

Memorandum

To: Planning Commission

From: Elizabeth J Corwin, PE, AIPC; Planning Director

Date: March 20, 2025

Re: SPR 24-06 FINAL APPROVAL

Applicant and Property Owner: Khaled Mheisen, KHAB, LLC

1131 White Lake Road PIN 11-02-300-002

Applicant Khaled Mheisens has submitted all the necessary approvals to satisfy the conditions of approval of the preliminary site plan approved by the Planning Commission on September 19, 2024. The revised plans include architectural plans for a site-built classroom structure instead of a modified portable unit, paved road approaches on White Lake Road and detailed storm water design. Copies of the permits from the Oakland County Health Division and Road Commission for Oakland County are submitted for your consideration.

I believe the submittal is complete and ready for your final approval.



Highland Township Planning Commission Record of the 1419th Meeting Highland Township Auditorium September 19, 2024

Roll Call:

Grant Charlick
Kevin Curtis
Chris Heyn, Acting Chairman
Mike O'Leary
Roscoe Smith
Scott Temple
Russ Tierney
Guy York

Also Present:

Elizabeth J. Corwin, Planning Director Megan Masson-Minock, Carlisle-Wortman Associates

Visitors: 6

Chairman Charlick called the meeting to order at 7:30 p.m.

Agenda Item #1: Call to the Public: Opportunity for anyone to bring forward issues of interest or concern for Planning Commission consideration. Each participant limited to 3 minutes.

No public comment was offered

Mr. Charlick offered a motion to bring SPR24-06 for the Wiggles and Giggles Childcare Center expansion back to the table for discussion and possible action. Mr. Tierney supported the motion, which carried by voice vote (all ayes, no nays)

Agenda Item #2:

Parcel # 11-02-300-002

Zoning: ARR, Agriculture and Rural Residential Address: 1131 White Lake Rd (Wiggles & Giggles)

File#: SPR 24-06

Request: Site Plan for expansion of childcare center

Applicant: Khalid Mheisen Owner: KHAB, LLC

Mr. Charlick introduced the site plan for the Wiggles & Giggles Childcare Center expansion at 1131 White Lake Road. He explained that the applicant had presented a request for variances on the south, north and west property lines, based on the renderings provided the Planning Commission in this packet, and that the variances had been approved. He invited the applicants to update the Planning Commission on their progress.

Mr. Brandon Chaney of Nederveld explained that since the last time they presented the proposal to the Planning Commission, they had also met with the Board of Trustees who had approved the Special Land Use for the childcare center expansion. They have also updated the site plan to show the traffic circulation pattern as discussed and as requested by the Fire Marshal. Two additional spaces have been provided, including barrier free spaces. Landscaping has been enhanced and one light pole is added at the entrance. The building elevations have been redesigned to comply with the character requirements of horizontal lap siding and a pitched roof. The unit is still a portable structure, but the axles will be removed and the structure will be installed on a slab.

Mr. Temple asked if the pitch of the roof indicated on the sketches was representative of what is proposed. Mr. Chaney explained that the pitch will be relatively flat compared to most site built structures.

Mr. York was concerned about the long, relatively blank wall facing the public road on the west. There are only two windows and no features to break up the perspective. He had hoped to see a canopy over a door or something else to add interest. The Planning Commissioners discussed the orientation of the building with the applicant. The east façade, which is the more "front" side of the building will face into the site, with the primary entrance to the north. There will be an enclosure around the HVAC units to give the appearance of a faux chimney. At this time, they need to respect the setbacks allowed by the Zoning Board of Appeals, which does limit the possibilities.

Mr. O'Leary asked the applicant if he thought he was providing ample parking based on their experience. There was considerable discussion of the parking area, which is proposed as a gravel-surfaced lot. Ms. Corwin explained that the Planning Commission does have the authority to approve a gravel surfaced lot under Section 11.02.H.2 if they determine this to be a "low usage" parking lot. Low usage is not defined in the Zoning Ordinance. Mr. Tierney asked the applicant if they could explain the traffic volumes. Ms. Westlake, the childcare center director explained that at most, the center might generate a trip for each child in the a.m. and again in the p.m. With 60 children enrolled, this could amount to as much as 60/120 trips per day, depending on how many families had more than one child enrolled. Mr. Tierney commented that this does not seem like a low volume use. Ms. Westlake noted that there has never been an issue with maintenance of the existing gravel parking lot. Mr. Mheisens agreed, and committed to maintain the lot in a safe and convenient condition for his clients. Mr. Temple cited other examples where gravel parking lots have been allowed, such as a church on Wardlow Road and Fragments.

Mr. Charlick suggested that the gravel parking lot may be in keeping with the character of the area, but that at minimum, the driveway approaches must be paved up to the right-of-way line so that mud is not tracked out into the public streets. He cautioned the applicant that the gravel parking lot will require greater maintenance effort. He asked about the drainage system, and whether the intent of the gravel was to reduce stormwater volumes. Mr. Chaney explained that there will be raingardens to deal with the runoff.

Mr. Tierney asked about the three driveways. Ms. Corwin explained that it will be up to the Road Commission for Oakland County to determine whether the multiple driveways would be allowed. The Fire Marshal asked for one driveway off White Lake Road for easier access to the existing building. The driveways on Milford Road are existing, but the Road Commission could require one to be closed.

Mr. Temple asked if the two large trees in the center of the property would be removed. Mr. Chaney noted that the site plan does call for removal, in order to accommodate the new structure. He noted that landscaping plans have been updated to include canopy trees adjacent to the public rights-of-way.

Mr. York reiterated his previous concern about the adequacy of the parking. Mr. Chaney noted that they are providing twelve parking spaces, which exceeds code, and that the staff will continue to park in the gravel areas off the driveway n the southeast corner of the site. Mr. York noted that twelve spaces will

clearly be inadequate for events. Ms. Westlake noted that she is formalizing a written shared parking agreement with Bonadeo Farms to the east and noted that if parking proved to be a problem, their events would be held offsite on Township properties

Mr. York also asked for clarification of the fencing. The playground is slightly reconfigured to accommodate the parking lot. The applicant intends to reuse the existing fence, moving sections as necessary.

Mr. Charlick offered the following motion: To grant preliminary approval of the Site Plan, SPR24-06 for a an expansion at the Wiggles and Giggles Childcare Center, 1131 White Lake Road, Parcel 11-02-300-002, based on the site plan by Nederveld, dated September 11, 2024 with the condition that the driveway approaches to Milford Road must be paved to the right-of-way line. Mr. Curtis supported the motion.

There was discussion on the motion, with Ms. Corwin reminding the Planning Commissioners that the gravel surfaced parking lot is not merely a "grandfathered" condition because it has been allowed to exist as gravel surface in the past, but depends on their finding that the driveway is low usage and appropriate for the proposal.

Mr. York noted that a gravel surfaced lot seems in keeping with the rural character of the neighborhood and that he is pleased to hear Mr. Mheisen express his commitment to the additional maintenance that will be necessary. He noted that since this is not a true "drop-off", but that the parents must park and bring the child into the center, this should be a quiet parking lot. He is also pleased with the landscaping plan and the attempt to develop a tree canopy over the road.

Mr. Heyn noted that his appreciation of how the plan had been modified, and acknowledged that in ways it would be more difficult to alter an existing portable building than to build something new.

Mr. Charlick called for a vote: O'Leary, yes; Tierney, yes; York, yes; Curtis, yes; Heyn, yes; Temple, yes; Smith, yes, Charlick, yes. Motion carried (8 yes votes, 0 no votes).

Agenda Item #3: Text Amendment discussion – parking for vehicle gas filling stations; maximum lot coverage in HS, Highland Station District

Ms. Corwin explained that there were two ordinance amendments that they had agreed to take up quickly in order to accommodate the site plan approval for the gas station at 394 N. Milford Road. The packet includes a memorandum discussing a proposed ordinance approach.

First, Ms. Corwin went on to explain that she had analyzed the parking provided at the six gas stations that currently exist in the township and had distributed a spreadsheet and aerial photographs showing the results. None of the gas stations provided the one space per 125 square feet noted in the ordinance, but most provided more than one space per 200 square feet as required in the ordinance. It was noted that although some of the gas stations seem to utilize all of the spaces. Mr. Curtis noted that during the morning rush hours, many of the spaces at the Mobil station on West Highland Road are full. It was agreed to proceed with the proposal presented in the memorandum, whereas all gas stations require one space per 200 square feet of floor area, plus two spaces per filling station.

Ms. Corwin noted the maximum lot coverage is simply too low given the size of the parcels in the Highland Station, HS Zoning District. At twenty percent coverage, most residential homes would exceed the coverage limits. In the Highland Township zoning ordinance, lot coverage refers only to roofs and decks, not to impervious surfaces such as driveways and parking lots.

DAY CARE FACILITIES WIGGLES \$ GIGGLES 1131 WHITE LAKE RD. HIGHLAND, MI 48356

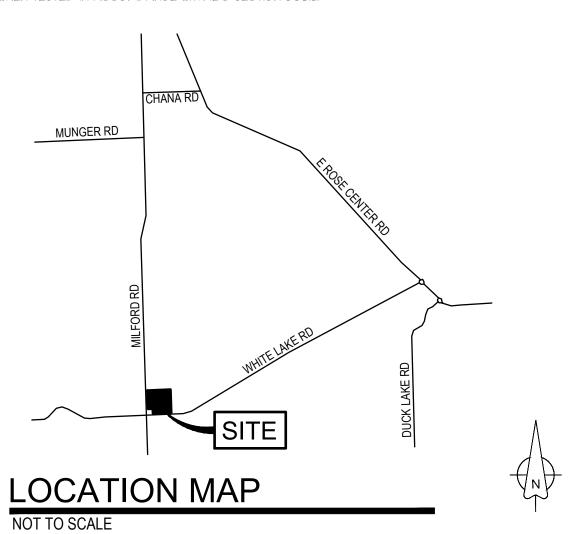
THE CONTRACTOR AND SUB-CONTRACTORS SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL FEDERAL, STATE, AND LOCAL SAFETY REQUIREMENTS TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF PERSONS INCLUDING EMPLOYEES AND PROPERTY. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SUB-CONTRACTORS TO INITIATE, MAINTAIN, AND SUPERVISE ALL SAFETY REQUIREMENTS,

- 2. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ALL WORK AND FOR THE MEANS, METHODS, PROCEDURES, TECHNIQUES, AND SEQUENCE OF CONSTRUCTION
- 3. GENERAL CONTRACTOR SHALL PROVIDE ALL REQUIRED PERMITS, FEES, AND INSPECTIONS AS MAY BE REQUIRED BY GOVERNING BODIES HAVING LEGAL JURISDICTION.
- 4. THE GENERAL CONTRACTOR IS TO GUARANTEE ALL WORK INCLUDING WORK DONE BY SUB-CONTRACTORS FOR A PERIOD OF A MINIMUM ONE (1) YEAR COMMENCING WITH THE DATE OF SUBSTANTIAL COMPLETION OF THE WORK, OR AS STATED IN CONTRACT WITH OWNER. WHICHEVER IS GREATER.
- 5. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SCHEDULING AND MONITORING OF ON-SITE TESTING AND INSPECTION.
- 6. WHEN CONTRACTOR ACCEPTS DELIVERY OF ALL ITEMS NOTED ON PLANS EITHER IN CONTRACT OR NOT IN CONTRACT HE SHALL BE RESPONSIBLE FOR LOSS AND! OR DAMAGE TO THESE ITEMS.
- 1. GENERAL CONTRACTOR TO HAVE JOB PHONE ON PREMISES DURING ENTIRE CONSTRUCTION PERIOD.
- 8. THE GENERAL CONTRACTOR \$ EACH SUBCONTRACTOR IS TO HAVE A FULL TIME QUALIFIED SUPERVISOR ON THE SITE AT ALL TIMES WHILE WORK IS BEING PERFORMED.
- 9. THE CONTRACTOR SHALL MAINTAIN FOR THE ENTIRE DURATION OF THE WORK ALL EXITS, EXIT LIGHTING, FIRE PROTECTION DEVICES, AND ALARMS IN CONFORMANCE WITH ALL APPLICABLE CODES AND ORDINANCES.
- 10. THE GENERAL CONTRACTOR IS TO VERIFY ALL DIMENSIONS AND EXISTING FIELD CONDITIONS WITH THE DRAWINGS. IN PARTICULAR: OVERALL WALL DIMENSIONS, SOIL CONDITIONS, INCOMING UTILITIES, ETC. GENERAL CONTRACTOR IS TO REPORT IMMEDIATELY TO AAA CONSULTING OR HIS ENGINEER ANY VARIANCES OR FIELD CONDITIONS THAT MAY CAUSE CONSTRUCTION PROBLEMS PRIOR TO COMMENCING WORK.
- II. DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS GOVERN. ALL PARTITION LOCATIONS, ALL DOOR AND OPENING LOCATIONS SHALL BE SHOWN ON FLOOR PLAN. IN CASE OF CONFLICT NOTIFY AAA CONSULTING OR HIS ENGINEER. ALL DIMENSIONS MARKED "CLEAR" SHALL BE MAINTAINED AND SHALL ALLOW FOR THICKNESS OF ALL FINISHES INCLUDING CARPET, PAD, CERAMIC TILE, V.C.T., SLATWALL, ETC.
- 12. ALL DIMENSIONS SHOWN ARE NOMINAL DIMENSIONS UNLESS SPECIFICALLY NOTED OTHERWISE.
- 3. EGRESS DOORS SHALL BE PROVIDED PER IBC SECTIONS 1014 THROUGH 1024.
- 14. ALL DOOR HANDLES SHALL BE OF THE LEVER TYPE, HARDWARE SHALL BE MOUNTED NO HIGHER THAN 48" ABOVE FINISH FLOOR
- 15. ALL ACCESS PANELS SHALL BE $24^{\prime\prime}\times30^{\prime\prime}$ UNLESS OTHERWISE NOTED.

GENERAL CONSTRUCTION NOTES

PRECAUTIONS, AND PROGRAMS IN CONNECTION WITH THE WORK.

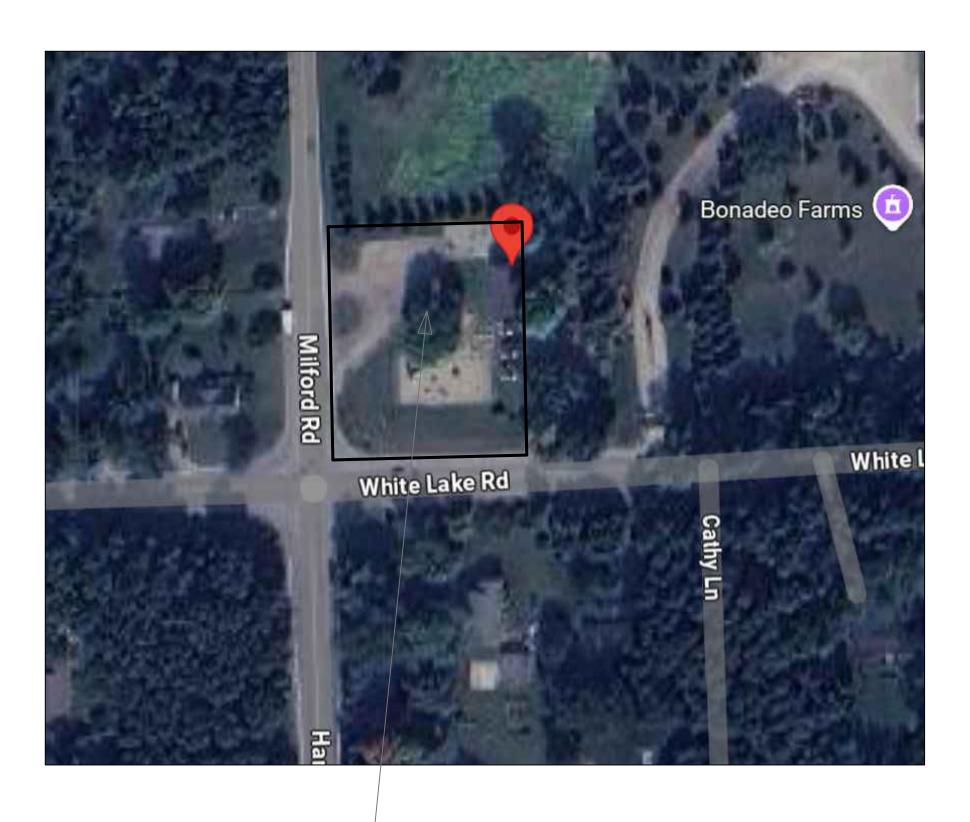
- 16. ALL GLASS UNITS LOCATED IN HAZARDOUS LOCATIONS AS INDICATED IN IBC 2406.3 SHALL COMPLY WITH TEST REQUIREMENTS OF CONSUMER PRODUCT SAFETY COMMISSION 16, CFR PART 1201 FOR HUMAN IMPACT LOADS.
- 17. ALL SAW CUTTING AND CORING LOCATIONS SHALL BE REVIEWED IN FIELD BY THE GENERAL CONTRACTOR PRIOR TO CUTTING/CORIN.
- 18. ALL EXTERIOR WOOD BLOCKING IS TO BE PRESSURE TREATED PER AWPA UI AND M4.
- 19. ALL FASTENERS, CONNECTORS, OR OTHER HARDWARE IN DIRECT CONTACT WITH PRESERVATIVE TREATED OR FIRE RETARDANT TREATED WOOD SHALL BE STAINLESS STEEL TYPE 304 OR TYPE 316, OR HOT-DIPPED GALVANIZED STEEL ASTM A653, CLASS G-185 WITH 1.85 OUNCES OF ZINC PER SQUARE FOOT TO REDUCE THE CORROSION PROCESS.
- 20. FIRE BLOCKING SHALL BE INSTALLED IN CONCEALED SPACES OF STUD WALL AND PARTITIONS, INCLUDING FURRED OR STUDDED-OFF SPACES OF MASONRY OR CONCRETE WALLS, AND AT THE CEILING AND FLOOR OR ROOF LEVELS. PER IBC SECTION 117.2.2.
- 21. FIRE BLOCKING SHALL BE INSTALLED AT ALL INTERCONNECTIONS BETWEEN VERTICAL AND HORIZONTAL SPACES SUCH AS OCCUR AT SOFFITS OVER CABINETS, DROP CEILINGS, COVE CEILINGS AND SIMILAR LOCATIONS. PER IBC SECTION 71.7.2.3.
- 22. REQUIRED FLAME SPREAD RATING: INTERIOR FINISH OF WALLS AND CEILINGS SHALL HAVE A FLAME SPREAD RATING NOT GREATER THAN THAT DESIGNATED BY THE CLASS PRESCRIBED FOR THE VARIOUS GROUPS LISTED IN IBC TABLE 803.5, WHEN TESTED IN ACCORDANCE WITH IBC SECTION 803.2.



PROJECT DESCRIPTION BUILDING CODES 2015 MICHIGAN BUILDING CODE 2021 MICHIGAN PLUMBING CODE 2021 MICHIGAN MECHANICAL CODE 2023 MICHIGAN ELECTRICAL CODE \$ NEC 2023 WITH PART 8 STATE AMENDMENTS 2021 INTERNATIONAL FIRE CODE 2021 INTERNATIONAL FUEL GAS CODE 2035 MICHIGAN UNIFORM ENERGY CODE ANSI/ASHRAE/JESNA STANDARD 30.1-2023 2011 ICC / ANSI AIIT.I \$ MICHIGAN BARRIER FREE DESIGN LAW OF PUBLIC ACT I OF 1966 AS AMENDED 2015 INTERNATIONAL FIRE CODE NFPA 13 2022 SPRINKLER CODE NFPA 12 2019 FIRE ALARM CODE

SITE LOCATION MAP

PROJECT INFORMATION



SITE LOCATION —

ZONING \$ PROPERTY AREA: TOTAL SITE AREA: 36,944 SQ.FT. (0.84 ACRES) CARS PARKING SPACES BUILDING DATA USER GROUP DAY CARE FACILITIES GROUP E (CHAPTER 3 SECTION 305.2) YB - UNPROTE4CTED WOOD FRAME (CHAPTER 6 SECTION 601) CONSTRUCTION TYPE BUILDING FOOT PRINT BUILDING HEIGHT 1 STORY 18'-20"FT **GENERAL NOTES** ZONING OF PROPERTY: ARR - AGRICULTURAL & RURAL RESIDENTIAL ARR ZONING REQUIREMENTS A) MINIMUM LOT AREA = 5 ACRES (217,800 SQ.FT.) B) MINIMUM LOT WIDTH = 330 FT. C) MAXIMUM BUILDING HEIGHT = 28 FT OR 2 STORIES D) MAXIMUM LOT COVERAGE = 10% A) FRONT YARD = 125 FT. (FRONTING MAJOR THOROUGHFARE) B) SIDE YARD = 40 FT.) SUMMARY OF LAND USE: A) TOTAL ACREAGE = 0.85 ACRES (36,946 SQ. FT.) (EXCLUDING R.O.W.) B) TOTAL BUILDABLE AREA = 0.02 ACRES (740.6 SQ. FT.) C) AREA OF PROPOSED BUILDING = 1,544 SQ. FT. D) AREA OF EXISTING BUILDING = 1,414 SQ. FT. E) LOT COVERAGE = 8.5% F) ZONING OF PARCELS TO SOUTH AND WEST = R-1.5 & ARR 70NING OF PARCELS TO NORTH AND EAST = ARR G) PROPOSED SETBACK ENCROACHMENTS (APPROVED BY THE ZBA ON 8/21): FRONT SETBACK (MILFORD RD) = 68.5 FT. FRONT SETBACK (WHITE LAKE RD) = 89 FT. *A VARIANCE APPLICATION FOR THE PROPOSED ENCROACHMENTS HAS BEEN SUBMITTED TO THE ZBA ON 7/2/2024 3) PARKING REQUIREMENTS: A) MINIMUM REQUIRED SPACE PER TOWNSHIP = 9'x20' (24' AISLE) B) TYPICAL PARKING SPACE PROVIDED = 9'x20' (24' AISLE) C) TYPICAL VAN ACCESSIBLE PARKING SPACE = 11'x18' WITH 5' AISLE D) TYPICAL CAR ACCESSIBLE PARKING SPACE = 8'x18' WITH 5' AISLE

PROJECT DATA \$ CODE COMPLIANCE

SITE DATA

F) NUMBER OF SPACES PROVIDED = 12 (INCLUDING 1 SHUTTLE BUS SPACE)

4) THIS PROJECT IS NOT LOCATED IN THE 100 YEAR FLOOD PLAIN, BASED ON THE NATIONAL FLOOD INSURANCE PROGRAM RATE MAPS

EN PREST MANAGEMENT PRACTICES WILL BE LITHLIZED DUBING AND AFTER CONSTRUCTION OF THE PROJECT, MEASURES WILL

EN PREST MANAGEMENT PRACTICES WILL BE LITHLIZED DUBING AND AFTER CONSTRUCTION OF THE PROJECT. MEASURES WILL

EN PREST MANAGEMENT PRACTICES WILL BE LITHLIZED DUBING AND AFTER CONSTRUCTION OF THE PROJECT.

FOR EACH 8 CHILDREN = 60 CHILDREN / 8 = 8 SPACES + 2 SPACES = 10 SPACES)

E) NUMBER OF SPACES REQUIRED = 10 (BASED ON HIGHLAND REQUIREMENTS - 2 SPACES PLUS 1 ADDITIONAL SPACE

5) BEST MANAGEMENT PRACTICES WILL BE UTILIZED DURING AND AFTER CONSTRUCTION OF THE PROJECT. MEASURES WILL INCLUDE THE USE OF 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.

6) 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.

7) CONTRACTOR TO FIELD VERIFY ALL INVERTS.

8) ALL LIGHTING SHALL BE SHIELDED FROM ALL ADJACENT PROPERTIES. PROPOSED LIGHTING SHALL CONSIST OF WALL-MOUNTED LIGHTS AND LIGHT POLES, BOTH FITTED WITH DOWN CAST TYPE FIXTURES TO BE SPECIFIED BY LIGHTING CONSULTANT.

9) THE PERMANENT PARCEL NUMBER FOR THE SITE IS H-11-02-300-002. THE ADDRESS OF THE PROPERTY IS 1131 WHITE LAKE RD.

10) NO FENCES OR WALLS OTHER THAN WHAT IS SHOWN ON THE SITE PLAN ARE PROPOSED AT THIS TIME.

2015 MBC. OCCUPANCY LOAD PER TABLE 1004.1.2
EGRESS REQUIREMENT:

TOTAL DAY CARE AREAS: 1,171 SQ.FT. / 35 = 34 OL REQUIRED EGRESS WIDTH = 34 \times 0.3 = 10.2"

DAY CARE: 35 NET SQ.FT. PER OCCUPANT

PROPOSED EXIST DOOR EGRESS WIDTH = 2 × 36"

OCCUPANCY WITHOUT SPRINKLER SYSTEM

SECTION 1006.3.1 EGRESS BASED ON OCCUPANT LOAD PER STORY LESS THAN 500 OCCUPANT LOAD PROVIDE 2 MINIMUM NUMBER OF EXITS OR ACCESS TO EXITS FROM STORY.

SECTION 1010.1.2.1 DIRECTION OF SWING PIVOT OR SIDE-HINGED SWINGING DOORS SHALL

2015 MBC. CHAPTER 10: MEANS OF EGRESS, EXIT ACCESS TRAVEL DISTANCE

OR AREA CONTAINING AN OCCUPANT LOAD OF 50 OR MORE PERSONS.

SECTION 1011 EXIT ACCESS TRAVEL DISTANCE PER TABLE 1011.2 GROUP E OCCUPANCY BUILDING WITHOUT SPRINKLER SYSTEM (200 FEET MAX. EXIT ACCESS TRAVEL DISTANCE).

1029.8 COMMON PATH OF EGRESS TRAVEL = 30 FEET MAX.

EXCEPTIONS:
- FOR AREAS SERVING LESS THAN 50 OCCUPANTS, THE COMMON PATH OF EGRESS TRAVEL SHALL NOT EXCEED 15 FEET.

- FOR SMOKE-PROTECTED ASSEMBLY SEATING, THE COMMON PATH OF EGRESS TRAVEL SHALL NOT EXCEED 50 FEET.

SWING IN THE DIRECTION OF EGRESS TRAVEL WHERE SERVING A ROOM

2015 MPC. CHAPTER 4 FIXTURES, FAUCETS AND FIXTURE FITTINGS PER TABLE 403.1

FIXTURE, FAUCET AND FIXTURE FITTINGS FOR USE GROUP E - EDUCATIONAL

WATER CLOSETS MALE AND FEMALE: 1 PER 50
LAVATORIES MALE AND FEMALE: 1 PER 50
DRINKING FOUNTAIN: 1 PER 100

4PPROVAL : 2/18/20:

ISSUED

COMMON DRAWINGS:

T9-1.∅ TITLE SHEET
- - - - - - - -

A-110

ARCHITECTURAL DRAWINGS:

ISSUED FOR SITE PLAN APPROVAL: 2-18-2025

A-100 ARCHITECTURAL SITE PLAN
A-101 FLOOR PLAN AND ROOF PLAN
A-102 GENERAL RULES
A-103 LIFE SAFETY PLAN
A-104 ELEVATION
A-105 BUILDING SECTION AND DETAILS
A-106 A-107 A-108 A-109 -

STRUCTURAL DRAWINGS:

\$1.0 FOUNDATION PLAN AND DETAILS

\$2.0
\$3.0
\$4.0 -

MECHANICAL DRAWINGS:

M-200 MECHANICAL PLAN
M-201 M-202 M-203 M-204 -

PLUMBING DRAWINGS:

P-300 PLUMBING PLAN
P-301 P-302 P-303 P-304 -

ELECTRICAL DRAWINGS:

E-400 ELECTRICAL PLAN
E-401 E-402 E-403 E-404 -

DRAWING INDEX LEGEND:

NOT ISSUED
ISSUED
REFERENCE

DRAWING NUMBER SYSTEM

- DISCIPLINE

JMBER SYSTEM:

SHEET #

DRAWING TITLE:

DRAWING TITLE:

PROPOSED

OWNER/DEVELOPER:

DAY CARE FACILITIES

WIGGLES \$ GIGGLES

1131 WHITE LAKE RD.

WIGGLES & GIGGLES

1131 WHITE LAKE RD.

HIGHLAND, MI 48356

COPYRIGHT © 2024

THESE PLANS AND DESIGNS CONTAINED HEREIN ARE PROPERTY OF AAA CONSULTING AND MAY NOT BE REPRODUCED ALL OR IN PART WITHOUT WRITTEN CONSENT AND FEES PAID TO AAA CONSULTING THEREFORE ALL UNAUTHORIZED USE OF THESE PLANS OR DESIGNS WILL BE CONSIDERED THIEF AND APPROPRIATE CHARGES WILL BE

AAA CONSULTING

CONSTRUCTION MANAGEMENT

29895 GREENFIELD ROAD

SOUTHFIELD, MICHIGAN 48076 TEL: (313) 815-0543

EMAIL: AAA.CONSULTING@HOTMAIL.COM

BROUGHT FORTH. COPYRIGHTED /ALL RIGHTS RESERVED.

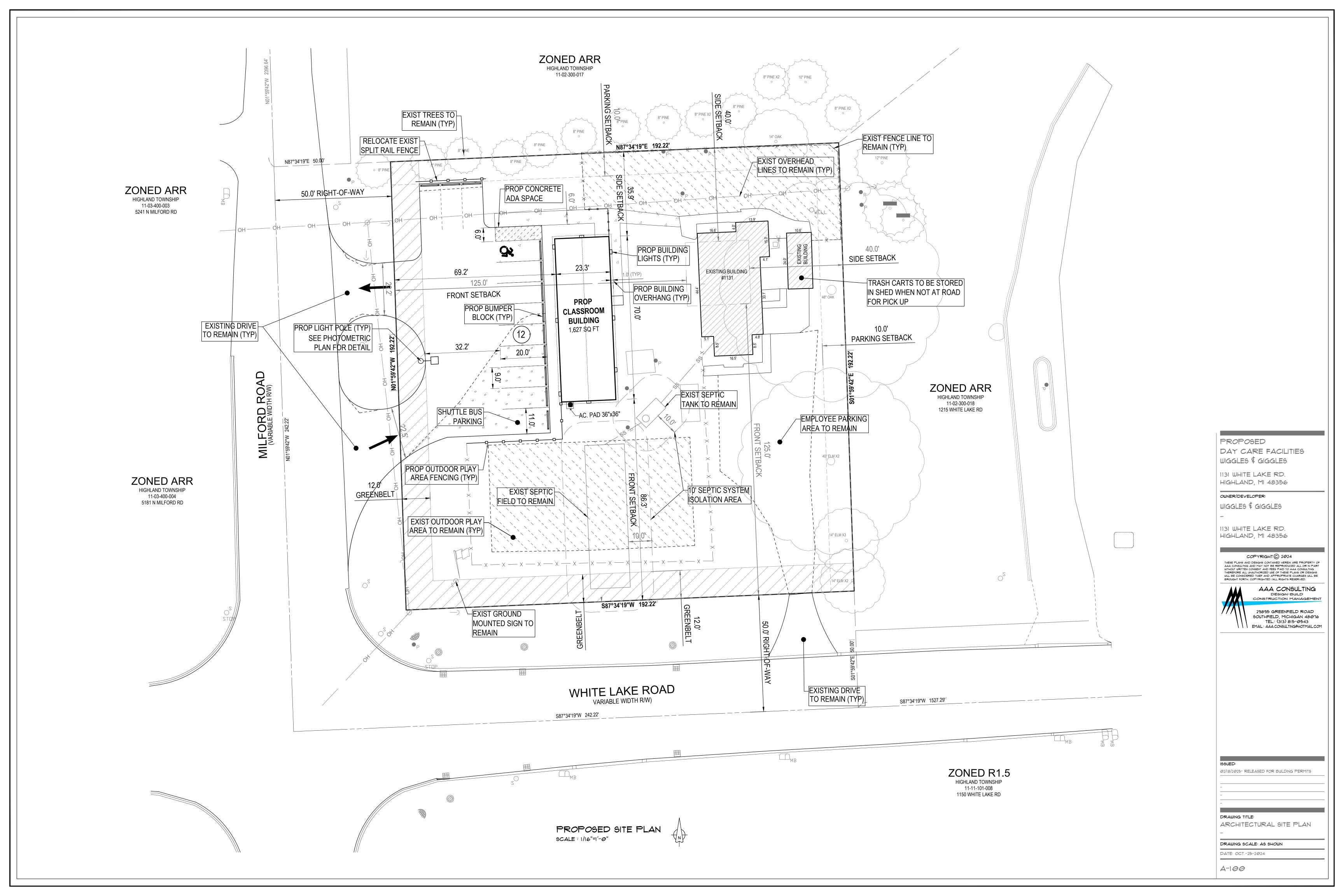
HIGHLAND, MI 48356

DRAWING SCALE: AS SHOWN

02/18/2025- RELEASED FOR BUILDING PERMITS

DATE: OCT.-25-2024

TS-1.0



STATE OF MICHIGAN DEPARTMENT OF HUMAN SERVICES BUREAU OF CHILDREN AND ADULT LICENSING

RULES FOR CHILD CARE CENTERS

PART I. GENERAL PROVISIONS FOR ALL CHILDREN

R 400.8182 RATIO AND GROUP SIZE REQUIREMENTS. RULE 182.

- (1) AT LEAST 2 ADULTS, I OF WHOM IS A CAREGIVER, SHALL BE PRESENT AT ALL TIMES WHEN AT LEAST 3 CHILDREN BETWEEN THE AGES OF BIRTH AND 3 YEARS OF AGE ARE PRESENT. A SECOND CAREGIVER IS REQUIRED WHEN NEEDED TO COMPLY WITH SUBRULE (3) OF THIS RULE.
- (2) AT LEAST 2 ADULTS, I OF WHOM IS A CAREGIVER, SHALL BE PRESENT AT ALL TIMES WHEN 1 OR MORE CHILDREN OVER 3 YEARS OF AGE ARE PRESENT. A SECOND CAREGIVER IS REQUIRED WHEN NEEDED TO COMPLY WITH SUBRULE (3) OF THIS RULE.
- (3) IN EACH ROOM OR WELL-DEFINED SPACE, THE MAXIMUM GROUP SIZE AND RATIO OF CAREGIVERS TO CHILDREN, INCLUDING CHILDREN RELATED TO A STAFF MEMBER OR THE LICENSEE, SHALL BE THE FOLLOWING: AGE CAREGIVER TO CHILD RATIO MAXIMUM GROUP SIZE
- (A) INFANTS AND TODDLERS, BIRTH UNTIL 30 MONTHS OF AGE 1 TO 4 (12)
- (B) PRESCHOOLERS, 30 MONTHS OF AGE UNTIL 3 YEARS OF AGE 1 TO 8 (16)
- (C) PRESCHOOLERS, 3 YEARS OF AGE UNTIL 4 YEARS OF AGE 1 TO 10 NOT APPLICABLE
- (D) PRESCHOOLERS, 4 YEARS OF AGE UNTIL SCHOOL-AGE 1 TO 12 NOT APPLICABLE
- (E) SCHOOL-AGERS 1 TO 18 NOT APPLICABLE
- (4) YOLUNTEERS MAY BE COUNTED IN THE CAREGIVER TO CHILD RATIOS OUTLINED IN SUBRULE (3) OF THIS RULE IF THEY MEET THE DEFINITION OF CAREGIVER AS DEFINED BY R 400.8101(C). (5) CHILDREN WHO HAVE REACHED 33 MONTHS OF AGE MAY, WHEN DEVELOPMENTALLY APPROPRIATE, BE
- ENROLLED IN A 3-YEAR-OLD CLASSROOM WITH WRITTEN PARENTAL PERMISSION. THE RATIO LISTED IN SUBRULE (3)(C) OF THIS RULE SHALL APPLY. (6) CHILDREN WHO HAVE REACHED 45 MONTHS OF AGE MAY, WHEN DEVELOPMENTALLY APPROPRIATE, BE
- ENROLLED IN A 4-YEAR-OLD CLASSROOM WITH WRITTEN PARENTAL PERMISSION. THE RATIO LISTED IN SUBRULE (3)(D) OF THIS RULE SHALL APPLY. (1) CHILDREN WHO HAVE REACHED 51 MONTHS OF AGE BUT WHO ARE NOT CONSIDERED A SCHOOL-AGER UNDER R 400.8101(BXIV) MAY, WHEN DEVELOPMENTALLY APPROPRIATE, BE ENROLLED IN A 9CHOOL-AGE
- CLASSROOM WITH WRITTEN PARENTAL PERMISSION. THE RATIO LISTED IN SUBRULE (3XE) OF THIS RULE SHALL (8) IF THERE ARE CHILDREN OF MIXED AGES IN THE SAME ROOM OR WELL-DEFINED SPACE, THEN THE RATIO AND GROUP SIZE SHALL BE DETERMINED BY THE AGE OF THE YOUNGEST CHILD, UNLESS EACH GROUP OF
- CHILDREN IS CLEARLY SEPARATED AND THE APPROPRIATE CAREGIVER-TO-CHILD RATIOS AND GROUP SIZES, IF APPLICABLE, FOR EACH AGE GROUP ARE MAINTAINED. (9) AN EXCEPTION TO THE REQUIREMENTS OF SUBRULE (3) OF THIS RULE MAY BE MADE WHEN THE CENTER IS TRANSPORTING CHILDREN AND IS IN COMPLIANCE WITH R 400.8760(1) AND (2). HISTORY: EFF. JAN. 2, 2014

R 400.8188 SLEEPING, RESTING, AND SUPERVISION. RULE 188.

- (1) CHILDREN UNDER 3 YEARS OF AGE SHALL BE PROVIDED OPPORTUNITIES TO REST REGARDLESS OF THE NUMBER OF HOURS IN CARE.
- (2) THE CENTER SHALL PERMIT CHILDREN UNDER 18 MONTHS OF AGE TO SLEEP ON DEMAND.
- (3) INFANTS SHALL REST OR SLEEP ALONE IN CRIBS OR PORTA-CRIBS.
- (4) INFANTS SHALL BE PLACED ON THEIR BACKS FOR RESTING AND SLEEPING.
- (5) INFANTS UNABLE TO ROLL FROM THEIR STOMACHS TO THEIR BACKS AND FROM THEIR BACKS TO THEIR
- STOMACHS SHALL BE PLACED ON THEIR BACKS WHEN FOUND FACE DOWN. (6) WHEN INFANTS CAN EASILY TURN OVER FROM THEIR STOMACHS TO THEIR BACKS AND FROM THEIR BACKS TO THEIR STOMACHS, THEY SHALL BE INITIALLY PLACED ON THEIR BACKS BUT SHALL BE ALLOWED TO ADOPT
- WHATEVER POSITION THEY PREFER FOR SLEEP (1) FOR AN INFANT WHO CANNOT REST OR SLEEP ON HER OR HIS BACK DUE TO DISABILITY OR ILLNESS, WRITTEN INSTRUCTIONS, SIGNED BY THE INFANT'S LICENSED HEALTH CARE PROVIDER, DETAILING AN ALTERNATIVE SAFE

SLEEP POSITION AND/OR OTHER SPECIAL SLEEPING ARRANGEMENTS FOR THE INFANT SHALL BE FOLLOWED

- AND ON FILE AT THE CENTER. (8) A SLEEPING INFANT'S BREATHING, SLEEP POSITION, AND BEDDING SHALL BE MONITORED FREQUENTLY FOR POSSIBLE SIGNS OF DISTRESS
- (9) AN INFANT'S HEAD SHALL REMAIN UNCOVERED DURING SLEEP. (10) TODDLERS SHALL REST OR SLEEP ALONE IN CRIBS, PORTA-CRIBS, OR ON MATS OR COTS.
- (II) INFANTS AND TODDLERS WHO FALL ASLEEP IN A SPACE THAT IS NOT APPROVED FOR SLEEPING SHALL BE MOVED TO APPROVED SLEEP EQUIPMENT APPROPRIATE FOR THEIR AGE AND SIZE.
- (12) NAPTIME OR QUIET TIME SHALL BE PROVIDED WHEN CHILDREN UNDER SCHOOL-AGE ARE IN ATTENDANCE 5 OR MORE CONTINUOUS HOURS PER DAY.
- (13) RESTING OR SLEEPING AREAS SHALL HAVE ADEQUATE SOFT LIGHTING TO ALLOW THE CAREGIVER TO ASSESS CHILDREN.
- (14) VIDEO SURVEILLANCE EQUIPMENT AND BABY MONITORS SHALL NOT BE USED IN PLACE OF SUBRULE (8) OF THIS RULE AND R 400.8125(1). HISTORY: EFF. JAN. 2, 2014

PART 2. ENVIRONMENTAL HEALTH PROVISIONS

R 400.8305 PLAN REVIEW; APPROVAL; INSPECTIONS. RULE 305.

- (i) ALL LOCAL HEALTH DEPARTMENT REQUIREMENTS REGARDING PLAN REVIEWS AND SPECIFICATIONS SHALL BE
- FOLLOWED. WRITTEN CONFIRMATION TO THE DEPARTMENT THAT THIS HAS OCCURRED SHALL BE SUBMITTED. (2) AN INSPECTION SHALL BE CONDUCTED BY THE LOCAL HEALTH DEPARTMENT AND AN APPROVAL GRANTED INDICATING COMPLIANCE WITH ALL OF THE RULES IN THIS PART EXCEPT R 400.8330, 400.8335, AND
- 400.8340 AT ALL OF THE FOLLOWING: (A) BEFORE ISSUANCE OF AN ORIGINAL PROVISIONAL LICENSE.
- (B) EVERY 2 YEARS, AT THE TIME OF RENEWAL IF THE CENTER HAS A PRIVATE WELL AND/OR SEPTIC.
- (C) EVERY 2 YEARS, AT THE TIME OF RENEWAL, IF THE CENTER PROVIDES FOOD SERVICE WHERE THE FOOD IS PREPARED AND SERVED ON-SITE.
- (D) PRIOR TO ADDING A FOOD SERVICE PROGRAM. ORANGE \$ GREEN.
- PRIOR TO ADDING AN INFANT/TODDLER PROGRAM.
- WHEN REQUESTED BY THE DEPARTMENT. HISTORY: EFF. JAN. 2, 2014.

R 400.8345 WATER SUPPLY; PLUMBING. RULE 345.

- (I) THE WATER SYSTEM SHALL COMPLY WITH THE REQUIREMENTS OF THE LOCAL HEALTH DEPARTMENT.
- (2) PLUMBING SHALL BE DESIGNED, CONSTRUCTED, INSTALLED, AND MAINTAINED TO PREVENT CROSS CONNECTION WITH THE WATER SYSTEM.
- (3) SINKS, LAVATORIES, DRINKING FOUNTAINS, AND OTHER WATER OUTLETS SHALL BE SUPPLIED WITH SAFE WATER,
- SUFFICIENT IN QUANTITY AND PRESSURE, TO MEET CONDITIONS OF PEAK DEMAND. (4) ALL PLUMBING FIXTURES AND WATER AND WASTE PIPES SHALL BE PROPERLY INSTALLED AND MAINTAINED IN
- GOOD WORKING CONDITION.
- (5) EACH WATER HEATER SHALL BE EQUIPPED WITH A THERMOSTATIC TEMPERATURE CONTROL AND A PRESSURE RELIEF VALVE, BOTH OF WHICH SHALL BE IN GOOD WORKING CONDITION. HISTORY: EFF. JAN. 2, 2014.

R 400.8350 TOILETS; HAND WASHING SINKS. RULE 350.

- (1) THE CENTER SHALL PROVIDE TOILET AND HAND WASHING SINKS AS FOLLOWS: (A) A CENTER OPERATING WITH CHILDREN IN ATTENDANCE LESS THAN 5 CONTINUOUS HOURS A DAY SHALL PROVIDE AT LEAST I TOILET AND I HAND WASHING SINK FOR EVERY 20 CHILDREN OR FRACTION
- (B) A CENTER OPERATING WITH CHILDREN IN ATTENDANCE 5 OR MORE CONTINUOUS HOURS A DAY SHALL PROVIDE AT LEAST I TOILET AND I HAND WASHING SINK FOR EVERY 15 CHILDREN OR FRACTION
- (2) AFTER DECEMBER 6, 2006, ANY CENTER THAT IS NEW, ADDS AN INFANT/TODDLER COMPONENT, OR INCREASES THE LICENSED INFANT/TODDLER CAPACITY SHALL HAVE A DIAPERING AREA WITH A READILY ACCESSIBLE, DESIGNATED HAND WASHING SINK.
- (3) AFTER DECEMBER 6, 2006, A SEPARATE HAND WASHING SINK IS REQUIRED IN THE KITCHEN FOR ALL OF THE
- FOLLOWING: (A) A NEW CENTER WITH A FOOD SERVICE COMPONENT.
- (B) A CENTER WITH A FOOD SERVICE COMPONENT THAT REMODELS THE KITCHEN.
- (C) ANY CENTER THAT ADDS A FOOD SERVICE COMPONENT. (4) HAND WASHING SINKS FOR CHILDREN SHALL BE ACCESSIBLE TO CHILDREN BY PLATFORM OR INSTALLED AT
- CHILDREN'S LEVEL
- (5) HAND WASHING SINKS SHALL HAVE WARM RUNNING WATER NOT TO EXCEED 120 DEGREES FAHRENHEIT.
- (6) SOAP AND SINGLE SERVICE TOWELS OR OTHER APPROVED HAND DRYING DEVICES SHALL BE PROVIDED NEAR HAND WASHING SINKS.
- (1) TOLET ROOMS FOR SCHOOL-AGE CHILDREN SHALL PROVIDE FOR PRIVACY. HISTORY: EFF. JAN. 2, 2014 R

400.8355 SEWAGE DISPOSAL. RULE 350.

- (1) SEWAGE AND OTHER WATER-CARRIED WASTES SHALL BE DISPOSED OF THROUGH A MUNICIPAL OR PRIVATE SEWER SYSTEM.
- (2) PRIVATE SEWER/SEPTIC SYSTEMS SHALL BE DESIGNED AND OPERATED TO SAFELY DISPOSE OF ALL WASTE WATERS GENERATED, SHALL BE ADEQUATE IN SIZE FOR THE PROJECTED USE, AND MEET THE CRITERIA OF THE LOCAL HEALTH DEPARTMENT. HISTORY: EFF. JAN. 2, 2014

R 400.8360 GARBAGE AND REFUSE. RULE 360.

- (1) ALL GARBAGE SHALL BE REMOVED FROM THE CENTER DAILY. (2) GARBAGE CONTAINERS SHALL BE WASHED WHEN SOILED.
- (3) GARBAGE STORED OUTSIDE SHALL BE IN SEALED PLASTIC BAGS IN WATERTIGHT CONTAINERS WITH TIGHT FITTING COVERS OR IN A COVERED DUMPSTER.
- (4) OUTSIDE GARBAGE AND REFUSE SHALL BE PICKED UP OR REMOVED AT A MINIMUM OF ONCE A WEEK. HISTORY: EFF. JAN. 2, 2014

R 400.8365 HEATING; TEMPERATURE. RULE 365.

- (1) THE TEMPERATURE IN CHILD USE AREAS SHALL BE MAINTAINED AT A SAFE AND COMFORTABLE LEVEL SO
- THAT CHILDREN IN CARE DO NOT BECOME OVERHEATED OR CHILLED. (2) THE INDOOR TEMPERATURE SHALL BE AT LEAST 65 DEGREES FAHRENHEIT IN CHILD USE AREAS AT A POINT 2 FEET ABOVE THE FLOOR.
- (3) IF TEMPERATURES EXCEED 82 DEGREES FAHRENHEIT, THEN A CENTER SHALL TAKE MEASURES TO COOL THE CHILDREN. HISTORY: EFF. JAN. 2, 2014

R 400.8370 LIGHT, VENTILATION, AND SCREENING. RULE 370.

- (1) THE TOTAL VENTILATION AREA IN EVERY HABITABLE ROOM, AS PROVIDED BY OPENABLE WINDOWS, SHALL BE NOT LEGG THAN 4-1/2"% OF THE FLOOR AREA, UNLEGG CENTRAL AIR CONDITIONING IS PROVIDED. (2) IF VENTILATION IS DEPENDENT ON A MECHANICAL SYSTEM. THEN THE SYSTEM SHALL BE ON AT ALL TIMES WHILE
- THE BUILDING IS OCCUPIED AND SHALL COMPLY WITH THE VENTILATION REQUIREMENTS OF THE APPLICABLE MECHANICAL CODE OF THE AUTHORITY HAVING JURISDICTION.
- (3) ARTIFICIAL LIGHT OR NATURAL LIGHT, OR BOTH, SHALL BE CAPABLE OF PROVIDING A MINIMUM ILLUMINATION OF 20 FOOT CANDLES OVER THE ENTIRE ROOM AT A HEIGHT OF 3 FEET FROM THE FLOOR. (4) WINDOWS AND DOORS USED FOR VENTILATION SHALL BE SUPPLIED WITH SCREENING OF NOT LESS THAN 16

MESH, WHICH SHALL BE KEPT IN GOOD REPAIR. THIS SUBRULE DOES NOT APPLY TO CHILD CARE PROGRAMS

PART 3. FIRE SAFETY PROVISIONS

OPERATING IN SCHOOL BUILDING

R 400.8510 PLANS AND SPECIFICATIONS; SUBMISSION; APPROVAL; INSPECTIONS. RULE

- (I) A COMPLETE SET OF PLANS AND SPECIFICATIONS OF ANY PROPOSED CENTER OR PROPOSED ADDITION, ALTERATION, OR REMODELING TO AN EXISTING CENTER SHALL BE SUBMITTED TO THE DEPARTMENT FOR
- REVIEW AND APPROVAL (2) WRITTEN APPROVAL SHALL BE OBTAINED FROM THE DEPARTMENT BEFORE INITIATING ANY CONSTRUCTION. (3) PLANS SHALL BEAR THE SEAL OF A REGISTERED ARCHITECT OR ENGINEER WHEN THE TOTAL COST OF THE
- PROJECT IS \$15,000.00 OR MORE, INCLUDING LABOR AND MATERIALS. (4) A FIRE SAFETY INSPECTION SHALL BE CONDUCTED BY THE BUREAU OF FIRE SERVICES OR A DEPARTMENT
- APPROVED QUALIFIED FIRE INSPECTOR AND AN APPROVAL GRANTED BEFORE ISSUANCE OF THE ORIGINAL PROVISIONAL LICENSE AND EVERY 4 YEARS THEREAFTER. AT THE TIME OF RENEWAL. (5) IF A BOILER IS USED, THEN IT SHALL BE INSPECTED AND A CERTIFICATE PROVIDED, AS REQUIRED, BY THE
- BOILER DIVISION, DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS. (6) FUEL-FIRED FURNACES SHALL BE INSPECTED BEFORE ISSUANCE OF AN ORIGINAL PROVISIONAL LICENSE AND
- EVERY 2 YEARS AT RENEWAL BY A MECHANICAL CONTRACTOR LICENSED BY THE STATE OF MICHIGAN. (1) FUEL-FIRED WATER HEATERS SHALL BE INSPECTED BEFORE ISSUANCE OF AN ORIGINAL PROVISIONAL LICENSE AND EVERY 2 YEARS AT RENEWAL BY EITHER A MECHANICAL CONTRACTOR OR A PLUMBING CONTRACTOR
- LICENSED BY THE STATE OF MICHIGAN. (8) NEW FURNACE AND WATER HEATER INSTALLATIONS SHALL BE EITHER OF THE FOLLOWING:
- (A) INSPECTED AND APPROVED BY THE DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS OR LOCAL MECHANICAL INSPECTING AUTHORITIES AT THE TIME OF INSTALLATION.
- (B) INSPECTED AND APPROVED BY A QUALIFIED FIRE SAFETY INSPECTOR OR THE BUREAU OF FIRE SERVICES TO ENSURE CONTINUED COMPLIANCE WITH APPROPRIATE FIRE SAFETY PROVISIONS OF THESE RULES, HISTORY: EFF, JAN. 2, 2014

R 400.8515 CONSTRUCTION. RULE 515.

- (1) IF CHILD OCCUPANCY IS LIMITED TO THE FIRST OR MAIN FLOOR, THEN THE BUILDING MAY BE OF WOOD FRAME
- (2) IF CHILD OCCUPANCY IS ON THE SECOND FLOOR, THEN ALL OF THE FOLLOWING ARE REQUIRED: A) THE BUILDING BE OF PROTECTED ORDINARY CONSTRUCTION.
- (B) ALL REQUIRED STAIRWAYS AND VERTICAL OPENINGS BE ENCLOSED BY WALLS, IN CONJUNCTION WITH OPENINGS THEREIN, AND CEILINGS AT WHICH THEY TERMINATE THAT MEET THE REQUIREMENTS OF STANDARD PARTITION CONSTRUCTION TO PROVIDE A PROTECTED MEANS OF EGRESS TO THE OUTSIDE WITH PROPER TERMINATION TO GRADE.
- (C) ALL DOOR OPENINGS CONTAINED IN SUBDIVISION (B) OF THIS SUBRULE MEET ALL OF THE FOLLOWING
- (1) BE PROTECTED WITH 13/-INCH FLUSH SOLID CORE WOOD DOORS OR 20-MINUTE LABELED FIRE-RATED DOORS.
- (II) BE INSTALLED IN FULLY STOPPED SMOKE-TIGHT, SUBSTANTIAL FRAMES. (III) BE EQUIPPED WITH APPROVED SELF-CLOSING DEVICES AND NON-LOCKING-AGAINST-EGRESS

POSITIVE LATCHING HARDWARE. (3) IF CHILD OCCUPANCY IS ABOVE THE SECOND FLOOR, THEN BOTH OF THE FOLLOWING SHALL BE REQUIRED: (A) THE BUILDING BE OF 1-HOUR FIRE-RESISTIVE CONSTRUCTION.

- (B) ALL REQUIRED STAIRWAYS AND OTHER VERTICAL OPENINGS BE ENCLOSED BY A MINIMUM 1-HOUR FIRE RESISTIVE CONSTRUCTION TO PROVIDE A PROTECTED MEANS OF EGRESS TO THE OUTSIDE WITH PROPER TERMINATION TO GRADE.
- (4) IF ANY PORTION OF A BASEMENT IS USED FOR MORE THAN 30 CHILDREN, THEN I OF THE FOLLOWING PROVISIONS SHALL BE REQUIRED
- (A) TWO ENCLOSED STAIRWAYS OF I-HOUR FIRE-RESISTANT CONSTRUCTION SHALL DISCHARGE DIRECTLY TO THE OUTSIDE WITH PROPER TERMINATION TO GRADE, AND ALL OPENINGS IN THE STAIRWAYS SHALL BE
- PROTECTED BY A MINIMUM OF 1-HOUR OR "B" LABELED FIRE DOORS AND FRAME ASSEMBLIES. (B) ONE APPROVED EXIT FROM THE OCCUPIED ROOM OR USE AREA SHALL DISCHARGE DIRECTLY TO THE OUTSIDE WITH PROPER TERMINATION TO GRADE. TRAVEL DISTANCE FROM ANY POINT IN THIS ROOM OR AREA TO THIS EXIT SHALL BE LESS THAN 50 FEET.
- (C) TWO EXITS COMPRISED OF ANY COMBINATION OF SUBDIVISIONS (A) AND (B) OF THIS SUBRULE. (5) IF BASEMENT OCCUPANCY IS LIMITED TO NOT MORE THAN 30 CHILDREN, THEN THE FOLLOWING SHALL APPLY:
- (A) ONE OF THE EXITS REQUIRED BY SUBRULE (4) OF THIS RULE SHALL DISCHARGE DIRECTLY TO THE OUTSIDE WITH PROPER TERMINATION TO GRADE OR THROUGH A 1-HOUR FIRE-RESISTIVE ENCLOSURE. (B) THE SECOND EXIT MAY TERMINATE AT THE FIRST FLOOR LEVEL WITH AN APPROVED FLOOR
- SEPARATION, MEETING THE REQUIREMENTS OF STANDARD PARTITION CONSTRUCTION, BETWEEN THE BASEMENT AND THE FIRST FLOOR. (C) FOR NEW CONSTRUCTION AND CONVERSIONS, THE SEPARATION SHALL BE LOCATED AT THE FIRST
- FLOOR WITH TRAVEL DISTANCE FROM THE DOOR TO AN APPROVED EXIT NOT EXCEEDING 100 FEET. (6) ALL VERTICAL OPENINGS AND STAIRWAYS THAT ARE NOT REQUIRED SHALL BE CONSTRUCTED AND ARRANGED WITH EFFECTIVE FIRE AND SMOKE SEPARATION UNDER THE REQUIREMENTS OF STANDARD
- PARTITION CONSTRUCTION. ALL DOOR OPENINGS SHALL BE AS FOLLOWS: (A) PROTECTED WITH 13-INCH FLUSH SOLID CORE WOOD DOORS OR 20-MINUTE LABELED FIRE-RATED
- (B) INSTALLED IN FULLY STOPPED SMOKE-TIGHT SUBSTANTIAL FRAMES.

LATCHING HARDWARE. HISTORY: EFF. JAN. 2, 2014

(C) EQUIPPED WITH APPROVED SELF-CLOSING DEVICES AND NON-LOCKING-AGAINST-EGRESS POSITIVE

R 400.8520 INTERIOR FINISHES. RULE 520.

- (1) THE CLASSIFICATIONS OF INTERIOR FINISHES FOR FLAME SPREAD AND SMOKE DEVELOPMENT IN TABLE 1 SHALL BE USED AS FOLLOWS:
- TABLE I FLAME SPREAD AND SMOKE DEVELOPMENT FOR INTERIOR FINISHES
- CLASS FLAME SPREAD SMOKE DEVELOPED A OR | 0-25 0-450
- C OR ||| 16-200 0-450

B OR || 26-75 0-450

- (2) BASIC MATERIALS IN A MEANS OF EGRESS AND BASEMENT USE OCCUPANCIES SHALL BE CLASS A OR I OR B
- (3) BASIC MATERIALS IN ALL OTHER AREAS SHALL BE CLASS C OR III.
- (4) INTERIOR FINISH MATERIAL MORE HAZARDOUS THAN CLASS C OR III SHALL BE PROHIBITED IN CHILD USE
- (5) IF AN APPROVED AUTOMATIC SPRINKLER SYSTEM IS INSTALLED AND MAINTAINED IN ACCORDANCE WITH NFPA- 13 AND NFPA-25, THEN CLASS C OR III INTERIOR WALL AND CEILING FINISH MATERIALS SHALL BE PERMITTED IN ANY LOCATION WHERE CLASS B OR II IS REQUIRED AND CLASS B OR II INTERIOR WALL AND CEILING FINISH MATERIALS SHALL BE PERMITTED IN ANY LOCATION WHERE CLASS A OR I IS REQUIRED.
- (6) IN AN EXISTING LICENSED CENTER OR CONVERSION, EXISTING INTERIOR FINISHES WHICH DO NOT COMPLY WITH THE CLASSIFICATIONS IN SUBRULE (1) OF THIS RULE MAY HAVE THEIR SURFACES PROTECTED WITH AN APPROVED FIRERETARDANT COATING TO MEET THE CLASSIFICATIONS FOR INTERIOR FINISHES. THE COATINGS SHALL BE APPLIED TO INTERIOR FINISHES THAT ARE ATTACHED TO, OR FURRED OUT NOT MORE THAN I INCH FROM A NONCOMBUSTIBLE BACKING AND APPLIED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. DOCUMENTATION SHALL BE PROVIDED AS REQUIRED BY THE DEPARTMENT.
- (1) INTERIOR FINISH MATERIALS OF CLASSES B OR II AND C OR III WHICH ARE LESS THAN 1/4 INCH IN THICKNESS SHALL BE APPLIED DIRECTLY AGAINST A NONCOMBUSTIBLE BACKING OR SHALL BE FURRED OUT NOT MORE THAN I INCH UNLESS THE TESTS UNDER WHICH SUCH MATERIAL HAS BEEN CLASSED WERE MADE WITHOUT A BACKER

(8) CENTERS LICENSED BEFORE DECEMBER 1, 2006 MAY RETAIN PREVIOUSLY APPROVED FIRE RETARDANT

- COATED INTERIOR FINISHES. (9) TEXTILE MATERIALS HAVING A CLASS A OR I RATING AND USED AS AN INTERIOR FINISH SHALL BE PERMITTED
- (A) ON WALLS OR CEILINGS OF ROOMS OR AREAS PROTECTED BY AN AUTOMATIC SPRINKLER SYSTEM
- APPROVED BY THE DEPARTMENT. (B) ON ROOM PARTITIONS THAT ARE LESS THAN 3/4 OF THE FLOOR-TO-CEILING HEIGHT NOT TO EXCEED 8
- (C) TO EXTEND UP TO 4 FEET ABOVE THE FINISHED FLOOR ON CEILING-HEIGHT WALLS AND CEILING-HEIGHT PARTITIONS. (D) TEXTILE MATERIALS SHALL BE PERMITTED ON WALLS AND PARTITIONS WHERE TESTED IN ACCORDANCE
- WITH AND MEETING THE STANDARDS OF NFPA-265. IF COMPLIANCE IS ACHIEVED BY APPLICATION OF A FLAMEPROOFING PRODUCT IN ACCORDANCE WITH NFPA-101, DOCUMENTATION SHALL BE PROVIDED AS REQUIRED BY THE DEPARTMENT
- (10) DRAPERY MATERIAL MAY BE USED FOR STAGE CURTAINS, ROOM DIVIDERS, AND SIMILAR USES IF THE MATERIAL HAS BEEN TESTED AND APPROVED IN ACCORDANCE WITH NFPA-101.
- (II) DRAPERY MATERIAL APPLIED TO SURFACES OF A FACILITY AS AN INTERIOR FINISH SHALL MEET THE REQUIREMENTS OF SUBRULE (9) OF THIS RULE.
- (12) ALL VINYL AND WOODEN WALL DIVIDERS SHALL MEET THE INTERIOR FINISH REQUIREMENTS OF SUBRULES (1), (2), AND (3) OF THIS RULE, AS APPLICABLE. (13) BULLETIN BOARDS SHALL MEET THE INTERIOR FINISH REQUIREMENTS OF SUBRULES (2) AND (3) OF THIS RULE.
- (14) COMBUSTIBLE MATERIALS AND DECORATIONS MAY BE DISPLAYED ON WALLS, NOT TO EXCEED 20% OF EACH WALL IN EACH ROOM. COMBUSTIBLE MATERIALS AND DECORATIONS SUSPENDED FROM OR NEAR THE CEILING ARE PROHIBITED. HISTORY: EFF. JAN. 2, 2014

R 400.8525 EXITS. RULE 525.

FEET IN HEIGHT.

- (1) EXCEPT AS REFERENCED IN R 400 8515(4XB) AND 400 8525(2XC) FACH OCCUPIED FLOOR SHALL HAVE NOT LESS THAN 2 APPROVED EXITS DIRECTLY TO THE OUTSIDE WITH PROPER TERMINATION TO GRADE, REMOTE FROM EACH OTHER BY 50% OF THE LONGEST DIMENSION OF THE FLOOR OR AREA SERVED, AND OCCUPIED ROOMS WITHIN THE CENTER SHALL BE LOCATED BETWEEN MEANS OF EGRESS, UNLESS A FIRST FLOOR, SELF-CONTAINED, OCCUPIED ROOM HAS AN APPROVED EXIT DIRECT TO THE OUTSIDE WITH PROPER TERMINATION TO GRADE WITH A MAXIMUM TRAVEL DISTANCE OF 50 FEET FROM THE MOST REMOTE POINT IN
- THE ROOM TO THE EXIT.
- (2) TRAVEL DISTANCE TO AN EXIT SHALL BE AS FOLLOWS: (A) FOR INFANTS AND TODDLERS, TRAVEL SHALL BE 50 FEET OR LESS FROM THE DOOR OF THE OCCUPIED
 - FROOM TO THE EXIT.
- (B) FOR PRESCHOOLERS AND SCHOOL-AGERS, TRAVEL SHALL BE 100 FEET OR LESS FROM THE DOOR OF THE OCCUPIED ROOM TO THE EXIT. (C) BUILDINGS HAVING COMPLETE AUTOMATIC SPRINKLER PROTECTION MAY INCREASE THEIR TRAVEL
- DISTANCES BY 50 FEET THOSE AREAS APPROVED BEFORE JULY 1, 2000, ARE EXEMPT FROM THE REQUIREMENTS OF THIS RULE.
- (3) FOR ALL CENTERS INITIALLY LICENSED AFTER DECEMBER 6, 2006, PROGRAMS WITH INFANTS AND TODDLERS SHALL HAVE EXITS WITH PROPER TERMINATION AND WITHIN 30 INCHES OF GRADE OR EXITS PROPERLY RAMPED TO GRADE.
- (4) EXIT DOORS AND ALL DOORS IN THE MEANS OF EGRESS SHALL BE SIDE-HINGED AND EQUIPPED WITH KNOB; LEVERTYPE, NON-LOCKING-AGAINST-EGRESS; OR PANIC-TYPE HARDWARE. (5) EXIT DOORS AND DOORS IN ROOMS OCCUPIED BY 21 OR MORE CHILDREN SHALL SWING IN THE DIRECTION OF
- (6) MEANS OF EGRESS SHALL BE MAINTAINED IN AN UNOBSTRUCTED, EASILY TRAVELED CONDITION AT ALL TIMES THAT THE CENTER IS IN OPERATION. MEANS OF EGRESS SHALL NOT BE EXPOSED TO INHERENT HAZARDS OF THE BUILDING, INCLUDING THE HEATING PLANT, FLAMMABLE STORAGE, COMMERCIAL KITCHEN, OR OTHER
- (1) IN NEW CONSTRUCTION, ADDITIONS, REMODELING, AND CONVERSIONS, THERE SHALL BE A FLOOR OR LANDING ON EACH SIDE OF AN EXIT DOOR. THE FLOOR OR LANDING SHALL BE AT THE SAME ELEVATION ON EACH SIDE OF THE DOOR EXCEPT FOR VARIATIONS IN ELEVATION DUE TO DIFFERENCES IN FINISH MATERIALS, WHICH SHALL NOT EXCEED 1/2 INCH.
- (8) IN CONVERSIONS, LANDINGS SHALL HAVE A WIDTH NOT LESS THAN THE WIDTH OF THE STAIRWAY OR THE WIDTH OF THE DOOR, WHICHEVER IS GREATER. LANDINGS SHALL HAVE A LENGTH NOT LESS THAN THE WIDTH OF THE
- (9) IN NEW CONSTRUCTION, ADDITIONS, AND REMODELING, LANDINGS SHALL COMPLY WITH THE LATCH-SIDE CLEARANCE REQUIREMENTS OF SECTIONS 404.2.3 THROUGH 404.2.3.5 OF THE INTERNATIONAL CODE COUNCIL/AMERICAN NATIONAL STANDARDS INSTITUTE STANDARD A117.1 (ICC/ANSI A117.1), 2003, ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES. SECTIONS 404.2.3 THROUGH 404.2.3.5 OF ICC/ANSI AII7.1 ARE HEREBY ADOPTED BY REFERENCE. COPIES OF THE ADOPTED MATTER MAY BE PURCHASED FROM THE
- INTERNATIONAL CODE COUNCIL AT WWW.ICCSAFE.ORG OR 1-800-186-4452. (10) FOR NEW CONSTRUCTION, ADDITIONS AND REMODELING, AN EXIT DOOR SHALL BE NOT LESS THAN 36 INCHES IN
- WIDTH. DOORS TO MULTIPLE-USE BATHROOMS SHALL NOT BE LESS THAN 32 IN WIDTH. (11) FOR THE CONVERSION OF AN EXISTING BUILDING, EXTERIOR EXIT DOORS SHALL BE NOT LESS THAN 36 INCHES IN WIDTH. OTHER USE ROOM DOORS SHALL BE NOT LESS THAN 28 INCHES IN WIDTH. SINGLE-USE TOILET ROOM DOORS SHALL NOT BE LESS THAN 24 INCHES IN WIDTH. ANY REMODELED DOOR OPENINGS, OTHER THAN DOOR
- SWING, SHALL COMPLY WITH SUBRULE (10) OF THIS RULE. (12) CENTERS LICENSED BEFORE DECEMBER 1, 2006 MAY RETAIN PREVIOUSLY APPROVED DOOR WIDTHS. (13) EXTERIOR EXITS SHALL BE MARKED OR DENOTED BY AN APPROVED EXIT SIGN. ALL EXIT SIGNS SHALL BE DISTINCTIVE IN COLOR AND SHALL PROVIDE CONTRAST WITH DECORATIONS, INTERIOR FINISH, OR OTHER SIGNS. EACH EXIT 9IGN SHALL HAVE THE WORD "EXIT" IN PLAIN, LEGIBLE LETTERS NOT LEGS THAN 6 INCHES HIGH ON A
- BACKGROUND OF CONTRASTING COLOR WITH STROKES NOT LESS THAN 3/-INCH WIDE. (14) WHEN NIGHTTIME CARE IS PROVIDED, THE CENTER SHALL HAVE EXITS WITH PROPER TERMINATION AND WITHIN 30 INCHES OF GRADE OR EXITS PROPERLY RAMPED TO GRADE. (15) WHEN NIGHTTIME CARE IS PROVIDED, EXIT SIGNS SHALL BE ILLUMINATED AND EMERGENCY LIGHTING PROVIDED
- AT EXITS. HISTORY: EFF. JAN. 2, 2014 R 400.8530 HAZARD AREAS, RULE 530.
- (I) HAZARD AREAS SHALL BE SEPARATED FROM THE PARTS OF THE BUILDING USED AS A CENTER IN THE
- (A) IN CENTERS LICENSED BEFORE JUNE 4, 1980, AREAS USED FOR THE STORAGE OF COMBUSTIBLES AND OTHER HAZARD AREAS WILL CONTINUE TO BE APPROVED IF THEY ARE ENCLOSED WITH A MINIMUM 3/4 HOUR FIRE RESISTIVE CONSTRUCTION AND DOORWAYS TO THE AREAS ARE PROTECTED WITH A MINIMUM 1-3/4 INCH FLUSH SOLID CORE WOOD OR 20-MINUTE LABELED FIRE-RATED DOORS EQUIPPED WITH APPROVED SELF-CLOSING DEVICES AND POSITIVE LATCHING HARDWARE.
- (B) IN CENTERS LICENSED BETWEEN JUNE 4, 1980 AND JULY 1, 2000, THE FOLLOWING SHALL APPLY: (1) WHERE THE AREA USED FOR THE STORAGE OF COMBUSTIBLES EXCEEDS 100 SQUARE FEET, BY CONSTRUCTION HAVING A MINIMUM 1-HOUR FIRE RESISTANCE RATING, OPENINGS IN THE SEPARATION SHALL BE PROTECTED WITH A MINIMUM OF I-HOUR OR "B" LABELED FIRE DOOR AND FRAME ASSEMBLY, INCLUDING AN APPROVED SELF-CLOSING DEVICE AND POSITIVE LATCHING HARDWARE.

(II) WHERE THE AREA USED FOR THE STORAGE OF COMBUSTIBLES DOES NOT EXCEED 100 SQUARE FEET, BY CONSTRUCTION HAVING A MINIMUM 3/-HOUR FIRE RESISTANCE RATING, ALL DOOR OPENINGS SHALL BE PROTECTED BY 39 MINIMUM 11/4-INCH FLUSH SOLID CORE WOOD DOORS OR 20-MINUTE LABELED FIRE-RATED DOORS HUNG IN SUBSTANTIAL FRAMES AND EQUIPPED WITH APPROVED

SELF-CLOSING DEVICES AND POSITIVE LATCHING HARDWARE. (C) IN CENTERS LICENSED AFTER JULY 1, 2000, THE FOLLOWING SHALL APPLY:

SELF-CLOSING DEVICES AND POSITIVE LATCHING HARDWARE.

- (I) WHERE THE AREA USED FOR THE STORAGE OF COMBUSTIBLES EXCEEDS 100 SQUARE FEET, BY CONSTRUCTION HAVING A MINIMUM 1-HOUR FIRE RESISTANCE RATING, OPENINGS IN THE SEPARATION SHALL BE PROTECTED WITH A MINIMUM OF I-HOUR OR "B" LABELED FIRE DOOR AND FRAME ASSEMBLY, INCLUDING AN APPROVED SELF-CLOSING DEVICE AND POSITIVE LATCHING HARDWARE. (II) WHERE THE AREA USED FOR THE STORAGE OF COMBUSTIBLES DOES NOT EXCEED 100 SQUARE FEET, BY CONSTRUCTION HAVING A MINIMUM I-HOUR FIRE RESISTANCE RATING. ALL DOOR OPENINGS SHALL BE PROTECTED BY MINIMUM 13/4 INCH FLUSH SOLID CORE WOOD DOORS OR 20-MINUTE LABELED FIRE-RATED DOORS IN SUBSTANTIAL FRAMES AND EQUIPPED WITH APPROVED
- (2) WHERE A KITCHEN WITH COMMERCIAL COOKING EQUIPMENT EXPOSES A REQUIRED MEANS OF EGRESS OR CHILD USE AREA. IT SHALL BE SEPARATED FROM THE REMAINDER OF THE BUILDING WITH MINIMUM I-HOUR FIRE RESISTIVE CONSTRUCTION INCLUDING A MINIMUM OF I-HOUR OR "B" LABELED FIRE DOOR AND FRAME ASSEMBLIES IN ALL COMMON OPENINGS. KITCHENS HAVING COMMERCIAL COOKING EQUIPMENT PROTECTED BY AN APPROVED AUTOMATIC KITCHEN HOOD SUPPRESSION SYSTEM ARE EXEMPT FROM THIS REQUIREMENT. (3) THE USE OF AN INCINERATOR IS PROHIBITED.
- (4) HEATING SHALL BE BY A CENTRAL HEATING PLANT OR AN APPROVED PERMANENTLY INSTALLED ELECTRICAL HEATING SYSTEM. IF HEATING IS PROVIDED BY A CENTRAL HEATING PLANT AND LOCATED ON THE SAME FLOOR THAT IS USED FOR CHILD OCCUPANCY, IT SHALL BE INSTALLED IN AN ENCLOSURE PROVIDING NOT LESS THAN A 1- HOUR FIRE-RESISTIVE SEPARATION, INCLUDING A MINIMUM OF 1-HOUR OR "B" LABELED FIRE DOOR AND FRAME ASSEMBLY EQUIPPED WITH AN APPROVED SELF-CLOSING DEVICE AND POSITIVE LATCHING HARDWARE IN ANY INTERIOR DOOR OPENING. DOOR OPENINGS FOR HEAT PLANT ENCLOSURES NOT LOCATED ON THE SAME FLOOR THAT IS USED FOR CHILD OCCUPANCY MAY HAVE 1%-INCH FLUSH SOLID WOOD CORE DOORS OR 20-MINUTE LABELED FIRE-RATED DOORS HAVING POSITIVE LATCHING HARDWARE AND AN APPROVED SELF-CLOSING DEVICE. AIR FOR PROPER COMBUSTION, A MINIMUM OF I SQUARE INCH PER 4,000 BTUS INPUT, SHALL BE PROVIDED DIRECTLY FROM THE OUTSIDE THROUGH A PERMANENTLY OPENED LOUVER
- OR METAL DUCT (5) IN CENTERS LICENSED BEFORE DECEMBER 1, 2006, A PROPERLY INSTALLED HEATING PLANT LOCATED IN A BASEMENT WHICH IS NOT USED FOR CHILD OCCUPANCY DOES NOT REQUIRE ADDITIONAL PROTECTION WHERE THERE IS A QUALIFIED FIRE SEPARATION AND WITH AT LEAST A 1%-INCH FLUSH SOLID CORE WOOD DOORS OR 20- MINUTE LABELED FIRE-RATED DOORS HUNG IN A SUBSTANTIAL FRAME AND EQUIPPED WITH AN APPROVED SELFCLOSING DEVICE AND POSITIVE LATCHING HARDWARE IN ALL STAIRWAY OPENINGS.
- (6) ANY FUEL-FIRED WATER HEATER OR OTHER SIMILAR EQUIPMENT SHALL BE LOCATED ACCORDING TO SUBRULE (4) OR (5) OF THIS RULE, AS APPLICABLE. (1) WHERE ELECTRIC HEATING IS USED, IT SHALL BE UNDERWRITERS' LABORATORIES, INC. LISTED, PERMANENT, FIXED-TYPE ELECTRICAL HEATING SUCH AS RECOGNIZED PANEL OR BASEBOARD FIXED-TYPE. ELECTRIC
- HEATING WHICH COMPLIES WITH THIS REQUIREMENT MAY BE INSTALLED IN ANY LOCATION. (8) AUXILIARY HEATING UNITS, SUCH AS PORTABLE COMBUSTION OR ELECTRICAL TYPES, ARE PROHIBITED. (9) THE CENTER SHALL NOT STORE FLAMMABLE MATERIALS, INCLUDING FUELS, PRESSURIZED CANS, CLEANING FLUIDS AND SUPPLIES, POLISHES, AND MATCHES, IN HEAT PLANT ENCLOSURES. THESE ITEMS MAY BE STORED OUTSIDE OF CHILD USE AREAS IN METAL CABINETS OR STORAGE FACILITIES ACCESSIBLE ONLY TO AUTHORIZED
- (10) THE CENTER SHALL NOT STORE COMBUSTIBLE MATERIALS WITHIN THE CENTRAL HEATING PLANT OR FUEL-FIRED WATER HEATER ROOMS OR IN BASEMENTS CONTAINING FUEL-FIRED HEATING EQUIPMENT, WITHOUT A PROPER
- (II) THE CENTER SHALL NOT PERMIT FLAMMABLE GASES, GASOLINE, OR GASOLINE-POWERED EQUIPMENT IN THE PART OF A BUILDING WHICH IS USED AS A CENTER OR IN OTHER PARTS OF THE BUILDING FROM WHICH THERE IS A DOOR, WINDOW, OR OTHER OPENING INTO THE CENTER, UNLESS THAT PART OF THE BUILDING IS SEPARATED FROM THE REMAINDER OF THE BUILDING BY MINIMUM 2-HOUR FIRE RESISTIVE CONSTRUCTION.

(12) IF COMMERCIAL-TYPE LAUNDRY EQUIPMENT IS INSTALLED. THEN THE EQUIPMENT SHALL BE ENCLOSED TO

PROVIDE A 1-HOUR RESISTANCE TO FIRE, INCLUDING A MINIMUM OF 1-HOUR OR "B" LABELED FIRE DOOR AND FRAME ASSEMBLY IN AN INTERIOR DOOR OPENING WHICH WOULD EXPOSE THE CENTER.

(13) DRYER VENTS SHALL BE METAL AND VENTED COMPLETELY TO THE EXTERIOR.

(14) FIRE DAMPERS SHALL NOT BE REQUIRED IN %-HOUR AND 1-HOUR FIRE-RESISTIVE ENCLOSURES. (15) ALL APPLIANCES AND EQUIPMENT IN THE CENTER SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE

(16) CENTERS SHALL BE KEPT FREE OF ALL CONDITIONS THAT CONSTITUTE FIRE SAFETY HAZARDS. HISTORY: EFF.

WITH THEIR MANUFACTURER'S SPECIFICATIONS.

- R 400.8535 FIRE ALARM. RULE 535. (1) IN ANY BUILDING USED AS A CENTER, AN APPROVED FIRE ALARM, EITHER ELECTRICAL OR MANUAL, SHALL BE
- (2) IN CENTERS OF MORE THAN 4 CHILD-OCCUPIED ROOMS, EXCLUDING BATHROOMS, OR IN CENTERS LICENSED FOR MORE THAN 60 CHILDREN, AN APPROVED FIRE ALARM SYSTEM SHALL BE INSTALLED AND MAINTAINED IN
- (3) IN NEW CONSTRUCTION, CONVERSIONS, REMODELING, OR NEWLY LICENSED CENTERS, THE TROUBLE SIGNAL FOR REQUIRED FIRE ALARM SYSTEMS SHALL BE LOCATED IN AN AREA NORMALLY OCCUPIED BY CHILD CARE
- STAFF. HISTORY: EFF. JAN. 2, 2014
- R 400.8540 SMOKE DETECTORS; CARBON MONOXIDE DETECTORS. RULE 540. (1) AFTER JULY 1, 2000, NEWLY CONSTRUCTED CENTERS, ADDITIONS, AND CONVERSIONS SHALL AT A MINIMUM BE EQUIPPED WITH APPROVED SINGLE STATION SMOKE DETECTORS COVERING ALL USE AREAS AND THEIR MEANS OF EGRESS. THESE SMOKE DETECTORS SHALL BE LOCATED AND SPACED ACCORDING TO NFPA-12.

(2) CENTERS WITH ANY FUEL-FIRED HEATING SYSTEMS SHALL HAVE A CARBON MONOXIDE DETECTOR, LISTED BY

A NATIONALLY RECOGNIZED TESTING LABORATORY, ON ALL LEVELS APPROVED FOR CHILD CARE AND IN EACH USE AREA COVERED BY A DIFFERENT FURNACE ZONE. (3) CENTERS SHALL PROPERLY INSTALL AND MAINTAIN ALL DETECTORS IN OPERABLE CONDITION IN

ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. HISTORY: EFF. JAN. 2, 2014

- R 400.8545 FIRE EXTINGUISHERS. RULE 545. (1) MULTIPURPOSE FIRE EXTINGUISHERS, HAVING RATINGS OF NOT LESS THAN 2A-10BC, SHALL BE INSTALLED IN OR
- ADJACENT TO THE KITCHEN OR COOKING AREA AND IN OR ADJACENT TO THE DOOR OF THE HEATING PLANT (2) THE REQUIREMENT OF HAVING ADDITIONAL MULTIPURPOSE FIRE EXTINGUISHERS WITH RATINGS OF NOT LESS THAN 2A-10BC SHALL BE DETERMINED BY THE DEPARTMENT OR A DEPARTMENT-APPROVED QUALIFIED FIRE INSPECTOR AND SHALL BE BASED ON THE CAPACITY OF THE CENTER AND ON OTHER CONDITIONS IN THE
- (3) FIRE EXTINGUISHERS SHALL BE PROPERLY MOUNTED, INSPECTED, AND MAINTAINED IN ACCORDANCE WITH NFPA- 10. THE FIRE EXTINGUISHER SHALL BEAR A TAG INDICATING THE LAST DATE OF INSPECTION OR SERVICE

AND THE INITIALS OF THE PERSON WHO PERFORMED THE INSPECTION OR SERVICE. HISTORY: EFF. JAN. 2, 2014

400.8550 ELECTRICAL SERVICE. RULE 550.

OF APPROVAL SHALL BE MAINTAINED AT THE CENTER AT ALL TIMES.

- (I) THE ELECTRICAL SERVICE SHALL BE MAINTAINED IN A SAFE CONDITION. (2) FOR NEW CONSTRUCTION AND ADDITIONS, ELECTRICAL SYSTEMS AND SERVICE SHALL BE INSPECTED AND APPROVED BY THE ELECTRICAL INSPECTING AUTHORITY HAVING JURISDICTION. A COPY OF THE CERTIFICATE
- (3) WHEN WARRANTED, CONVERSIONS OF EXISTING BUILDINGS AND EXISTING ROOMS TO CHILD CARE USE, AS WELL AS EXISTING LICENSED CENTERS, MAY REQUIRE AN ELECTRICAL INSPECTION. (4) EXTENSION CORDS, LISTED BY A NATIONALLY RECOGNIZED TESTING LABORATORY, AND USED IN ACCORDANCE WITH ALL MANUFACTURER'S RECOMMENDATIONS, MAY BE USED ON A TEMPORARY BASIS, AND
- FOR SHORT PERIODS OF TIME. (5) ALL ELECTRICAL OUTLETS IN CHILD USE AREAS FOR CHILDREN WHO ARE NOT YET SCHOOL-AGE SHALL BE MADE INACCESSIBLE TO CHILDREN.
- (6) ALL ELECTRICAL OUTLETS IN APPROVED CHILD USE SPACE LOCATED WITHIN 6 FEET OF A SINK OR OTHER WATER SOURCE SHALL BE PROTECTED BY A GROUND-FAULT CIRCUIT INTERRUPTER (GFCI). (1) POWER STRIPS SHALL BE EQUIPPED WITH SURGE PROTECTORS AND SHALL NOT BE LONGER THAN 6 FEET OR BE CONNECTED TO ANOTHER POWER STRIP. HISTORY: EFF. JAN. 2, 2014

ALL OPEN-FLAME DEVICES, CANDLES, AND INCENSE ARE PROHIBITED, EXCEPT FOR RELIGIOUS CELEBRATIONS. HISTORY: EFF. JAN. 2, 2014

R 400.8555 OPEN-FLAME DEVICES; CANDLES. RULE 555.

R 400.8560 MULTIPLE OCCUPANCY. RULE 560. (1) MULTIPLE OCCUPANCY OF A BUILDING MAY QUALIFY FOR LICENSURE IF THE ENTIRE BUILDING DOES NOT PRESENT A LIFE SAFETY HAZARD. A CENTER CURRENTLY LICENSED IN SUCH A BUILDING MAY CONTINUE AS

LONG AS SUCH OCCUPANCIES DO NOT CHANGE IN CHARACTER. (2) A BUILDING, PART OF WHICH IS USED FOR HAZARDOUS OPERATIONS OR FOR OCCUPANCY THAT IS UNPREDICTABLE, SUCH AS TAVERNS, GARAGES, REPAIR SHOPS, AND INDUSTRIAL OPERATIONS, SHALL NOT BE PERMITTED FOR CENTER USE. HOWEVER, AN EXCEPTION MAY BE MADE FOR A VOCATIONAL EDUCATION CENTER APPROVED BY THE DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS. HISTORY: EFF. JAN. 2,

PROPOSED DAY CARE FACILITIES WIGGLES & GIGGLES

1131 WHITE LAKE RD.

HIGHLAND, MI 48356

1131 WHITE LAKE RD.

HIGHLAND, MI 48356

OWNER/DEVELOPER: WIGGLES & GIGGLES

COPYRIGHT (C) 2024 THESE PLANS AND DESIGNS CONTAINED HEREIN ARE PROPERTY OF AAA CONSULTING AND MAY NOT BE REPRODUCED ALL OR IN PART WITHOUT WRITTEN CONSENT AND FEES PAID TO AAA CONSULTING THEREFORE ALL UNAUTHORIZED USE OF THESE PLANS OR DESIGNS WILL BE CONSIDERED THEIR AND APPROPRIATE CHARGES WILL BE

BROUGHT FORTH. COPYRIGHTED /ALL RIGHTS RESERVED. AAA CONSULTING DESIGN-BUILD CONSTRUCTION MANAGEMENT 29895 GREENFIELD ROAD SOUTHFIELD, MICHIGAN 48076

TEL: (313) 815-*0*543

\ \ \ EMAIL: AAA.CONSULTING@HOTMAIL.COM

02/18/2025- RELEASED FOR BUILDING PERMITS

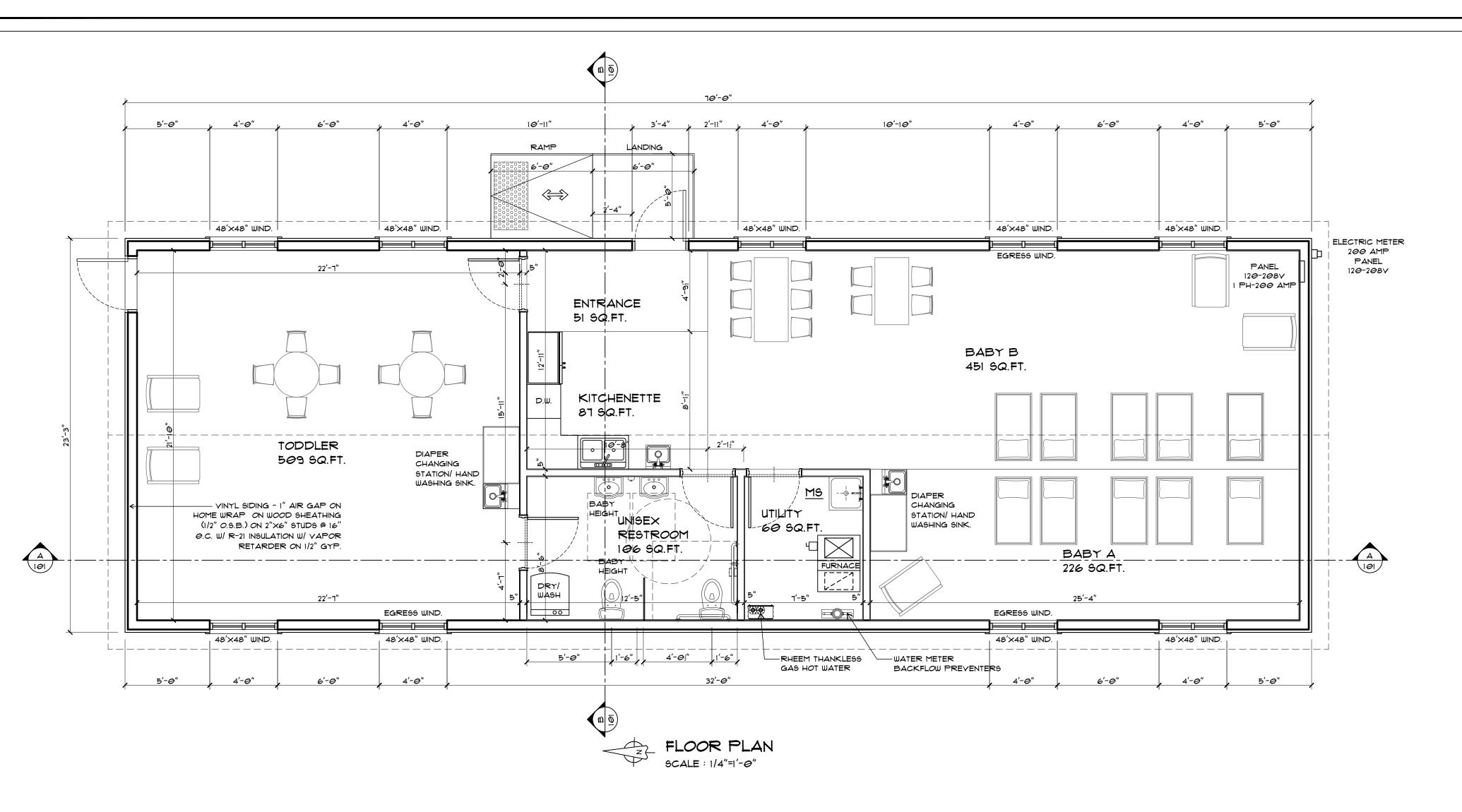
DRAWING TITLE:

GENERAL RULES

DRAWING SCALE: AS SHOWN

DATE: OCT.-25-2024

A-101



CONT GUTTER WITH DWNSPOUT W/ SPLASH BLOCK TO GRADE ROOF VENT 30 YEAR ASPHALT SHINGLES ON FELT ON 1/2" (PLYWOOD 0.5.B.) ON PRE-ENGINEERED WOOD TRUSSES @ 24" O.C. W INSULATION OF R48 THERMAL BAFFLE AT EACH TRUSS SPACE -2" CLEAR FOR VENTILATION CONTINUOUS RIDGE VENT TO BALANCE W/ SOFFIT VENTS RIDGE VENT CONT GUTTER WITH DWNSPOUT W/ SPLASH BLOCK TO GRADE

PLACE ICE BARRIER TWO LAYERS OF UNDERLAYMENT CEMENTED TOGETHER AND EXTEND FROM THE LOWEST EDGES OF ALL ROOF SURFACES TO AT LEAST 24" INSIDE THE EXTERIOR WALL LINE.

ATTIC SHALL HAVE VENTILATION EQUAL TO 1 SQ. FOOT PER 150 SQ. FEET OF ATTIC SPACE. VENTILATION SHALL BE PROTECTED FROM SNOW AND RAIN AND SHALL BE COVERED WITH GALVANIZED WIRE SCREEN. OPENINGS SHALL BE LOCATED TO PROVIDE CROSS VENTILATION.

TABLE 402.1.1

INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENET CLIMATE FENESTRATION SKYLIGHT | CEILING | FRAME WALL | MASS WALL | FLOOR WALL R-VALUE SPACE WALL ZONE U-FACTOR U-FACTOR R-VALUE R-VALUE R-VALUE R-VALUE R-VALUE AND DEPTH R-VALUE 13/17 30 1*0*/13 | 1*0*, 2FT | 15/19 15/20 30 49 15/19 10, 4FT **0**.32 **0**.32 49 19/21 38 15/19

TABLE 402.1.3

	EQUIVALENT U-FACTORS													
							BASEMENT	CRAWL						
CLIMATE	FENESTRATION	SKYLIGHT *	CEILING	FRAME WALL	MASS WALL	FLOOR	WALL	SPACE WALL						
ZONE	U-FACTOR	U-FACTOR	U-FACTOR	U-FACTOR	U-FACTOR	U-FACTOR	U-FACTOR	U-FACTOR						
5A	<i>0</i> .32	0.55	0.030	0.051	0.082	0.033	0.059	0.055						
6A	<i>0</i> .32	0.55	0.026	<i>0.0</i> 51	0.060	0.033	0.050	0.055						
٦	⊘ .32	0.55	0.026	0.051	0.057	0.028	0.050	0.055						

2015 MICHIGAN UNIFORM ENERGY CODE REQUIREMENTS.

ALL CONSTRUCTION METHODS AND MATERIALS SHALL COMPLY WITH THE CURRENT 2015 MICHIGAN UNIFORM ENERGY CODE, ORDINANCES AND REQUIREMENTS AS ADOPTED BY THE LOCAL GOVERNING BODY WHERE THE BUILDING IS TO BE LOCATED. IN CASE OF CONFLICT, THE MOST STRINGENT REQUIREMENT SHALL COMPLY. GENERAL CONTRACTOR TO PROVIDE ALL REQUIRED DOCUMENTATION SHOWING COMPLIANCE TO THE CITY AS REQUESTED.

DOOR AND WINDOW NOTES:

EGRESS WINDOW WITH FINISH SILL HEIGHT NOT GREATER THAN 44" ABOVE THE FINISH FLOOR HEIGHT AND SHALL HAVE A MINIMUM OPENABLE AREA OF 5.7 SQ. FT. EGRESS WINDOWS SHALL NOT HAVE AN OPENABLE AREA LESS THAN 20" WIDE OR 24" HIGH.

ALL GLAZING WITHIN 18 IN. OF THE FLOOR AND/OR WITHIN 24 IN. OF ANY DOOR (REGARDLESS OF WALL PLANE) ARE TO HAVE SAFETY GLAZING. ALL GLAZING WITHIN 60 IN. OF TUB OR SHOWER FLOOR, 60 IN. OF A STAIR LANDING OR GREATER THAN 9 SQUARE FEET ARE TO HAVE SAFETY GLAZING

SKYLIGHTS ARE TO BE GLAZED WITH TEMPERED GLASS ON OUTSIDE AND LAMINATED GLASS ON THE INSIDE (UNLESS PLEXIGLASS), GLASS TO HAVE MAXIMUM CLEAR SPAN OF 25 IN. AND FRAME IS TO BE ATTACHED TO A 2X CURB WITH A MINIMUM OF 4 IN. ABOVE ROOF PLANE

ALL EXTERIOR WINDOWS ARE TO BE DOUBLE GLAZED

ALL EXTERIOR DOORS ARE TO BE SOLID CORE WITH WEATHERSTRIPPING. PROVIDE 1/2 IN. DEADBOLT LOCKS ON ALL EXTERIOR DOORS, AND LOCKING DEVICES ON ALL DOORS AND WINDOWS WITHIN 10 FT. (VERTICAL) OF GRADE. PROVIDE PEEPHOLE 54-66 IN. ABOVE FIN. FLOOR ON EXTERIOR ENTRY DOORS.

EXTERIOR EXIT DOORS WILL BE 36" MIN. NET CLEAR DOORWAY SHALL BE 32" MIN. DOOR SHALL BE OPENABLE FROM INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT. GLAZING IN DOORS SHALL BE DUAL PANE SAFETY GLASS WITH MIN. U-VALUE OF 0.60.

SHOP DRAWINGS

THE TRUSS FABRICATOR AND PRE-ENGINEERING WOOD LUMBER FABRICATOR SHALL SUBMIT SHOP DRAWINGS TO G.C. / ENGINEER FOR REVIEW PRIOR TO FABRICATION. THE SHOP DRAWINGS SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE STATE OF MICHIGAN THE FOLLOWING INFORMATION SHALL APPEAR ON ALL SHOP DRAWINGS:

DESIGN CRITERIA. INCLUDING LOAD INFORMATION ACCOUNTING FOR SNOW BUILDUP WHERE APPLICABLE. CONNECTOR PLATE MANUFACTURER, GAUGE, SIZE AND LOCATION AT EACH TRUSS JOINT. THE LUMBER GRADE AND SIZE OF ALL MEMBERS. ALL REQUIRED STRUCTURAL LATERAL BRACING (SIZE, CONNECTION AND LOCATION).

COMPLETE TRUSS LAYOUTS (FRAMING PLANS) SHALL BE PREPARED BY THE TRUSS FABRICATOR. LAYOUTS SHALL INDICATE TRUSS TYPE, SPACING AND CONNECTIONS. REQUIRED TRUSS HANGER CONNECTIONS SHALL BE INDICATED ON THE LAYOUTS. ROOF TRUSS DESIGN BY TRUSS MANUFACTURER MUST ACCOMMODATE FOR UNBALANCED SNOW LOADING PER LATEST MICHIGAN BUILDING CODE.

WOOD AND ENGINEERED WOOD PRODUCTS:

- ALL WOOD CONSTRUCTION SHALL BE IN ACCORDANCE WITH AMERICAN INSTITUTE OF TIMBER CONSTRUCTION (AITC) AND NATIONAL DESIGN SPECIFICATIONS (NDS) AND SPECIFICATIONS.
- 2. ALL STRUCTURAL GLUE-LAMINATED TIMBER (GLULAM) OR LAMINATED VENEER LUMBER (LVL) SHALL HAVE THE FOLLOWING MINIMUM DESIGN PROPERTIES BASED ON AITC GRADING STANDARDS: FB=2900 PSI, FV=285 PSI, E=2,000,000 PSI. 3. U.N.O. ALL SAWN LUMBER FRAMING MEMBERS SHALL

BE HEM-FIR #2, OR HAVE THE FOLLOWING MINIMUM

- DESIGN PROPERTIES BASED ON THE NDS SPECIFICATIONS AS PUBLISHED BY THE NATIONAL FOREST PRODUCT ASSOCIATION (NFPA): FB=875 PSI, FV=85 PSI, E=1,300,000 PSI. 4. ROOF SHEATHING SHALL BE 1/2" OSB AND BE
- NAILED TO THE RAFTERS AT 8" O.C. MAXIMUM SPACING, EXCEPT AT OUTERMOST 4'X4' CORNER NAILING SHALL BE AT 3" O.C. 5. ALL PREFABRICATED METAL CONNECTORS SHALL BE "SIMPSON STRONG TIE" OR EQUAL AND SHALL
- BE GALYANIZED AND BE INSTALLED IN ACCORDANCE WITH MANUFACTURER INSTRUCTION. 6. DOUBLE MEMBERS SHALL BE NAILED @12" OC. T\$B STAGGERED WITH 16D NAILS.
- MISCELLANEOUS: . FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO START OF WORK. NOTIFY ENGINEER OF ANY DISCREPANCIES OR INCONSISTENCIES
- 2. DO NOT SCALE THE DRAWINGS. USE DEPICTED DIMENSIONS. 3. NOTIFY ENGINEER IF ANY EXISTING CONDITION
- CONFLICTS WITH DRAWINGS AND DETAILS. 4. IF ANY GENERAL NOTE CONFLICT WITH ANY DETAIL OR NOTE ON THE DRAWINGS, THE STRICTEST SHALL GOVERN SUBJECT TO APPROVAL OF ENGINEER.

FABRICATED WOOD TRUSSES: . FABRICATED WOOD TRUSSES SHALL BE PROVIDED

THE ENGINEER.

OF SHOP DRAWINGS.

- BY A CERTIFIED WOOD TRUSS FABRICATOR. 2. SUBMIT SHOP DRAWINGS FOR WOOD TRUSSES SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF MICHIGAN. SHOW TRUSS CONFIGURATION AND INDICATE DESIGN CRITERIA AND LOADS COMPLYING WITH REQUIREMENTS. FABRICATOR SHALL COMPLY WITH QUALITY-CONTROL PROCEDURES IN TPI-1 AND ENGAGE A THIRD-PARTY INSPECTION BY AN INDEPENDENT TESTING AGENCY ACCEPTABLE TO
- 5. TRUSS DESIGN SHALL INCLUDE ALL APPLICABLE LOADS AND LOAD COMBINATIONS PER ASCET AND PER LOADING CRITERIA INDICATED. INCLUDE PROVISIONS FOR WIND UPLIFT AND REQUIRED TIE-DOWNS. TRUSS BOTTOM CHORD SHALL BE DESIGNED TO SUPPORT WEIGHT OF CEILING SHEATHING AND INSULATION IN ADDITION TO A LIVE
- LOAD OF 10 PSF. 4. IN ADDITION TO LL AND UNIFORM SNOW LOAD, WHERE THE ROOF TRUSSES ARE SUBJECT TO SLIDING SNOW FROM HIGHER ROOFS, THE ROOF TRUSSES SHALL BE DESIGNED FOR AN ADDITONAL 13 PSF SLIDING SNOW (FOR 15 FT FROM FACE OF EXISTING BLDG) AND 40 PSF OF SNOW DRIFT (FOR 10 FT FROM FACE OF EXISTING BLDG.)
- 5. INSTALL AND BRACE TRUSSES ACCORDING TO TPI TOLERANCES AND RECOMMENDATIONS. 6. FIELD VERIFY DIMENSIONS RELATIVE TO TRUSSES PRIOR TO START OF FABRICATION. DO NOT PROCEED WITH FABRICATION PRIOR TO APPROVAL

FRAMING NOTES:

ATTIC YENTILATION: AREA / 150. PROVIDE 1" MIN. AIR GAP AT EAVES WITH INSULATION BAFFLES TYP. AT ALL TRUSS BAYS. PROVIDE GABLE VENTS ALL GABLE ENDS.

PROVIDE GALY. ROOF YENTS ON BACKSIDE OF ROOF LINE ABOVE CONDITIONED AREA.

GIRDER AND HEADER SPANS FOR EXTERIOR BEARING WALLS SUPPORTING ROOF, CEILING AND ONE CLEAR SPAN FLOOR SHALL CONFORM TO MRC. R602.7(1) FOLLOWING TABLE UNLESS OTHERWISE NOTED ON THE

2-2"X6" UP TO 3'-0" 2 JACK STUDS @ EACH END 3-2"X8" UP TO 4'-10" 2 JACK STUDS @ EACH END 3-2"XIO" UP TO 4'-11" 2 JACK STUDS @ EACH END 3-2"X12" UP TO 6'-10" 3 JACK STUDS @ EACH END

GIRDER AND HEADER SPANS FOR INTERIOR BEARING WALLS SUPPORTING ONE FLOOR SHALL CONFORM TO MRC. R602.7(2) FOLLOWING TABLE UNLESS OTHERWISE NOTED ON THE PLAN: 2-2"X6" UP TO 3'-6" | JACK STUDS @ EACH END

2-2"XIO" UP TO 5'-5" 2 JACK STUDS @ EACH END 2-2"X12" UP TO 6'-3" 2 JACK STUDS @ EACH END GIRDER AND HEADER SPANS FOR OPEN PORCHES 8' DEPTH SHALL CONFORM TO MRC. R602.7(3) FOLLOWING

2-2"×8" UP TO 4'-5" 2 JACK STUDS @ EACH END

TABLE UNLESS OTHERWISE NOTED ON THE PLAN: 2-2"X6" UP TO 1'-6" OPENING WIDTH 2-2"X8" UP TO 10'-1" OPENING WIDTH 2-2"XIO" UP TO 12'-4" OPENING WIDTH 2-2"X12" UP TO 14'-4" OPENING WIDTH

GIRDER AND HEADER SPANS FOR OPEN PORCHES 14' DEPTH SHALL CONFORM TO MRC. R602.7(3) FOLLOWING TABLE UNLESS OTHERWISE NOTED ON THE PLAN: 2-2"X6" UP TO 5'-8" OPENING WIDTH 2-2"×8" UP TO 1'-1" OPENING WIDTH 2-2"XIO" UP TO 9'-4" OPENING WIDTH 2-2"X12" UP TO 10'-10" OPENING WIDTH

MRC. R602.7.5 SUPPORTS FOR HEADERS: HEADERS SHALL BE SUPPORTED ON EACH END WITH ONE OR MORE JACK STUDS OR WITH APPROVED FRAMING ANCHORS IN ACCORDANCE WITH TABLE R602.7(1) OR R602.7(2). THE FULL HEIGHT STUD ADJACENT TO EACH END OF THE HEADER SHALL BE END NAILED TO EACH END OF THE HEADER WITH FOUR-16D NAILS (3.5 INCHES X 0.135 INCHES). THE MINIMUM NUMBER OF FULL HEIGHT STUDS AT EACH END OF A HEADER SHALL BE IN ACCORDANCE WITH FOLLOWING TABLE R602.7.5 UNLESS OTHERWISE NOTED ON THE PLAN:

HEADER SPAN UP TO 3' ONE STUD HEADER SPAN UP TO 4' TWO STUDS HEADER SPAN UP TO 8' THREE STUDS HEADER SPAN UP TO 12' FIVE STUDS HEADER SPAN UP TO 16' SIX STUDS

WOOD JOIST ARE TO BE SIZED AND PROVIDED BY LAMBER YARD.

ALL ENGINEERED WOOD TRUSS, WOOD BEAMS AND

PROVIDE DOUBLE JSTS. UNDER ALL WALLS RUNNING PARALLEL TO JOISTS.

PROVIDE POSITIVE VENTILATION AT EA. END OF EA. RAFTER SPACE AT VAULTED CEILING AREAS. PROVIDE FIRE BLOCKING, DRAFT STOPS AND FIRE

PROVIDE POSITIVE CONNECTIONS AT EACH END OF ALL POSTS AND COLUMNS TO RESIST LATERAL DISPLACEMENT.

WOOD AND ENGINEERED WOOD PRODUCTS:

STOPS AS PER IBC. SEC. R502.12.

- TRUSS DRAWING IS FOR ILLUSTRATION ONLY. ALL TRUSSES SHALL BE INSTALLED \$ BRACED TO MANUFACTURERS DRAWINGS \$ SPECIFICATIONS.
- ALL ENGINEERED WOOD TRUSS, WOOD BEAMS AND WOOD JOIST ARE TO BE SIZED AND PROVIDED BY LAMBER MANUFACTURERS. ALL TRUSSES WILL NOT BE FIELD ALTERED WITHOUT PRIOR BUILDING DEPT. APPROVAL OF
- ENGINEERING CALCULATIONS. TRUSSES SHALL HAVE DESIGN DETAILS \$ DRAWINGS ON SITE FOR FRAMING INSPECTION. NON BEARING WALLS SHOULD BE HELD DOWN FROM THE TRUSS BOTTOM CHORD W/ SIMPSON
- STC TO INSURE THAT THE TRUSS BOTTOM CHORD WILL NOT BEAR ON THE WALL. ALL CONNECTIONS OF RAFTERS, JACK OR HIP TRUSSES TO MAIN GIRDER TO BE PROVIDED BY TRUSS MANUFACTURER.ALL WOOD CONSTRUCTION SHALL BE IN ACCORDANCE WITH AMERICAN INSTITUTE OF TIMBER CONSTRUCTION (AITC) AND NATIONAL DESIGN SPECIFICATIONS (NDS) AND
- SPECIFICATIONS. ALL EXTERIOR WALL FRAMING SHALL BE 2X6
- WOOD STUDS (U.N.O.) ALL STRUCTURAL GLUE-LAMINATED TIMBER (GLULAM) OR LAMINATED YENEER LUMBER (LYL) SHALL HAVE THE FOLLOWING MINIMUM DESIGN PROPERTIES BASED ON AITC GRADING STANDARD: FB= 250 PSI, FV=285 PSI, E= 1,800,000 PSI.
- ALL SAWN LUMBER FRAMING MEMBERS SHALL HAVE THE FOLLOWING MINIMUM DESIGN PROPERTIES BASED ON THE NDS SPECIFICATIONS AS PUBLISHED BY THE NATIONAL FOREST PRODUCT ASSOCIATION (NFPA) FB= 875 PSI, FV - 285 PSI, E = 1,300,000 PSI NO 2 OR
- ROOF SHEATHING SHALL BE 1/2" OSB AND NAILED TO RAFTERS AT 16" O.C. MAX SPACING. 10. ALL PREFABRICATED METAL CONNECTORS
- SHALL BE "SIMPSON TIES" OR EQUAL AND SHALL BE GALYANIZED AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

THE ABOVE IS PROVIDED AS GENERAL CONSTRUCTION NOTES ONLY. IN NO WAY ARE THEY INTENDED TO BE UTILIZED AS ARCHITECTURAL SPECIFICATIONS FOR THIS PROJECT. ALL INSTALLATIONS AND FABRICATIONS

THESE DRAWINGS ARE PREPARED IN ACCORDANCE WITH THE LIMITED SERVICES FOR WHICH THE ARCHITECT WAS CONTRACTED.

THIS DRAWING IS DIAGRAMMATIC AND SHOULD BE USED TO DETERMINE THE DESIGN INTENT. THE GC. OWNER SHALL FIELD VERIFY ALL WORK AND SHALL NOTIFY AAA CONSULTING/ARCHITECT IMMEDIATELY OF ANY DISCREPANCY IN THE DOCUMENTS BEFORE PROCEEDING FAILURE TO DO SO WILL RESULT IN THE GC./OWNER

SHOULD BE VERIFIED WITH G.C. AND OWNER.

TAKING FULL RESPONSIBILITY AND LIABILITY FOR SAID DISCREPANCY AND FULL WORK.

GENERAL NOTES:

ALL TRUSSES DESIGNED FOR L/120 TOTAL LOAD DEFLECTION REQUIRED COORDINATE FRAMING AS REQUIRED TO ALLOW FOR LIGHTING TO BE CENTERED IN EACH ROOM OR SPACE. COORDINATE WITH

LIGHTING PLAN. CENTER FOOTINGS ON COLUMN

CENTERLINES, UNLESS OTHERWISE NOTED. COMPACTED GRANULAR FILL IN 8" LIFTS, COMPACTED TO 98% MODIFIED PROCTOR

DENSITY FIELD TESTING REQ'D

OF 3-PLY HEADERS OR GREATER PROVIDE DRAFTSTOPPING IN REQUIRED

3 - 16D NAILS @ 12" O.C. FOR ALL FASTENING

LOCATIONS PER MRC 2015 R502.12 -PROVIDE FIRE STOPPING AND SEALING PER MRC 2015 R602.8

FIELD VERIFY ALL EXISTING GRADES IN RELATIONSHIP TO NEW FOOTING \$ BRICK LEDGE ELEVATION HEIGHTS. REFER TO SURVEY DRAWINGS FOR FINAL GRADES

ELEVATION TARGET HEIGHTS ARE CALCULATED FROM MAIN LEVEL FINISH FLOOR BENCH MARK ELEV=100'-0". ALL PLAN DIMENSIONS ARE TO FINISHED DIMENSIONS

CONTRACTOR TO FIELD VERIFY ALL DIMENSION, HEIGHTS \$ ELEVATIONS AND MUST NOTIFY DESIGNER OF ANY DISCREPANCIES

ALL CONSTRUCTION METHODS AND MATERIALS WILL COMPLY WITH THE CURRENT 2015 MICHIGAN RESIDENTIAL CODE, ORDINANCES AND REQUIREMENTS AS ADOPTED BY THE LOCAL GOVERNING BODY. IN CASE OF CONFLICT, THE MOST STRINGENT REQUIREMENT SHALL COMPLY.

FOUNDATION PLAT AND SILL PLAT SHALL BE PRESSURE TREATED AND BOLTED TO FOUNDATION WITH MINIMUM 1/2" BOLTS AT 6' O.C. MAX. AND 1" MIN. EMBEDMENT INTO FOUNDATION. ALL PLAT IN CONTACT WITH CONCRETE MUST BE PRESSURE TREATED.

PROPOSED

DAY CARE FACILITIES WIGGLES \$ GIGGLES

1131 WHITE LAKE RD. HIGHLAND, MI 48356

OWNER/DEVELOPER: WIGGLES & GIGGLES

1131 WHITE LAKE RD. HIGHLAND, MI 48356

COPYRIGHT (C) 2024 THESE PLANS AND DESIGNS CONTAINED HEREIN ARE PROPERTY OF AAA CONSULTING AND MAY NOT BE REPRODUCED ALL OR IN PART WITHOUT WRITTEN CONSENT AND FEES PAID TO AAA CONSULTING THEREFORE ALL UNAUTHORIZED USE OF THESE PLANS OR DESIGNS WILL BE CONSIDERED THIEF AND APPROPRIATE CHARGES WILL BE BROUGHT FORTH. COPYRIGHTED /ALL RIGHTS RESERVED.



EMAIL: AAA.CONSULTING@HOTMAIL.COM

02/18/2025- RELEASED FOR BUILDING PERMITS

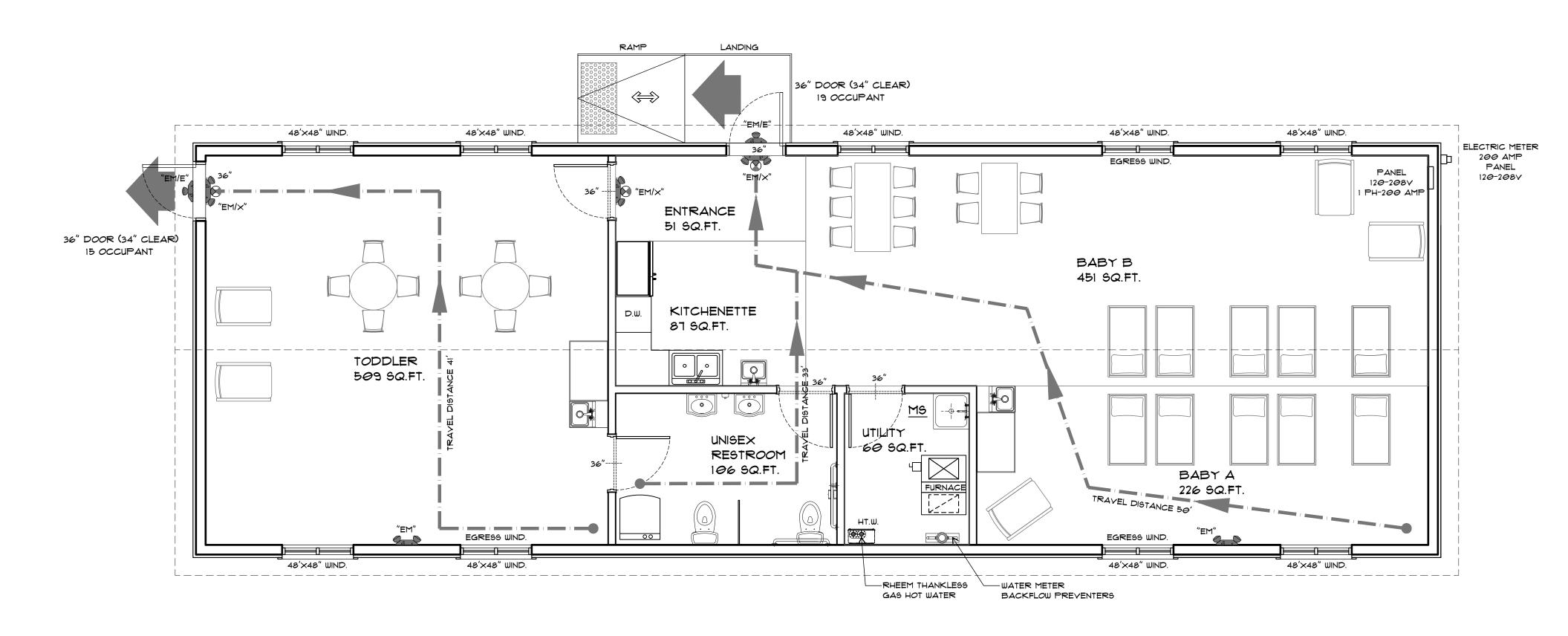
DRAWING TITLE:

PROPOSED FLOOR PLAN AND ROOF PLAN

DATE: OCT.-25-2024

DRAWING SCALE: AS SHOWN

A-102



LIFE SAFETY PLAN

E EDUCATIONAL

TOTAL OCCUPANT LOAD = 34

MAXIMUM OCCUPANCY LOAD FOR THE

ENTIRE STORE SHALL BE AT ALL TIME 34

PEOPLES INCLUDING EMPLOYEES

TRAVEL DISTANCE

FOR INFANTS AND TODDLERS, THE TRAVEL DISTANCE FROM THE OCCUPIED ROOM DOOR TO THE EXIT SHOULD BE 50 FEET OR LESS. FOR PRESCHOOLERS AND SCHOOL-AGERS, THE TRAVEL DISTANCE SHOULD BE 100 FEET OR LESS.

EMERGENCY LIGHTING

THE BUILDING SHOULD HAVE EMERGENCY LIGHTING THAT TURNS ON IN THE EVENT OF A POWER FAILURE.

FIRE EXTINGUISHERS

THE BUILDING SHOULD HAVE FIRE EXTINGUISHERS, WITH ONE 2A/10BC RATED EXTINGUISHER FOR EVERY 3,000 SQUARE FEET OF FLOOR AREA. CLOSET AND BATHROOM DOORS CLOSET DOORS SHOULD OPEN FROM THE INSIDE, AND BATHROOM DOORS SHOULD OPEN FROM THE OUTSIDE.

ELECTRICAL OUTLETS

UNUSED ELECTRICAL OUTLETS SHOULD HAVE SAFETY CAPS OR PLUGS IF CHILDREN UNDER 6 ARE IN THE BUILDING.

THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) PRODUCES THE FIRE SPRINKLER CODE, WHICH IS THE BASIS FOR MANY STATE AND CITY

CODED NOTES 🗵

- 1. SURFACE MOUNTED TYPE ABC FIRE EXTINGUISHER, MOUNT @ 44" AFF, COORDINATE FINAL LOCATIONS AND QUANTITY WITH FIRE MARSHAL.
- 2. PROVIDE TACTILE EXIT SIGN. REFER TO ACCESSIBILITY SHEETS.
- 3. POST SIGNAGE LISTING THE ASSEMBLY OCCUPANT LOAD IN A CONSPICUOUS PLACE NEAR THE MAIN EXIT DOOR FROM THE SPACE.
- 4. POST THE BUILDING ADDRESS WITH A MINIMUM OF 4" NUMBERS ON A CONTRASTING BACKGROUND THAT IS VISIBLE FROM THE STREET. FIELD VERIFY REQUIREMENTS WITH LOCAL FIRE DEPARTMENT PRIOR TO START OF CONSTRUCTION.

PER MICHIGAN BUILDING CODE SECTION 505.2(2)

AN AUTOMATIC SPRINKLER SYSTEM IS NOT REQUIRED. PROVIDE A KNOX BOX FOR EMERGENCY USE

A PORTABLE FIRE EXTINGUISHERS WILL BE PROVIDED LOCATION AND TYPE GENERAL CONTRACTOR COORDINATE WITH FIRE MARSHALL.

BUILDING CODES

2015 MICHIGAN BUILDING CODE BUILDING CODE 2021 MICHIGAN PLUMBING CODE 2021 MICHIGAN MECHANICAL CODE ELECTRICAL CODE MICHIGAN ELECTRICAL CODE \$ NEC 2023 WITH PART 8 STATE AMENDMENTS LIFE SAFETY CODE 2021 INTERNATIONAL FIRE CODE ENERGY CODE 2015 MICHIGAN UNIFORM ENERGY CODE ANSI/ASHRAE/IESNA STANDARD 90.1-2023 ACCESSIBILITY CODE 2017 ICC / ANSI A117.1 \$ MICHIGAN BARRIER FREE DESIGN LAW OF PUBLIC ACT I OF 1966 AS AMENDED FIRE CODE 2015 INTERNATIONAL FIRE CODE NFPA 13 2022 SPRINKLER CODE NFPA 2019 FIRE ALARM CODE

GENERAL NOTES

- A. 44 INCHES REQUIRED EGRESS CORRIDOR WIDTH FOR OCCUPANCIES OF 50 AND OVER. 42 INCHES REQUIRED EGRESS AISLE WIDTH FOR OCCUPANCIES OF 50 AND OVER. 36 INCHES REQUIRED EGRESS WIDTH FOR OCCUPANCIES UNDER 50. MBC TABLE 1020.2
- B. NO DEAD END CORRIDORS OVER 20'-0" IN LENGTH. MBC SECTION 1020.4
- C. MAXIMUM COMMON PATH OF EGRESS TRAVEL DISTANCE TO AN EXIT IS 15'-0" MEASURED AT THE MOST REMOTE POINT ALONG THE NATURAL AND UNOBSTRUCTED PATH OF HORIZONTAL AND VERTICAL TRAVEL TO THE EXIT. MBC TABLE 1006.3.2(2). THE COMMON PATH OF TRAVEL DISTANCE MUST BE LESS THAN 20 FEET WHERE THE PATH OF TRAVEL SERVES 50 OR MORE OCCUPANTS PER NFPA 101.
- D. DISTANCE BETWEEN TWO POINTS OF EGRESS (MEASURED IN A STRAIGHT LINE BETWEEN THE TWO)
 SHALL NOT BE LESS THAN 1/2 DIAGONAL DISTANCE OF THE SPACE BEING SERVED BY EGRESS
 PATH. MBC SECTION 1007.1.1
- E. MAXIMUM EXIT ACCESS TRAVEL DISTANCE 200'-0" WITHOUT SPRINKLER. MBC TABLE 1017.2
- F. LANDINGS SHALL HAVE A LENGTH MEASURED IN THE DIRECTION OF TRAVEL NOT LESS THAN 44 INCHES.
- G. SPACE BETWEEN TWO DOORS IN A SERIES SHALL BE 48 INCHES MIN PLUS WIDTH OF A DOOR SWINGING INTO THE SPACE. MBC SECTION 1010.1.8
- H. DOORS, WHEN FULLY OPENED, SHALL NOT REDUCE THE REQUIRED MEANS OF EGRESS WIDTH BY MORE THAN 1 INCHES. DOORS IN ANY POSITION SHALL NOT REDUCE THE REQUIRED WIDTH BY
- I. PROVIDE FIRE EXTINGUISHERS AS REQUIRED PER APPLICABLE CODES AND COORDINATE EXACT QUANTITY AND LOCATION WITH FIRE MARSHAL.
- J. PER IFC, THE MINIMUM FIRE EXTINGUISHER REQUIREMENT IS A 2AIOBC EXTINGUISHER WITHIN 15'-O" OF TRAVEL DISTANCE OF ALL AREAS.
- K. PROVIDE AND INSTALL OCCUPANCY SIGN IN A CONSPICUOUS LOCATION IN ACCORDANCE WITH
- L. ALL LIGHT SWITCHES, THERMOSTATS, SECURITY ALARMS, ELECTRICAL OUTLETS, ETC. MUST BE MOUNTED TO MEET ALL GOVERNING ACCESSIBILITY REQUIREMENTS FOR FLOOR \$ HEIGHT CLEARANCES AND ONE HAND GRASPING OPERATION.
- M. ALL MEANS OF EGRESS DOOR OPENING HARDWARE SHALL BE OPERATED BY A SINGLE HAND WITHOUT MEANS OF TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST TO OPERATE. ALL DOORS EQUIPPED WITH PANIC HARDWARE MUST MAINTAIN A 32" CLEAR WIDTH. MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED:
 - O.1. 8.5 L.B.F. (37.7N) FOR EXTERIOR DOORS
 O.2. 5.0 L.B.F. (22.2N) FOR INTERIOR DOORS

MORE THAN ONE HALF. MBC SECTION 1005.7

N. NFPA INSPECTION TAGS SHALL BE ATTACHED TO ALL FIRE EXTINGUISHERS.

OCCUPANT LOAD CALCULATION PER TABLE 1004.1.2

ROOM NAME	AREA	LOAD FACTOR	OCCUPANT LOAD	COUNT
TODDLER AREA	509	35	15	15
BABY A AREA	226	35	6	6
BABY B AREA	451	35	13	13
KITCHENETTE	87	N/A	-	_
ENTRANCE	51	N/A	-	_
RESTROOM	106	N/A	-	_
UTILITY ROOM	60	N/A	-	-
			TOTAL	34

	LIFE SAFETY	PLAN LEGEND
	SYMBOL	TYPE
		EXIT ACCESS TRAVEL DISTANCE
	OCCUPANT PER EXIT	EXIT
		MOST REMOTE POINT
	"EM/x"	EMERGENCY AND EXIT SIGN, BUILT-IN BATTERY/CHARGER, 2 LED LAMPS
,]	"EM"	EMERGENCY LIGHT FIXTURES, UNIVERSAL MOUNT, 2 LED LAMPS, BUILT-IN BATTERY/CHARGER
	"EM/E"	REMOTE EXTERIOR EMERGENCY FIXTURE
	"FE"	FIRE EXTINGUISHER COORDINATE LOCATION AND TYPE WITH FIRE MARSHALL.

PROPOSED

DAY CARE FACILITIES

WIGGLES \$ GIGGLES

HIGHLAND, MI 48356

OWNER/DEVELOPER:

1131 WHITE LAKE RD.

-1131 WHITE LAKE RD.

HIGHLAND, MI 48356

WIGGLES \$ GIGGLES

COPYRIGHT © 2024

HESE PLANS AND DESIGNS CONTAINED HEREIN ARE PROPERTY
AAA CONSULTING AND MAY NOT BE REPRODUCED ALL OR IN PA

THESE PLANS AND DESIGNS CONTAINED HEREIN ARE PROPERTY OF AAA CONSULTING AND MAY NOT BE REPRODUCED ALL OR IN PART WITHOUT WRITTEN CONSENT AND FEES PAID TO AAA CONSULTING THEREFORE ALL WAUNTHORIZED USE OF THESE PLANS OR DESIGNS WILL BE CONSIDERED THIEF AND APPROPRIATE CHARGES WILL BE BROUGHT FORTH. COPYRIGHTED /ALL RIGHTS RESERVED.

AAA CONSULTING
DESIGN—BUILD
CONSTRUCTION MANAGEMENT

29895 GREENFIELD ROAD SOUTHFIELD, MICHIGAN 48076 TEL: (313) 815-0543 EMAIL: AAA.CONSULTING@HOTMAIL.COM

ISSUED:

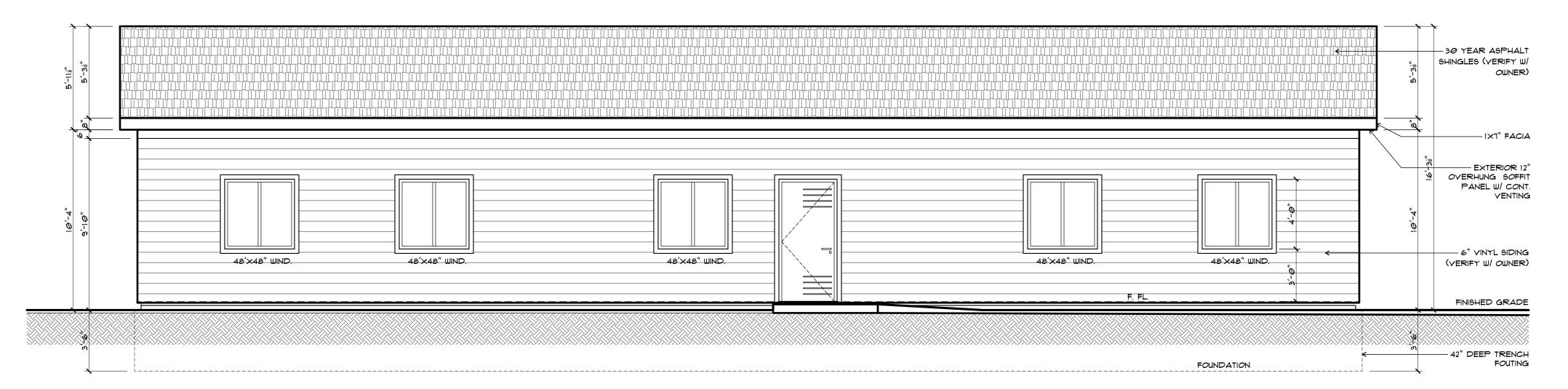
02/18/2025- RELEASED FOR BUILDING PERMITS

DRAWING TITLE:
PROPOSED

DRAWING SCALE: AS SHOWN

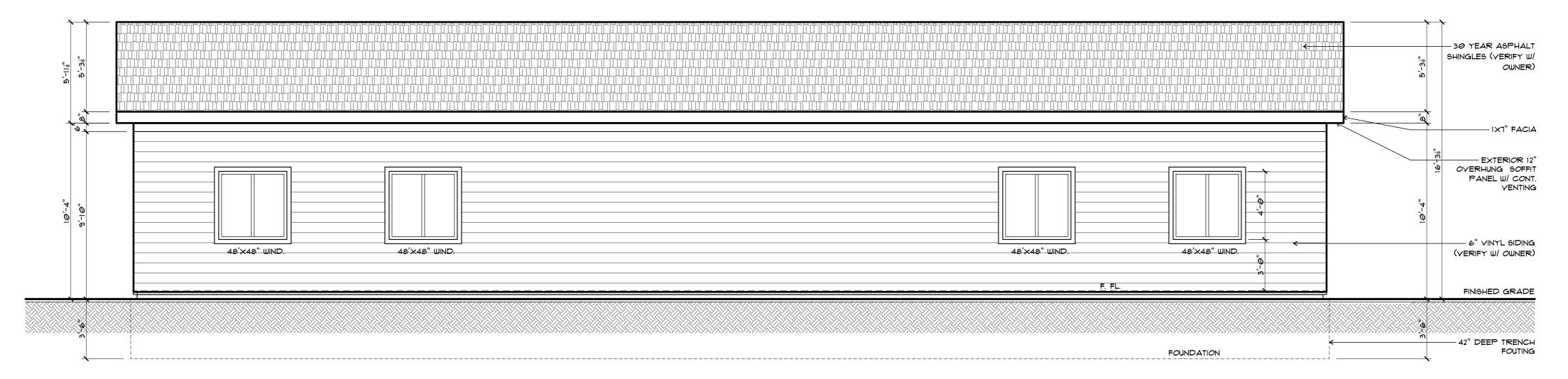
A-103

DATE: OCT.-25-2024



EAST ELEVATION

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



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

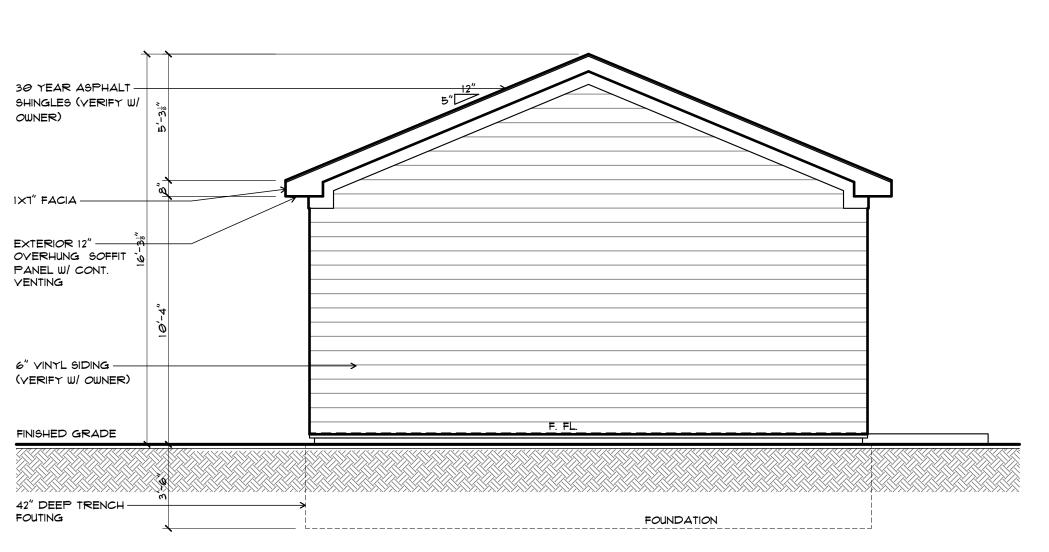
30 YEAR ASPHALT SHINGLES (YERIFY W/ OWNER) 1×1" FACIA -EXTERIOR 12"

OVERHUNG SOFFIT

PANEL W/ CONT.

VENTING 6" VINYL SIDING -(VERIFY W/ OWNER) FINISHED GRADE 42" DEEP TRENCH -FOUTING FOUNDATION NORTH ELEVATION

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



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

PROPOSED DAY CARE FACILITIES WIGGLES \$ GIGGLES

1131 WHITE LAKE RD.

HIGHLAND, MI 48356 OWNER/DEVELOPER: WIGGLES \$ GIGGLES

1131 WHITE LAKE RD. HIGHLAND, MI 48356

COPYRIGHT © 2024 THESE PLANS AND DESIGNS CONTAINED HEREIN ARE PROPERTY OF AAA CONSULTING AND MAY NOT BE REPRODUCED ALL OR IN PART WITHOUT WRITTEN CONSENT AND FEES PAID TO AAA CONSULTING THEREFORE ALL WAUTHORIZED USE OF THESE PLANS OR DESIGNS WILL BE CONSIDERED THIEF AND APPROPRIATE CHARGES WILL BE BROUGHT FORTH. COPYRIGHTED /ALL RIGHTS RESERVED.

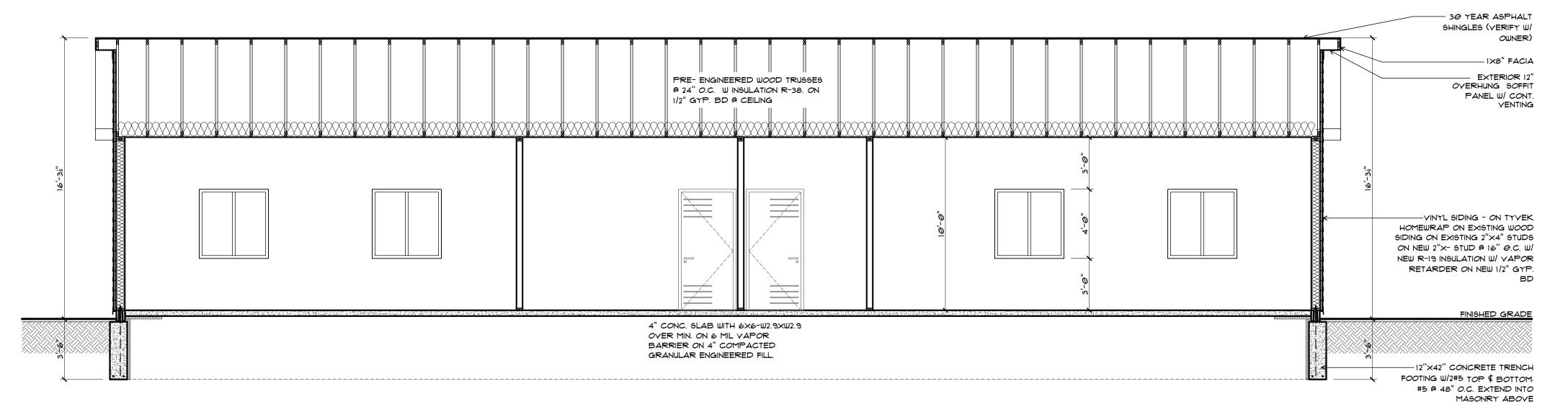
AAA CONSULTING
DESIGN-BUILD
CONSTRUCTION MANAGEMENT 29895 GREENFIELD ROAD SOUTHFIELD, MICHIGAN 48076 TEL: (313) 815-0543 EMAIL: AAA.CONSULTING@HOTMAIL.COM

02/18/2025- RELEASED FOR BUILDING PERMITS

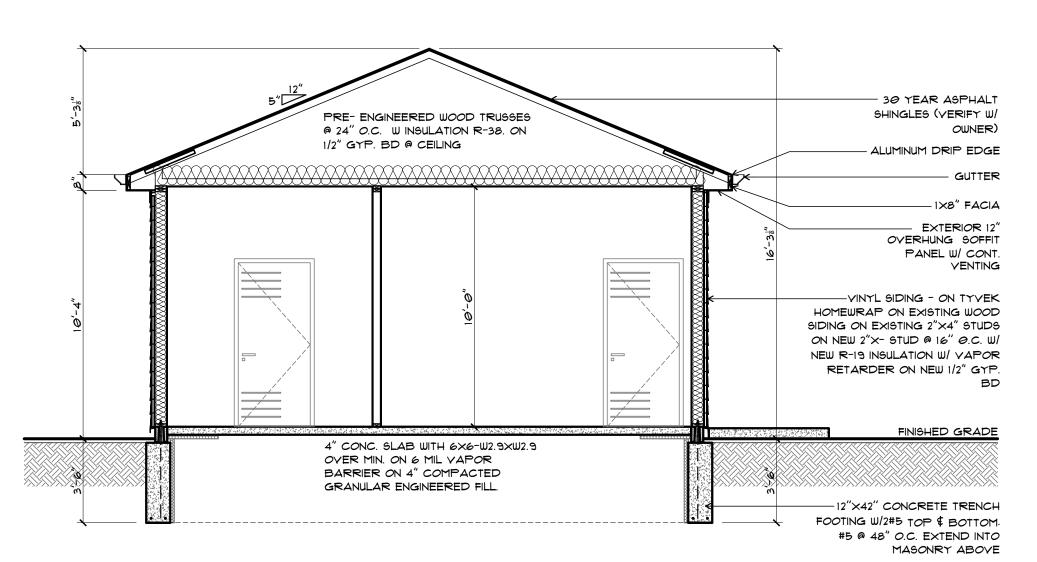
DRAWING TITLE: PROPOSED ELEVATION

DRAWING SCALE: AS SHOWN DATE: OCT.-25-2024

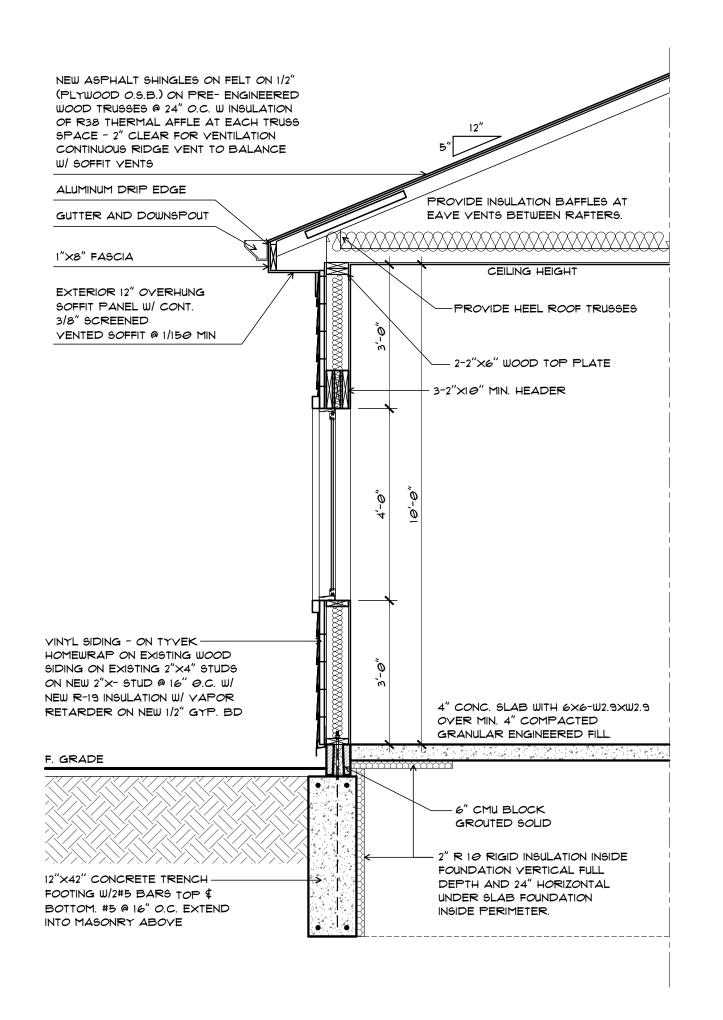
A-104



BUILDING SECTION A-A SCALE : 1/4"=1'-0"



BUILDING SECTION B-B SCALE : 1/4"=1'-0"



WALL DETAIL TYP. SCALE : 1/2"=1'-@"

THESE DRAWINGS ARE PREPARED IN ACCORDANCE WITH THE LIMITED SERVICES FOR WHICH THE ARCHITECT WAS CONTRACTED.

THIS DRAWING IS DIAGRAMMATIC AND SHOULD BE USED TO DETERMINE THE DESIGN INTENT. THE GC./OWNER SHALL FIELD VERIFY ALL WORK AND SHALL NOTIFY AAA CONSULTING/ARCHITECT IMMEDIATELY OF ANY DISCREPANCY IN THE DOCUMENTS BEFORE PROCEEDING. FAILURE TO DO SO WILL RESULT IN THE GC./OWNER TAKING FULL RESPONSIBILITY AND LIABILITY FOR SAID DISCREPANCY AND FULL WORK.

PROPOSED

DAY CARE FACILITIES WIGGLES \$ GIGGLES

1131 WHITE LAKE RD. HIGHLAND, MI 48356

OWNER/DEVELOPER: WIGGLES \$ GIGGLES

1131 WHITE LAKE RD. HIGHLAND, MI 48356

COPYRIGHT © 2024 THESE PLANS AND DESIGNS CONTAINED HEREIN ARE PROPERTY OF AAA CONSULTING AND MAY NOT BE REPRODUCED ALL OR IN PART WITHOUT WRITTEN CONSENT AND FEES PAID TO AAA CONSULTING THEREFORE ALL UNAUTHORIZED USE OF THESE PLANS OR DESIGNS WILL BE CONSIDERED THIEF AND APPROPRIATE CHARGES WILL BE BROUGHT FORTH. COPYRIGHTED /ALL RIGHTS RESERVED.

AAA CONSULTING DESIGN-BUILD CONSTRUCTION MANAGEMENT 29895 GREENFIELD ROAD SOUTHFIELD, MICHIGAN 48076
TEL: (313) 815-0543
EMAIL: AAA.CONSULTING@HOTMAIL.COM

02/18/2025- RELEASED FOR BUILDING PERMITS

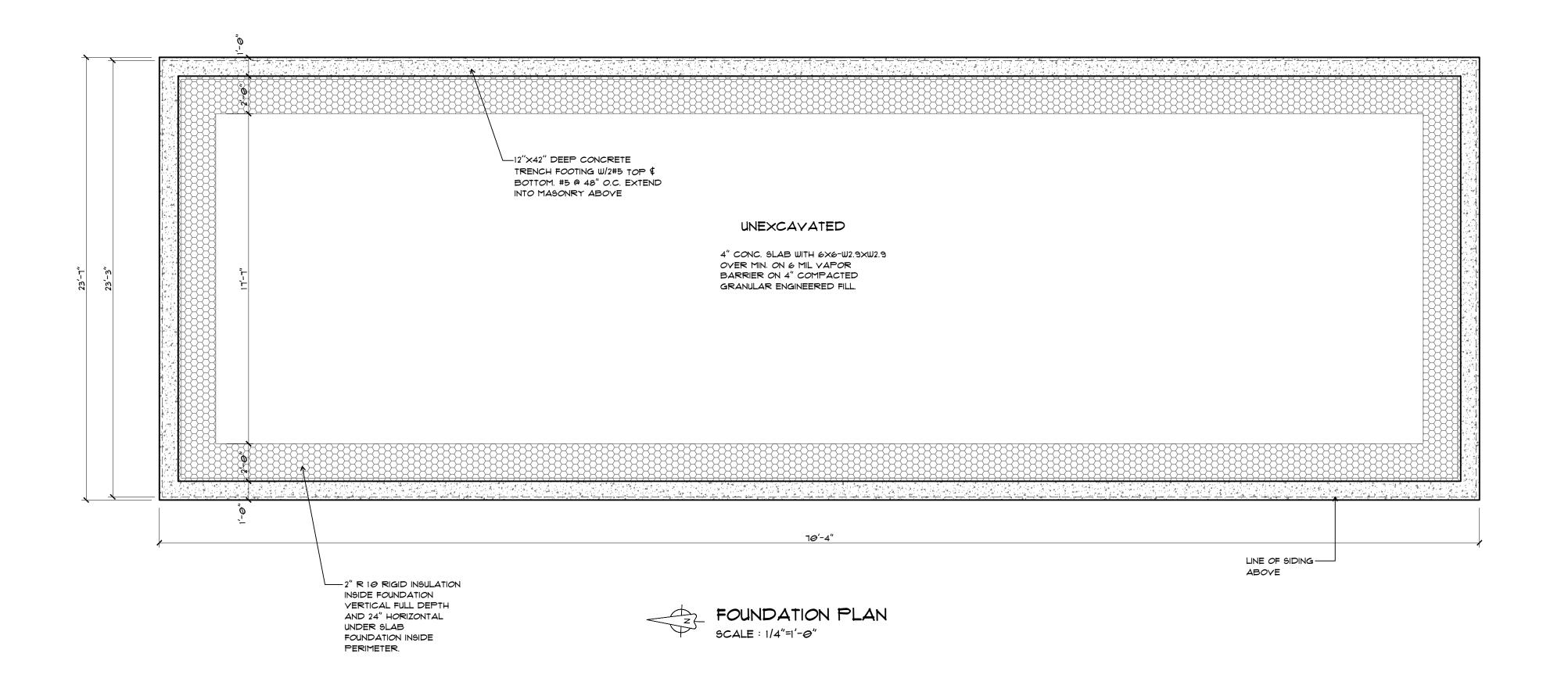
DRAWING TITLE:

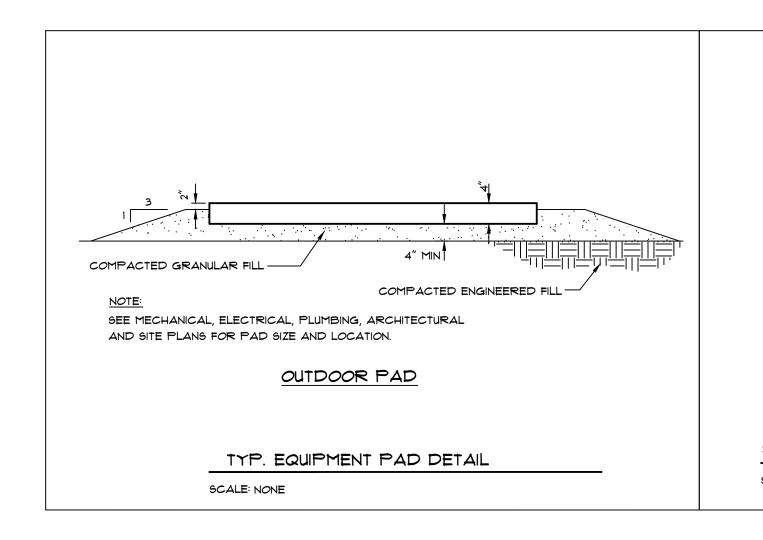
PROPOSED

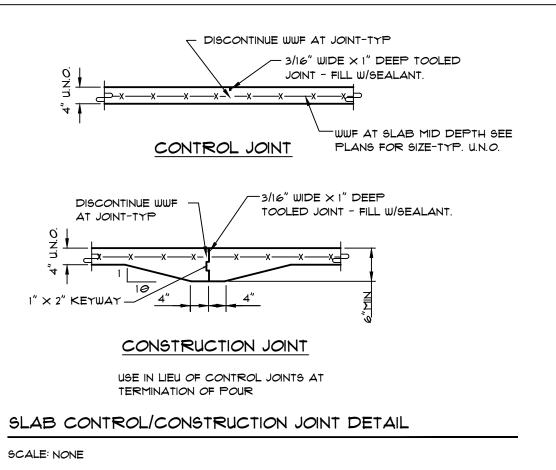
BUILDING SECTION AND DETAIL

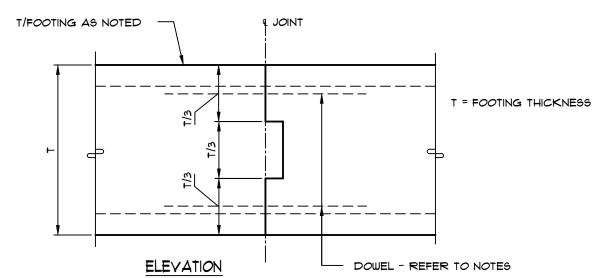
DRAWING SCALE: AS SHOWN DATE: OCT.-25-2024

A-105









NOTES:

1. DOWELS TO MATCH AND LAP 50% OF HORIZONTAL STEEL.

3. LOCATION TO MATCH MASONRY WALL, CONTROL JOINTS AND PRECAST WALL PANEL JOINTS.

2. IN LIEU OF USING DOWELS 50% OF HORIZONTAL STEEL MAY EXTEND THRU AND LAP WITH OTHER

4. TWO LAYERS OF WALL REINFORCING, ONE LAYER OF REINFORCING SIMILAR.

TYP. FOOTING CONSTRUCTION JOINT DETAIL

SCALE: NONE

REINF. STEEL.

GENERAL STRUCTURAL NOTES:

DESIGN CRITERIA AND CODE: . ALL DESIGN AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE 2015 MICHIGAN CODE AND IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS. ALL LOADS SHALL BE IN ACCORDANCE WITH THE MINIMUM DESIGN LOADS FOR BUILDING AND OTHER STRUCTURES BY ASCE.

2. MINIMUM DESIGN LOADS SHALL BE AS FOLLOWS: - ROOF SNOW/LIVE LOAD 20 PSF (GROUND SNOW) SNOW DRIFTING AND SLIDING SNOW ADDITIONAL - ROOF COLLATERAL DEAD LOAD 10 PSF - WIND LOAD (RISK CATEGORY II YU=115 MPH

(VASD=93 MPH) 3. THE DRAWINGS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT DEPICT THE METHOD OR MEANS OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL REQUIRED TEMPORARY BRACING, SHORING, ETC. TO PROTECT THE STRUCTURE DURING CONSTRUCTION. THE CONTRACTOR SHALL COMPLY WITH ALL MI O.S.HA. AND LOCAL SAFETY CODE REQUIREMENTS.

4. THE COMPLETE DETAILS OF CONSTRUCTION ARE NOT SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL PROVIDE ALL REQUIRED COMPONENTS FOR THE FINISHED STRUCTURE AND COMPLY WITH THE DESIGN INTENT OF THESE DRAWINGS. ADDITIONAL FEES/COST WILL NOT BE PAID FOR ANY ITEMS THAT ARE NECESSARY TO COMPLETE THE WORK AND RESULT IN A SOUND CONSTRUCTED AND CODE-COMPLIANCE STRUCTURE.

CONCRETE:

- DESIGN, DETAILING AND CONSTRUCTION WORK TO CONFIRM TO 318-91, ACI 315, ACI 315R, AND ACI 301 (LATEST REVISIONS).
- MIN. SOIL PRESSURE IS 3.000 PSF FOR CONTINUOUS FOOTING AND 3,000 PSF FOR SQUARE FOOTING (ISOLATED FOOTING).
- MIN. CONCRETE STRENGTH IS 3,000 PSI AND 3500 PSI FOR CONCRETE EXPOSED TO WEATHER TYPE 10 CONCRETE WITH 3" SLUMP. NO WATER OR CHLORIDE FREE SUPER PLASTICISER TO BE ADDED TO CONCRETE ON SITE WITHOUT THE APPROVAL OF THE ENGINEER. 5 TO 1% AIR ENTRAINED.
- ALL CONCRETE FILL AND MUD MATS TO HAVE MIN. CONCRETE STRENGTH OF 3,000 PSI TYPE 10.
- ALL REINFORCING STEEL SHALL BE IN ACCORDANCE WITH ASTM A432 AND A305, AND TO BE OF HARD NEW BILLET STEEL WITH FY = 58 KSI AND MINIMUM YIELD STRENGTH OF 60,000 PSI. LAP REINFORCEMENT TO BE 36 BAR DIAMETER. PROVIDE CORNER BARS AT EXTERIOR CORNERS SPACING TO MATCH HORIZONTAL REINFORCING. U.N.O. ON DRAWINGS. CONC. COVER: 3" AGAINST EARTH AND FOR SLAB 1 1/2" FROM TOP.
- ALL CONCRETE FLOOR TO BE MECHANICALLY VIBRATE. FIN. CONCRETE TO RECEIVE A 1.2 LB./G.F. T RAP ROCK/CEMENT SHAKE FINISH AND MEADOWS CURE HARD CURING/HARDENING APPLICATION.
- ALL COLUMN ANCHOR BOLTS TO BE CAST IN CONCRETE U.N.O. ON DRAWINGS.. CRUSH STONE OR SAND SUB BASE OR/AND FILL TO BE COMPACTED TO 100% MODIFIED PROCTOR DENSITY.
- 8. ALL EXPOSED CONCRETE EDGES TO BE 3/4"
- CHAMFERED. THE CONTRACTOR SHOULD COOPERATE WITH AN INDEPENDENT AGENCY FOR CONCRETE SLUMP TEST, SUB BASE AND FILL COMPACTION REPORTS. AGENCY TO BE APPOINTED BY GENERAL
- CONTRACTION AND REMUNERATED BY OWNER. 10. SUBMIT ONE SEPIA AND THREE BLUEPRINTS COPIES OF SHOP DRAWINGS OF ALL CONCRETE. ANCHOR BOLT LAYOUTS, REBAR AND REINFORCING STEEL TO ENGINEER FOR REVIEW
- PRIOR TO FABRICATIONS. HOT WEATHER REQUIREMENTS: DURING HOT WEATHER, PRECAUTIONS SHALL BE TAKEN TO CURING METHOD, CONCRETE TEMPERATURE, WATER EVAPORATION HANDLING
- OR ANYTHING THAT WOULD REDUCE THE STRENGTH OF CONCRETE. COLD WEATHER REQUIREMENTS: CONCRETE TO BE PLACED DURING FREEZING OR NEAR FREEZING SHALL COMPLY WITH THE
- FOLLOWING: A- PROVIDE HEATING EQUIPMENT FOR EQUIPMENT OF CONCRETE DURING FREEZING. B- CONCRETE MATERIALS AND REINFORCEMENT, FORMS, FILLERS AND GROUND WITH WHICH CONCRETE IS TO COME IN CONTACT SHALL BE FREE FROM FROST.
- C- FROZEN MATERIALS OR MATERIALS CONTAINING ICE SHALL NOT BE USED. D- GROUT SHOULD BE PLACED BELOW 4° C.
- S. FOUNDATION PLAT AND SILL PLAT SHALL BE PRESSURE TREATED AND BOLTED TO FOUNDATION WITH MINIMUM 1/2" BOLTS AT 6' O.C. MAX. AND 1" MIN. EMBEDMENT INTO FOUNDATION. ALL PLAT IN CONTACT WITH CONCRETE MUST BE PRESSURE TREATED.
- 4. ALL CONCRETE AND REINFORCING STEEL SHALL BE IN ACCORDANCE WITH A.C.I. 318 AND SHALL HAVE A MINIMUM DESIGN STRENGTH (F'C) OF 4000 PSI AT 28 DAYS.
- 15. ALL EXTERIOR SLABS SHALL BE AIR-ENTRAINED AT THE RATE OF 6%.
- 6. ALL REINFORCING BARS SHALL BE CONTINUOUS AND IN ACCORDANCE WITH ASTM A615, GRADE 60. REINFORCING STEEL SHALL BE CONTINUOUS AND SHALL BE DEVELOPED AND/OR SPLICED IN ACCORDANCE WITH ACI 318 REQUIREMENTS. PROVIDE LAPPING CORNER BARS ALL ALL CORNERS.
- ALL WELDED WIRE FABRIC SHALL BE FLAT SHEETS, ROLLS ARE NOT PERMISSIBLE.

ALL MASONRY WORK SHALL BE IN ACCORDANCE WITH ACI 530-LATEST EDITION.

2. CMU UNITS SHALL HAVE A PRISM STRENGTH (F'M) OF 1500 PSI AT 28 DAYS AND SHALL CONFORM TO ASTM COO. ALL MASONRY GROUT AND MORTAR SHALL BE TYPE S.

3. U.N.O. ON THE PLANS, ALL WALLS SHALL BE

- REINFORCED WITH MINIMUM #5 VERTICAL BARS PLACED AT 48" AND AT EACH CORNER U.N.O. REINFORCEMENT SHALL BE PROPERLY EMBED AND TIED OFF INTO THE SLAB OR FOUNDATION PRIOR TO CONCRETE PLACEMENT. CONTRACTOR MAY PLACE REBARS AFTER CONCRETE HAS BEEN POURED BY FIELD DRILLING HOLES AND EPOXY EMBEDDING THE REINFORCEMENT WHERE NOTED.
- 4. DOVETAIL ANCHORS: AT 16" VERTICALLY, UNLESS NOTED OTHERWISE, WHERE CMU WALLS ABUT CONCRETE SURFACES. 5. REINFORCEMENT SHALL BE GROUTED WITH IN
- MASONRY AND SHALL HAVE THE DEVELOPMENT AND LAP LENGTH BY ACI 530 BUT NO LESS THAN 36 BAR DIAMETER.

PROPOSED DAY CARE FACILITIES WIGGLES \$ GIGGLES

OWNER/DEVELOPER:

WIGGLES \$ GIGGLES

1131 WHITE LAKE RD.

HIGHLAND, MI 48356

1131 WHITE LAKE RD. HIGHLAND, MI 48356

COPYRIGHT © 2024 THESE PLANS AND DESIGNS CONTAINED HEREIN ARE PROPERTY OF AAA CONSULTING AND MAY NOT BE REPRODUCED ALL OR IN PART WITHOUT WRITTEN CONSENT AND FEES PAID TO AAA CONSULTING THEREFORE ALL UNAUTHORIZED USE OF THESE PLANS OR DESIGNS WILL BE CONSIDERED THIEF AND APPROPRIATE CHARGES WILL BE BROUGHT FORTH. COPYRIGHTED /ALL RIGHTS RESERVED.



02/18/2025- RELEASED FOR BUILDING PERMITS

DRAWING TITLE: PROPOSED FOUNDATION PLAN AND DETAILS

DRAWING SCALE: AS SHOWN DATE: OCT.-25-2024

S1.0

MECHANICAL SPECIFICATIONS:

GENERAL

- 1. ALL WORK SHALL BE IN ACCORDANCE WITH EQUIPMENT MANUFACTURER'S REQUIREMENTS AND RECOMMENDATIONS.
- 2. THE MECHANICAL PLANS ARE DIAGRAMMATIC. CONTRACTOR SHALL FIELD VERIFY AND DETERMINE EXISTING CONDITIONS AND LIMITATIONS UNDER WHICH THE WORK IS TO BE PERFORMED. THE SUBMISSION OF A BID SHALL BE CONTURED AS INDICATING SUCH KNOWLEDGE THAT SUCH EXAMINATION HAS BEEN MADE AND VERIFIED.
- 3. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE STATE AND LOCAL BUILDING, MECHANICAL CODES.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL NECESSARY PERMITS REQUIRED TO COMPLETE THE PROJECT.
- 5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF

CONTRACTOR SHALL WARRANTY ALL WORKMANSHIP, MATERIALS AND PERFORMANCE FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL

NEW EQUIPMENT

- 1. CONTRACTOR SHALL PROVIDE ONE-YEAR LABOR WARRANTY FOR ALL WORK ASSOCIATED WITH THIS PROJECT. EQUIPMENT MANUFACTURER SHALL PROVIDE ONE YEAR PARTS WARRANTY
- 2. NEW EQUIPMENT SHALL BE SECURED IN ACCORDANCE WITH STATE BUILDING AND ENERGY CODE.

AIR BALANCE

- 1. CONTRACTOR SHALL PROVIDE PROPER TESTING, ADJUSTING AND BALANCING OF THE SYSTEM TO ACHIEVE SPECIFIED PERFORMANCE.
- 2. ALL TESTING PROCEDURES SHALL BE PER ASSOCIATED AIR BALANCING COUNCIL (AABC) PROCEDURAL STANDARDS FOR TESTING, ADJUSTING AND BALANCING OF ENVIRONMENTAL SYSTEMS THROUGH AN APPROVED CERTIFIED AGENCY AND TECHNICIAN COMPLETE WITH SUBMITTAL REPORT.

WARRANTY

1. CONTRACTOR SHALL WARRANTY ALL WORKMANSHIP, MATERIALS AND PERFORMANCE FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE.

IDENTIFICATION

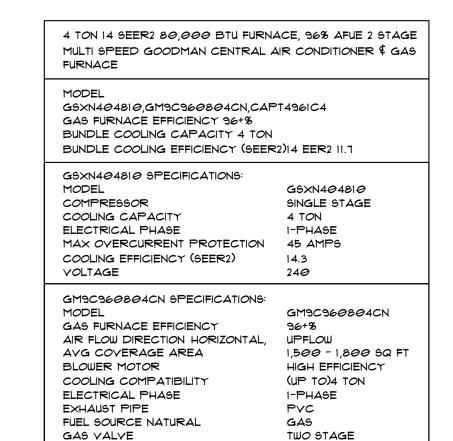
- PROVIDE PLASTIC ENGRAVED EQUIPMENT TAGS ON ALL NEW EQUIPMENT.
- 2. PROVIDE A PLASTIC NAMEPLATE ON ELECTRICAL PANEL NEAR FUSE SWITCH TO IDENTIFY EQUIPMENT SERVED.

SHEET METAL

- ALL SHEET METAL WORK SHALL BE IN ACCORDANCE WITH INDUSTRY STANDARDS, PUBLISHED BY THE SHEET METAL \$ AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION, INC., AND THE LATEST ASHRAE GUIDE, APPLICABLE TO LOW PRESSURE SYSTEMS.
- NEW DUCTWORK SHALL BE MINIMUM 26 GAUGE GALYANIZED SHEET METAL. DUCTWORK SHALL SECURELY BRACED TO PREVENT VIBRATION.
- 3. PROVIDE TURNING VANES IN ALL 90 DEGREE ELBOWS AND AIR EXTRACTORS AT ALL BRANCH DUCT TAKE-OFFS.

TEMPERATURE CONTROL SYSTEM

- 1. NEW ROOF TOP A/C UNITS SHALL BE CONTROLLED THROUGH HONEYWELL T1300 SERIES 2000 MICROELECTRONIC ROOM THERMOSTAT.
- 2. RETURN AIR SMOKE DETECTOR SHALL SHUT-DOWN ROOF TOP UNIT WHEN ACTIVATED.
- 3. NEW THERMOSTATS SHALL BE MOUNTED AT 48" AFF.



CAPT4961C4 SPECIFICATIONS: MODEL AIR FLOW DIRECTION	CAPT4961C4 VERTICAL
COOLING CAPACITY	4 TON, 5 TON

15,001 - 80,000 BTU

2 INCHES, 3 INCHES

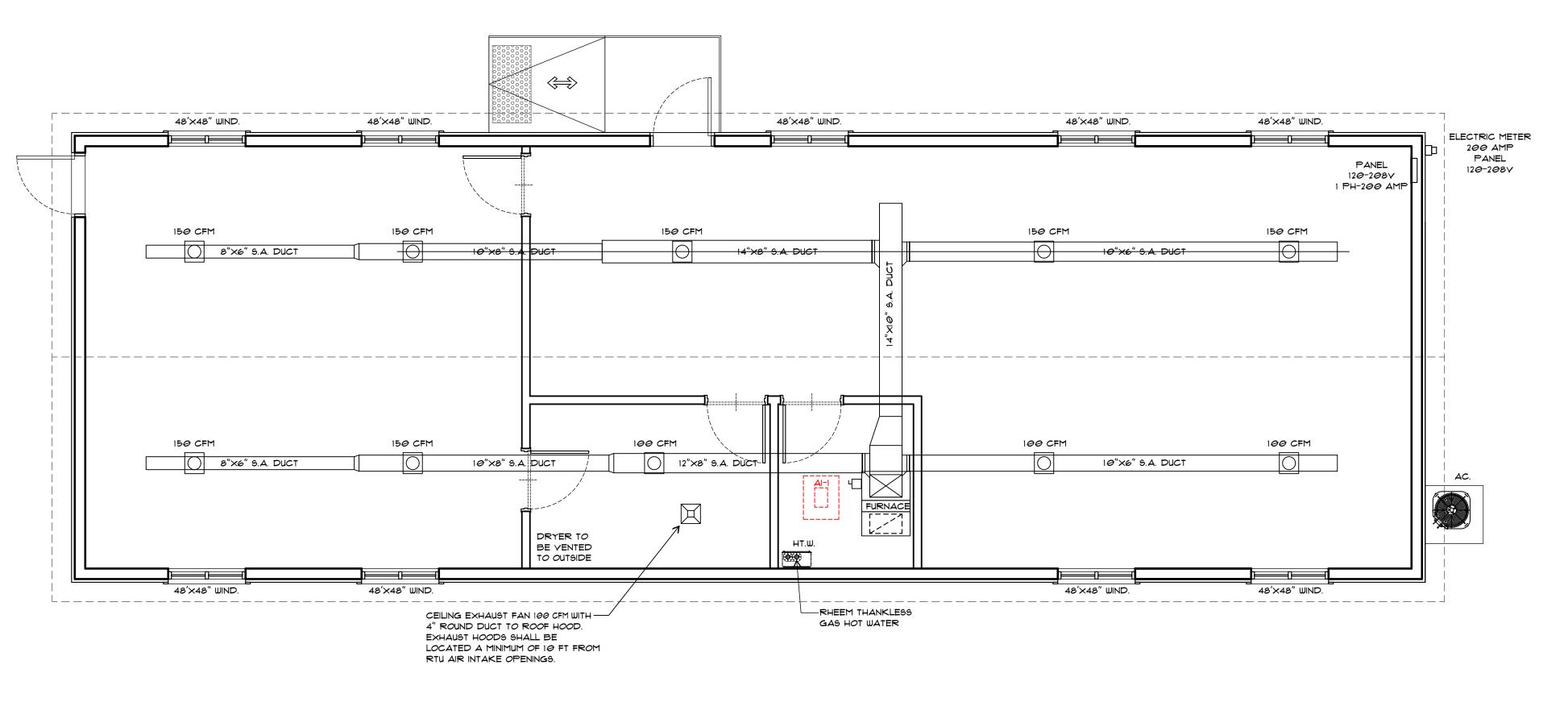
MAX OVERCURRENT PROTECTION 15 AMPS

PRIMARY HEATING CAPACITY

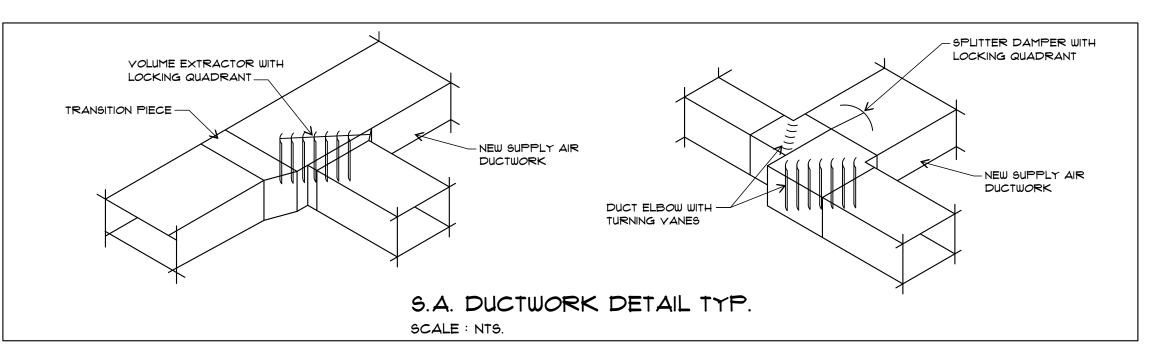
YENT CONNECTION

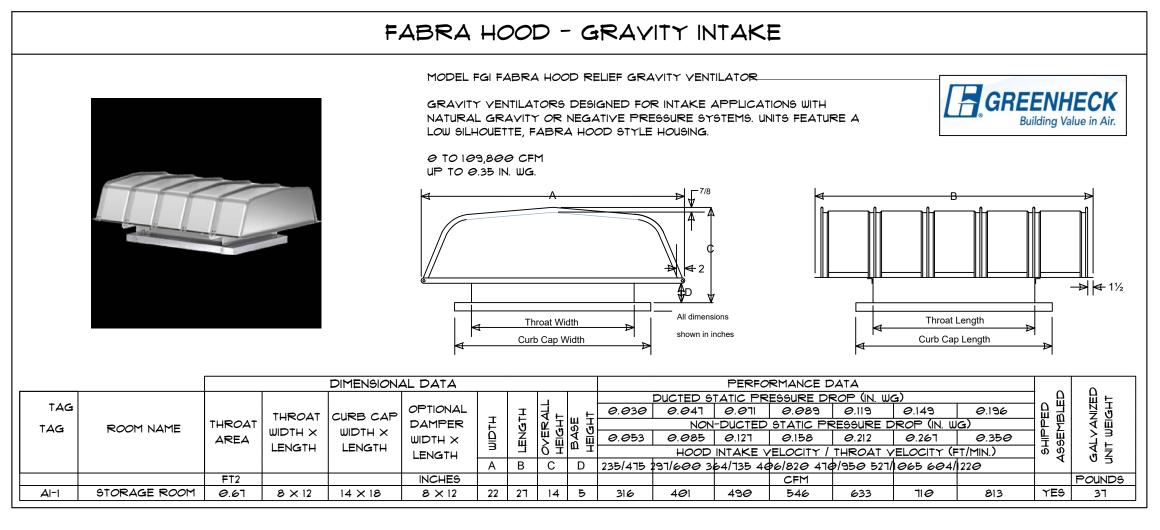
VOLTAGE

co		9481 <i>0**</i> /CA*T4 0 °F IBD, 61		00 CFM
"OUTDOOR TEM. ° F."	"TOTAL BTU/H"	"SENSIBLE BTU/H"	"LATENT BTU/H"	"TOTAL WATTS"
75	48,680	35,050	13,630	3,280
80	48,090	35,210	12,880	3,470
85	47,490	35,360	12,130	3,650
90	46,460	35,020	11,440	3,860
95	45,430	34,680	10,750	4,060
100	44,180	34,190	9,990	4,290
105	42,920	33,690	9,230	4,510
110	41,770	33,810	7,97€	4,780
115	40,620	33,920	6,100	5,040
TVAC	ONDITIONS (95° OD DB	, 75° ID DB	63° ID WB
95°	43,83 <i>0</i>	33,900	9,930	4,060









				i	RESTROO	M EXH	IAUS1	FAI	15	CH	EDULE	
SYMBOL	SERVICE	TYPE	DRIVE	CFM	EXT. STAT. PRESSURE	WATTS		ECTRI VOLT			MANUFACTURER \$ MODEL	REMARK
EF- 1	TOILET ROOM	CEILING MOUNTED	DIRECT	100	.25" WG	16.7	870	115	1	60	GREENHECK MODEL SP-ASO	EXHAUST MUST BE 10 FEET AWAY FROM PROPOSED MAKE UP AIR UNIT

MINIMUM VENTILATION CFM MEETS 2015 IMC TABLE. 403.3

PROVIDE OPTIONAL ROOF HOOD WITH BACKDRAFT DAMPER

TOTAL PIPE RUN: 15' TOTAL NEED: 192 MBH=CFH

NATURAL GAS PIPE SIZING CHART

LENGTH OF				SIZE OF F	PIPE IN IN	CHES			
LENGTH OF	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"
10	108	230	387	793	1237	2259	3640	6434	
20	75	160	280	569	877	1610	2613	5236	9521
30	61	129	224	471	719	1335	2165	4107	7859
40	52	110	196	401	635	1143	1867	3258	6795
50	46	98	דדו	364	560	1041	1680	2936	6142
60	42	89	159	336	513	957	1559	2684	5647
10	38	82	149	317	476	896	1447	2492	5250
80	36	76	140	239	443	840	1353	2315	4900
90	33	71	133	275	420	793	1288	22@3	4667
100	32	68	126	266	411	775	1246	2128	4518
125	28	60	117	243	369	100	1143	1904	4065
150	25	54	105	215	327	625	1008	1689	3645
175	23	50	93	196	303	583	993	1554	3370
200	22	47	84	182	280	541	דדפ	1437	3160
				1				—	

NATURAL GAS FLOW IS GIVEN IN THOUSANDS OF BTU/HR. - ONE CUBIC FOOT OF LP GAS = 1000 BTU NOMINAL PRESSURE AT THE BURNER FOR NATURAL GAS IS 3.5" OF WATER COLUMN. (TYPICAL MACHINE SUPPLY 5"-1") PIPE LENGTH MUST INCLUDE ADDITIONAL LENGTH FOR ALL FITTINGS. ADD APPROXIMATELY 5 FEET OF PIPE PER FITTING NATURAL GAS EXAMPLE: A MACHINE WITH A BURNER THAT REQUIRES 440,000 BTU WOULD NEED A 1-1/4" PIPE FOR A 20' LONG RUN.

300 | 17 | 37 | 70 | 145 | 224 | 439 | 686 | 1139 | 2539

NOTE

- CFM CALCULATIONS BASED ON THE MANUFACTURER UL-LISTING AND MMC-2021 STATE MECHANICAL CODE.
- EXHAUST AND MAKE-UP AIR MUST BE INTERLOCKED AT ALL TIMES.
 BALANCED EXHAUST AND MAKE-UP. FINAL BUILDING PRESSURE SHOULD NOT EXCEED +/.02 WATER GAUGE SMOKE CAPTURE TEST TO BE WITNESSED BY THE MECHANICAL
 INSPECTOR
- PROVIDE THE FOLLOWING AS REQUIRED BY LOCAL CODE:
- ECONOMIZER . - SMOKE DETECTORS WITH STATUS REMOTE PANELS.
- SMOKE DETECTORS WITH STATUS REMOTE PANELS.
 1-DAY DIGITAL PROGRAMMABLE T'STAT.
- OFA: OUISIDE FRESH AIR REQUIREMENI BASED ON MMC-2009 IABLE 403.3 - PRIOR TO FINAL INSPECTION PROVIDE CERTIFIED AIR BALANCE REPORT TO ALL EXHAUST
- \$ SUPPLY AIR UNITS.
 PROVIDE MIN 10' HORIZONTAL
- PROVIDE MIN. 10' HORIZONTAL OR 3'-0" VERTICAL DISTANCE BETWEEN EXHAUST FANS AND FRESH AIR INTAKES OF ALL HYAC UNITS.

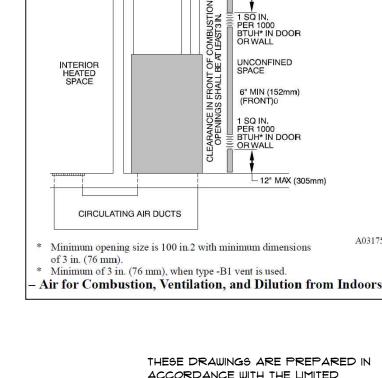
THE (M.E.P.) MECHANICAL, ELECTRICAL AND PLUMBING WILL BE SUBJECT FOR A SEPARATE CITY PERMIT BY CONTRACTORS PER MBC. AND CITY CODES.

MECH NOTES:

- 1. THE H.V.A.C. CONTRACTOR SHALL PERFORM ALL WORK REQUIRED TO COMPLETE THE HEATING, COOLING AND VENTILATING SYSTEMS AS SPECIFIED HEREIN AND AS SHOWN ON DRAWINGS.
- 2. ALL DUCTS SHALL BE INSULATED.
- 3. INTERIOR OF ALL DUCTS AND EQUIPMENT CASINGS SHALL BE THOROUGHLY BLOWN OUT AND CLEANED BEFORE FANS AND FILTERS ARE OPERATED. CHECK ALL BEARINGS FOR LUBRICATION. CHECK MOTORS AND FANS FOR ALIGNMENT AND A FOR VIBRATION-FREE OPERATION. DUCTS SHALL BE TESTED FOR LEAKAGE AND REPAIRS MADE, IF REQUIRED.
- 4. THE H.V.A.C. CONTRACTOR SHALL BALANCE, ADJUST AND TEST THE AIR MOVING EQUIPMENT AND AIR DISTRIBUTION AND EXHAUST SYSTEM IN ACCORDANCE WITH STATE REGULATIONS.
- 5. THE H.V.A.C. CONTRACTOR SHALL SERVICE THE EQUIPMENT FOR A PERIOD OF ONE (1) YEAR AFTER THE DATE OF ACCEPTANCE OF THE BUILDING BY THE OWNER. HE SHALL REPAIR OR REPLACE ANY MALFUNCTIONING EQUIPMENT DURING THAT PERIOD AT NO COST TO THE OWNER.
- 6. SUPPLY AIR DIFFUSER AND RETURN GRILLS SHALL BE LAY-IN PERFORATED TYPE, TITUS PAS \$ PAR.
- 1. MECHANICAL CONTRACTOR SHALL INSTALL ALL EQUIPMENT, FIXTURE AND PIPING ACCORDING TO MANUFACTURER'S RECOMMENDATION, LOCAL CODES AND AUTHORITIES HAVING JURISDICTION.
- 8. WATER HEATER SHALL INSTALLED PER APPLICABLE CODES.
- CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITION AND NOTIFY THE ENGINEER FOR ANY OBSTRUCTION TO THE PERFORMANCE OF THE JOB.

	VENTILATION SCHEDULE PER MMC.SECTION 403												
ROOM NAME	AREA (SQ.FT.)	AREA O.A. RATE	AREA O.A.	PEOPLE	PEOPLE O.A. RATE	PEOPLE O.A.	AREA+PEOPLE CODE O.A.	DESIGN O.A. RATE					
TODDLER	509	.18 CFM/9Q.FT.	92 CFM	15	10 CFM/PR	150 CFM	242 CFM	242 CFM					
BABY A	226	.18 CFM/9Q.FT.	41 CFM	6	10 CFM/PR	60 CFM	101 CFM	1 <i>0</i> 1 CFM					
BABY B	451	.18 CFM/9Q.FT.	81 CFM	13	10 CFM/PR	130 CFM	211 CFM	211 CFM					
TOTAL AREA							554 CFM	554 CFM					

INSTALL 14" DIA. DUCT TO OUTSIDE PROVIDE 554 FRESH AIR PER MMC 403.3.



ACCORDANCE WITH THE LIMITED SERVICES FOR WHICH THE ARCHITECT WAS CONTRACTED.

VENT THROUGH ROOF

THIS DRAWING IS DIAGRAMMATIC AND SHOULD BE USED TO DETERMINE THE DESIGN INTENT. THE GC./OWNER SHALL FIELD VERIFY ALL WORK AND SHALL NOTIFY AAA CONSULTING/ARCHITECT IMMEDIATELY OF ANY DISCREPANCY IN THE DOCUMENTS BEFORE PROCEEDING. FAILURE TO DO SO WILL RESULT IN THE GC./OWNER TAKING FULL RESPONSIBILITY AND LIABILITY FOR SAID DISCREPANCY AND FULL WORK.

PROPOSED

DAY CARE FACILITIES
WIGGLES \$ GIGGLES

1131 WHITE LAKE RD. HIGHLAND, MI 48356

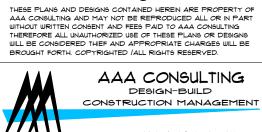
OWNER/DEVELOPER:
WIGGLES \$ GIGGLES

1131 WHITE LAKE RD.

HIGHLAND, MI 48356

COPYRIGHT © 2024

THESE PLANS AND DESIGNS CONTAINED HEREIN ARE PROPAAA CONSULTING AND MAY NOT BE REPRODUCED ALL OR





ISSUED:

02/18/2025- RELEASED FOR BUILDING PERMITS

DRAWING TITLE:
PROPOSED
MECHANICAL PLAN

DATE: OCT.-25-2024

M-200

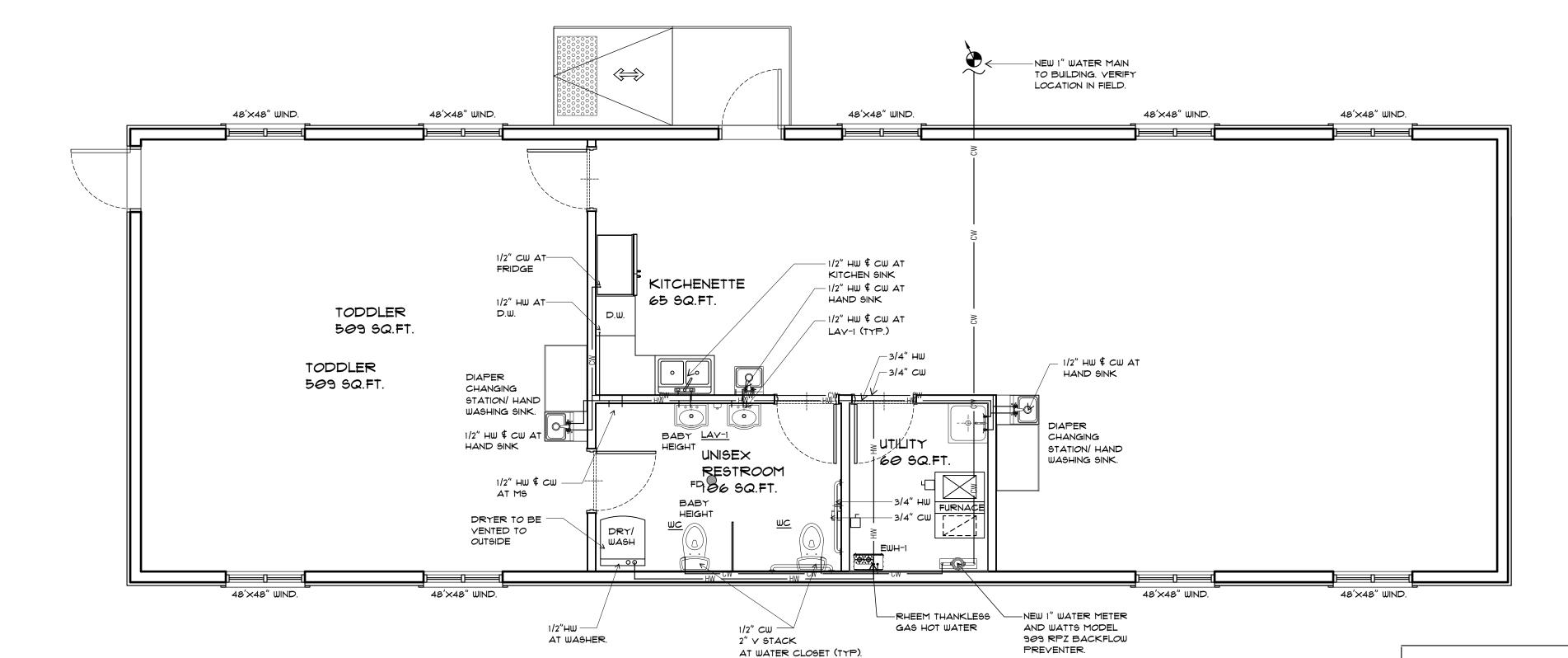
SANITARY SEWER AND VENTING PLAN SCALE: 1/4"=1'-0"

RHEEM THANKLESS

-WATER METER

BACKFLOW PREVENTERS

WASHER



DOMESTIC WATER PLAN SCALE : 1/4"=1'-0"

FLOOR DRAIN TRAP SEAL NOTE:

CONTRACTOR SHALL INSTALL SURESEAL INLINE TRAP

TEMPERING VALVE NOTE:

TO INDIVIDUAL · INSTALL AN APPROVED PLUMBING UNIT BACKFLOW PREVENTION DEVICE AT SERVICE CONNECTION PRESSURE REDUCING VALVE

WATER RISER DIAGRAM

PLUMBING CONTRACTOR TO SUBMIT BACKFLOW PREVENTOR FOR REVIEW BY BUILDING OFFICAL

PLUMBING SPECIFICATIONS:

GENERAL

CONDITIONS.

- 1. PLUMBING CONTRACTOR SHALL FIELD VERIFY ALL EXISTING
- PLUMBING INSTALLATION SHALL COMPLY WITH ALL LOCAL CODES. 3. INSTALL NEW PLUMBING LINES TO CONNECT NEW PLUMBING EQUIPMENT AND FIXTURES INDICATED ON PLANS. NEW FIXTURES SHALL BE INSTALLED PER ADA REQUIREMENTS, LOCAL CODES AND MANUFACTURERS REQUIREMENTS.
- 4. INCLUDE ALL NECESSARY ANCHORS, BRACES, MISCELLANEOUS STEEL, WALL BRACKETS AND RISER CLAMPS REQUIRED FOR A PROPER INSTALLATION.
- 5. YENT LINES THRU ROOF SHALL BE 3" MINIMUM AND SHALL
- TERMINATE 24" ABOVE ROOF. 6. PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL SHOCK ABSORBERS OR AIR CHAMBERS AT EACH HOT AND COLD WATER FIXTURE CONNECTION. CHAMBERS SHALL BE 18" HIGH AND OF THE SAME DIAMETER AS THE FIXTURE CONNECTION BUT NOT LESS THAN
- SUPPORT ALL RISERS AT BASE.
- 8. MAKE FINISHED PIPING CLEAN, FREE FROM FOREIGN MATTER AND WITH NO BURRS, WELDING ICICLES OR OTHER OBSTRUCTIONS. 9. INSTALL ALL PIPING TO PERMIT EASY DRAINING. ADJUST HANGERS AND SUPPORTS TO ELIMINATE SAG POCKETS. PROVIDE HOSE END DRAIN VALVES AT ALL LOW POINTS TO PERMIT DRAINING OF THE ENTIRE DOMESTIC WATER SYSTEM.
- 10. INSTALL PIPING TO PERMIT EXPANSION AND CONTRACTION WITHOUT UNDUE STRESS, PARTICULARLY AT FLASHING AND EQUIPMENT. 11. SUPPORT PIPING FROM ROOF BEAMS, TRUSSES OR JOIST. DO NOT
- HANG OR SUPPORT PIPING FROM ROOF DECK. NEW PIPING SHALL RUN CONCEALED IN FINISHED AREAS.
- 13. WHERE PIPES PASS THRU FINISHED WALLS OR CEILING, INSTALL A STEEL OR BRASS ESCUTCHEON PLATE WITH SET SCREW. 14. PERMANENTLY LABEL AND TAG ALL VALVES INDICATING THE PART
- OF THE SYSTEM CONTROLLED. 15. WARRANTY ALL WORKMANSHIP, MATERIALS AND PERFORMANCE
- FOR A PERIOD OF ONE (1) YEAR FROM DATE OF FINAL ACCEPTANCE. 16. INSTALL ALL PIPING PARALLEL OR AT RIGHT ANGLES WITH BEAMS, WALLS, OR OTHER BUILDING LINES. INSTALL ALL EXPOSED PIPING

AS CLOSE AS PRACTICAL TO WALLS, COLUMNS, OR OVER HEAD CONSTRUCTION TO PROVIDE MAXIMUM HEAD ROOM AND MINIMUM INTERFERENCE WITH USABLE BUILDING SPACE.

- 1. NEW DOMESTIC WATER LINES SHALL BE TYPE "L" HARD COPPER WITH SOLDERED COPPER JOINTS AND FITTINGS.
- SHOCK ABSORBERS AND SHUT-OFF VALVES ARE TO BE PROVIDED AT EACH FIXTURE OR GROUP OF FIXTURES.
- PROVIDE 1/2" THICK, HEAVY DUTY FIBERGLAS PIPE INSULATION WITH VAPOR BARRIER JACKET ON NEW WATER LINES. COLD WATER LINES SHALL HAVE 1/2" THICK INSULATION. HOT WATER LINES SHALL HAVE 3/4" THICK INSULATION.
- 4. NEW DOMESTIC WATER LINES SHALL BE THOROUGHLY TREATED AND STERILIZED WITH A LIQUID CHLORINE GAS, WATER SOLUTION IN AMOUNTS OF 250PPM CHLORINE CALCULATED ON THE VOLUME OF WATER IN THE NEW PIPING SYSTEM OR AS DIRECTED BY THE
- LOCAL HEALTH DEPARTMENT. 5. AFTER STERILIZING, FLUSH ALL LINES THOROUGHLY.

SANITARY \$ VENT

- 1. PRIOR TO INSTALLATION OF NEW SANITARY LINES, CHECK AND CONFIRM INVERT ELEVATIONS REQUIRED FOR SEWER CONNECTIONS AND ENSURE THAT THESE CAN BE PROPERLY CONNECTED WITH SLOPE FOR DRAINAGE.
- 2. NEW SANITARY AND VENT PIPING SHALL BE PVC SCHEDULE 40 ASTM 1488. SANITARY LINES BELOW FLOOR SHALL BE 3" MINIMUM.
- 3. SANITARY AND WASTE LINES 2 1/2" AND SMALLER SHALL PITCH NOT LESS THAN 1/4" TO THE FOOT. LARGER PIPE SHALL PITCH NOT LESS THAN 1/8" TO THE FOOT.
- 4. CONTRACTOR SHALL PROVIDE A CLEAN OUT FOR THE SANITARY LINE EVERY 90 FT AND EVERY CHANGE IN DIRECTION.

Venting								
	NIT: MAX. EQUIVA GTHS - STRAIGHT							
Number of 90	Max Length 2"	Max. length 3"	Water Flow (GPM) Temperature Rise (°F)					
Elbows	straight pipe	straight pipe	Model Number					
0	60 ft. (18.3 m)	150 ft. (45.7 m)	Estimates are for	Estimates are for sizing purposes only.				
1	54 ft. (16.5 m)	144 ft. (43.9 m)						
2	48 ft. (14.6 m)	138 ft. (42.7 m)		Clearance	 es			
3	42 ft. (12.8 m)	132 ft. (40.2 m)	Top / Bottom		12"			
4	36 ft. (11.0 m)	126 ft. (38.4 m)	Front		1/2"			
5	30 ft. (9.1 m)	120 ft. (36.6 m)	Sides		1/2"			
6	24 ft. (7.3 m)	114 ft. (34.7 m)	Back / From \	Vent Pipe	0"			

1/2"

1/2"

1/2"

PLUMBING FIXTURE SCHEDULE

PLUMBING

CONTRACTOR

PROVIDED MANUFACTURER

KOHLER

AMERICAN STANDARD

REGENCY

ZURN

ZURN

ZURN

ZURN

Venting Materials Allowed: Schedule 40 PVC, CPVC, Polypropylene

YENT

1-1/2"

1-1/2"

1-1/2"

1-1/2"

CW

1/2"

1/2"

1/2"

1/2"

EQUIPMENT

WC ADA WATER CLOSET (TANK

LAY-1 LAYATORY (WALL HUNG)

HAND SINCK (WALL HUNG)

FS FLOOR SINK

WALL CLEAN OUT

FLOOR CLEAN OUT

MOP SERVICE BASIN 24" × 24"

THREADED -HANGER ROD - ADJUSTABLE CLEVIS PIPE HANGER, GRINNELL FIGURE 260 OR EQUIVALENT INSULATION SHALL BE RUN CONTINUOUS THROUGH HANGERS PIPE INSULATION. (SEE SPECIFICATIONS) INSULATION PROTECTION SHIELD. USE 16 GAUGE SHEET STEEL, 2 PIPE DIAMETER LONG, 120 DEGREES SUPPORT, OR GRINNELL

NOTE: THIS DETAIL TYPICAL FOR ALL CW AND HW PIPING.

PIPING SUPPORT DETAIL

PLUMBING NOTES:

Specifications

Rheem Model Number

Built-in LeakGuard Model Number

Gas Input MAX

Uniform Energy Factor (UEF)

Gallons
Per -Minute
(GPM)

MAX (35°F)

45°F Rise

67°F Rise

Number of Bathrooms1

Temp. Range

Temp. Setting from Factor

High Temp. Upgrade

Available

Freeze Protection

Installation Type

Heat Exchanger Material

Minimum Activation Flow

Maximum Altitude

Ultra Low NOx

Warranty

Width

Weight (Lbs.)

Venting Diam, Allowed

Max. Single Vent Run

(straight pipe)

Venting Materials

Power Supply

Gas Connection

Hot Water Connection **Cold Water Connection** Condensate Connection

K-3979

FD2375-NH3-H

Z-1446

ZN-1400-X

Z1996-24

Manifold Controls (max. units)

Minimum Continuous Flow

MAX (35°F)

- THE CONTRACTOR SHALL VISIT AND CAREFULLY EXAMINE THE PORTION OF BUILDING AND SITE AFFECTED BY THIS WORK BEFORE SUBMITTING PROPOSALS, SO AS TO BECOME FAMILIAR WITH EXISTING CONDITIONS.
- 2. UTILITY AND SERVICE SHOWN ARE FOR REFERENCE ONLY, IT IS TO BE UNDERSTOOD THAT UNFORESEEN CONDITIONS PROBABLY EXIST AND NEW WORK MAY NOT BE FIELD LOCATED EXACTLY AS SHOWN ON THE
- THE CONTRACTOR SHALL FURNISH AND PROVIDE ALL DEMOLITION REQ'D TO ACCOMMODATE THIS PROJECT WHETHER INDICATE ON DRAWINGS OR DIRECTED IN THE FIELD.
- 4. PERFORM WHATEVER WORK IS NECESSARY TO SATISFY THE PURPOSE OF THE NEW WORK AND LEAVE SERVICE AND STRUCTURES IN SATISFACTORY AND SERVICEABLE CONDITION.

Rheem RTGH Series Super High Efficiency

Condensing Tankless Gas Water Heaters

Indoor Models

11,000-199,900 BTU/h

Natural Gas and

Liquid Propane Models*

*Swap P for N in model number for Liquid Propane model

RTGH-95DVLN-3

199,900 BTU/h

11 000 BTU/h

30°F Air Intake2, -4°F Ambient

Indoor (Outdoor Conversion Kit sold separately: RTGH-X

Primary: Copper – Secondary: Stainless Steel

0.4 GPM

0.26 GPM

eets 14 ng/J NOx requirements - SCAQMD Rule 1146.2 compliant

15 year Heat Exchanger | 5-Year Parts | 1-Year Labor

60 ft (2") / 150 ft (3")

Sched. 40 PVC, CPVC, Polypropylene

Built-in digital display

120V 60Hz

85W (Normal use), 0.7 Amps

3.5W (Standby), 0.03 Amps4

Band Connections (Adapter required to ven with 3" PVC from unit)

INCLUDE TANK COVER LOCKS.

PROVIDE BENEKE 52366 SEAT.

TO ACCEPT FLOOR FINISH.

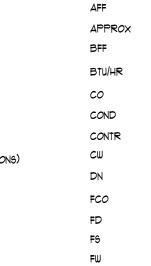
FLOOR MOUNTED.

PROVIDE AMERICAN STANDARD

REMARKS

All models are available in Natural Gas or Propane (LP). For Propane replace the N with P for LP model.

3/4" NPT



GREASE WASTE GALLONS PER MINUTE

HOT WATER INVERT ELEVATION

MANUF MANUFACTURER PRESSURE RELIEF VALVE SANITARY

PLUMBING ABBREVIATION LIST

APPROXIMATE

CLEAN OUT

CONDENSATE

CONTRACTOR

DOWN

ABOVE FINISHED FLOOR

BELOW FINISHED FLOOR

DOMESTIC COLD WATER

FLOOR CLEAN OUT

FLOOR DRAIN

FLOOR SINK

FILTERED WATER

BRITISH THERMAL UNITS PER HOUR

TYP TYPICAL VENT VTR VENT THRU ROOF

WASTE WATER CLOSET WCO

WALL CLEANOUT WATER HEATER

CONNECT NEW TO EXISTING

THESE DRAWINGS ARE PREPARED IN ACCORDANCE WITH THE LIMITED SERVICES FOR WHICH THE ARCHITECT WAS CONTRACTED.

THIS DRAWING IS DIAGRAMMATIC AND SHOULD BE USED TO DETERMINE THE DESIGN INTENT. THE GC./OWNER SHALL FIELD YERIFY ALL WORK AND SHALL NOTIFY AAA CONSULTING/ARCHITECT IMMEDIATELY OF ANY DISCREPANCY IN THE DOCUMENTS BEFORE PROCEEDING. FAILURE TO DO SO WILL RESULT IN THE GC. OWNER TAKING FULL RESPONSIBILITY AND LIABILITY FOR SAID DISCREPANCY AND FULL WORK.

PROPOSED DAY CARE FACILITIES

1131 WHITE LAKE RD. HIGHLAND, MI 48356

WIGGLES \$ GIGGLES

OWNER/DEVELOPER:

WIGGLES & GIGGLES

1131 WHITE LAKE RD. HIGHLAND, MI 48356

COPYRIGHT (C) 2024 THESE PLANS AND DESIGNS CONTAINED HEREIN ARE PROPERTY OF AAA CONSULTING AND MAY NOT BE REPRODUCED ALL OR IN PART WITHOUT WRITTEN CONSENT AND FEES PAID TO AAA CONSULTING THEREFORE ALL WAUTHORIZED USE OF THESE PLANS OR DESIGNS WILL BE CONSIDERED THEF AND APPROPRIATE CHARGES WILL BE BROUGHT FORTH. COPYRIGHTED /ALL RIGHTS RESERVED.

AAA CONSULTING DESIGN-BUILD CONSTRUCTION MANAGEMENT

29895 GREENFIELD ROAD SOUTHFIELD, MICHIGAN 48076 TEL: (313) 815-0543 | | | EMAIL: AAA.CONSULTING@HOTMAIL.COM

02/18/2025- RELEASED FOR BUILDING PERMITS

DRAWING SCALE: AS SHOWN

MODEL 1480.115 FAUCET. PROVIDE TEMPERING VALVE AT SINK. PROVIDE A REGENCY 8" GOOSENECK PROVIDE TEMPERING VALVE AT SINK. 6" OF SUMP DEPTH / 12" X 12" BASIN CAST IRON FLOOR SINK. WITH DOME STRAINER AND 1 1" AIR GAP WALL CLEAN OUT WITH ROUND ACCESS ROUND GASKETED DEPRESSED COVER

DRAWING TITLE: PROPOSED PLUMBING PLAN

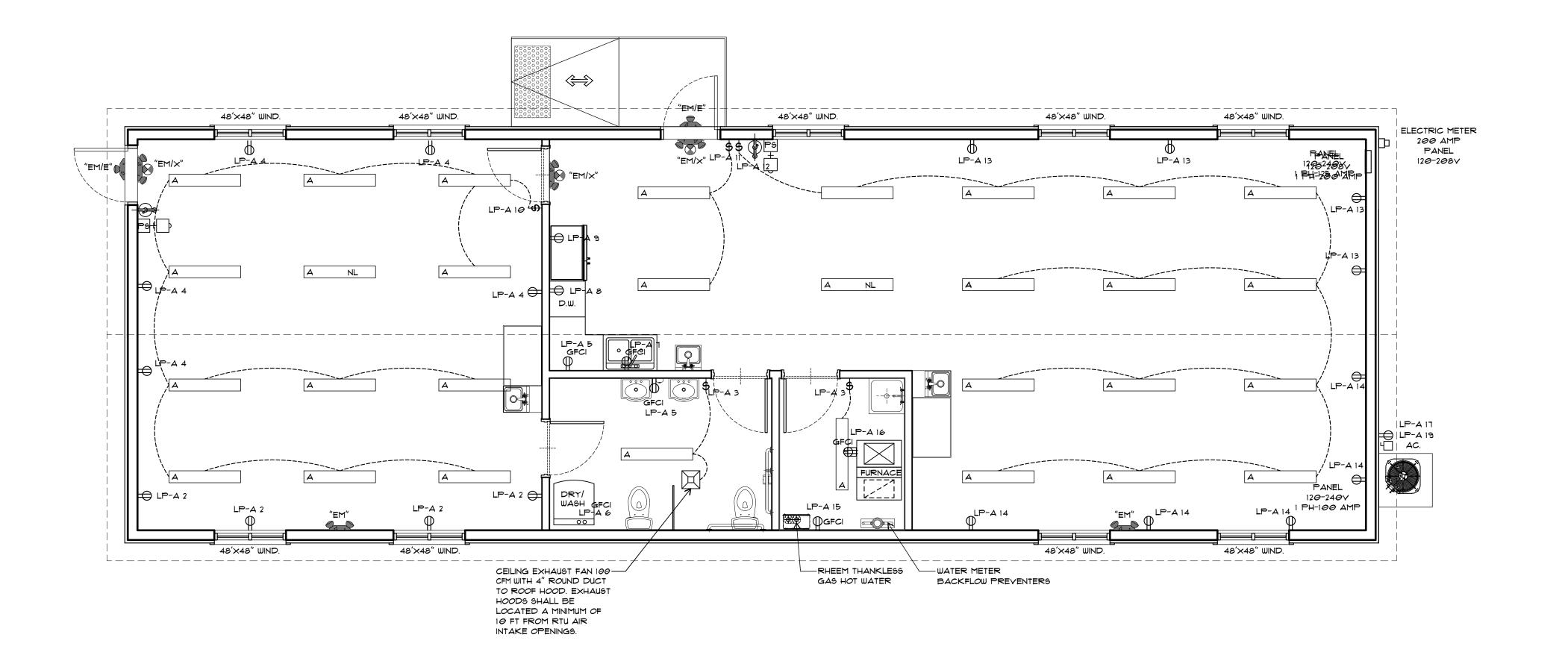
DATE: OCT.-25-2024

P-300

SEAL MODEL 993000 AT ALL FLOOR DRAINS.

PROVIDE A HOT WATER TEMPERING VALVE AT EACH LAVATORY AND HAND SINK. TEMPERING VALVE SHALL LIMIT WATER TEMPERATURE TO 110 DEG F AND CONFORMS WITH 2021 MICHIGAN PLUMBING CODE CHAPTER 27 SECTION P2724. AND ASSE 1070/ASME

A112.1070/CSA B125.70 AND SET TO NOT GREATER THAN 110°F (43°C).



ELECTRICAL PLAN
9CALE: 1/4"=1'-0"

				2118		
<u> </u>	EXIT/EMERGENCY COMBO FIXTURE	EXITRONIX	WALL OR CEILING	12 0 V/ 277V	2.2W	-
A: A:	REMOTE EXTERIOR EMERGENCY FIXTURE	EXITRONIX	WALL OR CEILING	-	2.2W	-
A	8"X48" LAY-IN LED CEILING LIGHT FIXTURE BLACK TRIM	LITHONIA	FLUSH MOUNT	12 0 V	3 9 W	3500K, 4400 LUMENS
	LIGHT FIXTURE	SCHEDULE				

MANUFACTURER

EXITRONIX

MOUNTING | LAMP VOLT | LAMP WATT

2.2W

		LIGHT FIXTURE SCHEDULE
SYMBOL	TYPE	DESCRIPTIONS
=		DUPLEX RECEPTACLE GROUNDING TYP.
GFCI		DUPLEX RECEPTACLE GROUND FAULT INTERRUPTER
\$		SWITCH
\$ _M		MOTION SENSOR SWITCH
\$ 3		3 WAY SWITCH
		8"X48" LIGHT FIXTURE
X		RESTROOM EXHAUST FAN
	"EM"	EMERGENCY LIGHT FIXTURES, UNIVERSAL MOUNT, 2 LED LAMPS, BUILT-IN BATTERY/CHARGER
	"EM/×"	EMERGENCY AND EXIT SIGN, BUILT-IN BATTERY/CHARGER, 2 LED LAMPS
	"EM/E"	REMOTE EXTERIOR EMERGENCY FIXTURE

GENERAL (ALL TRADES)

MARK DESCRIPTION

EMERGENCY FIXTURE

- 1. THE 2015 MICHIGAN BUILDING CODE SPECIFICATIONS, LATEST EDITIONS, SHALL BE THE BASIS FOR ALL DESIGN AND CONSTRUCTION FOR THIS PROJECT.
- CONTRACTOR TO FIELD CHECK ALL REQUIRED DIMENSIONS AND REPORT ALL DISCREPANCIES TO ENGINEER AND ALL RELEVANT TRADES. CONTRACTOR TO ENSURE ALL OTHERS TRADES ARE IN PLACE BEFORE COMMENCING POURING CONCRETE, FABRICATING STEEL ETC..
- 3. ALL INTERIOR FLOOR AND CEILING FINISHES COMPLY WITH CLASS II MATERIALS PER THE 2015 MICHIGAN BUILDING CODE. AND SHALL BE TESTED IN ACCORDANCE WITH ASTM C 635 AND C636
- 4. BOTH THE EMERGENCY LIGHT AND EXIT LIGHT SHALL HAVE MIN 90 MIN BATTERY BACKUP LOCATION AS REQUIRED FOR MEAN OF EGRESS AND INSIDE SIDE OF ALL EXIT DOORS
- 5. BARRIER FREE TOILET ROOM TO MEET ADA REQUIREMENTS SUBJECT
- TO FIELD INSPECTION

 6. ALL CEILING TILES IN THE FOOD AREA TO BE WASHABLE TYPE

GENERAL NOTES:

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE (N.E.C.), LATEST EDITION, AND ALL LOCAL AND STATE CODES AND REGULATIONS.

2. ALL WIRING ABOVE 18" ABOVE FINISHED FLOOR IS TO BE IN METALLIC RACEWAYS WITH TYPE MI, TO SNM OR MC CABLE.

3. PROVIDED GROUNDING FOR NEW ALL RECEPTACLES. PROVIDE GROUND FAULT INTERRUPTER CIRCUITS WITH RESET, IN ALL WET AREAS.

4. PROVIDE A COMPLETE, TYPED, PANEL SCHEDULE IN EACH ELECTRIC PANEL, RELATING TO THE AREA OF WORK, DESIGNATING THE LOCATION OF EACH CIRCUIT.

5. ALL MATERIAL AND WORKMANSHIP SHALL CONFORM TO THE REQUIREMENTS OF APPLICABLE BUILDING CODES AND ORDINANCES.

6. CONTRACTORS SHALL OBTAIN AND PAY FOR ALL THE PERMIT FEES THAT RELATED TO THEIR PART OF WORK.

1. PRIOR TO BIDDING, CONTRACTORS MUST VISIT THE JOB SITE TO BECOME FAMILIAR WITH THE SCOPE OF WORK.

8. PRIOR TO START OF WORK, CONTRACTORS TO CHECK AND VERIFY ALL DIMENSIONS ON THE FIELD, REPORT ANY ERRORS, OMISSIONS, OR POSSIBLE DISCREPANCIES TO THE OWNER! OR ARCHITECT.

9. THESE PLANS SHOW ROUGH-IN REQUIREMENTS FOR THE EQUIPMENTS DISCUSSED WITH OWNER AT THE START AND DURING THE DESIGN PROCESS. CONTRACTORS TO CHECK WITH OWNER FOR ANY CHANGES, SO THE SERVICE REQUIREMENTS ARE SIZED AND ROUGHED-IN PROPERLY.

10. CONTRACTOR TO PROVIDE NEW CABLE AND CONDUITS AS REQUIRED TO THE NEW PANELS AND DISCONNECT SWITCH AT NEW LOCATION AS PER LATEST REVISION OF NATIONAL ELECTRICAL CODE (N.E.C.) AND LOCAL CODE.

II. BOTH THE EMERGENCY LIGHT AND EXIT LIGHT SHALL HAVE MIN 90 MIN BATTERY BACKUP LOCATION AS REQUIRED FOR MEAN OF EGRESS AND INSIDE SIDE OF ALL EXIT DOORS

ELECTRICAL INSTALLATION NOTES FOR CONTRACTOR:

1. ALL WIRING TO BE INSTALLED PER THE 2011 N.E.C. ARTICLE 511 AND THE STATE OF MICHIGAN ELECTRICAL CODE RULES PART 8

2. ALL BRANCH CIRCUIT WIRING SHALL BE MINIMUM #12 AWG THHN/THWN AS SPECIFIED. ALL WIRE TO BE COPPER UNLESS SPECIFIED OTHERWISE.

3. ALL CONDUIT INSTALLED IN FLOORS SHALL BE INSTALLED PER CODE.

4. ALL SERVICE EQUIPMENT TO BE PROPERLY BONDED AND GROUNDED WITH CORRECT SIZE WIRE.

5. EACH SERVICE DISCONNECTING MEANS SHALL BE PERMANENTLY MARKED TO IDENTIFY IT AS A SERVICE DISCONNECTING MEANS AND THE LOAD SERVED. ALL PANELS, LOAD CENTERS, PANEL BOARDS, SWITCHBOARDS SHALL BE LEGIBLY IDENTIFIED BY PAINT, ENGRAVED OR EMBOSSED PLATES. ALL CIRCUITS NEW, EXISTING OR MODIFIED SHALL BE LEGIBLY IDENTIFIED AS TO PURPOSE OR USE ON A CIRCUIT DIRECTORY LOCATED ON THE FACE OR INSIDE OF THE PANEL DOORS

6. IN CASE OF MORE THAN ONE SERVICE TO A BUILDING, IDENTIFICATION SHALL BE PER N.E.C. 230-2.

1. ALL WIRING INSTALLED IN A PLENUM OR ENVIRONMENTAL AIR HANDLING SPACE SHALL BE APPROVED FOR SUCH USE AND COMPLY WITH N.E.C. 300-22.

8. LIGHT FIXTURES TO BE INSTALLED IN SUSPENDED CEILINGS THAT ARE ALSO USED FOR ENVIRONMENTAL AIR SHALL CONFORM TO SEE N.E.C. 300-2, ARTICLE 100 PLENUM DEFINITION.

9. A 120 VOLT G.F.C.I. PROTECTED RECEPTACLE OUTLET SHALL BE INSTALLED WITHIN 25 FEET OF ANY HVAC OR REFRIGERATION EQUIPMENT. N.E.C. 210-63

10. ALL BATTERY BACK UP OPERATED EXIT SIGNS AND EMERGENCY LIGHT UNITS ARE TO BE CONNECTED TO LIGHTING CIRCUITS IN AREAS SERVED AND AHEAD OF ANY SWITCHING DEVICE. N.F.P.A. LIFE SAFETY CODE SECTION 5-8 THRU 5-10. N.E.C. ARTICLE 100

11. ALL RECEPTACLES SHALL BE LISTED TAMPER-RESISTANT OR SHALL EMPLOY A LISTED TAMPER-RESISTANT COVER

TOTAL PHASE C (VA): 10,400

12. EVERY BATHROOM RECEPTACLE HAS TO BE PROTECTED BY SELF-CONTAINED GROUND FAULT SENSOR.

	V	VOLT-AMPS		CRC. A D C		CRC.	CRC. VOLT-AME					
DESCRIPTION	A	В	С	NO.		B C	NO.	А	В	С	DESCRIPTION	
SECURITY LIGHT	800			1	20A	20A	2	1600			4-GENERAL RECEPT.	
RESTROOM LIGHTING/FAN			600	3	20A	20A	4			2000	5-GENERAL RECE	PT.
RESTROOM / KITCHEN GFCI	1000			5	20A	20A	6	3000			CLOTH WASHER/D	RYER
GARBAGE DISP <i>O</i> SAL			600	٦	20A	20A	8			2000	DISHWASHER	
FRIDGE	1200			9	20A	20A	10	1200			LIGHT	
LIGHT			400	11	20A	2 0 A	12			1400	LIGHT	
4-GENERAL RECEPT.	1600			13	20A	20A	14	2000			5-GENERAL RECEPT.	
WATER HEATER EWH-I			400	15	20A	20A	16			1000	FURNACE	
AIR CONDITIONER	2000			٦٦	40A		18				SF	`ARE
AIR CONDITIONER			2000	19			20					
SPARE				21			22					
				23			24					
				25			26					
				27			28					
				29			30					
				31			32					
				33			34					
				35			36					
				37			38					
				39			40					
↓				41			42					
	6,600	-	4,000					1,800	-	6,400		
				1							I	

THESE DRAWINGS ARE PREPARED IN ACCORDANCE WITH THE LIMITED SERVICES FOR WHICH THE ARCHITECT WAS CONTRACTED.

THIS DRAWING IS DIAGRAMMATIC AND SHOULD BE USED TO DETERMINE THE DESIGN INTENT. THE GC./OWNER SHALL FIELD VERIFY ALL WORK AND SHALL NOTIFY AAA CONSULTING/ARCHITECT IMMEDIATELY OF ANY DISCREPANCY IN THE DOCUMENTS BEFORE PROCEEDING. FAILURE TO DO SO WILL RESULT IN THE GC./OWNER TAKING FULL RESPONSIBILITY AND LIABILITY FOR SAID DISCREPANCY AND FULL WORK.

PROPOSED

DAY CARE FACILITIES
WIGGLES \$ GIGGLES

1131 WHITE LAKE RD. HIGHLAND, MI 48356

OWNER/DEVELOPER:
WIGGLES \$ GIGGLES

1131 WHITE LAKE RD. HIGHLAND, MI 48356

COPYRIGHT © 2024

THESE PLANS AND DESIGNS CONTAINED HEREIN ARE PROPERTY OF AAA CONSULTING AND MAY NOT BE REPRODUCED ALL OR IN PART WITHOUT WRITTEN CONSENT AND FEES PAID TO AAA CONSULTING THEREFORE ALL UNAUTHORIZED USE OF THESE PLANS OR DESIGNS WILL BE CONSIDERED THIEF AND APPROPRIATE CHARGES WILL BE BROUGHT FORTH. COPYRIGHTED /ALL RIGHTS RESERVED.

WILL BE CONSIDERED THIEF AND APPROPRIATE CHARGES WILL BE BROUGHT FORTH. COPYRIGHTED /ALL RIGHTS RESERVED.

AAA CONSULTING
DESIGN-BUILD
CONSTRUCTION MANAGEMENT

29895 GREENFIELD ROAD
SOUTHFIELD, MICHIGAN 48076

TEL: (313) 815-*0*543

| | | EMAIL: AAA.CONSULTING@HOTMAIL.COM

ISSUED:

02/18/2025- RELEASED FOR BUILDING PERMITS

DRAWING TITLE:
PROPOSED

DRAWING SCALE: AS SHOWN

DATE: OCT.-25-2024

E-400



Leigh-Anne Stafford, Health Officer (248) 858-1280 | health@oakgov.com

(248) 858-1280 | nealth@oakg

PERMIT TO INSTALL AN ON-SITE SEWAGE DISPOSAL SYSTEM

PERMIT #: EHSI-2024-00043 Issue Date: 10/15/2024

PARCEL ID #: 1102300002 APPLICATION RECEIPT DATE: 01/30/2024

PROPERTY ADDRESS:

1131 White Lake Rd, Highland, MI 48356-1173

No. of Bedrooms: 0

SEPTIC INFORMATION: Proposed Use and Type:

Type of Establishment:

Non-Residential / Commercial Repair Child/Adult Care, Institutions

OWNER: APPLICANT:

Name: KHAB LLC Name: IMAGINATION STATION TWO
Address: 1131 WHITE LAKE RD Address: 1131 WHITE LAKE ROAD

1131 WHITE LAKE RD

Address: 1131 WHITE LAKE ROAD
HIGHLAND, MI 48356

HIGHLAND, MI 48356

Phone: 734-635-3507

PERMIT APPROVED SUBJECT TO THE FOLLOWING CONDITIONS:

Tank:

Size of Septic (Gallons) No. of Compartments Tank Type

1500 2 Septic Tank (Concrete)

Soil Absorption System:

Trench system 150 lineal feet, Trench Width 36 Inch ;7 Feet C-C; OR

Drainage bed consisting of 900 sq. ft.

Stipulations:

Locate absorption system over soil borings one (1) and two (2).

Cut all trenches six (6) feet to medium sand/remove old field when encountered.

Cut drainage bed 100% six (6) feet to medium sand/remove old field when encountered.

Backfill with 2NS sand to absorption system grade

Pre-Final Inspection:

Call when work begins

Bed-Call for midcut inspection prior to backfilling

THIS PERMIT IS VOID AFTER TWO (2) YEARS FROM DATE OF ISSUE

Sanitarian: Frankie Rhodes Supervisor: Joseph Kaighen

SEE NEXT PAGE FOR ADDITIONAL INFORMATION AND REQUIRMENTS



Leigh-Anne Stafford, Health Officer (248) 858-1280 | health@oakgov.com

PERMIT#: EHSI-2024-00043
Parcel ID: 1102300002

Property Address:

1131 White Lake Rd, Highland, MI 48356-1173

Minimum Isolation Distances to be Maintained:

75 feet from public well (Type II & III)	
50 feet from storm drains and catch basins designed to divert surface waters	
10 feet from building foundations	
10 feet from property lines	

Special Conditions:

- A soil entrapping barrier shall be provided. Acceptable cover shall be non-woven fabric with a weight not to exceed two (2) ounces per square yard, minimum trapezoidal tear strength of ten (10) pounds, and minimum puncture strength of eight (8) pounds.
- Prior to Health Division final approval, a copy of the recorded deed restriction shall be submitted. The deed restriction recorded with the Oakland County Register of Deeds shall include a notification of the technology used and description of the necessary maintenance.
- IF A NEW SEPTIC TANK IS NEEDED, AN APPROVED EFFLUENT FILTER SHALL BE INSTALLED. Effluent filters shall meet NSF/ANSI Standard 46. Effluent filters shall be rated by the manufacturer with a minimum daily flow rate of one and one-half (1.5) times the total required septic tank capacity.
- Sewer lines to and from all tanks and between a tank and head or distribution box shall be constructed of solid pipe with sealed joints, Schedule 40 PVC (solid).
- Final cover shall be eight (8) to twenty-four (24) inches over the soil absorption system.
- NOTICE: Floor drains are prohibited unless (1) They are connected to a sanitary sewer; (2) They are connected to a holding tank; or (3) At state groundwater discharge permit has been obtained.
- In no case shall any driveway, parking area, paved surface, swimming pool, stockpiled material or building be placed over the Onsite Wastewater Treatment System.
- Estimated Daily Flow (EDF) determined via Comparable Flow Data. EDF = 360 Gallons Per Day (GPD).
 - -The application rate and sizing determined utilizing OCHD Sanitary Code Article III. A trench application rate in medium sand is 0.8 gallons per square foot. A bed application rate = 0.4 gallons per square foot. Trench Sizing: 360 /0.8 /3 (trench width) = 150 Total Lineal Feet. Bed Sizing: 360 / 0.4 = 900 square feet.
- Risers shall be a minimum of twenty-four (24) inches in diameter, water tight and tamper resistant with a locking mechanism or boltheads that need specialized tools for access.



Leigh-Anne Stafford, Health Officer (248) 858-1280 | health@oakgov.com

PERMIT#: EHSI-2024-00043

Parcel ID: 1102300002

Property Address:

1131 White Lake Rd, Highland, MI 48356-1173

Comments:

The existing septic tank may be utilized if at least 1,500 gallons and in sound condition. If not, then properly abandon the septic tank and replace with a 1,500 Gallon 2CT with approved filter. Verify the septic tank outlet tee or ell is in place and shall be replaced if missing or damaged.

Replacement Area:

Adequate replacement available?: Yes, Another area (indicate on sketch)

STANDARD PERMIT REQUIREMENTS:

- Must install system in accordance with OCHD Sanitary Code, Article III and/or Michigan Criteria for Subsurface Sewage Disposal.
- Required isolation distances must be verified by the installer.
- Call to schedule all necessary inspections prior to the completion of the installation.
- · Call to schedule a final inspection prior to covering the system.
- Act 53, P.A. 1974 requires the applicant to notify the public utilities prior to excavation. In addition, you must call 1-800-MISS-DIG to locate public underground utilities.
- This Onsite Wastewater Treatment System Permit does not ensure an Onsite Well Permit. An Onsite Wastewater
 Treatment System installation may reduce or eliminate an approved well area resulting in denial of an application for an
 Onsite Well Permit.



Leigh-Anne Stafford, Health Officer (248) 858-1280 | health@oakgov.com

PERMIT#: EHSI-2024-00043

Parcel ID: 1102300002

Property Address:

1131 White Lake Rd, Highland, MI 48356-1173

APPROVED BORINGS:

Boring # 1	Soils Observed by:	rhodesf
------------	--------------------	---------

Boring	HSWT	HSWT	Depth	Ground	Depth of	Captured Date	Captured By
Label	Observe	Indicator	HSWT	Water	Water		

1 No No 10/07/2024 rhodesf

Texture(s)

Depth	Depth Units	Size	Wetness	Soil Info	Topsoil Texture	Color
12	Inch			Topsoil	Sandy Loam	
5	Feet			Sandy Loam		
3	Feet	Medium		Sand		

Boring #	Soils Observed by:	rhodesf
----------	--------------------	---------

Boring	HSWT	HSWT	Depth	Ground	Depth of	Captured Date	Captured By
Label	Observe	Indicator	HSWT	Water	Water		

2 No No 10/07/2024 rhodesf

Texture(s)

Depth	Depth Units	Size	Wetness	Soil Info	Topsoil Texture	Color
12	Inch			Topsoil	Sandy Loam	
5	Feet			Sandy Loam		
3	Feet	Medium		Sand		



Leigh-Anne Stafford, Health Officer (248) 858-1280 | health@oakgov.com

PERMIT#: EHSI-2024-00043

Parcel ID: 1102300002

Property Address:

1131 White Lake Rd, Highland, MI 48356-1173

Boring # 3	Soils Observed by:	rhodesf
------------	--------------------	---------

Boring	HSWT	HSWT	Depth	Ground	Depth of	Captured Date	Captured By
Label	Observe	Indicator	HSWT	Water	Water		

3 No No 10/07/2024 rhodesf

Texture(s)

Depth	Depth Units	Size	Wetness	Soil Info	Topsoil Texture	Color
12	Inch			Topsoil	Sandy Loam	
5	Feet			Sandy Loam		
3	Feet	Medium		Sand		

Boring # 4	Soils Observed by:	rhodesf
------------	--------------------	---------

Boring	HSWT	HSWT	Depth	Ground	Depth of	Captured Date	Captured By
Label	Observe	Indicator	HSWT	Water	Water		

4 No No 10/07/2024 rhodesf

Texture(s)

Depth	Depth Units	Size	Wetness	Soil Info	Topsoil Texture	Color
12	Inch			Topsoil	Sandy Loam	
5	Feet			Sandy Loam		
3	Feet	Medium		Sand		

Disclaimer: The Oakland County Health Division will not deny participation in its programs based on race, sex, religion national origin, age or disability. State and federal eligibility requirements apply for certain programs.

RECEIVED

Dec 20 2024

DEPARTMENT OF CUSTOMER

SERVICES PERMITS

2-"PROPER SIGNING" IS REQUIRED BEFORE ANY WORK IN R.O.W. IS STARTED

3-LANE CLOSURES RESTRICTED TO 9-3 PM MON – FRI

4-FLAG PERSON REQUIRED FOR TEMPORARY ONE LANE ROADS

5-MAINTAIN TWO-WAY TRAFFIC AT ALL TIMES 6-HAND DIG AROUND ALL UTILITES

8-WITHIN THE INFLUENCE OF THE ROADBED MDOT CLASS II, SAND, COMPACTED TO 95% MAX. UNIT DENSITY IS REQUIRED

10-ALL BORING PITS ARE TO BE SITUATED AT LEAST TEN FEET FROM EDGE OF PAVEMENT

11-MIN. DEPTH FOUR FEET UNDER ROADBED OR EX. GRADE WHICHEVER IS LOWER

12-UNDERGROUND UTILITIES TO BE 1 FOOT OFF R.O.W.

17-SUITABLE BASE TO BE DETERMINED BY RCOC DIRECTOR IN THE FIELD

18-RAMPS & SIDEWALKS MUST MEET ADA SPECIFICATIONS

WIGGLES & GIGGLES

HIGHLAND TOWNSHIP, OAKLAND COUNTY, MICHIGAN

APPROVED FOR CONSTRUCTION PERMIT

ROAD COMMISSION FOR OAKLAND COUNTY PERMITS OFFICE

01/30/2025 8:57:11 AM



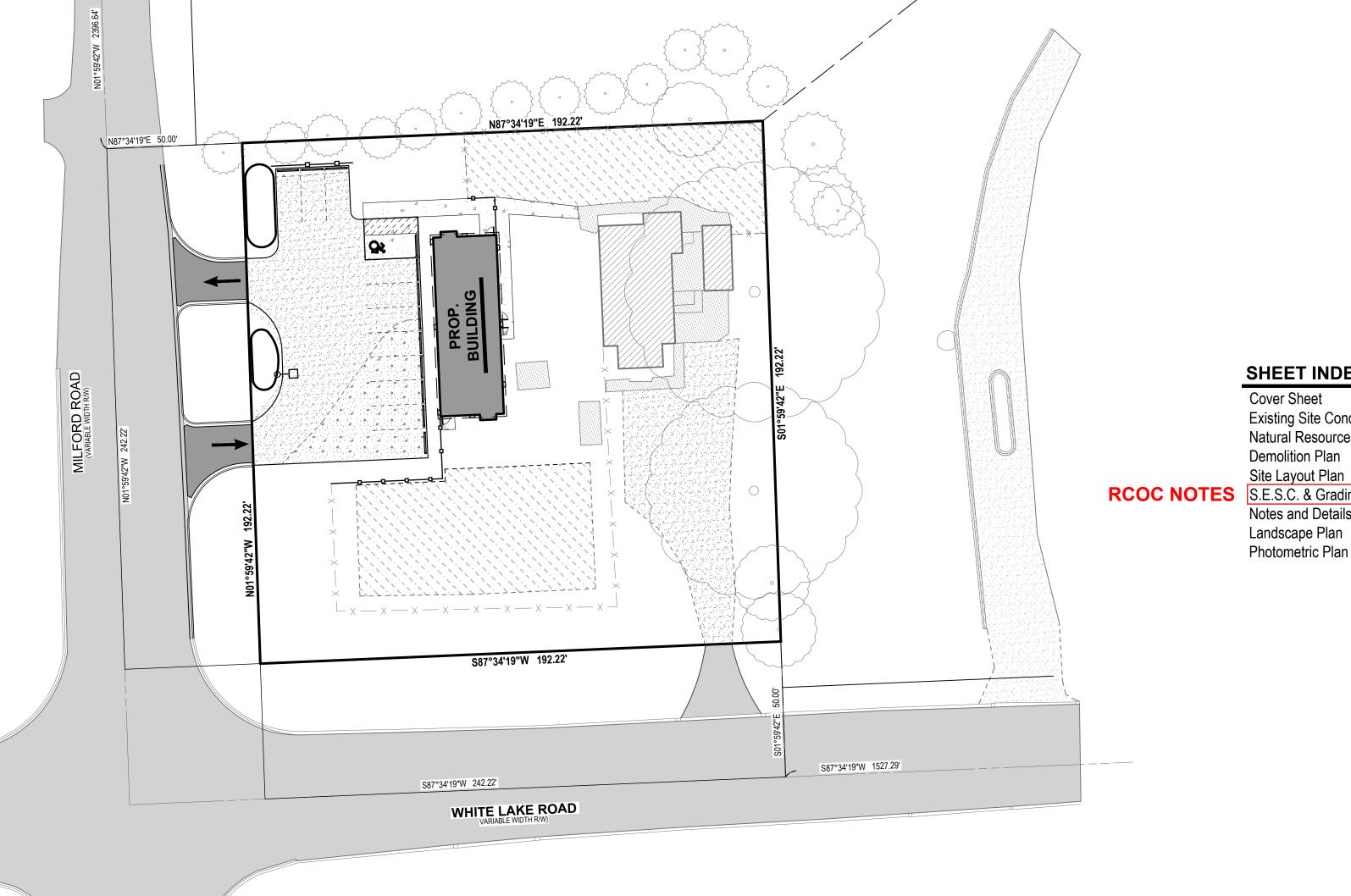
P-1

LOCATION MAP NOT TO SCALE

CONSTRUCTION PLAN

R.C.O.C GENERAL NOTES

- 1 CALL INSPECTOR OR PERMIT SUPERVISOR BEFORE BEGINNING ANY WORK IN R.O.W.
- 2 "PROPER SIGNING" IS REQUIRED BEFORE ANY WORK IN R.O.W. IS STARTED
- 3 LANE CLOSURES RESTRICTED TO 9-3 PM MON-FRI
- 4 FLAG PERSON REQUIRED FOR TEMPORARY ONE LANE ROADS
- 5 MAINTAIN TWO-WAY TRAFFIC AT ALL TIMES
- 6 HAND DIG AROUND ALL UTILITIES
- 7 KEEP ROADS CLEAN OF DIRT AND DEBRIS
- 8 REMOVE OR RELOCATE FIXED OBJECTS PRIOR TO EXCAVATION
- 9 FIXED OBJECTS TO BE MINIMUM 6 FEET OFF BACK OF CURB OR 12 FEET OFF EDGE
- 10 PROJECTS EXCEEDING 3-DAYS REQUIRE GROND MOUNTED SIGNS PER MDOT SSC/SEC 812.03



SHEET INDEX

	Cover Sheet	C-100
	Existing Site Conditions Plan	C-201
	Natural Resources Inventory Plan	C-202
	Demolition Plan	C-203
	Site Layout Plan	C-205
3	S.E.S.C. & Grading Plan	C-300
	Notes and Details	C-500
	Landscape Plan	L-100

GIGGL

MIGGI

800.222.1868

ANN ARBOR

Ann Arbor, MI 48103

Phone: 734.929.6963

CHICAGO

COLUMBUS

GRAND RAPIDS

HOLLAND

INDIANAPOLIS

Wiggles & Giggles

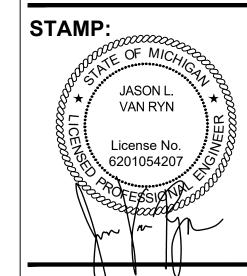
1131 White Lake Rd. Highland, MI 48356

Title: CONSTRUCTION PLAN RESUBMITTAL TO R.C.O.

PREPARED FOR:

REVISIONS:

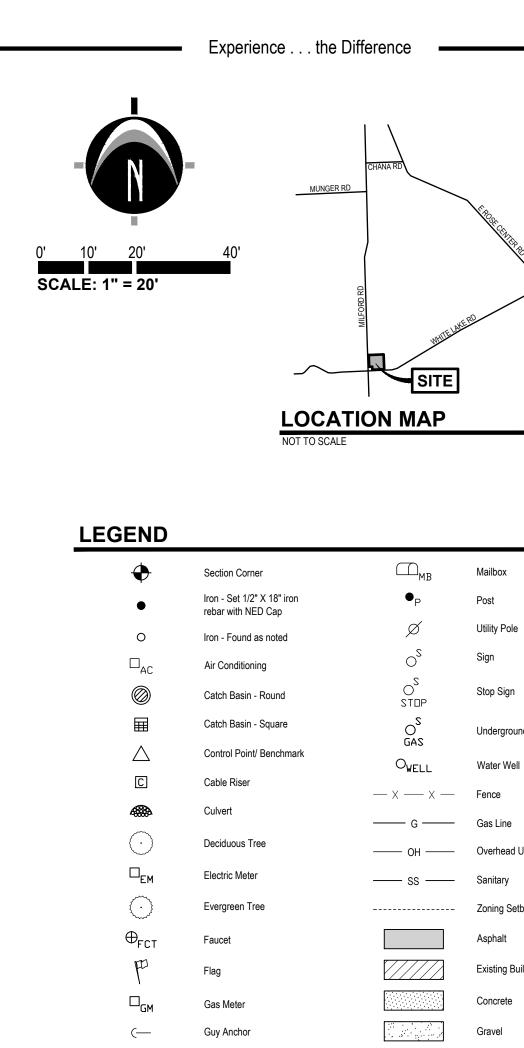
Title: REVISED LAYOUT PLAN

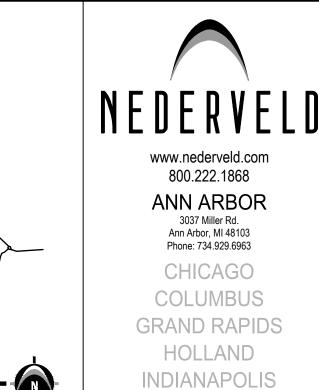


PROJECT NO: 24500220

SHEET NO:

SITE LAYOUT





PREPARED FOR:

REVISIONS:

Title: SITE PLAN SUBMITTAL

Title: REVISED LAYOUT PLAN

Title: SITE PLAN RESUBMITTAL

Title: CONSTRUCTION PLAN SUBMITTAL

Wiggles & Giggles

Khaled Mheisen

1131 White Lake Rd.

Highland, MI 48356

Drawn: CB/OO Checked: BC Date: 7.1.2024

Drawn: CB/OO Checked: BC Date: 8.16.2024

Drawn: CB/OO Checked: BC Date: 9.11.2024

Drawn: CB/OO Checked: BC Date: 10.10.2024 Title: CONSTRUCTION PLAN RESUBMITTAL TO R.C.O.O Drawn: CB/OO Checked: BC Date: 12.19.2024

�	Section Corner	\square_{MB}	Mailbox
•	Iron - Set 1/2" X 18" iron rebar with NED Cap	$ullet_{P}$	Post
0	Iron - Found as noted	Ø	Utility Pole
\square_{AC}	Air Conditioning	$O_{\mathcal{Z}}$	Sign
	Catch Basin - Round	O ^S STOP	Stop Sign
	Catch Basin - Square	O GAS	Underground Gas Marke
\triangle	Control Point/ Benchmark	O _{WELL}	Water Well
C	Cable Riser	— x — x —	Fence
6	Culvert	—— G ——	Gas Line
\odot	Deciduous Tree	—— ОН ——	Overhead Utility
\square_{EM}	Electric Meter	ss	Sanitary
\bigcirc	Evergreen Tree		Zoning Setback Line
\oplus_{FCT}	Faucet		Asphalt
P	Flag		Existing Building
\square_{GM}	Gas Meter		Concrete
(—	Guy Anchor		Gravel
*	Light Pole		

BENCHMARKS

BENCHMARK #1416 ELEV. = 1035.77 (NAVD88) Benchtie in East side of power pole, located 16'+/- East of edge of pavement for Milford Road and 190'+/-North of White Lake Road.

BENCHMARK #1268 ELEV. = 1029.35 (NAVD88)

Rim of catch basin, located at the Northeast corner of the intersection of White Lake Road and Milford Road 7'+/- North of back of curb.

LEGAL DESCRIPTION

Real property in the City of Highland, County of Oakland, State of Michigan, described as follows:

South 242.22 Feet of the West 242.22 feet of the Southwest 1/4 of Section 2, Town 3 North, Range 7 East, Except the South 50 feet of the West 50 feet taken for road.

(Warranty Deed, dated, December 15, 2023, 135783, Liber 59066, Page 442, Oakland County Register

SURVEYOR'S NOTES

- 1) Flood Zone Classification: An examination of the National Flood Insurance Program's Flood Insurance Rate Map for Community Number 260650, Map Number 26125C0311F, with an Effective Date of September 29, 2006, 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: NAD83 Michigan State Planes, South Zone, International Foot
- 5) Quit Claim Deed to Board of County Road Commissioners of the County of Oakland, State of Michigan, a Public Body Corporate as recorded in Liber 5589, Page 662, Oakland County Register of

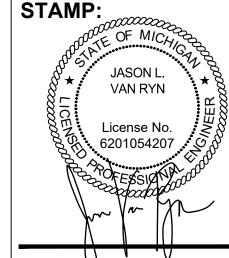
<u>9</u>5

Plan

Conditions

xisting

MIGGI



PROJECT NO: 24500220

SHEET NO:

—Land Planning — Landscape Architecture — Civil Engineering — Land Surveying — High Definition Scanning — Forensic Engineering — Fire Investigation –

Parcel #: 11-02-300-017 Address: N/A Owner: Ronald Bonadeo ZONING: ARR

N87°34'19"E 192.22'

SOUTH ACCESS LID; LOCATION APPROXIMATE PER CLIENT AND SEPTIC RECORD

LOCATION
APPROXIMATE
PER CLIENT
AND SEPTIC
RECORD

S87°34'19"W 242.22'

WHITE LAKE ROAD
VARIABLE WIDTH R/W)

8" PINE N. OF P/L

____x___x___x___x___x___x

Parcel #: H-11-02-300-002 Address: 1131 White Lake Rd Owner: KHAB LLC

ZONING: ARR

Inv. Elev. = 1027.73 Size and Type

> Culvert #1363 Inv. Elev. = 1026.09 Size and Type

BENCHMARK #1268

ELEV. = 1029.35

BENCHMARK #1416

T3N, R7E

_.20560, P.501, OCR

ELEV. = 1035.77

8" PINE X2

14" ELM X3

GRAVEL

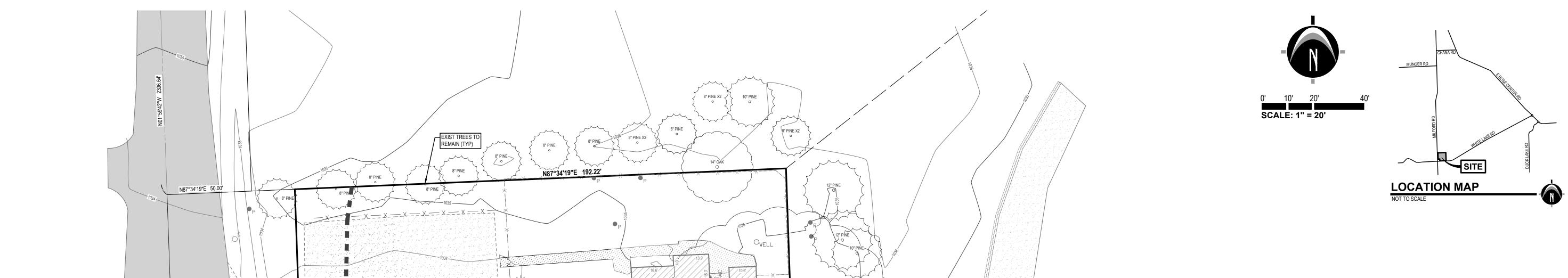
UTILITY LOCATIONS ARE DERIVED FROM ACTUAL MEASUREMENTS OR

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.

Parcel #: 11-02-300-018 Address: 1215 White Lake Rd Owner: Ronald Bonadeo ZONING: ARR

S87°34'19"W 1527.29'



EXIST TREES TO REMAIN (TYP)

S87°34'19"W 1527.29'

NOTES

- 1) Soils Classification:
- 13B Oshtemo-Boyer loamy sands, 0 to 6 percent slopes
- 2) All trees except those marked for removal (See sheet C-203 for details) shall

- Elm (Ulmus sp.) 20" Multi trunk, good condition

www.nederveld.com 800.222.1868 ANN ARBOR 3037 Miller Rd. Ann Arbor, MI 48103 Phone: 734.929.6963 CHICAGO COLUMBUS

PREPARED FOR:

Wiggles & Giggles Khaled Mheisen

GRAND RAPIDS

HOLLAND

INDIANAPOLIS

1131 White Lake Rd. Highland, MI 48356

REVISIONS:

Title: SITE PLAN SUBMITTAL Drawn: CB/OO Checked: BC Date: 7.1.2024 Title: REVISED LAYOUT PLAN

Drawn: CB/OO Checked: BC Date: 8.16.2024 Title: SITE PLAN RESUBMITTAL Drawn: CB/OO Checked: BC Date: 9.11.2024

Title: CONSTRUCTION PLAN SUBMITTAL Drawn: CB/OO Checked: BC Date: 10.10.2024 Title: CONSTRUCTION PLAN RESUBMITTAL TO R.C.O.C

Drawn: CB/OO Checked: BC Date: 12.19.2024

GIGGLES **WIGGLES**

PROJECT NO: 24500220

SHEET NO:

- 44B Riddles sandy loam, 1 to 6 percent slopes
- remain on site.
- Trees to be removed:
- Elm (Ulmus sp.) 20" Single trunk, good condition

EXIST TREE TO BE REMOVED

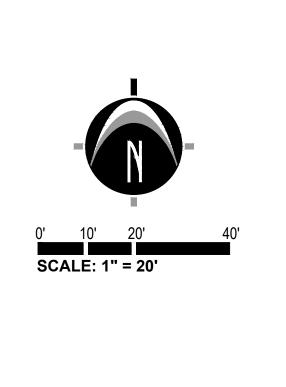
13B

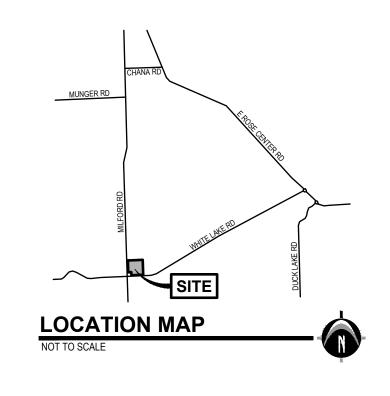
S87°34'19"W 242.22'

WHITE LAKE ROAD

VARIABLE WIDTH R.W.)

MILFORD ROAD (VARIABLE WIDTH R/W)





www.nederveld.com 800.222.1868 **ANN ARBOR** 3037 Miller Rd. Ann Arbor, MI 48103 Phone: 734.929.6963

CHICAGO

COLUMBUS

GRAND RAPIDS

HOLLAND

INDIANAPOLIS

Wiggles & Giggles Khaled Mheisen

1131 White Lake Rd. Highland, MI 48356

Drawn: CB/OO Checked: BC Date: 7.1.2024

Drawn: CB/OO Checked: BC Date: 8.16.2024

Drawn: CB/OO Checked: BC Date: 9.11.2024

Drawn: CB/OO Checked: BC Date: 10.10.2024

Title: CONSTRUCTION PLAN RESUBMITTAL TO R.C.O.O

Drawn: CB/OO Checked: BC Date: 12.19.2024

PREPARED FOR:

REVISIONS: Title: SITE PLAN SUBMITTAL

Title: REVISED LAYOUT PLAN

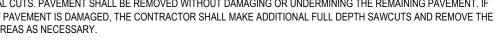
Title: SITE PLAN RESUBMITTAL

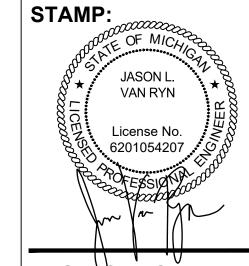
Title: CONSTRUCTION PLAN SUBMITTAL

DEMOLITION LEGEND

	EXISTING ASPHALT & CONCRETE F
	EXISTING GRAVEL REMOVAL
— × —	EXISTING FENCE REMOVAL
	EXISTING FENCE REMOVAL
×	EXISTING TREE REMOVAL
\Diamond	REMOVE EXISTING PAVEMENT
2	REMOVE EXISTING GRAVEL
③	REMOVE EXISTING TREE
4	REMOVE EXISTING LIGHT POLE
\$	REMOVE EXISTING FENCE
6	REMOVE EXISTING POST

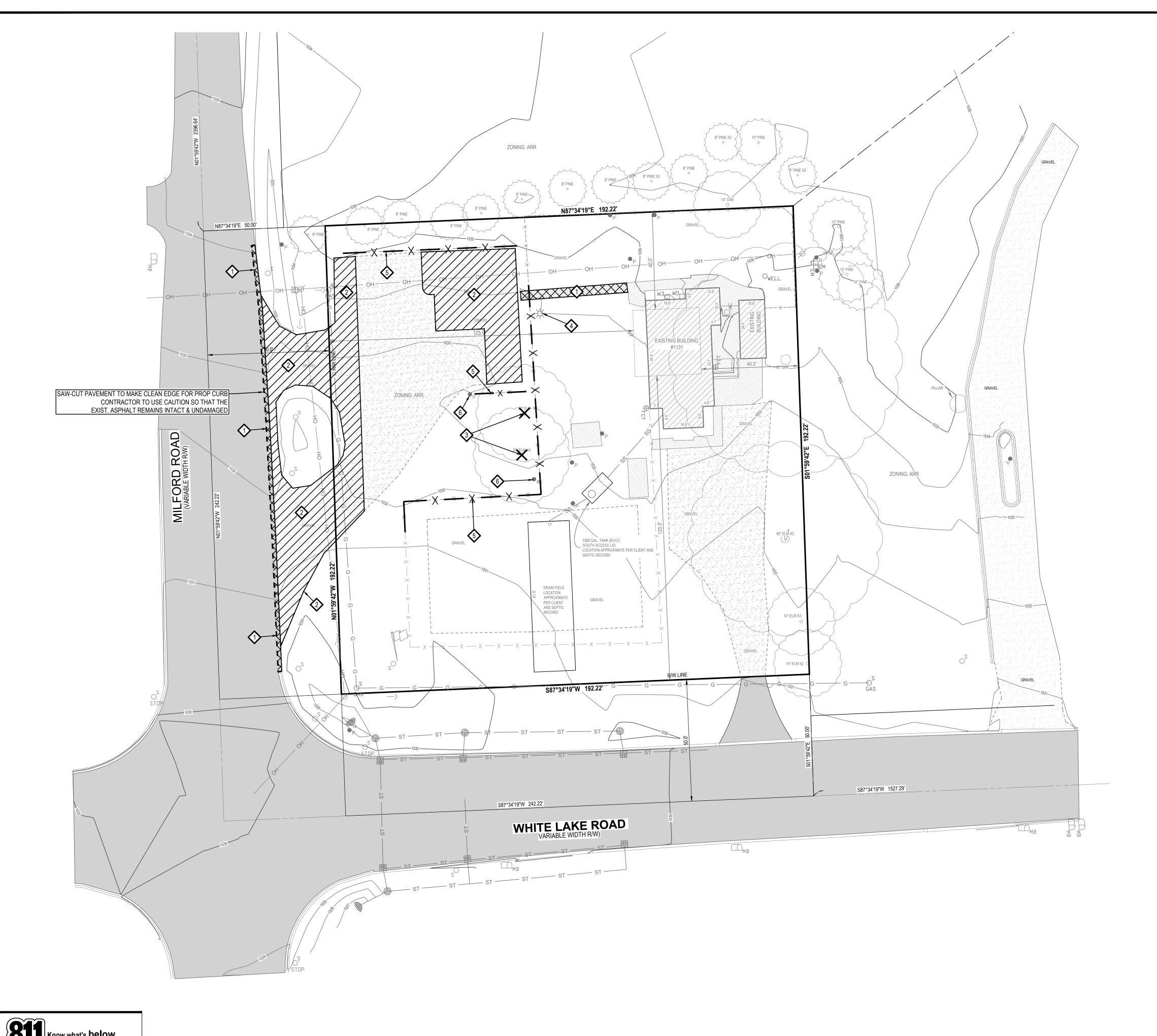
- 1) THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES AT LEAST THREE WEEKS PRIOR TO THE BEGINNING OF CONSTRUCTION OPERATIONS. THERE ARE EXISTING UNDERGROUND UTILITIES WHICH CROSS THE PROPOSED REPLACEMENT WORK AREAS. ALTHOUGH THEIR EXACT LOCATION CANNOT BE DETERMINED, IT IS KNOWN THESE UTILITIES ARE LOCATED WHERE DIGGING IS REQUIRED. THE CONTRACTOR SHALL CONDUCT THE REQUIRED EXCAVATION IN THESE
- 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
- 3) BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE TOWNSHIP AND BY THE OWNER, REPRESENTATIVES OF THE TOWNSHIP, 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.
- 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.
- OVERHEAD WIRES, UNDERGROUND UTILITIES, GUY WIRES, GAS LINES, ETC. ALL ADJUSTMENT OR RECONSTRUCTION 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 REMOVED SHALL 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 TOWNSHIP OR
- 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
- 11) ALL PAVEMENT REMOVAL AREAS SHALL BE FULL PAVEMENT CROSS-SECTION REMOVAL DOWN TO NATIVE SOIL LAYER IN
- ACCORDANCE WITH THE GEOTECHNICAL REPORT DATED MONTH/DAY/YEAR.





PROJECT NO: 24500220

SHEET NO:



REMOVAL / DEMOLITION NOTES

AREAS WITH EXTREME CAUTION.

2) ALL EXISTING UTILITY INFORMATION SHOWN IS TAKEN FROM EXISTING RECORDS, AND FIELD VERIFIED WHERE ACCESSIBLE

- ACCURACY. THE CONTRACTOR SHALL FIELD VERIFY FOR ACCURACY, LOCATION AND CONDITION.
- 4) THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION WORK.
- 6) THE CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES REGARDING REMOVAL OF EXISTING POLES,
- 10) ASPHALT AREAS SHOWN TO BE SAWCUT AND REMOVED FULL DEPTH ARE ACTUAL FACE OF PROPOSED CURBS. IT WILL BE
- 12) ALL TREES WITHIN THE GRADING LIMITS SHALL BE REMOVED UNLESS OTHERWISE NOTED.

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.

LIGHTS (TYP)

PROP BUILDING OVERHANG (TYP)

S87°34'19"W 192.22'

WHITE LAKE ROAD
VARIABLE WIDTH R/W)

ZONED R1.5

HIGHLAND TOWNSHIP 11-11-101-007 1124 WHITE LAKE RD

S87°34'19"W 242.22'

ISOLATION AREA

BUILDING

1,538 SQ FT

FRONT SETBACK

PROP BUMPER BLOCK (TYP)

PROP LIGHT POLE (TYP) SEE

EXIST SEPTIC FIELD

MOUNTED SIGN TO

TO REMAIN

PHOTOMETRIC PLAN FOR

PROP OUTDOOR PLAY

AREA FENCING (TYP)

EXIST OUTDOOR PLAY

AREA TO REMAIN (TYP)

12.0'

PROP MDOT DETAIL

"M" GUTTER (TYP)

ONE-WAY DRIVE ENTRANCES (TYP)

ROAD

MILFORD

ZONED ARR

HIGHLAND TOWNSHIP

11-03-400-004

5181 N MILFORD RD

PER OAKLAND COUNTY ROAD

COMMISSION STANDARDS

REPLACE EXISTING

"M" GUTTER (TYP)

GUIDE SIGN

40.0'

SIDE SETBACK

10.0'

PARKING SETBACK

EXISTING DRIVE TO

S87°34'19"W 1527.29'

ZONED R1.5 HIGHLAND TOWNSHIP

11-11-101-008 1150 WHITE LAKE RD

REMAIN (TYP)

TRASH CARTS TO BE STORED IN

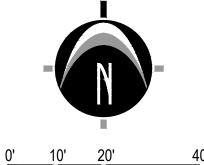
SHED WHEN NOT AT ROAD FOR

ZONED ARR

HIGHLAND TOWNSHIP 11-02-300-018

1215 WHITE LAKE RD

LEGEND



EXISTING BITUMINOUS EXISTING CONCRETE EXISTING GRAVEL PROPOSED BITUMINOUS (HEAVY DUTY) PROPOSED CONCRETE (STANDARD DUTY)

PROPOSED GRAVEL OUTDOOR PLAY AREA

- 1) ZONING OF PROPERTY: ARR AGRICULTURAL & RURAL RESIDENTIAL
- B) MINIMUM LOT WIDTH = 330 FT.
- D) MAXIMUM LOT COVERAGE = 10%

- B) TOTAL BUILDABLE AREA = 0.02 ACRES (740.6 SQ. FT.)
- C) AREA OF PROPOSED BUILDING = 1,538 SQ. FT. D) AREA OF EXISTING BUILDING = 1,414 SQ. FT.
- ZONING OF PARCELS TO NORTH AND EAST = ARR
- FRONT SETBACK (MILFORD RD) = 56.0 FT.
- SIDE SETBACK (NORTH) = 6.1 FT.
- *A VARIANCE APPLICATION FOR THE PROPOSED ENCROACHMENTS HAS BEEN SUBMITTED TO THE ZBA ON 7/2/2024
- A) MINIMUM REQUIRED SPACE PER TOWNSHIP = 9'x20' (24' AISLE)
- D) TYPICAL CAR ACCESSIBLE PARKING SPACE = 8'x18' WITH 5' AISLE
- F) NUMBER OF SPACES PROVIDED = 12 (INCLUDING 1 SHUTTLE BUS SPACE)
- 5) BEST MANAGEMENT PRACTICES WILL BE UTILIZED DURING AND AFTER CONSTRUCTION OF THE PROJECT. MEASURES WILL INCLUDE THE USE OF SEEDING AND MULCHING, SEDIMENT INLET FILTERS, COMPACTION AND PAVING. THE OWNER OF THE
- 6) 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
- 7) CONTRACTOR TO FIELD VERIFY ALL INVERTS.
- 9) THE PERMANENT PARCEL NUMBER FOR THE SITE IS H-11-02-300-002.
- THE ADDRESS OF THE PROPERTY IS 1131 WHITE LAKE RD. 10) NO FENCES OR WALLS OTHER THAN WHAT IS SHOWN ON THE SITE PLAN ARE PROPOSED AT THIS TIME.

GENERAL NOTES

SCALE: 1" = 20'

ARR ZONING REQUIREMENTS

A) MINIMUM LOT AREA = 5 ACRES (217,800 SQ.FT.)

C) MAXIMUM BUILDING HEIGHT = 28 FT OR 2 STORIES

SETBACKS A) FRONT YARD = 125 FT. (FRONTING MAJOR THOROUGHFARE)

B) SIDE YARD = 40 FT.

2) SUMMARY OF LAND USE:

A) TOTAL ACREAGE = 0.85 ACRES (36,946 SQ. FT.) (EXCLUDING R.O.W.)

E) LOT COVERAGE = 8.5% F) ZONING OF PARCELS TO SOUTH AND WEST = R-1.5 & ARR

G) PROPOSED SETBACK ENCROACHMENTS (APPROVED BY THE ZBA ON 8/21):

FRONT SETBACK (WHITE LAKE RD) = 40.7 FT.

B) TYPICAL PARKING SPACE PROVIDED = 9'x20' (24' AISLE)

C) TYPICAL VAN ACCESSIBLE PARKING SPACE = 11'x18' WITH 5' AISLE

E) NUMBER OF SPACES REQUIRED = 10 (BASED ON HIGHLAND REQUIREMENTS - 2 SPACES PLUS 1 ADDITIONAL SPACE FOR EACH 8 CHILDREN = 60 CHILDREN / 8 = 8 SPACES + 2 SPACES = 10 SPACES)

4) THIS PROJECT IS NOT LOCATED IN THE 100 YEAR FLOOD PLAIN, BASED ON THE NATIONAL FLOOD INSURANCE PROGRAM

SUBJECT PARCEL SHALL HAVE THE RESPONSIBILITY TO MAINTAIN THE PERMANENT SOIL EROSION PROTECTION MEASURES.

8) ALL LIGHTING SHALL BE SHIELDED FROM ALL ADJACENT PROPERTIES. PROPOSED LIGHTING SHALL CONSIST OF WALL-MOUNTED LIGHTS AND LIGHT POLES, BOTH FITTED WITH DOWN CAST TYPE FIXTURES TO BE SPECIFIED BY LIGHTING

<u>5</u>5

www.nederveld.com 800.222.1868

ANN ARBOR 3037 Miller Rd. Ann Arbor, MI 48103 Phone: 734.929.6963 CHICAGO

COLUMBUS

GRAND RAPIDS

HOLLAND

INDIANAPOLIS

Wiggles & Giggles

Khaled Mheisen

1131 White Lake Rd.

Highland, MI 48356

Drawn: CB/OO Checked: BC Date: 7.1.2024

Drawn: CB/OO Checked: BC Date: 8.16.2024

Drawn: CB/OO Checked: BC Date: 9.11.2024

Drawn: CB/OO Checked: BC Date: 10.10.2024

Title: CONSTRUCTION PLAN RESUBMITTAL TO R.C.O.O

Drawn: CB/OO Checked: BC Date: 12.19.2024

PREPARED FOR:

REVISIONS:

Title: SITE PLAN SUBMITTAL

Title: REVISED LAYOUT PLAN

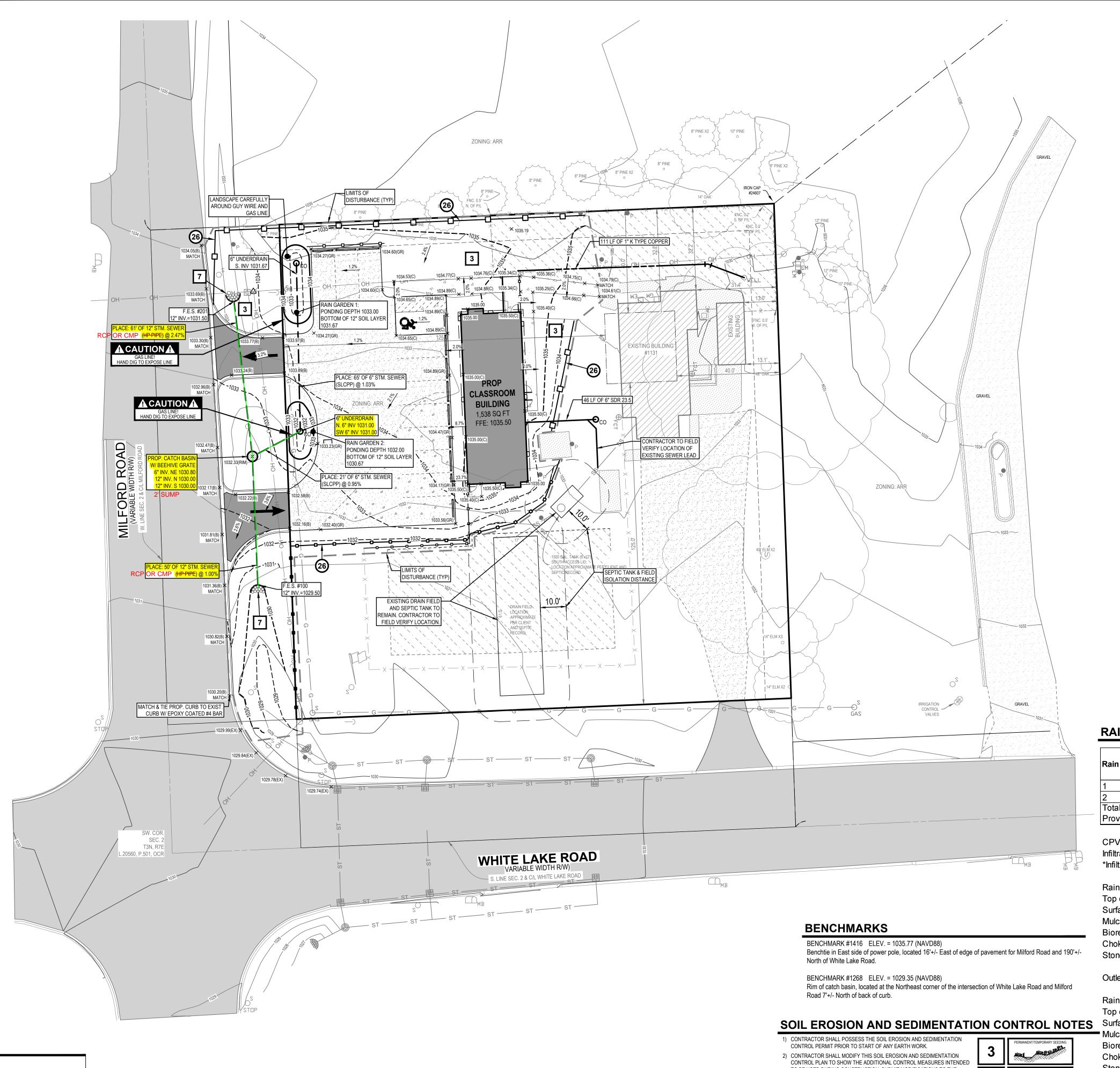
Title: SITE PLAN RESUBMITTAL

Title: CONSTRUCTION PLAN SUBMITTAL

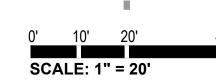
PROJECT NO: 24500220

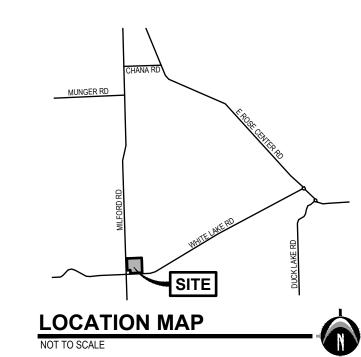
SHEET NO:

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.









EX. GRADE CONTOUR

LEGEND PROPOSED EXISTING

Section Corner

Iron - Set 1/2" X 18" iron PROP. GRADE CONTOUR rebar with NED Cap PROP. GRADE ELEV. Iron - Found as noted PROP. GRADE ELEV. Air Conditioning (CONCRETE) PROP. GRADE ELEV. Catch Basin - Round PROP. GRADE ELEV. Catch Basin - Square Control Point/ Benchmark PROPOSED CONCRETE (STANDARD DUTY) PROPOSED GRAVEL Deciduous Tree PROPOSED ASPHALT PROP. STORM SEWER Evergreen Tree PROP. WATERMAIN LIMITS OF GRADING

RAINGARDEN CALCULATIONS

Rain Garden ID	Bottom Contour Area	Top Contour Area	Surface Storage Volume	Subsurface Storage Volume	Active Infiltration Volume
1	107 s.f.	299 s.f.	203 c.f.	43 c.f.	94 c.f.
2	48 s.f.	183 s.f.	116 c.f.	19 c.f.	42 c.f.
Total Volume Provided		517 c.f.	. 319 c.f.	62 c.f.	136 c.f.

Existing Building

Existing Concrete

— G — Gas Line

0 c.f. CPVC Volume Req 1.75 in/hr Infiltration Rate

TO BE USED DURING CONSTRUCTION. SUBMIT MODIFICATIONS TO THE

3) EROSION PROTECTION SHALL BE PROVIDED AT ALL STORM SEWER INLETS

AND OUTLETS. ALL BARE EARTH SHALL BE STABILIZED WITH SEEDING.

4) REFER TO THE M.D.O.T. "SOIL EROSION AND SEDIMENTATION CONTROL

5) THE ENTIRE STORM SEWER SYSTEM SHALL BE CLEANED AND FLUSHED

FOLLOWING CONSTRUCTION AND PAID RECEIPT THEREOF PROVIDED TO THE ENGINEER AND COUNTY SESC AGENT PRIOR TO FINAL PAYMENT TO

6) THE CONTRACTOR SHALL BE RESPONSIBLE TO INSPECT, TAKE CORRECTIVE ACTION AND MAINTAIN ALL TEMPORARY SESC MEASURES DAILY AND AFTER EACH RAIN EVENT UNIT FINAL COMPLETION AND ACCEPTANCE OF THE

THE CONTRACTOR OR FINAL ACCEPTANCE OF THE CONSTRUCTION BY THE

REFER TO MDOT STANDARD PLAN R-96-D

CONTROLLING AGENCY, THE OWNER, AND THE ENGINEER.

MANUAL" (MARCH 2021) FOR ADDITIONAL INFORMATION

*Infiltration Rate per McDowell and Associates Soil Report Job No. 23-521 dated Jan 5 2024

Rain Garden 1		
Top of Storage	1034.00	
Surface Storage	1.00	
Mulch	0.33	Subsurface Depth
Bioretention Soil Mix	1.00	
Choker layer	0.00	
Stone	0.00	
Outlet Invert	1031.67	
Outlet invert	1031.07	
Rain Garden 2		
Top of Storage	1033.00	
Surface Storage	1.00	
− Mulch	0.33	Subsurface Depth
Bioretention Soil Mix	1.00	
Choker Layer	0.00	
Stone	0.00	
Outlet Invert	1030.67	

www.nederveld.com 800.222.1868 **ANN ARBOR**

3037 Miller Rd. Ann Arbor, MI 48103 Phone: 734.929.6963 CHICAGO COLUMBUS

GRAND RAPIDS

HOLLAND

INDIANAPOLIS

PREPARED FOR:

1131 White Lake Rd.

Wiggles & Giggles

Khaled Mheisen

Highland, MI 48356

REVISIONS:

Title: SITE PLAN SUBMITTAL Drawn: CB/OO Checked: BC Date: 7.1.2024 Title: REVISED LAYOUT PLAN

Drawn: CB/OO Checked: BC Date: 8.16.2024 Title: SITE PLAN RESUBMITTAL Drawn: CB/OO Checked: BC Date: 9.11.2024 Title: CONSTRUCTION PLAN SUBMITTAL Drawn: CB/OO Checked: BC Date: 10.10.2024

Title: CONSTRUCTION PLAN RESUBMITTAL TO R.C.O.C Drawn: CB/OO Checked: BC Date: 12.19.2024

<u>9</u>5

MIGG

1.33

1.33

PROJECT NO:

24500220

SHEET NO:

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

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.

ONLY UTILITIES IN THIS AREA.



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.

EXISTING LITH ITIES 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.



800.222.1868 **ANN ARBOR** 3037 Miller Rd. Ann Arbor, MI 48103

Phone: 734.929.6963

CHICAGO COLUMBUS **GRAND RAPIDS** HOLLAND **INDIANAPOLIS**

PREPARED FOR:

Wiggles & Giggles Khaled Mheisen

> 1131 White Lake Rd. Highland, MI 48356

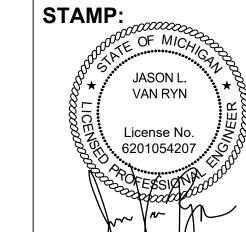
REVISIONS:

Title: SITE PLAN SUBMITTAL Drawn: CB/OO Checked: BC Date: 7.1.2024 Title: REVISED LAYOUT PLAN Drawn: CB/OO Checked: BC Date: 8.16.2024 Title: SITE PLAN RESUBMITTAL Drawn: CB/OO Checked: BC

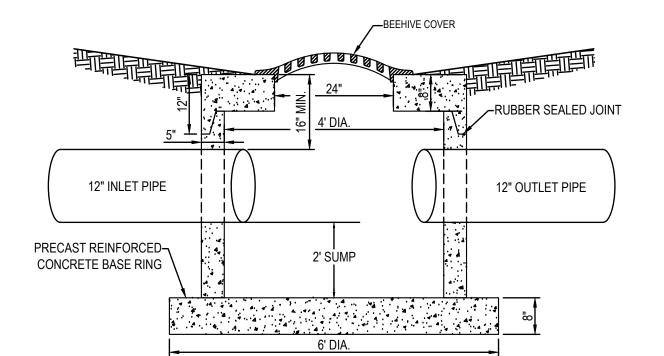
Title: CONSTRUCTION PLAN SUBMITTAL Drawn: CB/OO Checked: BC Date: 10.10.2024 Title: CONSTRUCTION PLAN RESUBMITTAL TO R.C.O.O Drawn: CB/OO Checked: BC Date: 12.19.2024

5 <u>9</u>5

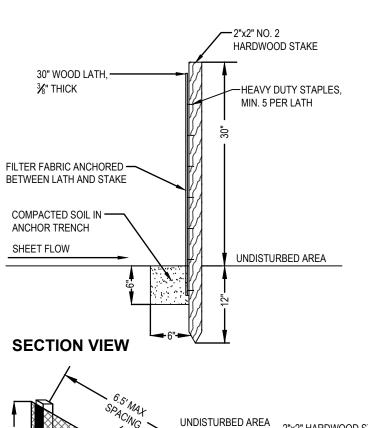
Ø

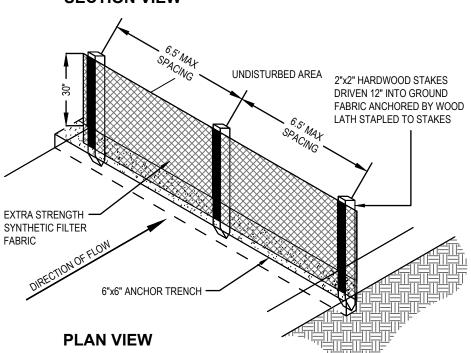


PROJECT NO:



LOW HEAD STORM STRUCTURE





SANITARY SEWER TRENCH AND BACKFILL DETAIL

— GRADE OVER

SAN. SEWER

MDOT CLASS II

SAND BED & BACKFILL

MIN = PIPF O D PLUS 12

MAX. = PIPE O.D. PLUS 18"

1. TRENCH TO BE BEDDED AND BACKFILLED WITH SAND AS NOTED ON DETAIL UNDER ALL

2. WHEN SANITARY SEWER PIPE IS OUTSIDE OF PAVED AREAS THE MINIMUM AMOUNT OF

SAND BACKFILL SHALL BE, AS NOTED, FROM THE BOTTOM OF TRENCH TO 12" ABOVE

CROWN OF STORM PIPE AND THE REMAINDER OF TRENCH BACKFILL WITH EXCAVATED

STORM SEWER TRENCH AND BACKFILL DETAIL

- GRADE OVER

MDOT CLASS II

SAND BED & BACKFILL

MIN. = PIPE O.D. PLUS 12"

MAX. = PIPE O.D. PLUS 30"

2. WHEN STORM SEWER PIPE IS OUTSIDE OF PAVED AREAS THE MINIMUM AMOUNT OF

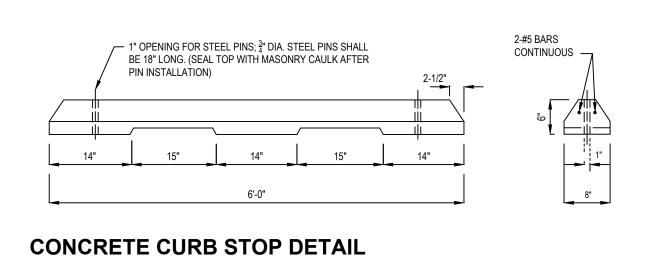
SAND BACKFILL SHALL BE, AS NOTED, FROM THE BOTTOM OF TRENCH TO 12" ABOVE CROWN OF STORM PIPE AND THE REMAINDER OF TRENCH BACKFILL WITH EXCAVATED

1. TRENCH TO BE BEDDED AND BACKFILLED WITH SAND AS NOTED ON DETAIL UNDER ALL

STORM SEWER

SEE PAVEMENT -

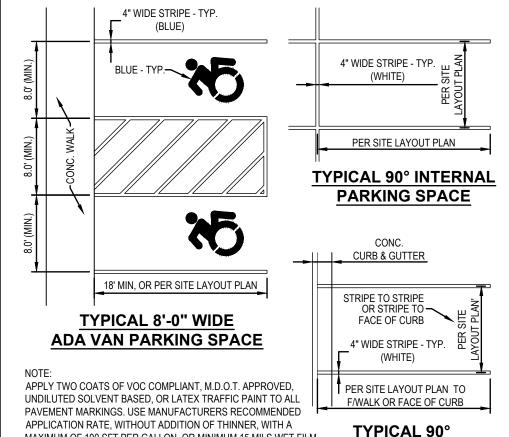
SPECIFICATIONS



UNDERCUT

SILT FENCE DETAIL

12 GAUGE ¬



PREMODELED EXPANSION/ISOLATION —

FILL WITH TRAFFIC SEALANT

2. LOCATE CONTROL JOINTS AND EXPANSION JOINTS PER ACI STANDARDS

4. PANELS SHALL BE KEPT AS SQUARE AS POSSIBLE WITH THE LENGTH

CONCRETE PAVEMENT DETAIL

-4" CONCRETE PAVEMENT

DUTY, 4,000 psi)

2" MDOT 5E BITUMINOUS PAVEMENT 3" MDOT 4E BITUMINOUS PAVEMENT

4" MDOT 3E BITUMINOUS PAVEMENT

R.C.O.C. INSPECTOR IN THE FIELD

SUITABLE BASE TO BE DETERMINED BY

(STANDARD DUTY, 4,000 psi)

6" CONCRETE PAVEMENT (HEAVY

STRIP WITH REMOVABLE TOP CAR

CONTROL JOINT

1. LIGHT BROOM FINISH

3. PANEL SIZE SHALL NOT EXCEED 8 FEET

NEVER EXCEEDING 1.25X THE WIDTH 5. AIR ENTRAINMENT - 7% ± 1%

1. HMA MIXTURE TO BE TIER I OR TIER II

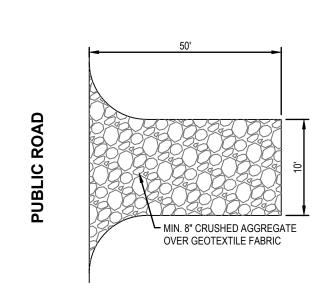
2. BINDER GRADE TO BE A MINIMUM OF PG 58-22

R.C.O.C RIGHT-OF-WAY

PAVEMENT CROSS SECTION DETAIL

TYPICAL 90° MAXIMUM OF 100 SFT PER GALLON, OR MINIMUM 15 MILS WET FILM PERIMETER THICKNESS, AND 7.5 MILS DRY FILM THICKNESS PER COAT, WITH MINIMUM 30 DAYS BETWEEN APPLICATIONS. SECOND COAT MUST **PARKING SPACE** NOT BE APPLIED EARLIER THAN 7 DAYS BEFORE OCCUPANCY.

PARKING SPACE MARKING DETAILS

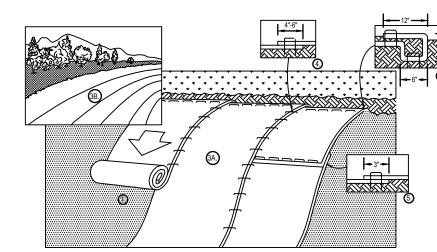


TEMPORARY CRUSHED ROCK TRACKING PAD



INSTALLATION INSTRUCTIONS

. Remove grate from the drainage



PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET. 3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS PER MANUFACTURES RECOMMENDATION.
THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 4"-6" OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN 5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE

3"OVERLAP, STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12"APART ACROSS ENTIRE BLANKET WIDTH. PLACE STAPLES/STAKES PER MANUFACTURE RECOMMENDATION FOR THE APPROPRIATE SLOPE BEING APPLIED. IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS. 8. FOLLOW EROSION CONTROL TECHNOLOGY COUNCIL SPECIFICATION FOR PRODUCT SELECTION

EROSION CONTROL BLANKET DETAIL

CONSTRUCTION NOTES

STORM SEWER ALL CATCH BASINS SHOULD BE PROVIDED WITH A MINIMUM 2' SUMP 2. ALL STORM SEWER SHALL BE SMOOTH LINED CORRUGATED POLYETHYLENE PIPE (SLCPP), WITH WATERTIGHT JOINTS MEETING THE REQUIREMENTS OF THE MICHIGAN PLUMBING CODE, AASHTO M-252 AND M-294, ASTM F-2306. F-2648. D-3212. F-477. F-2487. D-3350 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-III UNLESS OTHERWISE NOTED 3. 6" UNDERDRAIN SHALL BE PERFORATED PIPE WITH SOCK, MEETING THE REQUIREMENTS OF AASHTO M-252 AND THE GEOTEXTILE SHALL MEET AASHTO M-288 REQUIREMENTS

 ALL FLARED 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

1. ALL CONSTRUCTION AND MATERIAL SPECIFICATIONS INCLUDED FOR THIS PROJECT SHALL BE IN ACCORDANCE WITH THE MDOT CONSTRUCTION AND MATERIALS 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 PERFORMED BY THE OWNER AND SHALL BE PROVIDED TO THE CONTRACTOR.

VARIATION IN EXISTING SOIL CONDITIONS MAY IMPACT THE EARTHWORK QUANTITIES IF UNUSABLE SOILS ARE ENCOUNTERED DURING CONSTRUCTION. 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES TO THE EXISTING WATER AND SEWAGE SYSTEM RESULTING FROM NON-CONFORMANCE WITH THE APPLICABLE STANDARDS OR THROUGH GENERAL

4. ALL WORK, INCLUDING INSPECTIONS AND TESTING COST 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 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 REPLACED 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.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL NECESSARY PERMITS FROM

6. ALL LAWN AREAS REMOVED OR DISTURBED SHALL BE REPLACED WITH TOPSOIL AND SOD WHERE NEEDED AND SHALL BE RESEEDED 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

8. THE CONTRACTOR SHALL OBTAIN A STREET OPENING PERMIT FROM THE CITY BEFORE BEGINNING WORK

WITHIN ANY PUBLIC STREET RIGHT-OF-WAY. 9. THE CONTRACTOR SHALL MAINTAIN A CURRENT SET OF CONSTRUCTION DRAWINGS ON SITE AT ALL TIMES. 10. 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. 11. 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 AND TEMPORARY TRAFFIC CONTROL DEVICES 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 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.

12. THE CONTRACTOR SHALL PROTECT LOCATION OF ALL PROPERTY PINS AND BENCHMARKS.

13. ALL WORK CONTEMPLATED SHALL AT ALL TIMES BE SUBJECT TO THE DIRECT INSPECTION OF THE CITY, OWNER AND THEIR REPRESENTATIVES. THE CITY AND OWNER RESERVES THE RIGHT TO HALT ALL CONSTRUCTION ACTIVITY FOR NONCONFORMANCE OF PLANS, SPECIFICATIONS AND OTHER APPLICABLE STANDARDS OR REGULATIONS.

14. PRICES BID PER FOOT FOR ALL PIPES IS COMPACTED IN PLACE REGARDLESS OF SOIL OR ROCK CONDITIONS. CONTRACTOR IS RESPONSIBLE FOR ALL SIGNS, BARRICADES AND SAFETY FENCES TO DETER PEOPLE FROM 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

16. 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

17. 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. 18. NO PARKING OF CONTRACTOR OR CONTRACTOR EMPLOYEE'S VEHICLES ON ANY PUBLIC STREETS SHALL BE PERMITTED.

19. ALL DISTURBED SIGNS, GUARDRAILS, MAIL BOXES, AND DRIVEWAYS SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE CITY AND THE OWNER. 20. 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, MDEQ OR ANY OTHER GOVERNING AUTHORITY.

ALL SEWERS. MANHOLES, JUNCTION CHAMBERS AND INLET BASINS MUST BE CLEANED BEFORE ACCEPTANCE BY THE CITY AND OWNER. 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 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 TRANSFERS DEVICES SHALL BE REPLACED AS DIRECTED BY THE COUNTY AND THE ENGINEER.

ALL EXISTING CASTINGS FOR 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. 25. COMPACTED PREMIUM BACKFILL (MDOT CLASS II SAND) WILL BE REQUIRED AT ALL FILL AREAS OR 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 REQUIRED EVERY 50 FEET UNDER PAVEMENT. PAVEMENT INCLUDES, BUT NOT LIMITED TO, ROADWAY SURFACES, SIDEWALKS, BIKE WAYS, DRIVEWAYS, SHOULDERS, BUILDINGS, ETC.

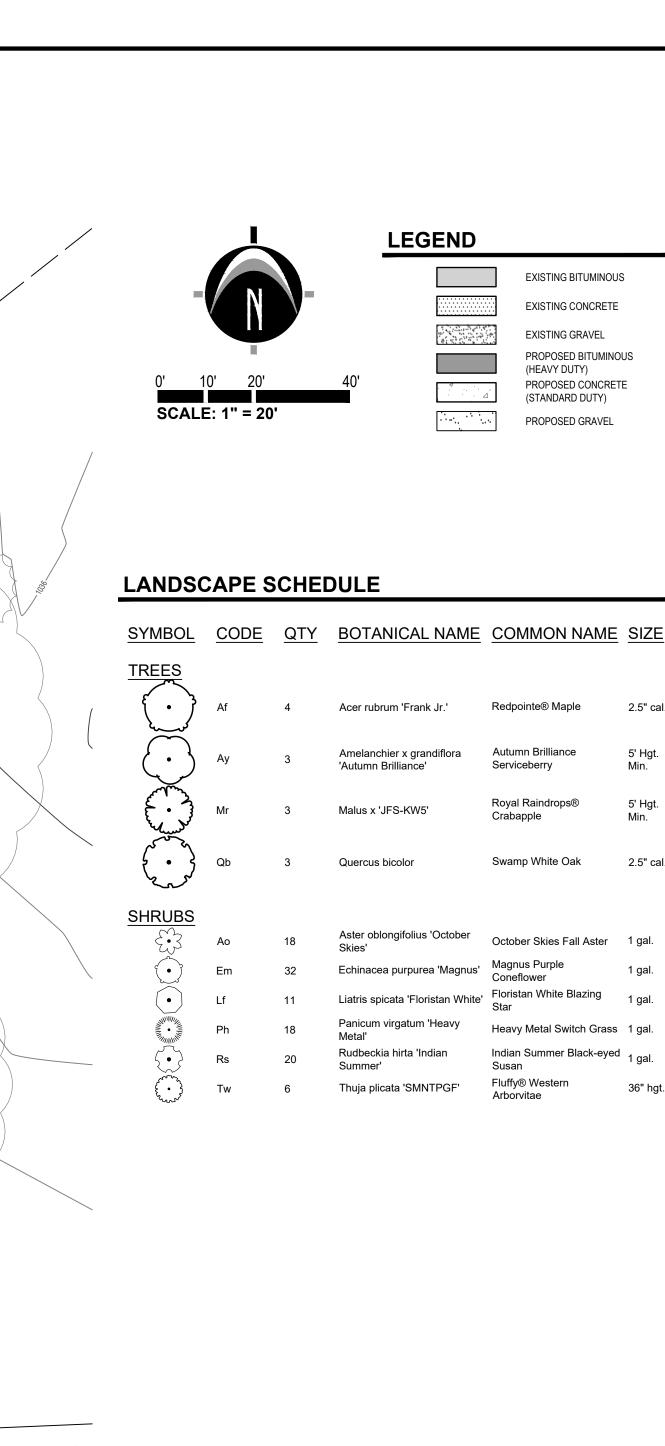
NO BUILDING MATERIAL, EQUIPMENT, VEHICLES OR CHEMICALS SHALL BE STORED OR PLACED OUTSIDE LIMITS OF WORK/DISTURBANCE. STORMWATER POLLUTION PREVENTION ITEMS SHALL BE IN PLACE PRIOR TO COMMENCING CLEARING OPERATIONS, EARTHWORK GRADING, OR ANY OTHER TYPE OF CONSTRUCTION ACTIVITY.

28. ROOF DRAINS, FOUNDATION DRAINS AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER ARE PROHIBITED. 29. CONSTRUCTION NOISE SHALL BE KEPT TO A MINIMUM DURING NIGHTTIME HOURS AND MUST COMPLY WITH MUNICIPAL CODE REQUIREMENTS.

30. ALL TREES WITHIN THE GRADING LIMITS SHALL BE REMOVED UNLESS OTHERWISE NOTED. 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.

32. ALL CONCRETE PAVEMENT OR CURB EDGES AT HOT MIX ASPHALT JOINTS SHALL BE IMMEDIATELY SEALED AFTER PAVING WITH A SUITABLE RUBBERIZED ASPHALT SEALANT PER MDOT STANDARD CONSTRUCTION SPECIFICATIONS SECTION 502 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 FOR PROJECT NAME PREPARED BY COMPANY NAME DATED



S87°34'19"W 1527.29'

8" PINE X2

N87°34'19"E 192.22'

ISOLATION AREA

LANDSCAPE NOTES

PLANTING NOTES:

LEGEND

EXISTING BITUMINOUS

EXISTING CONCRETE

PROPOSED BITUMINOUS

PROPOSED CONCRETE (STANDARD DUTY)

PROPOSED GRAVEL

Autumn Brilliance

Royal Raindrops®

Swamp White Oak

Fluffy® Western

Heavy Metal Switch Grass 1 gal.

Serviceberry

Crabapple

Amelanchier x grandiflora

'Autumn Brilliance'

Malus x 'JFS-KW5'

Quercus bicolo

EXISTING GRAVEL

(HEAVY DUTY)

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 OF 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 A NEAT, HEALTHY AND WEED FREE CONDITION. ANY DEAD, DISEASED OR DAMAGED PLANT MATERIALS ARE TO BE
- 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, APRROX. 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 SHREDDED 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" THICK AT TIME OF INSPECTION AND AFTER COMPACTED BY RAIN OR IRRIGATION. ALL PLANTING BEDS SHALL BE EDGED WITH 6" X 12 GAUGE STEEL LANDSCAPE EDGING.
- 8) LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE VERIFICATION OF ALL UNDERGROUND AND OVERHEAD UTILITIES. IF A CONFLICT WITH UTILITIES EXIST, NOTIFY OWNER/CONSTRUCTION MANAGER PRIOR TO

9) PLANT MATERIAL SHALL BE GUARANTEED FOR ONE YEAR AFTER PLANTING AND ACCEPTANCE.

-) 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 GRAIN 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"-4" OF LIGHTLY COMPACTED APPROVED TOPSOIL. TOPSOIL SHALL BE FERTILE, SCREENED, FRIABLE TOPSOIL FREE OF STONES 1/2" IN DIA. AND LARGER, ROOTS, STICKS, OR OTHER EXTRANEOUS MATERIAL INCLUDING NOXIOUS PLANTS. PH BETWEEN 6.0 AND 6.5, SALTS 500 PARTS PPM, ORGANIC CONTENT 3% MIN. DO NOT INSTALL TOPSOIL UNTIL APPROVED BY OWNER/C.M.. TOPSOIL SHALL BE FINE GRADED TO A SMOOTH FINISH, FREE OF LUMPS AND DEPRESSIONS.
- 6) ALL LANDSCAPE ISLANDS WITHIN PARKING LOTS SHALL BE BACK FILLED WITH TOPSOIL TO A DEPTH OF 18" MIN. **IRRIGATION NOTES:**
- 1) AN IN-GROUND IRRIGATION SYSTEM IS NOT REQUIRED PER LOCAL ZONING ORDINANCES. HOWEVER, IT IS RECOMMENDED THAT 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/OWNER FOR APPROVAL PRIOR TO COMMENCEMENT OF WORK.

LANDSCAPE CALCULATIONS

PARKING LOT LANDSCAPING: SEC. 12.05 1 TREE & 3 SHRUBS FOR EVERY 8 PARKING SPACES PARKING TOTAL: 10 SPACES PROPOSED: 1 TREE & 6 SHRUBS REQUIRED: 1 TREE & 3 SHRUBS

12 FT MIN. WIDTH, 1 DECIDUOUS TREE PER 30 LF OF FRONTAGE ABUTTING A PUBLIC ROAD RIGHT-OF-WAY. THE WIDTH OF DRIVEWAYS SHALL NOT BE COUNTED AS FRONTAGE. PROPOSED: 6 TREES & RAIN GARDEN INSTALLATION REQUIRED: 6 TREES WHITE LAKE RD FRONTAGE: 192 LF

SITE LANDSCAPING: SEC. 12.07

REQUIRED: 6 TREES

2 STRAND TWISTED 12 GAUGE GALVANIZED WIRE ENCASED IN 1" DIA. RUBBER HOSE

IN ADDITION TO REQUIRED LANDSCAPING AT LEAST 15% OF THE SITE AREA SHALL BE LANDSCAPED.

REQUIRED: 5,541 SQ. FT. OF AREA PROPOSED: 7,185 SQ. FT. OF LANDSCAPE AREA

PROPOSED: 6 TREES

PREPARED FOR: Wiggles & Giggles Khaled Mheisen

Title: SITE PLAN RESUBMITTAL Drawn: CB/OO Checked: BC Date: 9.11.2024

Drawn: CB/OO Checked: BC Date: 12.19.2024

(1)

<u>9</u>5

MEG

JASON L. VAN RYN License No. 6201054207

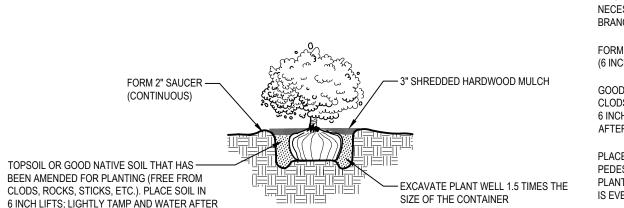
PROJECT NO: 24500220

SHEET NO:

IMPORTANT: FOR MULTI-STEMMED TREE (RUBBER HOSE AT BARK - TYP.) WIRE SHALL HAVE SOME SLACK IN IT TO ALLOW THE PLANTING, TIE ALL MAJOR TRUNK TO SWAY SLIGHTLY, WHILE KEEPING STEMS/BRANCHES TOGETHER THE ROOT SYSTEM STABILIZED. WHITE -WITH WIRE (USE RUBBER FLAG EACH GUY WIRE TO INCREASE HOSE TO PROTECT EACH STEM/BRANCH FROM THE (3) 2 INCH X 2 INCH HARDWOOD STAKES -DRIVEN (MIN. 18") FIRMLY INTO SUBGRADE KEEP MULCH AWAY PRIOR TO BACKFILLING FROM ROOT COLLAR NECESSARY, STAKE ABOVE FIRST BRANCHES FOR FIRM SUPPORT 3" SHREDDED HARDWOOD MULCH FORM SAUCER OUT OF PREPARED SOIL -(6 INCH MIN.)- TAMPED GOOD NATIVE SOIL OR TOPSOIL; (FREE FROM CLODS, ROCKS, STICKS, ETC.) PLACE SOIL IN ROPES AT TOP OF BALL SHALL BE CUT. REMOVE TOP 1/3 OF BURLAP; 6 INCH LIFTS; LIGHTLY TAMP AND WATER — AFTER EACH LIFT TO REMOVE AIR POCKETS CONTAINERS AND NON-BIODEGRADABLE MATERIAL SHALL BE TOTALLY REMOVED PLACE ROOTBALL ON UNDISTURBED PEDESTAL TO PREVENT SETTLING. PLANT SO THAT TOP OF ROOT BALL TREE PITS SHALL BE A MINIMUM OF 2 TIMES THE IS EVEN WITH THE FINISHED GRADE DIAMETER OF THE TREE BALL/CONTAINER, WITH

THREE TO FOUR TIMES THE DIAMETER

TYPICAL TREE PLANTING DETAIL



EACH LIFT TO REMOVE AIR POCKETS. TYPICAL SHRUB / PERENNIAL / ORNAMENTAL GRASS PLANTING DETAIL

(CONTINUOUS)

TOPSOIL OR GOOD NATIVE SOIL THAT HAS-

BEEN AMENDED FOR PLANTING (FREE FROM

—Land Planning — Landscape Architecture — Civil Engineering — Land Surveying — High Definition Scanning — Forensic Engineering — Fire Investigation =

N87°34'19"E 50.00'

ROAD

MILFORI

Know what's below.

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

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.

ONLY UTILITIES IN THIS AREA.

CALL before you dig.

PROP RAIN

GARDEN

GREENBELT

CLASSROOM

BUILDING

1,776 SQ FT

S87°34'19"W 242.22'

WHITE LAKE ROAD

ANN ARBOR 3037 Miller Rd. Ann Arbor, MI 48103 Phone: 734.929.6963 CHICAGO COLUMBUS **GRAND RAPIDS** HOLLAND INDIANAPOLIS

www.nederveld.com

800.222.1868

1131 White Lake Rd. Highland, MI 48356

REVISIONS:

Title: SITE PLAN SUBMITTAL Drawn: CB/OO Checked: BC Date: 7.1.2024 Title: REVISED LAYOUT PLAN Drawn: CB/OO Checked: BC Date: 8.16.2024

Title: CONSTRUCTION PLAN SUBMITTAL Drawn: CB/OO Checked: BC Date: 10.10.2024 Title: CONSTRUCTION PLAN RESUBMITTAL TO R.C.O.C

