

PORTAGE - NORTHERN HIGH SCHOOL - STORAGE BARN

PORTAGE PUBLIC SCHOOLS Portage, Michigan CONSTRUCTION DOCUMENTS

DESIGN TEAM

ARCHITECT/ENGINEER

TowerPinkster
Architecture · Engineering · Interiors

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KALAMAZOO, MICHIGAN 49007
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FAX: 269.343.6633

4 EAST FULTON STREET, SUITE 200
GRAND RAPIDS, MICHIGAN 49503
PHONE: 616.456.9944
FAX: 616.456.5936

CIVIL CONSULTANT

5725 VENTURE PARK DRIVE, SUITE A
KALAMAZOO, MI 49009
PHONE: 269.250.5991

REFERENCED CODES

BUILDING: 2015 MICHIGAN BUILDING CODE AND 2012 NFPA 101 LIFE SAFETY CODE
ENERGY: 2015 MICHIGAN ENERGY CODE
PLUMBING: 2015 MICHIGAN PLUMBING CODE
MECHANICAL: 2015 MICHIGAN MECHANICAL CODE
FUEL GAS: (IFGC) 2015 INTERNATIONAL FUEL GAS CODE
ELECTRICAL: 2017 NATIONAL ELECTRICAL CODE WITH MICHIGAN AMENDMENTS
BARRIER-FREE: 2015 MICHIGAN BUILDING CODE AND 2009 ICC & C A117.1
USE GROUP: S-1
CONSTRUCTION TYPE: TYPE VB
AUTOMATIC SPRINKLERS: NON SPRINKLED

PROJECT AREA

STORAGE BARN A 2,048 SQ. FT.
STORAGE BARN B 1,280 SQ. FT.

DRAWING INDEX

GENERAL

G 001 COVER SHEET
GA 101 FIRST FLOOR CODE COMPLIANCE PLAN BARN A, TYPICAL SYMBOLS AND GENERAL NOTES
GB 101 FIRST FLOOR CODE COMPLIANCE PLAN BARN B

CIVIL - STORAGE BARN A

CA 100 SITE PLAN

CIVIL - STORAGE BARN B

CB 100 SITE PLAN

ARCHITECTURAL - STORAGE BARN A

AA 100 FOUNDATION AND FRAMING PLAN
AA 101 FIRST FLOOR PLAN, ROOF FRAMING PLAN AND DOOR SCHEDULE
AA 301 EXTERIOR ELEVATIONS, BUILDING SECTIONS, 3D VIEW AND WALL SECTIONS

ARCHITECTURAL - STORAGE BARN B

AB 100 FOUNDATION AND FRAMING PLAN
AB 101 FIRST FLOOR PLAN, ROOF FRAMING PLAN AND DOOR SCHEDULE
AB 301 EXTERIOR ELEVATIONS, BUILDING SECTIONS, AND 3D VIEW

ELECTRICAL

EA 101 STORAGE BARN A ELECTRICAL PLAN
EB 101 STORAGE BARN A ELECTRICAL PLAN

SITE ADDRESS

PORTAGE PUBLIC SCHOOLS
1000 IDAHO AVE
PORTAGE, MI 49024

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ISSUED FOR _____ DATE _____

PROJECT TITLE
PORTAGE - NORTHERN
HIGH SCHOOL -
STORAGE BARN

OWNER
PORTAGE PUBLIC
SCHOOLS
Portage, Michigan

SHEET TITLE
COVER SHEET

SHEET NUMBER
G 001
20-200.00

DATE

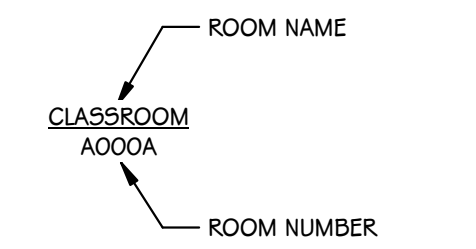
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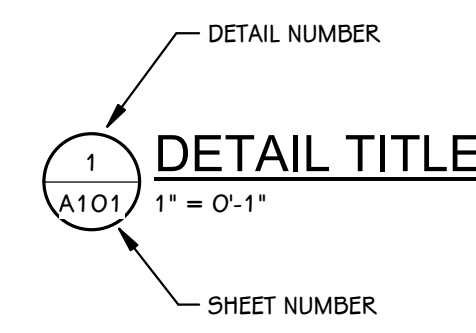
TYPICAL SYMBOLS & REFERENCES

ROOM IDENTIFICATION TAG

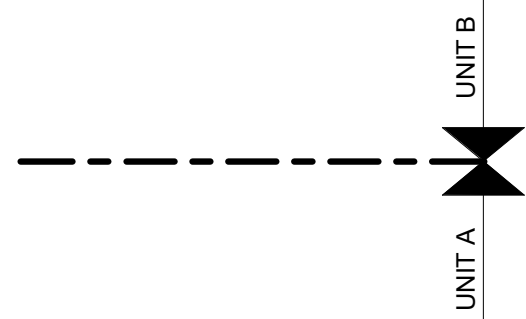


NOTE:
ROOM NAMES AND NUMBERS ON PLANS ARE FOR CONSTRUCTION PURPOSES ONLY. COORDINATE WITH OWNER REGARDING PROPOSED NUMBERS FOR ALL SIGNAGE, SCHEDULE AND PANEL DESIGNATIONS.

DETAIL TITLE

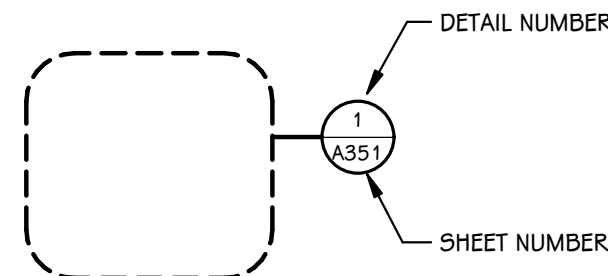


UNIT MATCHLINES

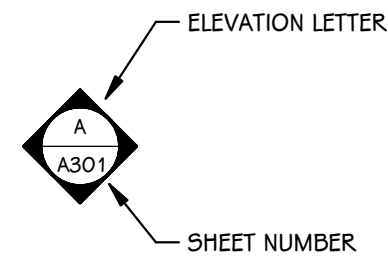


TYPICAL NOTATION SYMBOLS

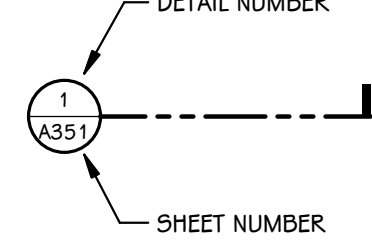
CALLOUT REFERENCE BUBBLE



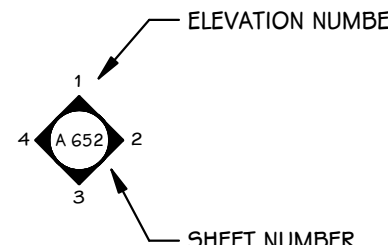
EXTERIOR ELEVATION REFERENCE BUBBLE



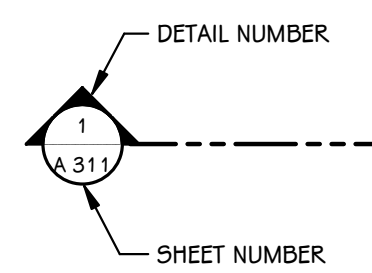
DETAIL REFERENCE BUBBLE



INTERIOR ELEVATION REFERENCE BUBBLE

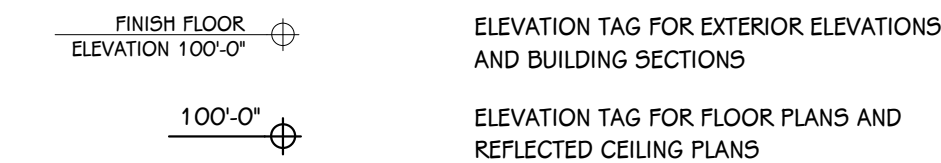


BUILDING SECTION REFERENCE BUBBLE

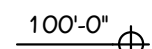


ELEVATION AND SECTION REFERENCE TOOLS

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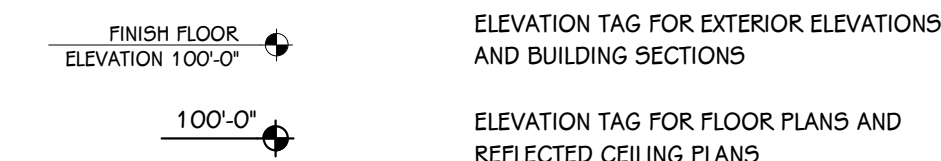


ELEVATION TAG FOR EXTERIOR ELEVATIONS AND BUILDING SECTIONS

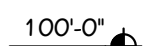


ELEVATION TAG FOR FLOOR PLANS AND REFLECTED CEILING PLANS

ELEVATION TAG - NEW

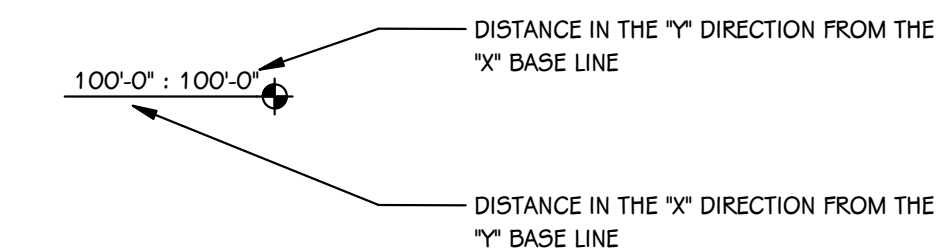


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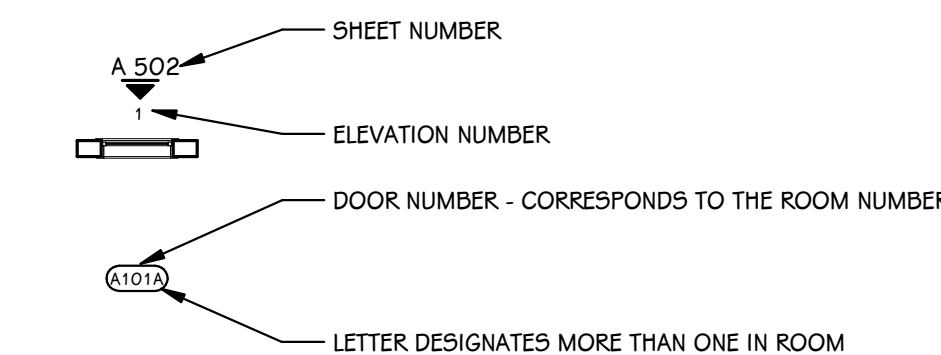


ELEVATION TAG FOR FLOOR PLANS AND REFLECTED CEILING PLANS

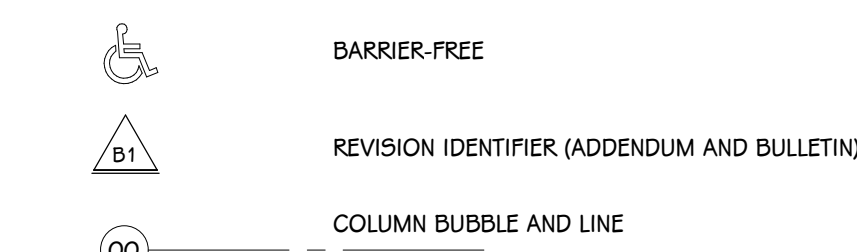
WORKING POINT LAYOUT TAG



BORROWED LIGHT AND DOOR IDENTIFICATION



SYMBOLS

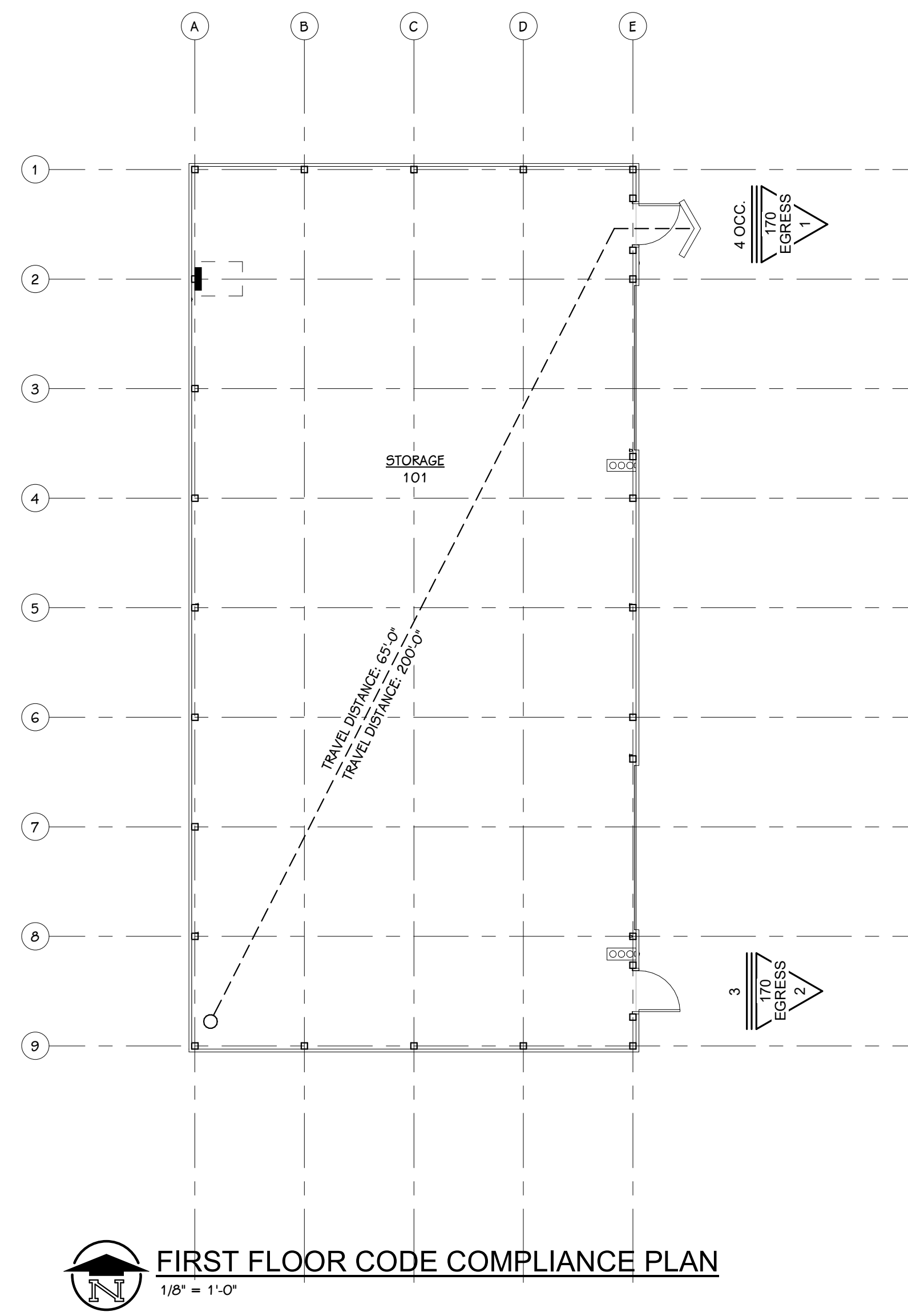


GENERAL DEMOLITION NOTES

- CONTRACTORS ARE REQUIRED TO INSPECT/REVIEW THE EXISTING BUILDING PRIOR TO RELATED DEMOLITION WORK. UNLESS NOTED OTHERWISE, REMOVAL OF ANY WALL, FLOOR OR CEILING INCLUDES ALL GENERAL MECHANICAL AND ELECTRICAL ITEMS WHICH ARE A PART OF, OR ATTACHED TO IT.
- CONTRACTOR SHALL VERIFY ALL EXISTING JOB SITE CONDITIONS AND DIMENSIONS AND BE RESPONSIBLE FOR THE SAME. ADVISE CONSTRUCTION MANAGER OF ANY AND ALL DISCREPANCIES.
- PATCH FLOORS, WALLS AND CEILINGS DAMAGED DURING CONSTRUCTION AND DEMOLITION AS REQUIRED. FINISH TO MATCH EXISTING.
- ACCOMMODATE NEW CONSTRUCTION IF NOT INDICATED.
- PROTECT ALL EXISTING FINISHES THROUGHOUT PROJECT.
- REFER TO DEMOLITION ELEVATIONS, SECTIONS AND DETAILS FOR ADDITIONAL INFORMATION.
- REFER TO STRUCTURAL, MECHANICAL, PLUMBING AND ELECTRICAL PLANS FOR ADDITIONAL DEMOLITION NOTES.
- SALVAGE ALL UNISTRUT AND PROTECT FOR RE-USE IN NEW CONSTRUCTION, IF REQUIRED.
- AT LOCATIONS OF REMOVED WALLS, ALL ASSOCIATED ITEMS ATTACHED TO THE WALL ARE TO BE REMOVED. SUCH AS: DOORS, WINDOWS, FRAMES, MARKERBOARDS, TACKBOARDS, TACK STRIPS, ETC.

GENERAL NOTES - ARCHITECTURAL

- THE OWNER RESERVES THE RIGHT TO REMOVE ANY ITEM FROM THE PROJECT PRIOR TO COMMENCEMENT OF CONTRACTED DEMOLITION WORK.
- ALL EXISTING CONDITIONS SHOULD BE FIELD VERIFIED BEFORE WORK BEGINS.
- DIMENSIONS GIVEN ARE ACTUAL AND ARE TO THE FACE OF MASONRY UNITS OR TO THE FACE OF STUD FRAMING, UNLESS NOTED OTHERWISE.
- DETAILS SHOWN ILLUSTRATE DESIGN INTENT, NOT ALL POSSIBLE CONDITIONS. FOR CONDITIONS NOT SHOWN, USE DETAILS CLOSEST TO CONDITION IN QUESTION.
- EXTEND ALL INTERIOR WALL PARTITIONS FROM FLOOR TO STRUCTURE/DECK ABOVE UNLESS NOTED OR DETAILED OTHERWISE.
- WITHIN BUILDING INTERIOR PROVIDE BULLNOSE BLOCK IN CMU WALL ASSEMBLIES AT ALL EXPOSED OUTSIDE CORNERS, INCLUDING WINDOW AND DOOR JAMBS, UNLESS NOTED OR DETAILED OTHERWISE. PROVIDE SQUARE OUTSIDE CORNERS AT ALL LOCATIONS FINISHED WITH WALL TILE, REFER TO FINISH PLANS (A600 SHEETS) FOR LOCATIONS.
- TOOTH-IN MASONRY AT NEW OPENINGS IN EXISTING WALLS.
- TOOTH-IN NEW MASONRY INFILL INTO EXISTING OPENINGS AT ALL BULLNOSE BLOCK LOCATIONS.
- STUD WALLS SPANNING OVER 12'-0" IN HEIGHT SHALL BE A MINIMUM OF 20 GAGE.
- STUD WALL SUPPORTING WALL CABINETS SHALL BE A MINIMUM OF 20 GAGE.
- DOORS ARE TO BE 4" FROM CORNER OF ROOM, UNLESS NOTED OR DIMENSIONED OTHERWISE.
- FIRESTOP ALL INTERCONNECTIONS BETWEEN VERTICAL AND HORIZONTAL SPACES AND CONCEALED WALL SPACES AT CEILING, FLOOR AND ROOF LEVELS.
- FIRESEAL ALL PENETRATIONS, SUCH AS, PIPES, DUCTS, CONDUITS, ETC. THROUGH FIRE AND/OR SMOKE RATED ASSEMBLIES.
- FOR CONTROL JOINT (C.J.) LOCATIONS REFER TO EXTERIOR ELEVATIONS AND/OR FLOOR PLANS.
- PAINT ALL ELECTRICAL PANEL COVERS AND ACCESS PANELS TO MATCH ADJACENT FINISHES. USING OIL-BASED PAINT, NOT LATEX WALL PAINT.
- PROVIDE WOOD BLOCKING IN WALLS THAT REQUIRE WALL MOUNTED EQUIPMENT OR ACCESSORIES. COORDINATE WITH EQUIPMENT OR ACCESSORY MANUFACTURER.
- PROVIDE ALL ASSOCIATED CURBS FOR ROOF TOP EQUIPMENT AND MECHANICAL ROOF TOP UNITS. LARGE VOIDS BELOW THE AIR HANDLING UNITS SHALL BE FILLED WITH INSULATION AS SPECIFIED FOR NOISE CONTROL.
- ALL EXISTING ROOF TOP PENETRATIONS BEING REMOVED REQUIRE ROOF PATCHING TO MATCH EXISTING ADJACENT.



CODE COMPLIANCE KEY

EGRESS SYMBOLS

- EGRESS EXIT NUMBER FROM ROOM OR SPACE
- MAXIMUM NUMBER OF OCCUPANTS PERMITTED BY EGRESS WIDTH
- ROOM OR SPACE EGRESS IS FROM
- EXISTING TRAVEL DISTANCE TO EGRESS DOOR
- DIRECTION OF EGRESS
- TRAVEL DISTANCE : 100'-0"
- PERMITTED TRAVEL DISTANCE - 200'-0"
- PERMITTED MAXIMUM TRAVEL DISTANCE PER CONDITION

FIRE SAFETY SYMBOLS

- EXISTING FIRE EXTINGUISHER
- EXISTING FIRE EXTINGUISHER CABINET
- FIRE EXTINGUISHER
- FIRE EXTINGUISHER CABINET

FIRE-RATING KEY

DESIGNATION	PARTITION RATING	PRIORITY
[Symbol]	3 HOUR	1
[Symbol]	2 HOUR FIRE/SMOKE	2
[Symbol]	2 HOUR	3
[Symbol]	1 HOUR FIRE/SMOKE	4
[Symbol]	1 HOUR	5
[Symbol]	SMOKE RESISTANT	6

- ALL PENETRATIONS THROUGH A FIRE OR SMOKE RATED PARTITION SHOULD BE SEALED WITH AN APPROVED U.L. RATED PRODUCT.
- THE TOPS OF ALL FIRE RATED PARTITIONS SHALL BE SEALED TO THE CONTINUOUS STRUCTURE ABOVE WITH A U.L. RATED SYSTEM OR ASSEMBLY.
- WOOD BLOCKING IN FIRE-RATED PARTITIONS SHALL BE NON-COMBUSTIBLE TREATED WOOD.
- REFER TO SPECIFICATION U.L. RATING INFORMATION.
- FIRE-RATED WALLS ENDING INTO AN ACOUSTICAL DECK MUST HAVE THE FLUTES FILLED, REFER TO TOP OF WALL DETAIL AT ACOUSTIC DECK SHOWN ON THIS SHEET.

- FOR MASONRY WALLS THE MASON SHALL FILL VOIDS AND FIRE SPRAY WITH UL LISTED MATERIAL.
- FOR STUD WALLS USE FIRE SAFING AND FIRE CAULK.

Michigan Building Code - 2015 Edition

Section 311.2: The storage room to be classified as Moderate-hazard Storage Group 5-1. (Must comply with the maximum allowable quantities of hazardous materials listed in Table 307.1 (1).)

Table 504.3: Allowable Height: Occupancy 5-1, Type V-S: 40 feet

Table 504.4: Allowable Stories: Occupancy 5-1, Type V-S: 1 Story

Section 506.2: Allowable Area: Occupancy 5-1, Type V-N5: 9,000 sf

Section 506.3: A frontage increase is not required. The building area complies with the allowable area in Table 506.2.

Section 602.2: Table 601 - Construction Type V-B (Non-sprinklered - Single Story) Construction in which structural elements, and exterior walls, and interior walls are of any materials permitted by this code.

Table 1004.1.2: Occupant Load Factors
Storage Areas: 300 gross
Calculated Occupancies
Storage (2,048 gross sq. ft.) - 7 Occupants

Section 1005.3: Egress Capacity Factors
1005.3.2 All others = 0.2 inches per Occupant

Table 1006.2.1: Maximum Common Path of Travel shall not exceed: Storage: 100 ft without sprinkler system and occupant load is less than 30 occupants

Section 1007.1.1: Where two exits, exit access doorways, exit access stairways or ramps, or any combination thereof, are required from any portion of the exit access, they shall be placed a distance apart equal to not less than one-half of the length of the maximum overall diagonal dimension of the building or area to be served measured in a straight line between them.

Table 1017.2: Exit Access Travel Distance shall not exceed:
Storage: 200 feet

PROJECT TITLE
PORTAGE - NORTHERN HIGH SCHOOL - STORAGE BARN

OWNER
PORTAGE PUBLIC SCHOOLS

Portage, Michigan

SHEET TITLE
FIRST FLOOR CODE COMPLIANCE PLAN BARN A, TYPICAL SYMBOLS AND GENERAL NOTES

DATE
MAY 21, 2021

SHEET NUMBER
GA 101

20-200.00

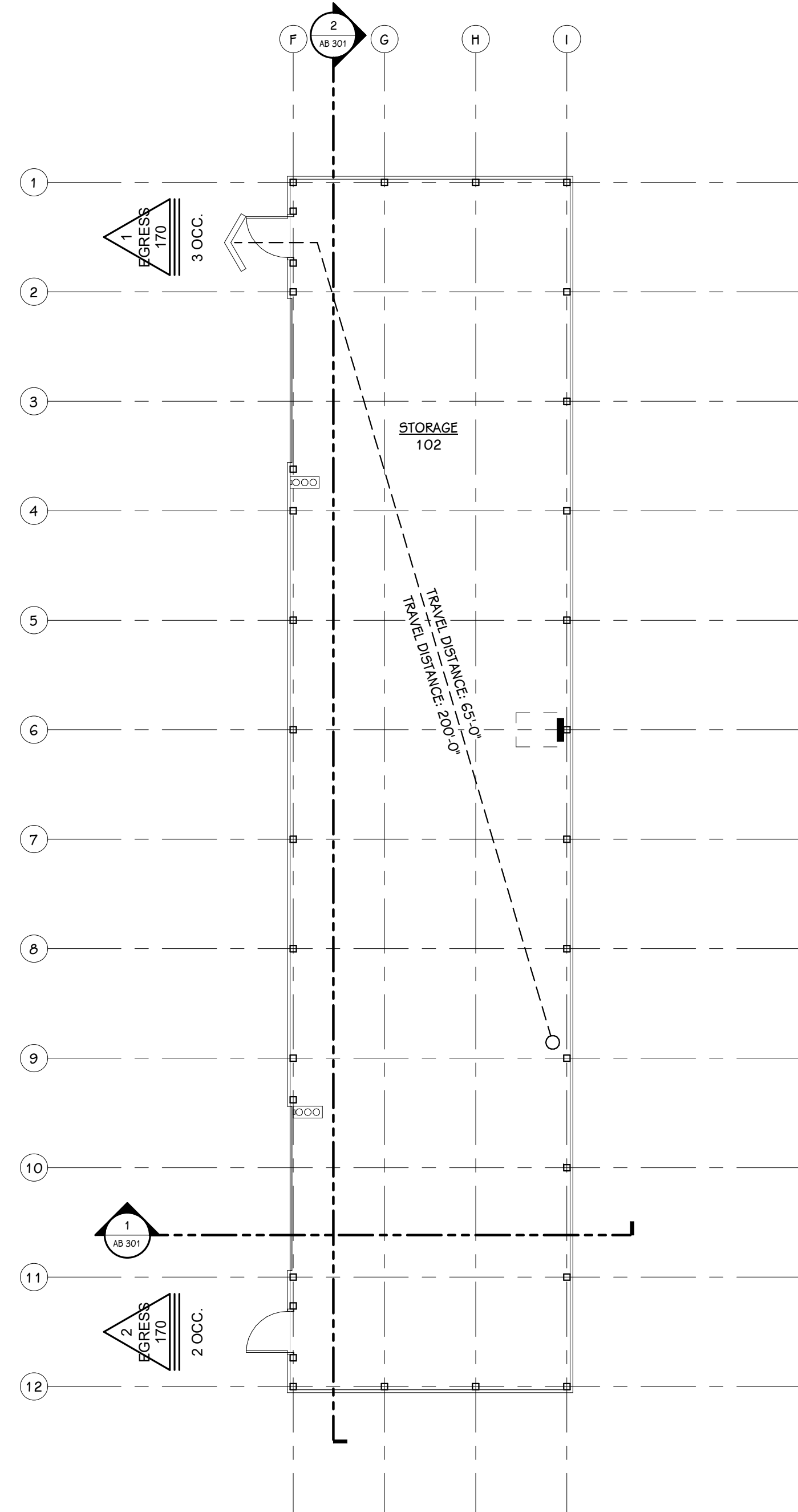
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FIRST FLOOR CODE COMPLIANCE PLAN
1/8" = 1'-0"

CODE COMPLIANCE KEY

EGRESS SYMBOLS

- EGRESS EXIT NUMBER FROM ROOM OR SPACE
- MAXIMUM NUMBER OF OCCUPANTS PERMITTED BY EGRESS WIDTH
- ROOM OR SPACE EGRESS IS FROM

EGRESS ROOM

EXISTING TRAVEL DISTANCE TO EGRESS DOOR

DIRECTION OF EGRESS

TRAVEL DISTANCE : 100'-0"

PERMITTED TRAVEL DISTANCE - 200'-0"

PERMITTED MAXIMUM TRAVEL DISTANCE PER CONDITION

FIRE SAFETY SYMBOLS

- (XFE) EXISTING FIRE EXTINGUISHER
- (XFEC) EXISTING FIRE EXTINGUISHER CABINET
- (FE) FIRE EXTINGUISHER
- (FEC) FIRE EXTINGUISHER CABINET

FIRE-RATING KEY

DESIGNATION	PARTITION RATING	PRIORITY
[Symbol]	3 HOUR	1
[Symbol]	2 HOUR FIRE/SMOKE	2
[Symbol]	2 HOUR	3
[Symbol]	1 HOUR FIRE/SMOKE	4
[Symbol]	1 HOUR	5
[Symbol]	SMOKE RESISTANT	6

- ALL PENETRATIONS THROUGH A FIRE OR SMOKE RATED PARTITION SHOULD BE SEALED WITH AN APPROVED U.L. RATED PRODUCT.
- THE TOPS OF ALL FIRE RATED PARTITIONS SHALL BE SEALED TO THE CONTINUOUS STRUCTURE ABOVE WITH A U.L. RATED SYSTEM OR ASSEMBLY.
- WOOD BLOCKING IN FIRE-RATED PARTITIONS SHALL BE NON-COMBUSTIBLE TREATED WOOD.
- REFER TO SPECIFICATION U.L. RATING INFORMATION.
- FIRE-RATED WALLS ENDING INTO AN ACOUSTICAL DECK MUST HAVE THE FLUTES FILLED, REFER TO TOP OF WALL DETAIL AT ACOUSTIC DECK SHOWN ON THIS SHEET.

- FOR MASONRY WALLS THE MASON SHALL FILL VOIDS AND FIRE SPRAY WITH UL LISTED MATERIAL.
- FOR STUD WALLS USE FIRE SAFING AND FIRE CAULK.

Michigan Building Code - 2015 Edition

Section 311.2: The storage room to be classified as Moderate-hazard Storage Group S-1. (Must comply with the maximum allowable quantities of hazardous materials listed in Table 307.1 (1).

Table 504.3: Allowable Height: Occupancy S-1, Type V-S: 40 feet

Table 504.4: Allowable Stories: Occupancy S-1, Type V-S: 1 Story

Section 506.2: Allowable Area: Occupancy S-1, Type V-S: 9,000 sf

Section 506.3: A frontage increase is not required. The building area complies with the allowable area in Table 506.2.

Section 602.2: Table 601 - Construction Type V-B (Non-sprinklered - Single Story) Construction in which structural elements, and exterior walls, and interior walls are of any materials permitted by this code.

Table 1004.1.2: Occupant Load Factors
Storage Areas: 300 gross
Calculated Occupancies
Storage (1,280 gross sq. ft.) - 5 Occupants

Section 1005.3: Egress Capacity Factors
1005.3.2 All others = 0.2 inches per Occupant

Table 1006.2.1: Maximum Common Path of Travel shall not exceed: Storage: 100 ft without sprinkler system and occupant load is less than 30 occupants

Section 1007.1.1: Where two exits, exit access doorways, exit access stairways or ramps, or any combination thereof, are required from any portion of the exit access, they shall be placed a distance apart equal to not less than one-half of the length of the maximum overall diagonal dimension of the building or area to be served measured in a straight line between them.

Table 1017.2: Exit Access Travel Distance shall not exceed:
Storage: 200 feet

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PROJECT TITLE
PORTAGE - NORTHERN
HIGH SCHOOL -
STORAGE BARN

OWNER
PORTAGE PUBLIC
SCHOOLS

Portage, Michigan

SHEET TITLE
FIRST FLOOR CODE COMPLIANCE PLAN
BARN B

DATE
MAY 21, 2021

SHEET NUMBER
GB 101
20-200.00

SITE PLAN NOTES

- A) 6" CONCRETE PAVEMENT (SEE DETAIL THIS SHEET)
- B) CONNECT ELECTRIC SERVICE AND METER, COORDINATE WITH UTILITY PROVIDER
- C) 10' OVERHEAD DOOR
- D) MAN DOOR

GRADING NOTES

- ALL WORK SHALL CONFORM TO ALL LOCAL, STATE AND FEDERAL LAWS, RULES AND REGULATIONS IN FORCE AT TIME OF CONSTRUCTION.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS, PERMIT COSTS, TAP FEES, METER DEPOSITS, PERMANENT UTILITY APPLICATIONS, BONDS, AND OTHER FEES REQUIRED FOR PROPOSED WORK. THIS SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO THOSE REQUIRED BY THE CITY OF PORTAGE.
- CONTACT "811" AT 1-800-482-7171 FOR LOCATION OF UNDERGROUND UTILITIES A MINIMUM OF 48 HOURS BEFORE COMMENCING EXCAVATION WORK. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO ARE NOT PART OF THE "811" ALERT SYSTEM. THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN A MANNER AS TO ENSURE THAT THOSE UTILITIES NOT REQUIRING RELOCATION WILL NOT BE DISTURBED.
- DEMOLISH & REMOVE ALL EXISTING SITE FEATURES AS REQUIRED.
- MATCH EXISTING GRADES AROUND PERIMETER WITH SLOPES AS SHOWN.
- ALL SPOT ELEVATIONS ARE TOP OF PAVEMENT GRADES AT EDGE OF METAL (EOM) UNLESS OTHERWISE NOTED.
- ALL SOIL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO MASS GRADING.
- ALL EXCAVATION SHALL BE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS AND GEOTECHNICAL REPORT.
- ALL EXISTING ELEVATIONS ARE TO BE VERIFIED AND ACCEPTED AS SHOWN PRIOR TO COMMENCEMENT OF WORK.
- CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID TRACKING SOIL ONTO ADJACENT ROADWAYS. CONTRACTOR SHALL SWEEP IMMEDIATELY IF OCCURS.
- ANY DISTURBED AREA WHICH WILL BE LEFT UNWORKED 15 DAYS OR LONGER MUST BE SEEDED TO ESTABLISH VEGETATION FOR TEMPORARY STABILIZATION. BASINS TO BE SEEDED AND MULCH BLANKETS APPLIED IMMEDIATELY TO PROVIDE A STABLE BASE AND AVOID EXCESSIVE EROSION.

GENERAL CONSTRUCTION NOTES

- ALL WORK SHALL CONFORM TO ALL LOCAL, STATE AND FEDERAL LAWS, RULES AND REGULATIONS IN FORCE AT TIME OF CONSTRUCTION.
- ALL WORK SHALL CONFORM TO THE MICHIGAN HANDICAPPED ACCESSIBILITY CODE AND THE AMERICANS WITH DISABILITIES ACT.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS, PERMIT COSTS, TAP FEES, METER DEPOSITS, PERMANENT UTILITY APPLICATIONS, BONDS, AND OTHER FEES REQUIRED FOR PROPOSED WORK.
- CONTACT "MISS DIG" AT 1-800-482-7171 FOR LOCATION OF UNDERGROUND UTILITIES A MINIMUM OF 48 HOURS BEFORE COMMENCING EXCAVATION WORK. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO ARE NOT PART OF THE "MISS DIG" ALERT SYSTEM. THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN A MANNER AS TO ENSURE THAT THOSE UTILITIES NOT REQUIRING RELOCATION WILL NOT BE DISTURBED.
- MANHOLE AND CATCH BASIN STRUCTURES SHALL BE PRECAST AND HAVE A MAXIMUM OF 2 ADJUSTING RINGS FOR FINISH GRADE ADJUSTMENT.
- DEMOLISH & REMOVE ALL EXISTING SITE FEATURES AS REQUIRED.

SITE MATERIALS & CONSTRUCTION NOTES:

- SOILS EXPOSED IN THE BASE OF ALL SATISFACTORY FOUNDATION EXCAVATIONS SHOULD BE PROTECTED AGAINST ANY DETRIMENTAL CHANGES IN CONDITION SUCH AS FROM DISTURBANCE, RAIN AND FREEZING. SURFACE RUN-OFF WATER SHOULD BE DRAINED AWAY FROM THE EXCAVATION AND NOT ALLOWED TO POND. IF POSSIBLE, ALL FOOTING CONCRETE SHOULD BE POURED THE SAME DAY THE EXCAVATION IS MADE. IF THIS IS NOT PRACTICAL, THE FOOTING EXCAVATIONS SHOULD BE ADEQUATELY PROTECTED.
- REMOVE ALL SUBGRADE GRADE MATERIAL THAT MAY BE SOFTENED BY RAINS, FREEZING, OR CONSTRUCTION TRAFFIC, ETC. AND REPLACE WITH COMPACTED GRANULAR FILL.
- THE CONTRACTOR SHALL INSTALL A PEDESTRIAN FENCE AROUND ALL EXCAVATIONS TO BE LEFT OPEN OVERNIGHT AS REQUIRED.
- EXTERIOR CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 4000 PSI AND SHALL HAVE LIMESTONE AGGREGATE AND SHALL HAVE 4 - 6 % AIR ENTRAINMENT WITH A BROOM FINISH.
- EXPANSION JOINTS IN CONCRETE PAVEMENT AND WALLS SHALL BE 1/2" ASPHALT IMPREGNATED FULL DEPTH 40" O.C. MAXIMUM & AT SIDEWALK INTERSECTIONS. CRACK CONTROL SCORING AT SIDEWALK WIDTH DIMENSION AND @ 10'-0" O.C. IN DRIVES.

GENERAL NOTES

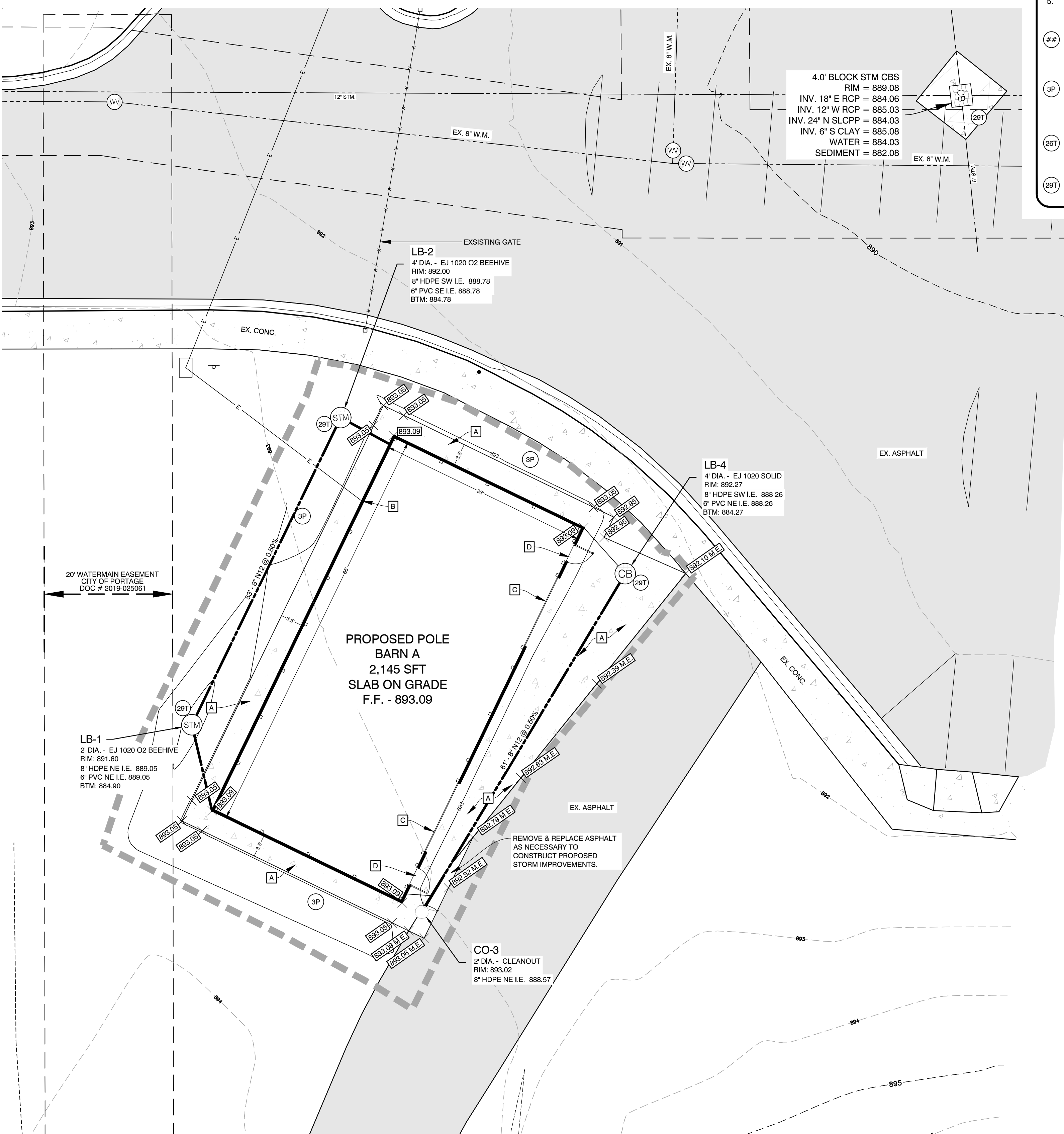
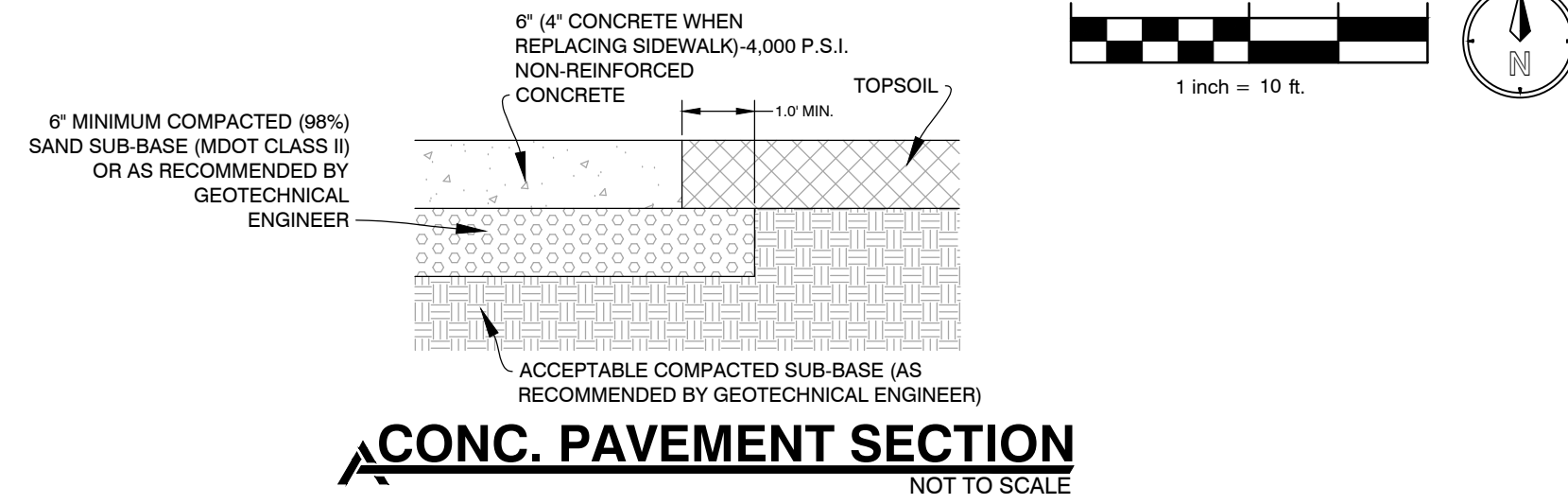
- DIMENSIONS TAKE PRECEDENCE OVER SCALE. CONTRACTOR TO VERIFY ALL DIMENSIONS IN FIELD.
- IF ANY ERRORS, DISCREPANCIES, OR OMISSIONS BECOME APPARENT, THESE SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER PRIOR TO CONSTRUCTION OF ANYTHING AFFECTED SO THAT CLARIFICATION OR REDESIGN MAY OCCUR.

LEGEND

- SAWCUT
- LIMITS OF CONSTRUCTION
- SILT FENCE
- MATCH EXISTING GRADE
- PAVEMENT REMOVAL/RECONSTRUCTION

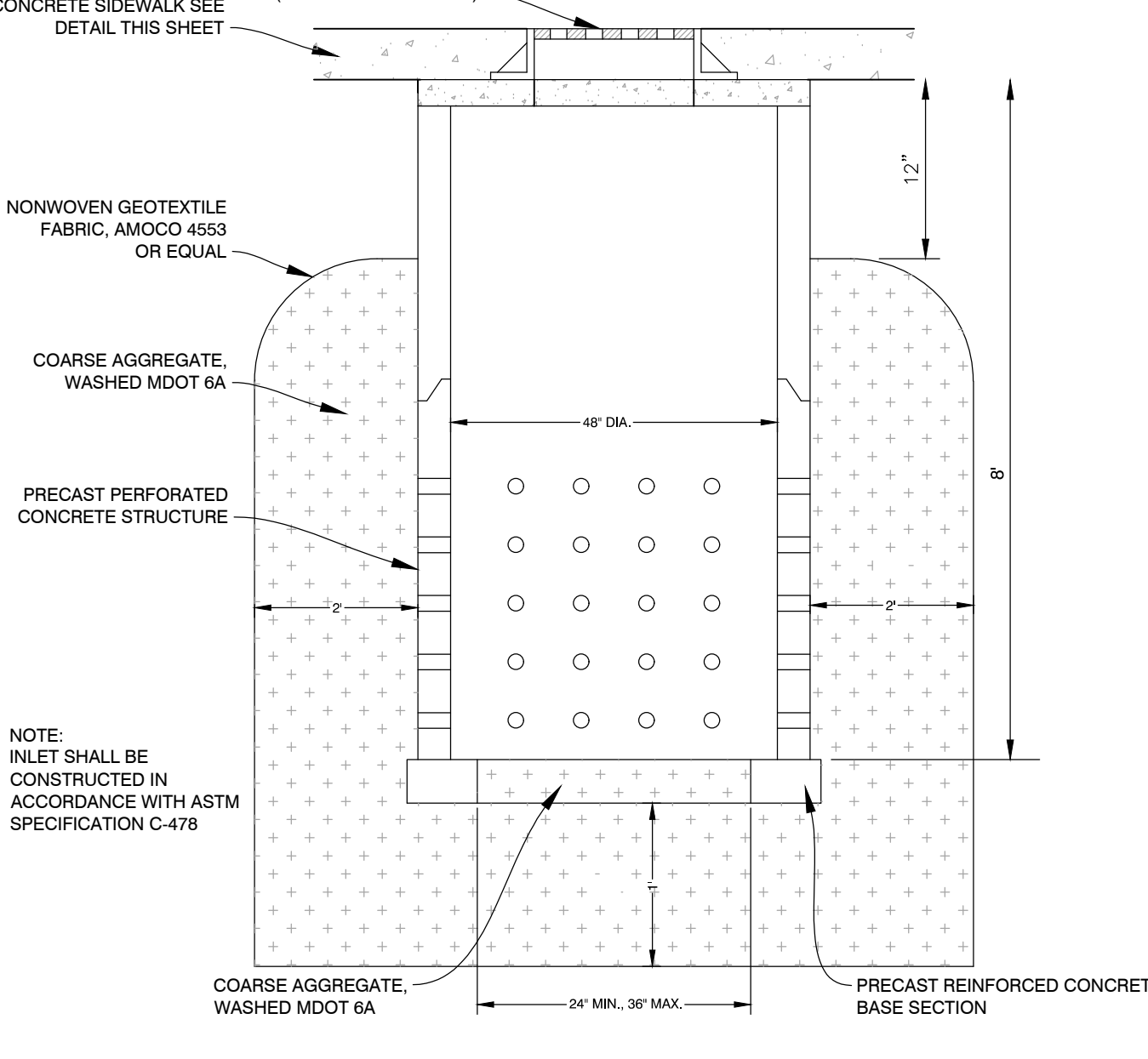
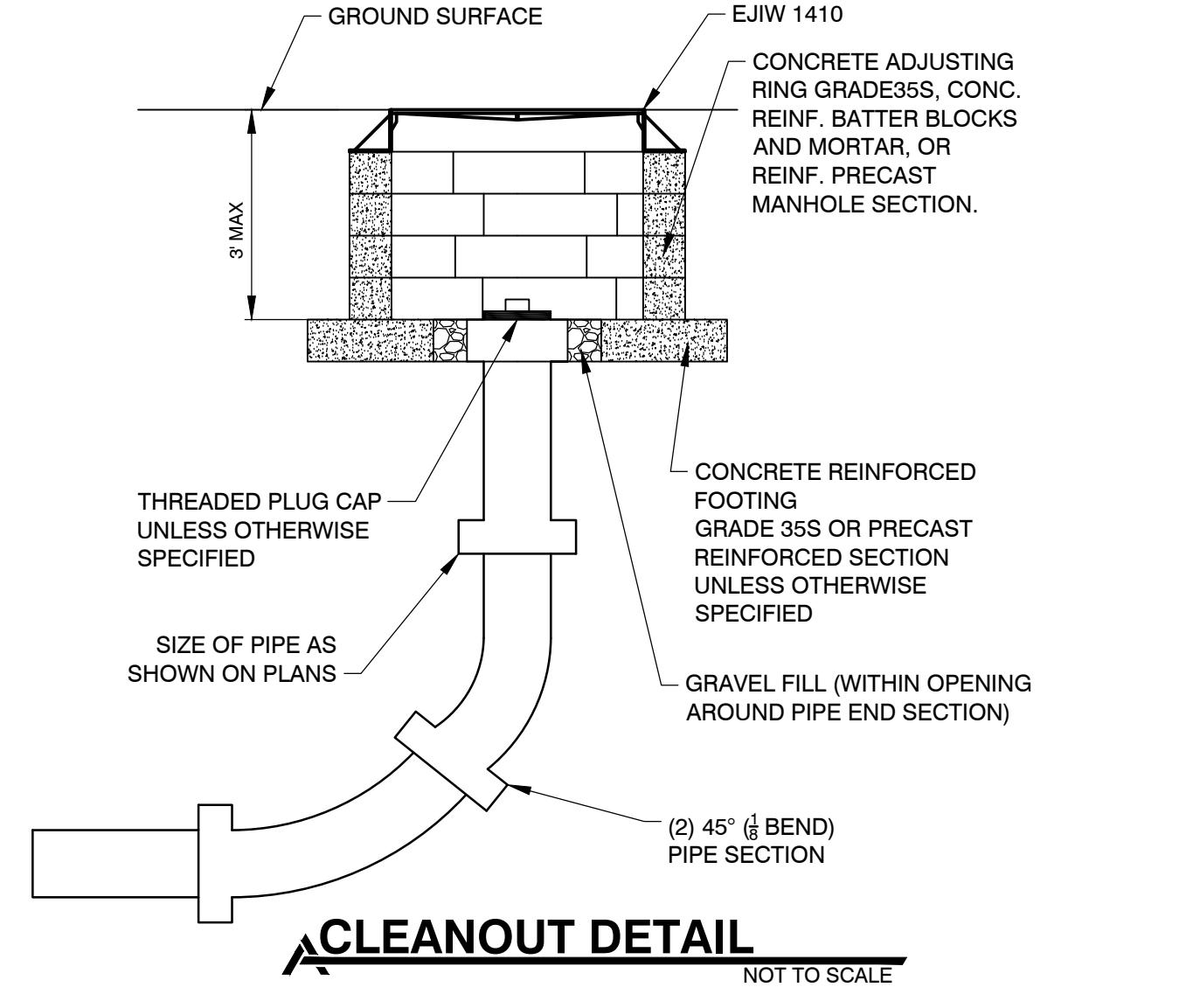
SITE DATA

- PROPERTY INFORMATION:
PARCEL #: 00017-095-0
SITE AREA: 2,875,000 SF (66 AC)
OWNER: PORTAGE PUBLIC SCHOOLS
8107 MUSTANG DR
PORTAGE, MI 49002
- ZONING:
R-1B RESIDENTIAL
ABUTTING PROPERTY CURRENTLY ZONED:
NORTH: R-1B RESIDENTIAL
SOUTH: PD RESIDENTIAL
EAST: R-1B RESIDENTIAL
WEST: PD RESIDENTIAL/RM-1 RESIDENTIAL
- SETBACKS
FRONT = 0'
SIDES = 0' (25' IF ABUTS R DISTRICT)
REAR = 0' (25' IF ABUTS R DISTRICT)
- PARKING: NOT APPLICABLE
- STORM WATER RETENTION REQUIRED
TOTAL IMPERVIOUS AREA: 3,278 SQFT
REQUIRED STORM WATER VOLUMES BASED ON 3" OVER IMPERVIOUS AREA:
REQUIRED STORAGE VOLUME: 820 CFT
PROVIDED VOLUME: 833 CFT



SOIL EROSION & SEDIMENTATION CONTROL NOTES

- ALL CONSTRUCTION METHODS SHALL BE DONE IN COMPLIANCE WITH MDOT-EGLE. THE OWNER SHALL BE RESPONSIBLE FOR OBTAINING A "SOIL EROSION PERMIT" FROM THE COUNTY AND A "PERMIT BY RULE/NOTICE OF COVERAGE" FROM EGLE, IF APPLICABLE, PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL REQUIREMENTS OF THE COUNTY "SOIL EROSION PERMIT" AND FOR ALL CERTIFIED STORM WATER INSPECTION SERVICE REQUIRED BY THE "PERMIT BY RULE". EROSION CONTROL MEASURES SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS AND SHALL NOT RELIEVE THE CONTRACTORS RESPONSIBILITY FOR PROVIDING ALL REQUIRED EROSION CONTROL MEASURES.
 - AVOID UNNECESSARY DISTURBING OR REMOVING OF EXISTING VEGETATED TOPSOIL OR EARTH COVER, THESE COVER AREAS ACT AS SEDIMENT FILTERS.
 - ALL TEMPORARY SOIL EROSION PROTECTION SHALL REMAIN IN PLACE UNTIL REMOVAL IS REQUIRED FOR FINAL CLEAN UP AND APPROVAL.
 - GEOTEXTILE SILT FENCE SHALL BE INSTALLED AS REQUIRED WHEN CROSSING CREEKS OR WHEN ADJACENT TO WETLANDS OR SURFACE WATER BODIES TO PREVENT SILTATION AND ELSEWHERE AS DIRECTED BY THE ENGINEER. SEEDING AND/OR SODDING SHALL BE INSTALLED ON CREEK BANKS IMMEDIATELY AFTER CONSTRUCTION TO PREVENT EROSION.
 - MAINTENANCE, CLEANING, AND REMOVAL OF THE VARIOUS SEDIMENT CONTROL MEASURES SHALL BE INCLUDED IN THE VARIOUS EROSION CONTROL ITEMS.
- NUMBER IN CIRCLE REFERS TO NUMBERED DETAILS ON MDOT STANDARD PLAN R-96-D, SOIL EROSION & SEDIMENTATION CONTROL MEASURES. "P" DENOTES PERMANENT MEASURE AND "T" DENOTES TEMPORARY MEASURE. SOIL EROSION CONTROL PLANS DENOTE MINIMUM EROSION MEASURES REQUIRED AS DESCRIBED BELOW.
- 29T DENOTES PERMANENT SEEDING. ALL DISTURBED AREAS NOT PAVED OR GRAVELED SHALL BE RESTORED. PLACE TOPSOIL SURFACE, SALV. 3 INCH, MDOT SEEDING MIXTURE TUF APPLIED AT A RATE OF 220 LB/ACRE, FERTILIZER, CHEMICAL NUTRIENT, CL A APPLIED AT A RATE OF 228 LB/ACRE, MULCH AT A RATE OF 2 TON/ACRE AND MULCH ANCHORING. (APPLIES TO ENTIRE PROJECT)
- 29T DENOTES TEMPORARY SILT FENCE. SILT FENCE SHALL BE INSTALLED AT CREEK CROSSINGS, ADJACENT TO ALL WETLANDS AND SURFACE WATERS, AND OTHER LOCATIONS AS DIRECTED BY THE ENGINEER. EACH SILT FENCE SHALL BE INSTALLED GENERALLY ALONG THE SAME CONTOUR ELEVATION.
- 29T DENOTES INLET PROTECTION FABRIC DROP. SHALL BE INSTALLED AT EXISTING AND PROPOSED STORM SEWER INLETS TO PROVIDE SETTLING AND FILTERING OF SILT LADEN WATER PRIOR TO ENTRY INTO THE DRAINAGE SYSTEM.



ALL UTILITIES AS SHOWN ARE APPROXIMATE LOCATIONS DERIVED FROM ACTUAL MEASUREMENTS AND AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETTED TO BE EXACT LOCATION NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THE AREA. FIELD WORK PERFORMED BY: H & S ENGINEERING



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Grand Rapids, Michigan 49503
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PROJECT TITLE
**PORTAGE - WEST
STORAGE BARN**

OWNER
**PORTAGE PUBLIC
SCHOOLS**

Portage, Michigan

DATE
MAY 21, 2021

SHEET NUMBER
CA 100
20-200.00

ISSUED FOR _____

DATE _____

SHEET TITLE
SITE PLAN

SOIL EROSION & SEDIMENTATION CONTROL NOTES

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GRADING NOTES

- ALL WORK SHALL CONFORM TO ALL LOCAL, STATE AND FEDERAL LAWS, RULES AND REGULATIONS IN FORCE AT TIME OF CONSTRUCTION.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS, PERMIT COSTS, TAP FEES, METER DEPOSITS, PERMANENT UTILITY APPLICATIONS, BONDS, AND OTHER FEES REQUIRED FOR PROPOSED WORK. THIS SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO THOSE REQUIRED BY THE CITY OF PORTAGE.
- CONTACT "811" AT 1-800-482-7171 FOR LOCATION OF UNDERGROUND UTILITIES A MINIMUM OF 48 HOURS BEFORE COMMENCING EXCAVATION WORK. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO ARE NOT PART OF THE "811" ALERT SYSTEM. THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN A MANNER AS TO ENSURE THAT THOSE UTILITIES NOT REQUIRING RELOCATION WILL NOT BE DISTURBED.
- DEMOLISH & REMOVE ALL EXISTING SITE FEATURES AS REQUIRED.
- MATCH EXISTING GRADES AROUND PERIMETER WITH SLOPES AS SHOWN.
- ALL SPOT ELEVATIONS ARE TOP OF PAVEMENT GRADES AT EDGE OF METAL (EOM) UNLESS OTHERWISE NOTED.
- ALL SOIL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO MASS GRADING.
- ALL EXCAVATION SHALL BE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS AND GEOTECHNICAL REPORT.
- ALL EXISTING ELEVATIONS ARE TO BE VERIFIED AND ACCEPTED AS SHOWN PRIOR TO COMMENCEMENT OF WORK.
- CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID TRACKING SOIL ONTO ADJACENT ROADWAYS. CONTRACTOR SHALL SWEEP IMMEDIATELY IF OCCURS.
- ANY DISTURBED AREA WHICH WILL BE LEFT UNWORKED 15 DAYS OR LONGER MUST BE SEEDED TO ESTABLISH VEGETATION FOR TEMPORARY STABILIZATION. BASINS TO BE SEEDED AND MULCH BLANKETS APPLIED IMMEDIATELY TO PROVIDE A STABLE BASE AND AVOID EXCESSIVE EROSION.

GENERAL CONSTRUCTION NOTES

- ALL WORK SHALL CONFORM TO ALL LOCAL, STATE AND FEDERAL LAWS, RULES AND REGULATIONS IN FORCE AT TIME OF CONSTRUCTION.
- ALL WORK SHALL CONFORM TO THE MICHIGAN HANDICAPPED ACCESSIBILITY CODE AND THE AMERICANS WITH DISABILITIES ACT.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS, PERMIT COSTS, TAP FEES, METER DEPOSITS, PERMANENT UTILITY APPLICATIONS, BONDS, AND OTHER FEES REQUIRED FOR PROPOSED WORK.
- CONTACT "MISS DIG" AT 1-800-482-7171 FOR LOCATION OF UNDERGROUND UTILITIES A MINIMUM OF 48 HOURS BEFORE COMMENCING EXCAVATION WORK. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO ARE NOT PART OF THE "MISS DIG" ALERT SYSTEM. THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN A MANNER AS TO ENSURE THAT THOSE UTILITIES NOT REQUIRING RELOCATION WILL NOT BE DISTURBED.
- MANHOLE AND CATCH BASIN STRUCTURES SHALL BE PRECAST AND HAVE A MAXIMUM OF 2 ADJUSTING RINGS FOR FINISH GRADE ADJUSTMENT.
- DEMOLISH & REMOVE ALL EXISTING SITE FEATURES AS REQUIRED.

SITE MATERIALS & CONSTRUCTION NOTES:

- SOILS EXPOSED IN THE BASE OF ALL SATISFACTORY FOUNDATION EXCAVATIONS SHOULD BE PROTECTED AGAINST ANY DETRIMENTAL CHANGES IN CONDITION SUCH AS FROM DISTURBANCE, RAIN AND FREEZING. SURFACE RUN-OFF WATER SHOULD BE DRAINED AWAY FROM THE EXCAVATION AND NOT ALLOWED TO POND. IF POSSIBLE, ALL FOOTING CONCRETE SHOULD BE POURED THE SAME DAY THE EXCAVATION IS MADE. IF THIS IS NOT PRACTICAL, THE FOOTING EXCAVATIONS SHOULD BE ADEQUATELY PROTECTED.
- REMOVE ALL SUBGRADE GRADE MATERIAL THAT MAY BE SOFTENED BY RAINS, FREEZING, OR CONSTRUCTION TRAFFIC, ETC. AND REPLACE WITH COMPACTED GRANULAR FILL.
- THE CONTRACTOR SHALL INSTALL A PEDESTRIAN FENCE AROUND ALL EXCAVATIONS TO BE LEFT OPEN OVERNIGHT AS REQUIRED.
- EXTERIOR CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 4000 PSI AND SHALL HAVE LIMESTONE AGGREGATE AND SHALL HAVE 4 - 6% AIR ENTRAINMENT WITH A BROOM FINISH.
- EXPANSION JOINTS IN CONCRETE PAVEMENT AND WALLS SHALL BE 1/2" ASPHALT IMPREGNATED FULL DEPTH 40' O.C. MAXIMUM & AT SIDEWALK INTERSECTIONS. CRACK CONTROL SCORING AT SIDEWALK WIDTH DIMENSION AND @ 10' O.C. IN DRIVES.

SITE PLAN NOTES

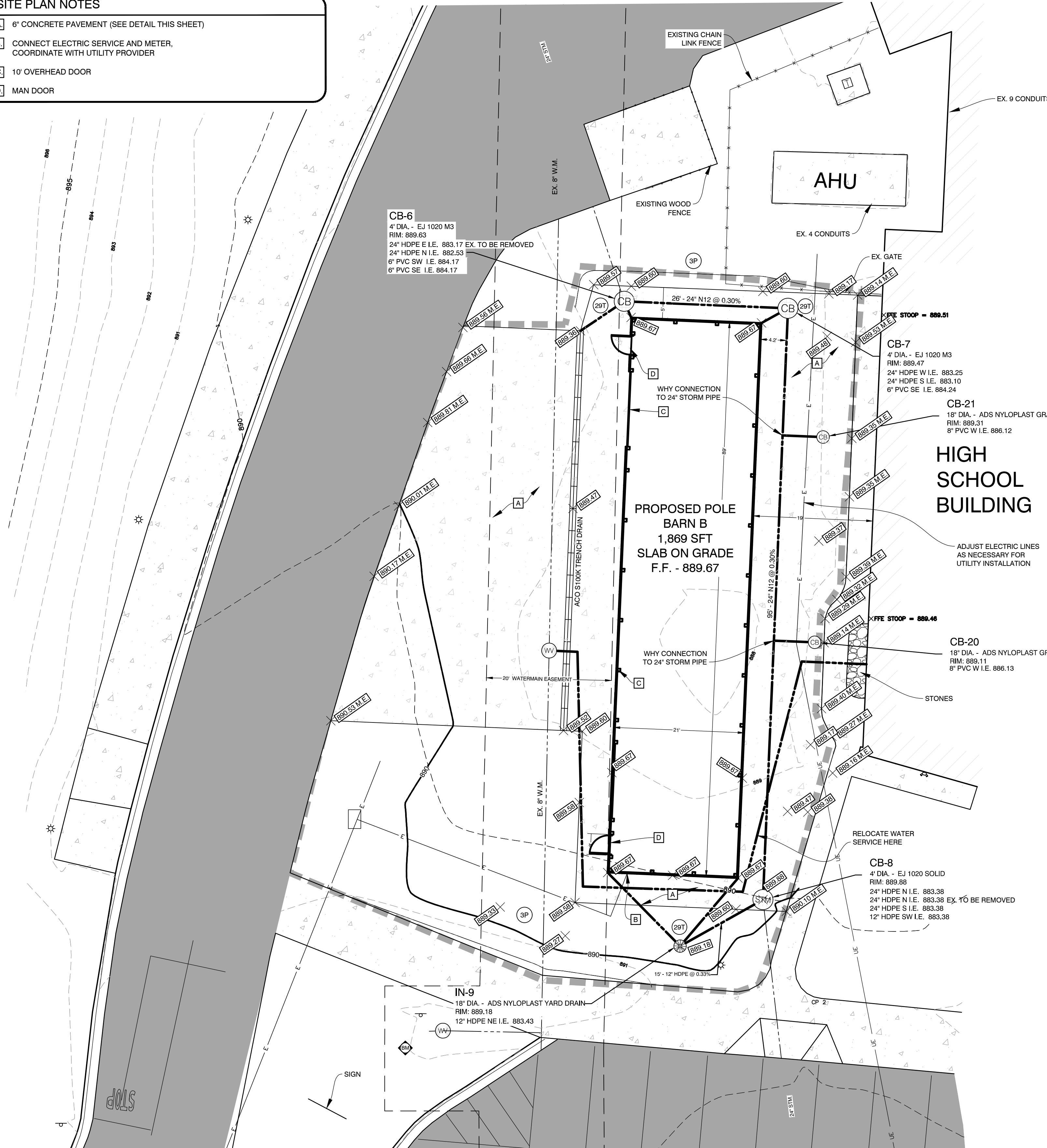
- A 6" CONCRETE PAVEMENT (SEE DETAIL THIS SHEET)
- B CONNECT ELECTRIC SERVICE AND METER, COORDINATE WITH UTILITY PROVIDER
- C 10' OVERHEAD DOOR
- D MAN DOOR

GENERAL NOTES

- DIMENSIONS TAKE PRECEDENCE OVER SCALE. CONTRACTOR TO VERIFY ALL DIMENSIONS IN FIELD.
- IF ANY ERRORS, DISCREPANCIES, OR OMISSIONS BECOME APPARENT, THESE SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER PRIOR TO CONSTRUCTION OF ANYTHING AFFECTED SO THAT CLARIFICATION OR REDESIGN MAY OCCUR.

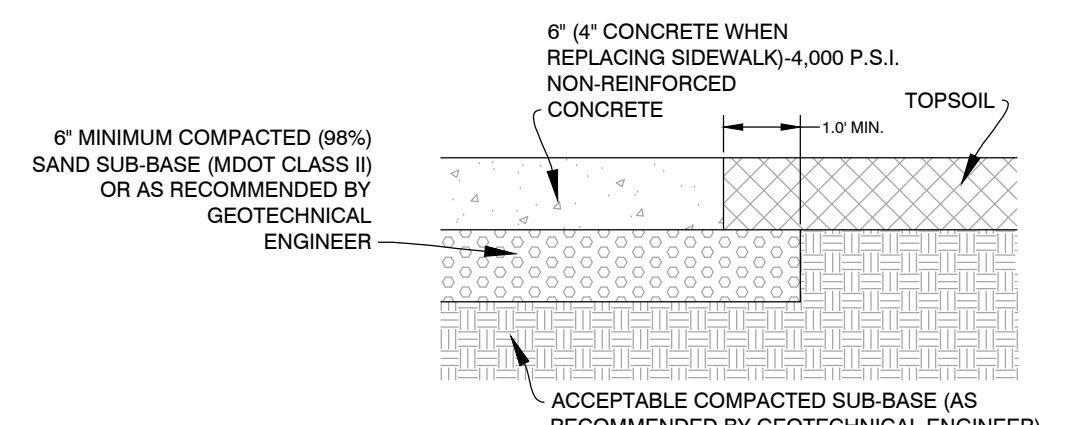
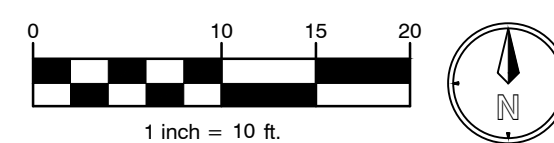
LEGEND

- SAWCUT
- LIMITS OF CONSTRUCTION
- SILT FENCE
- MATCH EXISTING GRADE
- UTILITY REMOVAL



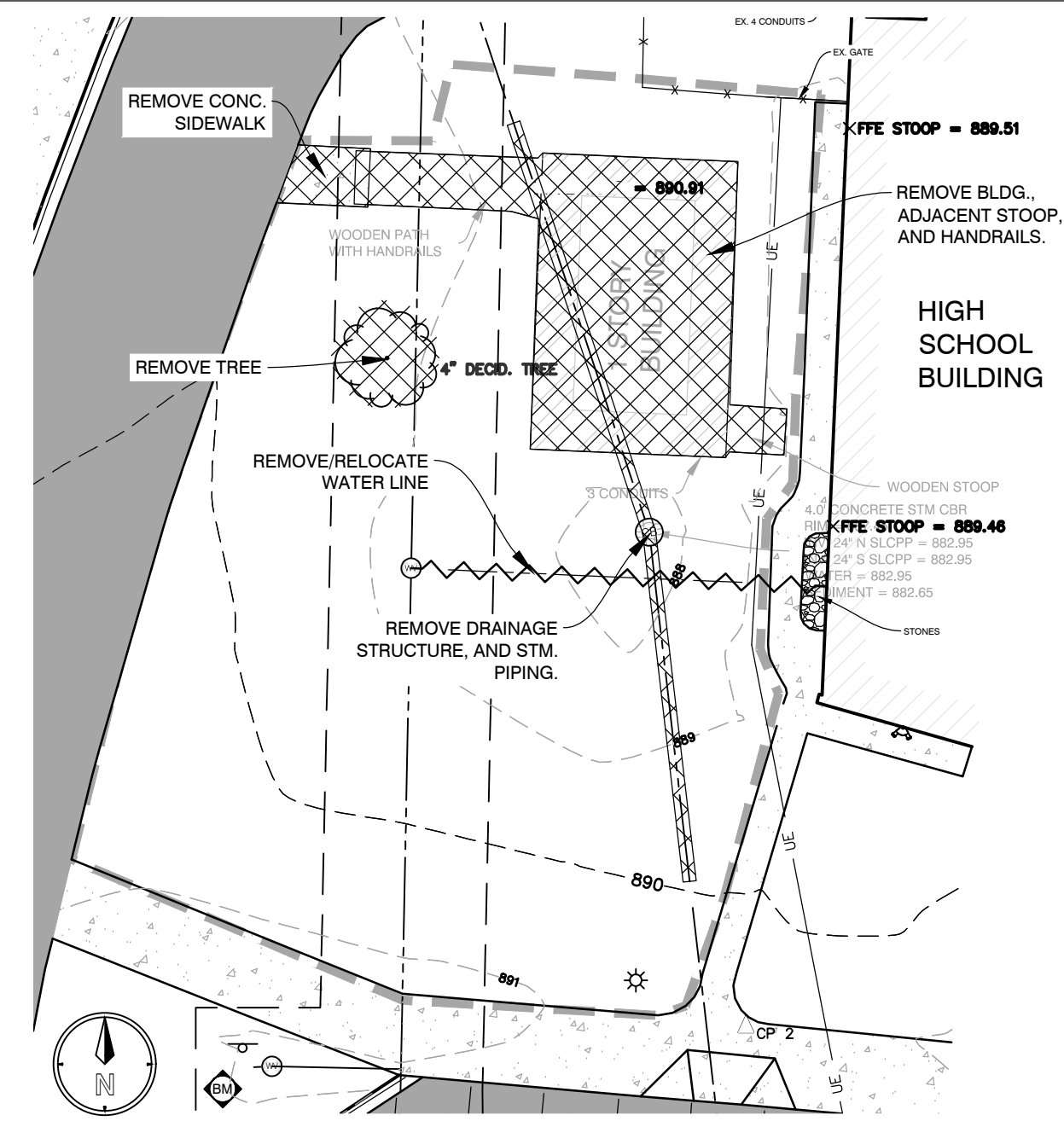
SITE PLAN

SCALE: 1" = 10'



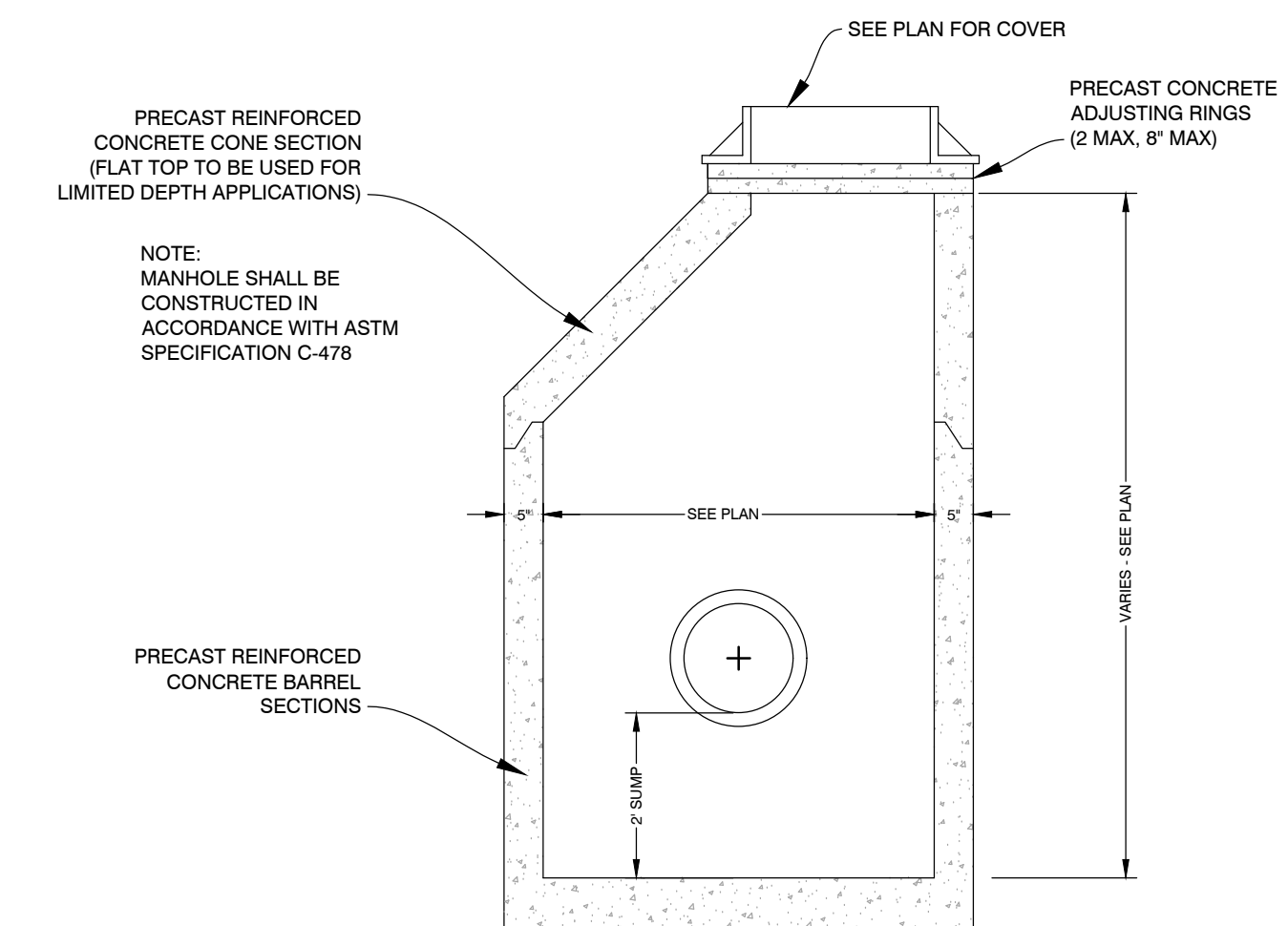
CONC. PAVEMENT SECTION

NOT TO SCALE



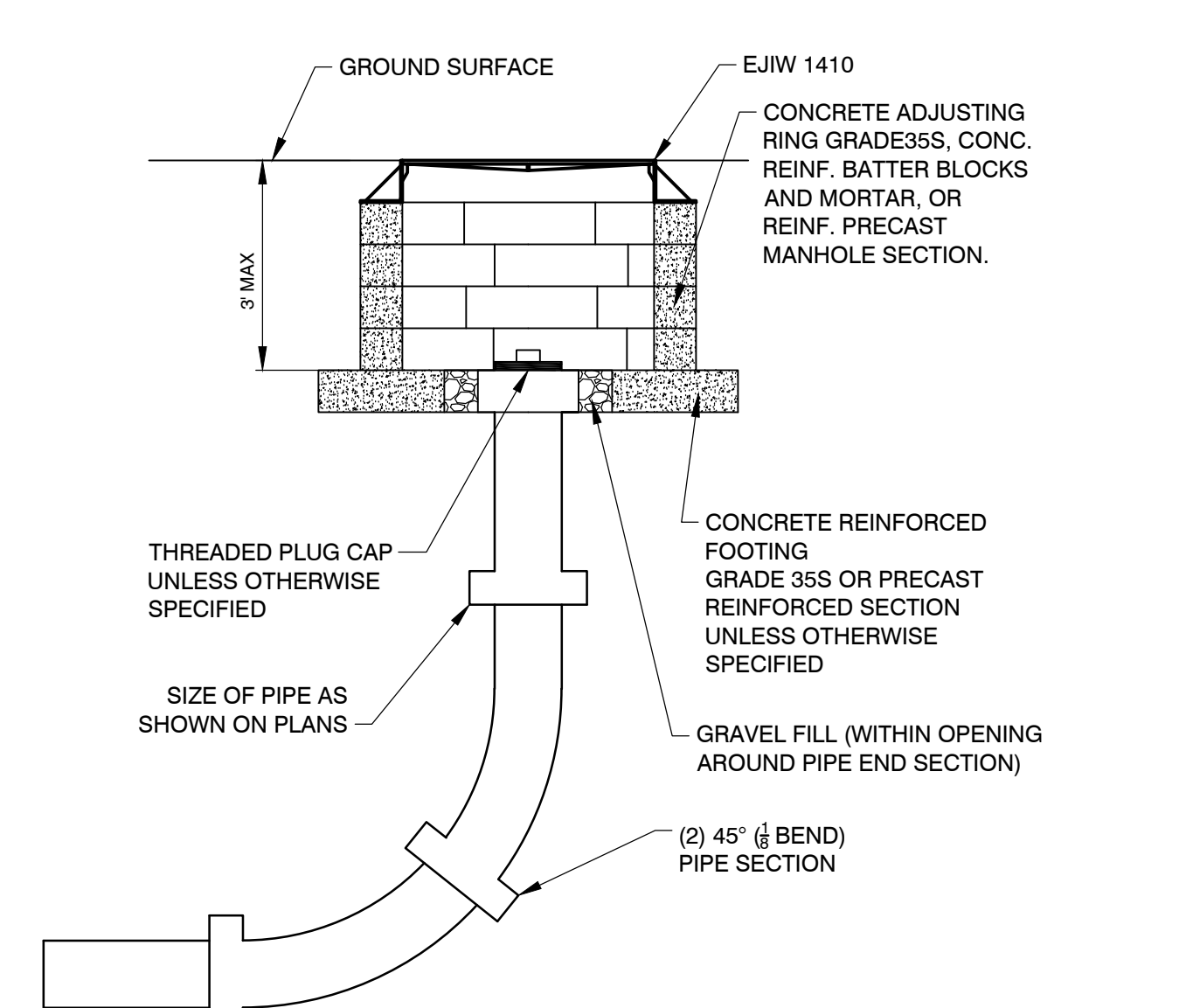
DEMOLITION PLAN

SCALE: 1" = 20'



CATCH BASIN DETAIL

NOT TO SCALE



CLEANOUT DETAIL

NOT TO SCALE



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STATE OF MICHIGAN
SPENCER D'JELL
ENGINEER
No. 6201309325
LICENSED PROFESSIONAL ENGINEER

ISSUED FOR _____ DATE _____

PROJECT TITLE
PORTAGE PUBLIC
SCHOOLS
NORTHERN
STORAGE BARN

OWNER
PORTAGE PUBLIC
SCHOOLS

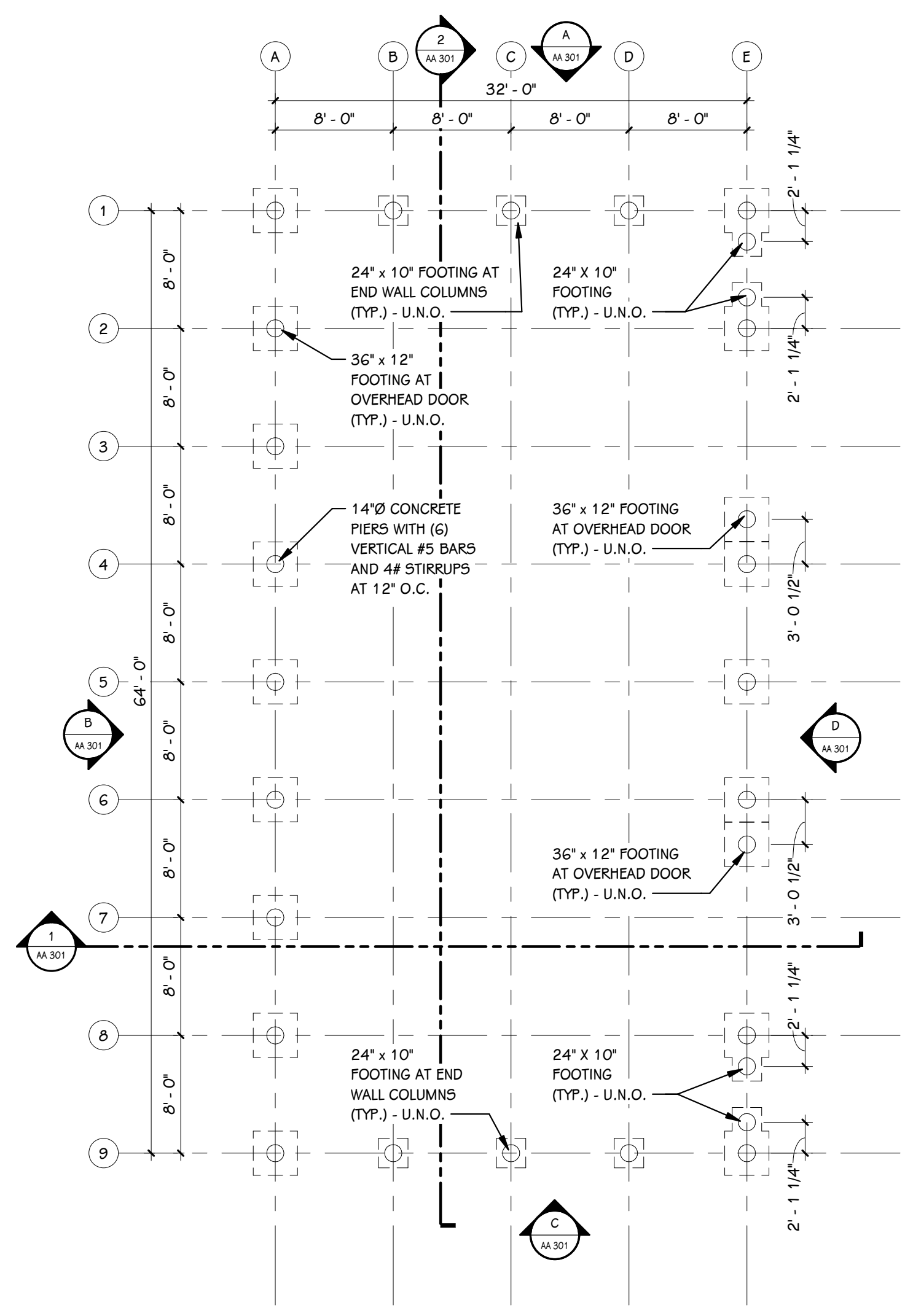
Portage, Michigan

SHEET TITLE
SITE PLAN

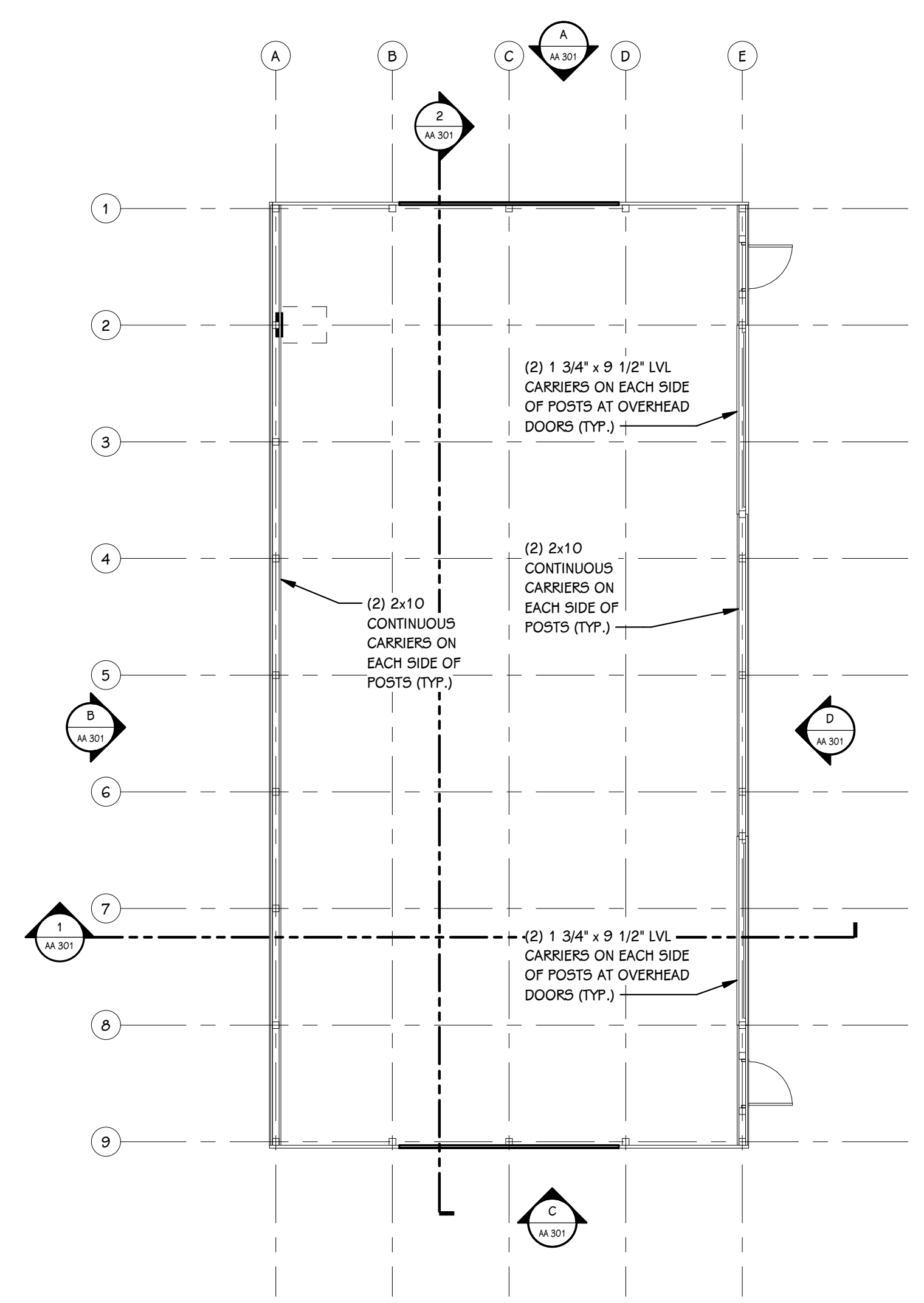
DATE
MAY 21, 2021

SHEET NUMBER
CB 100
20-200.00

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www.arengineeringllc.com



FOUNDATION PLAN
1/8" = 1'-0"



FRAMING PLAN
1/8" = 1'-0"

SHEET TITLE
FOUNDATION AND FRAMING PLAN

SHEET NUMBER
AA 100
20-200.00

DATE
MAY 21, 2021

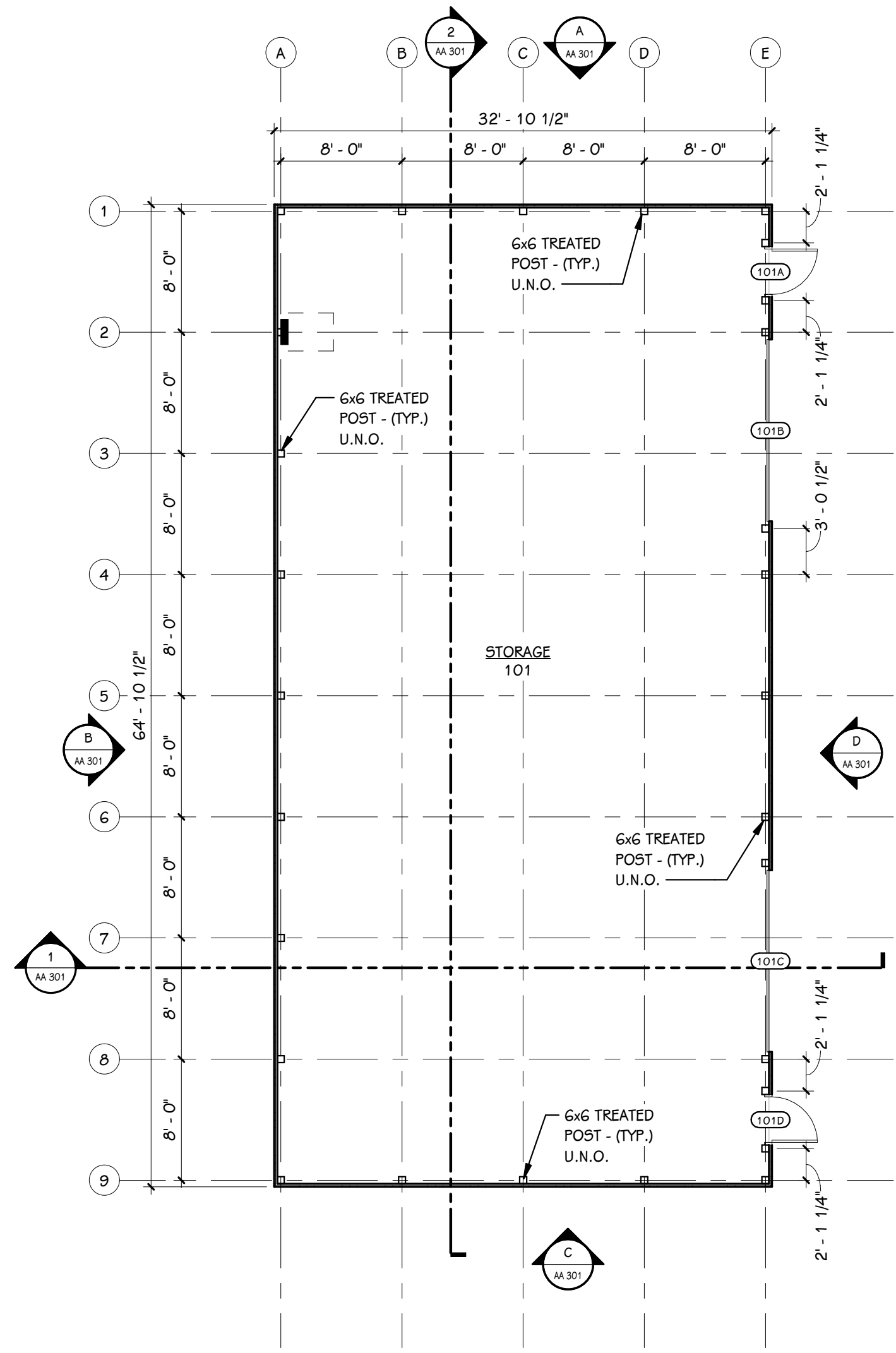
OWNER
PORTAGE PUBLIC
SCHOOLS

Portage, Michigan

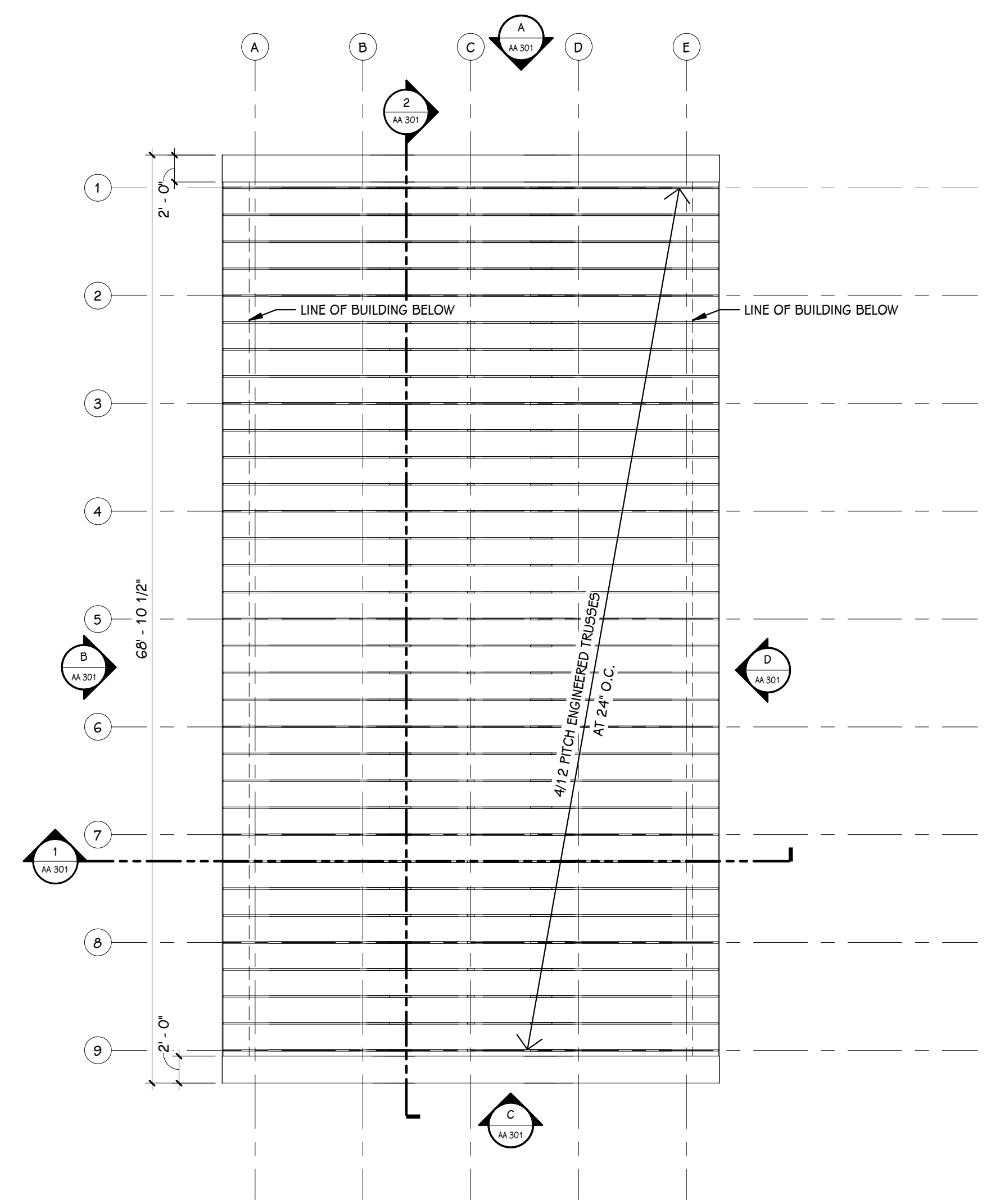
PROJECT TITLE
PORTAGE - NORTHERN
HIGH SCHOOL -
STORAGE BARNs

ISSUED FOR _____ DATE _____

- GENERAL NOTES**
- REFER TO CODE COMPLIANCE PLAN FOR WALL RATING LINES.
 - REFER TO FLOOR FINISH PLANS FOR INTERIOR ELEVATION CALLOUTS.
 - REFER TO SHEET A 501 FOR WALL AND CEILING ACCESS PANEL INFORMATION.



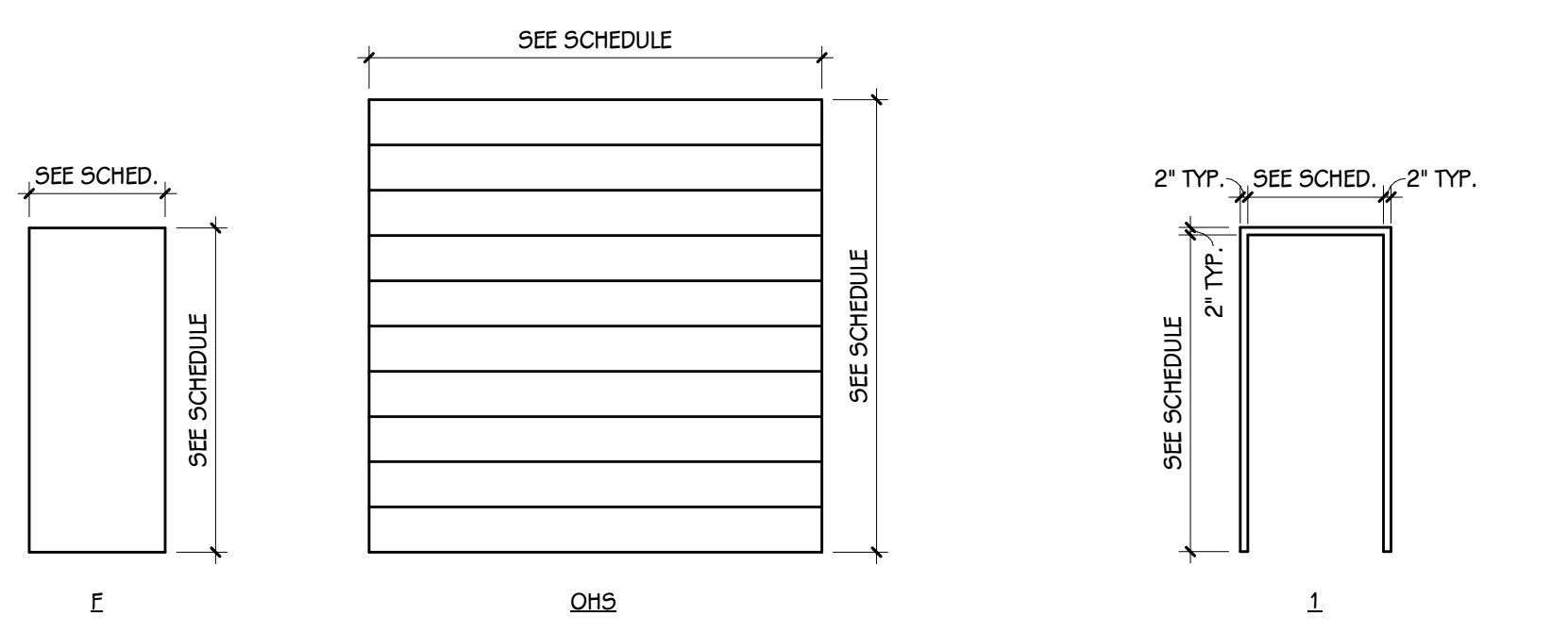
FIRST FLOOR PLAN
1/8" = 1'-0"



ROOF FRAMING PLAN
1/8" = 1'-0"

DOOR SCHEDULE - BUILDING A

NUMBER	ROOM	ROOM NAME	FIRE RATING		DOOR		SIZE		FRAME		DETAILS			ACCESS CONTROLS					HDWR. SET	REMARKS			
			DOOR	FRAME	TYPE	MAT	FIN	WIDTH	HEIGHT	ELEV	MAT	FIN	HEAD	JAMB	SILL	GLASS	A-PHONE	BARRIER-FREE			CARD READER	ELEC. LOCK HDWR.	MAG HOLD
101A	101	STORAGE	-	-	F	STL	FACTORY FINISH	3' - 0"	7' - 2"	1	HM	PAINT	-	-	-	-	No	No	No	No	No	1.0	-
101B	101	STORAGE	-	-	OH5	STL	FACTORY FINISH	12' - 0"	10' - 0"	-	STL	-	5 / AA 301	-	-	-	No	No	No	No	No	2.0	-
101C	101	STORAGE	-	-	OH5	STL	FACTORY FINISH	12' - 0"	10' - 0"	-	STL	-	5 / AA 301	-	-	-	No	No	No	No	No	2.0	-
101D	101	STORAGE	-	-	F	STL	FACTORY FINISH	3' - 0"	7' - 2"	1	HM	PAINT	-	-	-	-	No	No	No	No	No	-	-



DOOR TYPES
1/4" = 1'-0"

FRAME ELEVATION
1/4" = 1'-0"

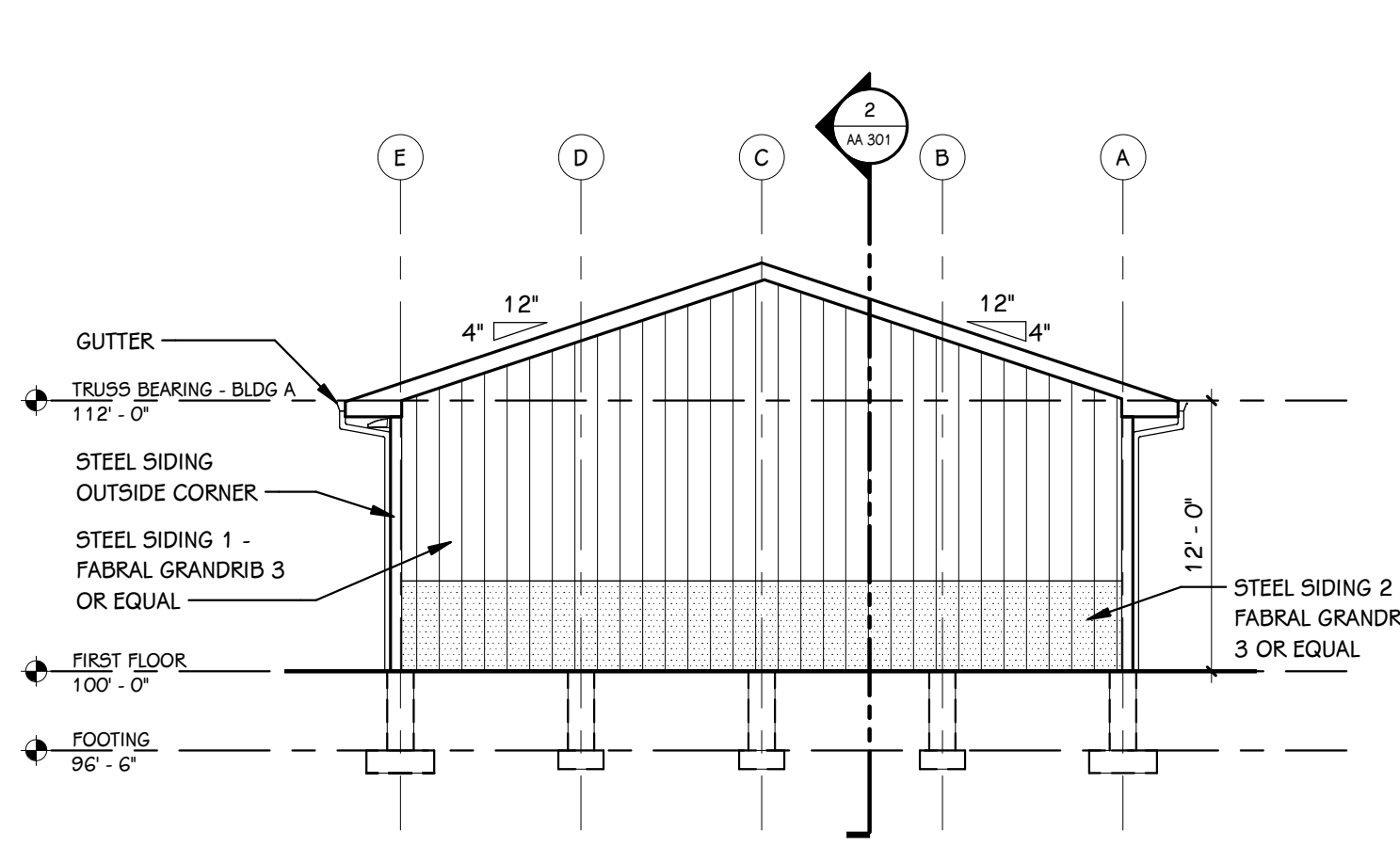
ISSUED FOR _____ DATE _____

PROJECT TITLE
PORTAGE - NORTHERN
HIGH SCHOOL -
STORAGE BARN

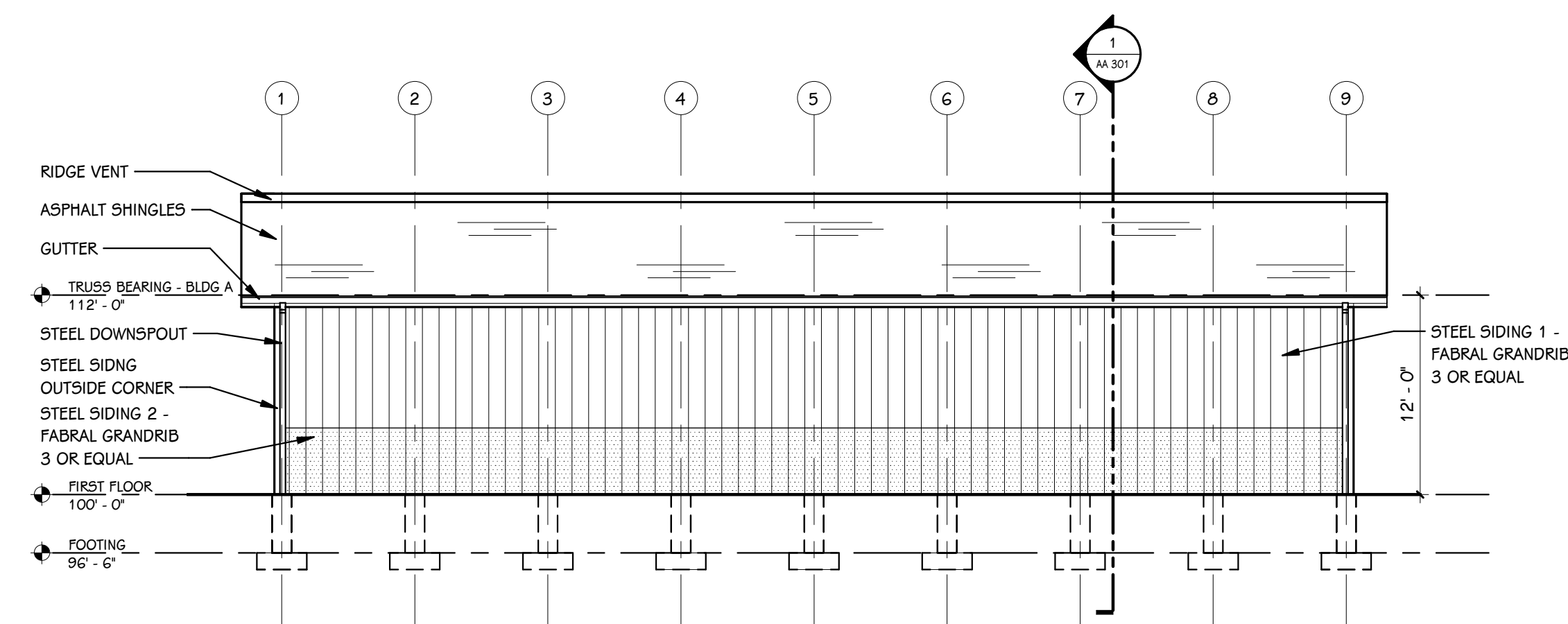
OWNER
PORTAGE PUBLIC
SCHOOLS
Portage, Michigan

SHEET TITLE
FIRST FLOOR PLAN, ROOF FRAMING
PLAN AND DOOR SCHEDULE

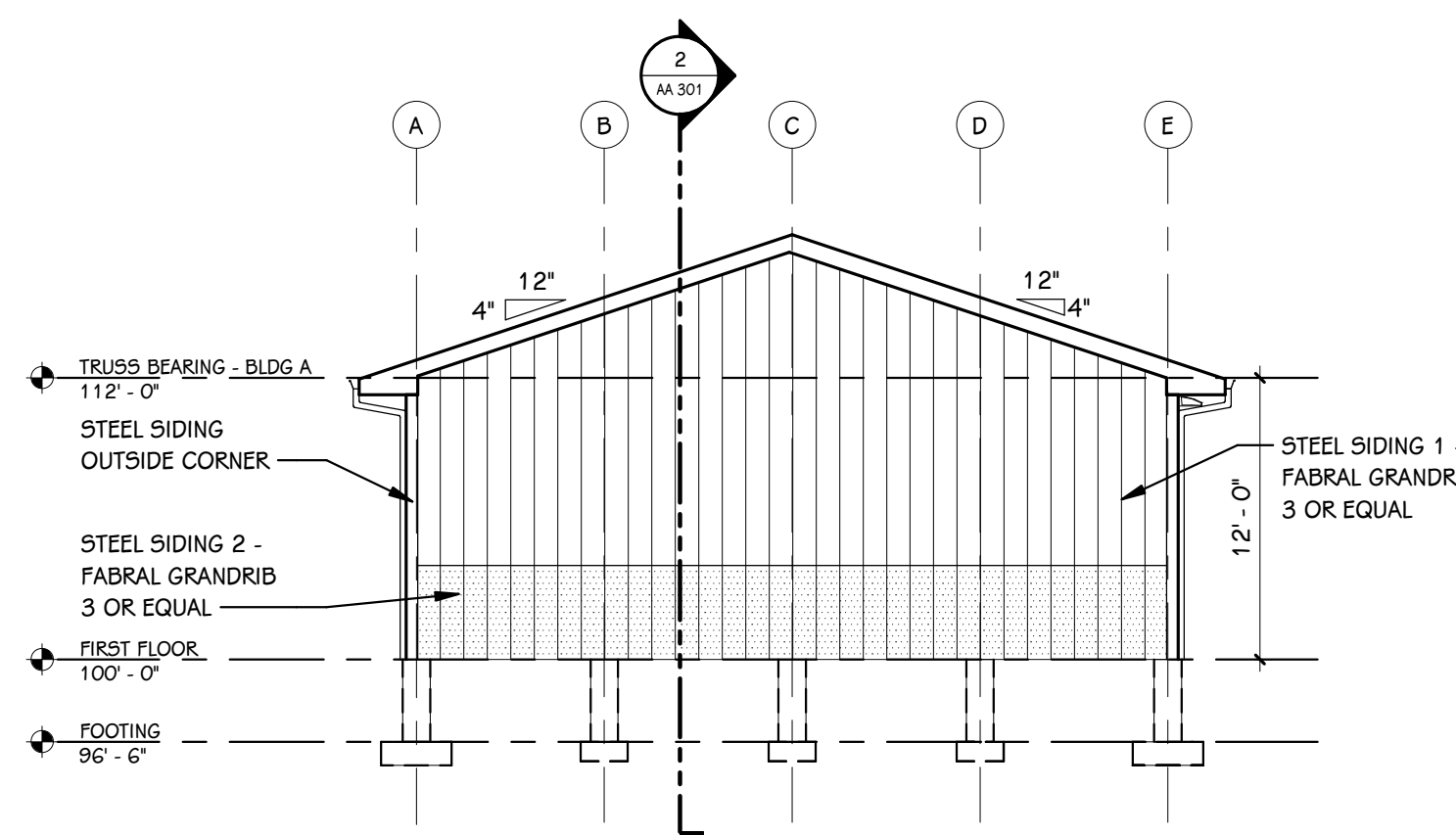
SHEET NUMBER
AA 101
20-200.00
DATE
MAY 21, 2021



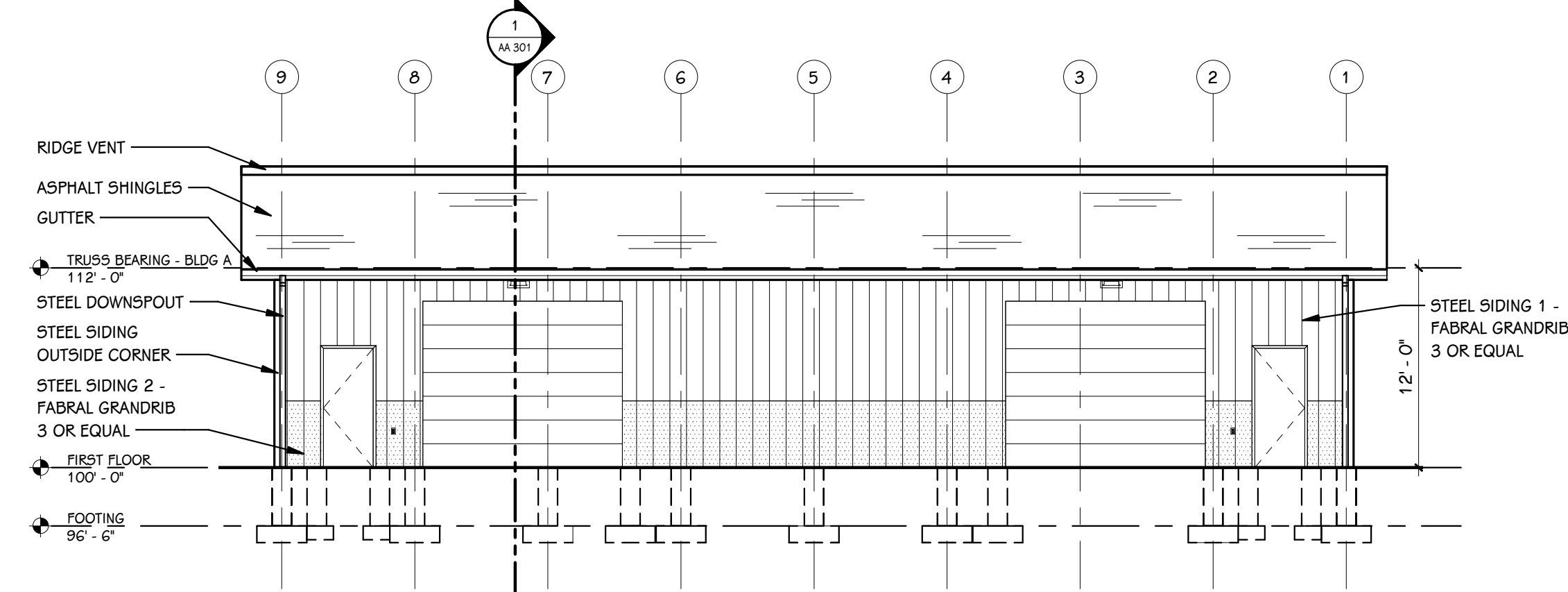
A NORTH ELEVATION
AA 301 1/8" = 1'-0"



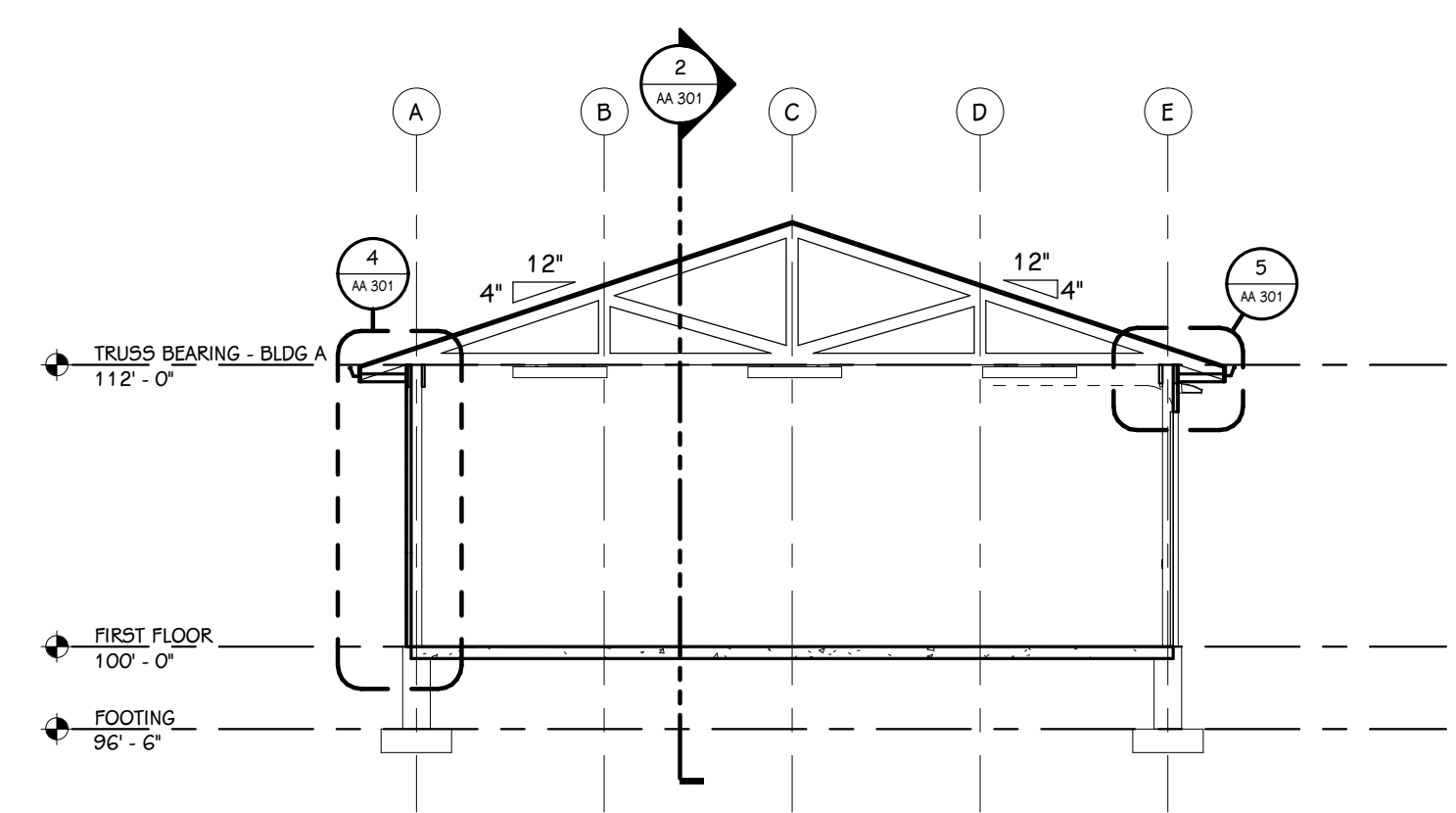
B WEST ELEVATION
AA 301 1/8" = 1'-0"



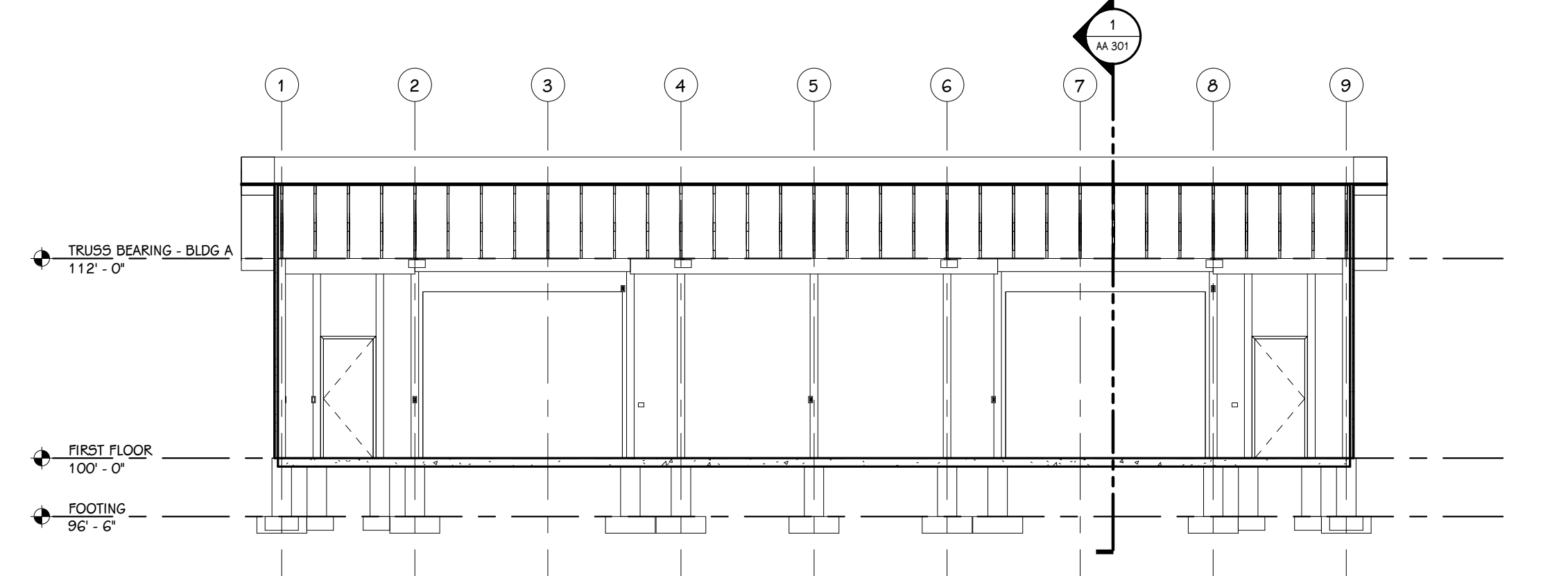
C SOUTH ELEVATION
AA 301 1/8" = 1'-0"



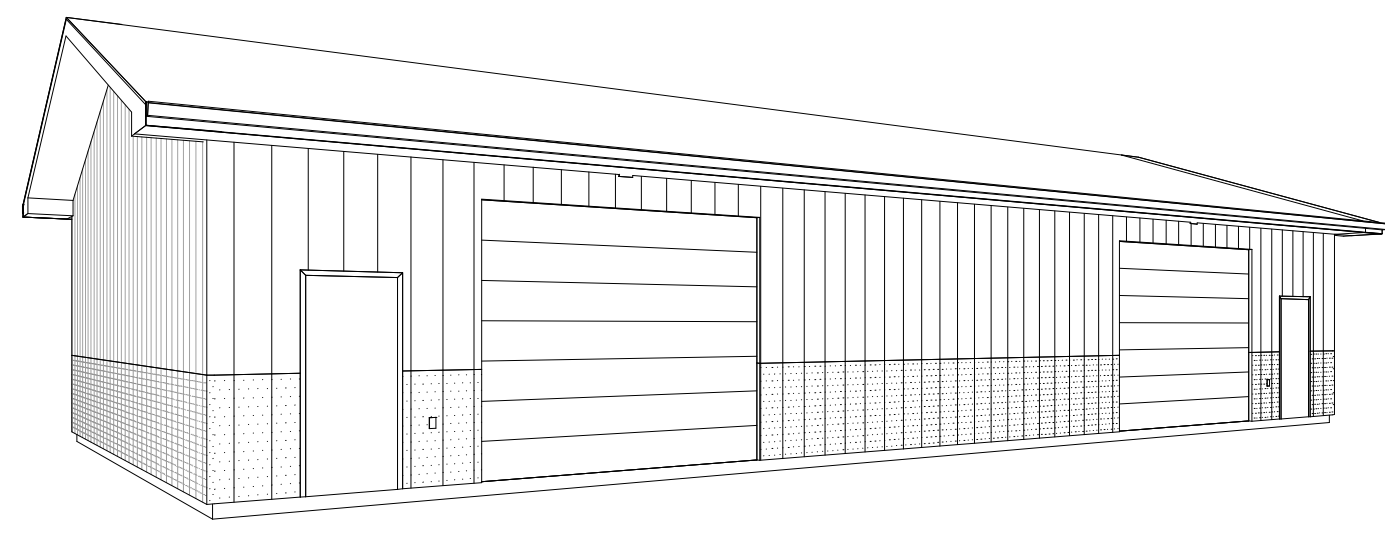
D EAST ELEVATION
AA 301 1/8" = 1'-0"



1 BUILDING SECTION
AA 301 1/8" = 1'-0"



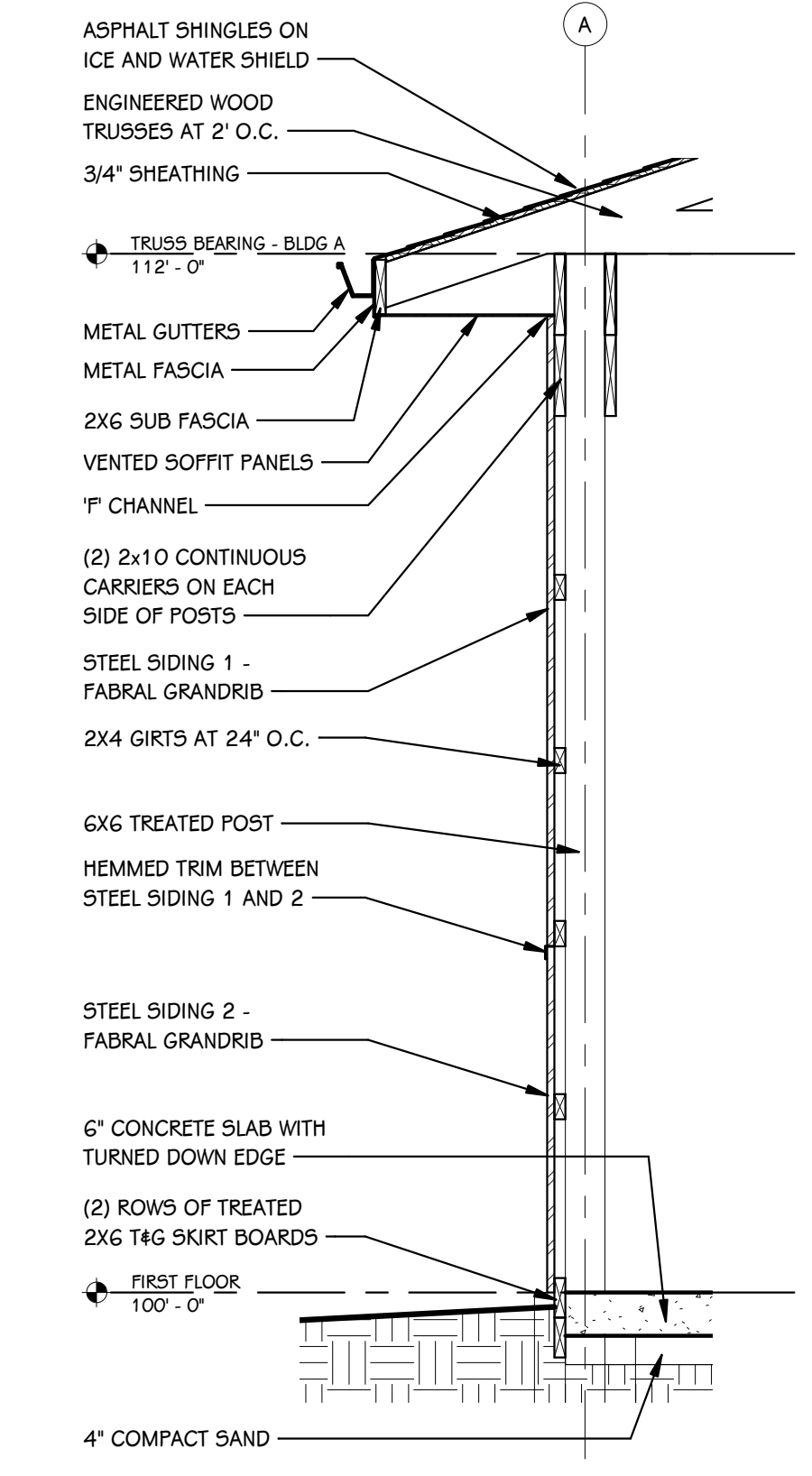
2 BUILDING SECTION
AA 301 1/8" = 1'-0"



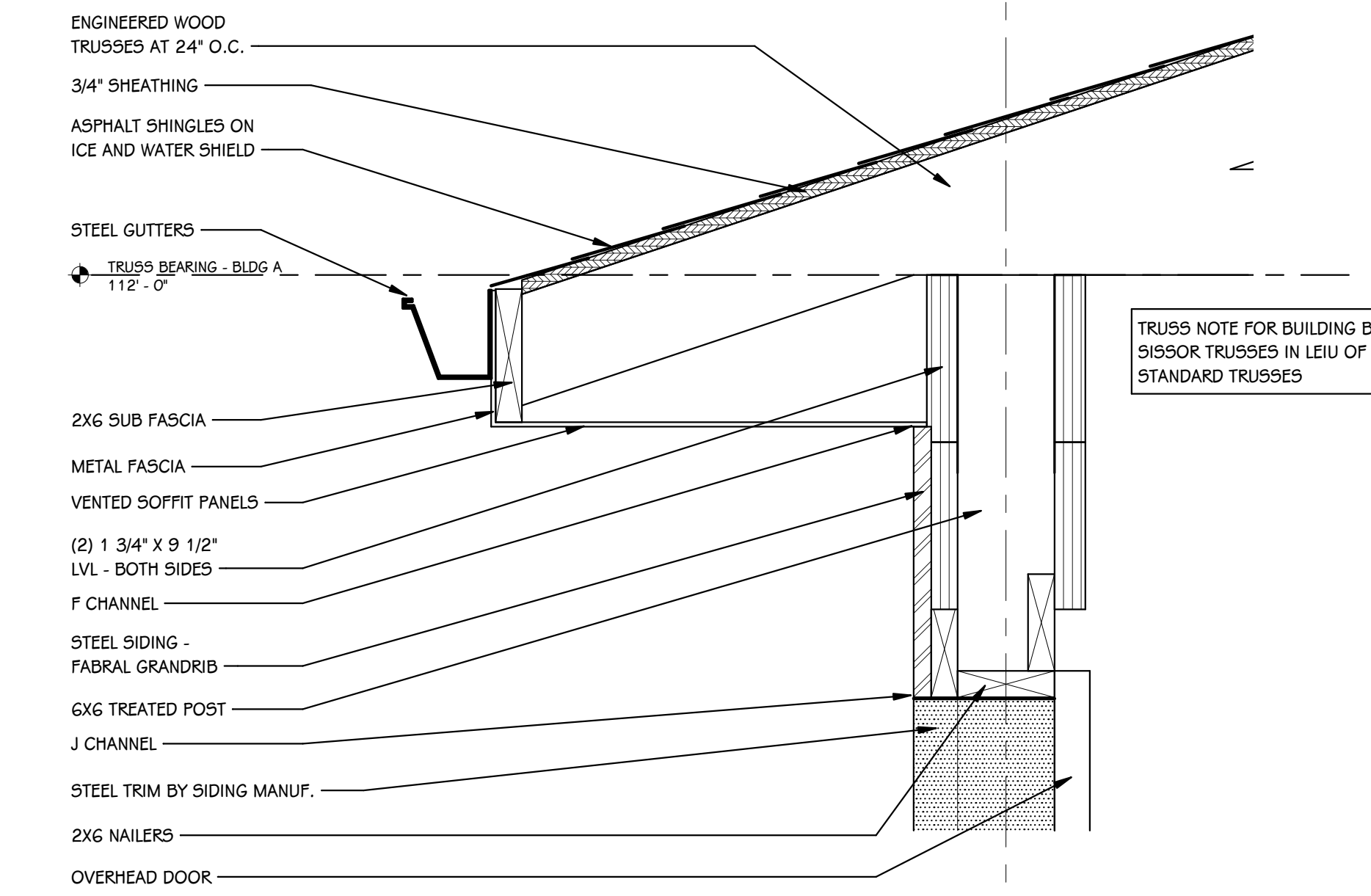
3D VIEW

EXTERIOR ELEVATION KEY

	ASPHALT SHINGLES, COLOR:
	STEEL SIDING 1, COLOR:
	STEEL SIDING 2, COLOR:



4 WALL SECTION
AA 301 1/2" = 1'-0"



5 WALL DETAIL
AA 301 1 1/2" = 1'-0"

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242 East Kalamazoo Avenue, Suite 100
Kalamazoo, Michigan 49007
269.343.6633 fax 269.343.6633 phone
www.towerpinkster.com
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PROJECT TITLE
**PORTAGE - NORTHERN
HIGH SCHOOL -
STORAGE BARN**

ISSUED FOR _____ DATE _____

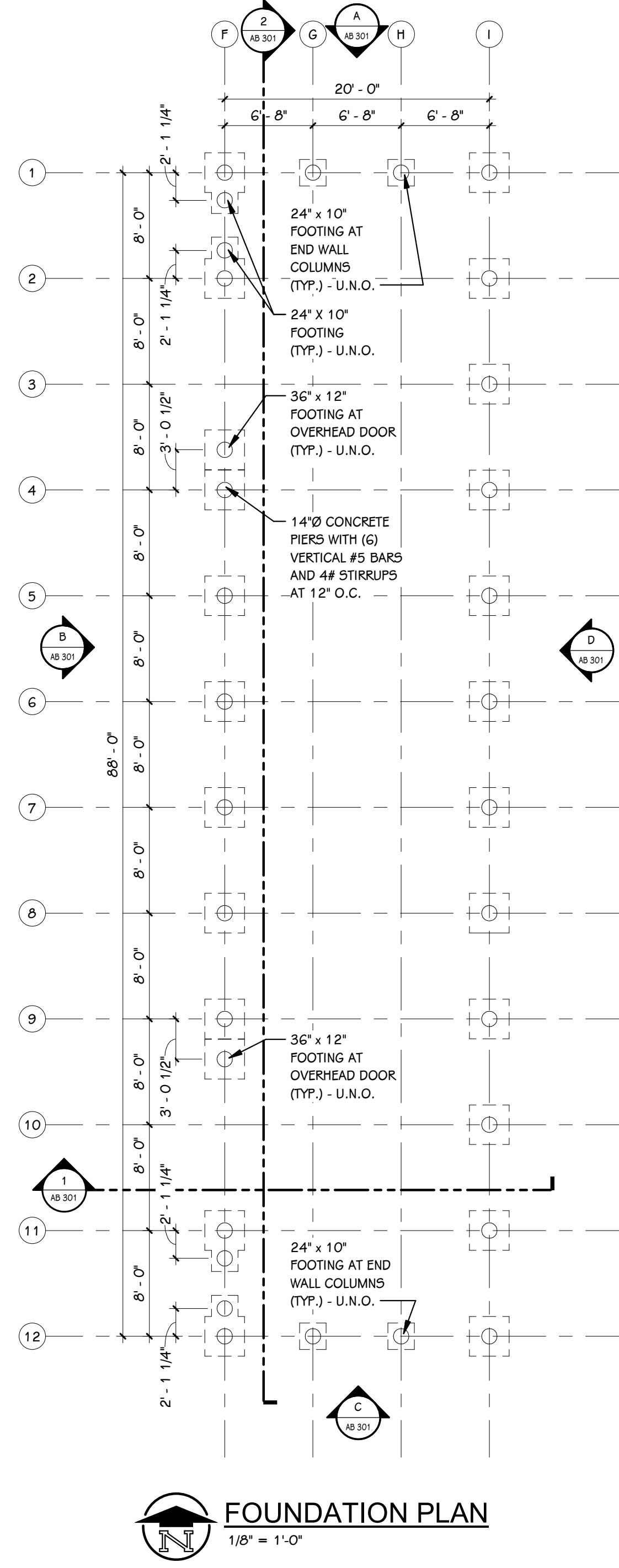
OWNER
**PORTAGE PUBLIC
SCHOOLS**

Portage, Michigan

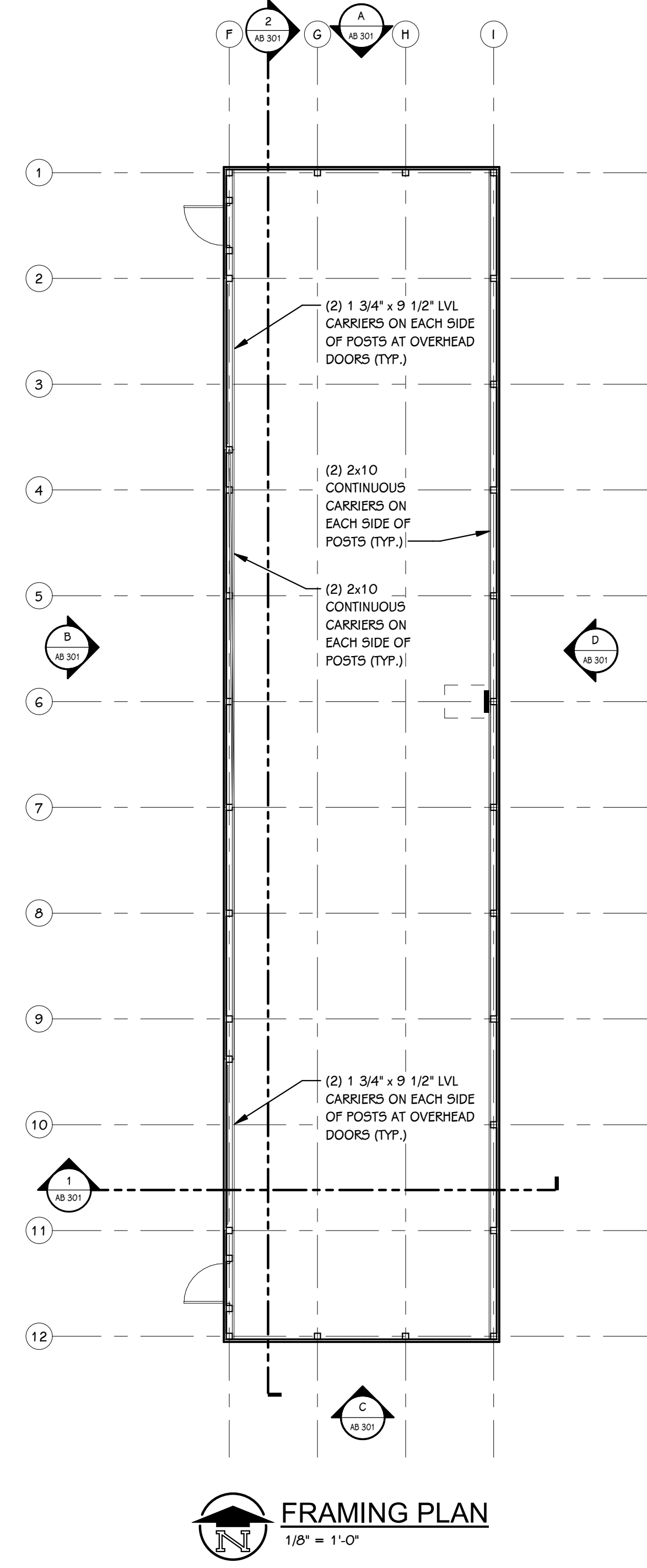
SHEET TITLE
**EXTERIOR ELEVATIONS, BUILDING
SECTIONS, 3D VIEW AND WALL
SECTIONS**

SHEET NUMBER
AA 301
20-200.00

DATE
MAY 21, 2021



FOUNDATION PLAN
1/8" = 1'-0"



FRAMING PLAN
1/8" = 1'-0"

SHEET TITLE
FOUNDATION AND FRAMING PLAN

OWNER
PORTAGE PUBLIC
SCHOOLS

Portage, Michigan

PROJECT TITLE
PORTAGE - NORTHERN
HIGH SCHOOL -
STORAGE BARN

ISSUED FOR _____ DATE _____

SHEET NUMBER
AB 100
20-200.00

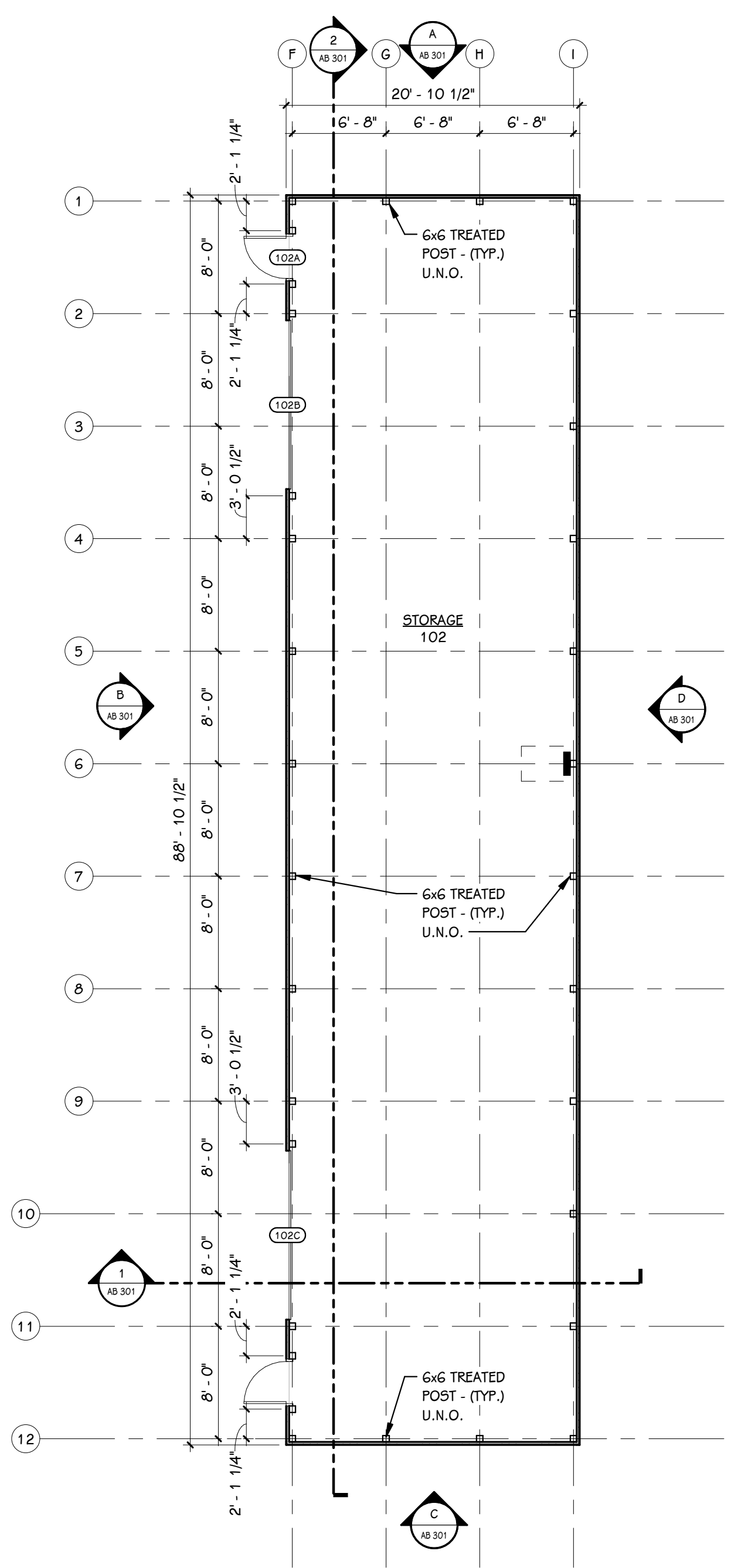
DATE
MAY 21, 2021

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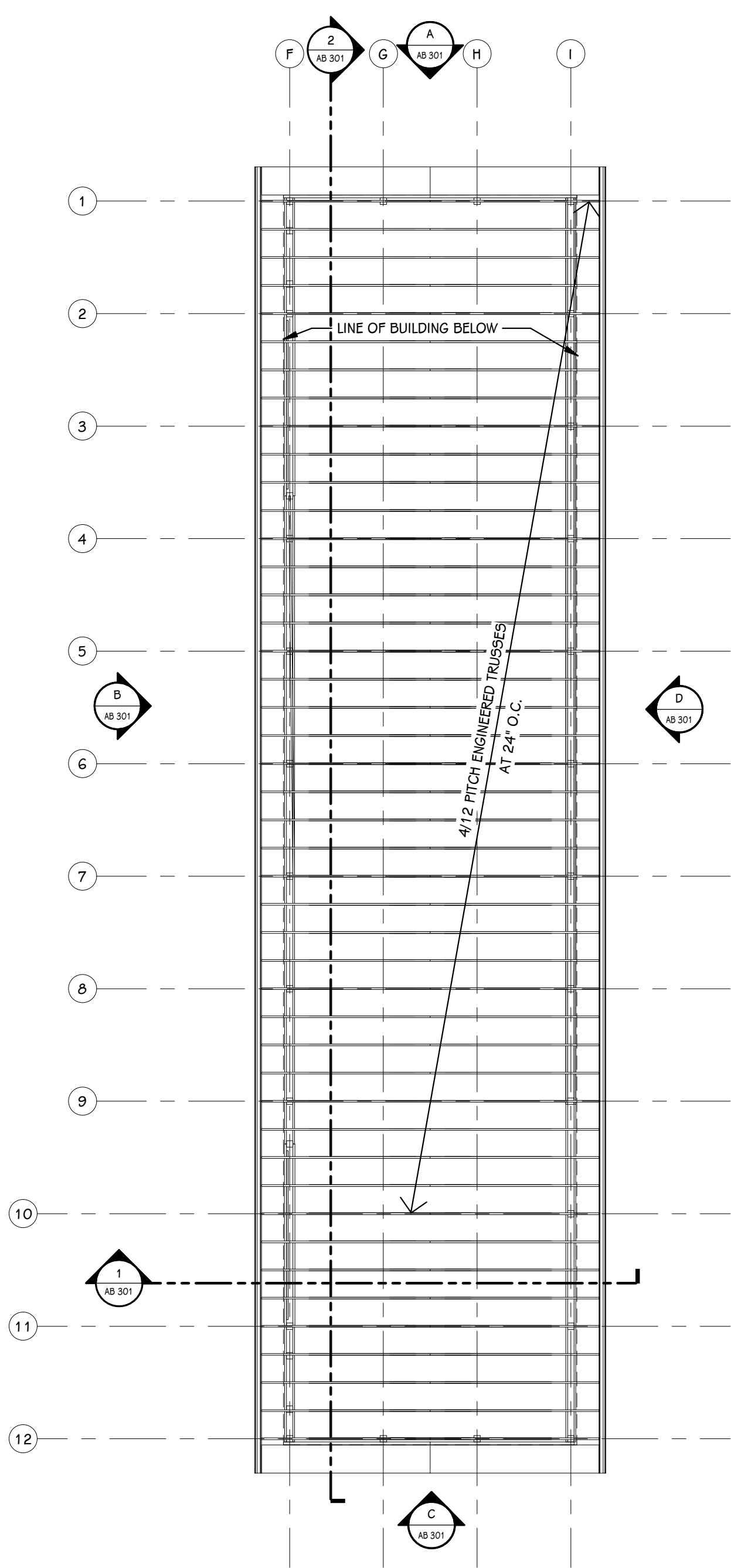
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GENERAL NOTES

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- REFER TO FLOOR FINISH PLANS FOR INTERIOR ELEVATION CALLOUTS.
- REFER TO SHEET A 501 FOR WALL AND CEILING ACCESS PANEL INFORMATION.



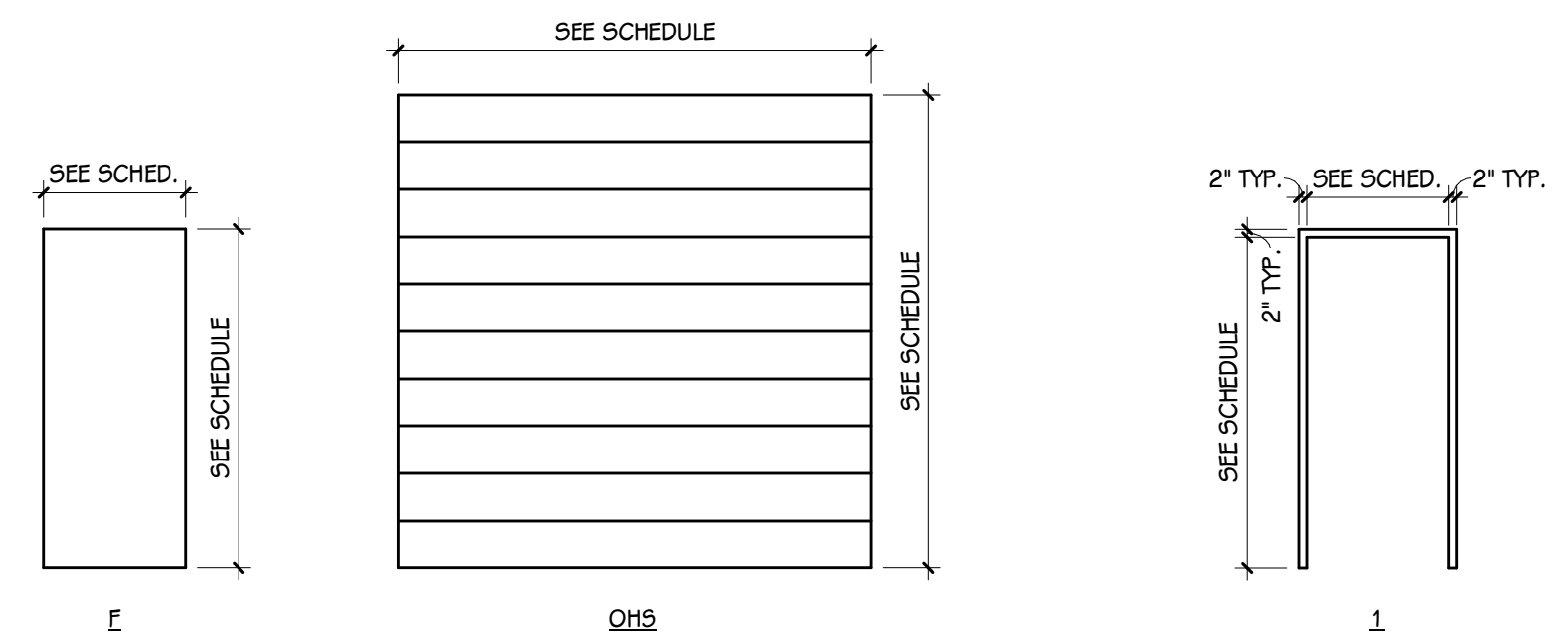
FIRST FLOOR PLAN
 1/8" = 1'-0"



ROOF FRAMING PLAN
 1/8" = 1'-0"

DOOR SCHEDULE - BUILDING B

NUMBER	ROOM	ROOM NAME	FIRE RATING		DOOR			SIZE		FRAME			DETAILS			GLASS	ACCESS CONTROLS					HDWR. SET	REMARKS
			DOOR	FRAME	TYPE	MAT	FIN	WIDTH	HEIGHT	ELEV	MAT	FIN	HEAD	JAMB	SILL		A-PHONE	BARRIER-FREE	CARD READER	ELEC. LOCK HDWR.	MAG HOLD		
101E	102	STORAGE	-	-	F	STL	FACTORY FINISH	3'-0"	7'-2"	1	HM	PAINT	-	-	-	-	No	No	No	No	No	-	-
102A	102	STORAGE	-	-	F	STL	FACTORY FINISH	3'-0"	7'-2"	1	HM	PAINT	-	-	-	-	No	No	No	No	No	1.0	-
102B	102	STORAGE	-	-	OH5	STL	FACTORY FINISH	12'-0"	12'-0"	-	STL	-	5 / AB 301	-	-	-	No	No	No	No	No	2.0	-
102C	102	STORAGE	-	-	OH5	STL	FACTORY FINISH	12'-0"	12'-0"	-	STL	-	5 / AB 301	-	-	-	No	No	No	No	No	2.0	-



DOOR TYPES
 1/4" = 1'-0"

FRAME ELEVATION
 1/4" = 1'-0"

ISSUED FOR _____ DATE _____

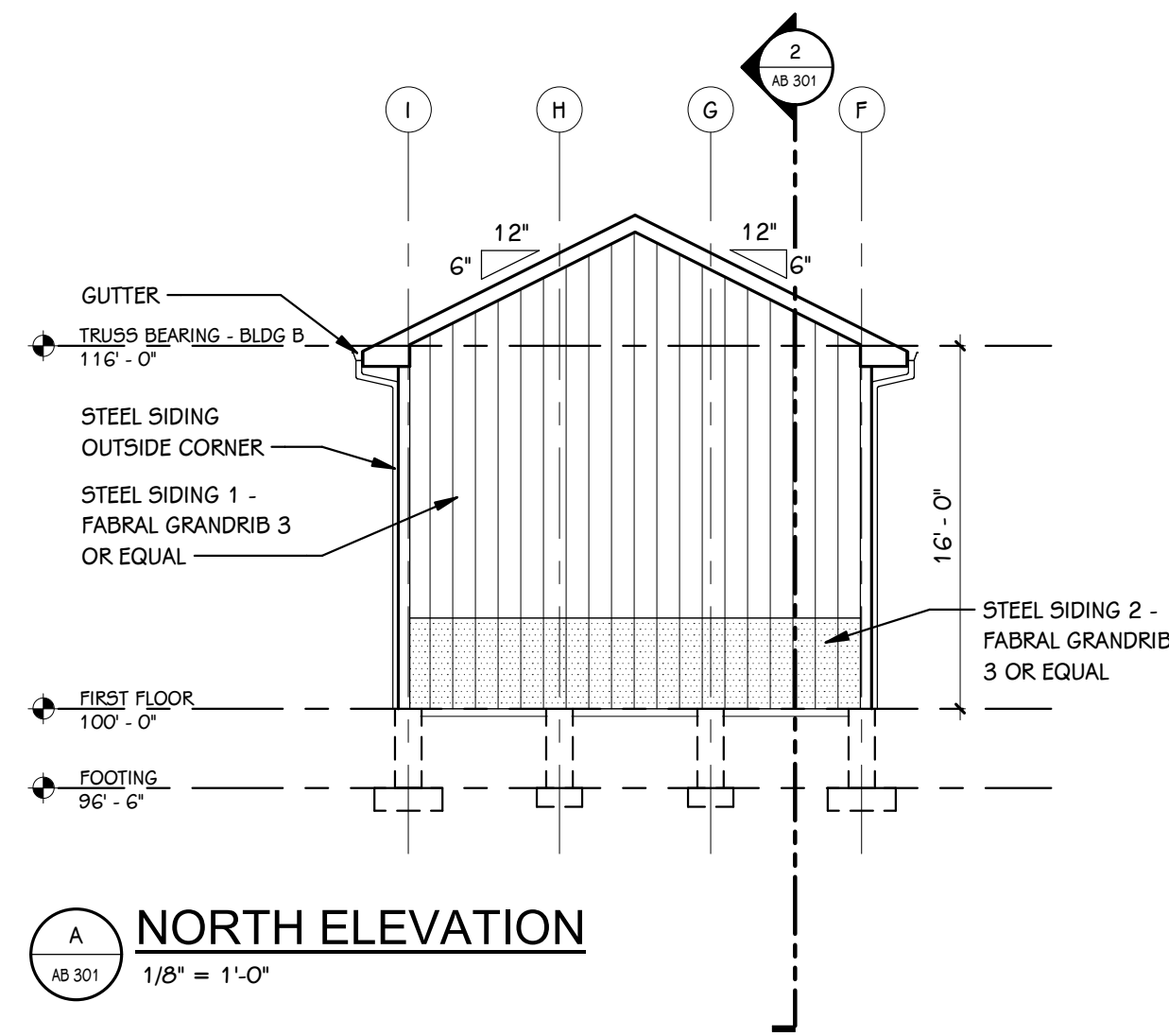
PROJECT TITLE
 PORTAGE - NORTHERN
 HIGH SCHOOL -
 STORAGE BARNs

OWNER
 PORTAGE PUBLIC
 SCHOOLS
 Portage, Michigan

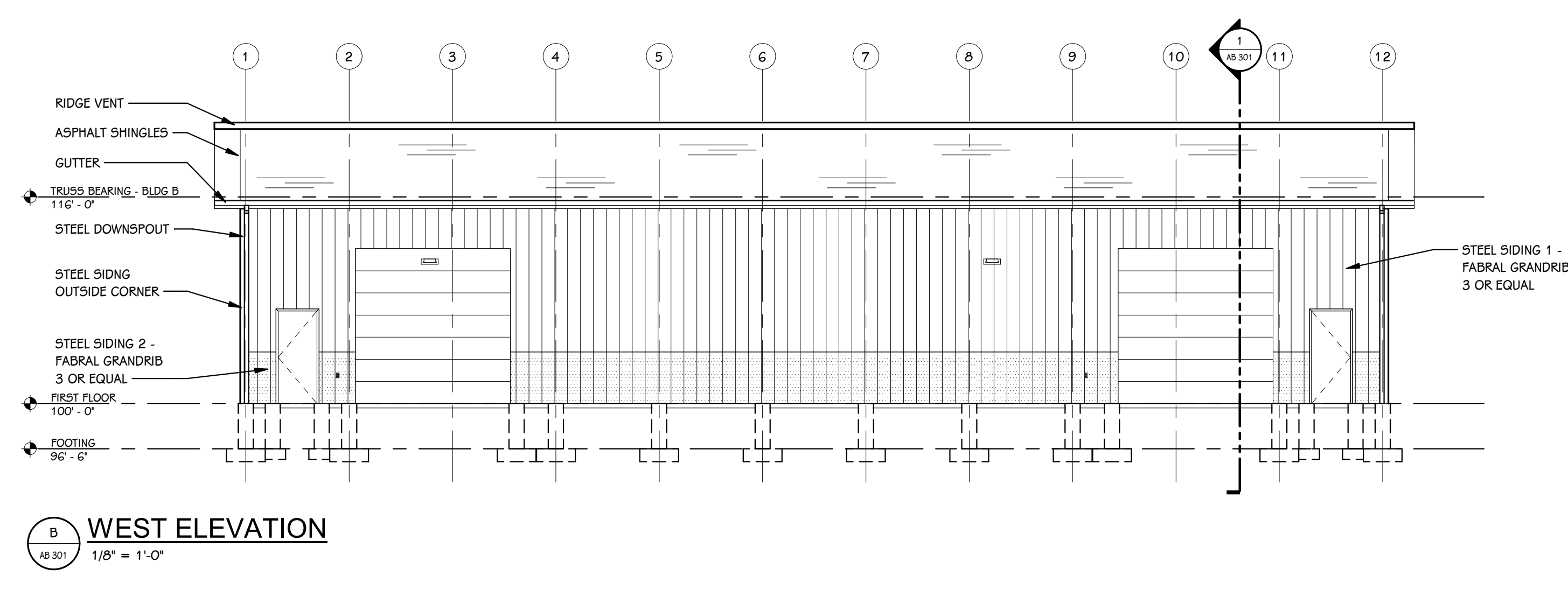
SHEET TITLE
 FIRST FLOOR PLAN, ROOF FRAMING
 PLAN AND DOOR SCHEDULE

SHEET NUMBER
AB 101
 20-200.00

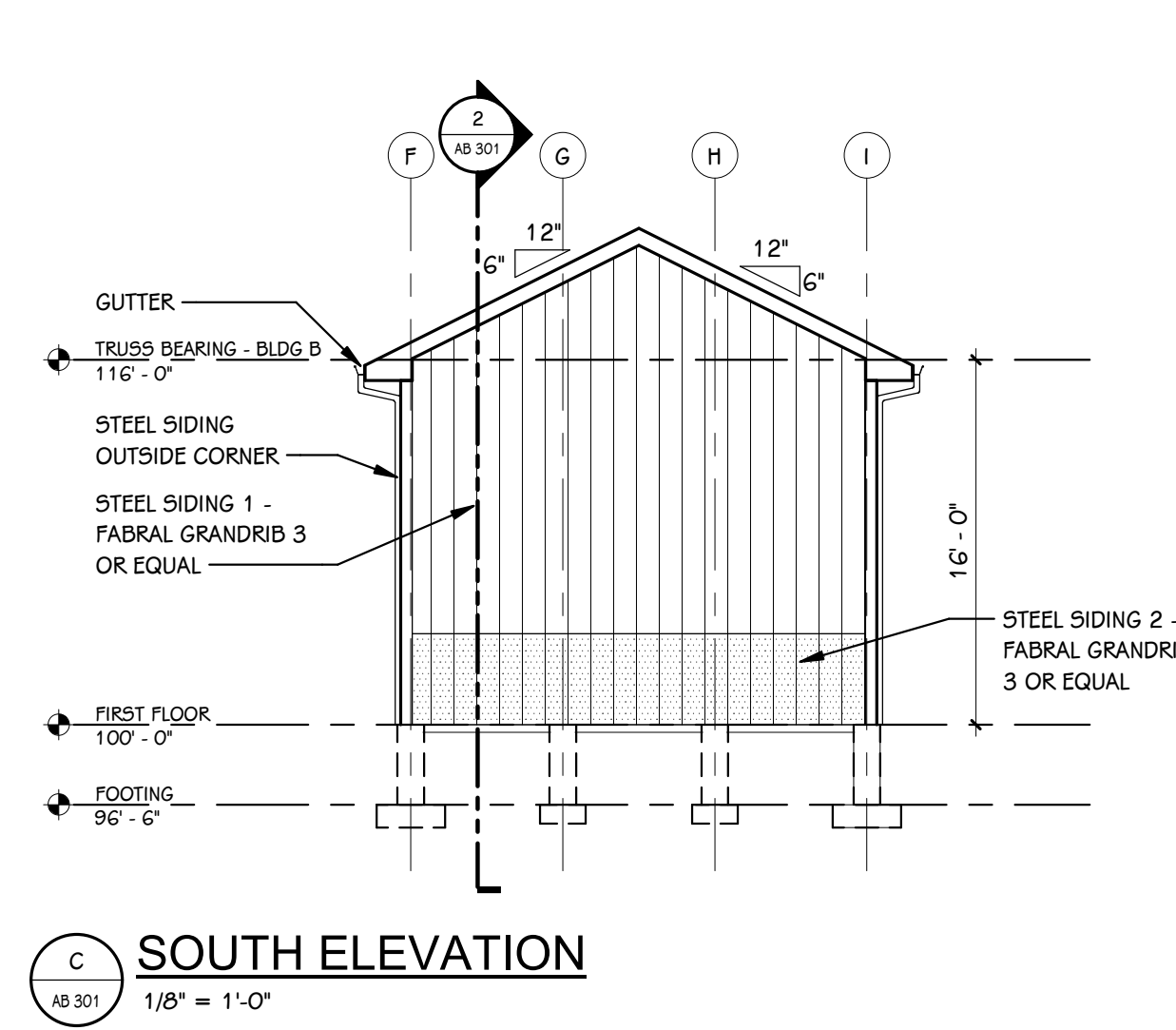
DATE
 MAY 21, 2021



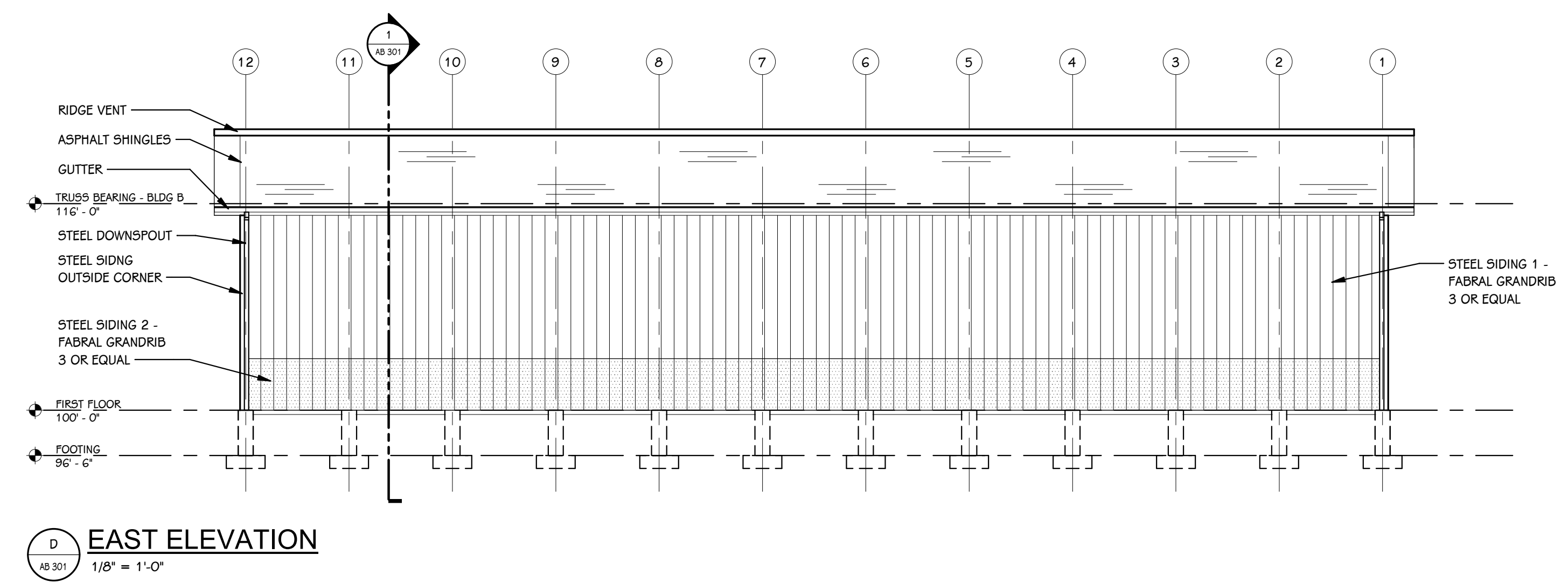
A NORTH ELEVATION
1/8" = 1'-0"



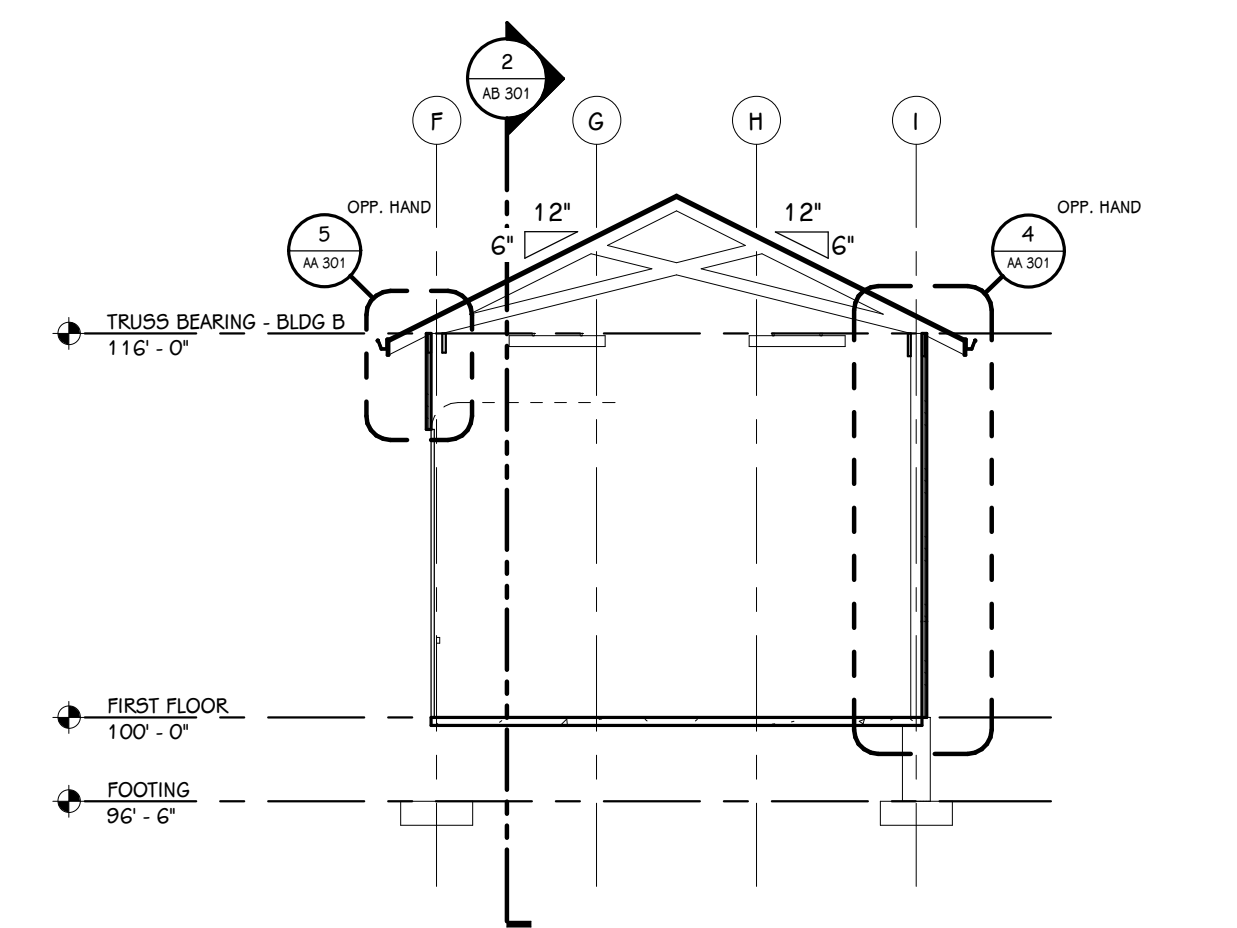
B WEST ELEVATION
1/8" = 1'-0"



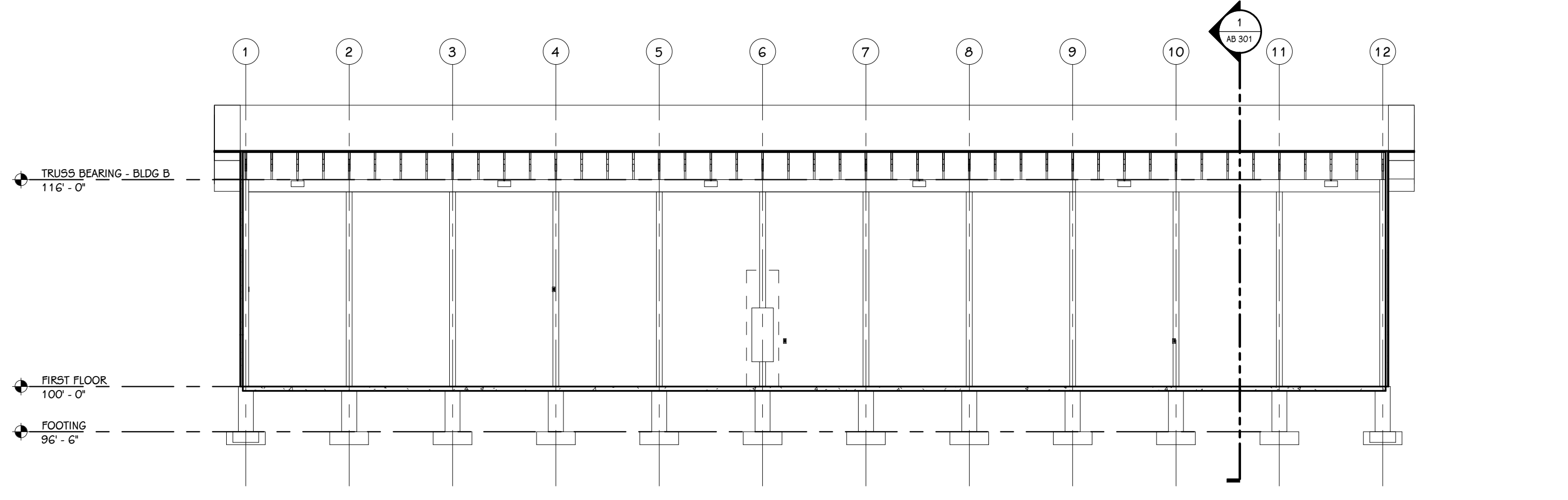
C SOUTH ELEVATION
1/8" = 1'-0"



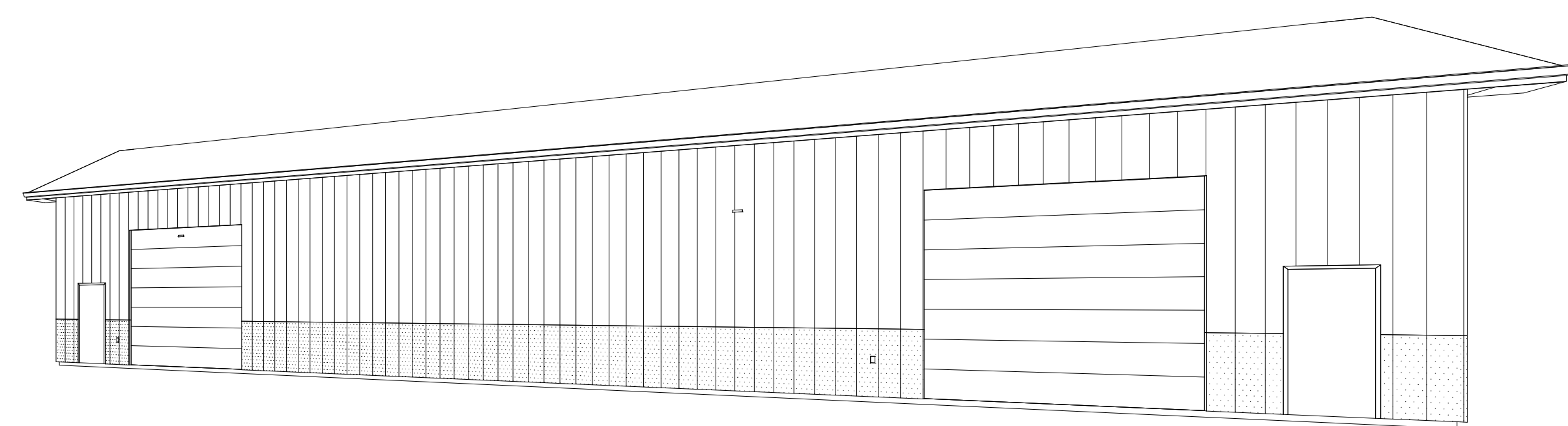
D EAST ELEVATION
1/8" = 1'-0"



1 BUILDING SECTION
1/8" = 1'-0"


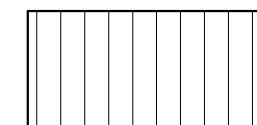
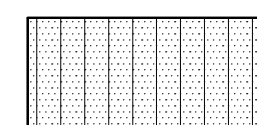


2 BUILDING SECTION
1/8" = 1'-0"



3D VIEW

EXTERIOR ELEVATION KEY

-  ASPHALT SHINGLES, COLOR:
-  STEEL SIDING 1, COLOR:
-  STEEL SIDING 2, COLOR:

ISSUED FOR _____ DATE _____

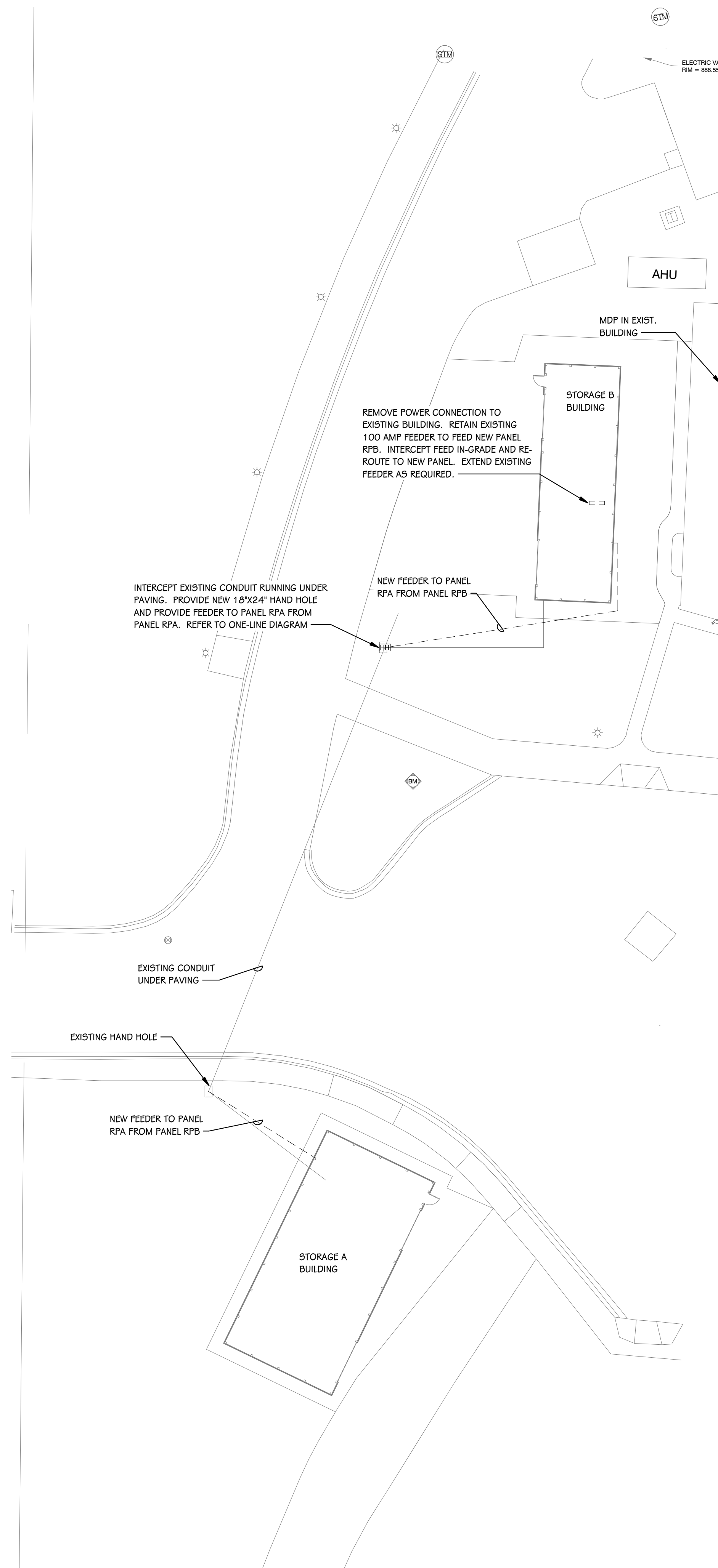
PROJECT TITLE
**PORTAGE - NORTHERN
HIGH SCHOOL -
STORAGE BARN**

OWNER
**PORTAGE PUBLIC
SCHOOLS**
Portage, Michigan

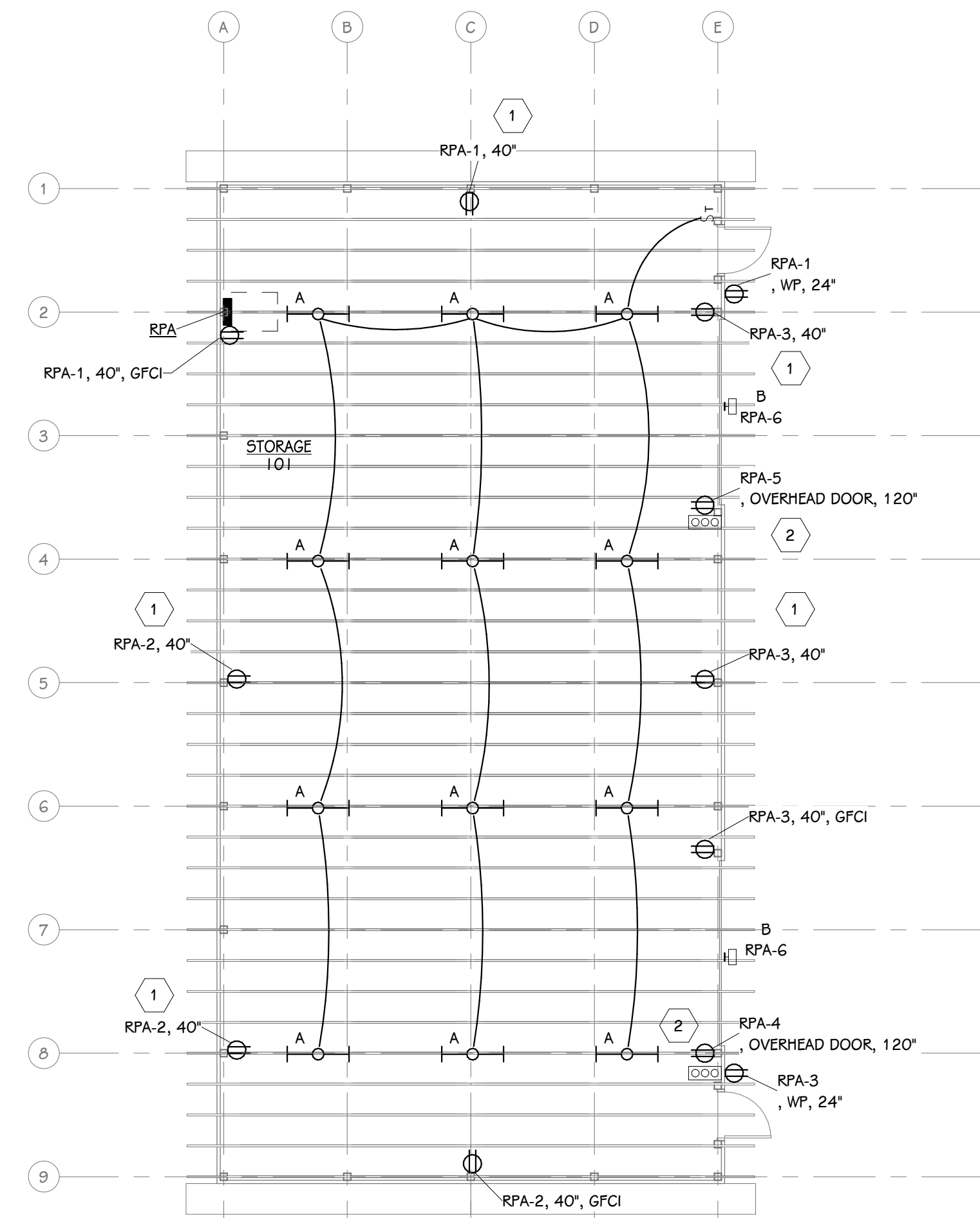
SHEET TITLE
**EXTERIOR ELEVATIONS, BUILDING
SECTIONS, AND 3D VIEW**

SHEET NUMBER
AB 301
20-200.00

DATE
MAY 21, 2021



ELECTRICAL SITE PLAN
1" = 20'-0"



STORAGE BARN A ELECTRICAL PLAN
1/8" = 1'-0"

PANELBOARD "RPA" LOAD SCHEDULE

PANEL: RPA MOUNTING: SURFACE VOLTAGE: 208/120V, 3PH, 4W
 LOCATION: STORAGE 101 / FIRST FLOOR AMPS: 60 A MB, ULSE RATED FED FROM: RPB
 ADDED ACCESSORIES: FEED-THRU LUGS... No I.C. RATING: 10 KAIC

CIRCUIT DESCRIPTION	TRIP (A)	POLES	A	B	C	POLES	TRIP (A)	CIRCUIT DESCRIPTION
1 RECEPTACLE - STORAGE 101	20	1	540	540			1	20 RECEPTACLE - STORAGE 101
3 RECEPTACLE - STORAGE 101	20	1		720	750		1	20 RECEPTACLE - STORAGE 101
5 RECEPTACLE - STORAGE 101	20	1			750	650	1	20 LIGHTING - Room 101
7 SPARE	20	1	0	0			1	20 SPARE
9 SPARE	20	1		0	0		1	20 SPARE
11 SPARE	20	1			0	0	1	20 SPARE
13								
15								
17								
TOTAL LOAD:			1080 VA	1470 VA	1400 VA			
ADDITIONAL FEED THRU LUGS LOAD (IF APPLICABLE):			0 VA	0 VA	0 A			
TOTAL AMPS:			9 A	13 A	12 A			
LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND		PANEL TOTALS			
LIGHTING -	650 VA	100.00%	650 VA		TOTAL CONNECTED LOAD: 3950 VA			
RECEPTACLE -	3300 VA	100.00%	3300 VA		TOTAL ESTIMATED DEMAND: 3950 VA			
					TOTAL CONNECTED LOAD (A): 11 A			
					TOTAL ESTIMATED DEMAND...: 11 A			

NOTES:

- GENERAL ELECTRICAL NOTES**
- ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING REQUIRED FOR NEW WORK OR WHERE DEVICES ARE REMOVED AND NOT REPLACED.
 - PATCH ALL PENETRATIONS AS REQUIRED TO MAINTAIN FIRE RATING.
 - ALL CONDUITS SHALL ENTER/EXIT THE BUILDING BELOW GRADE. PROVIDE TRENCHING AND DIRECTIONAL BORING AS REQUIRED. CUT AND PATCH AS REQUIRED. NO EXPOSED CONDUIT SHALL BE ALLOWED ON EXTERIOR OF BUILDING.
 - ALL CONDUITS SHALL RUN AS NEAR TO DECK AS PERMITTED BY CODE. SOME CONDUITS WILL BE EXPOSED AND SHALL BE RUN IN A NEAT MANNER. MAINTAIN THE SAME SPACING WHEN CONDUITS ARE RUN TOGETHER. CONCEAL JUNCTION BOXES OVER LAY-IN CEILING AND USE EMT DROPS DOWN TO CLOUDS. LOCATE CONDUIT DROPS TO CLOUDS AND CEILING ELEMENTS IN LEAST VISIBLE LOCATION.
- ELECTRICAL KEYED NOTES**
- CONNECT RECEPTACLE TO LOAD SIDE OF UPSTREAM GFCI RECEPTACLE.
 - COORDINATE FINAL POWER CONNECTION WITH OVERHEAD DOOR PROVIDER. MOUNT AND WIRE DOOR SWITCH AND ELECTRIC EYE(S) AT BOTTOM OF DOOR.

TowerPinkster
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269.343.6633 fax

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PROJECT TITLE
PORTAGE - NORTHERN
HIGH SCHOOL -
STORAGE BARN

OWNER
PORTAGE PUBLIC
SCHOOLS

Portage, Michigan

SHEET TITLE
STORAGE BARN A ELECTRICAL PLAN

SHEET NUMBER
EA 101

DATE
MAY 21, 2021

20-200.00

ISSUED FOR _____ DATE _____

LIGHT FIXTURE SCHEDULE				
TYPE	DESCRIPTION	MOUNTING	WATTS	MANUFACTURER
A	INDUSTRIAL STRIP	CHAIN	50 VA	LITHONIA: CLX-L48-7000-5EF-WDL-WD-MVOLT-GZ10-40K-8OCRI-WH-HC36
B	LED WALL PACK	WALL	25 VA	LITHONIA: # W9T-LED-P2-40K-VF-MVOLT-PIH-COLOR

ELECTRICAL SYMBOLS

SYMBOL DESCRIPTION MOUNTING HEIGHTS

LIGHTING SYMBOLS

So DIMMER SWITCH 40"
 HO WALL MTD. LIGHT FIXTURE
 I-O INDUSTRIAL LIGHT FIXTURE

RECEPTACLE SYMBOLS

⊖ DUPLEX RECEPTACLE 16"
 ⊖GFI DUPLEX RECEPTACLE - WITH GFI 16"
 ⊖WF DUPLEX RECEPTACLE - WET LOCATION ENCLOSURE WITH GFI 24"

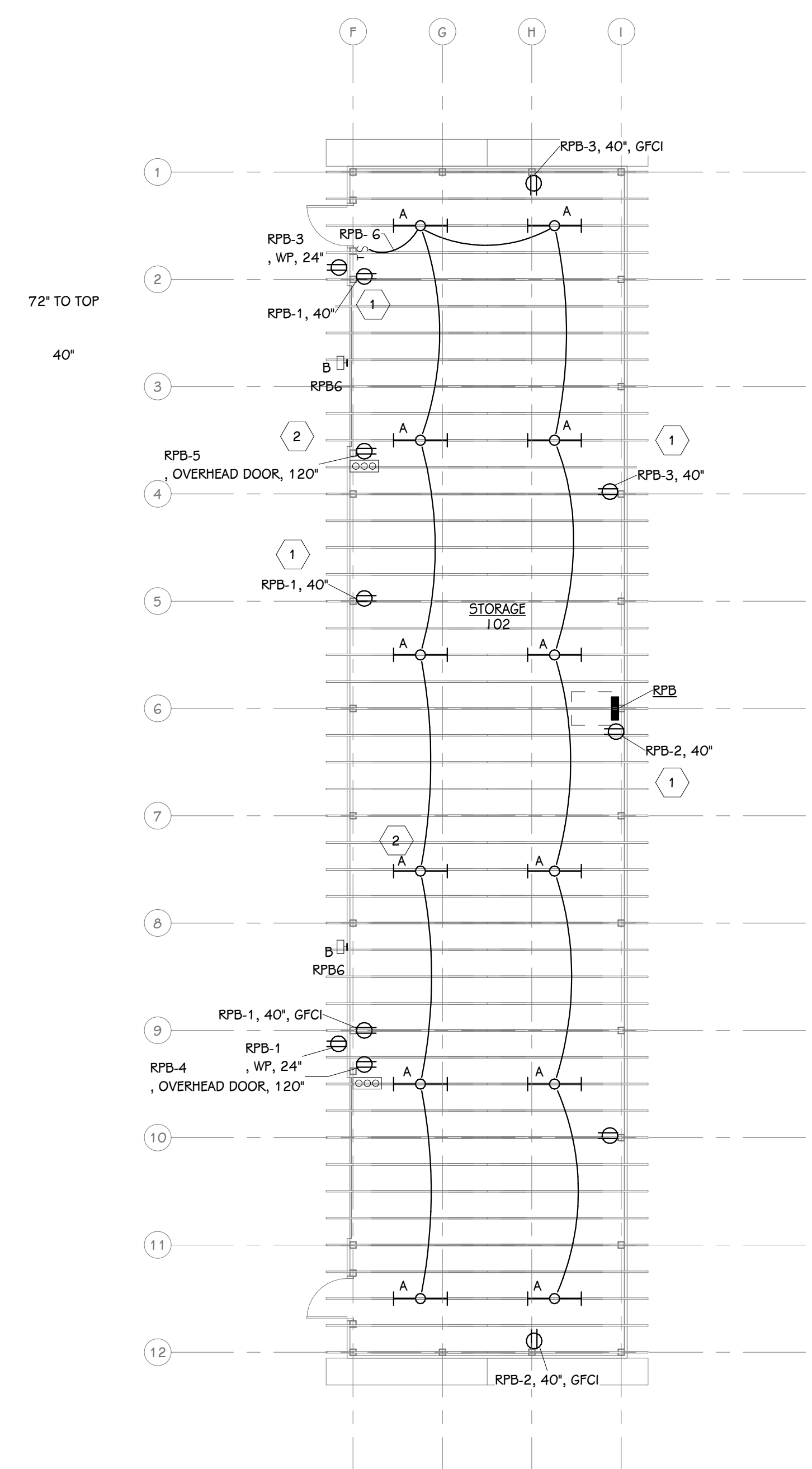
POWER SYMBOLS

▭ PANELBOARD
 ⎓ CIRCUIT BREAKER
 ⊞ PUSH-BUTTON STATION - 3 HOLE
 ⊞ FLUSH IN-GRADE HAND HOLE

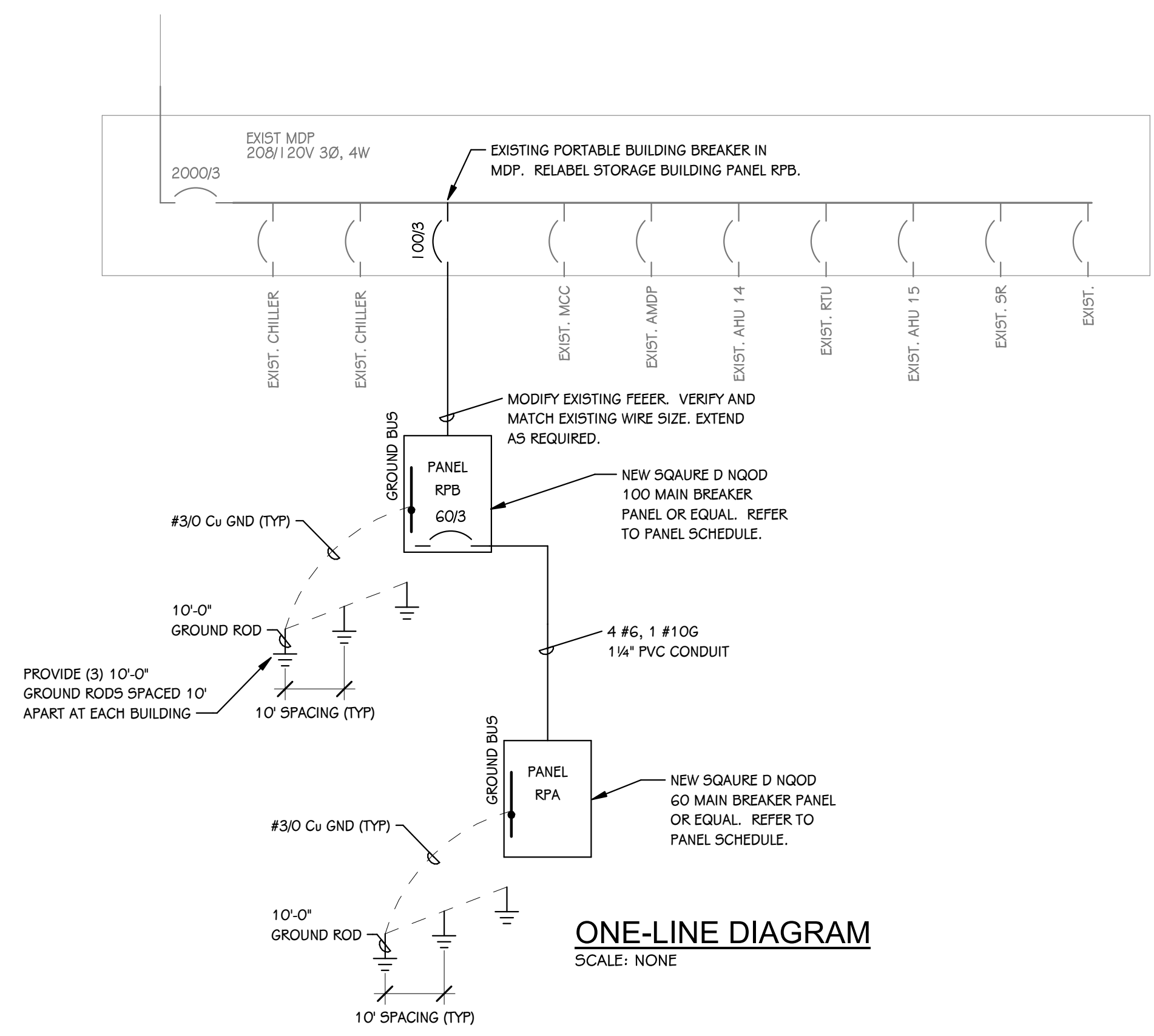
NOTES:

MOUNT DEVICES AT HEIGHTS INDICATED UNLESS INDICATED OTHERWISE ON PLANS. HEIGHTS ARE TO BOTTOM OF DEVICE.

PANELBOARD " RPB " LOAD SCHEDULE										
PANEL: RPB			MOUNTING: SURFACE			VOLTAGE: 208/120V, 3PH, 4W				
LOCATION: STORAGE 102 / FIRST FLOOR			AMPS: 100 A MB, ULSE RATED			FED FROM: MDP				
ADDED ACCESSORIES:			FEED-THRU LUGS... No			I.C. RATING: 10 KAIC				
CIRCUIT DESCRIPTION	TRIP (A)	POLES	A	B	C	POLES	TRIP (A)	CIRCUIT DESCRIPTION		
1 RECEPTACLE - STORAGE 102	20	1	720	540			1	20	RECEPTACLE - STORAGE 102	2
3 RECEPTACLE - STORAGE 102	20	1		540	750		1	20	RECEPTACLE - STORAGE 102	4
5 RECEPTACLE - STORAGE 102	20	1			750	650	1	20	LIGHTING - Room 102	6
7 SPARE	20	1	0	0			1	20	SPARE	8
9 SPARE	20	1		0	0		1	20	SPARE	10
11 SPARE	20	1			0	0	1	20	SPARE	12
13 SPARE	20	1	0	0			1	20	SPARE	14
15 SPARE	20	1		0						16
17										18
19			1080				3	60	RPA	20
21				1470			--	--		22
23					1400		--	--		24
TOTAL LOAD:			2340 VA	2760 VA	2800 VA					
ADDITIONAL FEED THRU LUGS LOAD (IF APPLICABLE):			0 VA	0 VA	0 A					
TOTAL AMPS:			20 A	24 A	24 A					
LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS						
LIGHTING -	1300 VA	100.00%	1300 VA	TOTAL CONNECTED LOAD: 7900 VA						
RECEPTACLE -	6600 VA	100.00%	6600 VA	TOTAL ESTIMATED DEMAND: 7900 VA						
				TOTAL CONNECTED LOAD (A): 22 A						
				TOTAL ESTIMATED DEMAND... 22 A						
NOTES:										



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STORAGE BARN B ELECTRICAL PLAN
 1/8" = 1'-0"

ONE-LINE DIAGRAM
 SCALE: NONE

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 269.343.8633 phone
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PROJECT TITLE
PORTAGE PUBLIC HIGH SCHOOL - STORAGE BARN B

OWNER
PORTAGE PUBLIC SCHOOLS

Portage, Michigan

SHEET TITLE
STORAGE BARN A ELECTRICAL PLAN

SHEET NUMBER
EB 101

DATE
MAY 21, 2021

SCALE
20-200.00