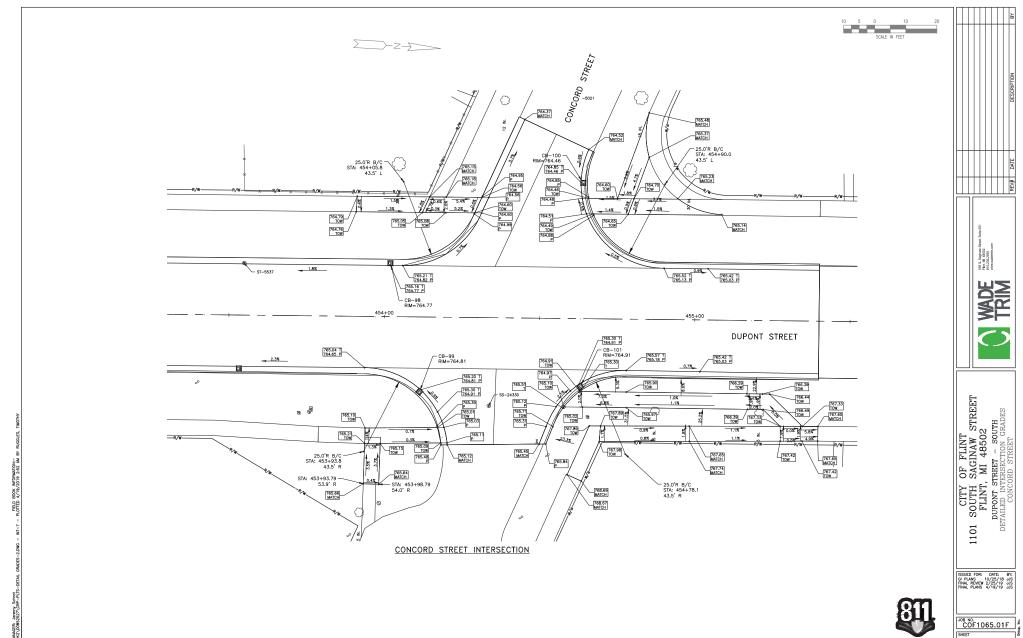


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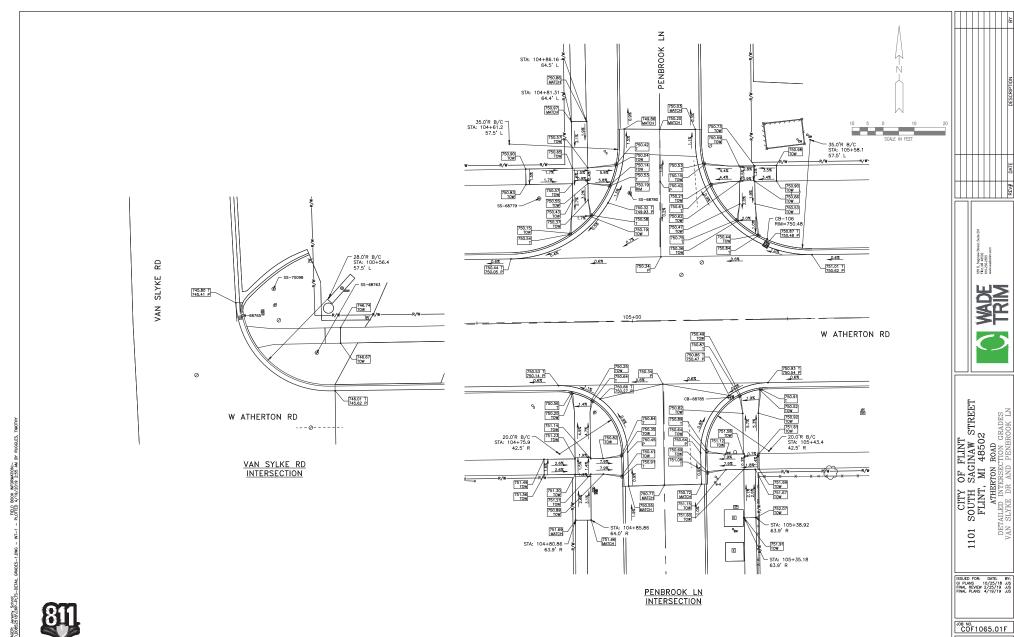






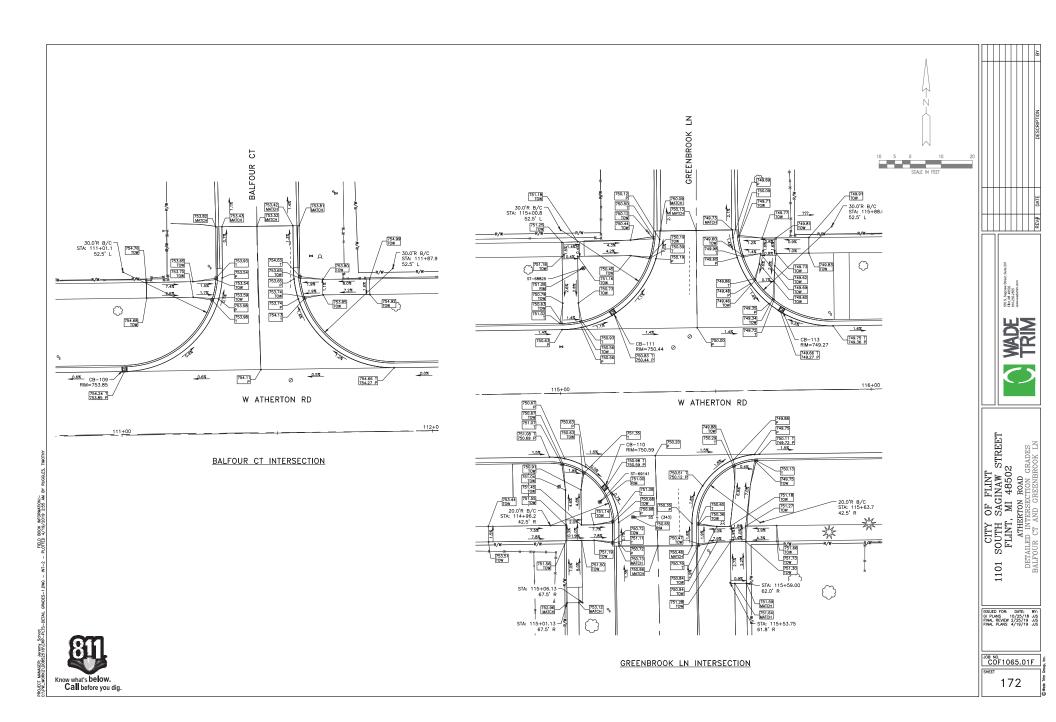


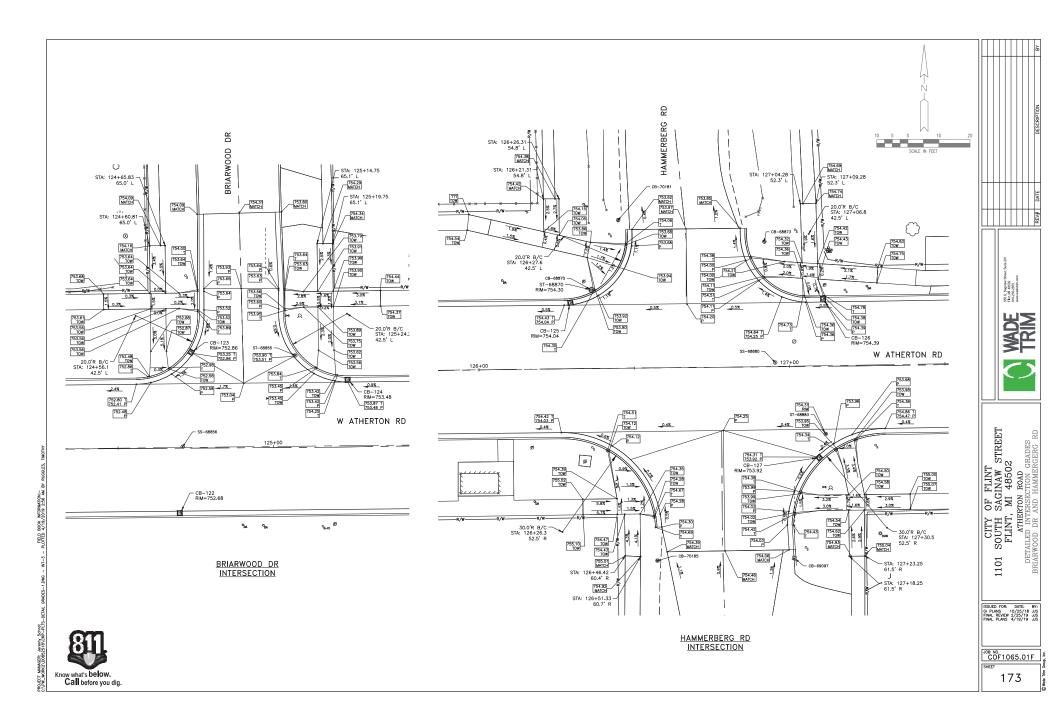
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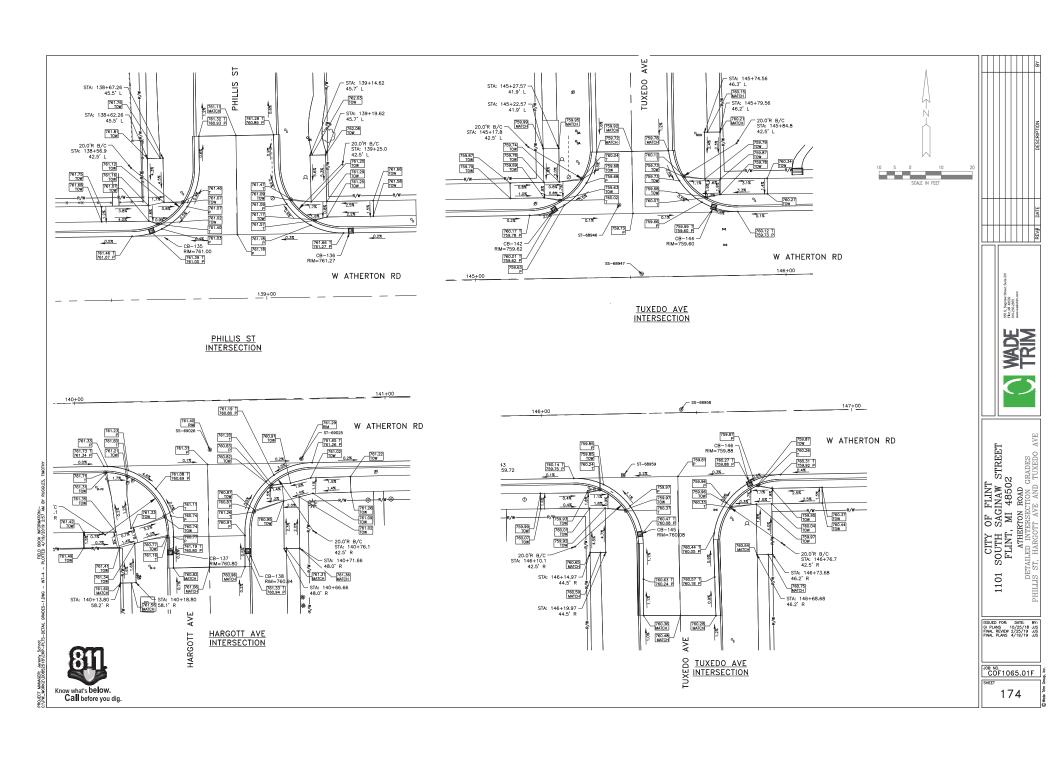


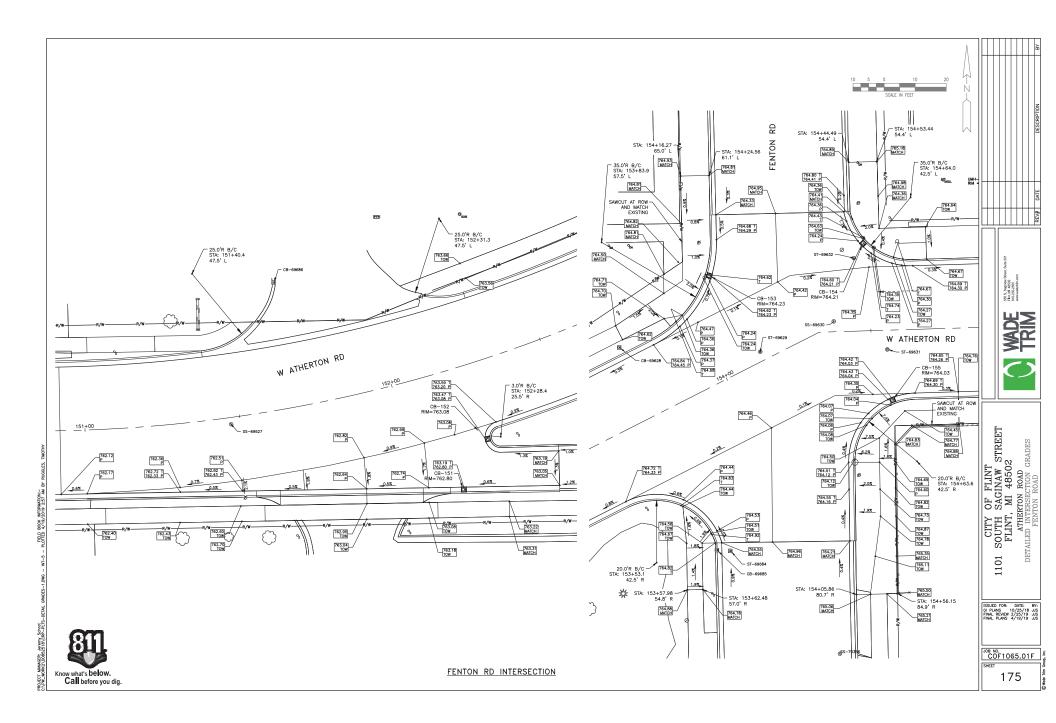
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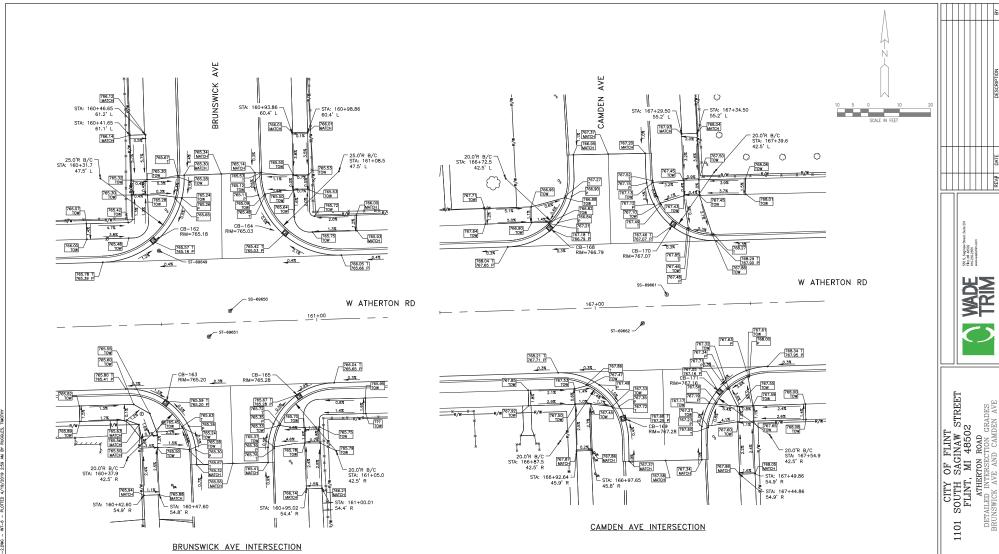
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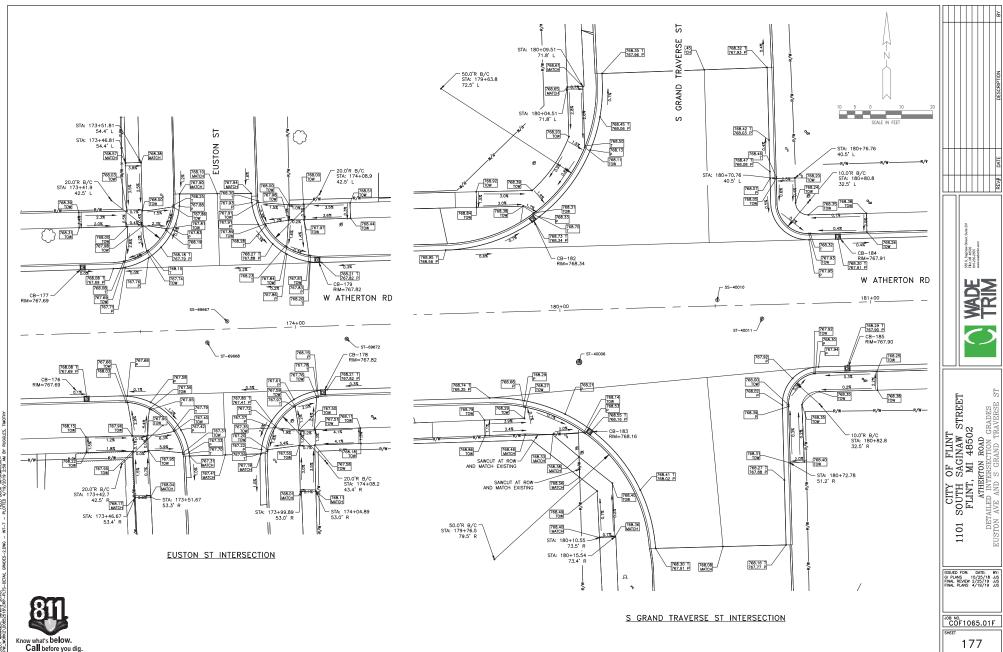




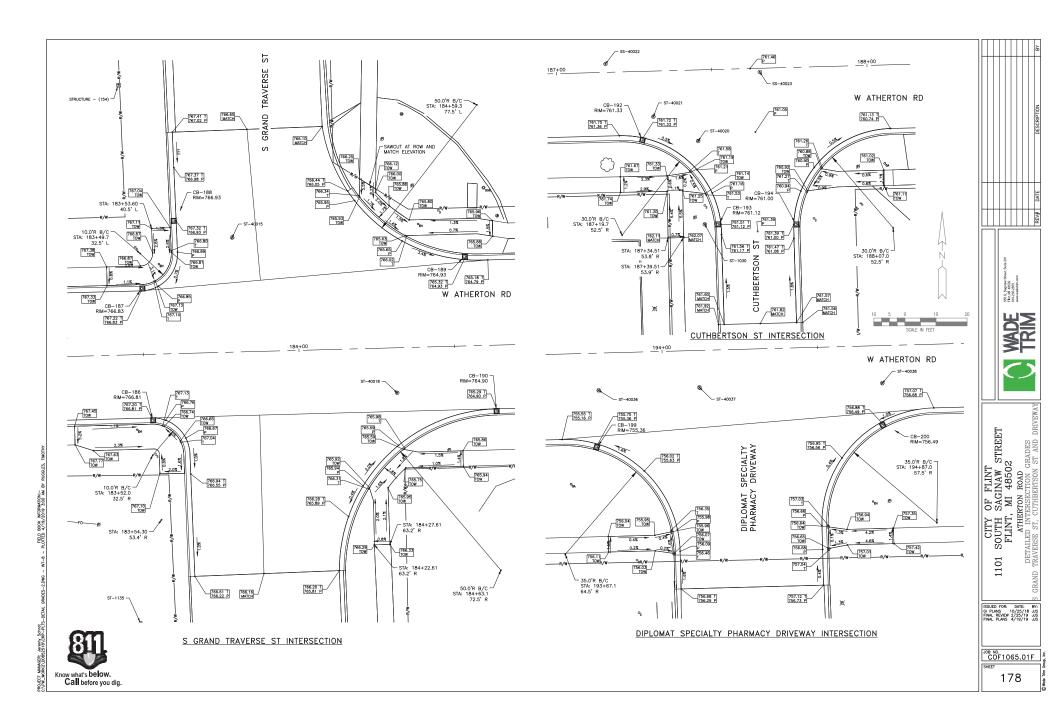


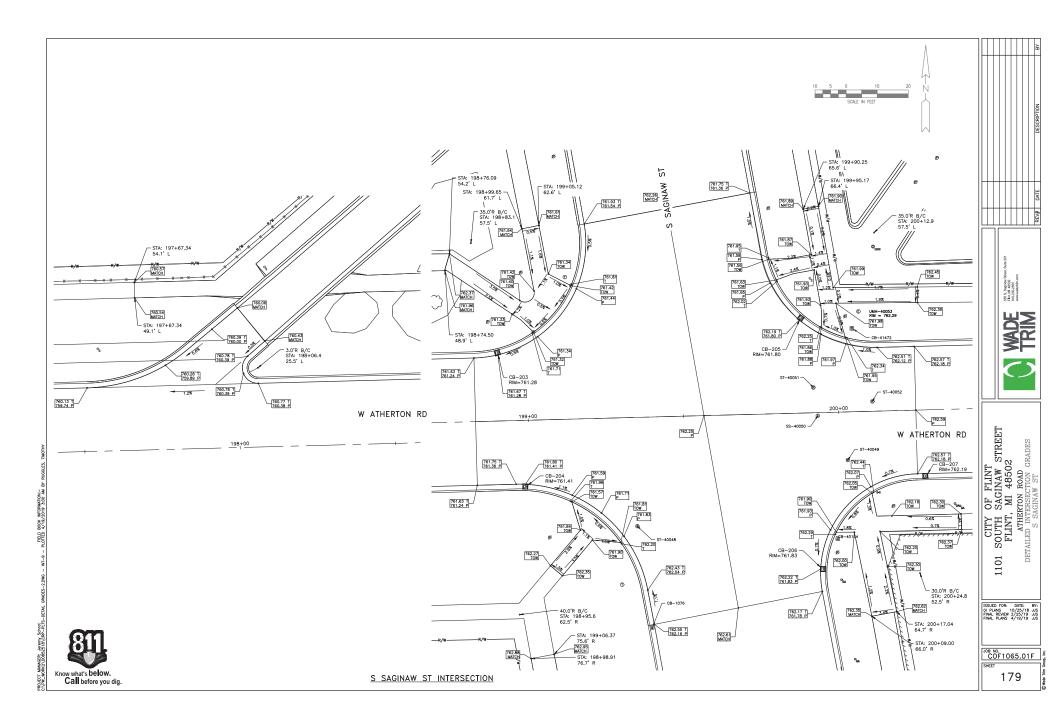
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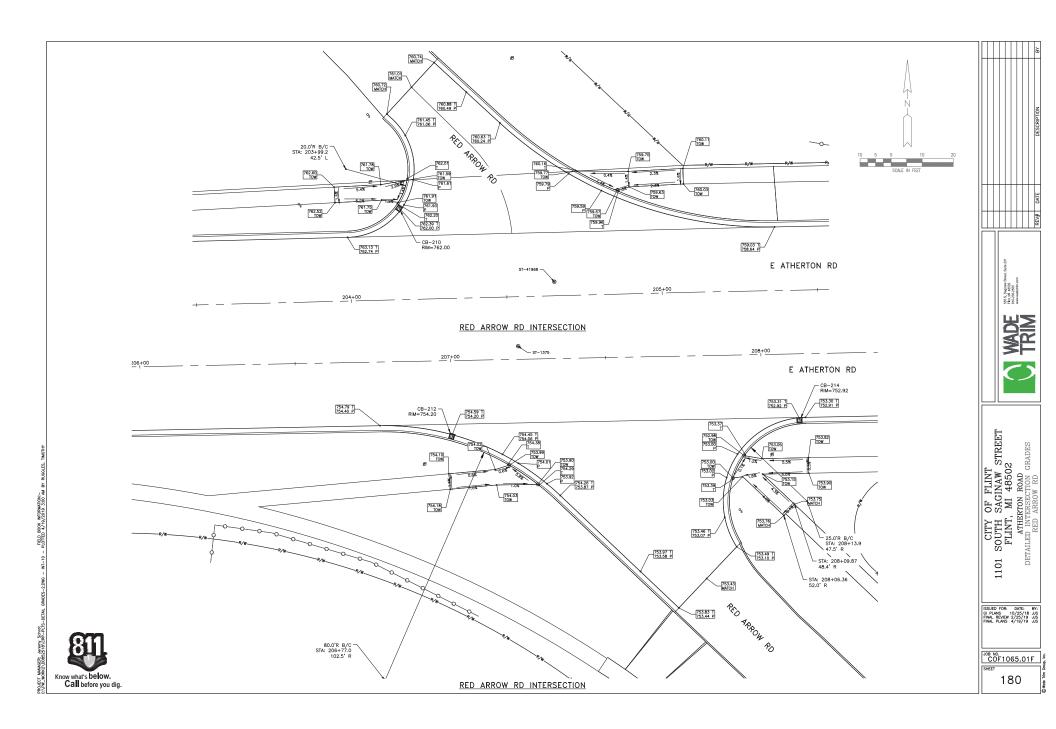
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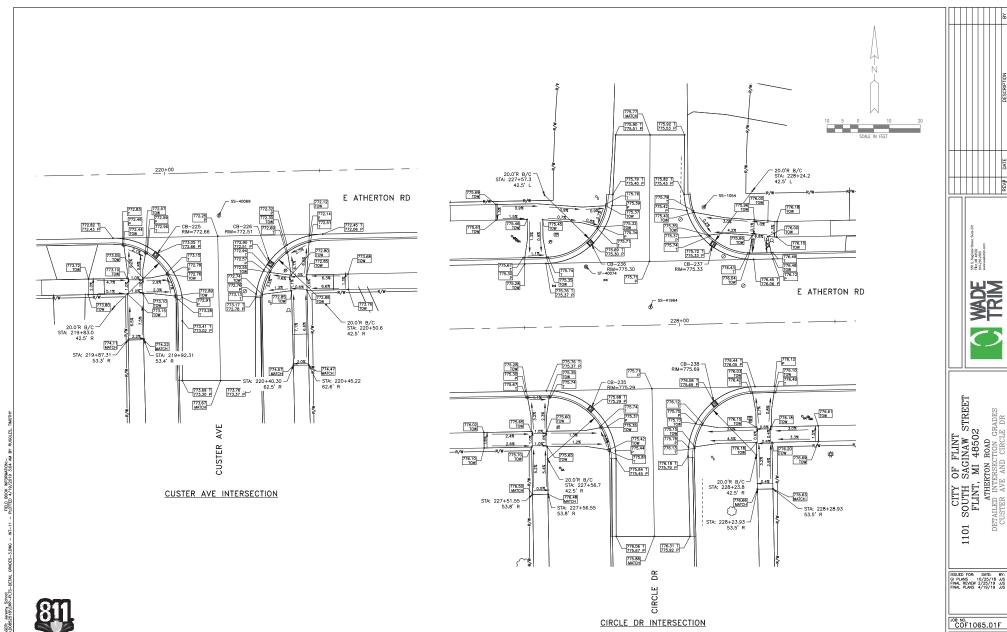


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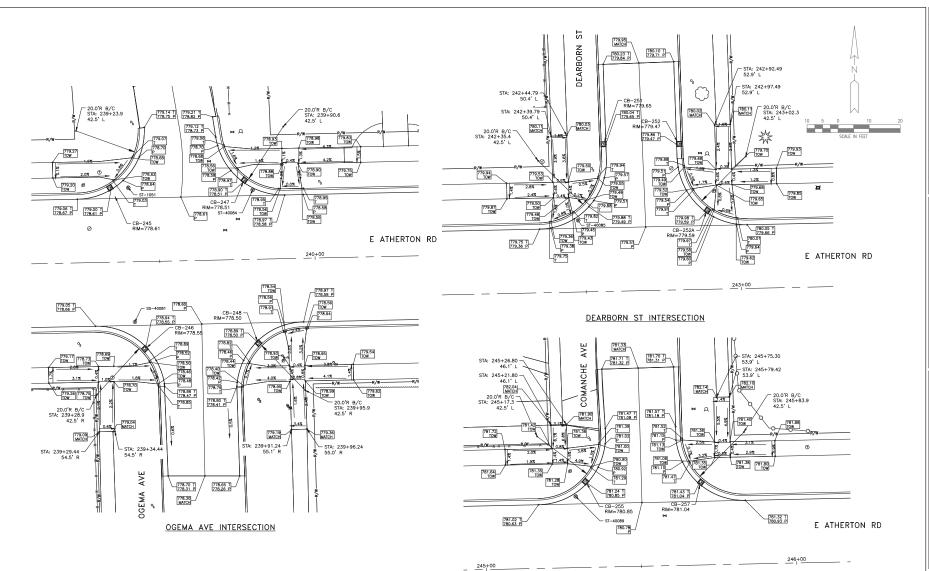






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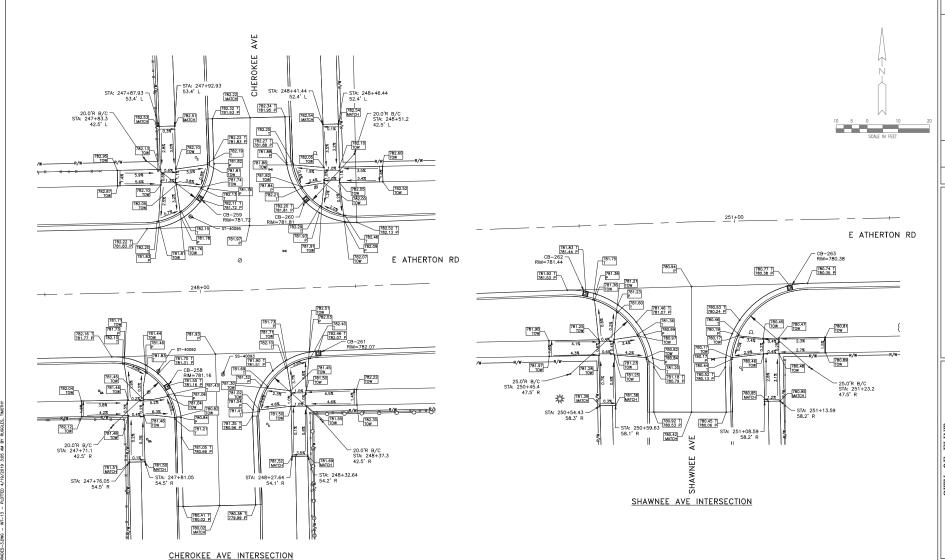
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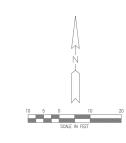
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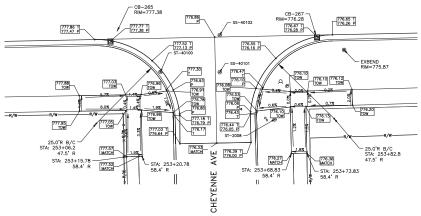
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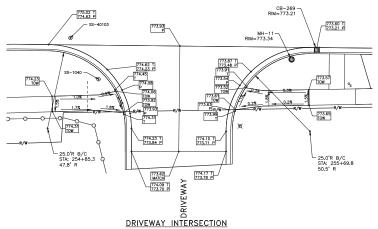


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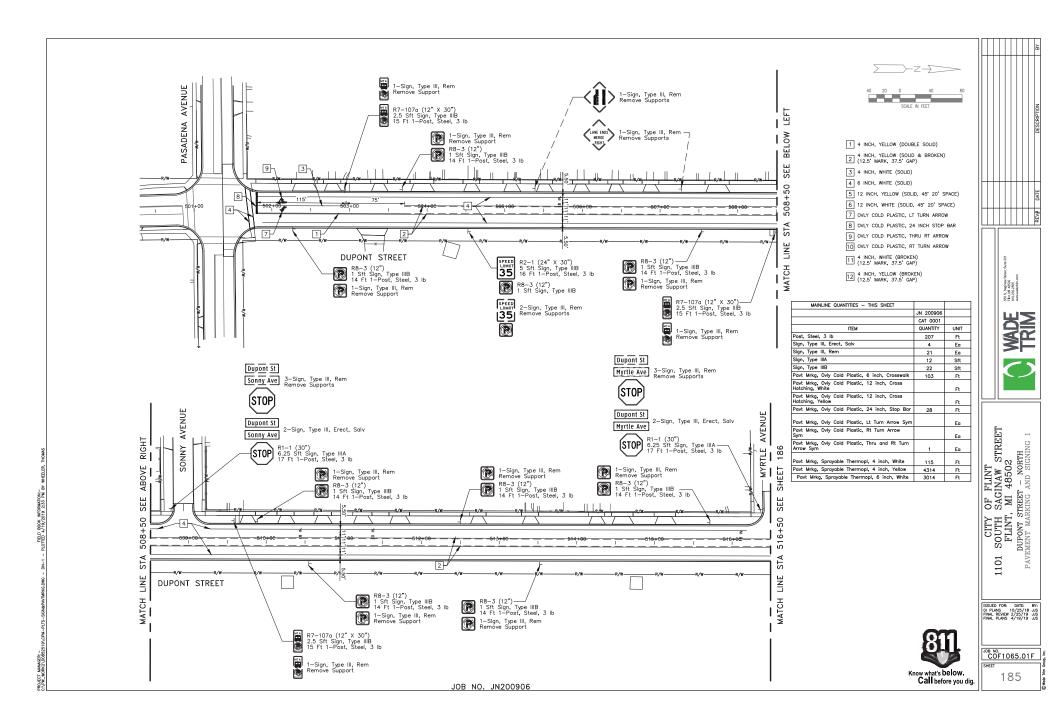
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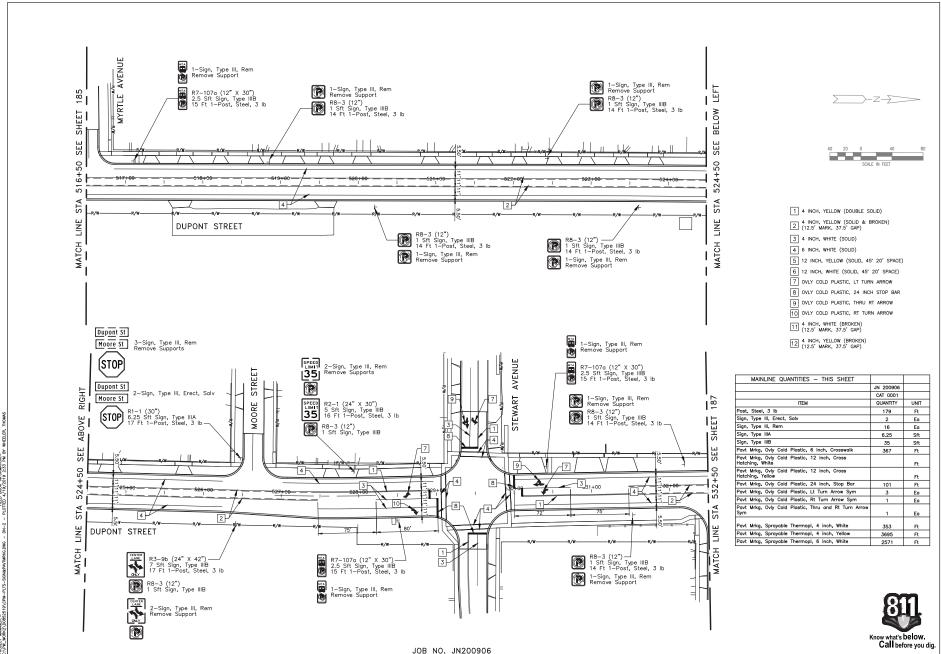
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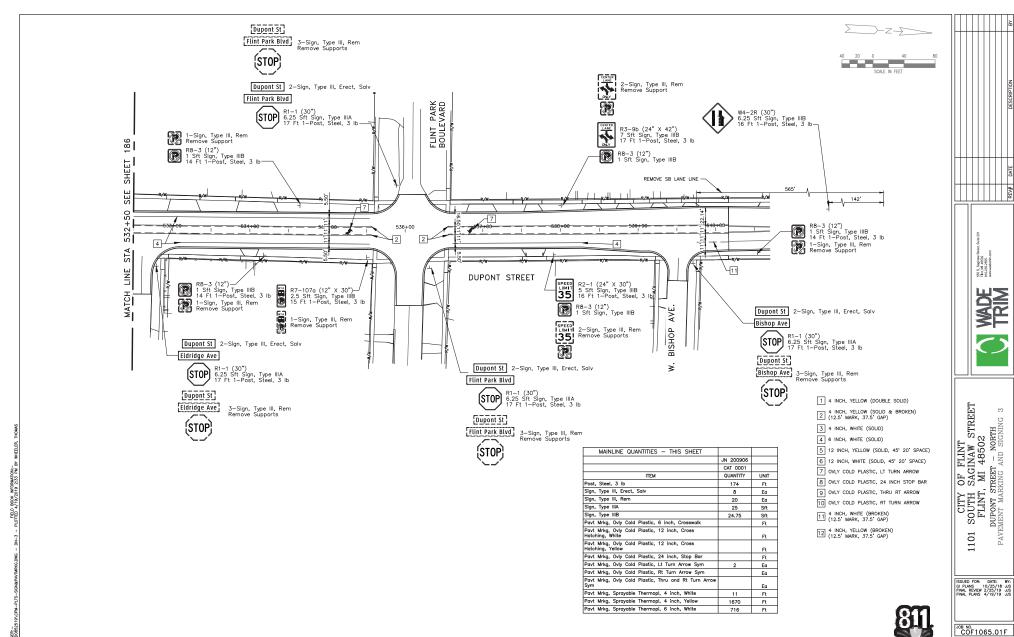


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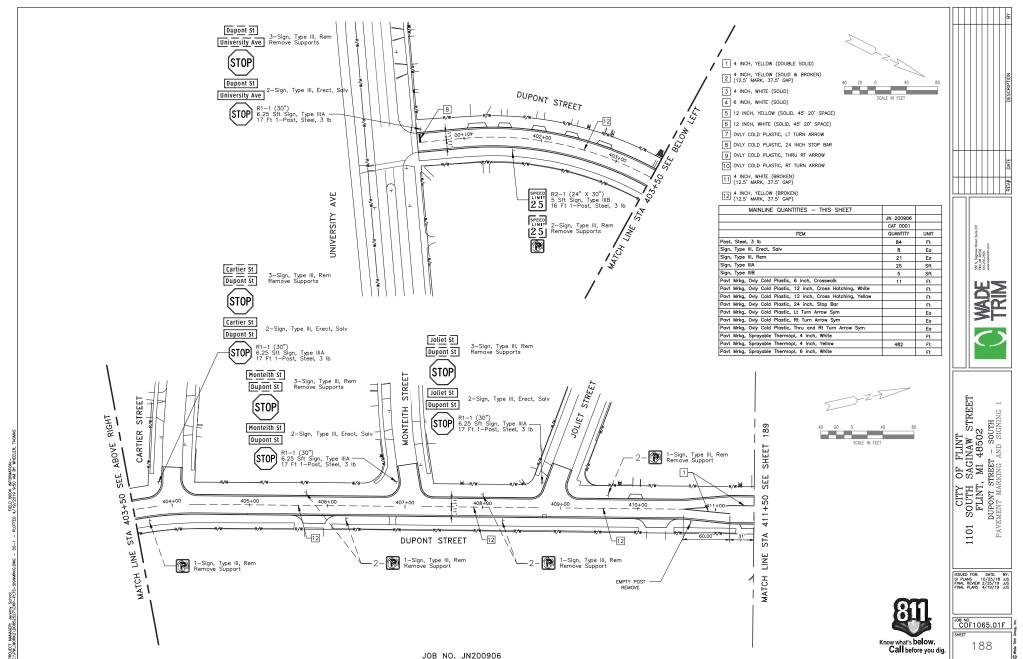
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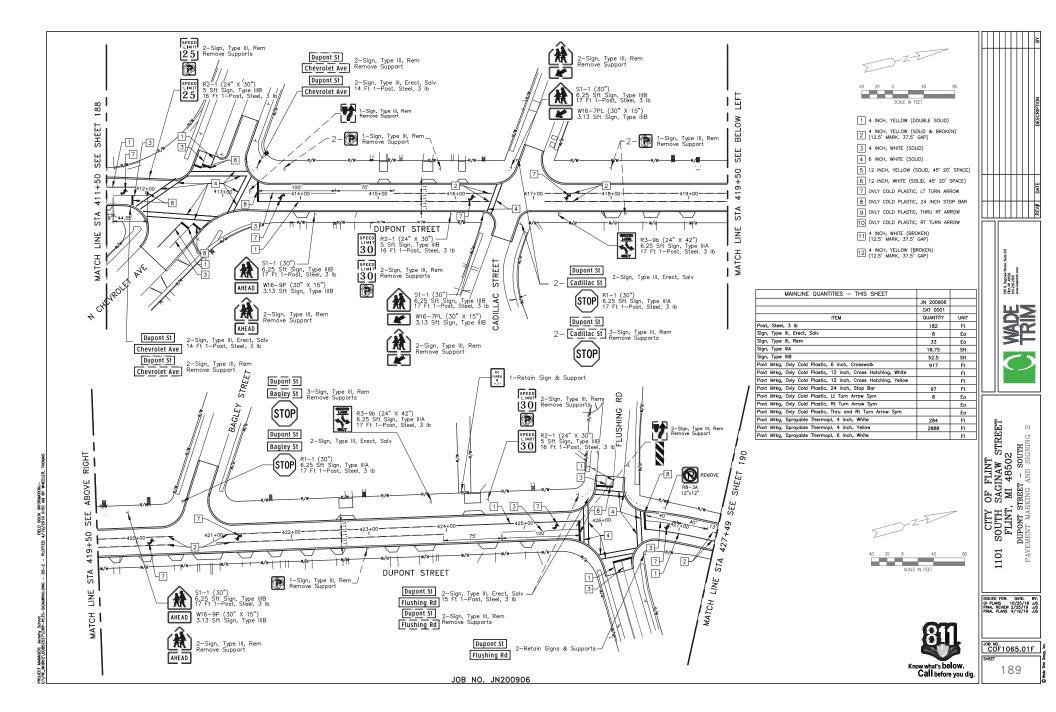
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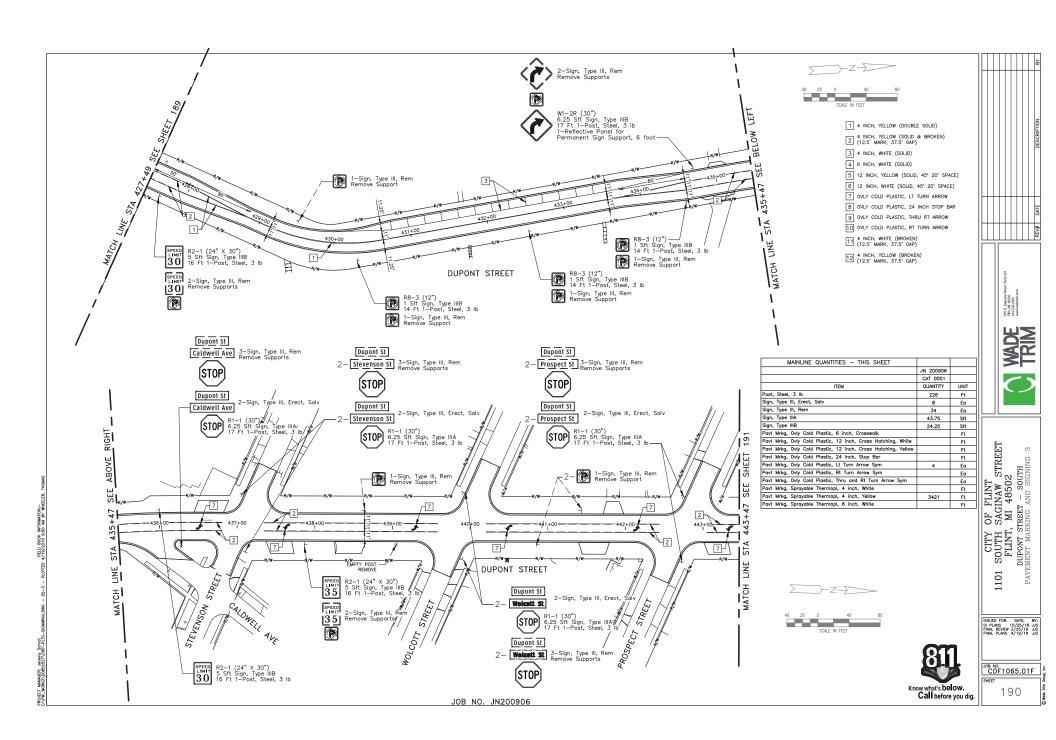


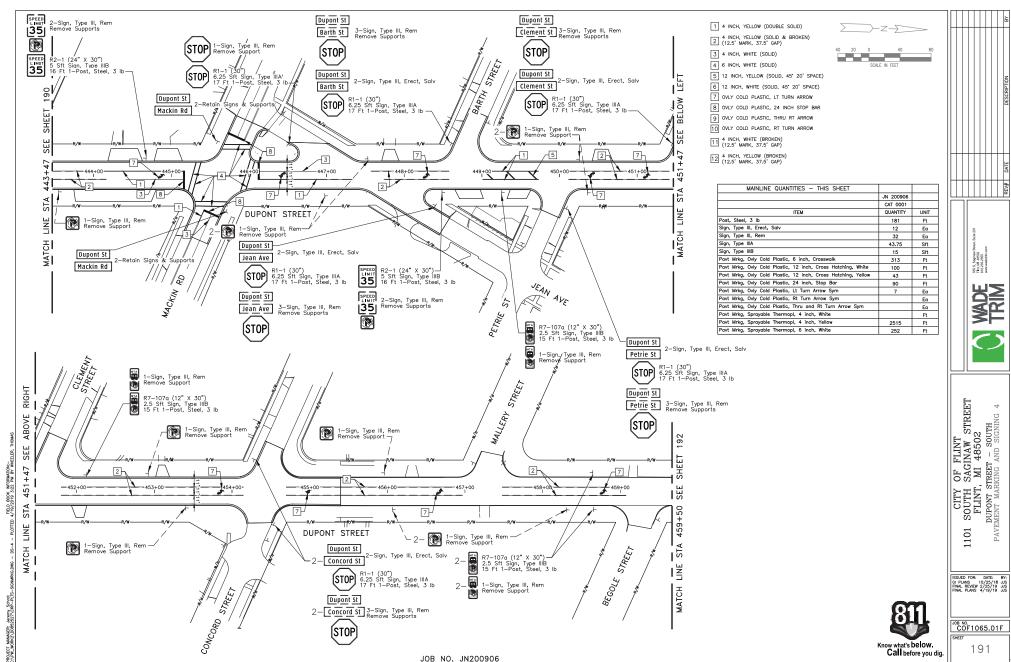
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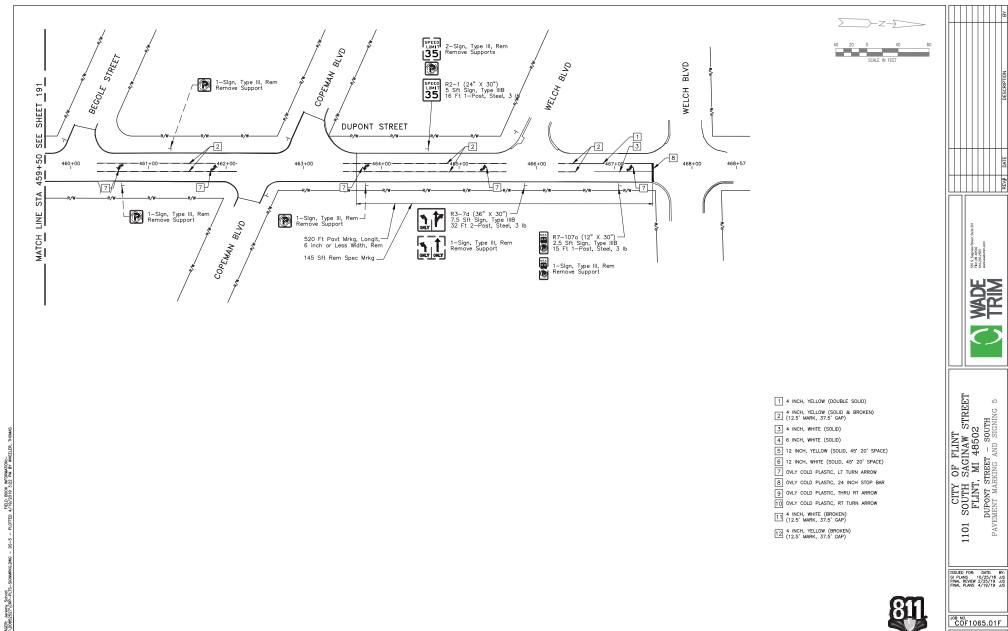
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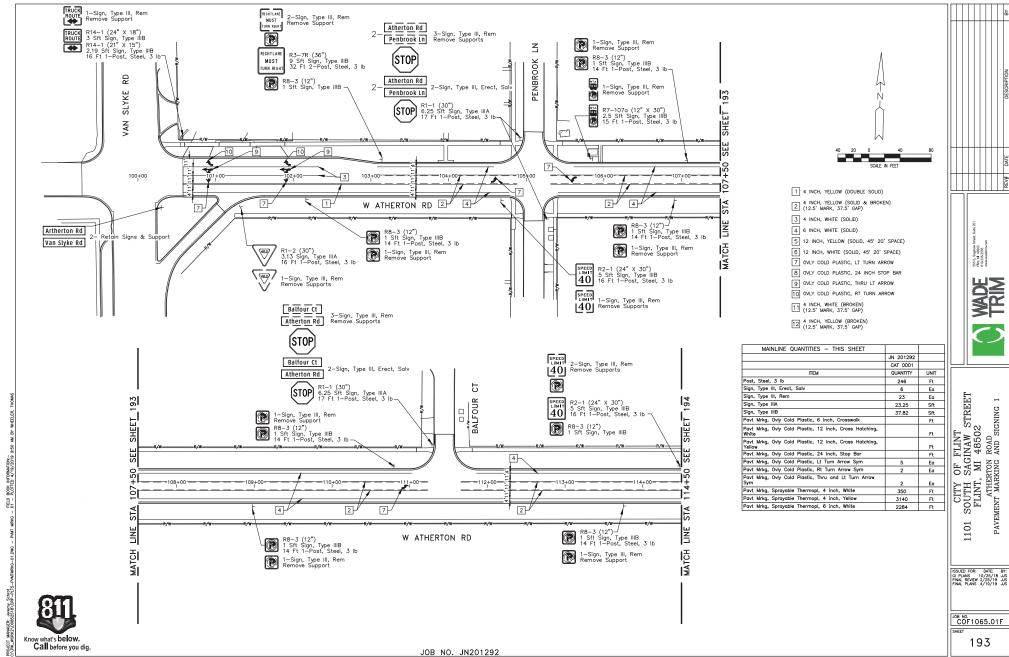


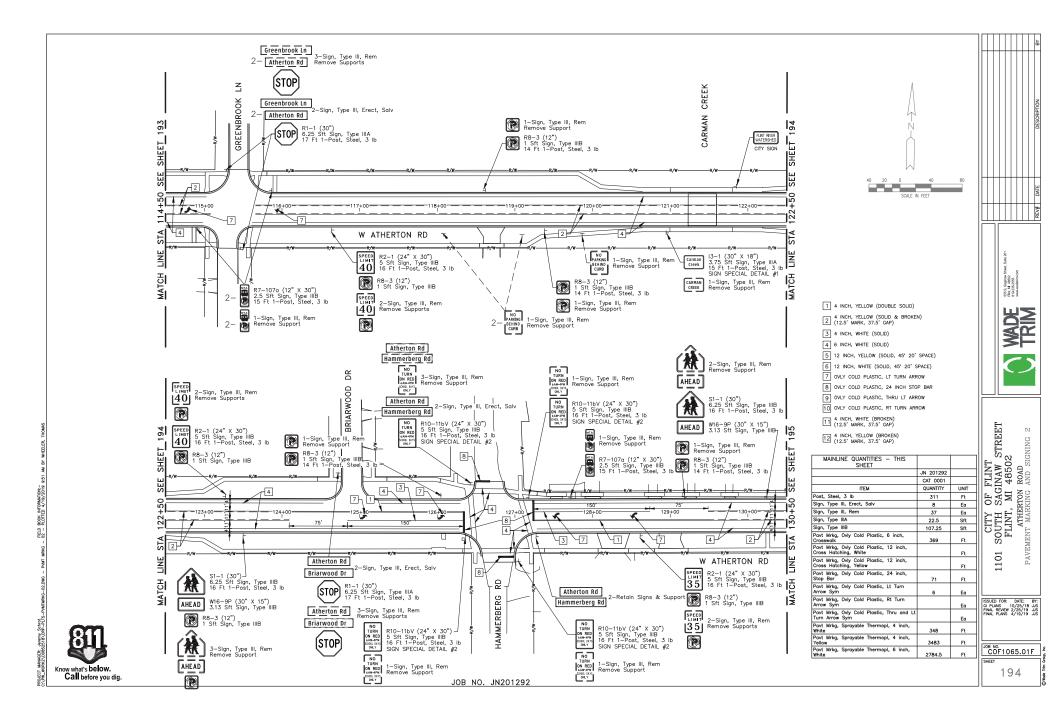


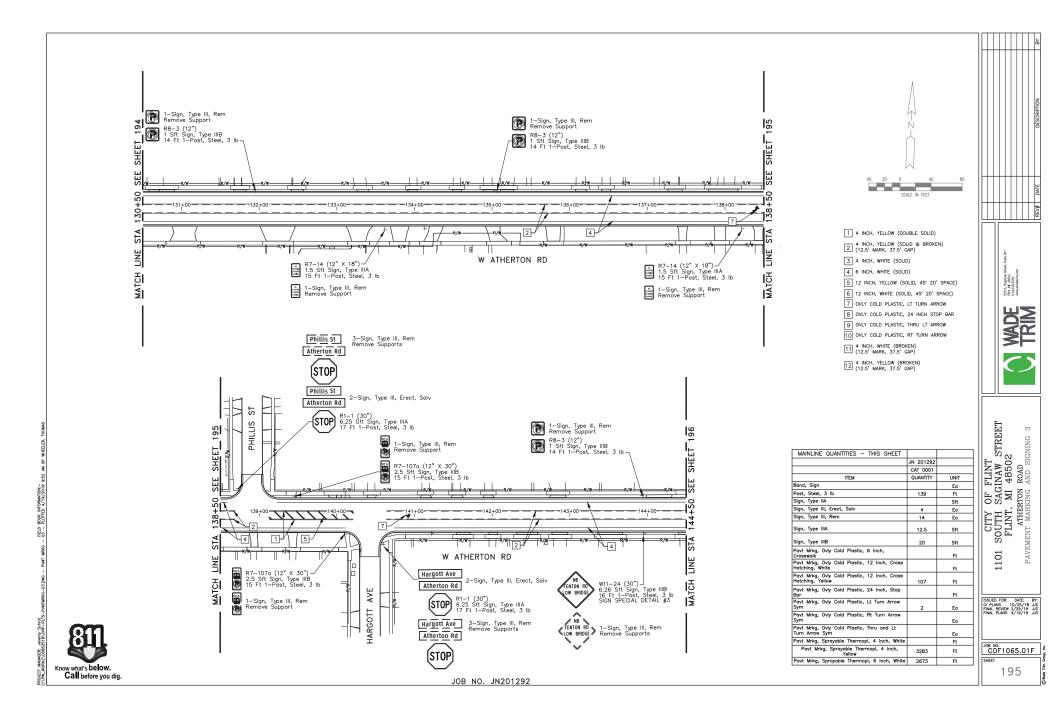


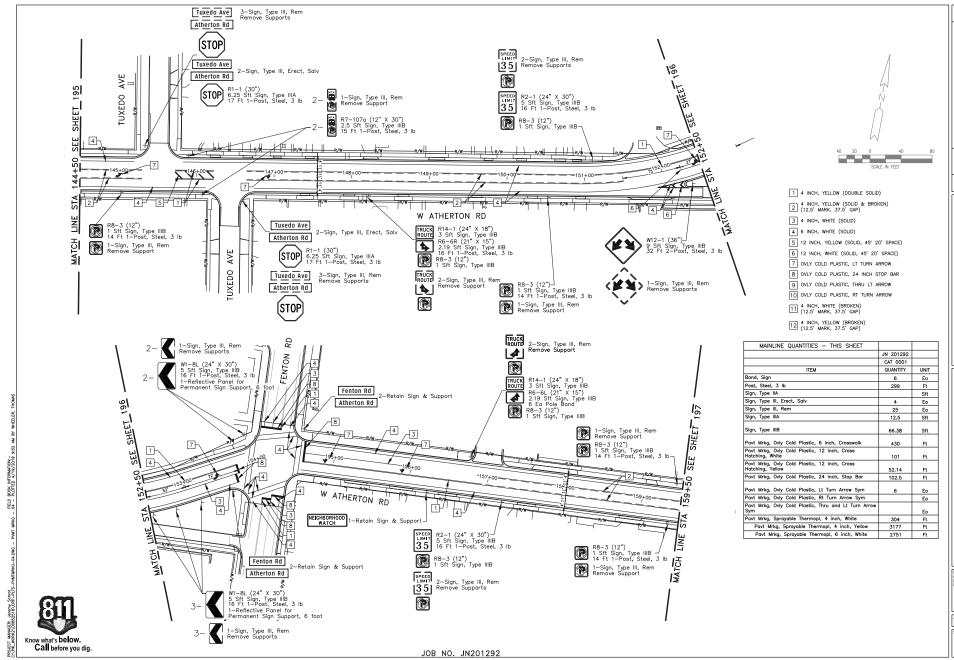
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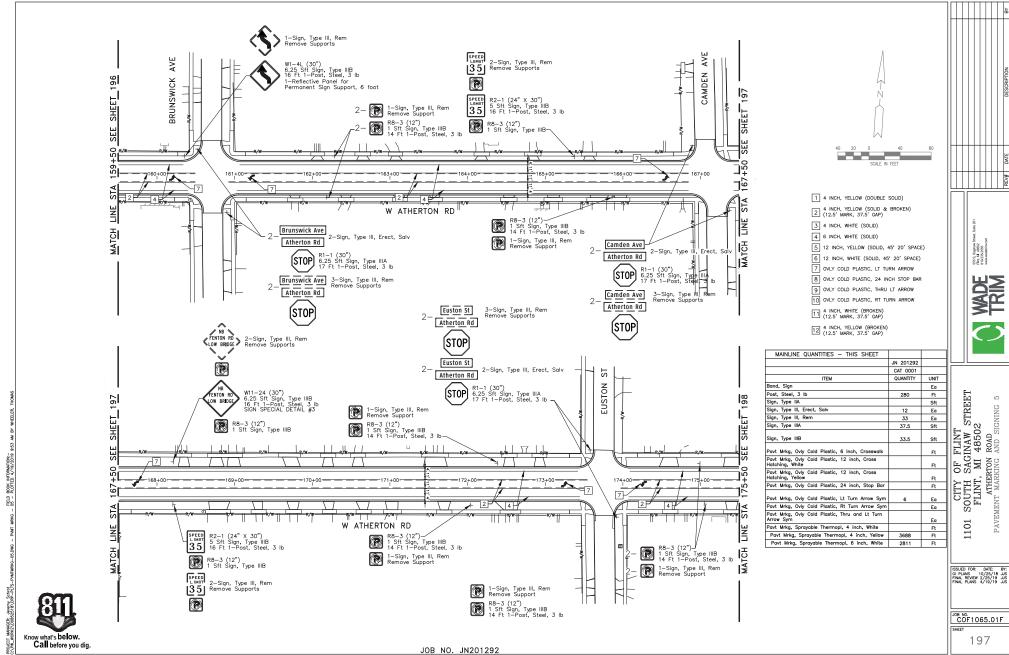


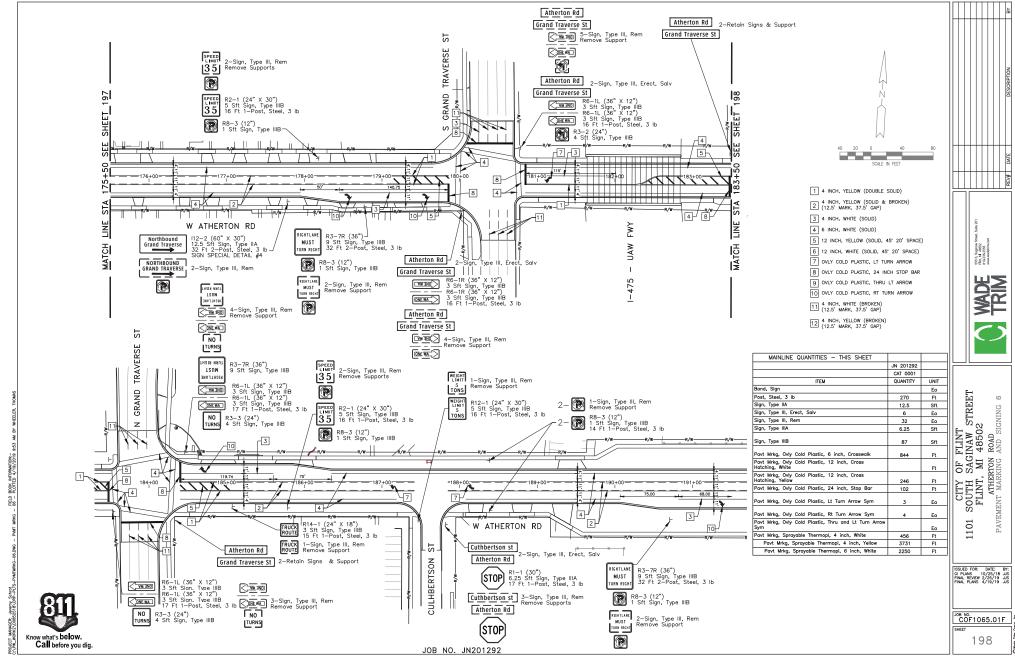
CITY OF FLINT
1101 SOUTH SAGINAW STREET
FLINT, MI 48502
ATHERTON ROAD
PAVEMENT MARKING AND SIGNING 4

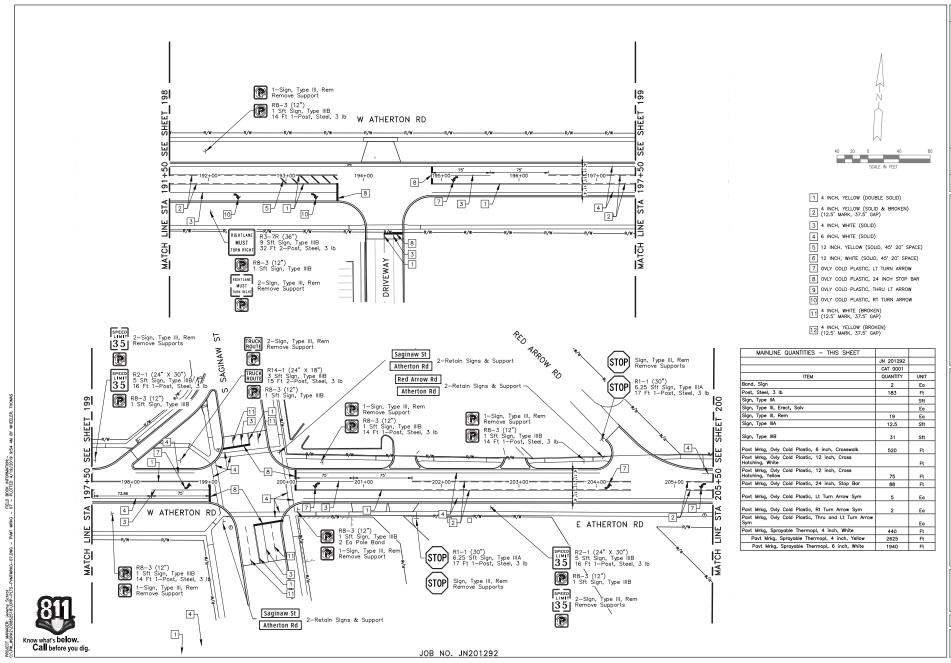
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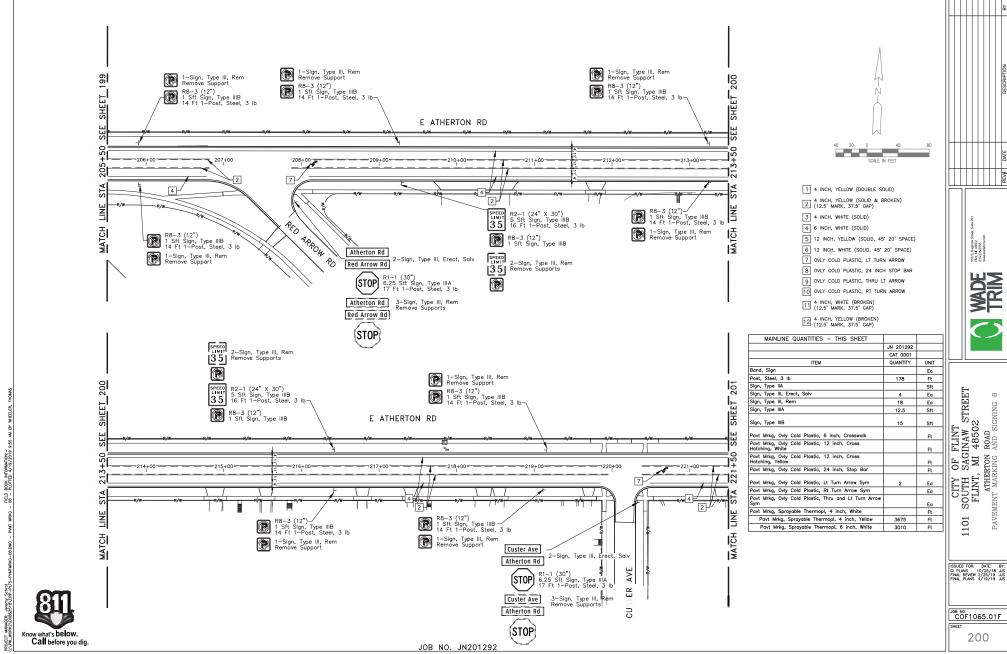


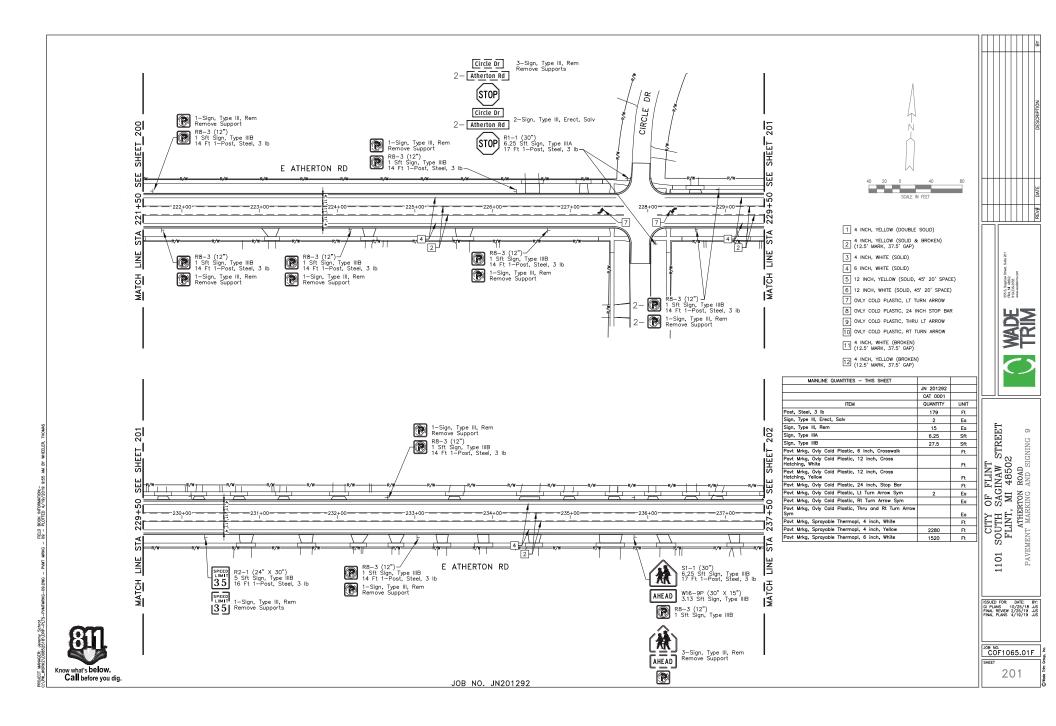
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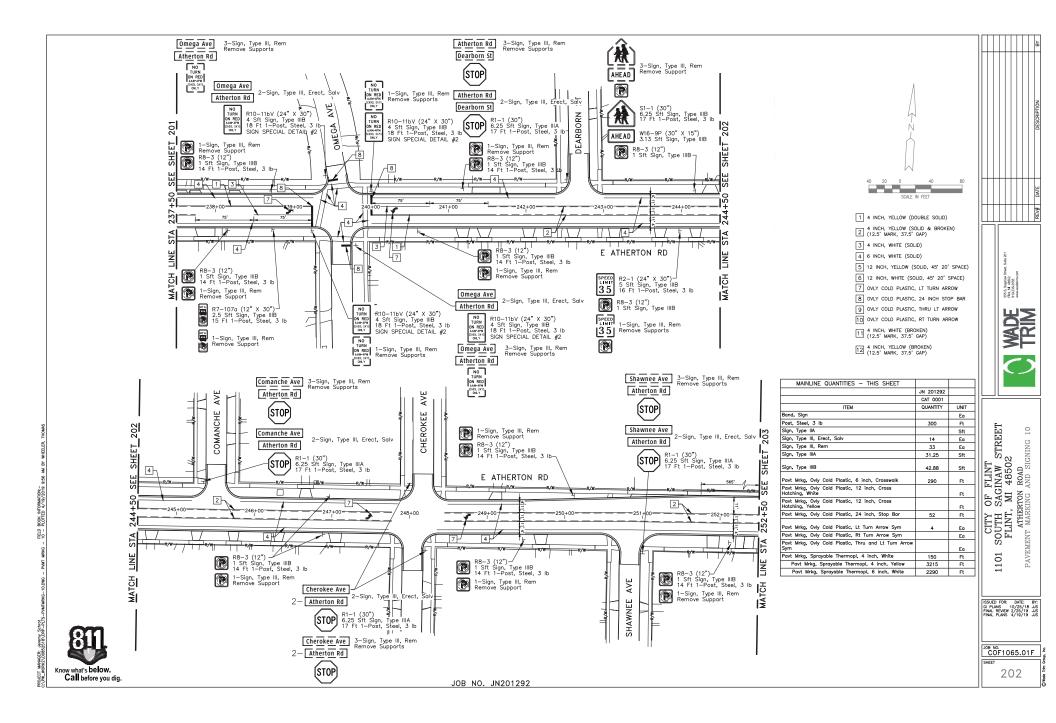
CITY OF FLINT
1101 SOUTH SAGINAW STREET
FLINT, MI 48502
ATHERTON ROAD
PAVEMENT MARKING AND SIGNING 7

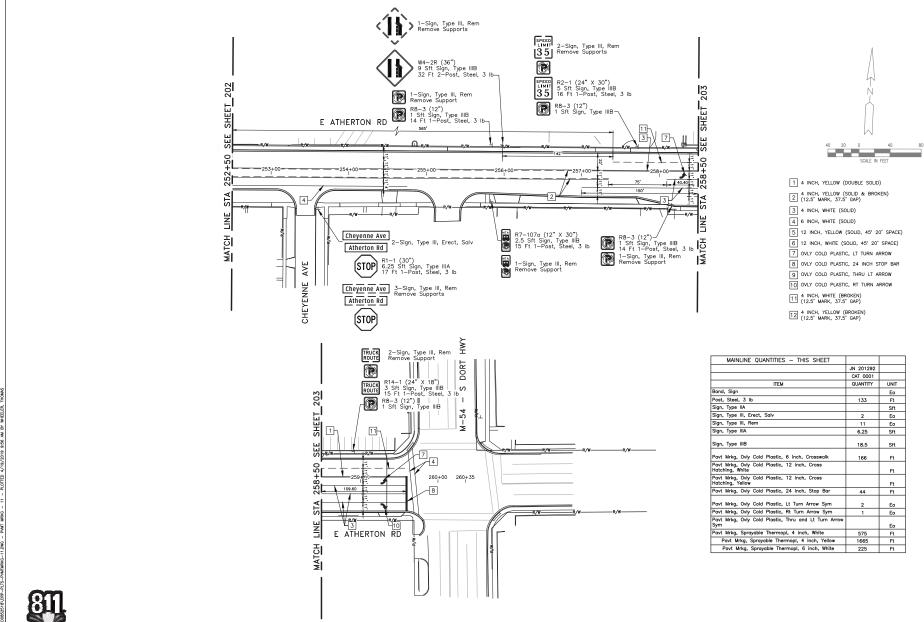
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