STATE OF DELAWARE
OMB / DIVISION OF FACILITIES MANAGEMENT
OMB / DFM CONTRACT # 0000628757

NEW CONSTRUCTION

OF

BELMONT HALL PAVILLION

217 SMYRNA LEIPSIC ROAD
SMYRNA, DELAWARE 19977

FOR THE

DIVISION OF FACILITIES MANAGEMENT

PROJECT LOCATION

BELMONT HALL

LOCATION MAP

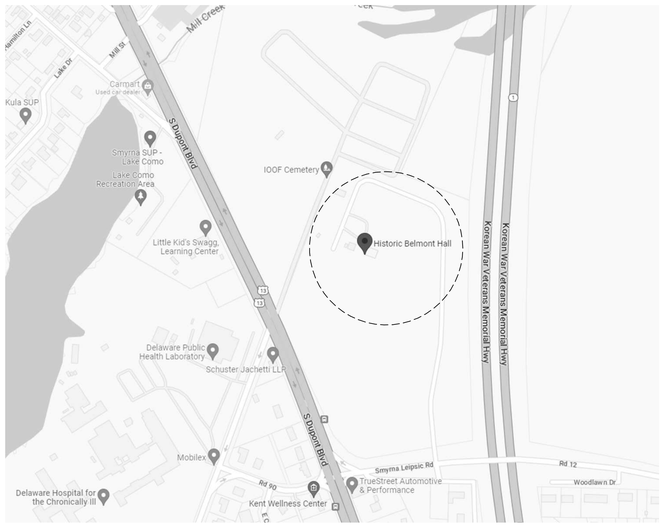
SITE

KENT COUNTY, DOVER DELAWARE

AREA MAP

BELMONT HALL PAVILION

217 SMYRNA LEIPSIC ROAD, SMYRNA, DELAWARE 19977



SITE MAP

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PROJECT TITLE

BELMONT HALL PAVILLION

217 SMYRNA LEIPSIC ROAD
SMYRNA, DELAWARE 19977

ISSUED
FOR BID / PERMIT ONLY
ISSUED: 07/14/2023

SHEET TITLE

COVER SHEET

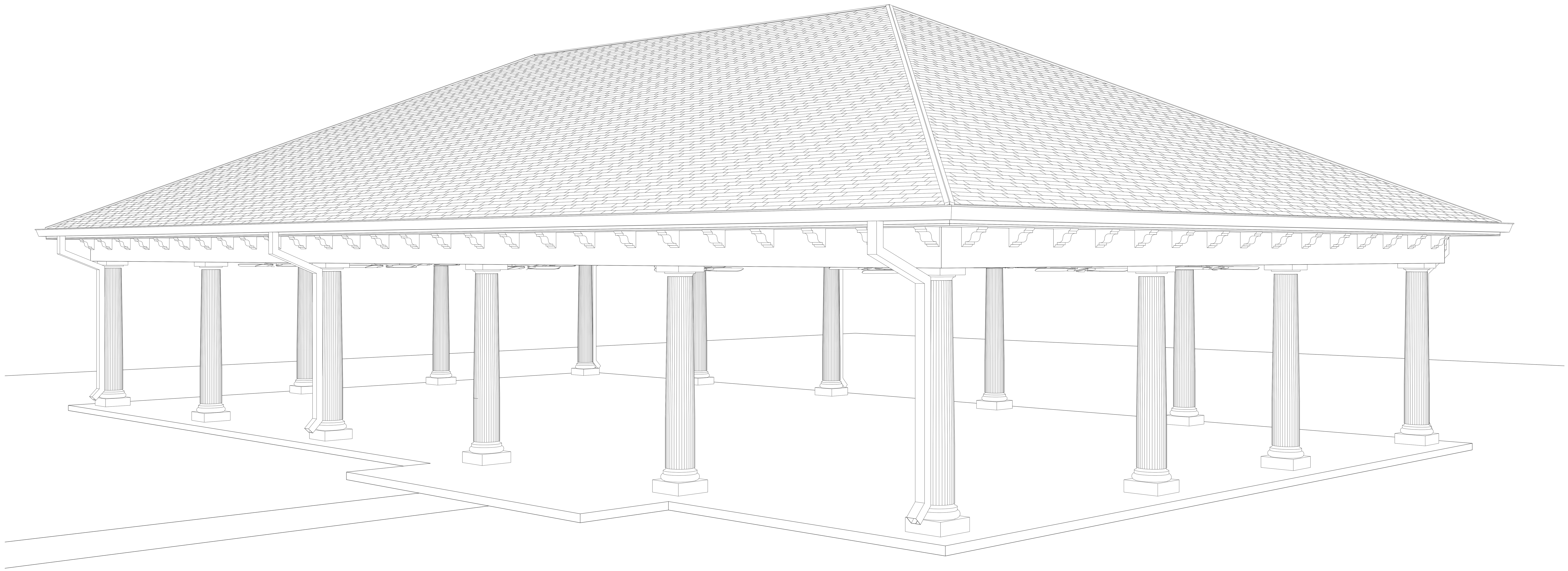
ISSUE BLOCK

Mark	Date	Description

PROJECT NO: 2022035.01
DATE: 07/14/2023
SCALE:
DRAWN BY: CGK | PROJ MGR: BLH

G001

9/12/2023 10:10:40 AM C:\Users\Ckilcain\Documents\2022035D1_ckilcain.rvt



ABBREVIATIONS

ACT	ACOUSTIC CEILING TILE
AC.	ACOUSTIC
AL., ALUM.	ALUMINUM
A.P.	ACCESS PANEL
A.R.GWB	ABUSE RESISSTANT GWB
A.F.F.	ABOVE FINISHED FLOOR
BD.	BOARD
BLDG.	BUILDING
B.M.	BENCH MARK
BRG.	BEARING
CAB.	CABINET
CB, C.B.	CHALKBOARD
C.T.	CERAMIC TILE
C.H.	CEILING HEIGHT
CJ, C.J.	CONTROL JOINT
C.L.	CENTER LINE
CLG.	CEILING
CLO., C.	CLOSET
CLR.	CLEAR
C.M.U., CMU	CONCRETE MASONRY UNIT
COL.	COLUMN
CONC.	CONCRETE
CONST.	CONSTRUCTION
CONT.	CONTINUOUS
CORR.	CORRIDOR
CPT.	CARPET
C.R.	COLD ROLLED
D.A.	DISTURBED AREA
DET.	DETAIL
D.F.	DRINKING FOUNTAIN
DBL	DOUBLE
DIA.	DIAMETER
DIM.	DIMENSION
DISP.	DISPENSER
DR.	DOOR
DW	DRYWALL
DS	DOWNSPOUT
DWG.	DRAWING
EA.	EACH
E.J., EJ	EXPANSION JOINT
ELEC.	ELECTRIC(-AL)
EP	EPOXY PAINT
EQ.	EQUAL
EQUIP, EQPT	EQUIPMENT
E.W.C.	ELECTRIC WATER COOLER
EXG.	EXISTING
EXP.	EXPANSION
EXT.	EXTERIOR
F.C.	FIRE CODE
F.C.U.	FAN COIL UNIT
F.D.	FLOOR DRAIN
FON.	FOUNDATION
F.E.	FIRE EXTINGUISHER
F.E.C.	FIRE EXTINGUISHER CABINET
FIN.F.,F.F.	FINISHED FLOOR
F.OF S.	FACE OF STUD
FRP	FIREGLASS REINFORCED PLASTIC
F.R.T.	FIRE RETARDANT TREATED
FTG.	FOOTING
FURR.	FURRING
F.V.	FIELD VERIFY
FVC	FIRE VALVE CABINET
GA.	GAUGE
G.B.	GRAB BAR
G.W.B, GWB	GYPSUM WALL BOARD
GYP.BD.	GYPSUM BOARD
H., HT.	HEIGHT
H.C.	HANDICAPPED
HDW.	HARDWARE
H.M.	HOLLOW METAL
HR.	HOUR
H.P.	HIGH POINT
I.D.	INSIDE DIAMETER
INSUL.	INSULATION
J., JAN.	JANITOR
JST.	JOIST
JT.	JOINT
LAM.	LAMINATE
LAV.	LOW POINT
L.P.	LAVATORY SINK
M.	MEN
MACH.	MACHINE
MAINT.	MAINTENANCE
MAS.	MASONRY
MAT.	MATERIALS
MAX.	MAXIMUM
MB, M.B.	MARKER BOARD
M.C.	MEDICINE CABINET
MECH.	MECHANICAL
MET., MTL.	METAL
MFR.	MANUFACTURER
MIN.	MINMUM
M.O.	MASONRY OPENING
M.S.,	METAL SHELVING
MTD	MOUNTED
N.C., NONCOM.	NON COMBUSTIBLE
N.I.C.	NOT IN CONTRACT
NO., #	NUMBER
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
OFF.	OFFICE
O.H.	OPPOSITE HAND
OPNG.	OPENING
PART.	PARTITION
PL.	PLATE
PLAM,, P-LAM	PLASTIC LAMINATE
PLY., PWD	PLYWOOD
PNL.	PANEL
PS., P.S.	PROJECTOR SCREEN
PT., PTD.	PAINTED
P.R.V.	POWER ROOF VENTILATOR
R.D.	ROOF DRAIN
REC.	RECESSED
RECPT.	RECEPTIONIST
REF.	REFRIGERATOR
REQD.	REQUIRED
R.L.	RAIN LEADER
RM.	ROOM
R.O.	ROUGH OPENING
RUB.	RUBBER (WALL BASE)
S.D.	SOAP DISPENSER
SECT.	SECTION
S.G.F.T.	STRUCT. GLAZED FACING TILE
S.H.	SHOWER HEAD
SHT.	SHEET
SIM.	SIMILAR
S.M.	SURFACE MOUNTED
S.P.	STAND PIPE
S.S.	SERVICE SINK
S/S	STAINLESS STEEL
STL.	STEEL
STOR.	STORAGE
STRUCT.	STRUCTURAL
SUSP.	SUSPENDED
SYN.FL.	SYNTHETIC FLOOR
TB, T.B.	TACKBOARD
TEL.	TELEPHONE
T.& G.	TONGUE AND GROOVE
THRESH.	THRESHOLD
T.O.B.	TOP OF BEARING
T.O.M.	TOP OF MASONRY PARAPET
T.P.	TOILET PAPER HOLDER
T.S.	TACK STRIP, TEACHING STATION
T.W.	TEACHING WALL
TYP.	TYPICAL
U.L.	UNDERWRITERS LABORATORIES
U.O.N.	UNLESS OTHERWISE NOTED
U.S.G.	U.S. GYPSUM COMPANY
V.A.T.	VINYL ASBESTOS TILE
V.C.T.	VINYL COMPOSITION TILE
VERT.	VERTICAL
VEST., V.	VESTIBULE
V.R.G.	VINYL REDUCER STRIP
V.T.R.	VENT THROUGH ROOF
W.	WOMEN
W/	WITH
WAIN.	WAINSCOT
WARD.	WARDROBE
W.C.	WATER CLOSET
WD.	WOOD
WDR.	WARDROBE
WL.	WALL
W.M.	WALL-MOUNTED
W.W.W.	WELDED WIRE MESH

DESIGN TEAM

BECKER MORGAN GROUP, INC.	STRUCTURAL, ARCHITECTS, CIVIL
DEDC, LLC.	ELECTRICAL ENGINEERS

GENERAL NOTES

1. **CODES**: ALL WORK ON THIS PROJECT SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE BUILDING CODES, ORDINANCES, REGULATIONS, STANDARDS, AND ANY ADDITIONAL REQUIREMENT STATED IN ANY LAW, ORDINANCE, OR REGULATION PERTAINING TO CONSTRUCTION WITHIN THE LIMITS OF THE AUTHORITY HAVING JURISDICTION OVER THE PROPOSED WORK (INCLUDING BUT NOT LIMITED TO: FIRE, ACCESSIBILITY, ZONING, WATER, WASTEWATER, ENVIRONMENTAL, STRUCTURAL, ARCHITECTURAL, HEALTH, FIRE PROTECTION, PLUMBING, MECHANICAL, ELECTRICAL, AND ENERGY CONSERVATION). CONFORMITY TO ALL CODES APPLICABLE TO THIS PROJECT SHALL BE THE CONTRACTORS RESPONSIBILITY.
2. **EGRESS**: ALL MEANS OF EGRESS SHALL BE CONTROLLED BY THE AUTHORITY HAVING JURISDICTION, INCLUDING EXITS, EXIT ACCESS, EXIT DISCHARGE, OTHER EGRESS PATHS, OCCUPANTS LOADS, SPRINKLER PROTECTION, ETC..
3. **ACCESSIBILITY**: ALL BUILDING COMPONENTS, FIXTURES, ACCESSORIES, ETC. SHALL BE INSTALLED WITH MANEUVERING AND OPERATING CLEARANCES, MOUNTING HEIGHTS, ETC. IN ACCORDANCE WITH AMERICANS WITH DISABILITIES ACT STANDARDS, ICC/ANSI A117.1, AND STATE ACCESSIBILITY CODE. OPERABLE PARTS SHALL BE OPERABLE BY ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST.
4. **FIELD VERIFICATION**: THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS AND PROPOSED BUILDING DIMENSIONS PRIOR TO CONSTRUCTION, ANY VARIATIONS, DISCREPANCIES, OR FIELD ALTERATIONS TO THESE DESIGN DRAWINGS SHALL BE BROUGHT TO THE ARCHITECT'S ATTENTION PRIOR TO CONSTRUCTION. IF CONTRACTOR COMMENCES CONSTRUCTION WITHOUT NOTIFYING ARCHITECT OF VARIATIONS, DISCREPENCIES, OR FIELD ALTERATIONS, THAT SHALL CONSTITUTE WAIVER TO ANY CLAIM BY CONTRACTOR FOR ADDITIONAL EXPENSES NECESSARY TO PERFORM WORK ASSOCIATED WITH THOSE CONDITIONS.
5. **SUBMITTALS**: CONTRACTOR SHALL SUBMIT ALL NECESSARY BUILDING COMPONENTS, SYSTEMS, EQUIPMENT, MATERIALS, FINISHES, ETC. FOR REVIEW BY ARCHITECT/OWNER PRIOR TO PROCUREMENT, FABRICATION, AND/OR INSTALLATION.
6. **INSTALLATION**: PROPER ASSEMBLY, INSTALLATION, AND OPERATION OF ALL MATERIALS, COMPONENTS, SYSTEMS, AND FINISHES IS THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE IN ACCORDANCE WITH MANUFACTURES INSTRUCTIONS AND ALL APPLICABLE CODES.
7. **INCIDENTAL WORK**: ANY ITEMS NOT SPECIFICALLY SHOWN ON THE DRAWINGS, BUT WHICH ARE REASONABLY INCIDENTAL TO AND NECESSARY FOR THE SATISFACTORY COMPLETION OF THE PROJECT IN ACCORDANCE WITH APPLICABLE CODES, ORDINANCES, REGULATIONS, AND STANDARDS, ARE INCLUDED WITHIN THE INTENT OF THESE DESIGN DRAWINGS.
8. **OWNER-PROVIDED WORK:** LOCATION OF ALL OWNER-PROVIDED FIXTURES, EQUIPMENT, ETC. SHALL BE COORDINATED TO ENSURE PROPER ALIGNMENT FOR INSTALLATION AND OPERATION, BLOCKING, ETC.
9. **SAFETY**: COMPONENTS FOR CONSTRUCTION SAFETY ARE NOT INDICATED IN THESE DRAWINGS. THE CONTRACTOR IS RESPONSIBLE TO COMPLY WITH ALL RULES AND OTHER REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA), AND APPLICABLE STATE AND LOCAL SAFETY REQUIREMENTS DURING ALL CONSTRUCTION ACTIVITIES.
10. **INSPECTIONS**: CONTRACTOR IS RESPONSIBLE FOR SCHEDULING ALL ON-SITE INSPECTIONS REQUIRED PRIOR TO OCCUPANCY APPROVAL.
11. **DIMENSIONS**: UNLESS OTHERWISE INDICATED: WALLS ARE TO FACE OF STUD FRAMING AND TO FACE OF MASONRY; WINDOWS AND DOORS ARE TO CENTERLINE OF OPENING IN STUD FRAMING AND TO FACE OF MASONRY OPENING IN MASONRY; PLUMBING FIXTURES ARE TO CENTERLINE OF FIXTURE.
12. **BLOCKING**: PROVIDE BLOCKING AS REQUIRED FOR INSTALLATION OF ALL PORTIONS OF THE WORK AND PER MANUFACTURER'S WRITTEN RECOMMENDATIONS, WHETHER OR NOT SPECIFICALLY INDICATED IN THESE DRAWINGS.
13. **METAL PROTECTION AT TREATED WOOD**: METAL CONNECTORS THAT COME IN CONTACT WITH TREATED LUMBER SHALL BE STAINLESS STEEL OR "ZMAX" CORROSION RESISTANT MATERIALS TO HELP PROTECT AGAINST ACCELERATED CORROSION. CONTRACTOR SHALL COORDINATE COMPATIBILITY OF ALL METALS USED WITH TREATMENT PRODUCT(S) MANUFACTURER(S)'S WRITTEN RECOMMENDATIONS.
14. **HURRICANE TIES**: CONTRCATOR SHALL PROVIDE HURRICANE TIES AND CONSTRUCTION CONNECTORS PER CODE AND AS REQUIRED BY AUTHORITY HAVING JURISDICTION.
15. **LIFE SAFETY COMPONENTS**: FINAL LOCATION OF FIRE EXTINGUISHERS, EMERGENCY LIGHTING, AND EXIT SIGNS TO BE AS DIRECTED BY LOCAL FIRE MARSHAL, AND ARE SUBJECT TO FINAL ON-SITE INSPECTION AND EVALUATION. CONTRACTOR SHALL MAKE REVISIONS AND/OR ADDITIONS IN ACCORDANCE WITH FIRE MARSHAL'S INSPECTION..
16. **FIRE PROTECTION, PLUMBING, MECHANICAL, ELECTRICAL WORK**: ALL FIRE PROTECTION, PLUMBING, MECHANICAL, AND ELECTRICAL WORK SHALL BE PERFROMED BY QUALIFIED, LICENSED (SUB)CONTRACTORS, AND BE IN ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, STANDARDS, ETC.. ALL COMPONENTS SHALL BE INSTALLED ABOVE THE FLOOD ELEVATION AS REQUIRED BY FEMA, LOCAL A.H.J., AND ALL APPLICABLE CODES
17. **GRADING**: CONTRACTOR SHALL COORDINATE SITE GRADING TO COMPLY WITH CODES AND ORDINANCES, AND TO MAINTAIN POSITIVE DRAINAGE AWAY FROM BUILDING.

DRAWING KEYS

- ALL METALS-SMALL SCALE
- ACOUSTIC C.M.U. SMALL SCALE
- ACOUSTIC C.M.U. LARGE SCALE
- BATT INSULATION
- BRICK
- CAST STONE
- CONCRETE
- CONCRETE MASONRY UNITS
- EARTH
- GLASS-LARGE SCALE
- GLAZED C.M.U.
- GRAVEL / POROUS FILL
- PARTICLE BOARD
- SHINGLES
- SOLID CONCRETE MASONRY UNITS
- STEEL-LARGE SCALE
- STUD PARTITION
- WOOD-FINISH
- WOOD BLOCKING

SYMBOLS OF MATERIALS

- 0 — STRUCTURAL GRID LINES
- 1 / A101 SIM — SECTION
- 1 / A101 SIM — DETAILS IN PLAN, SECTION
- 1i — WALL TYPE, SEE A501
- Name / 101 — ROOM NAME AND NUMBER
- 1 / A101 SIM — ELEVATION
- NEW WALL
- EXISTING WALL TO REMAIN
- EXISTING WALL TO BE REMOVED
- SF-1 — WINDOW TAG
- NEW DOOR
- EXISTING DOOR TO REMAIN
- EXISTING DOOR TO BE REMOVED
- 101 — DOOR TAG

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PROJECT TITLE

BELMONT HALL PAVILLION

217 SMYRNA LEIPSIC ROAD
SMYRNA, DELAWARE 19977

ISSUED
FOR BID / PERMIT ONLY
ISSUED: 07/14/2023

SHEET TITLE

DESIGN TEAM, ABBREVIATIONS, SYMBOLS, DRAWING KEYS, AND GENERAL NOTES

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2022035.01
DATE:	07/14/2023
SCALE:	1" = 1'-0"
DRAWN BY: CGK	PROJ MGR: BLH

G002

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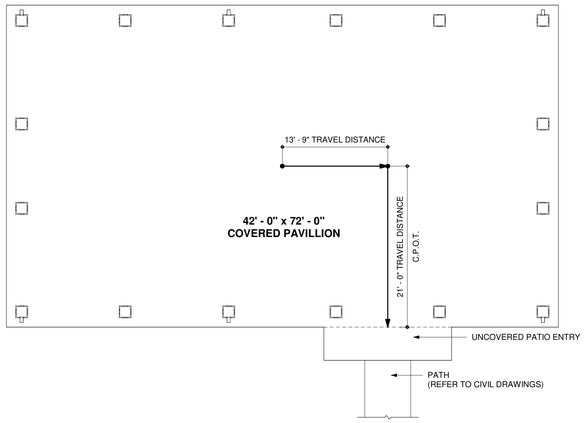

1 CODE PLAN

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

CODE STUDY DATA

(WHEN ONLY ONE SOURCE IS NOTED, THE DATA LISTED REPRESENTS THE MOST STRINGENT REQUIREMENTS WHEN COMPARING THE TWO CODES)

PROJECT	INFORMATION
PROJECT NAME	BELMONT HALL EVENT PAVILION
PROJECT LOCATION	713 SMYRNA LEIPSIC ROAD, SMYRNA, DELAWARE 19977
PROJECT DESCRIPTION	NEW CONSTRUCTION OF COVERED EVENT PAVILION
PROPERTY OWNER	STATE OF DELAWARE

APPLICABLE CODES

2018 INTERNATION BUILDING CODE (IBC)
2018 NFPA 101 LIFE SAFETY CODE (NFPA)
2017 ICC/ANSI A117.1 ACCESSIBLE AND USEABLE BUILDINGS AND FACILITIES
2010 ADA STANDARD FOR ACCESSIBLE DESIGN
MARYLAND ACCESSIBILITY CODE / STATE OF DELAWARE ARCHITECTURAL ACCESSIBILTIY STANDARDS
2019 STATE OF MARYLAND FIRE PREVENTION CODE / 2021 DELAWARE STATE FIRE PREVENTION REGULATIONS
2018 INTERNATIONAL ENERGY CONSERVATION CODE / ASHRAE 90.1-2016 ENERGY STANDARD FOR BUILDINGS EXCEPT LOW-RISE RESIDENTIAL BUILDINGS

BUILDING USE AND CONSTRUCTION CLASSIFICATION

BUILDING USE AND CONSTRUCTION CLASSIFICATION	LIFE SAFETY CODE REFERENCE	IBC REFERENCE
USE GROUPS (MIXED - SEPARATED)	NEW ASSEMBLY	303.4 ASSEMBLY GROUP A-3
CONSTRUCTION TYPE	V (000)	TYPE VB
	NON-SPRINKLERED	NON-SPRINKLERED
ALLOWABLE BUILDING HEIGHT		40' / 1 STORY
ACTUAL BUILDING HEIGHT		23' / 1 STORY
ALLOWABLE BUILDING AREA		6,000 SF
ACTUAL BUILDING AREA (PER IBC 202)		2,880 SF

BUILDING COMPONENT FIRE RATING

TABULAR FIRE RATING REQUIREMENTS OF STRUCTURAL ELEMENTS AND EGRESS COMPONENTS	NFPA 101 LIFE SAFETY CODE / TYPE V (000) CONSTRUCTION			IBC / TYPE 5-B CONSTRUCTION		
	REQUIRED RATING			REQUIRED RATING		
	WALL (HRS)	OPNG (HRS) - D (door) / W (window)	REFERENCE	WALL (HRS)	OPNG (HRS)	REFERENCE
PRIMARY STRUCTURAL FRAME						
PRIMARY STRUCTURAL FRAME - supporting a roof only	0	0	TABLE A. 8.2.1.2, NFPA 5000 - 7.2.3.2.8	0	0	TABLE 601
. - supporting Roof 20' A.F.F.	0	0	TABLE A. 8.2.1.2	0	0	TABLE 601
. - support one floor only	N/A	N/A	TABLE A. 8.2.1.2	0	N/A	TABLE 601
. - supporting more than one floor	N/A	N/A	TABLE A. 8.2.1.2	N/A	N/A	TABLE 601
BEAMS, GIRDERS, TRUSSED, ARCHES - supporting a roof only	0	0	TABLE A. 8.2.1.2, NFPA 5000 - 7.2.3.2.8	0	0	TABLE 601
. - supporting Roof 20' A.F.F.	N/A	N/A	TABLE A. 8.2.1.2	N/A	N/A	TABLE 601
. - supporting one floor only	N/A	N/A	TABLE A. 8.2.1.2	N/A	N/A	TABLE 601
. - supporting more than one floor	N/A	N/A	TABLE A. 8.2.1.2	N/A	N/A	TABLE 601
BEARING WALLS						
EXTERIOR BEARING WALLS - supporting a roof only	N/A	N/A	TABLE A.8.2.1.2 & TABLE 8.3.4.2	N/A	N/A	TABLE 601 - NOTE b
. - supporting Roof 20' A.F.F.	N/A	N/A	TABLE A.8.2.1.2, NFPA 5000 - 7.2.3.2.8	N/A	N/A	TABLES 601 & 602 & 705.8
. - support one floor only	N/A	N/A	TABLE A.8.2.1.2 & TABLE 8.3.4.2 & TABLE 7.3.2.1	N/A	N/A	TABLES 601 & 602 & 705.8
. - supporting more than one floor	N/A	N/A	TABLE A.8.2.1.2 & TABLE 8.3.4.2 & TABLE 7.3.2.1	N/A	N/A	TABLES 601 & 602 & 705.8
INTERIOR BEARING WALLS - supporting a roof only	N/A	N/A	TABLE A.8.2.1.2 & TABLE 8.3.4.2	N/A	N/A	TABLE 601
. - supporting Roof 20' A.F.F.	N/A	N/A	TABLE A.8.2.1.2, NFPA 5000 - 7.2.3.2.8	N/A	N/A	TABLE 601
. - supporting one floor only	N/A	N/A	TABLE A.8.2.1.2 & TABLE 8.3.4.2	N/A	N/A	TABLE 601
. - supporting more than one floor	N/A	N/A	TABLE A.8.2.1.2 & TABLE 8.3.4.2	N/A	N/A	TABLE 601
NONBEARING WALLS AND PARTITIONS						
EXTERIOR NON-BEARING WALLS	N/A	N/A	TABLE A.8.2.1.2 & TABLE 7.3.2.1	N/A	N/A	TABLES 601 & 602 & 705.8
INTERIOR NON-BEARING PARTITIONS	N/A	N/A	TABLE A.8.2.1.2	N/A	N/A	TABLE 601
FLOOR CONSTRUCTION AND ASSOCIATED SECONDARY MEMBERS						
FLOOR-CEILING ASSEMBLIES	0	0	TABLE A.8.2.1.2	0	0	TABLE 601
ROOF CONSTRUCTION AND ASSOCIATED SECONDARY MEMBERS						
ROOF-CEILING ASSEMBLIES	0	0	TABLE A.8.2.1.2	0	0	TABLE 601
ROOF-CEILING ASSEMBLIES - 20' A.F.F.	0	0	NFPA 5000 - 7.2.3.2.8	0	0	TABLE 601
RATED EGRESS ASSEMBLIES						
VERTICAL EXIT ENCLOSURES	N/A	N/A	8.6.5 & TABLE 8.3.4.2	N/A	N/A	SECTION 707.3 & 1023.2 & T716.5
CORRIDORS	N/A	N/A	7.1.3.1(1)	N/A	N/A	TABLE 1020.1 & T716.5
RATED ASSEMBLIES						
SHAFT ENCLOSURES	N/A	N/A	8.6.5 & TABLE 8.3.4.2	N/A	N/A	SECTION 713 & T716.5
SMOKE BARRIERS	N/A	N/A	8.5.1, & TABLE 8.3.4.2	N/A	N/A	SECTION 709, TABLE 716.15
SMOKE PARTITION	N/A	N/A		N/A	N/A	
OCCUPANCY SEPARATION						
OCCUPANCY SEPARATION ( ) TO ( )	N/A	N/A		N/A	N/A	TABLE 508.4
INCIDENTAL USES & PROTECTION FROM HAZARDS						
JANITOR / SERVICE CLOSETS	N/A	N/A		N/A	N/A	
LAUNDRY ROOMS >100SF	N/A	N/A		N/A	N/A	TABLE 509

TRAVEL DISTANCE LIMITS

TRAVEL DISTANCE LIMITS	LIFE SAFETY	IBC
MAXIMUM TRAVEL DISTANCE LIMIT TO AN EXIT OR EXIT ACCESS DOOR	NEW ASSEMBLY = 200' (TABLE A.7.6)	A = 200' (TABLE 1017.2)
MAXIMUM COMMON PATH OF TRAVEL LIMIT	NEW ASSEMBLY = 100' (TABLE A.7.6)	A = 100' (TABLE 1017.2)
MAXIMUM DEAD END CORRIDOR LIMIT	N/A	N/A

MINIMUM NUMBER OF EXIT REQUIRED

	LIFE SAFETY	IBC
FLOOR AREA OCCUPANCY LOAD BETWEEN 1 AND 500	-	N/A
MINIMUM NUMBER OF EXITS PER STORY	NEW ASSEMBLY = 2 EXITS (7.4.1.1 AND 38.2.4.1)	A = 2 EXITS (TABLE 1006.3.1)
MINIMUM NUMBER OF ACCESSIBLE ENTRANCES/EXITS	NEW ASSEMBLY = 1 EXIT (7.5.4.1.1 & 7.5.4.2.2)	A = 1 EXIT (1009.1 & 1105.1)

MINIMUM INTERIOR FINISH REQUIREMENTS

MINIMUM INTERIOR FINISH REQUIREMENTS	LIFE SAFETY	IBC
EXIT ENCLOSURES & EXIT PASSAGEWAYS - WALLS	NEW ASSEMBLY = CLASS A (TABLE A.10.2.2 WITH NOTE 6)	CLASS A (TABLE 803.1)
EXIT ENCLOSURES & EXIT PASSAGEWAYS - FLOORS	NEW ASSEMBLY = CLASS V / ASTM D2859 OR 16 CFR 160 (FFI-70) (TABLE A.10.2.2 WITH NOTE 6)	CLASS V (804.4.1, 804.4.2)
CORRIDORS & LOBBIES - WALLS	NEW ASSEMBLY = CLASS A (TABLE A.10.2.2 WITH NOTE 6)	CLASS A (TABLE 803.1)
CORRIDORS & LOBBIES - FLOORS	NEW ASSEMBLY = CLASS V / ASTM D2859 OR 16 CFR 160 (FFI-70) (TABLE A.10.2.2 WITH NOTE 6)	CLASS V (804.4.1, 804.4.2)
ROOMS & ENCLOSED SPACES - WALLS	NEW ASSEMBLY = CLASS A (TABLE A.10.2.2 WITH NOTE 6)	CLASS A (TABLE 803.1)
ROOMS & ENCLOSED SPACES - FLOORS	NEW ASSEMBLY = CLASS V / ASTM D2859 OR 16 CFR 160 (FFI-70) (TABLE A.10.2.2 WITH NOTE 6)	CLASS V (804.4.1, 804.4.2)
TRIM		NOT IN EXCESS OF 10% OF AGGREGATE WALL & CEILING AREA OF ANY ROOM/SPACE SHALL BE PERMITTED TO BE CLASS C MATERIAL

PLUMBING FIXTURE CALCULATIONS

USE GROUP	OCCUPANTS	WATER CLOSETS						LAVATORIES			DRINKING FOUNTAIN / B.F.S.			OTHER	
		MEN			WOMEN										
		REQUIRED		PROVIDED	REQUIRED		PROVIDED	REQUIRED		PROVIDED	REQUIRED		PROVIDED	REQUIRED	PROVIDED
FIRST FLOOR	186		1.48	N/A		2.86	N/A		0.93	N/A		0.37	N/A		N/A
A-3 ASSEMBLY		1/125	1.48	1	1/65	2.86	1	1/200	0.93	1	1/500	0.37	1	1 SERVICE SINK	1

NOTE: NON-PERMANENT BATHROOMS TO BE BROUGHT ON-SITE DURING EVENTS

BECKER MORGAN GROUP

ARCHITECTURE
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309 S Governors Ave
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302.734.7950

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Wilmington, NC 28403
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DEDC, LLC
FIRE PROTECTION, PLUMBING, MECHANICAL, AND ELECTRICAL ENGINEER
315 SOUTH CHAPEL STREET
NEWARK, DELAWARE 19711
302-738-7172 fax: 302-738-7175

PROJECT TITLE

BELMONT HALL PAVILLION

217 SMYRNA LEIPSIC ROAD
SMYRNA, DELAWARE 19977

ISSUED
FOR BID / PERMIT ONLY

ISSUED: 07/14/2023

SHEET TITLE

CODE STUDY

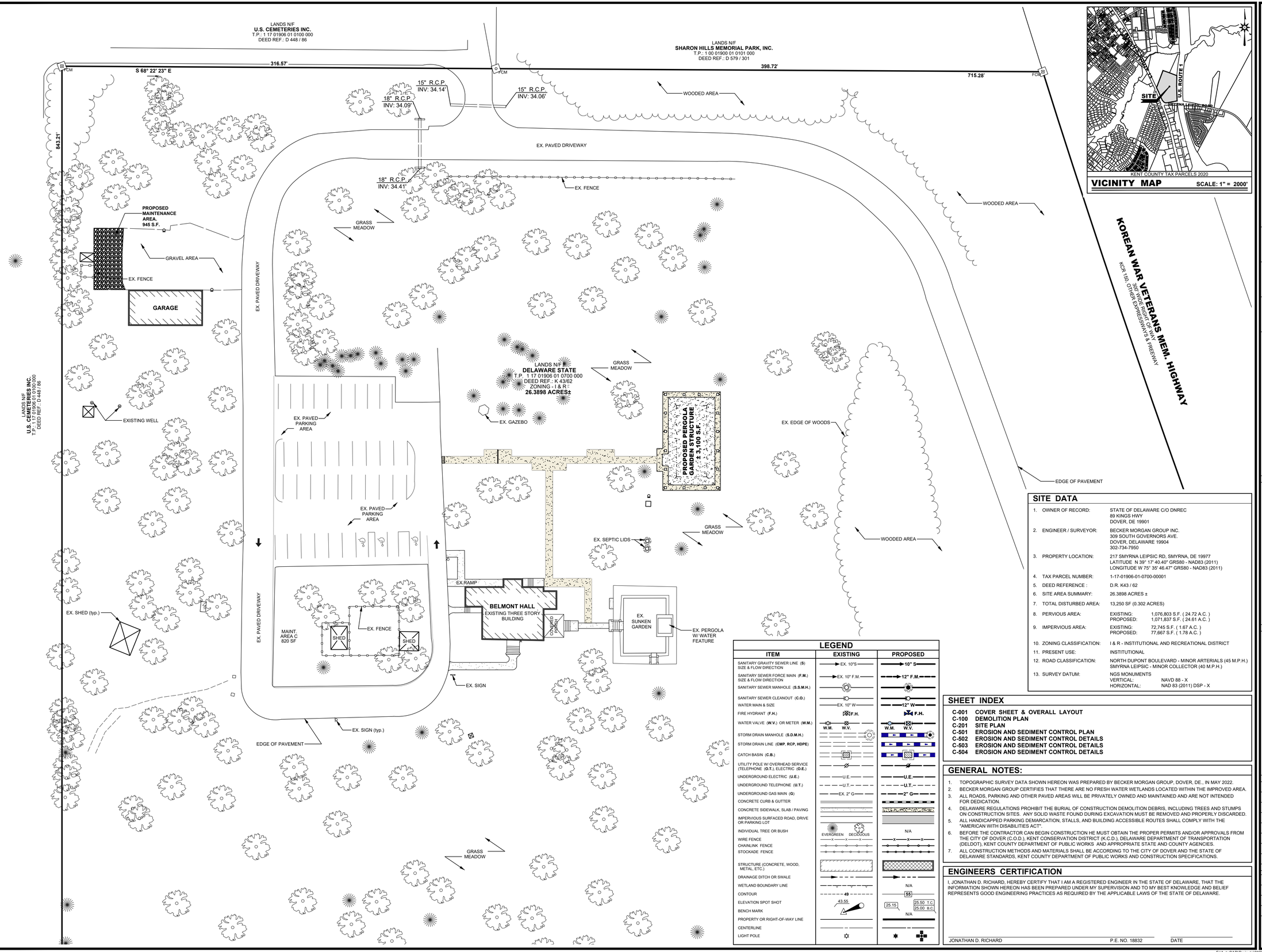
ISSUE BLOCK

Mark	Date	Description

PROJECT NO: 2022035.01
DATE: 07/14/2023
SCALE: As indicated
DRAWN BY: CGK | PROJ MGR: BLH

G101

9/12/2023 10:10:42 AM C:\Users\Okocan\Documents\2022035D1_okocan.rvt



LEGEND

ITEM	EXISTING	PROPOSED
SANITARY GRAVITY SEWER LINE (S) SIZE & FLOW DIRECTION	EX. 10"S	10" S
SANITARY SEWER FORCE MAIN (F.M.) SIZE & FLOW DIRECTION	EX. 10" F.M.	12" F.M.
SANITARY SEWER MANHOLE (S.S.M.H.)		
SANITARY SEWER CLEANOUT (C.O.)		
WATER MAIN & SIZE	EX. 10" W	12" W
FIRE HYDRANT (F.H.)	F.H.	F.H.
WATER VALVE (W.V.) OR METER (W.M.)	W.M. W.V.	W.M. W.V.
STORM DRAIN MANHOLE (S.D.M.H.)		
STORM DRAIN LINE (CMP, RCP, HDPE)		
CATCH BASIN (C.B.)		
UTILITY POLE W/ OVERHEAD SERVICE (TELEPHONE (O.T.), ELECTRIC (O.E.)		
UNDERGROUND ELECTRIC (U.E.)	U.E.	U.E.
UNDERGROUND TELEPHONE (U.T.)	U.T.	U.T.
UNDERGROUND GAS MAIN (G)	EX. 2" G	2" G
CONCRETE CURB & GUTTER		
CONCRETE SIDEWALK, SLAB / PAVING		
IMPERVIOUS SURFACED ROAD, DRIVE OR PARKING LOT		
INDIVIDUAL TREE OR BUSH	EVERGREEN DECIDUOUS	N/A
WIRE FENCE	X X X	X X X
CHAINLINK FENCE		
STOCKADE FENCE		
STRUCTURE (CONCRETE, WOOD, METAL, ETC.)		
DRAINAGE DITCH OR SWALE		
WETLAND BOUNDARY LINE		N/A
CONTOUR	49	55
ELEVATION SPOT SHOT	43.55	25.15 / 25.50 T.C. 25.00 B.C. / N/A
BENCH MARK		
PROPERTY OR RIGHT-OF-WAY LINE		
CENTERLINE		
LIGHT POLE		

SHEET INDEX

GENERAL NOTES:

1. TOPOGRAPHIC SURVEY DATA SHOWN HEREON WAS PREPARED BY BECKER MORGAN GROUP, DOVER, DE., IN MAY 2022.
2. BECKER MORGAN GROUP CERTIFIES THAT THERE ARE NO FRESH WATER WETLANDS LOCATED WITHIN THE IMPROVED AREA.
3. ALL ROADS, PARKING AND OTHER PAVED AREAS WILL BE PRIVATELY OWNED AND MAINTAINED AND ARE NOT INTENDED FOR DEDICATION.
4. DELAWARE REGULATIONS PROHIBIT THE BURIAL OF CONSTRUCTION DEMOLITION DEBRIS, INCLUDING TREES AND STUMPS ON CONSTRUCTION SITES. ANY SOLID WASTE FOUND DURING EXCAVATION MUST BE REMOVED AND PROPERLY DISCARDED.
5. ALL HANDICAPPED PARKING DEMARCATION, STALLS, AND BUILDING ACCESSIBLE ROUTES SHALL COMPLY WITH THE "AMERICAN WITH DISABILITIES ACT".
6. BEFORE THE CONTRACTOR CAN BEGIN CONSTRUCTION HE MUST OBTAIN THE PROPER PERMITS AND/OR APPROVALS FROM THE CITY OF DOVER (C.O.D.), KENT CONSERVATION DISTRICT (K.C.D.), DELAWARE DEPARTMENT OF TRANSPORTATION (DELDOT), KENT COUNTY DEPARTMENT OF PUBLIC WORKS AND APPROPRIATE STATE AND COUNTY AGENCIES.
7. ALL CONSTRUCTION METHODS AND MATERIALS SHALL BE ACCORDING TO THE CITY OF DOVER AND THE STATE OF DELAWARE STANDARDS, KENT COUNTY DEPARTMENT OF PUBLIC WORKS AND CONSTRUCTION SPECIFICATIONS.

ENGINEERS CERTIFICATION

I, JONATHAN D. RICHARD, HEREBY CERTIFY THAT I AM A REGISTERED ENGINEER IN THE STATE OF DELAWARE, THAT THE INFORMATION SHOWN HEREON HAS BEEN PREPARED UNDER MY SUPERVISION AND TO MY BEST KNOWLEDGE AND BELIEF REPRESENTS GOOD ENGINEERING PRACTICES AS REQUIRED BY THE APPLICABLE LAWS OF THE STATE OF DELAWARE.

JONATHAN D. RICHARD — P.E. NO. 18832 — DATE

SITE DATA

1.	OWNER OF RECORD:	STATE OF DELAWARE C/O DNREC 89 KINGS HWY DOVER, DE 19901
2.	ENGINEER / SURVEYOR:	BECKER MORGAN GROUP INC. 309 SOUTH GOVERNORS AVE. DOVER, DELAWARE 19904 302-734-7950
3.	PROPERTY LOCATION:	217 SMYRNA LEIPSIC RD, SMYRNA, DE 19977 LATITUDE N 39° 17' 40.40" GRS80 - NAD83 (2011) LONGITUDE W 75° 35' 46.47" GRS80 - NAD83 (2011)
4.	TAX PARCEL NUMBER:	1-17-01906-01-0700-00001
5.	DEED REFERENCE :	D.R. K43 / 62
6.	SITE AREA SUMMARY:	26.3898 ACRES ±
7.	TOTAL DISTURBED AREA:	13,250 SF (0.302 ACRES)
8.	PERVIOUS AREA:	EXISTING: 1,076,803 S.F. (24.72 A.C.) PROPOSED: 1,071,637 S.F. (24.61 A.C.)
9.	IMPERVIOUS AREA:	EXISTING: 72,745 S.F. (1.67 A.C.) PROPOSED: 77,667 S.F. (1.78 A.C.)
10.	ZONING CLASSIFICATION:	I & R - INSTITUTIONAL AND RECREATIONAL DISTRICT
11.	PRESENT USE:	INSTITUTIONAL
12.	ROAD CLASSIFICATION:	NORTH DUPONT BOULEVARD - MINOR ARTERIALS (45 M.P.H.) SMYRNA LEIPSIC - MINOR COLLECTOR (40 M.P.H.)
13.	SURVEY DATUM:	NGS MONUMENTS VERTICAL: NAVD 88 - X HORIZONTAL: NAD 83 (2011) DSP - X

BECKER MORGAN GROUP

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410.546.9100

North Carolina
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Wilmington, NC 28403
910.341.7600

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PROJECT TITLE

LANDS OF
STATE OF DELAWARE

BELMONT HALL

217 SMYRNA LEIPSIC RD
TOWN OF SMYRNA
KENT COUNTY, DE

SHEET TITLE

COVER SHEET AND OVERALL LAYOUT

0 15 30 60

SCALE: 1" = 30'

ISSUE BLOCK

MARK	DATE	DESCRIPTION

LAYER STATE: C-001

PROJECT NO.:	2022035.00
DATE:	03/23/2023
SCALE:	1" = 30'
DRAWN BY: J.D.M.	PROJ. MGR.: B.L.H.

SHEET

C-001

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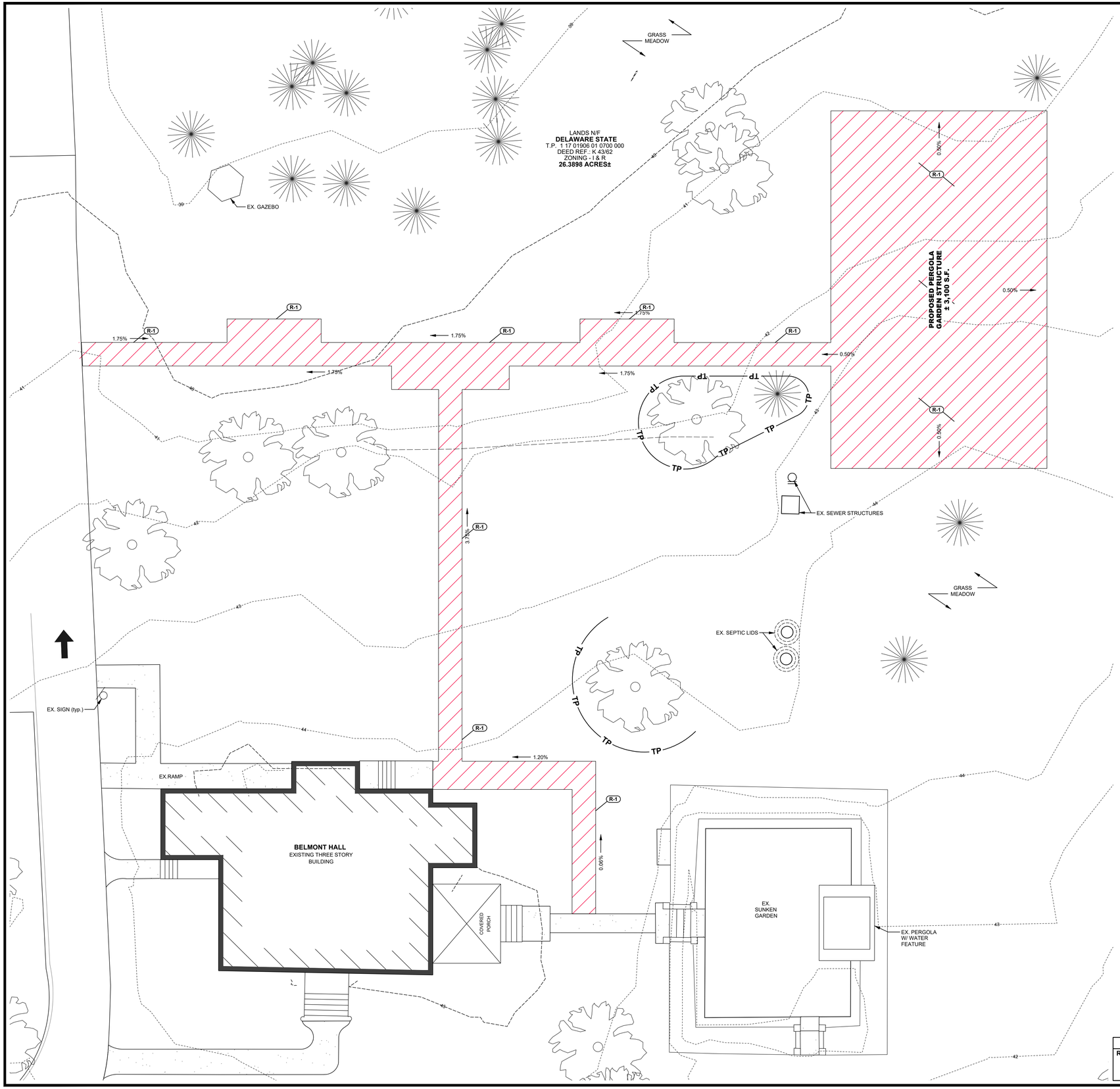
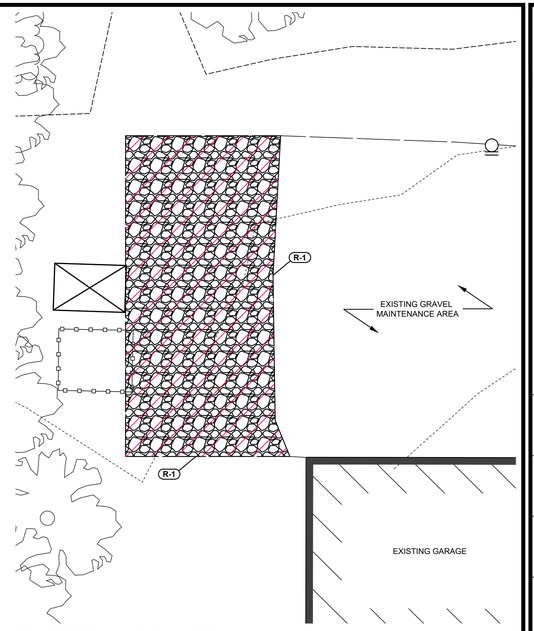
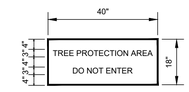




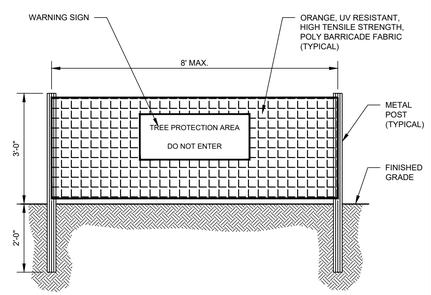
MAINTENANCE YARD

1" = 10'

NOTE:
WARNING SIGNS TO BE MADE OF DURABLE, WEATHERPROOF MATERIAL. LETTERS TO BE THREE (3) INCHES HIGH MINIMUM, CLEARLY LEGIBLE AND SPACED AS DETAILED. SIGNS SHALL BE PLACED AT 50' MAXIMUM INTERVALS. PLACE A SIGN AT EACH END OF LINEAR TREE PROTECTION AND 50' ON CENTER THERAFTER. FOR TREE PROTECTION AREAS LESS THAN 200' IN PERIMETER, PROVIDE NO LESS THAN ONE SIGN PER PROTECTION AREA. ATTACH SIGNS SECURELY TO FENCE POSTS AND FABRIC. MAINTAIN TREE PROTECTION FENCE THROUGHOUT DURATION OF PROJECT.



WARNING SIGN DETAIL



LINEAR TREE PROTECTION DETAIL

NO SCALE BMG NO. : L-05

DEMOLITION CONSTRUCTION NOTES

R-1 EXCAVATE EXISTING TOPSOIL WHERE MARKED ON PLAN.

* CONTRACTOR TO INFORM ENGINEER IF UTILITIES ARE ENCOUNTERED DURING DEMOLITION. CONTRACTOR TO LOCATE AND AVOID DISTURBING THE SEPTIC FIELD.

BECKER MORGAN GROUP

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PROJECT TITLE

LANDS OF
STATE OF DELAWARE

BELMONT HALL

217 SMYRNA LEIPSIC RD
TOWN OF SMYRNA
KENT COUNTY, DE

SHEET TITLE

DEMO PLAN

0 5 10 20

SCALE: 1" = 10'

ISSUE BLOCK

MARK	DATE	DESCRIPTION

LAYER STATE: C-100

PROJECT NO.:	**2022035.00**
DATE:	**03/23/2023**
SCALE:	**1" = 10'**
DRAWN BY: **J.D.M.**	PROJ. MGR.: **B.L.H.**

SHEET

C-100

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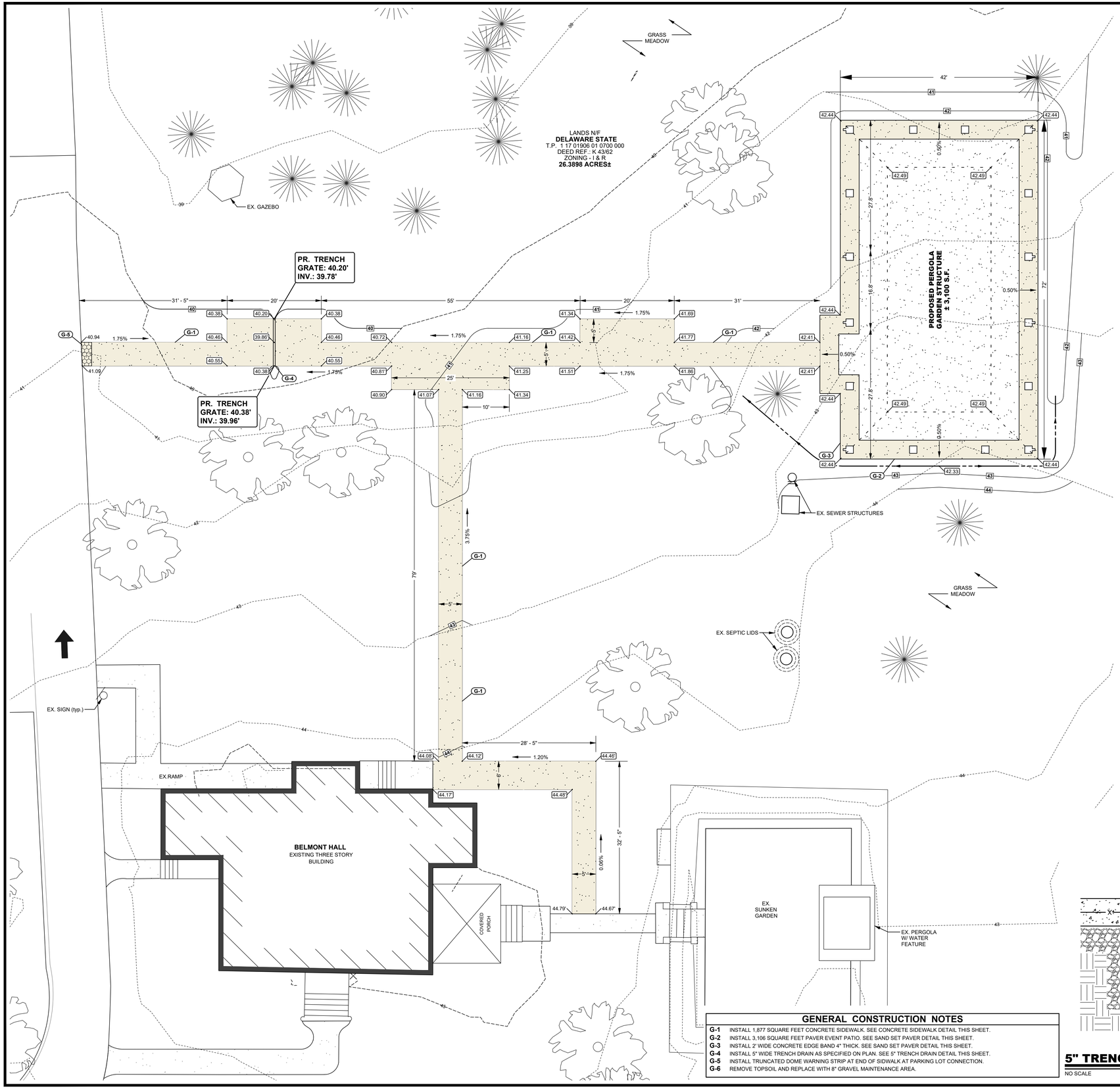
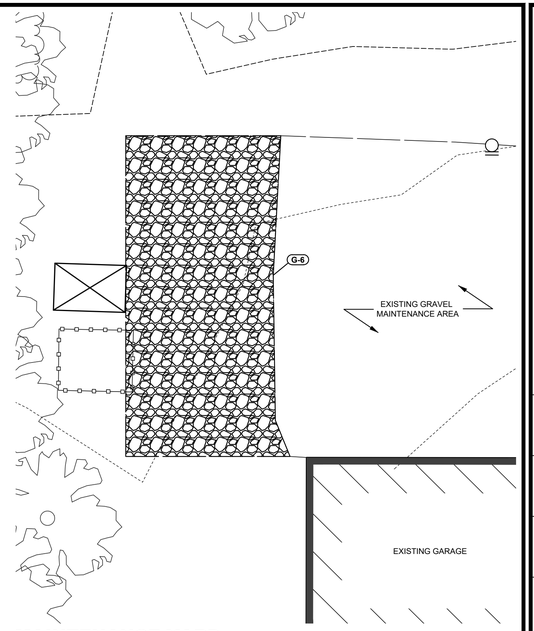
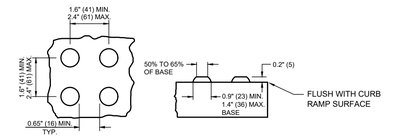




MAINTENANCE YARD

1" = 10'

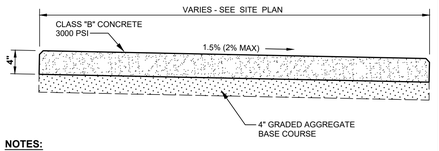


DETECTABLE WARNING TRUNCATED DOME DETAILS

NOTES: 1) THE AREA OF DETECTABLE WARNING TRUNCATED DOMES SHALL BE 24" (600) LONG AND THE FULL WIDTH OF THE RAMP.
2) SEE SPECIFICATION FOR ADDITIONAL INFORMATION.

DETECTABLE WARNING STRIP DETAIL

NO SCALE

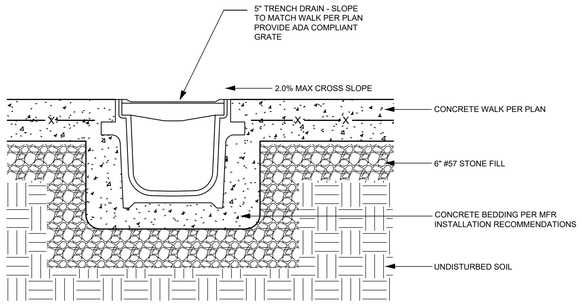


NOTES:

1. MARK IN 5' SQUARES, USE PREMOLDED EXPANSION JOINTS AT INTERVALS NOT GREATER THAN 20'
2. CONCRETE SIDEWALKS SHALL BE CONSTRUCTED AS PER SPECIFICATIONS.

4" CONCRETE SIDEWALK DETAIL

NO SCALE BMG NO. : SW-3C



5" TRENCH DRAIN DETAIL

NO SCALE

GENERAL CONSTRUCTION NOTES

G-1	INSTALL 1,877 SQUARE FEET CONCRETE SIDEWALK. SEE CONCRETE SIDEWALK DETAIL THIS SHEET.
G-2	INSTALL 3,106 SQUARE FEET PAVER EVENT PATIO. SEE SAND SET PAVER DETAIL THIS SHEET.
G-3	INSTALL 2' WIDE CONCRETE EDGE BAND 4" THICK. SEE SAND SET PAVER DETAIL THIS SHEET.
G-4	INSTALL 5" WIDE TRENCH DRAIN AS SPECIFIED ON PLAN. SEE 5" TRENCH DRAIN DETAIL THIS SHEET.
G-5	INSTALL TRUNCATED DOME WARNING STRIP AT END OF SIDWALK AT PARKING LOT CONNECTION.
G-6	REMOVE TOPSOIL AND REPLACE WITH 8" GRAVEL MAINTENANCE AREA.

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PROJECT TITLE

LANDS OF
STATE OF DELAWARE

BELMONT HALL

217 SMYRNA LEIPSIC RD
TOWN OF SMYRNA
KENT COUNTY, DE

SHEET TITLE

SITE PLAN

0 5 10 20

SCALE: 1" = 10'

ISSUE BLOCK		
MARK	DATE	DESCRIPTION

LAYER STATE: C-201

PROJECT NO.:	**2022035.00**
DATE:	**03/23/2023**
SCALE:	**1" = 10'**
DRAWN BY: **J.D.M.**	PROJ. MGR.: **B.L.H.**

SHEET

C-201

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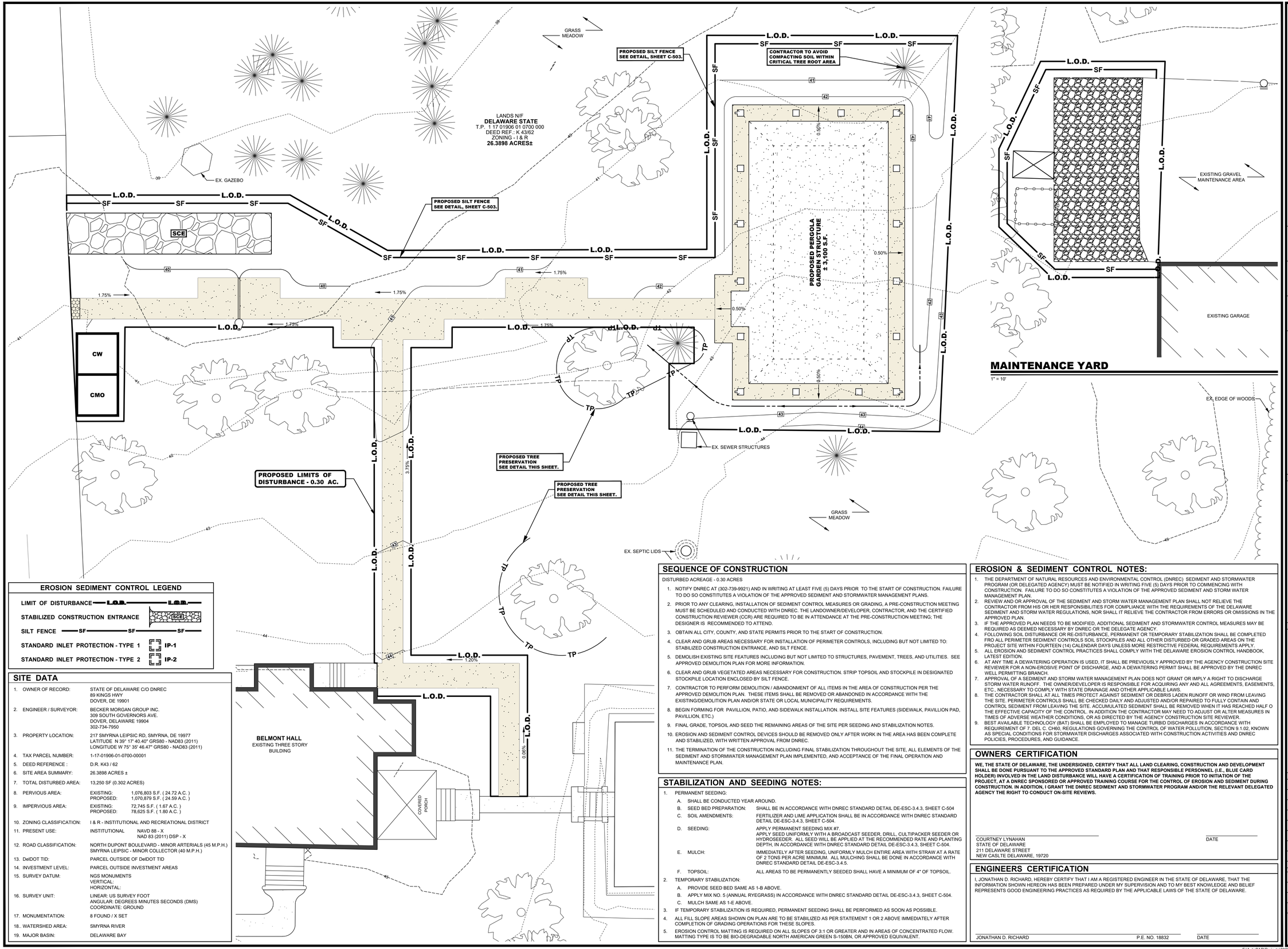

MAINTENANCE YARD

1" = 10'

EROSION SEDIMENT CONTROL LEGEND

- LIMIT OF DISTURBANCE — L.O.D. —
- STABILIZED CONSTRUCTION ENTRANCE — SCE
- SILT FENCE — SF — SF — SF
- STANDARD INLET PROTECTION - TYPE 1 — IP-1
- STANDARD INLET PROTECTION - TYPE 2 — IP-2

SITE DATA

1.	OWNER OF RECORD:	STATE OF DELAWARE C/O DNREC 89 KINGS HWY DOVER, DE 19901
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6.	SITE AREA SUMMARY:	26.3898 ACRES ±
7.	TOTAL DISTURBED AREA:	13,250 SF (0.302 ACRES)
8.	PERVIOUS AREA:	EXISTING: 1,076,803 S.F. (24.72 A.C.) PROPOSED: 1,070,879 S.F. (24.59 A.C.)
9.	IMPERVIOUS AREA:	EXISTING: 72,745 S.F. (1.67 A.C.) PROPOSED: 78,625 S.F. (1.80 A.C.)
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11.	PRESENT USE:	INSTITUTIONAL NAVD 88 - X NAD 83 (2011) DSP - X
12.	ROAD CLASSIFICATION:	NORTH DUPONT BOULEVARD - MINOR ARTERIALS (45 M.P.H.) SMYRNA LEIPSIC - MINOR COLLECTOR (40 M.P.H.)
13.	DelDOT TID:	PARCEL OUTSIDE OF DelDOT TID
14.	INVESTMENT LEVEL:	PARCEL OUTSIDE INVESTMENT AREAS
15.	SURVEY DATUM:	NGS MONUMENTS VERTICAL: HORIZONTAL:
16.	SURVEY UNIT:	LINEAR: US SURVEY FOOT ANGULAR: DEGREES MINUTES SECONDS (DMS) COORDINATE: GROUND
17.	MONUMENTATION:	8 FOUND / X SET
18.	WATERSHED AREA:	SMYRNA RIVER
19.	MAJOR BASIN:	DELAWARE BAY

SEQUENCE OF CONSTRUCTION

DISTURBED ACREAGE - 0.30 ACRES

1. NOTIFY DNREC AT (302-739-9921) AND IN WRITING AT LEAST FIVE (5) DAYS PRIOR TO THE START OF CONSTRUCTION. FAILURE TO DO SO CONSTITUTES A VIOLATION OF THE APPROVED SEDIMENT AND STORMWATER MANAGEMENT PLANS.
2. PRIOR TO ANY CLEARING, INSTALLATION OF SEDIMENT CONTROL MEASURES OR GRADING, A PRE-CONSTRUCTION MEETING MUST BE SCHEDULED AND CONDUCTED WITH DNREC, THE LANDOWNER/DEVELOPER, CONTRACTOR, AND THE CERTIFIED CONSTRUCTION REVIEWER (CCR) ARE REQUIRED TO BE IN ATTENDANCE AT THE PRE-CONSTRUCTION MEETING; THE DESIGNER IS RECOMMENDED TO ATTEND.
3. OBTAIN ALL CITY, COUNTY, AND STATE PERMITS PRIOR TO THE START OF CONSTRUCTION.
4. CLEAR AND GRUB AREAS NECESSARY FOR INSTALLATION OF PERIMETER CONTROLS, INCLUDING BUT NOT LIMITED TO: STABILIZED CONSTRUCTION ENTRANCE, AND SILT FENCE.
5. DEMOLISH EXISTING SITE FEATURES INCLUDING BUT NOT LIMITED TO STRUCTURES, PAVEMENT, TREES, AND UTILITIES. SEE APPROVED DEMOLITION PLAN FOR MORE INFORMATION.
6. CLEAR AND GRUB VEGETATED AREAS NECESSARY FOR CONSTRUCTION. STRIP TOPSOIL AND STOCKPILE IN DESIGNATED STOCKPILE LOCATION ENCLOSED BY SILT FENCE.
7. CONTRACTOR TO PERFORM DEMOLITION / ABANDONMENT OF ALL ITEMS IN THE AREA OF CONSTRUCTION PER THE APPROVED DEMOLITION PLAN. THESE ITEMS SHALL BE REMOVED OR ABANDONED IN ACCORDANCE WITH THE EXISTING/DEMOLITION PLAN AND/OR STATE OR LOCAL MUNICIPALITY REQUIREMENTS.
8. BEGIN FORMING FOR PAVILLION, PATIO, AND SIDEWALK INSTALLATION. INSTALL SITE FEATURES (SIDEWALK, PAVILLION PAD, PAVILLION, ETC.)
9. FINAL GRADE, TOPSOIL AND SEED THE REMAINING AREAS OF THE SITE PER SEEDING AND STABILIZATION NOTES.
10. EROSION AND SEDIMENT CONTROL DEVICES SHOULD BE REMOVED ONLY AFTER WORK IN THE AREA HAS BEEN COMPLETE AND STABILIZED, WITH WRITTEN APPROVAL FROM DNREC.
11. THE TERMINATION OF THE CONSTRUCTION INCLUDING FINAL STABILIZATION THROUGHOUT THE SITE, ALL ELEMENTS OF THE SEDIMENT AND STORMWATER MANAGEMENT PLAN IMPLEMENTED, AND ACCEPTANCE OF THE FINAL OPERATION AND MAINTENANCE PLAN.

STABILIZATION AND SEEDING NOTES:

1. PERMANENT SEEDING:
   - A. SHALL BE CONDUCTED YEAR AROUND.
   - B. SEED BED PREPARATION: SHALL BE IN ACCORDANCE WITH DNREC STANDARD DETAIL DE-ESC-3.4.3, SHEET C-504
   - C. SOIL AMENDMENTS: FERTILIZER AND LIME APPLICATION SHALL BE IN ACCORDANCE WITH DNREC STANDARD DETAIL DE-ESC-3.4.3, SHEET C-504.
   - D. SEEDING: APPLY PERMANENT SEEDING MIX #7. APPLY SEED UNIFORMLY WITH A BROADCAST SEEDER, DRILL, CULTIPACKER SEEDER OR HYDROSEEDER. ALL SEED WILL BE APPLIED AT THE RECOMMENDED RATE AND PLANTING DEPTH, IN ACCORDANCE WITH DNREC STANDARD DETAIL DE-ESC-3.4.3, SHEET C-504.
   - E. MULCH: IMMEDIATELY AFTER SEEDING, UNIFORMLY MULCH ENTIRE AREA WITH STRAW AT A RATE OF 2 TONS PER ACRE MINIMUM. ALL MULCHING SHALL BE DONE IN ACCORDANCE WITH DNREC STANDARD DETAIL DE-ESC-3.4.5.
   - F. TOPSOIL: ALL AREAS TO BE PERMANENTLY SEEDED SHALL HAVE A MINIMUM OF 4" OF TOPSOIL.
2. TEMPORARY STABILIZATION:
   - A. PROVIDE SEED BED SAME AS 1-B ABOVE.
   - B. APPLY MIX NO. 5 (ANNUAL RYEGRASS) IN ACCORDANCE WITH DNREC STANDARD DETAIL DE-ESC-3.4.3, SHEET C-504.
   - C. MULCH SAME AS 1-E ABOVE.
3. IF TEMPORARY STABILIZATION IS REQUIRED, PERMANENT SEEDING SHALL BE PERFORMED AS SOON AS POSSIBLE.
4. ALL FILL SLOPE AREAS SHOWN ON PLAN ARE TO BE STABILIZED AS PER STATEMENT 1 OR 2 ABOVE IMMEDIATELY AFTER COMPLETION OF GRADING OPERATIONS FOR THESE SLOPES.
5. EROSION CONTROL MATTING IS REQUIRED ON ALL SLOPES OF 3:1 OR GREATER AND IN AREAS OF CONCENTRATED FLOW. MATTING TYPE IS TO BE BIO-DEGRADABLE NORTH AMERICAN GREEN S-150BN, OR APPROVED EQUIVALENT.

EROSION & SEDIMENT CONTROL NOTES:

1. THE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL (DNREC) SEDIMENT AND STORMWATER PROGRAM (OR DELEGATED AGENCY) MUST BE NOTIFIED IN WRITING FIVE (5) DAYS PRIOR TO COMMENCING WITH CONSTRUCTION. FAILURE TO DO SO CONSTITUTES A VIOLATION OF THE APPROVED SEDIMENT AND STORM WATER MANAGEMENT PLAN.
2. REVIEW AND OR APPROVAL OF THE SEDIMENT AND STORM WATER MANAGEMENT PLAN SHALL NOT RELIEVE THE CONTRACTOR FROM HIS OR HER RESPONSIBILITIES FOR COMPLIANCE WITH THE REQUIREMENTS OF THE DELAWARE SEDIMENT AND STORM WATER REGULATIONS, NOR SHALL IT RELIEVE THE CONTRACTOR FROM ERRORS OR OMISSIONS IN THE APPROVED PLAN.
3. IF THE APPROVED PLAN NEEDS TO BE MODIFIED, ADDITIONAL SEDIMENT AND STORMWATER CONTROL MEASURES MAY BE REQUIRED AS DEEMED NECESSARY BY DNREC OR THE DELEGATE AGENCY.
4. FOLLOWING SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED FRO ALL PERIMETER SEDIMENT CONTROLS SOIL STOCKPILES AND ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE WITHIN FOURTEEN (14) CALENDAR DAYS UNLESS MORE RESTRICTIVE FEDERAL REQUIREMENTS APPLY.
5. ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL COMPLY WITH THE DELAWARE EROSION CONTROL HANDBOOK, LATEST EDITION.
6. AT ANY TIME A DEWATERING OPERATION IS USED, IT SHALL BE PREVIOUSLY APPROVED BY THE AGENCY CONSTRUCTION SITE REVIEWER FOR A NON-EROSIVE POINT OF DISCHARGE, AND A DEWATERING PERMIT SHALL BE APPROVED BY THE DNREC WELL PERMITTING BRANCH.
7. APPROVAL OF A SEDIMENT AND STORM WATER MANAGEMENT PLAN DOES NOT GRANT OR IMPLY A RIGHT TO DISCHARGE STORM WATER RUNOFF. THE OWNER/DEVELOPER IS RESPONSIBLE FOR ACQUIRING ANY AND ALL AGREEMENTS, EASEMENTS, ETC., NECESSARY TO COMPLY WITH STATE DRAINAGE AND OTHER APPLICABLE LAWS.
8. THE CONTRACTOR SHALL AT ALL TIMES PROTECT AGAINST SEDIMENT OR DEBRIS LADEN RUNOFF OR WIND FROM LEAVING THE SITE. PERIMETER CONTROLS SHALL BE CHECKED DAILY AND ADJUSTED AND/OR REPAIRED TO FULLY CONTAIN AND CONTROL SEDIMENT FROM LEAVING THE SITE. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT HAS REACHED HALF O THE EFFECTIVE CAPACITY OF THE CONTROL. IN ADDITION THE CONTRACTOR MAY NEED TO ADJUST OR ALTER MEASURES IN TIMES OF ADVERSE WEATHER CONDITIONS, OR AS DIRECTED BY THE AGENCY CONSTRUCTION SITE REVIEWER.
9. BEST AVAILABLE TECHNOLOGY (BAT) SHALL BE EMPLOYED TO MANAGE TURBID DISCHARGES IN ACCORDANCE WITH REQUIREMENT OF 7 DEL C. CH60, REGULATIONS GOVERNING THE CONTROL OF WATER POLLUTION, SECTION 9.1.02, KNOWN AS SPECIAL CONDITIONS FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES AND DNREC POLICIES, PROCEDURES, AND GUIDANCE.

OWNERS CERTIFICATION

WE, THE STATE OF DELAWARE, THE UNDERSIGNED, CERTIFY THAT ALL LAND CLEARING, CONSTRUCTION AND DEVELOPMENT SHALL BE DONE PURSUANT TO THE APPROVED STANDARD PLAN AND THAT RESPONSIBLE PERSONNEL (I.E., BLUE CARD HOLDER) INVOLVED IN THE LAND DISTURBANCE WILL HAVE A CERTIFICATION OF TRAINING PRIOR TO INITIATION OF THE PROJECT, AT A DNREC SPONSORED OR APPROVED TRAINING COURSE FOR THE CONTROL OF EROSION AND SEDIMENT DURING CONSTRUCTION. IN ADDITION, I GRANT THE DNREC SEDIMENT AND STORMWATER PROGRAM AND/OR THE RELEVANT DELEGATED AGENCY THE RIGHT TO CONDUCT ON-SITE REVIEWS.

COURTNEY LYNAHAN — DATE
STATE OF DELAWARE
211 DELAWARE STREET
NEW CASLTE DELAWARE, 19720

ENGINEERS CERTIFICATION

I, JONATHAN D. RICHARD, HEREBY CERTIFY THAT I AM A REGISTERED ENGINEER IN THE STATE OF DELAWARE, THAT THE INFORMATION SHOWN HEREON HAS BEEN PREPARED UNDER MY SUPERVISION AND TO MY BEST KNOWLEDGE AND BELIEF REPRESENTS GOOD ENGINEERING PRACTICES AS REQUIRED BY THE APPLICABLE LAWS OF THE STATE OF DELAWARE.

JONATHAN D. RICHARD — P.E. NO. 18832 — DATE

BECKER MORGAN GROUP

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410.546.9100

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Wilmington, NC 28403
910.341.7600

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PROJECT TITLE

LANDS OF
STATE OF DELAWARE

BELMONT HALL

217 SMYRNA LEIPSIC RD
TOWN OF SMYRNA
KENT COUNTY, DE

SHEET TITLE

EROSION AND SEDIMENT CONTROL PLAN

0 5 10 20

SCALE: 1" = 10'

ISSUE BLOCK

MARK	DATE	DESCRIPTION

LAYER STATE: C-501

PROJECT NO.:	2022035.00
DATE:	03/23/2023
SCALE:	1" = 10'
DRAWN BY: J.D.M.	PROJ. MGR.: B.L.H.

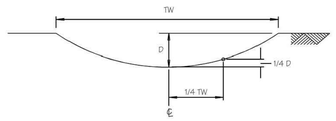
SHEET

C-501

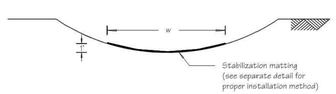
F:\AutoCAD\Projects\2022\2022035\DWG\2022035-SITE-C3D21.dwg, Sep 01, 2023 - 8:59am

Standard Detail & Specifications

Vegetated Channel - Parabolic



Typical Section (Design)



Typical Section (Stabilization)

DATA

Design discharge (Q_p)
Design topwidth (TW)
Design depth (D)
Design channel slope (e)
Width of stabilization mat (w)
Type of stabilization matting

Source:	Symbol:	Detail No.
Delaware ESC Handbook	VC-P	DE-ESC-3.3.3.1 Sheet 1 of 2 Effective FEB 2019

Standard Detail & Specifications

Vegetated Channel - Parabolic

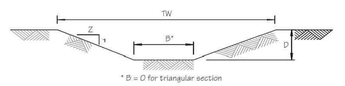
Construction Notes:

1. All trees, brush, stumps, obstructions, and other objectionable material shall be removed and disposed of so as not to interfere with the proper functioning of the waterway.
2. The channel shall be excavated or shaped to line, grade, and cross section as required to meet the criteria specified herein, and be free of bank projections or other irregularities which will impede normal flow.
3. Fills shall be compacted as needed to prevent unequal settlement that would cause damage in the waterway.
4. All earth removed and not needed in construction shall be spread or disposed of so that it will not interfere with the functioning of the waterway.
5. Stabilization shall be done in accordance with the appropriate Standard and Specifications for Vegetative Stabilization and Stabilization Matting.
   a. It is recommended that, when conditions permit, temporary diversions or other means should be used to prevent water from entering the waterway during the establishment of the vegetation.
   b. Should groundwater or base flow conditions preclude the establishment of adequate vegetative stabilization throughout the entire design section, provisions shall be made through use of a lining material, stone center drain and/or subsurface drain. Such practices shall be designed and constructed in accordance with the appropriate Standard(s) and Specifications and Standard Detail(s).

Source:	Symbol:	Detail No.
Delaware ESC Handbook	VC-P	DE-ESC-3.3.3.1 Sheet 2 of 2 Effective FEB 2019

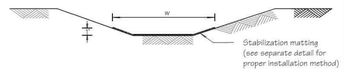
Standard Detail & Specifications

Veg. Channel - Triang./Trap.



* B = 0 for triangular section

Typical Section (Design)



Typical Section (Stabilization)

DATA

Design discharge (Q_p)
Design topwidth (TW)
Design depth (D)
Design bottom width (B)
Design sideslope (Z)
Design channel slope (e)
Width of stabilization mat (w)
Type of stabilization matting

Source:	Symbol:	Detail No.
Delaware ESC Handbook	VC-T	DE-ESC-3.3.3.2 Sheet 1 of 2 Effective FEB 2019

Standard Detail & Specifications

Veg. Channel - Triang./Trap.

Construction Notes:

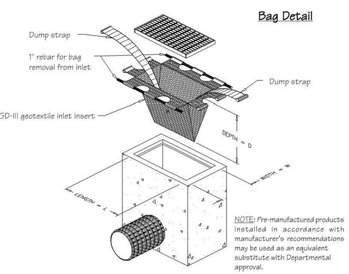
1. All trees, brush, stumps, obstructions, and other objectionable material shall be removed and disposed of so as not to interfere with the proper functioning of the waterway.
2. The channel shall be excavated or shaped to line, grade, and cross section as required to meet the criteria specified herein, and be free of bank projections or other irregularities which will impede normal flow.
3. Fills shall be compacted as needed to prevent unequal settlement that would cause damage in the waterway.
4. All earth removed and not needed in construction shall be spread or disposed of so that it will not interfere with the functioning of the waterway.
5. Stabilization shall be done in accordance with the appropriate Standard and Specifications for Vegetative Stabilization and Stabilization Mat.
   a. It is recommended that, when conditions permit, temporary diversions or other means should be used to prevent water from entering the waterway during the establishment of the vegetation.
   b. Should groundwater or base flow conditions preclude the establishment of adequate vegetative stabilization throughout the entire design section, provisions shall be made through use of a lining material, stone center drain and/or subsurface drain. Such practices shall be designed and constructed in accordance with the appropriate Standard(s) and Specifications and Standard Detail(s).

Source:	Symbol:	Detail No.
Delaware ESC Handbook	VC-T	DE-ESC-3.3.3.2 Sheet 2 of 2 Effective FEB 2019

Standard Detail & Specifications

Inlet Protection - Type 2

Bag Detail



NOTE: Pre-manufactured products installed in accordance with manufacturer's recommendations may be used as an equivalent substitute with Departmental approval.

Perspective

Source:	Symbol:	Detail No.
Adapted from ACF Products, Inc.	IP-2	DE-ESC-3.1.5.2 Sheet 1 of 2 Effective FEB 2019

Standard Detail & Specifications

Inlet Protection - Type 2

Notes:

1. This practice shall only be used in situations in which Inlet Protection - Type 1 cannot be used due to site constraints. These include, but are not limited to partially completed parking areas, streets, roads, etc.
2. It may be necessary to transition from Type 1 to Type 2 Inlet Protection as construction proceeds.
3. For areas where there is a concern for oil run-off or spills, insert shall meet one of the above specifications with an oil-absorbant pillow or shall be made completely from an oil-absorbant material with a woven pillow.

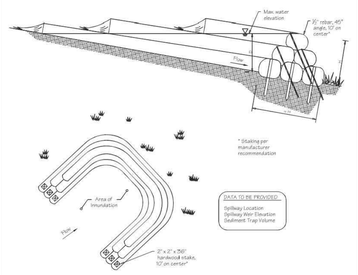
Materials:

The geotextile inlet insert shall meet or exceed the specifications of Type GD-III geotextile in accordance with Appendix A-3 of the Delaware Erosion & Sediment Control Handbook.

Source:	Symbol:	Detail No.
Adapted from ACF Products, Inc.	IP-2	DE-ESC-3.1.5.2 Sheet 2 of 2 Effective FEB 2019

Standard Detail & Specifications

Compost Log Sediment Trap



Source:	Symbol:	Detail No.
Adapted from Filtrexx™ International	CST	DE-ESC-3.1.3.4 Sheet 1 of 3 Effective FEB 2019

Standard Detail & Specifications

Compost Log Sediment Trap

Construction Notes:

1. Compost log sediment traps should be placed on low grade or level contours to maximize runoff-sediment volume containment.
2. Compost logs are stacked so the horizontal base width is at least equivalent to the effective height (H:H:V); traps shall be installed so the effective height is at least 3 feet.
3. The volume of sediment storage shall be 3600 cubic feet per acre of drainage area.
4. Stakes shall be installed through the middle of the compost logs using 2 inches by 2 inches by 3 feet wooden hardwood stakes on 10 feet centers. Stakes shall be placed in a pyramid configuration perpendicular to compost logs where stakes cross at the apex of the compost log trap. Stakes shall be joined and secured with wire wrapping at apex using 16 gauge or multi-strand 20 gauge wire allowing 12 inches of stake above the compost log trap.
5. All base layers shall be staked on 5 feet centers; placed opposite the pyramid staking; where staking is present every 2.5 feet Half inch rebar may also be used when ground is frozen or extremely compacted. Staking depth for all soil types shall be a minimum 12 inches into native soil.
6. Concentrated flows, channels, or ditches directing flow into the trap shall employ energy flow dissipaters prior to flow contact with the trap compost logs or entry into the trap system. Dissipaters shall be placed at a minimum distance of 20 feet from the base course of the trap.
7. In order to prevent water flowing around the ends of the sediment trap, the ends of the trap must be constructed pointing upslope so the ends are at a minimum 1 feet higher elevation than the lowest point (mid-section) of the sediment trap. The mid-section of the sediment trap shall be the point of lowest elevation. A minimum of 10 linear feet per end each placed at a 30 degree angle is recommended.
8. The design engineer will determine the location of a controlled outfall which will also serve as the minimum freeboard location for the trap. Erosion control matting or appropriately sized riprap shall be installed under the first row of compost logs and extend from the trap a distance no less than 30 feet.
9. The compost log sediment trap must be reviewed on a regular basis to ensure that it is in a functional condition at all times. Remove the sediment at the base of the upslope side of the sediment trap when accumulation has reached one half (1/2) of the effective height of the trap.

Source:	Symbol:	Detail No.
Adapted from Filtrexx™ International	CST	DE-ESC-3.1.3.4 Sheet 2 of 3 Effective FEB 2019

Standard Detail & Specifications

Compost Log Sediment Trap

10. The compost medium in the logs will be dispersed on site once the upgrade disturbed area has been permanently stabilized and approval is granted by the local delegated agency to remove the trap. The compost medium may be dispersed with a loader, rake, bulldozer or similar device and may be incorporated into the soil as an amendment or left on the soil surface to aid in permanent seeding or landscaping. The compost log mesh netting must be extracted and disposed of properly. In the case where biodegradable mesh netting has been used, the netting may remain incorporated with the compost medium when being spread on site.

Materials

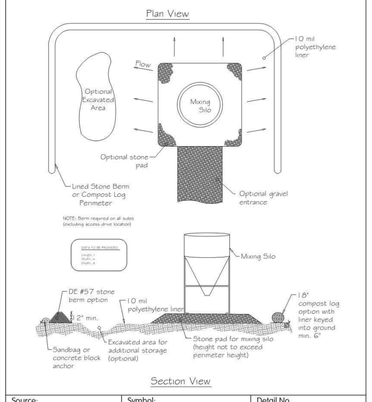
1. Stakes: 2" x 2" x 36" hardwood.
2. Compost media : See requirements in Standard Detail and Specifications for Compost Logs (DE-ES-3.1.7).
3. Filter sock: See requirements in Standard Detail and Specifications for Compost Logs (DE-ES-3.1.7).
4. Rebar: 1/2" nominal.

MAXIMUM DRAINAGE AREA: 5 ACRES

Source:	Symbol:	Detail No.
Adapted from Filtrexx™ International	CST	DE-ESC-3.1.3.4 Sheet 3 of 3 Effective FEB 2019

Standard Detail & Specifications

Concrete Mixing Operation



Source:	Symbol:	Detail No.
Adapted from MN/DOT Concrete Manual, Chap. 4	CMO	DE-ESC-3.6.3 Sheet 1 of 2 Effective FEB 2019

Standard Detail & Specifications

Concrete Mixing Operation

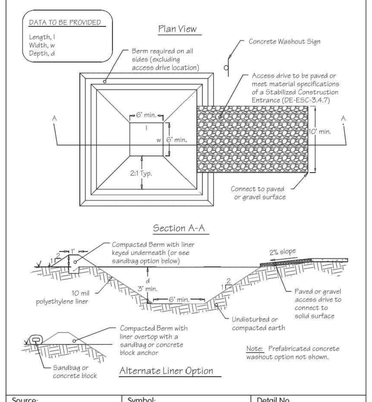
Construction Notes:

1. Locate concrete mixing and containment area a minimum of 50 feet from open channels, stormdrain inlets, wetlands or waterbodies.
2. Locate concrete mixing and containment area so that it is accessible to telescopic lifts (service with a minimum 10 foot wide gravel or paved accessway), but so it is not in a highly active construction area causing accidental damage.
3. Minimum volume for installed containment areas are 3.5 cubic feet per cubic foot of mixing capacity. The installed containment area must encompass the storage silo and mixing unit, and be surround on three sides minimum by a 12" high stone berm (DE #57) or 18" compost log
4. The 10-mil poly liner must be free of tears or holes and placed over smooth surfaces to prevent puncturing. The liner shall cover the perimeter control and be secured on the backside using cement or sand bags, or keyed into the ground a minimum of 6".
5. Allow cementitious waste to harden through evaporation of the wastewater. Once the facility has reached 75 percent of its capacity, remove the hardened concrete by reusing the broken aggregate onsite, recycling, or disposing of offsite. The hardened material can be buried on site with minimum of 1 foot of clean, compacted fill.
6. Apply a new liner before reusing the station for additional mixing after maintenance has occurred.

Source:	Symbol:	Detail No.
Adapted from MN/DOT Concrete Manual, Chap. 4	CMO	DE-ESC-3.6.3 Sheet 2 of 2 Effective FEB 2019

Standard Detail & Specifications

Concrete Washout



Source:	Symbol:	Detail No.
Adapted from Colorado Urban Storm Drainage Criteria Manual, Vol 3	CW	DE-ESC-3.6.2 Sheet 1 of 2 Effective FEB 2019

Standard Detail & Specifications

Concrete Washout

Construction Notes:

1. Locate washout area a minimum of 50 feet from open channels, stormdrain inlets, wetlands or waterbodies.
2. Locate washout area so that it is accessible to concrete equipment (service with a minimum 10 foot wide gravel accessway), but so it is not in a highly active construction area causing accidental damage.
3. Minimum dimensions for prefabricated units are 4 feet by 4 feet by 1 foot deep with a minimum 4mil polyethylene plastic liner. Minimum dimensions for constructed concrete washout areas are 6 feet by 6 feet by 3 feet deep, with a minimum 10mil polyethylene liner, 2:1 side slopes, and a 1 foot high by 1 foot wide compacted fill berm.
4. The liner must be free of tears or holes and placed over smooth surfaces to prevent puncturing. For excavated washouts, anchor the liner underneath the berm or overtop with sandbags or concrete blocks to hold in place.
5. Provide a sign designating the washout area, and for large construction sites, provide signs throughout directing traffic to its location.
6. Allow washed out concrete mixture to harden through evaporation of the wastewater. Once the facility has reached 75 percent of its capacity, remove the hardened concrete by reusing the broken aggregate onsite, recycling, or disposing of offsite. The hardened material can be buried on site with minimum of 1 foot of clean, compacted fill.
7. Apply a new liner before reusing the station for additional washouts after maintenance has occurred.

Source:	Symbol:	Detail No.
Adapted from Colorado Urban Storm Drainage Criteria Manual, Vol 3	CW	DE-ESC-3.6.2 Sheet 2 of 2 Effective FEB 2019

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www.beckermorgan.com

PROJECT TITLE

LANDS OF
STATE OF DELAWARE

BELMONT HALL

217 SMYRNA LEIPSIC RD
TOWN OF SMYRNA
KENT COUNTY, DE

SHEET TITLE

EROSION AND SEDIMENT CONTROL PLAN

ISSUE BLOCK

MARK	DATE	DESCRIPTION

LAYER/STATE: C502

PROJECT NO.: 2022035.00
DATE: 03/23/2023
SCALE: NONE
DRAWN BY: J.D.M. | PROJ. MGR.: B.L.H.

SHEET
C-502

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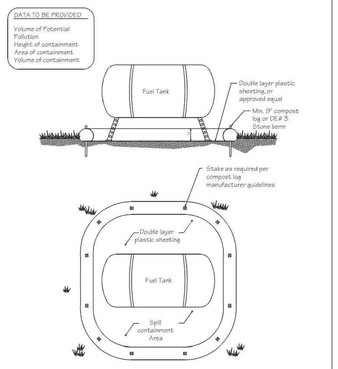
Standard Detail & Specifications

Construction Site Waste Mgt & Spill Control



Source:	Symbol:	Detail No.
Delaware ESC Handbook		**DE-ESC-3.6.1** Sheet 1 of 5 Effective FEB 2019

Standard Detail & Specifications

Construction Site Waste Mgt & Spill Control

Pollution Prevention – Spill Prevention

1. Fueling should only take place in signed designated areas, away from downstream drainage facilities and watercourses.
2. Fueling must be with nozzles equipped with automatic shut-off to control drips. Do not top off.
3. Protect the areas where equipment or vehicles are being repaired, maintained, fueled or parked from storm water run-on and runoff.
4. Use barriers such as berms to prevent storm water run-on and runoff, and to contain spills.
5. Place a "Fueling Area" sign next to each fueling area.
6. Store hazardous materials such as fuel, solvents, oil and chemicals in secondary containment.
7. Inspect vehicles and equipment for leaks on each day of use. Repair fluid and oil leaks immediately.
8. Absorbent spill clean-up materials and spill kits must be available in fueling areas and on fuel trucks.
9. If fueling is to take place at night, make sure the fueling area is sufficiently illuminated.
10. Properly dispose of used oil, fluids, lubricants and spill clean-up materials.

CLEAN UP SPILLS

1. If it is safe to do so, immediately contain and clean up any chemical and/or hazardous material spills.
2. Properly dispose of used oil, fluids, lubricants and spill clean-up materials.
3. Do not bury spills or wash them down with water.

LEAKS AND DRIPS

1. Use drip pans or absorbent pads at all times. Place under and around leaky equipment.
2. Do not allow oil, grease, fuel or chemicals to drip onto the ground.
3. Have spill kits and clean up material on-site.
4. Repair leaky equipment promptly or remove problem vehicles and equipment from the site. Clean up contaminated soil immediately.
5. Store contaminated waste in sealed containers constructed of suitable material. Label these containers properly.
6. Clean up all spills and leaks. Promptly dispose of waste and spent clean up materials.

Source:	Symbol:	Detail No.
Delaware ESC Handbook		**DE-ESC-3.6.1** Sheet 2 of 5 Effective FEB 2019

Standard Detail & Specifications

Construction Site Waste Mgt & Spill Control

Notes:

The Construction Site Pollution Prevention Plan should include the following elements:

1. **Material Inventory**

   Document the storage and use of the following materials:

   a. Concrete
   b. Detergents
   c. Paints (enamel and latex)
   d. Cleaning solvents
   e. Pesticides
   f. Wood scraps
   g. Fertilizers
   h. Petroleum based products

2. **Good housekeeping practices**
   a. Store only enough product required to do the job.
   b. All materials shall be stored in a neat, orderly manner in their original labeled containers and covered.
   c. Substances shall not be mixed.
   d. When possible, all of a product shall be used up prior to disposal of the container.
   e. Manufacturers' instructions for disposal shall be strictly adhered to.
   f. The site foreman shall designate someone to inspect all BMPs daily.

3. **Waste management practices**
   a. All waste materials shall be collected and stored in securely lidded dumpsters in a location that does not drain to a waterbody.
   b. Waste materials shall be salvaged and/or recycled whenever possible.
   c. The dumpsters shall be emptied a minimum of twice per week, or more if necessary. The licensed trash hauler is responsible for cleaning out dumpsters.

Source:	Symbol:	Detail No.
Adapted from USEPA Pub. 840-B-92-002		**DE-ESC-3.6.1** Sheet 3 of 5 Effective FEB 2019

Standard Detail & Specifications

Construction Site Waste Mgt & Spill Control

Notes (cont.)

d. Trash shall be disposed of in accordance with all applicable Delaware laws.
e. Trash cans shall be placed at all lunch spots and littering is strictly prohibited. Recycle bins shall be placed near the construction trailer.
f. If fertilizer bags can not be stored in a weather-proof location, they shall be kept on a pallet and covered with plastic sheeting which is overlapped and anchored.

4. **Equipment maintenance practices**
   a. If possible, equipment should be taken to off-site commercial facilities for washing and maintenance.
   b. If performed on-site, vehicles shall be washed with high-pressure water spray without detergents in an area contained by an impervious berm.
   c. Drip pans shall be used for all equipment maintenance.
   d. Equipment shall be inspected for leaks on a daily basis.
   e. Washout from concrete trucks shall be disposed of in a temporary pit for hardening and proper disposal.
   f. Fuel nozzles shall be equipped with automatic shut-off valves.
   g. All used products such as oil, antifreeze, solvents and tires shall be disposed of in accordance with manufacturers' recommendations and local, state and federal laws and regulations.

5. **Spill prevention practices**
   a. Potential spill areas shall be identified and contained in covered areas with no connection to the storm drain system.
   b. Warning signs shall be posted in hazardous material storage areas.
   c. Preventive maintenance shall be performed on all tanks, valves, pumps, pipes and other equipment as necessary.
   d. Low or non-toxic substances shall be prioritized for use.

Source:	Symbol:	Detail No.
Adapted from USEPA Pub. 840-B-92-002		**DE-ESC-3.6.1** Sheet 4 of 5 Effective FEB 2019

Standard Detail & Specifications

Construction Site Waste Mgt & Spill Control

Notes (cont.)

e. Contact information for reporting spills through the DNREC 24-Hour Toll Free Number shall be prominently posted.

6. **Education**
   a. Best management practices for construction site pollution control shall be a part of regular progress meetings.
   b. Information regarding waste management, equipment maintenance and spill prevention shall be prominently posted in the construction trailer.

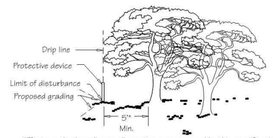
CONTACT INFORMATION

DNREC 24-Hour Toll Free Number	**800-662-8802**
DNREC Solid & Hazardous Waste Management Section	**302-739-9403**

Source:	Symbol:	Detail No.
Adapted from USEPA Pub. 840-B-92-002		**DE-ESC-3.6.1** Sheet 5 of 5 Effective FEB 2019

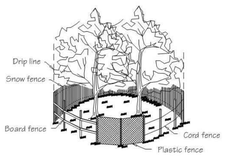
Standard Detail & Specifications

Sensitive Area Protection



*5' min. setback applies to all sensitive areas covered by this specification.

Location of Sensitive Area Protection



Methods of Sensitive Area Protection

Source:	Symbol:	Detail No.
Adapted from VA ESC Handbook	SAP	**DE-ESC-3.7.2** Sheet 1 of 3 Effective FEB 2019

Standard Detail & Specifications

Sensitive Area Protection

Construction Notes:

Fencing shall be installed at the extents of all sensitive areas. For trees, the fencing shall be installed outside the dripline (mature canopy) and at no time within 5 feet of the trunk. Personnel must be instructed to honor protective devices. The devices described are suggested only, and are not intended to exclude the use of other devices which will protect the trees to be retained. If silt fence is to be used for demarcation purposes, appropriate signage shall be provided a minimum of every 20 feet denoting the area as a sensitive area protection zone.

Materials:

1. Snow Fence - Standard 40-inch high snow fence shall be placed at the limits of clearing or construction on standard steel posts set 6 feet apart.
2. Board Fence - Board fencing consisting of 4-inch square posts set securely in the ground and protruding at least 4 feet above the ground shall be placed at the limits of clearing with a minimum of two horizontal boards between posts. For tree protection, if it is not practical to erect a fence at the drip line, construct a triangular fence nearer the trunk. The limits of clearing will still be located at the drip line, since the root zone within the drip line will still require protection.
3. Plastic Fencing - 40-inch high "international orange" plastic (polyethylene) web fencing secured to conventional metal "T" or "U" posts driven to a minimum depth of 18 inches on 6-foot minimum centers shall be installed at the limits of clearing. The fence should have the following minimum physical qualities:

   a. Tensile yield: Average 2,000 lbs. per 4-foot width (ASTM D638)
   b. Ultimate tensile yield: Average 2,900 lbs. per 4-foot width (ASTM D638)
   c. Elongation at break (%): Greater than 1000% (ASTM D638)
   d. Chemical resistance: Inert to most chemicals and acids

Source:	Symbol:	Detail No.
Adapted from VA ESC Handbook	SAP	**DE-ESC-3.7.2** Sheet 2 of 3 Effective FEB 2019

Standard Detail & Specifications

Sensitive Area Protection

4. Cord Fence - Posts with a minimum size of 2 inches square or 2 inches in diameter set securely in the ground and protruding at least 4 feet above the ground shall be placed at the limits of clearing with two rows of cord 1/4-inch or thicker at least 2 feet apart running between posts with strips of colored surveyor's flagging tied securely to the string at intervals no greater than 3 feet.
5. Earth Berms - Temporary earth berms shall be constructed according to specifications for a Temporary Earth Dike with the base of the berm on the sensitive area side located along the limits of clearing. Earth berms may not be used for this purpose if their presence will conflict with drainage patterns.
6. Trunk Armoring (Tree Protection Only) - As a last resort, a tree trunk can be armored with burlap wrapping and 2-inch studs wired vertically no more than 2 inches apart to a height of 5 feet encircling the trunk. If this alternative is used, the root zone within the drip line will still require protection. Nothing should ever be nailed to a tree.

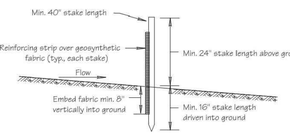
Maintenance:

Fencing and armoring devices shall be in place before any excavation or grading is begun, shall be kept in good repair for the duration of construction activities, and shall be the last items removed during the final cleanup after the completion of the project.

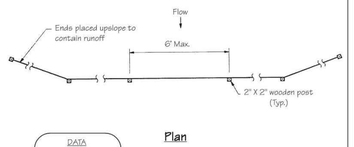
Source:	Symbol:	Detail No.
Adapted from VA ESC Handbook	SAP	**DE-ESC-3.7.2** Sheet 3 of 3 Effective FEB 2019

Standard Detail & Specifications

Silt Fence



Section



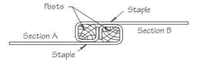
Plan

Source:	Symbol:	Detail No.
Adapted form MD Stds. & Specs. for ESC	SF	**DE-ESC-3.1.2.1** Sheet 1 of 2 Effective FEB 2019

Standard Detail & Specifications

Silt Fence

Construction Detail



Method for joining continuous sections

Top

Construction Notes:

1. Geosynthetic fabric to be fastened securely to fence posts with wire ties or staples.
2. When two sections of filter cloth adjoin each other they shall be overlapped by six inches and folded.
3. Maintenance shall be performed as needed and material removed when "bulges" develop in the silt fence.

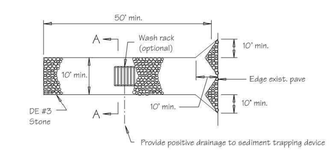
Materials:

1. Stakes: Steel (either T or U) or 2" x 2" hardwood
2. Geosynthetic Fabric: Type GD-I
3. Reinforcing strip: Wooden lath or plastic strip

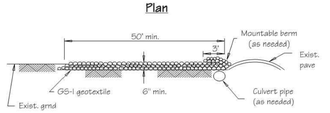
Source:	Symbol:	Detail No.
Adapted from MD Stds. & Specs. for ESC	SF	**DE-ESC-3.1.2.1** Sheet 2 of 2 Effective FEB 2019

Standard Detail & Specifications

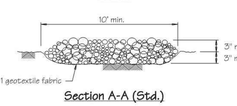
Stabilized Construct. Entrance



Plan



Profile

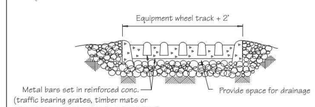


Section A-A (Std.)

Source:	Symbol:	Detail No.
Adapted from VA ESC Handbook	SCE	**DE-ESC-3.4.7** Sheet 1 of 2 Effective FEB 2019

Standard Detail & Specifications

Stabilized Construct. Entrance



Section A-A (Opt.)

Construction Notes:

1. Stone size - Use DE #3 stone.
2. Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum length would apply).
3. Thickness - Not less than size (6) inches.
4. Width - Ten (10) foot minimum, but not less than the full width at points where ingress or egress occurs.
5. Geotextile - Type GS-I, placed over the entire area prior to placing of stone.
6. Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 5:1 slopes will be permitted.
7. Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
8. Washing - Vehicle wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
9. Inspection - Periodic inspection and needed maintenance shall be provided after each rain.

Source:	Symbol:	Detail No.
Adapted from VA ESC Handbook	SCE	**DE-ESC-3.4.7** Sheet 2 of 2 Effective FEB 2019

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PROJECT TITLE

LANDS OF
STATE OF DELAWARE

BELMONT HALL

217 SMYRNA LEIPSIC RD
TOWN OF SMYRNA
KENT COUNTY, DE

SHEET TITLE

EROSION AND SEDIMENT CONTROL PLAN

ISSUE BLOCK

MARK	DATE	DESCRIPTION

LAYER STATE: C-502

PROJECT NO.: 2022035.00
DATE: 03/23/2023
SCALE: NONE
DRAWN BY: **J.D.M.** PROJ. MGR.: **B.L.H.**

SHEET
C-503

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Standard Detail & Specifications
Topsoiling

Construction Notes:

1. Site Preparation (Where Topsoil is to be added)

Note: When topsoiling, maintain needed erosion and sediment control practices such as diversions, grade stabilization structures, berms, dikes, waterways and sediment basins.

a. Grading - Grades on the areas to be topsoiled which have been previously established shall be maintained.

b. Liming - Where the topsoil is either highly acid or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/acre (200-400 pounds per 1,000 square feet). Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.

c. Tilling - After the areas to be topsoiled have been brought to grade, and immediately prior to dumping and spreading the topsoil, the subgrade shall be loosened by discing or by scarifying to a depth of a least 3 inches to permit bonding of the topsoil to the subsoil. Pack by passing a bulldozer up and down over the entire surface area of the slope to create horizontal erosion check slots to prevent topsoil from sliding down the slope.

2. Topsoil Material and Application

Note: Topsoil salvaged from the existing site may often be used but it should meet the same standards as set forth in these specifications. The depth of topsoil to be salvaged shall be no more than the depth described as a representative profile for that particular soil type as described in the soil survey published by USDA-SCS in cooperation with Delaware Agricultural Experimental Station.

Source:	Symbol:	Detail No.
USDA - NRCS		DE-ESC-3.4.1 Sheet 1 of 2 Effective FEB 2019

Standard Detail & Specifications
Topsoiling

Construction Notes (cont.)

a. Materials - Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand or other soil as approved by an agronomist or soil scientist. It shall not have a mixture of contrasting textured subsoil and contain no more than 5 percent by volume of cinders, stones, slag, coarse fragment, gravel, sticks, roots, trash or other extraneous materials larger than 1-1/2 inches in diameter. Topsoil must be free of plants or plant parts of bermudagrass, quackgrass, Johnsongrass, nutsedge, poison ivy, thistles, or others as specified. All topsoil shall be tested by a reputable laboratory for organic matter content, pH and soluble salts. A pH of 6.0 to 7.5 and an organic content of not less than 1.5 percent by weight is required. If pH value is less than 6.0 lime shall be applied and incorporated with the topsoil to adjust the pH to 6.5 or higher. Topsoil containing soluble salts greater than 500 parts per million shall not be used.

Note: No sod or seed shall be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed to permit dissipation of toxic materials.

b. Grading - The topsoil shall be uniformly distributed and compacted to a minimum of four (4) inches. Spreading shall be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets. Topsoil shall not be placed while in a frozen or muddy condition, when the subgrade is excessively wet, or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.

Note: Topsoil substitutes or amendments as approved by a qualified agronomist or soil scientist, may be used in lieu of natural topsoil. Compost material used to improve the percentage of organic matter shall be provided by a certified supplier.

Compost amendments that are intended to meet specific post-construction stormwater management goals shall further meet the requirements of **Appendix 3.06.2 Post Construction Stormwater Management BMP Standards and Specifications, Section 14.0 Soil Amendments.**

Source:	Symbol:	Detail No.
USDA - NRCS		DE-ESC-3.4.1 Sheet 2 of 2 Effective FEB 2019

Standard Detail & Specifications
Vegetative Stabilization

TEMPORARY SEEDING BY RATES, DEPTHS AND DATES

Mix #	Species[6]	Seeding Rate		Optimum Seeding Dates[1] O = Optimum Planting Period; A = Acceptable Planting Period							Planting Depth[3]
				Coastal Plain			Piedmont			All	
	Certified Seed	lb/Ac[5]	lb/1000 sq.ft.	2/1-4/30	[2] 5/1-8/14	8/15-10/31	3/1-4/30	[2] 5/1-7/31	8/1-10/31	10/31-2/1	
1	Barley	125	4	O	A	O	O	A	O		1-2 inches 2-3" sandy soils
2	Oats	125	4	O	A	A	O	A	A		1-2 inches 2-3" sandy soils
3	Rye	125	4	O	A	O	O	A	O	A	1-2 inches 2-3" sandy soils
4	Perennial Ryegrass	125	4	O	A	O	O	A	O		0.5 inches 1-2" sandy soils
5	Annual Ryegrass	125	4	O	A	O	O	A	O	A	0.5 inches 1-2" sandy soils
6	Winter Wheat	125	4	O	A	O	O	A	O	A	1-2 inches 2-3" sandy soils
7	Foxtail Millet	30 PLS	0.7		O			O			0.5 inches 1-2" sandy soils
8	Pearl Millet	20 PLS	0.5		O			O			0.5 inches 1-2" sandy soils

1. Winter seeding requires 3 tons per acre of straw mulch for proper stabilization.
2. May be planted throughout summer if soil moisture is adequate or seeded area can be irrigated.
3. Applicable on slopes 3:1 or less.
4. Fifty pounds per acre of Annual Lespedeza may be added to 1/2 the seeding rate of any of the above species.
5. Use varieties currently recommended for Delaware. Contact a County Extension Office for information.
6. Warm season grasses such as Millet or Weeping Lovegrass may be used between 5/1 and 9/1 if desired. Seed at 3-5 lbs. per acre. Good on low fertility and acid areas. Seed after frost through summer at a depth of 0.5".

NOTE: Alternative seed mixes may be used with prior approval from the Department or Delegated Agency.

Source:	Symbol:	Detail No.
Delaware ESC Handbook		DE-ESC-3.4.3 Sheet 1 of 4 Effective FEB 2019

Standard Detail & Specifications
Vegetative Stabilization

PERMANENT SEEDING AND SEEDING DATES

Mix No.	Seeding Mixtures / Certified Seed[3]	Seeding Rate[1] lb/Ac	lb/1000 sq.ft.	Coastal Plain 2/1-4/30	5/1-8/14	8/15-10/31	Piedmont 3/1-4/30	5/1-7/31	8/1-10/31	All[4] 10/31-2/1	Remarks
	Well Drained Soils										
1	Tall Fescue Weeping Lovegrass	140 10	3.2 0.23	A	O	A	A	O	A	Add 100 lbs./ac Winter Rye	Good erosion control mix Tolerant of low fertility soils Lovegrass very difficult to mow; Germinates only in hot weather
2	Deertongue Sheep Fescue Common Lespedeza[5] Inoculated	30 30 15	0.69 0.69 0.35	A	O	A	A	O	A	Add 100 lbs./ac Winter Rye	Good erosion control mix Tolerant of low fertility soils Good wildlife cover and food
3	Tall Fescue (Turf-type) **or** Strong Creeping Red Fescue **or** Perennial Ryegrass **plus** Flatpea[5]	50 50 50 15	1.15 1.15 1.15 0.34	O	A	O	O	A	O	Add 100 lbs./ac. Winter Rye	Good erosion control mix Tall Fescue for droughty conditions. Creeping Red Fescue for heavy shade. Flatpea to suppress woody vegetation.
4	Strong Creeping Red Fescue Kentucky Bluegrass Perennial Ryegrass **or** Redtop **plus** White Clover[5]	100 70 15 5 3	2.3 1.61 0.35 0.11 0.07	O	A	O	O	A	O	Add 100 lbs./ac. Winter Rye	Suitable waterway mix. Canada Bluegrass more drought tolerant. Use Redtop for increased drought tolerance.
5	Switchgrass[6,7] **or** Coastal Panicgrass Big Bluestem Little Bluestem Indian Grass	10 10 5 5 5	0.23 0.23 0.11 0.11 0.1		O			O			Native warm-season mixture. Tolerant of low fertility soils. Drought tolerant. Poor shade tolerance. N fertilizer discouraged - weeds
6	Tall Fescue (turf-type) (Blend of 3 cultivars)	150	3.5	O	A	O	O	A	O		Managed filter strip for nutrient uptake.
7	Tall Fescue Ky. Bluegrass (Blend) Perennial Ryegrass	150 20 20	3.5 0.46 0.46	O	A	O	O	A	O		Three cultivars of Kentucky Bluegrass. Traffic tolerant.
8	Big Bluestem[7] Indian Grass[7] Little Bluestem[7] Creeping Red Fescue **plus one of:** Partridge Pea Bush Clover Wild Indigo Showy Tick-Trefoil	10 10 8 30 5 3 3 2	0.23 0.23 0.18 0.69 0.11 0.07 0.07 0.05	O	A		O	A			All species are native. Indian Grass and Bluestem have fluffy seeds. Plant with a specialized native seed drill. Creeping Red Fescue will provide erosion protection while the warm season grasses get established.

Optimum Seeding Dates[2]: O = Optimum Planting Period; A = Acceptable Planting Period

NOTE: Alternative seed mixes may be used with prior approval from the Department or Delegated Agency.

Source:	Symbol:	Detail No.
Delaware ESC Handbook		DE-ESC-3.4.3 Sheet 2 of 4 Effective FEB 2019

Standard Detail & Specifications
Vegetative Stabilization

PERMANENT SEEDING AND SEEDING DATES (cont.)

Mix No.	Seeding Mixtures / Certified Seed[3]	Seeding Rate[1] lb/Ac	lb/1000 sq.ft.	Coastal Plain 2/1-4/30	5/1-8/14	8/15-10/31	Piedmont 3/1-4/30	5/1-7/31	8/1-10/31	All[4] 10/31-2/1	Remarks
	Poorly Drained Soils										
9	Redtop Creeping Bentgrass Sheep Fescue Rough Bluegrass	75 35 30 45	1.72 0.8 0.69 1	O	A	O	O	A	O	Add 100 lbs./ac. Winter Rye	Quick stabilization of disturbed sites and waterways
10	Reed Canarygrass[6]	10	0.23	A		O	A		O		Good erosion control, wildlife cover and wetland revegetation.
	Residential Lawns										
11	Tall Fescue Perennial Ryegrass Kentucky Bluegrass Blend	100 25 30	2.3 0.57 0.69	O	A	O	O	A	O		High value, high maintenance, light traffic, irrigation necessary. Well drained soils, full sun.
12	Tall Fescue Perennial Ryegrass Sheep Fescue	100 25 25	2.3 0.57 0.57	O	A	O	O	A	O		Moderate value, low maintenance, traffic tolerant
13	Creeping Red Fescue Chewings Fescue Rough Bluegrass Kentucky Bluegrass	50 50 20 20	1.15 1.15 0.4 0.4	O	A	O	O	A	O		Shade tolerant, moderate traffic tolerance, moderate maintenance.
14	Creeping Red Fescue Rough Bluegrass **or** Chewings Fescue	50 90	1.15 2.1	O	A	O	O	A	O		Shade tolerant, moisture tolerant.
15	K-31 Tall Fescue	150	3.5	O	A	O	O	A	O		Monoculture, but performs well alone in lawns. Discouraged.

Optimum Seeding Dates[2]: O = Optimum Planting Period; A = Acceptable Planting Period

1. When hydroseeding is the chosen method of application, the total rate of seed should be increased by 25%.
2. Winter seeding requires 3 tons per acre of straw mulch. Planting dates listed above are average for Delaware. These dates may require adjustment to reflect local conditions.
3. All seed shall meet the minimum purity and minimum germination percentages recommended by the Delaware Department of Agriculture. The maximum % of weed seeds shall be in accordance with Section 1, Chapter 24, Title 3 of the Delaware Code.
4. Cool season species may be planted throughout summer if soil moisture is adequate or seeded area can be irrigated.
5. All leguminous seed must be inoculated.
6. Warm season grass mix and Reed Canary Grass cannot be mowed more than 4 times per year.
7. Warm season grasses require a soil temperature of at least 50 degrees in order to germinate, and will remain dormant until then.

NOTE: Alternative seed mixes may be used with prior approval from the Department or Delegated Agency.

Source:	Symbol:	Detail No.
Delaware ESC Handbook		DE-ESC-3.4.3 Sheet 3 of 4 Effective FEB 2019

Standard Detail & Specifications
Vegetative Stabilization

Construction Notes:

1. Site Preparation
   a. Prior to seeding, install needed erosion and sediment control practices such as diversions, grade stabilization structures, berms, dikes, grassed waterways, and sediment basins.
   b. Final grading and shaping is not necessary for temporary seedings.
2. Seedbed Preparation

   It is important to prepare a good seedbed to insure the success of establishing vegetation. The seedbed should be well prepared, loose, uniform, and free of large clods, rocks, and other objectionable material. The soil surface should not be compacted or crusted.
3. Soil Amendments
   a. Lime - Apply liming materials based on the recommendations of a **soil test** in accordance with the approved nutrient management plan. If a nutrient management plan is not required, apply dolomitic limestone at the rate of 1 to 2 tons per acre. Apply limestone uniformly and incorporate into the top 4 to 6 inches of soil.
   b. Fertilizer - Apply fertilizer based on the recommendations of a **soil test** in accordance with the approved nutrient management plan. If a nutrient management plan is not required, apply a formulation of 10-10-10 at the rate of 600 pounds per acre. Apply fertilizer uniformly and incorporate into the top 4 to 6 inches of soils.
4. Seeding
   a. For **temporary stabilization**, select a mixture from **Sheet 1** . For a **permanent stabilization**, select a mixture from **Sheet 2** or **Sheet 3** depending on the conditions. Alternative seed mixes may be used with prior approval from the Department or Delegated Agency.
   b. Apply seed uniformly with a broadcast seeder, drill, cultipacker seeder or hydroseeder. All seed will be applied at the recommended rate and planting depth.
   c. Seed that has been broadcast should be covered by raking or dragging and then lightly tamped into place using a roller or cultipacker. If hydroseeding is used and the seed and fertilizer is mixed, they will be mixed on site and the seeding shall be done immediately and without interruption.
5. Mulching

   All mulching shall be done in accordance with detail **DE-ESC-3.4.5**.

Source:	Symbol:	Detail No.
Delaware ESC Handbook		DE-ESC-3.4.3 Sheet 4 of 4 Effective FEB 2019

Standard Detail & Specifications
Mulching

1. Materials and Amounts

a. *Straw* - Straw shall be unrotted small grain straw applied at the rate of 1-1/2 to 2 tons per acre, or 70 to 90 pounds (two bales) per 1,000 square feet. Mulch materials shall be relatively free of weeds and shall be free of noxious weeds such as; thistles, Johnsongrass, and quackgrass. Spread mulch uniformly by hand or mechanically. For uniform distribution of hand spread mulch, divide area into approximately 1,000 square feet sections and place 70-90 pounds (two bales) of mulch in each section.

b. *Wood chips* - Apply at the rate of approximately 6 tons per acre or 275 pounds per 1,000 square feet when available and when feasible. These are particularly well suited for utility and road rights-of-way. If wood chips are used, increase the application rate of nitrogen fertilizer by 20 pounds of N per acre (200 pounds of 10-10-10 or 66 pounds of 30-0-0 per acre).

c. *Hydraulically applied mulch* - The following conditions apply to hydraulically applied mulch:

i. Definitions:

a. Wood fiber mulch shall consist of specially prepared wood that has been processed to a uniform state, is packaged for sale as a hydraulic mulch for use with hydraulic seeding equipment, and consists of a minimum of 70% virgin or recycled wood fiber combined with 30% paper fiber and additives.

b. Blended fiber mulch shall consist of any hydraulic mulch that contains greater than 30% paper fiber. The paper component must consist of specially prepared paper that has been processed to a uniform fibrous state and is packaged for sale as a hydraulic mulch for use with hydraulic seeding equipment.

c. A bonded fiber matrix (BFM) consists of long strand, specially prepared wood fibers that have been processed to a uniform state held together by a water resistant bonding agent. BFMs shall contain no paper (cellulose) mulch but may contain small percentages of synthetic fibers to enhance performance.

d. Refer to **Figure 3.4.5a** for conditions and limitations of use for each of the above categories of hydraulic mulch.

ii. All components of the hydraulically applied mulches shall be pre-packaged by the manufacturer to assure material performance. Field mixing of the mulch components is acceptable, but must be done per manufacturers recommendations to ensure the proper results.

iii. Hydraulic mulches shall be applied with a viable seed and at manufacturer's recommended rates. Increased rates may be necessary based on site conditions.

iv. Hydraulically applied mulches and additives shall be mixed according to manufacturers recommendations.

iv. Materials within this category shall only be used when hydraulically applied mulch has been specified for use on the approved Sediment and Stormwater Plan, or supplemental approval from the plan approval agency has been obtained in writing for a specific area.

Source:	Symbol:	Detail No.
Delaware ESC Handbook & Filtrexx™ International		DE-ESC-3.4.5 Sheet 1 of 3 Effective FEB 2019

Standard Detail & Specifications
Mulching

v. Application:

a. Apply product to geotechnically stable slopes that have been designed and constructed to divert runoff away from the face of the slope.

b. Do not apply to saturated soils, or if precipitation is anticipated within 24-48 hours.

c. During the spring (March 1 to May 31) and fall (September 1 to November 30) seasons, hydraulic mulches may be applied in a one-step process where all components are mixed together in single-tank loads. It is recommended that the product be applied from opposing directions to achieve optimum soil coverage.

d. During the summer (June 1 to August 31) and winter (December 1 to February 28) seasons, the following two-step process is required:

Step One – Mix and apply seed and soil amendments with a small amount of mulch for visual metering.

Step Two – Mix and apply mulch at manufacturers recommended rates over freshly seeded surfaces. Apply from opposing directions to achieve optimum soil coverage.

e. Minimum curing temperature is 40° F (4° C). The best results and more rapid curing are achieved at temperatures exceeding 60° F (15° C). Curing times may be accelerated in high temperature, low humidity conditions on dry soils.

vi. Recommended application rates are for informational purposes only. Conformance with this standard and specification shall be performance-based and requires **100% soil coverage**. Any areas with bare soil showing shall be top dressed until full coverage is achieved.

d. *Compost blanket (CB)* - Loosely applied with a pneumatic blower so that a 1" compost blanket uniformly covers the **soil with 100% coverage**. This application can be used with seed to promote germination by applying the approved seed mix directly into the loosely blown compost. The compost blanket performs best on slopes less than 2:1 and requires no mulch anchoring.

2. Anchoring mulch - Mulch must be anchored immediately to minimize loss by wind or water. This may be done by one of the following methods, depending upon size of area, erosion hazard, and cost.

a. *Crimping* - A crimper is a tractor drawn implement designed to punch and anchor mulch into the top two (2) inches of soil. This practice affords maximum erosion control but is limited to flatter slopes where equipment can operate safely. On sloping land, crimping should be done on the contour whenever possible.

b. *Tracking* - Tracking is the process of cutting mulch (usually straw) into the soil using a bulldozer or other equipment that runs on cleated tracks. Tracking is used primarily on slopes 3:1 or steeper and should be done up and down the slope with cleat marks running across the slope.

c. *Liquid mulch binders* - Applications of liquid mulch binders should be heavier at edges, in valleys, and at crests of banks and other areas where the mulch will be moved by wind or water. All other areas should have a uniform application of binder. The use of synthetic binders is the preferred method of mulch binding and should be applied at the rates recommended by the manufacturer.

d. *Paper fiber* - The fiber binder shall be applied at a net dry weight of 750 lbs/ac. The wood cellulose fiber shall be mixed with water, and the mixture shall contain a maximum of 50 lbs. of wood cellulose fiber per 100 gallons.

e. *Nettings* - Synthetic or organic nettings may be used to secure straw mulch. Install and secure according to the manufacturers recommendations.

Source:	Symbol:	Detail No.
Delaware ESC Handbook & Filtrexx™ International		DE-ESC-3.4.5 Sheet 2 of 3 Effective FEB 2019

Standard Detail & Specifications
Mulching

MULCHING MATERIAL SELECTION GUIDE

Percent Slope	Type of Mulch / App. Rate*	Dec. 1 to Feb. 28(29)	March 1 to May 31	June 1 to Aug. 31	Sept. 1 to Nov. 30
Less than 2%	Blended Fiber @ 2000 lbs/ac. minimum	xxxxxxxxxxxxxxx	OK (≤1 ac.)	xxxxxxxxxxxxxxx	OK (≤1 ac.)
	Wood Fiber @ 2000 lbs/ac. min.	xxxxxxxxxxxxxxx	OK	xxxxxxxxxxxxxxx	OK
	BFM @ 3000 lbs/ac. min.	OK	OK	OK	OK
	Straw @ 2 Tons/ac. Min.	OK	OK	OK	OK
	Stabilization Matting**	OK	OK	OK	OK
	1" Compost Blanket (CB)	OK	OK	OK	OK
2% to 5.9%	Wood Fiber @ 2000 lbs/ac. min.	xxxxxxxxxxxxxxx	OK	xxxxxxxxxxxxxxx	OK
	BFM @ 3000-3500 lbs/ac. min	OK	OK	OK	OK
	Straw @ 2 Tons/ac. min.	OK	OK	OK	OK
	Stabilization Matting**	OK	OK	OK	OK
	1" Compost Blanket (CB)	OK	OK	OK	OK
6% to 10.9%	Wood Fiber @ 2000-2500 lbs/ac. min.	xxxxxxxxxxxxxxx	OK	xxxxxxxxxxxxxxx	OK
	BFM @ 3500-4000 lbs/ac. min.	OK	OK	OK	OK
	Straw @ 2 Tons/ac. min.	OK	OK	OK	OK
	Stabilization Matting**	OK	OK	OK	OK
	1" Compost Blanket (CB)	OK	OK	OK	OK
11% to 24.9%	Wood Fiber @ 2500-3000 lbs/ac. min.	xxxxxxxxxxxxxxx	OK	xxxxxxxxxxxxxxx	OK
	BFM @ 3500-4000 lbs/ac. min.	OK	OK	OK	OK
	Straw @ 2 Tons/ac. min.	OK	OK	OK	OK
	Stabilization Matting**	OK	OK	OK	OK
	1" Compost Blanket (CB)	OK	OK	OK	OK
25% to 33%	Wood Fiber @ 2500-3000 lbs/ac. min.	xxxxxxxxxxxxxxx	OK	xxxxxxxxxxxxxxx	OK
	BFM @ 4000 lbs/ac. min.	xxxxxxxxxxxxxxx	OK	xxxxxxxxxxxxxxx	OK
	Straw @ 2 Tons/ac. min.	OK	OK	OK	OK
	Stabilization Matting**	OK	OK	OK	OK
	1" Compost Blanket (CB)	OK	OK	OK	OK
33% and up	BFM @ 4000-4500 lbs/ac. min.	xxxxxxxxxxxxxxx	OK	xxxxxxxxxxxxxxx	OK
	Straw @ 2 Tons/ac. min.***	OK	OK	OK	OK
	Stabilization Matting**	OK	OK	OK	OK
	1" Compost Blanket (CB)	2:1 Max.	2:1 Max.	2:1 Max.	2:1 Max.

* Note: Manufacturers Recommended Rates for informational purposes only. Performance standard requires 100% soil coverage.
** Note: Stabilization Matting must be applied in accordance with Section 3.4.6 of the Delaware ESC Handbook.
***Note: Straw applied on slopes greater than 33% must be netted (this does not apply to topsoil stockpiles).
OK = Acceptable to use during this time period.
xx = Not acceptable to use during this time period.
All application rates are minimums

Source:	Symbol:	Detail No.
Delaware ESC Handbook & Filtrexx™ International		DE-ESC-3.4.5 Sheet 3 of 3 Effective FEB 2019

Standard Detail & Specifications
Dust Control

Temporary Methods:

1. Mulches - See **DE-ESC-3.4.5**, Standard Detail and Specifications for Mulching.
2. Vegetative cover - See **DE-ESC-3.4.3**, Std. Detail and Specifications for Vegetative Stabilization.
3. Adhesives - Use on mineral soils only (not effective on muck soils). Keep traffic off these areas. The following table may be used for general guidance.

Type of Emulsion	Water Dilution	Type of Nozzle	Apply Gal/Ac.
Latex emulsion	12.5:1	Fine spray	235
Resin-in-water emulsion	4.1	Fine spray	300
Acrylic emulsion (non-trafffic)	7:1	Coarse spray	450
Acrylic emulsion (traffic)	3.5:1	Coarse spray	350

4. Tillage - For emergency temporary treatment, scarify the soil surface to prevent or reduce the amount of blowing dust until a more appropriate solution can be implemented. Begin the tillage operation on the windward side of the site using a chisel-type plow for best results.
5. Sprinkling - Sprinkle site with water until the surface is moist . Repeat as needed.
6. Calcium Chloride - Apply as flakes or granular material with a spreader at a rate that will keep the soil surface moist. Re-apply as necessary.
7. Barriers - Place barriers such as soild board fences, snow fences, hay bales, etc. at right angles to the prevailing air currents at intervals of approx. 10X their height.

Permanent Methods:

1. Vegetative cover - See **DE-ESC-3.4.3**, Std. Detail and Specifications for Vegetative Stabilization.
2. Stone - Apply layer of crushed stone or coarse gravel to protect soil surface.

Source:	Symbol:	Detail No.
Adapted from VA ESC Handbook		DE-ESC-3.4.8 Sheet 1 of 1 Effective FEB 2019

BECKER MORGAN GROUP

ARCHITECTURE
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Salisbury, MD 21801
410.546.9100

North Carolina
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Wilmington, NC 28403
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www.beckermorgan.com

PROJECT TITLE

LANDS OF
STATE OF DELAWARE

BELMONT HALL

217 SMYRNA LEIPSIC RD
TOWN OF SMYRNA
KENT COUNTY, DE

SHEET TITLE

EROSION AND SEDIMENT CONTROL PLAN

ISSUE BLOCK

MARK	DATE	DESCRIPTION

LAYER STATE: C-502

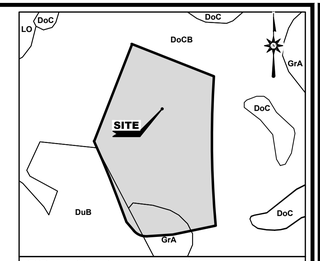
PROJECT NO.:	2022035.00
DATE:	03/23/2023
SCALE:	NONE
DRAWN BY: J.D.M.	PROJ. MGR.: B.L.H.

SHEET
C-504

LEGEND

ITEM	EXISTING	PROPOSED
CONCRETE CURB & GUTTER		
CONCRETE SIDEWALK, SLAB / PAVING		
IMPERVIOUS SURFACED ROAD, DRIVE OR PARKING LOT		N/A
INDIVIDUAL TREE OR BUSH	EVERGREEN DECIDUOUS	
WIRE FENCE		
CHAINLINK FENCE		
STOCKADE FENCE		
STRUCTURE (CONCRETE, WOOD, METAL, ETC.)		
DRAINAGE DITCH OR SWALE		
WETLAND BOUNDARY LINE		N/A
CONTOUR	49	55
ELEVATION SPOT SHOT	43.55	25.15 / 25.50 T.C. / 25.00 B.C.
BENCH MARK		N/A
PROPERTY OR RIGHT-OF-WAY LINE		
CENTERLINE		
LIGHT POLE		

ITEM	EXISTING	PROPOSED
SANITARY GRAVITY SEWER LINE (**S**) SIZE & FLOW DIRECTION	EX. 10"S	10" S
SANITARY SEWER FORCE MAIN (**F.M.**) SIZE & FLOW DIRECTION	EX. 10" F.M.	12" F.M.
SANITARY SEWER MANHOLE (**S.S.M.H.**)		
SANITARY SEWER CLEANOUT (**C.O.**)		
WATER MAIN & SIZE	EX. 10" W	12" W
FIRE HYDRANT (**F.H.**)	F.H.	F.H.
WATER VALVE (**W.V.**) OR METER (**W.M.**)	W.M. W.V.	W.M. W.V.
STORM DRAIN MANHOLE (**S.D.M.H.**)		
STORM DRAIN LINE (**CMP, RCP, HDPE**)		
CATCH BASIN (**C.B.**)		
UTILITY POLE W/ OVERHEAD SERVICE (TELEPHONE (**O.T.**), ELECTRIC (**O.E.**)		
UNDERGROUND ELECTRIC (**U.E.**)	U.E.	U.E.
UNDERGROUND TELEPHONE (**U.T.**)	U.T.	U.T.
UNDERGROUND GAS MAIN (**G**)	EX. 2" G	2" G



SOIL SURVEY MAP SCALE: 1" = 2,314'

SOIL MAP TAKEN FROM "SOIL SURVEY, KENT COUNTY DELAWARE", MAP NO. 18 & 22

DoC : DOWNER SANDY LOAM 5 TO 10 PERCENT SLOPES
DocB : DOWNER SANDY LOAM 2 TO 5 PERCENT SLOPES
DuB: DOWNER-URBAN LAND COMPLEX 0 TO 5 PERCENT SLOPES
GrA : GREENWICH LOAM 0 TO 2 PERCENT SLOPES
LO: LONGMARSH AND INDIANTOWN SOILS, FREQUENTLY FLOODED

SITE DATA

1.	OWNER OF RECORD:	STATE OF DELAWARE C/O DNREC 89 KINGS HWY DOVER, DE 19901
2.	ENGINEER / SURVEYOR:	BECKER MORGAN GROUP INC. 309 SOUTH GOVERNORS AVE. DOVER, DELAWARE 19904 302-734-7950
3.	PROPERTY LOCATION:	217 SMYRNA LEIPSIC RD, SMYRNA, DE 19977 LATITUDE N 39° 17' 40.49" GRS80 - NAD83 (2011) LONGITUDE W 75° 35' 46.47" GRS80 - NAD83 (2011)
4.	TAX PARCEL NUMBER:	1-17-01906-01-0700-00001
5.	DEED REFERENCE :	D.R. K43 / 62
6.	SITE AREA SUMMARY:	26.3898 ACRES ±
7.	TOTAL DISTURBED AREA:	13,250 SF (0.302 ACRES)
8.	PERVIOUS AREA:	EXISTING: 1,076,803 S.F. (24.72 A.C.) PROPOSED: 1,070,879 S.F. (24.59 A.C.)
9.	IMPERVIOUS AREA:	EXISTING: 72,745 S.F. (1.67 A.C.) PROPOSED: 78,625 S.F. (1.80 A.C.)
10.	ZONING CLASSIFICATION:	I & R - INSTITUTIONAL AND RECREATIONAL DISTRICT
11.	PRESENT USE:	INSTITUTIONAL NAVD 88 - X NAD 83 (2011) DSP - X
12.	ROAD CLASSIFICATION:	NORTH DUPONT BOULEVARD - MINOR ARTERIALS (45 M.P.H.) SMYRNA LEIPSIC - MINOR COLLECTOR (40 M.P.H.)
13.	DelDOT TID:	PARCEL OUTSIDE OF DelDOT TID
14.	INVESTMENT LEVEL:	PARCEL OUTSIDE INVESTMENT AREAS
15.	SURVEY DATUM:	NGS MONUMENTS VERTICAL: HORIZONTAL:
16.	SURVEY UNIT:	LINEAR: US SURVEY FOOT ANGULAR: DEGREES MINUTES SECONDS (DMS) COORDINATE: GROUND
17.	MONUMENTATION:	8 FOUND / X SET
18..	WATERSHED AREA:	SMYRNA RIVER
19.	MAJOR BASIN:	DELAWARE BAY

SUMMARY TABLE

SUBAREA	POA	TOTAL AREA	RCN
POST DA-1A	N/A	26.39 ± ACRES	43

STORMWATER LEGEND

SUBAREA BOUNDARY	
TC FLOW PATH	N/A
SOIL BOUNDARY	(SOIL GROUP B) / (SOIL GROUP C)

EROSION & SEDIMENT CONTROL LEGEND

LIMIT OF DISTURBANCE	L.O.D. L.O.D. L.O.D.
SILT FENCE	SF SF SF SF

STANDARD SEDIMENT AND STORMWATER GENERAL NOTES:

1. 1. THE DNREC SEDIMENT AND STORMWATER PROGRAM (OR DELEGATED AGENCY) SHALL BE NOTIFIED IN WRITING 5 DAYS PRIOR TO COMMENCING WITH CONSTRUCTION. FAILURE TO DO SO CONSTITUTES A VIOLATION OF THE APPROVED SEDIMENT AND STORMWATER MANAGEMENT PLAN.
2. REVIEW AND/OR APPROVAL OF THE SEDIMENT AND STORMWATER MANAGEMENT PLAN SHALL NOT RELIEVE THE CONTRACTOR FROM HIS OR HER RESPONSIBILITIES FOR COMPLIANCE WITH THE REQUIREMENTS OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS, NOR SHALL IT RELIEVE THE CONTRACTOR FROM ERRORS OR OMISSIONS IN THE APPROVED PLAN.
3. IF THE APPROVED PLAN NEEDS TO BE MODIFIED, ADDITIONAL SEDIMENT AND STORMWATER CONTROL MEASURES MAY BE REQUIRED AS DEEMED NECESSARY BY DNREC OR THE DELEGATED AGENCY.
4. FOLLOWING SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED FOR ALL PERIMETER SEDIMENT CONTROLS, SOIL STOCKPILES, AND ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE WITHIN 14 CALENDAR DAYS UNLESS MORE RESTRICTIVE FEDERAL REQUIREMENTS APPLY.
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OWNERS CERTIFICATION

WE, THE STATE OF DELAWARE, THE UNDERSIGNED, CERTIFY THAT ALL LAND CLEARING, CONSTRUCTION AND DEVELOPMENT SHALL BE DONE PURSUANT TO THE APPROVED STANDARD PLAN AND THAT RESPONSIBLE PERSONNEL (I.E., BLUE CARD HOLDER) INVOLVED IN THE LAND DISTURBANCE WILL HAVE A CERTIFICATION OF TRAINING PRIOR TO INITIATION OF THE PROJECT, AT A DNREC SPONSORED OR APPROVED TRAINING COURSE FOR THE CONTROL OF EROSION AND SEDIMENT DURING CONSTRUCTION. IN ADDITION, I GRANT THE DNREC SEDIMENT AND STORMWATER PROGRAM AND/OR THE RELEVANT DELEGATED AGENCY THE RIGHT TO CONDUCT ON-SITE REVIEWS.

COURTNEY LYNAHAN
STATE OF DELAWARE
211 DELAWARE STREET
NEW CASLTE DELAWARE, 19720

DATE

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PROJECT TITLE

LANDS OF
STATE OF DELAWARE

BELMONT HALL

217 SMYRNA LEIPSIC RD
TOWN OF SMYRNA
KENT COUNTY, DE

SHEET TITLE

POST DEVELOPED SUBAREA LIMIT OF DISTURBANCE DRAINAGE AREA PLAN

0 40 80 160

SCALE: 1" = 80'

ISSUE BLOCK

MARK	DATE	DESCRIPTION

LAYER STATE: SWM-POST

PROJECT NO.: 2022035.00
DATE: 03/23/2023
SCALE: 1" = 80'
DRAWN BY: J.D.M. | PROJ. MGR.: B.L.H.

SHEET

SWM-POST

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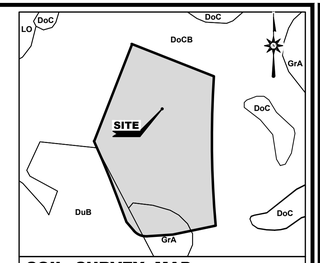

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TC FLOW PATH	N/A
SOIL BOUNDARY	(SOIL GROUP B) / (SOIL GROUP C)

EROSION & SEDIMENT CONTROL LEGEND

LIMIT OF DISTURBANCE	L.O.D. L.O.D. L.O.D.
SILT FENCE	SF SF SF SF

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COURTNEY LYNAHAN
STATE OF DELAWARE
211 DELAWARE STREET
NEW CASLTE DELAWARE, 19720

DATE

LEGEND

ITEM	EXISTING	PROPOSED
CONCRETE CURB & GUTTER		
CONCRETE SIDEWALK, SLAB / PAVING		
IMPERVIOUS SURFACED ROAD, DRIVE OR PARKING LOT		N/A
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WIRE FENCE		
CHAINLINK FENCE		
STOCKADE FENCE		
STRUCTURE (CONCRETE, WOOD, METAL, ETC.)		
DRAINAGE DITCH OR SWALE		
WETLAND BOUNDARY LINE		N/A
CONTOUR	49	55
ELEVATION SPOT SHOT	43.55	25.15 / 25.50 T.C. / 25.00 B.C.
BENCH MARK		N/A
PROPERTY OR RIGHT-OF-WAY LINE		
CENTERLINE		
LIGHT POLE		

ITEM	EXISTING	PROPOSED
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SANITARY SEWER FORCE MAIN (F.M.) SIZE & FLOW DIRECTION	EX. 10" F.M.	12" F.M.
SANITARY SEWER MANHOLE (S.S.M.H.)		
SANITARY SEWER CLEANOUT (C.O.)		
WATER MAIN & SIZE	EX. 10" W	12" W
FIRE HYDRANT (F.H.)	F.H.	F.H.
WATER VALVE (W.V.) OR METER (W.M.)	W.M. W.V.	W.M. W.V.
STORM DRAIN MANHOLE (S.D.M.H.)		
STORM DRAIN LINE (CMP, RCP, HDPE)		
CATCH BASIN (C.B.)		
UTILITY POLE W/ OVERHEAD SERVICE (TELEPHONE (O.T.), ELECTRIC (O.E.)		
UNDERGROUND ELECTRIC (U.E.)	U.E.	U.E.
UNDERGROUND TELEPHONE (U.T.)	U.T.	U.T.
UNDERGROUND GAS MAIN (G)	EX. 2" G	2" G

BECKER MORGAN GROUP

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ENGINEERING

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PROJECT TITLE

LANDS OF
STATE OF DELAWARE

BELMONT HALL

217 SMYRNA LEIPSIC RD
TOWN OF SMYRNA
KENT COUNTY, DE

SHEET TITLE

PRE DEVELOPED SUBAREA LIMIT OF DISTURBANCE DRAINAGE AREA PLAN

0 40 80 160

SCALE: 1" = 80'

ISSUE BLOCK

MARK	DATE	DESCRIPTION

LAYER STATE: SWM-PRE

PROJECT NO.: 2022035.00
DATE: 07/13/2023
SCALE: 1" = 80'
DRAWN BY: J.D.M. | PROJ. MGR.: C.D.C.

SHEET

SWM-PRE

F:\AutoCAD\Projects\2022\2022035\DWG\2022035-SITE-C3D21.dwg, Sep 01, 2023 - 9:00am

NOTES

GOVERNING CODES

THIS PROJECT SHALL COMPLY WITH THE **"INTERNATIONAL BUILDING CODE", INTERNATIONAL CODE COUNCIL, INC., 2018 EDITION,** INCLUDING SPECIFICATIONS REFERENCED WITHIN. USE THE REFERENCED OR LATEST EDITIONS UNLESS NOTED OTHERWISE. MANUFACTURER SPECIFICATION AND LOCAL CODE REQUIREMENTS, WHEN IN EXCESS OF MINIMUM SPECIFICATION, SHALL CONTROL.

DESIGN LOADS

DESIGN LOADS FOR THIS PROJECT ARE LISTED IN THE DESIGN LOAD TABLE BELOW BASED UPON "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES, (ASCE/SEI 7)", AMERICAN SOCIETY OF CIVIL ENGINEERS.

DESIGN LOADS

AREA	DEAD LOAD (PSF)	LIVE LOAD (PSF)	TOTAL LOAD (PSF)
FIRST FLOOR SLAB	20	150	170
ROOF	20	20	40

SNOW LOAD DESIGN DATA

GROUND SNOW LOAD	Pg	25 PSF
RAIN ON SNOW SURCHARGE	-	0 PSF
FLAT-ROOF SNOW LOAD	Pf	16.8 PSF
SNOW EXPOSURE FACTOR	Ce	1
SNOW LOAD IMPORTANCE FACTOR	Is	0.8
THERMAL FACTOR	Ct	1.2

ADDITIONAL LOADS DUE TO SNOW DRIFT AND SLIDING SNOW HAVE BEEN CONSIDERED WHERE APPLICABLE.

WIND LOAD DESIGN DATA

WIND SPEED	V_{ult}	110 MPH
WIND SPEED	V_{asd}	86 MPH
RISK CATEGORY	-	I
WIND EXPOSURE CATEGORY	-	C
DESIGN PROCEDURE	-	ASCE 7-16 CH.28 PT.1

SEISMIC LOAD DESIGN DATA

SITE CLASS	-	D
RISK CATEGORY	-	I
IMPORTANCE FACTOR	I_E	1
MAPPED SPECTRAL RESPONSE ACCELERATION	S_s	0.142
MAPPED SPECTRAL RESPONSE ACCELERATION	S_1	0.042
DESIGN SPECTRAL RESPONSE ACCELERATION	S_{DS}	0.151
DESIGN SPECTRAL RESPONSE ACCELERATION	S_{D1}	0.068
SEISMIC DESIGN CATEGORY	-	B
BASIC STRUCTURAL SYSTEM	POST & BEAM	
BASIC SEISMIC FORCE RESISTING SYSTEM	CANTILEVERED TIMBER FRAME	
SEISMIC RESPONSE COEFFICIENT	C_s	0.101
RESPONSE MODIFICATION COEFFICIENT	R	1.5
ANALYSIS PROCEDURE	EQUIV. LATERAL FORCE	
DESIGN BASE SHEAR	7	

WOOD

WOOD AND TIMBER CONSTRUCTION SHALL COMPLY WITH REFERENCED OR LATEST EDITIONS OF THE FOLLOWING STANDARDS:
1) NATIONAL FOREST PRODUCTS ASSOCIATION: "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION."
2) AMERICAN INSTITUTE OF TIMBER CONSTRICTION: " TIMBER CONSTRUCTION MANUAL."
3) AMERICAN PLYWOOD ASSOCIATION: "PLYWOOD DESIGN SPECIFICATION."
4) AMERICAN WOOD PRESERVERS ASSOCIATION STANDARDS

STRUCTURAL TIMBER SHALL BE STAMPED WITH A GRADE MARK IN ACCORDANCE WITH DOC PS 20 WITH MOISTURE CONTENT TO BE 19% MAXIMUM.

8x8 P.T. POSTS SHALL BE S. PINE #2 OR BETTER

LVL'S (LAMINATED VENEER LUMBER) SHALL BE 1 3/4" WIDE, OF THE DEPTH SPECIFIED ON THE PLANS, AND SHALL BE SECURED TOGETHER AS DIRECTED BY THE MANUFACTURER.

WOOD EXPOSED TO THE ELEMENTS, WOOD IN CONTACT WITH CONCRETE OR MASONRY, AND WOOD DESIGNATED "PRESERVATIVE TREATED" SHALL BE NO. 2 GRADE SOUTHERN PINE OR BETTER & PRESERVATIVE TREATED IN ACCORDANCE WITH AWPA U1 FOR THE SPECIES, PRODUCT, PRESERVATIVE AND END USE. FIELD CUT ENDS, NOTCHES AND DRILLED HOLES OF P.T. WOOD SHALL BE TREATED IN THE FIELD IN ACCORDANCE WITH AWPA M4.

PLYWOOD: APA EXPOSURE 1, GROUP 1 RATED SHEATHING, MIN. 4 PLY, MIN, SPAN RATING OF 32/16. U.N.O. USE 3/4" NOM. THICKNESS FOR FLOORS, 5/8" FOR ROOFS, AND 1/2" FOR WALLS. FOR FLOORS, USE TONGUE-AND-GROOVE PLYWOOD GLUED AND SCREW-FASTENED. FOR ROOFS, USE PLYWOOD CLIPS AT ALL UNSUPPORTED BUTT JOINTS. PLYWOOD SHALL BE MARKED PER DOC PS-1.

LUMBER SCHEDULE
(MINIMUM ALLOWABLE PROPERTIES)

SPECIES	f_b(PSI)	fv (PSI)	E (KSI)	S.G.
LVL	2,600	285	1,900	0.50
LSL	1,700	400	1,300	0.50
PSL (BEAM)	2,900	290	2,000	0.50
PSL (COLUMN)	2,400	190	1,800	0.50
GLULAM (24FV5 SP/SP)	2,400	165	1,700	0.50
S.P.F. #2	875	135	1,400	0.42
S. PINE #2	VARIES BY DIMENSIONS			0.50

MISCELLANEOUS ITEMS

THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL SAFETY REGULATIONS, PROGRAMS AND PRECAUTIONS RELATED TO ALL WORK ON THIS PROJECT AND FOR THE PROTECTION OF PERSONS AND PROPERTY EITHER ON OR ADJACENT TO THE PROJECT AND SHALL PROTECT SAME AGAINST INJURY, DAMAGE OR LOSS.

THE CONTRACTOR IS RESPONSIBLE FOR LIMITING THE AMOUNT OF CONSTRUCTION LOAD IMPOSED ON THE STRUCTURE. SUCH LOADS SHALL NOT EXCEED THE CAPACITY OF THE STRUCTURE AT ANY TIME. THE STRUCTURAL INTEGRITY OF THE BUILDING IS DEPENDANT UPON COMPLETION ACCORDING TO PLANS AND SPECIFICATIONS. THE STRUCTURAL ENGINEER ASSUMES NO LIABILITY FOR THE STRUCTURE DURING CONSTRUCTION. THE METHOD OF CONSTRUCTION AND SEQUENCE OF OPERATIONS IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL SUPPLY ANY NECESSARY SHORING, BRACING, GUYS, ETC., TO PROPERLY BRACE THE STRUCTURE AGAINST WIND, DEAD AND LIVE LOADS UNTIL THE BUILDING IS COMPLETED ACCORDING TO THE PLANS AND SPECIFICATIONS. CONTRACTOR SHALL NOT PLACE BACK FILL AGAINST BASEMENT WALLS UNTIL THE FLOOR SYSTEM IS COMPLETELY INSTALLED OR CONTRACTOR HAS PROVIDED ADEQUATE SHORING AND BRACING. ANY QUESTIONS REGARDING TEMPORARY SHORING REQUIREMENTS SHOULD BE FORWARDED TO THE STRUCTURAL ENGINEER FOR REVIEW.

THE STRUCTURE IS DESIGNED TO FUNCTION AS A UNIT UPON COMPLETION, AND ANY TEMPORARY BRACING OR SUPPORT REQUIRED TO ACCOMMODATE THE CONTRACTOR'S MEANS AND METHODS ARE THE RESPONSIBILITY OF THE CONTRACTOR.

THE CONTRACTOR IS TO VERIFY ALL OPENING SIZES AND LOCATIONS WITH THE REQUIREMENTS OF OTHER TRADES PRIOR TO FABRICATION AND ERECTION.

STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS, AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR SEEING THAT THE WORK OF ALL TRADES IS COORDINATED WITH ADJACENT WORK.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGNING, FURNISHING, ERECTING AND REMOVING ANY TEMPORARY SHORING AND BRACING DURING CONSTRUCTION

THE ARCHITECT AND ENGINEER SHALL BE NOTIFIED AT THE PROPER TIME WHEN ALL ITEMS ARE READY FOR OBSERVATION. SUFFICIENT NOTICE SHALL BE GIVEN BY THE CONTRACTOR TO ALLOW FOR SCHEDULING OF OBSERVATIONS.

SAFETY REGULATIONS SHALL BE STRICTLY FOLLOWED BY THE CONTRACTOR OR SUBCONTRACTOR DURING ALL TIMES OF WORK ON THIS PROJECT. THE ARCHITECT OR ENGINEER SHALL NOT HAVE CONTROL OR CHARGE OF, AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, FOR ACTS OF OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS, OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

ALL SPECIALTY BOLTS, INCLUDING EXPANSION TYPE AND EPOXY TYPE ANCHORS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS.

THE CONTRACTOR SHALL PROTECT FROM DAMAGES EXISTING BUILDING(S), OWNER EQUIPMENT, ROADS, WALKS AND UTILITIES. THE CONTRACTOR SHALL MAINTAIN THESE DURING THE COURSE OF THE WORK, AND SHALL REPAIR ALL DAMAGES AT NO ADDITIONAL EXPENSE TO THE OWNER.

IN AREAS WHERE THE DRAWINGS DO NOT ADDRESS METHODOLOGY, THE CONTRACTOR SHALL BE BOUND TO PERFORM IN STRICT COMPLIANCE WITH MANUFACTURER'S SPECIFICATIONS AND/OR RECOMMENDATIONS.

ON-SITE VERIFICATION OF ALL DIMENSIONS AND CONDITIONS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND HIS SUBCONTRACTORS. NOTED DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE.

THE GENERAL NOTES AND TYPICAL DETAILS APPLY THROUGHOUT THE JOB UNLESS OTHERWISE NOTED OR SHOWN.

THE CONTRACTOR SHALL COMPARE AND COORDINATE ALL DRAWINGS. IF A DISCREPANCY EXISTS, HE SHALL PROMPTLY REPORT IT FOR PROPER ADJUSTMENT BEFORE PROCEEDING WITH THE WORK.

IN THE EVENT THAT CERTAIN FEATURES OF THE CONSTRUCTION ARE NOT FULLY SHOWN ON THE DRAWINGS, THEIR CONSTRUCTION SHALL BE OF THE SAME CHARACTER AS SIMILAR CONDITIONS THAT ARE SHOWN OR NOTED.

CONCRETE (CAST-IN-PLACE)

CONCRETE CONSTRUCTION SHALL COMPLY WITH REFERENCED OR LATEST EDITIONS OF THE FOLLOWING STANDARDS:
1) "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, ACI 318", AMERICAN CONCRETE INSTITUTE.
2) "ACI MANUAL OF CONCRETE PRACTICE - PARTS 1 THROUGH 5 ", AMERICAN CONCRETE INSTITUTE.
3) "MANUAL OF STANDARD PRACTICE", CONCRETE REINFORCING STEEL INSTITUTE.
4) "ACI DETAILING MANUAL, SP-66", AMERICAN CONCRETE INSTITUTE.
5) "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS, ACI 301", AMERICAN CONCRETE INSTITUTE.

CONTRACTOR SHALL SUBMIT MIX DESIGNS IN ACCORDANCE WITH ASTM C94 ACCOMPANIED BY APPROPRIATE GRAPHS AND BACKGROUND DATA FOR APPROVAL. MIX DESIGN SHALL INDICATE 7 AND 28 DAYS STRENGTHS, CEMENT CONTENT, AIR CONTENT, WATER-CEMENT RATIO, AMOUNT OF FINE AND COARSE AGGREGATES, AND ADMIXTURES. CONCRETE SHALL BE MADE IN ACCORDANCE WITH DESIGN MIXES WHICH ARE TO BE APPROVED BY THE ARCHITECT OR ENGINEER PRIOR TO CASTING ANY CONCRETE. MIXES SHALL BE IN ACCORDANCE WITH THE AMERICAN CONCRETE INSTITUTE ACI 318.

USE OF ADDITIVES SHALL NOT BE PERMITTED UNLESS SPECIFICALLY APPROVED BY THE STRUCTURAL ENGINEER. USE OF ADDITIVES CONTAINING CALCIUM CHLORIDE SHALL NOT BE PERMITTED. HIGH-RANGE WATER REDUCING ADMIXTURES SHALL NOT BE USED IN AIR-ENTRAINED CONCRETE WITHOUT WRITTEN APPROVAL FROM CONCRETE PROVIDER AND VERIFICATION THAT THE ADMIXTURES ARE APPROVED TO BE USED TOGERTHER.

ADDITION OF WATER TO THE CONCRETE AT THE JOB SITE FOR THE PURPOSE OF INCREASING THE SLUMP OR FOR RETEMPERING THE CONCRETE WHICH HAS BEGUN TO SET IS STRICTLY PROHIBITED.

LIQUID-MEMBRANE CURING COMPOUNDS SHALL BE HIGH-SOLIDS, WATER AND ACRYLIC-BASED, COMPLYING WITH ASTM C309 AS TESTED UNDER ASTM C156.

REINFORCING BARS SHALL BE DEFORMED BILLET STEEL CONFORMING TO ASTM A615, GRADE 60. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A1064. BARS SHALL BE BRANDED BY THE MANUFACTURER WITH BAR SIZE AND GRADE OF STEEL AND CERTIFIED MILL REPORTS SHALL BE SUBMITTED FOR RECORD. REINFORCING STEEL SHALL BE DETAILED FABRICATED, AND PLACED IN ACCORDANCE WITH ACI 318, ACI 315, AND CRSI STANDARDS.

WELDED WIRE FABRIC SHALL CONFORM TO ASTM A1064, GRADE 60. LAP WELDED WIRE FABRIC ONE FULL MESH AT ENDS AND SIDES.

ALL REINFORCING STEEL (INCLUDING WELDED WIRE FABRIC) SHALL BE SECURELY TIED AND ANCHORED IN PLACE TO PREVENT DISLOCATION DURING THE PLACING OPERATION.

REINFORCING STEEL SHALL BE CLEAN OF MUD, DEBRIS, LOOSE RUST, CEMENT, GROUT, OR ANY OTHER MATERIAL WHICH MAY INHIBIT THE BOND BETWEEN THE STEEL AND CONCRETE.

REINFORCEMENT INSTALLATION SHALL COMPLY WITH CRSI'S "MANUAL OF STANDARD PRACTICE" FOR PLACING AND SUPPORTING REINFORCEMENT.

PROVIDE CORNER BARS AT JUNCTIONS OF CONCRETE WALLS, GRADE BEAMS AND WALL FOOTINGS AND LAP WITH WALL REINFORCING AS SHOWN IN TYPICAL DETAILS. SIZE AND SPACING OF CORNER BARS TO BE SAME AS HORIZONTAL WALL REINFORCING, UNLESS SHOWN OTHERWISE. WHERE CONTINUOUS BARS ARE CALLED FOR, THEY SHALL RUN CONTINUOUSLY AROUND CORNERS AND LAPPED AS NECESSARY. PROVIDE STANDARD HOOKS AT DISCONTINUOUS ENDS. PROVIDE DOWELS BETWEEN ALL FOOTINGS, WALLS AND PIERS TO MATCH SIZE AND SPACING OF VERTICAL REINFORCING. LAPS SHALL BE A MINIMUM OF 36 BAR DIAMETERS OR PER LAP TABLE. TENSION AND COMPRESSION LAP SPLICES SHALL NOT BE LESS THAN THE SPLICE LENGTHS AS GIVEN IN ACI-318. GENERALLY LAP TOP BARS AT MID SPAN AND BOTTOM BARS AT SUPPORTS. PROVIDE PLACING ACCESSORIES IN ACCORDANCE WITH ACI RECOMMENDATIONS.

REINFORCEMENT FOR SLABS ON GRADE SHALL BE SUPPORTED IN PLACE PRIOR TO PLACING CONCRETE. PLACE CONCRETE OVER 10 MIL. POLYETHYLENE VAPOR BARRIER AND 4 INCHES MINIMUM OR COURSE AGGREGATE OR AS RECOMMENDED BY GEOTECHNICAL ENGINEER. THE AGGREGATE LAYER SHALL BE PLACED OVER APPROVED SUBGRADE.

POUR SLABS ON GRADE IN ALTERNATE PANELS WITH A MAXIMUM OF 600 SF AND PROVIDE CONTROL AND KEYED CONSTRUCTION JOINTS AT 15'-0" MAXIMUM OR AS REQUIRED TO PREVENT UNCONTROLLED CRACKING. POUR CONCRETE INTO ISOLATION JOINTS AROUND COLUMN BASES AFTER SLAB ON GRADE IS POURED. CONCRETE FOR SLABS-ON-GRADE SHALL BE PLACED IN A SEQUENCE AND MANNER THAT IS CONSISTENT WITH THE RECOMMENDATIONS OF THE AMERICAN CONCRETE INSTITUTE. LOCATE CONSTRUCTION AND CONTROL JOINTS IN SUCH A WAY TO MINIMIZE THE EFFECTS OF SHRINKAGE OF THE CONCRETE SLAB SECTIONS. SUBMIT TO THE ARCHITECT/ENGINEER THE SEQUENCE AND METHOD OF CASTING CONCRETE SLABS-ON-GRADE PRIOR TO PLACING THESE ELEMENTS. DEPOSITE CONCRETE CONTINUOUSLY IN ONE LAYER. CONSOLIDATE CONCRETE WITH MECHANICAL VIBRATING EQUIPMENT IN ACCORDANCE WITH ACI 301. SCREED SLAB SURFACES WITH A STRAIGHTEDGE AND STRIKE OFF TO CORRECT ELEVATIONS. LEVEL CONCRETE, CUT HIGH AREAS AND FILL LOW AREAS.

AREAS NOT EXPOSED TO PUBLIC VIEW SHALL RECIEVE AN AS-CAST FINISH IN ACCORDANCE WITH ACI 301 SF-1.0. WHERE AS-CAST FINISH IS USED, PATCH VOIDS LARGER THAT 1 1/2" WIDE OR 1/2" DEEP, REMOVE PROJECTIONS GREATER THAN 1", SURFACE TOLERANCE SHALL BE ACI 117 CLASS D.

SLAB ISOLATION JOINTS: PROVIDE PRE-MOLDED JOINT FILLER AROUND ALL PIPING, PIERS AND FOUNDATION WALLS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING AND INSTALLING ANCHOR BOLTS, CLIPS, INSERTS, CONNECTION PLATES, SLEEVES, SLOTS AND OTHER REQUIRED ITEMS IN ACCORDANCE WITH THE CONTRACT DRAWINGS, AND IN COOPERATION WITH OTHER TRADES PRIOR TO PLACING CONCRETE. USE SETTING DRAWINGS, TEMPLATES, DIAGRAMS, INSTRUCTIONS, AND DIRECTIONS FURNISHED WITH ITEMS TO BE EMBEDED. INSTALL ANCHOR RODS ACCURATLY LOACATED, TO ELEVATIONS REQUIRED AND COMPLYING WITH TOLERANCES IN SECTION 7.5 OF ANSI/AISC 303.

MIX PROPERTIES

CLASS	USAGE	TYPE	EXPOSURE CLASS	f'c (28 DAYS)	MAXIMUM w/cm	AIR CONTENT	MAXIMUM CHLORIDE-ION CONTENT
A	FOOTINGS GRADE BEAMS TIE BEAMS	NORMAL WEIGHT	F2, S0, W0, C1	3,500 PSI	0.45	6% ± 1.5	0.3
B	EXTERIOR SLABS ON GRADE	NORMAL WEIGHT	F2, S0, W0, C1	3,500 PSI	0.45	6% ± 1.5	0.3

LIMIT PERCENTAGE BY WEIGHT OF CEMENTITIOUS MATERIALS OTHER THAN PORTLAND CEMENT IN CONCRETE AS FOLLOWS.
- FLY ASH OR OTHER POZZOLANS: 25% BY MASS
- SLAG CEMENT: 50% BY MASS
- SILICA FUME: 10% BY MASS
- TOTAL FLY ASH OR POZZOLANS, SLAG CEMENT, & SILICA FUME: 50% BY MASS, WITH FLY ASH OR POZZOLANS NOT EXCEEDING 25% BY MASS AND SILICA FUME NOT EXCEEDING 10% BY MASS
-TOTAL OF FLY ASH OR OTHER POZZOLANS & SILICA FUME: 35% BY MASS WITH FLY ASH OR POZZOLANS NOT EXCEEDING 25% BY MASS AND SILICA FUME NOT EXCEEDING 10% BY MASS.

MATERIALS

PORTLAND CEMENT	TYPE I/II
FLY ASH	ASTM C618, CLASS C OR F
SLAG CEMENT	ASTM C989/C989M, GRADE 100 OR 120
SILICA FUME	ASTM C1240
AGGREGATES (NORMAL WEIGHT)	ASTM C33/C33M CLASS 1S, 2S, 3S, 4S, & 5S
AGGREGATES (LIGHT WEIGHT)	ASTM C330/C33M CLASS 1S, 2S, 3S, 4S, & 5S
AGGREGATE SIZE	3/4"

ADDMIXTURES

WATER REDUCER	ASTM C494, TYPE A
AIR-ENTRAINER	ASTM C260
HIGH-RANGE WATER REDUCER	ASTM C494, TYPE F

MINIMUM CLEARANCES (COVER) FOR REINFORCEMENT

FOOTING AND CONCRETE CAST AGAINST EARTH	3"
FORMED CONCRETE EXPOSED TO EARTH OR WEATHER	2"
FORMED CONCRETE NOT EXPOSED TO EARTH OR WEATHER (SLABS, WALLS & JOISTS)	3/4"
FORMED CONCRETE NOT EXPOSED TO EARTH OR WEATHER (BEAMS & COLUMNS)	1-1/2"
SLABS ON GRADE, W.W.F.	LESSER OF MID-DEPTH OR 2" BELOW SURFACE

FRAMING NOTES

FASTENERS: JOIST HANGERS, HURRICANE ANCHORS, POST BASES AND OTHER FRAMING ANCHORS ARE TO BE AS MANUFACTURED BY SIMPSON STONG-TIE, U.S.P., OR EQUAL, AND ARE TO BE USED IN STRICT ACCORDANCE WITH MANUFACTURER'S WRITTEN SPECIFICATIONS. ALL FASTENERS TO BE 16 GA. MIN. UNLESS NOTED OTHERWISE. PROVIDE GALV. FINISH UNLESS NOTED OTHERWISE. JOIST HANGERS SHALL BE MIN. 16 GA. WITH SIZE AND PROFILE TO SUIT APPLICATION (U.N.O.). PROVIDE JOIST HANGERS FOR ALL FLUSH FRAMED JOISTS. ALL FASTENERS IN CONTACT WITH PRESSURE TREATED WOOD SHALL BE Z-MAX COATED, U.N.O.

NO STRUCTURAL MEMBER SHALL BE OMITTED, NOTCHED, CUT, BLOCKED OUT OR RELOCATED WITHOUT PRIOR APPROVAL BY THE DESIGNER OR THE STRUCTURAL ENGINEER. DO NOT ALTER SIZES OF MEMBERS NOTED WITHOUT APPROVAL OF BOTH.

ALL MULTI-PLY LVL AND PSL BEAMS SHALL BE BOLTED WITH 5/8" DIA. BOLTS AT 16" O.C. STAGGERED (U.N.O.). MANUFACTURER TO PROVIDE AND DESIGN ALL LVL AND PSL BEAM-TO-BEAM AND BEAM-TO-COLUMN CONNECTIONS (U.N.O.).

ALL EXTERIOR EXPOSED WOOD SHALL BE SOUTHERN YELLOW PINE #2 PRESSURE TREATED w/ A RETENTION OF 0.4 pcf OF ALKALINE COPPER QUATERNARY (ACQ)

ALL HANGERS EXPOSED TO WEATHER OR IN CONTACT w/ P.T. LUMBER SHALL BE GALVANIZED (Z-MAX).

SUBGRADE & BASE

EARTHWORK AND SUBGRADE PREPARATION SHALL BE IN ACCORDANCE WITH APPLICABLE SECTIONS OF THE FOUNDATIONS AND SOILS INVESTIGATION (GEOTECHNICAL REPORT). IN LIEU OF A FOUNDATIONS AND SOILS INVESTIGATION, THE REQUIREMENTS OF THESE SPECIFICATIONS SHALL APPLY. WHERE CONFLICTS EXIST, THE MORE STRINGENT SHALL APPLY, UNLESS APPROVED IN WRITING BY THE GEOTECHNICAL ENGINEER AND STRUCTURAL ENGINEER.

FOUNDATIONS SHALL BEAR ON UNDISTURBED SOIL OR CONTROLLED COMPACTED FILL HAVING AN ALLOWABLE BEARING CAPACITY OF **2000 PSF** OR GREATER. THE CONTRACTOR SHALL VERIFY THE ASSUMED BEARING CAPACITY OF THE BEARING SOILS IN THE FOOTING EXCAVATION PRIOR TO CASTING ANY FOOTINGS. FOOTING EXCAVATION SHALL BE INSPECTED BY THE BUILDING OFFICIAL AND/OR REGISTERED GEOTECHNICAL ENGINEER PRIOR TO POURING CONCRETE. WRITTEN VERIFICATION SHALL BE SUBMITTED TO THE ARCHITECT AND ENGINEER.

THE BOTTOM OF EXTERIOR FOOTINGS SHALL BE PLACED A MINIMUM OF **2'-6"** BELOW FINISH GRADE FOR FROST PROTECTION. THE BOTTOM OF INTERIOR FOOTINGS SHALL BE PLACED A MINIMUM OF 1'-0" BELOW FINISH FLOOR.

PLACE FOOTINGS ON FIRM, DRY, NON-FROZEN SUBGRADE. REMOVE SOFT SOILS ENCOUNTERED DURING EXCAVATION. SOILS, FOOTINGS, FOUNDATION WALLS AND SLABS SHALL NOT BE PLACED ON OR IN MARINE CLAY, PEAT OR OTHER ORGANIC MATERIALS.

ENGINEERED FILL SHALL BE PLACED IN LAYERS NOT MORE THAN 8 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT AND NOT MORE THAN 4 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND-OPERATED TAMPERS. UNDER STRUCTURES, BUILDING SLABS, STEPS, AND PAVEMENTS, SCARIFY AND RECOMPACT TOP 12 INCHES OF EXISTING SUBGRADE AND EACH LAYER OF BACKFILL OR FILL SOIL MATERIAL. COMPACT SOIL MATERIALS TO NOT LESS THAN 95% OF MAXIMUM DRY UNIT WEIGHT ACCORDING TO ASTM D1557 (MODIFIED PROCTOR). ENGINEERED FILL SHALL BE BROUGHT TO WITHIN 2 PERCENT OF OPTIMUM MOISTURE CONTENT BEFORE COMPACTION. DO NOT PLACE BACKFILL OR FILL SOIL MATERIAL ON SURFACES THAT ARE MUDDY, FROZEN, OR CONTAIN FROST OR ICE.

BACKFILL TRENCHES EXCAVATED UNDER FOOTINGS AND WITHIN 18 INCHES OF BOTTOM OF FOOTINGS WITH SATISFACTORY SOIL; FILL WITH CONCRETE TO ELEVATION OF BOTTOM OF FOOTINGS.

ENGINEERED FILL SHALL COMPLY WITH ASTM D2487 SOIL CLASSIFICATION GROUPS GW, GP, GM, SW, SP, OR SM, AASHTO M 145 GROUPS A-1, A-2-4, A-2-5, OR A-3, OR A COMBINATION OF THESE GROUPS; FREE OF ROCK OR GRAVEL LARGER THAN 3 INCHES IN ANY DIMENSION, DEBRIS, WASTE, FROZEN MATERIALS, VEGETATION, AND OTHER DELETERIOUS MATTER. ENGINEERED FILL SHALL HAVE A LIQUID LIMIT OF 34 AND A PLASTICITY INDEX OF 7.

SLABS ON GRADE SHALL BE SUPPORTED BY A DRAINAGE COURSE TO PROVIDE A CAPILLARY BREAK. DRAINAGE COURSE SHALL CONSIST OF A NARROWLY GRADED MIXTURE OF WASHED CRUSHED STONE, OR CRUSHED OR UNCRUSHED GRAVEL; ASTM D448; COARSE-AGGREGATE GRADING SIZE 57; WITH 100 PERCENT PASSING A 1-1/2-INCH SIEVE AND ZERO TO 5 PERCENT PASSING A NO. 8 SIEVE. PLACE DRAINAGE COURSE ON SUBGRADES FREE OF MUD, FROST, SNOW, OR ICE.

CONTRACTOR TO IMMEDIATELY NOTIFY THE OWNERS REPRESENTATIVE & ENGINEER IF UNUSUAL SOIL CONDITIONS ARE FOUND.

PROVIDE FREE DRAINING, GRANULAR BACKFILL WITH A MAXIMUM EQUIVALENT FLUID PRESSURE OF 30 PSF PER FOOT OF DEPTH AGAINST BASEMENT AND RETAINING WALLS. IF BACKFILL PRESSURE EXCEEDS 30 PSF, THEN WALL MUST BE DESIGNED FOR ACTUAL PRESSURES BY STRUCTURAL ENGINEER.

PRE-ENGINEERED WOOD TRUSSES

TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH THESE DOCUMENTS AND WHERE ANY APPLICABLE DESIGN FEATURE IS NOT SPECIFIED HEREIN, DESIGN SHALL BE IN ACCORDANCE WITH APPLICABLE PROVISIONS OF NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION (NDS) AMERICAN FOREST AND PAPER ASSOCIATION (AFPA), AND DESIGN SPECIFICATIONS FOR METAL PLATE CONNECTED WOOD TRUSSES (ANSI/TPI 1), TRUSS PLATE INSTITUTE (TPI), AND CODES OF JURISDICTION. FABRICATE, SUPPLY AND ERECT WOOD TRUSSES AS SHOWN ON THE DRAWINGS AND AS SPECIFIED. WORK SHALL INCLUDE ALL ANCHORAGE, BLOCKING, CURBING, MISCELLANEOUS FRAMING AND BRACING.

DEFLECTION IN ROOF TRUSSES SHALL NOT EXCEED SHALL NOT EXCEED L/360 FOR ROOF LIVE AND SNOW LOADS AND L/300 FOR TOTAL LOAD.

TRUSSES SHALL BE DESIGNED FOR LOADS SHOWN ON STRUCTURAL DRAWINGS AND AS REQUIRED BY CODE. TRUSSES MANUFACTURER SHALL DESIGN FOR UPLIFT FORCES AND PROVIDED HOLD DOWNS AS REQUIRED. TRUSS TO TRUSS CONNECTIONS ARE THE RESPONSIBILITY OF THE TRUSS MANUFACTURER.

THE MANUFACTURER SHALL SUBMIT ERECTION DRAWINGS AND SHOP DRAWINGS TO THE ENGINEER OR DESIGNER PRIOR TO FABRICATION. ALL SHOP DRAWINGS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE JOB IS TO BE CONSTRUCTED.

STRUCTURAL ENGINEER OF RECORD SHALL APPROVE SHOP DRAWINGS PRIOR TO SUBMITTAL TO BUILDING OFFICIAL. BUILDING OFFICIAL SHALL APPROVE SHOP DRAWING PRIOR TO INSTALLATION.

LUMBER USED FOR TRUSS MEMBERS SHALL BE IDENTIFIED BY GRADE MARK OF A LUMBER INSPECTION AGENCY, AND SHALL BE AS SHOWN ON DESIGN DRAWINGS. TRUSSES SHALL BE HANDLED DURING FABRICATION, DELIVERY AND AT JOBSITE SO AS NOT TO BE SUBJECTED TO EXCESSIVE BENDING. TRUSSES SHALL BE UNLOADED ON SMOOTH GROUND TO AVOID LATERAL STRAIN. TRUSSES SHALL BE PROTECTED FROM DAMAGE THAT MIGHT RESULT FROM ON-SITE ACTIVITIES AND ENVIRONMENTAL CONDITIONS. PREVENT TOPPLING WHEN BANDING IS REMOVED.

HANDLE DURING INSTALLATION IN ACCORDANCE WITH HANDLING, INSTALLING AND BRACING WOOD TRUSSES (HIB-91), TPI, AND ANSI/TPI 1. INSTALLATION SHALL BE CONSISTENT WITH GOOD WORKMANSHIP AND GOOD BUILDING PRACTICES. TRUSSES SHALL BE SET AND SECURED LEVEL AND PLUMB, AND IN CORRECT LOCATION. TRUSSES SHALL BE HELD IN CORRECT ALIGNMENT UNTIL SPECIFIED PERMANENT BRACING IS INSTALLED. CUTTING AND ALTERING OF TRUSSES IS NOT PERMITTED. CONCENTRATED LOADS SHALL NOT BE PLACED ATOP TRUSSES UNTIL ALL SPECIFIED BRACING HAS BEEN INSTALLED AND DECKING IS PERMANENTLY NAILED IN PLACE. ERECTION BRACING IS ALWAYS REQUIRED. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND FURNISHING THE MATERIALS USED FOR INSTALLATION AND PERMANENT BRACING. BRACING FOR TRUSSES SHALL COMPLY WITH "BUILDING COMPONENT SAFETY INFORMATION" (BCSI) BY TRUSS PLATE INSTITUTE.

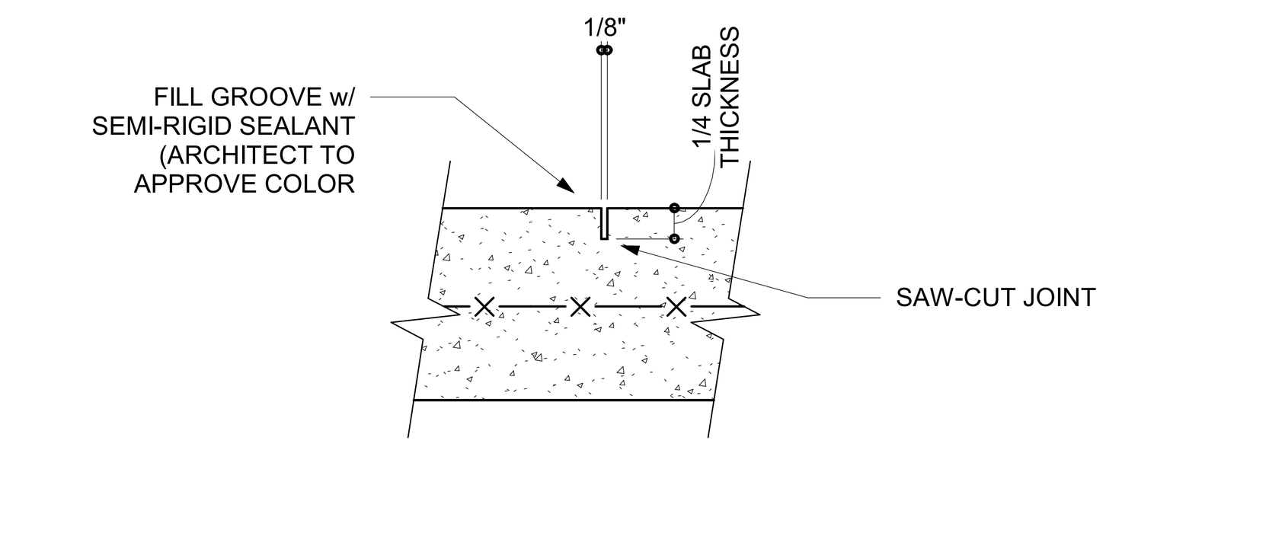
A. INCLUDE THE FOLLOWING ON SUBMITTED SHOP DRAWINGS:
1) STAMP AND SIGNATURE OF ENGINEER RESPONSIBLE FOR PREPARATION OF ALL TRUSS DESIGN AND LAYOUT DRAWING.
2) ALLOWABLE LOADS IN LBS/EFFECTIVE NAIL OR LBS/SQ. IN FOR LUMBER AND PLATES USED AS ALLOWED BY IBC AND CURRENT IBC REPORT NUMBER AND BY THE INTERNATIONAL BUILDING CODE.
3) STRESS REDUCTION FACTORS USED FOR PLATES.
4) TOP AND BOTTOM CHORD DESIGN LOADS IN PLF.
5) SIZE, GAUGE, AND EXACT LOCATION BY DIMENSION OF PLATES.
6) LUMBER SPECIES AND GRADES USED.
7) NAME AND TRADEMARK OF PLATE MANUFACTURER AND TRUSS FABRICATOR AND PROJECT NAME AND LOCATION.
8) CONCENTRATED LOAD REQUIREMENTS HAVE BEEN DESIGNED FOR AND SHOWN ON DOCUMENTS.
9) TRUSS CONNECTION HARDWARE REQUIREMENTS.

B. ALL TRUSS SHOP DRAWINGS MUST BE REVIEWED AND WRITTEN APPROVAL PROVIDED, BY GENERAL CONTRACTOR, PRIOR TO SUBMITTAL OF SHOP DRAWINGS TO STRUCTURAL ENGINEER.

C. SHOP DRAWINGS CAN NOT BE REVIEWED WITHOUT SEAL AND SIGNATURE OF TRUSS COMPANY ENGINEER ON ALL TRUSS ENGINEERING SHEETS.

D. ALL TRUSSES MUST BE DESIGNED FOR UPLIFT LOADS. UPLIFT VALUES @ EACH TRUSS BEARING POINT MUST BE SHOWN ON TRUSS ENGINEERING SHEET.

SAW CUT CONTROL JOINTS



- SAW CUT OR FORM TO 1/4 SLAB DEPTH.
- SPACE JOINTS AT NO MORE THAN 48 TIMES THE THICKNESS OF SLAB. NOT TO EXCEED 16FT.
- DISCONTINUE REINFORCEMENT AT CONTROL JOINTS.
- PROVIDE JOINTS ON GROUND SUPPORTED SLABS IN RECTANGULAR CONFIGURATION.
- THE LONGER SIDE SHALL BE NO MORE THAN ONE-AND-ONE-HALF THE SHORTER SIDE
- SAW-CUTTING SHALL BE DONE AS SOON AS POSSIBLE AFTER POURING CONCRETE. WHEN CONCRETE HAS HARDENED SUFFICIENTLY TO ALLOW CUTTING, NOT TO EXCEED 24 HRS.
- CONTRACTOR MAY SUBMIT CONTROL JOINT LAYOUT TO ENGINEER OF RECORD FOR APPROVAL.

ANNOTATIONS

FOOTING ANNOTATIONS

FOOTING TYPE
F - ISOLATED
CF - CONTINUOUS
TD - TURNDOWN
TS - THICKENED SLAB

X2.0x2.0 — FOOTING SIZE (SEE FOOTING SCHEDULE); FOOTING TYPE

FRAMING ANNOTATIONS

§ - (2) JACK STUDS EACH END
§§ - (3) JACK STUDS EACH END
F - FLUSH
D - DROPPED

HEADER
(3) 2x10 § — # PLIES, FRAMING MEMBER, SUPPORT CONDITION*

WOOD BEAM
(3) 11 7/8" LVL (F) — # PLIES, FRAMING MEMBER, BEAM INSTALLATION

* - (1) JACK STUD EACH END IF NO SUPPORT CONDITION NOTED

WOOD JOIST
2x12 @ 16" O.C. — SPACING, NOMINAL DEPTH, NOMINAL WIDTH

SPECIAL INSPECTIONS

INTERNATIONAL BUILDING CODE 2018

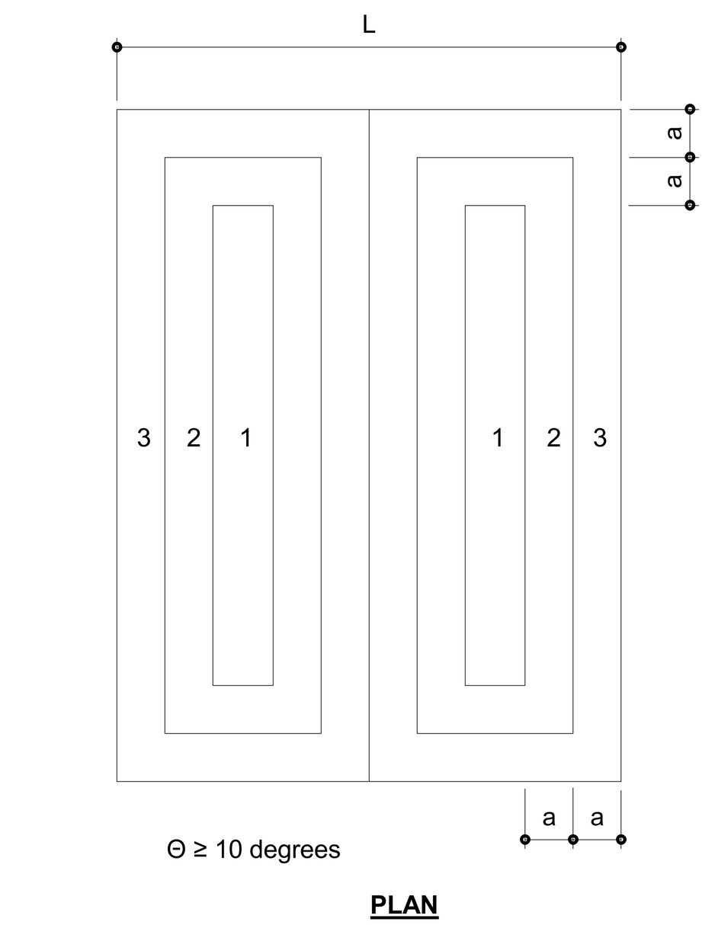
NOTES:
1) SPECIAL INSPECTIONS SHALL BE PROVIDED BY THE OWNER (OR AS DESIGNATED IN THE CONTRACT DOCUMENTS) TO PROVIDE INSPECTIONS DURING CONSTRUCTION AS NOTED.
2) SPECIAL INSPECTIONS AND TESTING TO BE PROVIDED AT A FREQUENCY AS DESIGNATED IN THE CODE REFERENCE.
3) ADDITIONAL INSPECTION AND TESTING MAY BE REQUIRED, SEE NOTES AND SPECIFICATIONS.
4) DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE CONTRACTOR FOR CORRECTION. REFUSAL TO CORRECT DISCRPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER / ARCHITECT PRIOR TO COMPLETION OF THAT PHASE OF WORK.
5) INSPECTION REPORTS SHALL BE SUBMITTED TO THE CONTRACTOR, OWNER AND ENGINEER / ARCHITECT. REPORTS SHALL DOCUMENT PERFORMED INSPECTIONS AND CORRECTED DISCRPANCIES. PROVIDE REPORTS A REGULAR INTERVALS DURING PROGRESS OF WORK.

COMPONENT	CODE REFERENCE	COMPONENT	CODE REFERENCE
CONCRETE CONSTRUCTION	IBC 1705.3 & TABLE 1705.3	WOOD CONSTRUCTION	IBC 1705.5
SOILS	IBC 1705.6 & TABLE 1705.6		

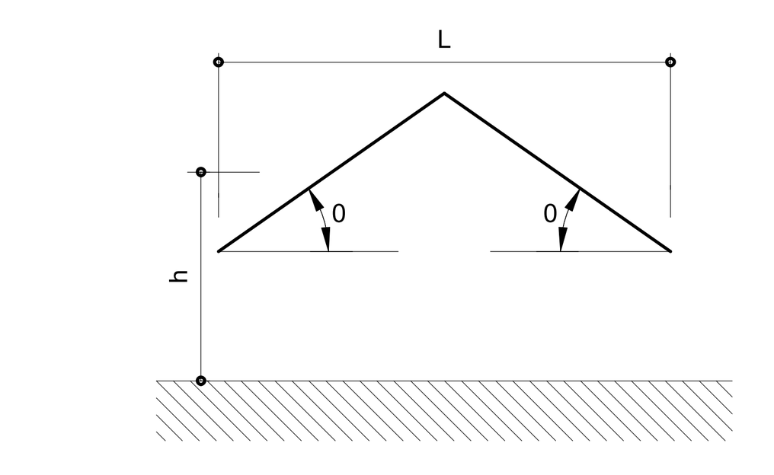
COMPONENTS & CLADDING

AREA (sq. ft.)	P (psf)											
	CLEAR WIND FLOW						OBSTRUCTED WIND FLOW					
EFF. WIND AREA	ZONE 3		ZONE 2		ZONE 1		ZONE 3		ZONE 2		ZONE 1	
AREA ≤ 9	37.4	-54.1	29.1	-41.6	18.7	-27.0	20.8	-58.2	16.6	-43.7	10.4	-29.1
9 < AREA ≤ 36	29.1	-41.6	29.1	-41.6	18.7	-27.0	16.6	-43.7	16.6	-43.7	10.4	-29.1
36 < AREA	18.7	-27.0	18.7	-27.0	18.7	-27.0	10.4	-29.1	10.4	-29.1	10.4	-29.1

a = 4.4'



PLAN



ELEVATION

ABBREVIATIONS

℄	CENTERLINE	GALV.	GALVANIZED	PSF	POUNDS PER SQUARE FOOT
Ø	DIAMETER	G.C.	GENERAL CONTRACTOR	PSI	POUNDS PER SQUARE INCH
⌟ ∟	HANGER	GR.	GRADE	P.T.	PRESERVATIVE TREATED
A.B.	ANCHOR BOLT	GWB	GYPSUM WALL BOARD	PWD.	PLYWOOD
A.F.F.	ABOVE FINISH FLOOR	G.T.	GIRDER TRUSS	QTY.	QUANTITY
ARCH.	ARCHITECTURAL	H	HEIGHT	RAD. OR R.	RADIUS
B.F.F.	BELOW FINSH FLOOR	H.C.	HOLLOW CORE	REF.	REFER TO
BLDG.	BUILDING	HORIZ.	HORIZONTAL	REINF.	REINFORCED
BL	BLOCK LINTEL	HSA	HEADED STUD ANCHOR	REQD	REQUIRED
BLK.	BLOCKING	HSS	HOLLOW STRUCTURAL SHAPE	REV.	REVERSE
BM.	BEAM	I.D.	INSIDE DIAMETER	R.O.	ROUGH OPENING
BO	BOTTOM OF	I.F.	INSIDE FACE	R.T.U.	ROOF TOP UNIT
B.O.S.	BOTTOM OF STEEL	INFO	INFORMATION	SCHED.	SCHEDULE
BRG.	BEARING	ISO	ISOLATED	SHT.	SHEET
C.A.	COLUMN ABOVE	I.D.	INSIDE DIAMETER	SIM.	SIMILAR
CHAM.	CHAMFER	I.F.	INSIDE FACE	SPECS	SPECIFICATIONS
C.J.	CONTROL JOINT	INT.	INTERIOR	SQ.	SQUARE
CLG.	CEILING	J.B.E.	JOIST BEARING ELEVATION	STD.	STANDARD
COL.	COLUMN	JST.	JOIST	STL.	STEEL
CONC.	CONCRETE	JNT.	JOINT	STRUCT.	STRUCTURAL
CMU	CONCRETE MASONRY UNIT	KSI	KIPS PER SQUARE INCH	T & B	TOP & BOTTOM
CNST. JNT.	CONSTRUCTION JOINT	L	LENGTH	T. & G.	TONGUE & GROOVE
CONT.	CONTINUOUS	L.L.H.	LONG LEG HORIZONTAL	THK	THICKNESS
CTR.	CENTER	L.L.V.	LONG LEG VERTICAL	T.O.	TOP OF
DBL.	DOUBLE	LONG.	LONGITUDINAL	T.O.B.	TOP OF BEAM
DIA.	DIAMETER	MAX	MAXIMUM	T.O.C.	TOP OF CONCRETE
DIM.	DIMENSION	MECH	MECHANICAL	T.O.F.	TOP OF FOOTING
DWG.	DRAWING	MFR	MANUFACTURER	T.O.G.B.	TOP OF GRADE BEAM
D.J.	DOUBLE JOIST	MIN	MINIMUM	T.O.M.	TOP OF MASONRY
EA.	EACH	MISC.	MISCELLANEOUS	T.O.P.	TOP OF PAVING
E.E.	EACH END	M.O.	MASONRY OPENING	T.O.S.	TOP OF STEEL OR SLAB
E.J.	EXPANSION JOINT	MTL.	METAL	T.O.W.	TOP OF WALL
E.S.	EACH SIDE	N/A	NOT APPLICABLE	TRANS	TRANSVERSE
EL.	ELEVATION	N.I.C.	NOT IN CONTRACT	TYP.	TYPICAL
EQ.	EQUAL	NO.	NUMBER	U.N.O.	UNLESS NOTED OTHERWISE
E.W.	EACH WAY	N.S.	NEAR SIDE	VERT.	VERTICAL
EX.	EXISTING	N.T.S.	NOT TO SCALE	V.I.F.	VERIFY IN FIELD
EXP.	EXPANSION	O.C.	ON CENTER	W	WIDTH
EXT.	EXTERIOR	O.D.	OUTSIDE DIAMETER	w/	WITH
FDN.	FOUNDATION	O.F.	OUTSIDE FACE	WD.	WOOD
FLR.	FLOOR	OPP.	OPPOSITE	w/o	WITHOUT
F.O.C.	FACE OF CONCRETE	OSL	OUTSTANDING LEG	WP	WORK POINT
F.O.F.	FACE OF FINISH	P.A.F.	POWDER ACTUATED FASTENER		
F.O.S.	FACE OF STUDS	PC	PRECAST		
F.S.	FAR SIDE	PCF	POUNDS PER CUBIC FOOT		
FTG.	FOOTING	PL	PLATE		
GA.	GAUGE	PLF	POUNDS PER LINEAR FOOT		

MATERIALS

VENEER
CMU
CONCRETE
EARTH
RIGID INSULATION
STEEL
PLYWOOD
WOOD
TIMBER
AGGREGATE
GROUT

DRAWING KEY

# GRID LINE	X SXXX SECTION
X SXXX ELEVATION	X SXXX DETAILS IN PLANS & SECTIONS
WALL TYPE	EXISTING TO REMAIN
sw # SHEAR WALL	CONTROL JOINT
EXPANSION JOINT	LIGHT GAUGE METAL CONNECTORS
SHEAR WALL HOLDOWN	FOUNDATION EXTENTS

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LICENSE NO: 18535
EXPIRATION DATE: 06/30/2024

PROJECT TITLE
BELMONT HALL EVENT PAVILION

217 SMYRNA LEIPSIC ROAD
SMYRNA, DELAWARE 19977

SHEET TITLE
NOTES

ISSUED
FOR BID / PERMIT ONLY
ISSUED: 07/14/2023

ISSUE BLOCK

Mark	Date	Description

Revision Schedule

PROJECT NO:	2022035.01
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SCALE:	As indicated
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S001

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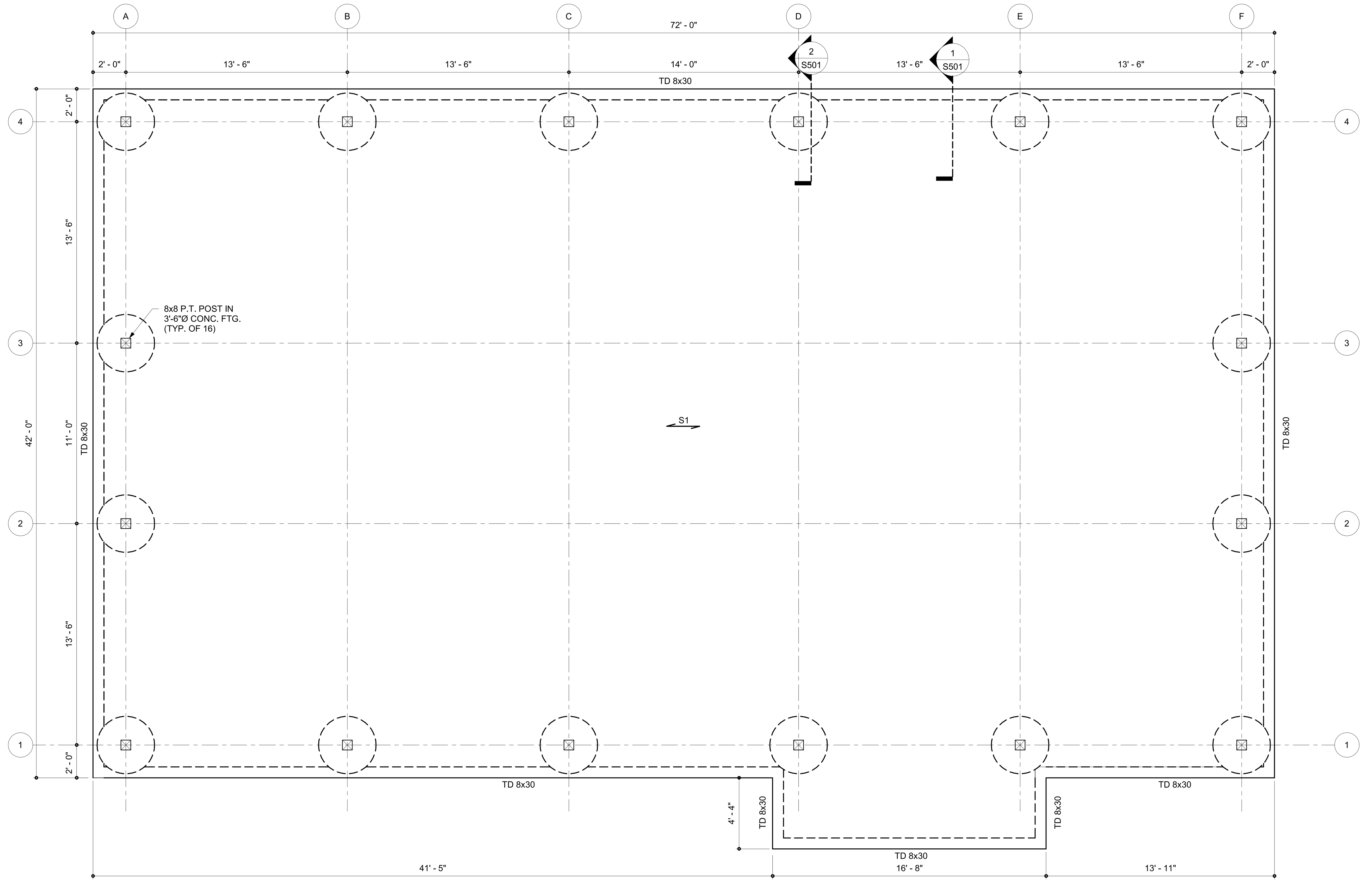
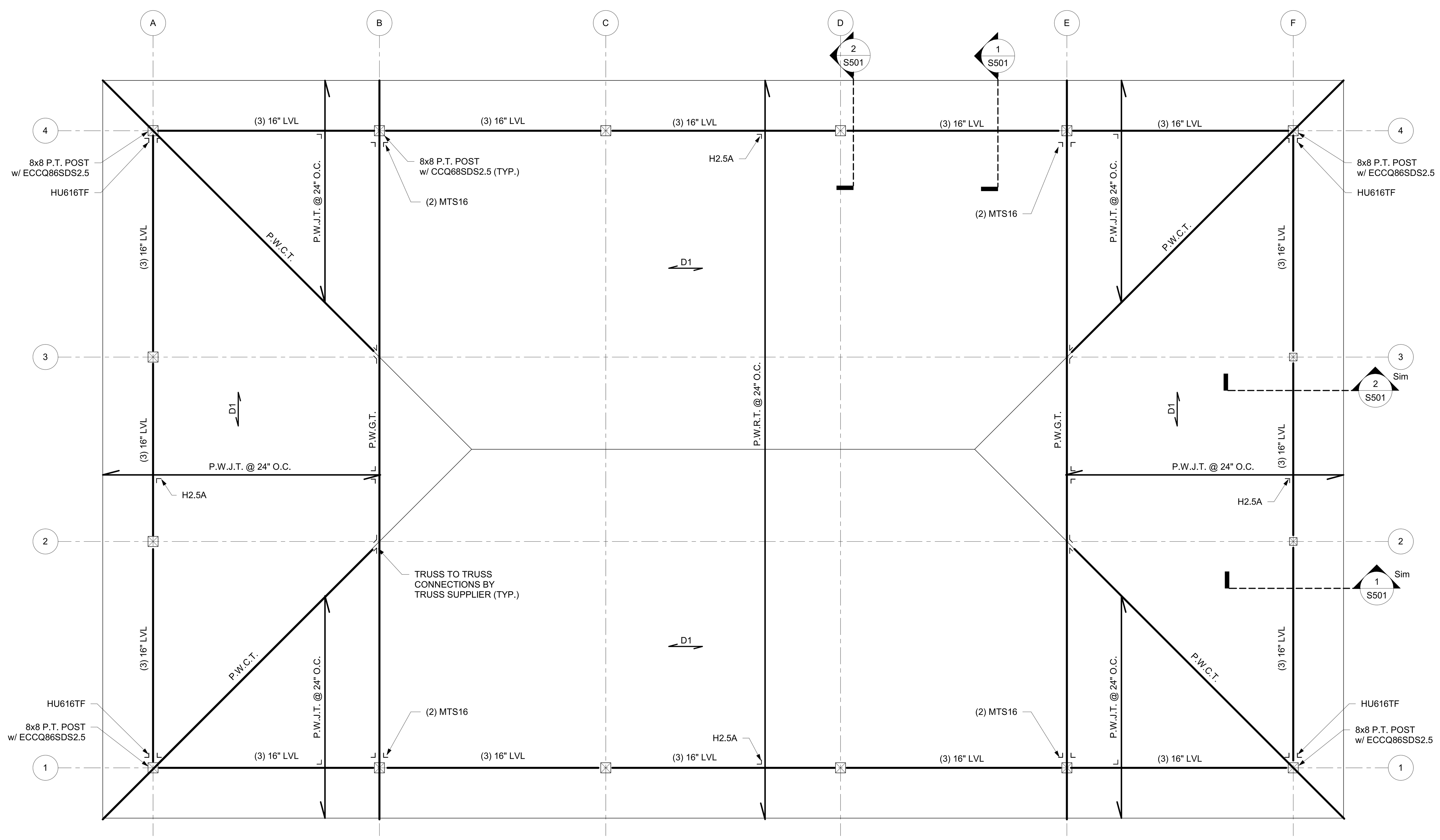


1 FOUNDATION PLAN

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



2 ROOF FRAMING PLAN

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

GENERAL NOTES:

1. SEE ARCHITECTURAL PLANS FOR ROOF BEARING, ROOF SLOPE, AND EAVE CONFIGURATION.
2. PROVIDE UPLIFT ANCHOR AT ENDS OF ALL RAFTERS, SIMPSON H2.5A, MIN. U.N.O.
3. SEE SHEET S001 FOR ADDITIONAL FRAMING INFORMATION INCLUDING FASTENING SCHEDULE.
4. ALL LIGHT GUAGE METAL CONNECTORS SPECIFIED AS SIMPSON STRONG TIE ® UNLESS NOTED OTHERWISE.
5. STRUCTURAL WOOD TRUSSES AS NOTED:
   P.W.R.T.: PRE-ENGINEERED WOOD ROOF TRUSS
   P.W.G.T.: PRE-ENGINEERED WOOD GIRDER TRUSS
   P.W.C.T.: PRE-ENGINEERED WOOD CORNER TRUSS
   P.W.J.T.: PRE-ENGINEERED WOOD JACK TRUSS

SHEET LEGEND:

NOTES:

S1 — 4" 3,500 PSI CONCRETE SLAB SHALL BE 4" AIR ENTRAINED w/ 4"x4" W2.9xW2.9 W.W.R ON, 4" DRAINAGE LAYER AND COMPACTED SUBGRADE.

D1 — ROOF SHEATHING (19/32" STRUCTURAL 1 PLYWOOD) WITH 8d @ 6" O.C. AT EDGES & AT INTERMEDIATE FRAMING (USE 8d RING SHANK NAILS 5'-0" FROM GABLE ENDS & EAVES)

FOOTING SCHEDULE

MARK	TYPE	SIZE	REINFORCEMENT
TD 8x30	TURNDOWN	8" W. x 30" D.	(2) #5 BARS T. & B.
F3.5	CONTINUOUS	3'-6" Ø x 9'-0" D.	(10) #5 BARS w/ #4 TIES @ 12" O.C.

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SHEET TITLE

FOUNDATION & ROOF FRAMING PLANS

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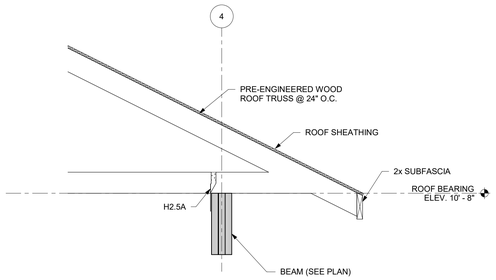
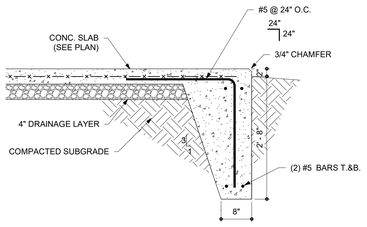
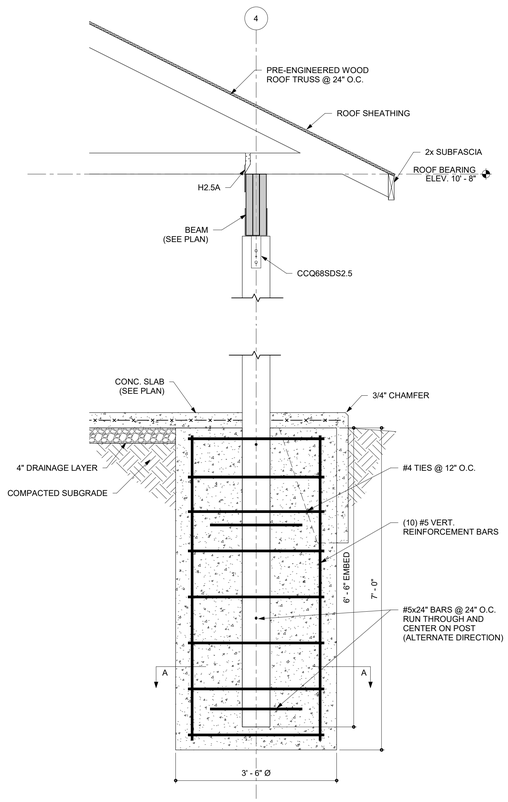




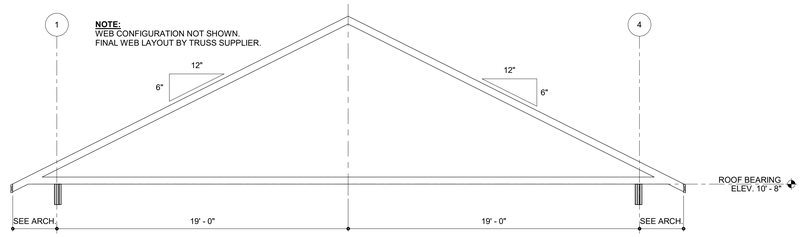
1 SECTION

SCALE: 3/4" = 1'-0"



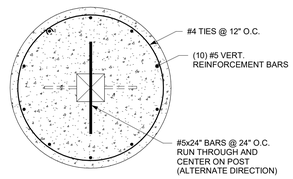
2 SECTION

SCALE: 3/4" = 1'-0"



A TRUSS PROFILE

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



3 SECTION "A-A"

SCALE: 3/4" = 1'-0"

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SECTIONS

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ISSUE BLOCK

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Revision Schedule

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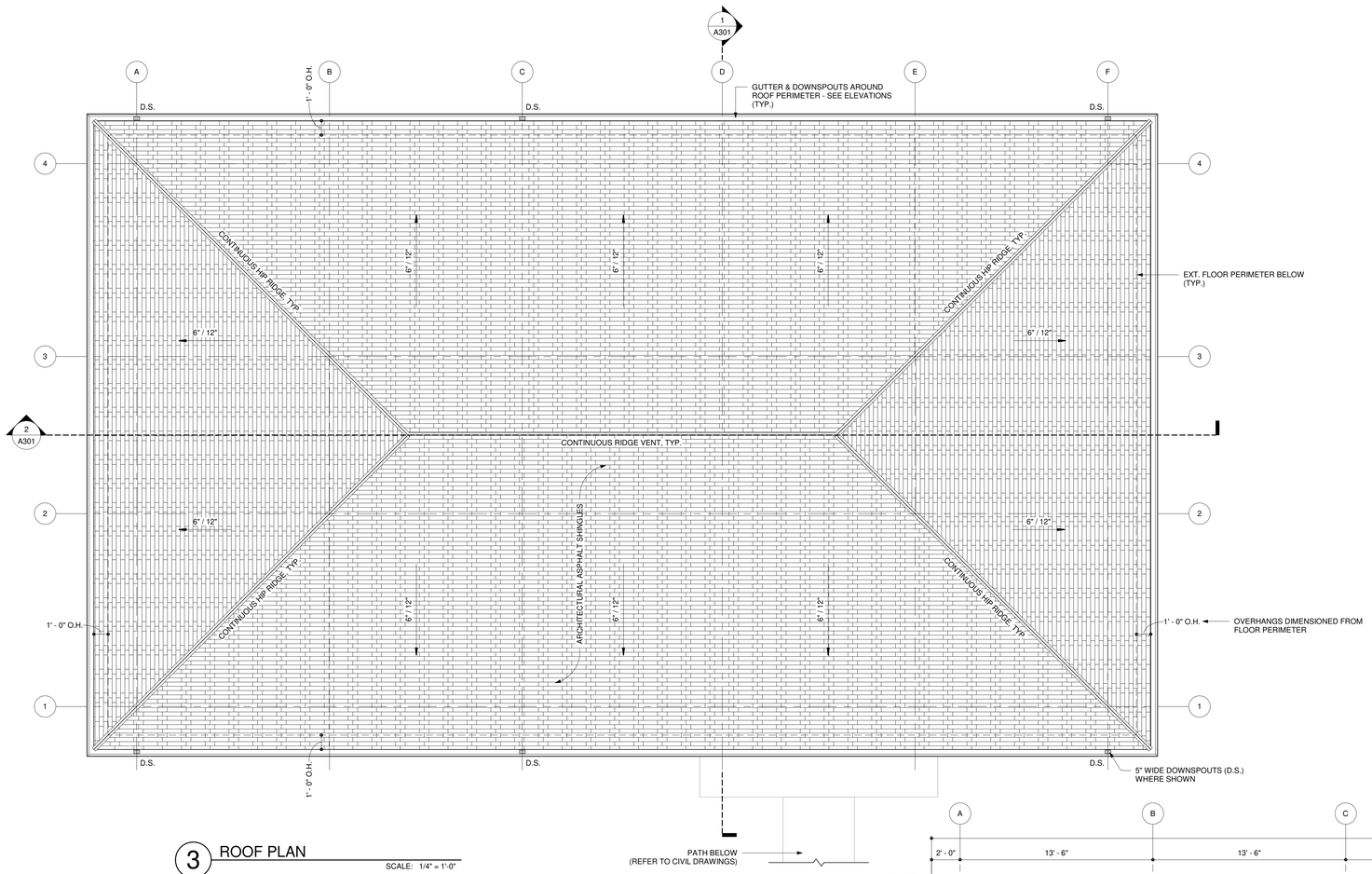


3 ROOF PLAN

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

REFLECTED CEILING LEGEND

WOOD TRIM		GYP. BD. CEILING - PTD.	AZEK SOFFIT
4" RECESSED DOWNLIGHT	R	SCONCE LIGHT	S
3" RECESSED PIN SPOT LED	PS	DUPLEX OUTLET	
INGROUND EXTERIOR LIGHTING		FLOOR OUTLET-QUAD (COORDINATE WITH FURNITURE LAYOUT)	
CHANDELIER	C	SWITCH	$
PENDANT	P	TV OUTLET/CABLE	TV

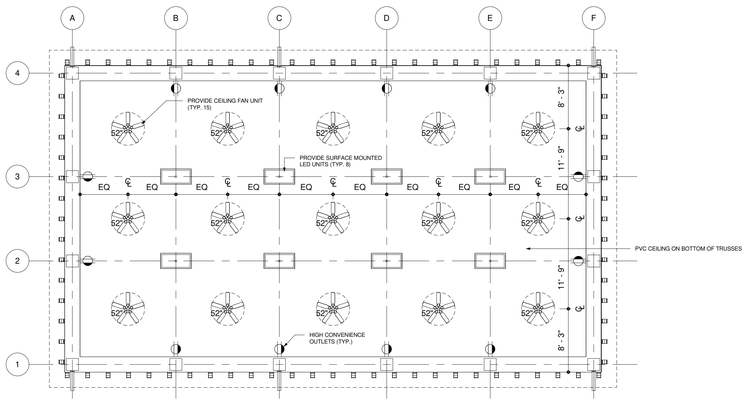
CEILING FAN

SURFACE MOUNTED CEILING LIGHT

SURFACE MOUNTED LED FIXTURE BOX 2'-0" x 2'-0"

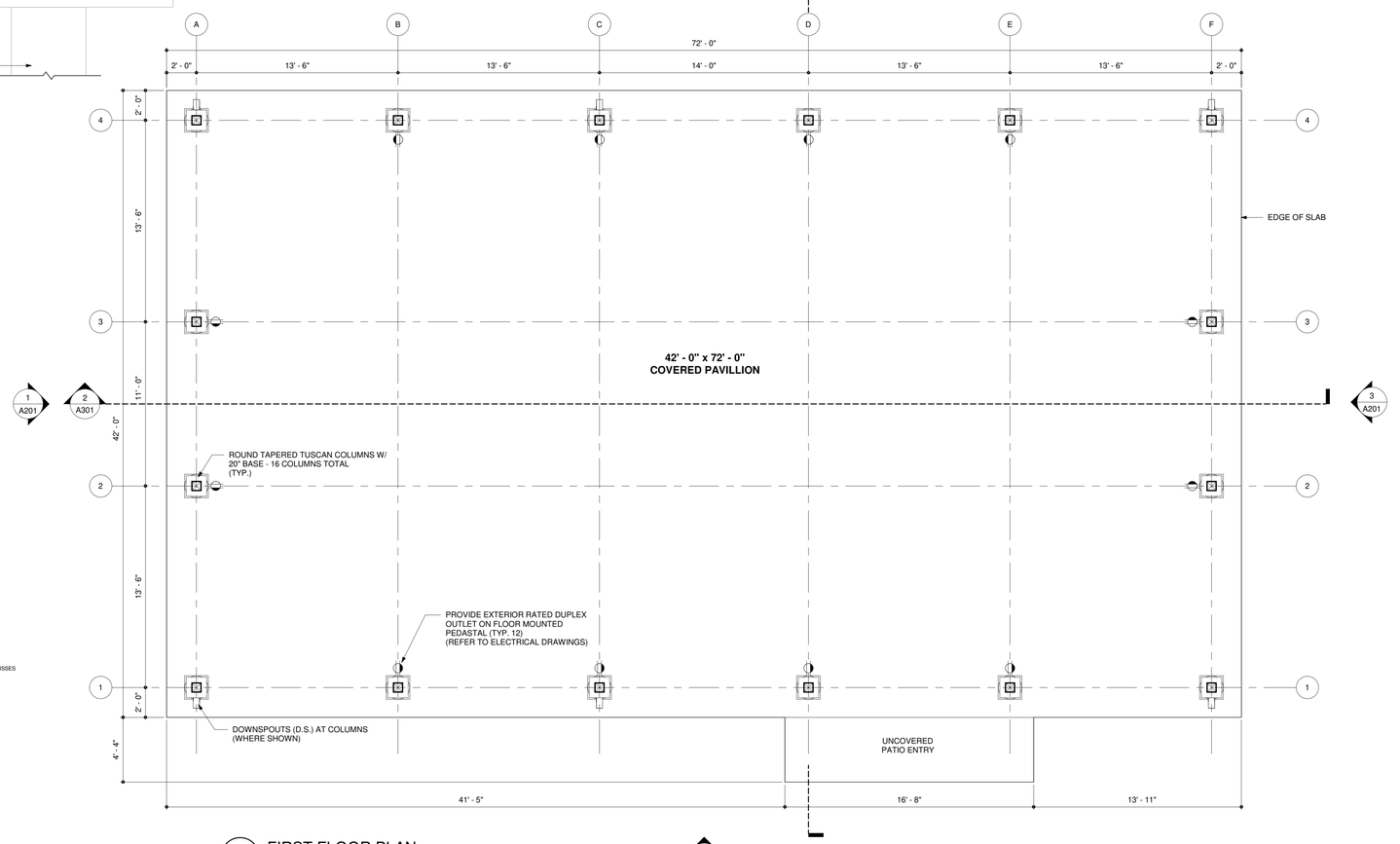
SURFACE MOUNTED LED FIXTURE BOX 2'-0" x 4'-0"

REFER TO ELECTRICAL DRAWINGS FOR LIGHTING DETAILS



2 REFLECTED CEILING PLAN

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



1 FIRST FLOOR PLAN

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

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SHEET TITLE

FIRST FLOOR PLAN, REFLECTED CEILING PLAN & ROOF PLAN

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2022035.01
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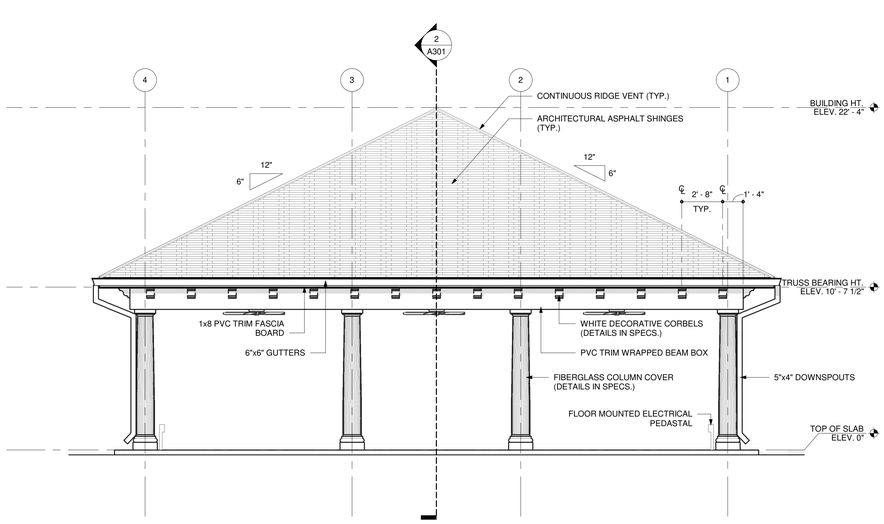
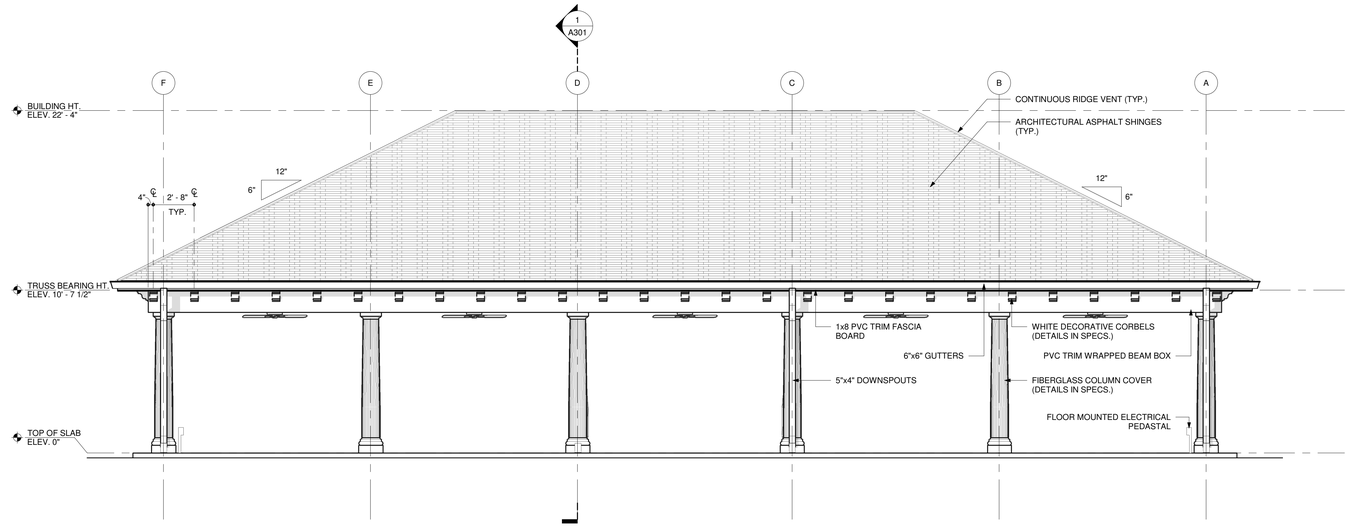


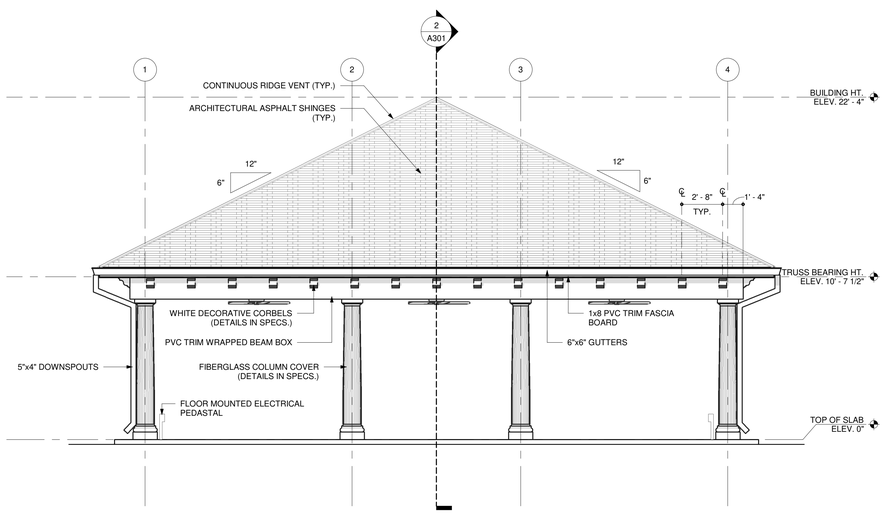
1 NORTH ELEVATION

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



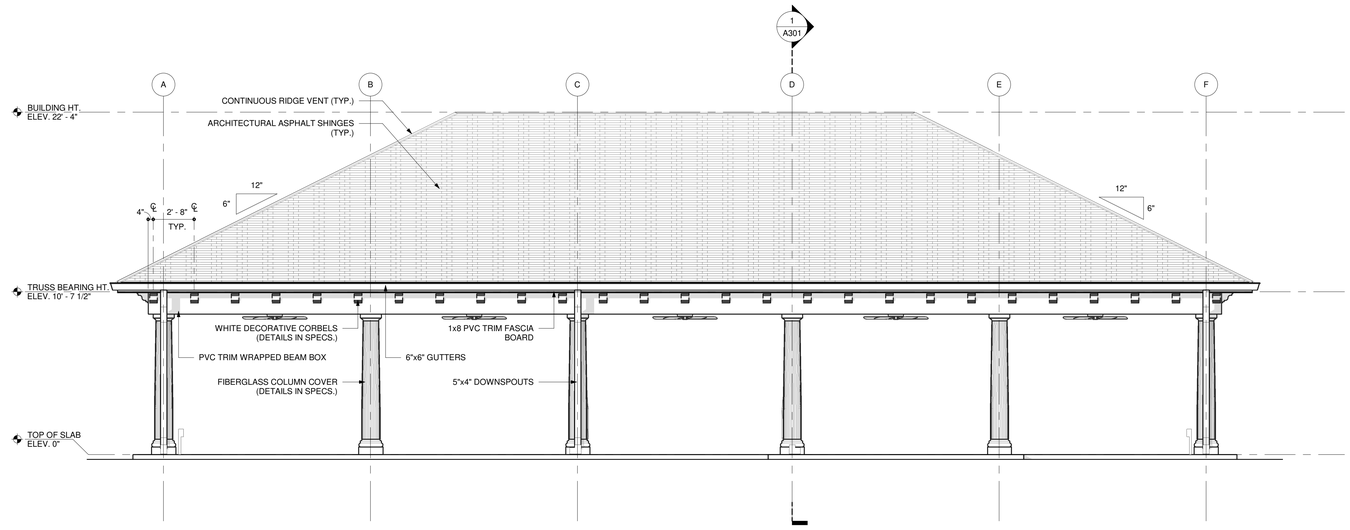
2 EAST ELEVATION

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



3 SOUTH ELEVATION

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



4 WEST ELEVATION

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

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PROJECT TITLE

BELMONT HALL PAVILLION

217 SMYRNA LEIPSIC ROAD
SMYRNA, DELAWARE 19977

ISSUED
FOR BID / PERMIT ONLY
ISSUED: 07/14/2023

SHEET TITLE

EXTERIOR ELEVATIONS

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2022035.01
DATE:	07/14/2023
SCALE:	1/4" = 1'-0"
DRAWN BY: CGK	PROJ MGR: BLH

A201

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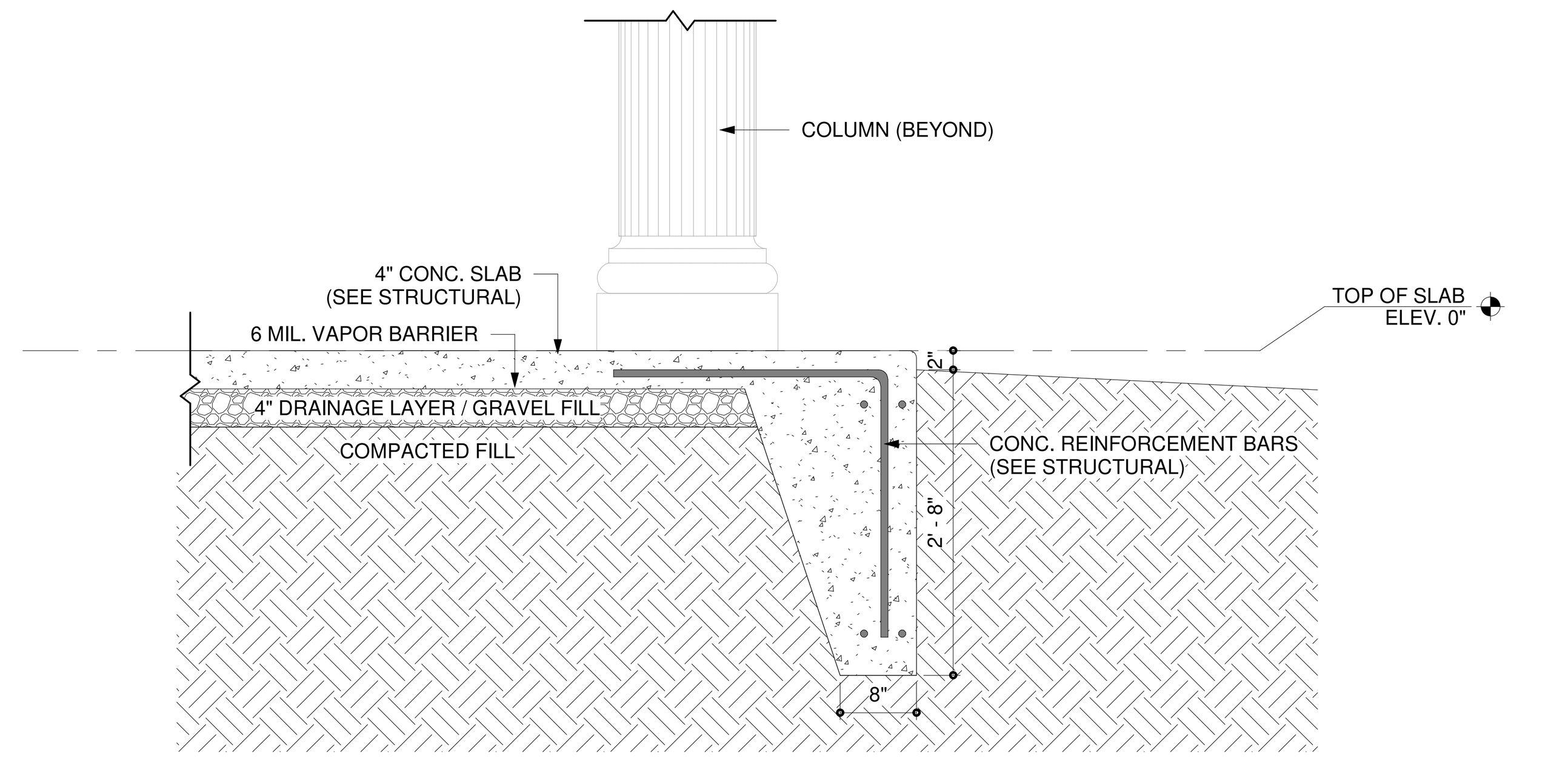
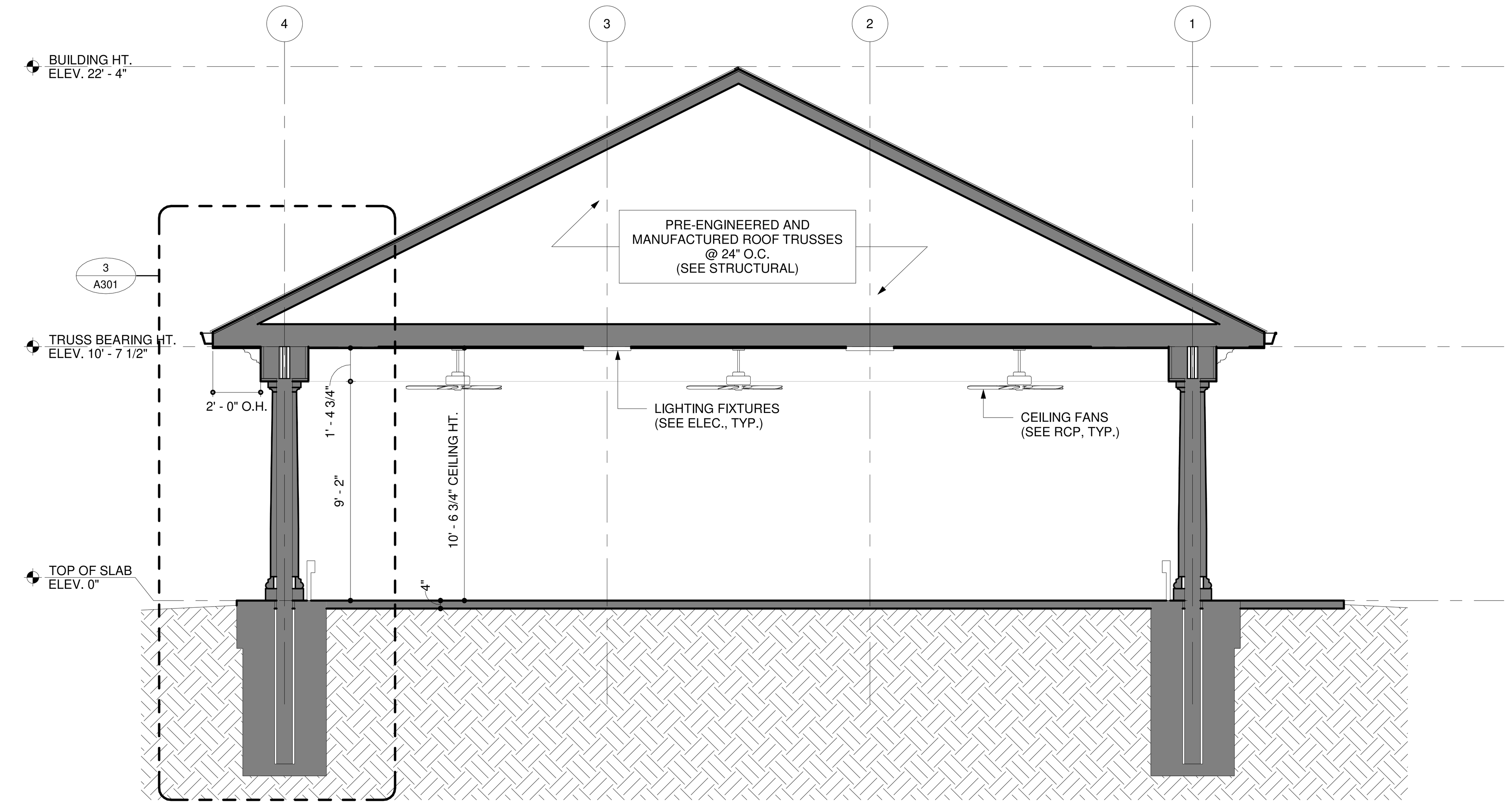
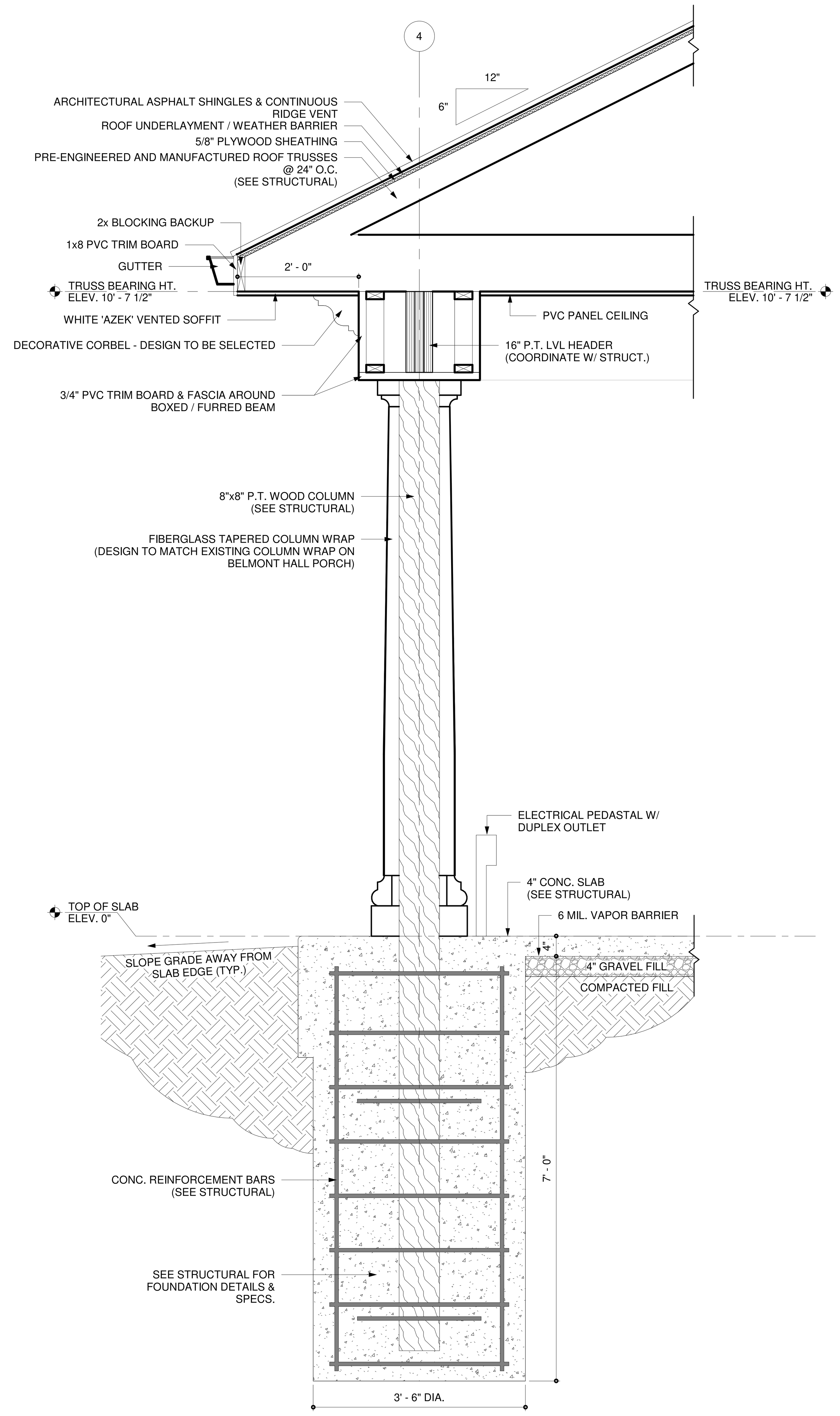
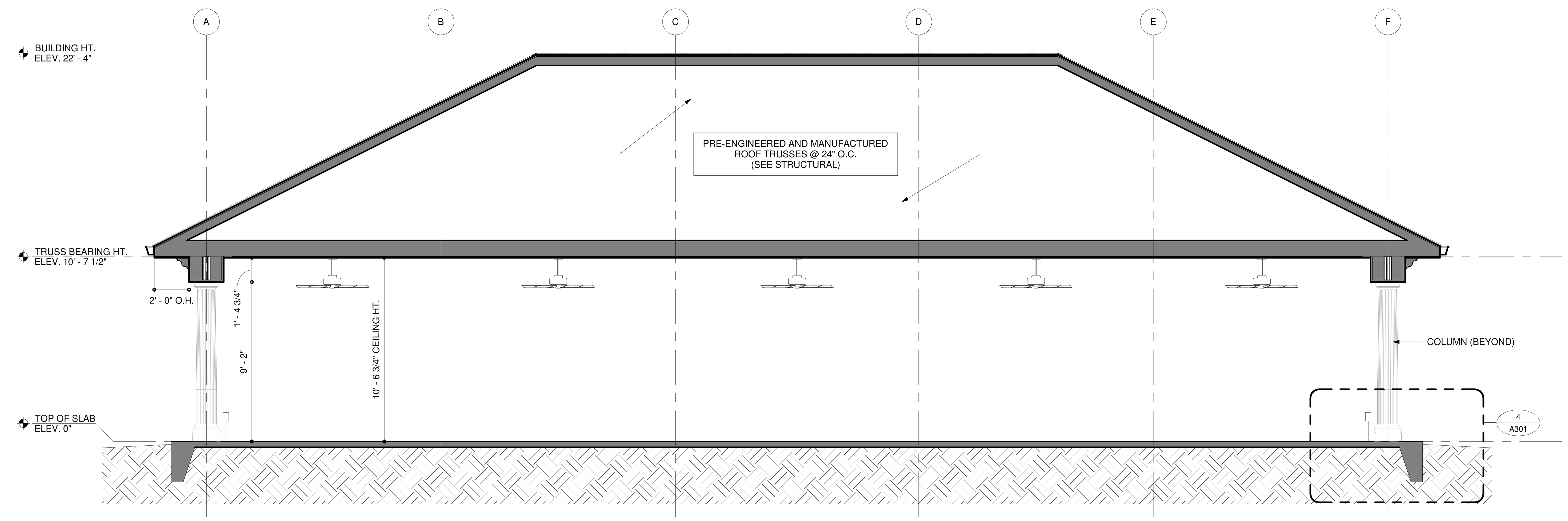


4 TYPICAL TURN-DOWN SLAB DETAIL
SCALE: 3/4" = 1'-0"



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





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

3 TYPICAL PILING / ROOF SECTION
SCALE: 3/4" = 1'-0"

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PROJECT TITLE

BELMONT HALL PAVILLION

217 SMYRNA LEIPSIC ROAD
SMYRNA, DELAWARE 19977

ISSUED
FOR BID / PERMIT ONLY
ISSUED: 07/14/2023

SHEET TITLE

BUILDING SECTIONS, TYPICAL PILING SECTION, AND SLAB DETAILS

ISSUE BLOCK

Mark	Date	Description

PROJECT NO: 2022035.01
DATE: 07/14/2023
SCALE: As indicated
DRAWN BY: CGK | PROJ MGR: BLH

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1 PLUMBING SITE PLAN

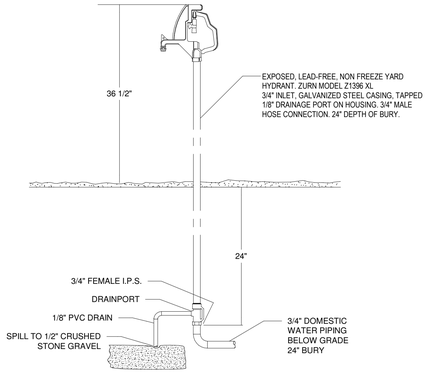
SCALE: 1/16" = 1'-0"

GENERAL NOTE

1. ALL WORK SHALL BE COORDINATED WITH OWNER AND ON-SITE ARCHAEOLOGICAL TEAM. ARCHAEOLOGICAL TEAM SHALL HAVE FULL AUTHORITY TO PUT WORK ON HOLD AS REQUIRED TO ALLOW FOR EVALUATION OF ANY UNFORSEEN FIELD CONDITIONS THEY DEEM WORTHY OF INVESTIGATION.
2. ALL WORK INSIDE EXISTING BUILDING SHALL BE COORDINATED WITH OWNER. THE PLUMBING CONTRACTOR SHALL MINIMIZE DAMAGE TO EXISTING HISTORICAL BUILDING FEATURES. IN THE EVENT OF ANY UNFORSEEN CONDITIONS THAT WOULD AFFECT THE PRESERVATION OF HISTORICAL FEATURES, ALL WORK SHALL BE IMMEDIATELY PAUSED AND THE OWNER NOTIFIED.

KEY NOTES

1. DOMESTIC COLD WATER PIPE SHALL BE INSTALLLED AT A MINIMUM BURY DEPTH 24" FROM THE TOP OF THE PIPE. CONTRACTOR SHALL COORDINATE ALL TRENCHING WITH OTHER TRADES, AND ON-SITE ARCHAEOLOGY TEAM.
2. (N) 3/4" CW PIPE FROM BASEMENT. REFER TO DETAIL 3/P101 FOR CONTINUATION. COORDINATE BUILDING PENETRATION WITH OWNER AND ON-SITE ARCHAEOLOGICAL TEAM.

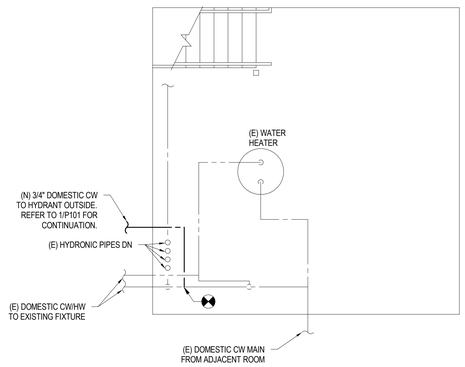


2 FREEZE PROOF HYDRANT DETAIL

SCALE: N.T.S.

PLUMBING FIXTURE SCHEDULE

			CONNCETION SIZES				
TAG	BASIS OF DESIGN	FLUSH VALE OR FAUCET	CW	HW	DRAIN	VENT	REMARKS
HYD-1	ZURN MODEL #Z1396XL	-	3/4"	-	-	-	EXPOSED, LEAD FREE, NON-FREEZE YARD HYDRANT. DURA-COATED CAST IRON HEAD AND LIFT HANDLE WITH LOCK OPTION, GALVANIZED STEEL CASING, BRONZE AND STAINLESS STEEL INTERIOR COMPONENTS, 3/4" INLET CONNECTION WITH 1/8" TAPPED DRAINAGE PORT ON HOUSING. 3/4" MALE HOSE CONNECTION. 2 FT BURY DEPTH.



3 ENLARGED PLUMBING BASEMENT PLAN

SCALE: N.T.S.

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PROJECT TITLE

BELMONT HALL EVENT PAVILLION

713 SMYRNA LEIPSIC ROAD
SMYRNA, DELAWARE 19977

ISSUED
FOR PERMIT ONLY
ISSUED: 06/16/2023

SHEET TITLE

PLUMBING SITE PLAN AND DETAILS

ISSUE BLOCK

Mark	Date	Description
1	07/14/2023	ISSUED FOR BID/PERMIT

PROJECT NO: 2022035.01
DATE: 04/14/2023
SCALE: As indicated
DRAWN BY: SAT | PROJ MGR: DBC

P101

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ELECTRICAL SYMBOL LEGEND

SYMBOL	DESCRIPTION
$	20A, 120-277V AC, SINGLE POLE TOGGLE SWITCH. MH = 48" A.F.F. AS MEASURED TO BOTTOM OF DEVICE BOX.
$3	20A, 120-277V AC, THREE WAY TOGGLE SWITCH. MH = 48" A.F.F. AS MEASURED TO BOTTOM OF DEVICE BOX.
$4	20A, 120-277V AC, FOUR WAY TOGGLE SWITCH. MH = 48" A.F.F. AS MEASURED TO BOTTOM OF DEVICE BOX.
$D	20A, 120V-277V AC, 0-10V DIMMING WALL SWITCH AS MANUFACTURED BY WATTSTOPPER MODEL#LMSW-101. E.C. TO INSTALL PER MANUFACTURERS WRITTEN INSTRUCTIONS. COLOR AS SELECTED BY ARCHITECT.
$DD	24V DC, SINGLE BUTTON DIGITAL DIMMING WALL SWITCH, SWITCH MOUNTING HEIGHT = 48" A.F.F. TO THE TOP OF DEVICE BOX, U.O.N.. SWITCH SHALL BE MODEL NUMBER LMDM-101 AS MANUFACTURED BY WATTSTOPPER OR EQUAL. DIGITAL WALL SWITCH SHALL BE FED BY DIGITAL ROOM CONTROLLER. CABLING BETWEEN CONTROLLER AND DIGITAL WALL SWITCH SHALL BE CAT-5E CABLE WITH RJ45 CONNECTORS. COLOR AS SELECTED BY ARCHITECT.
$OC	20A, 120-277V AC, SINGLE BUTTON WALL MOUNT, PASSIVE INFRARED SINGLE RELAY ON/OFF OCCUPANCY SENSOR. SWITCH MOUNTING HEIGHT = 48" A.F.F. TO CENTER OF DEVICE BOX, U.O.N. OCCUPANCY SWITCH SHALL BE #PW-101 AS MANUFACTURED BY WATTSTOPPER.
$OC2	20A, 120-277V AC, TWO BUTTON WALL MOUNT, DUAL TECHNOLOGY (PASSIVE INFRARED AND ULTRASONIC), DUAL RELAY OCCUPANCY SENSOR. SWITCH MOUNTING HEIGHT = 48" A.F.F. TO CENTER OF DEVICE BOX, U.O.N. OCCUPANCY SWITCH SHALL BE #DW-200 AS MANUFACTURED BY WATTSTOPPER.
$OC3	20A, 120-277V AC, SINGLE BUTTON 0-10V DIMMING WALL MOUNT, PASSIVE INFRARED, SINGLE RELAY OCCUPANCY SENSOR. SWITCH MOUNTING HEIGHT = 48" A.F.F. TO CENTER OF DEVICE BOX, U.O.N. OCCUPANCY SWITCH SHALL BE #PW-311 AS MANUFACTURED BY WATTSTOPPER.
$D10	20A, 120-277VAC, 0-10V DIMMING SWITCH AS MANUFACTURED BY WATTSTOPPER MODEL# RH4FBL3PTC. E.C. TO INSTALL PER MANUFACTURERS INSTRUCTIONS. COLOR TO BE SELECTED BY ARHCITECT.
$FC	20A, 120-277VAC, FAN CONTROLLER WALL BOX AS MANUFACTURED BY WATTSTOPPER MODEL# CDSC6-X. E.C. TO INSTALL PER MANUFACTURERS INSTRUCTIONS. COLOR TO BE SELECTED BY ARCHITECT.
$CC	20A, 120-277VAC, RGBW LED LIGHTING CONTROLLER, COLORDIAL PRO AS MANUFACTURED BY COLOR KINETICS OR EQUAL. E.C. SHALL FURNISH AND INSTALL CONTROLLER AND WIRING TO ALL DEVICES.
OC	1000 SQ. FT. COVERAGE CEILING MOUNTED OCCUPANCY SENSOR., 24V DC, DUAL TECHNOLOGY (ULTRASONIC AND PASSIVE INFRARED). SENSOR SHALL BE MODEL NUMBER LMDC-100 AS MANUFACTURED BY WATTSTOPPER OR EQUAL. FINISH SHALL BE SELECTED BY OWNER/ARCHITECT. OCCUPANCY SENSOR SHALL BE FED FROM DIGITAL ROOM CONTROLLER. CABLING BETWEEN CONTROLLER AND OCCUPANCY SENSOR SHALL BE CAT-5E CABLE WITH RJ45 CONNECTORS.
OC2	1000 SQ. FT. COVERAGE CEILING MOUNTED EXTENDED RANGE OCCUPANCY SENSOR., 24V DC, PASSIVE INFRARED. SENSOR SHALL BE MODEL NUMBER LMPC-100 AS MANUFACTURED BY WATTSTOPPER OR EQUAL. FINISH SHALL BE SELECTED BY OWNER/ARCHITECT. OCCUPANCY SENSOR SHALL BE FED FROM DIGITAL ROOM CONTROLLER. CABLING BETWEEN CONTROLLER AND OCCUPANCY SENSOR SHALL BE CAT-5E CABLE WITH RJ45 CONNECTORS.
RC1	20A, 120V AC, 60HZ, ON/OFF DIGITAL ROOM CONTROLLER, SINGLE RELAY, UL LISTED, U.O.N. SWITCH SHALL BE MODEL NUMBER LMRC-101 AS MANUFACTURED BY WATTSTOPPER OR EQUAL. CABLING BETWEEN LOW VOLTAGE DEVICES AND DIGITAL ROOM CONTROLLER SHALL BE CAT-5E CABLE WITH RJ45 CONNECTORS. E.C. SHALL MOUNT DIGITAL ROOM CONTROLLER SECURELY ABOVE DROP CEILING IN ACCESSIBLE SPACE. ROOM CONTROLLER'S CONTROLLING LIGHTING FED FROM EMERGENCY CIRCUITS SHALL BE PROVIDED WITH AN EMERGENCY BYPASS CONTROLLER. . EMERGENCY BYPASS CONTROLLER SHALL BE MANUFACTURED BY WATTSTOPPER, MODEL ELCU-200. E.C. SHALL PROVIDE (1) ONE DIGITAL WIRELESS CONFIGURATION TOOL AS MANUFACTURED BY WATTSTOPPER, MODEL LMCT-100. THE DIGITAL CONFIGURATION TOOL SHALL BE USED TO PROGRAM THE DIGITAL ROOM CONTROLLERS.
RCD1	20A, 120V AC, 60HZ, ON/OFF/0-10V DIMMING DIGITAL ROOM CONTROLLER, SINGLE RELAY, UL LISTED, U.O.N. SWITCH SHALL BE MODEL NUMBER LMRC-211 AS MANUFACTURED BY WATTSTOPPER OR EQUAL. CABLING BETWEEN LOW VOLTAGE DEVICES AND DIGITAL ROOM CONTROLLER SHALL BE CAT-5E CABLE WITH RJ45 CONNECTORS. E.C. SHALL MOUNT DIGITAL ROOM CONTROLLER SECURELY ABOVE DROP CEILING IN ACCESSIBLE SPACE. ROOM CONTROLLER'S CONTROLLING LIGHTING FED FROM EMERGENCY CIRCUITS SHALL BE PROVIDED WITH AN EMERGENCY BYPASS CONTROLLER. EMERGENCY BYPASS CONTROLLER SHALL BE MANUFACTURED BY WATTSTOPPER, MODEL ELCU-200. E.C. SHALL PROVIDE (1) ONE DIGITAL WIRELESS CONFIGURATION TOOL AS MANUFACTURED BY WATTSTOPPER, MODEL LMCT-100. THE DIGITAL CONFIGURATION TOOL SHALL BE USED TO PROGRAM THE DIGITAL ROOM CONTROLLERS.
RCD2	20A, 120V AC, 60HZ, ON/OFF/0-10V DIMMING DIGITAL ROOM CONTROLLER, DUAL RELAY, UL LISTED, U.O.N. SWITCH SHALL BE MODEL NUMBER LMRC-212 AS MANUFACTURED BY WATTSTOPPER OR EQUAL. CABLING BETWEEN LOW VOLTAGE DEVICES AND DIGITAL ROOM CONTROLLER SHALL BE CAT-5E CABLE WITH RJ45 CONNECTORS. E.C. SHALL MOUNT DIGITAL ROOM CONTROLLER SECURELY ABOVE DROP CEILING IN ACCESSIBLE SPACE. ROOM CONTROLLER'S CONTROLLING LIGHTING FED FROM EMERGENCY CIRCUITS SHALL BE PROVIDED WITH AN EMERGENCY BYPASS CONTROLLER. EMERGENCY BYPASS CONTROLLER SHALL BE MANUFACTURED BY WATTSTOPPER, MODEL ELCU-200. E.C. SHALL PROVIDE (1) ONE DIGITAL WIRELESS CONFIGURATION TOOL AS MANUFACTURED BY WATTSTOPPER, MODEL LMCT-100. THE DIGITAL CONFIGURATION TOOL SHALL BE USED TO PROGRAM THE DIGITAL ROOM CONTROLLERS.
RCD3	20A, 120V AC, 60HZ, ON/OFF/0-10V DIMMING DIGITAL ROOM CONTROLLER, TRIPLE RELAY, UL LISTED, U.O.N. SWITCH SHALL BE MODEL NUMBER LMRC-213 AS MANUFACTURED BY WATTSTOPPER OR EQUAL. CABLING BETWEEN LOW VOLTAGE DEVICES AND DIGITAL ROOM CONTROLLER SHALL BE CAT-5E CABLE WITH RJ45 CONNECTORS. E.C. SHALL MOUNT DIGITAL ROOM CONTROLLER SECURELY ABOVE DROP CEILING IN ACCESSIBLE SPACE. ROOM CONTROLLER'S CONTROLLING LIGHTING FED FROM EMERGENCY CIRCUITS SHALL BE PROVIDED WITH AN EMERGENCY BYPASS CONTROLLER. EMERGENCY BYPASS CONTROLLER SHALL BE MANUFACTURED BY WATTSTOPPER, MODEL ELCU-200. E.C. SHALL PROVIDE (1) ONE DIGITAL WIRELESS CONFIGURATION TOOL AS MANUFACTURED BY WATTSTOPPER, MODEL LMCT-100. THE DIGITAL CONFIGURATION TOOL SHALL BE USED TO PROGRAM THE DIGITAL ROOM CONTROLLERS. WP = WATERPROOF PROTECTIVE COVER.

SYMBOL	DESCRIPTION
	3 BUTTON OVERHEAD DOOR CONTROLLER
	20A, 120V AC, NEMA 5-20R, DUPLEX RECEPTACLE, SINGLE GANG BOX, TILE RING (DEPTH AS REQUIRED), COVERPLATE. MOUNTING HEIGHT TO CENTER OF DEVICE = 18" AFF TO CENTER OF DEVICE BOX, U.O.N., X" = INCHES A.F.F. MOUNTING HEIGHT TO CENTER OF DEVICE (COORDINATE WITH MILLWORK), T = TAMPER PROOF
GFI	20A, 120V AC, NEMA 5-20R, DUPLEX GROUND FAULT CIRCUIT INTERRUPTER TYPE RECEPTACLE (GFI), SINGLE GANG BOX, TILE RING (DEPTH AS REQUIRED). MOUNTING HEIGHT TO CENTER OF DEVICE = 18" A.F.F., X" = INCHES A.F.F. MOUNTING HEIGHT TO CENTER OF DEVICE (COORDINATE WITH MILLWORK), WP = IN USE WEATHERPROOF COVER.
ISO	20A, 120V AC, NEMA 5-20R, DUPLEX RECEPTACLE, SINGLE GANG BOX, TILE RING (DEPTH AS REQUIRED). MOUNTING HEIGHT TO CENTER OF DEVICE = 18" A.F.F., X" = INCHES A.F.F. MOUNTING HEIGHT TO CENTER OF DEVICE (COORDINATE WITH MILLWORK), ISO = GASKETED STAINLESS STEEL COVERPLATE.
48" GFI ISO	20A, 120V AC, NEMA 5-20R, DUPLEX GROUND FAULT CIRCUIT INTERRUPTER TYPE RECEPTACLE (GFI), SINGLE GANG BOX, TILE RING (DEPTH AS REQUIRED). MOUNTING HEIGHT TO CENTER OF DEVICE = 48" A.F.F, ISO = GASKETED STAINLESS STEEL COVERPLATE
S	20A, 120V AC, NEMA 5-20R, SURFACE MOUNTED DUPLEX RECEPTACLE, 4" SQUARE BOX, CONDUIT STUBBED UP TO EASILY ACCESSIBLE SPACE ABOVE CEILING. MOUNTING HEIGHT TO CENTER OF DEVICE = 18" AFF TO CENTER OF DEVICE BOX, U.O.N., X" = INCHES A.F.F. MOUNTING HEIGHT TO CENTER OF DEVICE (COORDINATE WITH MILLWORK).
U	20A, 120V AC, NEMA 5-20R, DUPLEX RECEPTACLE WITH 3.1 AMP USB CHARGING PORT. MOUNTING HEIGHT TO CENTER OF DEVICE = 18" AFF TO CENTER OF DEVICE BOX, U.O.N., X"= INCHES A.F.F. MOUNTING HEIGHT TO CENTER OF DEVICE (COORDINATE WITH MILLWORK).
	20A, 120V AC, NEMA 5-20R, DOUBLE DUPLEX RECEPTACLE, DOUBLE GANG BOX, TILE RING (DEPTH AS REQUIRED). MOUNTING HEIGHT TO CENTER OF DEVICE = 18" A.F.F., X" = INCHES A.F.F. MOUNTING HEIGHT TO CENTER OF DEVICE (COORDINATE WITH MILLWORK), T = TAMPER PROOF, ISO = GASKETED STAINLESS STEEL COVERPLATE
GFI WP	20A, 120V AC, NEMA 5-20R, GROUND FAULT CIRCUIT INTERRUPTER (GFI) TYPE DOUBLE DUPLEX RECEPTACLE, DOUBLE GANG BOX, TILE RING (DEPTH AS REQUIRED). MOUNTING HEIGHT TO CENTER OF DEVICE = 18" A.F.F., X" = INCHES A.F.F. MOUNTING HEIGHT TO CENTER OF DEVICE (COORDINATE WITH MILLWORK), T = TAMPER PROOF WP = IDENTIFIES "IN USE" WEATHERPROOF COVER.
48" S ISO	20A, 120V AC, NEMA 5-20R, SURFACE MOUNTED DOUBLE DUPLEX RECEPTACLE, CONDUIT STUBBED UP TO EASILY ACCESSIBLE SPACE ABOVE CEILING, GASKETED. X" = INCHES A.F.F. MOUNTING HEIGHT TO CENTER OF DEVICE (COORDINATE WITH MILLWORK), PROOF WP = IDENTIFIES "IN USE" WEATHERPROOF COVER, ISO = GASKETED STAINLESS STEEL COVERPLATE
XX-XXR	SPECIAL PURPOSE ELECTRICAL RECEPTACLE. XX-XXR = NEMA CONFIGURATION, X" = INCHES A.F.F. MOUNTING HEIGHT TO CENTER OF DEVICE (COORDINATE WITH MILLWORK).
GFI XX-XXR	ELECTRIC CORD REEL, FED FROM GFCI BRANCH CIRCUIT BREAKER. 20A, 250VAC RATED, YELLOW INDUSTRIAL REEL, UL TYPE 1, 35FT #12/3 SJO CORD, W/ YELLOW FEMALE WATERPROOF SINGLE RECEPTACLE. CORD REEL SHALL BE MODEL #HBLI35123Y WITH RECEPTACLE END #HBL1533 AS MANUFACTURED BY HUBBELL. PROVIDE BALL STOP #HBLI12BS AND PIVOT BASE #HVLI340PB AS MANUFACTURED BY HUBBELL. XX-XXR = NEMA CONFIGURATION.
?	ELECTRIC CORD REEL, FED FROM GFCI BRANCH CIRCUIT BREAKER. 30A, 250VAC RATED, YELLOW INDUSTRIAL REEL, UL TYPE 1, #10/3 SJO CORD, W/ YELLOW LOCKING FEMALE WATERPROOF RECEPTACLE. CORD REEL SHALL BE MODEL #HBLI35103Y WITH RECEPTACLE END #HBL2613VY AS MANUFACTURED BY HUBBELL. PROVIDE BALL STOP #HBLI14BS AND PIVOT BASE #HVLI340PB AS MANUFACTURED BY HUBBELL. XX-XXR = NEMA CONFIGURATION.
	CLOCK (TYPE DENOTED)
J	RECESSED JUNCTION BOX, CONDUIT STUBBED UP TO EASILY ACCESSIBLE SPACE ABOVE CEILING. X" = INCHES A.F.F. MOUNTING HEIGHT TO CENTER OF DEVICE (COORDINATE WITH MILLWORK).
J S	SURFACE MOUNTED JUNCTION BOX, RACEWAY STUBBED UP TO EASILY ACCESSIBLE SPACE ABOVE CEILING. X" = INCHES A.F.F. MOUNTING HEIGHT TO CENTER OF DEVICE (COORDINATE WITH MILLWORK)
J	FLOOR/CEILING RECESSED JUNCTION BOX
PB	PULL BOX
	POWER OR DISTRIBUTION PANEL. HIDDEN LINE REPRESENTS ELECTRICAL CLEARANCE SPACE.
	TRANSFORMER (SIZE AS DENOTED). HIDDEN LINE REPRESENTS ELECTRICAL CLEARANCE SPACE.
XX-1	MOTOR
$B	LOW VOLTAGE MOTORIZED BLIND CONTROLLER. DECOFLEX DRY CONTACT KEYPAD SHALL BE ITEM #1811402 AS MANUFACTURED BY HUNTER DOUGLAS.
$M	SINGLE-POLE OR TWO-POLE (AS REQUIRED), 250V AC, 1 HP RATED, TOGGLE TYPE MANUAL MOTOR STARTED UNIT WITH MELTING ALLOY TYPE THERMAL OVERLOAD RELAY, APPROPRIATELY SIZED THERMAL UNITS, NEMA TYPE 1 OR 4 (AS REQUIRED) ENCLOSURE, AND HANDLE GUARD/LOCK-OFF. SQUARE D CLASS 2510 FG OR FW TYPES (AS REQUIRED) OR APPROVED EQUAL. THREE-POLE, 250V AC, 1 OR 2 HP RATED (AS REQUIRED), TOGGLE TYPE MANUAL MOTOR STARTER UNIT WITH MELTING ALLOY TYPE THERMAL OVERLOAD RELAY, APPROPRIATELY SIZED THERMAL UNITS, NEMA TYPE 1 ENCLOSURE AND HANDLE GUARD/LOCK-OFF. SQUARE D CLASS 2510 K TYPE OR APPROVED EQUAL.
#A #AF NEMA#	FUSIBLE SWITCH TYPE COMBINATION STARTER UNIT WITH DOOR MOUNTED H-O-A SWITCH AND RED "MOTOR RUNNING" LED TYPE PILOT LIGHT. PROVIDE AUXILIARY CONTACT. "NEMA #" IDENTIFIES NEMA ENCLOSURE TYPE. "#A" IDENTIFIES DISCONNECT SWITCH AMPACITY RATING. "#AF", IF PRESENT, IDENTIFIES APPROXIMATE FUSE RATING. UNLESS OTHERWISE NOTED, ALL FUSIBLE DISCONNECT SWITCHES SHALL BE COMPLETE WITH APPROPRIATELY SIZED DE, TD, CL, CLASS RK5 FUSES.
#A NEMA#	NON-FUSIBLE DISCONNECT SWITCH. "#A" IDENTIFIES DISCONNECT SWITCH AMPACITY RATING. "NEMA #" IDENTIFIES NEMA ENCLOSURE TYPE.
#A #AF NEMA#	FUSIBLE DISCONNECT SWITCH. "#A" IDENTIFIES DISCONNECT SWITCH AMPACITY RATING. #AF IDENTIFIES DISCONNECT FUSE SIZE. "NEMA #" IDENTIFIES NEMA ENCLOSURE TYPE.
?	FLOOR BOX, ON GRADE CONCRETE. MODEL #RFBE

SYMBOL	DESCRIPTION
	BUS DUCT WITH PLUG IN DISCONNECT (FUSED)
R	RELAY
	ENCLOSED CIRCUIT BREAKER
	PRESSURE SWITCH
	FLOAT SWITCH
	PHOTOCELL
TC	TIME CLOCK. AS SHOWN ON WIRING DIAGRAMS
	TELEPHONE OUTLET CONSISTING OF ONE 4 PORT COVERPLATE, 4" SQUARE BOX, TILE RING (DEPTH AS REQUIRED), (1) 1-1/4" CONDUIT WITH PULLSTRINGS STUBBED UP INTO THE NEAREST ACCESSIBLE CEILING. MOUNTING HEIGHT=18" AFF TO THE CENTER OF DEVICE BOX UNLESS OTHERWISE NOTED. COMMUNICATIONS VENDOR TO FURNISH AND INSTALL DEVICES, DEVICE PLATES, AND WIRE.
W	TELEPHONE WALL OUTLET CONSISTING OF ONE 4 PORT COVERPLATE, 4" SQUARE BOX, TILE RING (DEPTH AS REQUIRED), 1-1/4" CONDUIT WITH PULLSTRING STUBBED UP INTO THE NEAREST ACCESSIBLE CEILING. MOUNTING HEIGHT=18" AFF TO THE CENTER OF DEVICE BOX UNLESS OTHERWISE NOTED. COMMUNICATIONS VENDOR TO FURNISH AND INSTALL DEVICES, DEVICE PLATES, AND WIRE.
	COMBINATION TELE/DATA OUTLET CONSISTING OF ONE 4 PORT COVERPLATE, 4" SQUARE BOX, TILE RING (DEPTH AS REQUIRED), 1-1/4" CONDUIT WITH PULLSTRING STUBBED UP INTO THE NEAREST EASILY ACCESSIBLE CEILING SPACE. MOUNTING HEIGHT=18" AFF TO THE CENTER OF DEVICE BOX UNLESS OTHERWISE NOTED. COMMUNICATIONS VENDOR TO FURNISH AND INSTALL DEVICES, DEVICE PLATES, AND WIRE.
48" S	COMBINATION TELE/DATA OUTLET CONSISTING OF ONE 4 PORT COVERPLATE, 4" SQUARE BOX, TILE RING (DEPTH AS REQUIRED), 1-1/4" CONDUIT WITH PULLSTRING STUBBED UP INTO THE NEAREST EASILY ACCESSIBLE CEILING SPACE. MOUNTING HEIGHT=48" AFF TO THE CENTER OF DEVICE BOX UNLESS OTHERWISE NOTED. COMMUNICATIONS VENDOR TO FURNISH AND INSTALL DEVICES, DEVICE PLATES, AND WIRE.
	WIRELESS ACCESS POINT CONSISTING OF JUNCTION BOX AND TILE RING PROVIDED BY E.C. ALL DEVICES, DEVICE PLATES, AND CAT-6 WIRE PROVIDED BY ELECTRICAL CONTRACTOR.
TV	TELEVISION OUTLET. PROVIDE 4" SQUARE DEVICE BOX, TILE RING (DEPTH AS REQUIRED), STUB-UP 1 1/4" CONDUIT TO NEAREST ACCESSIBLE SPACE, RG-6 CABLE FROM DEMARC TO OUTLET. MOUNTING HEIGHT = 18" A.F.F. TO CENTER OF DEVICE. ELECTRICAL CONTRACTOR TO FURNISH AND INSTALL DEVICES, DEVICE PLATES, AND WIRE.
	HORN TYPE SPEAKER
S 1	ALERTING SYSTEM VISUAL FHA TROUBLE STROBE LIGHT. E.C. SHALL FURNISH AND INSTALL J-BOXES AND 3/4" CONDUIT. ALERTING VENDOR TO FURNISH AND INSTALL DEVICES, DEVICE PLATES, AND ALL WIRE.
AS	ALERTING SYSTEM CEILING MOUNTED 8" SPEAKER. E.C. SHALL FURNISH AND INSTALL J-BOXES AND 3/4" CONDUIT. ALERTING VENDOR TO FURNISH AND INSTALL DEVICES, DEVICE PLATES, AND ALL WIRE.
AS OD	ALERTING SYSTEM CEILING MOUNTED OMNI-DIRECTIONAL SPEAKER. E.C. SHALL FURNISH AND INSTALL J-BOXES AND 3/4" CONDUIT. ALERTING VENDOR TO FURNISH AND INSTALL DEVICES, DEVICE PLATES, AND ALL WIRE.
BS	ALERTING SYSTEM CEILING MOUNTED BATHROOM SPEAKER. ALERTING SYSTEM RED VISUAL STROBE LIGHT. E.C. SHALL FURNISH AND INSTALL J-BOXES AND 3/4" CONDUIT. ALERTING VENDOR TO FURNISH AND INSTALL DEVICES, DEVICE PLATES, AND ALL WIRE.
LED	ALERTING SYSTEM CEILING MOUNTED 8" LED LIGHT/SPEAKER. ALERTING SYSTEM RED VISUAL STROBE LIGHT. E.C. SHALL FURNISH AND INSTALL J-BOXES AND 3/4" CONDUIT. ALERTING VENDOR TO FURNISH AND INSTALL DEVICES, DEVICE PLATES, AND ALL WIRE.
AS	ALERTING SYSTEM WALL MOUNTED SPEAKER. E.C. SHALL FURNISH AND INSTALL J-BOXES AND 3/4" CONDUIT. ALERTING VENDOR TO FURNISH AND INSTALL DEVICES, DEVICE PLATES, AND ALL WIRE.
RS	ALERTING SYSTEM EXTERIOR WALL RECESS MOUNTED SPEAKER WITH GRILL GUARD. E.C. SHALL FURNISH AND INSTALL J-BOX AND 3/4" CONDUIT. ALERTING VENDOR TO FURNISH AND INSTALL DEVICES, DEVICE PLATES, AND ALL WIRE.
$3S	ALERTING SYSTEM 3 BUTTON ALERT SELECTOR. ALERTING SYSTEM RED VISUAL STROBE LIGHT. E.C. SHALL FURNISH AND INSTALL J-BOXES AND 3/4" CONDUIT. ALERTING VENDOR TO FURNISH AND INSTALL DEVICES, DEVICE PLATES, AND ALL WIRE.
$V	ALERTING SYSTEM SPEAKER VOLUME CONTROL STATION. ALERTING SYSTEM RED VISUAL STROBE LIGHT. E.C. SHALL FURNISH AND INSTALL J-BOXES AND 3/4" CONDUIT. ALERTING VENDOR TO FURNISH AND INSTALL DEVICES, DEVICE PLATES, AND ALL WIRE.
	MICROPHONE OUTLET
	ANTENNA
	FIRE ALARM REMOTE ANNUNCIATOR
	PHOTOVOLTAIC SYSTEM SMOKE DETECTOR, E.C. SHALL PROVIDE 4" SQUARE DEVICE BOX, TILE RING (DEPTH AS REQUIRED).
	RATE OF RISE SYSTEM HEAT DETECTOR, E.C. SHALL PROVIDE 4" SQUARE DEVICE BOX, TILE RING (DEPTH AS REQUIRED).
S	PHOTOELECTRIC SYSTEM DUCT SMOKE DETECTOR WITH REMOTE TEST STATION
C	FIRE ALARM SYSTEM CARBON MONOXIDE DETECTOR, E.C. SHALL PROVIDE 4" SQUARE DEVICE BOX, TILE RING (DEPTH AS REQUIRED).
C	FIRE ALARM SYSTEM COMBINATION SMOKE/CO2 DETECTOR. E.C. SHALL PROVIDE 4" SQUARE DEVICE BOX, TILE RING (DEPTH AS REQUIRED).
F WP	FIRE ALARM WALL MOUNTED STROBE LIGHT. E.C. SHALL PROVIDE 4" SQUARE DEVICE BOX, TILE RING (DEPTH AS REQUIRED). WP = WEATHERPROOF
F	FIRE ALARM HORN STROBE. E.C. SHALL PROVIDE 4" SQUARE DEVICE BOX, TILE RING (DEPTH AS REQUIRED). WP=WEATHERPROOF, LF=LOW FREQUENCY
F WP	FIRE ALARM BELL. E.C. SHALL PROVIDE 4" SQUARE DEVICE BOX, TILE RING (DEPTH AS REQUIRED). WP=WEATHERRPROOF
F P	F.A. PULLSTATION, E.C. SHALL PROVIDE 4" SQUARE DEVICE BOX, TILE RING (DEPTH AS REQUIRED).
	SPRINKLER FLOW SWITCH
	SPRINKLER VALVE TAMPER SWITCH
PF	FIRE PUMP FAIL. FIRE ALARM ADDRESSABLE MODULE
PR	FIRE PUMP PHASE REVERSAL. FIRE ALARM ADDRESSABLE MODULE
R	FIRE PUMP RUN. FIRE ALARM ADDRESSABLE MODULE
	BELL
	BUZZER
	CHIME
	DOOR SIGNAL - APT. UNIT
FR	FIRE ALARM SHUT-DOWN RELAY

SYMBOL	DESCRIPTION
ES	ELECTRIC STRIKE, (AS PROVIDED BY SECURITY CONTRACTOR) JUNCTION BOX AT DOOR STRIKE LOCATION.
ML	MAGNETIC LOCK
	COMBINATION LOCK
	DOOR CONTACTS
	BIO-METRIC READER, CONSISTING OF 4" SQUARE JUNCTION BOX AT 48" A.F.F., 120V/24V LOW VOLTAGE TRANSFORMER, TILE RING (DEPTH AS REQUIRED), BIO-METRIC READER (AS PROVIDED BY OWNERS SECURITY CONTRACTOR), JUNCTION BOX OVERTOP OF DOOR JAM, 3/4" CONDUIT CONNECTING JUNCTION BOXES, AND CONDUIT STUBBED UP INTO EASILY ACCESSIBLE CEILING SPACE FROM TOP JUNCTION BOX. REFER TO DRAWING E602 FOR DETAILS. OWNER'S SECURITY VENDOR TO PROVIDE ALL WIRING, HEAD-END EQUIPMENT, DEVICES AND TERMINATIONS.
	HAND SWIPE PROXIMITY READER, CONSISTING OF 4" SQUARE JUNCTION BOX AT 48" A.F.F., TILE RING (DEPTH AS REQUIRED), PROXIMITY READER (AS PROVIDED BY OWNERS SECURITY CONTRACTOR), JUNCTION BOX OVERTOP OF DOOR JAM, 3/4" CONDUIT CONNECTING JUNCTION BOXES, AND CONDUIT STUBBED UP INTO EASILY ACCESSIBLE CEILING SPACE FROM TOP JUNCTION BOX.
	SINGLE BUTTON "PUSH TO ENTER" DEVICE. E.C. SHALL FURNISH AND INSTALL J-BOX AND 3/4" CONDUIT WITH PULLSTRING STUBBED UP ABOVE CEILING. SECURITY VENDOR TO FURNISH AND INSTALL DEVICES, DEVICE PLATES, AND WIRE.
	KEYPAD
MD	WALL MOUNTED MOTION DETECTOR
MD	CEILING MOUNTED MOTION DETECTOR
	NURSE CALL EMERG. STATION
	NURSE CALL CODE BLUE EMERG. STATION
	NURSE CALL DUTY STATION
	NURSE CALL STAFF STATION
	NURSE CALL SINGLE PATIENT STATION
	NURSE CALL DUAL PATIENT STATION
	NURSE CALL DOME LIGHT (2 LAMP)
WP	CCTV CAMERA LOCATION, CONSISTING OF 4" SQUARE JUNCTION BOX, CAT-6 CABLE RAN BACK TO HEAD END EQUIPMENT, TILE RING(DEPTH AS REQUIRED), AND 1" CONDUIT STUBBED UP INTO EASILY ACCESSIBLE CEILING SPACE WHEN WALL MOUNTED. ALL DEVICES, DEVICE PLATES, AND WIRING PROVIDED BY SECURITY VENDOR. WP=WEATHERPROOF COVER.
WP	CCTV CAMERA WITH PAN/TILT DRIVE LOCATION, CONSISTING OF 4" SQUARE JUNCTION BOX, CAT-6 CABLE RAN BACK TO HEAD END EQUIPMENT, TILE RING(DEPTH AS REQUIRED), AND 1" CONDUIT STUBBED UP INTO EASILY ACCESSIBLE CEILING SPACE WHEN WALL MOUNTED. ALL DEVICES, DEVICE PLATES, AND WIRING PROVIDED BY SECURITY VENDOR. WP=WEATHERPROOF COVER
360 WP	360 DEGREE CCTV CAMERA DRIVE LOCATION, CONSISTING OF 4" SQUARE JUNCTION BOX, CAT-6 CABLE RAN BACK TO HEAD END EQUIPMENT, TILE RING(DEPTH AS REQUIRED), AND 1" CONDUIT STUBBED UP INTO EASILY ACCESSIBLE CEILING SPACE WHEN WALL MOUNTED. ALL DEVICES, DEVICE PLATES, AND WIRING PROVIDED BY SECURITY VENDOR. WP=WEATHERPROOF COVER.
MS	WALL MOUNTED VIDEO DOORBELL MASTER STATION LOCATION. CONSISTING OF 3 GANG JUNCTION BOX. DEVICE, WIRING AND TERMINATIONS PROVIDED BY SECURITY CONTRACTOR. E.C. SHALL FURNISH AND INSTALL RECESSED 4" SQ. JUNCTION BOX AND 3/4" C. WITH PULLSTRING STUBBED UP TO ACCESSIBLE SPACE ABOVE CEILING.
DS	STAINLESS STEEL WEATHER RESISTANT DOOR STATION LOCATION WITH VIDEO CAMERA. DEVICE, WIRING AND TERMINATIONS PROVIDED BY SECURITY CONTRACTOR. E.C. SHALL FURNISH AND INSTALL RECESSED 4" SQ. JUNCTION BOX AND 3/4" C. WITH PULLSTRING STUBBED UP TO ACCESSIBLE SPACE ABOVE CEILING.
1	KEYED NOTE (SEE KEYNOTE ON PLAN)
X-#	TYPICAL BRANCH CIRCUITING HOME RUN SYMBOL. GENERALLY, 15A AND 20A BRANCH CIRCUITS CONSISTS OF (2) #12 AWG CU. AND (1) #12 AWG CU. GND. IN 3/4" CONDUIT, UNLESS OTHERWISE NOTED. "X" IDENTIFIES PANELBOARD DESIGNATION; "#" IDENTIFIES PANELBOARD CIRCUIT NUMBER.
	LIGHT AND SOLID SYMBOL INDICATES EXISTING TO REMAIN
	DARK AND SOLID SYMBOL INDICATES NEW WORK
	DARK AND DASHED SYMBOL INDICATES DEMOLISHED.
FRPT1	FIRE-RATED POKE-THRU W/ (2) 20A, 120V AC DUPLEX RECEPTACLES, MULTIMEDIA CONNECTIONS & SURFACE COVER. FIRE RATED POKE-THRU SHALL BE MODEL # 8ATC2BK AS MANUFACTURED BY WIREMOLD LEGRAND.
MM	4 GANG WALLBOX. PROVIDE 11"x13"x3 7/8" DEEP WALL BOX, TILE RING (DEPTH AS REQUIRED), STUB-UP (1) 1-1/4" CONDUIT FROM WALL BOX UP TO DATA OUTLET MOUNTED ABOVE BOX AT 72" A.F.F. FURNISH BOX WITH TWO GANGS FOR 5-20R DUPLEX RECEPTACLES, ONE GANG FOR (1) COAX "F" , (1) HDMI AND (2) RJ-45 ETHERNET CONNECTIONS, AND ONE GANG SPARE. MOUNTING HEIGHT TO BOTTOM OF BOX SHALL BE AS COORDINATED WITH ARCHITECTURAL DRAWINGS. WALLBOX MODEL SHALL BE #EFSB4 AS MANUFACTURED BY WIREMOLD LEGRANDE.
WM	4" WIDE STAINLESS STEEL RACEWAY, 20A-120V DUPLEX RECEPTACLE @ EVERY 6" O.C. RACEWAY SHALL BE #DS4000 AS MANUFACTURED BY WIREMOLD LEGRANDE. PROVIDE RACEWAY WIRE DIVIDER FOR COMMUNICATIONS INSTALLATIONS WHERE SHOWN ON DRAWINGS.
OS	1000 SQ. FT. COVERAGE WALL MOUNTED OCCUPANCY SENSOR., 24V DC, PIR TECHNOLOGY (PASSIVE INFRARED). SENSOR SHALL BE MODEL NUMBER LMPX-100 AS MANUFACTURED BY WATTSTOPPER OR EQUAL. OCCUPANCY SENSOR SHALL BE FED FROM DIGITAL ROOM CONTROLLER. CABLING BETWEEN CONTROLLER AND OCCUPANCY SENSOR SHALL BE CAT-5E CABLE WITH RJ45 CONNECTORS.
DH	WALL MOUNTED DAYLIGHT HARVESTING DIGITAL CLOSED LOOP SINGLE ZONE PHOTOCELL, 24V DC. SENSOR SHALL BE MODEL NUMBER LMLS-400 WITH WALL MOUNT BRACKET #LMLS-MB2 AS MANUFACTURED BY WATTSTOPPER OR EQUAL. PHOTOCELL SHALL BE FED FROM DIGITAL ROOM CONTROLLER. CABLING BETWEEN CONTROLLER AND PHOTOCELL SHALL BE CAT-5E CABLE WITH RJ45 CONNECTORS.

ELECTRICAL ABBREVIATIONS LIST

1P	1 POLE (2P, 3P, 4P, ETC.)
A	AMPERE
AC	ABOVE COUNTER OR AIR CONDITIONER
ACLG	ABOVE CEILING
ADO	AUTOMATIC DOOR OPENER
AF	AMP FRAME
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AFI	ARC FAULT CIRCUIT INTERRUPTER
AHU	AIR HANDLING UNIT
AL	ALUMINUM
ALT	ALTERNATE
AMP	AMPERE
AMPL	AMPLIFIER
ANNUN	ANNUNCIATOR
APPROX	APPROXIMATELY
AQ-STAT	AQUASTAT
ARCH	ARCHITECT, ARCHITECTURAL
AS	AMP SWITCH
AT	AMP TRIP
ATS	AUTOMATIC TRANSFER SWITCH
AUTO	AUTOMATIC
AUX	AUXILIARY
AV	AUDIO VISUAL
AWG	AMERICAN WIRE GAUGE
BATT	BATTERY
BD	BOARD
BFG	BELOW FINISHED GRADE
BLDG	BUILDING
BMS	BUILDING MANAGEMENT SYSTEM
C	CONDUIT
CAB	CABINET
CAT	CATALOG
CATV	CABLE TELEVISION
CB	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION
CKT	CIRCUIT
CLG	CEILING
COMB	COMBINATION
CMPR	COMPRESSOR
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUATION OR CONTINUOUS
CONTR	CONTRACTOR
CONV	CONVECTOR
CP	CIRCULATING PUMP
CRT	CATHODE-RAY TUBE
CT	CURRENT TRANSFORMER
CTR	CENTER
CU	COPPER
DCP	DOMESTIC WATER CIRCULATING PUMP
DEPT	DEPARTMENT
DET	DETAIL
DIA	DIAMETER
DISC	DISCONNECT
DIST	DISTRIBUTION
DN	DOWN
DPR	DAMPER
DS	SAFETY DISCONNECT SWITCH
DT	DOUBLE THROW
DWG	DRAWING
EC	ELECTRICAL CONTRACTOR
ELEC	ELECTRIC, ELECTRICAL
ELEV	ELEVATOR
EM	EMERGENCY
EMS	ENERGY MANAGEMENT SYSTEM
EMT	ELECTRICAL METALLIC TUBING
EP	ELECTRIC PNEUMATIC
EQUIP	EQUIPMENT
EWC	ELECTRIC WATER COOLER
EXIST	EXISTING
EXH	EXHAUST
EXP	EXPLOSION PROOF
FA	FIRE ALARM
FABP	FIRE ALARM BOOSTER POWER SUPPLY PANEL
FACP	FIRE ALARM CONTROL PANEL
FCU	FAN COIL UNIT
FIXT	FIXTURE
FLR	FLOOR
FLUOR	FLUORESCENT
FU	FUSE
FUDS	FUSED SAFETY DISCONNECT SWITCH
GA	GAUGE
GAL	GALLON
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GEN	GENERATOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFEP	GROUND FAULT EQUIPMENT PROTECTOR
GND	GROUND
GRS	GALVANIZED RIGID STEEL (CONDUIT)
GYP BD	GYPSUM BOARD
HOA	HANDS-OFF-AUTOMATIC SWITCH
HORIZ	HORIZONTAL
HP	HORSEPOWER
HPF	HIGH POWER FACTOR
HT	HEIGHT
HTG	HEATING
HTR	HEATER
HV	HIGH VOLTAGE
HVAC	HEATING, VENTILATING AND AIR CONDITIONING
HWP	HYDRONIC WATER PUMP
IC	INTERRUPTING CAPACITY
IG	ISOLATED GROUND
IMC	INTERMEDIATE METAL CONDUIT
INCAND	INCANDESCENT
IR	INFRARED
I/W	INTERLOCK WITH
J-BOX	JUNCTION BOX
KV	KILOVOLT
KVA	KILOVOLT-AMPERE
KVAR	KILOVOLT-AMPERE REACTIVE
KW	KILOWATT
KWH	KILOWATT HOUR
LOC	LOCATE OR LOCATION
LT	LIGHT
LTG	LIGHTING
LTNG	LIGHTNING
LV	LOW VOLTAGE
MAX	MAXIMUM
MAG.S	MAGNETIC STARTER
M/C	MOMENTARY CONTACT
MC	MECHANICAL CONTRACTOR
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MDC	MAIN DISTRIBUTION CENTER
MDP	MAIN DISTRIBUTION PANEL
MFR	MANUFACTURER
MFS	MAIN FUSED DISCONNECT SWITCH
MH	MOUNTING HEIGHT
MIC	MICROPHONE
MIN	MINIMUM
MISC	MISCELLANEOUS
MLO	MAIN LUGS ONLY
MMS	MANUAL MOTOR STARTER
MOA	MULTIOUTLET ASSEMBLY
MSP	MOTOR STARTER PANELBOARD
MSBD	MAIN SWITCHBOARD
MT	MOUNT
MT.C	EMPTY CONDUIT
MTS	MANUAL TRANSFER SWITCH
MTR	MOTOR, MOTORIZED
N.C.	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION
NFDS	NON-FUSED SAFETY DISCONNECT SWITCH
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
N.O.	NORMALLY OPEN
NPF	NORMAL POWER FACTOR
NTS	NOT TO SCALE
OH	OVERHEAD
OL	OVERLOADS
PA	PUBLIC ADDRESS
PB	PULL BOX OR PUSHBUTTON
PE	PNEUMATIC ELECTRIC
PED	PEDESTAL
PF	POWER FACTOR
PH	PHASE
PIV	POST INDICATING VALVE
PNL	PANEL
PP	POWER POLE
PR	PAIR
PRI	PRIMARY
PROJ	PROJECTION
PRV	POWER ROOF VENTILATOR
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE (CONDUIT)
PWR	POWER
QUAN	QUANTITY
RCPT	RECEPTACLE
REQD	REQUIRED
RM	ROOM
RSC	RIGID STEEL CONDUIT
RTU	ROOF TOP UNIT
SC	SURFACE CONDUIT
SEC	SECONDARY
SHT	SHEET
SIM	SIMILAR
S/N	SOLID NEUTRAL
SPEC	SPECIFICATION
SPKR	SPEAKER
SP	SPARE
SR	SURFACE RACEWAY
SS	STAINLESS STEEL
SSW	SELECTOR SWITCH
S/S	STOP/START PUSHBUTTONS
STA	STATION
STD	STANDARD
SURF	SURFACE MOUNTED
SW	SWITCH
SWBD	SWITCHBOARD
SYM	SYMMETRICAL
SYS	SYSTEM
TEL	TELEPHONE
TEL/DATA	TELEPHONE/DATA
TERM	TERMINAL
TL	TWIST LOCK
TR	TAMPER RESISTANT
T-STAT	THERMOSTAT
TTC	TELEPHONE TERMINAL CABINET
TV	TELEVISION
TVTC	TELEVISION TERMINAL CABINET
TYP	TYPICAL
UC	UNDER COUNTER
UE	UNDERGROUND ELECTRICAL
UG	UNDERGROUND
UH	UNIT HEATER
U.O.N.	UNLESS OTHERWISE NOTED
UT	UNDERGROUND TELEPHONE
UTIL	UTILITY
UV	UNIT VENTILATOR OR ULTRAVIOLET
V	VOLT
VA	VOLT-AMPERES
VDT	VIDEO DISPLAY TERMINAL
VERT	VERTICAL
VFD	VARIABLE FREQUENCY DRIVE
VOL	VOLUME
W	WATT
W/	WITH
WG	WIRE GUARD
WH	WATER HEATER
W/O	WITHOUT
WP	WEATHERPROOF
XFMR	TRANSFORMER
XFR	TRANSFER
∠	ANGLE
@	AT
△	DELTA
'L	FEET
'L	INCHES
#	NUMBER
Ø	PHASE
C	CENTER LINE
P	PLATE

ELECTRICAL DRAWINGS

E000	**ELECTRICAL SYMBOLS AND ABBREVIATIONS**
E101	**ELECTRICAL SITE PLAN**
E201	**ELECTRICAL LIGHTING AND POWER PLANS**
E801	**ELECTRICAL SCHEDULES AND DETAILS**
P101	**PLUMBING SITE PLAN AND DETAILS**

GENERAL ELECTRICAL NOTES

A. ALL WORK SHALL BE COORDINATED WITH OWNER AND ON-SITE ARCHAEOLOGICAL TEAM. ARCHAEOLOGICAL TEAM SHALL HAVE FULL AUTHORITY TO PUT WORK ON HOLD AS REQUIRED TO ALLOW FOR EVALUATION OF ANY UNFORSEEN FIELD CONDITIONS THEY DEEM WORTHY OF INVESTIGATION.

B. ALL WORK INSIDE EXISTING BUILDINGS SHALL BE COORDINATED WITH OWNER. E.C. SHALL MINIMIZE DAMAGE TO EXISTING HISTORICAL BUILDING FEATURES. IN THE EVENT OF ANY UNFORSEEN CONDITIONS THAT WOULD AFFECT THE PRESERVATION OF HISTORICAL FEATURES, ALL WORK SHALL BE IMMEDIATELY PAUSED AND THE OWNER NOTIFIED.

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PROJECT TITLE

BELMONT HALL EVENT PAVILLION

713 SMYRNA LEIPSIC ROAD
SMYRNA, DELAWARE 19977

ISSUED
FOR PERMIT ONLY
ISSUED: 06/16/2023

SHEET TITLE

ELECTRICAL SYMBOLS AND ABBREVIATIONS

ISSUE BLOCK

Mark	Date	Description
1	07/14/2023	ISSUED FOR BID/PERMIT

PROJECT NO: 2022035.01
DATE: 04/14/2023
SCALE: As indicated
DRAWN BY: JMD PROJ MGR: DBC

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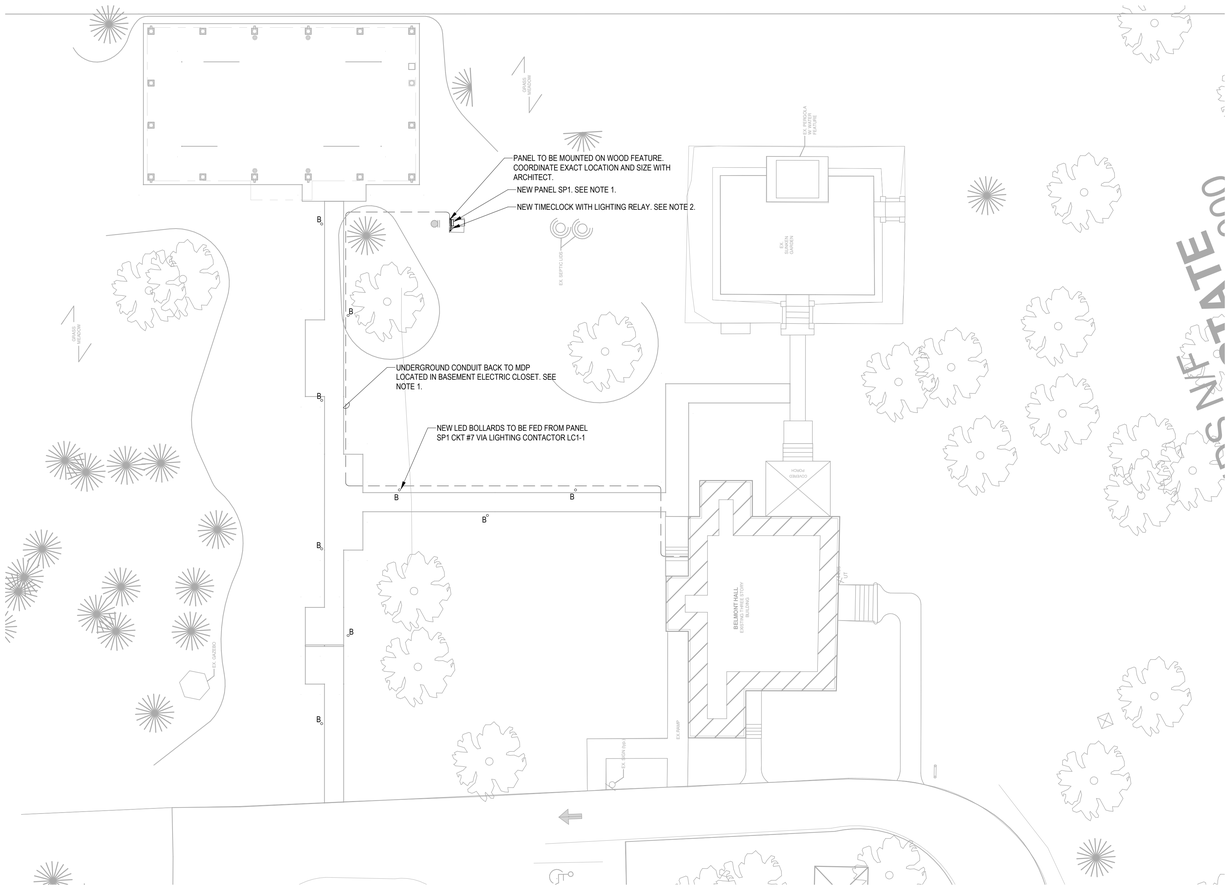

1 ELECTRICAL SITE PLAN

SCALE: 1/16" = 1'-0"

General Notes - Site Plans

1. NEW PANEL SP1 FED FROM EXISTING PANEL MDP LOCATED IN BASEMENT ELECTRIC ROOM. E.C. SHALL PROVIDE NEW, 3 POLE, 208V, 60A BREAKER IN AVAILABE SPACE IN EXISTING MDP. CIRCUIT SHALL SUPPLY PANEL SP1 VIA A 1 1/4" CONDUIT CONTAINING (3)#4 AWG CU, (1)#4 AWG CU NEUTRAL, AND (1)#4 AWG CU GND. CONDUIT SHALL BE BURIED AT A MINIMUM DEPTH OF 24" TO THE TOP OF THE CONDUIT. E.C. SHALL COORDINATE ALL TRENCHING WITH OTHER TRADES, AND ON-SITE ARCHAELOGOY TEAM.
2. NEW TIMECLOCK/PHOTOCELL AND LIGHTING RELAY SERVING NEW LED BOLLARDS. E.C. SHALL COORDINATE MOUNTING AND INSTALLTION IN FIELD. REFER TO LIGHTING CONTROL DETAIL ON THIS SHEET FOR DETAILS.
3. ALL LIGHTING AND POWER CONDUCTORS SHALL BE INSTALLED BETWEEN 24" (MINIMUM) AND 36" (MAXIMUM) BELOW FINISHED GRADE AND SHALL BE MINIMUM #10 AWG CU.

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SHEET TITLE

ELECTRICAL SITE PLAN

ISSUE BLOCK

Mark	Date	Description
1	07/14/2023	ISSUED FOR BID/PERMIT

PROJECT NO:	2022035.01
DATE:	04/14/2023
SCALE:	1/16" = 1'-0"
DRAWN BY: JMD	PROJ MGR: DBC

E101

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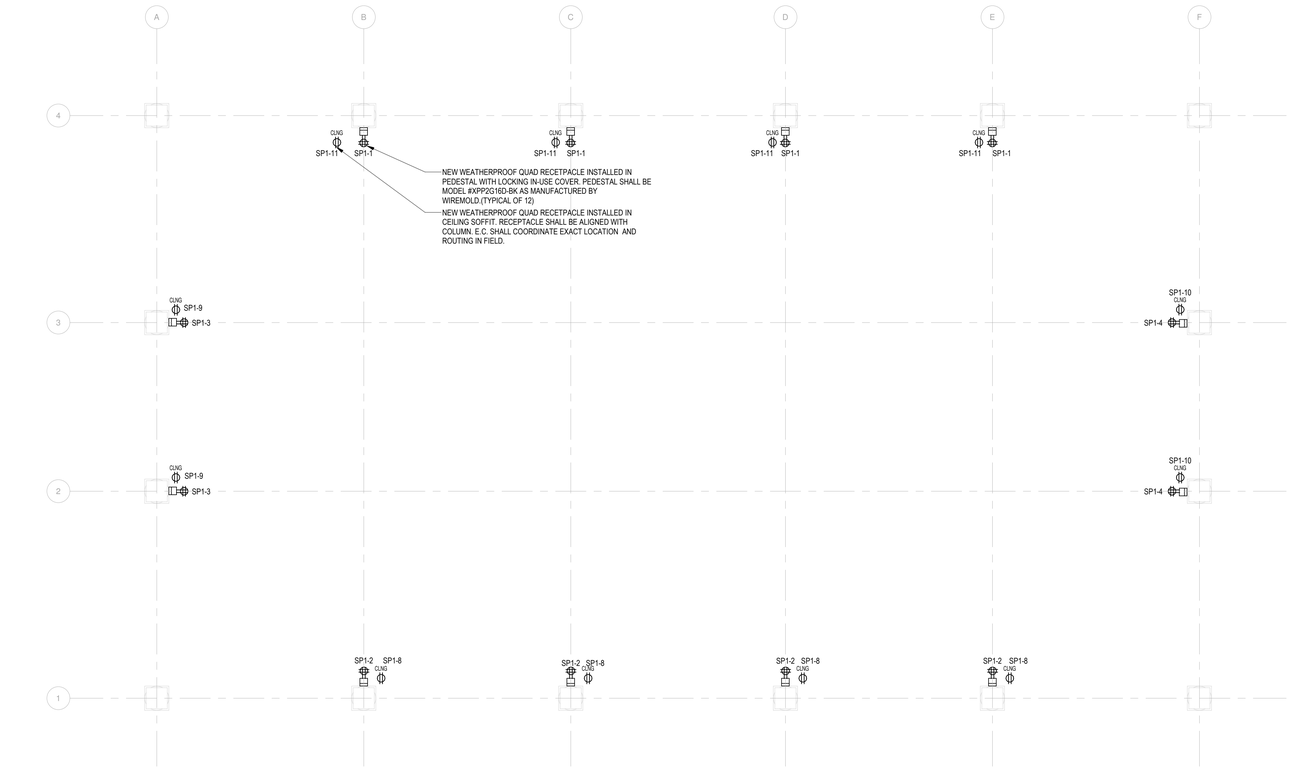
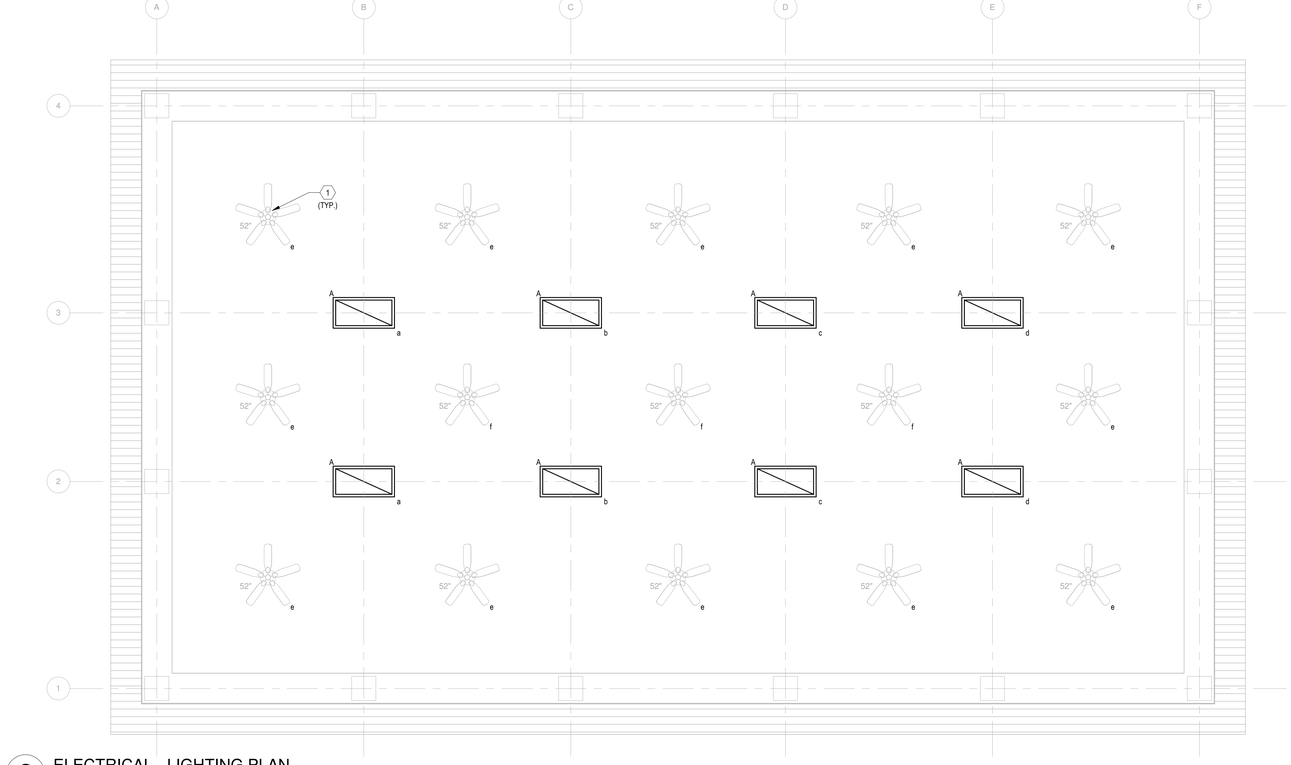


1 ELECTRICAL - POWER PLAN

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



2 ELECTRICAL - LIGHTING PLAN

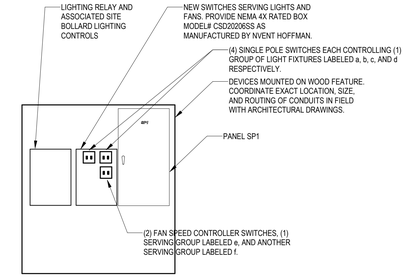
SCALE: 1/4" = 1'-0"

GENERAL NOTES - POWER AND LIGHTING

1. SEE ARCHITECTURAL EXTERIOR ELEVATIONS FOR MOUNTING/HEIGHTS OF EXTERIOR LIGHTING FIXTURES.
2. REFER TO SECTION 26 0519 FOR MINIMUM CONDUCTOR SIZE ADJUSTMENTS FOR VOLTAGE DROP.
3. PROVIDE PROPER NUMBER OF CONDUCTORS TO ACHIEVE CIRCUITING AND SWITCHING SHOWN.

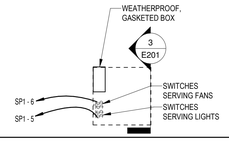
KEYNOTES

1. NEW CEILING FAN MODEL #53347 AS MANUFACTURED BY HUNTER. COORDINATE FINISH WITH ARCHITECT PRIOR TO PURCHASING.



3 LIGHT SWITCH ELEVATION

SCALE: 1/2" = 1'-0"



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302-738-7172 fax: 302-738-7175

PROJECT TITLE

BELMONT HALL EVENT PAVILLION

713 SMYRNA LEIPSIC ROAD
SMYRNA, DELAWARE 19977

ISSUED
FOR PERMIT ONLY
ISSUED: 06/16/2023

SHEET TITLE

ELECTRICAL LIGHTING AND POWER PLANS

ISSUE BLOCK

Mark	Date	Description
1	07/14/2023	ISSUED FOR BID/PERMIT

PROJECT NO: 2022035.01
DATE: 04/14/2023
SCALE: As indicated
DRAWN BY: JMD | PROJ MGR: DBC

E201

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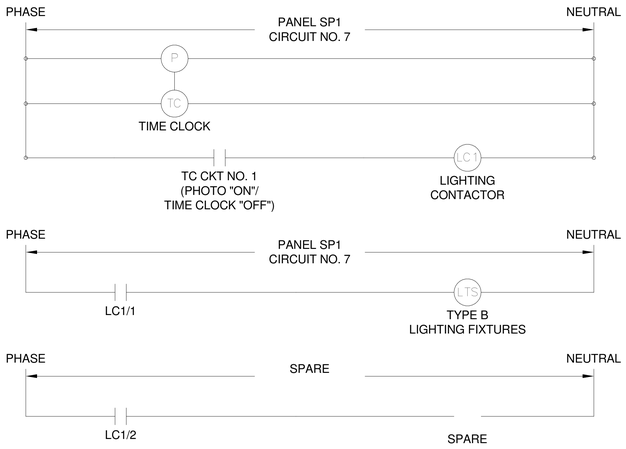
LIGHTING FIXTURE SCHEDULE

TAG	Wattage	Voltage (user)	Lamp Type	Color Temperature	Model Number	Description	Text Comment
A	53W	120V	LED	3500 K	VISIONEERING / LRTA-C292X4-LED-8-35K-063L-UNV-B39-C03	2X4 RECESSED LED FIXTURE, WET LOCATION LISTED FOR EXTERIOR USE	
B	37W	120V	LED	3500 K	ELITE LIGHTING / O8O-103-LED	36" LED BOLLLARD	



1 LIGHTING CONTROL DIAGRAM

SCALE: N.T.S.

Branch Panel: SP1

Location: SEE DWG E101
Supply From: MDP
Mounting: Surface
Enclosure: Outdoor

Volts: 208Y/120
Phases: 3
Wires: 4

A.I.C. Rating: 65kA
Mains Type: MCB
Mains Rating: 100.0 A
MCB Rating: 60.0 A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	REC-PAVILLION	20.0 A	1	720 VA	720 VA					1	20.0 A	REC-PAVILLION	2
3	REC-PAVILLION	20.0 A	1			360 VA	360 VA			1	20.0 A	REC-PAVILLION	4
5	LTS-PAVILLION	20.0 A	1					0 VA	0 VA	1	20.0 A	FANS-PAVILLION	6
7	LTS-BOLLARDS	20.0 A	1	0 VA	0 VA					1	20.0 A	REC-PAVILLION SOFFIT	8
9	REC-PAVILLION SOFFIT	20.0 A	1			0 VA	0 VA			1	20.0 A	REC-PAVILLION SOFFIT	10
11	REC-PAVILLION SOFFIT	20.0 A	1					0 VA	0 VA	1	20.0 A	SPARE	12
13	SPARE	20.0 A	1	0 VA	0 VA					1	20.0 A	SPARE	14
15	SPARE	20.0 A	1			0 VA	0 VA			1	20.0 A	SPARE	16
17	SPARE	20.0 A	1					0 VA	0 VA	1	20.0 A	SPARE	18
		Total Load:		1440 VA		720 VA		0 VA					
		Total Amps:		12.9 A		6.9 A		0.0 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Other	0 VA	0.00%	0 VA		
RCPT	2160 VA	100.00%	2160 VA	**Total Conn. Load:**	2160 VA
				Total Est. Demand:	2160 VA
				Total Conn.:	6.0 A
				Total Est. Demand:	6.0 A

Notes:

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