

**HOWELL TOWNSHIP PLANNING COMMISSION
REGULAR MEETING**

3525 Byron Road
Howell, MI 48855
August 26, 2025
6:30 pm

1. Call to Order
2. Roll Call: () Wayne Williams - Chair () Chuck Frantjeskos
 () Robert Spaulding – Vice Chair () Matt Stanley
 () Mike Newstead – Secretary () Sharon Lollo
 () Tim Boal – Board Rep.
3. Pledge of Allegiance
4. Approval of the Agenda:
 Planning Commission Regular Meeting: August 26, 2025
5. Approval of the Minutes:
 A. Regular Meeting July 22, 2025
 B. Special Meeting August 12, 2025
6. Call to the Public:
7. Zoning Board of Appeals Report:
8. Township Board Report:
 Draft Meeting Minutes August 11, 2025
9. Ordinance Violation Report:
10. Scheduled Public Hearings:
11. Other Matters to be Reviewed by the Planning Commission:
 A. Legal Update Information
12. Business Items
 A. Old Business:
 1. Mark Juett, PC2025-09, 4706-28-100-071, Vacant Hydraulic Dr., Final Site Plan Review
 2. Renewable Energy Ordinance – Including Invited Guest Speakers: John Mills and Rick VanGilder
 3. Portable Storage Container and Cargo Container Ordinance
- B. New Business:
 1. Ghraib Real Estate Holdings, PC2025-12, 4706-21-100-050, 2820 N. Burkhart Rd., Preliminary Site Plan Review
 2. Guided Mission Investments, PC2025-17, 4706-28-100-012, 1800 N. Burkhart Rd., Temporary Use Request
 3. Wrangler's Saloon, Request for Extension of Approved Site Plan
 4. Soapy Bucket, Request for Extension of Approved Site Plan
13. Call to the Public:
14. Adjournment

DRAFT

**HOWELL TOWNSHIP PLANNING COMMISSION
REGULAR MEETING MINUTES**

3525 Byron Road Howell, MI 48855

July 22, 2025

6:30 P.M.

MEMBERS PRESENT:

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

MEMBERS ABSENT:

| | |
|--------------|--------------|
| Matt Stanley | Commissioner |
|--------------|--------------|

ALSO IN ATTENDANCE:

Township planner Grayson Moore and Zoning Administrator Jonathan Hohenstein

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

APPROVAL OF THE AGENDA:

Motion by Boal, **Second** by Spaulding, “**Motion to approve the agenda with the modification to number 12 to switch 12A and 12B.**” Motion carried.

APPROVAL OF THE MEETING MINUTES:

June 24, 2025

Motion by Spaulding, **Second** by Boal, “**Approval.**” Motion carried.

CALL TO THE PUBLIC

None

ZONING BOARD OF APPEALS REPORT:

None

TOWNSHIP BOARD REPORT:

Draft minutes are included in the packet; Board Representative Boal gave an update. Architect’s proposal for oversight of the Township Hall renovation was accepted and the decision for the Community Center on Tooley Rd. was tabled. A digital mapping software program was approved to be used for the cemeteries. REU reduction that was requested by Wrangler’s Saloon was approved. Discussion of the letter of intent to purchase the property on the corner of Marr and Oak Grove Road was tabled until next month and an overview/discussion on how Tax Increment Financing (TIF) works. The proposal from Carlisle Wortman for the Park Master Plan was approved.

ORDINANCE VIOLATION REPORT:

Report in packet. Board Representative Boal questioned if there were any applicants for the Ordinance Enforcement Officer position that is posted and Commissioner Frantjeskos questioned if the applicant should live outside the Township.

SCHEDULED PUBLIC HEARINGS:

Portable Storage Container and Cargo Container Ordinance: **Motion** by Boal, **Second** by Newstead, **"To open the public hearing."** Motion carried. **Motion** by Newstead, **Second** by Frantjeskos, **"To close the public hearing."** Motion carried. Township Planner Moore gave an update on changes to the Cargo Container Ordinance and answered questions. Board Representative Boal questioned if in the Industrial Flex Zone shipping companies using cargo containers are not subjected to limitations on the number of containers on their site. Vice chair Spaulding questioned the height restrictions for screening of the cargo containers. Commissioner Frantjeskos questioned if detached structures should be 5 or 10 feet from a main structure as both are mentioned. Discussion followed. **Motion** by Frantjeskos, **Second** by Spaulding, **"To postpone any action on the proposed Text Amendment until the text is edited."** Motion carried.

OTHER MATTERS TO BE REVIEWED BY THE PLANNING COMMISSION:

None

BUSINESS ITEMS:

A. Old Business:

1. Renewable Energy Ordinance- Board Representative Boal would like Township resident John Mills to speak to the Planning Commission regarding his knowledge of community solar panels. Vice Chairman Spaulding questioned if anyone has approached the Township to place a Mega Solar Farm. Zoning Administrator Hohenstein spoke on the current Solar Ordinance section 16.19 and the proposed Overlay District. Commissioner Lollo spoke on her concerns about not having a Solar Farm Ordinance with guarantees and surety bonds that address returning property back to its original state once the panels are removed. Board Representative Boal questioned if the Township has any areas that are over 1,800 acres that would be available for an Overlay District. Discussion followed and Planner Moore answered questions.

B. New Business:

1. Mitch Harris Building Co., PC2025-13, Parcel # 4706-27-300-030, Final Site Plan Review. Township Planner Moore gave an update on changes that were made to the site plan and answered questions. Some of these changes are: back patio areas have been removed to comply with setbacks, landscaping plan that shows Dwarf Fountain Grass does not meet the shrub requirement, and minimum plant sizes should be noted on the plan. Vice Chair Spaulding would like an agreement with the River Downs Homeowners Association that Mitch Harris Development would have permission to have access to their detention pond and address the concerns from the Drain Commissioner. Applicants Colbie and Mitch Harris spoke regarding the detention ponds, the runoff from the buildings and their landscaping plan. Board Representative Boal would like to see shrubs for screening only where they are developing along Grand River and questioned the Dwarf Fountain Grass vs shrub requirement. Commissioner Lollo questioned if the ordinance requires buildings to be screened from Grand River Ave. Discussion followed. **Motion** by Boal, **Second** by Newstead with a friendly amendment, **"To conditionally approve final site plan for parcel # 4706-27-300-030, with the satisfaction of the Drain Commissioner that the drainage concerns have been adequately addressed also with the reduction of 20 Arborvitae trees along the Grand River side and addition of evergreen shrubs instead of the dwarf grass along the Edgebrook side."** Motion carried.

CALL TO THE PUBLIC:

None

Renewable Energy Ordinance:

Motion by Newstead, **Second** by Lollo, **“To postpone action on the proposed Text Amendment so that the following items can be addressed: Invite John Mills to speak and allow Grayson to make any changes or additions that were discussed at the July 22, 2025 Planning Commission meeting.”** Motion carried.

Motion by Spaulding, **Second** by Newstead, **“To excuse Commissioner Stanley from today’s meeting.”** Motion carried.

ADJOURNMENT:

Motion by Boal, **Second** by Newstead, **“To adjourn.”** Motion carried. The meeting was adjourned at 8:30 P.M.

Date

Mike Newstead
Planning Commission Secretary

Marnie Hebert
Recording Secretary

DRAFT

**HOWELL TOWNSHIP PLANNING COMMISSION
SPECIAL MEETING MINUTES**

3525 Byron Road Howell, MI 48855

August 12, 2025

6:30 P.M.

MEMBERS PRESENT:

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

MEMBERS ABSENT:

Also in Attendance:

Township Planner Grayson Moore, Applicant Dennis Freeman with Row Crop, LLC and Zoning Administrator Jonathan Hohenstein

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

APPROVAL OF THE AGENDA:

Motion by Spaulding, **Second** by Boal, **"To approve or suggested edits"** Motion carried.

SCHEDULED PUBLIC HEARINGS:

Row Crop, LLC / Dennis Freeman, PC2025-15, 4706-07-400-005, Vacant land, corner of Fleming Rd. and Marr Rd., request for a special use per Section 16.10 for an outdoor event – Luke Bryan Farm Tour on September 20, 2025.

Motion by Frantjeskos, **Second** by Newstead, **"To open the public hearing."** Motion carried. Township Planner Moore gave an overview of the proposed concert with four performing acts scheduled for Saturday, September 20th with operational hours between 2:00 P.M and 11:00 P.M. The week leading up to the concert there will be site preparation and vendors. Sound should not increase beyond 70 decibels outside of the parcel. There will be roads that will be getting treatment of chloride, emergency plans, law enforcement and adequate cell service. Applicant Dennis Freeman gave an overview of the day prior/day of concert and answered questions. They have contracted with Livingston County Sheriff for security and traffic control along with their own private security officers, Fire, EMS and U of M for medical services. They anticipate a maximum crowd of 20,000. Parking will occupy about 70 acres with light towers and four emergency gates. He gave an update of items that still needed to be addressed which were cell phone service, public liability insurance and surety bond. Chairman Williams questioned dust control on roads.

Janice Derr, 4811 Fleming Rd- Spoke on adequate cell service

Mark Fosdick, 5025 Gannon Rd- Spoke on concerns with traffic on roads, 911 service, noise level for residents in Cohoctah Township and possible conflict of interest with Secretary Newstead having tickets to the concert.

Motion by Spaulding, **Second** by Stanley, **"To close the public hearing."** Motion carried. Board Representative Boal questioned COW (cell on wheels), previous concerns in Conway Township, Clean-up on area streets, private security, number and size of gates, chain of command structures and what is the benefit to the Township. Commissioner Lollo questioned if alcohol was allowed in the concert area. Vice Chair Spaulding questioned public phone lines for first responders, safety signs inside the event, time frame of chloride on dirt roads and sanitation companies. Commissioner Stanley questioned time frame to empty the parking lot after the show. Chairman Williams questioned if there is a plan in place for parking if it rains. Board Representative Boal questioned the liability to the Township. Discussion followed. Secretary Newstead declared that he would abstain from voting due to possible conflict of interest. **Motion** by Boal, **Second** by Frantjeskos, will friendly amendments from Vice Chair Spaulding **"To approve the Temporary Land Use to the Luke Bryan Farm Tour on September 20, 2025, located at Parcel ID # 4706-07-400-005. Subject to the following conditions: In leu of public phone the applicant shall demonstrate adequate cell phone coverage for attendees and staff to meet the intent of ordinance number six, to include if possible, a metric for cell phone comparison between us and the last location also the completion of a held harmless agreement with the Township and adequate insurance coverage to be determined by the Township authorities and additional chloride of the roads as necessary. That all activities shall occur in accordance with the approved site plan and events scheduled submitted with the application dated July 10, 2025 or after September 20, 2025 or otherwise determined rain date as long as all light conditions are satisfactory and the services are to be provided as indicated in the application."** Roll Call: Lollo- yes, Boal- yes, Newstead- abstained, Williams- yes, Spaulding- yes Stanley- yes, Frantjeskos- yes. Motion passed 6-0. **Motion** by Spaulding, **Second** by Lollo, **"To recommend approval to Township Board of the Special Land Use for the Luke Bryan Farm Tour on September 20th or otherwise designated rain date on Parcel ID # 4706-07-400-005 finding that the proposed use meets the special land use standards of the Township zoning ordinance subject to the conditions listed in the Temporary Land Use approval dated August 12, 2025 and the Planner's report dated August 6, 2025.** Motion carried.

CALL TO THE PUBLIC:

None

ADJOURMENT:

Motion by Newstead, **Second** by Frantjeskos, **"To adjourn."** Motion carried. The meeting was adjourned at 7:50 P.M.

Date_____

Mike Newstead
Planning Commission Secretary

Marnie Hebert
Recording Secretary

Monthly Permit List

08/04/2025

1/3

Commercial Land Use

| Permit # | Applicant | Address | Fee Total | Const. Value |
|----------|---|------------------------|-----------|--------------|
| P25-143 | REGAL RIGGING & DEMILITION LLC | 3399 COUNTY AIRPORT DR | \$150.00 | \$0.00 |
| | Work Description: Demolition of 3480 W. Grand River | | | |
| P25-134 | JEREMY BEARD | 2770 FISHER RD | \$250.00 | \$0.00 |
| | Work Description: Building a berm | | | |
| P25-149 | ROW CROP, LLC | MARR- VACANT | \$250.00 | \$0.00 |
| | Work Description: Two temporary driveways into the parcel. One on Marr and one on Fleming. | | | |

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| Total Permits For Type: | 3 |
| Total Fees For Type: | \$650.00 |
| Total Const. Value For Type: | \$0.00 |

Residential Land Use

| Permit # | Applicant | Address | Fee Total | Const. Value |
|----------|---|-----------------------|-----------|--------------|
| P25-146 | Cale Gillett | 3700 N BURKHART | \$75.00 | \$0.00 |
| | Work Description: New Home Construction | | | |
| P25-140 | LAHO BRANDON AND CINDY | 5675 BYRON RD | \$75.00 | \$0.00 |
| | Work Description: 16' x 18' two story addition, second floor is unfinished attic space | | | |
| P25-138 | SUPERIOR CUSTOM HOMES | 1044 ELLINGTON DR | \$50.00 | \$0.00 |
| | Work Description: 10' x 16' treated wood deck on front of home | | | |
| P25-164 | FOUNDATION SYSTEM OF MICHIGAN | 5600 W GRAND RIVER RD | \$10.00 | \$0.00 |
| | Work Description: 1943 ft. Crawl Seal (5580 W. Grand River is house address) | | | |
| P25-133 | WEATHER GARD WINDOWS | 727 JOHN WARD DR | \$10.00 | \$0.00 |
| | Work Description: Install six same size vinyl replacement windows | | | |
| P25-147 | STRAWBERRY SOLAR | 5974 LAYTON RD | \$75.00 | \$0.00 |
| | Work Description: Installing a ground mount solar panel system, 14 panels | | | |
| P25-135 | Trademark Building Company | 1500 E MARR | \$75.00 | \$0.00 |
| | Work Description: New construction single family home with decks | | | |
| P25-139 | PREMIUM ROOFING LLC. | 900 W MARR RD | \$10.00 | \$0.00 |
| | Work Description: Tear off and reroof house and attached garage with no structural changes | | | |
| P25-137 | LAVALLEY RICHARD AND JESSICA | 4111 MARWOOD DR | \$50.00 | \$0.00 |
| | Work Description: wood panel fence 6 FT high, Approx. 16ft out and 96ft down | | | |
| P25-132 | SCOTT TERRY F & ANN C | 5525 OAK GROVE RD | \$10.00 | \$0.00 |
| | Work Description: Reside part of existing out building | | | |

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|---------|--|----------------------|---------|--------|
| P25-142 | Michael Chosid | 4412 RAMSBURY DR | \$0.00 | \$0.00 |
| | Work Description: New Mobile Home Installation | | | |
| P25-141 | Michael Chosid | 4430 RAMSBURY DR | \$0.00 | \$0.00 |
| | Work Description: New Mobile Home Installation | | | |
| P25-136 | Matthew Smith | 5480 SPRING CREEK DR | \$10.00 | \$0.00 |
| | Work Description: Roof replacement | | | |
| P25-148 | SGI Heating and Cooling | 3312 WARNER RD | \$10.00 | \$0.00 |
| | Work Description: Generator Installation. To be placed on a pre-fab pad | | | |
| P25-145 | Michael Chosid | 1032 WELLESLEY DR | \$0.00 | \$0.00 |
| | Work Description: New Mobile Home Installation | | | |
| P25-144 | Michael Chosid | 1036 WELLESLEY DR | \$0.00 | \$0.00 |
| | Work Description: New Mobile Home Installation | | | |
| P25-131 | JCH BUILDERS | 1555 WOODHAVEN RD | \$75.00 | \$0.00 |
| | Work Description: New 2445 SF single family home | | | |

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| Total Permits For Type: | 17 |
| Total Fees For Type: | \$535.00 |
| Total Const. Value For Type: | \$0.00 |

Sewer Connection

| Permit # | Applicant | Address | Fee Total | Const. Value |
|-----------|---|--------------------|-----------|--------------|
| PWS25-081 | DCM INVESTMENTS LLC | 3580 W GRAND RIVER | \$5000.00 | \$0.00 |
| | Work Description: Sewer connection | | | |
| PWS25-085 | Michael Chosid | 4412 RAMSBURY DR | \$2083.33 | \$0.00 |
| | Work Description: Sewer Connection | | | |
| PWS25-082 | Michael Chosid | 4430 RAMSBURY DR | \$2083.33 | \$0.00 |
| | Work Description: Sewer connection | | | |
| PWS25-089 | Michael Chosid | 1032 WELLESLEY DR | \$2083.33 | \$0.00 |
| | Work Description: Sewer Connection | | | |
| PWS25-086 | Michael Chosid | 1036 WELLESLEY DR | \$2083.33 | \$0.00 |
| | Work Description: Sewer Connection | | | |

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| Total Permits For Type: | 5 |
| Total Fees For Type: | \$13333.32 |
| Total Const. Value For Type: | \$0.00 |

Water Connection

| Permit # | Applicant | Address | Fee Total | Const. Value |
|-----------|---|------------------|-----------|--------------|
| PWS25-084 | Michael Chosid | 4412 RAMSBURY DR | \$2083.33 | \$0.00 |
| | Work Description: Water Connection | | | |
| PWS25-083 | Michael Chosid | 4430 RAMSBURY DR | \$2083.33 | \$0.00 |
| | Work Description: water connection | | | |

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|------------------------------------|----------------|------------------|-----------|--------|
| PWS25-088 | Michael Chosid | 1032 WELLESLY DR | \$2083.33 | \$0.00 |
| Work Description: Water Connection | | | | |
| PWS25-087 | Michael Chosid | 1036 WELLESLY DR | \$2083.33 | \$0.00 |
| Work Description: Water Connection | | | | |

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|-------------------------|---|
| Total Permits For Type: | 4 |
|-------------------------|---|

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|----------------------|-----------|
| Total Fees For Type: | \$8333.32 |
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|------------------------------|--------|
| Total Const. Value For Type: | \$0.00 |
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|-------------------|-------------|
| Grand Total Fees: | \$22,851.64 |
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|----------------------|-------|
| Grand Total Permits: | 29.00 |
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Code Enforcement List

08/04/2025

| Address | Owners Name | Parcel Number | Date Filed | Origin | Status |
|---|--------------------|-----------------|------------|-----------|-------------------------|
| 222 BAIN DR Complaint Running a business out of the home, business trucks, business equipment in yard, renting a dump trailer, storing building supplies, camper in the front yard, tractor on less than 2 acres. | OTREMBA EMILY AND | 4706-14-401-039 | 07/22/2025 | | OPEN - COMPLANT RECEIVE |
| Comments 7.22.25 - Owner stopped into Twp RE camper in his driveway, waiting on a part to fix the camper and then it will be stored off site again. Part should be in by August 4 7.22.25 - Unofficial email complaint received, additional email with information received 7.23.25 - Email from C received with additional information 7.23.25 - Emails from neighbor received 7.25.25 - Emails from C received with additional information 7.25.25 - Email from neighbor received 7.29.25 - Official complaint received 7.29.25 - Owner stopped in about another matter, spoke to owner about items in complaint 7.30.25 - Emails from neighbor received 8.4.25 - Site visit completed, photos attached. | | | | | |
| 5495 OAK GROVE RD Complaint Blighted property and Nuisance . Property is in a condition and disrepair. Accumulation of filth, garbage, dismantled cars, auto parts, vegetation overgrowth, decayed trees, junk, animal excrement and vermin. | LORENZ ROBERT & TR | 4706-02-401-001 | 05/01/2025 | ANONYMOUS | OPEN - COMPLANT RECEIVE |
| Comments 5.1.25 - Received complaint 5.7.25 - Site visit completed, photos attached, letter sent to owners 6.16.25 - Site visit completed, no apparent clean up efforts underway, photos attached, letter sent to owners 7.21.25 - Site visit completed, no apparent change to site. 8.4.25 - Site visit completed, no one was home, violation still present, issued MCI Notice of Violation Ticket #0207. | | | | | |

Code Enforcement List

08/04/2025

| Address | Owners Name | Parcel Number | Date Filed | Origin | Status |
|--|-------------------|-----------------|------------|----------------|-------------------------|
| 2900 BREWER RD Complaint Broken down vehicle in front yard, farm tractor on a lot under 2 acres. | LECHEVALIER KAYED | 4706-22-200-014 | 02/13/2025 | PUBLIC - EMAIL | OPEN - COMPLANT RECEIVE |
| Comments 2.13.25 - Received complaint 2.14.25 - Spoke to homeowner about violations 2.19.25 - Letter sent to homeowner 2.19.25 - Homeowner provided proof of registration and insurance 2.25.25 - Spoke to homeowner and Twp. Planner RE parking 3.31.25 - Site visit completed, violations still present. Waiting on letter from Twp. Planner. | | | | | |

Code Enforcement List

08/04/2025

| Address | Owners Name | Parcel Number | Date Filed | Origin | Status |
|--|-------------------|-----------------|------------|----------------|-------------------------|
| 3408 CHERYL DR Complaint Has 3 junk cars, junk boat, junk camper, and at least 80 yards of debris scattered in his backyard. | MELTON HAROLD D & | 4706-14-401-029 | 02/10/2025 | PUBLIC - EMAIL | OPEN - COMPLANT RECEIVE |
| Comments 2.10.25 - Complaint received. 2.11.25 - Site visit completed. 2.12.25 - Letter sent to owner. 2.18.25 - Owner came into the Township and discussed the violations. The owner has agreed to a schedule to remediate the violations. 3.31.25 - Site visit completed, no visible change. 4.30.25 - Site visit completed, one vehicle no longer on site 5.15.25 - Spoke to homeowner, is requesting extension until July 1st to get the property in compliance. Letter sent to owner RE agreement 6.16.25 - Site visit completed, photos attached. 6.16.25 - Contacted owner for update, boat has been removed from the property, working on dismantling and scrapping the camper, will be removing the Cadillac, and the truck or proving that it is in active service. 7.1.25 - Site visit completed, one car, one truck, and the camper are still on site. Spoke to homeowner, request to extend the deadline was denied, spoke about steps moving forward and expectations on getting the issues remediated. 7.2.25 - Issued ticket #0206. If property is in compliance by July 31st Twp will waive this ticket. 7.21.25 - Site visit completed, photos attached. 7.24.25 - Spoke to owner, camper has been removed from the site. Truck will be going to family member, Cadillac is for sale. Agreed that if the truck was gone by the 31st would be willing to allow a reasonable amount of time to try and sell the Cadillac. Will check after the 31st on status of the truck. 7.31.25 - Spoke to owners, confirmed prior conversation 8.4.25 - Spoke to owner, confirmed prior conversation 8.4.25 - Site visit completed, owner invited us to verify that items had been taken care of as agreed to. Photos attached of truck in the barn and camper has been removed. | | | | | |

Code Enforcement List

08/04/2025

| Address | Owners Name | Parcel Number | Date Filed | Origin | Status |
|--|--------------------|-----------------|------------|----------------|-------------------------|
| 5704 CRANDALL RD Complaint | JEWETT RICHARD L & | 4706-05-200-004 | 11/25/2024 | PUBLIC - EMAIL | OPEN - COMPLANT RECEIVE |
| A person is living in an RV in the back of the property against Township Ordinance. | | | | | |
| Comments | | | | | |
| 12.10.24 - Site visit completed. RV is located in the back of the property. Letter sent to owner. | | | | | |
| 1.27.25 - Site visit completed. No visible change. Letter sent to owner. | | | | | |
| 2.11.25 - Requested additional information from complainant | | | | | |
| 3.10.25 - January letter returned unclaimed. | | | | | |
| 3.11.25 - December letter returned unclaimed. | | | | | |
| 3.31.25 - Site visit completed. New letter mailed out. | | | | | |
| 4.7.25 - Copy of letter given to homeowner. Spoke to homeowner - admitted that someone is living in the RV. Follow up letter sent to owner. | | | | | |
| 4.14.25 - Spoke to homeowner on the phone. Spoke to Jake at LCHD on the phone, they received a complaint about sewage being discharged onto the ground from one of the RVs. Spoke to person staying in the RV (Wes Gray) on the phone. Jake from LCHD and I made a visit to the site, spoke to Wes. Wes understands that he cannot live in an RV on the property. We agreed to 30 days to remove his things from the site. | | | | | |
| 4.30.25 - Site visit completed, Wes appears to be working on getting his things removed. | | | | | |
| 5.14.25 - Spoke to the homeowner, Wes moved some things but has started building a new trailer. Owner will call the Sheriff's Department to understand her options to get Wes removed from her property. | | | | | |
| 5.19.25 - Spoke to Wes, he has removed a lot of stuff but would like until June 1, 2025 to remove the rest of his stuff. He will provide receipts for the dumpster that he used. Twp will make a site visit and confirm that progress has been made. If progress has been made then we are willing to extend deadline to June 1. | | | | | |
| 5.19.25 - Site visit completed, some clean up has taken place, photos attached. Spoke to homeowner, admits a lot of work has been done and has no issue with Wes's request to extend deadline to June 1. Letter sent to owner to confirm same. | | | | | |
| 06-02-25- MH- Spoke with Wes and he doesn't have any where to go, fractured his hand and hurt his back moving stuff off the property. He is still trying to move stuff off the property. Jonathan is out of the office so I let him know he would be contacted when he returns. | | | | | |
| 6.12.25 - Spoke to Wes, said he has hurt his hand but still intends to remove his things from the property. We agreed to an extension to July 31st for all things to be removed from the property, no further extensions will be granted for any reason. Will prepare letter to owners RE same. | | | | | |
| 6.16.25 - Site visit completed, some changes have been made, photos attached. | | | | | |
| 7.21.25 - Site visit completed, photos attached. | | | | | |
| 8.4.25 - Site visit completed, Wes has not removed his belongings from the property, still living in the RV. Spoke to owner. Personally issued MCI Citation ticket #0162 to Denise Stach. Personally issued MCI Citation ticket #0163 to Wes Gray. | | | | | |

Code Enforcement List

08/04/2025

| Address | Owners Name | Parcel Number | Date Filed | Origin | Status |
|--|------------------|-----------------|------------|--------|-------------------------|
| 4141 W GRAND RIVER A Complaint House is neglected, building unsafe, junk in yard. | TONON CHIARINA S | 4706-20-400-012 | 09/24/2024 | | OPEN - COMPLANT RECEIVE |
| Comments 9.24.24 - Contacted Livingston County Building Department RE performing dangerous building inspection. 10.3.24 - Received LCBD determination letter. Contacted Spicer RE Dangerous Buildings Hearing Officer availability. Spicer does not currently have availability to perform these duties. 10.17.24 - Letter sent to owner. 12.19.24 - No response received. Second letter sent to owner with tracking. 1.9.25 - Spoke to owner, is getting quotes from companies to demolish the structures. Provided contact information to Township and will stay in touch with progress reports. 1.27.25 - Violation still present. 3.31.25 - Site visit completed, violation still present, no visible change 4.30.25 - Site visit completed, violation still present, no visible change, will reach out to owners 5.7.25 - Left message for owner 5.9.25 - Received voicemail from owner, they are currently working through asbestos testing, getting the site taken care of in 4-6 weeks 5.14.25 - Spoke to the company that will be performing the demolition and discussed the permitting process 6.16.25 - Site visit completed, no change | | | | | |

Code Enforcement List

08/04/2025

| Address | Owners Name | Parcel Number | Date Filed | Origin | Status |
|---|-------------------|-----------------|------------|--------|-------------------------|
| 3265 W GRAND RIVER A Complaint Starting to add more parking on adjacent lot owned by MDOT without permits. | AMERICAN LEGION P | 4706-28-200-010 | 05/21/2024 | | OPEN - COMPLANT RECEIVE |
| Comments 4.25.24 - Received call regarding work being done by American Legion. Site visit, verified work was underway. Contacted MDOT RE approval. 5.21.24 - Site visit completed, violation still present. Sent letter to American Legion. 6.18.24 - Site visit. More work has been completed including installing gravel in excavated area and a tent and fencing has been erected next to gravel area on MDOT property. Letter sent to American Legion. 8.1.24 - Site visit completed. Tent and fencing have been removed, large pile of dirt has been removed, additional gravel parking area still on MDOT property. 9.4.24 - Site visit completed. Violation still present. Posted Notice of Violation Ticket to front door, mailed a copy of the violation. Ticket #: 0202 9.4.24 - Phone conversation with Commander Laura Goldthwait. Requested letter explaining the violation and steps moving forward. Mailed to Legion, emailed to Laura, attached. 9.12.24 - Received correspondence from Legion's attorney denying all responsibility. Documents provided to Township's attorney. Township's attorney has contacted Legion's attorney. 10.8.24 - Site visit completed. Photos of Legion using the additional parking attached. 12.10.24 - Site visit completed. Christmas trees located in additional parking area and land east of building. Letter sent regarding temporary uses requiring permits. 1.27.25 - No change to property 3.31.25 - No change to property 4.30.25 - No change to property 6.16.25 - Site visit completed, photos attached, tent and fencing have been installed by the Legion on MDOT Property, no change to the additional parking area | | | | | |

Code Enforcement List

08/04/2025

| Address | Owners Name | Parcel Number | Date Filed | Origin | Status |
|---|-------------------|-----------------|------------|---------------|--------------------------|
| 3590 W GRAND RIVER Complaint Zoning Violations:Outdoor storage without screening, setback issues, parking not hard surfaced, no sign permit. | HASLOCK PROPERTIE | 4706-28-100-024 | 05/06/2024 | | OPEN - FIRST LETTER SENT |
| Comments 5.13.24 - Violation letter to Occupant returned. 5.20.24 - Received phone call from owner. Will be preparing a site plan to take before the Planning Commission for approval. 6.20.24 - Received phone call from owner, discussed site plan requirements. 9.4.24 - Sent letter to owner RE site plan progress. 9.12.24 - Spoke to owner, Engineer has site plans almost complete. Will submit for review in the near future. 2.27.25 - Spoke to owner, Engineer will be submitting plans in the next week or two. 3.31.25 - Site visit completed, violations still present 4.30.25 - Site visit completed, violations still present 5.1.25 - Property owner turned in site plan. Currently considering if they would like to schedule a pre-conference prior to formally submitting the site plan. 6.9.25 - Spoke to the owner about next steps to move the site plan forward, owner is considering pairing down what has been proposed. 6.16.25 - Site visit completed, photos attached. 7.21.25 - Site visit completed, photos attached. | | | | | |
| 5057 WARNER RD Complaint LARGE AMOUNT OF JUNK AND LITTER IN THE YARD. | HARTER EDWARD H | 4706-19-200-005 | 03/14/2022 | PUBLIC/ EMAIL | OPEN - SECOND LETTER SEN |
| Comments 4.17.2023 THERE IS MORE JUNK NOW THEN THERE WAS LAST MARCH OF 2022 OR JANUARY OF 2023. 5.25.2023 I SPOKE WITH MR. HARTER HE IS STARTING TO CLEAN THE SITE UP, HE SAID THAT IT WILL TAKE SOME TIME TO GET IT ALL CLEANED UP. I WILL BEE CHECKING ON HIS PROGRESS EVERY FEW WEEKS TO MAKE SURE HE IS MAKING PROGRESS. 6.29.2023 SOME PROGRESS HAS BEEN MADE. WILL CHECK BACK IN A COUPLE OF WEEKS. 1.9.2024 did a site vist there has been no progress made on the clean up. 1.11.2024 Finial letter sent. 3.20.24 - Site visit. No remediation of issues has taken place. Photos attached. 3.25.24 Spoke to owner. Owner is working on cleaning up the property, has dumpsters being delivered, scrap is in piles and ready to be taken to the scrap yard. Has requested 3 months to get the property cleaned up. Letter sent in confirmation of agreement. Scheduled visit for June 25th. 4.23.24 - Site visit. Violation still present. Scheduled reinspection. 5.20.24 - Site visit. Work has been started. Violation still present. Scheduled reinspection. | | | | | |

Code Enforcement List

08/04/2025

| Address | Owners Name | Parcel Number | Date Filed | Origin | Status |
|---|-------------|---------------|------------|--------|--------|
| <hr/> | | | | | |
| 6.18.24 - Site visit. Violation still present, no evidence of continued clean up activity. Will reinspect on June 25th as agreed. | | | | | |
| 6.25.24 - Site visit. Minimal changes to site, violation still present. Letter sent to owner. | | | | | |
| 8.1.24 - Site visit completed. Owner still working on clean-up. | | | | | |
| 9.4.24 - Site visit completed, spoke to homeowner. Owner claims to have back of property nearly complete. Dumpster to be arriving next week, neighbors helping to remove scrap in the next few days. | | | | | |
| 10.8.24 - Site visit completed. No evidence of activity. Final violation letter sent to owner. | | | | | |
| 11.6.24 - Site visit completed. No evidence of activity. Will check property on 11.14.24 per letter. | | | | | |
| 11.14.24 - Site visit completed. No evidence of activity. Ticket number 0204 issued. Ticket mailed to homeowner 11.18.24. | | | | | |
| 12.4.24 - Spoke to homeowner. He will be completing a clean-up schedule and providing it to the Township. If the schedule is followed and clean-up of property is achieved ticket will be waived. | | | | | |
| 12.10.24 - Schedule has not been provided to Township. Site visit completed, no change. | | | | | |
| 1.27.25 - Site visit completed, no change. Schedule has not been provided to Township. Final violation letter sent to owner. | | | | | |
| 2.3.25 - Received phone call from owner's wife, owner is currently in jail. By February 24th they will contact the Township to discuss deadlines for removing the junk from the site. Letter sent to owner to confirm same. | | | | | |
| 2.24.25 - Spoke to owner's wife. | | | | | |
| 2.28.25 - Spoke to owner's wife, came to agreement on clean up schedule. Letter on agreement sent to owner. | | | | | |
| 3.17.25 - 2.28 letter returned. Mailed out letter again. | | | | | |
| 3.21.25 - Homeowner left message stating that all scrap metal has been removed, two vehicles will be removed this week. We may stop by any time to see the progress. | | | | | |
| 3.31.25 - Site visit completed, violation still present | | | | | |
| 4.30.25 - Site visit completed, violation still present. May 4th is the clean-up deadline, will make site visit Monday May 5th to check status. | | | | | |
| 5.7.25 - Site visit completed, violation still present. Posted ticket #0159 to the structure, filed ticket with the District Court and requested an informal hearing, mailed copy of ticket to owner. | | | | | |
| 5.19.25 - Received information from District Court setting formal hearing date. Contacted the court to switch to an informal hearing as originally requested. | | | | | |
| 6.10.25 - Called Court RE informal hearing date, Court's system indicated that the ticket had been paid and closed. | | | | | |
| 6.16.25 - Site visit completed, no apparent change, photos attached. Ticket filed with Court - requested informal hearing, ticket posted to structure and mailed to owner. | | | | | |
| 7.16.25 - Magistrate refused to hear the case, claimed he did not have the authority for injunctive relief, ticket dismissed. | | | | | |
| 7.21.25 - Site visit completed, no apparent change, photos attached. Ticket 0161 filed with the Court requesting formal hearing. Ticket posted to structure and mailed to owner. | | | | | |
| 7.29.25 - Formal Court hearing scheduled. | | | | | |

Records: 9

Population: All Records

From MSU Extension – Mary Reilly, AICP

Township's ZBA did not provide sufficient factual findings, remanded to ZBA for further explanation of decision to grant land-division variance

Case: *Keep Whitewater Twp. Rural, Inc. v. Township of Whitewater*, MI Court of Appeals, Unpublished, Decided 6-13-25

Holding that appellee-township's ZBA did not provide sufficient factual findings, the court vacated the trial court's order affirming the ZBA's order and remanded to the ZBA for further explanation of its decision to grant a land-division variance. Appellee's ZBA granted a land-division variance allowing a parcel of real property owned by third-party intervenor to comply with relevant ordinances, despite the fact that the parcel did not comply with the requirement that its depth-to-width ratio must not exceed 4:1. The trial court affirmed.

On appeal, the court rejected appellant's argument that the procedure used to approve the land division in 2020, which created the subject parcel, rendered the ZBA's 2023 variance award invalid. "We cannot see how an alleged procedural deficiency in the 2020 land-division approval process could have any impact on the 2023 variance request, given the fact that the 2020 land-division approval had been deemed invalid by the time of the 2023 variance request."

However, the "ZBA provided insufficient factual findings on" the five necessary "elements to permit us to meaningfully review the ZBA's decision to grant a variance." Because the ZBA "gave no meaningful explanation for its decision, the [trial] court grossly misapplied the substantial evidence test to the ZBA's factual findings when it affirmed the ZBA's order." [Source: Michigan Bar, e-Journal Summary, No. 83858, 6-30-25](https://www.michbar.org/Portals/0/opinions/appeals/2025/061325/83858.pdf). Full text:

<https://www.michbar.org/Portals/0/opinions/appeals/2025/061325/83858.pdf>

Reviewing Zoning Board of Appeals Petitions: Part 2 – Effective Decision Making

Excerpted from the Zoning Board of Appeals Toolkit, a Michigan Association of Planning publication

Discussion, deliberation, and decision principles

The following principles should be considered when reaching decisions on all applications. A more detailed analysis of the specific review criteria for the different types of petitions is included at the end of this section.

Base it on the zoning ordinance. The ZBA must ensure that the standards required for review are used properly and made part of the record. Discussion should be focused on ordinance requirements and standards, and ZBA members should be well-versed in the language, meaning, and application of the zoning ordinance. It is particularly important that the ZBA understand the reasoning behind the regulation. This may create the need to consult with the planning commission to determine why the language is constructed in a particular way. It is not sufficient to merely state that the standards are met or not met. The record must show sufficient facts to back up the findings made according to the ordinance standards.

Have knowledge of pertinent case facts. Before making a decision, determine whether all the applicable facts about the case have been submitted and reviewed. Refer to the ‘Gathering Information’ section of this toolkit for specific sources of information. This information must be shared with the entire board and discussed as part of the deliberation.

Relate to conditions on the land. For variances, the justification must be related to conditions present on the land, not those which happen to affect the applicant. Variances run with the land, not with the owner. Subsequent owners are entitled to the same variance.

Determine the validity of the difficulty or hardship. Property owners have certain rights to enjoy the use of the property within the limits of the ordinance. They are not, however, entitled to special privileges simply because compliance with the ordinance is inconvenient. The function of the ZBA is to uphold the provisions of the ordinance; it is not to allow someone to find a way around the ordinance to avoid an inconvenience.

Findings of fact

Documentation of decisions is the last formal step in the decision making process. Documentation takes place in the form of a motion and should be based on findings of fact. A finding of fact is a concise statement of the action taken by the ZBA which helps diminish ambiguity surrounding the rationale for a decision. In the event that a decision is litigated, a finding of fact provides the court with a full understanding of why a decision was made. Decisions made by the court are generally made on the basis of the record, not the result of additional testimony. If the community provides a solid record of their decision, including a finding of fact based on appropriate standards, the court is less likely to substitute its judgment for that of the board.

Findings of fact also help avoid concern of setting precedents. Every case must be heard on the merits of the facts presented, for that specific case, and every decision must be based on the standards of the ordinance. Making proper decisions and stating the reasons for such decisions emphasizes the individual treatment of each application.

Findings of fact typically include the following information:

- ☑ Applicant’s name and description of request.
- ☑ Location and description of the physical characteristics of subject property.
- ☑ References to relevant sections of the zoning ordinance.
- ☑ Statement of how the applicant meets, or fails to meet, the community’s standards for the type of request.
- ☑ Input from neighbors.
- ☑ The motion made by the board.
- ☑ Any conditions attached to an approved request.

Content of Motions

All motions should include the following:

- ☑ Application number and name of applicant.
- ☑ Description of the nature of the request.
- ☑ Action taken (approval, approval with condition, denial, tabling).
- ☑ Conditions attached to the motion, if applicable (including who will verify that they are met).
- ☑ Reasons for the action taken (findings of fact).

Motions and the Chair

- ☑ The chairperson should restate the motion clearly after it has been made and seconded, “It is moved and seconded that...”
- ☑ When a motion requires a second, the chairperson should be sure it is seconded; a motion with no second should be rejected.

- ☑ The chairperson should entertain only one motion at a time.
- ☑ The motion maker should be able to discuss the motion first.
- ☑ The chairperson should not permit anyone to speak twice on a motion until all have had a chance to speak once.

By directing all comments through the chair, it is often possible to avoid debates between members of the audience, the presenter and the audience, and the board and the audience or presenter.

Conditions

For variance requests, the zoning board of appeals may attach conditions of approval to ensure compliance with the purpose and intent of the zoning ordinance. If a motion includes condi-

tions, they must meet all of the following requirements:

- ☑ Be reasonable and designed to protect natural resources, the health, safety, and welfare and the social and economic wellbeing of those who will use the land or activity under consideration, residents and landowners immediately adjacent to the proposed land use or activity, and the community as a whole.
- ☑ Be related to a valid exercise of police power, and purposes which are affected by the proposed use or activity.
- ☑ Be necessary to meet the intent and purpose of the zoning ordinance, be related to the standards established in the ordinance for the land use or activity under consideration, and be

necessary to ensure compliance with those standards.

- ☑ Be recorded in the record of the approval action and remain unchanged except upon the mutual consent of the zoning board of appeals and the landowner. The ZBA shall maintain a record of conditions which are changed.

The motion should identify who is responsible to ensure conditions are implemented. This could include a statement such as "a revised site plan shall be submitted for the secretary of the ZBA or zoning administrator to certify that all conditions have been met."

Next in the series:

How to Avoid Litigation

To purchase a copy of the *Zoning Board of Appeals Toolkit*, go to www.planningmi.org

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Michigan Association of Planning
1919 West Stadium Blvd, Ste. 4
Ann Arbor, MI 48103

(734) 913-2000 | info@planningmi.org

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

File # _____

Parcel ID #: 4706- 28 - 100 - 071

Date 4.25.25

Applicant Name MARK JUETT

Applicant Address _____

Phone _____

Fax _____

Email _____

Property Owner Name _____

KEN COWDER

Phone _____

Fax _____

Email _____

Please list all recipients to receive information and/or reports:

Name: _____

COLIN JUETT

Email _____

Name: _____

HANNAH JUETT

Email _____

Name: _____

Email _____

Location of Property _____

4802 Hydraulic

Current Zoning Classification _____

IF

Existing Use _____

VACANT

Proposed Use _____

OUTSIDE STORAGE

Check One:

Preliminary Site Plan Review (20.06)

Final Site Plan Review (20.07)

Temporary Use (14.34)

Commercial/Industrial Development

Subdivision/Site Plan Condo

Multi-Family/Condo

Planned Unit Development (PUD) Type:

1

2

3

4

5

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

7-31-25
Howell Township
3525 Byron Road
Howell, Michigan 48855

Howell Township Planning Commission,

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

Please let this section of this letter serve to address the items listed by the community planners' letter revised 7-15-25.

1. Amended sheet SP to depict parcel zoning as Industrial Flex Zone instead of Industrial.
2. As discussed at the preliminary site plan review, the industry standard is to use the term "fabric" to refer to chain link fence material; however since this was mentioned again in the planner's revised letter, we have updated the site plan to replace the term "fabric" with "chain link."
3. As discussed with the planning commission and approved at preliminary site plan review meeting, the screening will remain as drawn.

We believe that the calculations used to determine the total possible shipping container square footage were incorrect. The planners determined a total of 1,200 sq.ft. of shipping container allowed for our site, citing section 14.07. However according to section 14.07, the regulation is 4% of lot area to a maximum of 3,000sq.ft. Our site is 11.5 acres, which is 500,940 sq.ft, and 4% of that is 20,037.6 sq.ft. Since that is more than the maximum allowed of 3,000sq.ft, our site should be allowed the maximum of 3,000sq.ft. of shipping container.

Please let this section of this letter serve to address the items listed by the Fire Authority review dated 7-7-25. We have added a fire hydrant per the fire inspector's review.

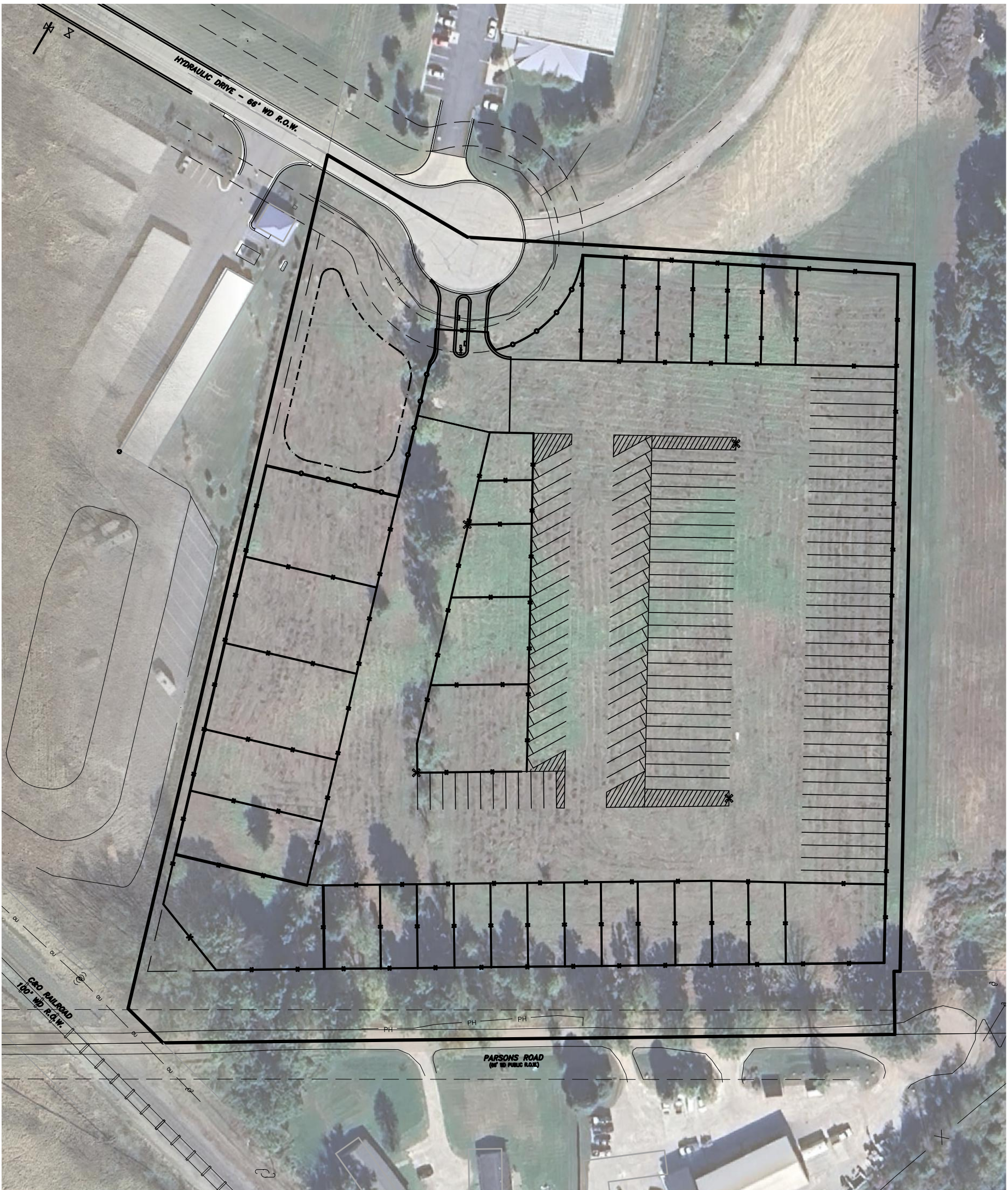
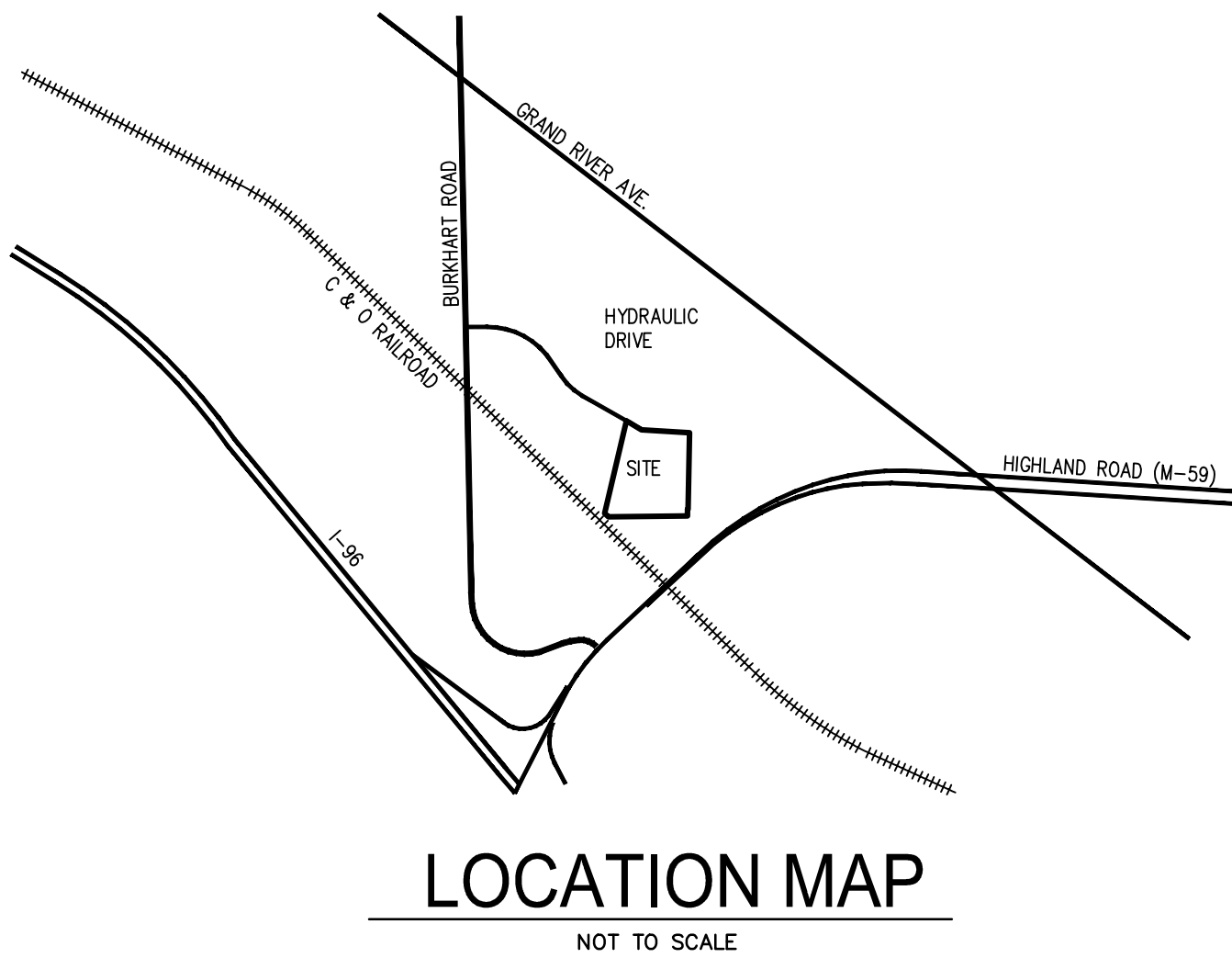
Thank you for your consideration and time reviewing our final site plan.

Sincerely,

The Juett Family
Outdoor Storage LLC

CONSTRUCTION PLANS
FOR
OUTSIDE STORAGE HOWELL

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

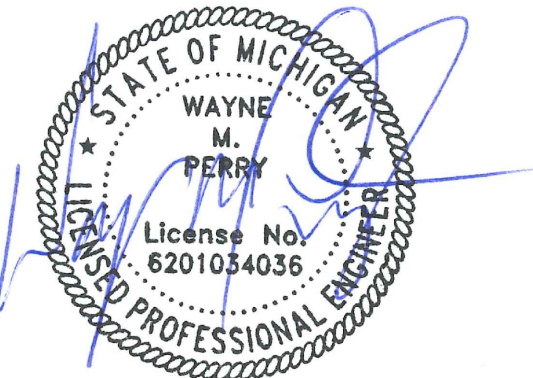


AERIAL PHOTOGRAPH
SCALE: 1in. = 100ft.

AERIAL PHOTOGRAPHY BY:
Google maps

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

| SHEET INDEX | |
|---------------------------------|---|
| EX | EXISTING CONDITIONS & DEMOLITION PLAN |
| SP | SITE PLAN |
| UT1 | UTILITY PLAN |
| UT2 | CONTROL STRUCTURE, DETAILS & CALCULATIONS |
| UT3 | UTILITY PROFILES |
| GR | GRADING PLAN |
| SE1 | SOIL EROSION CONTROL PLAN |
| SE2 | SOIL EROSION CONTROL DETAILS |
| WS | WATER SHED PLAN |
| DT1 | PAVING & SITE NOTES & DETAILS |
| DT2 | STORM SEWER NOTES & DETAIL |
| LANDSCAPE PLAN | |
| MHOG STANDARD WATERMAIN DETAILS | |



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

OWNER / DEVELOPER
OUTSIDE STORAGE HOWELL
1560 SABLE
COMMERCE TOWNSHIP, MICHIGAN 48382

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

| | |
|--------------|----------------------|
| ISSUED | SCALE: AS NOTED |
| JUNE 5, 2025 | PROJECT No.: 244802 |
| | DWG NAME: 4802 COV |
| | PRINT: JULY 29, 2025 |

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

SANITARY SEWER MANHOLE #5
NORTH RIM 938.98
NORTH WESTLF-8" 10.63

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

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

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

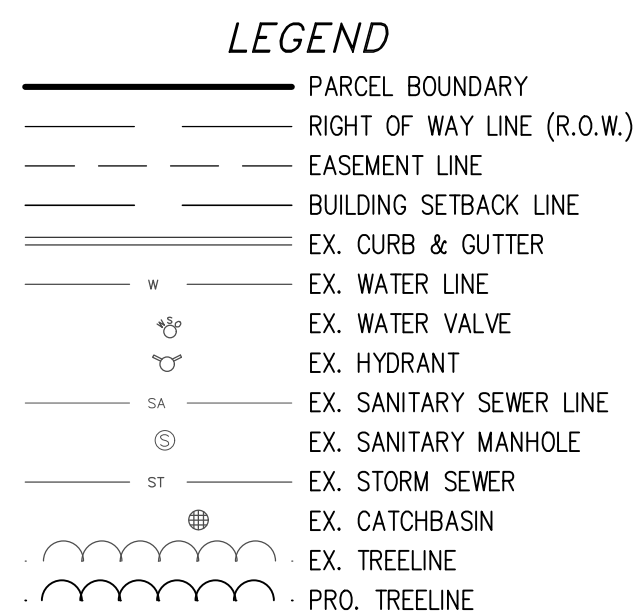
| | |
|---------------------|--------|
| CATCH BASIN # 207 | |
| SQUARE CATCH BASIN | 936.09 |
| SOUTH WEST 12" HDPE | 3.18 |

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

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

CATCH BASIN # 210
*NOT FIELD LOCATED

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



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

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

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

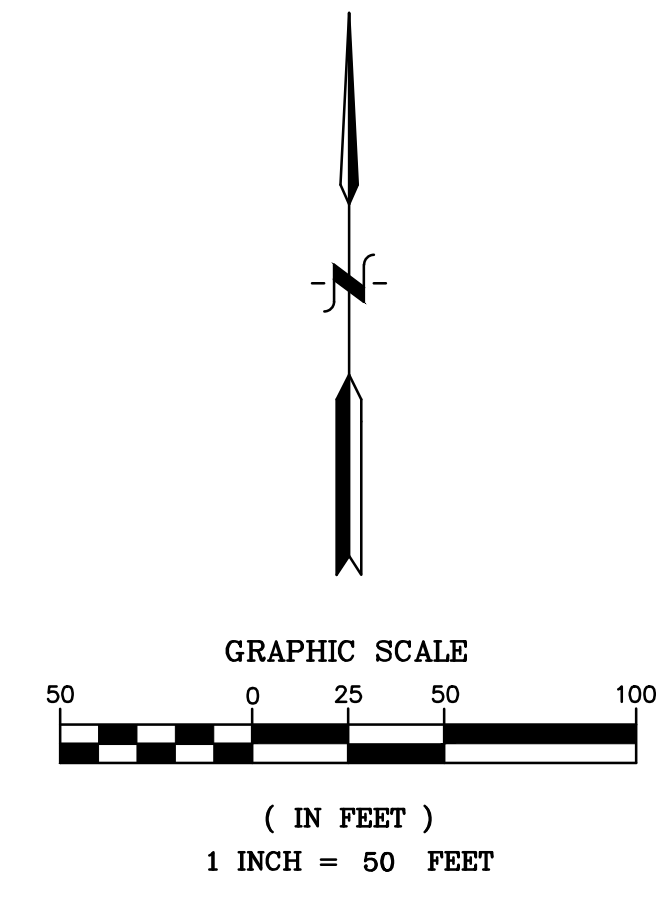
NOTE:
WETLAND LIMIT DELINEATED BY:
LAND PLANNING SOLUTIONS, LLC
PROJ. #25-107, DATE 03-17-2025



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

| | |
|-----------------------------------|-----------------------|
| CLIENT: | SCALE: 1in. = 50ft. |
| OUTSIDE STORAGE HOWELL | PROJECT No.: 244802 |
| 1560 SABLE | DWG NAME: 4802 EX |
| COMMERCE TOWNSHIP, MICHIGAN 48382 | ISSUED: JULY 29, 2025 |
| 248-217-8308 | |

EX



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

NOTES

1. ADDRESS NUMBERS SHALL BE POSTED ON GATE KEY PAD RISER. NUMBERS SHALL BE MIN. 6" HEIGHT WITH A CONTRASTING BACKGROUND.

2. KNOX BOX AND KNOX LOCK SHALL BE PROVIDED PER H.A.F.D. REQUIREMENTS. KNOX BOX TO BE INSTALLED ON KEY PAD RISER.

SITE CHARACTERISTICS

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

TOTAL UNPAVED AREA = 122,601 S.F.

BENCHMARK

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

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

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

811
Know what's below.
Call before you dig.

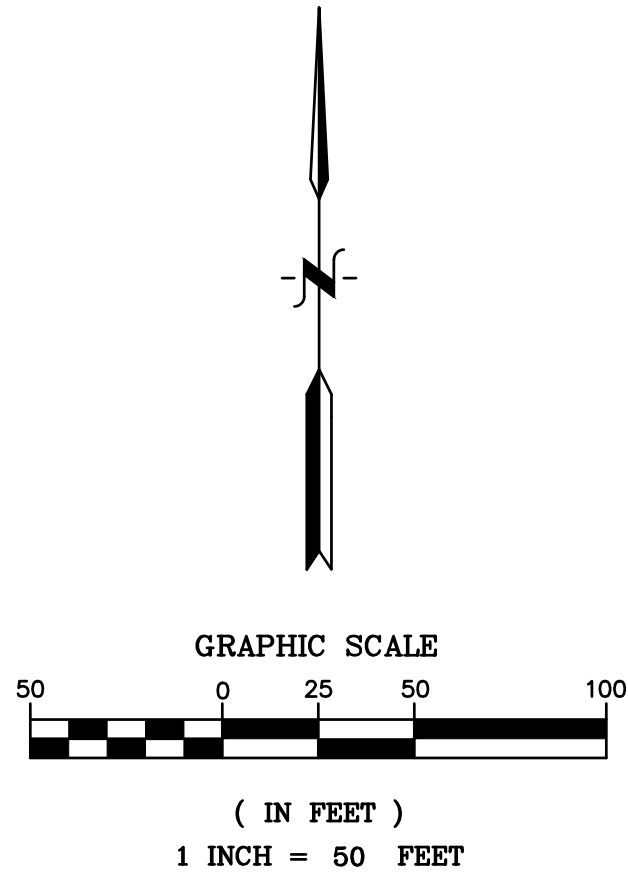
3 WORKING DAYS BEFORE YOU DIG
CALL 811 OR 1-800-482-7171 (TOLL FREE)
OR VISIT CALL811.COM

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

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

| | | | | | | | | | | |
|------------|------------|---------|---|------------|------|----------------------|---------------------------|-----------|-----------------------------------|-----------------------|
| DESIGN: S | REVISION # | DATE | REVISION-DESCRIPTION | REVISION # | DATE | REVISION-DESCRIPTION | OUTSIDE STORAGE HOWELL | SITE PLAN | CLIENT: | SCALE: |
| DRAFT: JHG | 1 | 7-29-25 | REVISED PER MHOG REVIEW COMMENTS DATED 7-7-25 | | | | | | OUTSIDE STORAGE HOWELL | 1 in. = 50 ft. |
| CHECK: WMP | | | | | | | | | 1560 SABLE | PROJECT No.: 244802 |
| | | | | | | | | | COMMERCE TOWNSHIP, MICHIGAN 48382 | DWG NAME: 4802 SP |
| | | | | | | | | | 248-217-8308 | ISSUED: JULY 29, 2025 |

SP



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

BENCHMARK

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

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

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



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



EXISTING
STRUCTURE INVENTORY

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

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

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

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

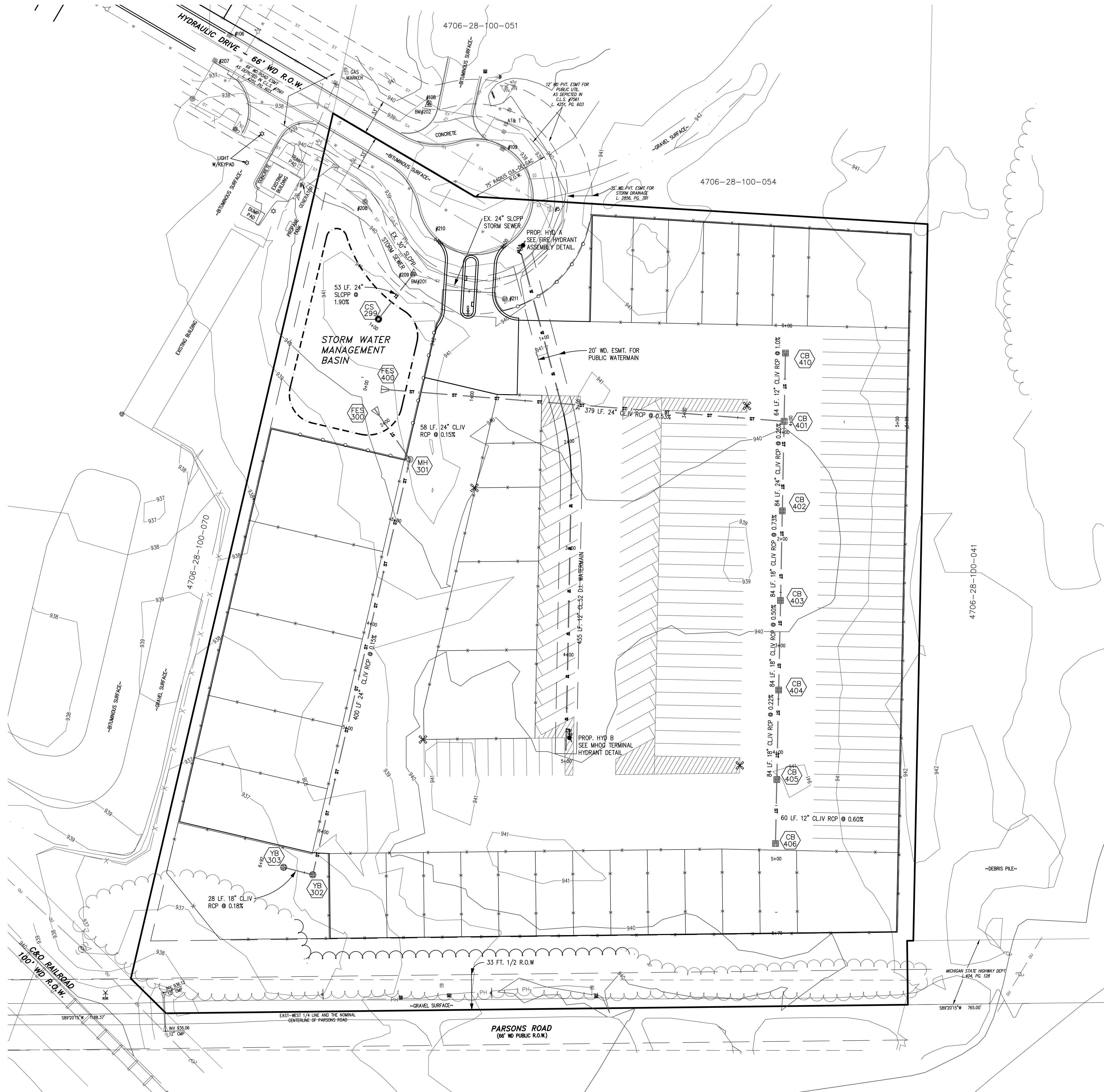
CATCH BASIN # 207
SQUARE CATCH BASIN 936.09
SOUTH WEST 12" HDPE 3.18

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

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

CATCH BASIN # 210
*NOT FIELD LOCATED

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



| DESIGN: S | REVISION # | DATE | REVISION-DESCRIPTION | REVISION # | DATE | REVISION-DESCRIPTION |
|------------|------------|---------|---|------------|------|----------------------|
| DRAFT: JHG | 1 | 7-29-25 | REVISED PER MHOG REVIEW COMMENTS DATED 7-7-25 | | | |
| CHECK: WMP | | | | | | |

OUTSIDE STORAGE
HOWELL

UTILITY PLAN

| | |
|-----------------------------------|-----------------------|
| CLIENT: | SCALE: 1in.= 50ft. |
| OUTSIDE STORAGE HOWELL | PROJECT No.: 244802 |
| 1560 SABLE | DWG NAME: 4802 UT |
| COMMERCE TOWNSHIP, MICHIGAN 48382 | ISSUED: JULY 29, 2025 |
| 248-217-8308 | |

UT1

| Design Criteria: | | 10 year event (I = 175/ft + 25) | | RCP n= 0.013 | | HDPE n= 0.011 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| FOREBAY CONTROL STRUCTURE CALCULATIONS | | | |
|--|--------------------------------------|------------------------------------|--------|
| Tributary Area : | A = | 9.20 Acres | |
| Compound Runoff Coefficient : | C = | 0.84 | |
| Orifice Flow Coefficient : | c = | 0.60 | |
| Allowable Outflow Rate : | Qa = | 0.31 CF5 | |
| Forebay Storage Volume = | Vf = | 34,059 CF | |
| Low Water Level : | LWL = | 932.00 | |
| Forebay Storage Elevation : | Xf = | 935.74 | |
| <u>Forebay Outlet Control:</u> | | | |
| Qf = | Vf * (1 / 24 hrs) * (1 / 3600 sec) = | 0.3942 CF5 | |
| Hf = | Xf - LWL = | 3.69 FT | |
| Af = | Qf / (c * SQRT(2 * 32.2 * Hf)) = | 0.0426 SF | |
| D = | Orifice Diameter | 1.250 inch dia. | |
| Nf = | Af / D | 5.0 Orifices | |
| Use Nf = | <input type="text" value="5"/> | Orifices at Centerline Elevation = | 932.05 |

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

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

CONTROL STRUCTURE NOTES:

1. Contractor shall locate control structure, outlet pipe with rip rap as shown on plan. Control structure shall be factory built by:
 - Johnson Co. 888-852-7755 for CMP or HDPE
 - L.T. Eley 800-426-3604 for CMP
 - Larsen Supply 810-648-3000 for CMP
 - St. Regis Culverts 517-543-2313 for CMP
 Or Equivalent
2. Structure material type is shown in key (A).
 - CMP shall be AASHTO M36 with corrosion resistant coating
 - RCP shall be ASTM C478 precast concrete with gasketed joints
 - HDPE shall be AASHTO M247 type 3, corrugated and smooth lined
 Minimum outside diameter 24"±; use 48" diameter when head of sump (A) exceeds 4 feet.
3. A 3000 PSI air entrained concrete base is required. The concrete base shall be secured to the control structure with a full strength watertight connection, equivalent to drawing.
4. Provide watertight connection between outlet pipe and control structure at following locations:
 - A. For CMP outlet pipe from a CMP structure: factory connect a CMP pipe stub with full strength welds all around and paint coated. Alternately, provide a bolted saddle with watertight gasket by ST.
 - B. For RCP C-76 outlet pipe OR HDPE outlet pipe/finger drains from a CMP structure: seal outside joint with 18" thick 2500 PSI cast-in-place concrete donut all around. Seal inside joint with a 2" bead of polysulfide seal.
 - C. For HDPE outlet pipe from a HDPE structure: seal both outside and inside joints with a full strength PE weld all around.
5. As part of control structure installation, wrap outlet holes with factory fabric per Note 8 on Erosion Control Sheet SE1. Then provide a temporary stone backfill as needed to stabilize control structure during the work.
6. Remove temporary stone and install permanent stone around control structure after all the following: removal of sediment from basin, hard rip rap of road stone around structure, stone turf around basin. Hard rip rap outside of stone with nonwoven geotextile fabric, 4 oz/syd polypropylene.
7. When directed by Engineer or Agency, Contractor shall temporarily install outlet holes or restrictor during construction. Remove plugs or sand bags upon completion of project, incidental to the work.
8. Create a berm over outlet pipe as needed to provide 30" of cover.

GRATE NOTES:

- G-1 Provide a factory made grate sized to fit over the outside edge of the control structure. Weld all joints full strength per current AWS code. Factory coat grating with a bituminastic paint. By Best Window Guard Co., Detroit, 313-838-4627 or equivalent.
- G-2 For 30" diameter and larger grates:
A. 0.75" x 0.25" steel bars at 2" or less on center with perpendicular 0.25" diameter stringers at 4" or less on center.
B. Alternate: Make grate using with 0.5" round steel bars at 2" on center each way.
C. For RCP structures, use cast iron coating, MDOOT cover E, unless noted otherwise on plan.
D. Do not use rerod.
- G-3 For 27" diameter and smaller grates:
Use heavy duty expanded metal grating, "PHEMG", with 0.25" nominal thick steel.
- G-4 Wrap all grates with a 0.25" x 3" bent steel bar, sized to fit over outside of control structure.

DETENTION VOLUME CALCULATION

Tributary Area (A) = $\frac{9.20}{0.84}$ Acres

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

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

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

Forebay Volume:

Downstream Infiltration Provided = V_{wq} = **28,053 cf**

100 Year Storm Inlet Rate calculation:

$$T_c = 18.4 \text{ (from storm sewer calculations)}$$
$$Q_{100in} = 44.30 \text{ cfs}$$

100 Year Storm Outlet Rate calculation:

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

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

Variable Release Rate = Q_{vrr} = 5.96 cfs

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

100 Year Required Storm Detention Volume calculation.

Storage Curve Factor = R = 0.68

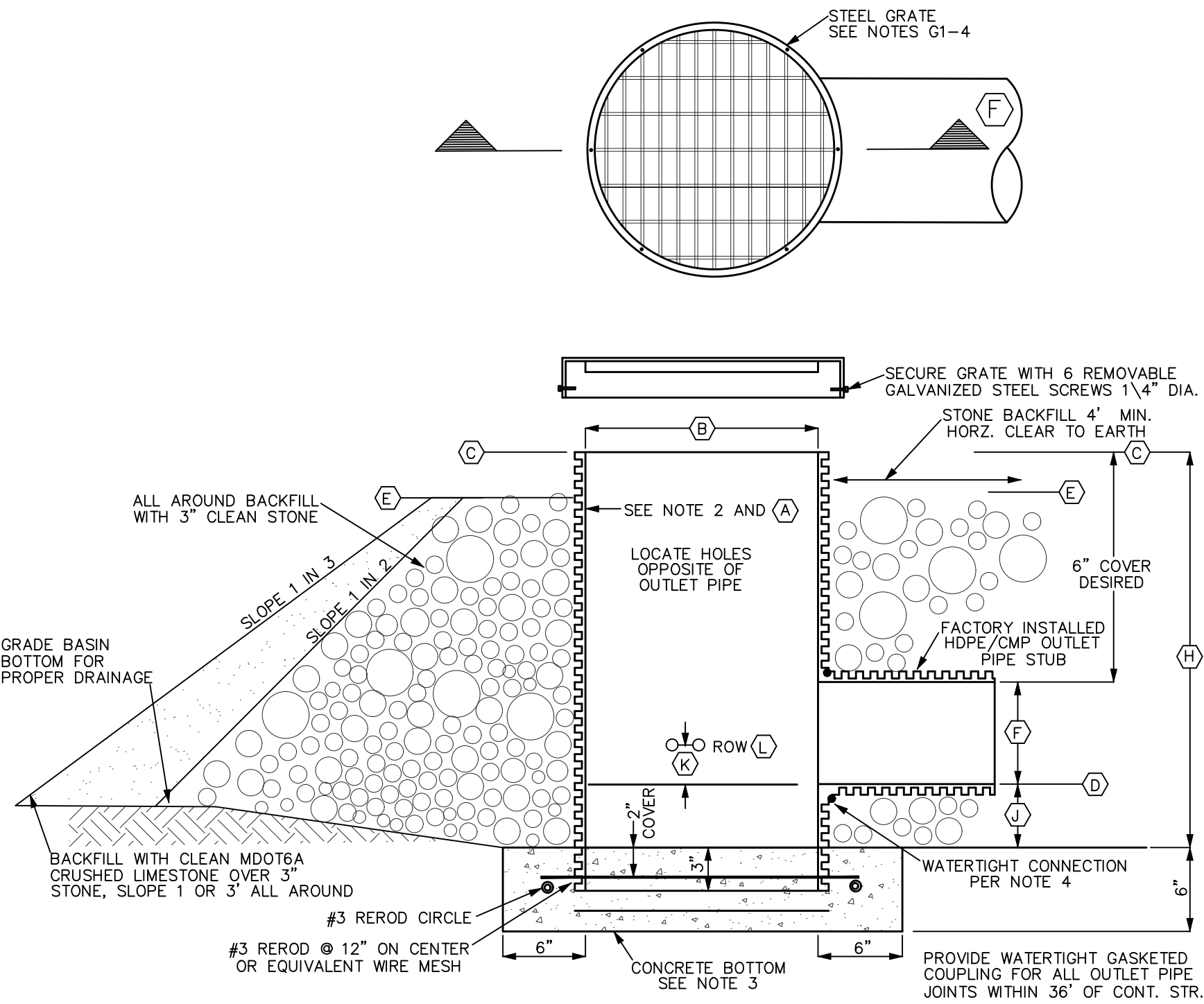
$$100 \text{ Year Storage Volume In} = V_{100IN} = 146,716.08 \text{ cf}$$

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

Portion of Community Detention Storage Volume:
 $[10.66 \text{ Ac.} / 47.67 \text{ Ac.}] \times 295,917 \text{ cu.ft.} = 66,173 \text{ cf}$

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

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



BASIN CONTROL STRUCTURE (CS)

NOT TO SCALE

| KEY | | |
|-----|---|---------|
| | CONTROL STRUCTURE DESIGNATION | CS--299 |
| A | MATERIAL TYPE , SEE NOTE 2 | SLOPP |
| B | STRUCTURE INSIDE DIAMETER | 4' DIA |
| C | RIM ELEVATION WITHOUT GRATE | 935.74 |
| D | INVERT ELEVATION OUTLET PIPE | 932.00 |
| E | TOP OF STONE ELEVATION | 935.50 |
| F | OUTLET PIPE DIAMETER | 24" |
| G | OUTLET PIPE MATERIAL | SLOPP |
| H | STRUCTURE HEIGHT WITHOUT GRATE | 5.74' |
| J | SUMP HEIGHT | 2' |
| K | CENTRIUSE HEIGHT OF BOTTOM ROW HOLES MEASURED ABOVE "D" | 932.05 |
| L | NUMBER OF HOLES IN BOTTOM ROW | 5 |

| DESIGN: S DRAFT: JHG CHECK: WMP | REVISION # | DATE | REVISION-DESCRIPTION | REVISION # | DATE | REVISION-DESCRIPTION |
|---------------------------------------|------------|---------|---|------------|------|----------------------|
| | 1 | 7-29-25 | REVISED PER MHOG REVIEW COMMENTS DATED 7-7-25 | | | |
| | | | | | | |
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| | | | | | | |

OUTSIDE STORAGE
HOWELL

CONTROL STRUCTURE NOTES & CALCULATIONS

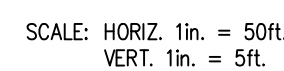
CLIENT:
OUTSIDE STORAGE HOWELL
1560 SABLE
COMMERCE TOWNSHIP, MICHIGAN 48382
248-217-8308

SCALE: NONE
PROJECT No.: 244802
DWG NAME: 4802 UT
ISSUED: JULY 29, 2025



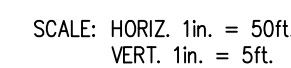
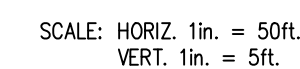
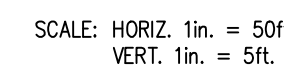
DESINE INC
 (810) 227-9533
 CIVIL ENGINEERS
 LAND SURVEYORS
 2183 PLESS DRIVE
 BRIGHTON, MICHIGAN 48114

UT2



NOTE:

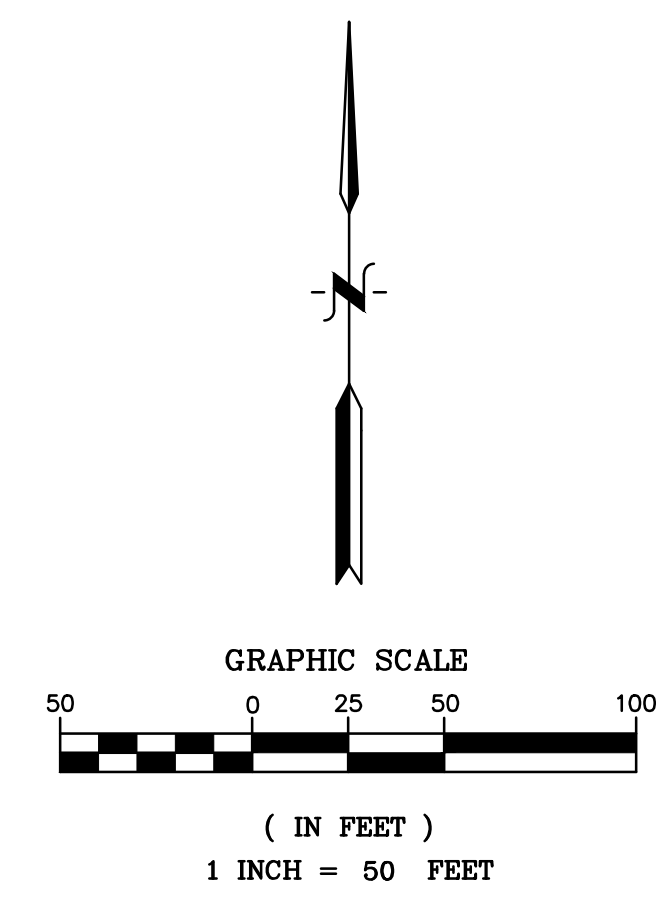
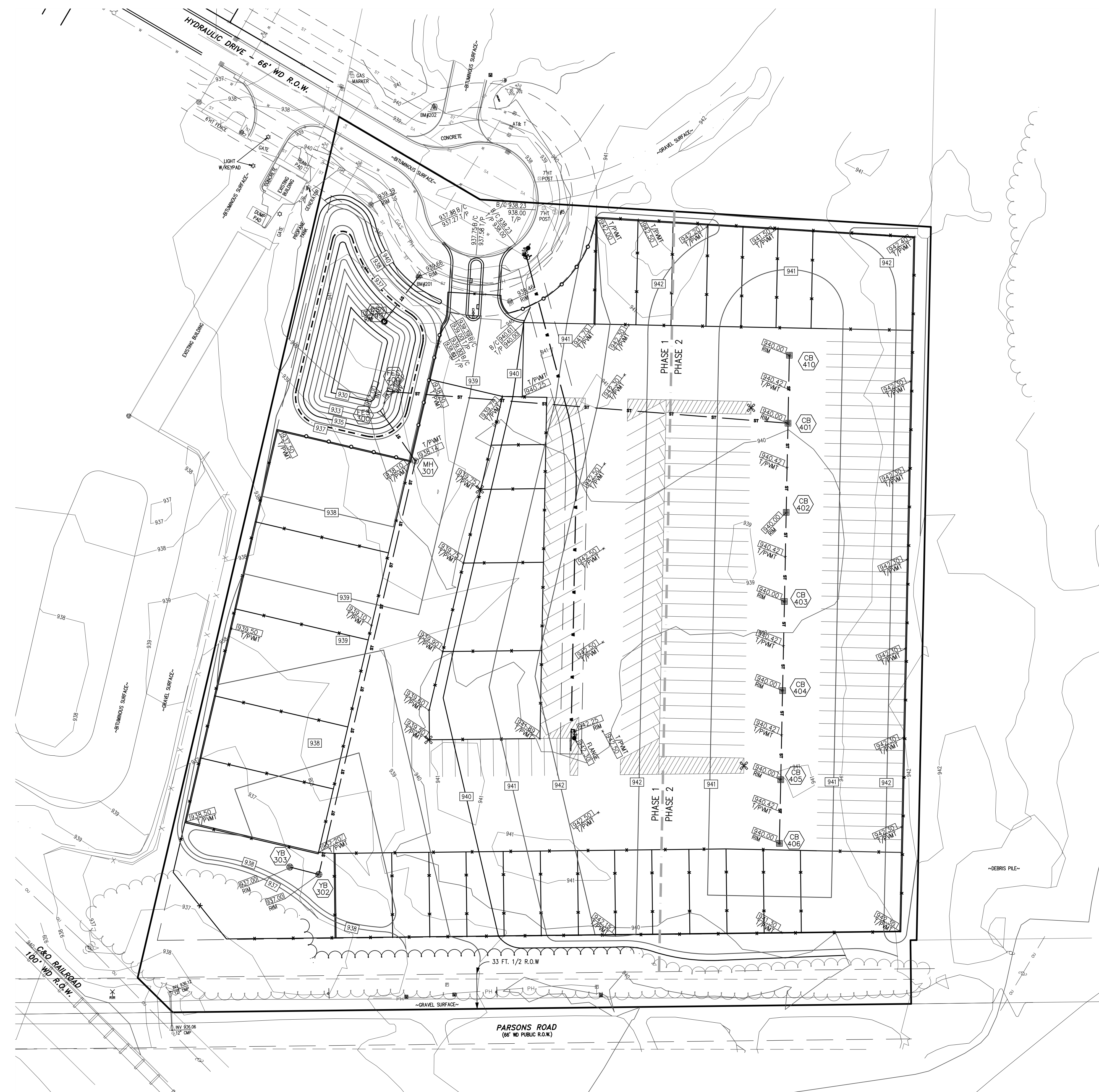
1. WATER IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CURRENT MARION, HOWELL, OCEOLA, AND GENOA (MHOG) DESIGN STANDARDS AND SPECIFICATIONS.
2. ALL WATERMAIN SHALL BE DUCTILE IRON PIPE (DIP) WITH POLYETHYLENE (P.E.) ENCASEMENT IN ACCORDANCE WITH AWWA C105/ANSI 21.5 AND TRACER WIRE INSTALLED.
3. ALL HYDRANTS MUST BE CONSTRUCTED 3' MINIMUM BEHIND THE BACK OF CURB.



UTILITY PROFILES

SCALE: 1in. = 50ft.
PROJECT No.: 244802
DWG NAME: 4802 UT
ISSUED: JULY 29, 2025

UT3




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

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

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

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



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BRIGHTON, MICHIGAN 48114**

| | | | | | | | | | | | |
|---------------------------------------|------------|---------|---|------------|------|----------------------|---------------------------|--------------|--|--|----|
| DESIGN: S DRAFT: JHG CHECK: WMP | REVISION # | DATE | REVISION-DESCRIPTION | REVISION # | DATE | REVISION-DESCRIPTION | OUTSIDE STORAGE HOWELL | GRADING PLAN | CLIENT: OUTSIDE STORAGE HOWELL 1560 SABLE COMMERCE TOWNSHIP, MICHIGAN 48382 248-217-8308 | SCALE: 1in. = 50ft. PROJECT No.: 244802 DWG NAME: 4802 GR ISSUED: JULY 29, 2025 | GR |
| | 1 | 7-29-25 | REVISED PER MHOG REVIEW COMMENTS DATED 7-7-25 | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

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 MDEQ 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 or way and/or paved access route shall be performed as necessary to maintain the access route free of sediment and debris.

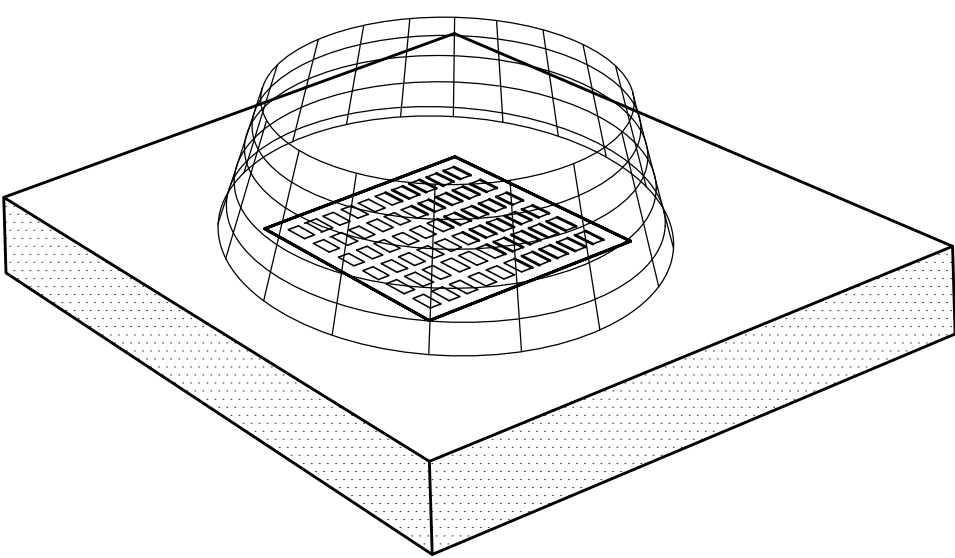
RETENTION BASIN: Retention basins shall be inspected to ensure erosion is not occurring along the inlet locations, banks and/or bottom of the basin and for sediment accumulation. Regular maintenance of the basin includes routine mowing of the buffer/filter strip, side slopes and basin floor and removal of litter and debris accumulation. Address vegetation and/or erosion concerns as soon as weather permits. Sediment accumulation shall be removed at least once a year. Sediment shall be removed only when the surface is dry and "mud-cracked". Light equipment must be used to avoid compacting of soils. After removal of sediment, the infiltration area shall be deep tilled to restore infiltration rates. More frequent tilling may be necessary in areas where soils are only marginally permeable. Sediment that is removed shall be disposed of offsite or at an upland area and stabilized so that it does not re-enter the drainage course.

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 removal 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.

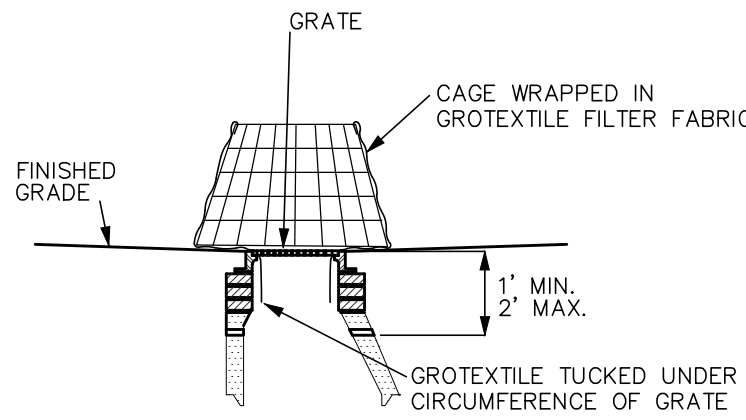
STOCKPILES: Temporary and permanent topsoil and spoils stockpiles shall be seeded to promote vegetative growth. Stockpiles shall be inspected to ensure excessive erosion has not occurred. When runoff or wind erosion is evident, reduce the side slopes of the stockpile or stabilize the stockpile with pieces 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.

STANDPIPE: Prior to project completion and approval by Livingston County Drain Commissioner's office, stone around the standpipe structure shall be refreshed with clean stone.



ISOMETRIC VIEW

54" CAGE
FITS SQUARE GRATES FROM 24" X 24" THROUGH 36" X 36"
FITS ROUND GRATES FROM 24" DIA. THROUGH 40" DIA.
FITS RECTANGULAR GRATES WITH A DIAGONAL
BETWEEN 28" AND 41" ($a^2 + b^2 = c^2$)

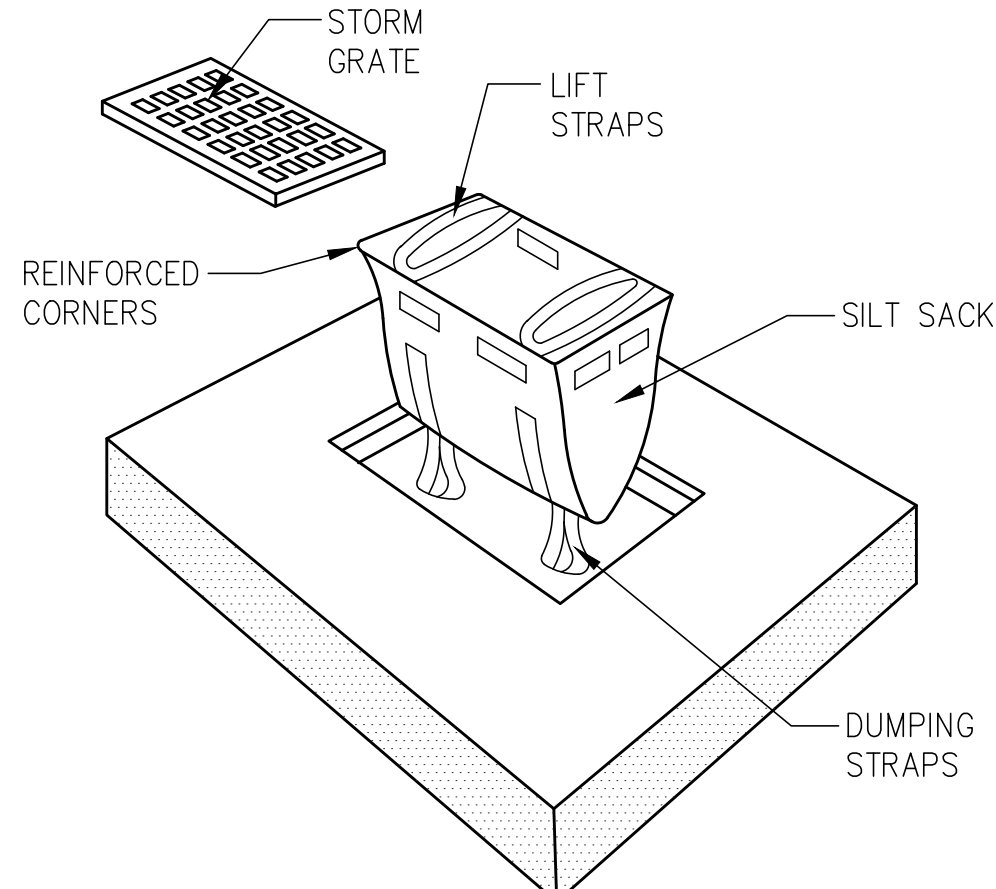


PROFILE

INLET PROTECTION SHALL BE INSTALLED AT THE TIME OF THE STRUCTURE IS SET. TO INSTALL: TUCK FABRIC UNDER GRATE. REMOVE SEDIMENT IF IT ACCUMULATES TO ONE HALF THE HEIGHT OF THE CAGE. THE AREA AROUND THE CAGE SHOULD BE AS FLAT AS POSSIBLE TO INCREASE EFFECTIVENESS AND REDUCE MAINTENANCE REQUIREMENTS. AS WITH ALL INLET PROTECTION DEVICES, CHECK TO SEE HOW DEEP THE WATER COULD RISE IF THE INLET WERE BLOCKED ENTIRELY. DO NOT INSTALL IN LOCATIONS THAT COULD CAUSE PROPERTY DAMAGE OR POSE A SAFETY HAZARD TO TRAFFIC.

60 YARD INLET FILTER CAGE

NOT TO SCALE



58 INLET SEDIMENT FILTER

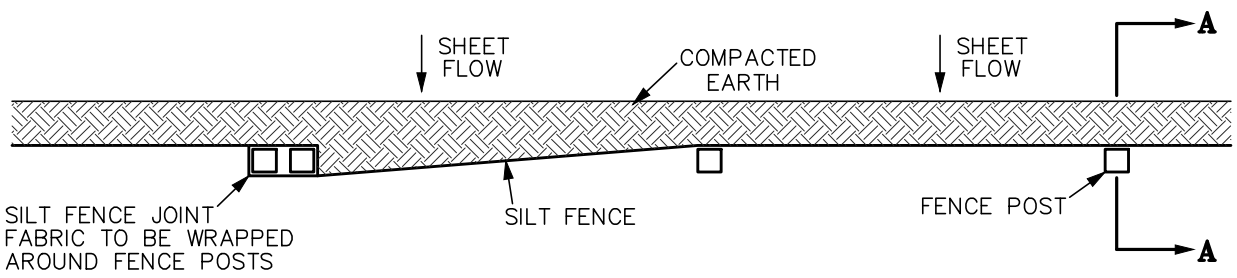
NOT TO SCALE



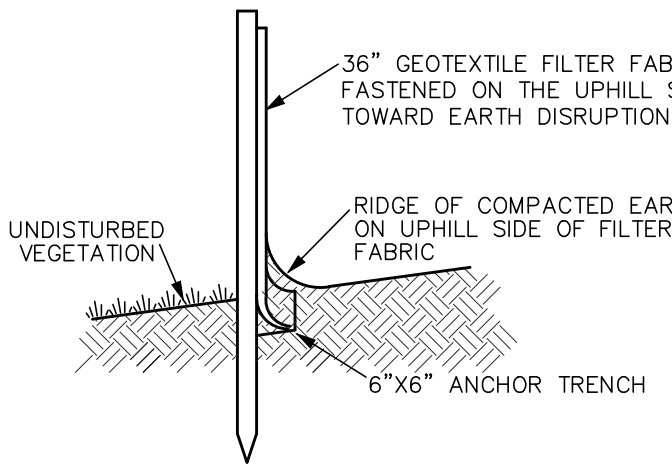
SOILS MAP

NOT TO SCALE

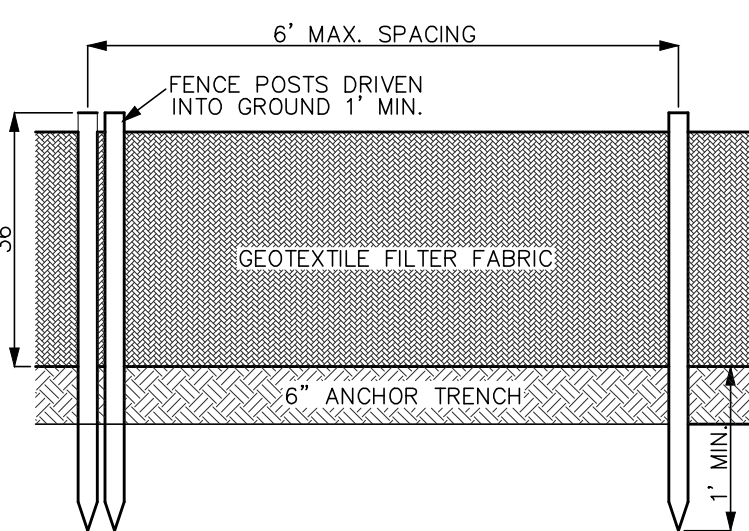
| Map Unit Legend | | | |
|-----------------------------|-------------------------------------|--------------|----------------|
| Map Unit Symbol | Map Unit Name | Acres in A21 | Percent of A21 |
| Sy | Shallow loam, 0 to 2 percent slopes | 0.5 | 3.4% |
| CvraB1 | Coarse loam, 0 to 4 percent slopes | 0.0 | 0.0% |
| MdB1 | Medium loam, 2 to 6 percent slopes | 1.3 | 8.9% |
| MdS | Medium loam, 2 to 6 percent slopes | 4.2 | 28.4% |
| Totals for Area of Interest | | 14.8 | 100.0% |



PLAN VIEW



SECTION A-A



FRONT VIEW

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.

NOTES:

1. The permit is not for individual building units. It is required that temporary stabilization of the entire site be completed and approved from the Livingston County Drain Commissioner's office be obtained prior to the issuance of permits for individual building units.
2. Any dewatering required shall have a dewatering plan submitted prior to starting any activity that may require EGLE approval.

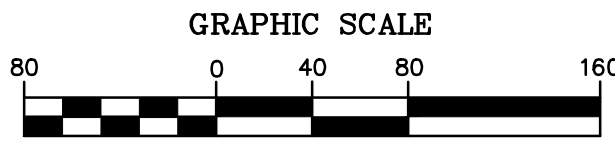
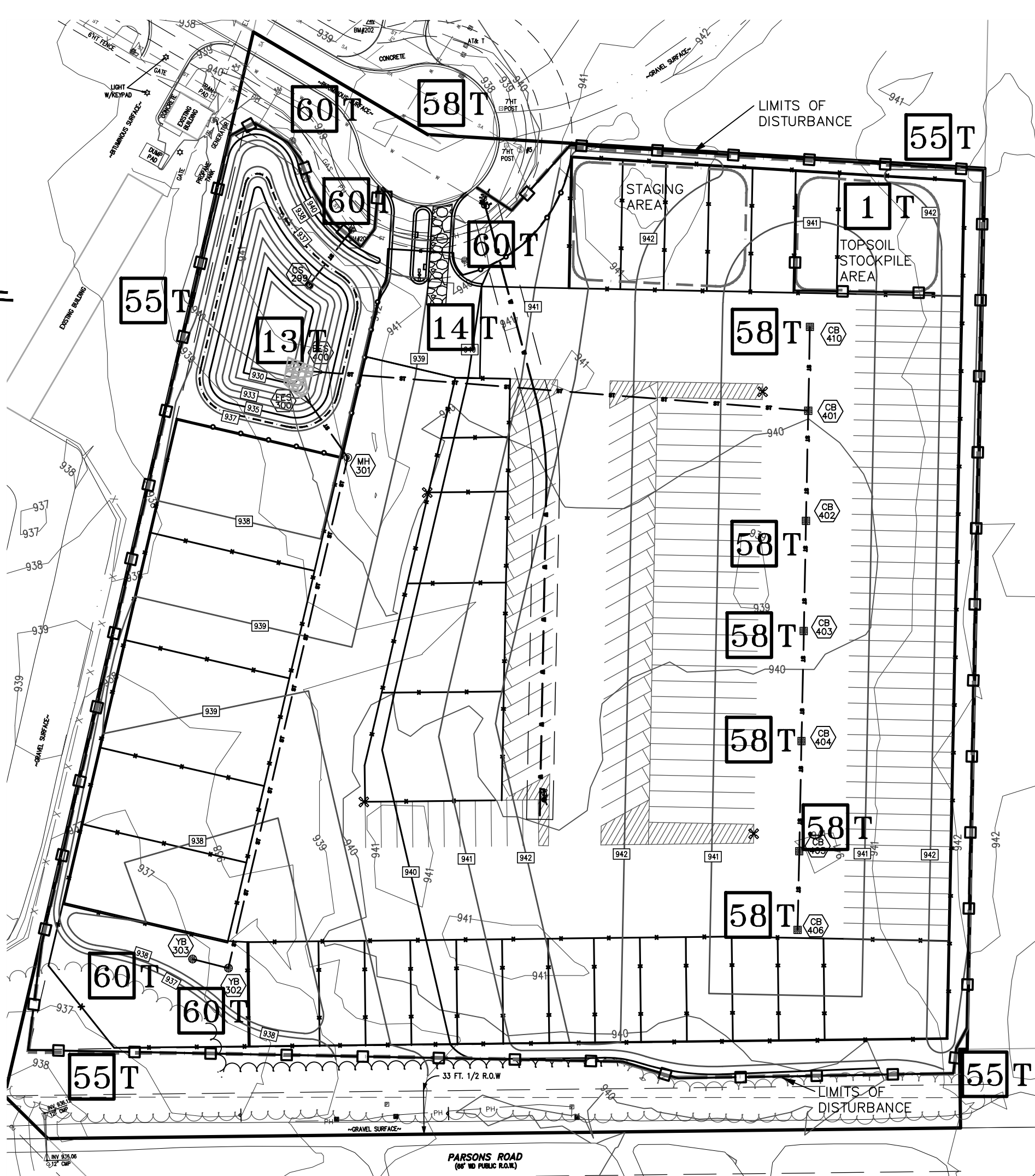
| Construction and Work Categories | Construction Period | | | | | | | | | | | |
|--|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | Month | Jan-25 | Jul-25 | Aug-25 | Sep-25 | Oct-25 | Nov-25 | Dec-25 | Jan-26 | Feb-26 | Mar-26 | Apr-26 |
| 1) Obtain Permits | | | | | | | | | | | | |
| 2) Install Initial SSSC Measures | | | | | | | | | | | | |
| 3) Inspect & Maintain SSSC Measures | | | | | | | | | | | | |
| 4) Demolition | | | | | | | | | | | | |
| 5) Construction and Stabilization of Basins L, M & N | | | | | | | | | | | | |
| 6) Earth Work | | | | | | | | | | | | |
| 7) Underground Utility Work | | | | | | | | | | | | |
| 8) Site Lighting Work | | | | | | | | | | | | |
| 9) Curb, Sidewalk & Pavement Work | | | | | | | | | | | | |
| 10) Backfill & Finish Grade Work | | | | | | | | | | | | |
| 11) Landscaping | | | | | | | | | | | | |
| 12) Topsoil, Seed & Mulch | | | | | | | | | | | | |
| 13) Remove Temporary SSSC Measures | | | | | | | | | | | | |

SOIL EROSION CONTROL AND CONSTRUCTION SEQUENCE:

1. 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.
2. 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.
3. Maintain all soil erosion and sedimentation control measures on a regular basis through the duration of the project. Inspect all measures weekly and following each storm event.
4. 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 and ring the top of the basin with silt fence to protect the basin and basin slopes, prior to massive earth disruption. Install temporary Soil Erosion Control Measures as necessary to stabilize Retention/Detention and Sedimentation Basins.
5. 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.
6. 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.
7. Excavate and expose the existing water main stub to connect new water main. Stockpile the top 12" of topsoil separately and use to backfill the top 12" portion of the excavation following completion of the water main connection.
8. Construct roadways and/or parking areas. Install appropriate Soil Erosion Control Measures in accordance with the Soil Erosion and Sedimentation Control Plan.
9. Backfill and finish grade all disturbed areas outside of pavement.
10. Install all landscape work, including trees, shrubs.
11. Perform final restoration, including placement of topsoil and establishment of vegetative growth outside of pavement.
12. 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.

**OUTSIDE STORAGE
HOWELL**

SOIL EROSION CONTROL PLAN



(IN FEET)
1 INCH = 80 FEET

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

BENCHMARK

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

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

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

SOIL EROSION AND SEDIMENTATION CONTROL NOTES:

1. 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.
2. 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.
3. 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.
4. 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.
5. 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.
6. 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 enclose all earthen material stockpiles, including but not limited to topsoil, sand and gravel.
7. The Contractor shall install Soil Erosion Control Measures associated with the proposed storm sewer system during storm sewer construction. Inlet structure filters, consisting of Silt Sack or equivalent for curb inlets and Sed-e-gate or equivalent for yard basins, 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.
8. The Contractor shall install filter stone around the storm basin control structure(s) in accordance with the Project Plans immediately following installation of the filter 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.
9. All disturbed areas outside of paved areas shall be restored within 15 days of finish grading. Temporary stabilization is required for any area where activity ceases for more than 30 days and prior to winter. Proposed vegetative areas shall be restored with a minimum of 2-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.

Topsoil: 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.

SOIL EROSION CONTROL LEGEND

| | | |
|----|-----------------------------------|--|
| 1 | SHIPPING & STOCKPILING TOPSOIL | TOPSOIL MAY BE STOCKPILED ABOVE BORROW AREAS TO ACT AS A DIVERSION |
| 6 | SEEDING WITH MULCH AND/OR MATTING | TOPSOIL SHOULD BE TEMPORARILY SEEDING |
| 14 | AGGREGATE COVER | FACILITATES ESTABLISHMENT OF VEGETATIVE COVER |
| 55 | GEOTEXTILE SILT FENCE | EFFECTIVE FOR DRAINAGES WITH LOW VELOCITY |
| 58 | INLET SEDIMENT FILTER | DAILY PLACED IN SMALL QUANTITIES BY EXPERIENCED PERSONNEL |
| 60 | INLET FILTER CAGE | STABILIZES SOIL SURFACE, THIS MINIMUM DESIGN PERMITS CONSTRUCTION TRAFFIC IN ADVERSE WEATHER |
| | | MAY BE USED AS PART OF PERMANENT BASE CONSTRUCTION OF PAVED AREAS |
| | | USES GEOTEXTILE AND POSTS OR POLES |
| | | MAY BE CONSTRUCTED ON PREPARED |
| | | DO NOT TO CONSTRUCT AND LOCATE IS NECESSARY |
| | | USES PREPARED GEOTEXTILE SACKS |
| | | FILTERS SEDIMENT FROM RUNOFF AT CATCH BASIN INLET |
| | | EASY TO INSTALL AND MAINTAIN |
| | | PREVENTS SEDIMENT FROM ENTERING STORM SYSTEM AT STRUCTURES |
| | | USES GEOTEXTILE FABRIC AND PREPARED WIRE CAGE |
| | | SILT FENCE CAN NOT BE USED |

811
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Call before you dig.
3 WORKING DAYS
BEFORE YOU DIG
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DESIGN INC.
(810) 227-9533
**CIVIL ENGINEERS
LAND SURVEYORS**
2183 PLESS DRIVE
BRIGHTON, MICHIGAN 48114

| DESIGN:WMP | REVISION # | DATE | REVISION-DESCRIPTION |
|------------|------------|---------|---|
| DRAFT: JHG | 1 | 7-29-25 | REVISED PER MHOG REVIEW COMMENTS DATED 7-7-25 |
| CHECK: WMP | | | |

| REVISION # | DATE | REVISION-DESCRIPTION |
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| REVISION # | DATE | REVISION-DESCRIPTION |
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| | |
|---------|-----------------------------------|
| CLIENT: | OUTSIDE STORAGE HOWELL |
| | 1560 SABLE |
| | COMMERCE TOWNSHIP, MICHIGAN 48382 |
| | 248-217-8308 |

| | |
|--------------|---------------|
| SCALE: | 1in.= 80ft. |
| PROJECT NO.: | 244802 |
| DWG NAME: | 4802 SE |
| ISSUED: | JULY 29, 2025 |

SE1

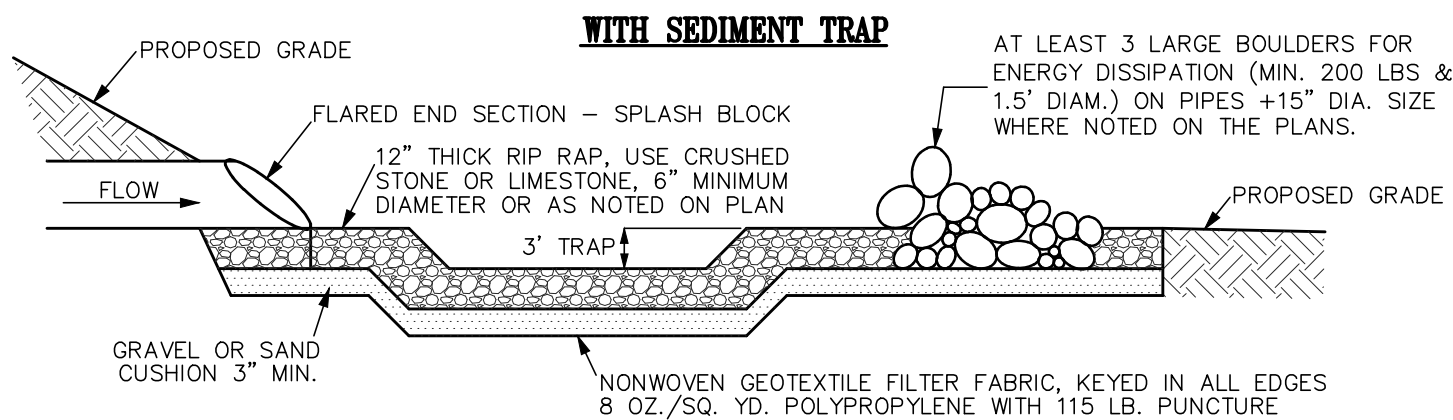
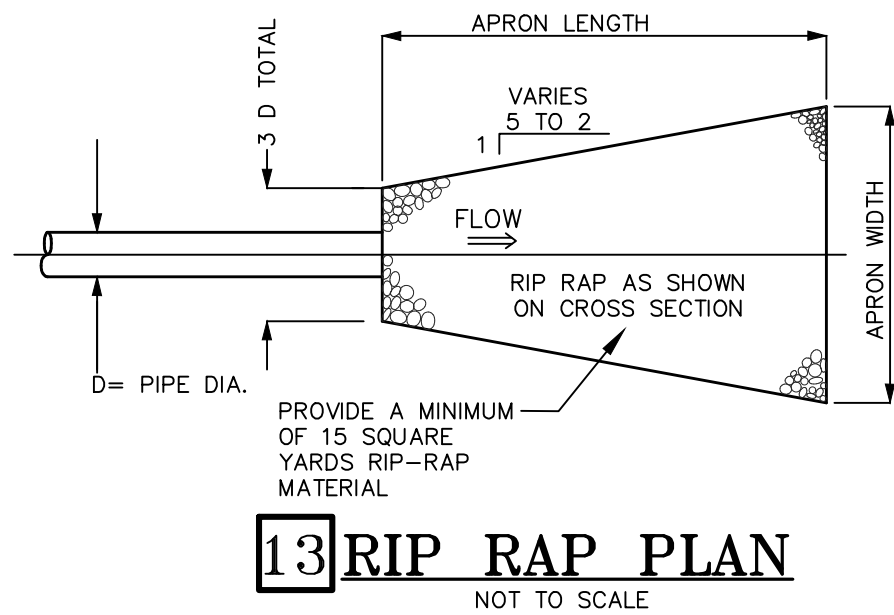
MIN. RIP RAP DIMENSIONS

| PIPE DIAMETER (inch) | APRON LENGTH (feet) | (1) APRON WIDTH (feet) | (2) ALTERNATE APRON WIDTH (feet) |
|----------------------------|---------------------------|------------------------------|---|
| 12 | 15 | 15 | 16 |
| 15 | 15 | 15 | 20 |
| 18 | 18 | 15 | 24 |
| 21 | 21 | 15 | 28 |
| 24 | 24 | 16 | 32 |
| 30 | 30 | 20 | 40 |
| 36 | 36 | 24 | 48 |
| 42 | 42 | 28 | 56 |

UNLESS SHOWN OTHERWISE ON PLANS.
May be varied to match natural
features; ie when meeting ex.
ditch, apron width to match
channel bottom extending up
sides to a depth of 1/2 pipe dia.

(1) APRON WIDTH FOR USE IN DITCHES
AND SWALES

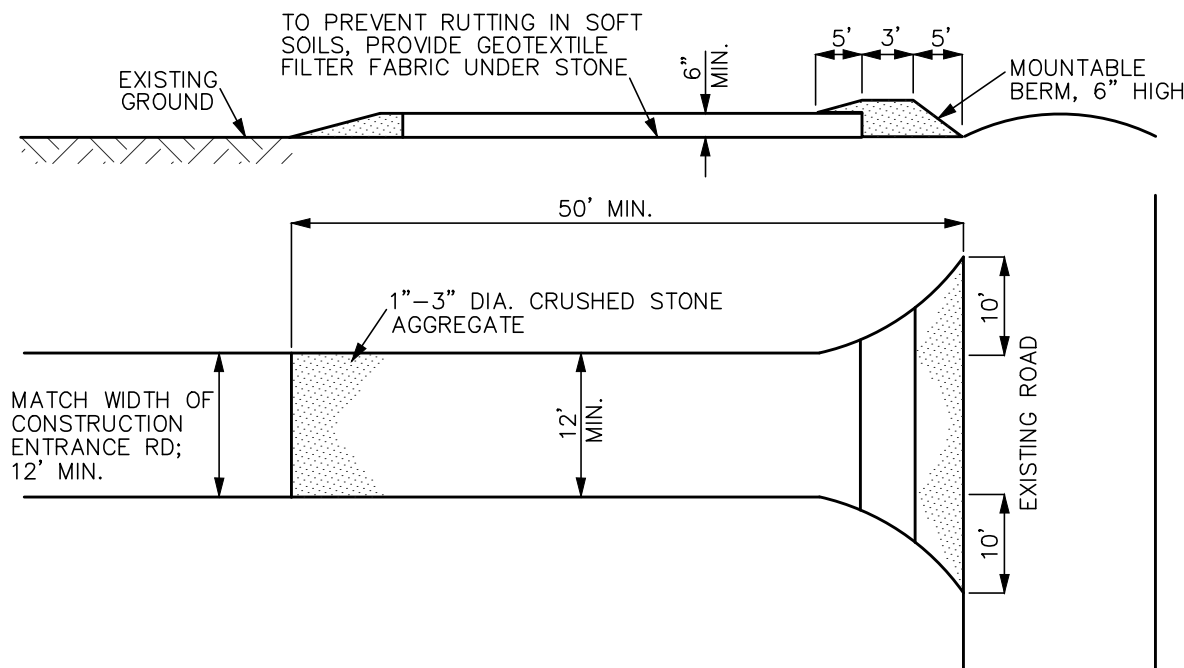
(2) APRON WIDTH FOR USE IN FLAT AREAS
WHERE SHEET FLOW DESIRED



- 13 RIP RAP CROSS SECTION
- NOT TO SCALE
- NOTES:
1. GROUT RIP-RAP WITH A 6" THICK CEMENT SLURRY FOR SLOPES STEEPER THAN 20%, 5 ON 1.

2. PROVIDE ANIMAL GUARDS ON ALL STORM SEWER 15" DIA. OR GREATER, INCIDENTAL TO FES PIPE.

3. STORM DRAIN OUTLETS THAT DO NOT EMPTY INTO THE DETENTION BASIN SHALL HAVE INSTALLED A TEMPORARY SEDIMENT TRAP AT THE TERMINATION OF THE STORM SEWER (5'x10'x3' TYP.). UPON COMPLETION OF THE STABILIZATION WORK, THE SUMP AREA SHALL BE FILLED AND RIP-RAPPED.



- 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.

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| | | | | | | | | | | |
|------------|------------|---------|---|------------|------|----------------------|---------------------------|------------------------------|--|--|
| DESIGN:WMP | REVISION # | DATE | REVISION-DESCRIPTION | REVISION # | DATE | REVISION-DESCRIPTION | OUTSIDE STORAGE HOWELL | SOIL EROSION CONTROL DETAILS | CLIENT: OUTSIDE STORAGE HOWELL 1560 SABLE COMMERCE TOWNSHIP, MICHIGAN 48382 248-217-8308 | SCALE: AS NOTED PROJECT No.: 244802 DWG NAME: 4802 SE ISSUED: JULY 29, 2025 |
| DRAFT: JHG | 1 | 7-29-25 | REVISED PER MHOG REVIEW COMMENTS DATED 7-7-25 | | | | | | | |
| CHECK: WMP | | | | | | | | | | |

SE2

EXISTING
STRUCTURE INVENTORY

SANITARY SEWER MANHOLE #5
NORTH RIM 938.98
NORTH WEST 1/2" HOPE 10.63

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

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

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

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

YARD BASIN # 208
NORTH RIM 939.39
NORTH WEST 30" HOPE 10.34
SOUTH EAST 30" HOPE 10.34

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

CATCH BASIN # 210
*NOT FIELD LOCATED

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

| DESIGN: S | REVISION # | DATE | REVISION-DESCRIPTION |
|------------|------------|---------|---|
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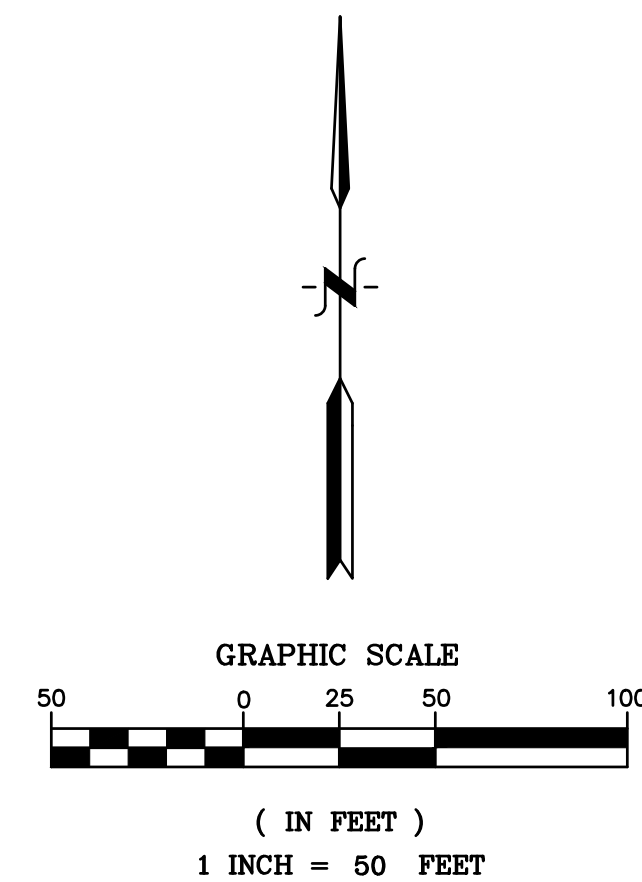
| REVISION # | DATE | REVISION-DESCRIPTION |
|------------|------|----------------------|
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OUTSIDE STORAGE
HOWELL

WATERSHED PLAN

| | |
|-----------------------------------|-----------------------|
| CLIENT: | SCALE: 1 in. = 50 ft. |
| OUTSIDE STORAGE HOWELL | PROJECT No.: 244802 |
| 1560 SABLE | DWG NAME: 4802 UT |
| COMMERCE TOWNSHIP, MICHIGAN 48382 | ISSUED: JULY 29, 2025 |
| 248-217-8308 | |

WS



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

BENCHMARK

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

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

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

| PROPOSED STORM WATER RUN-OFF | | | | | | | |
|------------------------------|----------|----------|------|-------|---------|------------|---------|
| "Area" | 0.90 | 0.90 | 0.20 | 1.00 | (ACRES) | "C" Factor | CA |
| Column1 | Pavement | Building | Lawn | Water | Area | Column1 | Column1 |
| 301 | 1.10 | 0.00 | 0.07 | 0.00 | 1.17 | 0.86 | 1.00 |
| 302 | 1.10 | 0.00 | 0.07 | 0.00 | 1.17 | 0.86 | 1.00 |
| 411 | 0.90 | 0.00 | 0.00 | 0.00 | 0.90 | 0.90 | 0.81 |
| 410 | 0.54 | 0.00 | 0.00 | 0.00 | 0.54 | 0.90 | 0.49 |
| 401 | 0.55 | 0.00 | 0.00 | 0.00 | 0.55 | 0.90 | 0.50 |
| 402 | 0.55 | 0.00 | 0.00 | 0.00 | 0.55 | 0.90 | 0.50 |
| 403 | 0.55 | 0.00 | 0.00 | 0.00 | 0.55 | 0.90 | 0.50 |
| 404 | 0.55 | 0.00 | 0.00 | 0.00 | 0.55 | 0.90 | 0.50 |
| 405 | 0.67 | 0.00 | 0.00 | 0.00 | 0.67 | 0.90 | 0.60 |
| BASIN | 1.81 | 0.00 | 0.61 | 0.13 | 2.55 | 0.74 | 1.88 |
| TOTAL AREA = | | | | | 9.20 | ACRES | 7.77 |
| RUN-OFF COEFFICIENT = | | | | | 0.84 | | |

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

BITUMINOUS PAVEMENT NOTES:

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



| KEY | DESCRIPTION | MATERIAL SPECIFICATION | MINIMUM COMPACTED THICKNESS |
|-----|-------------|------------------------|-----------------------------|
| S | SURFACE | BITUMINOUS MILLINGS | 12" |

AGGREGATE CROSS SECTION NOTES:

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

CONCRETE CURB NOTES:

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



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

SCREENING FENCE



GENERAL NOTES:

3. Contractor shall perform the work in accordance with the requirements of the appropriate Local, County and State Agencies and/or 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.
2. 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).
3. 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.
4. 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.
5. 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.
6. 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.
7. Contractor shall coordinate scheduling a Pre-Construction Meeting with Engineer prior to commencement of work.
8. 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.
9. 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.
10. 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.
11. 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.
12. 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.
13. 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.
14. Contractor shall notify Owner/Developer and Engineer immediately upon encountering any field conditions, which are inconsistent with the project plans and/or specifications.
15. 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.
16. 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.
17. Construction access to the site shall be located as accessible 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.
18. 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.

NOTES

1. ADDRESS NUMBERS SHALL BE POSTED ON GATE KEY PAD RISER. NUMBERS SHALL BE MIN. 6" HEIGHT WITH A CONTRASTING BACKGROUND.
2. KNOX BOX AND KNOX LOCK SHALL BE PROVIDED PER H.A.F.D. REQUIREMENTS. KNOX BOX TO BE INSTALLED ON KEY PAD RISER.



(810) 227-9533
CIVIL ENGINEER
LAND SURVEYOR
2183 PLESS DRIV
BRIGHTON, MICHIGAN 48111

| | REVISION # | DATE | REVISION-DESCRIPTION | REVISION # | DATE | REVISION-DESCRIPTION |
|------------|------------|---------|---|------------|------|----------------------|
| DESIGN: S | 1 | 7-29-25 | REVISED PER MHOG REVIEW COMMENTS DATED 7-7-25 | | | |
| DRAFT: JHG | | | | | | |
| CHECK: WMP | | | | | | |
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OUTSIDE STORAGE
HOWELL

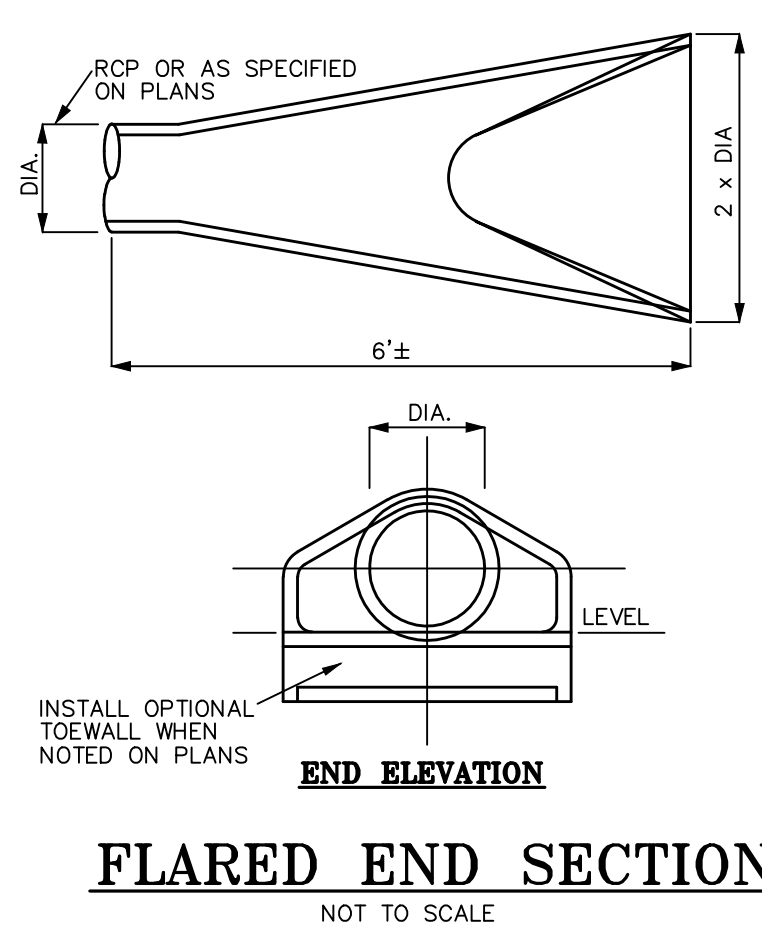
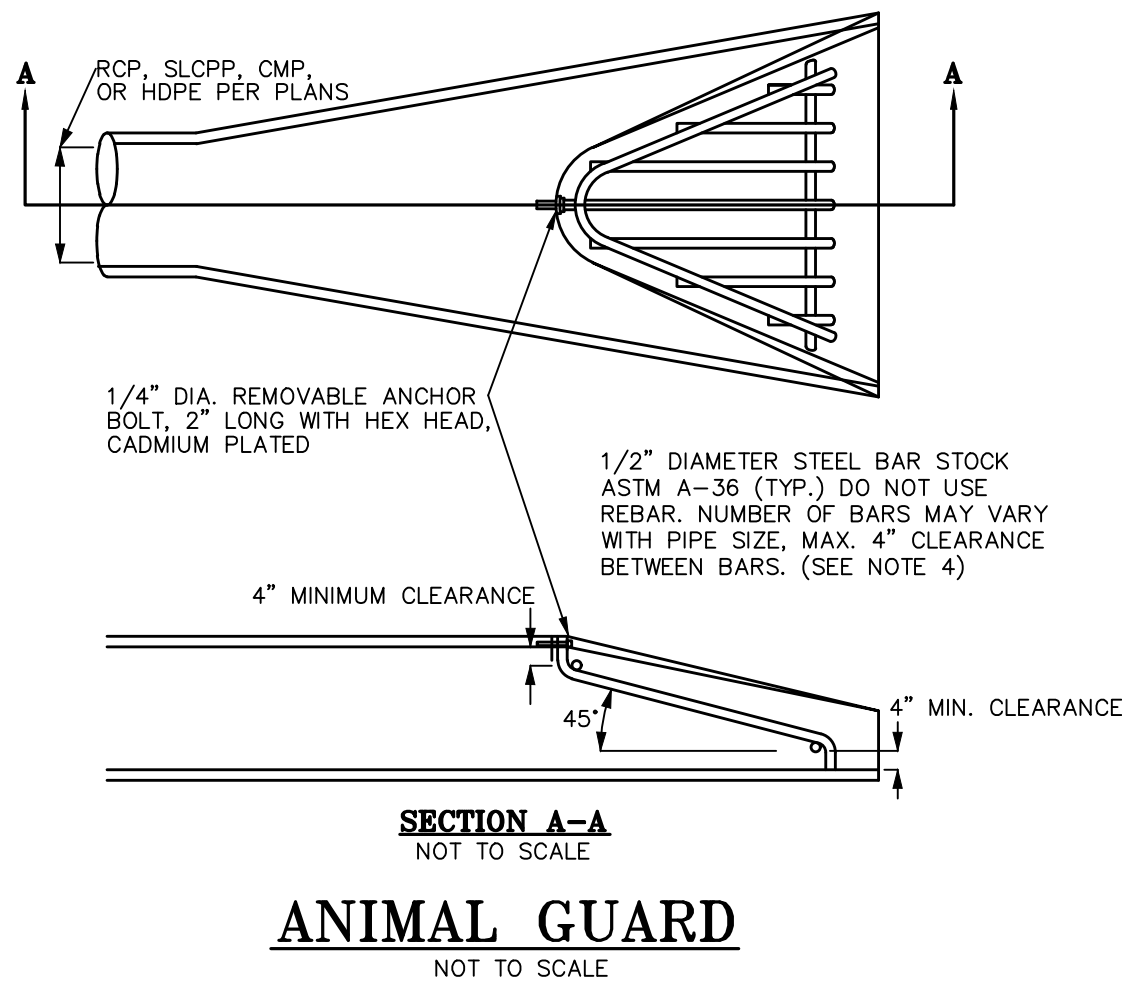
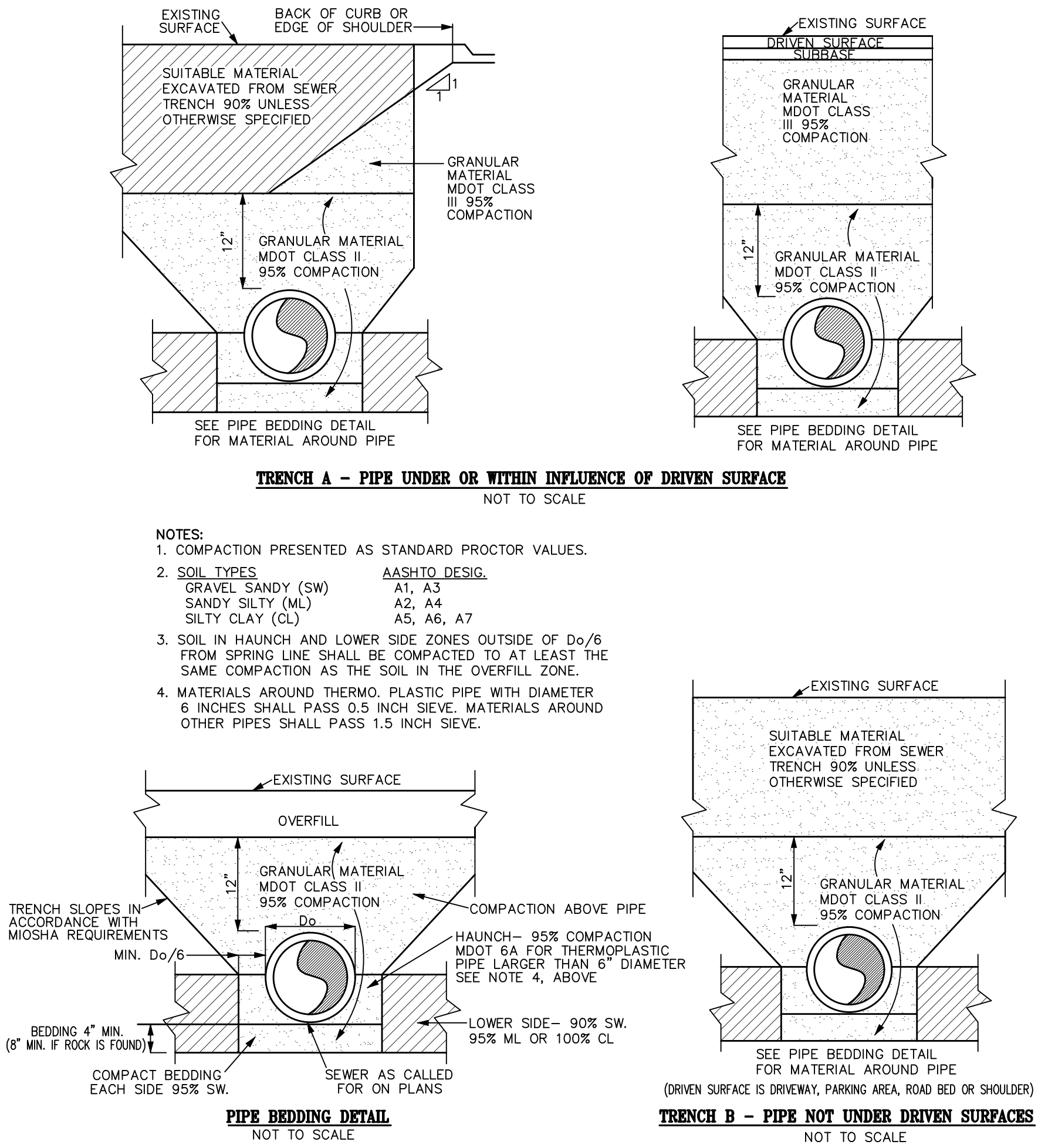
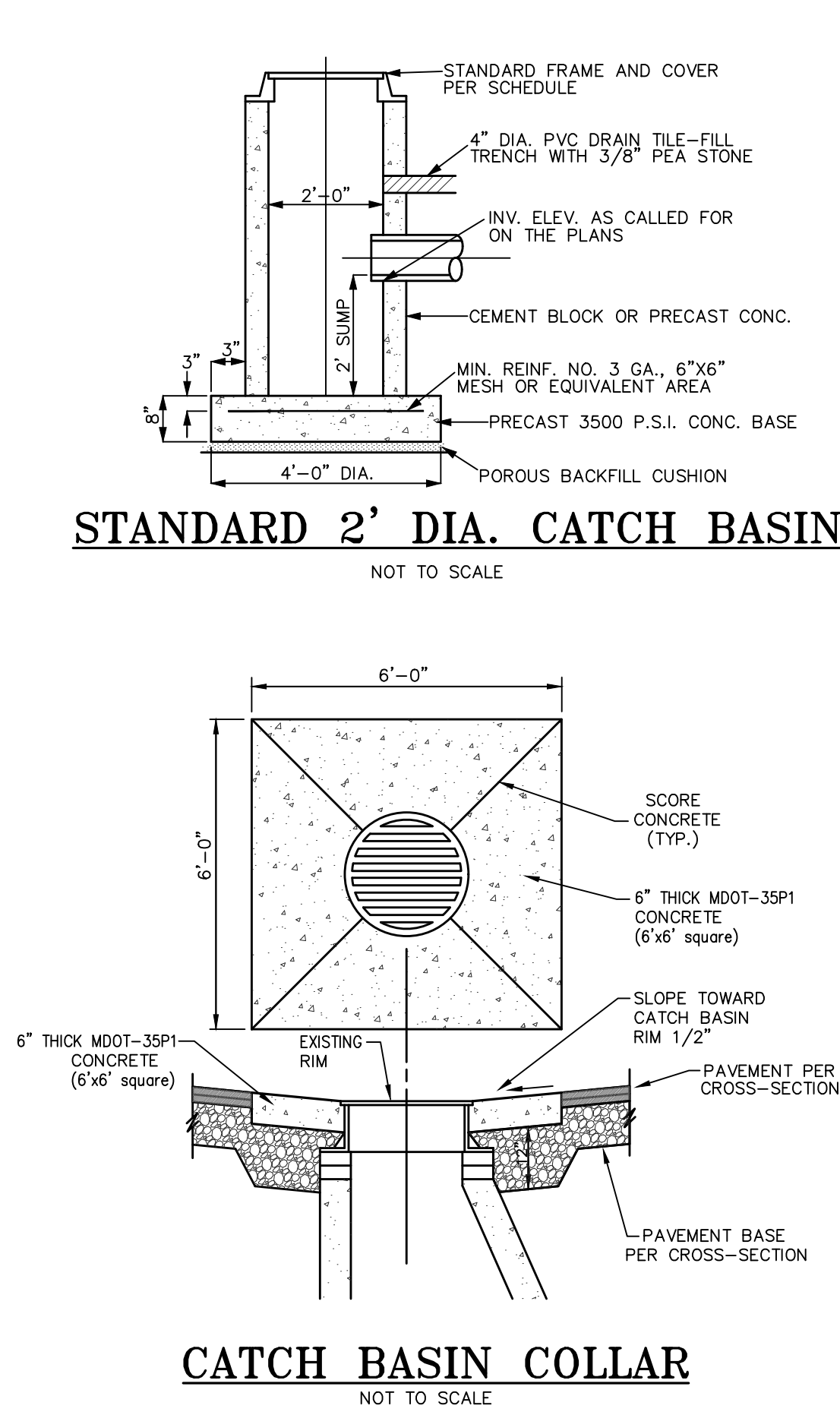
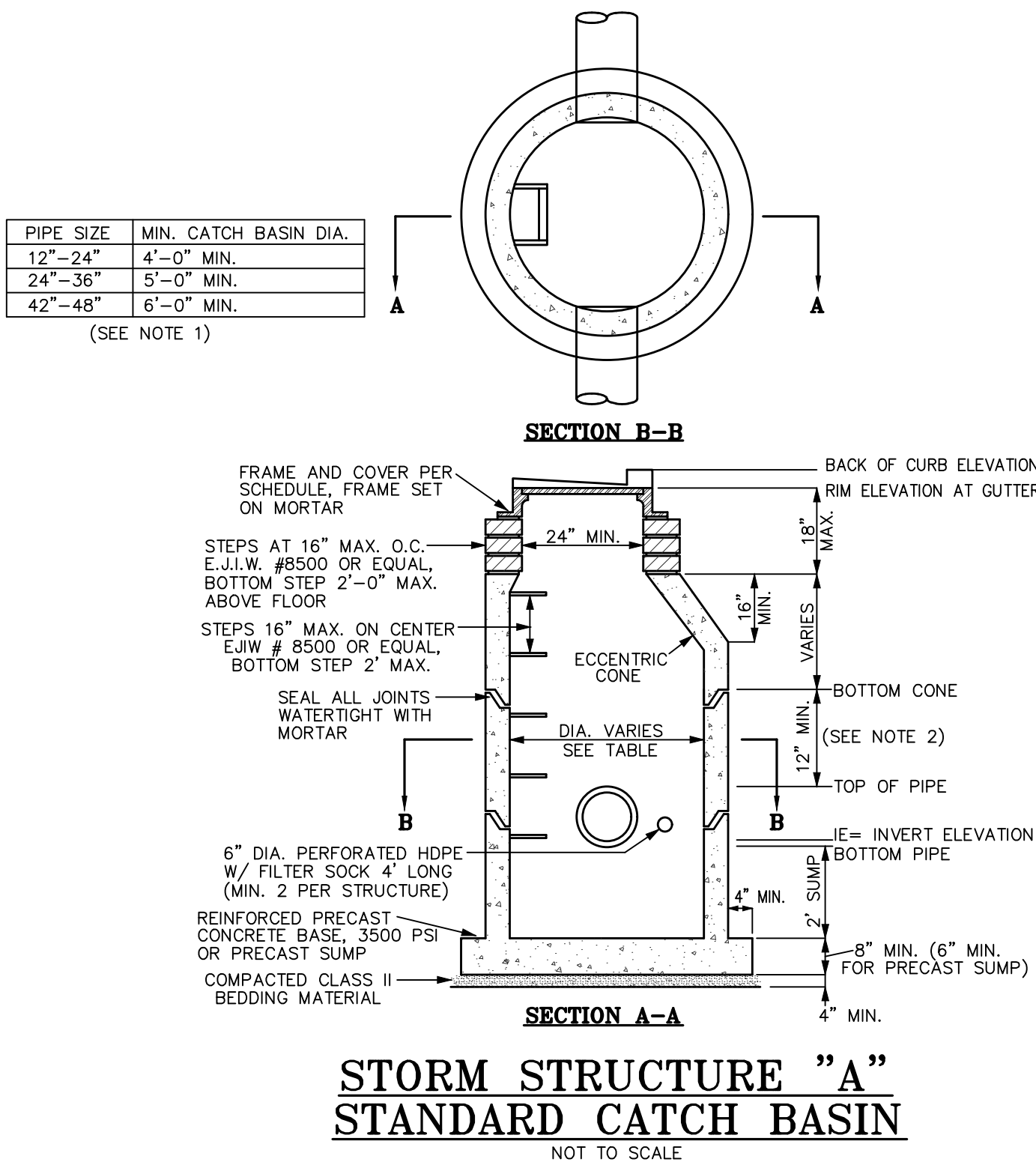
SITE & PAVING NOTES & DETAILS

CLIENT:

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

SCALE: AS NOTED
PROJECT No.: 244802
DWG NAME: 4802 DT
ISSUED: JULY 29, 2025

DT1



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

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

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

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

| | | | | |
|---------------------------|--------------------------------|--|--|-----|
| OUTSIDE STORAGE HOWELL | STORM SEWER NOTES & DETAILS | CLIENT: OUTSIDE STORAGE HOWELL 1560 SABLE COMMERCE TOWNSHIP, MICHIGAN 48302 248-217-8308 | SCALE: AS NOTED PROJECT No.: 244802 DWG NAME: 4802 DT ISSUED: JULY 29, 2025 | DT2 |
|---------------------------|--------------------------------|--|--|-----|

DESIGNED BY:



Wilson Design Associates
1030 N. Crooks Road, Suite E
Clawson, Michigan 48017

248-930-1565p.
Joe@wilson-design.net

CONTRACTORS:

CLIENT:
MR. MARK JUETT

PROJECT:
**Outdoor Storage -
Howell**

DRAWN BY:
JW

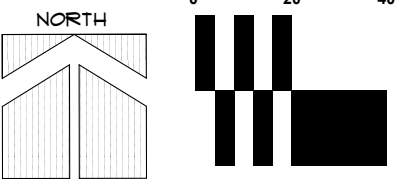
ISSUE:
03.30.2024

REVISIONS:
11.26.2024
12.17.2024
04.26.2025
06.12.2025

DESCRIPTION:

**Landscape
Plan**

SCALE: 1" = 40'-0"



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| PLANT LEGEND | | | | |
|--------------|-----|-----------|---|---------------------------------|
| SYM | QTY | SIZE | COMMON | LATIN |
| | 5 | 2.5" CAL. | SUGAR MAPLE | ACER SACCHARUM |
| | 26 | 2.5" CAL. | CRIMSON KING MAPLE | ACER FLATANOIDES 'CRIMSON KING' |
| | 3 | 10" HT. | RIVER BIRCH | BETULA NIGRA |
| | 19 | 6' HT. | NORWAY SPRUCE | PICEA ABIES |
| | 10 | 6' HT. | SERVICEBERRY | AMELANCHIER ARBOREA |
| | 109 | 36" HT. | DOUBLE FILE VIBURNUM | VIBURNUM PLICATE F. TOMENTOSUM |
| | 141 | 24" HT. | DWF. BURNING BUSH | EUONYMUS ALATUS 'COMPACTUS' |
| | 58 | 24" HT. | DWF. REDTWIG DOGWOOD | CORNUS SERICEA |
| | +99 | +6" DBH | MISC. EXISTING TREES ALONG PARSONS ROAD | |



TOTAL UNPAVED OPEN AREA
OF SITE = 25.1%



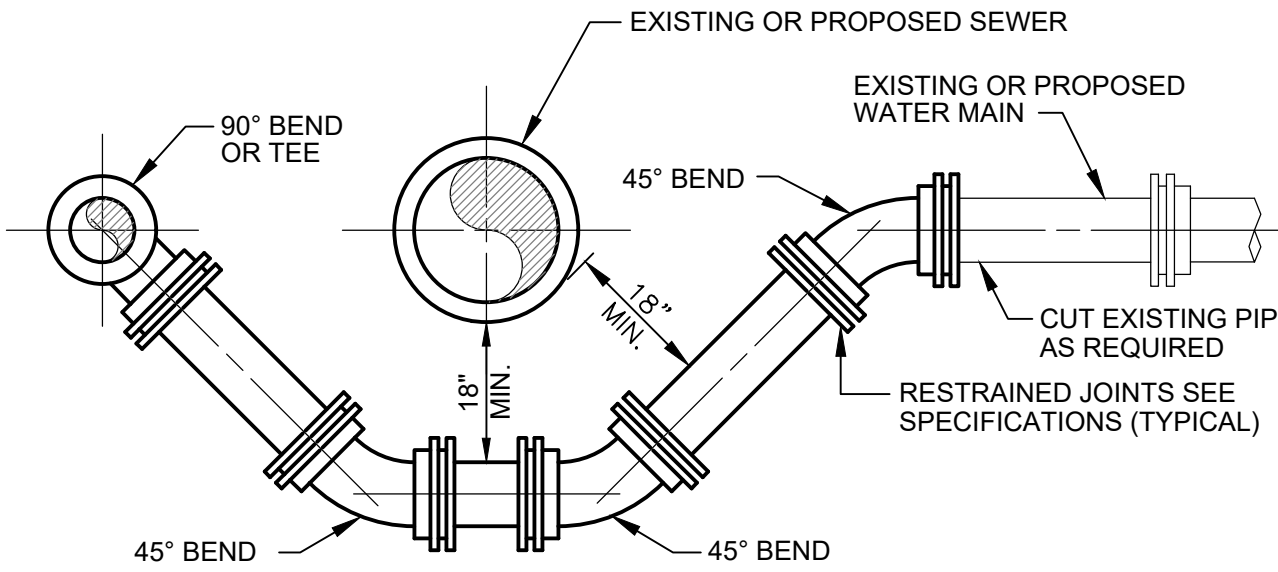
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| PIPE RESTRAINT SCHEDULE | | | | | | | |
|--|-----------------|-----------|---------------|---------------|-----------|--------------------------------|--------------------------------|
| GROUND BURIED PRESSURE PIPE - POLYETHYLENE ENCASED DUCTILE IRON PIPE | | | | | | | |
| PIPE DIAMETER | TEES, 90° BENDS | 45° BENDS | 22-1/2° BENDS | 11-1/4° BENDS | DEAD ENDS | REDUCERS (ONE SIZE REDUCTION)* | REDUCERS (TWO SIZE REDUCTION)* |
| 4 | 13 | 5 | 3 | 1 | 40 | -- | -- |
| 6 | 19 | 8 | 4 | 2 | 58 | 31 | -- |
| 8 | 24 | 10 | 5 | 2 | 75 | 30 | 70 |
| 12 | 34 | 14 | 7 | 3 | 107 | 57 | 116 |
| 16 | 43 | 18 | 9 | 4 | 139 | 59 | 137 |
| 20 | 52 | 22 | 10 | 5 | 169 | 59 | 134 |
| 24 | 61 | 25 | 12 | 6 | 199 | 60 | 132 |
| 30 | 73 | 30 | 15 | 7 | 242 | 85 | 168 |
| 36 | 84 | 35 | 17 | 8 | 281 | 84 | 168 |

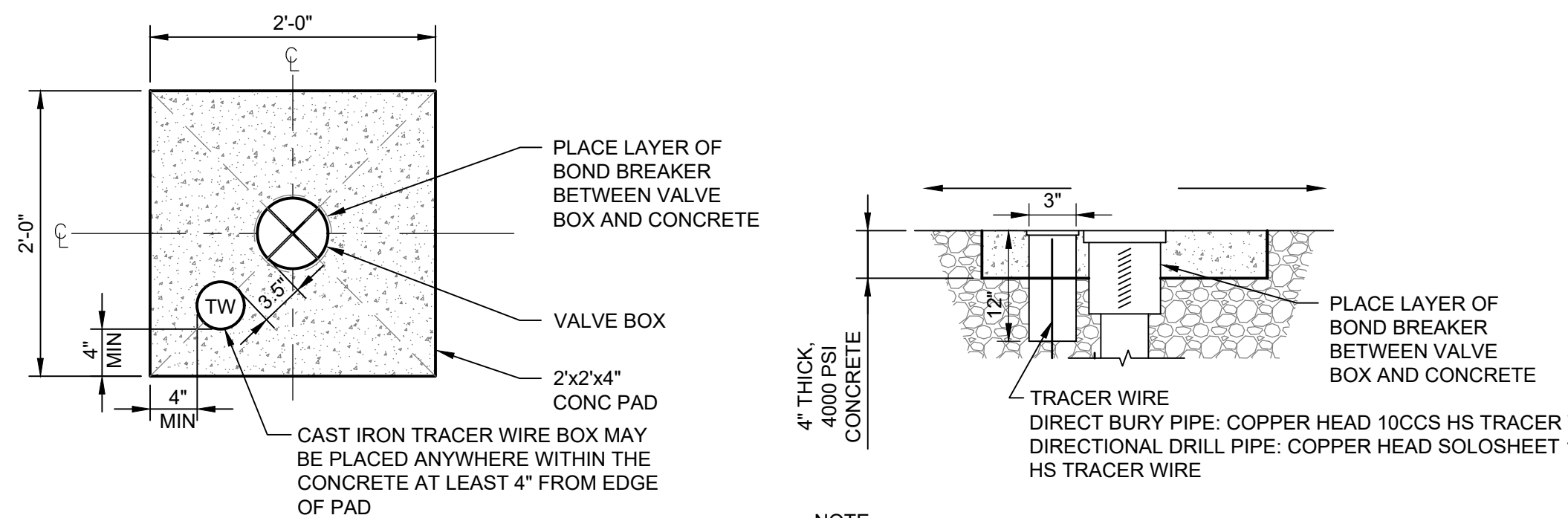
- LENGTHS OF PIPE RESTRAINT ARE GIVEN IN FEET.
- IF REQUIRED PIPE DIAMETER IS NOT LISTED IN THIS TABLE, THE NEXT LARGEST PIPE DIAMETER SHALL BE USED.
- THIS TABLE IS BASED ON A TEST PRESSURE OF 180 PSI (OPERATING PRESSURE PLUS WATER HAMMER. FOR OTHER TEST PRESSURES, ALL VALUES TO BE INCREASED OR DECREASED PROPORTIONALLY.
- THE VALUES PROVIDED OF RESTRAINT LENGTH ARE IN EACH DIRECTION FROM THE POINT OF DEFLECTION OR TERMINATION EXCEPT FOR TEES, AT WHICH ONLY THE BRANCH IN THE DIRECTION OF THE STEM.
- IF TIE RODS ARE USED, USE FOUR RODS MINIMUM AND ADD 1/8-INCH TO BAR DIAMETER AS CORROSION ALLOWANCE.
- * SIZE REDUCTION IS BASED UPON THE PIPE DIAMETER SHOWN IN THIS TABLE.

BASED UPON:

| | |
|--------------------|-----------|
| INTERNAL PRESSURE: | 180 |
| PIPE DEPTH: | 5 |
| BEDDING CLASS: | TYPE 4 |
| SOIL TYPE: | GOOD SAND |
| SAFETY FACTOR: | 2 |



WATER MAIN UTILITY OFFSET



NOTE: ALL BOXES & ADJOINING TW BOXES SHALL BE ENCASED IN A CONC. PAD UNLESS OTHERWISE DETERMINED BY MHOG.

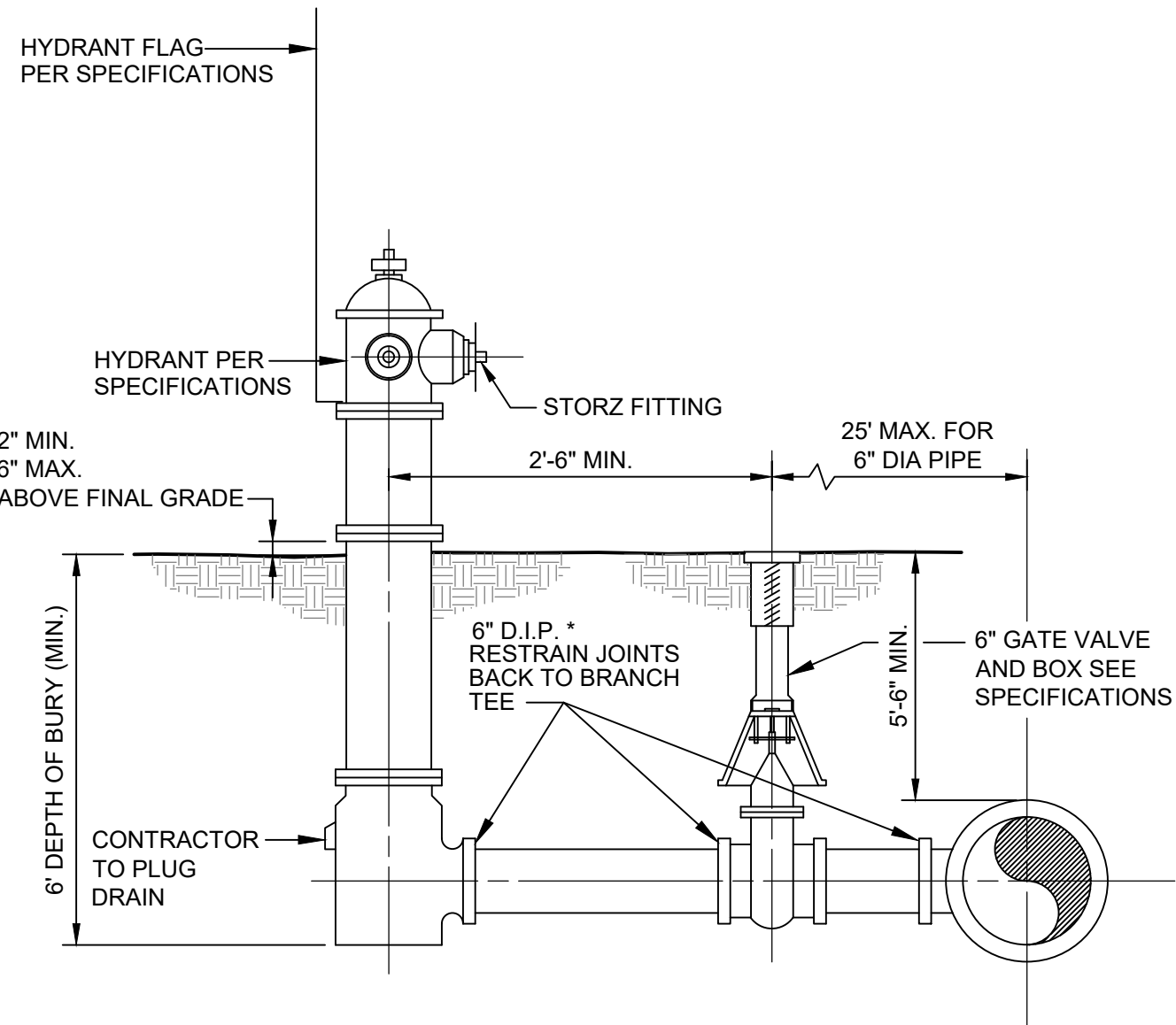
PLAN

VALVE/TRACER WIRE BOX IN CONCRETE DETAIL

NO SCALE

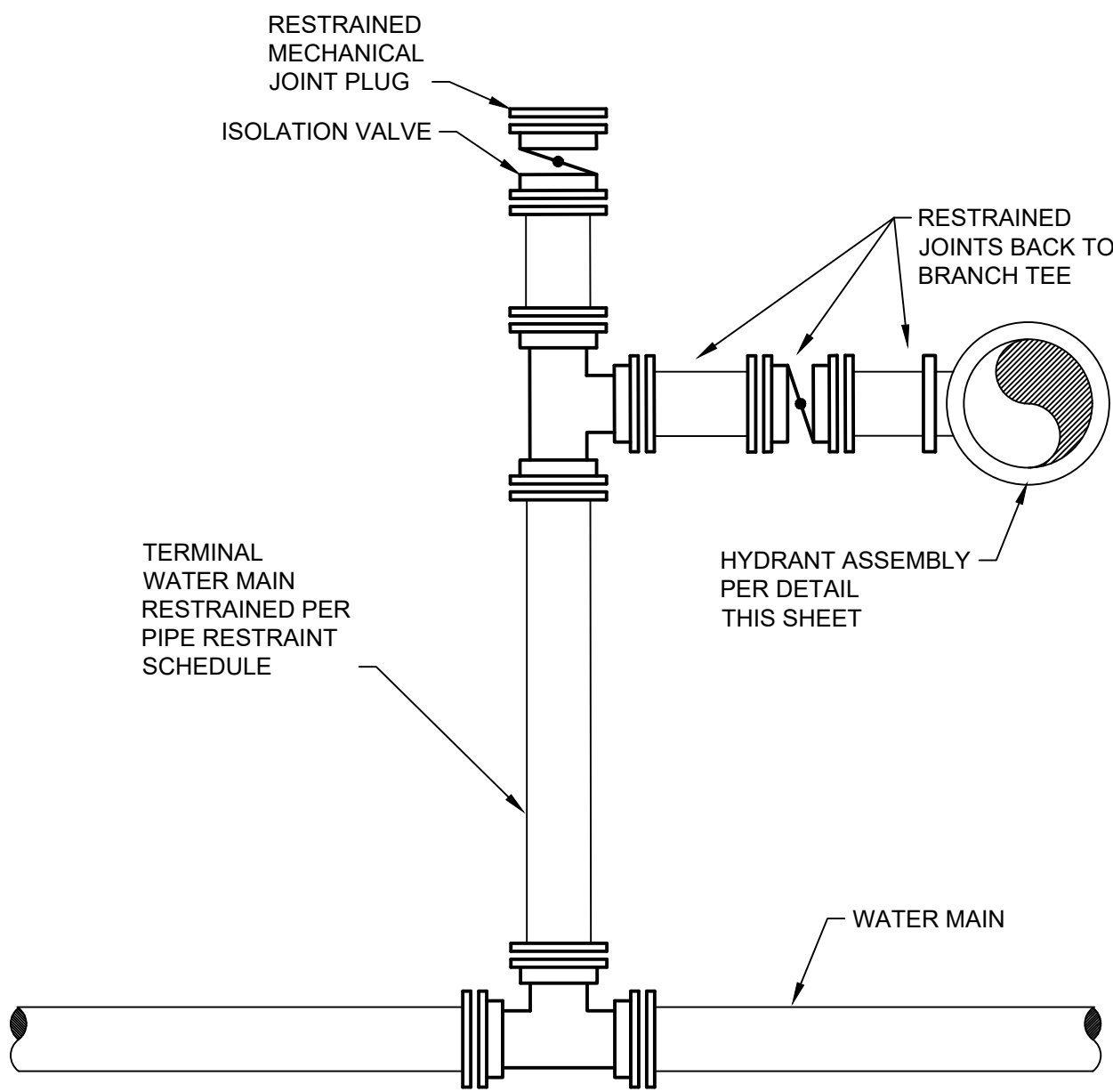
- NOTE:
- TRACER WIRE BOXES LOCATED WITHOUT A VALVE BOX ONLY REQUIRE AN 18" X 18" CONCRETE PAD.
 - TRACER WIRE BOX SHALL HAVE A LOCKING LID W/STANDARD AWWA PENTAGON KEY.
 - TRACER WIRE BOX SHALL BE COPPERHEAD RB14"TP IN ASPHALT INSTALLATIONS AND CD14"TP FOR ALL OTHER INSTALLATIONS.

SECTION

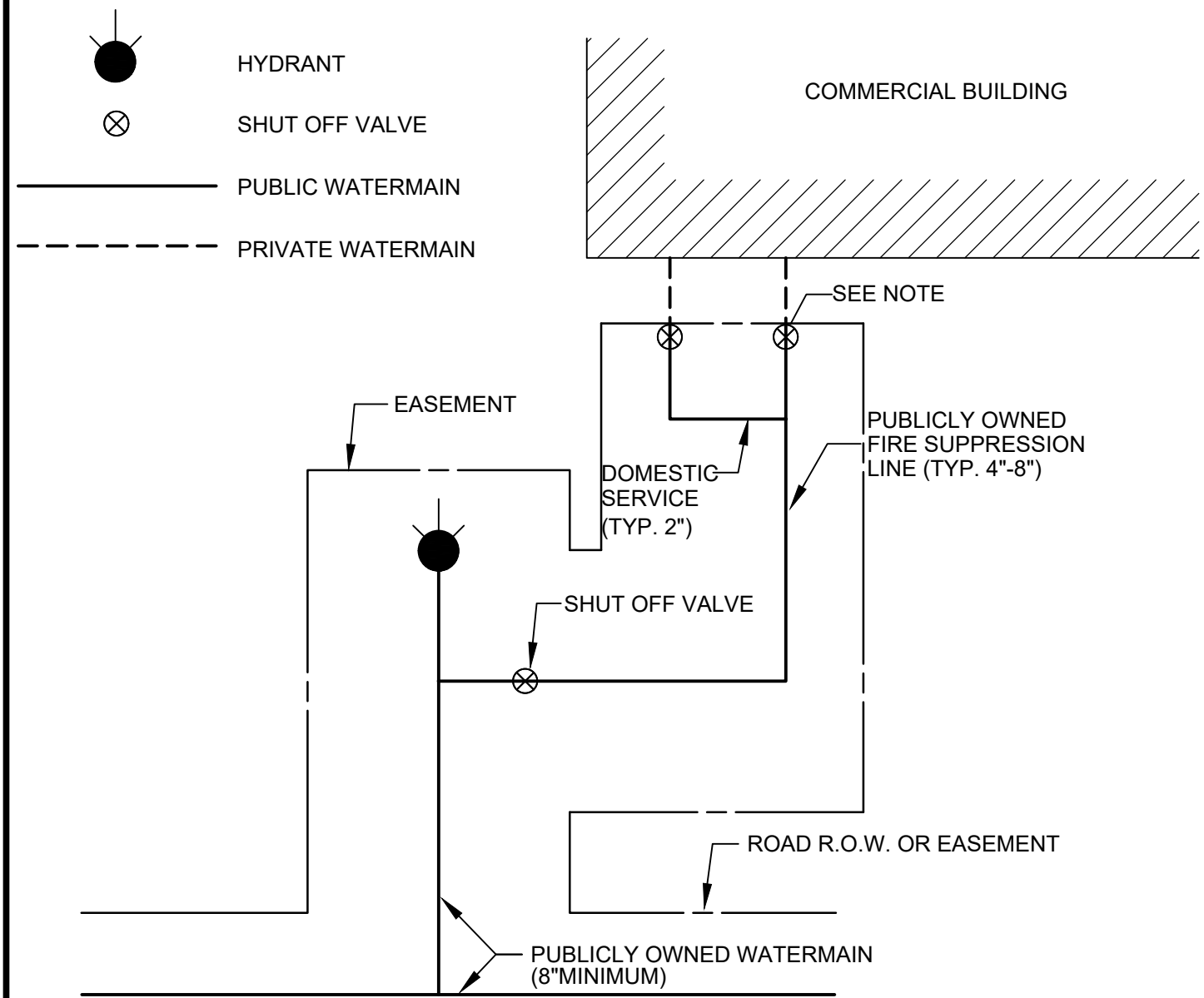


* THE LENGTH OF 6" PIPE FROM THE MAIN TO THE HYDRANT ASSEMBLY CANNOT EXCEED 25'. ANY PIPE OVER 25 FEET SHALL BE 8" DIAMETER MINIMUM AND DESIGNED PER MHOG SPECIFICATIONS.

FIRE HYDRANT ASSEMBLY

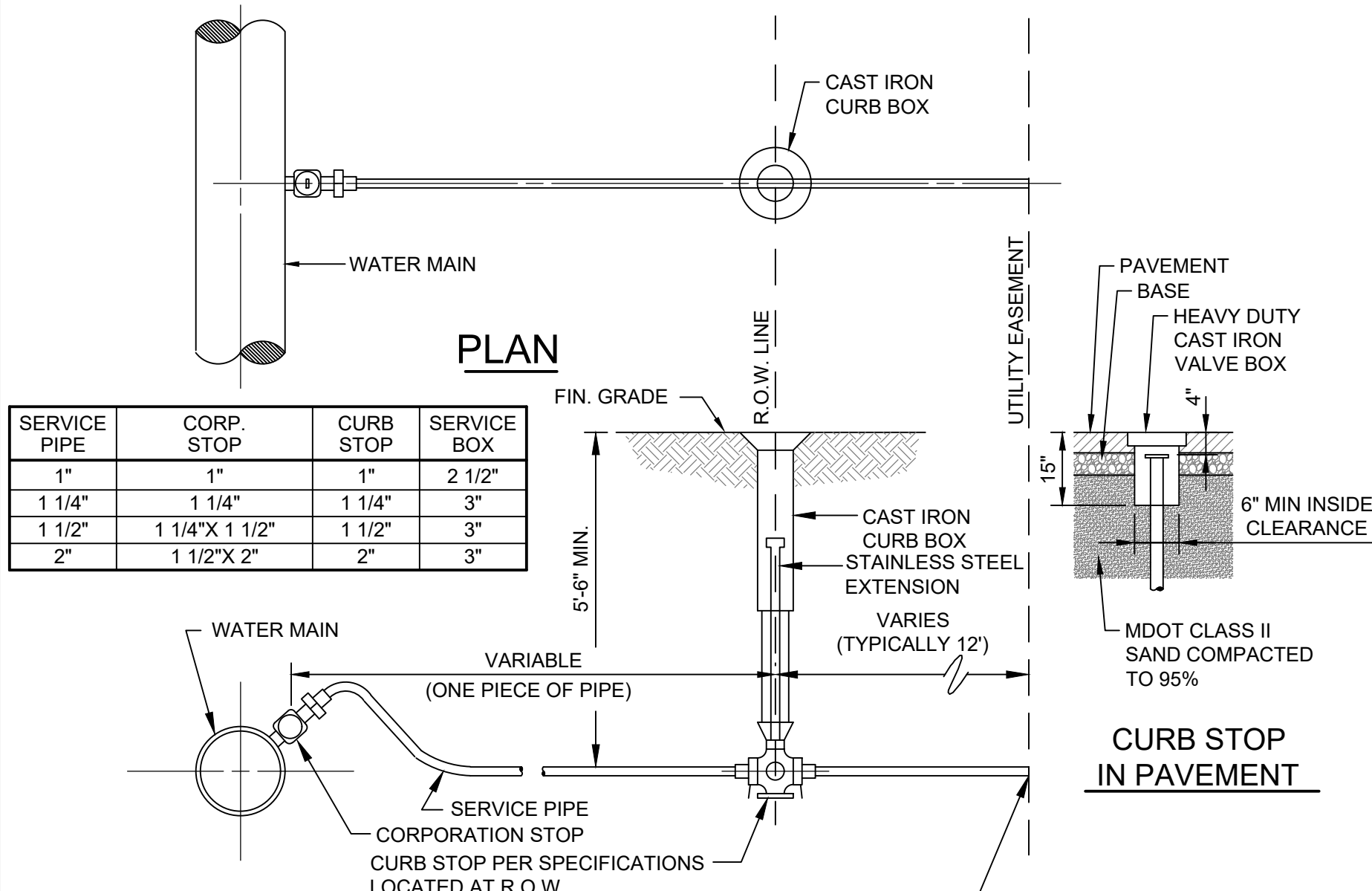


TERMINAL HYDRANT DETAIL



NOTE: FIRE SUPPRESSION LINE AND DOMESTIC SERVICE TO BE LOCATED WITHIN EASEMENT UP TO SHUTOFF VALVES OUTSIDE OF BUILDING.

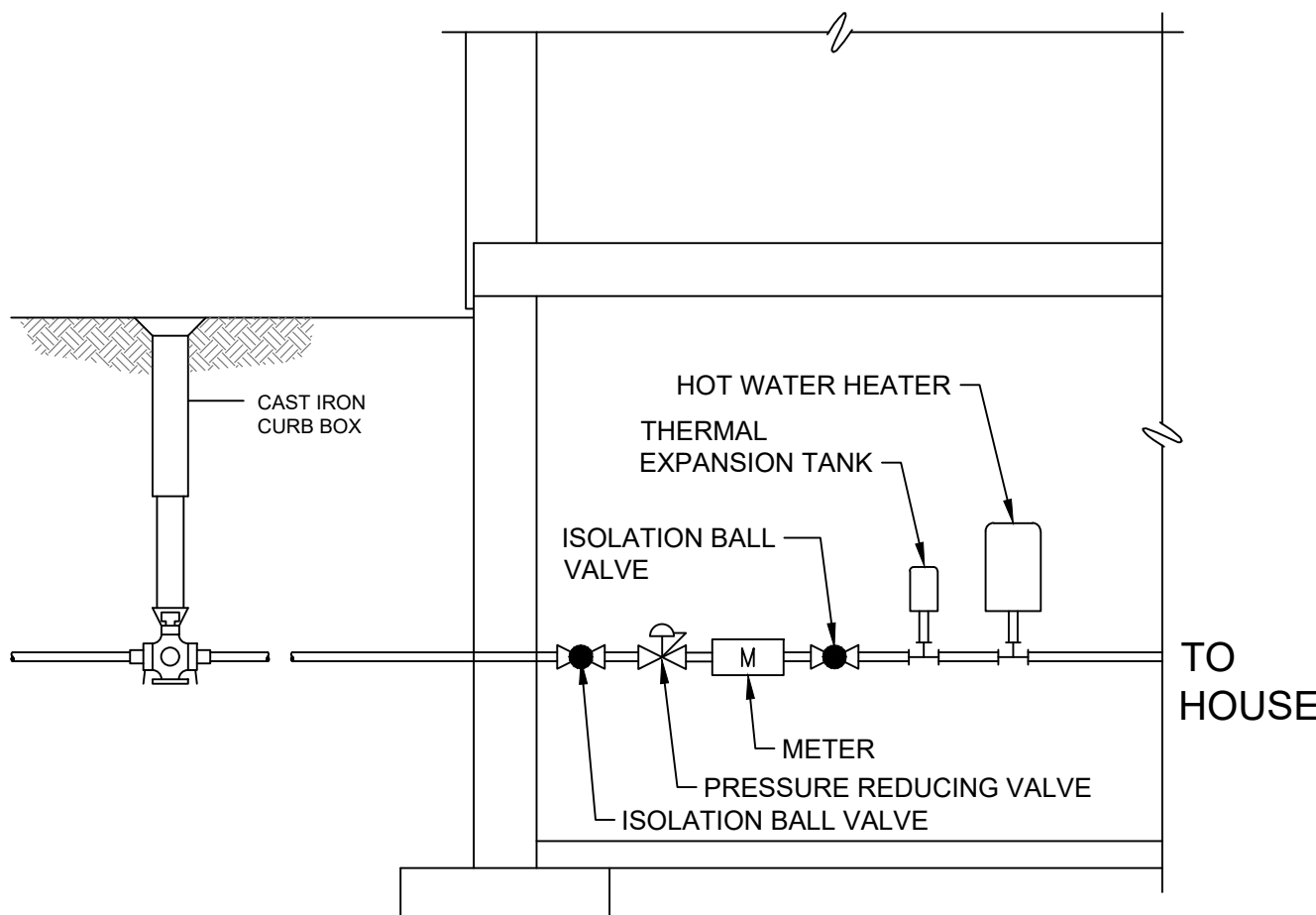
COMMERCIAL BUILDING WATER SERVICE LAYOUT



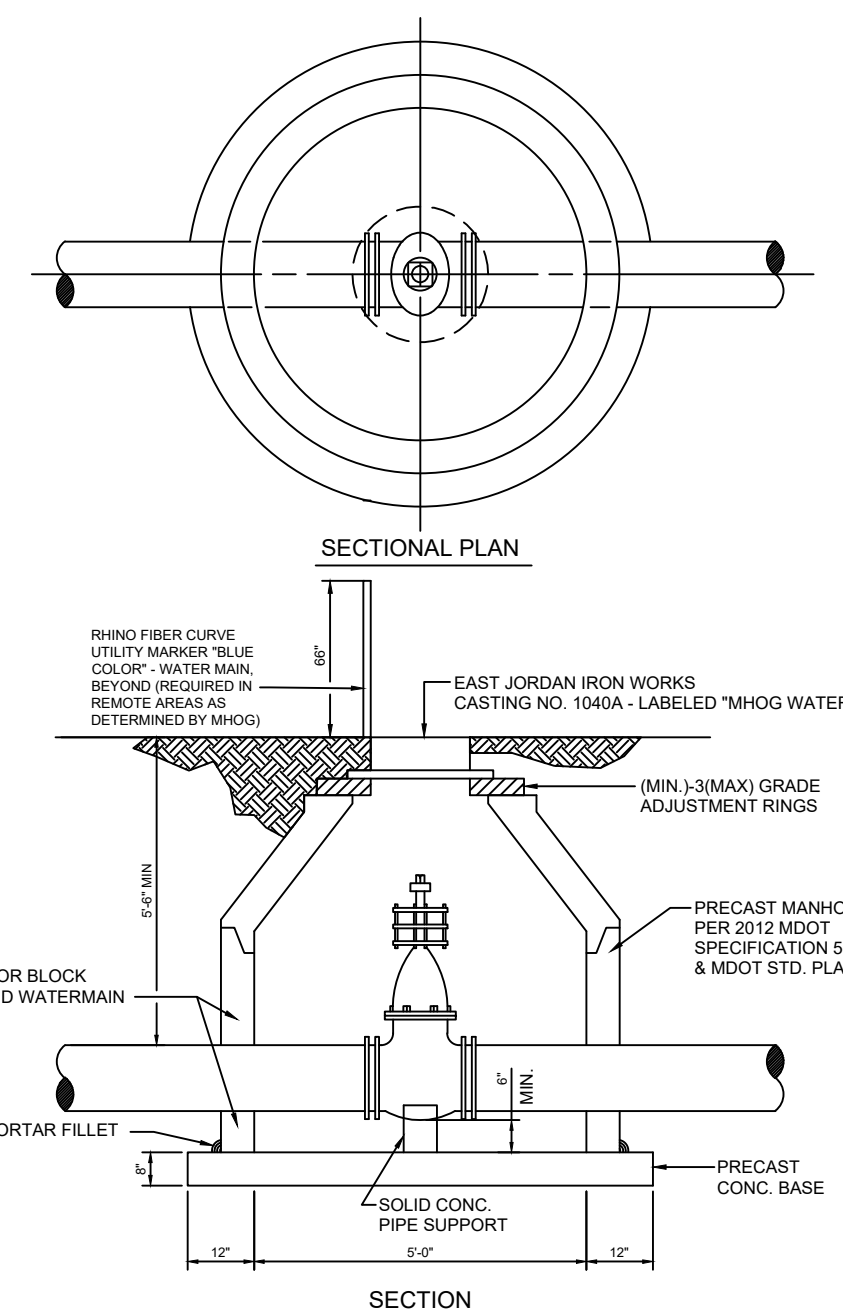
PLAN

SECTION

WATER SERVICE LATERAL

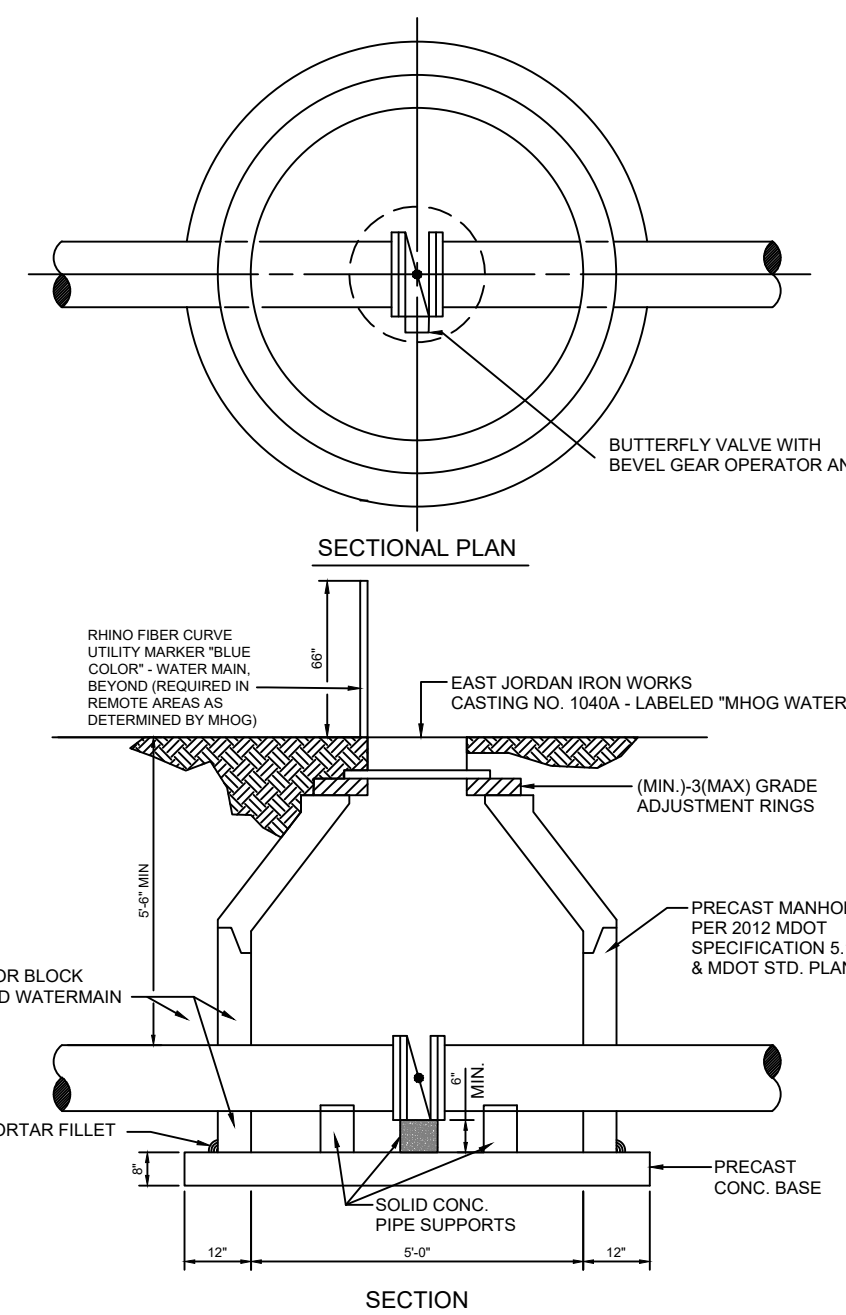


PRIVATE RESIDENCE
PRESSURE REDUCING VALVE (PRV)



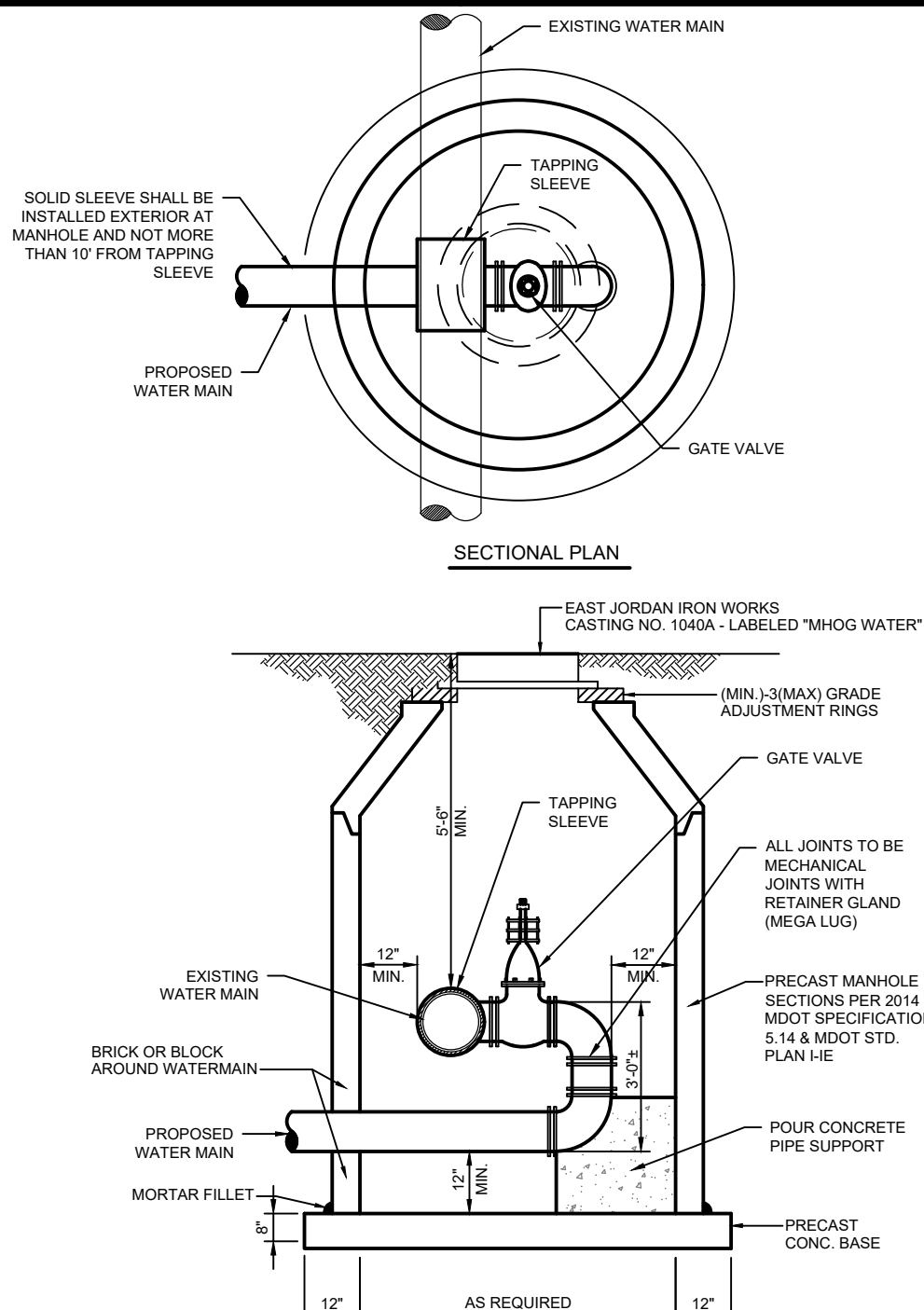
- NOTES:
- ALL LIFT HOLES AND JOINTS SHALL BE MORTARED BOTH INSIDE AND OUTSIDE.
 - BLOCK MANHOLES TO BE USED ONLY WITH ENGINEERS PERMISSION.
 - NO STEPS PERMITTED.

VALVE AND GATE WELL



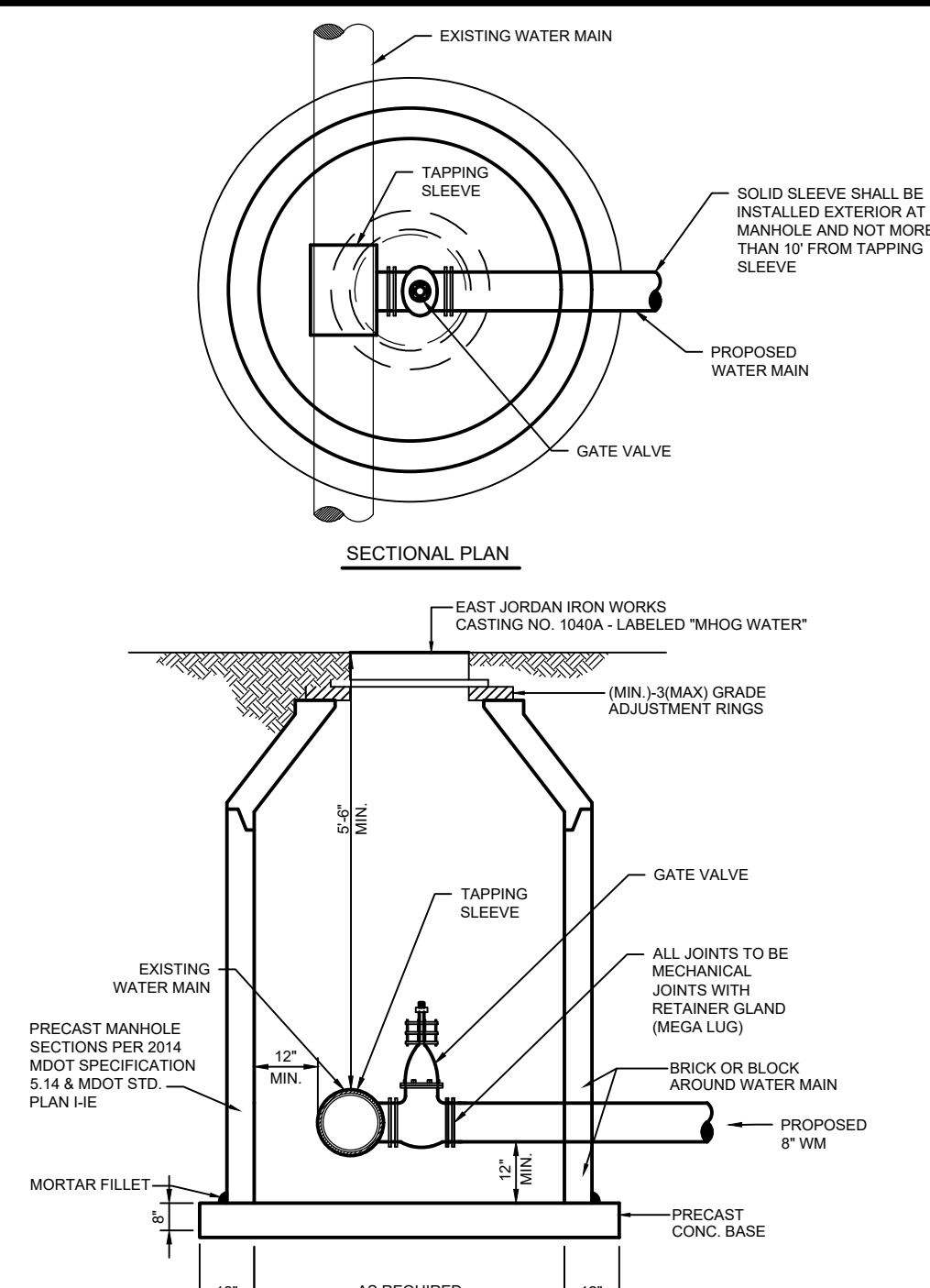
- NOTES:
- ALL LIFT HOLES AND JOINTS SHALL BE MORTARED BOTH INSIDE AND OUTSIDE.
 - BLOCK MANHOLES TO BE USED ONLY WITH ENGINEERS PERMISSION.
 - NO STEPS PERMITTED.

BUTTERFLY VALVE AND WELL



- NOTES:
- ALL LIFT HOLES AND JOINTS SHALL BE MORTARED BOTH INSIDE AND OUTSIDE.
 - BLOCK MANHOLES TO BE USED ONLY WITH ENGINEERS PERMISSION.
 - TAPPING SLEEVES ONLY PERMITTED FOR CONNECTIONS SMALLER THAN MAIN LINE.
 - NO STEPS PERMITTED.

REVERSE TAP GATE WELL



- NOTES:
- ALL LIFT HOLES AND JOINTS SHALL BE MORTARED BOTH INSIDE AND OUTSIDE.
 - BLOCK MANHOLES TO BE USED ONLY WITH ENGINEERS PERMISSION.
 - TAPPING SLEEVES ONLY PERMITTED FOR CONNECTIONS SMALLER THAN MAIN LINE.
 - NO STEPS PERMITTED.

REGULAR TAP GATE WELL



MARION HOWELL OCEOLA GENOA
Sewer and Water Authority

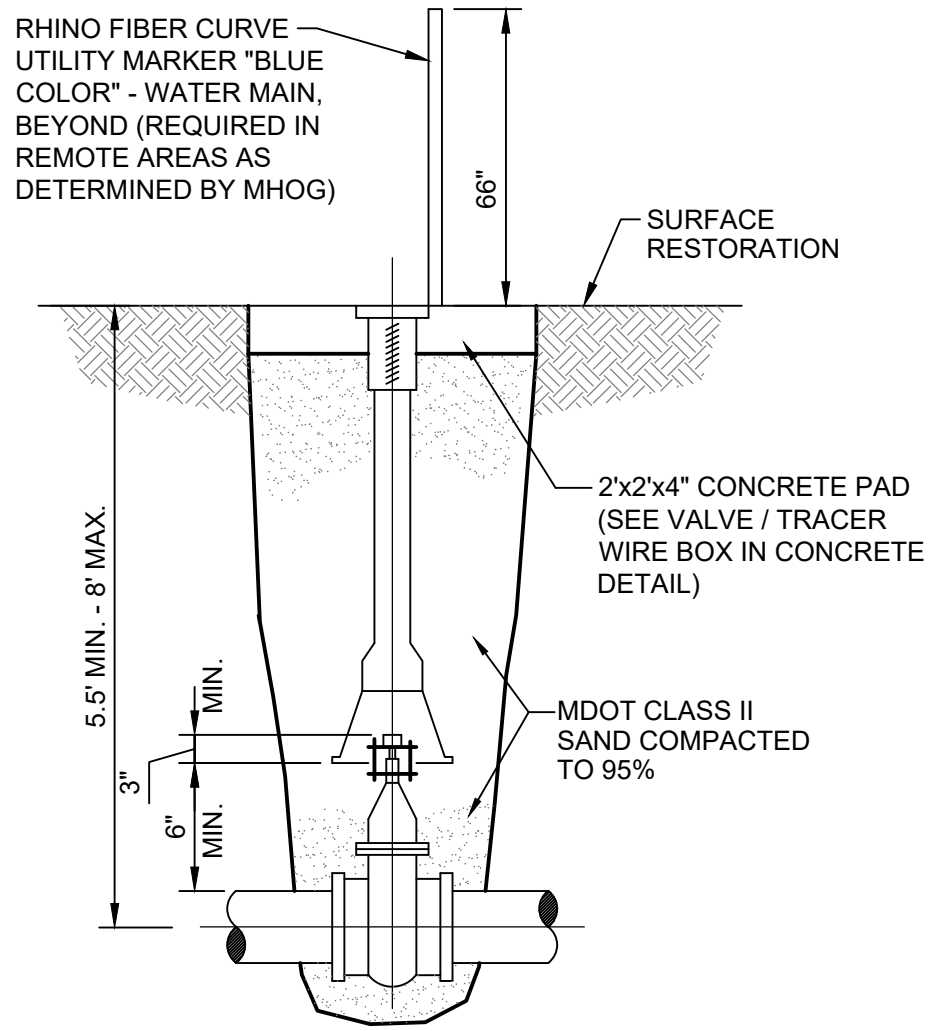
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UPDATED: FEBRUARY 2016
UPDATED: APRIL 2016
UPDATED: OCTOBER 2017
UPDATED: FEBRUARY 2019
UPDATED: NOVEMBER 2022

STANDARD DETAILS

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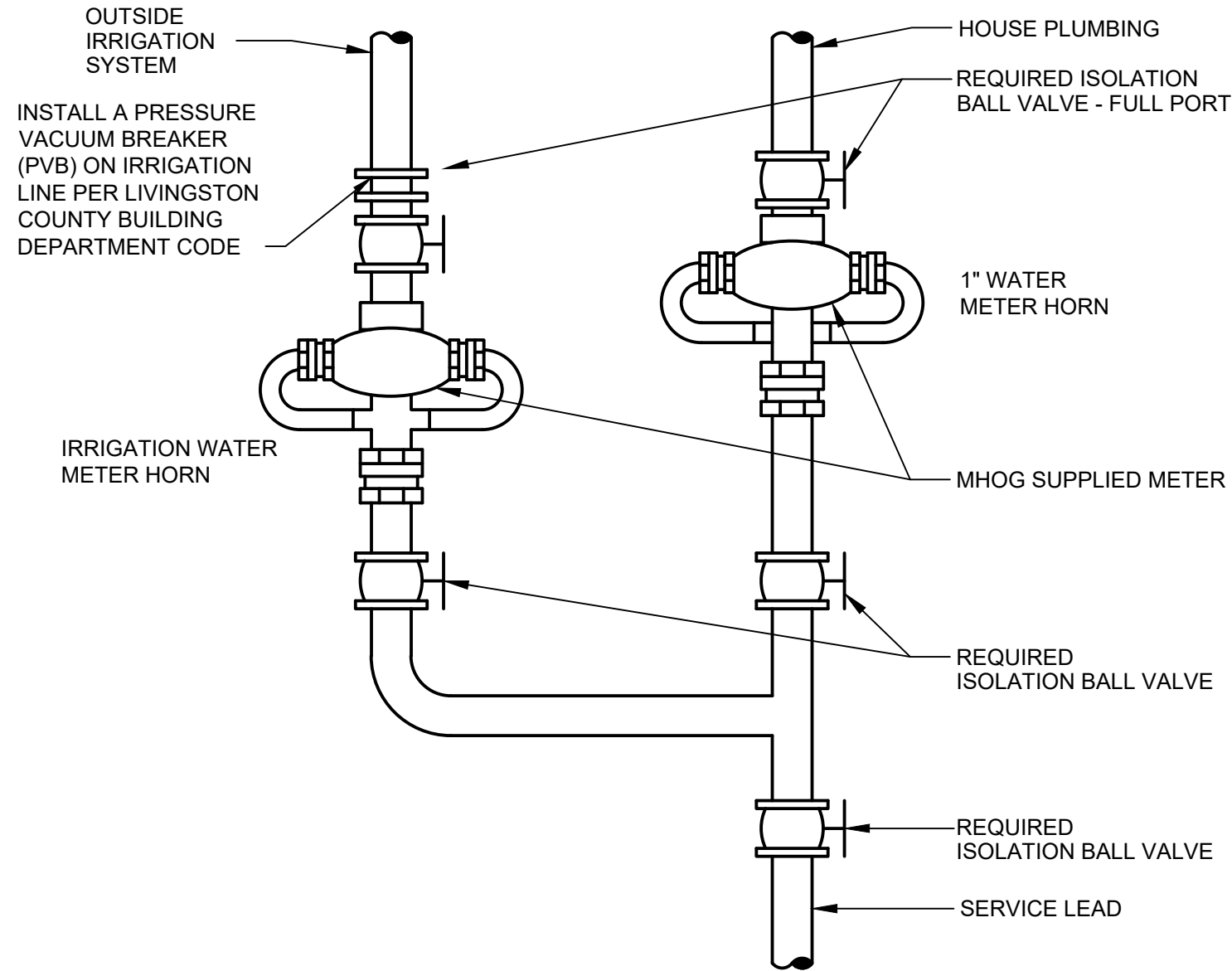
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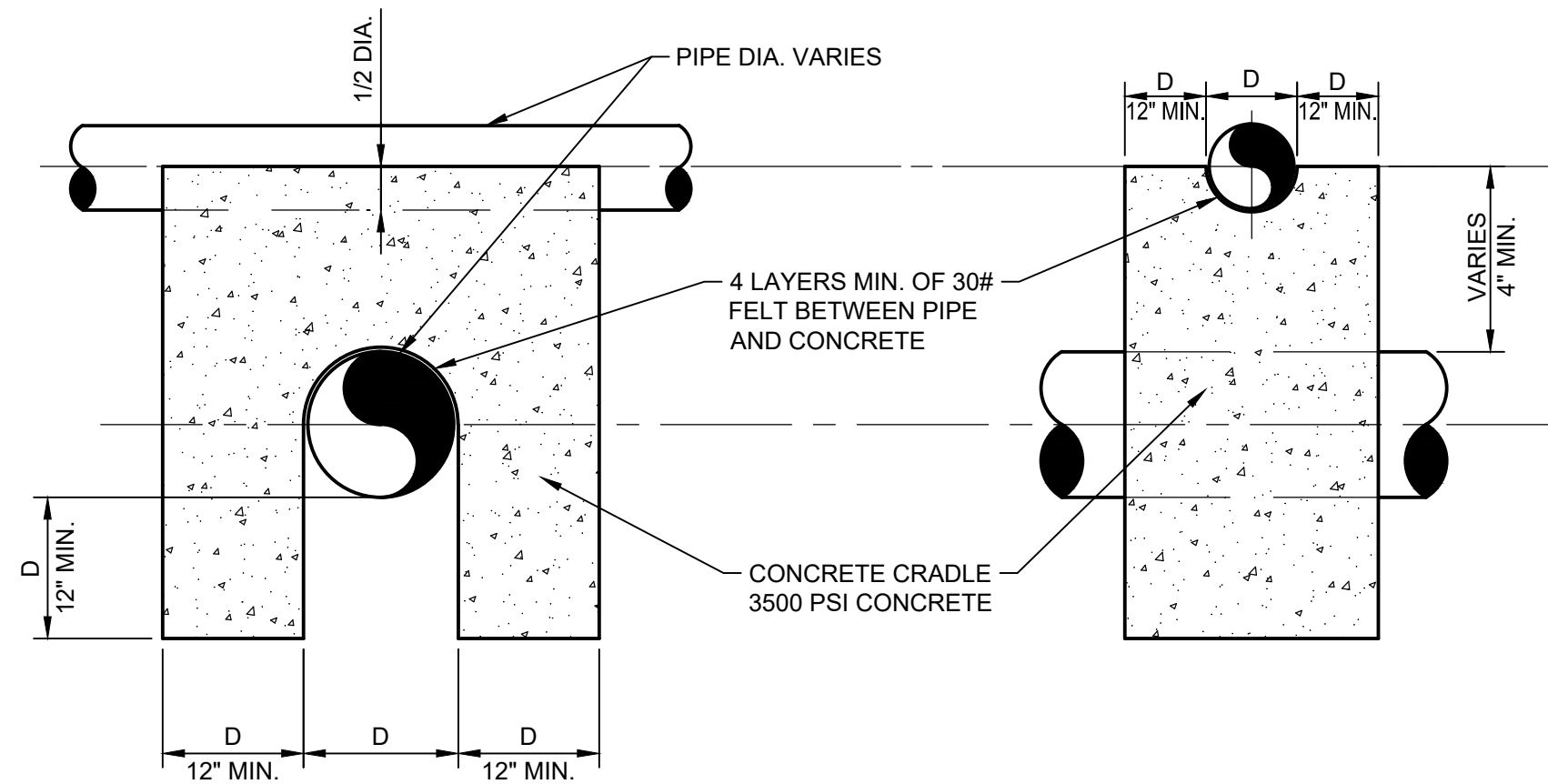
- NOTES:
1. VALVE BOX SHALL NOT REST ON VALVE OR MAIN LINE PIPE.
 2. A VALVE STEM EXTENSION WITH CENTERING RING IS REQUIRED FOR VALVES BURIED DEEPER THAN 6'.

GATE VALVE AND BOX



- NOTES:
1. ALL METERS ARE TO BE INSTALLED HORIZONTALLY IN A DRY, CLEAN, SANITARY LOCATION THAT IS READILY ACCESSIBLE. THIS DRAWING IS NOT TO SCALE & IS ONLY A REPRESENTATION OF HOW THE VALVES AND METERS SHOULD BE INSTALLED. THE SECOND METER IS OPTIONAL FOR IRRIGATION USAGE. METERS SHOULD NOT BE INSTALLED IN LINE (ONE RIGHT AFTER THE OTHER).
 2. PROPERTIES DESIGNATED "HIGH HAZARD" PER THE MHOG CROSS CONNECTION RULES MANUAL WILL REQUIRE THE INSTALLATION OF A REDUCED PRESSURE ZONE (RPZ) BACK FLOW PREVENTION DEVICE.

TYPICAL METER HORN INSTALLATION



CONCRETE CRADLE DETAIL

SCALE: NONE



MHOG CASTING DETAIL

NO SCALE



MARION HOWELL OCEOLA GENOA
Sewer and Water Authority

STANDARD DETAILS

Scale: NONE
Issued Date: JANUARY - 2014
UPDATED: MAY 2015
UPDATED: FEBRUARY 2016
UPDATED: APRIL 2016
UPDATED: OCTOBER 2017
UPDATED: FEBRUARY 2019
UPDATED: NOVEMBER 2022



Carlisle | Wortman
ASSOCIATES, INC.

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

Date: April 15, 2025
Rev. May 19, 2025
Rev. July 15, 2025
Rev. August 21, 2025

Site Plan Review For Howell Township, Michigan

Applicant: Outdoor Storage, LLC

Project Name: Juett Outside Storage

Plan Date: June 5, 2025
Revised Date: July 29, 2025

Location: 4802 Hydraulic Drive (Parcel #4706-28-100-071)

Zoning: Industrial Flex (IFZ)

Action Requested: Final Site Plan Approval

PROJECT AND SITE DESCRIPTION

The applicant has submitted a final site plan dated July 29, 2025, for the construction of an outdoor storage facility located at the end of Hydraulic Dr. on the vacant parcel #4706-28-100-071.

The Planning Commission previously chose to postpone the preliminary site plan and special land use application during their April 22, 2025 meeting. During the May 27, 2025 meeting the preliminary site plan was approved and the special land use application was recommended to the Township Board for approval. At their June 9, 2025 meeting, the Township Board approved the special land use application.

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

Contractor equipment and materials storage yards for building and other types of construction are permitted in the IFZ district with the requirement that any area used for outdoor storage is completely enclosed and screened from external visibility beyond such storage area per Section 12.02. L.

During the April 22, 2025 Planning Commission meeting the applicant made note that shipping containers were intended to be utilized for storage on site as well. Per Section 12.04 Cargo Containers, are considered accessory uses in the IF Zoning District subject to Section 14.07. Storage of containers on site shall be limited to 4% of the lot area, up to 3,000 square feet. All proposed structures must be indicated on the site plan.

Proposed storage spaces on the site are as follows:

Table 1. Proposed Storage Spaces

| Number of Spaces | Dimensions |
|-------------------------------|-------------------|
| 12 | Unspecified |
| 1 | 90' x 95' |
| 1 | 75' x 94' |
| 68 | 12' x 80' |
| 55 | 12' x 35' |
| 11 | 35' x 80' |
| 2 | 60' x 129' |
| 3 | 84' x 129' |
| Total Number of Spaces | 153 |

The subject site is a vacant 11.5 acre parcel and neighbors an existing storage facility. The site is proposed to function solely as an outdoor storage site. No work is performed at the facility and the applicant has stated that lease agreements are required for each tenant, which includes the provision that tenants are to be responsible for keeping their rental spaces clean and orderly, making each tenant responsible for the disposal of any waste generated. At the April 22, 2025 Planning Commission meeting the applicant spoke to how the business manages this agreement through regular inspections and surveillance. Ultimately any issues on the property will be the responsibility of the property owner.

The applicant has proposed the project in two phases. Phase 1 includes seventy (70) storage spaces beginning on the western property line. Phase 2 will build out the remaining eighty-three (83) of the total 153 storage spaces.

The applicant appeared before the Planning Commission at their May 27, 2025 meeting with a preliminary site plan and special land use application. The Commission approved the preliminary plan and recommended approval of the special land use application to the Township Board with the following findings:

1. No additional parking spaces are required
2. The hard surface paving requirements are waived and asphalt millings 8-12" in depth will be used

Figure 1. Aerial Image of Subject Site and Vicinity



Source: NearMap October 2024

Items to be Addressed: Denote all proposed structures on site, including proposed storage

NEIGHBORING ZONING, LAND USE AND MASTER PLAN

containers.

Neighboring zoning designations are summarized in Table 1.

Table 1. Zoning, Land Use and Master Plan Designations

| | Zoning | Existing Land Use | Master Plan Designations |
|---------------------|---|--------------------------|--------------------------|
| Subject Site | Industrial Flex Zone | Vacant | Industrial Flex Zone |
| North | Industrial | IT / Electrical Services | Industrial Flex Zone |
| South | Industrial Flex Zone / Highway Service Commercial | Landscaping Business | Industrial Flex Zone |

| | | | |
|-------------|----------------------|------------------|----------------------|
| East | Industrial Flex Zone | Trucking Company | Industrial Flex Zone |
| West | Industrial Flex Zone | Outdoor Storage | Industrial Flex Zone |

Items to be Addressed: None.

AREA, WIDTH, HEIGHT, SETBACKS

The following table summarizes the Density, Placement, and Height Regulations for the site plan associated with the use.

Table 2. Density, Placement, and Height Regulations

| | Required | Provided |
|------------------------|---|----------------------------------|
| Lot Area | 2 Acres | 11.5 Acres |
| Lot Width | 200 Feet | >200 Feet |
| Front Setback | 35 Feet | 35 Feet |
| Side Setback | 10 Feet Minimum (Minimum Total of Both Sides=25 Feet) | 10 feet (west) 15 feet (east) |
| Rear Setback | 10 Feet Minimum | 35 Feet |
| Lot Coverage | 75 % Max | 74.9% |
| Building Height | 70 Feet Max | No proposed building |

Items to be Addressed: None.

PARKING, LOADING

The letter submitted by the applicant states that the majority of the storage units will be used for work vehicles. The applicant states that typically, tenants come to the site, move vehicles out of their rented space, and park a personal vehicle in its place until they return. No formal parking area is proposed separate from the units themselves. The proposed seventy (70') foot wide drives are expected to provide reasonable space for a tenant to move their work vehicle out of their rented space and pull a personal vehicle in. Smaller spaces are positioned on a forty (40') foot wide drive, with direct access to the wider areas throughout the site.

Section 18.02 does not specifically address outdoor storage centers for parking, which allows for the Planning Commission to assign the parking requirements of a similar or related use. The proposed site will not have a building erected and no employees are planned to be on site as the entrance is via keypad.

During their May 27, 2025 meeting the Planning Commission ruled that no additional parking will be required and the Commission approved bituminous millings (8-12") throughout the interior of the site with the exception of the entrance and exit area at the northern boundary line.

Items to be Addressed: None.

FENCING

Eight (8') foot high cedar wood slat screen fencing is proposed along the northwestern portion of the site that fronts Hydraulic Drive. Six (6') foot chain linked fencing is proposed along the parcel boundary lines and will work as the dividing wall between storage spaces.

Additional fencing details are provided on Sheet DT1 of the submitted plans.

Items to be Addressed: None.

SITE ACCESS AND CIRCULATION

Proposed access to the facility will be from a two-way drive off Hydraulic Drive. Tenants are granted entrance via keypad as they enter and exit the site. Drives located within the site are either seventy (70') feet wide or forty (40') feet wide.

The applicant has provided an emergency vehicle circulation plan which demonstrates suitable vehicular traffic flow.

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

Items to be Addressed: None.

NATURAL FEATURES

The site is mostly open space and tilled farmland with trees lining the southern parcel boundary and lightly dispersed throughout. EGLE's Wetlands Map Viewer depicts soil area which include wetland soils near the southwest corner of the site. This is not an identified wetland on the National Wetlands Inventory (NWI) or Michigan Resource Inventory System (MIRIS) maps.

Items to be Addressed: None.

LANDSCAPING

The applicant has provided a landscape plan on Sheet L-1. A complete landscape plan is required for final site plan approval. The following table indicates the requirements in the Zoning Ordinance.

| Landscaped Area | Requirement | Factor | # Required | Provided |
|--------------------------------------|--|---|------------|-----------------------------------|
| Non-Residential Parcel | 1 tree per 3,000 square feet (25.1% open space = 112,945 square feet) | 112,945 square feet / 3,000 square feet = 38 trees | 38 trees | 36 trees + existing along Parsons |
| Hydraulic Drive | 1 deciduous or evergreen tree per 40 linear feet | 329.48 feet / 40 feet = 9 trees | 9 trees | 9 trees |
| | 1 ornamental tree per 100 linear feet | 329.48 feet / 100 feet = 4 trees | 4 trees | 4 trees |
| | Min. of 8 shrubs per every 40 linear feet | (329.48 feet / 40 feet) * 8 = 66 shrubs | 66 shrubs | 69 shrubs |
| Parsons Road | 1 deciduous or evergreen tree per 40 linear feet | 728.39 linear feet / 40 linear feet = 19 trees | 19 trees | Existing trees (99+) |
| | 1 ornamental tree per 100 linear feet | 728.39 linear feet / 100 linear feet = 8 trees | 8 trees | |
| | Min. of 8 shrubs per every 40 linear feet | 728.39 linear feet / 40 linear feet x 8 shrubs = 146 | 146 shrubs | 147 shrubs |
| Stormwater Retention/ Detention Area | Sodded or seeded groundcover | | N/A | Seeded |
| | 1 deciduous shade or evergreen tree per 50 lineal feet | 471.5 linear feet / 50 linear feet = 10 trees | 10 trees | 14 trees |
| | 10 shrubs for every 50 lineal feet | (471.5 linear feet / 50 linear feet) * 10 = 95 shrubs | 95 shrubs | 98 shrubs |

Further, as noted above, contractor equipment and materials storage yards for building and other types of construction are permitted in the IFZ district with the requirement that any area used for outdoor storage is completely enclosed and screened from external visibility beyond such storage area. As mentioned throughout the review process the applicant has not demonstrated that the outdoor storage will be adequately screened from view in all directions.

We continue to urge the addition of a berm and evergreen trees in two staggered lines along the eastern parcel line to provide sufficient screening from M-59. The currently proposed maple trees in this area do not achieve the required screening.

This is a Zoning Ordinance requirement and is not a requirement the Zoning Ordinance gives the Planning Commission authority to waive. Therefore, until screening is deemed appropriate administratively any associated Zoning permits will not be released.

Items to be Addressed: *The outdoor storage areas shall be completely screened from view from all directions per Section 12.02. L of the Zoning Ordinance.*

LIGHTING

A sufficient lighting plan has been provided. A photometric plan indicates that the light levels at property lines are acceptable. Planned lighting includes two types of base mounted downward fixed lights which will be located near the entrance as well as four (4) other corners throughout the site. All lights appear to be permanent horizontal fixtures that will appropriately shield light from adjacent properties.

Items to be Addressed: *None.*

SIGNS

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

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

Items to be Addressed: *None.*

TRASH ENCLOSURE

There is no trash enclosure proposed for the site. During the April 22, 2025 meeting, the applicant explained that each tenant will be responsible for the removal of any refuse in their storage area. The applicant has confirmed this is a requirement for each tenant per the lease agreement and that inspections and surveillance are utilized to ensure compliance.

Items to be Addressed: *None.*

RECOMMENDATIONS

The next step for the Planning Commission is to determine if the final site plan has met the requirements listed in Article 20 Site Plan Review Procedures.


If so decided, we recommend the Planning Commission condition approval on the following item(s):

Denote all proposed structures on site, including proposed storage containers.

1. The outdoor storage areas shall be completely screened from view from all directions per Section 12.02. L of the Zoning Ordinance.



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



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

#PC-2025-05

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

July 18, 2025

Jonathan Hohenstein
Howell Township
3525 Byron Road
Howell, MI 48855

RE: Outside Storage Howell
Parcel # 4706-28-100-071
Final Site Plan Review

Mr. Hohenstein,

We have received and reviewed the final site plan for the proposed Outside Storage Howell, Parcel #4706-28-100-071. The plans were prepared by Desine Inc, dated June 5, 2025 and were received on June 23, 2025. Based on our review, we offer the following comments:

General

The site consists of a single parcel located at the terminus of Hydraulic Drive, spanning 11.5 acres and is zoned Industrial (I). The proposed use of outside storage is consistent with the existing zoning regulations. The property is bordered by Industrial (I) zoning to the north and west and Industrial Flex Zone (IFZ) zoning to the east and south.

The cover sheet includes the project name, the owner's name and address, and the name and address of the firm preparing the plans. It also contains a vicinity map, the preparation date, and a legal description of the parcel, including bearings and distances.

Sheet SP outlines the required setbacks, which align with the values specified in the Howell Township Zoning Ordinance. The proposed setbacks meet or exceed the listed minimum requirements.

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

Grading and Drainage

The site is relatively flat and primarily drains via sheet flow to the identified wetland areas located in the center and southwest corner of the parcel.

The proposed stormwater management system includes seven catch-basins, two yard-basins, and 1,200 feet of reinforced concrete pipe (RCP) storm sewer, designed to collect and convey runoff to a detention basin in the northwest corner of the parcel. This basin then discharges into an existing storm sewer running along Hydraulic Drive.

An outlet control structure detail, a watershed plan, and stormwater detention calculations have been provided. The calculations indicate that the detention volume is sufficient to accommodate the 100-year storm event. These calculations, along with the outlet control structure details and conveyance calculations, will undergo further review during the Construction Site Plan Review.

Sanitary Sewer

No sanitary sewer is proposed for this project.

Site Access and Paving

The site plan includes a proposed bituminous boulevard approach with a gated ingress and egress. Several areas throughout the site are identified as bituminous millings; however, it is unclear which areas are intended to be paved, making it difficult to accurately determine the percentage of lot coverage, as stated in our Preliminary Site Plan Review.

Water main

There is no watermain proposed for this project.

Parking and Landscaping

A landscaping plan is included. Further comments are deferred to the Howell Township Planner.

Site Lighting

There are several proposed light poles in the site plan, but no photometric plan has been provided. We defer any further comments regarding the lighting plan to the Township Planner.

Recommendations

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

1. Plans should be reviewed and approved by:
 - a. Fire Marshal
 - b. Township Planner
 - c. Livingston County Drain Commissioner
 - d. Livingston County Road Commission
 - e. Livingston County Health Department
2. Please identify which areas are to be paved with bit. millings.
3. Please provide a photometric plan.

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

Sincerely,



Cameron T. Joseph

Phone: (810) 224-2119

Cameron.joseph@spicergroup.com



Philip A. Westmoreland, P.E.

Principal

Phone: (517) 375-9449

philaw@spicergroup.com

SPICER GROUP, INC.

30300 Telegraph Rd, Suite 100

Bingham Farms, MI 48025

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

August 19, 2025

Jonathan Hohenstein
Howell Township
3525 Byron Road
Howell, MI 48855

RE: Outside Storage Howell
Parcel # 4706-28-100-071
Final Site Plan Review #2

Mr. Hohenstein,

We have received and reviewed the final site plan for the proposed Outside Storage Howell, Parcel #4706-28-100-071. The plans were prepared by Desine Inc, dated July 29, 2025 and were received on August 4th, 2025. Based on our second review, there are still outstanding items to be addressed. In order to reduce the number of reviews and the time being spent on the project, we would suggest scheduling a short meeting to discuss the remaining comments. The meeting can be virtual in order to limit driving. Please contact our office if you would like to schedule a meeting. Having completed our review, we offer the following comments:

General

The site consists of a single parcel located at the terminus of Hydraulic Drive, spanning 11.5 acres and is zoned Industrial (I). The proposed use of outside storage is consistent with the existing zoning regulations. The property is bordered by Industrial (I) zoning to the north and west and Industrial Flex Zone (IFZ) zoning to the east and south.

The cover sheet includes the project name, the owner's name and address, and the name and address of the firm preparing the plans. It also contains a vicinity map, the preparation date, and a legal description of the parcel, including bearings and distances.

Sheet SP outlines the required setbacks, which align with the values specified in the Howell Township Zoning Ordinance. The proposed setbacks meet or exceed the listed minimum requirements.

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

Grading and Drainage

The site is relatively flat and primarily drains via sheet flow to the identified wetland areas located in the center and southwest corner of the parcel.

The proposed stormwater management system includes seven catch-basins, two yard-basins, and 1,200 feet of reinforced concrete pipe (RCP) storm sewer, designed to collect and convey runoff to a detention basin in the northwest corner of the parcel. This basin then discharges into an existing storm sewer running along Hydraulic Drive.

An outlet control structure detail, a watershed plan, and stormwater detention calculations have been provided. The calculations indicate that the detention volume is sufficient to accommodate the 100-year storm event.

These calculations, along with the outlet control structure details and conveyance calculations, will undergo further review during the Construction Site Plan Review.

Sanitary Sewer

No sanitary sewer is proposed for this project.

Site Access and Paving

The site plan includes a proposed bituminous boulevard approach with a gated ingress and egress. Several areas throughout the site are identified as 'bituminous millings'; however, it is unclear which areas are intended to be paved, making it difficult to accurately determine the percentage of lot coverage, as stated in our Preliminary Site Plan Review.

Water main

There is no watermain proposed for this project.

Parking and Landscaping

A landscaping plan is included. Further comments are deferred to the Howell Township Planner.

Site Lighting

There are several proposed light poles in the site plan, but no photometric plan has been provided. We defer any further comments regarding the lighting plan to the Township Planner.

Recommendations

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

1. Plans should be reviewed and approved by:
 - a. Fire Marshal
 - b. Township Planner
 - c. Livingston County Drain Commissioner
 - d. Livingston County Road Commission
 - e. Livingston County Health Department
2. Please clearly identify which areas are to be paved with bit. millings.
3. Please provide a photometric plan.

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

Sincerely,



Adam C. Jacqmain
Design Engineer
adamj@spicergroup.com
Phone: (517) 375-9449



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



Carlisle | Wortman
ASSOCIATES, INC.

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

TO: Howell Township Planning Commission

FROM: Paul Montagno, AICP, Principal Planner & Grayson Moore, Township Planner

DATE: August 20, 2025

RE: Proposed Zoning Ordinance Amendments to Regulate Renewable Energy Facilities

Please find attached draft Zoning Ordinance Amendments and overlay district map that would regulate Renewable Energy Facilities within the Township. This draft includes modifications requested by the Planning Commission at their regularly scheduled July 22, 2025, meeting. The proposed ordinance applies to those facilities under the State determined nameplate capacity but could be used for a facility at or above capacity if the developers find the ordinance reasonable and chose to work with the Township. Therefore, as proposed, the ordinance will not act as a compatible renewable energy ordinance (CREO) as defined by PA. 233 of 2023, but could be considered a workable ordinance.

Additionally, it is recognized that there is a desire for residents or local business to utilize accessory solar systems to provide for the energy needs of a single location. The proposed language also includes regulations for accessory solar systems. These are systems that would be incidental to the principal use of a property for a residence or a business.

Please note the following modifications for your consideration:


- Location requirements have been added for Renewable Energy Facilities.
- Article XXX. has been created to detail a Renewable Energy Overlay District as well as provide the opportunity for additional overlay districts to be added in the future.

We look forward to discussing these proposed Zoning Ordinance amendments at your next Planning Commission meeting. The next step in the process would be to make a recommendation to the Township Board to approve the proposed ordinance as presented, approve the proposed ordinance with amendments, or deny the ordinance as proposed.

Sincerely,



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



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

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

Draft Renewable Energy Facilities Ordinance to Replace Sections 16.15 and 16.19. Add Article XXX Overlay Districts.

Sections 16.15 Renewable Energy Facilities

A. RENEWABLE ENERGY DEFINITIONS

- 1) *Abandonment*: Any renewable energy system or facility that is no longer producing power over a consecutive 12-month period of time.
- 2) *Accessory Solar Energy Systems*: A device, and/or components designed to generate renewable and store energy installed at individual residential or commercial locations which are incidental to the principle permitted use on a parcel of land. The use of such installation is exclusively for private purposes, and not for any commercial resale of any energy, except for the sale of surplus electrical energy back to the electrical grid. Examples include Building-Mounted Solar Energy Collectors and Ground-Mounted Solar Energy Collectors.
- 3) *Decommission*: To remove and/or retire a renewable energy system or facility from active service, including the restoration of the ground to its original condition.
- 4) *Facility Boundary*. The boundary around a parcel, multiple parcels, or portions thereof, leased or purchased for the purposes of operating a renewable energy facility.
- 5) *Nameplate Capacity*: The designed full-load sustained generating output of an energy facility. This is determined by reference to the sustained output of an energy facility even if components of the energy facility are located on different parcels, whether contiguous or noncontiguous.
- 6) *Nonparticipating Property*: A property that is adjacent to an energy facility and that is not a participating property.
- 7) *Occupied Community Building*: a school, place of worship, day-care facility, public library, community center, or other similar building that the applicant knows or reasonably should know is used on a regular basis as a gathering place for community members.
- 8) *Solar Array*: A collection of solar panels, wired together to generate electricity from the sun.

9) *Renewable Energy Facilities*: A facility where the principal design, purpose, or use is to provide renewable energy via wind, solar and/or storage to off-site uses or the wholesale or retail sale of generated electricity.

10) *Renewable Energy Systems*: A device, and/or components designed to generate renewable energy.

11) *Wind Energy Conversion System (WECS)*: Any device such as a turbine, windmill, or charger that converts wind energy to a usable form of energy.

A. INTENT. Renewable Energy Facilities may only be permitted in the Howell Township Renewable Energy Overlay District. The following regulations are intended to ensure the interests of the landowner and the Township are achieved harmoniously with no negative effect to the long-term viability of the subject property or those surrounding it. In the Renewable Energy Overlay District where this special land use is permitted, facilities for the capture, storage, and distribution of renewable energy for commercial purposes.

B. SOLAR AND STORAGE FACILITIES

1) Setbacks. The solar and storage renewable energy facility setback requirements are found in the table below. All associated accessory equipment shall be subject to the same requirements. Setback requirements for all yards may be increased or decreased by the Planning Commission based upon the following considerations:

- The land use and zoning of adjacent properties, with particular attention to residential or other sensitive uses.
- The presence and effectiveness of screening measures such as landscaping, fencing, or natural buffers.
- Topographic conditions or existing vegetation that may reduce visual or noise impacts.
- The orientation and design of the facility, including panel direction and placement of accessory structures.
- Potential glare, noise, or other nuisance impacts on neighboring properties.

| | Renewable Energy Overlay District | | |
|---|---|---|-------------------------|
| Adjacent Properties | Residential Land Uses | Place of Worship or Public Institutional Land Uses | All Other Land Uses |
| Front Yard Setback (adjacent to right-of-way) | 300ft from nearest dwelling unit or 100ft from property line whichever is greater | 300ft from nearest dwelling unit or 100ft from property line whichever is greater | 50ft from property line |
| Side Yard Setback | 300ft from nearest dwelling unit or 100ft from property line whichever is greater | 300ft from nearest dwelling unit or 100ft from property line whichever is greater | 50ft from property line |
| Rear Yard Setback | 300ft from nearest dwelling unit or 100ft from property line whichever is greater | 300ft from nearest dwelling unit or 100ft from property line whichever is greater | 50ft from property line |

In instances where the renewable energy facility is comprised of multiple parcels, these setbacks shall apply to the exterior perimeter of all adjoining parcels. All setback distances are measured from the property line, or nearest point of a dwelling unit, to the closest point of the renewable energy system. Should the nearest component of the renewable energy system be a solar or photovoltaic array, the measurement shall be taken from the array at minimum tilt.

- 2) **Lot Coverage.** The area of the renewable solar energy facility and any associated accessory structures shall not exceed 75% of the square footage of the entire site within the facility boundary. Impervious surfaces for the purpose of calculating lot coverage for renewable solar energy systems include, but are not limited to, mounting pads, footings, concrete, asphalt, or gravel driveways and walkways, and accessory structures.
- 3) **Height.** The height of the renewable solar energy system and any mounts, buildings, accessory structures, and related equipment must not exceed twenty-five (25) feet when orientated at maximum tilt. Lightning rods may exceed twenty-five (25) feet in height, but they must be limited to the height necessary to protect the solar energy system from lightning and clearly shown in site plan proposals.

The height of the renewable storage energy system or any structure constructed to enclose the system shall not exceed thirty (30) feet.

- 4) Screening. Screening is required around the entire facility boundary perimeter to obscure, to the greatest extent possible, the solar or storage renewable energy system from all adjacent properties. Screening standards set forth in Section 28.03.A. shall be applied to all solar and storage renewable energy facilities. Each owner, operator, or maintainer of solar or storage renewable energy facility to which this ordinance applies shall utilize good husbandry techniques with respect to said vegetation, including but not limited to, proper pruning, proper fertilizer, and proper mulching, so that the vegetation will reach maturity as soon as practical and will have maximum density in foliage. Dead or diseased vegetation shall be removed and must be replanted at the next appropriate planting time. An acceptable and reasonable long term landscape maintenance plan must be submitted prior to final approval. The Planning Commission may modify these requirements if it reasonably determines it necessary as it relates to proposed placement of renewable energy systems and adjacent land uses and/or zoning.
- 5) Fencing. The facility boundary perimeter of a solar or storage renewable energy facility shall be completely enclosed by a lock gated perimeter fence at least eight (8) feet in height and in accordance with the other relevant Fencing and Protective Screening language of Section 14.26, 14.27, and 28.08 of the Township Zoning Ordinance. Additional fencing may be required for screening or security purposes in cases where the Planning Commission deems necessary. All fencing must comply with the latest version of the National Electrical Code.
- 6) Glare. Solar renewable energy systems must be placed and oriented such that concentrated solar radiation and/or glare does not project onto roadways and nearby properties. Applicants have the burden of proving any glare produced does not cause annoyance, discomfort, or loss in visual performance and visibility. An analysis by a qualified professional third-party, mutually agreeable by both the Township and applicant, shall be required to determine if glare from the utility-scale solar energy system will be visible from nearby residents and roadways. The analysis shall consider the changing position of the sun throughout the day and year, and its influence on the solar renewable energy system.
- 7) Drainage and Stormwater. Renewable solar and storage energy facilities shall not increase stormwater runoff onto adjacent properties. The application shall include a drainage plan prepared by a registered civil engineer showing how stormwater runoff shall be managed and demonstrating that runoff from the site

shall not cause undue flooding. Any necessary permits from outside agencies for off-site discharge shall be provided. It should also be reasonably demonstrated that maintenance procedures and products will not introduce chemicals or create detrimental impacts to the natural environment, groundwater, and wildlife.

- 8) Noise. The solar energy facility shall not generate a maximum sound in excess of 55 average hourly decibels as modeled at the nearest outer wall of the nearest dwelling located on an adjacent nonparticipating property. Decibel modeling shall use the A-weighted scale as designed by the American National Standards Institute.
- 9) Code Compliance. All renewable storage energy facilities, all dedicated use buildings, and all other buildings or structures that (1) contain or are otherwise associated with a renewable storage energy facility and (2) subject to the Building Code shall be designed, erected, and installed in accordance with all applicable provisions of the Building Code, all applicable state and federal regulations, and industry standards as referenced in the Building Code and the Howell Township Zoning Ordinance.

C. WIND ENERGY CONVERSION SYSTEM (WECS)

- 1) Design Safety Certification. The safety of the design of all WECS structures shall comply with all current applicable State of Michigan guidelines and standards.
- 2) Interference. All WECS structures shall be certified by the manufacturer to minimize or mitigate interference with existing electromagnetic communications, such as radio, telephone, microwave or television signals.
- 3) Setbacks. The distance between a WECS and the nearest property line and/or nearest road right of way shall be at least two and one-tenth (2.1) times the blade tip height for occupied community buildings and residences on nonparticipating properties and one and one-half (1.5) times the blade tip height from residences and other structures on participating properties, nonparticipating property lines, the public right-of-way, and overhead communication and electric transmission (not including utility service lines to individual houses or outbuildings). No part of the WECS structure, including guy wire anchors, may extend closer than ten (10) feet to the owner's property line.

All accessory equipment shall be at least one hundred (100) feet from the nearest property line. Setback requirements for all yards may be increased or decreased by the Planning Commission based upon impacts to existing land uses and/or zoning of adjacent properties.

- 4) Shadow Flicker. Each wind tower is sited such that any occupied community building or nonparticipating residence will not experience more than 30 hours per year of shadow flicker under planned operating conditions as indicated by industry standard computer modeling.
- 5) Height. Each wind tower blade tip does not exceed the height allowed under a Determination of No Hazard to Air Navigation by the Federal Aviation Administration under 14 CFR part 77.
- 6) Lighting. The WECS is equipped with a functioning light-mitigating technology. To allow proper conspicuity of a wind turbine at night during construction, a turbine may be lit with temporary lighting until the permanent lighting configuration, including the light-mitigating technology, is implemented. The Planning Commission may grant a temporary exemption from the requirements of this subparagraph if installation of appropriate light-mitigating technology is not feasible. A request for a temporary exemption must be in writing and state all of the following:
 - i. The purpose of the exemption.
 - ii. The proposed length of the exemption.
 - iii. A description of the light-mitigating technologies submitted to the Federal Aviation Administration.
 - iv. The technical or economic reason a light-mitigating technology is not feasible.
 - v. Any other relevant information requested by the Planning Commission.
- 7) Guy Wires. If an on-site WECS is supported by guy wires, the wires shall be clearly visible to a height of at least six (6) feet above the guy wire anchors.
- 8) Fencing. Facilities shall be completely enclosed by a lock gated perimeter fence at least eight (8) feet in height and in accordance with the other relevant Fencing and Protective Screening language of Section 14.26, 14.27, and 28.08 of the Township Zoning Ordinance. Additional fencing may be required for screening or

security purposes in cases where the Planning Commission deems necessary. All fencing must comply with the latest version of the National Electrical Code.

- 9) Noise. WECS facility shall not generate a maximum sound in excess of 55 average hourly decibels as modeled at the nearest outer wall of the nearest dwelling located on an adjacent nonparticipating property. Decibel modeling shall use the A-weighted scale as designed by the American National Standards Institute.
- 10) Color. Towers and blades shall be a non-reflective neutral color.
- 11) Controls and Brakes. All commercial WECS structures shall be equipped with manual and automatic controls to limit rotation of blades to a speed below the designed limits of the WECS. The Professional Engineer must certify that the rotor and overspeed control design and fabrication conform to applicable design standards. No changes or alterations from certified design shall be permitted unless accompanied by a Professional Engineer's statement of certification.
- 12) Compliance with FAA. It shall be the responsibility of the applicant to obtain the appropriate FAA permits for the WECS structure, or to obtain a determination of no significant impact to air navigation from the FAA.
- 13) Climb Prevention. All commercial WECS structures must be protected by anti-climbing devices.
- 14) Warning Signage. A visible warning sign of High Voltage is required to be placed at the base of all commercial WECS structures. Such signs shall also be located at all points of site ingress and egress.

D. STANDARDS FOR RENEWABLE ENERGY FACILITIES

- 1) Abandonment, Removal, Repowering and/or Maintenance. If a renewable energy facility ceases to perform its intended function (generating electricity) for more than 12 consecutive months, the operator shall remove all associated equipment and facilities no later than 90 days after the end of the 12-month period. Where the removal has not been lawfully completed as required above, and after at least 30 days' written notice, the Township may remove or secure the removal of the renewable energy facility and/or system or if due to abandonment and/or negligence to maintain, the Township shall have the right to enter the site for the

reason of repowering the facility, in cases where repairs or replacements to the renewable energy system components are necessary, in order to properly maintain the system. The Township's actual cost and reasonable administrative charges to be covered by the operator's security bond. Charges may include the procurement of a contractor with the expertise to oversee and execute the entire set of repairs and/or maintenance to restore the site to its original capacity. Any costs incurred by the Township above and beyond the value of the security bond will be the responsibility of the operator.

- 2) Decommissioning. The ground shall be restored to its original condition within 60 days of removal of structures. The restoration will include returning all soil within the facility to its original environmental state of which record must be taken prior to the commencement of construction. Acceptable ground covers include grasses, trees, crops, or other material demonstrated to be characteristic of the surrounding land. All above and below ground materials shall be removed when the renewable energy facility and/or system is decommissioned. All installed landscaping and greenbelts shall be permitted to remain on the site as well as any reusable infrastructure as determined by the Township. These can include service drives, utilities, etc.

Guarantee. A letter of credit, cash deposit, or other security instrument found acceptable to the Township Board shall be posted by the owner(s) and/or operator of the Utility-scale solar energy facility. Such surety shall be equal to one-hundred twenty five (125) percent of the total cost of decommissioning and/or reclamation based on an estimate that shall be presented by the applicant and evaluated and approved by the township. The guarantee shall be increase by a minimum of 3% each year or equal to one-hundred twenty five (125) percent of a new estimate. The cost of decommissioning shall be re-reviewed and submitted to the Township annually to ensure adequate funds are allocated for decommissioning. The developer shall provide a new estimate at least every five (5) years to assess whether the guarantee should be appropriately adjusted to reflect the current decommissioning cost.

- 3) The applicant shall engage a certified professional engineer acceptable to the Township to estimate the total cost of decommissioning all structures in the facility in accordance with the requirements of this Ordinance, including reclamation to the original site conditions.

- 4) A security bond, if utilized, shall be posted and maintained with a bonding company licensed in the State of Michigan or a Federal or State-chartered lending institution acceptable to the Township.
- 5) Any bonding company or lending institution shall provide the Township with 90 days' notice of the expiration of the security bond. Lapse of a valid security bond is grounds for the actions defined below.
- 6) If at any time during the operation of the renewable energy facility, prior to, during, or after the sale or transfer of ownership and/or operation of the facility the security instrument is not maintained, the Township may take any action permitted by law, to revoke the special land use, order a cessation of operations, and order removal of the structure and reclamation of the site.
- 7) In the event of sale or transfer of ownership and/or operation of the renewable energy facility, the security instrument shall be maintained throughout the entirety of the process. The security instrument shall be maintained until decommissioning and removal has been completed to the satisfaction of the Township.
- 8) Provision of Manufacturers' Safety Data Sheet(s). The applicant must submit manufacturer safety data sheets for all proposed equipment. If approval is granted, applicant must provide the Township with finalized manufacturer safety data sheets both to be kept on record with the Township and on-site in a clearly marked waterproof container. Applicants must provide updated manufacturer data sheets whenever equipment is modified so that all records are up to date. Documentation shall include the type and quantity of all materials used in the operation of all equipment.
- 9) Fire Response. All electrical equipment associated with and necessary for the operations of the facility shall comply with all local and state codes. All design and installation work shall comply with all applicable provisions of the National Electrical Code (NEC).
- 10) The applicant shall provide training, at no cost to the Township, before, approximately halfway through and after construction for all emergency service departments serving the Township. Including all other requirements for permits, all three (3) trainings must have been completed to receive final zoning permits.

Trainings upon the completion and during the operation of the renewable energy facility will be conducted upon the request of all emergency service departments but not exceed four (4) trainings per any given twelve (12) month period.

- 11) The applicant shall provide a set of procedures and protocols for managing risk or fire and for responding in the event of an emergency at the facility. It will be the burden of the applicant to ensure said procedures and protocols provided to the various emergency service departments is the most up to date version.
- 12) Special equipment that may be required to ensure the safety of fire and rescue personnel when responding to an emergency at the facility shall be provided at no cost to the Township prior to commencement of construction of the facility. The authority to determine whether, and what type of, special equipment is needed shall be with the fire and/or rescue department(s) serving the Township.
- 13) The applicant shall provide for and maintain reasonable means of access for emergency services. Lock boxes and keys shall be provided at locked entrances for emergency personnel access. If any adjoining properties are damaged as a result of ingress/egress to the facility, the applicant shall remedy all damages in full.
- 14) Anticipated Construction Schedule. Applicant must provide an anticipated construction schedule which highlights when potentially hazardous materials will be brought on-site and installed.
- 15) Permits. Applicant must coordinate with all applicable agencies for required permitting including but not limited to the Livingston County Road Commission and/or Michigan Department of Transportation (MDOT) Livingston County Drain Commission, Environmental Protection Agency (EPA), Michigan Department of Environment, Great Lakes and Energy (EGLE), etc.
- 16) Photographic Record. Applicant must submit a complete set of photos and video of the entire development area prior to construction. This will be used as historical documentation for the township to secure and refer to if/when decommissioning and redevelopment activities take place.
- 17) Site Security. A security plan shall be submitted with the special land use application and site plan application for a renewable energy facility. Additional

fees may be required to cover specialized reviews of these plans and or the Township's building official's inspection of the site. The security plan shall:

- i. Show all points of secured access as well as the means for limiting access to authorized personnel only.
- ii. Along with other signage requirements in this Ordinance and the Township Sign Ordinance, install and maintain warning signage on all dangerous equipment and facility entrances.
- iii. Provide a schedule outlining the implementation and maintenance of site security as well as routine inspections to ensure site security infrastructure is intact and operating as intended.

18) Indemnity. Applicant will indemnify and hold the Township harmless from any costs or liability arising from the approval, installation, construction, maintenance, use, repair, or removal of the Utility-scale solar energy facility and/or system, which is subject to the Township's review and approval.

19) Ownership Changes: If the owner of the Utility-scale solar energy facility changes or the owner of the property changes, the special use permit shall remain in effect, provided that the successor owner or operator assumes in writing all of the obligations of the special use permit, site plan approval, and decommissioning responsibilities. A new owner or operator of the Utility-scale solar energy facility shall notify the Township of such change in ownership or operator within 30 days of the ownership change. A new owner or operator must provide such notification to the Township in writing. The special use permit and all other local approvals for the Utility-scale solar energy facility may be determined by the Township Board at a public meeting to be void if a new owner or operator fails to provide written notification to the Township in the required timeframe, unless the new owner or operator provides a reasonable explanation for any delay. Reinstatement of a void special use permit will be subject to the same review and approval processes for new applications under this Ordinance.

20) Location: Renewable Energy Facilities shall be permitted only within the Renewable Energy Overlay District as designated in Section 30.01. This requirement does not apply to Accessory Solar Energy Systems, as outlined in Section 16.15(G).

- E. RENEWABLE ENERGY FACILITIES SITE PLAN REQUIREMENTS. Applications for all renewable energy facilities must be accompanied by detailed site plans, drawn to scale and dimensioned and certified by a registered engineer licensed in the State of Michigan. All site plans shall conform to the requirements listed in Article XX. In addition they shall display the following information:
- 1) Horizontal and vertical to scale drawings (elevations) with dimensions that show the location of the proposed solar array(s), wind turbines and energy storage facilities, buildings, structures, electrical tie lines and transmission lines, security fencing and all above ground structures and utilities on the property.
 - 2) Location of all existing and proposed overhead and underground electrical transmission or distribution lines within the renewable energy facility and within one hundred (100) feet of all facility boundary property lines. Use of above-ground lines shall be kept to a minimum.
 - 3) Planned security measures to prevent unauthorized trespass and access during the construction, operation, removal, maintenance or repair of the renewable energy facility. In no instance shall barbwire be used.
 - 4) A written description of the maintenance program to be used for the renewable energy facility, including decommissioning and removal. The description shall include maintenance schedules, types of maintenance to be performed, and decommissioning and removal procedures and schedules if the renewable energy facility is decommissioned. Description should include the average useful life of all primary renewable energy system equipment and components being proposed.
 - 5) Additional detail(s) and information as required by the Planning Commission and/or Township Board.
- F. RENEWABLE ENERGY FACILITIES REQUIRED STUDIES. All studies and analyses listed below may be required for renewable energy facilities as determined appropriate by the Planning Commission based on the size, location, and potential impacts of the proposed project. The Commission may waive or modify these requirements if it determines that sufficient information is otherwise available or the study is not necessary to ensure public health, safety, and welfare.

- 1) Stormwater Study. A stormwater plan prepared by a qualified professional shall be submitted in accordance with Part 31 of the Michigan Natural Resources and Environmental Protection Act (NREPA), and any applicable Township stormwater regulations. The analysis should address how site design, including layout, slope, and panel spacing, affects stormwater runoff and infiltration. Engineered stormwater solutions may be required where natural infiltration is not feasible.
- 2) Wildlife Impact Analysis. For sites with potential sensitive habitat or wildlife concerns, the Planning Commission may require the applicant to provide a wildlife and habitat assessment. This assessment should include a review of known species and habitats using available data from the Michigan Department of Natural Resources and U.S. Fish and Wildlife Service. Where applicable, the applicant shall implement best management practices and comply with relevant State and Federal endangered species protection laws.
- 3) Natural Feature Preservation Study. Applicants shall identify and preserve, to the extent feasible, significant natural features such as mature trees, wetlands, and natural grade. Tree clearing should be minimized, especially in setback areas. A tree inventory may be required for trees 6" DBH or greater if significant clearing is proposed.
- 4) Environmental Impact Analysis. The applicant shall provide a summary identifying how the proposed facility complies with relevant parts of the Michigan Natural Resources and Environmental Protection Act (Act 451 of 1994), including but not limited to:
 - i. Michigan Natural Resources and Environmental Protection Act (Act 451 of 1994, MCL 324.101 et seq.) including but not limited to:
 - ii. Part 31 Water Resources Protection (MCL seq.),
 - iii. Part 91 Soil Erosion and Sedimentation Control (MCL 324.9101 et seq.),
 - iv. Part 301 Inland Lakes and Streams (MCL 324.30101 et seq.),
 - v. Part 303 Wetlands (MCL 324.30301 et seq.),
 - vi. Part 323 Shoreland Protection and Management (MCL 324.32301 et seq.),
 - vii. Part 325 Great Lakes Submerged Lands (MCL 324.32501 et seq.),

- viii. Part 353 Sand Dunes Protection and Management (MCL 324.35301 et seq.).
- ix. The Township may request documentation from relevant regulatory agencies to confirm compliance with required permits and standards.

G. ACCESSORY SOLAR ENERGY SYSTEMS

- 1) Intent. Accessory Solar Energy Systems including all solar technologies and batteries for energy storage generated by the solar technologies are hereby permitted as accessory uses and subject to approval or a certificate of Zoning Compliance per Section 21.04 of this Ordinance. Typically installed at individual residential or commercial locations, use is exclusively for private purposes, and not for any commercial resale of any energy, except for the sale or credit of surplus electrical energy back to the electrical grid. Any accessory solar energy system shall be designed and size to provide for the energy needs of the principal use. The following requirements shall apply to all Accessory Solar Energy Systems for private use.
- 2) Building-Mounted Solar Energy Requirements. Any building-mounted solar energy system shall be a permitted accessory use by right in all zoning districts, subject to the following requirements:
 - i. Solar energy systems that are mounted on the roof of a building shall not project more than the highest point on the roof. Additionally, they are not to exceed the maximum building height limitation for the zoning district in which it is located and shall not project beyond the eaves of the roof.
 - ii. Solar energy systems that are wall-mounted shall not exceed the height of the building wall to which they are attached.
 - iii. Solar energy systems that are mounted on the roof or on a wall of a building, shall not be angled in such a way that glare from the surface is directed at a neighboring residential structure.

- iv. The design of accessory solar energy system, and the installation and use thereof, shall conform to the State Construction Code and all other applicable building, electrical, and fire codes.
- 3) Ground-Mounted Solar Energy System Requirements. A ground-mounted solar energy system is considered an accessory structure and may be permitted as an accessory use by right in all zoning districts, subject to the following requirements:
 - i. Ground-mounted solar energy systems may be located in the rear yard and the side yard, but must meet the required side and rear yard setbacks of the district in which they are located. Ground-mounted solar energy collectors may be located within the front yard if the following criteria are met:
 - a. The parcel is located in AR district.
 - b. The principal building is located at a minimum of 200% of the required front yard setback.
 - c. Ground-mounted solar energy systems shall meet the front yard setback.
 - d. Vegetative screening materials must meet the requirements of Section 28.04.
 - ii. Ground-mounted solar energy systems shall not exceed the height of fifteen (15) feet, measured from the ground at the base of such equipment at full tilt.
 - iii. The ground-mounted solar energy systems shall not be angled in such a way that glare from the surface is directed at a neighboring residential structure.
 - iv. The design of ground-mounted solar energy systems, and the installation and use thereof, shall conform to the State Construction Code and all other applicable building, electrical, and fire codes.
 - v. The lot coverage area, as measured from edge to edge, at minimum tilt, horizontally with the ground, of the solar array shall not exceed 50% of the square footage of the primary building of the property and shall

comply with the maximum ground floor coverage referred to in Section 3.17.

Section 30.01 PURPOSE:

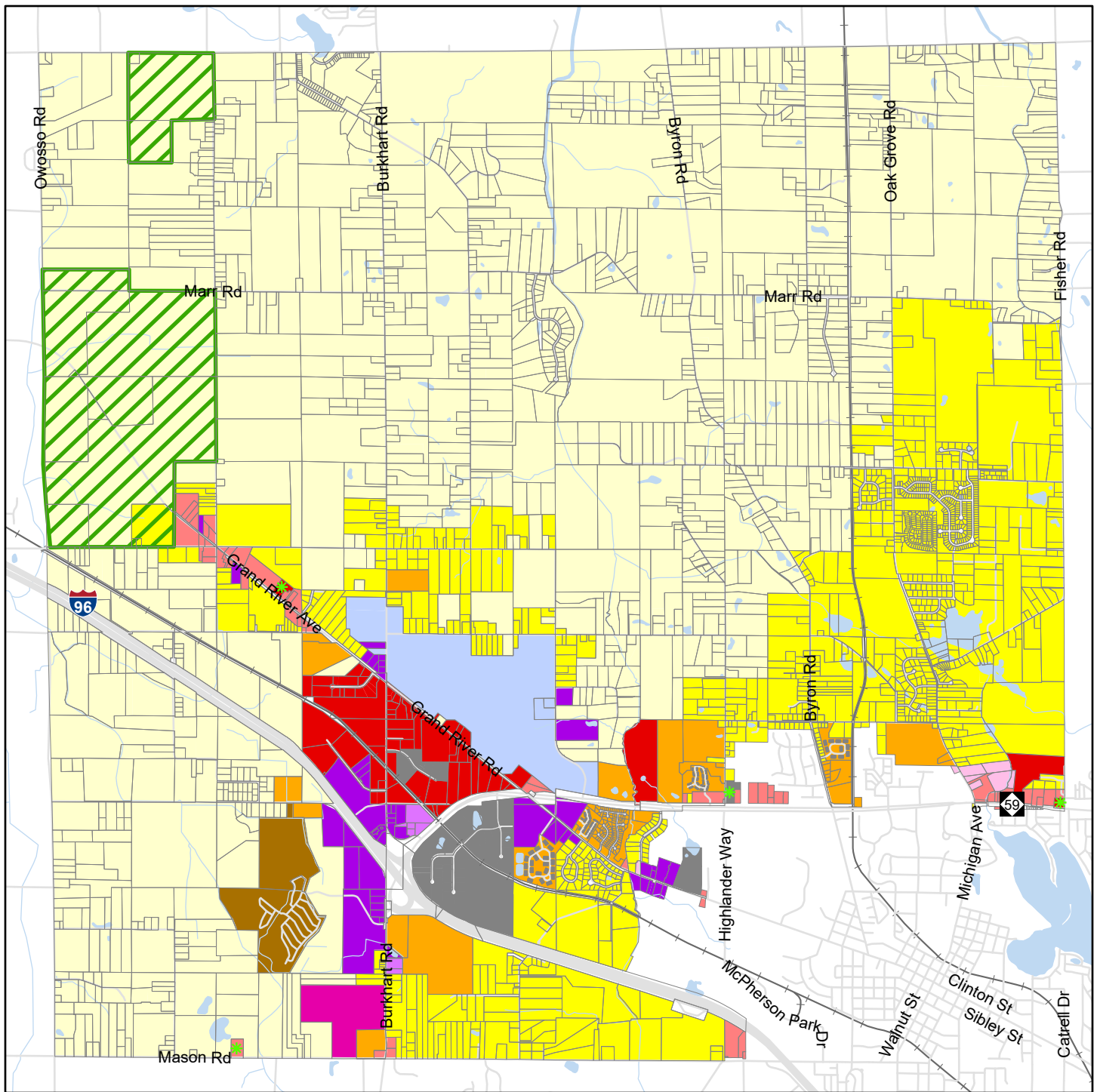
A. General Purpose Statement















It is the purpose of this Section to establish Overlay Districts that provide additional land use standards, development guidelines, or use permissions tailored to specific geographic areas or planning objectives within Howell Township. Overlay Districts are intended to address unique community goals, environmental considerations, infrastructure needs, or economic development opportunities, while maintaining compatibility with the underlying zoning and promoting the health, safety, and general welfare of the Township. These districts are designed to ensure coordinated and context-sensitive development that supports the long-term vision of the Master Plan and other adopted policies.

B. Specific Purpose Statements

1. Renewable Energy Facilities Overlay District.

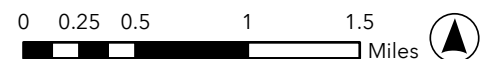
It is the purpose of the Renewable Energy Overlay District to provide appropriate locations for Renewable Energy Facilities. This district is intended to ensure such facilities are developed in a location that is compatible with surrounding land uses, minimizes adverse impacts on the community and environment, and supports the safe, efficient production of renewable energy in accordance with state law. The Renewable Energy Facilities Overlay District shall be incorporated into the official Zoning Map and shall be adopted in the manner identified in Section 3.02.



- | | |
|--|---|
|  Renewable Energy Overlay |  NSC - Neighborhood Service Commercial |
|  PUD - Planned Unit Development |  HSC - Highway Service Commercial |
|  AR - Agricultural Residential |  RSC - Regional Service Commercial |
|  SFR - Single Family Residential |  IFZ - Industrial Flex Zone |
|  MFR - Multiple Family Residential |  I - Industrial |
|  MHD - Manufactured Housing District |  RT - Research & Technology |
|  OS - Office Service |  Conditional Rezoning |

Renewable Energy Overlay District

Howell Township
Livingston County, Michigan



This map is for reference only. Data layers that appear on this map may not be accurate. The information is provided with the understanding that the conclusions drawn from such information are solely the responsibility of the user. Any assumption of legal status of this data is hereby disclaimed.

Data: Livingston County, Howell Township
Prepared by: Carlisle/Wortman Associates, Inc.
Date: July 2025





Carlisle | Wortman
ASSOCIATES, INC.

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

TO: Howell Township Planning Commission

FROM: Paul Montagno, AICP, Principal
Grayson Moore, Township Planner

DATE: August 20, 2025

RE: Proposed Zoning Ordinance Amendments for Portable Storage Containers

This memo addresses concerns raised at the July 22, 2025, Planning Commission meeting regarding proposed zoning regulations—specifically those related to accessory structures 200 square feet or less, as well as portable storage containers and cargo containers.

The previously adopted ordinance introduced regulations for cargo containers and portable storage units within residential districts. In response to community feedback and Planning Commission discussion, the proposed amendments clarify requirements for accessory structures 200 square feet or less and update the language governing the use of cargo containers in the Industrial Flex and Industrial Districts.


Please note the following modifications:

- Cargo containers being used to store or ship goods or building materials in the IFZ & I Districts in relation to a shipping facility shall not be subject to limitations on the number of containers permitted.
- Clarification has been added to exclude cargo containers from residential accessory building regulations in Section 14.07.
- Accessory structures 200 square feet or less are required to be located within a rear or side yard.

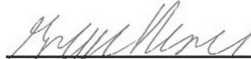
We look forward to discussing these proposed Zoning Ordinance amendments at your next Planning Commission meeting.

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

Sincerely,



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



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

SECTION 1 MODIFY SECTION 2.02, DEFINITIONS, TO MODIFY CARGO CONTAINERS DEFINITION

Cargo.Containers;A primarily metal weather-resistant container designed to store or ship goods or building materials. Such containers include reusable steel boxes, freight and bulk shipping containers, and those with similar qualities.

SECTION 2 MODIFY SECTION 4.04, PERMITTED ACCESSORY USES, TO UPDATE CARGO CONTAINER LANGUAGE AS PERMITTED ACCESSORY USES WITHIN THE AGRICULTURAL RESIDENTIAL DISTRICT

SECTION 4.04 PERMITTED ACCESSORY USES.

- A. Buildings and structures customarily incidental to the operation of an agricultural enterprise.
- B. Accessory buildings and structures customarily incidental to single family residential.
- C. Signs related to the permitted agricultural enterprise, provided that all such signs shall conform to the requirements of this Ordinance.
- D. Household Pets
- E. Cargo Containers, as an accessory structure, subject to Section 14.07

SECTION 3 MODIFY SECTION 5.05, PERMITTED CONDITIONAL ACCESSORY USES, TO INCLUDE CONDITIONS FOR CARGO CONTAINERS AS PERMITTED CONDITIONAL ACCESSORY USES WITHIN THE RESEARCH AND TECHNOLOGY DISTRICT

Section 5.05 PERMITTED CONDITIONAL ACCESSORY USES

The following accessory uses are permitted when they are an integral part of the permitted principal use or permitted principal special use and are located within the building or structure housing the permitted use or permitted principal special use or are included as a separate accessory use structure on the site plan upon the site upon which the permitted principal use or permitted principal use or permitted special use are located:

- A. Cafeterias
- B. Medical and health care facilities
- C. Office facilities
- D. Warehouses and storage facilities
- E. Recreation and physical fitness facilities
- F. Banking facilities
- G. Education, library and training facilities
- H. Research, experimentation and development facilities
- I. Truck, other vehicular and equipment maintenance and repair service

J. Storage Facilities

K. Sales display facilities and areas

E. Cargo Containers, as an accessory structure, subject to Section 14.07

1. Any site containing three (3) or more cargo containers shall ensure that all containers are of a similar, neutral color such as beige, gray, brown, tan, or muted green.

SECTION 4 MODIFY SECTION 8.05, PERMITTED ACCESSORY USES WITH CONDITIONS, TO INCLUDE CONDITIONS FOR CARGO CONTAINERS AS PERMITTED ACCESSORY USES WITH CONDITIONS WITHIN THE OFFICE SERVICE DISTRICT

Section 8.05 PERMITTED ACCESSORY USES WITH CONDITIONS.

1. Private swimming pools for use as a part of an Office District used in conformance with the provisions of Section 14.18.
2. Cargo Containers, as an accessory structure, subject to Section 14.07.I
 - a. No more than one cargo container is permitted per acre, with a maximum of two (2) containers per parcel.

SECTION 5 MODIFY SECTION 9.05, PERMITTED ACCESSORY USES WITH CONDITIONS, TO INCLUDE CARGO CONTAINERS AS PERMITTED ACCESSORY USES WITH CONDITIONS WITHIN THE NEIGHBORHOOD SERVICE COMMERCIAL DISTRICT

Section 9.06 DIMENSIONAL REQUIREMENTS EXCEPT AS OTHERWISE SPECIFIED IN THIS ORDINANCE.

Section 9.05 PERMITTED ACCESSORY USES WITH CONDITIONS.

1. Cargo Containers as an accessory structure, subject to Section 14.07.I
 - a. No more than one cargo container is permitted per acre, with a maximum of two containers per parcel.

SECTION 6 MODIFY SECTION 10.04, PERMITTED ACCESSORY USES, TO REMOVE CARGO CONTAINERS AS PERMITTED ACCESSORY USES WITHIN THE REGIONAL SERVICE COMMERCIAL DISTRICT

Section 10.04 PERMITTED ACCESSORY USES.

A. Normal accessory uses to all “Permitted Principal Uses.”

B. Normal accessory uses to all “Permitted Principal Special Uses.” See Section 14.34. 14.

SECTION 7 MODIFY SECTION 10.05, PERMITTED ACCESSORY USES WITH CONDITIONS, TO INCLUDE CARGO CONTAINERS AS PERMITTED ACCESSORY USES WITH CONDITIONS WITHIN THE REGIONAL SERVICE COMMERCIAL DISTRICT

Section 10.06 DIMENSIONAL REQUIREMENTS, EXCEPT AS OTHERWISE SPECIFIED IN THIS ORDINANCE.

Section 10.05 PERMITTED ACCESSORY USES WITH CONDITIONS.

- A. Cargo Containers, as an accessory structure, subject to Section 14.07.I
 - 1. No more than one cargo container is permitted per acre, with a maximum of two (2) containers per parcel.

SECTION 8 MODIFY SECTION 11.05, PERMITTED ACCESSORY USES WITH CONDITIONS, TO INCLUDE CARGO CONTAINERS AS PERMITTED ACCESSORY USES WITH CONDITIONS WITHIN THE HIGHWAY SERVICE COMMERCIAL DISTRICT

Section 11.05 PERMITTED ACCESSORY USES WITH CONDITIONS.

- A. Swimming pools for use as a part of a Highway Service Commercial District. Use in conformance with the provisions of Section 14.18.
- B. Cargo Containers, as an accessory structure, subject to Section 14.07.
 - 1. Any site containing three (3) or more cargo containers shall ensure that all containers are of a similar, neutral color such as beige, gray, brown, tan, or muted green.

SECTION 9 MODIFY SECTION 12.04, PERMITTED ACCESSORY USES, TO REMOVE CARGO CONTAINERS AS PERMITTED ACCESSORY USES WITHIN THE INDUSTRIAL FLEX ZONE

Section 12.04 PERMITTED ACCESSORY USES.

- A. All normal accessory uses to all “Permitted Principal Uses” and “Permitted Principal Special Uses” including:
 - 1. Restaurants.
 - 2. Cafeterias.
 - 3. Medical and health care facilities.
 - 4. Office facilities.
 - 5. Warehouse and storage facilities.
 - 6. Physical fitness facilities.
 - 7. Work clothing sales and service facilities.
 - 8. Banking facilities.
 - 9. Education, library and training facilities.
 - 10. Research and experimentation facilities.
 - 11. Truck or other vehicular and equipment service maintenance, repair and storage facilities conducted completely within a building or structure.
 - 12. Indoor sales display areas.
 - 13. See Section 14.34.

SECTION 10 MODIFY SECTION 12.05, PERMITTED ACCESSORY USES WITH CONDITIONS, TO INCLUDE CARGO CONTAINERS AS PERMITTED ACCESSORY USES WITH CONDITIONS WITHIN THE INDUSTRIAL FLEX ZONE

Section 12.06 REQUIRED CONDITIONS OF ALL DISTRICT USES.

Section 12.07 DIMENSIONAL REQUIREMENTS, EXCEPT AS OTHERWISE SPECIFIED IN THIS ORDINANCE.

Section 12.05 PERMITTED ACCESSORY USES WITH CONDITIONS.

- A. Cargo Containers, as an accessory structure, subject to Section 14.07.
1. The Planning Commission may approve an increased number of cargo containers if all the following conditions are met:
 - a. The additional containers do not adversely impact adjacent properties or the character of the district.
 - b. The primary use of the parcel is an industrial, warehousing, distribution, or a use of a similar manner where additional on-site storage is demonstrably necessary to support the principal operations.
 - c. Containers will not occupy any required parking spaces.
 - d. All containers are appropriately screened and do not obstruct access or circulation.
 2. Any site containing more than five (5) cargo containers shall ensure that all containers are of a similar, neutral color such as a beige, gray, brown, tan, or muted green.
 3. Cargo containers may be permitted in the absence of a principal building when the primary use of the lot is outdoor storage or other use where the storage function is integral to the principal use.
 4. Cargo containers being used to store or ship goods or building materials associated with a ~~storage or~~ shipping facility shall not be subject to limitations on the number of containers permitted.

SECTION 11 MODIFY SECTION 13.05, PERMITTED ACCESSORY USES WITH CONDITIONS, TO INCLUDE CARGO CONTAINERS AS PERMITTED ACCESSORY USES WITH CONDITIONS WITHIN THE INDUSTRIAL DISTRICT

Section 13.05 PERMITTED ACCESSORY USES WITH CONDITIONS.

The following uses are permitted when they are an integral part of the building or structure or are included as a part of the site development upon which the principal use is located:

- 1) Restaurants
- 2) Medical and health care facilities
- 3) Office facilities
- 4) Warehouse and storage facilities
- 5) Recreation and physical fitness facilities
- 6) Work-clothing sales and service facilities
- 7) Banking facilities
- 8) Education, library and training facilities
- 9) Research and experimentation facilities
- 10) Truck and equipment service, maintenance, repair and storage facilities

11) Sales display facilities and areas

12) See Section 14.34

13) Cargo Containers as an accessory structure, subject to Section 14.07

- a. The Planning Commission may approve an increased number of cargo containers if all the following conditions are met:
 - i. The primary use of the parcel is industrial, warehousing, distribution, or use of a similar manner.
 - ii. The containers are able to be arranged in a safe, orderly manner and do not interfere with emergency access, traffic flow, or required parking.
 - iii. All containers are appropriately screened and do not obstruct access or circulation.
- b. Any site containing more than five (5) cargo containers shall ensure that all containers are of a similar, neutral color such as a beige, gray, brown, tan, or muted green.
- c. Cargo containers may be permitted in the absence of a principal building when the primary use of the lot is outdoor storage or another use where the storage function is integral to the principal use.
- d. All cargo containers must comply with the additional requirements outlined in Section 14.07.I
- e. Cargo containers being used to store or ship goods or building materials associated with a ~~storage or~~ shipping facility, shall not be subject to limitations on the number of containers permitted.

SECTION 12 MODIFY SECTION 14.07 ACCESSORY BUILDING PROVISIONS, TO UPDATE CARGO CONTAINER PROVISIONS

Section 14.07 ACCESSORY BUILDING PROVISIONS.

Accessory buildings, except as otherwise permitted in this Ordinance, shall be subject to the following regulations:

A. Residential accessory building or structures, ~~not including cargo containers~~, having two-hundred (200) square feet or less of internal floor area, which is used for any purpose other than the housing of humans, but is primarily to be use for the housing of non human purpose such as pets, yard equipment, yard maintenance supplies, tools, toys, including motorized or non motorized bicycles and types of household equipment, and which -structures do not have to meet the requirements of the Livingston County Construction Code and will not be built on a structural foundation as required in the Construction Code for other types of buildings shall be excluded from the requirements of this ordinance except for the following minimum standards:

1. The applicant shall obtain a zoning permit.
2. The structure shall be set back a minimum of 3 feet from all property lines.
3. The structure shall be set back a minimum of 5 feet from the principal building.

4. The structure shall be located within a rear or side yard.

B. Detached accessory buildings and structures shall be located entirely in the rear yard outside of the side and rear setback with the following exceptions:

1. Said building or structure is being constructed pursuant to a Special Use Permit, and in that case, the Township Board after receiving the recommendation of the Planning Commission may authorize the location of the accessory building in any required yard.
2. For accessory buildings or structures to a residential use, if the primary residence is situated in the rear portion of a parcel over 2 acres, an accessory buildings or structure may be in the front yard if it:
 - a. Is setback at least 100 feet from the edge of the road right-of-way.
 - b. Meets the required side yard setback.
 - c. Is designed to be architecturally compatible with the principal building or structure, or screening that provides 80% opacity is provided between the buildings or structure and immediately adjacent neighboring properties and the road.
 - d. Has a roof overhang or eave of not less than twelve (12) inches on all sides, or alternatively with windowsills or roof drainage systems concentrating roof drainage at collection points along the sides of the building or structure.
 - e. In no instance shall an accessory building or structure be located within a dedicated easement right-of-way.

C. Accessory buildings located on lots and parcels in all Zoning Districts shall be subject to the following regulations:

| LOT OR PARCEL AREA REGULATION | REGULATION | MAXIMUM SQUARE FOOTAGE* |
|----------------------------------|---|----------------------------|
| 12,000 sq. ft. to 0.9 acre | 4% of lot area | 800 sq. ft. |
| 1 acre to 1.9 acres | 4% of lot area | 2000 sq. ft. |
| 2 acres to under 19.9 acres | 4% of lot area, except that commercial agricultural farm operations shall be excluded from this regulation | 3000 sq ft. |
| 20 acres and above | Subject to Max lot coverage | No limit |

D. No detached accessory buildings or structures – shall be located closer than ten (10) feet to any main building.

E. No detached accessory building or structure in AR, SFR, MFR, NSC, OS Districts shall exceed one (1) story or twenty (20) feet in height. Accessory buildings or structures in all other districts may be constructed to equal the permitted maximum height in said districts. Height shall be measured in accordance with Article II Definition 24.

F. When accessory buildings or structures are located on a corner lot, they shall not be located in any front yard or side yard, unless it is determined by the Zoning Administrator that there is insufficient rear yard in which to locate them, in which case they may be permitted in the side yard so long as the following criteria are met:

1. Insufficient rear yard shall mean there are natural features such as steep slopes, wetlands or that the location of a well or septic field would preclude the placement of such accessory building or structure.
2. **Front Yard:** The accessory building or structure shall not encroach into the front yard
3. **Side Yard Setback:** The accessory building or structure shall not encroach into the required side yard setback.
4. **Height Limitation:** The height of the building or structure must not exceed 15 feet when located in the front or side yard.
5. **Sight Lines at Intersections:** The accessory building or structure must not fall within a 15-foot visibility triangle at the corner of the lot.

G. In no instance shall an accessory building or structure be allowed until there is a principal building or structure located on the lot or parcel of land.

H. No accessory building or structure shall be used as a dwelling, lodging or sleeping quarters for human beings, except as otherwise permitted in this Ordinance.

I. Cargo Container standards.

1. The exterior appearance of all cargo containers shall be maintained in a clean and structurally sound condition, free from any visible rust, corrosion, holes, or other signs of deterioration that could compromise the container's appearance or structural integrity.
2. Cargo containers shall be completely screened from view of abutting properties and/or rights-of-ways by a fence or vegetative screening that meets the requirements of Section 14.26 Fences and 28.03 Specific Landscaping Requirements for Zoning Districts.
3. Cargo containers shall be subject to the requirements for Intermodal Shipping Containers in the International Building Code.
4. No plumbing or electricity may be connected to a cargo container.
5. No livestock or pets may be housed in a cargo container.
6. Cargo containers shall not be used to store hazardous materials, as defined by the Michigan Fire Prevention Code, 1941 PA 107, MCL 29.1 *et seq.*
7. A cargo container shall not be permitted in the front yard.
8. Cargo containers to be used as accessory structures on a parcel that is not used or zoned for residential shall abide by accessory building regulations in 14.07.C.

9. Additional standards for Cargo Containers to be used as an accessory building or structure to a residential use.

- i. Containers shall not be stacked above the height of a single container.
- ii. No writing, advertising, or graphics are permitted on the exterior of the container.
- iii. No more than one cargo container is permitted per acre, with a maximum of two containers per parcel. This limit does not apply to containers located in the Agricultural Residential Zoning District when they are used in a manner consistent with Generally Accepted Management Practices under the Michigan Right to Farm Act.

RECEIVED

JUN 12 2025

HOWELL TOWNSHIP

HOWELL TOWNSHIP

Application for Site Plan Review

3525 Byron Road Howell, MI 48855

Phone: 517-546-2817 ext. 108

Email: inspector@howelltownshipmi.org

File # _____

Parcel ID #: 4706- 21 - 100 - 050

Date 06/03/25

Applicant Name Ghraib Real Estate Holding #2, LLC Applicant Address 2820 N. Burkhardt Rd., Howell, MI 48855

Phone [REDACTED] Fax [REDACTED] Email [REDACTED]

Property Owner Name same

Phone _____ Fax _____ Email _____

Please list all recipients to receive information and/or reports:

Name: Lapham Associates - Scott Bell, AICP Email [REDACTED]

Name: _____ Email _____

Name: _____ Email _____

Location of Property Burkhardt Road Current Zoning Classification MFR

Existing Use vacant Proposed Use residential

Check One:

☒ Preliminary Site Plan Review (20.06)

☐ Final Site Plan Review (20.07)

☐ Temporary Use (14.34)

☐ Commercial/Industrial Development

☐ Subdivision/Site Plan Condo

☐ Multi-Family/Condo

☐ Planned Unit Development (PUD) Type: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

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

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

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

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

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

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

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

Nidhal Ghraib

Owner Signature

Nidhal Ghraib

Print Name

6/13/25

Date

Subscribed and sworn to before me this 3rd day of June, 2025.

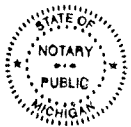
Deborah K. Wagner

Notary Public

Oakland

County, Michigan

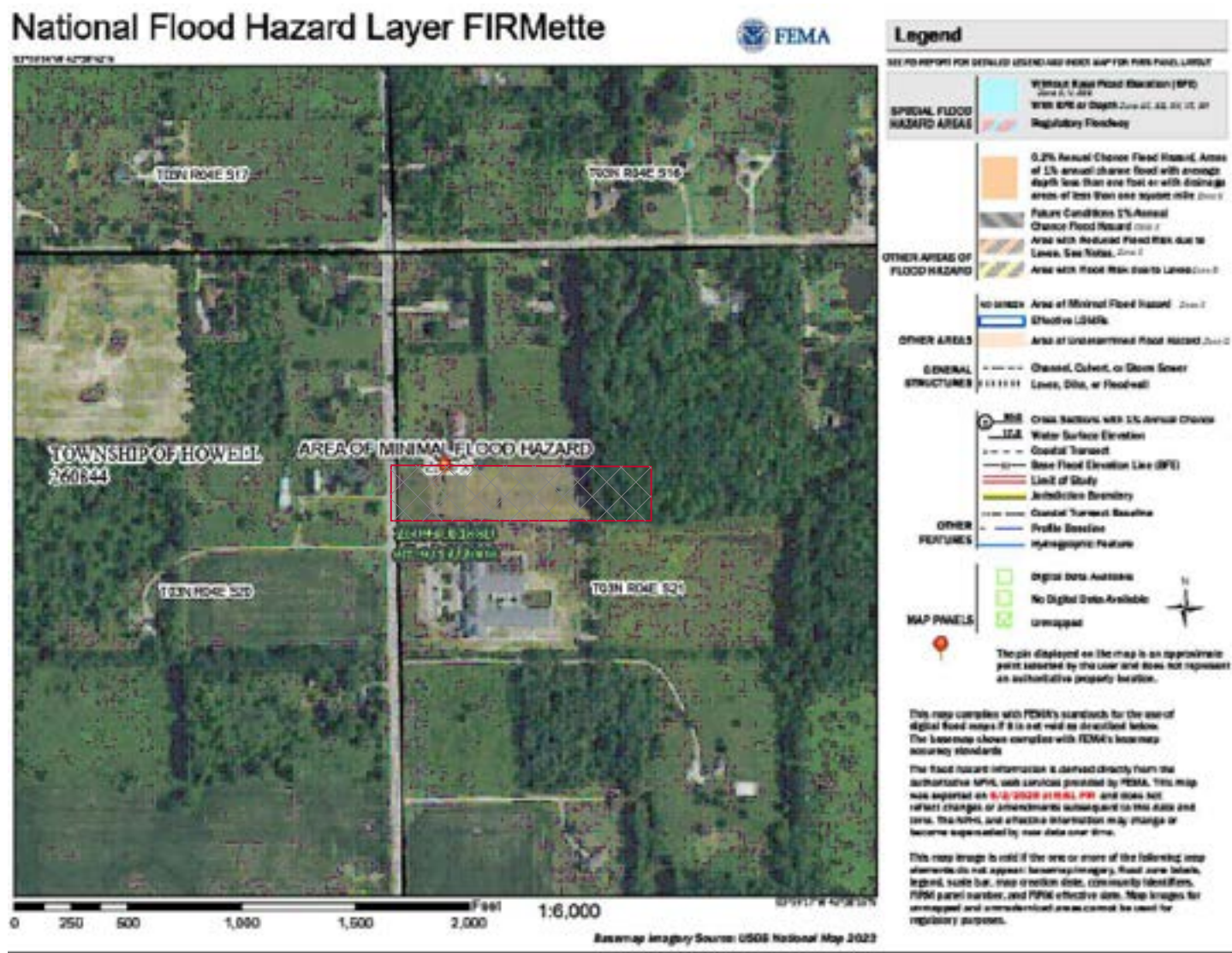
My Commission Expires: May 4, 2029.



DEBORAH K. WAGNER
My Commission Expires
May 4, 2029
County of Oakland
Acting in the County of Oakland

1. **SOIL EROSION:** The contractor shall submit a detailed Soil Erosion and Sedimentation Control plan and obtain an Act 451 Part 91, Soil Erosion and Sedimentation Control permit. This includes the payment of fees and the providing of necessary bonds. **No earth changes or excavation shall be started prior to the issuance of this permit.** The contractor shall protect all existing and proposed storm sewer facilities on and adjacent to the site during excavation and construction. All sediment shall be contained on site. Any silt in county drains, storm sewer, culverts, etc. as a result of this project, shall be removed by the contractor at the cost of the CONTRACTOR.
2. **FLOOD PLAIN OR WETLAND CONSTRUCTION:** If required, the developer shall apply to the Michigan Department of Environmental Quality for a permit for the alteration and/or occupation of a flood plain or floodway, as required under PA 451. Evidence of this permit may be required prior to plan approval by Howell Township.
3. **NPDES STORM WATER DISCHARGE PERMIT:** If required the owner of the property shall obtain a NPDES Storm Water Discharge permit for construction activities from MDEQ as required under Public Act 451. The notice of coverage form shall be submitted through Commerce Township with the Soil Erosion Control permit application. All MDEQ fees shall accompany the Notice of Coverage.
4. **LIVINGSTON COUNTY ROAD COMMISSION PERMIT:** If required, the contractor shall obtain a permit from the Livingston County Road Commission to perform work within the Livingston County Road Commission Right-of-Way. All fees for the permit, bonds and insurances are the responsibility of the contractor.
5. **MUNICIPALITY SANITARY SEWER AND WATER PERMIT:** Prior to the issuance of a building permit by the local municipality, the developer shall be required to obtain a sanitary sewer and/or water tap-in permit from the local municipality.
6. **STATE CONSTRUCTION PERMITS:** If required, the watermain construction permit from the Michigan Department of Environmental Quality shall be submitted to the MDEQ after approval of Howell Township. Construction shall not begin until this state permit is issued.
7. **Utility Warning** - Underground locations as shown on the plans were obtained from utility owners, and were not field located. A minimum of three (3) working days prior to beginning construction, the contractor shall notify "MISS DIG" (800-482-7171) and have all underground utilities staked before any work may begin. The contractor shall be responsible for the protection and/or relocation of all utilities that may interfere with construction. Three (3) Working Days Before You DIG - Call MISS DIG (1-800-482-7171).

FLOODZONE MAP



OTHER NOTES

1. The contractor shall be responsible to review and be familiar with all portions of these plans. Any discrepancies between different portions of the plans shall be brought to the attention of the Engineer and shall be resolved prior to construction.

BENCHMARKS

Benchmark #1

Arrow top nut on fire hydrant on west side of Burkhart Road 200' north of property.
Elevation 647.06 (NAVD 88)

Benchmark #2

Arrow top nut on fire hydrant on west side of Burkhart Road directly across from the entrance drive onto property.
Elevation 652.40 (NAVD 88)

Benchmark #3

Arrow top nut on fire hydrant on west side of Burkhart Road 450' south of the entrance drive.
Elevation 656.64 (NAVD 88)

WETLANDS



PLAN LEGEND

| | |
|--|------------------------------|
| | = OVERHEAD ELECTRIC LINE |
| | = BURIED GAS LINE |
| | = SANITARY SEWER |
| | = WATER MAIN |
| | = UNDERGROUND TELEPHONE |
| | = SANITARY MANHOLE |
| | = CATCH BASIN |
| | = FIRE HYDRANT |
| | = WATER VALVE |
| | = CURB BOX |
| | = LIGHT POLE |
| | = STREET SIGN |
| | = FENCE LINE |
| | = UTILITY POLE |
| | = FOUND IRON |
| | = SET CAPPED IRON |
| | = BITUMINOUS PAVING |
| | = CONCRETE PAVING OR WALKWAY |
| | = PLS SYSTEM CORNER |
| | = PROPOSED LIGHT POLE |

NRCS SOILS MAP

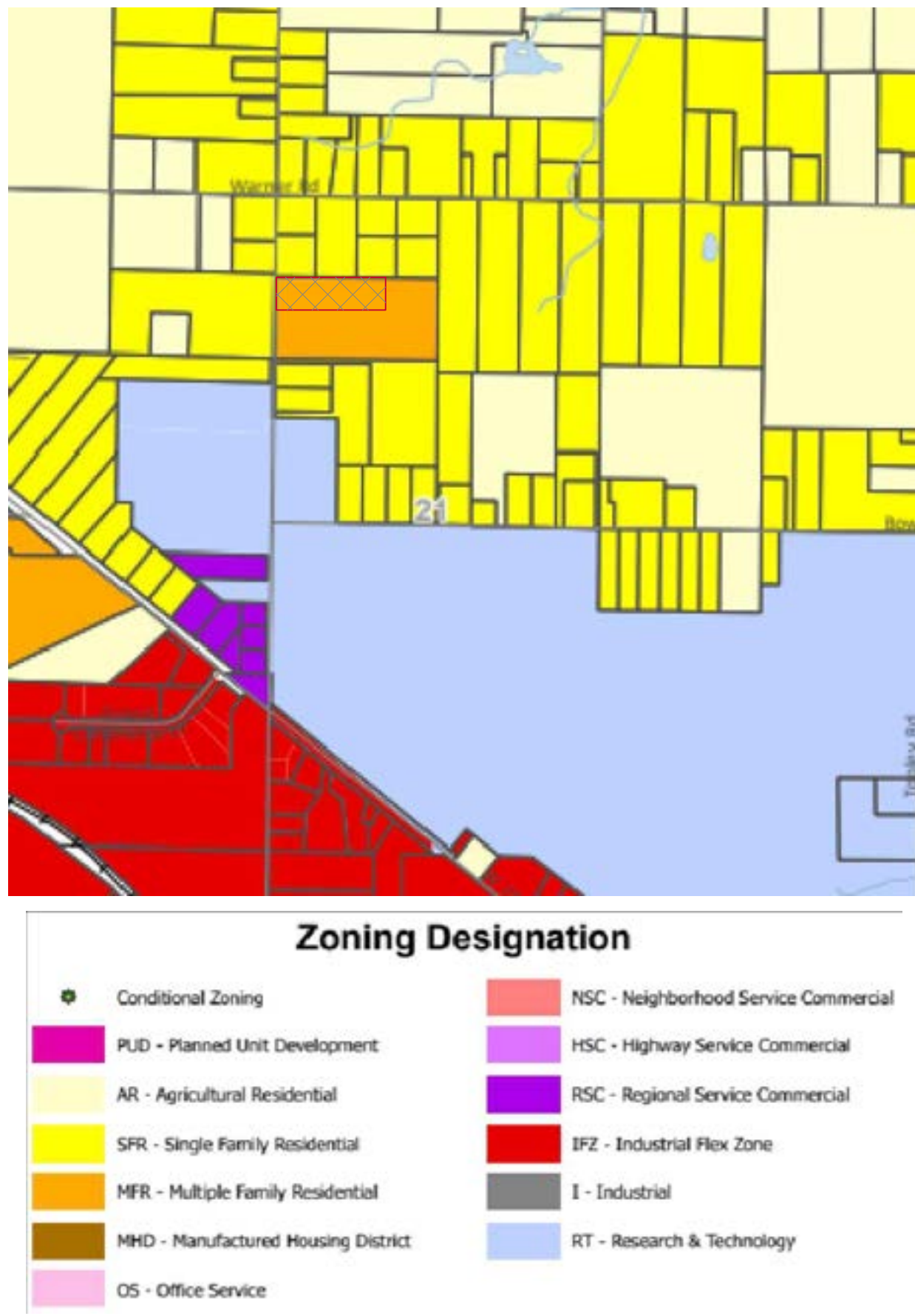


ABBREVIATIONS

LIST OF ABBREVIATIONS

| | Definitions |
|---------------|---|
| A.C. | Alternating Current |
| A.F.C. | Adult Foster Care |
| ASPH. | Asphalt Paving |
| ASTM | American Society of Testing Materials |
| AWS | American Welding Society |
| AWWA | American Waterworks Association |
| BLDG. | Building |
| CIP | Compacted in place |
| CL | Class |
| CONC. | Concrete |
| C.Yd. or CYD | Cubic Yard |
| DR | Dimension Ratio |
| ° | Degrees |
| EA | Each |
| EJ | East Jordan Iron Works |
| ELEV. | Elevation |
| EX | Existing |
| F.F. | Finish Floor |
| G.P.M. | Gallons Per Minute |
| I.Q. | Inside Diameter |
| Inv. | Invert |
| Lbs. | Pounds |
| LFT | Lineal Feet |
| L.S. | Lump Sum |
| Max. | Maximum |
| MDOT | Michigan Department of Transportation |
| M.H. | Manhole |
| Mil. | Millimeter |
| Min. | Minimum |
| MUW | Maximum Unit Weight at optimum moisture content |
| No. | Number |
| NSF | National Sanitation Foundation |
| OSHA | Occupational Safety Health Administration |
| PSIG | Pounds per square inch gauge |
| PVC | Polyvinyl Chloride |
| R.O.W. or R/W | Right-of-Way |
| RAD. | Radius |
| SDR | Standard Dimension Ratio |
| SYD | Square Yard |
| T.D.H. | Total Dynamic Head |
| V.L.F. | Vertical Lineal Feet |
| ' | Minutes of angles or Feet |
| " | Seconds of angles or Inches |
| % | Percent |
| # | Pounds |

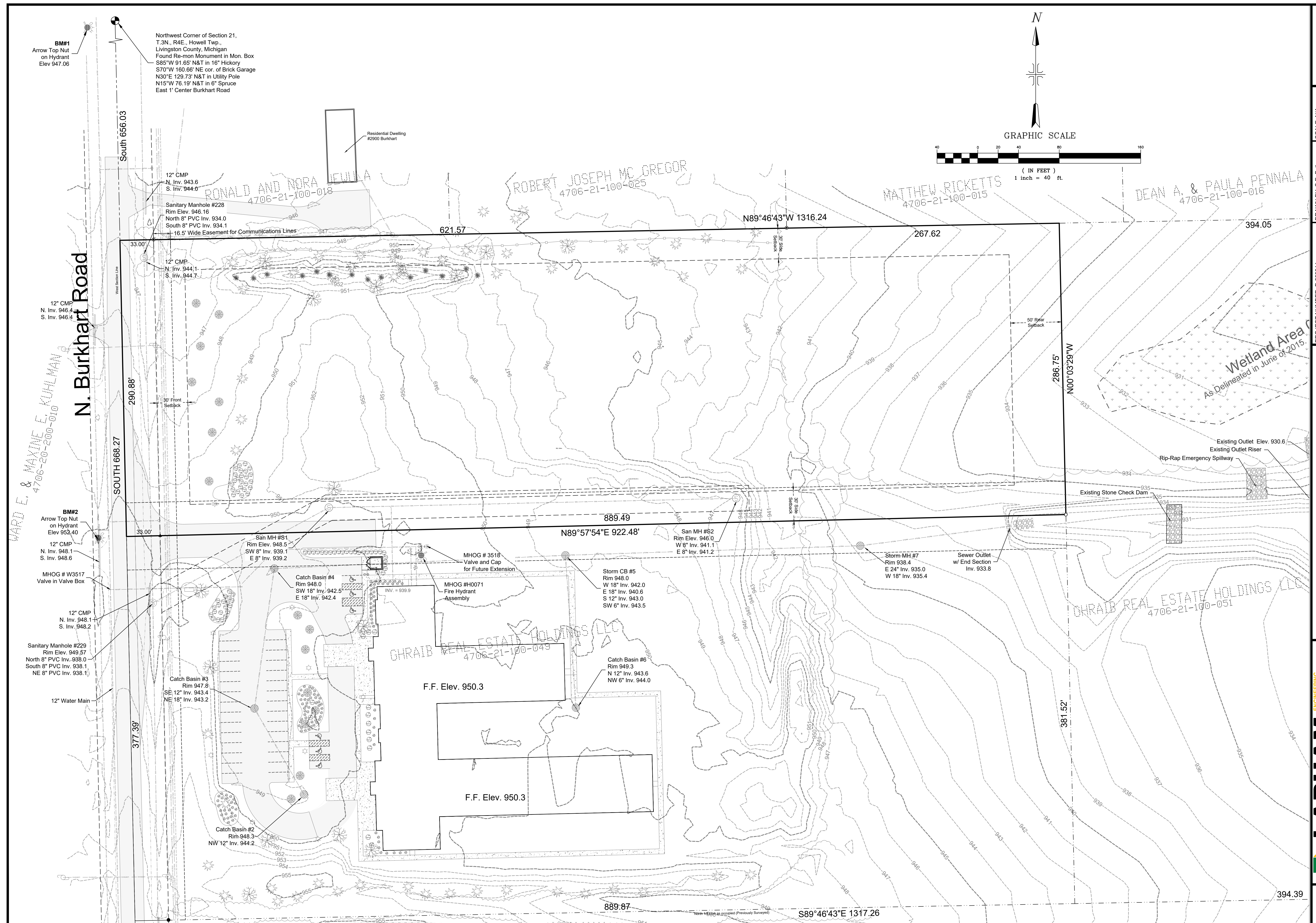
ZONING MAP



General Notes
Proposed Senior Housing Development
Ghraib Real Estate Holdings #2, LLC
2820 N. Burkhart Road
Howell, MI 48855

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PLANNING
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C-2



Zoning Notes:

Owner: Ghraib Real Estate Holdings #2, LLC
2820 N. Burkhart Road
Howell, MI 48855-8607

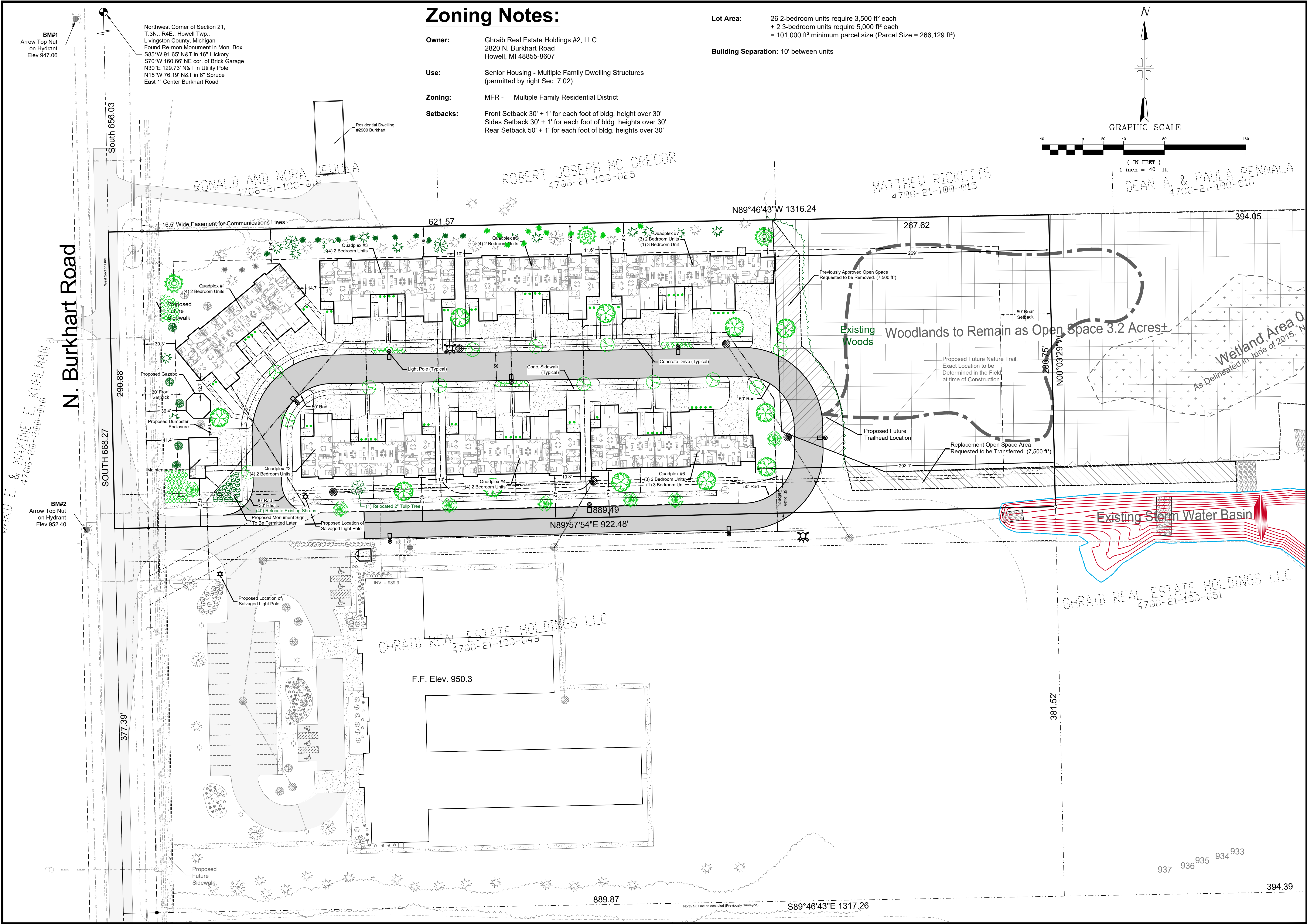
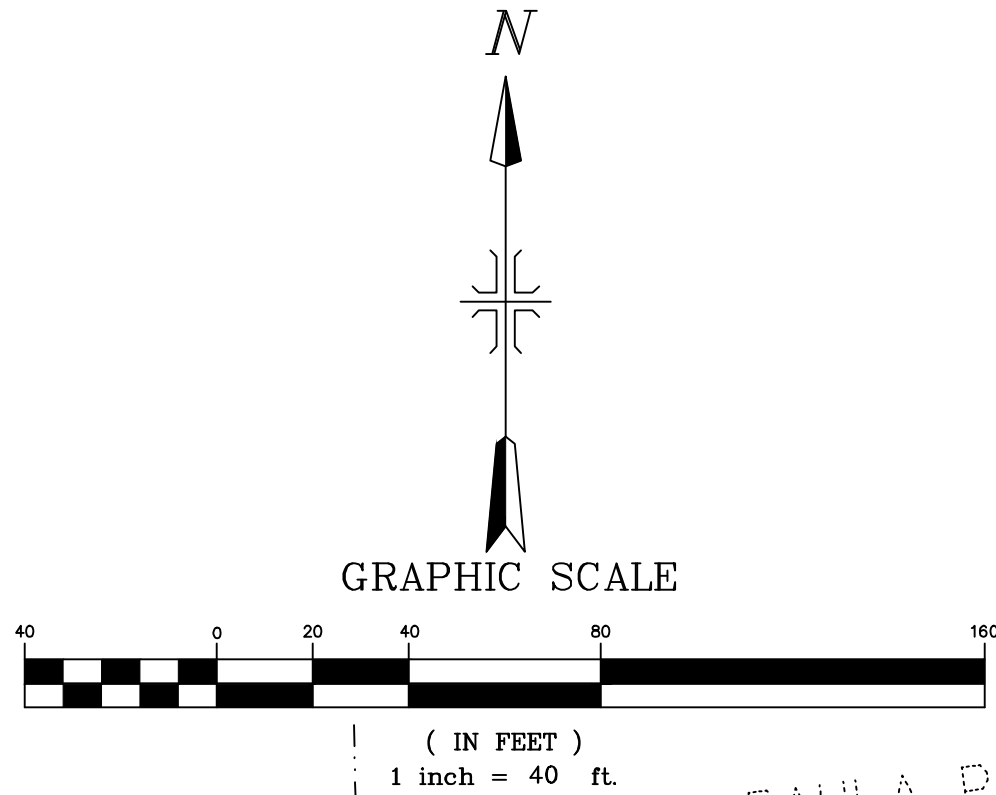
Use: Senior Housing - Multiple Family Dwelling Structures
(permitted by right Sec. 7.02)

Zoning: MFR - Multiple Family Residential District

Setbacks: Front Setback 30' + 1' for each foot of bldg. height over 30'
Sides Setback 30' + 1' for each foot of bldg. heights over 30'
Rear Setback 50' + 1' for each foot of bldg. heights over 30'

Lot Area: 26 2-bedroom units require 3,500 ft² each
+ 2 3-bedroom units require 5,000 ft² each
= 101,000 ft² minimum parcel size (Parcel Size = 266,129 ft²)

Building Separation: 10' between units



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Site Plan

Proposed Senior Housing Development

Ghraib Real Estate Holdings #2, LLC

2820 N. Burkhart Road
Howell, MI 48855

PROJECT NUMBER: P-200311

DRAWN BY: S.E. Bell

ENGINEER: Timothy L. Lapham, P.E. 6201027593

REVISIONS: 7/29/25 address site plan review comments

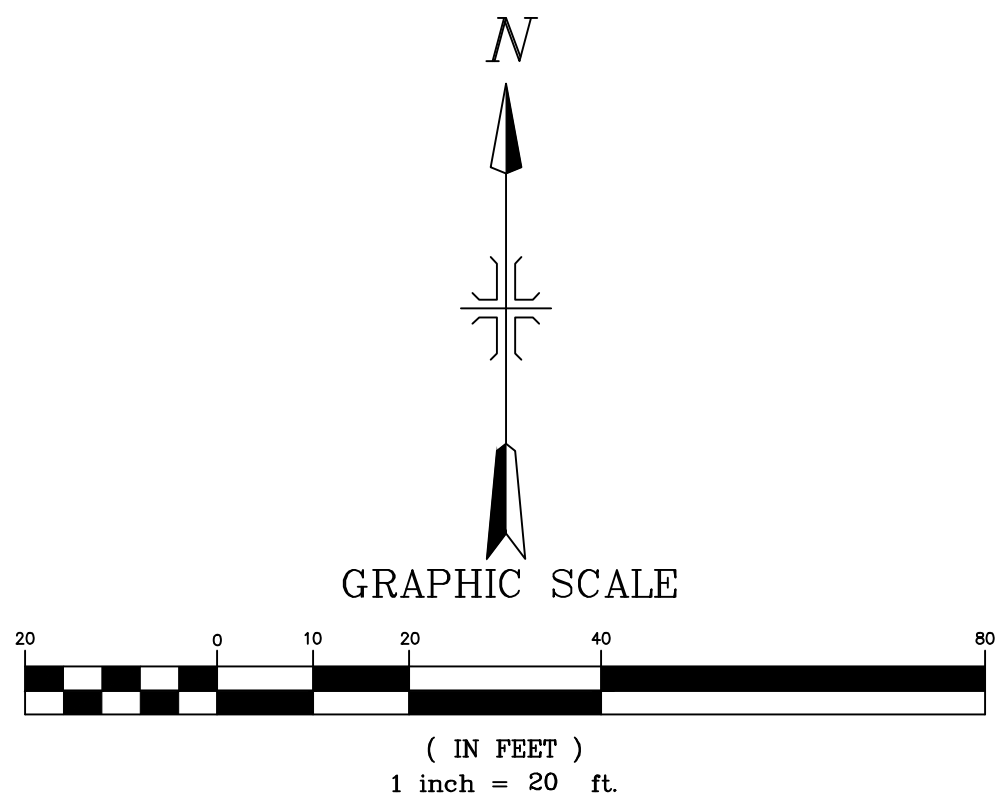
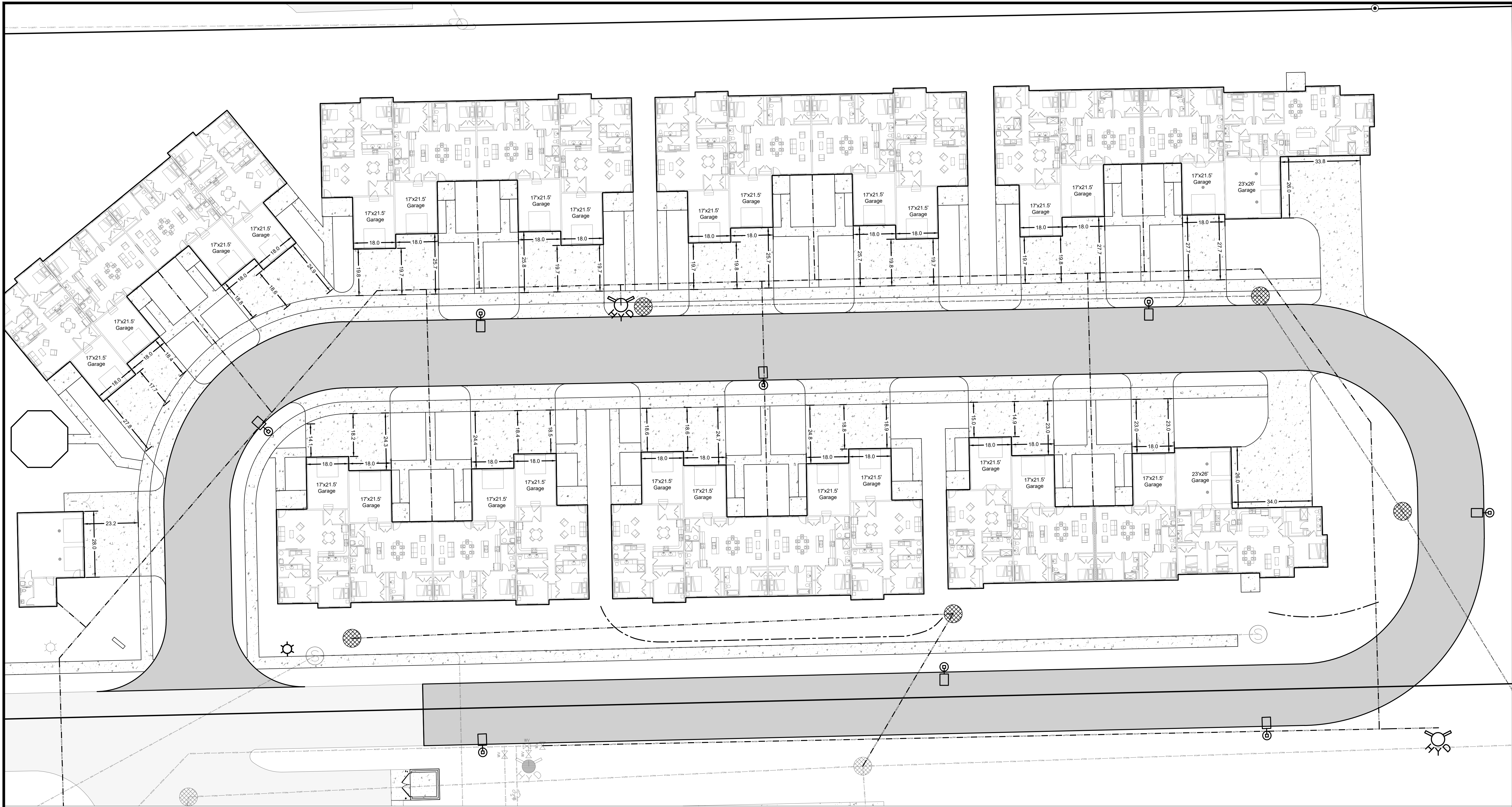
REVISIONS:

SCALE: 1" = 40'

SHEET C-5

DATE: June 3, 2025

C-5



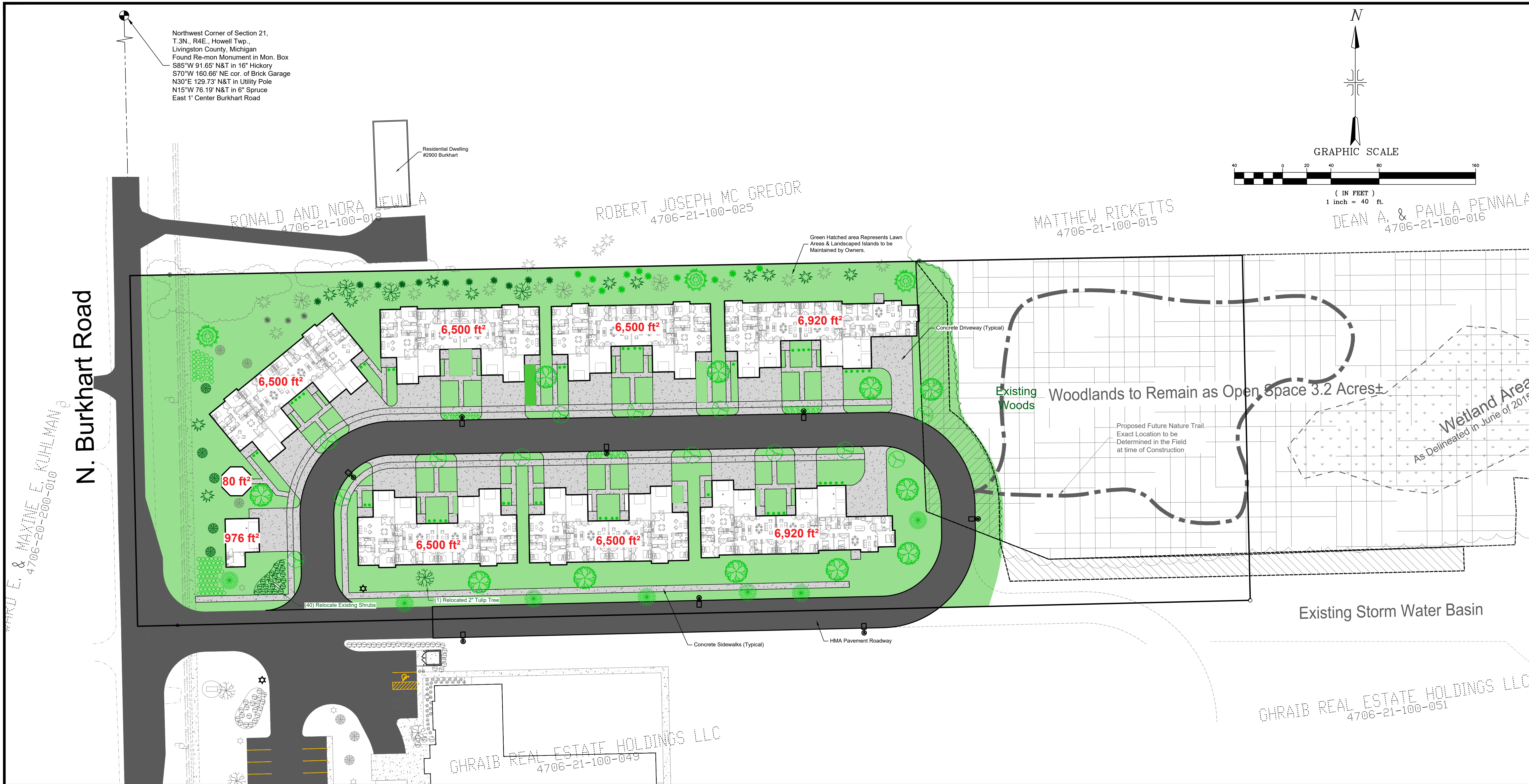
Driveway Dimension Plan
Proposed Senior Housing Development
Ghraib Real Estate Holdings #2, LLC
2820 N. Burkhardt Road
Howell, MI 48855

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C-5.1

| | | |
|--|---------------------|-----------------|
| PROJECT NUMBER: P-230311 | DRAWN BY: S.E. Bell | SCALE: 1" = 20' |
| ENGINEER: Timothy L. Lapham, P.E. 0201027592 | DATE: June 3, 2025 | SHEET C-5.1 |
| REVISED: 7/29/25 address site plan review comments | | |
| REVISED: | | |
| | | |
| | | |



Independent Senior Housing Development Areas

Lot Area: 26 2-bedroom units require 3,500 ft² each
+ 2 3-bedroom units require 5,000 ft² each
= 101,000 ft² minimum parcel size (Current Phase Parcel Size = 266,129 ft²)

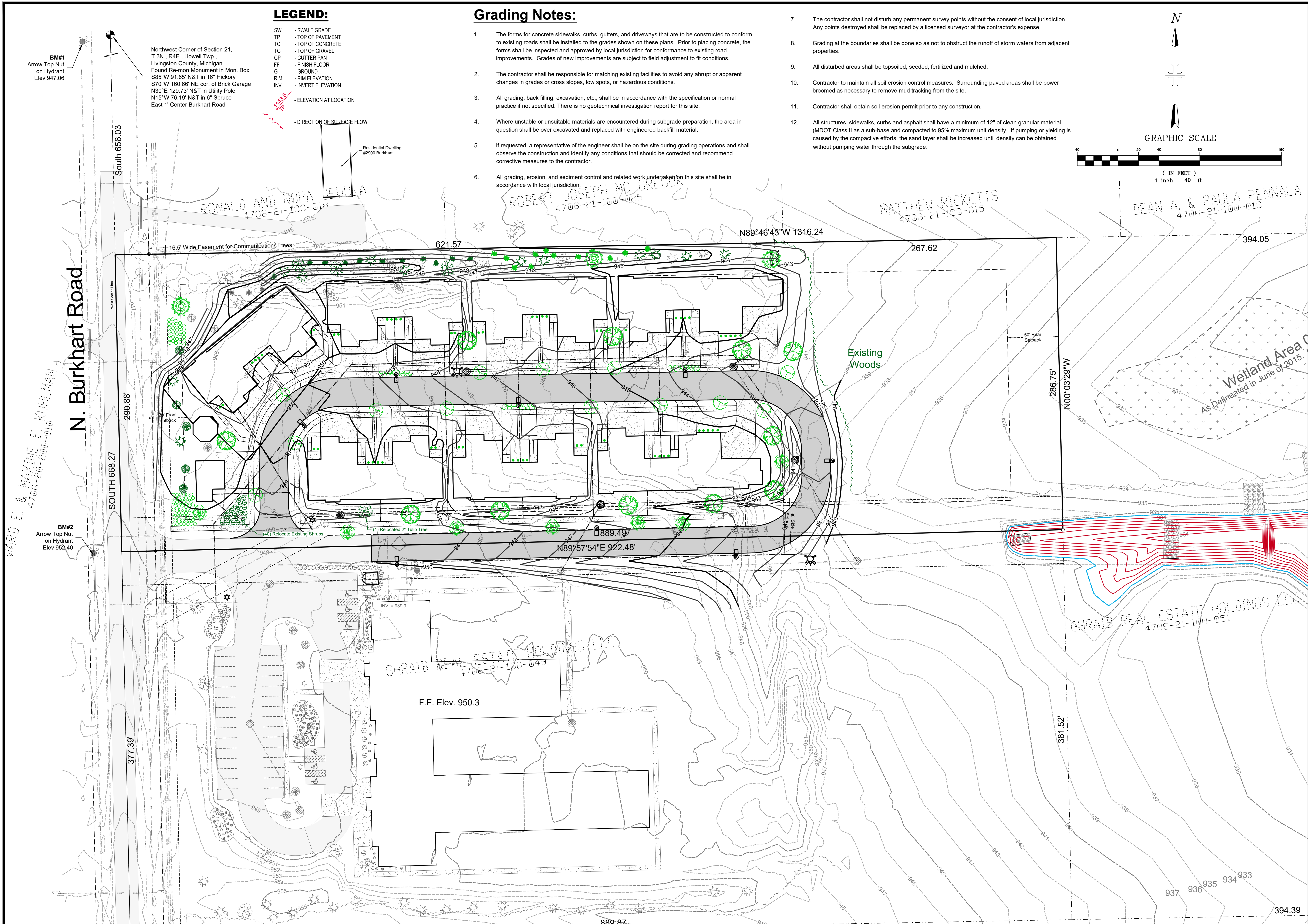
Coverage: 40% Maximum allowed.
Proposed Development at full build-out is 28%
3.2 Acres± of Existing Woodland to Remain as Open Space.
Requiring Change From the Previous Delineated Open Space
on This Plan.

Independent Senior Housing Development Phase is:
40,896 ft² buildings / 266,129 ft² = 15%

| | | | |
|---|--|---|--|
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| C-5.2 | | C-5.2 | |

| | | |
|--|---------------------|-----------------|
| PROJECT NUMBER: P-220311 | DRAWN BY: S.E. Bell | SCALE: 1" = 40' |
| ENGINEER: Timothy L. Lapham, P.E. 6201027593 | DATE: June 3, 2025 | SHEET C-5.2 |
| REVISED: 7/29/25 address site plan review comments | | |
| REVISED: | | |

Density Plan
Proposed Senior Housing Development
Ghraib Real Estate Holdings #2, LLC
2820 N. Burkhart Road
Howell, MI 48855



LEGEND:

- SW - SWALE GRADE
- TP - TOP OF PAVEMENT
- TC - TOP OF CONCRETE
- TG - TOP OF GRAVEL
- GP - GUTTER PAN
- FF - FINISH FLOOR
- G - GROUND
- RIM - RIM ELEVATION
- INV - INVERT ELEVATION
- ELEVATION AT LOCATION
- DIRECTION OF SURFACE FLOW

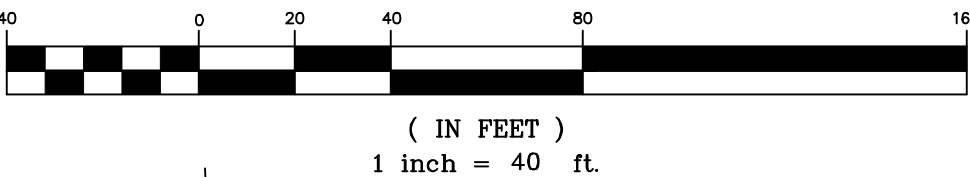
Grading Notes:

- The forms for concrete sidewalks, curbs, gutters, and driveways that are to be constructed to conform to existing roads shall be installed to the grades shown on these plans. Prior to placing concrete, the forms shall be inspected and approved by local jurisdiction for conformance to existing road improvements. Grades of new improvements are subject to field adjustment to fit conditions.
- The contractor shall be responsible for matching existing facilities to avoid any abrupt or apparent changes in grades or cross slopes, low spots, or hazardous conditions.
- All grading, back filling, excavation, etc., shall be in accordance with the specification or normal practice if not specified. There is no geotechnical investigation report for this site.
- Where unstable or unsuitable materials are encountered during subgrade preparation, the area in question shall be over excavated and replaced with engineered backfill material.
- If requested, a representative of the engineer shall be on the site during grading operations and shall observe the construction and identify any conditions that should be corrected and recommend corrective measures to the contractor.
- All grading, erosion, and sediment control and related work undertaken on this site shall be in accordance with local jurisdiction.
- The contractor shall not disturb any permanent survey points without the consent of local jurisdiction. Any points destroyed shall be replaced by a licensed surveyor at the contractor's expense.
- Grading at the boundaries shall be done so as not to obstruct the runoff of storm waters from adjacent properties.
- All disturbed areas shall be topsoiled, seeded, fertilized and mulched.
- Contractor to maintain all soil erosion control measures. Surrounding paved areas shall be power broomed as necessary to remove mud tracking from the site.
- Contractor shall obtain soil erosion permit prior to any construction.
- All structures, sidewalks, curbs and asphalt shall have a minimum of 12" of clean granular material (MDOT Class II as a sub-base and compacted to 95% maximum unit density. If pumping or yielding is caused by the compactive efforts, the sand layer shall be increased until density can be obtained without pumping water through the subgrade.

N



GRAPHIC SCALE



PROJECT NUMBER: P-230311

ENGINEER: Timothy L. Lapham, P.E. 6201027993

REVISION: 7/29/25 address site plan review comments

REVISION:

DRAWN BY: S.E. Bell

DATE: June 3, 2025

REVISION:

REVISION:

SCALE: 1" = 40'

SHEET C-6

Grading Plan

Proposed Senior Housing Development

Ghraib Real Estate Holdings #2, LLC

2820 N. Burkhart Road
Howell, MI 48855

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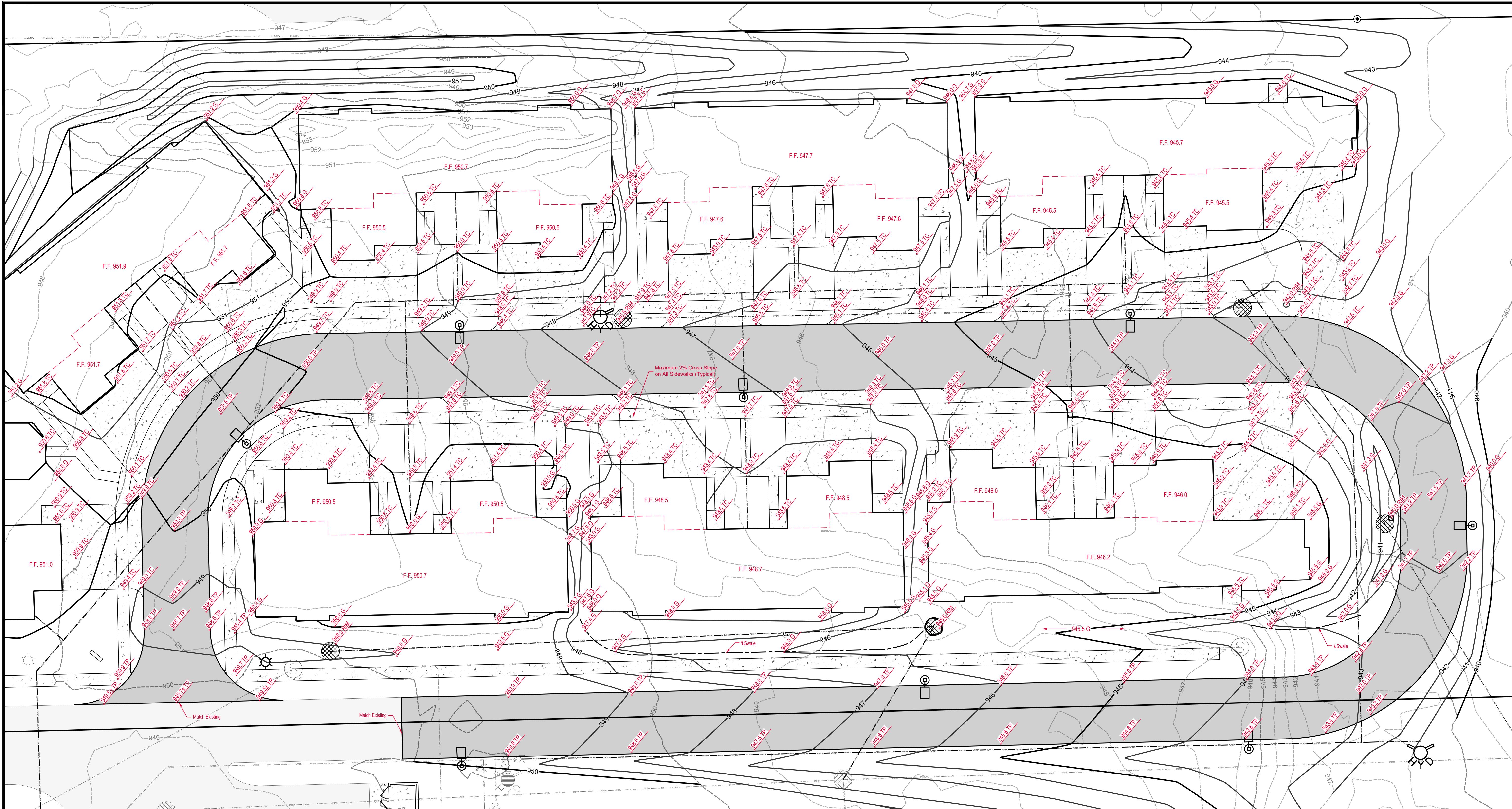
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PERMIT/BID

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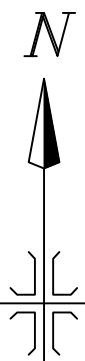
FINAL RECORD

C-6



LEGEND:

- SW - SWALE GRADE
- TP - TOP OF PAVEMENT
- TC - TOP OF CONCRETE
- TG - TOP OF GRAVEL
- GP - GUTTER PAN
- FF - FINISH FLOOR
- G - GROUND
- RIM - RIM ELEVATION
- INV - INVERT ELEVATION
- ELEVATION AT LOCATION
- DIRECTION OF SURFACE FLOW



GRAPHIC SCALE



(IN FEET)
1 inch = 20 ft.

Detail Grading Plan
Proposed Senior Housing Development
Ghraib Real Estate Holdings #2, LLC
2820 N. Burkhart Road
Howell, MI 48855

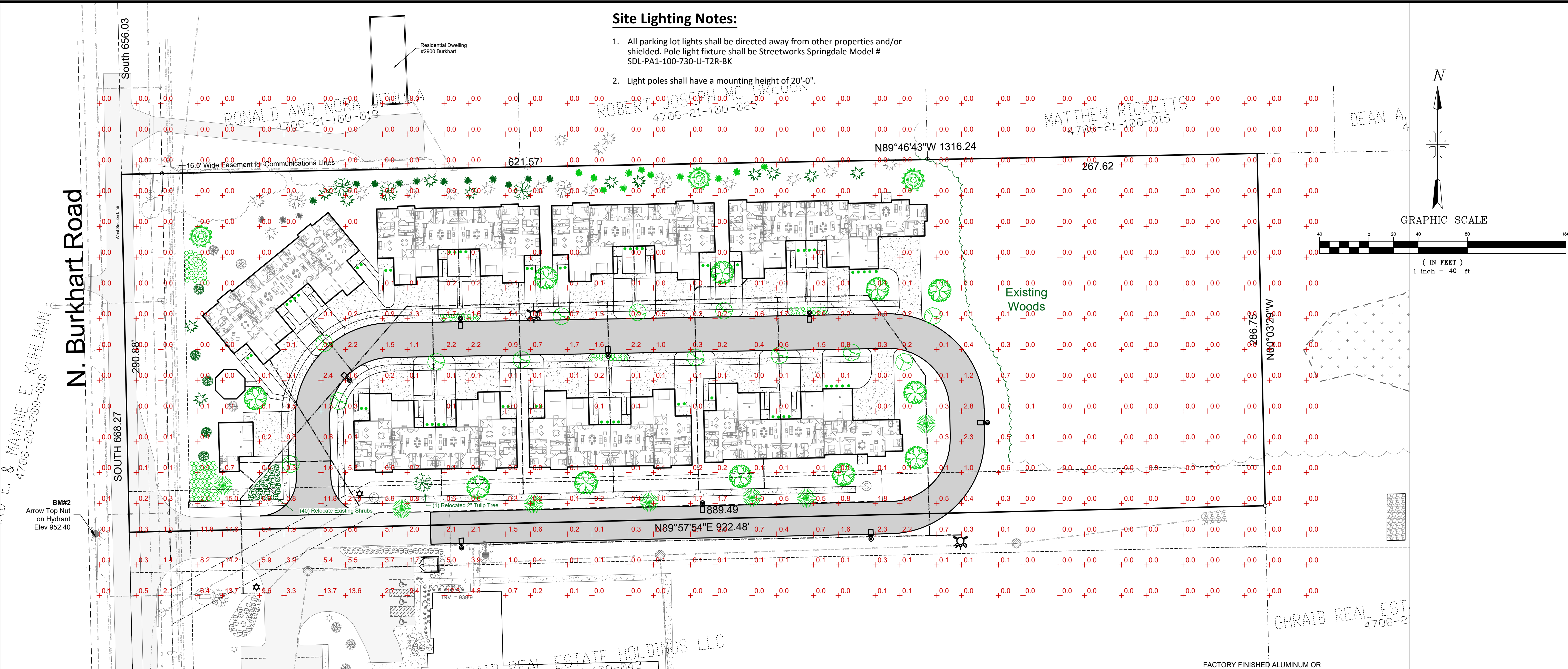
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C-6.1

| | | |
|--|---------------------|-----------------|
| PROJECT NUMBER: P-230311 | DRAWN BY: S.E. Bell | SCALE: 1" = 20' |
| ENGINEER: Timothy L. Lapham, P.E. 0201027592 | DATE: June 3, 2025 | SHEET C-6 |
| REVISED: 7/20/25 address site plan review comments | | |
| REVISED: | | |
| | | |
| | | |
| | | |

Site Lighting Notes:

- All parking lot lights shall be directed away from other properties and/or shielded. Pole light fixture shall be Streetworks Springdale Model # SDL-PA1-100-730-U-T2R-BK
- Light poles shall have a mounting height of 20'-0".



Streetworks

SDL Springdale

Decorative Luminaire

Product Features

Product Certifications

Interactive Menu

Quick Facts

Dimensional Details

Streetworks

SDL Springdale

Decorative Luminaire

Product Features

Product Certifications

Interactive Menu

Quick Facts

Dimensional Details

Streetworks

SDL Springdale

Ordering Information

Product Specifications

Technical

Warranty

Streetworks

SDL Springdale

Energy and Performance Data

Table 1: Energy and Performance Data

Table 2: Energy and Performance Data

Table 3: Energy and Performance Data

Streetworks

SDL Springdale

Table 4: Energy and Performance Data

Table 5: Energy and Performance Data

Table 6: Energy and Performance Data

Table 7: Energy and Performance Data

FACTORY FINISHED ALUMINUM OR ELECTROSTATICALLY APPLIED POLYESTER POWDER COATED POLE (NO SPRAY PAINTED OR SITE PAINTED POLES ARE PERMITTED). POLE COLOR SHALL MATCH LUMINAIRE.

CONNECT GROUND TO POLE BASE W/ BURNED NO. 6B4C

HOME RUN C/W

48"

24" DIA

NO. 8 TW GREEN GROUND WIRE

WELD NO. 5 TIE RODS ALL AROUND @ 12" O.C.

GROUND ROD CLAMP BURNED NO. GAR-6

ANCHOR BOLTS TO BE FURNISHED BY POLE MANUFACTURER

REINFORCED CONCRETE BASE

FINISH GRADE

18"

HAND HOLE - 4"x6" (NOMINAL)

PROJECT ANCHOR BOLTS 3" ABOVE TOP OF BASE. PROVIDE DOUBLE NUTS FOR LEVELING UNIT (ONE ABOVE AND ONE BELOW BASED FLANGE)

GROUT VOID BETWEEN BASE FLANGE AND TOP OF CONCRETE. HAND FINISH. PROVIDE 3/4" D. WEEP HOLE THROUGH GROUT AT BASE OF POLE.

CARSON 8"x8"x4" CURVED LID JUNCTION BOX P/N E88C24

1" CHAMFER

BASE COVER

BASE W/ BURNED NO. 6B4C

1

C-7

LIGHT POLE BASE

SCALE: NONE

Photometrics Plan

Proposed Senior Housing Development

Ghraib Real Estate Holdings #2, LLC

2820 N. Burkhardt Road

Howell, MI 48855

PROJECT NUMBER: P-230311

ENGINEER: Timothy L. Lapham, P.E. 920.027.7555

REVISION: 7/20/25 address site plan review comments

REVISION:

SCALE: 1" = 40'

SHEET C-7

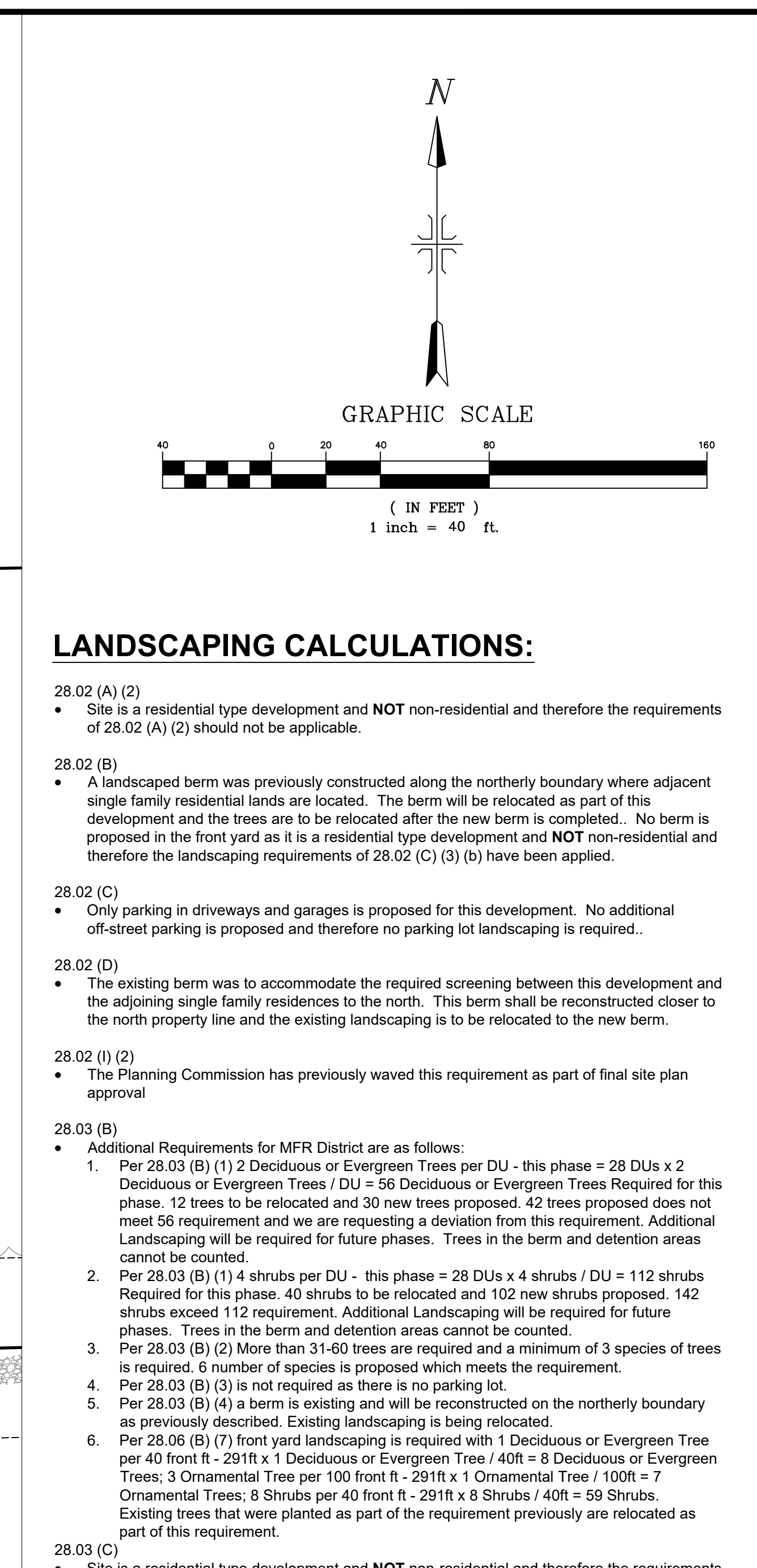
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C-7

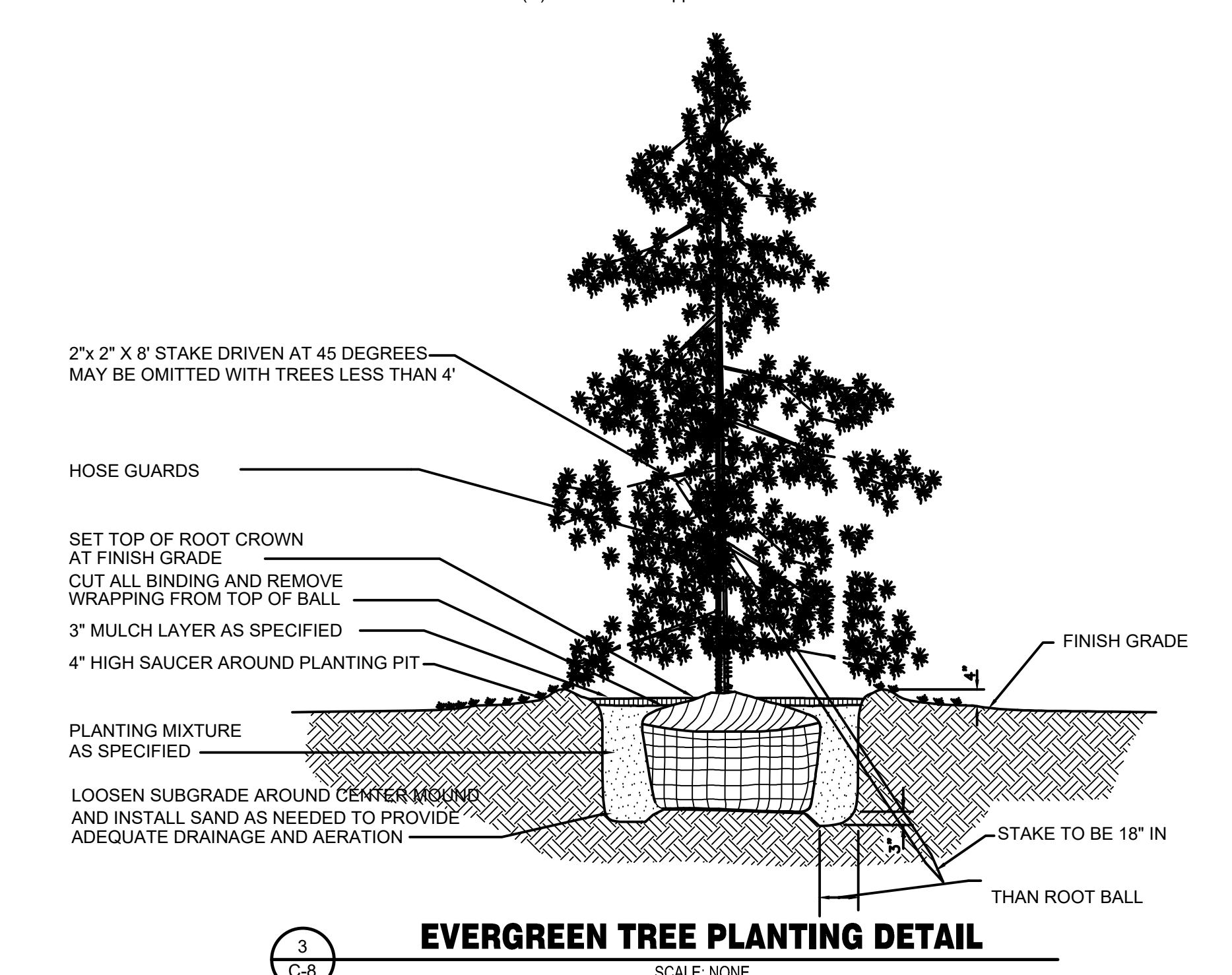


Note:

Light green trees & shrubs are new proposed landscaping.
Dark green trees & shrubs are existing trees to be relocated.
Gray trees are existing trees from prior development from phase 1.

FORM A 4" DIA. WATER SAUCER
AROUND SHUB BASE, COVER
WITH 3" OF BARK MULCH

EXCAVATE HOLE 6" LARGER THAN
THE DIA. OF PLANT BALL AND TO A
DEPTH EQUAL TO THE BALL DEPTH



LANDSCAPING CALCULATIONS:

28.02 (A) (2)

- Site is a residential type development and **NOT** non-residential and therefore the requirements of 28.02 (A) (2) should not be applicable.

28.02 (B)

- A landscaped berm was previously constructed along the northerly boundary where adjacent single family residential lands are located. The berm will be relocated as part of this development and the trees are to be relocated after the new berm is completed.. No berm is proposed in the front yard as it is a residential type development and **NOT** non-residential and therefore the landscaping requirements of 28.02 (C) (3) (b) have been applied.

28.02 (C)

- Only parking in driveways and garages is proposed for this development. No additional off-street parking is proposed and therefore no parking lot landscaping is required..

28.02 (D)

- The existing berm was to accommodate the required screening between this development and the adjoining single family residences to the north. This berm shall be reconstructed closer to the north property line and the existing landscaping is to be relocated to the new berm.

28.02 (I) (2)

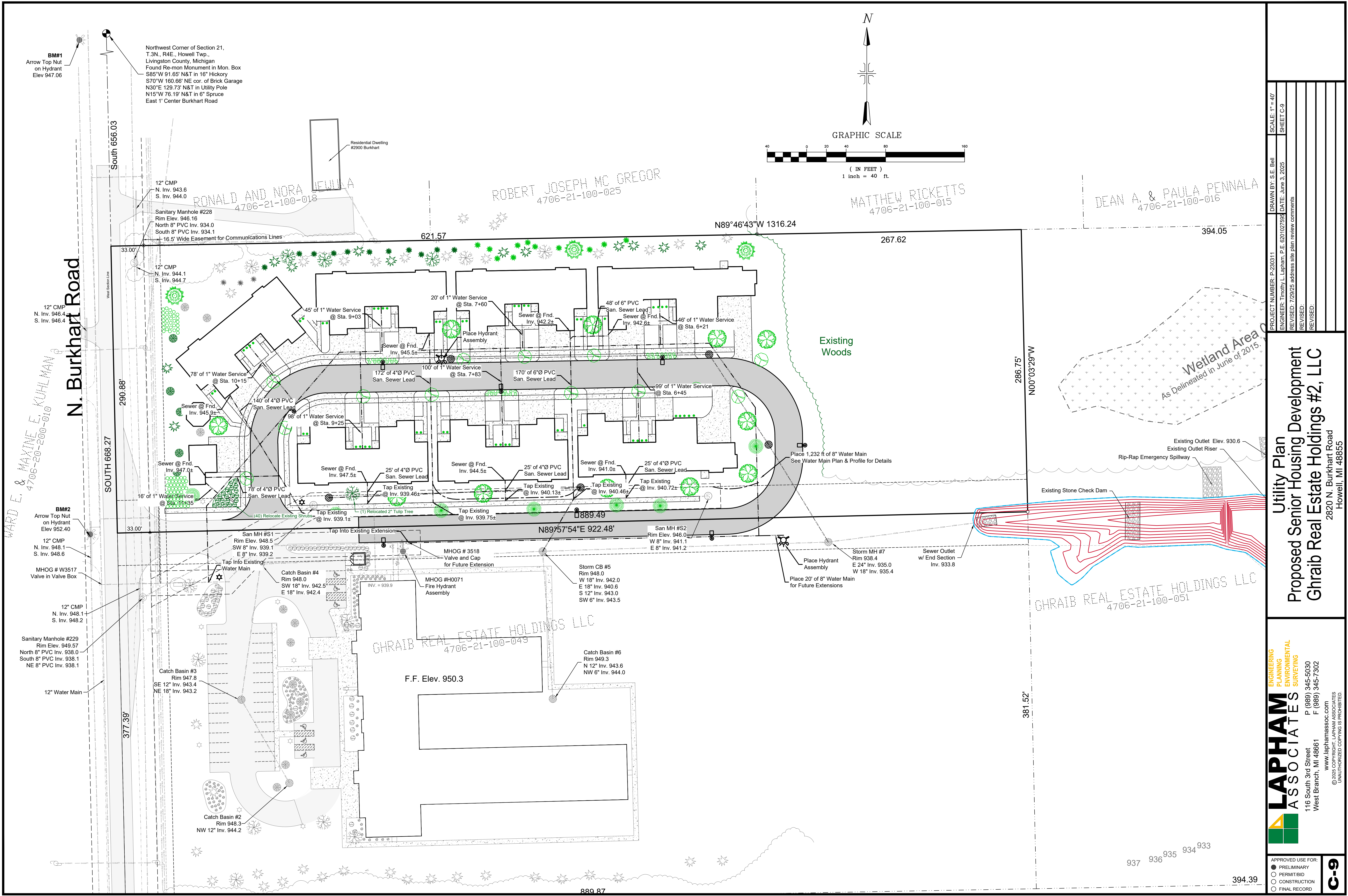
- The Planning Commission has previously waived this requirement as part of final site plan approval

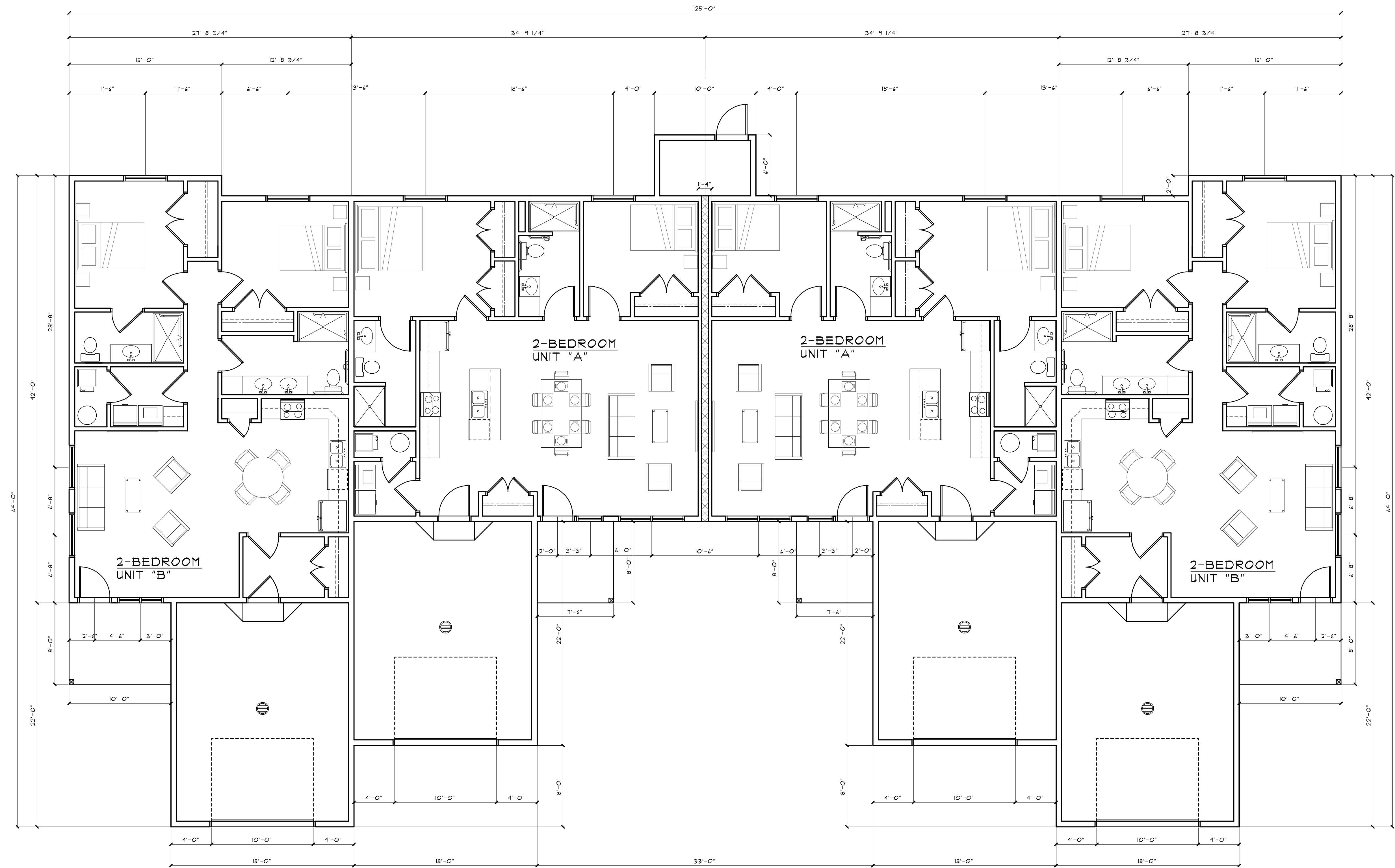
28.03 (B)

- Additional Requirements for MFR District are as follows:
 1. Per 28.03 (B) (1) 2 Deciduous or Evergreen Trees per DU - this phase = 28 DUs x 2 Deciduous or Evergreen Trees / DU = 56 Deciduous or Evergreen Trees Required for this phase. 12 trees to be relocated and 30 new trees proposed. 42 trees proposed does not meet 56 requirement and we are requesting a deviation from this requirement. Additional Landscaping will be required for future phases. Trees in the berm and detention areas cannot be counted.
 2. Per 28.03 (B) (1) 4 shrubs per DU - this phase = 28 DUs x 4 shrubs / DU = 112 shrubs Required for this phase. 40 shrubs to be relocated and 102 new shrubs proposed. 142 shrubs exceed 112 requirement. Additional Landscaping will be required for future phases. Trees in the berm and detention areas cannot be counted.
 3. Per 28.03 (B) (2) More than 31-60 trees are required and a minimum of 3 species of trees is required. 6 number of species is proposed which meets the requirement.
 4. Per 28.03 (B) (3) is not required as there is no parking lot.
 5. Per 28.03 (B) (4) a berm is existing and will be reconstructed on the northerly boundary as previously described. Existing landscaping is being relocated.
 6. Per 28.06 (B) (7) front yard landscaping is required with 1 Deciduous or Evergreen Tree per 40 front ft - 291ft x 1 Deciduous or Evergreen Tree / 40ft = 8 Deciduous or Evergreen Trees; 3 Ornamental Tree per 100 front ft - 291ft x 1 Ornamental Tree / 100ft = 7 Ornamental Trees; 8 Shrubs per 40 front ft - 291ft x 8 Shrubs / 40ft = 59 Shrubs. Existing trees that were planted as part of the requirement previously are relocated as part of this requirement.

28.03 (C)

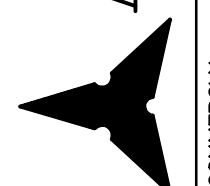
- Site is a residential type development and **NOT** non-residential and therefore the requirements of 28.03 (C) should not be applicable.

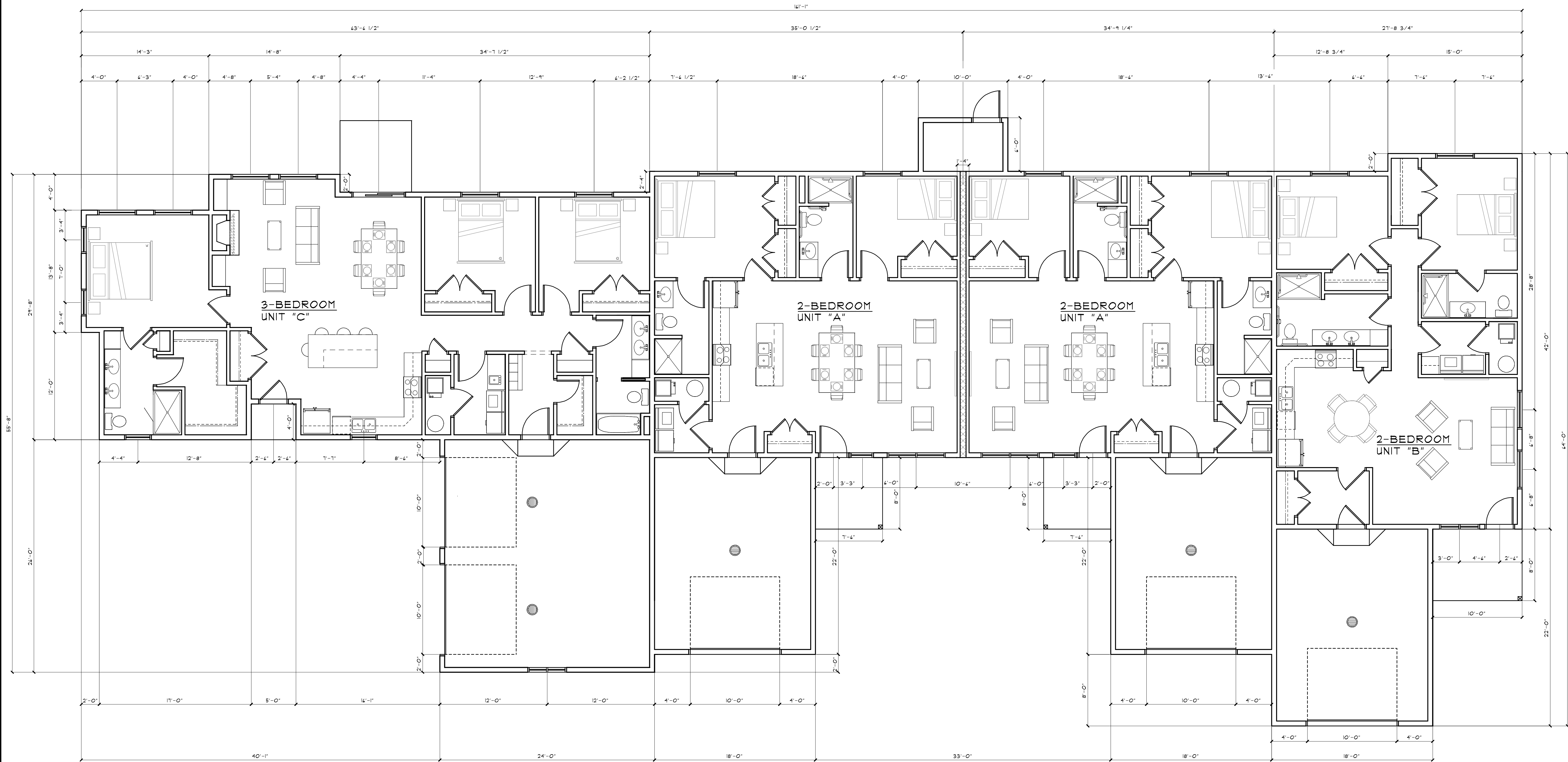




OVERALL FLOOR PLAN - BUILDING I


SCALE: 3/16" = 1'-0"

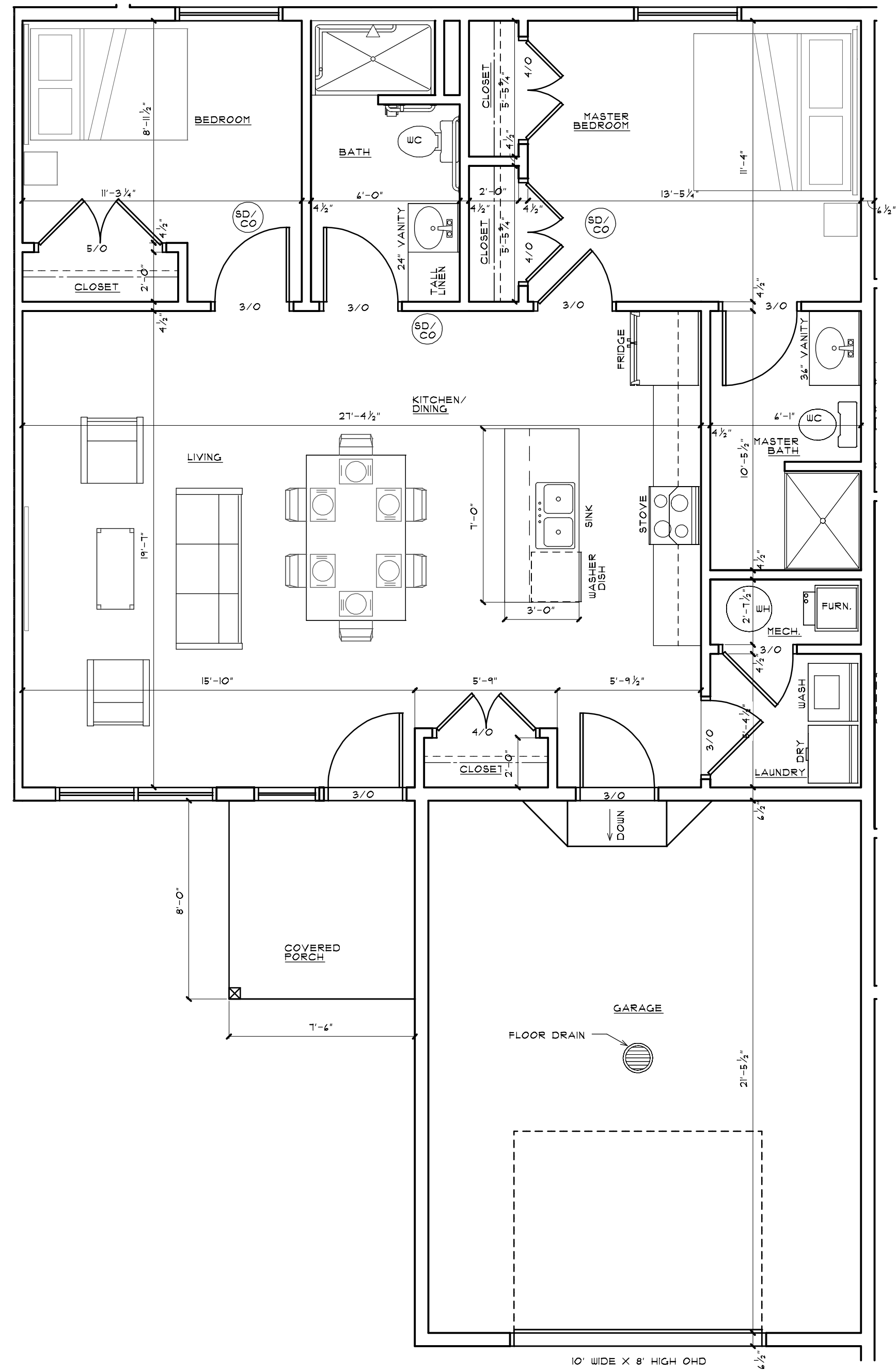
| | | | | | | | | | |
|---------|---|-----------------------|---------------------|--|-------------|---------|---------------|---------|------|
| PROJECT | GAULITY CARE OF HOWELL INDEPENDENT LIVING FACILITY | PROJECT NO. 23-234 | SHEET A.I.I. |  SEIDELLS ARCHITECTS COMMERCIAL 114 N. COURT AVE. STE. 201 POST OFFICE BOX 2189 GAYLORD, MICHIGAN 49734 PHONE (889) 731-0372 FAX (889) 731-6832 | DRAWN BY | C.J.K. | ISSUED | DATE | DATE |
| | | | | | CHECKED | T.L.S. | ZONING REVIEW | 1/25/25 | |
| | | | | | APPROVED BY | T.L.S. | | | |
| | | | | | DATE | 1/25/25 | | | |
| | | | | | | | | | |
| | | | | HOWELL, MI | | | | | |



OVERALL FLOOR PLAN - BUILDING 2

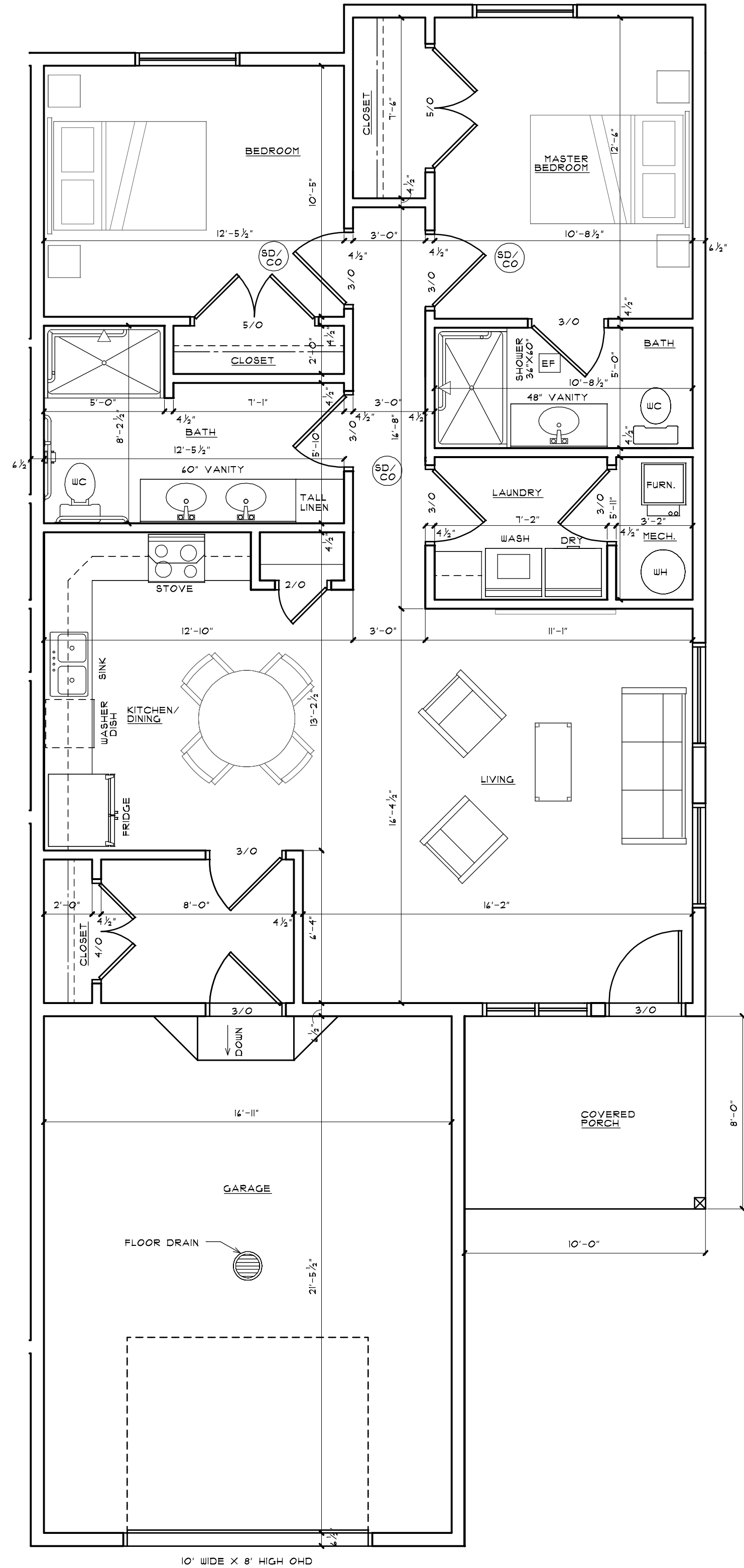
SCALE: 3/16" = 1'-0"

| | | | | | | | |
|--|---|-----------------------------|--|----------------------|------------|--------|--|
| PROJECT QUALITY CARE OF HOWELL INDEPENDENT LIVING FACILITY |  SEIDELLS ARCHITECTS | COMMERCIAL | | RESIDENTIAL | INDUSTRIAL | | |
| | | 114 N. COURT AVE., STE. 201 | | PHONE (888) 731-0372 | | | |
| | | POST OFFICE BOX 2189 | | FAX (888) 731-6932 | | | |
| | | GAYLORD, MICHIGAN 49734 | | | | | |
| | | | | | | | |
| PROJECT NO. 23-236 | | HOWELL, MI | | PRINT DATE | | | |
| SHEET | | | | DATE | | ISSUED | |
| A1.2 | | | | 7/25/25 | | T.L.S. | |
| | | | | 7/25/25 | | T.L.S. | |
| | | | | 7/25/25 | | T.L.S. | |
| | | | | 7/25/25 | | T.L.S. | |
| | | | | 7/25/25 | | T.L.S. | |
| | | | | 7/25/25 | | T.L.S. | |
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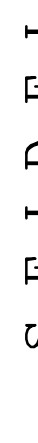
MODEL "A" : 14 UNITS TOTAL

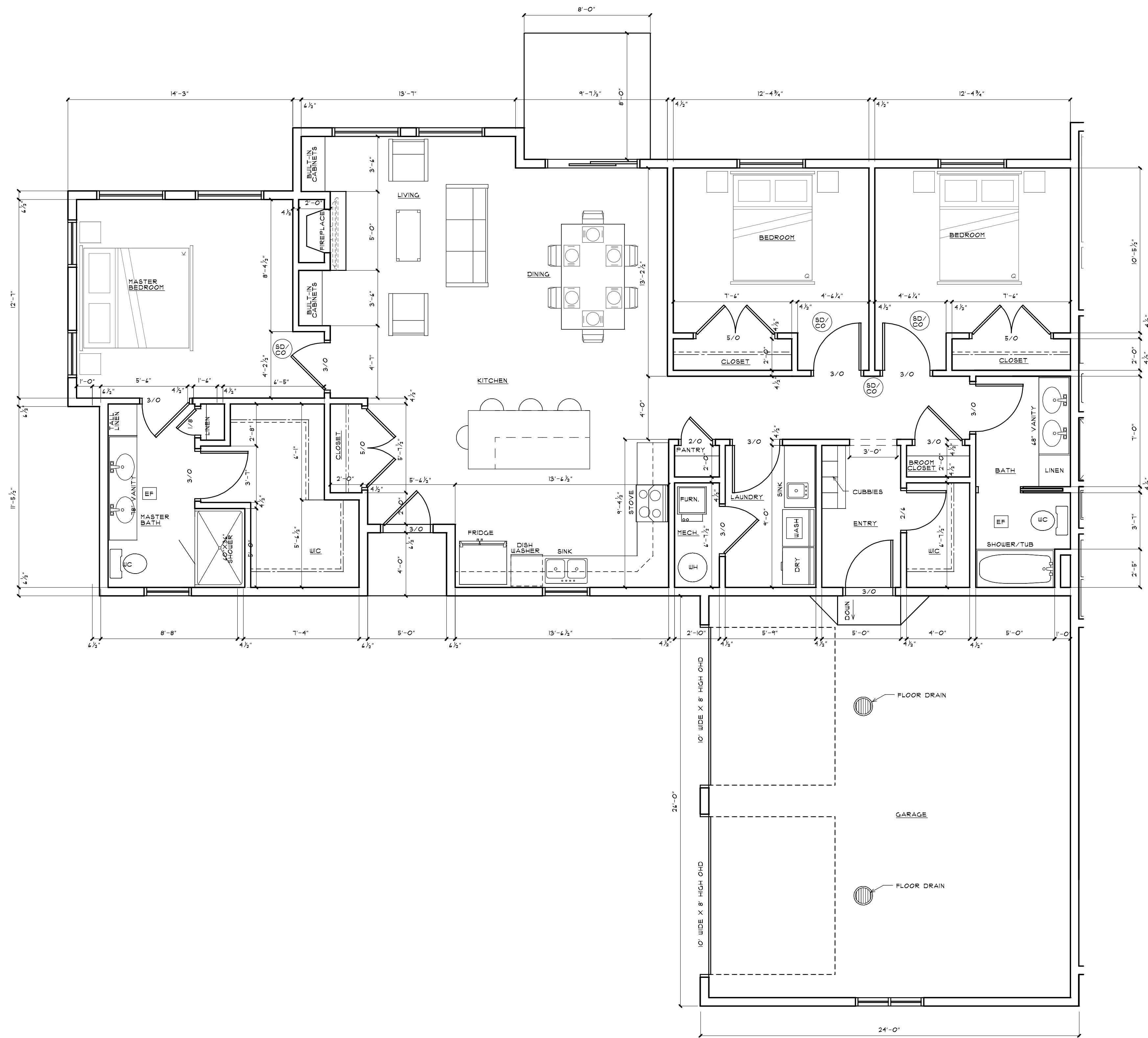
SCALE: 1/4" = 1'-0"
LIVING AREA: 1,010 SQ. FT.
GARAGE: 314 SQ. FT.



MODEL "B" : 12 UNITS TOTAL

SCALE: 1/4" = 1'-0"
LIVING AREA: 1,050 SQ. FT.
GARAGE: 314 SQ. FT.

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| SHEET A2.1 | PROJECT NO. 23-236 | PROJECT QAALITY CARE OF HOWELL INDEPENDENT LIVING FACILITY HOWELL, MI |  <div>SEIDELL ARCHITECTS</div> <div>COMMERCIAL RESIDENTIAL INDUSTRIAL</div> <div>114 N. COURT AVE., STE. 201 POST OFFICE BOX 2189 GATLORD, MICHIGAN 49734</div> <div>PHONE (888) 731-0372 FAX (888) 731-8822</div> | DRAIN BY | | C.J.K. | ISSUED | DATE | |
| | | | | CHECKED | | T.J.S. | ZONING REVIEW | 7/25/25 | |
| | | | | APPROVED BY | | T.J.S. | | | |
| | | | | DATE | | 7/25/25 | | | |
| | | | | PRINT DATE | | | | | |
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MODEL "C" : 2 UNITS TOTAL

SCALE: 1/4" = 1'-0"
LIVING AREA: 1,425 SQ. FT.
GARAGE: 424 SQ. FT.

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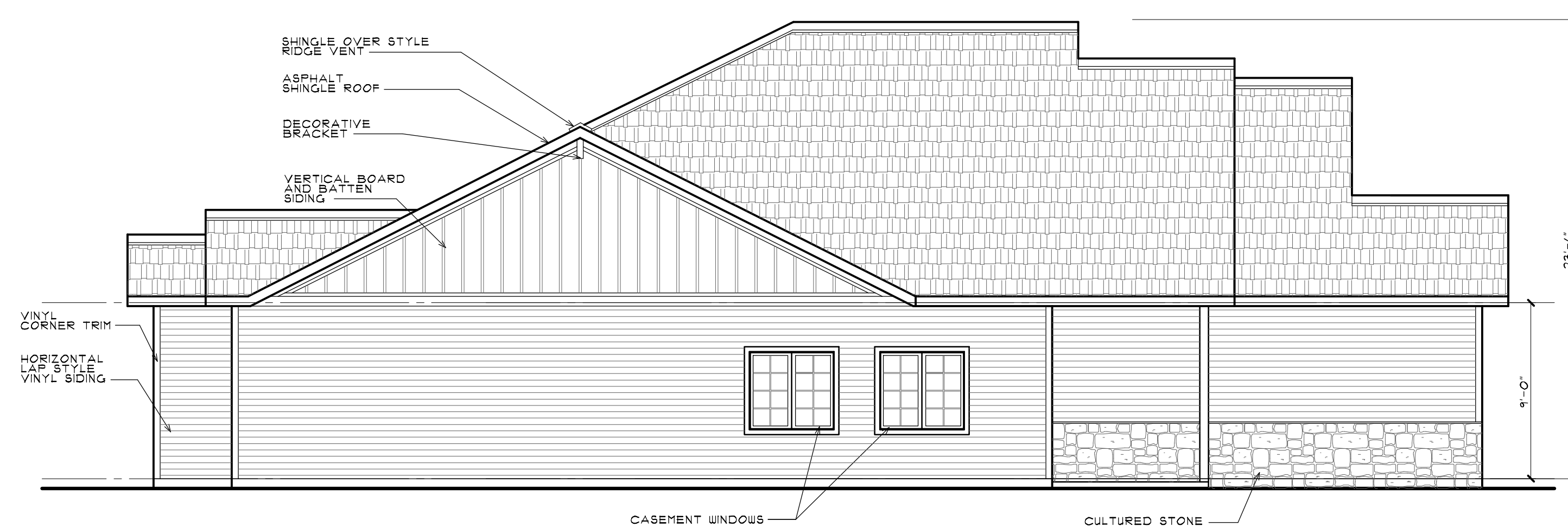
BUILDING A- BACK ELEVATION

SCALE: 3/16" = 1'-0"



BUILDING A- FRONT ELEVATION

SCALE: 3/16" = 1'-0"



BUILDING A- LEFT SIDE ELEVATION

SCALE: 3/16" = 1'-0"



BUILDING A- RIGHT SIDE ELEVATION

SCALE: 3/16" = 1'-0"



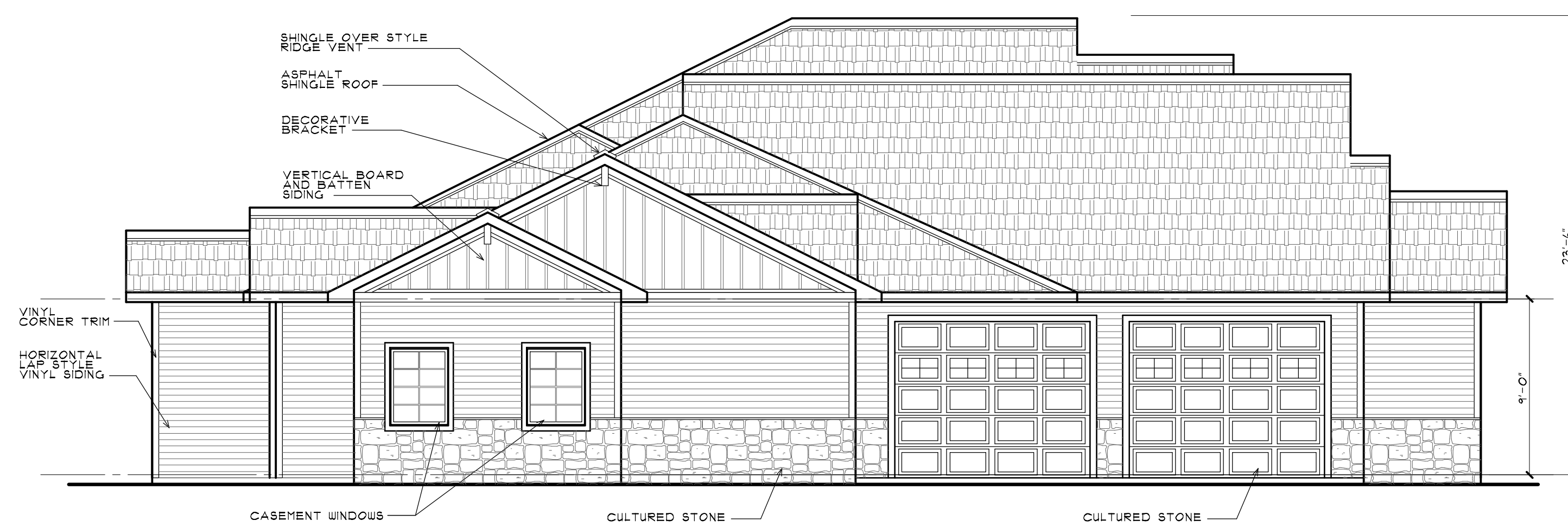
BUILDING B- BACK ELEVATION

SCALE: 3/16" = 1'-0"



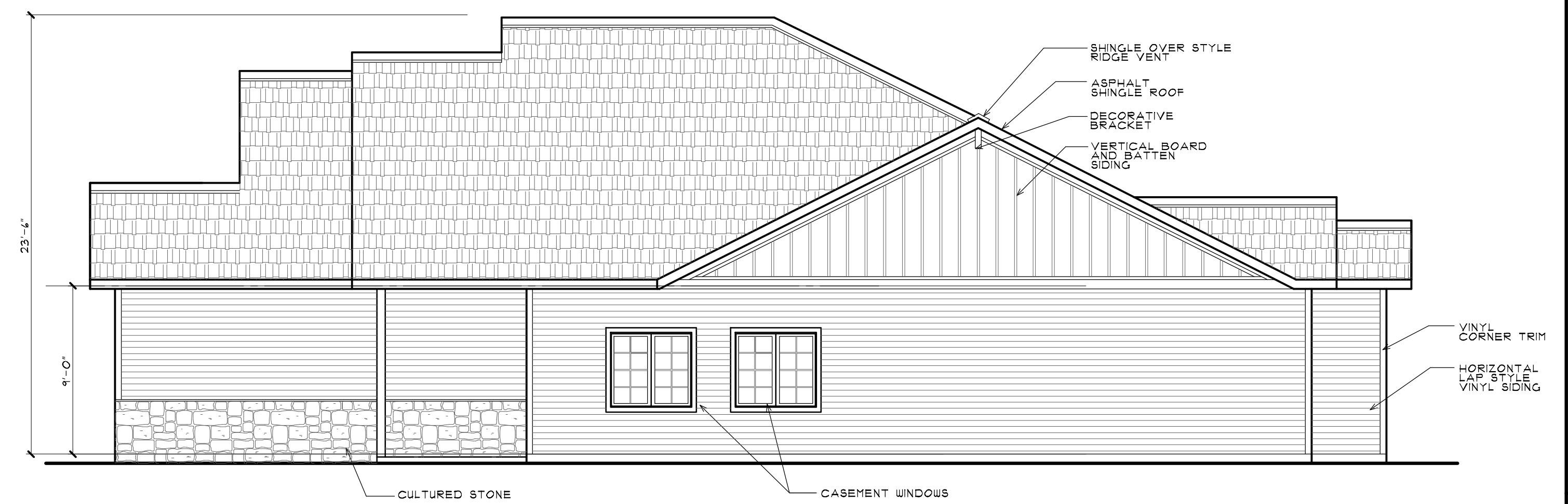
BUILDING B- FRONT ELEVATION

SCALE: 3/16" = 1'-0"




BUILDING B- LEFT SIDE ELEVATION

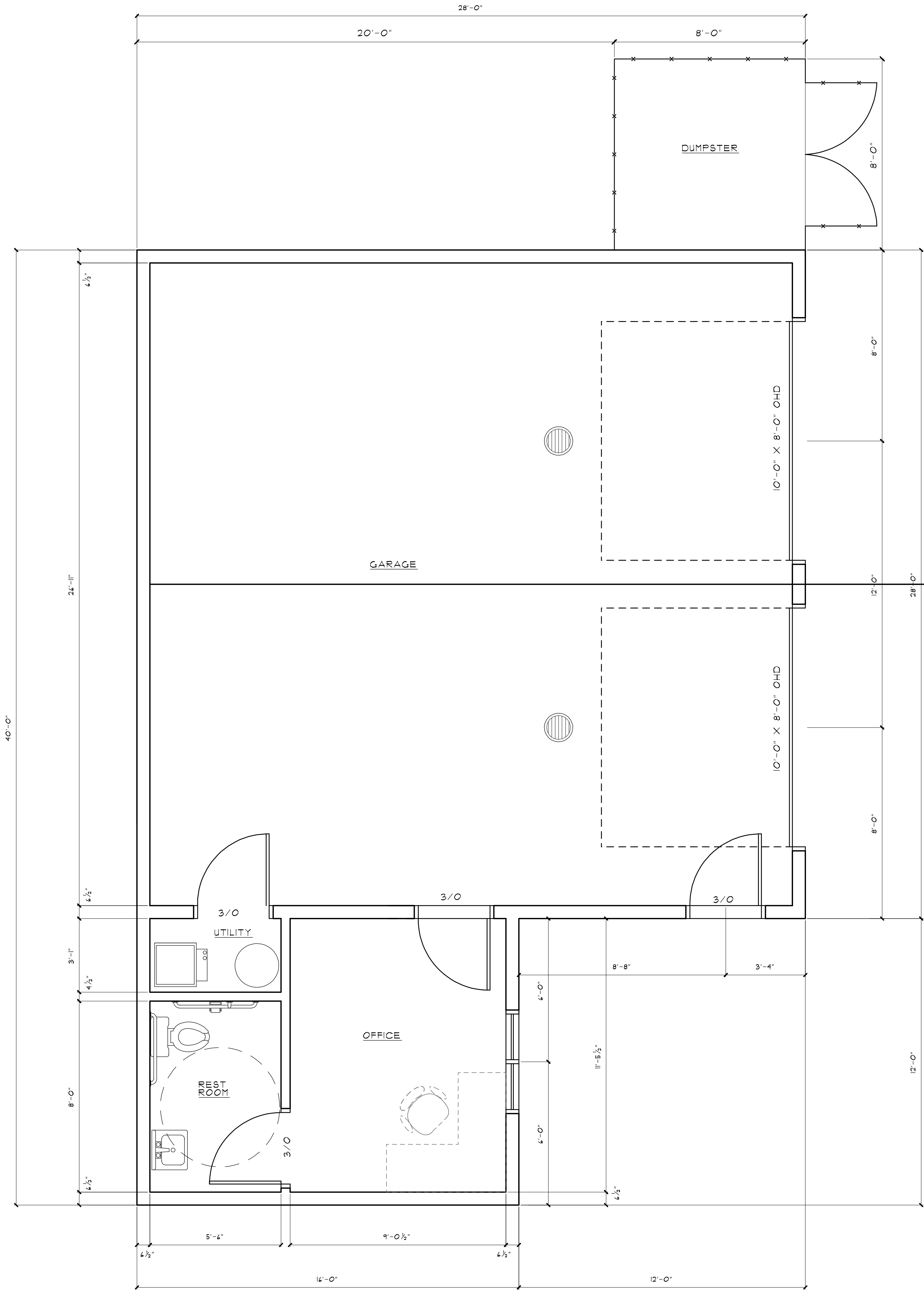
SCALE: 3/16" = 1'-0"



BUILDING B- RIGHT SIDE ELEVATION


SCALE: 3/16" = 1'-0"

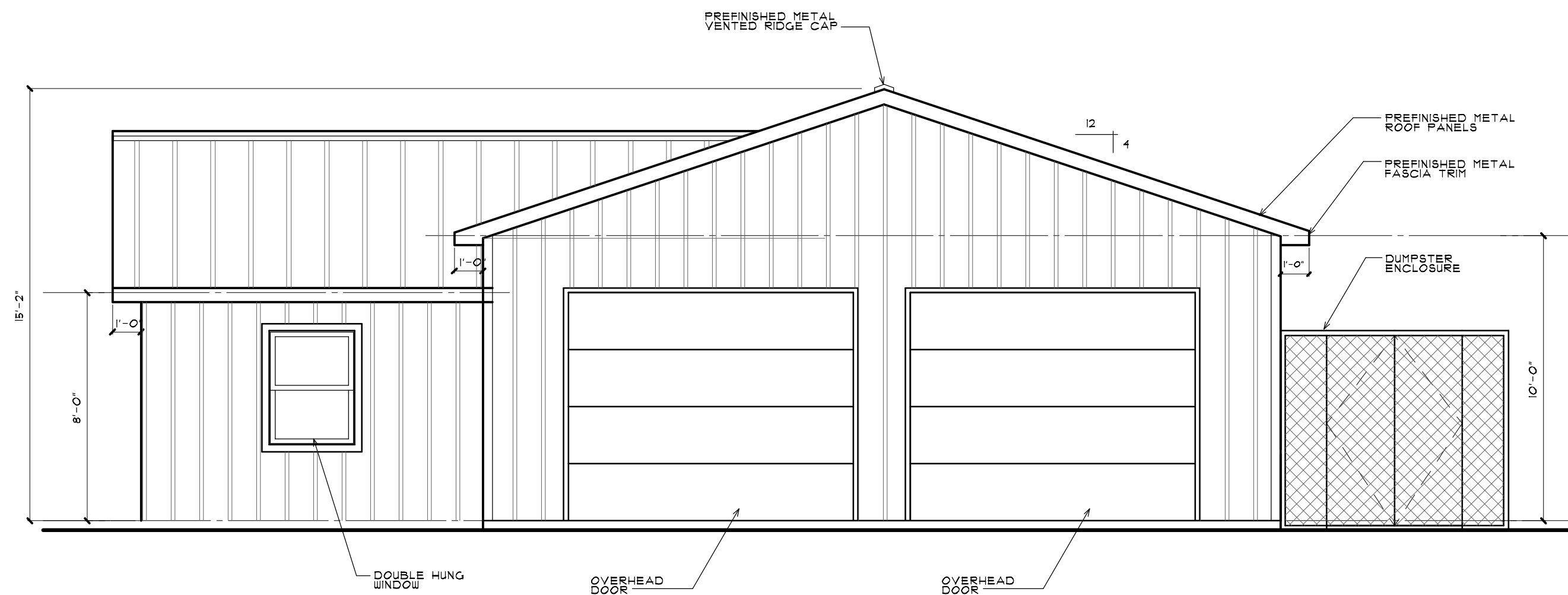
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|  SEIDEL ARCHITECTS | | COMMERCIAL RESIDENTIAL INDUSTRIAL | 114 N. COURT AVE. STE. 201 POST OFFICE BOX 2189 GATSBY, MICHIGAN 48724 | PHONE (989) 731-0372 FAX (989) 731-6932 |
| DRAIN BY | C.J.K. | CHECKED | T.L.S. | DATE |
| ZONING REVIEW | | APPROVED BY | T.L.S. | DATE |
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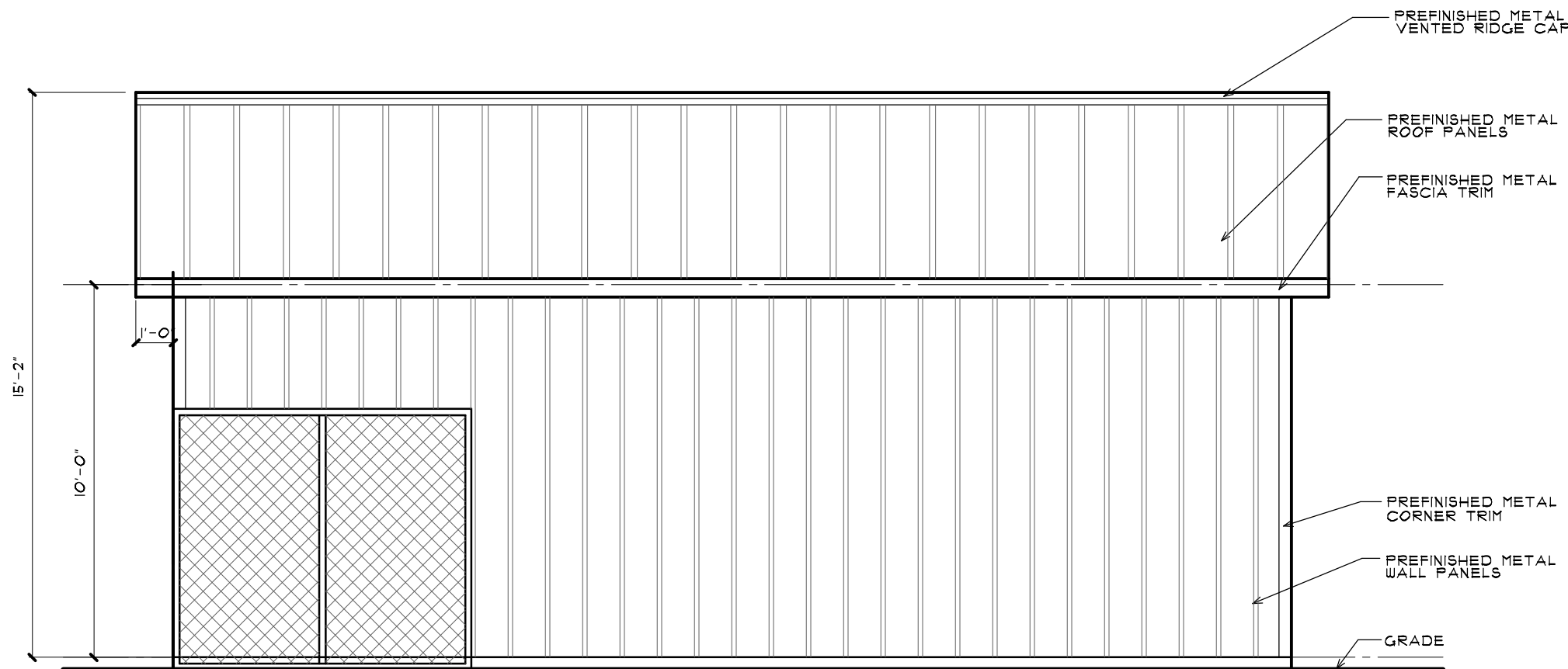
MAINTENANCE BUILDING FLOOR PLAN

SCALE: 3/8" = 1'-0"

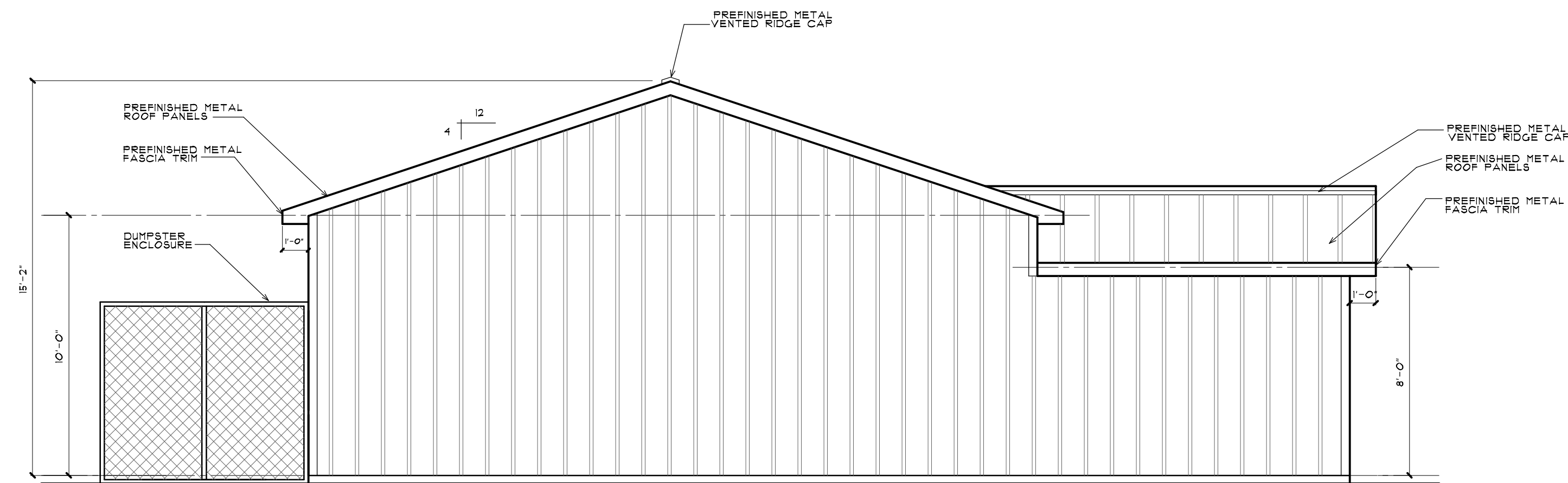
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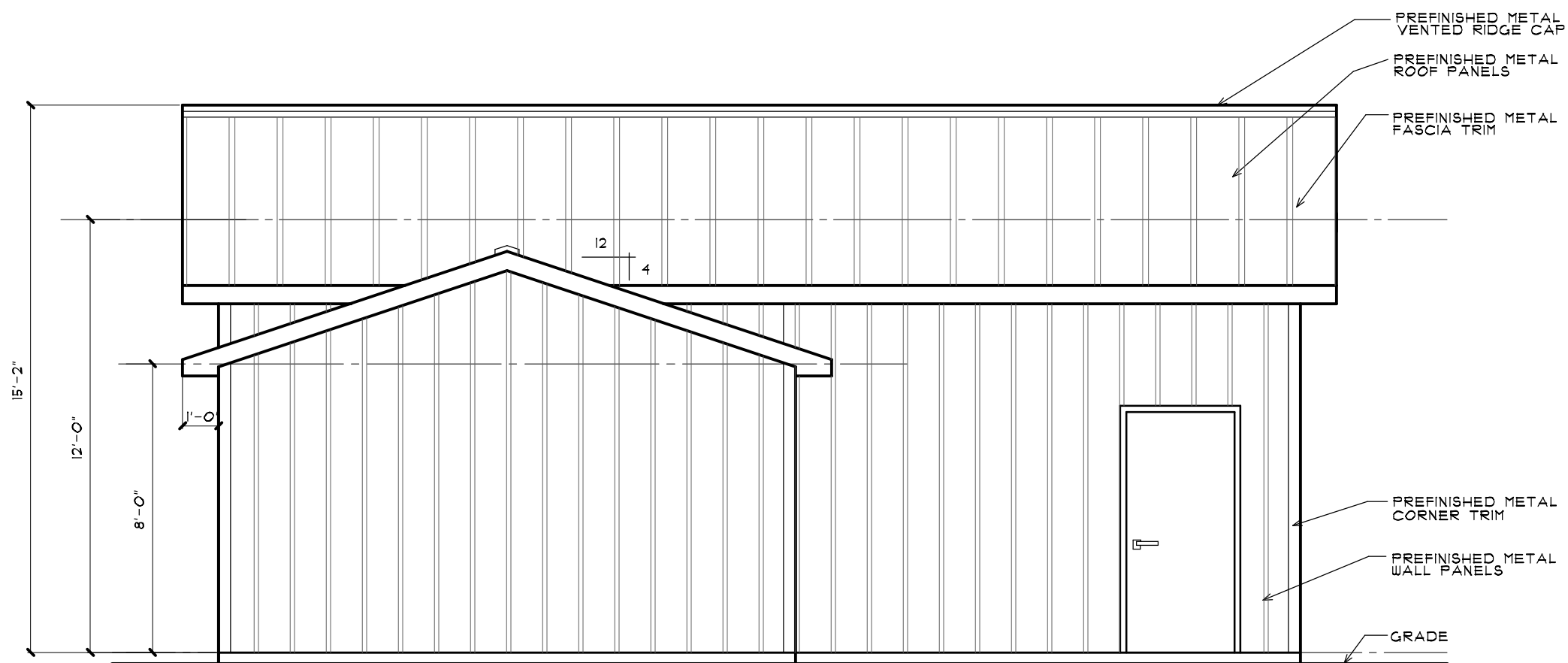
FRONT ELEVATION
SCALE: 1/4" = 1'-0"



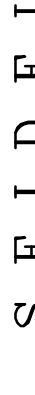
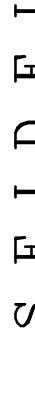
RIGHT SIDE ELEVATION
SCALE: 1/4" = 1'-0"



REAR ELEVATION
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LEFT SIDE ELEVATION
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Carlisle | Wortman
ASSOCIATES, INC.

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

Date: August 20, 2025

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

Applicant: Ghraib Real Estate Holdings #2, LLC

Project Name: Ghraib Senior Housing Development

Plan Date: July 25, 2025

Location: South of intersection at Warner Rd & Burkhart Rd
(Parcel #4706-21-100-050)

Zoning: Multiple Family Residential (MFR)

Action Requested: Preliminary Site Plan Approval

PROJECT AND SITE DESCRIPTION

The applicant has submitted a Preliminary Site Plan, dated July 25, 2025, for a proposed senior housing development consisting of twenty-six (26) two-bedroom units and two (2) three-bedroom units. The site is located south of the intersection of Warner Road and North Burkhart Road.

According to the applicant, the development will consist of multiple-family dwelling units and is not intended to operate as a State Licensed Facility, Adult Foster Care Group Home, or Adult Day Care Center. Residents will live independently in private units with no shared or common areas, and without any services typically associated with the aforementioned Special Land Uses.

Prior to Final Site Plan approval, the applicant shall submit a clear and detailed project narrative confirming that the proposed use will not involve services or operations similar to those associated with related Special Land Uses.

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

The approximately 6.1-acre subject site is currently vacant. It is bordered by an existing assisted living facility to the south, single-family residential homes to the north and west, and a vacant parcel to the east. **Figure 1** provides an aerial image of the site.

Figure 1. Aerial Image of Subject Site and Vicinity



Source: NearMap April 2025

Items to be Addressed: Applicant shall submit a detailed project narrative confirming that the proposed use will not involve services or operations similar to those associated with related Special Land Uses.

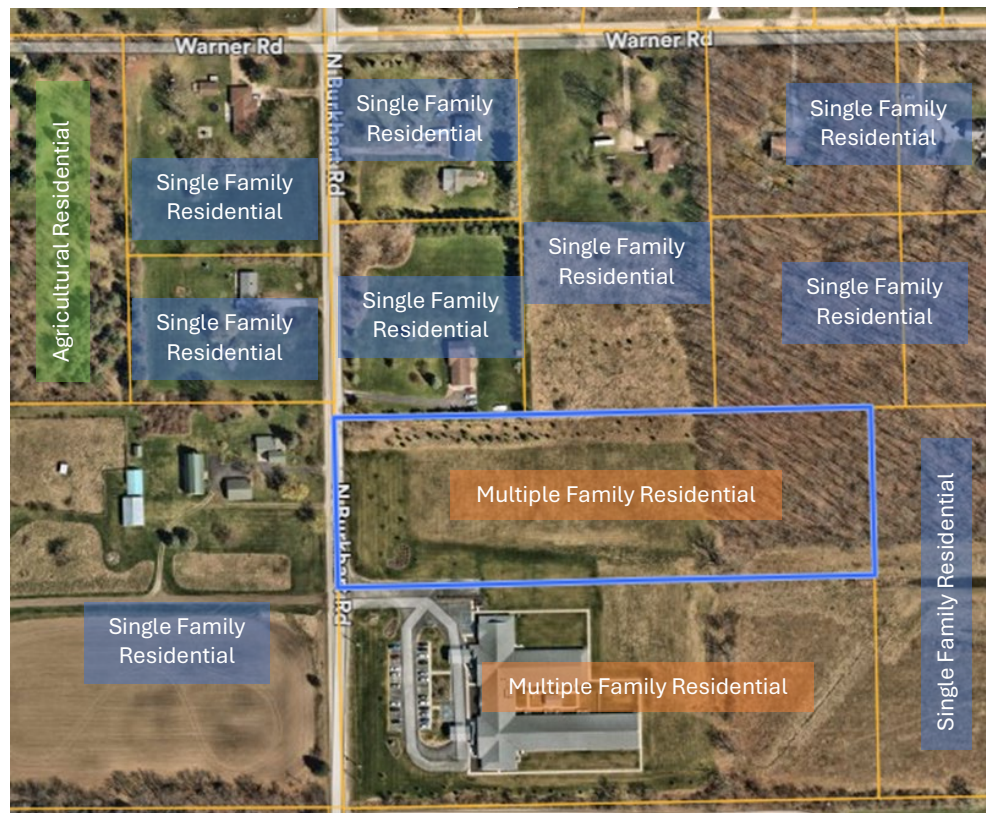
NEIGHBORING ZONING AND LAND USE

Neighboring zoning designations are summarized in **Table 1** and **Figure 2**.

Table 1. Zoning, Land Use and Master Plan Designations

| | Zoning | Existing Land Use | Master Plan Designations |
|---------------------|-----------------------------|--------------------------|--------------------------|
| Subject Site | Multiple Family Residential | Vacant | Low Density Residential |
| North | Single Family Residential | Single Family Residence | Low Density Residential |
| South | Multiple Family Residential | Assisted Living Facility | Low Density Residential |
| East | Single Family Residential | Vacant | Low Density Residential |
| West | Single Family Residential | Single Family Residence | Low Density Residential |

Figure 2. Surrounding Zoning Designations



Items to be Addressed: None.

AREA, WIDTH, HEIGHT, SETBACKS

Table 2 summarizes the Density, Placement, and Height Regulations for the site plan associated with the use as specified in Section 7.06, Section 7.07, and Section 15.10.

Table 2. Density, Placement, and Height Regulations

| Standard | Required | Provided | Complies |
|--|--------------------------------------|-----------------------------------|----------|
| Total Parcel Size | — | 6.1 acres (approx. 265,716 sq ft) | Yes |
| Minimum Lot Size for 1st Unit | Parcel of ½ acre or more | 6.1 acres | Yes |
| Open Space Requirement | 10% of gross area or minimum 3 acres | 3.2 acres (52.5%) | Yes |
| Two-Bedroom Unit Lot Area | 3,500 sq ft per unit | 26 units × 3,500 = 91,000 sq ft | Yes |
| Three-Bedroom Unit Lot Area | 5,000 sq ft per unit | 2 units × 5,000 = 10,000 sq ft | Yes |
| Total Required Lot Area (Units) | 101,000 sq ft (91,000 + 10,000) | 380,374 sq ft | Yes |

| | | | |
|----------------------------|---|--------------------------|-----|
| Lot Width | 200 ft | Approx. 290 ft | Yes |
| Front Setback | 30 ft + 1 ft per ft of height over 30 ft = 30 feet | Approx. 30 ft | Yes |
| Side Setback | 30 ft + 1 ft per ft of height over 30 ft = 30 ft | 30 ft at minimum | Yes |
| Rear Setback | 50 ft + 1 ft per ft of height over 50 ft | > 100 feet | Yes |
| Lot Coverage | Max 40% | 28% | Yes |
| Building Height | Max 5 stories / 60 ft | 1 story Approx. 24 ft | Yes |
| Building Separation | Min. 10 ft between buildings | 10 ft | Yes |
| Open Space | 10% of the total gross area or 3 acres | 3.2 acres preserved | Yes |

Section 7.07.B. requires multifamily developments to have open spaces comprising at least 10% of the total gross area of the project with the open spaces of at least three (3) acres in size and planned and built as a common facility to be used, operated and maintained by the developer or a nonprofit association representing the property owners and financed by means of a monthly or annual assessment.

Sheet C-5.2 notes that 3.2 acres of existing woodland will remain as open space. The applicant notes that this is a change from the previously delineated open space. Additionally, the plans depict a proposed nature trail through the naturally wooded area which branches off the easternmost drive isle.

Items to be Addressed: None.

PARKING, LOADING

Section 18.02 requires Multiple Family Dwellings to provide two (2) parking spaces per dwelling unit, plus one (1) additional space for each four (4) dwelling units, and one (1) space for each employee working during maximum employment hours.

As submitted, no employees are expected to be on site. Based on the applicant's proposal, the parking calculation below assumes no employees will be present, each driveway is suitable for a single parking space, and each garage is suitable for either one (1) or two (2) cars based on Sheet C-5.

$$(28 \text{ units} * 2 \text{ spaces} = 56 \text{ spaces}) + (28 \text{ units} / 4 \text{ units} = 7 \text{ spaces}) \\ = \mathbf{63 \text{ total required parking spaces}}$$

(26 one-car garages = 26 spaces) + (3 two-car garages = 6 spaces) + (32 driveway spaces)
= **64 total proposed parking spaces**

Items to be Addressed: None.

FLOOR PLAN & BUILDING ELEVATIONS

The applicant has provided floor plans on Sheets A1.1 – A4.2.

The development proposes a total of seven (7) residential buildings, comprising twenty-six (26) two-bedroom units and two (2) three-bedroom units. Each unit includes an attached garage, with configurations ranging from one-car to two-car garages depending on the unit type.

Items to be Addressed: None.

SITE ACCESS AND CIRCULATION

Proposed access to the facility will be from a shared two-way drive off N Burkhard Road.

The applicant has stated that the radii of the curves in the proposed road are fifty (50') feet, which exceed the required turning radii for fire trucks as required in parking lots.

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

Items to be Addressed: None.

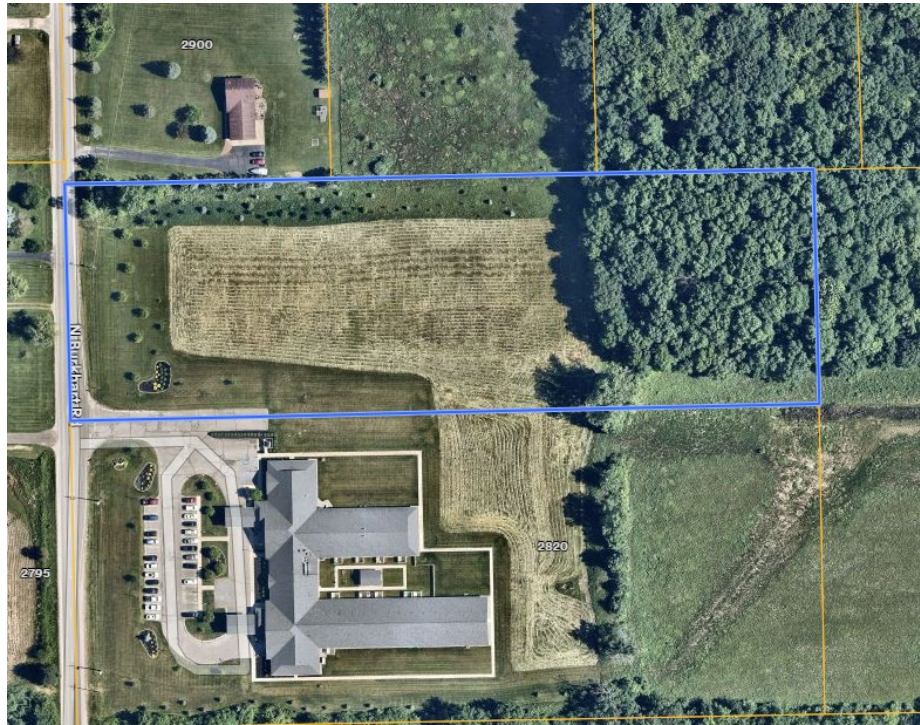
NATURAL FEATURES

The currently vacant site is open space and tilled farmland with a significant number of trees (shown in **Figure 3**) along the eastern parcel boundary and lightly dispersed along the western and northern property lines.

The site plan depicts 3.2 acres of woodlands to remain, which appears to comply with the Township's open space requirements.

EGLE's Wetlands Map Viewer shows an area which includes wetlands near the eastern property line of the site. This is an identified wetland on the National Wetlands Inventory (NWI) or Michigan Resource Inventory System (MIRIS) maps. No impacts are proposed to this wetland.

Figure 3. Natural Features



Nearmap: June 2024

Items to be Addressed: None.

LANDSCAPING

The applicant has provided a landscape plan on Sheet C-8 which notes that there will be several phases of the project. These phases are not described. Landscaping requirements are noted in **Table 3** are representative of the entire site.

The following table indicates the estimated landscaping requirements of the Zoning Ordinance.

Table 3. Landscaping Requirements

| Landscaped Area | Requirement | Factor | Required | Provided |
|-----------------------------------|--|------------------------------------|-----------|-----------|
| N Burkhardt Road | 1 deciduous shade or evergreen tree per 40 lineal feet | $(290.88 / 40 = 7.27)$ | 8 trees | 8 trees |
| | 1 ornamental tree per 100 lineal feet | $(290.88 / 100 = 2.9)$ | 3 trees | 3 trees |
| | 8 shrubs per 40 ft. | $((290.88 / 40) * 8 = 58.18)$ | 59 shrubs | 59 shrubs |
| Rear Yards Along N Burkhardt Road | 1 deciduous shade or evergreen per 40 ft. | $(\text{Approx. } 85 / 40 = 2.13)$ | 3 trees | 3 trees |

| | | | | |
|---|--|-------------------------------|------------|------------|
| | 1 ornamental tree per 100 ft. | (Approx. 85 / 100 = .85) | 1 tree | 1 tree |
| | 8 shrubs per 40 ft. | ((Approx. 85 / 40) * 8 = 17) | 17 shrubs | 45 shrubs |
| Multiple Family Residential Requirements | 2 deciduous or evergreen trees per dwelling unit | (28 * 2 = 56) | 56 trees | 71 trees |
| | 4 shrubs per dwelling unit | (28 * 4 = 112) | 112 shrubs | 128 shrubs |
| Berm Where Parcel Abuts Single Family Residential | | Existing berm to be relocated | | |

The submitted landscape plan incorporates a combination of existing vegetation and proposed plantings.

Items to be Addressed: Applicant to provide detailed cost estimates for landscaping materials.

LIGHTING

A sufficient lighting plan has been provided. A photometric plan indicates that the light levels at property lines are acceptable. Planned lighting includes pole mounted fixed lights which will be located along the sites main drive.

Items to be Addressed: None.

SIGNS

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

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

Items to be Addressed: None.

TRASH ENCLOSURE

No dedicated trash enclosure is proposed for the residences at this site. Waste removal is expected to occur via individual residential bins, with collection taking place once per week.

A trash enclosure is proposed on the side of the maintenance barn which is intended for associated waste and not for residential use.

Items to be Addressed: None.

RECOMMENDATIONS

The preliminary site plan generally appears to comply with the requirements. However, the following item(s) should be addressed or made a condition for the final site plan prior to the Planning Commission taking action on the site plan:

1. Applicant shall submit a detailed project narrative confirming that the proposed use will not involve services or operations similar to those associated with related Special Land Uses.
2. Applicant to provide detailed cost estimates for landscaping materials.

Please contact us with any questions or concerns.



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



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

#PC-2025-08

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

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

Date 8-2-2025

File # _____

Applicant Name Dwayne Combs Guided Mission Investments LLC
CASTAWAY PLAY CARE
LLC

Parcel ID # 4706-28 - 100 - 012

Location of Property 1800 N. BURKHART Current Zoning Classification IF2
Existing Use Indoor Recreation Proposed Use Indoor/OUTDOOR Recreation

Check One:

☐ Preliminary Site Plan Review (20.06)

☐ Final Site Plan Review (20.07)

☒ Temporary Use (14.34)

☐ Commercial/Industrial Development

☐ Subdivision/Site Plan Condo

☐ Multi-Family/Condo

☐ Planned Unit Development (PUD) Type: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

August 2025

| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
|-----|-----|-----|-----|-----|-----|-----|
| | | | | | | 1 |
| | | | | | | 2 |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | | | | | | |

September 2025

| Sun | Mon | Tue | Wed | Thu | Fri | Sat | |
|-----|-----|-----|-----|-----|-------------------------------|-----------|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 |
| 7 | 8 | 9 | 10 | 11 | 12 | 13 | |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 | |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | |
| | | | | | Hand Open 7:30-12:00 am | Hand Open | |
| 28 | 29 | 30 | | | | | |

October 2025

| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
|-----|-------------------------------------|-----|-----|-----|-----|--|
| | | | | 1 | 2 | 3 HAUNT OPEN 7:30 PM - MIDNIGHT |
| | | | | | | 4 HAUNT OPEN 7:30 MIDNIGHT PM |
| | 5 | 6 | 7 | 8 | 9 | 10 HAUNT OPEN 7:30 - MIDNIGHT PM |
| | | | | | | 11 HAUNT OPEN 7:30 - MIDNIGHT PM |
| | 12 | 13 | 14 | 15 | 16 | 17 HAUNT OPEN 7:30 - MIDNIGHT PM |
| | | | | | | 18 HAUNT OPEN 7:30 - MIDNIGHT PM |
| | 19 HAUNT OPEN 7:30 - MIDNIGHT | 20 | 21 | 22 | 23 | 24 HAUNT OPEN 7:30 - MIDNIGHT PM |
| | | | | | | 25 HAUNT OPEN 7:30 - MIDNIGHT PM |
| | 26 HAUNT OPEN 7:30 - MIDNIGHT | 27 | 28 | 29 | 30 | 31 HAUNT OPEN 7:30 - MIDNIGHT PM |

November 2025

| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
|-----|-------------------------------------|-----|-----|-----|-----|---|
| | | | | | | HAUNT OPEN Final Night 7:30 - Midnight P.M. 1 |
| | 2 Remove All Haunt Signage | 3 | 4 | 5 | 6 | 7 8 |
| 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 30 | | | | | | |

December 2025

| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
|------------------------------------|------------------------------------|--|-----|-----------------------------------|-----------------------------------|-----------------------------------|
| | | 1 | 2 | 3 | 4 | 5 |
| | | | | | ELF TRAINING OPEN 3pm - 8pm | ELF TRAINING OPEN 3pm - 8pm |
| | | 8 | 9 | 10 | 11 | 12 |
| ELF TRAINING OPEN NOON - 6pm | | | | | ELF TRAINING OPEN 3pm - 8pm | ELF TRAINING OPEN 3pm - 8pm |
| | | 15 | 16 | 17 | 18 | 19 |
| ELF TRAINING OPEN NOON - 6pm | | | | ELF TRAINING OPEN 3pm - 8pm | ELF TRAINING OPEN 3pm - 8pm | ELF TRAINING OPEN 3pm - 8pm |
| | | 22 | 23 | 24 | 25 | 26 |
| ELF TRAINING OPEN NOON - 6pm | ELF TRAINING OPEN NOON - 6pm | ELF TRAINING OPEN NOON - 6pm LAST DAY | | | | |
| 28 | 29 | 30 | 31 | | | |

January 2026

Sun

Mon

Tue

Wed

Thu

Fri

Sat

1

2

3

4

5

6

7

8

9

10

START
Demo of
STORAGE OF
All External ITEMS

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

February 2026

| Sun | Mon | Tue | Wed | Thu | Fri | Sat | |
|-----|-----|-----|-----|-----|-----|-----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| | 22 | 23 | 24 | 25 | 26 | 27 | 28 |

March 2026

| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
|-----|--|-----|-----|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| | | | | | | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 | 31 | | | | |
| | Complete Exterior Demolition Storage | | | | | |

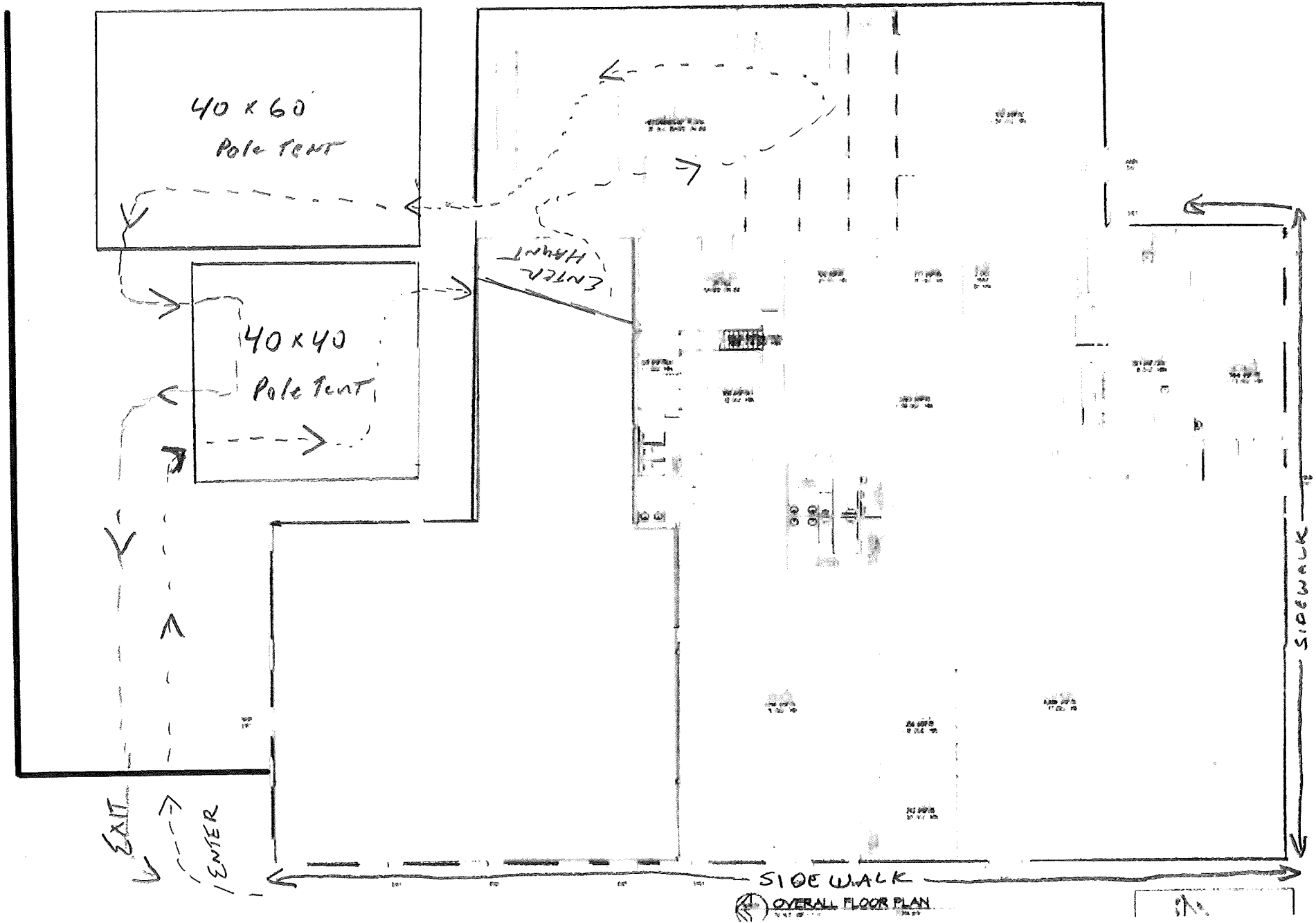
HYDRAULIC WORK

HAUNT PEDESTRIAN CIRCULATION

↑ NORTH

Sept 26th - Nov 1st

SCALE 1/8" = 3'



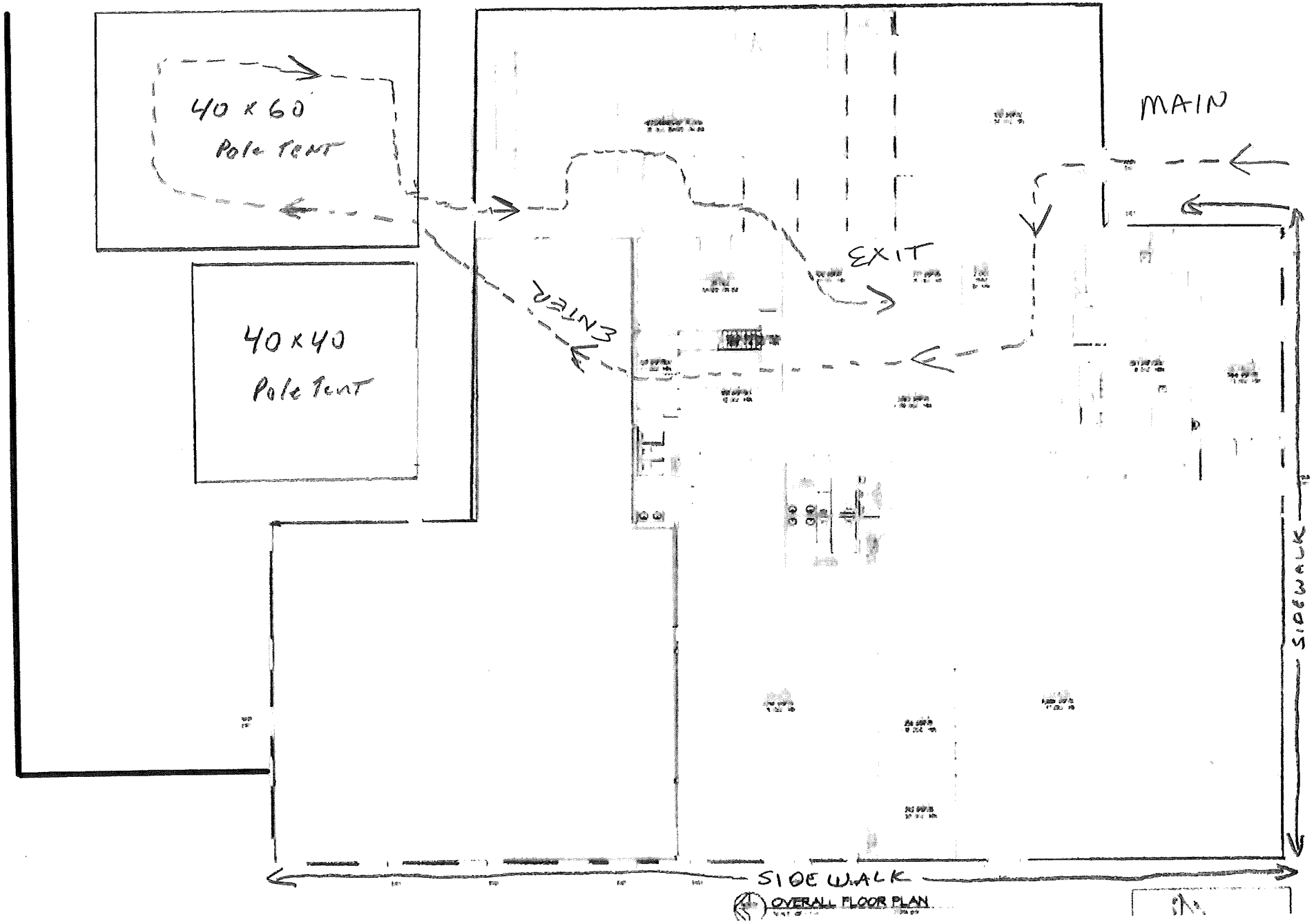
| | | | |
|------------------------------------|---------|---|-----------------------------|
| PUCI + VOLLMAR ARCHITECTS, P.C. | PV A | CRAFT-ALWAY-CAFE EXPANSION 1000 KUMAR BLVD HOUSTON, TEXAS 77004 | FLOOR PLANS AND CODE REVIEW |
| | | | |

Hydraulic wave

CHRISTMAS / ELF TRAINING
PEDESTRIAN CIRCULATION

Dec 4th - 23 RD

Scale 1/8" = 3'



| | |
|-----------------------------|--|
| PV A | PUCCI + VOLLMAR ARCHITECTS, P.C. |
| | CAPT-ARMY-CAFE EXPANSION 300 NORTH BURNHAM ROAD HOUSTON, TEXAS 77004 |
| FLOOR PLANS AND CODE REVIEW | |



Carlisle | Wortman
ASSOCIATES, INC.

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

Date: August 20, 2025

Temporary Site Plan Review For Howell Township, Michigan

GENERAL INFORMATION

Applicant: Castaway Play Café
Guided Mission Investments
Dwayne Combs

Application Date: August 2, 2025

Location: 1800 N Burkhart Road
#4706-28-100-012

Zoning: IFZ – Industrial Flex Zone

Action Requested: Temporary Use Site Plan Approval

PROJECT AND SITE DESCRIPTION

The applicant is seeking a temporary use permit to allow for a temporary use per Section 14.25 of the Zoning Ordinance. The applicant is proposing a haunted house and a Christmas event within the existing building located at 1800 N Burkhart. The proposal utilizes the northern portion of the principal structure, along with a pole tent to serve as an extension of the activity, and a smaller pole tent designated for administrative use during the temporary use. The site is located at the corner of North Burkhart and Hydraulic Drive, north of the railroad.

The proposed pole tent structure acting as the extension of the facility is forty (40) by sixty (60) feet and is located in the northeast corner of the site. The pole tent structure used for an administrative area is twenty (20) feet by forty (40) feet in size and is to be located at the northwest corner of the property.

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

Figure 1. Aerial Image of Subject Site and Vicinity



The proposed dates for the temporary use are from September 26, 2025, through January 5, 2026. The haunted house is proposed from September 26, 2025, through November 1, 2025. The Christmas event is proposed to begin on December 4, 2025, and last through December 23, 2025.

Items to be Addressed: None.

FIRE SAFETY REVIEW

We defer to the Fire Marshal for consideration of fire safety measures.

Items to be Addressed: Consider Fire Marshal's comments.

PARKING AND CIRCULATION

The proposed temporary use and structures located at the northern end of the parcel do not appear to negatively affect vehicular circulation or parking due to the parking lot being located in the southern portion of the parcel. There is a sidewalk along the frontage of the building that connects the parking lot at the south end of the building to the proposed entrance. We recommend a barrier be placed north of the northern entrance to direct traffic to the parking lot.

Items to be Addressed: Place a barrier at the northern entrance to direct traffic to the parking lot.

SIGNS

While the applicant has not given any indication of signage in their application, they should bear in mind that all signage must comply with Article 19, *Sign Regulations*, of the Zoning Ordinance. If any temporary signs are proposed, a separate sign permit must be obtained from the Township.

We recommend the applicant utilize signage to clearly direct pedestrian traffic and provide clear safety routes using Michigan Occupational Safety and Health Administration (MIOSHA) standards.

Items to be Addressed: 1) Planning Commission to determine if additional exterior safety signs are required. 2) If any other signs are proposed for, a separate sign permit must be obtained from the Township.

TEMPORARY USE

The applicant is seeking a temporary use permit as outlined in Section 14.25 of the Ordinance. Temporary uses are permitted in any district, provided that the Planning Commission determines the following to be true:

- *The location of such uses and their related activities will not adversely affect public health, safety, morals, and general welfare in the district in which it is to be temporarily located.*

The proposed use should not impact public health.

- *All temporary uses shall have a reasonable time limit placed upon their use based upon the normal periods of time such uses need to exist for their expressed purpose. The time limit shall be expressed in calendar dates for the number of days authorized by the Planning Commission.*

The applicant has proposed operating this use from September 26, 2025, through January 5, 2026. The haunted house would be open Fridays through Sundays in October, from 7:30 p.m. to 12:00 a.m. The Christmas event would have varying hours, but would not begin before 12:00 p.m. and would conclude no later than 8:00 p.m.

If the Planning Commission believes these times are reasonable, they should place a condition upon the application that if the temporary use permit is approved, such approval expires on January 5, 2026.

- *Temporary uses may be granted on the basis of compliance with the criteria stated in Section 20.08 (Criteria for Site Plan Review).*

The applicant has provided a sketch plan using sheets from what appears to be the original plan for the development. The Planning Commission should evaluate the plan to determine if there is enough information provided to make a determination on the proposed temporary use.

Items to Be Addressed: *Planning Commission should review the above criteria and determine if there will be adverse impacts with this facility.*

RECOMMENDATIONS

The following items should be addressed by the applicant:

1. Comply with conditions imposed by the Fire Marshal.
2. Place a barrier at the northern entrance to direct traffic to the parking lot.
3. Provide exterior safety signage that complies with the Michigan Occupational Safety and Health Administration (MIOSHA) standards
4. Apply for a temporary sign permit if any exterior signage is proposed.
5. Comply with conditions imposed by Planning Commission.

We look forward to discussing this with you at the next Planning Commission meeting.



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



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

August 4, 2025

Jonathan Hohenstein, Zoning Administrator

Howell Township

3525 Byron Road

Howell, MI 48855

Re: Wrangler's Saloon – Approval Extension Request

Jonathan and Township Plan Commission

We formally request a 1-year extension to our project approvals for the proposed Wrangler's Saloon at 4020 West Grand River, Howell, MI in concurrence with Township Zoning Ordinance Section 27.07 (F). It is still our intent to begin construction on the project in the fall of this year, 2025. A number of circumstances have delayed the project from the first pre-application meeting with the Township in the spring of 2022. The primary items are as follows:

1. Private Stormwater Easements: Although the project site, portions of West Grand River Ave., and several other properties on the north side of Grand River Avenue drain through an existing culvert under the road, and this was not proposed to change, the Livingston County Road Commission (LCRC) required stormwater easements from 'downstream' property owners. The existing culvert drains under the road into an existing ditch that is located on a portion of the Tonon property (4141 W. Grand River) and then through the Livingston Commerce Center Business Park storm sewer system, into a large detention basin at the west end of the development. These easements, essentially documenting/formalizing existing conditions, were not able to be fully executed until July 27, 2024, more than 1-1/2 years after the requirement was made by LCRC. Available stormwater capacity first needed to be confirmed by the Livingston County Drain Commissioner's office, followed by lengthy negotiations with the property

owners.

2. FAA Clearance: The site, proposed building, and proposed trees will be well below the Livingston County Airport 'Glide-Path' criteria. However, it was ultimately determined that due to its proximity to airport property a 'Tall Structure Permit' needed to be obtained. This application ended up including calculations for the presumed mature height of every proposed tree, each planned parking lot light pole height, as well as the structure. This was not fully approved until March 6, 2025 (with no ultimate changes needed to the building, proposed trees or lights).

3. REU Reduction Request: Although an initial draft study was completed in 2022, we had to revise the seating capacity with different designs and additional comparisons needed. to support our reduction request. We added several of our other restaurants as we obtained them, taking time. Our reduction request was approved July 15 th , 2025.

4. EGLE ACT399 Watermain Permit / Possible Contamination Site Issue: Following Township Engineer approvals this winter, the extension of watermain into the site for building fire suppression, including a new fire hydrant, needed to be submitted to MHOG for their approval and ultimately to EGLE under their ACT399 permitting process. During this process the site was flagged on EGLE's on-line RIDE Mapper as a possible 'contaminated' site. A Baseline Environmental Assessment (BEA) report from September, 2020 was referenced as the cause for this designation. This report was actually a due-diligence type report that needed to be submitted within 90-days of our purchase of property so that we would not be liable for any contamination if found in the future. Although the site had a history, circa 1904, as an automobile gasoline dispensary with a possible abandoned buried tank, none were found. The only

'contaminant' was an elevated arsenic level in one sample at the far northwest corner of the site – with no impacts to the watermain extension and no ultimate 'contamination' designation. Unfortunately, this took months to resolve – until July 29 th , 2025.

With these issues the anticipated demolition of the existing building on-site and the start of construction of the new restaurant had to be pushed back multiple times. However, as illustrated in the descriptions we have been continuing to move the process along and at no time dropped work on the project. As much as possible, we anticipate beginning work as early as September this year but want to avoid any possible gap between the expiration of approvals and the start of actual construction.

We respectfully request a 1-year extension to next year, September 5, 2026.

We have previously submitted the private stormwater easements with their associated dates but have also included copies with this submission. We are also including the FAA approval and sampling of email correspondence along with similar correspondence regarding the ACT399/MHOG process. Please contact us if you need additional information.

Respectfully,

WD REALTY

Holly Fletcher


Partner

Winfried 'Win' Dahm


Partner

[Redacted]

[Redacted]



SOAPY BUCKET CARWASH

Howell, MI 48843

August 18, 2025

Howell Township Planning Commission
3525 Byron Road
Howell, MI 48855

RE: Request for Extension of Site Plan Approval
Parcel Number: 4706-25-200-048
Project: Soapy Bucket Carwash

Dear Members of the Planning Commission,

I respectfully and formally request a one-year extension of the project approvals for the proposed Soapy Bucket Carwash. This request is being made in concurrence with Township Zoning Ordinance Section 27.07 (f), which allows extensions under circumstances such as those we are experiencing.

It remains my full intent to begin construction of the project this fall/winter. However, a number of circumstances beyond my immediate control have caused delays in advancing the project to the construction stage:

- Stormwater Basin/ZBA Process

As noted in Township correspondence, the approved stormwater basin location required a subsequent review through the Zoning Board of Appeals. This additional step extended the approval process beyond the originally anticipated schedule.

- Project Cost Opinion / Bonding Re-Bids

In working with Spicer Group on the project's cost opinion and bonding requirements, we were required to re-bid several major components to substantiate the "actual bid costs" requested. This process, coinciding with the busy summer construction season, has taken longer than expected and delayed finalizing financial commitments.

- Financing Pre-Approval Requirements

Prior to breaking ground, I wish to have all project financing fully pre-approved. To

responsibly secure this financing, I must provide final accepted bid pricing, which can only follow the completion of the re-bid process noted above.

I want to reaffirm my commitment to bringing this project to completion and contributing to Howell Township's continued economic development. The Soapy Bucket Carwash will not only serve the community but also enhance the tax base and provide local employment opportunities.

For these reasons, I respectfully request the Planning Commission grant a 12-month extension of the existing project approvals to allow us the necessary time to complete these steps and commence construction as intended.

Thank you for your consideration and continued cooperation. I appreciate the Township's guidance and support as we move forward.

Sincerely,

A handwritten signature in black ink, appearing to read "Russell Springborn", with a horizontal line above the name.

Russell Springborn

Owner/Developer

Soapy Bucket Carwash