Director's Report

Project Name: Taco Bell (Bogie Lake Road & Highland Road)

Description: Preliminary Site Plan Approval

Date on Agenda this packet pertains to: January 6th, 2022

□ Public Hearing	□Special Land Use
⊠Initial Submittal	□Rezoning
□Revised Plans	□0ther:
⊠Preliminary Approval	
□Final Approval	

Contact	Consultants &	Approval	Denial	Approved w/Conditions	Comments
	Departments				
Sean O'Neil	Planning			\boxtimes	Based on conditional
	Director				approval from reviewer's
DLZ	Engineering			\boxtimes	See letter dated
	Consultant				10/15/2021
McKenna &	Planning			\boxtimes	See letter dated
Associates	Consultant				10/17/2021
Jason	WLT Fire	\boxtimes			See letter dated
Hanifen	Marshal				10/07/2021
Aaron Potter	Director of				See letter dated
	DPS				10/16/2021
Jeanine	Assessor				See memo dated
Smith					10/01/2021



October 15, 2021

Sean O' Neil Community Development Department Charter Township of White Lake 7525 Highland Road White Lake, Michigan 48383

RE: Taco Bell Preliminary Site Plan Review - 1st Review

Ref: DLZ No. 2145-7233-16 Design Professional: L+A Architects Inc.

A.I.A/Kem-Tec

Dear Mr. O' Neil,

Our office has performed a Preliminary Site Plan review for the above-mentioned plan dated September 29, 2021. The plans were reviewed for feasibility based on general conformance with the Township Engineering Design Standards.

General Site Information

This 1.069 acre site is located at the northeast corner of M-59 and Bogie Lake Road.

Site Improvement Information:

- Construction of a 2,235 sf fast food restaurant.
- Associated paved and curbed parking area.
- ADA parking and barrier free access ramps.
- Water and sanitary sewer service.
- Storm water management facilities.

We offer the following comments with respect to our review:

<u>General</u>

1. The Nonexclusive Access Easement at the rear of the property will need to be amended to reflect the new location of the proposed access aisle.

Paving/Grading

- 1. All proposed barrier free ramps and ADA parking spaces will need to meet ADA standards in terms of slopes and dimensions; further details will be required at the time of Final Site Plan/Final Engineering Plan submittal.
- 2. Preliminary grading of the site has been proposed and demonstrates general drainage patterns; additional grades for greenspace areas will be required at time of Final Site Plan/Final Engineering Plan review to ensure positive drainage on entire site.
- 3. The existing sidewalk along Bogie Lake Road may require maintenance in some areas as it appears at least one area may need repair (north of sanitary MH#20074).
- 4. Plan sheet C3.1 shows the turning radius profile for a 40' long fire truck and the path necessary for navigating the site. Please note the plans indicate the truck would be required to turn around by backing into the hatched area on the south side of the parking lot. We defer further comment to the Township Fire Department.

Watermain

- 1. We defer to the Fire Department with regard to any items related to fire suppression including hydrant spacing. Note there is an existing fire hydrant near the south east corner of the subject property.
- 2. Plans show a 1.5" copper service lead for the building which satisfies the level of detail required for this submittal. The plans indicate the service tap will be made via tapping sleeve and well; please note that a well is not required for the service lead connection.

Sanitary Sewer

1. A proposed 6" sanitary sewer lead has been indicated along with a 1000-gallon grease trap meeting the level of detail required for this level of submittal. Please note that the wastewater flowing through the grease trap shall only come from the kitchen, an additional lead for black water shall come from the building and connect to the proposed sewer lead downstream of the grease trap.

Stormwater Management

- 1. Many of the existing utility structures are double labeled making them difficult to read and identify, please review and revise as necessary.
- 2. Please show existing off site storm sewer to clarify ultimate stormwater discharge point. Plans reference the Meijer plans and subject property being part of the Meijer drainage district, however, existing storm sewer shown on the plans does not appear to connect to the Meijer storm system.
- 3. Please clarify if stormwater treatment will be accomplished within the existing Meijer detention system or if pre-treatment will be required prior to stormwater leaving the site.

WLT-Taco Bell- PSP Review.01
October 15, 2021
Page 3 of 3

4. The plan shows a proposed connection of an 18" diameter storm pipe to the existing 12" diameter storm sewer. We question the basis for this design and note that the intent on the site shall not be to restrict storm water flows which would result in parking lot detention. Please clarify.

Recommendation

The plan demonstrates engineering feasibility and we therefore recommend approval of the Preliminary Site Plan subject to the above items being addressed at the time of Final Site Plan/Final Engineering Plan submittal. To help facilitate our review of the Final Site Plan / Final Engineering Plan, please provide a response letter addressing the above comments.

Please feel free to contact our office should you have any questions.

Sincerely,

DLZ Michigan

Michael Leuffgen, P.E. Department Manager Victoria Loemker, P.E. Senior Engineer

Cc:

Justin Quagliata, Community Development, via email Hannah Micallef, Community Development, via email Aaron Potter, DPS Director, White Lake Township, via email Jason Hanifen, Fire Marshall, White Lake Township, via email

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MCKENNA



October 17, 2021

Sean O'Neil – Community Development Director Charter Township of White Lake 7525 Highland Road White Lake, MI 48383

Subject: Taco Bell

Preliminary Site Plan Review #2 Zoned: Planned Business (PB) District

Applicant(s): Greg Lautzenheiser, L & A Architects

Location: 6305 Highland Road

Meijer Outlot

North side of Highland Road, east of Bogie Lake Road

Dear Mr. O'Neil:

We have received an application for preliminary site plan review for a 1.07 acre vacant outlot on the existing Meijer property. There is not an address for this site and it is part of parcel number is 12-20-276-033. The site is currently zoned Planned Business District (PB). The petitioner is proposing a new 2,235 square foot drive-thru fast food restaurant.



Approximate site boundaries. Source: Oakland County Property Gateway



COMMENTS

1. **Existing Conditions.** The conditions of the site and the surrounding area are summarized below:

Location Existing Land Use Master		Master Plan	Existing Zoning
Site	Vacant	Planned Business	Planned Business
North	Recreation	PB – N of proposed parcel ROS – N of entire parcel	GB – N of proposed parcel PD – N of entire parcel
East	Commercial	Planned Business	General Business
South	Commercial – across Highland Rd. ¹	Planned Business	Planned Business
West	Transportation/Utility Communication	Planned Business	Planned Business

¹The southern most portion of the site, across Highland Road has utilities (i.e. sanitary lift station, electrical panels) on it.

- 2. **Proposed Use.** The applicant is proposing a 2,235 square foot, one-story drive thru restaurant, which is a permitted use within the Planned Business district.
- 3. **Building Placement; Architecture and Design.** The site and the building comply with the setback requirements for the PB District. Architecture and design are covered under number 11, below.

Applicable Requirement	Required by the Zoning Ordinance in the PB District or specific for the proposed use	Proposed/Existing
Front Yard Setback	60 feet	77'-8" (Highland Rd.) 33'-5" (Bogie Lake Rd.) ¹
Side Yard Setback	TBD by Planning Commission	33'-5" (west) 75'-7" (east)
Rear Yard Setback	TBD by Planning Commission	174'-11"
Building Height	35 feet or 2 stories	23'
Minimum Lot Area	10 acres	1.069 acres ²
Minimum Lot Width	TBD by Planning Commission	137.67 feet
Lot Coverage	Governed by parking, loading, landscaping, etc.	Not provided

¹ See note number 10; under specific use standards

4. Site Circulation and Parking. The site does not have a curb cut on to Highland Road; rather it is accessed from a curb cut off of Bogie Lake Road and a proposed shared access easement with the McDonald's to the east. Because of the location of the drive thru lane in relation to the Bogie Lake Road entrance, there may be a traffic conflict. The petitioner should address this at final site plan review. There is a possibility of vehicles backing up onto Bogie Lake Road to enter the drive thru lane and blocking the fire lane. The alternative (with

² The proposed parcel is part of a development agreement



the current curb cut location) is to have cars that are entering off of Bogie Lake Road to turn right, circle around the building and enter the drive thru lane from the northeast side of the property.

The parking spaces on the far east side of the site are 17' in length and abut a 5' wide (presumably landscaped) area. The Zoning Ordinance allows parking spaces that are 17' if they abut a sidewalk or landscaped area at least 7' wide. As proposed, the landscaped area is only 5' in width. A 6" concrete curb and gutter is provided abutting all parking areas, at the end of all parking areas and stalls in accordance with the Zoning Ordinance. The proposed drive thru lane is 24' wide; the Zoning Ordinance requires a 25' wide lane. The petitioner needs to address the landscaped area adjacent to the 17' parking spaces and the drive thru lane width.

Fast food restaurant uses are required to have one parking space for every 75 square feet of gross floor area. A total of 30 spaces are required. The site plan proposes 37 spaces on site, including two barrier free spaces on the east side of the site, closest to the building in compliance with the Zoning Ordinance.

Additionally, restaurants operating drive-thru windows with indoor seating are required to provide eight (8) stacking spaces. The applicant has provided 9 stacking spaces, which satisfies this requirement.

- 5. **Pedestrian Circulation.** Per Section 5.21 of the Zoning Ordinance, a six (6) foot wide public sidewalk is required along Bogie Lake Road, and an eight (8) foot wide sidewalk is required along Highland Road. A sidewalk currently exists along each road, although **the petitioner needs to provide the width of those sidewalks.**
- 6. **Landscaping and Screening.** A landscape plan was not provided with the submitted application materials. The applicant notes in the site information & standards section (sheet A0.5) that 13,040 sq. ft. of landscaping is provided, meeting the 6,987 sq. ft. required. In the 3D renderings provided with the application, landscaping elements are depicted. The applicant should submit a landscape plan indicating location, type, size, and maintenance of the plant material at the time of final site plan review.
- 7. **Lighting.** Section 5.18(G) of the Zoning Ordinance includes the standards for outdoor lighting. A photometric plan was submitted, although no details were provided for lighting mounted on the building. The Zoning Ordinance does not require a review of the lighting plan until final site plan review. As proposed, the pole lights appear to meet the Zoning Ordinance requirements with the exception of a 1.1 foot-candle at the Bogie Lake curb cut and a 1.1 foot-candle on the northeast property line. Additionally, the photometric site plan indicates that the average foot-candle level in the parking and drive areas is 5.28. **The Zoning Ordinance allows a maximum foot candle average of 2.0.** A thorough review, including building mounted fixtures, will have to be conducted at final site plan review. Details were not supplied as to the outdoor light fixtures that are mounted on the building. Additionally, the petitioner is proposing a "purple light wall washer" on the Highland Road, Bogie Lake Road and east elevations. The Planning Commission should determine whether or not this type of lighting is appropriate.
- 8. **Signs.** Section 5.9 of the Zoning Ordinance regulates signs. The following signs are proposed:
 - One, 25' high pylon sign is proposed at the southeast corner of the site, along Highland Road. Per the
 First Amendment to the Development Agreement (for the Meijer Development), only one freestanding
 sign can be located within the area of the Meijer 72-acre development. That sign is constructed and



located along the Highland Road frontage. Taco Bell, or another tenant in this outlot, can have signage on this multi-tenant sign.

- Highland Road frontage: One wall sign on the corner tower that consists of the logo bell and the words, "Taco Bell", internally illuminated.
- East elevation (main entrance): One logo bell and a separate "Taco Bell" individual letter sign located above the canopy; both internally illuminated. Two mural type signs, illuminated from above, 4' x 8' in size
- West (Bogie Lake Road) Elevation: One wall sign that consists of the logo bell and the words, "Taco Bell", internally illuminated. One mural type sign, illuminated from above, 4' x 8' in size.
- Rear elevation: One, internally illuminated wall sign that reads, "Taco" "Bell logo" then "Bell"

The petitioner needs to provide the area of the (Highland Road) frontage in order to calculate the permitted area of wall signage. Additionally, a maximum of one wall sign is permitted for each principal building, although instances where a parcel has frontage on two streets, an additional wall sign may be permitted on the building facing the secondary thoroughfare, which is no greater than 5% of the wall area on which the sign is placed.

Per the Zoning Ordinance, area, quantity, location and dimensions of all signs are required the Preliminary Site Plan. Signage details, including the remaining standards of Section 5.9, are required on the Final Site Plan. If the Planning Commission approves the preliminary site plan, it should be subject to resolution of the above notes and subject to the submission of all of the required information, per Section 5.9.

- 9. **Trash Disposal.** The site plan indicates a trash enclosure will be located to the rear of the building, adjacent to the loading and unloading area. The enclosure is 9'-5" x 26' and is located on a 7" thick concrete pad. The proposed enclosure consists of plastic lumber pickets and is 5'-9" in height. **The Zoning Ordinance requires enclosures to be between 6' and 8' in height.** The gate consists of the same plastic lumber pickets. The Zoning Ordinance requires trash storage enclosures to be constructed of the same decorative masonry materials as the building which they are accessory to. The petitioner needs to revise the material and the height of the enclosure and fence to meet the Zoning Ordinance requirements as noted in section 5.19(N)(i).
- 10. **Specific Use Standards.** Section 4.17 highlights five standards which restaurants operating drive-thru windows must satisfy prior to approval.
 - a. A front yard setback of at least sixty (60) feet shall be required. Though the applicant satisfies this requirement adjacent to Highland Road, they do not comply with this requirement adjacent to Bogie Lake Road. If the Planning Commission deems it appropriate to only consider the Highland Road yard as a "front yard," the proposed layout would be in compliance with the Zoning Ordinance.
 - b. Entrance and exit drives shall be at least one hundred (100) feet from any street intersection and two hundred (200) feet from any residential district. The existing drive approach on Bogie Lake Road appears to be more than 100 feet from the Highland and Bogie Lake Road intersection, but the dimension is not specifically noted on the plan. From aerial photos, the site does not appear to be adjacent to any residential districts within 200 feet, but this should be confirmed on the site plan itself. The Zoning Ordinance Section 6.8.B requires preliminary site plan submittals to show both existing zoning and the zoning of adjacent parcels.



- c. An outdoor lighting plan shall specify the type of fixtures to be used, light intensity, and method of shielding the fixtures so that light does not project onto adjoining properties or on any public or private street or right-of-way. Dropped fixtures shall not be allowed. See notations above regarding lighting.
- d. An obscuring fence, screen wall, or land form buffer shall be provided in accordance with the provisions of Section 5.19 on all sides abutting a residential district. The site has no sides abutting a residential district.
- e. Adequate off-street waiting space shall be provided to prevent drive-through customers from waiting on a public or private street. The applicant has provided one more stacking space than the minimum required by the Zoning Ordinance, although as noted above, the petitioner should address the possibility of traffic congestion on site due to the drive thru traffic, and ways to address it, through directional signage, relocation of the drive thru ordering board and/or other mitigating efforts.

11. Architectural Character Requirements (property located on Highland Road Corridor)

The bulk of the exterior consists of gray Hardie plank siding (although on the elevations, it appears beige, the specifications indicate that it is a gray color). A "corner tower" is located on the southwest corner of the building and consists of 18" wide painted panels with the appearance of a rusted metal. Above each bank of windows, is a purple Hardie reveal panel. A black metal Hardie trim board "outlines the purple panels, and top and corners of the building. On the east elevation, black Hardie panels frame the entrance as well as the murals and the wall signage. The west elevation also consists of the gray Hardie plank and purple and black panels interspersed on the façade. The cooler and freezer are located in the rear of the restaurant and are contained in a projection that extends 8' from the rear façade and is 21'-9 ½" in length and 13' in height. The rear elevation consists of the gray Hardie plank siding on the rear wall and black Hardie panels on the cooler and freezer projection.

In accordance with the Highland Road Corridor Plan the development must meet the following requirements:

- a. Exterior building materials shall be composed primarily of high quality, durable, low maintenance material, such as masonry, stone, brick, glass, or equivalent materials. The building does not consist primarily of these materials. The petitioner needs to address this item.
- b. Building should address the street with entrances, windows, and architectural features facing the street. No overhead doors shall face the street, unless approved by the Planning Commission based upon a finding that the door is recessed back from the front facade and properly screened from public view. The primary entrance is on the east elevation although there is an entrance door on the Highland Road frontage. The west (Bogie Lake Road) elevation only has the drive thru windows and two small windows adjacent to the corner tower. The petitioner needs to address this also.
- c. **Buildings should be designed with varied architectural details to provide visual interest.** The building does have varied architectural details, albeit of (primarily) inferior materials.



- d. All buildings shall have windows at eye level. Windows should cover at least thirty (30%) percent of the front facade. Reflective glass may be permitted for office uses but shall not be used for retail stores. The windows shall not be obscured at any time, except by signage as permitted in Section 5.9. This requirement appears to have been met partially, although the petitioner needs to provide calculations on the final site plan. The west (Bogie Lake Road) elevation should have more windows to meet the spirit of this requirement.
- e. Side and Rear Facade Design. Wherever a side or rear facade is visible from a street, or if parking is located at the side or rear of a building, the facade shall be designed to create a pleasing appearance, using materials and architectural features similar to those present on the front of the building. The Bogie Lake Road elevation needs to meet this requirement as it is visible from a major road and lacking in an overall pleasing appearance.
- f. Mechanical Equipment, including but not limited to heating, ventilating and air conditioning equipment, and antennas, shall be placed in an inconspicuous location or screened from view. The petitioner needs to address this item. Mechanical equipment is visible on all elevations and it does not appear that there is any screening.
- g. Lighting shall be shielded from adjacent property and designed to reflect continuity with the pedestrian orientation of the area. Floodlights, wall pack units, and other types of unshielded lights, and lights where the lens or bulb is visible outside of the light fixture are not permitted except in service areas where the lights will not generally be visible by the public or adjacent residential properties. Lights underneath canopies must be fully recessed into the canopy to minimize glare from the light source. A detailed lighting plan with specifications on all light fixtures must be submitted at final site plan review.

RECOMMENDATION

As noted above, there are several issues, which require correction or clarification. Once the issues are adequately addressed, then we would recommend that the Planning Commission recommend preliminary site plan review approval to the Township Board.

If you have any questions about this report or require additional information, please do not hesitate to contact us.

Respectfully submitted,

McKENNA

Kathleen M. Jackson Senior Principal Planner

cc: Mr. Sean O'Neil, AICP

Mr. Justin Quagliata Ms. Hannah Micallef



Site / Construction Plan Review

To: Sean O'Neil, Planning Department Director

Date: 10/07/2021

Project: Taco Bell (Meijer Outlet)

File #: Not shown

Date on Plans: 9/29/2021

The Fire Department has the following comments with regards to the 2nd review of preliminary site plans for the project known as Taco Bell.

1. This Plans as submitted has satisfied the requirements of the Fire Department.

Jason Hanifen Fire Marshal Charter Township of White Lake (248)698-3993 jhanifen@whitelaketwp.com

Plans are reviewed using the International Fire Code (IFC), 2015 Edition and Referenced NFPA Standards.



Trustees Scott Ruggles Michael Powell Andrea C. Voorheis Liz Fessler Smith

WHITE LAKE TOWNSHIP DEPARTMENT OF PUBLIC SERVICES

7525 Highland Road, White Lake, Michigan 48383-2900, (248) 698-7700, www.whitelaketwp.com

October 16, 2021

Sean O'Neil Planning Director Charter Township of White Lake 7525 Highland Road White Lake, MI 48383

Re: Taco Bell Preliminary Site Plan Review

Sean,

I defer to the Township Engineer for the review of this preliminary Site Plan with the following exceptions:

Note 11 on sheet C5.0 indicates that the Township shall connect services 2 inch and smaller. While the Township can provide the connection, an 20 % admin fee will be charged per ordinance. It will usually be less expensive for the developer to use their own properly licensed and bonded contractor for the connection which we will inspect.

A plumbing fixture schedule or drain schedule were not provided with this plan set. Sheet numbering suggests that this will be forthcoming with future submittals. Below are preliminary estimates of connection and permit fees that will be required prior to the issuance of a building permit. These estimates will be updated through the planning process and ultimately as-built:

Preliminary Water Fees Estimate (not including tapping cost to be determined):

New Water Service Permit and Inspection	\$75.00
Irrigation System Permit and Inspection	\$50.00
Capital Connection Fee for 1.5"	\$2,607.15
Meter	\$392.70
Transmitter	\$96.00
Flanges	\$100.00
Meter Installation	\$75.00

Total \$3,395.85

Preliminary Sanitary Fees Estimate:

Commerce Twp. WWTP Connection Fee	\$11,785.00
Whtie Lake Capital Connection Fee (\$2100 per REUx 7.8	
REUs)	\$16,380.00
Oakland County Inspection Permit	\$200.00
White Lake Plumbing Permit	\$50.00

Total \$28,410.00

Please contact me if you have any questions.

Sincerely,

Aaron Potter DPS Director

White Lake Township

Assessing Department

Memo

To: Sean O'Neil, Planning

From: Jeanine A Smith

Date: October 1, 2021

Re: Project Name: Taco Bell Parcel Number: 12-20-276-033

Comments: Please note current parcel number for this property.

This plan is part of a much larger parcel. If the intent is to divide this parcel an application must be made at the Assessing Department.



CHARTER TOWNSHIP OF WHITE LAKE

SITE PLAN AND PLAT REVIEW APPLICATION
White Lake Township Community development Department, 7525 Highland Road, White Lake Michigan 48383 (248)698.3300 x163

APPLICANT AND PROPERTY INFORMATION
Applicant: GREG LAUTZENHEISER (L+A ARCHITECTS)
Phone: (248) 524 · 4700 Fax: (246) 524 · 9740
Address: 441 S. LIVERNOIS RD., ROCHESTER HILLS MI. 48307
Applicant's Legal Interest in Property: ARCHITECT FOR PROPOSED PROPERTY OWNER
CEE ATTACLED
Address: TTLE COMMTMENT (Street) (City) (State) (Zip)
found. Towns Tests
PROJECT INFORMATION
Project Name: TACO BELL Parcel I.D. No.: TBD
Proposed Use: FAST FOOD RESTAURANT Current Zoning: PIS
Existing Use: VACANT LAND Parcel Size: 1.069 AC Floor Area / No. of Units 2235
TYPE OF DEVELOPMENT
TIPE OF BEVELOPMENT
Subdivision Site Condominium Commercial
Markinka Farrika
Multiple Family Special Land Use Industrial
Adult Entertainment
SITE PLAN SUBMITTAL CHECKLIST
ONE PERIODOMITTAL OFFICIALIST
X PDF File and One Paper Copy (sealed) as required by Zoning Ordinance 58
Application Review Fees
* PLANS WILL NOT BE ACCEPTED UNLESS FOLDED *
On REQUIRED SIGNATURES
Modelly South REQUIRED SIGNATURES 9/29/21
(Signature of Property Owner) (Date)
9/29/2021
(Signature of Applicant) (Date)



Meijer Real Estate

Matthew Levitt
Real Estate Manager
2350 3 Mile Rd NW
Grand Rapids, MI 49544
Telephone: (616) 791-3909
matt.levitt@meijer.com

September 29, 2021

Mr. Justin Quagliata White Lake Township 7525 Highland Rd White Lake, MI 48383

Re: Meijer 227 White Lake Twp – Authorization for Submission

Dear Mr. Quagliata:

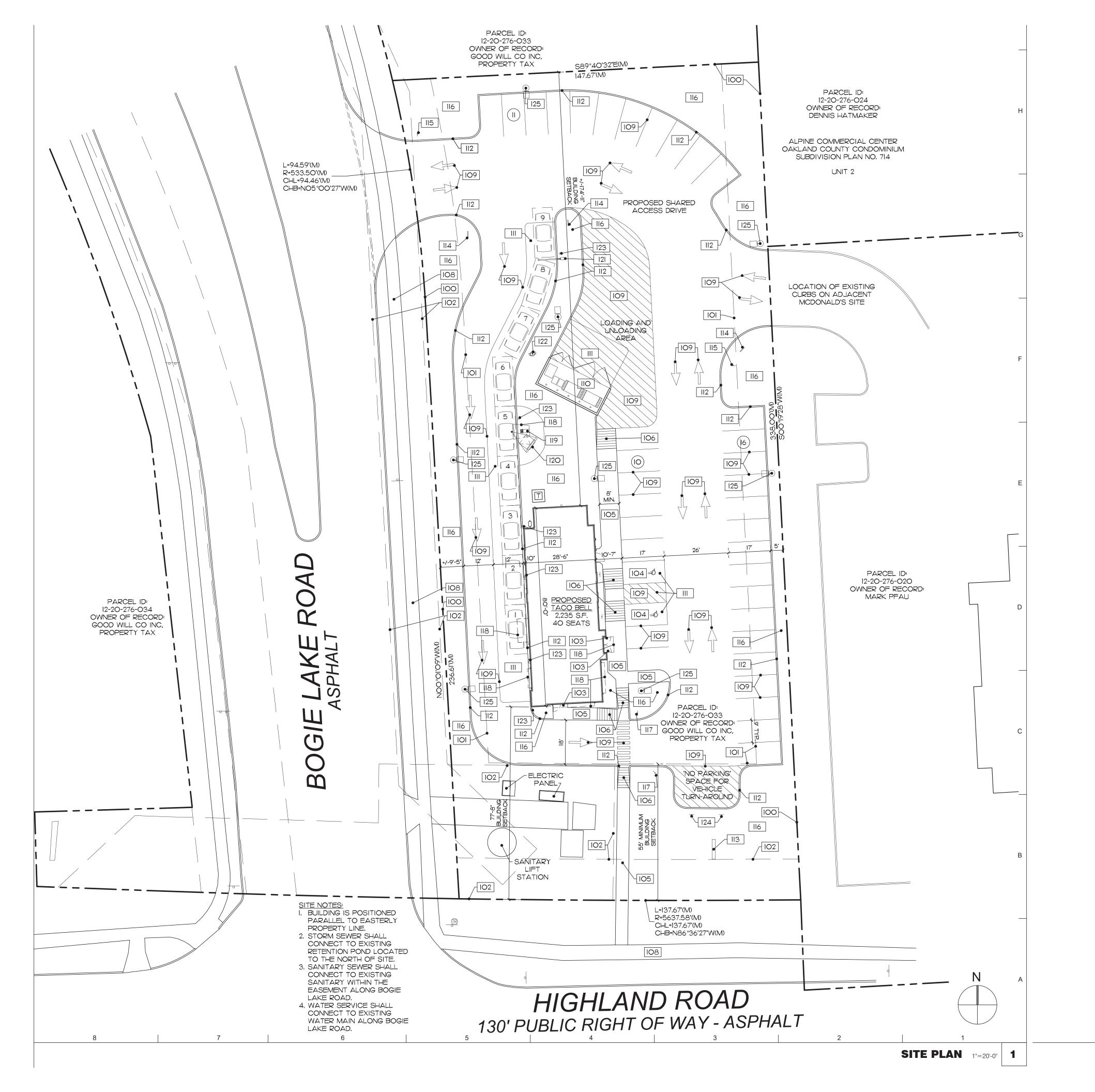
Please accept this letter on behalf of Meijer, Inc. authorizing Greg Lautzenheiser of L+A Architects, Inc. to submit a Site Plan Application on behalf of Meijer, Inc. for the parcel as described in the attached legal description of the proposed land division. If there are any additional questions, please do not hesitate to contact me directly.

Sincerely,

Matthew Levitt Real Estate Manager

Motthew Serith

Meijer, Inc.



SITE INFORMATION & STANDARDS

SITE IS ZONED 'PB' PLANNED BUSINESS SITE: +/- 46,580 SF (1.069 ACRES) BUILDING: 2,235 SF LANDSCAPE REQUIRED: 6,987 SF (15%) LANDSCAPE PROVIDED: 13,040 SF (28%) **OUTDOOR SEATING AREA: 0 SF** SEAT COUNT: 40 INT (0 EXT) DRIVE-THRU STACK REQUIRED: 8 DRIVE-THRU STACK PROVIDED: 9 PARKING SPACES REQUIRED: 30 PARKING SPACES PROVIDED: 37 LOADING SPACE REQUIRED: NONE LOADING SPACE PROVIDED: 12'x75'

REFER TO SHEET A0.1a & A0.2 FOR GENERAL NOTES

- 100. PROPERTY LINE
- 101. LINE OF REQUIRED YARD SETBACK
- 102. LINE OF SANITARY SEWER AND ROAD EASEMENTS
- 103. ACCESSIBLE ENTRY SIGNAGE 104. ACCESSIBLE PARKING STALL WITH ACCESSIBLE AISLE AND SIGNAGE -
- 2% MAX. SLOPE IN ANY DIRECTION
- 105. ACCESSIBLE CONC. SIDEWALK 5% MAX. SLOPE, 2% MAX. CROSS SLOPE
- 106. ACCESSIBLE CURB RAMP 8.3% MAX. SLOPE, 2% MAX. CROSS SLOPE 107. ACCESSIBLE CROSSWALK - 5% MAX. SLOPE, 2% MAX. CROSS SLOPE
- 108. EXISTING PUBLIC SIDEWALK
- 109. PAINTED PARKING STRIPING AND DIRECTIONAL ARROWS 110. TRASH ENCLOSURE - 6' HEIGHT - HDPE LUMBER ENCLOSURE AND GATES
- 111. CONCRETE PAVEMENT 112. CONCRETE CURB AND GUTTER - 6" MAXIMUM HEIGHT
- 113. PYLON SITE SIGN V-01.50 50S.F. 25' HEIGHT VARIANCE REQUIRED
- 114. DIRECTIONAL SIGNAGE V-03 4 S.F. 5' HEIGHT
- 115. STOP SIGN AND POST
- 116. LANDSCAPE AND IRRIGATION AREA
- 117. 'DO NOT ENTER' TRAFFIC SIGN AND POST
- 118. BUILDING CANOPY
- 119. SPEAKER POST AND CANOPY
- 120. DIGITAL MENU BOARD V12-2 25 S.F. 6'-2" HEIGHT
- 121. CLEARANCE BAR 122. DIGITAL PRE-SELL BOARD - V12-1 - 13.75 S.F. - 6'-2" HEIGHT
- 123. 6" DIA. CONC. FILLED PIPE BOLLARD PAINTED SAFETY YELLOW 124. 'NO PARKING' SIGN AND POST
- 125. POLE-MOUNTED SITE LIGHT FIXTURE REFER TO PHOTOMETRIC SITE PLAN

GREGORY SCOT

ARCHITECT

1301031102



SUITE 265 ROCHESTER HILLS, MI 48307

> (248) 524-4700 (248) 524-9746 PROJECT # 20023

	DATE	REMARKS

CONTRACT DATE:

BUILDING TYPE: END. MED40

PLAN VERSION: MARCH 2020

BRAND DESIGNER

SITE NUMBER:

STORE NUMBER

PA/PM:

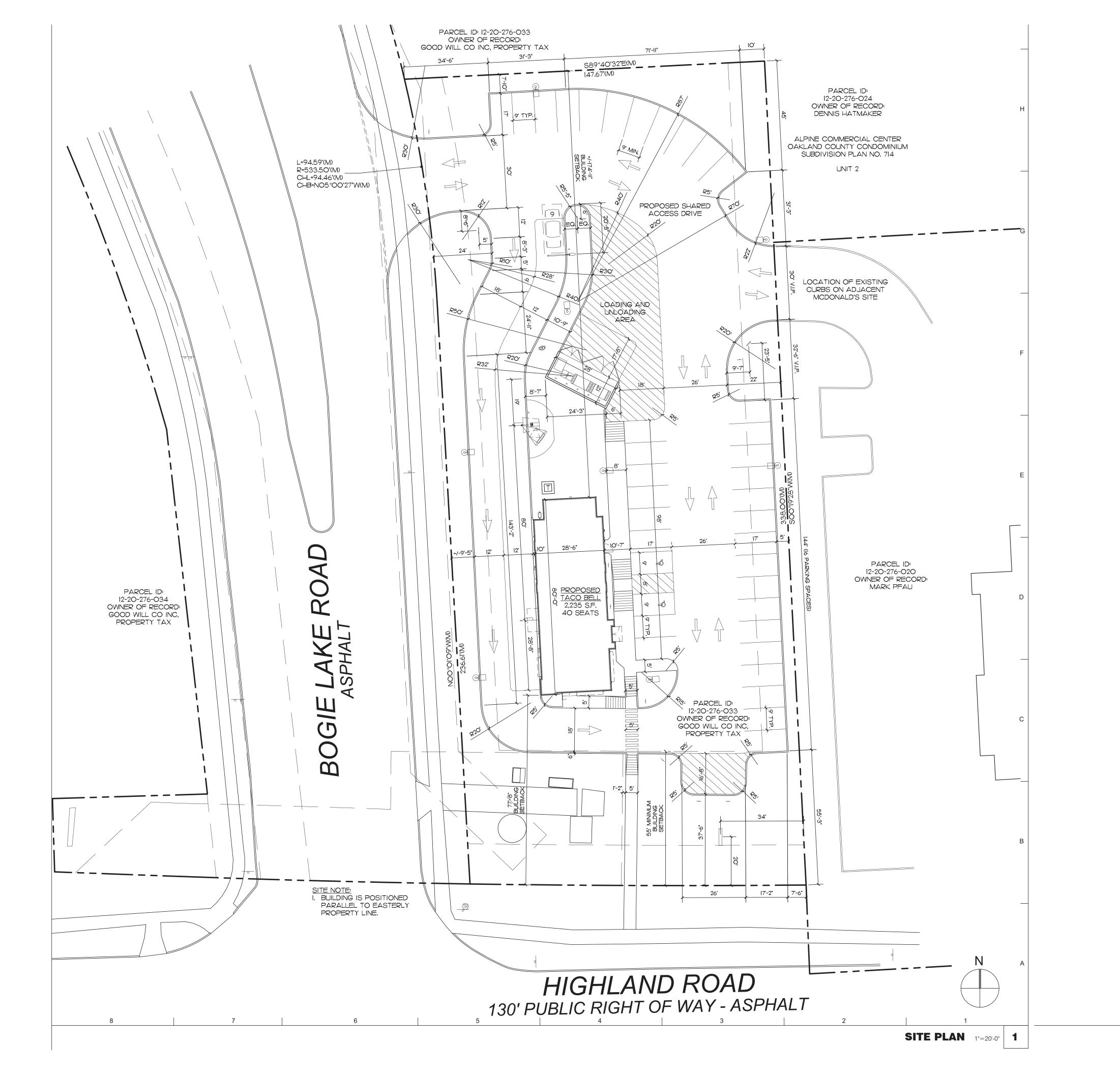
DRAWN BY. JOB NO.:

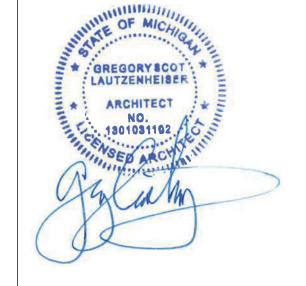
> **GREAT LAKES** TACO, L.L.C.

6305 Highland Road (M-59) White Lake Twp., Michigan 48383



ENDEAVOR 2.0 SITE PLAN







441 S. LIVERNOIS ROAD

SUITE 265 ROCHESTER HILLS, MI 48307 PHONE (248) 524-4700 (248) 524-9746

PROJECT # 20023

	DATE	REMARKS			

CONTRACT DATE:

BUILDING TYPE:

MARCH 2020 PLAN VERSION:

BRAND DESIGNER:

SITE NUMBER:

STORE NUMBER:

PA/PM: DRAWN BY.

JOB NO.: **GREAT LAKES**

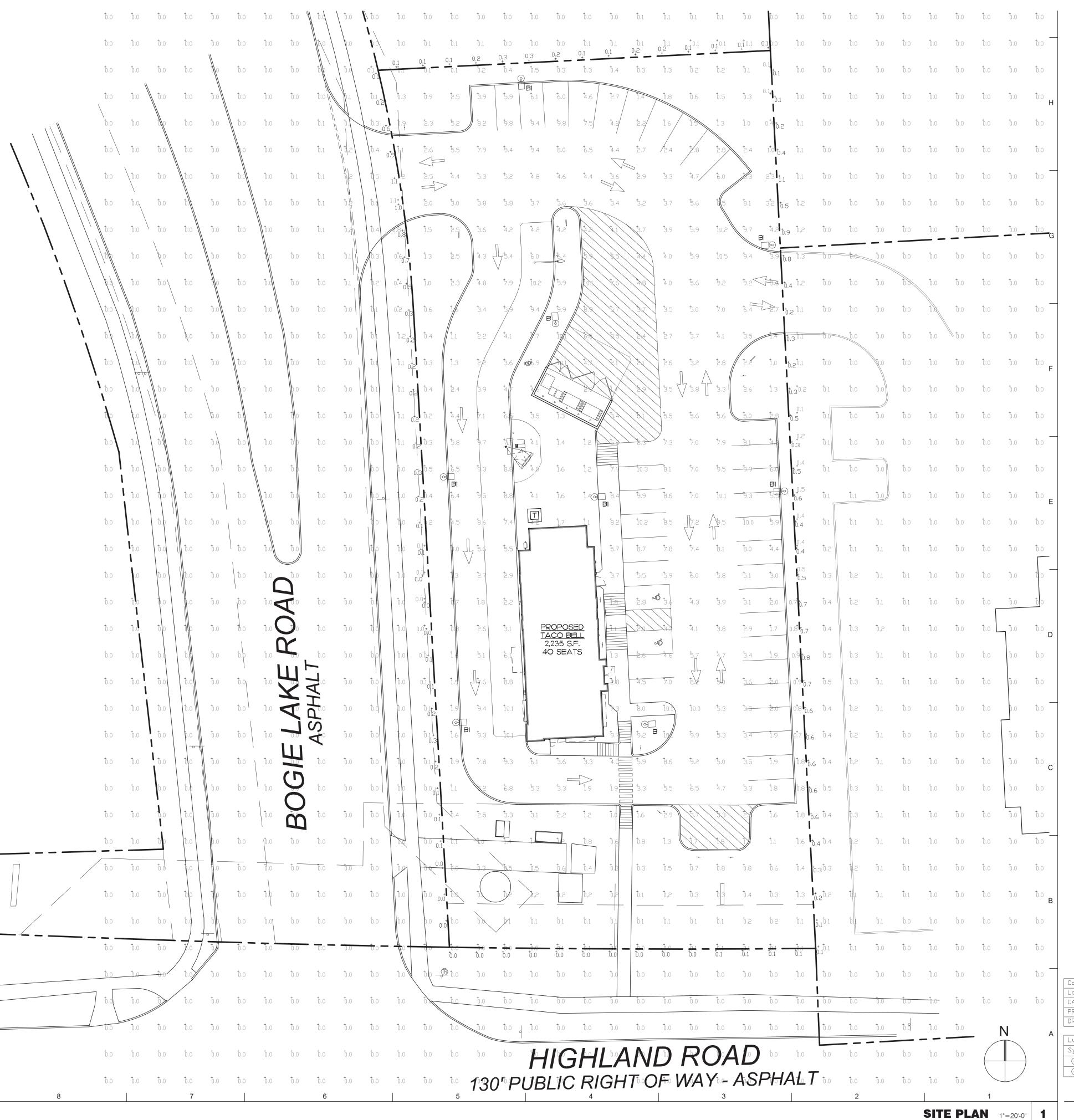
TACO, L.L.C. 6305 Highland Road (M-59) White Lake Twp., Michigan 48383

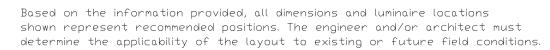


ENDEAVOR 2.0 DIMENSIONAL SITE PLAN

NOT USED

N.T.S.





This lighting plan represents illumination levels calculated from laboratory data taken under controlled conditions in accordance with The Illuminating Engineering Society (IES) approved methods. Actual performance of any manufacturer's luminaires may vary due to changes in electrical voltage, tolerance in lamps/LED's and other variable field conditions. Calculations do not include obstructions such as buildings, curbs, landscaping, or any other architectural elements unless noted. Fixture nomenclature noted does not include mounting hardware or poles. This drawing is for photometric evaluation purposes only and should not be used as a construction document or as a final document for ordering product.





Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
CALCULATIONS @ GRADE	Illuminance	Fc	1.02	10.5	0.0	N.A.	N.A.
PROPERTY LINE	Illuminance	Fc	0.29	1.1	0.0	N.A.	N.A.
DRIVING & PARKING SUMMARY	Illuminance	Fc	5.28	10.5	1.1	4.80	9.55

Luminair	Luminaire Schedule								
Symbol	Qty	Label	Arrangement	Description	LLD	LDD	LLF	Arr. Lum. Lumens	Arr. Watts
O	2	В	SINGLE	SLM-LED-30L-SIL-FT-50-70CRI-SINGLE-20' MH	1.000	1.000	1.000	31922	535
9	6	B1	SINGLE	SLM-LED-30L-SIL-FT-50-70CRI-IL-SINGLE-20' MH	1.000	1.000	1.000	20027	232

SITE LIGHTING NOTES

TACO, L.L.C.

6305 Highland Road (M-59) White Lake Twp., Michigan 48383

ENDEAVOR 2.0

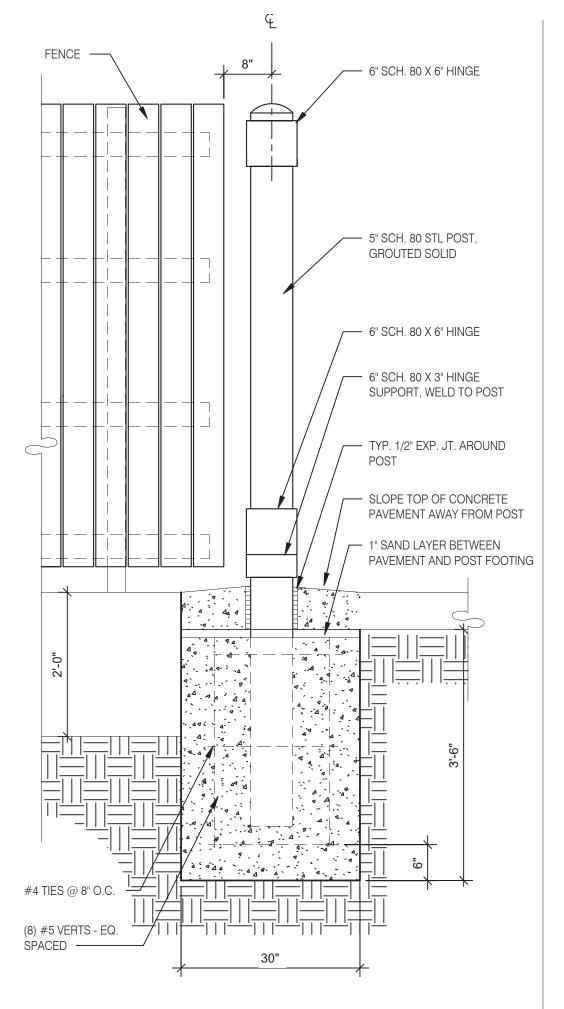
PHOTOMETRIC

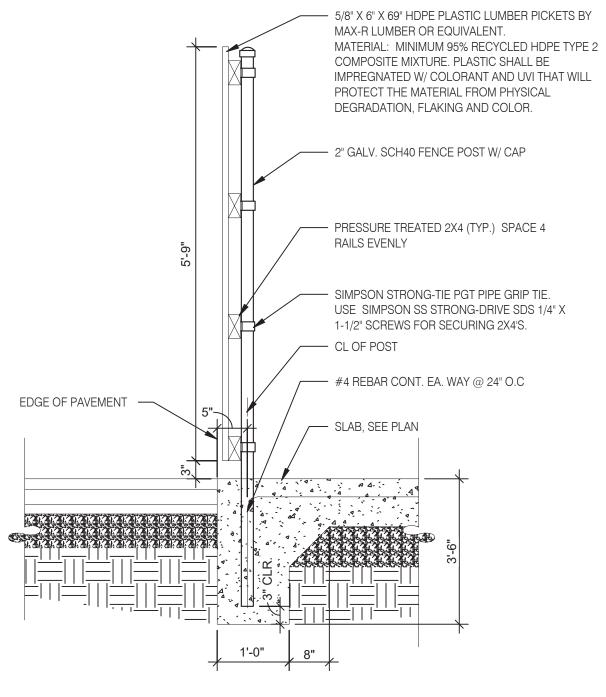
SITE PLAN

N.T.S.









GATE POST FOOTING	3/4" = 1'-0"	н
--------------------------	--------------	---

GATE HARDWARE: ALL HARDWARE AND ACCESSORIES SHALL BE HEAVY

GATE STOP: MUSHROOM TYPE OR FLUSH PLATE WITH ANCHORS SET IN CONCRETE TO ENGAGE THE CENTER DROP ROD OR PLUNGER BAR.

GATE NOTES: (4) EQUAL WIDE x 6-0" HIGH MTL. GATES, TYPE 'B' 1 1/2" DECKING, 22GA. W/ T.S. 1 X1 1875 BAR CROSS BRACING WELD AND GRIND SMOOTH ALL CONNECTIONS, TYP. PRIME AND PAINT ALL STEEL COMPONENTS.

ENCLOSURE NOTES

		FENCE SECTION	3/4" = 1'-0"	F
SYMBOL	AREA	MANUFACTURER	COLOR	
1	GATE FRAME COLOR	SHERWIN WILLIAMS	SW 7055 ENDURING BRONZE	
2	PIPE BOLLARDS	SHERWIN WILLIAMS	CAUTION YELLOW	
3	HDPE LUMBER	MAX. R	LIGHT BROWN TEXTURE	

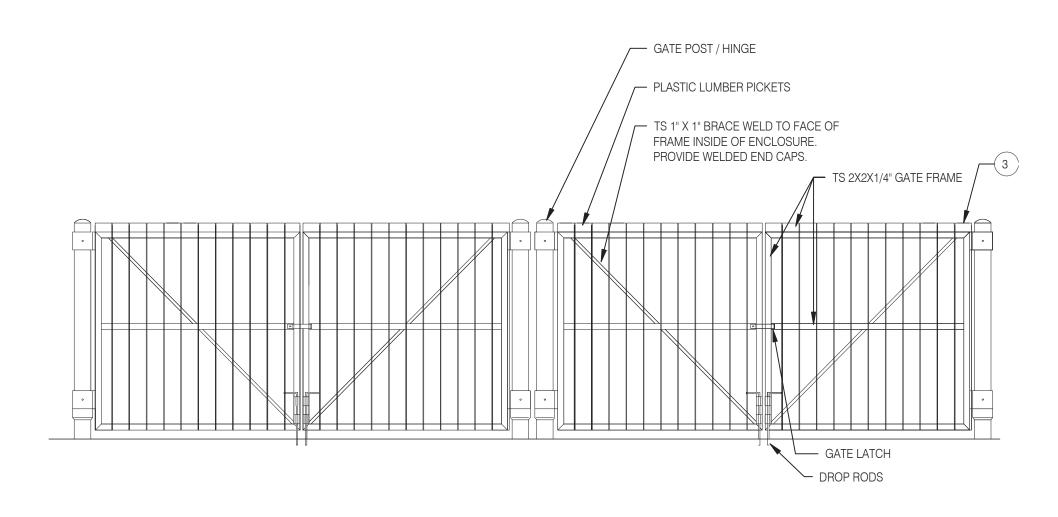
FRONT ELEVATION

SCHEDULE

N.T.S.

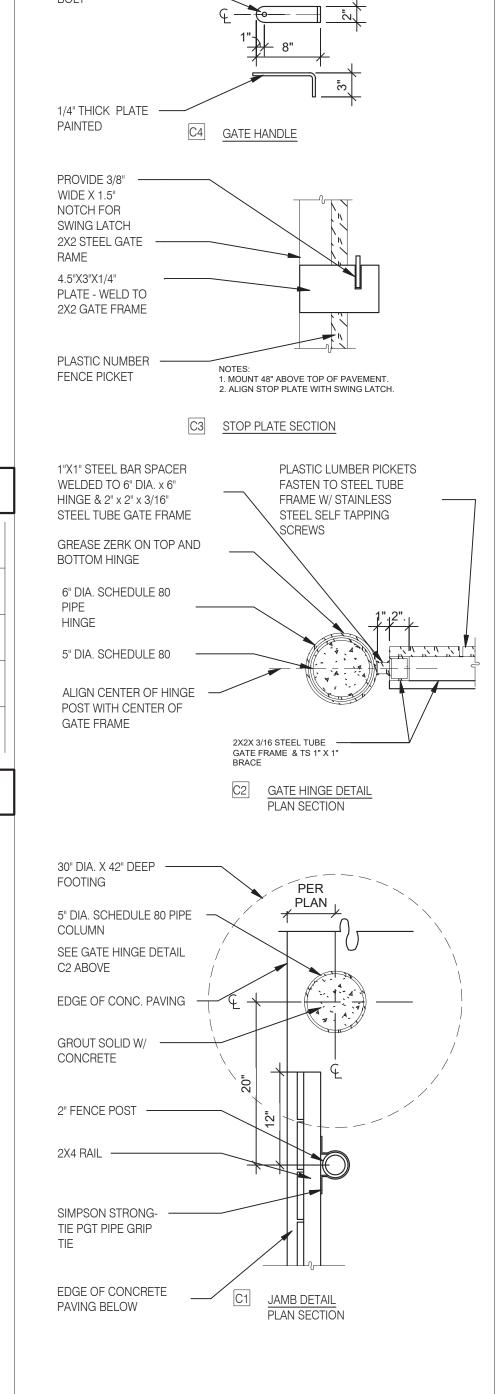
D

N.T.S.



G

N.T.S.



TS 1" X 1" -

CANE BOLT

4" x 24" x 1/4" PLATE BOLTED TO FRAME & FENCE 1" DIA. STEEL **GUIDES WELDED TO**

PLATE (TYP. OF 3)

DIA. STEEL GUIDES

WELDED TO PLATE

24" x 5" CANE BOLT

BOT. OF CANE BOLT -

PLATE 1" BELOW BOT.

3/8" HOLE FOR THRU

1" DIA. X 1" DEEP SLEEVE IN PAVEMENT FOR CANE BOLT AT CLOSED & 90° OPEN

ELEVATION

C5 CANE BOLT (1 PER GATE)

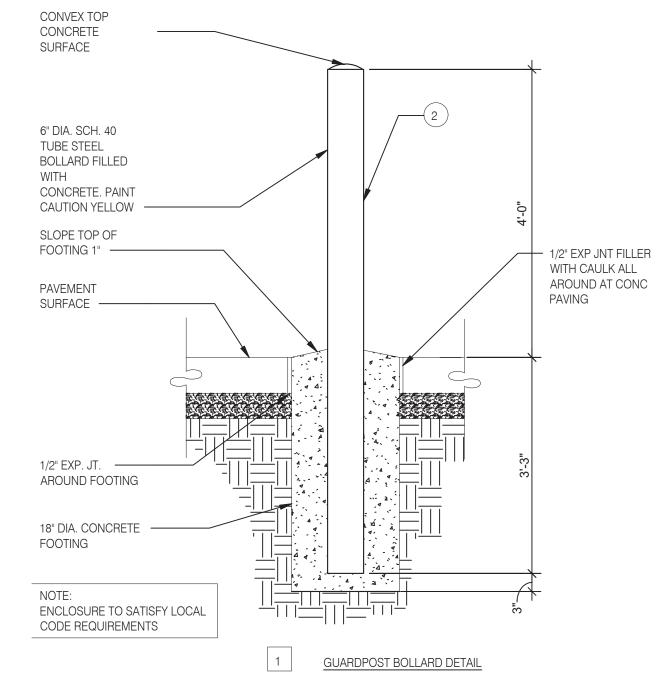
OF GATE FRAME

POSITIONS

(TYP. OF 3)

(3/4" DIA.)

BRACE





TRASH ENCLOSURE BOLLARD DETAILS 3/4" = 1'-0"

DRAIN PER LOCAL

INSTALL PICKET AT END OF

SEE SITE PLAN

7" CONCRETE PAVEMENT W/24"4

THICKENED EDGE ON 7"

CONCRETE SLAB ENTIRE

CONCRETE NOTES:

10' O.C. IN SLABS.

1. INSTALL 1/2" EXP. JT. MATERIAL

AND SEALANT BETWEEN CONCRETE SLABS 2. INSTALL CONTROL JOINTS AT MAX.

ARQUND ENTIRE PERIMETER, 28.

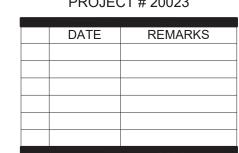
DAY MIN COMPRESSION STRENGTHE

4'-2"

441 S. LIVERNOIS ROAD

SUITE 265 ROCHESTER HILLS, MI 48307

> (248) 524-4700 (248) 524-9746 PROJECT # 20023



CONTRACT DATE:

BUILDING TYPE: END. MED 40

PLAN VERSION: MARCH 2021

BRAND DESIGNER:

SITE NUMBER:

STORE NUMBER: PA/PM:

DRAWN BY.

JOB NO.:

GREAT LAKES TACO, L.L.C.

6305 Highland Road (M-59) White Lake Twp., Michigan 48383



ENDEAVOR 2.0

TRASH ENCLOSURE DETAILS

TRASH LAYOUT 3/8" = 1'-0"

C

EDGE OF CONC

PAVING ON GRADE

HOLÉS AT ALL

CLOSED GATE+

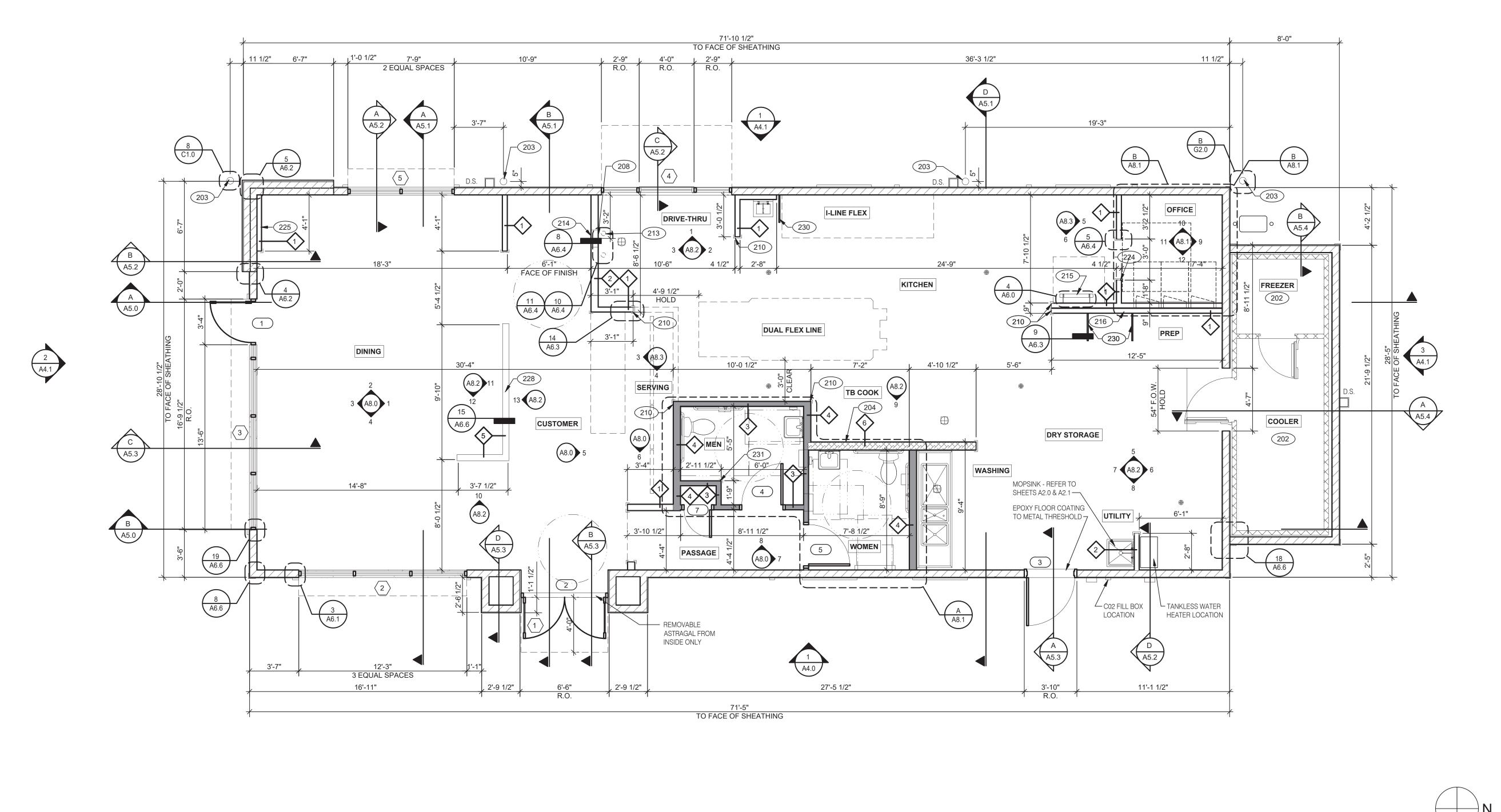
GATE DETAILS

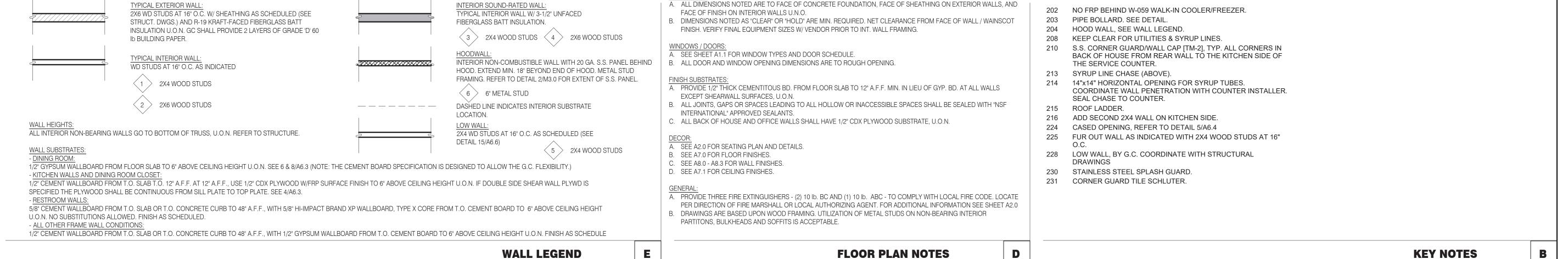
N.T.S.

4'-2"

DRGANICS

— EDGE OF CONC PAVING





GREGORY SCOT LAUTZENHEISER

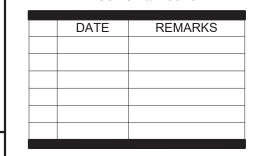
ARCHITECT
NO.
1301031102



ARCHITECTS INC. A.I.A

SUITE 265 ROCHESTER HILLS, MI 48307 PHONE FAX (248) 524-4700 (248) 524-9746

PROJECT # 20023



CONTRACT DATE:

BUILDING TYPE: END. MED 40

PLAN VERSION: MARCH 2021

BRAND DESIGNER:

SITE NUMBER:

STORE NUMBER

DRAWN BY.

FLOOR PLAN 1/4'' = 1'-0''

PA/PM:

JOB NO.:

GREAT LAKES TACO, L.L.C.

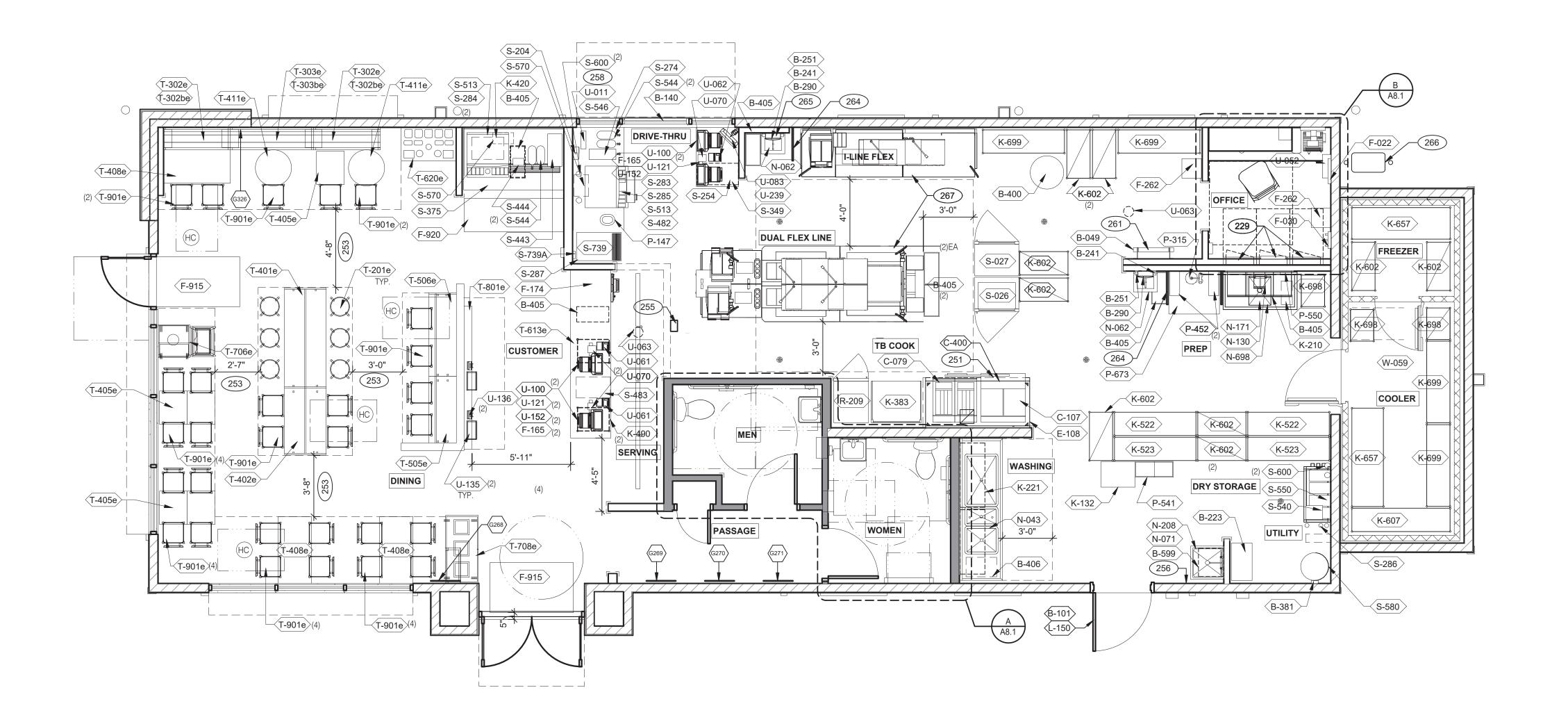
6305 Highland Road (M-59) White Lake Twp., Michigan 48383



ENDEAVOR 2.0
FLOOR PLAN

110

PLOT DATE:



OPTIONAL: ROLL-A-SHADE INFINITY SYSTEM MATERIAL: SHEERWEAVE 2390 5% CHARCOAL FASCIA SYSTEM: DARK BRONZE

CONTACT - RIC BERG

RIC.BERG@ROLLASHADE.COM

TAG	QTY	ITEM DESCRIPTION
T-105	5	RETRO CHAIR - 18
T-201e	6	BARREL BARSTOOL - 29 PURPLE WOOD SEAT
T-302be	2	BENCH BACK REST - 48"
T-302e	2	BENCH SEAT - 48"
T-303be	1	BENCH BACK REST - 60"
T-303e	1	BENCH SEAT - 60"
T-401e	1	HUB TABLE - 72" - HIGH TOP
T-402e	1	HUB TABLE - 48" - ADA
T-405e	5	LAMINATE TABLE - 24 X 20 X 30 - 2 TOP
T-408e	3	LAMINATE TABLE ADA - 24 X 48 X 30 - 4 TOP
T-411e	2	SS TABLE - 24 DIA X 30 - 2 TOP
T-415	1	SS TABLE - 24 DIA X 30 - 2 TOP
T-416	2	LAMINATE TABLE ADA - 24 X 48 X 30 - 4 TOP
T-505e	1	COUNTER TOP - 48" X 20" X 30"
T-506e	1	COUNTER TOP - 60" X 20" X 30"
T-613e	1	POS COUNTER 121 - 3 POS

TAG	QTY	ITEM DESCRIPTION
T-620e	1	CONDIMENT COUNTER - RECTANGLE
T-706e	1	WASTE ENCLOSURE - SINGLE
T-708e	1	WASTE ENCLOSURE - 3 STREAM
T-801e	1	KIOSK 1/2 TOWER
T-901e	29	CHAIR - LAMINATE SEAT
T-903	4	BENCH SEAT - 48"
T-904	3	BENCH SEAT - 60"

E

FURNITURE PACKAGE - BY FURNITURE VENDOR U.O.N.

$\langle x \rangle$	QTY.	NAME	FAMILY	FRAME OR MURAL	SIZE	LOCATION
(G326)	1	HYPNOTIZE ME BELL	D	M01	H6'-4" x W17'-6"	SEE A8.0
(G269)	1	CAMO PATTERN	D	F01	28x40	SEE A8.0
(G270)	1	CAMO PATTERN	D	F02	28x40	SEE A8.0
(G271)	1	CAMO PATTERN	D	F01	28x40	SEE A8.0

ARTWORK SCHEDULE D				D	SHELVING QUANTITIES		C2		
						FROZEN STORAGE	12		_
						COLD STORAGE	26		_
						_DRY STORAGE	53		-
						STORAGE TYPE	LINEAR	FT.	
						GENERAL NOTES		C1	266
J	D	F01	28x40	SEE A8.0					261 264 265
1	D	F02	28x40	SEE A8.0					256 258
J	D	F01	28x40	SEE A8.0					255
BELL	D	M01	H6'-4" x W17'-6"	SEE A8.0		2. (HC)- SYMBOL DENOTES A HANDICAP ACCESSIBLE TABLE.			253
	FAMILY	FRAME OR MURAL	SIZE	LOCATION		<u>DECOR</u> 1. REFER TO SC SHEETS FOR SCOPE OF WORK RESPONSIBILITY			229 251

229 ELECTRICAL PANELS.

251 HOOD FIRE SUPPRESSION SYSTEM (ANSUL R-102 OR EQUAL).

MAINTAIN 36" MIN. CLEAR ACCESSIBLE AISLE EGRESS PATHS TO EXIT DOORS, 32" AT DOORWAYS AND CASED OPENINGS. (42" AISLE REQUIRED WHEN AISLE SERVES MORE THAN 50 SEATS).

EQUIPMENT AND SEATING PLAN 1/4" = 1'-0"

255 ALERT LIGHT BOX FOR 3-COMP POWER SOAK.

256 PULL STATION @ 3'-8" A.F.F.

COORDINATE LOCATION OF HORIZONTAL PVC SYRUP CHASE THRU WALL TO

261 ROOF LADDER WITH BILCO LADDER UP SAFETY POST.

264 SPLASH GUARD.

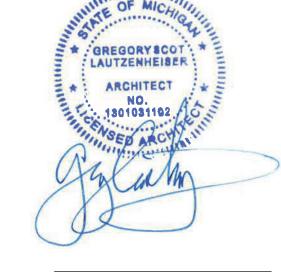
AUTOMATIC HAND SOAP AND SANITIZER DISPENSERS PROVIDED BY

ECOLAB. 266 GAS METER.

XXX

267 FOR DUAL-FLEX LINE AND I-FLEX LINE SUB-EQUIPMENT SEE SHEET A8.3.

KEY NOTES





441 S. LIVERNOIS ROAD SUITE 265

ROCHESTER HILLS, MI 48307 (248) 524-4700 (248) 524-9746

PROJECT # 20023

DATE	REMARKS

CONTRACT DATE: BUILDING TYPE: END. MED 40

PLAN VERSION: MARCH 2021

BRAND DESIGNER:

SITE NUMBER:

STORE NUMBER:

PA/PM:

DRAWN BY. JOB NO.:

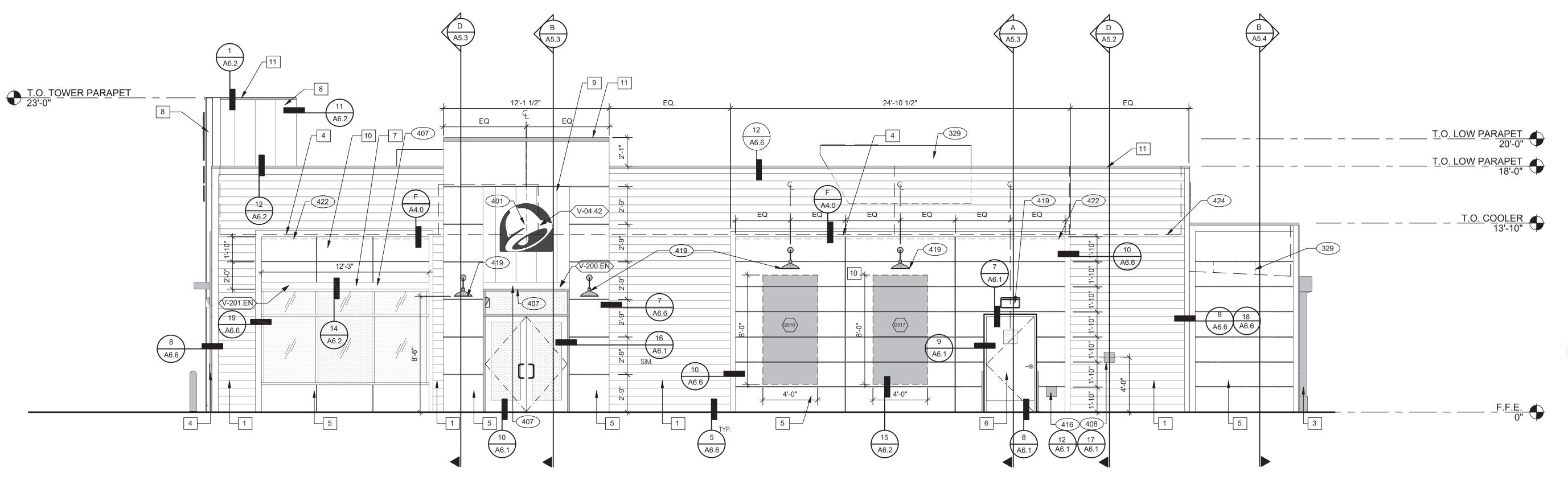
> **GREAT LAKES** TACO, L.L.C. 6305 Highland Road (M-59)

White Lake Twp., Michigan 48383



ENDEAVOR 2.0 EQUIPMENT AND SEATING PLAN

В



MISCELLANEOUS

A. SEE SHEET A1.1 "WINDOW TYPES" FOR WINDOW ELEVATIONS.

C. APPLY NEOPRENE GASKET (CONT.) BETWEEN BUILDING AND CANOPY.

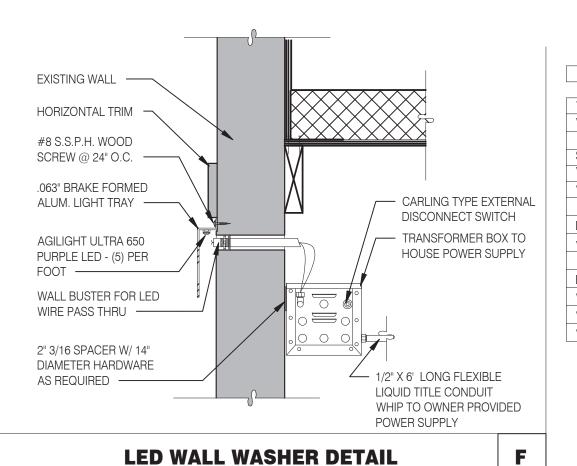
B. SEALANT AT ALL WINDOW AND DOOR FRAMES AND JAMB. DO NOT SEAL SILL @ WINDOWS.

EXTERIOR FINISH SCHEDULE

GENERAL NOTES

A. SEALANT AT ALL WALL AND ROOF PENETRATIONS.

SEALERS (REFER TO SPECS)



TYPE MARK	QTY	ITEM DESCRIPTION	LOC
TOWER			
V-09.14W	2	14" WHITE CHANNEL LETTERS VERTICAL	A4.1
SIDE ENTRY			
V-04.42	2	42" SWINGING BELL PURPLE LOGO FACE LIT	A4.1
V-200.EN	1	SIDE ENTRY AWNING 6' 4" X 6' 3" BLACK	A4.0
DRIVE THRU			
V-101.DT	1	DT AWNING (OVER DT) 9' 0" X 4' 0" BLACK	A4.1
EVEDDOM MANUELOS			
EYEBROW AWNINGS			
V-202.EN	1	FRONT EYEBROW (WINDOW) 16' 7" X 6" H X 1' 4" D BLACK	A4.1
V-203.EN	1	DT EYEBROW (WINDOW) 7' 8" L X 6" H X 1' 4" D BLACK	A4.1
V-201.EN	1	SIDE ENTRY EYEBROW (WINDOW) 12' L 6" H X 1' 4" D BLACK	A4.0

TYPE MARK	QTY	ITEM DESCRIPTION	LOC
TOWER			
V-09.14W	2	14" WHITE CHANNEL LETTERS VERTICAL	A4.1
SIDE ENTRY			
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DRIVE THRU			
V-101.DT	1	DT AWNING (OVER DT) 9' 0" X 4' 0" BLACK	A4.1
		,	
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V-202.EN	1	FRONT EYEBROW (WINDOW) 16' 7" X 6" H X 1' 4" D BLACK	A4.1
V-203.EN	1	DT EYEBROW (WINDOW) 7' 8" L X 6" H X 1' 4" D BLACK	A4.1
V-201.EN	1	SIDE ENTRY EYEBROW (WINDOW) 12' L 6" H X 1' 4" D BLACK	A4.0

l	1	SIDE ENTRY AWNING 6' 4" X 6' 3" BLACK	A4.0	CRITICAL DIMENSIONS A. REQUIRED CLEAR OPENING WIDTH TO ENSURE COORDINATION WITH STANDARD
HRU				SIGNAGE/BUILDING ELEMENTS DIMENSIONS.
-	1	DT AWNING (OVER DT) 9' 0" X 4' 0" BLACK	A4.1	
W AWNINGS				NOTE: NO EXTERIOR SIGNS ARE WITHIN THE SCOPE OF WORK COVERED BY THE BUILDING PERMIT
l	1	FRONT EYEBROW (WINDOW) 16' 7" X 6" H X 1' 4" D BLACK	A4.1	APPLICATION. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE
1	1	DT EYEBROW (WINDOW) 7' 8" L X 6" H X 1' 4" D BLACK	A4.1	INSTALLATION OF ALL EXTERIOR SIGNS AND INSTALLATION OF REQUIRED BLOCKING AND
l	1	SIDE ENTRY EYEBROW (WINDOW) 12' L 6" H X 1' 4" D BLACK	A4.0	ELECTRICAL CONNECTIONS FOR FINAL APPROVED SIGNS.

SYMBOL	ITEM/MATERIAL	MANUFACTURER	MATERIAL SPEC	COLOR	CONTACT INFORMATION
1	SIDING	JAMES HARDIE	ARTISAN V-GROOVE 144"L X 8.25"W; 7" EXPOSURE COMES PRIMED FOR PAINT	WORLDLY GRAY (SW7043), SEMI-GLOSS	SEE C / A 7.2
2	SCUPPERS	-	-	WORLDLY GRAY (SW7043), SEMI-GLOSS	
3	DOWN SPOUTS	-	-	WORLDLY GRAY (SW7043), SEMI-GLOSS	
4	HARDIE TRIM	JAMES HARDIE	HARDIE TRIM 5/4 SMOOTH 1"x5.5"	CYBERSPACE (SW7076), SEMI-GLOSS	SEE C / A 7.2
5	HARDIE REVEAL PANEL	JAMES HARDIE	REVEAL PANEL SYSTEM	CYBERSPACE (SW7076), SEMI-GLOSS	SEE C / A 7.2
6	HOLLOW METAL DOOR	-	-	SW PURPLE TB2603C, SEMI-GLOSS	
7	AWNINGS	SIGNAGE VENDOR	-	BLACK BY THE SIGNAGE VENDOR	
8	CORNER TOWER	WESTERN STATE	T-GROOVE 24GA PAINTED 18" PANEL	WEATHERED RUSTIC	SEE C / A 7.2
9	RECESS OF SIDE ENTRY PORTAL	WESTERN STATE	T-GROOVE 24GA PAINTED 18" PANEL	WEATHERED RUSTIC	SEE C / A 7.2
10	HARDIE REVEAL PANEL	JAMES HARDIE	REVEAL PANEL SYSTEM	SW PURPLE TB2603C, SEMI-GLOSS	SEE C / A 7.2
11	METAL PARAPET CAP	-	24GA GALVANIZED	CYBERSPACE (SW7076) KYNAR 500 COATING	

SIGNAGE

FRAME OR LOCATION A4.0 HYPNOTIZE ME BELL 48x96 HYPNOTIZE ME BELL 48x96 A4.0 HYPNOTIZE ME BELL M02 48x96 48x96

APPLICATOR MUST DO THEIR DUE DILIGENCE WITH PREPARATION. PRIMER: 1 COAT SW A24W8300 FINISH: 2 COATS SW A82-100 SERIES, MATCH COLORS FROM MATERIAL SCHEDULE.

FRONT ELEVATION 1/4" = 1'-0"

PAINT NOTES

329 MECHANICAL UNIT, SEE ROOF PLAN.

A-100 EXTERIOR LATEX SATIN.

BUILDING SIGN BY VENDOR. REQUIRES ELECTRICAL, SEE ELECTRICAL

METAL CANOPIES BY VENDOR. REQUIRES ELECTRICAL, SEE ELECTRICAL

PLANS. 408 CO2 FILLER VALVE & COVER.

416 HOSE BIB BOX AT 18" A.F.F.

419 EXTERIOR LIGHT FIXTURE. SEE ELECTRICAL DRAWINGS.

PURPLE LIGHT WALL WASHER, PROVIDED BY SIGNAGE VENDOR.

LINE OF ROOF BEYOND.

BUILDING ADDRESS NUMBER - OPAQUE APPLIQUE ON OUTSIDE OF GLAZING WHITE COLOR - ARIAL TYPEFACE 6" HEIGHT.



* GREGORY SCOT

NO. . 1301031102

SUITE 265 ROCHESTER HILLS, MI 48307 (248) 524-4700 (248) 524-9746

PROJECT # 20023

	1110000	31 # 20020
	DATE	REMARKS

CONTRACT DATE:

BUILDING TYPE: END. MED 40

PLAN VERSION: MARCH 2021

BRAND DESIGNER: SITE NUMBER:

STORE NUMBER: PA/PM:

DRAWN BY. JOB NO.:

> **GREAT LAKES** TACO, L.L.C.

6305 Highland Road (M-59) White Lake Twp., Michigan 48383



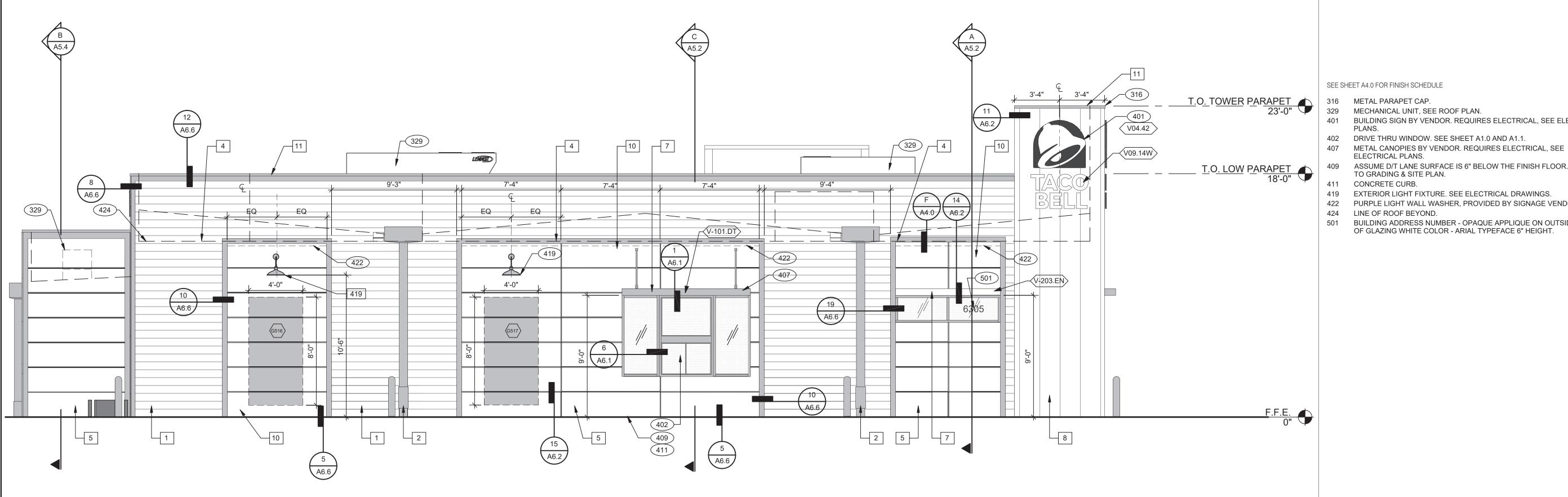
ENDEAVOR 2.0 EXTERIOR ELEVATIONS

KEY NOTES

D

C

В



SEE SHEET A4.0 FOR FINISH SCHEDULE

316 METAL PARAPET CAP.

329 MECHANICAL UNIT, SEE ROOF PLAN.

BUILDING SIGN BY VENDOR. REQUIRES ELECTRICAL, SEE ELECTRICAL

402 DRIVE THRU WINDOW. SEE SHEET A1.0 AND A1.1.

ELECTRICAL PLANS. ASSUME D/T LANE SURFACE IS 6" BELOW THE FINISH FLOOR. REFER

TO GRADING & SITE PLAN. CONCRETE CURB.

REAR ELEVATION 1/4" = 1'-0" **1**

NOTE: REFERENCE TO SHEET A4.0 FOR COLOR LEGEND

V-04.24 V-09.12W

12 A6.6

5

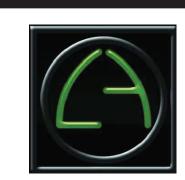
419

EXTERIOR LIGHT FIXTURE. SEE ELECTRICAL DRAWINGS.

PURPLE LIGHT WALL WASHER, PROVIDED BY SIGNAGE VENDOR. LINE OF ROOF BEYOND.

BUILDING ADDRESS NUMBER - OPAQUE APPLIQUE ON OUTSIDE OF GLAZING WHITE COLOR - ARIAL TYPEFACE 6" HEIGHT.

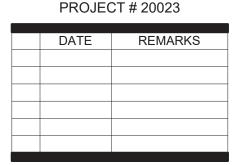




441 S. LIVERNOIS ROAD SUITE 265 ROCHESTER HILLS, MI 48307

(248) 524-4700 (248) 524-9746

PROJECT # 20023



CONTRACT DATE:

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> **GREAT LAKES** TACO, L.L.C. 6305 Highland Road (M-59)

White Lake Twp., Michigan 48383



ENDEAVOR 2.0 EXTERIOR ELEVATIONS

REAR ELEVATION 1/4" = 1'-0"

KEY NOTES

T.O. TOWER PARAPET 23'-0"

T.O. COOLER 13'-10"



T.O. TOWER PARAPET 23'-0"

15 A6.2

V-202.EN

A6.6

V04.42

V09.14

5 A6.2

419

A4.0

(419)-

422

14 A6.2

Great Lakes Taco, LLC Construction Plans

M59 and Bogie Lake Rd, White Lake Twp., MI

APPLICANT

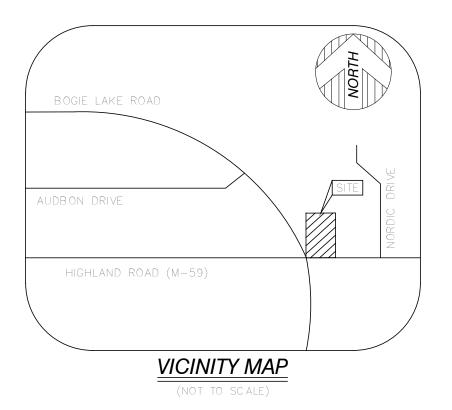
DORTCH ENTERPRISES, LLC 8467 RETREAT DR. GRAND BLANC, MI 48439 PHONE: (810)-771-4500

,

LEGEND LIGHTPOST/LAMP POST FLAGPOLE FOUND MONUMENT (AS NOTED GROUND ELEVATION GAS MANHOLE GAS VALVE LIGHT POLE WITH STREET LAMP TELEPHONE MANHOLE TRAFFIC SIGNAL STORM DRAIN MANHOLE FIRE HYDRANT FIRE DEPARTMENT CONNECTION WATER VALVE SINGLE POST SIGN DECIDUOUS TREE (AS NOTED) CONIFEROUS TREE (AS NOTED) SQUARE CATCH BASIN SANITARY LINE STORM LINE ----- W ----- GAS LINE PROPOSED CATCH BASIN PROPOSED MANHOLE PROPOSED FIRE HYDRANT PROPOSED WATER VALVE PROPOSED SANITARY LINE PROPOSED STORM WATER LINE PROPOSED WATER LINE __v __v __v __v __

ARCHITECT

L + A ARCHITECTS INC.
441 S. LIVERNOIS ROAD, SUITE 265
ROCHESTER HILLS, MI 48307
PHONE: (248)-524-4700



DRAWING INDEX

C1.0	COVER SHEET
1	TOPOGRAPHIC SURVEY
C2.0	DEMOLITION PLAN
C3.0	SITE LAYOUT & PAVING PLAN
C4.0	GRADING PLAN
C5.0	UTILITY PLAN
C6.0	PROFILE PLAN
C7.0	SOIL EROSION & SEDIMENTATION CONTROL PLAN
C8.0	SITE DETAILS

CIVIL ENGINEER

KEM-TEC & ASSOCIATES 22556 GRATIOT AVENUE EASTPOINTE, MI 48021

> CONTACT: GREG EZZO PHONE: (810)-712-8849

> > PARCEL AREA

46,541± SQUARE FEET = 1.068± ACRES

FLOOD NOTE
SUBJECT PARCEL DOES NOT LIE
WITHIN A FLOOD PLAIN

SITE BENCHMARKS

BENCHMARK #1
TURN ARROW ON HYDRANT, FIRST HYDRANT
ALONG WEST SIDE OF BOGIE LAKE ROAD NORTH
OF HIGHLAND ROAD.
ELEVATION = 982.44' (NAVD 88)

BENCHMARK #2 Turn arrow on hydrant, first hydrant along north side of highland road east of bogie lake road. elevation = 985.56' (navd 88)

PROPERTY DESCRIPTION

OF MICHIGAN, IS DESCRIBED AS FOLLOWS: A PART OF THE NORTHEAST 1/4 OF SECTION 20, TOWN 3 NORTH, RANGE 8 EAST, WHITE LAKE TOWNSHIP, OAKLAND COUNTY, MICHIGAN, DESCRIBED AS COMMENCING AT THE CENTER OF SECTION; THENCE NORTH OO DEGREES 31 MINUTES 08 SECONDS EAST ALONG THE NORTH-SOUTH 1/4 LINE OF SAID SECTION 20, 198.92 FEET; THENCE NORTH 89 DEGREES 58 MINUTES 09 SECONDS EAST, 519.78 FEET; THENCE SOUTH 87 DEGREES 30 MINUTES 16 SECONDS EAST, 513.36 FEET: THENCE 28.28 FEET ON A CURVE TO THE RIGHT WITH A RADIUS OF 5821.58 FEET, CHORD BEARING AND DISTANCE OF SOUTH 84 DEGREES 52 MINUTES 11 SECONDS EAST, 28.28 FEET; THENCE SOUTH 84 DEGREES 42 MINUTES 00 SECONDS EAST, 435.29 FEET; THENCE 118.86 FEET ON A CURVE TO THE LEFT WITH A RADIUS OF 5637.58 FEET, CHORD BEARING AND DISTANCE OF SOUTH 85 DEGREES 18 MINUTES 14 SECONDS EAST, 118.86 FEET TO THE POINT OF BEGINNING; THENCE NORTH 00 DEGREES 01 MINUTE 09 SECONDS WEST, 236.61 FEET; THENCE 94.59 FEET ALONG A CURVE TO THE LEFT WITH A RADIUS OF 533.50 FEET, CHORD BEARING AND DISTANCE OF NORTH 05 DEGREES 00 MINUTES 27 SECONDS WEST, 94.46 FEET; THENCE SOUTH 89 DEGREES 40 MINUTES 32 SECONDS EAST, 147.67 FEET; THENCE SOUTH 00 DEGREES 19 MINUTES 28 SECONDS WEST, 338.00 FEET; THENCE 137.67 FEET ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 5637.58 FEET, CHORD BEARING AND DISTANCE OF NORTH 86 DEGREES 36 MINUTES 27 SECONDS WEST, 137.67 FEFT TO THE POINT OF BEGINNING.





FOFESSIONAL ENGINEER
SURVEYING & ENVIRONME
SERVICES
A GROUP OF COMPANIES
SERVICES
SERVICES
Ann Arbor Grand Blanc
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COVER SHEET

FOR: GREAT LAKES TACO, LLC.

GAE

GAE

GAE

ENGINEERING SUBMISSION

GAE

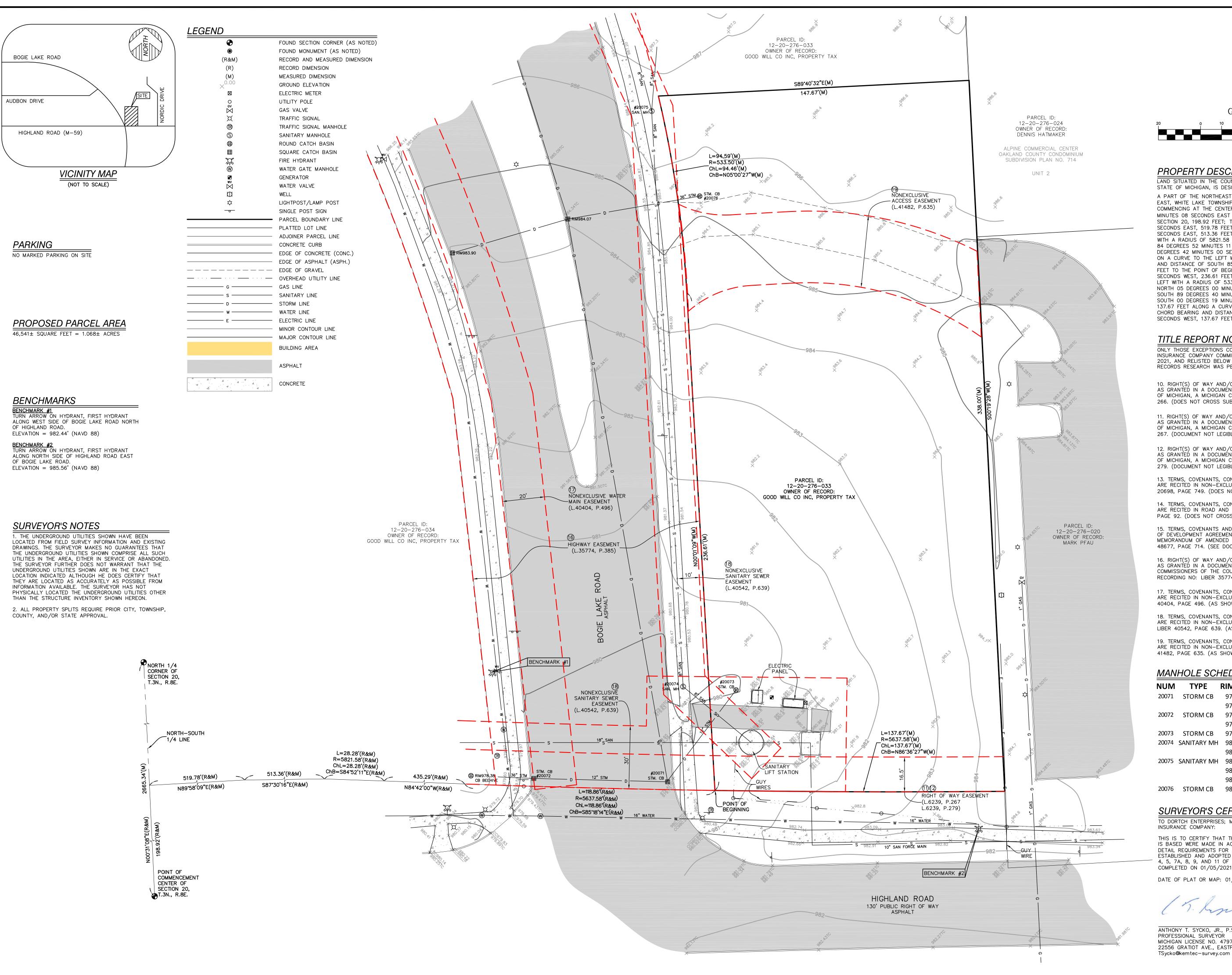
SPA SUBMISSION

BY

DESCRIPTION

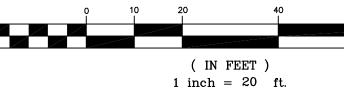
DRAWN BY: GAE 09/29/2021
CHECKED BY:
DATE:

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GRAPHIC SCALE



PROPERTY DESCRIPTION

LAND SITUATED IN THE COUNTY OF OAKLAND, TOWNSHIP OF WHITE LAKE, STATE OF MICHIGAN, IS DESCRIBED AS FOLLOWS:

A PART OF THE NORTHEAST 1/4 OF SECTION 20, TOWN 3 NORTH, RANGE 8 EAST, WHITE LAKE TOWNSHIP, OAKLAND COUNTY, MICHIGAN, DESCRIBED AS COMMENCING AT THE CENTER OF SECTION; THENCE NORTH 00 DEGREES 31 MINUTES 08 SECONDS EAST ALONG THE NORTH-SOUTH 1/4 LINE OF SAID SECTION 20, 198.92 FEET; THENCE NORTH 89 DEGREES 58 MINUTES 09 SECONDS EAST, 519.78 FEET; THENCE SOUTH 87 DEGREES 30 MINUTES 16 SECONDS EAST, 513.36 FEET; THENCE 28.28 FEET ON A CURVE TO THE RIGHT WITH A RADIUS OF 5821.58 FEET, CHORD BEARING AND DISTANCE OF SOUTH 84 DEGREES 52 MINUTES 11 SECONDS EAST, 28.28 FEET; THENCE SOUTH 84 DEGREES 42 MINUTES 00 SECONDS EAST, 435.29 FEET; THENCE 118.86 FEET ON A CURVE TO THE LEFT WITH A RADIUS OF 5637.58 FEET, CHORD BEARING AND DISTANCE OF SOUTH 85 DEGREES 18 MINUTES 14 SECONDS EAST, 118.86 FEET TO THE POINT OF BEGINNING; THENCE NORTH 00 DEGREES 01 MINUTE 09 SECONDS WEST, 236.61 FEET; THENCE 94.59 FEET ALONG A CURVE TO THE LEFT WITH A RADIUS OF 533.50 FEET, CHORD BEARING AND DISTANCE OF NORTH 05 DEGREES 00 MINUTES 27 SECONDS WEST, 94.46 FEET; THENCE SOUTH 89 DEGREES 40 MINUTES 32 SECONDS EAST, 147.67 FEET; THENCE SOUTH 00 DEGREES 19 MINUTES 28 SECONDS WEST, 338.00 FEET; THENCE 137.67 FEET ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 5637.58 FEET, CHORD BEARING AND DISTANCE OF NORTH 86 DEGREES 36 MINUTES 27 SECONDS WEST, 137.67 FEET TO THE POINT OF BEGINNING.

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TITLE REPORT NOTE

ONLY THOSE EXCEPTIONS CONTAINED WITHIN THE FIDELITY NATIONAL TITLE INSURANCE COMPANY COMMITMENT No. GLT2100144, DATED FEBRUARY 8, 2021, AND RELISTED BELOW WERE CONSIDERED FOR THIS SURVEY. NO OTHER RECORDS RESEARCH WAS PERFORMED BY THE CERTIFYING SURVEYOR.

10. RIGHT(S) OF WAY AND/OR EASEMENT(S) AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT: GRANTED TO: GENERAL TELEPHONE COMPANY OF MICHIGAN, A MICHIGAN CORPORATION RECORDING NO: LIBER 6239, PAGE 266. (DOES NOT CROSS SUBJECT PROPERTY)

11. RIGHT(S) OF WAY AND/OR EASEMENT(S) AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT: GRANTED TO: GENERAL TELEPHONE COMPANY OF MICHIGAN, A MICHIGAN CORPORATION RECORDING NO: LIBER 6239, PAGE 267. (DOCUMENT NOT LEGIBLE, EASEMENT SHOWN PER PREVIOUS SURVEY)

12. RIGHT(S) OF WAY AND/OR EASEMENT(S) AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT: GRANTED TO: GENERAL TELEPHONE COMPANY OF MICHIGAN, A MICHIGAN CORPORATION RECORDING NO: LIBER 6239, PAGE 279. (DOCUMENT NOT LEGIBLE, EASEMENT SHOWN PER PREVIOUS SURVEY)

13. TERMS, COVENANTS, CONDITIONS, RESTRICTIONS AND EASEMENTS WHICH ARE RECITED IN NON-EXCLUSIVE STORM SEWER EASEMENT RECORDED IN LIBER 20698, PAGE 749. (DOES NOT CROSS SUBJECT PROPERTY)

14. TERMS, COVENANTS, CONDITIONS, RESTRICTIONS AND EASEMENTS WHICH ARE RECITED IN ROAD AND GRADING EASEMENT RECORDED IN LIBER 27727, PAGE 92. (DOES NOT CROSS SUBJECT PROPERTY)

15. TERMS, COVENANTS AND CONDITIONS WHICH ARE RECITED IN MEMORANDUM OF DEVELOPMENT AGREEMENT RECORDED IN LIBER 30116, PAGE 166. MEMORANDUM OF AMENDED DEVELOPMENT AGREEMENT RECORDED IN LIBER

48677, PAGE 714. (SEE DOCUMENT FOR TERMS AND CONDITIONS) 16. RIGHT(S) OF WAY AND/OR EASEMENT(S) AND RIGHTS INCIDENTAL THERETO,

AS GRANTED IN A DOCUMENT: GRANTED TO: BOARD OF COUNTY ROAD COMMISSIONERS OF THE COUNTY OF OAKLAND, A PUBLIC BODY CORPORATE RECORDING NO: LIBER 35774, PAGE 385. (AS SHOWN)

17. TERMS, COVENANTS, CONDITIONS, RESTRICTIONS AND EASEMENTS WHICH ARE RECITED IN NON-EXCLUSIVE WATER MAIN EASEMENT RECORDED IN LIBER 40404, PAGE 496. (AS SHOWN)

18. TERMS, COVENANTS, CONDITIONS, RESTRICTIONS AND EASEMENTS WHICH ARE RECITED IN NON-EXCLUSIVE SANITARY SEWER EASEMENT RECORDED IN LIBER 40542, PAGE 639. (AS SHOWN)

19. TERMS, COVENANTS, CONDITIONS, RESTRICTIONS AND EASEMENTS WHICH ARE RECITED IN NON-EXCLUSIVE ACCESS EASEMENT RECORDED IN LIBER 41482, PAGE 635. (AS SHOWN)

MANHOLF SCHEDULF

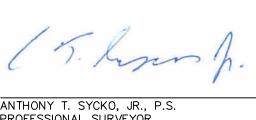
NUM	TYPE	RIM (FT)	SIZE (IN)	DIR	INV ELEV (FT)
20071	STORM CB	979.06	12	NE	973.64
		979.06	12	W	973.64
20072	STORM CB	979.21	12	Е	974.01
		979.21	36	W	974.01
20073	STORM CB	979.94	12	SW	974.94
20074	SANITARY MH	980.25	8	Ν	970.75
		980.25	8	SE	970.51
20075	SANITARY MH	986.31	8	Ν	973.36
		986.31	8	S	972.91
		986.31	8	Ν	977.11
20076	STORM CB	985.11	36	W	975.51

SURVEYOR'S CERTIFICATION

TO DORTCH ENTERPRISES; MEIJER, INC.; AND FIDELITY NATIONAL TITLE

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDED ITEMS 1, 2, 4, 5, 7A, 8, 9, AND 11 OF TABLE A, THEREOF. THE FIELD WORK WAS COMPLETED ON 01/05/2021.

DATE OF PLAT OR MAP: 01/21/2021



PROFESSIONAL SURVEYOR MICHIGAN LICENSE NO. 47976 22556 GRATIOT AVE., EASTPOINTE, MI 48021



1 OF 1 SHEETS



GENERAL DEMOLITION NOTES

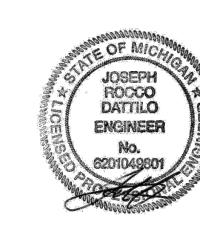
- THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT:
- THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT:
- 1. ALL MATERIAL TO BE REMOVED, WHETHER SPECIFICALLY NOTED IN THE PLANS OR NOT, SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR AND DISPOSED OF OFF—SITE IN A LEGAL MANNER. NO ON—SITE BURY OR BURN PITS SHALL BE ALLOWED.
- 2. ALL DEMOLITION WORK SHALL CONFORM TO ALL LOCAL CODES AND ORDINANCES.
- 3. STAGING/PHASING OF DEMOLITION AND CONSTRUCTION IS TO BE COORDINATED WITH THE OWNER AND THE CONTRACTOR PRIOR TO CONSTRUCTION.
- 4. SPECIFIC DEMOLITION ITEMS HAVE BEEN INDICATED ON THE PLANS AS A GUIDE TO THE GENERAL SCOPE OF THE WORK. IT IS THE INTENT THAT THESE ITEMS SHALL BE COMPLETELY REMOVED BY THE CONTRACTOR ABOVE AND BELOW GROUND, UNLESS SPECIFICALLY NOTED OTHERWISE, AND THAT DEMOLITION WILL INCLUDE BUT WILL NOT NECESSARILY BE LIMITED TO THESE ITEMS. CONTRACTOR SHALL VISIT SITE TO VERIFY EXISTING CONDITIONS AND EXTENTS OF THE DEMOLITION THAT WILL BE REQUIRED PRIOR TO SUBMITTING A BID.
- 5. REMOVE ALL STRUCTURES DESIGNATED FOR REMOVAL ACCORDING TO THE DEMOLITION PLAN. THIS INCLUDES CONCRETE SIDEWALKS, BRICK AND CURBED AREAS, ASPHALT, TRESS, ETC.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEAN UP, NOISE, DUST CONTROL, STREET SWEEPING AND HOURS OF OPERATION IN ACCORDANCE WITH THE LOCAL CODES.
- 7. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BARRICADES, SIGNAGE, MARKINGS, LIGHTS AND OTHER TRAFFIC CONTROL DEVICES
 TO PROTECT THE WORK ZONE AND SAFELY MAINTAIN TRAFFIC PER AGENCY REQUIREMENTS AND IN ACCORDANCE WITH THE MICHIGAN
 MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD) LATEST EDITION.
- 8. THE CONTRACTOR SHALL CONTACT THE APPROPRIATE UTILITY COMPANIES TO CONFIRM THAT UTILITY LEADS HAVE BEEN TAKEN OUT
 OF SERVICE PRIOR TO DEMOLITION.
- 9. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND REPLACEMENT OF SIGNS AND SUPPORTS WITHIN THE WORK AREA, AS
 NECESSARY TO FACILITATE CONSTRUCTION. SIGNS SHALL BE PROTECTED OR STOCKPILED FOR REUSE AS SPECIFIED IN THE PLANS
 OR AS REQUIRED BY THE AGENCY OF JURISDICTION. THE CONTRACTOR SHALL REPLACE ANY DAMAGED SIGNS AND SUPPORTS AT NO
 ADDITIONAL COST TO THE OWNER.
- 10. THE CONTRACTOR SHALL NOTIFY MISS DIG, THE CITY OF WARREN ENGINEER AND /OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
- 11.ALL SITE FEATURES WITHIN THE LIMIT OF DISTURBANCE INDICATED ON THIS PLAN ARE TO BE REMOVED/DEMOLISHED UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL NOTIFY KEM-TEC IF SIGNIFICANT DISCREPANCIES ARE DISCERNED BETWEEN THIS PLAN
- 12. THE LOCATION OF ALL UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE BASED ON RECORDS PROVIDED BY THE UTILITY OWNERS AND VISIBLE EVIDENCE OBTAINED IN THE FIELD. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED TO THE COMPLETENESS OR ACCURACY THEREOF.

DEMOLITION LEGEND

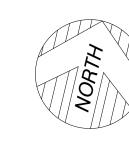
CONCRETE PAVEMENT REMOVAL

PROPERTY LINE

LIMITS OF DISTURBANCE







DEMOLITION PLAN SCALE: 1"= 20'

C2.0

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SURVEYING & ENVIRCE
SERVICES

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POINTE

Ann Arbor
Grand

TACO, LLC.
OAD, WHITE LAKE

PREPARED FOR: GREAT LAKES TACC HLAND (M-59) & BOGIE LAKE ROAD, TWP, MI, 48383

REVISED PER REVIEW COMMENTS
ENGINEERING SUBMISSION
SPA SUBMISSION
DESCRIPTION

9.29.2021 GAE 8.02.2021 GAE 2021 GAE DATE BY

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EMBER 29, 2021

SCALE: 4,, 0.,

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SEPTEMBER 29, 2021
PROJECT NO:



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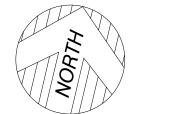
PROPOSED BUILDING PROPOSED ASPHALT PAVEMENT PROPOSED CONCRETE PAVEMENT PROPOSED WATER STRUCTURES PROPOSED MANHOLE / CATCH BASIN PAVING SITE NOTES 1. ALL LIGHTING SHALL BE SHIELDED AND DIRECTED DOWNWARD AND AWAY FROM ADJACENT PROPERTIES. LIGHTING SHALL MEET REQUIREMENTS OF THE LOCAL TANKS OF THE LOCAL TANKS. SEE LIGHTING PLAN FOR ADDITIONAL INFORMATION. 2. GROUND MOUNTED TRANSFORMERS AND ROOF MOUNTED MECHANICAL EQUIPMENT SHALL BE SCREENED AS REQUIRED IN THE LOCAL ZONING ORDINANCE. 3. ALL SIGNS TO MEET REQUIREMENTS OF CITY CODE OF ORDINANCES AND BE APPROVED BY BUILDING DEPARTMENT 4. PARKING SPACES SHALL BE STRIPPED PER LOCAL ZONING ORDINANCE 5. RESTORATION OF ANY EXISTING HARD SURFACE AREA, OF ANY TYPE, REQUIRED AS A RESULT OF REMOVAL OF EXISTING SURFACING BY CITY OF WARREN FORCES OR AGENTS DURING THE COURSE OF MAINTENANCE OF WATER MAIN OR SANITARY SEWER LOCATED UNDER PAVEMENT, IS THE RESPONSIBILITY OF THE OWNER OF THIS SITE AND WILL NOT BE PERFORMED BY, NOR PAID FOR BY CITY OF White Lake Twp. 6. THE SITE IS NOT ADJACENT TO ANY RESIDENTIALLY ZONED PROPERTY.

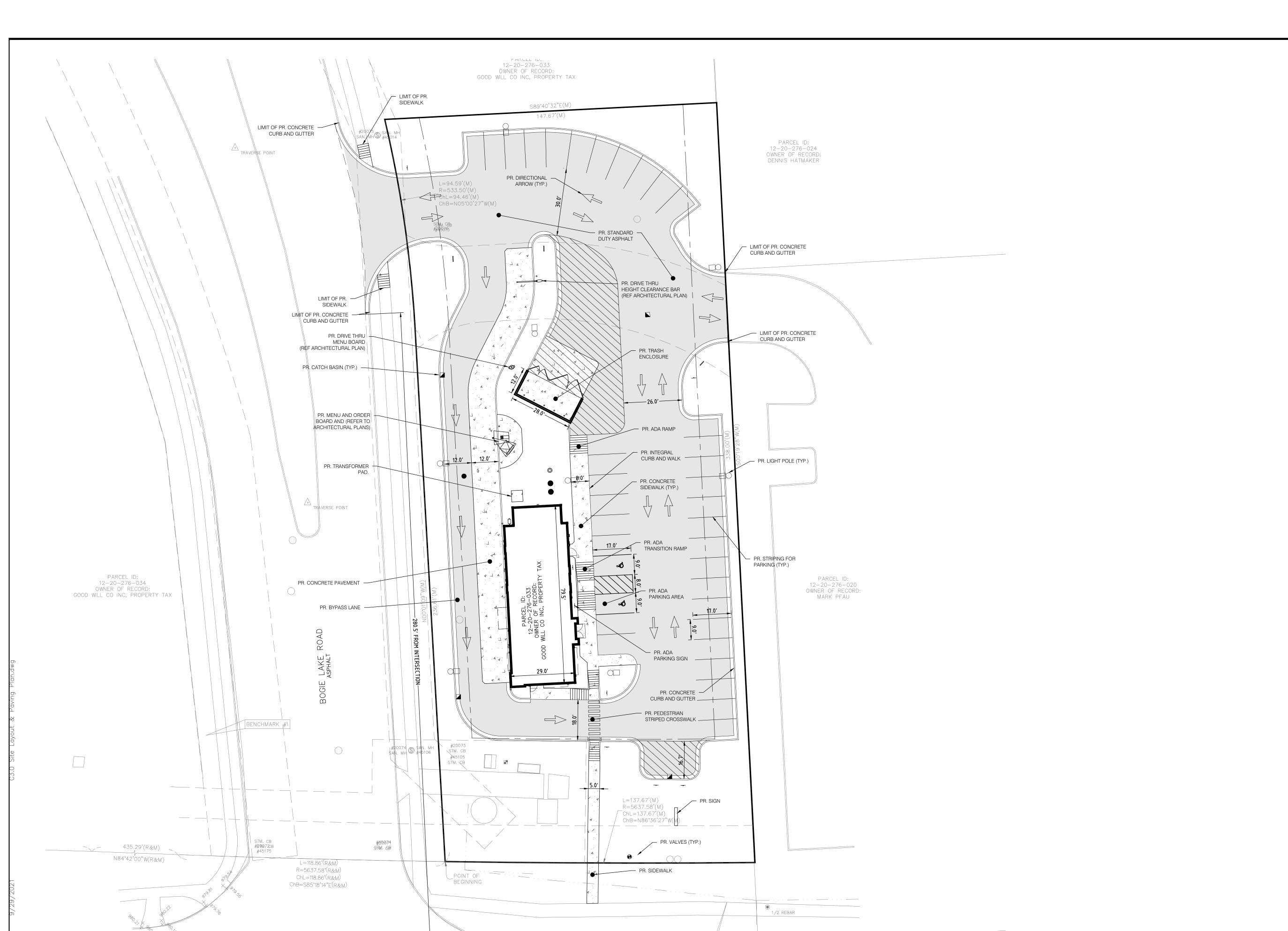
SITE LEGEND

PROPERTY LINE

PROPOSED CONCRETE

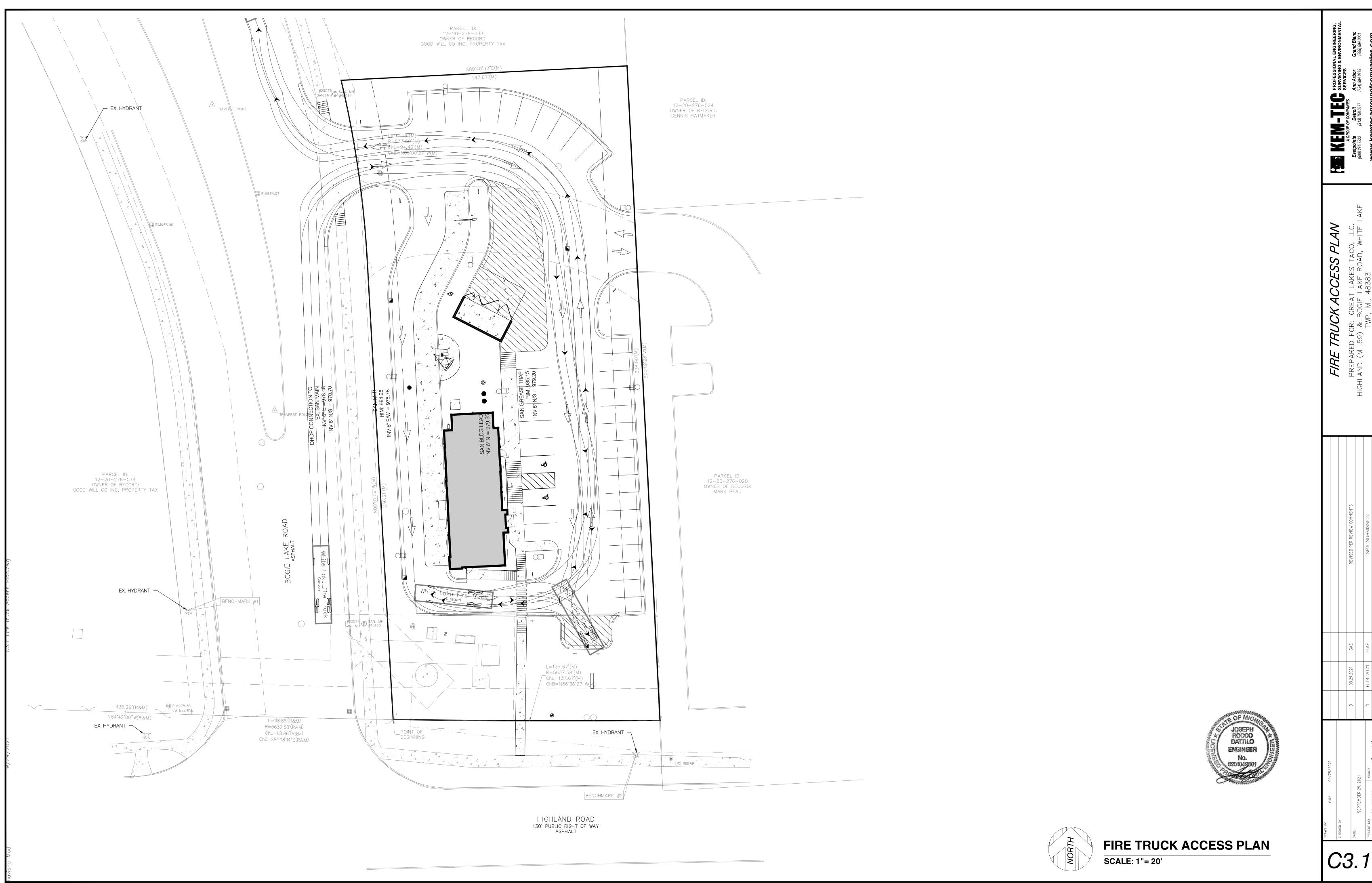
CURB AND GUTTER





HIGHLAND ROAD 130' public right of way asphalt

BENCHMARK #2





GRADING LEGEND

× 900.00 EXISTING GRADES

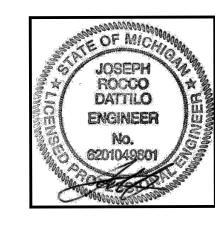
PROPOSED GRADES

PROPERTY LINE

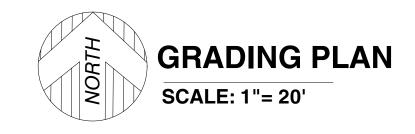
PROPOSED RIDGE LINE

GRADING NOTES

- 1. ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF WHITE LAKE TOWNSHIP AND OAKLAND COUNTY
- 2. IN AREAS WHERE NEW PAVEMENTS ARE BEING CONSTRUCTED, THE TOPSOIL AND SOIL CONTAINING ORGANIC MATTER SHALL BE REMOVED PRIOR TO PAVEMENT CONSTRUCTION.
- 3.ON—SITE FILL CAN BE USED IF THE SPECIFIED COMPACTION REQUIREMENTS CAN BE ACHIEVED. IF ON—SITE SOIL IS USED, IT SHOULD BE CLEAN AND FREE OF FROZEN SOIL, ORGANICS, OR OTHER DELETERIOUS MATERIALS.
- 4. THE FINAL SUBGRADE/EXISTING AGGREGATE BASE SHOULD BE THOROUGHLY PROOF ROLLED USING A FULLY LOADED TANDEM AXLE TRUCK OR FRONT END LOADER UNDER THE OBSERVATION OF A GEOTECHNICAL/ PAVEMENT ENGINEER. LOOSE OR YIELDING AREAS THAT CANNOT BE MECHANICALLY STABILIZED SHOULD BE REINFORCED USING GEOGRIDS OR REMOVED AND REPLACED WITH ENGINEERED FILL OR AS DICTATED BY FIELD CONDITIONS.
- 5. SUBGRADE UNDERCUTTING, INCLUDING BACKFILLING SHALL BE PERFORMED TO REPLACE MATERIALS SUSCEPTIBLE TO FROST HEAVING AND UNSTABLE SOIL CONDITIONS. ANY EXCAVATIONS THAT MAY BE REQUIRED BELOW THE TOPSOIL IN FILL SECTIONS OR BELOW SUBGRADE IN CUT SECTIONS, WILL BE CLASSIFIED AS SUBGRADE UNDERCUTTING.
- 6. SUBGRADE UNDERCUTTING, INCLUDING BACKFILLING SHALL BE PERFORMED WHERE NECESSARY AND THE EXCAVATED MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR. ANY SUBGRADE UNDERCUTTING SHALL BE BACKFILLED WITH SAND OR OTHER SIMILAR APPROVED MATERIAL. BACKFILL SHALL BE COMPACTED TO 95% OF THE MAXIMUM UNIT WEIGHT (PER ASTM D—1557) UNLESS OTHERWISE SPECIFIED.
- 7. BACKFILL UNDER PAVED AREAS SHALL BE AS SPECIFIED ON DETAILS.
- 8. ANY SUB-GRADE WATERING REQUIRED TO ACHIEVE REQUIRED DENSITY SHALL BE CONSIDERED INCIDENTAL TO THE JOB.
- 9.FINAL PAVEMENT ELEVATIONS SHOULD BE SO DESIGNED TO PROVIDE POSITIVE SURFACE DRAINAGE. A MINIMUM SURFACE SLOPE OF 1.0 PERCENT IS RECOMMENDED.
- 10. CONSTRUCTION TRAFFIC SHOULD BE MINIMIZED ON THE NEW PAVEMENT. IF CONSTRUCTION TRAFFIC IS ANTICIPATED ON THE PAVEMENT STRUCTURE, THE INITIAL LIFT THICKNESS COULD BE INCREASED AND PLACEMENT OF THE FINAL LIFT COULD BE DELAYED UNTIL THE MAJORITY OF THE CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED. THIS ACTION WILL ALLOW REPAIR OF LOCALIZED FAILURE, IF ANY DOES OCCUR, AS WELL AS REDUCE LOAD DAMAGE ON THE PAVEMENT SYSTEM.
- 11. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH WHITE LAKE TOWNSHIP AND SPECIFICATIONS.
- 12. SPOT ELEVATIONS INDICATE TOP OF PAVEMENT UNLESS OTHERWISE INDICATED:
 - TC = TOP OF CURB BC = BOTTOM OF CURB
- 13. REFER TO LANDSCAPE PLAN FOR LANDSCAPE TREATMENT AND PLACEMENT.







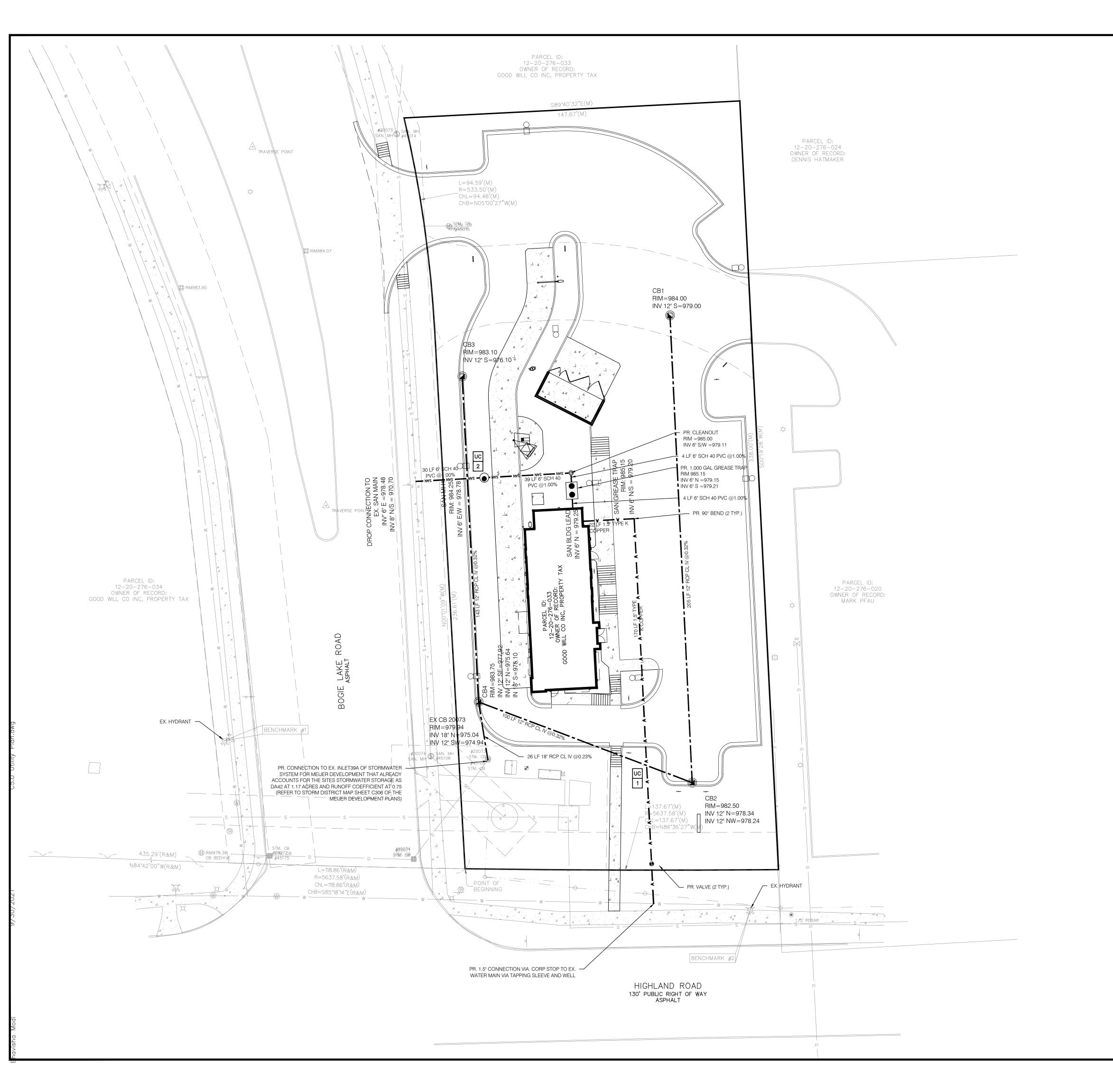
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SUNCESSIONAL SURVEYING & EN A GROUP OF COMPANIES

GRADING PLAN

D FOR: GREAT LAKES TACO, LL

-59) & BOGIE LAKE ROAD, WHIT



UTILITY LEGEND

PROPOSED SANITARY LINE

PROPOSED WATER LINE

PROPOSED STORMWATER PIPING

PROPOSED CATCH BASIN STRUCTURE

PROPOSED MANHOLE STRUCTURE /
WATER QUALITY UNIT

PROPOSED WATER STRUCTURES

PROPOSED SANITARY CLEANOUT

UTILITY NOTES

1. ALL CONSTRUCTION PROCEDURES AND MATERIALS SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF WHITE LAKE TOWNSHIP A PRE—CONSTRUCTION MEETING SHALL BE SCHEDULED BY WHITE LAKE TOWNSHIP AND HELD PRIOR TO THE START OF CONSTRUCTION.

2.CONTRACTOR MUST CONTACT MISS DIG (811) AT LEAST THREE WORKING DAYS PRIOR TO THE START OF CONSTRUCTION FOR UNDERGROUND UTILITY LOCATIONS. ALL UTILITIES SHALL BE STAKED BEFORE CONSTRUCTION

3.ALL WATER MAIN EASEMENTS SHALL BE PROVIDED PRIOR TO CONSTRUCTION AND ACCEPTANCE OF THE WATER DISTRIBUTION SYSTEM.

4. WATER MAINS SHALL BE CONSTRUCTED WITH A MINIMUM COVER OF 6 FEET BELOW FINISHED GRADES, INCLUDING OPEN DRAINAGE COURSES.

5.ALL TRENCHES UNDER OR WITHIN A 1:1 RATIO OF EXISTING OR PROPOSED PAVEMENT OR DRIVEWAYS, SHALL BE BACKFILLED WITH COMPACTED CLASS II SAND TO GRADE (95% MAXIMUM UNIT DENSITY).

6. WHERE TWO UTILITIES CROSS, PROVIDE CLASS II BACKFILL MATERIAL IN SIX (6) INCH COMPACTED LAYERS TO TOP HIGHEST UTILITY.

7. WHERE WATER MAINS DIP UNDER OTHER UTILITIES, THE SECTIONS WHICH ARE DEEPER THAN NORMAL SHALL BE CONSTRUCTED WITH 11-1/4° VERTICAL BENDS, 22 ½° OR 45° BENDS MUST BE RODDED AND PROPERLY

8.ALL PRECAST CONCRETE GATE WELL SECTIONS SHALL BE IN ACCORDANCE WITH A.S.T.M. C478, STANDARD SPECIFICATIONS FOR PRECAST REINFORCED CONCRETE MANHOLE SECTIONS. WALL THICKNESS SHALL BE AS SHOWN ON THESE DETAILS. ALL JOINTS FOR PRECAST CONCRETE GATE WELL SECTIONS SHALL BE "MODIFIED GROOVE TONGUE" WITH GASKET MANUFACTURED TO CONFORM WITH A.S.T.M. C443, STANDARD SPECIFICATION FOR JOINTS FOR CIRCULAR CONCRETE SEWER AND CULVERT PIPE USING RUBBER GASKETS.

9.CONTRACTOR SHALL INSTALL VALVES, TAPPING SLEEVES, AND GATE WELL STRUCTURES IN STRICT COMPLIANCE WITH MEASUREMENTS PROVIDED ON SHEET 1 (2'-0" BETWEEN GATE WELL WELL AND CENTERLINE OF OPERATING NUT) TO ALLOW PROPER OPERATION OF VALVE THROUGH GATE WELL OPENING.

10. ALL CROSS—CONNECTION CONTROL DEVICES SHALL BE INSTALLED AS REQUIRED BY THE PLYMOUTH TOWNSHIP PLUMBING INSPECTOR AND IN ACCORDANCE WITH THE STANDARDS OF THE **OAKLAND COUNY** COUNTY DRAIN COMMISSIONER OPERATION AND MAINTENANCE DIVISION AND THE MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY, DIVISION OF DRINKING WATER AND RADIOLOGICAL PROTECTION.

11. ALL WATER SERVICE CONNECTIONS TWO (2) INCHES AND SMALLER SHALL BE MADE BY WHITE LAKE TOWNSHIP, DEPARTMENT OF PUBLIC SERVICES AFTER WATER MAIN ACCEPTANCE AND APPLICABLE PERMITS ARE OBTAINED.

12. ALL FITTINGS AND BENDS SHOULD BE BLOCKED IN ACCORDANCE WITH THRUST BLOCK DETAILS, UNLESS ALTERNATE THRUST RESTRAINT SYSTEM, AS INDICATED PLANS AND SPECIFICATIONS, IS APPROVED BY WHITE LAKE TOWNSHIP DEPARTMENT OF PUBLIC SERVICES.

UTILITY QUANTITIES

18" RCP CL IV STORM PIPE 26 LF

12" RCP CL IV STORM PIPE 448 LF

1.5" TYPE K COPPER PIPE 192 LF

6" SCH 40 PVC SAN. PIPE 77 LF

1,000 GAL GREASE TRAP 1

CATCH BASIN 4

CLEANOUT STRUCTURE 1

VALVE 2

90° BEND 2

UTILITY CROSSING SCHEDULE

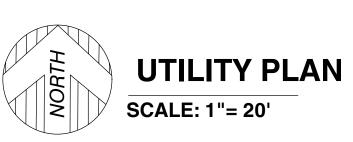
GRADE 983.50 ±
TOP OF 24" STORM 679.26

12" STORM INVERT 978.26
BOTTOM OF 1.5" WATER 976.76
(WATERMAIN DIPPED WITH MIN.
CLEARANCE 1.5 FT, DIPPING/DEFLECTING
OF THE WATERMAIN SHALL FOLLOW
APPLICABLE AGENCY STANDARDS)

UC 6" SAN INVERT 978.65 12" STORM INVERT 976.96 TOTAL CLEARANCE OF 1.69 FT







PROFESSIONAL ENGINEER
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OIT Ann Arbor Grand Blanc
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Eastpointe Detroit Ann
(800) 295.7222 (313) 758.0677 (734) 8

FOR: GREAT LAKES TACO, LLC. 9) & BOGIE LAKE ROAD, WHITE TWP, MI, 48383

ENGINEERING SUBMISSION
SPA SUBMISSION
DESCRIPTION

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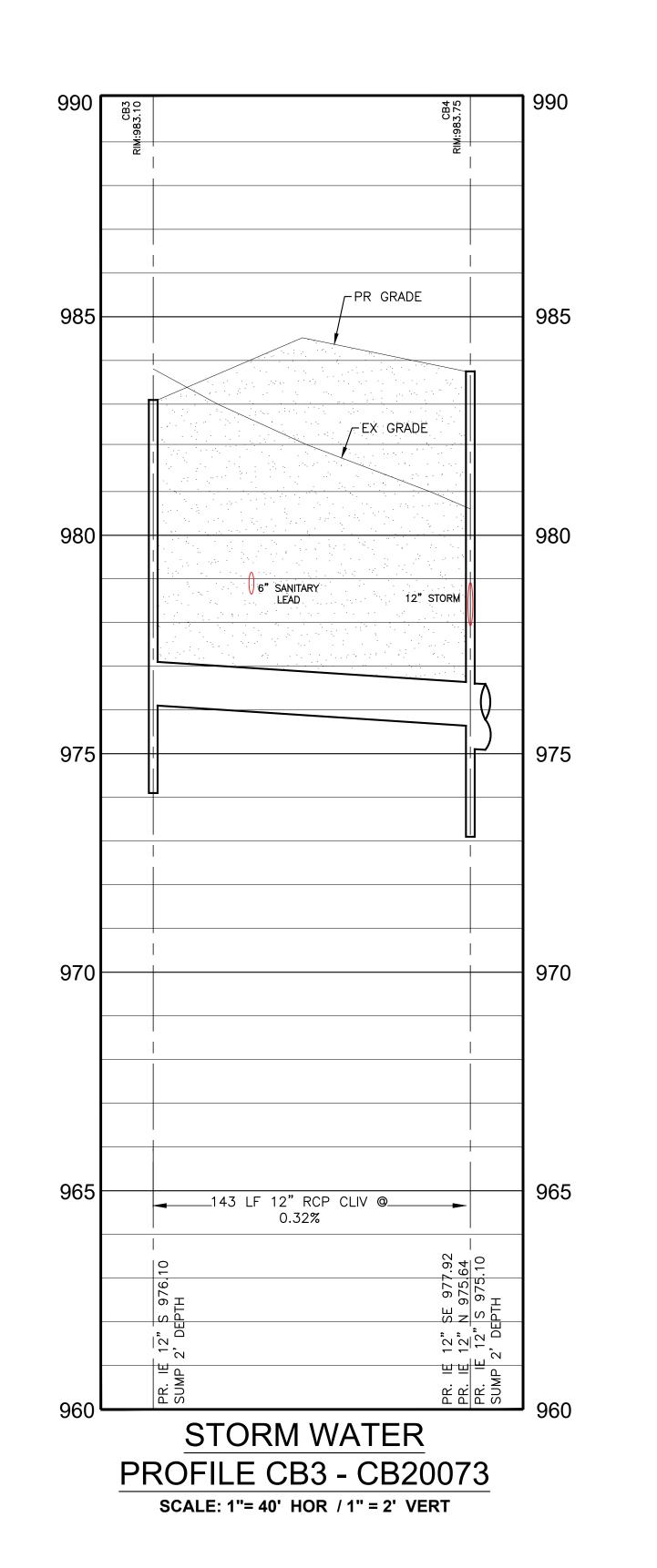
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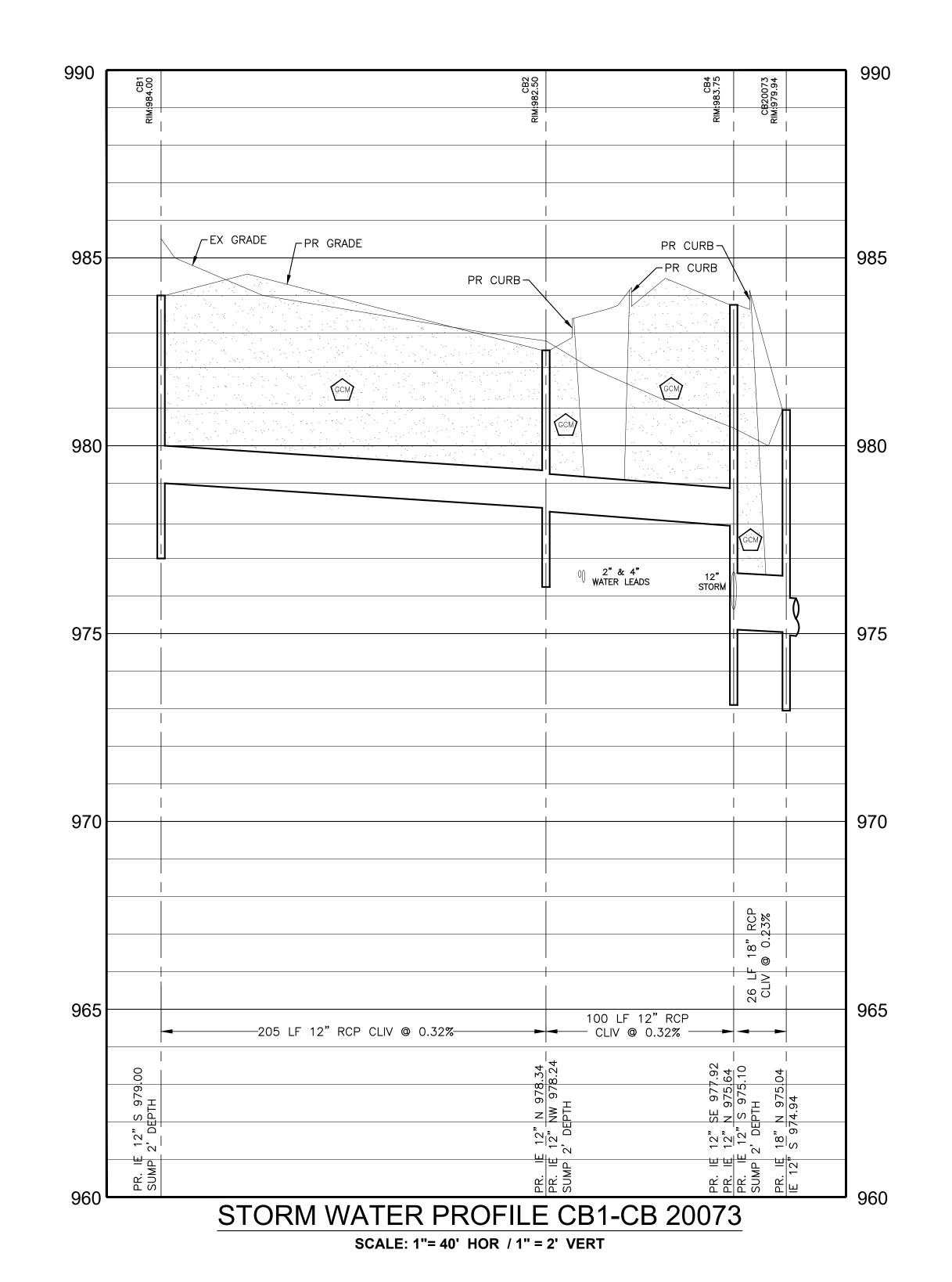
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CHECKED BY:

DATE:

SEPTEMBER 29, 2021

PROJECT NO; 18-00000 | scale: 1" =

FROFESSIONA SURVEYING & SURVEYING & SERVICES
A GROUP OF COMPANIES

Eastpointe Detroit Ann Arbor
(734) 994,0888

C6.0



SOIL EROSION LEGEND

PROPERTY LINE

PROPOSED LIMIT OF DISTURBANCE

PROPOSED SILT FENCE

PROPOSED INLET FILTER

SOIL EROSION & SEDIMENTATION CONTROL OPERATION TIME SCHEDULE

CONSTRUCTION SEQUENCE	AUG 2021	SEPT	ост	NOV
TEMPORARY EROSION CONTROL MEASURES	2021			
STRIP & STOCKPILE TOPSOIL / ROUGH GRAD	E 💻			
STORM SEWER				
FOUNDATION / BLDG. CONSTRUCTION				
SANITARY SEWER & WATER MAIN				
INSTALL ALL OTHER UTILITIES			_	
SITE CONSTRUCTION & PAVEMENT				
PERMANENT EROSION CONTROL MEASURES				
FINISH GRADING			_	
LANDSCAPING			_	

DISTURBED AREA =1.04± ACRES

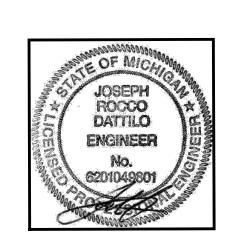
SOIL TYPE INFORMATION

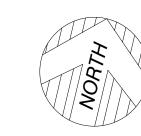
MAP UNIT SYMBOL	MAP UNIT NAME
50B	UDIPSAMMENTS, UNDULATING

MAINTENANCE OF EROSION CONTROL DEVICES

- FILTERS MUST BE CLEANED PERIODICALLY SO THEY DON'T CLOGGED.
- FILTER FENCING WHICH SAGS, FALLS OVER OR IS NOT STAKED IN, SHOULD BE PROMPTLY REPAIRED OR REPLACED.
- 3. SILT FENCES SHOULD BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND SEVERAL TIMES DURING PROLONGED RAINFALLS.
- 4. IF THE FENCE IS SAGGING OR THE SOIL HAS REACHED ONE HALF THE HEIGHT OF THE FABRIC, THE SOIL BEHIND THE FABRIC MUST BE REMOVED.
- 5. MULCHED AREAS SHOULD BE CHECKED FOLLOWING EACH RAIN TO ENSURE THE MULCH IS STAYING IN PLACE. ADDITIONAL TACKING MATERIALS OR NETTING MAY NEED TO BE APPLIED TO HOLD THE MULCH IN PLACE.

6. NEWLY SEEDED AREAS NEED TO BE INSPECTED FREQUENTLY FOR THE FIRST FEW MONTHS TO ENSURE THE GRASS IS GROWING. IF THE SEEDED AREA IS DAMAGED DUE TO RUNOFF, ADDITIONAL STORMWATER MEASURES MAY BE NEEDED.





SOIL EROSION & SEDIMENTATION CONTROL PLAN SCALE: 1"= 20'

C7.0

PROFESSIONAL ENGINEER SURVEYING & ENVIRONMEI SURVEYING & ENVIRONMEI SERVICES

A GROUP OF COMPANIES

Eastpointe Detroit Ann Arbor Grand Blanc (734) 994.0888 (888) 694.0001

DINIENTATION CONTROL PLAN
PREPARED FOR: GREAT LAKES TACO, LLC.
HLAND (M-59) & BOGIE LAKE ROAD, WHITE LAK
TWP. MI. 48383

REVISED PER REVIEW COMMENTS
ENGINEERING SUBMISSION
SPA SUBMISSION
DESCRIPTION

09.29.2021 GAE 08.02.2021 GAE 2021 GAE ON DATE BY

SEPTEMBER 29, 2021

SCALE: 1" =

CHECKED BY:
DATE:
SI
PROJECT NO:

