

WHITE LAKE CHARTER TOWNSHIP
COMMUNITY DEVELOPMENT DEPARTMENT
PLANNING COMMISSION – SUPPLEMENTAL STAFF REPORT

Property: 8320 Highland Road – BP Gas Station

Parcel ID: Y-12-13-454-019

Applicant: Evan Shimkus

Zoning: GB – General Business

Request: Special Land Use – Expansion of Existing Automobile Service Station

Proposal: Installation of four (4) dedicated EV charging spaces served by two (2) DC fast chargers and associated electrical equipment

Staff: David Waligora, AICP, Senior Planner

Background

The Planning Commission considered this Special Land Use request on August 20, 2026. The proposal would expand the existing automobile service station through the installation of four dedicated EV charging spaces served by two DC fast chargers, a pad-mounted transformer, and associated electrical and site improvements.

Discussion at the August meeting focused primarily on potential noise impacts and the relationship of the proposed charging equipment to the adjoining residential property. Residents also raised concerns regarding nighttime operation and the condition of the existing fence along the residential property line.

Following the public hearing, the Planning Commission unanimously tabled the request:

“...to gather further information from a sound expert and for said expert to be present at the next meeting this request is considered at, to study alternate charger locations and to improve the landscaping and buffering on the residential property line.”

The applicant has since provided additional noise information and prepared a revised plan, Revision 4, intended to respond to the Commission's concerns.

Revised Charger Location and Noise Analysis

Noise was a principal issue during the Planning Commission's August review. **Revision 3**, presented at the August meeting, included a sound-distance table using a charger sound level of **65 dBA at approximately one meter (3.5 feet)**. The table then calculated the anticipated reduction in sound over distance, decreasing to 59 dBA at 6.5 feet, 53 dBA at 13 feet, 47 dBA at 26 feet, 41 dBA at 52 feet, and 35 dBA at 105 feet. The same table identified transformer noise as 56 dBA at approximately one meter, decreasing to 30 dBA at 105 feet.

As part of the September resubmittal, the applicant provided additional documentation from Autel, the charger manufacturer, explaining the basis for the 65 dBA sound level used in the August plans. Autel tested its DC fast-charging equipment in a controlled indoor testing environment designed to minimize background sound and reflections. Measurements were taken one meter from the different sides of the equipment under high-power operating conditions. The highest reported measurement was 64.7 dBA at one meter.

Accordingly, the 65 dBA source level used in the August plans is consistent with, and slightly more conservative than, the manufacturer's maximum measured sound level. The new manufacturer documentation is therefore useful because it provides support for the starting sound level previously used by the manufacturer.

Please note, the manufacturer's documentation is not a site-specific acoustical study.

It does not measure the existing ambient sound environment at 8320 Highland Road and does not provide dBC or low-frequency sound measurements. The question of dBC and low-frequency sound was raised during the Commission's August discussion, although it was not specifically incorporated into the formal tabling motion and the measurement is becoming increasingly more known due to an insurgence of sites with onsite transformers.

More importantly, Revision 4 substantially changes the physical circumstances that led to the August noise concerns. The charging equipment has been relocated away from the residential interface to approximately 115 feet from the residential property line. **Staff considers this a substantial improvement over the August layout and a meaningful response to the Commission's direction to study alternate charger locations.**

Using the same sound-distance methodology contained in the applicant's August plans, a 65 dBA charger source would be approximately **34 dBA at 115 feet**. If both charger cabinets are conservatively assumed to operate simultaneously at this level, together with the transformer sound identified in the applicant's plans, the combined sound level is estimated at approximately **38 dBA at the residential property line**. This is approximately **7 dBA below the Township's 45 dBA nighttime standard**.

This remains a planning-level estimate rather than a site-specific acoustical analysis. Actual sound can be affected by equipment orientation, reflections, site conditions, vehicle-generated sound, and other factors, and the calculation does not address dBC or low-frequency sound. Nevertheless, the manufacturer documentation provides additional support for the 65 dBA source level already used in the August plans, while the substantially increased separation shown on Revision 4 significantly reduces the anticipated sound level at the residential property line.

The Commission's August motion also requested that a sound expert be present when the application returns for consideration, which the applicant feels is not necessary due to the new proposed location.

Staff Field Observation

Following the August meeting, staff visited an operating commercial fast-charging installation located behind a Starbucks to gain practical context regarding this type of equipment. The charging installation was very quiet relative to the surrounding commercial environment. A low-frequency hum from the transformer was perceptible to staff only when immediately adjacent to the equipment, and even then it was difficult to detect from surrounding noise.

This observation is not an acoustical study, and staff cannot confirm that the equipment observed was identical to the equipment proposed at 8320 Highland Road. It does, however, provide practical context when considered together with the manufacturer information and the substantially increased separation from the residential property.

Based on the revised location and additional information provided, **staff's concern regarding the potential for significant charger noise impacts on the adjoining residential property has been considerably reduced from the August review.**

Existing Business Hours and Site Activity

Staff also reviewed the publicly listed operating hours of the existing BP station. The business is listed as operating:

- **Monday through Friday:** 5:00 a.m. to 12:00 a.m.
- **Saturday:** 7:00 a.m. to 12:00 a.m.
- **Sunday:** 8:00 a.m. to 10:00 p.m.

The property therefore already functions as an active automobile-oriented commercial site during substantial portions of the evening and nighttime period. Existing activity includes vehicle arrivals and departures, fueling activity, HVAC and mechanical equipment, and other normal gas-station operations.

These existing conditions do not exempt the proposed charging equipment from applicable Township noise standards. However, they provide relevant context when evaluating whether the relocated charging equipment is likely to materially change the existing sound environment experienced by the adjoining residential property.

Residential Fence and Buffer

The Commission's August tabling motion also directed the applicant to **“improve the landscaping and buffering on the residential property line.”**

Since the August meeting, staff located a historical site plan associated with the approximately 1998 redevelopment of the current gas station site. The historical plan depicts a fence along the residential property line as part of the gas station site improvements. This provides additional context to the August public hearing, when the adjoining property owner indicated that he had been repairing the existing fence and requested that a masonry wall be installed, which he thought was a requirement of approval from memory.

However, the Commission's current direction was specifically to improve the landscaping and buffering along the residential property line, and as of the date of this report, they have not yet shown that on the proposed plan.

Staff has advised the applicant that a **new, high-quality screening fence supplemented by additional landscaping along the full residential property line** would more clearly respond to the Commission's direction than limited repairs to deteriorated portions of the existing fence.

Easements and Utility Infrastructure

During review of the resubmittal, staff located a recorded utility easement affecting the property that was not depicted on the August plans. The easement contains an existing **12-inch Township water main**.

The revised plans should depict the boundaries of the **recorded easement itself** so that the relationship between the proposed equipment and the Township's utility rights can be evaluated.

Staff has also requested that **all known easements affecting the property** be depicted on the revised plan. The applicant and its surveyor are responsible for accurately identifying known easements affecting the proposed improvements rather than relying solely upon easements that may be located in Township historical records.

Because the identified easement contains a Township water main, the proposed equipment location is also subject to DPW review to ensure that the improvements do not interfere with the utility or the Township's ability to access and maintain it.

Planning Commission Consideration

Revision 4 represents a meaningful change from the proposal considered in August. Most significantly, relocating the charging equipment to approximately **115 feet from the residential property line** directly responds to the Commission's request to study alternate locations and substantially increases the separation between the equipment and the adjoining residential use.

The additional Autel manufacturer documentation also provides support for the **65 dBA source level used in the August sound-distance calculations**. Applying that same methodology to the revised location results in a planning-level estimate of approximately **38 dBA at the residential property line when both chargers and the transformer are considered**, compared with the Township's 45 dBA nighttime standard.

The manufacturer documentation does not constitute a site-specific acoustical study or address dBC/low-frequency sound, and the Commission's direction that a sound expert be present remains relevant to its consideration.

The revised residential buffering and easement information should similarly be evaluated against the remaining portions of the Commission's August tabling motion.

Overall, staff considers the relocation of the charging equipment to be a **substantial improvement to the proposal**, and staff's concern regarding potential noise impacts on the adjoining residential property has been considerably reduced.

The Planning Commission may consider whether the revised plans and supplemental information sufficiently address the issues identified at its August 20 meeting and satisfy the applicable Special Land Use standards and their initial concerns.

Autel DC Fast 60-240kW

Noise Compliance Declaration

Date: 08/31/2026

To Whom It May Concern:

This letter serves as a formal declaration that the above-mentioned EV charging equipment has been evaluated for operational noise performance and complies with the applicable product noise requirement.

The charger was tested in a **semi-anechoic room** under stable operating conditions. During the test, the equipment was operated under representative high-power charging conditions, and noise measurements were taken at a distance of **1 meter** from the front, rear, left, and right sides of the equipment, at a height of approximately **1–1.5 meters above the ground**.

The applicable acceptance criterion for the product is that the **maximum operating noise level shall not exceed 65 dB(A)**.

The measured results are summarized below:

Power Setting	Ambient Background Noise (dB)	Front door (dB)	Rear side (dB)	Left door (dB)	Right door (dB)
400 V 300 A	37.1	55.0	62.6	57.7	64.5
800 V 300 A	37.1	59.0	61.1	55.5	64.7

The ambient background noise measured during the test was **37.1 dB(A)**.

Based on the above test results, the maximum measured operating noise level was **64.7 dB(A)**, which is **below the specified limit of 65 dB(A)**. Therefore, the equipment meets the applicable operational noise requirement under the tested conditions.

The equipment is designed and engineered to control operational noise generated by internal power conversion, cooling, and charging components. Under normal operating conditions, the charger is not expected to generate excessive or abnormal noise beyond the tested operating levels. Accordingly, the equipment is suitable for deployment at EV charging sites where noise performance is a consideration, subject to applicable site-specific installation and local noise regulations.

This declaration is issued for use in **project bidding, technical proposal, and compliance documentation** purposes.

Sincerely,

Authorized Signature:



Autel New Energy US Inc.

36 Harbor Park Drive, Port Washington, NY, 11050



8320 HIGHLAND

8320 HIGHLAND ROAD
WHITE LAKE, MI 48386

APPLICABLE CODES

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THE FOLLOWING CODES:

BUILDING CODE:

2021 MICHIGAN BUILDING CODE (IBC 2021)

ELECTRICAL CODE:

2023 NATIONAL ELECTRICAL CODE (NEC 2023)

PROJECT DESCRIPTION

- PROPOSED INSTALLATION OF (2) 160kW DCFC CHARGERS TO SUPPLY (4) DEDICATED CHARGING STALLS

CONTACTS

APPLICANT:

CHARGE-X USA
22345 W. WARREN AVENUE
DEARBORN HEIGHTS, MI 48127
TEL: (313) 523-1333
www.charge-xusa.com

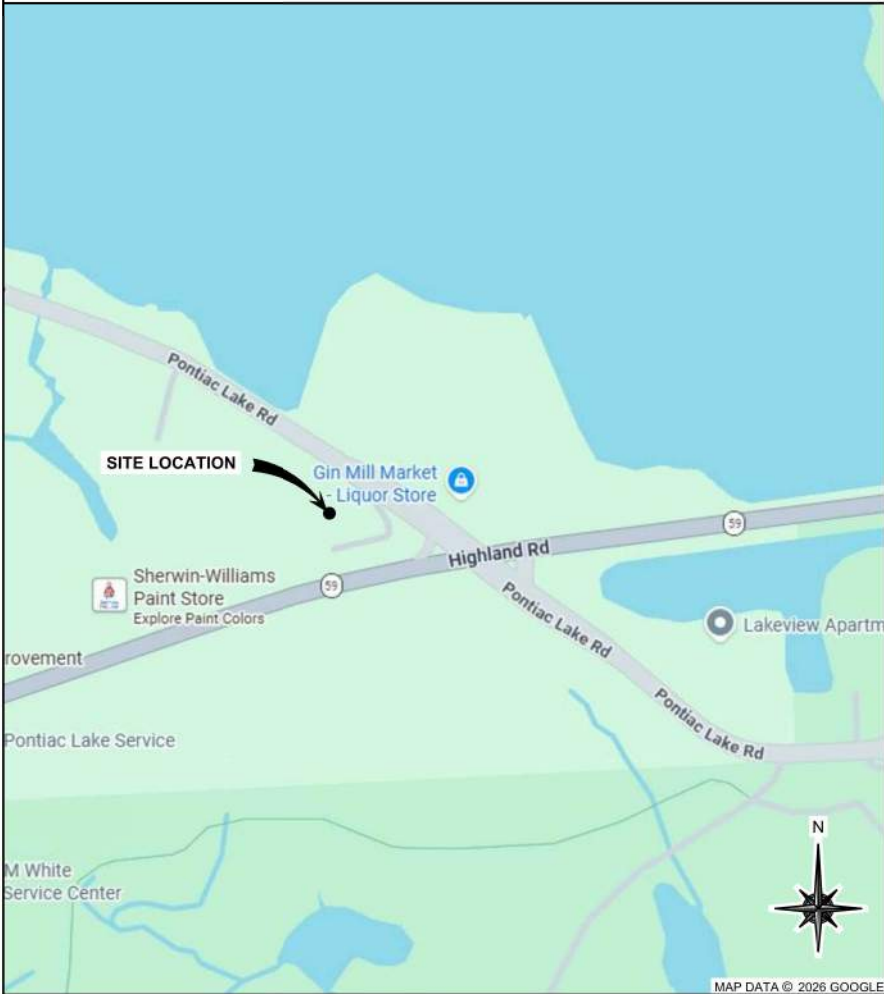
A&E:

WT GROUP AEC, LLC
2000 CENTER DRIVE
SUITE B411
HOFFMAN ESTATES, IL 60192
CONTACT: KEVIN CUNNIE
TEL: (847) 287-2085

AERIAL MAP



LOCATION MAP



SHEET INDEX

SHEET NUMBER:	DESCRIPTION:
T-1	TITLE SHEET
T-2 - T-4	GENERAL NOTES
1 OF 1	SURVEY (BY OTHERS)
C-1	OVERALL PROPERTY PLAN
C-2	OVERALL SITE PLAN
C-3	ENLARGED SITE PLAN
C-4	SOIL EROSION CONTROL PLAN
C-4.1	WRC SOIL EROSION DETAILS
C-4.2	CONSTRUCTION DETAILS
C-5	FEMA FIRMETTE MAP
C-6	WETLANDS MAP
C-7 - C-9	SITE DETAILS
L-1	LANDSCAPING PLAN
L-2	LANDSCAPING DETAIL & NOTES
E-1	ONE-LINE DIAGRAM
E-2	OVERALL ELECTRICAL PLAN
E-2.1	ENLARGED ELECTRICAL PLAN
E-3	ELECTRICAL DETAILS
E-4 - E-5	ELECTRICAL EQUIPMENT SPECIFICATIONS
E-6	UTILITY DETAILS AND SPECIFICATIONS

REFERENCED MATERIALS

A SITE WALK WAS NOT PERFORMED FOR THIS SITE PER SCOPE OF WORK. EQUIPMENT LAYOUT AND PLANS SHOWN WITHIN THIS SET WERE TAKEN FROM AVAILABLE DOCUMENTS/DRAWINGS PROVIDED BY OTHERS.



Know what's below.
Call before you dig.

CALL AT LEAST THREE WORKING
DAYS BEFORE YOU DIG

CONTRACTOR SHALL VERIFY ALL PLANS & EXISTING LOCATIONS, CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR THE SAME

DO NOT SCALE DRAWINGS



WT GROUP AEC

Engineering with Precision, Pace and Passion.

2000 Center Drive, Suite B411
Hoffman Estates, IL 60192
TEL: (847) 287-2085
www.wtgroupaec.com

WT Group
Engineering • Design • Consulting

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EXPIRES: 03/02/28 SIGNED: 09/02/26

REVISIONS

REV.	ISSUED FOR	DATE	BY
A	FOR CLIENT REVIEW	03/18/26	JTB
0	REVISION	03/23/26	JTB
1	REVISION	05/20/26	JTB
2	REVISION	06/12/26	JTB
3	REVISION	07/16/26	JTB
Δ	REVISION	09/02/26	JTB

AQUATIC \ DESIGN & PROGRAM MANAGEMENT
CIVIL \ TELECOMMUNICATION \ MECHANICAL
PLUMBING \ ELECTRICAL \ LAND SURVEYING
ACCESSIBILITY CONSULTING \ STRUCTURAL



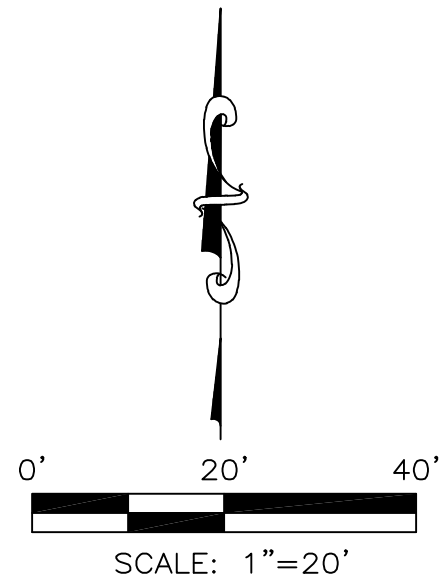
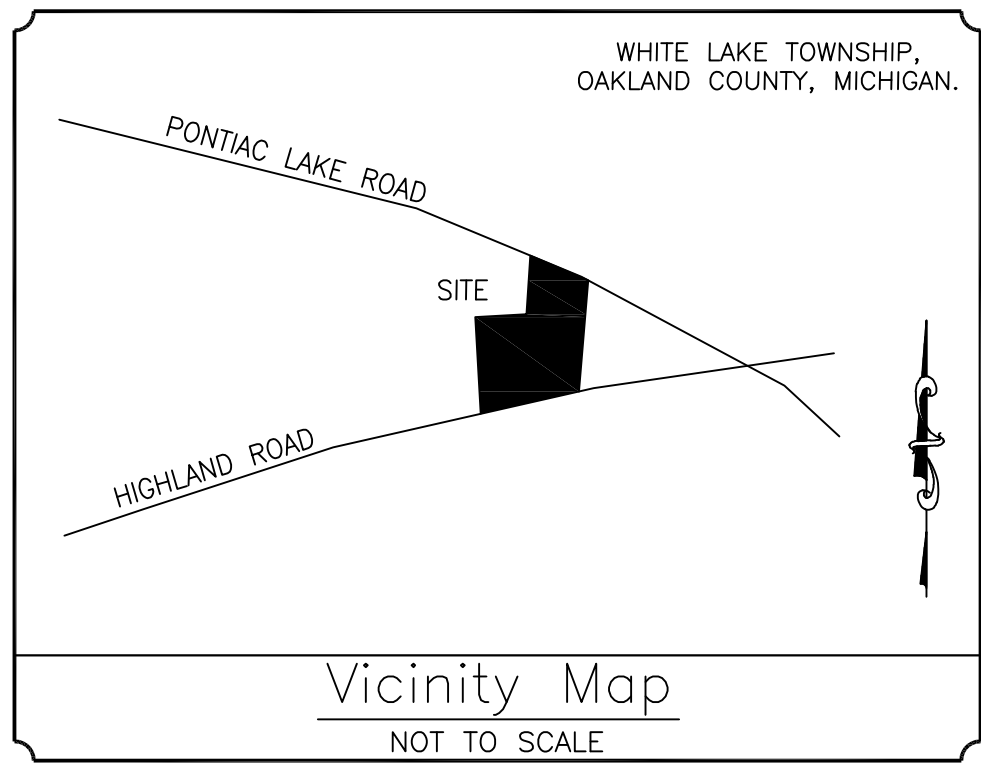
CHECK: JKR

DRAWN: JTB

JOB: T2600207

T-1

TITLE SHEET



ZONING INFORMATION

A ZONING REPORT WAS NOT PROVIDED BY THE CLIENT PER TABLE A 6(a) AND 6(b). THE ZONING CLASSIFICATION, SETBACK REQUIREMENTS, THE HEIGHT AND FLOOR SPACE AREA RESTRICTIONS, AND PARKING REQUIREMENTS ARE NOT SHOWN HEREON.

NOTES CORRESPONDING TO SCHEDULE B

A TITLE COMMITMENT WAS NOT PROVIDED

GENERAL NOTES

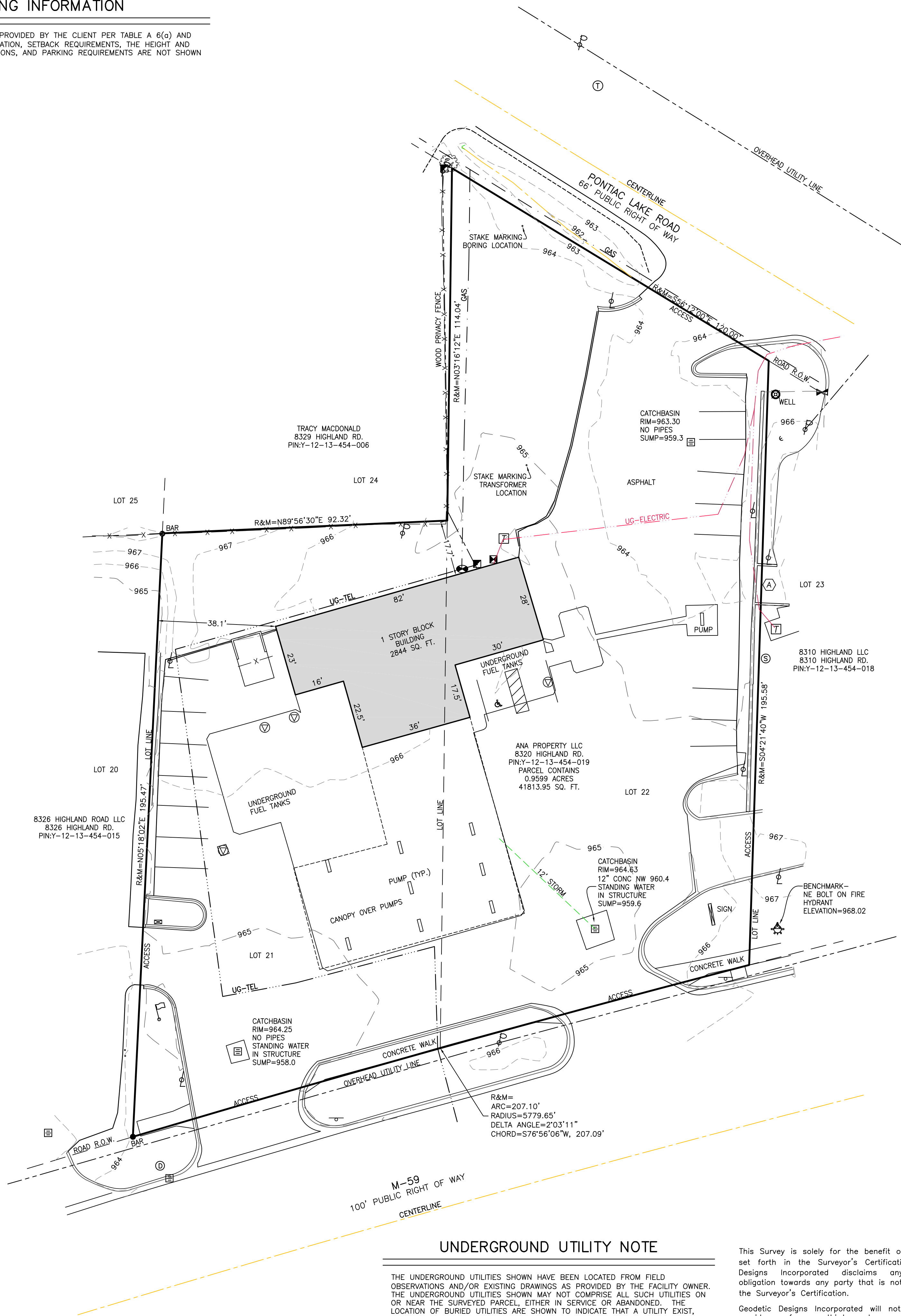
- 1) NO EVIDENCE OF EARTH MOVING OR BUILDING CONSTRUCTION/ADDITIONS WERE OBSERVED WHILE CONDUCTING THE FIELD WORK. (ITEM 16, TABLE A).
- 2) NO EVIDENCE OF PROPOSED STREET RIGHT OF WAY LINE CHANGES WERE PROVIDED BY THE CONTROLLING JURISDICTION. (ITEM 17, TABLE A).
- 3) THERE IS NO OBSERVABLE EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS. (ITEM 17, TABLE A).
- 4) THIS PARCEL HAS IMPROVED DIRECT ACCESS TO PONTIAC LAKE ROAD AND HIGHLAND ROAD (M-59), BOTH DEDICATED PUBLIC RIGHT OF WAYS.
- 5) THIS SURVEY MAP CORRECTLY REPRESENTS THE FACTS FOUND AT THE TIME OF THE SURVEY.
- 6) THERE ARE NO OBSERVED GAPS OR OVERLAPS BETWEEN THE BOUNDARY LINES OF THE PARCEL AS SHOWN ON THIS SURVEY MAP AND AS PROVIDED IN THE DESCRIPTION PRESENTED IN THE TITLE COMMITMENT.
- 7) THE BOUNDARY LINE DIMENSIONS AS SHOWN ON THIS SURVEY MAP FORM A MATHEMATICALLY CLOSED FIGURE WITHIN +/-0.1 FOOT.
- 8) THE BOUNDARY LINES OF THE PARCEL AS PROVIDED IN THE DESCRIPTION PRESENTED IN THE TITLE COMMITMENT ARE CONTIGUOUS WITH THE BOUNDARY LINES OF ALL ADJOINING STREETS, HIGHWAYS, RIGHTS OF WAY AND EASEMENTS, PUBLIC OR PRIVATE, AS DESCRIBED IN THEIR MOST RECENT RESPECTIVE DESCRIPTIONS OF RECORD.
- 9) EXCEPT AS OTHERWISE NOTED BELOW, IF THE OVERALL PARCELS CONSISTS OF TWO OR MORE DESCRIPTIONS, THERE ARE NO GAPS OR GORES BETWEEN SAID DESCRIPTIONS.
- 10) THIS PARCEL FRONTS ON BOTH PONTIAC LAKE ROAD AND HIGHLAND ROAD (M-59). (ITEM 14, TABLE A).
- 11) EASEMENTS AND EXCEPTIONS SHOWN HEREON WERE PROVIDED BY THE TITLE INSURANCE COMPANY, NO RESEARCH HAS BEEN CONDUCTED BY GEODETIC DESIGNS INC. TO IDENTIFY ANY ADDITIONAL EASEMENTS OR RECORD ENCUMBRANCES THAT MAY AFFECT THIS PARCEL.
- 12) ALL LINEAR DIMENSIONS SHOWN ARE IN INTERNATIONAL FEET AND DECIMALS THEREOF.
- 13) WHITE LAKE TOWNSHIP HAS NOT RESPONDED TO A REQUEST FOR MAPS OF UNDERGROUND WATER AND SANITARY AND THOSE ARE NOT SHOWN HEREON.

LEGEND

	Power Pole		Flag Pole		Storm Manhole
	Power Pole w/Light		Sign (As Noted)		Storm Catchbasin
	Light Pole		Well Head		Deciduous Tree
	Telephone Pole		Satellite Dish		Coniferous Tree
	Guy Wire		Tower		Sanitary Manhole
	Transformer		Water Valve		Sanitary Clean Out
	Electric Manhole		Fire Hydrant		Gas Valve
	Telephone Manhole		Water Manhole		Gas Manhole
	Telephone Pedestal		Water Meter Pit		Gas Meter
	Electric Meter		Water Meter		Gas Marker
	Cable Box		Indicates Handicapped Parking		Section Corner
	Air Conditioner Unit		Parking Count		Set 5/8" Bar & Cap
	Easement Identifier		Mailbox		Found Corner Monument
	Distance not to scale				Monitoring Well

ABBREVIATIONS

R = RECORDED	T-N = TOWN - NORTH	AVE. = AVENUE
M = MEASURED	R-E = RANGE - EAST	BLVD. = BOULEVARD
C = CALCULATED	SQ. FT. = SQUARE FEET	CT. = COURT
N = NORTH	NE = NORTHEAST	RD. = ROAD
E = EAST	SE = SOUTHEAST	ST. = STREET
S = SOUTH	SW = SOUTHWEST	PIN = PARCEL IDENTIFICATION NUMBER
W = WEST	NW = NORTHWEST	



UNDERGROUND UTILITY NOTE

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD OBSERVATIONS AND/OR EXISTING DRAWINGS AS PROVIDED BY THE FACILITY OWNER. THE UNDERGROUND UTILITIES SHOWN MAY NOT COMPRISE ALL SUCH UTILITIES ON OR NEAR THE SURVEYED PARCEL, EITHER IN SERVICE OR ABANDONED. THE LOCATION OF BURIED UTILITIES ARE SHOWN TO INDICATE THAT A UTILITY EXIST, BUT MAY REQUIRE SUB-SURFACE INVESTIGATION TO DETERMINE THE EXACT LOCATION.

This Survey is solely for the benefit of the parties set forth in the Surveyor's Certification. Geodetic Designs Incorporated disclaims any duty or obligation towards any party that is not identified in the Surveyor's Certification.

Geodetic Designs Incorporated will not include the providers of any third party reports in the Surveyor's Certification.
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DESCRIPTION

That part of Section 13, T3N, R8E, White Lake Township, Oakland County, Michigan being described as:

Lots 21 & 22, Huron River Subdivision, as recorded in Liber 57 of Plats, on Page 55, Oakland County Records.

BEARING BASIS

BEARINGS ARE BASED ON THE CENTERLINE OF PONTIAC LAKE ROAD RECORDED AS BEARING S°56'12"E.

FEMA 100 YEAR FLOODPLAIN

BY GRAPHIC PLOTTING ONLY, THIS PARCEL IS LOCATED IN ZONE X OF THE FLOOD INSURANCE RATE MAP NUMBER 26125C0337F WHICH BEARS AN EFFECTIVE DATE OF 9/29/2006.

SIGNIFICANT OBSERVATIONS

INFORMATION NOTED BELOW IS SIMPLY A STATEMENT OF FACT REGARDING THE LOCATION OF OBSERVED IMPROVEMENTS RELATIVE TO BOUNDARY, EASEMENT, AND SETBACK LINES, AND IS NOT A LEGAL OPINION, OPINION OF OWNERSHIP, OR DETERMINATION OF ENCROACHMENTS.	
BOUNDARY LINES	Δ DUMPSTER WALL CROSS PROPERTY LINE AS SHOWN
ROW & EASEMENTS	NONE OBSERVED
SETBACKS	NONE OBSERVED
PHYSICAL ACCESS BETWEEN ADJOINING PROPERTIES	NONE OBSERVED
USE OF ADJOINING PARCELS	NONE OBSERVED

CERTIFICATION

TO: RED E CHARGE:

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2026 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 2, 3, 4, 5, 6a, 6b, 7a, 7b, 7c, 8, 9, 10a, 10b, 11, 12, 13, 14, 15, 16, 17, 18, 19, and 20 of Table A thereto. The fieldwork was completed on May 28, 2026.



David J. VanDenBerghe
DAVID J. VANDENBERGHE
PROFESSIONAL SURVEYOR #4001051489

Registration No. 4001051489
Within the State of Michigan

"ALTA/NSPS LAND TITLE SURVEY"

PREPARED BY:



GEODETIC DESIGNS, INC.
2300 N. GRAND RIVER AVE.
LANSING, MI 48906
PHONE: (517) 908-0008
FAX: (517) 908-0009
WWW.GEODETICDESIGNS.COM

DATE	REVISION	BY
RED E CHARGE		
8320 Highland Road White Lake, MI Parcel #12-13-454-019		
DATE: May 28, 2026	SCALE: 1" = 20'	
DRAWN BY: DJV	JOB NUMBER: S092-2026	
CHECKED BY: DJV	SHEET 1 OF 1	

- GENERAL NOTES:
- CONTRACTOR RESPONSIBILITIES INCLUDE CHARGING STATION MOUNTING, OVERHEAD CONDUIT INSTALLATION AND WIRING.
 - CONTRACTOR TO PAINT PROPOSED EV PARKING SPACES PER JURISDICTIONAL REQUIREMENTS.
 - CONTRACTOR TO FIELD SCAN/X-RAY EXISTING CONCRETE SLAB TO ENSURE NO REINFORCEMENT IS DAMAGED DURING EQUIPMENT OR CONDUIT ANCHORING, ENSURE 1" GAP MIN. BETWEEN REBAR AND ANCHORAGE.
 - EXACT STATION PLACEMENT AND ROTATION ANGLE MAY VARY SLIGHTLY UPON INSTALLATION DEPENDING ON SITE CONDITIONS.
 - UNDERGROUND CONDUIT PATH TO BE VERIFIED BY GPR PRIOR TO INSTALLATION.
 - OVERALL CONDUIT ROUTE TO BE VERIFIED IN FIELD BY CONTRACTOR AND PROPERTY OWNER.
 - 3/4" MINIMUM FOR ALL CONDUIT.
 - ROOFTOP CONDUIT UTILIZING NON-PENETRATING SUPPORTS MAY BE USED IN ADDITION IF APPROVED BY PROPERTY OWNER.

PROPERTY INFORMATION	
JURISDICTION:	WHITE LAKE TOWNSHIP
ZONING:	GB
SUBDIVISION:	HURON RIVER
LOT AREA:	±0.9599 ACRES
OWNER:	ANA PROPERTY, LLC 8320 HIGHLAND ROAD WHITE LAKE TOWNSHIP, MI 48386

DISTANCES TO EXISTING BODIES OF WATER	
DIRECTION	
NORTH (PONTIAC LAKE)	±290'-0"
SOUTH (CEDAR CREEK)	±2575'-0"
EAST (INLET TO PONTIAC LAKE)	±660'-0"
WEST (UNNAMED PONDS)	±2690'-0"

LATITUDE AND LONGITUDE: 42.660101°, -83.449880°
SOURCE: GOOGLE MAPS, DATED 03/18/2026

- NOTE:
TYPICAL PARKING SPACE MINIMUM
DIMENSION FOR 90° PARKING STALL:
- 9'-0" WIDTH
 - 18'-0" DEPTH

NOTE:
THIS SITE PLAN IS BASED ON A SURVEY PROVIDED
BY GEODETIC DESIGNS, INC., DATED 05/28/2026.
CONTRACTOR SHALL FIELD VERIFY EXISTING
CONDITIONS PRIOR TO COMMENCEMENT OF
CONSTRUCTION.

FLOOD STATEMENT:
BY GRAPHIC PLOTTING ONLY, THIS PARCEL IS
LOCATED IN ZONE X OF FLOOD INSURANCE RATE
MAP NUMBER 26125C0337F WHICH BEARS AN
EFFECTIVE DATE OF 09/29/2006.

LEGAL DESCRIPTION:

THAT PART OF SECTION 13, T3N, R8E, WHITE LAKE
TOWNSHIP, OAKLAND COUNTY, MICHIGAN BEING
DESCRIBED AS:

LOTS 21 & 22, HURON RIVER SUBDIVISION, AS
RECORDED IN LIBER 57 OF PLATS, ON PAGE 55,
OAKLAND COUNTY RECORDS.

NOTE:
SEE 1/C-4.2 FOR SEQUENCE OF
CONSTRUCTION & COST ESTIMATES.

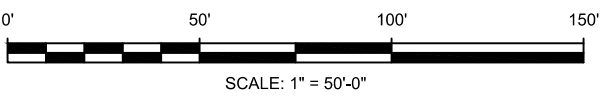
NOTE:
NO EXISTING SIDEWALK
ALONG PONTIAC LAKE ROAD.



EQUIPMENT NOISE LEVEL		
DISTANCE	CHARGER	TRANSFORMER
1 METER (3.5')	65 dBA	56 dBA
2 METERS (6.5')	59 dBA	54 dBA
4 METERS (13')	53 dBA	48 dBA
8 METERS (26')	47 dBA	42 dBA
16 METERS (52')	41 dBA	36 dBA
32 METERS (105')	35 dBA	30 dBA

- MINIMUM PARKING REQUIREMENTS:
- (1) FUELING SPACE PER NOZZLE
 - (1) PARKING SPACE PER 200 SQ. FT. OF GROSS FLOOR AREA

BUILDING SQUARE FOOTAGE	EXISTING REGULAR PARKING STALLS	EXISTING ADA PARKING STALLS	EXISTING PARKING STALLS CONVERTED TO EV PARKING STALLS	NEW EV PARKING STALLS	TOTAL PARKING STALLS (INCLUDING EV STALLS)	TOTAL PARKING STALLS (EXCLUDING EV STALLS)
±2844	17	2	3	1	20	16



OVERALL PROPERTY PLAN
SCALE: 1" = 50'-0"

1

WT GROUP AEC
Engineering with Precision, Pace and Passion.
2000 Center Drive, Suite B411
Farmington Hills, MI 48334
T: 248.268.4533
wtgroupaec.com

WT Group
Engineering • Design • Consulting

8320 HIGHLAND
8320 HIGHLAND ROAD
WHITE LAKE TOWNSHIP, MI 48386

EXPIRES: 03/02/28 SIGNED: 09/02/26

REVISIONS

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A	FOR CLIENT REVIEW	03/18/26	JTB
0	REVISION	03/23/26	JTB
1	REVISION	05/20/26	JTB
2	REVISION	06/12/26	JTB
3	REVISION	07/16/26	JTB
4	REVISION	09/02/26	JTB

AQUATIC \ DESIGN & PROGRAM MANAGEMENT
CIVIL \ TELECOMMUNICATION \ MECHANICAL
PLUMBING \ ELECTRICAL \ LAND SURVEYING
ACCESSIBILITY CONSULTING \ STRUCTURAL

CHECK: JKR
DRAWN: JTB
JOB: T2600207

C-1
OVERALL PROPERTY PLAN

GENERAL NOTES:

1. CONTRACTOR RESPONSIBILITIES INCLUDE CHARGING STATION MOUNTING, OVERHEAD CONDUIT INSTALLATION AND WIRING.
2. CONTRACTOR TO PAINT PROPOSED EV PARKING SPACES PER JURISDICTIONAL REQUIREMENTS.
3. CONTRACTOR TO FIELD SCAN/X-RAY EXISTING CONCRETE SLAB TO ENSURE NO REINFORCEMENT IS DAMAGED DURING EQUIPMENT OR CONDUIT ANCHORING, ENSURE 1" GAP MIN. BETWEEN REBAR AND ANCHORAGE.
4. EXACT STATION PLACEMENT AND ROTATION ANGLE MAY VARY SLIGHTLY UPON INSTALLATION DEPENDING ON SITE CONDITIONS.
5. UNDERGROUND CONDUIT PATH TO BE VERIFIED BY GPR PRIOR TO INSTALLATION.
6. OVERALL CONDUIT ROUTE TO BE VERIFIED IN FIELD BY CONTRACTOR AND PROPERTY OWNER.
7. 3/4" MINIMUM FOR ALL CONDUIT.
8. ROOFTOP CONDUIT UTILIZING NON-PENETRATING SUPPORTS MAY BE USED IN ADDITION IF APPROVED BY PROPERTY OWNER.

PROPERTY INFORMATION	
JURISDICTION:	WHITE LAKE TOWNSHIP
ZONING:	GB
SUBDIVISION:	HURON RIVER
LOT AREA:	±0.9599 ACRES
OWNER:	ANA PROPERTY, LLC 8320 HIGHLAND ROAD WHITE LAKE TOWNSHIP, MI 48386

DISTANCES TO EXISTING BODIES OF WATER	
DIRECTION	
NORTH (PONTIAC LAKE)	±290'-0"
SOUTH (CEDAR CREEK)	±2575'-0"
EAST (INLET TO PONTIAC LAKE)	±660'-0"
WEST (UNNAMED PONDS)	±2690'-0"

LATITUDE AND LONGITUDE: 42.660101°, -83.449880°
SOURCE: GOOGLE MAPS, DATED 03/18/2026

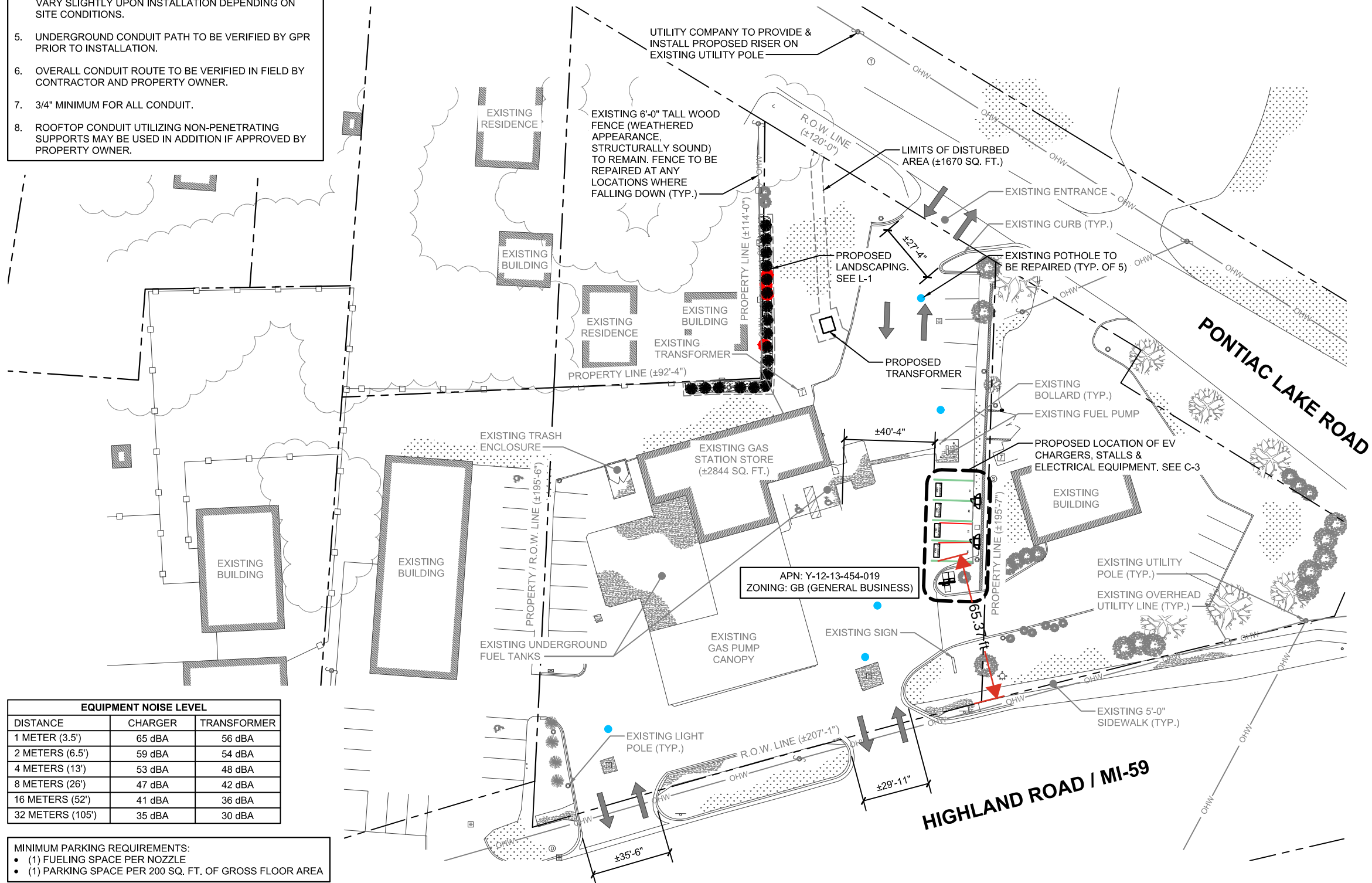
NOTE:
TYPICAL PARKING SPACE MINIMUM
DIMENSION FOR 90° PARKING STALL:
• 9'-0" WIDTH
• 18'-0" DEPTH

NOTE:
THIS SITE PLAN IS BASED ON A SURVEY PROVIDED
BY GEODETIC DESIGNS, INC., DATED 05/28/2026.
CONTRACTOR SHALL FIELD VERIFY EXISTING
CONDITIONS PRIOR TO COMMENCEMENT OF
CONSTRUCTION.

FLOOD STATEMENT:
BY GRAPHIC PLOTTING ONLY, THIS PARCEL IS
LOCATED IN ZONE X OF FLOOD INSURANCE RATE
MAP NUMBER 26125C0337F WHICH BEARS AN
EFFECTIVE DATE OF 09/29/2006.

NOTE:
SEE 1/C-4.2 FOR SEQUENCE OF
CONSTRUCTION & COST ESTIMATES.

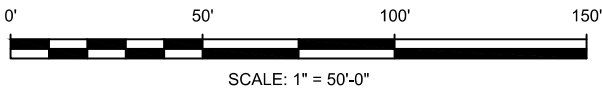
NOTE:
NO EXISTING SIDEWALK
ALONG PONTIAC LAKE ROAD.



EQUIPMENT NOISE LEVEL		
DISTANCE	CHARGER	TRANSFORMER
1 METER (3.5')	65 dBA	56 dBA
2 METERS (6.5')	59 dBA	54 dBA
4 METERS (13')	53 dBA	48 dBA
8 METERS (26')	47 dBA	42 dBA
16 METERS (52')	41 dBA	36 dBA
32 METERS (105')	35 dBA	30 dBA

MINIMUM PARKING REQUIREMENTS:
• (1) FUELING SPACE PER NOZZLE
• (1) PARKING SPACE PER 200 SQ. FT. OF GROSS FLOOR AREA

BUILDING SQUARE FOOTAGE	EXISTING REGULAR PARKING STALLS	EXISTING ADA PARKING STALLS	EXISTING PARKING STALLS CONVERTED TO EV PARKING STALLS	NEW EV PARKING STALLS	TOTAL PARKING STALLS (INCLUDING EV STALLS)	TOTAL PARKING STALLS (EXCLUDING EV STALLS)
±2844	17	2	3	1	20	16



SCALE: 1" = 50'-0"

OVERALL SITE PLAN

SCALE: 1" = 50'-0"

1



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CHECK: JKR

DRAWN: JTB

JOB: T2600207

C-2

OVERALL SITE PLAN

NOTE:
THIS SITE PLAN IS BASED ON A SURVEY PROVIDED BY GEODETIC DESIGNS, INC., DATED 05/28/2026. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION.

FLOOD STATEMENT:
BY GRAPHIC PLOTTING ONLY, THIS PARCEL IS LOCATED IN ZONE X OF FLOOD INSURANCE RATE MAP NUMBER 26125C0337F WHICH BEARS AN EFFECTIVE DATE OF 09/29/2006.

NOTE:
SEE 1/C-4.2 FOR SEQUENCE OF CONSTRUCTION & COST ESTIMATES.

NOTE:
NO EXISTING SIDEWALK ALONG PONTIAC LAKE ROAD.

LATITUDE AND LONGITUDE: 42.660101°, -83.449880°
SOURCE: GOOGLE MAPS, DATED 03/18/2026

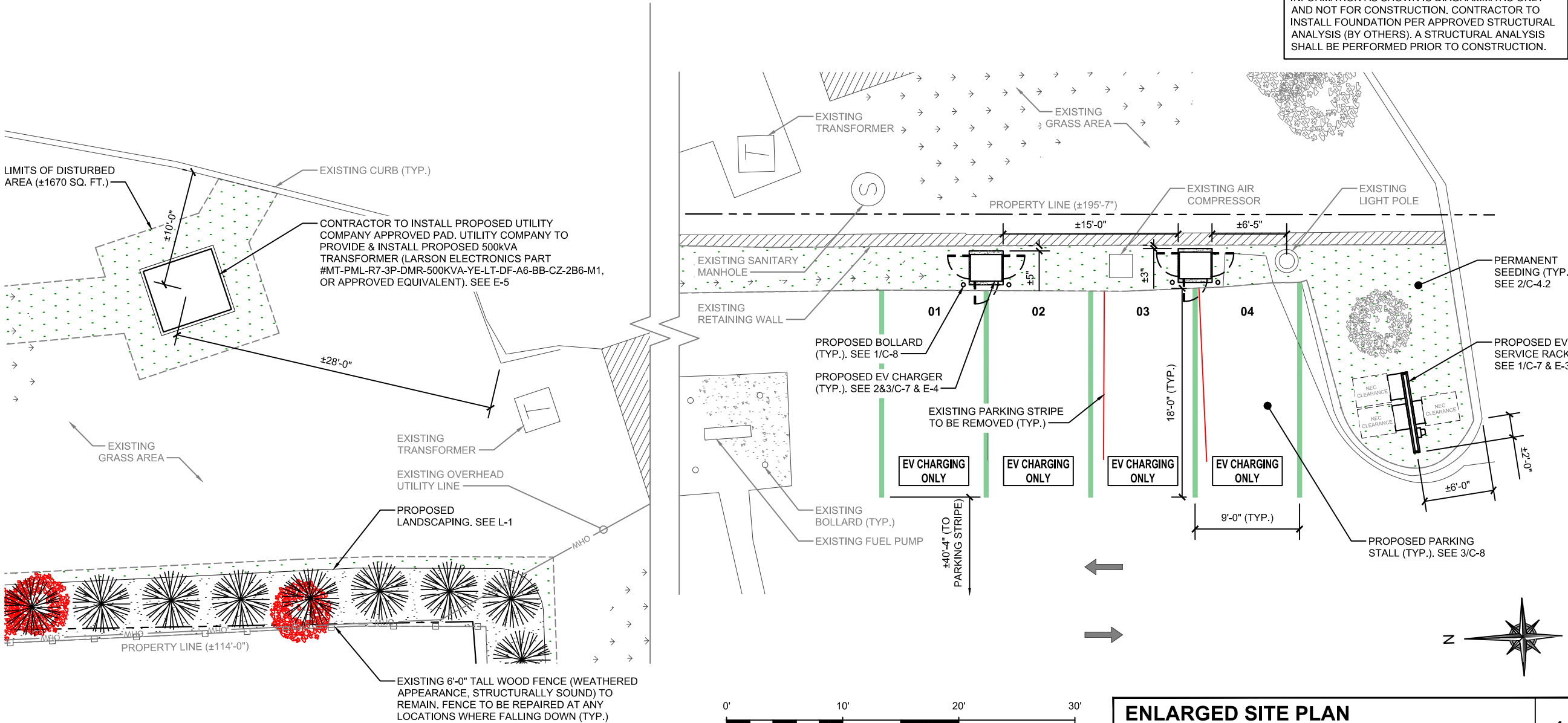
NOTE:
TYPICAL PARKING SPACE MINIMUM DIMENSION FOR 90° PARKING STALL:
• 9'-0" WIDTH
• 18'-0" DEPTH

EQUIPMENT NOISE LEVEL		
DISTANCE	CHARGER	TRANSFORMER
1 METER (3.5')	65 dBA	56 dBA
2 METERS (6.5')	59 dBA	54 dBA
4 METERS (13')	53 dBA	48 dBA
8 METERS (26')	47 dBA	42 dBA
16 METERS (52')	41 dBA	36 dBA
32 METERS (105')	35 dBA	30 dBA

DISTANCES TO EXISTING BODIES OF WATER	
DIRECTION	
NORTH (PONTIAC LAKE)	±290'-0"
SOUTH (CEDAR CREEK)	±2575'-0"
EAST (INLET TO PONTIAC LAKE)	±660'-0"
WEST (UNNAMED PONDS)	±2690'-0"

- GENERAL NOTES:
- CONTRACTOR RESPONSIBILITIES INCLUDE CHARGING STATION MOUNTING, OVERHEAD CONDUIT INSTALLATION AND WIRING.
 - CONTRACTOR TO PAINT PROPOSED EV PARKING SPACES PER JURISDICTIONAL REQUIREMENTS.
 - CONTRACTOR TO FIELD SCAN/X-RAY EXISTING CONCRETE SLAB TO ENSURE NO REINFORCEMENT IS DAMAGED DURING EQUIPMENT OR CONDUIT ANCHORING, ENSURE 1" GAP MIN. BETWEEN REBAR AND ANCHORAGE.
 - EXACT STATION PLACEMENT AND ROTATION ANGLE MAY VARY SLIGHTLY UPON INSTALLATION DEPENDING ON SITE CONDITIONS.
 - UNDERGROUND CONDUIT PATH TO BE VERIFIED BY GPR PRIOR TO INSTALLATION.
 - OVERALL CONDUIT ROUTE TO BE VERIFIED IN FIELD BY CONTRACTOR AND PROPERTY OWNER.
 - 3/4" MINIMUM FOR ALL CONDUIT.
 - ROOFTOP CONDUIT UTILIZING NON-PENETRATING SUPPORTS MAY BE USED IN ADDITION IF APPROVED BY PROPERTY OWNER.

NOTE (ALL PROPOSED CONCRETE PADS):
WT'S SCOPE OF WORK DOES NOT INCLUDE A STRUCTURAL ANALYSIS OF THE CONCRETE PAD. THE CONCRETE DIMENSIONS, ANCHORING AND REBAR INFORMATION AS SHOWN IS DIAGRAMMATIC ONLY AND NOT FOR CONSTRUCTION. CONTRACTOR TO INSTALL FOUNDATION PER APPROVED STRUCTURAL ANALYSIS (BY OTHERS). A STRUCTURAL ANALYSIS SHALL BE PERFORMED PRIOR TO CONSTRUCTION.



ENLARGED SITE PLAN

SCALE: 1" = 10'-0"

1

CHARGE-X

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STATE OF MICHIGAN

MARK VENTRELLI

ENGINEER

No. 6201057905

EXPIRES: 03/02/28

SIGNED: 09/02/26

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DRAWN: JTB

JOB: T2600207

C-3

ENLARGED SITE PLAN

XXX.XX

PROPOSED CONTOUR (FT)

XXX.XX

PROPOSED ELEVATION (FT)

T/F=XXX.XX
T/P=XXX.XX

FOUNDATION/PAVEMENT
ELEVATIONS (FT)

XXX.XX

INVERT/INLET (FT)

XXX.XX

PROPOSED SPOT GRADE (FT)

LF

LINEAR FEET

T/F

TOP OF FOUNDATION
(CONCRETE)

T/P

TOP OF PAVEMENT
(FINISHED GRADE/GRAVEL)

FLOW DIRECTION

PROPOSED CMP
(CORRUGATED METAL PIPE)

CENTER OF SWALE

PROPOSED CONTOUR

DISTANCES TO EXISTING BODIES OF WATER	
DIRECTION	
NORTH (PONTIAC LAKE)	±290'-0"
SOUTH (CEDAR CREEK)	±2575'-0"
EAST (INLET TO PONTIAC LAKE)	±660'-0"
WEST (UNNAMED PONDS)	±2690'-0"

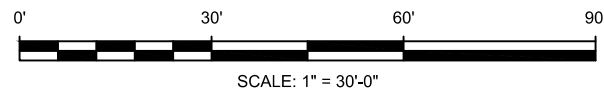
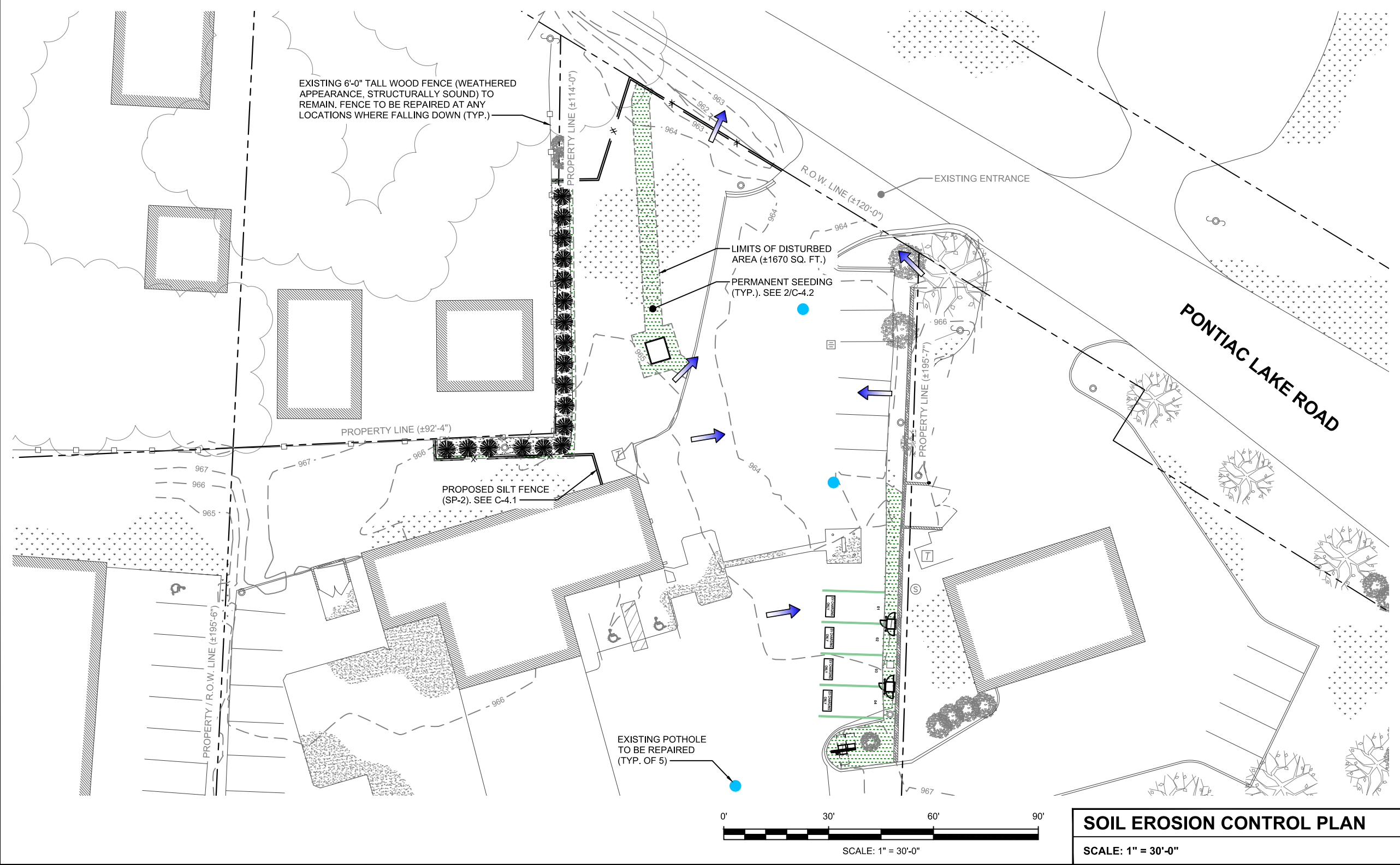
NOTE:
DUE TO EXISTING TOPOGRAPHY, A
GRADING PLAN IS NOT REQUIRED.

NOTE:
CHARGE-X USA SHALL BE RESPONSIBLE FOR
INSPECTION AND MAINTENANCE OF SESC
MEASURES UNTIL FINAL STABILIZATION.

NOTE:
THE SOIL EROSION CONTROLS WILL BE
MAINTAINED WEEKLY AND AFTER EVERY
STORM EVENT BY CHARGE-X USA.

NOTE:
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BY GEODETIC DESIGNS, INC., DATED 05/28/2026.
CONTRACTOR SHALL FIELD VERIFY EXISTING
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SOIL EROSION CONTROL PLAN

SCALE: 1" = 30'-0"



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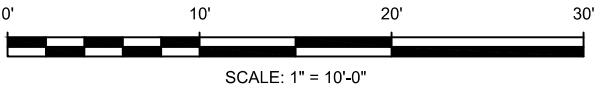
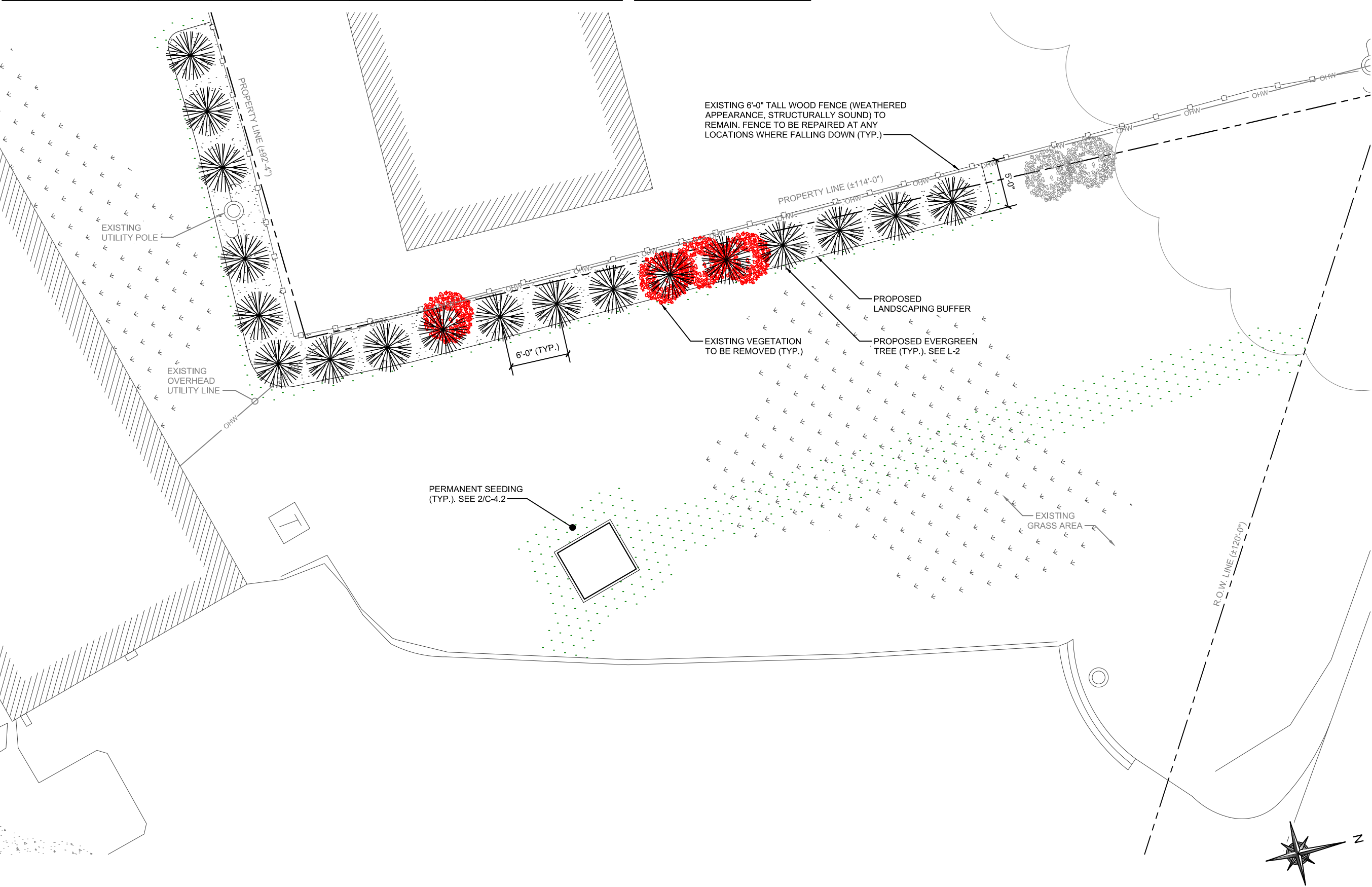
JOB: T2600207

C-4

SOIL EROSION
CONTROL PLAN

LANDSCAPE CHART						
QTY.	COMMON NAME	SCIENTIFIC NAME	HT. AT INSTALL	SPACING	ROOTBALL	OVERALL PROJECTED HEIGHT
18	MISSION ARBORVITAE	thuja occidentalis 'mission'	6'-0"	6'-0" O.C. MAX	B/B	10'-0"

NOTE:
LAND OWNER WILL BE RESPONSIBLE
FOR MAINTAINING AND WATERING ALL
LANDSCAPING ON SITE.



LANDSCAPING PLAN

SCALE: 1" = 10'-0"

1



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L-1

LANDSCAPING PLAN

ALL PLACEMENT OF LANDSCAPING SHALL MEET THE FOLLOWING CONDITIONS:

1. ALL PLANT MATERIAL SHALL BE PLANTED IN A MANNER WHICH IS NOT TO INTERFERE WITH OVERHEAD WIRES OR BE INTRUSIVE TO UTILITIES OR PAVEMENT.
2. NO TREES OR OTHER LANDSCAPING SHALL BE LOCATED CLOSER THAN 10 FEET TO A FIRE HYDRANT OR OTHER ABOVE GROUND UTILITIES.
3. NO LANDSCAPING SHALL INTERFERE WITH SITE REQUIREMENTS FOR SAFE INGRESS AND EGRESS.

INSTALLATION STANDARDS:

1. PLANT MATERIAL SHALL CONFORM WITH THE CURRENT AMERICAN STANDARDS FOR NURSERY STOCK, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSEYMEN FOR THAT TYPE OF TREE OR SHRUB AT THE TIME OF INSTALLATION.
2. ALL TREES SHALL BE GROWN IN A NURSERY LOCATED IN THE STATE OF MICHIGAN.
3. ALL PLANT MATERIAL SHALL BE INSTALLED FREE OF DISEASE AND IN A MANNER THAT ENSURES THE AVAILABILITY OF SUFFICIENT SOIL AND WATER TO SUSTAIN HEALTHY GROWTH.
4. ALL TAGS, WIRES, PLASTIC TIES AND ROPE SHALL BE CUT FROM EACH TREE TO PREVENT GIRDLING OF THE TREE. THE BURLAP SHALL BE PULLED BACK FROM THE UPPER THIRD OF THE ROOTBALL. IF A PLASTIC 'BURLAP' IS USED, IT SHALL BE REMOVED IN ITS ENTIRETY FROM THE ROOTBALL.
5. ALL PLANT MATERIAL SHALL BE PLANTED WITH A MINIMUM OF DEPTH OF THREE (3) INCHES OF MULCHED MATERIAL AND A DIAMETER OF THREE (3) FEET AROUND THE BASE OF THE TREE.
6. TREES SHALL BE STAKED WITH POSTS AND NOT STAKES IN AREAS OF HIGH WIND FOR ONE TO THREE YEARS TO ALLOW THE GROWTH OF PROPOSED ROOTS TO STABILIZE. ALL ROPES SHALL BE COVERED TO PREVENT CUTTING INTO THE BARK.
7. ANY EXCESS SOIL, CLAY, OR CONSTRUCTION DEBRIS SHALL BE REMOVED FROM THE PLANTING SITE, PRIOR TO PLANTING OF INDIVIDUAL TREES AT FINAL GRADE.
8. THE JURISDICTION, AT ITS DISCRETION, HAS THE RIGHT TO RETAIN A PROFESSIONAL LANDSCAPE ARCHITECT OR ARBORIST TO REVIEW SUBMITTED LANDSCAPE PLAN AND THE PROFESSIONAL LANDSCAPE ARCHITECT OR ARBORIST WILL SUBMIT A WRITTEN REPORT TO THE PLANNING AND ZONING COMMISSION. ALL EXPENSES INCURRED BY THE JURISDICTION FOR THE USE OF THE LANDSCAPE ARCHITECT OR ARBORIST SHALL BE REIMBURSED BY THE DEVELOPER.

PLANTING SEASONS:

1. PLANTS MUST BE PLANTED DURING THE FOLLOWING DATES: APRIL 1ST TO MAY 15TH AND SEPTEMBER 1ST TO OCTOBER 1ST.
2. THE PLANTING PERIODS INDICATED MAY BE EXTENDED DUE TO WEATHER CONDITIONS OR OTHER FACTORS, WHICH MUST BE APPROVED BY THE LANDSCAPE ARCHITECT/ENGINEER.
3. THE CONTRACTOR WILL BE RELIEVED FOR HIS GUARANTEE RESPONSIBILITY SHOULD THE OWNER REQUIRE PLANT MATERIAL INSTALLATIONS TO BE COMPLETED DURING OTHER TIMES THAN THE PLANTING PERIODS INDICATED.

PLANTING:

1. ALL SHADE TREES, ORNAMENTAL TREES, EVERGREEN TREES AND SHRUBS SHALL BE PLANTED IN HOLES EXCAVATED AT LEAST 3x THE WIDTH OF THE DIAMETER OF THE BALL OR CONTAINER AND DEEP ENOUGH SO THAT THE TOP OF THE BALL OR SOIL IN THE CONTAINER IS AT OR JUST ABOVE EXISTING GRADE.
2. ALL TWINE OR ROPE MUST BE CUT AND REMOVED AND THE BURLAP FOLDED AWAY FROM THE TOP OF THE BALL. THE EXCAVATION MUST BE BACKFILLED WITH THE PLANTING MIXTURE AND WATERED. ANY SETTLEMENT WILL BE FILLED WITH PLANTING MIXTURE.
3. A 4" DEEP SAUCER, SIMILAR TO THE DIAMETER OF THE PLANTING HOLE SHALL BE CREATED USING PLANTING MIX.
4. PLANTING MIX TO CONSIST OF 1/3 TOP SOIL, 1/3 SOIL FROM EXCAVATION, AND 1/3 MUSHROOM COMPOST (OR 1/3 PEAT MOSS).

CLEAN UP:

1. ALL DEBRIS GENERATED DURING THE INSTALLATION OF PLANT MATERIALS MUST BE REMOVED FROM THE SITE.
2. ALL PAVEMENTS AND WALKS MUST BE SWEEPED AFTER EACH DAYS WORK. UPON COMPLETION OF THE WORK, ALL PAVEMENTS MUST BE WASHED TO REMOVE ALL MUD OR DIRT.

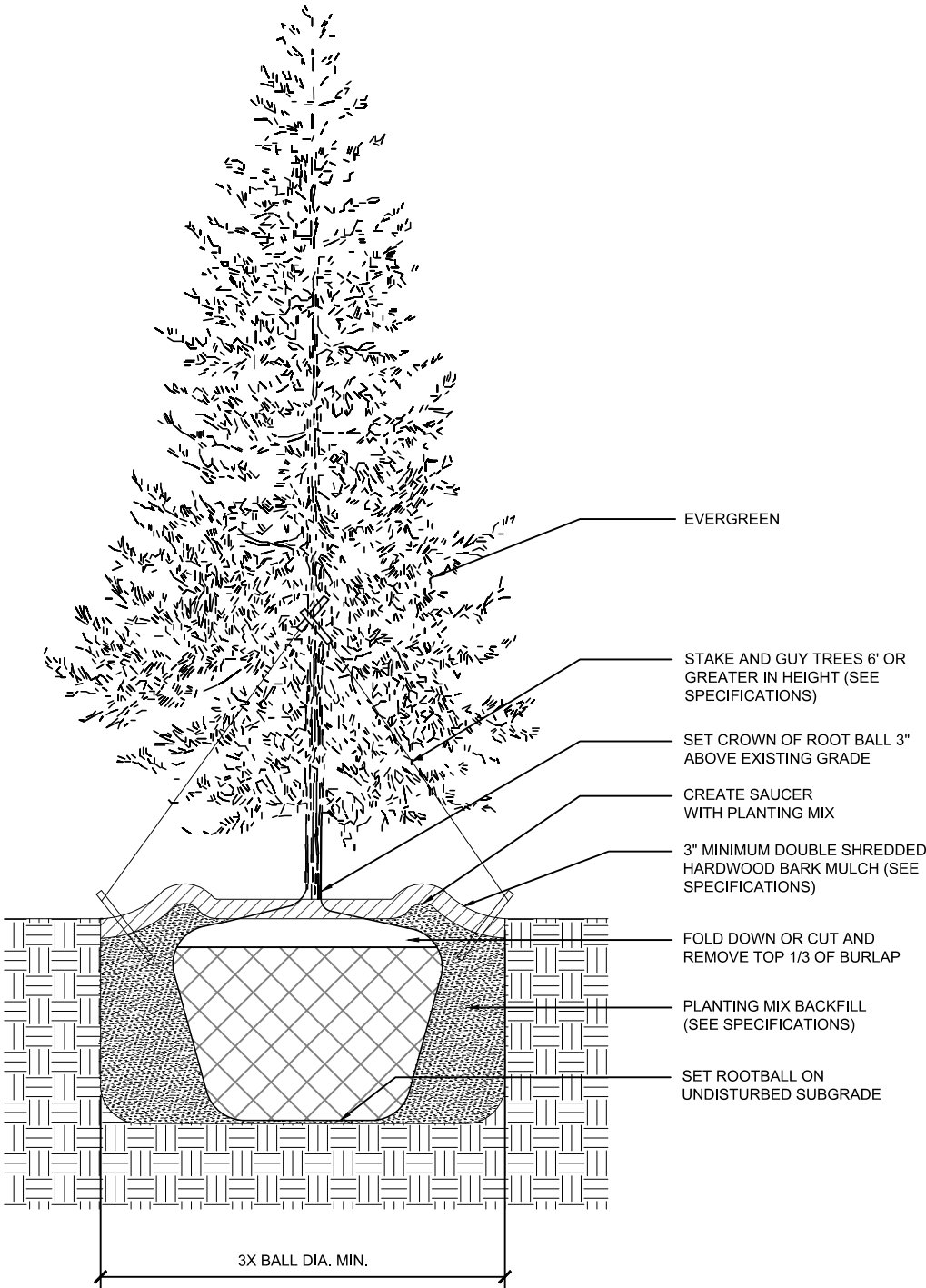
NOTES

SCALE: NONE

1

NOTE:

ALL MATERIALS SURROUNDING THE TREE ROOT BALL, INCLUDING WIRING, ARE TO BE REMOVED PRIOR TO PLANTING OF TREES.



LANDSCAPING DETAIL

SCALE: NONE

2



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L-2

LANDSCAPING DETAIL & NOTES

GENERAL NOTES:

- 1000VDC AND 600VAC CONDUCTORS ARE BASED ON 75°C COLUMN OF NEC TABLE 310.15B(16).
- METER LOCATION SHALL BE ACCESSIBLE FOR READING AND SERVICING. UTILITY COORDINATION IS ONGOING.
- UTILITY COORDINATION IS ONGOING. RESPONSIBILITY OF PRIMARY AND SECONDARY TERMINATIONS SHALL BE COMPLETED BY THE UTILITY COMPANY. CONTRACTOR SHALL SUPPLY CONDUIT ONLY ON PRIMARY SIDE AS SPECIFIED BY THE UTILITY COMPANY. TRANSFORMER SIZED AND PROVIDED BY THE UTILITY COMPANY. CONTRACTOR TO INSTALL PER UTILITY COMPANY GUIDELINES.
- #4 SOLID AWG CU GROUNDING ELECTRODE CONDUCTOR PER 250.66(A) TO ROD.
- GROUNDING ELECTRODE 5/8" x 8'-0" GALVANIZED GROUND ROD INSTALLATION PER NEC 250.52(A)(5), 250.53(A) AND 250.56. THERE SHALL BE TWO GROUND RODS SEPARATED BY SIX FEET OR MORE, OR PROVIDE A CERTIFIED TEST SHOWING THAT THE RESISTANCE TO GROUND IS 25 OHMs OR LESS.
- PROVIDE NAMEPLATES IDENTIFYING ALL NEW PANELBOARDS, DISCONNECTS, AND BRANCH CIRCUITS PER NEC 230.2(E) AND 225.37. AT EACH DISCONNECTING LOCATION, A PERMANENT PLAQUE DIRECTORY SHALL BE PROVIDED DENOTING ALL SERVICE FEEDERS SUPPLYING/PASSING THROUGH THE BUILDING FOR AREA SERVED BY EACH.
- CONTRACTOR SHALL PROVIDE A NAMEPLATE FOR ALL EMERGENCY STOP SWITCHES OR SAFETY DISCONNECTS THAT READS, "EV CHARGING EQUIPMENT EMERGENCY SHUTDOWN" AT EACH LOCATION.
- ALL EQUIPMENT SHALL HAVE THE ABILITY TO BE LOCKABLE IN THE OPEN.

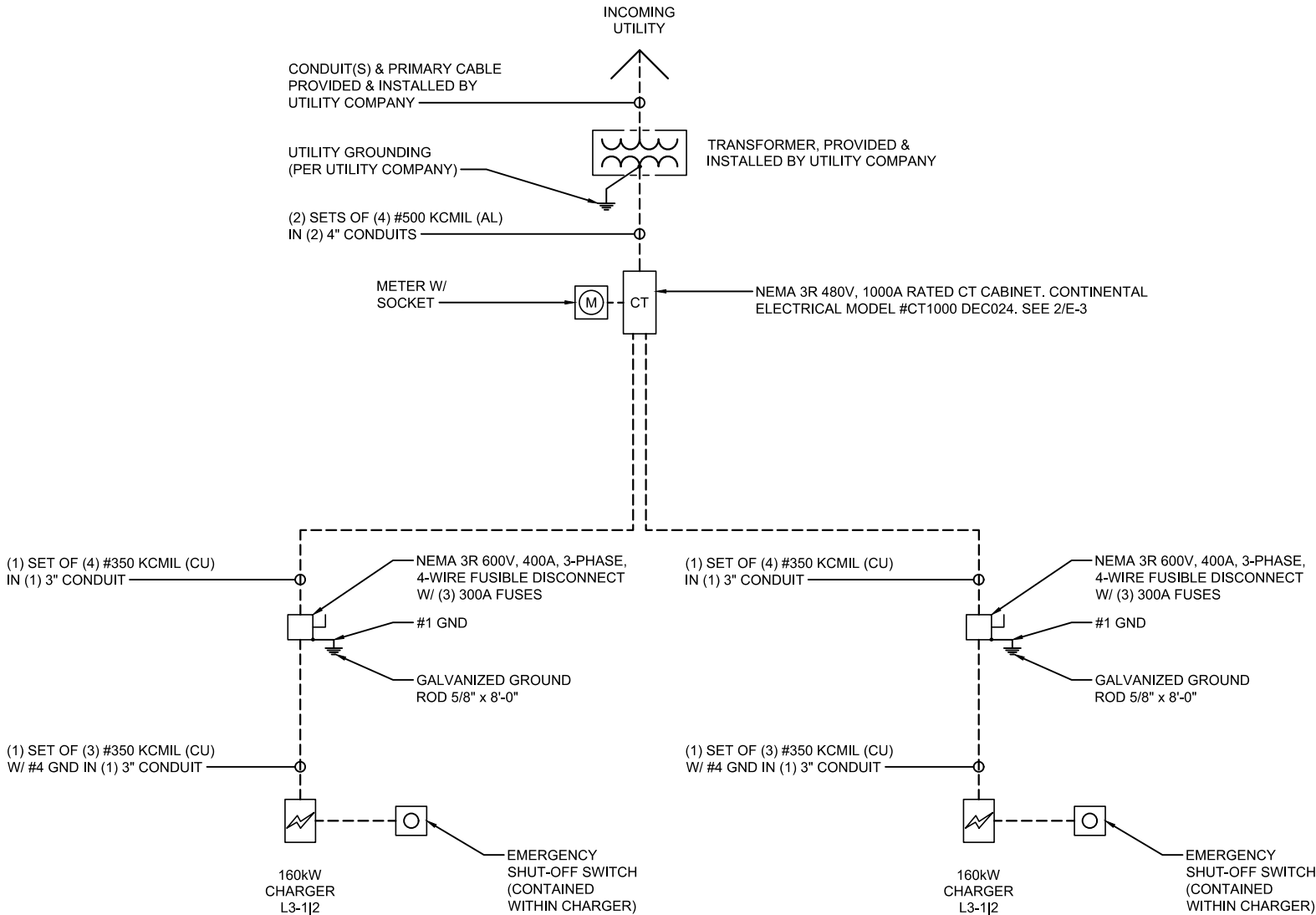
CONDUIT NOTE:

ALL UNDERGROUND CONDUIT SHALL BE SCHEDULE 40 PVC. ABOVE-GRADE CONDUIT (INCLUDING CONDUIT ASSOCIATED WITH FREE-STANDING OR WALL-MOUNTED SERVICE EQUIPMENT) SHALL BE SCHEDULE 40 PVC, UNLESS THE ABOVE-GRADE RUN LENGTH IS GREATER THAN OR EQUAL TO (5) FEET, IN WHICH CASE SCHEDULE 80 PVC SHALL BE UTILIZED.

TRENCHING NOTE:

PROPOSED TRENCHING ROUTE IS SCHEMATIC AND SUBJECT TO MODIFICATION BASED ON FIELD CONDITIONS AND/OR IDENTIFICATION OF A MORE EFFICIENT ROUTING METHOD. ALL TRENCHING SHALL AVOID EXISTING UNDERGROUND UTILITIES. CONTRACTOR SHALL COORDINATE UTILITY LOCATING THROUGH MISS DIG PRIOR TO EXCAVATION.

PENDING UTILITY
COORDINATION



NOTE:
- CONTRACTOR TO PLAN FOR MULTIPLE LUGS FOR PARALLEL RUNS

ONE-LINE DIAGRAM

SCALE: NONE

1



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E-1

ONE-LINE DIAGRAM

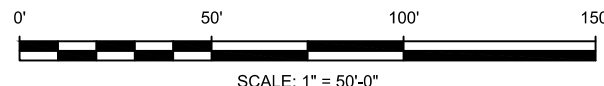
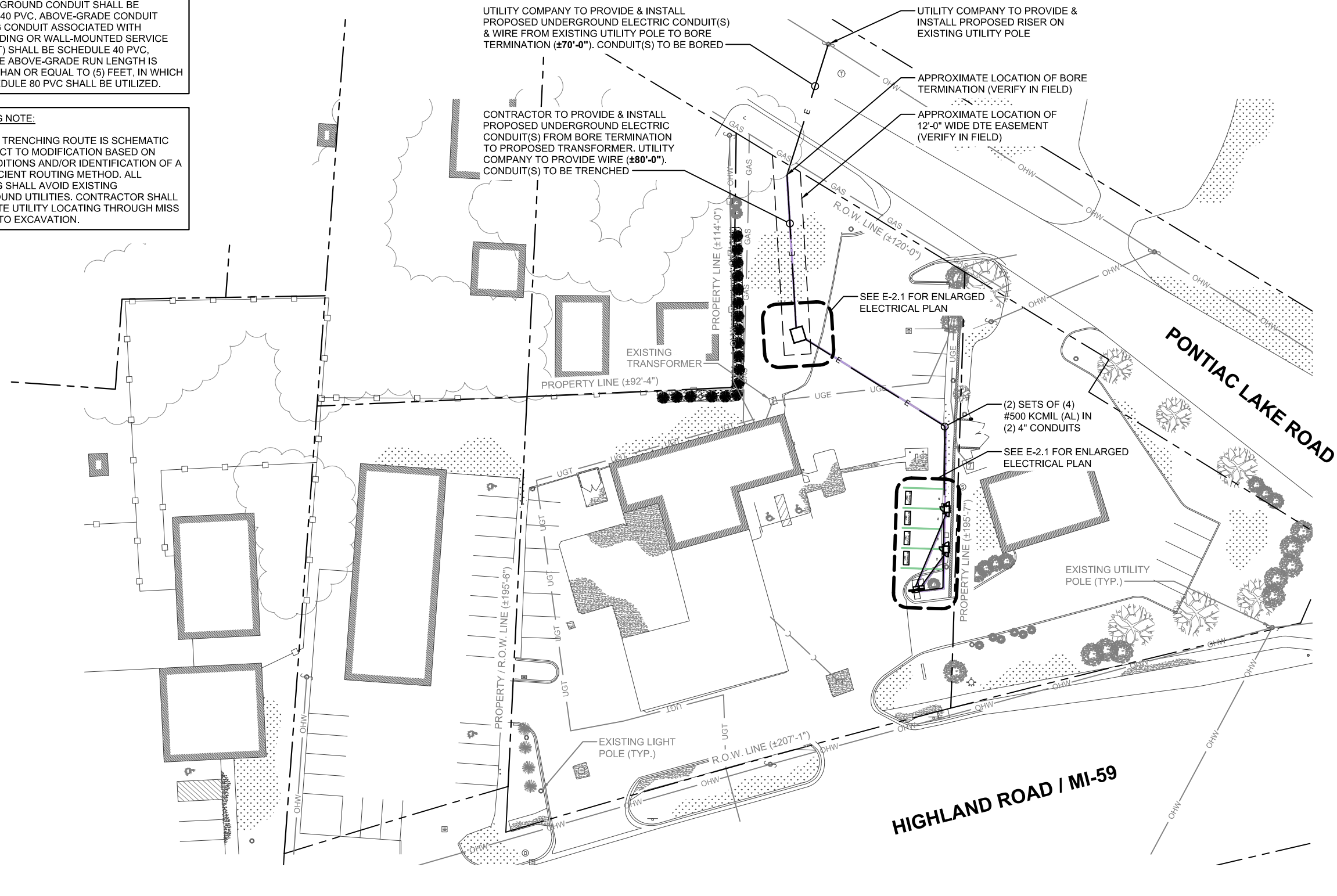
LEGEND

TRENCHING ROUTE

PENDING UTILITY COORDINATION

CONDUIT NOTE:
ALL UNDERGROUND CONDUIT SHALL BE SCHEDULE 40 PVC. ABOVE-GRADE CONDUIT (INCLUDING CONDUIT ASSOCIATED WITH FREE-STANDING OR WALL-MOUNTED SERVICE EQUIPMENT) SHALL BE SCHEDULE 40 PVC, UNLESS THE ABOVE-GRADE RUN LENGTH IS GREATER THAN OR EQUAL TO (5) FEET, IN WHICH CASE SCHEDULE 80 PVC SHALL BE UTILIZED.

TRENCHING NOTE:
PROPOSED TRENCHING ROUTE IS SCHEMATIC AND SUBJECT TO MODIFICATION BASED ON FIELD CONDITIONS AND/OR IDENTIFICATION OF A MORE EFFICIENT ROUTING METHOD. ALL TRENCHING SHALL AVOID EXISTING UNDERGROUND UTILITIES. CONTRACTOR SHALL COORDINATE UTILITY LOCATING THROUGH MISS DIG PRIOR TO EXCAVATION.



OVERALL ELECTRICAL PLAN

SCALE: 1" = 50'-0"

1

LEGEND

GAS

GAS LINE

OHW

OVERHEAD UTILITY LINE

STORM SEWER LINE

UGE

UNDERGROUND ELECTRIC LINE

UGT

UNDERGROUND TELCO LINE



CHARGE-
X
By

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STATE OF MICHIGAN
MARK VENTRELLI
ENGINEER
No. 6201057995
LICENSED PROFESSIONAL ENGINEER

EXPIRES: 03/02/28 SIGNED: 09/02/26

REVISIONS

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A	FOR CLIENT REVIEW	03/18/26	JTB
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CHECK: JKR
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E-2
OVERALL
ELECTRICAL PLAN

LEGEND

TRENCHING ROUTE

PENDING UTILITY COORDINATION

CONDUIT NOTE:
ALL UNDERGROUND CONDUIT SHALL BE SCHEDULE 40 PVC. ABOVE-GRADE CONDUIT (INCLUDING CONDUIT ASSOCIATED WITH FREE-STANDING OR WALL-MOUNTED SERVICE EQUIPMENT) SHALL BE SCHEDULE 40 PVC, UNLESS THE ABOVE-GRADE RUN LENGTH IS GREATER THAN OR EQUAL TO (5) FEET, IN WHICH CASE SCHEDULE 80 PVC SHALL BE UTILIZED.

TRENCHING NOTE:
PROPOSED TRENCHING ROUTE IS SCHEMATIC AND SUBJECT TO MODIFICATION BASED ON FIELD CONDITIONS AND/OR IDENTIFICATION OF A MORE EFFICIENT ROUTING METHOD. ALL TRENCHING SHALL AVOID EXISTING UNDERGROUND UTILITIES. CONTRACTOR SHALL COORDINATE UTILITY LOCATING THROUGH MISS DIG PRIOR TO EXCAVATION.

LEGEND

GAS

OHW

UGE

UGT

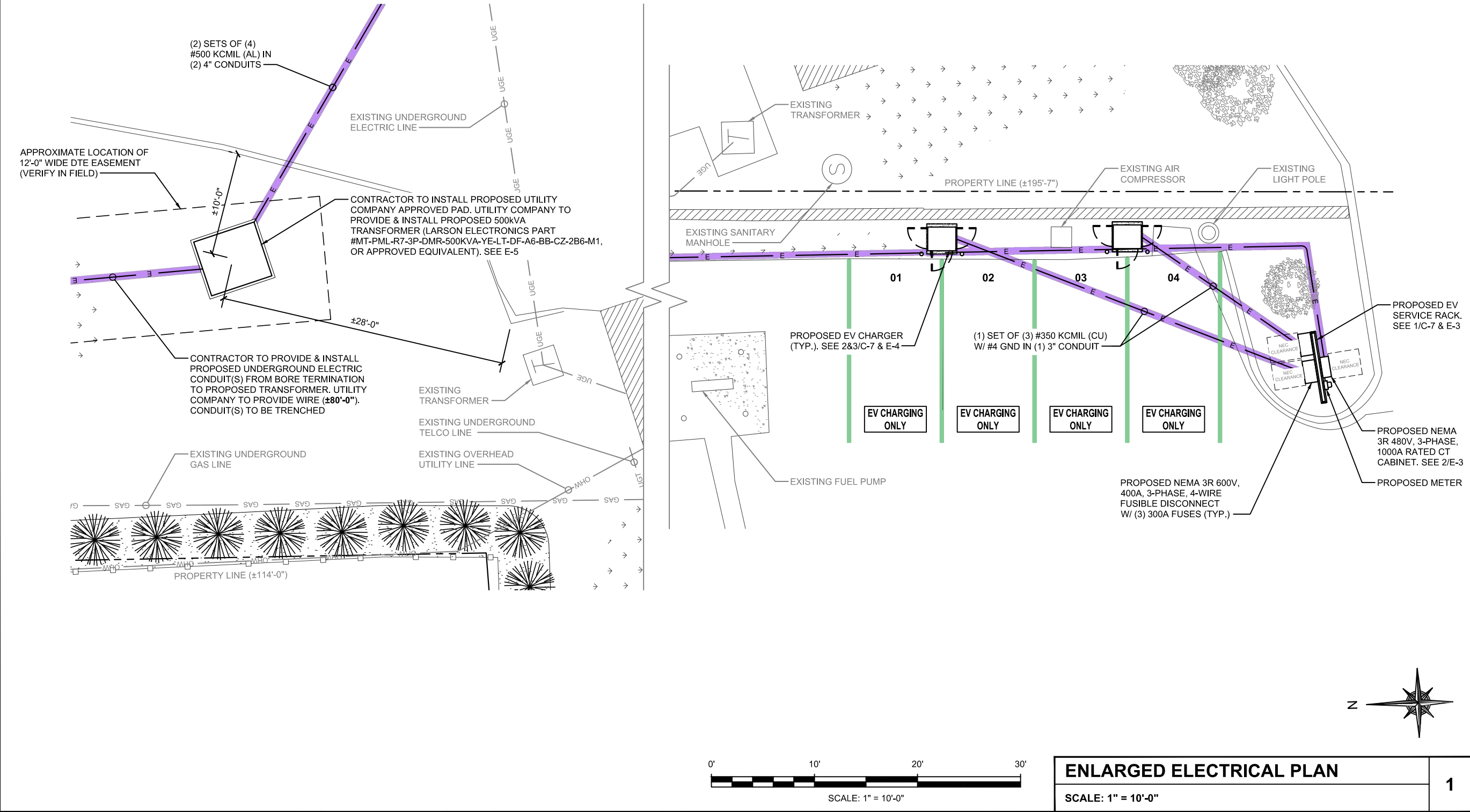
GAS LINE

OVERHEAD UTILITY LINE

STORM SEWER LINE

UNDERGROUND ELECTRIC LINE

UNDERGROUND TELCO LINE



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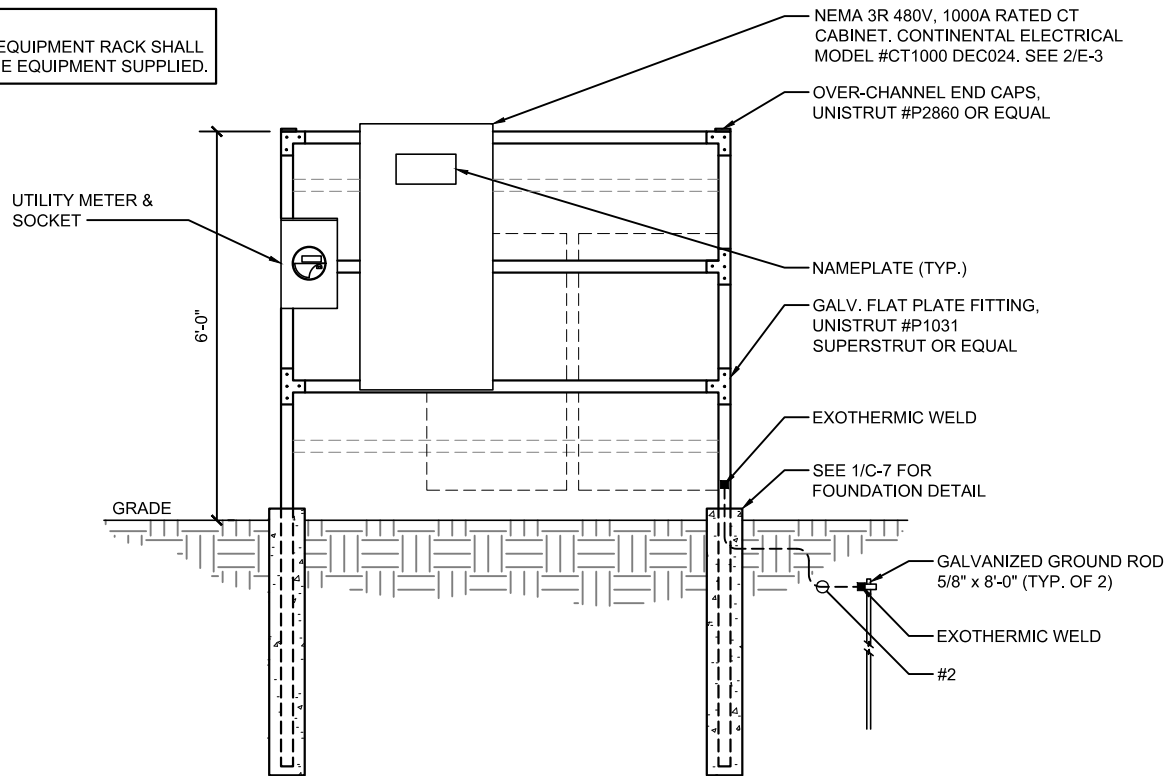
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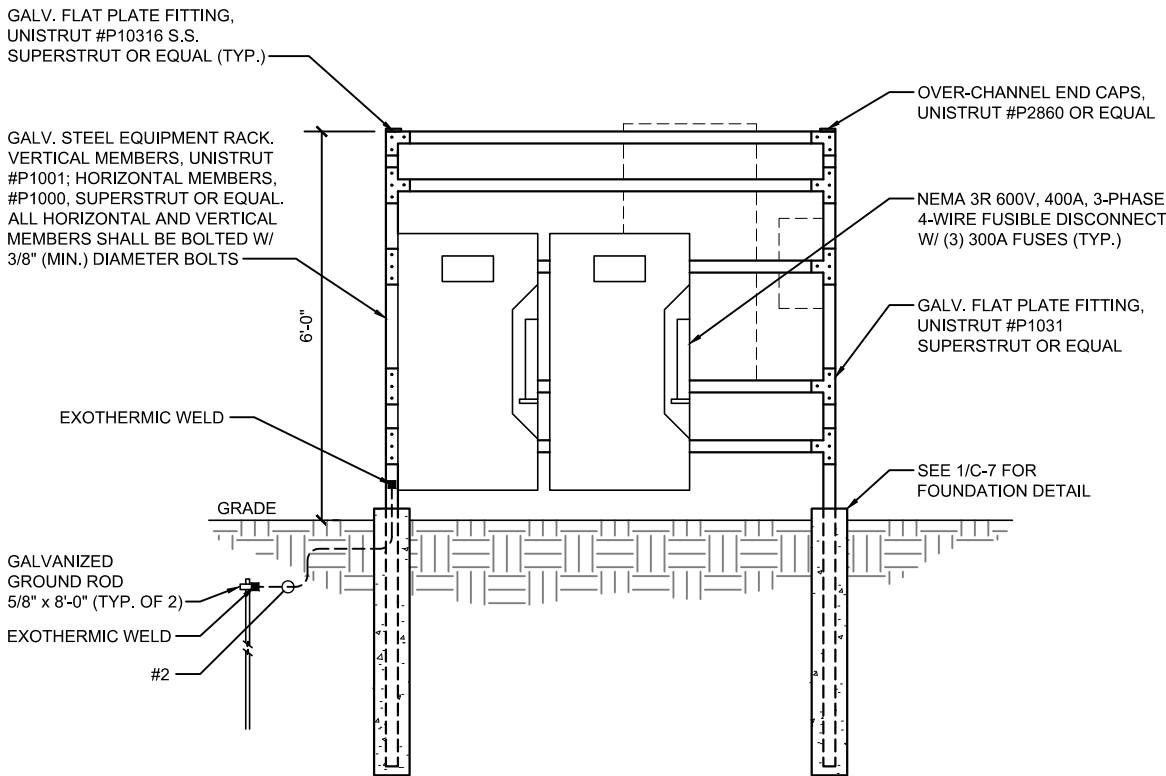
E-2.1

ENLARGED
ELECTRICAL PLAN

NOTE:
EXACT WIDTH OF THE EQUIPMENT RACK SHALL
BE DETERMINED BY THE EQUIPMENT SUPPLIED.



FRONT VIEW



REAR VIEW

EQUIPMENT RACK DETAIL

SCALE: NONE

1

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MODEL #CT1000 DECO24
CURRENT TRANSFORMER CABINET

RATINGS:
1000 AMPS
600 VAC
42K AIC SYM

STANDARD DIMENSIONS
24" X 48" X 10"



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- EDITION APPROVED
- POWDER COAT FINISH
- STAINLESS STEEL HINGES
- 3R CONSTRUCTION
- LIFT-OFF DOOR
- AVAILABLE WITH OUR U.L. LISTED BUS BARS
- PADLOCK & SEAL PROVISIONS
- EXPANDED 36" WIDE UNITS AVAILABLE - (SPECIFY EXPANDED LEFT OR RIGHT SIDE GUTTER)

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SWITCHGEAR, BUS DUCT, BUS PLUGS, ENCLOSURES, GROUND
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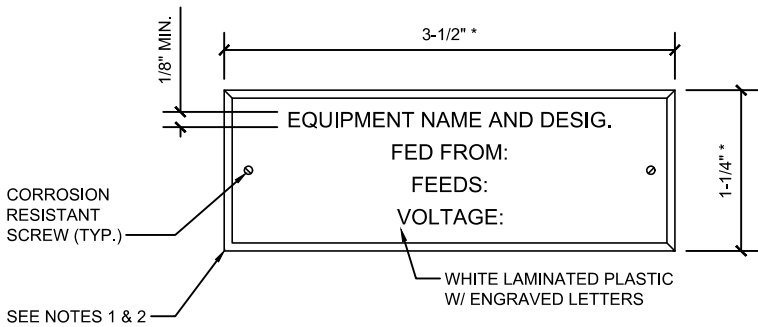


JANUARY 2010

CT CABINET SPECIFICATIONS

SCALE: NONE

2



* SMALLER SIZES MAY BE USED AS INDICATED; SEE SPECIFICATIONS

NOTES:

1. NAMEPLATES SHALL BE PROVIDED FOR ALL NEW BRANCH CIRCUITS IN NEW DISTRIBUTION PANELS AND RECEPTACLE PANELS.
2. NAMEPLATES SHALL BE PROVIDED FOR NEW BRANCH CIRCUITS AND/OR MODIFICATIONS TO EXISTING SWITCHGEARS, DISTRIBUTION PANELS, AND RECEPTACLE PANELS.

NAMEPLATE DETAIL

SCALE: NONE

3



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E-3

ELECTRICAL DETAILS

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MT-PML-R7-3P-DMR-500KVA-YE-LT-DF-A6-BB-CZ-2B4-M1

500 KVA Pad Mount Transformer - 12470V Delta Primary, 480Y/277 Wye-n Secondary - Copper, KNAN/Beil Green
Product ID: 152805

Please see last page for supporting documentation for this product(certificates, CAD files & drawings, IES files, wiring diagrams, etc).



Larson Electronics LLC manufactures a wide variety of products, including custom built to spec designs. The pictures displayed for this unit are a general representation of form factor for the product line and may not accurately represent this exact configuration in every detail due to custom builds and changes between similar products in our standard catalog. The specifics for this configuration are listed in the specification table and supporting documentation (CAD files, Dimensional Drawing, Name Plate Diagram, Wiring Diagram, etc.). This means that specific details (receptacles, plugs, wires, connections, mounting brackets, external finishes, etc.) may not be accurately represented in images vs specifications. Please review specifications and do not order based solely on images.

MT-PML-R7-3P-DMR-500KVA-YE-LT-DF-A6-BB-CZ-2B4-M1 3PH Pad Mount

Transformers
Transformer Type: Pad Mounted, Compartmental-Type
Transformer Configuration: Liquid Filled Pad Mounted
Transformer Feed Type: Loop Feed
Operation: Ring-Closed Operation (Not Approved for Step-Up)
Phase: Three Phase
Capacity: 500 KVA
Vector Group: DYN1
Primary Voltage: 12470V
Primary Voltage Rating: N/A
Primary Voltage Class: 15 kV Class
Primary Phase: Delta
Primary BIL: 45 kV
Secondary Voltage: 480Y/277
Secondary Voltage Class: 1.2 kV Class
Secondary Phase: Wye-N
Frequency: 60 Hz
Temperature Rise: 65°C
Insulation Rating: Class E Insulation - 120°C, 248°F
Cooling Class: KNAN; Self-Cooled
Forced Air (Fans): None
Tap Changer: 5-position Tap Changer
Tap Qty: (2) PCAN Above Taps, (2) FCBN Below Taps
Tap %: 2.5%

Rating

Meets/Exceeds DOE 2016 Efficiency Ratings
Meets/Exceeds CSA Efficiency Ratings
Complies with ANSI / IEEE C57.12.00
Complies with ANSI / IEEE C57.12.28
Complies with ANSI / IEEE C57.12.29
Complies with ANSI / IEEE C57.12.34
Complies with ANSI / IEEE C57.12.35
Complies with ANSI / IEEE C57.12.70
Complies with ANSI / IEEE C57.12.110
Complies with ANSI / IEEE C57.12.131
Complies with ANSI / IEEE C57.11
Complies with ANSI / IEEE C59.22
Complies with ANSI / IEEE C57.47
Complies with ANSI 2335.4
Complies with ASTM D3687
Complies with NEMA 250-1998
Complies with 10 CFR Part 431
Complies with CSA C2.1-08
Complies with CSA C20
Complies with CSA C88
Complies with CSA C88.1

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Email: sales@LarsonElectronics.com
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Tap Changer Switch Rating: 300-Amps, 15 kV
Tap Changer Switch Location: High Voltage (HV) Left Side Front Compartment
Impedance: 1.5% (0% Typical, Target 4.35-4.75%)
Primary Connection Type: Dead Front
Primary Termination Arrangement: V Termination Arrangement
Primary Termination: Externally Clamped Integral Bushings w/ Removable Studs, 200A
Load Break Switches
Primary Connection Qty: (8) Primary Connections for use w/ Elbow Connectors
Primary Parking Stand Qty: (6) Welded Brackets for Installing Accessory Parking Stand Bushings
Primary Neutral Connection: N/A
Primary Bushing Rating: 15 kV Class, 95 kV BIL, 200A, Load Break
Primary Surge Arresters: (3) High Voltage Elbow Surge Arresters, Included
Primary Surge Arrestor Voltage Rating: 15 kV Class Elbow Arrestor
Primary Surge Arrestor MOV Rating: 15.3 kVrms
Primary Over Current Protection (OCP): Bayonet Expulsion Fuses in series w/ Partial-Range Current-Limiting Fuse
Primary Over Current Protection Method: Fused, Oil-Immersed
Primary Over Current Protection Holder: Bayonet Fuse Holder w/ Flapper Valve and External Drip Shield
Primary Grounding Provision: (1) NEMA Ground Bar attached to tank via (2) Welded Ground Burge in HV Cabinet
Secondary Connection Type: Live Front
Secondary Termination Arrangement: Staggered Terminal Arrangement
Secondary Connections: NEMA Spade Terminals, 4-Hole Spade, Externally Clamped, Accepts up to (4) Double Lug connections with (2) cables per side of Spade connector
Secondary Connection Qty: (4) Externally Clamped One-Phase Epoxy Bushings Copper Threaded Studs
Secondary Connection Support: N/A
Secondary Over Current Protection (OCP): N/A
Secondary Neutral Connection: N/A
Secondary Grounding Provision: (1) NEMA Ground Bar attached to tank via (2) Welded Ground Burge in LV Cabinet
Metering Current Transformer (CT): N/A
Metering Panel: N/A
Auxiliary Control Panel: 1 N/A
Load Break Switch: Three 2-Position Load Break Switches
Load Break Switch Qty: (1)
Load Break Switch Rating: 300-Amps, 15 kV
Load Break Switch Location: High Voltage (HV) Front Compartment
Efficiency Standard(s): Meets DOE 2016 Standards, Meets CSA Standards Meets ANSI/IEEE Standards
K-Factor Rating (Harmonic Mitigation): K-1 (Standard)
Pulse Drive Rating: N/A
Insulation Fluid: Biodegradable Natural Vegetable Oil Ester Insulating Fluid - Non-PCB Fluid (Oil) Capacity: 157 Gallons
Fluid (Oil) Weight: 1,281 lb
Liquid Level Indicator: Analog Dial Gauge
Temperature Indicator: Analog Dial Gauge
Pressure/Vacuum Indicator: Analog Dial Gauge
Pressure Relief Device: Included, Automatic Action
Fault Indicator: N/A
Gas Sampler Valve: Included, Schrader Valve
Fill Valve: 1" NPT Port w/ Removable Bell Plug
Fill Valve Location: Front Compartment
Drain Valve: 1" NPT Port w/ 60° NPT Sample Valve
Drain Valve Location: Front Compartment
Winding Material: Copper
Ambient Temperature Rating: 40°C
Ambient Operating Temperature Range: -40°C to +40°C (-40°F to +104°F)

Sound Level: 66 dBA
Sound (Attitude): 1000m (1000 meters) Above Sea Level
Core Material: Grain Oriented Steel
Tank Material: Coated Steel
Cabinet Material: Coated Steel
Base Platform Material: Coated Steel
Portability: Lifting Lugs, provisions for jacking under base, w/ base construction suitable for using rollers or skidding
Hoisting Type: Compartmental Air-Filled Cabinet w/ Locking Doors, HV Compartment Left, LV Compartment Right, Steel Barrier Separation, HV Door Spring-Loaded Release Pin in

Complies with CSA C88-16
Complies with CSA C227.4
Complies with CSA C227.5
Complies with CSA C202.9
Complies with CSA C202.1
Penetration Bolt Entry Assembly
High-Fire Point Insulating Pad
Non-PCB Insulating Pad
Non-PCB Insulating Pad
Tank Cover Access Handlehole: N/A
Dimensions: 62"-W x 61"-D x 71"-H
Dry Weight (w/o Oil): 2,202 lb
Total Weight (Liquid Filled): 4,802 lb
*Please note that numbers are approximate and subject to change

Efficiency %: 99.30%
Based on transformer operating at 90% of nameplate base kVA
Load Losses Based on 80°C Reference Temp.
No Load Loss (in watts): +/- 700W
Full Load Loss (in watts) at 100%: +/- 5,000W
Total Load Loss (in watts) at 100%: +/- 5,700W
Total Losses at 90% LL Temp: 30°C ML Temp.
Total Load Loss (in watts) at 90%: +/- 1,800W
Note: Losses offered are typical only, not guaranteed

Labeling:
Externally Stenciled (Painted) KVA Rating
Externally Stenciled (Painted) Voltage Rating
External Non-PCB Label
External Warning & Danger Label
External Barcode Label
Internal Barcode & Accessory Labeling
Stainless Steel Riveted Nameplate

Factory Tests:
Winding Resistance Test
Insulation Resistance Test
Voltage Ratio Error Test
Short Circuit Impedance Test
No-Load Loss (Wattage) Test
Load Loss (Wattage) Test
Induced Voltage Withstand Test
Separate Source Voltage Withstand Test
Pressure Integrity Test Test
Shipping:
Shipped on pallet on open Railroad
Palletized on Wooden Pallet w/ Skid Pockets
Pallet Skid Facing Outward Sides of Tank
Note: Crated shipping in lieu of palletizing can be done upon request for an additional fee

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LV Compartment
Busbar Rating: NEMA 3R Weatherproof Wiring Cabinet, Stacked Tank
Selenite Rating: Yes
Paint Type: Weatherproof and UV Resistant Epoxy Coating and Undercoating
Finish Color: Polished Brown
Mounting: Pad Mounted
Conduit Opening: Rubber Feed Underground Entry/Exit
HV Compartment Base Window Dimensions: 20"-W x 5'-D
LV Compartment Base Window Dimensions: 10"-W x 5'-D
WV Compartment Cabinet Depth: 24"-D
Tank Cover Access Handlehole: N/A
Dimensions: 62"-W x 61"-D x 71"-H
Dry Weight (w/o Oil): 2,202 lb
Total Weight (Liquid Filled): 4,802 lb
*Please note that numbers are approximate and subject to change

Special Orders - Special Requirements
Contact us for special requirements
Toll Free: 1-800-369-6671
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E-mail: sales@larselectronics.com

The MT-PML-R7-3P-DMR-500KVA-YE-LT-DF-A6-BB-CZ-2B4-M1 Industrial Pad Mount Transformer from Larson Electronics offers powerful, reliable and efficient power distribution in indoor, outdoor and public locations. The low operating costs, low heat emissions and low cost of ownership makes this transformer ideal for a wide range of applications and businesses. An enclosed design caters to installations on concrete pads without protective fencing.

PLEASE NOTE: ANY FREE SHIPPING OFFERS DO NOT APPLY TO POWER DISTRIBUTION PANELS, TRANSFORMERS, OR SUBSTATIONS

Transformer Features: With a transformer rating of 500 KVA, the Industrial transformer features a primary voltage of three-phase 12470V Delta and a secondary voltage of three-phase 480Y/277 Wye-n. The unit has a primary loop feed for single installations and dead-front primary connections. We also offer systems with loop feed and live front primary connections. This transformer features a 5-position tap changer with two, +/- 2.5% taps above and two, +/- 2.5% taps below to allow small changes for voltage. There are no rapid rise relays present on the system.

The system features copper windings for high strength and thermal/electrical conductivity. This transformer consists of rectangular coil and five-legged wound core design with three coils and four core loops (this is for three-phase transformers only; single-phase units have one coil and two core loops). The MT-PML-R7-3P-DMR-500KVA-YE-LT-DF-A6-BB-CZ-2B4-M1 is air cooled and does not have fans or mounting provision for fans.

Enclosure Design: This pad mounted transformer is a compartmental design. The tank and housing are fabricated from steel. The front electrical enclosure carries a NEMA 3R rating. The high voltage and low voltage compartments are located in front of the transformer tank, with the high voltage compartment on the left side and low voltage compartment on the right side. The HV and LV compartments are air filled and separated by a full length steel barrier between the compartments. A removable steel plate at the base of the HV and LV compartments prevents rodents and other intrusions from entering the enclosure once installed. This steel plate allows for underground conduit entry into the enclosure compartments. Two hinged exterior doors allows for access into the compartments. A single pad lockable handle on the low voltage compartment door allows for securing the transformer. A spring loaded pin within the low voltage compartment prevents the high voltage door from being opened without pulling the safety pin. A hot stick is included in the high voltage compartment, mounted to the HV door.

Temperature Rise: This unit features 65°C temperature rise for reduced heat waste, increased reliability and longer life. At 65°C temperature rise, the transformer offers 500 KVA. The transformer meets standard efficiency requirements. The combination of low temperature rise and high efficiency makes this unit suitable for use in electrical rooms, air conditioned spaces in buildings, underground vaults and similar locations, in addition to outdoor areas.

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Insulation Fluid: The MT-PML-R7-3P-DMR-500KVA-YE-LT-DF-A6-BB-CZ-2B4-M1 features biodegradable cooling fluid (KNAN) with a capacity of 167 gallons. We offer transformers with FR-3 oil fluid, if needed.
Biodegradable Fluid: Biodegradable cooling fluid (vegetable oil) has a higher heat capacity compared to mineral oil, making the liquid safer to use and more reliable during operations. Vegetable oil has a higher flash point and fire point than mineral oil, hydrocarbon oil, silicone oil and synthetic ester. This cooling fluid is also non-toxic and can tolerate higher breakdown voltages than mineral oil. When operating at high temperatures, biodegradable cooling liquid sustains up to 120% load conditions, which helps preserve the transformer's lifespan and performance.

Gauges: The following gauges are included with the system: liquid level, temperature and pressure/vacuum gauges. Standard liquid level, temperature and pressure/vacuum gauges are analog, manual reading types. These gauges do not have auxiliary contacts.
Fault Pressure Devices: This transformer features an automatic action fault pressure device. Fault pressure devices are used to detect high rates of pressure rise within the tank.

Rapid Rise Relay: There are no rapid rise relays on the unit. This safety component is designed for protection when a rapid increase in tank pressure occurs. The relay is suitable for detecting sudden pressure fluctuations above predetermined safe limits.

Surge arresters: This system comes with high elbow surge arresters on the primary side. Designed for over-voltage and transient voltage protection, the components prevent damage caused by lightning, internal switching or voltage surges. We can offer models without high elbow surge arresters that have mounting provisions for customer-provided surge arresters.

Load Break Switch: The transformer is equipped with three 2-position load break switches.

Valves: The MT-PML-R7-3P-DMR-500KVA-YE-LT-DF-A6-BB-CZ-2B4-M1 is equipped with a pressure relief valve, fill valve and drain valve with sampler port.

Protection Fuses: This transformer contains bayonet protection fuses on the primary side. For units without protection fuses, up stream protection is provided. We recommend provisions for protection fuses when possible, as blown fuses may require more frequent oil changes.

Mount: The heavy-duty enclosure makes the unit suitable for both indoor and outdoor applications. This power distribution system can be pad mounted on concrete pads.

Benefits: The MT-PML-R7-3P-DMR-500KVA-YE-LT-DF-A6-BB-CZ-2B4-M1 pad mount transformer offers many benefits to consumers. This transformer provides owners with significant energy savings, as well as offering environmental benefits. Higher efficiency not only extends the life of the transformer, but also turns into cost savings for owners in the form of lower energy bills and decreased cost of ownership.

Applications: General purposes, industrial sites, electrical rooms, underground vaults, manufacturing facilities, steel plants, offshore, commercial, military, processing plants, electric power distribution, utilities, public locations and more. Larson Electronics is a manufacturer and as such can build stationary and portable transformer systems to your specifications. Although we carry several models of power distribution transformer systems, we can deliver custom ordered units almost as quickly as our prebuilt units. If this model does not meet your needs, please contact us at 1-800-369-6671 or sales@larselectronics.com to discuss your specific requirements.



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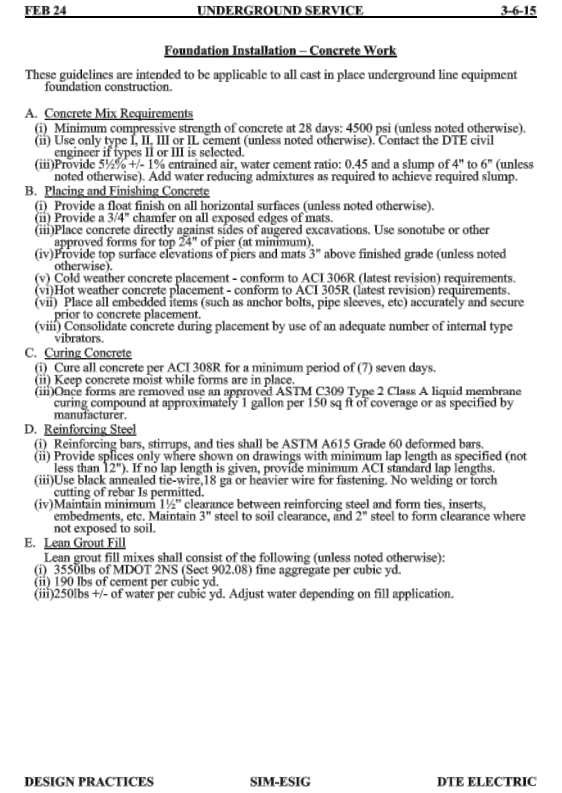
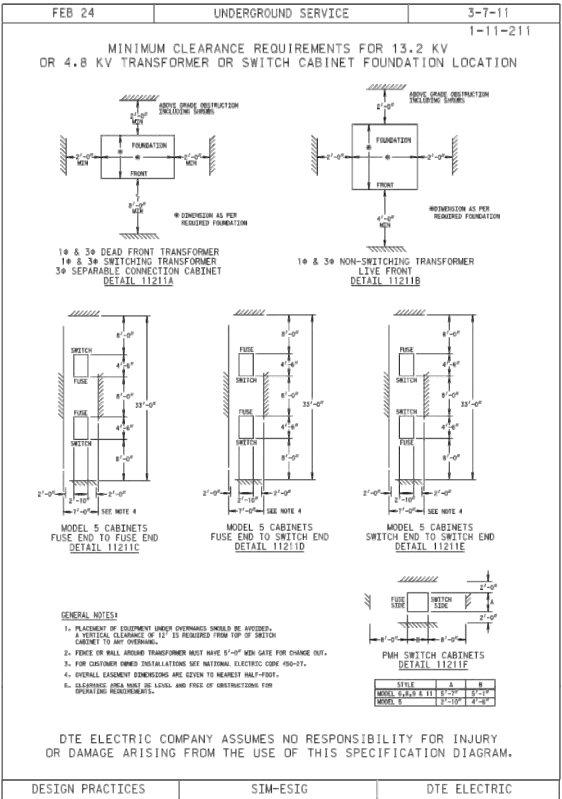
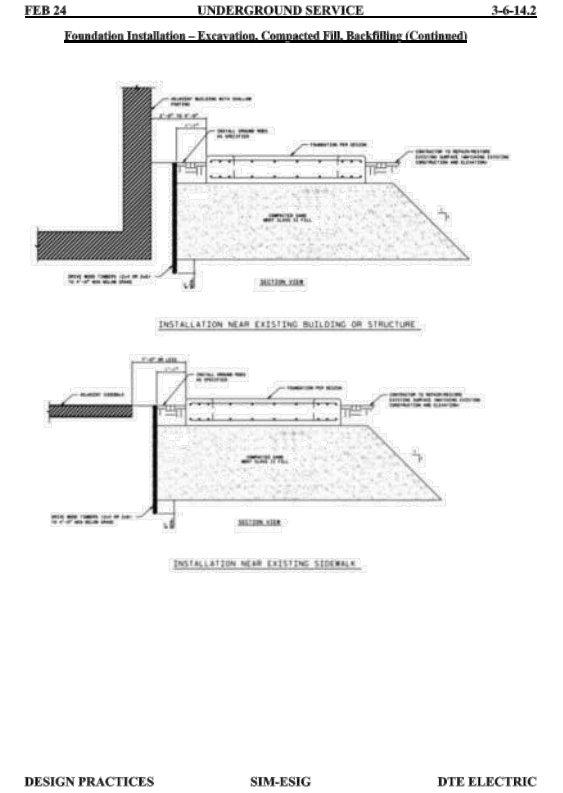
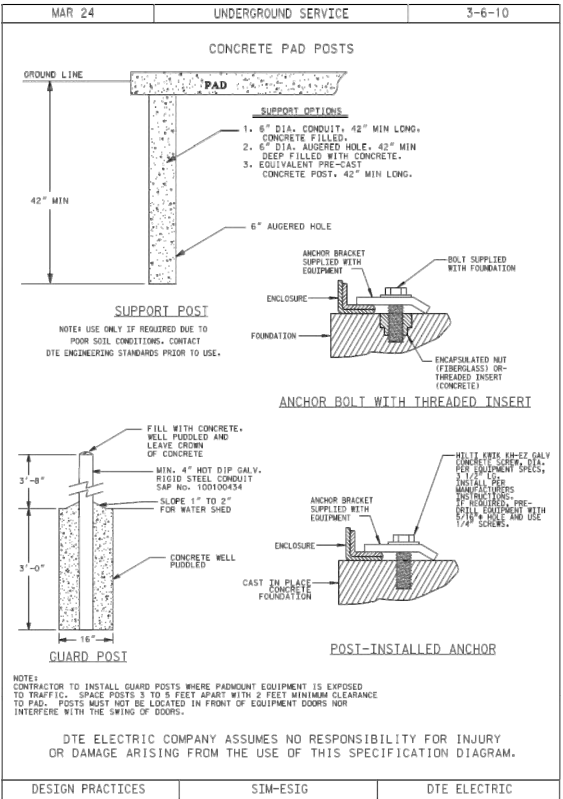
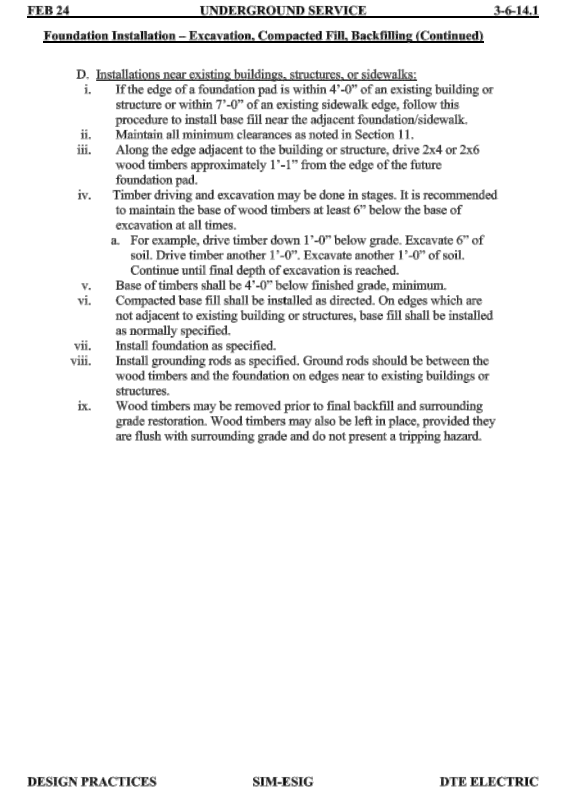
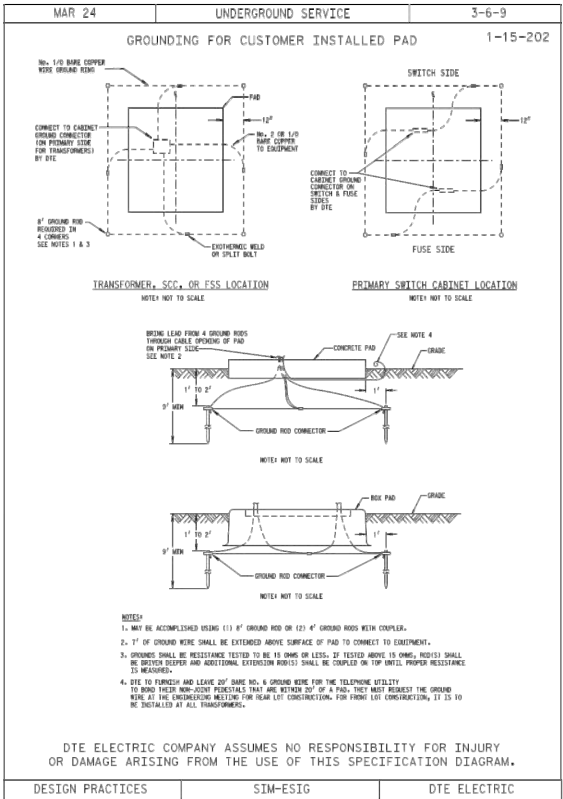
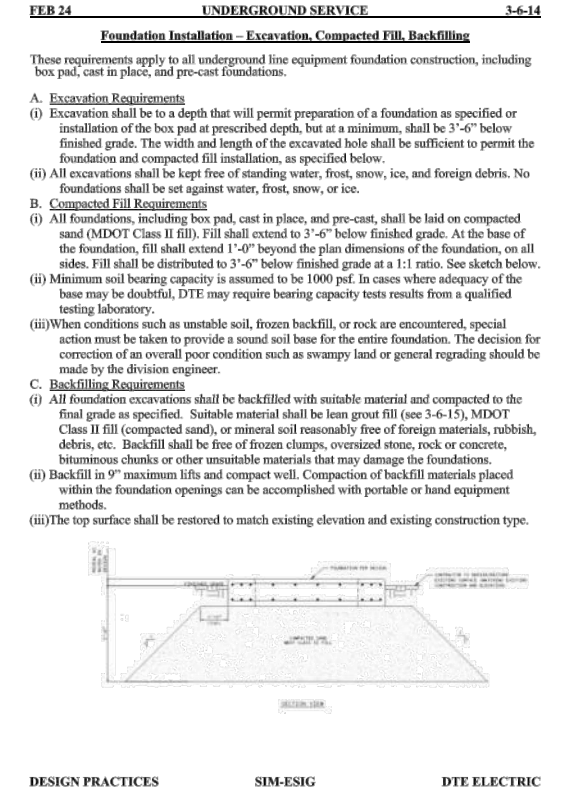
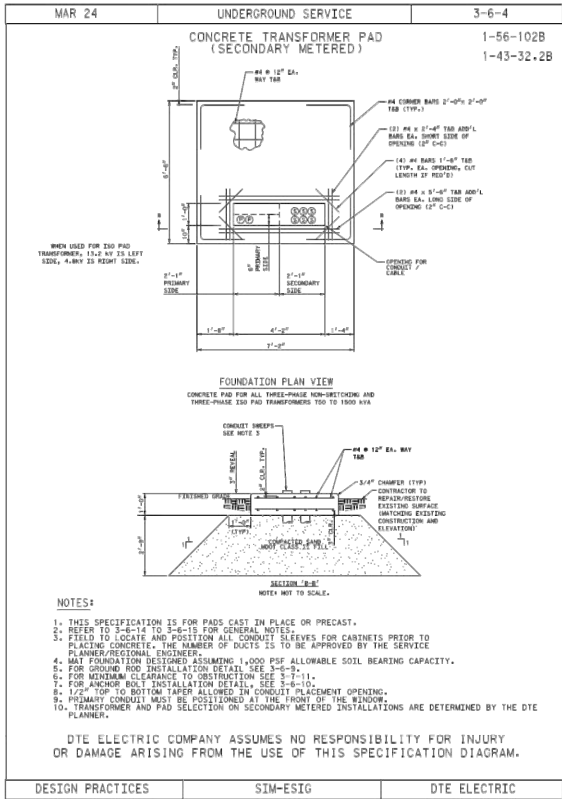
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TRANSFORMER SPECIFICATIONS

SCALE: NONE

1



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ACCESSIBILITY CONSULTING \ STRUCTURAL

CHECK: JKR

DRAWN: JTB

JOB: T2600207

E-5

UTILITY DETAILS AND SPECIFICATIONS

DETAILS FROM DTE ENERGY

UTILITY DETAILS AND SPECIFICATIONS

SCALE: NONE

1

**WHITE LAKE CHARTER TOWNSHIP
COMMUNITY DEVELOPMENT DEPARTMENT
PLANNING COMMISSION STAFF REPORT**

Meeting Date: August 20, 2026

Agenda Item: Special Land Use

Staff: David Waligora, AICP, Senior Planner

Property Address: 8320 Highland Road (BP Gas Station)

Parcel ID: Y-12-13-454-019

Applicant: Hadi Boussi

Applicant Address: 22243 W. Warren Avenue, Dearborn Heights, MI 48127

Property Owner: Abdelrahman Salem

Property Address: 8320 Highland Road, White Lake, MI 48386

Zoning: GB – General Business

Existing Use: Automobile Service Station / Gas Station

Request

The applicant is requesting Special Land Use approval to expand the existing automobile service station use at 8320 Highland Road through the installation of four (4) DC fast-charging electric vehicle spaces, charging equipment, a new pad-mounted transformer, and associated electrical infrastructure. The proposed improvements are located within the northeastern portion of the existing BP gas station site.



Proposed Request

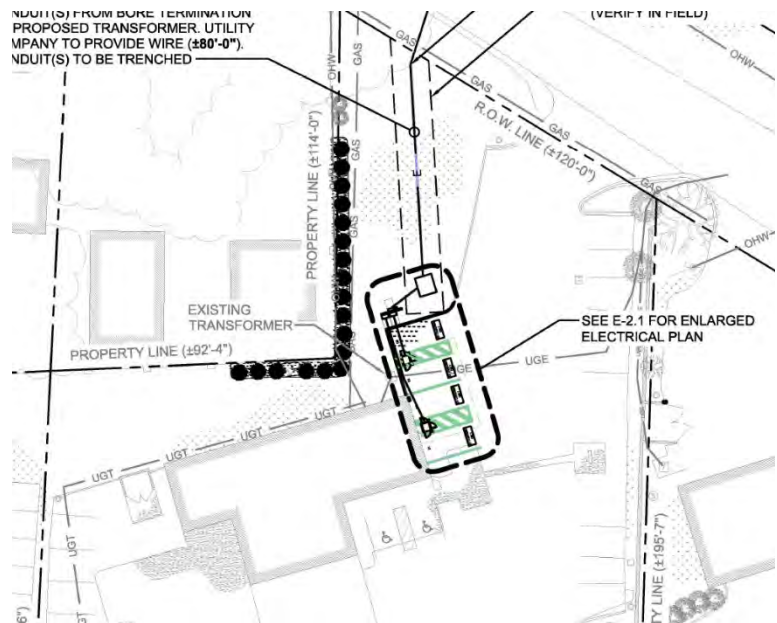
The applicant is requesting Special Land Use approval to expand the existing automobile service station use through the installation of four (4) direct current fast charging (DCFC) electric vehicle charging stations and associated electrical equipment. The proposed improvements would be located within the northeastern portion of the site, generally between the existing convenience store and Pontiac Lake Road.

The proposed improvements include four EV charging spaces, charging equipment, a new pad-mounted transformer and associated electrical infrastructure, along with modifications to the existing parking and circulation area necessary to accommodate the proposed improvements.

The application does not propose establishment of a new automobile service station. Rather, it represents an expansion of the longstanding automobile service station use. Available historical information indicates that automobile fueling has occurred on the property since at least the early 1960s, when the property operated as the Hudson Oil Station. The site was substantially redeveloped in approximately 1997, when the previous station was demolished and the property was developed generally in its present configuration.

The automobile service station predates the Township's current Special Land Use approval requirements. Staff has also been unable to locate a Special Land Use Permit or approved site plan associated with the 1997 redevelopment. Accordingly, no existing Special Land Use approval governing the current automobile service station has been identified in the Township's available records.

Because the applicant is now proposing an expansion of the automobile service station use, the Township is reviewing the use and proposed expansion under the current Special Land Use standards of the Zoning Ordinance. Finally, site plan review will be handled administratively.



Existing Features

The subject property is located at 8320 Highland Road and consists of Lots 21 and 22 of the Huron River Subdivision, totaling approximately 0.982 acres. The property is currently zoned GB, General Business, and is developed with an existing automobile service station/convenience store.

According to Township assessing records, the site contains a 2,846-square-foot, one-story commercial building classified as a mini-mart/convenience store.

The building was constructed in 1997 and has an average story height of approximately 14 feet.

The assessing records identify approximately 198.73 feet of total frontage and an average lot depth of approximately 215 feet. The site is located at the intersection of M-59 (Highland Road) and Pontiac Lake Road, with existing vehicular access to both roadways.

The site is currently improved with the convenience store building, gasoline fueling canopy and pumps, paved parking and circulation areas, and associated site improvements. The northeastern portion of the site contains additional parking and circulation area adjoining Pontiac Lake Road and the adjacent residential district.

Surrounding land uses generally consist of commercial development along the M-59 corridor and residential development to the north and northeast. M-59/Highland Road borders the property to the south, while Pontiac Lake Road borders the property to the east/northeast. Property immediately north/northeast of the site is zoned R1-C, Single-Family Residential, while commercial zoning and uses are generally located along the M-59 corridor to the east and west.



Site History / Existing Conditions

The subject property has a long history of automobile fueling use. Available historical information indicates that the property was in use as the **Hudson Oil Station** by at least the early 1960s, with curb cuts along Highland Road (M-59) established by approximately 1962. The automobile service station use therefore predates the Township's current Special Land Use requirements.

The site was substantially redeveloped in approximately **1997**, when the prior improvements were demolished and the service station was reconstructed generally in its present configuration. Around that time, an additional parcel appears to have been incorporated into the site to accommodate the northeastern parking and circulation area, and access to Pontiac Lake Road was established.

Staff reviewed available Township records for the 1997 redevelopment; however, **a Special Land Use Permit and/or approved site plan associated with that redevelopment was not located**. Accordingly, staff cannot confirm from the available records that the 1997 reconstruction received Special Land Use approval or identify any conditions that may have been attached to such an approval.

Historical Image from 1980



Section 4.10 – Automobile Service Station Standards

Although the subject property is zoned GB, General Business, the proposed expansion of the existing automobile service station is also reviewed for compliance with the specific automobile service station standards of Section 4.10. Staff reviewed the proposed improvements and existing site conditions against these standards as follows.

A. Entrance and Exit Drives

Section 4.10.A requires entrance and exit drives to be located at least 100 feet from any street intersection and at least 200 feet from any residential district.

The subject site contains longstanding access drives to both M-59 (Highland Road) and Pontiac Lake Road. These access points serve the existing automobile service station and are not proposed to be relocated, widened, or substantially modified as part of the EV charging project.

Although the existing driveway locations do not meet all current dimensional requirements of Section 4.10.A, staff considers these access points to be existing lawful nonconforming site conditions. The proposed EV charging facilities do not alter or increase the extent of these existing nonconformities.

Staff Finding: Legal nonconforming condition. No variance is required for the existing driveway locations as part of this application.

B. Minimum Street Frontage

Section 4.10.B requires a minimum of 200 feet of street frontage for an automobile service station.

Township assessing records identify approximately 198.73 feet of total frontage for the subject property. The existing lot configuration therefore falls approximately 1.27 feet short of the current requirement.

The proposed EV charging expansion does not alter the property boundaries, reduce the existing frontage, or otherwise increase the extent of the existing deficiency. Given the limited scope of the project and the fact that the site is not undergoing substantial redevelopment, staff considers the frontage deficiency to be an existing legal nonconforming site condition.

Staff Finding: Legal nonconforming condition. No variance is required for the existing frontage deficiency as part of this application.

C. Screening

Section 4.10.C requires a screen wall, obscuring fence, or land form buffer.

The site contains an existing approximately 6-foot-tall wood fence along the residential property line. The submitted plans describe the fence as weathered but structurally sound and propose that it remain. The applicant proposed additional plantings and shrubs in front of the existing fence, which are now shown on the site plan.

Given the limited scope of the proposed expansion and the fact that this application does not involve comprehensive redevelopment of the property, it is sufficient to satisfy the buffering requirement for this application.

Staff Finding: Complies as proposed.

D. Outdoor Lighting

Section 4.10.D requires outdoor lighting to be designed and shielded so that light does not project onto adjoining properties or public or private streets or rights-of-way. Outdoor lighting must also comply with the applicable performance standards of the Zoning Ordinance.

The proposed improvements will utilize fully shielded, wall-mounted lighting fixtures. Staff finds this approach acceptable provided the fixtures are downward-directed and installed so that illumination and glare are confined to the subject property.

Staff Finding: Complies subject to the use of fully shielded, downward-directed wall-mounted fixtures.

E. Steam Cleaning, Undercoating and Major Repair

Section 4.10.E prohibits steam cleaning, undercoating and major repair work.

The proposed EV charging expansion does not include any of these activities and does not propose an expansion of vehicle repair operations.

Staff Finding: Complies.

F. Setback of Fueling Equipment and Appurtenances

Section 4.10.F requires gasoline pumps, air and water hose stands, and other appurtenances to be set back at least 25 feet from existing or proposed street right-of-way lines.

The proposed EV charging equipment is located more than 25 feet from the applicable street right-of-way lines. The existing gasoline pumps and fueling canopy are not proposed to be relocated or modified as part of this application.

Staff Finding: Complies.

G. Vehicle Waiting Areas

Section 4.10.G requires adequate space to be available for vehicles that are required to wait.

The proposed project includes four dedicated EV charging spaces served by two DC fast chargers. The charging spaces are incorporated into the existing parking and circulation area adjacent to the convenience store. The site provides sufficient circulation area for vehicles entering and exiting the charging spaces, and the proposed configuration is not anticipated to result in vehicles waiting within the site's principal circulation routes or public rights-of-way.

Staff Finding: Complies.

H. Vehicle Storage

Section 4.10.H establishes screening and duration requirements for vehicles stored while awaiting service.

The proposed EV charging facilities are intended for temporary use by vehicles actively charging and do not involve the storage of vehicles awaiting repair or service. No expansion of vehicle storage activities is proposed.

Staff Finding: Not applicable to the proposed expansion.

Section 4.10 Recap

Staff finds that the proposed EV charging expansion is consistent with the applicable automobile service station standards of Section 4.10.

The existing driveway locations and approximately 198.73 feet of street frontage do not conform to the current dimensional standards of Sections 4.10.A and 4.10.B; however, these are longstanding existing site conditions that are not being altered or intensified by the proposed project. Staff therefore consider these conditions to be legal nonconforming site conditions for purposes of this limited expansion, and variance relief is not required as part of the present application.

The remaining applicable standards are either satisfied by the submitted plans or can be addressed through conditions of Special Land Use approval.

Special Land Use Standards – Section 6.10

Section 6.10 of the White Lake Township Zoning Ordinance requires the Planning Commission to make an affirmative finding for each of the following standards before approving a Special Land Use. Staff offers the following analysis based on the submitted plans and information available at the time of review.

i. Harmony with Surrounding Development and Zoning District

The subject property has operated as an automobile fueling/service station for several decades and is located within the GB, General Business District along the M-59 commercial corridor. The proposed installation of EV charging facilities represents an expansion and modernization of the existing automobile service station use rather than establishment of a substantially different land use.

The principal compatibility consideration is the relationship of the proposed charging facilities to the adjoining R1-C residential property. As discussed in greater detail under the nuisance standard below, staff has identified potential nighttime noise impacts associated with the proposed charging equipment. The applicant has also incorporated additional landscaping along the residential property line to supplement the existing fence and improve screening.

Staff Finding: Satisfied subject to conditions. The proposed expansion is generally compatible with the longstanding automobile service station and commercial character of the M-59 corridor, provided the recommended noise-related operating limitation and proposed residential buffering are maintained.

ii. Vehicular and Pedestrian Traffic

The subject property has existing vehicular access from both M-59 (Highland Road) and Pontiac Lake Road. The proposed EV charging facilities will utilize the existing access and circulation system and do not include the construction, relocation, or substantial modification of either driveway.

The proposed charging spaces are located adjacent to the existing convenience store and are integrated into the existing parking and circulation area. The work within the parking lot is limited primarily to installation of the charging facilities and associated electrical equipment, localized pavement modifications, and repair of deteriorated pavement and potholes.

The site does not currently contain a public sidewalk along Pontiac Lake Road. While Section 5.21 establishes sidewalk requirements for redevelopment, the present request represents a relatively limited expansion of an established automobile service station

and does not involve comprehensive redevelopment of the roadway frontages, driveway system, or principal parking areas. Given the limited scope of the proposed improvements and the number of longstanding existing site conditions, staff does not recommend requiring construction of the otherwise applicable sidewalk improvements as part of this application. Compliance with current sidewalk standards should instead be addressed as part of any future substantial redevelopment or remodel of the overall site.

Staff Finding: Satisfied for purposes of the Special Land Use standard. The proposed expansion will utilize the existing vehicular access and circulation system and is not anticipated to make vehicular or pedestrian traffic more hazardous than currently exists. Given the limited scope of the proposed improvements, staff is not recommending comprehensive pedestrian improvements as part of this application; those improvements can be addressed in conjunction with a future substantial redevelopment of the site.

iii. Nuisance Impacts, Including Noise and Lighting

The proposed EV charging equipment and associated transformer are located near residentially zoned property and therefore warrant particular review for potential noise and lighting impacts.

The principal stationary noise sources associated with the proposed expansion are the two DC fast chargers and the new pad-mounted transformer. The applicant's submitted equipment noise table identifies the chargers as producing 53 dBA at 13 feet and 47 dBA at 26 feet, while the transformer is identified at 48 dBA at 13 feet and 42 dBA at 26 feet.

Based on staff measurements from the submitted site plan, the nearest charger is located approximately 21.9 feet from the adjoining residential property line, the second charger approximately 34.7 feet, and the transformer approximately 25.7 feet from the property line. **Using the applicant's submitted sound data as a guide, the nearest charger alone is anticipated to generate approximately 48 to 49 dBA at the residential property line, which exceeds the Township's applicable 45 dBA nighttime noise standard.** The combined contribution of the two chargers and transformer would be greater than the contribution of the nearest charger alone.

The submitted noise information appears to address only the charging equipment and transformer. It does not quantify additional noise that may be generated by vehicles while actively using the DC fast chargers. Electric vehicles may operate battery cooling fans, coolant pumps, compressors, or other thermal-management systems during

charging. The level of vehicle-generated noise will vary by vehicle and operating conditions and cannot be reliably quantified from the information submitted. Accordingly, actual sound levels during charging events may exceed those attributable to the stationary equipment alone.

Based on the information currently submitted, staff does not believe the proposed charging operation can demonstrate compliance with the Township's nighttime noise standard. Staff therefore recommends that operation of the EV charging equipment be limited to 7:00 a.m. through 9:00 p.m., unless the applicant subsequently provides sufficient acoustical documentation and/or mitigation demonstrating compliance with the applicable nighttime noise standard at the adjoining residential property line.

The plans also propose new wall-mounted lighting associated with the EV charging area. Staff is comfortable with the use of fully shielded, downward-directed wall-mounted fixtures, provided the fixtures are designed and installed so that light is confined to the subject property and does not create glare or spillover onto adjoining residential property or public rights-of-way.

Staff Finding: Satisfied subject to conditions. The standard can be satisfied provided that the EV charging equipment is limited to operation between 7:00 a.m. and 9:00 p.m., unless nighttime noise compliance is otherwise demonstrated, and all proposed lighting consists of fully shielded, downward-directed wall-mounted fixtures.

iv. Buildings, Structures, Walls, Fences and Landscaping

The proposed EV charging equipment is located within the northeastern portion of the building near adjoining residential property. Because of this relationship, staff discussed additional screening and landscaping with the applicant during preliminary review of the project.

Additional plantings are proposed in front of the existing fence along the residential property line. The 6-foot-tall wood fence is identified as having a weathered appearance but being structurally sound and proposed to remain. The combination of the existing fence and the additional proposed landscaping is intended to improve visual screening between the charging area and the adjoining residences.

Staff Finding: Satisfied. The proposed location of the equipment, retention of the existing fence, and additional landscaping shown on the plan provide an appropriate level of screening for the scope of the proposed expansion.

v. Harmony with Adjacent Land Uses

The proposed EV charging facilities are functionally related to the existing automobile service station and are consistent with the longstanding commercial use of the property. The site is located along the M-59 commercial corridor, where vehicle-oriented commercial activity is already established.

The principal land use relationship requiring consideration is the adjoining residential property to the north and northeast. The proposed charging equipment has been positioned near the existing convenience store, and additional landscaping has been added along the residential property line to improve screening. Operational impacts are also addressed through the recommended limitation on charging activity between 9:00 p.m. and 7:00 a.m. unless compliance with the applicable nighttime noise standard is otherwise demonstrated.

Staff Finding: Satisfied subject to conditions. The proposed expansion is compatible with the physical and economic character of the surrounding area and with the existing commercial use of the property, provided the approved landscaping and recommended operational limitations are maintained.

vi. Density and Required Open Space

The proposed request does not involve residential development and therefore does not create any issue related to residential density.

The project consists of a limited expansion of an existing automobile service station within an already developed commercial site. The proposed improvements are concentrated within the existing developed area and do not materially alter the overall intensity of development on the property. Additional landscaping has been incorporated into the plan as part of the proposed improvements, particularly along the residential side of the site.

Because this application does not involve a comprehensive redevelopment of the property, staff is not recommending that the applicant reconstruct the entire site to current open-space and landscaping standards as part of this request.

Staff Finding: Satisfied. The proposed expansion does not increase residential density and does not materially reduce required open space or otherwise alter the overall development intensity of the site.

vii. Public Services and Facilities

The proposed EV charging expansion is limited in scope and is not anticipated to create a significant additional demand upon Township public services or facilities. The principal utility improvements associated with the project consist of the electrical infrastructure

necessary to serve the proposed charging stations, including the new pad-mounted transformer.

The applicant will be responsible for coordinating the proposed electrical improvements with the applicable utility provider and obtaining all required building, electrical, fire, and other permits prior to construction.

Staff Finding: Satisfied. The proposed expansion is not anticipated to create service or facility demands that cannot be accommodated by existing public services and utilities.

viii. Protection of the Natural Environment and Conservation of Natural Resources and Energy

The proposed improvements are located within an already developed commercial site and are largely confined to existing paved and disturbed areas. The project does not involve expansion into undeveloped portions of the property or significant alteration of existing natural features.

The proposed EV charging facilities will provide an additional vehicle fueling option that supports the use of electric vehicles and associated alternative energy infrastructure. The project also includes localized landscaping improvements and will be subject to applicable requirements for drainage, soil erosion control, utility installation, and restoration of disturbed areas.

Staff Finding: Satisfied. The proposed expansion is not expected to result in significant adverse impacts to the natural environment and is consistent with the intent of conserving energy resources through the provision of electric vehicle charging infrastructure.

ix. Public Convenience at the Proposed Location

The subject property is an existing automobile service station located at the intersection of M-59 (Highland Road) and Pontiac Lake Road. The proposed EV charging facilities would expand the range of vehicle fueling options available at an established automobile-oriented commercial site rather than requiring the development of a separate location for this service.

The proposed use is therefore well-suited to the existing function of the property and would provide an additional service to motorists traveling along the M-59 corridor and within the surrounding area.

Staff Finding: Satisfied. The proposed EV charging facilities are appropriately located at an existing automobile service station and would provide a convenient additional fueling option for the traveling public.

x. Public Health, Safety, and Welfare

The proposed expansion will utilize the existing access and circulation system of the automobile service station and is limited in scope to the installation of EV charging facilities, associated electrical equipment, localized pavement improvements, and landscaping.

Staff has reviewed the proposal with respect to circulation, parking, lighting, landscaping, screening, and the relationship of the proposed improvements to the adjoining residential property. The principal remaining health, safety, and welfare consideration is noise generated by the proposed chargers and transformer. As discussed previously, operation of the charging equipment should be limited to 7:00 a.m. through 9:00 p.m. unless the applicant demonstrates compliance with the applicable nighttime noise standard.

The project will also remain subject to applicable building, electrical, fire, utility, and other permitting requirements prior to construction.

Staff Finding: Satisfied subject to conditions. The proposed expansion can be operated in a manner protective of public health, safety, and welfare provided the recommended operating-hour limitation is observed and all applicable construction, electrical, fire, and utility requirements are satisfied.

xi. Property Values and Compatibility with Other Permitted Land Uses

The proposed EV charging facilities are consistent with the longstanding automobile service station use and the commercial character of the M-59 corridor. The primary compatibility consideration is the relationship of the proposed improvements to the adjoining residential properties.

The applicant has incorporated additional landscaping along the residential property line and will retain the existing 6-foot wood fence as part of the screening between the charging area and nearby residences. Operational impacts are further addressed through the recommended limitation on charging activity between 7:00 a.m. and 9:00 p.m. unless compliance with the applicable nighttime noise standard is otherwise demonstrated.

Staff Finding: Satisfied subject to conditions. With the proposed landscaping and screening improvements and the recommended operating-hour limitation, the

expansion is not expected to cause substantial injury to nearby property values or be detrimental to adjoining permitted land uses.

Planning Commission Consideration

The principal issue identified by staff is the potential for noise impacts on the adjoining residential property.

The applicant's submitted equipment data identifies the proposed DC fast chargers as producing 53 dBA at 13 feet and 47 dBA at 26 feet, while the proposed transformer is identified at 48 dBA at 13 feet and 42 dBA at 26 feet. Based on staff measurements from the submitted site plan, the nearest charger is approximately 21.9 feet from the residential property line, the second charger approximately 34.7 feet, and the transformer approximately 25.7 feet from the property line.

Based on the applicant's own sound data, the nearest charger alone is anticipated to generate approximately 48 to 49 dBA at the residential property line, exceeding the Township's applicable 45 dBA nighttime noise standard. The submitted noise information also does not quantify additional noise that may be generated by vehicles while actively charging, including battery cooling fans, compressors, pumps, and other thermal-management equipment.

The Planning Commission may wish to consider whether operation of the EV charging facilities should be limited to 7:00 a.m. through 9:00 p.m., unless the applicant can demonstrate through additional acoustical information or mitigation that the facility will comply with the applicable nighttime noise standard at the residential property line.

Section 6.11 – Planning Commission Action

In considering the application, the Planning Commission may incorporate its findings regarding the standards of Section 6.10 and any conditions of approval into its final action.

CHARTER TOWNSHIP OF WHITE LAKE

SITE PLAN AND PLAT REVIEW APPLICATION

White Lake Township Community Development Department, 7525 Highland Road, White Lake Michigan 48393 (248)698 3300 x163

APPLICANT AND PROPERTY INFORMATION

Applicant: Hadi Boussi
Phone: (313) 798-7651 Fax:
Address: 22243 W Warren Ave, Dearborn Hts, MI 48127
(Street) (City) (State) (Zip)
Applicant's Legal Interest in Property: Contractor acting with owner authorization
Property Owner: Abdelrahman Salem Phone: 248 633 5685
Address: 8320 Highland Rd. White Lake, MI 48386
(Street) (City) (State) (Zip)

PROJECT INFORMATION

Project Name: 8320 Highland Parcel I.D. No.: 12-13-454-019
Proposed Use: Addition of (4) EV Charging Stalls Current Zoning: GB
Existing Use: Gas Station Parcel Size: 0.98 Floor Area / No. of Units 2,846sf/1

TYPE OF DEVELOPMENT

☐ Subdivision ☐ Site Condominium ☒ Commercial
☐ Multiple Family ☒ Special Land Use ☐ Industrial
☐ Adult Entertainment

SITE PLAN SUBMITTAL CHECKLIST

☐ PDF File and Three (3) paper copies (sealed) as required by Zoning Ordinance 58
☐ Application Review Fees
PLANS WILL NOT BE ACCEPTED UNLESS FOLDED AND NO GREATER THAN 24" X 36" IN SIZE

REQUIRED SIGNATURES

 (Signature of Property Owner) 7/20/26 (Date)
 (Signature of Applicant) 7/20/26 (Date)

WHITE LAKE TOWNSHIP COMMUNITY DEVELOPMENT FEE SCHEDULE					
PROJECT NAME: GAS STATION - ELECTRIC CHARGER STATION					
PLANNING REVIEW			PLANNING COMMISSION		
Special Land Use/Cluster Option	\$500 + site plan fee	\$500.00	Residential	\$950	
Planned Development Agreement	\$125/hour		Commercial	\$950	\$950.00
Rezoning Request Review	\$650		Industrial	\$950	
Condominium Plan	\$375 plus site plan review		Planned Business/Development	\$1,200	
Additional reviews	\$125/hour		Special Meeting	\$1,200	
Site Plan			ZONING BOARD OF APPEALS (includes P.H. Notice & Mailing)		
Site Condominium	\$1,625		Residential	\$400	
Public, Institutional or Semi-Public Uses	\$1,625		Commercial	\$500	
Multi-Family Residential	\$1,625		Special Meeting	\$1,000	
Non-Residential (incl. 3 reviews)	\$1,625		WETLAND CONSULTANT		
PBD/PDD Plan Review with Rezoning	\$650 + Plus Review Fee		Wetland verification and reports (flagged 2-5 acres of wetland)	\$500	
PBD/PDD Plan Review(w/o Rezoning)	\$1,625		Each additional acre over 5 acres of wetland	\$100	
Sign Review	\$125		Preliminary wetland impact review or Final/Construction plan	\$1,000	
			Final Construction plan wetland impact review/permit issuance	\$1,000	
Subdivision Plat			PLANNING DEPARTMENT		
Tentative preliminary	\$1,625		Administrative site plan review	\$500	\$500.00
Final preliminary	\$1,625		Public Hearing/legal ads/300" mailing	\$300	\$300.00
Final plat	\$1,625		Pre-application meeting	Based on departmental attendance	
			ATTORNEY REVIEW		
Traffic Impact Study			PBD Agreement	\$600	
Abbreviated impact assessment - (such as Trip Generation Analysis)	\$150 Hour		Easement review (incl. 2 reviews)	\$450	
Full impact study	\$150 Hour		Master Deeds and Bylaws (incl. 2 reviews)	\$1000	
Scoping contents with applicant	\$150 Hour		Recording Fee	\$50	
FIRE DEPARTMENT			Covenants and Restrictions	\$450	
Site Plan Review	\$233	\$233.00	Hourly rate for additional reviews	\$150	
Construction Plan Review	\$233		Private Road Agreement	\$450	
<i>Ma Baydoun Ocharge@usa.com</i>			ENGINEERING REVIEW		
			Preliminary Site Plan	\$2,500	
			Tentative preliminary plat	\$2,500	
			Final Site Plan/Construction plan and document review	Based on construction cost estimate	
			Final Preliminary plat/construction/final plat and legal documents	Based on construction cost estimate	
			Private Road review	\$2500	
			Total :		\$2,483.00
			10 % -Admin fee:		\$248.30
			TOTAL FEES DUE:		\$2,731.30

(The engineering review fee schedule was adopted by Board action July 19, 2005)

*CONSTRUCTION COSTS	ENGINEERING PLAN REVIEW FEE	DOCUMENT REVIEW FEE	TOTAL
Up to \$50,000	2.5% (\$500.00 minimum)	1.5% (\$500 minimum)	4.0% (\$1,000 min)
\$50,000 to \$100,000	2.0% (\$1,250 minimum)	1.0% (\$750 minimum)	3.0% (\$2,000 min)
\$100,000 to \$250,000	1.5% (\$2,000 minimum)	1.0% (\$1,000 minimum)	2.5% (\$3,000 min)
Over \$250,000	1.0% (\$3,750 minimum)	0.5% (\$2,500 minimum)	1.5% (\$6,250 min)

Applicable Fee Total

\$ _____
(enter total on page 3)

Note: A revised cost estimate and fee adjustment may be required as a result of design changes.

Submitted by: Hadi Boussi Date: 7/20/26

Print Name: Hadi Boussi

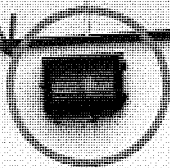
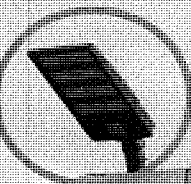
Make checks payable to White Lake Township.

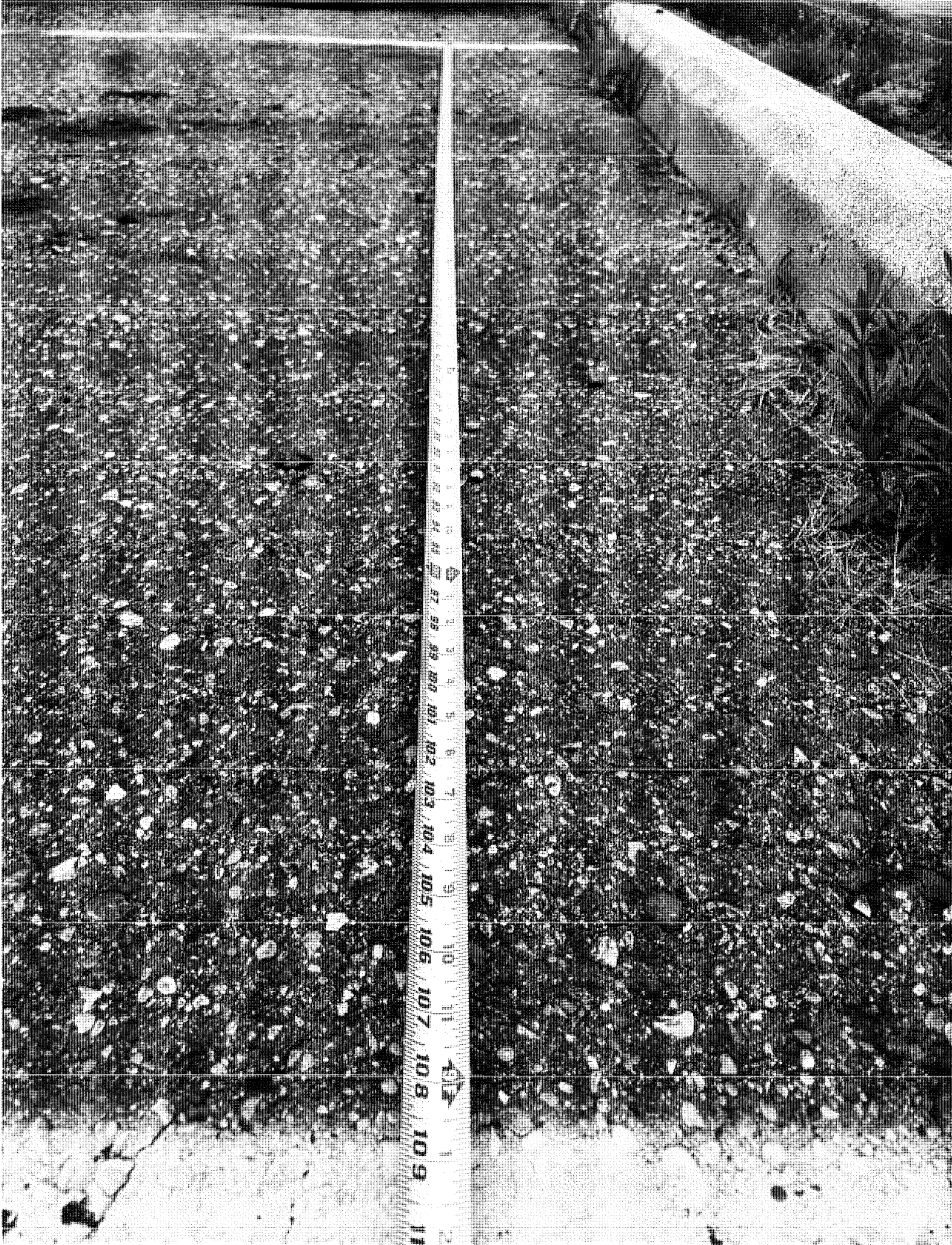
For the construction plan review, two (2) sets of engineer sealed plans are required along with the following items:

as attached

Storm sewer rational formula calculations	_____
Storm sewer discharge area map (on-site & off-site)	_____
Storm water detention/sedimentation basin calcs	_____
Construction plan checklist, completed	_____
Detailed engineers construction cost estimate, itemized	_____

Existing Lighting near EV
chargers





New Light proposed on
above new EV chargers
to match the existing wall
mounted light

DTE Transformer Stake.
Center of transformer
marked.

28'

