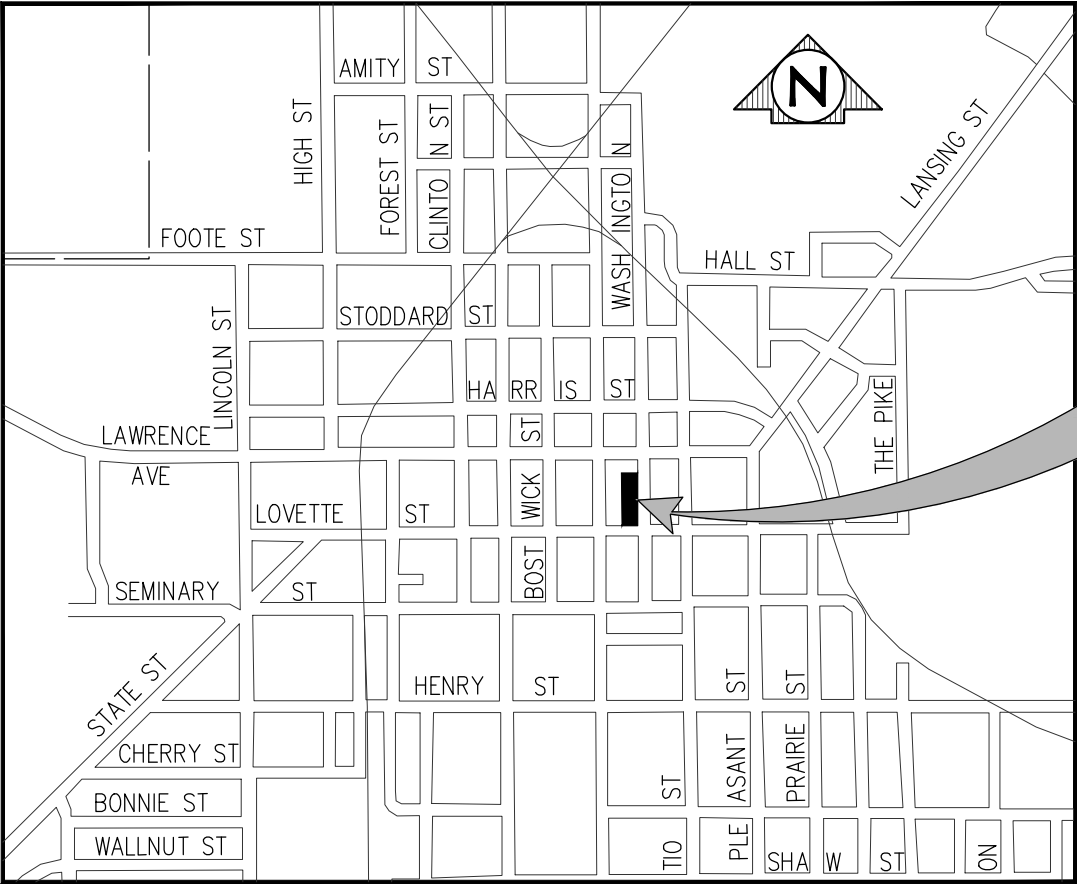


CONSTRUCTION PLANS FOR  
CITY OF CHARLOTTE  
PARKING LOTS 4 & 10 RECONSTRUCTION  
SECTION 13, CARMEL TOWNSHIP  
EATON COUNTY, MICHIGAN

PLAN SUBMITTAL LOG

AGENCY	UTILITY	SUBMITTAL DATE
1. CITY OF CHARLOTTE DEPARTMENT OF PUBLIC WORKS 111 EAST LAWRENCE AVENUE CHARLOTTE, MI 48813 MS. AMY GILSON (517) 543-8858	D.P.W.	-
2. CONSUMERS ENERGY 530 WEST WILLOW STREET LANSING, MI 48909 MR. TOM BARNHILL (517) 374-2031	GAS	-
3. CONSUMERS ENERGY 530 WEST WILLOW STREET LANSING, MI 48909 MR. DANIEL SMITH (517) 374-2259	ELECTRIC	-
4. WOW! CABLE 380 WRIGHT INDUSTRIAL PARKWAY POTTERVILLE, MI 48813 MR. JAMES SCOTT (517) 204-4910	CABLE	-
5. AT&T 337 ABBOT ROAD, ROOM 201 EAST LANSING, MI 48823 MS. HEATHER VALLEE-KNOBLAUCH (517) 337-3668	TELEPHONE	-



LOCATION MAP  
NOT TO SCALE

OWNER INFORMATION

CITY OF CHARLOTTE  
111 EAST LAWRENCE AVENUE  
CHARLOTTE, MI 48813

PROJECT DECSRIPTION

THIS PROJECT INCLUDES THE COMPLETE RECONSTRUCTION OF PARKING LOT NUMBERS FOUR AND TEN FOR THE CITY OF CHARLOTTE WHICH ARE LOCATED ON THE WEST SIDE OF S. WASHINGTON STREET AND THE NORTH SIDE OF LOVETT STREET.

MD.O.T. TRAFFIC AND SAFETY PLANS

THE FOLLOWING MICHIGAN DEPARTMENT OF TRANSPORTATION (M.D.O.T.) TRAFFIC AND SAFETY PLANS ARE REFERENCED IN THIS PROJECT. COPIES OF THE M.D.O.T. STANDARD PLANS ARE INCLUDED IN THE CONTRACT DOCUMENTS.

M0020a	TABLES FOR "L", "D" AND "B" VALUES
M0040a	TYPICAL ADVANCE SIGNING TREATMENT FOR LONG, INTERMEDIATE AND SHORT TERM STATIONARY WORK ZONE OPERATIONS OF LESS THAN TWO MILES IN LENGTH WHERE TRAFFIC CONTROL DEVICES MAY REMAIN AT END OF WORK DAY ON AN UNDIVIDED TWO-WAY ROADWAY
M0140a	TYPICAL TEMPORARY TRAFFIC CONTROL FOR A TWO-LANE TWO-LANE ROADWAY WHERE ONE LANE IS CLOSED UTILIZING TRAFFIC REGULATORS, NO SPEED REDUCTION
WZD-100-A	GROUND DRIVEN SIGN SUPPORTS FOR TEMPORARY SIGNS
WZD-125-E	TEMPORARY TRAFFIC CONTROL DEVICES

MD.O.T. STANDARD ROAD PLANS

THE FOLLOWING MICHIGAN DEPARTMENT OF TRANSPORTATION (M.D.O.T.) STANDARD ROAD PLANS ARE REFERENCED IN THIS PROJECT. COPIES OF THE M.D.O.T. STANDARD PLANS ARE INCLUDED IN THE CONTRACT DOCUMENTS.

R-7-F	COVER B
R-9-D	COVER D
R-12-E	COVER G
R-15-F	COVER K
R-18-F	COVER Q
R-29-I	DRIVEWAY OPENINGS & APPROACHES, AND CONCRETE SIDEWALKS
R-30-G	CONCRETE CURB AND CONCRETE CURB AND GUTTER
R-83-B	UTILITY TRENCHES
R-96-E	SOIL EROSION & SEDIMENTATION CONTROL MEASURES

SHEET INDEX

- 1 - COVER SHEET
- 2 - LEGEND SHEET
- 3 - NOTES AND QUANTITY SHEET
- 4 - DETAIL SHEET 1
- 5 - DETAIL SHEET 2
- 6 - EXISTING SURVEY SHEET
- 7 - REMOVAL SHEET
- 8 - SITE PLAN, LANDSCAPING & SURVEY CONTROL SHEET



Know what's below.  
Call before you dig.

REVISIONS

NO.	DATE	DESCRIPTION	BY
-	-	-	-

PLAN DATE:	FEBRUARY 2016
PROJECT MGR:	JBM
REVIEWER:	DAS
SCALE:	NOT TO SCALE

ROWE PROFESSIONAL  
SERVICES COMPANY



O: (810) 341-7500  
F: (810) 341-7573  
www.rowepsc.com  
The Rowe Building  
540 S. Saginaw St., Suite 200  
Flint, MI 48502

PREPARED FOR  
CITY OF CHARLOTTE  
PARKING LOTS 4 & 10 RECONSTRUCTION

COVER SHEET

REV:	
SHT#	1 OF 8
JOB No:	15C0139



STRUCTURE SYMBOLS

EXISTING CATCH BASIN IN CURB LINE

PROPOSED CATCH BASIN IN CURB LINE

EXISTING CATCH BASIN IN GREEN SPACE

PROPOSED CATCH BASIN IN GREEN SPACE

EXISTING STORM MANHOLE

PROPOSED STORM MANHOLE

PROPOSED CULVERT END SECTION

EXISTING HEADWALL

PROPOSED HEADWALL

EXISTING GATE VALVE AND BOX (SERVICE VALVE)

PROPOSED GATE VALVE AND BOX (SERVICE VALVE)

EXISTING WATER SHUTOFF (STOP BOX)

PROPOSED WATER SHUTOFF (STOP BOX)

EXISTING GATE VALVE AND WELL

PROPOSED GATE VALVE AND WELL

EXISTING SPRINKLER HEAD

EXISTING WATER WELL

EXISTING FIRE HYDRANT

PROPOSED FIRE HYDRANT

PROPOSED WATER MAIN FITTINGS

PROPOSED WATER MAIN CAP

EXISTING CLEAN OUT

EXISTING SANITARY SEWER MANHOLE

PROPOSED SANITARY SEWER MANHOLE

EXISTING MONITORING WELL

EXISTING TOPOGRAPHICAL SYMBOLS

SIGN

STREET SIGN

END OF PIPE

SWAMP OR WETLAND

DECIDUOUS TREE

CONIFEROUS TREE

TREE STUMP

MAIL BOX

SOIL BORING

ROCK

METAL POST

BUMPER BLOCK

UTILITY SYMBOLS

UTILITY POLE

GUY ANCHOR CABLE

LIGHT POLE / ORNAMENTAL LIGHT

POWER LIGHT POLE

TELEPHONE MANHOLE

UNDERGROUND GAS LINE MARKER

GAS RISER

GAS VENT

GAS VALVE

RAILROAD SIGNAL

METAL LIGHT POLE

OUTLET

CIRCUIT BREAKER PANEL

ELECTRICAL TRANSFORMER PAD

ELECTRICAL TRANSFORMER RISER

ELECTRIC METER

TELEPHONE PEDESTAL / RISER

TRAFFIC SIGNAL ON POLE

PHONE BOTH / PAY PHONE

SURVEY SYMBOLS

MONUMENT

BENCHMARK

TRAVERSE POINT

SECTION CORNER

FOUND SURVEY MONUMENTATION

MISCELLANEOUS SYMBOLS

EXISTING STORM STRUCTURE NUMBER

PROPOSED STORM STRUCTURE NUMBER

EXISTING SANITARY STRUCTURE NUMBER

PROPOSED SANITARY STRUCTURE NUMBER

FLOW DIRECTION

EXISTING RIP-RAP

PROPOSED RIP-RAP

CAUTION SYMBOLS

USED WITH UNDERGROUND GAS & ELECTRICAL LINES

USED WITH FIBER OPTICS LINES

PLAN VIEW LINE TYPES

EXISTING STORM SEWER

EXISTING CULVERT

PROPOSED STORM SEWER

EXISTING SANITARY SEWER

PROPOSED SANITARY SEWER

EXISTING WATER MAIN

PROPOSED WATER MAIN

SECTION LINE

EXISTING RIGHT OF WAY

PROPOSED RIGHT OF WAY

PROPOSED EASEMENT

EXISTING CENTER LINE DITCH

PROPOSED DITCH CENTERLINE

EXISTING CENTER LINE ROADWAY

PARCEL LINE / LOT LINE

EXISTING OVERHEAD UTILITIES

UNDERGROUND ELECTRICAL LINE

GAS LINE OR PETROLEUM PIPELINE

UNDERGROUND TELEPHONE LINE

UNDERGROUND CABLE TV LINE

UNDERGROUND FIBER OPTIC

PROJECT CONTROL LINE

TREE LINE

EXISTING FENCE

PROPOSED FENCE

EXISTING GUARD RAIL

PROPOSED SLOPE STAKE LINE

PROPOSED SILT FENCE

REMOVE UTILITY

TOPOGRAPHY

EXISTING CONTOURS MAJOR

EXISTING CONTOURS MINOR

PROPOSED CONTOUR MAJOR

PROPOSED CONTOURS MINOR

PARCEL INFORMATION

401-069

#5324

PARCEL/TAX IDENTIFICATION NUMBER

ADDRESS/BUSINESS NAME

PAVEMENT IDENTIFICATION

EXISTING CURB AND GUTTER

PROPOSED CURB AND GUTTER

EXISTING PAVEMENT

REMOVE PAVEMENT

REMOVE SIDEWALK

REMOVE GRAVEL

REMOVE CURB AND GUTTER

PROPOSED PAVEMENT

PROPOSED CONCRETE DRIVEWAY

PROPOSED SIDEWALK

PROPOSED SIDEWALK LEVEL LANDING

PROPOSED DETECTABLE WARNING

DECORATIVE STAMPED CONCRETE

PROPOSED CALLOUTS

TOPO CALLOUTS

PLAN VIEW

ADJ-K

ADJ

ADJ-B/O

REC

REL

REL-B/O

REM

R&R

SALV

SAVE

ABN

ADJ-K

ADJ

ADJ-B/O

REC

REL

REL-B/O

R

R&R

SALV

S

A

B

SR-R

ADJUST STRUCTURE W/ NEW CASTING

ADJUST STRUCTURE

ADJUST STRUCTURE BY OTHERS

RECONSTRUCT STRUCTURE

RELOCATE

RELOCATE BY OTHERS

REMOVE

REMOVE AND REPLACE

SALVAGE

SAVE

ABANDON

BULKHEAD

SIDEWALK RAMP TYPE

6

SOIL EROSION CONTROL MEASURE  
SEE MDOT STANDARD PLAN R-96

REVISIONS

NO.

DATE

DESCRIPTION

BY

-

-

-

-

811

Know what's below.  
Call before you dig.

ROWE PROFESSIONAL SERVICES COMPANY

PREPARED FOR

CITY OF CHARLOTTE

PARKING LOTS 4 & 10 RECONSTRUCTION

LEGEND SHEET

PLAN DATE: FEBRUARY 2016

PROJECT MGR: JBM

REVIEWER: DAS

SCALE: NOT TO SCALE

O: (810) 341-7500

F: (810) 341-7573

www.rowepsc.com

The Rowe Building  
540 S. Saginaw St., Suite 200  
Flint, MI 48502

REV:

SHT# 2 OF 8

JOB No: 15C0139

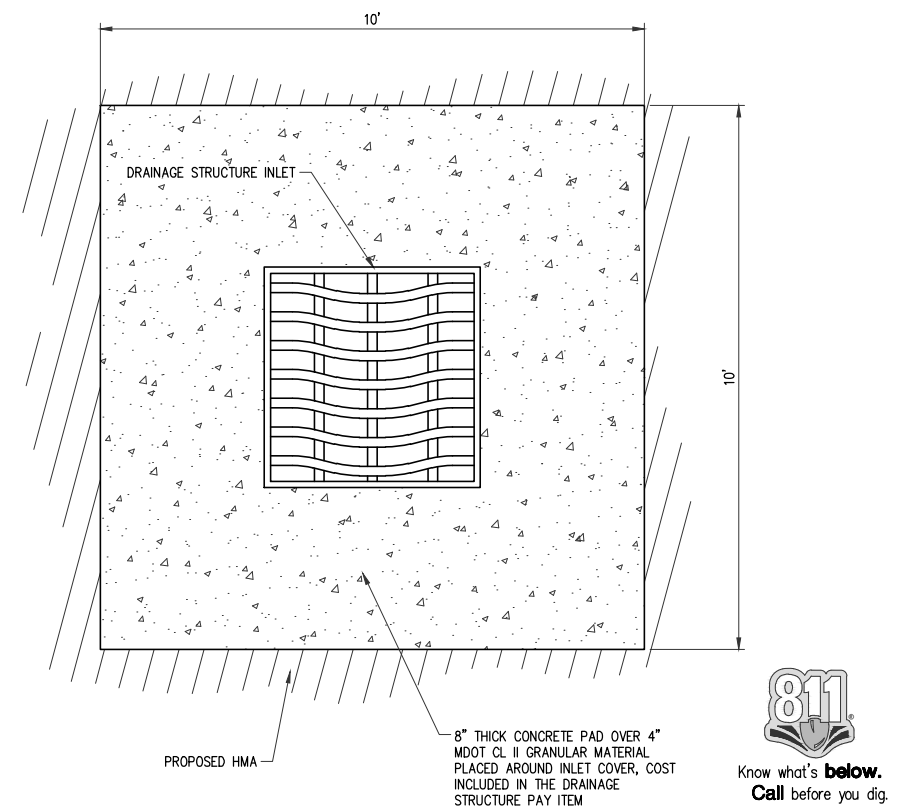
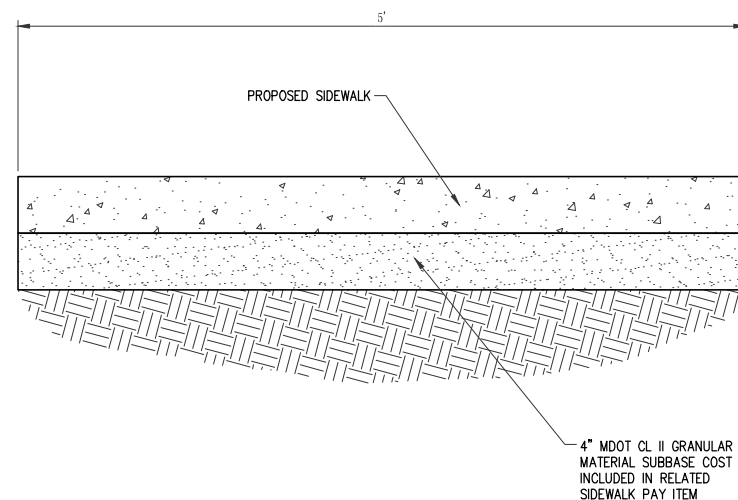
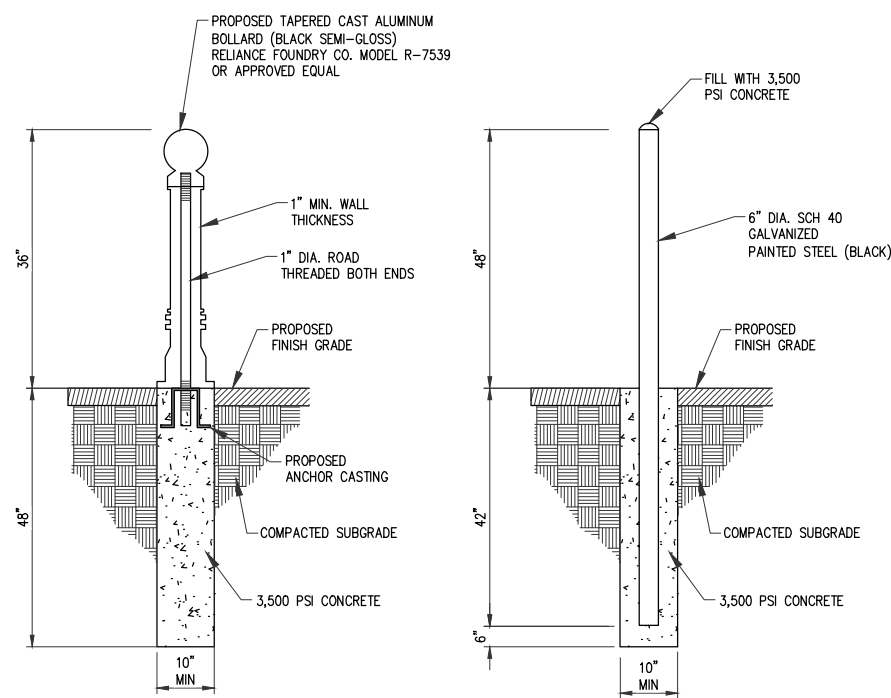
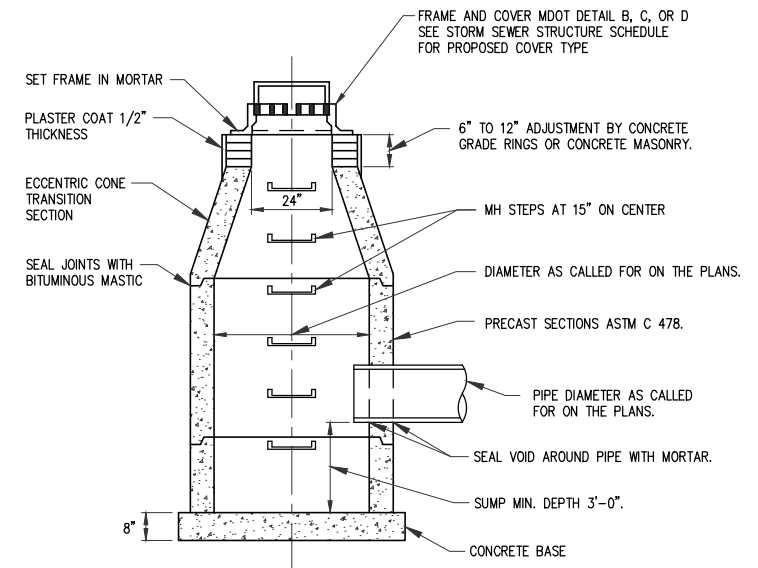
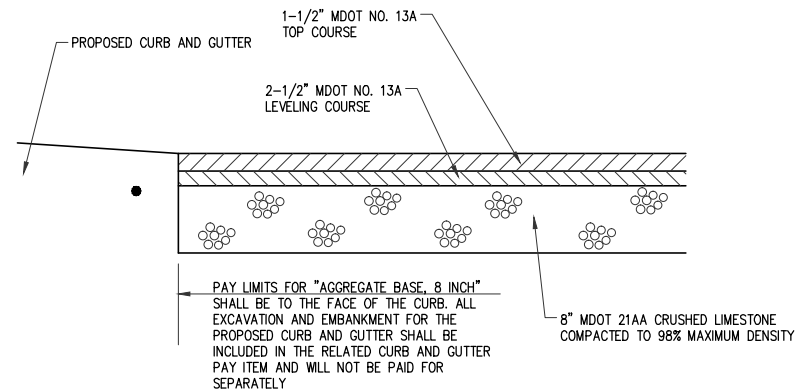
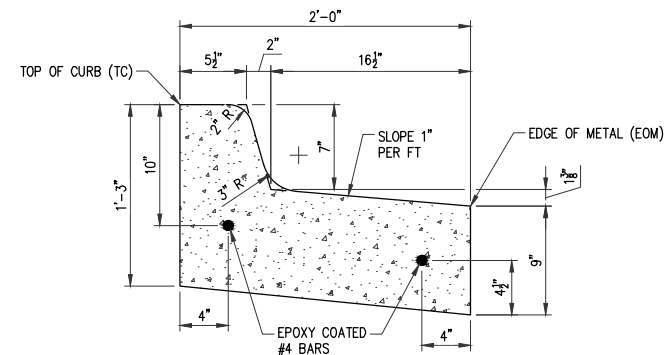
PLotted: 2/24/2016 2:52 PM

R:\Projects\1500139\leg Construction Drawings\SH-1500139-LEG.dwg



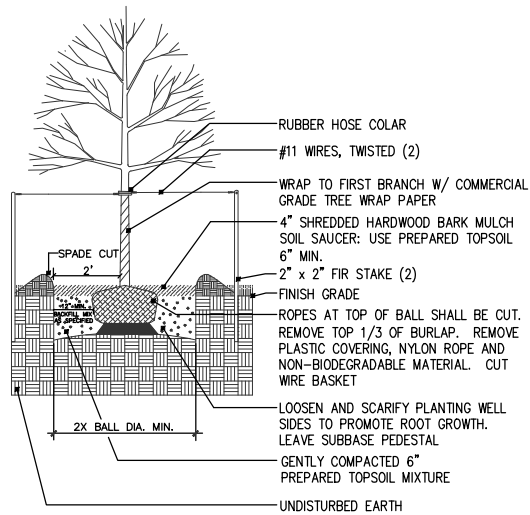




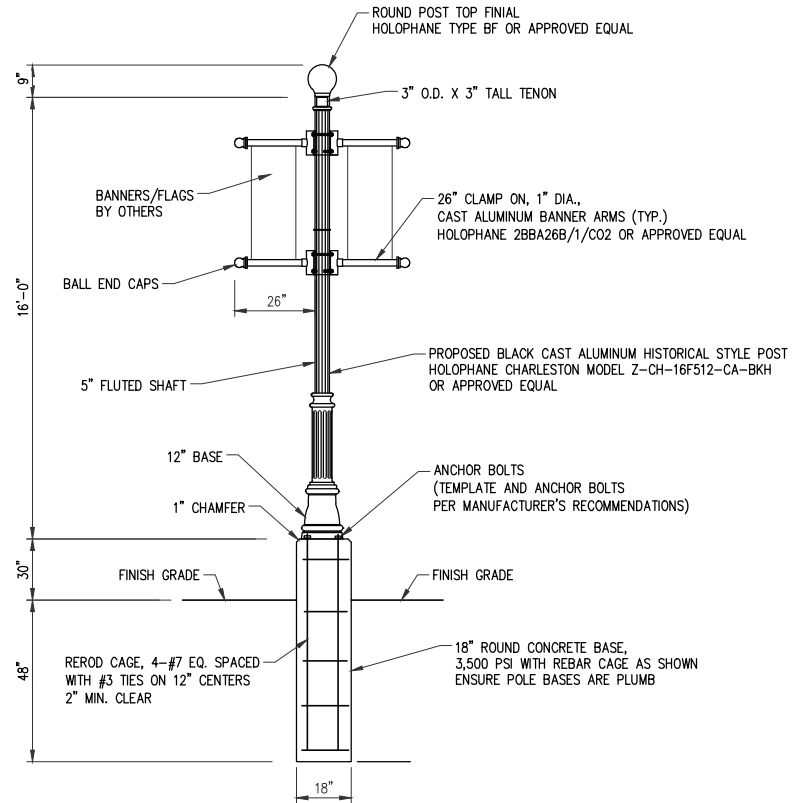


REVISIONS			
NO.	DATE	DESCRIPTION	E





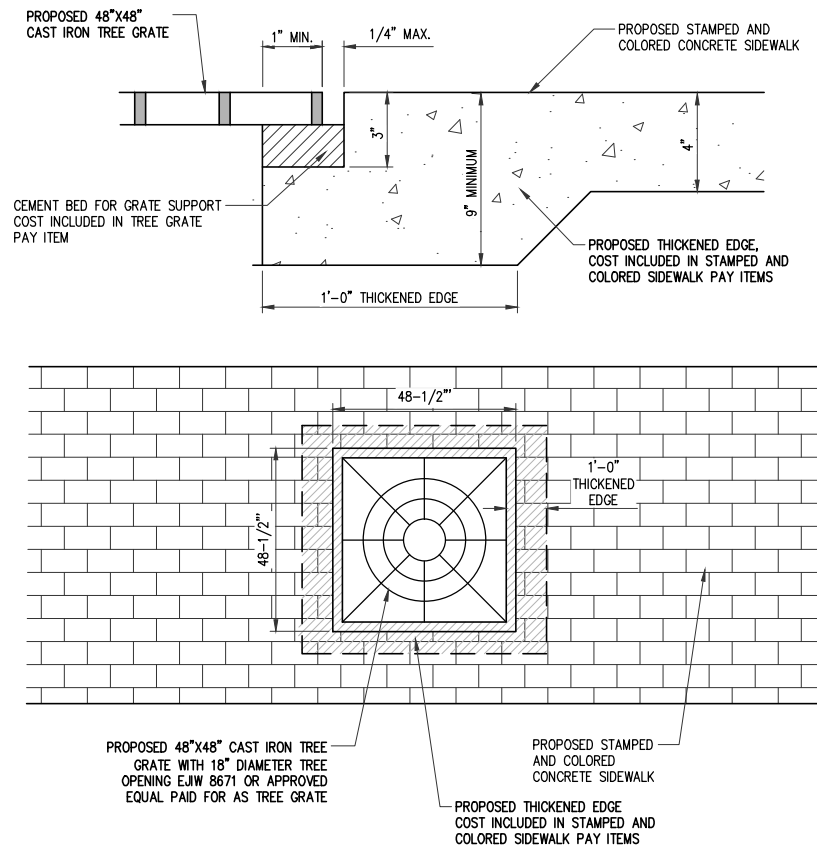
**TYPICAL TREE PLANTING DETAIL**  
NOT TO SCALE



NOTES:  
PAYMENT FOR "FLAGPOLE" SHALL INCLUDE ALL WORK AND MATERIALS REQUIRED TO FURNISH AND INSTALL THE PROPOSED FLAGPOLES INCLUDING THE CONCRETE FOOTING.

THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE CITY OF CHARLOTTE FOR REVIEW AND APPROVAL PRIOR TO ORDERING THE FLAGPOLE

**FLAGPOLE DETAIL**  
NOT TO SCALE



**PROPOSED TREE GRATE DETAILS**  
NOT TO SCALE



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

REVISIONS			
NO.	DATE	DESCRIPTION	BY
-	-	-	-



The Rowe Building  
540 S. Saginaw St., Suite 200  
Flint, MI 48502

**ROWE PROFESSIONAL  
SERVICES COMPANY**

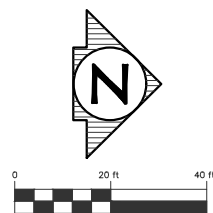
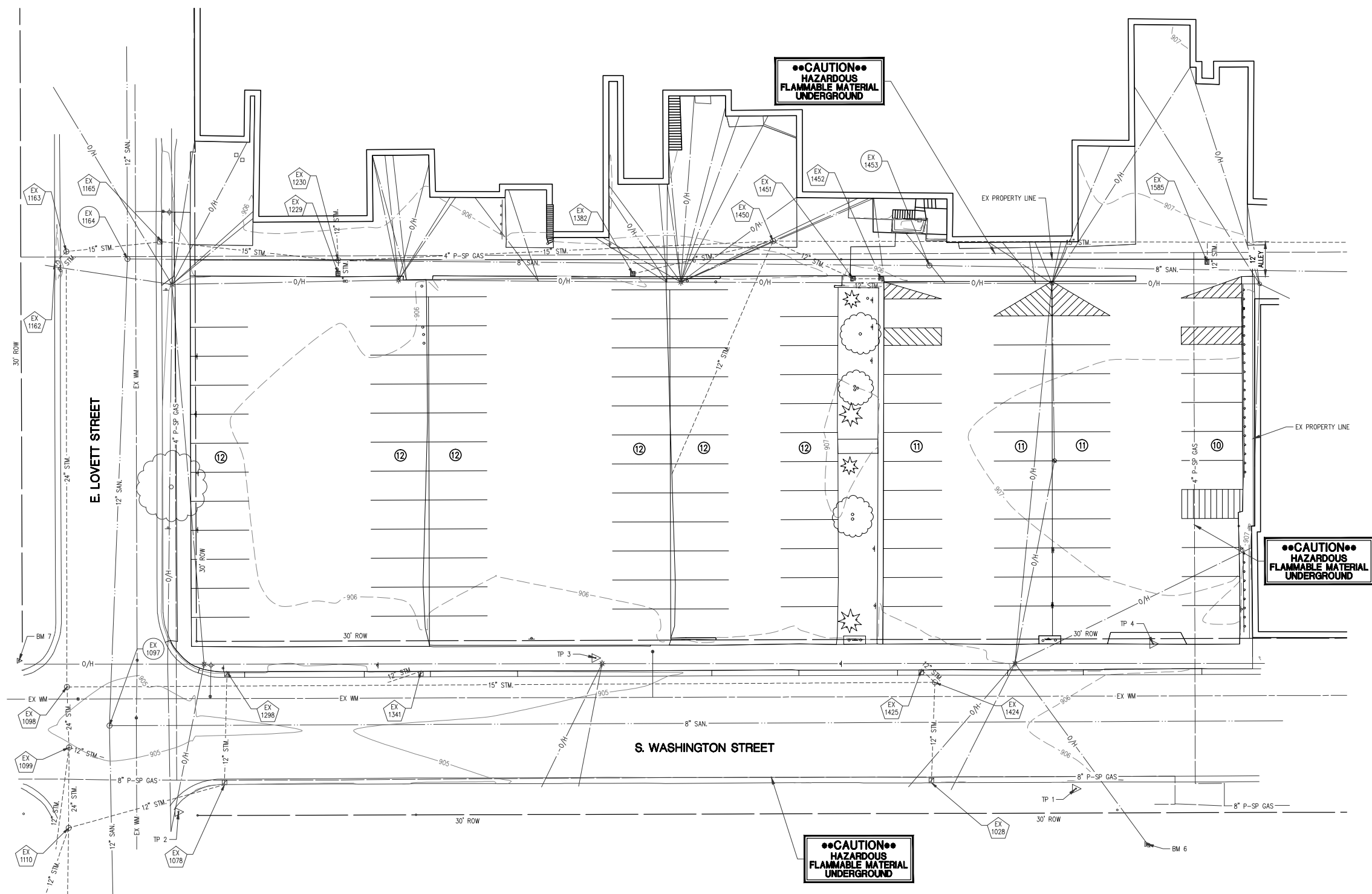
O: (810) 341-7500  
F: (810) 341-7573  
www.rowepsc.com

PLAN DATE: FEBRUARY 2016  
PROJECT MGR: JBM  
REVIEWER: DAS  
SCALE: NOT TO SCALE

PREPARED FOR  
**CITY OF CHARLOTTE**  
**PARKING LOTS 4 & 10 RECONSTRUCTION**  
  
DETAIL SHEET 2

REV:  
  
SHT# 5 OF 8  
JOB No: 15C0139





EXISTING PARKING SPACE SUMMARY  
HANDICAP = 2 SPACES  
REGULAR = 89 SPACES  
TOTAL = 91 SPACES  
TOTAL WITH TWO ROWS OF REGULAR  
PARKING IN GRAVEL LOT = 115 SPACES

EXISTING STORM SEWER STRUCTURE SCHEDULE					
STRUCTURE NUMBER	COVER TYPE	RIM ELEVATION	INVERT	NORTHING	EASTING
1028	K	T/C=905.54	12" 902.54 W	387791.5210	12997317.4830
1078	K	T/C=904.49	12" 901.69 W 12" 901.44 S	387547.9820	12997318.1200
1098	B	RIM=904.74	15" 900.59 N 24" 899.69 E 24" 899.69 W	387493.7090	12997284.4530
1099	B	RIM=904.76	24" 898.91 E 24" 899.36 W 12" 900.66 N 12" 901.56 E	387494.4210	12997305.3170
1110	B	RIM=904.64	12" 900.94 N 24" 899.19 W 24" 899.19 E 12" 900.84 E	387494.2920	12997333.0470
1162	K	T/C=903.89	8" 901.29 NW	387489.5070	12997138.4060
1163	B	RIM=904.00	24" 899.90 E 8" 901.30 SE 15" 899.75 N	387493.4620	12997134.3920
1165	K	T/C=904.08	15" 900.18 S 15" 900.23 N	387526.4460	12997131.0090
1229	D	RIM=905.35	8" 903.85 W	387587.1650	12997141.9410
1230	B	RIM=905.63	15" 900.84 S 12" 901.58 W 15" 900.84 N 8" 903.83 E	387587.1830	12997137.5090
1298	K	T/C=904.94	12" 901.74 E	387548.8240	12997279.2080
1341	K	T/C=904.62	12" 901.32 S	387615.6450	12997279.0720
1382	G	RIM=905.32	6" 903.82 N	387688.6670	12997142.0710
1424	B	RIM=905.50	12" 901.80 E 12" 901.50 SW 15" 901.40 S	387792.6940	12997282.8800
1425	K	T/C=905.34	12" 901.54 NE	387788.0710	12997278.5360
1450	B	RIM=906.26	6" 902.59 S 12" 901.56 NE 12" 902.61 SE 15" 901.16 N 15" 901.06 S	387736.9840	12997130.8240
1451	K	T/C=905.92	12" 902.02 SW 12" 902.22 N	387764.5420	12997143.7320
1452	K	T/C=905.72	12" 902.52 S	387774.1770	12997143.7550
1585	D	RIM=906.16	12" 903.51 W	387886.5750	12997138.0330

EXISTING SANITARY SEWER STRUCTURE SCHEDULE					
STRUCTURE NUMBER	COVER TYPE	RIM ELEVATION	INVERT	NORTHING	EASTING
1097	Q	RIM=905.14	8" 895.49 N 12" 893.44 E 12" 893.39 W	387508.3410	12997297.8390
1164	Q	RIM=904.58	12" 892.63 E 8" 895.18 N 12" 892.58 W	387514.5430	12997136.9450
1453	Q	RIM=906.39	8" 896.34 S 8" 896.39 N	387790.7910	12997139.2180



REVISIONS			
NO.	DATE	DESCRIPTION	BY
-	-	-	-

PLAN DATE: FEBRUARY 2016  
PROJECT MGR: JBM  
REVIEWER: DAS  
SCALE: 1" = 20'

ROWE PROFESSIONAL SERVICES COMPANY



The Rowe Building  
540 S. Saginaw St., Suite 200  
Flint, MI 48502

PREPARED FOR  
**CITY OF CHARLOTTE**  
**PARKING LOTS 4 & 10 RECONSTRUCTION**

EXISTING SURVEY SHEET

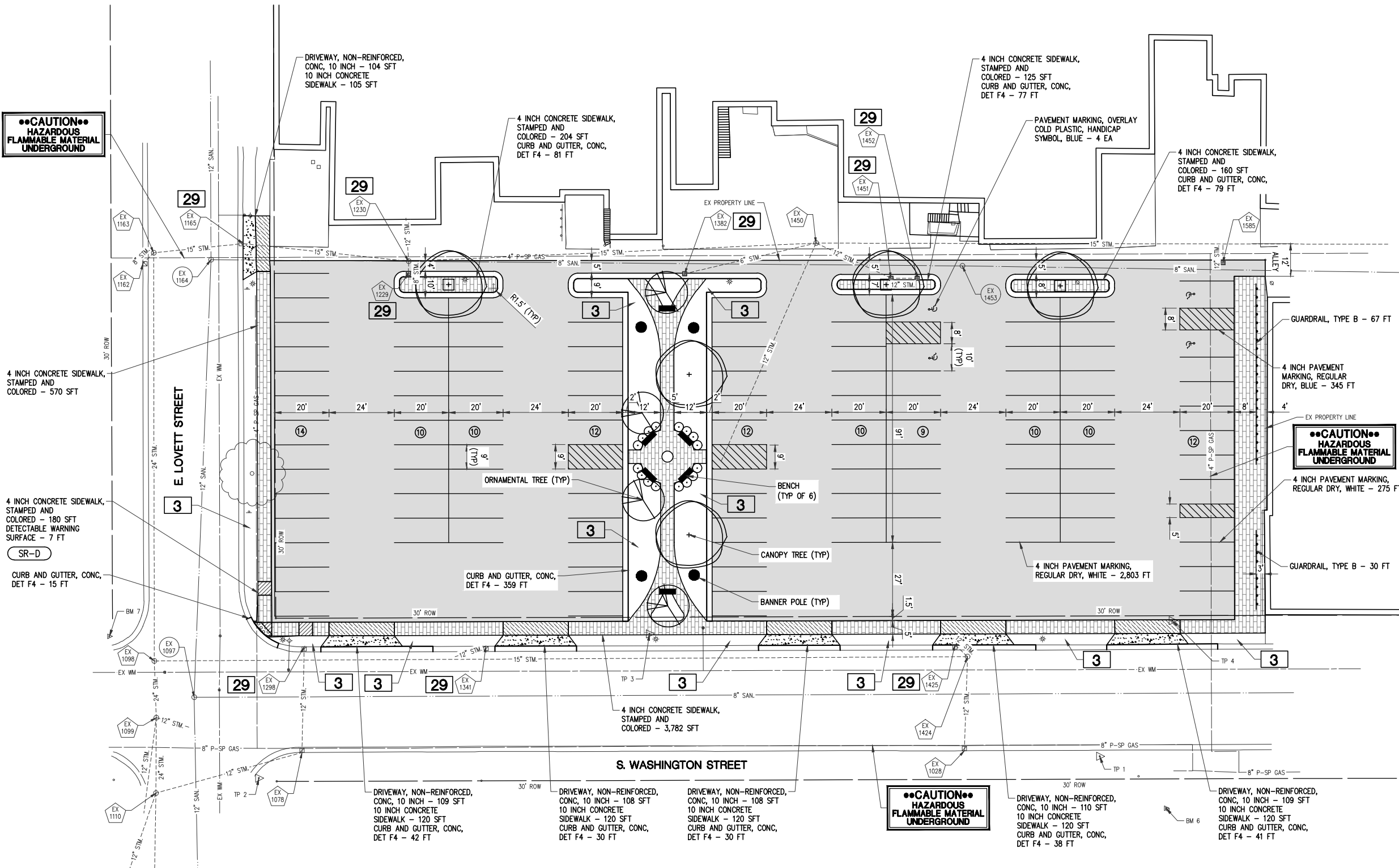
REV: SHT# 6 OF 8  
JOB No: 15C0139







••CAUTION••  
HAZARDOUS  
FLAMMABLE MATERIAL  
UNDERGROUND



PROPOSED PARKING SPACE SUMMARY  
HANDICAP = 4 SPACES  
REGULAR = 105 SPACES  
TOTAL = 109 SPACES

NOTES:

ADA SIDEWALK RAMP  
THE CONTRACTOR SHALL GRADE ALL SIDEWALK AND SIDEWALK RAMP TO MEET CURRENT ADA STANDARDS. COST TO BE INCLUDED IN THE SIDEWALK PAY ITEMS. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT ALL SIDEWALK AND SIDEWALK RAMP MEET CURRENT ADA STANDARDS BEFORE POURING ANY CONCRETE. IF ANY PROPOSED SIDEWALK OR SIDEWALK RAMP ARE DETERMINED BY THE ENGINEER NOT TO MEET ADA STANDARDS THE CONTRACTOR SHALL BE REQUIRED TO REMOVE AND REPLACE THE SIDEWALK AT NO ADDITIONAL COST TO THE OWNER.

SOIL EROSION

THE SOIL EROSION CONTROLS WILL BE MAINTAINED WEEKLY AND AFTER EVERY STORM EVENT BY THE CONTRACTOR.

PAVEMENT MARKING NOTES:

- PAVEMENT MARKING LOCATIONS MUST MEET THE MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION SECTION 811 AND BE APPROVED BY THE CITY OF CHARLOTTE PRIOR TO INSTALLATION.
- THE TRAFFIC CONTROL DEVICES SHALL MEET THE REQUIREMENTS FOR TRAFFIC SIGNS AS SPECIFIED IN SECTION 919 OF THE MDOT 2012 STANDARD SPECIFICATIONS FOR CONSTRUCTION, THE 2011 MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND SHALL BE VISUALLY INSPECTED AND APPROVED BY CITY OF CHARLOTTE, IN THE FIELD PRIOR TO ERECTION.
- PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE 2011 MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- MEASUREMENT AND PAYMENT FOR PAVEMENT MARKING WILL BE BASED ON THE PAY ITEMS DEFINED IN THE SPECIAL PROVISIONS AND IN THE PROPOSAL.
- PAVEMENT MARKING SHALL BE REGULAR DRY FOR LINE MARKINGS AND OVERLAY COLD PLASTIC FOR ALL SYMBOLS.
- PAVEMENT MARKINGS SHALL BE COMPLETED PRIOR TO FINAL ACCEPTANCE OF THE PROJECT.
- PAVEMENT MARKING REFERENCE POINTS WILL BE PROVIDED BY THE ENGINEER.
- EXISTING SIGNS SHALL BE SALVAGED AND REPLACED FOR THE CITY OF CHARLOTTE.
- FINAL PROPOSED SIGN POSTS LOCATIONS SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.



Know what's below.  
Call before you dig.

BENCHMARK DATA TABLE

NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
BM 6	387866	12997339	907.49	SET RAILROAD SPIKE IN WEST FACE OF POWER POLE, EAST SIDE OF WASHINGTON STREET BETWEEN CHURCH AND CITY #5 PARKING LOTS
BM 7	387477	12997275	905.81	SET SPIKE IN NORTHWEST FACE OF LIGHT POLE AT SOUTHWEST QUADRANT OF LOVETT STREET AND WASHINGTON STREET

TRAVERSE POINT DATA TABLE

NUMBER	NORTHING	EASTING	DESCRIPTION
TP 1	387841.245	12997319.533	SET IRON WITH ROWE TRAVERSE CAP, 2'± EAST OF BACK OF CURB OF WASHINGTON STREET, 79'± SOUTHEAST OF CORNER OF GUARDRAIL ON SOUTH SIDE OF SIDESTREETS DELI
TP 2	387532.073	12997327.571	SET PK NAIL IN NORTHEAST QUADRANT OF LOVETT STREET AND WASHINGTON STREET, 1.6'± NORTHEAST OF BACK OF CURB, 18.5'± SOUTHEAST OF CURB INLET
TP 3	387675.736	12997274.502	SET PK NAIL 3'± SOUTHWEST OF LIGHT POLE, 23'± NORTHEAST OF CITY PARKING LOT #10 SIGN
TP 4	387867.882	12997269.626	SET PK NAIL IN WEST EDGE OF SIDEWALK, 31.5'± SOUTHEAST OF CORNER OF GUARDRAIL ON SOUTH SIDE OF SIDESTREETS DELI
TP 5	387246.084	12997278.067	SET IRON WITH ROWE TRAVERSE CAP, 262'± SOUTH OF THE CENTERLINE OF LOVETT STREET, 21'± WEST OF THE CENTERLINE OF WASHINGTON STREET

REVISIONS				REV:
NO.	DATE	DESCRIPTION	BY	
-	-	-	-	

ROWE PROFESSIONAL  
SERVICES COMPANY



PREPARED FOR  
CITY OF CHARLOTTE  
PARKING LOTS 4 & 10 RECONSTRUCTION

SITE PLAN, LANDSCAPING & SURVEY CONTROL SHEET  
SHT# 8 OF 8  
JOB No: 15C0139

PLAN DATE: FEBRUARY 2016  
PROJECT MGR: JBM  
REVIEWER: DAS  
SCALE: 1" = 20'

The Rowe Building  
540 S. Saginaw St., Suite 200  
Flint, MI 48502

O: (810) 341-7500  
F: (810) 341-7573  
www.rowepsc.com