

**GENOA CHARTER TOWNSHIP
PLANNING COMMISSION
PUBLIC HEARING
FEBRUARY 13, 2023
6:30 P.M.
AGENDA**

CALL TO ORDER:

PLEDGE OF ALLEGIANCE:

APPROVAL OF AGENDA:

DECLARATION OF CONFLICT OF INTEREST:

CALL TO THE PUBLIC: (Public comment will be limited to two minutes per person) *:

(Note: The Board reserves the right to not begin new business after 10:00 p.m.)

OPEN PUBLIC HEARING # 1...Consideration of special land use application, environmental impact assessment and site plan for the construction of an 11,990 sq. ft. boat showroom and sales office building replacing the existing building for Wonderland Marine West located at 5796 Grand River Avenue. The request is petitioned by Mitts, LLC.

- A. Recommendation of Special Use Application.
- B. Recommendation of Environmental Impact Assessment (dated 11-1-22)
- C. Recommendation of Site Plan (dated 2-9-23)

OPEN PUBLIC HEARING # 2...Consideration of a sketch plan application and sketch plan to install an all-abilities playground "Senior Survivor Park" within the existing Genoa Charter Township park property. The park is located at 2911 Dorr Road, on the east side of Dorr Road, just north of Crooked Lake Road. The request is petitioned by Genoa Charter Township.

- A. Disposition of Sketch Plan (10-31-22)

OPEN PUBLIC HEARING #3...Close public hearing for the proposed Genoa Charter Township Master Plan, Master Plan Implementation Discussion, and consideration of adoption of Master Plan by resolution. (Roll Call)

ADMINISTRATIVE BUSINESS:

- *Staff Report*
- *Approval of January 9, 2023 Planning Commission meeting minutes*
- *Member discussion*

*Citizen's Comments- In addition to providing the public with an opportunity to address the Township Board at the beginning of the meeting, opportunity to comment on individual agenda items may be offered by the Chairman as they are presented. Anyone speaking on an agenda item will be limited to 2 minutes.



GENOA CHARTER TOWNSHIP
Application for Site Plan Review

TO THE GENOA TOWNSHIP PLANNING COMMISSION AND TOWNSHIP BOARD:

APPLICANT NAME & ADDRESS: MITTS, LLC
If applicant is not the owner, a letter of Authorization from Property Owner is needed.

OWNER'S NAME & ADDRESS: MITTS, LLC

SITE ADDRESS: 5796 E. Grand River, Howell, MI. PARCEL #(s): 4711-10-400-019

APPLICANT PHONE: (517) 548-5122 OWNER PHONE: (517) 548-5122

OWNER EMAIL: pmitter@WonderlandMarineWest.com

LOCATION AND BRIEF DESCRIPTION OF SITE: South side of Grand River, West of Dorr Road. Existing Wonderland Marine boat sales showroom and offices.

BRIEF STATEMENT OF PROPOSED USE: Boat showroom and sales offices

THE FOLLOWING BUILDINGS ARE PROPOSED: Construct a new showroom and sales offices to replace the existing showroom and sales offices.

I HEREBY CERTIFY THAT ALL INFORMATION AND DATA ATTACHED TO AND MADE PART OF THIS APPLICATION IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

BY: Gary Mitter

ADDRESS: 5796 E. Grand River, Howell, MI.

Contact Information - Review Letters and Correspondence shall be forwarded to the following:

1.) Wayne M. Perry, P.E. of Desine Inc. at Waynep@DesineInc.com
Name Business Affiliation E-mail Address

FEE EXCEEDANCE AGREEMENT

As stated on the site plan review fee schedule, all site plans are allocated two (2) consultant reviews and one (1) Planning Commission meeting. If additional reviews or meetings are necessary, the applicant will be required to pay the actual incurred costs for the additional reviews. If applicable, additional review fee payment will be required concurrent with submittal to the Township Board. By signing below, applicant indicates agreement and full understanding of this policy.

SIGNATURE: Gary E. Mitter DATE: 10-27-22
PRINT NAME: Gary Mitter PHONE: 517 548-5122
ADDRESS: 5796 E. Grand River, Howell, MI. 48843



GENOA CHARTER TOWNSHIP Special Land Use Application

This application **must** be accompanied by a site plan review application and the associated submittal requirements. (The Zoning Official may allow a less detailed sketch plan for a change in use.)

APPLICANT NAME & ADDRESS: MITTS, LLC, 5796 E. Grand River, Howell, MI 48843

Submit a letter of Authorization from Property Owner if application is signed by Acting Agent.

APPLICANT PHONE: (517) 548-5122 EMAIL: pmitter@WonderlandMarineWest.com

OWNER NAME & ADDRESS: MITTS, LLC, 5796 E. Grand River, Howell, MI 48843

SITE ADDRESS: 5796 E. Grand River, Howell, MI PARCEL #(s): 4711-10-400-019

OWNER PHONE: (517) 548-5122 EMAIL: pmitter@WonderlandMarineWest.com

Location and brief description of site and surroundings:

South side of Grand River, West of Dorr Road. Existing Wonderland Marine boat sales and service

Proposed Use:

New and used boat sales and service showroom and sales offices

Describe how your request meets the Zoning Ordinance General Review Standards (section 19.03):

a. Describe how the use will be compatible and in accordance with the goals, objectives, and policies of the Genoa Township Comprehensive Plan and subarea plans, and will promote the Statement of Purpose of the zoning district in which the use is proposed.

Proposed use of the site for new and used boat sales and service will remain the same as the current use of the site. The use as a retail business serving the requirements of the overall community. Future land use of the property, and the adjacent parcels, is anticipated to be Commercial.

b. Describe how the use will be designed, constructed, operated, and maintained to be compatible with, and not significantly alter, the existing or intended character of the general vicinity.

The proposed showroom and sales office building will replace the existing showroom and sales office building. The new building will be relocated to conform to the required front setback, and will be designed to conform to current architectural standards of the Township. The proposed building will provide a significant improvement to the area.

c. How will the use be served adequately by essential public facilities and services such as highways, streets, police and fire protection, drainage structures, water and sewage facilities, refuse disposal and schools?

The proposed expanded showroom and sales offices will allow for the display and sales of a wider variety of boats, and larger size boats. The existing public facilities and services currently servicing the site are adequate to accommodate the proposed larger showroom and sales office building.

d. Will the use involve any uses, activities, processes, or materials potentially detrimental to the natural environment, public health, safety, or welfare by reason of excessive production of traffic, noise, vibration, smoke, fumes, odors, glare, or other such nuisance? If so, how will the impacts be mitigated?

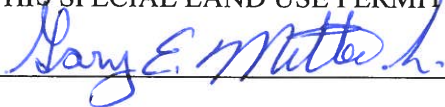
Proposed use as a showroom and sales offices for new and used boats is the same as the existing use. The activities are not detrimental to the environment, public health, safety or welfare.

e. Does the use have specific criteria as listed in the Zoning Ordinance (sections 3.03.02, 7.02.02, & 8.02.02)? If so, describe how the criteria are met.

7.02.02(c) - Site is the location of the existing showroom and sales offices for new and used boats, outdoor storage areas on the parcel are paved and not within proposed greenbelt areas, proposed building is 11,990 sq.ft. in area, adequate truck maneuvering area is provided, and the parcel does not abut residentially zoned property.

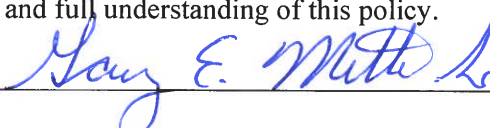
I HEREBY CERTIFY THAT ALL INFORMATION AND DATA ATTACHED TO AND MADE PART OF THIS APPLICATION ARE TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF. I AGREE TO DESIGN, CONSTRUCT AND OPERATE, AND MAINTAIN THESE PREMISES AND THE BUILDINGS, STRUCTURES, AND FACILITIES WHICH ARE GOVERNED BY THIS PERMIT IN ACCORDANCE WITH THE STATED REQUIREMENTS OF THE GENOA TOWNSHIP ZONING ORDINANCE, AND SUCH ADDITIONAL LIMITS AND SAFEGUARDS AS MAY BE MADE A PART OF THIS PERMIT.

THE UNDERSIGNED Gary Mitter, MITTS, LLC STATES THAT THEY ARE THE FREE OWNER OF THE PROPERTY OF PROPERTIES DESCRIBED ABOVE AND MAKES APPLICATION FOR THIS SPECIAL LAND USE PERMIT.

BY: Gary Mitter 

ADDRESS: 5796 E. Grand River, Howell, MI 48843

Contact Information - Review Letters and Correspondence shall be forwarded to the following:		
<u>Wayne M. Perry, P.E.</u>	<u>of Desine Inc.</u>	<u>at Waynep@Desineinc.com</u>
Name	Business Affiliation	Email

FEE EXCEEDANCE AGREEMENT	
As stated on the site plan review fee schedule, all site plans are allocated two (2) consultant reviews and one (1) Planning Commission meeting. If additional reviews or meetings are necessary, the applicant will be required to pay the actual incurred costs for the additional reviews. If applicable, additional review fee payment will be required concurrent with submittal to the Township Board. By signing below, applicant indicates agreement and full understanding of this policy.	
SIGNATURE: <u></u>	DATE: <u>10-27-22</u>
PRINT NAME: <u>Gary Mitter</u>	PHONE: <u>517-548-5122</u>

**GENOA CHARTER TOWNSHIP
PLANNING COMMISSION
PUBLIC HEARING
December 12, 2022
6:30 P.M.
MINUTES**

CALL TO ORDER: Chairman Grajek called the meeting of the Genoa Charter Township Planning Commission to order at 6:30 p.m. Present were Chris Grajek, Eric Rauch, Tim Chouinard, Diana Lowe, and Marianne McCreary. Absent were: Jeff Dhaenens and Glynis McBain. Also present was Township Manager Kelly VanMarter, Planning Director Amy Ruthig, Brian Borden of Safebuilt, and Shelby Byrne of Tetra Tech.

PLEDGE OF ALLEGIANCE: The pledge of allegiance was recited.

APPROVAL OF AGENDA:

Moved by Commissioner Rauch, seconded by Commissioner Lowe, to approve the agenda as presented. **The motion carried unanimously.**

DECLARATION OF CONFLICT OF INTEREST: None

CALL TO THE PUBLIC:

The call to the public was opened at 6:31 pm with no response.

OPEN PUBLIC HEARING #1...Consideration of special land use application, environmental Impact assessment and site plan for the construction of an 11,990 sq. ft. boat showroom and sales office building replacing the existing building for Wonderland Marine West located at 5796 East Grand River Avenue. The request is petitioned by Mitts, LLC.

- A. Recommendation of Special Use Application.**
- B. Recommendation of Environmental Impact Assessment (dated 11-1-22)**
- C. Recommendation of Site Plan (dated 11-21-22)**

Mr. Wayne Perry of Desine, Inc. and Mr. Gary Mitter, the applicant, were present. Mr. Perry provided a review of the request. They would like to demolish and reconstruct an 11,999 square foot showroom. They will also be removing and reconstructing the parking lot.

Mr. Borden reviewed his letter dated December 6, 2022.

1. Special Land Use:
 - a. The standards of Section 19.03 are generally met.

- b. In order to make favorable findings related to compatibility and impacts, the conditions of Section 7.02.02(c) need to be met to the Planning Commission's satisfaction.
 - c. The applicant must address any comments provided by the Township Engineer or Brighton Area Fire Authority regarding public facilities and services.
2. Use Conditions:
- a. The majority of the use conditions are met; however, the buffer zone requirements are not fully met for either side or the rear of the site. Under the Town Center Overlay District (TCOD) regulations, the Planning Commission may waive the side yard requirements; however, the rear yard buffer zone is required.
3. Site Plan Review:
- a. The proposed parking does not fully comply with the dimensional requirements of Section 9.04.01.
 - b. The proposed building does not fully comply with the architectural requirements of Section 9.05.01. Per Section 9.05.03, the Township may modify these requirements.
 - c. Proposed sidewalks, street trees and lighting do not fully comply with the streetscape requirements of Section 9.06.01.
 - d. The proposed parking does not fully comply with the parking and loading requirements of Section 9.07.
 - e. The site plan does not fully comply with the open space requirements of Section 9.08.

He noted that The Township has not had one project that has been able to comply completely with the Town Center Overlay standards. Any projects within this zoning district have had the TCOD removed. He and Township Staff have discussed this, and it appears that this zoning has not produced projects as was anticipated. Due to this, he would recommend that this site have the TCOD removed and have it returned to its general zoning. Without this, the applicant would need to go to the Zoning Board of Appeals for many variances. Additionally, he and Staff recommend removing this district from the zoning ordinance. The Planning Commission has the ability to do this by a motion. Ms. VanMarter showed the zoning map and what properties would be affected.

Commissioner Rauch agrees with the suggestion; however, he questioned the sidewalk requirements and those projects that have left money in escrow for those improvements. Ms. VanMarter would like to keep the sidewalk requirements for all those properties.

Ms. Byrne reviewed her letter dated December 7, 2022.

1. The sidewalk cross section should be updated to show six inches of MDOT CLII sand subbase.
2. The Livingston County Drain Commissioner (LCDC) requires that the "Land Use Summary Table" found in Appendix J of their updated LCDC Procedures and Design Criteria for Stormwater Management Systems be included on the cover sheet of the construction plans.

3. The existing site plan originally showed standing water around the storm catch basin on the south of the site. More information should be provided as to what is causing the on-site flooding, and the site plan should demonstrate how this issue will be addressed. Aerial imagery shows that the area is frequently flooded throughout the year.

Mr. Perry acknowledged there is standing water in the spring; however, this catch basin flows into the retention basin on the Crystal Gardens property and they do not have the ability to change it. It is a seasonal, temporary problem. It is where the boats are stored so it does not create a problem. Mr. Mitter stated when the water is too high, they pump the water out of this area onto their vacant property. Mr. Perry noted that the LCDC does not allow a connection into the storm sewer on Grand River because it is at capacity.

Commissioner Rauch asked if this project would increase or decrease the impervious service. Mr. Perry stated it is being reduced.

The Brighton Area Fire Marshal's letter dated December 5, 2022 states the Knox box and Knox Padlock are now shown on the revised site plan submittal. All other previous comments will be addressed on the architectural plan review and are subject to inspection by the fire authority.

The call to the public was made at 6:56 pm with no response.

Moved by Commissioner Rauch, seconded by Commissioner Lowe, to table the request for the construction of an 11,990 sq. ft. boat showroom and sales office building replacing the existing building for Wonderland Marine West located at 5796 East Grand River Avenue. **The motion carried unanimously.**

Commissioner Rauch noted that the TCOD zoning has been discussed very often over the last seven years, including during the latest Master Plan Update.

Moved by Commissioner Rauch, seconded by Commissioner Lowe, to direct Township Staff to take the action of removing the Township Center Overlay District (TCOD) from the zoning map. **The motion carried unanimously.**

OPEN PUBLIC HEARING #2...Continuation of public hearing for the proposed Genoa Charter Township Master Plan.

Ms. VanMarter stated a public hearing was held at the previous Planning Commission meeting; however, there are some changes that still need to be made before it can be presented to the Planning Commission.

The call to the public was made at 7:07 pm.



February 8, 2023

Planning Commission
Genoa Township
2911 Dorr Road
Brighton, Michigan 48116

Attention:	Amy Ruthig, Planning Director
Subject:	Wonderland Marine – Special Land Use and Site Plan Review #3
Location:	5796 Grand River Avenue – south side of Grand River, west of Dorr Road
Zoning:	GCD General Commercial District and TCO District Town Center Overlay District

Dear Commissioners:

At the Township’s request, we have reviewed the submittal from Wonderland Marine for construction of a new boat showroom and sales office building to replace the existing building (plans dated 11/21/22).

A. Summary

1. Special Land Uses (Section 19.03):

- a. The special land use standards of Section 19.03 are generally met.
- b. In order to make favorable findings related to compatibility and impacts, the conditions of Section 7.02.02(c) need to be met to the Commission’s satisfaction.
- c. The applicant must address any comments provided by the Township Engineer or Brighton Area Fire Authority regarding public facilities and services.

2. Use Conditions (Section 7.02.02(c)):

- a. The majority of the use conditions are met.
- b. The buffer zone requirements are not fully met for either side or the rear of the site.

3. Site Plan Review:

- a. The front parking setback is deficient by 2 feet.
- b. Building materials and design are subject to review and approval by the Planning Commission.
- c. We request the applicant evaluate alternatives to the use of parallel parking spaces.
- d. The site plan is deficient by 1 barrier-free parking space.
- e. One of the proposed light fixtures will cast light outwards instead of downwards.
- f. The lighting plan does not include photometric readings.
- g. The landscaping plan is deficient in terms of greenbelt and parking lot tree plantings.
- h. The Commission has the authority to waive or modify landscaping requirements.
- i. We request the applicant describe the intended method of refuse removal.
- j. We suggest the applicant remove the nonconforming pole sign as part of this project.

B. Proposal/Process

The applicant proposes to replace the existing boat showroom/office sales building with a new 11,990 square foot building.

As previously discussed, the Township is in the process of amending the Zoning Map to remove the TCO. As such, we have reviewed the proposal for compliance with the conventional standards of the GCD.

Table 7.02 allows boat and recreational vehicle sales with special land use approval in the GCD. The request is also subject to the use conditions of Section 7.02.02(c).

Procedurally, the Planning Commission is to review the special land use, site plan, and Environmental Impact Assessment, and put forth recommendations to the Township Board following a public hearing.



Aerial view of site and surroundings (looking south)

C. Special Land Use Review

Section 19.03 of the Zoning Ordinance identifies the review criteria for Special Land Use applications as follows:

- 1. Master Plan.** The Township Master Plan identifies the subject site as Mixed-Use Town Center, which is planned for “a mixture of uses integrated into a traditional-style development of high density single family homes, attached and detached, along with various commercial uses including retail and office” with the intent of creating “a destination in the Township as an alternative to the consistent strip development that currently exists along Grand River Avenue from Howell to Brighton.”

As previously discussed, the Township may view the proposal as an improvement to the site and existing building, while the existing business could be viewed as an attraction to the area.

- 2. Compatibility.** Surrounding properties along Grand River include a variety of commercial, office, and service uses (including boat sales). Use of the property for boat sales will not change; however, the new building results in the need for a new special land use review/approval.

Since the use is not changing, it is expected to remain compatible with surrounding area. The use conditions of Section 7.02.02(c) are also intended to help mitigate potential impacts of such uses.

Provided the use conditions are met to the Commission’s satisfaction, we expect the proposal to be compatible with the surrounding area.

- 3. Public Facilities and Services.** Given that the site fronts Grand River and has already been developed, we anticipate that necessary public facilities and services are in place.

However, the applicant must address any comments provided by the Township Engineer and/or Brighton Area Fire Authority related to this criterion.

- 4. Impacts.** Similar to comments above, provided the use conditions are met, surrounding properties are not expected to be adversely impacted by the proposal.
- 5. Mitigation.** If further concerns arise as part of the review process, the Township may require additional efforts to mitigate potential adverse impacts.

D. Use Conditions

Boat sales are subject to the use conditions of Section 7.02.02(c), as follows:

- 1. Sale space for used mobile homes, recreational vehicles and boats may only be carried on in conjunction with a regularly authorized new mobile home, recreational vehicle or boat sales dealership on the same parcel of land.**

The submittal notes that the business includes the sale of new and used boats.

- 2. All outdoor storage areas shall be paved with a permanent, durable and dustless surface and shall be graded and drained to dispose storm water without negatively impact adjacent property. The Township Board, following a recommendation of the Planning Commission and the Township Engineer, may approve a gravel surface for all or part of the display or storage area for low intensity activities, upon a finding that neighboring properties and the environment will not be negatively impacted.**

The project area includes new pavement, while the remainder of the site already contains paved surfaces.

- 3. No storage or display of vehicles shall be permitted in any landscape greenbelt area, provided the Township may permit a display pod for an automobile within the greenbelt area where it is integrated into the landscape design.**

The project includes a display area in the front yard towards the easterly side of the site; however, it is not located within the required front yard greenbelt area.

- 4. The site shall include a building of at least five hundred (500) feet of gross floor area for office use in conjunction with the use.**

The proposed building provides 11,990 square feet of gross floor area.

- 5. All loading and truck maneuvering shall be accommodated on-site.**

The submittal depicts sufficient maneuvering space is provided on-site.

- 6. All outdoor storage area property lines adjacent to a residential district shall provide a buffer zone A as described in Section 12.02. A buffer zone B shall be provided on all other sides. The Planning Commission may approve a six (6) foot high screen wall or fence, or a four (4) foot high landscaped berm as an alternative.**

A buffer zone B is required along both sides and the rear of the site; however, none of these areas are fully compliant.

The west side includes existing fencing ranging in height from 4' to 8' and a bioswale is proposed along the east side. Neither the site plan nor the landscape plan depicts the rear of the property.

The Commission has the authority to waive or modify landscaping requirements, in accordance with Section 12.02.13.

E. Site Plan Review

1. Dimensional Requirements. The proposal has been reviewed for compliance with the dimensional requirements of the GCD, as follows:

	Min. Lot Req.		Minimum Yard Setbacks (feet)				Max. Lot Coverage (%)	Max. Height (feet)
	Area (acres)	Width (feet)	Front Yard	Side Yard	Rear Yard	Parking Lot		
GCD	1	150	70	10	40	20 front 10 side/rear	35% building 75% impervious	35
Proposed	2.01	201	70.8	15 (W) 76.2 (E)	255.8	18 front 11.5 side (W) 10.7 side (E)	29.2% building 75% impervious	27.5

The only dimensional deficiency is the parking front setback. The additional 2 feet needed for compliance can be gained by reducing either the drive aisle width (from 26 to 24 feet) or the parking space depth (from 18 to 16 feet).

2. Building Design and Materials. The primary building materials are brick and metal siding with numerous windows on the north and east elevations.

If the west and south elevations are deemed to be visible from the road or parking lot, then the amount of metal siding exceeds that allowed by Section 12.01.

Additionally, the front elevation includes 2 overhead doors, which are typically only allowed on the side or rear.

We suggest additional discussion with the Commission regarding these items.

3. Pedestrian Circulation. The site plan proposes a 5-foot wide concrete sidewalk along Grand River, as required by Section 12.05.

4. Vehicular Circulation. The developed site has two existing full turning movement driveways to/from Grand River Avenue, and no changes are proposed.

The drive aisles at the front of the site provide sufficient width for two-way travel.

The applicant must address any comments provided by the Township Engineer and/or the Brighton Area Fire Authority with respect to vehicular circulation.

5. Parking. Based on information contained in the submittal, the project requires 26 parking spaces, which are provided by a mix of perpendicular and parallel parking.

The design and dimensions comply with Ordinance standards, though we generally recommend against the use of parallel spaces for off-street parking. We request the applicant evaluate possible alternatives to accommodate 4 spaces elsewhere.

Given the number of spaces provided (26), the site plan is deficient by 1 barrier-free space.

6. Exterior Lighting. The lighting plan identifies 4 new light poles and 7 new wall mounted fixtures.

Based on the detail sheets, the proposed fixtures are LED; however, one of the fixture types will cast light outward instead of downward, as required.

Pole heights comply with Ordinance standards; however, the lighting plan does not include photometric readings

7. Landscaping. The landscape plan has been reviewed for compliance with the standards of Section 12.02, as follows:

Standard	Required	Proposed	Notes
Front yard greenbelt	20' width 5 canopy trees 2.5' hedgerow OR 3' masonry wall	18' width Hedgerow	Width should be increased to 20' (as previously noted) Details of the hedgerow are not provided Deficient by 5 canopy trees
Parking lot	3 canopy trees 260 SF landscaped area	596 SF landscaped area	Deficient by 3 canopy trees

As described in Paragraph D Use Conditions, buffer zones are required along the side and rear lot lines, though neither existing conditions nor the proposed site plan provide for fully compliant buffer zones.

However, it is worth noting that the plan includes a rain garden/bioswale along the east side of the property, with plantings conducive to such conditions, and fencing of varied heights along the west side.

The Commission has the authority to waive or modify landscaping requirements, per Section 12.02.13.

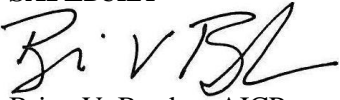
8. Waste Receptacle/Enclosure. The site plan does not identify a waste receptacle. As such, we request the applicant describe the intended method of refuse removal.

If a waste receptacle is necessary, one must be added to the site plan in accordance with requirements of Section 12.04.

9. Additional Considerations. Given the extent of improvements proposed, we suggest the applicant remove the nonconforming pole sign and replace it with a compliant monument sign.

Should you have any questions concerning this matter, please do not hesitate to contact our office.

Respectfully,
SAFE BUILT



Brian V. Borden, AICP
 Michigan Planning Manager



December 7, 2022

Ms. Amy Ruthig
Genoa Township
2911 Dorr Road
Brighton, MI 48116

**Re: Wonderland Marine Showroom
Site Plan Review No. 2**

Dear Ms. Ruthig:

Tetra Tech conducted a second review of the proposed Wonderland Marine West site plan last dated November 21, 2022. The plans were prepared by Desine, Inc. on behalf of MITTS LLC. The development is located on 2 acres on the south side of Grand River Avenue near Dorr Road. The Petitioner is proposing to remove their existing 6,640 square foot showroom building and replace it with a new 11,990 square foot showroom building. The proposed site work includes repaving the existing parking lot with curb and gutter. We offer the following comments:

GENERAL

1. The sidewalk cross section should be updated to show 6 inches of MDOT CLII sand subbase.

DRAINAGE AND GRADING

1. The LCDC requires that the “Land Use Summary Table” found in Appendix J of their updated LCDC Procedures and Design Criteria for Stormwater Management Systems be included on the cover sheet of the construction plans.
2. The existing site plan originally showed standing water around the storm catch basin on the south of the site. More information should be provided as to what is causing the on-site flooding, and the site plan should demonstrate how this issue will be addressed. Aerial imagery shows that the area is frequently flooded throughout the year.

We recommend the petitioner address the above comments prior to approval.

Sincerely,

A handwritten signature in blue ink that reads 'Shelby Byrne'.

Shelby Byrne, P.E.
Project Engineer



BRIGHTON AREA FIRE AUTHORITY

615 W. Grand River Ave.
Brighton, MI 48116
o: 810-229-6640 f: 810-229-1619

December 5, 2022

Amy Ruthig
Genoa Township
2911 Dorr Road
Brighton, MI 48116

RE: Wonderland Marine - Boat Showroom & Sales Office
5796 E. Grand River Avenue
Genoa Twp., MI

Dear Amy,

The Brighton Area Fire Department has reviewed the above-mentioned site plan. The plans were received for review on November 23, 2022 and the drawings are dated November 1, 2022 with a revision date of November 21, 2022. The project is based on a proposed new Type IIB, 11,990 square foot showroom and sales office to replace the existing building. This plan review is based on the requirements of the International Fire Code (IFC) 2021 edition.

The Knox box and Knox Padlock are now shown on the revised site plan submittal. All other previous comments will be addressed on the architectural plan review and are subject to inspection by the fire authority.

Additional comments will be given during the building plan review process (specific to the building plans and occupancy). The applicant is reminded that the fire authority must review the fire protection systems submittals (sprinkler & alarm) prior to permit issuance by the Building Department and that the authority will also review the building plans for life safety requirements in conjunction with the Building Department.

If you have any questions about the comments on this plan review please contact me at 810-229-6640.

Cordially,

A handwritten signature in black ink, appearing to read "R. Boisvert".

Rick Boisvert, CFPS
Fire Marshal

**WONDERLAND MARINE WEST
Genoa Township, Michigan
Site Plan Application**

IMPACT ASSESSMENT

Owner:

MITTS, L.L.C.
5796 East Grand River
Howell, Michigan 48843

Prepared by:

DESINE INC.
2183 Pless Drive
Brighton, Michigan 48114

A. INTRODUCTION (Sec. 18.07.01)

This impact assessment has been prepared pursuant to Article 18 – SITE PLAN REVIEW of the Zoning Ordinance for the Township of Genoa, Livingston County, Michigan. This assessment addresses the impact of the proposed construction of a new showroom and sales office building on the surrounding community and, the economic condition and social environment of the Township.

This Impact Assessment has been prepared under the direction of Wayne Perry, P.E., DESINE INC., 2183 Pless Drive, Brighton, Michigan 48114. Mr. Perry is a licensed Civil Engineer, providing professional engineering services in Livingston County since 1988 with experience in private and municipal development including projects within Genoa Township and Livingston County.

B. SITE LOCATION / DESCRIPTION (Sec. 18.07.02)

The site is an existing parcel containing 2.01 acres of property, bordered on the North by Grand River Avenue, on the East and South by Wilson Marine, with Crystal Gardens banquet center and a multi-tenant commercial building to the West, as shown on Figure 1. Properties North of Grand River Avenue are zoned “Lakeshore Resort Residential” (LRR) district, to the East and West is zoned General Commercial (GCD), and the parcel to the South is zoned Industrial (IND).

The existing site is developed and currently used as a showroom, sales center and for new boat display by Wonderland Marine West. The Wonderland Marine West Site Plan depicts removal and replacement of the existing showroom and sales center, and construction of a new showroom and sales center building. Re-development of the site will required demolition of the existing showroom building and removal of the surrounding pavement and utilities. Proposed improvements to the site will consist of the new 11,990 square foot showroom and sales center, sidewalks, parking, drive aisles, utilities, lighting and landscaping.

C. IMPACT ON NATURAL FEATURES (Sec. 18.07.03)

Existing soils on the property are Wawasee loam. These soils are well drained soils found in till plains and moraines, with slopes of 2%-18%. Surface runoff is medium, permeability is moderately low and the soil erosion hazard is light. The Soils Map, shown in Figure 3, shows the locations of specific soil types as classified.

Soil classifications are prepared by the United States Department of Agriculture, Soil Conservation Service, and “Soil Survey of Livingston County”. On-site soils consist of the following:

WAWASEE LOAM (MoB): WAWASEE LOAMS are typically well drained soils found in till plains and moraines, with slopes of 2%-6%. Surface runoff is medium, permeability is moderately low and the soil erosion hazard is light.

WAWASEE LOAM (MoC): WAWASEE LOAMS are typically well drained soils found in till plains and moraines, with slopes of 6%-12%. Surface runoff is

high, permeability is moderate and the soil erosion hazard is light.

MIAMI LOAM (MoD): MIAMI LOAMS are typically well drained soils found in till plains and moraines, with soil slopes of 12%-18%. Surface runoff is medium, permeability is moderate and the soil erosion hazard is moderate.

The property is currently fully developed and paved. Existing topography of the site is generally flat. Surface water drainage for the portion of the site proposed for re-development is to the Northeast.

The proposed construction and improvements will require filling and grading in the area of the proposed building and new parking area. The proposed elevations and grading of the site mesh with the existing grades at the property lines. The limits of disturbance have been depicted on the grading plan.

Surface drainage characteristics on the property will not be significantly impacted by the proposed construction. Construction of the proposed improvements will increase the permeable area on the property, resulting in a decrease in the surface water runoff generated. The proposed changes and modifications to the surface drainage conditions will not have a negative impact on local aquifer characteristics or groundwater recharge capacity. Surface water runoff from the development will be reduced and no significant impacts to adjacent properties are anticipated from the proposed construction and re-development of the site.

Landscaping is proposed for the re-developed portion of the site to reduce the visual impact of the proposed project. All proposed landscaping areas and plantings have been designed per the requirements of Genoa Township’s current Zoning Ordinance and are intended to improve the aesthetics of the property. Within the developed portion of the site, areas not otherwise covered, shall have lawn or other vegetative surface cover established.

No wildlife habitats currently exist on the property.

D. IMPACT ON STORM WATER MANAGEMENT (Sec. 18.07.04)

The portion of the site proposed for re-development currently discharges surface water runoff to an existing storm sewer system along Grand River Avenue. Site grading will mesh with existing grades on adjoining properties. No adverse impact to adjacent parcels is anticipated due to the construction and grading of the property.

Soil erosion and sedimentation are controlled by the Soil Erosion Control Act No. 347 of the Public Acts of 1972, as amended and is administered by the Livingston County Drain Commissioner. Silt fencing will be installed around a majority of the site during construction. The Contractor shall comply with all regulations including control during and after construction.

Impact on adjoining properties due to the construction of this site will be minimized by implementing soil erosion control methods. No adverse impact to adjacent properties due

to surface water runoff will be created as a result of the proposed improvements.

E. IMPACT ON SURROUNDING LAND USES (Sec. 18.07.05)

No adverse impact to adjacent properties is anticipated due to the proposed demolition of the existing building, parking and related site utilities, and construction of the new showroom, parking and improvements.

Ambient noise levels on and around the property are largely generated by vehicular traffic on Grand River Avenue. Daily activities within the proposed buildings are not anticipated to create an increase in the sound level in the area.

All site lighting proposed will be pole mounted fixtures, will be shielded and down directed on the site.

The proposed use of the property does not create any significant emissions of smoke, airborne solids, odors, gases, vibrations, noise or glare discernable and substantially annoying or injurious to person and/or property beyond the lot lines. No significant change in air pollution is anticipated.

The Contractor shall be responsible for initiating and maintaining adequate dust control measures during and after construction until the project site is fully stabilized and a vegetative cover established. Dust control measures used during construction may consist of site watering, mulching of completed areas, installation of windbreak fencing, and application of chemical dust control materials. The site will comply with the performance standards contained in Section 13.05 of the Township Zoning Ordinance.

Soil erosion control measures such as silt fence, geotextile silt sack filters and construction track mats will be used during construction to control siltation and sedimentation from entering the storm water system and have an adverse impact on adjacent properties.

F. IMPACT ON PUBLIC FACILITIES AND SERVICES (Sec. 18.07.06)

The Livingston County Sheriff and Michigan State Police will provide Police protection. Public safety services required to accommodate the proposed use are anticipated to be minor.

The Brighton Area Fire Department as a part of an existing governmental agreement will provide fire protection service. Existing fire hydrants are located along Grand River Avenue. The building address will be located at the front of the proposed building. No significant change in fire protection services are anticipated as a result of the proposed re-development of the property.

The proposed plan modifications will not create any direct adverse impact on the public schools.

G. IMPACT ON PUBLIC UTILITIES (Sec 18.07.07)

The property is presently within municipal sewer & water. Water service is available along

Grand River. Capacity is available within the existing water system to provide adequate service to this site.

Capacity is available within the existing sanitary sewer system to provide adequate service for the site.

The site is currently serviced by electric, gas, phone and cable systems located along Grand River Avenue.

Delivery services are generally limited to parcel trucks, such as UPS, and similar single axle vehicles. These delivery service providers use available street parking temporarily while dropping off deliveries.

- H. STORAGE AND HANDLING OF ANY HAZARDOUS MATERIALS (Sec. 18.07.08)**
The showroom and sales center use within the proposed building will not use, store, generate and/or discharge potentially polluting materials. Small quantities of material such as cleaning products and chemicals may be stored. No adverse effect is expected due to hazardous materials on-site.
- I. TRAFFIC IMPACT STUDY (Sec. 18.07.09)**
No change in traffic use to the site is anticipated by the removal and replacement of the existing showroom and sales center building. No adverse impact on pedestrian traffic in the area is anticipated as a result of developing the proposed project.
- J. HISTORIC AND CULTURAL RESOURCES (Sec. 18.07.10)**
The existing buildings on the property do not have any major historic significance on a local, regional or state level.
- K. SPECIAL PROVISIONS**
No special provisions or requirements are currently proposed for this facility.

FIGURE 1



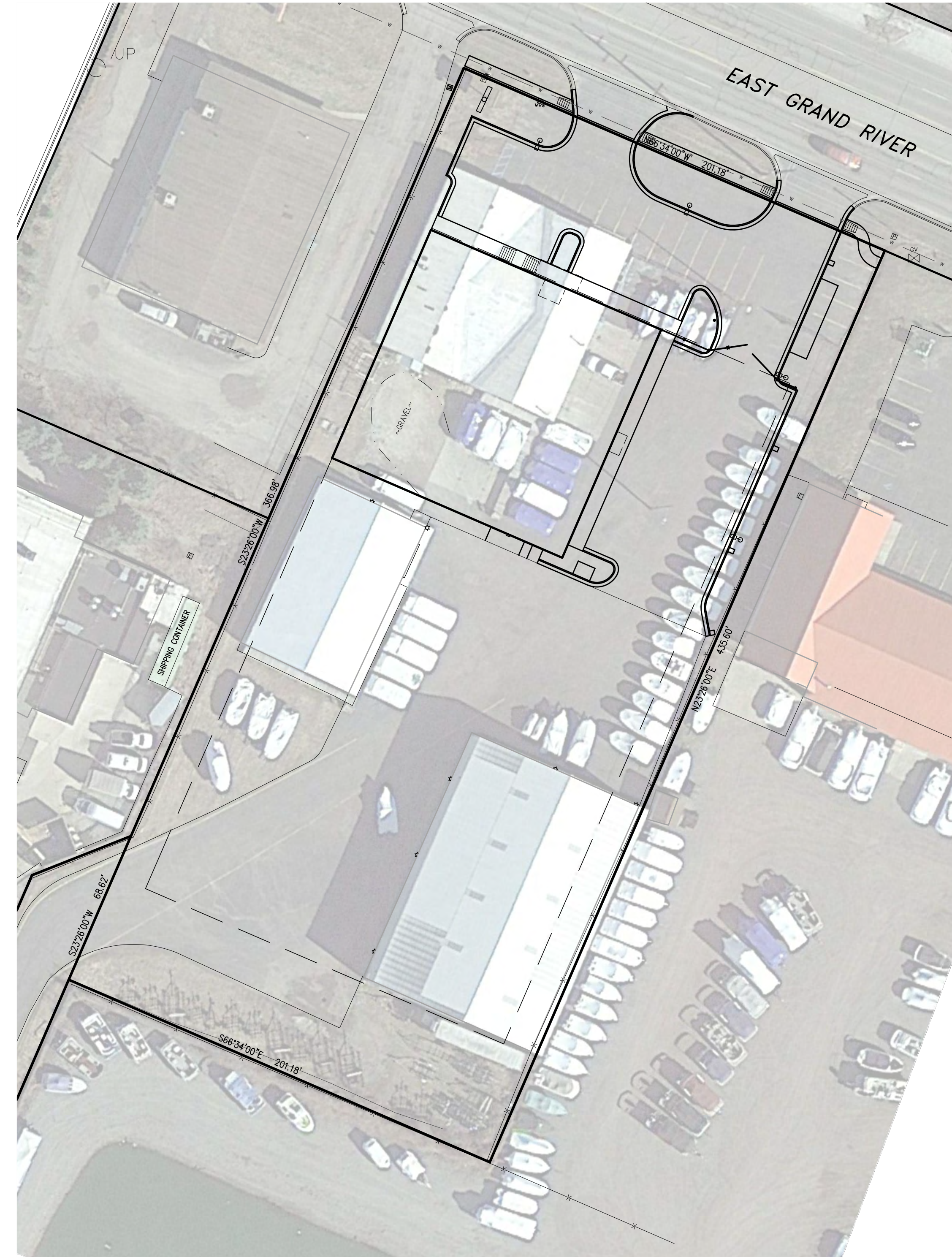
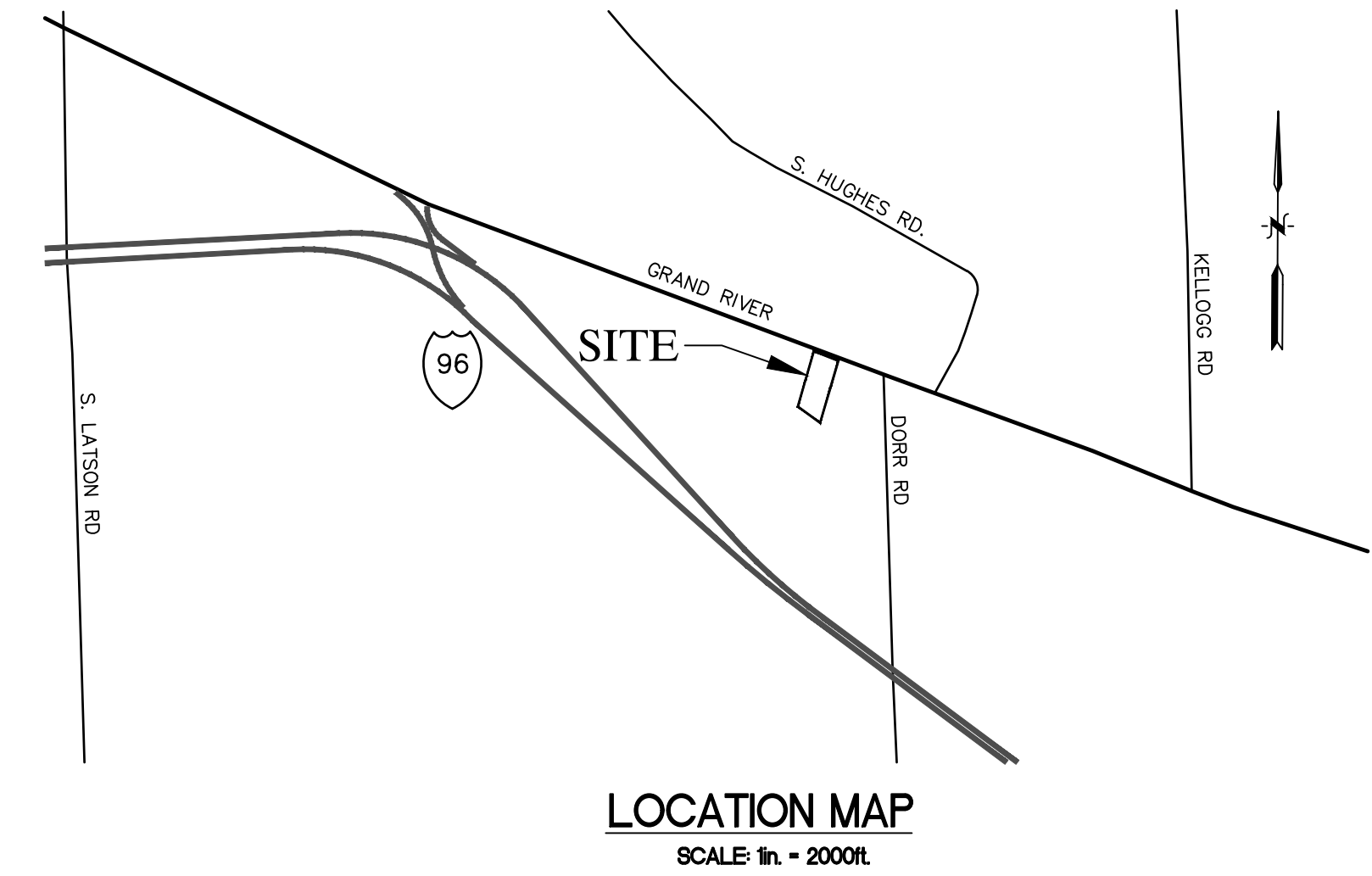
FIGURE 3



SOILS MAP
(NOT TO SCALE)

PROPOSED SITE PLAN FOR WONDERLAND MARINE WEST NEW SHOWROOM AND SALES OFFICE

A PART OF THE SE 1/4 OF SECTION 10, T 2 N, R 5 E,
GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN



LEGAL DESCRIPTION

LEGAL DESCRIPTION

Reference: Tax Roll 2022

Part of the Southeast 1/4 of Section 10, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan, more particularly described as follows:

Commencing at the Southeast Corner of said Section 10;
thence N02°08'E 800 feet;
thence N66°34'W 679 feet to the PLACE OF BEGINNING;
thence N66°34'W 200 feet;
thence S23°26'W 435.6 feet;
thence S66°34'E 200 feet;
thence N23°26'E 435.6 feet to the Place of Beginning.
Subject to and together with all easements and restrictions affecting title to the above described premises.
Tax ID No.: 4711-10-400-019
Also known as: 5796 E. Grand River, Howell, Michigan 48843

Refer to the current policy for title insurance for proof of ownership and all encumbrances affecting title to the described above parcel.

BENCHMARKS

DATUM BASED ON NGS OPUS SOLUTION REPORT, DATED MARCH 28, 2022 AT 11:26 AM. PREVIOUS DATUM FROM MARCH 1999 HAS A DIFFERENCE OF -0.76'.

BENCHMARK #201
ARROW ON HYDRANT, LOCATED ON THE SOUTHERLY SIDE OF GRAND RIVER, NEAR THE NORTHWESTERLY CORNER OF #5796 PARCEL.
ELEVATION = 986.63 (NAVD 88)

BENCHMARK #202
SOUTHEASTERLY CORNER OF CONCRETE PAD, LOCATED ON THE EASTERLY SIDE OF #5796 BUILDING.
ELEVATION = 983.53 (NAVD 88)

ARCHITECT
LINDHOUT ASSOCIATES
10465 CITATION DR.
BRIGHTON, MICHIGAN 48116
(810) 227-5668

OWNER/DEVELOPER
MITTS LLC
5796 E. GRAND RIVER
HOWELL, MICHIGAN 48843
(517) 548-5122

CIVIL ENGINEER/LAND SURVEYOR
DESINE INC.
2183 PLESS DRIVE
BRIGHTON, MI. 48114
(810) 227-9533

SHEET INDEX

EX	EXISTING CONDITIONS & DEMOLITION PLAN
SP	SITE PLAN
GR	GRADING PLAN
LA1	LANDSCAPE PLAN, NORTH AREA
LA2	LANDSCAPE NOTES & DETAILS
LT	LIGHTING PLAN
SE1	SOIL EROSION CONTROL PLAN
SE2	SOIL EROSION CONTROL DETAILS
DT	GENERAL NOTES & DETAILS
A1	PROPOSED FLOORPLAN
A2	PROPOSED BUILDING ELEVATIONS
A3	PROPOSED BUILDING ELEVATIONS
A4	PROPOSED PERSPECTIVE VIEWS



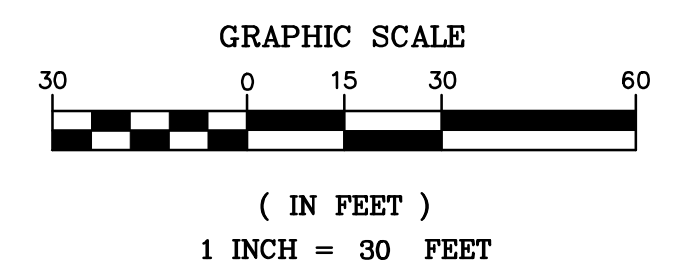
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OR VISIT CALL811.COM

REVISED	SCALE: N/A
NOV. 1, 2022	PROJECT No.: 214052
NOV. 21, 2022	DWG NAME: 4052 COV
	PRINT: FEB. 9, 2022

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



- DEMOLITION NOTES:**
- 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 1 on 1 influence zone of proposed structures, paved areas and/or other areas subject to vehicular traffic shall be backfilled with MDOT Class III 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).



- LEGEND**
- Parcel Boundary Line
 - Setback Line
 - Well Water
 - Bollard
 - Stop Sign / Pedestrian Crossing Sign
 - Sign / Monument Sign
 - Handicap Parking Designation
 - Ex. Wall Pack / Overhead Light
 - Light Base
 - Utility Meters & Boxes (Electric Meter, Gas Meter, Water Meter, Phone Box, CATV Box, Mail Box, Util. Box)
 - Utility Pole w/Guy Wire
 - Overhead Utility Lines (Electric/Phone/Cable)
 - U/G Utility Lines (Phone/Fiber Optic/Electric/Cable TV/Misc Utilities)
 - Edge of Brush Line
 - Deciduous Tree w/Identifier
 - Coniferous Tree w/Identifier
 - Bush / Shrub
 - Boulder
 - Fence (Chain Link Unless Otherwise Stated)
 - Edge of Gravel
 - Concrete Curb (Unless Otherwise Stated)
 - Edge of Water
 - Sanitary Sewer Manhole w/Identifier
 - Sanitary Sewer Pipe
 - Clean Out
 - Roof Drain
 - Storm Water Manhole w/Identifier
 - Catch Basin w/Identifier
 - Flared End Section
 - Storm Water Drainage Pipe
 - Hydrant
 - Water Shut Off
 - Water Valve Box
 - Water Main
 - Gas Shut Off
 - U/G Gas
 - 1' Contour
 - 5' Contour
 - Ex. Drainage Tributary Limits
 - Surface Runoff Flow Direction

BENCHMARK
 DATUM BASED ON NGS OPUS SOLUTION REPORT, DATED MARCH 28, 2022 AT 11:26 AM. PREVIOUS DATUM FROM MARCH 1999 HAS A DIFFERENCE OF -0.76'.
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 BENCHMARK #202
 SOUTHWESTERLY CORNER OF CONCRETE PAD, LOCATED ON THE EASTERLY SIDE OF #5796 BUILDING. ELEVATION = 983.53 (NAVD 88)

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DESIGN:WMP	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG	1	11-21-22	REVISED PER REVIEW COMMENTS			
CHECK: WMP						

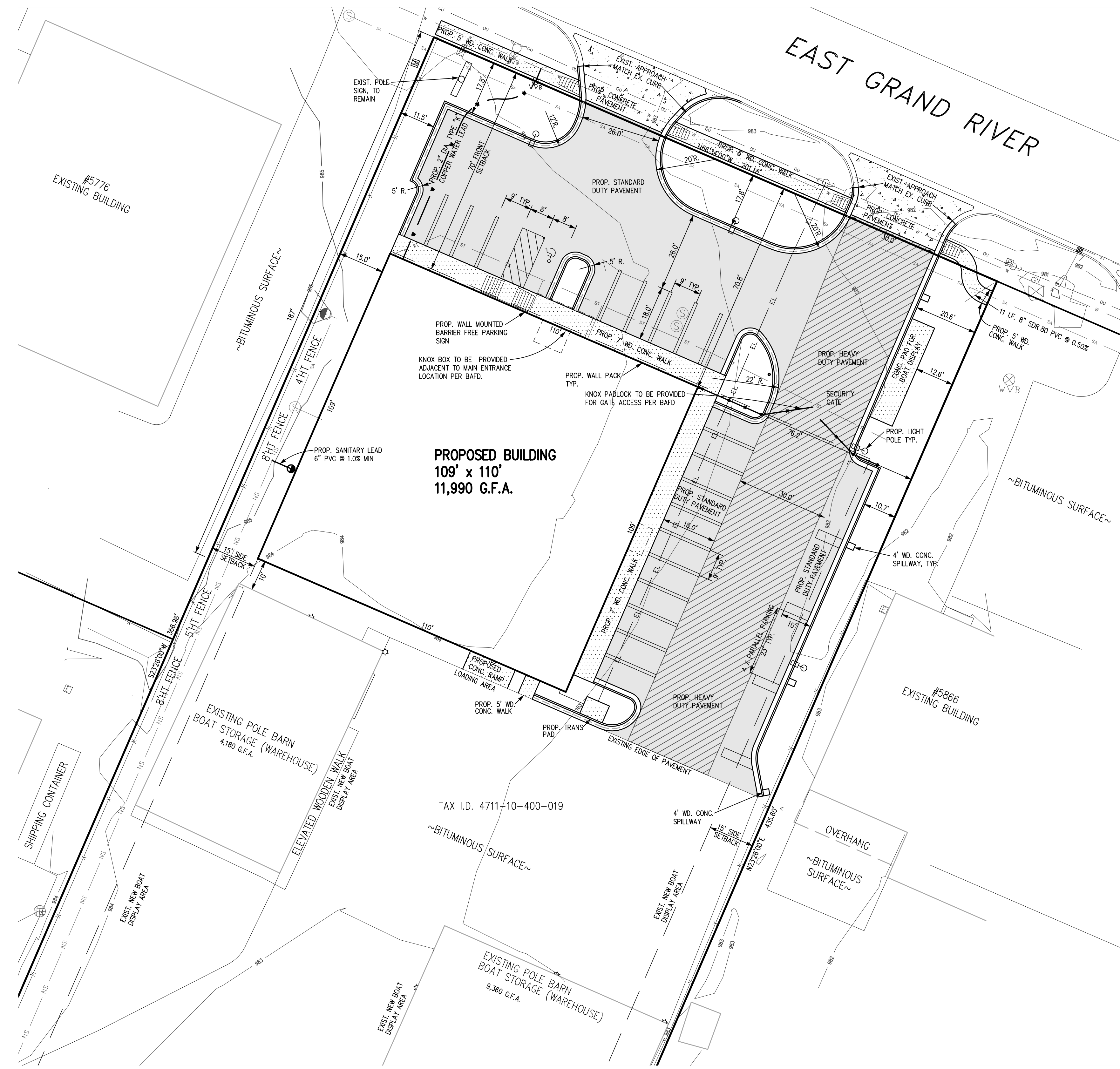
WONDERLAND MARINE WEST

EXISTING CONDITIONS AND DEMOLITION PLAN

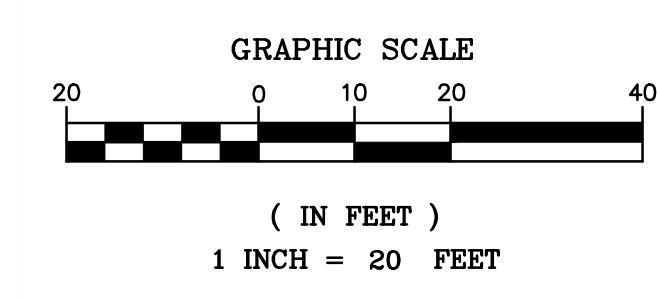
CLIENT: MITTS LLC
 5796 E. GRAND RIVER
 HOWELL, MICHIGAN, 48843
 517-548-5122

SCALE: 1in. = 30ft.
 PROJECT No.: 214052
 DWG NAME: 4052-DEMO
 ISSUED: NOV. 21, 2022

EX



- LEGEND**
- = PARCEL BOUNDARY LINE
 - = SETBACK LINE
 - = WELL WATER
 - = BOLLARD
 - = STOP SIGN / PEDESTRIAN CROSSING SIGN
 - = SIGN / MONUMENT SIGN
 - = HANDICAP PARKING DESIGNATION
 - = EX. WALL PACK / OVERHEAD LIGHT
 - = LIGHT BASE
 - = UTILITY METERS & BOXES (ELECTRIC METER, GAS METER, WATER METER, PHONE BOX, CATV BOX, MAIL BOX, UTIL. BOX)
 - = UTILITY POLE W/GUY WIRE
 - = OVERHEAD UTILITY LINES (ELECTRIC/PHONE/CABLE)
 - = U/G UTILITY LINES (PHONE/FIBER OPTIC/ELECTRIC/CABLE TV/MISC UTILITIES)
 - = EDGE OF BRUSH LINE
 - = DECIDUOUS TREE W/IDENTIFIER
 - = CONIFEROUS TREE W/IDENTIFIER
 - = BUSH / SHRUB
 - = BOULDER
 - = FENCE (CHAIN LINK UNLESS OTHERWISE STATED)
 - = EDGE OF GRAVEL
 - = CONCRETE CURB (UNLESS OTHERWISE STATED)
 - = EDGE OF WATER
 - = SANITARY SEWER MANHOLE W/IDENTIFIER
 - = SANITARY SEWER PIPE
 - = CLEAN OUT
 - = ROOF DRAIN
 - = STORM WATER MANHOLE W/IDENTIFIER
 - = CATCH BASIN W/IDENTIFIER
 - = FLARED END SECTION
 - = STORM WATER DRAINAGE PIPE
 - = HYDRANT
 - = WATER SHUT OFF
 - = WATER VALVE BOX
 - = WATER MAIN
 - = GAS SHUT OFF
 - = U/G GAS
 - = 1' CONTOUR
 - = 5' CONTOUR
 - = HEAVY DUTY PAVEMENT
 - = STANDARD DUTY PAVEMENT
 - = CONCRETE PAVEMENT
 - = CONCRETE SIDEWALK



SITE CHARACTERISTICS

PARCEL ID: 4711-10-400-019
 ZONED: GC - GENERAL COMMERCIAL
 REQUIRED PROVIDED
 AREA: 1.0 AC. 2.01 AC.
 WIDTH: 150' 201'
 SETBACKS: FRONT 70' 70.08'
 REAR 15' 15.0'
 50' 255.8'

BUILDING COVERAGE AREA: 35% MAX. 29.2%
 IMPERVIOUS COVERAGE AREA: 75% MAX. 75.0%

PARKING REQUIREMENTS

Recreational vehicle, boat, mobile home and similar sales = 1.0 space per 800 sq.ft. gross leasable floor area, plus 2.0 spaces per each vehicle sales service bay

Boat storage (warehouse), = 1.0 space per 1,500 sq.ft. gross leasable floor area

A. Gross leasable floor area (sales) = 11,990 sq. ft.
 Parking req'd 11,990 sq.ft. X 1.0space/800 sq.ft. = 15 spaces

B. Gross leasable floor area (warehouse) = 13,493 sq. ft.
 Parking req'd 13,493 sq.ft. X 1.0space/1,500 sq.ft. = 9 spaces

B. Vehicle sales service bays = 1 bays
 Parking req'd 1 bays X 2 spaces/bay = 2 spaces

TOTAL REQUIRED SPACES = 26 spaces
 SPACES PROVIDED = 26 spaces

COVERAGE CALCULATION
 CHANGE IN IMPERVIOUS AREA OF THE NORTHERLY 187' OF PARCEL 4711-10-400-019
 EXISTING IMPERVIOUS AREA: 31,443 SQ.FT.
 PROPOSED IMPERVIOUS AREA: 29,750 SQ.FT.

BENCHMARK
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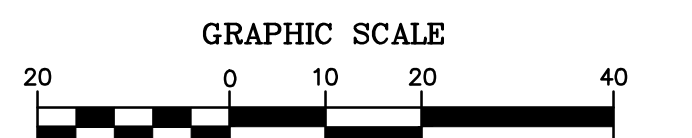
WONDERLAND
MARINE WEST

SITE PLAN

CLIENT: MITTS LLC
 5796 E. GRAND RIVER
 HOWELL, MICHIGAN, 48843
 517-548-5122

SCALE: 1in. = 20ft.
 PROJECT No.: 214052
 DWG NAME: 4052 SP
 ISSUED: NOV. 21, 2022

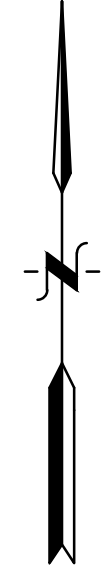
SP



(IN FEET)
1 INCH = 20 FEET

LEGEND

- = PARCEL BOUNDARY LINE
- = SETBACK LINE
- = WELL WATER
- = BOLLARD
- = STOP SIGN / PEDESTRIAN CROSSING SIGN
- = SIGN / MONUMENT SIGN
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- = LIGHT BASE
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- = ROOF DRAIN
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- = CATCH BASIN W/IDENTIFIER
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- = HYDRANT
- = WATER SHUT OFF
- = WATER VALVE BOX
- = WATER MAIN
- = GAS SHUT OFF
- = U/G GAS
- = 1' CONTOUR
- = 5' CONTOUR
- = PROP. SPOT ELEVATION
- = EX. SPOT ELEVATION
- = EDGE OF METAL
- = BACK OF CURB
- = TOP OF PAVEMENT
- = TOP OF WALK
- = CENTERLINE OF SPILLWAY



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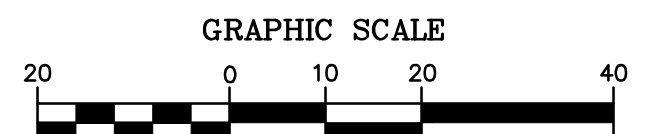
WONDERLAND
MARINE WEST

GRADING PLAN

CLIENT:
MITTS LLC
5796 E. GRAND RIVER
HOWELL, MICHIGAN, 48843
517-548-5122

SCALE: 1in. = 20ft.
PROJECT No.: 214052
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ISSUED: NOV. 21, 2022

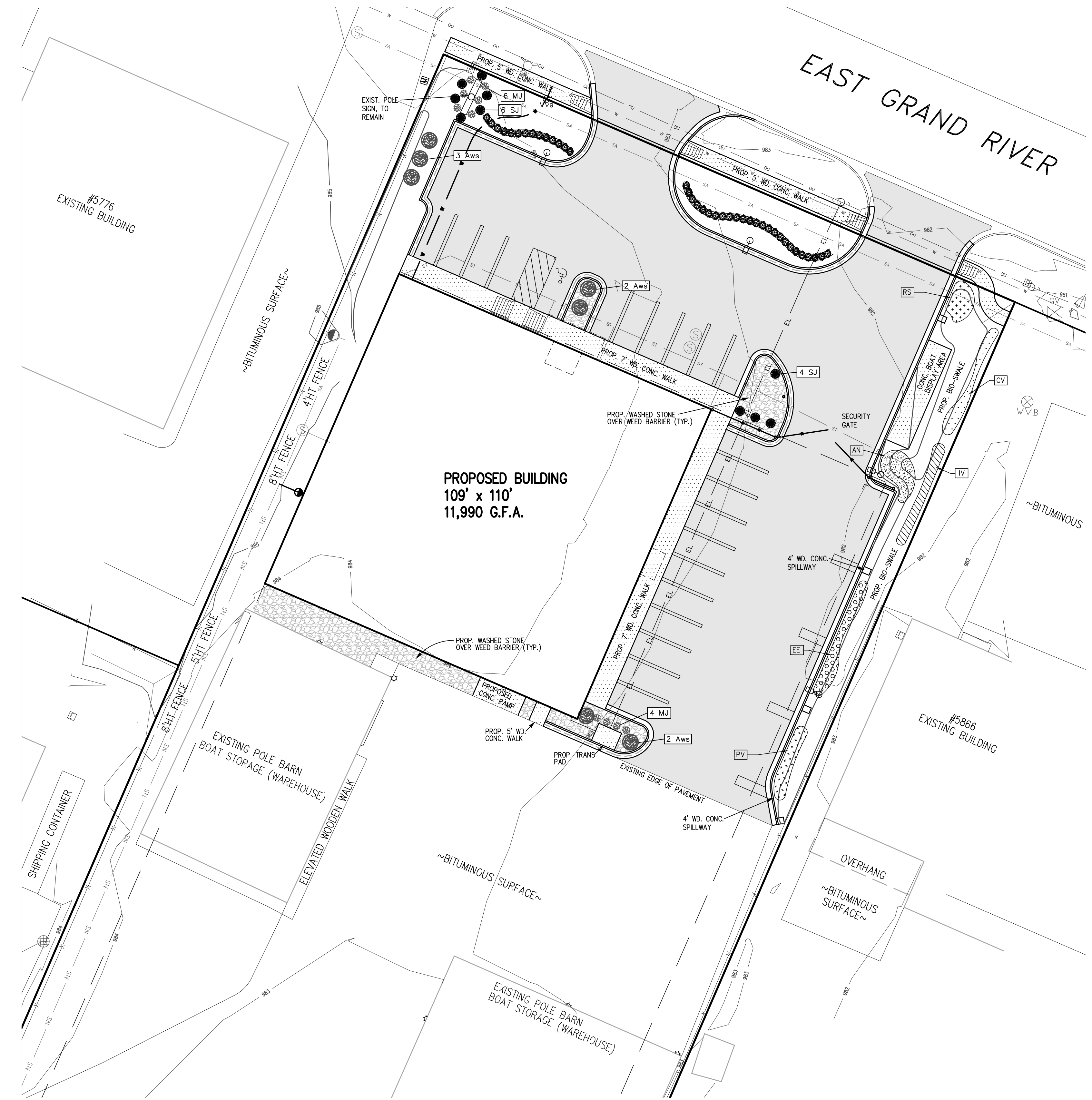
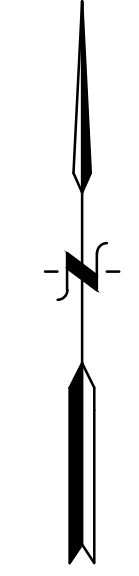
GR



(IN FEET)
1 INCH = 20 FEET

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- WATER MAIN
- GAS SHUT OFF
- U/G GAS
- 1' CONTOUR
- 5' CONTOUR



LANDSCAPE CALCULATION:

STREET FRONTAGE GREENBELT
20' WIDTH
1 CANOPY TREE PER 40 LF.
135 LF./40 = 3.4, 4 TREES REQUIRED, 0 PROVIDED

PARKING AREA LANDSCAPE
1 CANOPY TREE & 100 sq.ft. PER 10 SPACES
26 SPACES/10 = 2.6, 3 TREES REQUIRED, 0 PROVIDED
260 sq.ft. REQUIRED, 596 sq.ft. PROVIDED

PLANTING SCHEDULE

QTY	SYM	BOTANICAL NAME	COMMON NAME	SIZE
10	MJ	JUNIPERUS SCOPULORUM 'MEDORA'	MEDORA JUNIPER	3' HT.
7	Aws	SPIRAEA BIMALDA 'AWS'	ANTHONY WATERER SPIRAEA	24" HT.
10	SJ	SPIRAEA J. 'SHIROBANA'	SHIROBANA SPIRAEA	24" HT.
TBD	TBD	TBD	TBD	TBD

(SPECIES, SPACING, AND SIZE OF PROPOSED HEDGE PLANTINGS, TO BE DETERMINED BY OWNER*)

BENCHMARK
DATUM BASED ON NGS OPUS SOLUTION REPORT,
DATED MARCH 28, 2022 AT 11:26 AM.
PREVIOUS DATUM FROM MARCH 1999 HAS A
DIFFERENCE OF -0.76'.

BENCHMARK #201
ARROW ON HYDRANT, LOCATED ON THE
SOUTHERLY SIDE OF GRAND RIVER, NEAR THE
NORTHWESTERLY CORNER OF #5796 PARCEL.
ELEVATION = 986.63 (NAVD 88)

BENCHMARK #202
SOUTHEASTERLY CORNER OF CONCRETE PAD,
LOCATED ON THE EASTERLY SIDE OF #5796
BUILDING.
ELEVATION = 983.53 (NAVD 88)

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

WONDERLAND
MARINE WEST

LANDSCAPE PLAN

CLIENT:
MITTS LLC

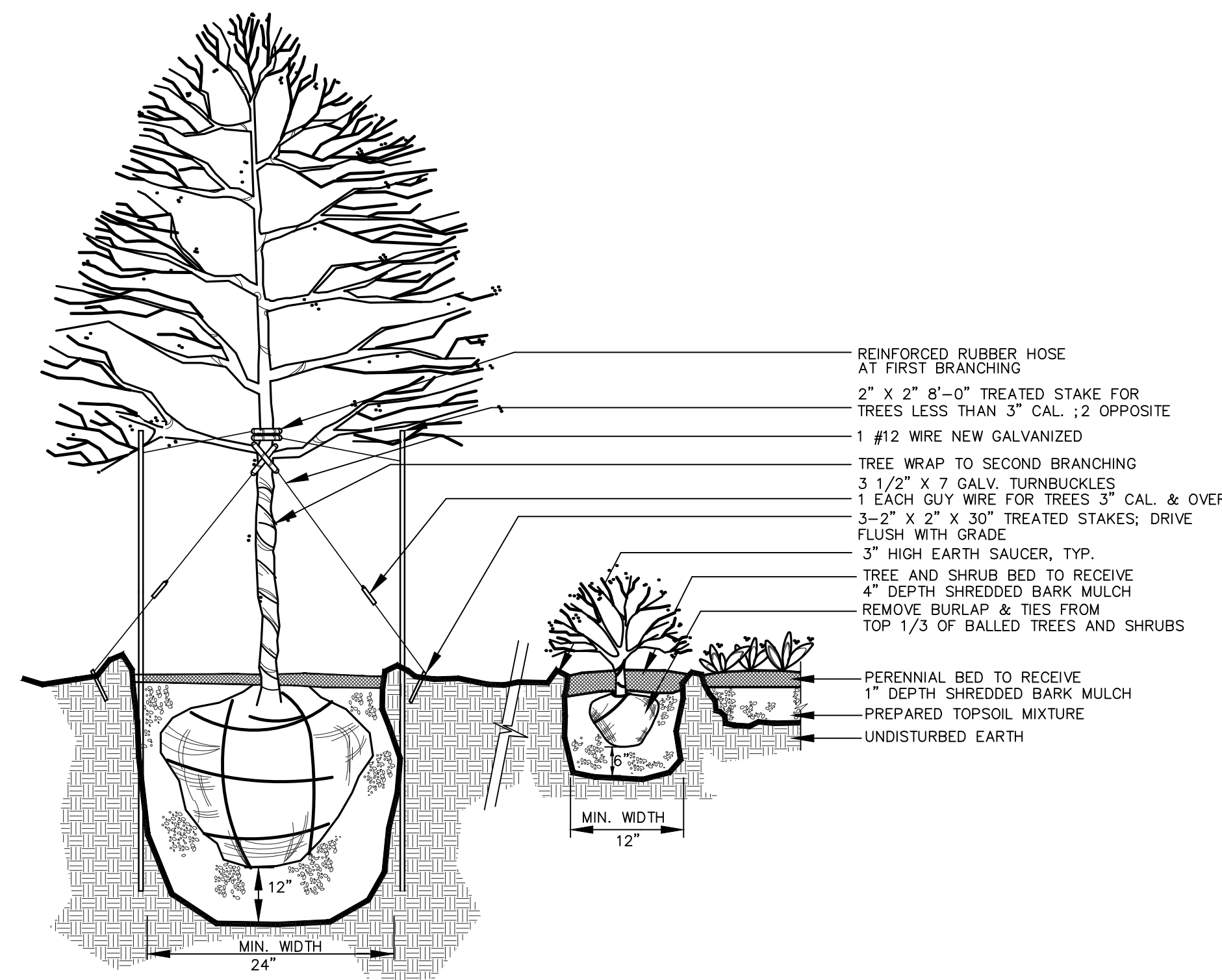
5796 E. GRAND RIVER
HOWELL, MICHIGAN, 48843
517-548-5122

SCALE: 1in. = 20ft.
PROJECT No.: 214052
DWG NAME: 4052 LA
ISSUED: NOV. 21, 2022

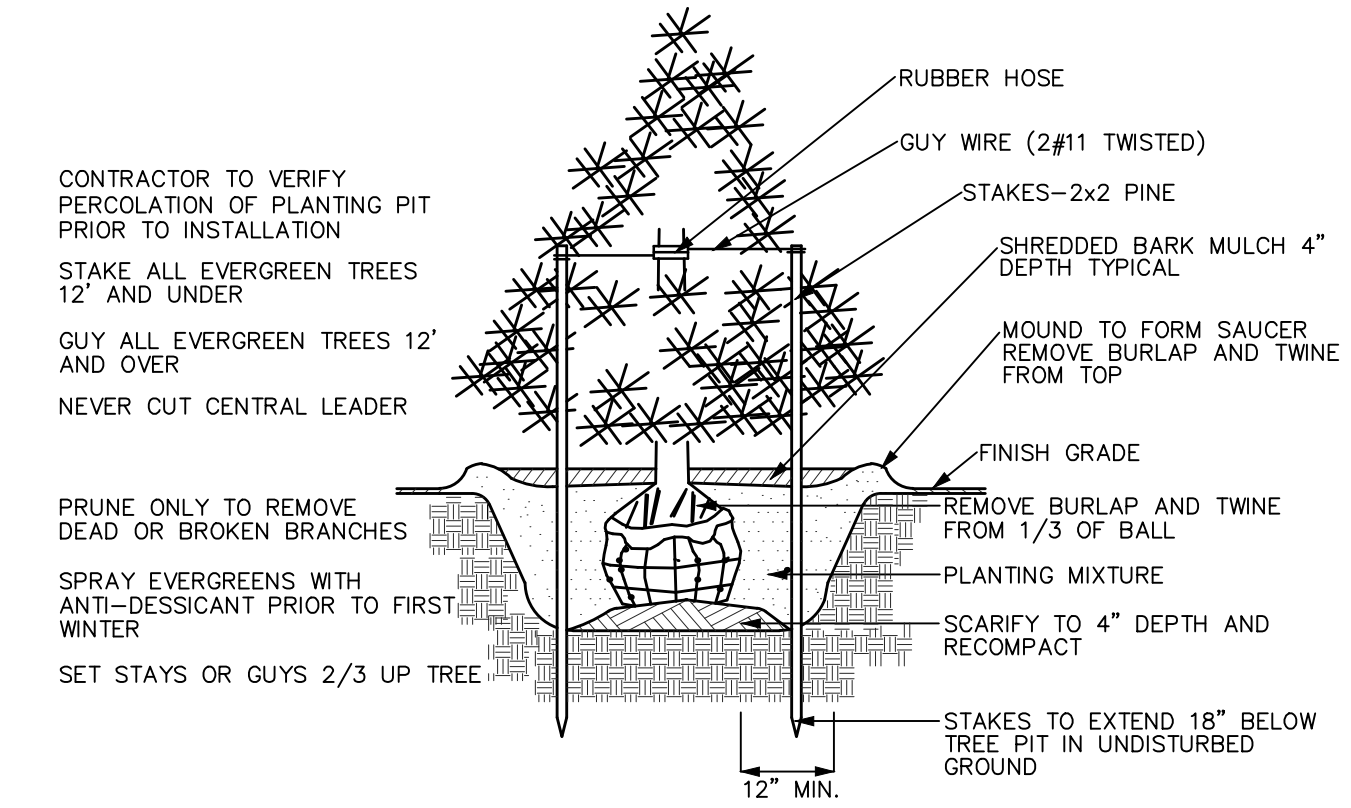
LA1

LANDSCAPING NOTES:

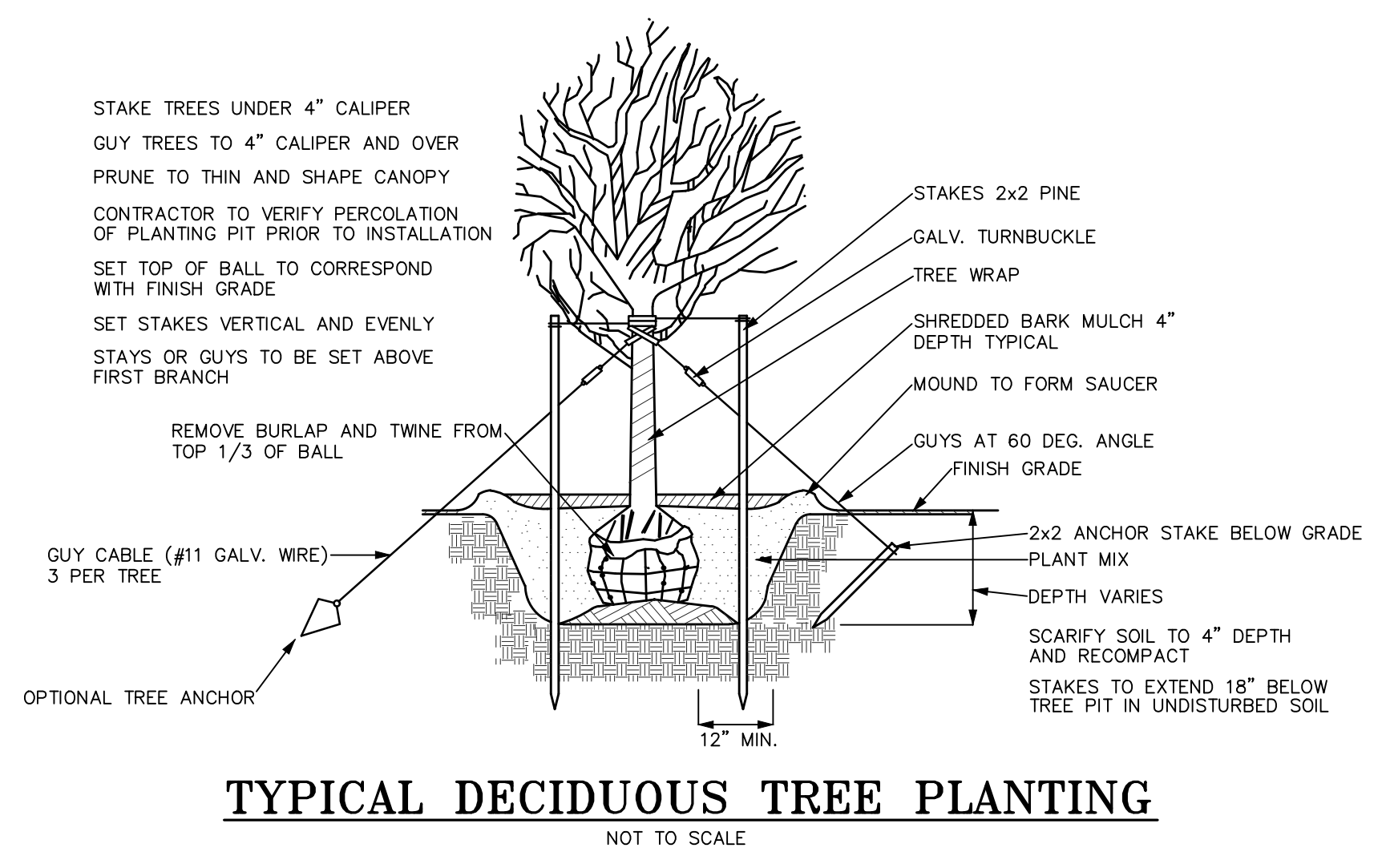
- All minimum planting sizes specified on the Project Plans shall be at the time of planting.
- All landscape materials shall be as specified on the Project Plans or approved equal. Substitutions shall not be made without prior written approval from the Project Engineer and receipt of the Owner's Authorization.
- All plant material shall be free of disease and insects and shall conform to the American Standard of Nursery Stock of the American Association of Nurserymen.
- All landscape plantings shall be planted and maintained in a healthy condition and shall be guaranteed by the Landscape Contractor and/or Supplier for a minimum period of 1 year from the time of planting. Any plantings that die or become diseased during the guarantee period shall be removed and replaced by the Landscape Contractor and/or Supplier at no cost to the Owner.
- Excavations for container or balled plantings shall be no deeper than the root ball or container and shall be at least twice the diameter of the root ball or container.
- Excavations for bare root plantings shall be no deeper than the longest roots and shall be at least twice the diameter of the root spread.
- The sides of planting excavations in heavy and/or wet soils shall be scarified with a fork, pick or shovel to eliminate glazing.
- Landscape planting backfill shall consist of a prepared mixture of peat moss, composted manure and topsoil or suitable excavated native soil material mixed with the appropriate soil conditioners that are compatible with the native soil and plant species. The type and mixture ratio of soil conditioners shall be in accordance with the Landscape Supplier's recommendations.
- The Landscape Contractor shall stake and reinforce all trees to prevent wind damage. The Landscape Contractor shall remove all tree reinforcement and stakes upon expiration of the guarantee period.
- Perennials shall be planted on a 3" minimum bed of prepared peat moss, composted manure and topsoil mixture.
- Ground cover within landscape beds shall be decorative stone. Decorative stone shall be 2" to 4" diameter washed river rock placed 4" deep.
- Ground cover within landscape beds shall be placed over a landscape fabric weed barrier. Landscape fabric shall be non-woven, 4 oz. per sq. yd. minimum weight, with UV protection. Landscape fabric shall be installed in strict accordance with the Manufacturer's specifications and recommendations. Landscape fabric shall not be installed over or within 12 inches of perennial plantings.
- Lawn areas shall be established with 3" minimum depth of prepared topsoil and hydrosed. The Landscape Contractor shall guarantee all lawn areas for a minimum period of 1 year from time of seeding. All lawn areas that do not take root or die during the guarantee period shall be re-hydrated as appropriate by the Landscape Contractor at no cost to the Owner. All lawn areas that become diseased during the guarantee period shall be removed and re-hydrated as appropriate by the Landscape Contractor at no cost to the Owner.
- Topsoil shall be a dark, organic, natural surface soil free of clay lumps, peat, muck, subsoil, noxious weeds and other foreign material such as roots, sticks and rocks over 1/2" diameter. Topsoil shall not be frozen or muddy. All earthen areas to receive topsoil shall be finish graded and properly trimmed. Topsoil shall be spread on the prepared areas to a depth of 3 inches. After spreading, any large clods and lumps of topsoil shall be broken up and pulverized. Stones and rocks over 1/2" in diameter, roots, litter and all foreign matter shall be raked up and disposed of by the Landscape Contractor. Seed and mulch shall be placed within 5 days of topsoil placement.
- Seed mixture for lawn areas shall consist of 10% Kentucky Blue Grass, 20% Perennial Rye Grass, 30% Hard Fescue and 40% Creeping Red Fescue. Hydrosed shall be placed within 5 days of topsoil placement and shall be placed to provide complete and uniform coverage. Fertilizer shall be placed at 80 pounds per acre, hydro mulch at 1,200 pounds per acre and water at 500 gallons per acre unless otherwise specified by the Seed Distributor/Manufacturer. All over spray areas shall be properly cleaned and restored at no expense to the contract.
- Seed and mulch may be substituted for hydrosed when authorized by the Owner. Seed mixtures shall meet the requirements for lawn areas as outlined above. Seed shall be uniformly applied at a rate of 220 lbs per acre unless otherwise recommended by the seed Distributor/Manufacturer. Seed mixture shall be fertilized. Fertilizer shall be uniformly applied at a rate of 240 pounds per acre of chemical fertilizer nutrients in equal portions (10-10-10) of Nitrogen, Phosphoric Acid and Potash.
- All seeded areas with a slope less than 1:4 shall be stabilized with straw mulch placed at 2 tons per acre unless otherwise recommended by the seed Distributor/Manufacturer. Erosion control blankets shall be substituted for straw mulch in roadway greenbelts, lawn areas adjacent to heavy traffic, lawn areas subject to high winds, slopes of 1:4 or greater and within ditches, swales and other areas exposed to concentrated overland storm water flow. Erosion control blankets shall consist of 100% straw fiber matrix with photodegradable polypropylene netting and have a 12-month minimum longevity rating. Erosion control blankets shall be pinned with biodegradable pins and shall be installed in accordance with the Manufacturer's recommendations.
- The Landscape Contractor shall be responsible for watering non-irrigated plantings and stck during dry weather conditions throughout the guarantee period as necessary to promote growth and establishment.



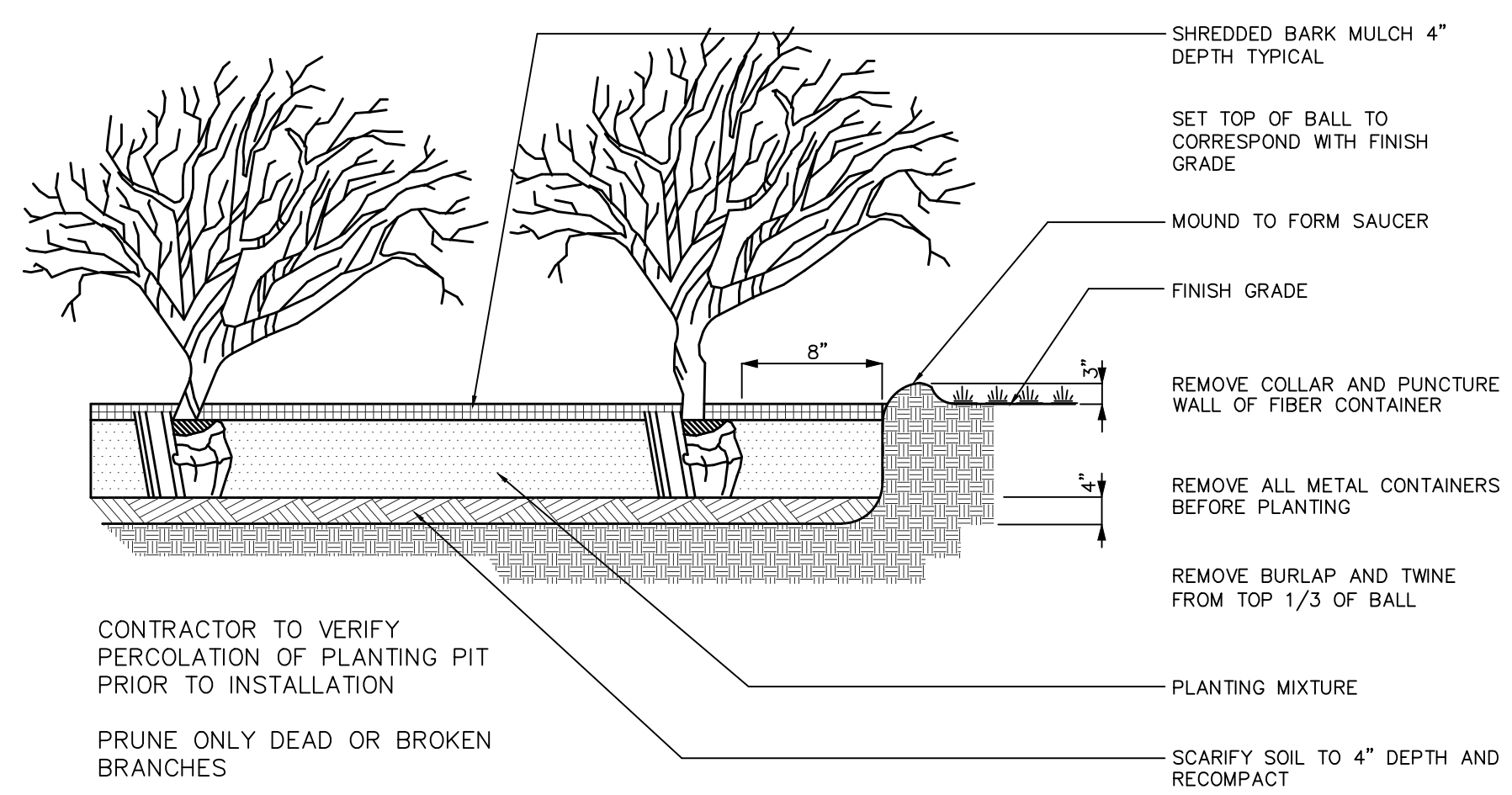
TYPICAL TREE/SHRUB/PERENNIAL PLANTING
NOT TO SCALE



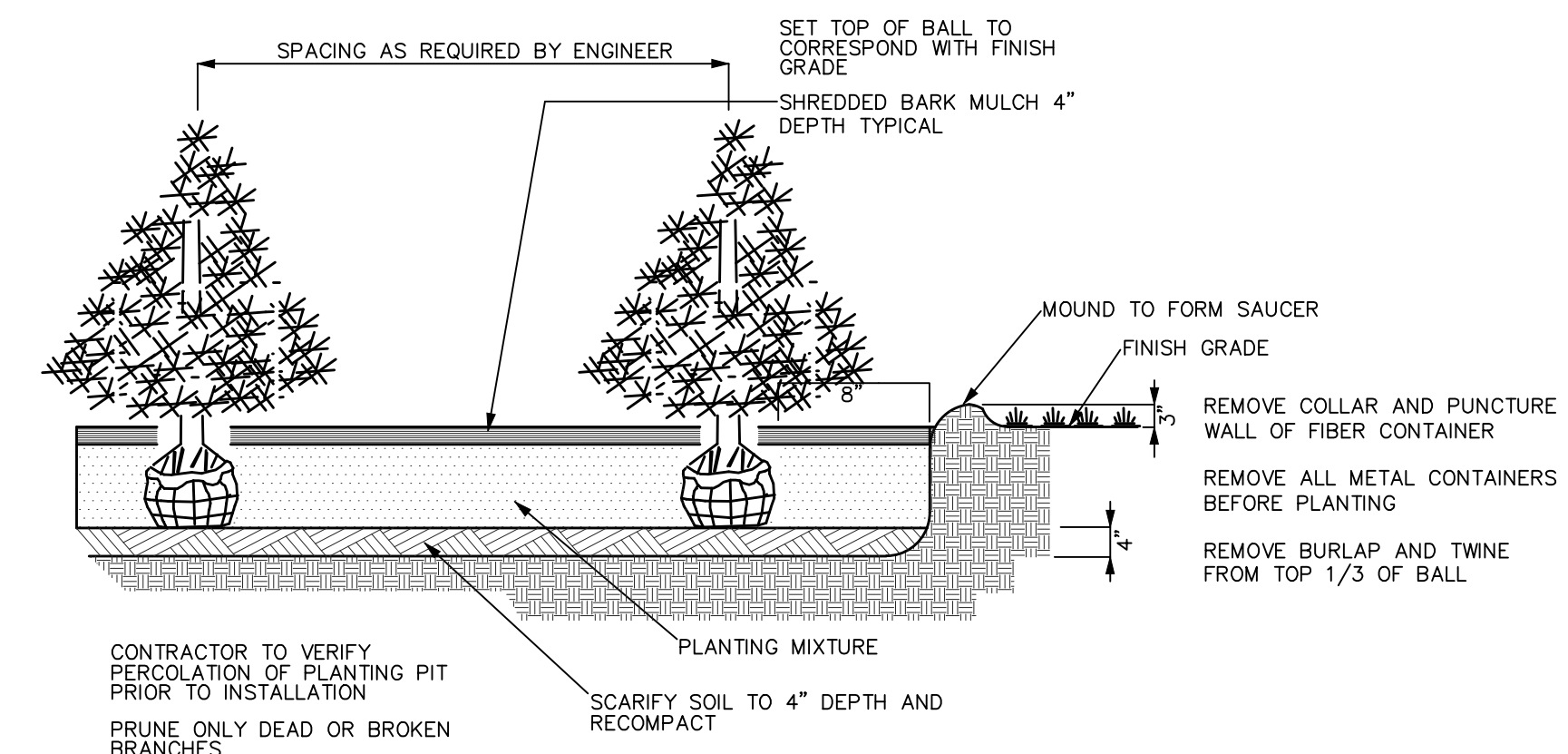
TYPICAL EVERGREEN TREE PLANTING
NOT TO SCALE



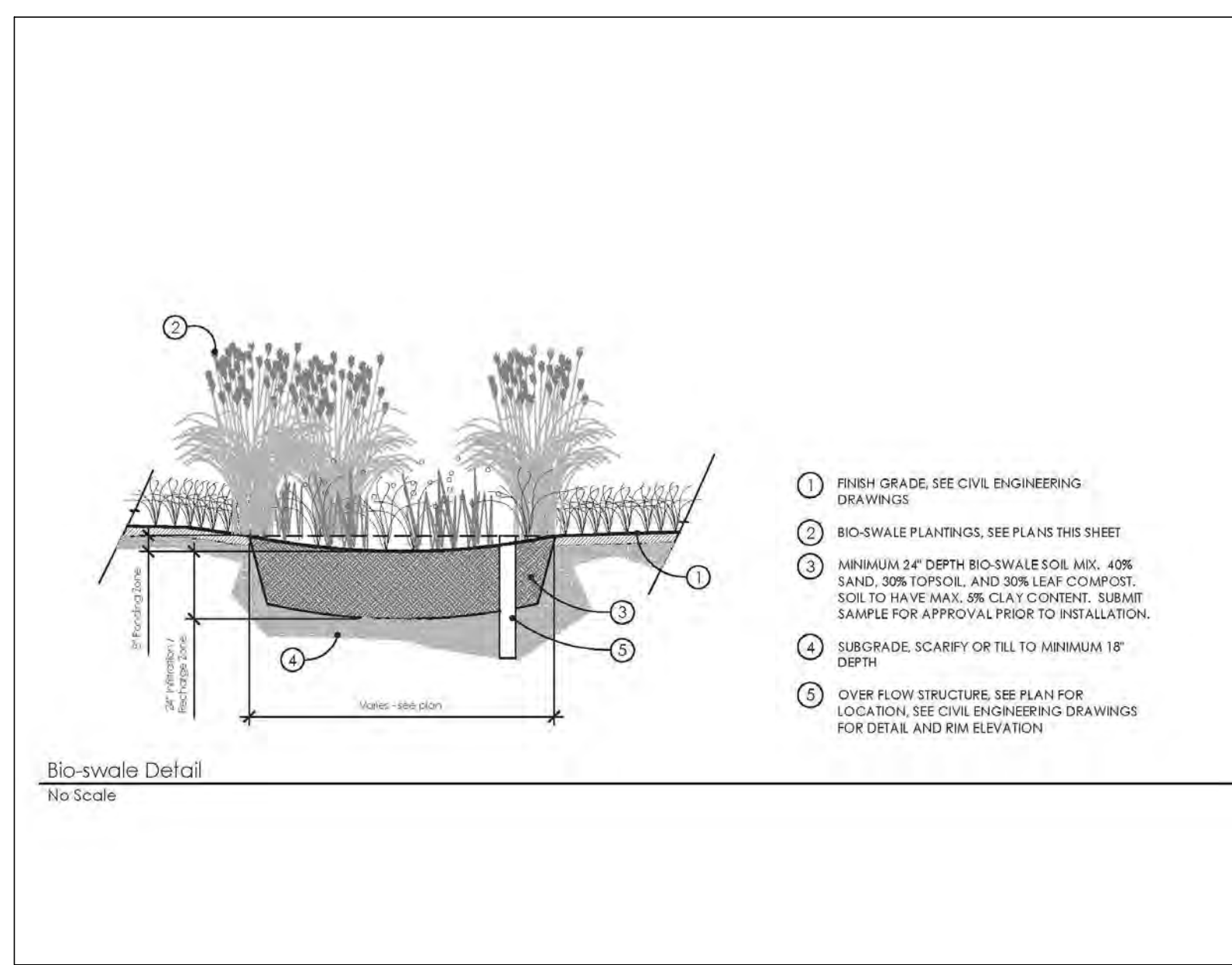
TYPICAL DECIDUOUS TREE PLANTING
NOT TO SCALE



TYPICAL SHRUB PLANTING
NOT TO SCALE



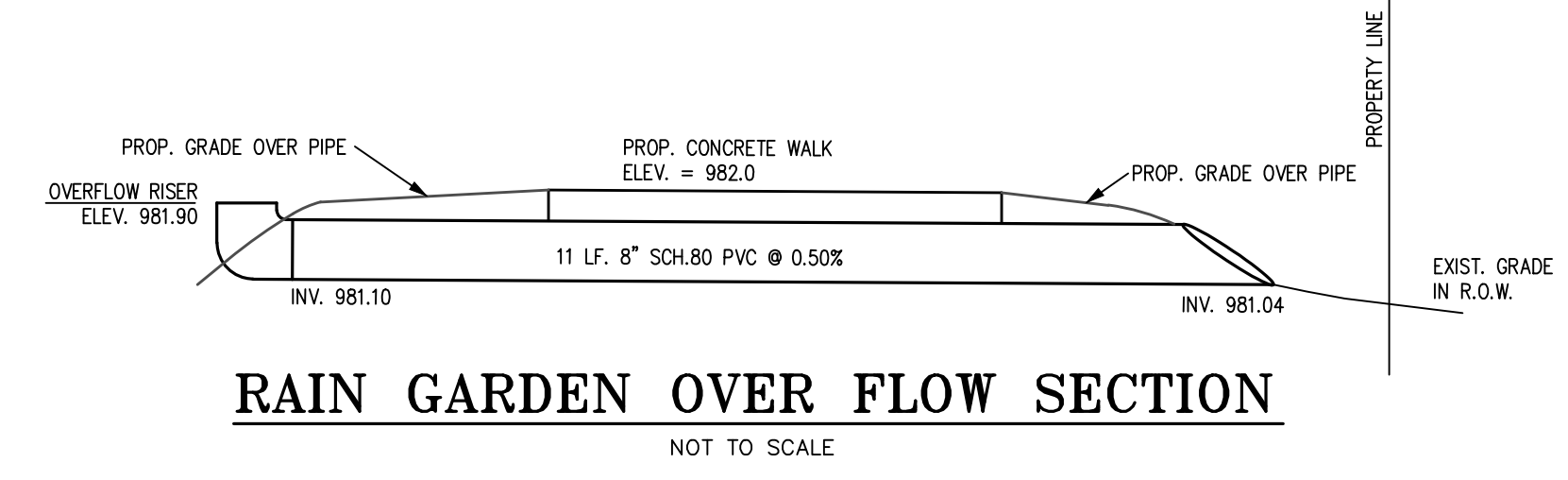
TYPICAL EVERGREEN SHRUB PLANTING
NOT TO SCALE



RAIN GARDEN PLANT LIST					
PERENNIALS AND GROUNDCOVERS					
KEY	QTY	BOTANICAL/COMMON NAME	ROOT	SIZE	COMMENT
AN	12	Aster novae-angliae / New England Aster	Potted	1 Gallon	
CV	15	Carex vulpimolde / Fox Sedge	Potted	1 Gallon	
EE	15	Eupatorium Phatom / Phantom Joe-Pye Weed	Potted	1 Gallon	
IV	10	Iris virginica-shrevei / Wild Blue Flag Iris	Potted	1 Gallon	
PV	10	Panicum virgatum 'Shenandoah' / Shenandoah Switch Grass	Potted	1 Gallon	
RS	12	Rudbeckia subtomentosa / Sweet Cone Flower	Potted	1 Gallon	

RAIN GARDEN NOTES:

- The planting soil must be a mixture that includes sand (2.0-0.50 mm) (50-60%), topsoil (sandy/clay loam) (20-25%), and leaf compost (20-25%). The maximum clay content of the mixture must be equal to or less than 5%. The planting soil mixture shall be a uniform mix, free of stones, stumps, roots or other similar objects larger than two inches, excluding mulch. The soil must have an infiltration rate of at least 0.5" per hour and a pH between 5.5 and 6.5. In addition, the planting soil should have a maximum 500 ppm concentration of soluble salts. The planting soil mixture will be installed in 6" horizontal lifts, compacted at each lift by evenly saturating the entire surface area of the lift until water flows from the underdrain system. Final grading of the planting soil will be performed after a 24 hour setting period.
- Compost shall be mature, stable, weed free and produce by aerobic decomposition of organic matter with a pH between 5.5 and 7.5, submit sample for approval.
- Underdrain gravel blanket should be double washed, 1.5" in size, MDOT CL.I porous material.
- A uniform depth of 3" shredded hardwood bark mulch (natural color) will cover the entire rain garden area.
- The planting soil mixture shall be placed and graded using low ground-contract pressure equipment or by excavators and/or backhoes operating on the ground adjacent to the rain garden area.
- No heavy equipment shall be used within the perimeter of the rain garden area before, during or after the placement of the planting soil mixture.
- Geotextile fabric should maintain a flow rate of 125 GPM per square foot, per MDOT specifications for non-woven geotextile separator.



RAIN GARDEN OVER FLOW SECTION
NOT TO SCALE

DESIGN: WMP	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG	1	11-21-22	REVISED PER REVIEW COMMENTS			
CHECK: WMP						

WONDERLAND
MARINE WEST

LANDSCAPE
NOTES & DETAILS

CLIENT:
MITTS LLC
5796 E. GRAND RIVER
HOWELL, MICHIGAN 48843
517-548-5122

SCALE:
PROJECT No.: 214052
DWG NAME: 4052 LA
ISSUED: NOV. 21, 2022

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SOILS MAP
NOT TO SCALE

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Frb	Fox-Boyer complex, 2 to 6 percent slopes	0.9	0.6%
HgtaA	Houghton musk, 0 to 1 percent slopes	1.3	0.9%
HmC	Hillsdale Miami loams, 6 to 12 percent slopes	1.5	1.1%
MoB	Wawassee loam, 2 to 6 percent slopes	85.9	62.4%
MoC	Wawassee loam, 6 to 12 percent slopes	7.5	5.4%
MoD	Miami loam, 12 to 18 percent slopes	12.7	9.2%
MoE	Miami loam, 18 to 25 percent slopes	0.7	0.5%
W	Water	24.6	17.9%
Wh	Wheatonaw silt loam	2.6	1.9%
Totals for Area of Interest		137.6	100.0%

MAINTENANCE NOTES FOR SOIL EROSION CONTROL MEASURES:

The Construction Site and all Soil Erosion Control Measures shall be inspected periodically in accordance with the appropriate local municipality/authority and the Michigan EGLE NPDES rules and regulations. At a MINIMUM, inspections shall be performed once a week and within 24 hours following a storm event resulting in 1" of rainfall or greater. Inspections shall be performed throughout the duration of the construction process and until the site is completely stabilized. Following construction, the owner (or its assignee) shall periodically inspect all permanent soil erosion control measures to ensure proper operation.

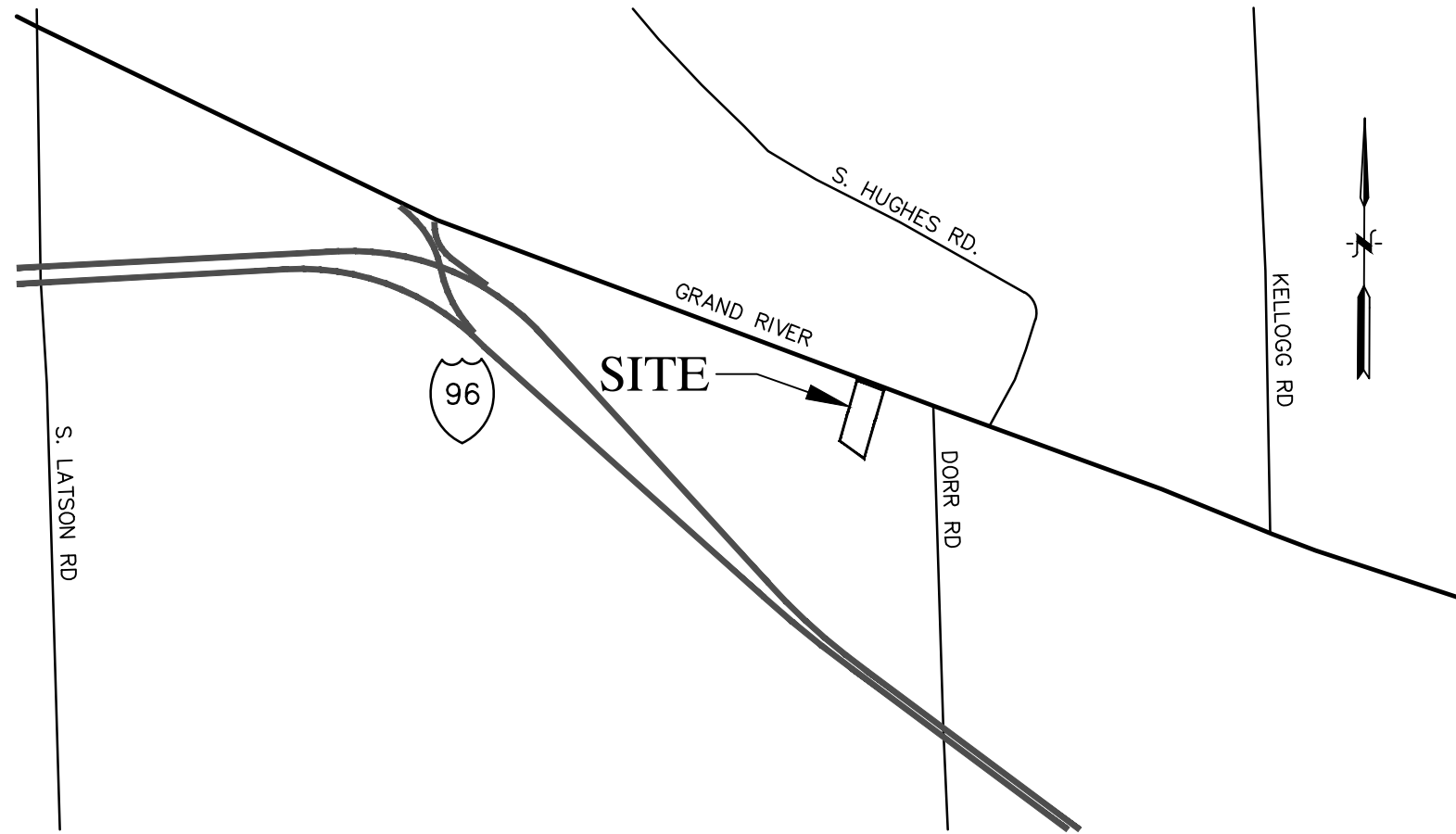
MUD TRACKING CONTROL DEVICE / CONSTRUCTION ACCESS: Mud tracking control devices shall be inspected for significant mud accumulation and to ensure the access is not eroding into public rights of way or drainage features. Add additional layers of stone or remove and replace stone each time the stone becomes covered with mud. All sediment dropped or eroded onto public rights of way shall be removed immediately. Sweeping of the public rights of way and/or paved access route shall be performed as necessary to maintain the access route free of sediment and debris.

SEEDING: Newly seeded areas shall be inspected until substantial vegetative growth is obtained. Seeded areas shall be inspected to ensure erosion is not occurring in the seeded area and vegetative growth is promoted. Eroded areas shall be finish graded as necessary to remove erosion channels or gulleys and new seed placed as soon as weather permits.

SILT FENCE: Silt fencing shall be inspected for soil accumulation/clogging, undercutting, overtopping and sagging. Soil accumulation shall be removed from the face of the silt fence each time it reaches half the height of the fence. Removed sediment shall be disposed of in a stable upland site or added to a spoils stockpile. When undercutting occurs, grade out areas of concentrated flow upstream of the silt fence to remove channels and/or gulleys and repair or replace silt fence ensuring proper trenching techniques are utilized. Silt fencing, which sags, falls over or is not staked in shall be repaired or replaced immediately. Silt fencing fabric, which decomposes or becomes ineffective, shall be removed and replaced with new fabric immediately. Silt fencing shall be removed once vegetation is well established and the up-slope area is fully stabilized.

STOCKPILES: Temporary and permanent topsoil and spoils stockpiles shall be seeded to promote vegetative growth. Stockpiles shall be inspected to ensure excessive erosion has not occurred. When runoff or wind erosion is evident, reduce the side slopes of the stockpile or stabilize the stockpile with pieces of staked soil laid perpendicular to the slope. When filter fencing is used around a stockpile, the fencing shall be inspected to ensure piping has not occurred under the fencing and to ensure the fencing has not collapsed due to soil slippage or access by construction equipment. Repair or replace damaged fencing immediately. Berms at the base of stockpiles, which become damaged, shall be replaced.

STORM STRUCTURE INLET FILTER: Inlet filters shall be inspected for sediment accumulation, clogging and damage. When stone is used in conjunction with inlet filter fabric, replace the stone each time it becomes clogged with sediment. Clean or replace the inlet filter fabric each time it becomes clogged with sediment. Reinstall or replace fallen filter fabrics immediately. Replace damaged filter fabrics immediately.



LOCATION MAP
SCALE: 1in. = 2000ft.

LEGAL DESCRIPTION

Reference: Tax Roll 2022

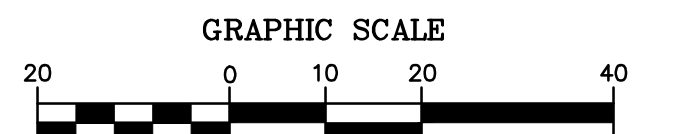
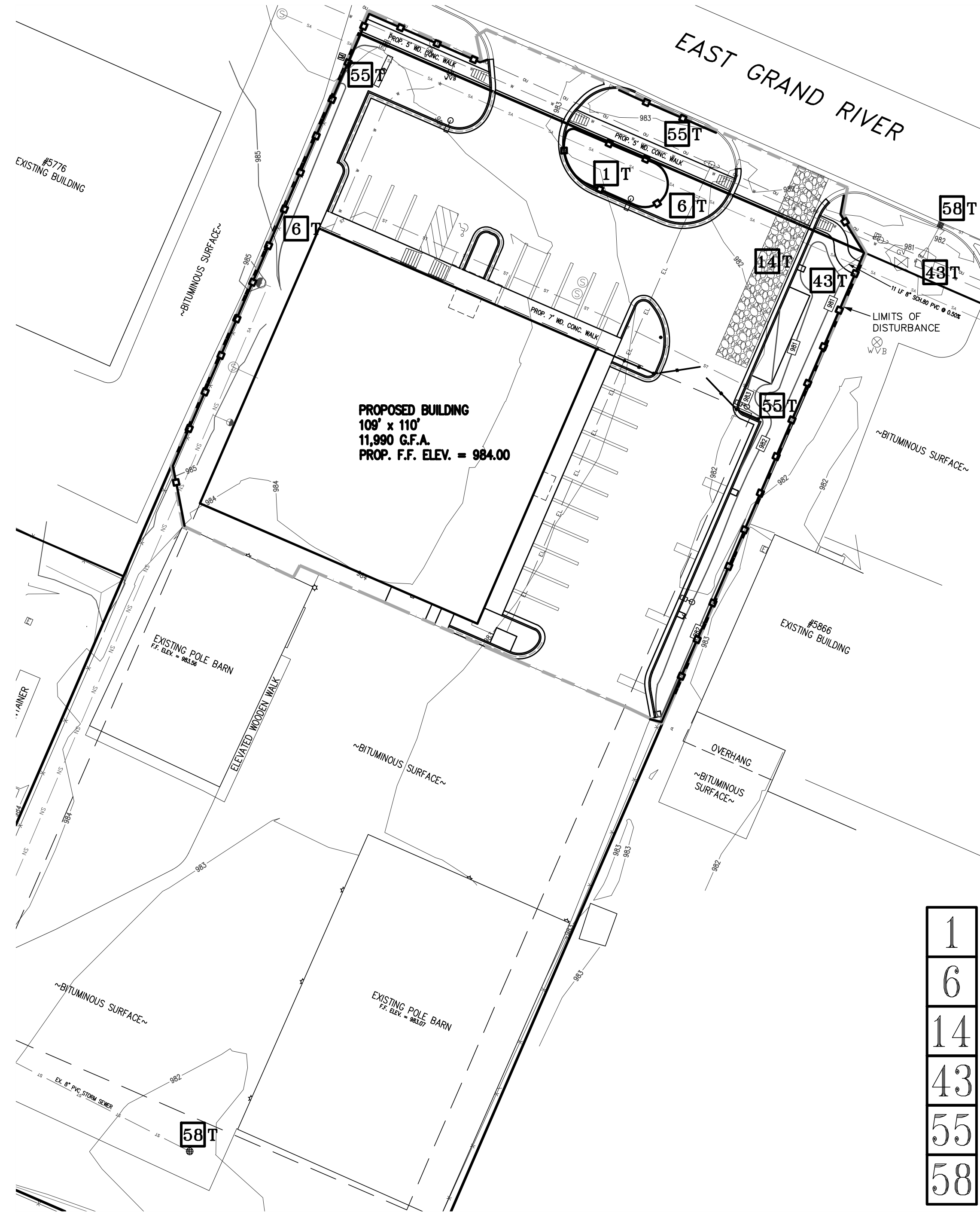
Part of the Southeast 1/4 of Section 10, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan, more particularly described as follows:

Commencing at the Southeast Corner of said Section 10; thence N02°08'E 800 feet; thence N66°34'W 679 feet to the PLACE OF BEGINNING; thence N66°34'W 200 feet; thence S23°26'W 435.6 feet; thence S66°34'E 200 feet; thence N23°26'E 435.6 feet to the Place of Beginning. Subject to and together with all easements and restrictions affecting title to the above described premises. Tax ID No.: 4711-10-400-019 Also known as: 5796 E. Grand River, Howell, Michigan 48843

Refer to the current policy for title insurance for proof of ownership and all encumbrances affecting title to the described above parcel.

SOIL EROSION AND SEDIMENTATION CONTROL NOTES:

- The Soil Erosion and Sedimentation Control Specifications of the appropriate Local, County and/or State Agencies are a part of this work. Refer to the General Notes on the Project Plans for additional requirements.
 - The Soil Erosion and Sedimentation Control (SESC) Permit Holder shall be responsible for compliance with the SESC Permit requirements for the duration of the project and until receipt of final approval from the Permitting Agency. For any site with an earth disturbance area of 1 acre or greater, the SESC Permit Holder shall retain a Certified Storm Water Operator in accordance with the SESC Permit requirements. The Certified Storm Water Operator shall perform routine inspections of the site and the SESC measures and file inspection reports in accordance with the SESC permit requirements. For any site with an earth disturbance area of 5 acres or greater, the SESC Permit Holder shall file a National Pollutant Discharge Elimination System (NPDES) Notice of Coverage Form with the State DEQ prior to any earth disruption.
 - The Contractor shall install the appropriate Soil Erosion Control Measures in accordance with the Project Plans prior to massive earth disruption, including but not limited to; silt fence, mud tracking control mats and sediment filters on existing storm sewer structures. Demolition work may be necessary prior to installation of some soil erosion control measures. In such cases, postpone installation of affected soil erosion control measures until immediately following demolition work. Refer to the Project Plans and the Soil Erosion Control and Construction Sequence for additional requirements.
 - The Contractor shall schedule work so as to minimize the period of time that an area is exposed and disturbed. The Contractor shall observe the grading limits and limits of disturbance in accordance with the Project Plans. The Contractor shall maintain an undisturbed vegetative buffer around the work when shown on the Project Plans.
 - The Contractor shall install and maintain Soil Erosion Control Measures in accordance with the Project Plans during the appropriate phases of construction. The Project Plans show the minimum requirements for Soil Erosion Control Measures. The Contractor shall install additional Soil Erosion Control Measures as necessary due to site conditions and as directed by the Permitting Agency and/or Engineer. The Contractor shall perform routine inspection and maintenance of all Soil Erosion Control Measures to ensure compliance with the permit requirements and proper operation of the Soil Erosion Control Measures.
 - The Contractor shall strip and stockpile topsoil from all areas of proposed disturbance. Topsoil stockpiles shall be located in accordance with the Project Plans. Topsoil stockpiles shall be stabilized with vegetative growth (or matted with straw during the non-growing season) to prevent wind and water erosion. A temporary diversion berm and/or silt fence shall encompass all earthen material stockpiles, including but not limited to topsoil, sand and gravel.
 - The Contractor shall install Soil Erosion Control Measures associated with the proposed storm sewer system during storm sewer construction. Inlet structure filters shall be installed immediately following completion of each storm inlet structure. Riprap shall be installed immediately following the installation of each flared end section with the following exception: Storm drain outlets that do NOT empty into a Retention, Detention or Sedimentation Basin shall have a temporary 5' wide x 10' long x 3' deep sump installed at the termination of the storm sewer. Upon completion of the stabilization work, the sump area shall be filled and riprap shall be installed in accordance with the Project Plans.
 - The Contractor shall install filter stone around the storm basin control structure(s) in accordance with the Project Plans immediately following installation of the control structure(s). The filter stone shall be monitored for sediment build up. The filter stone may need to be cleaned and/or replaced as site conditions require and as directed by the Permitting Agency and/or the Engineer.
 - All disturbed areas outside of paved areas shall be restored within 15 days of finish grading. Proposed vegetative areas shall be restored with a minimum of 3-inches of topsoil, then seeded and mulched, unless noted otherwise on the Project Plans. During the non-growing season, temporary stabilization shall be provided using straw matting or as directed by the Permitting Agency and/or the Engineer.
- Seeding, Fertilizer and Mulch Bare Ground Ratio:**
This information is provided as minimum guidance for acceptable application rates. Actual amounts depending on soil conditions and site topography shall be detailed on the construction plans.
Top-Soil 3 inches in depth.
Grass Seed 210 lbs. per acre.
Fertilizer 150 lbs. per acre.
Straw Mulch 3" in depth 1.5 to 2 tons per acre
 (All mulch must have a tie down, such as tackifier, net binding, etc.)
Hydro-Seeding: Hydro-seeding is not acceptable for slopes exceeding 1%, in such cases; stabilization shall be done with seed and straw mulch with a tackifier.
- Following complete site restoration and stabilization; sediment shall be removed from all storm sewer structures, paved areas and storm basins. The SESC Permit Holder shall contact the Permitting Agency to request closure of the SESC Permit. For any site with an earth disturbance area of 5 acres or greater, the SESC Permit Holder shall file a NPDES Notice of Termination Form with the State DEQ.



(IN FEET)
1 INCH = 20 FEET

LEGEND

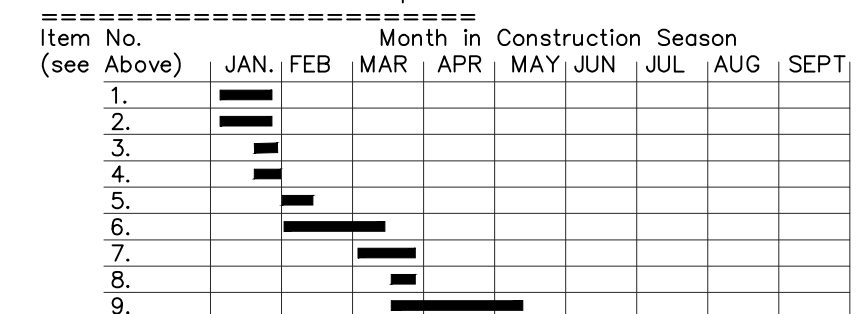
- PARCEL BOUNDARY LINE
- - - SETBACK LINE
- WELL WATER
- BOLLARD
- STOP SIGN / PEDESTRIAN CROSSING SIGN
- SIGN / MONUMENT SIGN
- HANDICAP PARKING DESIGNATION
- EX. WALL PACK / OVERHEAD LIGHT
- LIGHT BASE
- UTILITY METERS & BOXES (ELECTRIC METER, GAS METER, WATER METER, PHONE BOX, CATV BOX, MAIL BOX, UTIL. BOX)
- UTILITY POLE W/GUY WIRE
- OVERHEAD UTILITY LINES (ELECTRIC/PHONE/CABLE)
- U/G UTILITY LINES (PHONE/FIBER OPTIC/ELECTRIC/CABLE TV/MISC UTILITIES)
- EDGE OF BRUSH LINE
- DECIDUOUS TREE W/IDENTIFIER
- CONIFEROUS TREE W/IDENTIFIER
- BUSH / SHRUB
- BOULDER
- FENCE (CHAIN LINK UNLESS OTHERWISE STATED)
- EDGE OF GRAVEL
- CONCRETE CURB (UNLESS OTHERWISE STATED)
- EDGE OF WATER
- SANITARY SEWER MANHOLE W/IDENTIFIER
- SANITARY SEWER PIPE
- CLEAN OUT
- ROOF DRAIN
- STORM WATER MANHOLE W/IDENTIFIER
- CATCH BASIN W/IDENTIFIER
- FLARED END SECTION
- STORM WATER DRAINAGE PIPE
- HYDRANT
- WATER SHUT OFF
- WATER VALVE BOX
- WATER MAIN
- GAS SHUT OFF
- U/G GAS
- 1' CONTOUR
- 5' CONTOUR

SOIL EROSION CONTROL MEASURE LEGEND

1	STRIPPING & STOCKPILES TOPSOIL	TOPSOIL MAY BE STOCKPILED ABOVE BORROW AREAS TO ACT AS A DIVERSION STOCKPILE SHOULD BE TEMPORARILY SEEDED
6	SEEDING WITH MULCH AND/OR MATTING	FACILITATES ESTABLISHMENT OF VEGETATIVE COVER EFFECTIVE FOR DRAINAGEWAYS WITH LOW VELOCITY EASILY PLACED IN SMALL QUANTITIES BY INEXPERIENCED PERSONNEL SHOULD INCLUDE PREPARED TOPSOIL BED
14	AGGREGATE COVER	STABILIZES SOIL SURFACE, THUS MINIMIZING EROSION PERMITS CONSTRUCTION TRAFFIC IN ADVERSE WEATHER MAY BE USED AS PART OF PERMANENT BASE CONSTRUCTION OF PAVED AREAS
43	CULVERT SEDIMENT TRAP	EASY TO INSTALL AT INLET KEEPS CULVERT CLEAN AND FREE FLOWING MAY BE CONSTRUCTED OF LUMBER OR LOGS
55	GEOTEXTILE SILT FENCE	USES GEOTEXTILE AND POSTS OR POLES MAY BE CONSTRUCTED OR PREPARED EASY TO CONSTRUCT AND LOCATE AS NECESSARY
58	INLET SEDIMENT FILTER	USES PREPACKAGED GEOTEXTILE SACKS FILTERS SEDIMENT FROM RUNOFF AT CATCH BASIN INLET EASY TO INSTALL AND MAINTAIN

T = TEMPORARY, P = PERMANENT

TIME LINE of Construction Sequence



SOIL EROSION CONTROL AND CONSTRUCTION SEQUENCE:

- Obtain all necessary Soil Erosion and Sedimentation Control related permits from the appropriate Local, County and/or State Agencies. Refer to the General Notes on the project plans for additional requirements.
- Prior to commencement of any earth disruption install Silt Fence and Mud Tracking Control Device(s) in accordance with the Soil Erosion and Sedimentation Control Plan.
- Construct Retention/Detention and Sedimentation Basins, including associated spillways, in accordance with the project plans. Finish grade and establish vegetative growth in Retention/Detention and Sedimentation Basins prior to massive earth disruption. Install temporary Soil Erosion Control Measures as necessary to stabilize Retention/Detention and Sedimentation Basins.
- Strip and stockpile topsoil. Perform mass grading and land balancing. Install appropriate Soil Erosion Control Measures in accordance with the Soil Erosion and Sedimentation Control Plan.
- Install proposed underground utilities. (i.e.: storm and sanitary sewer, water main, etc.) Install appropriate Soil Erosion Control Measures in accordance with the Soil Erosion and Sedimentation Control Plan.
- Construct building(s) if required on the project plans. Install appropriate Soil Erosion Control Measures in accordance with the Soil Erosion and Sedimentation Control Plan.
- Construct roadways and/or parking areas. Install appropriate Soil Erosion Control Measures in accordance with the Soil Erosion and Sedimentation Control Plan.
- Finish grade all disturbed areas outside of pavement. Perform final restoration, including placement of topsoil and establishment of vegetative growth outside of pavement.
- Following establishment of sufficient vegetative ground cover and receipt of approval from the Permitting Agency remove all temporary Soil Erosion Control Measures, clean all storm sewer structures and repair all permanent Soil Erosion Control Measures.

BENCHMARK

DATUM BASED ON NGS OPUS SOLUTION REPORT, DATED MARCH 28, 2022 AT 11:26 AM. PREVIOUS DATUM FROM MARCH 1999 HAS A DIFFERENCE OF -0.76'.

BENCHMARK #201
ARROW ON HYDRANT, LOCATED ON THE SOUTHERLY SIDE OF GRAND RIVER, NEAR THE NORTHWESTERLY CORNER OF #5796 PARCEL. ELEVATION = 986.63 (NAVD 88)

BENCHMARK #202
SOUTHEASTERLY CORNER OF CONCRETE PAD, LOCATED ON THE EASTERLY SIDE OF #5796 BUILDING. ELEVATION = 983.53 (NAVD 88)

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

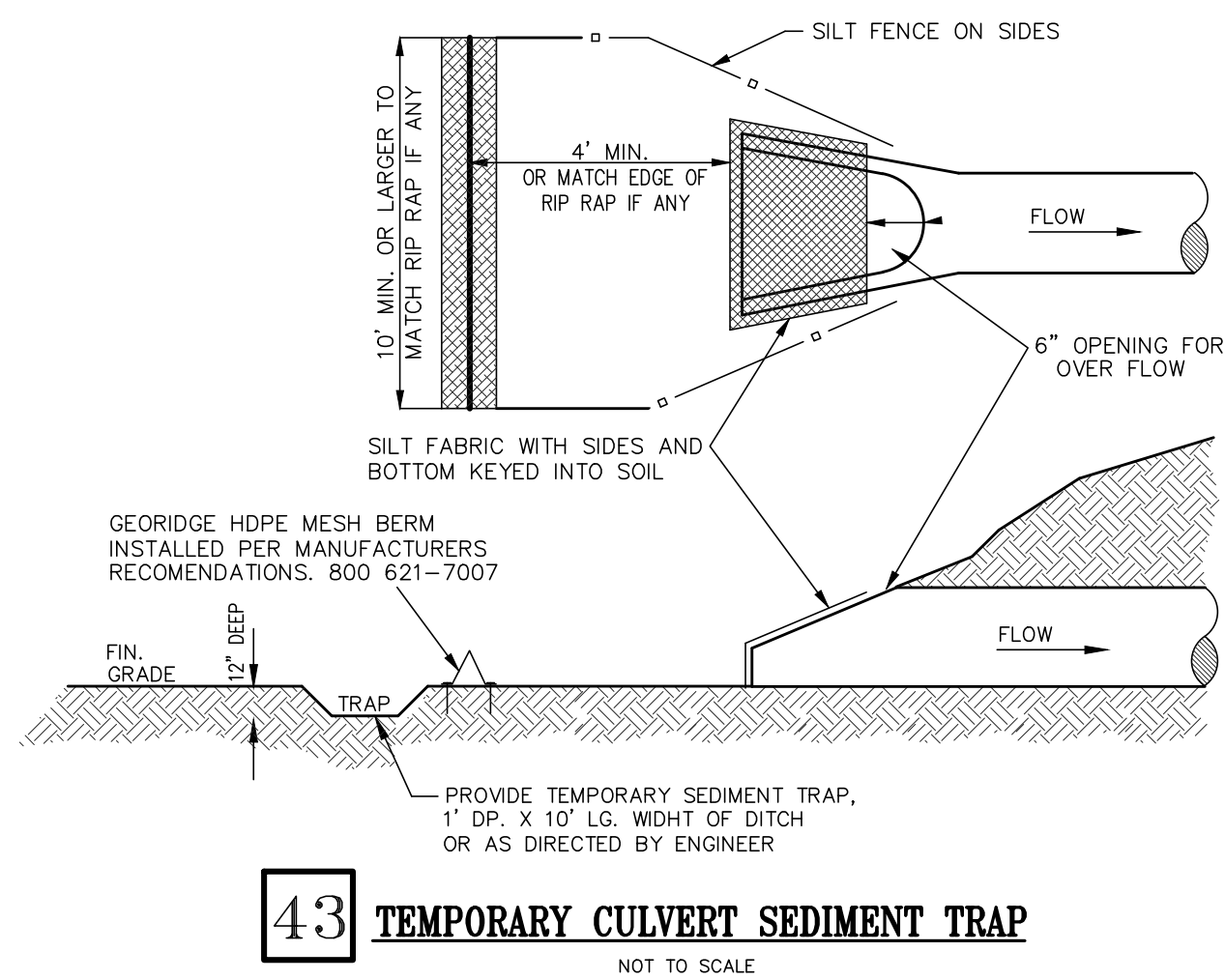
WONDERLAND
MARINE WEST

SOIL EROSION CONTROL PLAN

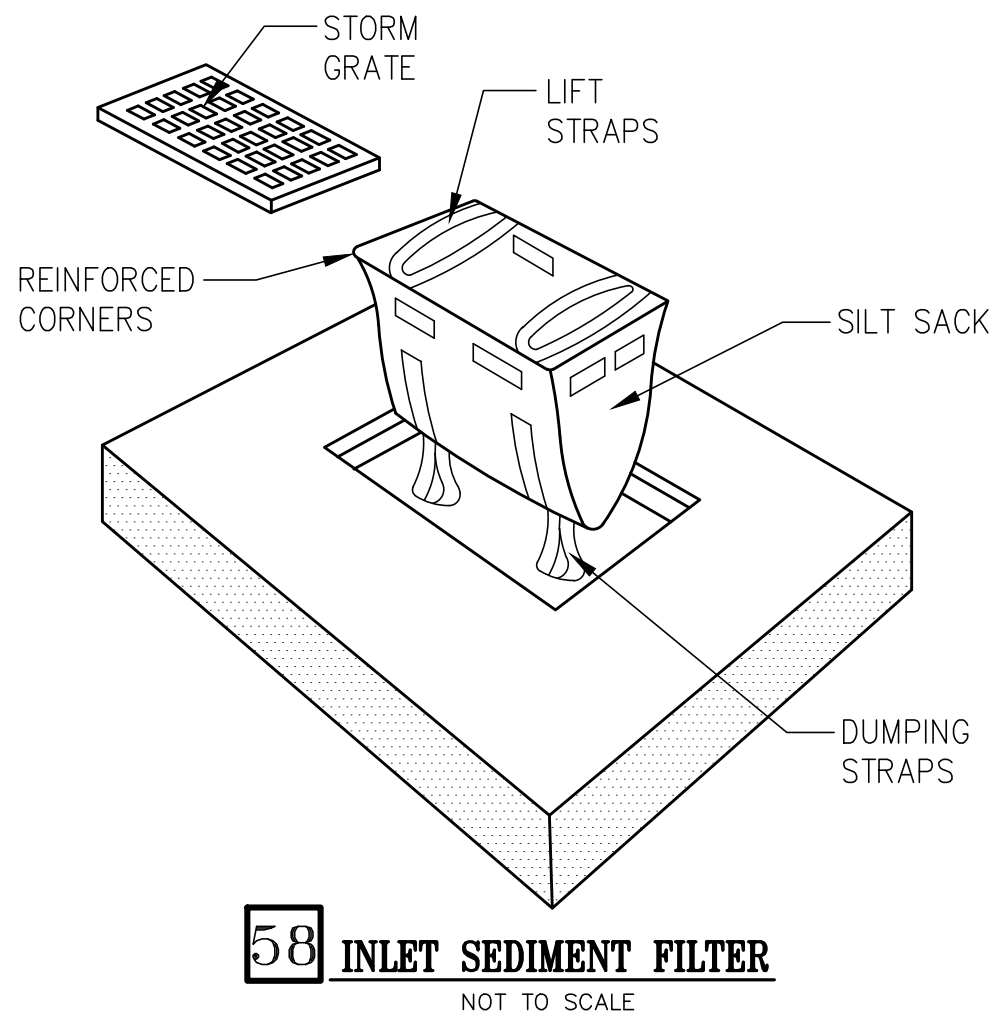
CLIENT:
MITTS LLC
5796 E. GRAND RIVER
HOWELL, MICHIGAN, 48843
517-548-5122

SCALE: 1in. = 30ft.
PROJECT No.: 214052
DWG NAME: 4052 SE
ISSUED: NOV. 21, 2022

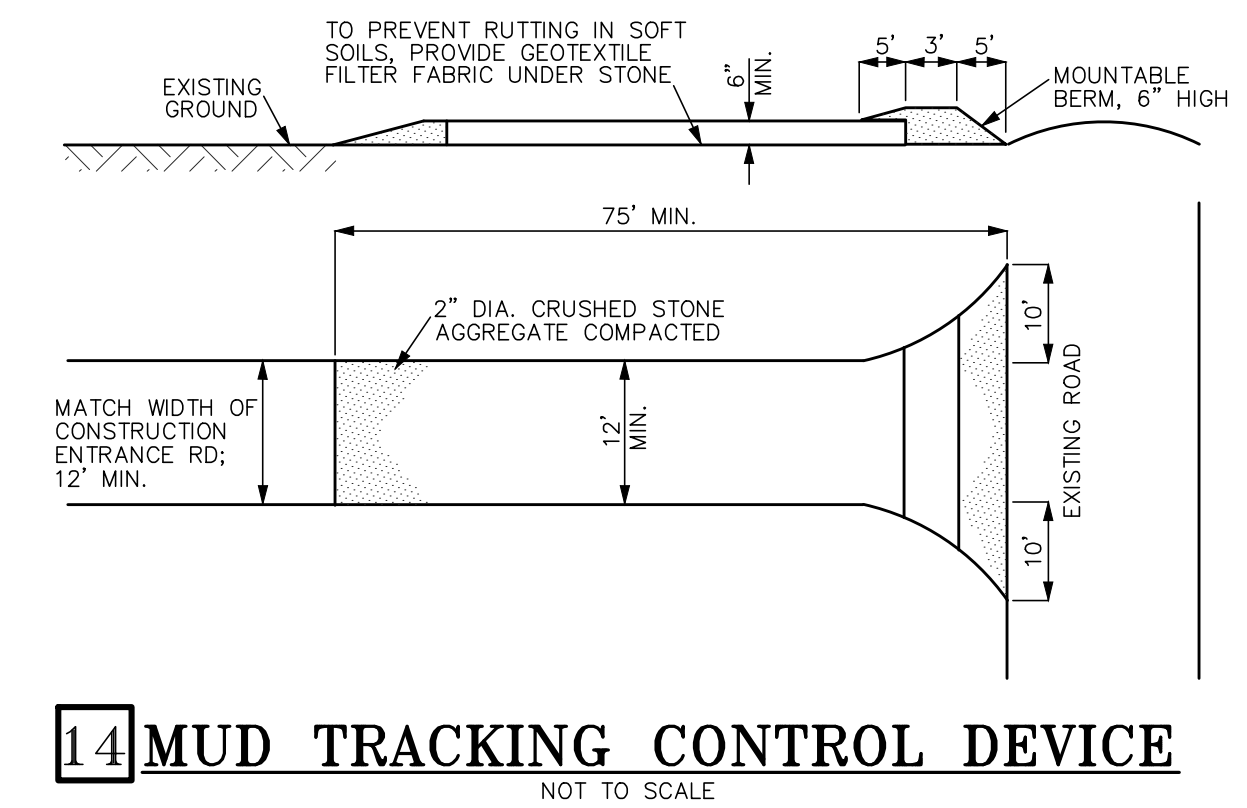
SE1



43 TEMPORARY CULVERT SEDIMENT TRAP
NOT TO SCALE

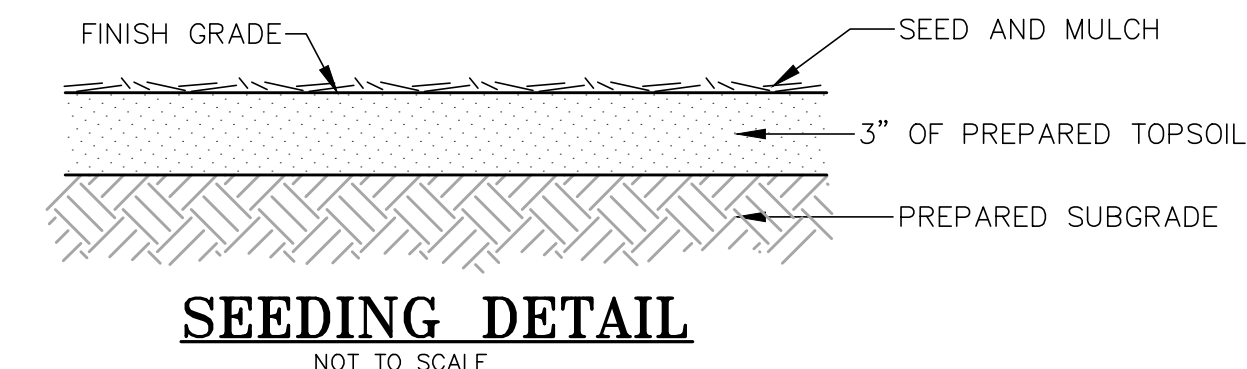


58 INLET SEDIMENT FILTER
NOT TO SCALE



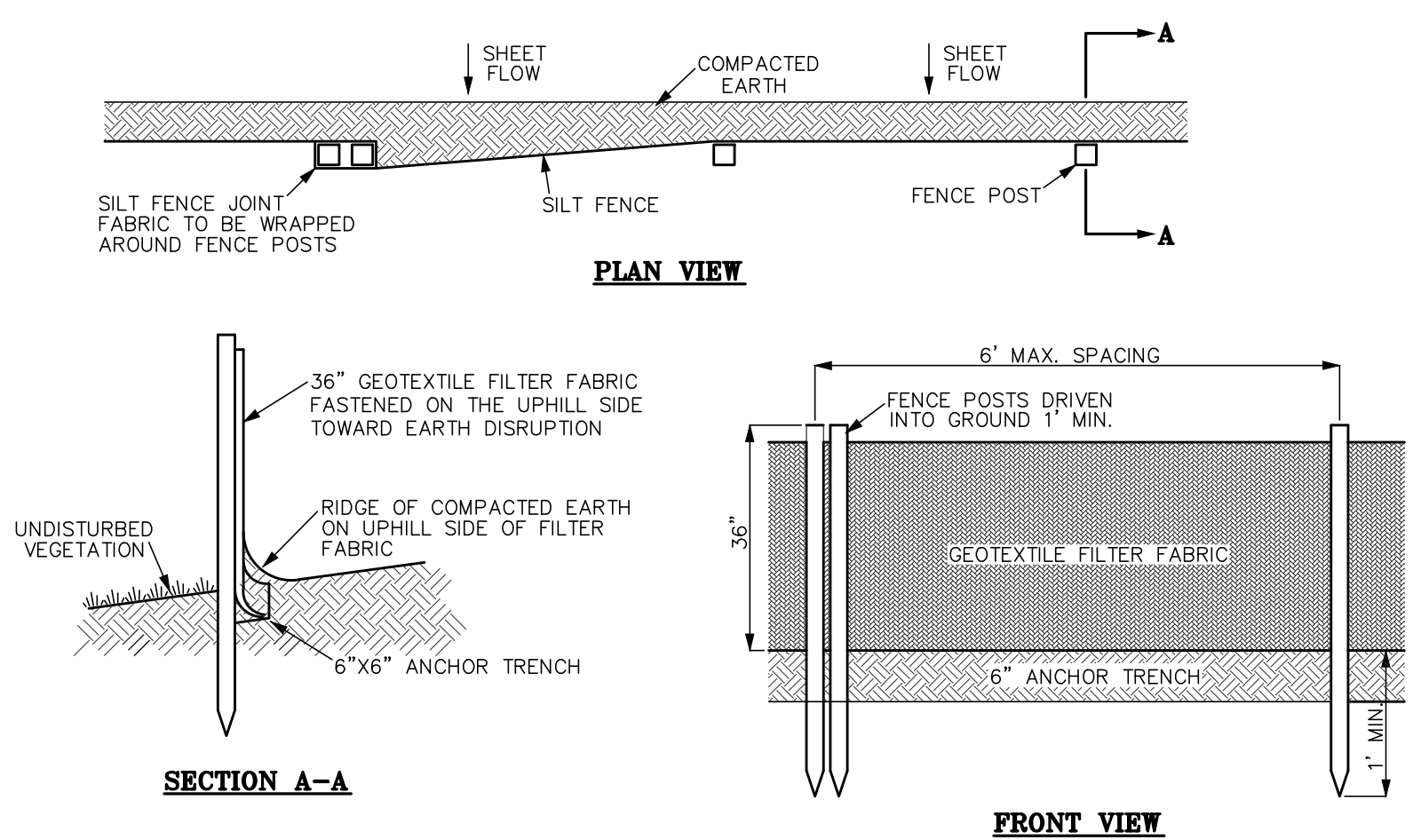
14 MUD TRACKING CONTROL DEVICE
NOT TO SCALE

NOTE:
WHEN ACCEPTABLE TO ENGINEER, CONTRACTOR MAY INSTALL STONE BELOW THE SUBGRADE ELEVATION; THUS STONE MAY BE LEFT IN PLACE BELOW PAVEMENT.



SEEDING DETAIL
NOT TO SCALE

1. Seed mixture shall consist of 10% - Kentucky Blue Grass
20% - Perennial Ryegrass
30% - Hard Fescue
40% - Creeping Red Fescue
Seed shall be uniformly applied at a rate of 210 pounds per acre.
2. Topsoil shall be a dark, organic, natural surface soil free of clay lumps, peat or muck, subsoil, noxious weeds or other foreign matter such as roots, sticks, rocks over 1/2" in diameter and not frozen or muddy. Material shall meet with approval of the Engineer.
3. Straw mulching shall be a minimum depth of 3" applied at a rate of 1.5 to 2 tons per acre. All mulching must have a tie down, such as tackifier, net binding, etc.
4. Fertilizer shall be evenly applied at a rate which will provide 150 pounds per acre of chemical fertilizer nutrients, in equal portions, (10-10-10), of Nitrogen, Phosphoric Acid and Potash.
5. Hydroseeding is not acceptable for slopes exceeding 1%. In such cases, stabilization shall be done with seed and straw mulch with a tackifier.
6. The earthen areas to receive topsoil shall be at the required grade and properly trimmed. Topsoil shall be spread on the prepared areas to a depth of 3 inches. After spreading, any large clods and lumps of topsoil shall be broken up and pulverized. Stones and rocks over 1/2" in diameter, roots, litter, and all foreign matter shall be raked up and disposed of by the contractor. Place topsoil only when it can be followed within a reasonable time by seeding operations.



55 SILT FENCE
NOT TO SCALE

- NOTES:
1. REPAIR AND REPLACE SILT FENCE AS NEEDED, INCIDENTAL.
 2. FIELD LOCATE SILT FENCE TO FOLLOW CONSTANT CONTOUR ELEVATIONS.
 3. OVERLAP FENCES AT JOINTS.
 4. INSTALL FILTER BERM AT LOW POINTS WHERE INDICATED ON PLANS.

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LAND SURVEYORS
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BRIGHTON, MICHIGAN 48114

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

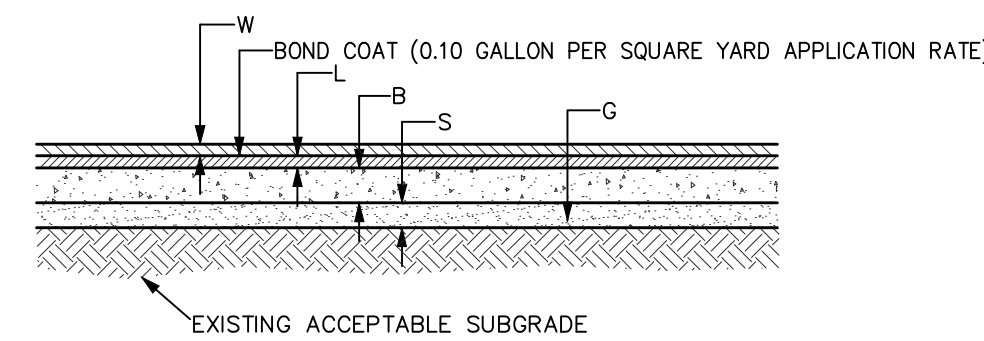
WONDERLAND
MARINE WEST

SOIL EROSION CONTROL
DETAILS

CLIENT:
MITTS LLC
5796 E. GRAND RIVER
HOWELL, MICHIGAN, 48843
517-548-5122

SCALE: AS NOTE
PROJECT No.: 214052
DWG NAME: 4052 SE
ISSUED: NOV. 21, 2022

SE2

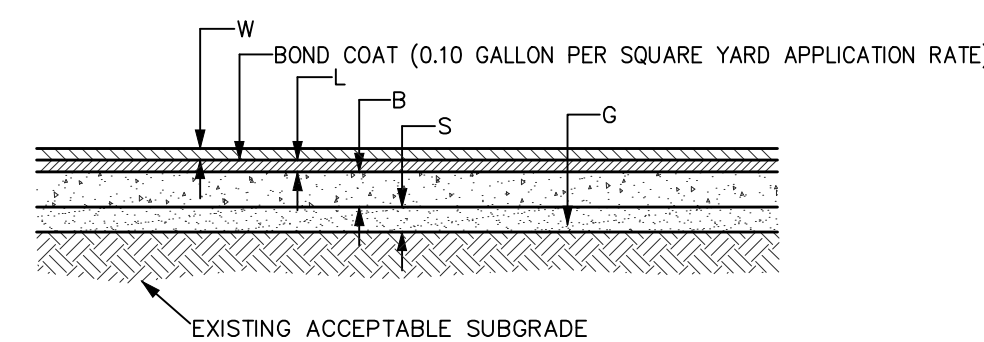


STANDARD DUTY BITUMINOUS PAVEMENT CROSS SECTION
NOT TO SCALE

KEY	DESCRIPTION	MATERIAL SPECIFICATION	MINIMUM COMPACTED THICKNESS
W	WEARING COURSE	MDOT 36A	1.5"
L	LEVELING COURSE	MDOT 13A	1.5"
B	AGGREGATE BASE	MDOT 21AA	8"
S	GRANULAR SUBBASE	MDOT CLASS II	6"
G	GEOGRID	N/A	N/A

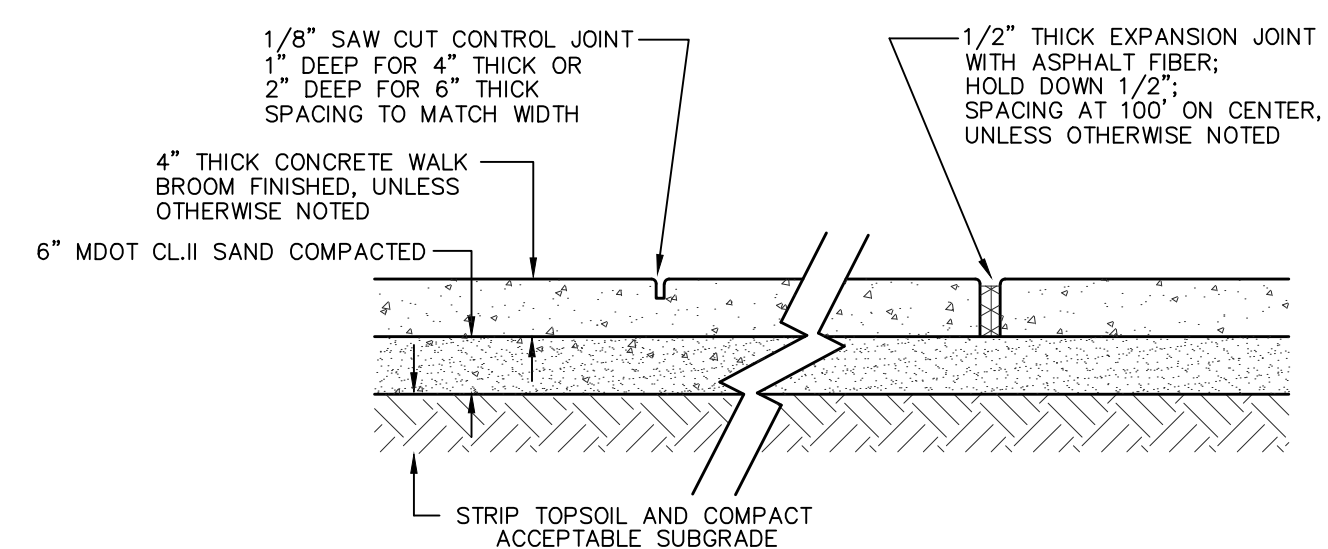
BITUMINOUS PAVEMENT NOTES:

- 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.
- 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.
- Contractor shall proof roll prepared subgrade as directed by Engineer. Unacceptable areas of subgrade shall be undercut and replaced as directed by Engineer.



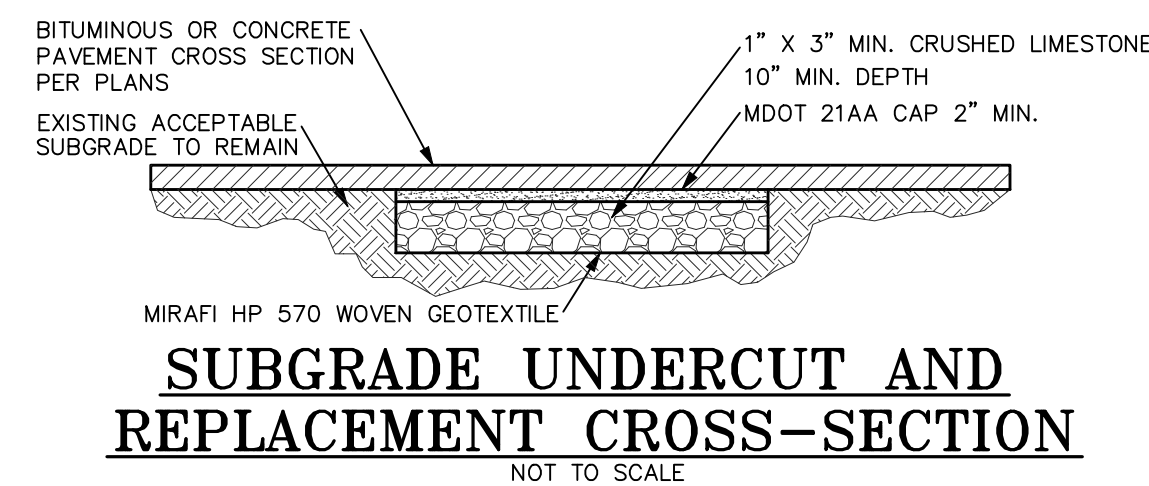
HEAVY DUTY BITUMINOUS PAVEMENT CROSS SECTION
NOT TO SCALE

KEY	DESCRIPTION	MATERIAL SPECIFICATION	MINIMUM COMPACTED THICKNESS
W	WEARING COURSE	MDOT 36A	1.5"
L	LEVELING COURSE	MDOT 13A	4"
B	AGGREGATE BASE	MDOT 21AA	8"
S	GRANULAR SUBBASE	MDOT CLASS II	6"
G	GEOGRID	N/A	N/A



SIDEWALK CROSS SECTION
NOT TO SCALE

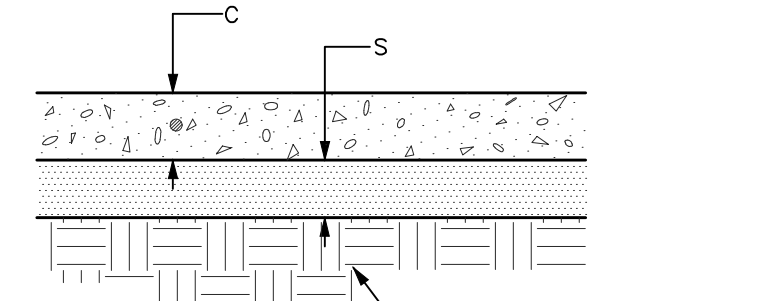
- NOTES:
1. SEE PLAN FOR WIDTH OF SIDEWALK.
2. PROVIDE CONCRETE TYPE PER LOCAL CODE. (3500 PSI AIR ENTRAINED)



SUBGRADE UNDERCUT AND REPLACEMENT CROSS-SECTION
NOT TO SCALE

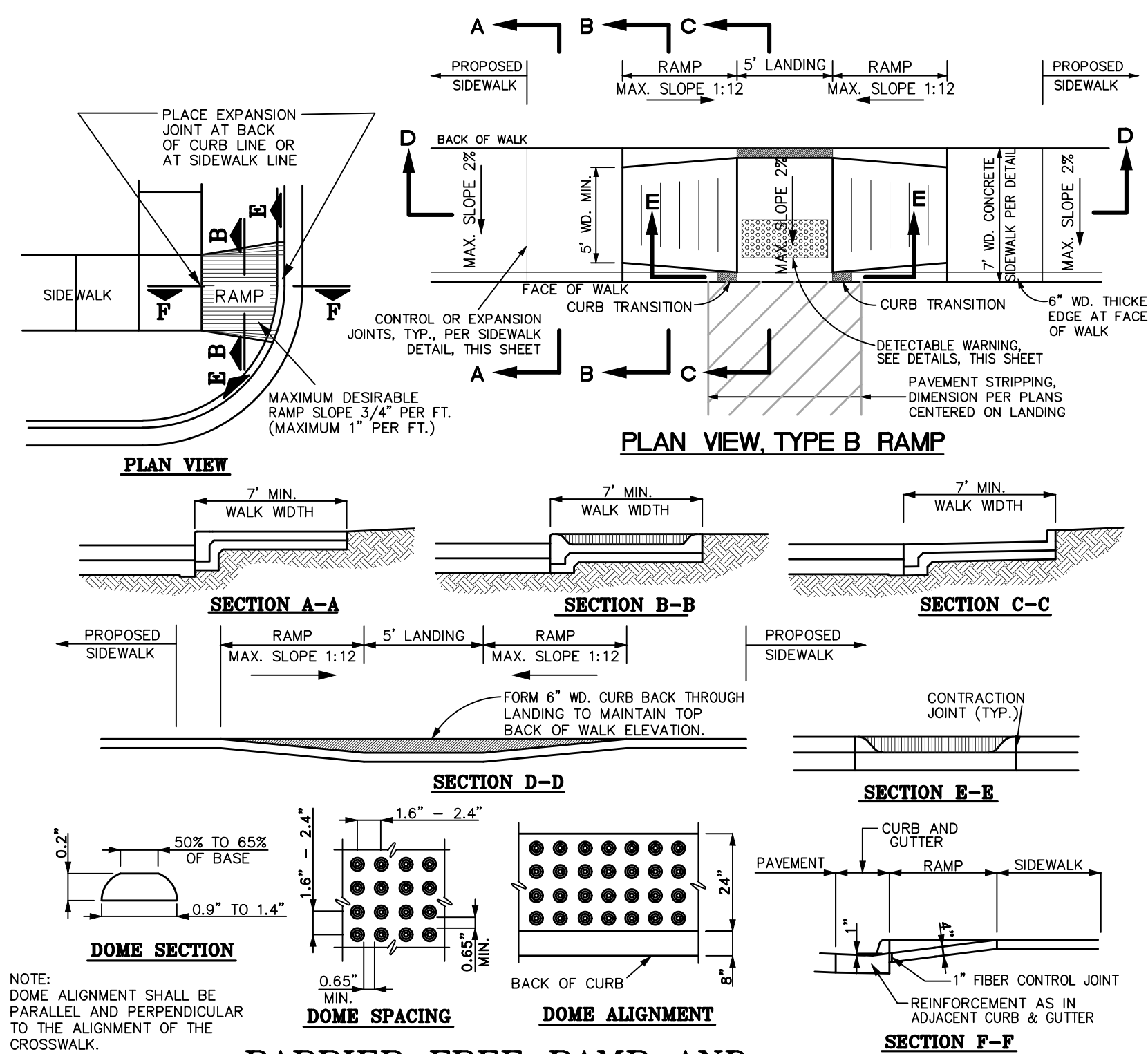
PAVEMENT SUBGRADE UNDERCUT NOTES:

- Areas of pavement subgrade that do not pass a proof roll inspection shall be undercut when directed by the Material Testing Engineer and/or Project Engineer. All undercut work shall be witnessed and field measured by the Material Testing Engineer and/or Project Engineer. Copies of the field notes depicting the field measurements of the undercut areas shall be provided to the General Contractor and/or Earthwork Subcontractor and Owner.
- Undercut areas shall be excavated to a depth of 12" below the proposed subgrade elevation using an Excavator or Backhoe with a Smooth Edged Ditching Bucket so as not to scarify the underlying soils. Undercut areas shall remain free of all construction traffic and equipment to avoid rutting and/or tracking of the underlying soils.
- Mirafi HP 570 Woven Geotextile Fabric (or approved equal) shall be placed over all undercut areas per the Manufacturer's specifications. Overlap all seams a minimum of 12" unless specified otherwise by the Manufacturer.
- Backfill the undercut areas with 1" x 3" minimum size crushed angular limestone and cap with 21AA crushed angular limestone up to the proposed subgrade elevation. Crushed concrete material shall NOT be substituted for crushed limestone material. The backfill material shall be spread with a Wide Track Dozer to minimize loading on the underlying soils. Static roll the backfill material with a large smooth drum roller.
- Construct the appropriate Bituminous or Concrete Pavement Cross Section over the undercut areas per the Project Plans.

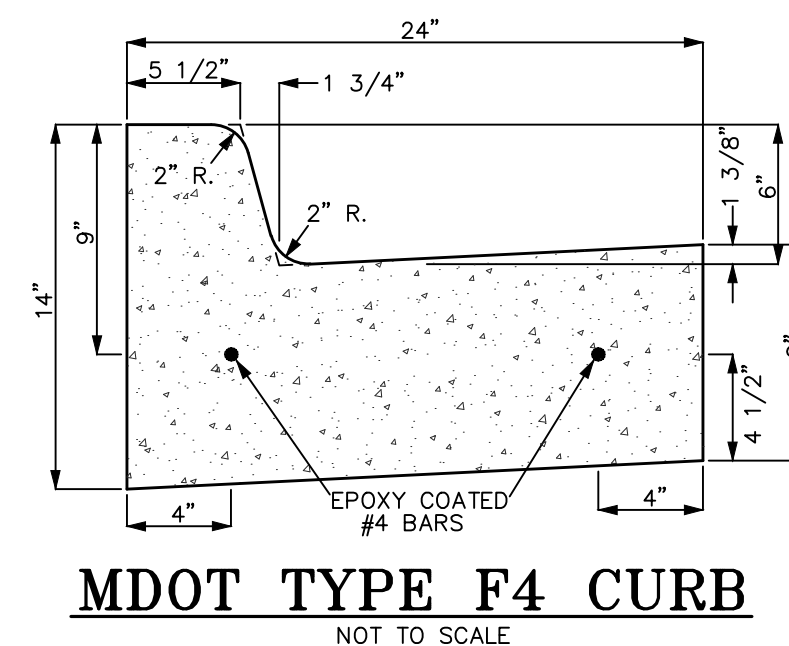


CONCRETE PAVEMENT CROSS-SECTION
NOT TO SCALE

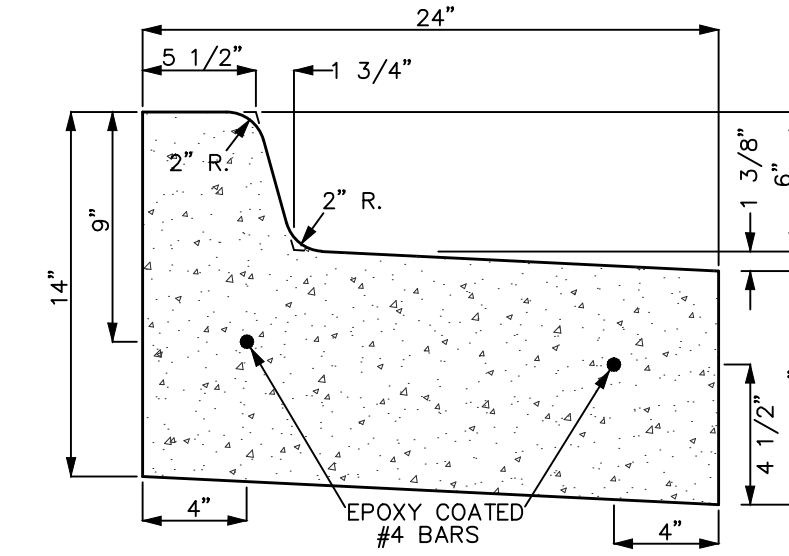
KEY	DESCRIPTION	MATERIAL SPEC.	MIN. THICKNESS
C	CONCRETE	MDOT P1-1A - 6 SACK	6"
S	GRANULAR SUBBASE	MDOT CLASS II	6"



BARRIER FREE RAMP AND DETECTABLE WARNING DETAILS
NOT TO SCALE



MDOT TYPE F4 CURB
NOT TO SCALE



MDOT TYPE F4 CURB REVERSE PITCH
NOT TO SCALE

CONCRETE CURB NOTES:

- Refer to the project plans for the proposed locations of the specific curb types.
- 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.
- 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.
- 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 P1 (I-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.
- 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.
- 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.
- Provide 1" asphalt fiber control joint between back of curb and all other concrete structures, such as concrete sidewalks and concrete driveways.
- Curb Contractor shall provide final adjustment of catch basin castings in curb line. Castings shall be tucked pointed to structure water tight with concrete or mortar inside and outside of casting.
- 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.

GENERAL NOTES:

- Contractor shall perform the work in accordance with the requirements of the appropriate Local, County and State Agencies and all other Government and Regulatory Agencies with jurisdiction over the project. Contractor shall notify the appropriate Agencies in advance of each stage of work in accordance with each Agency's requirements.
- Contractor shall comply with all permit, insurance, licensing and inspection requirements associated with the work. Prior to construction, Contractor and Owner/Developer shall determine who is responsible for obtaining each required permit. Contractor shall verify that the each required permit has been obtained prior to commencement of the stage of work associated with the required permit(s).
- Contractor shall furnish liability insurance and property damage insurance to save harmless the Owner, Developer, Architect, Engineer, Surveyor and Government Agencies for any accident occurring during the construction period. Refer to the appropriate Local, County and State Agencies for additional requirements. Copies of insurance certifications shall be made available to the Owner/Developer.
- Contractor shall conduct and perform work in a safe and competent manner. Contractor shall perform all necessary measures to provide for traffic and pedestrian safety from the start of work and through substantial completion. Contractor shall determine procedures and provide safety equipment such as traffic controls, warning devices, temporary pavement markings and signs as needed. Contractor shall comply with the safety standards of the State Department of Labor, the occupational health standards of the State Department of Health and safety regulations of the appropriate Local, County, State and Federal Agencies. Refer to the safety specifications of the appropriate Regulatory Agencies. The Contractor shall designate a qualified employee with complete job site authority over the work and safety precautions; said designated employee shall be on site at all times during the work.
- Contractor shall coordinate scheduling of all work in the proper sequence, including work by Subcontractors. Additional costs due to improper planning by Contractor or work done out of sequence as determined by standard acceptable construction practices, shall be Contractor's responsibility.
- 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 construction. 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 coordinate scheduling a Pre-Construction Meeting with Engineer prior to commencement of work.
- The Local Municipality, County and/or State in which the project is located may require an Engineer's Certification of construction of the proposed site improvements. Contractor shall verify the certification requirements with Engineer prior to commencement of work. Contractor shall coordinate construction staking, testing, documentation submittal and observation with the appropriate Agency, Surveyor and/or Engineer as required for Engineer's Certification and Government Agency Acceptance. All materials used and work done shall meet or exceed the requirements of certification and acceptance, the contract documents and the material specifications noted on the project plans. Any materials used or work done that does not meet said requirements, contract documents and/or specifications shall be replaced and/or redone at Contractor's expense. The Owner/Developer may wait for test results, certifications and/or Agency reviews prior to accepting work.
- Engineer may provide subsurface soil evaluation results, if available, to Contractor upon request. Subsurface soil evaluation results, soils maps and/or any other documentation does NOT guarantee existing soil conditions or that sufficient, acceptable on-site granular material is available for use as structural fill, pipe bedding, pipe backfill, road subbase or use as any other granular material specified on the project plans. On-site granular material that meets or exceeds the material specifications noted on the project plans may be used as structural fill, pipe bedding, pipe backfill and/or road subbase material. On-site granular material shall be stockpiled and tested as acceptable to the appropriate Agency and/or Engineer prior to use.
- During the performance of their work, Contractor shall be solely responsible for determining soil conditions and appropriate construction methods based on the actual field conditions. Contractor shall furnish, install and maintain sheeting, shoring, bracing and/or other tools and equipment and/or construction techniques as needed for the safety and protection of the workers, pedestrians and vehicular traffic and for protection of adjacent structures and site improvements.
- Contractor shall install temporary and permanent soil erosion and sedimentation control devices at the appropriate stages of construction in accordance with the appropriate regulatory Agencies. Refer to Soil Erosion and Sedimentation Control Plans and Notes on the project plans.
- Structural fill shall be placed as specified on the project plans and within the 1 on 1 influence zone of all structures, paved areas and other areas subject to vehicular traffic. Structural fill shall be placed using the controlled density method (12" maximum lifts, compacted to 95% maximum unit weight, modified proctor). Fill material shall meet or exceed the specifications noted on the project plans or as directed by Engineer when not specified on the project plans.
- All existing monuments, property corners, ground control and benchmarks shall be protected and preserved; and if disturbed by Contractor, shall be restored at Contractor's expense. Contractor shall notify Surveyor of any conflicts between existing monuments, property corners, ground control and/or benchmarks and the proposed site improvements.
- Contractor shall notify Owner/Developer and Engineer immediately upon encountering any field conditions, which are inconsistent with the project plans and/or specifications.
- When noted on the project plans for demolition and/or removal, Contractor shall remove existing structures, building and debris and recycle and/or dispose of in accordance with Local, County, State and Federal regulations.
- Contractor shall remove excess construction materials and debris from site and perform restoration in accordance with the project plans and specifications. Disposing of excess materials and debris shall be performed in accordance with Local, County, State and Federal regulations.
- Construction access to the site shall be located as acceptable to the Owner/Developer and to the appropriate Local, County and/or State Agency with jurisdiction over the road(s) providing access to the site. Construction access shall be maintained and cleaned in accordance with the appropriate Local, County and/or State Agencies and as directed by Owner/Developer and/or Engineer.
- Contractor shall take necessary precautions to protect all site improvements from heavy equipment and construction procedures. Damage resulting from Contractor actions shall be repaired at Contractor's expense.

DESIGN: WMP	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG	1	11-21-22	REVISED PER REVIEW COMMENTS			
CHECK: WMP	2	2-9-23	REVISED SIDEWALK CROSS SECTION DETAIL			

WONDERLAND MARINE WEST

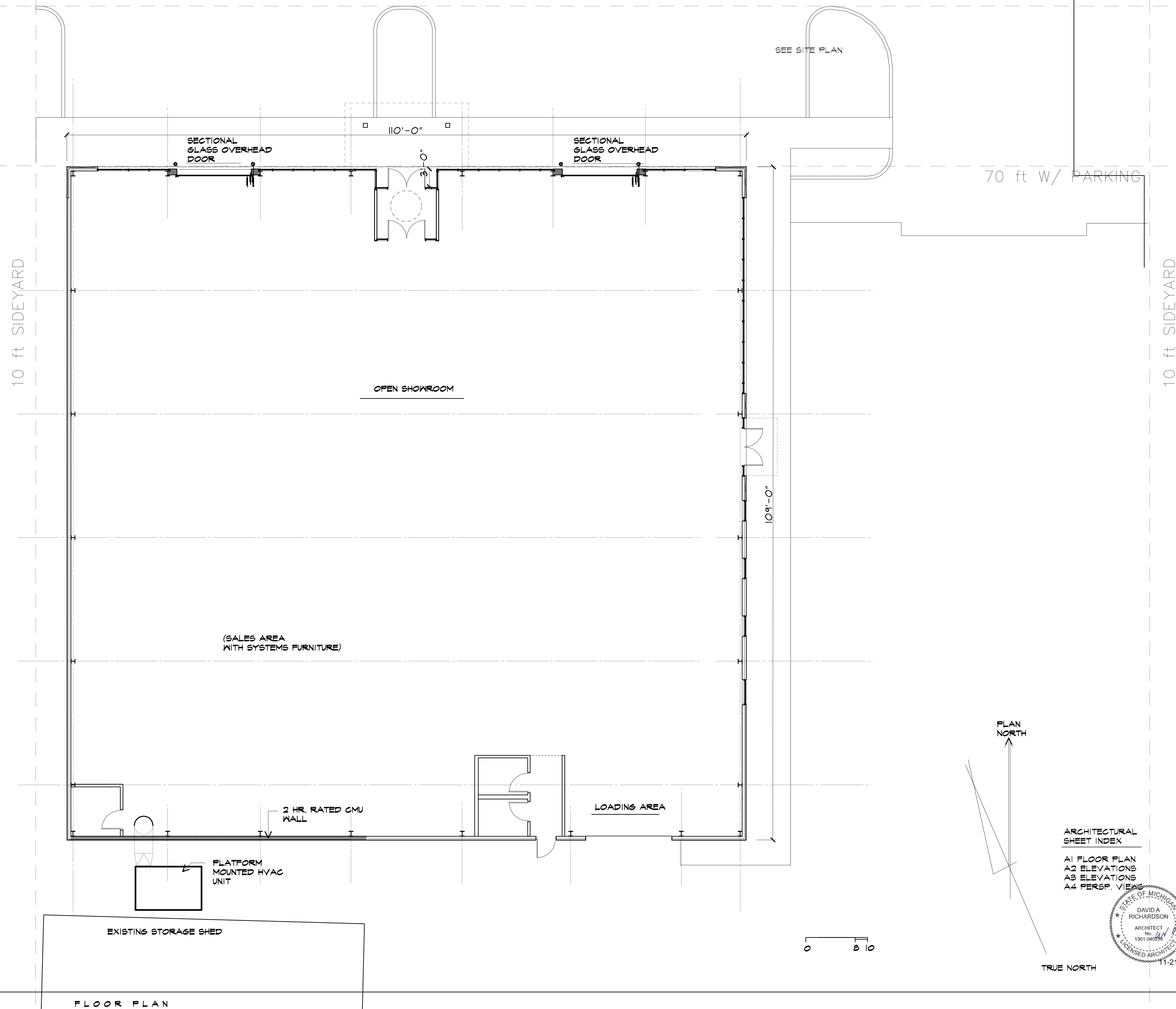
SITE & PAVEMENT NOTES AND DETAILS

CLIENT: MITTS LLC
5796 E. GRAND RIVER
HOWELL, MICHIGAN 48843
517-548-5122

SCALE: N/A
PROJECT No.: 214052
DWG NAME: 4052 DT
ISSUED: FEB. 9, 2023

DT

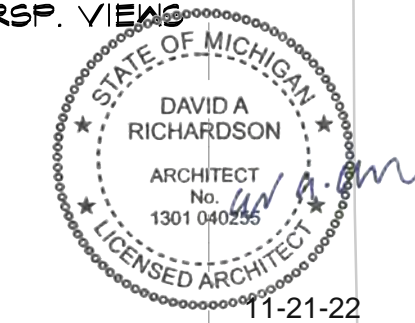
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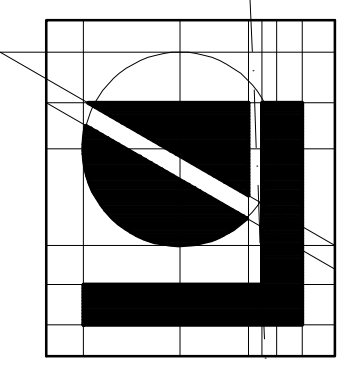
FLOOR PLAN

ARCHITECTURAL
SHEET INDEX

A1 FLOOR PLAN
A2 ELEVATIONS
A3 ELEVATIONS
A4 PERSP. VIEWS



11-21-22



Lindhout Associates
architects aia pc

10465 citation drive, brighton, michigan 48116-9510
www.lindhout.com (610)227-5668 fax: (610)227-5855

consultant

DR:	MRL	DATE	REVIEW
CK'D:	DAR	11-22-2022	SITE PLAN REVIEW
APP'D:		11-21-2022	OWNER REVIEW
		8-05-2022	INITIAL SITE PLAN REVIEW
			ISSUED FOR

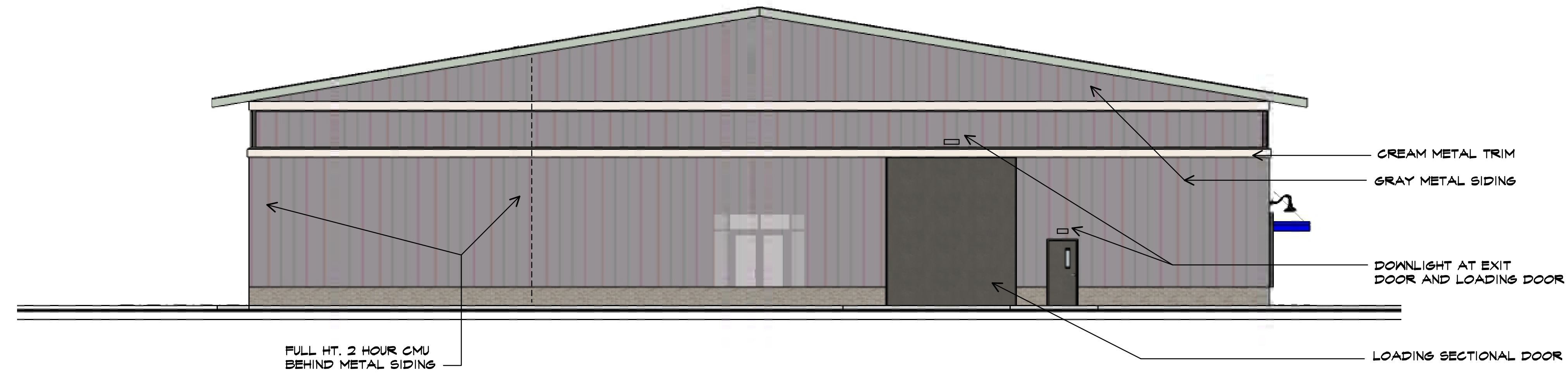
NEW HIGH BAY BOAT SHOWROOM for:
WONDERLAND MARINE WEST
GENOA TWP., MI

FLOOR PLAN

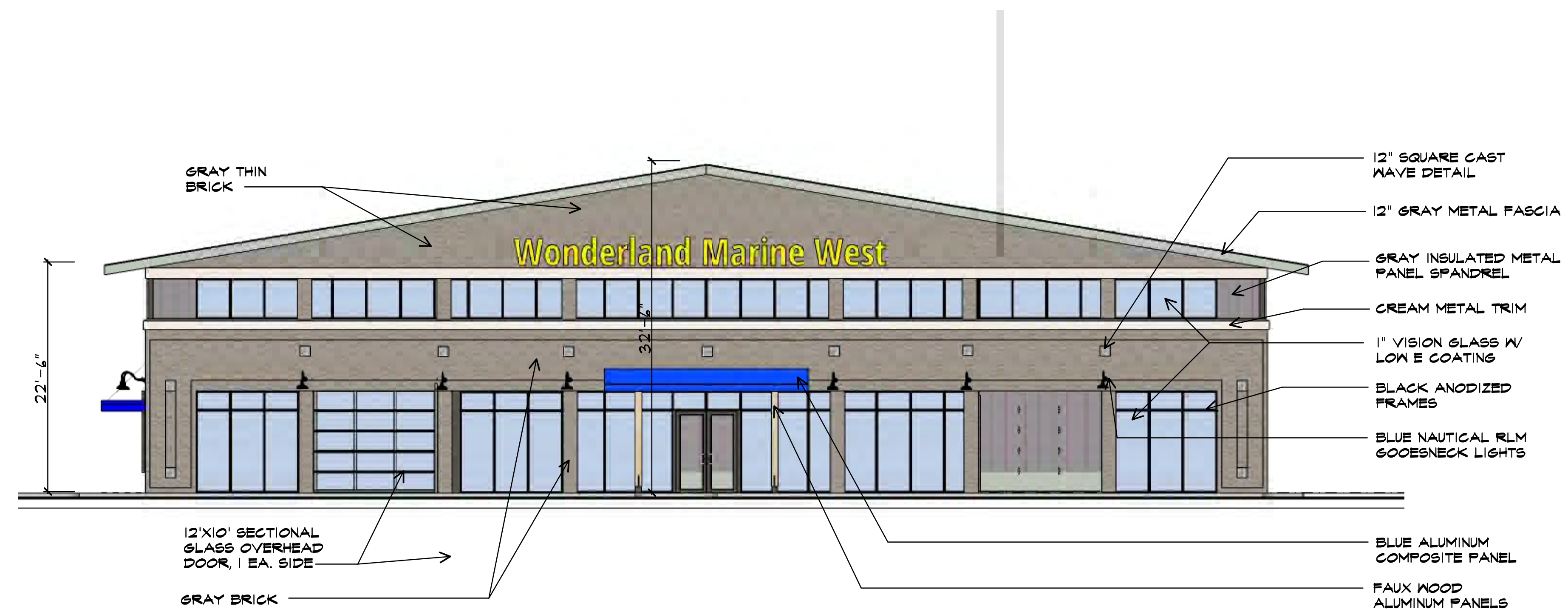
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SOUTH ELEVATION



NORTH ELEVATION



NORTH ELEVATION MATERIALS

2,925 SQ.FT. TOTAL

CORNER GLASS UNITS
 $2(88+99) = 274$ SQ.FT.

RUNNING GLASS UNITS
 $4(40+115) = 620$ SQ.FT.
 (INCLUDES GLASS SECTIONAL DOORS)

CENTER GLASS UNITS
 $91+242 = 333$ SQ.FT.

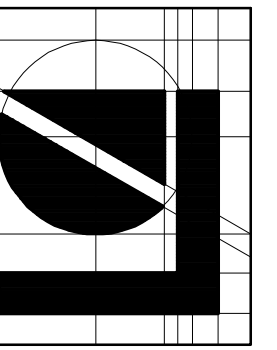
NON GLASS AREA
 $2,925 - 1,227 = 1,698$ SQ.FT.

METAL TRIM AND CORNER IMP SPANDRELS
 261 SQ.FT.

BLUE A.C.P. CANOPY, FAUX WOOD
 60 SQ.FT.

BRICK AREA
 1,357 SQ.FT.

BRICK PERCENTAGE
 $1,357 / 1,698 = 80\% \pm$



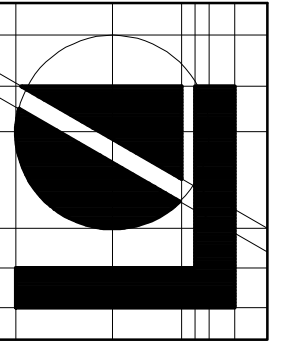
Lindhout Associates
 architects aia pc
 10465 citation drive
 www.lindhout.com
 brighton, michigan 48116-9510
 (810)227-5668 fax: (810)227-5855

consultant

DATE: MRL II-22-2022 II-21-2022
 DR: DAR CK'D: DATE: 11/21/22
 SITE PLAN REVIEW ISSUED FOR
 OWNER REVIEW

NEW HIGH BAY BOAT SHOWROOM for:
WONDERLAND MARINE WEST
 GENOA TWP., MI
ELEVATIONS

22001



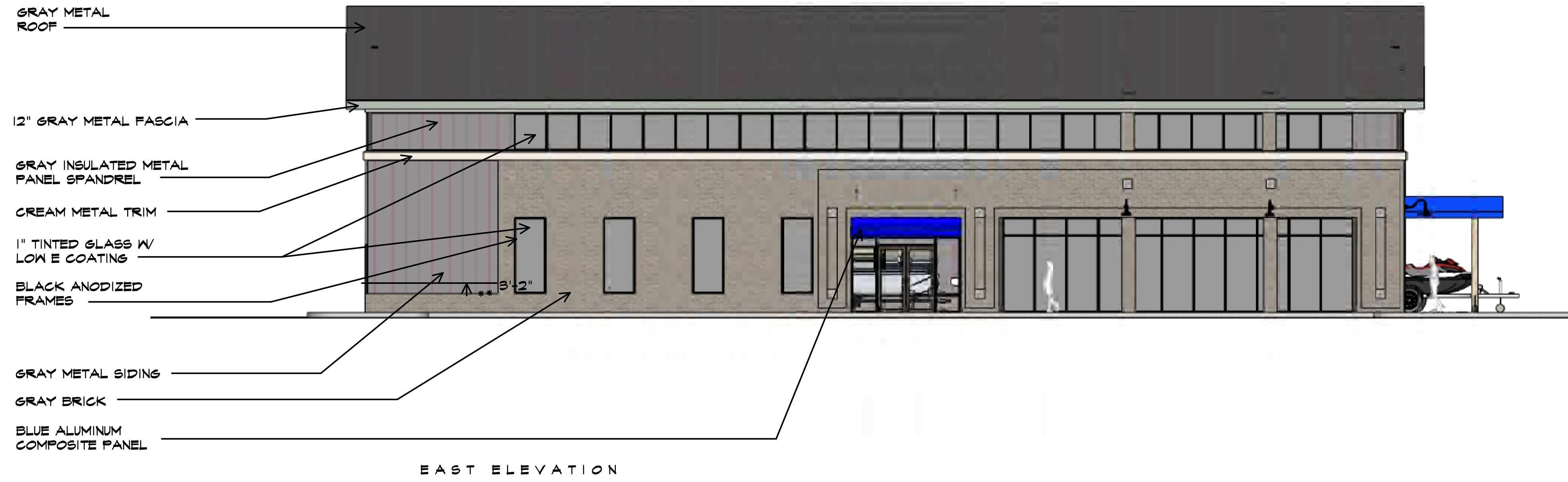
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www.lindhout.com (810)227-5668 fax:(810)227-5855

consultant

PHL
dr: DAR
ck'd: DAR
app'd:
SITE PLAN REVIEW
OWNER REVIEW
ISSUED FOR
11-22-2022
11-21-2022
date

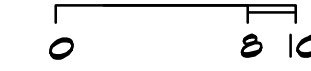
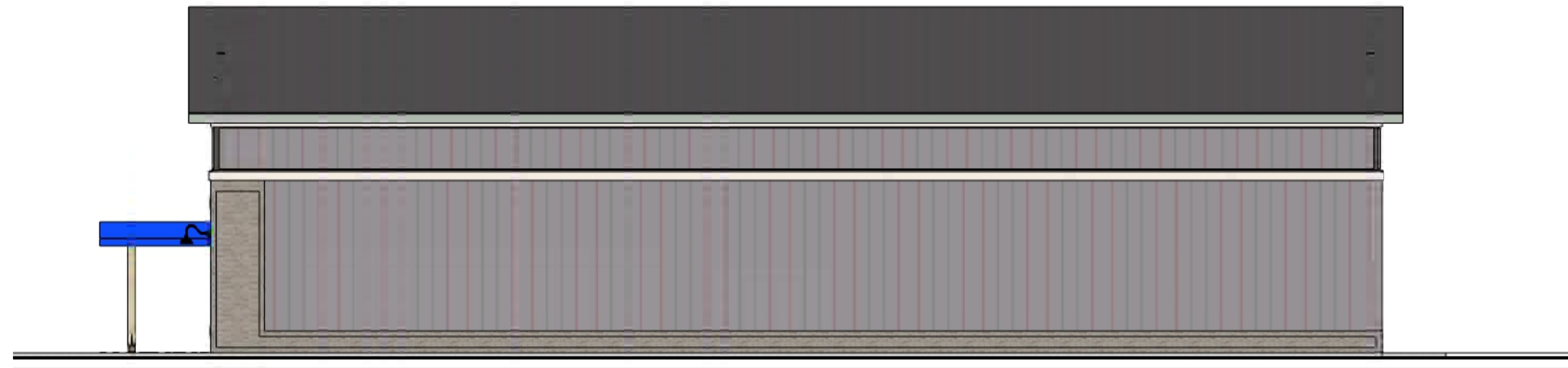
NEW HIGH BAY BOAT SHOWROOM For:
WONDERLAND MARINE WEST
GENOA TWP., MI
ELEVATIONS

AS
22001



**
RAISE BRICK BASE
12" THIS AREA TO 3'-2" EL. FOR
75% BRICK PERCENTAGE

SEE EAST ELEV.
FOR NOTES



EAST ELEVATION MATERIALS

2348 SQ.FT. TOTAL

CORNER GLASS UNITS
(31+31) = 112 SQ.FT.

UPPER GLASS LESS CORNER
49+242= 278 SQ.FT.

PUNCHED WINDOW OPENINGS
4(24)= 96 SQ.FT.

LOWER GLASS LESS CORNER
92+124+131= 347 SQ.FT.

NON GLASS AREA
2348 - 895 = 1508 SQ.FT.

METAL TRIM AND CORNER IMP SPANDRELS
184 SQ.FT.

METAL SIDING BELOW TRIM
179 SQ.FT.

BLUE A.C.P. CANOPY
24 SQ.FT.

BRICK AREA
1,131 SQ.FT.

BRICK PERCENTAGE
1,131 / 1,508 = 75%





VIEW FROM EAST DRIVE



VIEW FROM N.E. CORNER



NEW HIGH BAY BOAT SHOWROOM for:
WONDERLAND MARINE WEST
GENOA TWP., MI
PERSPECTIVE VIEWS

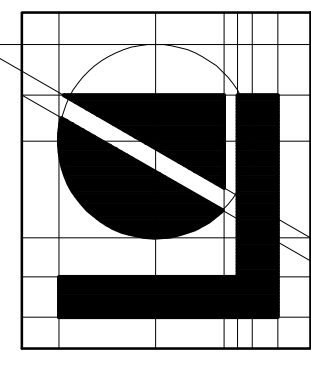
dr: HRL
ck'd: DAR
app'd:

11-22-2022
11-21-2022
date

SITE PLAN REVIEW
OWNER REVIEW
issued for

consultant

Lindhout Associates
architects aia pc
10465 citation drive, brighton, michigan 48116-0910
www.lindhout.com (810)227-5668 fax:(810)227-5655



A4
22001



GENOA CHARTER TOWNSHIP APPLICATION

Sketch Plan Review

TO THE GENOA TOWNSHIP PLANNING COMMISSION:

APPLICANT NAME & ADDRESS: Genoa Charter Township, 2911 Dorr Road
If applicant is not the owner, a letter of Authorization from Property Owner is needed.

OWNER'S NAME & ADDRESS: Same as applicant

SITE ADDRESS: 2911 Dorr Road PARCEL #(s): 11-14-300-029


APPLICANT PHONE: (810) 227-5225 OWNER PHONE: () Same as applicant

LOCATION AND BRIEF DESCRIPTION OF SITE: The request is to install an all-abilities playground centrally within the existing Genoa Charter Township park property located at 2911 Dorr Road. The hall is located on the east side of Dorr Road, just north of Crooked Lake Road.

BRIEF STATEMENT OF PROPOSED USE: Construction of an all-abilities playground (Senior Survivor Park) with a picnic plaza and seating area.

THE FOLLOWING IMPROVEMENTS ARE PROPOSED: All-abilities playground including safety surfacing, vertical tunnel, zip line, water play area, clamber log pile, spinneround top, net climber, basket swing, musical play, stump climber, twig hut, tunnel slide, picnic plaza, and seating area.

I HEREBY CERTIFY THAT ALL INFORMATION AND DATA ATTACHED TO AND MADE PART OF THIS APPLICATION IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

BY:  Kelly VanMarter, Township Manager

ADDRESS: 2911 Dorr Road, Brighton 48116

Contact Information - Review Letters and Correspondence shall be forwarded to the following:
1.) Amy Ruthig _____ of Township Planning Director _____ at amy@genoa.org
Name Business Affiliation Email Address

February 8, 2023

Planning Commission
Genoa Township
2911 Dorr Road
Brighton, Michigan 48116

Attention:	Amy Ruthig, Planning Director
Subject:	Survivor Park – Sketch Plan Review #1
Location:	2911 Dorr Road – east side of Dorr Road, north of Crooked Lake Road
Zoning:	PRF Public and Recreational Facilities District

Dear Commissioners:

At the Township’s request, we have reviewed the site plan submittal for new recreational facilities at the Genoa Township Park (plans dated 10/11/22).

A. Summary

1. The accessory recreational structures are affiliated with a principal use, per Ordinance requirements.
2. The height of all recreational structures proposed is within that allowed for conventional accessory structures.
3. Each structure is located well outside of minimum PRF setback requirements.
4. The Commission should consider any comments provided by the Township’s engineering consultant.

B. Proposal/Process

The Township proposes a variety of new recreational facilities/structures for the Genoa Township Park.

The improvements are located southeast of the Township Hall building (see location plan dated January 20, 2023).

Public parks and public recreation areas are permitted by right in the PRF District (Table 6.02).

Article 18 allows non-residential accessory structures via the sketch plan review process. As such, Planning Commission has review and approval authority over the project.



Aerial view of site and surroundings (looking north)

C. Sketch Plan Review

- 1. Relationship.** Accessory structures are required to be associated with a principal use/building. In this instance, the principal use of the property is for Genoa Township Hall and Genoa Township Park, both of which are permitted by right.

As such, the proposed recreational facilities are allowed as accessory structures.

- 2. Height.** Previous requests for accessory recreational structures have been reviewed for compliance with the height limits for conventional accessory structures.

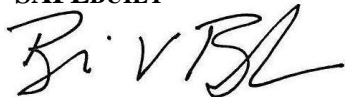
Section 11.04.02 established a maximum height of 18 feet for such structures. The submittal materials confirm that all of the structures proposed as part of this project are within this height limitation.

- 3. Setbacks.** The project area provides ample setbacks that greatly exceed the dimensional standards of Section 6.03 – 895’ from Dorr; 260’ from Crooked Lake; 680’ from I-96; and 305’ from the east side lot line.
- 4. Site Engineering.** The Commission should consider any comments provided by the Township’s engineering consultant. Of note, the project includes boulder retaining walls, which should be reviewed for compliance with the applicable standards of Section 11.04.03(j).

Should you have any questions concerning this matter, please do not hesitate to contact our office.

Respectfully,

SAFE BUILT



Brian V. Borden, AICP
Michigan Planning Manager



February 6, 2023

Ms. Amy Ruthig
Genoa Township
2911 Dorr Road
Brighton, MI 48116

**Re: Senior Survivor Playground
Sketch Plan Review No. 1**

Dear Ms. Ruthig:

Tetra Tech conducted a review of the proposed Senior Survivor Playground sketch plan last dated October 31, 2022. The plan was prepared by Michigan Recreational Construction. The Petitioner is proposing a new all-abilities playground located at Genoa Township Hall to the south of the existing playground. We offer the following comments:

1. The proposed playground master plan shows multiple small boulder retaining walls, along with a larger retaining wall around a picnic area. Prior to construction the Petitioner should provide more detail on the proposed grading and retaining walls around the picnic area for review.
2. The Petitioner should provide more information on how existing parking will support the new playground area, as no new parking is proposed. The Township has purchased adjacent property with the intention of future recreational space and should make sure the proposed playground will be compatible with future development of the Township property.

We recommend the petitioner address the above comments to the Township's satisfaction prior to approval. Please call if you have any questions.

Sincerely,

A blue ink signature of Gary J. Markstrom, written in a cursive style.

Gary J. Markstrom, P.E.
Vice President

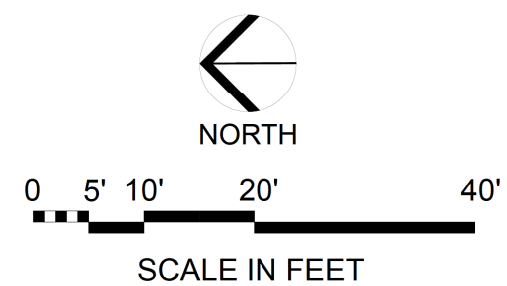
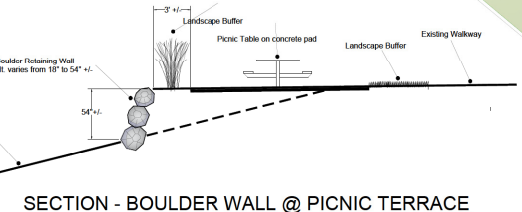
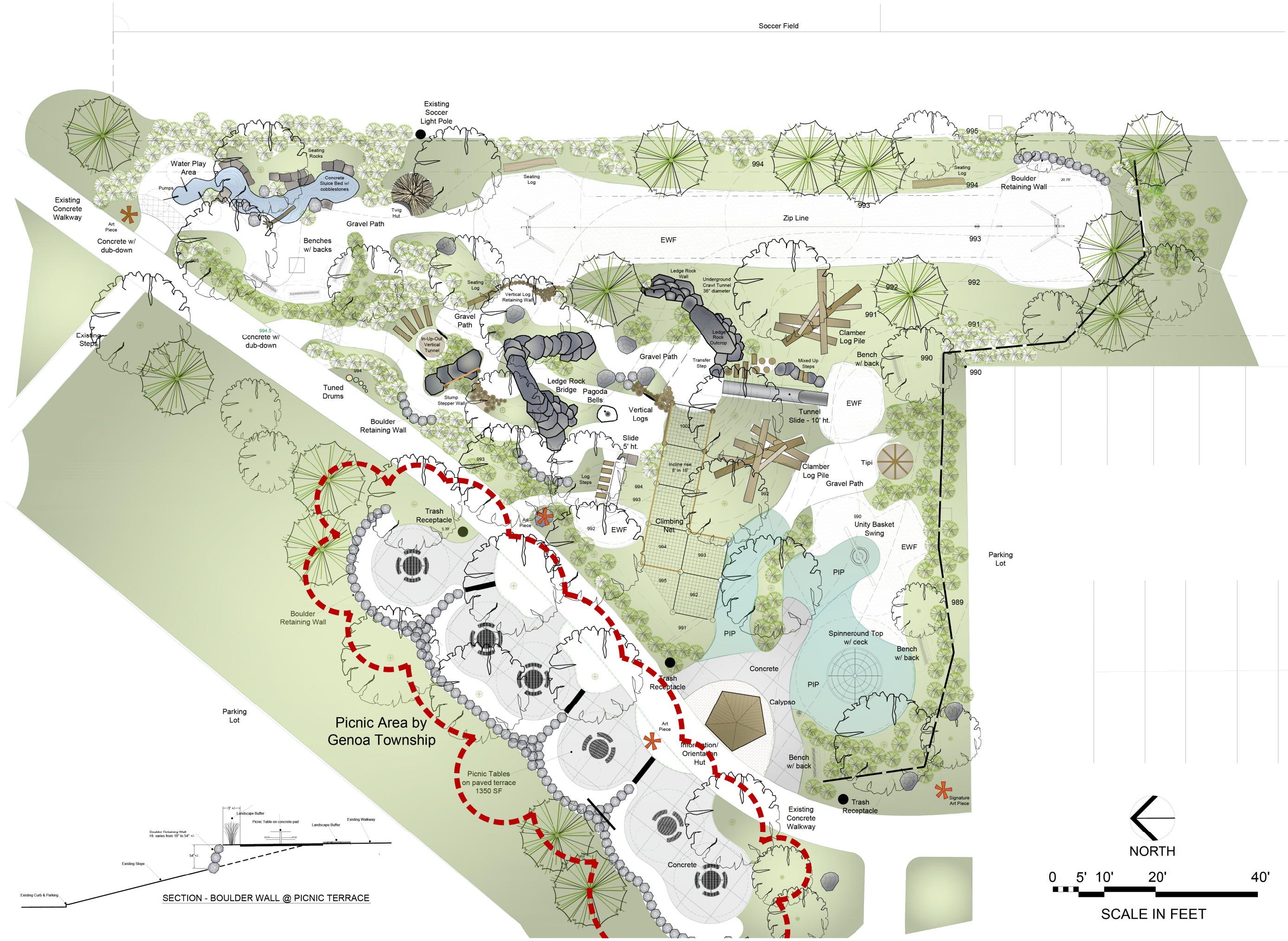
A blue ink signature of Shelby Byrne, written in a cursive style.

Shelby Byrne, P.E.
Project Engineer



Survivor Park - Proposed Location and Setbacks

Genoa Township Park
 2911 Dorr Road, Brighton, MI 48116



SURVIVOR PARK

@ Genoa Township Park
2911 DORR ROAD, GENOA TOWNSHIP, MI



client
HHS STUCO
1200 W. Grand River Ave.
Howell, MI 48843
517.540.8300

issue + revision	date
REVIEW	01.12.21
REVIEW	07.02.21
REVIEW	02.17.22
REVIEW	05.10.22
PROPOSAL	10.11.22
REVISIONS	10.31.22

date **OCT.31.2022**
project number **222086A**
sheet name

MASTER PLAN
sheet number **1 of 43**

Senior Survivor Playground

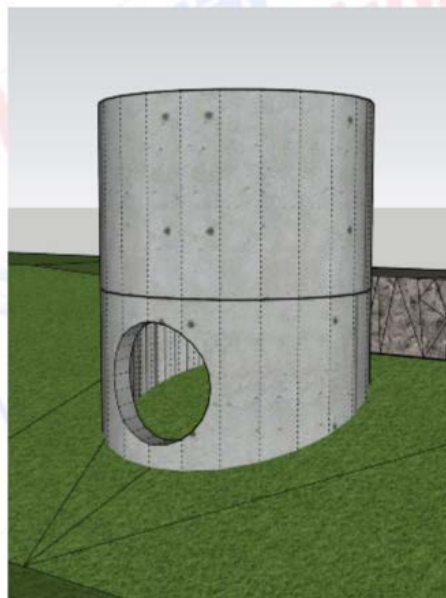


Safety Surfacing



- **Engineered Wood Fiber - EWF**
- **Poured-In-Place Rubber - PIP**

In-Up-Out Vertical Tunnel



Zip Line



Water Play Area



Clamber Log Pile



Spinneround Top



Net Climber



Unity Basket Swing



Buildina

Musical Play



Stump Climber



Twig Hut



Tunnel Hill Slide, 10'

