



Planning Commission

Larry Fox, Chairperson Summer L. McMullen, Trustee
Michael Mitchell, Vice-Chairperson Sue Grissim, Commissioner
Tom Murphy, Secretary Jim Mayer, Commissioner
Matthew Eckman, Commissioner

Planning Commission Meeting Agenda
Hartland Township Hall
Thursday, May 09, 2024
7:00 PM

1. Call to Order
2. Pledge of Allegiance
3. Roll Call
4. Approval of the Agenda
5. Approval of Meeting Minutes
6. Call to Public
7. Public Hearing
 - a. Site Plan/PD Application #24-001 Highland Road Self-Storage Facility PD – Preliminary Planned Development Site Plan
8. Call to Public
9. Planner's Report
10. Committee Reports
11. Adjournment

Hartland Township Planning Commission Meeting Agenda Memorandum

Submitted By: Troy Langer, Planning Director

Subject: Site Plan/PD Application #24-001 Highland Road Self-Storage Facility PD – Preliminary Planned Development Site Plan

Date: May 2, 2024

Recommended Action

Move to recommend approval of Site Plan/PD #24-001, the Preliminary Planned Development Site Plan for Highland Road Self-Storage Facility Planned Development as outlined in the staff memorandum dated May 2, 2024.

Approval is subject to the following conditions:

1. The Preliminary Planned Development Site Plan for Highland Road Self-Storage Facility Planned Development, SP/PD #24-001, is subject to the approval of the Township Board.
2. Waiver request for the planned development project area to be less than 20 acres is approved.
3. Waiver request for the building height to exceed 35 feet is approved.
4. Waiver request for one (1) wall sign on a side of the building that is not the building wall's primary entrance (south elevation) is approved.
5. The applicant shall adequately address the outstanding items noted in the Planning Department's memorandum, dated May 2, 2024, on the Construction Plan Set, subject to an administrative review by Planning staff prior to the issuance of a land use permit.
6. As part of the Final Plan Review, the applicant shall provide a Planned Development (PD) Agreement that includes any access and maintenance agreements. The documents shall be in a recordable format and shall comply with the requirements of the Township Attorney.
7. Applicant complies with any requirements of the Township Engineering Consultant, Department of Public Works Director, Hartland Deerfield Fire Authority, and all other government agencies, as applicable.
8. (Any other conditions the Planning Commission deems necessary).

Discussion

Applicant: Joe Qonja

Site Description

The proposed planned development (PD) is shown north of Highland Road, west of US-23, and located between Best Western of Hartland motel and Arby's restaurant. The subject parcel, zoned GC (General

Commercial), is approximately 1.21 acres in size and is undeveloped (Parcel ID #4708-21-300-039). The property has approximately 180 lineal feet of frontage along the right-of-way line for US-23 (east property line). The west property line aligns with the existing 30-foot-wide private service drive easement and the parcel has approximately 180 lineal feet of frontage along the private service drive.

The 2020-2021 Amendment to the Future Land Use Map (FLUM) designates the subject parcel as Commercial.

Public access to the proposed development is via an existing paved, private service drive which connects to Highland Road on the south, travels north to the Best Western of Hartland motel, then turns west to connect to Old US-23. The north-south portion of the service drive is paved and is approximately twenty (20) feet wide, as measured edge to edge, without curbing. The east-west portion of the service drive is approximately thirty (30) feet wide, edge to edge, and also without curbing. A 30-foot-wide private driveway easement for ingress-egress and utilities is associated with the service drive. Currently Arby's restaurant has access from the service drive via two (2) driveways as does Best Western. A vacant parcel is situated west of Best Western and north of the service drive. The applicant provided a copy of the recorded driveway easement for the service drive, which allows access to the service drive for the subject property.

Municipal water and sanitary sewer will be required for this project.

Arby's restaurant is to the south (10099 Highland Road) and is zoned GC. To the north, is the Best Western of Hartland (10087 Highland Road) which is also zoned GC. Southwest of the subject site is Chase Bank which is zoned PD (Planned Development). The Chase Bank property does not take access from the private service drive. The 2020-2021 Amendment to the FLUM shows Commercial as the designation for each parcel.

Site History

SUP #183 (Best Western Motel 1984)

The subject property for the climate controlled self-storage facility was originally part of a larger parcel that included the Best Western motel. SUP #183 for the Best Western motel was approved by the Township Board on August 21, 1984. The plan showed two (2) phases for the development of the site that included two (2) motel buildings, a separate motel office building, restaurant, donut shop, and associated parking areas.

Land Use Permit #1433 (1985)

Land Use Permit #1433 was approved on January 24, 1985, for the construction of the motel building, in its current location. It is unclear if the separate motel office building and pool were also approved under this permit.

Metes and Bounds Land Division Application #771 (2007)

The Planning Commission approved M & B Land Division Application #771 on June 28, 2007. This was a request to split the existing parcel into two (2) parcels, that included Parcel A (1.54 acres vacant land, NW corner of the site, adjacent to Old US-23) and Parcel B (3.95 acres, with motel buildings, paved parking areas, and undeveloped land to the south). A thirty (30) foot wide easement is shown on Parcel A and Parcel B, for ingress, egress, and public utilities. The easement connects to Old US-23 on the west and Highland Road to the south. The document was recorded in 2007.

Land Division Application #840 (2014)

This was a request to split Parcel B (3.95 acres) into two (2) parcels. Parcel B1 (2.72 acres) includes the existing motel building, office/indoor pool building, and parking area. Parcel B2 (1.21 acres) is the site of the proposed climate controlled self-storage PD. The 2014 recorded survey for the land division, for Parcel B1, shows a 30-foot-wide segment of land that appears to be the approximate location of the north-south portion of the ingress-egress easement described in the 2007 recorded document. However, a legal description of the 30-wide easement is not provided on this survey.

Site Plan/PD Application #23-009 (Climate Controlled Self-Storage Facility PD – Concept Plan)

The Concept PD plan was discussed under SP/PD Application #23-009. The Planning Commission reviewed the project on August 24, 2023, followed by the Township Board’s review of the project on September 5, 2023.

Planned Development Procedure

Section 3.1.18 of the Township’s Zoning Ordinance provides standards and approval procedures for a PD (Planned Development). Approval of a Planned Development is a three-step process. A Concept Plan, Preliminary Plan, and Final Plan are all reviewed by the Planning Commission and the Township Board, with the Planning Commission making a recommendation and the Board having final approval at each step.

The process usually requires a rezoning from the existing zoning district to the Planned Development (PD) zoning district. As part of the rezoning, a public hearing is held before the Planning Commission consistent with the Michigan Zoning Enabling Act; this public hearing is held at the same meeting during which the Planning Commission reviews and makes a recommendation on the Preliminary PD. Approval of the Final Plan by the Township Board usually constitutes a rezoning of the subject property to PD (Planned Development).

Given the requirements for publishing a notice for the planned development, the public hearing has been scheduled for the May 9, 2024, Planning Commission meeting. Approval of the Final Plan by the Township Board usually constitutes a rezoning of the subject property to PD (Planned Development).

For all intents and purposes, the Preliminary Plan step is essentially the same as a preliminary site plan review for a conventional project in the Township. All the information and details required for a preliminary site plan approval must be provided for the Preliminary PD review and approval. Final PD review will involve detailed plans for those phases for which construction is intended to begin immediately, review of the Planned Development Agreement, and other written documents as applicable.

Overview of the Preliminary Plan and Proposed Use

The applicant has submitted Preliminary PD plans for a 3-story, climate controlled self-storage facility, to be developed as a Planned Development. The property is currently zoned GC (General Commercial) which does not allow for a self-storage facility or mini warehouse use.

A mini warehouse facility typically consists of single-story buildings with multiple storage units per building, and drive aisles around the buildings. The storage unit/building may or may not be climate controlled. Each storage unit is typically accessed directly from a garage door (drive-up storage unit). Separate standards for Mini Warehouses are found in Section 4.35. Based on the discussion at the Concept Plan stage, the consensus of the Planning Commission was that the standards for Mini Warehouses (Section 4.35) do not apply to the proposed use. Specific zoning standards are not provided for this type of facility; thus, the applicant is pursuing the project as a Planned Development.

The subject parcel is approximately 1.21 acres. Per Section 3.1.18.B.ii, the minimum size for a Planned Development is twenty (20) acres of contiguous land. The Township Board, upon recommendation from the Planning Commission may permit a smaller Planned Development subject to meeting the requirements in Section 3.1.18.B.ii, such as the project offers unique characteristics and benefits or the parcel in question has unique characteristics that significantly impact development. The applicant submitted a letter to the Township, dated April 18, 2024, requesting a waiver of the minimum Planned Development size requirements and explained the basis for the request.

Regarding the site layout for the proposed facility, the building is positioned in the center of the site. The plans show three (3) driveways to the site from the existing service drive. The southern driveway provides ingress to the site and is one-way (west to east). The internal drive lane wraps around the building on the east and north, with a one-way egress driveway on the north (travel goes from east to west). The center driveway is the exit point from the building.

Vehicular access into the building is via a garage door on the east side of the building. The exit point is on the west side of the building, with a driveway connection to the private service drive. Eighteen (18) drive-up storage units are shown on the north side of the building with each unit having access via a garage door.

The southern drive lane is comprised of a 16-foot-wide paved driving surface and bordered with a 10-foot-wide grass paver area for fire access, for a total width of twenty-six (26) feet. The drive lane on the east and north sides of the building are comprised of a 24-foot-wide paved driving surface and bordered by a 2-foot-wide mountable curb on the outer edge of the paved drive lane. The total width is twenty-six (26) feet. The drive lane design is per the request of the Hartland Deerfield Fire Department.

The total gross square footage of the 3-story, climate-controlled building is approximately 64,000 square feet. The first floor is 18,600 square feet excluding the access drive that runs through the center of the first floor. The second and third floors are each 22,800 square feet. Floor plans are provided for each floor.

Patrons can enter the building (on-foot) via an entrance door on the east side of the building. Internally, the first floor has an office area, 18 drive-up units, 73 interior storage units, elevator, restroom, and staircase. A total of 91 storage units are found on the first floor. The second and third floors can be accessed via the elevator or stairs. Storage units are found on each floor, in varying sizes, with a total of 179 units on each floor (2nd and 3rd floor). The total number of storage units for the facility (all three floors) is 449 units based on the submitted floor plans.

Hours of operations are anticipated to be as follows:

Office hours:	Monday-Friday 8:00 a.m. to 9:00 a.m. and 5:00 p.m. to 6:00 p.m. Saturday 9:00 a.m. to 3:00 p.m. or 4:00 p.m. Sunday - closed
Established customers:	6:00 a.m. to 10:00 p.m.

Four (4) parking spaces are shown on the east side of the building. One (1) space is a van accessible, barrier-free parking space and three (3) are standard parking spaces. The parking formula listed on the plan is for Mini or Self-Storage Warehouse uses. Section 5.8.4.H. states the parking requirement as a minimum of six (6) parking spaces plus adequate loading area at each unit. During the review of the Concept Plan (SP/PD #23-009), the Planning Commission thought the proposed use, climate controlled, self-storage facility, is somewhat similar to but is not a direct match to a Mini Warehouse use (Section

4.35). Most mini warehouses have rows of units accessed by a vehicle via individual garage doors, and typically are not climate-controlled storage units.

The applicant has provided information from a mini storage facility in Provo, Utah, with 420 storage units, which appears to be a traditional mini storage facility with drive-up units. In that report, it was found that approximately 0-2 cars were parked each hour of the day between 7:00 a.m. and 7:00 p.m. The Planning Commission can take this into consideration regarding parking requirements to determine if sufficient parking is provided.

The building height is 40'-0" for the 3-story building, at the highest point. This height exceeds the maximum allowed height of thirty-five (35) feet in a Planned Development. A waiver request to exceed the maximum building height is provided from the applicant, in the letter dated April 18, 2024, with an explanation of the reasons for the height deviation.

The building elevations note that the primary façade materials consist of three (3) masonry products labeled as Masonry A, B, and C. Prefab composite panels and awnings on the east and west elevations are used as accent features on the building. Additional information on the facade materials is found in this memorandum under Architecture/Building Materials.

The plans list building setbacks as required for GC (General Commercial) zoning, and parking setbacks per the Zoning Ordinance. Section 3.1.18.C.vi.a. (PD section) provides the minimum yard setbacks for a planned development. Further discussion on this topic occurs in the Design Standards section of the memorandum.

Municipal water and sanitary sewer will be required for this development. The applicant will need to work with the Township and Livingston County regarding municipal water and sanitary sewer. The applicant will also need to work with the Hartland Township Department of Public Works (DPW) to acquire the necessary Residential Equivalency Units (REUs) for this development.

Stormwater management plans show an underground detention system on the south side of the building. Additional details are provided on the site plan set.

Eligibility Criteria (Section 3.1.18.B.)

To be eligible for PD approval, the applicant must demonstrate that the criteria in Section 3.1.18.B. will be met.

- 1. Recognizable Benefits.** *The planned development shall result in a recognizable and substantial benefit to the ultimate uses of the project and to the community and shall result in a higher quality of development than could be achieved under conventional zoning.*

The applicant has provided an explanation of the recognizable benefits in the submittal entitled Community Recognizable Benefit Statement. Per the applicant, the recognizable benefits include the following:

- The self-storage building is focused on serving the short and long-term needs of primary local residents. Additionally, the facility will service local businesses, professional office, and commercial retail customers.
- The building provides a fully enclosed one-way drive aisle inside the building, which is more secure than traditional self-storage facilities limited to exterior drive-up units.

- The building is climate controlled with the exception of the exterior drive-up units on the north side of the building.
- A digital surveillance system will monitor customer activity.
- Storage customers can have FedEx/UPS/USPS or other deliveries sent to their unit instead of packages sitting unsecured on their porch or in an apartment hallway.

2. Minimum Size. *Planned Developments must be a minimum of 20 acres of contiguous land.*

The parcel is approximately 1.21 acres and does not comply with the minimum size of 20 acres of contiguous land for a planned development. Per the applicant’s waiver request, dated April 18, 2024, the proposed self-storage facility will be a benefit to the community as this type of facility is not offered in the Township but is in high demand.

3. Use of Public Services. *The proposed type and density of use shall not result in an unreasonable increase in the use of public services, facilities, and utilities, and shall not place an unreasonable burden upon the subject site, surrounding land, property owners and occupants, or the natural environment.*

The self-storage facility is accessed from an existing private service drive. The 20-foot-wide paved service drive connects to Highland Road on the south and Old US-23 on the west. Best Western of Hartland and Arby’s restaurant also take access from the service drive.

Municipal water and sanitary sewer services will be required for the project. The Township Director of Public Works has provided comments in the review letter dated January 24, 2024.

The Hartland Deerfield Fire Authority provided comments on the project in the letter dated March 25, 2024.

4. Compatibility with Comprehensive Plan. *The proposed development shall not have an adverse impact upon the Comprehensive Plan for the Township. Notwithstanding this requirement, the Township may approve a Planned Development proposal that includes uses which are not called for on the Future Land Use Map, provided that the Planning Commission and Township Board determine that such a deviation from the Future Land Use Map is justified in light of the current planning and development objectives of the Township.*

The subject property is designated as Commercial on the 2020-2021 Comprehensive Plan and Future Land Use Map (FLUM) Amendment. Per the Comprehensive Plan, the majority of commercial land uses within the Township are intended to be concentrated around the M-59 and US-23 interchange. The intended uses in the Commercial category include the sale of convenience goods, personal /business services for the day-to-day needs of the immediate neighborhood as well as providing for auto-oriented services. The proposed project appears to be consistent with the intent of the Commercial designation in the FLUM and Comprehensive Plan.

Planned Development Design Standards (Section 3.1.18.C.)

This section outlines the design standards for a planned development. Additional site standards will be discussed from applicable sections of the Zoning Ordinance.

1. Permitted Uses. *The predominant use on the site shall be consistent with the uses specified for the parcel on the Township’s Comprehensive Plan for Future Land Uses.*

The predominant use on the subject site is a climate controlled, self-storage facility. The use is consistent with the Comprehensive Plan.

- 2. Residential Density.** *Residential density in a planned development shall be consistent with the density designation within the Township’s Comprehensive Plan.*

This standard does not apply to the proposed project.

- 3. Design Details.** *The applicant shall prepare a detailed description of design details to be implemented in the proposed planned development, to be presented in a Pattern Book.*

The design details are provided on the submitted site plans and architectural drawings for the project.

- 4. Minimum Yard Requirements.** The minimum yard requirements are noted in the chart below per Section 3.1.18.C.vi.a.(Non-Residential)

Yard Location	Minimum PD Standard	Proposed distance or setback*	Complies Yes/No
Along perimeter adjacent to public road (US-23, east side of site)	75 ft.	60.5 ft.	No**
Along perimeter, but not adjacent to a road	40 ft.	29.3 ft. (north) 36.5 ft. (south)	No No
Along an internal thoroughfare road (private service drive, west side of site)	40 ft.	27 ft.	No

*Measured to closest point of building as stated on plans

**Applicant stated the distance as 27.6 feet, however staff could not confirm/locate this measurement on the plans.

- 5. Building Height.** *No building in a planned development shall be greater than thirty-five (35) feet in height.*

Per the architectural plans, the building height is stated as forty (40) feet height, to the highest point. The applicant has submitted a waiver request to exceed the maximum allowed height of thirty-five (35) feet. The Planning Commission shall review the waiver request, dated April 18, 2024, and make a determination.

- 6. Parking and Loading.** *Planned Developments shall comply with the parking and loading requirements specified in Section 5.8, Off-Street Parking requirements, and Section 5.9, Loading Space Requirements of the Zoning Ordinance.*

Parking requirements are listed in Section 5.8.4.H (Table of Minimum Parking Space Requirements). The proposed use, climate-controlled, self-storage facility, is not listed in the table, thus, a parking standard is not stated. Four (4) parking spaces are shown and include one (1) van accessible, barrier-free parking space and access aisle, and three (3) standard parking spaces (10 feet by 20 feet). The applicant has submitted information on parking needs for a mini storage facility from another community for the Planning Commission to consider.

7. **Landscaping.** Landscaping requirements are found in Section 3.1.18.C.vi.e. These are considered minimum design standards, typically for a commercial or office development. A more detailed review of the landscaping is provided in this memorandum using applicable landscape standards as outlined in Section 5.11 (Landscaping and Screening - Updated Landscape Ordinance version).
8. **Open Space.** *Open space shall be provided to complement and accentuate the high-quality design of the proposed planned development. At minimum the planned development shall provide open space consistent with the previous zoning designation for the site.*

Per this section of the Zoning ordinance (Section 3.1.18.C.vi.f.), the planned development shall provide open space consistent with the previous zoning designation for the site, at a minimum. Currently the site is zoned GC (General Commercial). In GC, lot coverage is limited to seventy-five percent (75%) for the principal structure. The plans state the lot coverage as 43% for the building footprint.

A separate open space plan was not submitted. If the landscaped areas are counted as open space, the site has approximately 15% open space, per staff's estimate.

9. **Natural Features.** *Consistent with the stated intentions for the creation of these regulations, the preservation of the natural features of the Township is an important planning consideration. A PD proposal must consider the natural topography and geologic features, scenic vistas, trees and other vegetation and natural drainage patterns that exist on the site and propose a development pattern which preserves and avoids disruption of those natural features as much as possible.*

A Topographic Survey is provided. Currently the site consists of mowed lawn/field for the majority of the site. Seven (7) canopy trees are planted along the west property line (next to the private service drive) which are to be removed. Tree and brush areas occur along the east lot line and southeast corner of the site which are to be removed.

10. **Sidewalks and Pedestrian Access.** *The applicant must demonstrate the PD site, and all uses within the site, will be connected to any existing pedestrian and nonmotorized vehicle paths and trails within a public right-of-way or easement open to the public.*

A sidewalk is not proposed along the west side of the site, adjacent to the private service drive. Currently, sidewalks do not exist along the private service drive. Internally, concrete sidewalks are shown on the east side of the building adjacent to the main entrance to the building.

Requirements for Preliminary Review (Section 3.1.18.E.ii)

The following section is a summary of items that have not been addressed in the previous review as part of the Design Standards section.

1. **Sewer and Water.**

The Department of Public Works has provided a review letter dated January 24, 2024, which outlines the number of REU's required for the proposed development.

2. **Stormwater and Drainage Systems.**

The stormwater management plans show an underground chamber system on the south side of the building, under the drive aisle. Details are shown on Sheet C-4 and Sheet C-12.

3. Traffic Impacts.

The applicant has provided two (2) documents regarding traffic generation for a self-storage facility or mini warehouse. The studies are intended to provide general trip generation information for similar facilities in other parts of the country. Staff reached out to the Michigan Department of Transportation (MDOT) and Livingston County Road Commission for their input on the proposed use and traffic generation. Neither agency had any issues with the proposed use or traffic. The LCRC noted the driveway approach (of the private service drive) on Old US-23 is in poor condition and could use improvements.

4. Vehicular Circulation.

The proposed development is accessed from the existing 20-foot wide, private concrete service drive, which is located within a 30-foot-wide easement. The service drive extends from Old US-23 on the west to Highland Road on the south. The applicant submitted a copy of a 2007 recorded document for the private driveway easement (Hartland Township Agreement for Private Driveway Easement Rights and Responsibilities).

Internally a looped circulation system is shown, with one-way vehicle traffic around the building. The entry point to the building for vehicles is on the east side of the building, and exiting occurs on the west side of the building.

5. Fiscal Impacts.

The applicant has provided a response to this topic in the submittal entitled “Community Recognizable Benefit Statement.”

Site Requirements

Dumpster Enclosure (Sec. 5.7)

- Required – Dumpster designed, enclosed, and screened per requirements; decorative masonry screen wall on 3 sides to match exterior façade materials of the building and steel reinforced, opaque, lockable wooden gates. Enclosure height sufficient to screen dumpsters; minimum enclosure height is 6 feet.
- Proposed – 10’ by 10’ concrete pad in front of dumpster, with 6-foot tall, block enclosure with 4” face brick to match building façade material (Masonry C product). Metal gates shown-no color listed. Canopy trees shown on rear of enclosure. Enclosure does not meet 10-foot parking setback on east (shown at 6.8 ft.to property line) and north (shown at 3.3 ft.to property line)
- Meets Requirement? – **No, the enclosure does not meet the 10-foot setback on the north and east sides. Metal gates proposed (no color stated) versus steel reinforced, lockable wooden gates.**
- Comment – Planning Commission to determine if the placement of the enclosure is acceptable. Dumpster enclosure drawing to be revised to state color of gates (if metal gates are approved) on the Construction Plan Set.

Off-Street Parking (Sec. 5.8.4.H – Parking requirements for this use not listed)

- Required – Parking requirements for climate-controlled, self-storage facility is not listed in Section 5.8.4.H
- Proposed – 4 parking spaces; 3 spaces are 10’ X 20’ in dimension plus 1 barrier-free, van accessible parking space; loading area at each drive-up unit is not specified on the plan.
- Meets Requirement? – **TBD**
- Comment – Applicant provided a parking study for a mini storage facility in Provo, Utah for the

consideration of the Planning Commission regarding parking needs for the proposed facility. The Planning Commission to determine if four (4) parking spaces are sufficient for this facility, and if a loading area is required at each drive-up unit.

Barrier-Free Parking

- Required – 1 barrier-free space in a location most accessible to the building entrance, with at least 1 space van-accessible (1 barrier-free space required per 25 parking spaces)
- Proposed – 1 van accessible barrier-free space, with 8-foot-wide access aisle, by main building entrance (east)
- Meets Requirement? – Yes
- Comment – (none)

Loading (Sec. 5.9)

- Required – 1 loading space (10' X 50') required for up to 10,000 sq. ft. of gross floor area (for industrial use)
- Proposed – Loading space for the facility is not shown
- Meets Requirement? – **No**
- Comment – Typically this has not been required to be shown on a plan. In this case, patrons can park and unload/load, or drive inside the building and unload/load. A dedicated loading area for each drive-up unit is not provided. Planning Commission to determine if a loading space is necessary.

Landscaping (Section 5.11 – Updated Landscape Ordinance version)

Applicable sections of Section 5.11 (Landscaping and Screening) will be applied to the PD, as outlined below. This site has frontage on the private service drive (west) and US-23 (east). The applicant designated the Greenbelt area on the east side of the site, parallel to the right-of-way of US-23.

A. Irrigation (Sec. 5.11.2.A.viii.)

- Required – All landscaped areas (including lawns) shall be provided with an automatic, underground or drip irrigation system.
- Proposed – Irrigation system is to be designed to by irrigation contractor, per note on Sheet C-7.
- Meets Requirement? – Yes
- Comment – Irrigation plan required to be provided in the Construction Plan Set

B. Greenbelt Landscaping (Sec. 5.11.2. C.)

East (US-23)

- Required – Within the first 30 feet of the property, minimum 20-foot-wide area, 1 canopy tree for every 30 ft of lineal of frontage; Planning Commission may approve up to 50% substitution of canopy trees with evergreen trees; PLUS 3 small deciduous ornamental trees or large deciduous or evergreen shrubs for the initial 40 ft., and 1 per 20 ft. thereafter. Frontage = 180 ft.
EQUATES TO: 6 canopy trees; 3 ornamental trees, or large deciduous or evergreen shrubs in first 40 ft., plus 7 additional ornamental trees or large deciduous or evergreen shrub, or combination thereof **REQUIRED**
- Proposed – 6 canopy trees; combination of 12 large evergreen shrubs and 20 small shrubs (Compact Inkberry); Greenbelt area is less than 20 ft. wide (generally is 10 ft. wide at NE corner but narrows to 3.9 ft. at SE corner). Lawn proposed in this area.

- Meets Requirement? – Yes, for plant material; **NO**, for planting area width being less than 20 ft.
- Comment – Two (2) canopy trees on southeast portion of the landscape area are shown planted in the ROW of US-23. Planning Commission determination required if proposed plan is acceptable.

West (Private Service Drive – Greenbelt along Internal Road)

- Required – A minimum 15-foot-wide landscape area along length of internal roadway providing shared access to the site; 1 canopy or evergreen tree for every 30 ft. Frontage along easement of private service drive = 180 ft.
EQUATES TO: 6 canopy or evergreen trees **REQUIRED**
- Proposed – 5 canopy trees; combination of 12 large evergreen shrubs and 12 small shrubs (Compact Inkberry); Greenbelt area is approximately 22 ft. wide.
- Meets Requirement? – **No**, for number of canopy trees
- Comment – Planning Commission determination required if proposed plan is acceptable.

C. Foundation Landscaping (Sec. 5.11.2.D.)

- Required – Must equal 60% of the front and sides of the proposed building where facing road or adjacent to parking lot; must be 8-10 ft. in width, and consist of 1 ornamental or columnar tree, and 6 medium or 8 small shrubs for every 30 ft. Building perimeter east = 114 ft.; building perimeter west = 114 ft. Foundation perimeter calcs.: 228 ft. X 60% = 137 ft.
EQUATES TO: 5 ornamental/columnar trees; PLUS 40 small shrubs or 30 medium shrubs **REQUIRED** (total number)
- Proposed –
East: No foundation landscape bed or plantings proposed on the east side of the building.
- Meets Requirement? – **No**
- Proposed – **TBD**
West: Trees and shrubs in the Greenbelt area could be counted for Foundation landscaping.
- Comment – Planning Commission determination required if proposed plan is acceptable.

D. Parking Lot Landscaping (Sec. 5.11.2.E.) – Only applicable for off-street parking areas with ten (10) or more parking spaces. The proposed plan has four (4) parking spaces.

E. Screening of Ground Mounted Equipment (Sec. 5.11.2.G.iii.)

- Required – Screening on three sides for utility cabinets (if 30 inches or more in height)
- Proposed – 3 large shrubs are shown to screen the transformer on west; combination of small and large shrubs shown to screen 6 condenser units on west.
- Meets Requirement? – **TBD**
- Comment – The height of the transformer and each condenser unit should be stated on the plans. Evergreen shrubs should be used and of sufficient height to screen the transformer. The revisions shall be provided on the Construction Plan Set.

No roof-mounted mechanical equipment units are proposed or shown.

Other Landscaping and Site Comments

- Several areas on the landscape plan require plant material to cover a minimum of 80% of the ground surface. The areas are as follows: area on the south side of the building, between the building and curbing associated with the drive lane; 3 parking islands on the east side of the

building; and median area between the grass pavers and south property line. In particular, narrow habit ornamental trees or shrubs, ornamental grasses, or combination thereof should be provided in the median area between the grass pavers and south property line to provide visual/seasonal interest. Landscaping/plants/lawn should be used in said areas versus using 100% shredded hardwood mulch or a stone product. The landscape plan shall be revised to show landscaping in these areas on the Construction Plan Set.

- The required size of a canopy tree at the time of planting is 3” caliper. The plan states tree size of 2.5”-3” for each canopy tree species. Revisions to be provided on Construction Plan Set.
- Willow Oak (*Quercus Phellos*) is not hardy for this climate an alternate canopy tree species should be selected. Revisions to be provided on Construction Plan Set.
- Per the applicant’s Waiver Narrative, dated March 18, 2024, waivers are requested for the rear (east) parking setback and side (north) parking setback. Staff is unsure about the yard designations stated on the site plans but will use those designations in the next section.
- Parking setbacks are found in Section 5.8.3.A.iii. and only apply to an off-street parking space and not the drive aisle/internal maneuvering lanes associated with a parking area. In this case the off-street parking spaces on the east side of the building meet the required 10-foot rear parking setback and a waiver is not required. A drive aisle is located on the north side of the building, but parking spaces are not present, thus a waiver is not required for off-street parking as requested.

Lighting (Sec. 5.13)

A. Intensity

- Required – Max. 0.5 fc along property line adjacent to residential; or max.1.0 fc along property line adjacent to non-residential; average fc between 2.4 and 3.6 in main parking area and an average of 5.0 fc at main building entrance and at exit/entry drive; may not exceed 10 fc on site.
- Proposed – Photometric plan indicates footcandle values are less than 1.0 footcandle along each property line. Footcandle value less than 10 fc throughout the site. Average footcandle value in the main parking area is 3.4 fc (complies); average footcandle at main building entrance is 5.0 fc (complies); and average footcandle at exit/entry drives is 5.0 fc (complies). footcandle values are measured at 5 ft. above ground level.
- Meets Requirement? – Yes for light fixtures shown on plan.
- Comment – Wall-mounted light fixtures are not shown on the photometric plan and should be added. Footcandle values of the wall-mounted light fixtures shall be included in the calculations on the revised photometric plan, on Construction Plan Set.

B. Fixture Height

- Required – Lighting fixtures shall not exceed a height of 25’, or the height of the principal building, whichever is less, measured from the ground level to the centerline of the light source.
- Proposed – The overall stated height of the light pole and base (Fixture A) on Sheet C-6, is 18 feet or 25 feet; height is shown as measured from ground level to bottom of light fixture.
- Meets Requirement? – Height measurement is incorrect
- Comment – Plan to be revised on Construction Plan Set to show height measured from ground level to top of light fixture.

C. Fixture Type

- Required – Details of all lighting fixtures needed including specifications for shielding, wattage, and illumination.
- Proposed – Technical information on Fixture A (light pole) and wall mounted light fixtures provided.
- Meets Requirement? – Yes
- Comment – (None)

Water Supply and Wastewater Disposal (Sec. 5.16)

The site will be served by municipal water and sanitary sewer.

Architecture / Building Materials (Sec. 5.24)

Architecture Comments:

- Façade Materials Calculation – façade materials must comply with the specifications for Façade Materials Group #1; percentages for each elevation are provided on Sheet A400 of the Architectural plans.

Materials Group #1: Proposed Façade Materials by Percentage by Elevation

Elevation	Glass (50% max.) Glass curtain wall	Split-faced Block- (25% max.) Masonry A Stained & scored split faced	Brick, Natural Clay (30% min.) Masonry B + C combined	Spandrel Glass (15% max.)	Limestone (50% max.) Limestone Sill	Siding (10% max.) Hardie Plank Panels	O.H. Metal Doors (not listed in Sec. 5.24)	Metal Awning (not listed in Sec. 5.24) Blue awning	Drive-thru O.H. door (not listed in Sec. 5.24)
North	4.0%	19.0%	37.0%	20.0%	2.0%	1.0%	17.0%	0.0%	0.0%
South	5.0%	34.0%	50.0%	8.0%	2.0%	1.0%	0.0%	0.0%	0.0%
East	9.0%	29.0%	40.0%	8.0%	2.0%	6.0%	0.0%	1.0%	5.0%
West	9.0%	11%	64.0%	7.0%	1.0%	4.0%	0.0%	1.0%	4.0%

- Colors: Color renderings of the building are provided. Specific product information for each façade material is stated on Sheet A400. Earthtone colors are proposed for all products. Metal awnings are blue.
- Materials: Percentages are listed for each elevation side as indicated by the table; specifications on all materials are provided.
- Meets Requirement? – **TBD**
- Comment – Masonry A product is described as 8” by 16” split faced block with raked horizontal joints and stained with a Sherwin Williams product (stain color is Black Bean). Planning Commission to determine if the façade material Masonry A (stained and scored block) is acceptable.

Other Comments

Wall Sign (Section 5.26.8.H.)

Per Section 5.26.8.H. (wall) signs shall be located on the vertical face of the building wall's primary entrance generally parallel to the road right-of-way of the individual business. The primary entrance to the self-storage facility is on the east building elevation, which is the side that faces the right-of-way of US-23. The property also has frontage along the easement of the service drive on the west and is an exit point of the storage facility.

Per the Ordinance, two (2) wall signs are permitted for the facility, allowing for one (1) wall sign on the east elevation and one (1) wall sign on the west elevation, subject to other wall sign regulations.

The architectural plans show two (2) wall signs; one (1) wall sign on the west elevation, which is permitted, and one (1) wall sign on the south elevation. The wall sign on the south elevation does not meet the wall sign standards for sign location, thus a waiver is required.

The applicant has submitted a waiver request, dated April 18, 2024, to permit one (1) wall sign on the south elevation, in lieu of having a sign on the east elevation that would not be visible, per their letter.

Each wall sign is approximately 22.8 feet by 3.5 feet in dimensions, which equates to approximately 79.8 square feet per wall sign. Each wall sign is comprised of channel letters that are backlit. The wall signs comply with the Zoning Ordinance standards for size and design.

Monument Sign (Section 5.26.M.ii.)

One (1) monument sign is shown on the west side of the building and is set approximately ten (10) feet from the west property line. The monument sign has a masonry base (Masonry A product) and a sign on top that is comprised of an opaque metal box with internally illuminated die-cut letters. The total sign height is 6'-10" (maximum allowed height is seven (7) feet). The sign area (above base) is approximately 38.66 square feet. The monument sign complies with the Zoning Ordinance standards.

Other Requirements-Zoning Ordinance Standards

Nothing additional at this time.

Hartland Township DPW Review

The DPW Director has provided a review letter dated January 24, 2024.

Hartland Township Engineer's Review (Spaulding DeDecker)

The Township Engineer (SDA) has reviewed the Preliminary Site Plan and provided comments in the letter dated March 26, 2024.

Hartland Deerfield Fire Authority Review

The Hartland Deerfield Fire Authority has provided comments in the review letter dated March 25, 2024.

Attachments:

1. Township DPW review letter 01.24.2024 – *PDF version*
2. Township Engineer (SDA) review letter 03.26.2024 – *PDF version*
3. Hartland Deerfield Fire Authority review letter 03.25.2024 – *PDF version*
4. Waiver Narrative 04.18.2024 – *PDF version*
5. Community Recognizable Benefits Memorandum – *PDF version*
6. BYU Final Report 2011 – *PDF version*

7. Chiswell Traffic Memorandum – *PDF version*
8. Hours of Operation – *PDF version*
9. LCRC email 12.06.2023 – *PDF version*
10. MDOT email 12.06.2023 – *PDF version*
11. Private Driveway Easement – *PDF version*
12. Architectural Plans 03.07.2024 – *PDF version*
13. Site Plans 03.18.2024 – *PDF version*

CC:

SDA, Twp Engineer (via email)

Scott Hable, Twp DPW Director (via email)

Carroll, Hartland FD Fire Chief (via email)

T:\PLANNING DEPARTMENT\PLANNING COMMISSION\2024 Planning Commission Activity\Site Plan Applications\SP PD #24-001 Self Storage Prelim PD\Staff reports\PC Staff reports\SP PD #24-001 Prelim PD staff report PC 05.02.2024.docx



DEPARTMENT OF PUBLIC WORKS

Scott Hable, Public Works Director
2655 Clark Road
Hartland MI 48353
Phone: (810) 632-7498

TO: Planning Department
DATE: 1/24/2024
DEVELOPMENT NAME: Hartland Storage
APPLICATION #: SP PD# 24-001
REVIEW TYPE: Site Plan

The Department of Public Works has reviewed the site plans for the proposed three-story self-storage facility and has determined that it will require .40 REU's for both water and sewer, based on the small size of the office and bathrooms.

	Sewer REUs	Water REUs
Owned	0	0
Required	0.40	0.40
REU Difference	0.40	0.40
Cost Each	\$9,439.20	\$5,816.01
Total Due Each	\$3,775.68	\$2,326.40
TOTAL REU COST	\$6,102.08	

Hartland Township Public Works approves the Hartland Storage site plan subject to inclusion of the following details on the construction plans:

1. Sanitary sewer material and sizes and connection detail sheet
2. Monitoring manhole for sewer connection and location if required
3. Utility easements noted as public or private.
4. Approval of the Livingston County Drain Commission.

Prior to interior construction, applicant will be required to purchase a "size to be determined" water meter from the Township. Please contact the Public Works Department (810-632-7498) to purchase the water meter.

Please feel free to contact me with any further questions or comments regarding this matter.

Scott Hable
Public Works Director

Preliminary PD Site Plan Review

March 26, 2024

Mr. Troy Langer
Planning Director
Hartland Township
2655 Clark Road
Hartland, Michigan 48353

Re: Proposed Self-Storage Facility – Preliminary PD Site Plan Review #4
SDA Review No. HL22-122

Dear Commission Members:

We have received the revised preliminary site plan submittal for the above referenced project prepared by Stonefield Engineering & Design dated March 18, 2024 and received by our office on March 18, 2024. The plans were reviewed in accordance with the Site Plan Review Checklist, Current Design and Engineering Standards, Standard Details, Code of Ordinances, and the 2021 International Fire Code and the following comments are our observations.

Recommendation

Approval of the Final Site Plan is recommended, conditional upon all of the below comments being addressed to the satisfaction of the Planning Commission.

Comments:

The Site Plan meets the general requirements of the Hartland Township Code of Ordinances and the Engineering Design Manual.

Project Summary

- Construction of a self-storage facility on the east side of the service drive east of N Old US 23 and north of Highland Road (M-59). Site access would be provided via private roadways. The private road is 30' from edge to edge connected to N Old US 23 and is 20' from edge to edge connected to Highland Rd (M-59). The site is noted as 1.2 acres.
- Water service would be provided by an existing 8" diameter water main located west of the proposed facility cutting through the old Walgreens (10081 Highland Rd) and current Chase Bank (10083 Highland Rd) properties that extends to the proposed facility with an existing hydrant located on the proposed property. An additional hydrant is proposed on the northeast corner of the property. The 8" diameter water main connects to the existing 12" water main located on N Old US 23.
- Sanitary sewer service would be provided by an existing 8" diameter sanitary sewer traversing through the property with no recorded easement. This existing line ties into an existing 15" diameter sanitary sewer along Highland Rd (M-59).
- The plans show an existing basin/depression in the southeast corner of the existing property that drains through a 12" storm sewer to the south. The proposed on-site drainage collects to

a proposed underground detention system and outlets to the existing 12” diameter storm sewer to the south on the Arby’s property.

General

1. Five Waivers were requested from the Hartland Township Zoning Ordinance. These and any other variance in Land Use, Zoning and Landscaping shall be reviewed and approved by the Township.
2. No landscape will be allowed within the proposed easements unless approved by the Township and Board.

These comments are to assist in plan preparation in anticipation of your engineering review submittal and are **not required at this time** for site plan approval:

1. Drawing C-1: Update Architectural Plans date to 03/07/2024 in Plan Reference Materials.
2. Drawing C-2 and C-8: Concrete Wall Construction may require work within the MDOT right-of-way. All necessary permits shall be included.
3. Drawing C-5. All utility coordination including, but not limited to, underground electrical conduit, connection to existing 8” water main, connection to existing on site water valve, connection to existing sanitary manhole on neighboring property, gas, and telecommunication shall be conducted prior to issuing for bids and construction. A bypass or temporary relocation plan should be provided for disruption to existing storm sewer and sanitary sewer.

Water Main

These comments are to assist in plan preparation in anticipation of your engineering review submittal and are **not required at this time** for site plan approval:

1. Drawing C-5: Water main 20 foot wide easement is shown correctly, revise callout from Proposed 12 FT to Proposed 20 FT.
2. Drawing C-5: 8” water main shall be used from connection to existing water main to proposed hydrant.
3. The township records show that there is an existing 8-inch diameter water main along the private road from Old US-23 immediately adjacent to both parcels to a dead end with hydrant at the parcel south of the motel. Motels continuously use enough water to maintain water quality at a dead end, however the proposed use as a self-storage facility at the parcel to the south may not allow enough water use to maintain water quality for the site. Tapping the existing main west of the motel connection or constructing a water main from the dead end to the existing main in Highland Road may be required by the Township for adequate flow to maintain water quality for the self-storage property.

Sanitary Sewer

These comments are to assist in plan preparation in anticipation of your engineering review submittal and are **not required at this time** for site plan approval:

1. A proposed easement will be required along with pipe lengths, slopes, and materials as well as manholes and proposed inverts. A temporary bypass plan should be added to accommodate the existing 6” lines that currently tie in upstream of the proposed construction.
2. The developer will need to either enter into a shared-use agreement with the Best Western property owner to use this existing sewer or construct a new sewer with private easement to the Livingston Regional Drain sewer along the north side of Highland Road. The capacity of

this existing sewer, if used, will need to be sufficient to handle the proposed REU's produced by the proposed developments.

Storm Drainage

These comments are to assist in plan preparation in anticipation of your engineering review submittal and are **not required at this** time for site plan approval:

1. Drawing C-5: All storm sewers must be located in a public right-of way or an easement. The minimum storm sewer easement shall be 12 feet wide. The easement size will vary as required for maintenance and access. Any storm sewer that accepts runoff from abutting property or public right-of-way must be placed in a minimum 12 foot storm sewer easement.
2. Drawing C-4: See Current Design and Engineering Standards, many items will require addressing via the link (<https://www.hartlandtwp.com/planning/page/hartland-township-design-and-engineering-standards>)
3. Drawing C-4: Callouts on 12" RCP show slope pipes having slope of 0.30%, however inverts calculate a slope of 0.48%. Revise slope in callouts.
4. Drawing C-4: Use correct class of storm sewer for shallow cover.
5. Boundary & Topographical Survey: Ex 12" diameter storm sewer crosses the northwest corner of the property. Confirm with existing business connected that a maintenance agreement is not needed.
6. It is possible that the developer may be able to enter into a shared-use agreement with the Best Western/Arby's property owner to use this storm sewer. If this sewer is to be used, a capacity study will be necessary and onsite flow restriction may be required for both developments. Otherwise, the developer must construct a new storm sewer with private easement to an existing storm sewer subject to approval by the Livingston Regional Drain Commissioner.
7. Drawing C-11: Provide plan to tie underdrain shown in Grass Paver Specifications into shallow storm sewer or outlet properly if it is required.

Flood Plain

The 100-year flood plain does not appear to traverse the property.

Off-Site Easements

Any off-site utility easements anticipated must be executed prior to final approval of the plans. If you have note already done so, drafts of the easements must be submitted to our office for review and shall be approved prior to executing the easements.

The following must be submitted with the Revised Site Plan:

A letter from either the applicant or the applicant's engineer must be submitted with the Site Plan highlighting the changes made to the plans addressing each of the comments listed above and indicating the revised sheets involved.

Please be aware that additional comments may arise with the submittal of the requested revisions and/or additional information.

The comments are not to be construed as approvals and are not necessarily conclusive. The final engineering plans for this development are to be prepared in accordance with the Current Design and Engineering Standards, Standard Details, and Code of Ordinances.

If you have any questions regarding this letter, please contact Mark Collins or Luisa Amici at (248) 844-5400 with any questions.

Sincerely,

SPALDING DEDECKER ASSOCIATES, INC.



Mark Collins, PE
Municipal Project Manager



Luisa Amici
Engineer



HARTLAND DEERFIELD FIRE AUTHORITY
HARTLAND AREA FIRE DEPT.

3205 Hartland Road
Hartland, MI. 48353-1825

Voice: (810) 632-7676
E-Mail: firemarshal@hartlandareafire.com

March 25, 2024

To: Hartland Township Planning Commission
Attn: Zoning Department

Re: Self-Storage Facility
Highland Road, Hartland MI 48353 (Between Best Western & Arby's)

This office has reviewed the Self-Storage Facility Site Plan dated March 6, 2024.

We have the following comments regarding the proposed facility.

1. Ensure turning radius is a minimum of fifty feet.
2. Twenty-six feet of drivable space for aerial apparatus placement. Ensuring this space is clear from weather or debris including snow removal.
3. Supra Box installed on the exterior of the building for access into individual units. Fire Department to provide order form.
4. Due to the potential unknown of items to be stored within the facility, it is highly recommended the entire structure be suppressed according to International Fire Code 2012 Chapter 9.
5. The structure will possess off-site monitoring for fire according to International Fire Code 2012 Chapter 9.

Any revised drawings affecting the Fire Department must be submitted for review.

Jon Dehanke
Captain / Fire Inspector

STONEFIELD

April 18, 2024
Office of the Planning Director
Troy Langer
2655 Clark Road
Hartland, MI 48353

**RE: Waiver Narrative
Proposed Self Storage Facility
PARCEL ID: 4708-21-300-033
Highland Road
Hartland Township, Livingston County, Michigan**

Troy:

This narrative is being submitted to request six (6) waivers from the Hartland Township Zoning Ordinance to construct a Self-Storage Facility.

1. Section 3.1.18.C.vi.c ; Maximum Building Height of 35 feet – **40.0 feet proposed**

The 1.2 acre lot size creates difficulty to provide the required storage capacity for the communities needs within the limited space while adhering to the ordinance height limit. The proposed design and site location being off of the main road, along a highway, will ensure minimal visual impact.

2. Section 3.1.18.B.ii ; Minimum Lot Size of 20 acres – **1.2 acres proposed**

While the minimum lot size requirement is not met, the zoning ordinance states the waiver may be granted if the development provides a benefit to the community. With the absence of self-storage facilities there is a demand within the community for the service. This waiver would allow for the facility to provide secure storage options to meet the communities needs. The proposed Self Storage Facility will provide residents with a nearby storage option. See “Community Benefit Narrative” for additional information.

3. Section 3.1.18.C.vi.a ; Minimum Front Yard Setback of 75 feet – **27.6 feet proposed**

The required building setbacks result in 22,892 SF of developable building area. A 22,880 SF building area is proposed. A deviation from the setback requirement allows for a more efficient use of the land. The proposed building coverage is 43%, well under the permitted 75% coverage for a principal building.

4. Section 3.1.18.C.vi.a ; Minimum Rear Parking Setback of 20 feet – **8.8 feet proposed**

The reduced parking setback proposed, located along the highway at the rear of the site, allows for the best use of the land to provide storage units, parking, and adequate drive aisles. The full site circulation is required to provide safety for customers and fire access.

5. Section 5.8.3.iii ; Minimum Side Parking Setback of 10 feet – **5.0 feet proposed**

The reduced parking setback proposed, located along the northern property line which is a shared boundary to a property also owned by the petitioner, allows for the adequate fire circulation and aisle width. The full site circulation is required to provide safety for customers and fire access.



6. Section 5.26 ; Signs (1 permitted for each road frontage, East & West) – **Proposed South Wall Sign**

Per the Zoning regulations, since the building has frontage on US-23 (east) and the shared roadway on the west, one (1) wall sign could be permitted on the east building elevation and one (1) wall sign could be permitted on the west building elevation. In lieu of having a sign on the east elevation that would not be visible, a sign is being proposed on the south elevation for added visibility.

Best regards,

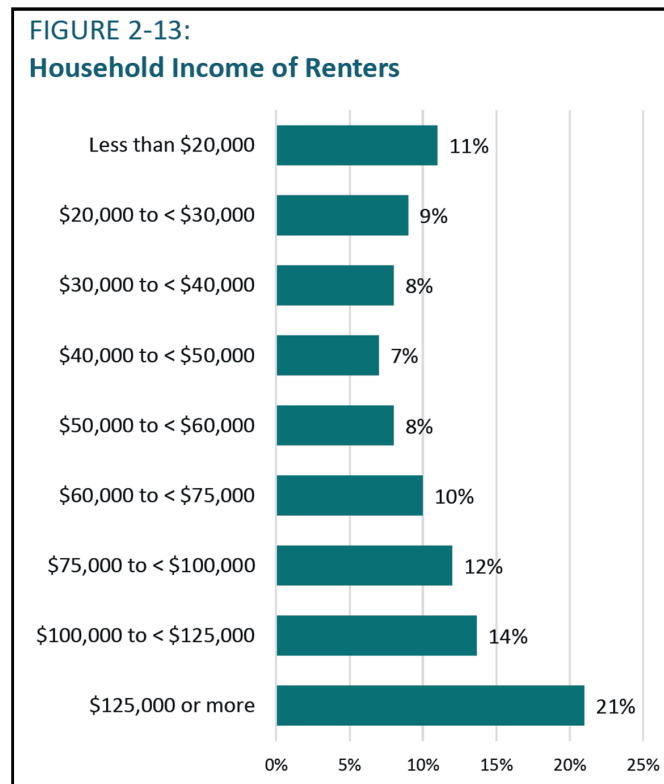
J. Reid Cooksey, PE
jcooksey@stonefieldeng.com
Stonefield Engineering and Design, LLC

Erin McMachen
emcmachen@stonefieldeng.com
Stonefield Engineering and Design, LLC

V:\DET\2022\DET-220363-onQ Commercial Real Estate-10087 Highland Road, Hartland, MI\Correspondence\Outgoing\Municipal\2024-04-18 Waiver Narrative.docx

Community Recognizable Benefit Statement

The subject self storage facility is focused on serving the short and long-term storage needs of primary local area residents. During the past several decades, the maturing self storage industry has identified that between 75% and 80% of all storage customers are area residents coming from roughly a 10 to 15-minute drive-time. The national Self Storage Association's research has shown that self storage is being used by all economic segments of the community as shown on the chart below. Local businesses, professional office and commercial retail customers will also be served by this conveniently located facility within the community.



*Page 18 - Self Storage Demand Study – 2023 Edition
prepared for the national Self Storage Association by C & R Research*

This fully sprinklered facility will have a number of unique features to enhance the customer experience. First it has been designed by local architects and engineers to provide customers with a fully enclosed one-way drive aisle inside the building. The community also directly benefits from this inside drive-aisle since all business activity of customers will be total invisible to anyone driving by the facility during the day or at night.

Unlike many of the older existing self storage facilities limited to exterior drive-up units, customers at this location will be totally out of all weather elements, rain, snow, cold or hot weather will not interfere with the customer's convenient use of their

storage space. With the upper floors being serviced by several heavy-duty elevators, with the availability of free moving carts, all units within the building will be a convenient distance from where customers unload. With the exception of the few exterior drive-up units at the side of the structure, all of the interior units will be heated and cooled to provide a positive environment for whatever is being stored.

The state-of-the-art facility will feature multi-layer security to benefit the customers and the things that they will be storing in their spaces. The first step is that all customers will be required to present a government issued photo id at the time that they are signing their Rental Agreement. This Rental Agreement, prepared by one of the leading self storage attorney's in the nation, is in full compliance with the specific standards set forth in Michigan's Self Storage legislation. Due to the drive-in aspects of the business, only customers in good standing with their individual designated security code will be permitted access into the building at any time.

The final additional layer of security being provided to customers is that a digital surveillance system will monitor customer activity. The storage industry has recognized that when customers realize that their actions are being digitally recorded it results in a secure feeling for all customers.

As an additional community benefit, storage customers can have FedEx / UPS/ Postal Service or other delivers sent to their storage unit instead of having valuable items sitting unsecured on their porch or in the hallway of their apartment. The ability to have someone receive packages is being used by home-based business people across the country to eliminate truck deliveries into their neighborhood.

The subject property will be professionally managed and will take advantage of a variety of new software features that will allow, for example, customers to rent a storage unit online in addition to paying their monthly rent. The storage office will also feature a full line of moving and storage products available to purchase.

All of these features will not only benefit the storage facility's customer but will have a positive community benefit. The storage facility will have very minimal impact on area infrastructure with limited utility usage and almost insignificant traffic generation and no impact on area school, while at the same time generating additional property tax revenue for the community.



TRIP AND PARKING GENERATION STUDY OF A MINI-WAREHOUSE

Introduction

The Brigham Young University (BYU) Institute of Transportation Engineers (ITE) student chapter recently completed the 2011 Data Collection Project as proposed to the ITE Western District. The data for this project were collected at a local mini-warehouse facility, which corresponds to Land Use Code 151. This project was a great learning experience for our student chapter; the funds we receive will help student chapter members attend the Western District ITE meeting in Anchorage, Alaska.

Ryan Hales, P.E., PTOE, AICP, of Hales Engineering, provided mentoring support and project review for this data collection effort. Craig Wagner, from Econolite, provided our student members with training on the use of our traffic data collection trailer on January 19 and February 23, 2011 (see Figure 1). Dr. Mitsuru Saito Ph.D., P.E. and Dr. Grant Schultz Ph.D., P.E., PTOE, both of BYU, have provided invaluable help and support and data collection equipment for the project.

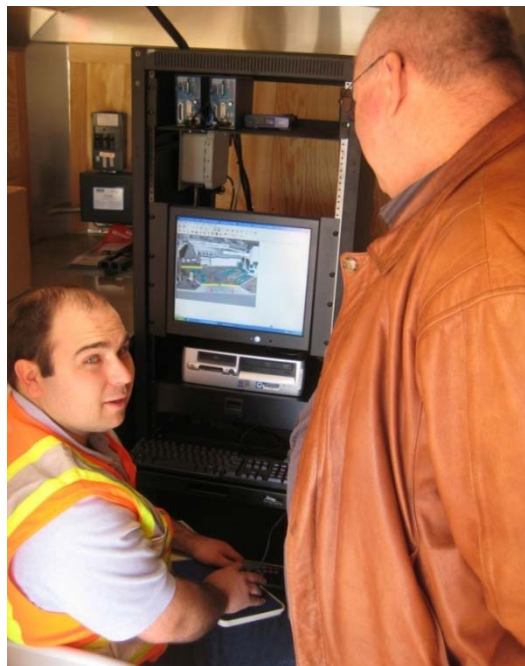


Figure 1: Data Collection training with Craig Wagner.

Site Information

Data were collected on three different days at the mini-warehouse facility, shown in Figure 2. The facility is Hillside Storage, located at 2067 Ironton Blvd. in Provo, UT. The approximate square footage of the office building, number of employees, number of parking stalls, number of units, percent of units occupied, net rentable area, gross floor area, and total property area can be seen in Table 1. There are two parking areas at the site, one of which includes the entrance to the area that contains the storage units.

Table 1: Site Characteristics

Characteristic	Value
Number of Employees	4 (2 FT, 2 PT)
Number of Units	420
Occupied Units	60%
Net Rentable Area	56,476 ft ²
Office Floor Space	1,700 ft ²
Gross Floor Area	58,098 ft ²
Property Area	3.44 acres
Number of Parking Stalls	6 (1 handicap)

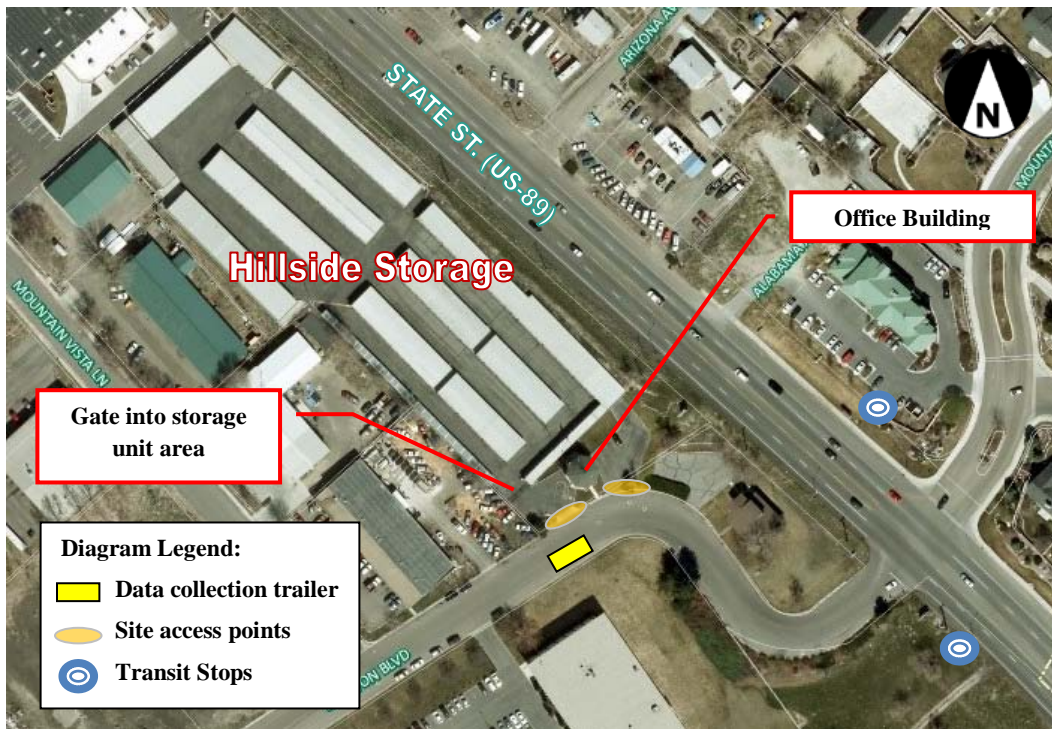


Figure 2: Site layout.

Methodology

Data were collected on Saturday, February 26, 2011; Sunday, February 27, 2011; and Tuesday, March 1, 2011. As stated in the proposal, trip generation was counted between the hours of 7am and 7pm on each day. The BYU Traffic Data Collection Trailer, shown in Figure 3, was used to collect data at the site.

The trailer is equipped with two video cameras that recorded each entrance to the site during the specified hours. These videos were then used to manually count vehicles entering and exiting the site through each access. The counts for the two driveways were totaled for each hour. The results of the trip generation are summarized in the attached Trip Generation Data Forms. Parking demand data were also collected every hour, on the hour, from 7am to 7pm. The parking data are attached in the Parking Demand Survey Forms.



Figure 3: BYU traffic data collection trailer at the site.

Results

The trip data for the morning peak period, the afternoon peak period, and the peak hour of generator are shown in Table 2, Table 3, and Table 4, respectively. Data about vehicle occupancy was not collected during this study. Furthermore, no pedestrian, bicycle, or transit trips were observed during the study. The trip rates shown are rates per occupied unit and per 1000 square feet of gross floor area (GFA). Table 5 shows a summary of trips counted for each day of the study.

Table 2: Morning Peak Period Trip Data for the Mini-Warehouse

Variable	Saturday 2/26/11	Sunday 2/27/11	Tuesday 3/1/11
Peak Hour	8:00-9:00 AM	8:00-9:00 AM	8:00-9:00 AM
All Vehicles	1	1	0
Trucks	0	0	0
Total Trips	1	1	0
Trip Rate (Occ. Units)	0.004	0.004	0.00
Trip Rate (GFA)	0.017	0.017	0.00
% Entering	100.0%	0.0%	0.0%
% Exiting	0.0%	100.0%	0.0%

Table 3: Afternoon Peak Period Trip Data for the Mini-Warehouse

Variable	Saturday 2/26/11	Sunday 2/27/11	Tuesday 3/1/11
Peak Hour	5:00-6:00 PM	5:00-6:00 PM	5:00-6:00 PM
All Vehicles	3	0	4
Trucks	0	0	2
Total Trips	3	0	4
Trip Rate (Occ. Units)	0.012	0.00	0.016
Trip Rate (GFA)	0.052	0.00	0.069
% Entering	66.7%	0.0%	50.0%
% Exiting	33.3%	0.0%	50.0%

Table 4: Peak Hour of Generator Trip Data for the Mini-Warehouse

Variable	Saturday 2/26/11	Sunday 2/27/11	Tuesday 3/1/11
Peak Hour	11:00-12:00 PM	9:00-10:00 AM	5:00-6:00 PM
All Vehicles	4	2	4
Trucks	0	0	2
Total Trips	4	2	4
Trip Rate (Occ. Units)	0.016	0.008	0.016
Trip Rate (GFA)	0.069	0.034	0.069
% Entering	50.0%	100.0%	50.0%
% Exiting	50.0%	0.0%	50.0%

Table 5. Summary of Daily Trip Data

Saturday (2/26/11)			Sunday (2/27/11)			Tuesday (3/1/11)		
Entering	Exiting	Total	Entering	Exiting	Total	Entering	Exiting	Total
13	12	25	4	4	8	11	8	19

Trip rates generated from this study have been calculated and are shown in Table 6 alongside average trip rates from *ITE Trip Generation, 7th Edition*. The actual number of trips for each analysis period is shown alongside the number of trips predicted from ITE trip rates in Table 7.

Table 6. Comparison of Calculated and ITE Trip Generation Rates

Independent Variable	Analysis Period	Saturday 2/26/11		Sunday 2/27/11		Tuesday 3/1/11	
		Calculated	ITE	Calculated	ITE	Calculated	ITE
Occupied Units	Full Day	0.099	0.250	0.032	0.180	0.075	0.280
	Peak Hour of Generator	0.016	0.040	0.008	0.030	0.016	0.030
Gross Floor Area	Full Day	0.430	2.330	0.138	1.780	0.327	2.500
	Peak Hour of Generator	0.069	0.400	0.034	0.300	0.069	0.290

Table 7. Comparison of Actual and Predicted Trips

Independent Variable	Analysis Period	Saturday 2/26/11		Sunday 2/27/11		Tuesday 3/1/11	
		Actual	Predicted	Actual	Predicted	Actual	Predicted
Occupied Units	Full Day	25	63	8	45	19	71
	Peak Hour of Generator	4	10	2	8	4	8
Gross Floor Area	Full Day	25	135	8	103	19	145
	Peak Hour of Generator	4	23	2	17	4	17

The trip rates calculated from this data collection study are substantially lower than the average trip rates provided by ITE. The difference between the trip rates is much larger when using gross floor area as the independent variable. This is due to gross floor area including both the space of the occupied units and unoccupied units. At the time of collection about 40% of the units were unoccupied. One reason the calculated rates are lower than the average rates provided by ITE may be that the storage units are usually used for long term storage rather than short term storage. Some of the storage units are being occupied by Brigham Young University for long term storage, which results in a lower number of trips being made for these units. Sunday trip rates may further be impacted by the demographics of the area as a large proportion of the nearby population believes that work and business activities should be avoided on Sunday. Finally, some of the difference in trip rates could be due to the timing of the study. Temperatures in Utah during February and March are often cool and accompanied by precipitation in the form of rain and snow. Cooler weather affects the behavior of mini-warehouse clients, resulting in less trips being made.

Figure 4, Figure 5, and Figure 6 show the hourly counts of vehicles entering and exiting the site, as well as the parking demand for the specified hour, for the Saturday, Sunday, and Tuesday dates, respectively.

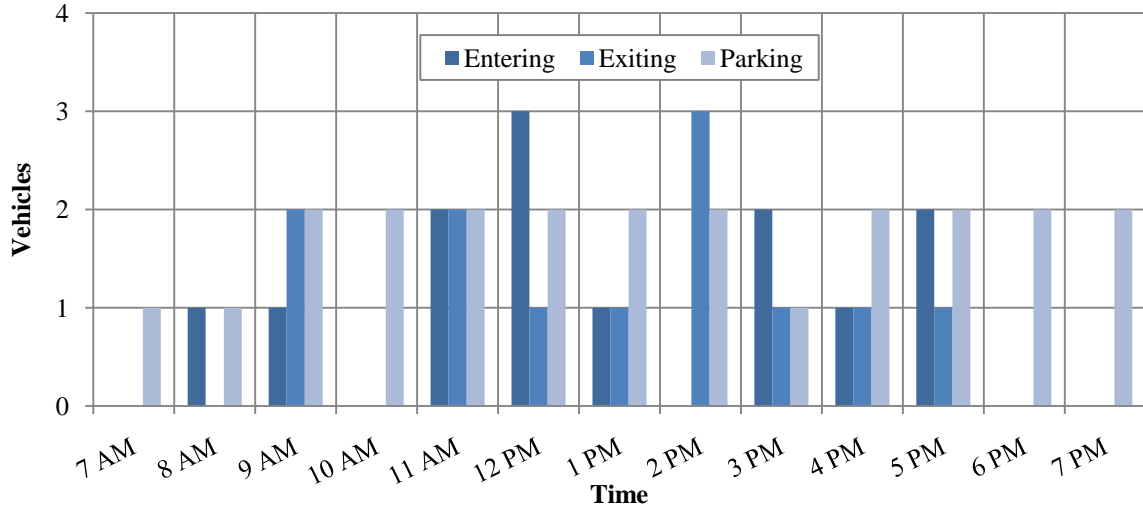


Figure 4: Counts for Saturday, February 26, 2011.

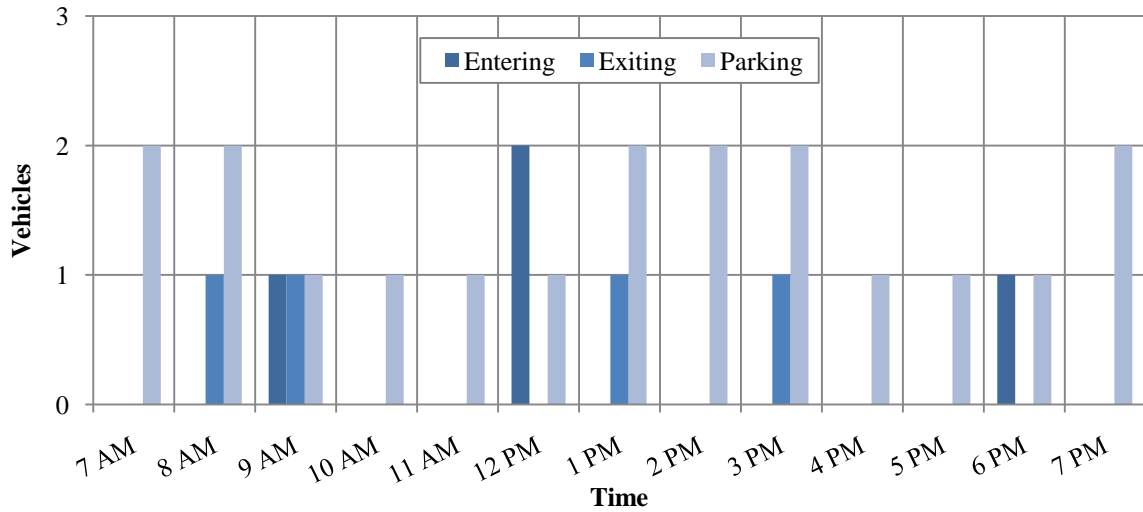


Figure 5: Counts for Sunday, February 27, 2011.

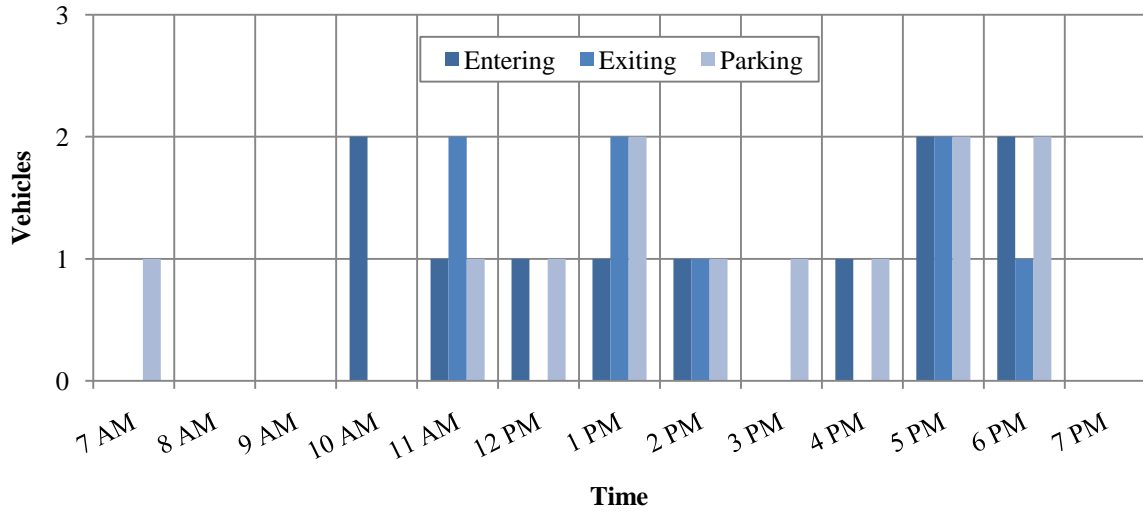


Figure 6: Counts for Tuesday, March 1, 2011.

Level of Effort

Many different BYU ITE student members were involved in this project. BYU ITE student chapter officers especially spent a lot of time organizing and carrying out the data collection efforts. A summary of hours spent on the project by student members is shown in Table 8.

Table 8: Level of Effort

Task	Number of Students	Hours per Student	Total Hours
Training	6	5	30
Data Collection	4	4	16
Data Reduction and Analysis	6	5	30
Writing and Revision	4	3	12
Total:			88

Trip Generation Data Form (Part 1)

Land Use/Building Type: ¹ <u>Mini Warehouse (Storage facility)</u>	ITE Land Use Code: <u>151</u>	
Source:	Source No. (ITE use only):	
Name of Development: <u>Hillside Storage</u>	Day of the Week: <u>Saturday, Sunday, Tuesday</u>	
City: <u>Provo</u> State/Province: <u>Utah</u> Zip/Postal Code: <u>84606</u>	Day:	Month: <u>February</u> Year: <u>2011</u>
Country: <u>U.S.A.</u>	Metropolitan Area: <u>Provo, UT</u>	

1. For fast-food land use, please specify if hamburger- or nonhamburger-based.

Location Within Area: <input type="checkbox"/> (1) CBD <input checked="" type="checkbox"/> (3) Suburban (Non-CBD) <input type="checkbox"/> (5) Rural <input type="checkbox"/> (2) Urban (Non-CBD) <input type="checkbox"/> (4) Suburban CBD <input type="checkbox"/> (6) Freeway Interchange Area (Rural) <input type="checkbox"/> (7) Not Given				Detailed Description of Development: ³ <u>Hillside Storage is a self storage business located in Provo, Utah. There are a variety of units available for rent and are open 365 days each year. The primary employees live on site.</u>			
Independent Variable: (include data for as many as possible) ²		Actual	Estimated				
<u>4</u> (1) Employees (#)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>6</u> (9) Parking Spaces (% occupied: _____)	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
_____ (2) Persons (#)	<input type="checkbox"/>	<input type="checkbox"/>	_____ (10) Beds (% occupied: _____)	<input type="checkbox"/>	<input type="checkbox"/>		
<u>470</u> (3) Total Units (#) (indicate unit: <u>rentable units</u>)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____ (11) Seats (#)	<input type="checkbox"/>	<input type="checkbox"/>		
<u>252</u> (4) Occupied Units (#) (indicate unit: <u>rentable units</u>)	<input type="checkbox"/>	<input type="checkbox"/>	_____ (12) Servicing Positions/Vehicle Fueling Positions	<input type="checkbox"/>	<input type="checkbox"/>		
_____ (5) Gross Floor Area (gross sq. ft.)	<input type="checkbox"/>	<input type="checkbox"/>	_____ (13) Shopping Center % Out-parcels/pads	<input type="checkbox"/>	<input type="checkbox"/>		
<u>56,476</u> (6) Net Rentable Area (sq. ft.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____ (14) A.M. Peak Hour Volume of Adjacent Street Traffic	<input type="checkbox"/>	<input type="checkbox"/>		
_____ (7) Gross Leasable Area (sq. ft.)	<input type="checkbox"/>	<input type="checkbox"/>	_____ (15) P.M. Peak Hour Volume of Adjacent Street Traffic	<input type="checkbox"/>	<input type="checkbox"/>		
_____ (% of development occupied _____)			<u>1,700</u> (16) Other <u>sq. ft. Total office Space</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
<u>3.44</u> (8) Total Acres (% developed: _____)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____ (17) Other _____	<input type="checkbox"/>	<input type="checkbox"/>		

2. Definitions for several independent variables can be found in the *Trip Generation, Second Edition, User's Guide Glossary*.

3. Please provide all pertinent information to describe the subject project, including the presence of bicycle/pedestrian facilities. To report bicycle/pedestrian volumes, please refer to Part 4 of this data form.

Other Data: Vehicle Occupancy (#): _____ A.M. _____ P.M. _____ 24-hour % Percent by Transit: _____ A.M. % _____ P.M. % _____ 24-hour % Percent by Carpool/Vanpool: _____ A.M. % _____ P.M. % _____ 24-hour % Employees by Shift: First Shift: Start Time _____ End Time _____ Employees (#) _____ Second Shift: Start Time _____ End Time _____ Employees (#) _____ Third Shift: Start Time _____ End Time _____ Employees (#) _____ Parking Cost on Site: Hourly _____ Daily _____		Transportation Demand Management (TDM) Information: At the time of this study, was there a TDM program (that may have impacted the trip generation characteristics of this site) underway? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (If yes, please check appropriate box/boxes, describe the nature of the TDM program(s) and provide a source for any studies that may help quantify this impact. Attach additional sheets if necessary) <input type="checkbox"/> (1) Transit Service <input type="checkbox"/> (5) Employer Support Measures <input type="checkbox"/> (9) Tolls and Congestion Pricing <input type="checkbox"/> (2) Carpool Programs <input type="checkbox"/> (6) Preferential HOV Treatments <input type="checkbox"/> (10) Variable Work Hours/Compressed Work Weeks <input type="checkbox"/> (3) Vanpool Programs <input type="checkbox"/> (7) Transit and Ridesharing Incentives <input type="checkbox"/> (11) Telecommuting <input type="checkbox"/> (4) Bicycle/Pedestrian Facilities and Site Improvements <input type="checkbox"/> (8) Parking Supply and Pricing Management <input type="checkbox"/> (12) Other _____	
--	--	---	--

Please Complete Form on Other Side

ite Institute of Transportation Engineers
Trip Generation Data Form (Part 2)

Summary of Driveway Volumes

(All = All Vehicles Counted, Including Trucks; Trucks = Heavy Duty Trucks and Buses)

	Average Weekday (M-F)						Saturday						Sunday					
	Enter		Exit		Total		Enter		Exit		Total		Enter		Exit		Total	
	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks
24-Hour Volume	11		8		19		13		12		25		4		4		8	
A.M. Peak Hour of Adjacent ¹ Street Traffic (7 – 9) Time (ex.: 7:15 - 8:15):																		
P.M. Peak Hour of Adjacent ¹ Street Traffic (4 – 6) Time:																		
A.M. Peak Hour Generator ² Time: 11:00 am - 12:00 pm	1		2		3													
P.M. Peak Hour Generator ² Time: 5:00 - 6:00 pm	2		2		4													
Peak Hour Generator ³ Time (Weekend): 12:00 - 1:00 pm							3		1		4		2		0		2	

¹ Highest hourly volume between 7 a.m. and 9 a.m. (4 p.m. and 6 p.m.). Please specify the peak hour.

² Highest hourly volume during the a.m. or p.m. period. Please specify the peak hour.

³ Highest hourly volume during the entire day. Please specify the peak hour.

Please refer to the *Trip Generation User's Guide* for full definition of terms.

Hourly Driveway Volumes- Average Weekday (M-F)

A.M. Period	Enter		Exit		Total		Mid-Day Period	Enter		Exit		Total		P.M. Period	Enter		Exit		Total	
	All	Trucks	All	Trucks	All	Trucks		All	Trucks	All	Trucks	All	Trucks		All	Trucks	All	Trucks	All	Trucks
6:00-7:00	0	0	0	0	0	0	11:00-12:00	1	0	2	0	3	0	3:00-4:00	0	0	0	0	0	0
6:15-7:15							11:15-12:15							3:15-4:15						
6:30-7:30							11:30-12:30							3:30-4:30						
6:45-7:45							11:45-12:45							3:45-4:45						
7:00-8:00	0	0	0	0	0	0	12:00-1:00	1	0	0	0	1	0	4:00-5:00	1	0	0	0	1	0
7:15-8:15							12:15-1:15							4:15-5:15						
7:30-8:30							12:30-1:30							4:30-5:30						
7:45-8:45							12:45-1:45							4:45-5:45						
8:00-9:00	0	0	0	0	0	0	1:00-2:00	1	0	2	0	3	0	5:00-6:00	2	1	2	1	4	2

Check if Part 3, 4 and/or additional information is attached.

Survey conducted by: Name: Steven Dudley
 Organization: Brigham Young University ITE Student Chapter
 Address: 368 Clyde Building
 City/State/Zip: Provo, UT 84602
 Telephone #: 801-422-2811 Fax #: 801-422-0159 E-mail: byuite@gmail.com

Please return to: Institute of Transportation Engineers
 Technical Projects Division
 1627 Eye Street, NW, Suite 600
 Washington, DC 20006 USA
 Telephone: +1 202-785-0060
 Fax: +1 202-785-0609
 ITE on the Web: www.ite.org



Parking Demand Survey Form

Institute of Transportation Engineers

(fill in all highlighted cells - * are required data)

Land Use Code* 151

Name of Site Hillside Storage

Brief Description of Site

Mini-warehouse site in south part of Provo UT

Transit* Yes

Area* SUB

City Provo

TMP* NO

State UT

Country USA

Parking Price* \$ -

Daily Rate \$

Hourly Rate

Site Size* 420

Units* Storage units

Occupancy* 60%

Land Use

Site Size 4

Units Employees

Occupancy

Site Size 56,476

Units Net rentable ar

Occupancy

Site Size 10,700

Units Office floor are

Occupancy

Site Size 58,098

Units Gross floor are

Occupancy

Site Size 3

Units Acres

Occupancy

Number of Parking Spaces Provided at Site 6

Highest Observed Parking Demand for the following hours of the day (hour beginning)*

Date	2/26/2011	2/27/2011	3/1/2011				
Day	Saturday	Sunday	Tuesday				
12 Mid							
1:00 AM							
2:00 AM							
3:00 AM							
4:00 AM							
5:00 AM							
6:00 AM							
7:00 AM	1	2	1				
8:00 AM	1	2	0				
9:00 AM	2	1	0				
10:00 AM	2	1	0				
11:00 AM	2	1	1				
12 Noon	2	1	1				
1:00 PM	2	2	2				
2:00 PM	2	2	1				
3:00 PM	1	2	1				
4:00 PM	2	1	1				
5:00 PM	2	1	2				
6:00 PM	2	1	2				
7:00 PM	2	2	0				
8:00 PM							
9:00 PM							
10:00 PM							
11:00 PM							

Person Steven Dudley

Organization BYU ITE

Phone 801-636-8821

Fax

Email

Notes Includes only vehicles parked at the office parking lot, not those parked at the storage units.

Enter data on the web at www.ite.org

Comments to: ite_staff@ite.org

IF not entered on web site, please mail to:

Institute of Transportation Engineers, 1627 Eye Street, NW Suite 600; Washington, DC 20006

Chiswell and Associates, LLC

7405 Brentford Terrace Fredericksburg, VA 22407 434-825-4204
www.selfstorageconsulting.com Chiswell@earthlink.net

December 1, 2023

Mr. Joe Qonja
Old 23 Lot, LLC
10087 Highland Road
Hartland, MI 48353

Mr. Qonja:

Thank you for the opportunity to provide you with my thoughts on the anticipated traffic for your proposed self storage facility in Hartland. Over my forty years of working within the self storage industry, the issue of traffic generation has always been a concern for municipal planners and community officials.

My decades of self storage industry experience have shown me that a self storage business is one of the lowest generators of customer traffic of all real estate uses. Many municipalities will look to the Institute of Transportation Engineers (ITE) Publication Trip Generation (currently the 11th Edition) for Land Use Code (LUC) 151 – Mini Warehouses. I have reviewed a number of industry related reports and studies using the ITE data over the years. I have included several of those as references for your consideration.

In a study for a 125,500 gross square foot facility in Livingston Township, New Jersey (smaller than your proposed project) the calculations prepared by their consulting firm, Dynamic Traffic, revealed the following:

Traffic Generation

Projections of future traffic volumes were developed utilizing data as published in the Institute of Transportation Engineers (ITE) publication *Trip Generation, 10th Edition* for Land Use Code (LUC) 151 – Mini-Warehouse. Table I summarizes the projected trips generated by the proposed self-storage building utilizing the ITE data during the critical peak street hours (PSH).

Table I
Trip Generation

Land Use	AM PSH			PM PSH			SAT PSH		
	In	Out	Total	In	Out	Total	In	Out	Total
125,550 SF Self-Storage Building	8	5	13	10	11	21	23	16	39

In a different report, prepared by Doland & Dean Consulting Engineers for another large project in the Township of Franklin, New Jersey, their Report stated:

Within the most recent edition of the Trip Generation Manual are traffic generation rates specifically for “Mini Warehouse” which are defined as self-storage facilities. Daily and peak hour trip generation estimates were developed utilizing the proposed total building area. Shown on Table I is the projected trip generation for the proposed self-storage facility as developed using ITE rates.

TABLE I
ESTIMATED TRIP GENERATION
PROPOSED 120,750 SF SELF STORAGE FACILITY

Time Period	Enter	Exit	Total
Morning Peak Hour	7	5	12
Evening Peak Hour	10	11	21
24-Hour Weekday	91	91	182
Saturday Peak Hour	22	15	37
24-Hour Saturday	117	118	235

I’ve attached the complete report (several years old) from a The Brigham Young University (BYU) Institute of Transportation Engineers (ITE) student chapter. I found this 2011 Report interesting because the BYU student team compared actual data from an operating self storage facility compared to the ITE Handbook methodology.

You will see in their Report their following conclusion:

The trip rates calculated from this data collection study are substantially lower than the average trip rates provided by ITE. The difference between the trip rates is much larger when using gross floor area as the independent variable. This is due to gross floor area including both the space of the occupied units and unoccupied units. At the time of collection about 40% of the units were unoccupied. One reason the calculated rates are lower than the average rates provided by ITE may be that the storage units are usually used for long term storage rather than short term storage. Some of the storage units are being occupied by Brigham Young University for long term storage, which results in a lower number of trips being made for these units. Sunday trip rates may further be impacted by the demographics of the area as a large proportion of the nearby population believes that work and business activities should be avoided on Sunday. Finally, some of the difference in trip rates could be due to the timing of the study. Temperatures in Utah during February and March are often cool and accompanied by precipitation in the form of rain and snow. Cooler weather affects the behavior of mini-warehouse clients, resulting in less trips being made.

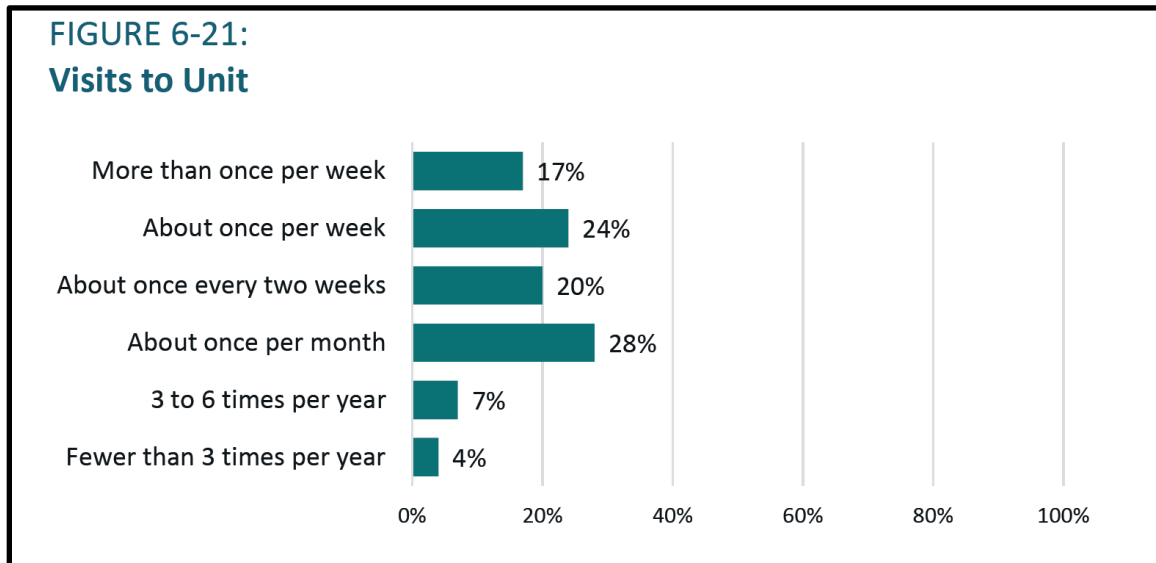
Table 6. Comparison of Calculated and ITE Trip Generation Rates

Independent Variable	Analysis Period	Saturday 2/26/11		Sunday 2/27/11		Tuesday 3/1/11	
		Calculated	ITE	Calculated	ITE	Calculated	ITE
Occupied Units	Full Day	0.099	0.250	0.032	0.180	0.075	0.280
	Peak Hour of Generator	0.016	0.040	0.008	0.030	0.016	0.030
Gross Floor Area	Full Day	0.430	2.330	0.138	1.780	0.327	2.500
	Peak Hour of Generator	0.069	0.400	0.034	0.300	0.069	0.290

Table 7. Comparison of Actual and Predicted Trips

Independent Variable	Analysis Period	Saturday 2/26/11		Sunday 2/27/11		Tuesday 3/1/11	
		Actual	Predicted	Actual	Predicted	Actual	Predicted
Occupied Units	Full Day	25	63	8	45	19	71
	Peak Hour of Generator	4	10	2	8	4	8
Gross Floor Area	Full Day	25	135	8	103	19	145
	Peak Hour of Generator	4	23	2	17	4	17

The ITE data shows that self storage usage is one of the lowest traffic generators among real estate property types. I think it is also helpful to look at the patterns of use by self storage customers. The national Self Storage Association commissioned over multi-years a Self Storage Demand study and report. The most recent Report, released in 2023 using 2022 customer data, showed the following usage patterns:



As you study the usage patterns, it becomes clear just how few customers with storage units at your proposed facility will be visiting their storage units on a regular basis.

My own personal research over the past 40 years, using client data from existing facilities, indicates average facility visits of 7 customers per 100 rented units. So, a facility with say 400 rental units and 90% occupancy (360 units) would be expected to generate 25.2 trips over a full day. This independent research produces a smaller result than the ITE calculations similar to the BYU Study. The bottom line to me, that I wanted to share with you, is that there is no denying the benign nature of customer traffic to and from a self storage facility.

Please let me know if you have any questions.

HARTLAND SELF STORAGE – SUMMARY OF OPERATIONS

01.26.24

Summary of the hours of operation, number of employees, and restrictions on what can be stored regarding hazardous materials.

Hartland Self Storage - Hours of Operation

I would anticipate that you will follow the operations of other facilities within the general market area. Office Mon-Friday 8 - 9 am to 5 - 6 pm Saturday 9 am to 3 - 4 pm. Sunday – Closed.

Access hours for Established Customers 6 am to 10 pm

Here are a few examples of nearby storage facilities with data directly from their websites on their hours of operations:

**National Storage
700 Old US 23 in Brighton**

Office Hours	Access Hours
Mon	9:00am - 5:30pm
Tue	Closed
Wed	9:00am - 5:30pm
Thu	9:00am - 5:30pm
Fri	9:00am - 5:30pm
Sat	9:00am - 5:30pm
Sun	Closed

Office Hours	Access Hours
Mon	24 Hours
Tue	24 Hours
Wed	24 Hours
Thu	24 Hours
Fri	24 Hours
Sat	24 Hours
Sun	24 Hours

AmeriGuard Storage Centers
8085 Old US 23 in Fenton

Fenton:

M-F → 10:00am – 5:00pm

Sat: → 10:00am – 2:00pm

Sun: → CLOSED

The AmeriGuard ACCESS hours:

*The AmeriGuard gate can be accessed using your personalized electronic pin from **6:00am to 10:00pm** if you have an active rental with us.*

CubeSmart Self Storage
9986 E. Grand River Avenue in Brighton

Office Hours

Monday–Friday: 9:30 AM–6:00 PM

Saturday: 8:30 AM–5:00 PM

Sunday: Closed

Access Hours

Daily: 6:00 AM–10:00 PM

Number of Employees

I would expect a total of three full and part-time employees. No more than two people on site at any time.

Storage of Hazardous Materials

All customers will be required to sign a written Occupancy Agreement that will be in total compliance with Michigan's Self-Service Storage Facility Act 148 of 1985. This Agreement will include various restricted activities including the storage of any Hazardous Materials. All customers will be required to provide a Government Issued Photo ID to be able to rent a space. This restriction in many cases will eliminate anyone trying to get around the rules of the facility.

In addition, it is important for community leaders to understand that only customers in good standing are permitted access to the building with the anticipated access security systems that will be used. There will also be a variety of digital video cameras that we provided recorded surveillance throughout the facility on all levels. The video surveillance system is a further deterrent to any customer violating the rules of the facility's operations.

Troy Langer

From: Troy Langer
Sent: Wednesday, December 06, 2023 8:25 AM
To: Troy Langer
Subject: Self-storage facility

Hi Martha,

We've also looked it over and have no issues with the proposed use of the site or with traffic. Our only issue is with the poor condition of the driveway approach at Old US-23, which has deteriorated considerably in the last 5 to 10 years. If there is any way for the developer(s) to repair the driveway approach at Old US-23, that would be great.

Regards,

Mike Goryl
Traffic and Safety Engineer
Livingston County Road Commission
3535 Grand Oaks Drive
Howell, MI 48843
517-546-4250 (office)
517-518-3019 (direct)
517-881-5012 (cell)

Troy Langer

From: Troy Langer
Sent: Wednesday, December 06, 2023 8:23 AM
To: Troy Langer
Subject: Self-storage facility

Hello Martha,

Thank you for sharing with MDOT. In a perfect world, the driveway access on M-59 would already be a right in right out. But since it is existing driveway and the storage facility isn't adding much additional traffic, MDOT is fine with what is being proposed.

Thank you

Craig Heidelberg, P.E.
MDOT Brighton TSC
Operations Engineer
810-623-8341 C



2007R-036799

RECORDED ON
11/09/2007 11:15:27AM

SALLY REYNOLDS
REGISTER OF DEEDS
LIVINGSTON COUNTY, MI 48943
RECORDING: 22.00
FEE: 4.00
PAGES: 5

5

Hartland Township Agreement for Private Driveway Easement Rights and Responsibilities

The undersigned, being all of the owners of that real estate described in Exhibit A, attached hereafter and incorporated by reference, which abuts a private driveway easement, situated in the Township of Hartland, Livingston County, Michigan and which is more fully described in Exhibit B, attached hereafter and incorporated by reference, hereby acknowledge that this private driveway is not the responsibility of the Township of Hartland or the Livingston County Road Commission, and is not paid for with public funds; therefore, the undersigned hereby enter into the following agreement for maintenance and repair of the private driveway easement.

Section 1: TERMS

This agreement shall be effective for the life of the private driveway easement or as provided by law. This agreement shall be a covenant running with all the lands described in Exhibit A, and shall irrevocably bind the land and their heirs, assigns, or personal representatives of the undersigned with respect to all of this agreement's terms and obligations.

Section 2: INTENT

It is the intent of this agreement to provide an effective and convenient mechanism for the afore described real estate owners to maintain a private driveway easement in a reasonably safe condition suitable for safe and efficient travel by the undersigned, their guests, government agencies, emergency service providers and public utilities. It is the intent of this agreement to maintain the private driveway easement in a reasonably suitable condition for travel. The undersigned agree that the private driveway shall, from time to time, require maintenance that could include grading, paving, restoration of the gravel base, restoration of the crown, cleaning and replacement of drainage improvements, and removal of snow and other hazards in order to safely travel on the driveway.

Section 3: GOVERNMENTAL CONDITIONS

This agreement shall be in addition to any and all governmental restrictions or requirements that may be applicable to the maintenance and repair of the private driveway.

Section 4: EASEMENT DECLARATION

The parties hereto hereby grant, transfer, establish, and declare a non-exclusive perpetual private driveway easement for ingress, egress, improved or unimproved, and for the location of public and private utilities, over and across and for the benefit of the parcels described in Exhibit B, attached hereto and made a part hereof.

Section 5: VOTING

1. Each parcel of property covered by this agreement which has a separate tax identification number, assigned by the Assessor of the Township of Hartland, Livingston County, Michigan, shall have one vote for any voting purposes pursuant to this agreement. The vote for each parcel may be exercised by any owner of that property with preference given to the owner in possession. In the event of any dispute as to whom should properly exercise the vote for a parcel, the parcel shall have no vote until the contesting parties unanimously agree as to whom shall properly exercise the vote for the parcel. Voting for a parcel may be done by written proxy duly witnessed and notarized and dated no sooner than thirty (30) days before the date of when voting will place. At least two-thirds (2/3) of those parcels eligible to vote shall be needed to vote in any action to be taken.
2. In the event of a tie vote or other outcome so that a decision by the owners cannot be determined, the voting owners shall request the Township to make a determination regarding required maintenance. The township decision shall be final and shall bind the parcel owners to proceed with maintenance as though the decision was made by the parcel owners. Further, any costs associated with the Township's decision shall be shared among the parcel owners.

Section 6: MAINTENANCE

1. In order to maintain the driveway easement in a safe condition suitable for safe and efficient travel by the undersigned, their guests, governmental agencies, emergency service providers and public utilities, each parcel owner is responsible for maintaining and improving the easement. It shall also be the responsibility of each parcel owner to ensure that regular maintenance and improvements to the private road easement's intersection with a public or private road is maintained in a safe condition. Performance under the terms of this agreement shall be at the sole discretion of Kalabat Investments, Inc.

2. Each eligible vote for each parcel, as provided in Section 5, shall share equally in the cost of maintaining the private road easement. The share of the cost shall be based upon the total number of parcels of property, each parcel being one vote and subject to the conditions and definitions established herein.
3. Prior to any costs incurred for normal maintenance or major improvements of the driveway, the owners shall agree to such normal maintenance being performed and the cost thereof.
4. Any costs incurred for maintenance or other improvements of the private driveway easement as described herein shall be a burden upon the land with a lien therefore against any parcel for which the costs of maintenance or improvements have not been paid by the owner of such parcel. Any such lien shall be attached upon the filing and recording of an affidavit by the owners of the remaining parcels which are subject to and liable for such costs. The affidavit shall set forth the description of the parcel or property against which the lien is claimed, what the expenditure is for, the total amount of the expenditure, the portion attributable to such parcel or property, and the date or dates of expenditures. A copy of the affidavit shall be sent to the owner or owners of the parcel against which the lien is claimed by regular mail, with postage prepaid, at the last know address of the owner.
5. The owner of each parcel shall be separately responsible to repair and for the costs thereof, of any damage caused to the driveway due to extraordinary use by the parcel owner or agent of the parcel owner. Extraordinary use shall include, but is not limited to: movement of construction equipment, moving vans, commercial trucks, or other heavy loads; movement of recreational vehicles, or increased usage not ordinarily consistent with normal traffic. The owner of the parcel or parcels, whether improved or unimproved, shall not be responsible for repair costs until such time as the private driveway is used by them or construction has commenced on their parcel.

In the event that any owner or their agents, employees or guests cause the type of damage described herein shall fail to make the necessary repairs within ninety (90) days, the remaining parcel owners may do so after notice to the owner, and any costs so expended shall be a burden upon the land of such owner with a lien enforceable as set forth herein.

Section 7: ACCESS

Any parcel abutting and responsible for the shared driveway shall only access the parcel from the shared driveway.

Section 8: SUBDIVISION

The private driveway easement described in Exhibit A may be used to serve additional parcels within the exterior boundary of all parcels combined in Exhibit A, but only with the consent of three-fourths (3/4) of the owners of all property described in Exhibit A. If any parcels are subdivided, all repair and maintenance charges that would have been levied in respect to the parcels shall be reallocated among all property abutting the shared driveway easement so that each existing and new parcels shall share equally in the cost of repair and maintenance. Any costs or expenses relating to the improvement or upgrading of the private driveway easement and all other costs resulting from the subdivision shall be borne by the owner of the parcel or parcels being subdivided. It shall be the responsibility of the parcel owner to notify Hartland Township officials, the Livingston County Road Commission, and all other agencies that may have specific requirements or review authority over the proposed subdivision in order to determine the appropriate procedures for subdivision of a parcel.

Section 9: EXTENSION OF PRIVATE DRIVEWAY EASEMENT

The private driveway easement described in Exhibit A may be extended to serve additional parcels outside the exterior boundary of all parcels in Exhibit A, but only with the consent of three-fourths (3/4) of the owners of all property described in Exhibit A. Any parcels that will abut the private driveway or extension of the private driveway shall be responsible for the maintenance of the driveway easement. All repair and maintenance charges that would have been levied in respect to the parcels shall be reallocated among all property abutting the private driveway easement so that each parcel shares equally in the costs of repair and maintenance. Any such extensions shall only be created with the approval of Hartland Township and all other governmental authorities exercising control or review authority for the land and drainage facilities associated with the extension of the private driveway easement.

Section 10: AMENDMENT

The provisions of this agreement may be amended, but only with three-fourths (3/4) of the owners of all property described in Exhibit A.

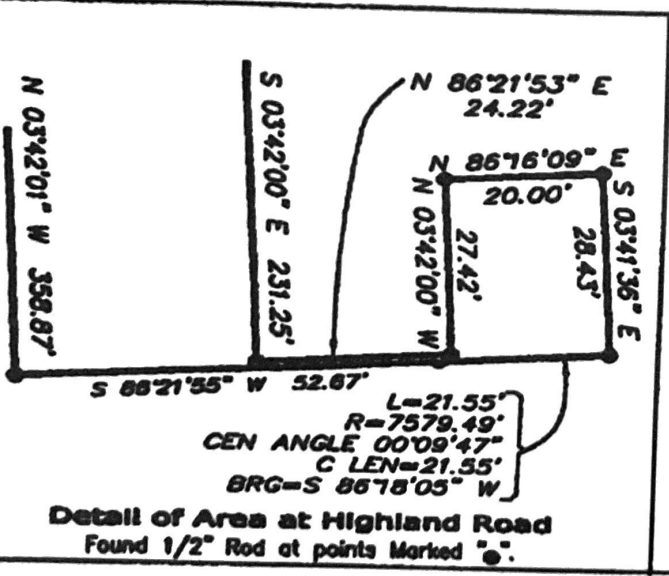
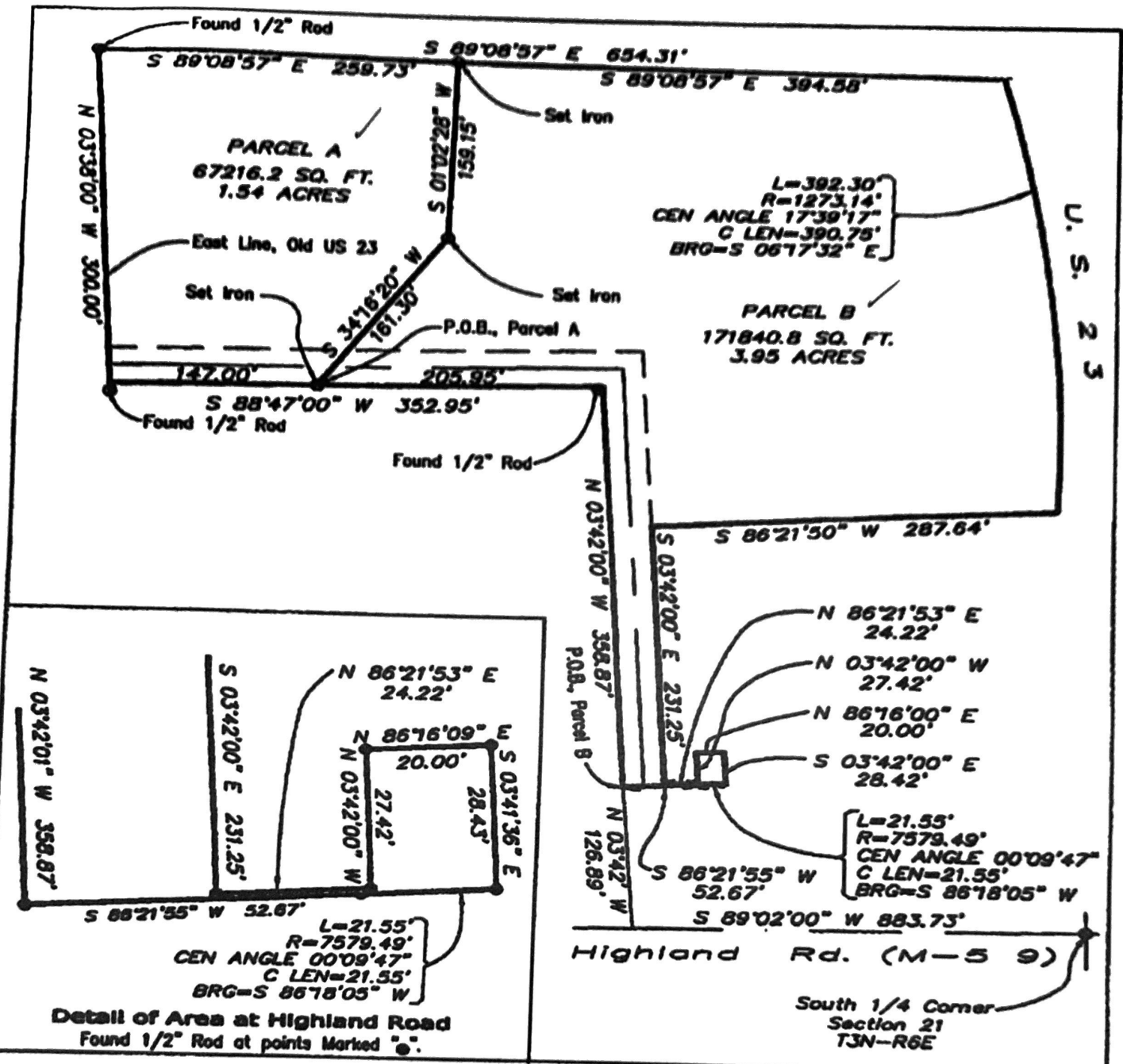
Section 11: FILING WITH TOWNSHIP

A copy of the executed and recorded agreement shall be filed with the Office of the Township Clerk.

Section 12: SEVERANCE

If any part of this agreement is determined to be invalid for any reason, then it shall not affect the remaining provisions and the balance of this agreement shall remain in effect.

IN WITNESS THEREOF, the parties hereto have set their hands and seals on the day and year as set forth in their respective acknowledgements. And this agreement, covenant and restrictions shall be binding upon the undersigned heirs, successors, and assigns.

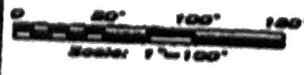


We hereby certify that the property herein described and mapped is based upon a survey performed upon the ground and under the direct supervision of the licensed Professional Surveyor whose seal is below and that the relative area of closure meets or exceeds 1/5000 and the requirements of PA 132 of 1970, as amended.

Basis of Bearings:
 Boss Engineering Survey, Certified Survey No. 4161, Deed Liber 1967, Page 0051, Livingston County Records

THE ORIGINAL PREPARATION OF THIS DOCUMENT IS IN THE RECORDING FILE OF FIELD TO FINISH, A RESPONSIBLE DOCUMENT ON VILLAGE, TOWN OR OTHER JURISDICTION IS ALSO STORED IN THE OFFICE OF THE REGISTER OF DEEDS. ALL FEES ARE THE EXCLUSIVE PROPERTY OF FIELD TO FINISH. ALL PARTIES SHOULD BE AWARE THAT ANY UNLAWFUL REPRODUCTION OR ALTERATION OF THIS DOCUMENT SHALL NOT BE RESPONSIBLE OR LIABLE FOR ANY SUBSEQUENT ALIENATION, ARISING OR SELECTING THEREBY. SIGNATURE AND SEAL ARE NOT TO BE CONSIDERED CERTIFIED UNLESS THE ORIGINAL SEAL AND SIGNATURE OF THE LICENSED PROFESSIONAL SURVEYOR IS PRESENT.

Exhibit A



Best Western of Hartland
 16156 Silver Crest Drive
 Fenton, MI 48430

Field To Finish
 Land Surveying, Civil & Structural Engineering
 401 South Lefay Street Fenton, MI 48430
 Phone 810 632 6204 Fax 810 632 6200
 810 632 6240 810 632 6242
 E-Mail: fieldtofinish@earthlink.net

PARCEL A

Part of the East 1/2 of the Southwest 1/4 of Section 21, T3N-R6E, Hartland Township, Livingston County, Michigan described as follows: Commencing at the South 1/4 corner of said Section 21; thence S 89°02'00" W, 883.73 feet; thence N 03°42'00" W, 485.76 feet; thence S 88°47'00" W 205.95 feet to the point of beginning; thence continuing S 88°47'00" W 147.00 feet to the Easterly right of way of Old US 23; thence N 03°38'00" W along said Easterly right of way, 300.00 feet; thence S 89°08'57" E, 259.73 feet; thence S 01°02'28" W 159.15 feet; thence S 34°16'20" W 161.31 feet to the point of beginning. The area described contains 1.54 acres and is together with and subject to a 30' wide easement for ingress, egress and public utilities, being part of the East 1/2 of the Southwest 1/4 of Section 21, T3N-R6E, Township of Hartland, Livingston County, Michigan, the centerline of which is described as follows: Commencing at the South 1/4 corner of said Section 21; thence S 89°02'00" W, 883.73 feet; thence N 03°42'00" W, 126.89 feet; thence N 86°21'55" E 15.00 feet to the point of beginning of the centerline of the 30 foot wide easement; thence along the centerline of said 30' easement, N 03°42'00" W 373.87 feet; thence S 88°47'00" W, 367.95 feet to the Easterly right of way line of Old US 23 and the point of ending. Also subject to any easements, restrictions or rights of way which may or may not be of public record.

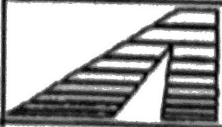
PARCEL B

Part of the East 1/2 of the Southwest 1/4 of Section 21, T3N-R6E, Hartland Township, Livingston County, Michigan described as follows: Commencing at the South 1/4 corner of said Section 21; thence S 89°02'00" W, 883.73 feet; thence N 03°42'00" W, 126.89 feet to the point of beginning; thence continuing N 03°42'00" W 358.87 feet; thence S 88°47'00" W 205.95 feet; thence N 34°16'20" E 161.30 feet; thence N 01°02'28" E 159.15 feet; thence S 89°08'57" E, 394.58 feet to the Westerly right of way line of US 23 expressway; thence Southeasterly along said Westerly right of way 392.30 feet on an arc right having a central angle of 1739'17", radius of 1273.14 feet and a long chord which bears S 06°17'32" E, 390.75 feet; thence S 86°21'50" W, 287.64 feet; thence S 03°42'00" E, 231.25 feet; thence N 86°21'53" E 24.22 feet; thence N 03°42'00" W 27.42 feet; thence N 86°16'00" E 20.00 feet; thence S 03°42'00" E, 28.42 feet to the Northerly right of way line of M-59; thence along the arc of a curve right 21.55 feet, said curve has a central angle of 00°09'47", a radius of 7579.49 feet and a long chord which bears S 86°18'05" W 21.55 feet; thence S 86°21'55" W along said Northerly right of way, 52.67 feet to the point of beginning. The area described contains 3.95 acres and is together with and subject to a 30' wide easement for ingress, egress and public utilities, being part of the East 1/2 of the Southwest 1/4 of Section 21, T3N-R6E, Township of Hartland, Livingston County, Michigan, the centerline of which is described as follows: Commencing at the South 1/4 corner of said Section 21; thence S 89°02'00" W, 883.73 feet; thence N 03°42'00" W, 126.89 feet; thence N 86°21'55" E 15.00 feet to the point of beginning of the centerline of the 30 foot wide easement; thence along the centerline of said 30' easement, N 03°42'00" W 373.87 feet; thence S 88°47'00" W, 367.95 feet to the Easterly right of way line of Old US 23 and the point of ending. Also subject to any easements, restrictions or rights of way which may or may not be of public record.

THE SIGNATURE, PRINTING OF THE SURVEYOR IS IN THE BLANK SPACE OF THIS FIELD TO BE FILLED BY THE SURVEYOR. ALL OTHER INFORMATION ON THIS FIELD IS FOR THE SURVEYOR'S USE ONLY. THE SURVEYOR SHALL BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS IN THIS FIELD. THE SURVEYOR SHALL BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS IN THIS FIELD.

Exhibit B

Plat of Survey
Best Western of Hartland
16156 Silver Crest Drive
Fenton, MI 48430



Field To Finish
Land Surveying, Civil & Structural Engineering
401 South Lefley Street Fenton, MI 48430
Phone 810 632 9304 Fax 810 632 9308
810 632 9300 810 632 9303
E-Mail: info@fieldtofinish.com

Livingston County Register of Deeds, 2007R-036799

SIGNATURES AND ADDRESSES OF PROPERTY OWNERS

Zohair Kallabat
Kalabat Investments, Inc.
Zohair Kallabat Pres.
1860 Rockdale Court
Bloomfield Hills, Mich. 48302

WITNESSES:

STATE OF MICHIGAN }
COUNTY OF LIVINGSTON } SS

On this 9th day of November, 2007, before me, a notary public, personally came the above named property owners, known to be the persons who executed the foregoing agreement and acknowledge the same to be their free act and deed. Zohair Kallabat Pres. Kalabat Investments Inc.

Kristin Plew
Notary Public
Ann Arbor County, State of Michigan
My Commission expires 9.14.11

Z. Kallabat
Drafted by: Field To Finish 401 S. LeRoy Street Fenton, MI 48430

When recorded, please send to Best Western of Hartland, 10087 M-59, Hartland, MI 48353

KRISTIN PLEW
Notary Public, State of Michigan
County of Ann Arbor
My Commission Expires Sep. 14, 2011
Acting in the County of Livingston



PROPOSED HARTLAND STORAGE

HARTLAND, MI



EAST ELEVATION CONCEPTUAL RENDERING



WEST ELEVATION CONCEPTUAL RENDERING

OWNER / DEVELOPER

V/L HIGHLAND ROAD
10087 HIGHLAND ROAD
HARTLAND, MI 48353
PHONE: 248-712-3300
FAX: N/A
JOE@ONQCRE.COM

ARCHITECT

RON JONA
PHONE: 248-357-3600
FAX: N/A
RJONA@RONJONA.COM

SURVEYOR

FENTON LAND SURVEYING & ENGINEERING, INC.
14165 FENTON ROAD SUITE 101A
FENTON, MI 48430
PHONE: 810-354-8115
FAX: N/A
INFO@FENTONLSE.COM

OWNER/DEVELOPER
V/L HIGHLAND RD.
10087 HIGHLAND RD.
HARTLAND MI, 48353
PHONE: 248.712.3300
JOE@ONGCRE.COM

ARCHITECT
RON JONA
PHONE: 248.357.3600
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SURVEYOR
FENTON LAND SURVEYING &
ENGINEERING
14165 FENTON ROAD
SUITE 101A FENTON, MI 48430
PHONE: 810.354.8115
INFO@FENTONLSE.COM

PROJECT
HARTLAND STORAGE

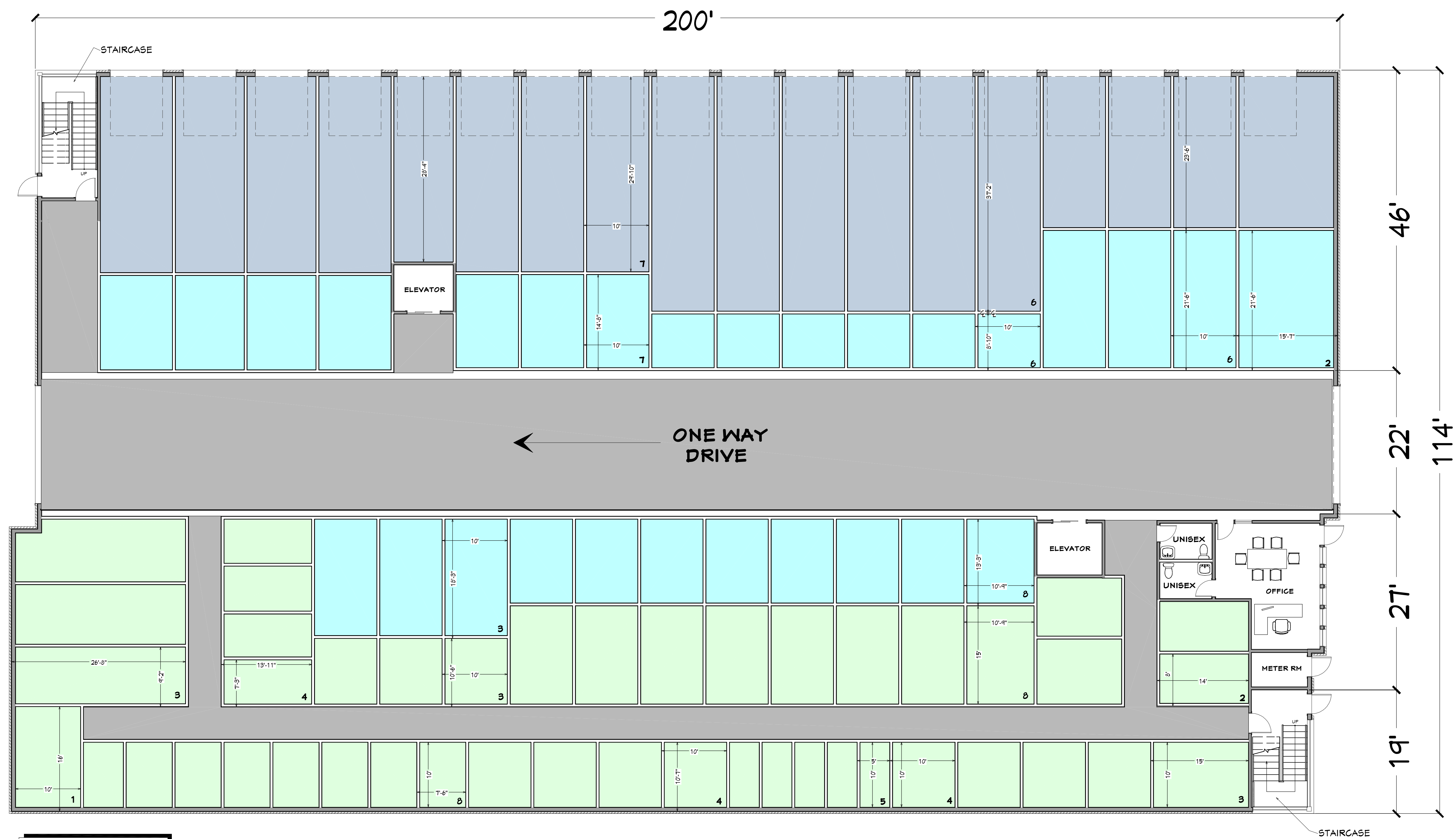
SHEET TITLE
FLOOR PLANS
TOTAL BUILDING
68,400 SF
TOTAL RENTABLE
50,750 SF

DATE ISSUED
8.01.2023

- REVISIONS**
- 8.22.2023
 - 10.10.2023
 - 12.27.2023 (ELEVATIONS)
 - 01.22.2024 (PROJECT INFO)
 - 02.05.2024 (REVISIONS)
 - 02.13.2024 (REVISIONS)
 - 03.07.2024 (REVISIONS)

SHEET NUMBER

A 100



NOTE:
ALL HVAC UNITS LOCATED IN
INTERIOR OF BUILDING

FIRST FLOOR PLAN
SCALE: 3/32"=1'-0"
TOTAL GROSS 22,800 SF
TOTAL RENTABLE 15,790 SF

OWNER/DEVELOPER
V/L HIGHLAND RD.
10087 HIGHLAND RD.
HARTLAND MI, 48353
PHONE: 248.712.3300
JOE@ONGCRE.COM

ARCHITECT
RON JONA
PHONE: 248.357.3600
RJONA@RONJONA.COM

SURVEYOR
FENTON LAND SURVEYING &
ENGINEERING
14165 FENTON ROAD
SUITE 101A FENTON, MI 48430
PHONE: 810.354.8115
INFO@FENTONLSE.COM

PROJECT
HARTLAND STORAGE

SHEET TITLE
ELEVATIONS

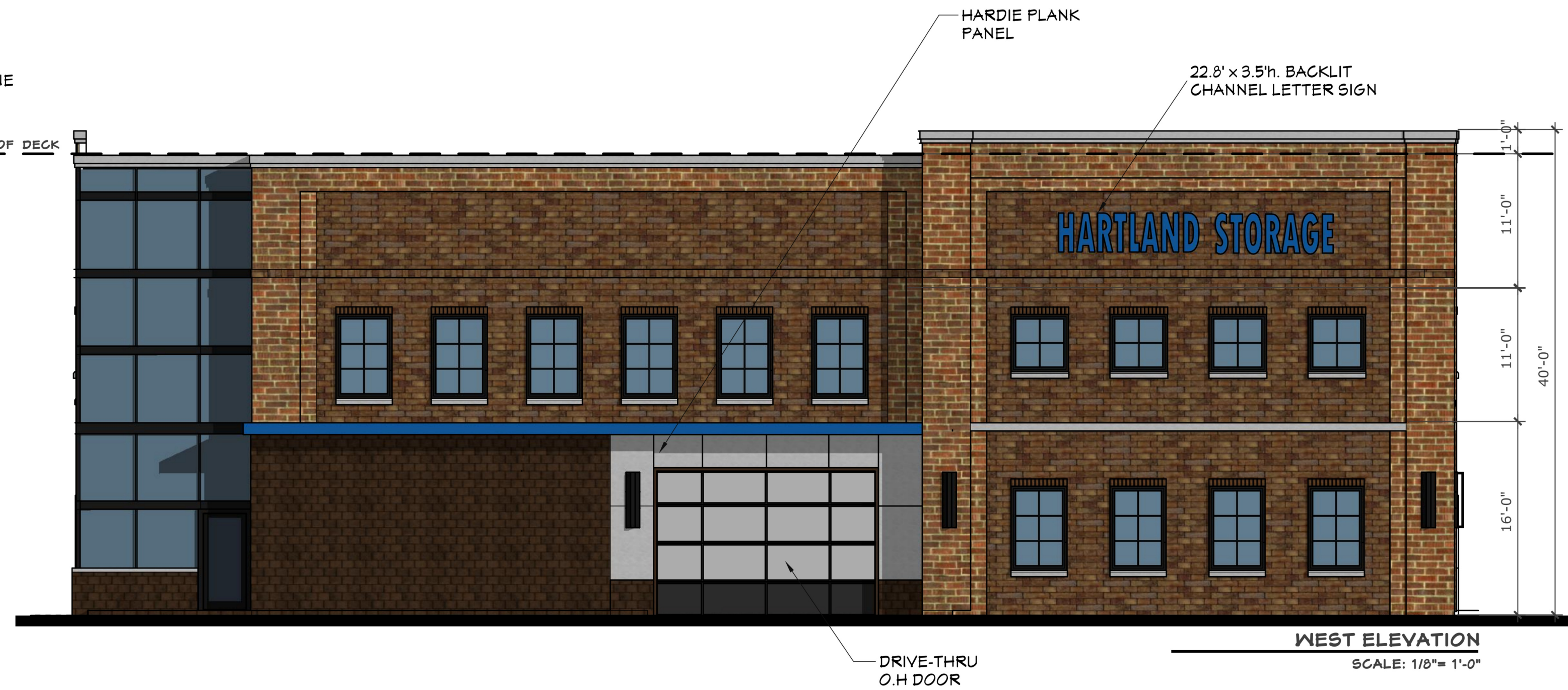
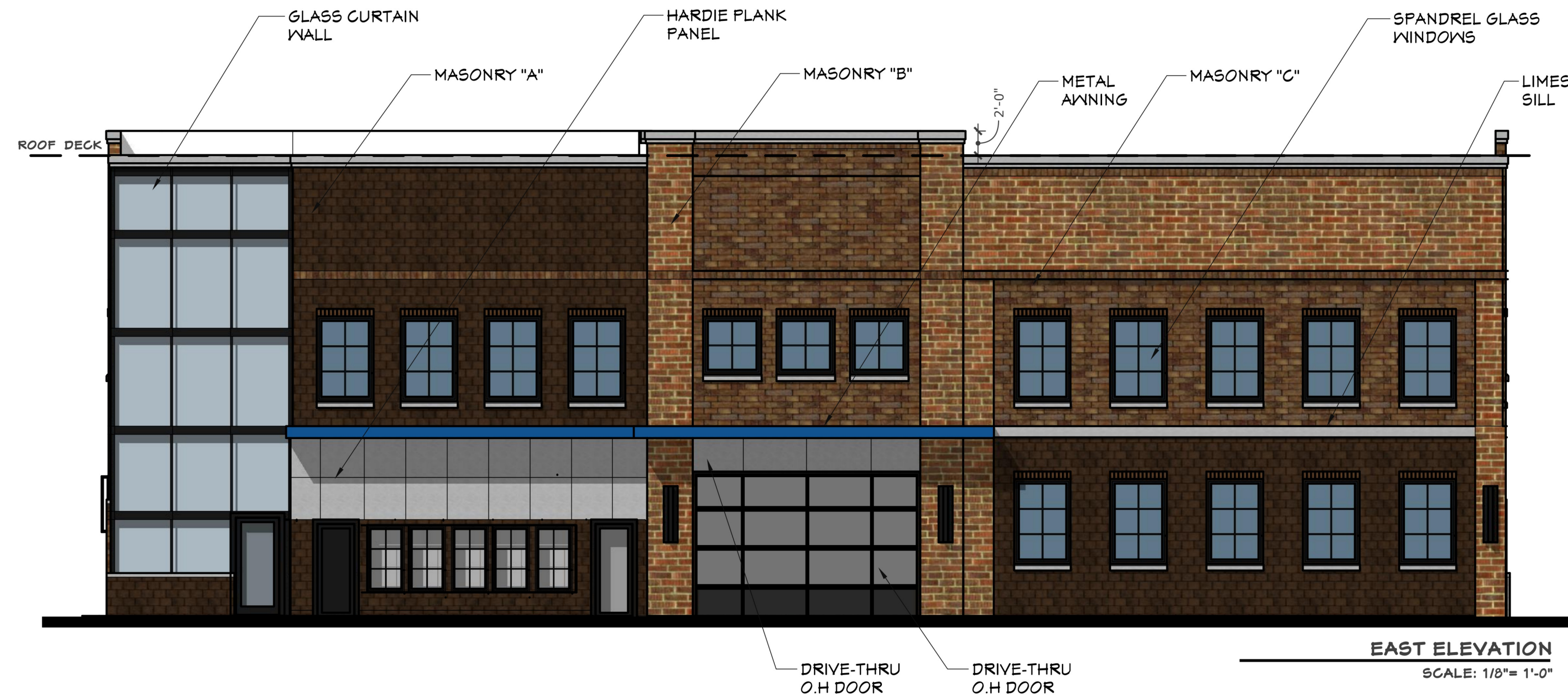
DATE ISSUED
8.01.2023

REVISIONS

8.22.2023	
10.10.2023	
12.27.2023	(ELEVATIONS)
01.22.2024	(PROJECT INFO)
02.05.2024	(REVISIONS)
02.13.2024	(REVISIONS)
03.07.2024	(REVISIONS)

SHEET NUMBER

A 300



NOTE:
ALL HVAC UNITS LOCATED IN
INTERIOR OF BUILDING

OWNER/DEVELOPER
V/L HIGHLAND RD.
10087 HIGHLAND RD.
HARTLAND MI, 48353
PHONE: 248.712.3300
JOE@ONGCRE.COM

ARCHITECT
RON JONA
PHONE: 248.357.3600
R.JONA@RONJONA.COM

SURVEYOR
FENTON LAND SURVEYING &
ENGINEERING
14165 FENTON ROAD
SUITE 101A FENTON, MI 48430
PHONE: 810.354.8115
INFO@FENTONLSE.COM

PROJECT
HARTLAND STORAGE

SHEET TITLE
FAÇADE SPECIFICATIONS

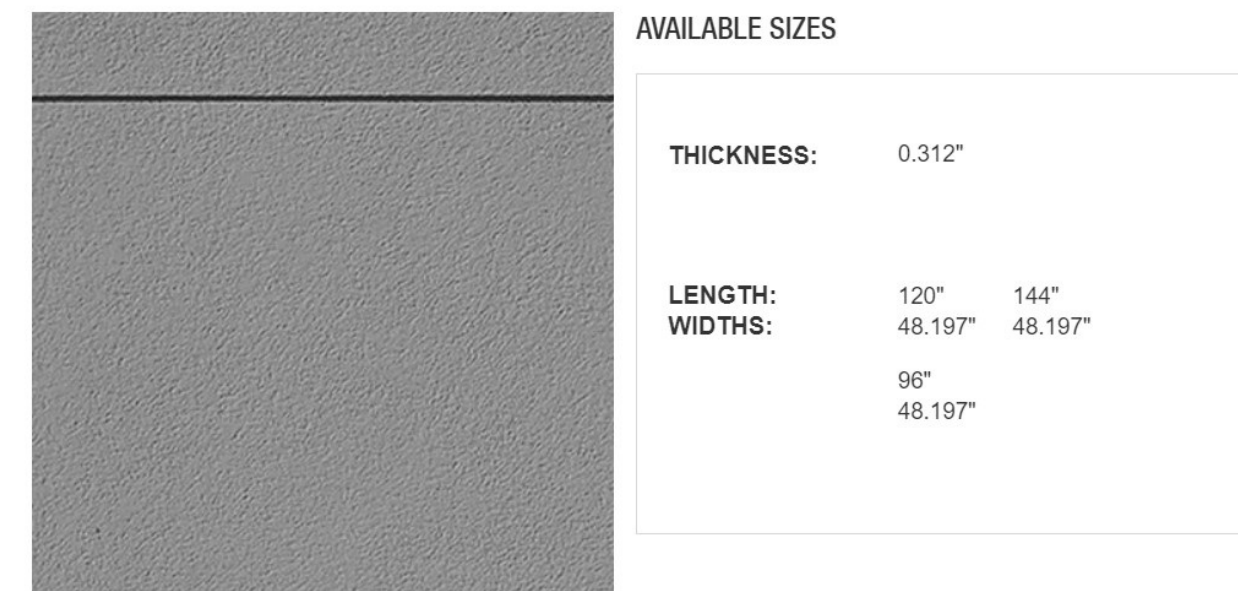
DATE ISSUED
8.01.2023

- REVISIONS**
- 8.22.2023
 - 10.10.2023
 - 12.27.2023 (ELEVATIONS)
 - 01.22.2024 (PROJECT INFO)
 - 02.05.2024 (REVISIONS)
 - 02.13.2024 (REVISIONS)
 - 03.07.2024 (REVISIONS)

SHEET NUMBER

A 400

FAÇADE MATERIAL PERCENTAGES			
SOUTH ELEVATION		EAST ELEVATION	
GLASS CURTAIN WALL	% COVERAGE	GLASS CURTAIN WALL	% COVERAGE
GLASS CURTAIN WALL	5%	GLASS CURTAIN WALL	9%
MASONRY "A"	34%	MASONRY "A"	29%
MASONRY "B"	22%	MASONRY "B"	17%
MASONRY "C"	28%	MASONRY "C"	23%
SPANDREL GLASS	8%	SPANDREL GLASS	8%
LIMESTONE SILL	2%	LIMESTONE SILL	2%
HARDIE PLANK PANEL	1%	DRIVE-THRU O.H DOOR	5%
		HARDIE PLANK PANEL	6%
		METAL AWNING	1%
NORTH ELEVATION		WEST ELEVATION	
GLASS CURTAIN WALL	% COVERAGE	GLASS CURTAIN WALL	% COVERAGE
GLASS CURTAIN WALL	4%	GLASS CURTAIN WALL	9%
MASONRY "A"	19%	MASONRY "A"	11%
MASONRY "B"	24%	MASONRY "B"	19%
MASONRY "C"	13%	MASONRY "C"	45%
SPANDREL GLASS	20%	HARDIE PLANK PANEL	4%
LIMESTONE SILL	2%	SPANDREL GLASS	7%
O.H. METAL DOORS	17%	LIMESTONE SILL	1%
HARDIE PLANK PANEL	1%	DRIVE-THRU O.H DOOR	4%
		METAL AWNING	1%



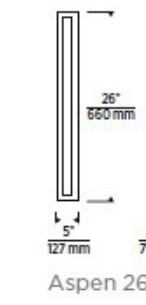
JAMES HARDIE FIBER CEMENT ARCHITECTURAL SERIES FINE SAND GROOVED PANELS PRE PRIMED PAINTED SW 7069 IRON ORE

EXTERIOR WALL SCONCE SPECIFICATIONS

DELIVERED LUMENS	1060
WATTS	38
VOLTAGE	Universal 120-277V, with integral transient 2.5kV surge protection (driver)
DIMMING	0-10, ELV
LIGHT DISTRIBUTION	Symmetric
MOUNTING OPTIONS	Wall
PERFORMANCE OPTIONS	In-Line Fuse / Surge Protector
CCT	2700K or 3000K
CRI	90+
COLOR BINNING	3 Step
BUG RATING	B0-U3-G1
DARK SKY	Non-compliant
WET LISTED	IP65
GENERAL LISTING	ETL
CALIFORNIA TITLE 24	Can be used to comply with CEC 2019 Title 24 Part 6 for outdoor use. Registration with CEC Appliance Database not required.
START TEMP	-30°C
FIELD SERVICEABLE LED	Yes
CONSTRUCTION	Aluminum
HARDWARE	Stainless Steel
FINISH	Powder Coat
LED LIFETIME	L70; >60,000 Hours
WARRANTY*	5 Years
WEIGHT	7 lbs.

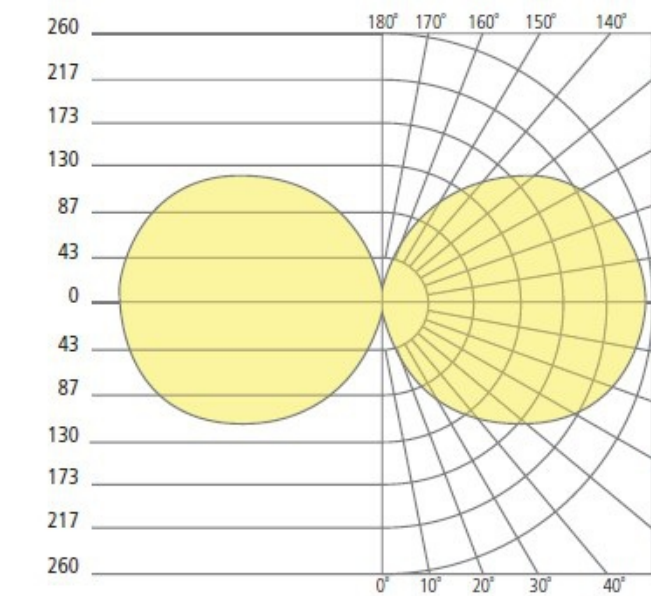


ASPEN 26 shown in charcoal



PHOTOMETRICS*

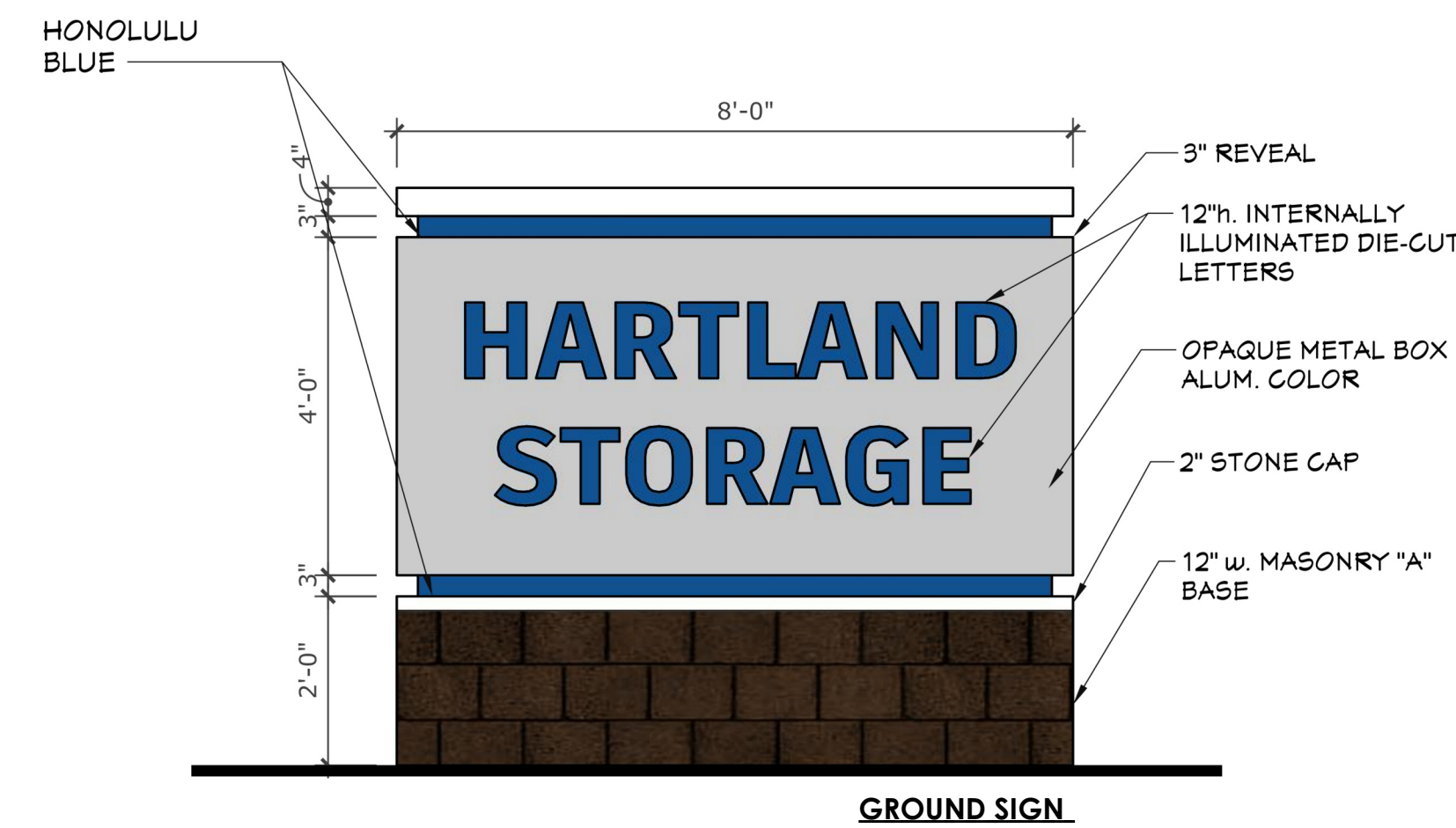
ASPEN 26	
Total Lumen Output:	1060
Total Power:	38
Luminaire Efficacy:	28
Color Temp:	3000K
CRI:	90
BUG Rating:	B0-U3-G1



FAÇADE MATERIAL SPEC	
GLASS CURTAIN WALL	KAWNEER 1" INSUALTED GLASS & ALUM. FRAME CURTAIN WALL SYSTEM LIGHT GREY TINT
MASONRY "A"	8x16 SPLITFACE BLOCK W/ RAKED HORZ. JOINTS STAINED "SW 6006 BLACK BEAN"
MASONRY "B"	BRICKTECH FRENCH QUARTER "FRISCO BLEND" MODULAR BRICK
MASONRY "C"	BRICKTECH FRENCH QUARTER "BURGUNDY BLEND" MODULAR BRICK
SPANDREL GLASS WINDOWS	KAWNEER SPANDRAL GLASS SYSTEM LIGHT GREY TINT
LIMESTONE SILL	4" LIMESTONE SILL
GARAGE DRIVE-THRU	CLOPAY ARCHITECTURAL SERIES COMMERCIAL OVERHEAD FLUSH STEEL DOORS, BLACK, THERMALLY-BROKEN, INSULATED GLASS PANEL
GARAGE METAL DOOR	CLOPLAY COMMERCIAL O.H DOOR BLACK FINISH
METAL AWNING	METAL AWNING COLOR "HONOLULU BLUE"
HARDIE PLANK PANELS	JAMES HARDIE FIBER CEMENT ARCHITECTURAL SERIES FINE SAND GROOVED PANELS PRE PRIMED PAINTED SW 7069 IRON ORE



MASONRY "A" STAINED BLOCK COLOR



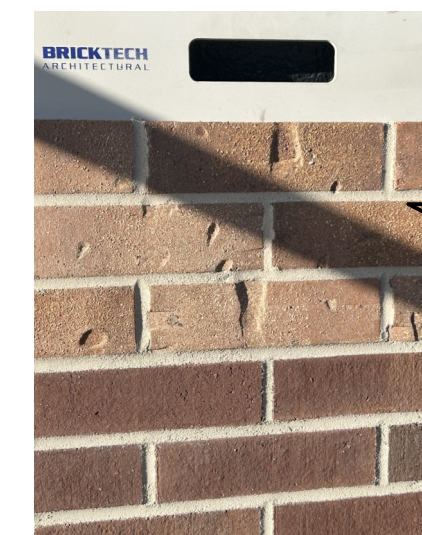
DRIVE-THRU O.H DOORS



O.H. METAL DOORS

All of our Steel Insulated Door models come with the following:

- Joint Design:** Tongue and groove section with continuous foam thermal break prevents cold or heat from passing through the section
- Paint System:** 3-stage paint process delivers maintenance free finish that resists rust perforation
- Limited Warranty:** 10-year paint / 10-year delamination / 1 year material and workmanship / 1 year hardware
- Model 3728/3729**
- Section Design/Emboss:** (3728) 2" thick stucco embossed steel with flush exterior skin pattern
(3729) 2" thick stucco embossed steel with minor ribbed exterior skin pattern
- Steel Gauge:** 27 exterior; 27 interior



MASONRY SAMPLE

MASONRY "B" BRICKTECH FRENCH QUARTER "FRISCO BLEND"

MASONRY "C" BRICKTECH FRENCH QUARTER "BURGUNDY BLEND"

MDOT DRAINAGE REQUIREMENTS								
FREQUENCY	EXISTING FLOW TO MDOT ROW		PROPOSED FLOW TO MDOT ROW WITHOUT DETENTION			PROPOSED FLOW TO MDOT ROW WITH DETENTION *		
	DISCHARGE (CFS)	RUNOFF VOLUME (CFT)	DISCHARGE (CFS)	VELOCITY (FT/S) **	RUNOFF VOLUME (CFT)	DISCHARGE (CFS)	RUNOFF VOLUME (CFT)	WATER SURFACE ELEVATION (FT)
2-YEAR STORM EVENT	0.91	2,107	2.97	N/A	6,844	0.81	6,844	974.00
10-YEAR STORM EVENT	2.03	4,488	4.50	N/A	10,632	1.75	10,632	974.53
50-YEAR STORM EVENT	3.90	8,561	6.64	N/A	16,075	2.87	16,075	975.30
100-YEAR STORM EVENT	4.92	10,828	7.72	N/A	18,846	4.34	18,846	975.69
DRAINAGE AREA (ACRES)	1.21 ACRES		1.21 ACRES			1.21 ACRES		
DESIGNED STORAGE VOLUME						6,142 CF		

* NOT REQUIRED IF PROPOSED DISCHARGE IS LESS THAN OR EQUAL TO THE EXISTING DISCHARGE WITHOUT DETENTION
 ** NOT APPLICABLE (N/A) IF "SHEET FLOW" INTO MDOT ROW OR DETENTION IS PROPOSED

SYMBOL	DESCRIPTION
---	PROPERTY LINE
100	PROPOSED GRADING CONTOUR
---	PROPOSED GRADING RIDGELINE
☐	PROPOSED STORMWATER STRUCTURES
---	PROPOSED STORMWATER PIPING

DRAINAGE AND UTILITY NOTES

- THE CONTRACTOR TO PERFORM A TEST PIT PRIOR TO CONSTRUCTION (RECOMMEND 30 DAYS PRIOR) AT LOCATIONS OF EXISTING UTILITY CROSSINGS FOR STORMWATER IMPROVEMENTS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IN WRITING.
- CONTRACTOR SHALL START CONSTRUCTION OF STORM LINES AT THE LOWEST INVERT AND WORK UP-GRADE.
- THE CONTRACTOR IS REQUIRED TO CALL THE APPROPRIATE AUTHORITY FOR NOTICE OF CONSTRUCTION/EXCAVATION AND UTILITY MARK OUT PRIOR TO THE START OF CONSTRUCTION IN ACCORDANCE WITH STATE LAW. CONTRACTOR IS REQUIRED TO CONFIRM THE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES IN THE FIELD. SHOULD A DISCREPANCY EXIST BETWEEN THE FIELD LOCATION OF A UTILITY AND THE LOCATION SHOWN ON THE PLAN SET OR SURVEY, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IMMEDIATELY IN WRITING.
- THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD OF THE AS-BUILT LOCATIONS OF ALL PROPOSED UNDERGROUND INFRASTRUCTURE. THE CONTRACTOR SHALL NOTE ANY DISCREPANCIES BETWEEN THE AS-BUILT LOCATIONS AND THE LOCATIONS DEPICTED WITHIN THE PLAN SET. THIS RECORD SHALL BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF WORK.

EXCAVATION, SOIL PREPARATION, AND DEWATERING NOTES

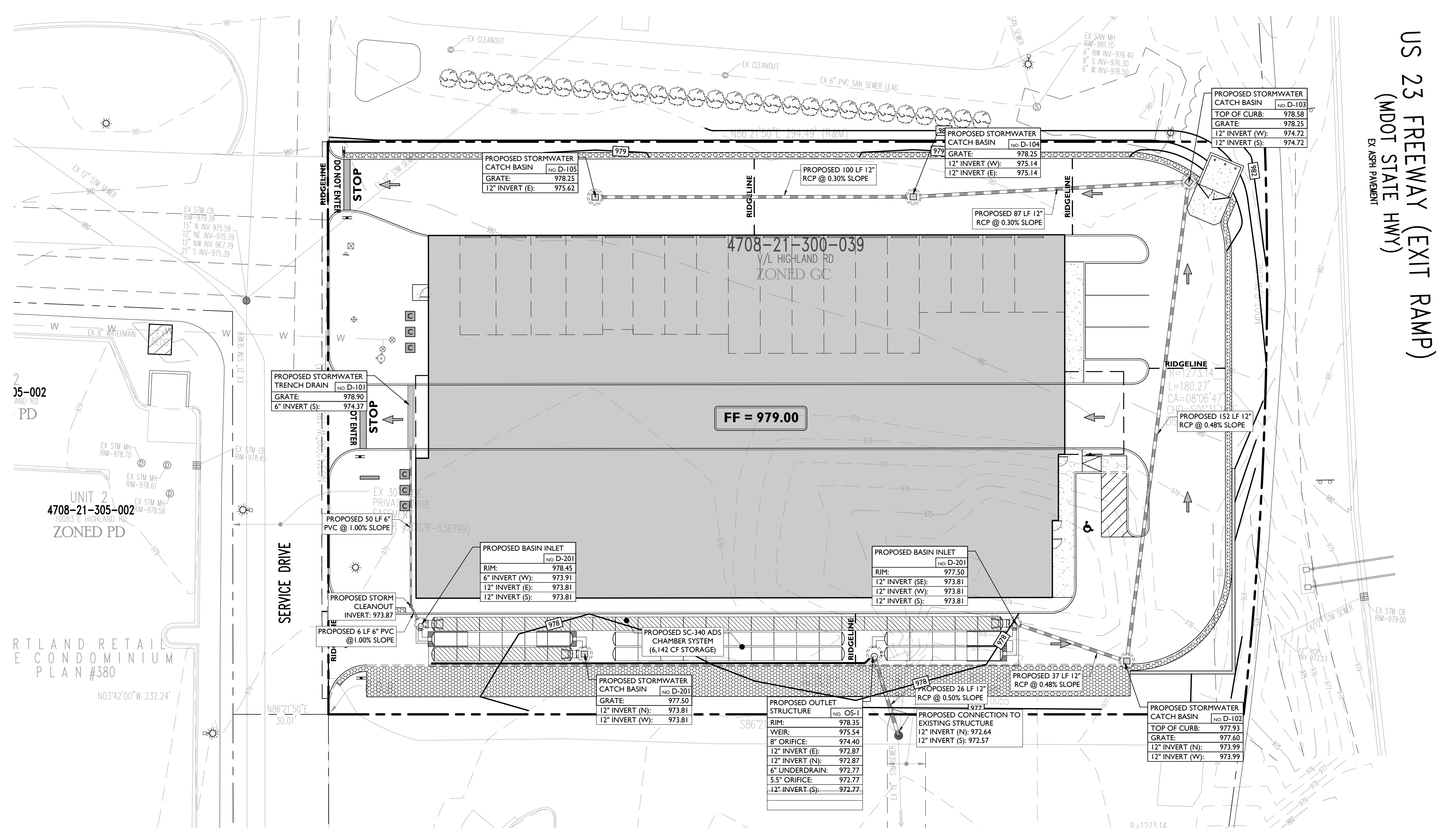
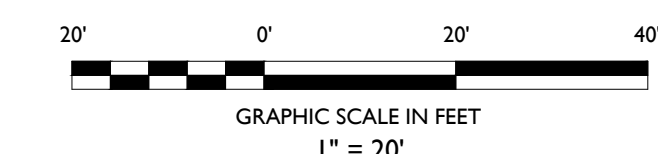
- THE CONTRACTOR IS REQUIRED TO REVIEW THE REFERENCED GEOTECHNICAL DOCUMENTS PRIOR TO CONSTRUCTION. THESE DOCUMENTS SHALL BE CONSIDERED A PART OF THE PLAN SET.
- THE CONTRACTOR IS REQUIRED TO PREPARE SUBGRADE SOILS BENEATH ALL PROPOSED IMPROVEMENTS AND BACKFILL ALL EXCAVATIONS IN ACCORDANCE WITH RECOMMENDATIONS BY THE GEOTECHNICAL ENGINEER OF RECORD.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING SHORING FOR ALL EXCAVATIONS AS REQUIRED. CONTRACTOR SHALL HAVE THE SHORING DESIGN PREPARED BY A QUALIFIED PROFESSIONAL SHORING DESIGNER. SHORING DESIGNS SHALL BE SUBMITTED TO STONEFIELD ENGINEERING & DESIGN, LLC, AND THE OWNER PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL OPEN EXCAVATIONS ARE PERFORMED AND PROTECTED IN ACCORDANCE WITH THE LATEST OSHA REGULATIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR ANY DEWATERING DESIGN AND OPERATIONS, AS REQUIRED, TO CONSTRUCT THE PROPOSED IMPROVEMENTS. THE CONTRACTOR SHALL OBTAIN ANY REQUIRED PERMITS FOR DEWATERING OPERATIONS AND GROUNDWATER DISPOSAL.

STORMWATER INFILTRATION BMP CONSTRUCTION NOTES

- PRIOR TO THE START OF CONSTRUCTION, ANY AREA DESIGNATED TO BE USED FOR AN INFILTRATION BMP (E.G. BASIN, BIOTENTION AREA, ETC.) SHALL BE FENCED OFF AND SHALL NOT BE UTILIZED AS STORAGE FOR CONSTRUCTION EQUIPMENT OR AS A STOCKPILE AREA FOR CONSTRUCTION MATERIALS. NO ACTIVITY SHALL BE PERMITTED WITHIN THE INFILTRATION BASIN AREA UNLESS RELATED TO THE CONSTRUCTION OF THE INFILTRATION BASIN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY ALL SUBCONTRACTORS OF BASIN AREA RESTRICTIONS.
- THE CONTRACTOR SHALL MAKE EVERY EFFORT, WHERE PRACTICAL, TO AVOID SUBGRADE SOIL COMPACTION IN THE AREAS DESIGNATED TO BE USED FOR AN INFILTRATION BMP.
- ALL EXCAVATION WITHIN THE LIMITS OF ANY INFILTRATION BMP SHALL BE PERFORMED WITH THE LIGHTEST PRACTICAL EXCAVATION EQUIPMENT. ALL EXCAVATION EQUIPMENT SHALL BE PLACED OUTSIDE THE LIMITS OF THE BASIN WHERE FEASIBLE. THE USE OF LIGHT-WEIGHT, RUBBER-TIRED EQUIPMENT (LESS THAN 8 PSI APPLIED TO THE GROUND SURFACE) IS RECOMMENDED WITHIN THE BASIN LIMITS.
- THE SEQUENCE OF SITE CONSTRUCTION SHALL BE COORDINATED WITH BASIN CONSTRUCTION TO ADHERE TO SEQUENCING LIMITATIONS.
- DURING THE FINAL GRADING OF AN INFILTRATION BASIN, THE BOTTOM OF THE BASIN SHALL BE DEEPLY TILLED WITH A ROTARY TILLER OR DISC HARROW AND THEN SMOOTHED OUT WITH A LEVELING DRAW OR EQUIVALENT GRADING EQUIPMENT. ALL GRADING EQUIPMENT SHALL BE LOCATED OUTSIDE OF THE BASIN BOTTOM WHERE FEASIBLE.
- FOLLOWING CONSTRUCTION OF AN INFILTRATION BASIN, SOIL INFILTRATION TESTING BY A LICENSED GEOTECHNICAL ENGINEER IS REQUIRED TO CERTIFY COMPLIANCE WITH THE DESIGN INFILTRATION RATES IN ACCORDANCE WITH APPENDIX E OF THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION'S BEST MANAGEMENT PRACTICES MANUAL, LATEST EDITION. IF THE FIELD INFILTRATION RATES ARE LOWER THAN THE RATE USED DURING DESIGN, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IN WRITING IMMEDIATELY TO DETERMINE THE APPROPRIATE COURSE OF ACTION.
- THE CONTRACTOR SHALL NOTIFY THE MUNICIPALITY TO DETERMINE IF WITNESS TESTING IS REQUIRED DURING INFILTRATION BASIN EXCAVATION AND/OR SOIL INFILTRATION TESTING.

STORMWATER UNDERGROUND BMP CONSTRUCTION NOTES

- THE CONTRACTOR SHALL INSTALL AND BACKFILL THE UNDERGROUND BMP IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION.
- UNDERGROUND BASINS SHALL UTILIZE A STONE BACKFILL WITH A MINIMUM VOID RATIO OF 40%.
- NO CONSTRUCTION LOADING OVER UNDERGROUND BASINS IS PERMITTED UNTIL BACKFILL IS COMPLETE PER THE MANUFACTURER'S SPECIFICATIONS. NO VEHICLES SHALL BE STAGED OR OPERATE FROM A FIXED POSITION OVER THE BASIN.



ISSUE	DATE	BY	DESCRIPTION
6	03/18/2024	ECM	REVISED PER PRELIMINARY SITE PLAN REVIEW
5	02/07/2024	ECM	REVISED PER PRELIMINARY SITE PLAN REVIEW
4	01/02/2024	ECM	REVISED PER PRELIMINARY SITE PLAN REVIEW
3	12/07/2023	ECM	REVISED PER PRELIMINARY SITE PLAN REVIEW
2	11/14/2023	ECM	FOR PRELIMINARY SITE PLAN REVIEW
1	08/22/2023	JRC	REVISED PER TOWNSHIP PLANNING COMMENT
0	05/16/2023	ECM/JRC	FOR CLIENT REVIEW

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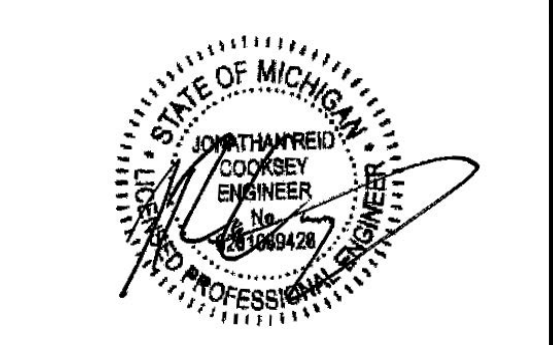
607 Shelby Suite 200, Detroit, MI 48226
 Phone 248.247.1115

PRELIMINARY SITE DEVELOPMENT PLANS

**HIGHLAND ROAD
 PLANNED DEVELOPMENT**

PROPOSED SELF-STORAGE FACILITY

PARCEL ID: 4708-21-300-039
 HIGHLAND ROAD (M-59) (VACANT LOT)
 HARTLAND TOWNSHIP
 LIVINGSTON COUNTY, MICHIGAN



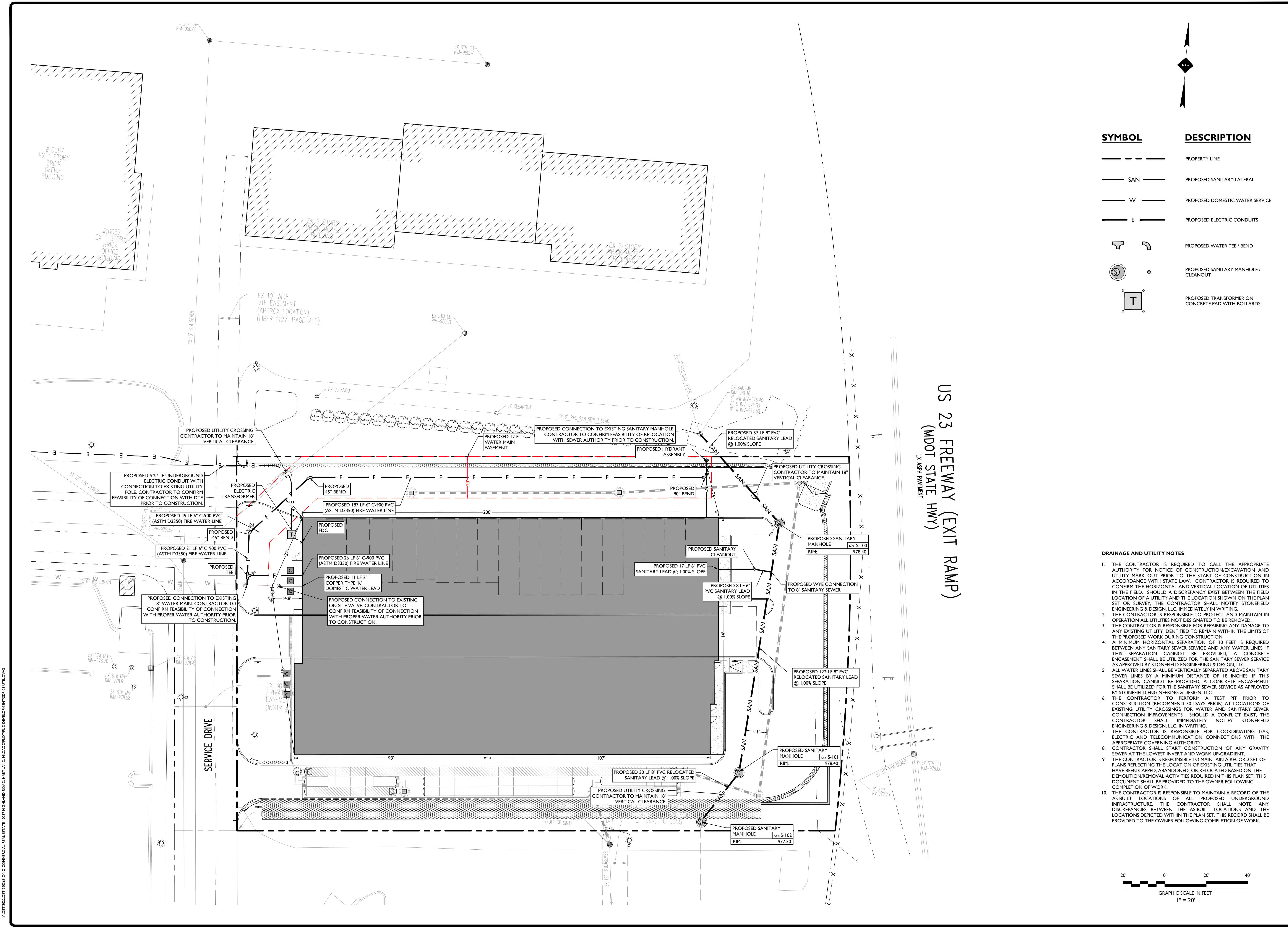
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 engineering & design

SCALE: 1" = 20' PROJECT ID: DET-220363

TITLE:
**STORMWATER
 MANAGEMENT PLAN**

DRAWING:
C-4

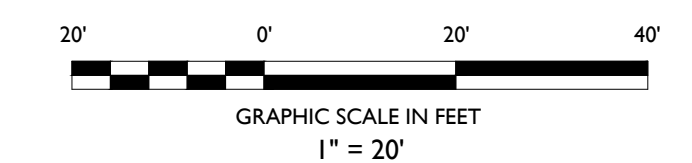
VERTICAL DIMENSIONS LONG COMPASSICAL REAL ESTATE (MSP) HIGHLAND ROAD, HARTLAND, MICHIGAN. PLOTTED FOR DEVELOPMENT FOR HARTLAND TOWNSHIP.



US 23 FREEWAY (EXIT RAMP)
 (MDOT STATE HWY)
 EX ASPHALT PAVEMENT

SYMBOL	DESCRIPTION
---	PROPERTY LINE
— SAN —	PROPOSED SANITARY LATERAL
— W —	PROPOSED DOMESTIC WATER SERVICE
— E —	PROPOSED ELECTRIC CONDUITS
T	PROPOSED WATER TEE / BEND
⊙	PROPOSED SANITARY MANHOLE / CLEANOUT
T	PROPOSED TRANSFORMER ON CONCRETE PAD WITH BOLLARDS

- DRAINAGE AND UTILITY NOTES**
- THE CONTRACTOR IS REQUIRED TO CALL THE APPROPRIATE AUTHORITY FOR NOTICE OF CONSTRUCTION/EXCAVATION AND UTILITY MARK OUT PRIOR TO THE START OF CONSTRUCTION IN ACCORDANCE WITH STATE LAW. CONTRACTOR IS REQUIRED TO CONFIRM THE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES IN THE FIELD. SHOULD A DISCREPANCY EXIST BETWEEN THE FIELD LOCATION OF A UTILITY AND THE LOCATION SHOWN ON THE PLAN SET OR SURVEY, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IMMEDIATELY IN WRITING.
 - THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN IN OPERATION ALL UTILITIES NOT DESIGNATED TO BE REMOVED.
 - THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO ANY EXISTING UTILITY IDENTIFIED TO REMAIN WITHIN THE LIMITS OF THE PROPOSED WORK DURING CONSTRUCTION.
 - A MINIMUM HORIZONTAL SEPARATION OF 10 FEET IS REQUIRED BETWEEN ANY SANITARY SEWER SERVICE AND ANY WATER LINES. IF THIS SEPARATION CANNOT BE PROVIDED, A CONCRETE ENCASMENT SHALL BE UTILIZED FOR THE SANITARY SEWER SERVICE AS APPROVED BY STONEFIELD ENGINEERING & DESIGN, LLC.
 - ALL WATER LINES SHALL BE VERTICALLY SEPARATED ABOVE SANITARY SEWER LINES BY A MINIMUM DISTANCE OF 18 INCHES. IF THIS SEPARATION CANNOT BE PROVIDED, A CONCRETE ENCASMENT SHALL BE UTILIZED FOR THE SANITARY SEWER SERVICE AS APPROVED BY STONEFIELD ENGINEERING & DESIGN, LLC.
 - THE CONTRACTOR TO PERFORM A TEST PIT PRIOR TO CONSTRUCTION (RECOMMEND 30 DAYS PRIOR) AT LOCATIONS OF EXISTING UTILITY CROSSINGS FOR WATER AND SANITARY SEWER CONNECTION IMPROVEMENTS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IN WRITING.
 - THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING GAS, ELECTRIC AND TELECOMMUNICATION CONNECTIONS WITH THE APPROPRIATE GOVERNING AUTHORITY.
 - CONTRACTOR SHALL START CONSTRUCTION OF ANY GRAVITY SEWER AT THE LOWEST INVERT AND WORK UP-GRADE.
 - THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD SET OF PLANS REFLECTING THE LOCATION OF EXISTING UTILITIES THAT HAVE BEEN CAPPED, ABANDONED, OR RELOCATED BASED ON THE DEMOLITION/REMOVAL ACTIVITIES REQUIRED IN THIS PLAN SET. THIS DOCUMENT SHALL BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF WORK.
 - THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD OF THE AS-BUILT LOCATIONS OF ALL PROPOSED UNDERGROUND INFRASTRUCTURE. THE CONTRACTOR SHALL NOTE ANY DISCREPANCIES BETWEEN THE AS-BUILT LOCATIONS AND THE LOCATIONS DISPICTED WITHIN THE PLAN SET. THIS RECORD SHALL BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF WORK.



REVISION	DATE	BY	DESCRIPTION
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1	08/22/2023	JRC	REVISED PER TOWNSHIP PLANNING COMMENT
0	05/16/2023	ECM/JRC	FOR CLIENT REVIEW

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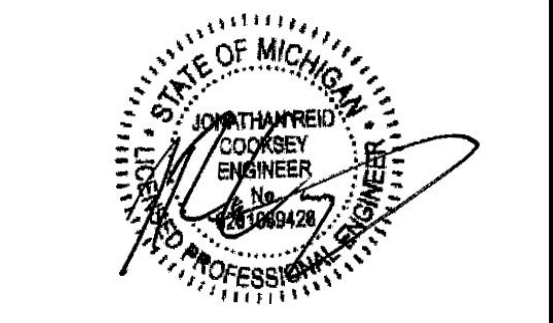
607 Shelby Suite 200, Detroit, MI 48226
Phone 248.247.1115

PRELIMINARY SITE DEVELOPMENT PLANS

**HIGHLAND ROAD
PLANNED DEVELOPMENT**

PROPOSED SELF-STORAGE FACILITY

PARCEL ID: 4708-21-300-039
HIGHLAND ROAD (M-59) (VACANT LOT)
HARTLAND TOWNSHIP
LIVINGSTON COUNTY, MICHIGAN



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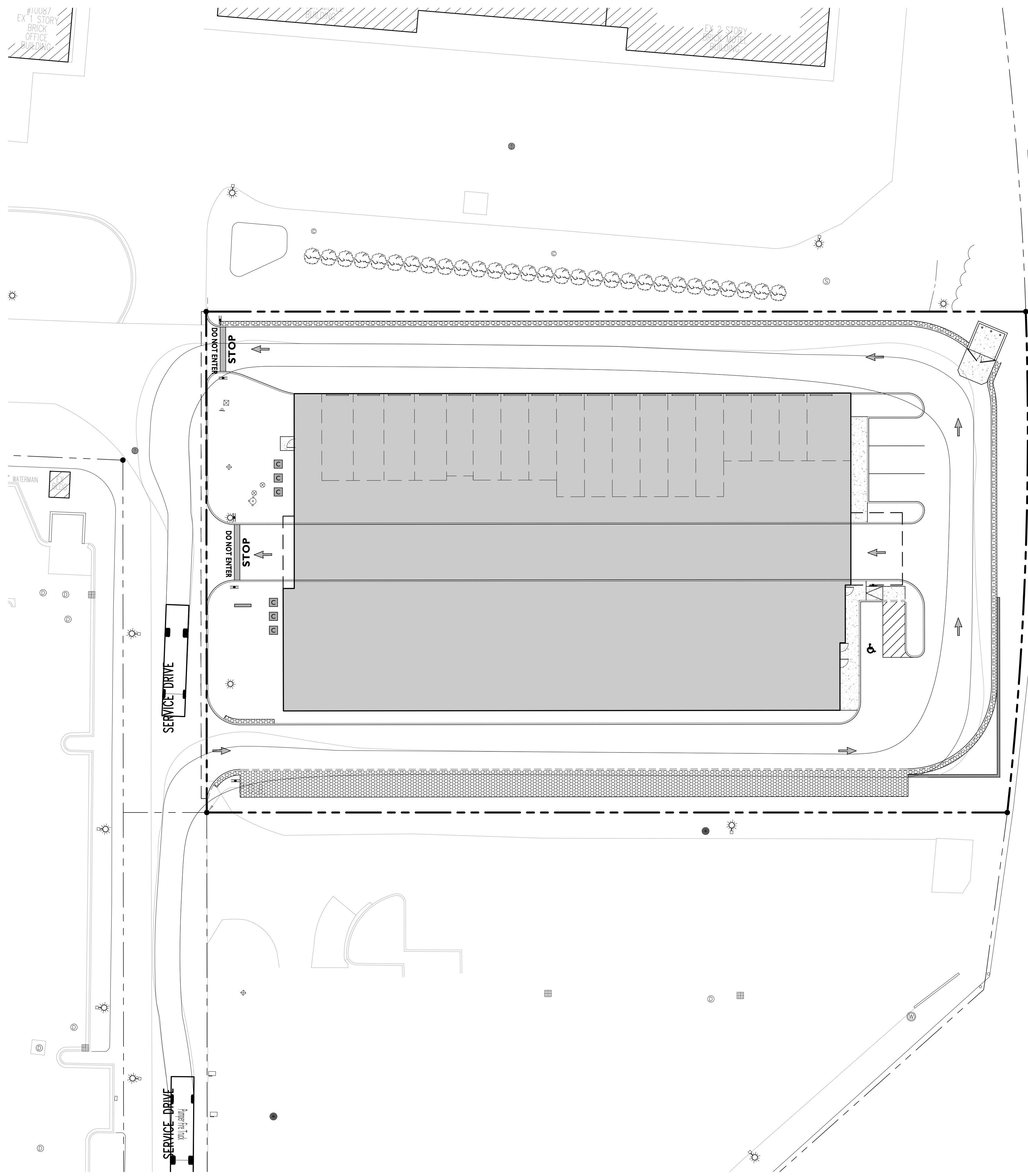
SCALE: 1" = 20' PROJECT ID: DET-220363

TITLE: **UTILITY PLAN**

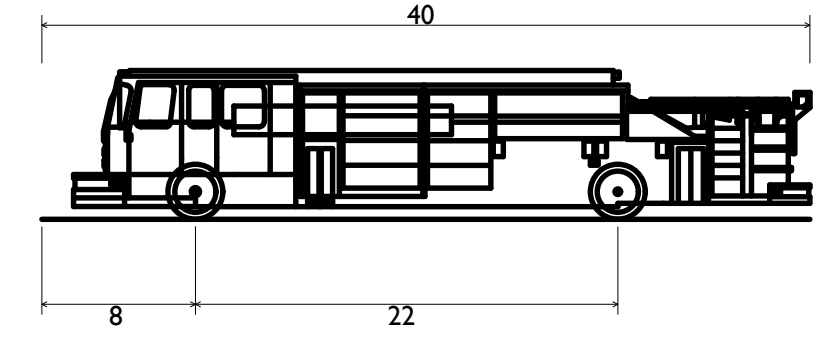
DRAWING: **C-5**

V:\2022\220363\220363-000-COMMERCIAL REAL ESTATE\1809 HIGHLAND ROAD, HARTLAND, MICHIGAN\CDP\1809 DEVELOPMENT\CDP\1809.DWG

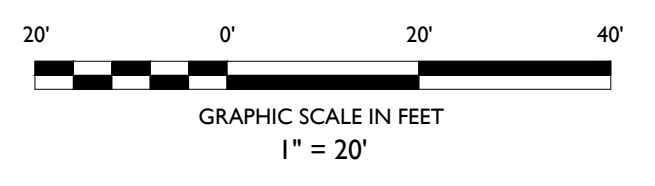
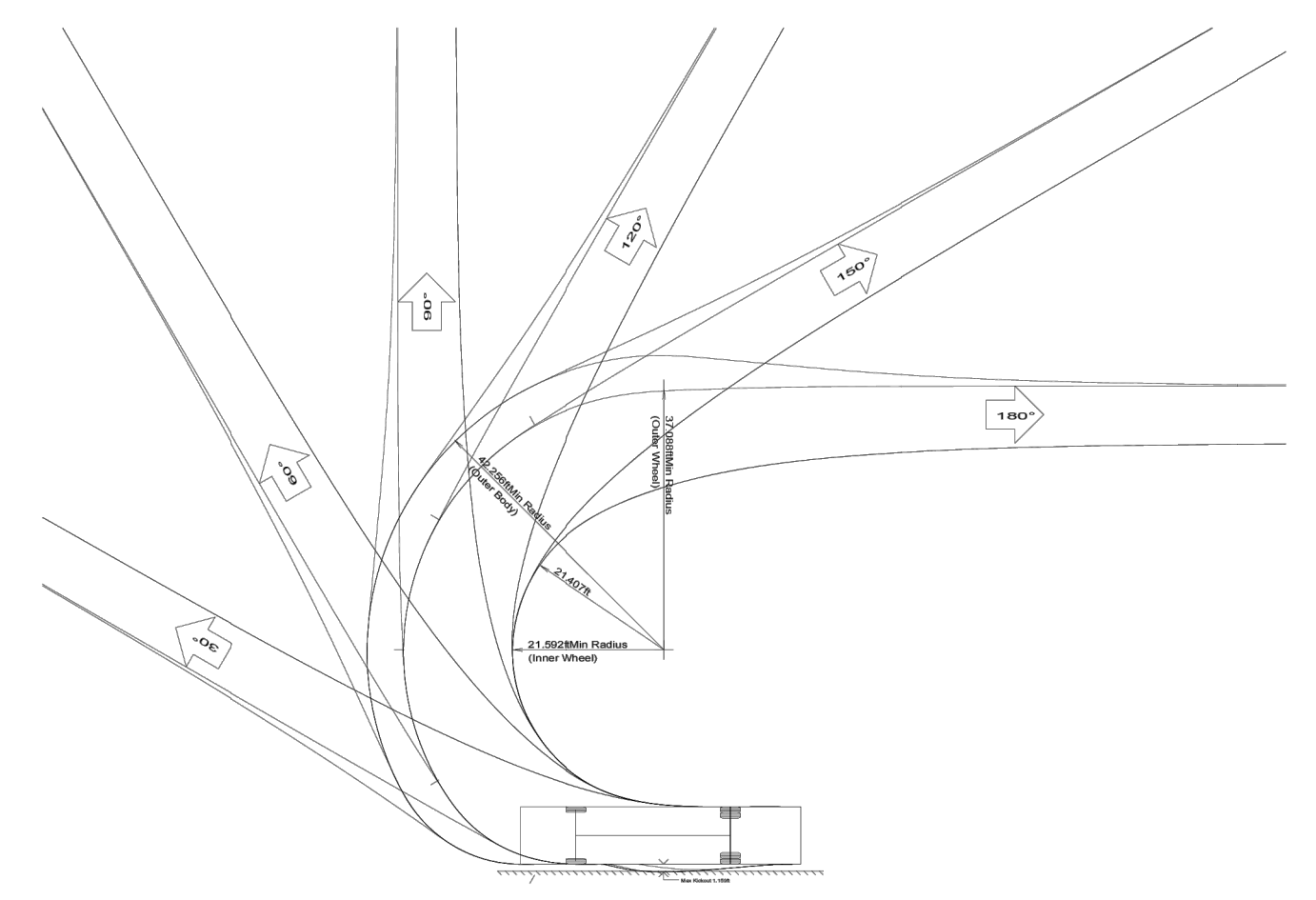
NOT TO SCALE. 2024. LONG COMMERCIAL REAL ESTATE (88P) HIGHLAND ROAD, HARTLAND, MICHIGAN. FOR PRELIMINARY DEVELOPMENT AND INFORMATION ONLY.



US 23 FREEWAY (EXIT RAMP)
(MDOT STATE HWY)
EX ASH PAVEMENT



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



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PRELIMINARY SITE DEVELOPMENT PLANS

**HIGHLAND ROAD
PLANNED DEVELOPMENT**

PROPOSED SELF-STORAGE FACILITY

PARCEL ID: 4708-21-300-039
HIGHLAND ROAD (M-59) (VACANT LOT)
HARTLAND TOWNSHIP
LIVINGSTON COUNTY, MICHIGAN



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SCALE: 1" = 20' PROJECT ID: DET-220363

TITLE:
**FIRE TRUCK TURNING
ANALYSIS**

DRAWING:
C-8

Catalog #: Project:
Prepared By: Date:

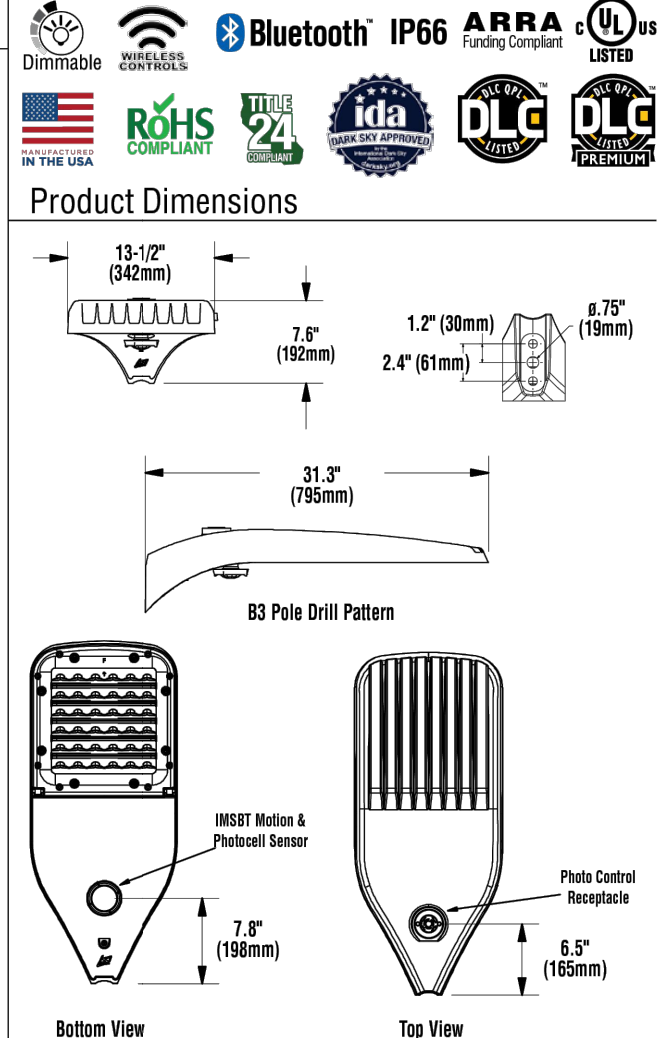


Mirada Medium - MRM Outdoor LED Area Light

The Mirada's sleek design makes it perfectly-suited for architectural & commercial applications, while its cost-effective die-cast aluminum housing makes its acquisition cost very competitive. The Mirada offers high performance factory-rotatable silicone optics, 5 standard CCT, 42,000+ delivered lumens, and is available with integral AirLink™ Wireless Controls.

Features & Specifications

- Optical System**
- State-of-the-art one piece silicone optic sheet delivers industry leading optical control with an integrated packet to provide IP66 rated sealed optical chamber in 1 component.
 - Proprietary silicone refractor optics provide exceptional coverage and uniformity in ES Types 2, 3, SW, FT and FTA.
 - Silicone optical material does not yellow or crack with age and provides a typical light transmittance of 93%.
 - Zero uplight.
 - Available in 5000K, 4000K, 3000K, and 2700K color temperatures per ANSI C78.377. Also Available in Phosphor Converted Amber with Peak Intensity at 610nm.
 - Minimum CRI of 70.
 - Integral Louver (IL) option available for improved back-light control without sacrificing street side performance. See page 5 for more details.
- Electrical**
- High-performance driver features over-voltage, under-voltage, short-circuit and over temperature protection.
 - 0-10V dimming (10% - 100%) standard.
 - Standard Universal Voltage (120-277 Vac) Input 50/60 Hz or optional High Voltage (347-480 Vac).
 - L80 Calculated Life > 100K Hours (See Lumen Maintenance on Page 2)
 - Total harmonic distortion < 20%
 - Operating temperature: -40°C to +50°C (-40°F to +122°F). 42L lumen package rated to +40°C.
 - Power factor > 0.9
 - Input power stays constant over life.
 - Field replaceable surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C82.41.2).
 - High-efficiency LEDs mounted to metal-core circuit board to maximize heat dissipation.
 - Components are fully encased in potting material for moisture resistance. Driver complies with FCC standards. Driver and key electronic components can easily be accessed.



Mirada Medium - MRM Outdoor LED Area Light

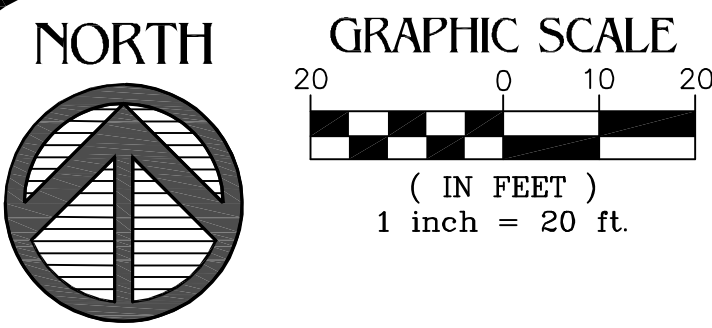
Features & Specifications (Cont.)

- Construction**
- Rugged die-cast aluminum housing contains factory prewired driver and optical unit. Cast aluminum wiring access door located underneath.
 - Designed to mount to square or round poles.
 - Luminaire is proudly manufactured in the U.S. of U.S. and imported parts.
 - Fixtures are finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling. Other standard LSI finishes available. Consult factory.
 - Shipping weight: 30 lbs in carton.
- Controls**
- Wireless Controls System**
- To make this fixture AirLink ready, simply order one of the following options:
- The integrated **Wireless Lighting Controller**: ALSC or ALSCH (see ordering guide) as the controls option, or
 - Integrated **Wireless Controller** option (above) with integrated motion sensor: ALSDS (ordering guide for mounting heights) or
 - The 7-Pin Photocentric Control Receptacle: CRTP as the controls option, and either the 5-pin or 7-pin **Transt Lock Controller**: ALSU UNV TL5 or ALSU UNV TL7 as an accessory
- To see how the components of AirLink system work together, reference the diagram in the controls section of this specsheet. For more information on our AirLink products, visit our website: www.lsi-industries.com/airlink-portal/
- Stand-Alone Controls**
- Integral Passive Infrared Bluetooth™ Motion/Photo Sensor (IMSBT)
 - Switches luminaire light levels based on motion and daylight (see the controls section for more details)
 - Features operate independently and can be commissioned via iOS or Android configuration app
 - 7-pin ANSI C136-41-2013 photocentric receptacle (CRTP)
 - Available for twist lock photocentrics or wireless control modules
- Installation**
- A single fastener secures the hinged door, underneath the housing and provides quick & easy access to the electrical compartment.
 - Includes terminal block accepts up to 12 pin wires.
 - Utilizes LSI's traditional 83° drill pattern B3 for easy fastening of LSI products. (See drawing on page 1)
- Warranty**
- LSI LED Fixtures carry a 5-year warranty.
 - Listed to UL 1598 and UL 8750.
 - RHCS Compliant.
 - American Recovery and Reinvestment Act Funding Compliant.
 - IEA compliant with 3000K color temperature selection.
 - UL Type 24 Compliant: see local ordinance for qualification information.
 - Suitable for wet Locations.
 - IP66 rated Luminaire per IEC 60598. IP66 rated optical chamber.
 - >C0 rated for ANSI C136-31 high vibration applications

Performance

ELECTRICAL DATA (AMPS)*

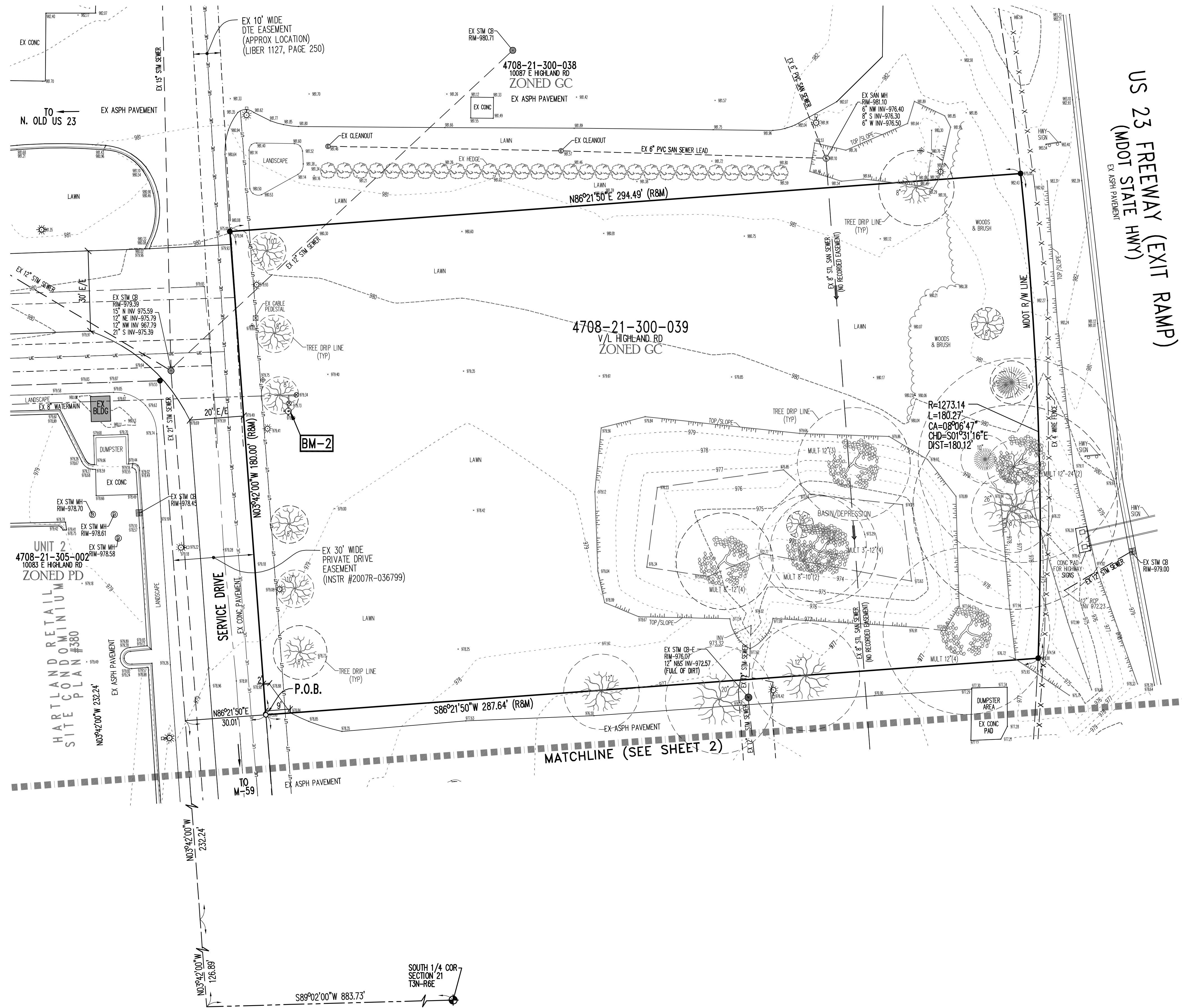
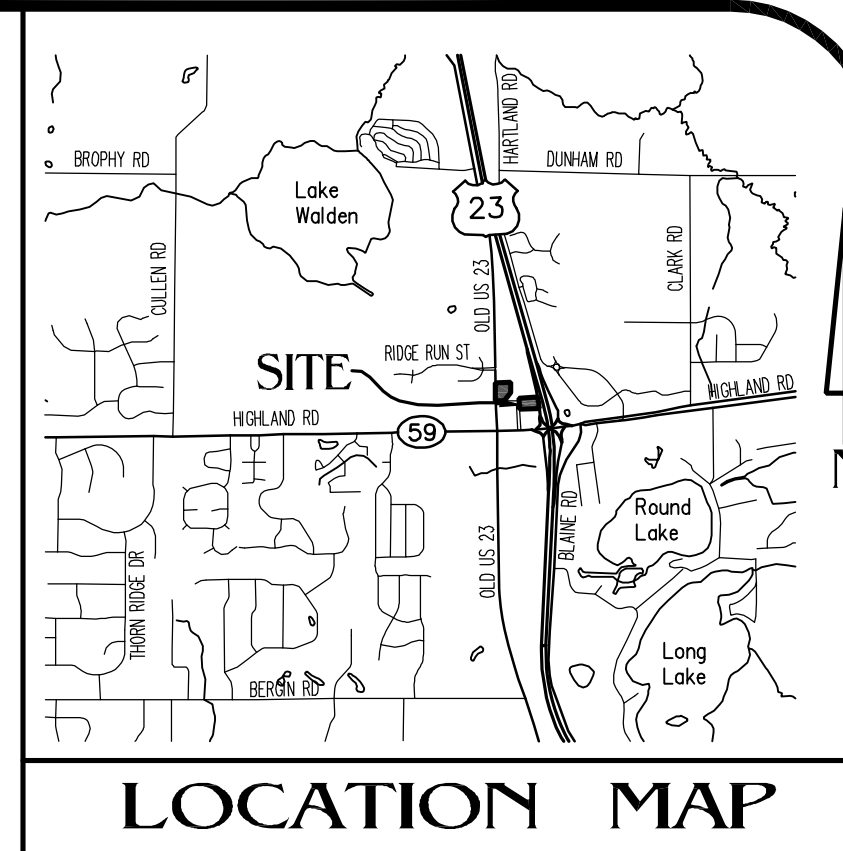
Lumens	Wattage	100V	200V	240V	277V	347V	480V
3L	90	0.84	0.34	0.24	0.24	0.34	0.34
3L	100	0.94	0.34	0.24	0.24	0.34	0.34
3L	120	1.04	0.34	0.24	0.24	0.34	0.34
3L	140	1.14	0.34	0.24	0.24	0.34	0.34
3L	160	1.24	0.34	0.24	0.24	0.34	0.34
3L	180	1.34	0.34	0.24	0.24	0.34	0.34
3L	200	1.44	0.34	0.24	0.24	0.34	0.34
3L	220	1.54	0.34	0.24	0.24	0.34	0.34
3L	240	1.64	0.34	0.24	0.24	0.34	0.34
3L	260	1.74	0.34	0.24	0.24	0.34	0.34
3L	280	1.84	0.34	0.24	0.24	0.34	0.34
3L	300	1.94	0.34	0.24	0.24	0.34	0.34
3L	320	2.04	0.34	0.24	0.24	0.34	0.34
3L	340	2.14	0.34	0.24	0.24	0.34	0.34
3L	360	2.24	0.34	0.24	0.24	0.34	0.34
3L	380	2.34	0.34	0.24	0.24	0.34	0.34
3L	400	2.44	0.34	0.24	0.24	0.34	0.34
3L	420	2.54	0.34	0.24	0.24	0.34	0.34
3L	440	2.64	0.34	0.24	0.24	0.34	0.34
3L	460	2.74	0.34	0.24	0.24	0.34	0.34
3L	480	2.84	0.34	0.24	0.24	0.34	0.34
3L	500	2.94	0.34	0.24	0.24	0.34	0.34
3L	520	3.04	0.34	0.24	0.24	0.34	0.34
3L	540	3.14	0.34	0.24	0.24	0.34	0.34
3L	560	3.24	0.34	0.24	0.24	0.34	0.34
3L	580	3.34	0.34	0.24	0.24	0.34	0.34
3L	600	3.44	0.34	0.24	0.24	0.34	0.34
3L	620	3.54	0.34	0.24	0.24	0.34	0.34
3L	640	3.64	0.34	0.24	0.24	0.34	0.34
3L	660	3.74	0.34	0.24	0.24	0.34	0.34
3L	680	3.84	0.34	0.24	0.24	0.34	0.34
3L	700	3.94	0.34	0.24	0.24	0.34	0.34
3L	720	4.04	0.34	0.24	0.24	0.34	0.34
3L	740	4.14	0.34	0.24	0.24	0.34	0.34
3L	760	4.24	0.34	0.24	0.24	0.34	0.34
3L	780	4.34	0.34	0.24	0.24	0.34	0.34
3L	800	4.44	0.34	0.24	0.24	0.34	0.34
3L	820	4.54	0.34	0.24	0.24	0.34	0.34
3L	840	4.64	0.34	0.24	0.24	0.34	0.34
3L	860	4.74	0.34	0.24	0.24	0.34	0.34
3L	880	4.84	0.34	0.24	0.24	0.34	0.34
3L	900	4.94	0.34	0.24	0.24	0.34	0.34
3L	920	5.04	0.34	0.24	0.24	0.34	0.34
3L	940	5.14	0.34	0.24	0.24	0.34	0.34
3L	960	5.24	0.34	0.24	0.24	0.34	0.34
3L	980	5.34	0.34	0.24	0.24	0.34	0.34
3L	1000	5.44	0.34	0.24	0.24	0.34	0.34
3L	1020	5.54	0.34	0.24	0.24	0.34	0.34
3L	1040	5.64	0.34	0.24	0.24	0.34	0.34
3L	1060	5.74	0.34	0.24	0.24	0.34	0.34
3L	1080	5.84	0.34	0.24	0.24	0.34	0.34
3L	1100	5.94	0.34	0.24	0.24	0.34	0.34
3L	1120	6.04	0.34	0.24	0.24	0.34	0.34
3L	1140	6.14	0.34	0.24	0.24	0.34	0.34
3L	1160	6.24	0.34	0.24	0.24	0.34	0.34
3L	1180	6.34	0.34	0.24	0.24	0.34	0.34
3L	1200	6.44	0.34	0.24	0.24	0.34	0.34
3L	1220	6.54	0.34	0.24	0.24	0.34	0.34
3L	1240	6.64	0.34	0.24	0.24	0.34	0.34
3L	1260	6.74	0.34	0.24	0.24	0.34	0.34
3L	1280	6.84	0.34	0.24	0.24	0.34	0.34
3L	1300	6.94	0.34	0.24	0.24	0.34	0.34
3L	1320	7.04	0.34	0.24	0.24	0.34	0.34
3L	1340	7.14	0.34	0.24	0.24	0.34	0.34
3L	1360	7.24	0.34	0.24	0.24	0.34	0.34
3L	1380	7.34	0.34	0.24	0.24	0.34	0.34
3L	1400	7.44	0.34	0.24	0.24	0.34	0.34
3L	1420	7.54	0.34	0.24	0.24	0.34	0.34
3L	1440	7.64	0.34	0.24	0.24	0.34	0.34
3L	1460	7.74	0.34	0.24	0.24	0.34	0.34
3L	1480	7.84	0.34	0.24	0.24	0.34	0.34
3L	1500	7.94	0.34	0.24	0.24	0.34	0.34
3L	1520	8.04	0.34	0.24	0.24	0.34	0.34
3L	1540	8.14	0.34	0.24	0.24	0.34	0.34
3L	1560	8.24	0.34	0.24	0.24	0.34	0.34
3L	1580	8.34	0.34	0.24	0.24	0.34	0.34
3L	1600	8.44	0.34	0.24	0.24	0.34	0.34
3L	1620	8.54	0.34	0.24	0.24	0.34	0.34
3L	1640	8.64	0.34	0.24	0.24	0.34	0.34
3L	1660	8.74	0.34	0.24	0.24	0.34	0.34
3L	1680	8.84	0.34	0.24	0.24	0.34	0.34
3L	1700	8.94	0.34	0.24	0.24	0.34	0.34
3L	1720	9.04	0.34	0.24	0.24	0.34	0.34
3L	1740	9.14	0.34	0.24	0.24	0.34	0.34
3L	1760	9.24	0.34	0.24	0.24	0.34	0.34
3L	1780	9.34	0.34	0.24	0.24	0.34	0.34
3L	1800	9.44	0.34	0.24	0.24	0.34	0.34
3L	1820	9.54	0.34	0.24	0.24	0.34	0.34
3L	1840	9.64	0.34	0.24	0.24	0.34	0.34
3L	1860	9.74	0.34	0.24	0.24	0.34	0.34
3L	1880	9.84	0.34	0.24	0.24	0.34	0.34
3L	1900	9.94	0.34	0.24	0.24	0.34	0.34
3L	1920	10.04	0.34	0.24	0.24	0.34	0.34
3L	1940	10.14	0.34	0.24	0.24	0.34	0.34
3L	1960	10.24	0.34	0.24	0.24	0.34	0.34
3L	1980	10.34	0.34	0.24	0.24	0.34	0.34
3L	2000	10.44	0.34	0.24	0.24	0.34	0.34
3L	2020	10.54	0.34	0.24	0.24	0.34	0.34
3L	2040	10.64	0.34	0.24	0.24	0.34	0.34
3L	2060	10.74	0.34	0.24	0.24	0.34	0.34
3L	2080	10.84	0.34	0.24	0.24	0.34	0.34
3L	2100	10.94	0.34	0.24	0.24	0.34	0.34
3L	2120	11.04	0.34	0.24	0.24	0.34	0.34
3L	2140	11.14	0.34	0.24	0.24	0.34	0.34
3L	2160	11.24	0.34	0.24	0.24	0.34	0.34
3L	2180	11.34	0.34	0.24	0.24	0.34	0.34
3L	2200	11.44	0.34	0.24	0.24	0.34	0.34
3L	2220	11.54	0.34	0.24	0.24	0.34	0.34
3L	2240	11.64	0.34	0.24	0.24	0.34	0.34
3L	2260	11.74	0.34	0.24	0.24	0.34	0.34
3L	2280	11.84	0.34	0.24	0.24	0.34	0.34
3L	2300	11.94	0.34	0.24	0.24	0.34	0.34
3L	2320	12.04	0.34	0.24	0.24	0.34	0.34
3L	2340	12.14	0.34	0.24	0.24	0.34	0.34
3L	2360	12.24	0.34	0.24	0.24	0.34	0.34
3L	2380	12.34	0.34	0.24	0.24	0.34	0.34
3L	2400	12.44	0.34	0.24	0.24	0.34	0.34
3L	2420	12.54	0.34	0.24	0.24	0.34	0.34
3L	2440	12.64	0.34	0.24	0.24	0.34	0.34
3L	2460	12.74	0.34	0.24	0.24	0.34	0.34
3L	2480	12.84	0.34	0.24	0.24	0.34	



BENCHMARK NO. 2
 ARROW ON TOP OF HYDRANT, LOCATED NEAR WEST PROPERTY LINE, AS SHOWN
 ELEVATION-979.74 (NAVD88)

**BOUNDARY & TOPOGRAPHICAL SURVEY FOR:
 VACANT LAND HIGHLAND ROAD**
 PART OF THE SOUTHWEST 1/4, SECTION 21,
 T3N-R6E, HARTLAND TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

LEGEND	
	SET IRON #55012
	FOUND IRON
	SECTION CORNER
	EX UTILITY POLE W/GUY WIRE
	EX LIGHT POLE
	EX LAMP POLE
	EX OVERHEAD POWERLINES
	EX UTILITY PEDISTAL
	EX ROAD SIGN
	EX STORM MANHOLE/CATCHBASIN
	EX STORM SEWER
	EX SANITARY MANHOLE
	EX SANITARY SEWER
	EX FIRE HYDRANT
	EX WATER MANHOLE
	EX GATEVALVE
	EX GASMAIN
	EX GASMAIN MARKER
	EX GAS/ELEC METER
	EX UNDERGROUND ELECTRIC
	EX UNDERGROUND TELEPHONE
	EX TREE LINE
	EX CHAIN LINK FENCE
	EX WOOD FENCE
	EX CENTERLINE DITCH
	EX TOP OF BANK
	TOE OF BANK/SLOPE
	EX SURFACE ELEVATION
	EX SURFACE CONTOUR
	(M) MEASURED
	(R) RECORDED
	(C) CALCULATED
	R/W RIGHT OF WAY
	CONC CONCRETE
	ASPH ASPHALT
	EX EXISTING
	E/E EDGE TO EDGE
	V/L VACANT LAND
	EX BUILDING AREA
	EX ASPH AREAS
	EX CONC AREAS



US 23 FREEWAY (EXIT RAMP)
 (MDOT STATE HWY)

PROPERTY DESCRIPTION
 PARCEL NUMBER 4708-21-300-039, V/L HIGHLAND ROAD
 QUIT CLAIM DEED, BOOK 2014R-022364, DATED 08-11-2014
 THE FOLLOWING DESCRIBED PREMISES SITUATED IN THE TOWNSHIP OF HARTLAND, COUNTY OF LIVINGSTON, AND STATE OF MICHIGAN, TO-WIT:
 LAND IN THE SW 1/4 SECTION 21, T.3N.,R.6E., HARTLAND TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN, DESCRIBED AS: BEGINNING AT A POINT, DISTANT S89°02'00"W, 883.73 FEET AND N03°42'00"W, 126.89 FEET AND N03°42'00"W, 232.24 FEET AND N86°21'50"E, 30.01 FEET FROM THE SOUTH 1/4 CORNER OF SAID SECTION 21; THENCE N03°42'00"W, 180.00 FEET; THENCE N86°21'50"E, 294.49 FEET; THENCE 180.27 FEET ALONG THE ARC OF A CURVE TO THE RIGHT ALONG HIGHWAY US-23, HAVING A RADIUS OF 1273.14 FEET, CENTRAL ANGLE OF 08°06'47" AND A CHORD BEARING AND DISTANCE OF S01°31'16"E, 180.12 FEET; THENCE S86°21'50"W, 287.64 FEET TO THE POINT OF BEGINNING, CONTAINING 1.21 ACRES.

EXISTING ZONING INFORMATION:
 ACCORDING TO THE CURRENT HARTLAND TOWNSHIP ZONING ORDINANCE THIS PROPERTY IS CURRENTLY ZONED GC (GENERAL COMMERCIAL DISTRICT), AND IS SUBJECT TO THE FOLLOWING CONDITIONS:
 1) MINIMUM LOT AREA = WITHOUT SEWER = 40,000 SF, WITH SEWER = 20,000 SF
 2) MINIMUM LOT WIDTH = 120 FEET
 3) FRONT SETBACK = 50 FEET
 4) SIDE SETBACK = 15 FEET
 5) REAR SETBACK = WITHOUT SEWER = 0 FEET, WITH SEWER 40 FEET
 6) MAXIMUM BUILDING HEIGHT = 35 FEET (2.5 STORIES)
 7) MAXIMUM LOT COVERAGE (PRINCIPLE STRUCTURE) = 75 PERCENT

FLOOD PLAIN NOTE:
 THIS PROPERTY IS IN ZONE "X" (AREAS OF MINIMAL FLOODING) OF THE FLOOD INSURANCE RATE MAP COMMUNITY PANEL NO. 26093C0219D WHICH BEARS AN EFFECTIVE DATE OF SEPTEMBER 17, 2008, AND IS NOT IN A SPECIAL FLOOD HAZARD AREA.

SURVEYOR NOTES:
 1. DATE OF LAST FIELD WORK: NOVEMBER 28, 2022.
 2. THE BEARINGS ARE RELATIVE TO THE DESCRIPTION, AS PROVIDED BY CLIENT.
 3. THE VERTICAL DATUM IS NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88).
 4. REFERENCED SURVEY BY BOSS ENGINEERING, JOB NO 88593-B, DATED 09-26-89 AND A SURVEY BY MASON BROWNS ASSOCIATES, LLC, JOB NO 13-018A.
 5. THE UNDERGROUND ELECTRIC AND TELEPHONE LOCATIONS WERE PROVIDED BY MISS DIG, TICKET NO. 2024010900364-000, AND ARE SHOWN PER INFORMATION THEY PROVIDED US.

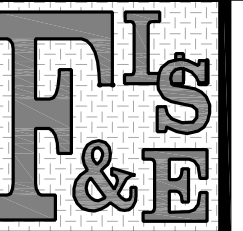
UTILITY STATEMENT
 THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS, IF AVAILABLE. THE SURVEYOR AND/OR ENGINEER MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR AND/OR ENGINEER FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR AND/OR ENGINEER HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

ELSE: JOBS 22-348/HARTLAND TWP/V/L OLD US 23/ENO-TOPODIG

SCALE: 1" = 20'
 JOB NO. 22-348

PREPARED FOR:
HARTLAND HOSPITALITY INV II LLC
 C/O ZUHER AND JOSEPH QONJA
 10087 HIGHLAND ROAD
 HARTLAND, MI 48353

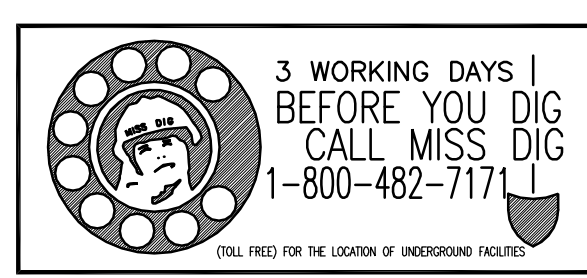
PART OF THE SOUTHWEST 1/4,
 SECTION 21, T3N-R6E
 HARTLAND TWP, LIVINGSTON CO, MI



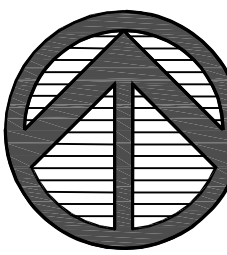
Fenton Land Surveying & Engineering, Inc
 14165 N. FENTON ROAD, SUITE 101A, FENTON, MI 48430
 PHONE: 810.354.8115 EMAIL: INFO@FENTONLSE.COM

BOUNDARY & TOPOGRAPHICAL SURVEY FOR:
 VACANT LAND HIGHLAND ROAD
 HARTLAND, MI 48353

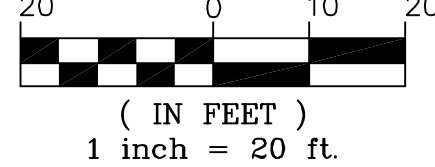
REVISIONS	DRN. BY:	D.S.S.	11.30.2022	SHEET NO:
02.07.2023	DSN BY:	J.R.B.	"	1 of 2
02.12.2024	CHK'D BY:	J.P.W.	"	
	APPR BY:	J.P.W.	"	



NORTH



GRAPHIC SCALE



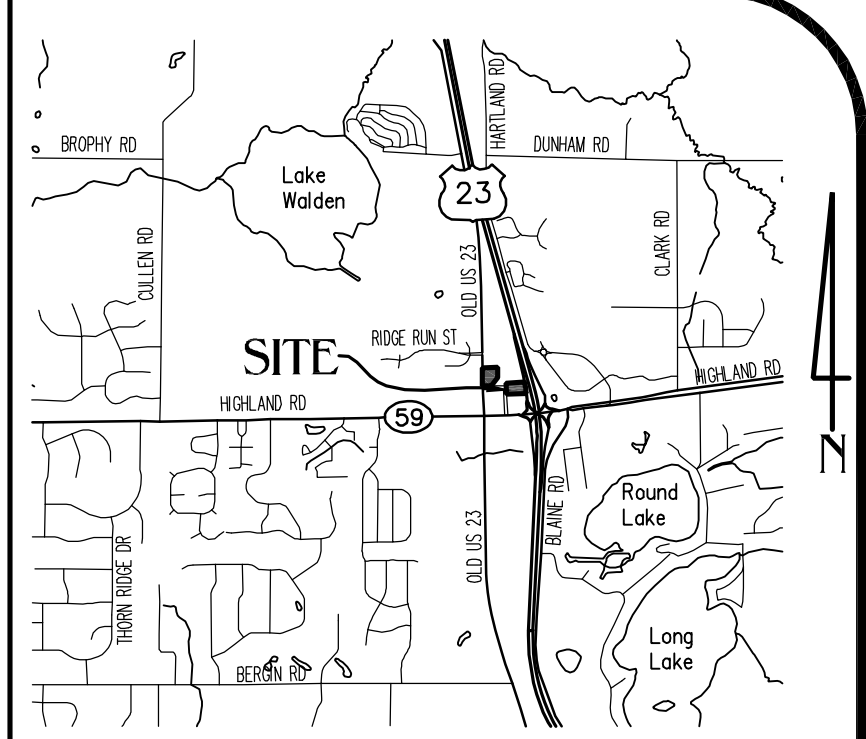
BENCHMARK NO. 2

ARROW ON TOP OF HYDRANT, LOCATED NEAR WEST PROPERTY LINE, AS SHOWN. ELEVATION=979.74 (NAVD88)

BOUNDARY & TOPOGRAPHICAL SURVEY FOR: VACANT LAND HIGHLAND ROAD PART OF THE SOUTHWEST 1/4, SECTION 21, T3N-R6E, HARTLAND TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

LEGEND

Legend table with symbols and descriptions for various features like SET IRON #55012, EX TREE LINE, EX CHAIN LINK FENCE, etc.



LOCATION MAP

PROPERTY DESCRIPTION

PARCEL NUMBER 4708-21-300-039, V/L HIGHLAND ROAD QUIT CLAIM DEED, BOOK 2014R-022364, DATED 08-11-2014 THE FOLLOWING DESCRIBED PREMISES SITUATED IN THE TOWNSHIP OF HARTLAND, COUNTY OF LIVINGSTON, AND STATE OF MICHIGAN, TO-WIT: LAND IN THE SW 1/4 SECTION 21, T3N,R6E., HARTLAND TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN, DESCRIBED AS: BEGINNING AT A POINT, DISTANT S89°02'00"W, 883.73 FEET AND N03°42'00"W, 126.89 FEET AND N03°42'00"W, 232.24 FEET AND N86°21'50"E, 30.01 FEET FROM THE SOUTH 1/4 CORNER OF SAID SECTION 21; THENCE N03°42'00"W, 180.00 FEET; THENCE N86°21'50"E, 294.49 FEET; THENCE 180.27 FEET ALONG THE ARC OF A CURVE TO THE RIGHT ALONG HIGHWAY US-23, HAVING A RADIUS OF 1273.14 FEET, CENTRAL ANGLE OF 08°06'47" AND A CHORD BEARING AND DISTANCE OF S01°31'16"E, 180.12 FEET; THENCE S86°21'50"W, 287.64 FEET TO THE POINT OF BEGINNING, CONTAINING 1.21 ACRES.

EXISTING ZONING INFORMATION:

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FLOOD PLAIN NOTE:

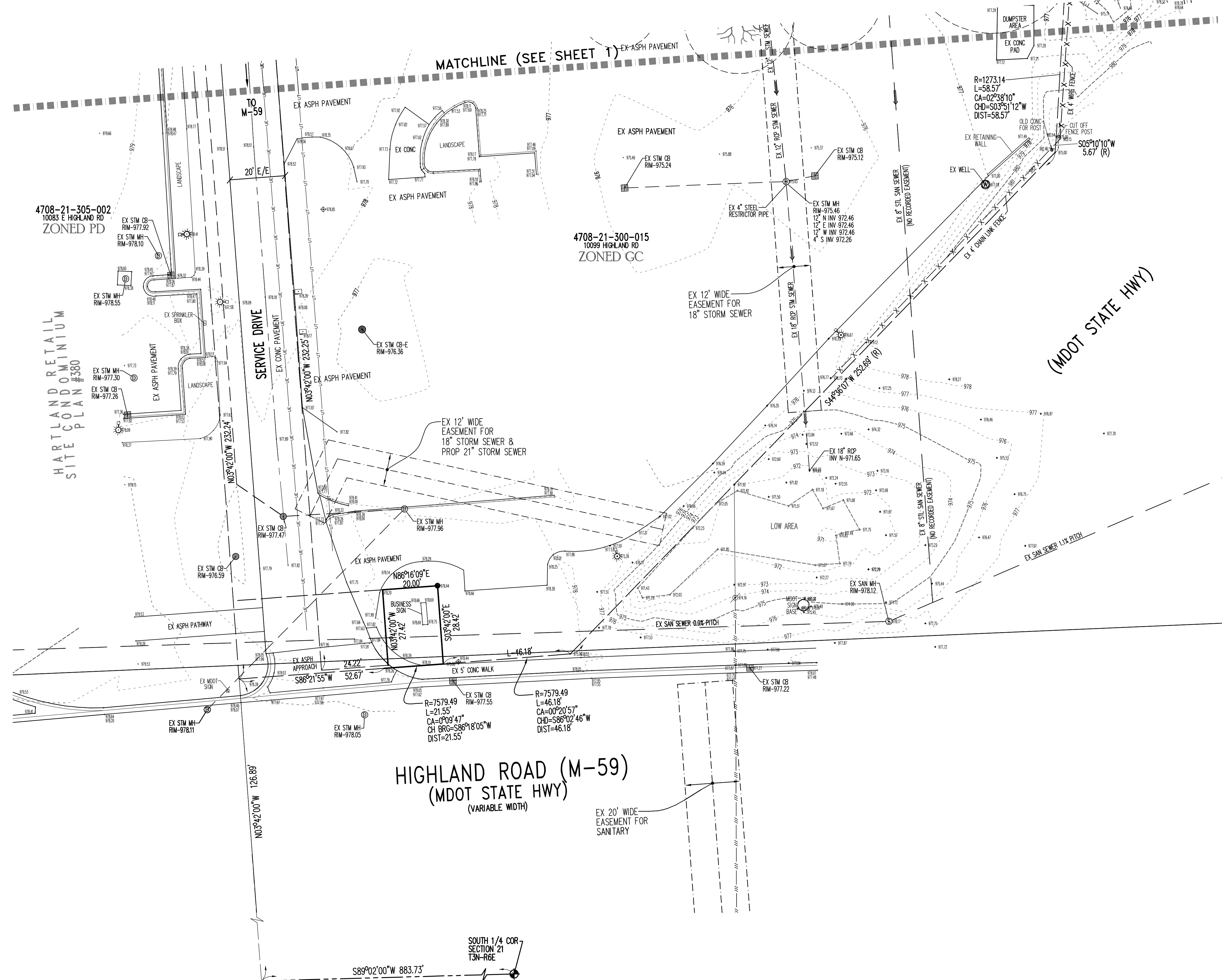
THIS PROPERTY IS IN ZONE "X" (AREAS OF MINIMAL FLOODING) OF THE FLOOD INSURANCE RATE MAP COMMUNITY PANEL NO. 26093C02190 WHICH BEARS AN EFFECTIVE DATE OF SEPTEMBER 17, 2008, AND IS NOT IN A SPECIAL FLOOD HAZARD AREA.

SURVEYOR NOTES:

- 1. DATE OF LAST FIELD WORK: NOVEMBER 28, 2022. 2. THE BEARINGS ARE RELATIVE TO THE DESCRIPTION, AS PROVIDED BY CLIENT. 3. THE VERTICAL DATUM IS NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88). 4. REFERENCED SURVEY BY BOSS ENGINEERING, JOB NO 88593-B, DATED 09-26-89 AND A SURVEY BY MASON BROWNS ASSOCIATES, LLC, JOB NO 13-018A.

UTILITY STATEMENT

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS, IF AVAILABLE. THE SURVEYOR AND/OR ENGINEER MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR AND/OR ENGINEER FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR AND/OR ENGINEER HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

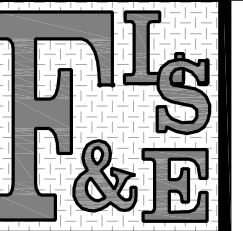


ELSE: JOBS/22-348/HARTLAND TWP/V/L OLD US 23/BN0-TOPO.DWG

SCALE: 1"=20'
JOB NO. 22-348

PREPARED FOR:
HARTLAND HOSPITALITY INV II LLC
C/O ZUHER AND JOSEPH QONJA
10087 HIGHLAND ROAD
HARTLAND, MI 48353

PART OF THE SOUTHWEST 1/4,
SECTION 21, T3N-R6E
HARTLAND TWP, LIVINGSTON CO, MI



Fenton Land Surveying & Engineering, Inc
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BOUNDARY & TOPOGRAPHICAL SURVEY FOR:
VACANT LAND HIGHLAND ROAD
HARTLAND, MI 48353

Table with columns: REVISIONS, DRN. BY, D.S.S., DATE, SHEET NO. (2 of 2)

