

MANDO PARKING LOT EXPANSION JSP24-11

MANDO PARKING LOT EXPANSION - JSP24-11

Public Hearing at the request of Tower Construction LLC, for the Mando Parking Lot Expansion JSP24-11 for Preliminary Site Plan, Woodland Permit and Stormwater Management Plan approval. The subject parcel is zoned I-1, Light Industrial and is located east of Hudson Drive and south of Hexagon Way in the Beck North Corporate Park. The applicant proposes to construct a new 37-space employee parking lot and is seeking approval to remove 53 regulated woodland trees.

Required Action

Approve/Deny the Preliminary Site Plan, Woodland Permit, and Stormwater Management Plan.

REVIEW	RESULT	DATE	COMMENTS
Planning	Approval recommended	07.18.24	PC finding that the proposed parking lot in the front yard is compatible with surrounding development. Items to be addressed by the applicant prior to Final Site Plan approval
Engineering	Approval of PSP, Denial of FSP	07.18.24	Items to be addressed by the applicant prior to Final Site Plan Approval
Landscape	Approval Recommended	07.11.24	PC waiver for the lack of greenbelt landscaping east of the entrance drive on Hexagon Way in order to preserve existing vegetation. Items to be addressed by the applicant prior to Final Site Plan approval
Woodland/ Wetland	Approval Recommended	07.15.24	A Woodland Permit is required for the removal of 53 regulated trees, requiring 72 replacement trees.
Traffic	Approval Recommended	07.15.24	Approval Recommended
Fire	Approval Recommended	07.10.24	Approval Recommended

MOTION SHEET:

Approval – Preliminary Site Plan

In the matter of Mando Parking Lot Expansion JSP24-11, motion to approve the Preliminary Site Plan based on and subject to the following:

- a. The Planning Commission finds that the parking area and lighting is compatible with surrounding development, as the existing vegetation provides an adequate buffer from Hexagon Way.
- b. Planning Commission waiver for the lack of greenbelt landscaping for the area east of the Hexagon Way in order to preserve the existing vegetation subject to the required street trees being planted east of the access drive.
- c. The findings of compliance with Ordinance standards in the staff and consultant review letters and the conditions and the items listed in those letters being addressed on the Final Site Plan; and
- d. (additional conditions here, if any)

(This motion is made because the plan is otherwise in compliance with Article 3, Article 4, and Article 5 of the Zoning Ordinance and all other applicable provisions of the Ordinance.)

- AND -

Approval - Woodland Permit

In the matter of Mando Parking Lot Expansion JSP24-11, motion to approve the Woodland Permit based on and subject to the following:

- a. The findings of compliance with Ordinance standards in the staff and consultant review letters, and the conditions and items listed in those letters being addressed on the Final Site Plan; and
- b. (additional conditions here if any)

(This motion is made because the plan is otherwise in compliance with Chapter 37 of the Code of Ordinances and all other applicable provisions of the Ordinance.)

- AND -

<u>Approval – Stormwater Management Plan</u>

In the matter of Mando Parking Lot Expansion JSP24-11, motion to approve the Stormwater Management Plan based on and subject to the following:

- a. The findings of compliance with Ordinance standards in the staff and consultant review letters, and the conditions and items listed in those letters being addressed on the Final Site Plan; and
- b. (additional conditions here if any)

(This motion is made because the plan is otherwise in compliance with Chapter 11 of the Code of Ordinances and all other applicable provisions of the Ordinance.)

- OR -

Denial - Preliminary Site Plan

In the matter of Mando Parking Lot Expansion JSP24-11, motion to deny the Preliminary Site Plan... (because the plan is not in compliance with Article 3, Article 4, and Article 5 of the Zoning Ordinance and all other applicable provisions of the Ordinance.)

- AND -

<u>Denial – Woodland Permit</u>

In the matter of Mando Parking Lot Expansion JSP24-11, motion to deny the Woodland Permit... (because the plan is not in compliance with Chapter 37 of the Code of Ordinances and all other applicable provisions of the Ordinance.)

- AND -

<u>Denial – Stormwater Management Plan</u>

In the matter of Mando Parking Lot Expansion JSP24-11, motion to deny the Stormwater Management Plan...

(because the plan is not in compliance with Chapter 11 of the Code of Ordinances and all other applicable provisions of the Ordinance.)



LOCATION MAP





LEGEND

Subject Property



City of Novi

Dept. of Community Development City Hall / Civic Center 45175 W Ten Mile Rd Novi, MI 48375 cityofnovi.org

Map Author: Heather Zeigler Date: 8/6/2024 Project: JSP24-11: Mando Parking Lot Expansion Version #: 1

0 50 100

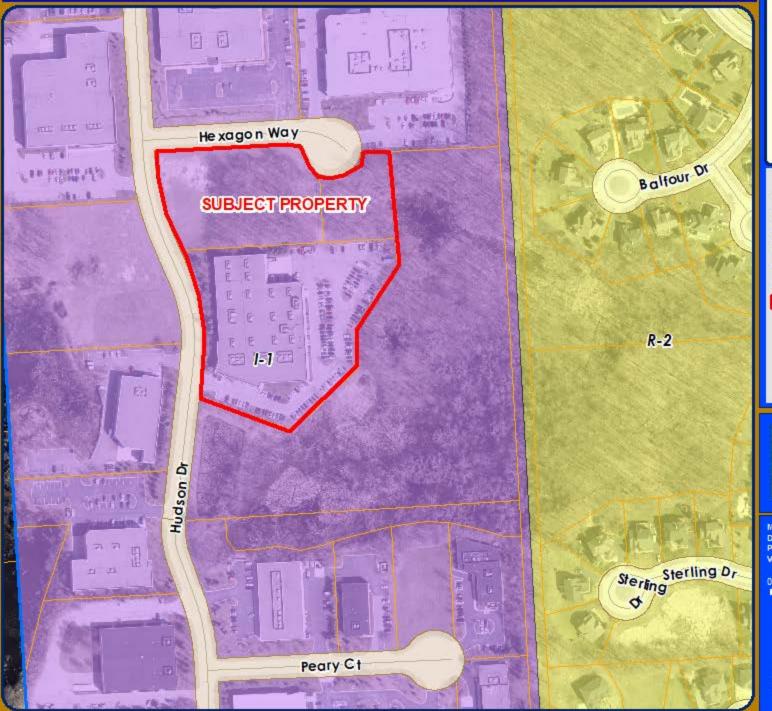


1 inch = 244 feet

MAP INTERPRETATION NOTICE

Map information depicted is not intended to replace or substitute for a licensed Michigan Surveyor as defined in Michigan Public Act 132 of 1970 as amended. Please contact the City GIS Managento confirm source and accuracy information related to this map.

ZONING MAP





LEG END

R-A: Residential Acreage

R-2: One-Family Residential

RM-1: Low-Density Multiple Family

B-3: General Business District

H1: Light Industrial District

Subject Property



City of Novi

Dept. of Community Development City Hall / Civic Center 45175 W Ten Mile Rd Novi, MI 48375 cityof novi.org

Map Author: Heather Zeigler Date 8/6/2024 Project: JSP24-11: Mando Parking Lot Expansion Version #: 1

300 0 50 100 200

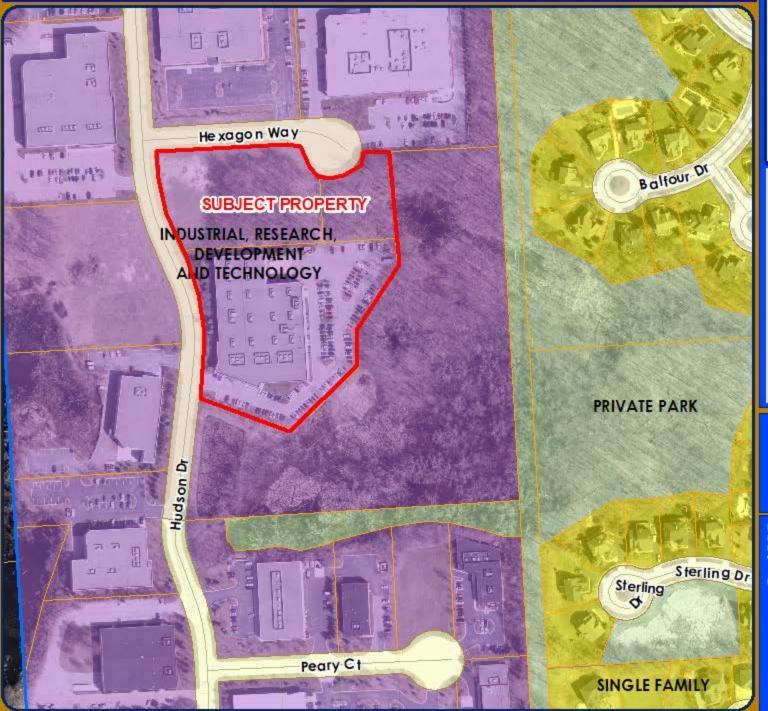


1 inch = 244 feet

MAP INTERPRETATION NOTICE

Map information depicted is not intended to replace or substitute for any official or primary source. This map was intended to meet National Map Accuracy Standards and use the most recent, accurate sources available to the people of the City of Novi. Boundary measurements and area calculations are approximate and should not be construed as survey measurements performed by a licensed Michigan Surveyor as defined in Michigan Public Act 132 of 1970 as amended. Please contact the City GIS Manager to confirm source and accuracy information related to this map.

FUTURE LAND USE MAP





LEG END

Single Family

Multiple-Family Residential

Industrial, Research, Development and Technology

/// Community Commercial

Public Park

Private Park

Subject Property

City of Novi

Dept. of Community Development City Hall / Civic Center 45175 W Ten Mile Rd Novi, MI 48375 cityof novi.org

Map Author: Heather Zeigler Date 8/6/2024 Project: JSP24-11: Mando Parking Lot Expansion Version #: 1

300 0 50 100 200



1 inch = 244 feet

MAP INTERPRETATION NOTICE

Map information depicted is not intended to replace or substitute for any official or primary source. This map was intended to meet National Map Accuracy Standards and use the most recent, accurate sources available to the people of the City of Novi. Boundary measurements and area calculations are approximate and should not be construed as survey measurements performed by a licensed Michigan Surveyor as defined in Michigan Public Act 13.2 of 1970 as amended. Please contact the City GIS Manager to confirm source and accuracy information related to this map.

NATURAL FEATURES MAP





LEGEND

WETLANDS WOODLANDS

Subject Property



City of Novi

Dept. of Community Development city Hall / Civic Center 45175 W Ten Mile Rd Novi, MI 48375 cityofnovi.org

Map Author: Heather Zeigler Date: 8/6/2024 Project: JSP24-11: Mando Parking Lot Expansion Version #: 1

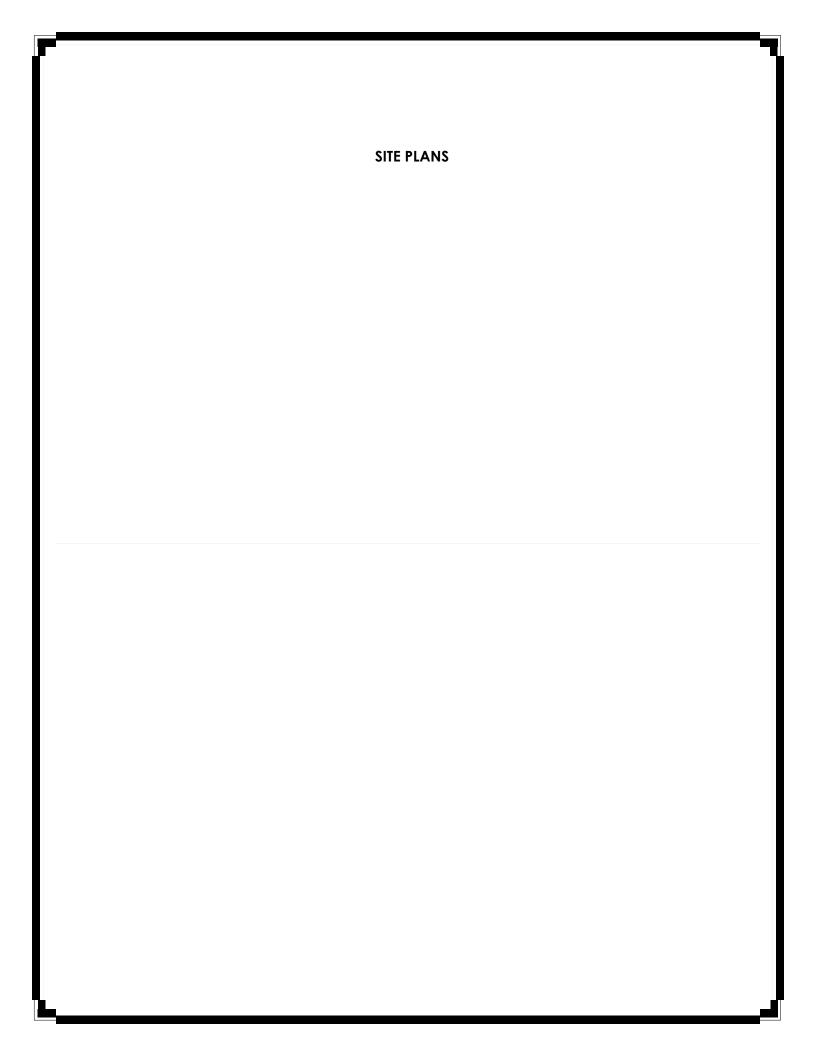
0 50 100



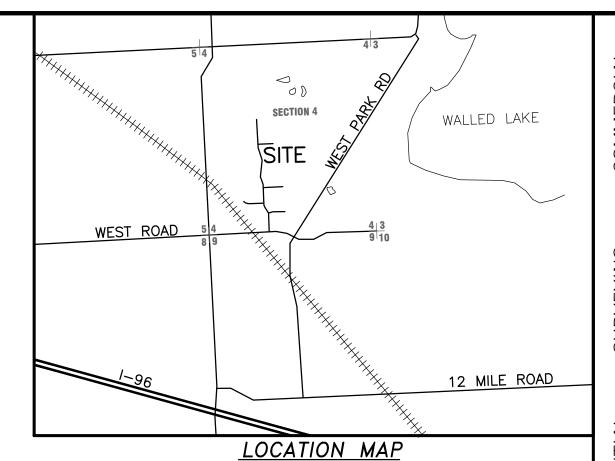
1 inch = 244 feet

MAP INTERPRETATION NOTICE

Map information depicted is not intended to replace or substitute for a licensed Michigan Surveyor as defined in Michigan Public Act 132 of 1970 as amended. Please contact the City GIS Manager to confirm source and accuracy information related to this map.



MANDO PARKING LOT EXPANSION SOUTHEAST CORNER OF HUDSON DRIVE AND HEXAGON WAY PRELIMINARY SITE PLAN PARCEL NO. 22-04-151-033 WNER: BROAD-OCEAN TECHNOLOGIES, LLC EDISON EASEMENT 10' ROAD /UTILITY HEXAGON WAY (60 FT. WIDE, PUBLIC) CONCRETE CONCRETE REMOVE/REPLACE ENTRANCE PER CITY/COUNTY ON EASEMEN CONCRETE ZONING: I-1 (LIGHT INDUSTRIAL) WALL (MAX SECTION 4, T1N, R8E N 368810.8947 **GENERAL SITE NOTES:** ZONING: I-1 (LIGHT INDUSTRIAL) . ALL WORK SHALL CONFORM TO THE CURRENT CITY OF NOVI STANDARDS AND EXTERIOR LIGHTING MUST COMPLY WITH SECTION 2511 OF THE CITY OF NOVI CODE. 3. A RIGHT OF WAY PERMIT IS REQUIRED FROM THE CITY OF NOVI FOR ANY WORK IN THE HEXAGON WAY RIGHT-OF-WAY OR THE HUDSON DRIVE RIGHT-OF-WAY. 4. ALL SIGNS SHALL CONFORM TO ALL APPLICABLE CODES AND ORDINANCES (CHAPTER 28) OF CONCRETE THE CITY OF NOVI, AND WHERE REQUIRED SHALL BE RENEWED AND APPROVED BY THE DEPARTMENT OF BUILDING AND SAFETY AND A PERMIT ISSUED. NO SIGNS (OTHER THAN TYPICAL TRAFFIC CONTROL SIGNS) ARE APPROVED AS PART OF THIS SITE PLAN APPROVAL PRIOR TO ERECTION OF A SIGN, AN APPLICATION AND APPROPRIATE SUBMISSIONS SHALL BE MADE TO THE BUILDING DEPARTMENT FOR REVIEW, APPROVAL AND ISSUANCE OF A SIGN 5. ALL PARKING AND TRAFFIC CONTROL SIGNS SHALL COMPLY WITH THE CURRENT DESIGN AND LEGEND: PLACEMENT REQUIREMENTS OF THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL EX. PEDESTAL 6. NOTIFY THE CITY OF NOVI A MINIMUM OF 48 HOURS PRIOR TO THE START OF EX. TRANSFORMER CONCRETE 7. CALL MISS DIG (811) A MINIMUM OF 72 HOURS PRIOR TO THE START OF CONSTRUCTION. 8. ALL SOIL EROSION AND SILT MUST BE CONTROLLED AND CONTAINED ON—SITE. EX. UTILITY POLE 9. ALL EXCAVATION UNDER OR WITHIN A 1 ON 1 INFLUENCE OF PUBLIC PAVEMENT, EXISTING OR PROPOSED, SHALL BE BACKFILLED AND COMPACTED WITH SAND (CLASS II MDOT). EX. GUY ANCHOR 10. THE CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE TO EXISTING UTILITIES. EX. OVERHEAD LINE 11. PRIOR TO ISSUANCE OF AN OCCUPANCY PERMIT, ENGINEERING SITE INSPECTION IS REQUIRED 12. IF DEWATERING IS ANTICIPATED OR ENCOUNTERED DURING CONSTRUCTION THE CONTRACTOR EX. SIGN IS REQUIRED TO SUBMIT A DEWATERING PLAN TO THE CITY ENGINEERING DIVISION FOR EDISON EASEMEN 13. DIMENSIONS OF PARKING STALLS ABUTTING A CURB OR SIDEWALK ARE TO THE FACE OF CURB OR WALK. ALL OTHER DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE ZONING: I-1 (LIGHT INDUSTRIAL) 10' ROAD/UTILITY EASEMENT 14. LONG—TEM DELIVERY TRUCK PARKING IS NOT PERMITTED. 15. THE LIGHTING, NOISE, VIBRATION, ODOR, AND OTHER POSSIBLE IMPACTS ARE IN COMPLIANCE WITH STANDARDS AND INTENT OF THE ARTICLE AND PERFORMANCE STANDARDS OF SECTION EX. GENERATOR EX. AIR CONDITIONER 16. THE WETLANDS WERE RE-FLAGGED BY ASTI ENVIRONMENTAL. REFER TO THE WETLAND 22-04-378-029 APPROXIMATE VARIABLE WIDTH . DETROIT EDISON UNDERGROUND EASEMENT PER DELINEATION AND JURISDICTIONAL ASSESSMENT (PREPARED BY ASTI ENVIRONMENTAL AND PROP. FINISH FLOOR ELEVATION DATED MAY 21, 2024.) LIBER 42750, PAGE 887, O.C.F #29930 HUDSON DRIVE PROP. CURB & GUTTER OWNER: MANDO AMERICA CORPORATION 20' WIDE ACCESS EASEMENT PE LIBER 41758, PAGE 699, O.C.R. & STORM DRAINAGE FACILITY MAINTENANCE AGREEMENT PER LIBER 41758, PAGE 704, O.C.R. PROP. ASPHALT USE 21AA CRUSHED LIMESTONE BASE FOR ANY |PAVEMENT WITHIN 100 FEET R=430.00' DELTA=30'22'05" CH=N08'41'25"W(M) N05"17'35"W(R) PROP. CONCRETE OF A WATER COURSE. NOTE: SEE CITY OF NOVI PAVING PROP. LIGHT POLE STANDARD DETAIL -7D 20' WIDE WATER SYSTEM EASEMENT PER LIBER 41829, PAGE 365, O.C.R. FIRE DEPARTMENT NOTES: <u> 18" WIDE CONCRETE CURB AND GUTTER (ON-SITE)</u> CONCRETE NEW BUILDINGS AND EXISTING BUILDINGS SHALL COMPLY WITH THE INTERNATIONAL FIRE CODE SECTION 510 FOR EMERGENCY RADIO COVERAGE. THIS SHALL BE COMPLETED BY THE TIME TO THE FINAL INSPECTION. O' ROAD/UTILITY EASEMENT NOTE: SEE CITY OF NOVI PAVING BE COMPLETED BY THE TIME THE FINAL INSPECTION OF THE FIRE ALARM AND FIRE SUPPRESSION PERMITS. 2. FIRE LANES WILL BE DESIGNATED BY THE FIRE CHIEF OR HIS DESIGNEE WHEN IT IS DEEMED NECESSARY AND SHALL COMPLY WITH THE FIRE PREVENTION ORDINANCES ADOPTED BY THE CITY OF NOVI. 3. FIRE APPARATUS ACCESS DRIVES TO AND FROM BUILDINGS THROUGH PARKING LOTS SHALL HAVE A MINIMUM FIFTY (50) FEET OUTSIDE TURNING RADIUS AND DESIGNED TO SUPPORT A MINIMUM OF STANDARD DETAIL -7C BITUMINOUS PAVEMENT CROSS-SECTION (ON-SITE) 20' WIDE WATER SYSTEM EASEMENT PER LIBER 41829, PAGE 365, O.C.R. THIRTY-FIVE (35) TONS. (D.C.S. SEC 11-239(B)(5)) CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AS DISCLOSED BY AVAILABLE UTILITY COMPANY RECORDS AND HAVE NOT BEEN NDEPENDENTLY VERIFIED BY THE COMPANY. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES 24' WIDE ACCESS EASEMENT PER LIBER 41758, PAGE 699, O.C.R. & STORM DRAINAGE FACILITY MAINTENANCE ACREEMENT PER LIBER 41758, PAGE 704, O.C.R. EFORE COMMENCING WORK, AND AGREES TO BE FULLY 20' WIDE ACCESS EASEMENT PER LIBER 41758, PAGE 699, O.C.R. & STORM DRAINAGE FACILITY MAINTENANCE AGREEMENT PER CONSERVATION EASEMENT PER LIBER 38064, PAGE 802, O.C.R. ESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE PARKING STALL DETAIL AT REDUCED OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY IF A CONFLICT IS APPARENT.



APPLICANT/OWNER: MANDO AMERICA CORP. 29930 HUDSON DRIVE

NOVI. MI 48377

SECTION 4. TIN. R8F

N 368929.9960

-BACK OF CURB

PARKING

FACE OF CURB

r18" WIDE &

4" HIGH CURB

- -- ---

r2' OVERHANG

DEPTH STALL LOCATIONS

NOTE: SEE PLAN FOR

4" HIGH CURB

LOCATIONS

SURVEYOR/ENGINEER: ALPINE ENGINEERING, INC.

46892 WEST ROAD, SUITE 109 NOVI, MI 48377 PHONE: (248) 926-3701 FAX: (248) 926-3765 CONTACT: SHILOH DAHLIN

LANDSCAPE ARCHITECT ALLEN DESIGN 557 CARPENTER NORTHVILLE, MI 48167 PHONE: (248) 467-4668

ORIGINAL LEGAL DESCRIPTIONS: • PARCEL NO. 22-04-378-030

CONTACT: JIM ALLEN

TOWN 1 NORTH, RANGE 8 EAST, SECTION 4 OAKLAND COUNTY CONDOMINIUM PLAN NO 1759 BECK NORTH CORPORATE PARK UNIT 36 LIBER 35825 PAGE 628

- PARCEL NO. 22-04-378-031 TOWN 1 NORTH, RANGE 8 EAST, SECTION 4 OAKLAND COUNTY CONDOMINIUM PLAN NO 1759 BECK NORTH CORPORATE PARK UNIT 37 LIBER 35825 PAGE 628
- PARCEL NO. 22-04-378-029 TOWN 1 NORTH, RANGE 8 EAST, SECTION 4 OAKLAND COUNTY CONDOMINIUM PLAN NO 1759 BECK NORTH CORPORATE PARK UNIT 35 LIBER 35825 PAGE 628

RESULTANT LEGAL DESCRIPTION COUNTY CONDOMINIUM PLAN NO. 1759, RECORDED IN LIBER 35825, PAGE 628, O.C.R., BEING A PART OF SECTION 4, TOWN 1 NORTH. RANGE 8 EAST, OAKLAND COUNTY, MICHIGAN ALSO BEING DESCRIBED AS FOLLOWS: BEGINNING AT THE NORTHWEST CORNER OF SAID UNIT 36; THENCE S89°52'29"E 333.74 FEET; THENCE 56.64 FEET ALONG A CURVE TO THE RIGHT, RADIUS 42.00 FEET, CHORD S51*14'21"E 52.45 FEET; THENCE 200.78 FEET ALONG A CURVE TO THE LEFT, RADIUS 76.00 FEET, CHORD S88"17'11"E 147.28 FEET; THENCE S89°34'14"E 76.52 FEET; THENCE THENCE S00°06'08"W 88.16 FEET; THENCE S49°41'31"W 230.21 FEET: THENCE N67°16'09"W 251.46 FEET: THENCE N09°53'28"E 95.86 FEET; THENCE 227.91 FEET ALONG A CURVE TO THE LEFT, RADIUS 430.00 FEET, CHORD NO51735"W 225.25 FEET; THENCE N20°28'37"W 104.72 FEET; THENCE 204.96 FEET ALONG A CURVE TO THE RIGHT, RADIUS 570.00 FEET, CHORD N1010'33"W 203.86 FEET; THENCE NO0'07'31"E 15.67 FEET TO THE POINT OF BEGINNING, CONTAINING 7.29 ACRES OF LAND AND BEING SUBJECT

<u>SIZE</u> 30"x30"

TO EASEMENTS AND RESTRICTIONS OF RECORD.

SITE DATA:
PARCEL ID# 22-04-378-030 & -031
SITE AREA: ±3.10 ACRES CURRENT ZONING= I-1 LIGHT INDUSTRIAL REQUIRED SETBACKS- 40' FRONT 20' EACH SIDE 20' REAR

NORTHERN YARD PARKING CALCULATIONS NORTHERN YARD AREA: 111,823 S.F • NORTHERN YARD PARKING SPACE AREA: 6,051 S.F. • NORTHERN YARD PARKING OCCUPANCY: 5%

EXISTING BUILDING: 2 STORY OFFICE 1ST FLOOR R&D ±47,900 S.F. ±76,500 S.F.

EXISTING PARKING: 158 PARKING SPACES (INCLUDING 6 ADA PARKING SPACES)

PROPOSED ADDITIONAL PARKING: 37 PARKING SPACES TOTAL PARKING: 195 SPACES

SHEET INDEX:

PRELIMINARY SITE PLAN TOPOGRAPHIC SURVEY PRELIMINARY GRADING PLAN PRELIMINARY UTILITY PLAN PRELIMINARY STORM WATER MANAGEMENT PLAN

TRUCK CIRCULATION AND SIGHT DISTANCE PLAN L-1 LANDSCAPE PLAN (PREPARED BY ALLEN DESIGN) L-2 LANDSCAPE DETAILS (PREPARED BY ALLEN DESIGN)

L-3 WOODLAND PLAN (PREPARED BY ALLEN DESIGN)

L-4 TREE LIST (PREPARED BY ALLEN DESIGN) CITY OF NOVI PROJECT#24-05 NOT FOR CONSTRUCTION Know what's **below** Call before you dig.

2024-03-12 DRAWN BY: SD CHECKED BY: TG FBK: **430** CHF: **BK**

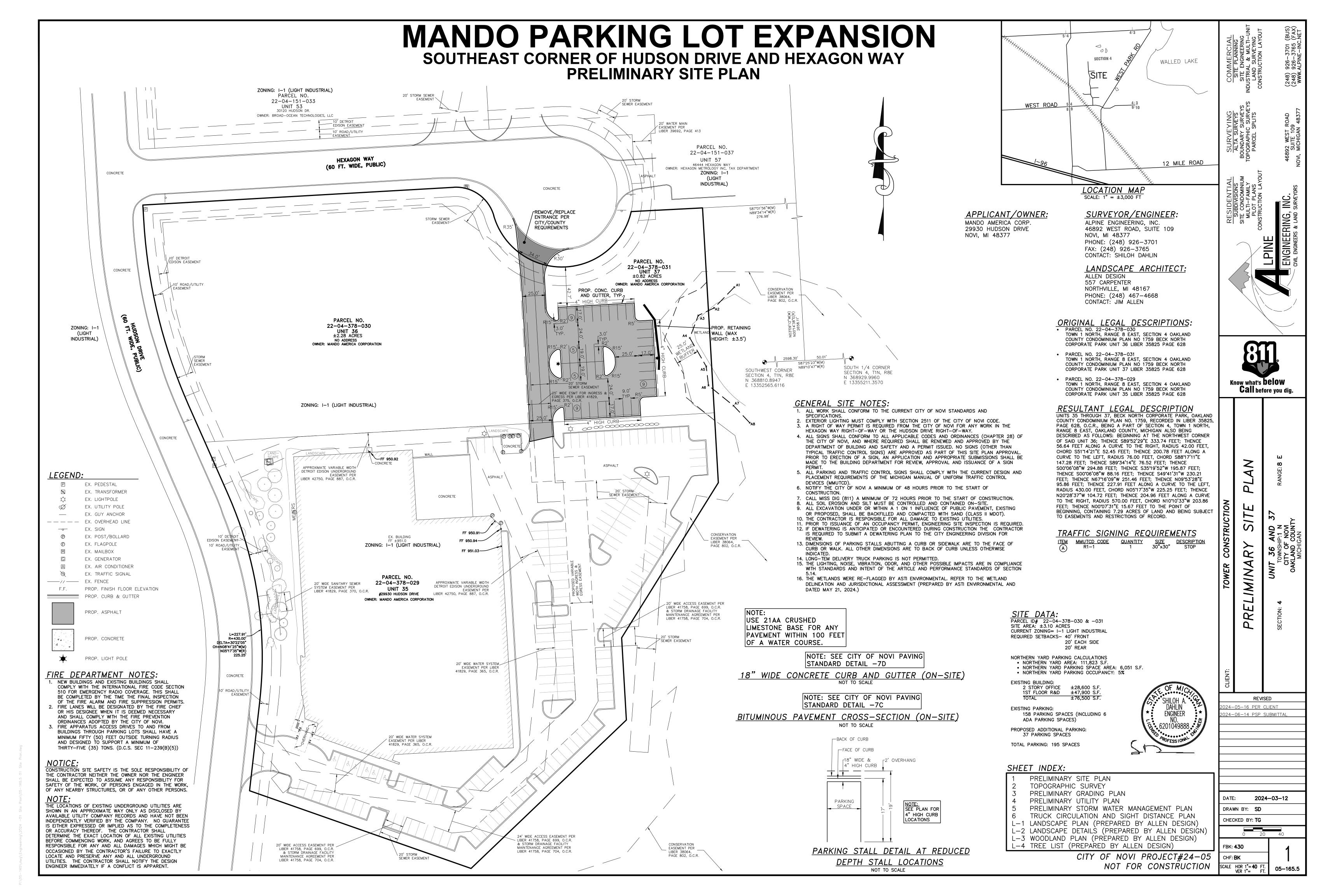
05-165.5

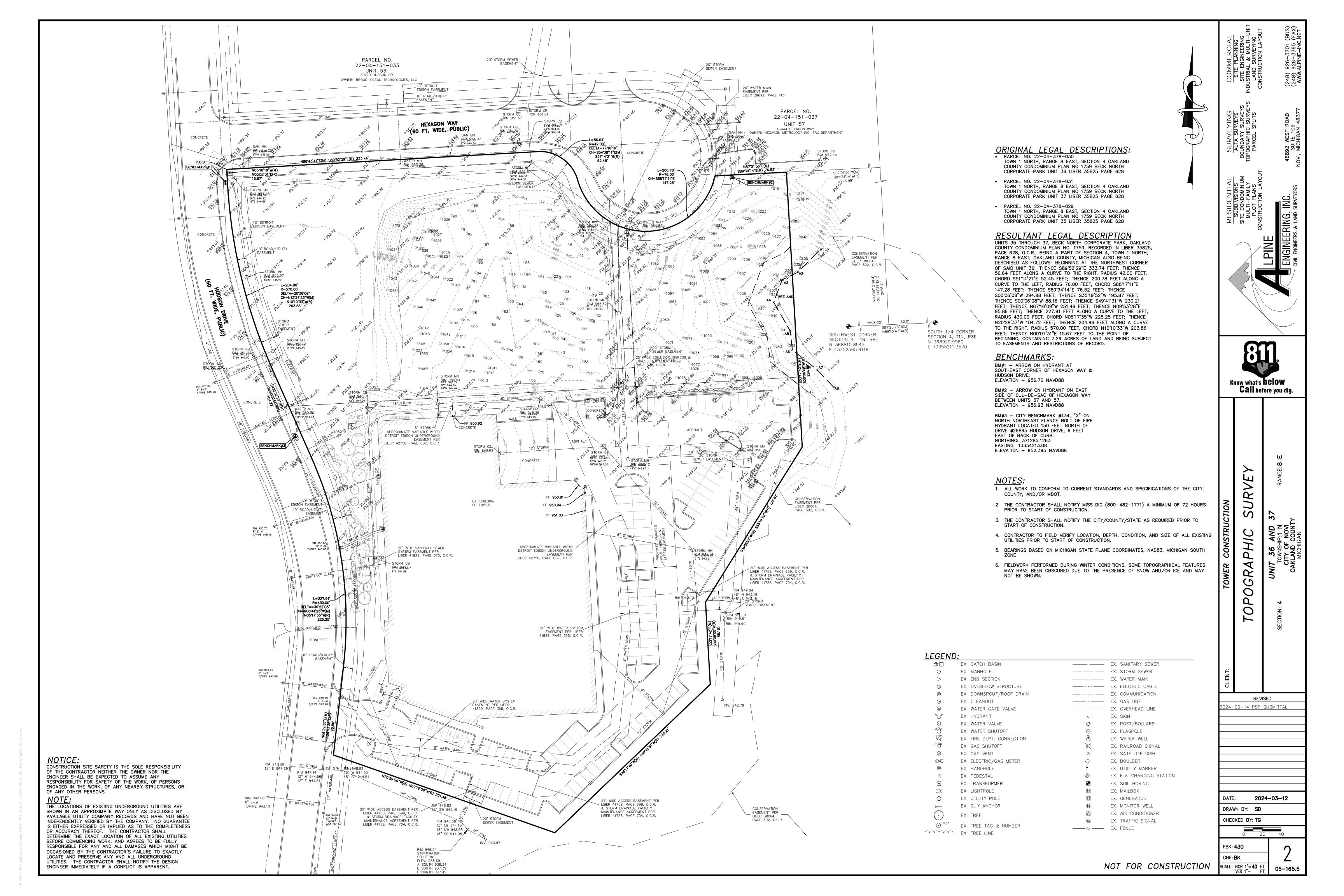
SCALE HOR 1"=40 FT. VER 1"= FT.

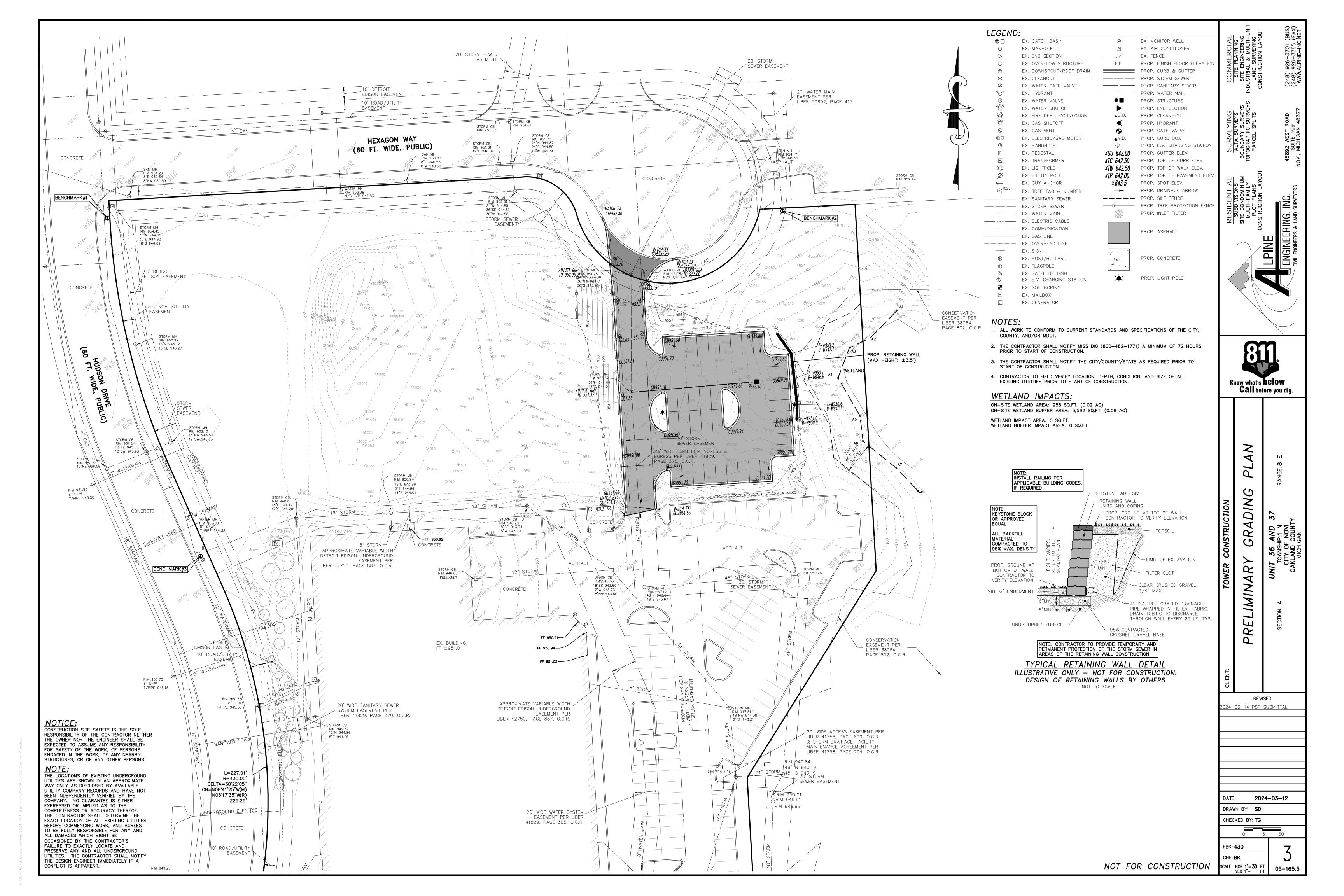
REVISED

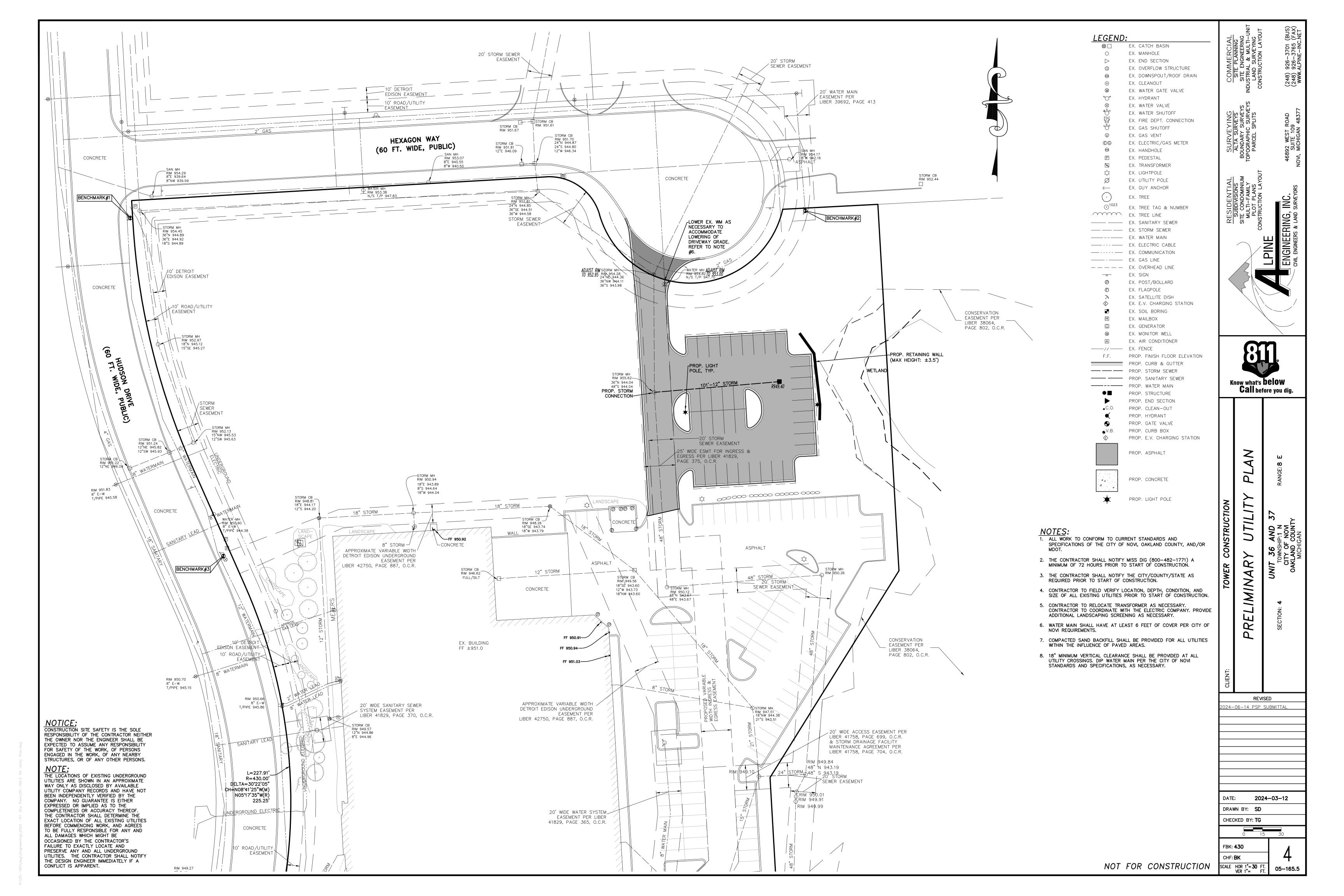
4-05-16 PER CLIENT

24-06-14 PSP SUBMITTAL









GENERAL

This specification shall govern the performance, materials and fabrication of the Stormwater Treatment System.

SCOPE OF WORK

The Aqua-Swirl™ Concentrator shall be provided by AquaShield™, Inc. 2733 Kanasita Drive, Chattanooga, TN (423-870-8888) and shall adhere to the following material and performance specifications at the specified design flows, and storage capacities.

MATERIALS

- Stormwater Treatment System shall be made from high-density polyethylene (HDPE) resins meeting the following requirements:
 - 1) HDPE Material The HDPE material supplied under this specification shall be high density, high molecular weight as supplied by manufacturer. The HDPE material shall conform to ASTM D3350-02 with minimum cell classification values of 345464C.
- PHYSICAL PROPERTIES OF HDPE COMPOUND
 - a) Density the density shall be no less than 0.955 g/cm³ as referenced in ASTM D 1505.
 - b) Melt Index the melt index shall be no greater than 0.15 g/10 minutes when tested in accordance with ASTM D 1238- Condition 190/2.16.
 - c) Flex Modulus flexural modulus shall be 110,000 to less
 - than 160,000 psi as referenced in ASTM D 790. d) Tensile Strength at Yield - tensile strength shall be 3,000 to less than 3,500 psi as referenced in ASTM D 638.
 - e) Slow Crack Growth Resistance shall be greater than 100 hours (PENT Test) as referenced in ASTM F 1473 or greater than 5000 hours (ESCR) as referenced in ASTM D 1693 (condition C).
- The inlets and outlets shall be extrusion welded on the inside and outside of the structure using accepted welding practice.
- The arched baffle wall shall be constructed from HDPE and shall be extrusion welded to the interior of the treatment chamber using accepted welding methods with connections made at 180 degrees of each end.
- HDPE lifting supports may be provided on the exterior of the Stormwater Treatment System in such a way as to allow the prevention of undue stress to critical components of the Stormwater Treatment System during loading, off-loading and moving operations. The lifting supports shall be constructed as an integral part of the treatment chamber and extrusion welded using accepted welding practices.
- Top of the treatment chamber shall be built to the requirements of the drawings. Deep burial applications shall require a reinforced HDPE top.

Reinforced concrete pads spanning the treatment chamber will be required with traffic rated frames and covers when the Stormwater Treatment System is used in traffic areas. A professional engineer shall approve the design of the concrete pad and the calculations must be included in the submittal.

The manufacturer upon request can supply anti-flotation/ buoyancy calculations. In addition, typical drawings of the AquaShield Stormwater Treatment System with concrete anti-flotation structures can also be provided. Anti-flotation structure design and approval are ultimately the responsibility of the specifying engineer. The contractor shall provide the anti-flotation structures.

INSTALLATION

Excavation and Bedding

The trench and trench bottom shall be constructed in accordance with ASTM D 2321, Section 6, Trench Excavation, and Section 7, Installation. The HDPE Stormwater Treatment System shall be installed on a stable base consisting of 12 inches of Class I stone materials (angular, crushed stone or rock, crushed gravel; large void content, containing little or no fines) as defined by ASTM D 2321, Section 5, Materials, and compacted to 95% proctor density.

SUBMITTALS

The Contractor shall be provided with dimensional drawings and, when specified, utilize these drawings as the basis for preparation of shop drawings showing details for construction and reinforcing. Shop drawings shall be annotated to indicate all materials to be used and all applicable standards for materials, required tests of materials and design assumptions for structural analysis. Shop drawings shall be prepared at a scale of not less than 1/4 inch per foot. Three (3) hard copies of said shop drawings shall be submitted to the Specifying Engineer for review and

QUALITY CONTROL INSPECTION

- - The quality of materials, the process of manufacture, and the finished sections shall be subject to inspection by the Specifying Engineer. Such inspection may be made at the place of manufacture, or on the work site after delivery, or at both places. The sections shall be subject to rejection at any time if material conditions fail to meet any of the specification requirements, even though sample sections may have been accepted as satisfactory at the place of manufacture. Sections rejected after delivery to the site shall be marked for identification and shall be removed from the site at once. All sections, which are damaged beyond repair after delivery will be rejected and, if already installed, shall be repaired to the Specifying Engineer's acceptance level, if permitted, or removed and replaced, entirely at the Contractor's expense.
- All sections shall be inspected for general appearance, dimensions, soundness, etc.
- Structural defects may be repaired, subject to the acceptance of the Specifying Engineer, after demonstration by the manufacturer that strong and permanent repairs will be made. The Specifying Engineer before final acceptance of the components shall carefully inspect repairs.

CONFLICT IS APPARENT.

C when tested in accordance with ASTM D 2837. g) Color – black with minimum 2% carbon black.

f) Hydrostatic Design Basis shall be 1,600 psi at 23 degrees

B. REJECTION - The Stormwater Treatment System may be rejected for failure to meet any of the requirements of this specification.

PERFORMANCE

- A. The Stormwater Treatment System shall include a ____-inch inner diameter (ID) circular hydrodynamic flow-through treatment chamber to treat the incoming water. A tangential inlet shall be provided to induce a swirling flow pattern that will cause sedimentary solids to accumulate in the bottom center of the chamber in such a way as to prevent re-suspension of captured particles. An arched baffle wall shall be provided in such a way as to prevent floatable liquid oils and solids from exiting the treatment chamber while enhancing the swirling action of the stormwater.
- B. The Stormwater Treatment System shall have a sediment storage capacity of ___ cubic feet and be capable of capturing ____ gallons of petroleum hydrocarbons. The Stormwater Treatment System shall have a treatment capacity of _____ cubic feet per second (cfs). The Stormwater Treatment System shall be capable of removing floating trash and debris, floatable oils and 80% of total suspended solids from stormwater entering the treatment chamber.
- C. Service access to the Stormwater Treatment System shall be provided via 30-inch inner diameter (ID) access riser(s) over the treatment chamber such that no confined space entry is required to perform routine inspection and maintenance functions.

TREATMENT CHAMBER CONSTRUCTION

- A. The treatment chamber shall be constructed from solid wall highdensity polyethylene (HDPE) ASTM F 714 cell class 345464C. For sizes above 63-inch OD, the treatment chamber shall be constructed from profile wall HDPE ASTM F 894 RSC 250 pipe or solid wall HDPE.
- B. The bottom thickness of the treatment chamber will be determined in accordance with ASTM F 1759. Calculations must be provided to justify the thickness of the bottom.

All required safety precautions for Stormwater Treatment System installation are the responsibility of the Contractor.

Backfill Requirements

Backfill materials shall be Class I or II stone materials (well graded gravels, gravelly sands; containing little or no fines) as defined by ASTM D 2321, Section 5, Materials and compacted to 90% proctor density. Class I materials are preferred. Backfill and bedding materials shall be free of debris. Backfilling shall conform to ASTM F 1759, Section 4.2, "Design Assumptions". Backfill shall extend at least 3.5 feet beyond the edge of the Swirl Concentrator for the full height to sub grade and extend laterally into undisturbed soils.

Pipe couplings to and from the Stormwater Treatment System shall be Fernco[®], Mission™ or equal type flexible boot with stainless steel tension bands. A metal sheer guard shall be used to protect the flexible boot.

DIVISION OF RESPONSIBILITY

Stormwater Treatment System Manufacturer The Manufacturer shall be responsible for delivering the Stormwater Treatment System to the site. The system includes the treatment chamber with debris baffle, inlet and outlet stub-outs, lifting supports, 30-inch ID service access riser(s) to grade with

temporary cover, and manhole frame(s) and cover(s).

- The Contractor shall be responsible for preparing the site for the system installation including, but not limited to, temporary shoring,
- excavation, cutting and removing pipe, new pipe, bedding, and compaction. The Contractor shall be responsible for furnishing the means to lift the system components off the delivery trucks. The Contractor shall be responsible for providing any concrete antifloatation/anti-creep restraints, anchors, collars, etc. with any straps or connection devices required. The Contractor shall be responsible for field cutting, if necessary, HDPE service access risers to grade. The Contractor shall be responsible for sealing the pipe connections to the Stormwater Treatment System, backfilling and furnishing all labor, tools, and materials needed.

_	Aqua-S	wirl™	Sizi	ng Char	t (English	1)
Aqua-Swirl™ Model	Swirl Chamber Diameter	Maxin Stub-Ou Out Diame	t Pipe er eter	Water Quality Treatment Flow ²	Oil/Debris Storage Capacity	Sediment Storage Capacity
	(ft.)	On/Offline	CFD ¹	(cfs)	(gal)	(ft³)
AS-2	2.50	8	12	1.1	37	10
AS-3	3.25	10	16	1.8	110	20
AS-4	4.25	12	18	3.2	190	32
AS-5	5.00	12	24	4.4	270	45
AS-6	6.00	14	30	6.3	390	65
AS-7	7.00	16	36	8.6	540	90
AS-8	8.00	18	42	11.2	710	115
AS-9	9.00	20	48	14.2	910	145
AS-10	10.0	22	54	17.5	1130	180
AS-12	12.0	24	48	25.2	1698	270
AS-XX*	Custom	10.2	8.5	>26	34.	174.01

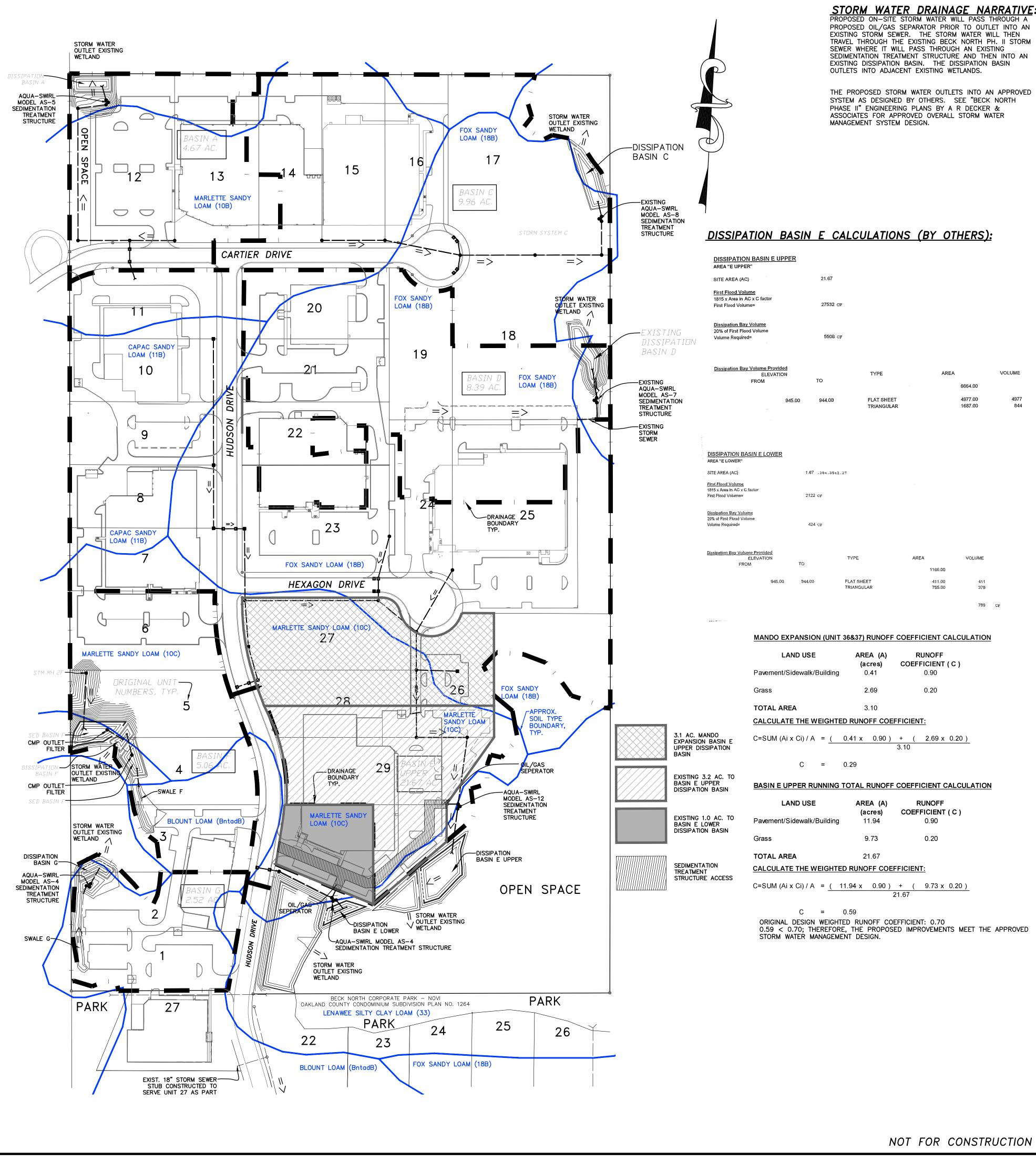
- 1) The Aqua-Swirl™ Conveyance Flow Diversion (CFD) provides full treatment of the "first flush," while the peak design storm is diverted and channeled through the main conveyance pipe. Please refer to your local representative for more information.
- 2) Many regulatory agencies are establishing "water quality treatment flow rates" for their areas based on the initial movement of pollutants into the storm drainage system. The treatment flow rate of the Aqua-Swirl™ system is engineered to meet or exceed the local water quality treatment criteria. This "water quality treatment flow rate" typically represents approximately 90% to 95% of the total annual runoff volume.

The design and orientation of the Aqua-Swirl™ generally entails some degree of customization. For assistance in design and specific sizing using historical rainfall data, please refer to an AquaShield™ representative or visit our website at www.AquaShieldInc.com. CAD details and specifications are available upon request.

NOTICE: CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY

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

NOTE:
THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AS DISCLOSED BY AVAILABLE UTILITY COMPANY RECORDS AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE COMPANY. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY IF A



Know what's **below**

Call before you dig.

REVISED

2024-03-12

DRAWN BY: SD

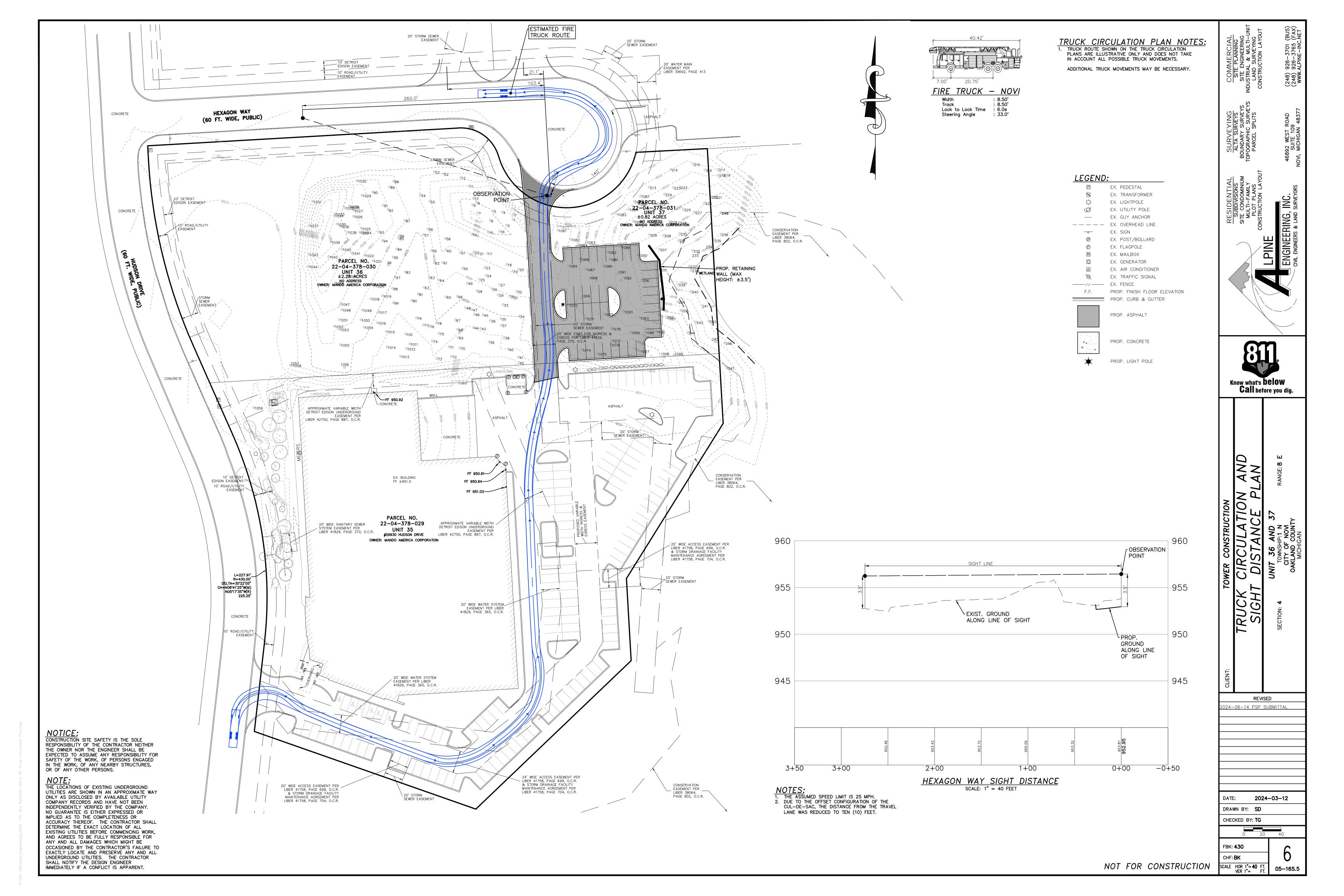
CHECKED BY: TG

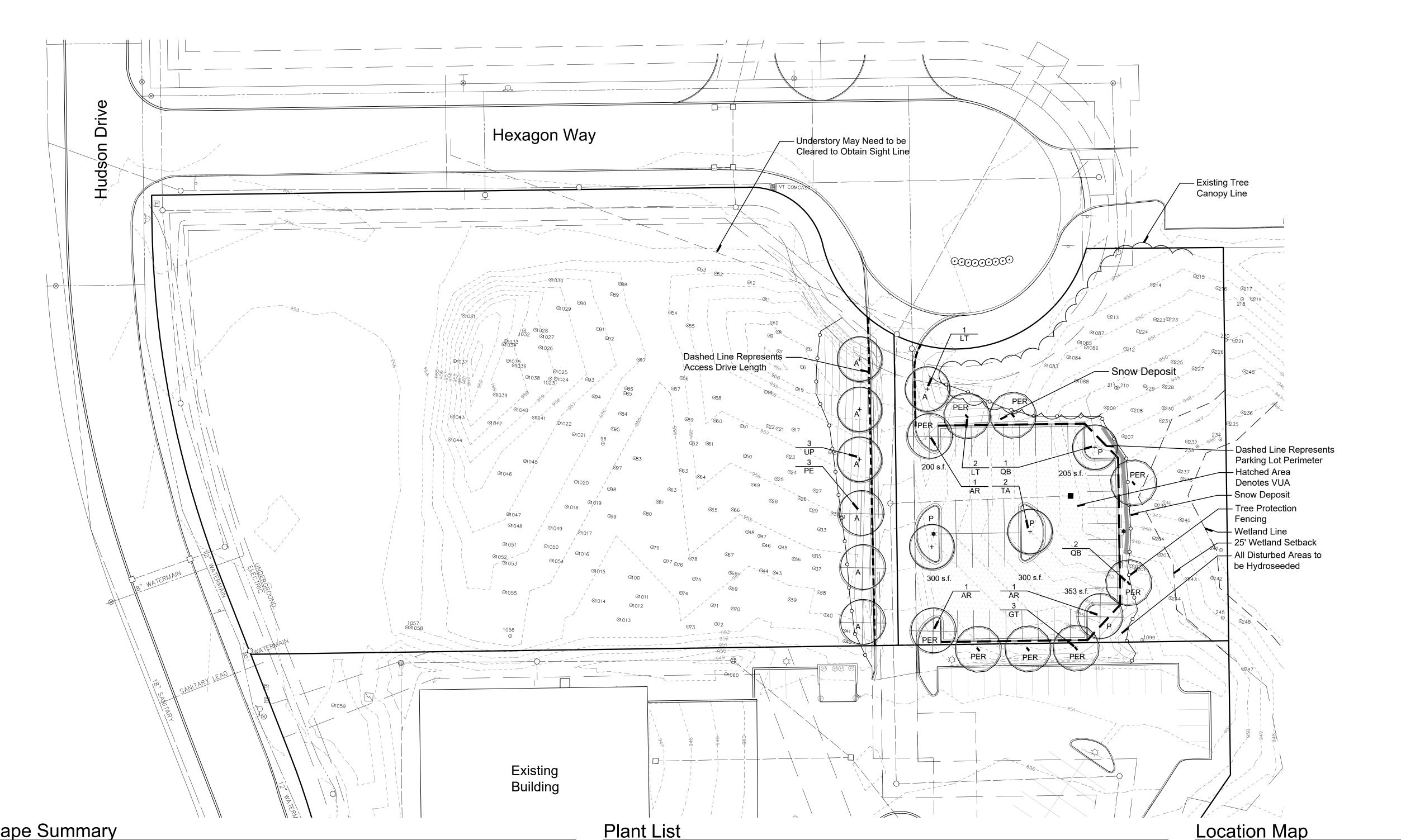
FBK: **430**

SCALE HOR 1"=120 FT

CHF: BK

24-06-14 PSP SUBMITTAL





LAND PLANNING / LANDSCAPE AR 557 Carpenter Northville, Michigan 48167 e. jca@wideopenwest.com t. 248.467.4668

Seal:



Title:

Landscape Plan

Project:

Mando

Revised

Novi, Michigan 29930 Hudson Drive

Prepared for:

Tower Construction 3883 Telegraph Road, Suite 200 Bloomfield Township, MI 48302 Chris Miller, 248.287.8200

Revision: Issued: March 12, 2024 Review

June 14, 2024

Landscape Summary

Existing Zoning I-2

Parking Lot Landscaping 12,233 s.f. Vehicular Use Area 734 s.f. (12,233 s.f. x 6%) Landscape Area Required Landscape Area Provided 1,358 s.f. 3.7 Trees (734 / 200) Canopy Trees Required Canopy Trees Provided 4 Trees

Parking Lot Perimeter Perimeter

300 l.f. "PER" Trees Required 8.5 Trees (300 l.f. / 35') Trees Provided 9 Trees

> Interior Street Industrial Subdivision Landscaping Hexagon Way

Street Frontage 16 I.f. (118' - Drive and Woodland) Trees Required 0.5 Trees (16 l.f. / 35') 0 Trees Trees Provided Sub-Canopy Trees Required 0.4 Trees (16 l.f. / 40') 0 Trees Sub-Canopy Trees Provided Shrubs Required 1 Shrub (16 l.f. / 40') x 2 Shrubs Provided 0 Shrubs 1.6' of Plantings (16 l.f. x 10%) Mass Plantings Required Mass Plantings Provided 0' of Plantings

Access Perimeter Perimeter Length

6.5 Trees (229' / 35') Trees Required Trees Provided 7 Trees

Plantings Along Street Street Frontage

2.7 Trees (134' / 50') Trees Required Trees Provided 0 Trees

Woodland Replacement Required Replacement

72 Trees Replacement Provided 0 Trees 72 Trees (72 x \$400 = \$28,800) Trees Paid into Tree Fund

1. No Overhead Lines Exist.

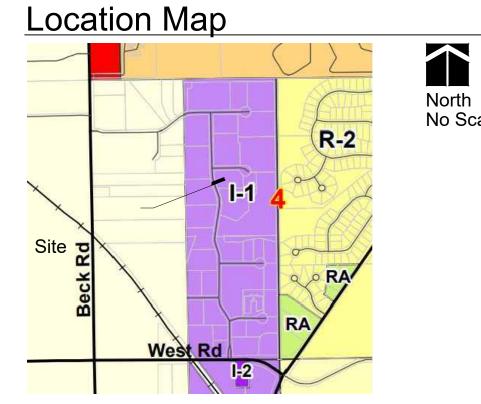
Trees Shall be Planted no Closer than 10' to Sanitary Sewer, Utility Structures Including Hydrants and 5' from Utility Lines.

3. Trees Shall not be Planted within 4' of Property Lines.

4. Utility Boxes Shall be Screen per Detail on Sheet L-2.

Soils Information is Found on Sheet 5. 6. No Phragmites or Japanese Knotweed Exist On-Site.

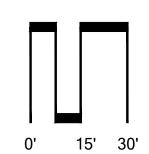
botanical name Species Genus Native Total common name caliper spacing root height price AR 3 Acer rubrum 'Red Pointe' Red Pointe Maple 3.0" as shown B&B \$ 400.00 \$ 15% 15% 3.0" as shown B&B 15% 15% Gleditsia triacanthos var. Imermis Honey Locust \$ 400.00 \$ 1,200.00 15% 3.0" as shown B&B \$ 400.00 \$ Tulip Tree 1,200.00 15% Liriodendron tulipifera 1,200.00 15% Platanus x acerifolia 'Exclamation' Exclamation London Planetree 3.0" as shown B&B \$ 400.00 \$ 15% Quercus bicolor Swamp White Oak 3.0" as shown B&B \$ 400.00 \$ 800.00 10% 10% Redmond Linden \$ 400.00 \$ 1,200.00 15% 15% Tilia americana 'Redmond' 3.0" as shown B&B UP 3 Ulmus a. 'Princeton' \$ 400.00 \$ 1,200.00 15% Pinceton Elm 3.0" as shown B&B 15% 20 Total Trees 10,000.00 4 4" Deep Shredded Hardwood Bark Mulch, s.y. \$ 35.00 \$ 140.00 \$ 3.00 \$ 2,694.00 898 Seed, s.y. Total \$ 20,834.00 Total % Native 86%



North No Scale

Job Number: 24-014

Drawn By:



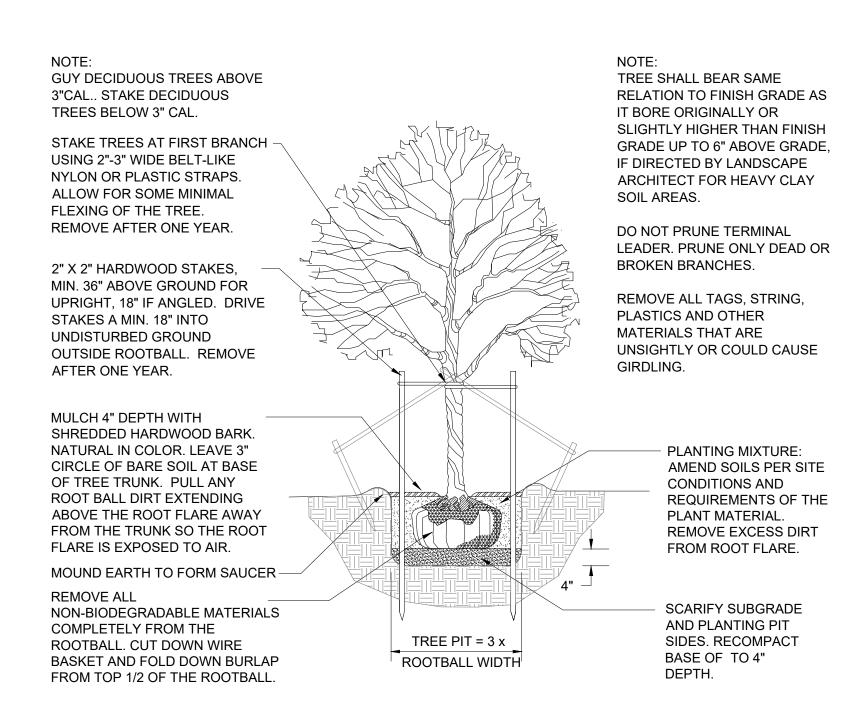


Checked By:

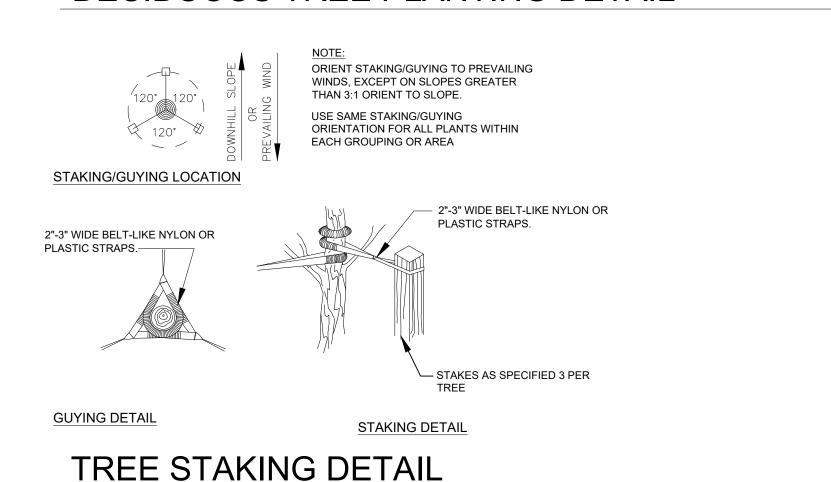
Sheet No.

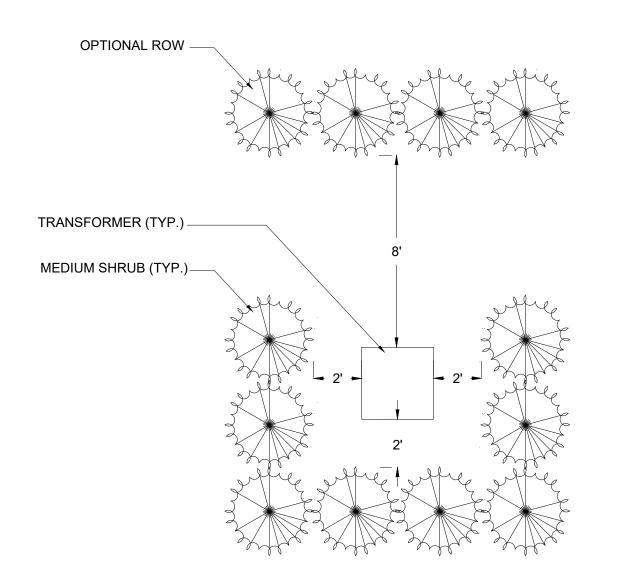
L-1



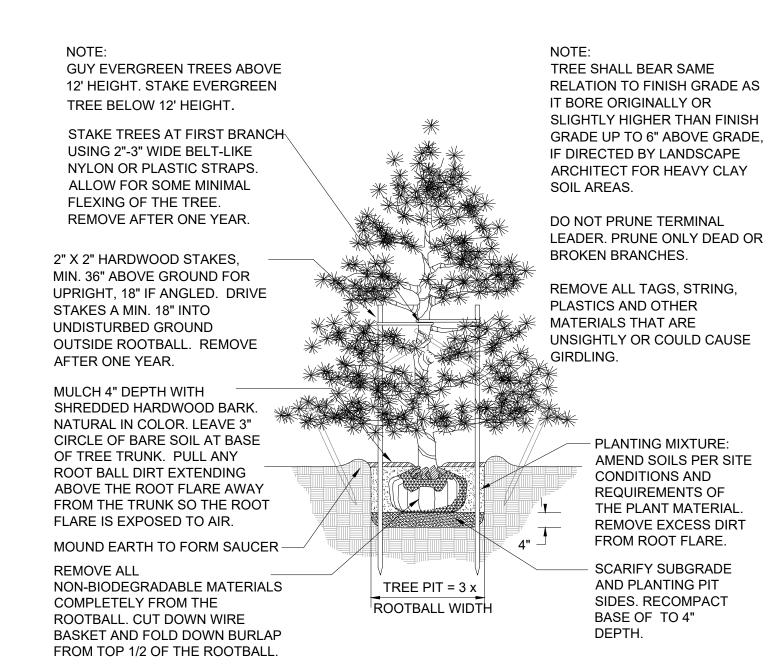


DECIDUOUS TREE PLANTING DETAIL

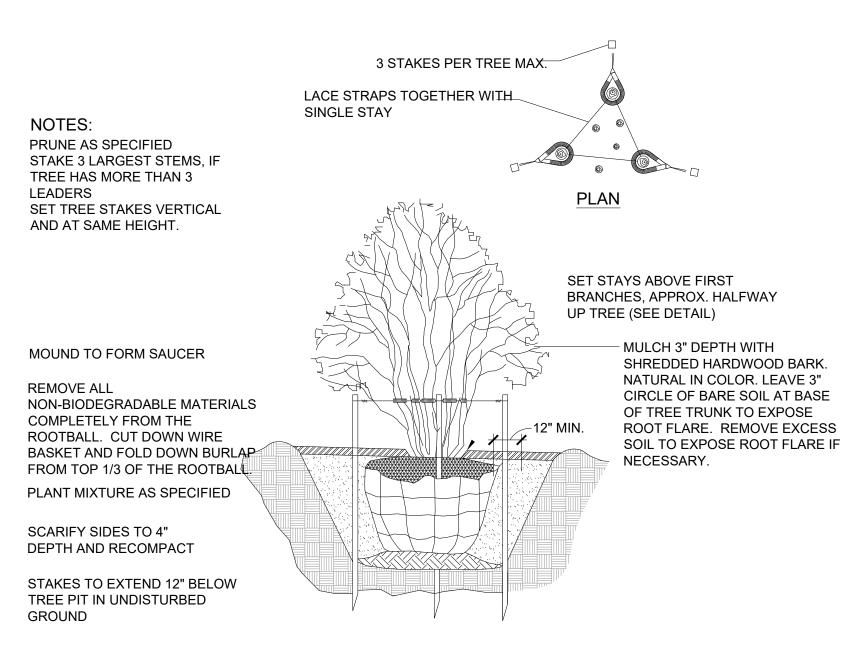




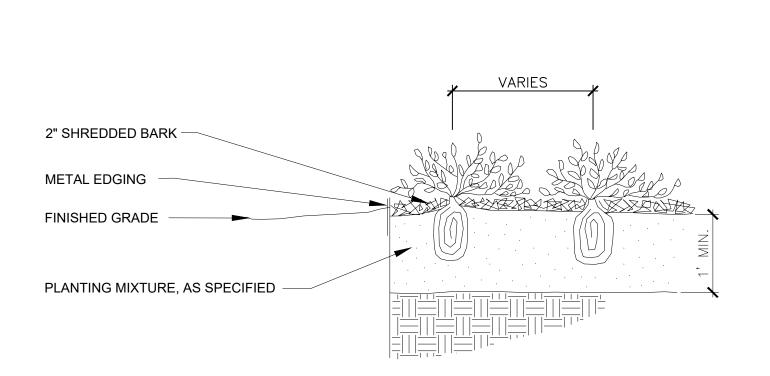
TRANSFORMER SCREENING DETAIL



EVERGREEN TREE PLANTING DETAIL



MULTI-STEM TREE PLANTING DETAIL Not to scale



PERENNIAL PLANTING DETAIL

NOTE: TREE SHALL BEAR SAME RELATION TO FINISH GRADE AS IT BORE ORIGINALLY OR SLIGHTLY HIGHER THAN FINISH GRADE UP TO 4" ABOVE GRADE, IF DIRECTED BY LANDSCAPE ARCHITECT FOR HEAVY CLAY SOIL AREAS.

PRUNE ONLY DEAD OR BROKEN BRANCHES.

REMOVE ALL TAGS, STRING, PLASTICS AND OTHER MATERIALS THAT ARE UNSIGHTLY OR COULD CAUSE

DEPTH.

PLANTING MIXTURE: AMEND SOILS PER GIRDLING. SITE CONDITIONS AND REQUIREMENTS OF THE PLANT MATERIAL. MOUND EARTH TO FORM SAUCER REMOVE COLLAR OF ALL FIBER -POTS. POTS SHALL BE CUT TO PROVIDE FOR ROOT GROWTH. REMOVE ALL NONORGANIC CONTAINERS COMPLETELY SCARIFY SUBGRADE REMOVE ALL AND PLANTING PIT NON-BIODEGRADABLE MATERIALS SIDES. RECOMPACT COMPLETELY FROM THE BASE OF TO 4" ROOTBALL. FOLD DOWN BURLAP

SHRUB PLANTING DETAIL

NOT TO SCALE

MULCH 3" DEPTH WITH

3" FROM TRUNK.

SHREDDED HARDWOOD BARK.

NATURAL IN COLOR. PULL BACK

LANDSCAPE NOTES

FROM TOP $\frac{1}{3}$ OF THE ROOTBALL

- 1. All plants shall be north Midwest American region grown, No. 1 grade plant materials,
- and shall be true to name, free from physical damage and wind burn. 2. Plants shall be full, well-branched, and in healthy vigorous growing
- Plants shall be watered before and after planting is complete 4. All trees must be staked, fertilized and mulched and shall be guaranteed to exhibit a normal growth cycle for at least two (2) full years following
- City approval. 5. All material shall conform to the guidelines established in the most recent
- edition of the American Standard for Nursery Stock.
- 6. Provide clean backfill soil, using material stockpiled on site. Soil shall be screened and free of any debris, foreign material, and stone.
- "Agriform" tabs or similar slow-release fertilizer shall be added to the planting pits before being backfilled.
- 8. Amended planting mix shall consist of 1/3 screened topsoil, 1/3 sand and
- 1/3 compost, mixed well and spread to the depth as indicated in planting details. All plantings shall be mulched per planting details located on this sheet.
- 10. The Landscape Contractor shall be responsible for all work shown on the landscape drawings and specifications.
- No substitutions or changes of location, or plant types shall be made
- without the approval of the Landscape Architect.
- 12. The City of Novi's Landscape Architect shall be notified in writing of any discrepancies between the plans and field conditions prior to installation.
- 13. The Landscape Contractor shall be responsible for maintaining all plant material in a vertical condition throughout the guaranteed period.
- 14. The Landscape Architect shall have the right, at any stage of the installation,
- to reject any work or material that does not meet the requirements of the plans and specifications, if requested by owner.
- 15. Contractor shall be responsible for checking plant quantities to ensure quantities on drawings and plant list are the same. In the event of a
- discrepancy, the quantities on the plans shall prevail.
- 16. The Landscape Contractor shall seed and mulch or sod (as indicated on plans) all areas disturbed during construction, throughout the contract limits.
- 17. A pre-emergent weed control agent, "Preen" or equal, shall be applied
- uniformly on top of all mulching in all planting beds.
- 18. Sod shall be two year old "Baron/Cheriadelphi" Kentucky Blue Grass grown in a sod

CITY OF NOVI NOTES

- 1. All landscape islands shall be backfilled with a sand mixture to facilitate drainage.
- 2. All proposed landscape islands shall be curbed.
- 3. All landscape areas shall be irrigated.
- 4. Overhead utility lines and poles to be relocated as directed by utility company of record. 5. Evergreen and canopy trees shall be planted a minimum of 10' from a fire hydrant, and
- manhole, 15' from overhead wires. All plant material shall be guaranteed for two (2) years after City Approval and shall be installed and maintained according to City of Novi standards. Replace Failing Material within 3 Months of Discovering the Need for Replacement. One cultivation per month shall occur in
- 7. All proposed street trees shall be planted a minimum of 4' from both the back of curb and proposed walks.
- 8. All tree and shrub planting beds shall be mulched with shredded hardwood bark, spread to minimum depth of 4". All lawn area trees shall have a 4' diameter circle of shredded hardwood mulch 3" away from trunk. All perennial, annual and ground cover beds shall receive 2" of dark colored bark mulch as indicated on the plant list. Mulch is to be free from debris and
- foreign material, and shall contain no pieces of inconsistent size. 9. All Substitutions or Deviations from the Landscape Plan Must be Approved in Writing by the City of Novi Prior to their Installation.

THE APPROXIMATE DATE OF INSTALLATION FOR THE PROPOSED LANDSCAPE WILL BE BETWEEN MARCH-NOVEMBER 2024, 2025.

THE SITE WILL BE MAINTAINED BY THE DEVELOPER IN ACCORDANCE WITH THE STANDARDS SET FORTH IN THE CITY OF NOVI ZONING ORDINANCE. THIS INCLUDES WEEDING AND WATERING AS REQUIRED BY NORMAL MAINTENANCE PRACTICES.

DEVELOPER SHALL BE RESPONSIBLE FOR REPLACING ANY TREES WITHIN UTILITY EASEMENTS THAT ARE DAMAGED THROUGH NORMAL MAINTENANCE OR REPAIRS.

PLANT MATERIALS SHALL BE GUARANTEED FOR 2 YEARS AND SHALL BE MAINTAINED IN ACCORDANCE WITH CITY ORDINANCES. WARRENTY PERIOD BEGINS AT THE TIME OF CITY APPROVAL. WATERING AS NECESSARY SHALL OCCUR DURING THIS WARRANTY PERIOD.





Seal



Title:

Landscape Details

Project:

Mando Novi, Michigan 29930 Hudson Drive

Prepared for:

Tower Construction 3883 Telegraph Road, Suite 200 Bloomfield Township, MI 48302 Chris Miller, 248.287.8200

Revision: Issued: March 12, 2024 Revised June 14, 2024

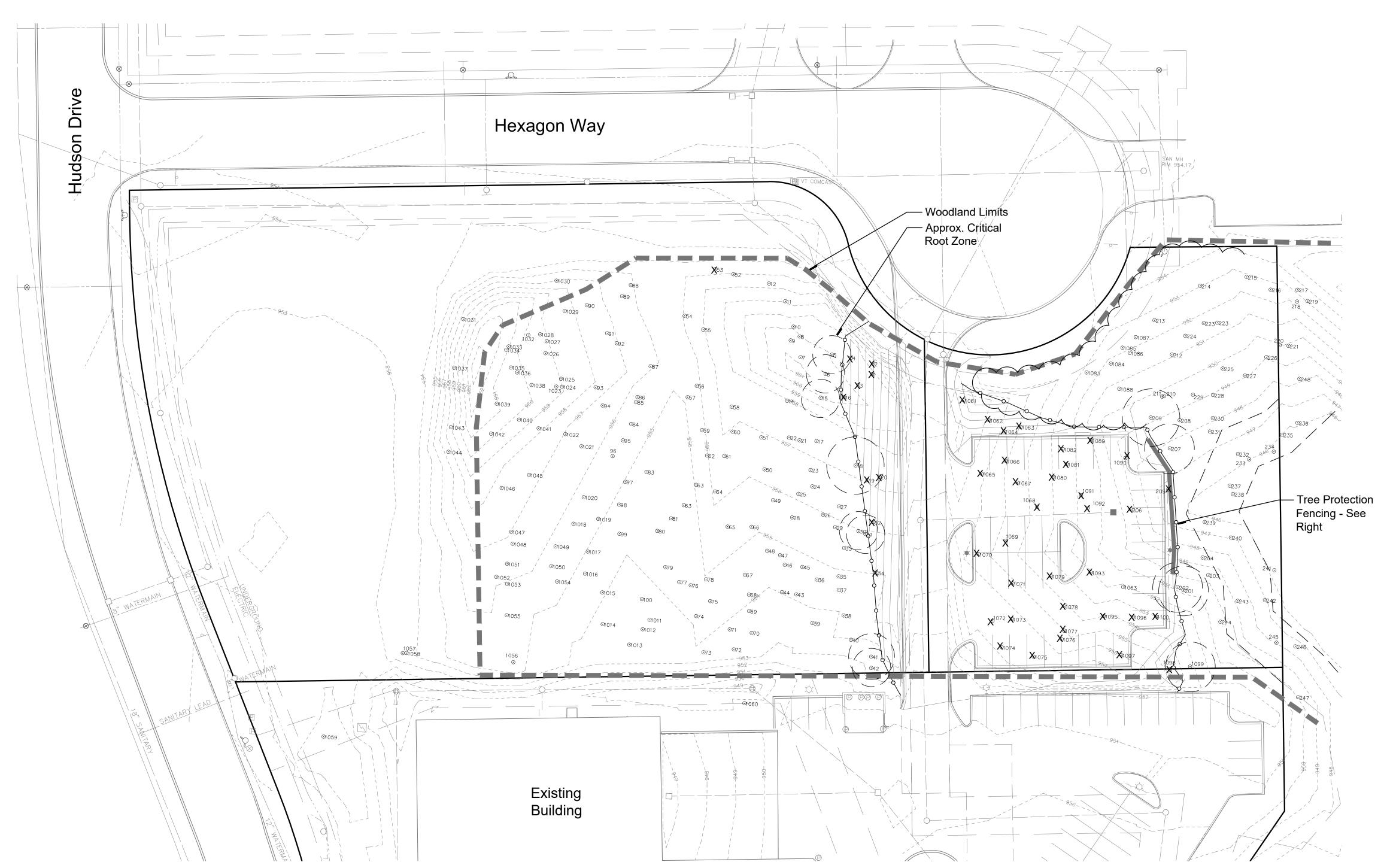
Job Number:

24-014

Drawn By: Checked By:

Sheet No.





Seal:



Title:

Woodland Plan

Project:

Mando

Novi, Michigan 29930 Hudson Drive

Prepared for:

Tower Construction 3883 Telegraph Road, Suite 200 Bloomfield Township, MI 48302 Chris Miller, 248.287.8200

Revision:

March 12, 2024 Review June 14, 2024

Issued:

Either Plastic or Wood Orange Snow Fencing Shall be Installed at or Beyond the Dripline, Unless More Substantial Fencing is Required.
 Stakes Shall be Metal "T" Poles Spaced no Further than 5' on Center.
 Fencing Shall not be Installed Closer to the Tree than the Dripline of Those Trees to be Saved. Special Circumstances Shall be Reviewed by the City.
 Fencing Shall be Erected Prior to Construction. The City Shall be Notified Once the Fencing is Installed for Inspection.
 Under no Circumstances Shall the Portective Fencing be Removed Without Proper Approval from the City.
 No Person Shall Conduct any Activity Within Areas Proposed to Remain. This Shall Include, but not Limited to:

 No Solvents or Chemicals Within Protected Areas.
 No Building Materials or Construction Equipment Within Protected Areas.
 No Grade Changes, Including Fill, Within Protected Areas.
 No Removal of Vegetation from the Ground Up Without Permission from the Proper Reviewing Authority, Including the Woodlands Review Board.
 Any Required Swale Needs to be Directed Around the Protected Areas. Instances Where Swales are Approved Through a Protected Area, the Swales Need to be HAND DUG. Machinery of Any Kind is Prohibited.

 Regulated Woodland or Regulated Trees Adjacent to the Property are Also Required to be Protected Whether or not they are Shown on the Plan.

- "T" POLES @ 5' O.C.

ORGANIC LAYER

— UNDERSTORY PLANTS MINERAL LAYER

- TOP SOIL

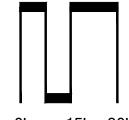
PROTECTIVE FENCING
PLACED 1' BEYOND DRIP LINE LIMITS

TREE PROTECTION DETAIL

NO SCALE

Job Number:

Drawn By:



15' 30'



Checked By:



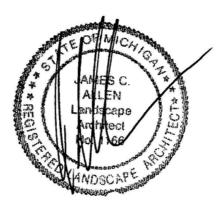
Tree List

© 2024 Allen Design L.L.C.

AG NO. DIA	METER	COMMON NAME	BOTANICAL NAME	CONDITION		Required Replacement	Multi-Stem Replacement	TAG NO.	DIAMETER	COMMON NAME	BOTANICAL NAME	CONDITION	STATUS	Required Replacement	Multi-Stem t Replacement		DIAMETER	COMMON NAME	BOTANICAL NAME		STATUS Rep	equired	Multi-Ste Replacem
1 2	11 11	Basswood Basswood	Tilia americana Tilia americana	Good Good	Remove Remove	1 1		100 201	14 8	Black Oak American Elm	Quercus velutina Ulmus americana	Good Good	Save CRZ	1		1062 1063	8 8	American Elm Sugar Maple	Ulmus americana Acer saccharum	Good Good	Remove Remove	1 1	
3	13	Basswood	Tilia americana	Good	Remove	2		202	19	Red Oak	Quercus rubra	Good	CRZ	2		1064	18	Basswood	Tilia americana	Good	Remove	2	
4 5	10 8	Basswood Basswood	Tilia americana Tilia americana	Good Good	Remove CRZ	1 1		203 204	8 7,22	Sugar Maple Red Maple	Acer saccharum Acer rubrum	Good Good	Save Save			1065 1066	12 12	Sugar Maple Basswood	Acer saccharum Tilia americana	Good Good	Remove Remove	2	
6	13	Basswood	Tilia americana	Good	Save	·		205	8	American Elm	Ulmus americana	Good	Remove	1		1067	15	Red Oak	Quercus rubra	Good	Remove	2	
7	10 0	Basswood Basswood	Tilia americana	Good Good	Save Save			206 207	9 7,9	Sugar Maple	Acer saccharum	Good	Remove CRZ	1		1068 1069	8	Red Maple Red Maple	Acer rubrum Acer rubrum	Good Good	Remove Remove	1	
9	11	Basswood	Tilia americana Tilia americana	Good	Save			208	13	Basswood Basswood	Tilia americana Tilia americana	Good Good	Save	'		1070	10	Sugar Maple	Acer saccharum	Good	Remove	1	
10	8	Basswood	Tilia americana	Good	Save			209	11	Sugar Maple	Acer saccharum	Good	CRZ	1		1071	19	Red Oak	Quercus rubra	Good	Remove	2	•
11 12	8 16	Sugar Maple Sugar Maple	Acer saccharum Acer saccharum	Good Good	Save Save			210 211	8 8	Red Maple Red Maple	Acer rubrum Acer rubrum	Good Good	Save Save			1072 1073	11,13 8	Red Maple Black Cherry	Acer rubrum Prunus serotina	Trunk Rot Good	Remove Remove	1	3
13	9	Black Cherry	Prunus serotina	Good	Save			212	22	Red Oak	Quercus rubra	Good	Save			1074	14	Black Cherry	Prunus serotina	Good	Remove	2	
14 15	10	Basswood	Tilia americana	Good Good	Save Save			213 214	8 11	Red Maple Red Maple	Acer rubrum	Good	Save Save			1075 1076	8	American Hombeam	Carpinus caroliniana	Good	Remove Remove	1	
16	8	Basswood Sugar Maple	Tilia americana Acer saccharum	Good	Remove	1		214	8	American Hornbeam	Acer rubrum Carpinus caroliniana	Good Good	Save			1076	9	Sugar Maple Black Cherry	Acer saccharum Prunus serotina	Good Good	Remove	1	
17	15	Basswood	Tilia americana	Good	Save			216	8	American Elm	Ulmus americana	Good	Save			1078	27	Red Oak	Quercus rubra	Good	Remove	3	
18 19	13 9	Red Oak American Beech	Quercus rubra Fagus grandifolia	Good Good	CRZ Remove	1 1		217 218	13 16	Red Maple Black Cherry	Acer rubrum Prunus serotina	Good Good	Save Save			1079 1080	8 17	American Elm Red Oak	Ulmus americana Quercus rubra	Good Good	Remove Remove	1 2	
20	9	American Beech	Fagus grandifolia	Good	Remove	1		219	11	Red Oak	Quercus rubra	Good	Save			1081	10	Basswood	Tilia americana	Good	Remove	1	
21 22	12 11	Basswood Black Cherry	Tilia americana Prunus serotina	Good	Save Save			220 221	21 9	Black Cherry American Elm	Prunus serotina	Good	Save Save			1082 1083	10 10	Sugar Maple Sugar Maple	Acer saccharum	Good	Remove Save	1	
22 23	8	Sugar Maple	Acer saccharum	Good Good	Save			222	13	Black Cherry	Ulmus americana Prunus serotina	Good Good	Save			1084	16	Black Cherry	Acer saccharum Prunus serotina	Good Good	Save		
24	13	Basswood	Tilia americana	Good	Save			223	25	Basswood	Tilia americana	Good	Save			1085	9	Black Cherry	Prunus serotina	Good	Save		
25 26	15 8	Red Oak Red Maple	Quercus rubra Acer rubrum	Good Good	Save Save			224 225	8 24	Red Maple Red Oak	Acer rubrum Quercus rubra	Good Good	Save Save			1086 1087	22 16	Red Oak Red Oak	Quercus rubra Quercus rubra	Good Good	Save Save		
27	13	Red Oak	Quercus rubra	Good	Save			226	17	Red Oak	Quercus rubra Quercus rubra	Good	Save			1088	6,8	Red Maple	Acer rubrum	Good	Save		
28	8	American Elm	Ulmus americana	Good	Save			227	9	Black Cherry	Prunus serotina	Good	Save			1089	8	Basswood	Tilia americana	Good	Remove	1	
29 80	9 19	Red Oak Red Oak	Quercus rubra Quercus rubra	Good Good	Save CRZ	2		228 229	13 12	Black Cherry Red Maple	Prunus serotina Acer rubrum	Good Good	Save Save			1090 1091	14 11	Sugar Maple Black Cherry	Acer saccharum Prunus serotina	Good Good	Remove Remove	2	
	6,8	Red Maple	Acer rubrum	Good	CRZ	1		230	14	Black Cherry	Prunus serotina	Good	Save			1092	8	Red Maple	Acer rubrum	Good	Remove	1	
32	16 0	Red Oak	Quercus rubra	Good	Remove	2		231	9 Dood	Black Cherry	Prunus serotina	Good	Save			1093	14 Dead	Red Maple	Acer rubrum	Good	Remove	2	
34	8	Red Maple Black Cherry	Acer rubrum Prunus serotina	Good Good	Save Remove	1		232 233	Dead 11	Red Oak	Quercus rubra	Good	Save Save			109 4 1095	Dead 8	Black Cherry	Prunus serotina	Good	Remove Remove	Մ 1	
5	15	Red Oak	Quercus rubra	Good	Save			234	16	Red Maple	Acer rubrum	Good	Save			1096	17	Sugar Maple	Acer saccharum	Good	Remove	2	
36 27	14 10	Red Oak Red Oak	Quercus rubra Quercus rubra	Good Good	Save Save			235	16 17	Red Maple	Acer rubrum	Good	Save			1097 1098	9 13	American Elm	Ulmus americana	Good	Remove	1	
57 88	17	Red Oak	Quercus rubra Quercus rubra	Good	Save			236 237	9	Pignut Hickory Sugar Maple	Carya glabra Acer saccharum	Good Good	Save Save			1099	10	Red Maple American Elm	Acer rubrum Ulmus americana	90% Dead Good	Remove CRZ	1	
9	16	Red Oak	Quercus rubra	Good	Save			238	9	Red Maple	Acer rubrum	Good	Save			1100	9	American Elm	Ulmus americana	Good	Remove	1	
0 1	8 10	Black Cherry Red Maple	Prunus serotina Acer rubrum	Good Good	Save CRZ	1		239 240	9 28	Red Maple Red Oak	Acer rubrum Quercus rubra	Good Good	Save Save							•	ulated Trees -Stem Trees	69	3
2	8	Black Cherry	Prunus serotina	Good	CRZ	1		240	11	Red Maple	Acer rubrum	Good	Save							Total William	otem nees		3
3	13	Red Oak	Quercus rubra	Good	Save			242	11	Red Maple	Acer rubrum	Good	Save										
, ,	14 12	Red Oak Basswood	Quercus rubra Tilia americana	Good Good	Save Save			243 244	17 9	Black Cherry Black Cherry	Prunus serotina Prunus serotina	Good Good	Save Save										
3	13	Red Oak	Quercus rubra	Good	Save			245	15	Black Cherry	Prunus serotina	Good	Save										
7	12 10	Red Oak Black Cherry	Quercus rubra	Good	Save			246	9	Black Cherry	Prunus serotina	Good	Save										
+o 49	9	Black Cherry	Prunus serotina Prunus serotina	Good Good	Save Save			247 248	10 10	Black Cherry Black Cherry	Prunus serotina Prunus serotina	Good Good	Save Save			11/000	dlan	d Summ	orv.				
0	15	Red Oak	Quercus rubra	Good	Save			1011	8	Red Maple	Acer rubrum	Good	Save			<u> </u>	<u>Jiaii</u>	u Sullill	ıaı y				
51	21	Red Oak American Hornbeam	Quercus rubra	Good Good	Save			1012	12	Basswood	Tilia americana	Good	Save			Total Trees	s		238 Trees				
3	9	Quaking Aspen	Carpinus caroliniana Populus tremuloides	Good	Save Save			1013 1014	10 8	Pignut Hickory Red Maple	Carya glabra Acer rubrum	Good Good	Save Save					lated Trees:					
4	10	Sugar Maple	Acer saccharum	Good	Save			1015	8	Red Oak	Quercus rubra	Good	Save			Non-Re	_		14 Trees				
5 6	18 10	Red Oak Basswood	Quercus rubra Tilia americana	Good Good	Save Save			1016 1017	14 13	Black Walnut Basswood	Juglans nigra Tilia americana	Good Good	Save Save			Net Reg	_		224 Regulate	d Trees			
i7	12	Basswood	Tilia americana	Good	Save			1017	12	Pignut Hickory	Carya glabra	Good	Save			Regulated			42 Trees	4 11000			
3	10	Black Cherry	Prunus serotina	Good	Save			1019	9	Red Oak	Quercus rubra	Good	Save			riogalatoa	1100011	tomovou	12 11000				
)	8	Basswood Basswood	Tilia americana Tilia americana	Good Good	Save Save			1020 1021	1 4 8	Red Oak Shellbark Hickory	Quercus rubra Carya lacinosa	Good Good	Save Save			Replaceme	ent Regi	iired					
1	17	Red Oak	Quercus rubra	Good	Save			1022	11	Basswood	Tilia americana	Good	Save			Trees 8" -	-	27 trees x 1=	27 Trees				
2	9	Basswood Red Maple	Tilia americana Acer rubrum	Good Good	Save Save			1023	11	Red Oak	Quercus rubra	Good	Save			Trees 11"			26 Trees				
4	21	Basswood	Tilia americana	Good	Save			1024 1025	9	Red Oak Red Oak	Quercus rubra Quercus rubra	Good Good	Save Save					13 trees x 2=					
	21	Basswood	Tilia americana	Good	Save			1026	13	Basswood	Tilia americana	Good	Save			Trees 20" -		1 tree x 3=	3 Trees				
	6,9 17	Red Maple Basswood	Acer rubrum Tilia americana	Good Good	Save Save			1027 1028	15 17	Red Oak Red Oak	Quercus rubra Quercus rubra	Good Good	Save Save			Trees 30"+		0 trees x 4=	0 Trees				
8	14	Basswood	Tilia americana	Good	Save			1028	Dead	Nou Jak	guorous rubra	3000	Save					ees (1 Tree)	3 Trees				
9	10 13	Black Cherry	Prunus serotina	Good	Save			1030	10	Black Locust	Robinia pseudoacacia	Good	Save			Critical Ro		•	13 Trees				
	13	Basswood Red Oak	Tilia americana Quercus rubra	Good Good	Save Save			1031 1032	13 13	Black Locust Red Oak	Robinia pseudoacacia Quercus rubra	Good Good	Save Save			Replaceme	ent Kequ	uired	72 Trees				
	19	Red Oak	Quercus rubra	Good	Save			1033	10	Sugar Maple	Acer saccharum	Good	Save				_	. –					
	12 11	Black Cherry Black Cherry	Prunus serotina Prunus serotina	Good Good	Save Save			1034 1035	8	Sugar Maple	Acer saccharum	Good	Save			"X" Denote	es Tree t	to be Removed					
	17	Red Oak	Quercus rubra	Good	Save			1035 1036	o 8	Sugar Maple Black Cherry	Acer saccharum Prunus serotina	Good Good	Save Save										
	11	Black Cherry	Prunus serotina	Good	Save			1037	6,8	Black Locust	Robinia pseudoacacia	Good	Save			Tree Fence	e Installa	ation and Remov	al \$2,724 (454 l	.f. x \$6 l.f.)			
	10 17	Basswood Basswood	Tilia americana Tilia americana	Good Good	Save Save			1038 1039	11 10	Basswood Red Oak	Tilia americana Quercus rubra	Good	Save Save										
	16	Red Oak	Quercus rubra	Good	Save			1039	9	Red Oak Red Oak	Quercus rubra Quercus rubra	Good Good	Save Save										
	13	Red Oak	Quercus rubra	Good	Save			1041	35	Red Oak	Quercus rubra	90% Dead	Save										
	16 12	Red Oak Basswood	Quercus rubra Tilia americana	Good Good	Save Save			1042 1043	11 11	Basswood Black Locust	Tilia americana Robinia pseudoacacia	Good Good	Save Save										
	13	Basswood	Tilia americana	Good	Save			1043	10	Black Locust	Robinia pseudoacacia Robinia pseudoacacia	Good	Save										
	12 12	Basswood	Tilia americana	Good	Save			1045	16	Pignut Hickory	Carya glabra	Good	Save										
	13 10	Basswood Basswood	Tilia americana Tilia americana	Good Good	Save Save			1046 1047	16 9	Red Oak Red Oak	Quercus rubra Quercus rubra	Good Good	Save Save										
	20	Red Maple	Acer rubrum	Good	Save			1048	7,8	Shellbark Hickory	Carya lacinosa	Good	Save										
	9	Sugar Maple	Acer saccharum	Good	Save			1049	9	Basswood	Tilia americana	Good	Save										
	9 11	American Beech American Beech	Fagus grandifolia Fagus grandifolia	Good Good	Save Save			1050 1051	15 11	Red Oak Shellbark Hickory	Quercus rubra Carya lacinosa	Good Good	Save Save										
	16	Basswood	Tilia americana	Good	Save			1051	17	Red Oak	Quercus rubra	Good	Save										
	13	Sugar Maple	Acer saccharum	Good	Save			1053	10	Red Oak	Quercus rubra	Good	Save										
	9 16	Basswood Red Oak	Tilia americana Quercus rubra	Good Good	Save Save			1054 1055	16 18	Red Oak Shellbark Hickory	Quercus rubra Canya lacinosa	Good	Save Save										
			Quercus rubra Quercus rubra	Good	Save				9,13,13,16,17,1	•	Carya lacinosa Quercus rubra	Good Good	Save Save										
	17	Red Oak	Quercus rubra	Good	Caro			1000				Ooou	Cave										
	13	Red Oak	Quercus rubra	Good	Save			1057	9	Black Locust	Robinia pseudoacacia	Good	Save										
									9 8														



Seal:



Title:

Tree List

Project:

Mando

Novi, Michigan 29930 Hudson Drive

Prepared for:

Tower Construction 3883 Telegraph Road, Suite 200 Bloomfield Township, MI 48302 Chris Miller, 248.287.8200

Revision: Issued:

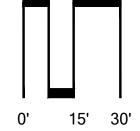
Review March 12, 2024
Revised June 14, 2024

Job Number:

24-014

Drawn By:

Checked By:



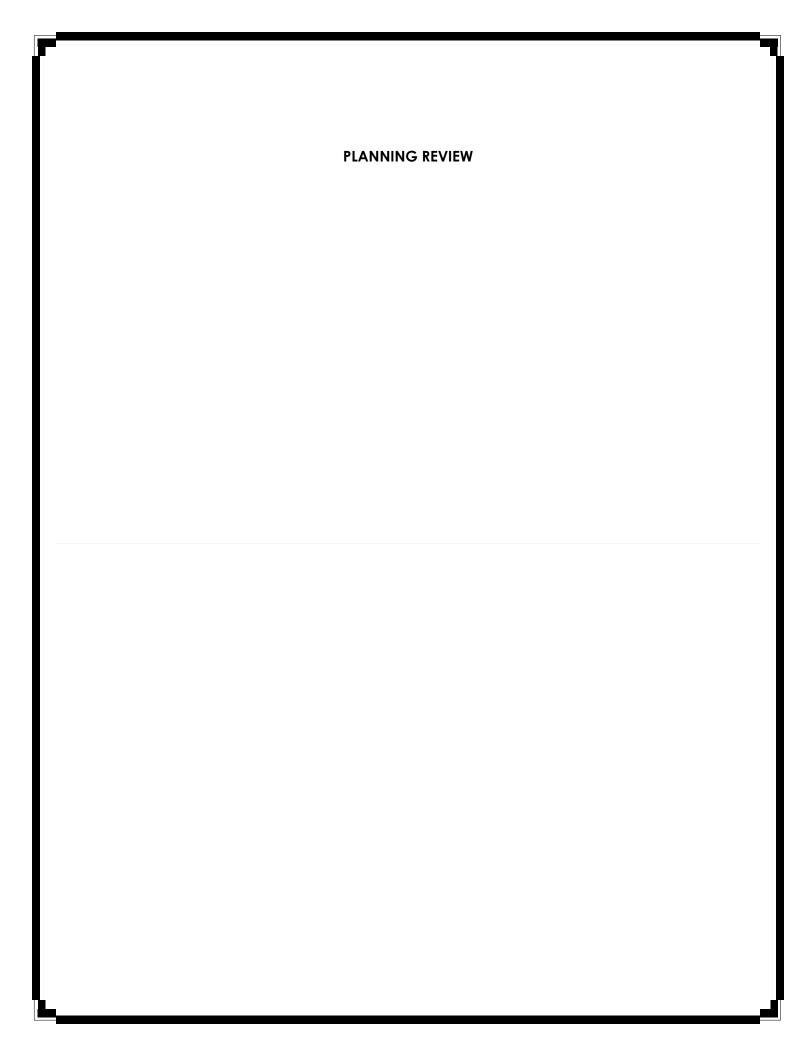






Sheet No.

L-4





PLAN REVIEW CENTER REPORT

July 18, 2024

Planning Review

Mando Parking Lot Expansion

JSP 23-24

PETITIONER

Tower Construction, LLC

REVIEW TYPE

Combined Preliminary and Final Site Plan

PROPERTY CHARACTERISTICS

Section	4					
Site Location	North of Co	artier Drive, East of Beck Road; 22-04-151-036				
Site School District	Walled Lak	e Consolidated School District				
Site Zoning	I-1: Light Inc	dustrial District				
Adjoining Zoning	North	North RM-1: Low Density Multiple Family				
	East	I-1: Light Industrial District				
	West	City of Wixom (M-1: Light Industrial District)				
	South	uth I-1: Light Industrial District				
Current Site Use	Light Indust	rial				
	North	Low Density Multiple Family				
A diaining Hage	East	Vacant				
Adjoining Uses	West	Light Industrial				
	South	Light Industrial				
Site Size	7.62 acres	7.62 acres				
Plan Date	January 23	, 2024				

PROJECT SUMMARY

The applicant is proposing to remove 53 regulated woodland trees to create 37 additional parking spaces for employees at the Mando Building on the northeast corner of the parcel.

RECOMMENDATION

Planning recommends approval of the Final Site Plan with comments to be addressed in the revised Final Site Plan. The plan mostly conforms to the requirements of the Zoning Ordinance, with deviations identified below. Planning Commission approval of the Woodland Permit will be required.

ORDINANCE REQUIREMENTS

This project was reviewed for conformance with the Zoning Ordinance with respect to Article 3 (Zoning Districts), Article 4 (Use Standards), Article 5 (Site Standards), and any other applicable provisions of the Zoning Ordinance. Please address the items in **bold** below for the next submittal.

<u>Planning Chart:</u> Please refer to the attached Planning Chart for additional comments to address in the next submittal.

- 1. <u>Woodland Permit</u>: As noted in the Woodland review letter, the applicant proposes to impact 53 regulated trees, requiring 72 replacement credits. The applicant has stated that no trees will be planted towards woodland replacements and all 72 tree replacements will be paid into The City of Novi Tree Fund. **Woodland permits must go in front of the Planning Commission.**
- 2. <u>Minimum number of Bicycle Parking (Sec. 5.16.1)</u>: Five (5) percent of required automobile spaces—minimum of 2 spaces. Please **include some additional bicycle parking within the next submittal**.
- 3. <u>Lighting and Photometric Plan (Sec. 5.7.A.i):</u> Site Plan showing location of all existing & proposed buildings, landscaping, streets, drives, parking areas and exterior lighting fixtures. Lighting Plan should show all photometric data in footcandles. **Please include a photometrics sheet at the time of Final Site Plan Submittal.**
- 4. <u>Parcel Combination:</u> With the current property line, the proposed parking lot does not meet the setback. A parcel combination will need to be completed prior to Final Stamping Set approval, and the new parcel number will need to be listed on the Final Stamping Set. Since there are existing Site Condominiums, an amendment to the Master Deed may be required and will need to be reviewed by our Legal team.
- 5. <u>Parking Setback:</u> Parking in the front yard setback has been calculated and appears to be in conformance with the ordinance. The Planning Commission may review this.

OTHER REVIEWS

- a. <u>Engineering Review:</u> Engineering recommending approval of the Preliminary Site Plan but is NOT recommending approval of the Final Site Plan. Please see the Engineering Review for additional information.
- b. <u>Landscape Review:</u> Landscape recommends **approval**, **with revisions to be made within a Revised Final Site Plan submittal**. Please see landscape review for additional details.
- c. <u>Woodland & Wetland Review:</u> Merjent **recommends approval** of the Woodland and Wetland Combined Preliminary and Final Site Plan. Please see review letter for additional information.
- d. <u>Traffic Review:</u> Traffic **recommends approval** of the Combined Preliminary and Final Site Plan,
- e. Fire Review: Fire recommends approval of the Combined Preliminary and Final Site Plan.

NEXT STEP: REVISED FINAL SITE PLAN SUBMITTAL

After receiving Planning Commission's approval of the Preliminary Site Plan and ZBA approval of variances, please follow the <u>Final Site Plan Checklist</u> and submit for approval:

- 1. **Three (3)** copies of Final Site Plan sets (<u>24" x 36", folded</u>) addressing ALL comments from Preliminary Site Plan Review.
- 2. Response letter addressing ALL comments from ALL review letters and **refer to sheet numbers** where the change is reflected.
- 3. Final Site Plan Application
- 4. No Revision Façade Affidavit (only if no façade changes have been made)
- 5. An itemized engineering cost estimate including sanitary sewer, watermain, storm sewer, paving and grading costs, size 8.5" x 11" (The cost estimate should not include soil erosion or demolition costs.)

PSP/FSP Review

- 6. An itemized landscaping cost estimate including greenbelt and greenbelt ornamental trees, perennials, pond plantings, shrubs, edging, mulch, seed mix and seeded lawn, size 8.5" x 11" (The cost estimate should not include woodland trees, replacement trees or mitigation.)
- 7. Hazardous Chemical Survey
- 8. ROW Permit Application (as needed)
- 9. Soil Erosion Permit Application
- 10. Other Agencies Checklist

NEXT STEP: PLANNING COMMISSION MEETING

A Woodland Permit is required for the removal of 53 trees. Due to this waiver, this site plan does not qualify for administrative approval under Section 6.1.1.C, Planning Commission approval will be required.

FUTURE STEP: STAMPING SET APPROVAL

Stamping sets are required for this project. After having received all of the review letters from City staff the applicant should make the appropriate changes on the plans and submit 9 size 24" x 36" copies with original signature and original seals on the cover sheet (subsequent pages may use electronic with signature), to the Community Development Department for final Stamping Set approval.

PRE-CONSTRUCTION MEETING

A Pre-Construction meeting is required for this project. Prior to the start of any work on the site, Pre-Construction (Pre-Con) meetings must be held with the applicant's contractor and the City's consulting engineer. Pre-Con meetings are generally held after Stamping Sets have been issued and prior to the start of any work on the site. There are a variety of requirements, fees and permits that must be issued before a Pre-Con can be scheduled, so it is recommended that you begin working with Sarah Marchioni [248.347.0430 or smarchioni@cityofnovi.org] in the Community Development Department after Final Site Plan approval. If you have questions regarding the checklist or the Pre-Con itself, please contact Sarah.

CHAPTER 26.5

Chapter 26.5 of the City of Novi Code of Ordinances generally requires all projects be completed within two years of the issuance of any starting permit. Please contact Sarah Marchioni at 248,347.0430 for additional information on starting permits. The applicant should review and be aware of the requirements of Chapter 26.5 before starting construction.

If the applicant has any questions concerning the above review or the process in general, do not hesitate to contact me at 248.347.0579 or hzeigler@cityofnovi.org.

teather Ligher

Heather Zeigler - Planner



PLANNING REVIEW CHART: I-1 Light Industrial

Review Date: April 4, 2024

Review Type: Revised Final Site Plan

Project Name: JSP24-11: Mando Parking Lot Expansion

Location: Beck North Corporate Park

Plan Date: March 19, 2024

Prepared by: Heather Zeigler, Planner

E-mail: heigler@cityofnovi.org; Phone: (248) 347-0579

Items in **Bold** need to be addressed by the applicant with next submittal. Items **Underlined Bold** require waivers or variances. *Italicized* items should be noted.

Item	Required Code	Proposed	Meets Code	Comments
Zoning and Use Require	ements			
Master Plan (adopted July 26, 2017)	Industrial Research Development and Technology	No Change	Yes	
Area Study	The site does not fall under any special category		N/A	
Zoning (Effective Jan. 8, 2015)	I-1: Light Industrial District	No Change	Yes	
Uses Permitted (Sec 3.1.18.B & C)	Sec 3.1.18.B Principal Uses Permitted. Sec 3.1.18.C Special Land Uses	Parking Lot Addition Only	Yes	
Height, bulk, density an	d area limitations – I-1 Distr	ict (Sec 3.1.18)		
Frontage on a Public Street (Sec. 5.12)	Frontage on a Public Street is required	Frontage on Cartier Drive	Yes	

Item	Required Code	Proposed	Meets Code	Comments
Minimum Zoning Lot Size for each Unit in Acres (Sec 3.6.2.D)	Except where otherwise provided in this Ordinance, the minimum lot area and width, and the		Yes	
Minimum Zoning Lot Size for each Unit: Width in Feet	maximum percent of lot coverage shall be determined on the basis of off-street parking, loading, greenbelt screening, yard setback		Yes	
Maximum % of Lot Area Covered (By All Buildings)	(Sec 3.6.2.D)	76,500 S.F existing	Yes	Building addition no longer proposed
Building Height (Sec. 3.1.18.D)	25 ft. maximum height Sec. 3.14.5.C: The maximum heights of any building [in the I-1 District] constructed on a lot or site adjacent to a residential district shall be twenty-five (25) feet	No change to building height	N/A	
Building Setbacks (Sec	3.1.18.D)		1	
Front (south)	40 ft.	43 ft	Yes	
Rear (north)	100 ft. (Sec 3.6.2.H)	250 ft	Yes	No change to building
Side (east)	20 ft.	170 ft	Yes	footprint
Side (west)	20 ft.	Existing	Yes	
Parking Setback (Sec 3	.1.18.D) & Refer to applicab	ole notes in Sec 3.6.2		
Front (south)	40 ft. (Sec. 3.6.2.E)	43.9 ft – Hudson Drive Complies	Yes	
Rear (north)	100 ft. (Sec 3.6.2.F)	60 ft	Yes	
Side (east)	10 ft.	43 ft	Yes	
Side (west)	10 ft.	existing	Yes	

Item	Required Code	Proposed	Meets Code	Comments
Note To District Standar	ds (Sec 3.6.2)			
Exterior Side Yard Abutting a Street (Sec 3.6.2.C)	All exterior side yards abutting a street shall be provided with a setback equal to front yard.	No side yard abutting street	N/A	
Off-Street Parking in Front Yard (Sec 3.6.2.E)	Off-street parking is allowed in front yard if - the site is min. 2 acres - does not extend into the minimum required front yard setback of the district, - cannot occupy more than 50% of the area between min. front yard setback & bldg. setback, - must be screened by brick wall or landscaped berm - lighting compatible with surrounding neighborhood	Parking proposed in front yard	No	Planning Commission approval will be required for parking in the front yard.
	For sites abutting a residential zoning district, off-street parking shall not occupy more than fifty (50) percent of the area of the side or rear yard abutting a residential district	Does not abut residential zoning	N/A	
Off-Street Parking in Side and Rear Yards (Sec 3.6.2.F)	Off-street parking shall be setback no less than one hundred (100) feet from the residential district. Exterior side yards shall be subject to the front yard setback requirements of the district, and all regulations applicable to a front yard shall apply.	Does not abut residential zoning	N/A	
Setback from Residential District (Sec 3.6.2.H)	I-1 and I-2 districts, five (5) feet of horizontal setback for each foot of building height, or one	Does not abut residential zoning	N/A	

Item	Required Code	Proposed	Meets Code	Comments
	hundred (100) feet, whichever is greater (except when a site or rear yard is separated from a residential district by a railroad right-ofway, the right-of-way may be included as part of the setback requirement).			
Wetland/Watercourse Setback (Sec 3.6.2.M)	A setback of 25ft from wetlands and from high watermark course shall be maintained			Refer to attached wetland review letter
Additional Height (Sec 3.6.2.0)	Additional heights for selected building is allowed based on conditions listed in Sec 3.6.2.0			
Parking setback screening (Sec 3.6.2.P)	Required parking setback area shall be landscaped per sec 5.5.3.	Provided	Yes	Refer to attached landscape review
Modification of parking setback requirements (Sec 3.6.2.Q)	The Planning Commission may modify parking setback requirements based on conditions listed in Sec 3.6.2.Q	Parking setbacks comply with minimum standards	N/A	
Parking, Loading and D	umpster Requirements			
Number of Parking Spaces: Industrial or research establishments and related accessory offices (Sec. 5.2.12.E)	One (1) space for each seven hundred (700) square feet of usable floor area or five (5) plus one (1) for each one and one-half (1 ½) employees in the largest working shift, whichever is greater. Space on site shall also be provided for all construction workers during periods of plant construction	Existing 158 (including ADA spaces) Plus a proposed additional 37 spaces.	Yes	75,500 / 700s.f = 147,522 s.f / 700 s.f = 210.75 → 211 spaces required Complies
	198 required spaces			

Item	Required Code	Proposed	Meets Code	Comments
Parking Space Dimensions and Maneuvering Lanes (Sec. 5.3.2)	 90° Parking: 9 ft. x 19 ft. 24 ft. two-way drives 9 ft. x 17 ft. parking spaces allowed along 7 ft. wide interior sidewalks as long as detail indicates a 4" curb at these locations and along landscaping 	24.6' drives & 8.2' wide sidewalks with a 4' curb depicted	Yes	
Parking stall located adjacent to a parking lot entrance: public or private (Sec. 5.3.13)	Shall not be located closer than twenty-five (25) feet from the street right-of-way (ROW) line, street easement or sidewalk, whichever is closer	Complies	Yes	
End Islands (Sec. 5.3.12)	 End Islands with landscaping and raised curbs are required at the end of all parking bays that abut traffic circulation aisles. The end islands shall generally be at least 8 feet wide, have an outside radius of 15 feet, and be constructed 3' shorter than the adjacent parking stall as illustrated in the Zoning Ordinance 	End islands are in conformance & dimensioned accordingly.	Yes	

Item	Required Code	Proposed	Meets Code	Comments
Barrier Free Spaces Barrier Free Code	7 barrier free parking spaces for sites containing 201-300 spaces, 2 of which must be van barrier free parking spaces	6 existing, none proposed	Yes	
Barrier Free Space Dimensions Barrier Free Code	 8' wide with an 8' wide access aisle for van accessible spaces 8' wide with a 5' wide access aisle for regular accessible spaces 	Existing- complies	Yes	
Barrier Free Signs Barrier Free Code	One sign for each accessible parking space.	Existing- complies	Yes	
Minimum number of Bicycle Parking (Sec. 5.16.1)	Five (5) percent of required automobile spaces, minimum two (2) spaces 10 bicycle parking spaces are required for 198 required automobile parking spaces	None proposed	No	Please include additional bicycle parking in the next submittal.
Bicycle Parking General requirements (Sec. 5.16)	 No farther than 120 ft. from the entrance being served When 4 or more spaces are required for a building with multiple entrances, the spaces shall be provided in multiple locations Spaces to be paved and the bike rack shall be inverted "U" design Shall be accessible via 6 ft. paved sidewalk 	N/A	N/A	
Bicycle Parking Lot layout (Sec 5.16.6)	Parking space width: 6 ft. One tier width: 10 ft. Two tier width: 16 ft. Maneuvering lane width: 4 ft. Parking space depth: 2 ft. single, 2 ½ ft. double	N/A	N/A	

Item	Required Code	Proposed	Meets Code	Comments
Loading Spaces (Sec. 5.4. & Sec. 3.14.5)	Loading area in the rear yard Loading area in interior side yard if it is adjacent to I, EXPO or EXO district	No new loading area proposed	N/A	
Accessory Structures				
Dumpster (Sec 4.19.2.F)	 Located in rear yard Attached to the building or No closer than 10 ft. from building if not attached Not located in parking setback If no setback, then it cannot be any closer than 10 ft, from property line. Away from Barrier free Spaces 	Existing; complies	Yes	
Dumpster Enclosure (Sec. 21-145. (c))	- Screened from public view - A wall or fence 1 ft. higher than height of refuse bin - And no less than 5 ft. on three sides - Posts or bumpers to protect the screening - Hard surface pad. - Screening Materials: Masonry, wood or evergreen shrubbery	Existing dumpster; complies	Yes	
Roof top equipment and wall mounted utility equipment (Sec. 4.19.2.E.ii)	All roof top equipment must be screened, and all wall mounted utility equipment must be enclosed and integrated into the design and color of the building	No rooftop equipment is proposed	N/A	

Item	Required Code	Proposed	Meets Code	Comments
Roof top appurtenances screening	Roof top appurtenances shall be screened in accordance with applicable facade regulations, and shall not be visible from any street, road or adjacent property.	No rooftop equipment is proposed	N/A	
I-1 District Required Cor	nditions (Sec 3.14)			
Outdoor Storage of Above Ground Storage Tanks (Sec. 3.14.1.B.ii)	Outdoor placement of above-ground storage tanks of not more than 600 capacity per tank and accessory to an otherwise permitted use. Additional conditions apply	Not proposed	N/A	
Outdoor Storage of recreational equipment (Sec. 3.14.1.B.iii)	See Sec. 3.14.1.B.iii.a – f	Not proposed	N/A	
Other (Sec 3.14.2)	Unless otherwise provided, dealing directly with consumer at retail, is prohibited.	Not proposed	N/A	
Adjacent to Freeway ROW (Sec 3.14.4)	Where a permitted use abuts a freeway right-of way, special conditions listed in section 3.14.4 apply	Not adjacent to Freeway ROW	N/A	

Item	Required Code	Proposed	Meets Code	Comments	
Adjacent Residential Uses (Sec 3.14.3.A)	Protecting current and future residential uses from development impact	Not adjacent to residential uses	N/A		
Long term truck parking Sec 3.14.3.B	Long-term delivery truck parking is not permitted	Provided: item #14 on sheet 1 – general site notes	Yes		
Performance standards Sec 3.14.3.C	The lighting, noise, vibration, odor and other possible impacts are in compliance with standards and intent of the article and performance standards of Section 5.14	Provided: item # 15 on sheet 1 – general site notes	Yes		
Storage and/use of material Sec 3.14.3.D	The storage and/or use of any volatile, flammable or other materials shall be fully identified in application and shall comply with any city ordinances regarding toxic or hazardous materials.	Not proposed	N/A		
Hazardous material checklist Sec 3.14.3.E	Compliance of City's hazardous materials checklist	Checklist provided	Yes		
Considerations for I-1 Permitted Uses Adjacent a Residential District (Sec. 3.14.5)					
Loading Area (Sec. 3.14.5.A)	No truck well, loading dock or door, shall be permitted on or in the wall of the building which faces the abutting residential district and only pedestrian exits or emergency doors shall be allowed on such wall.	Not adjacent to residential district	N/A		

Item	Required Code	Proposed	Meets Code	Comments
	No outside storage of any materials, equipment, trash or waste shall be permitted, except that dumpsters may be permitted outdoors where properly screened pursuant to the requirements of this Ordinance			
Outdoor Storage and Parking Screening (Sec. 3.14.5.B)	All off-street parking and areas used for vehicular repair, delivery, loading/unloading and transport shall not be closer than one-hundred (100) feet from the boundary of a residential district and effectively screened from view from said residential district by landscaping, walls or berms pursuant to the requirements of Section 3.14.5.E.	Not adjacent to residential district	N/A	
Exterior Lighting (Sec. 3.14.5.D)	A photometric plan is required at the Preliminary Site Plan stage when the site abuts residential. Exterior site lighting is required as regulated by Section 5.7. In addition, where a building wall faces an abutting residential district there shall be no floodlighting of such facade. This shall not preclude the lighting of doorways on such facades.	Not adjacent to residential district	N/A	
Windows and Doors (Sec. 3.14.5.F)	Windows and doors of non-office use areas of structures in an I-1 district may not be left open.	Not adjacent to residential district	N/A	

Item	Required Code	Proposed	Meets Code	Comments	
Special Land Use Considerations for I-1 Sites Adjacent to Residential Districts (Sec. 6.1.2.C)					
Traffic Circulation and Safety (Sec. 6.1.2.C.i)	The proposed use will not cause any detrimental impact on existing thoroughfares in terms of overall volumes, capacity, safety, vehicular turning patterns, intersections, view obstructions, line of sight, ingress and egress, accel/decel lanes offstreet parking, off-street loading & unloading, travel times and thoroughfare level of service.	Provided	Yes	Please see traffic review for additional details.	
Public Services & Utilities (Sec. 6.1.2.C.ii)	The proposed use will not cause any detrimental impact on the capabilities of public services and facilities, including water service, sanitary sewer service, storm water disposal, and police and fire protection to serve existing and planned uses in the area.	Provided	Yes	Please see engineering review for additional details.	
Natural Features (Sec. 6.1.2.C.iii)	The proposed use is compatible with the natural features and characteristics of the land, including existing woodlands, wetlands, watercourses and wildlife habitats.	Woodland tree removals will require permit	No	To be determined by the planning commission	
Impact on Surrounding Neighborhoods (Sec. 6.1.2.C.iv)	The proposed use is compatible with adjacent uses of land in terms of location, size, character, and impact on adjacent property or the surrounding neighborhood.	Expansion of existing use, closest residential use is some distance, and buffered by woodlands	TBD	To be determined by the planning Commission	

Item	Required Code	Proposed	Meets Code	Comments
Master Plan for Land Use (Sec. 6.1.2.C.v)	The proposed use is consistent with the goals, objectives and recommendations of the City's Master Plan for Land Use.	Complies	Yes	
Social & Economic Impact (Sec. 6.1.2.C.vi)	The proposed use will promote the use of land in a socially and economically desirable manner.		Yes	
Zoning Ordinance & Land Use (Sec. 6.1.2.C.vii)	The proposed use is listed among the provision of uses requiring special land use review as set forth in the various zoning districts of this Ordinance and is in harmony with the purposes and conforms to the applicable site design regulations of the zoning district in which it is located.		Yes	

Item	Required Code	Proposed	Meets Code	Comments
Other Requirements				
Exterior lighting (Sec. 5.7)	A photometric plan is required at the Preliminary Site Plan stage when the site abuts residential.	Not Provided	No	
Design and Construction Standards Manual	Land description, Sidwell number (metes and bounds for acreage parcel, lot number(s), Liber, and page for subdivisions).	Provided on sheet 1	Yes	
General layout and dimension of proposed physical improvements	Location of all existing and proposed buildings, proposed building heights, building layouts, (floor area in square feet), location of proposed parking and parking layout, streets and drives, and indicate square footage of pavement area (indicate public or private).	Provided	Yes	
Development and Street Names	Development and street names must be approved by the Street Naming Committee before Preliminary Site Plan approval	Not applicable	N/A	
Development/ Business Sign	Signage, if proposed, requires a permit.	None shown	<u>TBD</u>	For sign permit information contact Ordinance Enforcement at 248-735-5678.
Lighting and Photometr				
Intent (Sec. 5.7.1)	Establish appropriate minimum levels, prevent unnecessary glare, reduce spillover onto adjacent properties & reduce unnecessary transmission of light into the night sky	Not provided	No	Please include a photometrics plan within the next submittal.
Lighting Plan (Sec. 5.7.A.i)	Site plan showing location of all existing & proposed buildings, landscaping, streets,	Not provided	No	

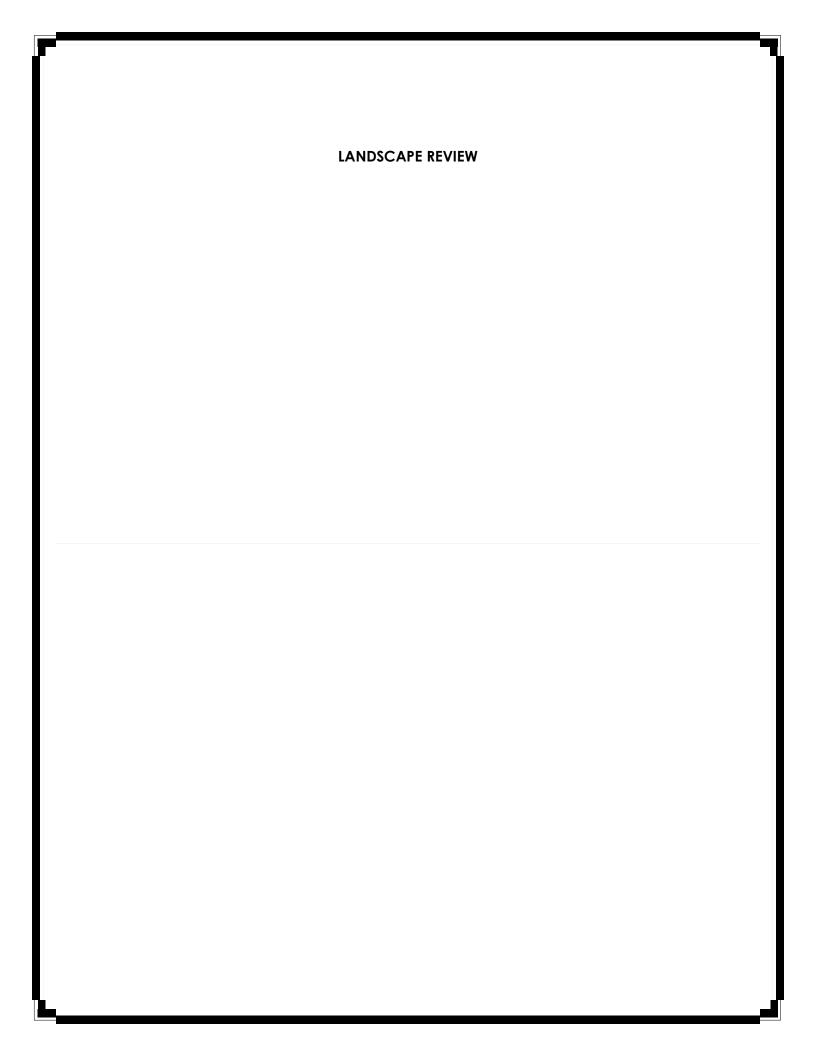
Item	Required Code	Proposed	Meets Code	Comments
	drives, parking areas &			
	exterior lighting fixtures			
	Relevant building elevation drawings			
	showing all fixtures, the			
Duilding Lighting	portions of the walls to		No	
Building Lighting (Sec. 5.7.2.A.iii)	be illuminated,			
(36C. 3.7.2.A.III)	illuminance levels of			
	walls and the aiming			
	points of any remote fixtures.			
	Specifications for all			
	proposed & existing		No	
	lighting fixtures			
	Photometric data		No	
Limblin at Disse	Fixture height		No	1
Lighting Plan (Sec.5.7.A.2.ii)	Mounting & design		No	
(JCC.J./.A.Z.II)	Glare control devices		No	1
	(Also see Sec. 5.7.3.D)		NO	
	Type & color rendition of		No	
	lamps			4
	Hours of operation		No	
	Height not to exceed maximum height of			
Maximum Height	zoning district (or 25 ft.			
(Sec. 5.7.3.A)	where adjacent to		No	
,	residential districts or			
	uses			
	- All Permanent lighting			
	installations shall have a			
	minimum color			
Color Spoodrum	Rendering Index (CRI) of			
Color Spectrum Management (Sec.	- All permanent lighting		No	
5.7.3.F)	installations shall have a		NO	
	Correlated Color			
	Temperature (CCT) of			
	no greater than 3000			
	Kelvin (K)			
In de ou Destaller (0	Indoor lighting shall not			
Indoor Lighting (Sec. 5.7.3.H)	be the source of exterior		No	
J./ .J.I IJ	glare or spillover			
Standard Notes	Electrical consider to	Standard Notes ast		
(Sec. 5.7.3.B)	- Electrical service to light fixtures shall be	Standard Notes not Provided	No	

Item	Required Code	Proposed	Meets Code	Comments
	placed underground - Flashing light shall not be permitted - Only necessary lighting for security purposes & limited operations shall be permitted after a site's hours of operation			
Security Lighting (Sec. 5.7.3.i)	 All fixtures shall be located, shielded and aimed at the areas to be secured. Fixtures mounted on the building and designed to illuminate the facade are preferred Lighting for security purposes shall be directed only onto the area to be secured. 		No	
Average Light Level (Sec.5.7.3.E)	Average light level of the surface being lit to the lowest light of the surface being lit shall not exceed 4:1		No	
True Color Lighting (Sec. 5.7.3.F)	Use of true color rendering lamps such as metal halide is preferred over high & low pressure sodium lamps		No	
	Parking areas: 0.2 min		No	
	Loading & unloading areas: 0.4 min		No	
Min. Illumination (Sec.	Walkways: 0.2 min		No	
5.7.3.K)	Building entrances, frequent use: 1.0 min		No	
	Building entrances, infrequent use: 0.2 min		No	
Max. Illumination adjacent to Non- Residential (Sec. 5.7.3.K)	When site abuts a non-residential district, maximum illumination at the property line shall not exceed 1 foot candle		No	
Cut off Angles (Sec. 5.7.3.L)	When adjacent to residential districts: - All cut off angles of fixtures must be 90° - maximum illumination at the property line		No	

Item	Required Code	Proposed	Meets Code	Comments
	shall not exceed 0.5 foot candle - No direct light source shall be visible at the property line (adjacent to residential) at ground level			

NOTES:

- 1. This table is a working summary chart and not intended to substitute for any Ordinance or City of Novi requirements or standards.
- 2. The section of the applicable ordinance or standard is indicated in parenthesis. Please refer to those sections in Article 3, 4 and 5 of the zoning ordinance for further details.
- 3. Please include a written response to any points requiring clarification or for any corresponding site plan modifications to the City of Novi Planning Department with future submittals.





PLAN REVIEW CENTER REPORT July 11, 2024 Mando Parking Lot Expansion

Combined Preliminary/Final Site Plan - Landscaping

Review Type
Preliminary/Final Site Plan Landscape Review

Job #

JSP24-0011

Property Characteristics

Site Location: 29930 Hudson Drive

Site Acreage: 0.82 ac.Site Zoning: I-1

Adjacent Zoning: North, South, East, West: I-1

• Plan Date: 6/14/2024

Ordinance Considerations

This project was reviewed for conformance with Chapter 37: Woodland Protection, Zoning Article 5.5 Landscape Standards, the Landscape Design Manual and any other applicable provisions of the Zoning Ordinance. Items in **bold** below must be addressed and incorporated as part of the revised Preliminary Site Plan submittal. Underlined items must be addressed on the Final Site Plans. Please follow guidelines of the Zoning Ordinance and Landscape Design Guidelines. This review and the accompanying Landscape Chart are summaries and are not intended to substitute for any Ordinance.

RECOMMENDATION:

This project is **recommended for approval**, with the provision that they plant the required street trees east of the drive to Hexagon Way. The remaining minor issues noted below can be addressed on the revised Final Site Plan.

LANDSCAPE WAIVERS REQUIRED FOR THIS PROJECT:

Lack of greenbelt landscaping for the area east of the Hexagon Way drive – supported by staff except for the street trees east of the access drive.

Please change the city project number to JSP24-0011 on the set cover sheet.

Ordinance Considerations

Existing Trees (Sec 37 Woodland Protection, Preliminary Site Plan checklist #17 and LDM 2.3 (2))

- 1. Tree survey is provided.
- 2. Wetland survey is provided.
- 3. The plans indicate that 72 woodland replacements are required. None are being planted on the site so a contribution to the tree fund will be made for all of those credits.

<u>Adjacent to Residential - Buffer (Zoning Sec. 5.5.3.A)</u>

The project is not adjacent to residential property so no screening berm is required.

Adjacent to Public Rights-of-Way – Berm/Wall, Buffer and Street Trees (Zoning Sec. 5.5.3.B.ii, iii)

The project does not front on any road except for the industrial park's roads.

Parking Lot Landscaping (Zoning Sec. 5.5.3.C.)

- 1. The required parking lot interior area and trees are provided.
- 2. The required parking lot perimeter trees are provided.

Non-Residential Landscaping (Zoning Sec 5.5.3.F.iv)

- 1. **Hudson Drive –** as no work is done facing Hudson, and utility lines prevent the planting of street trees, no frontage landscaping is required.
- 2. Hexagon Way
 - **a. West of entry -** as no work is done facing Hudson, and utility lines prevent the planting of street trees, no frontage landscaping is required
 - b. East of entry
 - 1) A waiver is sought to not provide the required landscaping in order to preserve the existing woods. This is supported by staff except for the 2 street trees east of the drive.
 - 2) The required 2 street trees can and should be planted.

Building Foundation Landscaping (Zoning Sec 5.5.3.D)

As no changes to the building are proposed, no new landscaping is required.

Plant List (LDM 4, 10)

- 1. 6 of 7 species proposed (86%) are native to Michigan.
- 2. The tree diversity meets the standard of LDM Section 4.

Planting Notations and Details (LDM 10)

Provided

Storm Basin Landscape (Zoning Sec 5.5.3.E.iv and LDM 3)

- 1. The stormwater detention will be handled by the original basin.
- 2. If any changes to that basin are required, detention basin landscaping will also be required.

Irrigation (LDM 10)

Why Meady

- 1. If an irrigation system will be used, a plan for it must be provided with Final Site Plans.
- 2. <u>If alternative means of providing water to the plants for their establishment and long-term survival, information regarding that is also required with Final Site Plans.</u>

If the applicant has any questions concerning the above review or the process in general, do not hesitate to contact me at 248.735.5621 or rmeader meader@cityofnovi.org.

Rick Meader – Landscape Architect

LANDSCAPE REVIEW SUMMARY CHART - Combined Preliminary/Final Site Plans

Review Date: July 11, 2024

Project Name: JSP24-0011: Mando Parking Lot Expansion

Project Location: 29930 Hudson Drive

Plan Date: March 7, 2024

Prepared by: Rick Meader, Landscape Architect E-mail: rmeader@cityofnovi.org;

Phone: (248) 735-5621

Items in **Bold** need to be addressed by the applicant before approval of the Preliminary Site Plan. Underlined items need to be addressed for Final Site Plan.

LANDSCAPE WAIVERS THAT MAY BE REQUIRED FOR THE PROPOSED LAYOUT:

• Landscape waiver to not provide the required greenbelt landscaping berm and trees along the north edge of the parking lot to preserve the existing vegetation to the greatest extent possible – supported by staff.

Please change the City of Novi Project Number to JSP24-0011.

Item	Required	Proposed	Meets Code	Comments
Landscape Plan Requir	ements (Landscape Design	Manual (LDM) and Zo	ning Ordino	ance (Zoning Sec)
Landscape Plan (Zoning Sec 5.5.2, LDM 2, 10)	 New commercial or residential developments Addition to existing building greater than 25% increase in overall footage or 400 SF whichever is less. 1"=20' minimum with proper North. Variations from this scale can be approved by LA Consistent with plans throughout set 	Scale: 1" = 30'	Yes	
Project Information (LDM 10)	Name and Address	Yes	Yes	
Owner/Developer Contact Information (LDM 10)	Name, address and telephone number of the owner and developer or association	In Title Block	Yes	
Landscape Architect contact information (LDM 10)	Name, Address and telephone number of RLA/PLA/LLA who created the plan	Jim Allen – Allen Design	Yes	
Sealed by LA. (LDM 10)	Requires original signature	Yes	Yes	
Miss Dig Note (800) 482-7171 (LDM 10)	Show on all plan sheets	In Title Block	Yes	

Item	Required	Proposed	Meets Code	Comments
Zoning (LDM 10)	Include all adjacent zoning	Parcel: I-1 North, South, East, West: I-1	Yes	
Survey information (LDM 10)	Legal description or boundary line survey Existing topography	Shown on L-1 Description and Existing conditions are on Sheet 2	Yes	
Existing plant material Existing woodlands or wetlands (LDM 10)	 Show location type and size. Label to be saved or removed. Plan shall state if none exists. 	 Tree survey on Sheets L-3 and L-4 Regulated woodlands occupy most of the site. Woodland replacement calculations are provided on L-4 Wetlands are shown on the east edge of the site 	YesYesYesYes	While it's not exactly landscaping, you should follow the federal guidelines for protecting Indiana bats and long-eared bats regarding tree clearing as there are definitely trees on the site that could be used by bats. Here is the link to what you should follow: https://www.fws.gov/sites/default/files/documents/Michigan%20Bat%20Project%20Review_April_12_2023.pdf
Soil types (LDM10)	 As determined by Soils survey of Oakland county Show types, boundaries 	Sheet 5	Yes	
Existing and proposed improvements (LDM 10)	Existing and proposed buildings, easements, parking spaces, vehicular use areas, and R.O.W	 All proposed changes are shown on L-1 Dimensions are on Sheet 1 	Yes	
Existing and proposed utilities (LDM 10)	 Overhead and underground utilities, including hydrants Show all existing and proposed light posts 	 Proposed storm, water and sanitary are on landscape plan Light posts are shown 	Yes	
Proposed grading. 2' contour minimum (LDM 10)	Provide proposed contours at 2' interval	Spot elevations and tw/bw elevations are on Sheet 3	Yes	
Snow deposit (LDM 10)	Show snow deposit areas on plan	Yes	Yes	
LANDSCAPING REQUIRE	EMENTS			
Parking Area Landscap	e Requirements (Zoning Se	- 1		
General requirements (LDM 5)	Clear sight distance within parking islandsNo evergreen trees	No landscaping in parking lot will block vision	Yes	

Item	Required	Proposed	Meets Code	Comments
Name, type and number of ground cover (LDM 5)	As proposed on planting islands	Grass seed is indicated	Yes	
General (Zoning Sec 5	5.3.C)			
Parking lot Islands	 A minimum of 200 SF to qualify A minimum of 200sf unpaved area per tree planted in an island 6" curbs Islands minimum width 10' BOC to BOC 	The islands appear to be large enough.	Yes	Please label the area of the southwest corner island.
Curbs and Parking stall reduction (Zoning Sec 5.3.12)	Parking stall can be reduced to 17' and the curb to 4" adjacent to a sidewalk of minimum 7 ft.	 17 feet where there is room for overhang 19 feet where no overhang is possible. 	Yes	
Contiguous space limit (Zoning sec 5.5.3.C)	Maximum of 15 contiguous spaces	9 spaces is maximum bay length	Yes	
Plantings around Fire Hydrant (Zoning sec 5.5.3.C)	 No plantings with matured height greater than 12' within 10 ft. of fire hydrants Plant trees at least 5 ft from underground utility lines Plantings near hydrants or FDCs should be no taller than 12" 	There are no hydrants in the project area	NA	
Landscaped area (Zoning sec 5.5.3.C)	Areas not dedicated to parking use or driveways exceeding 100 sq. ft. shall be landscaped	Yes	Yes	
Clear Zones (Zoning sec 5.5.3.B.ii Footnote 10)	 25 ft corner clearance required. Refer to Zoning Section 5.5.9 Road Commission for Oakland County zone for RCOC jurisdiction roads 	 Due to the configuration of the Hexagon entry, no clear vision zones are shown or are necessary. No plantings will conflict with sight vision 	Yes	
	DS-2, OSC, OST, B-1, B-2, B-3 district (Zoning Sec 5.5.3.C)		C-1, RC, Sp	pecial Land Use or non-
A = Total square footage of vehicular use areas up to	• A = x sf * 7.5 % = A sf • 50,000 * 7.5% = 3750 sf	NA		

Required	Proposed	Meets Code	Comments
• B = x sf * 1% = B sf • (xxx - 50000) * 1% = xx sf	NA		
d I-2 (Zoning Sec 5.5.3.C)			
 A = x sf * 6% = A sf A = 12233 * 6% = 734sf 	Calculation is provided		Please turn on the hatch for the VUA area called out on the plans.
• B = 0.5% x 0 sf = B SF	NA		
• C = A + B • C = 734 + 0 = 734 SF	1358 sf	Yes	Please label the SF of the southwest corner island with a perimeter tree.
D = C/200 treesD = 734/200 = 4 Trees	4 trees	Yes	
• 1 Canopy tree per 35 lf • 300/35 = 9 trees	9 trees	Yes	
 1 canopy tree per 35 If on each side of road, less widths of access drives. (229 If)/35 = 7 trees 	7 trees	Yes	
• NA	None		
Planting Requirements			
3.A & LDM 1)			
a maximum slope of 33%. Greed on lot line except in cor	•	encouraged. S	Show 1ft. contours
	A & LDM 1.a)		
The site is not adjacent to residential so this is	None	Yes	
not required			
	 B = x sf * 1% = B sf (xxx - 50000) * 1% = xx sf A = x sf * 6% = A sf A = 12233 * 6% = 734sf B = 0.5% x 0 sf = B SF C = A + B C = 734 + 0 = 734 SF D = C/200 trees D = 734/200 = 4 Trees 1 Canopy tree per 35 If on each side of road, less widths of access drives. (229 If)/35 = 7 trees NA Planting Requirements A & LDM 1) maximum slope of 33%. Greed on lot line except in constructed with 6" of topsoil. Non-residential (Sec 5.5.3.) The site is not adjacent 	B = x sf * 1% = B sf (xxx - 50000) * 1% = xx sf Calculation is provided A = x sf * 6% = A sf A = 12233 * 6% = 734sf B = 0.5% x 0 sf = B SF NA Calculation is provided B = 0.5% x 0 sf = B SF NA Calculation is provided NA C = A + B C = 734 + 0 = 734 SF D = C/200 trees D = 734/200 = 4 Trees 1358 sf 1358 sf 4 trees 1 Canopy tree per 35 If on each side of road, less widths of access drives. C29 If)/35 = 7 trees NA None Planting Requirements A & LDM 1) maximum slope of 33%. Gradual slopes are each on lot line except in conflict with utilities. Structed with 6" of topsoil. Non-residential (Sec 5.5.3.A & LDM 1.a) The site is not adjacent	Required B = x sf * 1% = B sf (xxx - 50000) * 1% = xx sf A = x sf * 6% = A sf A = 12233 * 6% = 734sf Calculation is provided B = 0.5% x 0 sf = B SF NA Calculation is provided B = 0.5% x 0 sf = B SF NA Calculation is provided A = 12233 * 6% = 734sf NA Calculation is provided Yes Calculation is provided A trees Yes Calculation is provided Yes A trees Yes Calculation is provided Yes Yes These These These These These Yes These These Yes These These

None

Yes

Adjacent to Public Rights-of-Way (Sec 5.5.3.B and LDM 1.b)

This does not face a

public right-of-way

Berm requirements (Zoning Sec

Item	Required	Proposed	Meets Code	Comments
5.5.3.A.(5))				
Cross-Section of Berms	(LDM 10)			
Slope, height and width	 Label contour lines Maximum 33% Min. 3 feet flat horizontal area Minimum 3 feet high Constructed of loam with 6' top layer of topsoil. 	No berm is required or provided	Yes	
Type of Ground Cover		NA		
Setbacks from Utilities	Overhead utility lines and 15 ft. setback from edge of utility or 20 ft. setback from closest pole	NA		
Walls (Zoning Sec 5.5.3.	A & LDM 10)			
Material, height and type of construction footing	Freestanding walls should have brick or stone exterior with masonry or concrete interior	 A wall exists along the east end of the parking lot A standard cross section detail is provided 	TBD	
Walls greater than 4 ft. should be designed and sealed by an Engineer		The wall is 4 feet tall at the center.		 As the wall is 4 feet tall at one point, it will need to be designed by an engineer. The drawing will need to be reviewed with the building plans. A railing on top of the wall may be required
ROW Landscape Scree	ning Requirements (Zoning	Sec 5.5.3.B.ii)		
Greenbelt width	Parking Setback equal to zoning requirements – 10 feet	42.7 ft	Yes	
Min. berm crest width	None required			
Minimum berm height	None required			
3' wall	(2)(3)(4)	None in greenbelt		
Canopy deciduous or large evergreen trees	See the non-residential project requirements below			
Sub-canopy deciduous trees)	See the non-residential project requirements below			

Item	Required	Proposed	Meets Code	Comments
Canopy deciduous trees in area between sidewalk and curb	See the non-residential project requirements below			
Non-Residential Project	s (Zoning Sec 5.5.3.F.iii)			
Greenbelt Plantings along Industrial Drive	 1 canopy tree or large evergreen tree per 35 lf 1 subcanopy tree per 40 lf 1 shrub per 20lf Massing of ornamental grasses, perennials and/or annuals or bulbs for 10% of frontage Evergreen shrubs to screen parking areas (a 36" high berm may be used in place of the shrubs) Hudson Drive – no change Hexagon Way (from the eastern edge of the drive to the adjacent property =122 lf) 122/35 = 3 large trees 122/40 = 3 subcanopy trees 2*122/40 = 6 shrubs 122 * 10% = 12lf of massed plantings 	Hudson Drive: Existing vegetation to remain Hexagon Way: Existing vegetation to remain – a landscape waiver is requested	• Yes • No	Staff supports the landscape waiver for the lack of new vegetation in order to preserve the existing natural vegetation.
Plantings along street	1 canopy tree per 50lf (from the greenbelt tree requirement above) Hudson Drive: No development is proposed along Hudson Drive Hexagon Way (east of drive): 122/50 = 2 trees	Hudson Drive: 0 trees Hexagon Way: 0 trees	• No • No	 It appears that the underground utilities along Hudson Drive and Hexagon Way west of the drive would prevent trees from being planted in the right-of-way to meet this requirement. No waiver would be required for the trees on Hudson and west of the drive to Hexagon due to the utility conflicts. As there are no conflicts east of the

Item	Required	Proposed	Meets Code	Comments
				drive, please add the required 2 street trees.
Screening of outdoor storage, loading/unloading (Zoning Sec. 3.14, 3.15, 4.55, 4.56, 5.5)	All loading areas are on the existing site and are screened by the building	No loading zones are associated with this project	NA	
Transformers/Utility boxes (LDM 6)	 A minimum of 2ft. separation between box and the plants Ground cover below 4" is allowed up to pad. No plant materials within 8 ft. from the doors 	 No new transformer boxes are proposed The utility box screening detail is provided 	TBD	If any new utility box is added, please screen it per the detail.
Building Foundation La	ndscape Requirements (Zor	ning Sec 5.5.3.D)		
Interior site landscaping SF (Zoning Sec 5.5.3.D)	 Equals to entire perimeter of the building addition x 8 with a minimum width of 4 ft. No new building is associated with this project. 	NA	NA	
Building Frontage Landscaping (Zoning Sec 5.5.3.D)	 If visible from public street a minimum of 60% of the exterior building perimeter should be covered in green space No new building is associated with this project. 	NA		
Detention/Retention Bo	usin Requirements (Zoning Se	ec. 5.5.3.E & LDM 3)		
Planting requirements (Zoning Sec 5.5.3.E & LDM 3)	 Clusters of large native shrubs shall cover 70-75% of the basin rim area at 10 lf from permanent water level 10" to 14" tall grass along sides of basin Refer to wetland for basin mix Deciduous canopy tree 1/35 of east, south and west sides of pond at 10 feet from permanent water level 	No new detention basin is provided	TBD	If changes to the existing basin are required, the newly created areas must be landscaped per the requirements.
Phragmites and Japanese Knotweed	Any and all populations of	A note indicates that none were	Yes	

Item	Required	Proposed	Meets Code	Comments
Control (Zoning Sec 5.5.6.B)	Phragmites australis and/or Japanese Knotweed on site shall be included on tree survey. Treat populations per MDEQ guidelines and requirements to eradicate the weed from the site.	found on the site		
LANDSCAPING NOTES,	DETAILS AND GENERAL REQU	UIREMENTS		
Landscape Notes – Utili	ze City of Novi Standard No			
Installation date (LDM 10)	Provide intended date	Between Mar 15 and Nov 15, 2024 or 2025	Yes	
Maintenance & Statement of intent (Zoning Sec 5.5.6 & LDM 10)	 Include statement of intent to install and guarantee all materials for 2 years. Include a minimum one cultivation in June, July and August for the 2-year warranty period. 	Both note	Yes	
Plant source (LDM 10 & 11)	Shall be northern nursery grown, No.1 grade.	Midwest American Grown, #1 grade	Yes	
Irrigation plan (LDM 10)	A fully automatic irrigation system or a method of providing sufficient water for plant establishment and survival is required on Final Site Plans. If irrigation won't be used, note how trees will get sufficient water for establishment and long-term survival	No		1. Please add an irrigation plan or information as to how plants will be watered sufficiently for establishment and long-term survival in the Final Site Plans 2. An irrigation system should meet the requirements listed at the end of this chart. 3. If xeriscaping is used, please provide information about plantings included.
Other information (LDM 10)	Required by Planning Commission	NA		piarnings included.
Establishment period (Zoning Sec 5.5.6 & LDM 10)	2 yr. Guarantee	Yes	Yes	
Approval of substitutions. (Zoning Sec 5.5.5 & LDM 10)	City must approve any substitutions in writing prior to installation.	Yes	Yes	

Item	Required	Proposed	Meets Code	Comments		
Plant List (LDM 10 & 11)	Plant List (LDM 10 & 11) – Include all cost estimates					
Quantities and sizes		Yes	Yes			
Root type		Yes	Yes			
Botanical and common names (LDM 4 & 11)	 At least 50% of species used shall be native to Michigan Tree diversity shall follow guidelines of LDM Section 4 	 6 of 7 species used (86%) are native to Michigan. The tree diversity is satisfactory. 	Yes			
Type and amount of lawn		Grass seed				
Cost estimate (LDM 10)	For all new plantings, mulch and sod as listed on the plan	Provided	Yes			
Planting Details/Info (LE	DM Part III) – Utilize City of N	ovi Standard Details				
Canopy Deciduous Tree		Yes	Yes			
Evergreen Tree		Yes	Yes			
Multi-stem Tree		Yes	Yes			
Shrub	Refer to LDM for detail drawings	Yes	Yes			
Perennial/ Ground Cover	a di di iliya	Yes	Yes			
Tree stakes and guys. (Wood stakes, fabric guys)		Yes	Yes			
Tree protection fencing	Located at Critical Root Zone (1' outside of dripline)	Yes	Yes			
Other Plant Material Re						
General Conditions	Plant materials shall not be planted within 4 ft. of property line	NA – No plantings are near the adjacent properties	Yes			
Plant Materials & Existing Plant Material (LDM 11)	Clearly show trees to be removed and trees to be saved.	Shown on Sheets L- 3 and L-4	Yes			
Landscape tree credit (LDM 11)	Substitutions to landscape standards for preserved canopy trees outside woodlands/ wetlands should be approved by LA. Refer to Landscape tree Credit Chart in LDM	No				
Plant Sizes for ROW, Woodland replacement and others	 Size determined by use detailed in LDM Table 11.b.(2)a.i Indicate on plant list 	On plant list	Yes			

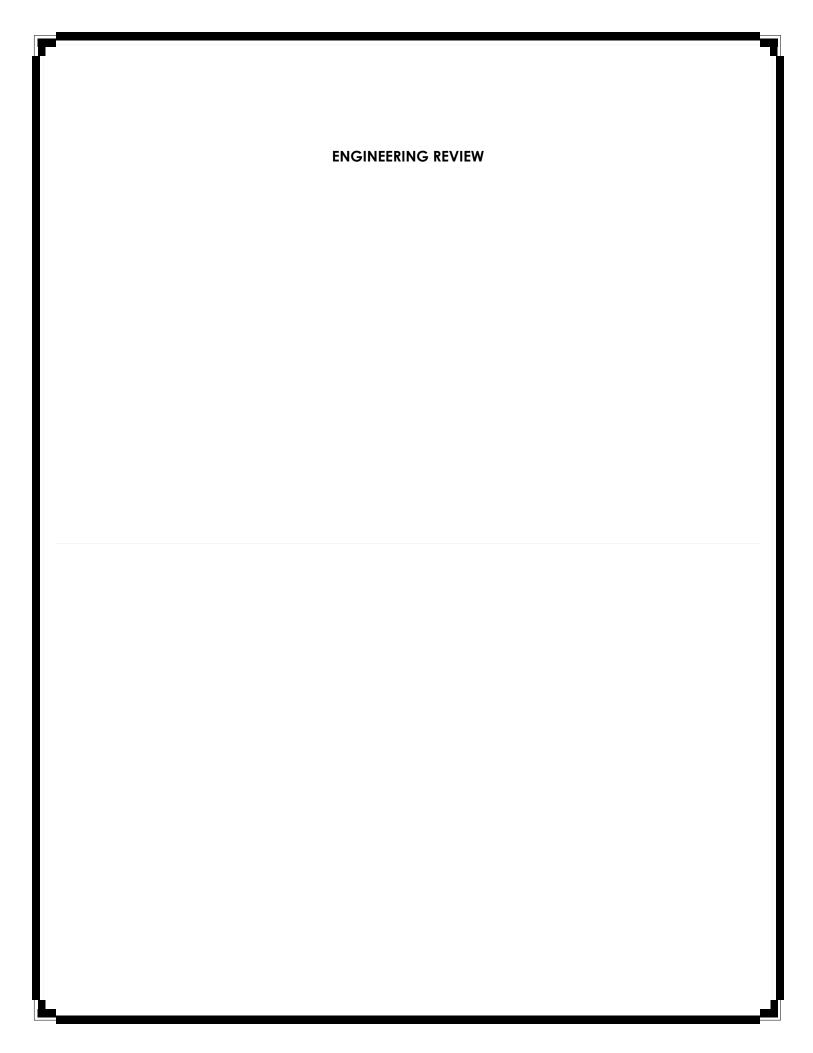
Item	Required	Proposed	Meets Code	Comments
(LDM 11)				
Plant size credit (LDM	NA	No		
Prohibited Plants (LDM 11.b)	No plants on City Invasive Species List	No prohibited species are used	Yes	
Recommended trees for planting under overhead utilities (LDM 11)	Label the distance from the overhead utilities	A note indicates no overhead lines exist	Yes	
Collected or Transplanted trees (LDM 11)		No		
Nonliving Durable Material: Mulch (LDM 12)	 Trees shall be mulched to 3"depth and shrubs, groundcovers to 2" depth Specify natural color, finely shredded hardwood bark mulch. Include in cost estimate. 	Yes	Yes	

NOTES:

- 1. This table is a working summary chart and not intended to substitute for any Ordinance or City of Novi requirements or standards.
- 2. The section of the applicable ordinance or standard is indicated in parenthesis. For the landscape requirements, please see the Zoning Ordinance landscape section 5.5 and the Landscape Design Manual for the appropriate items under the applicable zoning classification.
- 3. Please include a written response to any points requiring clarification or for any corresponding site plan modifications to the City of Novi Planning Department with future submittals.

<u>Irrigation System Requirements</u>

- 1. Any booster pump installed to connect the project's irrigation system to an existing irrigation system must be downstream of the RPZ.
- 2. The RPZ must be installed in accordance with the 2015 Michigan Plumbing Code.
- 3. The RPZ must be installed in accordance with the manufacture installation instructions for winterization that includes drain ports and blowout ports.
- 4. The RPZ must be installed a minimum of 12-inches above FINISHED grade.
- 5. Attached is a handout that addresses winterization installation requirements to assist with this.
- 6. A plumbing permit is required.
- 7. The assembly must be tested after installation with results recorded on the City of Novi test report form.





PLAN REVIEW CENTER REPORT

07/18/2024

Engineering Review

Mando Parking Lot Expansion JSP24-0011

APPLICANT

Mando America Corporation

REVIEW TYPE

Preliminary/Final Site Plan

PROPERTY CHARACTERISTICS

Site Location: Beck North Corporate Park, south of Hexagon Way

Site Size: 0.82 acresPlan Date: 6/14/2024

Design Engineer: Alpine Engineering, Inc.

PROJECT SUMMARY

- Construction of an approximately .41-acre parking lot expansion.
- One new catch basin is proposed in the interior of the parking lot and will connect to an existing storm sewer collection system that discharges to an on-site dissipation basin.

RECOMMENDATION

Approval of the Preliminary Site Plan is recommended. Approval of the Final Site Plan is NOT recommended until the following items are addressed.

Comments:

The Final Site Plan does **NOT** meet the general requirements of <u>Chapter 11 of the City of Novi Code of Ordinances</u>, the Storm Water Management Ordinance and the <u>Engineering Design Manual</u>. The following items must be addressed prior to resubmittal:

General

- 1. **Only at the time of the printed Stamping Set submittal**, provide the City's standard detail sheets for storm sewer (2 sheets) and paving (2 sheets). The most updated details can be found on the City's website under Engineering Standards and Construction Details.
- 2. A Right-of-Way Permit will be required from the City of Novi.
- 3. Provide a traffic control sign table listing the quantities of each **permanent** sign type proposed for the development. Provide a note along with the table stating all traffic signage will comply with the current MMUTCD standards.
- 4. Provide a traffic control plan for the proposed road work activity.
- 5. Provide a note that compacted sand backfill (MDOT sand Class II) shall be provided for all utilities within the influence of paved areas; illustrate and label on the profiles.
- 6. Provide a construction materials table on the utility plan listing the quantity and material type for the storm sewer being proposed.
- 7. Show the locations of all light poles on the utility plan and indicate the typical foundation depth for the pole to verify that no conflicts with utilities will occur. Light poles in a utility easement will require a License Agreement.
- 8. Refer to the City standard details for the proposed boardwalk design.

<u>Irrigation Comments</u>

9. Indicate if irrigation is proposed, and if so, include containment notes on irrigation sheets.

Storm Sewer

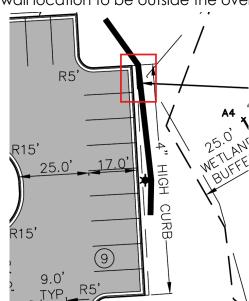
- 10. A minimum cover depth of 3 feet shall be maintained over all proposed storm sewer. Currently, a few pipe sections do not meet this standard. Grades shall be elevated, and minimum pipe slopes shall be used to maximize the cover depth. In situations where the minimum cover <u>cannot</u> be achieved, Class V pipe must be used with an absolute minimum cover depth of 2 feet. An explanation shall be provided where the cover depth cannot be provided.
- 11. Provide a 0.1-foot drop in the downstream invert of all storm structures where a change in direction of 30 degrees or greater occurs.
- 12. Match the 0.80 diameter depth above invert for pipe size increases.
- 13. Provide profiles for all storm sewer 12-inch and larger.
- 14. Label the 10-year HGL on the storm sewer profiles and ensure the HGL remains at least 1-foot below the rim of each structure.
- 15. Illustrate all pipes intersecting storm structures on the storm profiles.
- 16. Provide a schedule listing the casting type, rim elevation, diameter, and invert sizes/elevations for each proposed, adjusted, or modified storm structure on the utility plan. Round castings shall be provided on all catch basins except curb inlet structures.
- 17. Provide pipe flow calculations for the proposed inlet and pipe.

Storm Water Management Plan

- 18. The Storm Water Management Plan (SWMP) for this development shall be designed in accordance with the Storm Water Ordinance and Chapter 5 of the Engineering Design Manual (updated Jan 31, 2024)
- 19. Provide calculations verifying the post-development runoff rate directed to the proposed receiving drainage course does not exceed the predevelopment runoff rate for the site.
- 20. Since Unit 36 is not being impacted anymore project, please update the "Mando Expansion Runoff Coefficient Calculation" and associated drawings to only consider the 0.82 acres of Unit 37.

Paving & Grading

- 21. Provide a construction materials table on the Paving Plan listing the quantity and material type for each pavement cross-section being proposed.
- 22. Provide the proposed parking lot's internal contours on the Grading Plan at the time of the Final Site Plan submittal.
- 23. The end islands shall conform to the City standard island design, or variations of the standard design, while still conforming to the standards as outlined in Section 2506 of Appendix A of the Zoning ordinance (i.e. 2' minor radius, 15' major radius, minimum 10' wide, 3' shorter than adjacent 19' stall).
- 24. Provide top of curb/walk and pavement/gutter grades to indicate height of curb adjacent to parking stalls or drive areas.
- 25. Sheet 3 shall be signed and sealed by the design engineer responsible for the proposed retaining wall design and all associated calculations.
- 26. A retaining wall that has a grade change of 30" or more within a 3' horizontal distance will require a guardrail.
- 27. The proposed retaining wall seems to intersect the 2' overhang required for the 17' parking spaces on the northeast corner of the proposed lot. Please amend the retaining wall location to be outside the overhang area.



28. Additionally, the foundation of the proposed light pole directly adjacent to the retaining wall may cause issues at its current location due to its potential impact on the wall's base and drainage pipe. Please provide further details of the light pole to prove there will be no detriment to the wall here.

Soil Erosion and Sediment Control

29. A SESC permit is required. A full review has not been completed at this time. A review will be done when a completed packet is submitted to Sarah Marchioni at Community Development.

The following must be submitted with the Revised Final Site Plan:

- 30. A letter from either the applicant or the applicant's engineer must be submitted with the Stamping Set highlighting the changes made to the plans addressing each of the comments listed above <u>and indicating the revised sheets involved</u>. Additionally, a statement must be provided stating that all changes to the plan have been discussed in the applicant's response letter.
- 31. An itemized construction cost estimate must be submitted to the Community Development Department for the determination of plan review and construction inspection fees. This estimate should only include the civil site work and not any costs associated with construction of the building or any demolition work. The estimate must be itemized for each utility (water and storm sewer), on-site paving (square yardage, should include number do detectable warning plates), right-of-way paving (including proposed right-of-way), and grading.

The following must be addressed prior to construction:

- 32. A pre-construction meeting shall be required prior to any site work being started. Please contact Sarah Marchioni in the Community Development Department to setup a meeting (248-347-0430). Be advised that scheduling the pre-construction meeting can take 2-4 weeks.
- 33. A City of Novi Grading Permit will be required prior to any grading on the site. This permit will be issued at the pre-construction meeting (no application required). No fee is required for this permit.
- 34. Material certifications must be submitted to Spalding DeDecker for review prior to the construction of any onsite utilities. Contact Ted Meadows at 248-844-5400 for more information.
- 35. Construction inspection fees in the amount of **\$TBD** must be paid to the Community Development Department. **fees are subject to change.
- 36. A street sign financial guarantee in the amount of **\$TBD** (\$400 per traffic control sign proposed) must be posted at the Community Development Department. Signs must be installed in accordance with MMUTCD standards.

- 37. A traffic control inspection fee of **\$TBD** must be paid to Community Development. This fee is the inspection of traffic control items such as signs, striping, curbs, parking stalls, sidewalk, detectable warning surfaces, and temporary pavement markings.
- 38. A <u>Soil Erosion Control Permit</u> must be obtained from the City of Novi. Contact Sarah Marchioni in the Community Development Department, Building Division (248-347-0430) for forms and information. The financial guarantee and inspection fees will be determined during the SESC review.
- 39. A permit for all proposed work activities within the road right-of-way must be obtained from the City of Novi. This application is available from the City Engineering Division or on the city website (Right-of-Way Permit Application) and can be filed once the Final Site Plan has been submitted. Please contact the Engineering Division at 248-347-0454 for further information. Please submit the cover sheet, standard details, and plan sheets applicable to the permit only.

<u>The following must be addressed prior to issuance of a Temporary Certificate of Occupancy (TCO) approval for the development:</u>

- 40. The amount of the incomplete site work performance guarantee for any outstanding site improvement items (limited to top course of pavement and other minor items), is calculated at 1.2 times the amount required to complete the site improvements (as specified in the Performance Guarantee Ordinance).
- 41. The City's consultant Engineer Spalding DeDecker will prepare the record drawings for this development. The record drawings will be prepared in accordance with Article XII, Design and Construction Standards, Chapter 11 of the Novi Code of Ordinances.
- 42. Submit to the Community Development Department, Waivers of Lien from any parties involved with the installation of each utility as well as a Sworn Statement listing those parties and stating that all labor and material expenses incurred in connection with the subject construction improvements have been paid.
- 43. Submit an up-to-date Title Policy (dated within 90 days of City Council consideration of acceptance) for the purpose of verifying that the parties signing the Easement and Bill of Sale documents have the legal authority to do so. Please be sure that all parties of interest shown on the title policy (including mortgage holders) either sign the easement documents themselves or provide a Subordination Agreement. Please be aware that the title policy may indicate that additional documentation is necessary to complete the acceptance process.

Prior to preparing stamping sets, the Applicant should submit the Electronic Stamping set to Planning for review, if any changes are proposed after Electronic Stamping set approval send revised sheets directly to Engineering for an informal review and approval.

To the extent this review letter addresses items and requirements that require the approval of or a permit from an agency or entity other than the City, this review shall not be considered an indication or statement that such approvals or permits will be issued.

Please contact Ben Nelson at (248)735-5643 or email at bnelson@cityofnovi.org with any questions.

Ben Nelson.

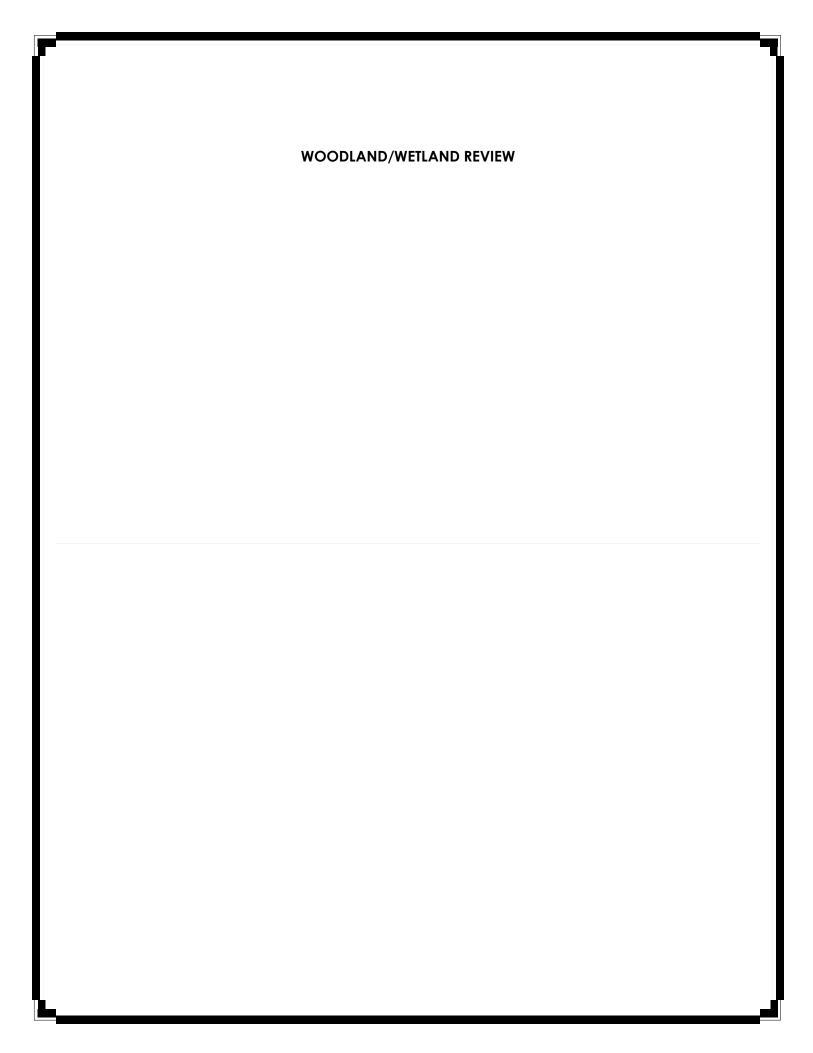
Project Engineer

Benjamin Nelson

cc: Heather Zeigler, Community Development

Diana Shanahan, Planning Assistant

Humna Anjum, Engineering Ben Croy, City Engineer





July 15, 2024

Heather Zeigler Planner – Community Development City of Novi 45175 Ten Mile Road Novi, MI 48375

Submitted electronically to hzeigler@cityofnovi.org

Re: Mando Parking Lot Expansion Woodland Review and Wetland Boundary Determination (Preliminary Site Plan; JSP24-11)

Dear Heather,

Merjent, Inc. (Merjent) has conducted a preliminary site plan (PSP) review of the proposed Mando Parking Lot Expansion (Mando) project (Project), which is located at the southeast corner of the intersection of Hudson Drive and Hexagon Way in Section 4 of the City of Novi (Parcel 50-22-04-378-031; site). The PSP was prepared by Alpine Engineering, Inc. (Applicant) and is dated June 14, 2024; the landscape portion of the PSP was prepared by Allen Design and is also dated June 14, 2024. Merjent reviewed the plan for conformance with the City of Novi's (City) Woodland Protection Ordinance, Chapter 37, and Wetlands and Watercourse Protection Ordinance, Chapter 12 Article V. The site contains City-regulated woodlands and City-regulated wetlands (**Figure 1** & **Figure 2**).

Woodlands

Woodland Recommendation: Merjent **recommends approval** of the Mando PSP. Additional Woodland Review comments have been provided below to meet the requirements of the Woodland Protection Ordinance. The following Woodland Regulations apply to this site:

Woodland Regulation	Required
Woodland Permit (Chapter 37, Section 37-26)	YES
Tree Replacement (Chapter 37, Section 37-8)	YES
Tree Protection (Fence; Chapter 37, Section 37-9)	YES
Woodland Conservation Easement (Chapter 37-30[e])	NO

Woodland Review Comments

- 1. City-regulated woodlands, as identified on the City of Novi Woodlands interactive map website, are present onsite. Note that both the woodlands and property limits depicted on the City map are considered approximations (**Figure 1**).
- Merjent conducted a site visit on July 12, 2024 to review the site conditions relative to the PSP submittal.
 Site photographs are included in **Attachment A**. The on-site conditions reflect the conditions listed in the PSP.

- 3. When a proposed site plan is located within a regulated woodland, any tree proposed for removal with a diameter at breast height (DBH) greater than or equal to eight inches will require tree replacement and a Woodland Use Permit per Section 37-8. This also applies to any tree that will be preserved, but where impacts to critical root zones are proposed.
- 4. Regardless of the presence of regulated woodlands onsite, a Woodland Use Permit is required to perform construction on any site containing the removal of trees larger than 36 inches DBH. No trees on-site are larger than 36 inches DBH.
- 5. The plan has proposed the impact to 53 regulated trees. A **Woodland Use Permit** is required to perform construction on any site containing regulated woodlands. Because more than three trees are proposed for removal, Planning Commission Approval is required.
- 6. **Woodland Replacement**. Based on a review of the plan, the following woodland replacements are required:

Tree Size (DBH, inches)	Number of Trees	Ratio Replacement/Removed Tree	Total Replacements Required
8-11	36	1	36
12-20	15	2	30
21-29	1	3	3
30+	0	4	0
Multi-stem	1	Sum of Stem DBH/8 (rounded up)	3
Total	53	-	-
		Total Replacements Required	72

Sheet L-4 provides a summary of the trees to be removed for the proposed project.

- 7. Critical root zone. Accurate critical root zones must be depicted on the site plan for all regulated trees within 50 feet of the proposed grading or construction activities. Section 37-2 defines a critical root zone as a circular area around a tree with a radius measured to the tree's longest dripline radius plus one foot.
 - a. The applicant has accurately depicted root zones on Sheet L-3 and has indicated the critical root zone impacts in the tree list on Sheet L-4.
- 8. The applicant has stated that no trees will be planted toward woodland replacements and all 72 tree replacements will be paid for into the City of Novi Tree Fund in an amount of **\$28,800** (72 x \$400/tree). It is encouraged that prior to paying into the City of Novi Tree Fund, the applicant try to mitigate the proposed removals on-site to the maximum extent practicable via planting woodland replacements.
- 9. A **woodland fence guarantee of \$6,000** (\$5,000 x 120%) is required per Chapter 26.5-37. The financial guarantee shall be paid prior to issuance of the City of Novi Woodland Use Permit.
 - a. The cost to stake, install, and remove the tree protection fencing has been provided by the applicant on Sheet L-4 (\$2,724). This amount will be used in calculating the Woodland Fence Inspection Fee.



Wetlands

Wetland Recommendation: Merjent **recommends approval** of the Mando PSP based on the comments provided below. Should no changes be made between the PSP and final site plan (i.e., no impacts to wetlands or the setback buffer), Merjent recommends approval of the final site plan as well, provisional to this condition.

Upon review of published resources, the Site appears to contain or immediately borders:

- ☑ City-regulated wetlands, as identified on the City of Novi interactive map website. Note that both wetland and property limits depicted on the City's map are considered approximations (**Figure 2**).
- Wetlands that are regulated by the Michigan Department of Environment, Great Lakes, and Energy (EGLE).
- Wetlands as identified on National Wetland Inventory (NWI) and Michigan Resource Inventory System (MIRIS) maps, as identified on the EGLE Wetlands Viewer interactive map website (**Attachment B**). NWI and MIRIS wetlands are identified by the associated governmental bodies' interpretation of topographic data and aerial photographs.

Merjent conducted a site visit on July 12, 2024 and observed conditions on-site consistent with the provided PSP and the *Wetland Delineation and Jurisdictional Assessment with GPS Survey* prepared by ASTI Environmental (ASTI). The PSP and *Wetland Delineation and Jurisdictional Assessment with GPS Survey* identified one emergent wetland (Wetland A) on-site.

Permits and Regulatory Status

The City of Novi Code of Ordinances, Chapter 12, Article V defines an essential wetland as meeting one or more of the criteria listed in subsections 12-174(b)(1) through (10). Due to Wetland A being part of a larger forested and emergent wetland complex, it is Merjent's opinion that Wetland A is a City of Novi Essential Wetland. However, no impacts are proposed to Wetland A.

ASTI noted in the *Wetland Delineation and Jurisdictional Assessment with GPS Survey* that Wetland A is also likely regulated by EGLE based on being likely larger than five acres (offsite). Merjent concurs with this statement.

Based on the provided PSP, the following wetland-related items will be required for this project:

ltem	Required/Not Required*	
Wetland Permit (specify Non-minor or Minor)	Not Required	
Wetland Mitigation	Not Required	
Environmental Enhancement Plan	Not Required	
Wetland Buffer Authorization	Not Required	
EGLE Wetland Permit	Not Required*	
Wetland Conservation Easement	Not Required	

^{*}EGLE holds final jurisdiction/determination over wetlands and permits within wetlands within the State of Michigan.



Wetland Review Comments

- 1. As stated above, Merjent conducted a site visit on July 12, 2024. Select photos are included in **Attachment A**.
- 2. No impacts are proposed on-site to Wetland A and therefore, a Wetland Permit will not be required for this project.
- 3. In addition to wetlands, the City of Novi regulates wetland and watercourse buffers/setbacks. Article 3.0 (Section 3.6 [M]) of the Zoning Ordinance, states: "There shall be maintained in all districts a wetland and watercourse setback, as provided herein, unless and to the extent, it is determined to be in the public interest not to maintain such a setback. The intent of this provision is to require a minimum setback from wetlands and watercourses". The established wetland and watercourse buffer/setback limit is 25 horizontal feet, regardless of grade change. The location and area of affected wetland buffers/setbacks must be identified on site development plans.
 - a. The 25-foot setback buffer is identified on both the PSP and the *Wetland Delineation and Jurisdictional Assessment with GPS Survey*.
 - b. As noted in the PSP, no impacts are proposed within the 25-foot natural features setback. Therefore, a wetland buffer authorization is not needed for this project.
- 4. The City of Novi requires the boundary lines of any watercourses or wetlands on the Site to be clearly flagged or staked and such flagging/staking shall remain in place throughout the conduct of permit activity (Section 12-172). The site does not need to be re-flagged during the site plan review process, but prior to construction, the wetlands should be marked or identified for avoidance in the field if the original flagging is removed or has deteriorated.

Should you have any questions or concerns with this review, please contact me via email at iason.demoss@merjent.com or via phone at (619) 944-3835.

Sincerely,

Merjent, Inc.

Jason DeMoss, PWS Environmental Consultant

Kuen Dimoll

Enclosures:

Figure 1 – City of Novi Woodlands Map
Figure 2 – City of Novi Wetlands Map
Attachment A – Site Photographs
Attachment B – Wetland Resource Documents

CC:

Diana Shanahan, City of Novi, dshanahan@cityofnovi.org
Rick Meader, City of Novi, rmeader@cityofnovi.org
Barbara McBeth, City of Novi, bmcbeth@cityofnovi.org



Robb Roos, Merjent, robb.roos@merjent.com
Kyle Luther, Merjent, kyle.luther@merjent.com



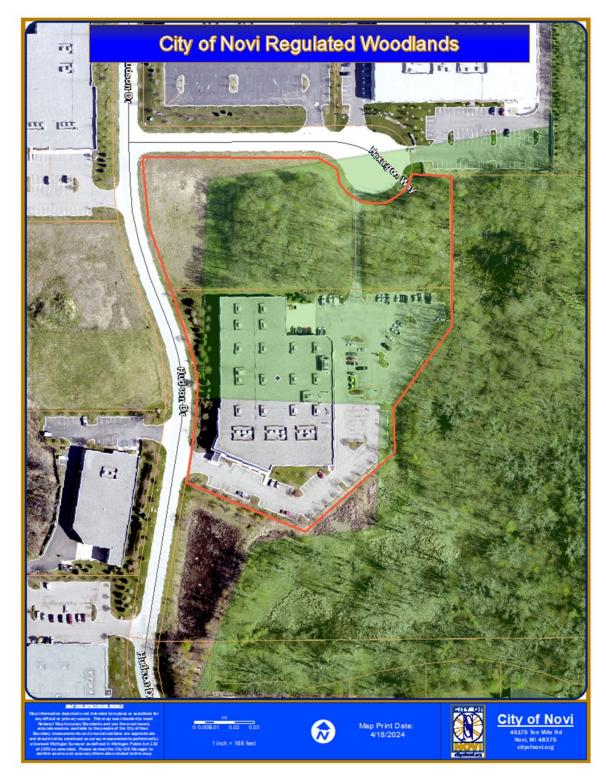


Figure 1. City of Novi Regulated Woodlands Map
Approximate parcel boundary is shown in Red.
(Approximate) Regulated Woodland areas are shown in Green





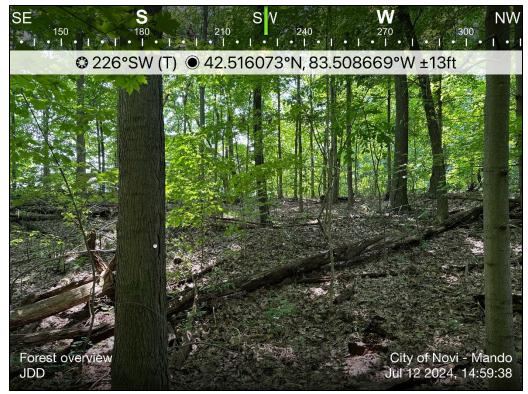
Figure 2. City of Novi Regulated Wetlands Map

Approximate parcel boundary is shown in red. (Approximate) Regulated Wetland areas are shown in turquoise.



Attachment A Site Photographs





Overview of the forest on-site



Overview of the forest on-site





Typical tree survey tag on-site, Tree 204



Typical tree survey tag on-site, Tree 207



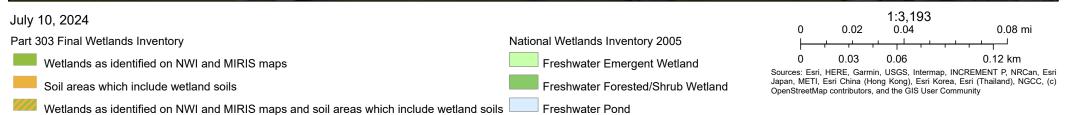
Overview of flagging/staking on-site for Wetland A.

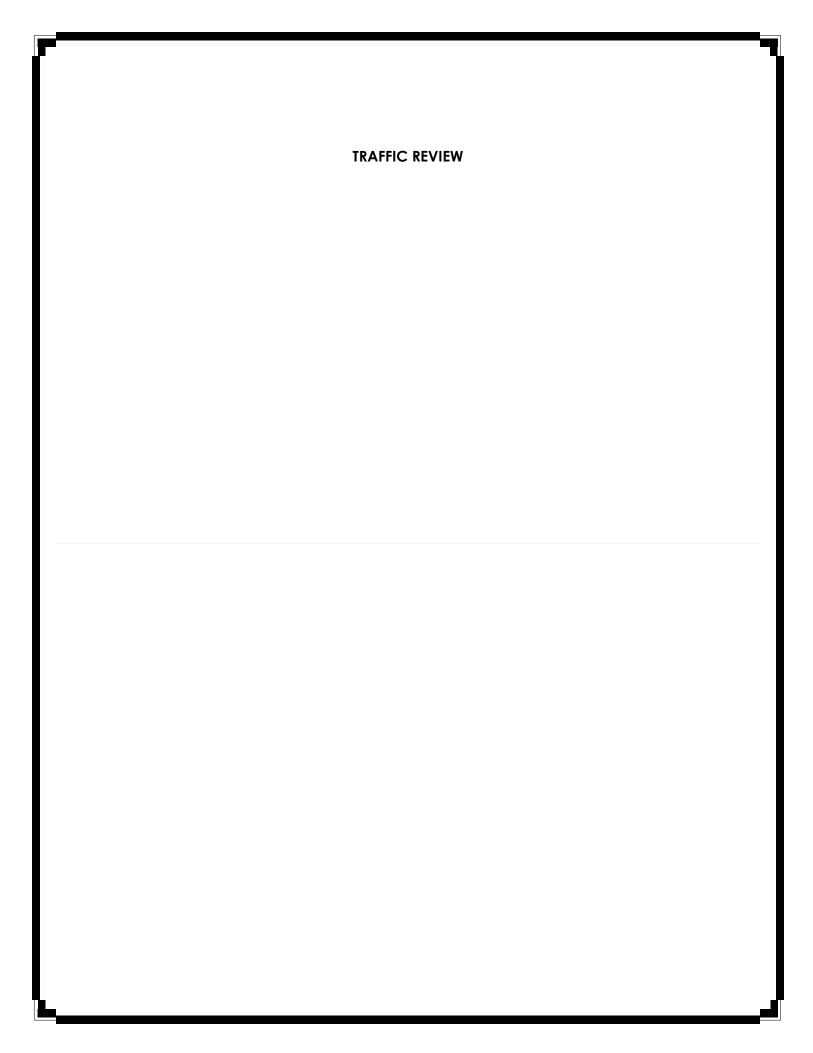
Attachment B Wetland Resource Documents



Wetlands Map Viewer









To:

Barbara McBeth, AICP City of Novi 45175 10 Mile Road Novi, Michigan 48375

CC:

Lindsay Bell, Heather Zeigler, Humna Anjum, Diana Shanahan, Adam Yako, Dan Commer

AECOM 39575 Lewis Dr, Ste. 400 Novi MI, 48377 USA aecom.com

Project name:

JSP24-11 – Mando Parking Lot Expansion PSP/FSP Traffic Review

From: AECOM

Date: July 15, 2024

Memo

Subject: JSP24-11 - Mando Parking Lot Expansion Combined Preliminary and Final Traffic Review

The combined preliminary and final site plan was reviewed to the level of detail provided and AECOM recommends **approval** for the applicant to move forward as long as the comments are addressed to the satisfaction of the City.

GENERAL COMMENTS

- 1. The applicant, Stucky Vitale Architects, Inc., is proposing a parking lot expansion.
- 2. The development is located on the east side of Hudson Drive, south of Hexagon Way. Hudson Drive and Hexagon Way are under the jurisdiction of the City of Novi.
- 3. The site is zoned I-1 (Light Industrial).
- 4. There are no traffic related deviations required at this time.

TRAFFIC IMPACTS

- 1. AECOM did not perform an initial trip generation based on the ITE Trip Generation Manual, 11th Edition, as there are no changes in the building footprint.
- 2. The City of Novi generally requires a traffic impact study/statement if the number of trips generated by the proposed development exceeds the City's threshold of more than 750 trips per day or 100 trips per either the AM or PM peak hour, or if the project meets other specified criteria.

	Trip Impact Study Recommendation
Type of Study:	Justification
None	-

TRAFFIC REVIEW

The following table identifies the aspects of the plan that were reviewed. Items marked O are listed in the City's Code of Ordinances. Items marked with ZO are listed in the City's Zoning Ordinance. Items marked with ADA are listed in the Americans with Disabilities Act. Items marked with MMUTCD are listed in the Michigan Manual on Uniform Traffic Control Devices.

The values in the 'Compliance' column read as 'met' for plan provision meeting the standard it refers to, 'not met' stands for provision not meeting the standard and 'inconclusive' indicates applicant to provide data or information for review and 'NA' stands for not applicable for subject Project. The 'remarks' column covers any comments reviewer has and/or 'requested/required variance' and 'potential variance'. A potential variance indicates a variance that will be required if modifications are not made or further information provided to show compliance with the standards and ordinances. The applicant should put effort into complying with the standards; the variances should be the last resort after all avenues for complying have been exhausted. Indication of a potential variance does not imply support unless explicitly stated.

EXT	ERNAL SITE ACCESS AND OPERATION	ONS		
No.	Item	Proposed	Compliance	Remarks
1	Driveway Radii O <u>Figure IX.3</u>	30' and 35'	Met	
2	Driveway Width O Figure IX.3	25'	Met	Within range for driveway. Meets width of existing parking lot.
3	Driveway Taper O <u>Figure IX.11</u>			
3a	Taper length	-	N/A	
3b	Tangent	-	N/A	
4	Emergency Access O 11-194.a.19	2 access points	Met	
5	Driveway sight distance O Figure VIII-E	-	N/A	For major roads.
6	Driveway spacing			
6a	Same-side O <u>11.216.d.1.d</u>	260' sight line	Met	
6b	Opposite side O <u>11.216.d.1.e</u>	103.4'	Met	Hexagon Way is classified as a non-residential collector.
7	External coordination (Road agency)	-	N/A	
8	External Sidewalk Master Plan & EDM	Not required	N/A	
9	Sidewalk Ramps EDM 7.4 & R-28-K	-	N/A	
10	Any Other Comments:			

INTE	RNAL SITE OPERATIONS			
No.	Item	Proposed	Compliance	Remarks
11	Loading zone ZO 5.4	Existing, none proposed	N/A	
12	Trash receptacle ZO 5.4.4	Existing	N/A	
13	Emergency Vehicle Access	Provided	Met	
14	Maneuvering Lane ZO 5.3.2	24' and 25'	Met	
15	End islands ZO 5.3.12			
15a	Adjacent to a travel way	Dimensions provided	Met	
15b	Internal to parking bays	Dimensions provided	Met	
16	Parking spaces ZO 5.2.12	37 additional proposed		See Planning review letter.
17	Adjacent parking spaces <u>ZO</u> <u>5.5.3.C.ii.i</u>	≤ 15 spaces in all parking bays	Met	
18	Parking space length ZO 5.3.2	17' and 19'	Met	
19	Parking space Width ZO 5.3.2	9'	Met	
20	Parking space front curb height <u>ZO 5.3.2</u>	4" in front of 17' spaces and 6"	Met	

INTE	RNAL SITE OPERATIONS			
No.	Item	Proposed	Compliance	Remarks
21	Accessible parking – number ADA	None proposed	Met	Not required for expansion.
22	Accessible parking – size ADA	N/A	-	
23	Number of Van-accessible space ADA	N/A	-	
24	Bicycle parking			
24a	Requirement ZO 5.16.1	N/A	-	
24b	Location <u>ZO 5.16.1</u>	N/A	-	
24c	Clear path from Street <u>ZO</u> <u>5.16.1</u>	N/A	-	
24d	Height of rack ZO 5.16.5.B	N/A	-	
24e	Other (Covered / Layout) <u>ZO</u> <u>5.16.1</u>	N/A	-	
25	Sidewalk – min 5' wide Master Plan	N/A	-	
26	Sidewalk ramps EDM 7.4 & R- 28-K	N/A	-	
27	Sidewalk – distance back of curb	N/A	-	
28	Cul-De-Sac O <u>Figure VIII-F</u>	N/A	-	
29	EyeBrow O Figure VIII-G	N/A	-	
30	Turnaround <u>ZO 5.10</u>	N/A	-	
31	Any Other Comments:			

SIG	NING AND STRIPING			
No.	Item	Proposed	Compliance	Remarks
32	Signing: Sizes MMUTCD	N/A	-	
33	Signing table: quantities and sizes	N/A	-	
34	Signs 12" x 18" or smaller in size shall be mounted on a galvanized 2 lb. U-channel post MMUTCD	N/A	-	
35	Signs greater than 12" x 18" shall be mounted on a galvanized 3 lb. or greater U-channel post MMUTCD	N/A	-	
36	Sign bottom height of 7' from final grade MMUTCD	N/A	-	
37	Signing shall be placed 2' from the face of the curb or edge of the nearest sidewalk to the near edge of the sign MMUTCD	N/A	-	
38	FHWA Standard Alphabet series used for all sign language MMUTCD	N/A	-	
39	High-Intensity Prismatic (HIP) sheeting to meet FHWA retro-reflectivity MMUTCD	N/A	-	
40	Parking space striping notes	N/A	-	
41	The international symbol for accessibility pavement markings ADA	N/A	-	
42	Crosswalk pavement marking detail	N/A	-	

SIG	NING AND STRIPING			
No.	Item	Proposed	Compliance	Remarks
43	Any Other Comments:			

Note: Hyperlinks to the standards and Ordinances are for reference purposes only, the applicant and City of Novi to ensure referring to the latest standards and Ordinances in its entirety.

Should the City or applicant have questions regarding this review, they should contact AECOM for further clarification.

Sincerely,

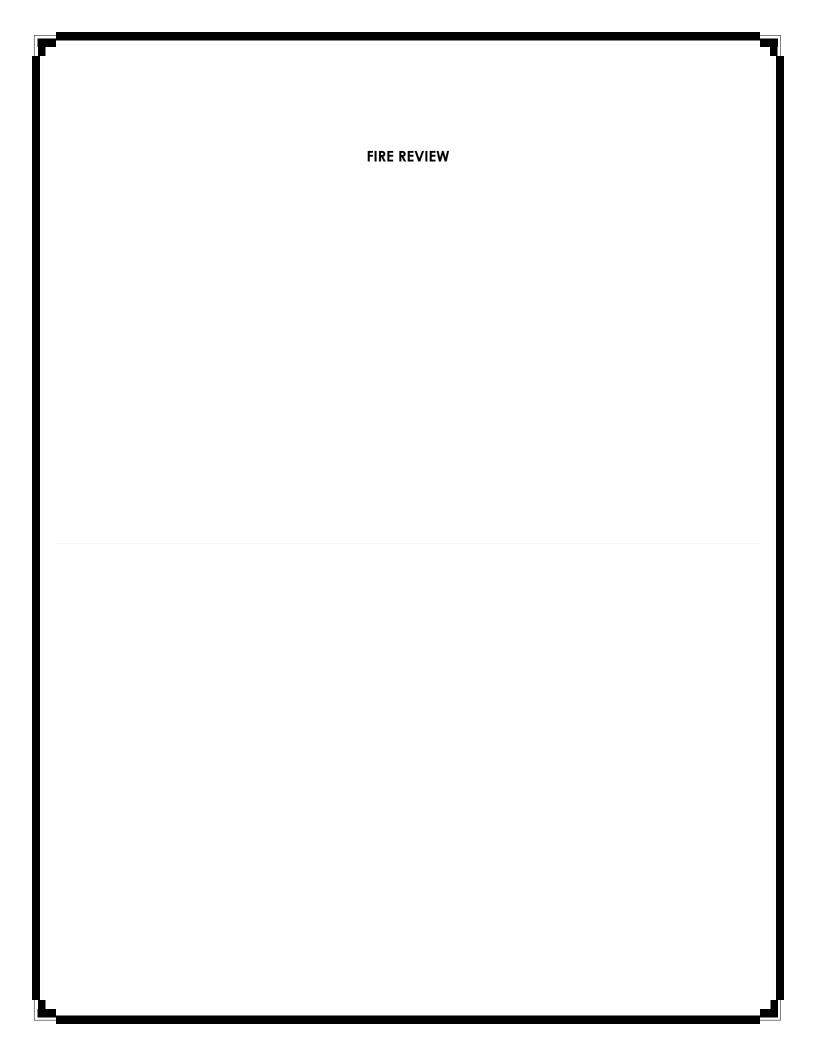
AECOM

Paula K. Johnson, PE Senior Transportation Engineer

Paulo K. Johnson

Saumil Shah, PMP Project Manager

Saumis Shal





CITY COUNCIL

Mayor

Justin Fischer

Mayor Pro Tem

Laura Marie Casey

Dave Staudt

Brian Smith

Ericka Thomas

Matt Heintz

Priya Gurumurthy

City Manager Victor Cardenas

Director of Public Safety Chief of Police

Erick W. Zinser

Fire Chief

John B. Martin

Assistant Chief of Police

Scott R. Baetens

Assistant Fire Chief

Todd Seog

July 10, 2024

TO: Barbara McBeth - City Planner Lindsay Bell - Plan Review Center Heather Zeigler – Plan Review Center Dan Commer – Plan Review Center Diana Shanahan – Planning Assistant

RE: Mando Parking Lot Expansion

PSP# 24-0034

Project Description:

Add more parking spaces to the existing parking lot.

Comments:

Meets fire departments standards.

Recommendation:

Approved

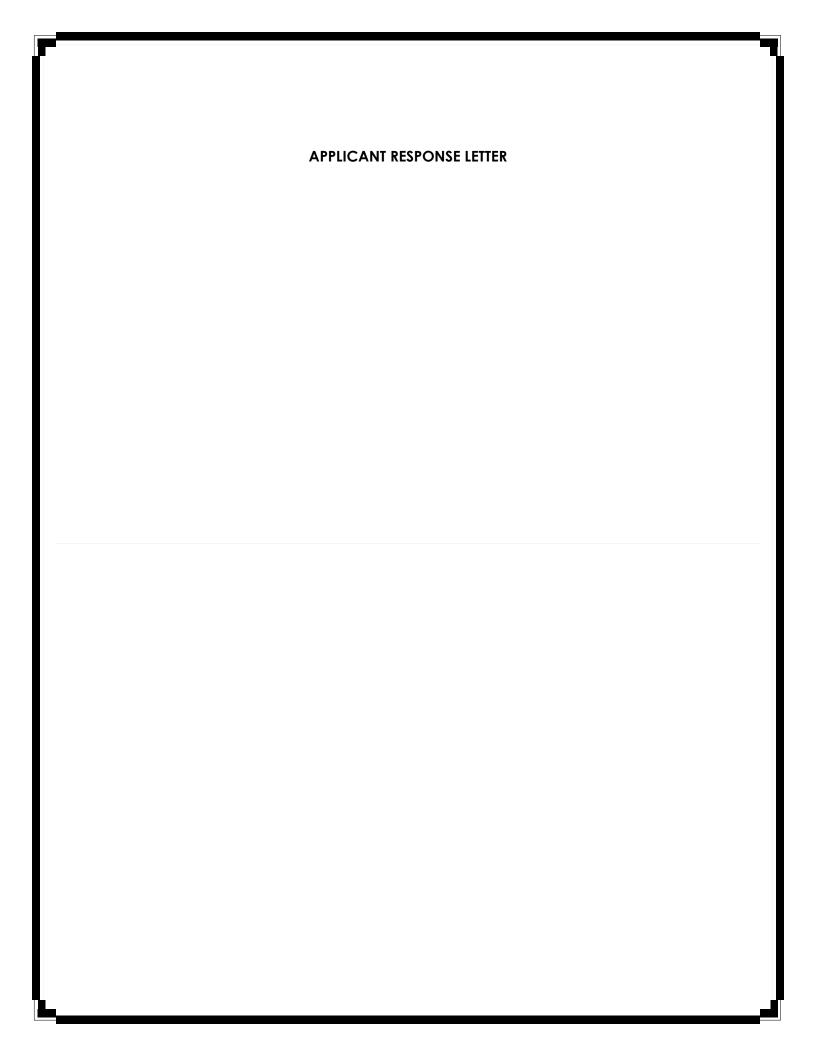
Sincerely,

Kevin S. Pierce-Fire Marshal City of Novi – Fire Dept.

cc: file

Novi Public Safety Administration 45125 Ten Mile Road Novi, Michigan 48375 248.348.7100 248.347.0590 fax

cityofnovi.org





46892 West Road, Suite 109 Novi, Michigan 48377 Phone: (248) 926-3701 Fax: (248) 926-3765 Web: www.alpine-inc.net

August 5, 2024

Heather Zeigler City of Novi Community Development Department 45175 West 10 Mile Road Novi, MI 48375

Re: Mando Parking Lot Expansion
Response to Preliminary Site Plan Review Comments
Alpine Engineering Inc. Project #05-165.5
JSP 24-0011

Dear Heather,

On behalf of our client, Tower Construction, please find the following information enclosed for your review and distribution

- PDF of the Preliminary Site Plan set (dated 2024-06-14)
- Color rendering of the Site Plan (dated 2024-06-14)
- Response to landscape review comments letter (dated 2024-08-02)

The following is in response to the reviews received on July 22, 2024, via email for the above referenced project:

PLANNING REVIEW CHART (dated July 18, 2024)

- Comment: Planning Commission approval will be required for parking in the front yard.

 Response: Understood. The Applicant respectively requests approval for the proposed front yard parking.
- Comment: Please include additional bicycle parking in the next submittal.

Response: Additional bicycle parking will be included in the next submittal.

• Comment: Natural Features: The proposed use is compatible with the natural features and characteristics of the land, including existing woodlands, wetlands, watercourses and wildlife habitats. Woodland tree removals will require permit. To be determined by the planning commission.

Response: Understood.

• Comment: Impact on Surrounding Neighborhoods: The proposed use is compatible with adjacent uses of land in terms of location, size, character, and impact on adjacent property or the surrounding neighborhood. Expansion of existing use, closest residential use is some distance, and buffered by woodlands. To be determined by the planning commission.

Response: Understood.

• Comment: A photometric plan is required at the Preliminary Site Plan stage when the site abuts residential.

Response: A photometrics plan will be included in the next submittal.

Landscape Review Summary Chart (dated July 11, 2024)

Refer to the response to review letter prepared by Allen Design (dated August 2, 2024).

ENGINEERING REVIEW (dated July 18, 2024)

General

1. Comment: Only at the time of the printed Stamping Set submittal, provide the City's standard detail sheets for storm sewer (2 sheets) and paving (2 sheets). The most updated details can be found on the City's website under Engineering Standards and Construction Details.

Response: The City's standard detail sheets will be included with the Stamping Set submittal.

2. Comment: A Right-of-Way Permit will be required from the City of Novi.

Response: Understood.

3. Comment: Provide a traffic control sign table listing the quantities of each permanent sign type proposed for the development. Provide a note along with the table stating all traffic signage will comply with the current MMUTCD standards.

Response: A traffic control sign table will be included in the next submittal.

4. Comment: Provide a traffic control plan for the proposed road work activity.

Response: A traffic control plan will be included in the next submittal.

5. Comment: Provide a note that compacted sand backfill (MDOT sand Class II) shall be provided for all utilities within the influence of paved areas; illustrate and label on the profiles.

Response: Additional design information will be provided in the next submittal.

6. Comment: Provide a construction materials table on the utility plan listing the quantity and material type for the storm sewer being proposed.

Response: Additional design information will be provided in the next submittal.

7. Comment: Show the locations of all light poles on the utility plan and indicate the typical foundation depth for the pole to verify that no conflicts with utilities will occur. Light poles in a utility easement will require a License Agreement

Response: Additional design information will be provided in the next submittal.

8. Comment: Refer to the City standard details for the proposed boardwalk design.

Response: A boardwalk is not currently proposed.

Irrigation Comments

9. Comment: Indicate if irrigation is proposed, and if so, include containment notes on irrigation sheets.

Response: Additional design information will be provided in the next submittal.

Storm Sewer

10. Comment: A minimum cover depth of 3 feet shall be maintained over all proposed storm sewer. Currently, a few pipe sections do not meet this standard. Grades shall be elevated, and minimum pipe slopes shall be used to maximize the cover depth. In situations where the minimum cover cannot be achieved, Class V pipe must be used with an absolute minimum cover depth of 2 feet. An explanation shall be provided where the cover depth cannot be provided.

Response: Grades will be raised to accommodate the minimum cover of three (3)-ft over the proposed storm sewer; however, there may be areas over the existing storm sewer where the resultant cover is less than three (3)-ft. This is due to lowering pavement elevations to accommodate positive drainage away from a potential future building expansion. Additional design information and explanation, if needed, will be provided in the next submittal.

11. Comment: Provide a 0.1-foot drop in the downstream invert of all storm structures where a change in direction of 30 degrees or greater occurs.

Response: It is anticipated that a 0.1-foot drop in the downstream invert can be provided. Additional design information will be provided in the next submittal.

12. Comment: Match the 0.80 diameter depth above invert for pipe size increases.

Response: Due to the proposed grading to lessen the retaining wall height, it is not anticipated that it will be possible to match the 0.80 diameter depth and still meet cover requirements over the proposed storm sewer. Additional design information and explanation, if needed, will be provided in the next submittal.

13. Comment: Provide profiles for all storm sewer 12-inch and larger.

Response: Profiles will be provided in the next submittal.

14. Comment: Label the 10-year HGL on the storm sewer profiles and ensure the HGL remains at least 1-foot below the rim of each structure.

Response: Additional information will be provided in the next submittal.

15. Comment: Illustrate all pipes intersecting storm structures on the storm profiles.

Response: Additional information will be provided in the next submittal.

16. Comment: Provide a schedule listing the casting type, rim elevation, diameter, and invert sizes/elevations for each proposed, adjusted, or modified storm structure on the utility plan. Round castings shall be provided on all catch basins except curb inlet structures.

Response: Additional information will be provided in the next submittal.

17. Comment: Provide pipe flow calculations for the proposed inlet and pipe.

Response: Additional information will be provided in the next submittal.

Storm Water Management Plan

18. Comment: The Storm Water Management Plan (SWMP) for this development shall be designed in accordance with the Storm Water Ordinance and Chapter 5 of the Engineering Design Manual.

Response: Additional information will be provided in the next submittal.

19. Comment: Provide calculations verifying the post-development runoff rate directed to the proposed receiving drainage course does not exceed the pre-development runoff rate for this site.

Response: Additional information will be provided in the next submittal.

20. Comment: Since Unit 36 is not being impacted anymore project, please update the "Mando Expansion Runoff Coefficient Calculation" and associated drawings to only consider the 0.82 acres of Unit 37.

Response: Revised information will be provided in the next submittal.

Paving & Grading

21. Comment: Provide a construction materials table on the Paving Plan listing the quantity and material type for each pavement cross-section being proposed.

Response: Additional information will be provided in the next submittal.

22. Comment: Provide the proposed parking lot's internal contours on the Grading Plan at the time of the Final Site Plan submittal.

Response: Additional information will be provided in the next submittal.

23. Comment: The end islands shall conform to the City standard island design, or variations of the

standard design, while still conforming to the standards as outlined in Section 2506 of Appendix A of the Zoning ordinance

Response: Additional information will be provided in the next submittal.

24. Comment: Provide top of curb/walk and pavement/gutter grades to indicate height of curb adjacent to parking stalls or drive areas.

Response: Additional information will be provided in the next submittal.

25. Comment: Sheet 3 shall be signed and sealed by the design engineer responsible for the proposed retaining wall design and all associated calculations.

Response: Retaining wall calculations will be submitted by others as part of the next submittal.

26. Comment: A retaining wall that has a grade change of 30" or more within a 3' horizontal distance will require a guardrail.

Response: Noted. Details regarding the retaining wall will be submitted by others as part of the next submittal.

27. Comment: The proposed retaining wall seems to intersect the 2' overhang required for the 17' parking spaces on the northeast corner of the proposed lot. Please amend the retaining wall location to be outside the overhang area.

Response: A dimension and/or note will be added to verify compliance. This information will be added as part of the next submittal.

28. Comment: Additionally, the foundation of the proposed light pole directly adjacent to the retaining wall may cause issues at its current location due to its potential impact on the wall's base and drainage. Please provide further details of the light pole to prove there will be no detriment to the wall here.

Response: A dimension and/or note will be added to accommodate constructability. This information will be added as part of the next submittal.

Soil Erosion and Sedimentation Control

29. Comment: A SESC permit is required. A full review has not been completed at this time. A review will be done when a completed packet is submitted to Sarah Marchioni at Community Development.

Response: It is noted that a SESC permit is required.

The following must be submitted with the Revised Final Site Plan

30. Comment: A letter from either the applicant or the applicant's engineer must be submitted with the Stamping Set highlighting the changes made to the plans addressing each of the comments listed above and indicating the revised sheets involved. Additionally, a statement must be provided stating that all changes to the plan have been discussed in the applicant's response letter.

Response: It is noted that a response to review letter must be submitted highlighting the changes of the stamping set.

31. Comment: An itemized construction cost estimate must be submitted to the Community Development Department for the determination of plan review and construction inspection fees. This estimate should only include the civil site work and not any costs associated with construction of the building or any demolition work. The estimate must be itemized for each utility (water and storm sewer), on-site paving (square yardage, should include number do detectable warning plates), right-of-way paving (including proposed right-of-way), and grading.

Response: It is noted that an itemized construction cost estimate is required.

The following must be addressed prior to construction

32. Comment: A pre-construction meeting shall be required prior to any site work being started. Please contact Sarah Marchioni in the Community Development Department to setup a meeting (248-347-0430). Be advised that scheduling the pre-construction meeting can take 2-4 weeks.

Response: Noted.

33. Comment: A City of Novi Grading Permit will be required prior to any grading on the site. This permit will be issued at the pre-construction meeting (no application required). No fee is required for this permit.

Response: Noted.

34. Comment: Material certifications must be submitted to Spalding DeDecker for review prior to the construction of any onsite utilities.

Response: Noted.

35. Comment: Construction inspection fees in the amount of \$TBD must be paid to the Community Development Department.

Response: Noted.

36. Comment: A street sign financial guarantee in the amount of \$TBD (\$400 per traffic control sign proposed) must be posted at the Community Development Department. Signs must be installed in accordance with MMUTCD standards.

Response: Noted.

37. Comment: A traffic control inspection fee of \$TBD must be paid to Community Development. This fee is the inspection of traffic control items such as signs, striping, curbs, parking stalls, sidewalk, detectable warning surfaces, and temporary pavement markings.

Response: Noted.

38. Comment: A Soil Erosion Control Permit must be obtained from the City of Novi. Contact Sarah Marchioni in the Community Development Department, Building Division for forms and information. The financial guarantee and inspection fees will be determined during the SESC review.

Response: Noted.

39. Comment: A permit for all proposed work activities within the road right-of-way must be obtained from the City of Novi. The application is available from the City Engineering Division or on the city website and can be filled once the Final Site Plan has been submitted. Please submit the cover sheet, standard details, and plan sheets applicable to the permit only.

Response: Noted.

The following must be addressed prior to issuance of a Temporary Certificate of Occupancy (TCO) approval for the development

- 40. Comment: The amount of the incomplete site work performance guarantee for any outstanding site improvement items is calculated at 1.2 times the amount required to complete the site improvements. Response: Noted.
- 41. Comment: The City's consultant Engineer Spalding DeDecker will prepare the record drawings for this development. The record drawings will be prepared in accordance with Article XII, Design and Construction Standards, Chapter 11 of the Novi Code of Ordinances.

Response: Noted.

42. Comment: Submit to the Community Development Department, Waivers of Lien from any parties involved with the installation of each utility as well as a Sworn Statement listing those parties and stating that all labor and material expenses incurred in connection with the subject construction improvements have been paid.

Response: Noted.

43. Comment: Submit an up-to-date Title Policy for the purpose of verifying that the parties signing the Easement and Bill of Sale documents have the legal authority to do so.

Response: Noted.

MERJENT REVIEW (dated July 15, 2024)

Woodlands

1. Comment: City-regulated woodlands, as identified on the City of Novi Woodlands interactive map website, are present on site. Note that both the woodlands and property limits depicted on the City map are considered approximations.

Response: Noted.

2. Comment: Merjent conducted a site visit on July 12, 2024 to review the site conditions relative to the PSP submittal. Site photographs are included in Attachment A. The on-site conditions reflect the conditions listing in the PSP.

Response: Noted.

3. Comment: When a proposed site plan is located within a regulated woodland, any tree proposed for removal with a diameter at breast height (DBH) greater than or equal to eight inches will require tree replacement and a Woodland Use Permit per Section 37-8. This also applies to any tree that will be preserved, but where impacts to critical root zones are proposed.

Response: Noted. Refer to the Landscape Plan prepared by Allen Design regarding proposed tree replacements.

4. Comment: Regardless of the presence of regulated woodlands onsite, a Woodland Use Permit is required to perform construction on any site containing the removal of trees larger than 36 inches DBH. No trees on-site are larger than 36 inches DBH.

Response: Noted.

5. Comment: The plan has proposed the impact to 53 regulated trees. A Woodland Use Permit is required to perform construction on any site containing regulated woodlands. Because more than three trees are proposed for removal, Planning Commission Approval is required.

Response: Noted.

6. Comment: Woodland Replacement. Sheet L-4 provides a summary of the trees to be removed for the proposed project.

Response: Noted.

- 7. Comment: Critical root zone. Accurate critical root zones must be depicted on the site plan for all regulated trees within 50 feet of the proposed grading or construction activities. Section 37-2 defines a critical root zone as a circular area around a tree with a radius measured to the tree's longest dripline radius plus one foot.
 - a. The applicant has accurately depicted root zones on Sheet L-3 and has indicated the critical root zone impacts in the tree list on Sheet L-4.

Response: Noted.

8. Comment: The applicant has stated that no trees will be planted toward woodland replacements and all 72 tree replacements will be paid for into the City of Novi Tree Fund in an amount of \$28,000. It is encouraged that prior to paying into the City of Novi Tree Fund, the applicant try to mitigate the proposed removals on-site to maximum extent practicable via planting woodland replacements.

Response: Noted. Refer to the Landscape Plan prepared by Allen Design.

9. Comment: A woodland fence guarantee of \$6000 is required per Chapter 26.5-37. The financial guarantee shall be paid prior to issuance of the City of Novi Woodland Use Permit.

a. The cost to stake, install, and remove the tree protection fencing has been provided by the applicant on Sheet L-4. This amount will be used in calculating the Woodland Fence Inspection Fee.

Response: Noted.

Wetland

1. Comment: As stated above, Merjent conducted a site visit on July 12, 2024. Select photos are included in Attachment A.

Response: Noted.

2. Comment: No impacts are proposed on-site to Wetland A and therefore, a Wetland Permit will not be required for this project.

Response: Noted.

- 3. Comment: In addition to wetlands, the City of Novi regulates wetland and watercourse buffer/setbacks. Article 3.0 of the Zoning Ordinance, states: "There shall be maintained in all districts a wetland and watercourse setback, as provided herein, unless and to the extent, it is determined to be in the public interest not to maintain such a setback. The intent of this provision is to require a minimum setback from wetlands and watercourses". The established wetland and watercourse buffer/setback limit is 25 horizontal feet, regardless of grade change. The location and area of affected wetland buffers/setback must be identified on site development plans.
 - a. The 25-foot setback buffer is identified on both the PSP and the Wetland Delineation and Jurisdiction Assessment with GPS Survey.
 - b. As noted in the PSP, no impacts are proposed within the 25-foot natural features setback. Therefore, a wetland buffer authorization is not needed for this project.

Response: Noted.

4. Comment: The City of Novi requires the boundary lines of any watercourses or wetlands on the Site to be clearly flagged or staked and such flagging/staking shall remain in place throughout the conduct of permit activity. The site does not need to be re-flagged during the site plan review process, but prior to construction, the wetlands should be marked or identified for avoidance in the field if the original flagging is removed or has deteriorated.

Response: Noted.

AECOM – Combined Preliminary and Final Traffic Review (dated July 15, 2024)

• Comment: The combined preliminary and final site plan was reviewed to the level of detail provided and AECOM recommends approval for the applicant to move forward as long as the comments are addressed to the satisfaction of the City.

Response: Noted.

City of Novi Fire Department Review (dated April 9, 2024)

• Comment: Meets fire department standards.

Response: Noted.

If you have any questions/comments, please feel free to contact me at (248) 941-5624 or shiloh@alpine-inc.net.

Sincerely,

Alpine Engineering, Inc.

Shiloh Dahlin

Senior Project Engineer



August 2, 2024

Mr. Rick Meader, Landscape Architect **City of Novi Community Development** 45175 West 10 Mile Novi, MI 48375

RE: Mando Parking Addition

Dear Mr. Meader:

Below are our responses to your review dated July 11, 2024.

Landscape Comments:

- Non-Residential Landscaping. Two trees will be added to Hexagon Way.
- Parking Lot Landscaping. The VUA hatch will be shown on the next submittal.

If you have any questions or comments regarding this response, please contact me at your convenience.

Sincerely,

James Q. Allen Allen Design L.L.C.