Marshall Township Fire Station No. 1 13550 15 Mile Road Marshall, MI 49068

UTILITY COMPANIES

TELEPHONE AMERITECH

54 NORTH MILL STREET PONTIAC, MICHIGAN PH: 248.456-0809

MARSHALL INTERNET DEPARTMENT 323 WEST MICHIGAN AVE, MARSHALL, MI 49068

PH: 269.781.5163

ELECTRICAL MARSHALL PUBLIC POWER 323 WEST MICHIGAN AVE, MARSHALL, MI 49068 PH: 269.781.5163

CONSUMERS ENERGY COMPANY 1030 FEATHERSTONE RD. PONTIAC, MI 48342 PH: 858.4448

WARNING!

INDERGROUND UTILITIES AS SHOWN ON THIS DRAWI PRESSED OR IMPLIED AS TO THE COMPLETENESS OF ACCURACY THEREOF. THE CONTRACTOR SHALL BE CCURACT THEREOF. THE CONTRACTOR SHALL BE CLUSIVELY RESPONSIBLE FOR DETERMINING THE EXAC TILITY LOCATIONS AND ELEVATIONS PRIOR TO THE



Orientation

MARSHAL TOWNSHIP FIRE STATION NO. 1

Project Location 13550 15 MILE RD MARSHALL, MI 49068

Engineer's Seal

FOR CONSTRUCTION

Da	te		
		12/15/2023	}
SM	E Project No.		
		094551.00)
Pro	ject Manager:		
	Jeet managen.		
		J. GRAVES	
Do	signer:		
De	signer.		
		A. REED	
		A. NLLD	
C A	DD.		

J. RIOS

A. REED

J. GRAVES

COVER SHEET

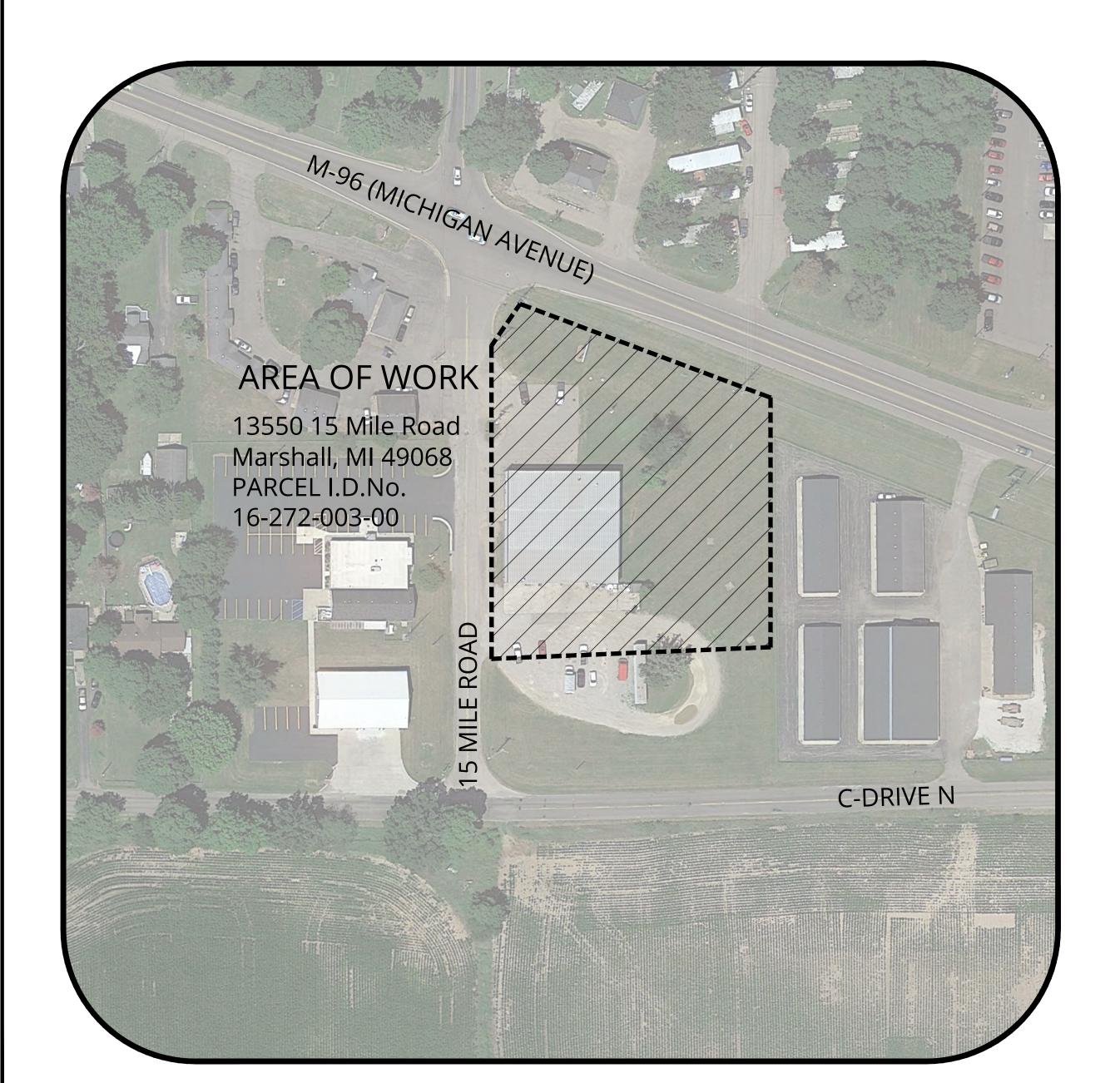
C-100

LEGAL DESCRIPTION

CONSTRUCTION SITE SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR. NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME RESPONSIBILITY FOR

LAND SITUATED IN THE STATE OF MICHIGAN, COUNTY OF CALHOUN, TOWNSHIP OF MARSHALL.

THE WEST 165 FEET OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 27, TOWN 2 SOUTH, RANGE 6 WEST, LYING SOUTH OF OLD U.S. 12, EXCEPT THE NORTH 35 FEET.



OVERALL SITE PLAN NOT TO SCALE

OWNER

MR. JAMES DURIAN MARSHALL AREA ECONOMIC DEVELOPMENT ALLIANCE 323 WEST MICHIGAN AVENUE

SURVEYOR

43980 PLYMOUTH OAKS BLVD. PLYMOUTH, MI 48170

MARSHALL, MICHIGAN 48068

CONTACT: MR. JEFFREY S. EVANS, PS PH: 734.454.9900

ARCHITECT

ALLIED DESIGN ARCHITECTURAL & ENGINEERING GROUP, P.C. 100 S. PERSHING P.O. BOX 110 MORTON, IL 61550

CONTACT: MR. MARK BRININGER SALES CONSULTANT

3301 TECH CIR KALAMAZOO, MI 49008

ENGINEER

CONTACT: MR. AARON REED 269-323-3555 www.sme-usa.com

SME PROJECT NO. 094551.00

LIST OF DRAWINGS

SHEET No.	SHEET TITLE
C-100	COVER SHEET

GENERAL PROJECT NOTES EXISTING SITE CONDITIONS SESC AND SITE PREPARATION PLAN

C-400 REMOVAL PLAN

SITE LAYOUT PLAN C-500 INSTALLATION, PAVING AND GRADING PLAN

DETAILS

CITY/COUNTY DETAILS







COUNTY MAP NOT TO SCALE

GENERAL NOTES

- MATERIAL AND CONSTRUCTION METHODS SHALL FOLLOW THE PRACTICE DEFINED BY THE LATEST EDITION OF THE MICHIGAN DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" AND APPLICABLE SPECIAL PROVISIONS UNLESS OTHERWISE MODIFIED HEREWITHIN OR IN THE PROJECT
- THE LOCATION OF ALL UTILITIES SHOWN ON THESE PLANS IS TAKEN FROM AVAILABLE DATA. OWNER WILL NOT BE RESPONSIBLE FOR ANY OMISSION OR VARIATIONS FROM THE LOCATIONS SHOWN. PURSUANT TO ACT 174 OF THE PA OF 2013 AS A CONDITION OF THIS CONTRACT NOTICE SHALL BE GIVEN TO MISS DIG

PRIOR TO UNDERGROUND WORK TO BE PERFORMED IN ACCORDANCE WITH THIS CONTRACT, CALL 811

- FOR PRIVATE UTILITIES, CONTRACTOR SHALL RETAIN THE SERVICES OF A PRIVATE UTILITY LOCATOR TO LOCATE ALL PRIVATE UTILITIES OWNED BY OWNER.
- CONTRACTOR SHALL NOTIFY OWNER'S REPRESENTATIVE A MINIMUM OF 72 HOURS PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES OR DISRUPTION OF ANY UTILITY.
- THE CONTRACTOR SHALL LOCATE ALL ACTIVE UNDERGROUND UTILITIES PRIOR TO STARTING WORK AND SHALL CONDUCT HIS OPERATIONS IN SUCH A MANNER AS TO ENSURE THAT THOSE UTILITIES NOT REQUIRING RELOCATION WILL NOT BE DISTURBED. CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR UTILITIES DAMAGED DURING CONSTRUCTION. SPRINKLER SYSTEMS SHALL BE REPAIRED BY CONTRACTOR AT
- THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN SUCH A MANNER TO COMPLY WITH ALL FEDERAL, STATE, AND LOCAL CODES FOR NOISE LEVELS, VIBRATIONS, OR ANY OTHER RESTRICTIONS WHILE REMOVING PAVEMENT OR FOR ANY OTHER CONSTRUCTION OPERATIONS WITHIN THIS CONTRACT TO BE INCLUDED IN THE RESPECTIVE ITEM OF WORK.
- CONTRACTOR AGREES TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROTECTION OF PROPERTY.
- THE CONTRACTOR SHALL DESIGN, CONSTRUCT, AND MAINTAIN ALL SAFETY DEVICES, AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE, AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS, AND REGULATIONS. ALL TRAFFIC CONTROL ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST VERSION OF THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND SHALL SUBMIT ALL REQUESTS TO OWNER'S REPRESENTATIVE AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO THE ANTICIPATED NEED TO CLOSE AREAS.
- CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS AND CONFORMING TO ALL APPLICABLE PERMIT REQUIREMENTS.
- 10. CONTRACTOR SHALL SUBMIT ALL MATERIAL SUBMITTALS REQUIRED BY THE PROJECT SPECIFICATIONS INCLUDING ASPHALT CONCRETE AND PORTLAND CEMENT CONCRETE MIX DESIGNS TO ENGINEER A MINIMUM OF 14 DAYS PRIOR TO BEGINNING FIELD WORK.
- 11. CONTRACTOR IS RESPONSIBLE FOR LAYOUT AND FIELD VERIFICATION. ADJUST CATCHBASINS AS REQUIRED. CONTRACTOR IS RESPONSIBLE FOR PROVIDING POSITIVE DRAINAGE. DRAINAGE ISSUES SHALL BE BROUGHT TO THE ATTENTION OF SME PRIOR TO PLACEMENT OF ANY PAVEMENT STRUCTURE LAYERS. AREAS OF PONDING WATER SHALL BE REPAIRED BY FULL DEPTH PATCHING AT NO ADDITIONAL COST TO OWNER. CONTRACTOR SHALL PERFORM WALKTHROUGH WITH OWNER AND SME BEFORE PLACEMENT OF ASPHALT CONCRETE LEVELING COURSE TO REVIEW PROPOSED GRADES.
- 12. OBJECTS DESIGNATED TO REMAIN INCLUDING SIDEWALKS, PAVEMENT, CURB, LIGHT POLES, TRAFFIC SIGNS, LANDSCAPE AREAS, ETC. SHALL BE PROTECTED. IF DAMAGED BY THE CONTRACTOR, IT SHALL BE REPAIRED TO OWNER SATISFACTION AT NO ADDITIONAL COST TO THE OWNER.
- UPON COMPLETION OF EACH DAY OF WORK, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LEAVING THE WORK AREA FREE OF HAZARDS AND SHALL PROVIDE ALL NECESSARY TEMPORARY SIGNS, WARNING DEVICES, AND BARRICADES.
- 14. THE CONTRACTOR SHALL HAVE AN APPROVED SET OF FINAL PLANS MARKED ``ISSUED FOR CONSTRUCTION" ON THE IOB SITE AT ALL TIMES. THE CONTRACTOR SHALL KEEP ACCURATE AND LEGIBLE RECORDS OF ALL CHANGES OF WORK THAT OCCUR DURING CONSTRUCTION AND INFORMATION ON ``AS-BUILT" CONDITIONS. DOCUMENTATION OF CHANGES AND AS-BUILT INFORMATION SHALL BE RECORDED ON AN APPROVED SET OF FINAL PROJECT PLANS AND DELIVERED TO SME AFTER COMPLETION OF WORK.
- 15. THE CONTRACTOR SHALL TAKE THE NECESSARY STEPS TO PROTECT THE PROJECT AND ADJACENT PROPERTY FROM ANY EROSION AND SILTING THAT RESULT FROM THE CONSTRUCTION BY APPROPRIATE MEANS UNTIL SUCH TIME THE PROJECT IS COMPLETED AND ACCEPTED FOR MAINTENANCE BY OWNER.

SURVEY NOTE

THE SITE PLANS WERE DEVELOPED BASED ON DRAWINGS PROVIDED BY THE OWNER AND A TOPOGRAPHICAL SURVEY BY SME. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING LOCATIONS OF EXISTING STRUCTURES AND VERIFYING QUANTITIES. THE CONTRACTOR IS RESPONSIBLE FOR FINAL LAYOUT AND PROVIDING POSITIVE DRAINAGE.

EARTHWORK NOTES

- 1. ALL NATURAL SOIL LEFT IN PLACE, IN CUT SECTIONS, SHALL BE COMPACTED TO NOT LESS THAN 95 PERCENT OF MAXIMUM DRY DENSITY OF THE MATERIAL AS DETERMINED BY THE MODIFIED PROCTOR TO A MINIMUM DEPTH OF 12 INCHES.
- 2. THE LIMIT OF EARTH DISTURBANCE SHALL BE THE SLOPE STAKE LINE UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- 3. ALL SLOPES SHALL BE CLASS A SLOPES.
- 4. AREAS DISTURBED BY THE CONTRACTOR OR SUBCONTRACTOR SHALL BE RESTORED AS SPECIFIED IN THE SOIL EROSION AND SEDIMENTATION CONTROL PLAN, RESTORATION PLAN OR DIRECTED BY THE ENGINEER. NO ADDITIONAL PAYMENT OR COMPENSATION WILL BE ALLOWED FOR AREAS DISTURBED OUTSIDE THE SLOPE STAKE LINE.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE PROPERTY BEYOND THE GRADING LIMITS, INCLUDING EXISTING FENCING, LAWN, TREES, SHRUBBERY, AND SIDEWALKS.

EARTH EXCAVATION NOTES

- 1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE TEMPORARY STORAGE AREAS FOR EXCAVATED MATERIAL WHICH MAY BE USED AS EMBANKMENT MATERIAL IN OTHER AREAS IF IT IS SUITABLE MATERIAL AS DETERMINED BY THE ENGINEER, ANY EXTRA HANDLING OF EXCAVATED MATERIAL IS CONSIDERED INCLUDED IN THESE PAY ITEMS.
- 2. EXCAVATION DROP-OFFS GREATER THAN 8 INCHES SHALL BE PROTECTED BY 4 FT TALL ORANGE PLASTIC SAFETY FENCE (SNOW FENCE) SECURELY ATTACHED TO GROUND DRIVEN STAKES WHEN LEFT OVERNIGHT. SAFETY FENCING SHALL BE MAINTAINED UNTIL AREA IS WITHIN 8 INCHES OF ADJACENT GRADE. PAYMENT FOR THIS WORK IS INCLUDED IN TRAFFIC CONTROL LUMP SUM UNIT

SOIL BORING NOTES

THE SOIL BORINGS LOGS DEPICT POINT LOCATIONS AND DO NOT INFER THAT THE SURFACE CONDITIONS ARE THE SAME IN OTHER AREAS. BORING LOCATIONS ARE SHOWN ON THE PLANS, SOIL BORING LOGS ARE AVAILABLE UPON REQUESTOR INCLUDED WITH THE SPECIFICATIONS.

SITE GRADING NOTES

- 1. PROPOSED ELEVATIONS ARE SHOWN WHERE SIGNIFICANT GRADE CHANGES ARE ANTICIPATED. IF PROPOSED GRADES ARE NOT SHOWN THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING POSITIVE DRAINAGE WITH MIN. SLOPE OF 1.5%. LONGITUDINAL SLOPE ALONG GUTTER LINES SHALL BE 0.5% MIN.
- 2. PRIOR TO INSTALLING ANY PAVEMENT LAYERS, THE CONTRACTOR SHALL REVIEW THE PROPOSED SITE GRADES WITH THE ENGINEER TO IDENTIFY AND RECTIFY ANY
- 3. PROPOSED SIDEWALKS SHALL HAVE MIN. 1.0% AND MAX. 2.0% CROSS SLOPE.
- 4. CONTRACTOR SHALL ADJUST ALL UTILITY RIMS LOCATED WITHIN THE WORK LIMITS AS NECESSARY TO BE FLUSH WITH THE PROPOSED FINISHED SURFACE. THIS INCLUDES ALL STORM MANHOLES, CATCH BASINS, CLEANOUTS, SANITARY MANHOLES AND CLEANOUTS, WATER MAIN MANHOLES, GATE VALVES, AND BOXES OR ANY OTHER UTILITY RIMS OR
- 5. WHERE PROPOSED PAVEMENT ABUTS EXISTING PAVEMENT DESIGNATED TO REMAIN, MATCH ELEVATIONS UNLESS INDICATED OTHERWISE ON THE PLANS.
- 6. ADJUST GUTTER PAN FROM SPILL IN TO SPILL OUT AS REQUIRED TO ACHIEVE POSITIVE DRAINAGE.
- 7. ADJUST ELEVATION OF CURB REPAIRS AS REQUIRED TO ACHIEVE POSITIVE DRAINAGE.
- 8. TAPER CURB HEIGHT TO 0" IN 10' WHEN ABUTTING TO EX. PAVEMENT WITHOUT CURB.

GENERAL PAVING NOTES

- NEW PAVEMENT SHALL BE OF THE TYPE, THICKNESS AND CROSS-SECTION INDICATED ON
- MATCH EXISTING ELEVATIONS WHERE NEW PAVEMENT ABUTS EXISTING PAVEMENTS OR OTHER FIXED OBJECTS.
- CONTRACTOR SHALL MATCH EXISTING STRIPING PATTERNS UNLESS OTHERWISE SHOWN ON THE PLANS. CONTRACTOR SHALL DOCUMENT EXISTING STRIPING PATTERN PRIOR TO REMOVAL OF ANY PAVEMENT.
- CONTRACTOR IS RESPONSIBLE FOR LAYOUT TO PROVIDE POSITIVE SITE DRAINAGE. WATER PONDING AND BIRD BATHS SHALL BE CORRECTED AS DIRECTED BY THE BEGINNER AT NO ADDITIONAL COST TO THE OWNER.
- NEW AGGREGATE BASE REQUIRED SHALL BE MDOT 21AA CRUSHED LIMESTONE
- SUBGRADE SOIL FOUND TO BE UNSUITABLE SHALL BE RECONDITIONED OR REPLACED AS DIRECTED BY THE ENGINEER, INCLUDING THE NECESSARY FINE GRADING TO ENSURE THAT MINIMUM SPECIFIED PAVEMENT THICKNESS IS ACHIEVED.

TRAFFIC CONTROL NOTES

- OBTAIN WRITTEN PERMISSION FROM OWNER'S REPRESENTATIVE WHEN ROADS, SIDEWALKS AND PARKING LOTS NEED TO BE CLOSED PRIOR TO CLOSING ANY PAVED
- 2. SUBMIT ALL REOUESTS TO OWNER'S REPRESENTATIVE AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO THE ANTICIPATED NEED TO CLOSE ANY PAVED AREA.
- PROVIDE ALTERNATE TRAFFIC ROUTES AROUND CLOSED OR OBSTRUCTED TRAFFIC ROUTES AS NECESSARY OR REQUIRED BY OWNER'S REPRESENTATIVE.
- THE CONTRACTOR IS RESPONSIBLE FOR FURNISHING, PLACING AND MAINTAINING ALL TRAFFIC CONTROL DEVICES ACCORDING TO THE LATEST EDITION OF THE "MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES."

DEMOLITION/REMOVAL NOTES

- SAWCUT FULL DEPTH THE PAVEMENT, SIDEWALK AND CURB DESIGNATED TO BE REMOVED AT THE LIMITS OF WORK SHOWN ON THE PLANS OR MARKED IN THE FIELD.
- REMOVE ONLY THE STRUCTURES AND PAVEMENTS WITHIN THE LIMITS OF WORK AS DETAILED ON THE PLANS AND CROSS SECTIONS. ALL OTHER STRUCTURES AND PAVEMENT SHALL BE PROTECTED AS REQUIRED.
- ALL EXISTING UNDERGROUND UTILITIES WITHIN THE AREA OF WORK SHALL REMAIN AND BE PROTECTED DURING CONSTRUCTION, UNLESS, OTHERWISE DESIGNATED TO BE REMOVED. CONTRACTOR SHALL VERIFY EXACT LOCATION AND DEPTHS OF ALL EXISTING UTILITIES PRIOR TO COMMENCEMENT OF DEMOLITION OPERATIONS.
- CONTRACTOR SHALL DISPOSE OF ALL CONCRETE , ASPHALT, AGGREGATE BASE AND SUBGRADE SPOILS AT LEGAL DISPOSAL SITE. CONTRACTOR SHALL PAY FOR ALL TRUCKING AND DISPOSAL COSTS.
- MATERIAL AND SITE FEATURES HAVING SALVAGE VALUE SHALL BECOME THE PROPERTY OF THE OWNER UNLESS SPECIFIED OTHERWISE. ALL OTHER MATERIAL AND DEBRIS ACCUMULATED AS A RESULT OF DEMOLITION/REMOVAL/REPAIR ACTIVITIES SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND DISPOSED OF IN A LEGAL MANNER.
- EXISTING WIRING AND ELECTRICAL OUTLETS SHALL BE CONSIDERED INCIDENTAL TO ELECTRICAL FEATURE DEMOLITION/REMOVAL.

CURB REPAIR NOTES

- SAWCUT THE CURB AREAS DESIGNATED FOR REPAIR AT THE LIMITS MARKED IN THE FIELD BY OWNER'S REPRESENTATIVE.
- REMOVE EXISTING CONCRETE WITHOUT CAUSING DAMAGE OR SPALLING TO ADJACENT SIDEWALK OR CURBS WHICH ARE DESIGNATED TO REMAIN. DAMAGED AREAS SHALL BE REMOVED AND REPLACED TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL
- DRILL AND EPOXY GROUT TWO (2) #5 (18 INCH LONG EPOXY COATED) DEFORMED BARS A MINIMUM OF 6 INCHES INTO EXISTING CONCRETE CURBS (TWO FACES) WHICH ARE DESIGNATED TO REMAIN.
- MATCH EXISTING CURB GEOMETRY.
- PLACE AND CONSOLIDATE CONCRETE IN THE REPAIR AREA TO MATCH THE ELEVATION OF ADJACENT CURB AND SIDEWALK AREAS TO MAINTAIN POSITIVE DRAINAGE. FINISH CURBS TO MATCH FINISH OF ADJACENT AREAS WHICH ARE DESIGNATED TO REMAIN.
- VOID/HOLES (HONEYCOMB AREAS) ON THE CURB BACK/FACE SHALL BE REPAIRED WITH

CLEANUP AND RESTORATION NOTES

CEMENT MORTAR PASTE TO THE SATISFACTION OF THE OWNER.

- PROTECT ADJACENT AREAS OUTSIDE OF PROJECT LIMITS DURING CONSTRUCTION. RESTORE ALL DISTURBED AREAS TO MATCH EXISTING CONDITIONS UNLESS OTHERWISE NOTED ON THE PROJECT PLANS, RESTORE GRASS AREAS WITH MINIMUM 4" OF TOPSOIL AND SOD UNLESS OTHERWISE NOTED ON THE PLANS. HYDRO SEED MAY BE USED WITH ENGINEERS APPROVAL. INSTALL SLOPE RESTORATION TYPE AS INDICATED ON PLAN.
- UPON COMPLETION OF WORK, THE ENTIRE SITE SHALL BE CLEARED OF EQUIPMENT, UNUSED MATERIALS, AND RUBBISH AND ANY DISTURBED AREAS RESTORED TO THE SATISFACTION OF THE OWNER.
- FINAL PAYMENT WILL NOT BE MADE UNTIL THE SITE IS CLEARED, RESTORED AND CLEANED PER THE PROJECT SPECIFICATIONS.

ABBREVIA	BBREVIATIONS ARE USED ON THESE PLANS:
THE FOLLOWING A	BBREVIATIONS ARE USED ON THESE FLANS.
@	AT (RATE OF)
&	AND
	INCH
#	FOOT NUMBER
# AC	ASPHALT CONCRETE = ASPHALT PAVEMENT/HOT MIX ASPHALT PAVEMEN
ADA	AMERICANS WITH DISABILITIES ACT (BARRIER FREE ACCESS)
AGG	AGGREGATE BASE
ALT	ALTERNATE
APPROX.	APPROXIMATE/APPROXIMATELY
ARCH.	ARCHITECT
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AVG	AVERAGE
В	BORING
BDY	BOUNDARY
BIT	BITUMINOUS
BF	BARRIER FREE
BFF BLDG	BANK FULL FLOOD BUILDING
BM	BENCHMARK
BOL	BOLLARD
BOT	BOTTOM
BRG	BEARING
BSMT	BASEMENT
BOW	BOTTOM OF WALL
C	CORE
CAP	CAPACITY
CB	CATCH BASIN
CENTL .	CENTERLINE
CF	CUBIC FEET
CHANN.	CHANNEL
CJ CLS	CONTROL JOINT CRUSHED LIMESTONE
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COEF	COEFFICIENT
COL	COLUMN
COMM/COMM.	COMMUNICATIONS
CONC.	CONCRETE
CONN.	CONNECTION
COV.	COVER
CULV.	CULVERT CORPUGATED BLASTIC BIRE
CPP CY	CORRUGATED PLASTIC PIPE CUBIC YARD
DIA/DIA.	DIAMETER
DI	DUCTILE IRON
DIM/DIM.	DIMENSION
DEG/DEG.	DEGREE
DEMO/DEMO.	DEMOLITION
DEPT.	DEPARTMENT
DMH	DROP MANHOLE
DS	DOWNSPOUT
EA	EACH
E	EAST

EACH END

ELEVATION

ENGINEER

FNTRANCE

EXCAVATE

EXISTING

EXPANSION

FLOOR DRAIN

FOUNDATION

FINISH FLOOR

FINISH GRADE

FLOOD PLAIN

FEET/FOOT

ELEVATION

EQUIPMENT

FOOTING

GALLON GENERAL

GUTTER

GRAVEL **HEAVY DUTY**

GATE VALVE

HANDHOLE

HIGH POINT

HORIZONTAL

HYDRANT

LIGHT DUTY

LINEAR FEET

LOW POINT

MATCH EXISTING

NOT IN CONTRACT

NOT FIELD VERIFIED

OUTSIDE DIAMETER

POLYVINYL CHLORIDE

REINFORCED CONCRETE PIPE

STABILIZED BASE COURSE

TOP OF PROPOSED CURB

TOP OF PAD (CONCRETE)

NOT TO SCALE

ON CENTER

PROPOSED

REAR YARD

SANITARY SEWER

SQUARE FEET

STORM SEWER

SQUARE YARD

TOP OF WALL TEST PIT

TOP OF SIDEWALK

VITRIFIED CLAY PIPE

WELDED WIRE FABRIC

VAPOR BARRIER

TYPICAL

VERTICAL VERIFY IN FIELD

VAULT

WEST

WATER

VOLUME

WATER MAIN

SUBGRADE

SOUTH

MAXIMUM

MANHOLE

MINIMUM

NUMBER

INSTALL

FURNISH

FIRE DEPARTMENT CONNECTION

GEOGRAPHIC INFORMATION SYSTEM

HIGH DENSITY POLYETHYLENE

HOT MIX ASPHALT PAVEMENT

MICHIGAN DEPARTMENT OF TRANSPORTATION

PORTLAND CEMENT CONCRETE = CONCRETE

SOIL EROSION AND SEDIMENT CONTROL

TOP OF HMA PAVEMENT ELEVATION

TEMPORARY EARTH RETENTION SYSTEM

HYDRAULIC GRADE LINE

FULL DEPTH RECLAMATION

EQUIPMENT

END SECTION

ELEV.

FNT.

EQUIP.

EX/EX.

EXPN

FD

FDC

FURN.

ELEV.

GEN.

GVL

HD

HGL

HMA

INT

HORIZ/HORIZ

MAX/MAX

MDOT

MIN/MIN

NFV

NTS

SESC

STM

TERS

TOP

TOW

VB

VCP

VLT

VOL

WM

WTR

VERT/VERT

HDPE

EQUIP.

GAL/GAL

GV/GVA

ENG/ENG

EXCAV/EXCAV

EDGE OF GRAVEL ELECTRICAL HAND HOLE

EDGE OF METAL

DEFINITIONS USED IN DRAWINGS

THE FOLLOWING DEFINITIONS ARE USED ON THESE PLANS:

SME ENGINEER MARSHAL TOWNSHIP CITY COUNTY CALHOUN OWNER MARSHAL TOWNSHIP



Orientation Scale

MARSHAL TOWNSHIP FIRE STATION NO. 1

Project Location 13550 15 MILE RD | MARSHALL, MI 49068

Engineer's Seal

PRELIMINARY - NOT FOR CONSTRUCTION

12/15/2023

SME Project No. 094551.00

J. GRAVES

Designer: A. REED

Project Manager:

Checked By:

CADD:

Reviewed By:

J. GRAVES

GENERAL PROJECT NOTES

Sheet No.

C-101

J. RIOS

A. REED

NO REPRODUCTION SHALL BE MADE WITHOUT THE PRIOR



HE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLI

AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE

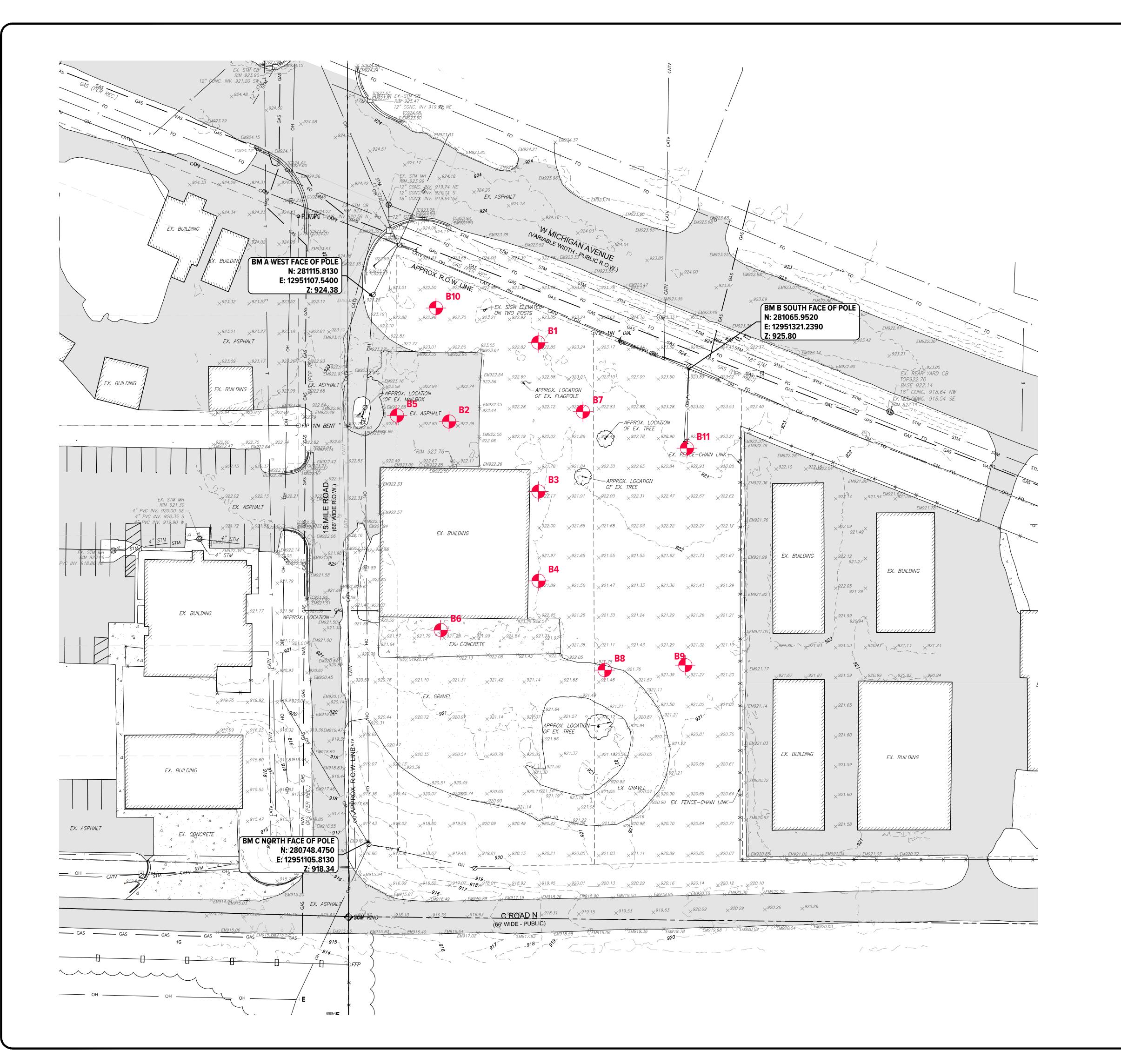
VATIONS PRIOR TO THE START OF CONSTRUCTION.

LUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND

CONSTRUCTION SITE SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR. NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME RESPONSIBILITY FOR SAFETY OF

THE WORK, OF PERSONS ENGAGED IN THE WORK, OF NEARBY STRUCTURES, NOR OF OTHER

Know what's **below**. Callbefore you dig.



BENCHMARK DATA

BM A WEST FACE OF POWER POLE N: 281115.8130 E: 12951107.5400 ELEVATION = 924.38 (NAVD88 DATUM)

SOUTH FACE OF POWER POLE N: 281065.9520 E: 12951321.2390 ELEVATION = 925.80 (NAVD88 DATUM)

NORTH FACE OF POWER POLE
N: 280748.4750
E: 12951105.8130
ELEVATION = 918.34 (NAVD88 DATUM)





EXISTING LEGEND

CONTOUR	
INDEX CONTOUR— — —	
WATER MAIN—————	
STORM SEWER — — —	
SANITARY SEWER —— —	
CABLETV— catv — catv —	
OVERHEAD UTILITY OF	н — ОН —
FIBER OPTIC FO	FO
GAS ———— GAS ————	GAS -
ELECTRICAL—— E —	E
CHAIN LINK FENCE— × —	
IRON FENCE → •	
WOOD FENCE	0 0 0
HYDRANT	
GATE VALVE	
POST INDICATOR VALVE (PIV)	4
WATER MAIN MANHOLE	
SQUARE CATCH BASIN	l
ROUND CATCH BASIN	(
BEEHIVE CATCH BASIN	
SANITARY MANHOLE	(
END SECTION	
CULVERT	>
STORM MANHOLE	(
CLEAN OUT	(-
SIGN	
UTILITY POLE RISER	(
KISEK LIGHT POLE)
LIGHT POLE LANDSCAPE LIGHT	7
SPRINKLER)
ELECTRICAL BOX/TRANSFORMI	
ELECTRICAL MANHOLE	(
FLAG POLE	`
MAILBOX	i.
TOP OF CURB	TC
GUTTER	GU
EX. GRADE	× ^{999.9}
EDGE OF ASPHALT	EM
TOP OF WALL	TW
BOTTOM OF WALL	BW
TREE	*(:
CONCRETE	. 4
ASPHALT PAVEMENT	
, G. 117 (ET 17 (V EIVIEIVI	Profession and the second
GRAVEL	
RIP-RAP	

NOTES

- 1. DRAWING BASED ON MICHIGAN STATE PLAN COORDINATES SYSTEM, SOUTH ZONE, INTERNATIONAL FEET.
- 2. THIS SURVEY WILL NOT SHOW ALL EASEMENTS OF RECORD UNTIL AN UPDATED TITLE POLICY HAS BEEN FURNISHED TO THE SURVEYOR BY THE
- 3. ALL ELEVATIONS ARE EXISTING ELEVATIONS
- 4. THE LOCATION OF THE EXISTING UTILITIES AS SHOWN WERE OBTAINED FROM MUNICIPAL AND UTILITY COMPANIES RECORDS. NO GUARANTEE CAN BE MADE REGARDING THE COMPLETENESS OR EXACTNESS OF THE UTILITIES LOCATION. IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY IN THE FIELD THE LOCATION OF ALL UTILITIES.
- 5. NO BOUNDARY SURVEY WAS PERFORMED.

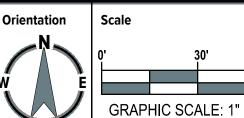


HE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE VATIONS PRIOR TO THE START OF CONSTRUCTION.

CONSTRUCTION SITE SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR. NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF NEARBY STRUCTURES, NOR OF OTHER







MARSHAL TOWNSHIP FIRE STATION NO. 1

Project Location 13550 15 MILE RD MARSHALL, MI 49068

Engineer's Seal

PRELIMINARY - NOT FOR CONSTRUCTION

Rev	visions			
REV	ISSUED FOR	DATE	BY	
01	SITE PLAN SUBMITTAL	01/15/2023	JWG	

12/15/2023

SME Project No.

094551.00 Project Manager:

J. GRAVES A. REED

CADD: J. RIOS

Checked By: A. REED

Reviewed By: J. GRAVES

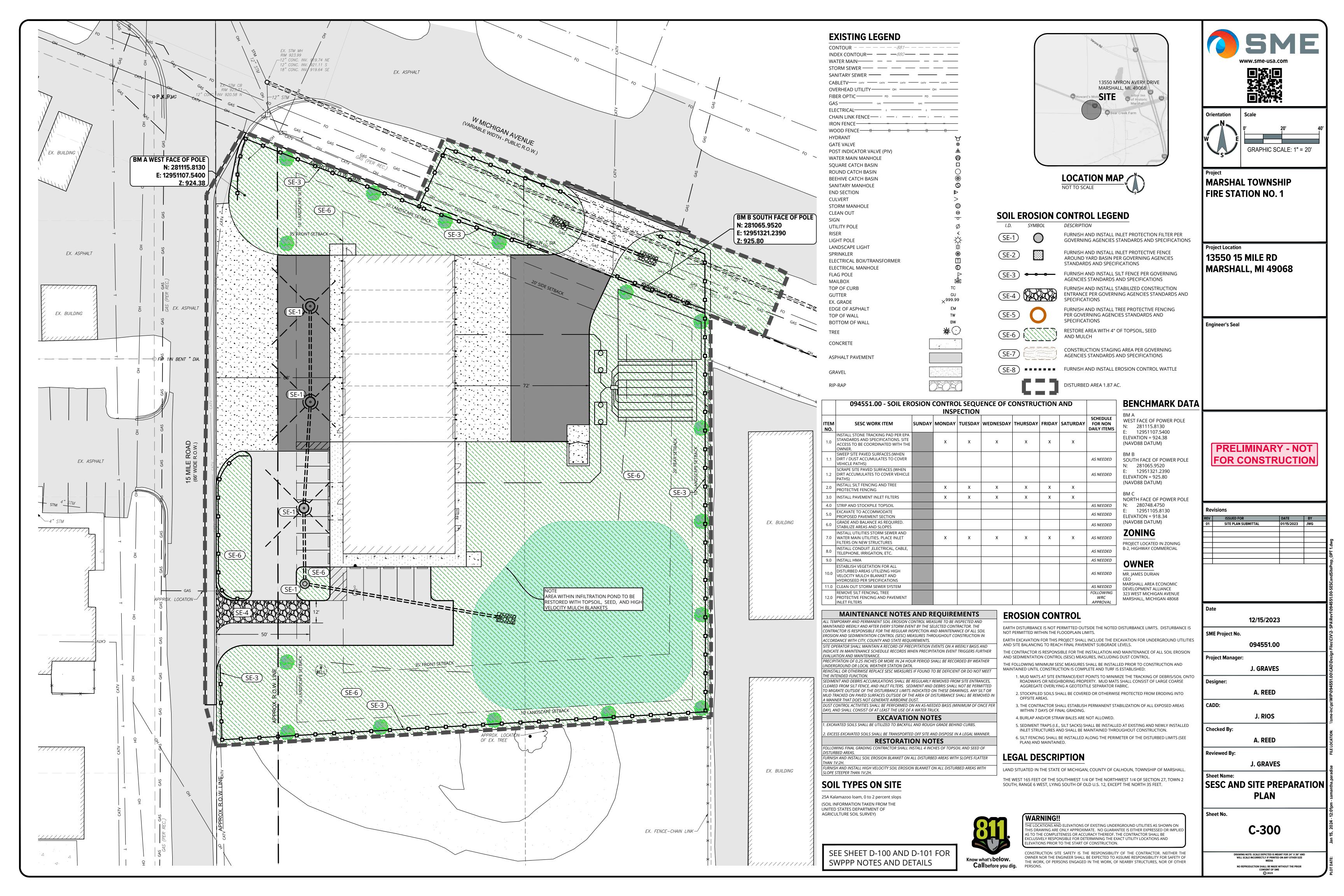
EXISTING SITE CONDITIONS

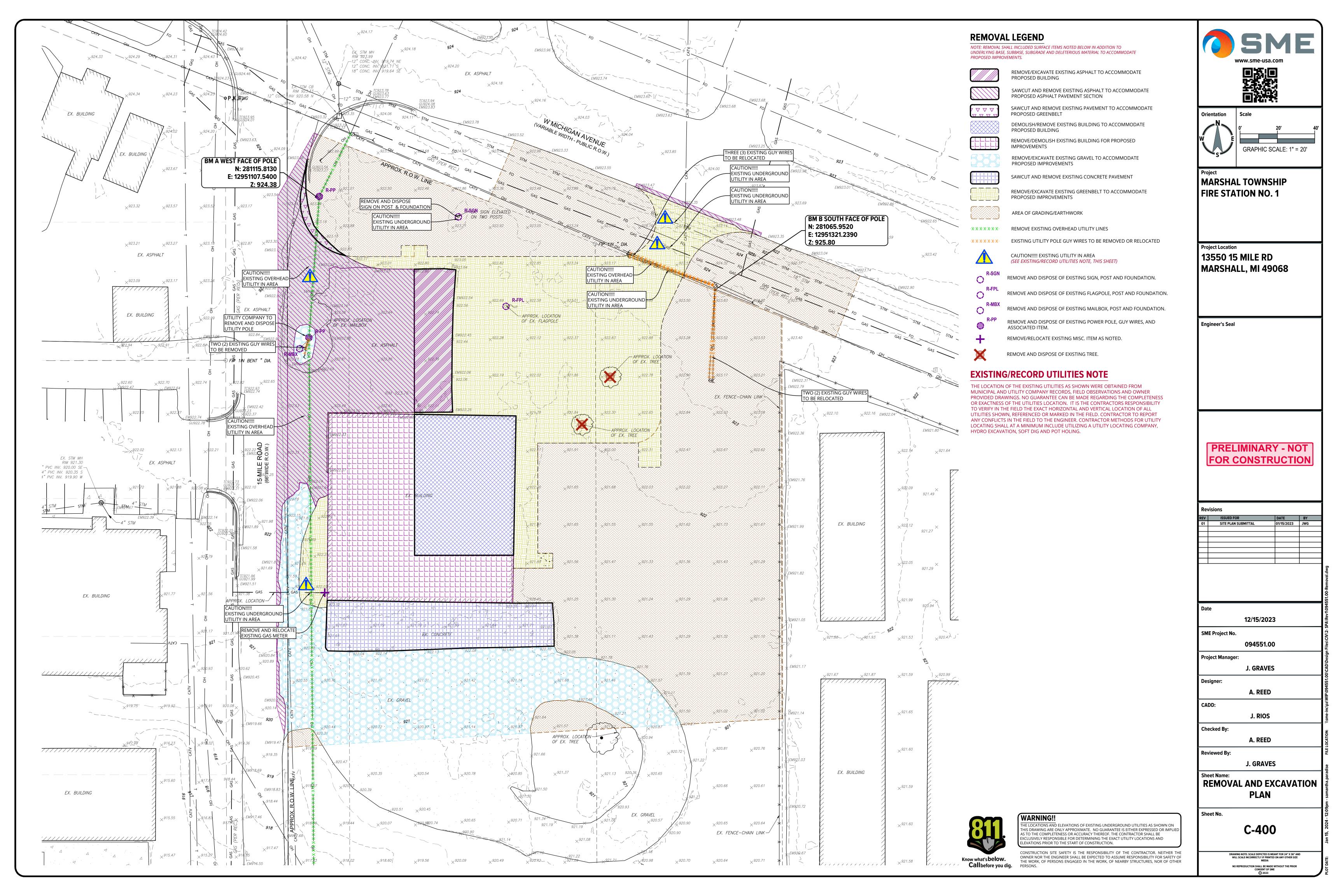
Sheet No.

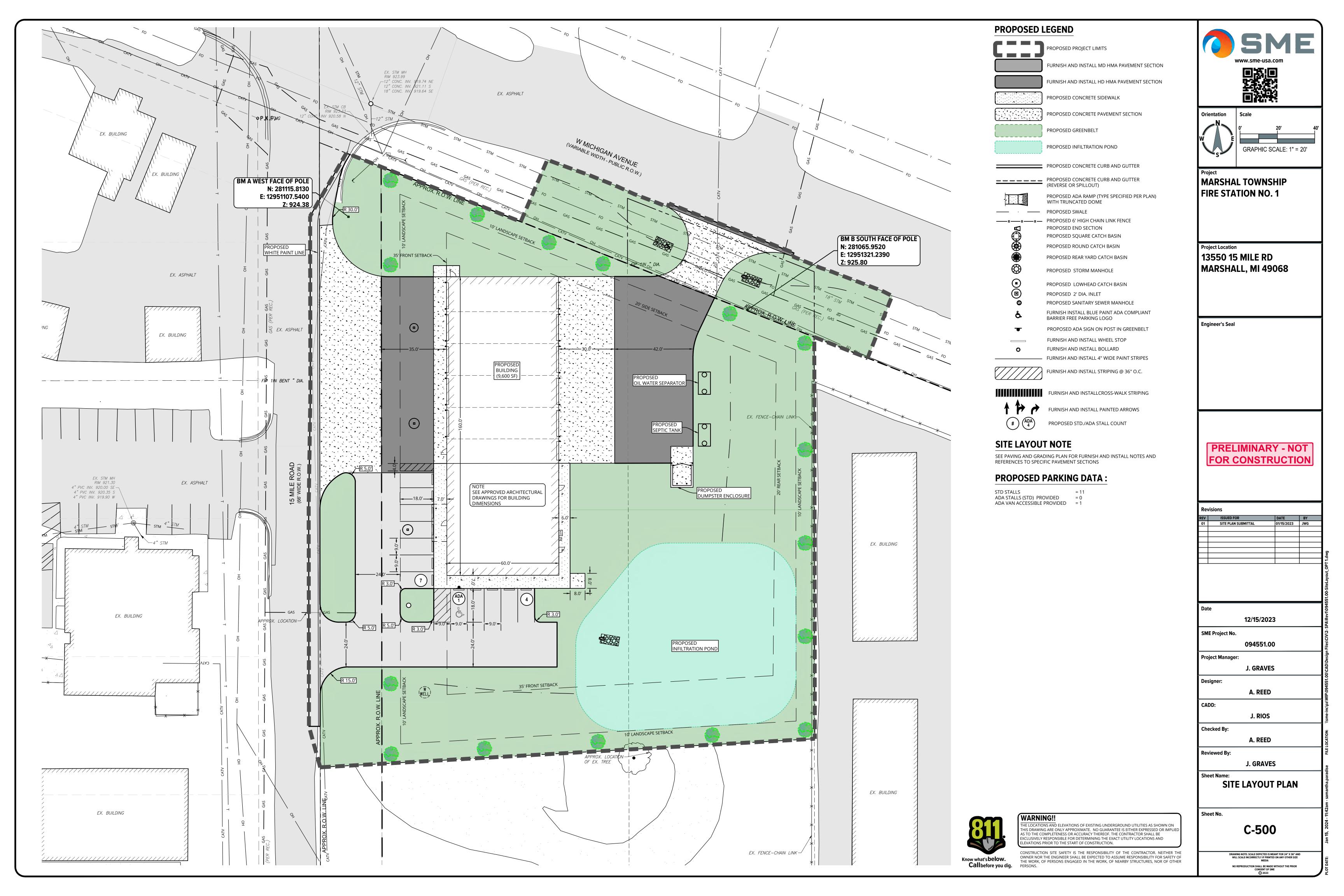
C-200

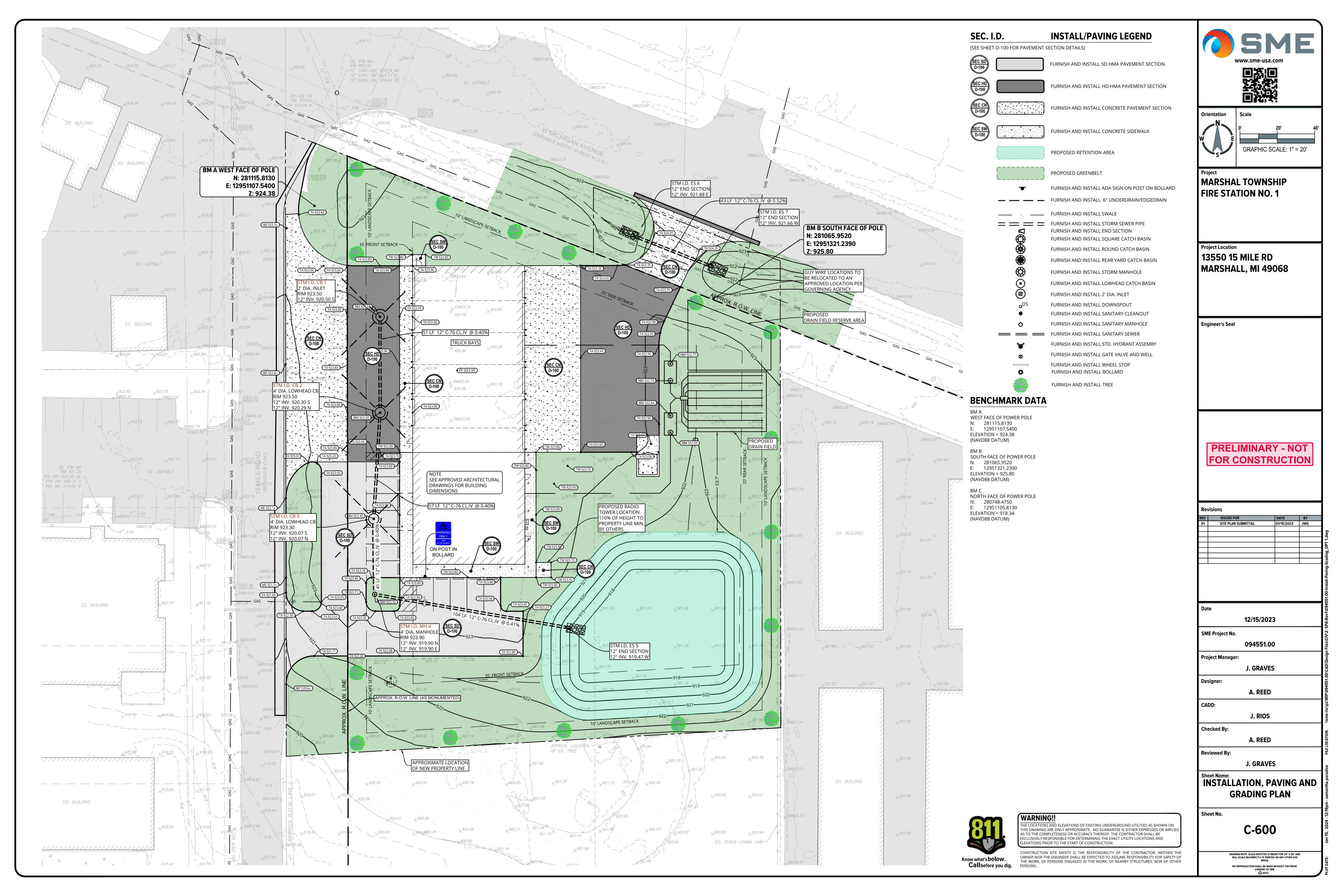
NO REPRODUCTION SHALL BE MADE WITHOUT THE PRIOR CONSENT OF SME

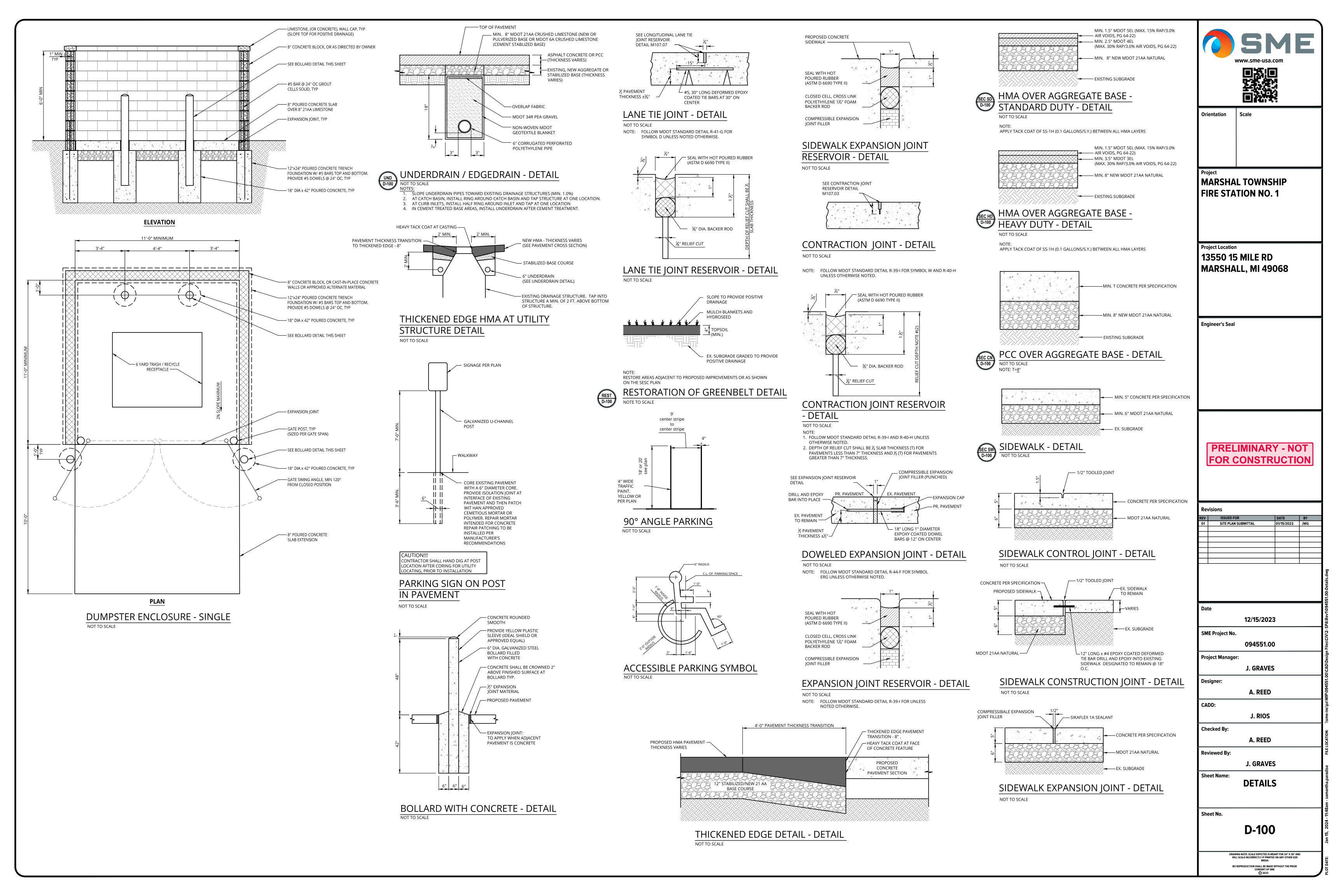
© 2023

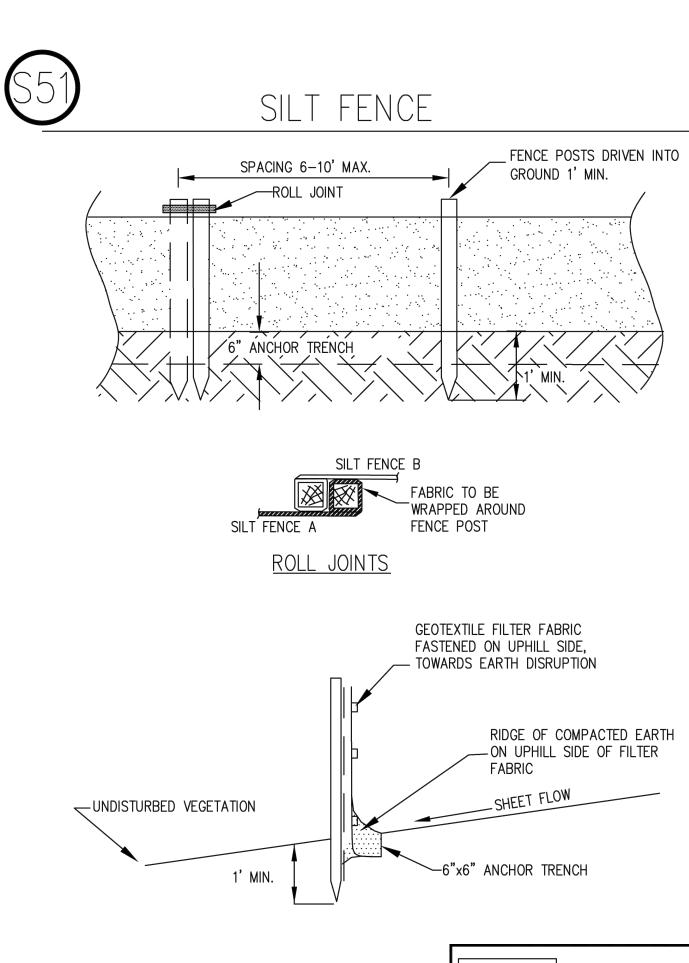






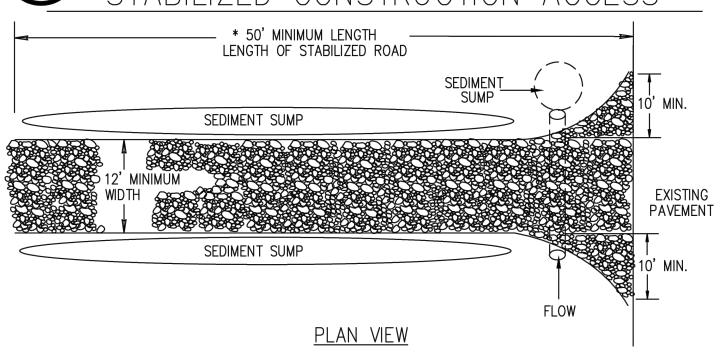


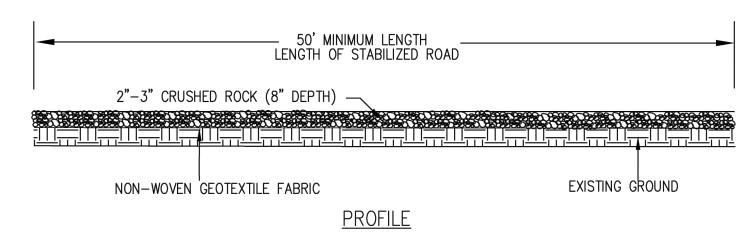










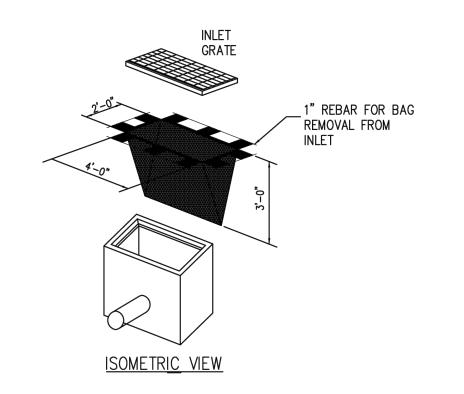


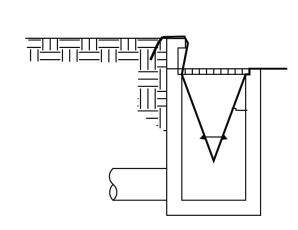
NOTES:

- 1. Establish stabilized construction entrance prior to the initiation of site construction activities.
- 2. Care should be taken to prevent material movement into adjacent wetlands/waterbodies.
- 3. Care should be taken to maintain existing roadside drainage via culvert installation, with sediment sump placed downflow of culvert.









INSTALLATION DETAIL





Orientation Scale

Project
MARSHAL TOWNSHIP
FIRE STATION NO. 1

Project Location
13550 15 MILE RD
MARSHALL, MI 49068

Engineer's Seal

PRELIMINARY - NOT FOR CONSTRUCTION

REV	ISSUED FOR	DATE	
01	SITE PLAN SUBMITTAL	01/15/2023	Τ
			T
			T
			T
			T
			1
			T
			T

Date 12/15/2023

SME Project No.

094551.00
Project Manager:
J. GRAVES

Designer:
A. REED

CADD:

J. RIOS

Checked By:

A. REED

J. GRAVES

DETAILS

Sheet No.

D-101

DRAWING NOTE: SCALE DEPICTED IS MEANT FOR 24" X 36" AND WILL SCALE INCORRECTLY IF PRINTED ON ANY OTHER SIZE MEDIA

NO REPRODUCTION SHALL MADE WITHOUT THE PRIOR CONSENT OF SME

(2) 2023