



Planning Commission

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

Planning Commission Meeting Agenda
Hartland Township Hall
Thursday, August 11, 2022
7:00 PM

1. Call to Order
2. Pledge of Allegiance
3. Roll Call
4. Approval of the Agenda
5. Approval of Meeting Minutes
 - a. Planning Commission Meeting Minutes of July 14, 2022
6. Call to Public
7. Old and New Business
 - a. Site Plan #22-009 Charyl Stockwell Academy-Building Addition
8. Public Hearing
 - a. Zoning Amendment #22-001 – Ordinance Amendment to Landscape Requirements to Section 5.7 (Dumpster Enclosure); Section 5.11 (landscaping and Screening); and Section 5.26 (Signs)
9. Call to Public
10. Planner's Report
11. Committee Reports
 - a. Resolution of Appreciation for Commissioner Michelle LaRose
12. Committee Reports

HARTLAND TOWNSHIP PLANNING COMMISSION **DRAFT** MEETING MINUTES

July 14, 2022– 7:00 PM

1. **Call to Order:** Chair Fox called the meeting to order at 7:00 p.m.

2. **Pledge of Allegiance:**

3. **Roll Call and Recognition of Visitors:**

Present – Commissioners Fox, Grissim, Mayer, McMullen, Mitchell, Murphy

Absent – LaRose

4. **Approval of the Meeting Agenda:**

A Motion to approve the July 14, 2022 Planning Commission Meeting Agenda was made by Commissioner Mitchell and seconded by Commissioner McMullen. Motion carried unanimously.

5. **Approval of Meeting Minutes:**

a. Planning Commission Work Session Meeting Minutes of June 23, 2022

A Motion to approve the Work Session Meeting Minutes of June 23, 2022 was made by Commissioner Grissim and seconded by Commissioner Murphy. Motion carried unanimously.

6. **Livingston County Planning Visit, Kathleen J. Kline-Hudson, Director**

[Discussed later in the meeting]

Livingston County Planning Director Kathleen J. Kline-Hudson introduced herself and new Planning Commissioner Paul Funk. They gave an overview of the issues their office is working with such as Master Plans, Capital Improvement Plans, Zoning Amendments.

- Livingston Countywide Broadband study and ARPA (American Rescue Plan Act of 2021) funds.
- High Quality Natural Areas Assessment and GIS mapping.
- Updating their Five-Year Parks and Open Space Plan.
- Working with MDOT regarding broader traffic issues including M-59.

7. **Call to the Public:**

None

8. **Public Hearing:**

a. **Site Plan/PD Application #22-006, Preliminary Planned Development Site Plan – Hartland Senior Community, a Single-Family Residential Planned Development (PD)** – a request for a single-family residential Planned Development containing thirty-two (32) detached ranch style condominium units. The target buyers are 55-plus years old, without children, and are to be owner occupied

Chair Fox opened the Public Hearing at 7:04 PM stating all public notice requirements for the Public Hearing have been met.

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Director Langer gave an overview of the location and scope of the request stating the following:

- Located east of Arena Drive, north of Highland Road, and north of Bella Vita Senior Living.
- Planned Development process involves three levels of review by both the Planning Commission and Township Board: Conceptual (comments only), Preliminary and Final. This request is in the Preliminary phase.

Representing the Applicant, Khurram Baig, of Baig Development, Steve Peck of Epcon Communities of Ohio introduced himself and stated the following:

- 55+ Senior Community
- 32 detached single-family units
- Solid surface with some masonry
- Did come to an agreement with the hockey arena regarding the secondary access since the previous meeting.

Mr. Baig reiterated he feels there is a need for this product in Hartland as fifty-five percent (55%) of the population is fifty-five or older.

CALL TO PUBLIC:

None

Chair Fox closed the Public Hearing at 7:15 PM

Chair Fox referred to the staff memorandum dated July 7, 2022

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 Planning Commission had no additional comments as to the benefits proposed in the letter, provided by the Applicant dated June 1, 2022.
2. **Minimum Size** – requesting a waiver from the twenty acre size minimum. The Planning Commission had no additional comments.
3. **Use of Public Services** - Commissioner Mayer asked about the location of the sanitary sewer tap. The Applicant stated they have rights to an easement for water and sewer within the right Bella Vita Drive right-of-way and they have been told there is already a stub. There will be a lift station. Commissioner Mayer summarized they intend to install 1192 feet of force main and a lift station. The Applicant confirmed and stated they will use directional boring.
4. **Compatibility with Comprehensive Plan** – The Planning Commission had no additional comments.
5. **Unified Control** - Planning Commission had no additional comments.

Planned Development Design Standards (Section 3.1.18.C.)

1. **Permitted Uses** - The proposed use, a single-family residential development appears to be an acceptable use of the site and is consistent with the FLUM designation. The Planning Commission had no additional comments.
2. **Residential Density.** Thirty-two (32) units requested. Could have asked for 108 with the bonus density. A density bonus is not being considered for this PD project. The Planning Commission had no additional comments.
3. **Design Details** – will be addressed later in this discussion.

4. Minimum Yard Requirements

Director Langer stated the following:

- Generated some discussion at the Concept Review.
- Site Plan shows building envelopes; all house plans are designed to fit within the building envelopes.
- Minimum PD Standard is forty (40) feet along perimeter: the PD process allows for variations from those, and these are ten (10) and twenty (20) feet, and fifteen (15) along the internal roadway but are significantly larger to the north. In summary the units are tighter on the front, east and west sides but much bigger to the north.

The Planning Commission had no additional comments.

5. Distances Between Buildings

Director Langer stated during the Conceptual Review the units were closer together and the Fire Authority expressed some concern about the distance. The Applicant has worked with the Fire Authority to space the structures farther apart, fifteen (15) feet as opposed the earlier ten (10) feet and agreed to use certain fire retardant materials as well as finalizing the secondary emergency access.

Commissioner Murphy asked if the building envelopes include the roof overhangs. The Applicant stated it is exterior wall to wall. The Building Code is ten (10) feet, so they exceed that requirement and are providing more fire retardant exterior finishes.

6. **Building Height** - The one-story structures comply with this regulation. The mean building height is approximately fifteen (15) feet. The Planning Commission had no additional comments.
7. **Parking and Loading** - Each unit has an attached 2-stall garage, plus a 16-foot-wide driveway that is 20 feet long as measured from the house to the leading edge of the public/common sidewalk. The Planning Commission had no additional comments.
8. **Landscaping** – will be discussed later.
9. **Open Space**
Director Langer stated the following:
 - The Applicant provided an Open Space Plan.
 - Minimum of twenty-five percent (25%) for residential condominium units broken into two (2) types of open space: usable and regular (undefined) open space.

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- Green area with dots indicates usable open space, plain green is regular open space.
- Open Space Plan states the proposed open space is approximately 6.26 acres, or 65% of the PD; and 5.34 acres as useable open space, or 56% of the site.

10. Natural Features

Director Langer stated the northeastern portion of the site has a 100-year Flood Zone as well as regulated wetland as part of Ore Creek. The Applicants intend to leave that as natural area for the most part but have proposed a trail.

Commissioner Mayer asked if the area encircled by the nature trail is the area intended to be left untouched. The Applicant stated they will only grade where they have to in that area to create the detention basin.

11. Sidewalks and Pedestrian Access

Director Langer stated the development has 5-foot-wide sidewalk on both sides of each private road within the development. Also, there is a 5-foot-wide mulched pedestrian trail shown. The trail starts from a sidewalk located between Units 19 and 28 and follows the edge of the wetland in the northeast corner, then travels around the northern edge of the detention basin in the northwest, and loops back to the starting point (sidewalk).

Commissioner Grissim asked about the sidewalk connecting to along M-59. Director Langer stated there is no continuation of sidewalk at that location in front of Bella Vita, it was not required at the time, so it would essentially be a sidewalk to nowhere. Chair Fox stated originally there was the potential for a second Bella Vita-like facility behind the first, so no sidewalks were required at that time.

Commissioner Murphy stated he would like to see it connect to M-59 to further the walkable community plan. Now there is retail in the front. It would be a recognizable benefit.

Commissioner Grissim clarified the memory care patients are given an enclosed area to walk, but the others can walk freely within the community. Walking down the road is not ideal. She does not want to miss these opportunities if they can avoid it as walkability is a goal.

Commissioner Mayer agreed with both.

The Applicant stated if we were to extend it to our property boundary, it would not go anywhere beyond that point. It would have to be extended down Bella Vita Drive all the way to M-59 for it to be usable or worth doing. Their development is intended to be walkable within.

The Planning Commission discussed sidewalks and walkability. The Planning Commission agreed to not require a connection to the edge of the property south toward M-59 but that they would try to be more aware of this issue with future developments.

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

1. Sewer and Water

The Planning Commission had no further comments.

2. Stormwater and Drainage Systems

Director Langer stated the Township Engineers, and the County Drain Commissioner's Office will review the storm water plans which is generally handled at the construction phase. Chair Fox stated it will meet the standards or be revised until it does. The Applicant stated there is

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plenty of room for the detention basin and has been designed to the County standards. The Planning Commission had no further comments.

3. Traffic Impacts

Chair Fox stated MDOT has reviewed the plans and has no concerns with traffic generated by the proposed development as related to the intersection of Bella Vita Drive and Highland Road. The Planning Commission had no further comments.

4. Vehicular Circulation

Director Langer stated the following:

- Bella Vita Drive extends into the development in a somewhat circular pattern.
- There is a gated emergency access connected to the ice arena property; full-time traffic will not be permitted to pass through. It will serve as access for both properties in case of an emergency where standard access is not available.

Commissioner Murphy asked if it will be signed “no parking.” Director Langer stated it will. The Planning Commission had no further comments.

- 5. Fiscal Impacts** – Chair Fox stated the applicant has provided a response to this topic in the letter dated June 1, 2022. The Planning Commission had no further comments.

Landscaping (Section 5.11)

A. Canopy trees along Internal Roadways (Sec. 5.11.2.C.ii.)

Commissioner Grissim stated the following:

- Canopy trees 35 feet on center with at least one on each lot.
- On the sides where there are no driveways, try to get the tree spacing closer to 35 feet on center.
- Really appreciate the placement of the utilities to allow for the street trees.

B. Buffering or Screening (Sec. 5.11.2.G.i)

Commissioner Grissim stated the following:

- There are many nice trees on the site, and it is understood that you are trying to preserve as many as possible, especially on the west side and near the basin.
- Thrilled that the homes are clustered to preserve so much of the natural area and existing trees, but the look needs to be tied together so everyone wins. The Applicant stated the basin will not be visible from most of the sidewalks and homes.
- Screening on the east side is pretty tight; she is not sure there is room for spruce or pine trees. She encouraged them to think about that more selectively. It may need to be a more informal mix as everything is natural there, with a few canopy trees to blend with what is already there.

C. Detention/Retention Area Landscaping (Sec. 5.11.2.H.)

Commissioner Grissim suggested they try to meet the canopy tree requirements for that area to fill in some of what will be removed in order to blend in. Will not require ground cover or shrubs, just field grass or whatever is being done that will blend in with the natural. The Applicant agreed.

- D. Requirements for Single Family Residential Districts (Sec. 5.11.6.B.)** - A typical landscape plan is provided for these areas.

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Other site details

Irrigation

Chair Fox stated per the applicant irrigation will be provided for landscaping around the monument/entrance sign to the development. Each homeowner will be responsible for maintaining landscaping around their unit.

Monument Sign

Director Langer stated normally signs are subject to the regular sign ordinance requirements, but in this case, with respect to the location, the Planning Commission must approve the sign part of the Preliminary Site Plan. Normally a sign is required to be setback ten (10) feet from the road right-of-way, but in this location it must be in the right-of-way. The sign requires a separate permit which will be reviewed administratively. The Planning Commission agreed.

Commissioner Murphy asked about a standard setback from the road. Director Langer replied once you are in the right-of-way, the standard cannot apply. Commissioner Murphy wondered what is reasonable around it given the location and suggested the Applicant be aware of potential snow accumulation around the sign.

Commissioner Mayer asked about the pump station screening and asked if it is underground. The Applicant stated there are manholes, a pad, a meter and a pole; not a physical building or structure. They are working on the design; if it needs to be screened with landscaping, they will do it.

Lighting

Street lighting is not proposed. The architectural plans show decorative light fixtures as exterior lighting for the house.

Architecture/Building Materials (Sec. 5.24)

Director Langer showed one example and displayed the brochure. Chair Fox added cement board siding, cultured stone and windows make up the exterior elements to the units.

Chair Fox asked if the Applicant had any questions regarding the other agency review letters. The Applicant replied they have drafted response letters and indicated their intent.

Commissioner Mitchell offered the following Motion:

Approval and recommend approval of Site Plan/PD Application #22-006, the Preliminary Planned Development Site Plan for Hartland Senior Community, subject to the following conditions:

- 1. The Preliminary Planned Development Site Plan for Hartland Senior Community, SP PD #22-006, is subject to the approval of the Township Board.**
- 2. Waiver request on the minimum lot size requirement for a planned development, being less than 20 acres, is approved.**
- 3. As part of the Final Plan Review, the applicant shall secure an ingress-egress easement agreement for the proposed access drive connection to the adjacent property to the west (Hartland Sports Center, at 2755 Arena Drive), and the document shall be in a recordable**

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format. In the event the applicant is not able to reach an agreement with the adjacent property owner for said access drive connection, the applicant shall install their portion of the emergency access drive on the planned development property and provide applicable easement documents that are to be properly executed and recorded.

- 4. The applicant shall adequately address the outstanding items noted in the Planning Department's memorandums, dated July 7, 2022, on the Construction Plan set, subject to an administrative review by Planning staff prior to the issuance of a land use permit.**
- 5. 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.**

Seconded by Commissioner Murphy. Motion carried unanimously.

9. Call to the Public:

- Joe Fleischman, Hartland Township stated the following:
- His property is to the north.
- Expressed concern about dewatering and the detention basin.
- Ice arena detention pond is not sufficient, so the overflow runs into Ore Creek.
- Feels it is important to watch the runoff.
- Did not like the V8 diesel dewatering system used in the previous construction of the ice arena.

10. Planner Report:

Director Langer reported the following:

- Changes to Dairy Queen building elevations, now will be located in the single tenant building and some windows will be removed to accommodate their floor plan. There may be changes to Unit 1 in the future depending on who the tenant will be. The Planning Commission briefly discussed the orientation of the proposed buildings.
- July 28, 2022 Planning Commission will be canceled.
- The Landscape Ordinance Public Hearing will at the August 11, 2022 meeting.

11. Committee Reports:

Commissioner Murphy inquired as to the status of the Phragmites invasive species removal near Spranger Field. Director Langer stated he would find the information and follow up.

12. Adjournment:

A Motion to adjourn was made by Commissioner Mitchell and seconded by Commissioner McMullen. Motion carried unanimously. The meeting was adjourned at approximately 8:20 PM.

Hartland Township Planning Commission Meeting Agenda Memorandum

Submitted By: Troy Langer, Planning Director

Subject: Site Plan #22-009 Charyl Stockwell Academy-Building Addition

Date: August 4, 2022

Recommended Action

Move to approve Site Plan Application #22-009, a request to amend the original site plan and construct an approximate 24,310 square foot addition to the existing building at 9758 Highland Road (Charyl Stockwell Academy), including approval of the roof appurtenance and architectural waiver requests. Approval is subject to the following conditions:

1. The applicant shall adequately address the outstanding items noted in the Planning Department's memorandum, dated August 4, 2022, on the Construction Plan set, subject to an administrative review by the Planning staff prior to the issuance of a land use permit.
2. The two (2) existing modular classroom structures shall be removed at the completion of the building addition project.
3. A dumpster enclosure shall be installed around the existing dumpster units and shall be constructed to comply with Section 5.7 (Dumpster Enclosure) of the Zoning Ordinance, with brick to match the building. Construction details of the enclosure shall be provided on the Construction Plan set.
4. 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.
5. (Any other conditions the Planning Commission deems necessary)

Discussion

Applicant: Renae Behr

Site Description

The subject site, addressed as 9758 Highland Road, is located on the south side of Highland Road between Old US-23 and Andover Boulevard, in Section 29 of Hartland Township (Tax ID #4708-29-200-015). The approximate 10-acre site is zoned GC (General Commercial). Access is provided from Highland Road, via an internal private drive, which also provides access to the business at 9990 Highland (LAG Development).

Properties abutting the site on the south and west are zoned HDR (High Density Residential,) and are part of the single-family residential development known as Millpointe of Hartland. The property to the north (9990 Highland Road), is zoned GC (General Commercial) and is occupied by the maintenance division of LaFontaine Automotive Group known as LAG Development. The vacant parcel to the east is zoned GC (General Commercial).

Per the school's website information, Charyl Stockwell Academy District is a tuition-free school district for grades kindergarten through high school and operates over three (3) campuses. The school was founded

in 1996 by Charles Stockwell. The campus at 9758 Highland Road includes the Charyl Stockwell Academy Elementary School plus Charyl Stockwell Montessori Academy Preschool, which is a private tuition-based pre-school. This campus currently includes the existing school building, two (2) temporary modular classroom structures, one detached garage, playground areas, and parking associated with the school. The current and anticipated school enrollment at this campus is 625 students. The middle school and high school facilities are on separate campuses in Brighton, Michigan.

Overview and Background Information

Site Plan Application (PSP) #81

In 1987 Site Plan application (PSP) #81 was reviewed as a request to construct an approximate 20,000 square foot building for a data processing center for Old Kent Bank. The Planning Commission recommended approval on November 19, 1987 and the Township Board approved the project on December 11, 1987. An access drive and 66-foot wide easement on the east side of the site is shown on the plans, which provide access to the subject site from Highland Road.

Land Use Permit #1842

In December 1987, Land Use Permit #1842 was approved for the construction of the data processing building.

1994-sale of property

In 1994 the property (previously owned by Old Kent) was sold to Livingston Development Academy. The file records do not indicate when the school began operating out of this building.

Site Plan Application #227

This was a request to construct an approximate 7,550 square foot, prefabricated, detached classroom building on the site and add 55 parking spaces. On the approved site plan for SP #227, the classroom is shown east and south of the main building. The request was considered a major amendment to SP #81. The Planning Commission recommended approval on July 10, 1997 and the Township Board approved the project on July 15, 1997. At that point in time the school name had changed to Charyl Stockwell Academy.

Land Use Permit #4042

In July 1997 Land Use Permit #4042 was approved for the construction of the 7,550 square foot classroom building.

2005

Per the applicant's summary dated July 27, 2022, two (2) modular buildings were added to the site in 2005. There is no file information on these modular buildings.

Request

The subject site is zoned GC (General Commercial). The zoning regulations are outlined in Section 3.1.14 (GC). Business or private schools operated for a profit and completely within an enclosed building are considered a Principal Permitted Use in GC (Section 3.1.14.B.xi.). Charyl Stockwell Academy fits into this category since a portion of the school is tuition-based.

The applicant is requesting to amend the previously approved site plan and construct an approximate 24,310 square foot addition on the west side of the existing building, with a connection to the main building via an enclosed breezeway. The entrance to the new building is also via the breezeway.

The two (2) existing modular classroom structures will also be removed as part of this request (total square footage of 22,007 square feet). Per the applicant the two (2) modular buildings will be removed once the proposed addition is constructed. An existing garage (631 square feet) is shown in the southwest corner of the site and will remain.

The proposed addition has 24 rooms, most of which are dedicated classrooms. The floor plan shows classrooms, offices, testing rooms, and storage rooms. Per the applicant, the addition is intended to provide the same number of classrooms and serve the same number of students as the existing modular classroom structures. No additional parking is proposed or required at this time.

Based on information provided, the combined total of the existing building, detached garage, and proposed addition is approximately 70,366 square feet in area. This does not include the two (2) modular classroom buildings, which are to be removed at the completion of the building addition.

The applicant has submitted waiver requests to deviate from the Roof Appurtenance standards (Section 5.24.4.) and the Architectural Standards (Section 5.24.14.), with consideration of Section 5.24.8. (Additions) being applied regarding the use of the same façade materials as the existing school building.

Approval Procedure

The project requires site plan approval and is subject to the standards outlined in Section 6.6 of the Township's Zoning Ordinance as well as applicable standards of the GC (General Commercial) zoning district outlined in Section 3.1.14. The Planning Commission has Site Plan review authority and will make a final decision on the proposed project.

Since the building addition, façade materials, landscaping, and lighting, are the only items to be reviewed as part of this request, the site plan review will be limited in scope in this memorandum. The proposed project requires a land use permit from the Township and applicable approvals from other state and county agencies.

SITE PLAN REVIEW – Applicable Site Standards

Site Description

The subject site, located south of Highland Road, west of Old US-23 between Old US-23 and Andover Boulevard, in Section 29 of Hartland Township. Currently there are four (4) buildings on the site: the main school building; two (2) portable classroom structures; and a detached garage. The existing building is approximately 45,523 square feet in size. Parking is provided on the east side of the building.

The site is served by public sanitary sewer and water.

Dimensional Requirements (GC-General Commercial District- Sec. 3.1.14.E.)

Building Setbacks (Sec. 3.1.14.E.) – for proposed building addition

	Required Setback	Proposed Setback	Meets Requirements? (Y / N)
Front (north)	50'	291.1'	Yes
Side (west)	15'	101.8'	Yes
Side (east)	15'	365'	Yes
Rear -w/ sewer	40'	234.7'	Yes

Building and Height (Sec. 3.1.14.E.)

- Required – 35 feet or 2½ stories, whichever is less
- Proposed – 15'- 4" feet
- Meets Requirement? – Yes
- Comment – (none)

Lot Coverage (Sec. 3.1.14.E.)

- Required – 75% for principal structure
- Proposed – 16.2% (ex. Bldg, ex. garage + addition = 70,366 SF; $70,366 \text{ SF} \div 435,600 \text{ SF}$ (lot area) = 16.3%)
- Meets Requirement? – Yes
- Comment – (none)

Site Requirements

Dumpster Enclosure (Sec. 5.7)

- Required – Dumpster designed, enclosed, and screened per requirements; dumpster materials must match the building. Minimum height of enclosure wall is six (6) feet.
- Proposed – Sheet A-4.1 shows the proposed dumpster enclosure, to screen three (3) existing dumpster containers. Elevation drawings indicate the dumpster enclosure is 7'-4" in height and comprised of split face CMU block. Gate comprised of solid decking boards. Coniferous trees (Arborvitae) are proposed on three (3) sides of the enclosure.
- Meets Requirement? – **No, the building materials for the enclosure should be comprised of brick that matches the building.**
- Comment – **Revised drawings of the dumpster enclosure are to be provided on the construction set of drawings.**

Off-Street Parking (Sec. 5.8, parking standards for elementary and middle schools) – review of current parking; additional parking not proposed or required.

- Required – 1 space for each classroom plus 1 space for each 5 fixed seats of any area used for auditorium purposes OR for each 35sq. ft. of assembly seating area where there are no fixed seats. EQUATES TO: 89 parking spaces required
(24 existing classrooms + 18 prop. Classrooms = 42 spaces; PLUS 1,600 sq. ft. assembly seating area $\div 35 = 47$ spaces; TOTAL required = 89 spaces)
- Existing parking – 144 spaces
- Meets Requirement? – Yes
- Comment – (none)

Barrier-Free Parking (Sec. 5.8.4.E.)

- Required – barrier-free spaces 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); for 144 parking spaces, 5 barrier-free parking spaces are required.
- Existing – 7 barrier-free spaces, all spaces are van accessible, and generally near the main entrance door
- Meets Requirement? – Yes
- Comment – (none)

Landscaping and Screening (Sec. 5.11)

A landscape plan is provided and shows proposed landscaping at the entrance door/breezeway of the new building. New ornamental trees are shown along the west side of the building addition. It should be noted that the tree species Golden Glory Cornelian Cherry (single trunk) may be difficult to find.

The existing tree screen along the west side of the site is to be preserved. Per the applicant's letter, the tree screen is comprised of deciduous and coniferous trees, varying in height between 25 feet and 75 feet. It is the intent of the applicant to retain this tree line to buffer the single-family residential homes in Millpointe of Hartland subdivision, which abuts the school property along this boundary.

Section 5.11.2.G. (Buffering and Screening) requires a landscape buffer at least eight (8) feet in height along all adjoining boundaries of a non-residential use and an abutting single-family residential zoned property (Millpointe of Hartland). The existing tree line and the proposed conifer trees in the southwest corner of the site fulfills this requirement.

Lighting (Sec. 5.13)

The applicant intends to install wall-mounted LED light fixtures and lights under the canopy. Cut sheets have been provided. The fixtures are directed downward and shielded.

Architecture Standards (Sec. 5.24)

Section 5.24.4. (Roof Appurtenances)

Per this section, all roof appurtenances are to be screened from view by the use of a parapet wall or sloped roof system using materials consistent with the building design and the requirements of Section 5.24, Architectural Standards. The use of façade materials to form a screen not included as an integral part of the building wall or roof structure shall be deemed inconsistent with this Section.

The Site Plan Review Committee discussed this with the applicant who initially did not intend to provide a parapet wall as this would be inconsistent with the design of the current building that they are trying to match. The Site Plan Review Committee suggested the applicant consider grouping the roof-mounted mechanical units (RTUs) in the center of the roof and use a screening device (wall, fencing) around the units, to be placed on the north, south, and west side of the roof. The Committee suggested the applicant show examples of similar buildings where this method of screening is employed.

The applicant is proposing to utilize a screen wall system on the roof to screen the roof-top heating and cooling units (RTUs), in place of a parapet wall that matches the building façade materials. The RTUs are generally clustered in the middle of the roof and the screen wall system is placed around the units on the north, south, and west sides. The screen wall is comprised of 4-foot high, prefabricated corrugated metal panels. The overall height of the screen wall and support poles is approximately five (5) feet. Perspective drawings of the rooftop and screen system are provided as well as examples of screening devices used on other buildings as examples.

The applicant has requested a waiver to deviate from Section 5.24.4. (Roof Appurtenances) and provide screen walls in place of parapet walls to screen the roof appurtenances. The applicant states the reasons for the waiver request in the letter dated July 27, 2022.

The reasons are as follows:

- Intent is to match existing school architecture language including the building height (15'-4").
- Existing school wall section includes a gravel stop roof coping and no parapet.
- Continuing the existing top of wall datum line is important to the client for a unified and contextual design solution.
- Extending the parapet wall above the roof elevation would not allow for the desired unified design.

Section 5.24.4. (Roof Appurtenances)

- Required – comply with Sec. 5.24.4. Roof Appurtenances
- Proposed – roof-mounted screening device (prefabricated corrugated metal panels) to screen mechanical units (RTUs) in place of the required parapet walls as a screening device.
- Meets Requirement? – **TBD**
- Comment – **Applicant has requested a waiver to deviate from the Architecture Standards**

(Sec. 5.24.4.) and use roof-mounted screening device (corrugated metal panels) to screen mechanical units (RTUs) in place of the required parapet walls. Planning Commission to review the waiver request in consideration with the standards outlined in Section 5.24.4. (Roof Appurtenances).

Section 5.24.8. (Additions)

The site is within the Township's Façade Materials Group #1 in Section 5.24.14 of the Zoning Ordinance. A copy of this section is provided. The existing building façade materials consist of split face CMU veneer (Concrete Masonry Unit) and brick, plus aluminum and glass window systems, and canopy systems.

The applicant intends to continue the existing architectural theme for the current project, using the same façade materials (product type, color, and architectural design) as utilized on the existing building. Use of the same façade materials will architecturally appear seamless and unified with the existing building per the applicant.

Section 5.24.8. (Additions), provides for the continuation of the existing façade materials for proposed additions provided the following criteria are met:

- A. The addition does not exceed one hundred (100) percent of the existing building floor area;
- B. All new facades substantially constitute a continuation of the existing facades with respect to color, texture, size, height, and location of materials; and
- C. That the visual effect is to make the addition appear as part of the existing building.

The proposed plans meet the intent of Section 5.24.8. in staff's opinion. Also, the façade materials utilized on the proposed addition comply with Section 5.24.14. (Façade Material Group #1) and a waiver from this Section is not required. Please see the summary chart in the next section.

Section 5.24.14. (Façade Material Groups)

Façade Materials Calculation – façade materials must comply with the specifications for Façade Material Group #1 in Section 5.24.14. Please refer to the Sheet A5-1 (**revised plan dated 07.28.2022**) for the Façade Material Chart.

Percentages are proposed as follows:

Materials Group #1: Proposed Façade Material Percentages by Elevation

Elevation	Clay Brick (30% min.)	Decorative concrete masonry unit (Split faced- 25% max.)	Clear Glass (50% max.)	Spandrel Glass (15% max.)
South	46.6%	22.9%	30.5%	0.0%
West	52.5%	20.7%	26.8%	0.0%
North	63.9%	8.8%	26.3%	1.0%
East	44.0%	12.4%	43.7%	0.0%
West side entrance	53.9%	0.0%	36.6%	9.6%
East side entrance	100%	0.0%	0.0%	0.0%

- Required – comply with Sec. 5.24.14 Facade Materials Chart (Group #1)
- Proposed – continuation of existing façade materials, product and color
- Meets Requirement? – Yes
- Comment – (none)

Other Requirements-Zoning Ordinance Standards/Other Comments

No comments at this time.

Hartland Township DPW Review

The Hartland Township DPW Director provided comments in the email dated August 3, 2022.

Hartland Township Engineer's Review (SDA)

The Township's Engineer (Spaulding DeDecker) has reviewed the plans and recommends site plan approval subject to items being addressed in the letter dated July 26, 2022.

Hartland Deerfield Fire Authority Review

The Hartland Deerfield Fire Authority has reviewed the plans and provided comments in the letter dated July 11, 2022. The Fire Authority approves the project subject to the contingencies being addressed as outlined in the letter.

Attachments

1. Applicant's letter dated 07.27.2022 – *PDF version*
2. Waiver request parapet wall dated 07.27.2022 – *PDF version*
3. DPW Director email dated August 3, 2022 – *PDF version*
4. Township Engineer (SDA) review letter dated 07.26.2022 – *PDF version*
5. Hartland Deerfield Fire Authority review letter dated 07.11.2022 – *PDF version*
6. Section 3.1.14 GC District (General Commercial) – *PDF version*
7. Section 5.24.14 Architectural standards – *PDF version*
8. Revised Floor Plan Sheet A1.1 dated 07.28.2022 – *PDF version*
9. Revised Elevations Sheet A5-1 dated 07.28.2022 – *PDF version*
10. Site Plans dated 07.27.2022

CC:

Spaulding DeDecker, Twp Engineer (via email)

Mike Luce, Twp DPW Director (via email)

A. Carroll, Hartland FD Fire Chief (via email)

T:\PLANNING DEPARTMENT\PLANNING COMMISSION\2022 Planning Commission Activity\Site Plan Applications\SP #22-009 Charyl Stockwell Addition\Staff reports\SP 22-009 staff report 08.04.2022.docx



27 July 2022

Mr. Troy Langer, Planning Director
Ms. Martha Wyatt, Planner – Landscape Architect
Hartland Township
2655 Clark Road
Hartland, MI 48353

RE: Charyl Stockwell Academy – Concept Plan Review Response
SDA Review No. HL22-114
IA Project No. 20220121

Dear Mr. Langer,

In response to your email communication dated 19 July 2022 regarding our submission for the Charyl Stockwell Academy (CSA) site plan review, we have the following responses:

1. Please provide a brief summary of the Charyl Stockwell Academy and the proposed project-short history of the school, and current enrollment; how long the portable classrooms have been in use; and reasons for the proposed addition.

Response: The Charyl Stockwell Academy was founded in 1996 by Charles Stockwell. It was developed and refined based upon five core philosophies:

- Education of the “whole child”.
- The developmental approach.
- Continuous mastery learning model.
- High expectations.
- Internal modification philosophies.

The school has been consistently recognized as a school of excellence with high student retention rates. Current and anticipated enrollment is 625 children.

The current preschool/elementary facility is located at 9758 E Highland Road. The charter school currently utilizes two modular buildings which were added in 2005. The modular facilities have increasingly become expensive to operate due to many repairs required each year. Additionally, the condition of the spaces continues to deteriorate. The reason for the classroom addition is to accommodate the current student and staff population served by the modular classrooms. Once the addition is constructed, the modular classroom structures will be removed.

2. The use of the proposed screen wall to screen the roof-mounted HVAC units instead of a parapet wall, as required by the Zoning Ordinance, requires a waiver request from the applicant. The waiver is from Section 5.24.4 (Roof Appurtenances). I have provided that section for your reference.

Response: See attached for a waiver request to allow a separate roof mounted screen and revised architectural sheet A4-1 with roof screen details and material definition.

3. An architectural waiver from Section 5.24.14 (Façade materials for Façade Materials Group #1) is required to deviate from the required façade materials. The plans indicate that the intent is to use similar façade materials to match the existing building, and in some cases those materials or allowed percentages do not comply with the ordinance. Section 5.24.8. outlines when existing façade materials can be used for an addition. You can reference those sections and request a waiver. I have provided a file letter for a different project that essentially requested the same waiver.

Response: We do not believe we need a variance for this section because our façade material percentages fall within the required maximums established in table 5.24.14. Brick – 52.5%, split face CMU – 16.4%, glass – 30.7%, and spandrel – 0.3%. Additionally, we comply with all requirements of section 5.24.8.

4. Architectural drawings of the proposed dumpster enclosure were not provided. Please provide scaled drawings for the enclosure and state the materials to be used. The maximum height is 6 feet. The building materials must match those used on the building.

Response: The existing dumpsters will reside on the east side of the gymnasium and will continue to serve the school's needs. A dumpster enclosure will be constructed to house the existing dumpsters. See new sheet AS1-1 for details.

5. Please provide cut sheets for all proposed exterior lighting fixtures.

Response: See attached.

6. Please provide a scaled, detail drawing of the proposed screen wall to be used to screen the RTU's, and state what product(s) are being used.

Response: See sheet A4-1 for section detail.

7. Sheet C-1.0: If the existing trees on the west side of the property are to be used for screening purposes, please provide a general description of the tree types and size (height mostly). Also fence protection of the wooded area should be shown on the plans if the trees are to be preserved. Screening is required along adjoining boundaries of a non-residential use and an abutting single family residential zoned property (Millpointe to the east).

Response: See sheet C1.0 attached. The existing tree line along the west edge of the property is moderately wooded with a mixture of deciduous and coniferous trees. 50% of the trees are fir and spruce ranging in height between 25' and 30'. The other 50% of trees are fir, spruce, birch, cherry, oak, and cottonwood, ranging in height between 35' and 75'. It is the desire of the school to use the existing natural buffers along the residential properties adjacent to the property lines.

8. Please label the skylight on Sheet A4-1 and Sheet A5-1.

Response: See attached sheets with added labels.

9. Sheet LP1-OSP: Please provide conifer trees in the area shown in order to provide the required tree screen. The minimum tree height at the time of planting is 8 feet for a conifer tree.

Response: See attached sheet LP1-0 with added conifer tree plantings.

27 July 2022

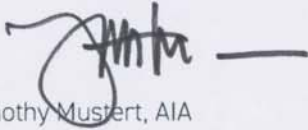
10. The proposed water main shall not be located under the pavement.

Response: The watermain has been relocated from underneath the proposed HMA fire lane.

Should you have any further questions, or would like to discuss, please feel free to call me.

Respectfully,

INTEGRATED ARCHITECTURE



Timothy Mustert, AIA
Principal

cc: Renae Behr, CS Partners
Todd Dryer, CS Partners
Justin Longstreth, Moore and Bruggink

Attachments: Revised site plan submittal including drawings C1-0, C1-1, C1-2, C1-3, C1-4, A1-1, A4-1, A5-1,
A5-2, A5-3, ES2-1, LP1-OSP
Waiver request 5.24.4



27 July 2022

Mr. Troy Langer, Planning Director
Ms. Martha Wyatt, Planner – Landscape Architect
Hartland Township
2655 Clark Road
Hartland, MI 48353

RE: Charyl Stockwell Academy – Concept Plan Review
SDA Review No. HL22-114
Architectural Waiver #1 – 5.24.4 (Roof Appurtenances)

Dear Mr. Langer,

On behalf of Charyl Stockwell Academy (CSA), Integrated Architecture requests an Architectural Waiver from the zoning ordinance 5.24.4 regarding Roof Appurtenances for the CSA classroom addition as discussed in our conceptual meeting dated 29 June 2022.

Our design intent was to match the existing school architectural language including the existing building height. The existing school wall section utilizes a gravel stop roof coping and no parapet. The height of the existing wall is 15' – 4" and the space program requires clear volume within the new classrooms to match that of the existing adjacent classrooms. Continuing the existing top of wall datum line is important to our client for a unified and contextual design solution, and extending a parapet wall above the roof elevation, as stated in ordinance Section 5.24.4, would not allow for this.

The use of a roof screen inset from exterior wall edge to wrap the proposed rooftop mechanical units allows for the continuous perimeter wall elevation to match the existing and achieves the same desire of Hartland Township, to screen the equipment from view. There are other commercial properties that are represented with photographs included in the site plan submission, that serves as basis of comparison.

We thank you for your consideration of this request for variance and look forward to the successful completion of this project with you.

Sincerely,

INTEGRATED ARCHITECTURE

Timothy Mustert, AIA
Architectural Principal

cc: Renae Behr, CS Partners
Todd Dryer, CS Partners

Troy Langer

From: Troy Langer
Sent: Wednesday, August 03, 2022 12:16 PM
To: Troy Langer
Subject: FW: Charyl Stockwell

Good morning Martha,

Currently Charyl Stockwell Academy is deficient in REU's in both Water and Sewer and per Township policy they must be current and whole on REU's before any expansion. Currently the breakdown is as follows:

- **Water Owned = 1**
- Needed = 19
- Cost per REU: \$5,816.01
- Total = \$110,504.19

- **Sewer Owned = 12.43**
- Needed = 7.57
- Cost per REU = \$9,439.20
- Total = \$71,454.74

Total Cost for applicant = **\$181,958.93**

These calculations are based off the historical data from their previous billings that depict they would require 20 REU's for the complex. Subsequently the Township Board will be willing to explore financing options as the cost is substantial.

Please feel free to reach out with any questions.



Mike Luce
Public Works Director
517.294.0056 c | 810.632.7498 o
2655 Clark Road
Hartland, MI 48353
www.hartlandtwp.com

July 26, 2022

Troy Langer
Planning Director
Hartland Township, MI

Re: Charyl Stockwell Academy – Site Plan Review #1
SDA Review No. HL22-114

Dear Troy:

We have received the concept site plan submittal for the above referenced project prepared by Integrated Architecture and the following comments are our observations.

A. General

The site is located along the south side of Highland Road (M-59) and west of Old US 23. It is noted as 10.03 acres total area. The proposed development will remove the existing structures behind the school and construct a new additional that totals approximately 24,175 sft.

All existing and proposed easements shall be shown on the site and utility plans.

Hartland Township Standard Detail Sheets are to be attached to the proposed site plans when the applicant is ready to submit for engineering review.

B. Water Main

The site is serviced by an existing 8" water main along the eastern property line. Along the north side of the existing building to remain, an 8" fire line is proposed to be relocated to the northwest corner of the proposed building addition.

Based on this water main layout, we have the following comments:

1. The hydrant layout must be reviewed and approved by the Hartland Fire Marshall.
2. The proposed water main shall not be located under the pavement. Relocate the water main from underneath the proposed HMA fire lane.
3. Buildings shall be covered by a 250-foot radius of a hydrant.
4. All public water main shall be centered within a minimum 20-foot wide easement, dedicated to Hartland Township.

C. Storm Drainage/Grading

There is an existing stormwater detention facility along the southern property line. Additional information will be required during engineering review including the method of release and comparison of site runoff coefficients to ensure the existing facility has enough capacity for the proposed development. All storm water design calculations are to follow Hartland Township and Livingston County Drain Commissioner standards and details. No impacts to existing wetlands or floodplains are shown on this plan.

Based on this storm layout, we have the following comments that are not necessary to complete at this time for site plan review but are aimed to assist in the development of the engineering review set:

1. Offsite surface runoff shall not be trapped along the development perimeter. If the existing runoff from adjacent properties pass onto the proposed site, the proposed storm sewer system must be sized to accommodate.
2. On-site drainage must be captured within the proposed development via the storm sewer network and will not be allowed to drain to adjacent properties. Both proposed swales around the proposed addition appear to drain offsite. This runoff will need to be directed to the existing storm facility.
3. The maximum allowable grade shall be 1:4.
4. Minimum slope for swales shall be 1.0%

D. Sanitary Sewer

The site is located within the sanitary sewer district for Hartland Township. The existing buildings connect to the existing 8" sanitary sewer along the eastern property line. The proposed plan shows removal of the existing grinder pumps and force main in the rear of the existing building but do not show any proposed work. All sanitary sewer design requirements are to follow current Livingston County Drain Commissioner's (LCDC) standards and details. LCDC sanitary sewer detail sheets shall be attached to the proposed plans when applicable.

Permits Required

Based on those improvements depicted on the plans, the following permits may be required and will need to be provided to the Township once available. Any changes to the approved site plan from the following agencies that impact the design may require reapproval.

Hartland Township:

1. All necessary easements. Easements must be on Hartland Township Standard Easement document and include a sketch. A current title policy for ownership verification shall be provided with all executed easement submittals, if applicable.
2. A Land Use Permit will be granted after the pre-construction meeting.
3. Storm Water Agreement (for the storm water improvements on the site).
4. Maintenance bond and insurance for the water main to be dedicated to the township.

Livingston County:

1. Copy of Livingston County Drain Commissioner approval and permit.
2. Copy of a Soil Erosion and Sedimentation permit from Livingston County Drain Commissioner.

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

RECOMMENDATION

We recommend approval of the site plan, conditional upon all of the above comments being addressed to the satisfaction of the Planning Commission. Final engineering approval is not recommended at this time due to the number and nature of the comments.

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 Hartland Township Engineering Design Standards and 2008 Hartland Township Standard Details. Sanitary sewer and water benefit fees may be applicable for this project.

If you have any questions regarding this matter, please contact our office at your convenience.

Sincerely,

SPALDING DEDECKER



Adam Chludzinski
Project Engineer

cc: Jeremy Schrot, Hartland Township Engineer (via email)



HARTLAND DEERFIELD FIRE AUTHORITY

FIRE MARSHALS OFFICE

Hartland Area Fire Dept.
3205 Hartland Road
Hartland, MI. 48353-1825

Voice: (810) 632-7676

Fax: (810) 632-2176

E-Mail: jwhitbeck@hartlandareafire.com

July 11, 2022

To: Hartland Township
2655 Clark Road
Hartland MI 48353

Re: Preliminary Construction Expansion Plans
Charyl Stockwell Academy
9758 Highland Road

We have reviewed the renovation plans for Charyl Stockwell Academy at 9758 Highland Road for the above project (plans dated July 6, 2022 and as received electronically by Hartland Township on July 7, 2022). The project as drawn meets and/or exceeds the site accessibility requirements of the fire department.

The items listed below are some of what the fire department would need to address moving forward.

- 1) All suppression and fire alarm plans need to be sent to:
Fire Marshal Rick Boisvert
Brighton Area Fire Dept.
615 W. Grand River Road, Brighton MI 48116.
Phone: 810-229-6640 for review and approval.
- 2) Submission of a plan including the placement of emergency lighting, exit signage and fire extinguishers.
- 3) Final inspection and testing of suppression and alarm systems upon completion of project before a Certificate of Occupancy can be issued.

We have no further comments at this time. Please forward any revised drawings affecting the fire department for further review.

Sincerely,

Yours In Fire Safety,

Jennifer Whitbeck
Fire Inspector

A. INTENT

The “GC” General Commercial District is established to accommodate those retail businesses and services which are intended to serve the requirements of the Hartland community. The large size and variety of permitted commercial uses typically generates significant volumes of vehicular traffic. Uses in the “GC” District typically require a relatively large area devoted to off-street parking and loading, and tend to create problems of congestion. It is intended to direct all intensive commercial development to those areas designated as such on the Hartland Township Comprehensive Plan.



User Note: For uses listed in **bold blue**, refer to Article 4, or click on use, for use-specific standards

B. PRINCIPAL PERMITTED USES

- i. Retail stores, wholesale clubs, or retail centers up to sixty thousand (60,000) square feet in gross floor area
- ii. Professional and medical offices or clinics
- iii. **Financial institutions with drive-through service** §4.57
- iv. Personal service establishments
- v. Food and beverage service establishments, excluding drive-in or drive-through service, live entertainment or dancing
- vi. **Outdoor seating and dining areas** §4.47
- vii. Business service establishments
- viii. **Adult day care facilities,** **and child care centers,** **preschool and day care centers** §4.12
- ix. Public buildings, post offices, libraries, libraries, community centers but not including warehouses, garages, or storage areas
- x. Public or private parks and open space
- xi. Business and private schools operated for a profit completely within an enclosed building
- xii. **Churches and religious institutions** §4.20
- xiii. Essential public services, provided there is no building or outdoor storage yard
- xiv. Banquet halls, assembly halls, private clubs , lodge halls or similar places of assembly.
- xv. **Funeral homes and mortuary establishments** §4.29
- xvi. Theaters and concert halls
- xvii. Newspaper offices and accessory printing/distribution.
- xviii. Personal fitness centers
- xix. **Veterinary offices, small animal** §4.45

C. ACCESSORY USES

- i. **Accessory buildings, uses and activities customarily incidental to any of the above-named principal permitted uses** §5.14

D. SPECIAL LAND USES

- i. **Automobile service stations** §4.16
- ii. **Automobile sales** §4.15
- iii. **Automobile wash, when within a completely enclosed building** §4.17
- iv. Billiard halls
- v. **Open air business uses** §4.38
- vi. **Drive-in establishments for the retail delivery of products to customers in automobiles where the type of drive-in establishment is not otherwise specifically included in this Ordinance** §4.24
- vii. **Essential service facilities and related accessory storage yards, including telephone exchange buildings and public utility offices** §4.26
- viii. Garden centers, nurseries and greenhouses.
- ix. Leasing of recreational, landscaping, or moving equipment
- x. **Large institutional uses** §4.53
- xi. **Motels** **and hotels** §4.36
- xii. **Outdoor and indoor commercial recreation** §4.40
- xiii. **Radio and television towers** §4.39
- xiv. Restaurant , bar, or brew-pubs, including with live entertainment or dancing. **With drive-in or drive-through service** §4.28
- xv. **Shopping centers and other stores of over sixty thousand (60,000) square feet in gross floor area** §4.46
- xvi. Restaurant , bar, or brew-pubs including with live entertainment or dancing. With drive-in or drive-through service.
- xvii. Uses of the same nature or class as uses listed in this district as either a Permitted Principal Use or Special Use in this district, but not listed elsewhere in this Zoning Ordinance, as determined by the Planning Commission.
- xviii. **Automobile fueling and convenience station** §4.58
- xix. **Automobile repair - minor** §4.60



E. DEVELOPMENT STANDARDS

Lot SizeMinimum lot area[☐]:

Without sewer 40,000 sq ft

With sewer 20,000 sq ft

Minimum lot width[☐]:

120 ft

Maximum Lot Coverage[☐]

Principal Structure

75%

Setbacks[☐]

Minimum front yard setback: 50 ft

Minimum rear yard setback:

Without sewer 0 ft

With sewer 40 ft

Minimum side yard setback:

15 ft

Building Height[☐]

Maximum building height:

Dwelling unit 35 ft or 2.5 stories

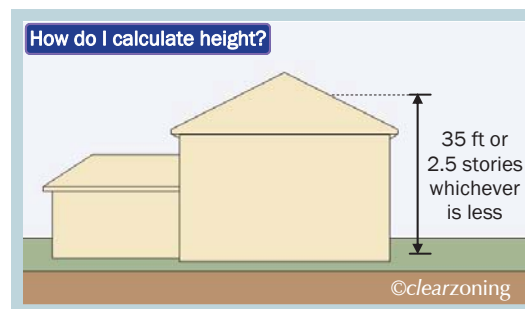
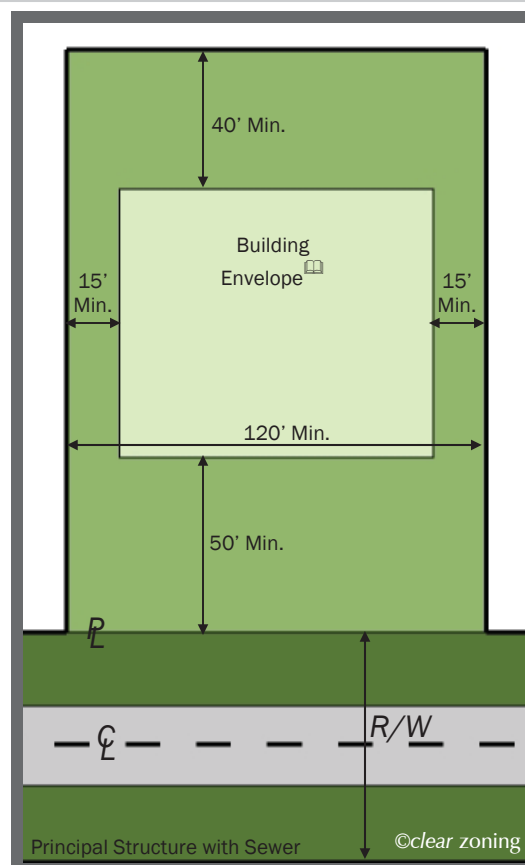
whichever is less

Accessory structure

15 ft or 1 story

NOTES

- For additions to the above requirements, refer to Section 3.24: 2, 5, 8, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 27, 28.
- See *Suggested References* below for applicability



The above drawings are not to scale.

SELECTED REFERENCES

3. Zoning Districts

- Planned Development §3.1.18

5. Site Standards

- Paved Access §5.22.3
- Off-Street Parking and Loading Requirements §5.8
- Access Management and Driveways §5.10
- Sidewalks & Pathways §5.12
- Landscaping §5.11
- Lighting 5.13

- Walls and Fences §5.20
- Performance Standards §5.19
- Architectural Standards §5.24

6. Development Procedures

- Site Plan Review §6.1
- Traffic Impact §6.5
- Special Use Review §6.6

1 Purpose and Introduction

2 Definitions

3 Zoning Districts

4 Use Standards

5 Site Standards

6 Development Procedures

7 Admin and Enforcement



5.24.14 Maximum Percentage of Façade Materials Allowed by Group

Façade Materials	Group #1 ^L (%)	Group #1A ^L (%)	Group #2 (%)	Group #3 (%)	Group #4 ^H (%)
Brick, natural clay	100 (30% min.) ^F	100 (40% min.) ^F	100	100	100
Glazed brick ^A	25	25	25	25	25
Ceramic tiles	10	10	10	10	10
Limestone	50	50	100	100	100
Stone, field, cobble, and other types of stone	50	50	75	100	100
Granite or marble, polished	50	50	100	100	100
Decorative concrete masonry unit ^B (split faced)	25	25	50	75	0
Plywood siding (T-111)	0	0	0	0	0
Precast exposed aggregate	0	0	25	25	0
Precast, other	25	25	50	50	0
Flat metal panels	20	20	50	75	0
Standing seam metal	20	20	25 ^E	50 ^E	0
Ribbed metal panels	0	0	25	50 ^E	0
Spandrel glass	15	10	25	25	0
Glass block	15	10	25	25	0
Glass ^J	50	50	50	50	50
Molded cornices, trim, columns, surrounds	15	20	15	15	20
Wood siding, painted tongue and groove, batten siding, 4"vinyl siding, and aluminum siding ^G	10	10	25	50	100
Exterior insulation finishing system ^K	15	10	50	50 ^C	0
Cement Plaster	0	0	25	25	0
Awnings ^{D, I}	10	10	15	15	15
Asphalt shingles, asphalt-fiberglass shingles, or other similar roofing materials	25	25	25	50	25
Neon	0	0	0	0	0

15. Footnotes to the Schedule Regulating Façade Materials

- A. Allowed only if earth tone and matte finish.
- B. Plain faced, striated, fluted and scored concrete masonry units are not permitted. Ground, polished or burnished concrete masonry units forming an accent element in the building's design may be permitted with Planning Commission approval. Colors of any approved concrete block

material must be part of the manufacturing process and not a painted on finish.

- C. Must be designed to simulate stone via a joint pattern. Maximum joint spacing shall be three (3) feet on center horizontally and four (4) feet on center vertically.
- D. Adjacent permanent facade materials shall extend behind awnings, backlit translucent awnings are not permitted.



PRELIMINARY NOT FOR CONSTRUCTION

MAIN FLOOR
PLAN

A1-1

FLOOR PLAN LEGEND

- NEW WALL CONSTRUCTION
- EXISTING WALL CONSTRUCTION TO REMAIN
- THIRTY MINUTE FIRE RATED SEPARATION SEE INDEX SHEETS/CODE REVIEW FOR LOCATIONS
- ONE HOUR FIRE RATED SEPARATION SEE INDEX SHEETS/CODE REVIEW FOR LOCATIONS
- TWO HOUR FIRE RATED SEPARATION SEE INDEX SHEETS/CODE REVIEW FOR LOCATIONS
- THREE HOUR FIRE RATED SEPARATION SEE INDEX SHEETS/CODE REVIEW FOR LOCATIONS
- FLAT PANEL TV ON WALL MOUNT (REFER TO A/V CONSULTANT INFO.)
- CARD READER
- COMPOSITE WOOD DECKING SYSTEM
- FULLY RECESSED FIRE EXTINGUISHER CABINET
- WALL MOUNTED FIRE EXTINGUISHER
- LOCATION OF WALL MOUNTED AUTOMATIC DOOR OPERATION CONTROL BUTTON (B.F.P.B.)
- AUTOMATIC DOOR OPERATOR (SEE TROL BUTT ON STAINLESS STEEL POST (B.F.P.B.))
- PARTITION TYPE SEE A2.1
- FURNISHINGS, FIXTURES & EQUIPMENT (F.F. & E.)
- CONTROL JOINT - SEE A5 SERIES DRAWINGS

FLOOR PLAN NOTES

- ALL DIMENSIONS ARE TO FACE OF GYP. BD., MASONRY, CONCRETE, ETC. UNLESS INDICATED OTHERWISE AND DO NOT INCLUDE ANY APPLIED FINISHES. DIMENSIONS TO MASONRY ARE NOMINAL. ROUND OFFS FOR WALLS ARE TO BE TO THE NEAREST 1/4" UNLESS NOTED.
- ALL GYP. BD. SHALL BE 5/8" TYPE-X AND SHALL EXTEND TO FLOOR OR ROOF DECK ABOVE IN ALL AREAS UNLESS NOTED OTHERWISE.
- AT ALL DEVICES INSTALLED IN FIRE-RATED CONSTRUCTION, CONSTRUCT AS REQUIRED TO MAINTAIN INTEGRITY OF FIRE-RATING.
- ALL FIRE-RATED WALLS & PARTITIONS SHALL EXTEND TIGHT TO THE UNDERSIDE OF CONSTRUCTION ABOVE & SHALL BE INSTALLED AS TO ALLOW APPROPRIATE DEFLECTION AMOUNT (1/2" MINIMUM) IN STRUCTURE WHILE MAINTAINING THE INTEGRITY OF THE RATING.
- PROVIDE 1/2" CEMENT TILE BACKER & ON THE STUD WALLS DESIGNATED TO RECEIVE CERAMIC TILE. PROVIDE MOLD & WATER RESISTANT (W-R) GYPSUM BOARD IN ALL WET AND DAMP AREAS.
- UNLESS SPECIFICALLY NOTED OTHERWISE, THE WALL LEGEND BELOW REFERS TO ALL INTERIOR WALL CONSTRUCTION INSTALLED INDEPENDENTLY OF THE EXTERIOR BUILDING SHELL - REFER TO WALL SECTIONS & DETAILS ON A6 SERIES DRAWINGS FOR EXTERIOR WALL CONDITIONS.
- ALL CONCEALED SPACES IN WALLS, COLUMN ENCLOSURES, BULKHEADS & SIMILAR LOCATIONS, NOT COMPLETELY FILLED W/ INSULATION, ARE TO BE FIRE STOPPED AT THE CEILING/FLOOR LEVELS.
- LOCATE ALL DOORS WITH THE EXCEPTION OF STORAGE ROOM DOORS 1'-6" FROM THE LATCH SIDE OF THE DOOR OPENING TO THE NEAREST PROJECTION UNLESS OTHERWISE DIMENSIONED ON PLANS.
- ALL HINGE SIDE WALL RETURNS SHALL BE MIN. OF 4" AT GYP. BD. PARTITIONS & 8" AT CMU WALLS UNLESS NOTED OTHERWISE OR IMPACTS NOTE 8.
- SEE INTERIOR ELEVATIONS & FINISH PLANS FOR WALL FINISHES.
- EXTEND ALL TOILET & RESTROOM WALLS TIGHT TO STRUCTURE ABOVE AND ALLOW FOR APPROPRIATE DEFLECTION. ACoustically AND/OR FIRE RESISTANCE RATED SEAL WALLS TO STRUCTURE SYSTEMS ABOVE. FULL PERIMETER, EACH SIDE.
- PROVIDE BLOCKING CONCEALED WITHIN WALLS AT ALL WALL-MOUNTED ITEMS INCLUDING BUT NOT LIMITED TO: DOOR HARDWARE, TOILET WARM ACCESSORIES, MILLWORK, SHELVEING, P.E.C.S., TELEVISIONS, TACKBOARDS & MARKERBOARDS. COORDINATE WITH SPECS, FLOOR PLANS, INTERIOR ELEVATIONS & FINISH DRAWINGS.
- SEE CODE COMPLIANCE DRAWINGS FOR FIRE-RATING REQUIREMENTS.
- SEE DRAWING A2.0 FOR TYPICAL WALL TYPES AND FIRE-RATED CONSTRUCTION DETAILS.
- AT SMOKE RATED AND FIRE RATED WALLS THAT EXTEND ABOVE A FINISHED CEILING, OR BELOW THE RAISED FLOOR, PROVIDE A PAINTED STENCIL AT 10'-0" ON CENTER THAT CALLS OUT THAT WALL TO BE "SMOKE RATED WALL" OR "FIRE RESISTANCE RANGING" - HOUR FIRE RATED WALL ABOVE THAT CEILING. SEE WALL LOCATIONS ON CODE COMPLIANCE AND FIRE/SMOKE RATING SHEETS IN THE CODE COMPLIANCE SERIES OF DRAWINGS AT THE BEGINNING OF THIS SET.
- PROVIDE 3/4" FIRE RETARDANT TREATED PLYWOOD TO 8'-0" A.F.F. IN TELE-DATA, PLUMBING, AND ELECTRICAL CLOSES, TYPICAL.
- WALLS WHICH ABUT MIDDLE OF COLUMNS ARE CENTERED ON THE COLUMN UNLESS OTHERWISE NOTED.
- WALLS WHICH ALIGN AT COLUMN ENCLOSURE TO BE ALIGNED AT FACE OF FINISH TAPE AND SPACKLE TO ENSURE SMOOTH AND CONTINUOUS SURFACE TO RECEIVE FINISH.
- WALLS WHICH ABUT MULLIONS ARE CENTERED ON THE MULLION UNLESS NOTED OTHERWISE.
- COORDINATE ALL APPLIANCES AND PLUMBING FIXTURES/ACCESSORIES WITH INTERIOR DESIGN DRAWINGS AND MEP DESIGN/BUILD CONTRACTORS.
- REFER TO EXTERIOR ELEVATIONS FOR WINDOW SIZE/TYPE DESIGNATIONS.
- REFER TO INTERIOR DESIGN DRAWINGS FOR INTERIOR DOOR AND WINDOW CASINGS AND FOR LOCATION OF DOORS WITH TRANSOMS.
- ALL DOOR HARDWARE TO SPECIFIED BY INTERIOR DESIGNER.
- ALL DOORS TO HAVE CLEARANCES AS DEFINED BY ADAAG: ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES.
- SEE LIFE SAFETY DRAWINGS FOR FIRE-RATING REQUIREMENTS. SEE WALL TYPE DETAILS FOR CONSTRUCTION.
- AT OWNER SUPPLIED ARTWORK, KEEP AREA FREE OF ALL THERMOSTATS, SWITCHES, OUTLETS, STROBES, ALARMS, ETC.
- KEEP ALL DEVICES WITHIN 2'-0" OF DOOR FRAME CORNERS TO MAXIMIZE FREE WALL AREA FOR ARTWORK.
- AREAS WITH A CONVEYOR PLANE OF NEW GYPSUM BOARD (WALLS, CEILINGS, ETC.) GREATER THAN 25' ARE TO RECEIVE A CONTROL JOINT. UNLESS SPECIFICALLY NOTED OTHERWISE, THE BASIS OF DESIGN FOR ALL GYPSUM BOARD CONTROL JOINTS IS TO BE: 1/4" WIDE, SQUARE GROOVE, FULL DEPTH OF GYPSUM BOARD WITH A FLANGE THAT IS TO RECEIVE TAPE & JOINT COMPOUND AT BOTH SIDES OF REVEAL. CONTROL JOINTS ARE TO BE ALIGNED WITH A WINDOW OR DOOR FRAME WHENEVER POSSIBLE. FINAL LOCATIONS OF ALL CONTROL JOINTS ARE TO BE COORDINATED WITH ARCHITECT PRIOR TO INSTALLATION.
- FOR ALL WALLS THAT EXTEND UP TO THE ROOF, PROVIDE A DEEPLEES DEFLECTION TRACK AT THE TOP OF THE WALLS THAT WILL ALLOW FOR 2" OF DEFLECTION IN THE ROOF STRUCTURE.
- THE FOLLOWING ITEMS ARE TO BE DESIGNED & ENGINEERED ("DELEGATED DESIGN") BY THE BIDDING SUB CONTRACTOR:
 - LIGHT-GAUGE METAL STUD FRAMING (BOTH LOAD-BEARING & NON-LOAD BEARING)
 - ALUMINUM CURTAINWALL & STOREFRONT WINDOW FRAMING
 - CONCRETE FILLED METAL PAN STAIRS
 - GUARDRAIL SYSTEMS

WALL TYPE LEGEND

S1	ONE LAYER 5/8" TYPE "X" GYPSUM BOARD ON BOTH SIDES OF 3/8" METAL STUDS @ 16" O.C. EXTEND TO UNDERSIDE OF DECK ABOVE (UNLESS NOTED OTHERWISE).
S2	ONE LAYER 5/8" TYPE "X" GYPSUM BOARD ON BOTH SIDES OF 3/8" METAL STUDS @ 16" O.C. W/ 3/2" BATT INSUL. EXTEND TO UNDERSIDE OF DECK ABOVE (UNLESS NOTED OTHERWISE).
S2B	SAME AS S2 BUT WITH 6" METAL STUDS
S3	ONE LAYER OF 5/8" TYPE "X" GYPSUM BOARD ON ONE SIDE OF 2 1/2" METAL STUDS @ 16" O.C. EXTEND GYPSUM BOARD UP ABOVE CEILING.
S3B	SAME AS S3 BUT WITH 3/8" METAL STUDS

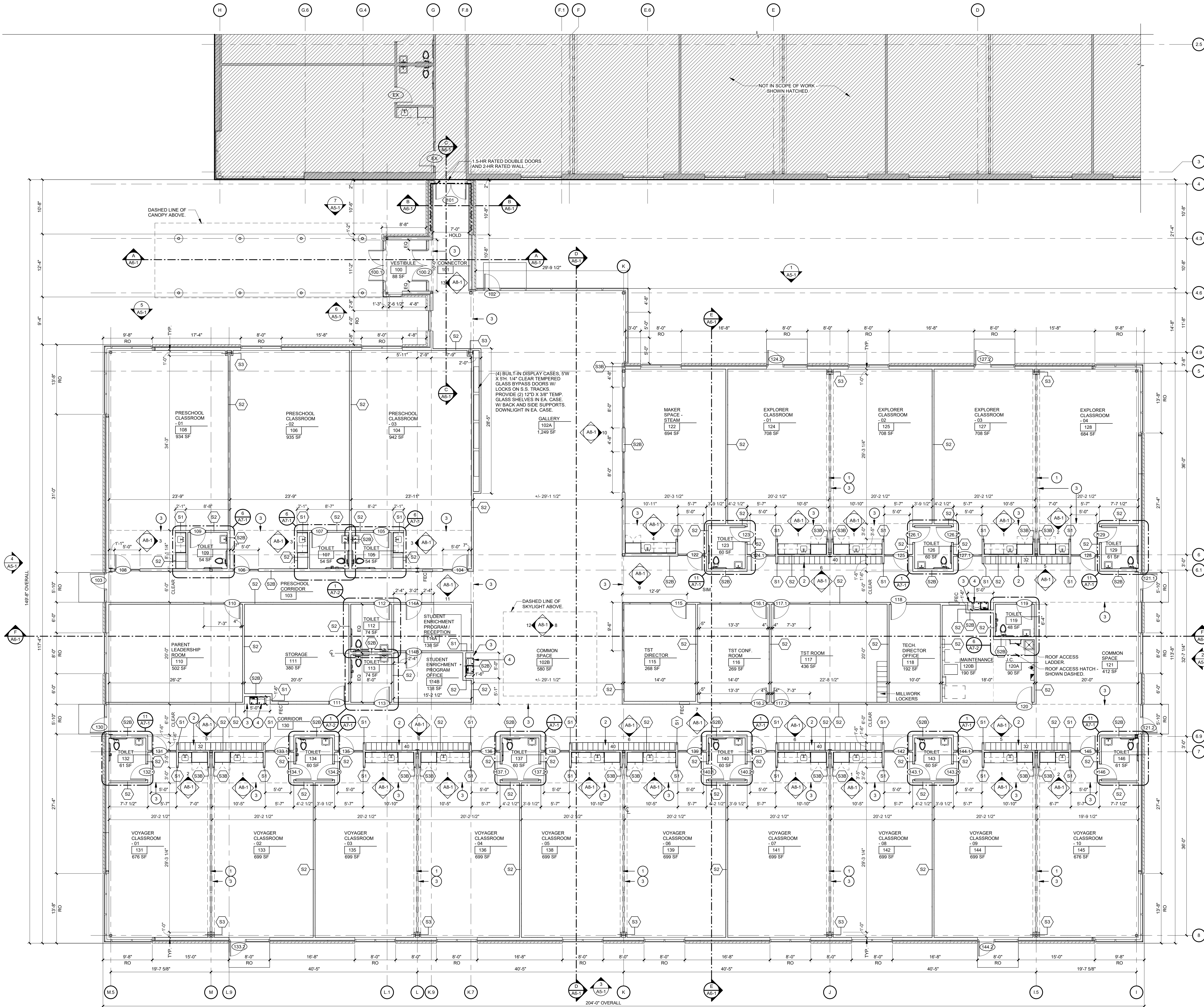
FLOOR PLAN KEY NOTES

- ACCORDIAN PARTITION DOOR AS CLASSROOM DIVIDER.
- 30 1/4" x 12 1/2" x 18 1/2" METAL LOCKERS - (2) PER TIER W/ SLOPING TOP. METAL FILLER PIECE EQUAL AT ENDS AS REQUIRED - MATCH LOCKERS.
- BULKHEAD ABOVE - SHOWN DASHED. SEE A3 SERIES FOR MORE INFO.
- CHILDREN'S USE DRINKING FOUNTAIN MOUNTING HEIGHTS - TYP. SEE A7 SERIES FOR MORE INFO.

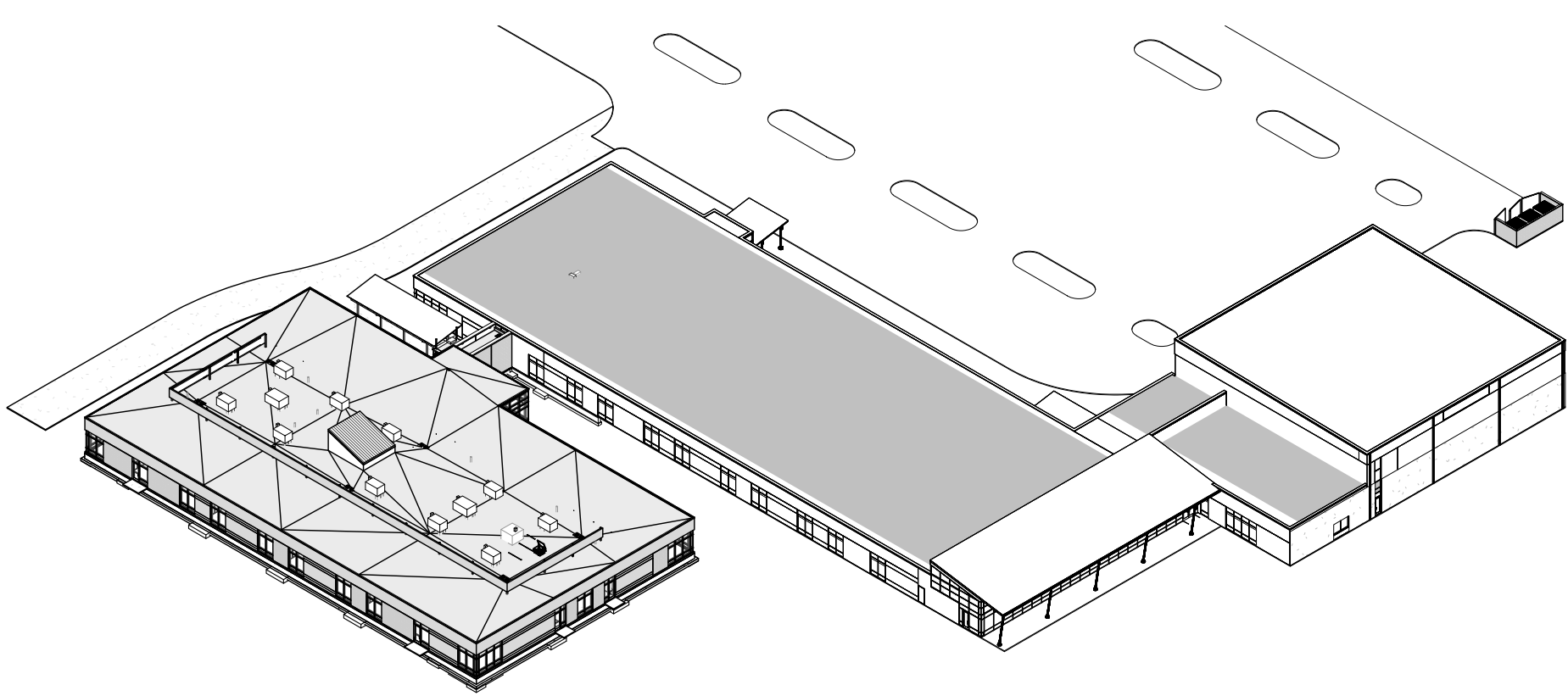
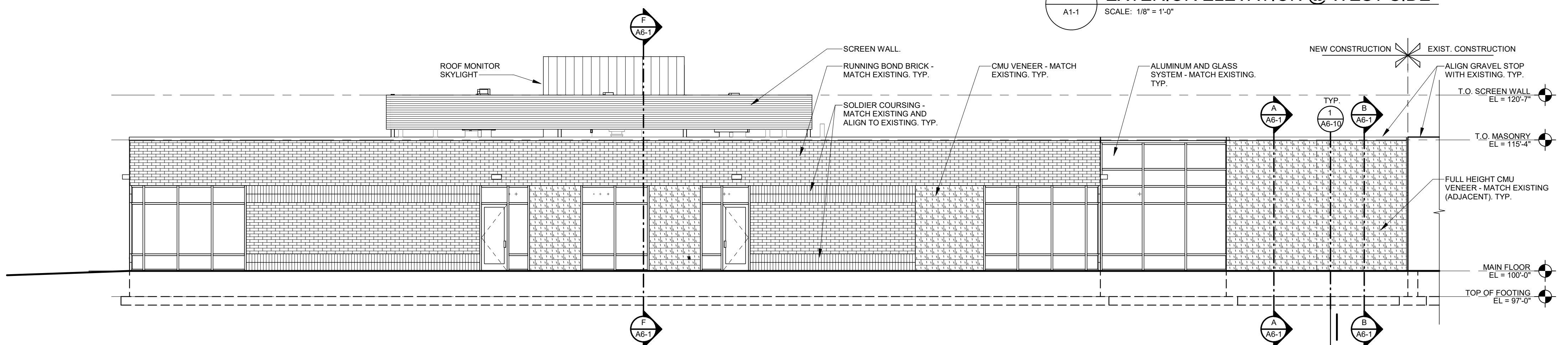
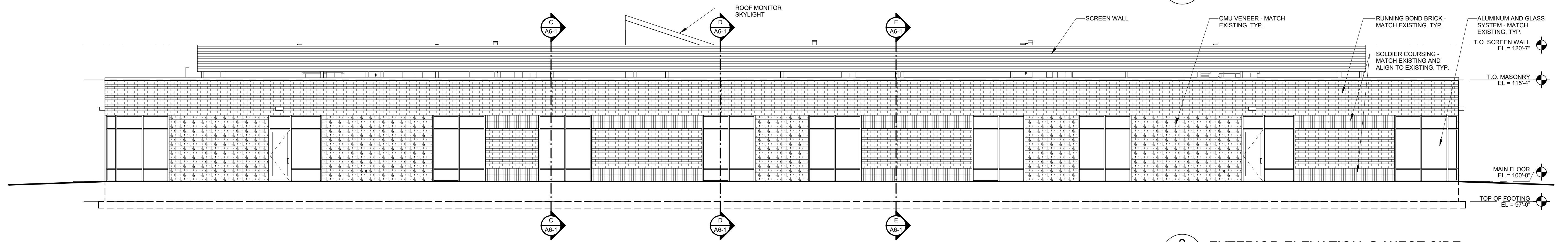
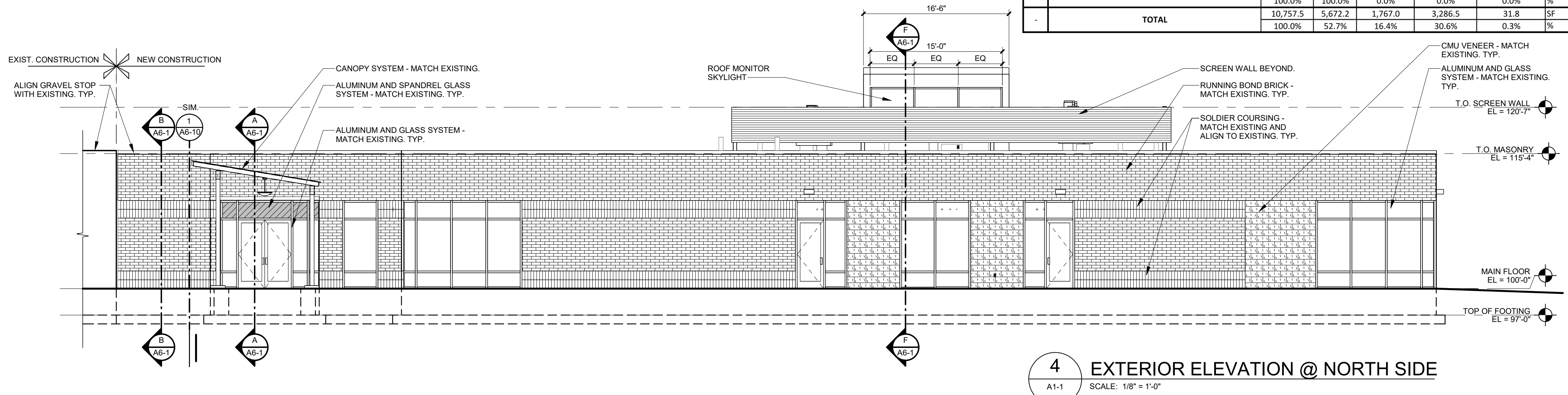
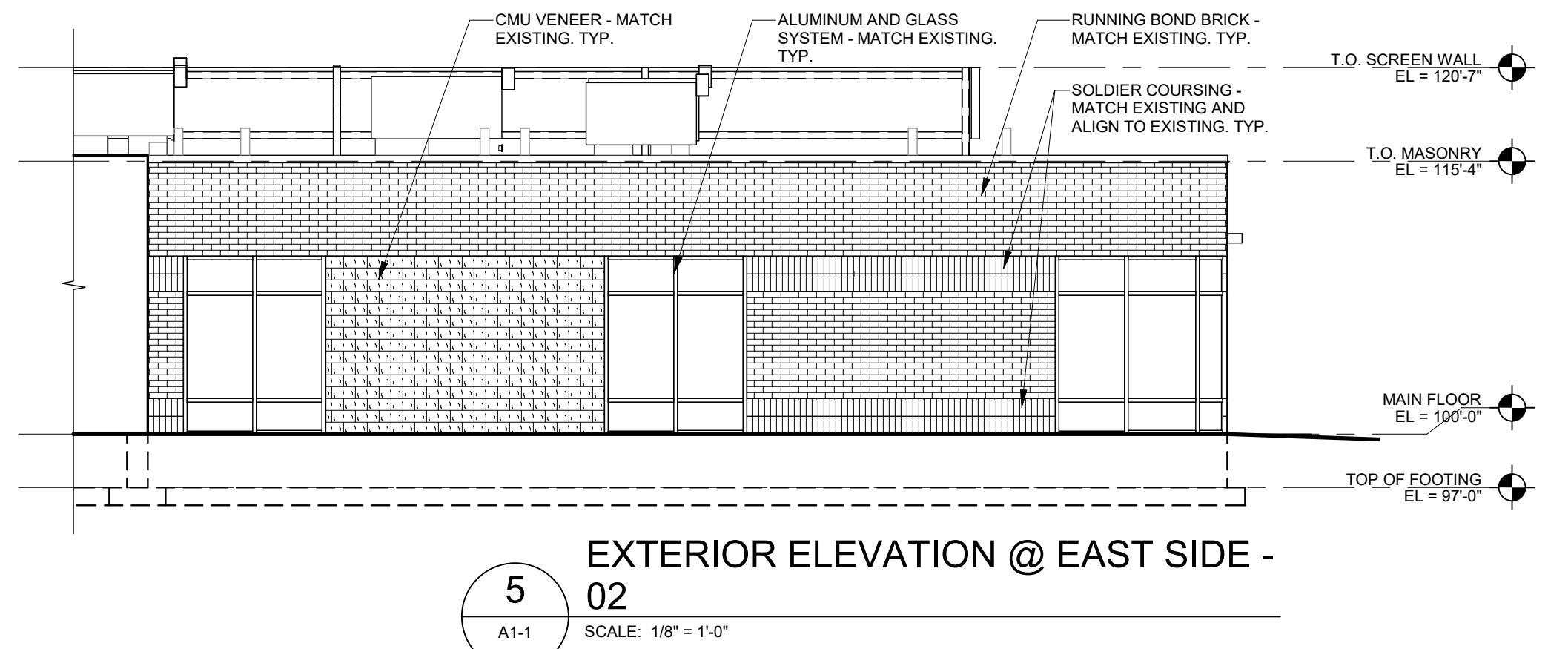
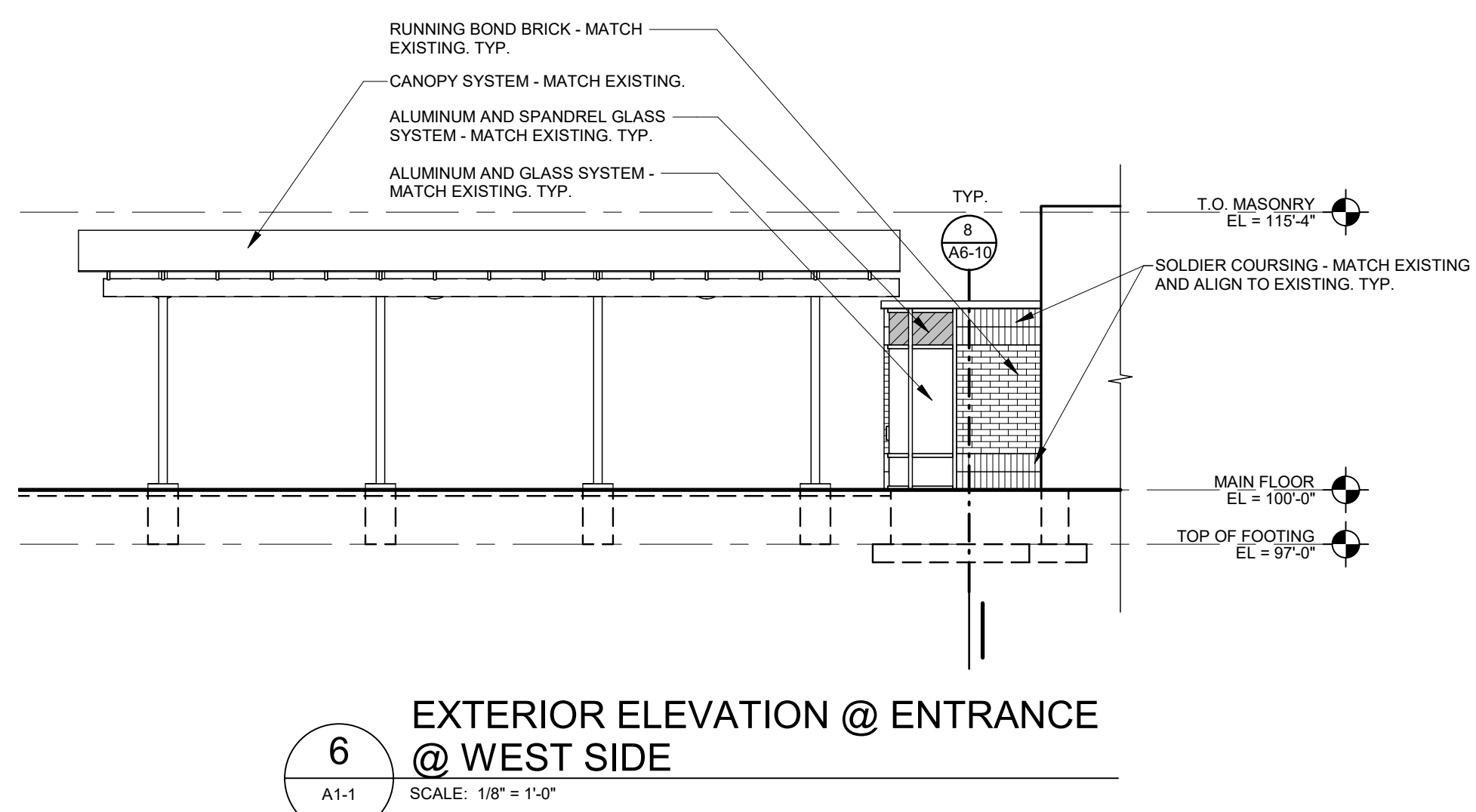
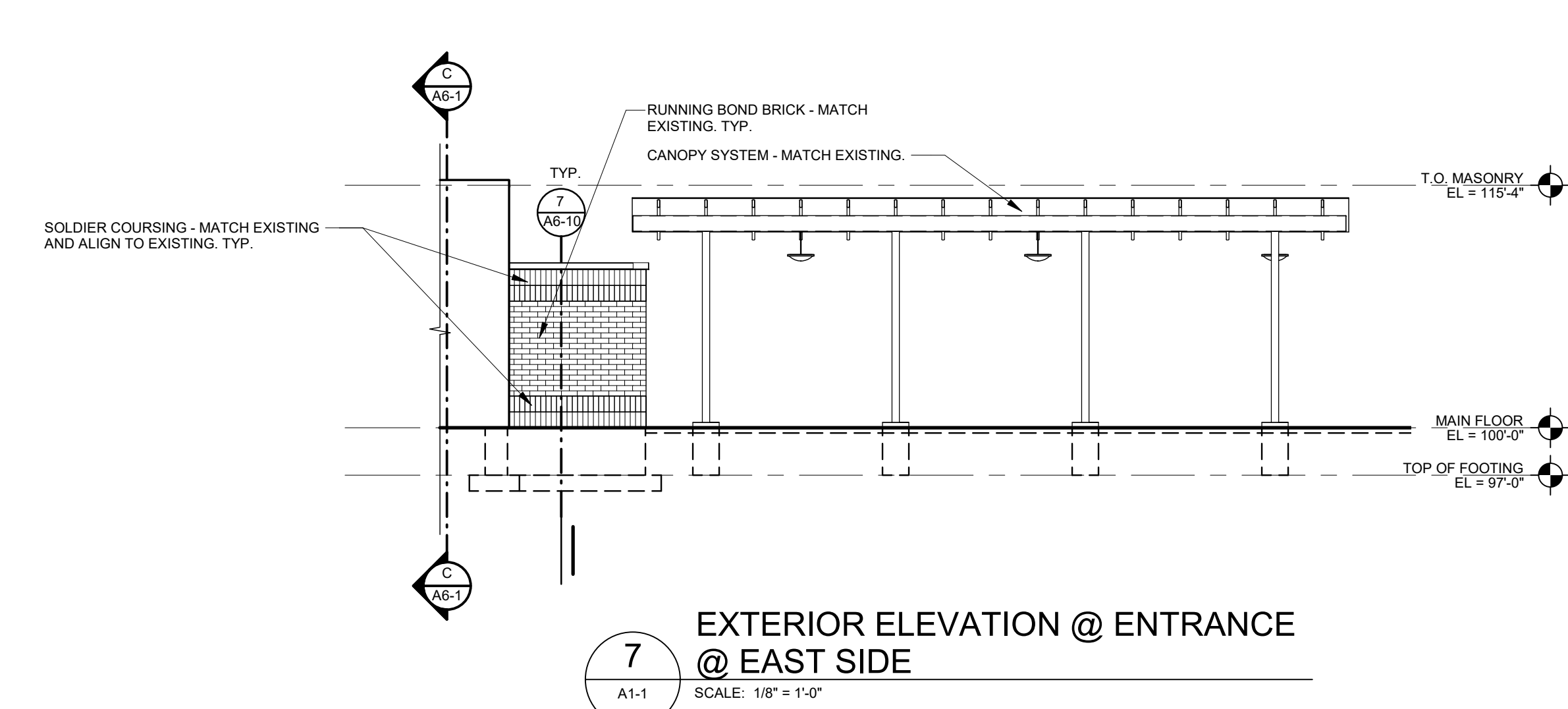
MAIN FLOOR PLAN

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

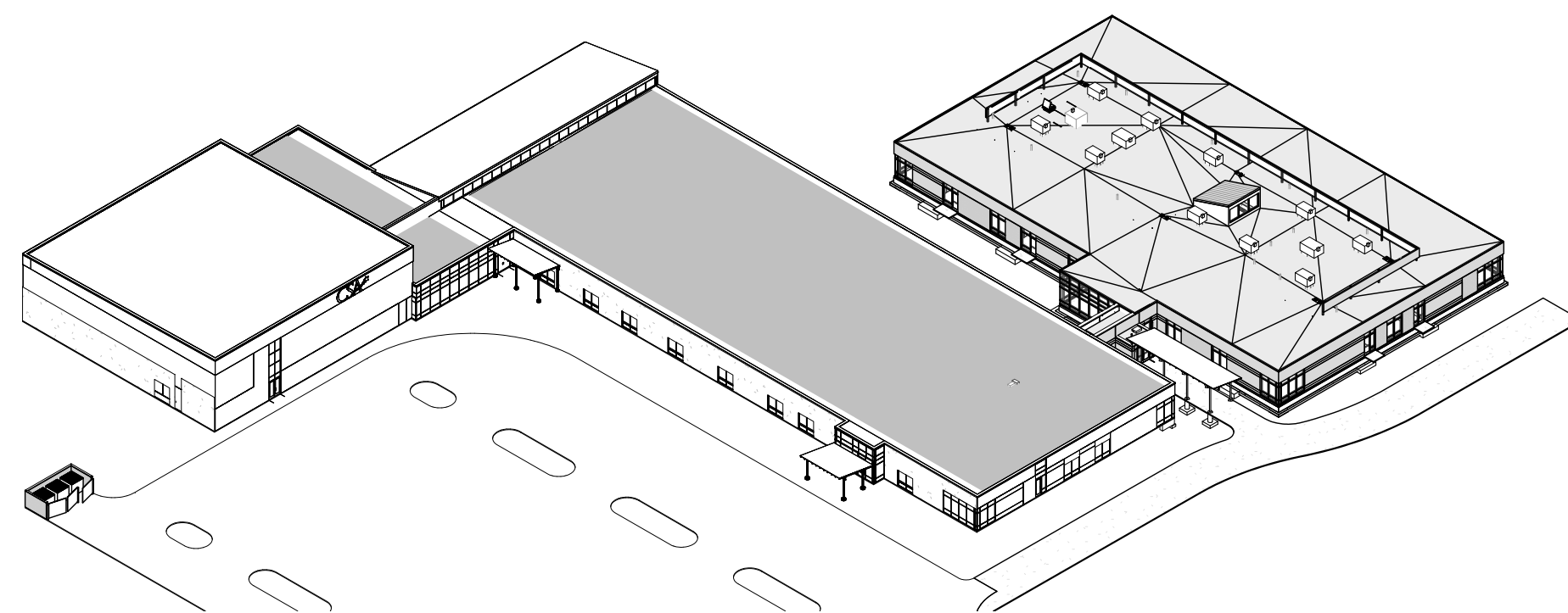
GROSS AREA: 24,310 SF
USABLE AREA: 15,967 SF



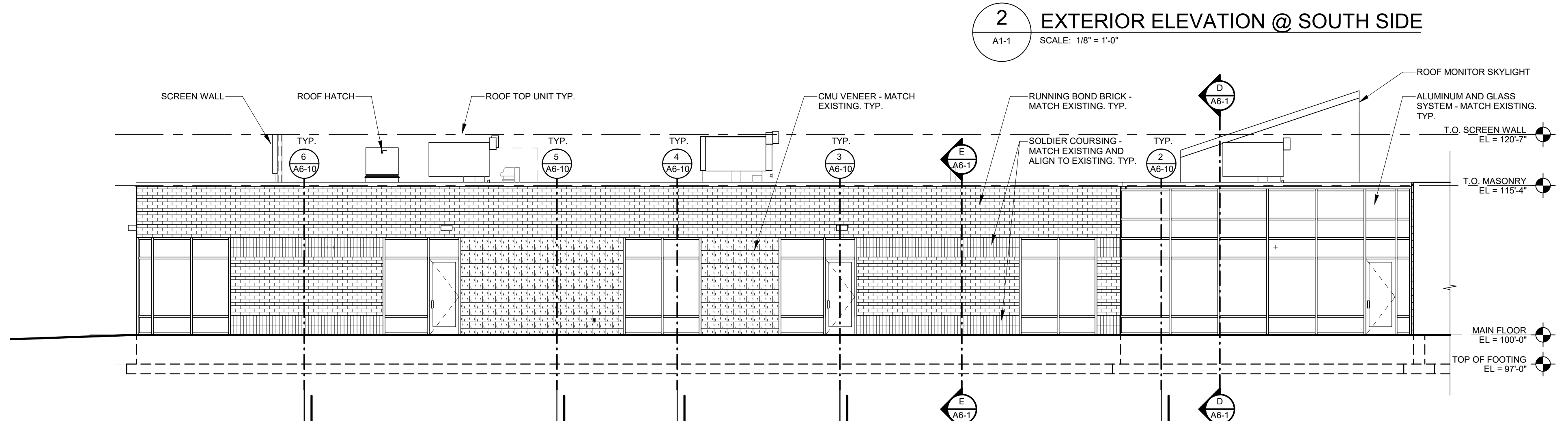
EXTERIOR ELEVATION LEGEND						
	BRICK - RUNNING BOND - MATCH EXISTING. TYP.		CMU VENEER (SPLIT FACE) - RUNNING BOND - MATCH EXISTING. TYP.		INSULATED SPANDREL GLASS - MATCH EXISTING SYSTEM.	
	BRICK - SOLDIER COURSE - MATCH EXISTING. TYP.		CLEAR INSULATED GLASS - MATCH EXISTING SYSTEM.			
NOTES: 1. SEE SPECS FOR BRICK, STONE, GLASS, AND METAL PANEL TYPES 2. "C.J." = CONTROL JOINT						
FACADE MATERIALS						
AS-1	VIEW:	TOTAL:	BRICK:	SPLIT FACE CMU:	CLEAR INSUL. GLASS:	INSUL. SPANDREL GLASS:
1	EXTERIOR ELEVATION @ EAST SIDE - 01	1,996.7	878.4	246.7	871.6	0.0
		100.0%	44.0%	12.4%	43.7%	0.0%
2	EXTERIOR ELEVATION @ SOUTH SIDE	2,277.8	1,063.6	521.5	694.7	0.0
		100.0%	46.6%	22.9%	30.5%	0.0%
3	EXTERIOR ELEVATION @ WEST SIDE	3,106.8	1,631.1	642.2	833.5	0.0
		100.0%	52.5%	20.7%	26.8%	0.0%
4	EXTERIOR ELEVATION @ NORTH SIDE	2,277.5	1,455.9	199.9	598.2	23.5
		100.0%	63.9%	8.8%	26.3%	1.0%
5	EXTERIOR ELEVATION @ EAST SIDE - 02	925.3	511.8	156.7	256.8	0.0
		100.0%	55.3%	16.9%	27.8%	0.0%
6	EXTERIOR ELEVATION @ ENTRANCE @ WEST SIDE	86.7	46.7	0.0	31.7	8.3
		100.0%	53.9%	0.0%	36.6%	9.5%
7	EXTERIOR ELEVATION @ ENTRANCE @ EAST SIDE	86.7	86.7	0.0	0.0	0.0
		100.0%	100.0%	0.0%	0.0%	0.0%
	TOTAL	10,757.5	5,672.2	1,767.0	3,286.5	31.8
		100.0%	52.7%	16.4%	30.6%	0.3%



3D ISOMETRIC - SOUTH WEST



3D ISOMETRIC - NORTH EAST



EXTERIOR ELEVATION @ EAST SIDE - 01

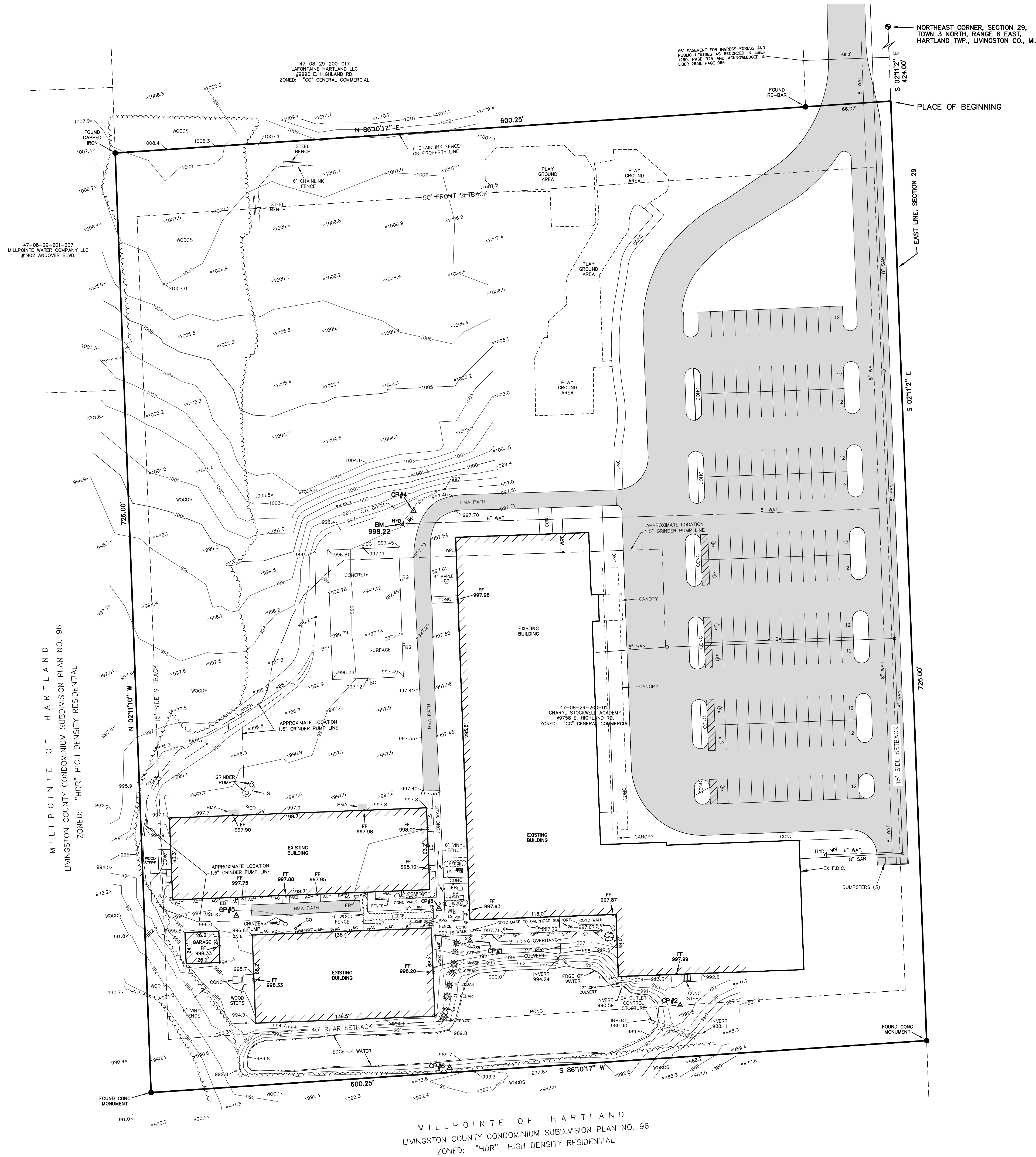
P:\220149.01 Charyl Stockwell Academy\CADD\DWG\220149.1_Charyl Stockwell Academy DESIGN SHEETS.dwg, 7/27/2022 1:59:24 PM_LISA FRIZZELL

BENCHMARKS - NAVD88

ELEVATION = 998.22
TOP FENCE BOLT ON WEST SIDE OF
HYDRANT, LOCATED 41'± WEST & 10'±
NORTH OF THE MOST NW CORNER OF
CHARYL STOCKWELL ACADEMY BUILDINGS.

CONTROL POINTS

CP#1 M+B RED CAP N 3927.3691 E 4691.3922 ELEV 997.52	CP#2 M+B RED CAP N 3877.9173 E 4653.5016 ELEV 992.74	CP#3 PK NAIL N 3952.5979 E 4667.2042 ELEV 997.26
CP#4 M+B RED CAP N 4259.9081 E 4647.6883 ELEV 996.97	CP#5 M+B RED CAP N 3947.2053 E 4510.7607 ELEV 996.69	CP#6 M+B RED CAP N 3959.8170 E 4675.5920 ELEV 991.99



PROPERTY DESCRIPTION

Part of the East one-half of the Northeast one-quarter of Section 29, Town 3 North, Range 6 East, Hartland Township, Livingston County, Michigan, described as: **COMMENCING** at the Northeast corner of said Section 29; thence South 02°11'10" East along the East line of said Section 29, 424.00 feet to the **POINT OF BEGINNING** of the parcel to be described; thence continuing South 02°11'10" East along said East line, 726.00 feet; thence South 86°10'17" West, 600.25 feet; thence North 02°11'10" West, 726.00 feet; thence North 86°10'17" East, 600.25 feet to the point of beginning.

10.00 Acres
435,600 SFT

AND INCLUDING the use of a 66 foot wide private road easement for ingress and egress and public utilities as described below: Part of the East one-half of the Northeast one-quarter of Section 29, Town 3 North, Range 6 East, Hartland Township, Livingston County, Michigan, described as: **COMMENCING** at the Northeast corner of said Section 29; thence South 02°11'10" East along the East line of said Section 29, 48.26 feet to the **POINT OF BEGINNING** of the easement to be described; thence continuing South 02°11'10" East along said East line, 375.74 feet; thence South 86°10'17" West, 65.07 feet; thence North 02°11'10" West, 361.08 feet to the Southerly right of way line of M-59 highway; thence North 86°28'18" East along said right of way line, 16.14 feet; thence along said right of way line North 03°31'42" West, 15.00 feet; thence North 86°28'18" East along said right of way line, 50.27 feet to the point of beginning.

LEGEND	
●	SURVEY IRON (FOUND)
○	SURVEY IRON (SET)
△	HYDRANT (HYD)
◊	WATER VALVE (WV)
◊	SAN CLEANOUT (CO)
◊	GAS VENT (GV)
◊	ELECTRIC BOX (EB)
◊	AIR CONDITIONER (AC)
◊	STEEL POST (SP)
◊	WOOD POST (WP)
◊	BASKETBALL GOAL (BG)
LS	LANDSCAPE AREA
FF	FINISHED FLOOR
---	FENCE
---	HOT MIX ASPHALT SURFACE (HMA)

REV SITE PLAN ISSUE	07-27-22
Design	M&B/JFL
PM / PA	/
Drawn	M&B/FEF
IA Project Number	20220121

CIVIL SET SHEET SCHEDULE
C-1.0 BOUNDARY & TOPOGRAPHIC SURVEY
C-1.1 EXISTING NATURAL FEATURES INVENTORY
C-1.2 REMOVAL PLAN
C-1.3 SITE & UTILITY PLAN
C-1.4 GRADING & SOIL EROSION CONTROL

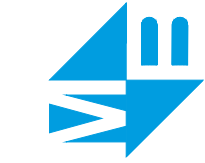
BOUNDARY & TOPOGRAPHIC SURVEY

C-1.0

Charyl Stockwell Academy
Classroom Addition

9759 East Highland Road
Howell, MI 48843

Moore+Bruggink
Consulting Engineers
2020 Monroe Ave NW
Grand Rapids, MI 49503
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PROJECT NO.: 220148401



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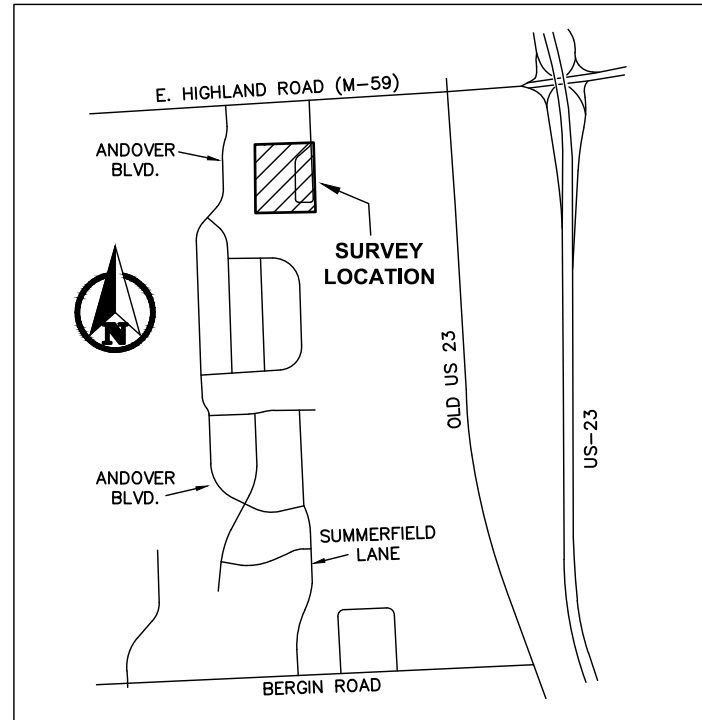
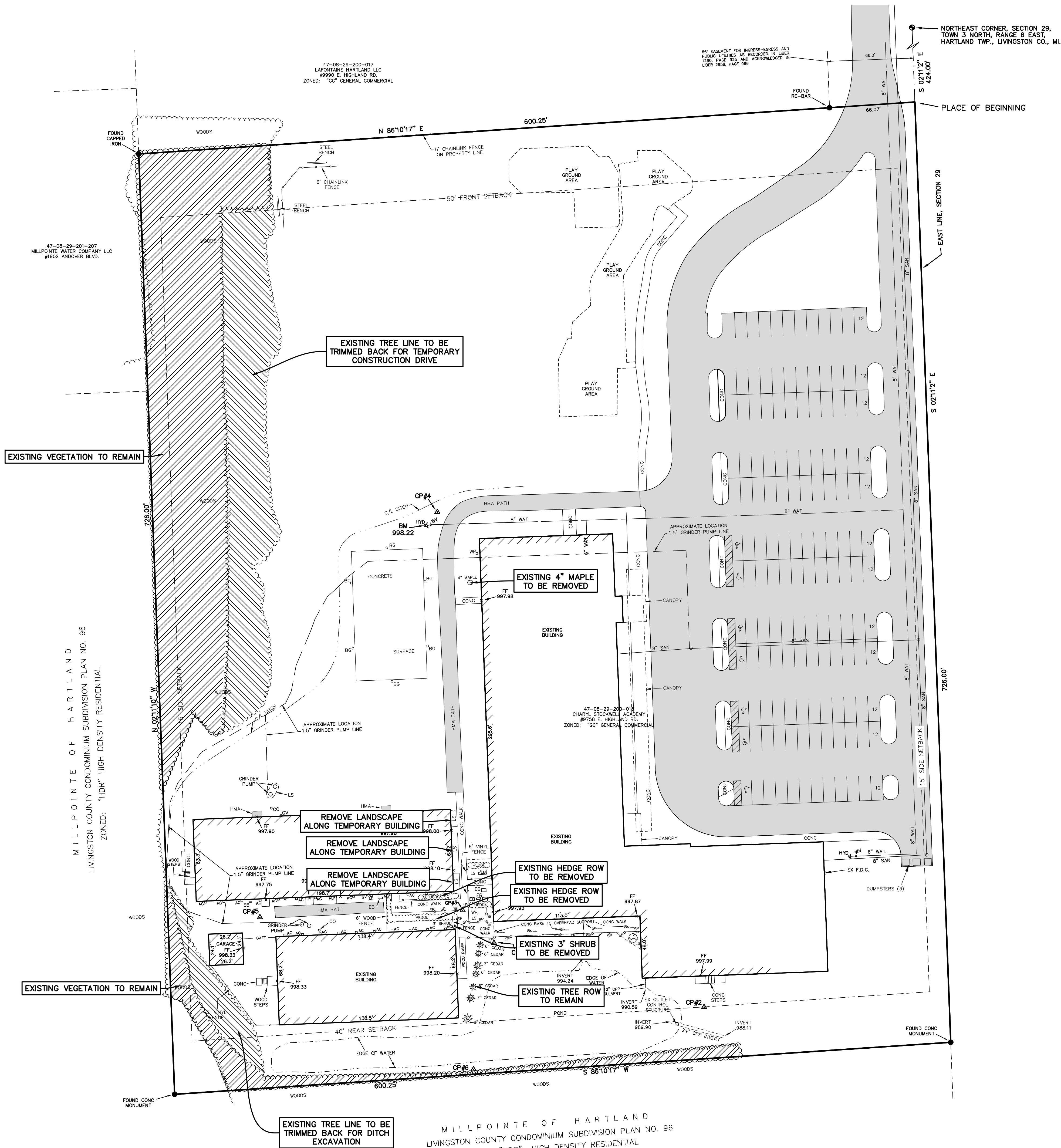


BENCHMARKS - NAVD88

ELEVATION = 998.22
TOP FANGE BOLT ON WEST SIDE OF
HYDRANT, LOCATED 41'± WEST & 10'±
NORTH OF THE MOST NW CORNER OF
CHARYL STOCKWELL ACADEMY BUILDINGS.

CONTROL POINTS

CP#1 M+8 RED CAP N 3927.3691 E 4691.3922 ELEV 997.52	CP#2 M+8 RED CAP N 3877.9173 E 4653.5016 ELEV 992.74	CP#3 PK NAIL N 3952.5979 E 4667.2042 ELEV 997.26
CP#4 M+8 RED CAP N 4225.9381 E 4647.6883 ELEV 996.97	CP#5 M+8 RED CAP N 3947.2053 E 4510.7607 ELEV 996.69	CP#6 M+8 RED CAP N 3929.8170 E 4675.5920 ELEV 991.99



PROPERTY DESCRIPTION

Part of the East one-half of the Northeast one-quarter of Section 29, Town 3 North, Range 6 East, Hartland Township, Livingston County, Michigan, described as: COMMENCING at the Northeast corner of said Section 29; thence South 02°11'10\"/>

10.00 Acres
435,600 SFT

AND INCLUDING the use of a 66 foot wide private road easement for ingress and egress and public utilities as described below: Part of the East one-half of the Northeast one-quarter of Section 29, Town 3 North, Range 6 East, Hartland Township, Livingston County, Michigan, described as: COMMENCING at the Northeast corner of said Section 29; thence South 02°11'10\"/>

LEGEND

- - SURVEY IRON (FOUND)
- - SURVEY IRON (SET)
- △ - HYDRANT (HYD)
- ~ - WATER VALVE (WV)
- - SAN CLEANOUT (CO)
- - GAS VENT (GV)
- - ELECTRIC BOX (EB)
- - AIR CONDITIONER (AC)
- - STEEL POST (SP)
- - WOOD POST (WP)
- - BASKETBALL GOAL (BG)
- LS - LANDSCAPE AREA
- FF - FINISHED FLOOR
- FENCE
- HOT MIX ASPHALT SURFACE (HMA)



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Moore+Bruggink
Consulting Engineers



Charyl Stockwell Academy
Classroom Addition

9759 East Highland Road
Howell, MI 48843

REV SITE PLAN ISSUE	07-27-22
Design	M&B/JFL
PM / PA	/
Drawn	M&B/FEF
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EXISTING
NATURAL
FEATURES

C-1.1

CIVIL SET SHEET SCHEDULE
C-1.0 BOUNDARY & TOPOGRAPHIC SURVEY
C-1.1 EXISTING NATURAL FEATURES INVENTORY
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C-1.3 SITE & UTILITY PLAN
C-1.4 GRADING & SOIL EROSION CONTROL

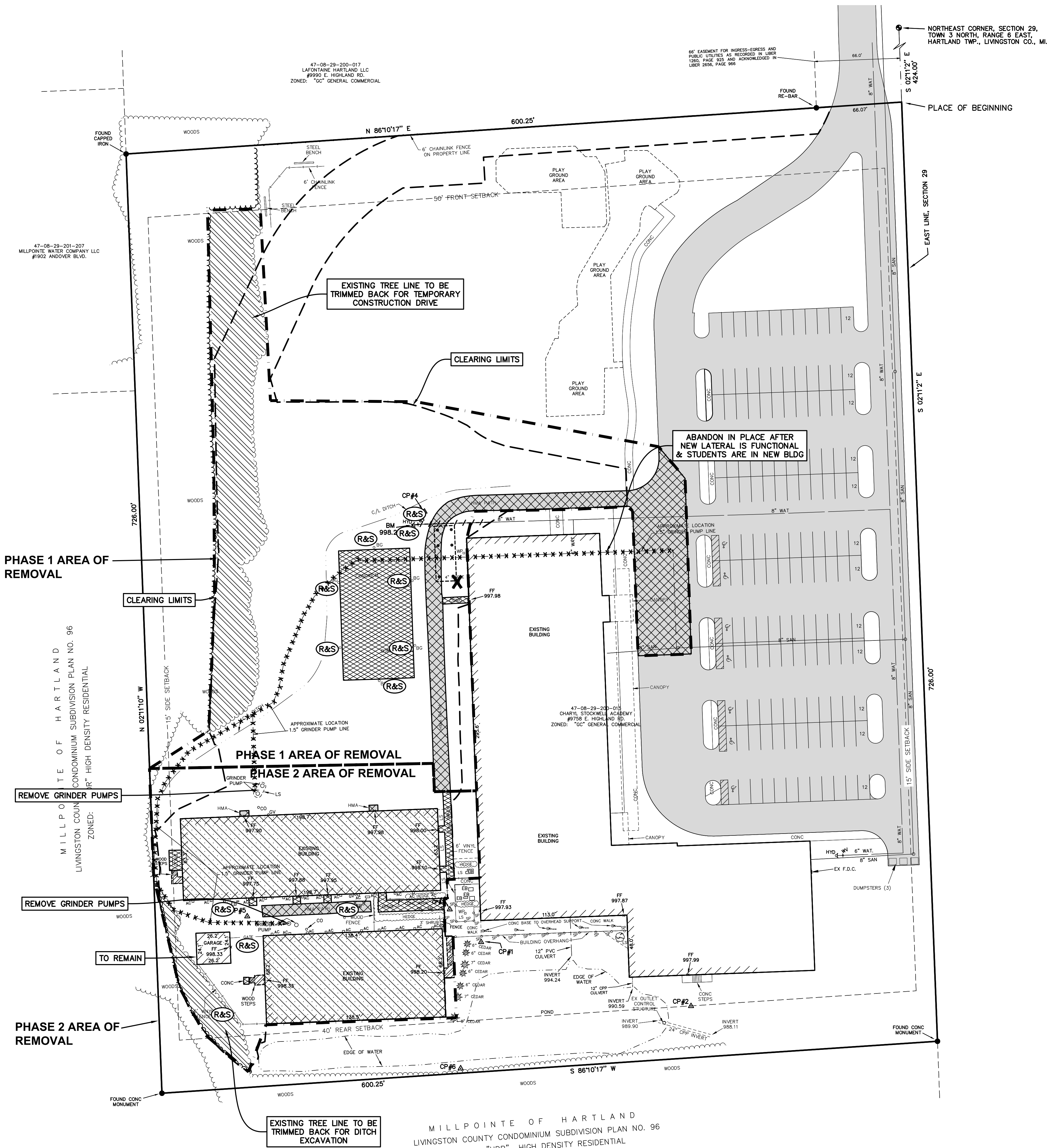
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BENCHMARKS - NAVD88

ELEVATION - 998.22
TOP FANGE BOLT ON WEST SIDE OF
HYDRANT, LOCATED 41'± WEST & 10'±
NORTH OF THE MOST NW CORNER OF
CHARYL STOCKWELL ACADEMY BUILDINGS.

CONTROL POINTS

CP#1	CP#2	CP#3
M+B RED CAP	M+B RED CAP	PK NAIL
N 3927.3691	N 3877.8173	N 3852.9979
E 4691.3922	E 4853.5016	E 4667.2042
ELEV 997.52	ELEV 992.74	ELEV 997.26
CP#4	CP#5	CP#6
M+B RED CAP	M+B RED CAP	M+B RED CAP
N 4259.8081	N 3847.2053	N 3829.8170
E 4647.6883	E 4510.7607	E 4675.5920
ELEV 996.97	ELEV 996.69	ELEV 991.99



GENERAL DEMOLITION NOTES:

1. THE CONTRACTOR SHALL OBTAIN ALL PERMITS AND SURETY AS PART OF THIS WORK.
2. THE CONTRACTOR SHALL CALL MISS DIG 3 WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.
3. THE CONTRACTOR SHALL REMOVE ALL CONCRETE, HMA PAVEMENT, SANITARY SEWER STRUCTURES, SANITARY SEWER PIPE, LIGHT POLES, FENCING, UNDERGROUND ELECTRIC, VEGETATION, AIR CONDITIONERS, BASKETBALL POSTS AND SO ON AS INDICATED ON THIS PLAN TO PREPARE THE SITE FOR IMPROVEMENTS. THE HYDRANT AND VALVE BOX SHALL BE REMOVED AND SALVAGED.
4. ALL SOIL EROSION CONTROL MEASURES SHALL COMPLY WITH ACT 451 OF PUBLIC ACTS OF 1997, SOIL EROSION AND SEDIMENTATION CONTROL, NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION ACT, AND THE STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENTATION CONTROL AS ADOPTED BY LIVINGSTON COUNTY..
5. ALL SOIL EROSION CONTROL MEASURE SHALL BE IN PLACE PRIOR TO COMMENCEMENT OF EARTHWORK ACTIVITIES.
6. THE CONTRACTOR SHALL CLEAN PUBLIC STREETS DAILY OF ANY DIRT AND/OR DEBRIS FROM CONSTRUCTION SITE.

LEGEND

- - SURVEY IRON (FOUND)
- - SURVEY IRON (SET)
- △ - HYDRANT (HYD)
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- - SAN CLEANOUT (CO)
- - GAS VENT (GV)
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- LS - LANDSCAPE AREA
- FF - FINISHED FLOOR
- FENCE
- - HOT MIX ASPHALT SURFACE (HMA)

REMOVAL LEGEND

- REMOVE BUILDING
- REMOVE BITUMINOUS
- REMOVE CONCRETE
- REMOVE WATER MAIN
- REMOVE SANITARY SEWR
- TREE REMOVAL
- RELOCATE BY OTHERS
- REMOVE & SALVAGE

REMOVAL PLAN
C-1.2

CIVIL SET SHEET SCHEDULE
C-1.0 BOUNDARY & TOPOGRAPHIC SURVEY
C-1.1 EXISTING NATURAL FEATURES INVENTORY
C-1.2 REMOVAL PLAN
C-1.3 SITE & UTILITY PLAN
C-1.4 GRADING & SOIL EROSION CONTROL

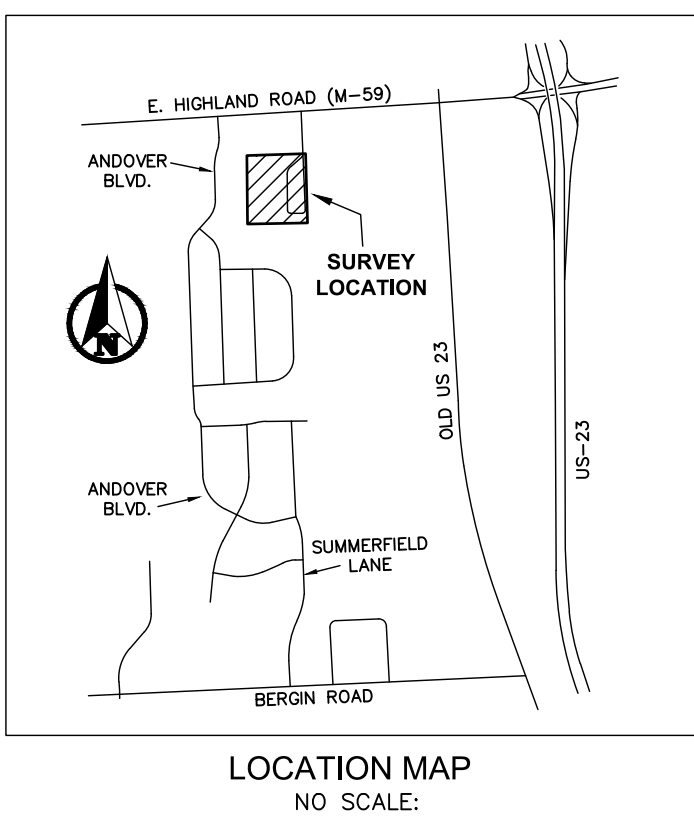
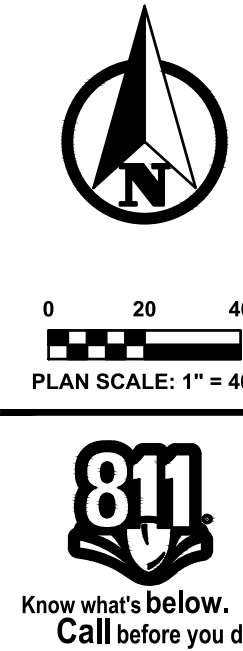
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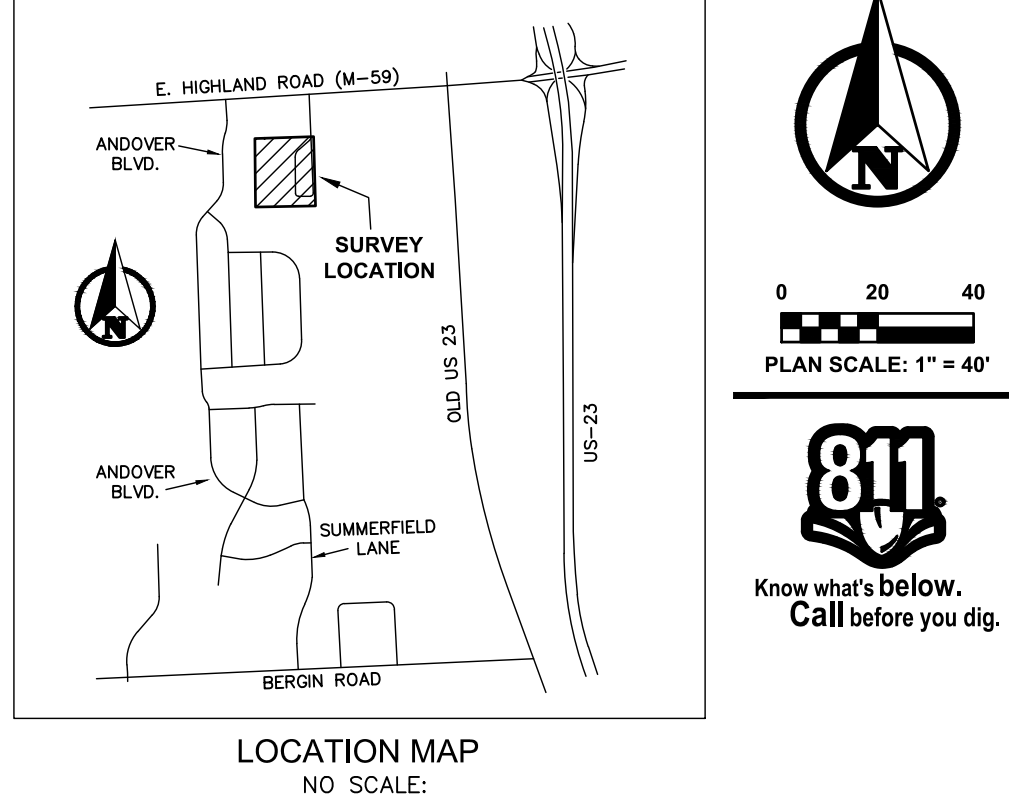
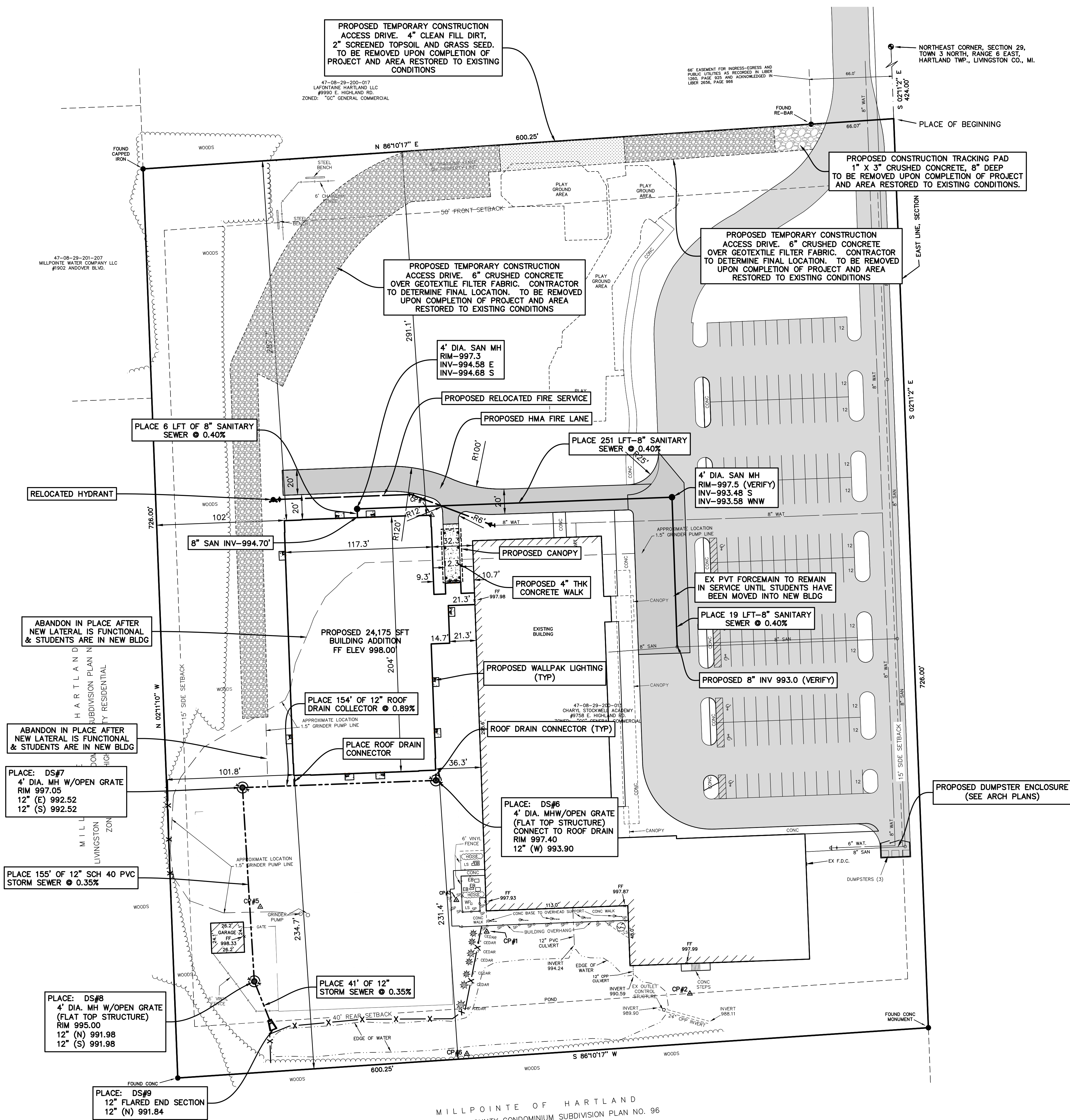
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INTEGRATED
ARCHITECTURE



BENCHMARKS - NAVD88
ELEVATION - 998.22
TOP FANGE BOLT ON WEST SIDE OF
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CP#6 M+B RED CAP N 3829.8170 E 4675.9920 ELEV 991.99



SITE & UTILITY PLAN GENERAL NOTES:

1. THE CONTRACTOR SHALL OBTAIN ALL PERMITS AND SURETY AS PART OF THIS WORK.
2. THE CONTRACTOR SHALL CALL MISS DIG 3 WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.
3. ALL STORM SEWER PIPE SHALL BE ADS N-12 PLASTIC PIPE UNLESS OTHERWISE SPECIFIED.
4. ALL CATCH BASINS AND MANHOLES SHALL BE MINIMUM 4' DIAMETER PRECAST CONCRETE, UNLESS NOTED OTHERWISE.
5. THE PAVED AREAS SUBJECT TO TRUCK TRAFFIC SHALL BE CONSTRUCTED WITH:
12" MDT CL-2 SAND SUBBASE (C.I.P.)
8" 21A4 GRAVEL BASE (C.I.P.)
2"-3C HMA LEVELING COURSE
2"-SE3 HMA WEARING COURSE
6. THE CONTRACTOR SHALL BED AND BACKFILL ALL UNDERGROUND PIPING WITH MDT CL-2 SAND TO A MINIMUM OF 95% MAXIMUM DRY DENSITY PER ASTM- 1557.
7. THIS SITE PLAN SHALL NOT BE USED TO STAKE THE LOCATION OF PROPOSED BUILDING COLUMN LINES. THE SURVEYORS ARE TO USE THE BUILDING FOUNDATION PLANS.
8. THE CONTRACTOR SHALL PLACE AND COMPACT FILL UNDER THE PROPOSED BUILDING AREA TO A MINIMUM OF 95% MAXIMUM DRY DENSITY PER ASTM-1557. ALL OTHER AREAS SHALL BE COMPACTED TO A MINIMUM OF 90% MAXIMUM DRY DENSITY.
9. THE CONTRACTOR SHALL PIPE ALL BUILDING ROOF WATER TO THE STORM WATER DETENTION POND AS SHOWN AND SPECIFIED.
10. THE CONTRACTOR SHALL REQUEST CONSTRUCTION STAKING BY EMAIL USING THE MOORE+BRUGGINK, INC. CONTRACTORS' CONSTRUCTION STAKING REQUEST FORM. ONLY COMPLETED REQUESTS WILL BE SCHEDULED. NOTE THE PROJECT OWNER WILL PAY THE SURVEYOR TO PLACE STAKES ONLY ONCE. ALL LOST AND DAMAGED STAKES ARE THE CONTRACTORS RESPONSIBILITY.
11. THE THREE EXISTING DUMPSTERS ON SITE SHALL BE ENCLOSED WITH SPLIT FACE CMU TO MATCH THE EXISTING SCHOOL BUILDING, WITH WOODEN GATES.

SITE DATA:

EXISTING ZONING: "GC" GENERAL COMMERCIAL
MIN LOT AREA: WITHOUT SEWER-40,000 SFT
WITH SEWER-20,000 SFT
MIN LOT WIDTH: 120'
NAX LOT COVERAGE: 75%
(PRINCIPLE STRUCTURE)
MIN FRONT SETBACK: 50'
MIN REAR SETBACK: WITHOUT SEWER-0'
WITH SEWER-40'
MIN SIDE SETBACK: 15'
MAX BUILDING HEIGHT: 35' OR 2.5 STORIES, WHICHEVER IS LESS

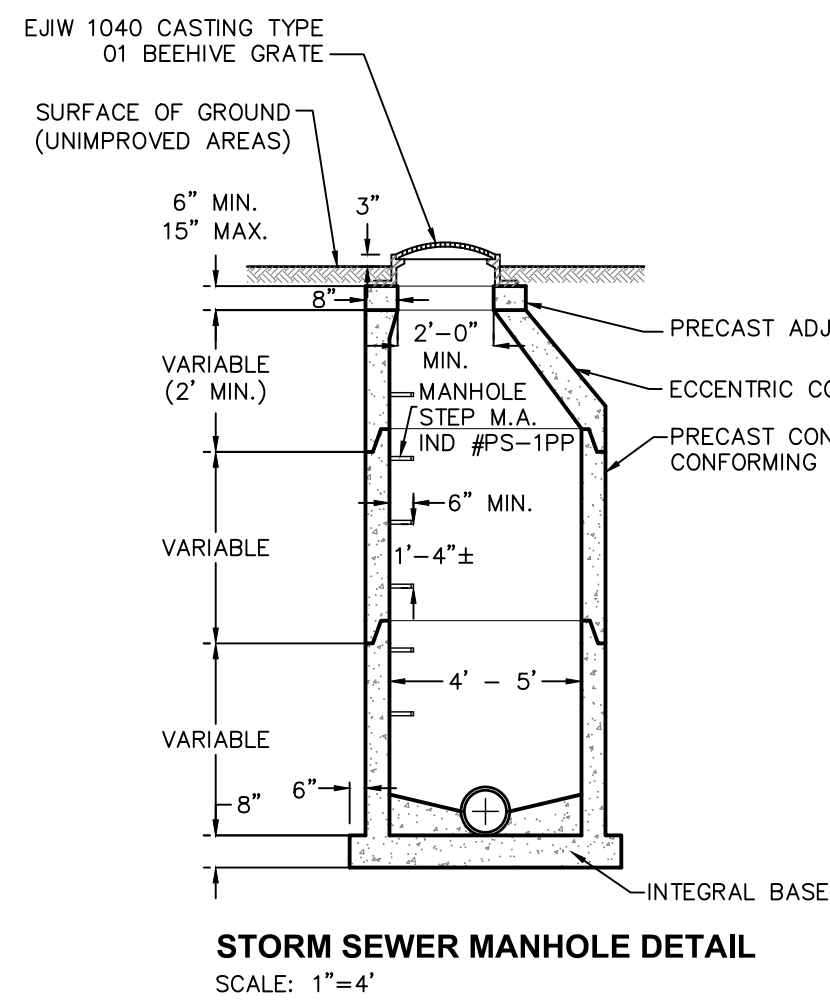
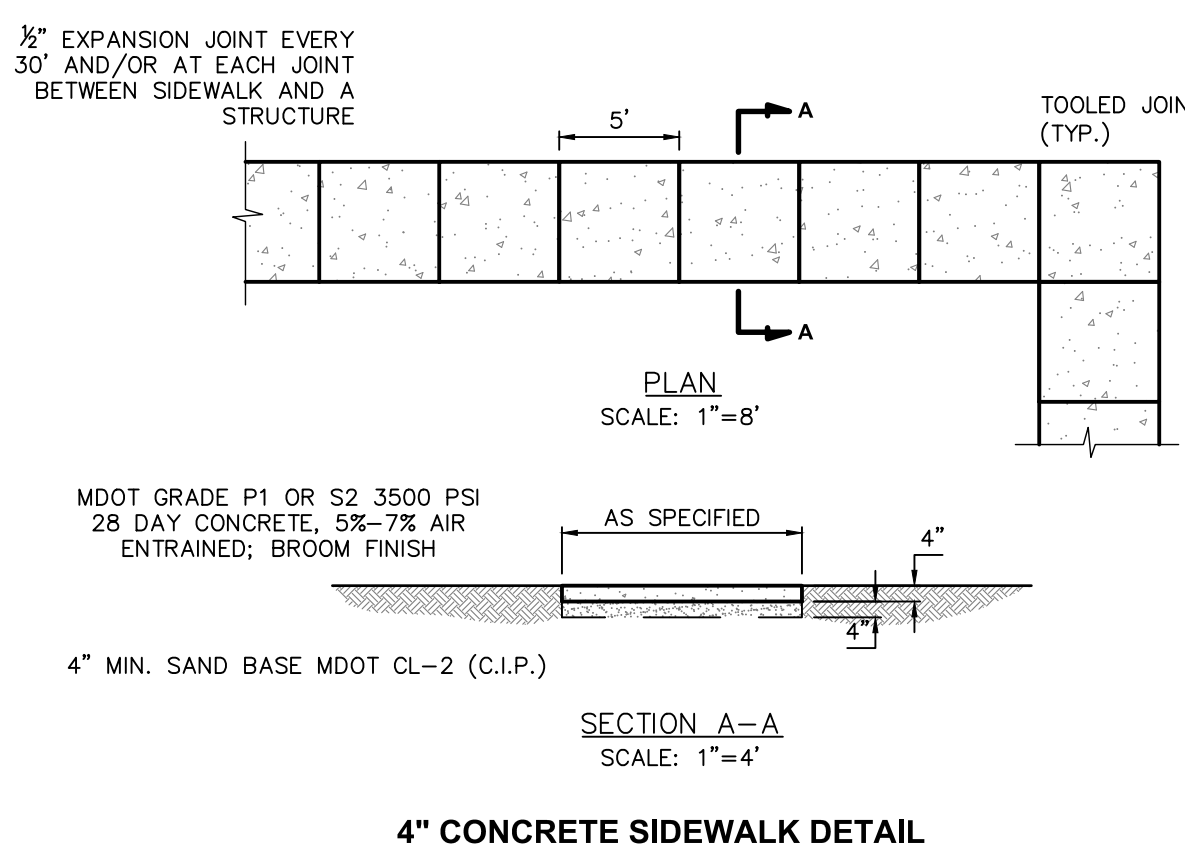
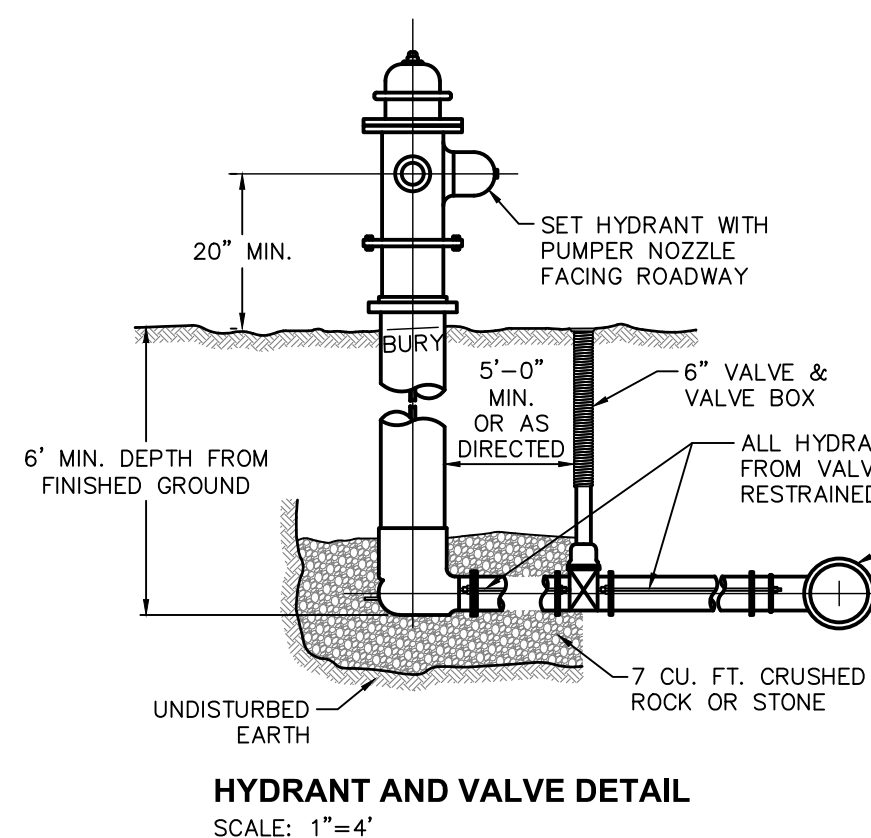
PARKING REQUIREMENTS:
1 SPACE/CLASSROOM PLUS
1/35 SFT ASSEMBLY SEATING AREA

EXISTING CLASSROOMS = 24 (24 SPACES REQUIRED)
PROPOSED CLASSROOMS = 18 (18 SPACES REQUIRED)
1660 SFT/ASSEMBLY SEATING AREA/35 (47 SPACES REQUIRED)

TOTAL PARKING SPACES REQUIRED = 89
TOTAL PARKING SPACES PROVIDED = 144

LOT COVERAGE CALCULATIONS:
EXISTING BUILDINGS = 68,161 SFT (INCL GARAGE)
PROPOSED BUILDINGS = 70,366 SFT (INCL GARAGE)
(EXISTING GARAGE = 631.5 SFT)

PROPOSED BUILDING TOTAL = 70,366 SFT (16.2% COVERAGE)
LOT AREA = 435,600 X 0.75 = 326,700 SFT ALLOWABLE BLDG AREA



CIVIL SET SHEET SCHEDULE
C-1.0 BOUNDARY & TOPOGRAPHIC SURVEY
C-1.1 EXISTING NATURAL FEATURES INVENTORY
C-1.2 REMOVAL PLAN
C-1.3 SITE & UTILITY PLAN
C-1.4 GRADING & SOIL EROSION CONTROL

SITE & UTILITY PLAN

C-1.3



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Consulting Engineers
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Grand Rapids, MI 49503
(616) 963-9801
PROJECT NO. 22014841



Charyl Stockwell Academy
Classroom Addition

9759 East Highland Road
Howell, MI 48843

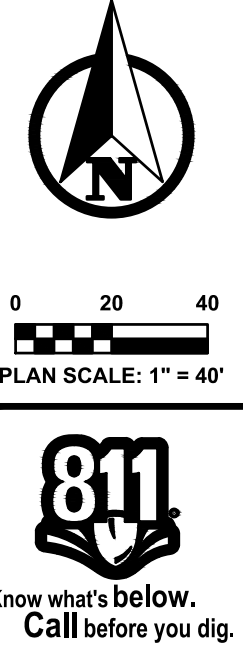
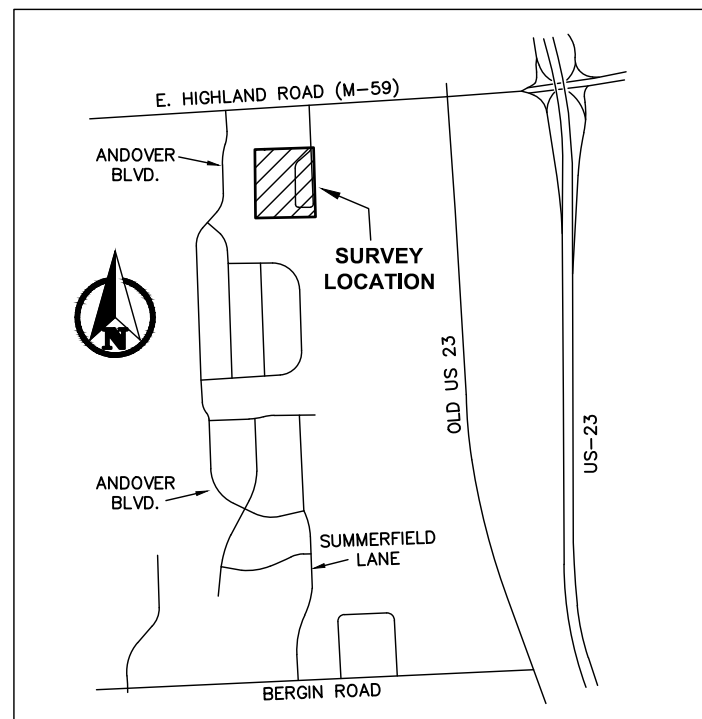
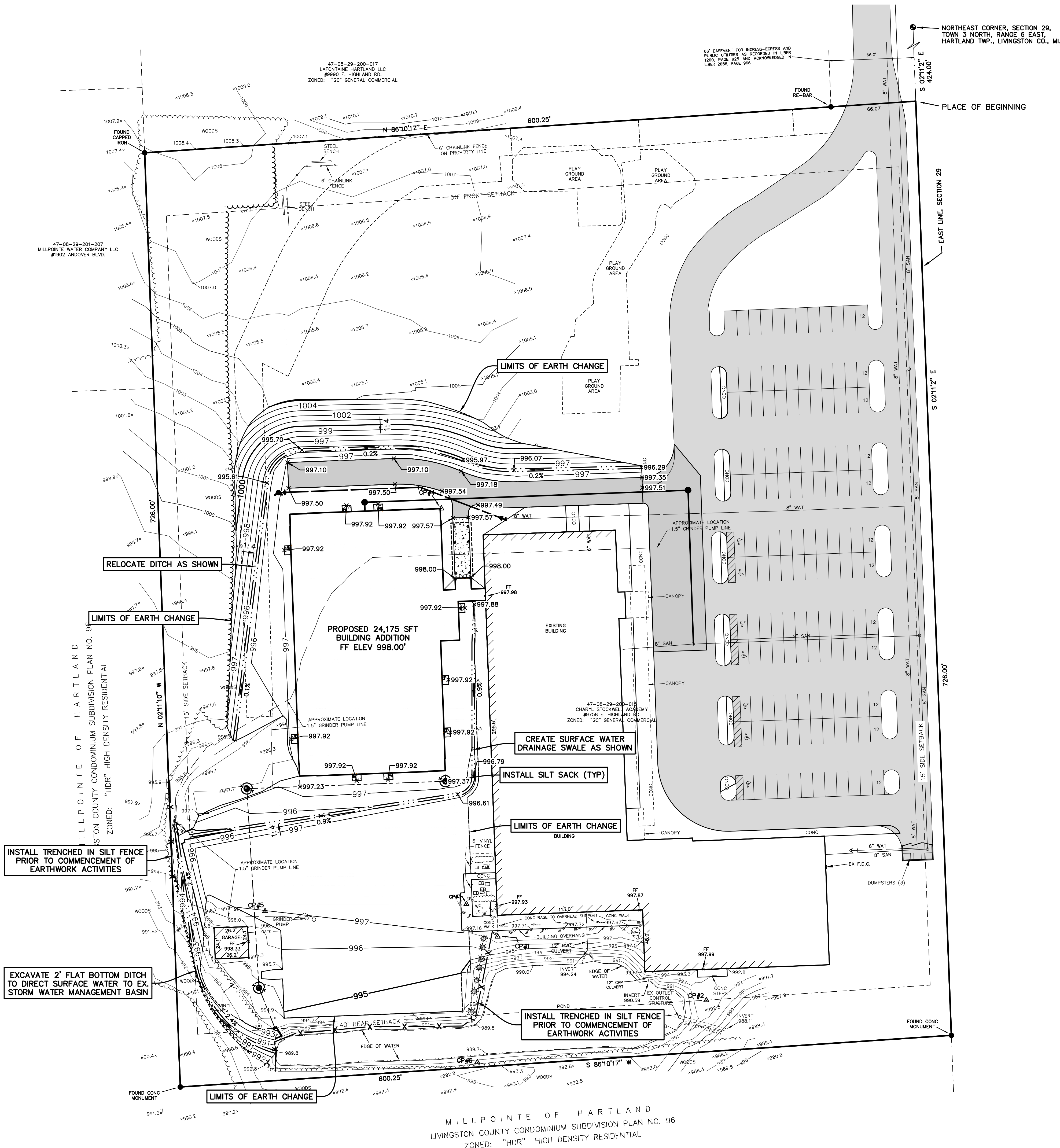
REV SITE PLAN ISSUE 07-27-22
Design M&B/JFL
PM / PA /
Drawn M&B/FEF
IA Project Number 20220121

BENCHMARKS - NAVD88

ELEVATION - 998.22
TOP FANGE BOLT ON WEST SIDE OF
HYDRANT, LOCATED 41± WEST & 10±
NORTH OF THE MOST NW CORNER OF
CHARYL STOCKWELL ACADEMY BUILDINGS.

CONTROL POINTS

CP#1 M+8 RED CAP N 3927.3691 E 4691.3922 ELEV 997.52
CP#2 M+8 RED CAP N 3877.9173 E 4853.5016 ELEV 992.74
CP#3 PK NAIL N 3952.6979 E 4667.2042 ELEV 997.26
CP#4 M+8 RED CAP N 4259.9081 E 4647.6883 ELEV 996.97
CP#5 M+8 RED CAP N 3947.2053 E 4510.7607 ELEV 996.69
CP#6 M+8 RED CAP N 3828.8170 E 4675.5920 ELEV 991.99



GRADING & SOIL EROSION CONTROL NOTES:

1. THE CONTRACTOR SHALL OBTAIN ALL PERMITS AND SURETY AS PART OF THIS WORK.
2. THE CONTRACTOR SHALL CALL MISS DIG 3 WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.
3. THE CONTRACTOR SHALL REQUEST CONSTRUCTION STAKING BY EMAIL USING THE MOORE & BRUGGINK, INC. CONTRACTORS CONSTRUCTION STAKING REQUEST FORM. ONLY COMPLETED REQUESTS WILL BE SCHEDULED. NOTE THE PROJECT OWNER WILL PAY THE SURVEYOR TO PLACE STAKES ONLY ONCE. ALL LOST AND DAMAGED STAKES ARE THE CONTRACTORS RESPONSIBILITY.
4. THE CONTRACTOR SHALL REMOVE ALL CONCRETE, HMA PAVEMENT, SANITARY SEWER STRUCTURES, SANITARY SEWER PIPE, LIGHT POLES, FENCING, UNDERGROUND ELECTRIC, VEGETATION AIR CONDITIONERS, BASKETBALL POSTS AND SO ON AS INDICATED ON THE REMOVAL PLAN TO PREPARE THE SITE FOR IMPROVEMENTS. THE HYDRANT AND VALVE BOX SHALL BE REMOVED AND SALVAGED.
5. NORTH AMERICAN GREEN DS-150 EROSION CONTROL BLANKET SHALL BE PLACED ON ALL SLOPES 1:3 OR GREATER. SECURE BLANKET TO SLOPE PER MANUFACTURERS SPECIFICATIONS.
6. ALL SILT FENCING SHALL BE TRENCHED IN PRIOR TO COMMENCEMENT OF EARTHWORK ACTIVITIES.
7. SILT FENCING IS REQUIRED ALONG ALL DOWNSTREAM EDGES OF THE GRADING LIMITS AND MUST REMAIN IN PLACE UNTIL VEGETATION IS UNIFORMLY RE-ESTABLISHED.
8. ALL SOIL EROSION CONTROL MEASURES SHALL COMPLY WITH ACT 451 OF PUBLIC ACTS OF 1997, SOIL EROSION AND SEDIMENTATION CONTROL, NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION ACT, AND THE STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENTATION CONTROL AS ADOPTED BY LIVINGSTON COUNTY.
9. NEW & EXISTING STORM SEWER INLET POINTS SHALL BE PROTECTED FROM SEDIMENT INFILTRATION WITH INLET FABRIC DROP (SILT SACK) PER CITY OF GRAND RAPIDS APPROVED MANUFACTURERS (H-FLOW AND/OR ACT BRANDS). CONTRACTOR SHALL PROVIDE PRODUCT INFORMATION TO THE CITY PRIOR TO INSTALLATION.
10. ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSPECTED AND MAINTAINED ON A DAILY BASIS, AND IMMEDIATELY FOLLOWING EVERY SIGNIFICANT RAINFALL EVENT.
11. ALL EXCESS SPOILS ARE TO BE REMOVED FROM THE SITE. OTHERWISE STOCKPILES MUST BE PROVIDED WITH TEMPORARY AND PERMANENT STABILIZATION MEASURES.
12. IF EXCESS DIRT IS TO BE PLACED ON SITE, THE LOCATION SHALL BE APPROVED BY THE PROPERTY OWNER & ENGINEER.
13. FILL MATERIAL BROUGHT INTO THE TOWNSHIP SHALL BE FREE OF CONTAMINATION FROM HAZARDOUS SUBSTANCES, DEBRIS, JUNK, OR WASTE.
14. ALL TEMPORARY EROSION CONTROLS MUST REMAIN IN PLACE UNTIL VEGETATION IS UNIFORMLY RE-ESTABLISHED.
15. DUST CONTROL SHALL BE PROVIDED BY MEANS OF WATER DISTRIBUTION ON A REGULAR BASIS OVER AREAS THAT COULD POTENTIALLY PRODUCE DUST CONDITIONS.
16. A TRACKING PAD MUST BE PROVIDED AT CONSTRUCTION ACCESS POINTS TO PREVENT SOILS FROM BEING TRACKED OFF-SITE, PER DETAIL THIS SHEET.
17. CONTRACTOR SHALL SWEEP PAVED AREAS EACH DAY (OR MORE AS NEEDED) BY MECHANICAL MEANS FOR ALL PAVED AREAS IN AND AROUND THE PERIMETER OF THE PROJECT AFFECTED BY TRUCKING OPERATIONS.
18. ALL DISTURBED AREAS SHALL BE RESTORED WITH 4" TOPSOIL (MIN), SEED, FERTILIZER AND MULCH UNLESS OTHERWISE NOTED.
19. CONSTRUCTION ENTRANCE SHALL BE PROVIDED FROM EAST HIGHLAND ROAD..
20. EXISTING SOIL CONDITIONS: URBAN SOILS

STORM WATER DETENTION BASIN NOTES:

EXISTING TOTAL IMPERVIOUS SURFACE AREA: 185,513 SFT (C=0.48)
PROPOSED TOTAL IMPERVIOUS SURFACE AREA: 182,623 SFT (C=0.48)
NET REDUCTION OF IMPERVIOUS SURFACE AREA: -2890 SFT
DUE TO OVERALL DECREASE IN IMPERVIOUS SURFACE AREA FOR THE PROPOSED PROJECT,
NO EXPANSION OF THE EXISTING STORM WATER MANAGEMENT SYSTEM IS NECESSARY.

CONSTRUCTION SCHEDULE

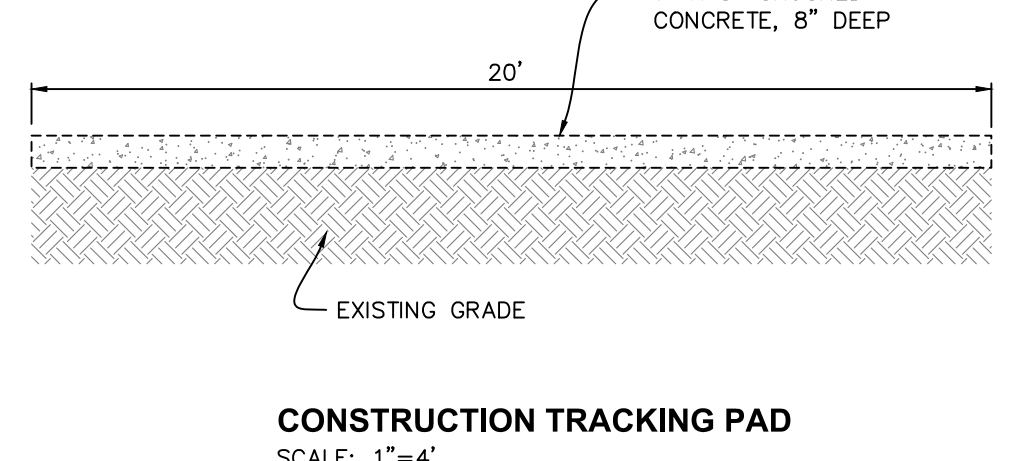
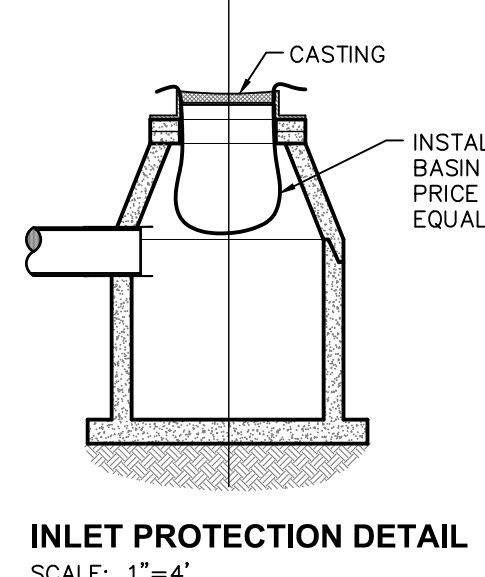
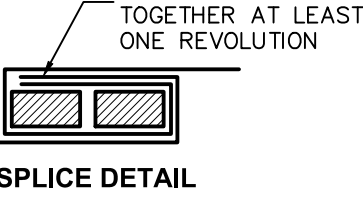
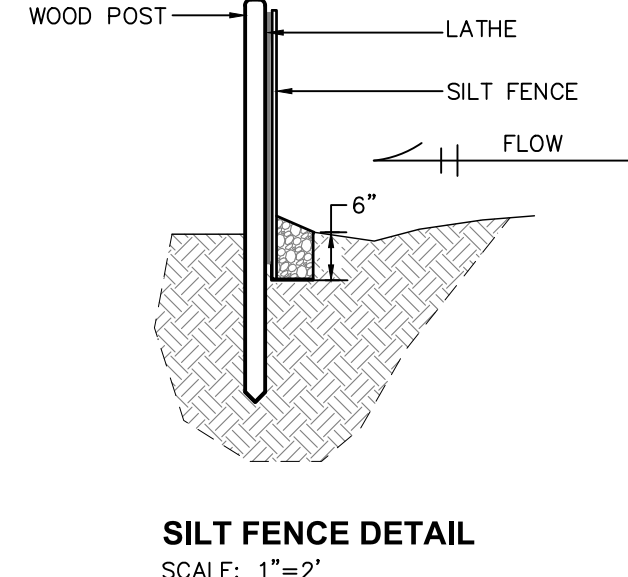
ITEM	J	F	M	A	M	J	J	A	S	O	N	D
TEMP. EROSION CONTROL												
TOPSOIL STRIPPING												
SITE GRADING												
SITE UTILITIES												
BUILDING CONSTRUCTION												
PERM. EROSION CONTROL												
LANDSCAPING												
PAVING												
REMOVE TEMP. EROSION CONTROL												

REV SITE PLAN ISSUE 07-27-22
Design M&B/JFL
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Drawn M&B/FEF
IA Project Number 20220121

GRADING & S.E.S.C. PLAN

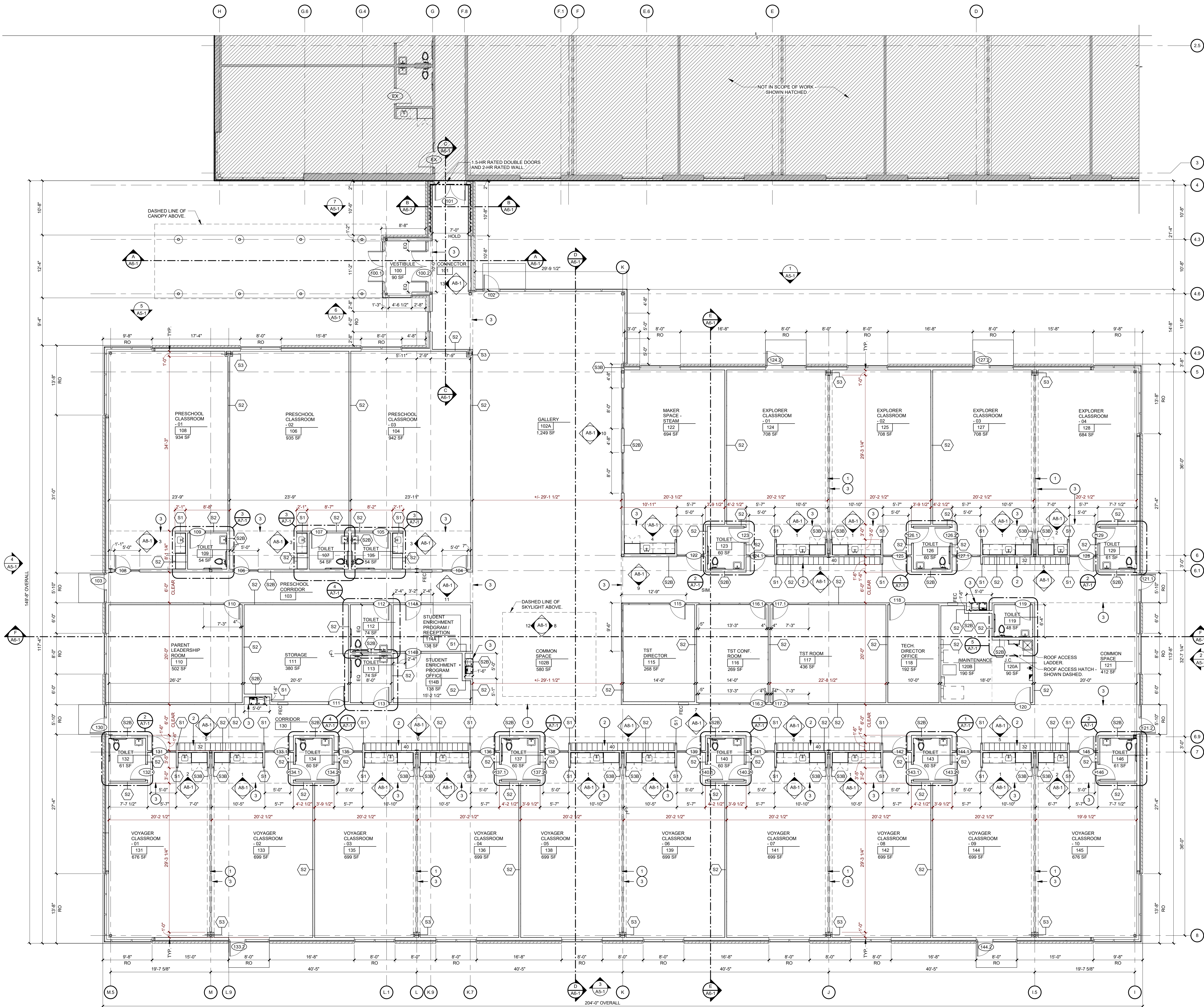
C-1.4

CIVIL SET SHEET SCHEDULE
C-1.0 BOUNDARY & TOPOGRAPHIC SURVEY
C-1.1 EXISTING NATURAL FEATURES INVENTORY
C-1.2 REMOVAL PLAN
C-1.3 SITE & UTILITY PLAN
C-1.4 GRADING & SOIL EROSION CONTROL



FLOOR PLAN LEGEND

- NEW WALL CONSTRUCTION
- EXISTING WALL CONSTRUCTION TO REMAIN
- THIRTY MINUTE FIRE RATED SEPARATION SEE INDEX SHEETS/CODE REVIEW FOR LOCATIONS
- ONE HOUR FIRE RATED SEPARATION SEE INDEX SHEETS/CODE REVIEW FOR LOCATIONS
- TWO HOUR FIRE RATED SEPARATION SEE INDEX SHEETS/CODE REVIEW FOR LOCATIONS
- THREE HOUR FIRE RATED SEPARATION SEE INDEX SHEETS/CODE REVIEW FOR LOCATIONS
- FLAT PANEL TV ON WALL MOUNT (REFER TO A/V CONSULTANT INFO.)
- CARD READER
- COMPOSITE WOOD DECKING SYSTEM
- FULLY RECESSED FIRE EXTINGUISHER CABINET
- WALL MOUNTED FIRE EXTINGUISHER
- LOCATION OF WALL MOUNTED AUTOMATIC DOOR OPERATION CONTROL BUTTON (B.F.P.B.)
- AUTOMATIC DOOR OPERATION CONTROL BUTTON ON STAINLESS STEEL POST (B.F.P.B.)
- PARTITION TYPE SEE A2.1
- FURNISHINGS, FIXTURES & EQUIPMENT (F.F. & E.)
- CONTROL JOINT - SEE A5 SERIES DRAWINGS



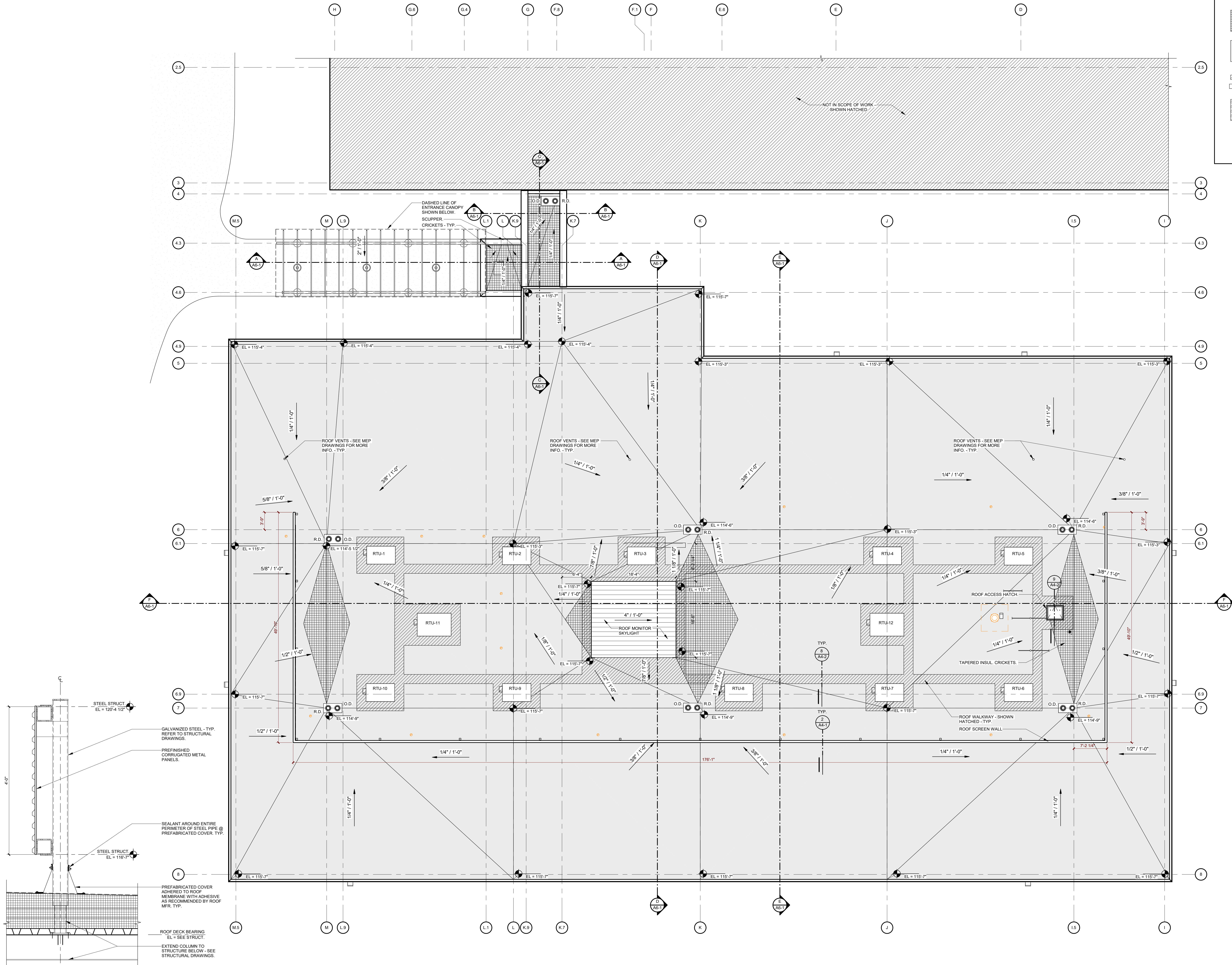
MAIN FLOOR PLAN

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

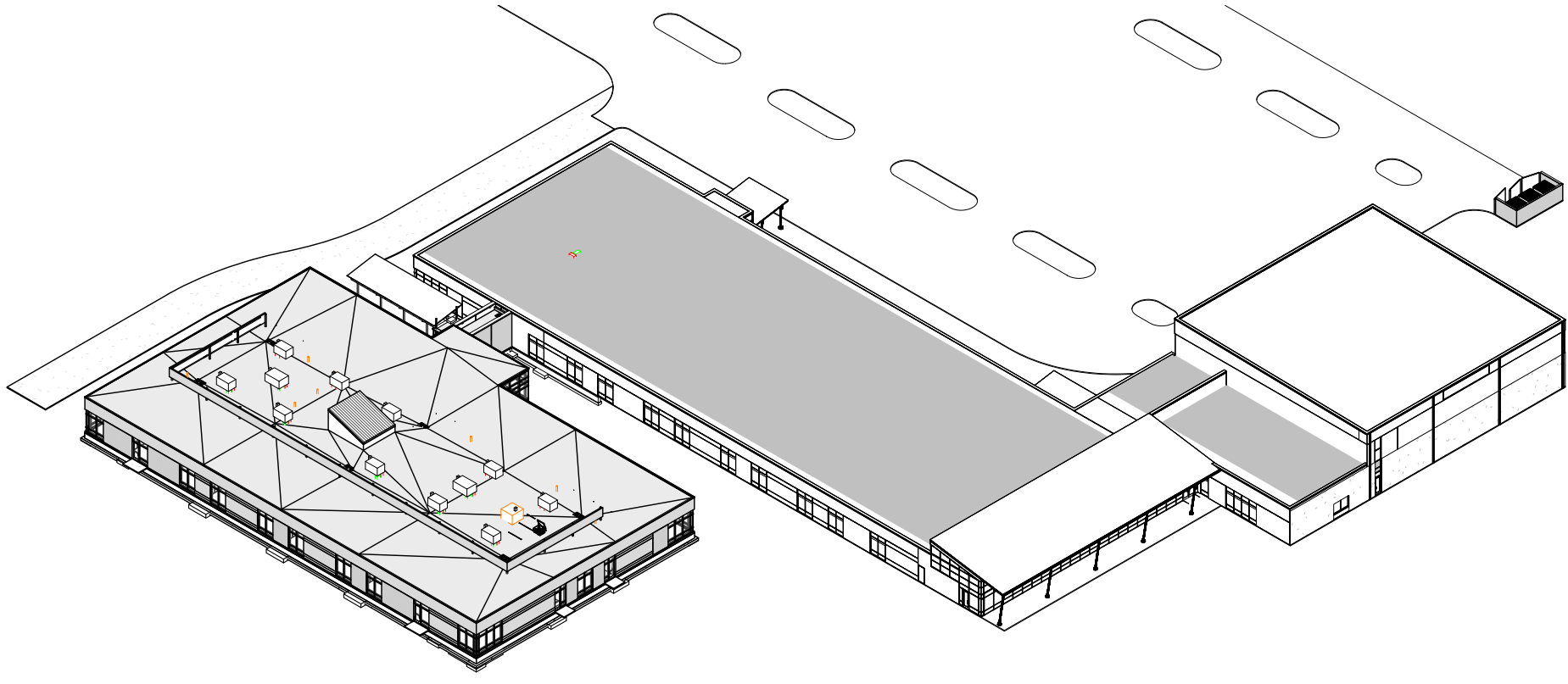
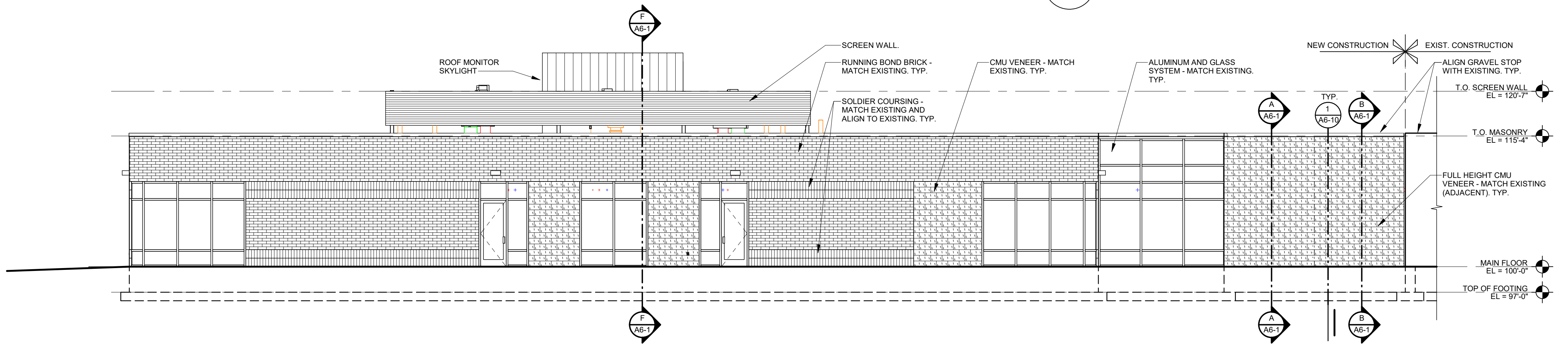
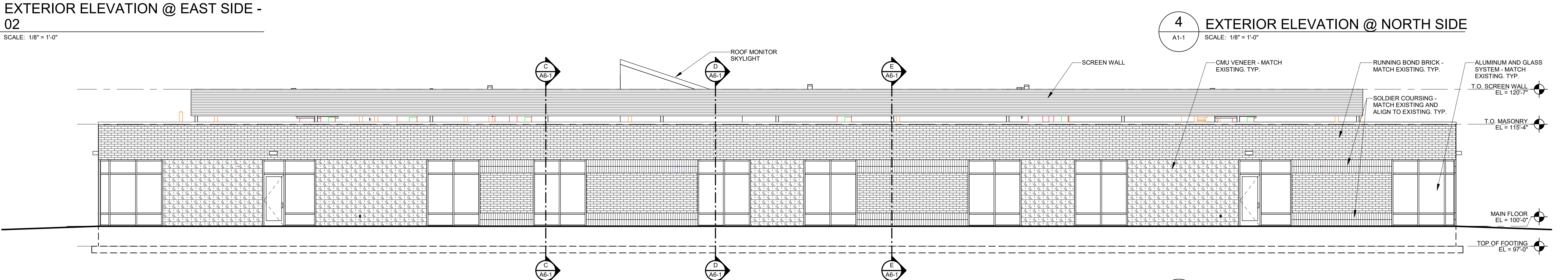
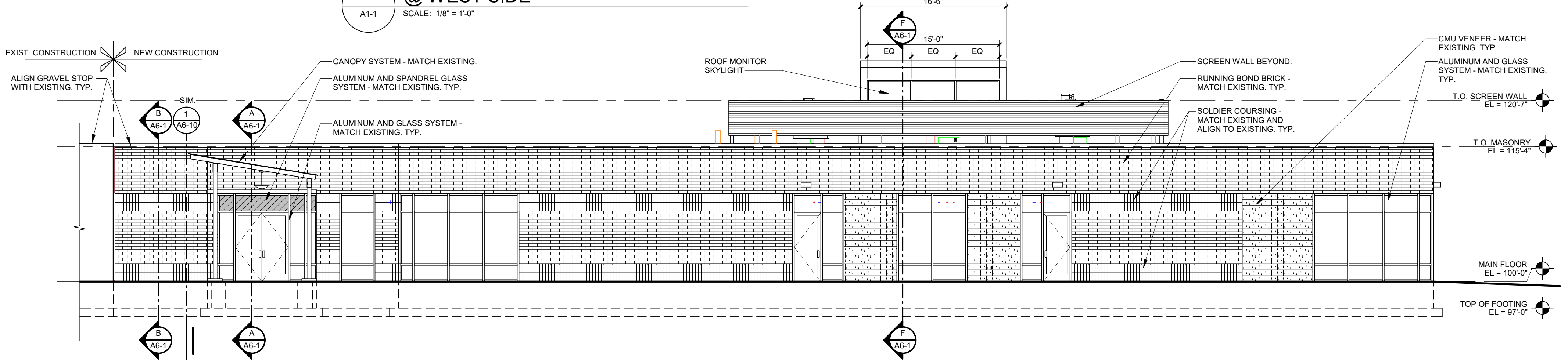
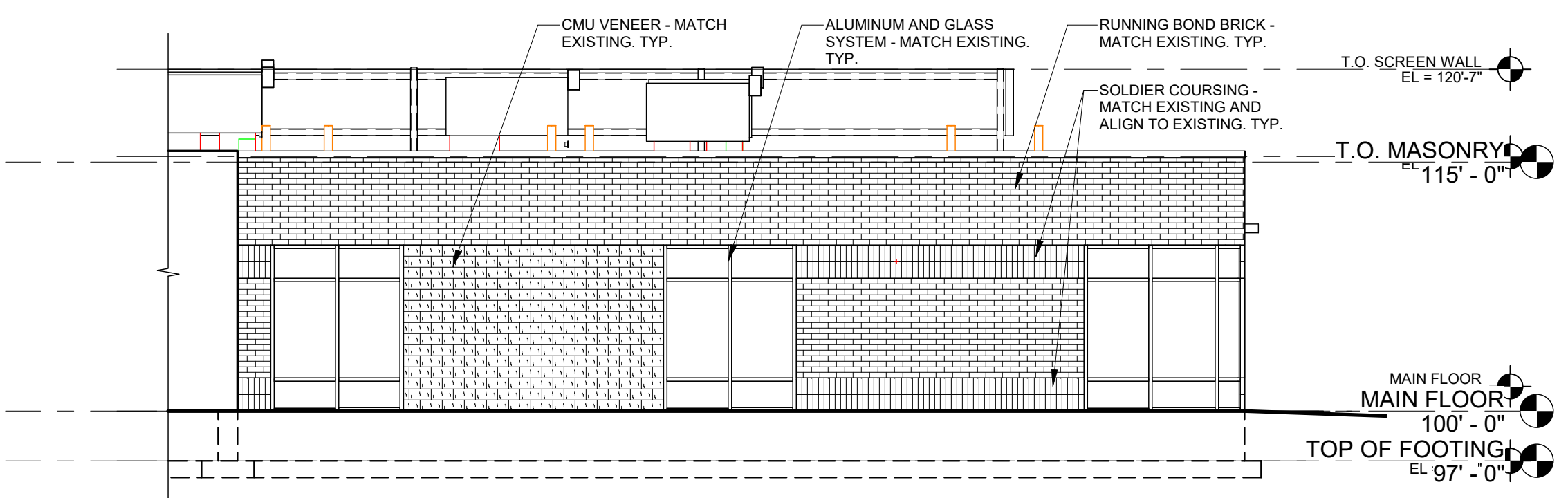
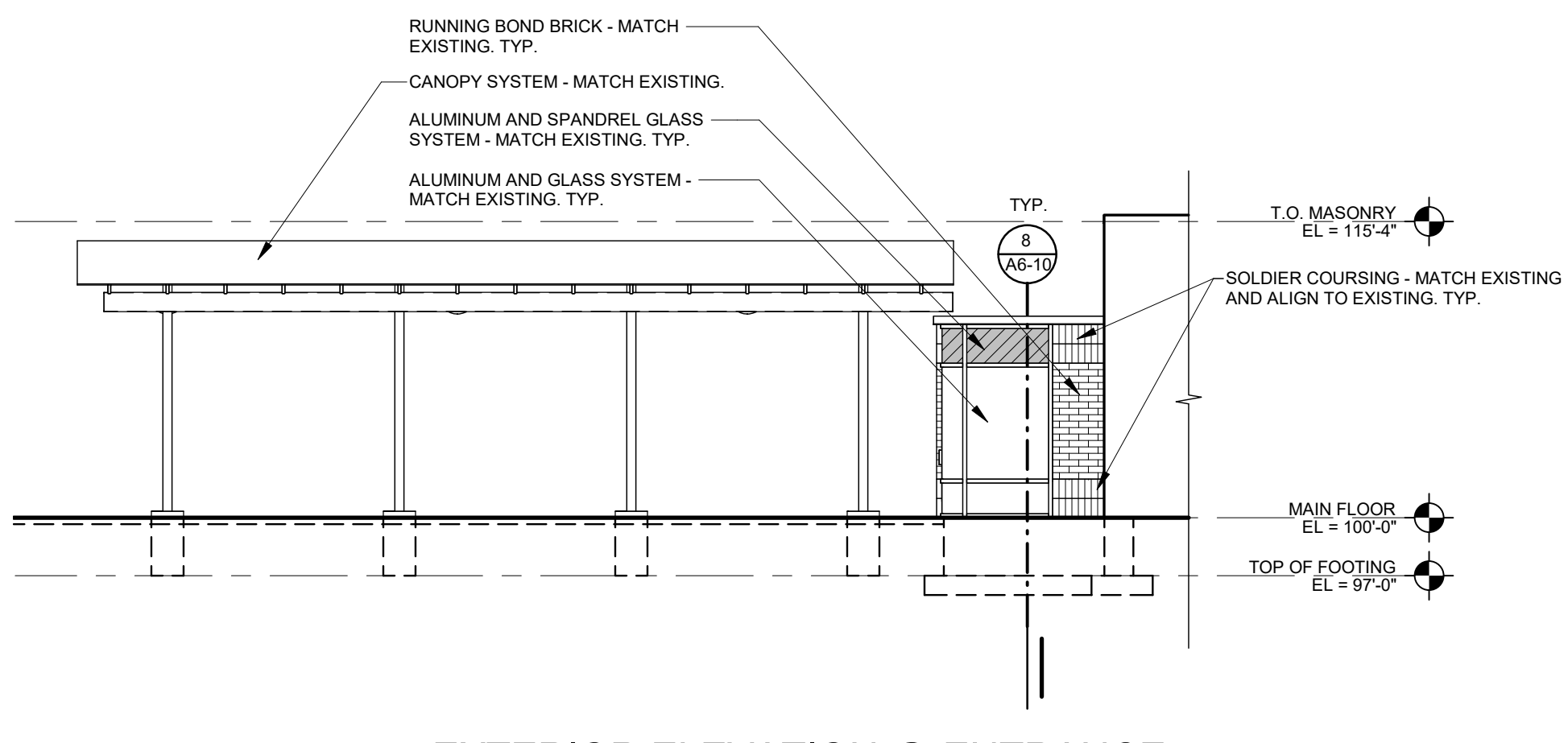
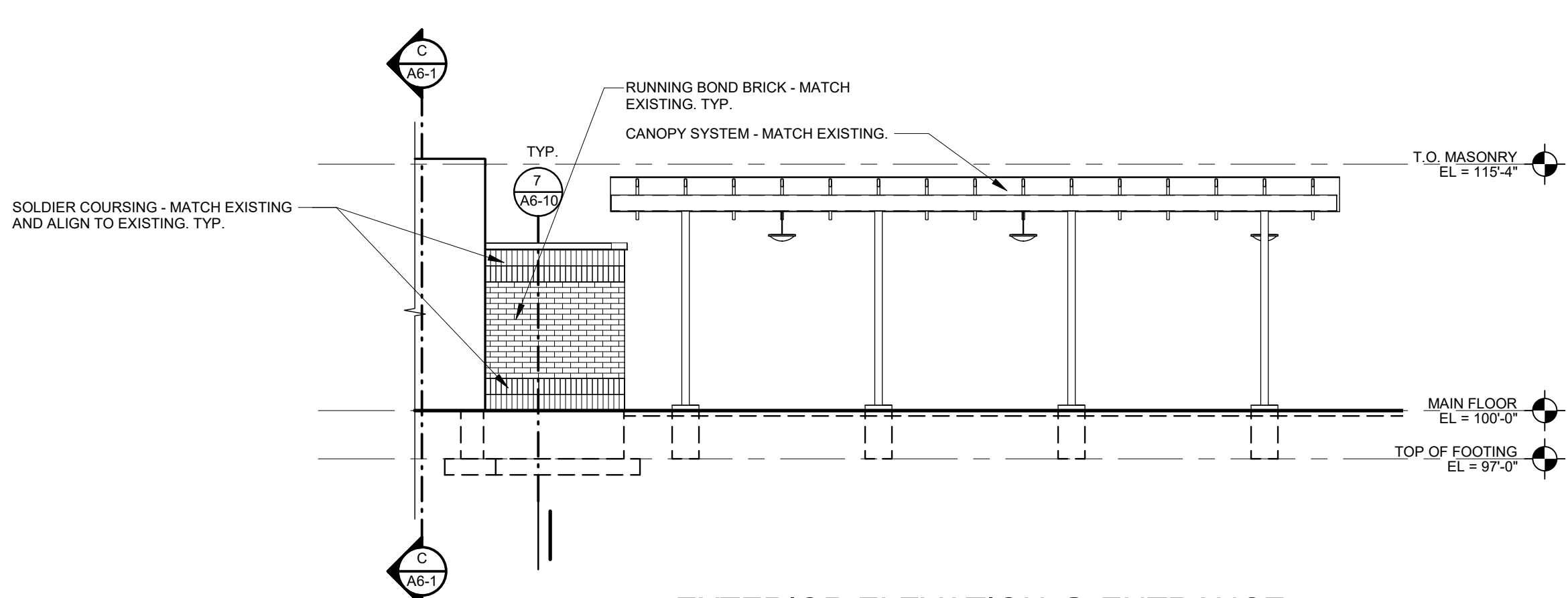
GROSS AREA: 24,310 SF
USABLE AREA: 15,967 SF

ROOF LEGEND

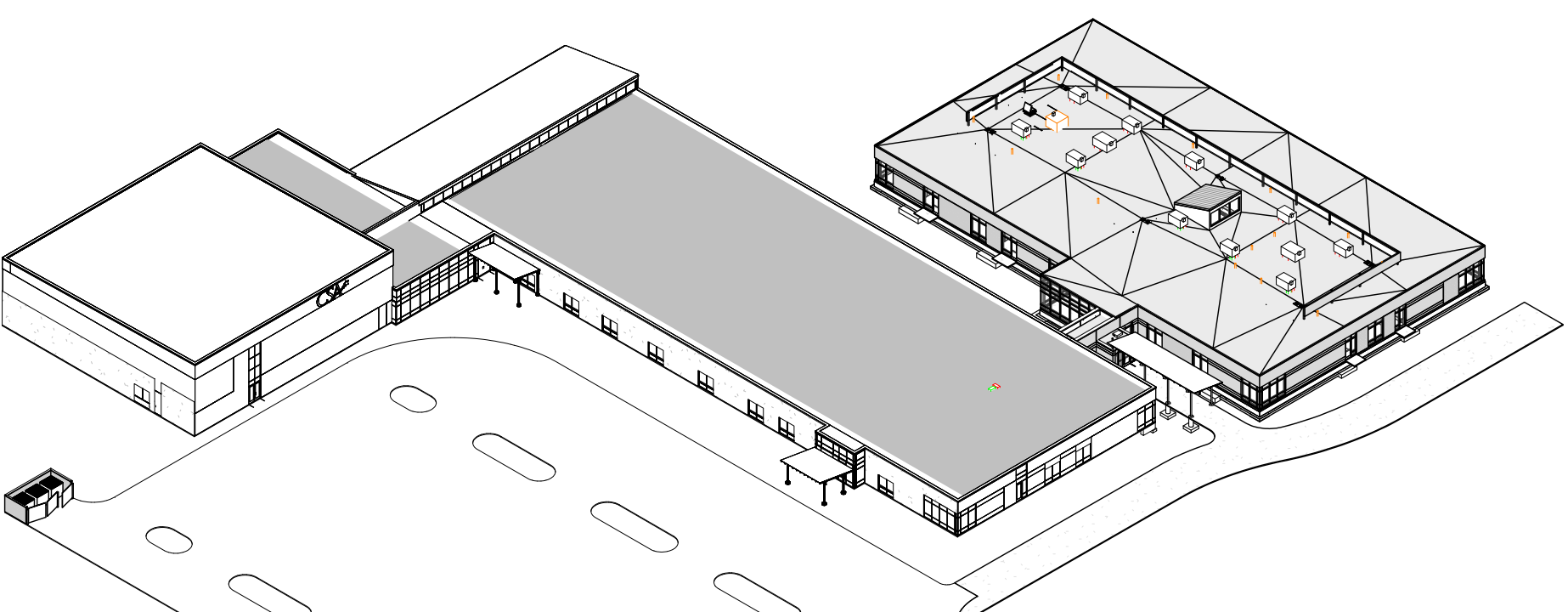
- TAPERED RIGID INSULATION W/ 1/4" PER FT. MINIMUM SLOPE AS REQUIRED FOR SLOPE TOWARDS ROOF DRAINS.
- WHITE FULLY ADHERED MEMBRANE ROOF ON RIGID INSULATION ON ROOF DECKING ON STRUCTURAL FRAMING.
- ROOF WALKWAY PAD - SEE DETAIL.
- 1" TO 2" WASHED RIVER ROCK BALLAST FOR AESTHETICS. PROVIDE MINIMAL COVERAGE TO HIDE MEMBRANE.
- O.D. = OVERFLOW DRAIN
- R.D. = ROOF DRAIN
- ROOF SLOPE



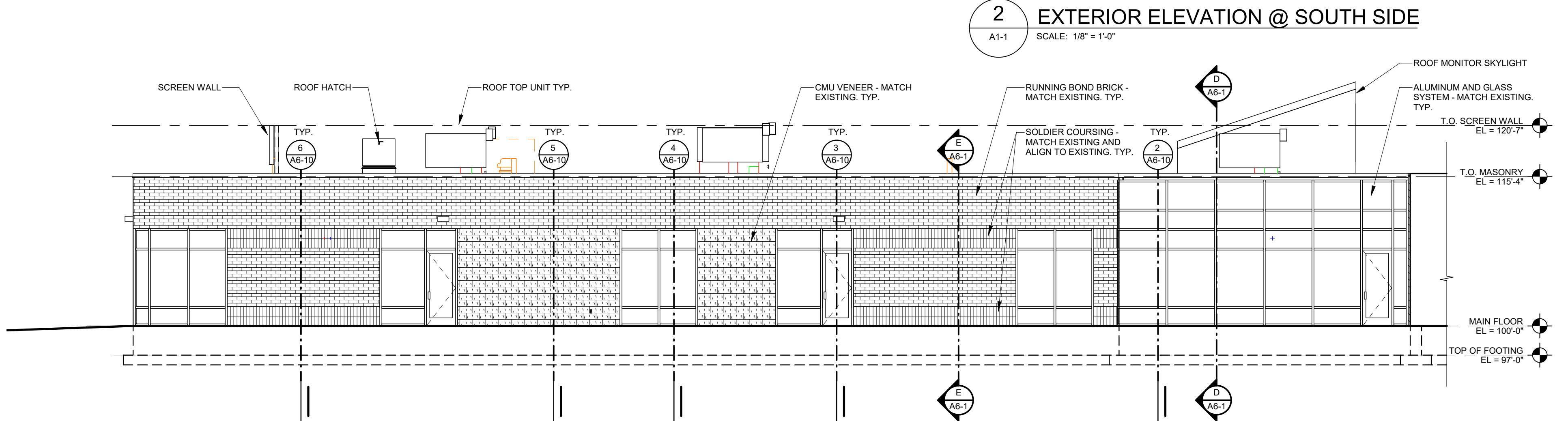
EXTERIOR ELEVATION LEGEND			
	BRICK - RUNNING BOND - MATCH EXISTING. TYP.		CMU VENEER (SPLIT FACE) - RUNNING BOND - MATCH EXISTING. TYP.
	BRICK - SOLDIER COURSE - MATCH EXISTING. TYP.		CLEAR INSULATED GLASS - MATCH EXISTING SYSTEM.
	INSULATED SPANDREL GLASS - MATCH EXISTING SYSTEM.		
NOTES:			
1. SEE SPECS FOR BRICK, STONE, GLASS, AND METAL PANEL TYPES			
2. "C.J." = CONTROL JOINT			



3D ISOMETRIC - SOUTH WEST



3D ISOMETRIC - NORTH EAST



EXTERIOR ELEVATION @ EAST SIDE - 01



IMAGE 06 - EXTERIOR EXISTING CONDITIONS



IMAGE 05 - EXTERIOR EXISTING CONDITIONS



IMAGE 04 - EXTERIOR EXISTING CONDITIONS



IMAGE 03 - EXTERIOR EXISTING CONDITIONS



IMAGE 02 - EXTERIOR EXISTING CONDITIONS



IMAGE 01 - EXTERIOR EXISTING CONDITIONS @ ENTRANCE CANOPY.



GLASS AND ALUMINUM SYSTEM



BRICK - RUNNING BOND



BRICK - SOLDIER COURSE



CMU VENEER (SPLIT FACE) - RUNNING BOND

EXTERIOR ELEVATION LEGEND	
	BRICK - RUNNING BOND. MATCH EXISTING.
	BRICK - SOLDIER COURSE. MATCH EXISTING.
	INSULATED SPANDREL GLASS. MATCH EXISTING SYSTEM.
	CMU VENEER (SPLIT FACE). RUNNING BOND. MATCH EXISTING.
	CLEAR INSULATED GLASS. MATCH EXISTING SYSTEM.

NOTES:
1. SEE SPECS FOR BRICK, STONE, GLASS, AND METAL PANEL TYPES
2. "C.J." = CONTROL JOINT

PRELIMINARY NOT FOR CONSTRUCTION



THE HECK INDUSTRIES/WOODWARD FAB - 1498 OLD US 23, HOWELL, MI 48843



THE HECK INDUSTRIES/WOODWARD FAB - 1498 OLD US 23, HOWELL, MI 48843



CVS PHARMACY - 10073 E. HIGHLAND RD, HOWELL, MI 48843



CVS PHARMACY - 10073 E. HIGHLAND RD, HOWELL, MI 48843

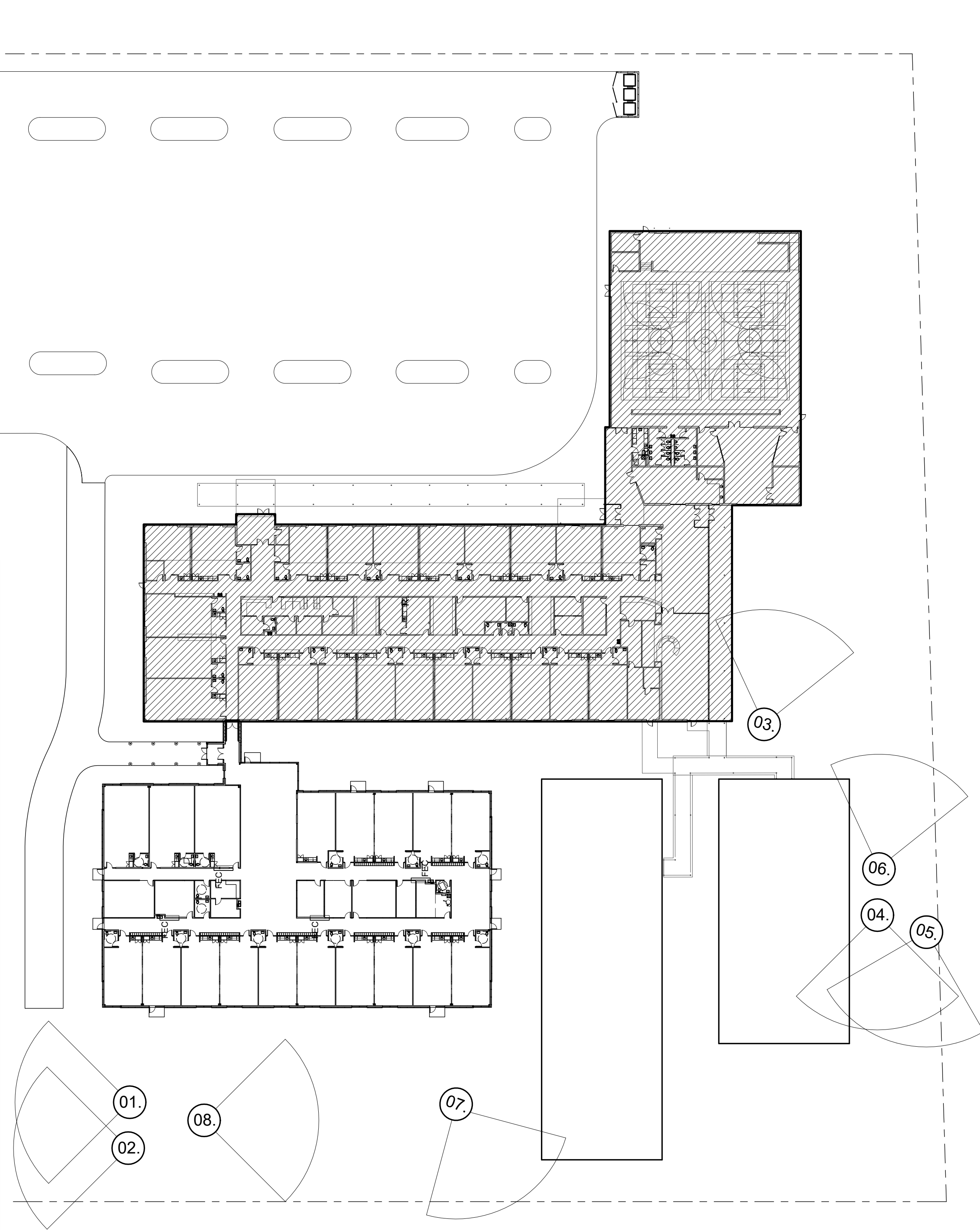
PRELIMINARY NOT FOR CONSTRUCTION

Charyl Stockwell Academy
Classroom Addition

3700 East Michigan Road,
Howell, MI 48843

Revised Site Plan	27 July 2021
Submission	
Site Plan Submission	07 July 2022
Design	Designer
PMPA	TM / BS
Drawn	Author
IA Project Number	20220121

EXAMPLE
IMAGES -
SCREEN WALLS

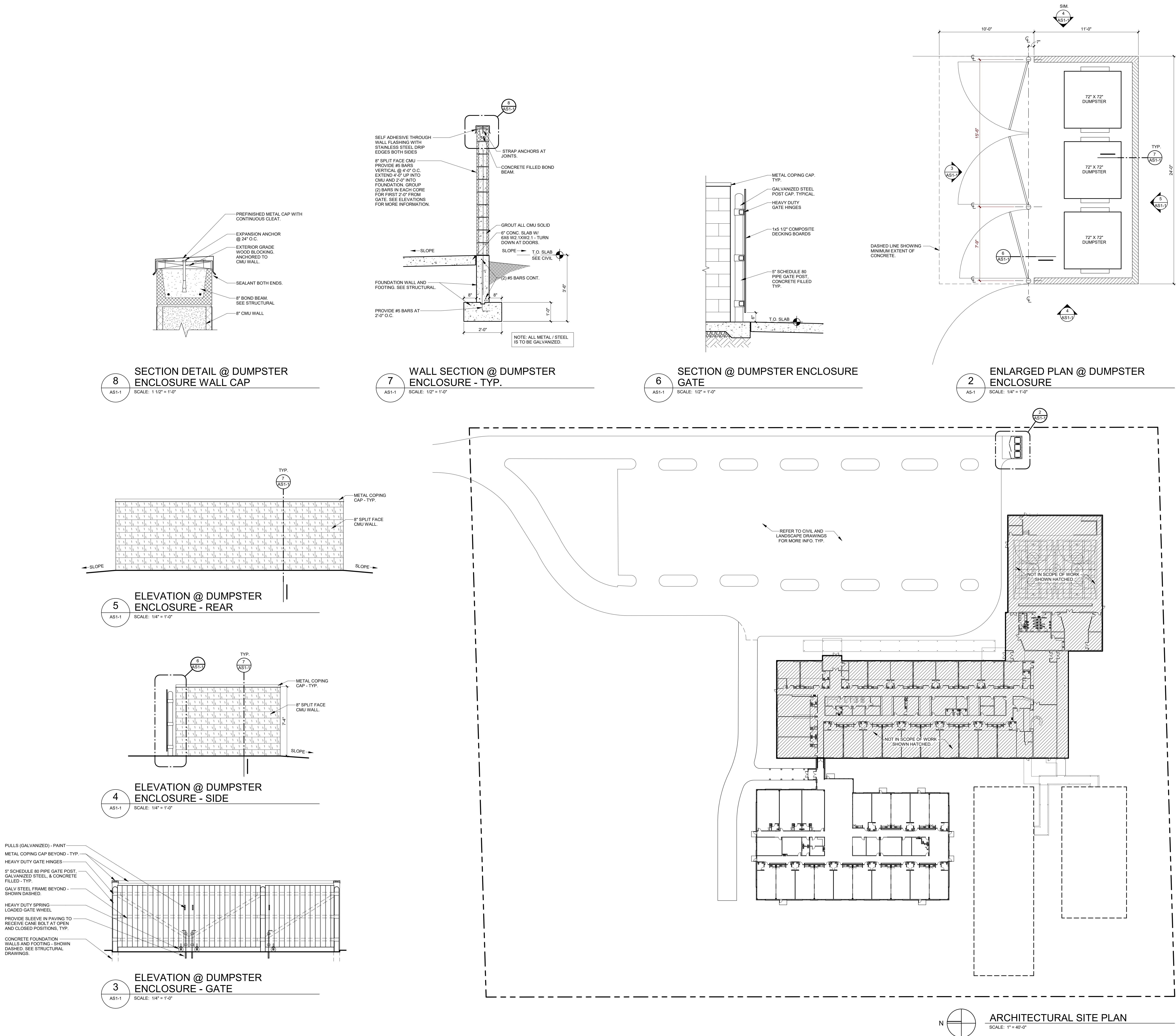


ARCHITECTURAL SITE PLAN -
SITE PHOTO LOCATION LEGEND
SCALE: 1" = 40'-0"

PRELIMINARY NOT FOR CONSTRUCTION

Revised Site Plan Submission	27 July 2021
Design	SV
PM/PA	TM / BS
Drawn	JV
IA Project Number	20220121

SITE PHOTOS



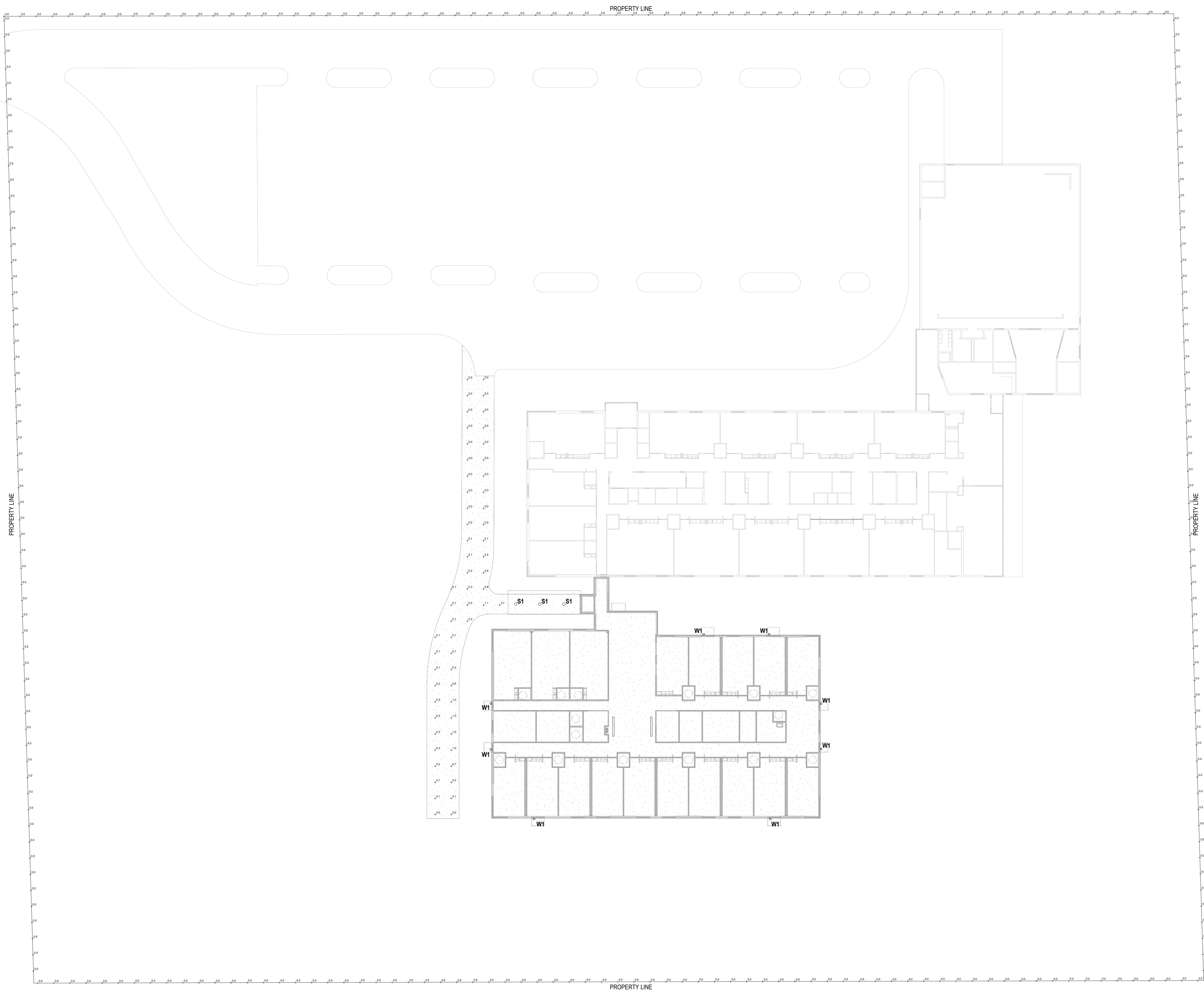
SITE PHOTOMETRIC STATISTICS					
AREA	AVG. (fc)	MAX. (fc)	MIN. (fc)	MAX:MIN	AVG:MIN
PROPERTY LINE	0.00	0.00	0.00	N/A	N/A
NEW DRIVE	0.30	3.70	0.00	N/A	N/A

ELECTRICAL GENERAL NOTES:

- A. PROVIDE HOUSEKEEPING PADS FOR ALL FLOOR MOUNTED AND GRADE MOUNTED ELECTRICAL EQUIPMENT.
- B. FIRE ALARM, SECURITY, AND ACCESS CONTROL DEVICES SHOWN FOR REFERENCE ONLY AND DO NOT REPRESENT COMPREHENSIVE SYSTEMS.
- C. ALL LIGHTING CAPABLE OF 0-10V TO HAVE 1/2" WIRE RUN TO FIXTURES FOR DIMMING CONTROL.
- D. ALL EGRESS SIGNAGE TO BE CIRCUITED TO NEAREST UNSWITCHED LIGHTING CIRCUIT.
- E. ALL POWER PACKS TO BE INSTALLED ABOVE ACCESSIBLE CEILING SPACE AND OUT OF SIGHT.
- F. EC TO PROVIDE BUILDING LIGHTING CONTROLS SYSTEM TO COMPLY WITH ASHRAE 90.1 2013.
- G. COORDINATE WITH MECHANICAL AND PLUMBING DRAWINGS FOR EQUIPMENT LOCATIONS.



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 <p>VCPG LED Parking Garage</p> <p>                                     </p>

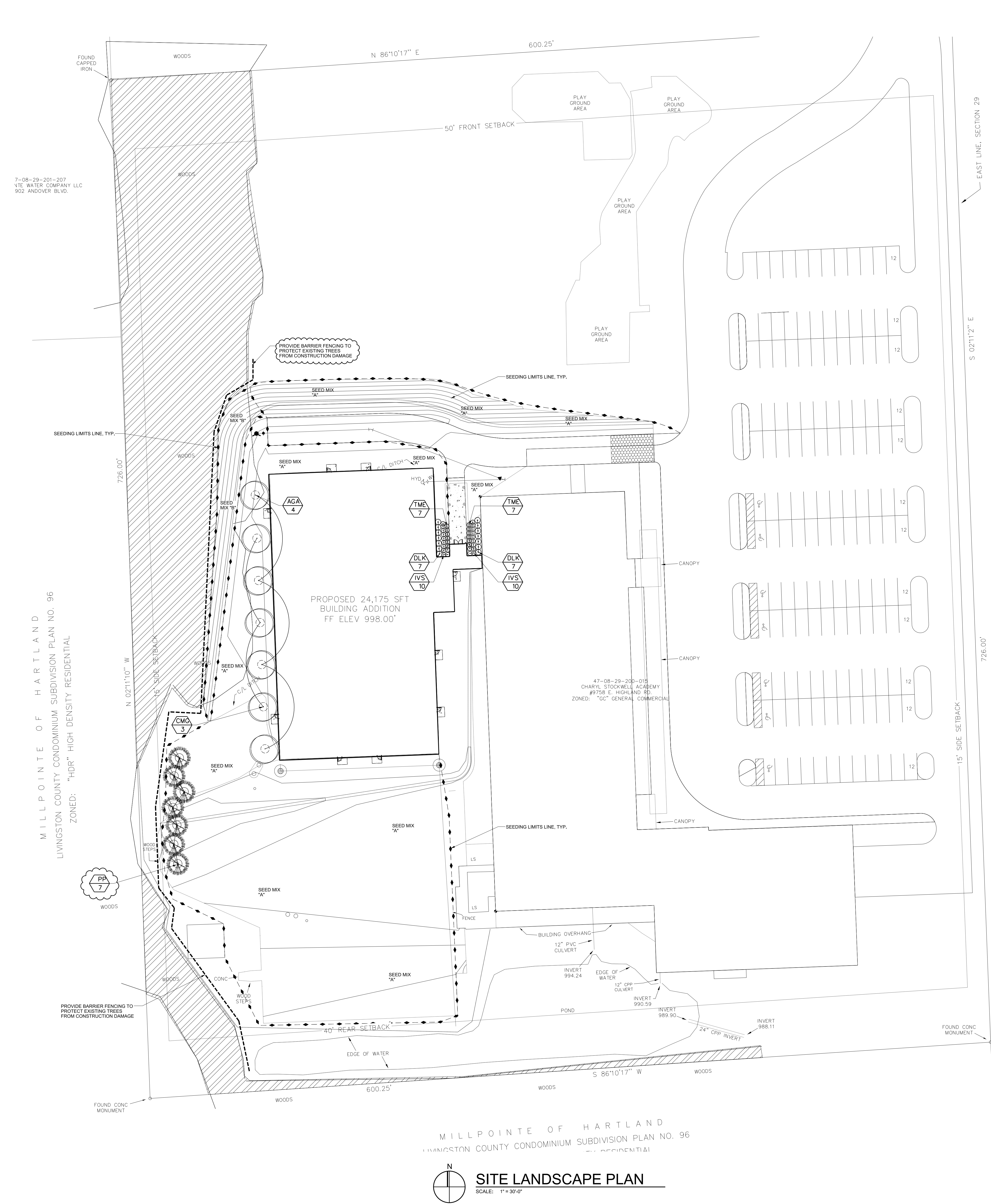
Charyl Stockwell Academy
Classroom Addition

9758 East Highland Road,
Howell MI 48843

Revised Site Plan Submission	27 July 2022
Design Development	20 July 2022
Design	Designer
PM/PA	Checker
Drawn	Author
IA Project Number	20220121

*SITE
PHOTOMETRIC
PLAN*

ES2-1



HARTLAND TOWNSHIP ZONING ORDINANCE
SECTION 5.11 - LANDSCAPING AND SCREENING
2. GENERAL LANDSCAPING REQUIREMENTS
1. ALL APPROPRIATE STANDARDS SHALL COMPLY WITH THIS ORDINANCE.
C. GREENBELT
1. EXISTING GREENBELT CONDITIONS SHALL APPLY
D. FOUNDATION PLANTINGS
1. PROVIDE ONE (1) DECIDUOUS TREE FOR EVERY 30 L.F. OF BUILDING FOUNDATION AND 6-8 SHRUBS FOR EVERY 30 L.F.
a. TOTAL L.F. OF BUILDING = 204'
b. TOTAL TREES NEEDED = 6.8 OR 7 TREES
c. TOTAL SHRUBS NEEDED = 56 SHRUBS
d. TOTAL TREES PROVIDED = 7 ALONG WESTERN SIDE OF NEW BUILDING ADDITION
e. TOTAL SHRUBS PROVIDED = 48 AT NEW ENTRANCE BUILDING ADDITION
E. PARKING LOT LANDSCAPING
1. EXISTING PLANTING SHALL APPLY
F. BERMS
1. EXISTING BERMS SHALL APPLY
G. BUFFERING ADJACENT LAND USES
1. EXISTING PLANTING SHALL APPLY

CONTRACTOR NOTE:
ALL TREES OUTSIDE OF THE IRRIGATION AREA TO HAVE TREE WATERING BIDS, SEE SPECIFICATIONS

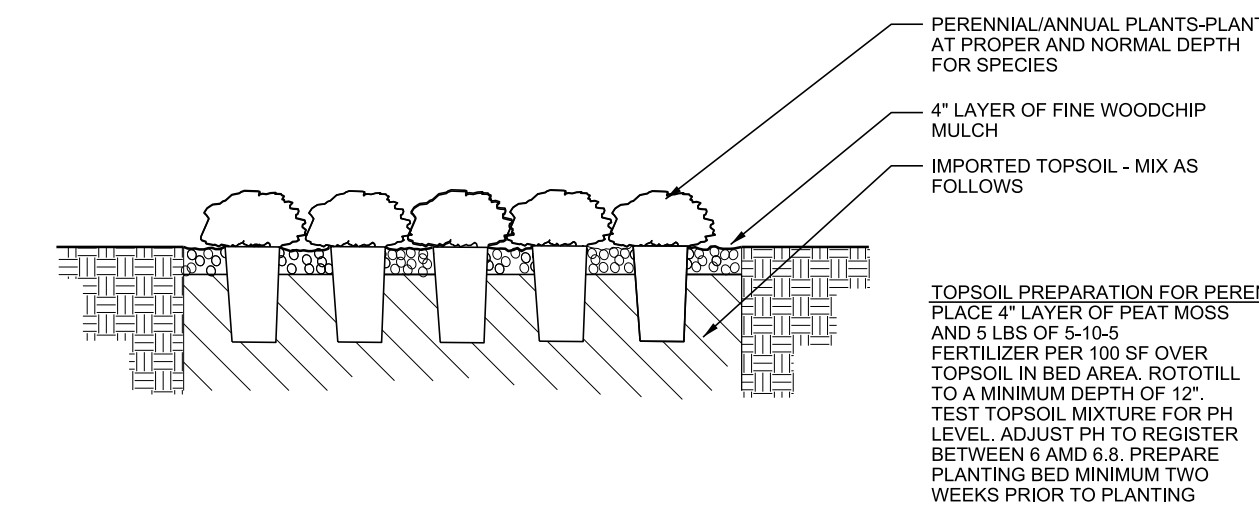
EXISTING TREES:
THE AREA BELOW THE DRIP LINE OF AN EXISTING TREE TO BE SAVED SHALL REMAIN UNDISTURBED. NO IMPERVIOUS MATERIAL SHALL BE PLACED UNDER THE DRIP LINE. PROVIDE TREE PROTECTION FENCING AND INSTALL AROUND TREES DESIGNATED TO BE SAVED AND/OR LINE OF DISTURBANCE.
NO VEHICLE OR CONSTRUCTION EQUIPMENT SHALL BE PARKED OR STORED WITHIN THE DRIP LINE OF ANY PLANT MATERIAL DESIGNATED TO BE SAVED.
IN THE EVENT THAT HEALTHY EXISTING TREES DESIGNATED TO BE SAVED ARE DESTROYED, THEY SHALL BE REPLACED WITH TREES WHICH COMPLY WITH THE TOWNSHIP REQUIREMENTS.

SEED MIXES FOR TURF GRASS
1. SEED MIX "A" - SPARTAN GRADE A MIX - EARTH CARPET OR EXISTING SEED TYPE PER OWNER.
SEED MIXES FOR SITE FROM PRAIRIE NURSERY:
1. SEED MIX "B" - SHORT PRAIRIE FOR MEDIUM SOILS MIX

PLANT PALETTE AND PLANT SIZES

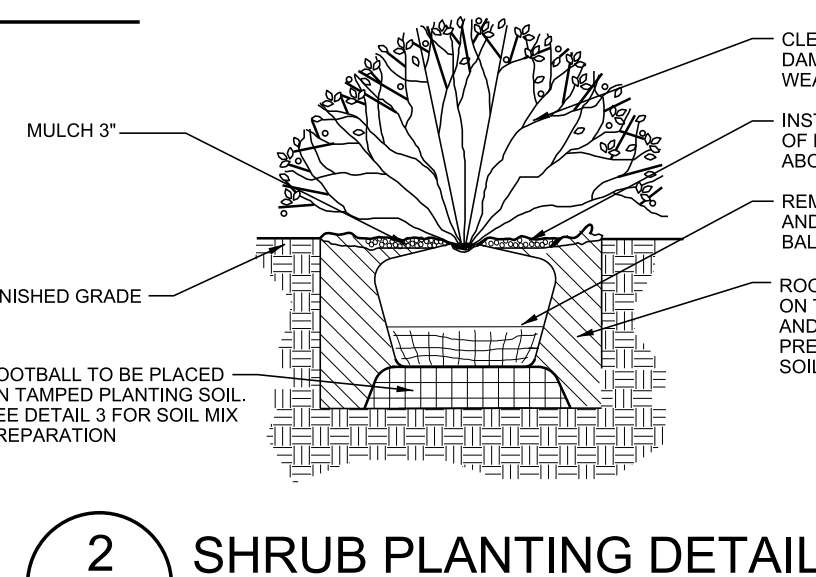
		PLANT LIST			
KEY	QUAN	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
AGA	4	AMELANCHIER GRAN. 'AUTUMN BRILLIANCE'	AUTUMN BRILLIANCE SERVICEBERRY	2.5" CAL.B & B	SINGLE STEM/STRAIGHT LEADER/TREE FORM
CMG	3	CORNUS MAS 'GOLDEN GLORY'	GOLDEN GLORY CORNELIAN CHERRY	2.5" CAL.B & B	SINGLE STEM/STRAIGHT LEADER/TREE FORM
PP	7	PICEA GLAUCA	WHITE SPRUCE	6" TALL B & B	TREES TO BE SHEARD SYMMETRICALLY
DLK	14	DIERVILLA LONICERA 'KODIAK ORANGE'	KODIAK ORANGE HONEYSUCKLE	30" IN HEIGHT MIN.	SPACING 4' O.C.
IVS	20	ITEA VIRGINICA 'SCENTLANDIA'	SCENTLANDIA SWEETSPICE	18" IN HEIGHT MIN.	SPACING 3' O.C.
TME	14	TAXUS MEDIA 'EVERLOW'	EVERLOW YEW	18" IN HEIGHT MIN.	SPACING 3' O.C.

* DENOTES CHANGES MADE TO PLANT TYPE, QUANTITY AND/OR SIZE



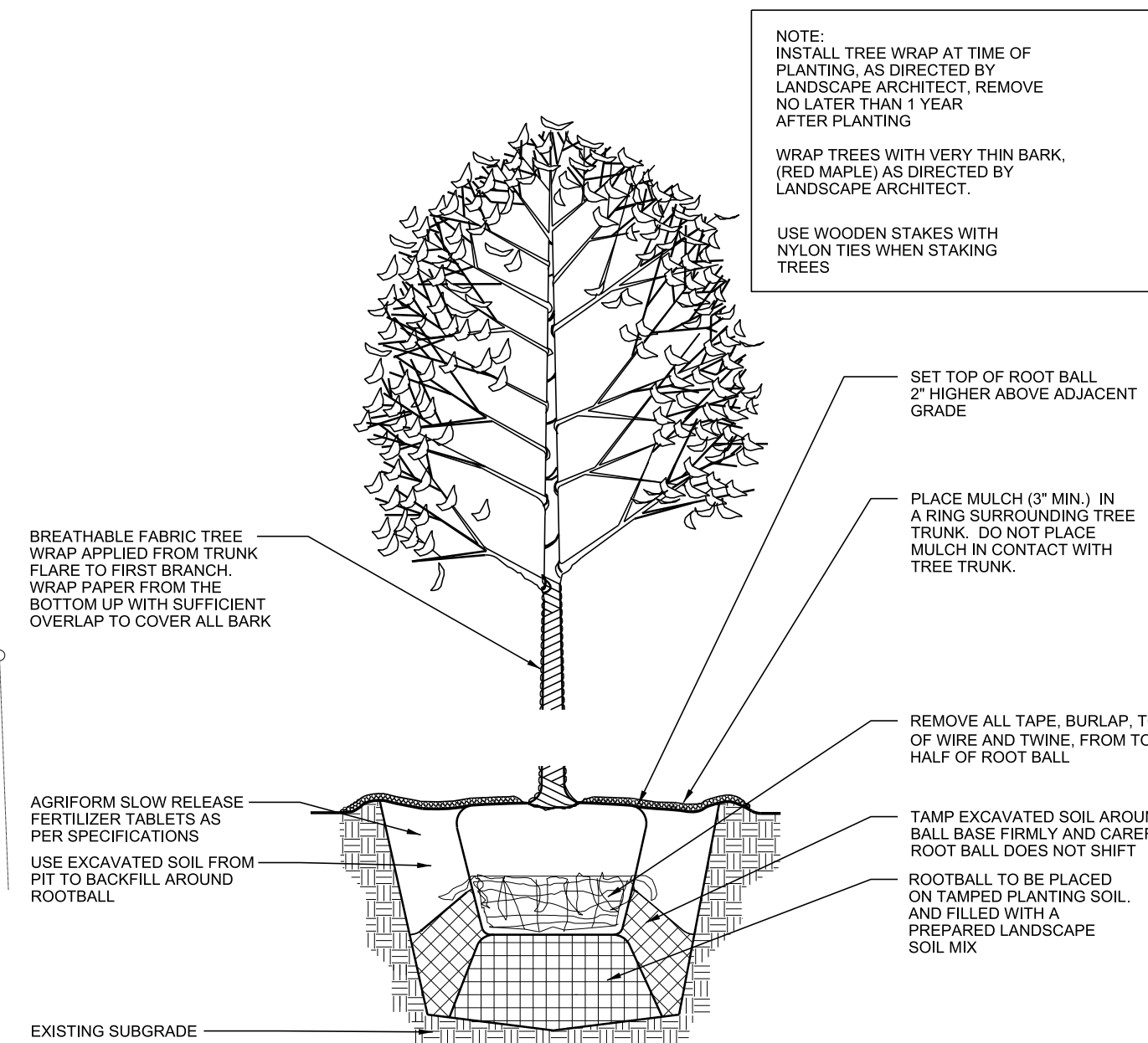
PERENNIAL / ANNUAL
PLANTING DETAIL

LP1.0 NOT TO SCALE:



SHRUB PLANTING DETAIL

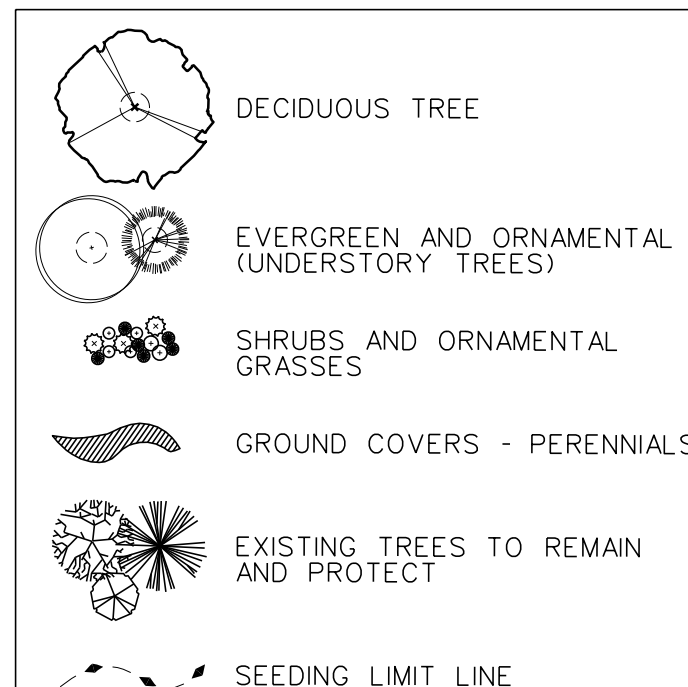
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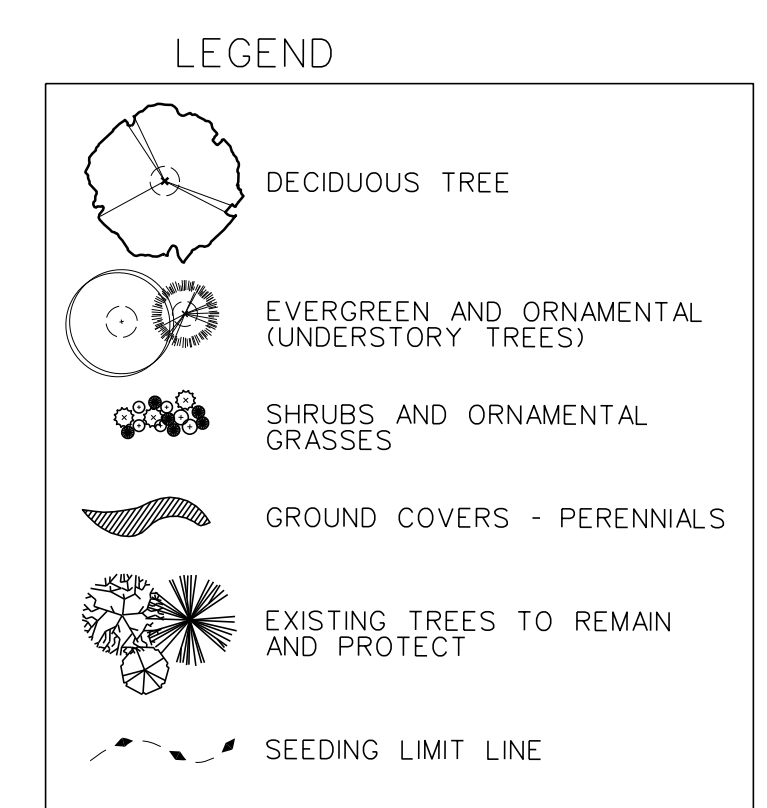


TREE PLANTING DETAIL

LP1.0 NOT TO SCALE:

LEGEND





1. CONTRACTOR SHALL OBTAIN ALL NECESSARY STATE AND LOCAL PERMITS REQUIRED FOR CONSTRUCTION INCLUDING SUNDAYS, SUNDAYS, AND HOLIDAYS.
2. CALL "MISS DIG" 1-800-482-7171, THREE (3) DAYS PRIOR TO ANY CONSTRUCTION, INCLUDING SUNDAYS, SUNDAYS, AND HOLIDAYS.
3. EXISTING UNDERGROUND UTILITIES ARE PLOTTED FROM ORIGINAL SITE DRAWINGS AND SITE TOPOGRAPHIC SURVEY. EVERY ATTEMPT HAS BEEN MADE TO LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL EXERCISE EXTREME PRECAUTION IN EXCAVATING FOR NEW UTILITIES SINCE A UTILITY LOCATED DEEPER THAN 48" MAY BE DAMAGED. CONTRACTOR SHALL BE RESPONSIBLE TO MAKE HADSET THOROUGHLY FAMILIAR WITH ALL UNDERGROUND UTILITY LOCATIONS PRIOR TO ANY EXCAVATION AND VERIFY LOCATIONS AND DEPTHS OF ALL UTILITIES.
4. CONTRACTOR SHALL PROVIDE HIS OWN LAYOUT, GRADING, STAKING, AND SURVEYING REQUIRED FOR CONSTRUCTION. REFERRING TO EXISTING TOPOGRAPHIC SURVEY AND LAYOUT. CONTRACTOR SHALL BE RESPONSIBLE FOR HIS OWN LAYOUT. CONTRACTOR SHALL FIELD VERIFY LAYOUT PRIOR TO CONSTRUCTION.
5. CONTRACTOR SHALL PROTECT ALL EXISTING AND NEW CONSTRUCTION FROM DAMAGE TO EXISTING CONSTRUCTION. CONTRACTOR SHALL MAKE ALL NECESSARY REPAIRS AT NO COST TO THE OWNER.
6. LANDSCAPE CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER CONTRACTORS ON SITE TO PREVENT DAMAGE TO EXISTING LAWN, RESTORATION AND PLANT MATERIAL.
7. IF ANY DISCREPANCY EXISTS BETWEEN THE QUANTITIES, SIZES OR PLACEMENT INDICATED BY THE LANDSCAPE PLAN AND SHOWN IN THE PLANT LIST, THE PLAN SHALL GOVERN.
8. IT IS THE LANDSCAPE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE PRIOR TO WORK SUBMITTAL, TO BECOME FAMILIAR WITH EXISTING CONDITIONS AT THE SITE.
9. THE EARTHWORK CONTRACTOR IS RESPONSIBLE FOR ROUGH GRADING OF LAWN AREAS AND PREPARATION OF LAWN AREAS.
10. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR RESPREADING TOPSOIL, FINE GRADING AND PREPARATION OF ALL LAWN AND LANDSCAPE AREAS.
11. PRIOR TO SPREADING TOPSOIL, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY AND GRADE INDICATED ON THE GRADING PLAN SHALL BE CORRECTED BY THE LANDSCAPE CONTRACTOR PRIOR TO SPREADING TOPSOIL.
12. BEFORE PLANT MATERIAL INSTALLATION BEGINS, STATE LOCATIONS OF NEW PLANT MATERIAL AND NOTIFY ARCHITECT FOR APPROVAL. NOTIFY ARCHITECT ONE WEEK MINIMUM PRIOR TO TENTATIVE DATE OF STARTING.
13. CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY FORCE MAJEURE OR OTHER UNUSUAL, SUBSTANTIAL CONDITIONS ARE ENCOUNTERED DURING EXCAVATION FOR PLANTING DITS.
14. ALL GRADING, UTILITY, AND IRRIGATION WORK SHALL BE COMPLETED PRIOR TO ANY PLANT MATERIAL PLANTING AND LAYOUT OF MULCH.
15. ALL SHRUB BEDS ADJACENT TO LAWN AREAS SHALL HAVE A SPADED EDGE BORDER, UNLESS METAL EDGE BORDER IS SPECIFIED.
16. ALL SHRUB BED AREAS SHALL HAVE A MINIMUM 3-INCH THICK LAYER OF LANDSCAPE MULCH.
17. PRE-EMERGENT HERBICIDE SHALL BE USED UNDER MULCH IN ALL LARGE BED AREAS.
18. LANDSCAPE CONTRACTOR SHALL EXCEED ALL AREAS DISTURBED BY CONSTRUCTION.
19. LANDSCAPE CONTRACTOR SHALL WORK OVER LAWN AREAS THAT HAVE REMAINED PARTIALLY INTACT, TOP DRESSING WITH SOIL, SCARIFYING, AND SEEDING TO PROMOTE GROWTH, FULL EVEN LAWN, FREE OF BARE SPOTS, INDENTATIONS, AND WEEDS.
20. LANDSCAPE CONTRACTOR SHALL COORDINATE PLANTING SCHEDULE WITH THE ARCHITECT AND THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SEEDING AREAS AFTER INSTALLATION. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SEEDING AREAS AFTER INSTALLATION. LANDSCAPE CONTRACTOR SHALL COORDINATE PLANTING SCHEDULE WITH THE ARCHITECT AND THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SEEDING AREAS AFTER INSTALLATION.

Hartland Township Planning Commission Meeting Agenda Memorandum

Submitted By: Troy Langer, Planning Director

Subject: Zoning Amendment #22-001 – Ordinance Amendment to Landscape Requirements to Section 5.7 (Dumpster Enclosure); Section 5.11 (landscaping and Screening); and Section 5.26 (Signs)

Date: August 4, 2022

Recommended Action

Move to recommend approval of Zoning Amendment #22-001, Ordinance Amendment to Landscape Requirements in Section 5.7 (Dumpster Enclosure); Section 5.11 (Landscaping and Screening); and Section 5.26 (Signs)

Discussion

The Ordinance Review Committee (ORC) and has been working on an ordinance amendment regarding landscaping and screening requirements in the Zoning Ordinance as outlined in Section 5.11 (Landscaping and Screening). Section 5.7 (Dumpster Enclosure) provides standards for dumpster enclosures, including landscaping requirements around the enclosure (Section 5.7.5.) and is part of the discussion as well. Similarly, landscaping requirements associated with monument signs are found in Section 5.26.8.M.ii.b., thus this is also part of the amended language.

The ORC examined landscape standards and ordinances from many other communities, including the following communities:

Ann Arbor Township
Brighton Township
Commerce Township
Genoa Township
Green Oak Township
City of Novi
West Bloomfield Township

The research included townships comparable to the size and character of Hartland Township as well as several cities which had some notable landscape standards to consider such as plant material options and design options for screening parking lots and detention areas.

The ORC met on several occasions to discuss potential revisions to various sections of the current landscape ordinance and offer guidance to Planning staff in their efforts to prepare a draft version of the amended ordinance. The intent of the modifications to the ordinance is to both simplify and update the current landscape requirements where necessary and to make it “user friendly” for staff, applicants, and the general public. Additionally, the goal is to reduce planting requirements where possible and allow for flexibility in the landscape standards and overall design.

Planning staff worked with Planning Commissioner Grissim, a member of the ORC, on the project. Several draft versions of the ordinance were presented to the ORC for their input. Memorandums were sent to the Planning Commission in 2018 and 2020 which provided updates on the project.

A draft version of the amended ordinance was recently presented to the Planning Commission at their Work Session on June 9, 2022. The discussion was continued at the Planning Commission Work Session on June 23, 2022, and at that meeting the Planning Commission initiated a zoning ordinance amendment to the landscape requirements as outlined in Section 5.7, 5.11, and 5.26.

The amended language applies primarily to Section 5.11 (Landscaping and Screening), with minor changes to Section 5.7.5 (Dumpster Enclosure) and Section 5.26 (Signs), where landscape requirements apply to monument signs. The proposed changes are too numerous to list individually in this memorandum thus a general summary of the revisions is provided below.

The first section lists landscape standards that are proposed to be eliminated or reduced regarding plant material. The remaining sections list proposed updates and reorganization of the Landscape and Screening Ordinance. Please note that the section references below are based on the current Zoning Ordinance designations.

Modifications to plant material requirements:

1. Eliminate landscaping requirement around a dumpster enclosure (Section 5.7.5.).
2. Simplify landscaping requirement for a divider median-eliminate shrub requirement and only require trees and lawn/live plantings to meet required 80% ground coverage (Section 5.11.2.A.vii.)
3. Eliminate landscaping requirement around base of a monument sign (Section 5.11.2.A.ix and 5.26.8.M.ii.b.-Signs). This reduces the number of general landscaping categories from 6 to 5 categories.
4. Eliminate the requirement to provide an extra 25% trees and shrubs, above and beyond the minimum required plants (Section 5.11.2.B.i.).
5. Reduce foundation planting area width from 10 feet to 8 feet. Allow lawn to be a portion of the foundation planting requirement (Section 5.11.2.D.).
6. Eliminate shrub requirement in interior parking lot islands and require lawn and typical number of shade/canopy trees. Require typical number of shrubs/ground coverage/canopy trees in the first row of parking islands closest to the commercial building and/or parking islands located on the perimeter of a parking lot (Section 5.11.2.E.i.d.).
7. Eliminate plantings around a masonry screen wall that is located adjacent to a parking lot (Section 5.11.2.E.ii.a.(3)).

Revise and/or add tables, lists, or drawings

1. Update Figure 5.11.2.B.i (Site Landscaping) and provide additional drawings to denote the following areas:
 - End cap
 - Landscape island in parking row (also called landscaped area in parking lot)
 - 15-foot wide landscape area along the length of an internal roadway
 - Perimeter area visible from a public or private road
 - Perimeter area not visible from a public road
 - Buffering and screening
 - Detention basin
2. Provide drawing for detention/retention pond grading and landscaping requirements.
3. Provide drawing of tree protection fencing.
4. Revise berm slopes from 1:4 to over 1:3 with a flatter crest. Revise berm drawing (Section 5.11.2.F.ii.).
5. Update/simplify the plant list in Section 5.11.3.C.ii:
 - Require large or small shrubs and eliminate the “medium” shrub category. Revise other sections as necessary where medium shrubs are stated as part of a formula for required landscaping.

- Update plant chart (“Suggested Plant Materials”) for large and small shrubs-shrub names, shrub height/spread at time of planting. Update tree list as necessary (Section 5.11.3.C.ii.). Add an expanded plant list as found in other ordinances.
- Update Section 5.11.3.C.iv. accordingly, to match plant chart.

Updates and reorganization of Landscape Ordinance

1. Reorganize order of some sub-sections, for instance, move the sub-section “Treatment of Existing Plant Material” to “General Site Landscaping”, in order to consider existing plants as part of the required plantings where applicable.
2. Re-write parking lot landscaping section. (Section 5.11.2.E.).
3. Add language to Tree Preservation section. Add requirement for a tree survey by a professional where existing trees are to be preserved and be used to meet tree requirements. Provide a drawing of tree protection fencing, for landscaping to be preserved.
4. Require landscape plans to be prepared by a Registered Landscape Architect (RLA), signed and sealed, unless waived by the Planning Commission or Planning Department. Waiver options are provided. This is in place of the current requirement that states the “Planning Commission may require sealed plans when the project is over five (5) acres in size, or part of a Planned Development, or contains unique or natural features that would benefit from that level of expertise”. The recommended change would provide a professional level of expertise; reduce the number of mistakes in plant selection and design principals; and make the review process much easier for staff and the applicant (Section 5.11.1.D.).
5. Update irrigation standards-irrigation may be waived if the project incorporates landscaping that will contribute points towards LEED certification or equivalent rating system (Section 5.11.2.A.viii.).
6. Add requirement to increase the massing of foundation landscaping/plantings proportionately where the building is taller than 1-story, or building height is twenty (20 feet or greater, or building is longer than 70 feet (Section 5.11.2.D.i.g.)
7. Reduce parking lot berm screening from 3 feet to minimum of 2 feet in height (Section 5.11.2.E.ii.a.(1)).
8. Define the percentage of (tree) heights required for an evergreen tree screen/buffer (Section 5.11.2.G.i.a.).
9. Add language to allow “greenbelt” shrubs to count as “parking lot screen shrubs” or plantings for a detention area, where those areas are adjacent to one another, in order to decrease the number of required plants in overlapping areas.
10. Revise detention requirements-plantings to be integrated into the overall site design; new planting formula; clarify side slope of basin; and add language that Planning Commission could modify detention requirements (plantings) if stormwater collection systems include bioswales, rain gardens and other features that are in place to filter stormwater. Provide drawing of detention pond planting scheme. (Section 5.11.2.H.)
11. Clarify depth of mulch requirements around plant material. Clarify that rock, stone, or gravel can only be used in a narrow maintenance strip along building foundations and cannot be used as mulch (Section 5.11.3.C.iv.j.).
12. Add section on subdivision planting requirements to require street trees.
13. State throughout the ordinance as applicable that landscaped areas must provide 80% bed coverage with plant material at the ground level within two (2) years. This includes parking islands, foundation landscape beds around a building, and any mulched planting beds. The intent is to avoid large, mulched areas with few plants and the potential for weeds.
14. Additional language/ revised language as applicable to clarify and simplify the standards as currently stated.

Other comments

Draft drawings are provided as attachments, for General Site Landscaping, Detention/Retention Pond Grading and Landscaping, and Tree Protection Fencing. Other revisions will be necessary for various charts and other drawings currently provided in Section 5.11 (Landscaping and Screening), and those pages are provided as well. The final details on those items will be addressed at a future time when staff will be working with Clear Zoning on the amended ordinance sections.

Process

Zoning Ordinance Text Amendments are outlined in Section 7.4.4 of the Zoning Ordinance, as follows:

4. Zoning Ordinance Text Amendment Criteria. The Planning Commission and Township Board shall consider the following criteria for initiating amendments to the zoning ordinance text or responding to a petitioner's request to amend the ordinance text.
 - A. The proposed amendment would correct an error in the Ordinance.
 - B. The proposed amendment would clarify the intent of the Ordinance.
 - C. Documentation has been provided from Township staff or the Zoning Board of Appeals indicating problems or conflicts in implementation or interpretation of specific sections of the ordinance.
 - D. The proposed amendment would address changes to state legislation.
 - E. The proposed amendment would address potential legal issues or administrative problems with the Zoning Ordinance based on recent case law or opinions rendered by the Attorney General of the State of Michigan.
 - F. The proposed amendment would promote compliance with changes in other Township ordinances and county, state or federal regulations.
 - G. The proposed amendment is supported by the findings of reports, studies, or other documentation on functional requirements, contemporary building practices, environmental requirements and similar technical items.
 - H. Other criteria as determined by the Planning Commission or Township Board which would protect the health and safety of the public, protect public and private investment in the Township, promote implementation of the goals and policies of the Comprehensive Plan and enhance the overall quality of life in Hartland Township.

Based on Section 7.4.4 of the Zoning Ordinance, either the Planning Commission or the Township Board may initiate a Zoning Ordinance Text Amendment. The Planning Commission initiated the amendment at their Work Session on June 23, 2022.

Per the Hartland Township Zoning Ordinance and the State Enabling Act, a public hearing is required for a Zoning Ordinance text amendment. Given the requirements for publishing a notice for a text amendment, the public hearing has been scheduled for the August 11, 2022 Planning Commission meeting.

Attachments:

1. Draft Landscape Ordinance with strikeouts dated 07.28.2022 – PDF version
2. Draft drawing – General Site Landscaping – PDF version
3. Draft drawing – Detention/Retention Pond Grading and Landscaping Requirements – PDF version
4. Draft drawing – Tree Protection Fencing – PDF version
5. Draft edits to drawings and charts – PDF version

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5.7 DUMPSTER ENCLOSURE

All dumpster enclosures shall comply with the following requirements:

1. Dumpsters shall be completely enclosed and secured by a decorative masonry screen wall on three sides, and steel reinforced, opaque and lockable wooden gates.
2. The type, color, and pattern of the enclosure materials shall match or complement the exterior façade materials of the building and meet the architectural standards in Section 5.24 if applicable.
3. The height of the enclosure shall be sufficient to completely screen all dumpsters and materials, a minimum of six (6) feet in height.
4. The bottom surface within the enclosure shall be constructed of concrete and shall extend a minimum of ten (10) feet in front of the enclosure.
- ~~5. The enclosure shall be screened with plant materials to the satisfaction of the Planning Commission. Such screening shall also meet the requirements of Section 5.11.1., Section 5.11.3., and Section 5.11.4. contained herein unless superseded by the Planning Commission.~~

5.11 LANDSCAPING AND SCREENING

1. Intent and Scope of Requirements

A. Intent. Landscaping enhances the visual image of the Township, preserving natural features, improving property values, and alleviating the impact of noise, traffic, and visual distraction associated with certain uses. Screening is important to protect less intensive uses from the noise, light, traffic, litter and other impacts of more intensive, nonresidential uses. Lighting and sidewalks create, where appropriate, an important part of the Township's visual image. These provisions are intended to set minimum standards for the design and use of landscaping, greenbelts, screening, lighting, and walkways, and for the protection and enhancement of the Township's environment. More specifically, the intent of these provisions is to:

- i. Improve the appearance of off-street parking areas, vehicular use areas, and property abutting public rights-of-way,
- ii. Protect and preserve the appearance, character, and value of the neighborhoods that abut non-residential areas, parking areas, and other intensive use areas, thereby protecting the public health, safety and welfare,
- iii. Create a safe and efficient means of pedestrian circulation,
- iv. Reduce soil erosion and depletion, and v. Increase soil water retention, thereby helping to prevent flooding.

B. Scope of Requirements. A detailed landscape plan shall be submitted as part of the site plan review process in accordance with the provisions set forth in Section 6.1, Site Plan Review. No site plan shall be approved unless it shows landscaping, screening, buffering, berming grading, walls, fencing, lighting and

sidewalks consistent with the requirements of this Ordinance. Landscaping shall include plant materials such as trees, shrubs, ground covers, perennial and annual plants; landscape elements such as rocks, water features, fences, walls, paving materials, and site lighting; and site furnishings such as benches, drinking fountains, trash receptacles, and planters. All graphics, contained in this Section, are for illustrative purposes only. The requirements in this Section shall not apply to single family detached homes, unless otherwise specifically noted.

C. Minimum Requirements. The requirements in this Section are minimum requirements, and under no circumstances shall they preclude the developer and the Township from agreeing to more extensive standards.

D. Design Creativity for Landscaping. Creativity in landscape design is encouraged. Accordingly, required trees and shrubs may be planted at uniform intervals, at random, or in groupings, depending on the designer's desired visual effect. The developer and landscape professional shall work with the Township to ensure consistency with the character of the area, providing the massing and visual interest to enhance the architecture and ensure coordination of the proposed landscaping with adjoining properties and throughout the community.

~~A landscape professional shall be professionally trained and have expertise in the area of landscape architecture, horticulture, landscape design or a similar field. Expertise in types of plant material, growth patterns, durability, installation and maintenance is required. The Planning Commission may require sealed plans from a Licensed Landscape Architect when the project is over five (5) acres in size, part of a Planned Development or contains unique or natural features that would benefit from that level of design expertise.~~

Whenever a landscape plan is required under the provisions of the Ordinance a detailed planting plan of said improvements shall be submitted and approved with the site plan prior to the issuance of a building permit. Unless waived by the Planning Commission, or the Planning Department reviewing the plan, the plan shall be prepared by a landscape architect, registered in the State of Michigan. A waiver could include the following:

i. Minor site plan amendment as outline in Section 6.1.10 of the Zoning Ordinance.

ii. Agricultural operation

iii. Adding a drive-through window in an existing building.

iv. Building addition less than ten percent (10%) of the overall existing building size.

v. Addition of parking spaces that include screening consistent with previously approved landscape plan.

vi. Any other site improvement where the Planning Commission deems such improvements does not require a plan prepared by a registered landscape architect.

2. General Landscaping Requirements

A. General Requirements

i. Standards. All developed portions of the site shall conform to the following general landscaping standards, except where specific landscape elements, such as a greenbelt, berm, or screening are required. All unpaved portions of the site shall be planted with grass, ground cover, shrubbery, or other suitable live plant material, which shall extend to any abutting street pavement edge, unless an alternate material is approved by the Planning Commission.

ii. All planting beds with shrub or groundcover requirements shall provide a minimum eighty percent (80%) ground coverage within two (2) years of planting.

iii. Units of Measurement. For purposes of determining the minimum number of live plant materials required for a site, when the calculation results in a fractional number, any fraction of less than one-half (1/2) may be disregarded, while a fraction of one-half (1/2) or more shall be counted as a requirement for one plant.

iv. Lot Frontage Measurement. For purposes of determining the minimum number of live plant materials required for a site, lot frontage shall mean the distance between the two side lot lines of a lot or parcel of land as measured at the road and shall include any openings for driveways, sidewalk, or easements.

~~iv. Lawn Areas. Grass areas in the front yard of all non-residential uses shall be planted with sod or hydro-seeded.~~

v. Maintenance of Unobstructed Visibility. No landscaping shall be established or maintained on any parcel or in any parking lot that will obstruct the view of drivers. Accordingly, all landscaping shall comply with the provisions concerning clear vision area set forth in Section 5.1, Clear Vision Area.

vi. Utility Clearance. In no case shall landscaping material be planted in a way that will interfere with or cause damage to underground utility lines, public roads, or other public facilities. Species of trees whose roots are known to cause damage to public roadways, sewers, or other utilities shall not be planted closer than fifteen (15) feet from any such roadways, sewers, or utilities. Trees shall be setback from overhead utility lines as indicated in Table 5.11.2.A.vi, Utility Clearance.

vii. Landscaping of Divider Medians. Where traffic on driveways, maneuvering lanes, private roads, or similar vehicle access ways are separated by a divider median, the median shall be curbed and have a minimum width of ten (10) feet. A minimum of one (1) canopy or evergreen tree ~~and six (6) medium shrubs~~ shall be planted for the initial twenty five (25) lineal feet or portion thereof plus one (1) additional canopy or evergreen tree ~~and four (4) additional medium shrubs~~ for every increment of twenty five (25) lineal feet. Trees may be planted at uniform intervals, at random, or in groupings, but in no instance shall the center-to-center distance between trees exceed sixty (60) feet. The ground surface

shall be covered with grass, groundcover, shrubbery or other live plant material to meet ground coverage in Section 5.11.2.A.ii.

viii. Irrigation. ~~The site plan shall indicate the proposed method of watering landscaped areas. For all new developments, requiring site plan approval, an in-ground irrigation/sprinkler system is required. The Planning Commission may permit an alternate method of irrigation in accordance with Section 5.11.7, Modification to Landscape Requirements. To assist in maintaining plant materials in a healthy condition, all landscaped areas (including lawns) shall be provided with an automatic, underground, or drip irrigation system, subject to the following:~~

a. All automatic irrigation systems shall be designed to minimize water usage, have rain sensors, and shall be shut off during water emergencies, periods of protracted rainfall, or water rationing periods.

b. The irrigation requirement may be waived by the reviewing authority if the project incorporates landscaping that will contribute points towards LEED certification or an equivalent rating system.

~~ix. Landscaping around the base of monument signs. Landscaping shall be provided at the base of the monument sign. The landscape area shall be a minimum width of five (5) feet on each of the longest sign faces and be defined by a landscape edge to maintain a finished appearance. Plantings shall include a mix of evergreen/deciduous shrubs or ornamental trees. Landscaping should provide year-round interest. Perennials, annuals and mulch may be used as in-fill but shall not exceed thirty percent 30% of the planting area. Landscaping should be in scale with the sign height and length to create a substantial base.~~

B. General Site Landscaping

i. Site landscaping is required by this Section in ~~six-five~~ general areas: greenbelt; foundation; parking lot interior and perimeter; retention/detention facilities; ~~monument signs~~; and, screening and buffering. As part of site plan review, the applicant shall identify the minimum number of trees and shrubs required to meet the general areas described in this Section. ~~In addition to these minimum requirements, the applicant shall provide additional trees and shrubs comprising twenty five percent 25% of the minimum required for each Plant Material Category. Additional plantings shall be used to further enhance the site's overall landscape plan and may be used in existing planting beds or to provide continuity between landscape areas.~~

The Planning Commission may allow substitutions to Section 5.11.3.C, Plant Material Specifications when it finds that the intent of this Ordinance would be met, and the landscape plan enhanced through the modification.

ii. Landscaping may include the preservation of existing trees and shrubs along with new trees, shrubs, grass, ground cover, and other living plant material. ~~No more than one third (33%) of the area being comprised of grass or ground covers. The one third (33%) shall be calculated within each required~~

~~landscape area, i.e. greenbelt, screening, foundation, etc.~~ Preserved landscaping shall meet the intent and quality as required by this Section.

[TEXT MOVED FROM SEC 5.11. ~~4.E.5~~]

5iii. Treatment of Existing Plant Material. The following regulations shall apply to existing plant material:

Aa. Consideration of Existing Elements in the Landscape Design.

i.(1) In instances where healthy plant material exists on a site prior to its development, the Planning Commission may permit substitution of such plant material in place of the requirements set forth ~~previously~~ in this Section, provided such substitution is in keeping with the spirit and intent of this Ordinance. In order to satisfy the landscape requirements the preserved trees shall be of high quality and a minimum of four (4) inch caliper measured twelve (12) inches above grade and located within the developed portion of the site.

ii.(2) In no case shall the minimum number of required trees be reduced by more than fifty percent (50%) through the use of the preserved trees.

iii.(3) Existing trees, berms, walls, or other landscape elements may be used to satisfy the requirements set forth ~~previously~~, provided that such landscaping is in conformance with the requirements of this Section.

Bb. Preservation of Existing Plant Material

(1) Trees

i.(a) ~~Site~~ The plans shall show all existing trees which are located in the portions of the site that will be built upon or otherwise altered, and are ~~eight (8) four (4)~~ inches or greater in caliper, ~~measured four and one-half (4.5) feet above grade.~~

(b) ~~If existing trees are proposed to remain and be used to meet tree requirements a tree survey, prepared by a professional land surveyor, shall be submitted showing all trees to be preserved. Tree size (height or trunk diameter), species and condition of the tree shall be provided on the survey.~~

(2) Trees and Other Plantings

ii.(a) Trees and plantings shall be labeled "To Be Removed" or "To Be Saved" on the site plan. If existing plant material is labeled "To Be Saved" on the site plan, protective measures should be implemented, such as the placement of fencing ~~or stakes~~ at the drip line around each tree or planting bed. No vehicle or other construction equipment or materials shall be parked or stored within the drip line of any tree or other plant material intended to be saved. Refer to Figure _____.

(b) ~~If existing tree(s) and plant material to be saved are not being watered by an irrigation system currently, they are not required to received irrigation.~~

.iii.(b) In the event that healthy plant materials which are intended to meet the requirements of the Ordinance are cut down, damaged or destroyed during construction, said plant material shall be replaced with ~~the same species as the damaged or removed tree~~plantings to meet all other requirements. A modified landscape plan shall be submitted to the Township showing the replacement of the damaged or removed ~~tree plantings~~ and the proposed replacement to the Zoning Administrator for review and approval. The Zoning Administrator, at his/her discretion, may require Planning Commission review and approval.

C. Greenbelt

i. A greenbelt shall be planted along any public or private road right-of-way within the first thirty (30) feet of the property, see 5.11.2.B.i, General Site Landscaping. Plantings may occur within the right-of-way, private property or a combination of both. If the plantings are not permitted within the first thirty (30) feet of the property, due to conflicts with utilities, sight lines or other right-of-way encumbrances, the Planning Commission may allow the planting elsewhere within the required front yard setback if it finds the intent of the greenbelt is still met. The greenbelt shall meet the following standards:

a. The greenbelt shall be a minimum of twenty (20) feet wide and shall generally run parallel to the public or private right-of-way, excluding regulated wetlands. The greenbelt should be arranged to simulate a natural setting with staggered or clustered plantings, except where a more traditional or formal design is appropriate for the development and surrounding area and will meet the intent of this Section.

b. The greenbelt shall include one (1) canopy tree for every thirty (30) linear feet or portion thereof of lot frontage. For example, eighty (80) feet of frontage shall require three (3) canopy trees. The Planning Commission may approve a substitution of evergreen trees for up to fifty percent (50%) ~~percent~~ of the canopy trees.

c. The greenbelt shall include three (3) small deciduous ornamental trees or large deciduous or evergreen shrubs for the initial forty (40) linear feet or portion thereof of lot frontage. Thereafter, one (1) additional small deciduous ornamental tree or large deciduous or evergreen shrub shall be required for every twenty (20) feet or portion thereof of lot frontage. For example, eighty (80) feet of frontage shall require five (5) ornamental trees or large shrubs.

d. The greenbelt shall be planted with grass, groundcover, shrubbery or other live plant material, other than those areas used as drives, sidewalks or other approved structures and areas where live plant material would not survive.

e. Public rights-of-way located adjacent to required landscaped areas and greenbelts shall be maintained by the owner or occupant of the adjacent property as if the rights-of-way were part of the required landscaped areas or greenbelts. No plantings except grass or ground cover shall be permitted closer than three (3) feet from the edge of the road pavement.

f. The Planning Commission may determine that existing trees which are preserved within the road right-of-way, easement or determined greenbelt area may meet all or part of the requirement based on their location, species, size and integration into the overall landscape plan. Preservation of the trees located within the right-of-way must be confirmed in writing by all agencies having an easement over said right-of-way prior to site plan review.

g. In instances where the greenbelt is adjacent to a parking area, the greenbelt shrubs may be used to provide the required screening as outlined in Section 5.11.2.E. Perimeter Parking Lot Landscaping.

ii. A minimum fifteen (15) foot wide landscape area shall be provided along the length of internal roadways providing shared public access to the site. The landscape area shall be planted with a minimum of one (1) canopy or evergreen tree for every thirty (30) feet or portion thereof. Where an internal roadway abuts a parking area, screening shall be provided per Section 5.11.2.E.ii.

D. Foundation Landscaping

i. Foundation ~~plantings landscaping~~ shall be required to visually break up the mass of buildings ~~and enhance the traffic flow~~ in accordance with the following requirements and as illustrated in Figure 5.11.2.B.i., General Site Landscaping. Foundation landscape areas can be a combination of lawn and plantings.

a. The length of this planting area must equal at least sixty percent (60%) of front and sides of the building length along the front and sides of buildings which face a public or private road, is adjacent to a parking lot or other areas which provide access to the building(s) or adjacent to a developable site or area.

b. Planting Landscape areas shall be a minimum of eight (8) feet in width ~~when and be~~ located adjacent to the building ~~or ten (10) feet in width when located between the building and a parking area or drive aisle to prevent vehicle encroachment.~~

c. Plantings shall contain a minimum of one (1) deciduous ornamental tree or columnar tree and six (6) ~~medium large~~ shrubs or eight (8) small shrubs for every thirty (30) lineal feet of building length or portion thereof. ~~The Planning Commission may permit a mixture of small and medium size shrubs when the ratio of plantings is consistent with the intent of this Section.~~ Landscape areas shall meet minimum coverage per Section 5.11.2.A.ii.

~~d. Planting areas shall be integral with the pedestrian walkways and parking areas and associated driveways.~~

~~ed.~~ Permanent raised landscape planters which are designed as an integral part of the pedestrian walkway may be used to satisfy the foundation landscape requirement. ~~A minimum of one (1) ornamental tree and eight (8) small shrubs per thirty (30) lineal feet of building frontage or portion thereof is required for raised planters as long as all plant material coverage requirements are met, and planter dimensions provide appropriate growing conditions.~~

~~fe.~~ Where arcades are used across a building's façade, trees may be used in lieu of shrub plantings and satisfy the requirements for foundation plantings. A minimum of one (1) canopy or evergreen tree per thirty (30) lineal feet of building frontage is required

~~gf.~~ Buildings ~~with a greater mass in length or height that are taller than one story or are longer than seventy (70) feet~~ shall be required to increase the massing of the foundation landscaping proportionately through modification in the required number of plants, size of the plants at time of planting and/or a change to a larger tree or shrub species.

E. Parking Lot Landscaping. Off-street parking areas containing ten (10) or more parking spaces shall provide landscaping in accordance with the following requirements and as illustrated in Figure 5.11.2.B.i., General Site Landscaping:

i. Interior Areas. Each separate landscape area within a parking lot shall be adequately planted and maintained and shall be located in such a manner as to divide and breakup the expanse of pavement and define parking areas and circulation paths. The following specific standards apply:

a. ~~Where a row of parking spaces exceed ten (10) parking spaces, a~~ Unless otherwise approved by the Planning Commission, landscaped endcaps shall be installed at each terminus of the row of parking. Endcaps shall also be used to direct vehicles into the drive aisle and further define the designated parking area.

b. ~~Where a parking row contains twenty (20) or more continuous spaces, one landscape island shall be required at or about the midpoint of the row or as determined by the Planning Commission as part of the overall design.~~ A landscape island shall be required at intervals, not to exceed, fifteen (15) continuous parking spaces.

c. Landscaped areas in parking lots shall be no less than ten (10) feet in any single dimension and no less than one hundred eighty (180) square feet. To improve visibility and maneuvering, the length of the landscaped areas shall be two (2) feet less than the adjacent parking stalls. Landscaped areas in or adjacent to parking lots shall be protected with curbing or other means to prevent encroachment of vehicles.

d. Requirements for plant material shall be based on the location, size, and shape of the parking lot landscaped area. ~~A minimum of one (1) canopy tree shall be planted per one hundred eighty (180) square feet or fraction thereof of interior landscaped endcaps, islands or medians. A minimum of fifty (50) percent of each interior landscaped area shall be covered with a combination of small and medium evergreen and deciduous shrubs. The remaining landscape area may include a combination of groundcover, perennials, annuals and mulch.~~ to achieve the following goals:

(1) Mitigate heat from parking lot pavement:

(a) All parking lot islands shall be planted with canopy trees at a minimum rate of one (1) tree per one hundred eighty (180) square feet or a fraction thereof.

(b) All parking lot islands shall be crowned and covered with lawn or live plant material to meet minimum ground coverage requirements per Section 5.11.2.A.i.

(2) Screening large expanses of parking lot pavement. Islands located on the perimeter of parking areas shall be planted to provide a twenty four (24) to thirty (30) inch in height screen to meet minimum ground coverage requirements per Section 5.11.2.A.i.
Refer to figures 5.11.2.B.i and 5.11.2.E.i for additional clarification.

e. Plantings within parking lots shall comply with the requirements for clear vision set forth in Section 5.1, Clear Vision Area. The landscape plan shall indicate the type, size, and quantity of plant material proposed for such areas.

f. Where the installation of interior parking lot landscaping would impede circulation or prevent routine maintenance, the Planning Commission may approve alternative landscaping ~~along the perimeter of the parking lot.~~

g. The Planning Commission may require evergreen trees where visibility is not an issue and screening or buffering would be beneficial.

ii. Perimeter Areas. For purposes of this ~~S~~section the perimeter area measures fifteen (15) feet in width from the edge of the parking lot or drive aisle measured from the back of curb and the length of the abutting parking aisle. To minimize the conflict between parking lots and public or private roads and neighboring uses, the perimeter of the parking lot shall be screened in accordance with the following standards:

a. Parking lots shall be effectively screened or buffered from the public right of way, ~~or a private road, or~~ internal roadway with one or more of the following landscaping designs:

(1) Landscape berm ~~between a minimum of~~ two (2) ~~and three (3)~~ feet in height and planted with a combination of evergreen and deciduous shrubs to effectively screen vehicles and associated headlights all year long.

(2) Evergreen hedge row a minimum of three (3) feet in height within two (2) years of planting, planted in a row or staggered to create continuous screening. In no case shall an evergreen hedge be less than thirty (30) inches at the time of planting.

(3) A decorative screening wall a minimum of three (3) feet in height located adjacent to the parking lot ~~with a combination of evergreen and deciduous shrubs planted between the parking area and roadway. The Planning Commission may require similar planting materials on the development/building side of the screening wall.~~

(4) The Planning Commission may permit modifications to the screening requirement including the use of ~~metal ornamental~~ fencing or other decorative elements where a greater setback, natural landscaping or topography, or unique site layout would allow for a lesser or modified screening requirement.

b. Perimeter areas not visible from a public road ~~that do not have other screening requirements such as screening between properties,~~ shall be landscaped with a minimum of one (1) canopy ~~tree with four (4) large shrubs or one (1) or~~ evergreen tree for every thirty (30) lineal feet or portion thereof. ~~When canopy trees are used, understory shrubs are required to buffer/screen the parking lot.~~ The Planning Commission may require additional plantings where the proposed intensity of land uses deviate from the existing adjacent land uses or zoning district.

iii. Cart Corrals. Shopping cart corrals provided in parking areas shall be designed as an integral part of a parking lot landscape island(s). The cart corral area shall be a maximum of ten (10) feet in width and ~~up to forty (40) feet in depth (standard island width for back-to-back parking stalls)~~ two (2) feet less in depth than the adjacent parking stalls. The cart corral area shall be flanked on each side by a crowned landscape area a minimum of eight (8) feet in width and extending the full depth of the cart corral, and have a minimum six (6) inch concrete curb to contain the carts between the landscape areas. ~~Raised or depressed pavement may be used at the openings of the cart corral and at the center to contain the carts within.~~ Plantings shall be provided within the landscape areas ~~and shall include canopy trees and medium evergreen or deciduous shrubs~~ sufficient to obscure view of stored carts all year long to a height of three (3) feet. The landscape areas may count towards the interior parking lot landscape requirements. ~~No additional structures shall be permitted for storage of shopping carts in parking areas.~~

F. Berms. Where berms are used they shall conform to the following standards:

i. General Requirements. Berms used for screening between land uses shall be landscaped in accordance with Section 5.11.2.G, Buffering or Screening Requirements.

Berms used for screening between parking lots and access rights-of-way shall be landscaped in accordance with the Section 5.11.2.E.ii, Perimeter Parking. The height of berms used to screen off-street parking shall be measured from the adjacent parking lot or right-of-way whichever is higher.

Berms shall be integrated into the site's overall landscape design to provide a natural rhythm and flow between all landscape areas and improvements. The Township encourages berms to undulate in height and vary in contours to create a more natural appearance.

ii. Dimensions. Unless otherwise indicated or appropriate, required berms shall be measured from the grade of the parking lot or flat ground adjacent to the berm, and shall be constructed with slopes no steeper than one (1) foot vertical for each ~~four (4)~~ three (3) feet horizontal (~~25 percent slope~~ thirty-three percent (33%) slope), with at least a four (4) foot ~~wide flatter crest area~~ on top. ~~The exterior face of the berm shall be constructed as an earthen slope. The interior face may be constructed as an earthen slope or retained by means of a wall or terrace. A berm shall run the length of the developed site area and shall be a minimum width of twenty (20) feet wide with an average berm height of three (3) feet and a~~

~~minimum berm height of two (2) feet. When additional screening is required, the Planning Commission may require a minimum berm height of four (4) feet.~~

iii. Protection from Erosion. Any required berm shall be planted with ~~sod lawn~~, ground cover, or other suitable live plant material to protect it from erosion so that it retains its height and shape. The Planning Commission may allow the use of hardscape material, including masonry landscape blocks, stones, and other natural and decorative materials to retain the shape and height of a berm.

G. Buffering or Screening Requirements

i. Screening between Land Uses. Upon any improvement or change in use for which a site plan is required, a landscape buffer shall be provided to create a visual screen at least eight (8) feet in height along all adjoining boundaries of a non-residential use or a residential use of higher density and an abutting single family residential zoned property. At the discretion of the Planning Commission, modifications to the required screening may be permitted when alternative screening methods, existing site conditions and/or use of the properties would meet the intent of this Section. The overall height of the visual screen may include the combination of landscape berm and plant material and/or decorative screening walls.

a. When using evergreen trees to meet the screening requirements, plantings shall be spaced no more than twelve (12) feet apart measured on center ~~(depending on their planting size)~~ and shall be planted in a minimum of two (2) rows in a staggered or a clustered pattern with varying tree heights to provide for optimal screening and create a natural looking buffer, see Figure 5.11.2.B.i and 5.11.2.G.i.a. When using a staggered pattern, the minimum spacing between rows shall be ~~six (6)~~ ten (10) feet. When using evergreen trees solely to meet screening requirements and to provide an eight (8) foot in height minimum natural looking buffer, evergreen tree heights shall range from a minimum of eight (8) feet to twelve (12) feet in height or taller. Up to sixty percent (60%) of trees can be eight (8) feet in height, thirty percent (30%) shall be at least ten (10) feet in height and the remaining ten percent (10%) shall be twelve (12) feet in height or taller. In no case shall the trees be less than eight (8) feet in height. Additional deciduous plant materials may be used provided that a complete minimum eight (8) feet in height visual barrier is maintained throughout the year.

b. At the discretion of the Planning Commission, a berm ~~greater than five (5) feet in height may be required and/or a decorative wall or fencing may be required to supplement the plantings.~~ If a decorative wall or fencing is used, landscaping shall be required on the side(s) of the wall facing the residential or agricultural zoned district, visible to the public from the site or adjacent to a developable property. The Planning Commission may require additional plantings adjacent to the wall and development site.

ii. Screening Parking Lots from Public Roads. Parking lots shall be screened from the public roads in accordance with Section 5.11.2.E Perimeter Parking Lot Landscaping.

iii. Screening of Ground Mounted Equipment. Mechanical equipment, such as utility cabinets, transformers, satellite dish antennae a minimum of thirty (30) inches in height, and similar equipment

shall be screened on at least three (3) sides using evergreen plantings. Insofar as practical, said screening shall exceed the vertical height of the equipment being screened by at least six (6) inches within two (2) years of planting. Screening of mechanical equipment may also be provided using decorative fences or walls when landscaping is not permitted due to equipment clearance and easement restrictions.

H. Landscaping Requirements for Detention/ Retention Areas. Detention/retention ponds shall be integrated into the overall design of the property and landscaped to provide a natural setting. The design and construction of the detention/retention systems shall be in accordance with Hartland Township Engineering Design Standards. When the detention/retention area is in the form of a basin, the following requirements shall apply:

i. Basins shall have a natural, free-form shape, following existing natural topography to the greatest extent possible. If the site is generally flat, the basin shall be shaped to emulate a naturally formed depression. The basin should be a natural shape, and not square, rectangle or other geometric shape. Side slopes should be varied and undulating, rather than having a uniform grade.

~~ii. Basins with side slopes that require fencing are prohibited in front and side yards. When a rear yard basin requires a fence, the fence shall be a decorative style. Chain link fence is prohibited in any circumstance. Side slopes shall not exceed one (1) foot vertical for every five (5) feet horizontal. Side slopes of basins shall not exceed one (1) foot vertical for every four (4) feet horizontal. The Planning Commission shall approve perimeter fencing if deemed necessary.~~

~~iii. A combination of natural stone and landscape materials shall be used to replicate the natural environment and~~ integrate the area with the overall landscape design. Where a basin is designed to have permanent water, a fountain or other water feature may be used.

~~iv. A mixture of landscape materials, including evergreen and canopy/ deciduous trees, shrubs and other substantial plant material shall be planted in a random pattern or groupings. At a minimum one (1) canopy or evergreen tree and ten (10) medium deciduous or evergreen shrubs or six (6) large deciduous or evergreen shrubs or ornamental deciduous trees shall be planted for every fifty (50) linear feet of pond perimeter as measured along the top of the bank elevation. Plantings shall be integrated into the overall site design and may be surrounding and within the basin(s). At a minimum, one (1) canopy tree or evergreen tree shall be planted for every fifty (50) lineal feet of basin perimeter as measured along the top of the bank elevation. The required trees shall be planted in a random pattern or in groupings.~~

v. Basins shall be planted with seed mix or other plantings appropriate to site conditions. All areas to meet vegetation coverage per Section 2.A.ii.

vi. If the detention/retention area is located within the greenbelt, the overall number of plantings required for the greenbelt and detention/retention area may be reduced, at the discretion of the Planning Commission. Refer to Figure 5.11.2.H.1.

vii. Where appropriate, the stormwater collection system may include bioswales, rain gardens and other features that allow run-off water to flow through vegetation prior to entering the stormwater management system. Oil and sediment filters, and other best management practices to control the quality of water entering the system are encouraged. If such systems are employed for the stormwater collection system, landscaping requirements around the detention/retention area may be modified at the discretion of the Planning Commission.

3. Standards for Landscape Materials

Unless otherwise specified, all landscape materials shall comply with the following standards:

A. Plant Quality. Plant materials used in compliance with the provisions of this Ordinance shall be nursery grown, free of pests and diseases, hardy in southeastern Michigan, in conformance with the standards of the American Association of Nurserymen, and shall have passed inspections required under state regulations. Plants shall be No. 1 grade with straight unscarred trunk and well developed uniform crown (park grade trees will not be accepted). Plant materials installed in locations in close proximity to areas exhibiting environmental impacts (for example, exhaust fumes, salt runoff) commonly associated with motorized vehicles shall be hardy under such conditions.

B. Non-Living Plant Material. Plastic and other non living plant materials shall not be considered acceptable to meet the landscaping requirements of this Section.

C. Plant Material Specifications

i. Landscaping shall be varied to enhance design creativity and minimize possible landscape loss caused by specie specific disease. Variations to the species shall continue to provide unity in the overall site design. Tree species shall be required to meet the level of diversity noted in the table that follows.

ii. The use of native plant materials to the area and Southeast Michigan and mixture of trees from the same species association is encouraged. Following is a list of suggested plant materials by category:

iii. Use of plant materials that cause disruption to storm drainage or that are susceptible to pests or disease are not encouraged. The following plant materials exhibit such characteristics, and therefore their use is not encouraged in the Township:

- a. Ashes
- b. Elm (American and Siberian)
- c. Box Elder
- d. Tree of Heaven
- e. European Barberry
- f. Northern Catalpa
- g. Poplar
- h. Willow
- i. Maple (Amur, Norway & Silver)
- j. Ginkgo (Female)

- k. Goldenrain tree
- l. Black Locust
- m. Honey Locust (with thorns)
- n. Horse Chestnut (Nut Bearing)
- o. Cottonwood
- p. Mulberry
- q. Amur Cork Tree

iv. The following specifications shall apply to all plant material proposed in accordance with the landscaping requirements of this Ordinance:

a. Canopy Trees. Deciduous canopy trees shall be a minimum of three (3) inches in caliper measured six (6) inches above grade with the first branch a minimum of four (4) feet above grade when planted and not to exceed seven (7) feet above grade when screening is desired.

~~b. Other Deciduous and Columnar Trees. These may be included as part of the overall landscape site design but are generally not considered. At time of planting, the tree height shall be a minimum of twelve (12) feet in height.~~

~~eb.~~ Small Deciduous Ornamental Trees and Large Shrubs. Small deciduous ornamental trees/ shrubs shall be a minimum of two (2) inches in caliper measured six (6) inches above grade ~~with a minimum height of four (4) feet above grade when planted~~ or six (6) feet in height ~~from for~~ clump varieties.

~~dc.~~ Evergreen Trees. Evergreen trees shall be a minimum of eight (8) feet in height when planted, except as otherwise specified in this Ordinance. Furthermore, evergreen trees used for screening shall have a minimum spread of five (5) feet at time of planting. Columnar evergreen trees may be included as part of the overall landscape site design.

~~ed. Deciduous and Evergreen Large~~ Shrubs. Large shrubs shall be a minimum of thirty (30) inches in height and twenty-four (24) inches in spread when planted when used to screen or buffer, unless otherwise specified in this Ordinance.

~~fe. Deciduous and Evergreen Small~~ Shrubs Small ~~deciduous and evergreen~~ shrubs shall be a minimum of eighteen (18) inches in height when planted and shall not be used for screening purposes. Low growing shrubs shall have a minimum spread of twenty-four (24) inches when planted.

~~gf.~~ Ground Cover. Ground cover used in lieu of turf grasses in whole or in part shall be planted in such a manner as to ~~present a finished appearance and reasonably complete coverage after one (1) complete growing season~~ meet coverage requirements per Section 5.11.2.A.ii.

~~hg.~~ Perennials/Annuals/Ornamental Grass. Perennials/Annuals/ Ornamental Grass are to be used as accent plantings in addition to the required trees and shrubs.

ih. Grass. Grass area shall be planted using species normally grown as permanent lawns in southeast Michigan. Grass, sod, and seed shall be clean and free of weeds, pests, and diseases. Grass may be sodded, ~~plugged, sprigged~~ or seeded. When grass is to be established by a method other than complete sodding or seeding, nurse grass seed shall be sown for immediate effect and protection until complete coverage is otherwise achieved. Straw or other mulch shall be used to protect newly seeded areas.

ji. Mulch. Planting beds shall present a finished appearance with shredded hardwood bark mulch or similar natural material ~~at a minimum depth of three (3) inches~~. Mulch used around trees, ~~and shrubs, and vines~~ shall be a maximum of ~~four (4) three (3) inches in depth deep~~ and shall be pulled three (3) inches away from the trunk. Mulch shall be ~~contained within its respective planting areas through the installation of edging material or curbing~~ two (2) inches in depth around perennials, groundcover and ornamental grasses. Rock, stone, or gravel is not allowed as mulch in planting beds but could be used for a narrow maintenance strip along a building foundation, with the maintenance strip a maximum of two (2) feet in width.

4. Installation, Irrigation and Maintenance. The following standards shall be observed where installation and maintenance of landscape materials are required:

A. Minimum Standards

i. Time of planting. Landscaping shall be installed in a sound, workmanlike manner to ensure the continued growth of healthy plant material. Trees, shrubs, and planting beds shall be generously mulched at the time of planting.

ii. Irrigation. All landscaped areas shall be provided with an irrigation system in accordance with Section 5.11.2.A.viii, Irrigation.

iii. Support Material Removal. Where required, tree stakes, guy wires and tree wraps are to be removed after one year.

B. Off-Season Planting Requirements. If development is completed during the off season when plants cannot be installed, the owner shall provide a performance guarantee to ensure installation of required landscaping in the next planting season, in accordance with Section 6.4, Performance Guarantees.

C. Phased Projects. Projects that are developed in phases may construct and install landscaping to coordinate with the development schedule. A phasing landscape plan shall be submitted at time of site plan review. Prior to beginning the initial or any subsequent phase, all screening required along the property boundaries adjacent to residentially zoned or used property shall be installed. Where screening material would be destroyed during construction, interim planting materials may be required.

D. Maintenance. Landscaping required by this Ordinance shall be maintained in a healthy, neat, and orderly appearance, free from refuse, debris and weeds. All unhealthy and dead plant material shall be replaced immediately, unless the season is not appropriate for planting, in which case such plant material shall be replaced at the beginning of the next planting season. The developer or owner(s) shall

insure perpetual and mandatory maintenance and/or replacement of vegetative plantings pursuant to the approved landscape plan.

E. All constructed or manufactured landscape elements, such as but not limited to benches, retaining walls, edging, and so forth, shall be maintained in good condition and neat appearance. Elements approved as part of Site Plan approval shall, when necessary, be replaced pursuant to the approved plan.

[TEXT MOVED TO SEC 5.11.2.B.iii]

65. Specific Landscaping Requirements

A. Requirements for LC, Limited Commercial and STR, Settlement Residential Districts. Because of the typical small lot size and compact character of the settlements in which these two zoning districts are located, site landscaping requirements shall be as follows for non-residential uses:

i. General Site Landscaping. All developed portions of the site shall conform to Section 5.11.2, General Requirements.

ii. Landscaping Adjacent to Road. Street trees shall be provided and maintained ~~where feasible at one (1) tree per thirty-five (35) feet of frontage. Street trees shall be located in five (5) foot minimum width lawn strip between the road and sidewalk. When this is not feasible, trees shall be planted no further than fifteen (15) feet from the edge of pavement or back of curb.~~ Landscaping shall be consistent with the streetscape design as provided by the Township, if applicable.

iii. Screening. Upon any improvement or change in use for which a site plan is required, a landscape buffer shall be provided to create a visual screen at least eight (8) feet in height along all adjoining boundaries of a nonresidential use or a residential use of higher density than an abutting single family residential zoned property. At the discretion of the Planning Commission, modification for screening may be allowed pursuant to Section 5.11.7, Modification to Landscape Requirements.

iv. Utility Clearance. See Section 5.11.2.A.vi.

B. Requirements for Single Family Residential Districts. Single Family Residential properties are encouraged to plant and maintain landscaping which provides a good street side appearance, is a mixture of deciduous and evergreen plantings and is in-keeping with the character of the surrounding area. The following requirements are required for all single family detached residential properties and is in addition to the requirements for residential developments that are approved through the Site Plan Review process.

i. General Site Landscaping. All unpaved portions of the front yard shall be planted with grass, ground cover, shrubbery, or other suitable live plant and landscape bed material, which shall extend to any abutting street pavement edge.

ii. Maintenance of Unobstructed Visibility. No landscaping shall be established or maintained on any parcel that will obstruct the view of drivers. Accordingly, all landscaping shall comply with the provisions set forth in Section 5.1, Clear Vision Area.

iii. Utility Clearance. See Section 5.11.2.A.vi.

C. Subdivision Planting Requirements. In single family platted subdivisions, residential site condominiums or non-residential subdivisions (example: interior streets in industrial subdivisions) street trees, medium or large canopy deciduous trees, shall be planted in front of each lot as follows: one (1) tree shall be planted for every thirty (30) feet of frontage between the sidewalk and curb. The width of the area between the sidewalk and back of curb shall be a minimum of four (4) feet.

~~76.~~ Modifications to Landscape Requirements

In consideration of the overall design and impact of a specific landscape plan, and in consideration of the amount of existing plant material to be retained on the site, the Planning Commission may modify the specific requirements outlined herein, provided that any such adjustment is in keeping with the intent of this Ordinance. In determining whether a modification is appropriate, the Planning Commission shall consider whether the following conditions exist:

A. Topographic features or other unique features of the site create conditions such that strict application of the landscape regulations would result in a less effective screen than an alternative landscape design.

B. Parking, vehicular circulation, or land use are such that required landscaping would not enhance the site or result in the desired screening effect.

C. The public benefit intended by the landscape regulations could be better achieved with a plan that varies from the strict requirements of this Ordinance.

5.26.8.M.ii.b. SIGNS

~~b. All monument signs shall include adequate landscaping in size and quantity of plant material around the base of the sign so as to create a unified and aesthetic appearance with the structure or development in which the sign is promoting.~~

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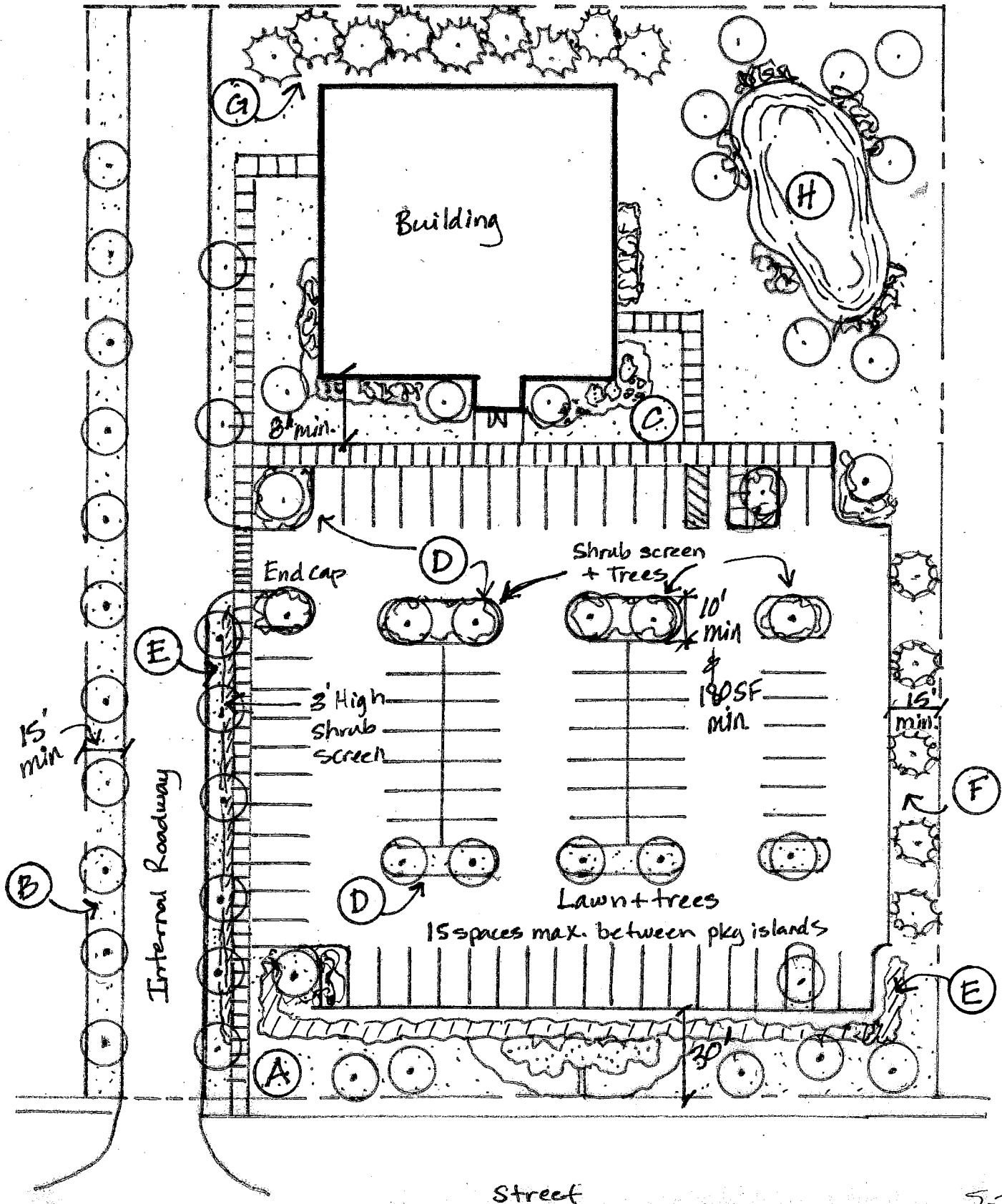
5.11.2.B.i. GENERAL SITE LANDSCAPING

CATEGORY/AREA

- A. Greenbelt
- B. Internal Roadway
- C. Foundation
- D. Parking Lot-Interior Areas
- E. Parking Lot-Perimeter Areas
- F. Perimeter Areas not visible from public road
- G. Buffering/Screening
- H. Detention/Retention Areas

ORDINANCE SECTION

- 5.11.2.C.
- 5.11.2.C.ii.
- 5.11.2.D.
- 5.11.2.E.i.
- 5.11.2.E.ii.a.
- 5.11.2.E.ii.b.
- 5.11.2.G.
- 5.11.2.H.



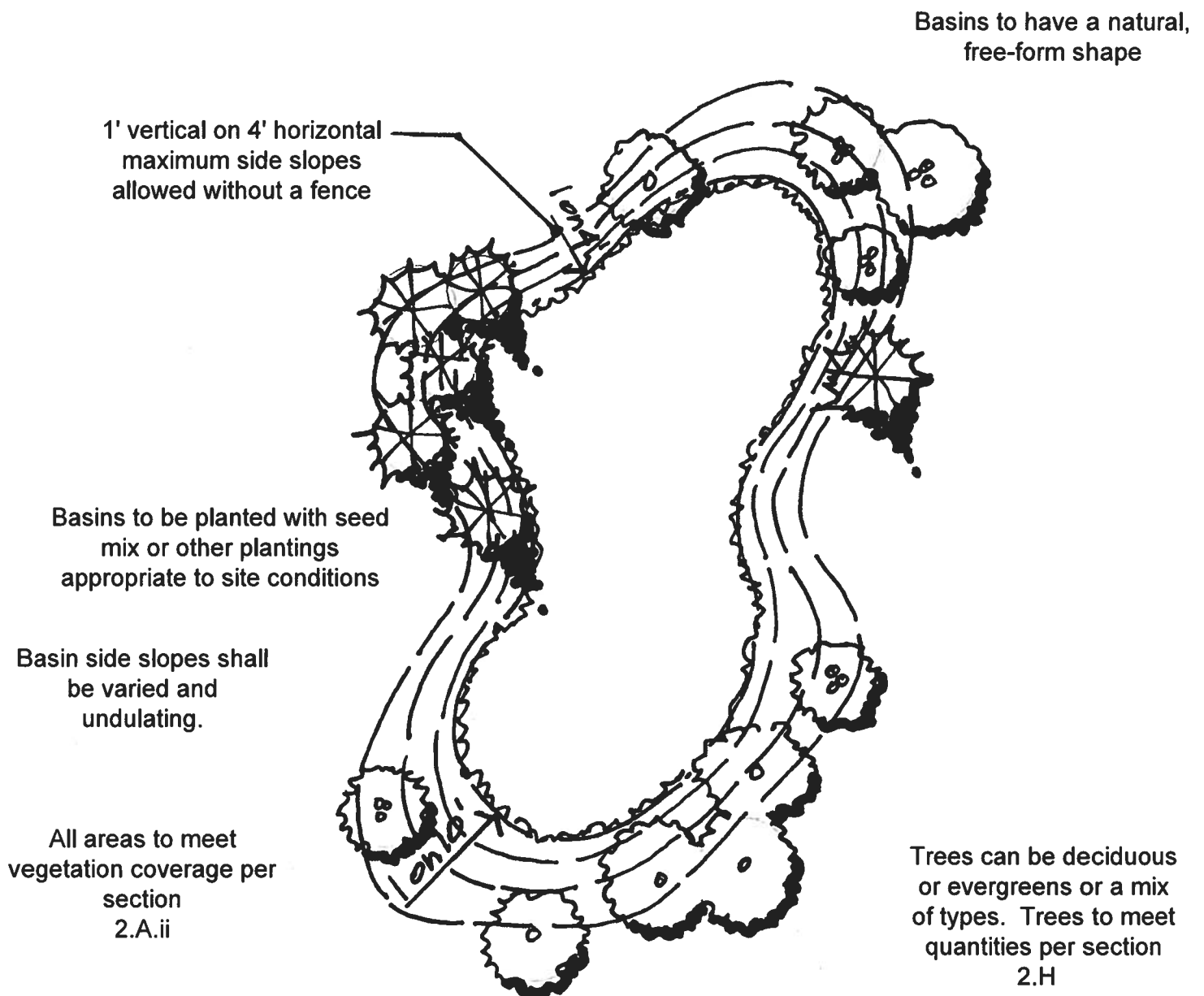
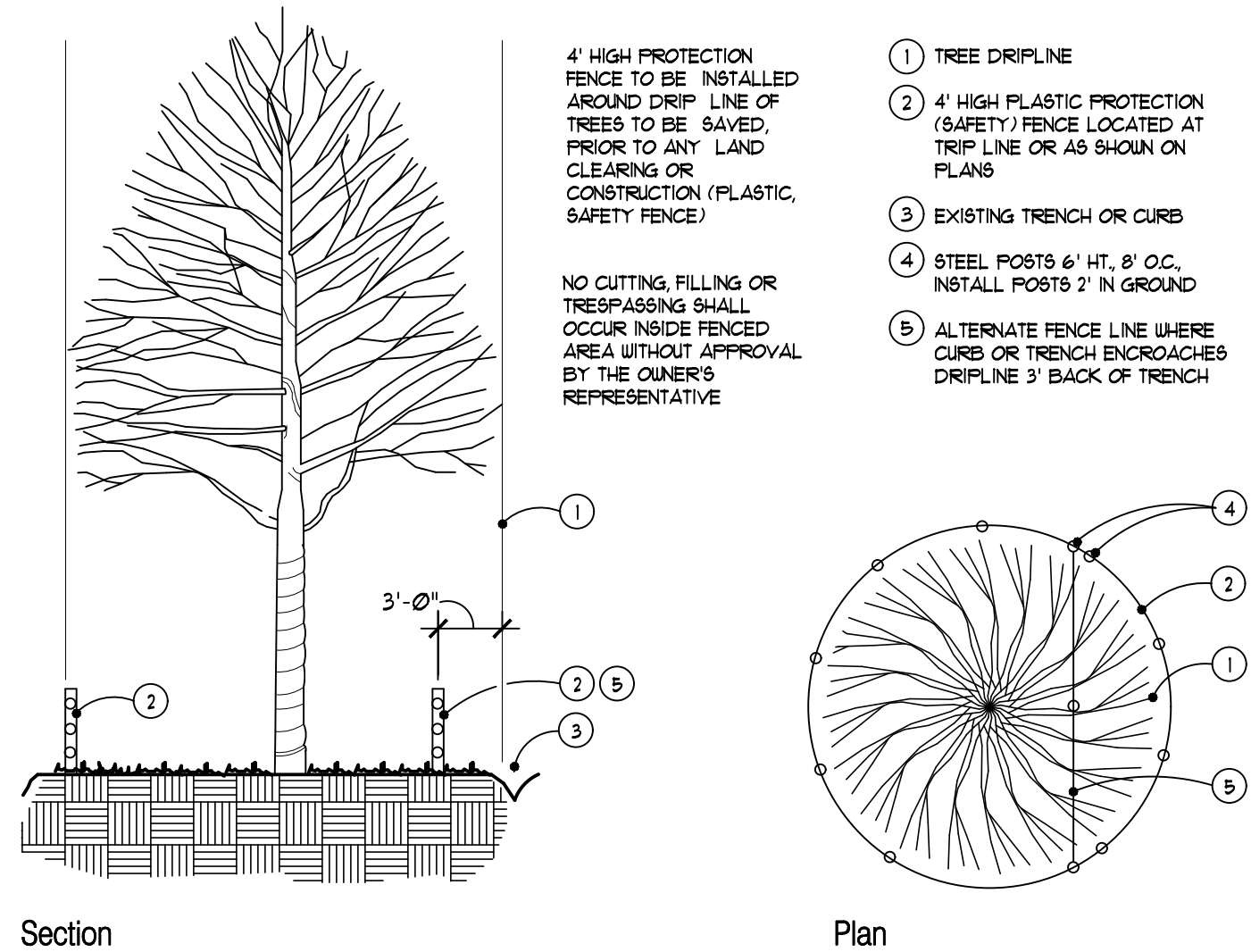


Figure 5.11.2.H
Detention/Retention Pond Grading
and Landscape Requirements

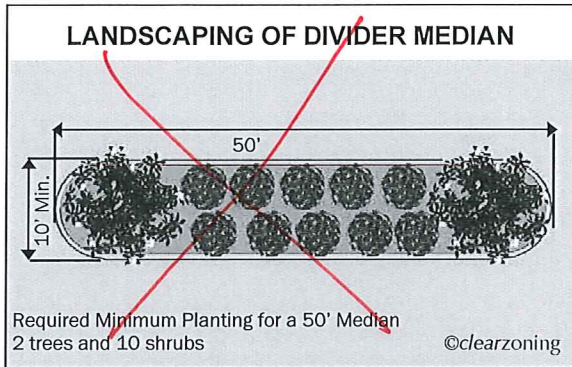
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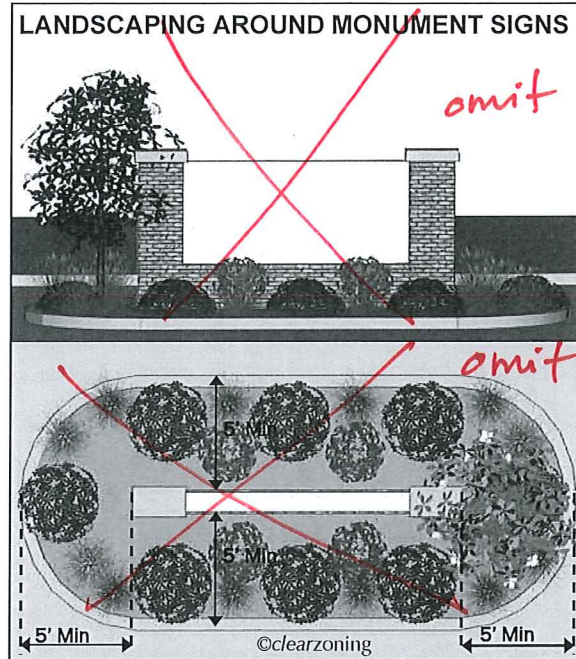
1 Tree Protection Fence Detail

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

but in no instance shall the center-to-center distance between trees exceed sixty (60) feet.



- viii. Irrigation. The site plan shall indicate the proposed method of watering landscaped areas. For all new developments, requiring site plan approval, an in-ground irrigation/sprinkler system is required. The Planning Commission may permit an alternate method of irrigation in accordance with Section 5.11.7, Modification to Landscape Requirements.
- ix. Landscaping around the base of monument signs. Landscaping shall be provided at the base of the monument sign. The landscape area shall be a minimum width of five (5) feet on each of the longest sign faces and be defined by a landscape edge to maintain a finished appearance. Plantings shall include a mix of evergreen/deciduous shrubs or ornamental trees. Landscaping should provide year-round interest. Perennials, annuals and mulch may be used as in-fill but shall not exceed thirty percent 30% of the planting area. Landscaping should be in scale with the sign height and length to create a substantial base.



B. General Site Landscaping

- i. Site landscaping is required by this Section in six general areas: greenbelt; foundation; parking lot interior and perimeter; retention/detention facilities; monument signs; and, screening and buffering. As part of site plan review, the applicant shall identify the minimum number of trees and shrubs required to meet the general areas described in this Section. In addition to these minimum requirements, the applicant shall provide additional trees and shrubs comprising twenty five percent 25% of the minimum required for each Plant Material Category. Additional plantings shall be used to further enhance the site's overall landscape plan and may be used in existing planting beds or to provide continuity between landscape areas.

The Planning Commission may allow substitutions to Section 5.11.3.C, Plant Material Specifications when it finds that the intent of this Ordinance would be met and the landscape plan enhanced through the modification.

1 Purpose and Introduction

2 Definitions

3 Zoning Districts

4 Use Standards

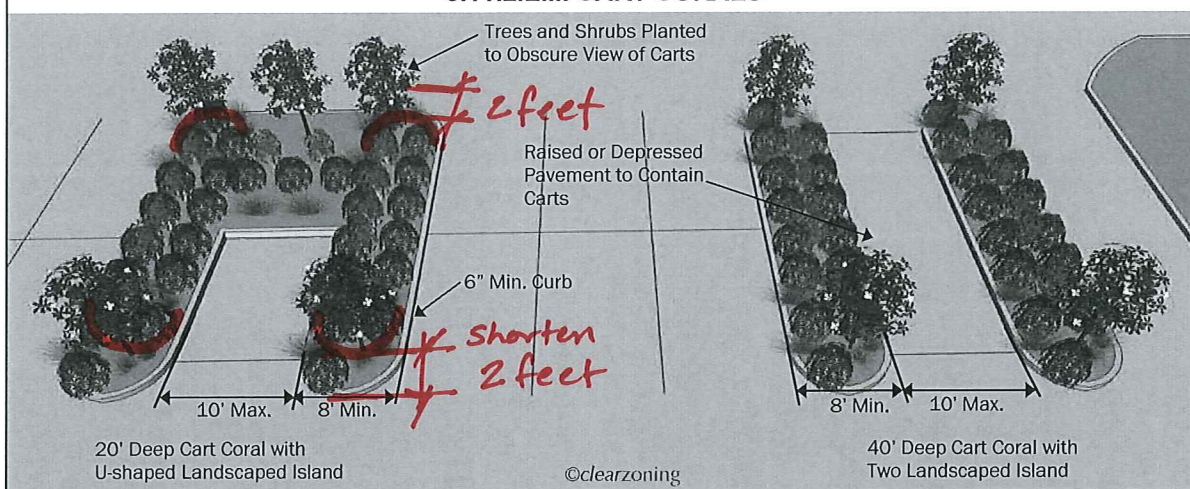
5 Site Standards

6 Development Procedures

7 Admin and Enforcement



5.11.2.E.iii CART CORALS



iii. Cart Corrals. Shopping cart corrals provided in parking areas shall be designed as an integral part of a parking lot landscape island(s). The cart corral area shall be a maximum of ten (10) feet in width and up to forty (40) feet in depth (standard island width for back-to-back parking stalls). The cart corral area shall be flanked on each side by a landscape area a minimum of eight (8) feet in width and extending the full depth of the cart corral, and have a minimum six (6) inch concrete curb to contain the carts between the landscape areas. Raised or depressed pavement may be used at the openings of the cart corral and at the center to contain the carts within. Plantings shall be provided within the landscape areas and shall include canopy trees and medium evergreen or deciduous shrubs sufficient to obscure view of stored carts to a height of 3 feet. The landscape areas may count towards the interior parking lot landscape requirements. No additional structures shall be permitted for storage of shopping carts in parking areas.

shall be landscaped in accordance with the Section 5.11.2.E.ii, Perimeter Parking. The height of berms used to screen off-street parking shall be measured from the adjacent parking lot or right-of-way whichever is higher.

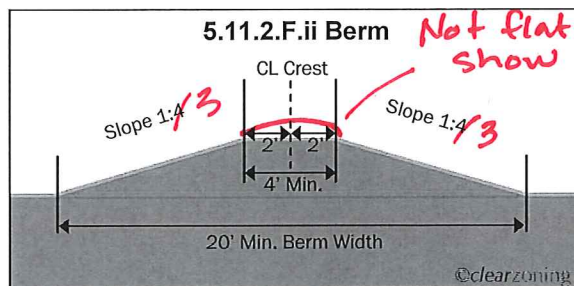
Berms shall be integrated into the site's overall landscape design to provide a natural rhythm and flow between all landscape areas and improvements. The Township encourages berms to undulate in height and vary in contours to create a more natural appearance.

ii. Dimensions. Unless otherwise indicated or appropriate, required berms shall be measured from the grade of the parking lot or flat ground adjacent to the berm, and shall be constructed with slopes no steeper than one (1) foot vertical for each four (4) feet horizontal (25 percent slope), with at least a four (4) foot flat area on top. The exterior face of the berm shall be constructed as an earthen slope. The interior face may be constructed as an earthen slope or retained by means of a wall or terrace.

F. Berms. Where berms are used they shall conform to the following standards:

i. General Requirements. Berms used for screening between land uses shall be landscaped in accordance with Section 5.11.2.G, Buffering or Screening Requirements.

Berms used for screening between parking lots and access rights-of-way



A berm shall run the length of the developed site area and shall be a minimum width of twenty (20) feet wide with an average berm height of three (3) feet and a minimum berm height of two (2) feet. When additional screening is required, the Planning Commission may require a minimum berm height of four (4) feet.

- iii. Protection from Erosion. Any required berm shall be planted with sod, ground cover, or other suitable live plant material to protect it from erosion so that it retains its height and shape. The Planning Commission may allow the use of hardscape material, including masonry landscape blocks, stones, and other natural and decorative materials to retain the shape and height of a berm.

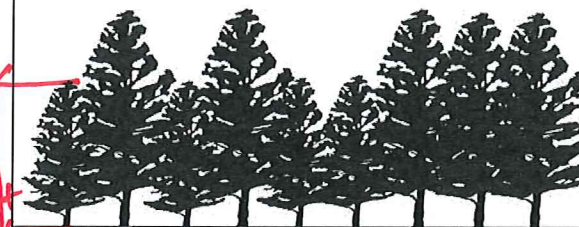
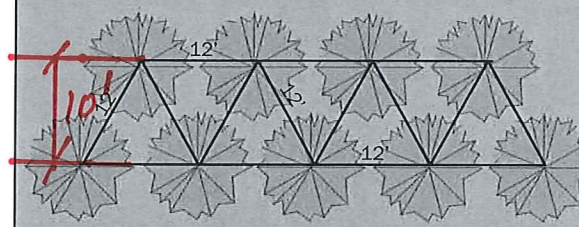
G. Buffering or Screening Requirements

- i. Screening between Land Uses. Upon any improvement or change in use for which a site plan is required, a landscape buffer shall be provided to create a visual screen at least eight (8) feet in height along all adjoining boundaries of a non-residential use or a residential use of higher density and an abutting single family residential zoned property. At the discretion of the Planning Commission, modifications to the required screening may be permitted when alternative screening methods, existing site conditions and/or use of the properties would meet the intent of this Section. The overall height of the visual screen may include the combination of landscape berm and plant material and/or decorative screening walls.

- a. When using evergreen trees to meet the screening requirements, plantings shall be spaced no more than twelve (12) feet apart measured on center (depending on their planting size) and shall be planted in staggered or a clustered pattern with varying tree heights to provide for optimal screening and create a natural looking buffer, see Figure 5.11.2.B.i and 5.11.2.G.i.a. When using a staggered pattern the minimum spacing between rows shall be six

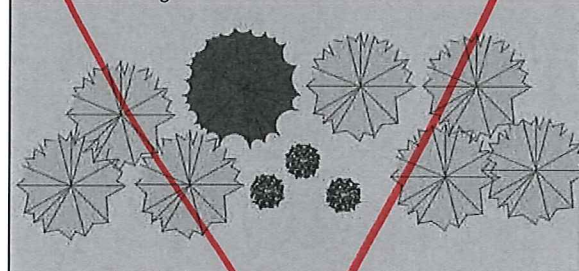
5.11.2.G.i.a LANDSCAPE SCREENING PLANTING PATTERNS

Staggered Plantings



12 Feet Distance Measured at Centerline of Trees
Evergreen Trees Planted in a Staggered Pattern
Minimum Spacing Between Rows Shall be 6 Feet
Varied Size of Trees for More Natural Plantings

Cluster Plantings



Evergreen and Deciduous Plantings Where Screening is Not
Necessary for Entire Length of Plantings
Staggered Plantings
Varied Size of Trees for More Natural Plantings

OMIT

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1 Purpose and Introduction

2 Definitions

3 Zoning Districts

4 Use Standards

5 Site Standards

6 Development Procedures

7 Admin and Enforcement



5.11.3.C.ii Suggested Plant Materials

Common Name	Genus
Ornamental Trees	
Serviceberry	Amelanchier
Dogwood (Tree Form)	Cornus
Flowering Crabapple	Malus
Flowering Pear	Pyrus
Flowering Plum (Tree Form)	Prunus
Hawthorn	Crataegus
Hornbeam	Genus
Magnolia	Magnolia
Redbud	Cercis
Rose of Sharon	Hibiscus
Narrow Evergreen Shrubs (Large Shrubs)	
Arborvitae	Thuja
Juniper	Juniperus
Yew	Taxus
Deciduous Shrubs (Medium or Small Shrubs)	
Barberry	Berberis
Boxwood	Buxus
Currant	Ribes
Euonymus	Euonymus
Forsythia	Forsythia
Holly	Ilex
Hydrangea	Hydrangea
Lilac	Syringa
Potentilla	Potentilla
Privet	Ligustrum
Quince	Chaenomeles
Spiraea Rosa	Shrub Rose
Viburnum	Viburnum
Weigela	Weigela
Evergreen Shrub (Medium or Small Shrub)	
Arborvitae (Globe/Dwarf)	Thuja
False Cypress	Chamaecyparis
Juniper / Spruce (Low Spreading)	Juniperus / Picea
Yew (Globe/Spreading/Upright)	Taxus

5.11.3.C.ii Suggested Plant Materials (continued)

Common Name	Genus
Shade or Canopy Trees - Non-columnar varieties	
Beech	Fagus
Hybrid Elm	Qlmnus
Birch	Betula
Hard Maples (Sugar, Red)	Acer
Hackberry	Celtis
Hickory	Garya
Hornbeam (Blue Beech)	Carpinus
Hophornbeam (Ironwood)	Ostrya
Quercus	Oak
Clump Form Trees	Variety
Linden	Tilia
Evergreen Trees	
Douglas Fir	Pseudotsuga
Fir	Abies
Hemlock	Tsuga
Pine	Pinus
Spruce	Picea
Groundcovers, Vines and Flower/Grass	
Groundcovers, Vines and Flowers/Grasses should be used as accent materials. All materials shall be selected for their suitability and appearance in the proposed planting area. Materials such as Black Eyed Susan, Dianthus, Phlox, Gaillardia, Sedum are considered to be hardy in southeast Michigan gardens.	

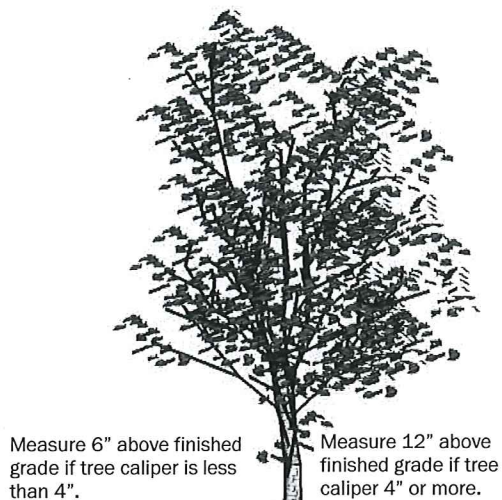
- iii. Use of plant materials that cause disruption to storm drainage or that are susceptible to pests or disease are not encouraged. The following plant materials exhibit such characteristics, and therefore their use is not encouraged in the Township:

- Ashes
- Elm (American and Siberian)
- Box Elder
- Tree of Heaven
- European Barberry
- Northern Catalpa
- Poplar
- Willow

* Provide list for large shrubs



PLANT MATERIAL PRINCIPLES



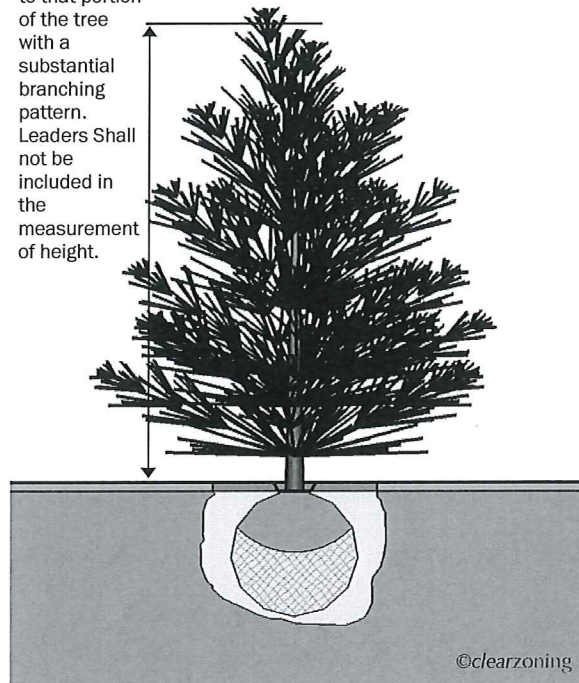
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General Planting Standards

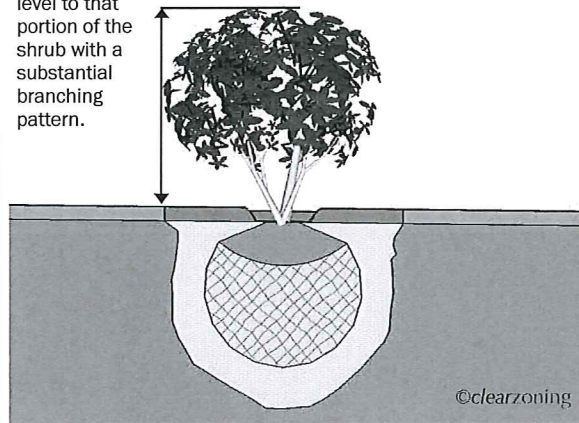
- Do not prune leader or branch tips.
- Remove nursery applied tags or labels.
- Stake tree (2 at 180 degrees) as defined in the ~~Harland Township Planting Detail.~~
- Mulch 3"-4" deep leaving 3" of bare soil around the trunk.
- Remove burlap, plastic, rope and wire exposing top half of rootball.
- Prune away dead or broken branches.

Height is measured from the ground level to that portion of the tree with a substantial branching pattern. Leaders shall not be included in the measurement of height.

The spread or width should be proportional to the height of the tree.



Height is measured from the ground level to that portion of the shrub with a substantial branching pattern.



Insert into above:
Plant at depth where root flare begins so that top of root flare is even with surrounding soil.

BOARD OF TRUSTEES

2655 Clark Road
Hartland, Michigan 48353
(810) 632-7498 Office
(810) 632-6950 Fax



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RESOLUTION NO. 22-

**RESOLUTION OF APPRECIATION FOR DISTINGUISHED SERVICE BY
COMMISSIONER MICHELLE LAROSE**

At a regular meeting of the Planning Commission of Hartland Township, Livingston County, Michigan, held at the Township Hall in said Township on the 11th day of August 2022 at 7:00 p.m.

PRESENT: _____

ABSENT: _____

The following preamble and resolution were offered by Commissioner _____ and seconded by Commissioner _____.

WHEREAS, Commissioner Michelle LaRose has served faithfully and demonstrated great leadership on the Planning Commission; and

WHEREAS, Commissioner Michelle LaRose started with the Planning Commission on January 1, 2020, served as Secretary of the Planning Commission, and also served as a member of the Site Plan Review Committee; and

WHEREAS, that leadership was instrumental in outcomes such as promoting smart growth and development throughout the Township, including growing and expanding the Township's exceptional parks resources; and

WHEREAS, often Planning Commission decisions and discussion were sometimes difficult, Commissioner Michelle LaRose persevere through the challenges of remote and in person meetings during the pandemic, as well as balancing future development with neighbor concerns, and

WHEREAS, Commissioner LaRose was able to bring her technical background and experience and apply it to her role on the Planning Commission to ensure the Township had quality development projects; and

WHEREAS, Commissioner Michelle LaRose leadership has always put the health, safety and well-being of the Hartland community first.

NOW, THEREFORE, BE IT RESOLVED, that the Hartland Township Planning Commission extends its deep gratitude to Commissioner LaRose for her years of service to the community, wishing her all the best in her future endeavors.

A vote on the foregoing resolution was taken and was as follows:

RESULT:
MOVER:
SECONDER:
AYES:
NAYS:

STATE OF MICHIGAN)
)
COUNTY OF LIVINGSTON)

I, the undersigned, the duly qualified and acting Planning Commission Chair of the Township of Hartland, Livingston County, Michigan, DO HEREBY CERTIFY that the foregoing is a true and complete copy of certain proceedings taken by the Planning Commission of said Township at a regular meeting held on the 11th day of August 2022.

Larry Fox, Planning Commission Chair