



UTILITY LOCATIONS ARE DERIVED FROM ACTUAL MEASUREMENTS OR AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATIONS NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THIS AREA.

NOTE: EXISTING UTILITIES AND SERVICE LINES IDENTIFIED AS "UNKNOWN" WERE OBTAINED FROM AVAILABLE AS-BUILT RECORD DRAWINGS. THE CONTRACTOR SHALL VERIFY THE LOCATION, DEPTH AND STATUS OF ALL UTILITIES AND SERVICE LINES PRIOR TO NEW CONNECTIONS.

### REMOVAL / DEMOLITION NOTES

- 1) THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES AT LEAST THREE WEEKS PRIOR TO THE BEGINNING OF CONSTRUCTION OPERATIONS. THESE ARE EXISTING UNDERGROUND UTILITIES WHICH CROSS THE PROPOSED REPLACEMENT WORK AREAS. ALTHOUGH THEIR EXACT LOCATION CANNOT BE DETERMINED, IT IS KNOWN THESE UTILITIES ARE LOCATED WHERE DIGGING IS REQUIRED. THE CONTRACTOR SHALL CONDUCT THE REQUIRED EXCAVATION IN THESE AREAS WITH EXTREME CAUTION.
- 2) ALL EXISTING UTILITY INFORMATION SHOWN IS TAKEN FROM EXISTING RECORDS, AND FIELD VERIFIED WHERE ACCESSIBLE ONLY. INFORMATION OBTAINED FROM EXISTING RECORDS MAY NOT BE COMPLETE OR ACCURATE. THE LOCATION OF ALL EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. THE CONTRACTOR SHALL FIELD VERIFY FOR ACCURACY, LOCATION AND CONDITION.
- 3) BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE CITY AND BY THE OWNER, REPRESENTATIVES OF THE CITY, THE OWNER AND THE CONTRACTOR SHALL MAKE AN INSPECTION OF THE EXISTING SEWERS WITHIN THE WORK LIMITS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING UTILITIES AND THEIR APPURTENANCES SHALL BE DETERMINED FROM FIELD OBSERVATIONS AND EXISTING VIDEO TAPES. RECORDS OF THE INSPECTIONS SHALL BE KEPT IN WRITING BY THE CONTRACTOR.
- 4) THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION WORK.
- 5) ALL EXISTING UTILITIES, SEWERS AND WATER LINES ARE TO REMAIN UNDISTURBED UNLESS OTHERWISE NOTED ON THE PLANS. THE CONTRACTOR SHALL CONTACT AND COORDINATE WITH ALL APPLICABLE UTILITY COMPANIES, MUNICIPALITIES AND AGENCIES BEFORE COMMENCING ANY WORK.
- 6) THE CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES REGARDING REMOVAL OF EXISTING POLES, OVERHEAD WIRES, UNDERGROUND UTILITIES, GUY WIRES, GAS LINES, ETC. ALL ADJUSTMENT OR CONSTRUCTION WORK, EXCEPT FOR THOSE STRUCTURES OTHERWISE NOTED ON THE PLANS, SHALL BE PERFORMED BY THE CONTRACTOR. EXISTING APPURTENANCES SUCH AS UTILITY POLES AND VALVES BOX SHALL NOT BE DISTURBED BY THE CONTRACTOR DURING CONSTRUCTION.
- 7) THE CONTRACTOR SHALL MAINTAIN EXISTING UTILITY SERVICE TO ALL ADJOINING PROPERTIES.
- 8) ALL DEBRIS SHALL BE REMOVED FROM THE SITE, AND NO STOCKPILING ON SITE SHALL BE ALLOWED UNLESS APPROVED BY THE OWNER OR THEIR REPRESENTATIVES.
- 9) THE CONTRACTOR SHALL LIMIT SAWCUT AND PAVEMENT REMOVAL TO ONLY THOSE AREAS WHERE REQUIRED OR AS SHOWN. ALL PAVEMENTS TO BE SAWCUT AND REMOVED TO FULL DEPTH AT ALL PAVEMENT LIMITS OR EXISTING JOINTS. IF ANY DAMAGE IS INCURRED TO ANY OF THE SURROUNDING PAVEMENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS REMOVAL AND REPAIR AT NO ADDITIONAL COST TO ANYONE ELSE, INCLUDING THE CITY OR OWNER.
- 10) ASPHALT AREAS SHOWN TO BE SAWCUT AND REMOVED FULL DEPTH ARE ACTUAL FACE OF PROPOSED CURBS. IT WILL BE NECESSARY TO MAKE OFF-SET SAWCUTS TO PROVIDE CLEARANCE FOR PROPOSED CURBS. THE CONTRACTOR SHALL DETERMINE THE AMOUNT OF OFF-SET NECESSARY TO CONSTRUCT THE PROPOSED CURBS. ADDITIONAL CUTS MAY BE DESIRED TO FACILITATE THE REMOVAL OF THE EXISTING PAVEMENT BUT THERE WILL BE NO EXTRA PAYMENT FOR ADDITIONAL CUTS. PAVEMENT SHALL BE REMOVED WITHOUT DAMAGING OR UNDERMINING THE REMAINING PAVEMENT. IF ADJACENT PAVEMENT IS DAMAGED, THE CONTRACTOR SHALL MAKE ADDITIONAL FULL DEPTH SAWCUTS AND REMOVE THE DAMAGE AREAS AS NECESSARY.
- 11) ALL PAVEMENT REMOVAL AREAS SHALL BE FULL PAVEMENT CROSS-SECTION REMOVAL DOWN TO NATIVE SOIL LAYER IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.
- 12) ALL TREES AND VEGETATION WITHIN THE GRADING LIMITS SHALL BE REMOVED UNLESS OTHERWISE NOTED.

### REMOVAL / DEMOLITION NOTES

- |   |  |
|---|--|
| 1) REMOVE EXISTING CONCRETE CURB & GUTTER | 12) REMOVE EXISTING POST   |
| 2) REMOVE EXISTING TREES/SHRUBS           | 13) REMOVE EXISTING ELECTRIC METER   |
| 3) REMOVE EXISTING STRUCTURE              | 14) REMOVE EXISTING VACUUM   |
| 4) REMOVE EXISTING CONCRETE SIDEWALK      | 15) REMOVE EXISTING MONITORING WELLS   |
| 5) REMOVE EXISTING CONCRETE DRIVEWAY      | 16) REMOVE AND REPLACE/RECONSTRUCT EX. SANITARY LATERAL AS NECESSARY TO PROVIDE SERVICE TO THE NEW BUILDING.   |
| 6) REMOVE EXISTING CONCRETE WALL          | 17) REMOVE AND REPLACE/RECONSTRUCT EX. WATER SERVICE AS NECESSARY TO PROVIDE SERVICE TO THE NEW BUILDING.  |
| 7) REMOVE EXISTING AIR CONDITIONING UNIT  | 18) SAWCUT, REMOVE, AND REPLACE EX. CURB/SIDEWALK AS NECESSARY TO REMOVE EXISTING DRIVEWAY APPROACH.   |
| 8) REMOVE EXISTING GAS METER              | 19) IF NECESSARY WITH REMOVING THE EXISTING APPROACH, ANY RELATED SAW CUTTING WITHIN ASPHALT ROADWAY SHALL REQUIRE MILLING THE ENTIRE LANE FOR ASPHALT REPLACEMENT TO AVOID JOINT IN WHEEL PATH. |
| 9) REMOVE EXISTING ASPHALT DRIVEWAY       | 20) REMOVE AND REPLACE GRATE IF AS NECESSARY FOR DRIVEWAY APPROACH CLOSURE.  |
| 10) REMOVE EXISTING STORM SEWER           | 21) REMOVE EXISTING LIGHT POLE   |

### SCHEDULE B - SECTION II NOTES

- 14) Rights of others over easement parcel as disclosed in Liber 3061, Page 19 and by Lease recorded in Liber 1503, Page 1159 and Dead recorded in Liber 1495, Page 1213, as to Parcel 2. The easement described in this document is shown on this survey.
- 15) Rights of other that pertain to advertising and landscaping as disclosed in Liber 1495, Page 1213, as to Parcel 2. The easement described in this document is shown on this survey.
- 16) Easement to the City of Lansing, by and through its Board of Water and Light, as disclosed in Liber 2857, Page 949, as to Parcel 2. The easement described in this document is shown on this survey.

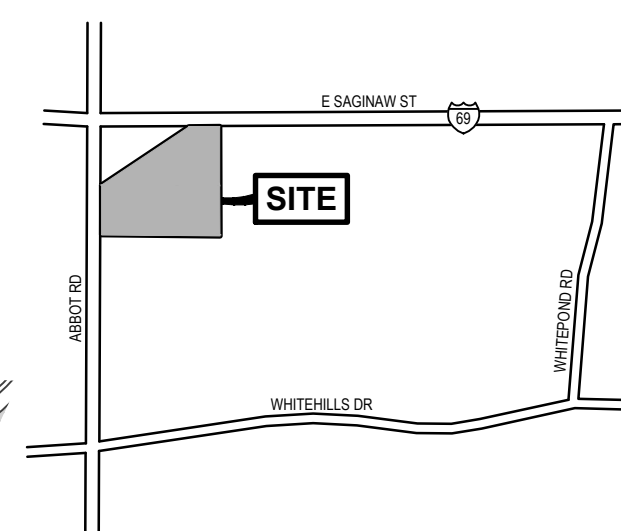
### SURVEYOR'S NOTES

- 1) Flood Zone Classification: An examination of the National Flood Insurance Program's Flood Insurance Rate Map for Community Number 260089, Map Number 26065C0151D, with an Effective Date of August 16, 2011, shows this parcel to be located in Zone X (subject to map scale uncertainty).
- 2) Lacking excavation, the exact location of underground features cannot be accurately, completely, and reliably depicted. In addition, in some jurisdictions, 811 or other similar utility locate requests from surveyors may be ignored or result in an incomplete response. Where additional or more detailed information is required, the client is advised that excavation and/or a private utility locate request may be necessary. These locations should not be interpreted to be exact locations nor should it be assumed that they are the only utilities in this area.
- 3) NOTE TO CONTRACTORS: 3 (THREE) WORKING DAYS BEFORE YOU DIG, CALL MISS DIG AT TOLL FREE 1-800-482-7171 FOR UTILITY LOCATIONS ON THE GROUND.
- 4) BASIS OF BEARING: Commercial-Diversified National Title (underwritten by Westcor Land Title Insurance Company), Commitment No. 23-1088, dated February 17, 2023.

PARCEL 33-20-02-07-300-008  
ADDRESS: 111 E SAGINAW  
OWNER: EJM, LLC  
USE: RITE AID  
ZONED B-2

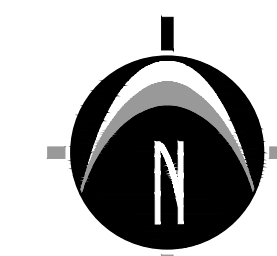
### BENCHMARKS

BENCHMARK #1366 ELEV. = 857.65 (NAVD88)  
MAG nail in utility pole, located 275' +/- East of Abbot Road & 230' +/- South of E. Saginaw Street.



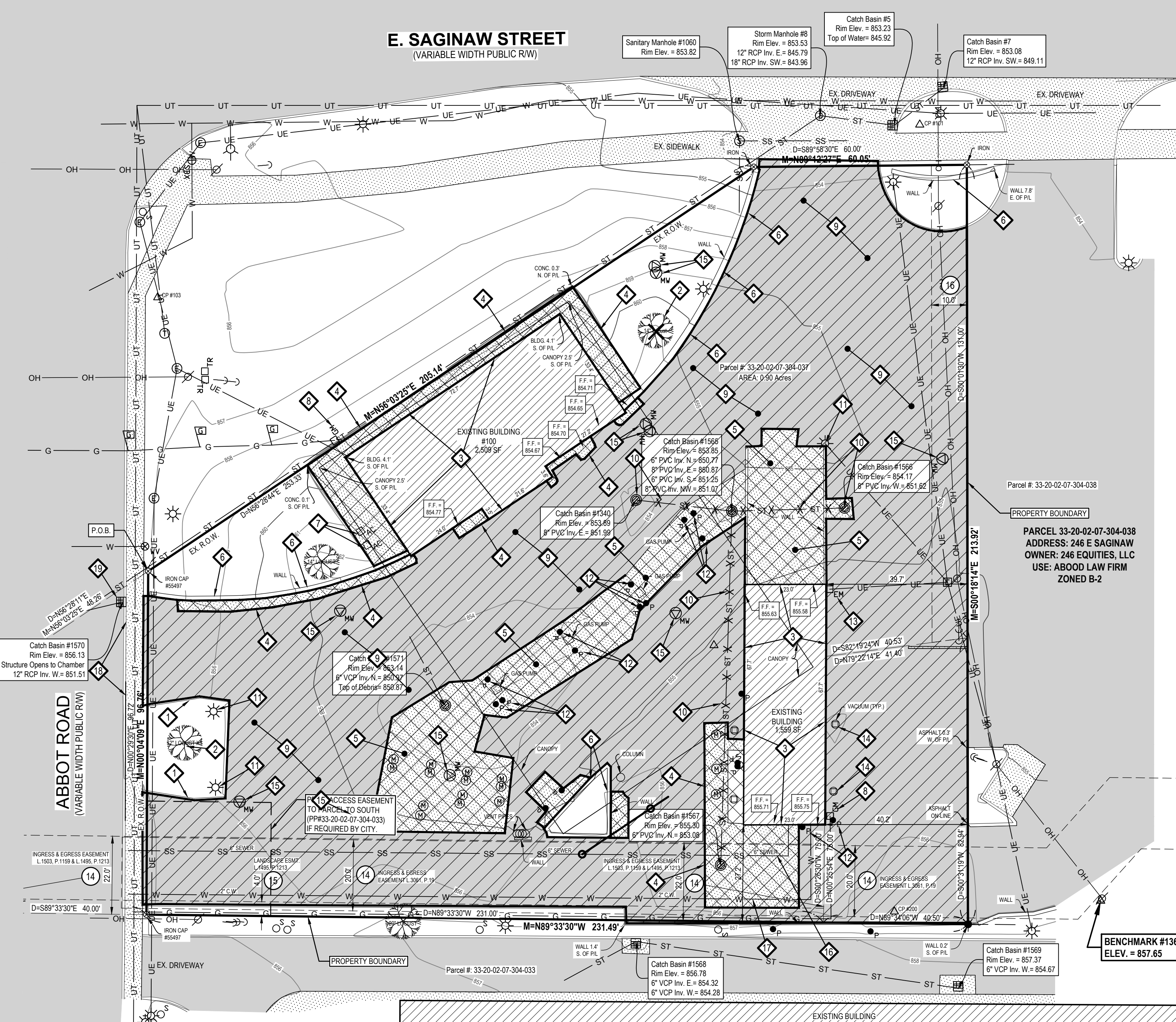
### LOCATION MAP

NOT TO SCALE



SCALE: 1" = 20'

E. SAGINAW STREET  
(VARIABLE WIDTH PUBLIC RW)



### LEGEND

- |     |                           |       |                       |
|-----|---------------------------|-------|-----------------------|
| AC  | Air Conditioner           | SM    | Stormwater Manhole    |
| BC  | Benchmark / Control Point | TM    | Transformer           |
| CB  | Catch Basin - Round       | UP    | Utility Pole          |
| CS  | Catch Basin - Square      | WV    | Water Valve           |
| DT  | Deciduous Tree            | WC    | Water Closet          |
| EM  | Electric Manhole          | UE    | Underground Electric  |
| EM  | Electric Meter            | FO    | Fiber Optic           |
| ER  | Electric Riser            | G     | Gas                   |
| GA  | Gas Meter                 | OH    | Overhead Utility      |
| GA  | Gas Anchor                | SS    | Sanitary              |
| HY  | Hydrant                   | ST    | Storm                 |
| IS  | Iron - Set                | UT    | Underground Telephone |
| IF  | Iron - Found              | W     | Watermain             |
| LP  | Light Pole                |       |                       |
| MDF | Miss Dig Flag - Gas       | X-X-X | Fence                 |
| MH  | Manhole                   | ASPH  | Asphalt               |
| MW  | Monitor Well              | CONC  | Concrete              |
| PO  | Post                      | EB    | Existing Building     |
| SBX | Stop Box                  | M=    | Measured Dimension    |
| SI  | Sign                      | D=    | Described Dimension   |
| SSM | Sanitary Sewer Manhole    |       |                       |

### TITLE INFORMATION

The Title Description and Schedule B items herein are from Commercial-Diversified National Title (underwritten by Westcor Land Title Insurance Company), Commitment No. 23-1088, dated February 17, 2023.

### TITLE DESCRIPTION

Parcel 2:  
That part of the Southwest fractional 1/4 of Section 7, T4N, R1W, City of East Lansing, Ingham County, Michigan, beginning on the Section line at a point South 00°29'30" West 589.64 feet from the West 1/4 post of said Section 7, running thence South 00°29'30" West 69.76 feet on the Section line, thence South 89°33'30" East 231.0 feet on a common line with the U.S. Post Office property, thence South 0°26'30" East 75.0 feet, thence North 82°19'24" East 40.53 feet, thence North 0°10'30" East 131.0 feet perpendicular to Saginaw Street to the South right of way of Saginaw Street, 60 feet from the centerline thereof, thence North 89°58'30" West 60.0 feet on said right of way line, thence South 56°28'44" West 253.33 feet to the point of beginning.

AND EXCEPTING:  
That part of the Southwest fractional 1/4 of Section 7, T4N, R1W, City of East Lansing, Ingham County, Michigan, beginning on the Section line at a point South 00°29'30" West 589.64 feet from the West 1/4 post of said Section 7, running thence South 00°29'30" West 69.76 feet on the Section line, thence South 89°33'30" East 40.00 feet on a common line with the U.S. Post Office property, thence North 0°29'30" East 96.72 feet parallel with West Section line of said Section 7, thence South 56°28'11" West 48.26 feet to the point of beginning.

ALSO  
That part of the Southwest fractional 1/4 of Section 7, T4N, R1W, City of East Lansing, Ingham County, Michigan, the boundary of said parcel described as:  
Commencing at the West 1/4 corner of said Section 7; thence South 00°29'30" West along the West Section line 448.64 feet; thence South 89°58'30" East 270.00 feet; thence South 00°31'19" West 130.99 feet to the point of beginning of this description; thence continuing South 00°31'19" West 82.94 feet; thence North 89°34'06" West 40.50 feet; thence North 00°25'54" East 75.00 feet; thence North 79°22'14" East 41.10 feet to the point of beginning.

\*NOTE: There appears to be a typo in the description provided: South 0°26'30" East should be North 0°26'30" East, further deed research is recommended.

### AS SURVEYED DESCRIPTION

Part of the Southwest 1/4 of Section 7, Town 4 North, Range 1 West, City of East Lansing, Ingham County, Michigan, described as: Commencing at the West 1/4 corner of said Section; thence S00°04'03"W 589.64 feet along the West line of said Section 7; thence N66°03'25"E 48.26 feet to the Point of Beginning; thence continuing N56°03'25"E 205.14 feet; thence N89°12'27"E 60.05 feet along the South right-of-way line of East Saginaw Street; thence S00°18'14"E 213.92 feet; thence N89°33'30"W 231.49 feet; thence N00°04'09"E 96.76 feet along the East right-of-way line of Abbot Road to the Point of Beginning. Contains 0.90 acres. Subject to any and all easements, restrictions, right-of-way of record.

PARCEL: 33-20-01-12-409-020  
ADDRESS: 0 ABBOT  
OWNER: CITY OF EAST LANSING  
USE: VACANT  
ZONED: R2 MEDIUM DENSITY RES

PARCEL: 33-20-01-12-409-004  
ADDRESS: 1155 ABBOT  
OWNER: MARK TORRES  
USE: RESIDENTIAL  
ZONED: R2 MEDIUM DENSITY RES

PARCEL: 33-20-01-12-409-005  
ADDRESS: 1145 ABBOT  
OWNER: LYNISI WARD  
USE: RESIDENTIAL  
ZONED: R2 MEDIUM DENSITY RES

PARCEL: 33-20-02-07-304-033  
ADDRESS: 1140 ABBOT  
OWNER: US POSTAL SERVICE  
USE: POST OFFICE  
ZONED B-1

PARCEL 33-20-02-07-304-038  
ADDRESS: 246 E SAGINAW  
OWNER: 246 EQUITIES, LLC  
USE: ABOOD LAW FIRM  
ZONED B-2

BENCHMARK #1366  
ELEV. = 857.65

**NEDERVELD**  
www.nederveld.com  
800.222.1868  
GRAND RAPIDS  
217 Grandville Ave., Suite 302  
Grand Rapids, MI 49503  
Phone: 616.575.5190

ANN ARBOR  
CHICAGO  
COLUMBUS  
HOLLAND  
INDIANAPOLIS

PREPARED FOR:  
American Gas & Oil, Inc.  
Attention: Jason Beris

P.O. Box 247 - 440 West Division  
Sparta, MI 49345  
Phone: 616.887.0956

### REVISIONS:

Title	Drawn: SW	Checked: SW	Date: 08/14/23
Title: Preliminary Plan			
Title: Site Plan			
Drawn: SW	Checked: SW	Date: 08/24/23	
Title: Site Plan Submitted to Planning Commission			
Drawn: SW	Checked: SW	Date: 08/29/23	
Title: Modified Per Staff and PC Comments from 9/25/23			
Drawn: SW	Checked: SW	Date: 10/05/23	

**UNIVERSITY MARATHON**  
Existing Conditions and Demolition Plan  
100 E Saginaw Street, East Lansing MI 48823  
PART OF THE SOUTHWEST FRACTIONAL 1/4 OF SECTION 7, T4N, R1W,  
CITY OF EAST LANSING, INGHAM COUNTY, MICHIGAN

STAMP:  
STATE OF MICHIGAN  
STEVEN L. WITTE  
LICENSED PROFESSIONAL ENGINEER  
License No. 6201046769

PROJECT NO:  
23500029

SHEET NO:  
**C-201**

SHEET: 1 OF 5

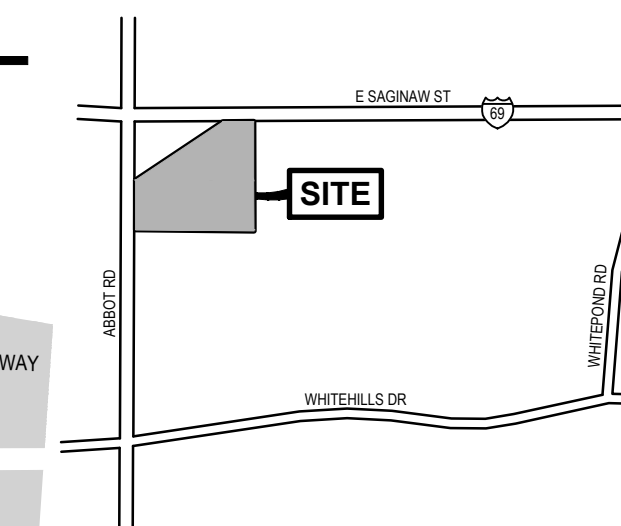


UTILITY LOCATIONS ARE DERIVED FROM ACTUAL MEASUREMENTS OR AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATIONS NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THIS AREA.

NOTE: EXISTING UTILITIES AND SERVICE LINES IDENTIFIED AS "PLAN" WERE OBTAINED FROM AVAILABLE AS-BUILT RECORD DRAWINGS. THE CONTRACTOR SHALL VERIFY THE LOCATION, DEPTH AND STATUS OF ALL UTILITIES AND SERVICE LINES PRIOR TO NEW CONNECTIONS.

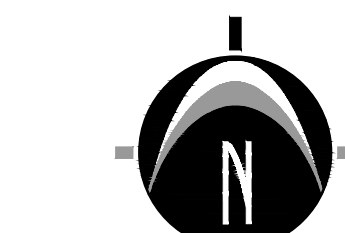
**BENCHMARKS**

BENCHMARK #1366 ELEV. = 857.65 (NAVD88)  
MAG nail in utility pole, located 275' +/- East of Abbot Road & 230' +/- South of E. Saginaw Street.



**LOCATION MAP**

NOT TO SCALE

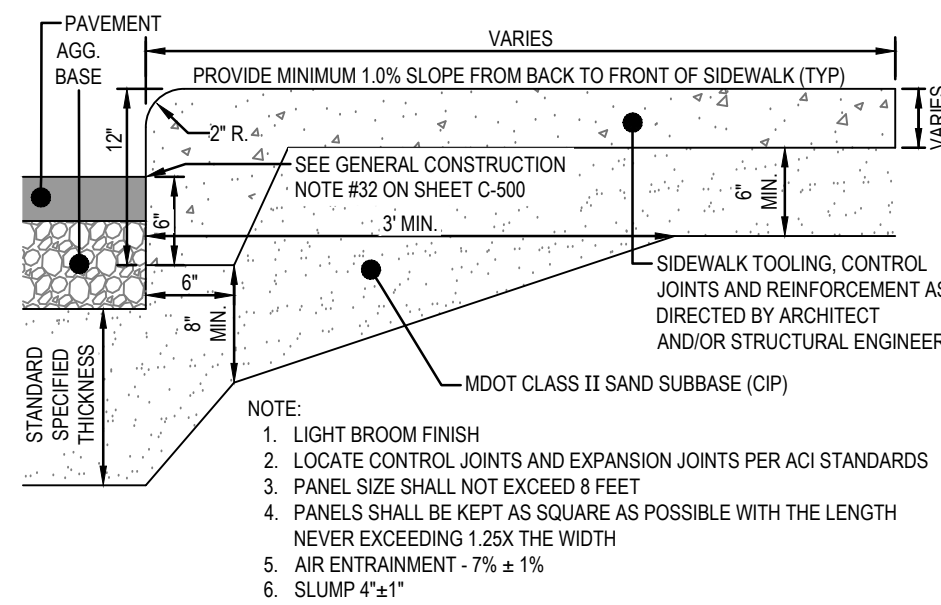


**LEGEND**

[Symbol]	EXISTING BITUMINOUS
[Symbol]	EXISTING CONCRETE
[Symbol]	PROPOSED BITUMINOUS
[Symbol]	PROPOSED CONCRETE
[Symbol]	PROPOSED BUILDING

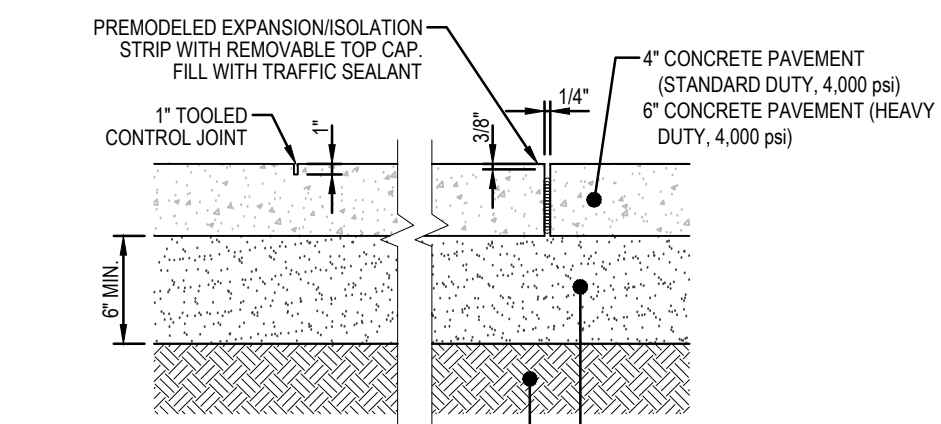
**GENERAL NOTES**

- ZONING OF PROPERTY: B-2 = RETAIL SALES BUSINESS  
B-2 ZONING REQUIREMENTS:  
MINIMUM LOT AREA = NONE  
MINIMUM LOT WIDTH = NONE  
MAXIMUM ALLOWED BUILDING HEIGHT = 36 FT  
MAXIMUM ALLOWED BUILDING COVERAGE = NOT APPLICABLE  
MINIMUM ALLOWED BUILDING SETBACKS:  
FRONT YARD = NONE  
SIDE YARD = NONE  
REAR YARD = NONE  
PUMP SETBACKS = 10 FT FROM ALL PROPERTY LINES
- SUMMARY OF LAND USE:  
A) TOTAL ACREAGE = 0.30 ACRES (39,259 SF +/-) (EXCLUDING ROAD R.O.W.)  
B) AREA OF EXISTING BUILDINGS TO BE REMOVED = 4,068 SF +/-  
C) AREA OF EXISTING ON-SITE ASPHALT AND CONCRETE TO BE REMOVED = 30,750 SF  
D) PROPOSED BUILDING FOOTPRINT AREA = 4,032 SF +/-  
E) PROPOSED BUILDING HEIGHT = APPROXIMATELY 25 FT TO PEAK  
F) BUILDING LOT COVERAGE = 10.3% +/-  
G) PROPOSED NEW ON-SITE ASPHALT/CONCRETE AREA = 30,150 SF +/-  
H) TOTAL PROPOSED IMPERVIOUS PERCENTAGE = APPROXIMATELY 87.1% (34,182 SF)  
EXISTING IMPERVIOUS AREA = 34,818 SF +/-  
(NET REDUCTION IN IMPERVIOUS AREA = 636 SF +/-)  
I) THE BUILDING AND SITE WILL BE USED AS CONVENIENCE STORE/GAS STATION.  
J) ZONING OF SURROUNDING PARCELS:  
NORTH AND EAST = B-2  
SOUTH = B-1  
WEST = B-2 RESIDENTIAL
- PARKING REQUIREMENTS:  
A) TYPICAL PARKING SPACE = 9' x 20' (20' TWO-WAY DRIVE AISLES)  
B) TYPICAL BARRIER FREE SPACE = 8' x 20' (WITH 6" WIDE VAN ACC. AISLES)  
C) NUMBER OF SPACES REQUIRED = 14 (BASED ON 2 PER BAY PLUS 1 PER 300 SF)  
D) NUMBER OF SPACES PROVIDED = 17 (NOT INCLUDING PARKING AT THE FUEL PUMPS)  
E) MINIMUM ALLOWED PARKING SETBACK = 3 FT FRONT AND SIDE YARDS = 8 FT REAR YARD  
F) PARKING SPACES SHALL BE STRIPED WITH 4" WIDE PAINT.
- THIS PROJECT IS NOT IN THE 100 YEAR FLOOD PLAIN, BASED ON THE NATIONAL FLOOD INSURANCE PROGRAM RATE MAPS.  
BEST MANAGEMENT PRACTICES WILL BE UTILIZED DURING AND AFTER CONSTRUCTION OF THE PROJECT. MEASURES WILL INCLUDE THE USE OF SILT FENCING, SEEDING AND MULCHING, SEDIMENT INLET FILTERS, COMPACTION AND PAVING. THE OWNER OF THE SUBJECT PARCEL SHALL HAVE THE RESPONSIBILITY TO MAINTAIN THE PERMANENT SOIL EROSION PROTECTION MEASURES.
- SIGNS SHALL BE CONSTRUCTED TO THE STANDARDS SET FORTH BY CHAPTER 32 OF THE CITY CODE. THE REQUIRED PERMITS(S) SHALL BE OBTAINED FROM THE DEPARTMENT OF PLANNING, BUILDING, AND DEVELOPMENT FOR ALL EXTERIOR SIGNS, IN ACCORDANCE WITH CHAPTER 32 - SIGNS - OF THE CITY CODE.  
WALL SIGN:  
MAXIMUM SIZE = 2 SF PER FT OF WALL FRONTING A PUBLIC STREET OR PARKING AREA  
NO SIGN SHALL BE GREATER THAN 120 SF.  
GROUND SIGN: (ONE ALLOWED PER MAJOR STREET FRONTAGE)  
SIGNS SHALL HAVE A HEIGHT SETBACK SURFACE AREA OF 1:1:10  
MINIMUM SETBACK FROM CURB LINE = 10 FT, MAXIMUM SETBACK = 50 FT.  
SO A SIGN THAT HAS A 10 FT SETBACK WOULD BE ALLOWED A HEIGHT OF 2 FT AND AREA OF 20 SF.  
A SIGN THAT HAS A 50 FT SETBACK WOULD BE ALLOWED A HEIGHT OF 10 FT AND AREA OF 100 SF.  
POLE SIGN: (ONE ALLOWED PER 100 FT OF MAJOR STREET FRONTAGE)  
MAXIMUM HEIGHT = 14 FT  
MAXIMUM AREA = 50 SF AT MINIMUM SETBACK, INCREASES IN SIZE AS MOVE FURTHER OFF ROAD)  
MINIMUM SETBACK = 25 FT FROM EXISTING CURB  
THE OWNER IS REQUESTING THE FREE-STANDING SIGN AT THE ABBOT ROAD ENTRANCE BE ALLOWED TO BE A MONUMENT SIGN WITH A 4 FT SETBACK AND A SIZE OF 32 SF.  
THE OWNER IS REQUESTING THE FREE-STANDING SIGN AT THE SAGINAW STREET ENTRANCE BE ALLOWED TO BE A MONUMENT SIGN WITH A 6 FT HEIGHT AND A SIZE OF 48 SF.
- UTILITIES SHOWN ARE APPROXIMATE LOCATIONS DERIVED FROM ACTUAL MEASUREMENTS OR AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATIONS NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THIS AREA.
- CONTRACTOR TO FIELD VERIFY ALL INVERTS.
- ALL LIGHTING SHALL COMPLY WITH THE CITY OF EAST LANSING ZONING ORDINANCE (SECTION 50-155). ALL LIGHTING SHALL BE FULLY SHIELDED FROM ALL ADJACENT PROPERTIES. PROPOSED LIGHTING SHALL CONSIST OF SOFFIT LIGHTS AT BUILDING ENTRANCES, WALL MOUNTED LIGHTS, AND LIGHT POLES.  
THE FIXTURES WILL BE SHOEBOX TYPE FIXTURES THAT DIRECT THE LIGHT DOWNWARD.  
LANDSCAPING SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 50-840 OF THE CITY CODE.
- THE PERMANENT PARCEL NUMBER FOR THE SITE IS 33-20-02-07-304-037.  
THE ADDRESS FOR THE SITE IS 100 E. SAGINAW, EAST LANSING, MICHIGAN 48823.
- THE CONSTRUCTION OF THE SITE WILL BEGIN PROMPTLY PENDING TOWNSHIP/AGENCY APPROVALS AND PERMITS.  
IT IS ANTICIPATED THAT THE PROJECT WILL BE COMPLETED IN 2024.
- THE PROJECT WILL BE COMPLETED IN ONE PHASE.
- THE STORM WATER RUNOFF FROM THE SITE WILL BE COLLECTED BY CATCHBASINS AND STORM SEWER PIPES AND WILL DISCHARGE AT THE ALLOWABLE RATE TO THE STORM SEWER SYSTEM IN THE VICINITY.
- THE SITE SOIL IS PRIMARILY URBAN LAND - MARLETTE COMPLEX, BASED ON THE USDA SOIL SURVEY MAP INFORMATION.
- A KNOX BOX SHALL BE PROVIDED ON THE MAIN BUILDING. THE EXACT LOCATION SHALL BE COORDINATED WITH THE FIRE DEPARTMENT.
- THE TRASH CONTAINER SHALL BE CONSTRUCTED AND SCREENED IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 50-147 OF THE CITY CODE.
- RECYCLING CONTAINERS SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 36-86 OF THE CITY CODE.
- THE PROJECT SHALL BE DESIGNED AND DEVELOPED IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL STATUTES, CODES AND REGULATIONS.
- THE PROJECT SHALL BE DESIGNED TO MEET THE REQUIREMENTS FOR PUBLIC ART ESTABLISHED IN THE CITY CODE.



**INTEGRAL CURB AND WALK DETAIL**

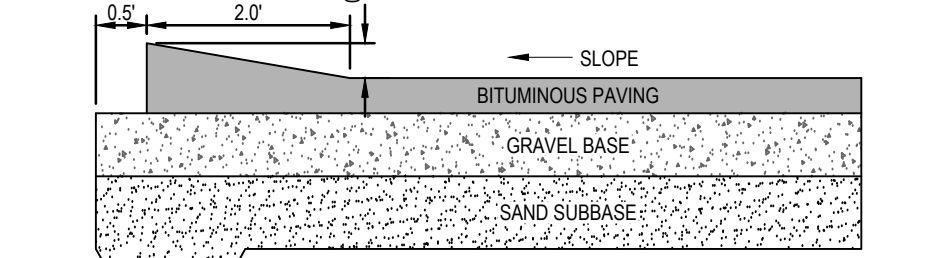
N.T.S.



- NOTE:
- LIGHT BROOM FINISH
  - LOCATE CONTROL JOINTS AND EXPANSION JOINTS PER ACI STANDARDS
  - PANEL SIZE SHALL NOT EXCEED 8 FEET
  - PANELS SHALL BE KEPT AS SQUARE AS POSSIBLE WITH THE LENGTH NEVER EXCEEDING 1.25X THE WIDTH
  - AIR ENTRAINMENT - 7% ± 1%
  - SLUMP 4" ± 1"

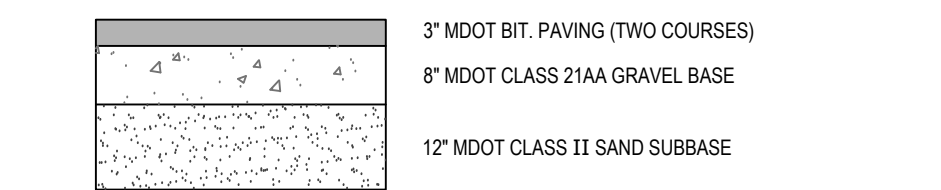
**CONCRETE PAVEMENT DETAIL**

N.T.S.



**BITUMINOUS VALLEY GUTTER DETAIL**

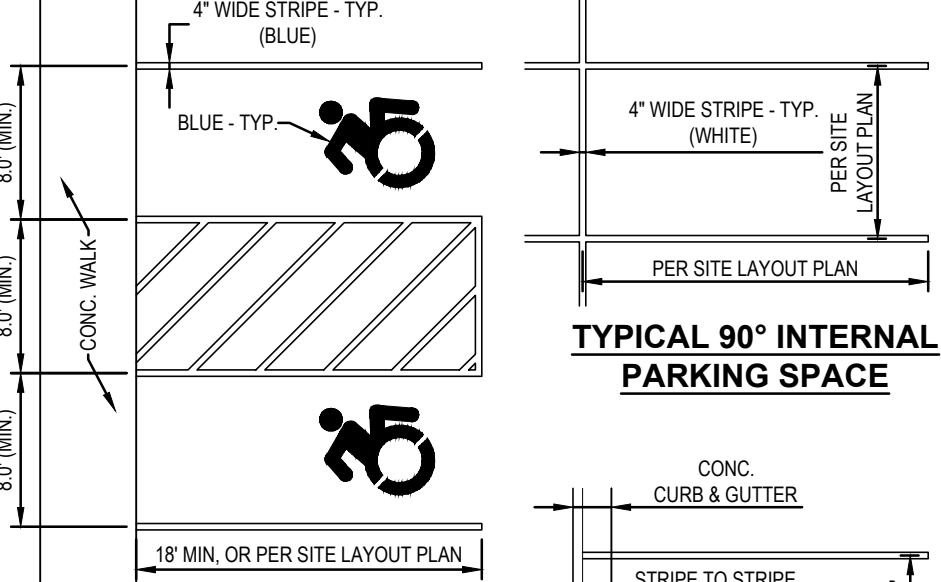
N.T.S.



- NOTE:
- REFER TO GEOTECHNICAL REPORT FOR FINAL PAVEMENT DESIGN SPECIFICATION
  - HMA MIXTURE TO BE TIER I OR TIER II
  - BINDER GRADE TO BE A MINIMUM OF PG 58-28

**STANDARD DUTY BITUMINOUS PAVEMENT CROSS SECTION DETAIL**

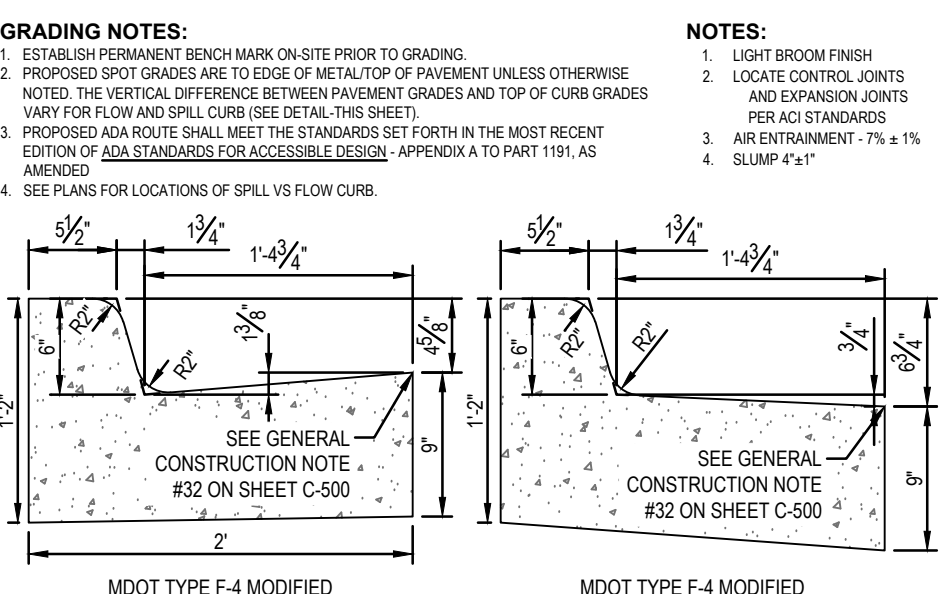
N.T.S.



- NOTE:
- APPLY TWO COATS OF VOC COMPLIANT, M.D.O.T. APPROVED, UNDILUTED SOLVENT BASED, OR LATEX TRAFFIC PAINT TO ALL PAVEMENT MARKINGS. USE MANUFACTURERS RECOMMENDED APPLICATION RATE, WITHOUT ADDITION OF THINNER, WITH A MAXIMUM OF 100 SF PER GALLON, OR MINIMUM 15 MILS WET FILM THICKNESS, AND 7.5 MILS DRY FILM THICKNESS PER COAT, WITH MINIMUM 30 DAYS BETWEEN APPLICATIONS. SECOND COAT MUST NOT BE APPLIED EARLIER THAN 7 DAYS BEFORE OCCUPANCY.

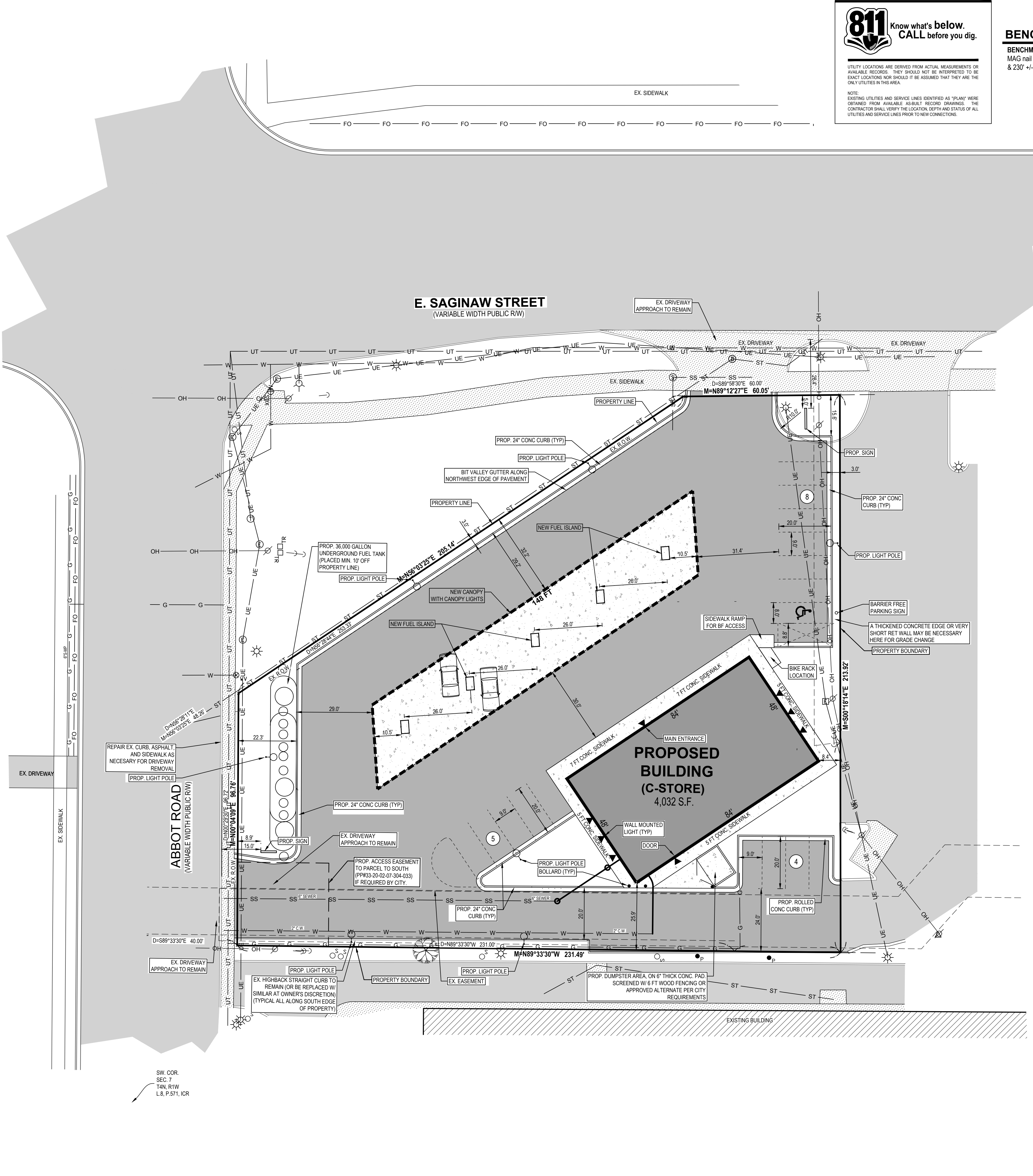
**PARKING SPACE MARKING DETAILS**

N.T.S.



**24" CONCRETE CURB AND GUTTER DETAIL**

N.T.S.



**NEDERVELD**  
www.nederveld.com  
800.222.1868  
GRAND RAPIDS  
217 Grandville Ave., Suite 302  
Grand Rapids, MI 49503  
Phone: 616.575.5190  
ANN ARBOR  
CHICAGO  
COLUMBUS  
HOLLAND  
INDIANAPOLIS

**PREPARED FOR:**  
American Gas & Oil, Inc.  
Attention: Jason Berris  
P.O. Box 247 - 440 West Division  
Sparta, MI 49345  
Phone: 616.887.0956

**REVISIONS:**

Title: Preliminary Plan	Drawn: SW	Checked: SW	Date: 08/14/23
Title: Site Plan	Drawn: SW	Checked: SW	Date: 08/24/23
Title: Site Plan Submitted to Planning Commission	Drawn: SW	Checked: SW	Date: 08/29/23
Title: Modified Per Staff and PC Comments from 9/25/23	Drawn: SW	Checked: SW	Date: 10/05/23

**UNIVERSITY MARATHON**  
Site Layout Plan  
100 E. Saginaw Street, East Lansing, MI 48823  
PART OF THE SOUTHWEST FRACTIONAL 1/4 OF SECTION 7, T4N, R1W,  
CITY OF EAST LANSING, INGHAM COUNTY, MICHIGAN

**STAMP:**  
STATE OF MICHIGAN  
LICENSED PROFESSIONAL ENGINEER  
STEVEN L. WITTE  
License No. 6201046769

**PROJECT NO:**  
23500029

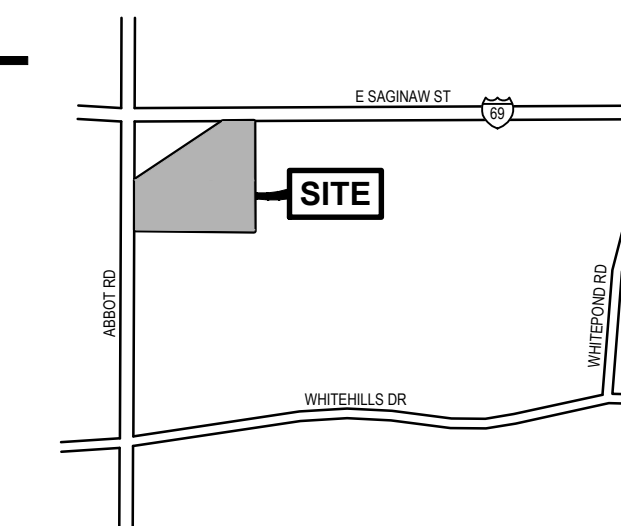
**SHEET NO:**  
**C-205**

**SHEET: 2 OF 5**



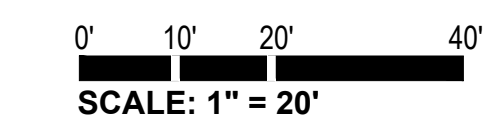
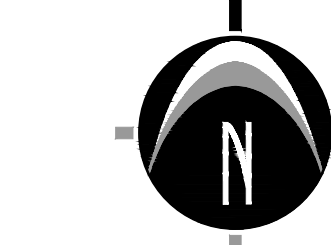
**BENCHMARKS**

**BENCHMARK #1366 ELEV. = 857.65 (NAVD88)**  
 MAG nail in utility pole, located 275' +/- East of Abbot Road & 230' +/- South of E. Saginaw Street.



**LOCATION MAP**

NOT TO SCALE



**LEGEND**

- EXISTING BITUMINOUS
- EXISTING CONCRETE
- PROPOSED BITUMINOUS
- PROPOSED CONCRETE
- PROPOSED BUILDING

**CONSTRUCTION NOTES**

- STORM SEWER**
1. ALL CATCH BASINS SHOULD BE PROVIDED WITH A MINIMUM 2' SLUMP.
  2. ALL STORM SEWER SHALL BE SMOOTH LINED CORRUGATED POLYETHYLENE PIPE (SCPP), WITH WATERTIGHT JOINTS MEETING THE REQUIREMENTS OF THE MICHIGAN PLUMBING CODE, ASHTO M-252 AND M-284, ASTM D306, F-2648, D-3272, F-747, F-847, D-3353 AND F-1417. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS AND ASTM D-2321 OR CONCRETE PIPE MEETING THE REQUIREMENTS OF ASTM C-76-81 UNLESS OTHERWISE NOTED.
  3. 6" UNDERDRAIN SHALL BE PERFORATED PIPE WITH SOCK, MEETING THE REQUIREMENTS OF ASHTO M-252 AND THE GEOTEXTILE SHALL MEET ASHTO M-289 REQUIREMENTS.
  4. ALL FLOWLINE END SECTIONS SHALL BE CONCRETE.
  5. ALL CATCH BASINS AND MANHOLES SHALL BE CONCRETE, CONFORMING TO ASTM C-478 WITH BUTYL RUBBER GASKETED JOINTS WITH BOOT TYPE PIPE CONNECTIONS CONFORMING TO ASTM C-923 FOR ALL PIPE CONNECTIONS 24" DIAMETER AND SMALLER.
  6. ALL CATCH BASINS ARE DRAWN AND WILL BE STAKED AT CENTER OF CASTING.
- WATERMAIN AND SANITARY SEWER**
1. ALL WATERMAIN AND SANITARY SEWER CONSTRUCTION SHALL CONFORM TO THE CITY STANDARD CONSTRUCTION SPECIFICATIONS, INCLUDING POST CONSTRUCTION VIDEO INSPECTION OF THE SANITARY SEWER SYSTEM.
  2. ALL WATER SERVICES SHALL PROVIDE A MINIMUM 6" OF COVER.
  3. ANY ALL EXISTING VALVE OPERATIONS SHALL BE COMPLETED BY CITY WATER DEPARTMENT PERSONNEL ONLY.
  4. TELEVIEW EXISTING SANITARY LEADERSHIP TO DETERMINE THE CONDITION OF LATERAL AND VERIFY IF IT SHOULD BE REPLACED AS PART OF THE PROJECT.

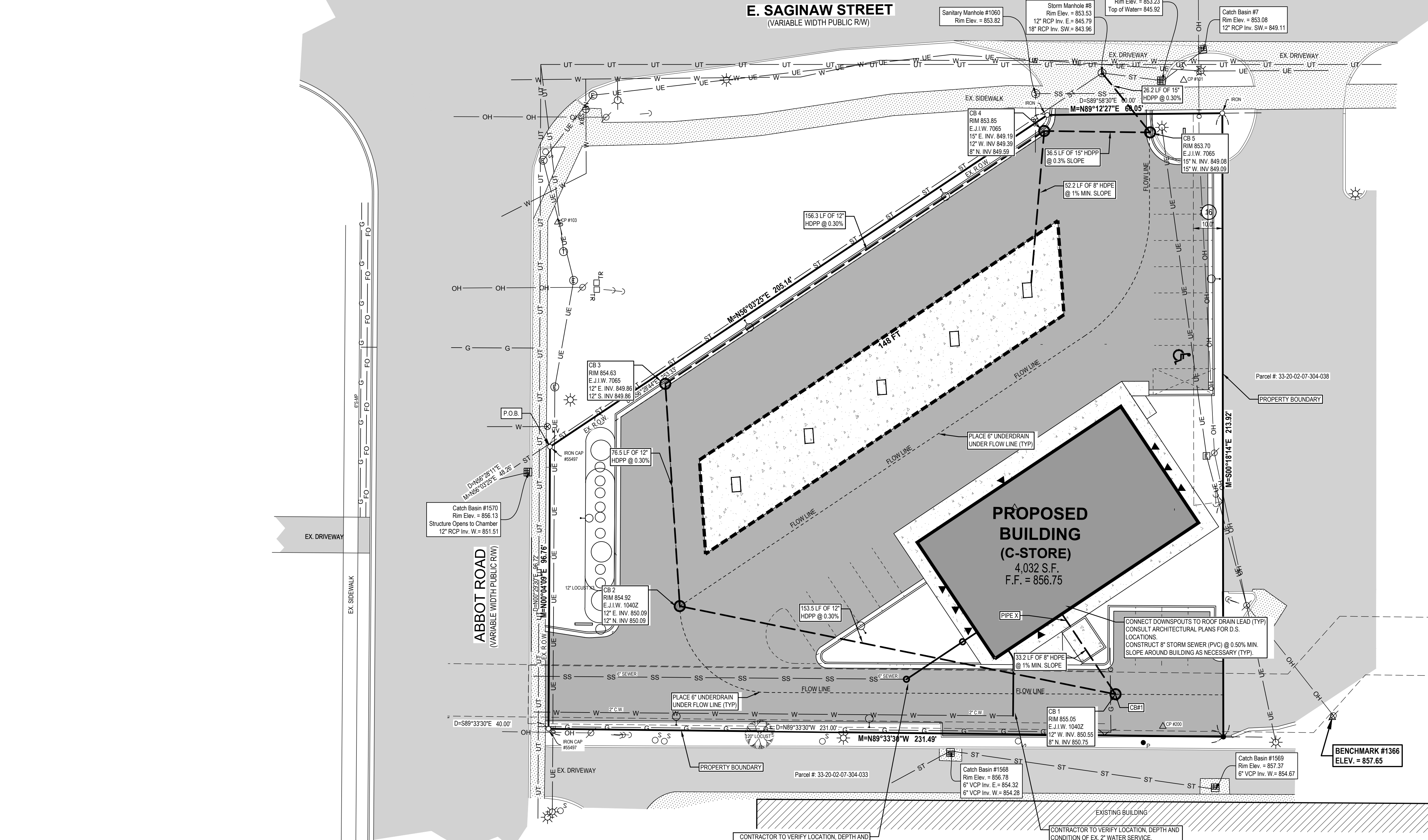
**GENERAL**

1. ALL CONSTRUCTION AND MATERIAL SPECIFICATIONS INCLUDED FOR THIS PROJECT SHALL BE IN ACCORDANCE WITH THE MOST CURRENT AND MATERIAL SPECIFICATIONS (LATEST EDITION) AND THE ORDINANCES OF THE CITY. WHERE CONFLICTS OCCUR IN THE ABOVE, THE CITY SHALL BE THE GOVERNING AUTHORITY.
2. SOIL BORINGS HAVE BEEN DEVELOPED FOR ELECTRONIC FIELD LAYOUT. DIMENSIONS SHOWN ARE FOR GRAPHIC PRESENTATION ONLY AND SHOULD NOT BE USED FOR LAYOUT. CONTACT THE ENGINEER IF ANY DISCREPANCIES BETWEEN THE PLAN AND ELECTRONIC DATA ARE DISCOVERED.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES TO THE EXISTING WATER AND SEWAGE SYSTEM RESULTING FROM NON-COMPLIANCE WITH THE APPLICABLE STANDARDS OR THROUGH GENERAL NEGLIGENCE.
4. ALL WORK INCLUDING INSPECTIONS AND TESTS REQUIRED FOR REMOVAL, RELOCATION OR NEW CONSTRUCTION FOR PRIVATE OR PUBLIC UTILITIES, WILL BE DONE BY AND AT THE EXPENSE OF THE CONTRACTOR AND INCLUDED IN THE BID PRICE FOR THE VARIOUS WORK ITEMS UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL NECESSARY PERMITS FROM THE CITY AND COUNTY AND ANY OTHER AGENCY FOR ALL WORK DONE BY THE CONTRACTOR.
5. ANY DEFECTS IN THE CONSTRUCTION, INCLUDING MATERIALS OR WORKMANSHIP, SHALL BE REPAIRED OR CORRECTED BY REMOVAL AND REPLACEMENT OR OTHER APPROVED METHODS PRIOR TO ACCEPTANCE BY THE CITY OR OWNER WITHOUT ANY ADDITIONAL COST TO THE CITY OR OWNER.
6. ALL LAWN AREAS REMOVED OR DISTURBED SHALL BE REPLACED WITH TOPSOIL AND SOIL WHERE NEEDED AND SHALL BE RESEEDING AND MULCHED IF SATISFACTORY RE-ESTABLISHMENT OF LAWN DOES NOT OCCUR.
7. ALL PUNCH LIST AND DEFICIENCY WORK SHALL BE COMPLETED WITHIN 1 MONTH OF THE END OF CONSTRUCTION.
8. THE CONTRACTOR SHALL OBTAIN A STREET OPENING PERMIT FROM THE CITY BEFORE BEGINNING WORK WITH ANY PUBLIC STREET RIGHT-OF-WAY.
9. THE CONTRACTOR SHALL MAINTAIN A CURRENT SET OF CONSTRUCTION DRAWINGS ON SITE AT ALL TIMES. THESE PLANS HAVE BEEN DEVELOPED FOR ELECTRONIC FIELD LAYOUT. DIMENSIONS SHOWN ARE FOR GRAPHIC PRESENTATION ONLY AND SHOULD NOT BE USED FOR LAYOUT. CONTACT THE ENGINEER IF ANY DISCREPANCIES BETWEEN THE PLAN AND ELECTRONIC DATA ARE DISCOVERED.
10. THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY LIGHTS, BARRICADES, FLAGMEN, ETC. AS REQUIRED TO PERFORM THE REQUIRED WORK. THE INSTALLATION AND OPERATION OF ALL TEMPORARY TRAFFIC CONTROL DEVICES TO BE USED TO CONTROL TRAFFIC AS REQUIRED SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS. THE CONTRACTOR SHALL FURNISH, ERECT, MAINTAIN AND SUBSEQUENTLY REMOVE SUCH ADDITIONAL TRAFFIC CONTROL DEVICES LOCATED OUTSIDE THE WORK LIMITS OF CONSTRUCTION AS ARE REQUIRED ON THOSE STREETS WHICH ARE USED AS DETOURS, INCLUDING "ROAD CLOSED" SIGNS AND BARRICADES AT THE POINT WHERE THE ROAD IS CLOSED TO THROUGH TRAFFIC.
11. THE CONTRACTOR SHALL PROTECT LOCATION OF ALL PROPERTY PINS AND BENCHMARKS.
12. ALL WORK CONTEMPLATED SHALL AT ALL TIMES BE SUBJECT TO THE DIRECT INSPECTION OF THE CITY, OWNER AND THEIR REPRESENTATIVES. THE CITY AND OWNER RESERVE THE RIGHT THAT ALL CONSTRUCTION ACTIVITY FOR NON-COMPLIANCE OF PLANS, SPECIFICATIONS AND OTHER APPLICABLE STANDARDS OR REGULATIONS.
13. PRICES BID PER FOOT FOR ALL PIPES IS COMPACTED IN PLACE REGARDLESS OF SOIL OR ROCK CONDITIONS.
14. CONTRACTOR IS RESPONSIBLE FOR ALL SIGNAGE, BARRICADES AND SAFETY FENCES TO BE SET UP PRIOR TO ENTERING THE WORK AREA AND FOR MAINTAINING AND PROTECTING THE FLOW OF VEHICULAR AND PEDESTRIAN TRAFFIC AROUND THE JOB SITE. TRAFFIC CONTROLS SHALL BE COORDINATED WITH THE POLICE DEPARTMENT AND THE CITY. PRIOR TO ANY CONSTRUCTION OR GRADING, A PROTECTIVE BARRIER, FENCE, POST AND/OR SIGNS CLEARLY INDICATING LIMITS OF WORK/DISTURBANCE SHALL BE INSTALLED INDICATING NO TREE REMOVAL OR DISTURBANCES OUTSIDE LIMITS. THE CITY AND OWNER SHALL BE CONTACTED UPON DETERMINATION OF LIMITS TO THE FIELD.
15. ALL ROAD SURFACES, EASEMENTS OR RIGHT-OF-WAYS DISTURBED BY CONSTRUCTION OF ANY PART OF THIS IMPROVEMENT ARE TO BE RESTORED COMPLETELY TO THE SATISFACTION OF THE CITY AND THE OWNER.
16. NO PARKING OF CONSTRUCTION OR CONTRACTOR'S EQUIPMENT OR PUBLIC STREETS SHALL BE PERMITTED.
17. ALL DISTURBED SIGNS, GUARDRAILS, MAIL BOXES, AND DRIVEWAYS SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE CITY AND THE OWNER.
18. DUST CONTROL: THE CONTRACTOR SHALL SUPPLY ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY SUCH AS CALCIUM CHLORIDE, WATER OR A MOTORIZED DUST FREE STREET SWEEPING DEVICE TO MAINTAIN ALL ROADWAYS BEING USED FOR ACCESS TO THE CONSTRUCTION SITE AND SHALL ADHERE TO ALL ORDINANCES OF THE CITY, COUNTY, MICHIGAN OR ANY OTHER GOVERNING AUTHORITY.
19. ALL SEWERS, MANHOLES, JUNCTION CHAMBERS AND CATCH BASINS MUST BE CLEANED BEFORE ACCEPTANCE BY THE CITY AND OWNER.
20. IF MUD, SOIL OR OTHER DEBRIS IS DEPOSITED ON ADJACENT STREETS, ROADS OR OTHER PROPERTY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF SUCH AT THE END OF EACH WORK DAY OR AS REQUIRED DURING THE WORK DAY.
21. ADJUST TO GRADE OR RECONSTRUCT TO GRADE WORK SHALL INCLUDE THE REMOVAL AND REPLACEMENT OF ANY EXISTING CONCRETE BLOCKOUT PAVEMENT, DAMAGED PAVEMENT DOWELS OR OTHER SUCH LOAD TRANSFER DEVICES SHALL BE REPLACED AS DIRECTED BY THE COUNTY AND THE ENGINEER.
22. ALL EXISTING CASTINGS OR STRUCTURES TO BE ADJUSTED OR RECONSTRUCTED TO GRADE SHALL BE FIELD CHECKED AT THE TIME OF CONSTRUCTION AND MARKED SUITABLE FOR SALVAGE AND REUSE OR REPLACED.
23. COMPACTED PREMIUM BACKFILL (MIDT CLASS SAND) WILL BE REQUIRED AT ALL FILL AREAS ON ANY STREETS WHERE REMOVAL AND REPLACEMENT OF PAVEMENT IS REQUIRED AND FOR ALL UNDERGROUND CONSTRUCTION UNDER ANY DRIVEWAY OR PAVEMENT INCLUDING THE 45 DEGREE ANGLE OF INFLUENCE FROM THE OUTSIDE EDGE OF PAVEMENT OR TOP OF CURB. COMPACTION TESTS SHALL BE TAKEN EVERY 10 FEET UNDER PAVEMENT. PAVEMENT INCLUDES, BUT NOT LIMITED TO, ROADWAY SURFACES, SIDEWALKS, BIKE WAYS, DRIVEWAYS, SHOULDERS, BUILDINGS, ETC. NO BUILDING MATERIAL, EQUIPMENT, VEHICLES OR CHEMICALS SHALL BE STORED OR PLACED OUTSIDE LIMITS OF WORK/DISTURBANCE.
24. STORMWATER POLLUTION PREVENTION ITEMS SHALL BE IN PLACE PRIOR TO COMMENCING CLEARING OPERATIONS, EARTHWORK GRADING, OR ANY OTHER TYPE OF CONSTRUCTION ACTIVITY.
25. ROOF DRAIN, FOUNDATION DRAINAGE AND OTHER CLEAR WATER CONNECTIONS TO THE SANITARY SEWER ARE PROHIBITED.
26. CONSTRUCTION NOISE SHALL BE KEPT TO A MINIMUM DURING NIGHTTIME HOURS AND MUST COMPLY WITH MUNICIPAL CODE REQUIREMENTS.
27. ALL TREES WITHIN THE GRADING LIMITS SHALL BE REMOVED UNLESS OTHERWISE NOTED.
28. CONTRACTOR TO FIELD VERIFY AND SCOPE EXISTING SANITARY SEWER LATERAL TO CONFIRM ELEVATION, SLOPE, CONDITION AND PHYSICAL CONNECTION TO PUBLIC SANITARY SEWER MAIN PRIOR TO CONNECTION OF NEW LATERAL SERVICE.
29. ALL CONCRETE PAVEMENT OR CURB EDGES AT HOT MIX ASPHALT JOINTS SHALL BE IMMEDIATELY SEALED AFTER PAVING WITH A SUITABLE RUBBERIZED ASPHALT SEALANT PER MDT STANDARD CONSTRUCTION SPECIFICATIONS SECTION 507.
30. ALL SITE WORK INCLUDING BUILDING PAD AND SITE PREPARATION, FOUNDATIONS, FLOORS, RETAINING WALLS, EXCAVATIONS, FILL PLACEMENT, UNSUITABLE SOIL EXCAVATION AND BACKFILL, GROUNDWATER MANAGEMENT, ASPHALT PAVEMENT, CONCRETE PAVEMENT AND QUALITY CONTROL TESTING SHALL COMPLY WITH THE REPORT OF GEOTECHNICAL INVESTIGATION.
31. A MINIMUM 4" TOPSOIL IS REQUIRED IN ALL DISTURBED, NON-IMPROVED AREAS (TYP).
32. UPON PROJECT FINAL APPROVAL, THE EAST LANSING ENGINEERING DEPARTMENT SHALL RECEIVE A PROJECT BID SET THAT INCLUDES ALL RELATED SPECIFICATIONS, PLANS AND ADDENDUMS.

**REQUIRED SITE WORK PERMITS**

THE FOLLOWING CITY OF EAST LANSING PERMITS WILL LIKELY BE REQUIRED FOR THIS PROJECT. THESE PERMITS CAN BE OBTAINED FROM THE DEPARTMENT OF PUBLIC WORKS ENGINEERING DEPARTMENT

1. WATER AND SEWER CONNECTION AND WATER TAP PERMIT.
2. GRADING AND SOIL EROSION SEDIMENTATION CONTROL PERMIT.
3. OCCUPATION AND USE OF STREET ALLEYS RIGHTS-OF-WAY PERMIT.
4. STORMWATER PERMIT.
5. WETLAND IS NOT PRESENT ON THE SITE AND IS THEREFORE NOT REQUIRED.
6. A TREE SURVEY IS REQUIRED PRIOR TO ANY SITE CLEARING. THE FIRST PAGE OF THIS PLAN SET IS LIKELY SUFFICIENT FOR THE TREE SURVEY FOR THIS PROJECT.



**811 Know what's below. CALL before you dig.**

UTILITY LOCATIONS ARE DERIVED FROM ACTUAL MEASUREMENTS OR AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATIONS NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THIS AREA.

NOTE: EXISTING UTILITIES AND SERVICE LINES IDENTIFIED AS "PLAN" WERE OBTAINED FROM AVAILABLE AS-BUILT RECORD DRAWINGS. THE CONTRACTOR SHALL VERIFY THE LOCATION, DEPTH AND STATUS OF ALL UTILITIES AND SERVICE LINES PRIOR TO NEW CONNECTIONS.

**NEDERVELD**

www.nederveld.com  
 800.222.1868

**GRAND RAPIDS**  
 217 Grandville Ave., Suite 302  
 Grand Rapids, MI 49503  
 Phone: 616.575.5190

**ANN ARBOR**  
**CHICAGO**  
**COLUMBUS**  
**HOLLAND**  
**INDIANAPOLIS**

**PREPARED FOR:**  
 American Gas & Oil, Inc.  
 Attention: Jason Berris

P.O. Box 247 - 440 West Division  
 Sparta, MI 49345  
 Phone: 616.887.0956

**REVISIONS:**

Title	Drawn: SW	Checked: SW	Date
Title: Preliminary Plan			08/14/23
Title: Site Plan			08/24/23
Title: Site Plan Submitted to Planning Commission			08/29/23
Title: Modified Per Staff and PC Comments from 9/25/23			10/05/23

**UNIVERSITY MARATHON**

**Utility Plan**

100 E. Saginaw Street, East Lansing, MI 48823

PART OF THE SOUTHWEST FRACTIONAL 1/4 OF SECTION 7, T4N, R17W,  
 CITY OF EAST LANSING, INGHAM COUNTY, MICHIGAN

**STAMP:**

STATE OF MICHIGAN  
 LICENSED PROFESSIONAL ENGINEER  
 STEVEN L. WITTE  
 License No. 6201046769

**PROJECT NO:**  
 23500029

**SHEET NO:**  
**C-400**

**SHEET: 4 OF 5**

23/0000-C04-000 - SW - 10/05/2023 14:24

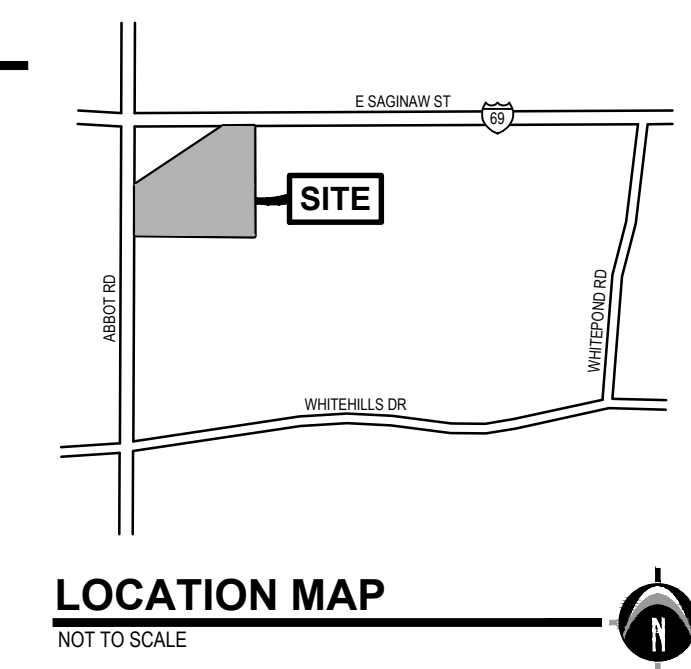
**811** Know what's below.  
CALL before you dig.

UTILITY LOCATIONS ARE DERIVED FROM ACTUAL MEASUREMENTS OR AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATIONS NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THE AREA.

NOTE:  
EXISTING UTILITIES AND SERVICE LINES IDENTIFIED AS "PLAN" WERE OBTAINED FROM AVAILABLE AS-BUILT RECORD DRAWINGS. THE CONTRACTOR SHALL VERIFY THE LOCATION, DEPTH AND STATUS OF ALL UTILITIES AND SERVICE LINES PRIOR TO NEW CONNECTIONS.

**BENCHMARKS**

**BENCHMARK #1366** ELEV. = 857.65 (NAVD88)  
MAG nail in utility pole, located 275' +/- East of Abbot Road & 230' +/- South of E. Saginaw Street.



**NEDERVELD**  
www.nederveld.com  
800.222.1868  
**GRAND RAPIDS**  
217 Grandville Ave., Suite 302  
Grand Rapids, MI 49503  
Phone: 616.575.5190

**ANN ARBOR  
CHICAGO  
COLUMBUS  
HOLLAND  
INDIANAPOLIS**

**PREPARED FOR:**  
American Gas & Oil, Inc.  
Attention: Jason Berris

P.O. Box 247 - 440 West Division  
Sparta, MI 49345  
Phone: 616.887.0956

**REVISIONS:**

Title: Preliminary Plan	Drawn: SW	Checked: SW	Date: 08/14/23
Title: Site Plan	Drawn: SW	Checked: SW	Date: 08/24/23
Title: Site Plan Submitted to Planning Commission	Drawn: SW	Checked: SW	Date: 08/29/23
Title: Modified Per Staff and PC Comments from 9/25/23	Drawn: SW	Checked: SW	Date: 10/05/23

**LANDSCAPE LEGEND / SCHEDULE**

TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CAL
	Ca	2	Carpinus caroliniana	American Hornbeam	B&B	3.5" min.
	Co	2	Celtis occidentalis	Common Hackberry	B&B	3.5" min.
	Ma	2	Maackia amurensis	Amur Maackia	B&B	3.5" min.
	Ta	4	Tilia americana	American Linden	B&B	3.5" min.
SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	
	Ap	9	Aronia melanocarpa 'SMNAMPEN'	Low Shade Snowflake™ Black Chokeberry	24" min.	
	Cl	8	Diervilla lonicera 'Michigan Sunset'	Dwarf Bush Honeysuckle	24" min.	
	Jn	31	Juniperus virginiana 'Greguard'	Grey Guardian™ Eastern Redcedar	24" min.	
	Pt	21	Physocarpus opulifolius 'SMPTW'	Tiny Wine® Ninebark	24" min.	

**LANDSCAPE CALCULATIONS**

**REQUIRED LANDSCAPING:**

**PARKING LOT LANDSCAPING**

- ONE SHADE TREE PER EACH 40 LINEAL FEET OF PARKING LOT ADJACENT TO PROPERTY LINE/ROW

• WHERE 20 OR MORE PARKING SPACES ARE PROVIDED, 10 SQ. FT. INTERIOR PARKING LANDSCAPE PER PARKING SPACE WITHIN THE OVERALL PERIMETER OF THE PARKING LOT

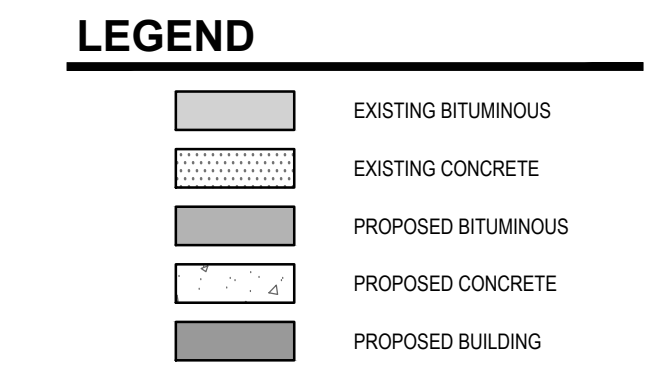
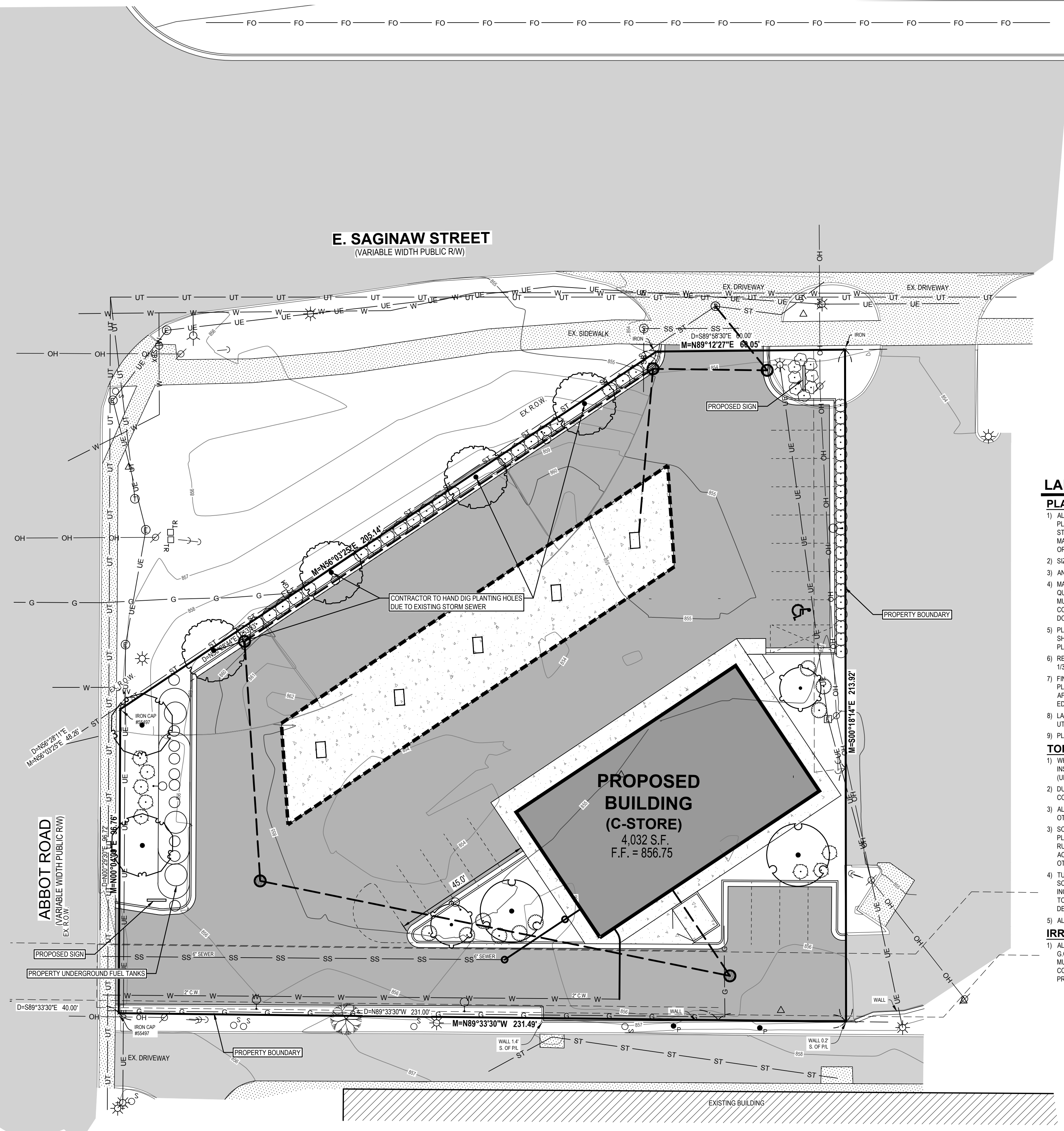
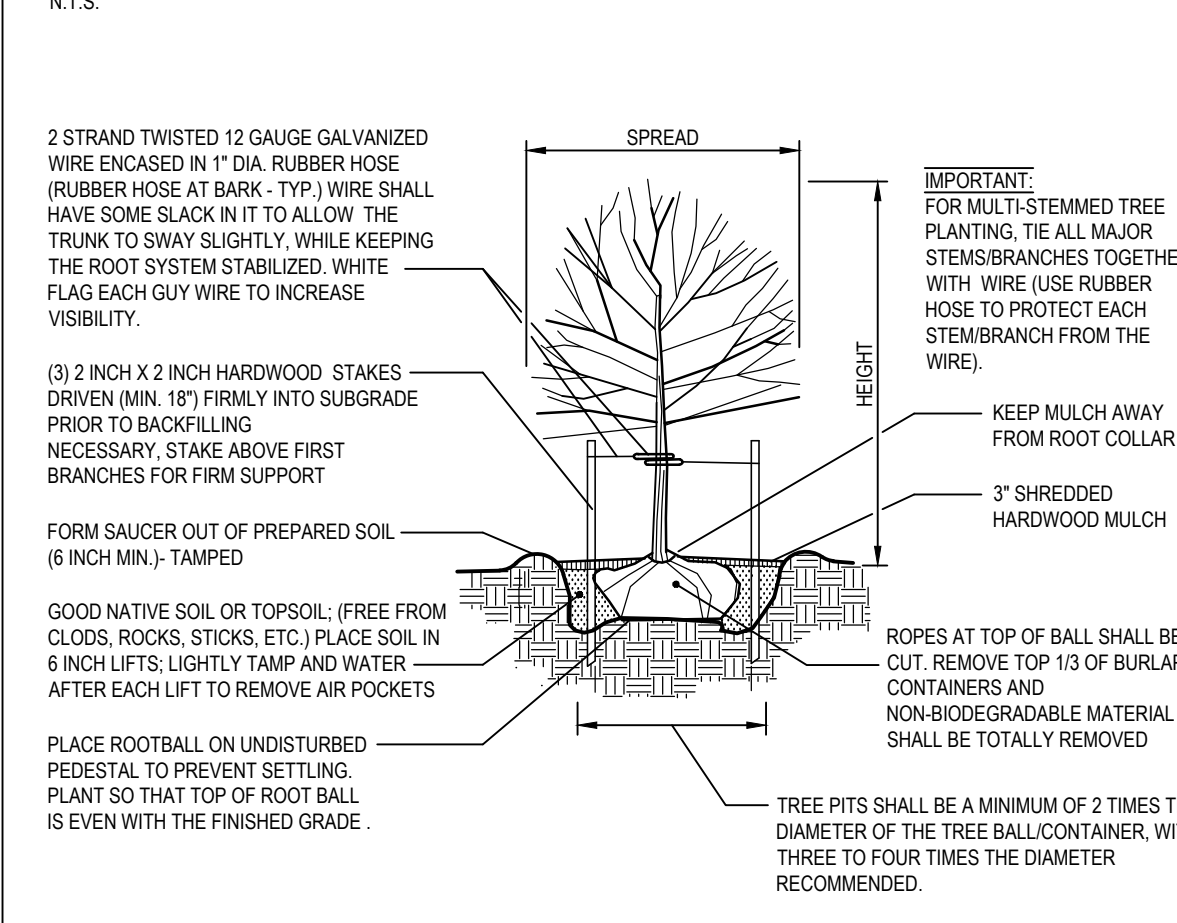
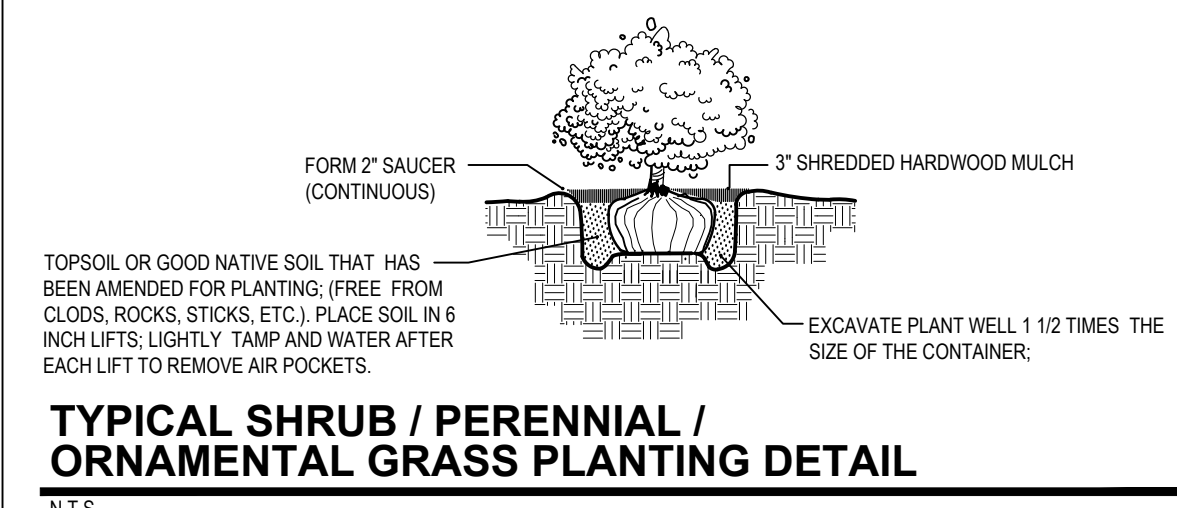
**PROPOSED LANDSCAPING:**

**PARKING LOT LANDSCAPING**

- 807.3 TOTAL LINEAL FEET - 68 DRIVEWAYS = 739.39 / 40 = 18 SHADE TREES REQUIRED
- 10 SHADE TREES PROVIDED

(445' ADJOINING PROPERTY UNABLE TO PLANT REQUIRED TREES, PROPOSED ADDITIONAL LANDSCAPING ALONG OTHER PROPERTY BOUNDARIES WITH EVERGREEN AND FLOWERING SHRUBS AND ORNAMENTAL TREES)

• LESS THAN 20 PROPOSED PARKING SPACES, INTERIOR LANDSCAPE REQUIREMENTS DO NOT APPLY. (INTERIOR LANDSCAPE PROVIDED HOWEVER DUE TO LIMITED PLANTING SPACE ALONG PROPERTY BORDERS)



**LANDSCAPE NOTES**

- PLANTING NOTES:**
- 1) ALL PLANT MATERIAL SHALL BE LOCALLY NURSERY GROWN NO. 1 GRADE AND INSTALLED ACCORDING TO ACCEPTED PLANTING PROCEDURES. ALL PLANT MATERIALS SHALL MEET CURRENT AMERICAN ASSOCIATION OR NURSERYMEN STANDARDS. DO NOT PLANT MATERIALS UNTIL DIRECTED BY OWNER, LANDSCAPE ARCHITECT, AND/OR CONSTRUCTION MANAGER. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL, FOR ANY REASON BEFORE OR AFTER IT IS INSTALLED.
  - 2) SIZES SPECIFIED ARE MINIMUM SIZES TO WHICH THE PLANTS ARE TO BE INSTALLED.
  - 3) ANY PLANT SUBSTITUTIONS SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT.
  - 4) MAINTENANCE OF LANDSCAPING ITEMS, TREES, AND PLANTS SHALL BE PERFORMED BY THE PROPERTY OWNER OR A QUALIFIED PROFESSIONAL. ALL LANDSCAPING SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH APPLICABLE MUNICIPAL STANDARDS AND IN ACCORDANCE WITH CURRENT INDUSTRY STANDARDS IN NEAT, HEALTHY AND WEED FREE CONDITION. ANY DEAD, DISEASED OR DAMAGED PLANT MATERIALS ARE TO BE REPLACED IMMEDIATELY AFTER NOTIFIED TO DO SO.
  - 5) PLANT TREES AND SHRUBS IN ACCORDANCE WITH PLANTING DETAILS. DIG TREE PITS PER DETAILS. PLANT TREES AND SHRUBS AT THE SAME GRADE LEVEL AT WHICH THEY WERE GROWN AT THE NURSERY. IF HEAVY CLAY SOILS ARE EVIDENT, PLANT TREES AND SHRUBS HIGHER, APPROX. 1/4 OF THE ROOT BALL ABOVE GRADE, AND BACKFILL TO TOP OF ROOT BALL.
  - 6) REMOVE ALL TWINE, WIRE, NURSERY TREE GUARDS, TAGS AND INORGANIC MATERIAL FROM ROOT BALLS. REMOVE THE TOP 1/3 OF BURLAP FROM EARTH BALLS AND REMOVE BURLAP FROM AROUND TRUNK.
  - 7) FINELY SHREDED HARDWOOD BARK MULCH, NATURAL COLOR (NON-COLORED), IS REQUIRED FOR ALL PLANTINGS AND PLANTING BEDS. MULCH PER PLANTING DETAILS. MULCH IN PLANT BEDS SHALL BE 3\"/>
- TOPSOIL AND TURF NOTES:**
- 1) WHEREVER GROUND IN ITS NATURAL STATE HAS BEEN DISTURBED, APPROVED LANDSCAPING OR GRASS SHALL BE FULLY INSTALLED, AND ESTABLISHED WITHIN A REASONABLE PERIOD OF TIME, BUT NO LONGER THAN ONE GROWING SEASON (UNLESS OTHERWISE NOTED AND APPROVED).
  - 2) DURING EXCAVATION, GRADING AND INSTALLATION OF REQUIRED LANDSCAPING, ALL SOIL EROSION AND SEDIMENTATION CONTROL REGULATIONS SHALL BE STRICTLY FOLLOWED AND COMPLIED WITH.
  - 3) ALL LAWN AREAS SHALL RECEIVE SOD OR HYDROSEED. TURF SHALL BE INSTALLED ON TOPSOIL UNLESS APPROVED OTHERWISE. DO NOT PLANT UNTIL ACCEPTANCE OF FINISH GRADE.
  - 4) SOD SHALL BE GROWN ON TOPSOIL UNLESS APPROVED OTHERWISE. SOD SHALL BE 2 YEARS OLD AND STRONGLY ROOTED. PLACE SOD TIGHTLY WITH NO GAPS AND WITH GRASS IN SAME DIRECTION. SEAMS OF SOD SHALL BE STAGGERED IN A RUNNING BOND PATTERN. SOD SHALL BE WATERED IMMEDIATELY TO AVOID DRYING OUT. DO NOT INSTALL SOD UNTIL ACCEPTANCE OF FINISH GRADE AND IRRIGATION SYSTEM IS OPERATING PROPERLY UNLESS DIRECTED IN WRITING TO DO OTHERWISE. FINISH ROLL SOD WITH A WATER FILLED LAWN ROLLER, ROLL PERPENDICULAR TO LENGTH OF SOD.
  - 5) TURF SHALL BE INSTALLED ON A MIN. OF 3\"/>
- IRRIGATION NOTES:**
- 1) ALL PLANTING AREAS, LAWN AREAS AND LANDSCAPE ISLANDS SHOWN ARE TO HAVE A COMPLETE IRRIGATION SYSTEM. THE G.C. SHALL BE RESPONSIBLE FOR RETAINING A QUALIFIED FIRM FOR THE DESIGN OF THE IRRIGATION SYSTEM. THE DESIGN MUST SHOW HOW THE SYSTEM TIES INTO THE BUILDING AND MUST SHOW ALL OF THE NECESSARY EQUIPMENT FOR A COMPLETE SYSTEM. THE G.C. SHALL SUBMIT THE IRRIGATION SYSTEM DESIGN TO THE ARCHITECT/TOWNER FOR APPROVAL PRIOR TO COMMENCEMENT OF WORK.

**UNIVERSITY MARATHON**

**Landscaping Plan**

100 E. Saginaw Street, East Lansing, MI 48823

PART OF THE SOUTHWEST FRACTIONAL 1/4 OF SECTION 7, T4N, R1W, CITY OF EAST LANSING, INGHAM COUNTY, MICHIGAN

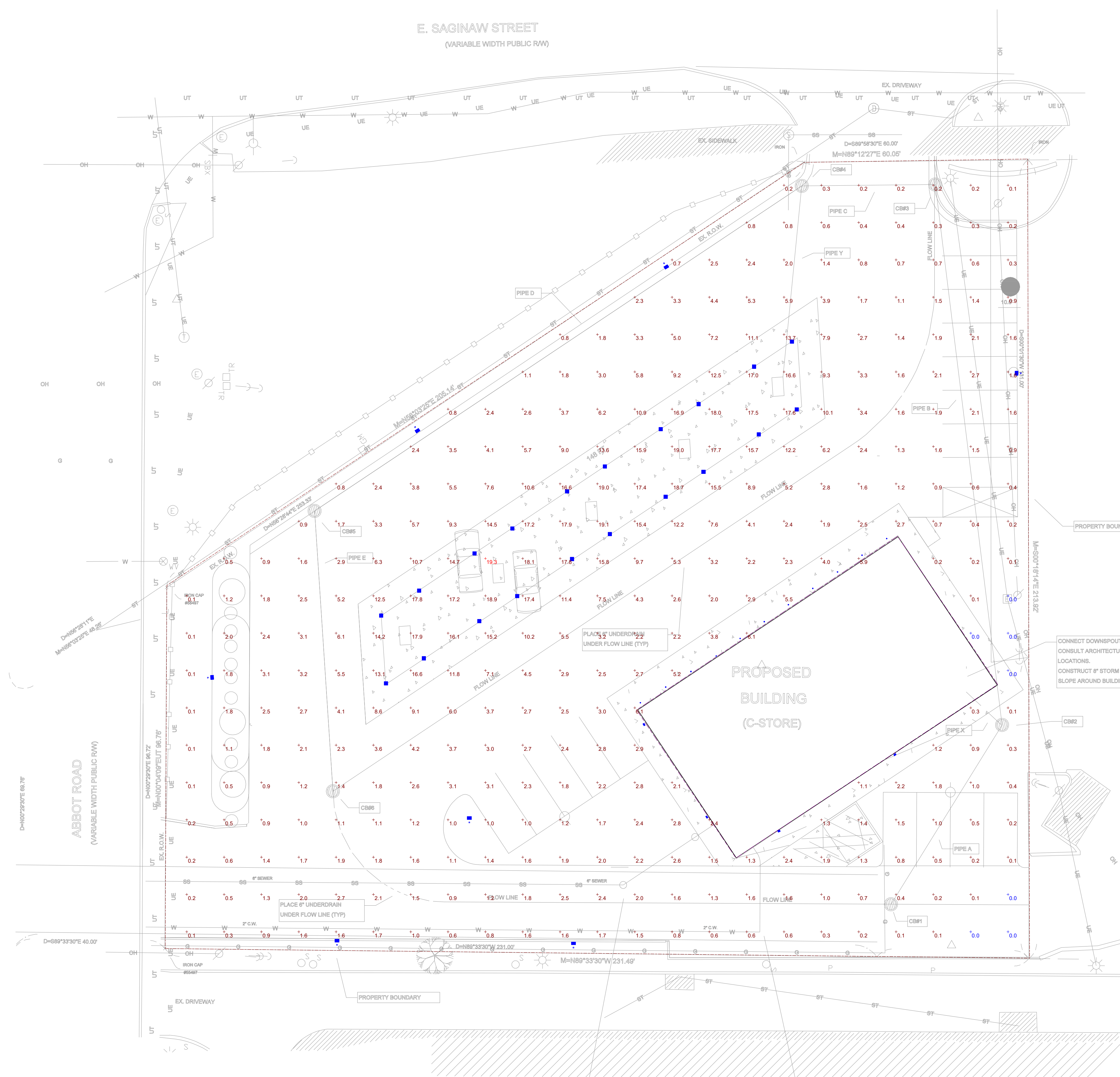
**STAMP:**

**PROJECT NO:**  
23500029

**SHEET NO:**  
**L-201**

**SHEET: 5 OF 5**

E. SAGINAW STREET  
(VARIABLE WIDTH PUBLIC R/W)



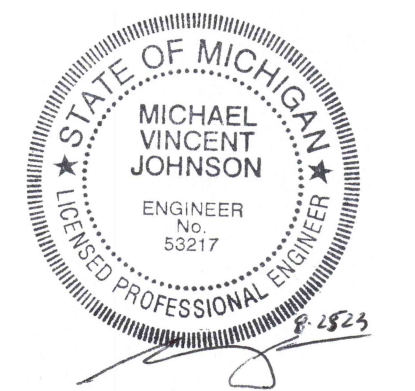
Plan View  
Scale - 1" = 16ft

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #1	+	4.1 fc	19.3 fc	0.0 fc	N/A	N/A

Image			
Label	Manufacturer	Catalog	Description
DL1	Lithonia Lighting	WFA LED 40K MOUNTED IN C-STORE CANOPY	4" MATTE WHITE LED ULTRA-THIN WAFER DOWNLIGHT, 4000K CCT, LEXTAR LED
SA	Lithonia Lighting	DSX0 LED P1 40K 80CRI BLC3 MOUNTED ON SQUARE STEEL POLE AT 15' ABOVE GRADE	D-Series Size 0 Area Luminaire P1 Performance Package 4000K CCT 80 CRI Type 3 Extreme Backlight Control
SB	RAB LIGHTING INC.	MAS116-52NW/D10 MOUNTED RECESSED UNDER GAS CANOPY	CAST METAL HOUSING, CAST METAL HEAT SINK, 1 WHITE CIRCUIT BOARD WITH 121 LEADS, CLEAR FLAT GLASS DOOR IN CAST WHITE PAINTED METAL FRAME.
SW1	Lithonia Lighting	WDGE2 LED P2 40K 80CRI TFM MOUNTED AT 10' ABOVE FINISHED FLOOR	WDGE2 LED WITH P2 - PERFORMANCE PACKAGE, 4000K, 80CRI, TYPE FORWARD THROW MEDIUM OPTIC

CONNECT DOWNSPOUTS TO ROOF DRAIN LEAD (TYP)  
CONSULT ARCHITECTURAL PLANS FOR D.S. LOCATIONS.  
CONSTRUCT 8" STORM SEWER (PVC) @ 0.80%/100' MIN. SLOPE AROUND BUILDING AS NECESSARY (TYP).

AMERICAN GAS & OIL  
100 E SAGINAW  
EAST LANSING, MI



Designer  
Date 08/28/2023  
Scale Not to Scale  
Drawing No. ES101  
Summary

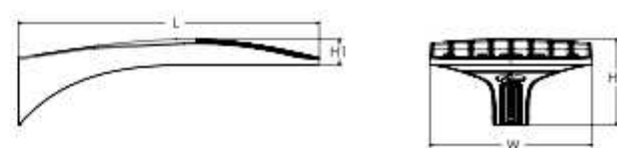
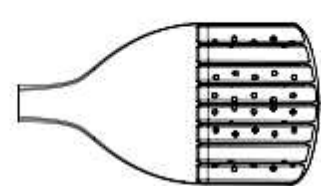


## D-Series Size 0 LED Area Luminaire



### Specifications

EPA: 0.44 ft<sup>2</sup> (0.04 m<sup>2</sup>)  
 Length: 26.18" (66.5 cm)  
 Width: 14.06" (35.7 cm)  
 Height H1: 2.26" (5.7 cm)  
 Height H2: 7.46" (18.9 cm)  
 Weight: 23 lbs (10.4 kg)



Series	
Notes	
Type	

### Introduction

The modern styling of the D-Series features a highly refined aesthetic that blends seamlessly with its environment. The D-Series offers the benefits of the latest in LED technology into a high performance, high efficiency, long-life luminaire.

The photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. D-Series outstanding photometry aids in reducing the number of poles required in area lighting applications, with typical energy savings of 70% and expected service life of over 100,000 hours.

### Ordering Information

Series	LEDs	Color temperature <sup>1</sup>	Color Rendering Index <sup>2</sup>	Distribution	Voltage	Mounting
DSX0 LED	<b>Forward optics</b> (this section 70CRI only)					
	P1	P5	30K 3000K	70CRI	T5	Type V medium
	P2	P6	40K 4000K	70CRI	T2M	Type II medium
	P3	P7	50K 5000K	70CRI	T3M	Type III medium
	<b>Retrated optics</b> (this section 80CRI only, extended lead times apply)					
	P10 <sup>3</sup>	P12 <sup>3</sup>	27K 2700K	80CRI	T16L	Type II low glare <sup>4</sup>
	P11 <sup>3</sup>	P13 <sup>3</sup>	30K 3000K	80CRI	T4M	Type IV medium
			35K 3500K	80CRI	T4L	Type IV low glare <sup>4</sup>
			40K 4000K	80CRI	T4L	Type IV low glare <sup>4</sup>
			50K 5000K	80CRI	T4M	Type IV medium
					T4L	Type IV low glare <sup>4</sup>
					T4M	Type IV medium

Control options	Shipped installed	Other options	Finish
<b>Shipped installed</b> NLAIR2 PIRH2 Night All-in-2 enabled with bi-level motion / ambient sensor 8-40' mounting height, ambient sensor enabled at 26" ± 1/4" ± 1/8" PIR High-flow, motion/ambient sensor, 8-40' mounting height, ambient sensor enabled at 26" ± 1/4" ± 1/8" PER 180° beam rock-escape only (remote ordered separately) PER5 Five-pin receptacle only (remote ordered separately) **	<b>Shipped installed</b> FET Seven-pin receptacle only (remote ordered separately) ** FAO Field adjustable output 1/2" ± 1/8" BLSO Bi-level switch dimming 32% ± 1% ± 1/8" BLSO Bi-level switch dimming 32% ± 1% ± 1/8" DMG 0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately) DMG 0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately)	<b>Other options</b> HS Heuristic shield (black finish standard) L90 Left rotated optics <sup>5</sup> R90 Right rotated optics <sup>5</sup> CCE Coastal Construction <sup>6</sup> HA 50% ambient operation <sup>7</sup> <b>Shipped separately</b> EGR External Guard Shield (removable, field install required, matches housing finish) B50R Bird spikes (field install required)	<b>Finish</b> D50K0 Dark Bronze D50L0 Black D50A0 Natural aluminum D50W0 White D50F0 Textured dark bronze D50B0 Textured black D50N0 Textured natural aluminum D50W0 Textured white D50F0 Textured sandstone

LITHONIA LIGHTING One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.lithonia.com  
 © 2011-2023 Acuity Brands Lighting, Inc. All rights reserved. DSX0 LED Rev. 04/23/23 Page 1 of 8

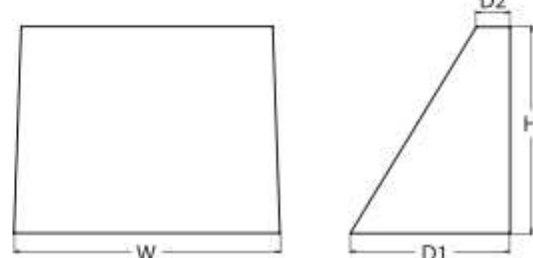


## WDGE2 LED Architectural Wall Sconce Precision Refractive Optic



### Specifications

Depth (D1): 7"  
 Depth (D2): 1.5"  
 Height: 9"  
 Width: 11.5"  
 Weight: 13.5 lbs (without options)



Series	
Notes	
Type	

### Introduction

The WDGE2 LED family is designed to meet specifier's every wall-mounted lighting need in a widely accepted shape that blends with any architecture. The clean, rectangular design comes in four sizes with lumen packages ranging from 1,200 to 25,000 lumens, providing a true site-wide solution. Embedded with nLight® AIR wireless controls, the WDGE2 family provides additional energy savings and code compliance.

WDGE2 with industry leading precision refractive optics provides great uniform distribution and optical control. When combined with multiple integrated emergency battery backup options, including an 18W cold temperature option, the WDGE2 becomes the ideal wall-mounted lighting solution for pedestrian scale applications in any environment.

### WDGE2 LED Family Overview

Luminaire	Optics	Standard EM, 0°C	Cold EM, -30°C	Sensor	Approximate Lumens (4000K, 80CRI)								
					P0	P1	P2	P3	P4	P5	P6		
WDGE2 LED	Visual Comfort	AW	—	—	750	1,200	2,000	—	—	—	—	—	—
WDGE2 LED	Visual Comfort	10W	18W	Standalone / night	—	1,200	2,000	3,000	4,500	6,000	—	—	—
WDGE2 LED	Precision Refractive	10W	18W	Standalone / night	700	1,200	2,000	3,200	4,200	—	—	—	
WDGE2 LED	Precision Refractive	15W	18W	Standalone / night	—	7,500	8,500	10,000	12,000	—	—	—	
WDGE2 LED	Precision Refractive	—	—	Standalone / night	—	12,000	16,000	18,000	20,000	22,000	25,000	—	

### Ordering Information

Series	Package	Color Temperature	CRI	Distribution	Voltage	Mounting	Shipped included	Shipped separately
WDGE2 LED	P0 <sup>3</sup>	27K 2700K	70CRI	T15	Type I Short	MVOLT	SRM	SRM
	P1 <sup>3</sup>	30K 3000K	80CRI	T2M	Type II Medium	347 <sup>3</sup>	SRM	SRM
	P2 <sup>3</sup>	40K 4000K	LW Limited Wavelength	T3M	Type III Medium	480 <sup>3</sup>	ICW	Waterproof Canopy Ceiling Mount (not for damp locations only)
	P4 <sup>3</sup>	50K 5000K	Amber	T3M	Forward Throw Medium	—	—	—

Options	Standard Sensors/Controls	Finish
E10WV Emergency battery backup, Certified in CA (UL 2074 MANDS 120V, 5°C, med)	PR Bi-level (100/25%) motion sensor for 8-15' mounting heights. Intended for use on switched circuits with external dusk-to-dawn switching.	D50D0 Dark Bronze
E20WV Emergency battery backup, Certified in CA (UL 2074 MANDS 120V, 5°C, med)	PRH Bi-level (100/25%) motion sensor for 15-30' mounting heights. Intended for use on switched circuits with external dusk-to-dawn switching.	D50L0 Black
PE <sup>3</sup> Photoeye, Button Type	PRHCV Bi-level (100/25%) motion sensor for 8-15' mounting heights with photoeye pre-programmed for dusk-to-dawn operation.	D50A0 Natural aluminum
DMG <sup>3</sup> 0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately)	PRHCV Bi-level (100/25%) motion sensor for 8-15' mounting heights with photoeye pre-programmed for dusk-to-dawn operation.	D50W0 White
BCE Bottom conduit entry for back box (P80B), total of 4 entry points.	PRHCV Bi-level (100/25%) motion sensor for 8-15' mounting heights with photoeye pre-programmed for dusk-to-dawn operation.	D50F0 Textured dark bronze
BAA Buy American/Act Compliant	Networked Sensors/Controls NLAIR2 PIR nLight AIR Wireless enabled bi-level motion/ambient sensor for 8-15' mounting heights. NLAIR2 PIR nLight AIR Wireless enabled bi-level motion/ambient sensor for 15-30' mounting heights. (see page 4 for full feature list)	D50B0 Textured black
		D50N0 Textured natural aluminum
		D50W0 Textured white
		D50F0 Textured sandstone

LITHONIA LIGHTING COMMERCIAL OUTDOOR One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.lithonia.com  
 © 2019-2022 Acuity Brands Lighting, Inc. All rights reserved. WDGE2 LED Rev. 11/21/22

## MASI16-52NW/D10



Project:	Type:
Prepared By:	Date:

Driver Info		LED Info	
Type	Constant Current	Watts	52W
120V	0.46A	Color Temp	4000K (Neutral)
208V	0.214A	Color Accuracy	72 CRI
240V	0.238A	L70 LifeSpan	100,000 Hours
277V	0.206A	Lumens	6,857 lm
Input Watts	54.9W	Efficacy	125

### Technical Specifications

**Compliance:** Die-cast aluminum with stainless steel cover.  
**UL Listed:** Suitable for wet locations.  
**IP Rating:** Ingress protection rating of IP66 for dust and water.  
**IESNA LM-79 & LM-80 Testing:** This product is listed by Design Lights Consortium (DLC) as an ultra-efficient premium product that qualifies for the highest tier of rebates from DLC Member Utilities. Designed to meet DLC 5.1 requirements.  
**DLC Product Code:** P9Q8W84  
**Green Technology:** Mercury and UV Free, RoHS-compliant components.  
**Performance:** 100,000 Hour LED lifespan based on IES LM-80 results and TM-21 calculations.  
**Wattage Equivalency:** Equivalent to 150W Metal Halide.

**LED Characteristics:** Long-life, high-efficiency, surface-mount LEDs.  
**Color Consistency:** 7-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color.  
**Color Stability:** RAB LEDs exceed industry standards for chromatic stability.  
**Color Uniformity:** RAB's range of Correlated Color Temperature follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.  
**Electrical:** Constant Current, Class 2 100V - 277V, 50/60 Hz THD <20%, PF >0.90, 1400mA.  
**Dimming Driver:** Driver includes dimming control wiring for 0-10V dimming systems. Requires separate 0-10V DC dimming circuit. Dims down to 10%.  
**THD:** 6.6% @ 120V, 7.8% @ 277V

Need help? Tech help line: (888) 723-1000 Email: sales@rablighting.com Website: www.rablighting.com  
 Copyright © 2023 RAB Lighting All Rights Reserved Note: Specifications are subject to change at any time without notice.



### FEATURES & SPECIFICATIONS

**INTENDED USE** — The 4" Wafer™ LED Downlight with Switchable White provides high-quality light output and efficiency featuring a switch for easy color temperature adjustment - while eliminating the need for recessed housings. The innovative, slim design allows for easy retrofit, remodel or new construction installation from below the ceiling. The Wafer LED Downlight's wet location listed - making it ideal for use in a breadth of outdoor residential, hospitality, commercial and multifamily applications. The LED module maintains at least 70% light output for 50,000 hours.  
**CONSTRUCTION** — Aluminum die-cast wafer frame. Durable, powder coat paint to prevent rust. 1/4" aluminum rated cable connector to connect from module to remote driver box. IC rated driver with convenience and value of new remote selectable color temperature options, each with a setting choice to choose either 2700K, 3000K, and 3500K or 3000K, 4000K, and 5000K using the switch. The isolated driver is integrated inside steel smooth box with four 1/8" knockouts with slots for wires. Suitable for pulling wires with the 1/2" cable-inch wiring compartment to accommodate up to (6) 14 gauge insulated conductors, making the Wafer LED Downlights much easier to wire in 2-in/2-out (plus ground) duty-chain applications and contractor friendly.  
**INSTALLATION** — Ideal for shallow ceiling plenum; no housing required. Steel spring clip for easy installation. 4" cut-out template is provided to ensure a correct sized hole is cut into ceiling for proper installation of the trim. Size of hole should not exceed 4 1/4 inches for this product. Suitable for installation in 1-gird and drop ceiling applications. 3" plenum space required for installation of the remote driver box.  
**OPTICS** — Edge LED technology uses light guided plate to distribute light. Polycarbonate lens provides even illumination throughout the space.  
**ELECTRICAL** — Connect directly to 120V Class-2 (CAN/ICES 005 (B) / NMB-005 (B) LED driver. High-efficient driver with power factor >0.9. Ambient operating temperature -40°F (-40°C) to +104°F (+40°C). Dimming down to 10% with most standard incandescent dimmers (see list of approved dimmers). Replaces 65W incandescent for 750 lumens.  
**LISTINGS** — CSA certified to US and Canadian safety standards. ENERGY STAR™ certified. Wet location. Air Tight certified in accordance with ASTM E283-2004, NOM Certified. Can be used to comply with California Title 24 Part 6 High Efficacy LED Light Source Requirements.  
**WARRANTY** — 5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions.  
**Note:** Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25°C. Specifications subject to change without notice.

Series	
Notes	
Type	

### Wafer LED Recessed Downlight

## WF4 4" LED Switchable White Color Temperature

IC/Non-IC New Construction/Remodel



Specifications
Aperture: 3.2 (8.1)
Ceiling opening: 4.2 (10.7)
Overlap trim: 4.7 (12.0)
Height: 1.1 (2.8)

### ORDERING INFORMATION

Series	LED	Lamp	CCC/W Lumens <sup>1</sup>	CRI	Finish	
WF4	4" wafer-thin LED downlight	LED	27K30K35K	2700K/10,500/750L 3000K/10,500/900L 3500K/10,500/780L	90CRI 90CRI	NW Matte White MB Matte Black BN Brush Nickel ORB Oil-Rubbed Bronze
			30K40K50K	3000K/10,500/750L 4000K/10,500/910L 5000K/10,500/790L		

Accessories: Order as separate catalog number.	
WF843 Pin U	Universal new construction pin
WF8 U	Remodel joint bar
WF8K5 SW3PIN FT4	3-Pin diff Cable
WF8K5 SW3PIN FT4	3-Pin 10ft Cable
WF8K5 SW3PIN FT4	3-Pin 20ft Cable
WF462 MW JZ	4" round oversized trim ring

DOWNLIGHTING WF4 LED - Switchable White

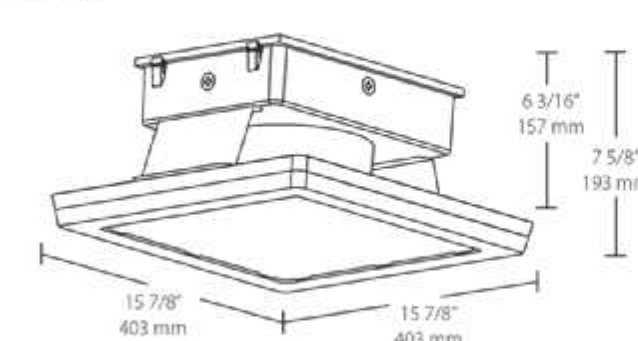
## MASI16-52NW/D10



### Technical Specifications (continued)

**Power Factor:** 99.2% at 120V, 96.3% at 277V  
**Other:**  
**Warranty:** RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. RAB's warranty is subject to all terms and conditions found at rablighting.com/warranty.  
**Buy American Act Compliance:** RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

### Dimensions



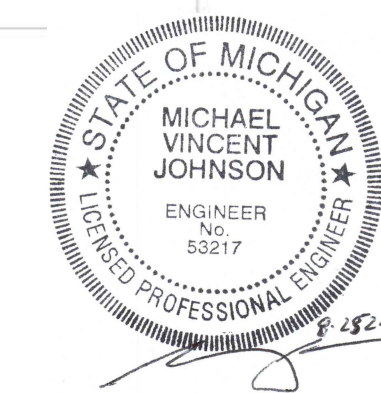
### Features

All 120-277V models DLC Premium listed, qualifying for highest available utility rebates.  
 Premium performance, ultra-high efficiency for fastest payback.  
 Easily installs in 4" openings and replaces most existing fixtures.  
 Retrofit accessory available for openings larger than 4".  
 Water-resistant junction box and drain-off slots.  
 5-Year, No-Compromise Warranty.

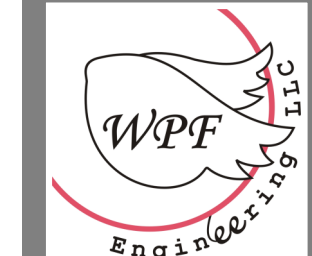
### Ordering Matrix

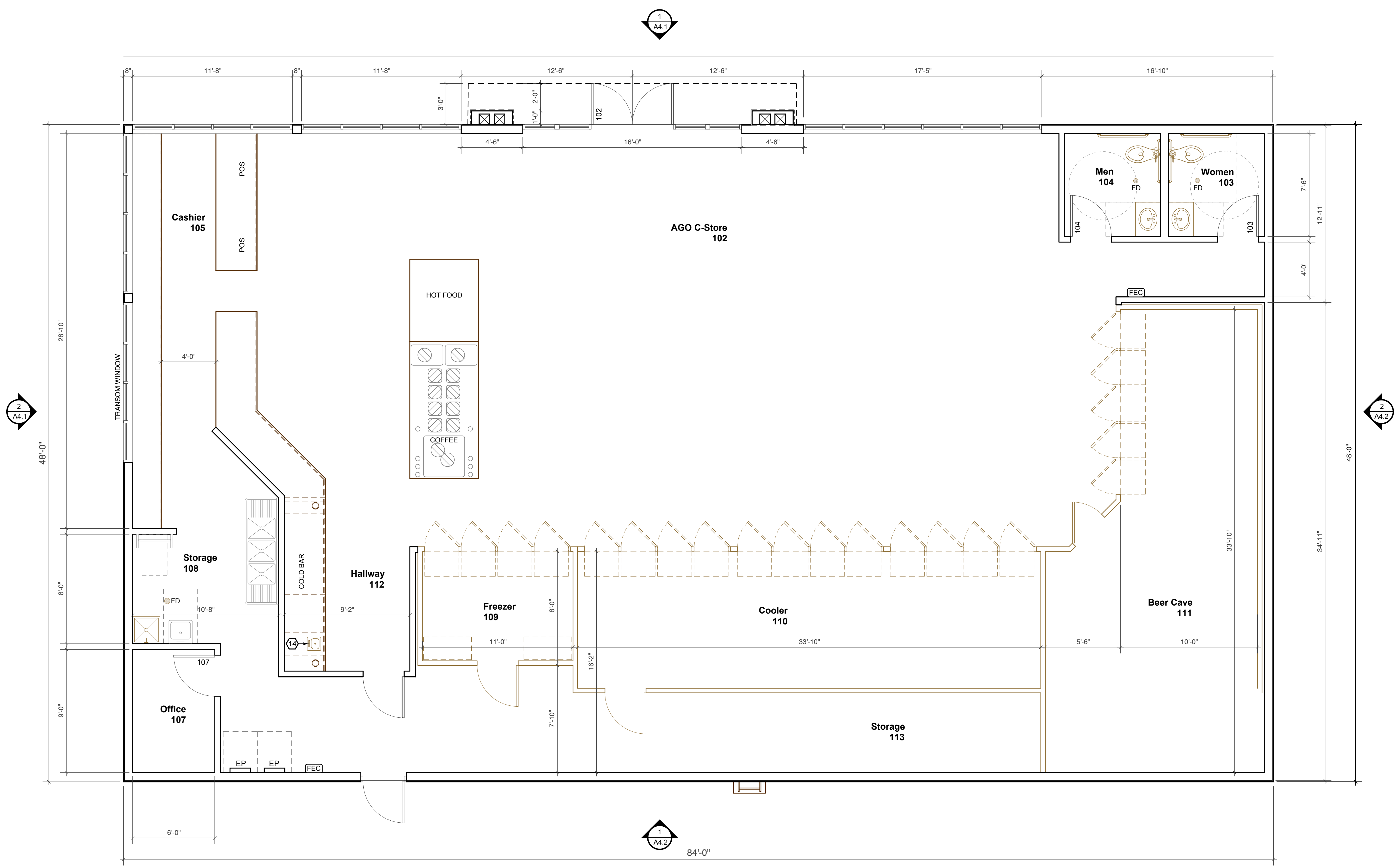
Family	Size	Wattage	Color Temp	Finish	Driver Options
MASI	16	52	N	W	/D10
	20 = 20" x 20"	52 = 52W	Black = 5000K Cool	W = White	/D10 = 120-277V w/ 0-10V Dimming
	16 = 16" x 16"	80 = 80W	N = 4000K Neutral		/460 = 480V On/Off Driver
		100 = 100W	Y = 3000K Warm		
		160 = 160W			
		200 = 200W			

Need help? Tech help line: (888) 723-1000 Email: sales@rablighting.com Website: www.rablighting.com  
 Copyright © 2023 RAB Lighting All Rights Reserved Note: Specifications are subject to change at any time without notice.



Designer  
 Date: 08/28/2023  
 Scale: Not to Scale  
 Drawing No.: ES102  
 Summary



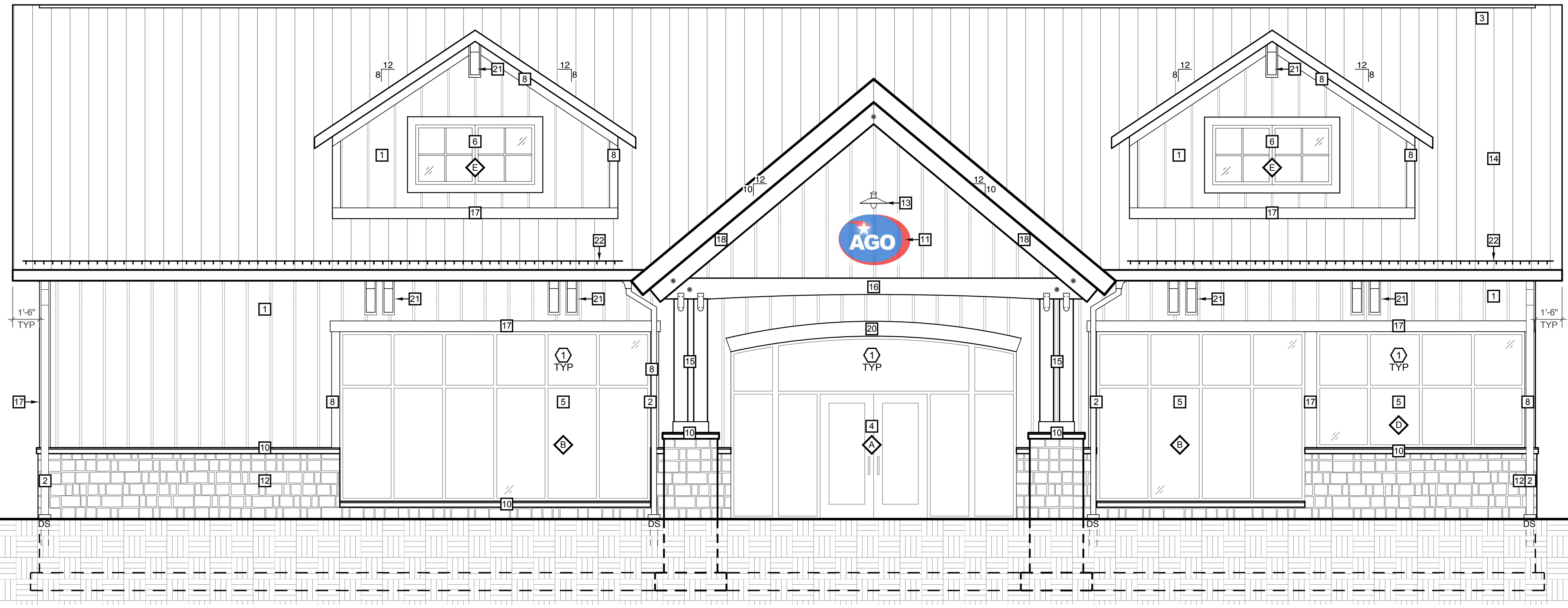


**1. Floor Plan**  
 SCALE: 1/4" = 1'-0"  
 BLDG AREA: 4,032 SQ FT

Revisions:


Project No: 223041  
 Issue Date: 8/19/23  
 Reviewer: KCD  
 Drawn By: KCD

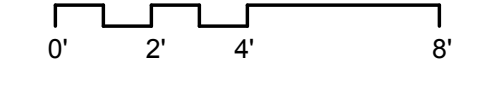
- 128'-9 3/4" ELEV BUILDING RIDGE
- 127'-4 3/4" ELEV DORMER RIDGE
- 124'-8" ELEV ENTRY RIDGE
- 122'-1" ELEV DORMER WINDOW HEAD
- 118'-9" ELEV DORMER WINDOW SILL
- 116'-10" ELEV DORMER BASE
- 113'-6" ELEV TRUSS BEARING
- 110'-6" ELEV WINDOW HEAD
- 110'-4" ELEV WINDOW HEAD AT DOOR
- 107'-0" ELEV DOOR HEAD
- 104'-0" ELEV STONE VENEER PRECAST SILL
- 101'-6" ELEV WINDOW SILL
- 100'-0" ELEV FLOOR FINISH



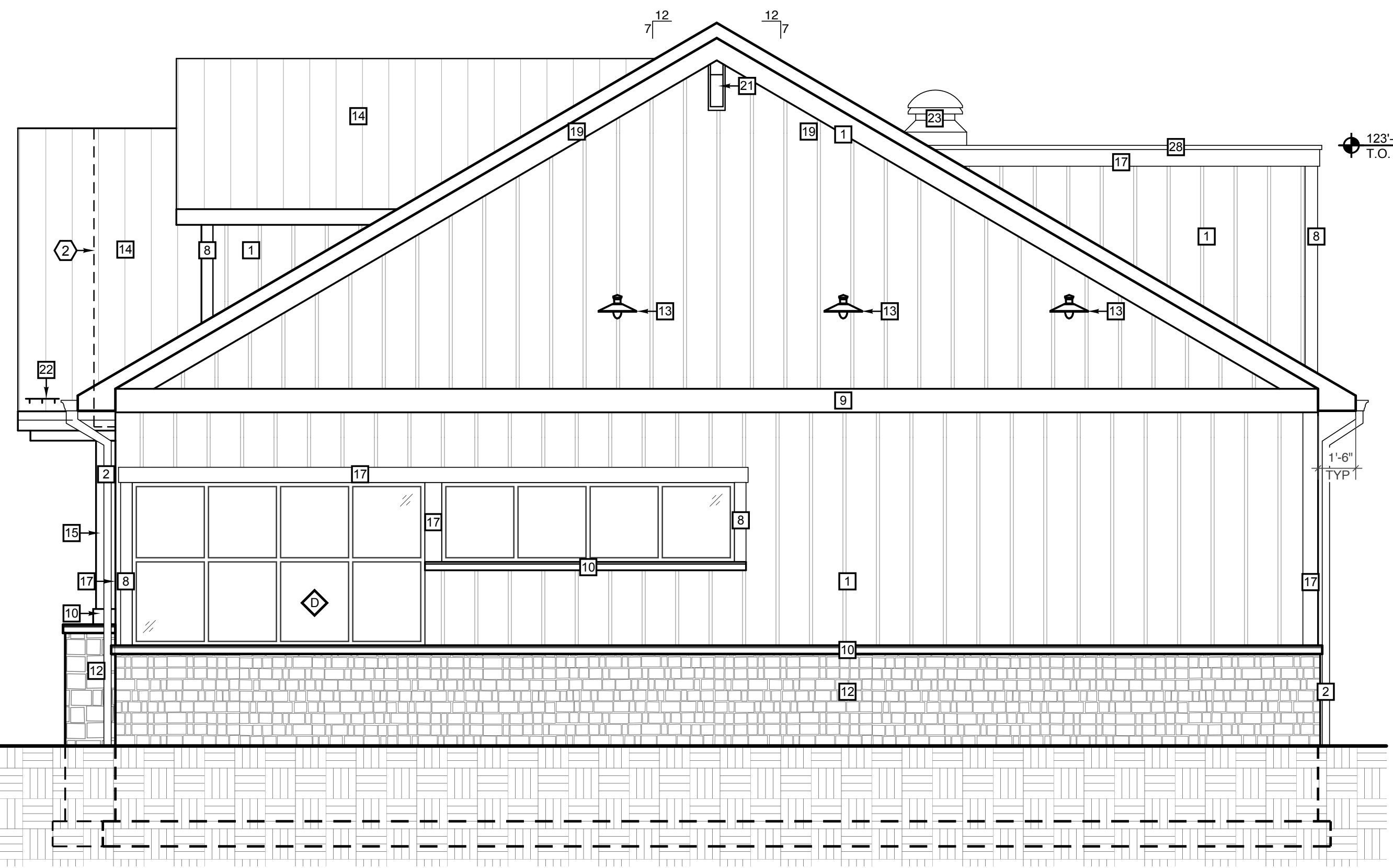
- 117'-0" ELEV T.O. SIGNAGE
- 113'-6" ELEV B.O. SIGNAGE
- 112'-8" ELEV SOFFIT HGT AT ENTRY CANOPY
- 112'-4" ELEV TOP OF WOOD COLUMNS AT ENTRY
- 104'-10" ELEV STONE VENEER PRECAST SILL AT ENTRY PIER
- 100'-0" ELEV FLOOR FINISH

**1. Front Exterior Elevation**

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

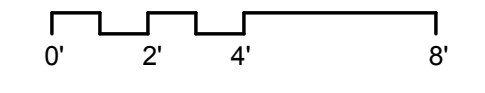


- 128'-9 3/4" ELEV BUILDING RIDGE
- 127'-4 3/4" ELEV DORMER RIDGE
- 124'-8" ELEV ENTRY RIDGE
- 116'-10" ELEV DORMER BASE
- 113'-6" ELEV TRUSS BEARING
- 112'-8" ELEV TRUSS BRG HGT AT ENTRY CANOPY
- 110'-6" ELEV WINDOW HEAD
- 104'-10" ELEV STONE VENEER PRECAST SILL AT ENTRY PIER
- 104'-0" ELEV STONE VENEER PRECAST SILL & WINDOW SILL
- 100'-0" ELEV FLOOR FINISH



**2. Side Exterior Elevation**

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



**Exterior Materials Legend (OR DESIGN EQUIVALENT)**

LABEL	MATERIAL	MANUFACTURER	STYLE	COLOR
1	BOARD AND BATTEN SIDING	JAMES HARDIE	BATTENS 16" O.C.	COLOR #1 - EVENING BLUE
2	PREFINISHED ALUMINUM GUTTERS	AWARD METALS	K-STYLE	WHITE - MATCH TRIM
3	CONTINUOUS RIDGE VENT	OWENS CORNING	VENTSURE RIDGE VENT	MATCH SHINGLES
4	STOREFRONT DOOR	VOS GLASS	LOW 'E' / TINTED	BLACK FRAME
5	STOREFRONT WINDOW	VOS GLASS	LOW 'E' / TINTED	BLACK FRAME
6	ALUMINUM CLAD WOOD WINDOW	PELLA OR EQ.	ARCHITECTURAL SERIES	BLACK FRAME
7	1X4 TRIM	JAMES HARDIE	RUSTIC	ARCTIC WHITE
8	1X6 FIBER CEMENT TRIM	JAMES HARDIE	RUSTIC	ARCTIC WHITE
9	1X12 FIBER CEMENT TRIM	JAMES HARDIE	RUSTIC	ARCTIC WHITE
10	4" PRECAST WATER TABLE	TERRY'S	CAST-FIT	LB
11	EXTERIOR SIGNAGE	TBD	ALL SIGNAGE BY OWNER	TBD
12	STONE VENEER	CULTURED STONE	SOUTHERN LEDGESTONE	BUCKS COUNTY
13	EXTERIOR WALL LIGHT	HI-LITE MFG. CO.	H-18110 10" WIDTH W/ B-1 ARM	BLACK
14	STANDING SEAM METAL ROOF	BUIS SHEET METAL	MAXIMA	MIDNIGHT BRONZE
15	TREATED 1X10 TIMBER POSTS	ROUGH SAWN	STAINED	TBD
16	TREATED WOOD BEAM SIZE 1	ROUGH SAWN	STAINED	TBD
17	1X8 FIBER CEMENT TRIM	JAMES HARDIE	RUSTIC	ARCTIC WHITE
18	TREATED WOOD BEAM SIZE 1	ROUGH SAWN	STAINED	TBD
19	1X10 FIBER CEMENT TRIM	JAMES HARDIE	RUSTIC	ARCTIC WHITE
20	1X10 ARCHED FIBER CEMENT TRIM	JAMES HARDIE	RUSTIC	ARCTIC WHITE
21	DECORATIVE BRACKETS	ROUGH SAWN	STAINED	STAIN - TBD
22	ICE / SNOW BAR	TBD	TBD	MATCH STANDING SEAM METAL ROOF
23	HOOD EXHAUST	TBD	TBD	TBD
24	EXTERIOR DOOR	TBD	HOLLOW METAL DOOR	FRAME COLOR - BLACK, DOOR COLOR - TBD
25	9"X6"X9" SCUPPER CONDUCTOR HEAD	TBD	ALUMINUM	PAINT TO MATCH TRIM
26	METAL FLASHING	TBD	TBD	TBD
27	EPDM (WRAPPED ONTO WALL)	TBD	TBD	TBD
28	1X6 SLOPED FIBER CEMENT CAP	JAMES HARDIE	TBD	WHITE - MATCH TRIM
29	LADDER PER O.S.H.A. REGULATION	TBD	ALUMINUM METAL LADDER, W/ LOCKABLE CAGE	GALVANIZED ALUMINUM

**Keyed Elevation Notes**

- ① GENERAL NOTE: ALL GLAZING TO HAVE AT LEAST 60% VISUAL LIGHT TRANSMISSION (VLT), TYPICAL. REFER TO WINDOW SCHEDULE ON SHEET A6.1
- ② FACE OF WALL AT CANOPY ENTRANCE.
- ③ SOFFIT AT UNDERSIDE OF CANOPY ENTRANCE.



**AGO University Marathon**  
 100 E. Saginaw  
 East Lansing, Michigan  
**Exterior Elevations**



Revisions:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Project No: 223041  
 Issue Date: 8/19/23  
 Reviewer: KCD  
 Drawn By: KCD

**A4.1**

Revisions:

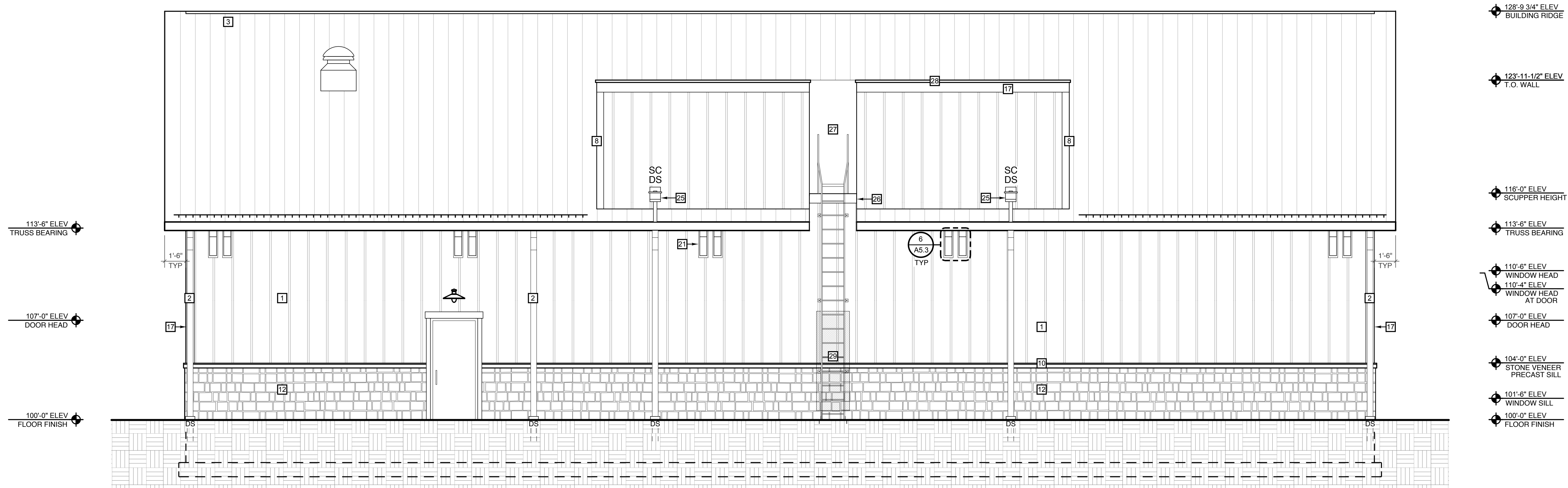
Project No: 223041

Issue Date: 8/19/23

Reviewer: KCD

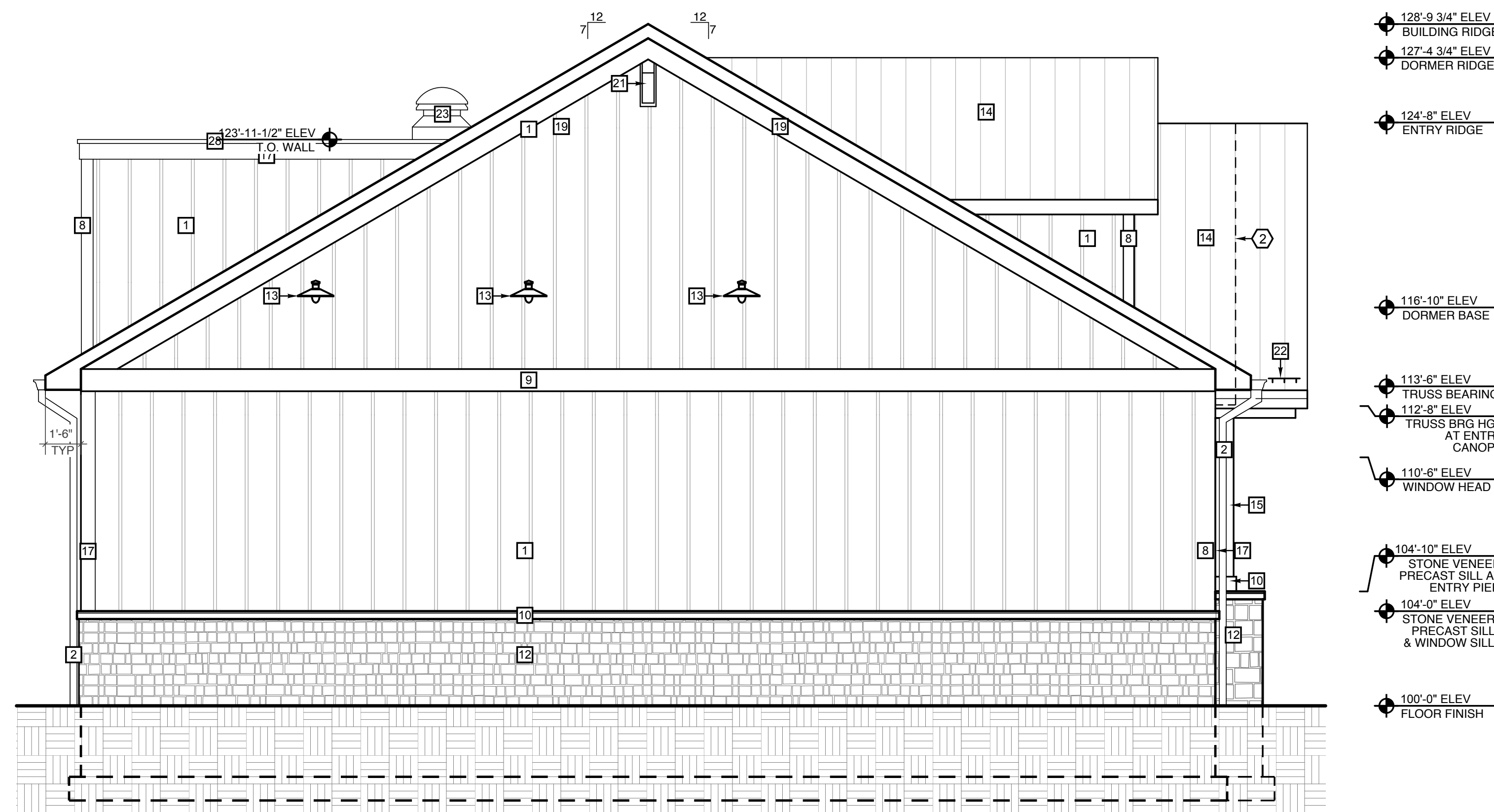
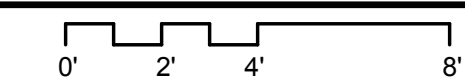
Drawn By: KCD

**A4.2**



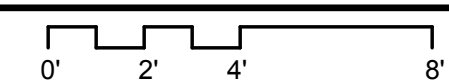
**1. Back Exterior Elevation**

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



**2. Side Exterior Elevation**

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



**Exterior Materials Legend** (OR DESIGN EQUIVALENT)

LABEL	MATERIAL	MANUFACTURER	STYLE	COLOR
1	BOARD AND BATTEN SIDING	JAMES HARDIE	BATTENS 16" O.C.	COLOR #1 - EVENING BLUE
2	PREFINISHED ALUMINUM GUTTERS	AWARD METALS	K-STYLE	WHITE - MATCH TRIM
3	CONTINUOUS RIDGE VENT	OWENS CORNING	VENTSURE RIDGE VENT	MATCH SHINGLES
4	STOREFRONT DOOR	VOS GLASS	LOW 'E' / TINTED	BLACK FRAME
5	STOREFRONT WINDOW	VOS GLASS	LOW 'E' / TINTED	BLACK FRAME
6	ALUMINUM CLAD WOOD WINDOW	PELLA OR EQ.	ARCHITECTURAL SERIES	BLACK FRAME
7	1X4 TRIM	JAMES HARDIE	RUSTIC	ARCTIC WHITE
8	1X6 FIBER CEMENT TRIM	JAMES HARDIE	RUSTIC	ARCTIC WHITE
9	1X12 FIBER CEMENT TRIM	JAMES HARDIE	RUSTIC	ARCTIC WHITE
10	4" PRECAST WATER TABLE	TERRY'S	CAST-FIT	LB
11	EXTERIOR SIGNAGE	TBD	ALL SIGNAGE BY OWNER	TBD
12	STONE VENEER	CULTURED STONE	SOUTHERN LEDGESTONE	BUCKS COUNTY
13	EXTERIOR WALL LIGHT	HI-LITE MFG. CO.	H-181 10 10" WIDTH W/ B-1 ARM	BLACK
14	STANDING SEAM METAL ROOF	BUISH SHEET METAL	MAXIMA	MIDNIGHT BRONZE
15	TREATED 1X10 TIMBER POSTS	ROUGH SAWN	STAINED	TBD
16	TREATED WOOD BEAM SIZE 1	ROUGH SAWN	STAINED	TBD
17	1X8 FIBER CEMENT TRIM	JAMES HARDIE	RUSTIC	ARCTIC WHITE
18	TREATED WOOD BEAM SIZE 1	ROUGH SAWN	STAINED	TBD
19	1X10 FIBER CEMENT TRIM	JAMES HARDIE	RUSTIC	ARCTIC WHITE
20	1X10 ARCHED FIBER CEMENT TRIM	JAMES HARDIE	RUSTIC	ARCTIC WHITE
21	DECORATIVE BRACKETS	ROUGH SAWN	STAINED	STAIN - TBD
22	ICE / SNOW BAR	TBD	TBD	MATCH STANDING SEAM METAL ROOF
23	HOOD EXHAUST	TBD	TBD	TBD
24	EXTERIOR DOOR	TBD	HOLLOW METAL DOOR	FRAME COLOR - BLACK, DOOR COLOR - TBD
25	9"X6"X9" SCUPPER CONDUCTOR HEAD	TBD	ALUMINUM	PAINT TO MATCH TRIM
26	METAL FLASHING	TBD	TBD	TBD
27	EPDM (WRAPPED ONTO WALL)	TBD	TBD	TBD
28	1X6 SLOPED FIBER CEMENT CAP	JAMES HARDIE	TBD	WHITE - MATCH TRIM
29	LADDER PER O.S.H.A. REGULATION	TBD	ALUMINUM METAL LADDER, W/ LOCKABLE CAGE	GALVANIZED ALUMINUM

**Keyed Elevation Notes**

- ① GENERAL NOTE: ALL GLAZING TO HAVE AT LEAST 60% VISUAL LIGHT TRANSMISSION (VLT), TYPICAL. REFER TO WINDOW SCHEDULE ON SHEET A6.1
- ② FACE OF WALL AT CANOPY ENTRANCE.
- ③ SOFFIT AT UNDERSIDE OF CANOPY ENTRANCE.