Gahanna
DEPARTMENT OF PLANNING

ZONING DIVISION
200 S. Hamilton Road
Gahanna, Ohio 43230
614-342-4025
zoning@gahanna.gov
www.gahanna.gov

FINAL DEVELOPMENT PLAN APPLICATION

PROPERTY INFORMATION		
Project/Property Address: 425 s. Hamilton Rd., Gahanna, OH 43230	Project Name/Business Name: Shepherd Church of the Nazarene	
Parcel #: 025-000406-00	Zoning: *(see Map)* RID	Acreage: 35.7 Total acres (26.12 parcel)

PLAN SPECIFICATIONS
Project Description & Proposed Use(s): Installation of double wide, pre-manufactured modular classroom unit on the west side of the existing school building. Building is to be temporary (no more than 3 years) to facilitate the growing school population while the school decides on a permanent expansion project for the school.

APPLICANT INFORMATION	
Applicant Name *(Primary Contact)*: Jeff Hutcheson	Applicant Address: 3351 McDowell Rd./PO Box 370, Grove City, OH 43210
Applicant E-mail: jhutcheson@mcknightgroup.com	Applicant Phone: 614-875-1689
Business Name *(if applicable)*: McKnight & Hosterman Architects, Inc.	

ADDITIONAL CONTACTS *Please list all applicable contacts for correspondence*	
Name(s)	Contact Information (phone/email)
Mike Fluhart (principal of the school)	mfluhart@shepherdchristian.school 614-471-0859 (ext. 223)
Property Owner Name: *(if different from Applicant)* Shepherd Church of the Nazarene	Property Owner Contact Information (phone no./email): Mike Fluhart (see info above)

APPLICANT SIGNATURE BELOW CONFIRMS THE SUBMISSION REQUIREMENTS HAVE BEEN COMPLETED

I certify that the information on this application is complete and accurate to the best of my knowledge, and that the project as described, if approved, will be completed in accordance with the conditions and terms of that approval.

Applicant Signature: Jeffrey T. Hutcheson Digitally signed by Jeffrey T. Hutcheson DN: C=US, E=jhutcheson@mcknightgroup.com, O="McKnnight & Hosterman Architects, Inc.", CN=Jeffrey T. Hutcheson Date: 2023.08.02 11:37:02-04'00' Date: 8/2/23

ADDITIONAL INFORMATION ON NEXT PAGE....

INTERNAL USE

Zoning File No. FDP-0364-2023

RECEIVED: KAW DATE: 8-22-23

PAID: 1000.00 DATE: 8-22-23

Updated Apr 2022

Gahanna
DEPARTMENT OF PLANNING

FINAL DEVELOPMENT PLAN APPLICATION - SUBMISSION REQUIREMENTS

TO BE COMPLETED/SUBMITTED BY THE APPLICANT:
1. Review Gahanna Code Chapter 1108 (visit www.municode.com) & Chapter 914, Tree Requirements
2. Pre-application conference with staff. Contact zoning@gahanna.gov to schedule
3. The Final Development Plan shall include the following: a. Scale: Minimum - one inch equals 100 feet. b. The proposed name of the development, approximate total acreage, north arrow, and date c. The names of any public and/or private streets adjacent to or within the development d. Names and addresses of owners, developers and the surveyor who designed the plan e. Vicinity map showing relationship to surrounding development and its location within the community f. Natural features currently within proposed development, including drainage channels, tree lines, bodies of water, and other significant features g. Zoning district, building and parking setbacks h. Proposed location, size and height of building and/or structures i. Location and dimensions of proposed driveways and access points j. Proposed parking and number of parking spaces k. Distance between buildings
4. A table of development calculations is required which shall include: a. Parking calculations: (square footage of proposed buildings, number of spaces per square foot, number of spaces required, and actual number of spaces proposed) b. Lot coverage calculations: (square footage of site, area of permanently impervious surfaces broken down into buildings and parking, area of uncovered land, coverage requirements, proposed lot coverage) c. Setback calculations necessary when commercial abuts residential (if needed; see chapter 1167.20) d. Landscaping calculations: (square footage of pavement, proposed area of landscaping, square footage of landscaping, number of trees required, and number of trees proposed; see chapter 1163.08)
5. Any other information the Planning Commission may deem to be necessary to evaluate the application. These items can include such things as elevations, traffic studies, floor plans, etc.
6. List of contiguous property owners & their mailing address
7. One set of pre-printed mailing labels for all contiguous property owners
8. Application fee (*in accordance with the Building & Zoning Fee Schedule*)
9. Application & all supporting documents submitted in digital format
10. Application & all supporting documents submitted in hardcopy format
11. **One (1) copy** 24”x36” or 11”x17” prints of the plans
12. Authorization Consent Form Complete & Notarized (see page 3)

PLEASE NOTE:

- The Public Hearing will not occur until the City of Gahanna reviews the Application for Code Consistency. Applications that are not consistent with the code will not be scheduled for hearing.
- The application expires if no action is taken 6 months from the date of the last staff comment letter.

Gahanna
DEPARTMENT OF PLANNING

AUTHORIZATION CONSENT FORM

(must sign in the presence of a notary)

If you are filling out more than one application for the same project & address, you may submit a copy of this form with additional applications.

PROPERTY OWNER

IF THE PROPERTY OWNER IS THE APPLICANT, SKIP TO NEXT SECTION

As the property owner/authorized owner's representative of the subject property listed on this application, hereby authorize the applicant/representative to act in all matters pertaining to the processing and approval of this application, including modifying the project. I agree to be bound by all terms and agreements made by the applicant/representative.

Michael T Ehrhart
(property owner name printed)

(property owner signature) 8/9/23 (date)

Subscribed and sworn to before me on this 9 day of August, 2023.

State of Ohio County of Franklin

Notary Public Signature: Sydney McGrath

Stamp or Seal: Sydney J. McGrath
Notary Public, State of Ohio
My Commission Expires 07-26-2027

Applicant/Property Owner/Representative

AGREEMENT TO COMPLY AS APPROVED As the applicant/representative/owner of the subject property listed on this application, I hereby agree that the project will be completed as approved with any conditions and terms of the approval, and any proposed changes to the approval shall be submitted for review and approval to City staff.

AUTHORIZATION TO VISIT THE PROPERTY I hereby authorize City representatives to visit, photograph and post notice *(if applicable)* on the subject property as described.

APPLICATION SUBMISSION CERTIFICATION I hereby certify that the information on this application is complete and accurate to the best of my knowledge.

JEFFREY T. HUTCHESON
(applicant/representative/property owner name printed)

(applicant/representative/property owner signature) 8/17/23 (date)

Subscribed and sworn to before me on this 17th day of August, 2023

State of Ohio County of Franklin

Notary Public Signature: Andrea J. Tipton

Stamp or Seal: ANDREA J. TIPTON
Notary Public, State of Ohio
My Commission Expires 4-24-28

Updated
Apr 2022

Shepherd Church of the Nazarene owned properties:

Mark	ID	Owner	Property Address	Owner Address (if different from physical add.)
1	025-002211-00	SCN	S Rocky Fork Dr.	
2	025-000473-00	SCN	401 S Rocky Fork Dr.	425 S. Hamilton Rd., Gahanna, OH 43230
3	025-000472-00	SCN	393 S Rocky Fork Dr.	
4	025-000471-00	SCN	387 S Rocky Fork Dr.	
5	025-000470-00	SCN	373 S Rocky Fork Dr.	
6	025-000469-00	SCN	367 S Rocky Fork Dr.	
7	025-000406-00	SCN	1501 N Hamilton Rd.	425 S. Hamilton Rd., Columbus, OH 43230
8	025-002205-00	SCN	425 S Hamilton Rd.	
9	025-012950-00	SCN	N Hamilton Rd	

Neighboring properties

Mark	ID	Owner	Property Address	Owner Address (if different from physical add.)
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11	025-000468-00	Patricia A. Winterhalter	359 S Rocky Fork Dr.	14895 Cline Rd., Danville, OH 43014-9521
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13	025-000466-00	Scott T. Hisey	345 S Rocky Fork Dr.	
14	025-000465-00	Richard P. Tr. Parker	339 S Rocky Fork Dr.	
15	025-000464-00	Josh E. Burford and Jason B. McKee	331 S Rocky Fork Dr.	
16	025-000463-00	Jeanne E. and Ronald H. Parker	325 S Rocky Fork Dr.	
17	025-000462-00	Helen Joan Donley	317 S Rocky Fork Dr.	
18	025-000461-00	Johnathan David and Kaitlyn E. Pattee	311 S Rocky Fork Dr.	
19	025-000460-00	Pamela J. Frye	303 S Rocky Fork Dr.	
20	025-000459-00	Glen E. Wilson	297 S Rocky Fork Dr.	11231 Pickerington Rd., Pickerington, OH 43147
21	025-012951-00	City of Gahanna	N Hamilton Rd. Rear	200 S. Hamilton Rd., Columbus, OH 43230
22	025-002538-00	City of Gahanna	N Hamilton Rd.	200 S. Hamilton Rd., Columbus, OH 43230
23	025-013582	City of Gahanna	Hamilton Rd. Rear	200 S. Hamilton Rd., Columbus, OH 43230

*NOTE: All property information obtained from Franklin County Auditors website.

SHEPHERD CHURCH OF THE NAZARENE

425 S. HAMILTON ROAD — GAHANNA, OHIO 43230

PROJECT GENERAL NOTES

GENERAL:

1. IT IS THE RESPONSIBILITY OF EACH CONTRACTOR TO PROVIDE COMPLETE WORKING SYSTEMS FOR NEW ELEMENTS.
2. ALL CONTRACTORS SHALL PROVIDE NEW, UNDAMAGED MATERIALS UNLESS OTHERWISE SPECIFIED.
3. STORE MATERIALS IN SUCH A MANNER AS NOT TO OVERSTRESS, OVERLOAD, OR OTHERWISE PUT AN UNSAFE LOAD ON ANY STRUCTURE DURING CONSTRUCTION.
4. INSTALL ALL WORK IN ACCORDANCE WITH CURRENT APPLICABLE LOCAL, STATE, AND NATIONAL CODES' PUBLISHED STANDARDS, AND ACCEPTABLE CONSTRUCTION STANDARDS. ALL NEW WORK SHALL BE PLUMB AND LEVEL UNLESS NOTED OTHERWISE.
5. ALL FIRE-RATED PARTITIONS SHALL EXTEND TO STRUCTURE ABOVE. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR EXTENDING FIRE RATED PARTITIONS AROUND EQUIPMENT CABINETS AND OTHER ITEMS WHICH PENETRATE THESE PARTITIONS, AND SHALL BE RESPONSIBLE FOR FILLING ALL VOIDS IN FIRE-RATED PARTITIONS ABOVE CEILINGS TO MAINTAIN DESIGNATED FIRE-RATINGS.
6. ITEMS INDICATED N.I.C. ARE "NOT IN CONTRACT". WORK IN SURROUNDING AREAS MAY REQUIRE ACCESS THROUGH OR IN N.I.C. INDICATED ROOMS. REPAIR ALL SURFACES AND SYSTEMS TO THEIR ORIGINAL CONDITION IF DISTURBED OR DAMAGED.
7. ALL DIMENSIONS ARE TO FACE OF STRUCTURE OR EXISTING WALL FINISH SURFACE, UNLESS NOTED OTHERWISE. I.E. FACE OF STUD, FACE OF CONCRETE BLOCK.
8. DISSIMILAR FINISH FLOOR MATERIALS SHALL MEET MEET UNDER CENTER OF DOORS LEAF, UNLESS NOTED OTHERWISE.
9. ~~TOP OF FLOOR DRAINS TO BE 1/2" BELOW FINISHED FLOOR ELEVATION UNLESS NOTED OTHERWISE. SLOPE FLOOR TO THREE (3) FEET RADIUS IF NOT SPECIFIED OTHERWISE.~~
10. ALL BASES, INCLUDING CONCRETE PADS FOR MECHANICAL, PLUMBING, AND ELECTRICAL EQUIPMENT ARE THE RESPONSIBILITY OF THE TRADES INVOLVED UNLESS NOTED OTHERWISE.
11. SUB-CONTRACTOR SHALL DETERMINE ERECTION PROCEDURE AND SEQUENCE AND PROVIDE BRACING, ETC. THAT MAY BE REQUIRED TO COMPLETE THE WORK.
12. ~~VERIFY ROUGH OPENINGS WITH MANUFACTURERS PRIOR TO FRAMING.~~
13. FIELD VERIFY ALL EXISTING UNDERGROUND UTILITIES PRIOR TO EXCAVATION.
14. FIELD VERIFY ALL EXISTING SITE DIMENSIONS PRIOR TO START OF CONSTRUCTION.
15. ~~FIREBLOCKING SHALL BE INSTALLED IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS INCLUDING FURRED OR STUDDED OFF SPACES OF MASONRY OR CONCRETE WALLS, AND AT THE CEILING AND FLOOR OR ROOF LEVELS. FIRESTOPPING SHALL BE INSTALLED AT ALL INTERCONNECTIONS BETWEEN VERTICAL AND HORIZONTAL SPACES SUCH AS OCCUR AT SOFFITS OVER CABINETS, DROP CEILINGS, COVE CEILINGS, ETC.~~
16. HANDRAILS, GUARDRAILS, BALUSTERS, AND NEWEL POSTS SHALL COMPLY WITH CURRENT LOCAL CODES.
17. SCHEDULE ALL SHUT DOWNS OF UTILITIES WITH THE OWNER IN ADVANCE AS SPECIFIED. PREPARE SITE BEFOREHAND TO MINIMIZE THE DURATION OF SHUT DOWN. COMBINE SHUT DOWNS WHERE POSSIBLE WITH ALL TRADES.
18. THE EXISTING BUILDING ENVELOPE SHALL BE MAINTAINED IN A WATER TIGHT CONDITION AT ALL TIMES.
19. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EMERGENCY EGRESS FOR ALL OCCUPIED AREAS OF THE BUILDING DURING CONSTRUCTION.
20. DEFINITIONS:
    FURNISH-TO SUPPLY, PURCHASE, PROCURE, ACQUIRE, DELIVER TO THE SITE COMPLETE WITH RELATED ACCESSORIES AND TRANSFER TO OTHERS FOR INSTALLATION
    INSTALL-TO RECEIVE, UNLOAD, DISTRIBUTE, CONSTRUCT, ERECT, MOUNT, AND CONNECT COMPLETE WITH RELATED ACCESSORIES AND READY FOR SAFE AND REGULAR OPERATION AS APPLICABLE
    PROVIDE-TO FURNISH, INSTALL, AND PAY ALL COSTS IN CONNECTION THEREWITH.

COORDINATION OF TRADES:

1. EACH CONTRACTOR SHALL COORDINATE THEIR WORK WITH ALL OTHER TRADES.
2. GENERAL CONTRACTOR SHALL THICKEN WALLS AS REQUIRED TO ACCOMMODATE PLUMBING PIPES, ELECTRICAL PANEL BOXES, AND SIMILAR ITEMS. COORDINATE WITH THE ARCHITECT PRIOR TO CONSTRUCTION.
3. EACH SUB-CONTRACTOR SHALL OBTAIN AND PAY FOR REQUIRED BUILDING PERMIT, SCHEDULE REQUIRED INSPECTIONS, AND COORDINATE WITH ALL OTHER TRADES.

DISCREPANCIES/ CLARIFICATIONS:

1. CONTRACTOR SHALL VERIFY ALL ELEVATIONS, DIMENSIONS, AND EXISTING CONDITIONS PRIOR TO INITIATING CONSTRUCTION.
2. DO NOT SCALE DRAWINGS TO DETERMINE DIMENSIONS. IF A REQUIRED DIMENSION IS NOT INDICATED, CONTACT THE ARCHITECT FOR DETERMINATION.
3. DETAILS ARE GENERALLY TYPICAL AND ARE NOT TO BE CONSTRUED AS LIMITED TO THOSE AREAS SPECIFICALLY INDICATED. REVIEW ANY QUESTIONS OR CONFLICTING INFORMATION WITH THE ARCHITECT PRIOR TO INSTALLATION.
4. WHERE A DISCREPANCY IS FOUND BETWEEN EXISTING FIELD CONDITIONS AND/OR BETWEEN ARCHITECTURAL, STRUCTURAL, PLUMBING, ~~FIRE PROTECTION,~~ HVAC, OR ELECTRICAL CONTRACT DOCUMENTS, NOTIFY THE ARCHITECT IN WRITING FOR CLARIFICATION PRIOR TO BIDDING, FABRICATION, OR INSTALLATION.

DEMOLITION WORK:

1. ~~WHERE PARTITIONS AND WALLS ARE INDICATED TO BE REMOVED, ALL PLUMBING, MECHANICAL, AND ELECTRICAL WORK CONTAINED IN THE WALL OR ATTACHED SHALL BE REMOVED. CAP EXISTING LINES BEHIND REMAINING SURFACES, OR REMOVE TO NEAREST ALLOWABLE LOCATION, OR AS SPECIFIED.~~
2. DEMOLITION WORK SHALL BE EXECUTED IN CONFORMANCE WITH ALL APPLICABLE CODES AND ORDINANCES.
3. BRACE EXISTING STRUCTURAL ELEMENTS DURING DEMOLITION AS REQUIRED.
4. ~~ALL EXISTING COUNTER TOPS, PLUMBING AND LIGHT FIXTURES, DOOR HARDWARE, CABINET HARDWARE, TOILET ACCESSORIES, OR OTHER OWNER EQUIPMENT INDICATED FOR DEMOLITION SHALL BE DELIVERED TO THE OWNER'S DESIGNATED PLACE ON-SITE. COORDINATE WITH THE OWNER FOR DISPOSAL OF NON-SALVAGEABLE ITEMS.~~
5. REMOVE EXISTING FINISHES AT LOCATIONS WHERE NEW FINISHES ARE SCHEDULED, UNLESS NOTED OTHERWISE. REPLACE OR REPAIR ANY EXISTING FINISHES SCHEDULED TO REMAIN, WHICH ARE DAMAGED DURING DEMOLITION (I.E. CEILING GRID, WALL COVERING, FLOOR COVERING, ETC.).

CEILING INSTALLATION:

1. ~~ALL LAY-IN CEILING GRID SHALL BE EQUAL FROM OPPOSING EDGES OF ROOM UNLESS NOTED OTHERWISE. AVOID CUT SIZES SMALLER THAN 3 INCHES.~~

PREPARATION FOR NEW FINISHES:

1. ~~FILL ALL HOLES IN FLOOR AT LOCATIONS OF FORMER PLUMBING, ELECTRICAL, OR HVAC WORK. PREPARE FLOOR FOR NEW FINISHES.~~
2. ~~BRING EXISTING FLOOR SURFACES TO A SMOOTH, LEVEL SURFACE PRIOR TO INSTALLATION OF NEW FLOOR SURFACES. FILL ALL DEPRESSED AREAS WITH LIGHTWEIGHT CONCRETE FILL, SUCH AS WHERE OLD PARTITIONS ARE REMOVED. USE UNDERLAYMENT TO FILL ALL CRACKS, JOINTS,AND UNEVEN AREAS IN THE FLOOR TO REMAIN. PRIOR TO INSTALLATION OF NEW FLOOR FINISH, THE FLOOR SURFACE SHALL BE MADE FREE OF ALL BLEMISHES, UNEVENNESS AND EVIDENCE OF FORMER FLOOR FINISHES THAT COULD TELEGRAPH THROUGH THE NEW FLOOR FINISH.~~
3. ~~WHERE EXISTING WALLS ARE SHOWN AS REMAINING AND SCHEDULED FOR NEW FINISHES, REMOVE EXISTING FINISHES AND FILL HOLES, INCLUDING THOSE RESULTING FROM THE REMOVAL OF WALL DEVICES AND WALL MOUNTED EQUIPMENT. REPAIR ALL DAMAGED SURFACES AND PREPARE SURFACES FOR NEW FINISHES AS SPECIFIED AND/OR INDICATED.~~
4. ~~FILL ALL EXISTING AND NEW VOIDS IN RATED PARTITIONS AND SMOKE PARTITIONS ABOVE CEILINGS AS REQUIRED TO MAINTAIN DESIGNATED FIRE RATING.~~

CUTTING AND PATCHING:

1. THE CONTRACTOR SHALL NOT CUT STRUCTURAL WORK IN A MANNER RESULTING IN A REDUCTION OF LOAD CARRYING CAPACITY OR LOAD/DEFLECTION RATIO.
2. CUTTING OF JOISTS OR BEAMS IS PROHIBITED EXCEPT AS INDICATED ON THE DRAWINGS AND AS ALLOWED BY THE ARCHITECT OR STRUCTURAL ENGINEER ON A PER-CASE BASIS.
3. ~~MAINTAIN EXISTING WALL ABOVE WHERE POSSIBLE, AND PROVIDE LINTELS WHERE REQUIRED FOR NEW DOOR OPENINGS IN EXISTING WALLS.~~

WOOD BLOCKING:

1. PROVIDE BLOCKING AS REQUIRED ~~IN WALLS AND CEILINGS~~ TO ANCHOR ALL ~~WALL AND CEILING MOUNTED ITEMS, INCLUDING BUT NOT LIMITED TO, MILLWORK / CASEWORK, WALL CABINETS,~~ HANDRAILS, ~~COAT RACKS, DOOR STOPS, OWNER EQUIPMENT, SHELVING, CUBICLE TRACK, FURNITURE, WINDOW COVERING TRACK, SCREENS, AND OTHER SIMILAR ITEMS INCLUDING ITEMS SPECIFIED N.I.C. OR BY OWNER.~~
2. ALL WOOD BLOCKING TO BE 2X4 (OR 1X6) MINIMUM, ~~FIRE RETARDANT TREATED LUMBER.~~

A SITE AERIAL IMAGE
SCALE: N.T.S.

INDEX OF DRAWINGS

SHEET	SHEET DESCRIPTION
COVER	GENERAL PROJECT NOTES, SITE LOCATION, INDEX OF DRAWINGS
–	CIVIL DRAWINGS COVER SHEET & ZONING INFORMATION
C1.1	ARCHITECTURAL SITE DEVELOPMENT PLAN
C1.2	STORMWATER AND SEDIMENT CONTROL DETAILS
S0.1	STRUCTURAL NOTES
S1.1	FOUNDATION PLAN
S5.1	FOUNDATION DETAILS
A101	FLOOR PLAN, SCHEDULES, & NOTES
A201	ELEVATIONS & NOTES
A701	STAIR AND RAMP DETAILS & NOTES
SP100	SPECIFICATIONS
ME1	MECHANICAL ELECTRICAL PLAN & NOTES
E1	ELECTRICAL RISER AND LOAD CALCULATIONS
13	TOTAL SHEETS INCLUDING COVER SHEET

SUPPLEMENTAL DRAWINGS

SHEET	SHEET DESCRIPTION
	MANUFACTURERS DESIGN SET OF DRAWINGS
	SPECIALIZED STRUCTURES INC.
1 OF 5	COVER SHEET
2 OF 5	FLOOR PLAN
3 OF 5	ELEVATIONS
4 OF 5	FOUNDATION
5 OF 5	CROSS SECTION
5	TOTAL SUPPLEMENTAL SHEETS INCLUDING TITLE SHEETS

OWNER PARTICIPATION SCHEDULE

NO.	ITEM	FURNISHED AND INSTALLED/DONE BY OWNER	FURNISHED BY OWNER, INSTALLED BY CONT'R.
1.	ALL RISK INSURANCE	✓	
2.	TEMPORARY UTILITIES	✓	
3.	FURNITURE	✓	
4.	EXTERIOR SIGNAGE	✓	
5.	INTERIOR SIGNAGE	✓	
6.	WINDOW TREATMENTS	✓	
7.	ENTRY MATS	✓	
8.	TELEPHONE/INTERCOM SYSTEMS	✓	
9.	SECURITY SYSTEMS	✓	
10.	ELECTRONIC INFO. DISPLAYS	✓	
11.	I.T. / WIFI EQUIPMENT/CONN.	✓	
12.			

NOTES TO BUILDING PLANS EXAMINER

THE SCOPE OF THE PROJECT IS THE INSTALLATION OF A USED DOUBLE WIDE CLASSROOM MODULE ON THE EXISTING SITE FOR THE PURPOSE OF EXPANDING THE CLASSROOMS OF THE EXISTING CHRISTIAN SCHOOL. THE COMPANY THAT IS SUPPLYING THE MODULAR UNIT(S) IS RESPONSIBLE FOR PLACING THE UNIT ON THE FOUNDATIONS PROVIDED BY THE CC ON THE PROJECT AND SECURING THE ANCHORS PER MANUFACTURES RECOMMENDATIONS AND AS DESCRIBED BY THE STRUCTURAL DRAWINGS.

EXISTING SITE INFORMATION INCLUDING TOPOGRAPHY WAS DETERMINED FROM CIVIL DRAWINGS SUBMITTED AND APPROVED FOR THE PREVIOUS SCHOOL SUBMISSION IN 2004 AND COORDINATED WITH INFORMATION OBTAINED FROM THE FRANKLIN COUNTY GIS ONLINE WEBSITE AND SITE VERIFICATION AND DIMENSIONING.

STATEMENT OF SPECIAL INSPECTIONS

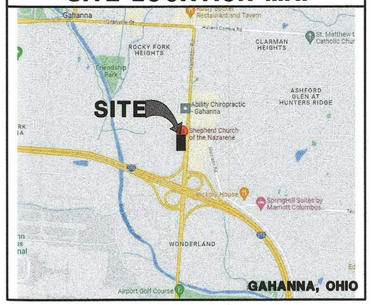
SPECIAL INSPECTIONS ARE REQUIRED TO BE PERFORMED BY AN INDEPENDENT THIRD PARTY TESTING AGENCY FOR CONSTRUCTION ON THIS PROJECT, WHICH HAS NOT BEEN DETERMINED AT THE TIME OF PERMIT SUBMISSION. ONCE THE FIRM HAS BEEN SELECTED TO PERFORM THE SPECIAL INSPECTIONS, THEIR CONTACT INFORMATION AND CREDENTIALS WILL BE SENT TO THE BUILDING DEPARTMENT FOR THEIR RECORDS AREAS OF SPECIAL INSPECTIONS ARE OUTLINED ON STRUCTURAL SHEET SO.1, BUT A SUMMARY OF THE FOLLOWING AREAS ARE TO BE INSPECTED:

1. MASONRY CONSTRUCTION
2. POURED CONCRETE FOOTINGS (ANCHORS, SPECIMEN TESTING, ETC.)
3. FILED WELDING OF TIE DOWN ANCHORS

ALTERNATES

ALTERNATE 1: USE OF PRE-MANUFACTURED, TEMPORARY ALUMINUM STAIRS AND RAMP WITH RAILINGS, TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS INSTEAD OF CONSTRUCTED WOOD STAIRS AND RAMP AS INDICATED ON THE DRAWINGS.

SITE LOCATION MAP



DRAWING STATUS

	DATE	STATUS
	11 JUL 23	PRELIMINARY - DD#1 SET
X	01 AUG 23	100% REVIEW / PERMIT SET

△ REVISIONS

MARK	DATE	SHEETS/COMMENTS
A	20 OCT 23	CORRECTION LETTER COMMENTS

STATE OF OHIO
PHILIP J. TIPTON
13225
REGISTERED ARCHITECT
10/23/23
PHILIP J. TIPTON, LICENSE #13225
EXPIRATION DATE 12/31/2023

SHEPHERD CON - MODULAR UNITS

The McKnight Group

McKnight & Hosterman Architects, Inc.
3351 McDowell Road P.O. Box 370 Grove City, Ohio 43123 Phone (614) 875-1689 Philip J. Tipton NCARB Certificate No. 56503

SET NUMBER _____ SET DATE - 08 AUG 23 COMM. NO. 223223

SHEPHERD CHURCH OF THE NAZARENE

425 S. HAMILTON ROAD — GAHANNA, OHIO 43230

Zoning: City of Gahanna — Franklin County, Ohio

ADJACENT PROPERTY INFORMATION:

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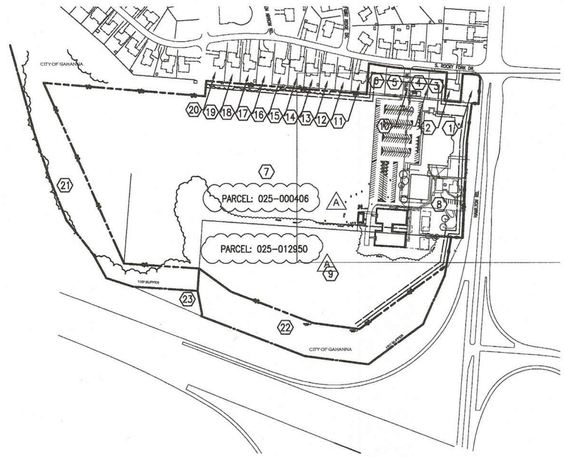
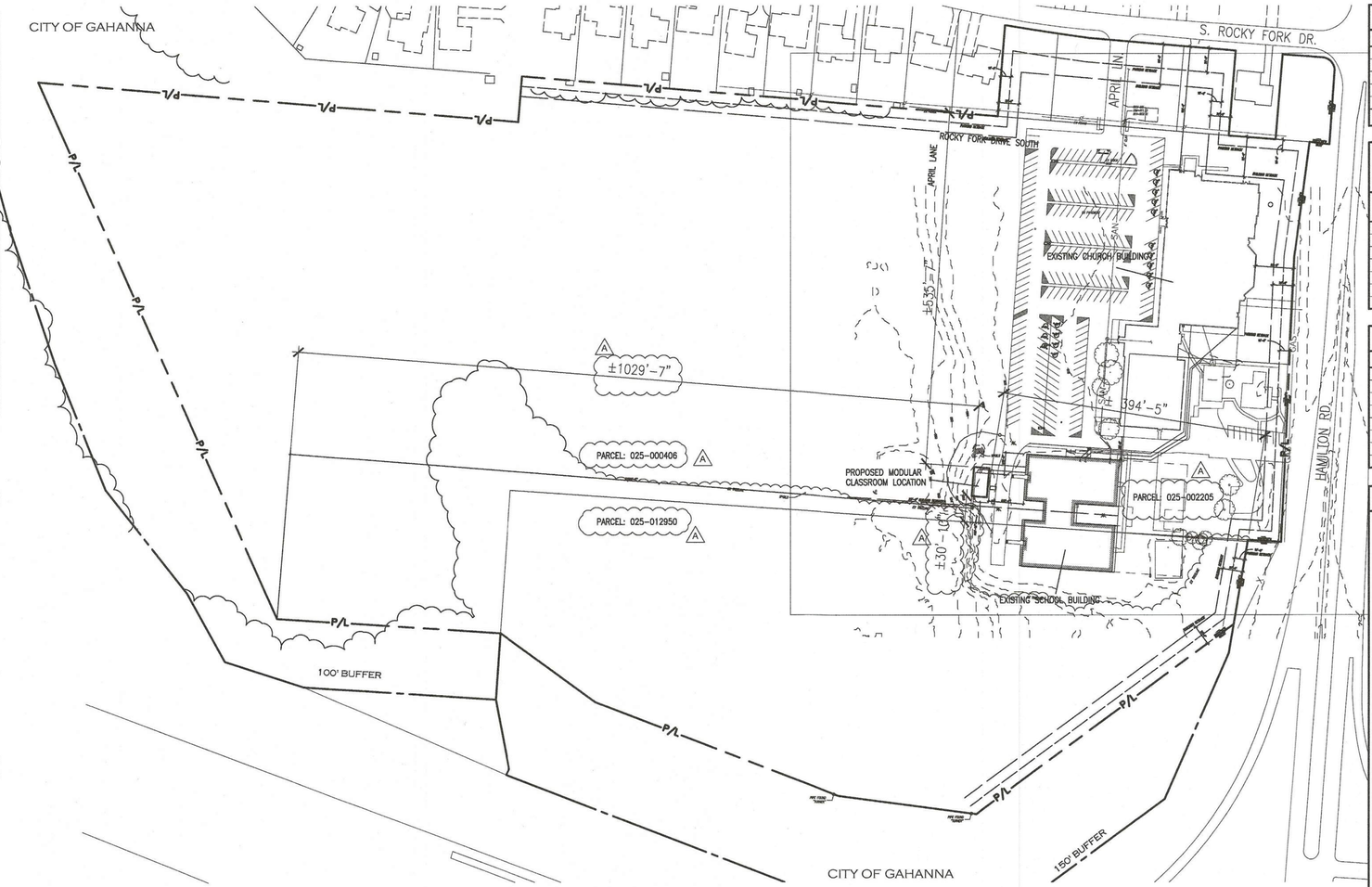
*NOTE: All property information obtained from Franklin County Auditors website.



ADJACENT PROPERTIES INDEX
SCALE: NOT TO SCALE



NORTH

A OVERALL SITE PLAN
SCALE: 1" = 100'

EXISTING ZONING INFORMATION:

ZONING INFORMATION

ZONING DISTRICT – RID (RESTRICTED INSTITUTIONAL DISTRICT)

SITE AREA = 35.70 AC (1,555,092.00 SQFT)

EXISTING BUILDING HEIGHT = 24'-6", PER SECT. 1143.05
MODULAR BUILDING HEIGHT = ±13'-4" ABOVE GRADE
DISTRICT BUILDING HEIGHT ALLOWABLE = 30'-0"

FLOOD ZONE – ZONE X
AS SHOWN ON FLOOD INSURANCE RATE MAP (PANEL 188 OF 387)
COMMUNITY PANEL # 39049C0188-G DATED: AUGUST 2, 1995

PARKING

TOTAL EXISTING PARKING – 189 SPACES
H.C. PARKING (INCL) – 17 SPACES

DIRECTOR OF ENGINEERING, CITY OF GAHANNA, OHIO — DATE:

SENIOR UTILITIES ENGINEER, CITY OF GAHANNA — DATE:

BENCH MARKS

(BASED ON 1929 NGVD)

BM #1 – IRON PIN (SET) LOCATED @ THE NORTH WEST CORNER OF THE PROPOSED ADDITION ELEV – 812.27

BM #2 – IRON PIN (SET) LOCATED @ THE SOUTH EAST CORNER OF THE FUTURE ADDITION ELEV – 812.27

INDEX OF DRAWINGS

SHEET	SHEET DESCRIPTION
COVER	ZONING INFORMATION, NOTES, AND INDEX OF CIVIL DRAWINGS
C1.1	ARCHITECTURAL SITE IMPROVEMENT PLAN
C1.2	SEDIMENT CONTROL DETAILS
3	TOTAL SHEETS INCLUDING COVER SHEET

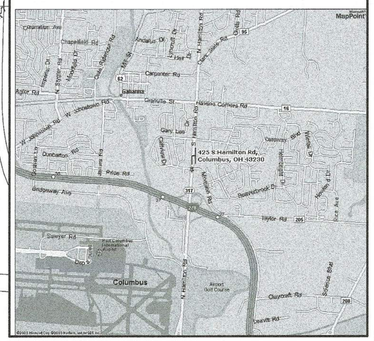
STANDARD CONSTRUCTION DRAWING LIST

THE STANDARD CONSTRUCTION DRAWINGS LISTED ON THESE PLANS SHALL BE CONSIDERD A PART THEROF.

ESTIMATE OF QUANTITIES

ITEM	UNIT	QUANTITY	DESCRIPTION
207	EACH	3	DANDY BAG SEDIMENT FILTER
207	L.F.	250	SEDIMENT CONTROL FENCE
207	LUMP SUM	AS NEEDED	TEMPORARY SEEDING

SITE LOCATION MAP



△ REVISIONS

MARK	DATE	SHEETS
A	20 OCT–2023	COVER, C1.1, C1.2

STATE OF OHIO
PHILIP J. TIPTON
13225
REGISTERED ARCHITECT
10/23/23

PHILIP J. TIPTON, LICENSE #13225
EXPIRATION DATE 12/31/2023

SHEPHERD CON - MODULAR UNITS

The McKnight Group

McKnight & Hosterman Architects, Inc.
3351 McDowell Road P.O. Box 370 Grove City, Ohio 43123 Phone (614) 875-1699 Philip J. Tipton NCARB Certificate No. 56503

SET NUMBER _____ SET DATE - 08 AUG 23 COMM. NO. 223223

SITE LEGEND

NOTE: NOT ALL SYMBOLS LISTED BELOW ARE APPLICABLE TO THIS PROJECT

EXISTING	PROPOSED	DESCRIPTION
		UTILITY POLE
		PAD MTD. TRANSFORMER
		LIGHT POLE
		GROUND LIGHT
		FIRE HYDRANT
		WATER METER
		GAS METER
C.O.	C.O.	CLEAN OUT
Y.D.	Y.D.	YARD DRAIN
		CATCH BASIN
		SANITARY MANHOLE
		DRAINAGE MANHOLE
		GUY WIRE
P/L		PROPERTY LINE
R/W		RIGHT-OF-WAY LINE
000.00		NEW GRADE CONTOUR WITH ELEVATION
000.00		EXISTING GRADE CONTOUR WITH ELEVATION
Gas		EXISTING UTILITY LINE TO REMAIN
Pwr		EXISTING UTILITY LINE TO BE REMOVED/ABANDONED
SIM		PROPOSED NEW UTILITY SERVICE LINE

KEYED NOTES

1. EXISTING ASPHALT PARKING LOT TO REMAIN UNCHANGED.
2. EXISTING SITE LIGHT POLES TO REMAIN UNCHANGED.
3. EXISTING TREES TO REMAIN UNCHANGED. PROTECT FROM CONSTRUCTION.
4. EXISTING CONCRETE WALK TO REMAIN UNCHANGED.
5. EXISTING 3" GAS SERVICE LINE TO REMAIN UNCHANGED.
6. EXISTING GAS METER TO REMAIN UNCHANGED.
7. EXISTING WATER SERVICE LINE TO REMAIN UNCHANGED.
8. EXISTING POWER COMPANY TRANSFORMER TO REMAIN UNCHANGED.
9. EXISTING UNDERGROUND PRIMARY ELECTRIC SERVICE TO REMAIN UNCHANGED.
10. EXISTING UNDERGROUND SECONDARY ELECTRIC LINES TO REMAIN UNCHANGED.
11. EXISTING STORMWATER STRUCTURE TO REMAIN. PROTECT FROM SEDIMENT RUNOFF AS NEEDED.
12. APPROXIMATE LOCATION OF NEW UNDERGROUND ELECTRIC LINE(S) TO FEED NEW MODULAR UNITS. SEE SHEETS "E1-1" AND "ME-1" FOR ADDITIONAL INFORMATION. AFTER CONDUITS INSTALLED, TRENCH AND BACKFILL AS REQUIRED.
13. LIMITS OF EXISTING ASPHALT DRIVE. UTILITY LINES ARE TO BE BORED UNDER DRIVE IF POSSIBLE TO PREVENT DIGGING UP DRIVE.
14. NEW GAS LINE FEEDING MODULAR UNIT HEATING UNIT TIED INTO EXISTING GAS SERVICE AS REQUIRED. SEE "ME-1" SHEET FOR ADDITIONAL INFORMATION. AFTER GAS LINE IS INSTALLED, BACKFILL AS REQUIRED.
15. NEW CONCRETE APPROACH FOR STAIRS AND RAMP FOR THE MODULAR UNIT(S). SEE SHEET A101 FOR DIMENSIONS.
16. EXISTING PLAYGROUND AREA/STRUCTURE TO REMAIN. NO WORK IS TO BE DONE IN THIS AREA OF THE SITE.
17. PROPOSED FUTURE BUILDING CONSTRUCTION.
18. EXISTING SEDIMENT CONTROL STRUCTURE TO REMAIN AND PROTECTED AS REQUIRED.
19. PROPOSED LOCATION OF SOIL PILE FROM EXCAVATED FOOTINGS AND WALKS. APPROX. SOIL VOLUME = 26.3 CU. YRDS.
20. PROPOSED WOODEN STEPS AN/OR RAMP UP TO FLOOR OF MODULAR CLASSROOM UNIT.

SCN-Lot coverage breakdown

	Acres	Sq. Ft.
Site area:	35.7 acres	1555092
Existing buildings		
Item	Sq. Ft.	% lot coverage
Existing buildings	68060	4.38
Parking/drives	103101	6.63
Concrete/walks	13600	0.87
TOTAL	184761	11.88
ADDITION		
Item	Sq. Ft.	% lot coverage
Modular building	1026	0.07
Concrete walk/ramp	90	0.01
TOTAL	1116	0.07
TOTAL PROPOSED		
Item	Sq. Ft.	% lot coverage
Buildings	69086	4.44
Parking/drives	103101	6.63
Concrete/walks	13690	0.88
TOTAL	185877	11.95

SCN-Soil displacement calculations

Mark	Diam.(in.)	X (in.)	Y (in.)	Hght(in.)	Displ.(cu.in.)	Quantity	Total displ.
F1	24			36	16286.02	28	456008.46
F2	30			36	25446.90	2	50893.80
F3	16			36	7238.23	25	180955.74
F4		48	72	36	124416.00	3	373248.00
F5		24	36	36	31104.00	2	62208.00
Walks		60	216	8	103680.00	1	103680.00
Total displacement of soil (cu.rds.)					26.29874		

LANDSCAPING NOTE:

BECAUSE THE MODULAR UNIT IS A TEMPORARY SOLUTION TO THE SCHOOL'S GROWING ATTENDANCE, THE MODULAR CLASSROOM UNIT IS ONLY INTENDED TO BE USED FOR 3 YEARS, AT WHICH TIME A PERMANENT SOLUTION WILL BE PROPOSED. WITH THIS IN MIND, THE ONLY LANDSCAPING BEING PROPOSED FOR THE PROJECT IS THE REPAIR OF THE GRASSY AREA AROUND THE MODULAR UNIT AND THE RAMP, STAIRS, AND WALKS.

GENERAL PLAN NOTES:

1. SEE SHEET C1.2 FOR SEDIMENT AND EROSION CONTROL INFORMATION.
2. ALL DAMAGE TO EXISTING ASPHALT DRIVES AND PARKING AREAS CAUSED BY CONSTRUCTION MUST BE REPAIRED.
3. AFTER MODULAR UNIT(S) IS/ARE SECURED IN ITS FINAL LOCATION, ALL SOILS EXTRACTED FROM FOOTING EXCAVATIONS THAT HAVE BEEN P[LACED IN THESPOILS PILE ARE TO BE SPREAD OVER EXISTING FIELD TO THE WEST OF THE EXISTING CHURCH, OR REMOVED FROM THE SITE COMPLETELY.
4. EXISTING SITE INFORMATION INCLUDING TOPOGRAPHY WAS DETERMINED FROM CIVIL DRAWINGS SUBMITTED AND APPROVED FOR THE PREVIOUS SCHOOL SUBMISSION IN 2004 (PERMIT NO. 24-04) AND COORDINATED WITH INFORMATION OBTAINED FROM THE FRANKLIN COUNTY GIS ONLINE WEBSITE WITH VISUAL SITE VERIFICATION.

EXISTING ZONING INFORMATION:

ZONING INFORMATION

ZONING DISTRICT – RID (RESTRICTED INSTITUTIONAL DISTRICT)

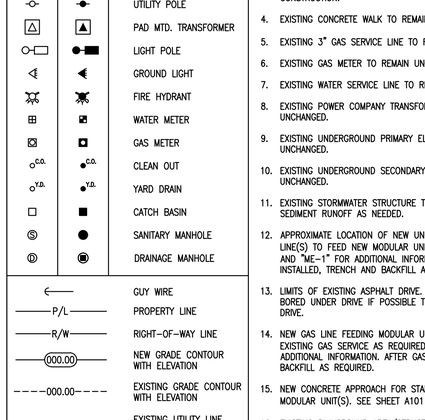
SITE AREA = 35.70 AC (1,555,092.00 SQFT)

EXISTING BUILDING HEIGHT = 24'-6", PER SECT. 1143.05
MODULAR BUILDING HEIGHT = ±13'-4" ABOVE GRADE
DISTRICT BUILDING HEIGHT ALLOWABLE = 30'-0"

FLOOD ZONE – ZONE X
AS SHOWN ON FLOOD INSURANCE RATE MAP (PANEL 188 OF 387)
COMMUNITY PANEL # 39049C0188-G DATED: AUGUST 2, 1995

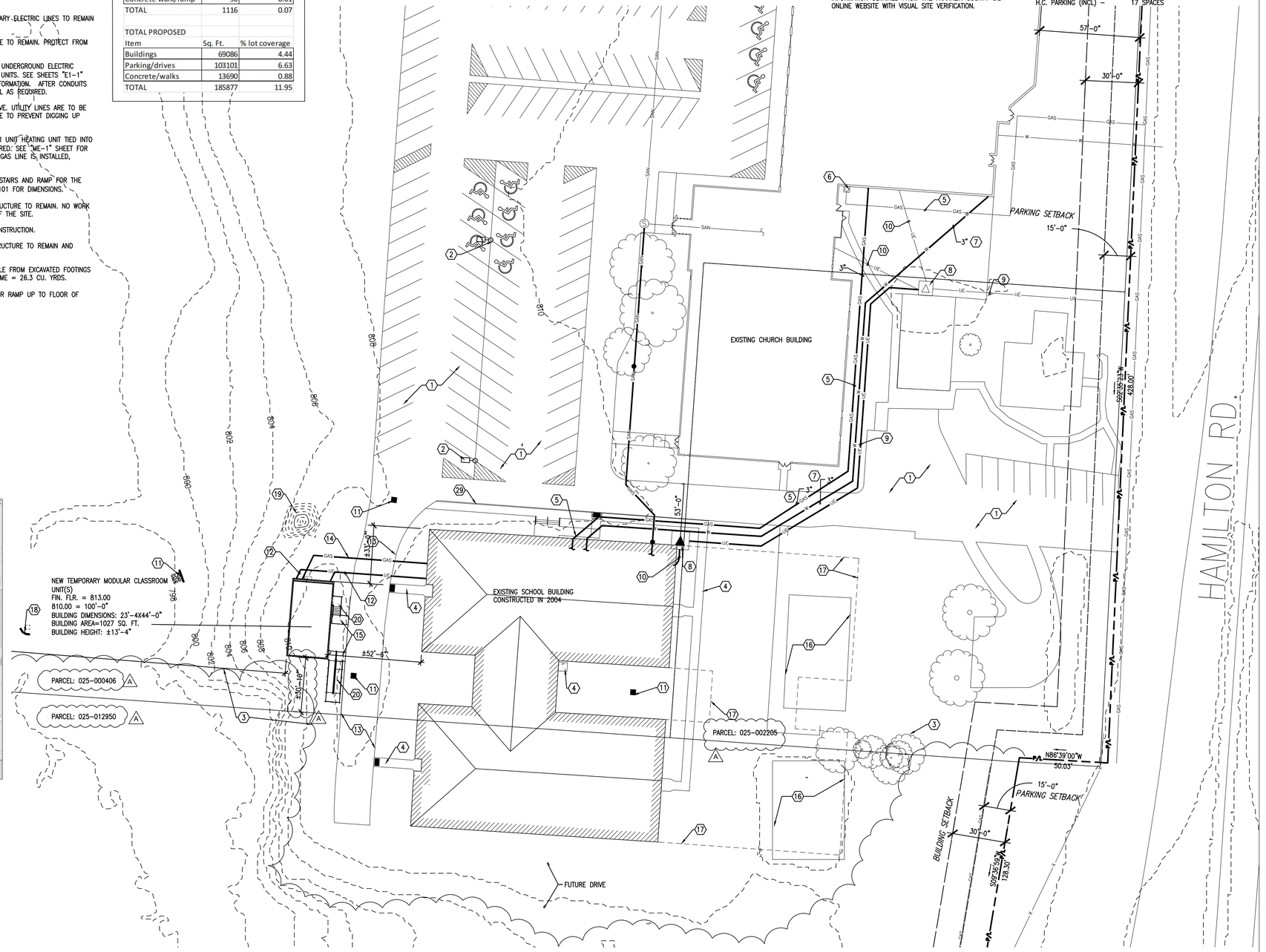
PARKING

TOTAL EXISTING PARKING – 189 SPACES
H.C. PARKING (INCL) – 17 SPACES



NORTH A **SITE LOCATION MAP**
SCALE: N.T.S.

2 WORKING DAYS
BEFORE YOU DIG
CALL TOLL FREE 800-362-2764
OHIO UTILITIES PROTECTION SERVICE



NORTH A **ARCHITECTURAL SITE DEVELOPMENT PLAN**
SCALE: 1" = 30'

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PHILIP J. TIPTON
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REGISTERED ARCHITECT
STATE OF OHIO

PHILIP J. TIPTON, LICENSE #13225
EXPIRATION DATE 12/31/2023

Architect is not responsible for any dimensions scaled from drawings. Dimensions noted take precedence.

Modular Building Addition for:

SHEPERD CHURCH OF THE NAZARENE

425 S. HAMILTON ROAD
GAHANNA, OH 43230

DRAWING	DATE
☐ REVIEW SET	11 JUL 23
☒ Permit/Bid Set	08 AUG 23

REVISIONS

"A" 20 OCT 23

ARCHITECTURAL SITE DEVELOPMENT PLAN

C1.1
OF . SHEETS

223223

GRADING LEGEND

NOTE: NOT ALL SYMBOLS LISTED BELOW ARE APPLICABLE TO THIS PROJECT

EXISTING	PROPOSED	DESCRIPTION
		UTILITY POLE
		PAD MTD. TRANSFORMER
		LIGHT POLE
		GROUND LIGHT
		FIRE HYDRANT
		WATER METER
		GAS METER
C.O.	C.O.	CLEAN OUT
Y.D.	Y.D.	YARD DRAIN
		CATCH BASIN
S		SANITARY MANHOLE
D		DRAINAGE MANHOLE
		GUY WIRE
P/L		PROPERTY LINE
R/W		RIGHT-OF-WAY LINE
000.00		NEW GRADE CONTOUR WITH ELEVATION
000.00		EXISTING GRADE CONTOUR WITH ELEVATION (DASHED)
FG		FINISHED GRADE
TC		TOP OF CASTING
TOC		TOP OF CURB
BOC		BOTTOM OF CURB
TP		TOP OF PIER
HP		HIGH POINT
		MAJOR FLOOD ROUTING
		STORMWATER ROUTING

DRAINAGE SCHEDULE

STRUCTURE	DESCRIPTION	TOP OF CASTING	INVERT ELEVATION
①	(E) CATCH BASIN	808.75	805.40
②	(E) END WALL		799.00
③	(E) HEAD WALL		796.80±
④	(E) CATCH BASIN	809.80	806.42
⑤	(E) CATCH BASIN	810.70	807.68

GENERAL PLAN NOTES:

1. SEE SHEET C1.1 FOR SITE IMPROVEMENT INFORMATION.
2. ALL DAMAGE TO EXISTING ASPHALT DRIVES AND PARKING AREAS CAUSED BY CONSTRUCTION MUST BE REPAIRED.
3. AFTER MODULAR UNIT(S) IS/ARE SECURED IN ITS FINAL LOCATION, ALL SOILS EXTRACTED FROM FOOTING EXCAVATIONS ARE TO BE SPREAD OVER EXISTING FIELD TO THE WEST OF THE EXISTING CHURCH, OR REMOVED FROM THE SITE COMPLETELY.
4. EXISTING SITE INFORMATION INCLUDING TOPOGRAPHY WAS DETERMINED FROM CIVIL DRAWINGS SUBMITTED AND APPROVED FOR THE PREVIOUS SCHOOL SUBMISSION IN 2004 AND COORDINATED WITH INFORMATION OBTAINED FROM THE FRANKLIN COUNTY GIS ONLINE WEBSITE AND SITE VERIFICATION AND DIMENSIONING.
5. NEW UTILITIES SUPPORTING THE MODULAR UNIT (ELECTRIC AND GAS) ARE TO BE PLACED UNDERGROUND IN A MANNER TO NOT CONFLICT WITH OR INTERFERE WITH EXISTING STORMWATER DRAINAGE SYSTEM.

KEYED NOTES

1. PROPOSED LIMITS OF SILT FENCE (APPROX. 250'-0").
2. EXISTING STORMWATER STRUCTURE TO REMAIN. INSTALL SILT PROTECTION BAG DURING CONSTRUCTION TO PROTECT FROM SEDIMENT RUNOFF IF NEEDED.
3. MINIMAL AMOUNT OF TOPSOIL TO BE REMOVED DIRECTLY BENEATH MODULAR UNITS IN ORDER TO FLATTEN THE GROUND FOR PLACEMENT OF FOOTINGS.
4. LIMITS OF EXISTING ASPHALT DRIVE. UTILITY LINES ARE TO BE BORED UNDER DRIVE IF POSSIBLE TO PREVENT DIGGING UP DRIVE..
5. EXISTING SEDIMENT CONTROL STRUCTURE TO REMAIN AND PROTECTED AS REQUIRED.
6. PROPOSED LOCATION OF SOIL PILE FROM EXCAVATED FOOTINGS.
7. APPROXIMATE LOCATION OF PROPOSED SILT FENCING FOR EROSION CONTROL.
8. LIMITS OF EXISTING SCHOOL BUILDING.

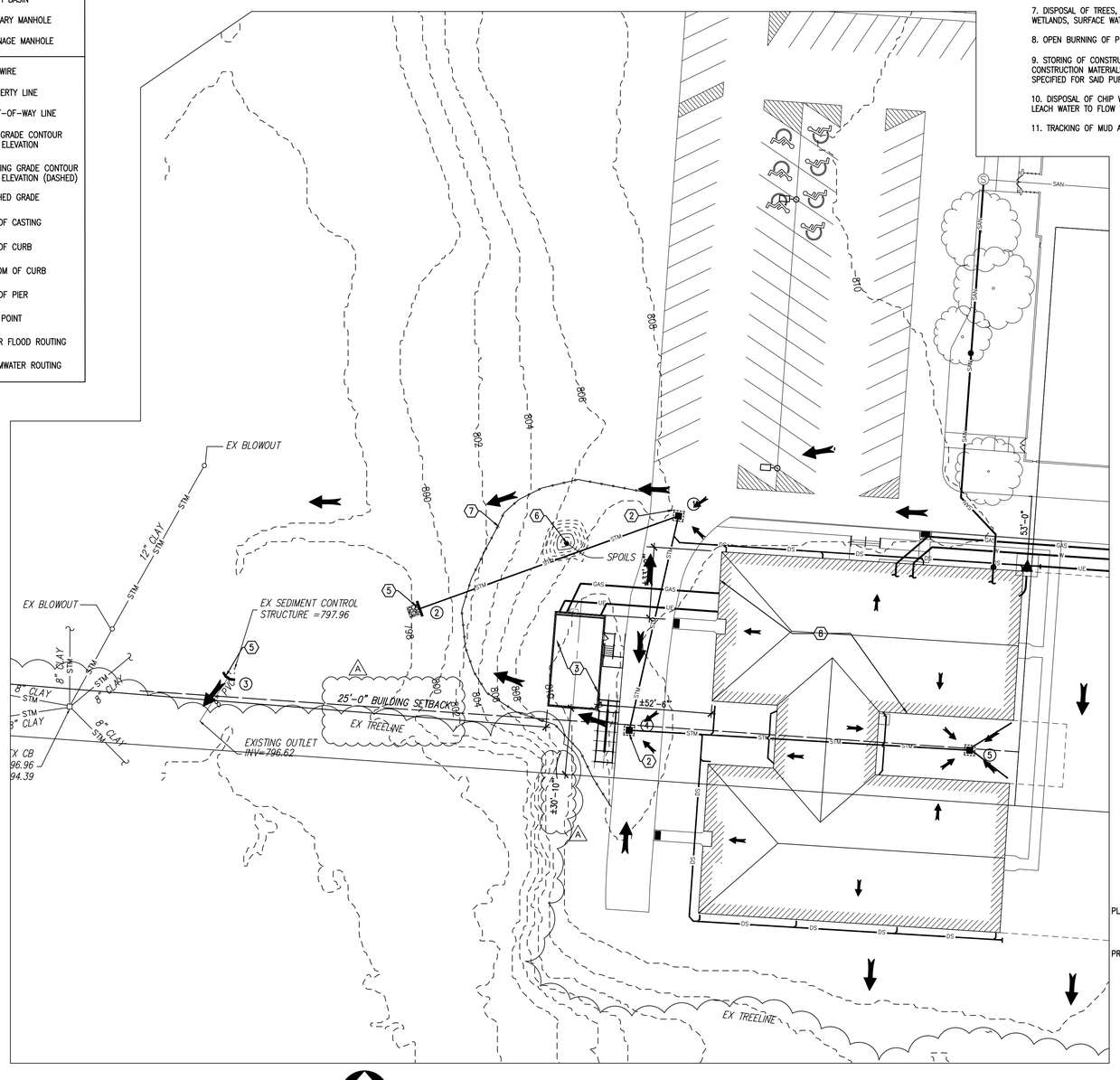
PROHIBITED CONSTRUCTION ACTIVITIES:

THE CONTRACTOR SHALL NOT USE CONSTRUCTION PROCEEDING, ACTIVITIES, OR OPERATIONS THAT MAY UNNECESSARILY IMPACT THE NATURAL ENVIRONMENT OR THE PUBLIC HEALTH AND SAFETY. PROHIBITED CONSTRUCTION PROCEEDINGS, ACTIVITIES, OR OPERATIONS INCLUDED BUT NOT LIMITED TO:

1. DISPOSING OF EXCESS OR UNSUITABLE EXCAVATED MATERIAL IN WETLANDS OR FLOODPLAINS, EVEN WITH THE PERMISSION OF THE PROPERTY OWNER.
2. INDISCRIMINATE, ARBITRARY, OR CAPRICIOUS OPERATION OF EQUIPMENT IN ANY STREAM CORRIDORS, WATERS, ANY WETLANDS, OR ANY AREA OUTSIDE OF THE PROPOSED WORK AREAS.
3. PUMPING OF SEDIMENT LADEN-WATER FROM TRENCHES OR OTHER EXCAVATIONS INTO ANY SURFACE WATERS, STREAM CORRIDORS, WETLANDS, OR STORM DRAINS.
4. DISCHARGING POLLUTANTS SUCH AS CHEMICALS, FUEL, LUBRICANTS, BITUMINOUS MATERIALS, RAW SEWERAGE, AND OTHER HARMFUL WASTE INTO OR ALONGSIDE OF RIVERS, STREAMS, IMPOUNDMENT, OR INTO NATURAL OR MAN-MADE CHANNELS LEADING THERETO.
5. PERMANENT OR UNSPECIFIED ALTERATION OF FLOW LINE OF A STREAM.
6. DAMAGING VEGETATION OUTSIDE OF THE PROPOSED WORK LIMITS, INSIDE NO-BUILD ZONES, AND TREE PROTECTION AREAS.
7. DISPOSAL OF TREES, BRUSH AND OTHER DEBRIS IN ANY STREAM CORRIDORS, WETLANDS, SURFACE WATERS, OR ANY OTHER UNSPECIFIED LOCATION.
8. OPEN BURNING OF PROJECT DEBRIS WITHOUT A PERMIT.
9. STORING OF CONSTRUCTION EQUIPMENT AND VEHICLES AND/OR STOCKPILING CONSTRUCTION MATERIALS ON PROPERTY, PUBLIC OR PRIVATE, NOT PREVIOUSLY SPECIFIED FOR SAID PURPOSE.
10. DISPOSAL OF CHIP WOOD IN SUCH A MANNER THAT WOULD ALLOW CHIP WOOD LEACH WATER TO FLOW TO ANY SURFACE WATER, STREAM CORRIDOR, OR WETLAND.
11. TRACKING OF MUD AND OTHER CONSTRUCTION DEBRIS ONTO ROADWAY.

SEDIMENTATION NOTES:

1. EROSION AND SEDIMENTATION CONTROL PRACTICES SHALL BE INSTALLED AS A FIRST STEP IN THE CONSTRUCTION SEQUENCE AND SHALL BE FUNCTIONAL THROUGHOUT EARTH DISTURBING ACTIVITIES OF THE DEVELOPMENT PHASE.
2. ALL TRENCH DEWATERING EFFLUENT SHALL BE DISCHARGED THROUGH A SEDIMENTATION BASIN OR OTHER SETTLING DEVICE APPROVED BY FRANKLIN SOIL AND WATER CONSERVATION DISTRICT.
3. IF REQUIRED, A PRE-CONSTRUCTION MEETING AT THE PROPOSED SITE SHALL BE ARRANGED BETWEEN THE CONTRACTOR(S), ARCHITECT, AND FRANKLIN SOIL AND WATER CONSERVATION DISTRICT NO LESS THAN 7 DAYS PRIOR TO BEGINNING OF ACTIVITIES ASSOCIATED WITH THE DEVELOPMENT PHASE. AT THIS MEETING AN ABSOLUTE CONSTRUCTION SEQUENCE, SITE CONTACT AND EROSION AND SEDIMENTATION CONTROL PLAN SHALL BE SUBMITTED TO THE FRANKLIN SOIL AND WATER CONSERVATION DISTRICT REPRESENTATIVE.
4. TEMPORARY / PERMANENT SEED SHALL BE APPLIED TO DENUDED AREAS WITHIN 7 DAYS IF THEY ARE TO REMAIN DORMANT FOR MORE THAN 21 DAYS.
5. TEMPORARY / PERMANENT SEED SHALL BE APPLIED TO DENUDED AREAS WITHIN 7 DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE.
6. SHEET FLOW RUNOFF FROM DENUDED AREAS SHALL BE DIVERTED TO AN APPROVED SETTLING STRUCTURE.
7. NO-BUILD ZONES AND TREE PRESERVATION AREAS SHALL BE CLEARLY IDENTIFIED BY HIGH-VISIBILITY ORANGE PERIMETER FENCING.
8. PERSONNEL FROM FRANKLIN SOIL AND WATER CONSERVATION DISTRICT SHALL MAKE ROUTINE INSPECTIONS TO ENSURE THE EROSION AND SEDIMENTATION PLAN COMPLIANCE.
9. ALTHOUGH NOT ANTICIPATED FOR THIS PROJECT, ADDITIONAL OR ALTERNATE EROSION AND SEDIMENTATION CONTROL PRACTICES, NOT INDICATED ON THIS PLAN, MAY BE REQUIRED DUE TO UNFORESEEN ENVIRONMENTAL AND/OR CHANGES IN DRAINAGE PATTERNS CAUSED BY EARTH MOVING ACTIVITIES. FRANKLIN SOIL AND WATER CONSERVATION DISTRICT SHALL CONTACT THE SITE CONTACT INDICATED AT THE PRE-CONSTRUCTION MEETING, TO ADDRESS THE AMENDMENTS TO THE EROSION AND SEDIMENTATION CONTROL PLAN.
10. RIGHT OF WAYS, CRITICAL AREAS, AND DENUDED AREAS TO REMAIN DORMANT >45 DAYS OR AT FINAL GRADE SHALL BE SEEDED PRIOR TO BEING CONSIDERED FOR SUBSTANTIAL COMPLETION.



NORTH

A3 **SEDIMENT/STORMWATER MANAGEMENT PLAN**
SCALE: 1" = 30'

PRESERVING EXISTING VEGETATION

- WHENEVER POSSIBLE, PRESERVE EXISTING TREES, SHRUBS, AND OTHER VEGETATION.
- TO PREVENT ROOT DAMAGE, DO NOT GRADE, PLACE SOIL PILES, OR PARK VEHICLES NEAR TREES MARKED FOR PRESERVATION.

SILT FENCE & STRAW BALES

- PUT UP BEFORE ANY OTHER WORK IS DONE.
- INSTALL ON DOWNSLOPE SIDE(S) OF SITE WITH ENDS EXTENDED UP SIDESLOPES A SHORT DISTANCE.
- PLACE PARALLEL TO THE CONTOUR OF THE LAND TO ALLOW WATER TO POND BEHIND FENCE.
- ENTRENCH 6 INCHES DEEP.
- STRAW BALES SHALL BE USED ONLY IN MAJOR DITCH LINES WITH THE APPROVAL OF THE CITY ENGINEER. ALL OTHER LOCATIONS REQUIRE SILT FENCE.
- STAKE (2 STAKES PER BALE OR 1 STAKE EVERY 3 FEET FOR SILT FENCE).
- LEAVE NO GAPS BETWEEN BALES OR SECTIONS OF SILT FENCE.
- INSPECT AND REPAIR ONCE A WEEK AND AFTER EVERY 1/2 INCH RAIN. REMOVE SEDIMENT IF DEPOSITS REACH HALF THE FENCE OR STRAW BALE HEIGHT.
- MAINTAIN UNTIL A LAWN IS ESTABLISHED.

SOIL PILES

- LOCATED AWAY FROM ANY DOWNSLOPE STREET, DRIVEWAY, STREAM, LAKE, WETLAND, DITCH OR DRAINAGEWAY.
- TEMPORARY SEED SUCH AS ANNUAL RYE IS RECOMMENDED FOR TOPSOIL PILES.
- SURROUND WITH STRAW BALES OR SILT FENCE.

SEDIMENT CLEANUP

- BY THE END OF EACH WORK DAY, SWEEP OR SCRAPE UP SOIL TRACKED ONTO THE ROAD AND IN THE GUTTERS.
- BY THE END OF THE NEXT WORK DAY AFTER A STORM, CLEAN UP SOIL WASHED OFF-SITE, AND CHECK STRAW BALES AND SILT FENCE FOR DAMAGE OR SEDIMENT BUILDUP.

IF CONSTRUCTION IS COMPLETED AFTER AUGUST 31, SEEDING OR SODDING MAY BE DELAYED. APPLY MULCH AND TEMPORARY SEED (SUCH AS RYE OR WINTER WHEAT) FROM SEPTEMBER 1 TO MARCH 15. STRAW BALES OR SILT FENCES MUST BE MAINTAINED UNTIL FINAL SEEDING IS COMPLETED IN SPRING, MARCH 15 TO MAY 31.

REVEGETATION

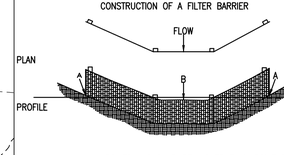
DISTURBED SOILS SHALL BE STABILIZED AS QUICK AS PRACTICABLE WITH TEMPORARY VEGETATION AND / OR MULCHING TO PROTECT EXPOSED CRITICAL AREAS DURING DEVELOPMENT. TEMPORARY MULCH IS TO BE APPLIED AT THE RATE OF 2-3 BALES OF STRAW PER 1000 SQ. FT.

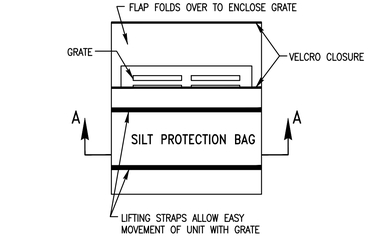
SODDING (ALTERNATE)

- SPREAD 4 TO 6 INCHES OF TOPSOIL.
- FERTILIZE ACCORDING TO SOIL TEST (OR APPLY 10 LB. / 1000 SQ. FT. OF 20-10-10 OR 10-10-10 FERTILIZER).
- INSTALL SOD IN ACCORDANCE WITH SUPPLIERS' RECOMMENDATIONS.
- WATERING REQUIREMENTS SHALL BE IN ACCORDANCE WITH SUPPLIERS' RECOMMENDATIONS AND/OR UNTIL LAWN IS WELL ESTABLISHED.

SEEDING AND MULCHING

- RESPREAD 4 TO 6 INCHES OF EXISTING TOPSOIL.
- FERTILIZE ACCORDING TO SOIL TEST (OR APPLY 10 LB. / 1000 SQ. FT. OF 20-10-10 OR 10-10-10 FERTILIZER).
- SEED WITH AN APPROPRIATE MIX FOR THE SITE.
- RAKE LIGHTLY TO COVER SEED WITH 1/4" OF SOIL. ROLL LIGHTLY.
- MULCH WITH STRAW (2-3 BALES PER 1000 SQ. FT.) FROM MARCH 15 TO AUGUST 31.
- ANCHOR MULCH BY PUNCHING 2 INCHES INTO THE SOIL WITH A DULL, WEIGHTED DISK OR BY USING NETTING OR OTHER MEASURES ON STEEP SLOPES AND WINDY AREAS.
- WATERING REQUIREMENTS SHALL BE IN ACCORDANCE WITH SUPPLIERS' RECOMMENDATIONS AND/OR UNTIL LAWN IS WELL ESTABLISHED.





A1 **EROSION CONTROL DETAIL**
SCALE: N.T.S.

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STATE OF OHIO
PHILIP J. TIPTON
13225
REGISTERED ARCHITECT

PHILIP J. TIPTON, LICENSE #13225
EXPIRATION DATE 12/31/2023

Architect is not responsible for any dimensions scaled from drawings. Dimensions noted take precedence.

Modular Building Addition for:
SHEPERD CHURCH OF THE NAZARENE
425 S. HAMILTON ROAD
GAHANNA, OH 43230

DRAWING	DATE
☐ REVIEW SET	11 JUL 23
☒ Permit/Bid Set	08 AUG 23

REVISIONS

"A" 20 OCT 23

STORMWATER AND SEDIMENT CONTROL DETAILS

C1.2
OF . SHEETS

223223

GOVERNING CODE: 2017 OHIO BUILDING CODE

1. DEAD LOADS
   - A. TOTAL DEAD LOAD = 25.0 PSF
1. ROOF LIVE LOADS:
   - A. MINIMUM ROOF LIVE LOAD = 20 PSF
3. FLOOR LIVE LOADS:
   - A. FIRST FLOOR = 50 PSF
4. ROOF SNOW DESIGN PARAMETERS
   - A. GROUND SNOW LOAD Pg = 20.0 PSF
   - B. FLAT ROOF SNOW LOAD Pf = 15.4 PSF
   - C. MINIMUM ROOF DESIGN SNOW LOAD = 20.0PSF
   - D. SNOW EXPOSURE FACTOR Ce = 1.0
   - E. SNOW LOAD IMPORTANCE FACTOR I = 1.0
   - F. THERMAL FACTOR Ct = 1.1
   - G. DRIFTING AND UNBALANCED SNOW PER ASCE 7-10
5. WIND DESIGN PARAMETERS
   - A. ULTIMATE DESIGN WIND SPEED Vult = 115 MPH
   - B. NOMINAL DESIGN WIND SPEED Vasd = 89 MPH
   - C. RISK CATEGORY = II
   - D. WIND EXPOSURE CATEGORY = C
   - E. INTERNAL PRESSURE COEFFICIENT = +/-0.18
6. \SEISMIC DESIGN PARAMETERS
   - A. SEISMIC IMPORTANCE FACTOR = 1.0
   - B. SEISMIC OCCUPANCY CATEGORY = II
   - C. MAXIMUM CONSIDERED EARTHQUAKE GROUND MOTION AT 0.2 SECOND PERIOD, SS = 11.6%G
   - D. MAXIMUM CONSIDERED EARTHQUAKE GROUND MOTION AT 1.0 SECOND PERIOD, S1 = 6.1%G
   - E. SITE CLASS = B
   - F. SDS = 0.124G
   - G. SD1 = 0.098G
   - H. SEISMIC DESIGN CATEGORY = B
   - I. BUILDING SYSTEM: BEARING WALL SYSTEMS
   - J. SEISMIC RESISTING: LIGHT FRAMED WOOD WALLS WITH STRUCTURAL WOOD PANELS.
   - K. RESPONSE MODIFICATION FACTOR, R: 6.5
   - L. DESIGN BASE SHEAR: 0.018W

BUILDING DESIGN NOTES:

A. THE PROPOSED BUILDING IS A RELOCATED MODULAR STRUCTURE NOT ORIGINALLY DESIGNED FOR THE PROVISIONS OF THE 2017 OHIO BUILDING CODE. DERWACTER & ASSOCIATES, LLC HAS REVIEWED THE ORIGINAL DESIGN DATA AND FOUND THAT THE REQUIREMENTS MEET OR EXCEED THE REQUIREMENTS FOR LOADS SET FORTH BY CHAPTER 16 OF THE CURRENT OHIO CODE. THE INFORMATION BELOW IS THE BASIS OF THIS ASSESSMENT.

ORIGINAL DESIGN FIRM: SPECIALIZED STRUCTURES INC.
2400 SPRINGFIELD CHURCH ROAD
WILLACOOCHE, GA 31650

ORIGINAL THIRD PARTY APPROVAL AND INSPECTION AGENCY: RADCO
5801 BENJAMIN CENTER DRIVE
TAMPA, FL 33634

B.

	ORIGINAL DESIGN	REQUIRED DESIGN
FLOOR LIVE LOAD:	50.0 PSF	50.0 PSF
ROOF LIVE LOAD:	20.0 PSF	20.0 PSF
ROOF SNOW LOAD:		
Pg	30.0 PSF	20.0 PSF
Pf	23.1 PSF	22.0 PSF
Ce	1.0	1.0
Is	1.0	1.1
Ct	1.1	1.1
WIND LOAD:		
WIND SPEED	110 MPH (SERVICE)	93 MPH (SERVICE) 120 MPH (STRENGTH)
Iw	1.0	N/A
EXPOSURE	C	C
GCpi	0.18	0.18
BASE PRESSURE	28.1 PSF	17.5 PSF
SEISMIC LOAD:		
Ie	1.0	1.25
SITE CLASS	D	D
Ss	.537	.116
S1	.285	.061
Sds	.49	.124
Sd1	.34	.098
R	6.5	6.5
Cs	.08	.018

C. BASED UPON THE DRAWINGS PROVIDED DATED 11-13-15 BY SPECIALIZED STRUCTURES INC. AND SINGED AND SEALED BY JAMES E. BRADLEY WITH A PENNSYLVANIA SEAL NUMBER OF 0192214E, IT IS THE OPINION OF DERWACTER & ASSOCIATES, LLC THAT THE BUILDING DESIGN EXCEEDS THE REQUIREMENTS OF THE CURRENT OHIO BUILDING CODE. THIS EVALUATIONS IS BASED ON A REVIEW OF THE STATED DRAWINGS ONLY. DERWACTER & ASSOCIATES, LLC HAS NOT MADE ANY INSPECTIONS OF THE EXISTING BUILDING OR REVIEWED ANY MODIFICATIONS (IF ANY) TO THE ORIGINAL DESIGN.

SCHEDULE OF SPECIAL INSPECTIONS

ITEM	REQ'D	INSPECTION TYPE CONT.	INSPECTION TYPE PER.	REFERENCED STANDARD	OBC REFERENCE
MASONRY CONSTRUCTION	X				
SPECIAL INSPECTION TESTING PER THE QUALITY ASSURANCE REQUIREMENTS OF TNS 402/ACI			X		
REINFORCEMENT AND CONNECTORS			X		
GROUTING			X		
COLD WEATHER PROTECTION			X		
CONCRETE CONSTRUCTION	X				
INSPECT ANCHORS CAST IN CONCRETE			X	ACI 318: 17.8.2	
VERIFY USE OF REQUIRED DESIGN MIX			X	ACI 318: CHAPTER 19 AND 26.4.3, 26.4.4	1904.1, 1904.2, 1908.2, 1908.3
PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS AND DETERMINE THE TEMPERATURE OF CONCRETE		X		ASTM C 172, ASTM C 31, ACI 318: 26.4.5, 26.12	1908.10
VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES			X	ACI 318: 26.4.7 - 26.4.9	1908.9
INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED			X	ACI 318: 26.10.1	
SOILS	X				
VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY			X		
VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL			X		
PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS			X		
VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESS DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.		X			
PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.			X		

REINFORCING FOR CONCRETE:

1. REINFORCING SHALL CONFORM TO ASTM A615, GRADE 60 OR ASTM A706, UNLESS NOTED OTHERWISE. ALL WELDED REINFORCING BARS SHALL CONFORM TO ASTM A706.
2. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 (SHEETS FORM, NOT ROLLED)
3. MINIMUM CONCRETE COVER, UNLESS NOTED OTHERWISE:
   - A. UNFORMED SURFACE IN CONTACT WITH THE GROUND: 3 IN.
   - B. FORMED SURFACES EXPOSED TO EARTH OR WEATHER:
     - #6 BARS AND LARGER 2 IN.
     - #5 BARS AND SMALLER 1 1/2 IN.
   - C. FORMED SURFACES NOT EXPOSED TO EARTH OR WEATHER:
     - BEAMS, GIRDERS, AND COLUMNS 1 1/2 IN.
     - SLABS, WALLS, AND JOISTS
       - #11 BARS AND SMALLER 3/4 IN.
       - #14 AND #18 BARS 1 1/2 IN.
4. LAP SPLICES SHALL BE IN ACCORDANCE WITH THE FOLLOWING TABLE, UNLESS NOTED OTHERWISE.

BAR SIZE	CLASS B SPLICE LAP LENGTH (INCHES)	COMPRESSION SPLICE LAP LENGTH (INCHES)	BAR SIZE	CLASS B SPLICE LAP LENGTH (INCHES)	COMPRESSION SPLICE LAP LENGTH (INCHES)
#3	22	12	#8	72	30
#4	29	15	#9	81	34
#5	36	19	#10	89	38
#6	43	23	#11	98	42
#7	63	27			

5. COMPRESSION DOWEL EMBEDMENT: 22 BAR DIAMETERS, UNLESS NOTED OTHERWISE.
6. BASE PLATES, ANCHOR RODS, SUPPORT ANGLES, ETC., BELOW GRADE SHALL BE COVERED WITH A MINIMUM OF 3" OF CONCRETE.

REINFORCED MASONRY:

1. REINFORCED MASONRY SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH, f'm, OF 1500 PSI. MASONRY UNITS SHALL BE NORMAL WEIGHT BLOCK CONFORMING TO ASTM C90, AND SHALL HAVE A MINIMUM NET AREA COMPRESSIVE STRENGTH OF 2150 PSI. MORTAR SHALL CONFORM TO ASTM C270, TYPE S. MINIMUM GROUT COMPRESSIVE STRENGTH SHALL EQUAL OR EXCEED f'm, BUT NOT BE LESS THAN 2000 PSI.
2. REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60, UNLESS NOTED OTHERWISE.
3. CONTINUOUS WIRE REINFORCING (JOINT REINFORCING) SHALL BE HOT DIPPED GALVANIZED, LADDER TYPE FORMED FROM 9 GAUGE COLD - DRAWN STEEL WIRE COMPLYING WITH ASTM A82. JOINT REINFORCING SHALL BE SPACED AT 16" O.C. VERTICALLY IN ALL MASONRY WALLS AND PIERS, U.N.O.
4. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF VERTICAL CONTROL JOINTS. HORIZONTAL BOND BEAM AND LINTEL REINFORCING SHALL BE CONTINUOUS ACROSS VERTICAL CONTROL JOINTS. JOINT REINFORCING SHALL BE STOPPED EACH SIDE OF VERTICAL CONTROL JOINTS.
5. ALL REINFORCED CELLS, ALL CELLS BELOW GRADE AND ALL CELLS BELOW FINISH FLOOR SHALL BE GROUTED SOLID.
6. AT VERTICAL REINFORCING LOCATIONS, PROVIDE DOWEL FROM FOOTING TO MATCH SIZE AND SPACING OF VERTICAL WALL REINFORCING. DOWELS SHALL BE EMBEDDED INTO THE FOOTING MINIMUM 9" INCHES AND SHALL HAVE A 90 DEGREE STANDARD HOOK.
7. WHEN A FOUNDATION DOWEL DOES NOT LINE UP WITH A VERTICAL BLOCK CORE, IT SHALL NOT BE SLOPED MORE THAN ONE HORIZONTAL IN 6 VERTICAL. DOWELS MAY BE GROUTED INTO A CELL IN VERTICAL ALIGNMENT, EVEN THOUGH IT IS IN A CELL ADJACENT TO THE VERTICAL WALL REINFORCING.
8. REINFORCING STEEL SHALL BE SECURED IN PLACE BEFORE GROUTING STARTS.
9. ALL REINFORCING LAP SPLICES SHALL BE IN ACCORDANCE WITH THE MASONRY REINFORCING LAP SPLICE LENGTH SCHEDULE, U.N.O. SPLICE VERTICAL SHALL BE WIRED TOGETHER. LAP SPLICES BETWEEN ADJACENT BARS SHALL BE STAGGERED A MINIMUM OF 24 BAR DIAMETERS.
10. VERTICAL BARS SHALL BE HELD IN POSITION AT TOP AND BOTTOM AND AT INTERVALS NOT EXCEEDING 96 DIAMETERS OF THE REINFORCING BAR WITH REBAR POSITIONERS. BARS SHALL BE ANCHORED IN PLACE PRIOR TO GROUTING.
11. VERTICAL REINFORCING BARS SHALL HAVE A MINIMUM CLEARANCE OF 3/4 OF AN INCH FROM THE MASONRY AND NOT LESS THAN ONE BAR DIAMETER BETWEEN BARS.
12. VERTICAL CELLS THAT WILL BE GROUTED SHALL HAVE A VERTICAL ALIGNMENT TO MAINTAIN A CONTINUOUS UNOBSTRUCTED CELL AREA NOT LESS THAN 3"x4".
13. GROUT SHALL BE PLACED IN LIFTS NOT TO EXCEED 5 FEET. THE TOTAL HEIGHT OF 8-INCH (NOMINAL) OR LARGER MASONRY TO BE GROUTED PRIOR TO THE ERECTION OF ADDITIONAL MASONRY SHALL NOT EXCEED 24 FEET.
14. GROUTING SHALL BE STOPPED 1 1/2" BELOW THE TOP OF A COURSE SO AS TO FORM A KEY AT THE POUR JOINT.
15. GROUTING OF MASONRY BEAMS OVER OPENINGS SHALL BE DONE IN ONE CONTINUOUS OPERATION.
16. ALL BOLTS, ANCHORS, ETC., INSERTED IN THE WALLS, SHALL BE GROUTED SOLID INTO POSITION. CELLS AT ANCHOR LOCATIONS SHALL BE GROUTED TO MINIMUM 6" ABOVE AND 6" BELOW THE CENTERLINE OF THE ANCHOR.

MASONRY REINFORCING LAP SPLICE LENGTH (IN.)

BAR SIZE	NUMBER OF REINFORCING LAYERS					
	ONE LAYER			TWO LAYERS		
	NOMINAL WALL THICKNESS			NOMINAL WALL THICKNESS		
	8"	10"	12"	8"	10"	12"
#4	25	25	25	31	31	31
#5	31	31	31	48	48	48
#6	57	52	52	98	98	98
#7	79	61	61	177	121	121
#8	112	86	74	-	149	149

GENERAL NOTES:

1. ANY CHANGES MADE TO THE DESIGN IDENTIFIED ON THESE DRAWINGS AND/OR ASSOCIATED SPECIFICATIONS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL PRIOR TO MAKING ANY MODIFICATIONS TO THE PROJECT. ANY LIABILITY AS A RESULT OF DESIGN MODIFICATIONS, AS WELL AS ANY COSTS ASSOCIATED WITH SUCH MODIFICATIONS, MADE WITHOUT THE WRITTEN APPROVAL OF ENGINEER OF RECORD SHALL BECOME THE RESPONSIBILITY OF THE CONTRACTOR.
2. THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE BUILDING IS FULLY COMPLETED. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE, AND TO ENSURE THE STABILITY OF THE BUILDING AND ITS COMPONENT PARTS, AND THE ADEQUACY OF TEMPORARY OR INCOMPLETE CONNECTIONS, DURING ERECTION. THIS INCLUDES THE ADDITION OF ANY SHORING, SHEETING, TEMPORARY GUYS, BRACING OR TIEDOWNS THAT MIGHT BE NECESSARY. SUCH MATERIAL IS NOT SHOWN ON THE DRAWINGS. IF APPLIED, THEY SHALL BE REMOVED AS CONDITIONS PERMIT, AND SHALL REMAIN THE CONTRACTOR'S PROPERTY. THE ENGINEER HAS NO EXPERTISE IN, AND TAKES NO RESPONSIBILITY FOR, CONSTRUCTION MEANS AND METHODS OR JOB SITE SAFETY DURING CONSTRUCTION, PROCESSING AND/OR APPROVING SUBMITTALS MADE BY THE CONTRACTOR WHICH MAY CONTAIN INFORMATION RELATED TO CONSTRUCTION METHODS OR SAFETY ISSUES, OR PARTICIPATION IN MEETINGS WHERE SUCH ISSUES MIGHT BE DISCUSSED, SHALL NOT BE CONSTRUED AS VOLUNTARY ASSUMPTION BY THE ENGINEER OF ANY RESPONSIBILITY FOR SAFETY PROCEDURES.
3. IT IS SOLELY THE RESPONSIBILITY OF EACH CONTRACTOR TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION. THE ENGINEER IS NOT ENGAGED IN, AND DOES NOT SUPERVISE CONSTRUCTION.
4. SHOULD ANY OF THE DETAILED INSTRUCTIONS SHOWN ON THE PLANS CONFLICT WITH THESE STRUCTURAL NOTES, OR WITH EACH OTHER, THE STRICTEST PROVISION SHALL GOVERN.

USE OF THESE DOCUMENTS:

1. THESE DOCUMENTS SHALL NOT BE REPRODUCED IN ANY MANNER FOR THE PRODUCTION OF FABRICATION OR ERECTION SUBMITTALS. REPRODUCTION OF THESE DOCUMENTS IN THAT MANNER CONSTITUTES COPYRIGHT INFRINGEMENT. ANY DOCUMENTS SUBMITTED FOR REVIEW THAT CONTAIN ANY IMAGE, SKETCH, DETAIL, ETC. FROM THESE DOCUMENTS WILL BE REJECTED.
2. ELECTRONIC VERSIONS OF THESE DOCUMENTS ARE THE PROPERTY OF DERWACTER & ASSOCIATES, LLC. ELECTRONIC OR CAD FILES WILL NOT BE MADE AVAILABLE FOR CONSTRUCTION PURPOSES.

FOUNDATIONS - GENERAL:

1. THE FOUNDATION HAS BEEN DESIGNED BASED UPON AN ASSUMED BEARING CAPACITY.
2. BOTTOM OF FOOTINGS SHALL BEAR ON SOIL CAPABLE OF SUSTAINING A NET ALLOWABLE BEARING PRESSURE OF 1.5 KSF UNDER SERVICE LIVE AND DEAD LOAD.
3. FOOTINGS MAY BE POURED INTO AN EARTH-FORMED TRENCH IF SOIL CONDITIONS PERMIT.
4. ALL BEARING MATERIAL SHALL BE INSPECTED BY THE INDEPENDENT TESTING AGENCY PRIOR TO CONCRETE PLACEMENT. THE INDEPENDENT TESTING AGENCY SHALL BE THE SOLE JUDGE AS TO THE SUITABILITY OF THE BEARING MATERIAL. FOOTING ELEVATIONS SHALL BE ADJUSTED AS REQUIRED.
5. BOTTOM OF EXTERIOR FOOTINGS SHALL BEAR A MINIMUM OF 36" BELOW LOWEST ADJACENT GRADE.
6. FOUNDATION WALLS THAT RETAIN EARTH SHALL BE BRACED AGAINST BACKFILLING PRESSURES UNTIL FLOOR SLABS AT TOP AND BOTTOM ARE IN PLACE AND CURED.
7. WHERE FOUNDATION WALLS ARE TO HAVE EARTH PLACED ON EACH SIDE, PLACE FILL SIMULTANEOUSLY SO AS TO MAINTAIN A COMMON ELEVATION ON EACH SIDE OF THE WALL.
8. FOUNDATION CONCRETE SHALL HAVE REACHED A MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI BEFORE BEING LOADED. STRENGTHS SHALL BE VERIFIED BY TEST.

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5275 Milford Dr.
Zanesville, OH 43701

STATE OF OHIO
MATTHEW D DERWACTER
E-68641
REGISTERED
PROFESSIONAL ENGINEER

01-08-2023

Architect is not responsible for any dimensions scaled from drawings. Dimensions noted take precedence.

Modular Building Addition for:
SHEPHERD CHURCH OF THE NAZARENE
425 S. HAMILTON ROAD
GAHANNA, OH 43230

DRAWING	DATE
☐ REVIEW SET	11 JUL 23
☒ Permit/Bid Set	1 AUG. 23

REVISIONS

STRUCTURAL NOTES

S0.1
OF . SHEETS

223223

Plot Date: 8/1/2023 1:28:02 PM shepherd church - struct.dwg Larry Perks

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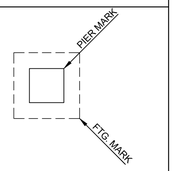
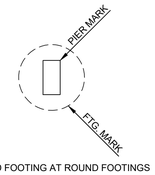
LEGEND



PIER AND FOOTING AT SQUARED FOOTINGS



PIER AND FOOTING AT ROUND FOOTINGS

PIER SCHEDULE

MARK	SIZE	REINFORCING *
P1	0'-8" x 1'-4" (CMU)	(2) #5 VERTICAL BARS w/ #4 TIES
P2	1'-4" x 1'-4" (CMU)	(4) #5 VERTICAL BARS w/ #4 TIES

COLUMN FOOTING SCHEDULE

MARK	SIZE	REINFORCING
F1	2'-0"Ø x 3'-0"	N/A
F2	2'-6"Ø x 3'-0"	N/A
F3	1'-4"Ø x 3'-0"	N/A
F4	4'-0" x 6'-0" x 3'-0"	#5 BARS AT 12"O.C., E.W. BOTTOM
F5	2'-0" x 3'-0" x 3'-0"	#5 BARS AT 12"O.C., E.W. BOTTOM

* SEE DETAIL S5.1-08 FOR PLAN LAYOUT AND REINFORCING PLACEMENT.

KEYED NOTES cont.

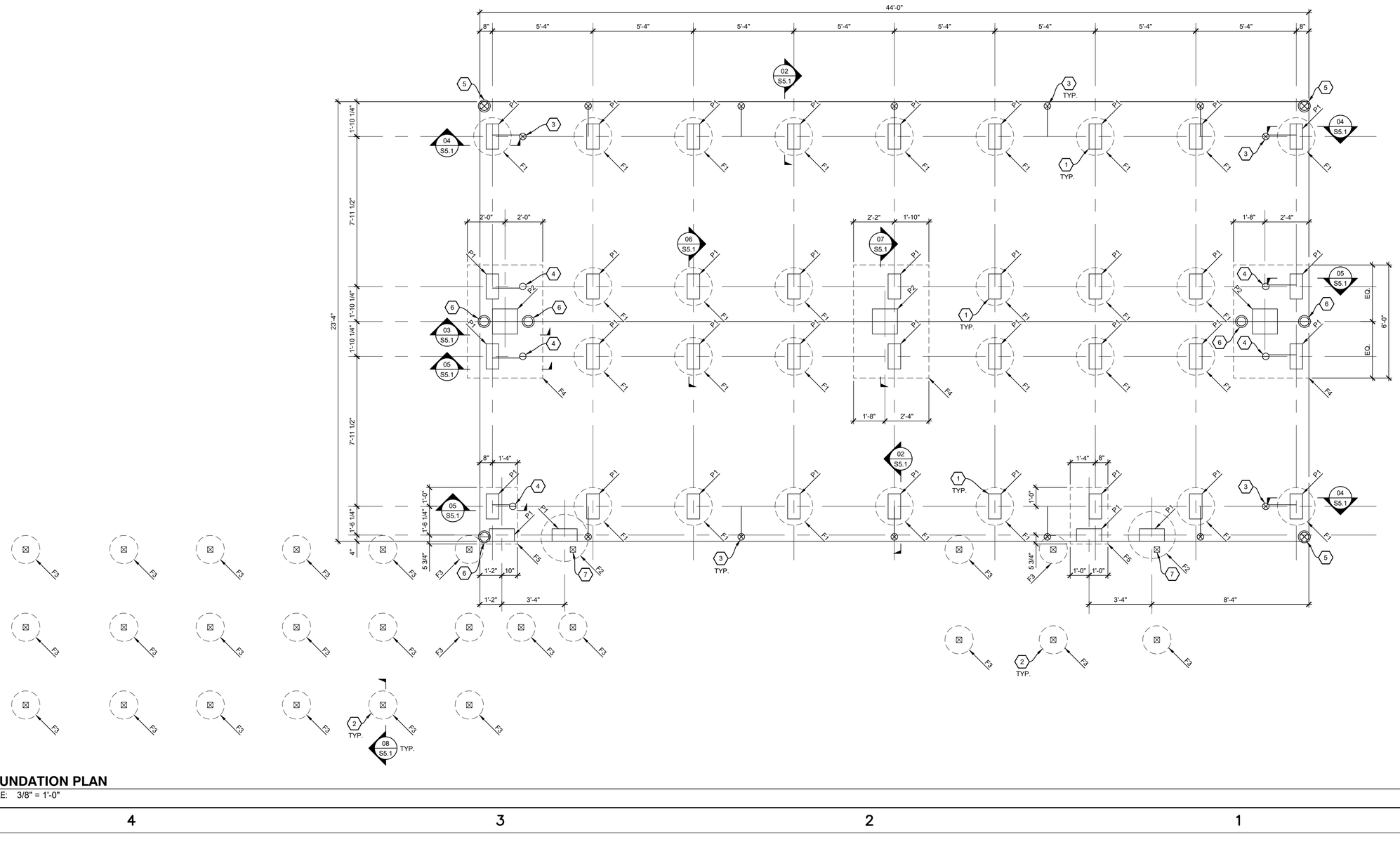
#	
5	⊗ LOCATION OF VERTICAL UPLIFT. PROVIDE HELICAL ANCHOR & STRAPPING ANCHORAGE AT ANCHOR LOCATIONS INDICATED ON PLAN. HELICAL ANCHOR TO BE DOUBLE DISC, 3/4"Ø ROD x 36" WITH 6"Ø DISCS (MINUTE MAN #4636 DH DOUBLE DISC TENSION HEAD ANCHOR OR EQUAL). GALVANIZED STEEL STRAPPING AND FASTENING PER MODULAR BLDG. MFR.
6	⊖ LOCATION OF VERTICAL UPLIFT. PROVIDE EMBED AND STRAPPING ANCHORAGE AT ANCHOR LOCATIONS INDICATED ON PLAN. EMBED TO BE 1/2"x10" STEEL "J" ANCHOR (MINUTE MAN #210 JDH SWIVEL HEAD ANCHOR OR EQUAL) EMBEDDED IN TOP OF CONCRETE FOOTING. GALVANIZED STEEL STRAPPING AND FASTENING PER MODULAR BLDG. MFR.
7	WHERE RAMP / STAIR POST OCCURS AT MODULAR PIER FOOTING, ANCHOR POST TO TOP OF FOOTING WITH SIMPSON POST BASE AND 1/2"Ø WEDGE ANCHOR.

KEYED NOTES

#	
1	CMU SUPPORT PIER ON CONCRETE FOOTING, SEE SCHEDULES.
2	FOOTING AT EXTERIOR DECK, STAIRS AND RAMP POSTS, COORDINATE LOCATION WITH ARCH. SEE SCHEDULE FOR FOOTING REINFORCING.
3	⊗ LOCATION OF GROUND ANCHOR FOR OVER TURNING & SLIDING, PROVIDE HELICAL ANCHOR & STRAPPING ANCHORAGE. HELICAL ANCHOR TO BE DOUBLE DISC, 3/4"Ø ROD x 36" WITH 6"Ø DISCS (MINUTE MAN #4636 DH DOUBLE DISC TENSION HEAD ANCHOR OR EQUAL). ANCHOR TO BE PLACED AND 1 1/4" GALVANIZED STEEL STRAPPING PLACED OVER BEAM ABOVE, OR FASTENED TO WELDED ANCHOR ON BEAM ABOVE, WINCH TIGHT AND LOCK. COORDINATE WITH MODULAR BLDG. DRAWINGS.
4	⊖ LOCATION OF GROUND ANCHOR FOR OVER TURNING & SLIDING, PROVIDE EMBED AND STRAPPING ANCHORAGE AT ANCHOR LOCATIONS INDICATED ON PLAN. EMBED TO BE 1/2"x10" STEEL "J" ANCHOR (MINUTE MAN #210 JDH SWIVEL HEAD ANCHOR OR EQUAL) EMBEDDED IN TOP OF CONCRETE FOOTING AND 1 1/4" GALVANIZED STEEL STRAPPING PLACED OVER BEAM ABOVE, OR FASTENED TO WELDED ANCHOR ON BEAM ABOVE, WINCH TIGHT AND LOCK. COORDINATE WITH MODULAR BLDG. DRAWINGS.

FOUNDATION PLAN NOTES

A	SEE SHEET S0.1 FOR GENERAL NOTES.
B	ALL ELEVATIONS ARE RELATIVE TO A FINISH FIRST FLOOR ELEVATION OF 100'-0" (REFERENCE ONLY).
C	COORDINATE DOOR OPENINGS AND STOOP LOCATIONS WITH ARCH. DRAWINGS.
D	SEE DETAIL S5.1-01 FOR TYPICAL REINFORCING DETAILING.
E	LOCATION OF HOLD DOWN ANCHORS AT OVERTURNING, SLIDING, AND UPLIFT LOCATIONS TO BE COORDINATED WITH FINAL MODULAR MANUFACTURER'S DRAWINGS.



01 **FOUNDATION PLAN**
SCALE: 3/8" = 1'-0"

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REVISIONS

FOUNDATION PLAN

S1.1
OF . SHEETS

223223

Plot Date: 8/1/2023 1:28:03 PM shepherd church – struct.dwg Larry Perks

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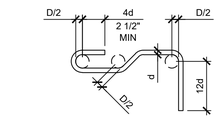
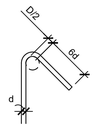
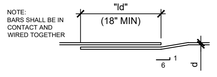


A. HOOKS AND BENDS

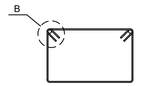


B. 135 DEGREE STIRRUP AND TIE HOOK



C. LAP SPLICE

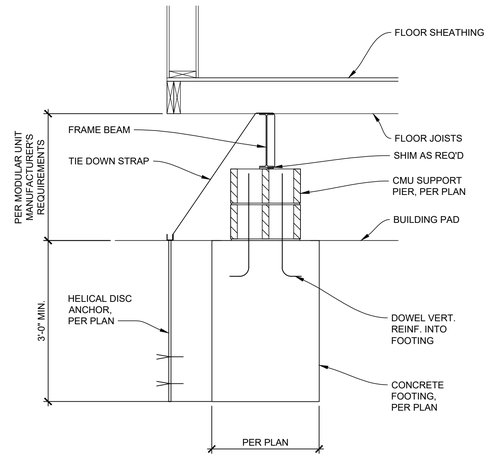
SEE REINFORCING STEEL NOTES ON S0.1-T FOR LAP LENGTHS



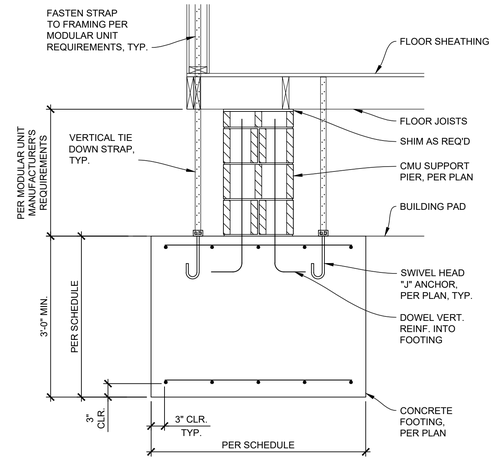
D. GRADE BEAM STIRRUP

BEND DIAMETER SCHEDULE		
BAR SIZE	STANDARD BEND DIAMETER	REDUCED BEND DIAMATER FOR TIES AND STIRRUPS
#3 THROUGH #5	D = 6*d	D = 4*d
#6 THROUGH #8	D = 6*d	NA
#9 THROUGH #11	D = 8*d	NA
#14 AND #18	D = 10*d	NA

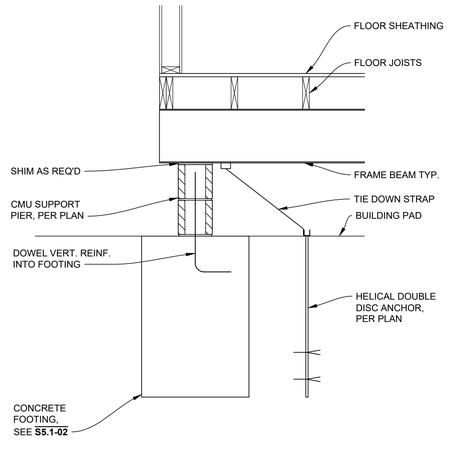
01 TYPICAL REINFORCEMENT DETAILS
SCALE: N/A = 1'-0"



02 FOUNDATION DETAIL
SCALE: 3/4" = 1'-0



03 FOUNDATION DETAIL
SCALE: 3/4" = 1'-0"



04 FOUNDATION DETAIL
SCALE: 3/4" = 1'-0"

05 FOUNDATION DETAIL
SCALE: 3/4" = 1'-0"

06 FOUNDATION DETAIL
SCALE: 3/4" = 1'-0"

07 FOUNDATION DETAIL
SCALE: 3/4" = 1'-0"

08 FOUNDATION DETAIL
SCALE: 3/4" = 1'-0"

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S5.1
OF . SHEETS

223223

CODE ANALYSIS SUMMARY - 2017 OBC

USE GROUP/CONSTRUCTION TYPE

PREVIOUS USE GROUP(S): B (ADULT CLASSROOM) EXISTING CONSTRUCTION TYPE: V-B
PROPOSED USE GROUP(S): E

FIRE AREA TABULATIONS

BUILDING FOOTPRINT = 1,026 SQ. FT. (937 SQ. FT. INTERIOR)

ALLOWABLE AREA PER TABLE 506.2 FOR "E"/V-B -NON SPRINKLED = 9,500 SQ. FT.

ACTUAL BUILDING AREA IS LESS THAN ALLOWABLE: 1,026 SQ. FT. < 9,500 SQ. FT.(PASSES)

HEIGHT TABULATIONS

ALLOWABLE HEIGHT PER TABLE 504.3 OBC = 40'-0"
ALLOWABLE STORIES PER TABLE 504.4 OBC (E/V-B) = 1 STORY
ACTUAL MAX. HEIGHT = ±30'-0" @ MODULAR UNIT RIDGE
ACTUAL NO. OF STORIES = ONE (1) STORY ABOVE GRADE

OCCUPANT LOAD

CALCULATED OCCUPANT LOAD PER TABLE 1004.1.2 OBC = MAXIMUM 46 OCCUPANTS
TOTAL EGRESS PROVIDED = 340 TOTAL EGRESS CAPACITY (2-36" DOORS)

FIRE RESISTANCE RATINGS (SEE PLAN FOR DETAILS)

FIRE RATED PARTITIONS ARE NOT REQUIRED FOR THIS BUILDING. EXTERIOR WALL NEAREST TO EXISTING SCHOOL BUILDING IS IN EXCESS OF 40'-0" (±52'-6") SO THIS TEMPORARY STRUCTURE DOES NOT REQUIRE FIRE RATED EXTERIOR WALLS. EXISTING SCHOOL BUILDING IS OF TYPE III-B, NS CONSTRUCTION.

SPRINKLER REQUIREMENTS

A FIRE SUPPRESSION SYSTEM IS NOT REQUIRED IN THIS BUILDING OR IN NEARBY SCHOOL BUILDING..

APPLICABLE CODES

2017 OHIO BUILDING CODE (OBC)

2017 OHIO MECHANICAL CODE (MMC)

2017 OHIO PLUMBING CODE (MPC)

2015 INTERNATIONAL ENERGY CONSERVATION CODE

2015 OHIO ENERGY CODE (MENC)

2017 OHIO CHAPTER 11 AND ICC/ANSI A117.1-2009 ACCESSIBILITY CODE

2015 INTERNATIONAL FUEL GAS CODE

2017 OBC CHAPTER 27 (ELECTRIC) AND NEC 2017

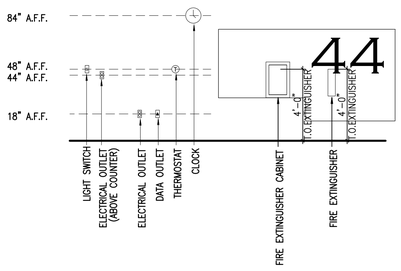
2017 OHIO FIRE CODE (IFC) W/ 2019 AMMENDMENTS

DESIGN LOADS

1. ASSUMED SOIL BEARING PRESSURE = 1,500 PSF.
2. SEE STRUCTURAL DRAWINGS FOR FOUNDATION DESIGN FOR SOIL CONDITIONS.
3. SEE STRUCTURAL DRAWINGS FOR CONVENTIONAL FRAMING DESIGN LOADS.

MOUNTING HEIGHT LEGEND

NOTE: TYPICAL MOUNTING HEIGHTS UNLESS NOTED OTHERWISE.
NOTE: PROVIDE SOLID WOOD BLOCKING IN PARTITION FOR ANCHORAGE OF ACCESSORIES & EQUIPMENT.



C2 **TYPICAL MOUNTING HEIGHTS**
SCALE: 1/4" = 1'-0"

DESIGN LOADS:

1. SOIL BEARING 1,500 PSF. SOIL BEARING VALUE TO BE CONFIRMED ON SITE BY THE GENERAL CONTRACTOR (SEE STRUCTURAL DRAWINGS FOR ADDITIONAL LOAD INFORMATION)

2. ROOF LOADS:
   A. SNOW 20 PSF
   B. WIND 93 MPH (SERVICE)
      120 MPH (STRENGTH)

3. LIVE LOADS:
   A. EDUCATIONAL
      1. CLASSROOMS 40 PSF
   B. EXTERIOR STAIRWAYS & EXITWAYS 100 PSF
      1. LANDINGS
         a. 100 PSF LIVE
         b. 300 LB. CONCENTRATED LOAD
      2. EXITWAYS 100 PSF
   C. GUARDS/KNEEWALLS IMPACT LOAD 200 LB.

4. WIND LOAD: BASIC WIND SPEED = 90 MPH-EXPOSURE "C", RISK CATEGORY II

5. EARTHQUAKE DESIGN DATA: (SEE STRUCTURAL DRAWINGS SHEET S0.1)

(SPECIAL NOTE: SEISMIC DESIGN DOES NOT GOVERN-GOVERNING FACTOR IS WIND).

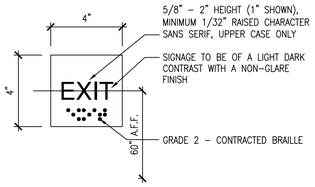
PLUMBING CALCULATION - 2017 OPC

2017 OPC TABLE 403.1: MIN. NUMBER OF REQ. PLUMBING FIXTURES

	WATER CLOSETS		LAVATORIES	DRINKING FOUNTAINS	OTHER
	MALE	FEMALE			
EDUCATION USE (E) (INCL. EXISTING) (387 EXISTING + 46 PROPOSED = 433 OCC.) 433 OCCUPANT LOAD (E) REQUIRED NUMBER OF FIXTURES:	1 PER 50 4.34	1 PER 50 4.34	1 PER 50 8.66 (4.34 EA)	1 PER 100 4.33 (5)	1 SERVICE SINK
TOTAL REQUIRED FIXTURES:	*4.34(5)	4.34 (5)	8.66 9 (5 EA)	4.33 (5)	1
TOTAL PROVIDE FIXTURES IN FACILITY:	8 TOILETS /6 URINALS	14	23 (MIN. 5 EA)	**6	1

NOTE: ALL PLUMBING FIXTURES ARE EXISTING AND ARE LOCATED IN THE EXIST. SCHOOL BUILDING LESS THAN 150'-0" FROM MODULAR UNITS.
* NOTE: OPC 405.3.5 ALLOWS 50% OF REQUIRED TOILETS TO BE SUBSTITUTED BY URINALS.
** THREE (E) HI-LOW ELECTRIC WATER COOLERS EQUALS 6 DRINKING FOUNTAINS.

NOTES:
1. EVERY ROOM OR SPACE THAT IS AN ASSEMBLY OCCUPANCY SHALL HAVE THE OCCUPANT LOAD POSTED IN A CONSPICUOUS PLACE, NEAR THE MAIN EXIT OR EXIT ACCESS DOORWAY FROM THE ROOM OR SPACE.
2. SIGNS WITH CHANGEABLE NUMBERS ARE NOT ACCEPTABLE.



C3 **INTERIOR SIGNAGE**
SCALE: 3" = 1'-0"

MODULAR UNIT NOTES

FOLLOWING ARE NOTES ABOUT THE USED HACC, 24'X44', MANUFACTURED MODULAR UNIT (FOR ADDITIONAL INFORMATION, REFER TO SUPPLEMENTAL INFORMATION AT THE END OF THE SET):

1. OUTRIGGER FRAME DESIGN
2. DETACHABLE HITCHES
3. NYLON IMPREGNATED BOTTOM BOARD
4. 2X8 FLOOR JOISTS @ 16" O.C., W/5/8" T&G PLYWOOD DECKING, COVERED W/ 1/8" VINYL COMPOSITION TILE
5. 2X6 WOOD EXTERIOR STUDS
6. 2X4 WOOD INTERIOR STUDS
7. 1/2" VINYL COVERED GYPSUM WALLBOARD
8. GROUND SNOW LOAD: 30 PSF
9. TRUSS TYPE: BOX
10. TRUSS SPACING: 24" O.C.
11. FR-DECK
12. 45 MIL BLACK EPDM
13. CEILING IS 1/2" PRE-FINISHED C-SPRAY WITH ROSETTES, SPLINES
14. CEILING HEIGHT: 8'-0"
15. MATLINE RIDGEBEAM
16. TWO (2) 100A ELECTRIC PANELS
17. (16) SURFACE MOUNTED FLOURESCENT LIGHTS
18. (2) BLACK PORCH LIGHTS
19. (2) COMBO LIGHTED EXIT SIGNS/EMERGENCY LIGHTS WITH BATTERY BACKUP
20. (6) EMPTY 2X4 JUNCTION BOXS W/ 3/4" CONDUIT STUBS (ALL ALARM DEVICES AND WIRING BY OTHERS). WIRE TO BE 12-2 ROMEX.
21. (2) OCCUPANCY SENSORS
22. 1 – 3 ½ TON WALL MOUNT HEATING UNIT W/ GAS HEAT
23. PROGRAMMABLE THERMOSTAT
24. FIBERGLASS SUPPLY AND RETURN DUCTS
25. 2X4 PLENUM WALL
26. HARDI-PANEL SIDING OVER HOUSE WRAP
27. HARDI PANEL MANSARD
28. (2) 36X80 STEEL DOOR W/10 VB 20 GA DOOR AND 18 GA FRAME. STANDARD CLOSER AND PANIC HARDWARE W/ LEVER HANDLE INCLUDED
29. R-30C FLOOR INSULATION
30. R-19 WALL INSULATION
31. R-38 ROOF INSULATION

GENERAL PLAN NOTES

A. SEE THIS SHEET AND "S" SHEETS FOR BUILDING DESIGN LOADS. ALSO REFER TO SUPPLEMENTAL MANUFACTURERS SET FOR ADDITIONAL STRUCTURAL INFORMATION.

B. ALL EXTERIOR WOOD FRAMING IS TO BE PRESSURE TREATED LUMBER AND RATED FOR EXTERIOR USE OR GROUND CONTACT DEPENDING ON ITS LOCATION.

C. SCHOOL IS RESPONSIBLE TO PROVIDE ALL APPLICABLE SIGNAGE IN COMPLIANCE WITH ANSI A117.1 GUIDELINES.

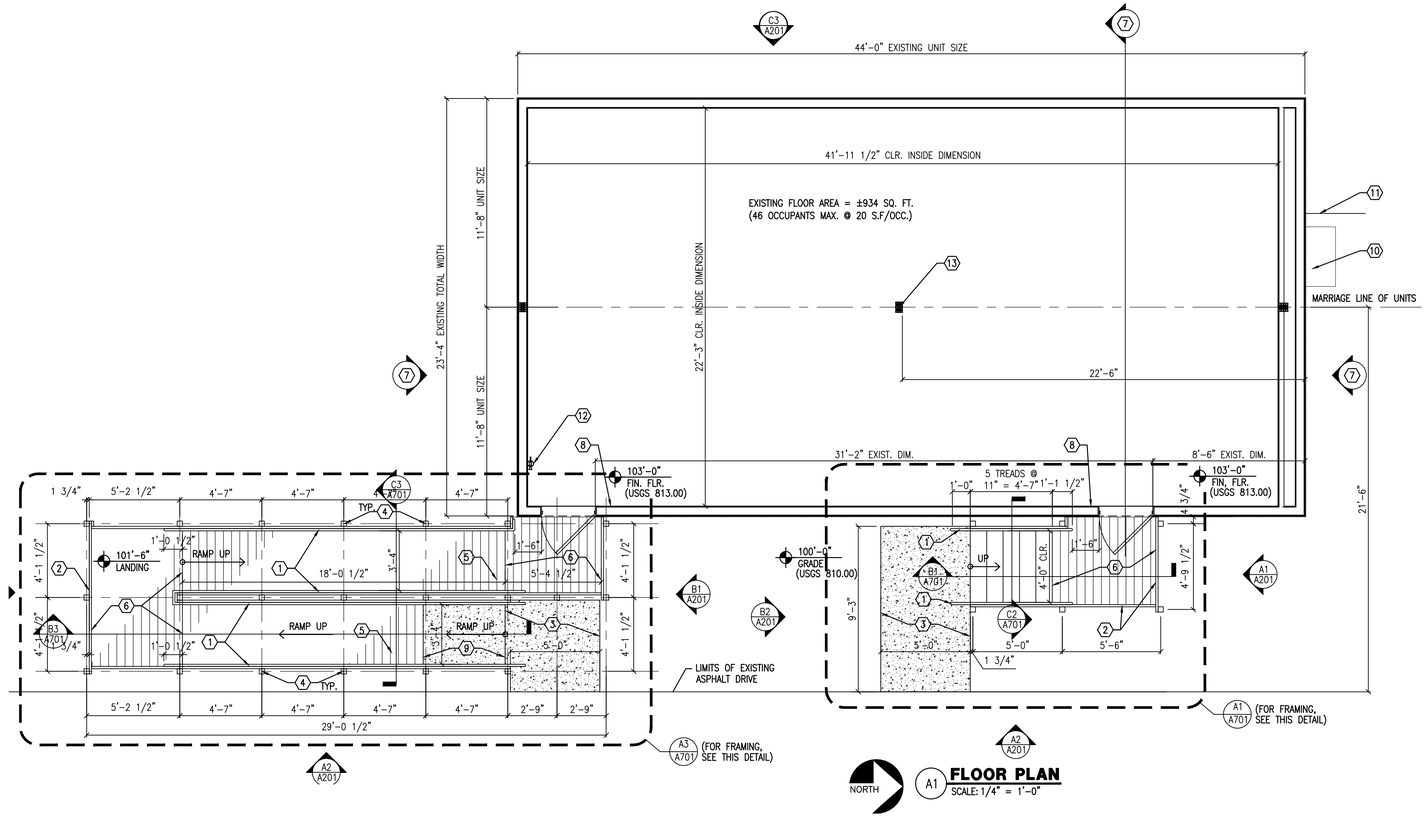
D. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION PERTAINING TO A SPECIFIC ITEM OR MATERIAL.

E. REFER TO SUPPLEMENTAL MANUFACTURERS SET FOR ADDITIONAL MODULAR UNIT INFORMATION INCLUDING, BUT NOT LIMITED TO ELEVATIONS, BUILDING SECTION, MECHANICAL, ETC. FOR COORDINATION WITH THESE DRAWINGS.

⬡PLAN KEYED NOTES

NOTE: NOT ALL NOTES MAY APPLY TO THIS SHEET.

1. 1 1/2" DIA. STL. PIPE HANDRAIL, MTD. W/ CNTR. @2'-10" A.F.F..
2. TOP OF GUARD RAIL TO BE 42" ABOVE FINISH FLOOR.
3. 4" CONCRETE SLAB-ON-GRADE POURED FOR APPROACHES TO STAIRS AND RAMP AS SHOWN.
4. 4X4 PRESSURE TREATED (PRT) WOOD POST, TYPICAL (SEE STRUCTURAL DRAWINGS FOR ANCHORING DETAILS).
5. HC ENTRANCE RAMP CREATED WITH PRT WOOD AT A MAX. 1:12 SLOPE UP TO MODULAR UNIT ENTRY.
6. WOOD PLATFORM AT THE TOP OF STAIRS AND RAMP CONSTRUCTED USING 2X PRT FRAMING AND 2X6 PRT DECKING (SEE STRUCTURAL DRAWINGS AND SHEET A701).
7. INFORMATION FOR THIS SECTION OR ELEVATION IS LOCATED IN THE SUPPLEMENTAL DRAWINGS INCLUDED WITH THIS SUBMISSION.
8. LOCATION OF BRAILLE EXIT SIGNAGE (SEE DETAIL C3/A101).
9. CAST-IN-PLACE SLOPED CONCRETE APPROACH RAMP AT A MAX. 1:12 SLOPE UP TO WOOD RAMP. SEE DETAILS ON SHEET A701.
10. HVAC UNIT SUPPLIED WITH MODULAR. INDIVIDUAL TRADES TO MAKE CONNECTIONS TO THE UNIT FROM THE NEARBY EXISTING SCHOOL BUILDING FOR GAS LINE, ELECTRIC, AND FIRE ALARM. SEE MECHANICAL SHEETS AND SUPPLEMENTAL MODULAR UNIT DRAWINGS FOR MORE INFORMATION.
11. PROPOSED GAS LINE LOCATION FOR UNIT.
12. FIRE EXTINGUISHER, WALL BRACKET MOUNTED.
13. FIELD INSTALLED WOOD COLUMN (SEE SUPPLEMENTAL DRAWINGS FOR DETAILS).



A1 **FLOOR PLAN**
SCALE: 1/4" = 1'-0"

The McKnight Group
Leaders in Innovative Church Design and Building

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www.mcknightgroup.com

STATE OF OHIO
PHILIP J. TIPTON
13225
REGISTERED ARCHITECT

PHILIP J. TIPTON, LICENSE #13225
EXPIRATION DATE 12/31/2023

Architect is not responsible for any dimensions scaled from drawings. Dimensions noted take precedence.

Modular Building Addition for:
SHEPERD CHURCH OF THE NAZARENE
425 S. HAMILTON ROAD
GAHANNA, OH 43230

DRAWING	DATE
☐ REVIEW SET	11 JUL 23
☒ Permit/Bid Set	08 AUG 23

REVISIONS

FLOOR PLAN, SCHEDULES & NOTES

A101
OF . SHEETS

223223

Plot Date: 8/8/2023 3:00:53 PM a101-223223.dwg Hutcheson, Jeff

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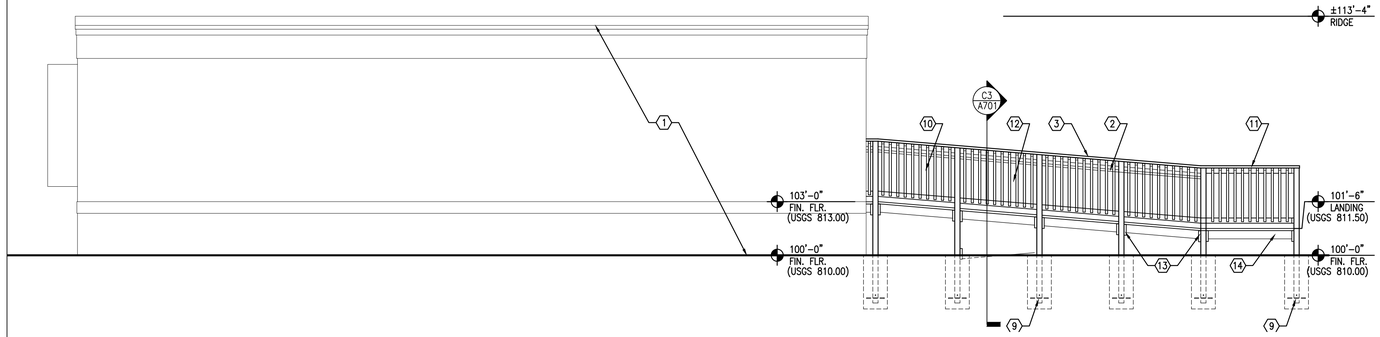
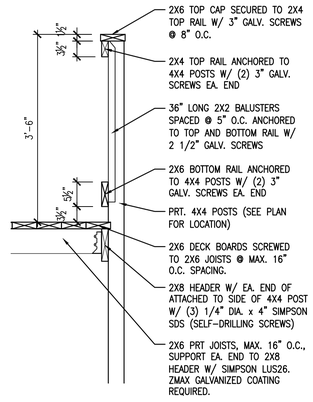


C3 **WEST ELEVATION**
SCALE: 1/4" = 1'-0"



2X6 TOP CAP SECURED TO 2X4 TOP RAIL W/ 3" GALV. SCREWS @ 8" O.C.

2X4 TOP RAIL ANCHORED TO 4X4 POSTS W/ (2) 3" GALV. SCREWS EA. END

36" LONG 2X2 BALUSTERS SPACED @ 5" O.C. ANCHORED TO TOP AND BOTTOM RAIL W/ 2 1/2" GALV. SCREWS

2X6 BOTTOM RAIL ANCHORED TO 4X4 POSTS W/ (2) 3" GALV. SCREWS EA. END

PRT. 4X4 POSTS (SEE PLAN FOR LOCATION)

2X6 DECK BOARDS SCREWED TO 2X6 JOISTS @ MAX. 16" O.C. SPACING.

2X8 HEADER W/ EA. END OF ATTACHED TO SIDE OF 4X4 POST W/ (3) 1/4" DIA. x 4" SIMPSON SDS (SELF-DRILLING SCREWS)

2X6 PRT JOISTS, MAX. 16" O.C., SUPPORT EA. END TO 2X8 HEADER W/ SIMPSON LUS26. ZMAX GALVANIZED COATING REQUIRED.

C2 **TYP. GUARD RAIL DETAIL**
SCALE: 3/4" = 1'-0"

GENERAL PLAN NOTES

A. SEE THIS SHEET AND "S" SHEETS FOR BUILDING DESIGN LOADS. ALSO REFER TO SUPPLEMENTAL MANUFACTURERS SET FOR ADDITIONAL STRUCTURAL INFORMATION.

B. SEE ROOM FINISH SCHEDULE & SPECIFICATIONS FOR INTERIOR FINISH SPECIFICATIONS.

C. SCHOOL IS RESPONSIBLE TO PROVIDE ALL APPLICABLE SIGNAGE IN COMPLIANCE WITH ANSI A117.1 GUIDELINES.

D. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION PERTAINING TO A SPECIFIC ITEM OR MATERIAL.

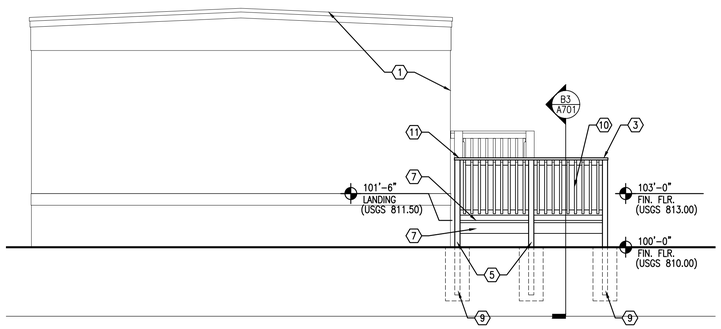
E. REFER TO SUPPLEMENTAL MANUFACTURERS SET FOR ADDITIONAL MODULAR UNIT INFORMATION INCLUDING, BUT NOT LIMITED TO ELEVATIONS, BUILDING SECTION, MECHANICAL, ETC. FOR COORDINATION WITHTHESE DRAWINGS.

⬡ELEVATION KEYED NOTES

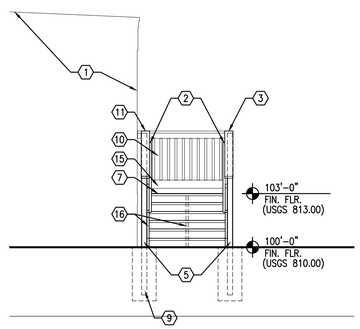
NOTE: NOT ALL NOTES MAY APPLY TO THIS SHEET.

1. LIMITS OF TEMPORARY MODULAR CLASSROOM UNIT.
2. 1 1/2" DIA. STL. PIPE HANDRAIL, MTD. W/ CNTR. @2'-10" A.F.F. EA. SIDE OF STAIR OR RAMP.
3. TOP OF GUARD RAIL TO BE 42" ABOVE FINISH FLOOR.
4. 4" CONCRETE SLAB-ON-GRADE POURED FOR APPROACHES TO STAIRS AND RAMP AS SHOWN.
5. 4X4 PRESSURE TREATED (PRT) WOOD POST, TYPICAL (SEE STRUCTURAL DRAWINGS FOR ANCHORING DETAILS).
6. HC ENTRANCE RAMP CREATED WITH PRT WOOD AND AT A MAX. 1:12 SLOPE UP TO MODULAR UNIT ENTRY.
7. PRT WOOD PLATFORM AT THE TOP OF STAIRS AND RAMP CONSTRUCTED USING 2X PRT FRAMING AND DECKING (SEE STRUCTURAL DRAWINGS).
8. INFORMATION FOR THIS SECTION OR ELEVATION IS LOCATED IN THE SUPPLEMENTAL DRAWINGS INCLUDED WITH THIS SUBMISSION.
9. CONC. FOUNDATION PIERS, TYP. (SEE STRUCTURAL DRAWINGS).
10. 2X2 BALUSTERS SPACED 5" O.C. (SEE DETAIL B5/A201 FOR RAILING PANEL CONSTRUCTION).
11. 2X6 GUARD RAIL TOP CAP (TYP.)
12. 2x4 GUARD RAIL TOP CAP ONLY AT MIDDLE COLUMN ROW @ LOWER RAIL HEIGHT (SEE SECTION C3/A701).
13. 2x8 HEADER PLACED BOTH SIDES OF INTERMEDIATE 4x4 POSTS AND ONE SIDE AT PERIMETER POSTS, TYP.
14. 2x6 DECK BRDS. SCREWED TO 2x6 FLOOR JOISTS SPACED @ 1'-4" MAX. SPACING, TYP.
15. 2x6 BOT. RAIL OF GUARD ONLY @ STAIR LANDING
16. 2x12 STRINGER, TYP. OF (3).

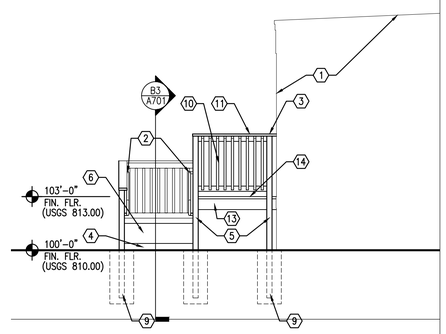
B5 **TYP. RAILING PANEL DETAIL**
SCALE: 3/4" = 1'-0"



B4 **SOUTH ELEVATION**
SCALE: 1/4" = 1'-0"



B2 **SOUTH STAIR ELEVATION**
SCALE: 1/4" = 1'-0"



B1 **NORTH RAMP ELEVATION**
SCALE: 1/4" = 1'-0"

A2 **EAST ELEVATION**
SCALE: 1/4" = 1'-0"

A1 **NORTH ELEVATION**
SCALE: 1/4" = 1'-0"

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Modular Building Addition for:
SHEPERD CHURCH OF THE NAZARENE
425 S. HAMILTON ROAD
GAHANNA, OH 43230

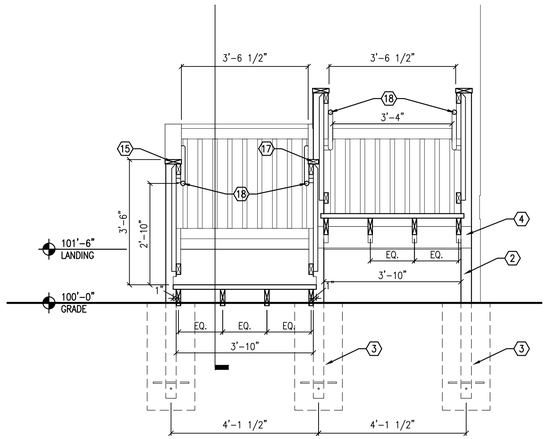
DRAWING	DATE
☐ REVIEW SET	11 JUL 23
☒ Permit/Bid Set	08 AUG 23

REVISIONS

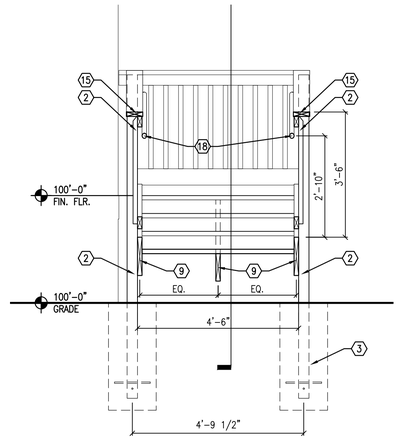
MODULAR UNIT ELEVATIONS

A201
OF . SHEETS

223223



C3 **RAMP SECTION**
SCALE: 1/2" = 1'-0"



C2 **STAIR SECTION**
SCALE: 1/2" = 1'-0"

KEYED NOTES

NOTE: NOT ALL NOTES MAY APPLY TO THIS SHEET.

1. LIMITS OF MODULAR UNIT
2. TYP. 4X4 PRT. POST RATED FOR GROUND CONTACT EMBEDDED IN CONCRETE PIER. PLACE (2) 12" LONG #4 REBAR @ BOTTOM OF POST, 90° OPPOSED TO EACH OTHER FOR UPLIFT. WRAP BOTTOM OF POST THAT WILL BE ENCASED IN CONCRETE WITH PLASTIC TO PREVENT POST FROM ABSORBING WATER FROM CONCRETE (SEE STRUCTURAL SHEETS FOR MORE INFORMATION).
3. TYP. CAST IN PLACE CONC. FOOTING (SEE STRUCTURAL SHEETS FOR MORE INFORMATION).
4. TYP. 2x8 TREATED HEADER, PLACING (1) 2x8 EACH SIDE OF 4x4 WOOD POSTS, ONLY ONE SIDE AT PERIMETER POSTS. ATTACH EA. END OF HEADER TO SIDE OF POST W/ (3) 1/4" DIA. x 4" LONG SIMPSON SDS (SELF-DRILLING SCREWS).
5. TYP. 2x6 TREATED WOOD JOISTS SPACED AT 16" O.C. MAX SPACING (SEE PLAN). SUPPORT EA. END OF JOISTS TO 2x8 HEADER W/ SIMPSON LSU26 (NOT LUS26). ZMAX GALVANIZED COATING REQUIRED.
6. FRAMING OF WOOD PORTION OF RAMP TO START AT THIS LOCATION. 2X8 BRD. TO BE ANCHORED TO 4X4 POSTS WITH 2X6 DECK BRD. IN PLACE BEFORE FOOTING IS POURED AROUND POST.
7. 2X WOOD FORMS FOR CONCRETE APPROACH RAMP PLACED AFTER WOOD FRAMING OF RAMP INSTALLED.
8. CONCRETE APPROACH RAMP @ 1:12 SLOPE STARTING AT THIS POINT.
9. 2X12 WOOD STAIR STRINGER ANCHORED TO DBL. 2X8 HEADER USING SIMPSON LSCZ ADJUSTABLE STAIR STRINGER CONNECTOR W/ Z-MAX FINISH. OUTER STRINGERS TO ALSO BE SECURED TO 4x4 POSTS W/ (3) 1/4" DIA. x 4" LONG SIMPSON SDS (SELF-DRILLING SCREWS).
10. 2x8 HEADER ANCHORED TO 4x4 POSTS AND SHORTER 2x8 BLOCKING SCREWED TO IT CREATING DBL. HEADER @ TOP OF STAIRS.
11. 2x8 HEADER TO EXTEND PAST 4x4 POST TO THE MODULAR UNIT @ THIS LOCATION TO ALLOW 2x6 BRACKET TO BE SECURED.
12. 4" CONC. WALK/APPROACH OVER 4" GRAVEL BASE.
13. SIMPSON STAIR ANGLE @ EA. END OF STAIR TREADS @ OUTER STRINGERS ONLY.
14. 2x2 BALUSTERS SPACED @ 5" O.C., TYP. (SEE OUARD RAILING PANEL DETAIL B5/A201 FOR MORE INFORMATION).
15. 2x6 TOP RAIL CAP SECURED TO 2x4 TOP RAIL W/ SCREWS @ 8" O.C., TYP.
16. LANDING 2x6 JOISTS TO BE SUPPORTED ON EA. END USING SIMPSON LUS26 JOIST HANGERS @ EA. END, INSTALLED PER MANUFACTURERS SPECIFICATIONS.
17. 2x4 TOP RAIL CAP ONLY @ INTERMEDIATE LOWER GUARD RAIL, BETWEEN 4X4 POSTS, SECURED TO 2x4 TOP RAIL W/ SCREWS @ 8" O.C., TYP.
18. 1 1/2"ø STEEL HANDRAIL PLACED @ 2'-10" TO CENTER OF RAILING ABOVE STAIR NOSING OR RAMP DECK. RAILING TO CONTINUE BEYOND UPPER AND LOWE LANDINGS AS REQUIRED TO MEET ANSI A117.1.

GENERAL NOTES

A. SEE THIS SHEET AND "S" SHEETS FOR BUILDING DESIGN LOADS. AND OTHER DETAIL INFORMATION. ALSO REFER TO SUPPLEMENTAL MANUFACTURERS SET FOR ADDITIONAL INFORMATION CONCERNING MODULAR UNIT.

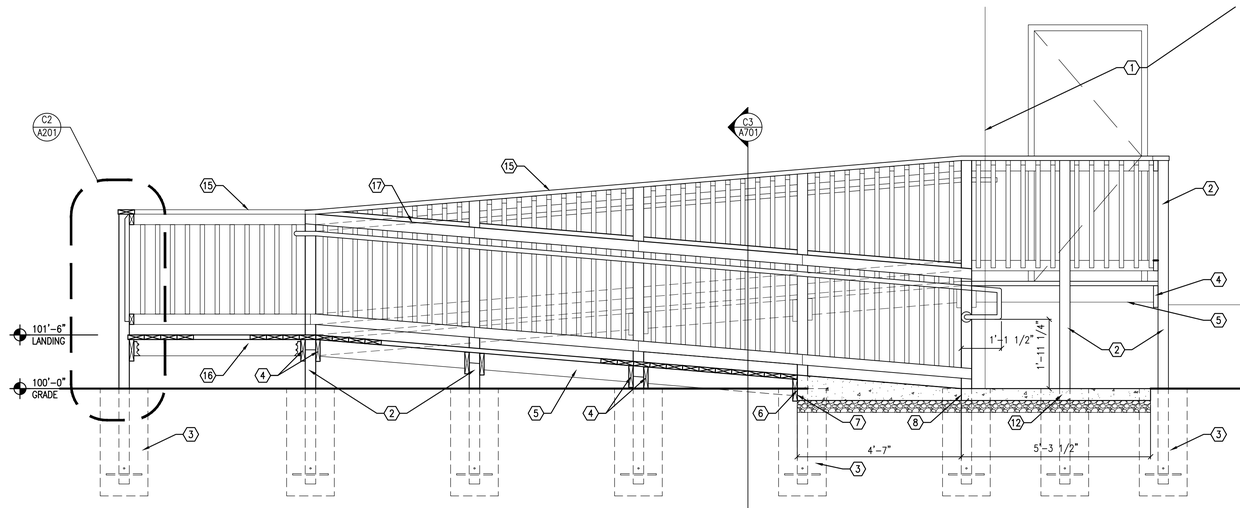
B. ALL EXTERIOR WOOD FRAMING IS TO BE PRESSURE TREATED LUMBER AND RATED FOR EXTERIOR USE OR GROUND CONTACT DEPENDING ON ITS LOCATION.

C. SCHOOL IS RESPONSIBLE TO PROVIDE ALL APPLICABLE SIGNAGE IN COMPLIANCE WITH ANSI A117.1 GUIDELINES.

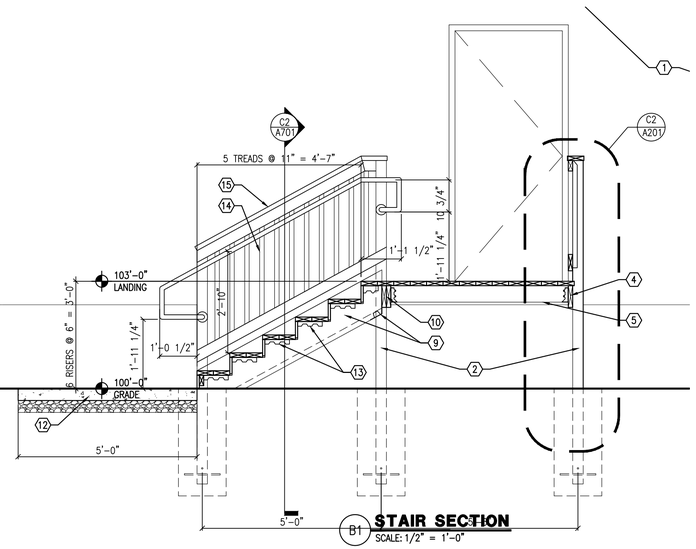
D. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION PERTAINING TO A SPECIFIC ITEM OR MATERIAL.

E. REFER TO SUPPLEMENTAL MANUFACTURERS SET FOR ADDITIONAL MODULAR UNIT INFORMATION INCLUDING, BUT NOT LIMITED TO ELEVATIONS, BUILDING SECTION, MECHANICAL, ETC. FOR COORDINATION WITH THESE DRAWINGS.

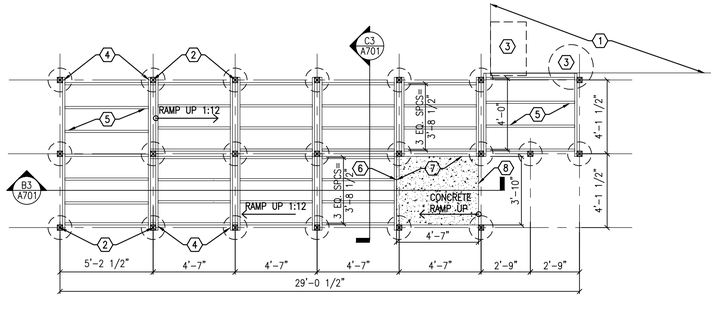
F. DECK BOARDS FOR STAIRS, LANDINGS, AND RAMP TO BE PRT 2x6 BOARDS SCREWED TO SUPPORTING FRAMING WITH CORROSION RESISTANT 3" DECK SCREWS, (2) @ EA. HEADER OR JOIST.



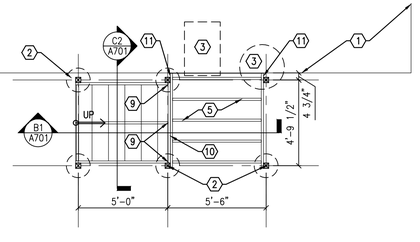
B3 **RAMP SECTION**
SCALE: 1/2" = 1'-0"



B1 **STAIR SECTION**
SCALE: 1/2" = 1'-0"



A3 **RAMP FRAMING PLAN**
SCALE: 1/4" = 1'-0"



A1 **STAIR FRAMING PLAN**
SCALE: 1/4" = 1'-0"

The McKnight Group
Leaders in Innovative Church Design and Building

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STATE OF OHIO
PHILIP J. TIPTON
13225
REGISTERED ARCHITECT

PHILIP J. TIPTON, LICENSE #13225
EXPIRATION DATE 12/31/2023

Architect is not responsible for any dimensions scaled from drawings. Dimensions noted take precedence.

SHEPERD CHURCH OF THE NAZARENE

Modular Building Addition for:
425 S. HAMILTON ROAD
GAHANNA, OH 43230

DRAWING	DATE
☐ REVIEW SET	11 JUL 23
☒ Permit/Bid Set	08 AUG 23

REVISIONS

STAIR AND RAMP DETAILS AND NOTES

A701
OF . SHEETS

223223

DIVISION 01 – GENERAL REQUIREMENTS

1. PROJECT SPECIFICATIONS HAVE BEEN INCORPORATED INTO THE DRAWINGS.

2. THE DRAWINGS HAVE BEEN ARRANGED TO SHOW THE EXTENT OF WORK INVOLVED AND ARE NOT INTENDED TO DEFINE ANY COMPLETE SUB–CONTRACT. EACH CONTRACTOR SHALL FURNISH ALL NECESSARY LABOR, SUPERVISION, MATERIALS, APPLIANCE, EQUIPMENT AND SERVICES NECESSARY TO PROVIDE ANY WORK REQUIRED TO COMPLETE THE PORTION OF SAID SCOPE IN A WORKMANLIKE MANNER.

3. BEFORE SUBMITTING A PROPOSAL, EACH CONTRACTOR/SUPPLIER SHALL CAREFULLY EXAMINE THE DRAWINGS, SPECIFICATIONS AND ALL OTHER CONTRACT DOCUMENTS, VISIT THE SITE, FULLY INFORM HIMSELF PRIOR TO BIDDING AS TO EXISTING CONDITIONS AND LIMITATIONS UNDER WHICH THE WORK IS TO BE PERFORMED AND SHALL INCLUDE IN HIS PROPOSAL A SUM TO COVER THE COST OF ITEMS AND EQUIPMENT NECESSARY TO PERFORM THE WORK AS SET FORTH IN THE CONTRACT DOCUMENTS. NO ALLOWANCE WILL BE MADE TO A CONTRACTOR/SUPPLIER DUE TO A LACK OF SUCH EXAMINATION OR KNOWLEDGE. THE SUBMISSION OF A PROPOSAL WILL BE CONSIDERED AS CONCLUSIVE EVIDENCE THAT THE BIDDER HAS MADE SUCH EXAMINATION.

4. CONTRACTORS/SUPPLIERS SHALL PROMPTLY NOTIFY THE ARCHITECT OF ANY AMBIGUITY, INCONSISTENCY OR ERROR, WHICH THEY MAY DISCOVER UPON EXAMINATION OF THE BIDDING DOCUMENTS OR OF SITE AND LOCAL CONDITIONS.

5. THE GENERAL CONTRACTOR SHALL PROVIDE OVERALL SUPERVISION AND COORDINATION AMONG CONTRACTORS AND PROVIDE GENERAL CONDITIONS AS REQUIRED.

6. THE GENERAL CONTRACTOR SHALL OBTAIN AND INITIALLY PAY FOR ALL REQUIRED "BUILDING AND MAINLINE UTILITY SERVICE FEES, PERMITS AND ASSESSMENTS." AFTER ALL FEES, PERMITS AND ASSESSMENTS ARE PAID, THE CONTRACTOR WILL PRESENT THE PAID RECEIPTS TO THE OWNER FOR FULL REIMBURSEMENT. WHEN FEES EXCEED $5,000.00 THE OWNER IS REQUIRED TO ADVANCE THE FEE AMOUNT TO THE CONTRACTOR BEFORE PAYMENT IS MADE TO THE RESPECTIVE BUILDING AUTHORITIES. EXAMPLES OF VARIOUS FEES AND ASSESSMENTS ARE, BUT ARE NOT LIMITED TO, THE FOLLOWING:

A. SIDEWALK PERMIT
B. CURB CUT PERMIT
C. WATER TAP
D. WATER FRONT FOOTAGE CHARGE
E. WATER SYSTEM CAPACITY CHARGE
F. WATER METER
G. STORM SEWER
H. STORM SEWER INSPECTION (STANDBY)
I. SANITARY SEWER TAP
J. SANITARY SEWER SYSTEM CAPACITY CHARGE
K. SANITARY SEWER INSPECTION (STANDBY)
L. EXCESS FACILITIES COSTS FOR GAS, ELECTRIC AND TELEPHONE
M. AID TO CONSTRUCTION (ELECTRICAL)

7. PERMITS AND INSPECTIONS FEES FOR PLUMBING, HEATING, VENTILATING, AIR CONDITIONING, ELECTRICAL, FIRE ALARM SYSTEMS, FIRE SUPPRESSION SYSTEMS, ETC. TO BE APPLIED AND PAID FOR BY THEIR RESPECTIVE SUB–CONTRACTORS.

8. ALL WORK PROPOSALS SHALL INCLUDE INSTALLATION ACCORDING TO GOVERNING CODES AND TRADE STANDARDS.

9. COPIES OF PERMITS, APPROVED SHOP DRAWINGS, AND A COMPLETE SET OF CONTRACT DRAWINGS MARKED UP TO DATE WITH ALL REVISIONS SHALL BE KEPT ON SITE.

10. EACH CONTRACTOR IS RESPONSIBLE FOR KEEPING A SET OF RECORD DRAWINGS COVERING THE SCOPE OF HIS WORK. THESE RECORD DRAWINGS ARE TO BE KEPT CURRENT AS JOB PROGRESSES AND MUST BE TURNED OVER TO THE GENERAL CONTRACTOR AT THE COMPLETION OF THE PROJECT BEFORE FINAL RETAINAGE WILL BE PAID.

11. EACH CONTRACTOR SHALL BE FAMILIAR WITH THE ENTIRE SCOPE OF THE PROJECT AND SHALL BE RESPONSIBLE FOR COORDINATING HIS WORK WITH THAT OF OTHER CONTRACTORS

12. EACH CONTRACTOR REQUIRING INSPECTIONS SHALL ARRANGE AND SECURE ALL NECESSARY INSPECTIONS.

13. ALL WORK SHALL COMPLY WITH THE LATEST EDITIONS OF THE 2017 OHIO BUILDING CODE, THE NFPA CODE, THE NATIONAL BUILDING AND ELECTRICAL CODE, O.S.H.A., AND ALL OTHER NATIONAL, STATE AND LOCAL CODES AND ORDINANCES HAVING JURISDICTION OVER THIS PROJECT.

14. FURNISH ALL MATERIAL AND EQUIPMENT AS SPECIFIED, EXCEPT WHERE APPROVAL FOR SUBSTITUTION HAS BEEN GRANTED BY THE ARCHITECT AND/OR OWNER.

15. ALL CONTRACTORS SHALL PROVIDE ANY TEMPORARY SIGNAGE AND BARRICADES AS NECESSARY TO PROTECT THE BUILDING INHABITANTS AND PUBLIC FROM THE WORK AND STAGING AREAS.

16. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS THAT MAY BE AFFECTED BY THE WORK. CONTRACTOR SHALL MAKE MINOR ADJUSTMENTS TO DIMENSIONS AS REQUIRED TO PERFORM THE WORK.

17. EACH CONTRACTOR IS REQUIRED TO PROVIDE AND MAINTAIN ALL TEMPORARY BRACING REQUIRED FOR AVOIDING COLLAPSE DURING CONSTRUCTION FOR THEIR PARTICULAR PHASE OF WORK.

18. ALL WORK SHALL BE DONE BY SKILLED CRAFTSMEN AND SHALL BE OF HIGHEST QUALITY IN ACCORDANCE WITH THE BEST PRACTICES OF EACH RESPECTIVE TRADE.

19. CONTRACTORS SHALL FOLLOW MATERIAL MANUFACTURER'S RECOMMENDATIONS FOR STORAGE AND INSTALLATION OF THEIR PRODUCTS. ANY DEVIATION FROM MANUFACTURER'S DIRECTIONS SHALL BE MADE AT THE CONTRACTOR'S RISK.

20. ALL PATCH WORK SHALL BE CONSISTENT WITH ADJOINING SURFACES.

21. ALL ROUGH OPENINGS AND EQUIPMENT SHALL BE VERIFIED WITH MANUFACTURER'S SPECIFICATIONS PRIOR TO CONSTRUCTION OR INSTALLATION AND COORDINATED WITH APPROPRIATE TRADES AND CONTRACTORS.

22. THE CARPENTRY CONTRACTOR SHALL FURNISH AND INSTALL ALL MISCELLANEOUS SUPPORT FORMS, BLOCKING, HANGERS, FITTINGS, ETC., NOT NECESSARILY SHOWN BUT REQUIRED TO FULLY COMPLETE THE WORK.

23. OWNER REQUIRES ANY CONTRACTOR OR SUPPLIER PERFORMING ANY WORK OR SUPPLYING ANY MATERIALS TO GUARANTEE THE SAME TO BE FREE FROM ANY AND ALL DEFECTS IN WORKMANSHIP AND MATERIALS FOR ONE (1) YEAR FROM THE DATE OF PROJECT COMPLETION THEREOF AND REQUIRES SUCH PERSON TO BE RESPONSIBLE FOR THE REPLACEMENT OR REPAIR WITHOUT ADDITIONAL CHARGE TO THE OWNER.

24. ALL CONTRACTORS WORKING ON THIS PROJECT MUST MEET OR EXCEED ALL OSHA STANDARDS AND REQUIREMENTS. EACH CONTRACTOR MUST MEET THESE MINIMUM REQUIREMENTS THROUGHOUT THE DURATION OF THE PROJECT, BUT IS NOT LIMITED TO, A COMPLETE, ACTIVE, ONGOING SAFETY PROGRAM, HAZARDOUS COMMUNICATIONS PROGRAM AND EVIDENCE OF REQUIRED EMPLOYEE TASK TRAINING.

25. IF ANY CONTRACTOR ENCOUNTERS HAZARDOUS MATERIALS OR CONDITIONS WHICH MAY BE DANGEROUS, HE IS TO IMMEDIATELY STOP WORK IN THE AFFECTED AREA AND NOTIFY THE GENERAL CONTRACTOR WHO WILL, IN TURN, NOTIFY THE OWNER OF THE FINDING. THE OWNER IS RESPONSIBLE FOR REMOVAL OR NEUTRALIZATION OF ANY EXISTING HAZARDOUS MATERIALS OR CONDITIONS.

26. PAYMENTS TO CONTRACTOR, GUARANTEE OF WORK, DATE OF COMPLETION AND ALL OTHER CONTRACTUAL MATTERS SHALL BE AS AGREED TO BETWEEN OWNER AND CONTRACTOR.

27. ALL RISK INSURANCE SHALL BE PROVIDED BY OWNER WITH A COPY TO THE GENERAL CONTRACTOR FOR POSTING AT THE JOB SITE.

28. THE GENERAL CONTRACTOR SHALL PURCHASE AND MAINTAIN, DURING THE TERM OF THE CONTRACT, INSURANCE FOR NOT LESS THAN THE LIMITS OF LIABILITY AGREED TO BY THE OWNER OR REQUIRED BY LAW FOR:

A. WORKMAN'S COMPENSATION

B. COMPREHENSIVE LIABILITY

C. CONTRACTUAL LIABILITY

D. COMPREHENSIVE AUTOMOTIVE LIABILITY

E. EXCESS LIABILITY UMBRELLA

CERTIFICATES OF INSURANCE LISTED ABOVE SHALL BE FILED WITH THE OWNER PRIOR TO COMMENCEMENT OF THE WORK.

29. APPROVED SUBSTITUTIONS REQUIRE SUBMITTALS OF PRODUCT LITERATURE FOR FORMAL APPROVAL OF THE ARCHITECT AND/OR ENGINEER. WHEN SUBSTITUTIONS FOR FINISH MATERIALS ARE REQUESTED THE SUPPLIER MUST SUPPLY A MINIMUM OF THREE SAMPLES OF EACH MATERIAL IF THE ARCHITECT / ENGINEER APPROVES THE SUBSTITUTION A LETTER OF ACCEPTANCE WILL BE ISSUED BY THE ARCHITECT. NO SUBSTITUTION OF MATERIALS IS PERMITTED UNLESS THE ARCHITECT ISSUES A LETTER OF ACCEPTANCE.

DIVISION 03 – CONCRETE (NOTES IN THIS SECTION ARE TO BE COORDINATED WITH THE STRUCTURAL DRAWINGS. IF THERE IS A CONFLICT, THE STRUCTURAL DRAWINGS TAKE PRECEDENCE.

03 30 00 – CAST–IN–PLACE CONCRETE

PART1 GENERAL

I. SUMMARY

1. BASIC SPECIFICATION: PERFORM WORK OF THIS SECTION ACCORDING TO ACI 301–10, "SPECIFICATIONS FOR STRUCTURAL CONCRETE," EXCEPT AS SPECIFICALLY MODIFIED HEREIN.

2. SECTION INCLUDES: ALL CAST_IN_PLACE CONCRETE SHOWN ON THE DRAWINGS AND REQUIRED BY THESE SPECIFICATIONS. ALLOW FOR THE INSTALLATION OF CAST_IN_PLACE ITEMS FURNISHED UNDER OTHER SECTIONS. INSTALL ANCHOR BOLTS FOR STEEL POST BASES. PROVIDE AND INSTALL GROUT UNDER STEEL COLUMN BASE PLATES.

3. PROVIDE CONCRETE PADS, PIERS, CURBS, AND BASES REQUIRED FOR EQUIPMENT OF ALL TRADES. COORDINATE DIMENSIONS AND DETAILS WITH REQUIREMENTS OF EQUIPMENT BEING SUPPLIED, PRIOR TO PLACING CONCRETE.

4. COORDINATE THE WORK OF OTHER TRADES WHO WILL PROVIDE AND INSTALL ITEMS (SLEEVES, PIPING, CONDUIT, INSERTS, ETC.) TO BE CAST IN THE CONCRETE. PLACE NO CONCRETE UNTIL ALL SUCH ITEMS ARE IN PLACE.

5. INSPECTION AND TESTING SERVICES REQUIRED BY THIS SECTION ARE TO BE PERFORMED BY AN AGENCY RETAINED BY THE CONTRACTOR. THIS INCLUDES NOT ONLY THE SERVICES REQUIRED TO ESTABLISH MIX DESIGNS, BUT ALSO INCLUDES ALL FIELD SAMPLING AND TESTING REQUIRED BY THE FIELD QUALITY CONTROL ARTICLE OF THIS SECTION (1.6.2 THROUGH 1.6.4).

6. RELATED SECTIONS: CAREFULLY EXAMINE ALL OTHER SECTIONS AND ALL DRAWINGS FOR RELATED WORK, WHICH INCLUDES BUT IS NOT LIMITED TO:

A. UNIT MASONRY: SECTION 04 20 00
B. STRUCTURAL STEEL: SECTION 05 12 00

II. QUALITY ASSURANCE

1. REFERENCE STANDARDS:
A. ACI 318–19, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE.
B. ACI 347R–14, GUIDE TO FORMWORK FOR CONCRETE.
C. ACI 302.1R–15, GUIDE FOR CONCRETE FLOOR AND SLAB CONSTRUCTION.
D. ACI 305R–20 HOT WEATHER CONCRETING, (INCL. SPECIFICATION ACI 305.1)
E. ACI 306R–16 COLD WEATHER CONCRETING, (INCL. SPECIFICATION ACI 306.1)
F. CRSI "PLACING REINFORCING BARS," 10TH EDITION, 2019.
G. WWR–500 "MANUAL OF STANDARD PRACTICE" DEC 2016, 9TH EDITION.

III. SUBMITTALS

1. ALL REQUIRED FIELD TESTING AND SAMPLING IS TO BE PERFORMED BY PERSONNEL EMPLOYED BY THE PROPOSED SPECIAL INSPECTION AGENCY.

2. SUBMIT A MIX DESIGN FOR EACH CLASS OF CONCRETE REQUIRED. SUBMITTALS TO COMPLY WITH APPROPRIATE METHODS LISTED IN ACI 301. INDICATE WHETHER MIXES HAVE BEEN DESIGNED FOR PUMPING.

3. SUBMIT PDF COPIES OF SHOP DRAWINGS FOR ALL REINFORCING. INDICATE STRENGTH, SIZE, AND DETAILS OF ALL BAR REINFORCING, AND STYLE AND SPECIFICATION OF ALL WELDED WIRE FABRIC. ONLY PRINTS WITH THE APPROVAL STAMP PRINTED ON THEM SHALL BE PERMITTED ON THE SITE.

4. SUBMIT, ON REQUEST ONLY, PRODUCT LITERATURE FOR ADMIXTURES AND CURING COMPOUNDS PROPOSED FOR USE.

5. SUBMIT REPORTS OF ALL REQUIRED TESTING AND INSPECTION.

6. SUBMIT FOR APPROVAL PROPOSED SPACING AND LOCATION OF CONSTRUCTION AND/OR CONTROL JOINTS IN CONCRETE SLABS ON GRADE.

IV. FIELD REFERENCE MANUALS

1. PROVIDE AT LEAST ONE COPY OF THE ACI FIELD REFERENCE MANUAL, MNL–15, AND ONE COPY OF CRSI'S "PLACING REINFORCING BARS," IN THE FIELD OFFICE AT ALL TIMES.

PART2 PRODUCTS

I. MATERIALS

1. CEMENTITIOUS MATERIALS:
A. PORTLAND CEMENT: ASTM C150, TYPE I, II, OR III.
B. FLY ASH: ASTM C618, CLASS C OR F.
C. SLAG CEMENT: ASTM C989, GRADE 100 OR 120.
D. BLENDED HYDRAULIC CEMENT: ASTM C595

2. WATER: POTABLE, CONFORMING TO C94.

3. AGGREGATES: ASTM C33. USE SIZE NO. 57 COARSE AGGREGATE, UNLESS OTHERWISE INDICATED. PROVIDE AGGREGATES FROM A SINGLE SOURCE.

4. CHEMICAL OR OTHER ADMIXTURES (WHERE REQUIRED OR PERMITTED): CERTIFIED BY MANUFACTURER TO BE COMPATIBLE WITH OTHER ADMIXTURES THAT DO NOT CONTRIBUTE WATER–SOLUBLE CHLORIDE IONS EXCEEDING THOSE PERMITTED IN HARDENED CONCRETE. DO NOT USE CALCIUM CHLORIDE OR ADMIXTURES CONTAINING CALCIUM CHLORIDE.

A. WATER–REDUCING AND RETARDING: ASTM C494, TYPE A.
B. RETARDING ADMIXTURE: ASTM C494, TYPE B.
C. WATER–REDUCING AND RETARDING ADMIXTURES: ASTM C494, TYPE D.
D. HIGH–RANGE, WATER–REDUCING ADMIXTURE: ASTM C494, TYPE F.
E. HIGH–RANGE, WATER–REDUCING AND RETARDING ADMIXTURE: ASTM C494, TYPE G.
F. PLASTICIZING AND RETARDING ADMIXTURE: ASTMC1017, TYPE II.
G. AIR–ENTRAINING ADMIXTURE: ASTM C260.
H. SYNTHETIC FIBER REINFORCEMENT: ASTM C1116 AND ASTM C1018.

5. REINFORCING STEEL:
A. DEFORMED BARS: ASTM A615 OR A706. MINIMUM YIELD STRENGTH TO BE 60 KSI. BARS TO BE WELDED ARE TO BE ASTM A706.
B. EPOXY COATING: ASTM A775 OR ASTM A934
C. WELDED WIRE FABRIC: ASTM A1064. PROVIDE IN SHEET FORM (NOT ROLLS).

6. PREFORMED EXPANSION JOINT OR ISOLATION JOINT FILLER: ASTM D1751 OR ASTM D1752.

7. CURING COMPOUND: FOLLOW REQUIREMENTS OF ACI 308R AND COMPLY WITH ASTM C309, TYPE 1, CLASS B (CLEAR). APPLY AT THE MANUFACTURER'S WRITTEN RECOMMENDED APPLICATION RATE. MUST BE COMPATIBLE WITH ADHESIVE SPECIFIED FOR FLOOR FINISHES OR BE REMOVED BY THE CONTRACTOR PRIOR TO APPLYING FLOOR FINISH.

8. GROUT FOR MASONRY CORE FILL: ASTM C476, COARSE TYPE OR FINE TYPE, PLACED PER ACI 530.1.

9. NON_SHRINK GROUT UNDER BEARING ELEMENTS: ASTM C1107. GRADE A, B, OR C. MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS = 7,000 PSI; MINIMUM COMPRESSIVE STRENGTH AT 48 HOURS = 2,000 PSI. ACCEPTABLE PRODUCTS INCLUDE, BUT ARE NOT LIMITED TO:
A. SIKAGROUT 212 BY SIKA.

12. CURING AND SEALING COMPOUND: ASTM C1315, TYPE 1, CLASS A, A CLEAR MEMBRANE–FORMING COMPOUND WHICH WILL NOT YELLOW. MUST BE FORMULATED FOR INTENDED APPLICATION, EITHER INTERIOR OR EXTERIOR AND APPLIED PER MANUFACTURER'S WRITTEN RECOMMENDATIONS.

13. KEYED FLOOR SLAB JOINTS: MILL GALVANIZED STEEL, 20 GAGE MINIMUM, WITH MINIMUM KEY DIMENSIONS OF 3/4 INCH DEEP BY 1–1/2 INCHES AT ITS WIDEST POINT. ACCEPTABLE PRODUCTS INCLUDE, BUT ARE NOT LIMITED TO:
K. TONGUE & GROOVE JOINT 95 BY HECKMANN BUILDING PRODUCTS, INC.

14. JOINT SEALANT: USE 1–COMPONENT POLYURETHANE, CONFORMING TO ASTM C920, TYPE S, GRADE NS, CLASS 25. USE WITH BACKER ROD AS REQUIRED.

15. UNDERSLAB VAPOR BARRIER:
A. 10 MIL POLYETHYLENE SHEETS. OVERLAP AND TAPE JOINTS.
B. RETARDING SHEET VAPOR RETARDER: ASTM E1745, CLASS A; NOT LESS THAN 10 MILS (0.25 MM) THICK. INCLUDE MANUFACTURER'S RECOMMENDED ADHESIVE OR PRESSURE–SENSITIVE TAPE.

16. DOVETAIL SLOTS: GALVANIZED STEEL, 24 GAGE MINIMUM.

II. MIXES

1. THE FOLLOWING CLASSES OF CONCRETE ARE REQUIRED (F'c AT 28 DAYS):
A. CLASS I – FOOTINGS; MINIMUM F'C = 3000 PSI.
B. CLASS II – INTERIOR SLABS ON GRADE, CONCRETE FILL OVER COMPOSITE STEEL DECK, AND ALL INTERIOR CONCRETE NOT OTHERWISE IDENTIFIED. MINIMUM F'C=3500 PSI; WATER–REDUCER REQUIRED. MINIMUM CEMENT CONTENT 517 LBS. PER CUBIC YARD.
C. CLASS III – EXTERIOR SLABS ON GRADE AND PIERS CAST INTEGRAL WITH SUCH WALLS, AND ALL EXTERIOR CONCRETE NOT OTHERWISE IDENTIFIED. MINIMUM F'C=4000 PSI; AIR–ENTRAINING ADMIXTURE AND WATER–REDUCER REQUIRED. MINIMUM CEMENT CONTENT 564 LBS. PER CUBIC YARD. MAXIMUM WATER–CEMENTITIOUS MATERIAL RATIO 0.45, AIR CONTENT 6% (+1%, –1.5%).
D. CLASS IV – LOW DENSITY, LEAN CONCRETE FILL AS REQUIRED UNDER FOOTINGS. MINIMUM F'C=500 PSI

2. PREPARE DESIGN MIXTURES FOR EACH TYPE AND STRENGTH OF CONCRETE, PROPORTIONED ON THE BASIS OF LABORATORY TRIAL MIXTURE OR FIELD TEST DATA, OR BOTH, IN ACCORDANCE WITH ACI 301. USE A QUALIFIED TESTING AGENCY FOR PREPARING AND REPORTING PROPOSED MIXTUREDESIGNS, BASED ON LABORATORY TRIAL ADMIXTURES.

3. CEMENTITIOUS MATERIALS: LIMIT PERCENTAGE, BY WEIGHT, OF CEMENTITIOUS MATERIALS OTHER THAN PORTLAND CEMENT IN CONCRETE AS FOLLOWS:

A. FLY ASH AND OTHER POZZOLANS: 25 PERCENT BY MASS.
B. SLAG CEMENT: 50 PERCENT BY MASS.
C. TOTAL FLY ASH OR OTHER POZZOLANS, SLAG CEMENT: 50 PERCENT BY MASS, WITH FLY ASH OR POZZOLANS NOT EXCEEDING 25 PERCENT BY MASS.
D. TOTAL OF FLY ASH OR OTHER POZZOLANS: 35 PERCENT BY MASS WITH FLY ASH OR POZZOLANS NOT EXCEEDING 25 PERCENT BY MASS.

4. ALL CONCRETE IS TO BE READY–MIXED PER ASTM C94. ALL ADMIXTURES ARE TO BE ADDED AT THE BATCH PLANT, EXCEPT THAT SUPERPLASTICIZER, WHERE USED, IS TO BE ADDED AT THE SITE. SUPERPLASTICIZER RETARDER CAN BE ADDED AT THE BATCH PLANT.

5. SLUMP:
A. DESIGN CONCRETE MIXES FOR A MAXIMUM SLUMP OF 4 INCHES, UNLESS A SUPERPLASTICIZER IS TO BE USED.
B. IF A SUPERPLASTICIZER IS TO BE USED, DESIGN MIXES FOR A SLUMP OF 2 INCHES – 3 INCHES BEFORE ITS ADDITION; MAXIMUM SLUMP PERMITTED AFTER ITS ADDITION IS 8 INCHES.

PART3 EXECUTION

I. ERECTION

1. THIS STRUCTURE IS DESIGNED TO BE FULLY SUPPORTING AND STABLE AFTER THE BUILDING IS FULLY ANCHORING TO THE FOUNDATIONS IS COMPLETED. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE INSTALLATION PROCEDURES AND SEQUENCE, AND TO ENSURE THE STABILITY OF THE BUILDING AND ITS COMPONENT PARTS, AND THE ADEQUACY OF TEMPORARY OR INCOMPLETE CONNECTIONS, DURING INSTALLATION. THIS INCLUDES THE ADDITION OF ANY SHORING, SHEETING, TEMPORARY GUYS, BRACING OR TIE–DOWNS THAT MIGHT BE NECESSARY. SUCH MATERIAL IS NOT SHOWN ON THE DRAWINGS. IF APPLIED, THEY SHALL BE REMOVED AS CONDITIONS PERMIT, AND SHALL REMAIN THE CONTRACTOR'S PROPERTY.

II. SURFACE CONDITIONS

1. VERIFY THAT EXCAVATIONS ARE FREE OF WATER AND ICE, ARE OF THE REQUIRED DIMENSIONS, AND HAVE BEEN APPROVED BY THE TESTING AGENCY RESPONSIBLE FOR SOILS INSPECTION, PRIOR TO PLACING CONCRETE.

2. DETERMINE FIELD CONDITIONS BY ACTUAL MEASUREMENT.

III. FORMWORK AND REINFORCING

1. FOOTINGS MAY BE CAST AGAINST EARTH CUTS WHEN SOIL CONDITIONS PERMIT.

2. REMOVAL OF FORMS AND SHORING:
A. REMOVE NO FORMS WITHIN FIRST 24 HOURS AFTER PLACEMENT.

IV. EMBEDDED ITEMS

1. PLACE AND SECURE ANCHORAGE DEVICES AND OTHER EMBEDDED ITEMS REQUIRED FOR ADJOINING WORK THAT IS ATTACHED TO OR SUPPORTED BY CAST–IN–PLACE CONCRETE:
A. USE SETTING DRAWINGS, TEMPLATES, DIAGRAMS, INSTRUCTIONS, AND DIRECTIONS FURNISHED WITH ITTEMS TO BE EMBEDDED.
B. INSTALL ANCHOR RODS, ACCURATELY LOCATED, TO ELEVATIONS REQUIRED AND COMPLYING WITH TOLERANCES IN SECTION 7.5 OF ANSI/AISC 303.

2. INSTALL EMBEDDED CONDUIT, PIPES AND SLEEVES SUBJECT TO THE FOLLOWING LIMITATIONS
A. DO NOT EMBED ALUMINUM WITHOUT PRIOR APPROVAL OF COATING MATERIAL.
B. DO NOT DISPLACE REINFORCING STEEL.
C. IN SLABS AND WALLS, LIMIT OUTSIDE DIMENSION OF CONDUITS AND PIPES TO 1/3 MEMBER THICKNESS.
D. MAINTAIN A CENTER–TO–CENTER SPACING OF AT LEAST THREE DIAMETERS OF CONDUIT OR PIPE.

V. DELIVERY AND PLACEMENT

1. PREPARATION BEFORE PLACEMENT:
A. VERIFY THAT INSTALLATION OF FORMWORK, REINFORCEMENT, EMBEDDED ITEMS, AND VAPOR RETARDER IS COMPLETE AND THAT REQUIRED INSPECTIONS ARE COMPLETED.
B. IMMEDIATELY PRIOR TO CONCRETE PLACEMENT, INSPECT VAPOR RETARDER FOR DAMAGE AND DEFICIENT INSTALLATION, AND REPAIR DEFECTIVE AREAS.
C. REMOVE ALL DEBRIS FROM FORMS AND DECK. CLEAN STEEL DECK OF GREASE, OIL, AND OTHER SUBSTANCES WHICH WOULD REDUCE BOND TO CONCRETE.
D. DO NOT USE ADDITIVES OR SALTS TO REMOVE ICE.
E. IN COLD WEATHER, MAINTAIN TEMPERATURE OF FORMS AND REINFORCING SUCH THAT CONCRETE TEMPERATURE CAN BE KEPT WITHIN THE SPECIFIED RANGE.

2. NOTIFY ARCHITECT AND SPECIAL INSPECTION AND TESTING AGENCY 24 HOURS PRIOR TO PLACING CONCRETE.

3. DO NOT ADD WATER TO CONCRETE DURING DELIVERY, AT PROJECT SITE, OR DURING PLACEMENT UNLESS APPROVED BY ARCHITECT IN WRITING, BUT NOT TO EXCEED THE AMOUNT INDICATED ON THE CONCRETE DELIVERY TICKET. DO NOT ADD WATER TO CONCRETE AFTER ADDING HIGH–RANGE WATER–REDUCING ADMIXTURES TO THE MIXTURE.

4. DELIVERY:
A. CONFORM TO ASTM C94.
B. ASTM C94 REQUIRES DISCHARGE WITHIN 1–1/2 HOURS OR 300 REVOLUTIONS, WHICHEVER OCCURS FIRST, AFTER THE INTRODUCTION OF WATER TO CEMENT AND AGGREGATES, OR THE INTRODUCTION OF CEMENT TO THE AGGREGATES. THE ARCHITECT MAY REQUIRE AN EARLIER DISCHARGE DURING HOT WEATHER.
C. PLACE CONCRETE AT THE MAXIMUM SLUMP FOR WHICH THE MIX WAS DESIGNED WITH A TOLERANCE OF UP TO 1 INCH ABOVE THE MAXIMUM FOR ONE BATCH IN ANY FIVE CONSECUTIVE BATCHES TESTED.

5. PLACEMENT:
A. PLACE CONCRETE IN ACCORDANCE WITH ACI 304R.
B. PLACE CONCRETE FOR FLOOR SLABS IN ACCORDANCE WITH ACI 302.1R.
C. IN HOT OR COLD WEATHER, PLACE CONCRETE IN ACCORDANCE WITH ACI 305R OR ACI 306R RESPECTIVELY
D. UNLESS REQUIRED OTHERWISE PER ACI GUIDELINES, PLACE WITHIN 6 FEET OF FINAL POSITION. SPREADING WITH VIBRATORS WITHIN FORMS IS PROHIBITED.
E. IN WALLS AND PIERS, DEPOSIT CONCRETE IN UNIFORM HORIZONTAL LAYERS WITH A MAXIMUM DEPTH OF 5 FEET PER HOUR.
F. MAXIMUM FREE FALL WITHOUT CHUTES OR ELEPHANT TRUNKS TO BE 5 FEET.
G. IF A SECTION CANNOT BE PLACED CONTINUOUSLY, PROVIDE FOR CONSTRUCTION JOINTSAS PROVIDED WITHIN THIS SPECIFICATION.
H. CONSOLIDATE CONCRETE DURING PLACEMENT OPERATIONS, SO CONCRETE IS THOROUGHLY WORKED AROUND REINFORCEMENT AND OTHER EMBEDDED ITEMS AND INTO CORNERS.
I. MAINTAIN REINFORCEMENT IN POSITION ON CHAIRS DURING CONCRETE PLACEMENT.

VI. JOINTING

1. INTERIOR SLABS ON GRADE:
A. LOCATE CONTROL AND CONSTRUCTION JOINTS AS SHOWN ON THE DRAWINGS. IN THE ABSENCE OF INFORMATION ON DRAWINGS, LOCATE AT OPENINGS, WALLS, COLUMNS, GRID LINES, INSIDE CORNERS AND AT 15 FEET ON CENTER GENERALLY. SCHEDULE SLAB PLACEMENTS AND SAWCUTTING OPERATIONS SUCH THAT SAWING IS COMPLETED PRIOR TO ONSET OF SHRINKAGE CRACKING. COMPLETE SAW CUTTING WITHIN 12 HOURS AFTER PLACEMENT.
B. SAW–CUT JOINTS SHALL BE AT LEAST 1/8 INCH WIDE AND 1/4 DEPTH OF SLAB THICKNESS.
C. PROVIDE ISOLATION JOINTS AT COLUMNS AND PIERS (1/2 INCH THICK) AND AT WALLS (1/4 INCH THICK) UNLESS ANOTHER DETAIL IS SPECIFICALLY SHOWN WITHOUT THEM. WHERE ISOLATION JOINT WILL BE EXPOSED TO VIEW, SET TOP OF JOINT FILLER BELOW TOP OF SLAB A DISTANCE EQUAL TO THE FILLER THICKNESS, TO RECEIVE SEALANT. WHERE NOT EXPOSED TO VIEW, SET TOP OF FILLER FLUSH WITH TOP OF SLAB.

2. STRUCTURAL FRAMING MEMBERS:
A. PLACE JOINTS PERPENDICULAR TO MAIN REINFORCEMENT.

3. EXTERIOR SLABS ON GRADE: LOCATE JOINTS AS SHOWN ON THE DRAWINGS. IN THE ABSENCE OF INFORMATION ON THE DRAWINGS, PROVIDE THE FOLLOWING:
A. EXPANSION JOINTS: FULL DEPTH, WITH 1/2 INCH JOINT FILLER, WHERE SLABS ABUT VERTICAL SURFACES, AT INTERSECTIONS OF SIDEWALKS, AT ABRUPT CHANGES IN WIDTH, AND AT A SPACING NOT EXCEEDING 30 FEET.
B. CONTROL JOINTS: TOOLED, 7/8 INCH DEEP, 4'–0" TO 6'–0" ON CENTER BETWEEN EXPANSION JOINTS.

VII. FINISHES

1. COMPLY WITH ACI 302.1R RECOMMENDATIONS FOR SCREEDING, RESTRAIGHTENING, AND FINISHING OPERATIONS FOR CONCRETE SURFACES. DO NOT WET CONCRETE SURFACES.
2. REPAIR SURFACE DEFECTS, INCLUDING TIE HOLES, IMMEDIATELY AFTER REMOVING FORMWORK.
3. SCHEDULE OF FINISHES ON FLATWORK IS AS FOLLOWS:
A. TROWELED FINISH: TYPICAL INTERIOR FLOOR AREAS TO RECEIVE ADHESIVE–APPLIED FINISH, OR CARPET, OR TO REMAIN EXPOSED.
B. FLOATED FINISH: INTERIOR FLOOR AREAS TO RECEIVE FINISH IN CEMENTITIOUS SETTING BED.
C. OTHER SURFACES TO BE LEFT EXPOSED: TROWELED FINISH, MINIMIZING BURNISH MARKS AND OTHER APPEARANCE DEFECTS.
D. BROOM FINISH: EXTERIOR SLABS, STEPS, RAMPS, ETC.
E. AS PER INDICATED ON THE DRAWINGS (IF REQUIRED): NON–SLIP OR APPLICATION OD HARDENER PER THE MANUFACTURER'S INSTRUCTIONS.
3. IN AREAS WITH FLOOR DRAINS, MAINTAIN FLOOR ELEVATION AT WALLS; PITCH SURFACES UNIFORMLY TO DRAINS AT 1:50 NOMINAL.

VIII. FINISHING TOLERANCES

1. IN GENERAL, CONFORM TO ACI 117 FOR CONCRETE MEMBERS.

2. ALL EXTERIOR SLABS SHALL BE FINISHED TO A 1/2" IN 10'–0" TOLERANCE.

IX. CURING AND PROTECTION

1. TEMPERATURE:
A. WHEN AIR TEMPERATURE DURING PLACEMENT IS LESS THAN 40 DEGREES, OR WILL BE WITHIN 24 HOURS, TEMPERATURE OF CONCRETE AS PLACED IS TO BE BETWEEN 50 AND 90 DEGREES F (55 AND 90 DEGREES F FOR SECTIONS LESS THAN 12 INCHES THICK). MAINTAIN CONCRETE TEMPERATURE WITHIN THESE LIMITS FOR THE FULL CURING PERIOD OF SEVEN DAYS.

2. CURING:
A. COMPLY WITH THE REQUIREMENTS OF ACI 308R.
B. ALL EXTERIOR SLAB AREAS MAY BE EITHER MOIST–CURED OR RECEIVE AN APPLICATION OF CURING COMPOUND. CURING COMPOUNDS AND OTHER SURFACE COATINGS ARE USUALLY CONSIDERED UNACCEPTABLE BY FLOORING AND ADHESIVE MANUFACTURERS. IF SUCH MATERIALS MUST BE USED, EITHER OBTAIN THE APPROVAL OF THE FLOORING AND ADHESIVE MANUFACTURER PRIOR TO USE OR REMOVE THE SURFACE COATING AFTER CURING TO FLOORING MANUFACTURER'S SATISFACTION.
C. WHICHEVER CURING METHOD IS USED, IT IS TO COMMENCE IMMEDIATELY AFTER DISAPPEARANCE OF WATER SHEEN, AND CONTINUE FOR AT LEAST SEVEN DAYS. DO NOT ALLOW CURING TO BE DELAYED OVERNIGHT.
D. PREVENT EXCESSIVE MOISTURE LOSS FROM FORMED SURFACES. IF FORMS ARE REMOVED BEFORE SEVEN DAYS HAVE ELAPSED, CURE THE FORMED SURFACES BY MOIST–CURING OR APPLICATION OF CURING COMPOUND FOR THE REMAINDER OF THE CURING PERIOD.
E. ALL EXTERIOR SLABS ARE TO RECEIVE AN APPLICATION OF CURING/SEALING COMPOUND TO HARDENED CONCRETE PRIOR TO COMPLETION OF CONSTRUCTION.

X. GROUTING

1. GROUT BELOW COLUMN BASE PLATES IS TO BE INSTALLED ONLY AFTER THE STEEL IS PLUMBED. THE USE OF LEVELING PLATES AT COLUMN BASES IS PROHIBITED.

2. INSTALL GROUT PER THE RECOMMENDATIONS OF THE MANUFACTURER.

XI. FIELD QUALITY CONTROL

1. TEST REPORTS SHALL INCLUDE REPORTING REQUIREMENTS OF ASTM C31, ASTM C39, AND ACI 301. MAINTAIN RECORDS OF ALL TESTS, INDICATING EXACT LOCATION OF THE STRUCTURE REPRESENTED BY EACH TEST.

2. OBTAIN CONCRETE FOR REQUIRED TESTS AT POINT OF PLACEMENT.

3. FOR EACH CONCRETE CLASS, PREPARE AS COMPOSITE SAMPLE AND CURED TEST CYLINDERS AND PERFORM A STRENGTH TEST FOR EACH 100 YARDS, OR FRACTION THEREOF, PLACED IN ANY ONE DAY. COMPOSITE SAMPLES OF FRESH CONCRETE SHALL BE OBTAINED IN ACCORDANCE WITH ASTM C172.

4. FOR EACH REQUIRED CONCRETE SAMPLE, THE FOLLOWING PROPERTIES SHALL BE DETERMINED
A. SLUMP: ASTM C143
B. SLUMP FLOW: ASTM C1611
C. AIR CONTENT: ASTM C231
D. TEMPERATURE: ASTM C1064. DETERMINE CONCRETE TEMPERATURE FOR EACH STRENGTH TEST WHEN AIR TEMPERATURE IS LESS THAN 40 DEGREES F OR WILL BE WITHIN 24 HOURS.
E. UNIT WEIGHT: ASTM C567
F. COMPRESSION TEST SPECIMEN: ASTM C31. CAST AND FIELD CURE AT LEAST TWO SETS OF THREE CYLINDER SPECIMENS FOR EACH REQUIRED SAMPLE AND STRENGTH TEST. ALSO CAST AND LABORATORY CURE THE SAME.
G. COMPRESSIVE STRENGTH TEST: ASTM C39. TEST ONE SET OF TWO SPECIMENS AT SEVEN DAYS AND ONE SET OF TWO SPECIMENS AT 28 DAYS. A COMPRESSIVE STRENGTH TEST SHALL BE THE AVERAGE COMPRESSIVE STRENGTH FROM A SET OF TWO SPECIMENS OBTAINED FROM THE SAME COMPOSITE SAMPLE AND TESTED AT AGE INDICATED.

5. DO NOT PLACE CONCRETE WHEN SLUMP, AIR CONTENT OR TEMPERATURE VARY FROM ALLOWABLE.

6. WHEN STRENGTH OF FIELD–CURED CYLINDERS IS LESS THAN 85 PERCENT OF COMPANION LABORATORY–CURED CYLINDERS, CONTRACTOR SHALL EVALUATE OPERATIONS AND PROVIDE CORRECTIVE PROCEDURES FOR PROTECTING AND CURING IN–PLACE CONCRETE.

7. STRENGTH OF EACH CONCRETE MIXTURE WILL BE SATISFACTORY IF EVERY AVERAGE OF ANY THREE CONSECUTIVE COMPRESSIVE–STRENGTH TESTS EQUALS OR EXCEEDS SPECIFIED COMPRESSIVE STRENGTH AND NO COMPRESSIVE–STRENGTH TEST VALUE FALLS BELOW SPECIFIED COMPRESSIVE STRENGTH BY MORE THAN 500 PSI WHEN THE SPECIFIED COMPRESSIVE STRENGTH IS 5,000 PSI OR LESS.

8. ADDITIONAL TESTS:

A. TESTING AND INSPECTING AGENCY SHALL MAKE ADDITIONAL TESTS OF CONCRETE WHEN TEST RESULTS INDICATE THAT SLUMP, AIR ENTRAINMENT, COMPRESSIVE STRENGTHS, OR OTHER REQUIREMENTS HAVE BEEN MET, AS DIRECTED BY ARCHITECT OR ENGINEER.
B. TESTING AND INSPECTING AGENCY MAY CONDUCT TESTS TO DETERMINE ADEQUACY OF CONCRETE BY CORED CYLINDERS COMPLYING WITH ASTM C42/C42M OR BY OTHER METHODS AS DIRECTED BY ARCHITECT OR ENGINEER.
C. NON–DESTRUCTIVE TESTING: IMPACT HAMMER, SONOSCOPE, OR OTHER NON–DESTRUCTIVE DEVICE MAY BE PERMITTED BY ARCHITECT OR ENGINEER BUT WILL NOT BE USED AS SOLE BASIS FOR APPROVAL OR REJECTION OF CONCRETE.
D. ACCEPTANCE CRITERIA FOR CONCRETE STRENGTH SHALL BE IN ACCORDANCE WITH ACI 301 SECTION 1.6.6

9. ADDITIONAL TESTING AND INSPECTING, AT CONTRACTOR'S EXPENSE, WILL BE PERFORMED TO DETERMINE COMPLIANCE OF REPLACED OR ADDITIONAL WORK WITH SPECIFIED REQUIREMENTS.

10. CORRECT DEFICIENCIES IN THE WORK THAT TEST REPORTS AND INSPECTIONS INDICATE DO NOT COMPLY WITH THE CONTRACT DOCUMENTS.

DIVISION 04 – MASONRY (NOTES IN THIS SECTION ARE TO BE COORDINATED WITH THE STRUCTURAL DRAWINGS. IF THERE IS A CONFLICT, THE STRUCTURAL DRAWINGS TAKE PRECEDENCE).

04 20 00 – UNIT MASONRY

1. STANDARD CONCRETE BLOCK UNITS SHALL COMPLY WITH ASTM C–90 FOR HOLLOW LOAD BEARING UNITS, ASTM C–145 FOR SOLID LOAD BEARING UNITS AND ASTM C–55 FOR CONCRETE BRICK.

2. CMU BEARING UNITS TO BE "DRY–STACKED" AT LOCATIONS INDICATED ON THE DRAWINGS.

3. MINIMUM BEARING OF MASONRY ON MASONRY SHALL BE 7 1/2", U.N.O. IN THE DRAWINGS.

4. MASONRY CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF SLEEVES THROUGH FOUNDATION WALLS. SLEEVES AND THEIR LOCATIONS ARE TO BE PROVIDED BY THE VARIOUS CONTRACTORS' NEED FOR SLEEVES.

5. SUBMIT PDF'S OF SHOP DRAWINGS OF REINFORCING MATERIALS FOR APPROVAL, PRIOR TO FABRICATION.

DIVISION 5 – MISCELLANEOUS STEEL (NOTES IN THIS SECTION ARE TO BE COORDINATED WITH THE STRUCTURAL DRAWINGS. IF THERE IS A CONFLICT, THE STRUCTURAL DRAWINGS TAKE PRECEDENCE).

05 12 00 – STRUCTURAL STEEL FRAMING

PART1 GENERAL

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6. CLEANING:
A. REMOVE OIL, DIRT, LOOSE MILL SCALE, OR OTHER MATERIAL WHICH WOULD IMPAIR WELDING, PERFORMANCE OF SLIP CRITICAL CONNECTIONS, OR ADHERENCE OF CONCRETE OR SPRAYED FIREPROOFING.
B. FOR STEEL THAT IS TO BE PAINTED, CLEANING TECHNIQUES ARE TO BE AS REQUIRED BY THE APPROPRIATE SSPC PAINT SPECIFICATION LISTED BELOW.

10. SHOP PAINTING:
A. SHOP–PAINT STEEL EXPOSED TO VIEW IN THE FINISHED STRUCTURE, EXCEPT THAT TO BE GALVANIZED, WITH PRIMER AS FOLLOWS:
1. PREPARE SURFACE BY COMMERCIAL BLAST CLEANING PER "SSPC–SP 6 (WAB)/NACE WAB–3" AND APPLY ONE COAT OF PRIMER.
2. MINIMUM DRY FILM THICKNESS SHALL BE 2.0 MILS.
3. DO NOT PAINT SURFACES TO BE ENCASED IN CONCRETE OR TO RECEIVE SPRAYED FIREPROOFING, OR CONTACT SURFACES IN SLIP–CRITICAL CONNECTIONS, OR SURFACES TO BE FIELD–WELDED, OR TOP SURFACES OF CRANE RAILS.
B. STEEL NOT EXPOSED TO VIEW IN THE FINISHED STRUCTURE NEED NOT BE PAINTED, EXCEPT COLUMNS AND PORTIONS OF BEAMS OTHER THAN LINTELS EMBEDDED IN OR BUILT WITHIN EXTERIOR WALLS, WHICH SHALL BE PAINTED WITH TWO COATS OF PRIMER PER THE REQUIREMENTS IN #1 ABOVE, FOR A TOTAL DRY FILM THICKNESS OF 4.0 MILS.
C. PAINT ALL LINTELS IN INTERIOR WALLS WITH ONE COAT OF PRIMER PER THE REQUIREMENTS IN #1 ABOVE.

11. GALVANIZING:
A. PREPARE SURFACES ACCORDING TO SSPC–SP 16.
B. GALVANIZING IS TO CONFORM TO ASTM A123, GRADE 100, OR ASTM A153, CLASS C. FOLLOW ALL RECOMMENDATIONS OF THE AMERICAN HOT DIP GALVANIZERS ASSOCIATION.
C. EXCEPT FOR BOLTS, NUTS, WASHERS, AND ANCHORS, PERFORM ALL GALVANIZING AFTER FABRICATION.
D. PRIOR TO GALVANIZING, CLEAN STEEL OF FOREIGN SUBSTANCES PER ASTM A385.
E. DO NOT TREAT GALVANIZED FINISH WITH A STAIN–INHIBITING CHROMATE TREATMENT.
F. AFTER FINAL ERECTION, TOUCH UP ALL ABRASIONS WITH A COLD GALVANIZING COMPOUND, Z.R.C. COLD GALVANIZING COMPOUND BY ZRC PRODUCTS COMPANY, OR EQUAL.
G. GALVANIZE ALL SHELF ANGLES, LINTELS IN EXTERIOR WALL, AND ALL STEEL EXPOSED TO THE ELEMENTS AND ALL ITEMS INDICATED ON THE DRAWINGS AS GALVANIZED.

PART3 EXECUTION

I. SURFACE CONDITIONS

1. PRIOR TO BEGINNING WORK OF THIS SECTION, VERIFY THAT THE INSTALLED WORK OF OTHER TRADES IS COMPLETE AND CORRECT TO THE EXTENT NECESSARY FOR THE PROPER EXECUTION OF THE WORK OF THIS SECTION. THIS INCLUDES LOCATIONS OF ANCHOR BOLTS, AND LINES AND GRADES OF BEARING AREAS.

2. IN THE EVENT OF DISCREPANCIES, IMMEDIATELY NOTIFY THE ARCHITECT. DO NOT PROCEED WITH WORK AFFECTED BY THE DISCREPANCIES UNTIL THEY HAVE BEEN RESOLVED.

3. SAFETY: IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS GOVERNING THIS WORK.

4. CLEAN BEARING SURFACES AND OTHER SURFACES IN PERMANENT CONTACT, PRIOR TO ASSEMBLY.

5. SPLICES ARE PERMITTED ONLY WHERE INDICATED.

6. TOLERANCES: PER AISC CODE OF STANDARD PRACTICE.

7. TOUCH–UP PAINTING: AFTER ERECTION, TOUCH_UP FIELD CONNECTIONS AND ABRASIONS IN THE SHOP COAT WITH SAME PAINT USED FOR SHOP COAT. DO NOT PAINT WELDS UNTIL THEY HAVE BEEN CLEANED IN ACCORDANCE WITH AWS D1.1.

05 5000 – METAL FABRICATIONS

PART 1 GENERAL

1. INCLUDES SHOP FABRICATED STEEL ITEMS.

2. SUBMIT SHOP DRAWINGS THAT INDICATE PROFILES, SIZES, CONNECTION ATTACHMENTS, REINFORCING, ANCHORAGE, SIZE AND TYPE OF FASTENERS. INCLUDE ERECTION DRAWINGS, ELEVATIONS, AND DETAILS WHERE APPLICABLE.

PART 2 PRODUCTS

1. MATERIALS – STEEL
A. STEEL SECTIONS: ASTM A 36/A 36M.
B. STEEL TUBING: ASTM A501/A501M HOT–FORMED STRUCTURAL TUBING.
C. PLATES: ASTM A 283.
D. PIPE: ASTM A 53/A 53M, GRADE B SCHEDULE 40, BLACK FINISH.
E. BOLTS, NUTS, AND WASHERS: ASTM A 325 (ASTM A 325M), TYPE 1, GALVANIZED TO ASTM A 153/A (153M WHERE CONNECTING GALVANIZED COMPONENTS).
F. WELDING MATERIALS: AWS D1.1/D1.1M; TYPE REQUIRED FOR MATERIALS BEING WELDED.
G. SHOP AND TOUCH–UP PRIMER: SSPC–PAINT 15, COMPLYING WITH VOC LIMITATIONS OF AUTHORITIES HAVING JURISDICTION.

2. FABRICATION
A. FIT AND SHOP ASSEMBLE ITEMS IN LARGEST PRACTICAL SECTIONS, FOR DELIVERY TO SITE.

B. FABRICATE ITEMS WITH JOINTS TIGHTLY FITTED AND SECURED.

C. GRIND EXPOSED JOINTS FLUSH AND SMOOTH WITH ADJACENT FINISH SURFACE. MAKE EXPOSED JOINTS BUTT TIGHT, FLUSH, AND HAIRLINE. EASE EXPOSED EDGES TO SMALL UNIFORM RADIUS.

D. SUPPLY COMPONENTS REQUIRED FOR ANCHORAGE OF FABRICATIONS. FABRICATE ANCHORS AND RELATED COMPONENTS OF SAME MATERIAL AND FINISH AS FABRICATION, EXCEPT WHERE SPECIFICALLY NOTED OTHERWISE.

3. FABRICATED ITEMS

A. LEDGE ANGLES, SHELF ANGLES, CHANNELS, AND PLATES NOT ATTACHED TO STRUCTURAL FRAMING: PRIME PAINT FINISH.

B. RAILING ASSEMBLY: PIPE HAND RAILS, WALL RAILS, AND ALL ATTACHMENTS TO RESIST LATERAL FORCE OF 75 LBS AT ANY POINT WITHOUT DAMAGE OR PERMANENT SET. TEST IN ACCORDANCE WITH ASTM E 935. PROVIDE WELDING FITTINGS TO JOIN LENGTHS, SEAL OPEN ENDS, AND CONCEAL EXPOSED MOUNTING BOLTS AND NUTS, INCLUDING BUT NOT LIMITED TO ELBOWS, T–SHAPES, SPLICE CONNECTORS, FLANGES, ESCUTCHEONS, AND WALL BRACKETS.

4. FINISHES – STEEL
A. PRIME PAINT STEEL ITEMS.

B. PREPARE SURFACES TO BE PRIMED IN ACCORDANCE WITH SSPC–SP2.

C. CLEAN SURFACES OF RUST, SCALE, GREASE, AND FOREIGN MATTER PRIOR TO FINISHING.

D. PRIME PAINTING: ONE COAT.

DIVISION 06 – WOOD, PLASTICS, AND COMPOSITES (NOTES IN THIS SECTION ARE TO BE COORDINATED WITH THE STRUCTURAL DRAWINGS. IF THERE IS A CONFLICT, THE STRUCTURAL DRAWINGS TAKE PRECEDENCE).

06 10 00 STRUCTURAL LUMBER, SHEATHING, AND ROUGH CARPENTRY

1. ROUGH OPENINGS OF ALL DOORS, WINDOWS, ETC. SHALL BE VERIFIED BY CONTRACTOR PRIOR TO INSTALLATION.

2. CARPENTRY CONTRACTOR SHALL COORDINATE WITH GENERAL CONTRACTOR REGARDING LOCATION AND EXTENT OF ALL WOOD BLOCKING PRIOR TO FINISH MATERIAL INSTALLATION.

3. ALL STRUCTURAL GRADE LUMBER SHALL HAVE A MINIMUM ALLOWABLE STRESS IN COMPRESSION OF 1.400 PSI OR GREATER AND A MODULUS OF ELASTICITY OF 1,500,000 PSI.

4. WHERE REQUIRED, STRUCTURAL LUMBER SHALL BE TREATED PER GOVERNMENTAL CODES AND REGULATIONS HAVING JURISDICTION OVER THE PROJECT. PROVIDE WRITTEN CERTIFICATION FOR FIRE RETARDANT CLASSIFICATION FROM AN ACCREDITED INDEPENDENT LABORATORY.

5. ROUGH CARPENTER TO FURNISH AND INSTALL JOIST HANGERS FOR ALL WOOD TRUSSES, JOISTS AND RAFTERS FRAMING INTO SIDES OF OTHER MEMBERS. CONTRACTOR TO FURNISH HANGERS SIZED IN ACCORDANCE WITH SIMPSON DESIGN GUIDELINES FOR THE SPECIFIED LOADING AS SHOWN ON DRAWINGS.

6. ROUGH CARPENTRY TO FURNISH AND INSTALL SIMPSON HS SEISMIC/HURRICANE ANCHORS AT BEARING POINTS OF ALL ROOF MEMBERS (INCLUDING CONVENTIONAL FRAMING AND WOOD TRUSSES) TO PREVENT UPLIFT.

7. ALL EXTERIOR LUMBER TO BE PRESSURE TREATED AND RATED FOR GROUND CONTACT WHERE APPLICABLE.

8. ALL FASTENERS USED SHALL BE GALVANIZED AND SHALL BE COMPATIBLE FOR USE WITH PRESSURE TREATED LUMBER.

DIVISION 07 – THERMAL & MOISTURE PROTECTION

07 21 00 – INSULATION

1. BATT INSULATION

A. CODE COMPLIANT BATT INSULATION HAS BEEN PREVIOUSLY BEEN INSTALLED AT THE TIME THE MODULAR UNIT WAS MANUFACTURED. NO MODIFICATIONS ARE TO TAKE PLACE WITH THE UNIT.

2. FLASHING

A. OPTIONAL APPLICATION OF SELF–HEALING, 4" WIDE PEEL–N–STICK MEMBRANE FLASHING TO BE PLACED OVER TOP OF EXTERIOR WOOD JOISTS AND HEADERS PRIOR TO THE INSTALLATION OF DECKING.

DIVISION 08 – OPENINGS

*THE PRE–MANUFACTURED UNIT IS UNDERSTOOD TO BE COMPLETE WITH CODE COMPLIANT DOORS AND HARDWARE ALREADY INSTALLED.

DIVISION 09 – FINISHES – NOT APPLICABLE

*THE PRE–MANUFACTURED UNIT IS UNDERSTOOD TO BE COMPLETE WITH FINISHES ALREADY INSTALLED. MODIFICATIONS OR REPLACEMENT OF FINISHES IS THE RESPONSIBILITY OF THE OWNER, AND THEY ARE REQUIRED TO MEET THE REQUIREMENTS LISTED IN THE BUILDING CODE.

DIVISION 10 – SPECIALTIES – NOT APPLICABLE

10 4400 – FIRE PROTECTION SPECIALTIES

3. TYPE 1: PROVIDE AND INSTALL STANDARD WALL BRACKET MOUNTED 2A–10BC–ABC DRY CHEMICAL FIRE EXTINGUISHER. VERIFY SIZE AND TYPE OF FIRE EXTINGUISHER PRIOR TO ORDERING.

DIVISION 11 – EQUIPMENT – NOT APPLICABLE

DIVISION 12 – FURNISHINGS – NOT APPLICABLE

DIVISION 13 – SPECIAL CONSTRUCTION – NOT APPLICABLE

DIVISION 14 – CONVEYING EQUIPMENT – NOT APPLICABLE

DIVISION 21 – FIRE PROTECTION (FIRE SUPPRESSION/SPRINKLER/STANDPIPE SYSTEMS) – NOT APPLICABLE

DIVISION 22 – PLUMBING – (SEE MECHANICAL SHEET FOR SPECIFICATIONS)

DIVISION 23 – HEATING, VENTILATING & AIR CONDITIONING (SEE MECHANICAL SHEET FOR SPECIFICATIONS)

DIVISION 26 – ELECTRICAL – (SEE ELECTRICAL SHEET FOR SPECIFICATIONS)

DIVISION 31 – EARTHWORK

1. COMPLY WITH ALL REGULATIONS OF THOSE GOVERNMENTAL AGENCIES HAVING JURISDICTION REGARDING DISPOSAL OF EXCESS AND WASTE MATERIALS.

2. CONTRACTOR(S) SHALL BE RESPONSIBLE TO EXAMINE THE SITE AND VERIFY THE EXTENT OF DEMOLITION WORK PRIOR TO SUBMITTING PROPOSAL.

3. ALL WORK IN RIGHT–OF–WAY SHALL MEET ALL REGULATIONS AND STANDARDS OF THOSE GOVERNMENTAL AGENCIES HAVING JURISDICTION.

4. LOCATE AND PROTECT BENCH MARKS, MONUMENTS AND CONTROL POINTS AND, IF DISTURBED OR DESTROYED, REPAIR AND/OR REPLACE AT NO COST TO THE OWNER.

5. IN EVENT OF DESTRUCTION OR DAMAGE TO ITEMS NOTED NOT TO BE DEMOLISHED OR REMOVED INCLUDING UNDERGROUND OR OVERHEAD UTILITIES, PROMPTLY REPAIR OR REPLACE SUCH ITEMS TO THE SATISFACTION OF AND AT NO COST TO THE OWNER.

6. CAREFULLY DEMOLISH AND REMOVE FROM THE SITE THOSE ITEMS NOTED ON DRAWINGS, PAYING STRICT ATTENTION TO ITEMS SCHEDULED TO BE REMOVED AND RELOCATED OR RETURNED TO OWNER. PAY CLOSE ATTENTION TO AREAS OF SELECTIVE DEMOLITION. ITEMS SCHEDULED FOR RE–USE OR SALVAGE ARE TO BE REMOVED WITHOUT DAMAGE AND TURNED OVER TO OWNER OR STORED FOR RE–INSTALLATION.

7. REMOVE ALL EXISTING SLABS, FOOTINGS, FOUNDATIONS, WOOD, METAL, REFUSE, UNSUITABLE SOIL, ETC. WITHIN AREA OF NEW BUILDING FOUNDATIONS. ALL OTHER ITEMS INTERFERING WITH SITE IMPROVEMENTS SHALL BE REMOVED TO A MINIMUM OF THREE (3) FEET BELOW FINISHED GRADE.

8. REPAIR AND REPLACE DISTURBED/DAMAGED PAVING, CURBS AND SIDEWALKS AS A RESULT OF THE CONSTRUCTION OF THIS PROJECT TO THE SATISFACTION OF THE ARCHITECT.

9. IF REQUIRED, GENERAL CONTRACTOR WILL DO ONLY MACHINE GRADING OF DISTURBED AREAS TO MEET FINAL GRADES.

10. EARTH FILL, WHEN REQUIRED, CAPABLE OF ACHIEVING THE SPECIFIED COMPACTION SHALL BE PLACED IN HORIZONTAL LAYERS NOT GREATER THAN 8" OF UNCOMPACTED THICKNESS.

11. IN AREAS DESIGNATED FOR BUILDINGS, WALKS AND PAVING, COMPACT THE SUB–GRADE AND, WHEN REQUIRED, EACH LAYER OF FILL TO A UNIFORM FIRM CONDITION TO ACHIEVE 98% OF MAXIMUM DENSITY PER ASTM D–698. NON–STRUCTURAL FILL MAY BE COMPACTED TO 90% OF THIS VALUE.

12. FINISHED GRADES AND WALKS SHALL SLOPE AWAY FROM BUILDING TO PREVENT PONDING OR STANDING WATER.

13. JUST PRIOR TO INSTALLATION, PROOF ROLL ALL AREAS WHERE BUILDING, WALKS AND PAVING CONSTRUCTION WILL OCCUR TO VERIFY COMPACTION CONDITIONS. REMOVE ANY SOFT OR UNSUITABLE MATERIAL AND REPLACE WITH FILL PER ITEM 10 ABOVE.

14. OWNER TO PROVIDE ALL LANDSCAPE WORK SHOWN ON DRAWINGS.

15. SITE LAYOUT OF UTILITIES IS SCHEMATIC AND APPROXIMATE. CONTRACTOR(S) SHALL CHECK RECORDS AND DRAWINGS FOR EXISTING UTILITIES AND VERIFY, AT THE SITE, THEIR LOCATION AND SERVICE CONNECTIONS. IF UTILITIES ARE UNCHARTED OR INCORRECTLY CHARTED AND SUBSEQUENTLY ENCOUNTERED, IMMEDIATELY NOTIFY THE APPLICABLE UTILITY COMPANY AND OWNER FOR PROCEDURE DIRECTIONS.

16. ALL UTILITIES TO BE INSTALLED IN ACCORDANCE WITH CODES AND REGULATIONS OF GOVERNMENTAL AGENCIES AND UTILITY COMPANIES HAVING JURISDICTION OVER THIS PROJECT.

17. GAS SERVICE:

A. SEE SITE AND PLUMBING DRAWINGS FOR CONNECTIONS TO EXISTING NATURAL GAS SERVICE. CONFIRM GAS TAP SIZE AND LOCATION WITH GAS COMPANY SERVICING THE AREA AND COORDINATE WITH PLUMBING CONTRACTOR RESPONSIBLE FOR INSTALLING GAS SERVICE.

23. ELECTRIC SERVICE:

A. CONFIRM TYPE OF ELECTRIC SERVICE, TYPE AND SIZE OF TRANSFORMER AND METER, AND THEIR INSTALLATION WITH ELECTRIC COMPANY SERVING AREA, COORDINATING SAME WITH ELECTRICAL CONTRACTOR.
B. SEE ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR CONNECTIONS TO EXISTING SERVICES, INCLUDING FIRE ALARM.

24. TELEPHONE SERVICE:

A. IF LAND LINE IS REQUIRED TO BE INSTALLED, CONFIRM WITH TELEPHONE COMPANY SERVING THE AREA THE LOCATION OF TELEPHONE SERVICE FROM POINT OF TAP–IN TO BUILDING'S MAIN TELEPHONE TERMINAL ENTRANCE, COORDINATING SAME WITH ELECTRICAL CONTRACTOR

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D C B A

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STATE OF OHIO
PHILIP J. TIPTON
13225
REGISTERED ARCHITECT

PHILIP J. TIPTON, LICENSE #13225
EXPIRATION DATE 12/31/2023

Architect is not responsible for any dimensions scaled from drawings. Dimensions noted take precedence.

Modular Building Addition for:
SHEPERD CHURCH OF THE NAZARENE
425 S. HAMILTON ROAD
GAHANNA, OH 43230

DRAWING	DATE
☐ REVIEW SET	11 JUL 23
☒ Permit/Bid Set	08 AUG 23

REVISIONS

SPECIFICATIONS

SP100

OF . SHEETS

223223

Plot Date: 8/8/2023 2:55:56 PM sp100–223223.dwg Hutcheson, Jeff

GENERAL NOTES

1. CONTRACTOR IS RESPONSIBLE TO SECURE AND PAY FOR ALL PERMITS, ADHERE TO ALL STATE, LOCAL AND NATIONAL ELECTRIC CODES, AND SCHEDULE INSPECTION TIMES AS TO NOT DELAY JOB PROGRESS.
2. COORDINATE ALL WORK WITH OTHER TRADES TO ELIMINATE CONFLICTS ON THE JOB.
3. PERFORM ALL WORK IN A NEAT AND PROFESSIONAL MANNER, AND SUPPLY ALL NEW EQUIPMENT AND ACCESSORIES.
4. SUBMIT SHOP DRAWINGS AND OPERATION MANUALS OF ALL EQUIPMENT AND ACCESSORIES FOR OWNER APPROVAL, PRIOR TO STARTING WORK.
5. REFER TO SUPPLEMENTAL DRAWINGS FOR PREFABRICATED MODULAR CLASSROOM DETAILS INCLUDING POWER, LIGHTING & UTILITY CONNECTIONS.

ELECTRICAL:

6. ALL LINE VOLTAGE WIRING IS TO BE IN CONDUIT OR MC CABLE. MINIMUM SIZE CONDUIT TO BE 1/2" FOR INDIVIDUAL LIGHT FIXTURE CONNECTIONS, AND 3/4" FOR ALL OTHER LOCATIONS. FLEXIBLE CONDUIT TO BE MC CABLE (NO BX). MINIMUM POWER WIRE SIZE: #12 AWG. INSULATION TO BE THHN/THWN.
7. ALL ELECTRICAL PANELS ARE TO BE BASED ON SQUARE "D" OR EQUAL BY G.E., EATON OR SIEMENS WITH BOLT-ON TYPE CIRCUIT BREAKERS,
8. ALL PENETRATIONS OF WALL, ROOF AND CEILINGS TO BE SEALED AS REQUIRED WITH UL APPROVED FIRE SEALANT PER MANUFACTURER'S DETAIL TO MAINTAIN FIRE RATING AS REQUIRED. CONTRACTOR TO HAVE UL APPROVED DETAIL ON SITE.
9. CONDUITS AND/OR CABLES INSTALLED UNDER ROOF DECKING SHALL HAVE A MINIMUM OF 1 1/2" SPACE BETWEEN CONDUITS AND/OR CABLES AND ROOF DECKING PER NEC ARTICLE 300.4 (E).
10. PANELBOARDS, METER SOCKET ENCLOSURES ETC... THAT ARE LIKELY TO REQUIRE EXAMINATION, ADJUSTMENT, SERVICING, OR MAINTENANCE WHILE ENERGIZED SHALL BE FIELD MARKED TO WARN QUALIFIED PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS PER NEC 110.16.
11. ALL WIRING IS TO BE COLOR-CODED AS FOLLOWS:

    120/208 VOLT SYSTEM:
    NEUTRAL – WHITE
    PHASE A OR L1 – BLACK
    PHASE B OR L2 – RED
    PHASE C OR L3 – BLUE
    GROUND – GREEN

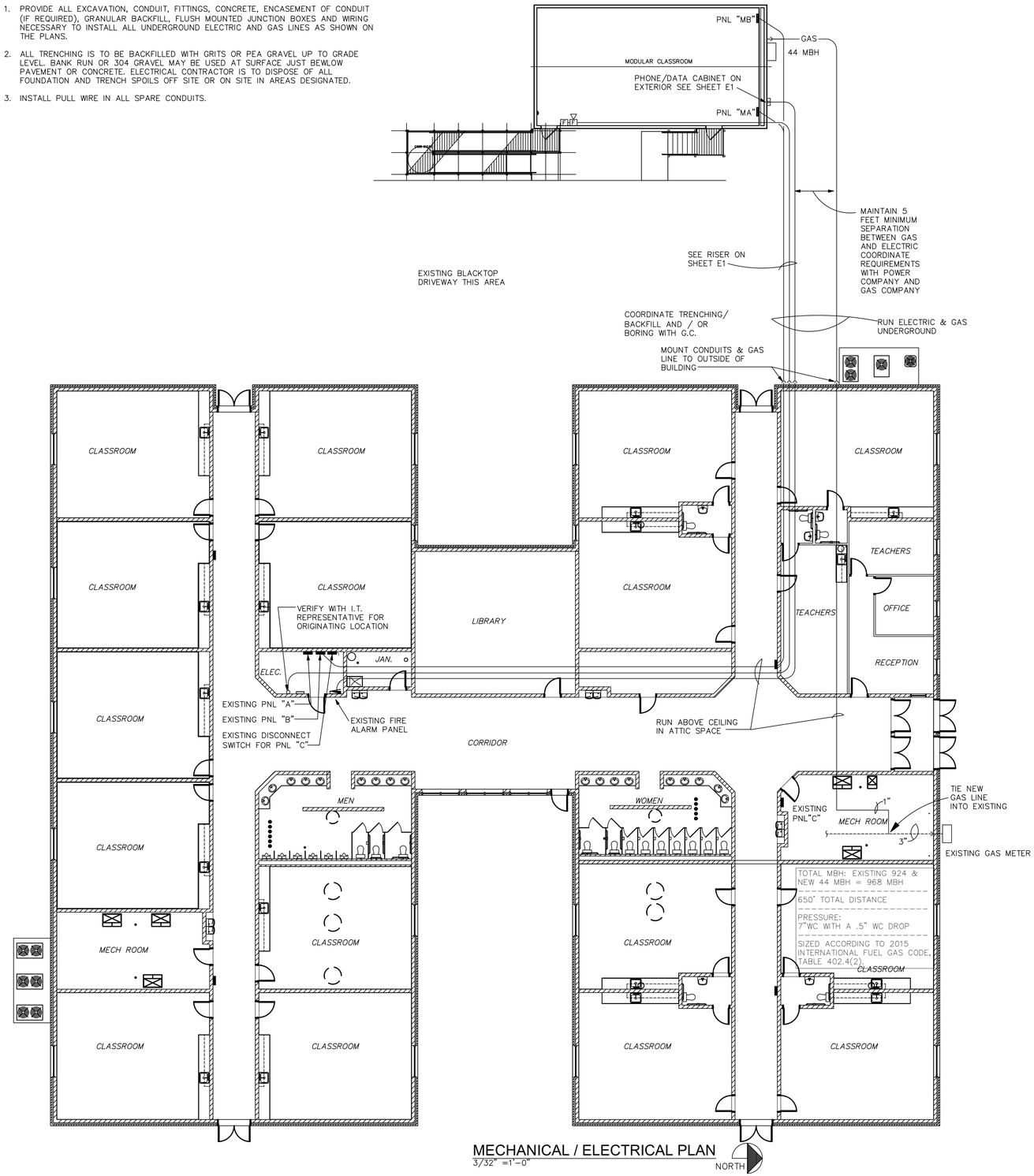
12. PROVIDE FLEXIBLE CONDUIT FOR ALL VIBRATING EQUIPMENT, NOT TO EXCEED 3 FT. IN LENGTH.
13. MINIMIZE EXPOSED CONDUIT BY CONCEALING IN WALLS AS MUCH AS POSSIBLE.
14. BALANCE ALL PANELS WITHIN 10% OF EACH PHASE LEG.
15. PROVIDE LABELS AND TAGS FOR ALL PANELS AND SWITCHGEAR EQUIPMENT. PROVIDE TYPED DIRECTORY OF ALL CIRCUITS LABELED BY ROOM NUMBER OR NAME.
16. CIRCUIT ALL EMERGENCY LIGHT FIXTURES, EXIT SIGNS AND NIGHTLIGHTS, (NL) TO LOCAL CIRCUIT AHEAD OF ANY SWITCHING.
17. REFER TO MECHANICAL PLAN FOR LOCATION OF MECHANICAL EQUIPMENT. FIELD VERIFY EXACT LOCATIONS.
18. ALL WORK SHALL BE IN STRICT ACCORDANCE WITH NATIONAL ELECTRIC CODE AND ALL LOCAL CODES AND ORDINANCES. THE CONTRACTOR SHALL INQUIRE INTO AND COMPLY WITH ALL APPLICABLE CODES, ORDINANCES, AND REGULATIONS. AFTER CONTRACT IS ISSUED, NO ADDITIONAL COST DUE TO CODE ISSUES SHALL BE REIMBURSED BY THE OWNER TO THE CONTRACTOR.
19. ELECTRICAL CONTRACTOR SHALL VERIFY EXACT/ALL MOUNTING HEIGHTS, LOCATIONS AND COLOR (FINISH) OF ALL DEVICES AND EQUIPMENT WITH THE ARCHITECT AND/OR OWNERS REPRESENTATIVE PRIOR TO ROUGH-IN.
20. EC IS TO KEEP A CURRENT COPY OF THE AS-BUILT CONDITIONS DURING THE PROJECT. AT THE END OF THE PROJECT, THE EC SHALL TURN OVER TO THE OWNER 3 COPIES OF THE FINAL AS-BUILT DRAWINGS. EC SHALL ALSO FURNISH O & M FOR SYSTEMS AND EQUIPMENT TO DESIGNATED REPRESENTATIVE.
21. LIGHTING SYSTEMS SHALL BE TESTED TO ENSURE PROPER CALIBRATION, ADJUSTMENT, PROGRAMING, AND OPERATION.

MECHANICAL – GAS PIPING:

22. ABOVE GROUND: GAS LINES SHALL BE BLACK STEEL, SCHEDULE 40, ASTM A-53/53M. FITTINGS SHALL BE AS FOLLOWS:
23. 14" W.C. OR LESS: FITTINGS SHALL BE STEEL OR MALLEABLE IRON THREADED FITTINGS FOR 2 1/2" AND SMALLER, AND WELDED JOINTS FOR 3" AND LARGER.
24. ABOVE 14" W.C.: FITTINGS SHALL BE STEEL WITH WELDED JOINTS.
25. WHERE APPROVED BY OWNER IN WRITING, FITTINGS 4" AND SMALLER SHALL BE STEEL PRESS-CONNECT FITTINGS, ANSI LC-4, WITH HNBR SEALS. REFER TO MANUFACTURER FOR PRESSURE RATINGS.
26. ABOVE/BELOW GROUND: WHERE NOTED ON PLANS OR APPROVED BY OWNER IN WRITING, GAS PIPING SHALL BE CSST GAS PIPING, ANSI LC1/CSA 6.26, WITH ARC-RESISTANT JACKET. WHERE USED UNDERGROUND PIPING SHALL BE RATED FOR DIRECT BURY OR INSTALLED IN A PIPE SLEEVE EXTENDING ABOVE GROUND ON BOTH ENDS. NO FITTINGS ARE ALLOWED UNDERGROUND.
27. OUTSIDE BELOW GROUND: GAS LINES SHALL BE POLYETHYLENE GAS PIPING, ASTM D2513, WITH FACTORY ASSEMBLED ANODELESS RISERS. JOINTS SHALL BE OF HEAT FUSION TYPE PER ASTM D2513. A TRACER WIRE SHALL BE PROVIDED AND INSTALLED AS REQUIRED BY CODE.
28. BELOW GROUND: OTHER SUITABLE CODE APPROVED PIPING WITH ADEQUATE PROTECTION IS ACCEPTABLE WITH WRITTEN APPROVAL FROM OWNER.
29. PROVIDE A GAS COCK, DIRT LEG, AND UNION CONNECTION TO EACH PIECE OF EQUIPMENT. PROVIDE GAS METER AND/OR REGULATOR AS REQUIRED. REGULATOR TO BE VENTED TO THE EXTERIOR UNLESS NOTED OTHERWISE.
30. PITCH PIPING AT A UNIFORM GRADE OF 1/4" IN 15 FEET UPWARD IN DIRECTION OF FLOW. SUPPORT PIPING EVERY 5 FEET. SUPPORT AS DETAILED ON DRAWINGS, OR BY STANDARD INDUSTRY PRACTICE, WHICHEVER IS MORE STRINGENT.
31. GAS PIPING EXPOSED ON ROOF AND GAS PIPING EXPOSED OUTSIDE MUST BE PAINTED WITH RUST-INHIBITING PAINT. COORDINATE COLOR(S) WITH G.C.
32. INSTALLATION, TESTING AND PURGING OF GAS PIPING SHALL BE DONE PER THE REQUIREMENTS OF THE LOCAL GAS COMPANY, LOCAL CODES, AND APPLICABLE FUEL GAS CODE.
33. CONTACT AND COORDINATE GAS SERVICE AND METER REQUIREMENTS WITH THE LOCAL GAS COMPANY AND THE BUILDING'S MANAGER PRIOR TO BID.

SITE GENERAL NOTES

1. PROVIDE ALL EXCAVATION, CONDUIT, FITTINGS, CONCRETE, ENCASEMENT OF CONDUIT (IF REQUIRED), GRANULAR BACKFILL, FLUSH MOUNTED JUNCTION BOXES AND WIRING NECESSARY TO INSTALL ALL UNDERGROUND ELECTRIC AND GAS LINES AS SHOWN ON THE PLANS.
2. ALL TRENCHING IS TO BE BACKFILLED WITH GRITS OR PEA GRAVEL UP TO GRADE LEVEL. BANK RUN OR 304 GRAVEL MAY BE USED AT SURFACE JUST BEWLOW PAVEMENT OR CONCRETE. ELECTRICAL CONTRACTOR IS TO DISPOSE OF ALL FOUNDATION AND TRENCH SPOILS OFF SITE OR ON SITE IN AREAS DESIGNATED.
3. INSTALL PULL WIRE IN ALL SPARE CONDUITS.



MECHANICAL / ELECTRICAL PLAN
3/32" =1'-0"

APPLIED ENGINEERING GROUP, LTD.
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Blacklick, Ohio 43004
Phone: 614.322.7050
Fax: 614.322.7049
www.aegltd.com

SHEPHERD CHRISTIAN SCHOOL
425 South Hamilton Road
Gahanna, OH 43230

REVISIONS

NO.	DESCRIPTION	DATE

DATE: 7-31-23
SCALE: AS NOTED
JOB #: 23238

SEAL
STATE OF OHIO
DAN R. RHODES
E-57289
REGISTERED
PROFESSIONAL ENGINEER

SHEET TITLE
MECHANICAL ELECTRICAL PLAN

SHEET NO. **ME1**

DWG TAG — 23238-ME1 | CAD USER — DRR

PANEL WIRING SCHEDULE (3-PHASE)

PANELBOARD "A" | VOLTAGE 120/208 | PHASE 3 WIRE 4 | AIC RATING EXISTING
PANEL TYPE G.E. A SERIES | MAINS 200A MCB | BUS RATING 200A
NEMA TYPE ENCLOSURE 1 | MOUNTING SURFACE | OPTIONS --- | NOTE

CKT. NO.	LOAD DESCRIPTION	BRKR. SIZE ▲	NOTE	N.E.C. KVA ØA	N.E.C. KVA ØB	N.E.C. KVA ØC	PHASE	N.E.C. KVA ØA	N.E.C. KVA ØB	N.E.C. KVA ØC	NOTE	BRKR. SIZE ▲	LOAD DESCRIPTION	CKT. NO.
1	EXISTING CU	60/3		4.320			A	4.320				60/3	EXISTING CU	2
3	---				4.320		B		4.320				---	4
5	---					4.320	C			4.320			---	6
7	EX FURNACE 5 B			1.127			A	1.127					EX FURNACE 5 A	8
9	EX WATER COOLER				0.360		B		0.360				EX WATER COOLER	10
11	EX SPACE					–	C			0.300			EX REMOTE ANN.	12
13	EX RECEPTS			0.900			A	0.720					EX FIRE ALARM	14
15	EX RECEPTS				0.900		B		0.900				EX RECEPTS	16
17	EX SNOWMELT					0.360	C			0.900			EX RECEPTS	18
19	EX RECEPTS			0.900			A	0.900					EX LIGHTS	20
21	EX LIGHTS				0.900		B		0.900				EX RECEPTS	22
23	EX RECEPTS					0.900	C			0.900			EX LIGHTS	24
25	EX CORRIDOR LIGHTS (E)			0.900			A	0.900					EX LIGHTS	26
27	EX LIGHTING				0.900		B		0.900				EX LIGHTS	28
29	EX R.R. LIGHTING					0.900	C			0.900			EX RECEPTS	30
31	SPACE			–			A	–					SPARE	32
33	SPARE				–		B		–				SPARE	34
35	EX NIGHT LTS (E)					0.900	C			1.872		30/2	EX SNOWMELT	36
37	SPACE			–			A	1.872					---	38
39	EX SNOWMELT	30/2			1.872		B		1.872			30/2	EX SNOWMELT	40
41	---					1.872	C			1.872			---	42

NOTES
1. ALL CIRCUIT BREAKERS TO BE 20-AMP, 1-POLE UNLESS OTHERWISE NOTED.
2. ALL PHASES TO BE BALANCED TO WITHIN 10% USING ACTUAL LOAD TOTALS.

PANEL LOAD SUMMARY

N.E.C. CONNECTED TOTALS		
ØA	17.986	KVA
ØB	18.504	KVA
ØC	20.316	KVA
TOTAL	56.806	KVA
TOTAL	157.8	AMPS

BREAKER NOTES:
LO – HANDLE LOCK-OFF DEVIDE
HACR – HEATING, A/C & REFRIGERATION
TC – RUN CIRCUIT THROUGH TIME CLOCK

PANEL WIRING SCHEDULE (3-PHASE)

PANELBOARD "B" | VOLTAGE 120/208 | PHASE 3 WIRE 4 | AIC RATING EXISTING
PANEL TYPE G.E. A SERIES | MAINS 200A MCB | BUS RATING 200A
NEMA TYPE ENCLOSURE 1 | MOUNTING SURFACE | OPTIONS --- | NOTE

CKT. NO.	LOAD DESCRIPTION	BRKR. SIZE ▲	NOTE	N.E.C. KVA ØA	N.E.C. KVA ØB	N.E.C. KVA ØC	PHASE	N.E.C. KVA ØA	N.E.C. KVA ØB	N.E.C. KVA ØC	NOTE	BRKR. SIZE ▲	LOAD DESCRIPTION	CKT. NO.
1	EXISTING CU	60/3		4.320			A	2.250				30/2	EX WATER HEATER	2
3	---				4.320		B		2.250				---	4
5	---					4.320	C			1.127			EX FURNACE 4B	6
7	EX WATER COOLER			0.360			A	0.360					EX HOT WATER CIRC PUMP	8
9	EX POINT USE WTR HTR	30/2			2.250		B		1.127				EX FURNACE 4 A	10
11	---					2.250	C			0.900			EX RECEPTS	12
13	EX RECEPTS			0.900			A	0.900					EX RECEPTS	14
15	EX RECEPTS				0.900		B		0.900				EX RECEPTS	16
17	EX RECEPTS					0.900	C			0.900			EX RECEPTS	18
19	EX RECEPTS			0.900			A	0.900					EX RECEPTS	20
21	EX RECEPTS				0.900		B		0.900				EX RECEPTS	22
23	EX RECEPTS					0.900	C			0.900			EX LIGHTING	24
25	EX RECEPTS			0.900			A	0.900					EX LIGHTING	26
27	EX LIGHTING				0.900		B		0.900				EX LIGHTING	28
29	EX LIGHTING					0.900	C			0.900			EX LIBRARY LTS	30
31	EX CORRIDOR LTS (E)			0.900			A	0.900					EX LIGHTING TIME CLOCK	32
33	EX CORRIDOR LTS (E)				0.900		B		0.900				EX LIGHTING	34
35	EX LIGHTING					0.900	C			0.900			EX LIGHTING	36
37	EX LIGHTING			0.900			A	0.900					EX NIGHT LTS (E)	38
39	PANEL MA	70/2			2.500		B		5.250			70/2	PANEL MB	40
41	---					1.900	C			6.250			---	42

NOTES
1. ALL CIRCUIT BREAKERS TO BE 20-AMP, 1-POLE UNLESS OTHERWISE NOTED.
2. ALL PHASES TO BE BALANCED TO WITHIN 10% USING ACTUAL LOAD TOTALS.
3. EC TO MOVE EXISTING RECEPT CKT 39 TO SPARE CKT 19 AND MOVE EXISTING NIGHTLIGHT CKT 40 TO SPARE CKT 38. PROVIDE NEW BREAKERS FOR PANELS MA & MB.

PANEL LOAD SUMMARY

N.E.C. CONNECTED TOTALS		
ØA	16.290	KVA
ØB	24.897	KVA
ØC	23.947	KVA
TOTAL	65.134	KVA
TOTAL	180.9	AMPS

BREAKER NOTES:
LO – HANDLE LOCK-OFF DEVIDE
HACR – HEATING, A/C & REFRIGERATION
TC – RUN CIRCUIT THROUGH TIME CLOCK

ELECTRIC LOAD SUMMARY IN ACCORDANCE WITH NEC 2017

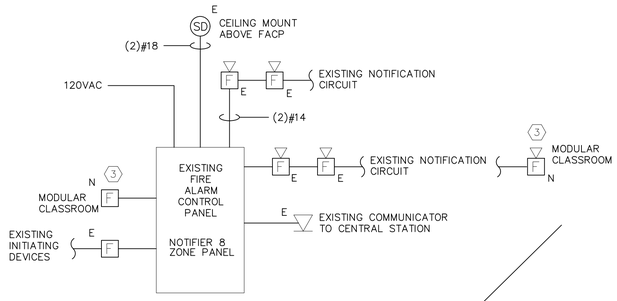
DESCRIPTION	CONN. KVA	DEMAND FACTOR	DEMAND KVA
PEAK DEMMAND IN LAST 12 MONTHS (AUGUST 2022)	57.1	1.25	71.4
PANEL MA	4.4	1.0	4.4
PANEL MB	11.5	1.0 PLUS 25% OF LARGEST MOTOR	13.1
TOTALS	73.0		88.9

DEMAND KVA * 1000 / VOLTAGE*SQ. ROOT OF PHASE = MINIMUM SERVICE AMPERAGE

88.9 * 1000 / 208 * √3 = 246.9 AMPS MIN. SERVICE, REUSE EXISTING 600 AMP SERVICE

CODED NOTES

1. PANELS MA AND MB ARE PROVIDED WITH THE MODULAR CLASSROOM. THESE PANELS ARE RATED AT 100 AMPS MLO EACH.
2. RUN NEW FEEDERS FROM EXISTING PANEL 'B' TO NEW PANELS MA & MB AS SHOWN.
3. RUN 4 #12 FOR NEW HORN/STROBE AND 2 #18 FOR PULL STATION IN MODULAR CLASSROOM. BOTH SETS OF WIRING TO BE IN 1" CONDUIT FROM EXISTING FACP TO MODULAR CLASSROOM. SEE F.A. RISER DIAGRAM AT LEFT. ADD ZONE TO PANEL IF PANEL IS EXPANDABLE, OTHERWISE SHARE ZONE FOR NEW PULL STATION WITH EXISTING.
4. EC TO GROUND PANELS MA & MB TO (2) DRIVEN GROUND RODS SPACED 6 FEET APART AND CARY SEPARATE NEUTRAL AND ROUND THROUGH BACK TO MAIN SERVICE. GROUND AND NEUTRAL TO ONLY BE BONDED AT MAIN SERVICE.
5. EC TO RUN (2) 1" CONDUITS FOR PHONE / DATA LINES BY OTHERS. ROUTE FROM EXISTING ELECTRIC ROOM (VERIFY IF THIS IS WHERE EXISTING PHONE BOARD IS LOCATED) TO NEMA 3R 18" X 18" CABINET ON EXTERIOR OF MODULAR CLASSROOM. COORDINATE WITH I.T. REPRESENTATIVE.

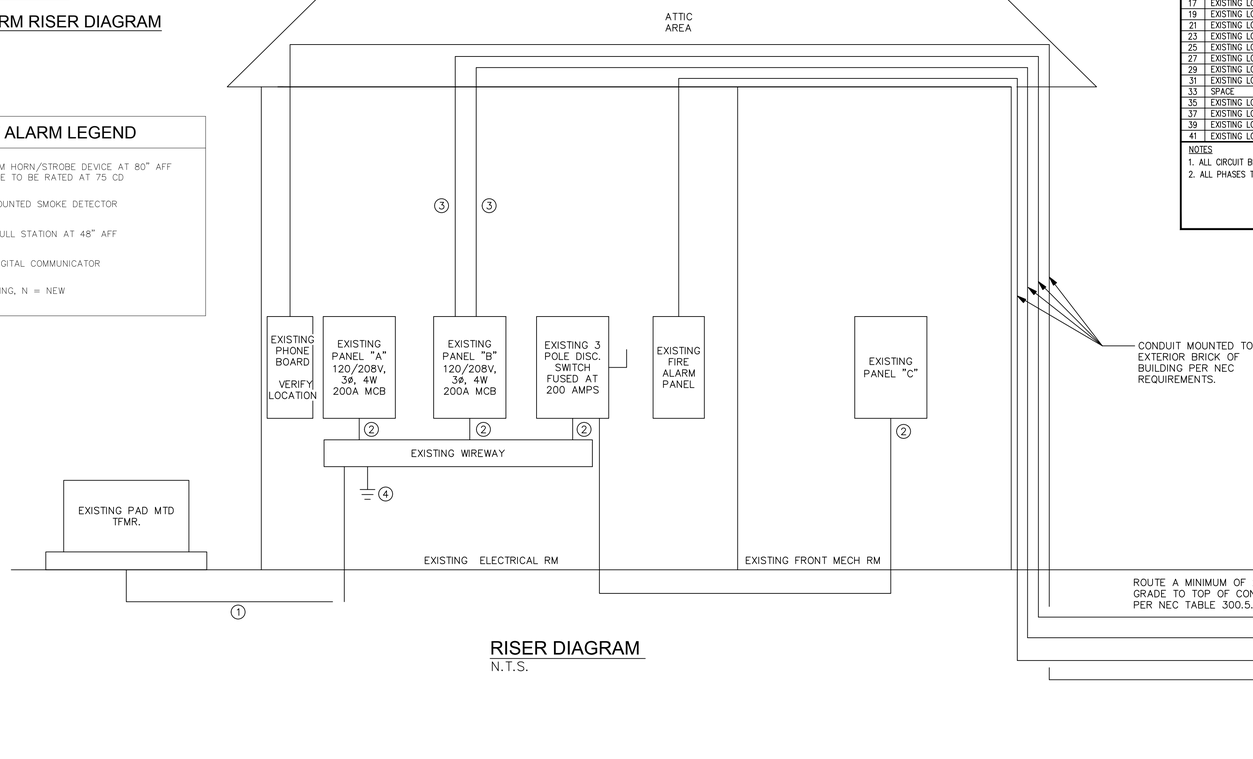


FIRE ALARM RISER DIAGRAM
N.T.S.

FIRE ALARM LEGEND

F	FIRE ALARM HORN/STROBE DEVICE AT 80" AFF NEW DEVICE TO BE RATED AT 75 CD
SD	CEILING MOUNTED SMOKE DETECTOR
F	MANUAL PULL STATION AT 48" AFF
▽	LINE TO DIGITAL COMMUNICATOR
	E = EXISTING, N = NEW

FEEDER SCHEDULE	
DESIGNATION	WIRE & CONDUIT SIZE
1	EXISTING 600 AMP 3 PHASE SERVICE LATERAL
2	EXISTING 200 AMP 3 PHASE FEEDER
3	3 #4 & 1 #8 GRD IN 1 1/4" C.
4	EXISTING GROUND PER NEC ART. 250



RISER DIAGRAM
N.T.S.

PANEL WIRING SCHEDULE (3-PHASE)

PANELBOARD "C" | VOLTAGE 120/208 | PHASE 3 WIRE 4 | AIC RATING EXISTING
PANEL TYPE SQ D NQ OR EQUAL | MAINS 200A MLO | BUS RATING 200A
NEMA TYPE ENCLOSURE 1 | MOUNTING SURFACE | OPTIONS --- | NOTE

CKT. NO.	LOAD DESCRIPTION	BRKR. SIZE ▲	NOTE	N.E.C. KVA ØA	N.E.C. KVA ØB	N.E.C. KVA ØC	PHASE	N.E.C. KVA ØA	N.E.C. KVA ØB	N.E.C. KVA ØC	NOTE	BRKR. SIZE ▲	LOAD DESCRIPTION	CKT. NO.
1	EXISTING CU	20/3		1.440			A	2.880				40/3	EXISTING CU	2
3	---				1.440		B		2.880				---	4
5	---					1.440	C			2.880			---	6
7	EXISTING CU	60/3		4.320			A	–					SPARE	8
9	---				4.320		B		1.127				EX FURNACE	10
11	---					4.320	C			1.127			EX FURNACE	12
13	EX FURNACE			1.127			A	1.127					EX FURNACE	14
15	EX FURNACE				1.127		B		–				SPACE	16
17	EXISTING LOAD					0.900	C			0.900			EXISTING LOAD	18
19	EXISTING LOAD			0.900			A	0.900					EXISTING LOAD	20
21	EXISTING LOAD				0.900		B		0.900				EXISTING LOAD	22
23	EXISTING LOAD					0.900	C			0.900			EXISTING LOAD	24
25	EXISTING LOAD			0.900			A	0.900					EXISTING LOAD	26
27	EXISTING LOAD				0.900		B		0.900				EXISTING LOAD	28
29	EXISTING LOAD					0.900	C			0.900			EXISTING LOAD	30
31	EXISTING LOAD			0.900			A	0.900					EXISTING LOAD	32
33	SPACE				–		B		0.900				EXISTING LOAD	34
35	EXISTING LOAD					0.900	C			0.900			EXISTING LOAD	36
37	EXISTING LOAD			0.900			A	0.900					EXISTING LOAD	38
39	EXISTING LOAD				0.900		B		0.900				EXISTING LOAD	40
41	EXISTING LOAD					0.900	C			0.900			EXISTING LOAD	42

NOTES
1. ALL CIRCUIT BREAKERS TO BE 20-AMP, 1-POLE UNLESS OTHERWISE NOTED.
2. ALL PHASES TO BE BALANCED TO WITHIN 10% USING ACTUAL LOAD TOTALS.

PANEL LOAD SUMMARY

N.E.C. CONNECTED TOTALS		
ØA	18.094	KVA
ØB	17.294	KVA
ØC	18.767	KVA
TOTAL	54.155	KVA
TOTAL	150.4	AMPS

BREAKER NOTES:
LO – HANDLE LOCK-OFF DEVDE
HACR – HEATING, A/C & REFRIGERATION
TC – RUN CIRCUIT THROUGH TIME CLOCK

APPLIED ENGINEERING GROUP, LTD.
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SHEPHERD CHRISTIAN SCHOOL
425 South Hamilton Road
Gahanna, OH 43230

REVISIONS

NO.	DESCRIPTION	DATE

DATE: 7-31-23
SCALE: AS NOTED
JOB #: 23238

SEAL
STATE OF OHIO
DAN R. RHODES E-57289 REGISTERED PROFESSIONAL ENGINEER
7-31-23

SHEET TITLE
RISER AND LOAD CALCULATIONS

SHEET NO. E1

CAD DWG FILE — 23238-E1 — CAD USER — DRR

The McKnight Group®

October 23, 2023

City of Gahanna
Department of Planning
Attn: Kelly Wicker; Planning and Zoning Coordinator
200 S. Hamilton Rd.
Gahanna, Ohio 43230
Ph.: (614) 277-3075

Re.: Final Development Plan review comments

Dear Ms. Wicker,

The plans affected by this response letter are known as:

Shepherd Church of the Nazarene
Modular Building addition
425 S. Hamilton Rd.
Gahanna, Ohio 43230

We are responding to the letter received that was sent from your office dated September 13, 2023 regarding the comments on the Final Development Plan application for the installation of the modular classroom unit, and are responding to them item by item below. New plans are being submitted for review in response to the correction letter.

Item 1. **Planning (614) 342-4025.**

1. Please see comments left on associated application and revise as necessary.

RESPONSE: Response to these comments have been covered in the letter for the Design Review/ C of A. submitted to the Department of Planning.

Items 2-5. **Engineering Project Administrator (614) 342-4056.**

2. Use the City of Gahanna Basemap Application as a reference for public utilities owned and operated by the City of Gahanna *(Informational Comment).*

3351 McDowell Road, P.O. Box 370, Grove City, Ohio 43123 614.875.1689 800.625.6448 614.875.7006 fax www.mcknightgroup.com

The McKnight Group

RESPONSE: The information that was provided with this submission was a combination of the drawings for the school building, verified site information, and documents from the online Franklin County GIS website

3. This preliminary review does not constitute a comprehensive engineering design review. A formal site civil review will be conducted upon the approval of the final development plan *(Informational Comment).*

RESPONSE: It is understood that this preliminary review is just that, preliminary. The formal site review and approval will come after the FDP has been approved.

4. Do not disrupt existing storm water runoff drainage patterns. Two catch basins are located near the proposed improvement location.

RESPONSE: The proposed building is in the specified location to not disrupt the existing stormwater system or drainage runoff pattern. The water is still able to continue to flow in the direction it was previously towards the two catch basins and down the grades to the west. The two existing storm sewer catch basin structures located in the existing drive.

5. Ensure proposed utilities do not conflict with existing storm sewer.

RESPONSE: The proposed utilities (gas and electric) are to be installed underground in a manner so as to not disrupt the existing stormwater system or impact the two existing storm sewer catch basin structures located in the existing drive. A general note has been added on sheet C1.2 stating "NEW UTILITIES SUPPORTING THE MODULAR UNIT (ELECTRIC AND GAS) ARE TO BE PLACED UNDERGROUND IN A MANNER TO NOT CONFLICT WITH OR INTERFERE WITH EXISTING STORMWATER DRAINAGE SYSTEM."

Item 6. **Parks (614) 342-4261**

6. No comments per Julie Predieri

RESPONSE: It is acknowledged that there are no current comments from the Parks department at this time.

Item 7. **Building (614) 342-4010**

7. No Comments were received. Building Permits will be required for the project please contact the Chief Building Official, Ken Fultz at 614-342-4013

The McKnight Group®

with any questions you may have.

RESPONSE: We have received a Non-conformance letter/adjudication order from Kenneth W. Fultz, P.E. dated September 13, 2023 and responding to those comments in a separate response letter.

We appreciate your time and effort towards permitting this project.

Sincerely,

Jeffrey T. Hutcheson
Project Architect
The McKnight Group

Gahanna
DEPARTMENT OF PLANNING

November 17, 2023

McKnight and Hosterman Architects
3351 McDowell Rd PO Box 370
Columbus, OH 43210

RE: Project 425 S Hamilton Rd Final Development Plan

Dear McKnight and Hosterman Architects:

The following comments were generated from the review of the submitted plans and documents for the referenced project.

Engineering Project Administrator (614) 342-4056

1. This preliminary review does not constitute a comprehensive engineering design review. A formal site civil review will be conducted upon the approval of the final development plan. Be advised, this comment will remain for record keeping purposes, the other comments were marked as "resolved" based on the applicant's responses. The Engineering Department expects these comments will be addressed, as noted in their responses. *(Informational Comment)*

Parks (614) 342-4261

2. No Comments per Julie Predieri

Building (614) 342-4010

3. A phased plan approval was issued for the construction documents that were submitted for the building permit. Please refer to comments provided in that approval.

Fire District (welshp@mifflin-oh.gov)

4. The fire division has no objection or additional comments

Planning (614) 342-4025

5. Informational Comment: All Planning comments have been addressed.

If you have general comments or questions, please contact me at kelly.wicker@gahanna.gov or (614) 342-4025. If your questions are specific to a certain department's comments, please reach out to that department using the contact information provided with their comments above.

Sincerely,

Kelly Wicker
Planning and Zoning Coordinator

Gahanna
DEPARTMENT OF PLANNING

STAFF REPORT

Request Summary

The applicant is requesting approval of a Final Development Plan and Design Review for a modular classroom unit for Shepherd Church of the Nazarene at 425 South Hamilton Road. The property is located on the western side of Hamilton Road and is zoned RID – Restricted Institutional District. This zoning district designates the site as part of Design Review District 3 (DRD-3).

The applicant states that the modular classroom is necessary for the growing school population while the school works on a more permanent expansion project. The intent is for the modular classroom to be temporary and removed after three years or less.

The modular unit is 44 feet wide and 23 feet 4 inches deep and is 1,027 SF. It will be located to the rear of the school building off of an existing drive and will not be viewable from Rocky Fork Drive, Hamilton Road, or I-270 due to heavy vegetation.

The unit is pre-manufactured, and the façade consists of Hardie Panel siding and vinyl skirt panels, while the ramp and steps are constructed of pressure treated wood to be sealed with a UV protectant. Since its pre-manufactured, design options are very limited and much of the criteria for DRD-3 is not applicable. The Zoning Code does not have any landscaping requirements for these applications and therefore no landscaping is proposed.

Design Review

General review criteria for Design Review applications include the following:

- Are stylistically compatible with other new, renovated, and existing structures in the applicable Design Review District in order to maintain design continuity and provide protection of existing design environment.
- Contribute to the improvement and upgrading of the architectural and design character of the Design Review District.
- Contribute to the continuing economic and community vitality of the Design Review District
- Maintain, protect and enhance the physical surroundings of the Design Review District.

Final Development Plan

Planning Commission shall approve an FDP application if the following four conditions are met:

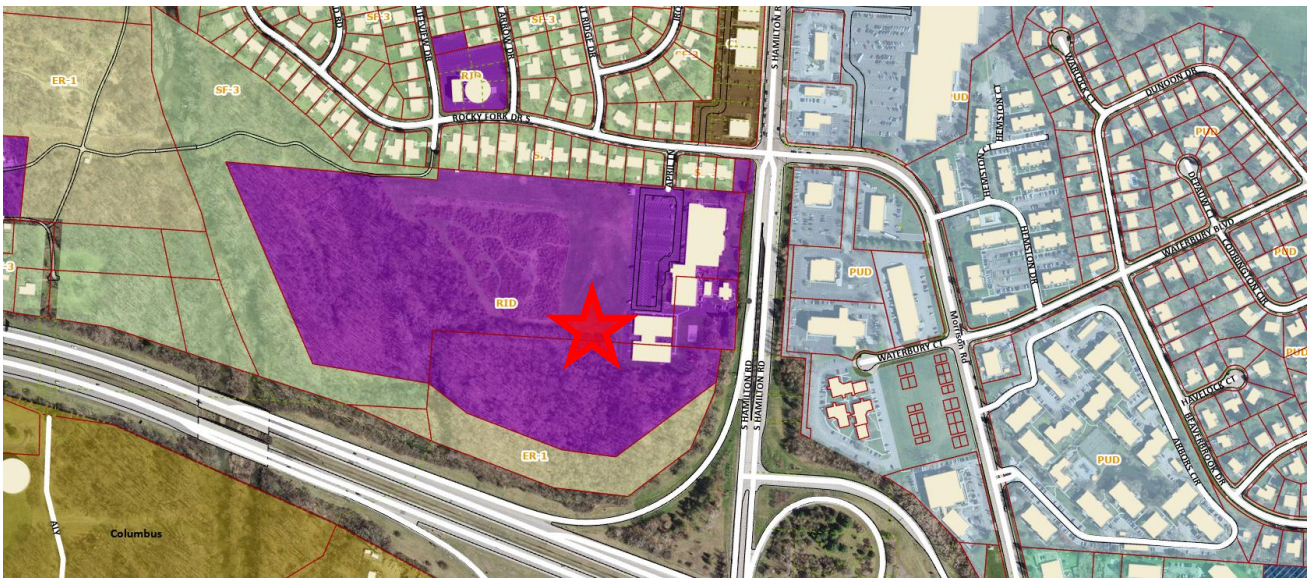
- The proposed development meets the applicable development standards of this Zoning Ordinance.
- The proposed development is in accord with appropriate plans for the area.
- The proposed development would not have undesirable effects on the surrounding area.
- The proposed development would be in keeping with the existing land use character and physical development potential of the area.

Gahanna
DEPARTMENT OF PLANNING

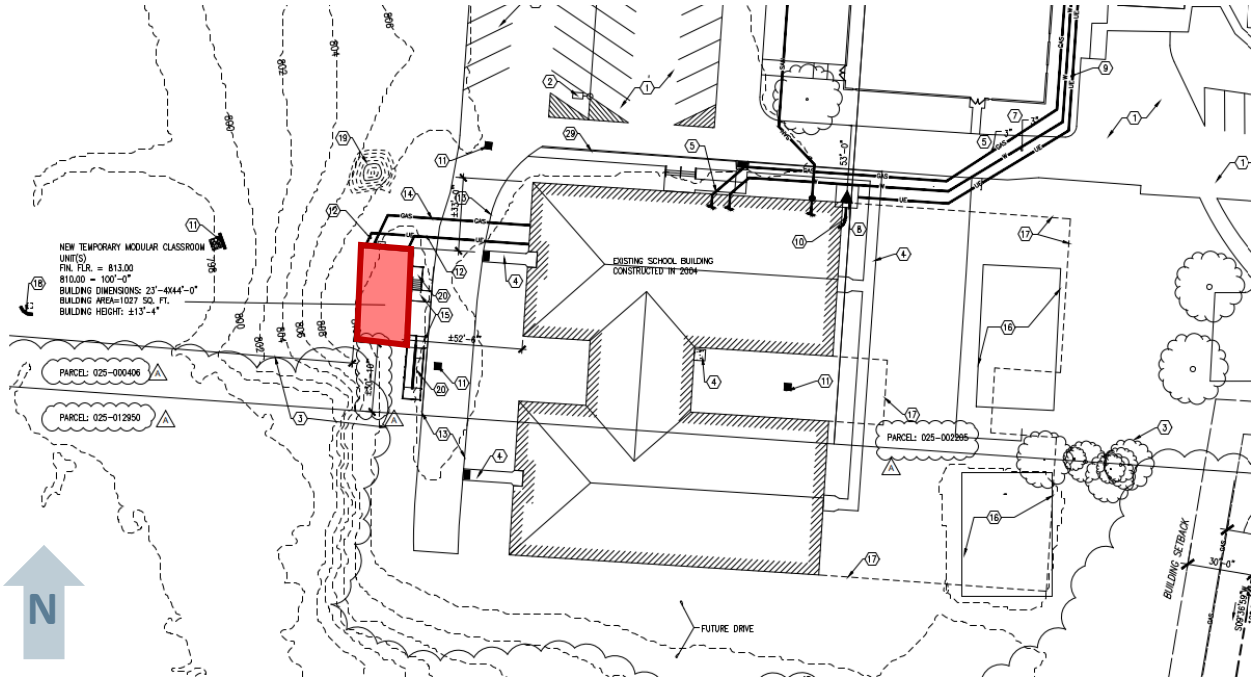
Staff Comments

Staff recommends approval of the Final Development Plan and Design Review applications as submitted. As the applicant stated, the modular classroom is necessary to account for the number of students and will be temporary. The proposed unit is not viewable from any right-of-way and does not require any variances. The site still exceeds parking requirements after the proposed changes. Planning Commission may add conditions for additional screening/landscaping or a time restriction if desired.

Location/Zoning Map



Submitted Site Plan



Respectfully Submitted By:
Maddie Capka
Planner