

**HOWELL TOWNSHIP PLANNING COMMISSION
REGULAR MEETING**

3525 Byron Road
Howell, MI 48855
April 22, 2025
6:30 pm

1. Call to Order
2. Roll Call: () Wayne Williams - Chair () Chuck Frantjeskos
 () Robert Spaulding – Vice Chair () Matt Stanley
 () Mike Newstead – Secretary () Sharon Lollio
 () Tim Boal – Board Rep.
3. Pledge of Allegiance
4. Approval of the Agenda:
 Planning Commission Regular Meeting: April 22, 2025
5. Approval of the Minutes:
 A. Regular Meeting March 25, 2025
6. Call to the Public:
7. Zoning Board of Appeals Report:
8. Township Board Report:
9. Ordinance Violation Report:
10. Scheduled Public Hearings:
 A. Alisa and Marc Seyburn, PC2025-03, 4706-12-400-010 Request to rezone from SFR to AR
11. Other Matters to be Reviewed by the Planning Commission:
 A. Legal Update
12. Business Items
 A. Old Business:
 1. ADU Ordinance

 B. New Business:
 1. Kory Leppek, PC2025-04, 4706-20-100-027, 4940 W. Grand River Ave., Final Site
 Plan Review
 2. Agape City Church, PC2025-05, 4706-28-400-012, Vacant Grand River Ave.,
 Preliminary Site Plan Review
 3. Mark Juett, PC2025-06, 4706-28-100-071, Vacant Hydraulic Dr., Preliminary Site Plan
 Review
13. Call to the Public:
14. Adjournment

Public Hearings. All public hearings held by the Planning Commission must be held as part of a regular or special meeting of the Planning Commission. The following rules of procedure shall apply to public hearings held by the Planning Commission:

1. Chairperson opens the public hearing and announces the subject.
2. Chairperson summarizes the procedures/rules to be followed during the hearing.
3. Township Planner/Engineer/other consultants present their report and recommendation.
4. Applicant presents the main points of the application.
5. Persons having comments on the application are recognized.
6. Chairperson closes the public hearing and returns to the regular/special meeting.
7. Planning Commission begins deliberation and arrives at a decision.

To ensure everyone has the opportunity to speak, the Chairperson may elect to limit the time permitted for each person to speak, except that the applicant may be permitted additional time as the Chairperson allows. The Chairperson may also elect to allow persons to speak only once, until all persons have had the opportunity to speak, at which time the Chairperson, in his/her discretion, may permit additional comments.

All comments by the public, staff and the Planning Commission shall be directed to the Chairperson. All comments shall be related to the land use request; unrelated comments shall be ruled out of order.

A written notice containing the decision of the Planning Commission will be sent to petitioners and originators of the request.

DRAFT

**HOWELL TOWNSHIP PLANNING COMMISSION
REGULAR MEETING MINUTES**

3525 Byron Road Howell, MI 48855

March 25, 2025

6:30 P.M.

MEMBERS PRESENT:

Wayne Williams	Chair
Robert Spaulding	Vice Chair
Mike Newstead	Secretary
Tim Boal	Board Representative
Chuck Frantjeskos	Commissioner
Sharon Lollo	Commissioner

MEMBERS ABSENT:

Matt Stanley	Commissioner
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Also in Attendance:

Township Planner Grayson Moore, Colbie Harris from Mitch Harris Building Company, Pat Keough from ACE Civil Engineering and Zoning Administrator Jonathan Hohenstein

Chairman Williams called the meeting to order at 6:30 pm. The roll was called. Chairman Williams requested members rise for the Pledge of Allegiance.

APPROVAL OF THE AGENDA:

Motion by Boal, **Second** by Spaulding, **“To move 12B and make that number 10, and then subsequently the rest of them would be 11, 12, 13, 14, and 15.”** Motion carried.

APPROVAL OF THE MEETING MINUTES:

February 25, 2025

Motion by Newstead, **Second** by Spaulding, **“To approve.”** Motion carried.

Call to the Public

None

ZONING BOARD OF APPEALS REPORT:

None

TOWNSHIP BOARD REPORT:

Draft minutes are included in the packet. Board representative Boal gave an update on rezoning for Hydraulic Drive that was approved from Industrial-to-Industrial flex. Heritage Square PUD agreement and final site approval passed. Amendment for increased lot coverage was denied but was passed at the Special Board Meeting on March 17th. Vice Chair Spaulding questioned the number of lots for the increased lot coverage.

ORDINANCE VIOLATION REPORT:

Report in packet. Commissioner Lollo questioned if there was an area on the Township website to track violations with monetary fines, tickets and number of visits to property. Zoning Administrator Hohenstein reviewed the process of distributing violation tickets. Vice Chair Spaulding questioned when does running a business out of a home become a problem with the Township.

BUSINESS ITEMS:

A. New Business:

1. Mitch Harris Building Co., PC2025-02, Parcel #4706-27-300-030, Preliminary Site Plan Review. Township planner Moore gave an overview of the site plan. This is for a 4-unit Townhome development at the corner of Grand River and Edgebrook Drive. The proposed units will be two story buildings with an attached garage and first floor patios. The site is 2.24 acres. Board Representative Boal questioned why it's taxed commercial but zoned as multi-family. Pat Keough from ACE Civil Engineering and Colbie Harris from Mitch Harris Building Company discussed items that needed to be addressed in Township Planner's report. Commissioner Lollo questioned square footage of each unit and if they will be rentals or sold separately. Commissioner Frantjeskos questioned square footage of each floor. Vice Chair Spaulding questioned if these units would be a self-standing association or would be part of River Downs Association, if there were plans in the future to develop additional units on this site and proposed outside lighting plan. Board Representative Boal was concerned with the tight dimensions and would like to see more detail due to the fenced in detention basin and requested a preliminary report from the Drain Commission due to complaints from residents in the area with drainage concerns. Commissioner Lollo questioned whether the screening would be Arbor Vite trees or fencing. Discussion followed. **Motion** by Boal, **Second** by Newstead, **"To postpone PC2025-02, Parcel #4706-27-300-030 until such time the applicant can address the concern in the Planner's report, I'm just going to say 1 thru 16, I know some of them have already been addressed, so if they're not there then they will just disappear when you come back, so the only one you did say you had problem with was number 10 reducing the pavement to the site, we can take that up with the rest of them I guess, any other amendments we need to make?"** Motion carried.

SCHEDULED PUBLIC HEARINGS:

- A. Renewable Energy Ordinance Public Hearing: **Motion** by Boal, **Second** by Newstead, **"To open the public hearing."** Motion carried. **Motion** by Newstead, **Second** by Frantjeskos, **"To close the public hearing."** Motion carried. Commissioner Frantjeskos questioned if the Township has an overlay district. Chairman Williams questioned should the Township decide to do nothing can the state mandate solar energy being installed on private property. Vice Chair Spaulding questioned if there was a commercial property ordinance for solar panels and if there was ever an ordinance adopted, if a solar overlay district is needed and is there an advantage/disadvantage to having one. There are concerns with hazardous waste and what will happen with the batteries and panels if they are abandoned by home owners or reach the end of their life. Board Representative Boal concerned with public health safety and welfare of residents if the panels break/leak, concerns of battery storage and how the noise decimal was decided. Commissioner Lollo asked for clarifications of who owns property near potential overlay district. Chairman Williams questioned if we could add regulation for fire suppression of battery storage systems. Discussion followed and questions were answered by Zoning Administrator Hohenstein and Township Planner Moore. **Motion** by Spaulding, **Second** by Newstead, **"To postpone action on the proposed text amendment so that the following items can be addressed, Grayson if you can look at stricter fire control systems and decommissioning definition, some of the word changes that I had, adding sales/credit."** Motion carried.

OTHER MATTERS TO BE REVIEWED:

- A. Legal Update- Discussion on legal motions and taking of meeting minutes.

BUSINESS ITEMS:

- A. Unfinished Business
1. ADU Ordinance- Commissioner Lollo read her letter on her concerns regarding potential ADUs in the Township. Planner Moore reviewed the ordinance and answered questions. Commissioner Frantjeskos spoke on being able to put an extension on an existing residence to be able to house family members in need. Vice Chair Spaulding questioned what needs to be changed to incorporate the approval of ADUs with a Special Use Permit and the current cost of a Special Land Use Permit. Chairman Williams questioned what is legally enforceable to be considered family. Discussion followed. **Motion** by Newstead, **Second** by Spaulding, **"To postpone action on the proposed text amendment so the following items can be addressed, that all changes that were discussed in this meeting are added to the final ordinance Special Use."** Motion carried.

CALL TO THE PUBLIC:

None

ADJOURMENT:

Motion by Spaulding, **Second** by Lollo, **"To Adjourn."** Motion carried. The meeting was adjourned at 8:45 P.M.

Date

Mike Newstead
Planning Commission Secretary

Marnie Hebert
Recording Secretary

Monthly Permit List

Commercial Land Use

Permit #	Applicant	Address	Fee Total	Const. Value
P25-026	ACE FACTORY	1475 N BURKHART F-180	\$50.00	\$0.00
Work Description: Removing shelves, installing indoor turf and POS station.				

Total Permits For Type:	1
Total Fees For Type:	\$50.00
Total Const. Value For Type:	\$0.00

Residential Land Use

Permit #	Applicant	Address	Fee Total	Const. Value
P25-042	Michael Chosid	1044 ADMIRAL DR	\$0.00	\$0.00
Work Description: New mobile home installation				
P25-039	Michael Chosid	1018 AVONDALE DR	\$0.00	\$0.00
Work Description: New mobile home installation				
P25-040	Michael Chosid	1022 AVONDALE DR	\$0.00	\$0.00
Work Description: New mobile home installation				
P25-041	Michael Chosid	1025 AVONDALE DRIVE	\$0.00	\$0.00
Work Description: New mobile home installation				
P25-022	RENEWAL BY ANDERSEN - Store 92	2131 BREWER RD	\$10.00	\$0.00
Work Description: Replacing 1 patio door and 1 entry door				
P23-188	OSBURN SERVICES, INC	2385 BYRON RD	\$50.00	\$0.00
Work Description: Generator installation 24kw Generac.				
P25-024	Ambia Energy LLC	1306 EDGEBROOK DR	\$10.00	\$0.00
Work Description: 11.475 KW residential solar system to be installed on roof.				
P25-027	A1 POOL SERVICE CHAD PIETILA	3072 HILL HOLLOW LN	\$50.00	\$0.00
Work Description: ZBA approved 1-12-2025 - waiver setback. Location 25' from rear 10' from side yard. - 18 foot above ground pool				
P25-023	NEIGHBORHOOD INSULATION CO. INC.	3964 INDIAN CAMP TRL	\$10.00	\$0.00
Work Description: Re-roof on house using dimensional shingles. No structural changes.				
P25-025	RAPID ROOFING	4265 INDIAN CAMP TRL	\$10.00	\$0.00
Work Description: Re-roof full tear off / installing new shingles on the house.				
P25-044	ZARZYCKI, BRADLEY FRABOTTA, GABRIELA	1520 E. MARR	\$50.00	\$0.00
Work Description: inground pool with fence				
P25-043	S & B BUILDING LLC A MICHIGAN LIMITED LIABILITY CO	3297 OAK GROVE RD	\$75.00	\$0.00
Work Description: 1744 sq foot ranch house with attached garage on basement				

P25-038	Michael Chosid	1019 RIVER LINE DR	\$0.00	\$0.00
	Work Description: New mobile home installation			
P25-037	Michael Chosid	1021 RIVER LINE DR	\$0.00	\$0.00
	Work Description: New mobile home installation			
P25-032	Michael Chosid	1023 RIVER LINE DR	\$0.00	\$0.00
	Work Description: New mobile home installation			
P25-028	Michael Chosid	1036 RIVER LINE DR	\$0.00	\$0.00
	Work Description: New mobile home installation.			
P25-029	Michael Chosid	1040 RIVER LINE DR	\$0.00	\$0.00
	Work Description: New mobile home installation			
P25-030	Michael Chosid	1080 RIVER LINE DR	\$0.00	\$0.00
	Work Description: New mobile home installation			
P25-031	Michael Chosid	1088 RIVER LINE DR	\$0.00	\$0.00
	Work Description: New mobile home installation			
P25-045	HEINZE JARED S AND KALEE	2667 THISTLEWOOD DR	\$50.00	\$0.00
	Work Description: 5' fence located in the side and rear yards, not located on the property line.			
P25-036	Michael Chosid	1023 WELLESLEY DR	\$0.00	\$0.00
	Work Description: New mobile home installation			
P25-035	Michael Chosid	1027 WELLESLEY DRIVE	\$0.00	\$0.00
	Work Description: New mobile home installation			
P25-034	Michael Chosid	4413 WILLOWBANK DR	\$0.00	\$0.00
	Work Description: New mobile home installation			
P25-033	Michael Chosid	4416 WILLOWBANK DR	\$0.00	\$0.00
	Work Description: New mobile home installation			

Total Permits For Type:	24
Total Fees For Type:	\$315.00
Total Const. Value For Type:	\$0.00

Sewer Connection

Permit #	Applicant	Address	Fee Total	Const. Value
PWS25-033	Michael Chosid	1044 ADMIRAL DR	\$5000.00	\$0.00
	Work Description: Sewer connection			
PWS25-027	Michael Chosid	1018 AVONDALE DR	\$5000.00	\$0.00
	Work Description: Sewer connection			
PWS25-029	Michael Chosid	1022 AVONDALE DR	\$5000.00	\$0.00
	Work Description: Sewer connection			
PWS25-031	Michael Chosid	1025 AVONDALE DRIVE	\$5000.00	\$0.00
	Work Description: Sewer connection			

PWS25-025	Michael Chosid	1019 RIVER LINE DR	\$5000.00	\$0.00
	Work Description: Sewer connection			
PWS25-023	Michael Chosid	1021 RIVER LINE DR	\$5000.00	\$0.00
	Work Description: Sewer connection			
PWS25-013	Michael Chosid	1023 RIVER LINE DR	\$5000.00	\$0.00
	Work Description: Sewer connection			
PWS25-005	Michael Chosid	1036 RIVER LINE DR	\$5000.00	\$0.00
	Work Description: Sewer Connection			
PWS25-007	Michael Chosid	1040 RIVER LINE DR	\$5000.00	\$0.00
	Work Description: Sewer Connection			
PWS25-009	Michael Chosid	1080 RIVER LINE DR	\$5000.00	\$0.00
	Work Description: Sewer Connection			
PWS25-011	Michael Chosid	1088 RIVER LINE DR	\$5000.00	\$0.00
	Work Description: Sewer connection			
PWS25-021	Michael Chosid	1023 WELLESLEY DR	\$5000.00	\$0.00
	Work Description: Sewer connection			
PWS25-019	Michael Chosid	1027 WELLESLEY DRIVE	\$5000.00	\$0.00
	Work Description: Sewer connection			
PWS25-017	Michael Chosid	4413 WILLOWBANK DR	\$5000.00	\$0.00
	Work Description: Sewer connection			
PWS25-015	Michael Chosid	4416 WILLOWBANK DR	\$5000.00	\$0.00
	Work Description: Sewer connection			

Total Permits For Type:	15
Total Fees For Type:	\$75000.00
Total Const. Value For Type:	\$0.00

Water Connection

Permit #	Applicant	Address	Fee Total	Const. Value
PWS25-034	Michael Chosid	1044 ADMIRAL DR	\$5000.00	\$0.00
	Work Description: water connection			
PWS25-028	Michael Chosid	1018 AVONDALE DR	\$5000.00	\$0.00
	Work Description: water connection			
PWS25-030	Michael Chosid	1022 AVONDALE DR	\$5000.00	\$0.00
	Work Description: water connection			
PWS25-032	Michael Chosid	1025 AVONDALE DRIVE	\$5000.00	\$0.00
	Work Description: water connecton			
PWS25-026	Michael Chosid	1019 RIVER LINE DR	\$5000.00	\$0.00
	Work Description: water connection			
PWS25-024	Michael Chosid	1021 RIVER LINE DR	\$5000.00	\$0.00

Work Description: water connection				
PWS25-014	Michael Chosid	1023 RIVER LINE DR	\$5000.00	\$0.00
Work Description: water connection				
PWS25-006	Michael Chosid	1036 RIVER LINE DR	\$5000.00	\$0.00
Work Description: water connection				
PWS25-008	Michael Chosid	1040 RIVER LINE DR	\$5000.00	\$0.00
Work Description: water connection				
PWS25-010	Michael Chosid	1080 RIVER LINE DR	\$5000.00	\$0.00
Work Description: water connection				
PWS25-012	Michael Chosid	1088 RIVER LINE DR	\$5000.00	\$0.00
Work Description: water connection				
PWS25-022	Michael Chosid	1023 WELLESLEY DR	\$5000.00	\$0.00
Work Description: water connection				
PWS25-020	Michael Chosid	1027 WELLESLEY DRIVE	\$5000.00	\$0.00
Work Description: water connection				
PWS25-018	Michael Chosid	4413 WILLOWBANK DR	\$5000.00	\$0.00
Work Description: water connection				
PWS25-016	Michael Chosid	4416 WILLOWBANK DR	\$5000.00	\$0.00
Work Description: water connection				

Total Permits For Type:	15
Total Fees For Type:	\$75000.00
Total Const. Value For Type:	\$0.00

Grand Total Fees:	\$150,365.00
Grand Total Permits:	55.00

Code Enforcement List

04/02/2025

Address	Owners Name	Parcel Number	Date Filed	Origin	Status
4040 MASON RD Complaint Owner is modifying the parking lot without applying to Planning Commission or permits.	GHELANI PRITI	4706-32-400-002	04/02/2025		OPEN - COMPLANT RECEIVE
Comments 3.29.25 - Notified that Angelo's party store is performing work to their parking lot. Owner has not applied to the PC for approval, nor applied for permits 3.31.25 - Site visit completed, verified work to parking lot, letter sent to owner					
5800 PRESTON RD Complaint Trash and furniture left at the road for a month	BARROW JAMES A & G	4706-02-200-007	02/26/2025	PUBLIC - EMAIL	OPEN - COMPLANT RECEIVE
Comments 2.26.25 - Received complaint. Site visit completed. Letter sent to owner. 3.31.25 - Site visit completed, violation still present. Letter sent to owner.					

Code Enforcement List

04/02/2025

Address	Owners Name	Parcel Number	Date Filed	Origin	Status
3276 HILL HOLLOW LN Complaint Abandoned junk vehicle left in the road, not working, not in use.	JOHNSTON PHILIP AN	4706-13-302-019	02/25/2025	PUBLIC - EMAIL	OPEN - COMPLANT RECEIVE
Comments 2.20.25 - Complaint received 2.25.25 - Site visit completed, contacted Sheriff's Dept - verified owner, sent letter to owner. 3.31.25 - Site visit completed, car has been moved, still parked in the street but at a different location.					
222 BAIN DR Complaint Business being run out of the house, camper in front yard, business trucks, building built without a permit.	OTREMBA EMILY AND	4706-14-401-039	02/13/2025	PUBLIC - EMAIL	OPEN - COMPLANT RECEIVE
Comments 2.13.25 - Complaint received 2.26.25 - Site visit completed. Review completed. Letter sent to owner. 3.4.25 - Spoke to owner RE violations and remediation. 3.5.25 - Spoke to owner RE violations and remediation. 3.31.25 - Site visit completed, camper parked in driveway in front yard. No other vehicles or trailers on property. 4.1.25 - Received email from neighbor with photographs 4.2.25 - Received email from neighbor with photographs					

Code Enforcement List

04/02/2025

Address	Owners Name	Parcel Number	Date Filed	Origin	Status
3710 BOWEN Complaint Plumbing company is being run out of a home with many vehicles and commercial dumpster in the front yard.	ORDUNA PLUMBING I	4706-21-100-013	02/13/2025	PUBLIC - EMAIL	OPEN - COMPLANT RECEIVE
Comments 2.13.25 - Complaint received 2.26.25 - Investigation complete, site visit completed 2.27.25 - Letter sent to owner 3.31.25 - Site visit completed, dumpster no longer on property					
3750 BOWEN RD Complaint Business being run out of the home, over 20 vehicles, trailers, and equipment in yard with many temporary buildings.	BENFORD ANDREW T	4706-21-100-028	02/13/2025	PUBLIC - EMAIL	OPEN - COMPLANT RECEIVE
Comments 2.13.25 - Complaint received 2.26.25 - Investigation complete, site visit completed 2.27.25 - Letter sent to owner 3.12.25 - Spoke to owner, plans to remediate violation 3.31.25 - Site visit completed, some clean up has occurred					

Code Enforcement List

04/02/2025

Address	Owners Name	Parcel Number	Date Filed	Origin	Status
2900 BREWER RD Complaint Broken down vehicle in front yard, farm tractor on a lot under 2 acres.	LECHEVALIER KAYED	4706-22-200-014	02/13/2025	PUBLIC - EMAIL	OPEN - COMPLANT RECEIVE
Comments 2.13.25 - Received complaint 2.14.25 - Spoke to homeowner about violations 2.19.25 - Letter sent to homeowner 2.19.25 - Homeowner provided proof of registration and insurance 2.25.25 - Spoke to homeowner and Twp. Planner RE parking 3.31.25 - Site visit completed, violations still present. Waiting on letter from Twp. Planner.					
3408 CHERYL DR Complaint Has 3 junk cars, junk boat, junk camper, and at least 80 yards of debris scattered in his backyard.	MELTON HAROLD D &	4706-14-401-029	02/10/2025	PUBLIC - EMAIL	OPEN - COMPLANT RECEIVE
Comments 2.10.25 - Complaint received. 2.11.25 - Site visit completed. 2.12.25 - Letter sent to owner. 2.18.25 - Owner came into the Township and discussed the violations. The owner has agreed to a schedule to remediate the violations. 3.31.25 - Site visit completed, no visible change.					

Code Enforcement List

04/02/2025

Address	Owners Name	Parcel Number	Date Filed	Origin	Status
3353 BOWEN RD Complaint Camper parked in the front yard.	FRANTJESKOS CHARL	4706-21-400-005	02/10/2025	PUBLIC - EMAIL	OPEN - COMPLANT RECEIVE
Comments 2.10.25 - Complaint Received 2.11.25 - Site visit completed 2.11.25 - Letter sent to owners 2.24.25 - Spoke to Homeowner RE violation 2.24.25 - Received correspondence from Homeowner RE violation and remediation agreement 2.25.25 - Sent letter to Homeowner RE remediation agreement 3.31.25 - Site visit completed, RV parked in back yard					
70 HENDERSON RD Complaint Dumpster on site for months. Piles of debris on site and people dropping off garbage and adding to piles of debris.	LESPERANCE CHRIS A	4706-24-301-017	12/02/2024	ANONYMOUS	OPEN - COMPLANT RECEIVE
Comments 12.10.24 - Site visit completed. Verified complaint, dumpster is on site with large pile of junk near the dumpster. Letter sent to owner. 1.27.25 - Site visit completed. Violation still exists. Letter sent to owner. 1.29.25 - Received phone call from homeowner. They did not understand that this was not allowed and will be getting it taken care of. 2-11-2025 - Homeowner (Kate) called, the dumpster has been removed and the junk is being removed either 2-12- or 2-13. She will let us know. 3.31.25 - Site visit completed. Dumpster no longer on site, all junk has been removed, trailer parked in side yard. Matter is closed, letter send to owner					

Code Enforcement List

04/02/2025

Address	Owners Name	Parcel Number	Date Filed	Origin	Status
5704 CRANDALL RD Complaint A person is living in an RV in the back of the property against Township Ordinance.	JEWETT RICHARD L &	4706-05-200-004	11/25/2024	PUBLIC - EMAIL	OPEN - COMPLANT RECEIVE
Comments 12.10.24 - Site visit completed. RV is located in the back of the property. Letter sent to owner. 1.27.25 - Site visit completed. No visible change. Letter sent to owner. 2.11.25 - Requested additional information from complainant 3.10.25 - January letter returned unclaimed. 3.11.25 - December letter returned unclaimed. 3.31.25 - Site visit completed. New letter mailed out and posted to structure.					
4141 W GRAND RIV Complaint House is neglected, building unsafe, junk in yard.	TONON CHIARINA S	4706-20-400-012	09/24/2024		OPEN - COMPLANT RECEIVE
Comments 9.24.24 - Contacted Livingston County Building Department RE performing dangerous building inspection. 10.3.24 - Received LCBD determination letter. Contacted Spicer RE Dangerous Buildings Hearing Officer availability. Spicer does not currently have availability to perform these duties. 10.17.24 - Letter sent to owner. 12.19.24 - No response received. Second letter sent to owner with tracking. 1.9.25 - Spoke to owner, is getting quotes from companies to demolish the structures. Provided contact information to Township and will stay in touch with progress reports. 1.27.25 - Violation still present. 3.31.25 - Site visit completed, violation still present, no visible change					

Code Enforcement List

04/02/2025

Address	Owners Name	Parcel Number	Date Filed	Origin	Status
5407 OAK GROVE RD Complaint	CITIZENS BANK NA	4706-02-401-008	09/10/2024	PUBLIC - EMAIL	OPEN - COMPLANT RECEIVE
Garbage outside on the lawn surrounding the house and overflowing from the garage. Garbage is attracting vermin.					
Comments					
9.10.24 - Complaint received. Site visit completed. Letter sent to owner and to bank.					
10.8.24 - Site visit completed. No change in condition. Letter sent to owner and to bank.					
10.17.24 - Original certified letter to owner returned.					
10.21.24 - Letter posted on the house.					
11.6.24 - Site visit. Letter is no longer posted to the house. No change in condition.					
12.10.24 - Site visit. No change in condition. Property in foreclosure.					
3.31.25 - Site visit completed. Tree has been removed from the house, garbage has been removed from inside the garage. Pile of rubbish at the road.					
30 SANTA ROSA DR Complaint	FAGAN, SHANE	4706-33-400-050	07/02/2024		OPEN - COMPLANT RECEIVE
Owner is operating a manufacturing business in the SFR zoning district.					
Comments					
7.2.24 - Reviewed information regarding Speakeasy Speed Shop. Not a permitted use in the SFR zoning district. Violation letter sent to owner.					
8.1.24 - Site visit completed. No observed business activity at site.					
9.4.24 - Site visit completed. Searched website and watched YouTube videos. Industrial use is continuing at this location in SFR Zoning district. Letter sent to owner.					
9.30.24 - Communication from owner received, attached. Owner is requesting Township Board to modify home occupation portion of Zoning Ordinance to allow this use in SFR Zoning.					
Enforcement action will pause until a decision has been made.					
10.16.24 - Ticket submitted to Court					
10.17.24 - Ticket presented to homeowner. Discussion with homeowners.					
11.14.24 - Ticket not paid. Owner has requested a formal hearing.					
1.13.25 - Hearing adjourned until 2.12.25.					
2.12.25 - Hearing held, but not finished. Remainder of hearing scheduled for 3.26.25					
3.26.25 - Owner found responsible for violating Township Ordinance, court order attached					

Code Enforcement List

04/02/2025

Address	Owners Name	Parcel Number	Date Filed	Origin	Status
3265 W GRAND RIVER A Complaint Starting to add more parking on adjacent lot owned by MDOT without permits.	AMERICAN LEGION P	4706-28-200-010	05/21/2024		OPEN - COMPLANT RECEIVE
Comments 4.25.24 - Received call regarding work being done by American Legion. Site visit, verified work was underway. Contacted MDOT RE approval. 5.21.24 - Site visit completed, violation still present. Sent letter to American Legion. 6.18.24 - Site visit. More work has been completed including installing gravel in excavated area and a tent and fencing has been erected next to gravel area on MDOT property. Letter sent to American Legion. 8.1.24 - Site visit completed. Tent and fencing have been removed, large pile of dirt has been removed, additional gravel parking area still on MDOT property. 9.4.24 - Site visit completed. Violation still present. Posted Notice of Violation Ticket to front door, mailed a copy of the violation. Ticket #: 0202 9.4.24 - Phone conversation with Commander Laura Goldthwait. Requested letter explaining the violation and steps moving forward. Mailed to Legion, emailed to Laura, attached. 9.12.24 - Received correspondence from Legion's attorney denying all responsibility. Documents provided to Township's attorney. Township's attorney has contacted Legion's attorney. 10.8.24 - Site visit completed. Photos of Legion using the additional parking attached. 12.10.24 - Site visit completed. Christmas trees located in additional parking area and land east of building. Letter sent regarding temporary uses requiring permits. 1.27.25 - No change to property 3.31.25 - No change to property					
3590 W GRAND RIV Complaint Zoning Violations:Outdoor storage without screening, setback issues, parking not hard surfaced, no sign permit.	HASLOCK PROPERTIE	4706-28-100-024	05/06/2024		OPEN - FIRST LETTER SENT
Comments 5.13.24 - Violation letter to Occupant returned. 5.20.24 - Received phone call from owner. Will be preparing a site plan to take before the Planning Commission for approval. 6.20.24 - Received phone call from owner, discussed site plan requirements. 9.4.24 - Sent letter to owner RE site plan progress. 9.12.24 - Spoke to owner, Engineer has site plans almost complete. Will submit for review in the near future. 2.27.25 - Spoke to owner, Engineer will be submitting plans in the next week or two. 3.31.25 - Site visit completed, violations still present					

Code Enforcement List

04/02/2025

Address	Owners Name	Parcel Number	Date Filed	Origin	Status
5057 WARNER RD Complaint LARGE AMOUNT OF JUNK AND LITTER IN THE YARD.	HARTER EDWARD H	4706-19-200-005	03/14/2022	PUBLIC/ EMAIL	OPEN - SECOND LETTER SEN
Comments					
4.17.2023 THERE IS MORE JUNK NOW THEN THERE WAS LAST MARCH OF 2022 OR JANUARY OF 2023.					
5.25.2023 I SPOKE WITH MR. HARTER HE IS STARTING TO CLEAN THE SITE UP, HE SAID THAT IT WILL TAKE SOME TIME TO GET IT ALL CLEANED UP. I WILL BEE CHECKING ON HIS PROGRESS EVERY FEW WEEKS TO MAKE SURE HE IS MAKING PROGRESS.					
6.29.2023 SOME PROGRESS HAS BEEN MADE. WILL CHECK BACK IN A COUPLE OF WEEKS.					
1.9.2024 did a site vist there has been no progress made on the clean up.					
1.11.2024 Finial letter sent.					
3.20.24 - Site visit. No remediation of issues has taken place. Photos attached.					
3.25.24 Spoke to owner. Owner is working on cleaning up the property, has dumpsters being delivered, scrap is in piles and ready to be taken to the scrap yard. Has requested 3 months to get the property cleaned up. Letter sent in confirmation of agreement. Scheduled visit for June 25th.					
4.23.24 - Site visit. Violation still present. Scheduled reinspection.					
5.20.24 - Site visit. Work has been started. Violation still present. Scheduled reinspection.					
6.18.24 - Site visit. Violation still present, no evidence of continued clean up activity. Will reinspect on June 25th as agreed.					
6.25.24 - Site visit. Minimal changes to site, violation still present. Letter sent to owner.					
8.1.24 - Site visit completed. Owner still working on clean-up.					
9.4.24 - Site visit completed, spoke to homeowner. Owner claims to have back of property nearly complete. Dumpster to be arriving next week, neighbors helping to remove scrap in the next few days.					
10.8.24 - Site visit completed. No evidence of activity. Final violation letter sent to owner.					
11.6.24 - Site visit completed. No evidence of activity. Will check property on 11.14.24 per letter.					
11.14.24 - Site visit completed. No evidence of activity. Ticket number 0204 issued. Ticket mailed to homeowner 11.18.24.					
12.4.24 - Spoke to homeowner. He will be completing a clean-up schedule and providing it to the Township. If the schedule is followed and clean-up of property is achieved ticket will be waived.					
12.10.24 - Schedule has not been provided to Township. Site visit completed, no change.					
1.27.25 - Site visit completed, no change. Schedule has not been provided to Township. Final violation letter sent to owner.					
2.3.25 - Received phone call from owner's wife, owner is currently in jail. By February 24th they will contact the Township to discuss deadlines for removing the junk from the site. Letter sent to owner to confirm same.					
2.24.25 - Spoke to owner's wife.					
2.28.25 - Spoke to owner's wife, came to agreement on clean up schedule. Letter on agreement sent to owner.					
3.17.25 - 2.28 letter returned. Mailed out letter again.					
3.21.25 - Homeowner left message stating that all scrap metal has been removed, two vehicles will be removed this week. We may stop by any time to see the progress.					
3.31.25 - Site visit completed, violation still present					

RECEIVED

MAR 17 2025

HOWELL TOWNSHIP
Application for Re-Zoning/Text Amendment

HOWELL TOWNSHIP

3525 Byron Road Howell, MI 48855
 Phone: 517-546-2817 ext. 108
 Email: inspector@howelltownshipmi.org

Fee: \$1000.00

PC 2025-03

Parcel ID #: 4706-	<u>12 400 010</u>	Date	<u>3</u>
Applicant Name	<u>Alisa & Marc Seyburn</u>		
Applicant Address	<u>779 Elderberry Ct - Commerce Twp., MI 48390</u>		
Phone	[REDACTED]	Fax	[REDACTED]
Email	[REDACTED]		
Property Owner Name	<u>Alisa & Marc Seyburn</u>		
Phone	[REDACTED]	Fax	[REDACTED]
Email	[REDACTED]		

Current Zoning Classification	<u>Single Family Housing</u>	Proposed Zoning Classification	<u>Agricultural / Rural Residential</u>
Existing Use	<u>Vacant</u>	Proposed Use	<u>Working Farm</u>
Legal Description (attach copy if necessary) <u>See attached</u>			

Request to change in Ordinance / Zoning Map:
<u>Agricultural / Rural Residential</u>

Reason for Requested Change:

Desire general agricultural activities, including receiving and handling of sheep, horses, and other domestic animals with necessary agricultural buildings/barns, Functionally related to on-site agricultural activities.

Has the Applicant made a previous request to rezone the property?

☐

Yes

☒

No

If yes, state when and the decision of the Township Board:

Owner, being first fully sworn, on oath deposes and says that all of the above statements in this application herewith are true.

Owner Signature

Alisa Seyburn
Alisa Seyburn

Date

3.15.25

Printed Name

Subscribed and sworn to before me

This

15th

day of

March

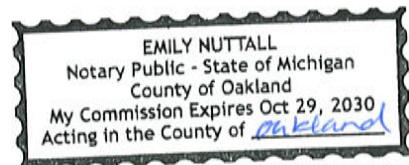
2025

Notary Public

Emily Nuttall
Oakland County, Michigan

My commission expires:

10/29/2030



TOWNSHIP HOURS 8-5 MONDAY-THURSDAY. CLOSED FRIDAYS.
POSTMARKS ARE NOT ACCEPTED. USE DROP BOX AFTER HOURS,
PAYMENTS WILL BE POSTED NEXT BUSINESS DAY. PLEASE WRITE
PROPERTY NUMBER AND PHONE NUMBER ON CHECK. RECEIPTS ARE
GIVEN UPON REQUEST.

TOWNSHIP OFFICE WILL BE CLOSED: DECEMBER 24, 25 AND 31,
2024

LAST DAY TO PAY TAXES IN 2024: DECEMBER 30, BY 5 PM.

TOWNSHIP SPRING CLEAN UP DAY - MAY 17, 2025 9:00A.M. TO
NOON INFORMATION AVAILABLE AT HOWELLTOWNSHIPMI.ORG

PROPERTY INFORMATION

Property Assessed To:

SEYBURN MARC AND ALISA
7457 FRANKLIN RD STE 250
BLOOMFIELD HILLS, MI 48301-3612

Prop #: 4706-12-400-010

HOWELL PUBLIC SCHOO
School: 47070

Prop Addr: MARR - VACANT

Legal Description:

SEC 12 T3N R4E BEG 847 FT N & 272 FT W OF SE COR, W 1852 FT, N N 1130
FT, E 2121.5 FT, S3*W 235.7 FT, W 236 FT, S 896 FT TO BEG. EXC THE E 25
AC, THEREOF. 24.5 AC.

As of March 1st, all or part of your prior year taxes
were returned delinquent to the County. For more
information please call the County Treasurer (517) 546
-7010.

OPERATING FISCAL YEARS

The taxes on bill will be used for governmental
operations for the following fiscal year(s):

County: 01-01 - 12-31
Twn/Cty: 07-01 - 06-30
School: 07-01 - 06-30
State: 10-01 - 09-30

Does NOT affect when the tax is due or its amount

PAYMENT INFORMATION

This tax is due: 02/14/2025

Pay by mail to: HOWELL TOWNSHIP TREASURER
3525 BYRON ROAD
HOWELL, MI 48855

SUMMER TAXES OWING

TAX DETAIL

Taxable Value: 51,362 RESIDENTIAL-VACANT
State Equalized Value: 96,647 Class: 402
PRE/MBT %: 0.0000

THIS ESCROW COMPANY REQUESTED YOUR BILL:

Taxes are based upon Taxable Value.
1 mill equals \$1.00 per \$1000 of Taxable Value.
Amounts with no millage are either Special
Assessments or other charges added to this bill.

DESCRIPTION	MILLAGE	AMOUNT
COUNTY AMBULANCE	0.28230	14.49
HCMA - PARKS	0.20620	10.59
VETERANS RELIEF	0.09180	4.71
HOWELL ALLOC	0.84530	43.41
HOWELL ROAD	0.90020	46.23
HO SCHOOL DEBT	2.75000	141.24
HO LIBRARY	1.02320	52.55
HO FIRE AUTH	1.98400	101.90
HAPRA - PARKS	0.50000	25.68

Total Tax	8.58300	440.80
Administration Fee		4.40
Interest/Penalty		
TOTAL AMOUNT DUE		445.20
Previous Payments		
BALANCE DUE		445.20

Please detach and return with payment. Keep the top portion.

Bill #

PLEASE RETURN THIS PORTION WITH PAYMENT. THANK YOU.

This tax is due: 02/14/2025

Township office will be open for tax payments only
on Friday, Feb. 14th from 8-5pm

2024 Winter Tax for Prop #: 4706-12-400-010

Pay this tax to:

HOWELL TOWNSHIP TREASURER
3525 BYRON ROAD
HOWELL, MI 48855

TAXPAYER NOTE: Is your name & mailing address correct?
If not, please make corrections below. Thank You.

Make Check Payable To: HOWELL TOWNSHIP TREASURER

TOTAL AMOUNT DUE: 445.20

Amount Remitted: _____

Property Addr: MARR - VACANT

*****AUTO**ALL FOR AADC 480
SEYBURN MARC AND ALISA
7457 FRANKLIN RD STE 250
BLOOMFIELD HILLS, MI 48301-3612



SUMMER TAXES OWING



Howell Township Inspector

From: Brian Boudreau [REDACTED]
Sent: Friday, March 28, 2025 2:16 PM
To: Howell Township Inspector
Cc: Kelly Boudreau
Subject: Parcel # 4706-12-400-010

Petitioner Alisa and Marc Seyburn file number pc2025-03 Vacant Land Rezone SFR to AR.

Property owner Brian and Kelly Boudreau 1013 E. Marr Rd Howell MI 48855 , no objections or issue with Request to Rezone to AR Agriculture Residential.

Have A Great Day,

Brian Boudreau
CEO
BKJ Construction



Excavation & Concrete Services

www.bkjconstruction.net



Carlisle | Wortman
ASSOCIATES, INC.

117 NORTH FIRST STREET SUITE 70 ANN ARBOR, MI 48104 734.662.2200 734.662.1935 FAX

Date: April 15, 2025

Land Use and Zoning Analysis For Howell Township, Michigan

Applicant:	Alisa & Marc Seyburn
Project Name:	Working Agricultural Farm Rezoning
Location:	Parcel #4706-12-400-010
Current Zoning:	Single Family Residential, SFR
Action Requested:	Rezoning from SFR (Single Family Residential) to AR (Agricultural Residential)

PETITION

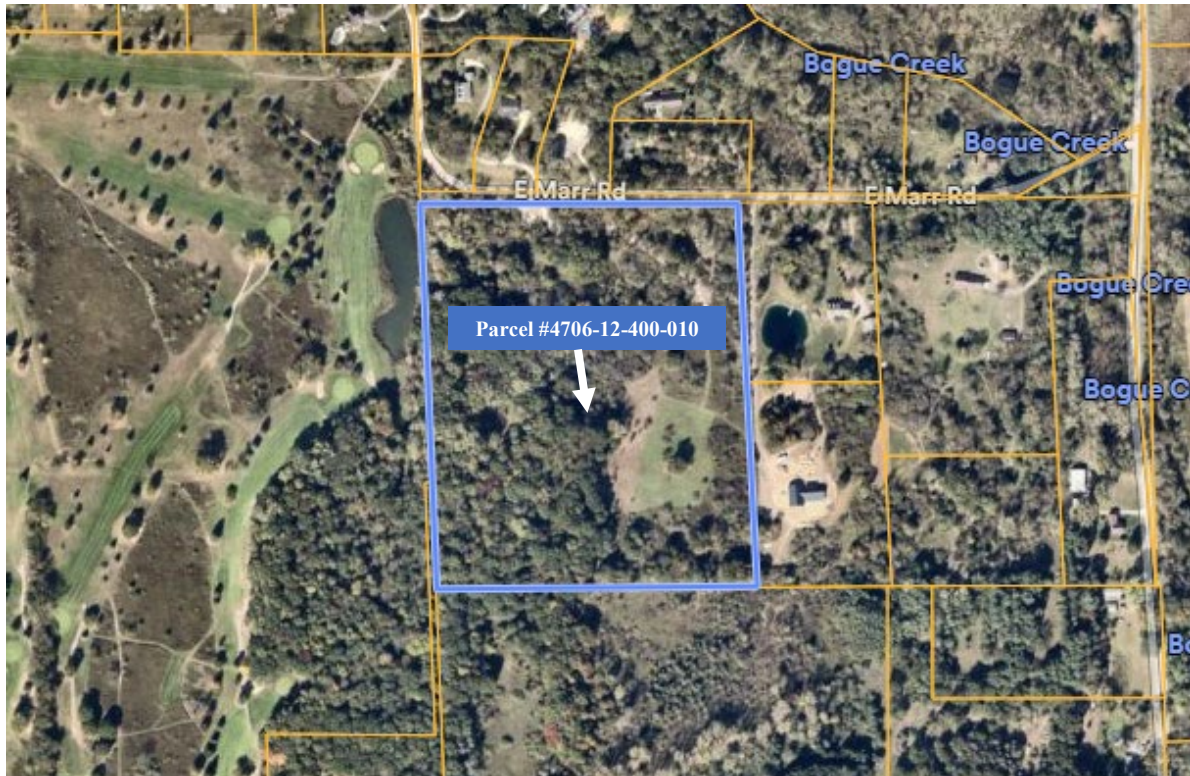
The applicant is requesting a rezoning for parcel #4706-12-400-010 located on East Marr Road and east of Fisher Road. The petitioner requests that the parcel be re-designated from SFR, Single Family Residential, to AR, Agricultural Residential. The applicant has indicated that their intended use if approved will be general agricultural activities including receiving and handling of sheep, horses, and other domestic animals.

SITE DESCRIPTION/CURRENT USE

The subject site is approximately 24 acres and is currently vacant. The site is next to 1900 E Marr Rd (parcel #4706-12-400-019) a single family residence, 410 E Marr Rd (parcel #4706-12-300-007) a recreation golf course, parcel #4706-12-400-002 which is currently vacant, and 1013 E Marr Rd (parcel #4706-12-400-031) a single family residence.

Benjamin R. Carlisle, *President* John L. Enos, *Vice President* Douglas J. Lewan, *Principal*
David Scurto, *Principal* Sally M. Elmiger, *Principal* R. Donald Wortman, *Principal* Craig Strong, *Principal*
Paul Montagno, *Principal* Megan Masson-Minock, *Principal* Laura Kreps, *Principal*
Richard K. Carlisle, *Past President/Senior Principal*

Figure 1 - Aerial Image of Site and Surroundings



Source: Nearmap, October 2024

SURROUNDING ZONING AND LAND USE

The following chart compares zoning, future land use designation per the Master Plan, and existing land use for the subject parcel and its adjacent parcels.

	Zoning	Existing Land Use	Future Land Use Designation
Subject parcel	Single Family Residential	Vacant	Agricultural Preservation
North	Agricultural Residential	Residential	Agricultural Preservation
South	Single Family Residential	Vacant	Agricultural Preservation
East	Single Family Residential	Residential	Agricultural Preservation
West	Single Family Residential	Recreation (Golf Course)	Low Density Residential

MASTER PLAN

Figure 2 - Current Zoning Map

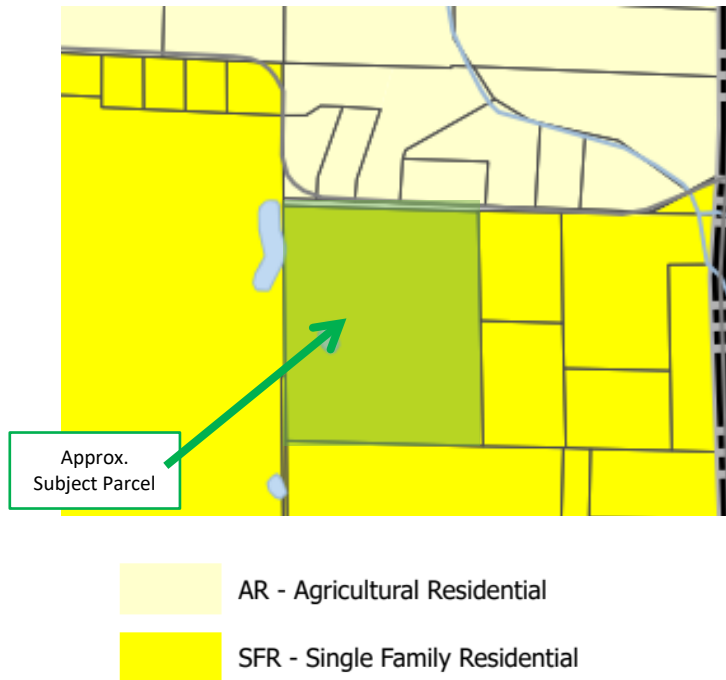
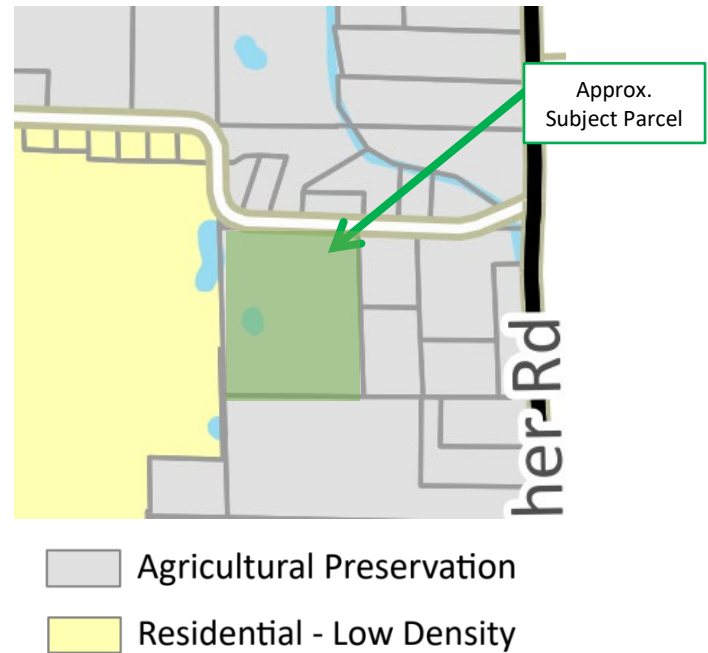


Figure 3 - Future Land Use Map



As noted above and depicted in Figure 2, which portrays the current zoning map, the subject site is presently zoned Single Family Residential (SFR). Figure 3 depicts the Future Land Use Map from the adopted 2023 Howell Township Master Plan. The Future Land Use Plan designates the subject site as being Agricultural Preservation which the Master Plan defines as:

“These areas are intended to remain rural. These areas are intended to maintain the existing agricultural lands in the Township. Housing in these areas should be on large lots to keep density low. The area planned for Agricultural Preservation includes the majority of the Township. In addition to preserving large swaths of active farmland that helps to support the agricultural industry in the community, these areas also help to maintain the existing character that many Township residence identify as what they feel is most important about the community.”

DEVELOPMENT POTENTIAL

Current Zoning: Single Family Residential

A significant portion of the Township is zoned Single Family Residential. Much of this zoning district is planned to remain as low density residential in the 2023 Master Plan. The Single Family Residential District's intent is to provide for single family housing neighborhoods free from other uses except those which are normally accessory and compatibly supportive and convenient to the residents. Currently, this includes uses such as single family conventional dwellings, state licensed day care facilities, state licensed foster care facilities, and allows for the rearing and housing of horses, mules, and similar domestic animals as a special land use.

Proposed Zoning: Agricultural Residential

Agricultural Residential (AR) is the largest zoning district within the Township. The primary goal of the AR District is to facilitate the compatible development of residential properties in pastoral, agricultural, woodland, or open land areas. These areas are expected to remain unserved by public water and wastewater systems for the foreseeable future. The district is intended for residential use in locations that can support safe, on-site water supply and wastewater disposal. Additionally, it aims to preserve and conserve land that is best suited for current and future agricultural, woodland, natural resource, and other extensive land uses.

Permitted uses within the AR district include general agriculture, state licensed day care facilities, state licensed foster care facilities, single family farm related or non-farm conventional dwelling, developments for the purpose of conservation, growing and harvesting of stock, churches, and stables. A number of special land uses may also be considered in the AR district.

Proposed Use

As noted above the applicant has indicated that they would like to use the site for general agricultural activities. We do not foresee the described use negatively impacting the surrounding area. It should be noted that if the rezoning is approved any permitted or special use in the AR district could be lawfully established on the property, subject to review and approval as well as review of any special use permit and supplemental regulations.

FINDINGS FOR REZONING

In reviewing an application for the rezoning of land, whether the application be made with or without an offer of conditions, factors that should be considered by the Planning Commission and the Township Board include, but are not limited to, the following:

- a) Whether the rezoning is consistent with the policies and uses proposed for that area in the Township's Master Land Use Plan;

CWA The Future Land Use Map in the Master Plan designates this area as being Agricultural Preservation. Agricultural Preservation zoning accounts for roughly 62% of the land in the Township and has been identified as a topic of importance in the Master Plan. The intended use proposes low density development of the land that is adjacent to other low density housing or agricultural uses. The proposed rezoning is in line with the goals of the Master Plan.

- b) Whether all uses allowed under the proposed rezoning would be compatible with other zones and uses in the surrounding area;

CWA The site is situated between residential uses, a recreation area, and vacant land, with the intent of the area mapped out in the Master Plan as continuing to develop in this manner. The Future Land Use Map plans for Agricultural Preservation and Low Density Residential on adjacent parcels.

- c) Whether any public services and facilities would be significantly adversely impacted by a development or use allowed under the requested rezoning; and

CWA The proposed zoning should not adversely impact public services and facilities.

- d) Whether the uses allowed under the proposed rezoning would be equally or better suited to the area than uses allowed under the current zoning of the land.

CWA The uses permitted in the Agricultural Residential District are compatible with this area. The site is situated in an area that is surrounded by existing or planned residential and agricultural uses.

RECOMMENDATIONS

The Planning Commission should review each of the findings in this report to determine if the proposed rezoning is appropriate before making a recommendation to the Township Board.



CARLISLE/WORTMAN ASSOC., INC.
Paul Montagno, AICP
Principal



CARLISLE/WORTMAN ASSOC., INC.
Grayson Moore
Community Planner

#PC-2025-03

cc: Joanathan Hohenstein, Township Zoning Administrator
 Carol Makushik, Township Deputy Zoning Administrator
 Adam Jacqmain, Township Engineer

Allowing Accessory Dwelling Units: The Pros, The Cons, and The Current Trends

More recently, accessory dwelling units (“ADUs”) have become a focus with increased housing availability and demands. Many have raised questions regarding whether ADUs can alleviate housing shortages or be an answer to providing some affordable housing stock. ADUs and the policy considerations surrounding whether they should be allowed and how to allow them has been a hot topic over recent years. This E-Letter will explore the pros and cons of allowing and regulating ADUs, and the recent trends associated with ADUs. We hope to offer some insight for communities that are considering whether to allow ADUs or communities that are wondering how to best regulate ADUs.

The Problem: Housing Shortages

Whether your community allows ADUs or not, many proponents claim that ADUs could help alleviate the affordable housing shortage that is plaguing many American communities:

Housing affordability is a shared problem that is getting worse across the country: 80 percent of Americans living in rural communities believe housing affordability is getting worse in their community, while 72 percent of residents in urban areas feel the same. This sense is shared across all demographics, regardless of partisan identification, race, age, gender, education, or whether you own or rent your home.

Americans Recognize Housing Affordability Crisis, Support New Policies To Fix the Market and Build More Homes, AmericanProgress.org, Oct.9, 2024. The United States is facing a housing supply deficit, and creative solutions such as ADUs may help to alleviate that deficit. ADUs are unlikely to magically fix housing shortages and the lack of affordable housing. However, they offer an additional tool to address and potentially remedy some of the issues caused by housing shortages. You may want to consider whether ADUs could offer a benefit to your community and how to address and regulate the negative impacts that may be associated with allowing ADUs.

Overview: What is an Accessory Dwelling Unit?

An “Accessory Dwelling Unit” or “ADU” is defined by the American Planning Association as “a smaller, independent residential dwelling unit located on the same lot as a stand-alone (i.e., detached) single-family home.” *Accessory Dwelling Units*, American Planning Association, (last visiting March 3, 2025). Colloquially, ADUs are called many different names, including accessory apartments, secondary suites, and granny flats. Although typically thought of as a detached structure, ADUs can be attached (such as renting a basement unit or a loft above a garage) or detached (as in converting a shed into an ADU).

In recent years, many communities have been interested in expanding housing options and availability by allowing ADUs in residential zoning districts. The growing popularity of ADUs has also led to criticism and concerns about whether ADUs will change the character of neighborhoods, overburden existing infrastructure, or cause other nuisance concerns associated with an increase in residential density, such

as parking, noise, and traffic issues. On the other hand, allowing ADUs can offer a relatively inexpensive method to create lower-cost housing units that use existing infrastructure, such as water and sewer.

The Pros and Cons of Allowing ADUs

As with many emerging land use issues and trends, there are arguments both in favor of allowing ADUs and against allowing ADUs. The benefits and potential negative impacts associated with ADUs will largely depend on the specific circumstances within a particular community or neighborhood, and thus there is no clear answer to the question of whether to allow ADUs and how to regulate them. Below, we have summarized some of the widely recognized arguments in favor of allowing ADUs and arguments for disallowing ADUs:

Pros of Allowing ADUs:

- **Affordable Housing (To Rent).** The cost of constructing an ADU is typically less than a new single-family dwelling. A newly constructed detached ADU can range from \$90,000 to \$350,000, depending on the size, configuration, and many other factors. *Accessory dwelling units*, Local Housing Solutions, May 10, 2021. But, an attached ADU, such as a basement, attic, or garage conversion to an ADU, is typically cheaper, ranging from roughly \$30,000 to \$75,000. *See id.* One study found that the average cost to construct a detached ADU is around \$90,000, and the cost to construct an attached ADU is around \$45,000. *How much do ADUs cost to build*, org (last visited March 25, 2025). An example of ADUs providing more affordable housing options is in high-cost areas such as San Diego. According to one study, the average cost to rent an ADU in San Diego is around \$1,200 to \$2,500 per month, whereas the average rent of a conventional home or apartment in San Diego is around \$3,000 per month. Argi, Avetisyan, *ADU San Diego for Rent: A Comprehensive Guide*, gatherADU.com, March 17, 2025; *San Diego, CA rental market*, Zillow Rentals, March 23, 2025. However, there is no consensus about how much ADUs will alleviate the affordable housing shortage, and each community is different. Sources tend to agree that additional methods to create affordable housing are necessary, but ADUs may be an important piece of the puzzle to alleviate affordable housing shortages. *Accessory dwelling units*, *supra* note 3.
- **Secondary Income.** ADUs often allow homeowners to rent their ADU to draw a secondary income. Given the price of housing and the difficulty experienced by many first-time homeowners, this secondary income may reduce some of the strain caused by increased housing costs. Thus, ADUs may allow homeowners to afford a home that they otherwise would not be able to afford. One proponent argues that “ADUs support families in several ways. They serve as a flexible resource that provides stabilizing income during some phases of life and provides housing for extended family during other phases.” *Summing up ADU research: are accessory dwelling units as great, or as horrible, as people say?* org (last visited March 25, 2025).
- **Raising Property Values.** ADUs can increase the overall value of a property by providing additional living space, rental income, and making a property more attractive to potential buyers. Increased property values also caused an increase in tax revenues. One study found that in larger cities, a home with an ADU is priced at around 35% higher than a home without an ADU. *Study: ADUs Can Add 35% to Home's Value*, Realtor Magazine Media, Nov. 3, 2021.
- **Provides Housing For Aging Family Members.** ADUs are often built to provide housing for aging family members or adult children with special needs or circumstances. The classic example is an ADU being constructed for an elderly parent. This can have many advantages, such as allowing an elderly parent to retain independence by constructing the ADU with specific amenities for aging individuals (e.g. walk-in shower, single-story configuration, etc.). This also provides an opportunity for an aging parent to offer support to the family, such as childcare during the workday, which has downstream positive impacts for families and communities.

Cons of Allowing ADUs

- **Residential Density Concerns.** One of the major concerns associated with the proliferation of ADUs in residential districts is the densification of existing neighborhoods. ADUs are “infill” developments that, by definition, increase the density of existing neighborhoods. While each individual ADU may cause a small change to neighborhood density, many years of ADU proliferation may cause a notable change in neighborhood character and demographics. Some opponents to ADUs cite this concern and note that allowing ADUs to address housing shortages is a bad urban design, which leads to “backyard tenants” that are virtually strangers as opposed to neighbors, with virtually no street frontage and limited opportunities for neighborly relationship building. *ADUs Can Help Address the Lack of Housing. But They’re Bad Urban Design*, NextCity.org, Oct. 5, 2023.
- **Traffic, Noise, Overcrowding and Nuisance.** Related to the density issue, many opponents of ADUs cite the increase in traffic, noise, on-street parking scarcity, well and septic system concerns, and other nuisance-type concerns that are associated with a denser neighborhood. Many of these concerns can be addressed through zoning regulations, such as minimum parking requirements for ADUs. However, these are still valid points in opposition to ADUs.
- **Decreasing Affordable Housing (to Buy).** Although ADUs can provide more affordable housing for rent, the proliferation of ADUs can cause residential property values to increase, which makes it harder for buyers to afford the homes. This can effectively price out many homebuyers.

Permitting ADUs by Right or by Special Use Permit

If your community does allow or is considering whether to allow ADUs, you must decide whether to allow ADUs by right or by special land use permit. Zoning provisions can be used to mitigate some of the actual or potential impacts caused by allowing ADUs. For example, the following options can be employed to limit the negative impacts of ADUs:

- **Permitting ADUs by Right.** This option carries the least amount of administrative burden, allowing ADUs to be approved at the staff level. This option may be most suitable for communities that have identified a need for supplemental housing or otherwise have a strong desire to allow ADUs. This option can still impose many of the regulations that are designed to offset the potential negative impacts of ADUs, but with a less robust and burdensome permitting process. Under this option, ADUs can still be limited to specific residential districts where they are most appropriate.
- **Special Land Use Approval.** By requiring special land use approval, a community can attach specific requirements to the approval of an ADU. The decision of whether to approve a specific ADU can be reviewed in relation to the special use standards to ensure that the ADU is compatible with the neighborhood and will not cause an unsustainable impact on services and infrastructure. In addition, ADUs can be limited to specific residential districts where they are more appropriate and will have fewer negative impacts.
- **Size and Occupancy Limits.** Maximum size limits can be imposed to ensure that the ADU remains subordinate to the principal single-family dwelling. Size and occupancy limits can also ensure that the ADU is not occupied by a large family or otherwise causing overcrowding concerns.

- **Owner-Occupied Requirements.** Often, local regulations require that the property owner lives on the property, either in the principal residence or in the ADU. The purpose of this requirement is to minimize nuisances associated with the ADU. The general idea is that the ADU occupants will be accountable to the property owner, and the owner will be present to address issues if they arise.
- **Parking.** On-site parking requirements are typically required to minimize the impact on neighborhood parking infrastructure.
- **No Short-Term Rental of ADUs.** Regulations can prohibit the short-term rental of ADUs (e.g. rental for less than 30 days). These are meant to prevent the negative impacts caused by short-term rentals (e.g. noise, nuisance, overcrowding, parking, increased housing prices, etc.). Many of the concerns associated with ADUs stem from the short-term rental of ADUs, and thus this option may allow some of the benefits of ADUs without causing as many negative externalities.
- **Lot Size.** Minimum lot size requirements can help prevent overcrowding and density issues by ensuring that ADUs are only constructed on properties that are big enough to accommodate the ADU without impacting the adjacent parcel or the neighborhood as a whole.

Conclusion

Whether to allow ADUs and how to regulate them is a complicated decision, with many potential benefits and risks. Ultimately, the decision will depend on the character of your community, and thus there is no one-size-fits-all answer. The purpose of this E-Letter is to provide a primer into the pros and cons associated with ADUs and the typical local regulations that we often implement to offset the potential negative impacts of ADUs. If your community has an interest in allowing ADUs or refining the current regulations as to ADUs, we encourage you to reach out to your attorney for guidance. With properly crafted local regulations, your community can gain the benefits of allowing ADUs, while also decreasing the negative impacts that are sometimes associated with ADUs.

By: Trent Cunningham

This publication is intended for educational purposes only. This communication highlights specific areas of law and is not legal advice. The reader should consult an attorney to determine how the information applies to any specific situation.

HOWELL TOWNSHIP
Application for Site Plan Review
 3525 Byron Road Howell, MI 48855
 Phone: 517-546-2817 ext. 108
 Email: inspector@howelltownshipmi.org

File # PC2025-04

Parcel ID #: 4706- <u>20</u> - <u>100</u> - <u>027</u>	Date <u>01/03/25</u>
Applicant Name <u>Kory Leppek</u> Applicant Address <u>4640 W. Grand River Ave.</u>	
Phone <u>(810)227-2566</u> Fax _____ Email <u>kleppek97@yahoo.com</u>	
Property Owner Name <u>Leppek Landscape Inc</u>	
Phone <u>(810)227-2566</u> Fax _____ Email <u>kleppek97@yahoo.com</u>	
Please list all recipients to receive information and/or reports:	
Name: <u>Tim Zimmer, Livingston Engineering</u> Email <u>tim @livingstoneng.com</u>	
Name: _____ Email _____	
Name: _____ Email _____	

Location of Property <u>4640 W. Grand River Ave.</u>	Current Zoning Classification <u>NSC</u>
Existing Use <u>dog training</u>	Proposed Use <u>landscape contractor and supply</u>

Check One:

- | | |
|---|--|
| ☐ Preliminary Site Plan Review (20.06) | ☒ Final Site Plan Review (20.07) |
| ☐ Temporary Use (14.34) | ☐ Commercial/Industrial Development |
| ☐ Subdivision/Site Plan Condo | ☐ Multi-Family/Condo |
| ☐ Planned Unit Development (PUD) Type: | 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ |

Applicant needs to provide the following site plan drawings: twelve (12) full size copies, eight (8) - 11" x 17" copies, and an electronic set (either on an USB drive or provide an online link) for the preliminary site plan drawings. Drawings shall be submitted with an application for site plan review (20.06 a) thirty (30) days prior to the meeting.

The site plan is to contain the following information or the drawing submitted under the Land Use Permit can be utilized if it also contains the following information and is accurately drawn to scale:

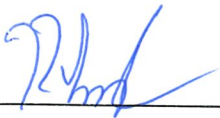
- a. The date, north arrow and scale. The scale shall be not less than 1" = 20' for property under three (3) acres and at least 1" = 100' for those (3) acres or more.
- b. Statistical data including number of dwelling units, size of dwelling units, if any, and total gross acreage involved. In the case of a mobile home park, the size and location of each mobile home site shall be shown.
- c. The location and height of all existing and proposed structures on and within 100' of the subject property's boundary.
- d. All lot and/or property lines are to be shown and dimensioned, including building setback lines on corner lots.
- e. The location and dimensions of all existing and proposed drives, sidewalks, curb openings, signs, exterior lighting, curbing, parking areas (show dimensions of a typical parking space), unloading areas and recreation areas.
- f. Vehicular traffic and pedestrian circulation features within and without the site.
- g. The location of all proposed landscaping, fences, or walls.
- h. Size and location of existing and proposed utilities, including proposed connection to public sewer or water supply system.
- i. A location map indicating the relationship of the site to the surrounding land uses.
- j. The location and pavement width and right-of-way width of all abutting roads, streets, alleys, or easements.
- k. Show properties and respective zoning abutting the subject property.
- l. The location and size of all surface water drainage facilities.
- m. Contour intervals shall be shown at a maximum of 2' intervals, with 1' intervals preferred for topographic features of the site.

By signing below the applicant understands and acknowledges the following statements:

- a. The Planning Commission has sixty (60) days from filing date to approve or deny site plan.
- b. Approval of preliminary site plan is valid for a period of one (1) year from date of approval.
- c. A one (1) year extension may be granted upon written request of the applicant and approval by the Planning Commission.
- d. Approval of preliminary site plan shall expire one year after approval of final site plan unless zoning permit has been obtained.
- e. Approval of the final site plan expires six (6) months after approval unless a land use permit application is applied for and granted.

- f. The final site plan approval shall expire one (1) year following the date of approval unless construction has begun on the property in accordance with the plan.
- g. Applicant may appeal the Planning Commission's ruling of the final site plan to the Board of Appeals within ten (10) days of the Planning Commission's decision on all matters except use of the land, use of buildings, or structures.
- h. The Planning Commission has sixty (60) days from the date of the Planning Commission meeting at which the final site plan was received to approve or deny the final site plan.
- i. Improvements not in conformance with the final site plan shall be deemed a violation of the ordinance and be subject to the penalties of the ordinance.
- j. Sewer system and water system tap in fees, if applicable, must be paid prior to issuance of a land use permit.

Applicant hereby deposes and says that all the above statements and information contained in this application and any statements submitted herewith or on the site plan are true and accurate.



Owner Signature

Kory Leppek

Print Name

3/20/25

Date

Subscribed and sworn to before me this 20th day of March, 2025.



Notary Public

Washtenaw

County, Michigan

Andrea Tauldie

Acting in Livingston

My Commission Expires: 12/9, 2025.



LIVINGSTON ENGINEERING

Howell Township
3525 Byron Road
Howell, MI 48855

March 25, 2025

Attention: Mr. Jonathan Hohenstein

Regarding: Site Plan Re-submittal #1
Leppek Nursery
Tax ID: 21-09-100-043

The following discussion outlines responses to Site Plan review comments received from the township planner and engineer in the respective letters dated below. Our responses are listed ***in bold italics*** after each review comment.

Review by Carlisle Wortman Associates, INC., dated 02-18-2025

1. Applicant to clarify the intended use of the site and functionality on the plans.
Use statement has been added to the plans.
2. Correct Sheet C-1 to reflect updated zoning classification
Zoning classification has been updated to Industrial Flex Zone (IFZ).
3. Applicant to provide a detailed use description for all areas of the site.
Use statement has been added to the plans.
4. Update required site data table on Sheet C-1 to reflect IFZ – Industrial Flex Zone zoning requirements.
Site Data Table has been updated to reflect IFZ zoning requirements.
5. The applicant shall provide parking calculations for the proposed use to demonstrate compliance with Section 18.02.G of the Zoning Ordinance.
Parking calculations have been updated.
6. The applicant must provide fencing details.
No new fencing is proposed.
7. Provide easement agreement with neighboring parcel.
Easement agreement was provided prior to preliminary site plan meeting on 2/25/2025.
8. Provide appropriate letters of approval for the additional access point to W Grand River Ave.
Sight distance review was conducted for the proposed drive location by LCRC on 11/21/2024 and recommended for approval (copy attached). A permit for the drive approach will be obtained during final construction plan stage of the process.
9. Provide sidewalks along building frontages where entrances are located.
Existing building has existing sidewalk where entrances are located. No new sidewalks needed or proposed.
10. Confirm that that grass areas in the front yard of all nonresidential uses shall be planted with sod, hydroseeding, or mulched or covered seeding.
A note to this effect has been added to the landscape plan.

11. Provide required berm to screen parking.

Berm has been added to screen the employee overflow parking.

12. Provide landscaping table showing the location, name and size of trees, shrubs, vines and ground covers to be planted on-site, including plantings related to buildings and structures, buffer areas and screenings, including detailed cost estimates for each item of construction required berm to screen parking

Landscape planting key provides name and sizing of plants to be planted on-site with the plan showing locations of all plants. A detailed cost estimate will be provided by the owner at the appropriate time.

13. Include dimensional information for detention pond on sheet LP-1.

Informational note regarding the length of the pond perimeter has been added to the plan.

14. Provide 11 additional shrubs along W Grand River Ave.

12 additional shrubs are proposed along the landscape berm.

15. Applicant shall provide a professionally sealed lighting plan.

As discussed with the Planning Commission at the 2/25/2025 meeting no new lighting is proposed for the site and it was understood that a photometric plan for the site would not be required. A note stating no new exterior lighting is proposed on the site.

16. Applicant to provide scaled elevations for the proposed building.

Dimensioned elevations for the proposed building are provided on sheet A-1.

17. Applicant to provide scaled elevations for the existing building.

As discussed with the Planning Commission at the 2/25/2025 meeting the existing building was to remain as is and it was understood that elevations of the building would not be required.

18. Applicant to provide detailed floor plans for the existing building.

Floor Plan has been added to sheet A-1.

19. Applicant to provide trash enclosure details.

Dumpster enclosure has been added to the site and details added to sheet C3.0.

Review by Spicer Group, dated 02/14/2025

1. Plans should be reviewed and approved by:
 - a. Fire Marshal
 - b. Township Planner
 - c. Livingston County Drain Commissioner
 - d. Livingston County Road Commission
 - e. Livingston County Health Department

Noted.

2. Remove the word "Future" from all references to the pole building if it is part of the site; otherwise, remove all references to it from the plans.

'Future' has been removed from all references the pole building.



3. Include a lighting plan for the parking area and submit a photometric plan with future submissions.
See response to item 15 above regarding this subject.
4. Add a Knox Box for fire department access at the proposed gate on the north end of the drive.
Proposed Knox Box location has been added to the plans (see sheet C3.0).
5. Ensure consistency across all plan sheets regarding the layout of the west drive.
Noted.
6. If the west drive provides access to the parking area, it must be surfaced with asphalt or concrete.
West drive provides access to landscape yard only. Public parking area will be serviced by the existing eastern drive.
7. Extend the acceleration and deceleration tapers on the Grand River Avenue approach to meet LCRC Commercial Driveway Approach Standard requirements.
Drive approach has been modified to meet county standards and as directed by the LCRC permit engineer.

Also included in this plan revision are the following items discussed at the 2/25/2025 PC meeting:

- Pond was moved out of the front yard setback.
- Additional plantings were added to the north and east property lines for screening of the yard from adjacent properties in lieu of an opaque fence.

Your review and approval of the Site Plan is respectfully requested.

Sincerely,

Livingston Engineering



Timothy J. Zimmer, PE
Sr. Project Manager

Cc: Kory Leppek, Leppek Landscape





LIVINGSTON COUNTY ROAD COMMISSION LAND SPLIT / SIGHT DISTANCE REVIEW

****NOTE: THIS IS NOT A
DRIVEWAY PERMIT****

Review Number 2410-007

Property Owner and Applicant Information

Owner: Kory Leppek
Street Address: 601 S. Hacker Road
City, State, ZIP: Brighton, MI
Day Phone:

Applicant: **Kory Leppek**
Company:
Address: **601 S. Hacker Road**
City, State: **Brighton MI,**
Applicant Phone:

Recommended for Approval:

Yes

Date of Review:

11/21/2024

Inspector:

Mack Hubert

Location

Township: **Howell** Section **20** Roadway On: **Grand River** Side of Street: **North**
 Approach Type: **Commercial** Development: **Leppek Nursery**
 Speed Limit (if posted): **55** Speed Factors (if any):

Comments:

A commercial approach could be permitted at 1912 feet west of Emmons Road. A commercial approach permit will be required.

Inspector: Wick Hubert

Field Measurements: Location of existing property corners from nearest crossroad: and feet West of Emmons

Parcel	Prop/Emnt Corners	Access Point(s)	Sight Distance Req.		Sight Distance Measured		S.D. Comply	CVA Comply	Neighbor Consent	Approve
			Std	Min						
Commercial Approach		1912	850	610	850 East	850 West	Yes	Yes	No	Yes

**** This review is based on the survey/sketch provided to us at the time of application or during the review process. Any changes to property lines or driveway locations after the date of this review will void the review and may prevent approval or permits for any future driveway approaches.**

SITE PLAN FOR LEPPEK LANDSCAPE, INC

4640 WEST GRAND RIVER AVENUE
HOWELL TOWNSHIP,
LIVINGSTON COUNTY, MICHIGAN

ADJACENT PROPERTY TABLE

Direction	Lot	Zoning	Use
North	Farmland	SFR	Farmland
East	Vacant	NSC	Vacant
Southeast	Livingston Veterinary Clinic	NSC	Veterinary Clinic
Southwest	Farmland	SFR	Farmland
West	Farmland	NSC	Farmland

SITE DATA TABLE

PARCEL NUMBER:	4706-20-100-027	
PARCEL ACREAGE:	4.22 ACRES ±	
ZONING:		
EXISTING	IFZ - INDUSTRIAL FLEX ZONE.	
USE:		
PROPOSED	LANDSCAPE CONTRACTOR	
LOT:		
MINIMUM LOT AREA	REQ'D 2 AC	PROVIDED 4.22 AC
MINIMUM LOT WIDTH	200 FT	304 FT
MAXIMUM LOT COVERAGE	75% MAX	3.5%
SETBACKS:		
MINIMUM FRONT YARD-GRAND RIVER AVE	REQ'D 50 FT	PROVIDED 305 FT
MINIMUM SIDE YARD		
--ONE SIDE	10 FT	41.2 FT
--TOTAL BOTH SIDES	25 FT	322.9 FT
MINIMUM REAR YARD	50 FT	50 FT
BUILDING:		
HEIGHT	REQ'D 70 FEET	PROVIDED

PARKING CALCULATIONS

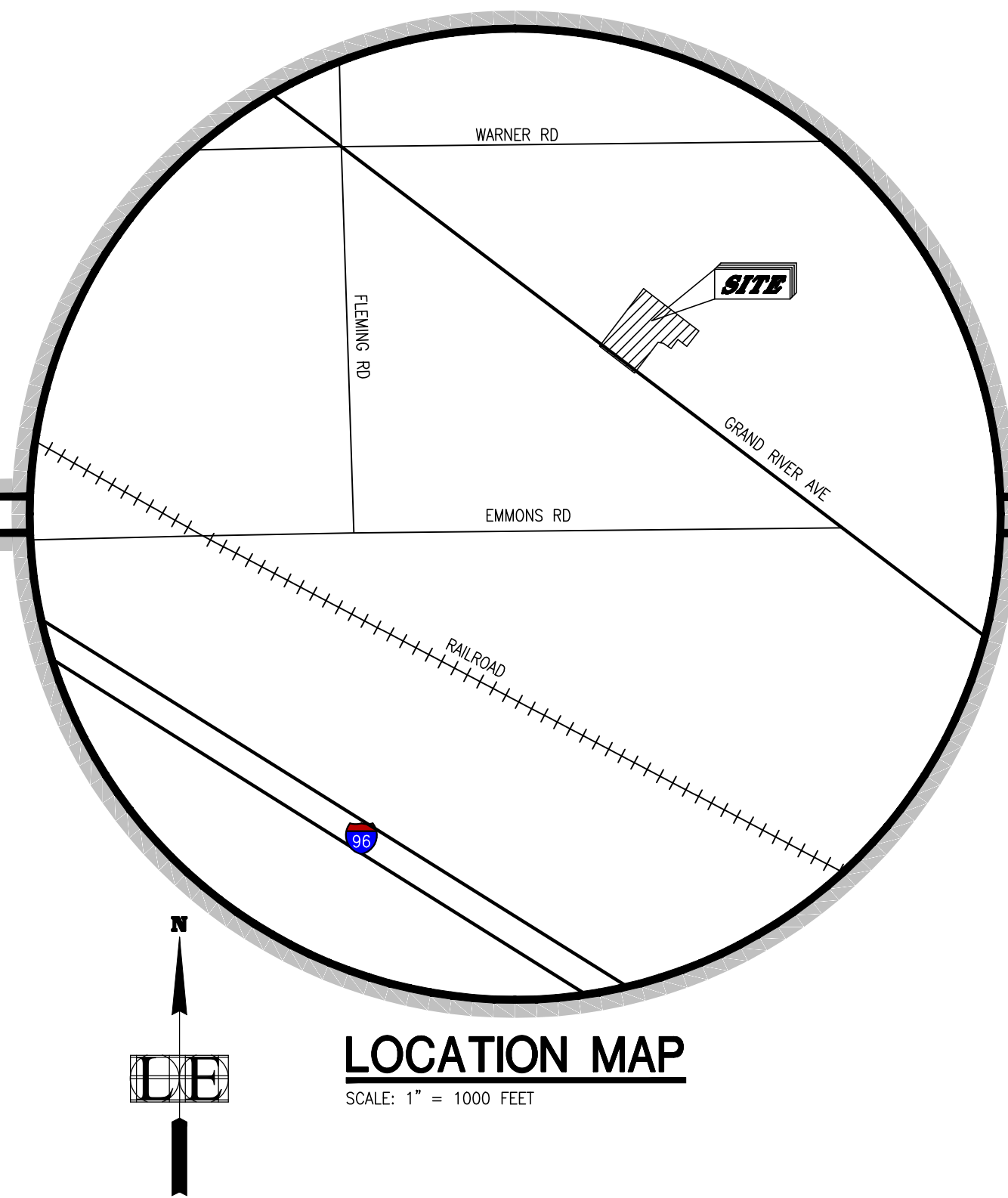
REQUIRED PARKING PER ORDINANCE		
PROPOSED USE:	LANDSCAPE CONTRACTOR & SUPPLY EXISTING BUILDING - BUSINESS OFFICE (60%) AND STORAGE (40%) PROPOSED BUILDING - STORAGE (100%)	
BUILDING DATA:	EXISTING BUILDING 4,000 SF PROPOSED BUILDING 2,400 SF TOTAL BUILDINGS 6,400 SF	
REQUIRED PARKING CALCULATION:		
BUSINESS OFFICE SPACE:		
2,088 S.F. @ 1 SP. PER 400 S.F.	=	2,088/400
		= 5.2 SPACES
STORAGE:		
4,312 S.F. @ 1 SP. PER 1,500 S.F.	=	4,000/1,500
		= 2.8 SPACES
TOTAL PARKING REQUIRED	=	8 SPACES*
*TOT. TO INCLUDE ONE (1) BARRIER FREE SPACE		
<u>PROVIDED PARKING</u>		
PAVED SPACES PROPOSED:	=	13 SPACES (Paved)
		INCL/ 2 BARRIER FREE SPA
<u>GRAVEL EMPLOYEE SPACES PROPOSED:</u>	=	<u>4 SPACES</u>
TOTAL PARKING SPACES	=	17 SPACES

UTILITY DISCLAIMER



Know what's below.
Call before you dig.

Utilities as shown indicate approximate location of facilities only, as described by the various companies and no guarantee is given either as to the completeness or accuracy thereof. Contractor shall call "MSS DIG" 1-800-482-7171 prior to the start of construction. Electric, gas, phone and television companies should be contacted prior to the commencement of field activities.



LEGAL DESCRIPTIONS:

A part of the Northwest 1/4 of Section 20, T3N, R4E, Howell Township, Livingston County, Michigan more particularly described as follows: commencing at the North 1/4 corner of said Section 20, thence along the North and South 1/4 line of Section 20 (as monumented), S00°17'43"W, 1324.37 feet; thence continuing along said North and South 1/4 line of Section 20, S00°02'52"E, 796.59 feet to the centerline of Grand River Avenue (100 foot wide Right-of-Way); thence along the centerline of said Grand River Avenue, N51°30'40"W, 192.50 feet; thence N51°10'00"W, 691.89 feet to the Point of Beginning of the parcel to be described; thence continuing along said centerline of Grand River Avenue, thence N51°10'00"W, 304.58 feet; thence N38°50'00"E, 500.00 feet; thence S51°10'00"E, 479.16 feet; thence S38°50'00"W, 135.11 feet; thence N49°53'39"W, 78.89 feet; thence S37°25'32"W, 79.54 feet; thence N54°24'47"W, 65.64 feet; thence N78°29'28"W, 36.17 feet; thence S38°50'00"W, 266.80 feet to the Point of Beginning, containing 4.220 acres and subject to the rights of the public over Grand River Avenue (100 foot wide Right-of-Way), also subject to the rights and use of a 33 foot wide easement for ingress and egress as described as follows:
A part of the Northwest 1/4 of Section 20, T3N, R4E, Howell Township, Livingston County, Michigan more particularly described as follows: commencing at the North 1/4 corner of said Section 20, thence along the North and South 1/4 line of Section 20 (as monumented), S00°17'43"W, 1324.37 feet; thence continuing along said North and South 1/4 line of Section 20, S00°02'52"E, 796.59 feet to the centerline of Grand River Avenue (100 foot wide Right-of-Way); thence along the centerline of said Grand River Avenue, N51°30'40"W, 192.50 feet; thence N51°10'00"W, 596.46 feet; thence N38°50'00"E, 50.00 feet to a point on the Northerly Right-of-Way line of Grand River Avenue, said point also being the Point of Beginning of a 33 foot wide ingress and egress easement; thence along the Northerly Right-of-Way line of Grand River Avenue, N51°10'00"W, 33.17 feet; thence N32°59'54"E, 234.97 feet; thence S54°24'47"E, 33.03 feet; thence S32°59'54"W, 236.85 feet to the Point of Beginning.

SITE DATA & GENERAL NOTES

- PROPERTY IS ZONED: NSC (NEIGHBORHOOD SERVICE COMMERCIAL).
- CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL EXISTING AND PROPOSED UTILITIES FROM DAMAGE DURING ALL STAGES OF CONSTRUCTION.
- THE ENGINEER AND APPLICABLE AGENCY MUST APPROVE, PRIOR TO CONSTRUCTION, ANY ALTERATION, OR VARIANCE FROM THESE PLANS.
- ALL SIGNS SHALL MEET THE REQUIREMENTS OF THE HOWELL TOWNSHIP ZONING ORDINANCE.
- UNDERGROUND DRY UTILITIES SHALL BE EXTENDED FROM EXISTING LOCATIONS TO SERVICE THIS SITE AS REQUIRED BY UTILITY COMPANIES.
- BARRIER FREE PARKING SPACES SHALL BE MARKED WITH ABOVE GRADE SIGN IN ACCORDANCE WITH CURRENT ADA STANDARDS.
- ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE HOWELL TOWNSHIP AND LIVINGSTON COUNTY.
- THE CONTRACTOR SHALL TELEPHONE THE HOWELL TOWNSHIP 72 HOURS BEFORE BEGINNING ANY CONSTRUCTION.
- THREE WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL TELEPHONE MISS DIG (800-482-7171) FOR THE LOCATION OF UNDERGROUND UTILITIES AND SHALL ALSO NOTIFY REPRESENTATIVES OF OTHER UTILITIES LOCATED IN THE VICINITY OF THE WORK - IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY AND/OR OBTAIN ANY INFORMATION NECESSARY REGARDING THE PRESENCE OF UNDERGROUND UTILITIES WHICH MIGHT AFFECT THIS JOB.
- PROPOSED SITE CONTAINS NO WETLANDS OR FLOOD PLAINS PER NATIONAL WETLAND INVENTORY AND FEMA FIRM MAP.
- SITE PLAN USE: LANDSCAPE CONTRACTOR
- SITE STORM DRAINAGE WILL BE DETAINED ON SITE AND RELEASED TO EXITING GRADE.
- BUILDING(S) SHALL HAVE APPROVED ADDRESS NUMBERS, BUILDING NUMBERS OR APPROVED BUILDING IDENTIFICATION PLACED IN A POSITION THAT IS PLAINLY LEGIBLE AND VISIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY. THESE NUMBERS/LETTERS SHALL BE AT LEAST 6" HIGH AND SHALL CONTRAST WITH THEIR BACKGROUND.
- THE FIRE DEPARTMENT ACCESS DRIVE SHALL MEET THE FOLLOWING CONDITIONS:
 - A. THE MINIMUM UNOBSTRUCTED WIDTH SHALL BE 20 FEET.
 - B. THE MINIMUM UNOBSTRUCTED HEIGHT SHALL BE 13 FEET
 - C. THE ACCESS DRIVE SHALL BE ACCESSIBLE AT ALL TIMES (I.E. SNOW REMOVAL, PARKED EQUIPMENT).
- A KNOX BOX IS REQUIRED FOR THE BUILDING. PURCHASE CAN BE COMPLETED ON-LINE AT WWW.KNOXBOX.COM. THE USE OF THE KNOX RAPID ENTRY SYSTEM PADLOCK OR KNOX KEY SWITCH WILL BE REQUIRED FOR ANY ENTRY GATE INSTALLED.
- A FINAL INSPECTION OF THE BUILDINGS, GATES AND SITE SHALL BE PERFORMED BY THE FIRE DEPARTMENT BEFORE C OF O IS ISSUED.
- NO NEW EXTERIOR LIGHTING IS PROPOSED FOR THE SITE.

PROJECT NARRATIVE:

USE STATEMENT

LEPPEK LANDSCAPE IS A LANDSCAPING CONTRACTOR SERVICING LOCAL COMMERCIAL AND RESIDENTIAL CLIENTS. SITE IS PLANNED TO OPERATE DURING THE HOURS OF 8:00AM TO 5:30PM WITH AN ESTIMATED SIX TO EIGHT EMPLOYEES THAT PARK AT THE SITE DAILY. THE SITE WILL HAVE AN OUTDOOR YARD AND STOCK AREA TO DISPLAY AND STORE LANDSCAPING MATERIALS. THE EXISTING BUILDING WILL HAVE ADMINISTRATIVE AND LANDSCAPE DESIGNERS WITH A MEETING ROOM FOR CLIENTS TO MEET WITH DESIGNERS. NO RETAIL SALES ARE PROPOSED. MATERIALS STORED ARE TO BE USED BY LANDSCAPE INSTALLERS. THE REAR OF THE EXISTING BUILDING IS FOR THE STORAGE OF SMALL EQUIPMENT, WHILE THE PROPOSED POLE BARN IS TO BE COLD STORAGE FOR LARGER EQUIPMENT.

SITE SHEET INDEX

C1.0	COVER SHEET
C2.0	EXISTING CONDITIONS & REMOVALS
C3.0	SITE LAYOUT & UTILITY PLAN
C5.0	SITE GRADING PLAN
C6.0	STORM WATER MANAGEMENT PLAN
C7.0	EMERGENCY ACCESS PLAN
LP-1	LANDSCAPE PLAN
A-1	POLE BARN FLOOR PLAN & ELEVATIONS

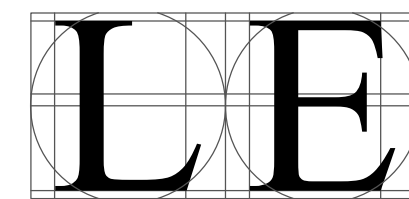
LEGEND

	EXISTING	PROPOSED
SPOT GRADE	x 000.00	x 000.00
CONTOUR	---	000
SPOT GRADE		TP 311.4
DRAINAGE ARROW		-1.5%
SANITARY SEWER	--- SAN ---	SAN
SANITARY SEWER STRUCTURE LABEL		00
STORM SEWER	--- ST ---	ST
STORM SEWER STRUCTURE LABEL		00
WATER	--- W ---	W
WATER STRUCTURE LABEL		HYD 87
OVERHEAD		
FENCE	x x x	X
GAS	g g g	g
ELECTRIC	E E E	E
DRAINAGE AREA BOUNDARY		
LIMITS OF DISTURBANCE		
RIDGE LINE		
SWALE LINE		
LIGHT POLE	*	
UTILITY POLE	o	
DECIDUOUS TREE	o	
GATE VALVE IN WELL	o	

OWNER/DEVELOPER

LEPPEK LANDSCAPE, INC
4640 W. GRAND RIVER AVE.
HOWELL, MI 48855
PHONE: (810) 227-2566
ATTN: Kory Leppek

ENGINEER



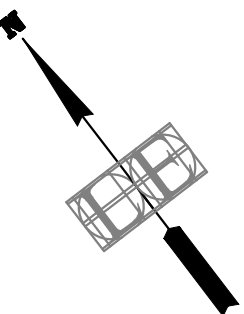
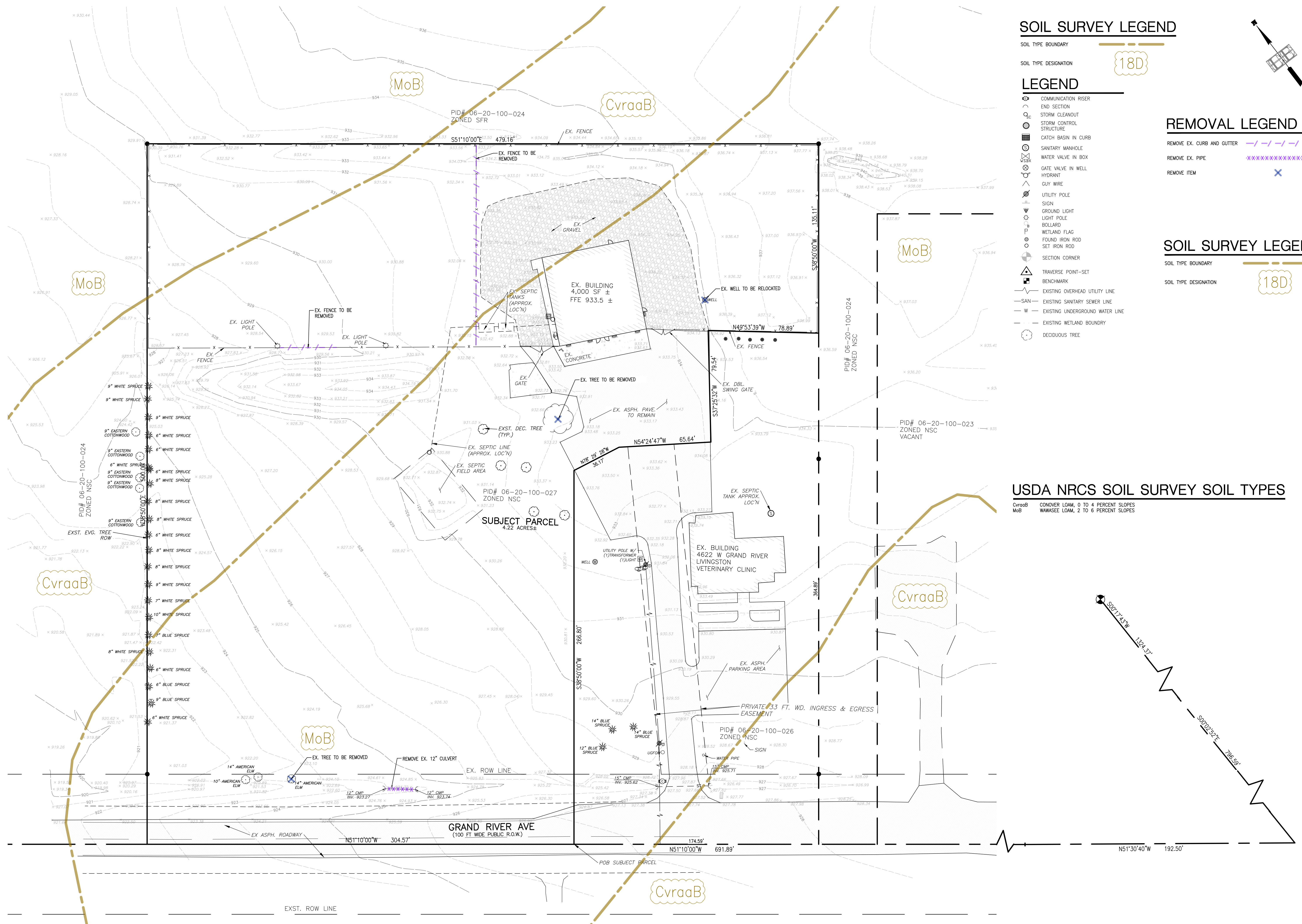
LIVINGSTON ENGINEERING
CIVIL ENGINEERING SURVEYING PLANNING
3300 S. OLD U.S. 23, BRIGHTON, MI 48114
www.livingstoneng.com PHONE: (810) 225-7100 FAX: (810) 225-7699

LEPPEK LANDSCAPE, INC
HOWELL TOWNSHIP
LIVINGSTON COUNTY, MICHIGAN
SITE PLAN

ENGINEER'S SEAL



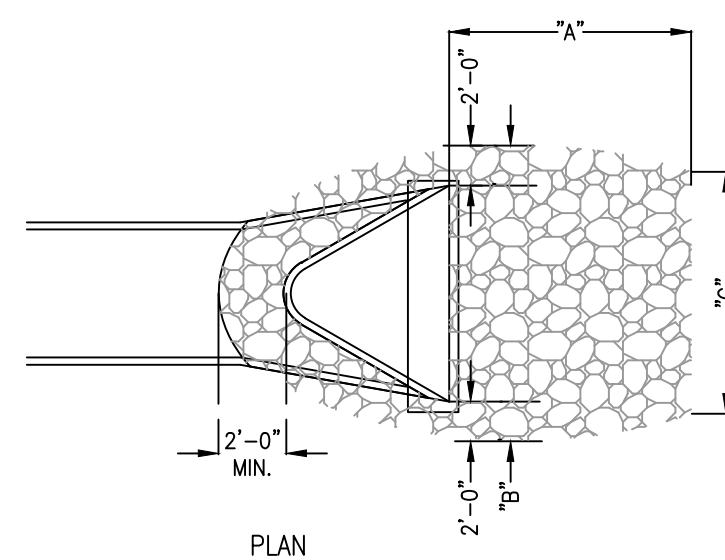
REVISIONS	DATE	PROJECT No.
PER TOWNSHIP REVIEW AND FC MTS COMMENTS	03/25/2025	19238-1
		SHEET C10
		DATE: 12/16/2024



	BUMPER BLOCK, PRECAST CONCRETE SEE DETAIL, THIS SHEET		BARRIER FREE SIGN (R7-B), SEE DETAIL, THIS SHEET
	DUMPSTER ENCLOSURE, SEE DETAIL, THIS SHEET		FLARED END SECTION
	RIP RAP SEE DETAIL, THIS SHEET		DETENTION POND SEE SHEET C6.0
	4" SINGLE SOLID LINES, BLUE		OUTLET STRUCTURE SEE DETAIL ON SHEET C6.0
	4" SINGLE SOLID LINES, BLUE, 45° CROSS HATCH PATTERN (2" O.C.) WITH BORDER, ADA COMPLIANT		EMERGENCY SPILLWAY SEE DETAIL ON SHEET C6.0
	PAINTED INTERNATIONAL SYMBOL OF ACCESSIBILITY, BLUE ADA COMPLIANT		FOREBAY FILTER BERM SEE DETAIL ON SHEET C6.0
	4" SINGLE SOLID LINE, WHITE		

ASPH-SD	PROPOSED STANDARD DUTY ASPHALT PAVEMENT SECTION PER DETAIL, SHEET C7.0	
CONC-PV	PROPOSED CONCRETE PAVEMENT SECTION PER DETAIL, SHEET C7.0	
GRVL-PV	PROPOSED GRAVEL PAVEMENT SECTION PER DETAIL, SHEET C7.0	

1. ALL UTILITY COMPANIES SHALL BE CONTACTED PRIOR TO CONSTRUCTION AND ALL UTILITIES LOCATED. ANY DISCREPANCIES OR CONFLICTS SHALL BE REPORTED TO ENGINEER FOR RESOLUTION PRIOR TO COMMENCING CONSTRUCTION.
2. ALL SIDEWALK RAMPS AND ACCESSIBLE ROUTES TO MEET CURRENT ADA GUIDELINES AND SPECIFICATIONS.
3. UNDERGROUND ELECTRIC CONNECTION WILL BE PROVIDED AS DETERMINED BY UTILITY COMPANY.

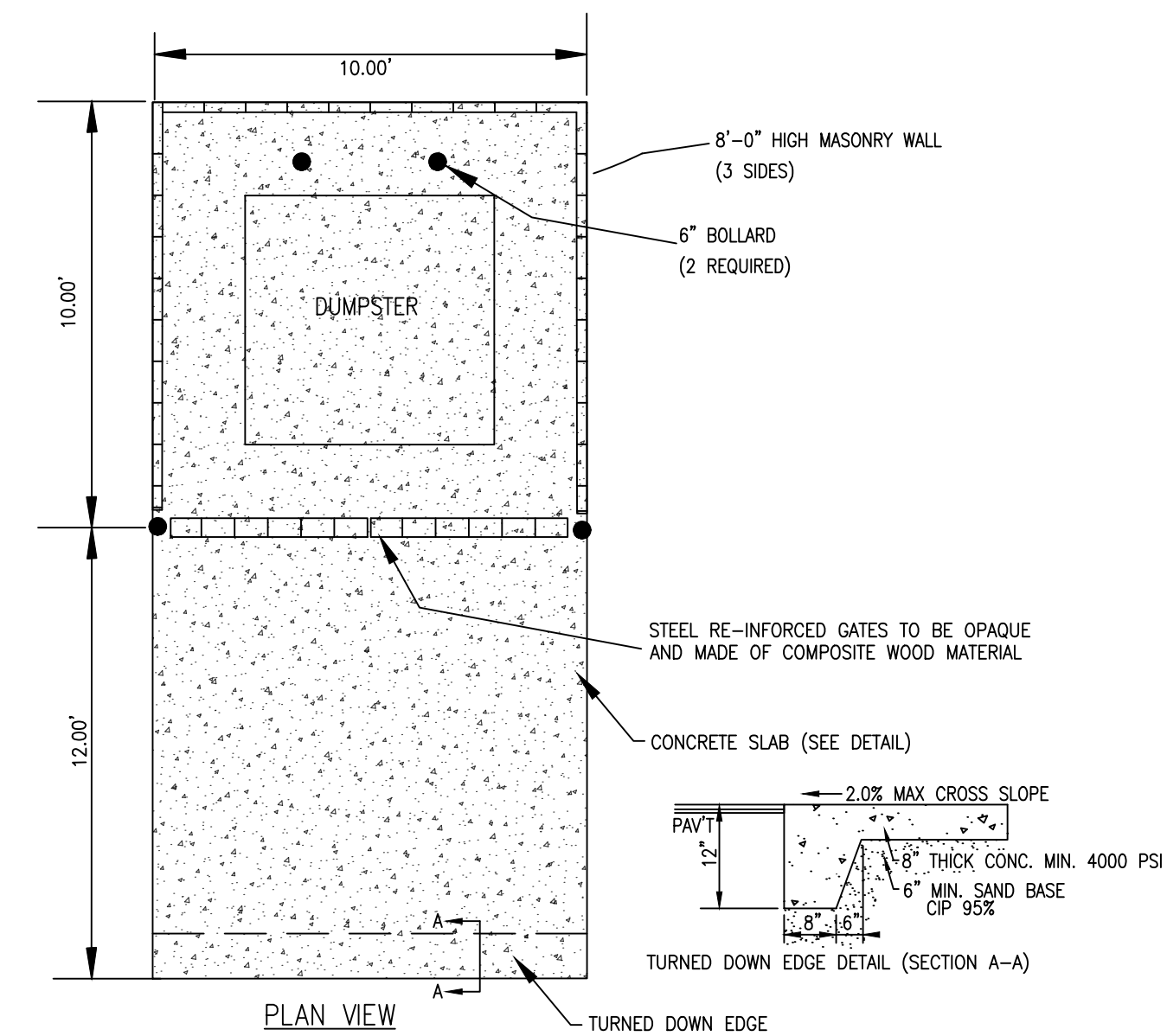


PIPE DIAMETER	"A"	"B"	"C"	SQUARE YARDS
12"	5'-0"	6'-6"	3'-0"	15 MIN
15"	5'-0"	7'-0"	3'-0"	15 MIN
18"	5'-0"	7'-6"	3'-6"	15 MIN
21"	5'-6"	8'-0"	4'-0"	15 MIN
24"	6'-0"	8'-6"	4'-6"	15 MIN

NOT TO SCALE



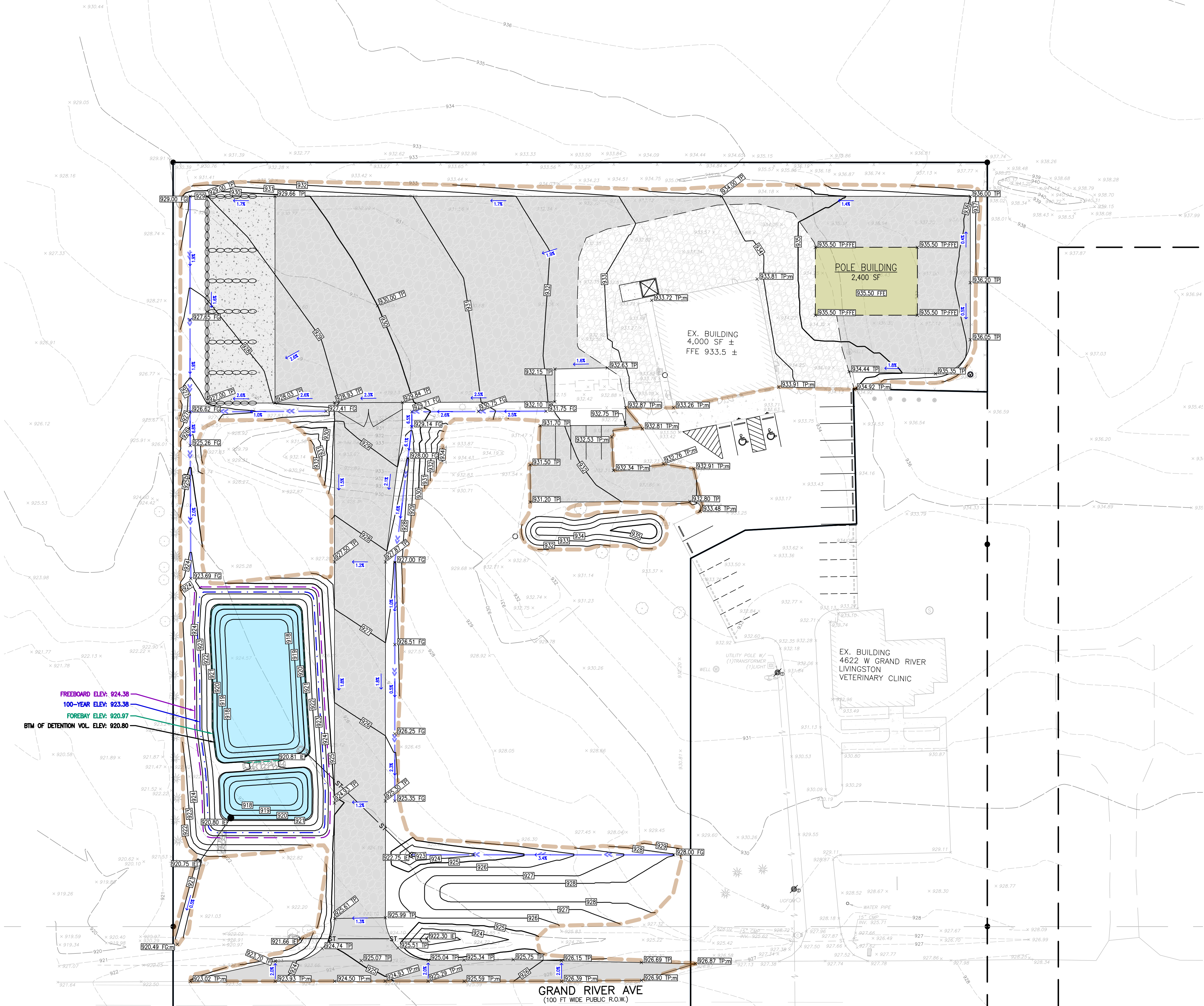
SIGN-BF **BARR**
NOT TO SCALE



NOT TO SCALE



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GRADE PLAN LEGEND

- PR. CONTOUR 615
- LIMITS OF GRADING ———
- SWALE LINE ———
- DRAINAGE ARROW -1.5%
- PR. SPOT GRADE X 811.40 TP

SPOT GRADE ABBREVIATIONS LIST

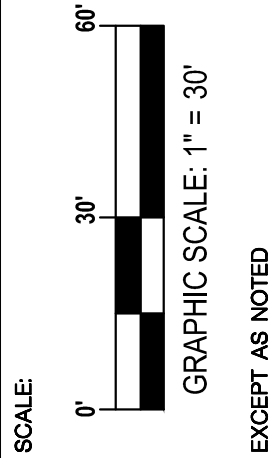
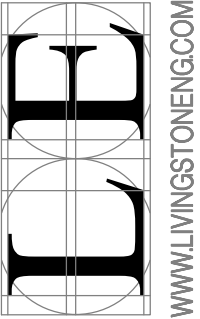
- TP = TOP OF PAVEMENT
IE = INVERT ELEVATION
FG = FINISHED GRADE
FFE = FIN. FLOOR ELEVATION
m. = MATCH EXISTING

GRADE PLAN NOTES:

1. CROSS-SLOPE IN BARRIER FREE PARKING SHALL NOT EXCEED 2% PER ADA STANDARDS

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LIVINGSTON ENGINEERING
CIVIL ENGINEERING
SURVEYING
PLANNING
3300 S. OLD U.S. 23, BRIGHTON, MI 48114
PHONE: (810) 225-7000
FAX: (810) 225-7699



CLIENT
Leppek Landscape Inc.
4640 W. Grand River Ave.
Howell, MI 48855
Attn: Kory Leppek

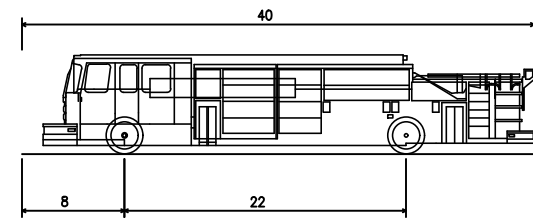
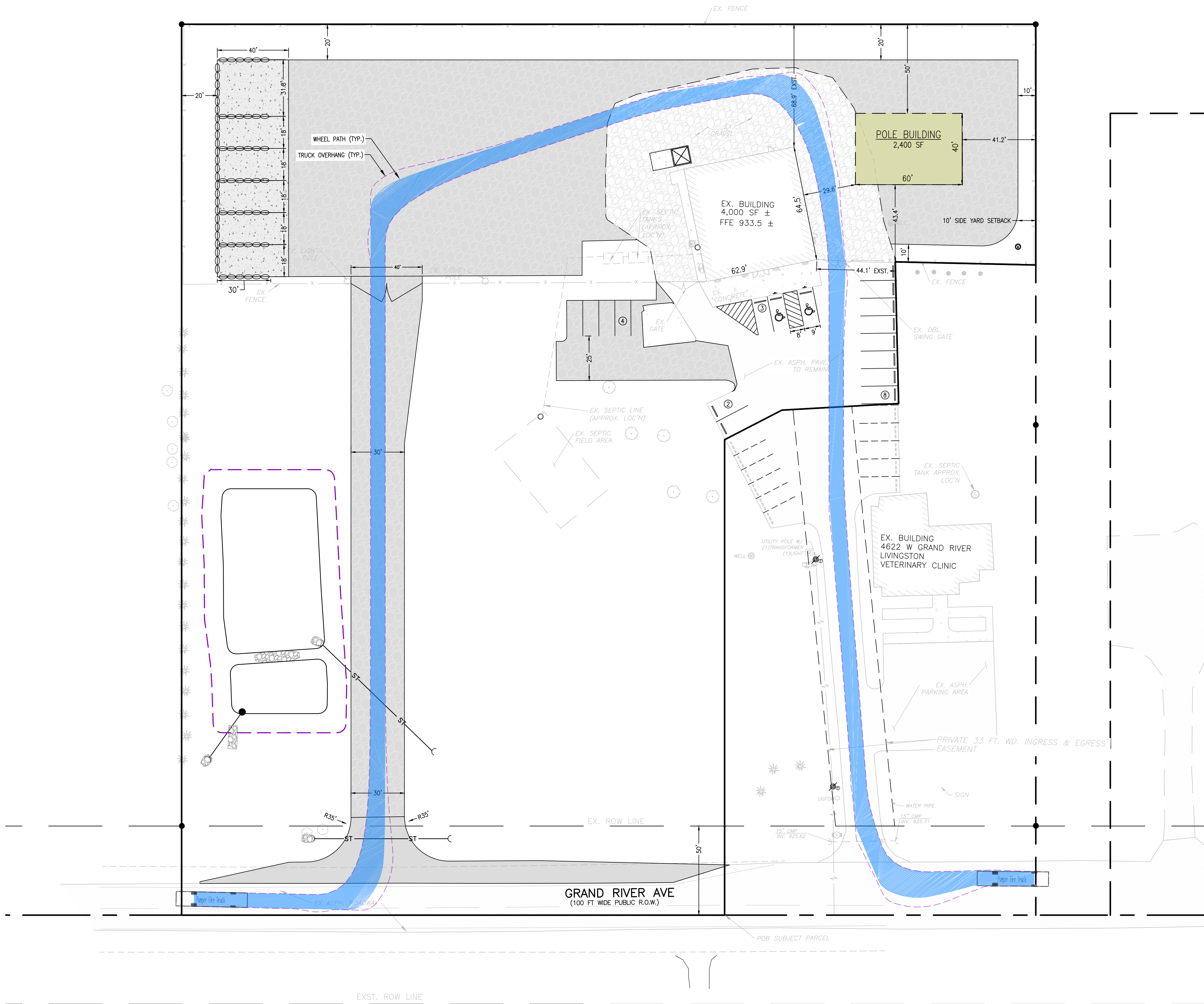
LEPPEK LANDSCAPE INC.
4640 W. GRAND RIVER AVENUE
HOWELL TOWNSHIP, LIVINGSTON COUNTY, MI
SITE PLAN
SITE GRADING PLAN

REVISIONS	DATE
1. PER TOWNSHIP REVIEW AND ALL VEG COMMENTS	03/25/2025

JOB NO. 19238-1	DRAWN: MSA/TJZ	DATE: 12/16/2024
CHECKED:	APPROVED:	

C5.0

FILE:C:\Users\juser\OneDrive\Projects\2019\19238-1 Leppek 4640 W Grand River\19238-1 C7.0 Emergency Access Plan.dwg

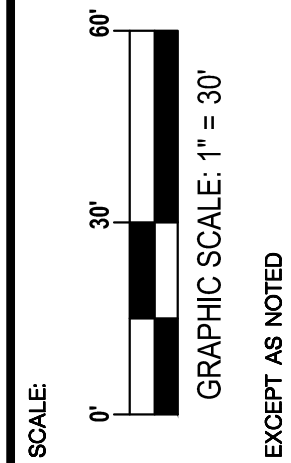
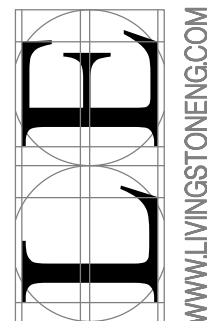


Pumper Fire Truck
Overall Length 40.000ft
Overall Width 8.167ft
Overall Body Height 7.745ft
Min Body Ground Clearance 0.656ft
Track Width 8.167ft
Lock-to-lock time 5.00s
Max Wheel Angle 45.00°

PUMPER FIRE TRUCK PROFILE

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CLIENT
Leppek Landscape Inc.
4640 W. Grand River Ave.
Howell, MI 48855
Attn: Kory Leppek

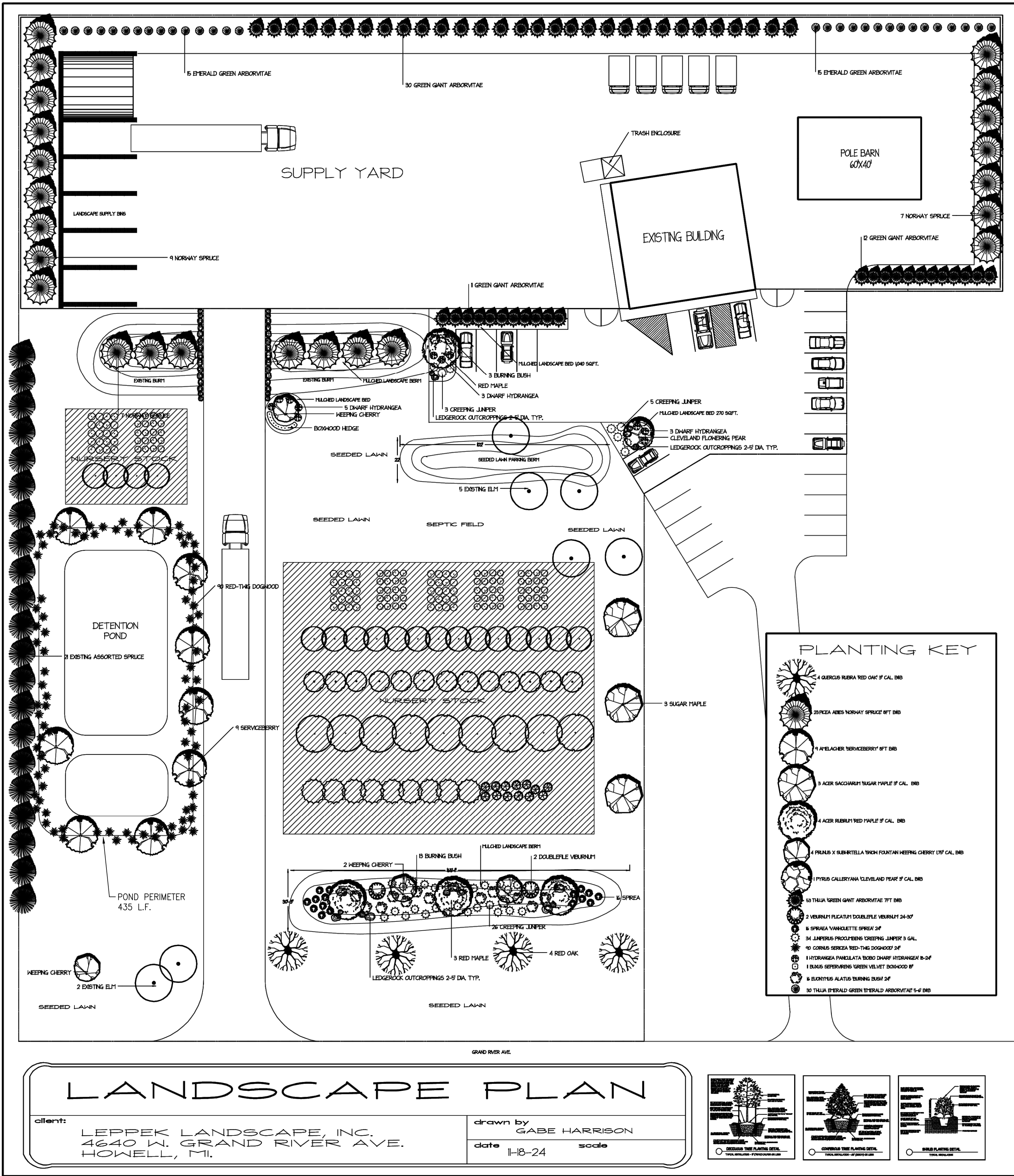
LEPPEK LANDSCAPE INC.
4640 W. GRAND RIVER AVENUE
HOWELL TOWNSHIP, LIVINGSTON COUNTY, MI
SITE PLAN
EMERGENCY ACCESS PLAN

REVISIONS	DATE
1. PER TOWNSHIP REVIEW AND PER MFG COMMENTS	03/25/2025

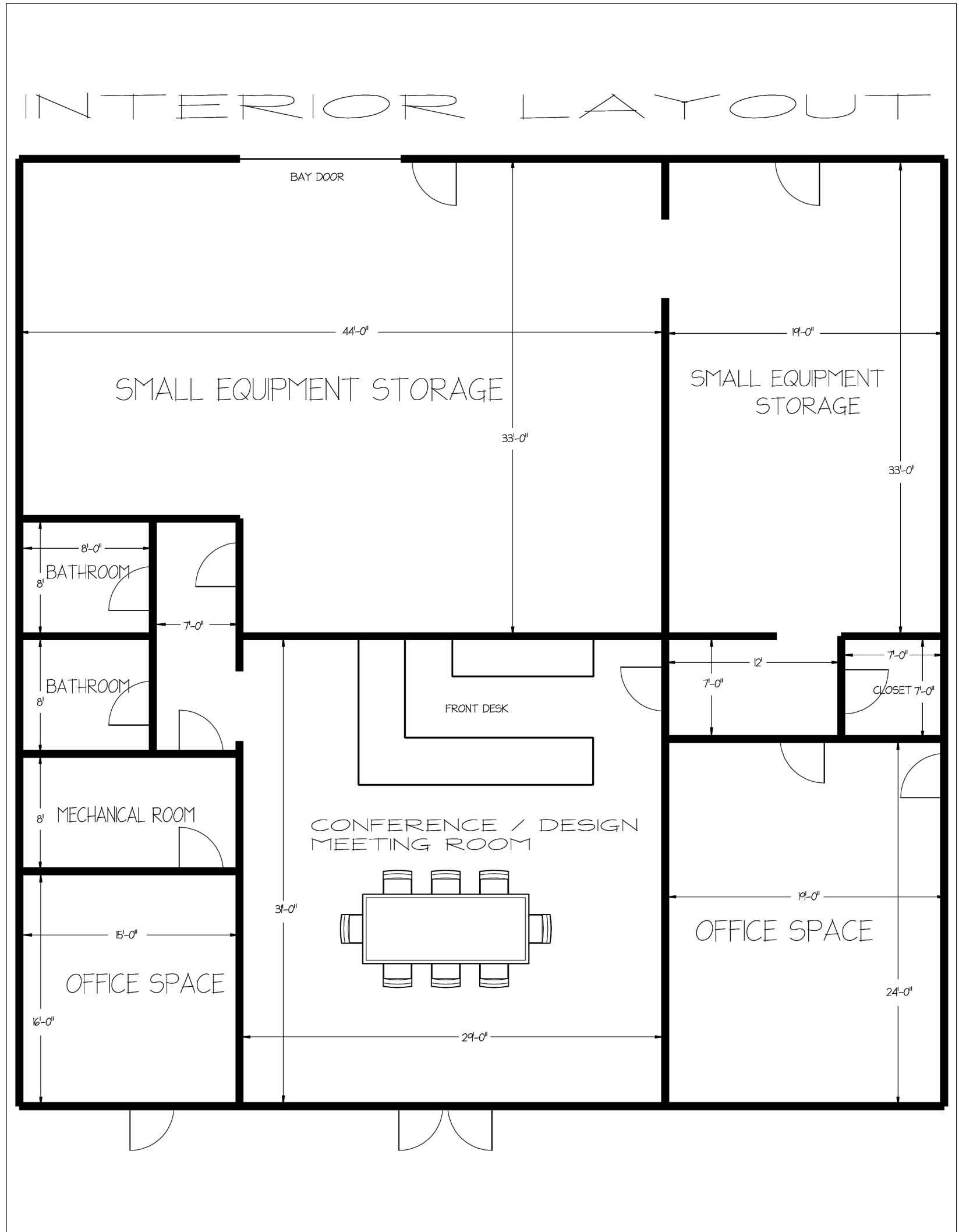
JOB NO.
19238-1
DRAWN: MSA/TJZ
CHECKED:
APPROVED:
DATE: 12/16/2024

C7.0

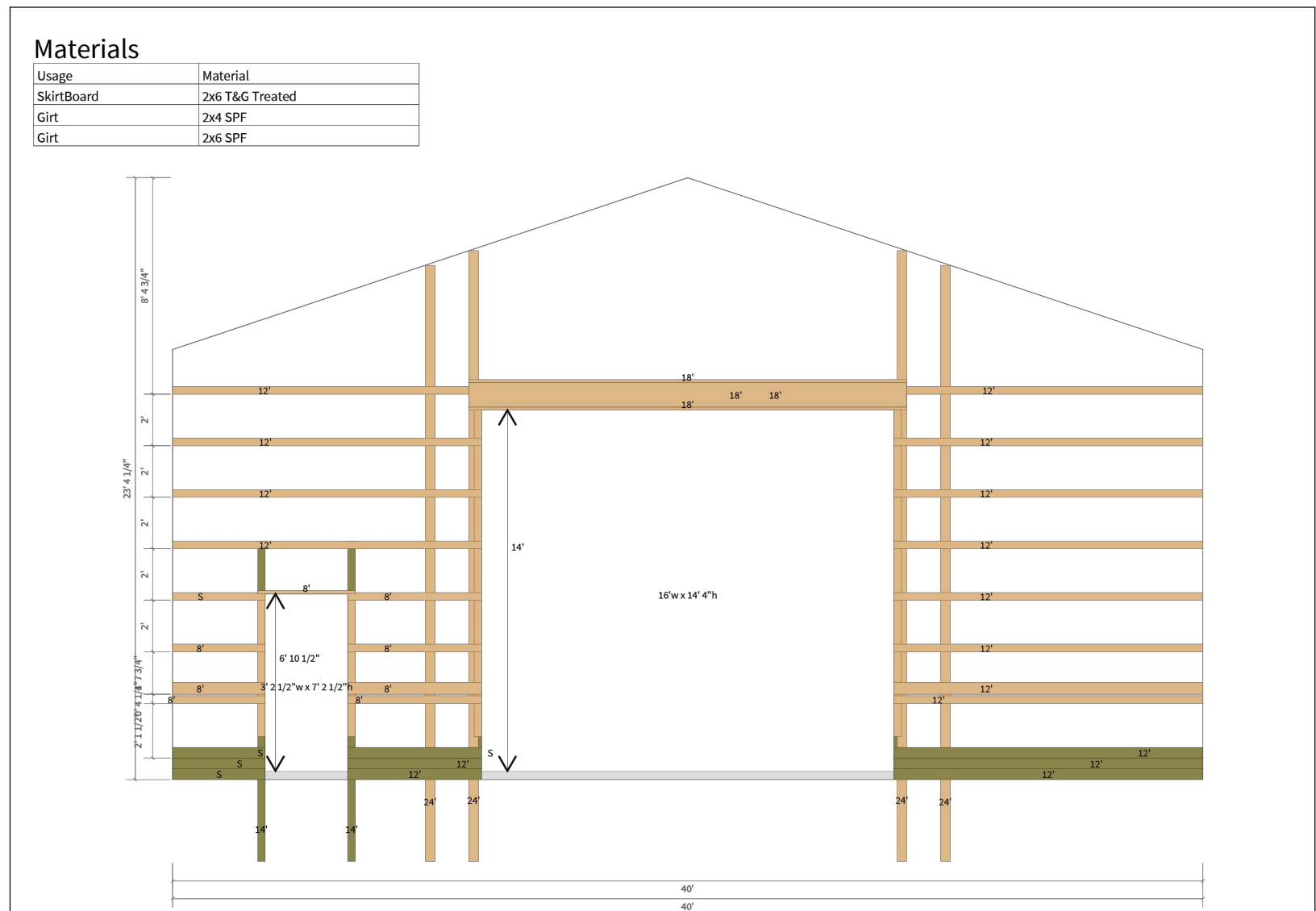
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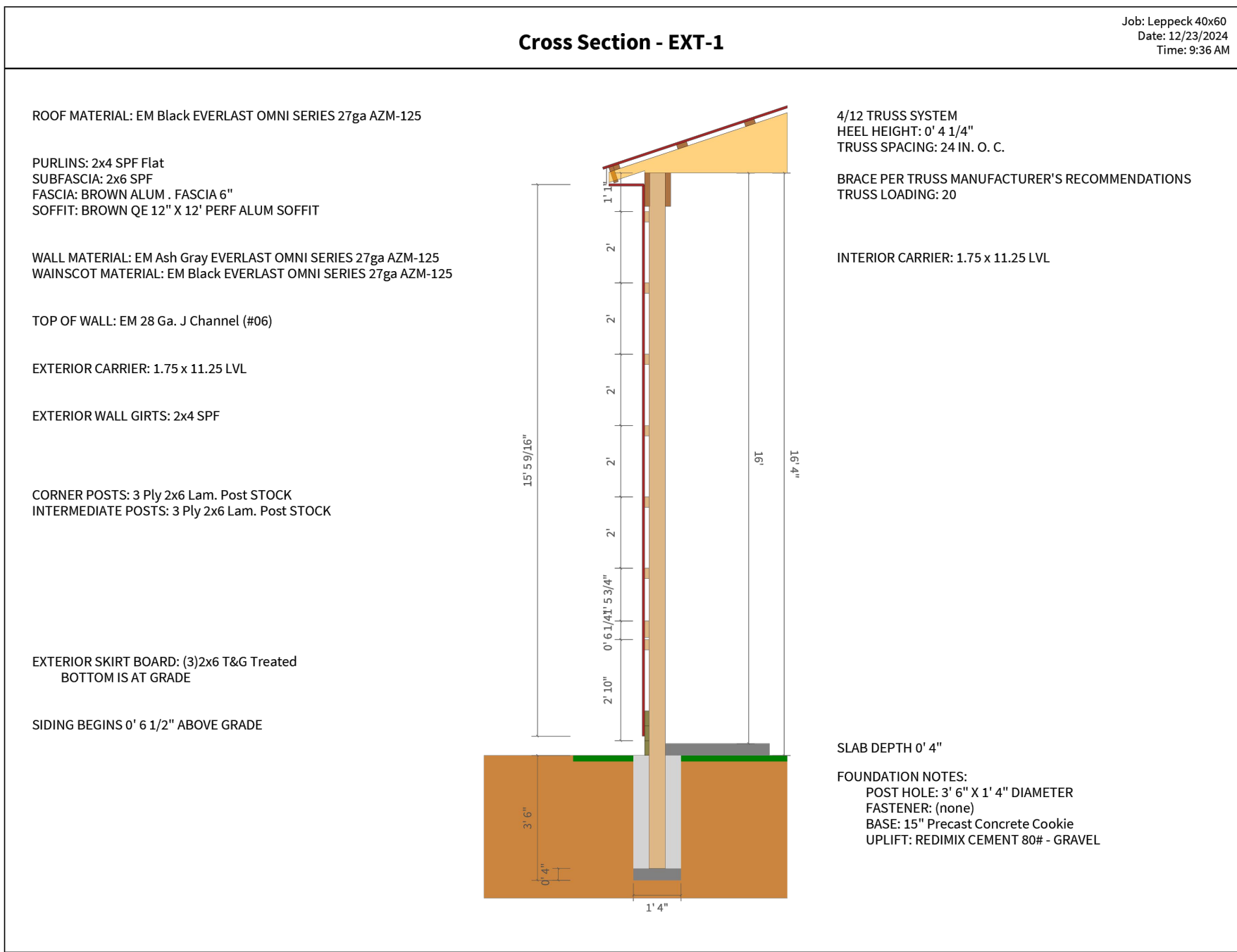
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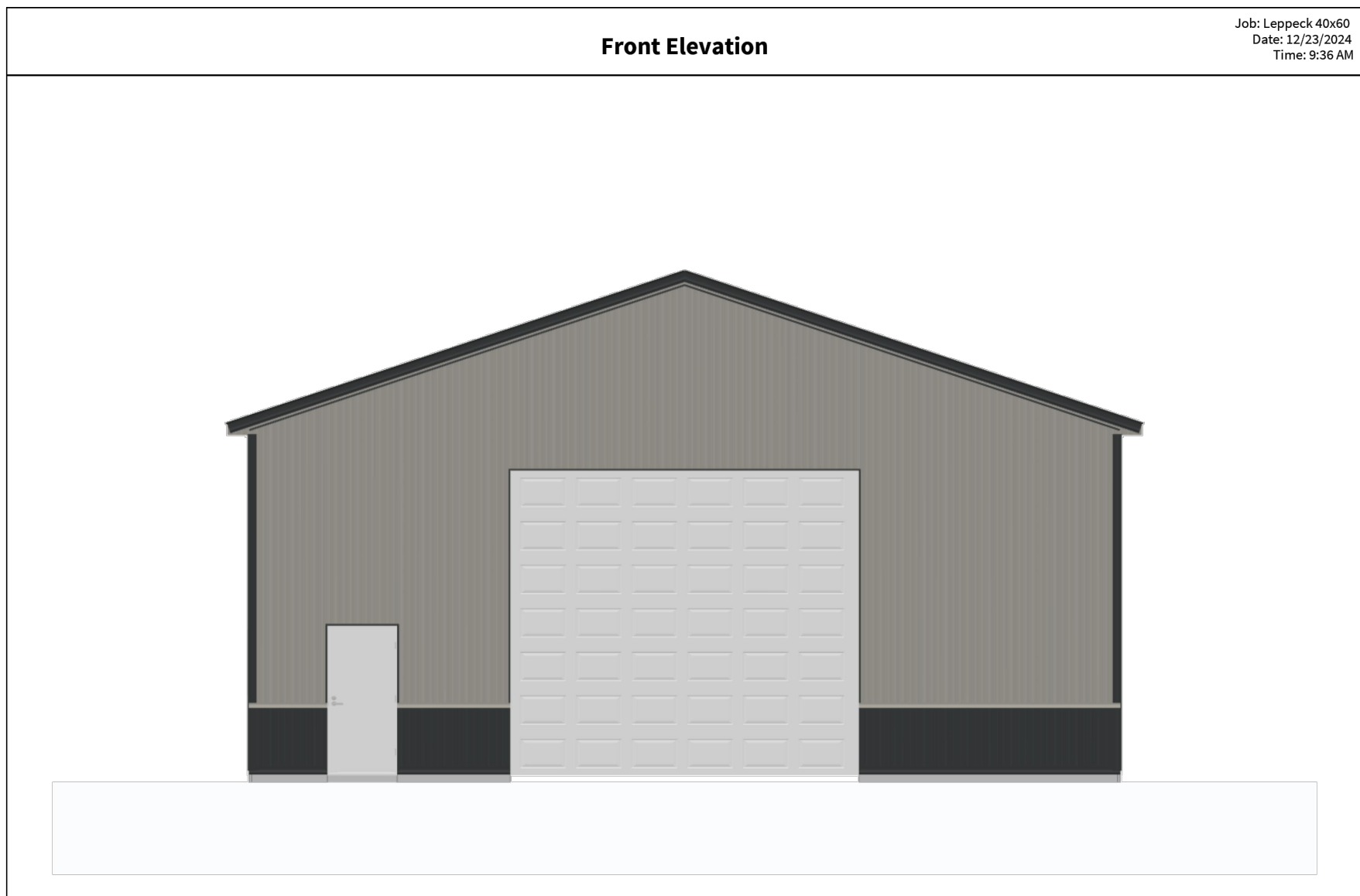
EXISTING BUILDING PROPOSED FLOOR PLAN
NOT TO SCALE



SECTION
NOT TO SCALE



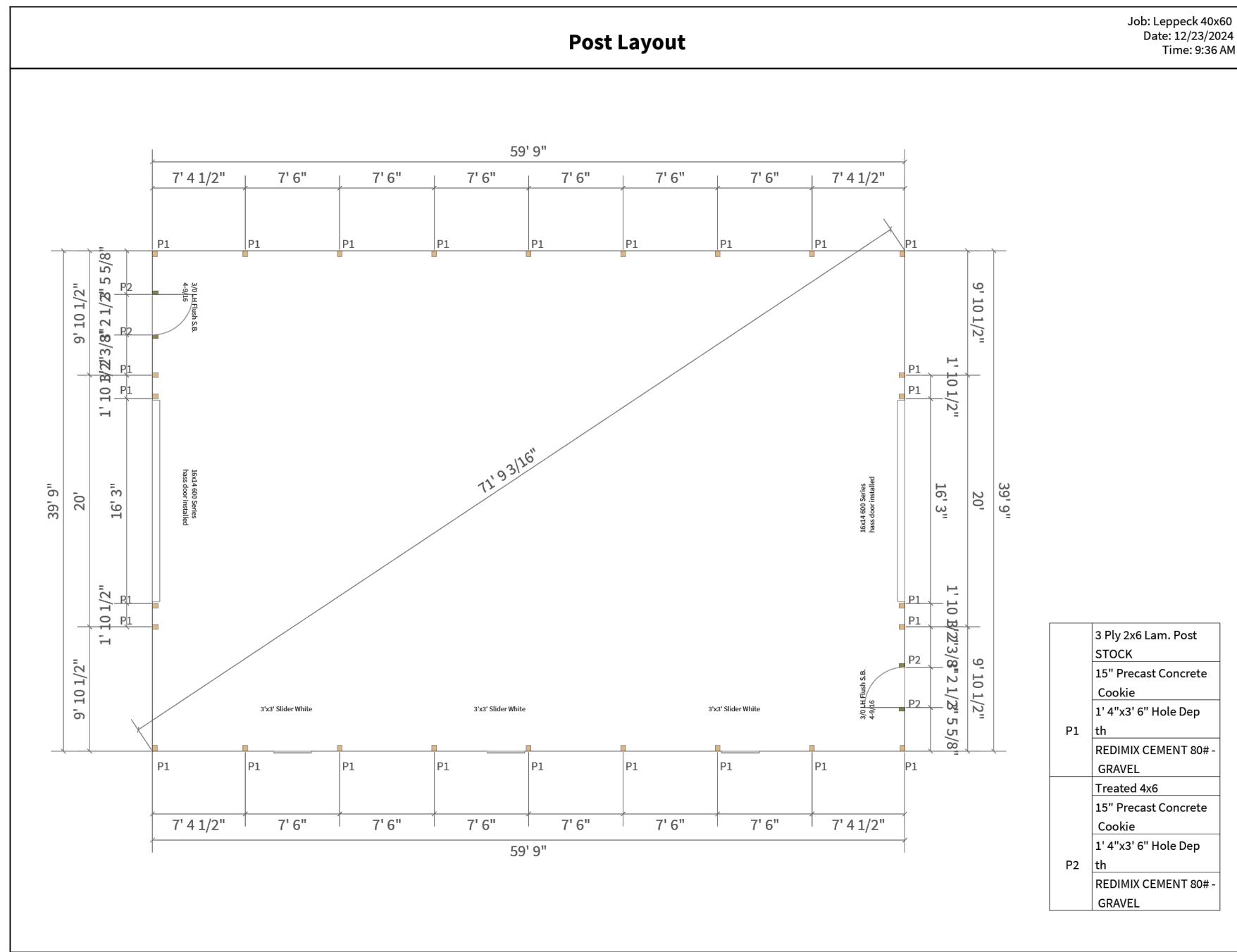
SECTION
NOT TO SCALE



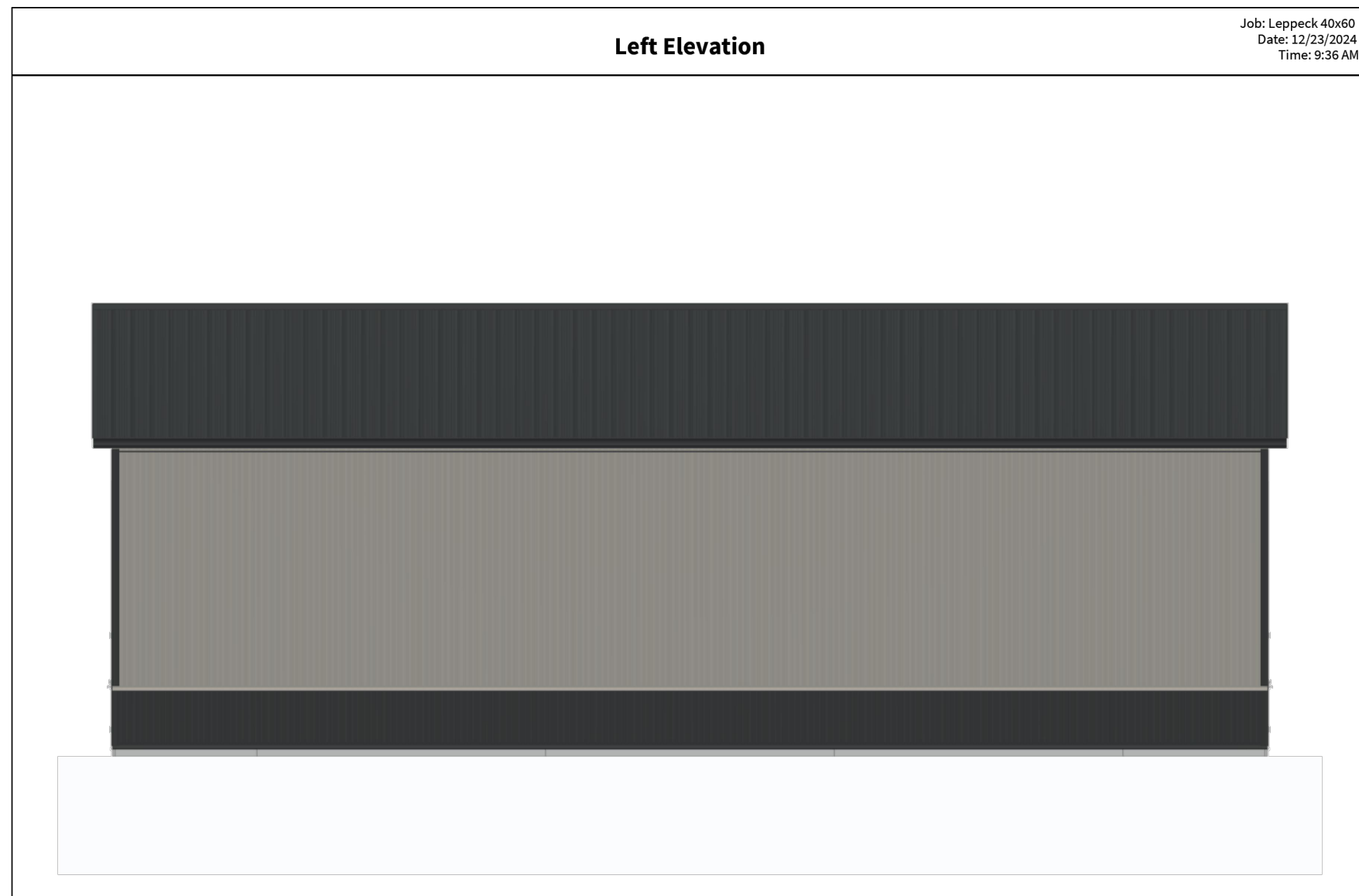
ELEVATION - NORTH WEST SIDE
NOT TO SCALE



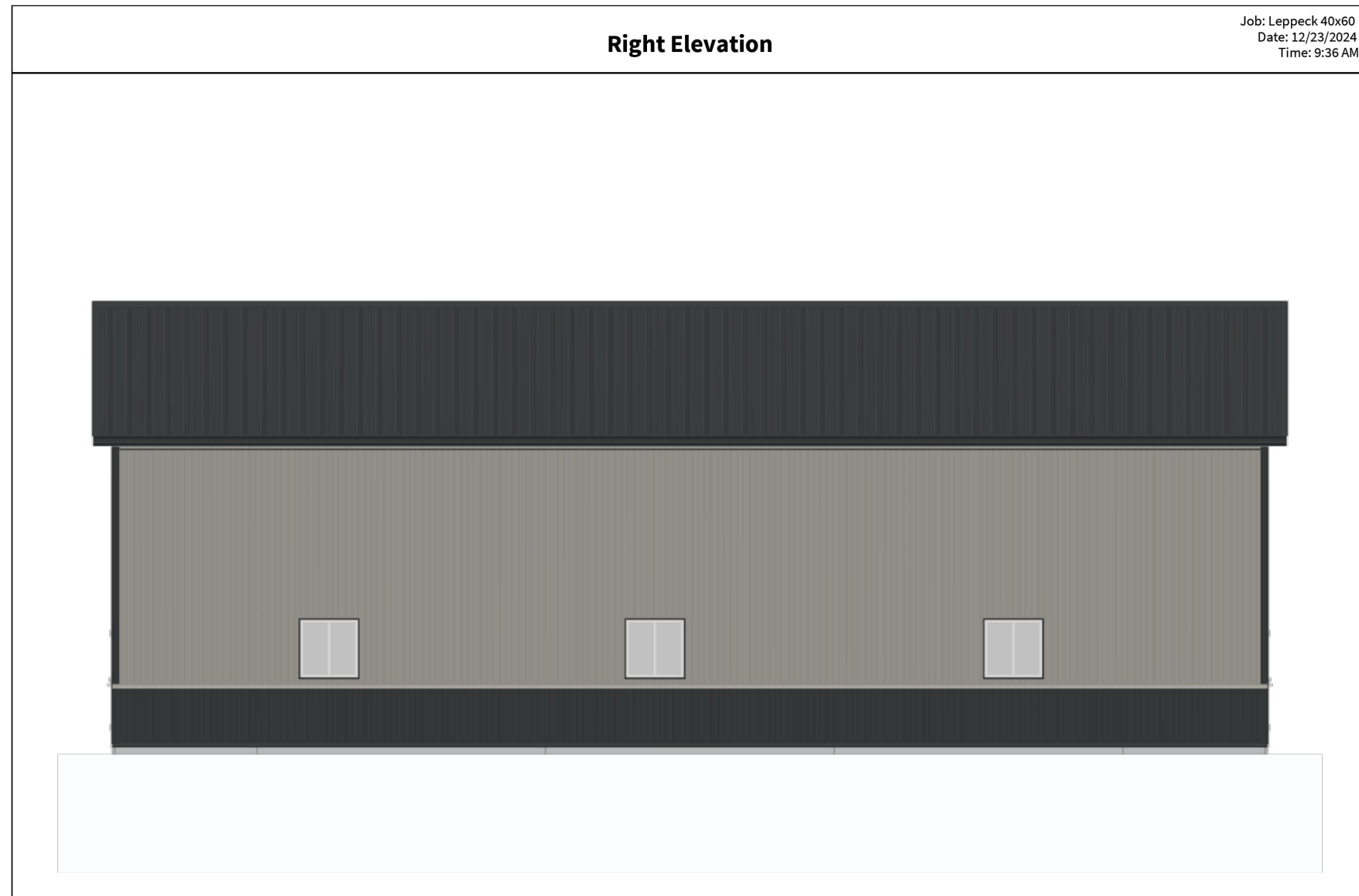
ELEVATION - SOUTH EAST SIDE
NOT TO SCALE



FLOOR PLAN
NOT TO SCALE



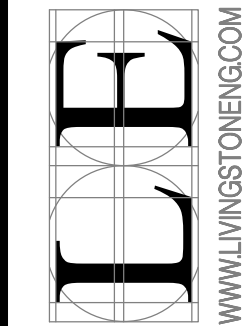
ELEVATION - NORTH EAST SIDE
NOT TO SCALE



ELEVATION - SOUTH WEST SIDE
NOT TO SCALE

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PHONE: (810) 225-7100 FAX: (810) 225-7899
WWW.LIVINGSTONENG.COM



SCALE: 0' 1" = 16'
GRAPHIC SCALE: 1" = 16'
EXCEPT AS NOTED

CLIENT
Leppek Landscape Inc.
4640 W. Grand River Ave.
Howell, MI 48855
Attn: Kory Leppek

LEPPEK LANDSCAPE INC.
4640 W. GRAND RIVER AVENUE
HOWELL TOWNSHIP, LIVINGSTON COUNTY, MI
SITE PLAN
POLE BARN PLAN

REVISIONS	DATE
1. PER TOWNSHIP REVIEW AND PER VEC COMMENTS	03/25/2025

JOB NO. 19238-1
DRAWN: MSA/TJZ
CHECKED:
APPROVED:
DATE: 12/16/2024



Carlisle | Wortman
ASSOCIATES, INC.

117 NORTH FIRST STREET SUITE 70 ANN ARBOR, MI 48104 734.662.2200 734.662.1935 FAX

Date: February 18, 2025
Revision: March 31, 2025

Site Plan Review For Howell Township, Michigan

Applicant: Kory Leppek
Project Name: Leppek Landscapes
Plan Date: December 16, 2024
Location: 4640 W Grand River
Zoning: Industrial Flex Zone (IFZ)
Action Requested: Final Site Plan Approval

PROJECT AND SITE DESCRIPTION

The applicant has submitted a final site plan, dated December 16, 2024, for a landscaping business located at 4640 W Grand River with parcel ID #4706-20-100-027. They are proposing the construction of a 60' x 40' (2,400 s.f.) pole barn, gravel yard, nursery stock area, and the addition of six (6) open air storage bins. The plan also includes the use of the existing 4,032 square foot building on the site.

During their regular meeting on April 23, 2024, the Planning Commission recommended that the Township Board approve a conditional rezoning of the parcel, from NSC - Neighborhood Service Commercial, to IFZ – Industrial Flex Zone. The Township Board approved the conditional rezoning at their June 10, 2024, meeting. The applicant requested the rezoning to facilitate the downsizing of the existing Leppek Landscaping business located at 7341 Grand River Ave, in Brighton.

Benjamin R. Carlisle, *President* John L. Enos, *Vice President* Douglas J. Lewan, *Principal*
David Scurto, *Principal* Sally M. Elmiger, *Principal* R. Donald Wortman, *Principal* Craig Strong, *Principal*
Paul Montagno, *Principal* Megan Masson-Minock, *Principal* Laura Kreps, *Principal*
Richard K. Carlisle, *Past President/Senior Principal*

As part of the rezoning, the applicant provided the following conditions:

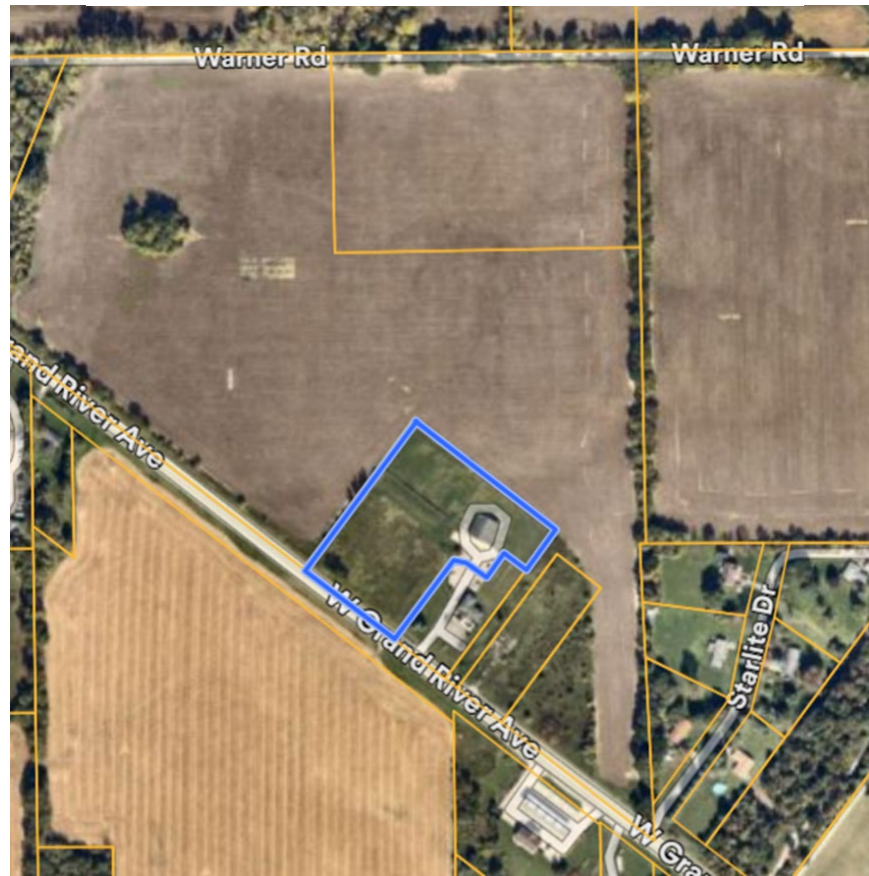
1. The property shall not be used for the following purposes (which would otherwise be permitted with or without special use approval in the IFZ district):
 - a. Sale or leasing of new motorized passenger vehicles including cars and trucks.
 - b. Sale or leasing of used motorized passenger vehicles in conjunction with a new car dealership.
 - c. Warehouses and distribution centers.
 - d. Mini-warehousing, when conducted completely within a building or structure.
 - e. Woodworking or furniture making shops.
 - f. Tool and die, machine shops, light assembly, injection molding.
 - g. Any manufacturing plants.
 - h. Water parks.
 - i. Fabricating metal products, except heavy machinery and transportation equipment.
 - j. Contract plastic material processing, molding, and extrusion.
 - k. Propane storage/distribution.
 - l. Sale, leasing, or rental of used motorized vehicles not in conjunction with a new car dealership.
2. Additional screening and landscaping elements beyond the minimum requirements of the Zoning Ordinance (to be further determined/defined prior to approval).

The subject site is 4.19 acres, primarily open space, and shares an easement with parcel #4706-20-100-026, which is currently home to Livingston Veterinary Clinic. The site is surrounded by tilled farmland to the north, east, and west. Livingston County Airport is located approximately one mile east of the site.

The proposed development is intended to operate as a landscape contractor and supplier. In accordance with Section 12.02, contractor buildings, structures, equipment, and materials storage yards for building and other construction activities are permitted uses in the Industrial Flex Zone (FZ), provided that any area used for outdoor storage is fully enclosed and screened from external view.

The site will not function as a retail center but will allow for customers by appointment for consultations and viewing of the landscaping selections on site. The business will operate between the hours of 8am and 5:30pm. There will be between six (6) and eight (8) employees on site throughout the week. However, it is not clear if the business will operate within the Monday-Friday workweek only, or if operations will continue through the weekend.

Figure 1. Aerial Image of Subject Site and Vicinity



Source: NearMap

Items to be Addressed: None

NEIGHBORING ZONING, LAND USE AND MASTER PLAN

Neighboring zoning designations are summarized in Table 1.

Table 1. Zoning, Land Use and Master Plan Designations

	Zoning	Master Plan Designations
Subject Site	IFZ - Industrial Flex Zone	Commercial, Local
North	SFR - Single Family Residential	Residential-Low Density
South	SFR - Single Family Residential	Residential-Low Density
East	NSC - Neighborhood Service Commercial	Commercial, Local
West	NSC - Neighborhood Service Commercial	Residential-Low Density

Items to be Addressed: None.

AREA, WIDTH, HEIGHT, SETBACKS

The following table summarizes the Density, Placement, and Height Regulations for the site plan associated with the use. The proposed structures appear to meet all dimensional regulations of the zoning ordinance.

Table 2. Density, Placement, and Height Regulations

	Required	Provided	Complies
Lot Area	2 Acres	4.22 Acres	Complies
Lot Width	200 Feet	304 Feet	Complies
Front Setback	35 Feet	305 Feet	Complies
Side Setback	10 Feet Minimum (Minimum Total of Both Sides=25 Feet)	East: 41.2 Feet West: 322.9 Feet	Complies
Rear Setback	50 Feet Minimum Abutting SFR	50 Feet	Complies
Lot Coverage	75 % Max	3.5 %	Complies
Building Height	70 Feet Max	Approx. 20 Feet	Complies

Items to be Addressed: None.

PARKING, LOADING

The applicant has proposed seventeen (17) parking spaces including two (2) handicap spaces and four (4) gravel spaces for employees. The site will mainly function as an operations center with between six (6) and eight (8) employees on site per day.

Currently, the proposed parking area is screened from the loading areas as required in Section 12.05.C.

Items to be Addressed: None.

FENCING

At the February 25, 2025 Planning Commission meeting it was determined that the preferred form of screening of storage would be through additional landscaping. Supplementary landscaping was a condition of the rezoning and has been provided.

Items to be Addressed: None.

SITE ACCESS AND CIRCULATION

Proposed general traffic access to the facility will be from the existing shared entrance drive from W Grand River Ave and an additional thirty (30') foot access drive on the southwest corner of the site. The site shares an existing easement with the neighboring parcel.

During the February 25, 2025 Planning Commission meeting it was determined that the additional drive is necessary in promoting the efficient and safe use of the site as the second drive will separate truck and heavy equipment operations from general traffic.

We defer to Engineering and the Fire Chief for further consideration.

Items to be Addressed: None.

NATURAL FEATURES

The majority of the site is open space with little topography change throughout. The plans propose the removal of two (2) trees on the site with the remaining trees being preserved.

Conover loam and Wawasee loam are the recorded soil types of the site.

Per Sheet C1.0, the proposed site does not contain wetlands or flood plains per the National Wetland Inventory and FEMA FIRM map.

Items to be Addressed: None.

LANDSCAPING

The applicant has provided a landscape plan, as shown in the following tables.

The submitted landscaping plan currently does not show the detailed cost estimates for each item of construction as required per Section 20.06.B-2.4. For the purpose of this review, lot information is taken from Sheets C1.0, C3.0, and LP-1.

The conditions of rezoning require that there is to be additional landscape screening. Additional screening has been provided around the outside of the storage bins and on the north and east sides of the proposed yard which are planned or currently zoned as residential. The applicant has provided arborvitae along the perimeter of the supply yard and a landscaping brim in front of the nursery stock yard in the front yard. The Planning Commission should review the proposed additional landscape screening to determine if it meets the intent of the conditional rezoning.

Table 3. Landscape Requirements

Landscaped Area	Requirement	Factor	Required	Provided	Complies
Non-Residential Parcel	1 tree per 3,000 square feet	$183,823 / 3,000 = 61$ trees	61 trees	97 trees	Complies
Parking Lot	10 square feet of interior landscaping per parking space	17 parking spaces x 25 square feet = 425 square feet	425 square feet	1,310	Complies
Foundation	1 ornamental tree per 35 linear feet	63 feet / 35 feet = 2 trees	2 trees	Not provided	Not applicable
	5 shrubs per 35 linear feet	63 feet / 35 feet x 5 = 9 shrubs	9 shrubs	Not provided	Not applicable
W Grand River Ave	1 deciduous or evergreen tree per 40 linear feet	270 linear feet / 40 linear feet = 7.64 trees	7 trees	7 trees	Complies
	1 ornamental tree per 100 linear feet	270 linear feet / 100 = 3.06 trees	3 trees	4 trees	Complies
	Min. of 8 shrubs per every 40 linear feet	270 linear feet / 40 linear feet x 8 = 54 shrubs	54 shrubs	55 shrubs	Complies

Table 4. Berm Requirements

	Requirement	Provided
Berm	20 feet wide	30 feet
	Minimum 2 feet in height Average height of 3 feet	3 feet

Table 5. Detention Area Requirements

	Requirement	Factor	Provided
Detention Pond	Groundcover – sodded or seeded	-	Seeded
	1 deciduous or evergreen tree per 50 lineal feet	$435 / 50 = 8.7$ trees	9 trees
	10 shrubs per 50 lineal feet	$(435 / 50) * 10 = 87$	90 shrubs

The applicant has indicated that a detailed cost estimate will be provided by the owner.

Items to be Addressed: 1) *The Planning Commission should review the proposed additional landscape screening to determine if it meets the intent of the conditional rezoning.*

LIGHTING

Exterior lighting from the existing building is to remain. No additional lighting is proposed for the site.

Items to be Addressed: None.

SIGNS

The submitted site plan does not indicate any signage proposed on the site.

If added, signs will require a separate permit from the Zoning Administrator. A sign application must be filed with the Zoning Administrator, at which time the zoning administrator will determine if the signs meet the requirements of the ordinance.

Items to be Addressed: None.

FLOOR PLAN AND ELEVATIONS

Floor plans and elevations have been provided on Sheet A-1. The proposed pole barn has an approximate height of eighteen (18') feet. The pole barn is proposed for use as cold storage for large equipment. The existing building is intended to serve as storage for small equipment in the rear of the building and an office center in the front. There is a small conference/design meeting room and two (2) offices.

Items to be Addressed: None.

TRASH ENCLOSURE

A trash enclosure is proposed near the northwest corner of the existing building. Section 14.21 Solid Waste Receptacle Areas, require that truck lifted receptacle areas shall be enclosed by a six (6) foot high wooden or a masonry wall. The applicant has proposed an eight (8) foot masonry wall which will match the building façade.

We believe that the additional height of the enclosure is appropriate to screen from the northern parcel which is currently zoned as single family residential and is proposed as low-density residential in the Howell Township Master Plan.

Items to be Addressed: None.

RECOMMENDATIONS

We recommend the following items be addressed before the Planning Commission takes action on the final site plan:

1. Correct Sheet C-1 to reflect updated zoning classification under Site Data & General Notes.
2. Provide detailed landscaping cost estimates for each item of construction.
3. The Planning Commission should review the proposed additional landscape screening to determine if it meets the intent of the conditional rezoning.

Respectfully submitted,



CARLISLE/WORTMAN ASSOC., INC.
Paul Montagno, AICP
Principal



CARLISLE/WORTMAN ASSOC., INC.
Grayson Moore
Community Planner



April 4th, 2025

Jonathan Hohenstein
Howell Township
3525 Byron Road
Howell, MI 48855

RE: Leppek Landscape
4640 W Grand River Avenue
Final Site Plan Review

Mr. Hohenstein,

We have received and reviewed the Final site plan for the proposed Leppek Landscape at 4640 W Grand River Avenue. The plans were prepared by Livingston Engineering, are dated 25 March, 2025 and were received on 25 March, 2025. Based on our review, we offer the following comments:

General

The site comprises a single parcel located on Grand River Avenue between Flemming Road and Emmons Road. It spans 4.22 acres and is zoned as Industrial Flex Zone (IFZ). The proposed use for the site—a landscaping contractor and supply business—aligns with the existing zoning. The property is bordered by Neighborhood Services Commercial (NSC) zoning to the northwest and southeast, while Single-Family Residential (SFR) zoning lies to the northeast and southwest.

The cover sheet includes the project name (*Leppek Landscape*), the owner's name and address (*Leppek Landscape Inc.*), the name and address of the firm preparing the plans (*Livingston Engineering*), a vicinity map, the preparation date (3/25/2025), and a legal description of the parcel, including bearings and distances.

The cover sheet also includes setback information. The identified required setbacks align with the values specified in the Howell Township Zoning Ordinance, and the provided setbacks meet or exceed the listed minimum requirements.

An existing conditions topographical map is included in the plan. This map features property lines, 1-foot contour intervals, and clearly identifies and labels adjacent roads, existing easements, tree locations, soil conditions, and existing structures and pavement.

No lighting plan was included in the submitted plan set. It was noted by the Owner in their reply to Howell Township on 3/25/2025 that since no new lighting was proposed for the site, the Planning Commission approved the absence of a photometric plan for the site on 2/25/2025.

April 10, 2025

2 of 3

Grading and Drainage

The site currently drains by sheet flow from east to west, with two culverts along Grand River Avenue facilitating water movement across the shared entrance to the neighboring veterinary clinic.

The proposed stormwater management plan for the site, as shown on sheet C6.0, indicates that stormwater will drain by sheet flow to swales along the east side of the proposed drive and the west property line. It will then flow into sedimentation and detention basins in the southwest corner of the site, which outlet to the Grand River Avenue right-of-way, which will require an MDOT permit. Drainage to the east of the proposed drive will be conveyed through a 12-inch culvert beneath the drive to reach the detention basins.

Stormwater detention calculations have been provided in the plan sheets and indicate that the detention volume provided is adequate to store their calculated 100-year storm volume. However, some calculations were found to not match between what was shown on the plan sheets and grading sheet elevation labels. These include but aren't limited to; the 100-year storm volume, 100-year storm Detention Basin elevation, and Freeboard elevation. It should also be noted that the plan sheets are missing Stormwater Conveyance calculations necessary to prove the correct Time of Concentration, t_c .

Sanitary Sewer

Sheet C7.0 shows the existing septic line and septic field area located to the west of the existing building. It appears that the existing septic system will be used for the proposed site, which may require approval from the Livingston County Health Department.

Site Access and Paving

There is an existing 11,000 square feet of gravel lot surrounding the building, which will remain in place, along with an additional 42,000 square feet of gravel lot/drive, 4,900 square feet of concrete for a material storage area, and 3,700 square feet of HMA at the Grand River Avenue approach. Details for each of the proposed pavement types have been provided. The Proposed HMA in the Grand River Ave Right of way must meet the minimum 5-inches MDOT HMA, 7-inches MDOT 21AA Aggregate, and 10 inches of MDOT CL II Sand, or 8 inches Concrete and 7inches MDOT 21AA Aggregate.

An emergency access plan has been provided, showing that a pumper fire truck can traverse the site. A proposed gate is located at the north end of the drive, and the plans have been updated to include a Knox Box for fire department access. Other comments regarding the emergency access plan are deferred to the Fire Marshal.

Water main

The plans indicate that there is an existing private well that is to be relocated. This will require a Livingston County Health Department permit.

Parking and Landscaping

Parking lot calculations are provided on the cover sheet, and the landscaping plan is shown on sheet LP-1. Parking calculations are included and based on the listed building classifications; ample parking stalls are provided. Further comments on parking and landscaping are deferred to the Township Planner.

Recommendations

Should the Planning Commission decide to proceed with approval of this project, we recommend the following conditions be placed with approval:

April 10, 2025
3 of 3

1. Plans should be reviewed and approved by:
 - a. Fire Marshal
 - b. Township Planner
 - c. Livingston County Drain Commissioner
 - d. Livingston County Road Commission
 - e. Livingston County Health Department
2. Ensure matching stormwater calculation fields between Grading Sheet elevation labels and Calculations on Plan Sheets.
3. Include Stormwater Conveyance Calculations in the proper Plan Sheets.

If you have any questions or need anything further, please feel free to contact our office.

Sincerely,



Eric J. Schulte
Design Engineer
Phone: (248) 767-7876
Eric.schulte@spicergroup.com



Philip A. Westmoreland, P.E.
Principal
Phone: (517) 375-9449
philaw@spicergroup.com

SPICER GROUP, INC.
30300 Telegraph Rd, Suite 100
Bingham Farms, MI 48025

CC: SGI File
Jonathan Hohenstein, Howell Township Planner
Ken Recker, Livingston County Chief Deputy Drain Commissioner
Paul Montagno, Carlisle Wortman
Bryan Hager, Howell Township Fire Inspector

HOWELL TOWNSHIP
Application for Site Plan Review
 3525 Byron Road Howell, MI 48855
 Phone: 517-546-2817 ext. 108
 Email: inspector@howelltownshipmi.org

File # PC2025-05

Parcel ID #: 4706- <u>28</u> - <u>400</u> - <u>012</u>	Date <u>03/21/25</u>
Applicant Name <u>Schafer Construction, Inc</u> Applicant Address <u>102 E. Grand River Ave. Brighton, MI 48116</u>	
Phone <u>(810)220-0296</u> Fax _____	Email <u>dbader@schaferconstruction.net</u>
Property Owner Name <u>Agape City Church</u>	
Phone <u>(517) 295-5075</u> Fax _____	Email <u>bo@agapecity.church</u>
Please list all recipients to receive information and/or reports:	
Name: <u>Deanna Bader</u>	Email <u>dbader@schaferconstruction.net</u>
Name: <u>Lucas Driesenga</u>	Email <u>LDriesenga@peagroup.com</u>
Name: <u>Bo Harrington</u>	Email <u>bo@agapecity.church</u>

Location of Property <u>Southwest corner of intersection between Highland Rd. and Grand River Ave.</u>	Current Zoning Classification <u>RSC</u>
Existing Use <u>Vacant</u>	Proposed Use <u>Church</u>

Check One:

- | | |
|--|--|
| ☒ Preliminary Site Plan Review (20.06) | ☐ Final Site Plan Review (20.07) |
| ☐ Temporary Use (14.34) | ☐ Commercial/Industrial Development |
| ☐ Subdivision/Site Plan Condo | ☐ Multi-Family/Condo |
| ☐ Planned Unit Development (PUD) Type: | 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ |

Applicant needs to provide the following site plan drawings: twelve (12) full size copies, eight (8) - 11" x 17" copies, and an electronic set (either on an USB drive or provide an online link) for the preliminary site plan drawings. Drawings shall be submitted with an application for site plan review (20.06 a) thirty (30) days prior to the meeting.

- f. The final site plan approval shall expire one (1) year following the date of approval unless construction has begun on the property in accordance with the plan.
- g. Applicant may appeal the Planning Commission's ruling of the final site plan to the Board of Appeals within ten (10) days of the Planning Commission's decision on all matters except use of the land, use of buildings, or structures.
- h. The Planning Commission has sixty (60) days from the date of the Planning Commission meeting at which the final site plan was received to approve or deny the final site plan.
- i. Improvements not in conformance with the final site plan shall be deemed a violation of the ordinance and be subject to the penalties of the ordinance.
- j. Sewer system and water system tap in fees, if applicable, must be paid prior to issuance of a land use permit.

Applicant hereby deposes and says that all the above statements and information contained in this application and any statements submitted herewith or on the site plan are true and accurate.

Owner Signature

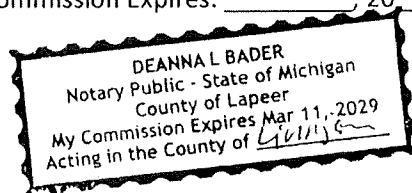
Print Name

Date

Subscribed and sworn to before me this 20th day of March, 2025.

Notary Public

My Commission Expires: _____, 20____.



Howell Township Reimbursement Agreement

The applicant accepts responsibility for all expenses at actual cost for professional services related to the application required by the Township for the issuance of any permits, approvals, reviews and attendance at meetings by the Township's Planner, Landscape Architects, Legal Counsel, Engineering and Administrative Staff, over and above the fees listed in the Howell Township fee schedule.

Information for Additional Billing:

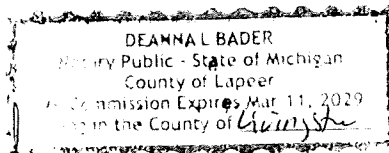
Name Matt Vetter Address 102 E. Grand River Ave. Brighton, MI 48116
Phone (810) 220-0296 Email mvetter@schaferconstruction.net

I have read and agree to the reimbursement agreement as presented between myself/my company and Howell Township.

Applicant Signature *Matt Vetter* Date 3.20.25

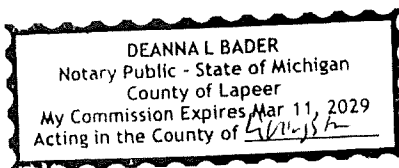
Deanna L. Bader
Notary Public

County, Michigan
My Commission Expires: _____



Owner Signature *Joe Schure* Date 3/20/25
Deanna L. Bader
Notary Public

County, Michigan
My Commission Expires: _____





AUGER KLEIN ALLER ARCHITECTS INC.
303 E. THIRD STREET SUITE 100
ROCHESTER, MI 48307
248.814.9160
WWW.AKA-ARCHITECTS.NET

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and with appropriate compensation to AKA
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PROJECT
**Agape
City Church**

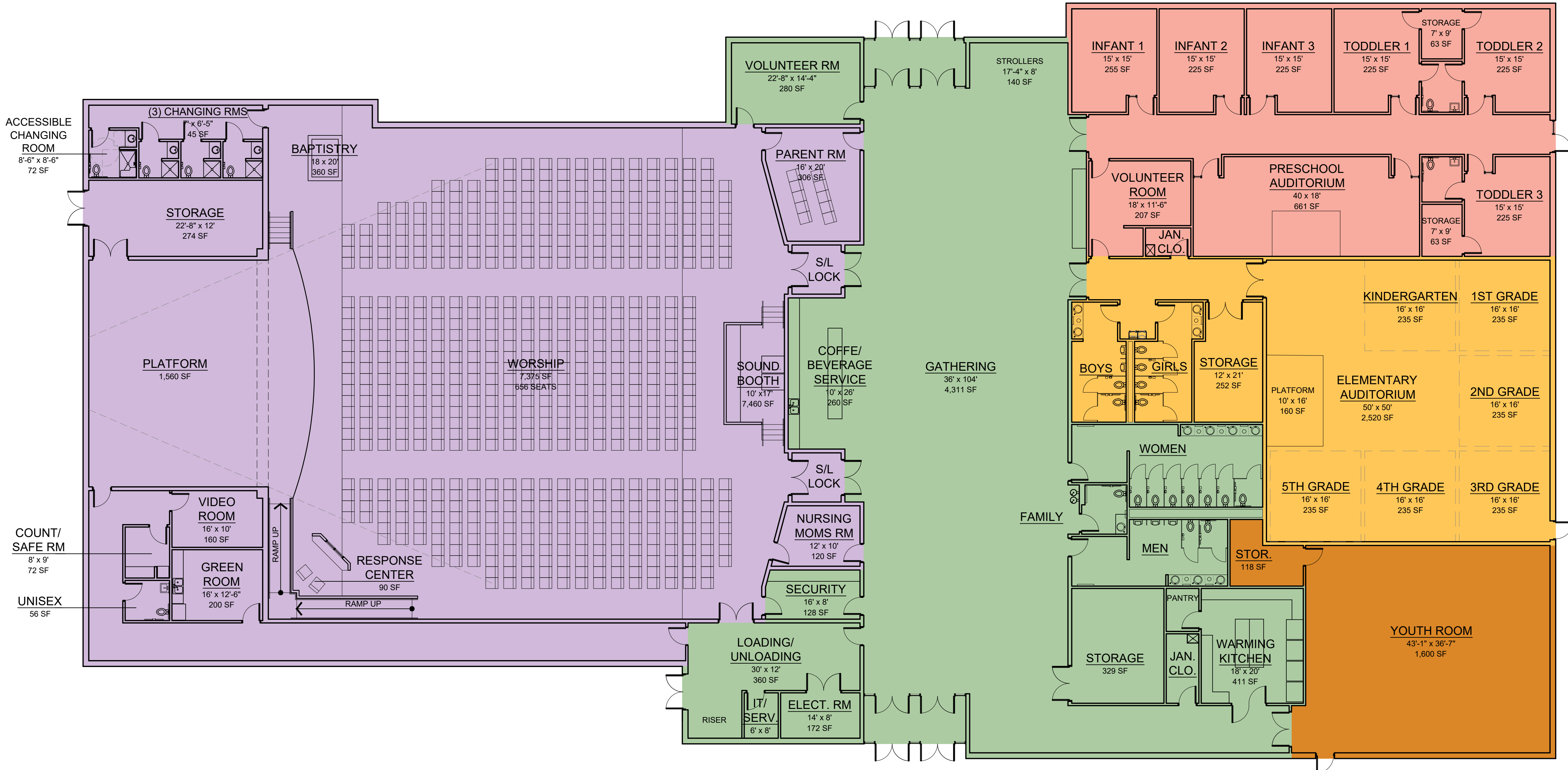
**Howell,
Michigan**

DATE ISSUED	ISSUED FOR
03.11.2025	Owner Review
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DRAWN	af
CHECKED	bk
APPROVED	bk

SHEET
**Proposed
Floor Plan—Scheme C**
scale as shown

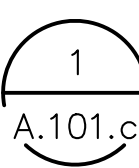
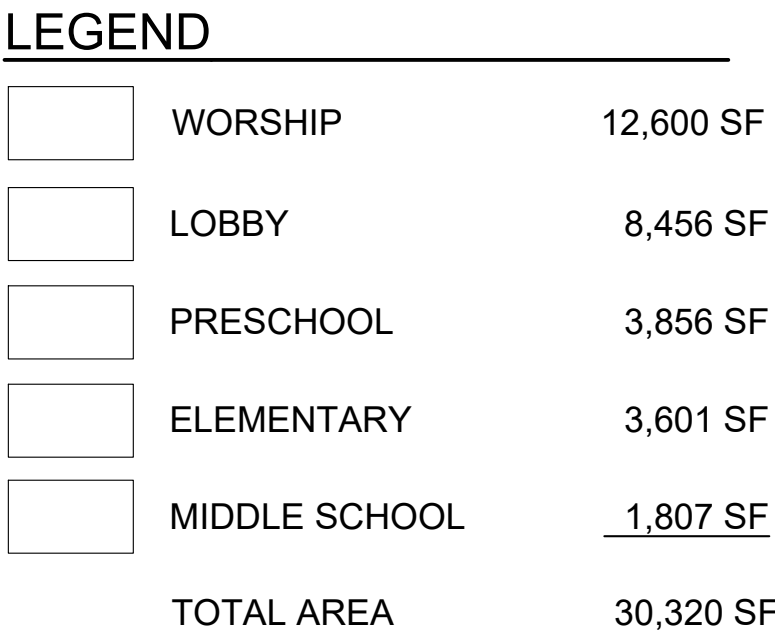
FILE NUMBER
2437

SHEET NUMBER
A.101.c



LEGEND		
	WORSHIP	12,600 SF
	LOBBY	8,456 SF
	PRESCHOOL	3,856 SF
	ELEMENTARY	3,601 SF
	MIDDLE SCHOOL	1,807 SF
	TOTAL AREA	30,320 SF

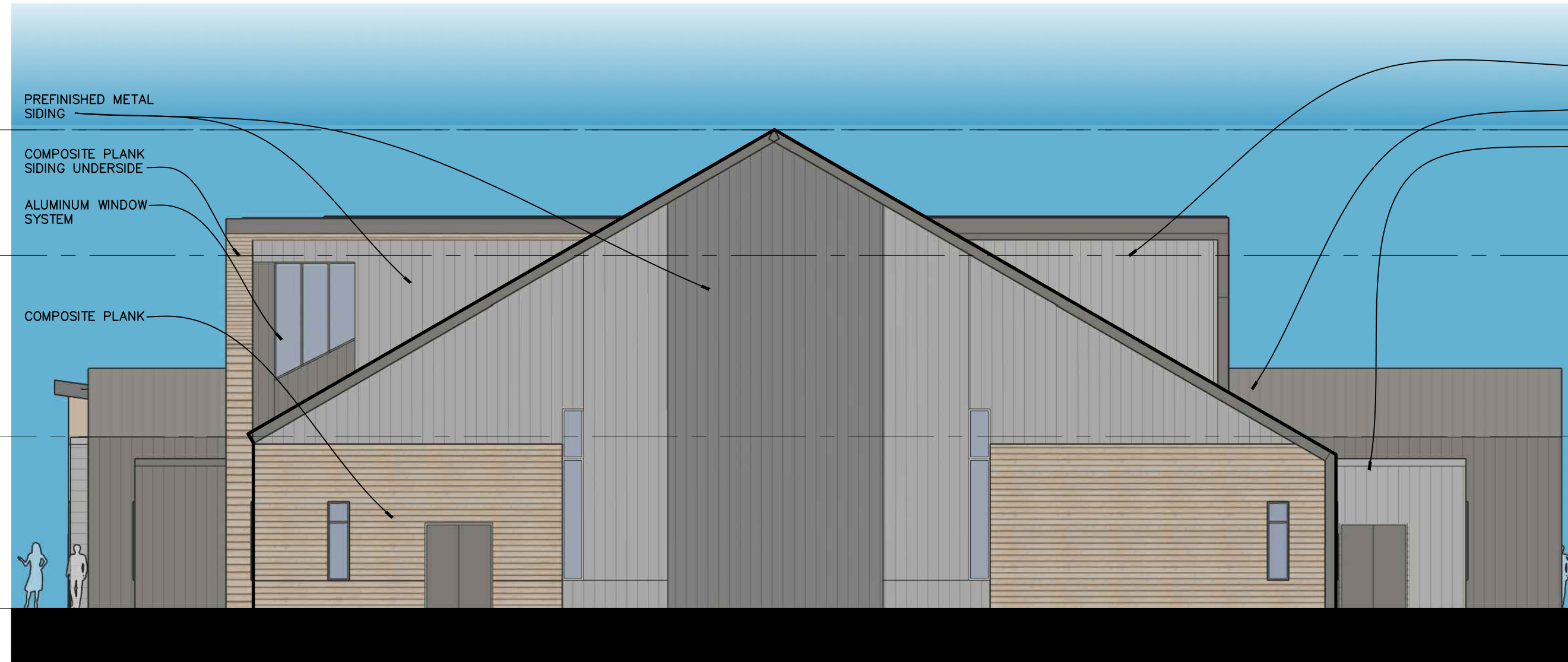
Proposed
Floor Plan—Scheme C
SCALE: 3/32" = 1'-0"
A.101.C



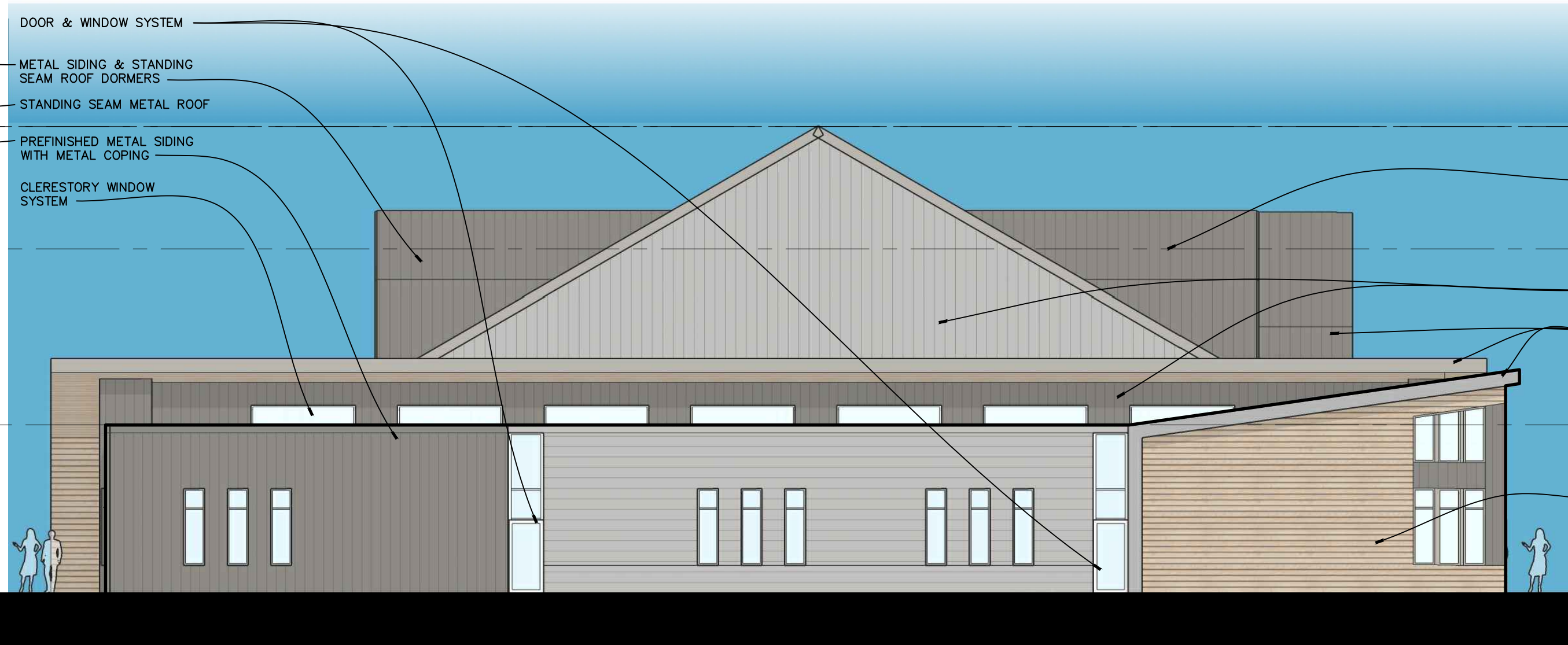
Proposed
Floor Plan—Scheme C
SCALE: $\frac{3}{32}'' = 1'-0''$

SCALE: $3/32" = 1'-0"$

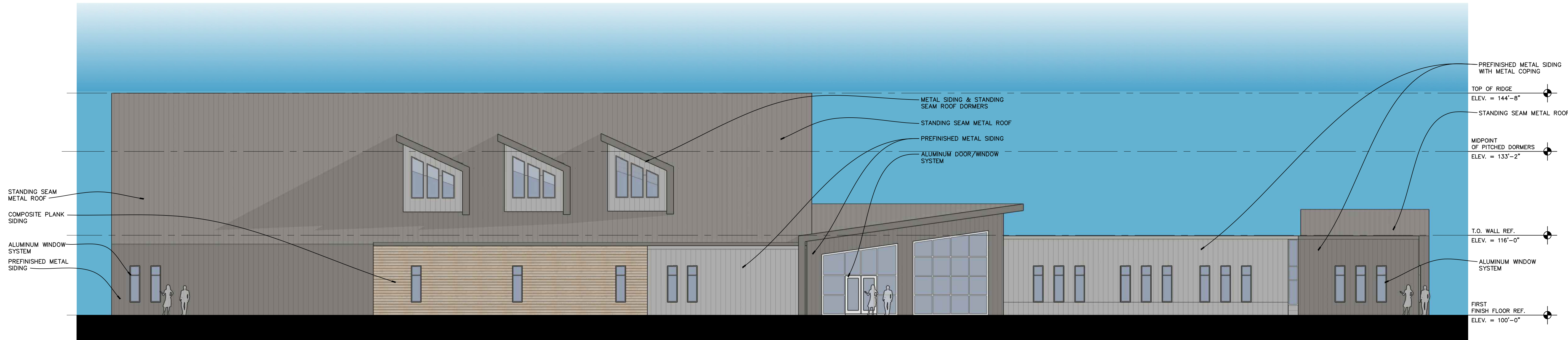
A.101.C



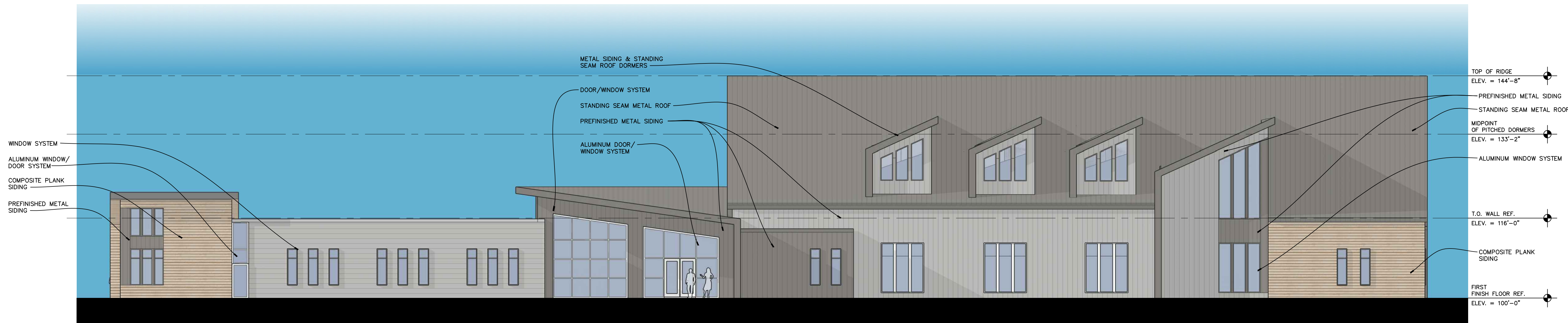
4
A.201
Conceptual West Elevation
SCALE: 1/8" = 1'-0"



3
A.201
Conceptual East Elevation
SCALE: 1/8" = 1'-0"



1
A.201
Conceptual South Elevation
SCALE: 1/8" = 1'-0"



1
A.201
Conceptual North Elevation
SCALE: 1/8" = 1'-0"



AUGER KLEIN ALLER ARCHITECTS INC.

303 E. THIRD STREET SUITE 100
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PROJECT

Agape Church
City of Chicago

Howell,
Michigan

DATE ISSUED ISSUED FOR

3.21.2025 SPA SUBMITTAL

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SHEET

Proposed Elevations

scale as shown

FILE NUMBER

2437

SHEET NUMBER

A.201



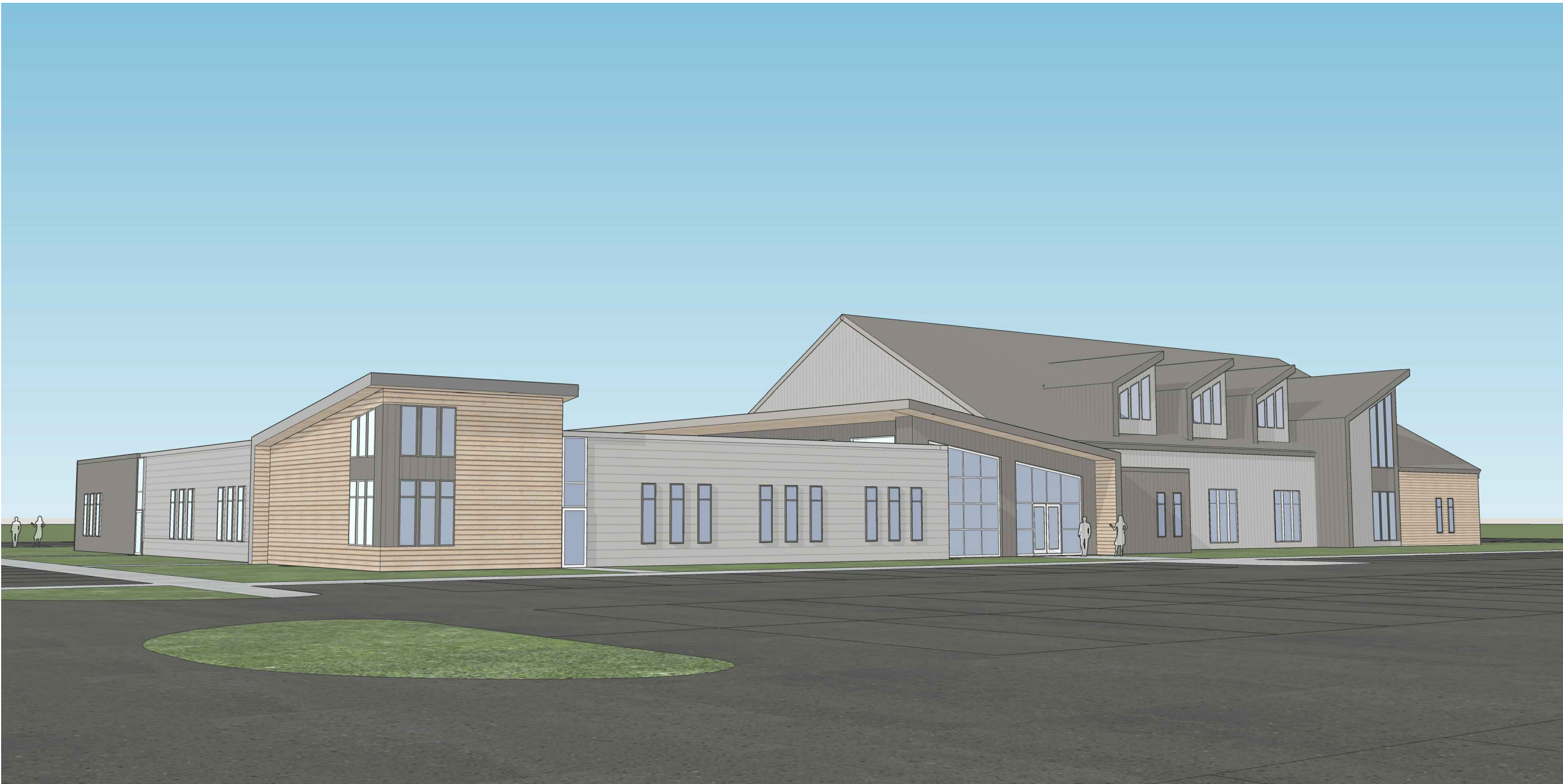
4
A.202
Conceptual View From Dufree Blvd.
NO SCALE



3
A.202
Conceptual Southeast View
NO SCALE



2
A.202
Conceptual Northwest View
NO SCALE



1
A.202
Conceptual Northeast View
NO SCALE



**AUGER KLEIN ALLER
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PROJECT
Agape
City Church

Howell,
Michigan

DATE ISSUED	ISSUED FOR
3.21.2025	SPA SUBMITTAL
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DRAWN	mw
CHECKED	bk
APPROVED	bk

SHEET
Proposed
Perspective
Views
scale as shown

FILE NUMBER
2437
SHEET NUMBER
A.202

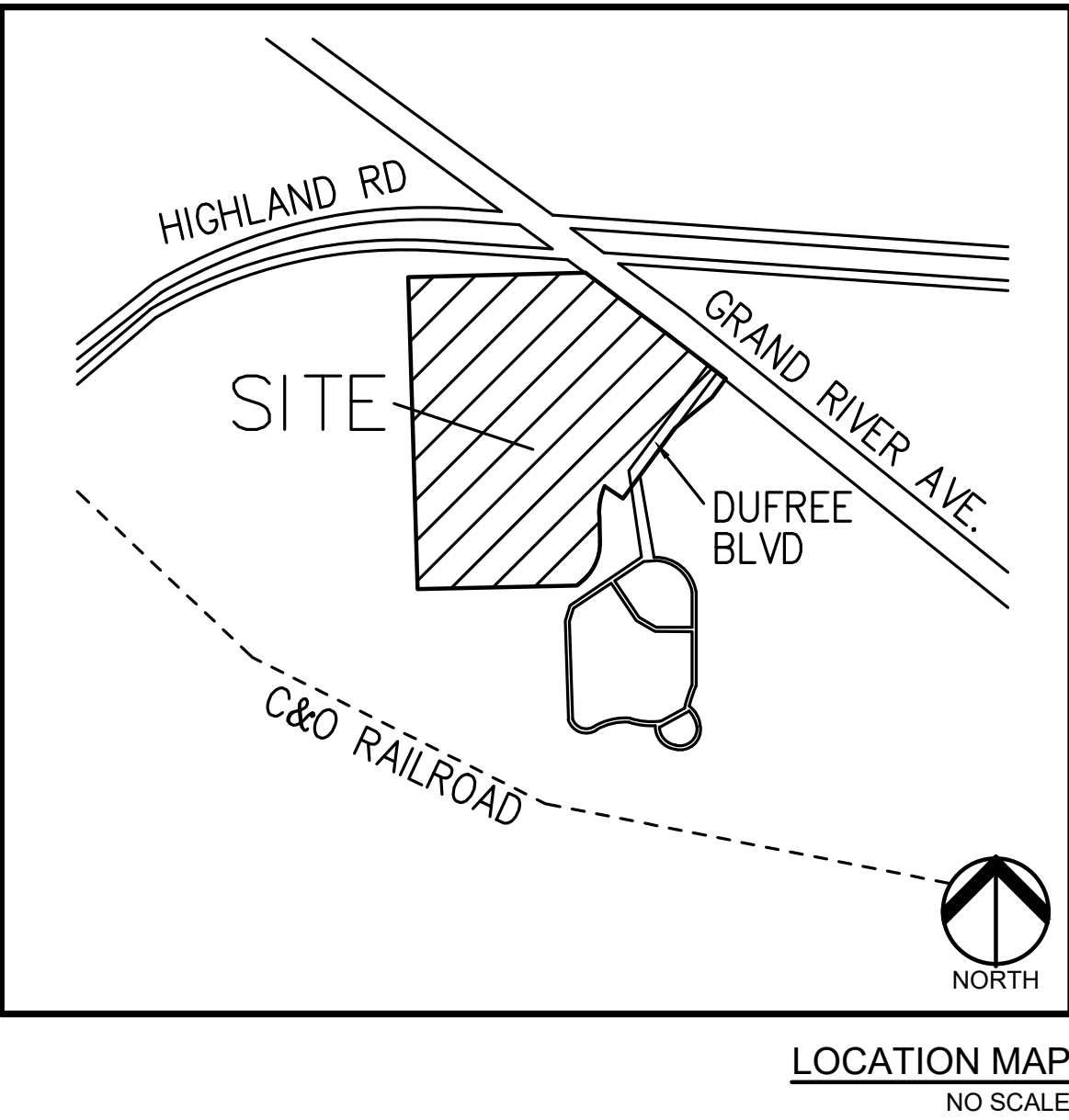
PRELIMINARY SITE PLANS

AGAPE CITY CHURCH

DUFREE BLVD.
HOWELL TWP, LIVINGSTON COUNTY, MI



PERMIT / APPROVAL SUMMARY		
DATE SUBMITTED	DATE APPROVED	PERMIT / APPROVAL
3/21/2025		HOWELL TOWNSHIP SPA



INDEX OF DRAWINGS	
	COVER SHEET
C-1.0	TOPOGRAPHIC SURVEY
C-3.0	PRELIMINARY SITE PLAN
C-3.1	FIRE TRUCK TURNING PLAN
C-4.0	PRELIMINARY GRADING PLAN
C-6.0	PRELIMINARY UTILITY PLAN
C-6.1	WATER MAIN EXTENSION
C-9.0	NOTES AND DETAILS
L-1.0	PRELIMINARY LANDSCAPE PLAN
L-1.1	LANDSCAPE DETAILS
	ARCHITECTURAL PLANS (AKA ARCHITECTS INC.)
A.101.C	PROPOSED FLOOR PLAN SCHEME C

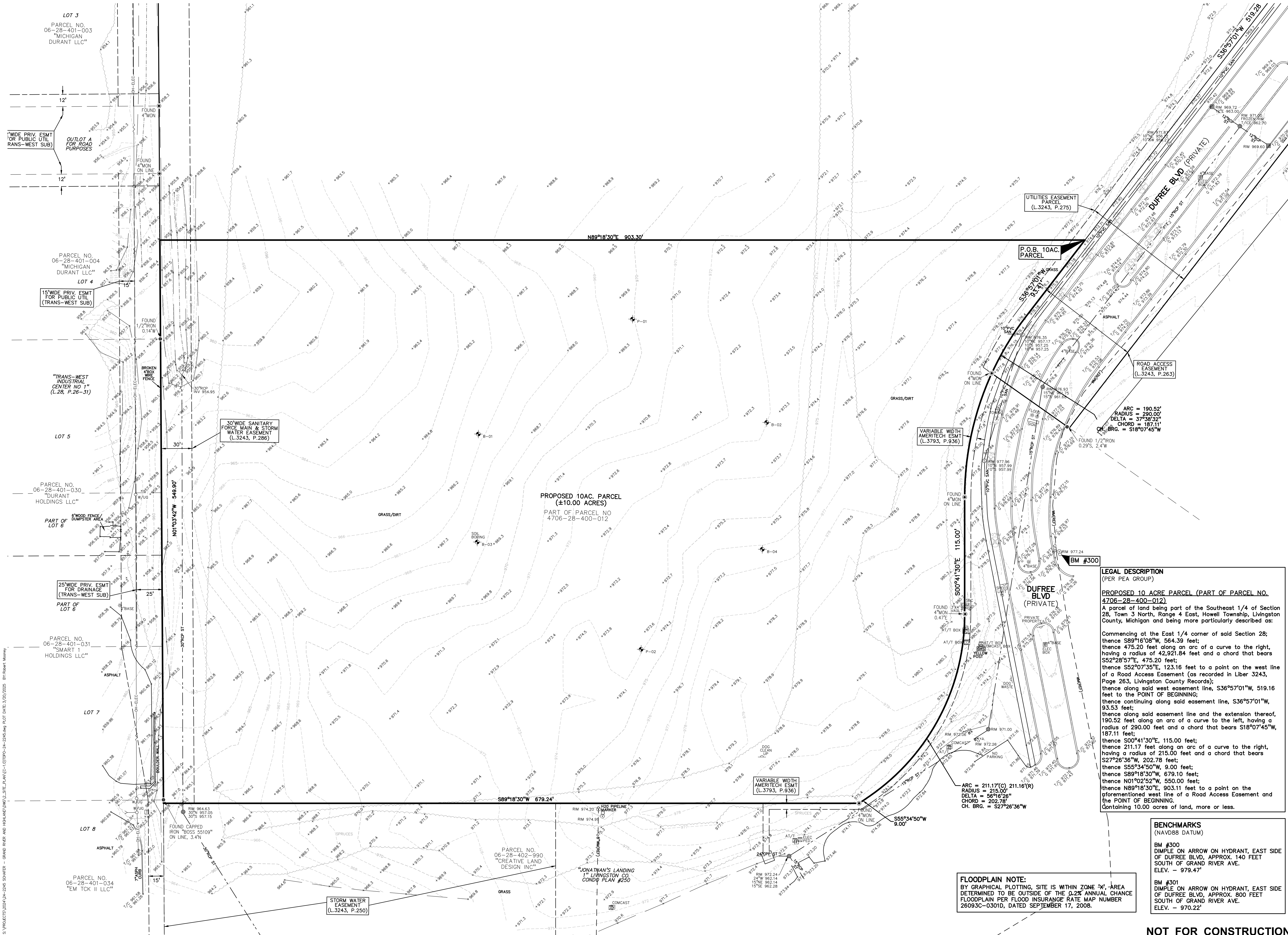
DESIGN TEAM

APPLICANT	CIVIL ENGINEER
SCHAFFER CONSTRUCTION, INC. 102 EAST GRAND RIVER AVENUE BRIGHTON, MI 48116 CONTACT: DEANNA BADER PHONE: 810.656.0697 EMAIL: DBADER@SCHAFFERCONSTRUCTION.NET	PEA GROUP 1849 POND RUN AUBURN HILLS, MI 48326 CONTACT: LUCAS DRIESENKA, PE PHONE: 844.813.2949 EMAIL: LDRIESENKA@PEAGROUP.COM
ARCHITECT	LANDSCAPE ARCHITECT
AUGER KLEIN ALLER ARCHITECTS, INC. 303 E. THIRD STREET, STE 100 ROCHESTER, MI 48307 CONTACT: BRAD KLEIN PHONE: 248.287.7277 EMAIL: B.KLEIN@AKA-ARCHITECTS.NET	PEA GROUP 7927 NEMCO WAY, STE. 115 BRIGHTON, MI 48116 CONTACT: JANET EVANS, PLA PHONE: 844.813.2949 EMAIL: JEVANS@PEAGROUP.COM



REVISIONS	
DESCRIPTION	DATE
CLIENT REVIEW	2/28/2025
SPA	3/21/2025

NOT FOR CONSTRUCTION



PEA GROUP

t: 844.813.2949

www.peagroup.com

STATE OF MICHIGAN

LUCAS DRIESSEN

License No. 6201309300

PROFESSIONAL ENGINEER

NORTH

0 20 40 80

SCALE: 1" = 40'

811

Know what's below.

Call before you dig.

CAUTION!!

THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE AS TO ACCURACY OR COMPLETENESS OF THE INFORMATION IS MADE. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

CLIENT

SCHAFFER CONSTRUCTION

102 EAST GRAND RIVER AVENUE
BRIGHTON, MICHIGAN 48116

PROJECT TITLE

AGAPE CITY CHURCH

DUFFREE BLVD
HOWELL TWP. MICHIGAN

REVISIONS	
CLIENT REVIEW	2/28/2025
SPA SUBMITTAL	3/21/2025

ORIGINAL ISSUE DATE:
FEBRUARY 28, 2025

DRAWING TITLE

TOPOGRAPHIC SURVEY

PEA JOB NO.	24-2245
P.M.	JPB
DN.	LGD
DES.	LGD
DRAWING NUMBER:	

C-1.0

NOT FOR CONSTRUCTION



0 20 40 80
SCALE: 1" = 40'



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CLIENT
SCHAFER CONSTRUCTION
102 EAST GRAND RIVER AVENUE
BRIGHTON, MICHIGAN 48116

PROJECT TITLE
AGAPE CITY CHURCH
DURFREE BLVD
HOWELL TWP. MICHIGAN

REVISIONS	
CLIENT REVIEW	2/28/2025
SPA SUBMITTAL	3/21/2025

ORIGINAL ISSUE DATE:
FEBRUARY 28, 2025

DRAWING TITLE
**PRELIMINARY
SITE PLAN**

PEA JOB NO. 24-2245

P.M.	JPB
DN.	LGD
DES.	LGD

DRAWING NUMBER:

C-3.0

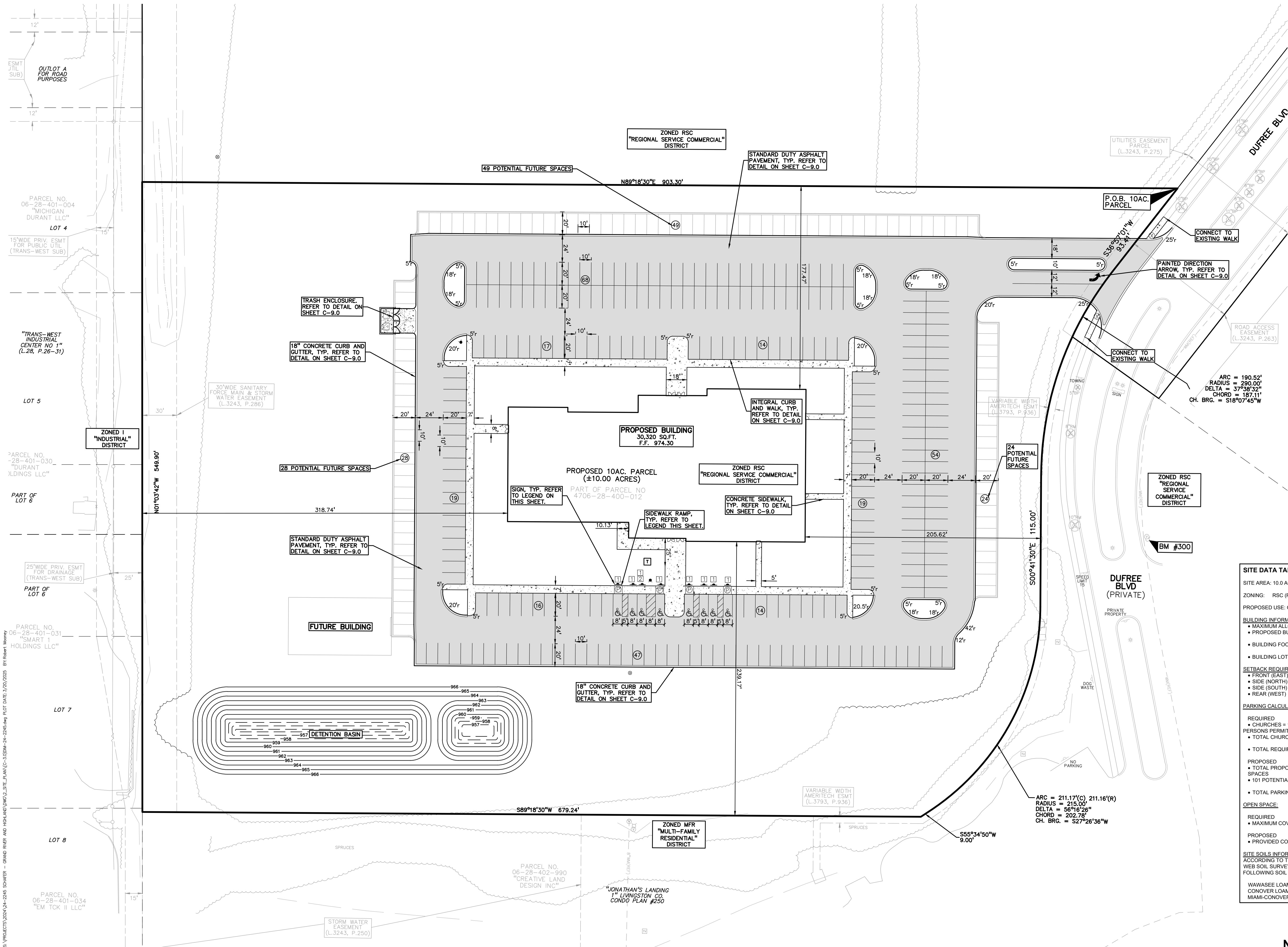
LEGEND:	
	CONCRETE PAVEMENT
	ASPHALT PAVEMENT
	CONCRETE CURB AND GUTTER
	SETBACK LINE
	SIGN
	LIGHTPOLE

GENERAL NOTES:
THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT.

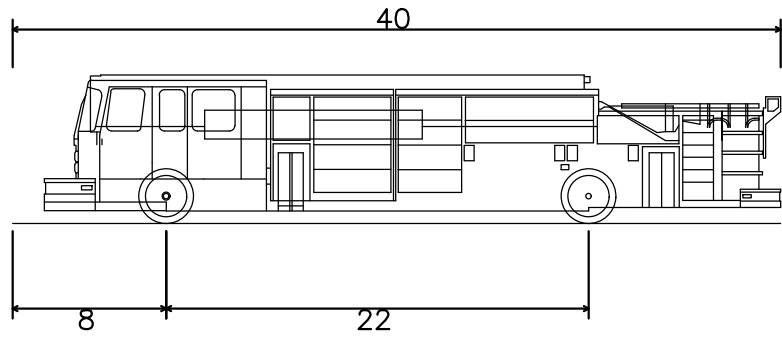
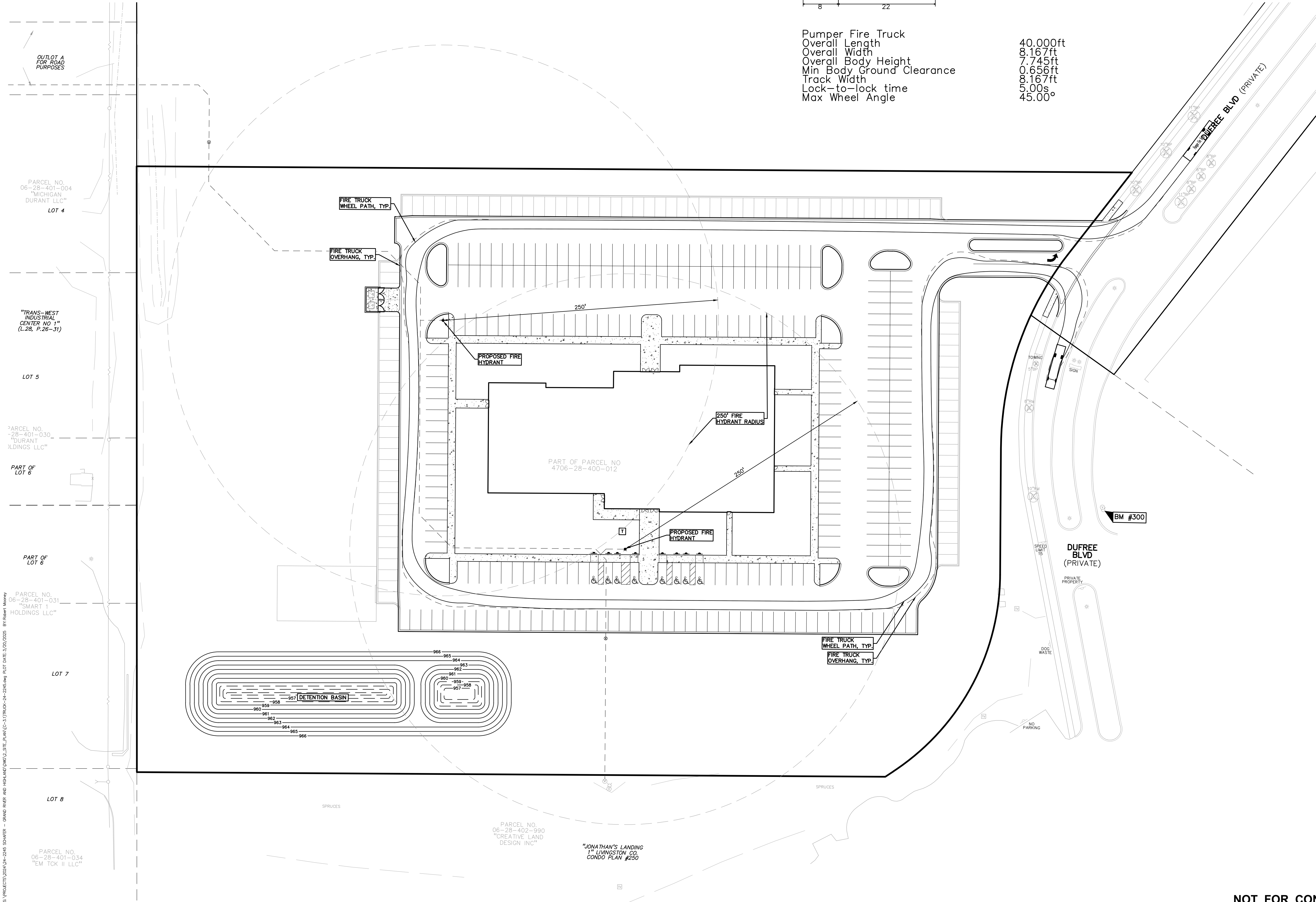
- ALL DIMENSIONS SHOWN ARE TO BACK OF CURB, FACE OF SIDEWALK, OUTSIDE FACE OF BUILDING, PROPERTY LINE, CENTER OF MANHOLE/CATCH BASIN OR CENTERLINE OF PIPE UNLESS OTHERWISE NOTED.
- 'NO PARKING-FIRE LANE' SIGNS SHALL BE POSTED ALONG ALL FIRE LANES AT 100 FOOT INTERVALS OR AS DIRECTED BY THE FIRE OFFICIAL.
- REFER TO NOTES & DETAILS SHEET FOR ON-SITE PAVING DETAILS.

SIGN LEGEND:
'BARRIER FREE PARKING' SIGN 1
'VAN ACCESSIBLE' SIGN 2
REFER TO DETAIL SHEET FOR SIGN DETAILS

SIDEWALK RAMP LEGEND:
SIDEWALK RAMP 'TYPE P' 16
CURB DROP ONLY 2
REFER TO LATEST MDOT R-28
STANDARD RAMP AND DETECTABLE
WARNING DETAILS



NOT FOR CONSTRUCTION



Pumper Fire Truck
Overall Length 40.000ft
Overall Width 8.167ft
Overall Body Height 7.745ft
Min Body Ground Clearance 0.656ft
Track Width 8.167ft
Lock-to-lock time 5.00s
Max Wheel Angle 45.00°



0 20 40 80
SCALE: 1" = 40'



CAUTION!!
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CLIENT
SCHAFER CONSTRUCTION
102 EAST GRAND RIVER AVENUE
BRIGHTON, MICHIGAN 48116

PROJECT TITLE
AGAPE CITY CHURCH
DUFFREE BLVD
HOWELL TWP, MICHIGAN

REVISIONS	
CLIENT REVIEW	2/28/2025
SPA SUBMITTAL	3/21/2025

ORIGINAL ISSUE DATE:
FEBRUARY 28, 2025

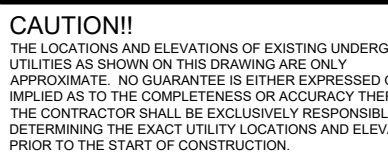
DRAWING TITLE
FIRE TRUCK TURNING PLAN

PEA JOB NO.	24-2245
P.M.	JPB
DN.	LGD
DES.	LGD

DRAWING NUMBER:

C-3.1

NOT FOR CONSTRUCTION

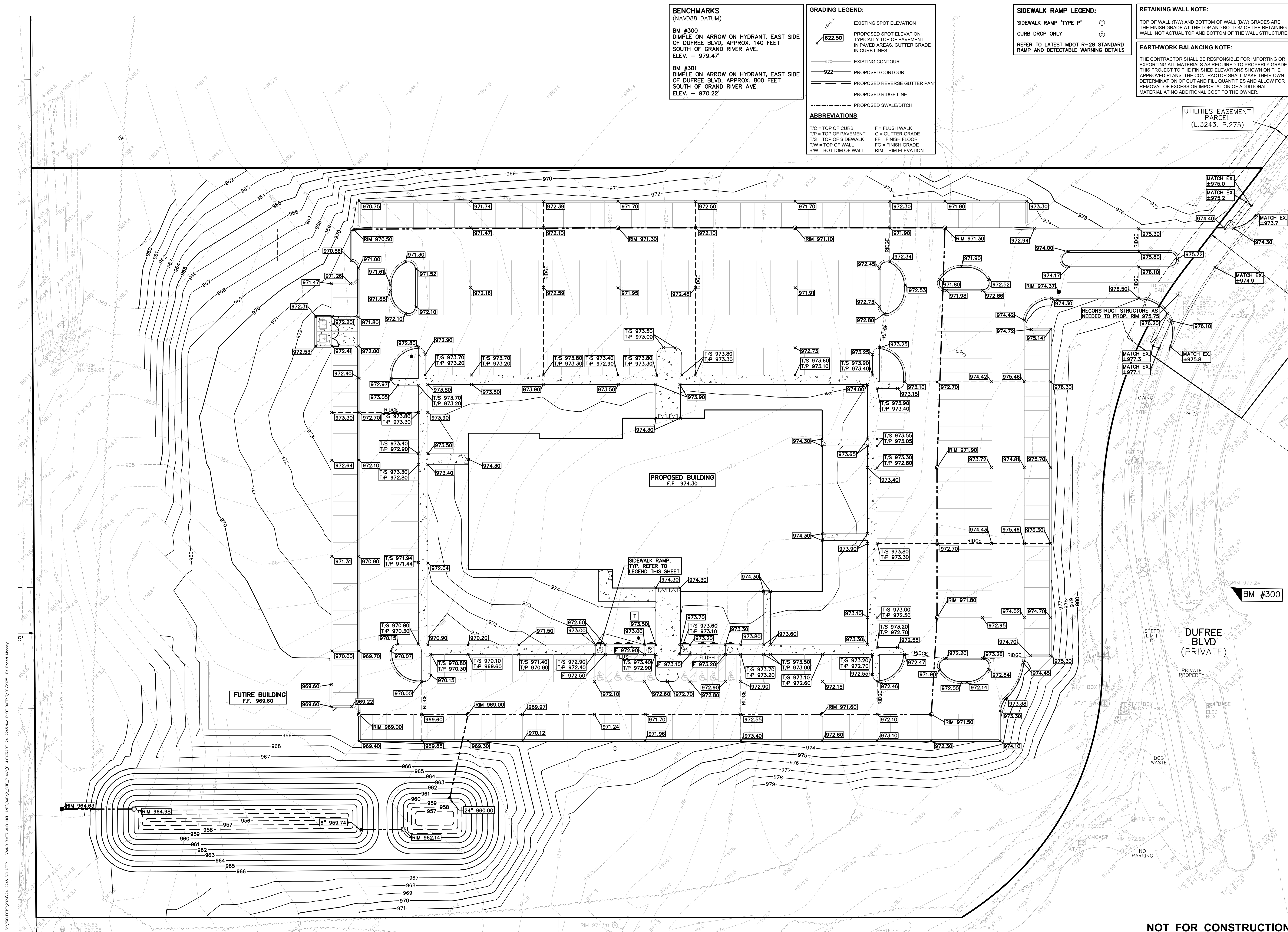


PROJECT TITLE
**AGAPE CITY
CHURCH**
DURFREE BLVD
HOWELL TWP, MICHIGAN

ORIGINAL ISSUE DATE:
FEBRUARY 28, 2025

PEA JOB NO.	24-2
P.M.	
DN.	
DES.	
DRAWING NUMBER:	

C-4.0



NOT FOR CONSTRUCTION

S:\PROJECTS\2024\24-2245 SCHAFER - GRAND RIVER AND HIGHLAND\DWG\2_SITE_PLAN\G-4\GRADE-24-2245.dwg PLOT DATE: 3/20/2025 By: Robert Mooney

STORM SEWER SYSTEM DESIGN

Region Michigan
Location: Livingston County

$I = \frac{B}{(T+D)} \wedge E$
 $C = \text{varies}$
 $T = 15 \text{ (min.)}$
 $B = 175.00$
 $D = 25.00$
 $E = 1.00$
 $\text{Pipe "n" Value} = 0.013$

FROM STR	TO STR	AREA (A) (Acres)	COEF. C	A x C	TOTAL AREA (Ax C) (Acres)	TOTAL AREA (Acres)	TIME t (min.)	INT. I (in/hr)	FLOW Q (cfs)	PIPE CAP. (cfs)	PIPE DIA. (in.)	PIPE LENGTH (ft.)	PIPE SLOPE (%)	MIN HG PER "Q"	VEL. FULL (ft./sec)	TIME FLOW (min.)	H.G.L. ELEV.		RIM ELEV.		INVERT ELEV.		PIPE COVER		HGL COVER	
																	UP STREAM	DOWN STREAM	UP STREAM	DOWN STREAM	UP STREAM	DOWN STREAM	UP STREAM	DOWN STREAM	UP STREAM	DOWN STREAM
14	13	0.61	0.84	0.51	0.51	0.61	15.00	4.38	2.25	2.25	12	195	0.40	0.40%	2.9	1.1	966.89	966.12	970.50	971.30	966.09	965.32	3.24	4.82	3.61	5.18
13	12	0.39	0.86	0.34	0.85	1.01	16.10	4.26	3.64	3.85	15	130	0.35	0.32%	3.1	0.7	966.12	965.66	971.30	971.10	965.12	964.66	4.75	5.00	5.18	5.44
12	11	0.51	0.89	0.45	1.31	1.51	16.80	4.19	5.46	5.75	18	110	0.30	0.27%	3.3	0.6	965.66	965.33	971.10	971.30	964.46	964.13	4.93	5.46	5.44	5.97
11	10	0.48	0.83	0.40	1.70	1.99	17.40	4.13	7.03	7.05	18	176	0.45	0.45%	4.0	0.7	965.23	964.44	971.30	969.03	964.03	963.24	5.56	6.95	6.07	7.46
10	9	0.44	0.84	0.37	2.08	2.43	18.10	4.06	8.43	8.47	18	110	0.65	0.64%	4.8	0.4	964.34	963.62	971.90	971.80	963.14	962.42	7.05	7.67	7.56	8.18
9	8	0.31	0.84	0.26	2.34	2.74	18.50	4.02	9.40	10.12	24	71	0.20	0.17%	3.2	0.4	963.62	963.48	971.80	971.50	962.02	961.88	7.53	7.37	8.18	8.02
8	7	0.27	0.59	0.16	2.50	3.02	18.90	3.99	9.95	10.12	24	80	0.20	0.19%	3.2	0.4	963.38	963.22	971.50	971.60	961.78	961.62	7.47	7.73	8.12	8.38
7	6	1.16	0.86	0.99	3.49	4.18	19.30	3.95	13.78	14.31	24	260	0.40	0.37%	4.6	1.0	963.12	962.08	971.60	969.00	961.52	960.48	7.83	6.27	8.48	6.92
6	5	0.67	0.73	0.49	4.46	5.40	20.30	3.86	17.24	17.52	24	64	0.60	0.58%	5.6	0.2	961.98	961.60	969.00	962.64	960.38	960.00	6.37	0.39	7.02	1.04
4	3	0.00	0.00	0.00	0.00	0.00	15.00	4.38	0.00	0.25	6	32	0.20	0.00%	1.3	0.4	960.20	960.14	962.12	961.04	959.80	959.74	1.69	0.67	1.92	0.90
2	1	0.64	0.30	0.19	0.19	0.64	15.00	4.38	0.85	17.52	24	53	0.60	0.00%	5.6	0.2	960.60	960.28	964.91	964.63	959.00	958.68	3.66	3.70	4.31	4.35
15	6	0.56	0.87	0.48	0.48	0.56	15.00	4.38	2.11	2.11	12	80	0.35	0.35%	2.7	0.5	964.76	964.48	969.00	969.00	963.96	963.68	3.87	4.15	4.24	4.52

UTILITY LEGEND:	
OH-ELEC-V-W-O	EX. OH. ELEC. POLE & GUY WIRE
UG-CATV-□	EX. U.G. CABLE TV & PEDESTAL
UG-COMM-□	EX. U.G. COMMUNICATION LINE, PEDESTAL & MANHOLE
UG-ELEC-□	EX. U.G. ELEC. MANHOLE, METER & HANDHOLE
EX. GAS LINE	
EX. GAS VALVE & GAS LINE MARKER	
EX. TRANSFORMER & IRRIGATION VALVE	
EX. WATER MAIN	
EX. HYDRANT, GATE VALVE & POST INDICATOR VALVE	
EX. WATER VALVE BOX & SHUTOFF	
EX. SANITARY SEWER	
EX. SANITARY CLEANOUT & MANHOLE	
EX. COMBINED SEWER MANHOLE	
EX. STORM SEWER	
EX. CLEANOUT & MANHOLE	
EX. SQUARE, ROUND, & BEEHIVE CATCH BASIN	
EX. YARD DRAIN & ROOF DRAIN	
EX. UNIDENTIFIED STRUCTURE	
PROPOSED WATER MAIN	
PROPOSED HYDRANT AND GATE VALVE	
PROPOSED TAPPING SLEEVE, VALVE & WELL	
PROPOSED POST INDICATOR VALVE	
PROPOSED SANITARY SEWER	
PROPOSED SANITARY CLEANOUT & MANHOLE	
PROPOSED STORM SEWER	
PROPOSED STORM SEWER CLEANOUT & MANHOLE	
PROPOSED CATCH BASIN, INLET & YARD DRAIN	

DETENTION CALCULATIONS			
Site Drainage Data			
Select County:	Livingston		
Proposed			
Improved Greenspace area:	3.30 acre	C =	0.25
Select NCRS Soil type:	C		
Impervious Area:	6.20 acre	C =	0.90
Greenbelt Area:	3.30 acre	C =	0.25
Total Area (A):	9.50 acre		
Weighted Coefficient of Runoff (C):	0.67		
Rainfall Intensity			
Flood Control Time of Concentration, Tc =	15.00 minutes		

Rainfall Intensity		3/30/2025 (Detention V2.0)
Time of Concentration (Tc):	15.00 min	
Since Tc <= 15 min, I1 = 2.0 in/hr		
I1 = 30.2 / (T + 9.17)^.81	2.00 in/hr	
I10 = 97 / (T + 30)	2.16 in/hr	
I100 = 30.2033 x 100^0.2203 / (T + 9.1747)^0.8069	6.37 in/hr	
Water Quality Volume		
V _{LIV} = 1/12(43560)CA	23,105 cf	
CPVC: Channel Protection Volume Control Volume		
Note: V _{cpvc} = 3630^1.2^CA = (4356)CA		
V _{cpvc} = (4719)CA	30,036 cf	
CPRC: Channel Protection Rate Control Volume: Extended Detention		
Note: V _{ed} = 3630^1.9^CA = 6897CA		
V _{ed} = (6897)CA	43,899 cf	
Q _{VED} = V _{ED} / (48^60^60)	0.25 cfs	
Forebay Calculations		
Forebay Volume = (545)CA	3,469 cf	
Forebay Release Rate: Q _{VF} = Q _{VED}	0.25 cfs	
100-Year Allowable Outlet Rate		
Since 2<A<100, Q _{wr} = 1.1055-0.207xln(A)		
Q _{VRR} =	0.64 cfs/ac	
100-Year Peak Allowable Discharge		
Area, A =	9.50 ac	
Q _{100P} = Q _{VRR} (A)	6.08 cfs	
100-Year Runoff Volume		
V _{100R} = (18,985)CA	120,840 cf	
100-Year Peak Inflow		
Q _{100IN} = C(I ₁₀₀)A	40.55 cfs	
Storage Curve Factor (Vs/Vr)		
R = 0.206-0.15 x ln(Q _{100P} /Q _{100IN})	0.491	
100-Year Storage Volume		
V _s = R(V _{100R})	59,332 cf	

FOREBAY DESIGN			
Design Requirements			
Forebay Volume: V _F =		3,469 cf	
Forebay Release Rate: Q _{VF} =		0.25 cfs	
Forebay Overflow rate: Q _{FO} =		40.55 cfs	
100 Year Peak Inflow: Q _{100IN} =		40.55 cfs	

Sedimentation Basin			
V _F Storage Elevation:	962.14		3,469 cf
Elev. (ft)	Area (sf)	Vol. (cf)	Total Vol. (cf)
960.0	1,000	0	0
961.0	1,500	1,250	1,250
962.0	2,200	1,850	3,100
963.0	3,000	2,600	5,700

DETENTION POND DESIGN			
Design Requirements			
CPRC Extended Detention: V _{ED} =		43,899 cf	
CPRC Allowable Outlet Rate: Q _{VED} =		0.25 cfs	
Detention Storage Volume, V _{DET} =		59,332 cf	
Detention Allowable Outlet Rate: Q _{VRR} =		6.08 cfs	
Detention Peak Inflow: Q _{100IN} =		40.55 cfs	

Detention Basin			
CPRC Storage Elevation:	964.05		43,899 cf
Detention Storage Elevation:	964.98		59,332 cf
Elev. (ft)	Area (sf)	Vol. (cf)	Total Vol. (cf)
959.00	3,300	0	0
960.00	5,000	4,150	4,150
961.00	7,500	6,250	10,400
962.00	9,000	8,250	18,650
963.00	12,500	10,750	29,400
964.00	15,000	13,750	43,150
965.00	18,000	16,500	59,650
966.00	21,760	19,880	79,530

PEA GROUP

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www.peagroup.com



0 20 40 80
SCALE: 1" = 40'



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CLIENT
SCHAFER CONSTRUCTION
102 EAST GRAND RIVER AVENUE
BRIGHTON, MICHIGAN 48116

PROJECT TITLE
AGAPE CITY CHURCH
DUFFREE BLVD
HOWELL TWP. MICHIGAN

REVISIONS		
CLIENT REVIEW	2/28/2025	
SPA SUBMITTAL	3/21/2025	

ORIGINAL ISSUE DATE:
FEBRUARY 28, 2025

DRAWING TITLE
PRELIMINARY UTILITY PLAN

PEA JOB NO. 24-2245

P.M. JPB

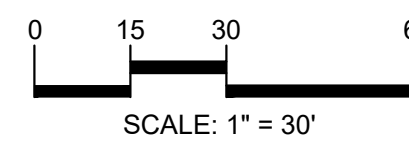
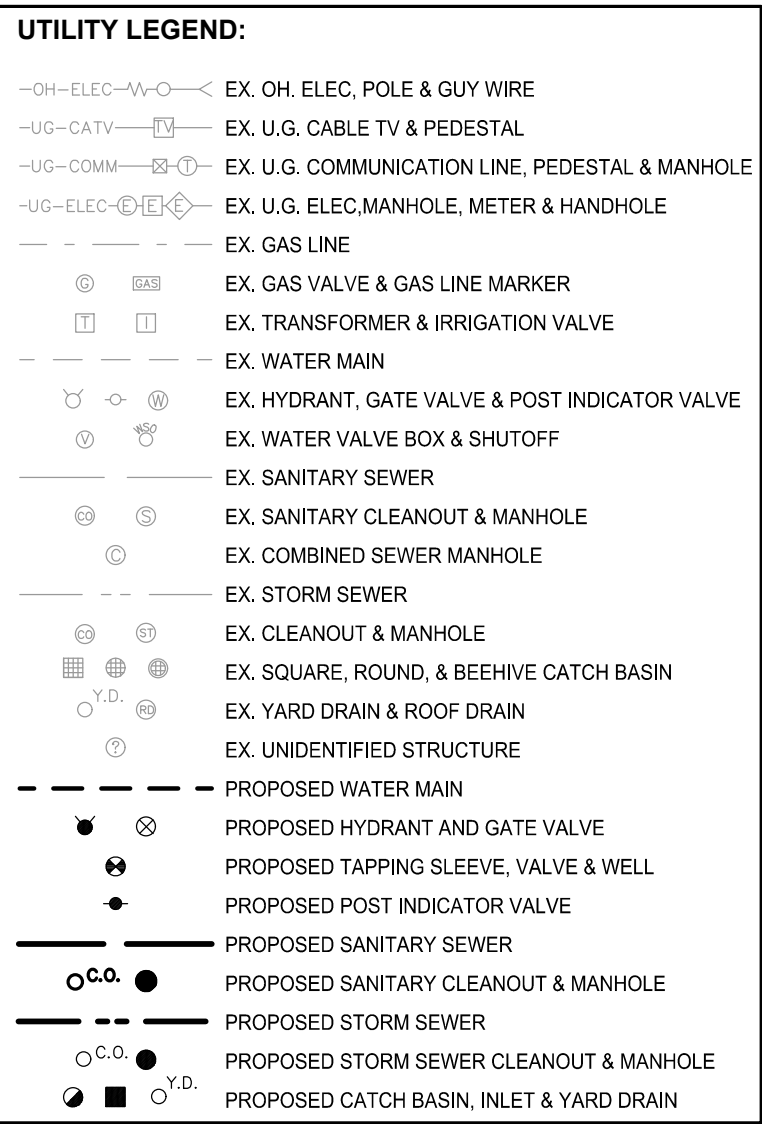
DN. LGD

DES. LGD

DRAWING NUMBER:

C-6.0

NOT FOR CONSTRUCTION



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CLIENT
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CONSTRUCTION**
102 EAST GRAND RIVER AVENUE
BRIGHTON, MICHIGAN 48116

PROJECT TITLE
**AGAPE CITY
CHURCH**
DURFREE BLVD
HOWELL TWP, MICHIGAN

REVISIONS	
CLIENT REVIEW	2/28/2
SPA SUBMITTAL	3/21/2

ORIGINAL ISSUE DATE:
FEBRUARY 28, 2025

DRAWING TITLE

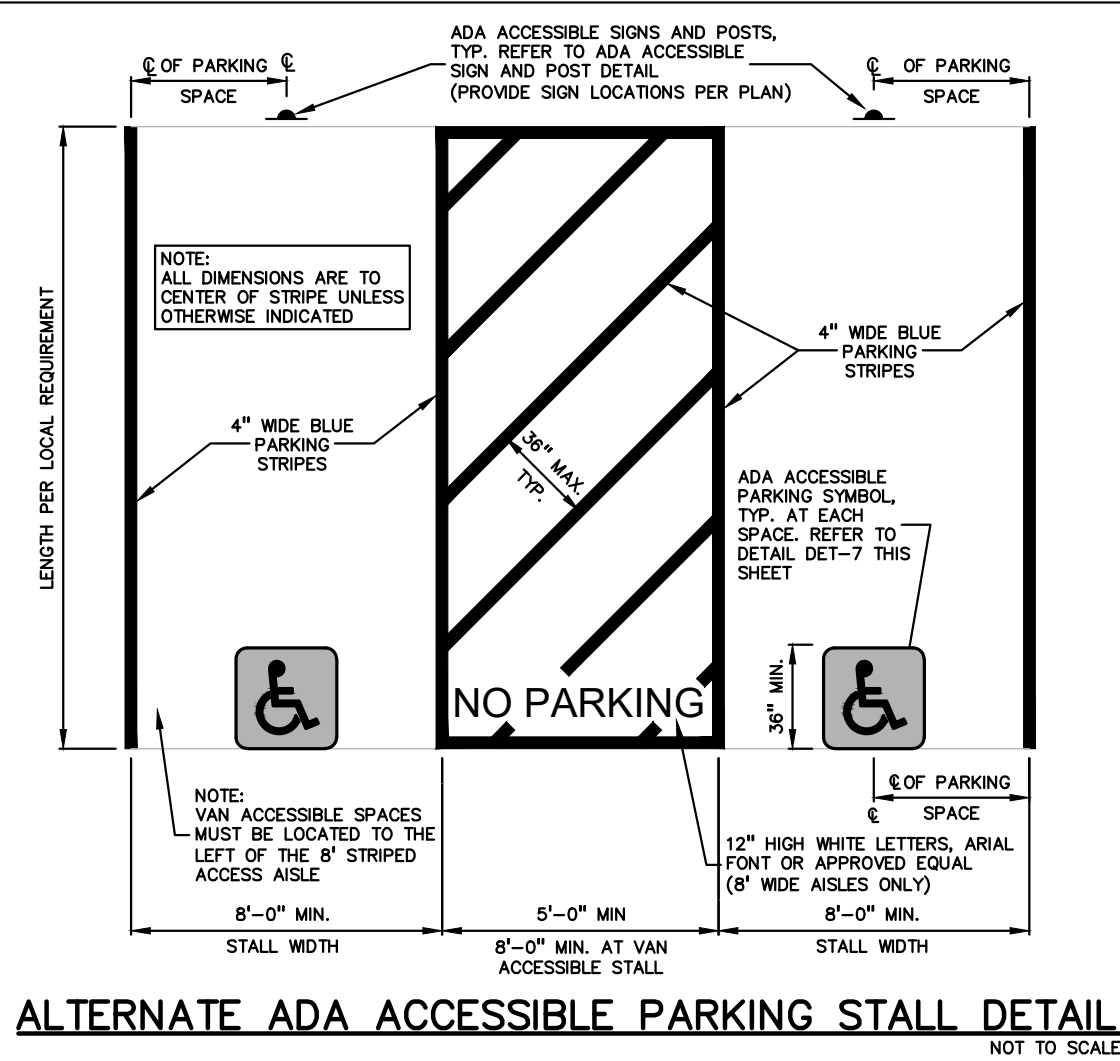
**WATER MAIN
EXTENSION**

PEA JOB NO.	24-22
P.M.	J
DN.	L
DES.	L

DRAWING NUMBER:

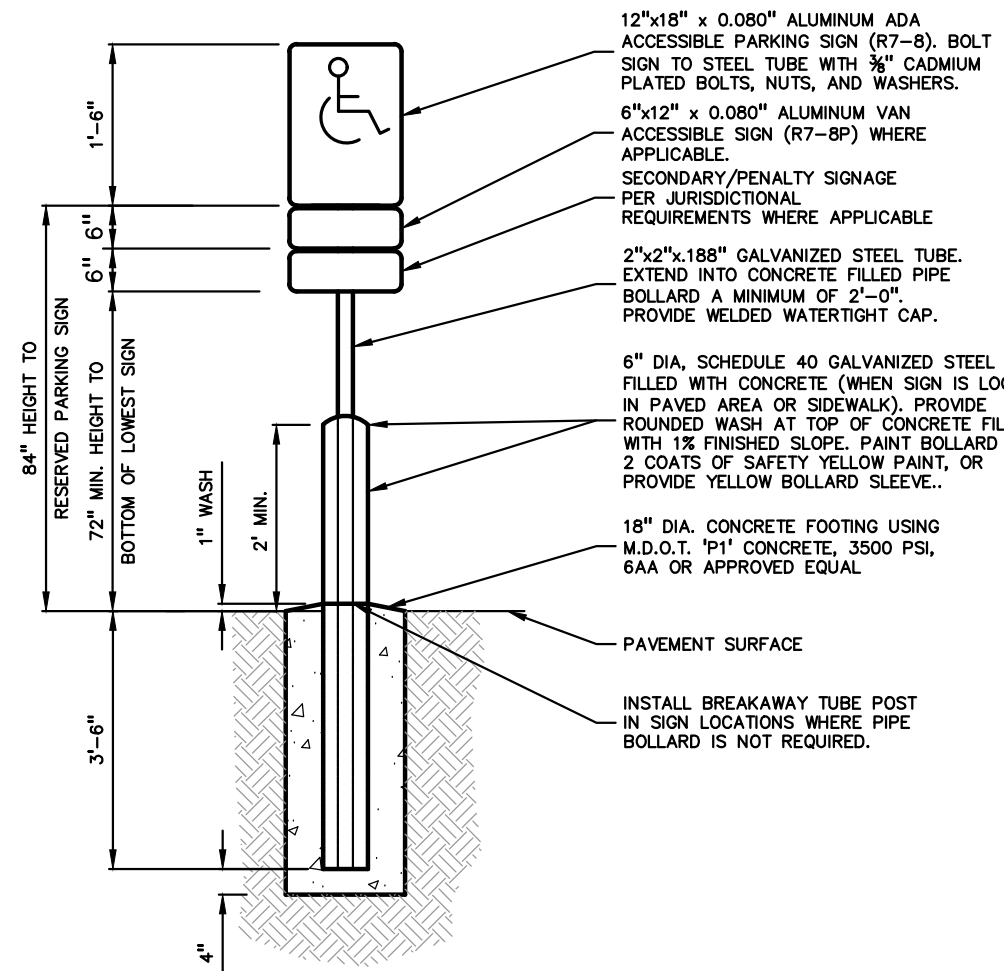
C-6.1

S:\PROJECTS\2024\24-2245-SCHAFFER - GRAND RIVER AND HIGHLAND\DWG\2-D\PEA PLAN\C-9.0DET-24-2245.dwg PLOT DATE: 3/20/2025 BPI-Reprint: Mooney



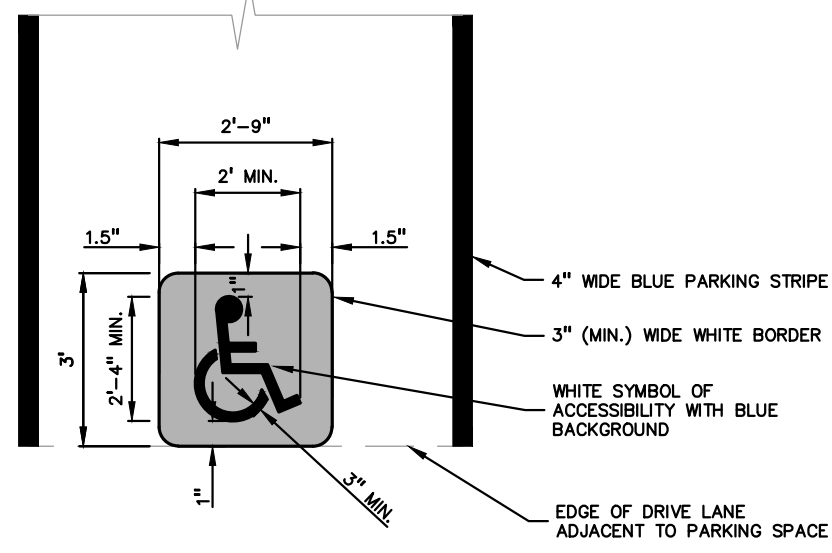
ALTERNATE ADA ACCESSIBLE PARKING STALL DETAIL
NOT TO SCALE

- ADA ACCESSIBLE SIGN NOTES:
- ONE SIGN IS REQUIRED AT EACH ADA ACCESSIBLE PARKING SPACE.
 - ALL SIGNS SHALL COMPLY WITH THE LATEST STANDARDS OF THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD).
 - WHEN TWO ADA ACCESSIBLE PARKING SPACES ARE ADJACENT AND FACING EACH OTHER, TWO SIGNS ARE REQUIRED, BUT CAN BE MOUNTED ON THE SAME POST.
 - SIGN POSTS SHALL BE 2" NOM. SQUARE 14-GAUGE GALVANIZED STEEL TUBE WITH 7/16" HOLES AT 1" CENTERS. POSTS SHALL TELESCOPE INSIDE ANCHOR POSTS A MINIMUM OF 12".
 - ANCHOR POSTS SHALL BE 2.25" NOM. SQUARE 12-GAUGE GALVANIZED STEEL POST, A MINIMUM OF 3 FEET LONG.
 - IF THESE NOTES AND DETAILS CONFLICT WITH LOCAL CODES AND ORDINANCES, THE STRICTER REQUIREMENT SHOULD BE USED.
 - ALTERNATE MATERIALS MAY BE USED IF IN COMPLIANCE WITH ADA GUIDELINES AND LOCAL REQUIREMENTS.



ADA ACCESSIBLE SIGN AND POST DETAIL
NOT TO SCALE

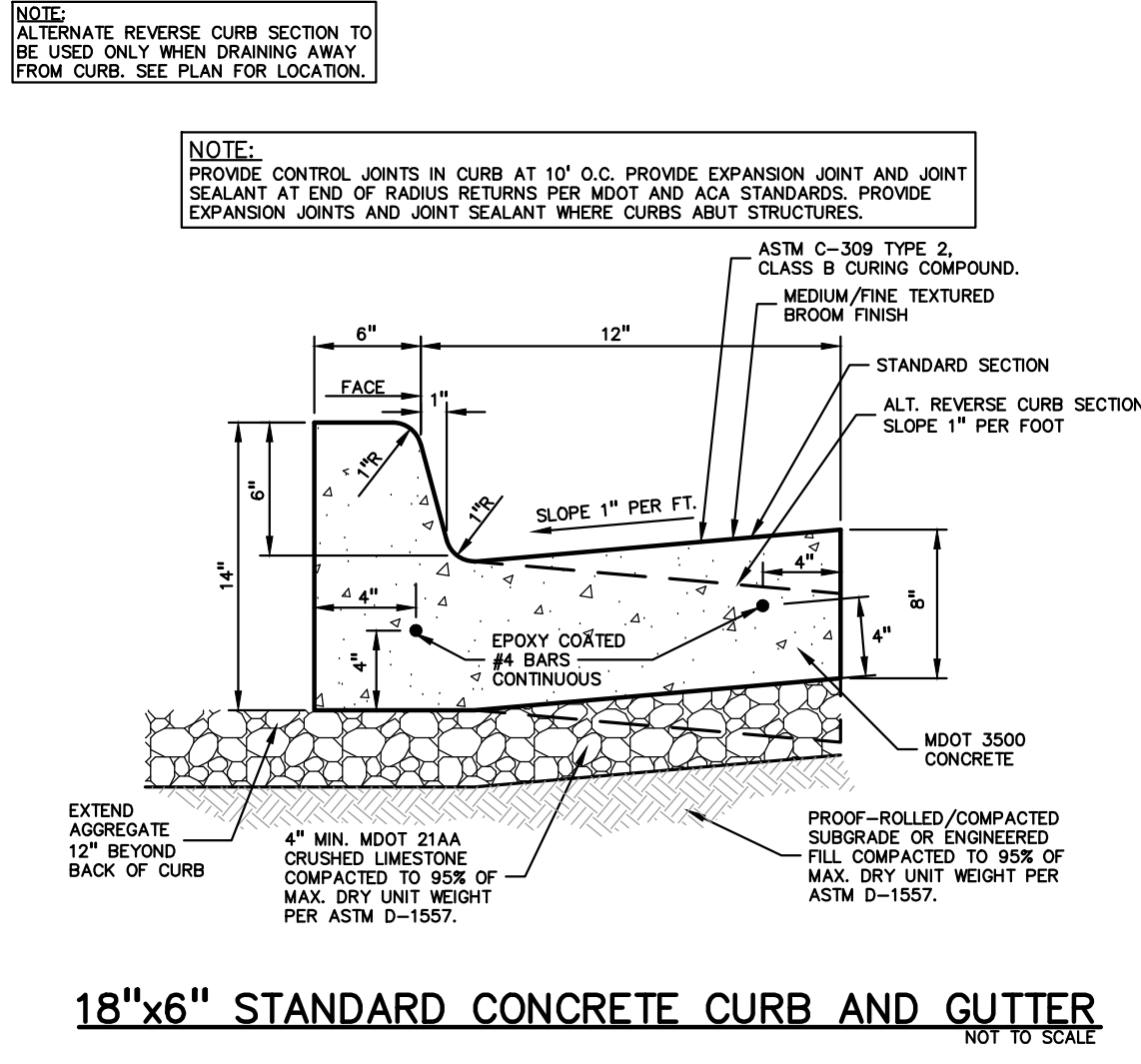
- NOTES:
- THE ADA ACCESSIBLE PARKING SYMBOL SHALL BE LOCATED IN THE CENTER OF THE PARKING SPACE AND ALONG THE EDGE OF THE ADJACENT DRIVE AISLE, TYP.
 - PARKING SYMBOL STRIPING SHALL HAVE A MINIMUM WIDTH OF 3".
 - CONTRACTOR SHALL ADHERE TO LOCAL/STATE JURISDICTIONAL REQUIREMENTS FOR ALL PAINTING WITH ACCESSIBLE SPACES.



ADA ACCESSIBLE PARKING SYMBOL DETAIL
(INTERNATIONAL SYMBOL OF ACCESSIBILITY)
NOT TO SCALE



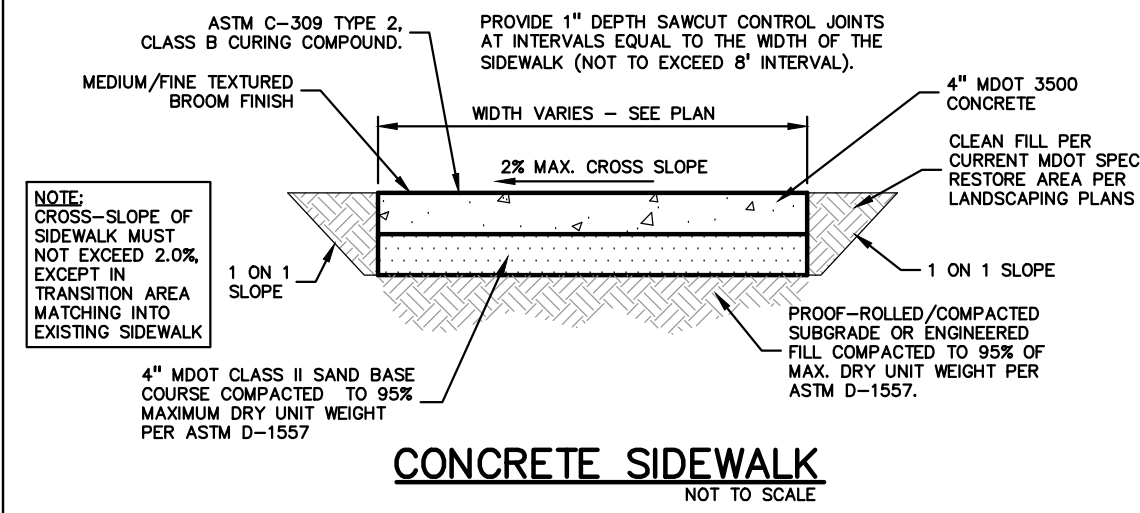
VAN ACCESSIBLE
PARKING SIGN DETAIL
NOT TO SCALE



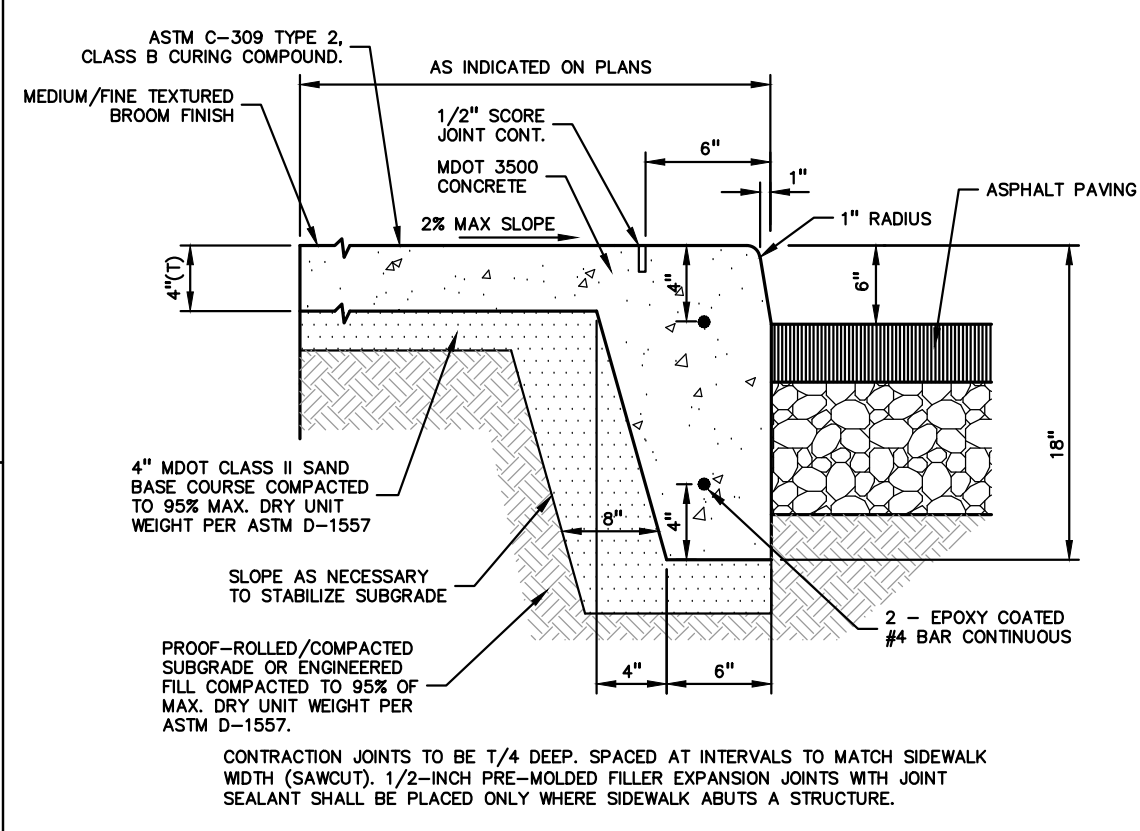
18"x6" STANDARD CONCRETE CURB AND GUTTER
NOT TO SCALE



ADA ACCESSIBLE
PARKING SIGN DETAIL
NOT TO SCALE

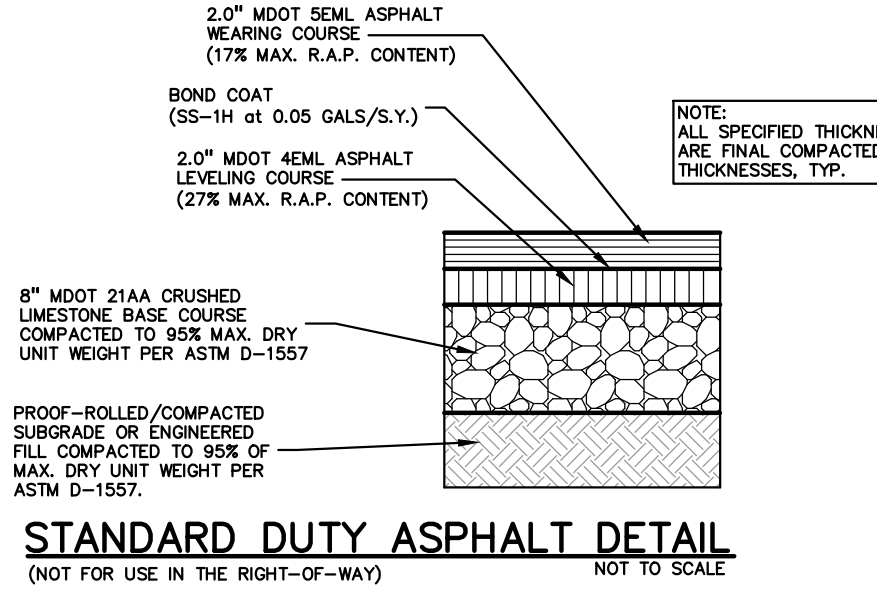


CONCRETE SIDEWALK
NOT TO SCALE



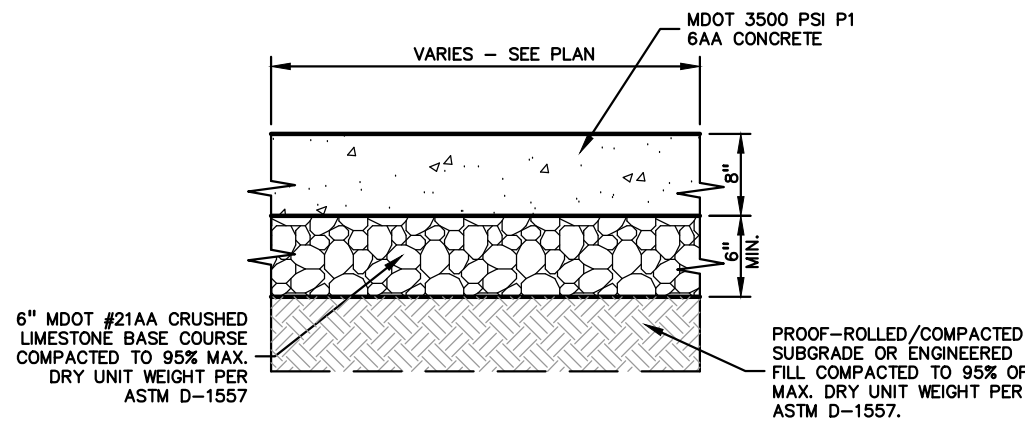
INTEGRAL CURB AND SIDEWALK
NOT TO SCALE

- AGGREGATE BASE NOTE:
- THIS PAYMENT SECTION DESIGN ASSUMES THE USE OF MDOT 21AA CRUSHED LESTONE BASE MATERIAL THAT MEETS THE REQUIREMENTS OF MDOT STANDARD SPECIFICATION SECTION 902 FOR AGGREGATES. IF CRUSHED CONCRETE AGGREGATE BASE IS PROPOSED IN LIEU OF THE SPECIFIED CRUSHED LESTONE MATERIAL, PEA GROUP WILL REQUIRE A MINIMUM 25% INCREASE IN BASE THICKNESS. HOWEVER, IF TESTING DOCUMENTATION IS PROVIDED TO PEA GROUP THAT SHOWS THAT THE CRUSHED CONCRETE MATERIAL MEETS ALL REQUIREMENTS OF MDOT SPECIFICATION SECTION 902, THEN THE 25% INCREASE IN THICKNESS MAY BE REEVALUATED.
- ASPHALT MATERIAL NOTES:
- HOT-MIX ASPHALT MIXTURES UTILIZING RECYCLED ASPHALT PAVEMENT (RAP) MUST MEET MDOT SPECIAL PROVISION (2020P). THE BINDER GRADE FOR THIS WORK IS PG64-28. IF ASPHALT MIXES CONTAINING RAP ARE TO BE SUPPLIED FOR THIS PROJECT, THE ASPHALT BINDER MUST BE REVISED PER MDOT TIER 1 OR TIER 2 REQUIREMENTS (RAP CONTENT UP TO 27% MAXIMUM). TIER 3 MIXES ARE NOT ACCEPTABLE ON THIS PROJECT. AN ASPHALT MIX DESIGN FOR ALL SPECIFIED MIXES SHOULD BE FORWARDED TO PEA GROUP FOR REVIEW PRIOR TO CONSTRUCTION.

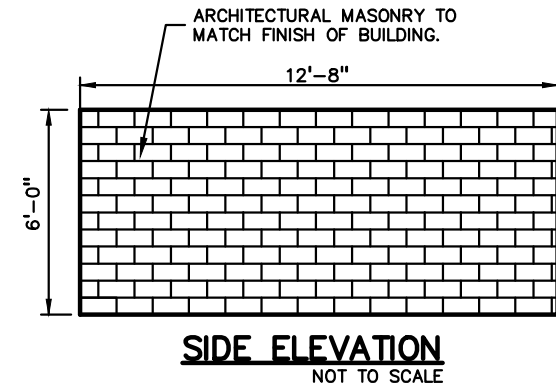


STANDARD DUTY ASPHALT DETAIL
(NOT FOR USE IN THE RIGHT-OF-WAY)
NOT TO SCALE

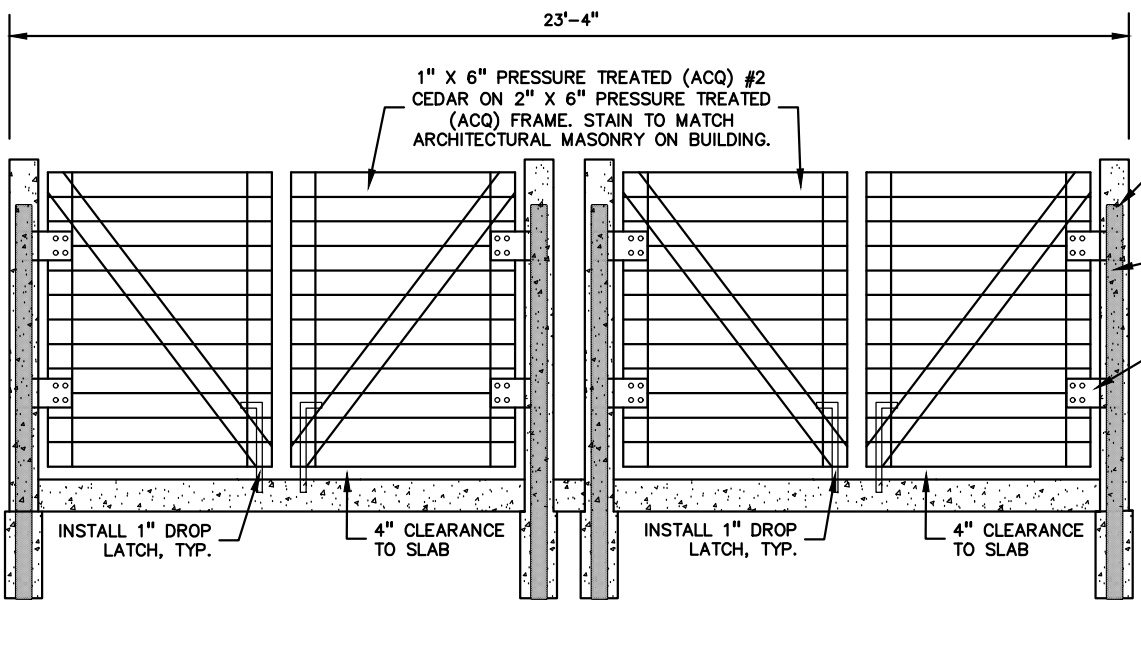
ASPHALT MIX DESIGN CHART					
COMMERCIAL ADT 0-300	COMMERCIAL ADT 301-1000	COMMERCIAL ADT 1001-3400	COMMERCIAL ADT 3401	APPLICATION RATE (LB/YD)	COURSE APPLICATION
2EL	2ELM	2EMH	2EH	435-550	BASE
3EL	3ELM	3EMH	3EH	330-410	BASE AND/OR LEVELING
4EL	4ELM	4EMH	4EH	220-275	LEVELING AND/OR TOP
5EL	5ELM	5EMH	5EH	165-220	TOP
PG 58-28	PG 64-28	PG 64-28	PG 70-28P		



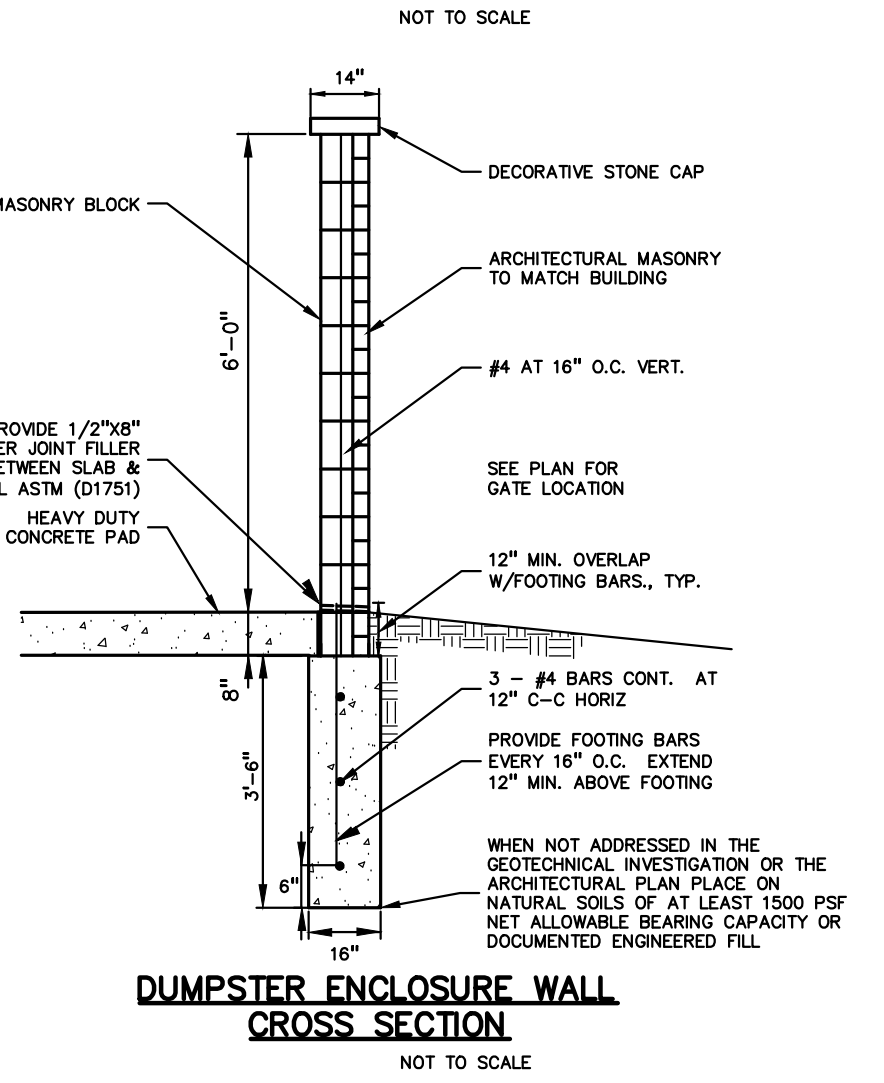
HEAVY DUTY CONCRETE PAD DETAIL
NOT TO SCALE



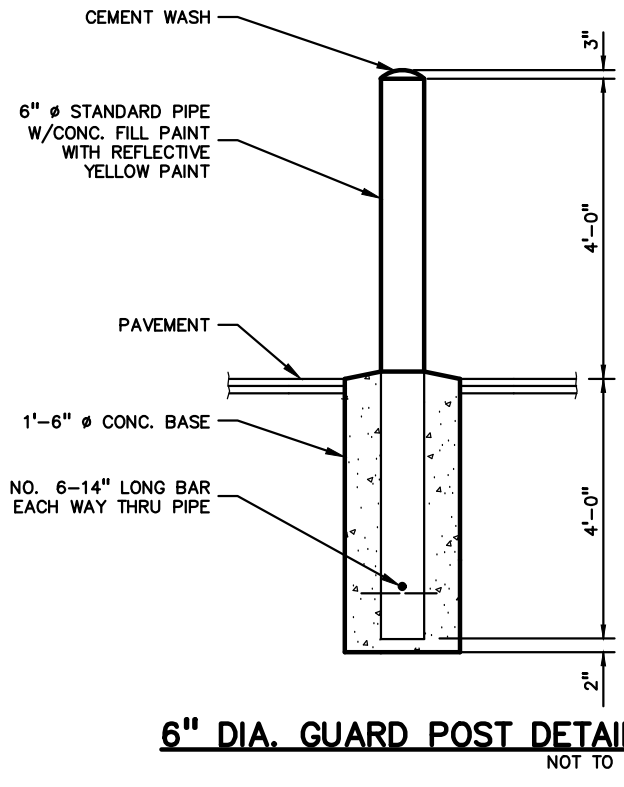
SIDE ELEVATION
NOT TO SCALE



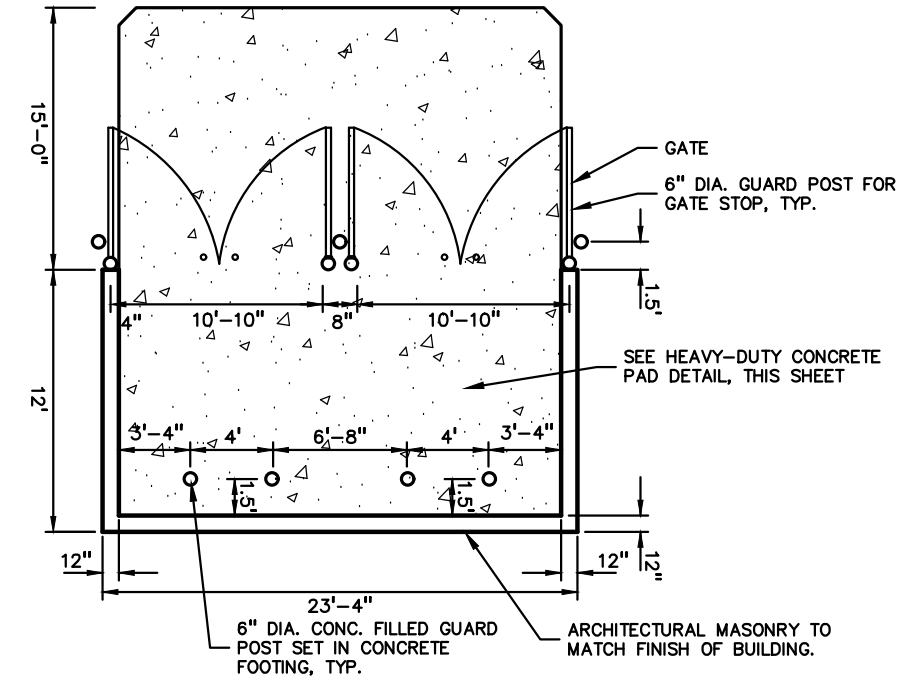
FRONT ELEVATION
NOT TO SCALE



DUMPSTER ENCLOSURE WALL
CROSS SECTION
NOT TO SCALE



6" DIA. GUARD POST DETAIL
NOT TO SCALE



DOUBLE DUMPSTER ENCLOSURE DETAIL
NOT TO SCALE

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PROJECT TITLE
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DURFREE BLVD
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REVISIONS
CLIENT REVIEW 2/28/2025
SPA SUBMITTAL 3/21/2025

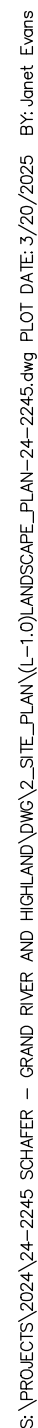
ORIGINAL ISSUE DATE:
FEBRUARY 28, 2025
DRAWING TITLE
NOTES AND DETAILS

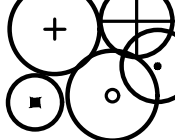
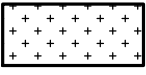
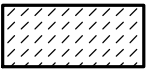
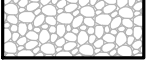
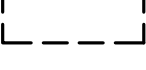
PEA JOB NO. 24-2245
P.M. JPB
DN. LGD
DES. LGD
DRAWING NUMBER:

C-9.0

NOT FOR CONSTRUCTION

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	SPACING	DESIGNATION	REMARKS
DECIDUOUS TREES								
ARR2.5	6	ACER RUBRUM 'REDPOINTE'	REDPOINTE MAPLE	2.5" CAL.	B&B	PER PLAN	NATIVE	
ARRS2.5	3	ACER RUBRUM 'SCARSEN'	SCARLET SENTINEL MAPLE	2.5" CAL.	B&B	PER PLAN	NATIVE	
BN10	2	BETULA NIGRA	RIVER BIRCH	10" HT.	B&B	PER PLAN	NATIVE	MULTI-TRUNK (3-5)
GTS2.5	3	GLEDITSIA TRIACANTHOS INERMIS 'SUNCOLE'	SUNBURST HONEY LOCUST	2.5" CAL.	B&B	PER PLAN	NATIVE	THORNLESS
NS2.5	7	NYSSA SYLVATICA	TUPELO	2.5" CAL.	B&B	PER PLAN	NATIVE	
PO2.5	2	PLATANUS OCCIDENTALIS	AMERICAN SYCAMORE	2.5" CAL.	B&B	PER PLAN	NATIVE	
QA2.5	2	QUERCUS ALBA	WHITE OAK	2.5" CAL.	B&B	PER PLAN	NATIVE	
QB2.5	6	QUERCUS BICOLOR	SWAMP WHITE OAK	2.5" CAL.	B&B	PER PLAN	NATIVE	
TG2.5	5	TILIA CORDATA 'GREENSPIRE'	GREENSPIRE LITTLELEAF LINDEN	2.5" CAL.	B&B	PER PLAN	NON-NATIVE	
UP2.5	2	ULMUS PARVIFOLIA 'ALLEE'	ALLEE@ LACEBARK ELM	2.5" CAL.	B&B	PER PLAN	NON-NATIVE	
	38	SUBTOTAL:						
EVERGREEN TREES								
AP6	6	ABIES BALSAMEA PHANEROLEPIS	CANAAN BALSAM FIR	6' HT.	B&B	PER PLAN	NATIVE	
PA6	10	PICEA ABIES	NORWAY SPRUCE	6' HT.	B&B	PER PLAN	NATIVE	
	16	SUBTOTAL:						
ORNAMENTAL TREES								
AS2	7	AMELANCHIER CANADENSIS 'SPRIZAM'	SPRING GLORY® CANADIAN SERVICEBERRY	2" CAL.	B&B	PER PLAN	NATIVE	
CR2	3	CERCIS CANADENSIS 'JUNZ'	THE RISING SUN™ EASTERN REDBUD	2" CAL.	B&B	PER PLAN	NATIVE	
PK2	2	PRUNUS SERRULATA 'KWANZAN'	KWANZAN JAPANESE FLOWERING CHERRY	2" CAL.	B&B	PER PLAN	NON-NATIVE	
SR2	5	SYRINGA RETICULATA 'IVORY SILK'	IVORY SILK JAPANESE TREE LILAC	2" CAL.	B&B	PER PLAN	NON-NATIVE	
	17	SUBTOTAL:						
SHRUBS								
AM24	66	ARONIA MELANOCARPA	BLACK CHOKEBERRY	24" HT.	B&B OR CONT.	5' O.C.	NATIVE	
CR24	29	CORNUS SERICEA	RED TWIG DOGWOOD	24" HT.	CONT.	PER PLAN	NATIVE	
HL30	14	HYDRANGEA PANICULATA 'LIMELIGHT'	LIMELIGHT PANICLE HYDRANGEA	30" HT.	B&B OR CONT.	6' O.C.	NON-NATIVE	
IL24	27	ILEX VERTICILLATA 'SOUTHERN GENTLEMAN'	SOUTHERN CHINESE WINTERBERRY	24" CONT.	B&B OR CONT.	6' O.C.	NATIVE	
IW24	27	ILEX VERTICILLATA 'WINTER RED'	WINTER RED WINTERBERRY	24" HT.	B&B OR CONT.	6' O.C.	NATIVE	
JSG24	12	JUNIPERUS CHINENSIS 'SEA GREEN'	SEA GREEN JUNIPER	24" SPRD	B&B OR CONT.	5' O.C.	NON-NATIVE	
PO274	32	PHYSCARPUS OPULIFOLIUS 'TINY WINE'	TINY WINE NINEBARK	24" HT.	B&B OR CONT.	42" O.C.	NATIVE	
SP24	6	SYRINGA PATULA 'MISS KIM'	MISS KIM KOREAN LILAC	2" HT.	B&B OR CONT.	5' O.C.	NON-NATIVE	
TH6	2	TAXUS X MEDIA 'HOKUSIJ'	HICKS ANGLO-JAPANESE YEW	3" HT.	B&B OR CONT.	30" O.C.	NON-NATIVE	
VL24	15	VIBURNUM LENTAGO	NANNYBERRY	24" HT.	CONT.	PER PLAN	NATIVE	
	218	SUBTOTAL:						



-  = PROPOSED DECIDUOUS TREE
-  = PROPOSED EVERGREEN TREE
-  = EXISTING TREES TO REMAIN
-  = IRRIGATED SEED LAWN
-  = RESTORE NON-IRRIGATED SEED LAWN
-  = SWALE SEED MIX
SEE NATIVE SEED INFO ON SHT. L-1.1
-  = ECONOMY PRAIRIE SEED MIX
SEE NATIVE SEED INFO ON SHT. L-1.1
-  = STORMWATER SEED MIX
SEE NATIVE SEED INFO ON SHT. L-1.1
-  = ROCK MULCH, SEE DETAIL ON SHT. L-1.1
-  = SHRUBS TO BE DETAILED AT CONSTRUCTION
-  = POTENTIAL SNOW STORAGE AREA
-  = TREE PROTECTION FENCE

S = SITE TREES
D = MEDIAN DIVIDER TREES
B = BASIN TREES
R = ROAD FRONTAGE TREES
F = FOUNDATION TREES

SEE SHEET L-1.1 FOR LANDSCAPE DETAILS, NOTES AND
NATIVE SEED MIX

PROVIDED: 13 PROPOSED ORNAMENTAL TREES AND 63 SHRUBS
SHRUBS TO BE DETAILED AT CONSTRUCTION DRAWINGS,
TREES AND SHRUBS AT BLDG TO COINCIDE WITH BLDG ARCHITECTURE

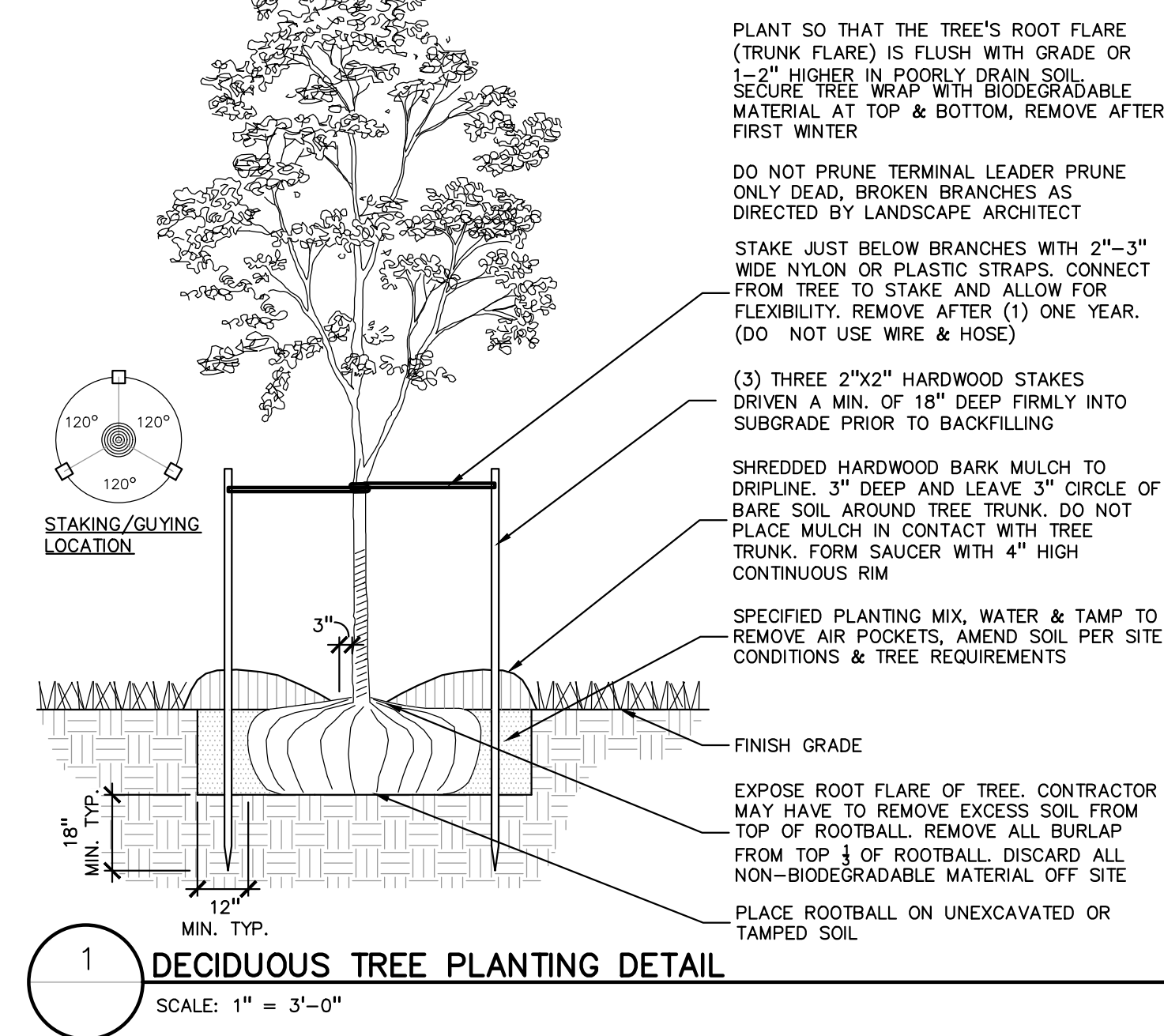
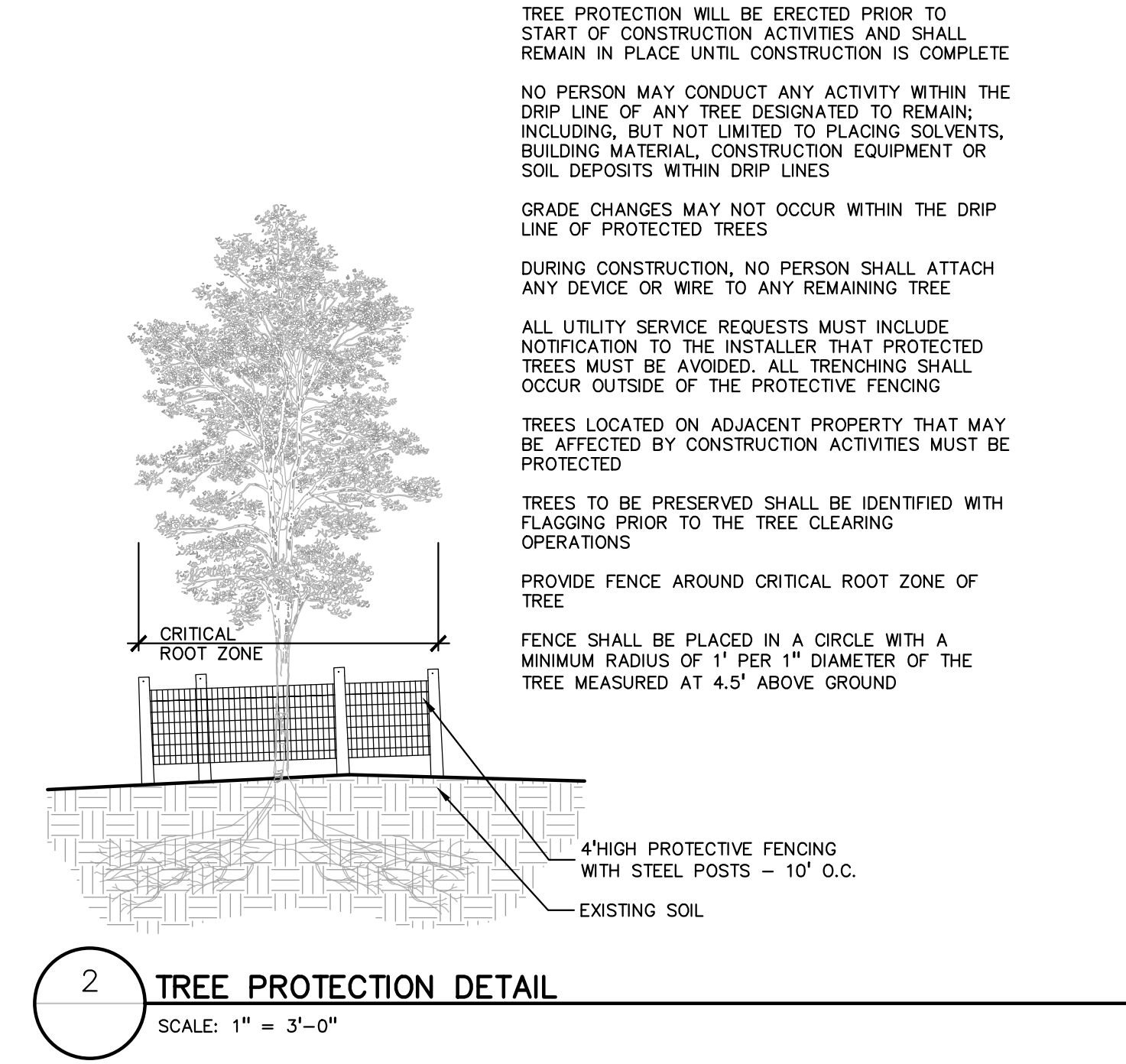
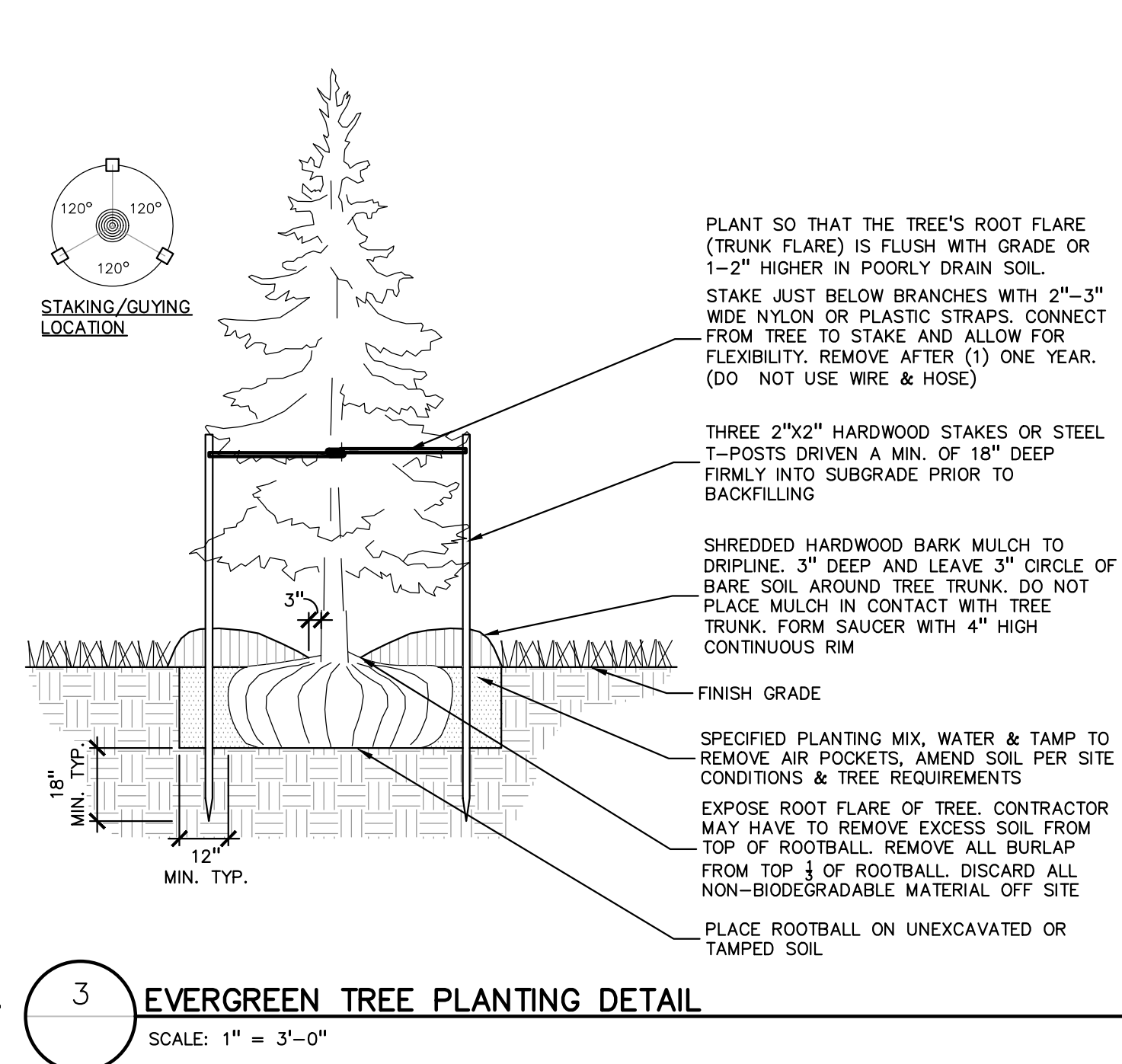
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DRAWING NUMBER

L-1.0

NATIVE SEED MIX, BY STANTEC NATIVE PLANT NURSERY, 574-586-2412, OR EQUAL SPECIES TO BE NATIVE TO COUNTY, NO INVASIVE SPECIES ALLOWED FOR ALL SEED MIXES, PROVIDE EROSION MAT ON SLOPES AND AREAS OF WASH OUT TYPE INSTALL AND PREP PER MANUFACTURERS SPECIFICATIONS.	
Stormwater Seed Mix	
STANTEC NATIVE PLANT NURSERY 574-586-2412 stantec.com/native-plant-nursery	
Botanical Name	Common Name
Perennial Grasses/Sedges/Rushes:	
<i>Bolboschoenus fluviatilis</i>	River Bulrush
<i>Carex cristatella</i>	Crested Owl Sedge
<i>Carex lurida</i>	Bottlebrush Sedge
<i>Carex vulpinoidea</i>	Brown Fox Sedge
<i>Elymus virginicus</i>	Virginia Wild Ry
<i>Glyceria striata</i>	Fowl Manna Grass
<i>Juncus effusus</i>	Common Rush
<i>Leersia oryzoides</i>	Rice Cut Grass
<i>Panicum virgatum</i>	Switch Grass
<i>Schoenoplectus tabernaemontani</i>	Softstem Bulrush
<i>Scirpus atrovirens</i>	Dark Green Rush
<i>Scirpus cyperinus</i>	Wool Grass
Temporary Cover:	
<i>Avena sativa</i>	Common Oat
<i>Lolium multiflorum</i>	Annual Ry
Forbs & Shrubs:	
<i>Alisma spp.</i>	Water Plantain (Various Mix)
<i>Asclepias incarnata</i>	Swamp Milkweed
<i>Bidens spp.</i>	Bidens (Various Mix)
<i>Helenium autumnale</i>	Sneezeweed
<i>Iris virginica</i>	Blue Flag
<i>Lycopus americanus</i>	Common Water Horehound
<i>Mimulus ringens</i>	Monkey Flower
<i>Oligoneuron ridelii</i>	Ridgell's Goldenrod
<i>Penthorum sedoides</i>	Ditch Stonecrop
<i>Polygonum spp.</i>	Pinkweed (Various Mix)
<i>Rudbeckia subtomentosa</i>	Sweet Black-Eyed Susan
<i>Rudbeckia triloba</i>	Brown-Eyed Susan
<i>Sagittaria latifolia</i>	Common Arrowhead
<i>Senna hebecarpa</i>	Wild Senna
<i>Sparganthyrum novae-angliae</i>	New England Star
<i>Thalictrum dasycarpum</i>	Purple Meadow Rue

NATIVE SEED MIX, BY STANTEC NATIVE PLANT NURSERY, 574-586-2412, OR EQUAL SPECIES TO BE NATIVE TO COUNTY, NO INVASIVE SPECIES ALLOWED FOR ALL SEED MIXES, PROVIDE EROSION MAT ON SLOPES AND AREAS OF WASH OUT TYPE INSTALL AND PREP PER MANUFACTURERS SPECIFICATIONS.	
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<i>Carex vulpinoidea</i>	Brown Fox Sedge
<i>Elymus virginicus</i>	Virginia Wild Ry
<i>Glyceria striata</i>	Fowl Manna Grass
<i>Juncus effusus</i>	Common Rush
<i>Leersia oryzoides</i>	Rice Cut Grass
<i>Panicum virgatum</i>	Switch Grass
<i>Schoenoplectus tabernaemontani</i>	Softstem Bulrush
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<i>Sagittaria latifolia</i>	Common Arrowhead
<i>Senna hebecarpa</i>	Wild Senna
<i>Symphoricarpon novae-angliae</i>	New England Star
<i>Thalictrum dasycarpum</i>	Purple Meadow Rue



CLIENT

**SCHAFFER
CONSTRUCTION**

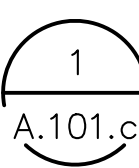
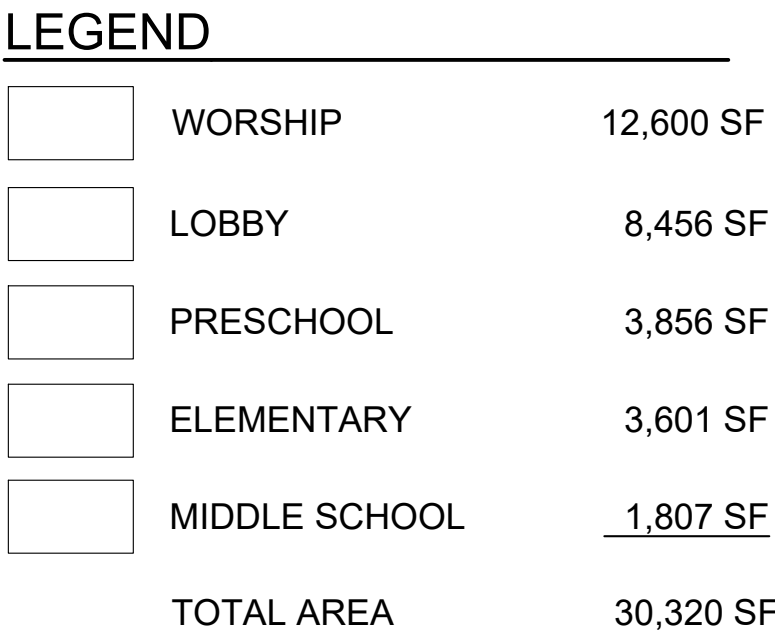
102 EAST GRAND RIVER AVE
BRIGHTON, MICHIGAN 48116

PROJECT TITLE

**AGAPE CITY
CHURCH**

DURFREE BLVD
HOWELL TWP. MICHIGAN

L-1.1



Proposed
Floor Plan—Scheme C
SCALE: $\frac{3}{32}'' = 1'-0''$

SCALE: $3/32" = 1'-0"$

A.101.C

General Note
1. SEE SCHEDULE FOR LUMINAIRE MOUNTING HEIGHT.
2. SEE LUMINAIRE SCHEDULE FOR LIGHT LOSS FACTOR.
3. CALCULATIONS ARE SHOWN IN FOOTCANDLES AT: GRADE

THE ENGINEER AND/OR ARCHITECT MUST DETERMINE APPLICABILITY OF THE LAYOUT TO EXISTING / FUTURE FIELD CONDITIONS. THIS LIGHTING LAYOUT REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY APPROVED METHODS. ACTUAL PERFORMANCE OF ANY MANUFACTURER'S LUMINAIRE MAY VARY DUE TO VARIATION IN ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, AND OTHER VARIABLE FIELD CONDITIONS. MOUNTING HEIGHTS INDICATED ARE FROM GRADE AND/OR FLOOR UP.

THESE LIGHTING CALCULATIONS ARE NOT A SUBSTITUTE FOR INDEPENDENT ENGINEERING ANALYSIS OF LIGHTING SYSTEM SUITABILITY AND SAFETY. THE ENGINEER AND/OR ARCHITECT IS RESPONSIBLE TO REVIEW FOR MICHIGAN ENERGY CODE AND LIGHTING QUALITY COMPLIANCE.

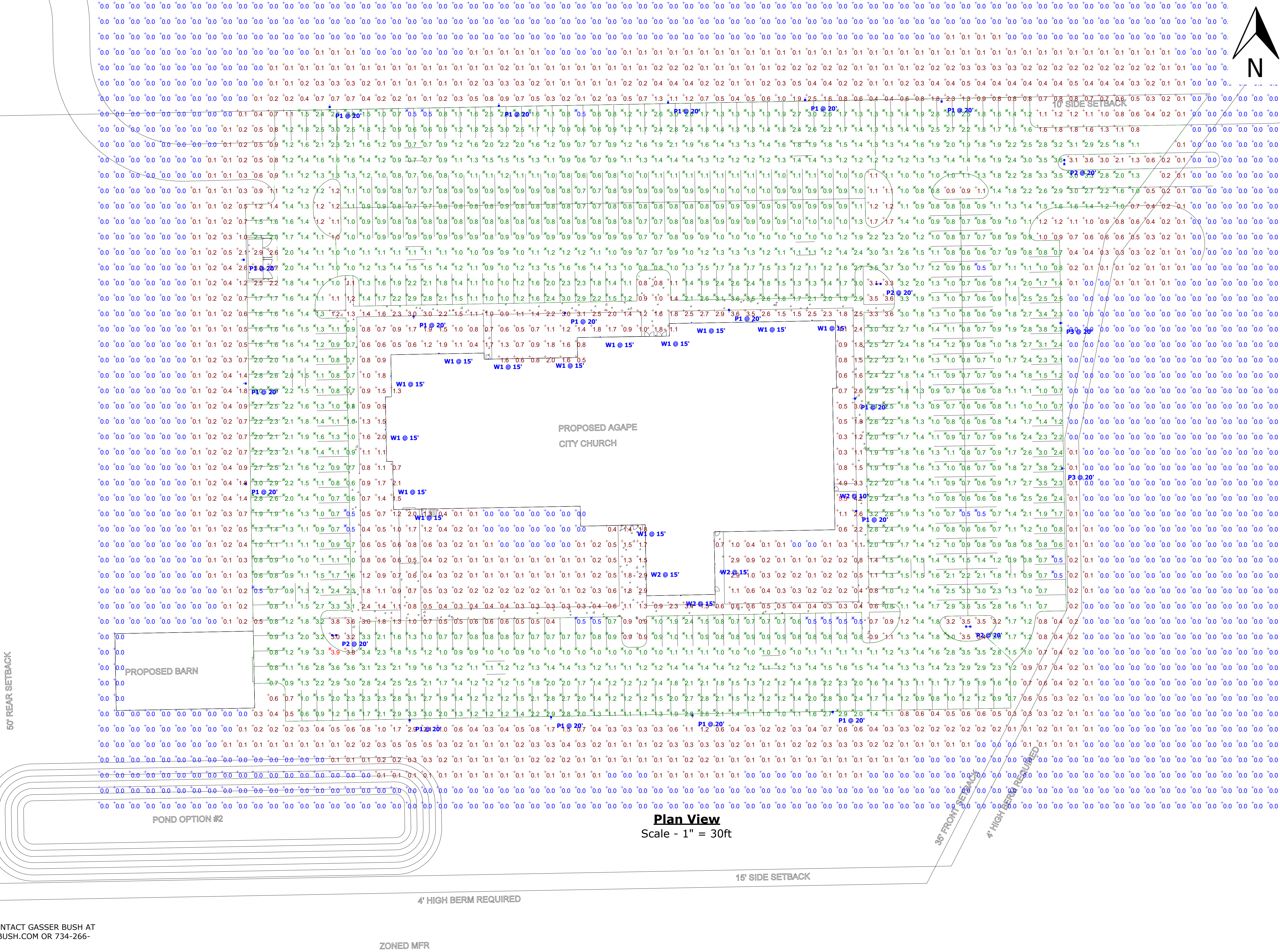
UNLESS EXEMPT, PROJECT MUST COMPLY WITH LIGHTING CONTROLS REQUIREMENTS DEFINED IN ASHRAE 90.1 2013. FOR SPECIFIC INFORMATION CONTACT GBA CONTROLS GROUP AT CONTROLS@GASSERBUSH.COM OR 734-266-6705.

Alternates Note
THE USE OF FIXTURE ALTERNATES MUST BE RESUBMITTED TO THE CITY FOR APPROVAL.

Ordering Note
FOR INQUIRIES CONTACT GASSER BUSH AT QUOTES@GASSERBUSH.COM OR 734-266-6705.

Drawing Note
THIS DRAWING WAS GENERATED FROM AN ELECTRONIC IMAGE FOR ESTIMATION PURPOSE ONLY. LAYOUT TO BE VERIFIED IN FIELD BY OTHERS.

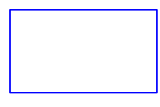
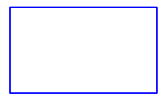
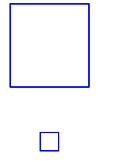
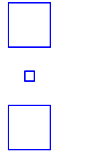
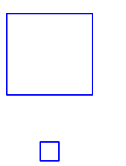
Mounting Height Note
MOUNTING HEIGHT IS MEASURED FROM GRADE TO FACE OF FIXTURE. POLE HEIGHT SHOULD BE CALCULATED AS THE MOUNTING HEIGHT LESS BASE HEIGHT.



Plan View
Scale - 1" = 30ft



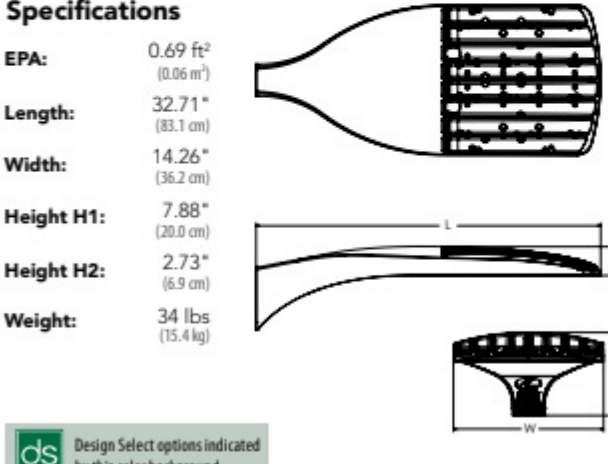
AGAPE CHURCH HOWELL
EXTERIOR PHOTOMETRIC PLAN
GASSER BUSH ASSOCIATES
WWW.GASSERBUSH.COM

Schedule								
Symbol	Label	QTY	Manufacturer	Catalog	Description	Lamp Output	LLF	Input Power
	W1	13	Lithonia Lighting	WDGE1 LED P1 40K 80CRI VF	WDGE1 LED WITH P1 - PERFORMANCE PACKAGE, 4000K, 80CRI, VISUAL COMFORT FORWARD OPTIC	1227	0.9	10.0002
	W2	4	Lithonia Lighting	WDGE1 LED P2 40K 80CRI VW	WDGE1 LED WITH P2 - PERFORMANCE PACKAGE, 4000K, 80CRI, VISUAL COMFORT WIDE OPTIC	1982	0.9	15.0178
	P1	17	Lithonia Lighting	DSX1 LED P3 40K 80CRI TFTM HS	D-Series Size 1 Area Luminaire P3 Performance Package 4000K CCT 80 CRI Forward Throw Houseside Shield	10822	0.9	102.1727
	P2	4	Lithonia Lighting	DSX1 LED P3 40K 80CRI T5M EGS	D-Series Size 1 Area Luminaire P3 Performance Package 4000K CCT 80 CRI Type 5 Medium External Glare Shield	9512	0.9	204.3454
	P3	2	Lithonia Lighting	DSX1 LED P3 40K 80CRI BLC3	D-Series Size 1 Area Luminaire P3 Performance Package 4000K CCT 80 CRI Type 3 Extreme Backlight Control	9186	0.9	102.17

Statistics						
Description		Symbol	Avg	Max	Min	Avg/Min
Overall/Grade		+	0.7 fc	5.5 fc	0.0 fc	N/A
Parking & Drive Lanes		✖	1.5 fc	3.9 fc	0.5 fc	7.8:1
						3.0:1



D-Series Size 1 LED Area Luminaire



Specifications

EPA: 0.69 ft² (0.06 m²)

Length: 32.71" (83.1 cm)

Width: 14.26" (36.2 cm)

Height H1: 7.88" (20.0 cm)

Height H2: 2.73" (6.9 cm)

Weight: 34 lbs (15.4 kg)

Ordering Information

EXAMPLE: DSX1 LED P7 40K 70CRI T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

Series

DSX1 LED

LEDs

(this section 70CRI only)

P1 P6 30K 3000K

P2 P7 40K 4000K

P3 P8 50K 5000K

P4 P9 50K 5000K

P5 (this section 80CRI only, extended lead times apply)

P6 P10 27K 2700K

P7 P11 30K 3000K

P8 P12 35K 3500K

P9 P13 40K 4000K

P10 P14 50K 5000K

Color Rendering Index

70CRI

80CRI

90CRI

95CRI

97CRI

98CRI

99CRI

Distribution

T15 Actuator front row

T16 Type I short

T17 Type II medium

T18 Type III medium

T19 Type IV wide

T20 Type V wide

T21 Type VI wide

T22 Type VII wide

T23 Type VIII wide

T24 Type IX wide

T25 Type X wide

T26 Type XI wide

T27 Type XII wide

T28 Type XIII wide

T29 Type XIV wide

T30 Type XV wide

T31 Type XVI wide

T32 Type XVII wide

T33 Type XVIII wide

T34 Type XIX wide

T35 Type XX wide

T36 Type XXI wide

T37 Type XXII wide

T38 Type XXIII wide

T39 Type XXIV wide

T40 Type XXV wide

T41 Type XXVI wide

T42 Type XXVII wide

T43 Type XXVIII wide

T44 Type XXIX wide

T45 Type XXX wide

T46 Type XXXI wide

T47 Type XXXII wide

T48 Type XXXIII wide

T49 Type XXXIV wide

T50 Type XXXV wide

T51 Type XXXVI wide

T52 Type XXXVII wide

T53 Type XXXVIII wide

T54 Type XXXIX wide

T55 Type XL wide

T56 Type XLI wide

T57 Type XLII wide

T58 Type XLIII wide

T59 Type XLIV wide

T60 Type XLV wide

T61 Type XLVI wide

T62 Type XLVII wide

T63 Type XLVIII wide

T64 Type XLIX wide

T65 Type L wide

T66 Type LI wide

T67 Type LII wide

T68 Type LIII wide

T69 Type LIV wide

T70 Type LV wide

T71 Type LVI wide

T72 Type LVII wide

T73 Type LVIII wide

T74 Type LIX wide

T75 Type LX wide

T76 Type LXI wide

T77 Type LXII wide

T78 Type LXIII wide

T79 Type LXIV wide

T80 Type LXV wide

T81 Type LXVI wide

T82 Type LXVII wide

T83 Type LXVIII wide

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T85 Type LXX wide

T86 Type LXXI wide

T87 Type LXXII wide

T88 Type LXXIII wide

T89 Type LXXIV wide

T90 Type LXXV wide

T91 Type LXXVI wide

T92 Type LXXVII wide

T93 Type LXXVIII wide

T94 Type LXXIX wide

T95 Type LXXX wide

T96 Type LXXXI wide

T97 Type LXXXII wide

T98 Type LXXXIII wide

T99 Type LXXXIV wide

T100 Type LXXXV wide

T101 Type LXXXVI wide

T102 Type LXXXVII wide

T103 Type LXXXVIII wide

T104 Type LXXXIX wide

T105 Type XL wide

T106 Type XLI wide

T107 Type XLII wide

T108 Type XLIII wide

T109 Type XLIV wide

T110 Type XLV wide

T111 Type XLVI wide

T112 Type XLVII wide

T113 Type XLVIII wide

T114 Type XLIX wide

T115 Type L wide

T116 Type LI wide

T117 Type LII wide

T118 Type LIII wide

T119 Type LIV wide

T120 Type LV wide

T121 Type LVI wide

T122 Type LVII wide

T123 Type LVIII wide

T124 Type LIX wide

T125 Type LX wide

T126 Type LXI wide

T127 Type LXII wide

T128 Type LXIII wide

T129 Type LXIV wide

T130 Type LXV wide

T131 Type LXVI wide

T132 Type LXVII wide

T133 Type LXVIII wide

T134 Type LXIX wide

T135 Type LXX wide

T136 Type LXXI wide

T137 Type LXXII wide

T138 Type LXXIII wide

T139 Type LXXIV wide

T140 Type LXXV wide

T141 Type LXXVI wide

T142 Type LXXVII wide

T143 Type LXXVIII wide

T144 Type LXXIX wide

T145 Type LXXX wide

T146 Type LXXXI wide

T147 Type LXXXII wide

T148 Type LXXXIII wide

T149 Type LXXXIV wide

T150 Type LXXXV wide

T151 Type LXXXVI wide

T152 Type LXXXVII wide

T153 Type LXXXVIII wide

T154 Type LXXXIX wide

T155 Type XL wide

T156 Type XLI wide

T157 Type XLII wide

T158 Type XLIII wide

T159 Type XLIV wide

T160 Type XLV wide

T161 Type XLVI wide

T162 Type XLVII wide

T163 Type XLVIII wide

T164 Type XLIX wide

T165 Type L wide

T166 Type LI wide

T167 Type LII wide

T168 Type LIII wide

T169 Type LIV wide

T170 Type LV wide

T171 Type LVI wide

T172 Type LVII wide

T173 Type LVIII wide

T174 Type LIX wide

T175 Type LX wide

T176 Type LXI wide

T177 Type LXII wide

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T199 Type LXXXIV wide

T200 Type LXXXV wide

T201 Type LXXXVI wide

T202 Type LXXXVII wide

T203 Type LXXXVIII wide

T204 Type LXXXIX wide

T205 Type XL wide

T206 Type XLI wide

T207 Type XLII wide

T208 Type XLIII wide

T209 Type XLIV wide

T210 Type XLV wide

T211 Type XLVI wide

T212 Type XLVII wide

T213 Type XLVIII wide

T214 Type XLIX wide

T215 Type L wide

T216 Type LI wide

T217 Type LII wide

T218 Type LIII wide

T219 Type LIV wide

T220 Type LV wide

T221 Type LVI wide

T222 Type LVII wide

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T250 Type LXXXV wide

T251 Type LXXXVI wide

T252 Type LXXXVII wide

T253 Type LXXXVIII wide

T254 Type LXXXIX wide

T255 Type XL wide

T256 Type XLI wide

T257 Type XLII wide

T258 Type XLIII wide

T259 Type XLIV wide

T260 Type XLV wide

T261 Type XLVI wide

T262 Type XLVII wide

T263 Type XLVIII wide

T264 Type XLIX wide

T265 Type L wide

T266 Type LI wide

T267 Type LII wide

T268 Type LIII wide

T269 Type LIV wide

T270 Type LV wide

T271 Type LVI wide

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T305 Type XL wide

T306 Type XLI wide

T307 Type XLII wide

T308 Type XLIII wide

T309 Type XLIV wide

T310 Type XLV wide

T311 Type XLVI wide

T312 Type XLVII wide

T313 Type XLVIII wide

T314 Type XLIX wide

T315 Type L wide

T316 Type LI wide

T317 Type LII wide

T318 Type LIII wide

T319 Type LIV wide

T320 Type LV wide

T321 Type LVI wide

T322 Type LVII wide

T323 Type LVIII wide

T324 Type LIX wide

T325 Type LX wide

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T564 Type XLIX wide

T565 Type L wide

T566 Type LI wide

T567 Type LII wide

T568 Type LIII wide

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T598 Type LXXXIII wide

T599 Type LXXXIV wide

T600 Type LXXXV wide

T601 Type LXXXVI wide

T602 Type LXXXVII wide

T603 Type LXXXVIII wide

T604 Type LXXXIX wide

T605 Type XL wide

T606 Type XLI wide

T607 Type XLII wide

T608 Type XLIII wide

T609 Type XLIV wide

T610 Type XLV wide

T611 Type XLVI wide

T612 Type XLVII wide

T613 Type XLVIII wide

T614 Type XLIX wide

T615 Type L wide

T616 Type LI wide

T617 Type LII wide

T618 Type LIII wide

T619 Type LIV wide

T620 Type LV wide

T621 Type LVI wide

T622 Type LVII wide

T623 Type LVIII wide

T624 Type LIX wide

T625 Type LX wide

T626 Type LXI wide

T627 Type LXII wide

T628 Type LXIII wide

T629 Type LXIV wide

T630 Type LXV wide

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T652 Type LXXXVII wide

T653 Type LXXXVIII wide

T654 Type LXXXIX wide

T655 Type XL wide

T656 Type XLI wide

T657 Type XLII wide

T658 Type XLIII wide

T659 Type XLIV wide

T660 Type XLV wide

T661 Type XLVI wide

T662 Type XLVII wide

T663 Type XLVIII wide

T664 Type XLIX wide

T665 Type L wide

T666 Type LI wide

T667 Type LII wide

T668 Type LIII wide

T669 Type LIV wide

T670 Type LV wide

T671 Type LVI wide

T672 Type LVII wide

T673 Type LVIII wide

T674 Type LIX wide

T675 Type LX wide

T676 Type LXI wide

T677 Type LXII wide

T678 Type LXIII wide

T679 Type LXIV wide

T680 Type LXV wide

T681 Type LXVI wide

T682 Type LXVII wide

T683 Type LXVIII wide

T684 Type LXIX wide

T685 Type LXX wide

T686 Type LXXI wide

T687 Type LXXII wide

T688 Type LXXIII wide

T689 Type LXXIV wide

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T697 Type LXXXII wide

T698 Type LXXXIII wide

T699 Type LXXXIV wide

T700 Type LXXXV wide

T701 Type LXXXVI wide

T702 Type LXXXVII wide

T703 Type LXXXVIII wide

T704 Type LXXXIX wide

T705 Type XL wide

T706 Type XLI wide

T707 Type XLII wide

T708 Type XLIII wide

T709 Type XLIV wide

T710 Type XLV wide

T711 Type XLVI wide

T712 Type XLVII wide

T713 Type XLVIII wide

T714 Type XLIX wide

T715 Type L wide

T716 Type LI wide

T717 Type LII wide

T718 Type LIII wide

T719 Type LIV wide

T720 Type LV wide

T721 Type LVI wide

T722 Type LVII wide

T723 Type LVIII wide

T724 Type LIX wide

T725 Type LX wide

T726 Type LXI wide

T727 Type LXII wide

T728 Type LXIII wide

T729 Type LXIV wide

T730 Type LXV wide

T731 Type LXVI wide

T732 Type LXVII wide

T733 Type LXVIII wide

T734 Type LXIX wide

T735 Type LXX wide

T736 Type LXXI wide

T737 Type LXXII wide

T738 Type LXXIII wide

T739 Type LXXIV wide

T740 Type LXXV wide

T741 Type LXXVI wide

T742 Type LXXVII wide

T743 Type LXXVIII wide

T744 Type LXXIX wide

T745 Type LXXX wide

T746 Type LXXXI wide

T747 Type LXXXII wide

T748 Type LXXXIII wide

T749 Type LXXXIV wide

T750 Type LXXXV wide

T751 Type LXXXVI wide

T752 Type LXXXVII wide

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T755 Type XL wide

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T765 Type L wide

T766 Type LI wide

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T770 Type LV wide

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T809 Type XLIV wide

T810 Type XLV wide

T811 Type XLVI wide

T812 Type XLVII wide

T813 Type XLVIII wide

T814 Type XLIX wide

T815 Type L wide

T816 Type LI wide

T817 Type LII wide

T818 Type LIII wide

T819 Type LIV wide

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T828 Type LXIII wide

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T865 Type L wide

T866 Type LI wide

Technical Memo

SUBJECT: Grand River and Dufree Trip Generation Forecast

TO: Deanna Bader – Schafer Construction

FROM: Alyssa Wambold, PE, PTOE and Jill Bauer, PE, PTOE

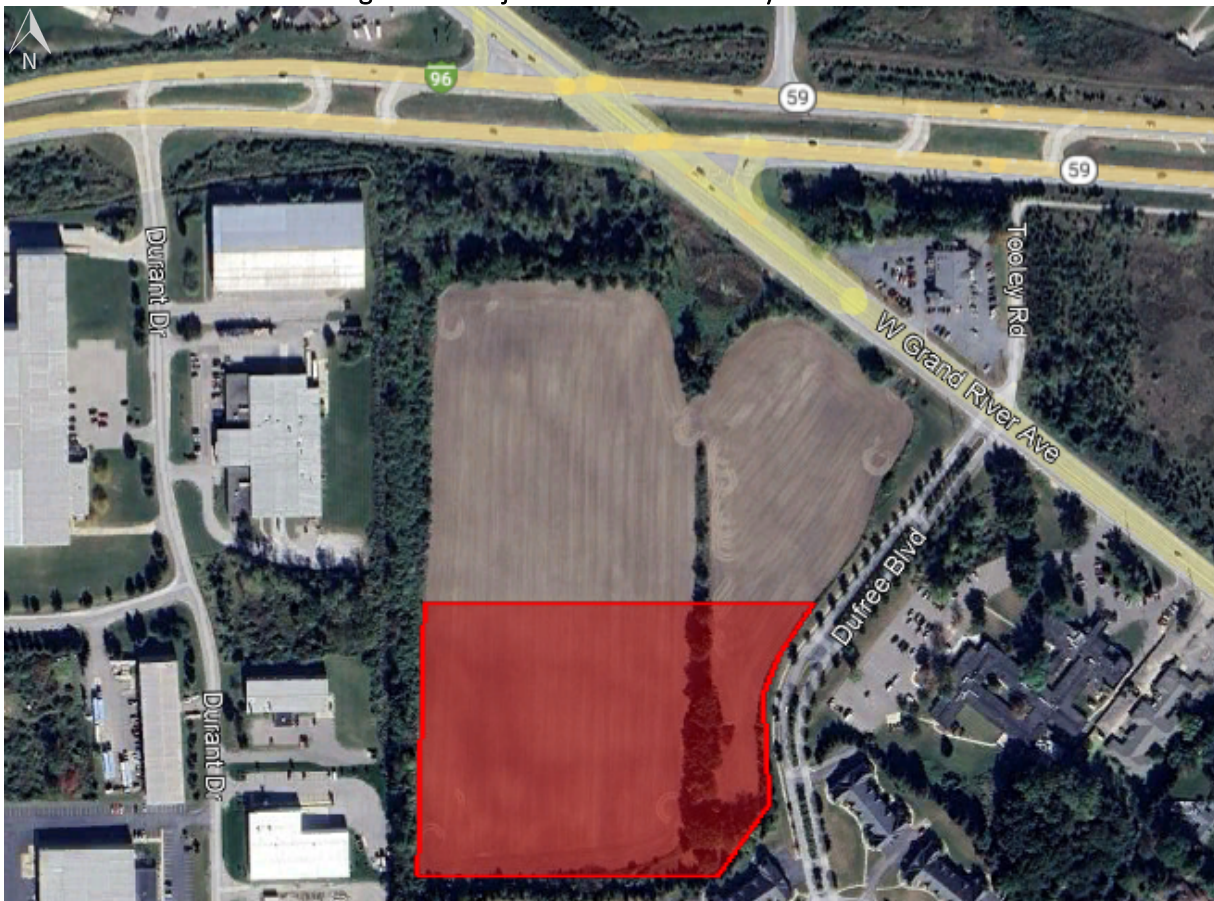
DATE: March 21, 2025

PROJECT NO.: 2500387

Introduction

On behalf of Schafer Construction, Fishbeck has completed a trip generation forecast for a proposed church to be located on Dufree Boulevard southwest of Grand River Avenue in Howell Township (Township), Livingston County, Michigan. The development will have one driveway on Dufree Boulevard. The project location is displayed in Figure 1.

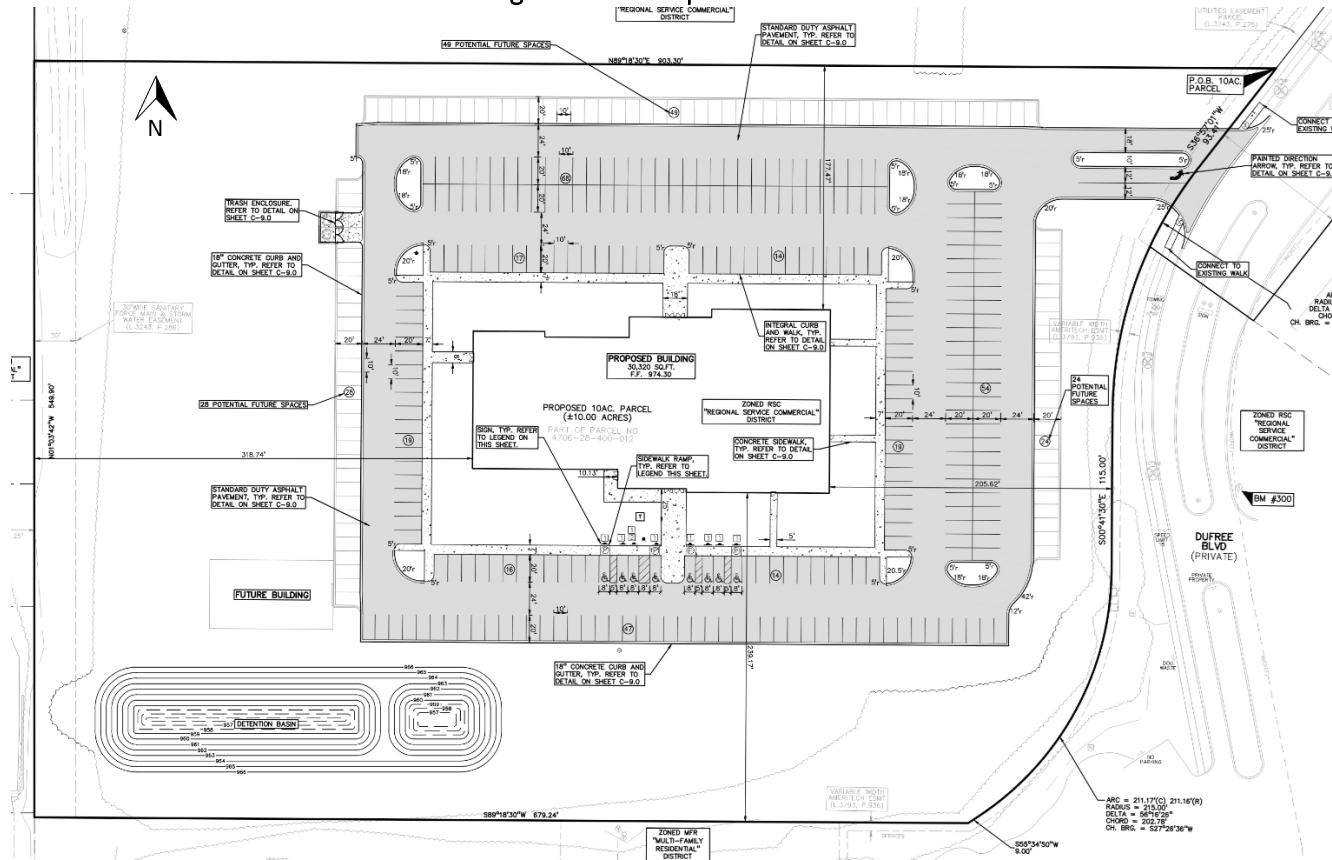
Figure 1 – Project Location and Study Network



Site Traffic Characteristics

A representation of the current conceptual site plan is provided in Figure 2.

Figure 2 – Conceptual Site Plan



Trip Generation

Using the information and methodologies specified in the *Trip Generation Manual*, Fishbeck forecast the weekday a.m. peak hour, weekday p.m. peak hour, and Sunday peak hour trips associated with the proposed development. Table 1 presents the resulting trip generation for the development. Additional information related to the trip generation forecast is attached to this memo.

Table 1 – Trip Generation for Proposed Development

Land Use	LUC	Units	a.m. Peak Hour			p.m. Peak Hour			Sunday Peak Hour			Weekday	Sunday
			In	Out	Total	In	Out	Total	In	Out	Total		
Church	560	656 seats	28	18	46	30	36	66	160	166	326	593	1,450

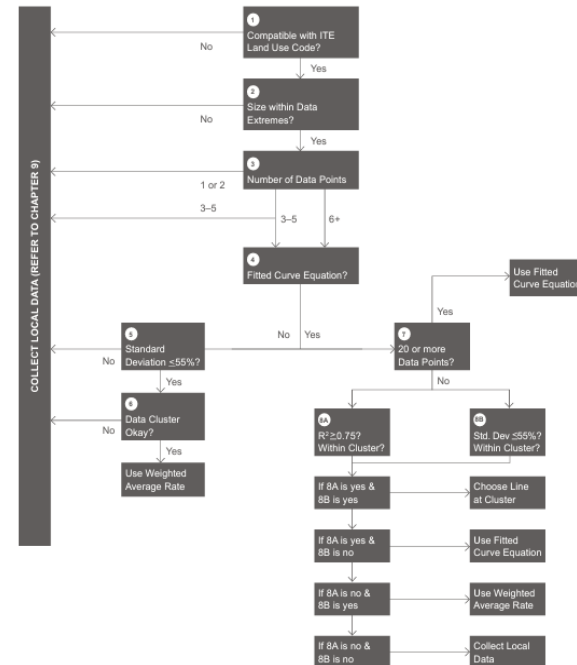
LUC Land Use Code

Attachment

ITE Land Use	Land Use Code	Units	a.m. Peak Hour			p.m. Peak Hour			Sunday Peak Hour			Weekday	Sunday
			In	Out	Total	In	Out	Total	In	Out	Total		
Church	560	656 seats	28	18	46	30	36	66	160	166	326	593	1,450

ITE Land Use	Land Use Code	Units	Time Period	Equation	R2	Rate	Studies	Notes
Church	560	656 seats	a.m. Peak	-	-	0.07	2	Use Average Rate.
			p.m. Peak	-	-	0.10	4	Use Average Rate.
			Sunday Peak	$T=0.53(X)-21.83$	0.92	0.51	14	Use Fitted Curve.
			Weekday	$T=0.93(X)-16.74$	0.85	0.90	4	Use Fitted Curve.
			Sunday	-	-	2.21	1	Use Average Rate.

Figure 4.2 Process for Selecting Average Rate or Equation in Trip Generation Manual Data





Howell Area Fire Department Fire Marshal Division

1211 W Grand River Ave Howell, MI 48843
office: 517-546-0560 fax: 517-546-6011
firemarshal@howellfire.net

DATE: April 1, 2025

TO: Jonathan Hohenstein
Howell Township
3525 Byron Rd
Howell, MI 48855

FROM: Bryan Hager- Fire Inspector

PROJECT: Site Plan Review for Agape City Church-Dufree Blvd– Howell Twp

COMMENTS: I have reviewed the above-listed site plan and find it is **satisfactory** as presented with the following comments. All of the following is required to be complete at time of Final Inspection for C of O:

1. All roadways shall meet fire department access requirements to include the following conditions:
 - a. The minimum unobstructed width shall be 20 feet.
 - b. The minimum unobstructed height shall be 13 feet.
 - c. The roadways shall be accessible at all times, even after seasonal operation, for access to all buildings (i.e. snow removal if needed).
 - d. The roadways shall be constructed so it can support up to 100,000-pound fire apparatus.
 - e. “No Parking-Fire Lane” signs shall be required along the opposite side of parking areas.
2. Building shall have approved building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall be at least 6” high and shall contrast with their background.
3. Building will need fire extinguishers of no less 2A10BC in size
4. Building will need fire suppression.
5. Building will need a monitored fire alarm system
6. A Knox Box is required for the building. Purchase can be completed on-line at www.knoxbox.com.
7. Any gates will require Knox Gate Keys or Knox Locks.
8. Due to the size of the building, suppression and alarm system plans will require a third party review of each system before fire department review. Contact the fire department for a list of approved vendors.



Howell Area Fire Department Fire Marshal Division

1211 W Grand River Ave Howell, MI 48843

office: 517-546-0560 fax: 517-546-6011

firemarshal@howellfire.net

9. Due to the proposed school system, the State of Michigan Bureau of Fire Services will also have involvement with this project. Agape will need to ensure compliance with State as well as local jurisdiction.
10. A final inspection of the buildings and site shall be performed by the fire department before Certificate of Occupancy is issued

Any changes in this site plan shall be submitted to the Howell Area Fire Department for additional approval. Please feel free to give me a call if there are any concerns. Thank you for the opportunity to review this site plan.

Howell Township Treasurer

From: Ken Recker <KRecker@livgov.com>
Sent: Wednesday, March 26, 2025 2:17 PM
To: Howell Township Treasurer; Paul Montagno; Jacqmain, Adam C.; Westmoreland, Phil A.; Bryan Hager; Greg Tatara
Cc: Paul Lewsley; Darrin Burns; Shelly Messing; Jennifer McGinty
Subject: RE: Agape City Church

Jonathan,

From a preliminary perspective we have only 1 comment on the plan set, which involves the drainage outlet.

As I mentioned at our in person meeting regarding this project, there have been historical issues with flooding of the building on Lot 1 of the Trans-West Industrial Park (1500 Durant Dr). The drainage might be better handled if some portion of it can be discharged into the Trans-West system following the water line into the outlot at the intersection of Durant and Packard.

I will check with my engineer regarding if there's available capacity in the trans-west system to redirect some portion of that flow. Otherwise additional improvements may be needed to the downstream drainageway north and west of Lot 1 in order to assure the flow can be conveyed past the Durant/M-59 intersection without a recurrence of historical issues at the building at 1500 Durant Dr.).

Kenneth E. Recker, II, P.E.
Chief Deputy Drain Commissioner
Livingston County, Michigan
Ph. 517-546-0040



MHOG Utility Department

2911 Dorr Road
Brighton, MI 48116
810-227-5225
www.mhog.org

Via e-mail

April 1, 2025

Mr. Jonathan Hohenstein
Howell Township Zoning Administrator/Treasurer
3525 Byron Road
Howell, MI 48855

Subject: Agape City Church Preliminary Site Plan Utility Review

Dear Mr. Hohenstein,

The MHOG Utility Department has reviewed the preliminary utility plan for the Agape City Church's Sewer and Water Service. We offer the following comments:

Water System

- The watermain easement should be shown as 25' in width
- It is possible that the proposed transformer will be within the expanded water main easement and may need to be relocated outside of the new easement boundaries
- The only location a proposed gate well shall be located is the new connection shown on Durant Drive. This connection should be shown as a tapping valve and sleeve in a gate well.
- The fire suppression and domestic service lines shall be shown as per the MHOG Standard Detail.
- Note that a minimum of 18-inch vertical separation will need to be shown on construction plan profiles

Sanitary Sewer

- Cleanouts on the sanitary sewer line should not be placed in paved surfaces and parking spaces as they are easily damaged and become a source of infiltration into the sanitary sewer system. Cleanouts should be placed in parking islands and green belt areas.
- A 25' sanitary sewer easement should be shown up to and surrounding proposed monitoring manhole.
- The existing sanitary sewer is 8-inch diameter, so the proposed sewer shall also be 8-inch.

Thank you for having us review the plans. Please let me know if you have any questions or require additional information.

Sincerely,

Greg Tatara
Utility Director



April 7th, 2025

Jonathan Hohenstein
Howell Township
3525 Byron Road
Howell, MI 48855

RE: Agape City Church
Parcel 4706-28-400-012
Preliminary Site Plan Review

Mr. Hohenstein,

We have received and reviewed the preliminary site plan for the proposed Agape City Church, Parcel 4706-28-400-012. The plans were prepared by PEA Group, dated 21st March 2025 and were received on 25th March 2025. Based on our review, we offer the following comments:

General

The site consists of a single parcel on Grand River Avenue, just south of Highland Road. Spanning 10 acres, it is zoned as Regional Services Commercial (RSC). The proposed use—a church—complies with the existing zoning. The property is bordered by Industrial (I) to the west, Multiple Family Residential (MFR) to the south, and RSC to the east and north.

The cover sheet includes key project details, including the project name (*Agape City Church*), the name and address of the firm preparing the plans (*PEA Group*), a vicinity map, and the preparation date (3/21/2024). The cover sheet should include the owner's name and address (Agape City Church – James Harrington).

An existing conditions topographical map is included in the plan, detailing property lines, 1-foot contour intervals, and clearly labeling adjacent roads, existing easements, structures, and pavement. A legal description of the parcel, including bearings and distances, is provided in the Topographical Survey.

The plan also includes a conceptual drawing depicting the proposed building, drive, parking areas, walkways, signage, outdoor lighting, open space uses, trash receptacle storage areas, and the stormwater detention area.

The conceptual plan references a “Future Building” and “Potential Future Spaces.” If these elements are not part of the current project, all references to them should be removed. If they are included in this project, the word “Future” should be removed from the plans.

Grading and Drainage

The site currently drains via sheet flow, primarily toward the northwest.

The proposed stormwater management plan, detailed on sheet C-4.0, directs stormwater from hard-surfaced areas into a storm sewer network, which channels it to an on-site detention pond. This pond then

April 7, 2025
2 of 4

discharges into an existing storm sewer on the west side of the property, outletting at the northwest corner of the site.

As discussed during the pre-conference meeting and outlined in the March 26, 2025, email correspondence from Ken Recker (LCDC), it is preferred that a portion of the site drainage be directed to the outlot located at the intersection of Durant and Packard, discharging into the Trans-West system. This approach is recommended to help mitigate the historical flooding issues experienced on Lot #1 (1500 Durant Drive).

Stormwater conveyance and detention calculations have been provided, demonstrating that the detention volume is sufficient to accommodate the calculated 100-year storm event. These calculations will undergo further review during the Final Site Plan Review.

Additional comments on stormwater management are deferred to the Livingston County Drain Commission (LCDC).

Sanitary Sewer

Sheet C-6.0 depicts a proposed 6" sanitary lead and a 10" sanitary sewer connecting to an existing stub from the sanitary main along Dufree Avenue. The invert and slope of the existing stub will need to be confirmed during the construction plan phase of reviews.

Site Access and Paving

The plans depict an HMA-paved, curbed parking lot with multiple curbed islands and a concrete sidewalk encircling the entire perimeter of the proposed building. The current design includes a single boulevard access drive from Dufree Boulevard.

As identified on Sheet C-3.0, Dufree Boulevard as a private roadway. Please verify the ownership and confirm that the proposed site has access to utilize this roadway.

Details for curbs, sidewalks, and HMA pavement have been provided and will undergo further evaluation during the Final Site Plan Review.

An access plan confirms that a pumper fire truck can effectively navigate the site.

During the preconference meeting on April 5, 2025, the plans presented included a second exit onto Durant Drive. Given the proposed site usage and expected traffic volumes, we strongly recommend incorporating this second entrance/ exit. Without it, significant congestion is likely on Dufree Avenue during peak hours, before and after services.

We also recommend redesigning the approach to achieve a more perpendicular alignment with Dufree Boulevard, as the current skewed configuration is not ideal given the anticipated traffic volumes during peak hours. Modifications to the existing median islands on Dufree Boulevard will be necessary to accommodate this realignment.

April 7, 2025
3 of 4

Water main

The proposed plan includes an 8" water main connecting to an existing stub at the southern property line and the existing watermain along Durant Avenue. Two fire hydrants are also proposed, with Sheet C-3.1 confirming that the entire building falls within a 250-foot radius of these hydrants.

Further review and comments on the water main are deferred to MHOG.

Parking and Landscaping

Parking lot calculations are provided on sheet C-3.0, and a landscaping plan is included on sheet L-1.0. Based on the listed building classifications, ample parking stalls are provided. Further comments on parking and landscaping are deferred to the Township Planner.

April 7, 2025
4 of 4

Recommendations

Should the Planning Commission decide to proceed with approval of this project, we recommend the following conditions be placed with approval:

1. Plans should be reviewed and approved by:
 - a. Fire Marshal
 - b. Township Planner
 - c. Livingston County Drain Commissioner
2. Remove all references to "Future Building" and "Potential Future Spaces" if they are not part of the current project. If they are to be included, remove the word "Future" from the plans.
3. Adjust stormwater discharge pattern per LCDC comments.
4. Incorporate a second entrance/exit to improve traffic flow and reduce congestion.
5. Reconfiguration approach to be perpendicular to Dufree Blvd.
6. Please Include a lighting plan for Final Site Plan Submissions.

If you have any questions or need anything further, please feel free to contact our office.

Sincerely,



Adam C. Jacqmain
Design Engineer
Phone: (989) 598-6196
adamj@spicergroup.com



Philip A. Westmoreland, P.E.
Principal
Phone: (517) 375-9449
philaw@spicergroup.com

SPICER GROUP, INC.
30300 Telegraph Rd, Suite 100
Bingham Farms, MI 48025

CC: SGI File
Jonathan Hohenstein, Howell Township Planner
Ken Recker, Livingston County Chief Deputy Drain Commissioner
Paul Montagno, Carlisle Wortman
Bryan Hager, Howell Township Fire Inspector
Deanna Bader, Schafer Construction
Lucas Driesenga, PEA Group



Carlisle | Wortman
ASSOCIATES, INC.

117 NORTH FIRST STREET SUITE 70 ANN ARBOR, MI 48104 734.662.2200 734.662.1935 FAX

Date: April 14, 2025

**Site Plan Review
For
Howell Township, Michigan**

Applicant: Schafer Construction Inc.

Project Name: Agape City Church

Plan Date: March 21, 2025

Location: Southwest corner of Highland Road (M-59) & Grand River Ave

Zoning: Regional Service Commercial (RSC)

Action Requested: Preliminary Site Plan Approval

PROJECT AND SITE DESCRIPTION

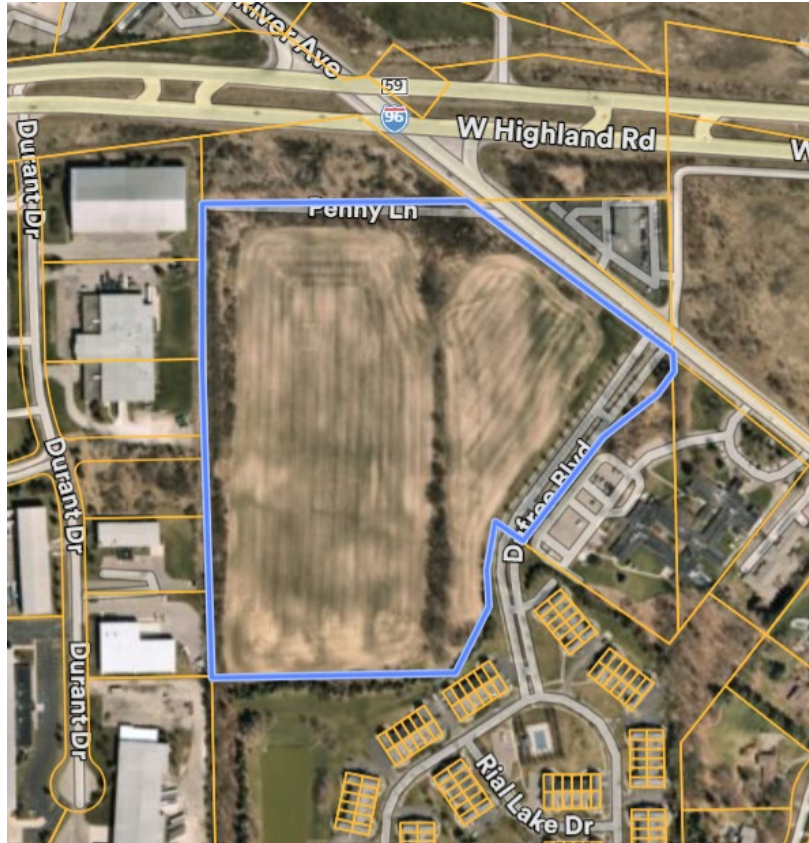
The applicant has submitted a preliminary site plan, dated March 21, 2025, proposing the construction of a 30,320 square foot worship center on parcel #4706-28-400-012. The site is zoned Regional Service Commercial (RSC). Churches are a permitted use in the RSC district. The plan accounts for 12,600 square feet of the proposed structure to be used as a worship space, 8,456 square feet for the lobby area, 3,856 square feet for preschool rooms, 3,601 square feet for elementary school rooms, and 1,807 square feet for middle school rooms. It is our understanding that these rooms are for youth activities during service. The plan also notes a future building to be constructed southwest of the proposed principal building. Additional information regarding this future building has not been provided. Any future construction on site which is not proposed in the submitted site plan will require additional review prior to development.

The subject site is noted as 10 acres on the proposed site plan. However, available parcel mapping services, including Livingston County data, designate the site as 30.19 acres. This discrepancy

Benjamin R. Carlisle, *President* John L. Enos, *Vice President* Douglas J. Lewan, *Principal*
David Scurto, *Principal* Sally M. Elmiger, *Principal* R. Donald Wortman, *Principal* Craig Strong, *Principal*
Paul Montagno, *Principal* Megan Masson-Minock, *Principal* Laura Kreps, *Principal*
Richard K. Carlisle, *Past President/Senior Principal*

should be resolved. The site is currently farmland. Most of the site is clear with vegetation along the parcel boundaries and a line of trees through the middle.

Figure 1. Aerial Image of Subject Site and Vicinity



Source: NearMap (April 6, 2024)

Items to be Addressed: Correct discrepancy in site area.

NEIGHBORING ZONING, LAND USE AND MASTER PLAN

Neighboring zoning designations are summarized in Table 1.

Table 1. Zoning, Land Use and Master Plan Designations

	Zoning	Master Plan Designations
Subject Site	RSC – Regional Service Commercial	Residential – Medium Density
North	NSC – Neighborhood Service Commercial	Commercial, Local
South	MFR – Multiple Family Residential	Residential – Medium Density
East	RSC – Regional Service Commercial	Industrial Flex Zone
West	I – Industrial	Industrial

Notably, Livingston County Airport is located approximately .2 miles north of the site, directly across Grand River Ave.

Items to be Addressed: None.

AREA, WIDTH, HEIGHT, SETBACKS

The following table summarizes the Density, Placement, and Height Regulations for the site plan associated with the use. The proposed structures appear to meet all dimensional regulations of the zoning ordinance.

Table 2. Density, Placement, and Height Regulations

	Required	Provided	Complies
Lot Area	2 Acres	10 Acres 30.19 Acres	Complies
Lot Width	200 Feet	Exceeds	Complies
Front Setback	Grand River - 50 Feet Other - 35 Feet	Grand River - Exceeds Dufree Blvd – 205 Feet	Complies
Side Setback	10 Feet Minimum (Minimum Total of Both Sides=25 Feet)	East: 41.2 Feet West: 322.9 Feet	Complies
Rear Setback	50 Feet	318 Feet	Complies
Lot Coverage	75 % Max	6.9 %	Complies
Building Height	70 Feet Max	1 Story Measurement Not Provided	More Information Needed

Items to be Addressed: Provide measured building height.

PARKING, LOADING

Per Section 18.02.G, Churches require one (1) space per three (3) seats, or for each three (3) persons permitted in such building as determined by the State Fire Marshall.

Table 3. Parking Requirements

Required	Proposed	Complies
1 space per 3 seats 656 seats/ 3 = 219 spaces	268 spaces total	Yes

The site plan currently proposes 268 parking spaces including eight (8) handicapped spaces. The plan also includes 101 potential future parking spaces for a total of 369 potentially available parking spaces.

Items to be Addressed: None.

SITE ACCESS AND CIRCULATION

According to SEMCOG's 2021 Average Annual Daily Trip (AADT) counts, the segment of Grand River Avenue fronting the site experiences approximately 11,500 daily trips. Meanwhile, the segment of Highland Road (M-59) north of the site sees between 7,000 and 15,500 trips per day. Given the developments potential for high volumes of people, these existing traffic counts, along with the expected trip generation are an important consideration for the proposal.

The applicant has provided a traffic study, completed by Fishbeck, which provides the trip generation forecasts listed in Table 4 below. No conclusions were provided related to how the additional trips might affect traffic on Dufree Boulevard or Grand River Avenue. Dufree is a private road, and Grand River is a state trunkline. We recommend getting feedback from MDOT on the proposed development.

Table 4. Traffic Study

Land Use	Units	a.m. Peak Hour			p.m. Peak Hour			Sunday Peak Hour			Weekend	Sunday
		In	Out	Total	In	Out	Total	In	Out	Total		
Church	656 seats	28	18	46	30	36	66	160	166	326	593	1,450

Proposed access to the site is through a single curb cut located north of the proposed building onto Dunfree Blvd. The site plan proposes a connection to the existing walk along Dunfree Blvd. Seven (7') foot sidewalks are also proposed along the exterior of the building with ramps into the parking lot. We would recommend providing an internal sidewalk that connects to the sidewalk along Dunfree using a crosswalk and islands through the parking lot to create a pedestrian connection to the site.

Sheet C-3.1 provides an emergency vehicle circulation plan. The site's waste receptacle is located at the northwest corner of the site and circulation routes provided indicate that there will be no interference.

We defer to Engineering and the Fire Chief for further consideration.

Items to be Addressed: 1) Provide feedback from MDOT on the increased traffic on Grand River.
2) Provide a sidewalk connection to the street with crosswalks and islands through the parking lot.

NATURAL FEATURES

The site is currently open farmland with minimal vegetation throughout. However, there appear to be mature trees along the perimeter of the site and in a row that crosses the site from north to south. Section 28.06 requires that all existing trees be labeled “To Be Removed” or “To Be Saved” on the site plan and that all existing trees 6 inches or greater in diameter, measured at four and one-half (4’ - ½”) feet above grade be shown. We would recommend that existing mature trees be incorporated in the site design to the extent possible. The site’s topography slopes from the highest point at the southeast corner of the parcel to the lowest point at the northwest corner.

Per Sheet C1.0, the proposed site does not contain wetlands or flood plains. The National Wetland Inventory, EGLE wetlands mapper, and FEMA FIRM map also confirm this.

Items to be Addressed: 1) Applicant must indicate trees 6 inches or larger per section 28.06. 2) Existing mature trees should be incorporated in the site design to the extent possible.

LANDSCAPING

The applicant has provided a landscape plan on Sheet L-1.0, compliance with the Zoning Ordinance is shown in the following tables. The plan indicates that unpaved portions of the site will be planted with irrigated lawn seed.

The natural topography of the site along Dunfree Blvd provides a three (3’) foot high berm, which should be labeled. While the width of the berm is not listed on Sheet L-1.0, it appears to be in compliance with Section 28.03.A. Additional berm requirements and deficiencies are noted in Tables 5-7 below.

Table 5. Berm Requirements

	Requirement	Complies
Berm	20 feet wide	Appears to comply
	Minimum 2 feet in height Average height of 3 feet	Complies
	2 feet flat area at top	More information needed
	1 deciduous shade or evergreen tree per 40 lineal feet of road frontage	More information needed
	1 ornamental tree per 100 lineal feet of road frontage	More information needed
	8 shrubs per 40 lineal feet of road frontage	More information needed

Table 6. Landscape Requirements

Landscaped Area	Requirement	Factor	Required	Provided	Complies
Non-Residential Parcel	1 tree per 3,000 square feet	$105,653 / 3,000 = 36$ trees	36 trees	36 trees	Complies
Parking Lot	10 square feet of landscaping per space	268 parking spaces x 10 square feet = 2,680 square feet	2,680 square feet	3,478 square feet	Complies
Medians	12 foot width 1 deciduous or evergreen tree per 30 linear feet	$85 / 30$ linear feet = 2.83 trees	3 trees	3 trees	Complies
Foundation	1 ornamental tree per 35 linear feet	$441 \text{ feet} / 35 \text{ feet} = 13$ trees	13 trees	13 trees	Complies
	5 shrubs per 35 linear feet	$441 \text{ feet} / 35 \text{ feet} \times 5 = 63$ shrubs	63 shrubs	63 shrubs	Complies
Dufree Blvd	1 deciduous or evergreen tree per 40 linear feet	$320 \text{ linear feet} / 40 \text{ linear feet} = 8$ trees	8 trees	7 existing 1 proposed	Complies
	1 ornamental tree per 100 linear feet	$320 \text{ linear feet} / 100 = 4$ trees	4 trees	4 trees	Complies
	Min. of 8 shrubs per every 40 linear feet	$320 \text{ linear feet} / 40 \text{ linear feet} \times 8 = 63$ shrubs	63 shrubs	63 shrubs	Complies

Table 7. Detention Area Requirements

	Requirement	Factor	Provided
Storm Water Detention Pond	Groundcover – sodded or seeded	-	Seeded
	1 deciduous or evergreen tree per 50 lineal feet	$695 / 50 = 14$ trees	14 trees
	10 shrubs per 50 lineal feet	$694 / 50 * 10 = 139$ shrubs	139 shrubs

To confirm compliance with berm requirements in Section 28.03.A.3, the applicant must provide specific berm dimensions, plantings, and existing trees.

Items to be Addressed: 1) Provide berm dimensions. 2) Provide required plantings outlined in Section 28.03.A.3 for berms adjacent to roadways. 3) Applicant to note if existing trees are proposed 'To Be Removed' or, 'To Be Saved.'

LIGHTING

A lighting plan has been provided for the site as a separate document. The proposed exterior lighting includes downward projecting wall scones along the building and downward projecting pole lighting throughout the parking lot.

We do not foresee the external illumination of the site adversely affecting drivers visibility along the adjacent road.

Items to be Addressed: *None.*

SIGNS

The submitted site plan does not indicate any signage proposed on the site.

If added, signs will require a separate permit from the Zoning Administrator. A sign application must be filed with the Zoning Administrator, at which time the zoning administrator will determine if the signs meet the requirements of the ordinance.

Items to be Addressed: *None.*

FLOOR PLAN AND ELEVATIONS

Floor plans have been provided on Sheet A.101.c. As previously mentioned, the proposed building is planned to utilize 12,600 square feet as a worship area, 8,456 square feet as a lobby area, 3,856 for a preschool gathering area, 3,601 square feet as an elementary gathering area, and 1,807 square feet as a middle school gathering area.

Sheet A.201 depicts elevations for the proposed building. The elevations include the planned building materials and colors. The elevations should depict the proposed building height.

Items to be Addressed: *Provide building height.*

TRASH ENCLOSURE

Two (2) trash enclosures have been proposed northwest of the building. The applicant has provided details on Sheet C-9.0. The proposed height is six (6') feet with masonry to match the principal building. The enclosure gates are planned to be cedar with stain to match the principal building architecture.

The double waste enclosure is twelve (12') feet by twenty-three and four inches (23' – 4") with an additional fifteen (15') foot long concrete apron.

Items to be Addressed: *None.*

RECOMMENDATIONS

We recommend the following items be addressed before the Planning Commission takes action on the preliminary site plan:

1. Applicant to correct discrepancy in site area.
2. Applicant to provide measured building height.
3. Applicant to provide feedback from MDOT on the increased traffic on Grand River.
4. Applicant to provide a sidewalk connection to the street with crosswalks and islands through the parking lot.
5. Applicant must indicate trees 6 inches or larger pers section 28.06.
6. Applicant to incorporate existing mature trees in the site design to the extent possible.
7. Applicant to provide berm dimensions.
8. Applicant to provide required plantings outlined in Section 28.03.A.3 for berms adjacent to roadways.
9. Applicant to note if existing trees are proposed 'To Be Removed' or, 'To Be Saved.'
10. Applicant to provide building height on dimensions.

Respectfully submitted,



CARLISLE/WORTMAN ASSOC., INC.
Paul Montagno, AICP
Principal



CARLISLE/WORTMAN ASSOC., INC.
Grayson Moore
Community Planner

#308-2503

cc: Joannathan Hohenstein, Township Zoning Administrator
Carol Makushik, Township Deputy Zoning Administrator
Adam Jacqmain, Township Engineer

HOWELL TOWNSHIP

Application for Site Plan Review

3525 Byron Road Howell, MI 48855
 Phone: 517-546-2817 ext. 108
 Email: inspector@howelltownshipmi.org

File # PC2025-06

Parcel ID #: 4706- <u>28</u> - <u>100</u> - <u>071</u>	Date <u>3/25/25</u>
Applicant Name <u>Colin Juett</u> Applicant Address <u>1560 Sable St, Commerce Township, MI 48382</u>	
Phone <u>2489782603</u> Fax _____ Email <u>colejuett@gmail.com</u>	
Property Owner Name <u>Outdoor Storage, LLC</u>	
Phone <u>2489782603</u> Fax _____ Email <u>juettstorage@gmail.com</u>	
Please list all recipients to receive information and/or reports:	
Name: <u>Colin Juett</u> Email <u>colejuett@gmail.com</u>	
Name: <u>Hannah Juett</u> Email <u>hannah.juett@gmail.com</u>	
Name: <u>Mark Juett</u> Email <u>markjuett@sbcglobal.net</u>	

Location of Property <u>4802 Hydraulic Drive, Howell Township, MI 48843</u>	Current Zoning Classification <u>Industrial Flex</u>
Existing Use <u>Vacant</u>	Proposed Use <u>Outdoor Storage</u>

Check One:

- | | |
|--|--|
| ☒ Preliminary Site Plan Review (20.06) | ☐ Final Site Plan Review (20.07) |
| ☐ Temporary Use (14.34) | ☐ Commercial/Industrial Development |
| ☐ Subdivision/Site Plan Condo | ☐ Multi-Family/Condo |
| ☐ Planned Unit Development (PUD) Type: | 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ |

Applicant needs to provide the following site plan drawings: twelve (12) full size copies, eight (8) - 11" x 17" copies, and an electronic set (either on an USB drive or provide an online link) for the preliminary site plan drawings. Drawings shall be submitted with an application for site plan review (20.06 a) thirty (30) days prior to the meeting.

The site plan is to contain the following information or the drawing submitted under the Land Use Permit can be utilized if it also contains the following information and is accurately drawn to scale:

- a. The date, north arrow and scale. The scale shall be not less than 1" = 20' for property under three (3) acres and at least 1" = 100' for those (3) acres or more.
- b. Statistical data including number of dwelling units, size of dwelling units, if any, and total gross acreage involved. In the case of a mobile home park, the size and location of each mobile home site shall be shown.
- c. The location and height of all existing and proposed structures on and within 100' of the subject property's boundary.
- d. All lot and/or property lines are to be shown and dimensioned, including building setback lines on corner lots.
- e. The location and dimensions of all existing and proposed drives, sidewalks, curb openings, signs, exterior lighting, curbing, parking areas (show dimensions of a typical parking space), unloading areas and recreation areas.
- f. Vehicular traffic and pedestrian circulation features within and without the site.
- g. The location of all proposed landscaping, fences, or walls.
- h. Size and location of existing and proposed utilities, including proposed connection to public sewer or water supply system.
- i. A location map indicating the relationship of the site to the surrounding land uses.
- j. The location and pavement width and right-of-way width of all abutting roads, streets, alleys, or easements.
- k. Show properties and respective zoning abutting the subject property.
- l. The location and size of all surface water drainage facilities.
- m. Contour intervals shall be shown at a maximum of 2' intervals, with 1' intervals preferred for topographic features of the site.

By signing below the applicant understands and acknowledges the following statements:

- a. The Planning Commission has sixty (60) days from filing date to approve or deny site plan.
- b. Approval of preliminary site plan is valid for a period of one (1) year from date of approval.
- c. A one (1) year extension may be granted upon written request of the applicant and approval by the Planning Commission.
- d. Approval of preliminary site plan shall expire one year after approval of final site plan unless zoning permit has been obtained.
- e. Approval of the final site plan expires six (6) months after approval unless a land use permit application is applied for and granted.

- f. The final site plan approval shall expire one (1) year following the date of approval unless construction has begun on the property in accordance with the plan.
- g. Applicant may appeal the Planning Commission's ruling of the final site plan to the Board of Appeals within ten (10) days of the Planning Commission's decision on all matters except use of the land, use of buildings, or structures.
- h. The Planning Commission has sixty (60) days from the date of the Planning Commission meeting at which the final site plan was received to approve or deny the final site plan.
- i. Improvements not in conformance with the final site plan shall be deemed a violation of the ordinance and be subject to the penalties of the ordinance.
- j. Sewer system and water system tap in fees, if applicable, must be paid prior to issuance of a land use permit.

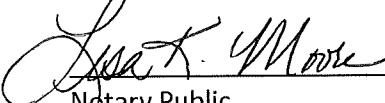
Applicant hereby deposes and says that all the above statements and information contained in this application and any statements submitted herewith or on the site plan are true and accurate.


Owner Signature

Colin Juett
Print Name

3-25-25
Date

Subscribed and sworn to before me this 25 day of MARCH, 2025.

 OAKLAND County, Michigan
Notary Public

My Commission Expires: 8-28, 20 29.

LISA K. MOORE
NOTARY PUBLIC, STATE OF MI
COUNTY OF OAKLAND
MY COMMISSION EXPIRES Aug 28, 2029
ACTING IN COUNTY OF OAKLAND

3-25-25
Howell Township
3525 Byron Road
Howell, Michigan 48855

Howell Township Planning Commission,

We are applying for preliminary site plan approval on the parcel at 4802 Hydraulic Drive. Our intended use for this property is to provide needed storage for Boats, RV's, Trucks and small contractors.

This business model evolved at our Commerce Township location over the course of twenty years. The majority of our tenants come from within a 5 mile radius of the facility, local residents. As communities tighten restrictions on storing boats, RV's and work trucks at their homes the need for this type of facility has grown.

The small local contractor currently has no place to go once they grow out of their garage and neighborhood. Our typical tenant is a plumber, brick mason, excavator, irrigation contractor or landscape contractor.

No work is performed at this facility. Typically tenants come to the site, move vehicles out of their rented space, park a personal vehicle in the rented space and drive their truck or RV away. Contractors do the same; park a personal or employee vehicle in the rented space and drive a work vehicle to job sites.

According to our Lease Agreement tenants are responsible for keeping their rental spaces clean and orderly. Some tenants have a dumpster in their unit. Typical contractor storage is trucks, trailers, tools, equipment and supplies for their work.

Lighting, cameras and a keypad controlled gate will provide a safe and secure area for tenants. Cameras are monitored and keep a record of all activities. A manager will visit the site regularly. There will be no public access.

There is a very low turnover of tenants. Our Commerce facility has tenants who have been there for over twenty years. Vacancy rates are extremely low, showing the need for this type of facility.

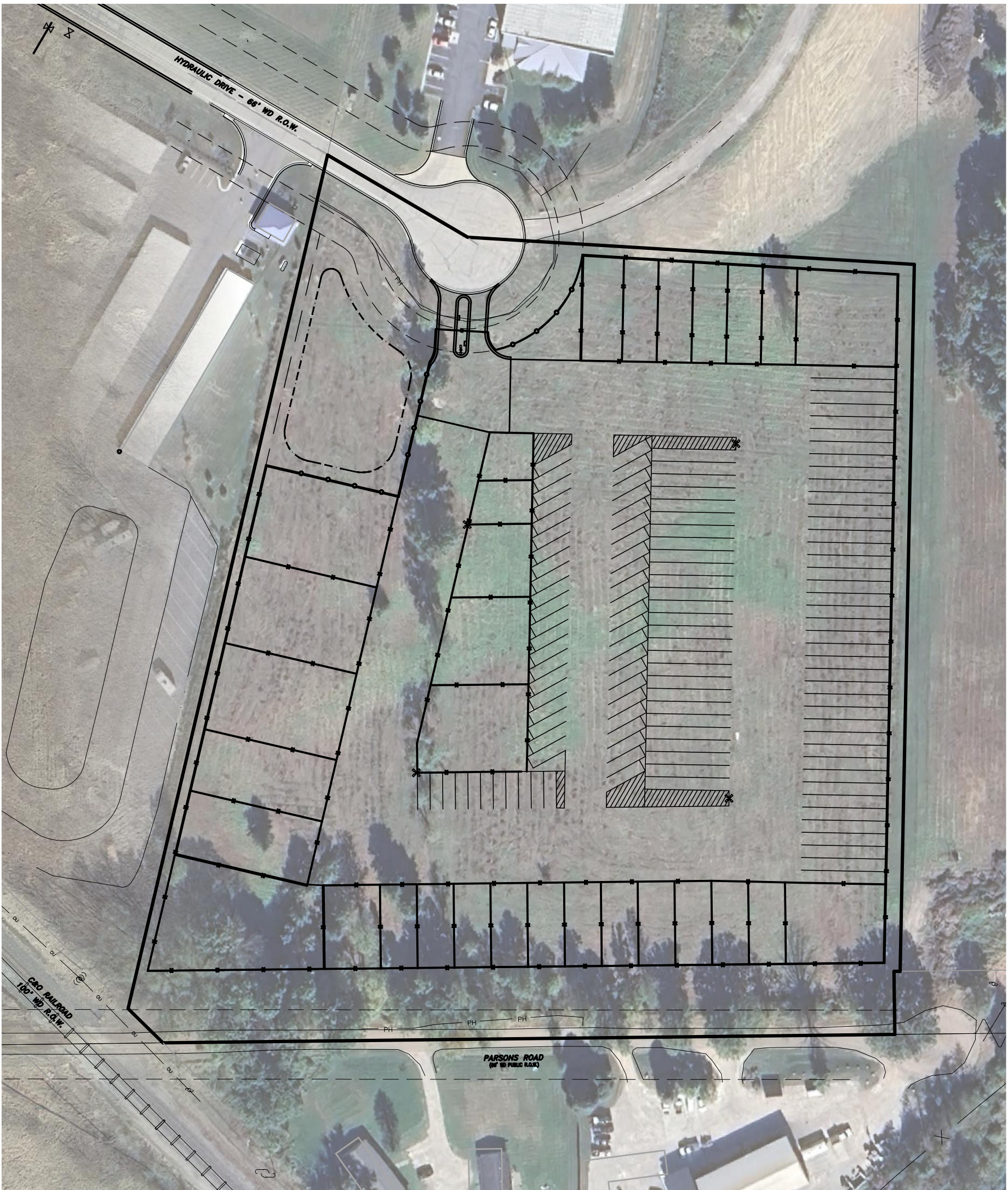
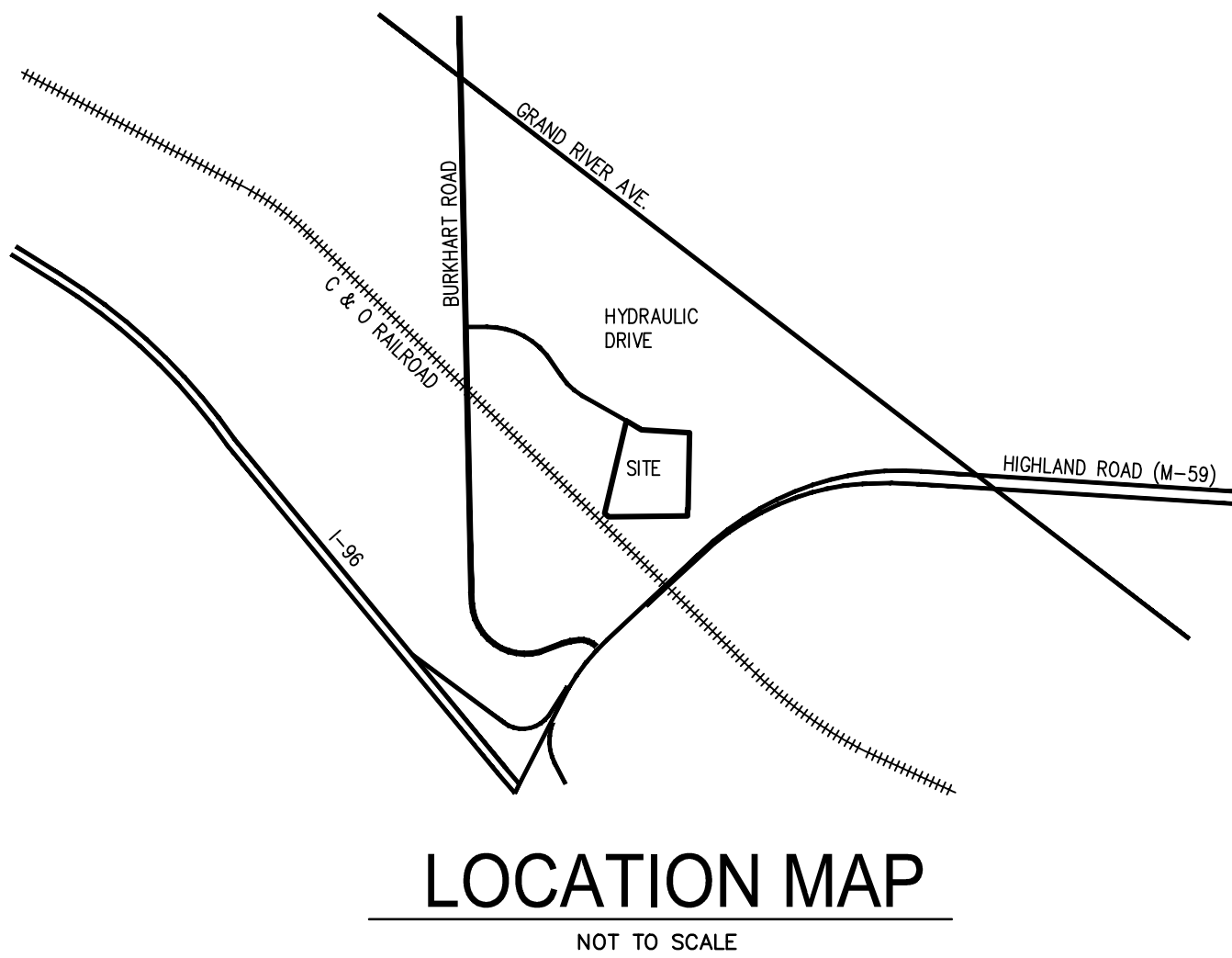
Thank you for your consideration of our intended use and time reviewing our preliminary site plan.

Sincerely,

The Juett Family
Outdoor Storage. LLC

SITE PLAN
FOR
OUTSIDE STORAGE HOWELL

A PART OF THE NORTHWEST 1/4 OF SECTION 28
T3N, R4E, HOWELL TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN



PARCEL No. 4706-28-100-071 11.50± Acres (Net 10.66± Acres without Right-of-Ways)

Commencing at the West 1/4 Corner of Section 28, Town 3 North, Range 4 East, Howell Township, Livingston County, Michigan; thence N00°55'07"W 1666.00 feet along the West line of said Section and the centerline of Burkhardt Road; thence along the centerline of a 66 foot wide permanent road easement (Hydraulic Drive) the following four courses:

- 1) N89°04'54"E 178.89 feet,
- 2) Southeasterly 645.25 feet along the arc of a 650.00 foot radius curve to the right through a central angle of 56°52'37" and having a chord bearing S62°28'48"E 619.08 feet,
- 3) S34°02'30"E 203.08 feet,
- 4) Southeasterly 178.17 feet along the arc of a 400.00 foot radius curve to the left through a central angle of 25°31'17" and having a chord bearing S46°48'08"E 176.70 feet and
- 5) S59°33'47"E 465.29 feet to the **PLACE OF BEGINNING**;

thence S59°33'47"E 154.26 feet; thence S86°31'50"E 425.43 feet; thence S1°08'59"W 672.06 feet; thence S89°20'15"W 5.80 feet; thence S00°39'45"E 60.00 feet; thence S89°20'15"W 695.67 feet; thence N45°25'07"W 46.47 feet; thence N13°09'30"E 833.18 feet to the Place of Beginning. Containing 11.50 acres, more or less. Subject to and together with a 66 foot wide permanent road easement (Hydraulic Drive) as described in Certified Land Survey #7561 recorded in Liber 4251, Page 603, Livingston County Michigan over the Northwesterly portion as occupied, also being subject to and together with a 35 foot wide private easement for storm drainage as previously described in said Certified Land Survey #7561, also subject to a 12 foot wide private easement for public utilities lying adjacent to and exterior said 66.00 foot wide road easement, also being subject to easements and restrictions of record, if any.

AERIAL PHOTOGRAPH
SCALE: 1in. = 100ft.

AERIAL PHOTOGRAPHY BY:
Google maps

Aerial photographic underlay is an unrectified image and is orientated to the engineering line work within reasonable accuracy and precision, and may not accurately depict current site conditions.

SHEET INDEX

- EX EXISTING CONDITIONS & DEMOLITION PLAN
- SP SITE PLAN
- UT1 UTILITY PLAN
- UT2 CONTROL STRUCTURE, DETAILS & CALCULATIONS
- GR GRADING PLAN
- WS WATER SHED PLAN
- DT1 PAVING & SITE NOTES & DETAILS
- DT2 STORM SEWER NOTES & DETAIL

LANDSCAPE PLAN



ENGINEER/SURVEYOR

DESINE INC.
2183 PLESS DRIVE
BRIGHTON, MICHIGAN 48114
PHONE: (810) 227-9533

OWNER / DEVELOPER

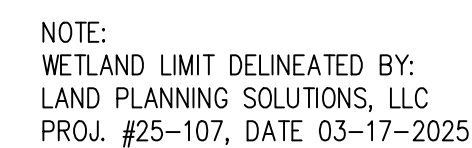
OUTSIDE STORAGE HOWELL
1560 SABLE
COMMERCE TOWNSHIP, MICHIGAN 48382



ISSUED	SCALE: AS NOTED
	PROJECT No.: 244802
	DWG NAME: 4802 COV
	PRINT: MAR. 25, 2025

-
- The demolition specifications of the Local Municipality are a part of this work. Refer to the General Notes on the project plans for additional requirements.
- Contractor shall contact the 811 Underground Public Utility Locating System or other appropriate local underground utility locating Agency, a minimum of three (3) working days prior to performing demolition work. Existing utility information on the project plans may be from information disclosed to this firm by the Utility Companies, Local, County or State Agencies, and/or various other sources. No guarantee is given as to the completeness or accuracy thereof. Prior to construction, locations and depths of all existing utilities (in possible conflict with the proposed improvements) shall be verified in the field.
- Contractor shall contact the appropriate Agencies to coordinate disconnect of the electric, gas, phone, cable and other public utilities as necessary prior to performing demolition work.
- Contractor shall contact the appropriate Agencies to coordinate removal and/or relocation of any underground and/or overhead public utility lines as necessary prior to performing demolition work.
- Contractor shall recycle and/or dispose of all demolition material and debris in accordance with the appropriate Local, County, State and Federal regulations.
- All bituminous and concrete pavement that is to be removed shall be saw cut at the limits of removal to provide for a clean straight edge for future abutment.
- All existing irrigation lines that are to be removed shall be terminated at the limits of demolition or as necessary to allow for construction of the proposed site improvements. Ends of pipe shall be capped and the location of marked for future connection.
- All existing water main and sanitary sewer that is to be removed shall be terminated at the limits of demolition or as indicated on the project plans. Temporary plugs shall be installed in the ends of pipe in accordance with the appropriate Agency and the locations of marked for future connection. Permanent plugs shall be installed in the ends of pipe in accordance with the appropriate Agency. The Contractor shall record the location of all permanent plugs and provide the location information to the appropriate Agency.
- All existing storm sewer that is to be removed shall be terminated at the limits of demolition or as indicated on the project plans. Temporary plugs shall be installed in the ends of pipe in accordance with the appropriate Agency and the locations of marked for future connection. Permanent bulkheads shall be installed in the ends of pipe and/or openings in terminating structures in accordance with the appropriate Agency. The Contractor shall record the location of all permanent bulkheads and provide the location information to the appropriate Agency.
- All existing light sources to be removed shall have their power cables removed up to the power source or properly terminated for future connection at the limits of demolition or as necessary to allow for construction of the proposed site improvements. Removal and termination of power cables shall be performed in accordance with local electric codes.
- All existing utility meters that are to be removed shall be properly removed to allow for reuse. Any existing utility meters that are not to be reused as a part of this project shall be returned to the appropriate Agency.
- All trenches and/or excavations resulting from the demolition of underground utilities, building foundations, etc., that are located within the 10' influence zone of proposed structures, paved areas and/or other areas subject to vehicular traffic shall be backfilled with MDOT Class II granular material (or better) to the proposed subgrade elevation. Backfill shall be placed using the controlled density method (12" maximum lifts, compacted to 95% maximum unit weight, Modified Proctor).

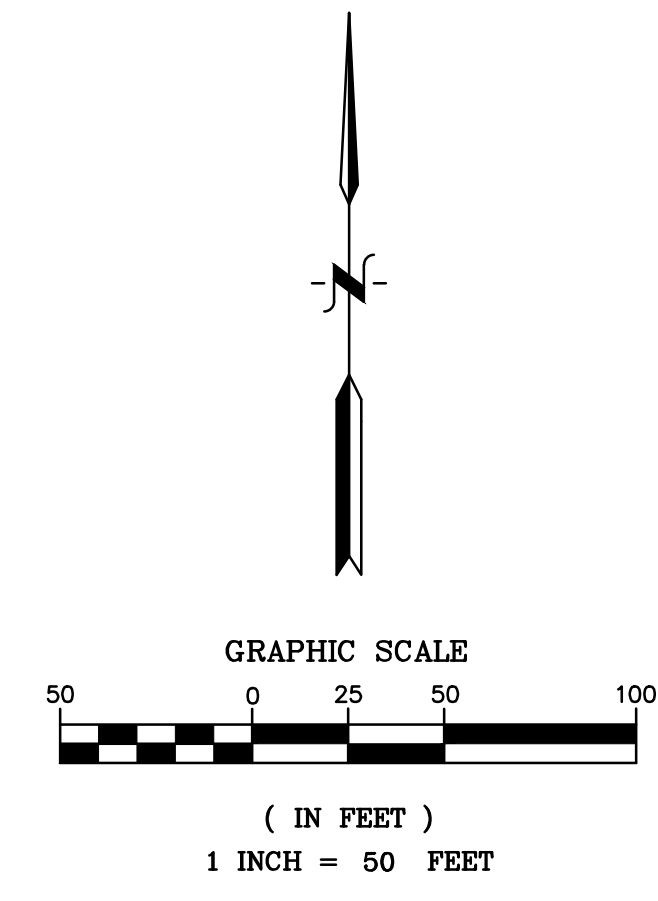
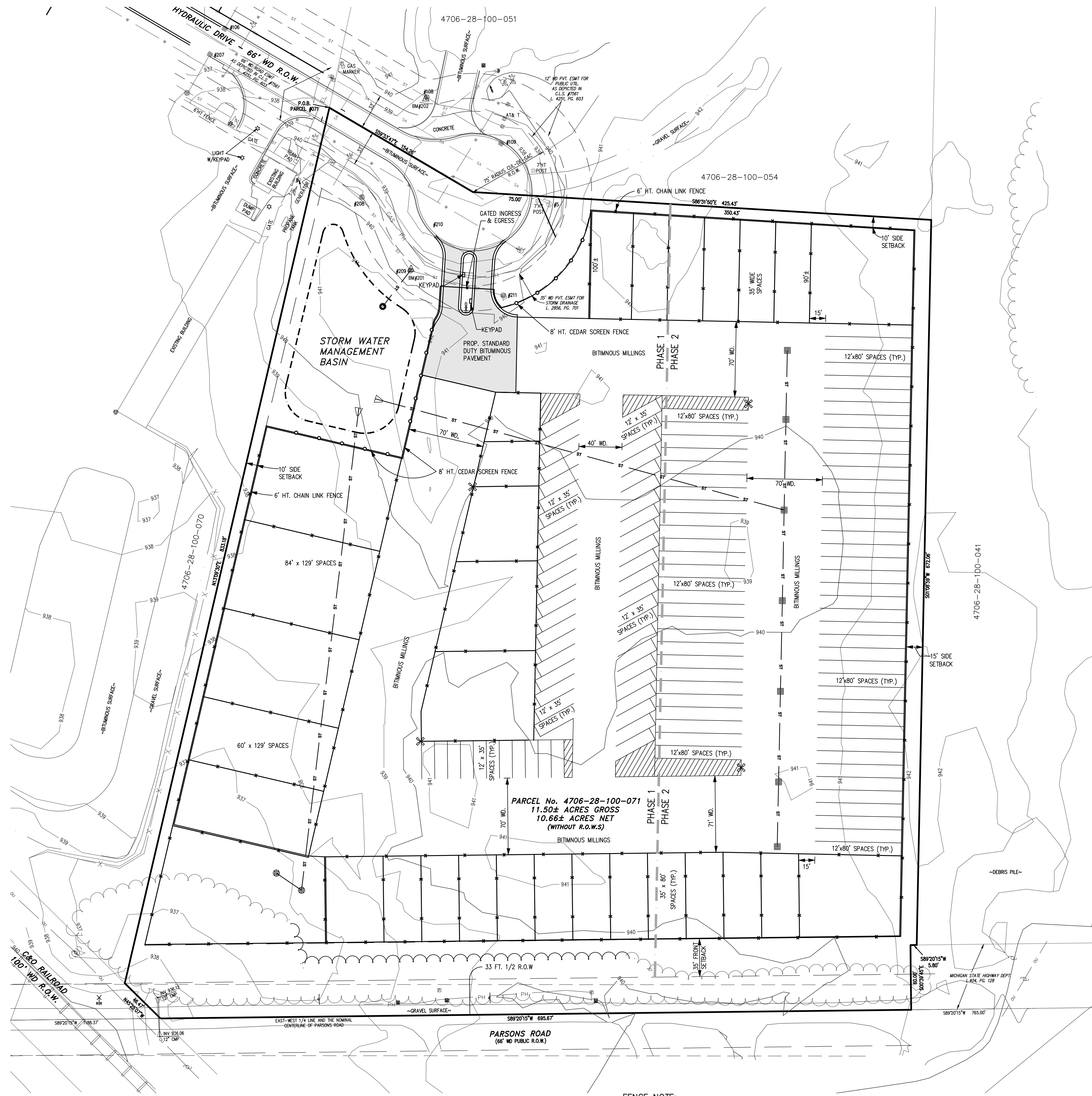
YARD BASIN # 211
NORTH RIM 939.46
NORTH WEST 24" HDPE 9.14



(810) 227-9533
CIVIL ENGINEERS
LAND SURVEYORS
2183 PLESS DRIVE
BRIGHTON, MICHIGAN 48114

CLIENT:	SCALE: 1in.= 50ft.
OUTSIDE STORAGE HOWELL	PROJECT No.: 244802
1560 SABLE	DWG NAME: 4802 EX
COMMERCE TOWNSHIP, MICHIGAN 48382	ISSUED: MAR. 25, 2025
248-217-8308	

EX



- LEGEND**
- PARCEL BOUNDARY
 - RIGHT OF WAY LINE (R.O.W.)
 - EASEMENT LINE
 - BUILDING SETBACK LINE
 - EX. CURB & GUTTER
 - EX. WATER LINE
 - EX. WATER VALVE
 - EX. HYDRANT
 - EX. SANITARY SEWER LINE
 - EX. SANITARY MANHOLE
 - EX. STORM SEWER
 - EX. CATCHBASIN
 - EX. TREELINE
 - PRO. TREELINE
 - PRO. CONCRETE CURB
 - PRO. EDGE OF PAVEMENT
 - PRO. STORM SEWER
 - PRO. CATCHBASIN
 - PRO. FENCE
 - PRO. LIGHT POLES
 - EX. 1' CONTOUR
 - EX. 5' CONTOUR

SITE CHARACTERISTICS	
PARCEL ID:	4706-28-100-071
PARCEL ZONING:	I - INDUSTRIAL
PROPOSED USE:	OUTDOOR STORAGE
PARCEL AREA:	11.5± AC.
COVERAGE:	74.9%
SETBACKS:	
FRONT:	35'
SIDE:	10'
REAR:	35'

BENCHMARK
DATUM BASED ON NGS OPUS SOLUTION REPORT,
DATED FEBRUARY 11, 2025 AT 3:07PM

BENCHMARK #201
"X" ON NORTH SIDE OF CASTING OF YARD BASIN
#209, LOCATED NEAR MID-POINT OF PARCEL ON
SOUTH SIDE OF HYDRAULIC DRIVE.
ELEVATION = 939.60 (NAVD 88)

BENCHMARK #202
"X" ON SOUTH SIDE OF CASTING OF YARD BASIN
#108, LOCATED NEAR THE SIDE SIDE OF PARCEL
#100-051 ON NORTH SIDE OF HYDRAULIC DRIVE.
ELEVATION = 938.71 (NAVD 88)

FENCE NOTE:
PERIMETER FENCE SHALL BE CONSTRUCTED AS
A PART OF PHASE 1 CONSTRUCTION. INTERIOR
FENCING SHALL BE CONSTRUCTED AS NEEDED.

DESIGN-S	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG						
CHECK: WMP						

OUTSIDE STORAGE HOWELL

PRELIMINARY SITE PLAN

CLIENT:
OUTSIDE STORAGE HOWELL
1560 SABLE
COMMERCE TOWNSHIP, MICHIGAN 48382
248-217-8308

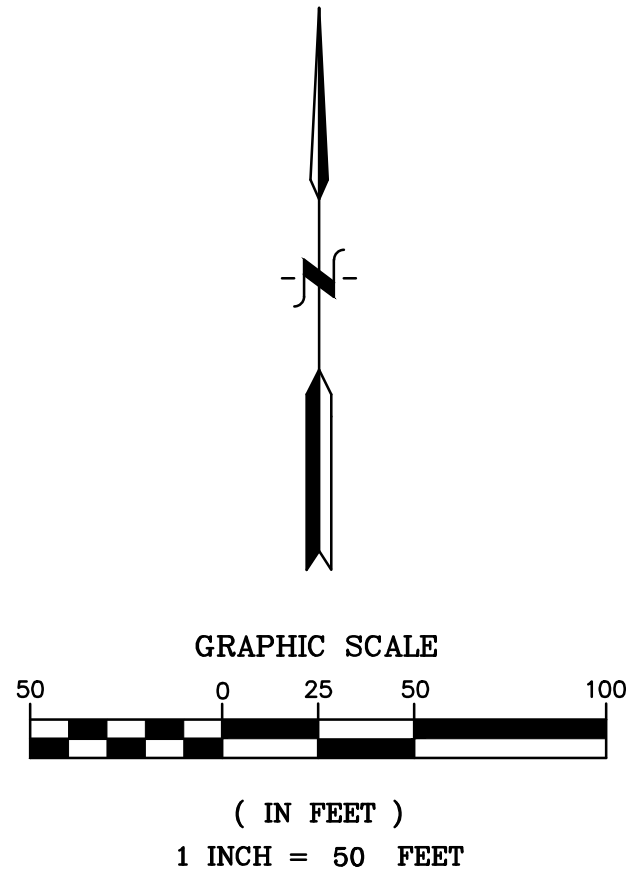
SCALE: 1in. = 50ft.
PROJECT No.: 244802
DWG NAME: 4802 SP
ISSUED: MAR. 20, 2025

SP

811
Know what's below.
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3 WORKING DAYS
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(TOLL FREE)
OR VISIT CALL811.COM

DESIGN INC.
(810) 227-9533
CIVIL ENGINEERS
LAND SURVEYORS
2183 PLESS DRIVE
BRIGHTON, MICHIGAN 48114



- LEGEND
- PARCEL BOUNDARY
 - RIGHT OF WAY LINE (R.O.W.)
 - EASEMENT LINE
 - BUILDING SETBACK LINE
 - EX. CURB & GUTTER
 - EX. WATER LINE
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 - PRO. TREELINE
 - PROP. CONCRETE CURB
 - PROP. EDGE OF PAVEMENT
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 - PROP. CATCHBASIN
 - PROP. FENCE
 - PROP. LIGHT POLES
 - EX. 1' CONTOUR
 - EX. 5' CONTOUR

BENCHMARK

DATUM BASED ON NGS OPUS SOLUTION REPORT,
DATED FEBRUARY 11, 2025 AT 3:07PM

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ELEVATION = 938.71 (NAVD 88)

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CIVIL ENGINEERS
LAND SURVEYORS
2183 PLESS DRIVE
BRIGHTON, MICHIGAN 48114

EXISTING
STRUCTURE INVENTORY

SANITARY SEWER MANHOLE #5
NORTH RIM 938.98
NORTH WEST LF=8'10.63

CATCH BASIN # 106
SQUARE CATCH BASIN 935.98
NORTH EAST 12" HDPE 3.09

YARD BASIN # 108
NORTH RIM 938.81
NORTH WEST 24" HDPE 8.51
SOUTH EAST 12" HDPE 9.08

CATCH BASIN # 109
SQUARE CATCH BASIN 936.91
NORTH WEST 12" HDPE 5.52

CATCH BASIN # 207
SQUARE CATCH BASIN 936.09
SOUTH WEST 12" HDPE 3.18

YARD BASIN # 208
NORTH RIM 939.39
NORTH WEST 30" HDPE 10.34
SOUTH EAST 30" HDPE 9.99
NORTH EAST 12" HDPE 9.94

YARD BASIN # 209
NORTH RIM 939.66
NORTH WEST 30" HDPE 10.09
SOUTH EAST 24" HDPE 9.99
NORTH EAST 12" HDPE 9.94

CATCH BASIN # 210
*NOT FIELD LOCATED

YARD BASIN # 211
NORTH RIM 939.46
NORTH WEST 24" HDPE 9.14

OUTSIDE STORAGE
HOWELL

UTILITY PLAN

CLIENT:

OUTSIDE STORAGE HOWELL
1560 SABLE
COMMERCE TOWNSHIP, MICHIGAN 48382
248-217-8308

SCALE:

1 in. = 50 ft.

PROJECT No.: 244802
DWG NAME: 4802 UT
ISSUED: MAR. 25, 2025

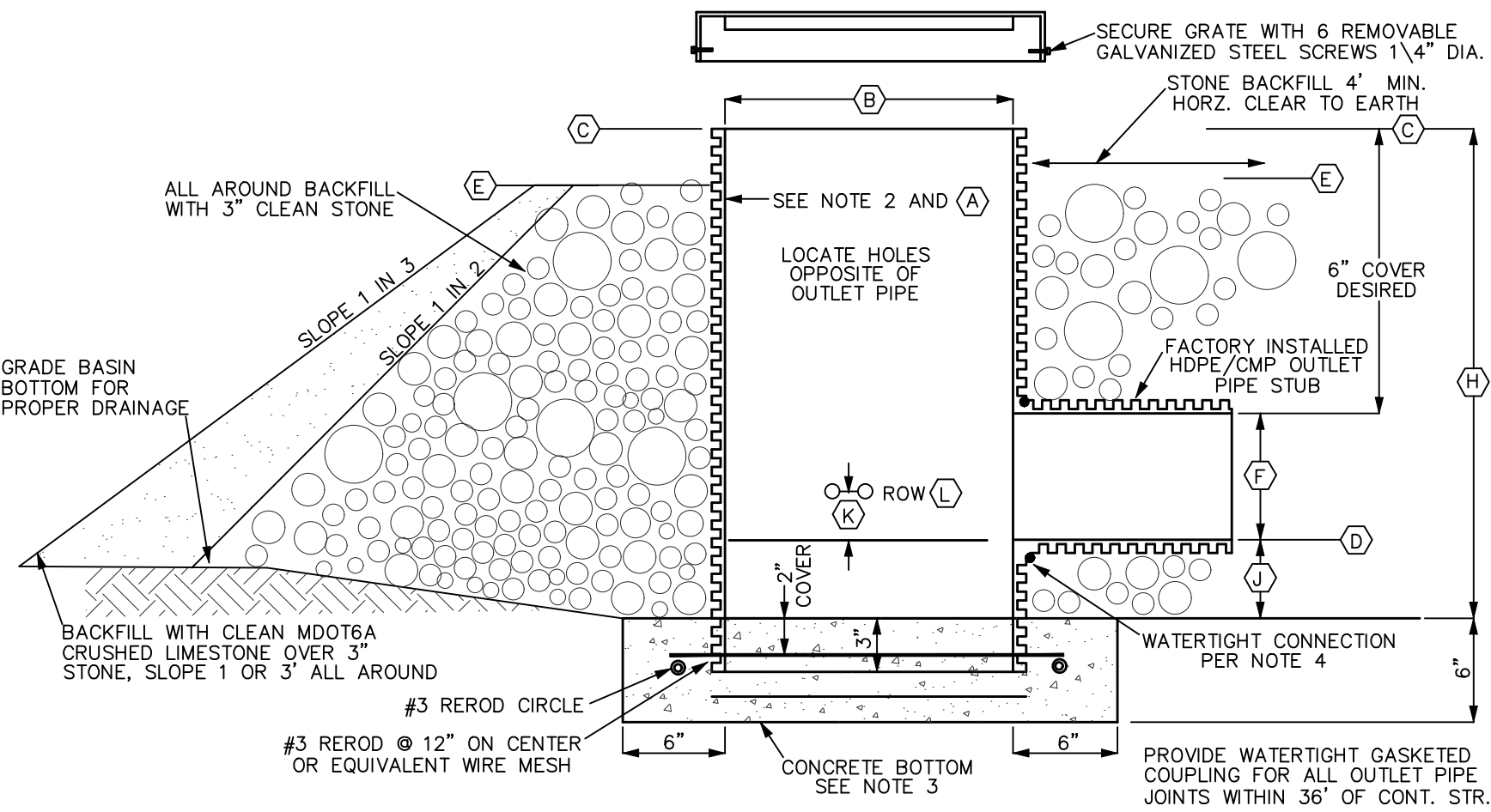
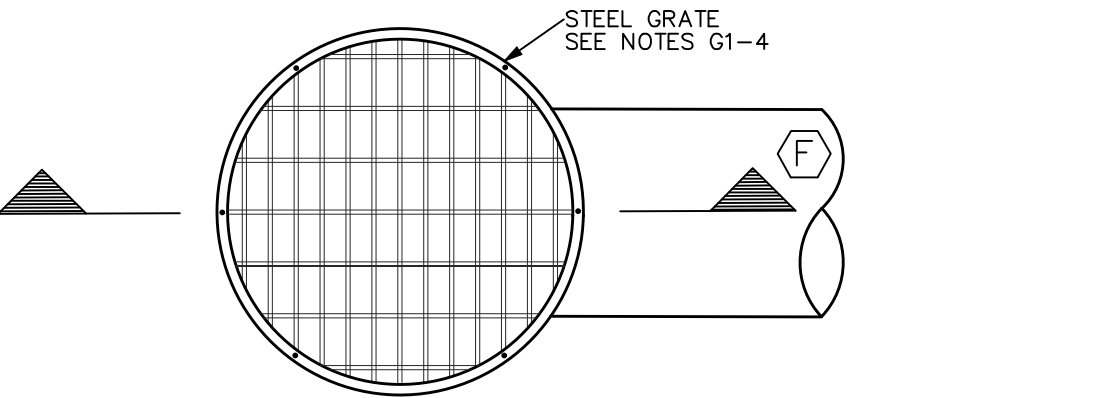
UT1

Design Criteria:		10 year event (I = 175/t + 25)				RCP n= 0.013		HDPE n= 0.011																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						</
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BASIN L	
FOREBAY CONTROL STRUCTURE CALCULATIONS	
Tributary Area :	A = 9.20 Acres
Compound Runoff Coefficient :	C = 0.84
Orifice Flow Coefficient :	c = 0.60
Allowable Outflow Rate :	Qa = 0.31 CFS
Forebay Storage Volume =	Vf = 34,059 CF
Low Water Level :	LWL = 932.00
Forebay Storage Elevation :	Xf = 935.74
Forebay Outlet Control:	
Of =	Vf * (1 / 24 hrs) * (1 / 3600 sec) = 0.3942 CFS
Hf =	Xf - LWL = 3.69 FT
Af =	Of / (c * SQRT(2 * 32.2 * Hf)) = 0.0426 SF
D =	Orifice Diameter 1.250 inch dia.
Nf =	Af / D 5.0 Orifices
Use Nf =	5 Orifices at Centerline Elevation = 932.05

PROPOSED FOREBAY VOLUME			
POND DEPTH (FT)	ELEV.	FOREBAY CONTOUR AREA (SF)	FOREBAY BASIN VOLUME (CF)
0	929.00	1,830	
1.0	930.00	2,861	
2.0	931.00	4,128	
3.0	932.00	5,563	0
4.0	933.00	7,250	6,388
5.0	934.00	9,154	14,571
6.0	935.00	11,322	24,790
7.0	936.00	13,674	37,270
8.0	937.00	16,229	52,203

Forebay Storage Elevation Calculation:			
	ELEV.	VOLUME	VOLUME REQ.
Lower	935.00	24,790	34,059
Higher	936.00	37,270	935.74



BASIN CONTROL STRUCTURE (CS)
NOT TO SCALE

CONTROL STRUCTURE NOTES:
1. Contractor shall locate control structure, outlet pipe with rip rap as shown on plan. Control structure shall be factory built by:
Larson Co. 888-952-7755 for CMP or HDPE
L.T. Elsey 800-426-3604 for HDPE
Jenson Supply 810-648-3000 for CMP
St. Regis Culverts 517-543-2313 for CMP
Or Equal

2. Structure material type is shown in key (K):
- CMP shall be AASHTO M36 with corrosion resistant coating
- RCP shall be ASTM C478 precast concrete with gasketed joints
- HDPE shall be AASHTO M294 Type S, corrugated and smooth lined
Minimum structure diameter is 24"; use 48" diameter when height (D) less sump (L) exceeds 4 feet.

3. A 3000 PSI air entrained concrete base is required. The concrete base shall be secured to the control structure with a full strength watertight connection, equivalent to drawing.

4. Provide watertight connection between outlet pipe and control structure as follows:

A. For CMP outlet pipe from a CMP structure: factory connect a CMP pipe stub with full strength welds all around and paint coated. Alternately, provide a bolted saddle with watertight gasket by St. Regis or equal.

B. For RCP C-76 outlet pipe OR HDPE outlet pipe/finger drains from a CMP structure: seal outside joint with 18" thick 2500 PSI cast-in-place concrete donut all around. Seal inside joint with a 2" bead of bitumastic tar.

C. For HDPE outlet pipe from a HDPE structure: seal both outside and inside joints with a full strength PE weld all around.

5. As part of control structure installation, wrap outlet holes with temporary filter fabric per Note 8 on Erosion Control Sheet SE1. Then provide a temporary stone backfill as needed to stabilize control structure during the work.

6. Remove temporary stone and install permanent stone around control structure after all the following: removal of sediment from basin, hard surfacing of roads, and establishment of grass turf around basin. Wrap outside of stone with nonwoven geotextile fabric, 4 oz/syd polypropylene.

7. When directed by Engineer or Agency, Contractor shall temporarily plug outlet holes or restrictor during construction. Remove plugs or sand bags upon completion of project, incidental to the work.

8. Create a berm over outlet pipe as needed to provide 30" of cover.

GRATE NOTES:
G-1 Provide a factory made grate sized to fit over the outside edge of the control structure. Weld all joints full strength per current AWS code. Factory coat grating with a bitumastic paint. By Best Window Guard Co., Detroit, 315-638-4627 or equivalent.

G-2 For 30" diameter and larger grates:

A. 0.75" x 0.25" steel bars at 2" or less on center with perpendicular 0.25" diameter stringers at 4" on center.

B. Alternate: Make a grid with 0.5" round steel bars at 2" on center each way

C. For RCP structures, use cast iron casting, MDO cover E, unless noted otherwise on plan.

D. Do not use rerod.

G-3 For 27" diameter and smaller grates:
Use heavy duty expanded metal grating, "PHEMG", with 0.25" nominal thick steel.

G-4 Wrap all grates with a 0.25" x 3" bent steel bar, sized to fit over outside of control structure.

DETENTION VOLUME CALCULATION	
------------------------------	--

Tributary Area (A) = 9.20 Acres
Compound Runoff Coefficient (C) = 0.84

Water Quality Control Volume: (3,630)(A)(C) = 28,053 cf

Channel Protection Volume: (4,719)(A)(C) = 36,468 cf

Extended Detention Volume: (6,897)(A)(C) = 53,300 cf

Forebay Volume:
Downstream Infiltration Provided = V_{wi} = 28,053 cf

100 Year Storm Inlet Rate calculation:

T_c = 18.4 (from storm sewer calculations)

Q_{100yr} = 44.30 cfs

100 Year Storm Outlet Rate calculation:

Allowed Outlet Rate is lesser of Q_{out} or restricted release rate for the drain

County Drain Restricted Rate (0.20 cfs/acre) = 1.84 cfs

Variable Release Rate = Q_{var} = 5.96 cfs

ALLOWABLE 100 YEAR OUTLET RATE = Q_{all} = 1.84 cfs

100 Year Required Storm Detention Volume calculation:

Storage Curve Factor = R = 0.68

100 Year Storage Volume In = V_{100yr} = 146,716.08 cf

Calculated 100 Year Storage Volume = V_{100cal} = 100,232 cf

Portion of Community Detention Storage Volume:
 $[10.66 \text{ Ac.} / 7.67 \text{ Ac.}] \times 295,917 \text{ cu ft.} = 66,173 \text{ cf}$

REQUIRED VOLUME: $V_{100det} > V_{ed}$ = 34,059 cf

Extended Detention Discharge Rate: $V_{ed} / 172,800 = 0.308 \text{ cfs}$

KEY	
CONTROL STRUCTURE DESIGNATION	CS-299
A MATERIAL TYPE, SEE NOTE 2	CMP
B STRUCTURE INSIDE DIAMETER	4' DIA
C RIM ELEVATION WITHOUT GRATE	935.74
D INVERT ELEVATION OUTLET PIPE	932.00
E TOP OF STONE ELEVATION	935.50
F OUTLET PIPE DIAMETER	12"
G OUTLET PIPE MATERIAL	RCP
H STRUCTURE HEIGHT WITHOUT GRATE	5.74'
J SUMP HEIGHT	2'
K CENTERLINE HEIGHT OF BOTTOM ROW HOLES MEASURED ABOVE "D"	932.05
L NUMBER OF HOLES IN BOTTOM ROW	5

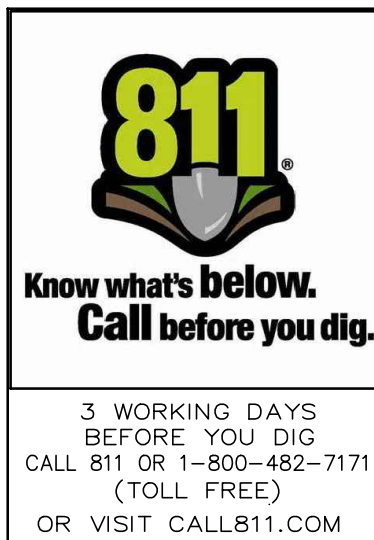
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DRAFT: JHG						
CHECK: WMP						

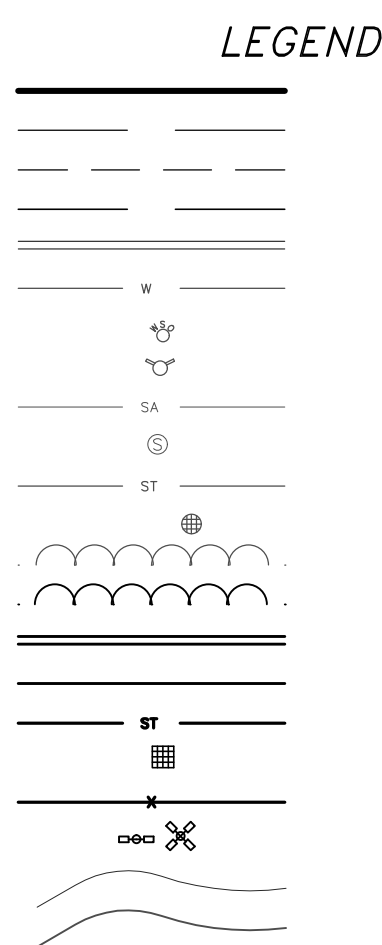
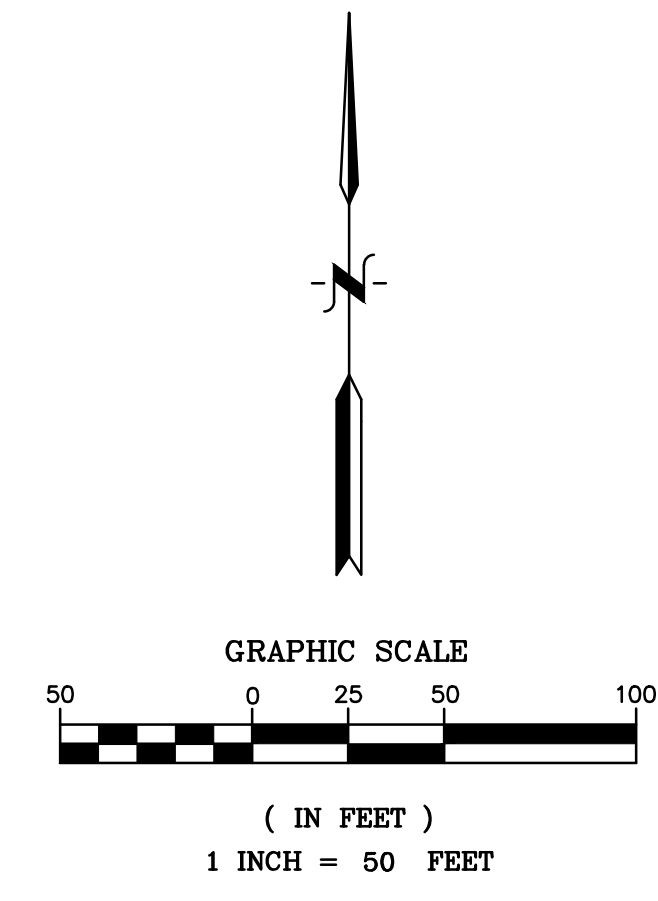
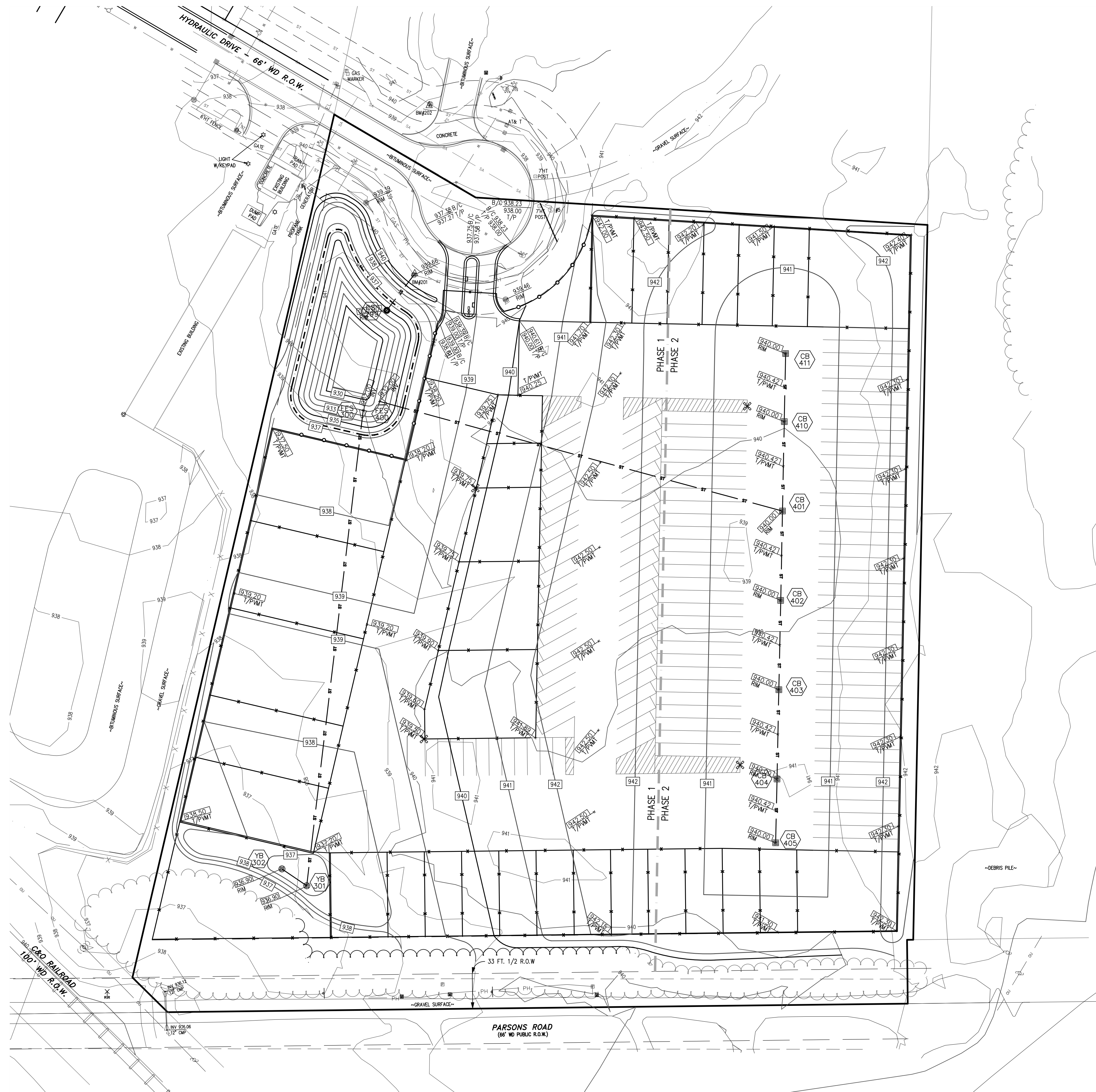
OUTSIDE STORAGE
HOWELL

CONTROL STRUCTURE
NOTES & CALCULATIONS

CLIENT:	SCALE: NONE
OUTSIDE STORAGE HOWELL	PROJECT No.: 244802
1560 SABLE	DWG NAME: 4802 UT
COMMERCE TOWNSHIP, MICHIGAN 48382	ISSUED: MAR. 25, 2025
248-217-8308	

UT2





BENCHMARK
DATUM BASED ON NGS OPUS SOLUTION REPORT,
DATED FEBRUARY 11, 2025 AT 3:07PM

BENCHMARK #201
"X" ON NORTH SIDE OF CASTING OF YARD BASIN
#209, LOCATED NEAR MID-POINT OF PARCEL ON
SOUTH SIDE OF HYDRAULIC DRIVE.
ELEVATION = 939.60 (NAVD 88)

BENCHMARK #202
"X" ON SOUTH SIDE OF CASTING OF YARD BASIN
#108, LOCATED NEAR THE SIDE SIDE OF PARCEL
#100-051 ON NORTH SIDE OF HYDRAULIC DRIVE.
ELEVATION = 938.71 (NAVD 88)



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LAND SURVEYORS
2183 PLESS DRIVE
BRIGHTON, MICHIGAN 48114

DESIGN: S DRAFT: JHG CHECK: WMP	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION	OUTSIDE STORAGE HOWELL	GRADING PLAN	CLIENT: OUTSIDE STORAGE HOWELL 1560 SABLE COMMERCE TOWNSHIP, MICHIGAN 48382 248-217-8308	SCALE: 1 in. = 50 ft. PROJECT No.: 244802 DWG NAME: 4802 GR ISSUED: MAR. 25, 2025	GR

EXISTING
STRUCTURE INVENTORY

SANITARY SEWER MANHOLE #5
NORTH RIM 938.98
NORTH WEST12" HDPE 3.09

CATCH BASIN # 106
SQUARE CATCH BASIN 935.98
NORTH EAST12" HDPE 3.09

YARD BASIN # 108
NORTH RIM 938.81
NORTH WEST24" HDPE 8.51
SOUTH EAST 12" HDPE 9.08

CATCH BASIN # 109
SQUARE CATCH BASIN 936.91
NORTH WEST12" HDPE 5.52

CATCH BASIN # 207
SQUARE CATCH BASIN 936.09
SOUTH WEST12" HDPE 3.18

YARD BASIN # 208
NORTH RIM 939.39
NORTH WEST30" HDPE 10.34
SOUTH EAST 30" HDPE 9.14

YARD BASIN # 209
NORTH RIM 939.66
NORTH WEST30" HDPE 10.09
SOUTH EAST24" HDPE 9.99
NORTH EAST12" HDPE 9.94

CATCH BASIN # 210
*NOT FIELD LOCATED

YARD BASIN # 211
NORTH RIM 939.46
NORTH WEST24" HDPE 9.14

DESIGN: S
DRAFT: JHG
CHECK: WMP

REVISION #	DATE	REVISION-DESCRIPTION

REVISION #	DATE	REVISION-DESCRIPTION

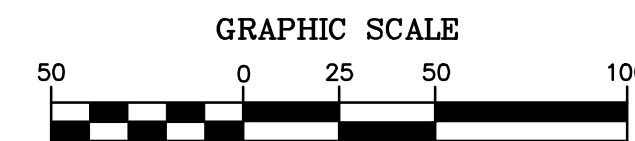
OUTSIDE STORAGE
HOWELL

WATERSHED PLAN

CLIENT:
OUTSIDE STORAGE HOWELL
1560 SABLE
COMMERCE TOWNSHIP, MICHIGAN 48382
248-217-8308

SCALE: 1 in. = 50 ft.
PROJECT No.: 244802
DWG NAME: 4802 UT
ISSUED: MAR. 25, 2025

WS



(IN FEET)
1 INCH = 50 FEET

LEGEND

- PARCEL BOUNDARY
- RIGHT OF WAY LINE (R.O.W.)
- EASEMENT LINE
- BUILDING SETBACK LINE
- EX. CURB & GUTTER
- EX. WATER LINE
- EX. WATER VALVE
- EX. HYDRANT
- EX. SANITARY SEWER LINE
- EX. SANITARY MANHOLE
- EX. STORM SEWER
- EX. CATCHBASIN
- EX. TREELINE
- PRO. TREELINE
- PROP. CONCRETE CURB
- PROP. EDGE OF PAVEMENT
- PROP. STORM SEWER
- PROP. CATCHBASIN
- PROP. FENCE
- PROP. LIGHT POLES
- EX. 1' CONTOUR
- EX. 5' CONTOUR

BENCHMARK

DATUM BASED ON NGS OPUS SOLUTION REPORT,
DATED FEBRUARY 11, 2025 AT 3:07PM

BENCHMARK #201
"X" ON NORTH SIDE OF CASTING OF YARD BASIN
#209, LOCATED NEAR MID-POINT OF PARCEL ON
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ELEVATION = 939.60 (NAVD 88)

BENCHMARK #202
"X" ON SOUTH SIDE OF CASTING OF YARD BASIN
#108, LOCATED NEAR THE SIDE OF PARCEL
#100-051 ON NORTH SIDE OF HYDRAULIC DRIVE.
ELEVATION = 938.71 (NAVD 88)

PROPOSED STORM WATER RUN-OFF							
"Area"	0.90	0.90	0.20	1.00	(ACRES)	"C" Factor	CA
Pavement	Building	Lawn	Water	Area			
Column1	Column2	Column3	Column4	Column5	Column6	Column7	Column8
301	1.10	0.00	0.07	0.00	1.17	0.86	1.00
302	1.10	0.00	0.07	0.00	1.17	0.86	1.00
411	0.90	0.00	0.00	0.00	0.90	0.90	0.81
410	0.54	0.00	0.00	0.00	0.54	0.90	0.49
401	0.55	0.00	0.00	0.00	0.55	0.90	0.50
402	0.55	0.00	0.00	0.00	0.55	0.90	0.50
403	0.55	0.00	0.00	0.00	0.55	0.90	0.50
404	0.55	0.00	0.00	0.00	0.55	0.90	0.50
405	0.67	0.00	0.00	0.00	0.67	0.90	0.60
BASIN	1.81	0.00	0.61	0.13	2.55	0.74	1.88
TOTAL AREA =					9.20	ACRES	
RUN-OFF COEFFICIENT =					0.84		



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KEY	DESCRIPTION	MATERIAL SPECIFICATION	MINIMUM COMPACTED THICKNESS
W	WEARING COURSE	MDOT 4C	2"
L	LEVELING COURSE	MDOT 3C	2"
B	AGGREGATE BASE	MDOT 21AA GRAVEL	8"

BITUMINOUS PAVEMENT NOTES

1. The construction specifications of the appropriate Local Municipality are a part of this work. Refer to the General Notes, Road and/or Parking Lot Construction Notes and Typical Road and/or Pavement Cross Section details on the project plans for additional requirements.
2. Unsuitable soils found within the 1 on 1 influence zone of the pavement, such as muck, peat, topsoil, marl, silt or other unstable materials shall be excavated and replaced up to the proposed subgrade elevation with MDOT Class III granular material compacted to 95% maximum unit weight, modified proctor.
3. Contractor shall proof roll prepared subgrade as directed by Engineer. Unacceptable areas of subgrade shall be undercut and replaced as directed by Engineer.
4. Owner/Developer may delay placement of the bituminous wearing course outside of the public road right of way. Repair of the bituminous leveling course may be necessary due to any delay in placement of the bituminous wearing course. Substantial repair to the bituminous leveling course may be necessary if placement of the bituminous wearing course is delayed for more than 12 months after placement of the bituminous leveling course. The bituminous leveling course shall be repaired as directed by Engineer prior to placement of the bituminous wearing course.



KEY	DESCRIPTION	MATERIAL SPECIFICATION	MINIMUM COMPACTED THICKNESS
S	SURFACE	BITUMINOUS MILLINGS	8"

AGGREGATE CROSS SECTION NOTES:

1. Refer to the General Notes, Road Construction Notes and Typical Road Cross Section detail on the project plans for additional requirements.
2. Unsuitable soils found within the 1 on 1 influence zone of the roadway, such as muck, peat, topsoil, marl, silt or other unstable materials shall be excavated and replaced up to the proposed subgrade elevation with MDOT Class III granular material compacted to 95% maximum unit weight, modified proctor.
3. Contractor shall proof roll prepared subgrade as directed by Engineer. Unacceptable areas of subgrade shall be undercut and replaced as directed by Engineer. See Subgrade Undercut & Replacement Cross Section detail for additional requirements.

CONCRETE CURB NOTES:

1. Refer to the project plans for the proposed locations of the specific curb types.
2. The construction specifications of the appropriate Local Municipality are a part of this work. Refer to the General Notes and Curb Cross Section Details on the project plans for additional requirements.
3. Extend the base and/or subbase material of the appropriate adjacent pavement cross-section horizontally to 1 foot behind the back of curb. Concrete curb shall be constructed on no less than 6" of combined depth of compacted base/subbase material.
4. Concrete material shall meet or exceed the specification requirements of the appropriate Local Municipality. If not specified by the Local Municipality, then the concrete material shall be MDOT PI (1-A) 6.0 sack concrete pavement mixture with a minimum 28 day design compressive strength of 4,000 PSI and 6.5% (+/-1.5%) entrained air. Contractor shall submit concrete mix design and aggregate mechanical analysis report to the Local Municipality and Engineer for review and approval prior to use.
5. Install transverse contraction control joints in accordance with the Local Municipality requirements. If not specified by the Local Municipality, then install transverse contraction control joints in curb with 1" minimum depth at 10' on center. Tool joints in fresh concrete or saw cut within 8 hours.
6. Install transverse expansion control joints in accordance with the Local Municipality requirements. If not specified by the Local Municipality, then install transverse expansion control joints in curb as follows: 400' maximum on center, at spring points of intersecting streets and within 10' on each side of catch basins. Transverse expansion control joints shall be 1" thick asphalt fiber joint filler matching entire curb cross section.
7. Provide 1" asphalt fiber control joint between back of curb and all other concrete structures, such as concrete sidewalks and concrete driveways.
8. Curb Contractor shall provide final adjustment of catch basin eastings in curb line. Castings shall be tucked pointed to structure water tight with concrete or mortar inside and outside of casting.
9. Install curb cuts for all existing and proposed sidewalks and pedestrian ramps in accordance with the American Disabilities Act and the Barrier Free Design requirements of the appropriate Local, County and/or State Agency. Refer to MDOT Standard Plan R-28, latest revision. Install curb cuts for all existing and proposed vehicular ramps and drives as noted on the project plans.



NOTE:
FENCE TO BE PAINTED/STAINED TO GROUND LEVEL
COLOR PER OWNERS DISCRETION.



ROLLING GATE DETAIL

DESIGN: S DRAFT: JHG CHECK: WMP	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION

OUTSIDE STORAGE
HOWELL

SITE & PAVING NOTES & DETAILS

CLIENT:

OUTSIDE STORAGE HOWELL
1560 SABLE
MERCER TOWNSHIP, MICHIGAN 48382
248-217-8308

SCALE: AS NOTED

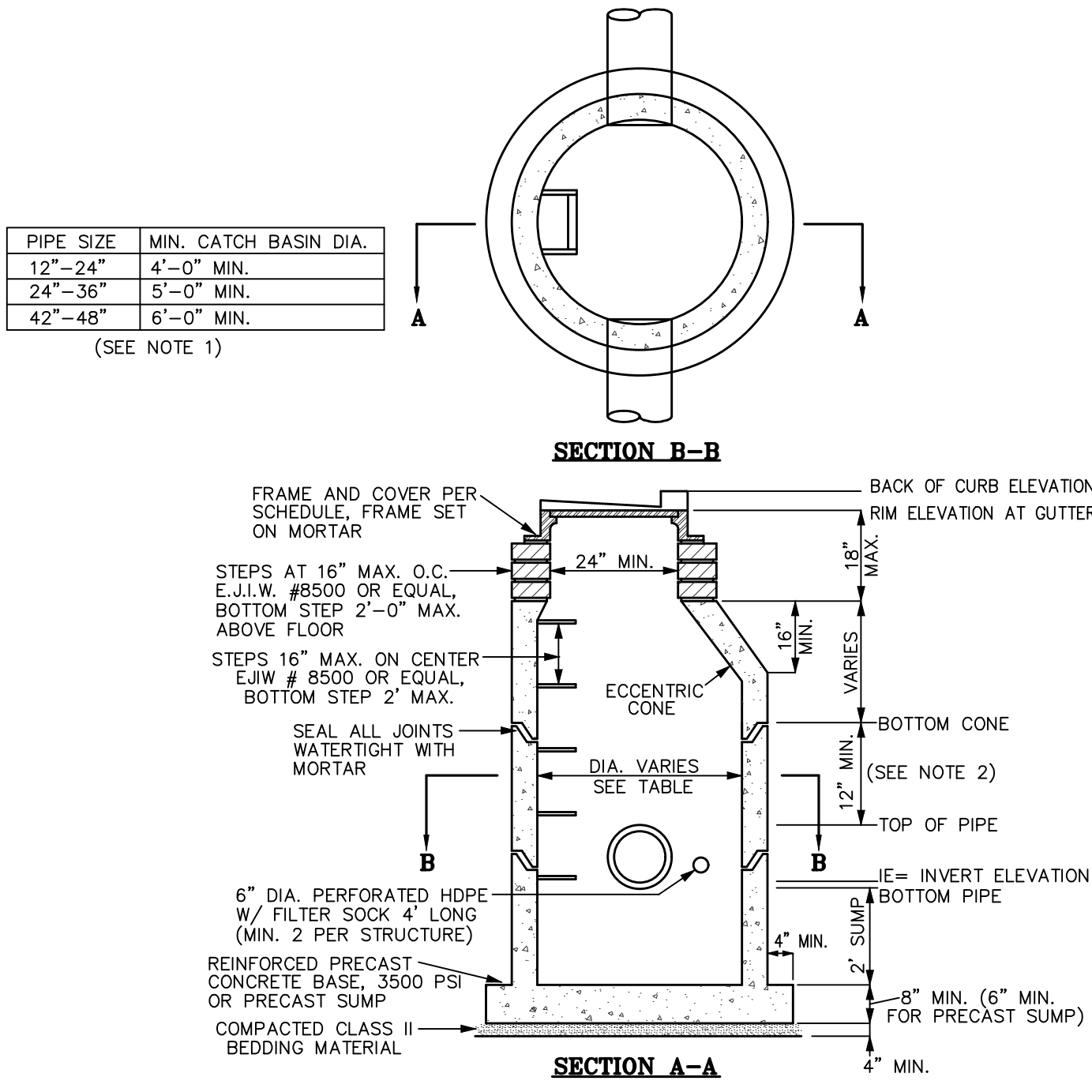
PROJECT No.: 244802
DWG NAME: 4802 DT
ISSUED: MAR. 25, 2025

DT1



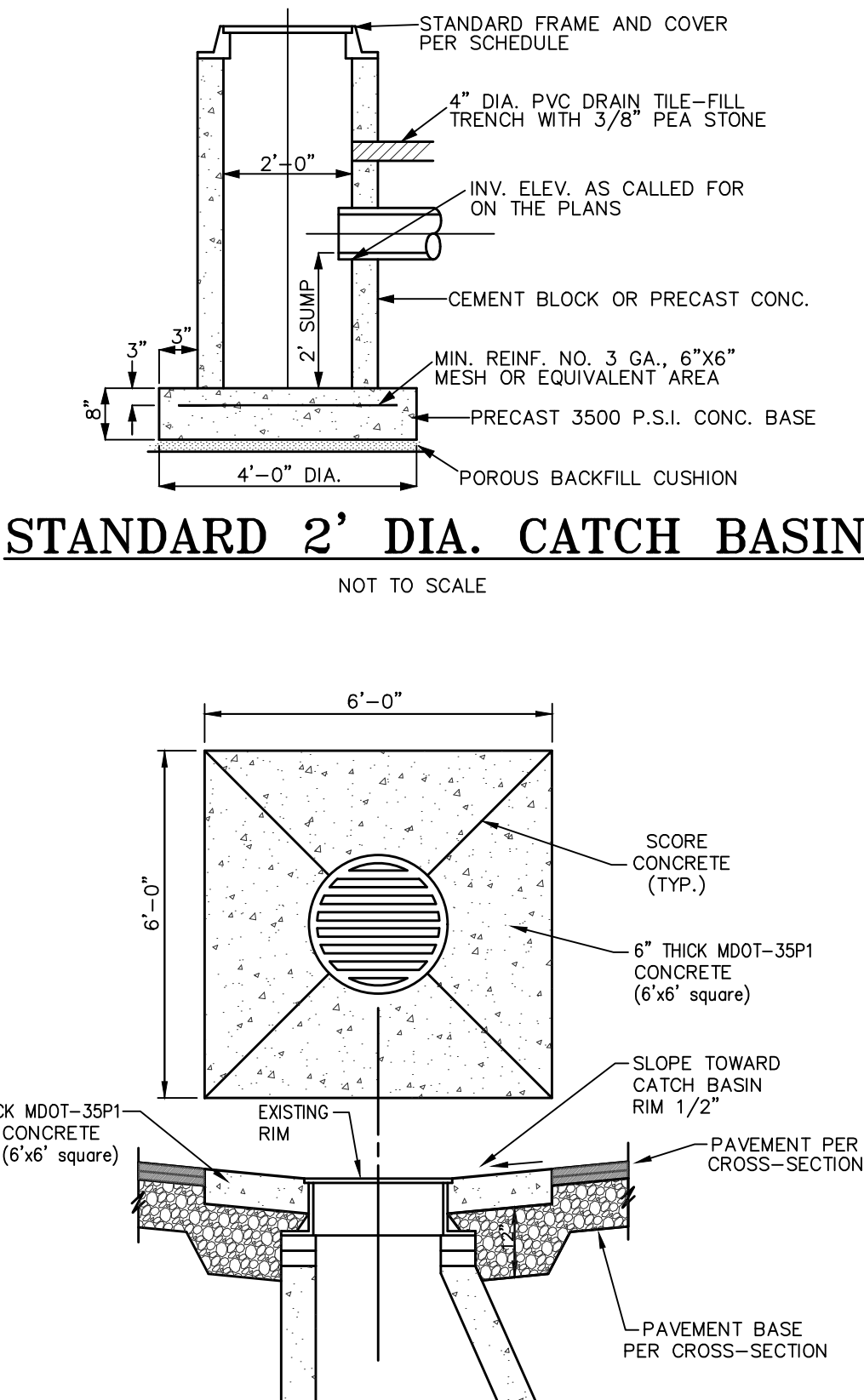
3 WORKING DAYS
BEFORE YOU DIG
CALL 811 OR 1-800-482-7171
(TOLL FREE)
OR VISIT CALL811.COM





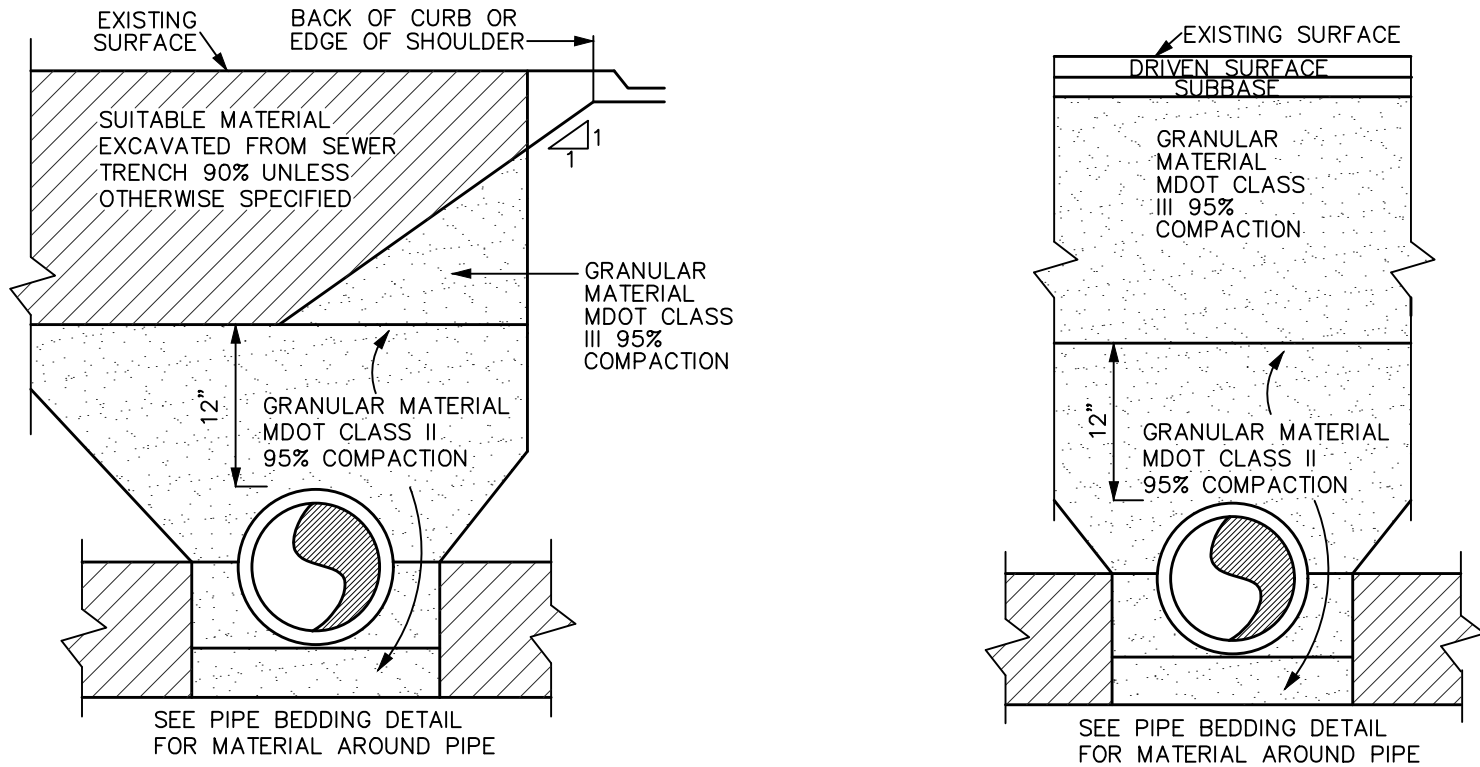
**STORM STRUCTURE "A"
STANDARD CATCH BASIN**

- NOTES:
1. FURNISH LARGER STRUCTURE DIAMETER AS NEEDED TO MAINTAIN 6" MIN CLEAR BETWEEN PIPE OPENINGS.
 2. FURNISH LOW PROFILE STRUCTURE ONLY WHEN NECESSARY TO MAINTAIN PROPER CLEARANCE ABOVE PIPES.



CATCH BASIN COLLAR

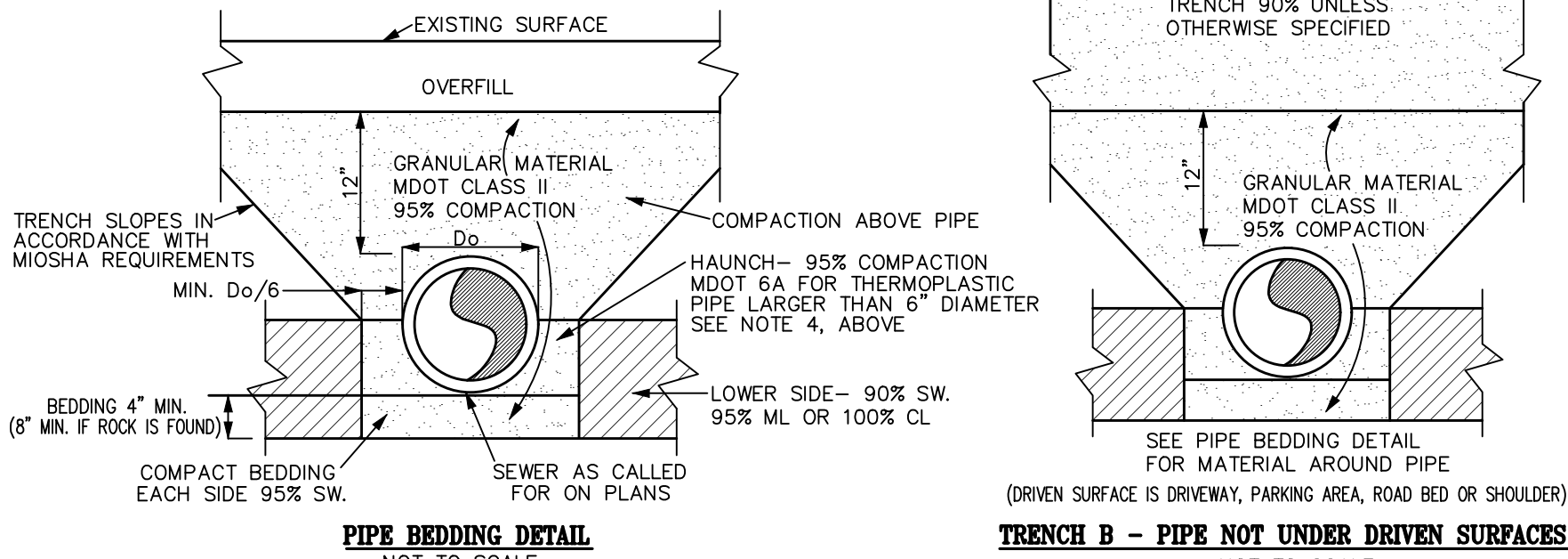
NOT TO SCALE



TRENCH A - PIPE UNDER OR WITHIN INFLUENCE OF DRIVEN SURFACE

NOT TO SCALE

- NOTES:
1. COMPACTION PRESENTED AS STANDARD PROCTOR VALUES.
 2. SOIL TYPES: AASHTO DESIG. GRAVEL SANDY (SW) A1, A3 SANDY SILTY (ML) A2, A4 SILTY CLAY (CL) A5, A6, A7
 3. SOIL IN HAUNCH AND LOWER SIDE ZONES OUTSIDE OF D_o/6 FROM SPRING LINE SHALL BE COMPACTED TO AT LEAST THE SAME COMPACTION AS THE SOIL IN THE OVERFILL ZONE.
 4. MATERIALS AROUND THERMO. PLASTIC PIPE WITH DIAMETER 6 INCHES SHALL PASS 0.5 INCH SIEVE. MATERIALS AROUND OTHER PIPES SHALL PASS 1.5 INCH SIEVE.

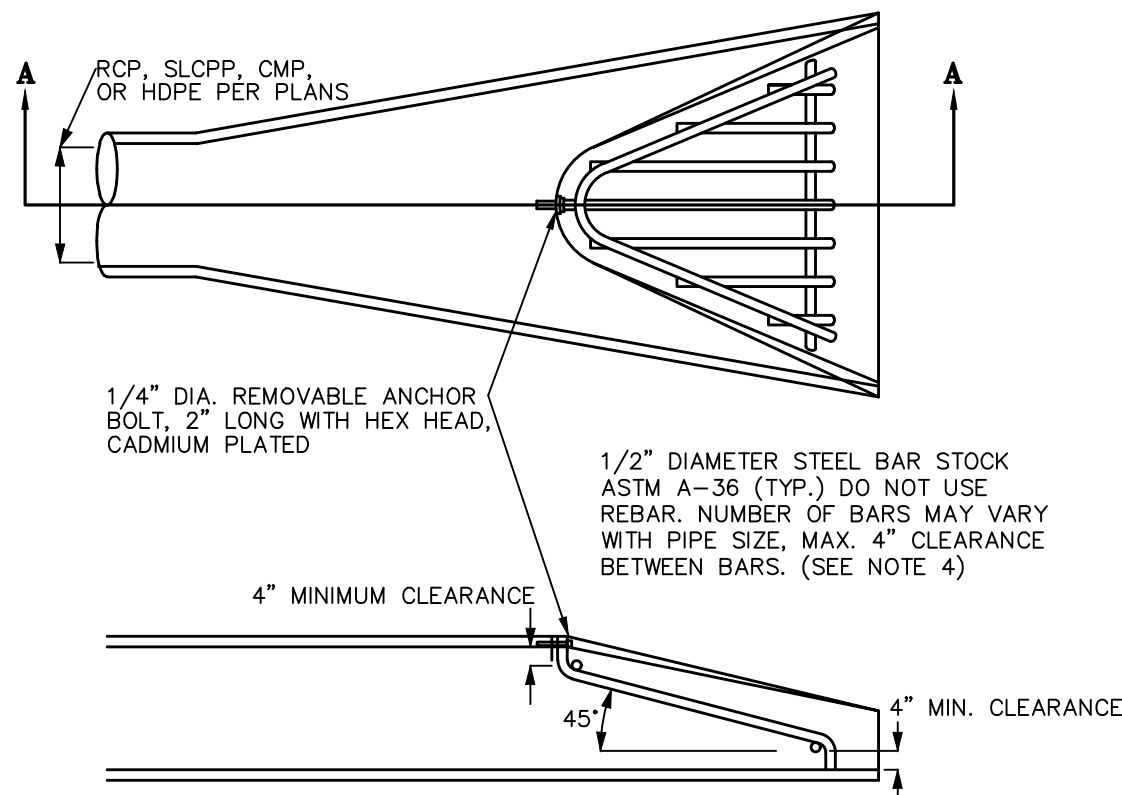


TRENCH B - PIPE NOT UNDER DRIVEN SURFACES

NOT TO SCALE

TRENCH DETAILS

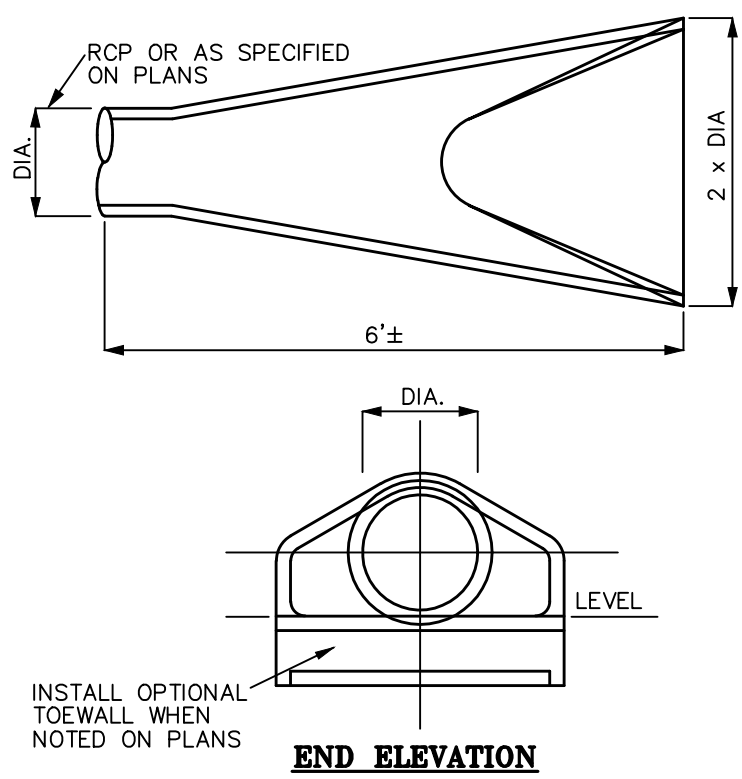
NOT TO SCALE



ANIMAL GUARD

NOT TO SCALE

- NOTES:
1. ANIMAL GUARD REQUIRED ON ALL FLARED END SECTIONS OF 15" DIAMETER PIPE OR GREATER.
 2. CONTRACTOR MAY SUBSTITUTE ALTERNATE GRATING LAYOUT AS APPROVED BY OWNER/ENGINEER/AGENCY PRIOR TO INSTALLATION.
 3. DETAIL SHOWN FOR RCP FLARED END SECTION. PROVIDE SIMILAR ANIMAL GUARD FOR FLARED END SECTIONS ON CMP, HDPE, AND SLOPP.
 4. WELD ALL CONNECTIONS FULL STRENGTH PER AMERICAN WELDING SOCIETY STANDARDS.



FLARED END SECTION

NOT TO SCALE

- NOTES:
1. RCP FLARED END SECTION SHOWN. PROVIDE SIMILAR FLARED END SECTION FOR CMP, SLOPP OR HDPE PIPE.
 2. PROVIDE RIP-RAP PER RIP-RAP DETAILS FOR ALL OUTLET FLARED END SECTIONS.
 3. INSTALL FLARED END SECTION WITH INVERT ELEVATION LEVEL AS VIEWED FROM END.

STORM SEWER NOTES:

1. The storm sewer and stormwater management specifications of the Local Municipality are a part of this work. Refer to the General Notes on the project plans for additional requirements.
2. Storm sewer work shall include clearing of vegetation and tree stumps, stripping and stockpiling of topsoil for reuse, excavation of pipe trench, placement of pipe bedding, placement of pipe and structures including castings, connection to existing structures, tuck pointing of structures, backfill of pipe trench, compaction of backfill, finish grading to provide positive drainage to structures, adjustment of castings to match finish grade, topsoil placement, seed & mulch, site cleanup and restoration, and other work as shown on the project plans and specifications.
3. Existing and proposed grades shown in profile view, when provided on the project plans, may be in relation to the centerline of road or item other than the centerline of pipe. The pipe lengths and grades shown in profile view on the project plans may not be to scale.
4. RCP when shown on the project plans shall be reinforced concrete pipe and shall conform to the specifications for reinforced concrete pipe per ASTM C76. RCP pipe joints shall be bell-and-spigot with rubber gaskets conforming to ASTM C433. Non-gasketed joints shall only be utilized when authorized by the Owner, Engineer AND Municipality. Non-gasketed joints of pipe having a diameter of 30 inches or greater shall be tuck-pointed on the inside with cement mortar after the backfill process is complete. Install reinforced concrete end sections incidental to work. Saw cut pipes to length as needed. When pipe class is not shown on the project plans, provide the following:

Pipe cover to proposed grade:		
0 to 4 feet	Class V	
4.1 to 10 feet	Class III*	
10.1 to 18 feet	Class IV	
18.1 feet and greater	Class V	

* Use Class IV under paved surfaces
5. CMP when shown on the project plans shall be corrugated metal pipe and shall conform to the specifications for corrugated metal pipe per AASHTO Designation M36. CMP shall be 16-gauge steel minimum for 24 inch diameter or smaller and 14-gauge steel minimum for 30 inch diameter or greater. Install galvanized steel end sections and connection bands, incidental to work. Connection bands for CMP pipe joints located under paved surfaces shall be gasketed couplers. Saw cut pipes to length as needed.
6. HDPE - Type S when shown on the project plans shall be high density polyethylene pipe with a smooth interior and shall conform to the specifications for high density polyethylene pipe per AASHTO Designation M252 Type S for pipes of 3" to 10" diameter and per AASHTO Designation M294 Type S for pipes of 12" to 60" diameter. HDPE - Type S pipe joints shall be bell-and-spigot type conforming to ASTM D3212 with rubber gaskets conforming to ASTM F477. Tamp backfill at spring line of HDPE - Type S pipe. Install high density polyethylene end sections incidental to work. Saw cut pipes to length as needed.
7. HDPE - Type C when shown on the project plans shall be high density polyethylene pipe with a corrugated interior and shall conform to the specifications for high density polyethylene pipe per AASHTO Designation M252 for pipes of 3" to 10" diameter and per AASHTO Designation M294 for pipes of 12" to 60" diameter. HDPE - Type C pipe joints shall be bell-and-spigot type conforming to ASTM D3212 with rubber gaskets conforming to ASTM F477. Tamp backfill at spring line of HDPE - Type C pipe. Install high density polyethylene end sections incidental to work. Saw cut pipes to length as needed.
8. CPVC when shown on the project plans shall be corrugated polyvinyl chloride pipe and shall conform to the specifications for corrugated polyvinyl chloride pipe per ASTM F794 and F949. CPVC pipe joints shall be bell-and-spigot type conforming to ASTM D3212 with rubber gaskets conforming to ASTM F477. Tamp backfill at spring line of CPVC pipe. Install high density polyethylene end sections incidental to work. Saw cut pipes to length as needed.
9. PVC when shown on the project plans shall be polyvinyl chloride pipe and shall conform to the specifications for polyvinyl chloride pipe per ASTM D2751, maximum SDR of 26. PVC pipe joints shall be bell-and-spigot type conforming to ASTM D3212 with rubber gaskets conforming to ASTM F477 or solvent welded type conforming to ASTM D2564. Tamp backfill at spring line of PVC pipe. Saw cut pipes to length as needed.
10. Concrete storm structures shall be pre-cast and shall conform to the specification of pre-cast concrete structures per ASTM C478. Joints of concrete storm structure sections shall be bell-and-spigot with rubber gaskets conforming to ASTM C433. Brick, concrete block or cast in place storm structures may be substituted for pre-cast storm structures ONLY when authorized by the Owner, Engineer AND Municipality; refer to MDOT standard plan R-1, latest revision. Pipe openings in pre-cast structures shall be factory installed. All temporary openings in storm structures shall be tuck-pointed watertight with cement mortar. Refer to MDOT standard plan R-2, latest revision, for alternate on-line storm structure details when pipe exceeds 42 inch diameter.
11. Tap existing structures as acceptable to the Engineer and Municipality, incidental to work. All temporary openings in storm structures shall be tuck-pointed watertight with cement mortar.
12. Backfill all storm sewer in accordance with the Pipe Trench details provided on the project plans. Provide pipe bedding that meets or exceeds both the specifications of the Pipe Trench details on the project plans and the recommendation of the pipe manufacturer, incidental to work.
13. When edge drains and/or under drains are shown on the project plans, connection to storm structures is incidental to work. During storm sewer construction, install first 10 linear feet of edge drain and/or under drain from the storm structures in each specified direction and install temporary cap at end. Complete installation of edge drain following preparation of the subgrade when under paved surface or following finish grade when not under paved surface.
14. Install removable plugs in storm sewer stubs as acceptable to Engineer and Municipality, incidental to work. Mark the end of all storm sewer stubs with a 2" x 4" wooden stake extending a minimum of 12" above finish grade, incidental to work.
15. Storm structure castings shall be coated with water based asphaltic paint by the manufacturer. Seams and temporary openings between storm structures and castings shall be tuck-pointed water tight with cement mortar. Coordinate correct curb box / hood / "T" back as needed to match curb profile. See casting schedule on project plans for additional requirements.
16. Provide 3.5' minimum cover from the top of pipe of all roof drain pipes to the proposed finish grade when site conditions allow. When pipe cover is less than 3.5', install 2" thick by 24" wide Styrofoam insulation centered over the top of pipe at 12" above top of pipe or as required by the Local Municipality.

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CIVIL ENGINEERS
LAND SURVEYORS
2183 PLESS DRIVE
BRIGHTON, MICHIGAN 48114

DESIGN: S	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG						
CHECK: WMP						

OUTSIDE STORAGE
HOWELL

STORM SEWER
NOTES & DETAILS

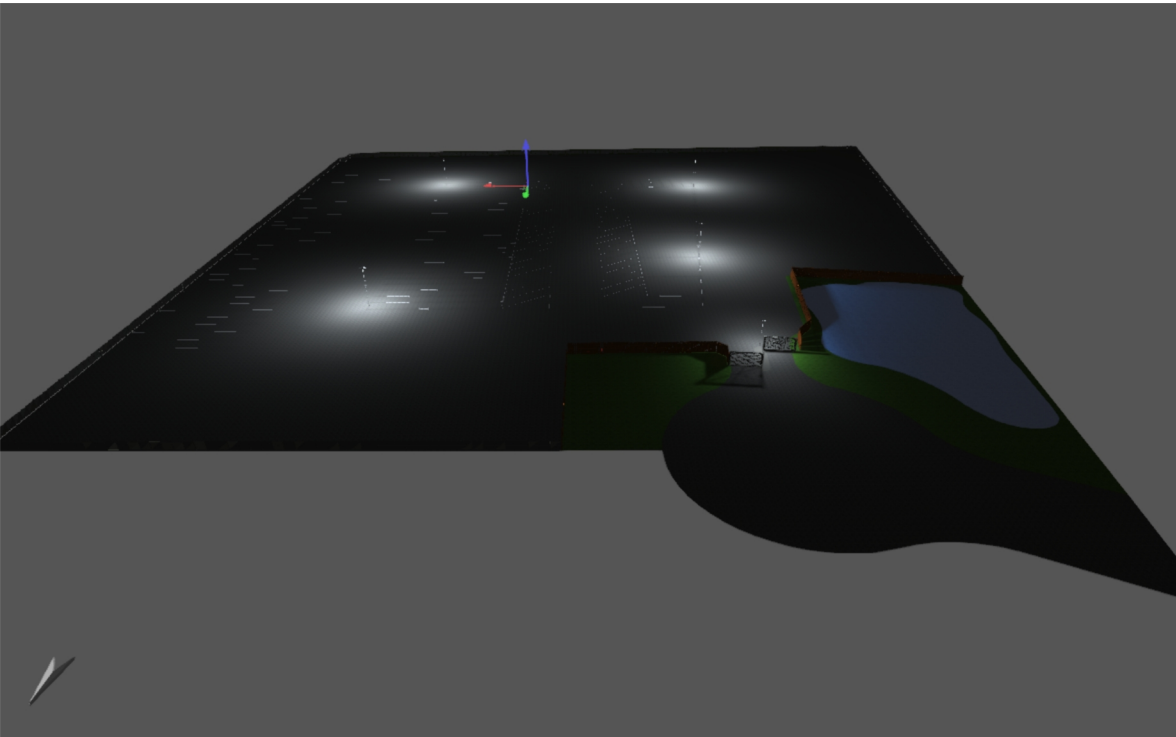
CLIENT:	SCALE: AS NOTED
OUTSIDE STORAGE HOWELL 1560 SABLE COMMERCE TOWNSHIP, MICHIGAN 48302 248-217-8308	PROJECT No.: 244802 DWG NAME: 4802 DT ISSUED: MAR. 25, 2055

DT2



PLANT LEGEND				
SYM	QTY	SIZE	COMMON	LATIN
	5	2.5" CAL.	SUGAR MAPLE	ACER SACCHARUM
	20	2.5" CAL.	CRIMSON KING MAPLE	ACER PLATANOIDES 'CRIMSON KING'
	3	10' HT.	RIVER BIRCH	BETULA NIGRA
	19	6' HT.	NORWAY SPRUCE	PICEA ABIES
	8	6' HT.	SERVICEBERRY	AMELANCHIER ARBOREA
	24	36" HT.	DOUBLE FILE VIBURNUM	VIBURNUM PLICATE F. TOMENTOSUM
	40	24" HT.	DWF. BURNING BUSH	EUONYMUS ALATUS 'COMPACTUS'
	40	24" HT.	DWF. REDTWIG DOGWOOD	CORNUS SERICEA





Hydraulic Drive

Outdoor lighting plan for Hydraulic Drive Storage Facility

4x 30ft poles each with 4x 500W AL-L lights positioned around the property to provide adequate distribution. 1x 20ft pole with 2x 200W AL-L fixtures on the landscaped median at the entrance to provide entry/exit lighting.

Object

XXXX Hydraulic Drive
Howell, MI 48855

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Product data sheets

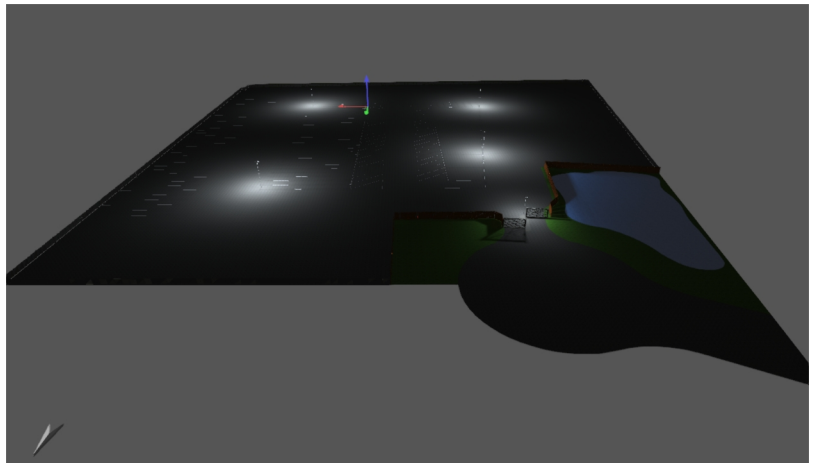
BLUECOLT LIGHTING LLC - AL-L AREA LIGHT (1x LED)	6
BLUECOLT LIGHTING LLC - AL-L AREA LIGHT (1x)	7

Building Site

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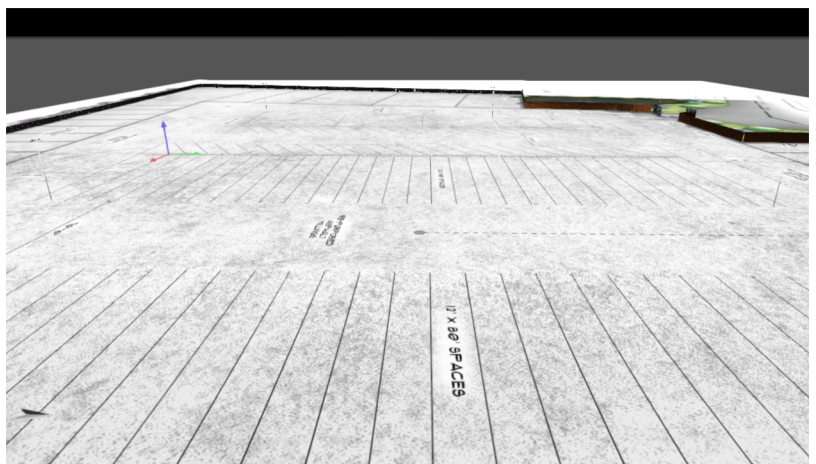
Images

Overview



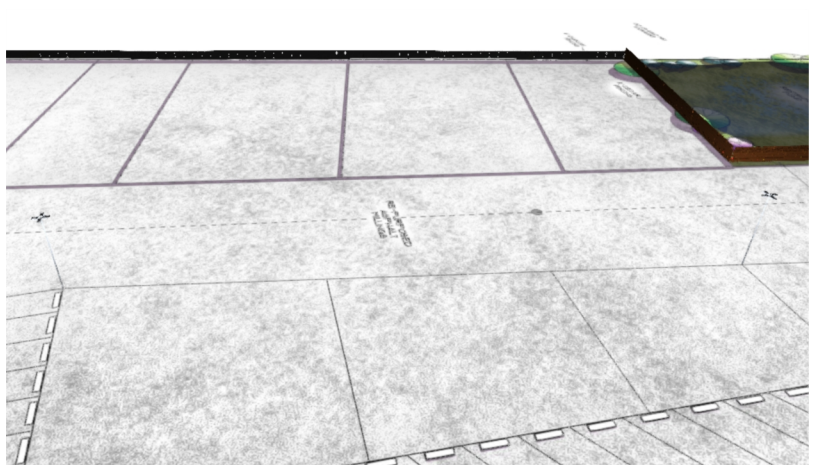
East Lane Overview

30ft positioned along the main driving lane to provide as much light distribution as possible.



Entry Lane Overview

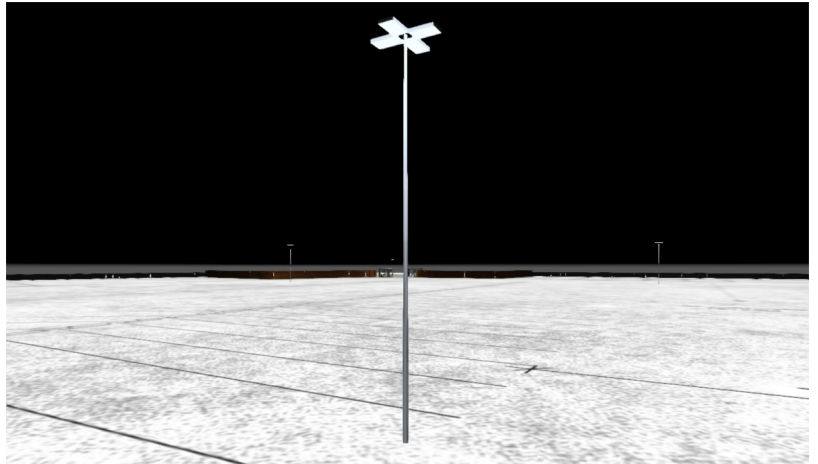
30ft positioned along the main driving lane to provide as much light distribution as possible.



Images

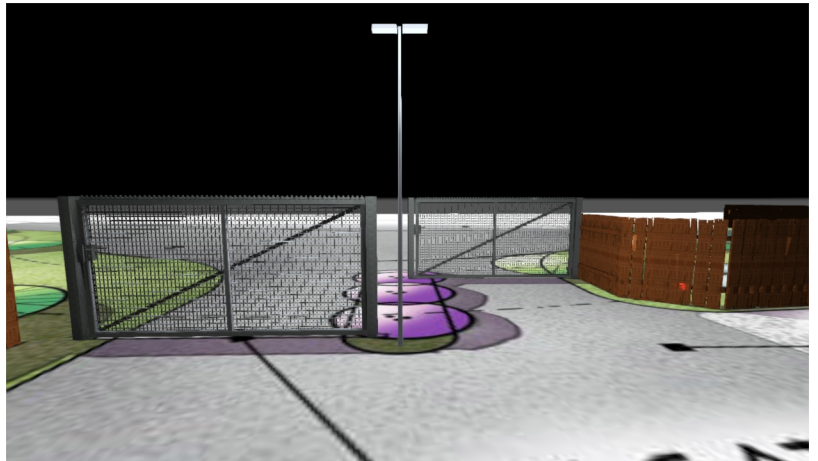
30ft Pole Detail

30ft poles equipped with 4x 500W Area Lights



20ft Pole Detail

20ft Pole located on the landscaping strip with 2x 200W Area Lights.



Luminaire list

Φ_{total} 1340460 lm	P_{total} 8387.8 W	Luminous efficacy 159.8 lm/W
------------------------------	-------------------------	---------------------------------

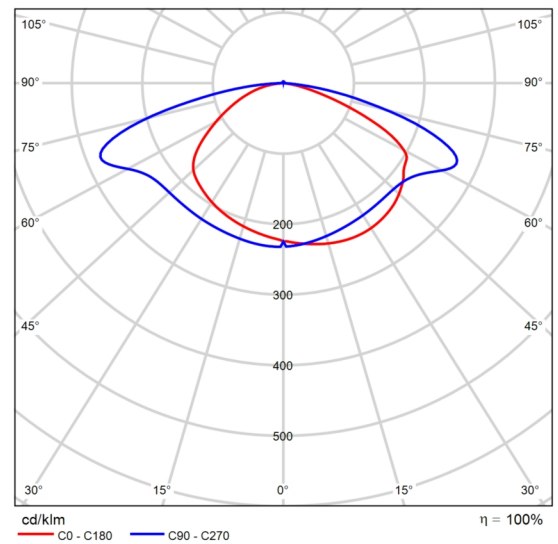
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2	BLUECOLT LIGHTING LLC	BLALL- 200W-5K- T4	AL-L AREA LIGHT	193.9 W	30238 lm	155.9 lm/W	A
16	BLUECOLT LIGHTING LLC	BLALL- 500W-5K- T4	AL-L AREA LIGHT	500.0 W	79999 lm	160.0 lm/W	B

Product data sheet

BLUECOLT LIGHTING LLC - AL-L AREA LIGHT



Article No.	BLALL-500W-5K-T4
P	500.0 W
Φ_{Lamp}	80000 lm
$\Phi_{\text{Luminaire}}$	79999 lm
η	100.00 %
Luminous efficacy	160.0 lm/W
CCT	5000 K
CRI	76
Index	B



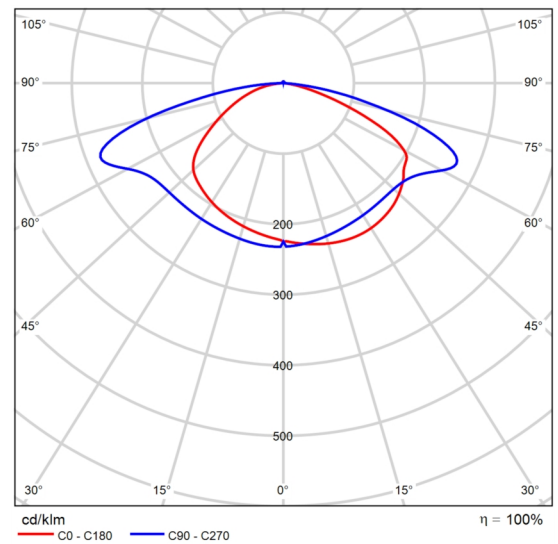
Polar LDC

Product data sheet

BLUECOLT LIGHTING LLC - AL-L AREA LIGHT



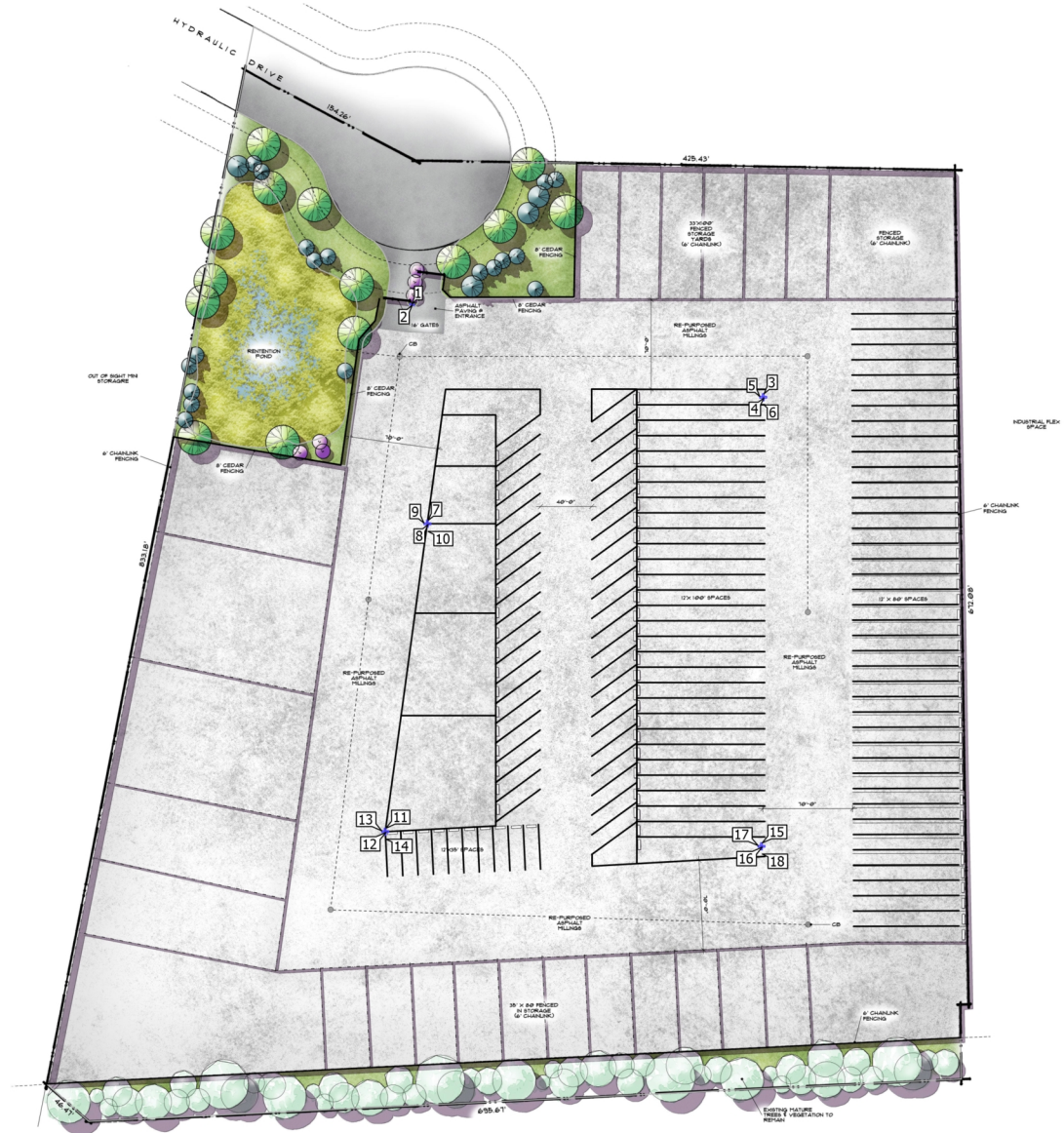
Article No.	BLALL-200W-5K-T4
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Φ_{Lamp}	30238 lm
$\Phi_{\text{Luminaire}}$	30238 lm
η	100.00 %
Luminous efficacy	155.9 lm/W
CCT	5000 K
CRI	76
Index	A



Polar LDC

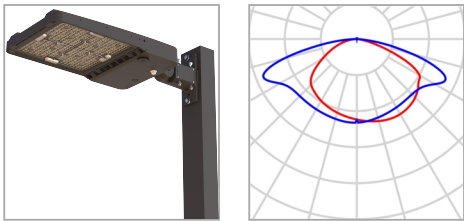
Building Site

Luminaire layout plan



Building Site

Luminaire layout plan



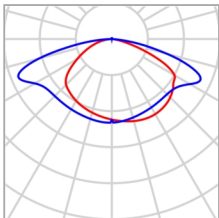
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Article No.	BLALL-200W-5K-T4	$\Phi_{\text{Luminaire}}$	30238 lm
Article name	AL-L AREA LIGHT		
Fitting	1x		
Index	A		

Individual luminaires

X	Y	Mounting height	Luminaire
-175.828 ft	414.788 ft	20.000 ft	1
-174.001 ft	414.496 ft	20.000 ft	2

Building Site

Luminaire layout plan



Manufacturer	BLUECOLT LIGHTING LLC	P	500.0 W
Article No.	BLALL-500W-5K-T4	$\Phi_{\text{Luminaire}}$	79999 lm
Article name	AL-L AREA LIGHT		
Fitting	1x LED		
Index	B		

Individual luminaires

X	Y	Mounting height	Luminaire
98.422 ft	344.156 ft	30.000 ft	3
100.069 ft	342.516 ft	30.000 ft	4
96.779 ft	342.514 ft	30.000 ft	5
98.422 ft	340.875 ft	30.000 ft	6
-163.013 ft	245.620 ft	30.000 ft	7
-161.412 ft	244.003 ft	30.000 ft	8
-164.685 ft	243.977 ft	30.000 ft	9
-163.043 ft	242.359 ft	30.000 ft	10
-195.887 ft	5.915 ft	30.000 ft	11
-194.246 ft	4.288 ft	30.000 ft	12
-197.529 ft	4.273 ft	30.000 ft	13
-195.856 ft	2.612 ft	30.000 ft	14

Building Site

Luminaire layout plan

X	Y	Mounting height	Luminaire
97.062 ft	-5.554 ft	30.000 ft	15
98.703 ft	-7.195 ft	30.000 ft	16
95.420 ft	-7.196 ft	30.000 ft	17
97.062 ft	-8.812 ft	30.000 ft	18

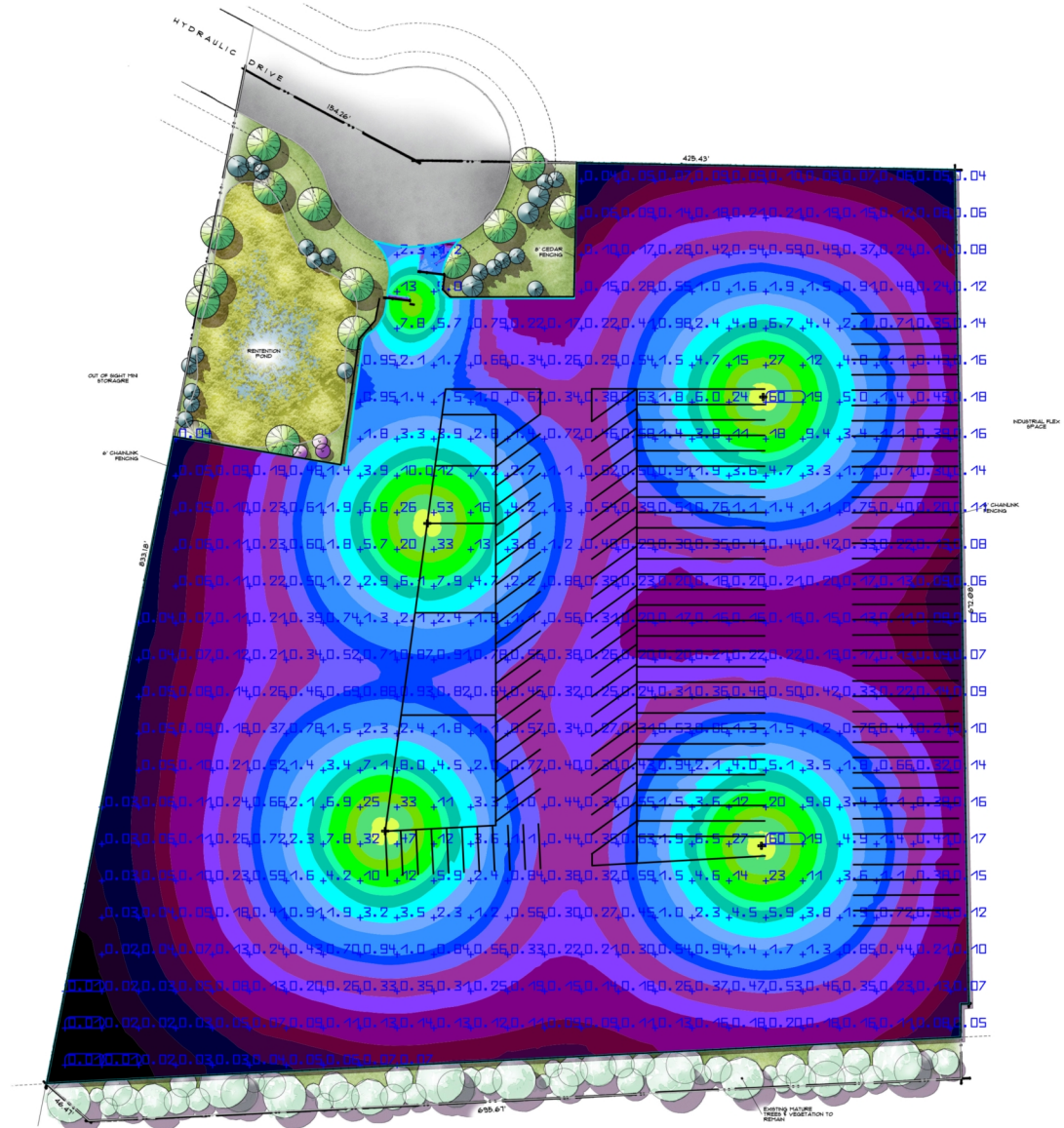
Building Site

Luminaire list

Φ_{total} 1340460 lm	P_{total} 8387.8 W	Luminous efficacy 159.8 lm/W
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pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy	Index
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16	BLUECOLT LIGHTING LLC	BLALL- 500W-5K- T4	AL-L AREA LIGHT	500.0 W	79999 lm	160.0 lm/W	B

Building Site (Light scene 1) Calculation objects



Building Site (Light scene 1)

Calculation objects

Calculation surfaces

Properties	$\bar{E}$	E_{min}	E_{max}	$\bar{E}/E_{min}$	E_{max}/E_{min}
Calculation surface 3 Perpendicular illuminance (adaptive) Height: 0.000 ft	2.50 fc	0.009 fc	62.4 fc	280	6997

Utilisation profile: DIALux preset (Default (Drive Aisles/Parking Areas))



Howell Area Fire Department Fire Marshal Division

1211 W Grand River Ave Howell, MI 48843
office: 517-546-0560 fax: 517-546-6011
firemarshal@howellfire.net

DATE: April 1, 2025

TO: Jonathan Hohenstein
Howell Twp Zoning Administrator
3525 Byron Rd
Howell, MI 48855

FROM: Bryan Hager-Fire Inspector

PROJECT: Proposed Storage Development-Hydraulic Dr, **Howell Township**

REF: Site Plan Review - **Approved w/concerns noted**

CONCERNS:

I have reviewed the above listed site plan and find that it is **satisfactory** as presented as long as the **following conditions** are met:

1. Any building(s) shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property.
 1. These numbers/letters shall be at least 6" high and shall contrast with their background.
2. A Knox Gate Key or Knox Lock will also be required if gating entrance off Hydraulic Drive. Application can be obtained from the Howell Area Fire Department or on-line at www.knoxbox.com.
3. Where the road is 20' wide to 26' wide, "No Parking-Fire Lane" signs would be required on both sides of the street. Where the road is between 27' and 32' wide, "No Parking this side of street" signs would be required on the hydrant side of the street.
4. An approved fire apparatus access road shall be within 150 feet of all portions of the grade level.
 - a) The fire department access (driveway) shall meet the following conditions:
 - b) The minimum unobstructed width shall be 20 feet.
 - c) The minimum unobstructed height shall be 13 feet.
 - d) The driveway shall be accessible at all times (i.e. snow removal).
 - e) The driveway shall be constructed so it can support up to 100,000 pound fire apparatus.



Howell Area Fire Department Fire Marshal Division

1211 W Grand River Ave Howell, MI 48843

office: 517-546-0560 fax: 517-546-6011

firemarshal@howellfire.net

5. Fire Hydrants shall be installed at intermediate locations so that in no case will the distance between hydrants exceeds 400' via dedicated right-of-away.
6. A final inspection of the site shall be performed by the fire department before C of O is issued.

Any changes in this site plan shall be submitted to the Howell Area Fire Department for additional approval. If there is anything further that you need, please feel free to give me a call.