



**LOCATION MAP** SOURCE: PEMA 22001930 PAN  
SCALE: 1"=400'

**ACT 172 UTILITY LIST**

CABLE - COMCAST CABLE COMMUNICATIONS (814)238-4651  
ELECTRIC - WEST PENN POWER (888)544-4877  
SEWER - UNIVERSITY AREA JOINT AUTHORITY (814)238-5361  
TELEPHONE - VERIZON PENNSYLVANIA LLC  
WATER - STATE COLLEGE BOROUGH WATER AUTHORITY (814)238-6766



**GENERAL INFORMATION**

PROPERTY OWNER  
RUSSIAN CHURCH OF CHRIST  
3645 WEST COLLEGE AVE.  
STATE COLLEGE, PA 16803  
DEED BOOK 1360, PAGE 0005  
TAX PARCEL 24-004-078-0000

MUNICIPALITY: FERGUSON TWP COUNTY: CENTRE  
PARCEL/PROJECT AREA: 25.01-AC TOTAL DISTURBED AREA: 3.65-AC  
LATITUDE/LONGITUDE (CENTER OF PROPERTY): 40°45'10.21"N 77°52'23.57"W  
USGS QUADRANGLE MAP: JULIAN, PA AND STATE COLLEGE, PA  
ORIGINAL LAND DEVELOPMENT PLAN: PLAT BOOK 70, PG 3 (10/27/2003)  
SECOND PLAN RECORDING: PLAT BOOK 75, PG 72-76 (11/10/2005)

BUILDING COVERAGE  
EX. BUILDING COVERAGE: 19,335-SF, 0.444-AC, 1.78%  
NEW BUILDING COVERAGE: 15,108-SF, 0.347-AC, 1.39%  
PROPOSED TOTAL BUILDING COVERAGE: 34,443-SF, 0.791-AC, 3.18%

IMPERVIOUS COVER  
EX. IMPERVIOUS COVER: 120,443-SF, 2.785-AC, 11.06%  
PROPOSED TOTAL IMPERVIOUS COVER: 139,300-SF, 3.198-AC, 12.79%  
EXISTING LAND USE: CHURCH ON AGRICULTURAL LANDS. LAND USE IS TO REMAIN THE SAME AFTER NEW DEVELOPMENT.

TAX ID NUMBER  
24-004-078-0000-

DEED REFERENCE  
PB 1360, P 0005

ZONING INFORMATION  
ZONING DISTRICT: RA - RURAL AGRICULTURE  
WITH CORRIDORE OVERLAY DIST.  
MINIMUM SETBACK  
FRONT YARD: 50'  
REAR YARD: 75'  
SIDE YARD: 50'  
MAX. BUILDING AREA: 30%  
MAX. IMPERVIOUS COVER: 30%  
MAX. BUILDING HEIGHT: 45'  
MIN. LOT WIDTH: 60'

RECEIVING WATERS: SLAB CABIN RUN  
CHAPTER 83 CWF, MF EXISTING; NO CWF, MF (PFBC)  
WETLANDS DESIGNATION: NOT PRESENT ON SITE  
SEWAGE DISPOSAL: UNIVERSITY AREA JOINT AUTHORITY  
WATER SOURCE: STATE COLLEGE BOROUGH WATER AUTHORITY

**SALVATION BAPTIST CHURCH**

3645 WEST COLLEGE AVENUE  
STATE COLLEGE, PA 16801

**FINAL LAND DEVELOPMENT PLAN UPDATE**

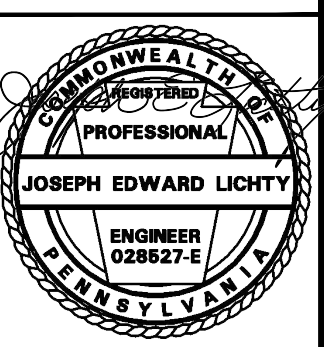
ORIGINAL ZONING PERMIT APPLICATION DATE: 02/09/2022

**PROJECT NARRATIVE**

SALVATION BAPTIST CHURCH, AKA RUSSIAN CHURCH OF CHRIST, HAS OPERATED A CHURCH AT 3645 WEST COLLEGE AVENUE SINCE 2003. AT THE TIME OF THE ORIGINAL LAND DEVELOPMENT PLAN, A FELLOWSHIP HALL WAS SHOWN NEXT TO THE CHURCH, BUT THE BUILDING WAS NEVER CONSTRUCTED. SINCE IT HAS BEEN MORE THAN 5-YEARS SINCE THE LAST APPROVED LAND DEVELOPMENT PLAN, THIS LAND DEVELOPMENT PLAN UPDATE IS REQUIRED. A STORMWATER MANAGEMENT PLAN HAS BEEN INCLUDED SINCE NEW FACILITIES WERE NEEDED TO MEET CURRENT PADEP WATER QUALITY REQUIREMENTS. THERE WILL BE NO CHANGE TO THE EXTERIOR LIGHTING EXCEPT FOR SHIELDED LUMINAIRES AT THE DOORS OF THE PROPOSED BUILDINGS. CONSEQUENTLY NO REVISED LIGHTING PLAN IS INCLUDED. IN ADDITION, NO NEW LANDSCAPE PLANTING IS PROPOSED EXCEPT LANDSCAPING NEXT TO THE BUILDINGS, SO NO LANDSCAPE PLAN IS INCLUDED. A VARIANCE FROM BUFFER YARD REQUIREMENTS WAS GRANTED TO THE CHURCH IN 2005 BY THE ZONING HEARING BOARD, AS PART OF THIS UPDATE, THE CHURCH REQUESTS THAT THE VARIANCE BE EXTENDED. PARKING FOR THE CHURCH WAS ADDRESSED DURING THE ORIGINAL PLANNING. TWO HUNDRED TWENTY-FIVE SPACES ARE PROVIDED WITH TWELVE HANDI-CAPPED SPACES ARE PROVIDED. A TOTAL OF 223 SPACES ARE PROVIDED. 12 HANDICAPPED AND 211 REGULAR SPACES. TEMPORARY AND PERMANENT BICYCLE PARKING IS ALSO PROVIDED PER THE ORDINANCE. WORK PROPOSED AT THE SITE IN THIS UPDATE INCLUDE A FELLOWSHIP HALL AND A NEW GARAGE TOTALING 13,826-SF OF BUILDING COVERAGE. THE STRUCTURES ARE TO BE BUILT DURING 2022 AND 2023. AN NPDES PERMIT FOR DISCHARGE OF RUNOFF FROM CONSTRUCTION ACTIVITIES HAS BEEN APPLIED FOR. THIS PERMIT INCLUDES EROSION AND SEDIMENTATION CONTROL, AND STORMWATER MANAGEMENT PLANS. THE SITE IS CURRENTLY SERVED BY UAJA FOR SEWAGE AND SCBWA FOR WATER.

**FINAL LAND DEVELOPMENT PLAN UPDATE  
LIST OF PLAN SHEETS**

SHEET	TITLE
LD-1	LAND DEVELOPMENT PLAN SHEET 1 - COVER
LD-2	LAND DEVELOPMENT PLAN SHEET 2 - PLAN
TP-1	TREE SURVEY AND PROTECTION PLAN
LS-1	LANDSCAPE PLAN
LT-1	LIGHTING PLAN
ES-1	NPDES EROSION AND SEDIMENTATION CONTROL PLAN - PLAN SHEET
ES-2	NPDES EROSION AND SEDIMENTATION CONTROL PLAN - DETAILS SHEET
AR-1	FELLOWSHIP HALL FLOOR PLAN
AR-2	FELLOWSHIP HALL ELEVATIONS
AR-3	NEW GARAGE FLOOR PLAN
AR-4	NEW GARAGE ELEVATIONS



DRAWN BY: JEL  
DATE: 11/10/2023  
SOURCE: Survey

REVISIONS  
SCALE: 1"=50'

ORIGINAL DATE OF ZONING PERMIT APPLICATION: 02/09/2022

Salvation Baptist Church  
3645 West College Ave - Ferguson Twp - Centre Co - PA  
**FINAL LAND DEVELOPMENT PLAN UPDATE  
LAND DEVELOPMENT PLAN SHEET 1 - COVER**

**OWNERSHIP ACKNOWLEDGEMENT AND STORMWATER ACCEPTANCE**

COMMONWEALTH OF PENNSYLVANIA  
COUNTY OF CENTRE

I, VITALY MASLOV, HEREBY CERTIFY THAT I HAVE BEEN APPOINTED BY THE RUSSIAN CHURSH OF CHRIST, AKA SALVATION BAPTIST CHURCH, TO REPRESENT THEIR INTERESTS IN THIS LAND DEVELOPMENT PLAN. I FURTHER CERTIFY THAT THE CHURCH OWNS THE LAND SHOWN ON THE PLAN. THIS CAN BE FOUND AT CENTRE COUNTY RECORDER'S OFFICE IN RB 1360, P 0005. THERE ARE NO OFFERS OF LAND OR FACILITY DEDICATION INCLUDED IN THIS SUBMISSION. THE CHURCH, AS OWNERS, ACKNOWLEDGE THAT THEY ARE RESPONSIBLE FOR MAINTENANCE OF THIS PROPERTY IN ACCORDANCE WITH THE ORDINANCES OF FERGUSON TOWNSHIP. THE STORMWATER MANAGEMENT FACILITIES DEPICTED BY THE PLAN ARE PERMANENT AND WILL BE REMOVED ONLY AFTER APPROVAL OF REVISED PLANS BY FERGUSON TOWNSHIP. THE STORMWATER MANAGEMENT SYSTEM SHALL BE MAINTAINED IN ACCORDANCE WITH THE OWNERSHIP AND MAINTENANCE PLAN.

VITALY MASLOV, CHURCH PROJECT MGR. DATE \_\_\_\_\_  
SWORN BEFORE ME THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2022. NOTARY SEAL  
NOTARY PUBLIC \_\_\_\_\_

**TOWNSHIP APPROVALS**

**FERGUSON TOWNSHIP PLANNING COMMISSION**

\_\_\_\_\_  
DATE CHAIR DATE  
\_\_\_\_\_  
DATE SECRETARY DATE

**FERGUSON TOWNSHIP BOARD OF SUPERVISORS**

\_\_\_\_\_  
DATE CHAIR DATE  
\_\_\_\_\_  
DATE SECRETARY DATE

**FIRE CHIEF**

\_\_\_\_\_  
DATE

**TOWNSHIP REVIEWER CERTIFICATION**

I, \_\_\_\_\_, HAVE REVIEWED AND HEREBY CERTIFY THIS PLAN MEETS ALL THE ENGINEERING DESIGN STANDARDS AND CRITERIA OF THE FERGUSON TOWNSHIP CODE OF ORDINANCES.

SIGNED \_\_\_\_\_ DATE \_\_\_\_\_

**PROFESSIONAL ENGINEER'S CERTIFICATIONS**

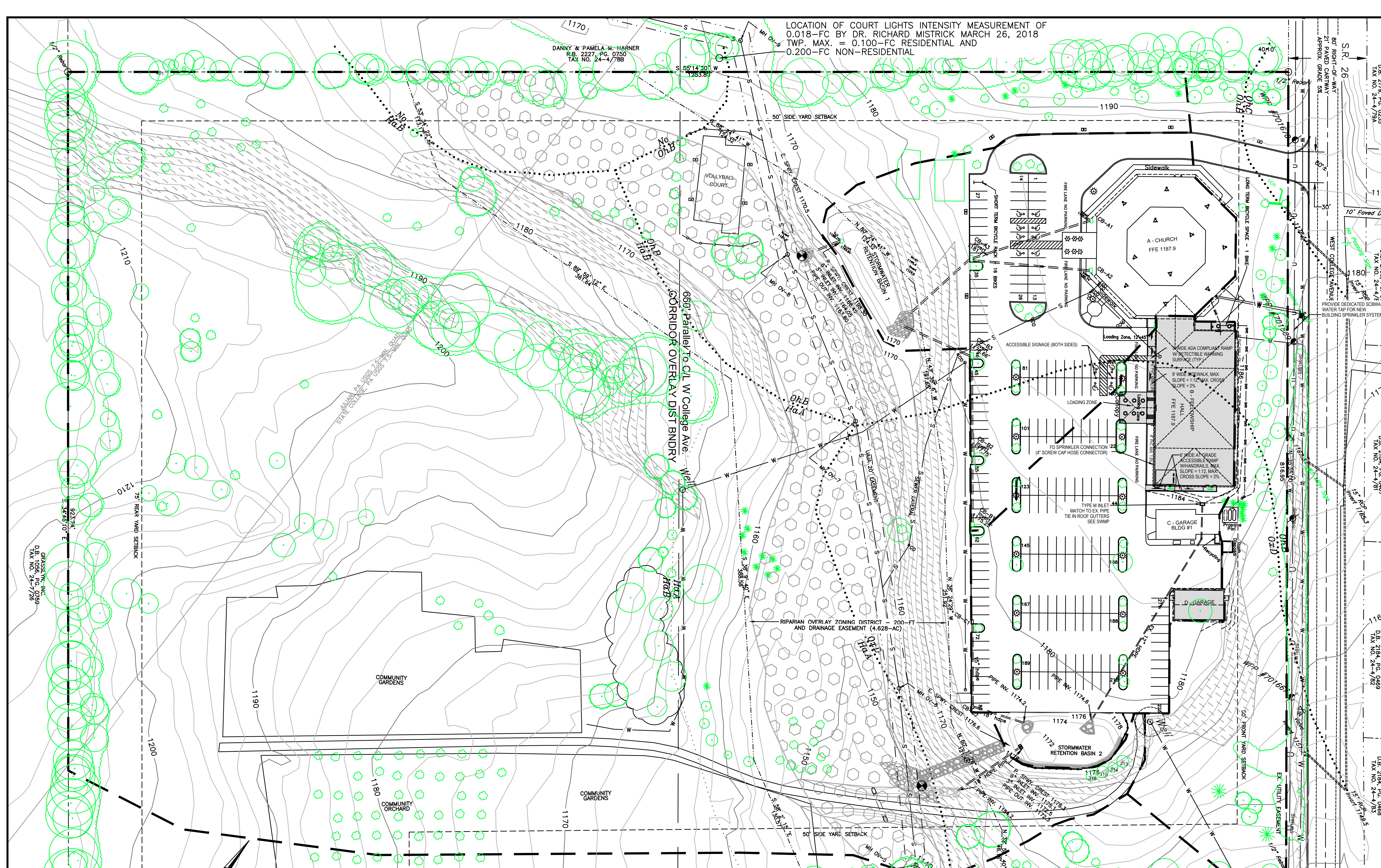
ZONING AND SUBDIVISION AND LAND DEVELOPMENT  
I, JOSEPH E. LICHTY, PE, HEREBY CERTIFY THAT THIS PLAN MEETS ALL THE DESIGN REQUIREMENTS OF THE SUBDIVISION AND LAND DEVELOPMENT AND ZONING ORDINANCES OF FERGUSON TOWNSHIP.

\_\_\_\_\_  
JOSEPH E. LICHTY, PE 11/10/2023  
DATE

**STORMWATER MANAGEMENT**

I, JOSEPH E. LICHTY, PE, HEREBY CERTIFY THAT THE STORMWATER MANAGEMENT PLAN MEETS ALL DESIGN STANDARDS AND CRITERIA OF THE FERGUSON TOWNSHIP STORMWATER MANAGEMENT ORDINANCE.

\_\_\_\_\_  
JOSEPH E. LICHTY, PE 11/10/2023  
DATE



LOCATION OF COURT LIGHTS INTENSITY MEASUREMENT OF 0.018-FC BY DR. RICHARD MISTRICK MARCH 26, 2018  
 TWP. MAX. = 0.100-FC RESIDENTIAL AND 0.200-FC NON-RESIDENTIAL

LEGEND		GENERAL INFORMATION	
---	EXISTING CONTOUR LINES	---	PROPERTY BOUNDARY
---	FINISHED GRADE CONTOURS	---	SETBACK
---	PROPERTY BOUNDARY	---	PENNDOT CENTERLINE
---	UTILITY LINE	---	ROWEASEMENT
---	SEWER/LATERAL	---	SOIL BOUNDARY/TYPE
---	WATERLINE	---	RIPARIAN OVERLAY ZONING DISTRICT/ DRAINAGE EASEMENT
---	GAS	---	POLE LIGHTS - PARKING LOT AND VB COURT
---	GASLINE	---	EXISTING TREES AND SHRUBS
---	ROWEASEMENT	---	EXISTING TREELINE
---	SOIL BOUNDARY/TYPE	---	STEEP SLOPES (>25%)
---	RIPARIAN OVERLAY ZONING DISTRICT/ DRAINAGE EASEMENT	---	FEMA FLOOD BOUNDARY
---	POLE LIGHTS - PARKING LOT AND VB COURT	---	PROPOSED NEW STRUCTURES
---	EXISTING TREES AND SHRUBS	---	ADA DETECTIBLE WARNING SURFACE (DWS)
---	EXISTING TREELINE	---	
---	STEEP SLOPES (>25%)	---	
---	FEMA FLOOD BOUNDARY	---	
---	PROPOSED NEW STRUCTURES	---	
---	ADA DETECTIBLE WARNING SURFACE (DWS)	---	

GFA AND PERCENT IMPERVIOUS DETERMINATION						
COVER CALCULATION	EXISTING	PROPOSED	TOTAL	ALLOWABLE	TOTAL	% LOT COVERAGE
BUILDING COVERAGE	19,335	14,838	34,173	3,14%		
TOTAL IMPERVIOUS COVER	120,443	18,857	139,300	381,302	12,79%	36,53%

PROJECT NARRATIVE			
SALVATION BAPTIST CHURCH, AKA RUSSIAN CHURCH OF CHRIST, HAS OPERATED A CHURCH AT 3645 WEST COLLEGE AVENUE SINCE 2003. AT THE TIME OF THE ORIGINAL LAND DEVELOPMENT PLAN, A FELLOWSHIP HALL WAS SHOWN NEXT TO THE CHURCH, BUT THE BUILDING WAS NEVER CONSTRUCTED. SINCE IT HAS BEEN MORE THAN 5 YEARS SINCE THE LAST APPROVED LAND DEVELOPMENT PLAN, THIS LAND DEVELOPMENT PLAN UPDATE IS REQUIRED. A STORMWATER MANAGEMENT PLAN HAS BEEN INCLUDED SINCE NEW FACILITIES WERE NEEDED TO MEET CURRENT PADEP WATER QUALITY REQUIREMENTS. THERE WILL BE NO CHANGE TO THE EXISTING LIGHTING EXCEPT FOR SHIELDED LUMINAIRES AT THE DOORS OF THE PROPOSED BUILDINGS. CONSEQUENTLY NO REVISED LIGHTING PLAN IS INCLUDED. IN ADDITION, NO NEW LANDSCAPE PLANTING IS PROPOSED EXCEPT LANDSCAPING NEXT TO THE BUILDINGS. SO NO LANDSCAPE PLAN IS INCLUDED. A VARIANCE FROM BUFFER YARD REQUIREMENTS WAS GRANTED TO THE CHURCH IN 2005 BY THE ZONING HEARING BOARD. AS PART OF THIS UPDATE, THE CHURCH REQUESTS THAT THE VARIANCE BE EXTENDED.			

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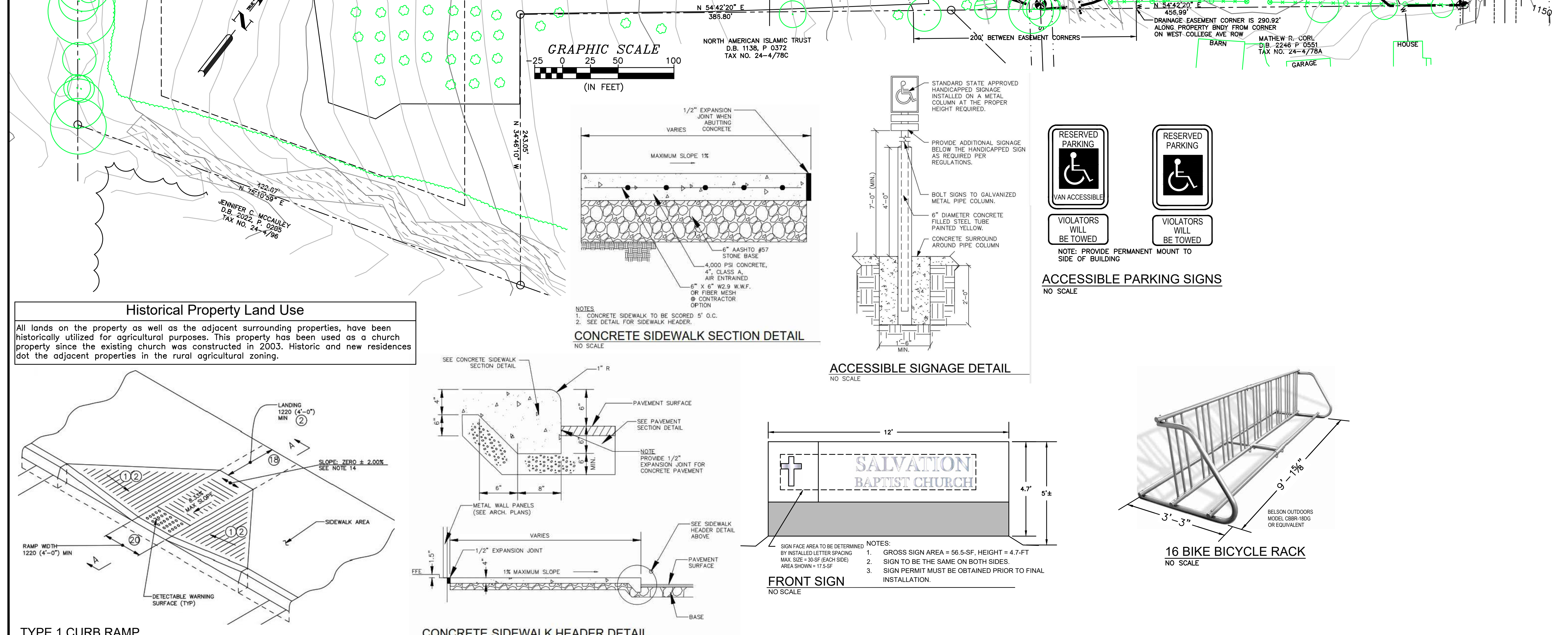
Soil Characteristics and Limitations						
Map Key	Name	Slope (%)	Hydrologic Soil Group	Depth to Restricting Layer (in)	Depth to Bedrock (in)	Depth to Seasonal Water (in)
HoA	Hagerstown silt loam	0-3	B	43-98	43-98	>80
HoB	Hagerstown silt loam	3-8	B	43-98	43-98	>80
No	Nolin silt loam	0-5	B	72-99	72-99	>80
OhB	Opequan-Hagerstown complex	3-8	D	12-20	12-20	>80
OhC	Opequan-Hagerstown complex	8-15	D	12-20	12-20	>80
OxD	Opequan Rock outcrop	0-5	D	10-19	10-19	36-72

- NOTES:**
- EXISTING CONDITIONS PROVIDED ON THIS PLAN ARE BASED ON A SURVEY BY GREGORY A. SHIFFRIN, PLS DATED 2005. TOPOGRAPHY IS BASED ON PA LIDAR DATA DATED 2008. THE SEWER LINE BUILT ACROSS THE PROPERTY TO THE HARNER PROPERTY LOCATION WAS PROVIDED BY LIN TECH, INC. BASED ON AS-BUILT DRAWINGS.
  - THE FOLLOWING FEATURES ARE NOT PRESENT IN THE IMMEDIATE VICINITY OF THE PROPOSED DISTURBED AREA: SINKHOLES AND RAILROADS.
  - ALL PROPOSED DEVELOPMENT IS TO REMAIN PRIVATE PROPERTY.
  - THE FOLLOWING ITEMS REQUIRED FOR PRELIMINARY AND FINAL PLANS ARE NOT APPLICABLE TO THIS PROJECT: WALKWAYS BETWEEN LOTS, STREET LIGHTS, PUBLIC USE LANDS AND INSTALLED MONUMENTS.
  - THE LANDSCAPE PLAN DOES NOT CHANGE WITH THIS UPDATE AND A LANDSCAPE PLAN IS NOT INCLUDED IN THIS SUBMISSION.
  - THE LIGHTING PLAN DOES NOT CHANGE WITH THIS UPDATE AND A LIGHTING PLAN IS NOT INCLUDED IN THIS SUBMISSION. THE LIGHT INTENSITY FOR THE VOLLEYBALL COURT LIGHTS WAS MEASURED AT THE NEARBY PROPERTY BOUNDARY IN 2019 AND FOUND TO BE MUCH BELOW THE LEVEL REQUIRED BY THE TOWNSHIP.
  - NO TREES OR SHRUBS SHALL BE PLANTED IN THE STORMWATER MANAGEMENT AREAS UNLESS APPROVED BY THE TOWNSHIP. TREES AND SHRUBS WHICH VOLUNTEER IN THESE AREAS SHALL BE REMOVED AS QUICKLY AS POSSIBLE.
  - THE FELLOWSHIP HALL SHALL PROVIDE FIRE SUPPRESSION BY SPRINKLER SYSTEM SIMILAR TO THE SYSTEM PROVIDED IN THE EXISTING HALL. THE FELLOWSHIP HALL SHALL PROVIDE A SEPARATE SCWMA WATER TAP FOR THE FIRE SUPPRESSION. A STAND PIPE CONNECTION SHALL BE PROVIDED FOR FIRE DEPARTMENT CONNECTION TO THE SPRINKLER SYSTEM.
  - ON AUGUST 18, 2005, THE FERGUSON TOWNSHIP ZONING HEARING BOARD APPROVED A VARIANCE FROM THE BUFFER YARD REQUIREMENT IN THE CORRIDOR OVERLAY DISTRICT AND BUFFER YARD ORDINANCES AS PART OF THIS SUBMISSION. SALVATION BAPTIST CHURCH REQUESTS AN EXTENSION OF THAT VARIANCE.
  - THERE ARE NO ACTIVE SINKHOLES ON THE PROPERTY.
  - THE DRAINAGE WAY THAT BISECTS THE PROPERTY NORTH TO SOUTH IS SHOWN BY THE FEMA FLOODPLAIN AND EXISTING CONTOUR LINES AND IS IN CLOSE PROXIMITY TO THE UJAH SEWER MAIN. IT IS NOT SYMBOLIC BECAUSE IT IS AN EPHEMERAL STREAM, ONLY FLOWING DURING EXTREME PRECIPITATION EVENTS.
  - TREES WITH GREATER THAN 4" IN CALIPER ARE NUMBERED ON THE PLAN. EACH OF THOSE TREES IS IDENTIFIED ON THE TREE SURVEY AND PROTECTION PLAN (TP-1). THERE ARE NO TREES WITHIN THE STREET RIGHT-OF-WAY.
  - ADA IDENTIFIED FACILITIES SHALL CONFORM TO THE AMERICANS WITH DISABILITIES ACT AND THE MOST RECENT PUBLISHED STANDARDS.
  - ALL PARKING AND LOADING AREAS ARE SURFACED WITH ASPHALT OR CONCRETE WITH NO SLIP SURFACE. NO NEW PAVEMENT IS PROPOSED FOR THIS UPDATE.
  - ON SEPTEMBER 26, 2017, THE FERGUSON TOWNSHIP ZONING HEARING BOARD APPROVED A VARIANCE FROM THE FLOODPLAIN REGULATIONS AND 50 FOOT RIPARIAN BUFFER IN ORDER TO ESTABLISH A DRIVEWAY WITH CULVERTS THAT CROSS THE FLOODPLAIN TO THE BACK HALF OF THE PROPERTY AND TO ESTABLISH A VOLLEYBALL COURT WITH LIGHT STANDARDS WITHIN THE FLOODPLAIN. THE VARIANCE INCLUDED A REQUIREMENT TO OBTAIN A WATERWAYS ENDOCHMENT PERMIT FOR THE DRIVEWAY CROSSING. GR0704219-003 WAS ISSUED BY THE CENTRE COUNTY CONSERVATION DISTRICT JULY 2, 2019.
  - A HIGHWAY OCCUPANCY PERMIT IS REQUIRED PURSUANT TO SECTION 420 OF THE ACT OF JUNE 1, 1965 (P.L. 1942, NO. 420), KNOWN AS THE "STATE HIGHWAY LAW", BEFORE DRIVEWAY ACCESS TO THE STATE HIGHWAY IS PERMITTED.
  - THE FLOODPLAIN LIMITS SHOWN ON THIS PLAN WERE DETERMINED BASED ON ELEVATIONS ESTABLISHED BY A DETAILED STUDY CONDUCTED IN 2017 DURING THE ZONING HEARING BOARD REVIEW FOR DEVELOPMENT WITHIN THE FLOODPLAIN. (SEE ITEM 15).
  - THE RIPARIAN ZONE SHOWN ON THE PLAN IS BASED ON SEC. 27-213 RIPARIAN BUFFER ZONE DETAIL DEFINITION OF 100-FEET ON EITHER SIDE OF A STREAM. SINCE THE EXISTING SWALE HAS NO DEFINED BED AND BANKS AND DOES NOT FLOW EXCEPT DURING STORM EVENTS, THE RIPARIAN ZONE IS SHOWN AS 100-FEET ON EITHER SIDE OF THE CENTERLINE OF THE SWALE.
  - THE SWALE RUNNING THROUGH THE PROPERTY WAS DESIGNATED BY PADEP AS NON-JURISDICTIONAL WATER IN A WATER OBSTRUCTION AND INSPECTION REPORT DATED 02/27/2022.
  - A VARIANCE WAS GRANTED BY THE FERGUSON TOWNSHIP ZONING HEARING BOARD ON AUGUST 22, 2023 TO CHAPTER 27-701.3 FOR THE SALVATION BAPTIST CHURCH TO NOT BE REQUIRED TO COMPLETE A LETTER OR MAP REVISION FOR THE ZONE A MAPPED FLOODPLAIN. THIS VARIANCE ONLY PERTAINS TO THIS LAND DEVELOPMENT PLAN.

- BUILDING ADDRESSES:**  
 STREET ADDRESS 3645 WEST COLLEGE AVENUE
- BUILDING IDENTIFIERS:**  
 A - CHURCH  
 B - FELLOWSHIP HALL  
 C - GARAGE BUILDING #1  
 D - GARAGE BUILDING #2
- EACH BUILDING SHALL HAVE THE BUILDING ID AFFIXED TO AN EXTERIOR WALL FACING THE PARKING LOT. LETTERS SHALL BE 6" TALL OR LARGER. LETTERING SHALL BE IN THE FORM "3645 A".

**PARKING SPACE CALCULATIONS**  
 SECTION 22-501.8.4.D: 1 SPACED SEAT X 550 SEATS = 184 SPACES  
 HANICAPPED SPACES: 1 PER 25 SPACES = 8 SPACES  
 REQUIRED SPACES: 176 REGULAR PLUS 8 HANICAPPED = 184 TOTAL SPACES  
 NUMBER PROVIDED: 211 REGULAR PLUS 12 HANICAPPED = 223 TOTAL SPACES  
 THE CAPACITY OF THE SANCTUARY (550 SEATS) FOR THIS CALCULATION IS BASED ON THE VALUE ESTABLISHED BY CENTRE REGION CODE ENFORCEMENT IN A LETTER FROM ROB WAGNER TO JEFF RESSLER DATED SEPTEMBER 2, 2003.

**BICYCLE SPACE CALCULATIONS**  
 SECTION 22-502: TEMPORARY SPACES 2% X 550 SEATS = 11 SPACES  
 PERMANENT SPACES: 1 PER 20 EMPLOYEES NEEDED 1 SPACE  
 REQUIRED SPACES: 11 TEMPORARY PLUS 1 PERMANENT = 12 TOTAL SPACES  
 NUMBER PROVIDED: 16 TEMPORARY PLUS 1 PERMANENT = 17 TOTAL SPACES  
 ONE 16-BIKE RACK WILL BE PROVIDED IN THE PARKING LOT, ELIMINATING TWO PRIOR AUTO PARKING SPACES. THE EMPLOYEE PERMANENT PARKING SPACE WILL BE PROVIDED ON THE BACK COURTYARD AREA OF THE FELLOWSHIP HALL. THE CAPACITY OF THE SANCTUARY (550 SEATS) FOR THIS CALCULATION IS BASED ON THE VALUE ESTABLISHED BY CENTRE REGION CODE ENFORCEMENT IN A LETTER FROM ROB WAGNER TO JEFF RESSLER DATED SEPTEMBER 2, 2003.



**Historical Property Land Use**  
 All lands on the property as well as the adjacent surrounding properties, have been historically utilized for agricultural purposes. This property has been used as a church property since the existing church was constructed in 2003. Historic and new residences dot the adjacent properties in the rural agricultural zoning.

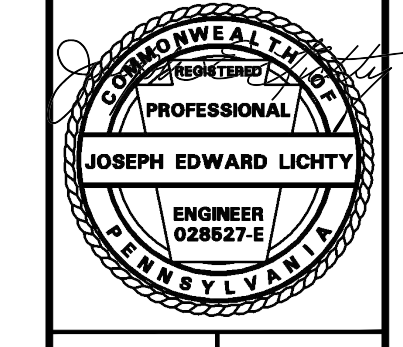
**TYPE 1 CURB RAMP**  
 NO SCALE

**CONCRETE SIDEWALK HEADER DETAIL**  
 NO SCALE

**FRONT SIGN**  
 NO SCALE

**16 BIKE BICYCLE RACK**  
 NO SCALE

**LICHTY ENGINEERING**  
 687 Bankshire Drive  
 State College, PA 16803  
 Licthy.Engineering@comcast.net



DRAWN BY: JEL  
 11/10/2023  
 REVISIONS  
 ORIGINAL DATE OF ZONING PERMIT APPLICATION: 02/09/2022

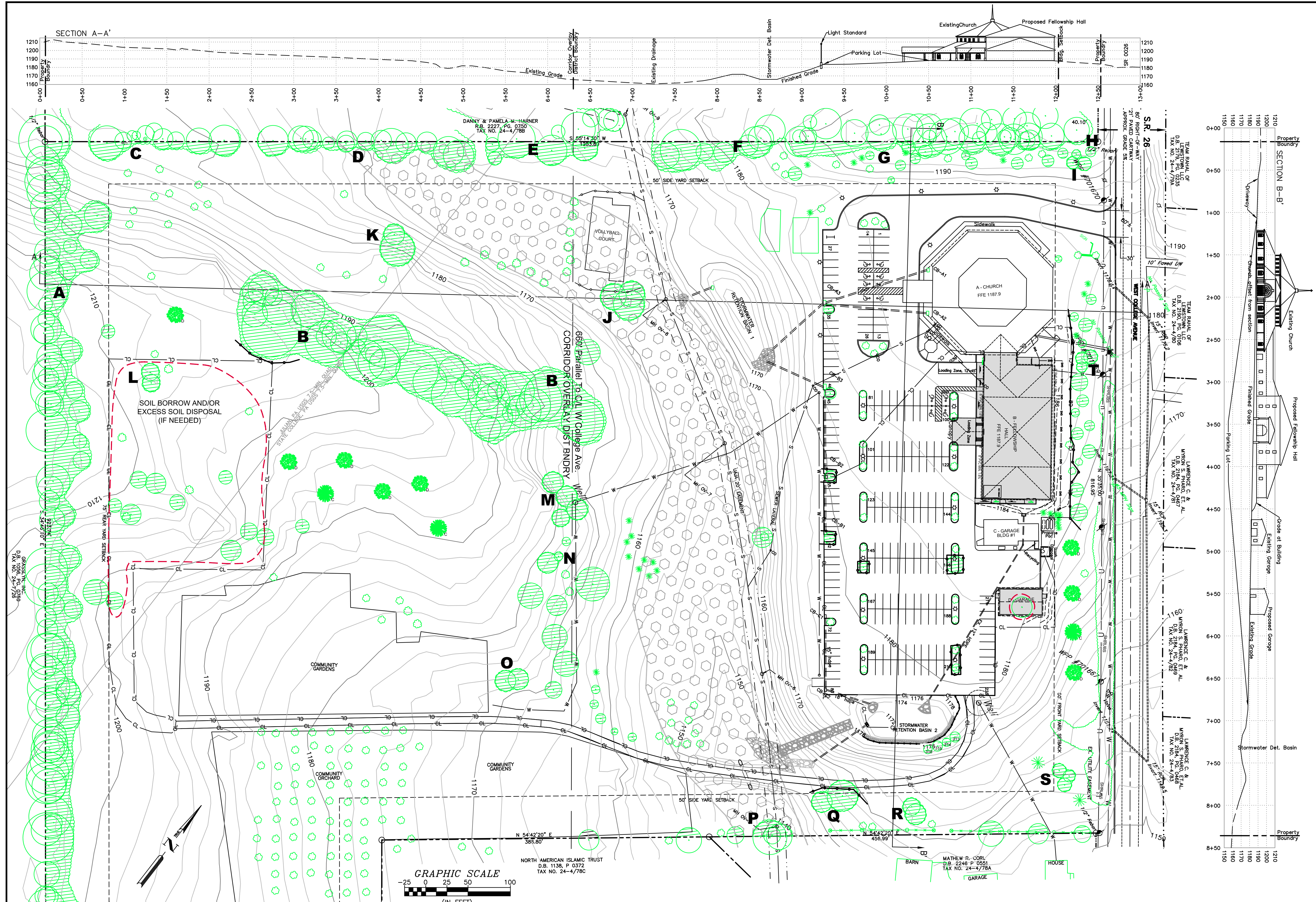
SCALE: 1"=50'

3645 West College Ave - Ferguson Twp - Centre Co - PA  
**FINAL LAND DEVELOPMENT PLAN UPDATE**  
**LAND DEVELOPMENT PLAN SHEET 2 - PLAN**

LD-2

2 11





### LEGEND

- 1170 EXISTING CONTOURS
- 1184 FINISHED CONTOURS
- CONSTRUCTION WORK LIMIT
- EX. TREE W/ 6" OR GREATER CALIPER
- INDIVIDUAL CANOPY CALCULATION TREE
- TREE GROUP CANOPY LIMITS
- EX. TREE W/ <6" CALIPER
- EXISTING TREES TO BE REMOVED
- TREE PROTECTION FENCE
- TREES TO BE PLANTED
- FEMA FLOOD BOUNDARY
- SEWER AND EASEMENTS
- WATER LINE
- UTILITY LINE/POLL
- PROPERTY BOUNDARY
- RIGHT OF WAY
- SETBACK LINE
- PROPOSED NEW CONSTRUCTION

#### TREE PLANTING LIST

DECIDUOUS (D)		CONIFER (C)	
Acer platanum cv. - Japanese Maple	Abies fraseri - Fraser Fir	Picea abies - Norway Spruce	
Acer rubrum - Red Maple	Picea pungens var. glauca - Blue Colorado Spruce	Pinus strobus - Eastern White Pine	
Quercus alba - White Oak			
Quercus rubra - Red Oak			

Select species for planting from the list for trees to be planted as identified on the plan. Any deviation from this list must be reviewed and approved by the Ferguson Township Arborist.

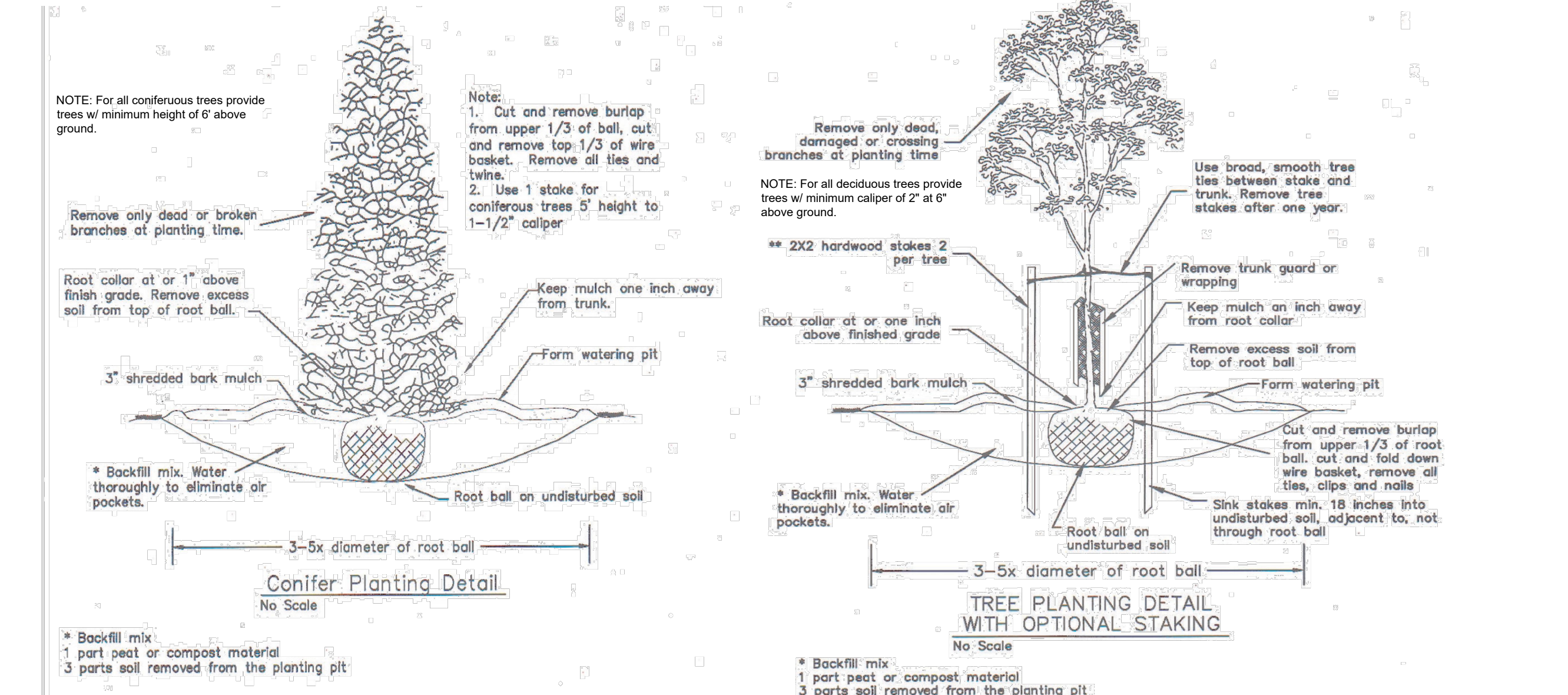
### GENERAL NOTES:

- TREE SURVEY CONDUCTED IN APRIL AND MAY 2022 BY LICHTY ENGINEERING WITH SPECIES IDENTIFICATION BY ERIC BURKHART.
- 2-FOOT TOPOGRAPHIC CONTOURS FROM PENNSYLVANIA LIDAR 2008 WITH MODIFICATIONS AT DETENTION BASINS BY GREGORY SHUFMAN, PLS DATED 2017 TO SHOW AS-BUILT CONDITIONS.
- ALL TREES NOT SHOWN AS REMOVED SHALL BE CONSIDERED PROTECTED FOR THE PURPOSE OF THIS PLAN.
- THE TREENLINE LOCATED ALONG THE COMMON BOUNDARY WITH JENNIFER C. MCCOULLEY AND PART OF TREE GROUP A IS SURROUNDED BY DENSE SHRUBBERY AND WAS NOT SURVEYED BY DIRECT MEASUREMENT. THE TREES IN THE AREA WERE SURVEYED BY PHOTOGRAPHIC METHODS APPROVED BY THE FERGUSON TOWNSHIP ARBORIST. IT WAS ESTIMATED THAT 62 TREES ARE LOCATED IN THE AREA WITH CHEST HEIGHT CALIPER GREATER THAN 6-INCHES. THE BIOLOGIST ESTIMATED THAT THE SPECIES INCLUDED 60% JUGLANS NIGRA, 60% CARYA CORDIFORMIS, 2% PRUNUS SEROTINA AND 2% CARYA OVATA.
- DURING THE ORIGINAL CHURCH LAND DEVELOPMENT IN 2003 AND AGAIN WHEN PHASE 2 WAS ORIGINALLY APPROVED, THE CHURCH WAS GRANTED A VARIANCE FROM THE BUFFER YARD REQUIREMENT BECAUSE THE LAND DEVELOPMENT WAS LIMITED TO A SMALL PORTION OF THE 25-ACRE LOT ALONG WEST COLLEGE AVENUE AND THE EXISTING PROPERTY BOUNDARIES ARE DENSELY COVERED WITH TREES. WITH THE NEWLY PROPOSED DEVELOPMENT, THE AREA TO BE DEVELOPED REMAINS IN THE AREA ALONG WEST COLLEGE AVENUE AND THE PROPERTY BOUNDARIES REMAIN DENSELY VEGETATED. AN ANALYSIS OF TREES LOCATED ON THE PROPERTY WITHIN 30-FEET OF THE PROPERTY BOUNDARY INDICATES A TREE CREDIT OF APPROXIMATELY 142 TREES IN ACCORDANCE WITH 22-513.3(D)(4)(ii). THE CHURCH IS REQUESTING EXTENSION OF THE VARIANCE.
- LESS THAN 4% OF THE TREE CANOPY ON THE SITE WILL BE IMPACTED BY THE PROPOSED CONSTRUCTION AND EARTH BORROW AND DISPOSAL SITE. A TOTAL OF THIRTEEN TREES THIS TREE PRESERVATION PLAN PROPOSES PLANTING THIRTEEN NEW TREES TO BALANCE THE LOSS. THE LOCATION OF THE NEW TREES IS SHOWN ON THE PLAN AND INCLUDES TEN DECIDUOUS TREES AND THREE CONIFEROUS TREES. THE TREES PLANTED TREES MUST BE ON THE CURRENT OFFICIAL FERGUSON TOWNSHIP TREE LIST.
- THE WASTE STORAGE AREA WILL REMAIN ENCLOSED WITHIN A FENCE. THE CHURCH CONTINUES TO MAINTAIN THE FENCE WHICH SHIELDS THE WASTE AREA FROM VIEW.
- ALL PLANTING SHALL BE IN ACCORDANCE WITH 'GUIDE TO PLANTING IN FERGUSON TOWNSHIP' AND DETAILS ON THIS PLAN.
- NO SUBSTITUTIONS SHALL BE ALLOWED FOR THE SPECIFIED PLANT LIST UNLESS REVIEWED AND APPROVED BY FERGUSON TOWNSHIP.
- NO TREES OR SHRUBS SHALL BE PLANTED IN THE STORMWATER MANAGEMENT AREAS UNLESS APPROVED BY THE TOWNSHIP.
- LANDSCAPE PLANTINGS WITHIN 10-FEET OF A STRUCTURE SHALL BE AT THE DISCRETION OF THE OWNER.
- NO TREES ARE WITHIN THE WEST COLLEGE AVENUE RIGHT-OF-WAY.

### TREE SURVEY SUMMARY

SPECIES	COMMON NAME	NO.
Abies fraseri	Fraser Fir	12
Acer negundo	Ash-leaf Maple	13
Acer platanoides	Norway Maple	8
Acer rubrum	Red Maple	7
Carya cordiformis	Bitternut Hickory	31
Carya glabra	Pignut Hickory	11
Carya ovata	Shagbark Hickory	14
Fraxinus americana	American Ash	1
Gleditsia triacanthos	Honeylocust	2
Juglans nigra	Black Walnut	147
Larix laricina	Eastern Redcedar	2
Larix sp.	Larch	1
Malus sp.	Crabapple	5
Morus alba	White Mulberry	3
Picea abies	Norway Spruce	8
Picea pungens	Blue Spruce	11
Picea sp.	Spruce	5
Pinus nigra	Austrian Black Pine	1
Pinus strobus	Eastern White Pine	1
Prunus serotina	Black Cherry	47
Prunus sp. (hybrid)	Cherry	2
Pyrus calleryana	Bradford Pear	2
Quercus alba	White Oak	6
Quercus rubra	Northern Red Oak	3
Quercus velutina	Black Oak	2
Robinia pseudoacacia	Black Locust	2
Tilia americana	American Basswood	1
Ulmus nigra	Slippery Elm	1
Ulmus sp.	Elm	1
TOTAL		355

NOTE: FOR INDIVIDUAL TREE IDENTIFICATION, SEE TREE SURVEY AND PROTECTION PLAN.



#### Required Buffer Yard Plantings

BY ACTION OF THE FERGUSON TOWNSHIP BOARD OF SUPERVISORS ON \_\_\_\_\_ AND THE ZONING HEARING BOARD ON \_\_\_\_\_ THIS SITE IS EXEMPT FROM MEETING THE BUFFER YARD REQUIREMENTS SET FORTH IN THE CORRIDOR OVERLAY DISTRICT AND BUFFER YARD ORDINANCES. THE FOLLOWING CONDITIONS ARE ATTACHED TO THIS EXEMPTION:

- EXISTING TREES ALONG THE MCCOULLEY, GRASSLYN AND HARNER PROPERTY BOUNDARIES SHALL NOT BE DISTURBED WITHOUT TOWNSHIP APPROVAL.
- EXISTING OR FUTURE OCCURRENCE OF RUSSIAN OLIVE OR MULTIFLORA ROSE AT ANY LOCATION ON THE PROPERTY MAY BE REMOVED AND ARE ENCOURAGED TO BE REMOVED BY THE TOWNSHIP BECAUSE THEY ARE INVASIVE FOREIGN SPECIES WHICH ARE NOT A RECOGNIZED TOWNSHIP PLANT MATERIAL.

Salvation Baptist Church  
3645 West College Ave - Ferguson Twp - Centre Co - PA

FINAL LAND DEVELOPMENT PLAN UPDATE  
LANDSCAPE PLAN

ORIGINAL DATE OF ZONING PERMITS APPROVAL  
02/09/2022

REVISIONS

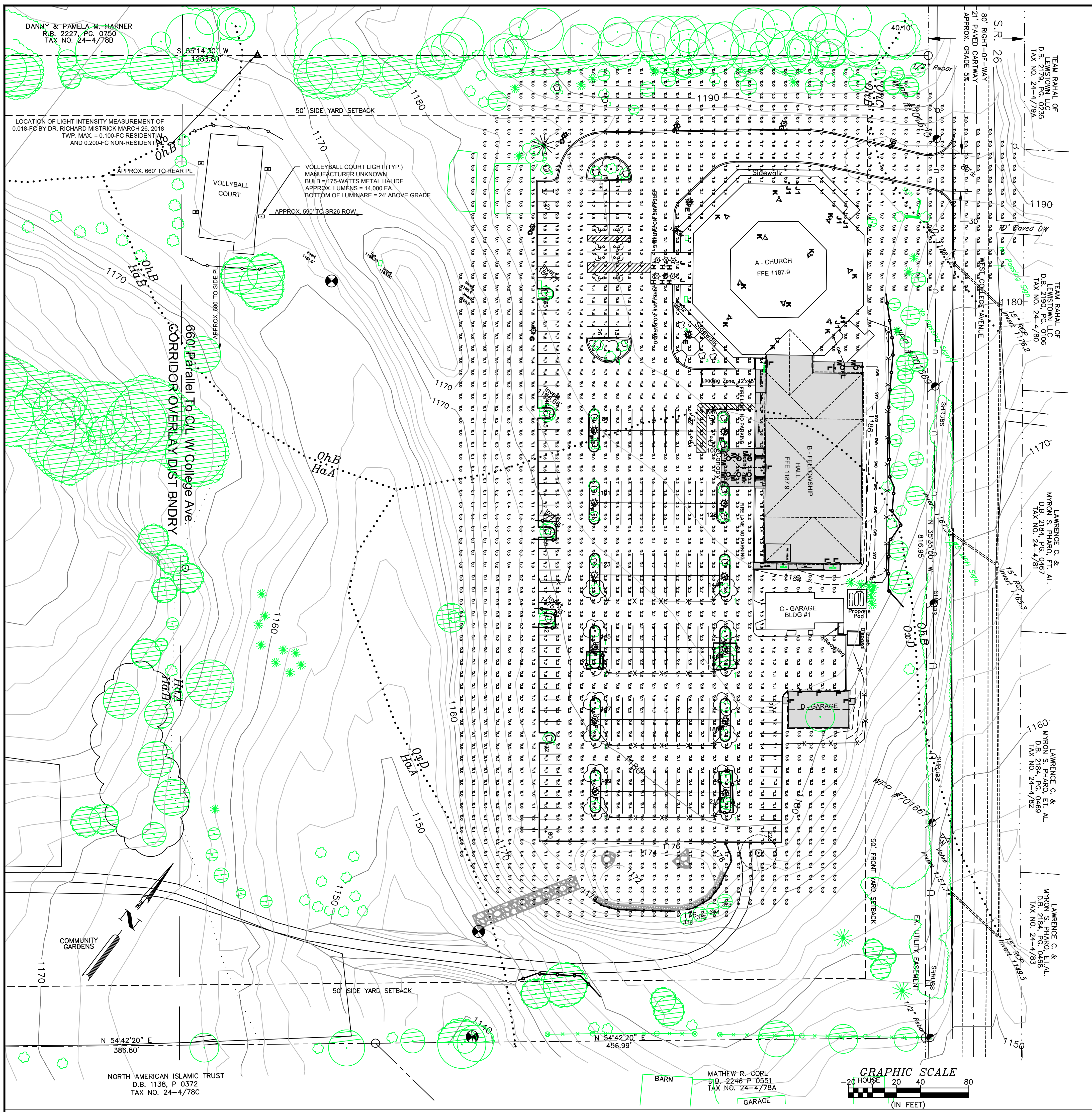
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DRAWN BY: JEL  
11/10/2023

SOURCE:  
Survey

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PROFESSIONAL  
JOSEPH EDWARD LICHTY  
LICENSED PROFESSIONAL ENGINEER  
NO. 008527



**VOLLEYBALL LIGHTS MONITORING REPORT**  
 Richard Mistrick, PhD, PE  
 358 McBeth St. State College, PA 16801

Joe Lichty  
 Lichty Engineering  
 687 Berkshire Dr  
 State College, PA 16803

Dear Joe,

This letter contains a summary of illuminance measurements taken at the neighboring property line alongside the lighted volleyball court at the Russian Baptist Church, which is located at 3645 W. College Avenue in Ferguson Township. A point on the property line that is closest to the court, and which had a direct view to the four installed luminaires was measured. The horizontal illuminance at this point on the ground at the property line was 0.038 fc, which is well below the Ferguson Twp exterior lighting ordinance limit of 0.3 fc for neighboring residential properties and 0.2 fc for non-residential properties.

The Metal Halide luminaires that are installed are designed to emit no light above the horizontal, but in this application they are tilted slightly upward from the horizontal as they are currently mounted on the poles. This slight tilt directs light primarily parallel to the property line and within the church's property, with a small amount above the horizontal plane. Even at the current mounting positions, they may still meet the IES cutoff distribution criteria, but this condition cannot be evaluated without knowledge of the luminaire manufacturer and catalog number. The fact that the terrain slopes upward behind the lighting equipment on both sides of the court further aids in keeping the emitted light in close proximity to the court.

Given the location of the volleyball court, and the low measured illuminance at the property line, it does not appear that these luminaires should be objectionable to any current or future neighbors and recommend that Ferguson Township permit the installation to proceed as installed.

Respectfully submitted,  
 Richard Mistrick, PhD, PE, FIES  
 Lighting Consultant

- VOLLEYBALL LIGHTING NOTES**
- VOLLEYBALL LIGHTS ARE EXISTING AT TIME OF PERMITTING.
  - LIGHTS WERE INSTALLED AFTER DEMOLITION AT ANOTHER SITE.
  - MANUFACTURER OF LUMINAIRES IS UNKNOWN.
  - EACH LUMINARY INCLUDES A 175-W METAL HALIDE BULB WITH A POWER RATING OF APPROXIMATELY 14000-LUMENS.
  - THE LIGHT STANDARDS ARE APPROXIMATELY 24-FT ABOVE GRADE OR EL. 1168-FM.L.S.
  - LIGHT IS DIRECTED TOWARD THE VOLLEYBALL PLAYING SURFACE.
  - IN SITU MEASUREMENT OF LIGHT POWER WAS USED IN LUI OF MODELING SINCE THE MANUFACTURER'S DATA IS UNAVAILABLE AND THE LIGHT ARE ALREADY IN PLACE.
  - MEASUREMENT WAS TAKEN MARCH 26, 2018 BY DR. RICHARD MISTRICK AT THE NEAREST PROPERTY BOUNDARY (APPROXIMATELY 90-FT FROM THE NEAREST LUMINARY).
  - HORIZONTAL ILLUMINANCE MEASURED AT THE PROPERTY BOUNDARY AFTER FULL WARMUP OF THE LIGHTS WAS 0.018-FC. FERUGSON TOWNSHIP ORDINANCE CHAPTER 4 SECTION F- OUTDOOR SPORTS AND RECREATIONAL LIGHTING REQUIRES THAT ILLUMINANCE BE LIMITED TO 0.100-FC FOR ADJACENT RESIDENTIAL USES AND 0.200-FC FOR ADJACENT NON-RESIDENTIAL USES.
  - THE LIGHTS AS INSTALLED MEET THIS REQUIREMENT BY A FACTOR OF 5.6 FOR THE MOST STRINGENT RESIDENTIAL STANDARD.

**LEGEND**

- 1180 EXISTING CONTOUR LINES
- FINISHED GRADE CONTOURS
- PROPERTY BOUNDARY
- SETBACK
- PENNOET CENTERLINE
- ROOF/EASEMENT
- POLE LIGHTS - PARKING LOT AND VOLLEYBALL COURT
- EXISTING TREES AND SHRUBS
- EXISTING TREELINE
- PROPOSED NEW STRUCTURES

**2022 NOTES**

- NO NEW EXTERIOR AREA LIGHTING IS PROPOSED IN ADDITION TO APPROVED PHASE 2 LIGHTING INFORMATION FOR THOSE LIGHTS ARE INCLUDED IN THIS SUBMISSION.
- ANY NEW EXTERIOR LIGHTS MOUNTED ON BUILDINGS SHALL BE SHIELDED AND SHINE DOWN TO ILLUMINATE THE IMMEDIATE AREA NEXT TO LIGHT. NO SPOT OR FLOOD LIGHTS OR OTHER LIGHTS SHALL BE INSTALLED WHICH SHINE TOWARDS STREETS OR NEIGHBORING LOTS.
- VOLLEYBALL COURT LIGHTS WERE PERMITTED IN 2018 USING MONITORING OF ACTUAL LIGHT INTENSITY AT THE PROPERTY BOUNDARY. NO NEW LIGHTS ARE PROPOSED IN THIS AREA. ONLY EXTERIOR LUMINAIRES ON THE EXTERIOR OF THE TWO NEW BUILDINGS ARE TYPE L EMERGENCY LIGHTS AND TYPE M DOWN MOUNT LED CAN LIGHTS. THE ONLY IMPACT TO THE LIGHTING PLAN IS THE SURFACE DIRECTLY UNDER THE RECESSED LED CANS. SPECIFICATIONS FOR THE TYPE M LIGHTS ARE PROVIDED BELOW.

**DESIGN NOTES**

- ALL POLES ARE 22' FIXTURE IS 17' HIGH.
- ALL CALCULATIONS ARE TO GRADE.
- LIGHT LEVELS ARE BASED ON MAINTAINED LIGHT OUTPUT.

**LUMINAIRE SCHEDULE**

Symbol	Label	Qty	Catalog Number	Description	Lamp	File	Lumens	LLF
E	5	LITHONIA KVF 400M ASYFL TB SP220 / KWV SSP22-5.0-17-2	SQUARE AREA LIGHT, ASYMMETRIC DISTRIBUTION, FLAT LENS, MOUNTED ON 22' POLE PLUS BASE.	ONE 400-WATT CLEAR BT-37 METAL HALIDE, VERTICAL BASE UP POS.	LH9433.ies		36000	0.72
F	3	LITHONIA KVF 400M ASYFL TB SP220 / KWV SSP22-5.0-17-2	SQUARE AREA LIGHT, ASYMMETRIC DISTRIBUTION, FLAT LENS MOUNTED ON 22' POLE PLUS BASE.	ONE 400-WATT CLEAR BT-37 METAL HALIDE, VERTICAL BASE UP POS.	LH9432.ies		36000	0.72
G	8	LITHONIA KVF 400M ASYFL EHS TB SP220 / KWV SSP22-5.0-17-2	SQUARE AREA LIGHT, ASYMMETRIC DISTRIBUTION, FLAT LENS, HOUSING SIDE SHIELD, MOUNTED ON 22' POLE PLUS BASE, SHIELD.	ONE 400-WATT CLEAR BT-37 METAL HALIDE, VERTICAL BASE UP POS.	LH9434.ies		36000	0.72
H	2	LITHONIA B63 /6LFS	RECESSED DOWNLIGHT IN CANOPY MOUNTED AT 14' ABOVE GRADE	100PAR38/FL40*	100PAR38_HI R_FL40.ies		2070	1.00
J	2	HINKLEY 2336	WALL MOUNT INCAND. AREA LIGHT AT 7'-4" ABOVE GRADE	(4) 40w/CANDLE	*		1220	*
J1	8	HINKLEY 2335	WALL MOUNT INCAND. AREA LIGHT AT 7'-4" ABOVE GRADE	(3) 40w/CANDLE	*		990	*
K	11	RAD LIGHTING QF200	SURFACE MOUNT BUILD. ILLUMINATING SPOT MTD. ON ROOF SURFACE	ONE 200-WATT HALOGEN	*		3600	*
L	12	LITHONIA ELACDSH0606	SURFACE MOUNT BUILD. EMERGENCY LIGHTING MTD. ON WALL SURFACE	ONE 8-WATT HALOGEN	*		NOT RATED	*
M	8	RAD LIGHTING WFL LL LED 30K 60CR MW M6	RECESSED DOWNLIGHT MTD. ON CEILING SURFACE	ONE 210-WATT LED	*		1150	*

\* NOT AVAILABLE - SEE GENERAL NOTE NO. 2

**STATISTICS**

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
GRID @ GRADE	+	1.0 fc	11.0 fc	0.0 fc	N/A	N/A
ROADWAY	X	1.7 fc	2.6 fc	0.2 fc	13.0:1	8.7:1
PARKING LOT	X	2.0 fc	6.3 fc	0.9 fc	7.0:1	2.3:1

**GENERAL NOTES**

- LIGHTING DESIGN AND LIGHT INTENSITY ANALYSIS BY ZANE LEEPER OF LAFACE & MCGOVERN ASSOCIATES, PHONE 412-854-2200 AT THE DIRECTION OF LICHTY ENGINEERING DURING ORIGINAL PHASE 2 PLANNING.
- EXTERIOR WALL FIXTURES FROM HINKLEY LIGHTING DO NOT HAVE AVAILABLE LIGHT INTENSITY FILE AND WERE NOT INCLUDED IN THE ANALYSIS. THE LOW WATTAGE INCANDESCENT FIXTURES WOULD PROVIDE INSIGNIFICANT CHANGES IN THE MODEL EXCEPT IN A SHORT RADIUS FROM THE FIXTURE. THE FIXTURES PROVIDE AREA ILLUMINATION IMMEDIATELY ADJACENT TO DOORS AND BUILDING WALL ILLUMINATION ABOVE DOORS.
- RAD LIGHTING SURFACE MOUNT SPOTS ARE MOUNTED ON ROOF AND SHINE ONTO BUILDING AND STEEPLE FOR BUILDING ILLUMINATION IN ACCORDANCE WITH SECTION 4.H.4.14S OF THE FERUGSON TOWNSHIP LIGHTING ORDINANCE. BECAUSE OF THEIR MOUNTING LOCATION ON THE ROOF AND ATTITUDE (ONTO THE BUILDING) THE LIGHTS ARE NOT INCLUDED IN THE MODELING ANALYSIS.

**SPECIFICATIONS FOR NEW TYPE M EXTERIOR LED CAN LIGHTS**

**LITHONIA LIGHTING**

**Water LED Recessed Downlight**  
**WF4/WF6/WF8**  
**4", 6" and 8" LED**  
**Switchable White**  
**Color Temperature**

**FEATURES & SPECIFICATIONS**

**PHOTOMETRICS**

Dimension	Value
Aperture	4.13" Dia
Cut-off angle	63.0°
Cut-off height	4.27" Dia
Height	1.12" Dia

**LITHONIA LIGHTING**

**WF4/WF6/WF8 Switchable White 4", 6" or 8" LED Wafer Module**

**PHOTOMETRICS**

Dimension	Value
Aperture	4.13" Dia
Cut-off angle	63.0°
Cut-off height	4.27" Dia
Height	1.12" Dia

**ENERGY DATA**

Parameter	Value
Power	20W
Power Factor	0.98
Efficiency	110 lm/W
Beam Spread	63.0°
Beam Diameter	4.13" Dia
Beam Height	4.27" Dia
Beam Area	14.7 sq ft
Beam Volume	62.1 cu ft
Beam Weight	0.15 lbs
Beam Length	4.13" Dia
Beam Diameter	4.13" Dia
Beam Height	4.27" Dia
Beam Area	14.7 sq ft
Beam Volume	62.1 cu ft
Beam Weight	0.15 lbs
Beam Length	4.13" Dia
Beam Diameter	4.13" Dia
Beam Height	4.27" Dia
Beam Area	14.7 sq ft
Beam Volume	62.1 cu ft
Beam Weight	0.15 lbs

**LICHTY ENGINEERING**  
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 (814) 238-7141  
 LichtyEngineering@comcast.net

**PROFESSIONAL ENGINEER**  
 JOSEPH EDWARD LICHTY  
 LICENSE NO. 158274

DRAWN BY: JEL  
 11/10/2023

REVISIONS

ORIGINAL DATE OF ZONING PERMIT APPLICATION: 02/09/2022

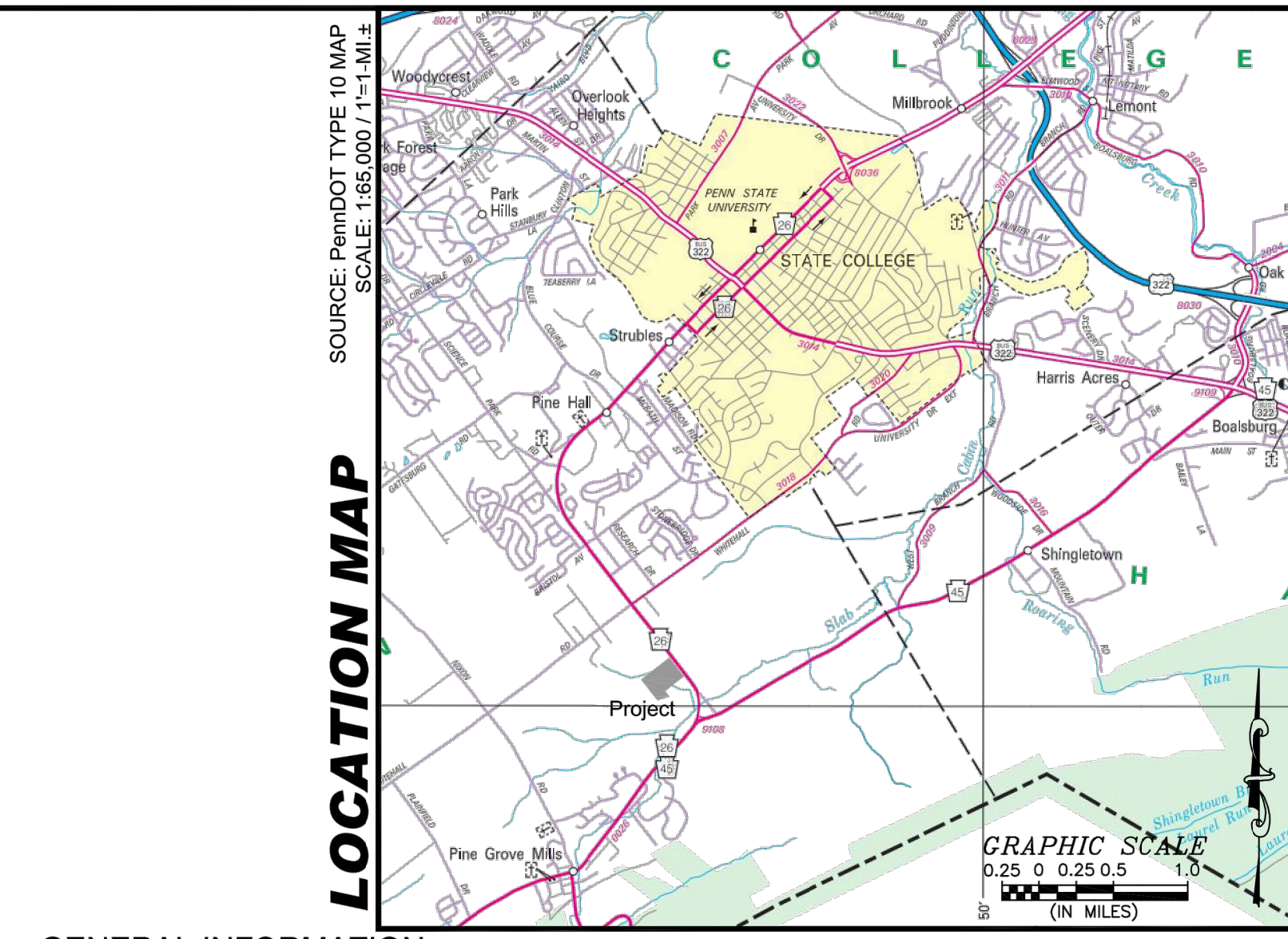
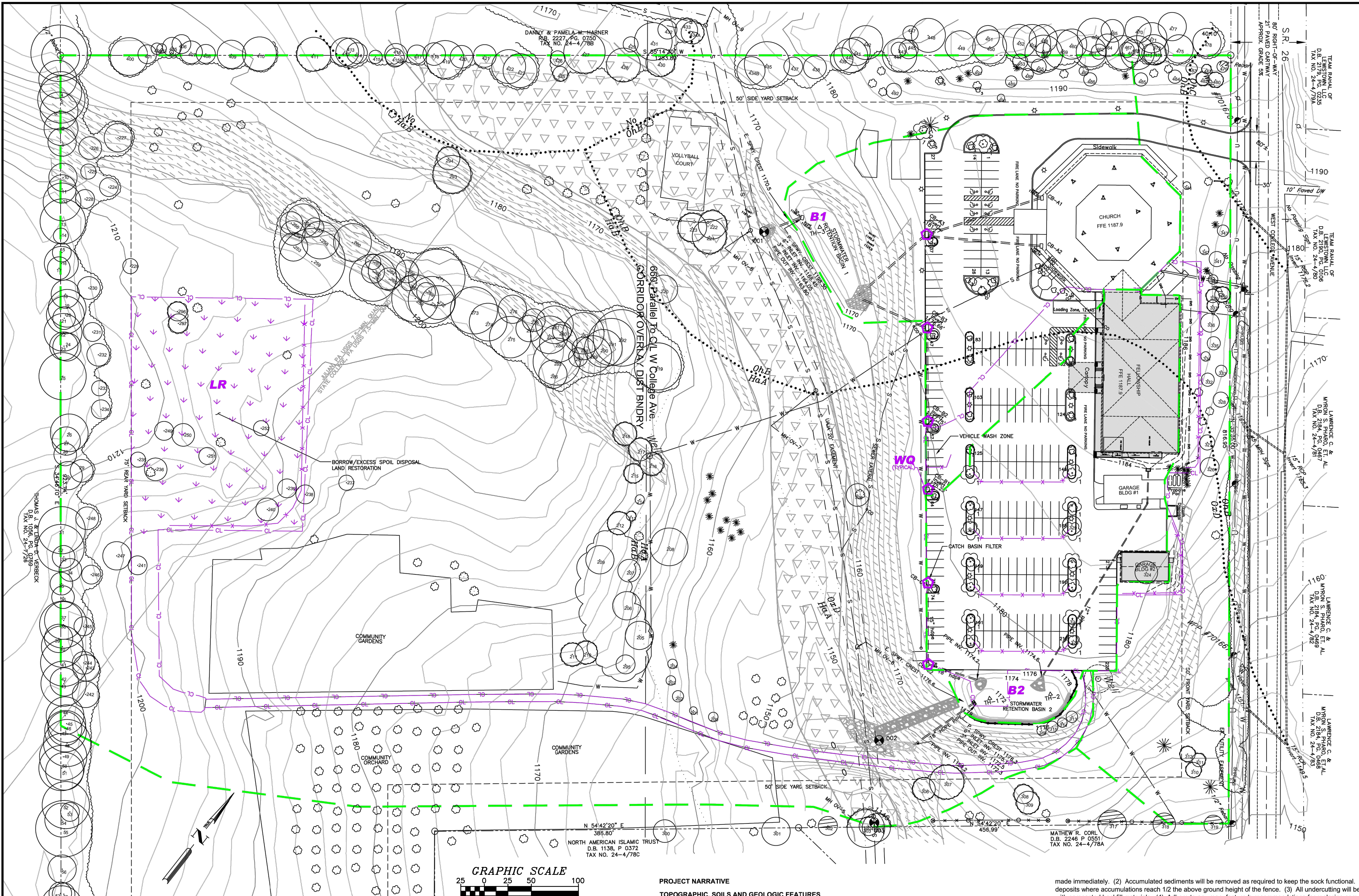
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Salvation Baptist Church  
 3645 West College Ave - Ferguson Twp - Centre Co - PA

**FINAL LAND DEVELOPMENT PLAN UPDATE**  
**LIGHTING PLAN**

**5**

**11**



**GENERAL INFORMATION**

PROPERTY OWNER: RUSSIAN CHURCH OF CHRIST, 3465 WEST COLLEGE AVE, STATE COLLEGE, PA 16803

TAX ID NUMBER: 24-004-078-0000

DEED REFERENCE: RB 1360, P 0005

ZONING INFORMATION: ZONING DISTRICT: RA - RURAL AGRICULTURE WITH CORRIDOR OVERLAY DIST. MINIMUM SETBACK: FRONT YARD: 50', REAR YARD: 75', SIDE YARD: 50'

MUNICIPALITY: FERGUSON TWP COUNTY: CENTRE

PARCEL/PROJECT AREA: 25.01 AC TOTAL DISTURBED AREA: 3.65 AC

LATITUDE/LONGITUDE (CENTER OF PROPERTY): 40°45'10.21"N 77°52'23.57"W

BUILDING COVERAGE: EX. BUILDING COVERAGE: 19,335-SF, 0.444-AC, 1.78%  
NEW BUILDING COVERAGE: 15,168-SF, 0.347-AC, 1.39%  
PROPOSED TOTAL BUILDING COVERAGE: 34,503-SF, 0.791-AC, 3.16%

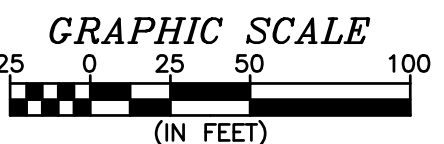
IMPERVIOUS COVER: EX. IMPERVIOUS COVER: 120,443-SF, 2.766-AC, 11.00%  
NEW IMPERVIOUS COVER: 130,300-SF, 3.198-AC, 12.79%  
PROPOSED TOTAL IMPERVIOUS COVER: 250,743-SF, 5.964-AC, 23.79%

EXISTING LAND USE: CHURCH ON AGRICULTURAL LANDS. LAND USE IS TO REMAIN THE SAME AFTER NEW DEVELOPMENT.

RECEIVING WATERS: SLAB CABIN RUN  
CHAPTER 85 CWF, MF. EXISTING: 400 CWF, MF (PFC)  
WETLANDS DESIGNATION: NOT PRESENT ON SITE  
SEWAGE DISPOSAL: UNIVERSITY AREA JOINT AUTHORITY  
WATER SOURCE: STATE COLLEGE BOROUGH WATER AUTHORITY

**LEGEND**

--- 1180 ---	EXISTING CONTOUR LINES	---	CONSTRUCTION LIMIT
---	FINISHED GRADE CONTOURS	⊙	SOIL TEST HOLE
---	PROPERTY BOUNDARY	⊙	DISCHARGE POINT
---	SETBACK	⊙	CATCH BASIN WATER QUALITY FILTER
---	SOIL GROUP BNDY/MAP KEY	⊙	STEEP SLOPES (>25%)
---	UTILITY LINE	⊙	AREA DRAINING TO RAIN GARDEN
---	SEWER/LATERAL	⊙	LAND RESTORATION
---	WATERLINE	⊙	PROPOSED BUILDING 2021
---	GAS	⊙	
---	ROW/EASEMENT	⊙	
---	DRAINAGE BOUNDARY	⊙	
---	EXISTING TREES AND SHRUBS	⊙	
---	EXISTING TREELINE	⊙	
---	FEMA FLOOD BOUNDARY	⊙	



**PROJECT NARRATIVE**

**TOPOGRAPHIC, SOILS AND GEOLOGIC FEATURES**

**Site Description**  
The site is located within the Ridge and Valley Physiographic Province in Pennsylvania. It is located in the broad Nittany Valley with Tussey Ridge to the south and Bald Eagle Ridge to the north. An unnamed tributary to Slab Cabin Run bisects the property from northwest to southeast. The UNT discharges to Slab Cabin Run where it flows under PA Route 26 near the intersection with PA Route 45. The UNT watershed has a drainage area of 1.05-SQ. MI. and is underlain by Karst geology. The watershed has many depressions and sinkholes upstream of the property. As a result, the drainage swale is ephemeral and only flows during extreme precipitation events. The channel, which has no bed and banks, remains dry during the rest of the year. No wetlands have been identified on the property.

The site currently includes the Salvation Baptist Church and one out building (a garage/workshop) along with a parking area. A volleyball court and a community garden are also located on the property. Proposed changes include a fellowship hall and a second garage. The fellowship hall was previously approved by Ferguson Township, but never constructed. Total new impervious cover is 15,168-SF (0.35-AC). The disturbed area for the new construction is 3.65-AC.

**Soils Information**  
Project soils were identified by using the USDA NRCS Web Soil Survey. The soil boundaries are delineated on the attached PCSM and EAS Control Plans. The soils are identified in the table entitled Soil Characteristics and Limitations. A copy of the web soil survey is included in the accompanying documents.

**Geologic Conditions**  
The project is underlain by the Nittany and Axeman formations. The contact between the formations is nearly perpendicular to West College Avenue and bisects the property between the existing church and garage. Both of these formations are Karst by nature (they consist of limestone which is susceptible to sinkhole development). Upon review of the geologic maps available from the PaDEP, no sinkholes or depressions which may develop into sinkholes have been identified on or immediately adjacent to the site property. Many of these conditions are located across West College Avenue to the northeast and to the northwest across Whitehall Road. The Karst conditions allow for a high degree of depressional storage and infiltration so that the unnamed tributary which crosses the property is ephemeral, only flowing during extreme precipitation events. As a result, the unnamed stream is neither perennial nor intermittent and does not have a stream bed and banks or riparian characteristics.

**Soil Characteristics and Limitations**

Map Key	Name	Slope (%)	Hydrologic Soil Group	Depth to Restricting Layer (in)	Depth to Bedrock (in)	Depth to Seasonal Water (in)
HsA	Hagerstown silt loam	0-3	B	43-98	43-98	>80
HsB	Hagerstown silt loam	3-8	B	72-99	72-99	>80
No	Nolin silt loam	0-5	D	12-20	12-20	>80
OnB	Opequon-Hagerstown complex	3-8	D	12-20	12-20	>80
OnC	Opequon Rock outcrop	8-15	D	10-19	10-19	36-72
OnD	Opequon Rock outcrop	0-5	D	10-19	10-19	36-72

**Pre- and Post Development Peak Runoff Estimates**

Return Period (Years)	Pre-Development* (CFS)	Post Development Undertained (CFS)	Post Development Detained (CFS)	Post Development No Parivious* (CFS)
1	3.0	10.7	3.1	1.0
2	7.1	15.0	6.5	1.6
10	23.4	31.5	21.3	2.7
50	48.4	56.1	46.1	5.7
100	61.9	69.1	59.8	8.7
100	Clogged Principal Spwy.	50.8		

**EROSION AND SEDIMENTATION CONTROL PLAN**

**Description of Control Methodology**  
An erosion and sedimentation control plan has been developed to minimize site erosion and resulting sedimentation. Since the project is located within a watershed which the PaDEP has identified as having an existing use of HQ-CWF (Slab Cabin Run), the project is subject to the requirements of the PaDEP's ABACT program. Some BMPs must be installed prior to disturbing the earth that drains to them. These are identified in the following discussion. Temporary BMPs shall remain in place until the disturbed area is regraded and vegetated.

**Summary of Erosion and Sediment Control BMPs Including Construction and Maintenance**

**Compost Filter Sock** - An ABACT compliant compost filter sock will be installed where and to the species shown on the plans. All single sock placements shall be 18" socks unless otherwise noted on the plan. The sock may be filled with compost or wood chips. Installation: (1) Compost socks are to be placed on level grades across slope to intercept runoff flowing down the slope. The sock shall be laid flush with the ground. The bottom of the sock shall be placed on a level grade. When it is necessary to cross small depressions, the sock top may deviate slightly from the level grade. Grades in such sections will not exceed one percent (1%), nor will the deviation extend for more than 25 feet. (2) Support stakes will be driven to the required depth below the existing ground surface, to support the sock where the sock is installed on pavement, aggregate shall be placed on the downstream side in place of stakes to keep the sock in place. (3) The sock shall be fully filled with compost or wood chips, but care should be taken not to cause tears by over-filling.

**Maintenance:** (1) The sock installation will be inspected after every precipitation event. Any necessary repairs will be made immediately. (2) Accumulated sediments will be removed as required to keep the sock functional. In all cases, remove deposits where accumulations reach 1/2 the above ground height of the fence. (3) All undercutting will be repaired immediately with compacted backfill materials. (4) Adhere to any manufacturer's recommendations for replacing compost sock due to weathering.

**Water Quality Filter** - Each existing catch basin shall be fitted with a water quality filter to provide pollutant removal during runoff events. The filter will be installed prior to initiation of construction and will remain in place after construction. As such, this BMP qualifies as both an ESC and a PCSM BMP. During construction the TX filters will be used to primarily contain sediment. During the post construction stormwater period, the PCPCO filters will be used to reduce oils and greases from the parking lot. See the details sheet for additional information.

**Maintenance:** The filters shall be checked for excess material at least monthly. When the filter collects sediment and debris, the filter shall be removed and cleaned. The material that is removed shall be disposed of in a suitable manner which will minimize pollution. When cleaning the filters, the filters shall be inspected and the damaged filters shall be replaced. The cut sheet on the Details Sheet (ESC-2) provides additional maintenance information.

**Retention Basin** - All retention basins already exist on the property and do not need modified. However, during the construction phase, an aggregate filter shall be placed in front of the lowest outlet orifice on the principal spillway to minimize sediment discharge. This filter shall be removed when all areas draining to the basin are vegetated or cleaned for paved surfaces.

**Maintenance:** The basins must be inspected periodically for signs of sediment, erosion and gully vegetation. This includes the interior of the basin, embankments, inlets and outlets. Issues must be corrected immediately or as soon as possible for vegetation.

**Vehicle Wash Zone** - A vehicle wash zone has been shown on the plan. In particular, the tires, become covered with mud on the site, this area shall be used to wash the mud off prior to the vehicles leaving the site on West College Avenue.

**Maintenance:** The wash zone is designed to maximize trapping mud and sediment within the area. When it becomes filled with sediment, the area shall be cleaned and the material shall be transported to a soil stockpile on site which is protected by a BMP. After construction when the wash zone is removed, the area shall be thoroughly cleaned to remove all mud and sediment.

**Temporary Vegetative Surface Stabilization** - Whenever disturbed areas or stockpiles will remain in place for more than 7 days, the area will be stabilized by using the temporary cover specified in the PLANTING SPECIFICATIONS table. If the area will be permanently stabilized within a short period after the 7-day limit or if seed will not germinate due to weather, the area may be temporarily stabilized with mulch only. If temporarily stabilized with mulch, the mulch should be removed and the area seeded and re-mulched during the first available growing season.

**Maintenance:** Temporary vegetation or mulch shall be inspected after each precipitation event to ensure that no areas of erosion are present. If present, the areas should be re-stabilized immediately.

**Vegetative Surface Stabilization** - Permanent vegetative stabilization will be provided on all disturbed areas (including channels) not covered by gravel or pavement at the end of all work. The vegetation will meet the requirements of Planting Specifications table. Note that the rain garden and the land restoration area have specific vegetation specifications outlined in the details.

**Maintenance:** Permanent vegetative areas will be inspected after each precipitation event until greater than 70% cover is maintained for a period of one year. After this time, the locations will be inspected quarterly. Any areas with less than 70% cover will be inspected and active erosion will be corrected immediately.

**Disposal of Accumulated Sediment** - All sediment accumulated within BMPs on site shall be disposed of in one of two ways. (1) mixing with topsoil and/or subsoil and placing on the site in a fill or final grade operation or (2) trucking from the site and disposing in an approved and permitted off-site fill area. Any disposal off-site must be cleaned with the Centre County Conservation District prior to removal from the site.

**Construction Sequence**

1. Hold a pre-construction meeting to go over ESC and PCSM Plans including all BMPs. Identify critical stages in construction.
2. Clearly field mark the Limits of Control Areas (LOCA) and the Limits of Construction Areas (LOCA). These areas shall remain in place throughout construction and shall be inspected periodically and replaced if removed or destroyed.
3. Install vehicle wash zone for washing muddy vehicles prior to leaving the site.
4. Install compost sock where shown prior to working in the area draining to the sock. No earth disturbance shall be conducted without first installing compost sock or other ESC BMPs which control runoff from the area to be disturbed. Install AASHTO aggregate filters at retention basins principal spillways.

**Historical Property Land Use**

All lands on the property as well as the adjacent surrounding properties, have been historically utilized for agricultural purposes. This property has been used as a church property since the existing church was constructed in 2003. Historic and new residences dot the adjacent properties in the rural agricultural zoning.

NOTE: PLEASE REFERENCE THE STORMWATER MANAGEMENT PLAN AND REPORT AS WELL AS THE NPDES POST-CONSTRUCTION STORMWATER MANAGEMENT PLAN FOR ADDITIONAL INFORMATION.

NPDES PERMIT 140085 ISSUED JULY 8, 2022

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PROFESSIONAL ENGINEER  
NO. 02827-E  
STATE OF PENNSYLVANIA

PROJECT: NPDES ESC PLAN - PLAN SHEET FOR WEST COLLEGE AVENUE CHURCH IMPROVEMENTS

DRAWN BY: JEL 12/20/2021

REVISIONS: 06/30/2022

SCALE: AS SHOWN

DATE OF ZONING PERMIT APPLICATION: 02/09/2022

SCALE: AS SHOWN

ESC-1

1

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PROFESSIONAL ENGINEER  
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STATE OF PENNSYLVANIA

**SALVATION BAPTIST CHURCH**  
3645 West College Ave - Ferguson Twp - Centre Co - PA

**FINAL LAND DEVELOPMENT PLAN UPDATE**  
**NPDES EROSION & SEDIMENTATION CONTROL PLAN**  
**PLAN AND NARRATIVE**

DRAWN BY: JEL 11/10/2023

REVISIONS: 02/09/2022

SCALE: AS SHOWN

DATE OF ZONING PERMIT APPLICATION: 02/09/2022

SCALE: AS SHOWN

ES-1

6

11

**LAND GRADING TO MINIMIZE EROSION AND SEDIMENTATION**

- Construction Specifications:**
- Only disturb, clear, or grade areas necessary for construction. Flag or otherwise delineate areas not to be disturbed. Exclude vehicles and construction equipment from these areas to preserve natural vegetation.
  - All graded or disturbed areas including slopes shall be protected during clearing and construction in accordance with the approved erosion and sediment control plan until they are permanently stabilized.
  - All sediment control measures shall be constructed and maintained in accordance with the approved erosion and sediment control plan and according to the standards and specifications for the appropriate erosion control practices.
  - If topsoil is required for the establishment of vegetation, it shall be stockpiled in the amount necessary to complete finished grading and protected from erosion during the interim.
  - Areas to be filled shall be cleared, grubbed to remove trees, vegetation, roots and other objectionable material, and stripped of topsoil.
  - Areas to receive topsoil shall be scarified to a minimum depth of 3 inches (76 mm) prior to placement of topsoil.
  - All fills shall be compacted as required by building standards to reduce erosion, slippage, settlement, subsidence and other related problems. Fill intended to support buildings, structures, conduits, etc., shall be compacted in accordance with local requirements or codes.
  - The outer face of the fill slope should be allowed to stay loose, not rolled, compacted, or bladed smooth. A bulldozer may run up and down the fill slope so the dozer treads (cleat tracks) create grooves perpendicular to the slope. If the soil is not too moist, excessive compaction will not occur.
  - All fill shall be placed and compacted in layers not to exceed 8 inches (0.2 m) per lift.
  - Use slope breaks, such as diversions, benches, or contour furrows as appropriate, to reduce the length of cut-and-fill slopes to limit sheet and rill erosion and prevent gully erosion.
  - The finished cut-and-fill slopes, which are to be vegetated with grass and legumes, should not be steeper than 2:1.
  - Slopes to be maintained by tractor or other equipment should not be steeper than 3:1.
  - Slopes in excess of 2:1 may require hydroseeding, hydromulching, tacking, and/or "punching-in" straw, bioengineering techniques, or retaining walls.
  - Roughen the surface of all slopes during the construction operation to retain water, increase infiltration, and facilitate vegetation establishment.
  - Seeps or springs encountered during construction shall be handled in accordance with approved methods.
  - Stabilize all graded areas with vegetation, crushed stone, riprap, or other ground cover as soon as grading is completed or if work is interrupted for 21 working days or more.
  - Use mulch to stabilize areas temporarily where final grading must be delayed.
  - Stockpiles, borrow areas and spoil areas shall be shown on the plans and shall be stabilized to prevent erosion and sedimentation.

**PLANTING SPECIFICATIONS**

TYPE OF PLANTING AND PLANTING DATES (4)	FORMULA AND SPECIES	% BY WEIGHT	MIN. PURITY (%)	MIN. GERMINATION (%)	SEEDING RATE (#/AC)
<b>TEMPORARY</b> 03/15 - 10/15	<b>PennDOT E</b> - Annual Ryegrass	100	98	90	48
	<b>PennDOT B</b> - Perennial Ryegrass (1) - Creeping Red Fescue or Chewing Fescue - Kentucky Bluegrass (2)	20 30 50	98 98 98	90 85 80	102
<b>PERMANENT LAWNS AND OPEN SPACE</b> 03/15 - 06/01 & 08/01 - 10/15	<b>PennDOT D</b> - Tall Fescue	70	98	85	73
	<b>PennDOT C</b> - Creeping Red Fescue or Chewing Fescue	30	98	85	29
<b>PERMANENT SWALES AND PONDS</b> 03/15 - 06/01 & 08/01 - 10/15	<b>PennDOT C</b> - Crownvetch (5) - Annual Ryegrass (1)	45 55	99 98	70 90	19 24
	<b>PennDOT W</b> - Tall Fescue - Birdsfoot Trefoil (3) - Redtop	70 20 10	98 98 92	85 80 80	36 10 5

- use a combination of approved certified varieties with no one exceeding 50% of the total Ryegrass component.
- use a combination of approved certified varieties with no one variety exceeding 25% of the total Bluegrass component.
- use a combination of varieties (Viking, Empire, Norcen, Dawn, Leo, Bull, Maitland) with no one variety exceeding 50% of the total Trefoil component. Recommended 10% hard seed and 70% normal sprouts, except during August and September planting use 35% hard seed.
- if conditions warrant and it becomes necessary to plant outside the recommended dates, apply 50% of supplements at time of seeding and remainder within the next recommended planting period.
- Crownvetch portion of PennDOT C formula should be applied anytime except September and October.

**SPECIAL INSTRUCTIONS**

- Except under favorable conditions as determined by the Conservation District, DO NOT plant permanent mixture outside the specified planting dates. Instead use a temporary cover and then plant the permanent mixture during the next available planting period.

- Maximum weed content = 0.15%.
- Application of seed may be drilled, broadcast or hydroseeded in accordance with the current *Penn State Agronomy Guide*.

**FERTILIZER APPLICATION RATES**

- Pulverized Agricultural Limestone = 2-tons/acre
- 10-20-20 Analysis Commercial Fertilizer = 680-lb./acre
- 38-0-0 Ureaform Fertilizer = 240-lb./acre

**MULCH AND MAT APPLICATION**

- All seeded areas shall be mulched using an application of 3-tons/acre of straw (3" to 1" thick loosely distributed). On permanent cover areas anchor as follows: wood or cellulose fibers at 775-lb./acre OR non-asphalt emulsion at 120-lb./acre or at manufacturer's recommended application rate.
- In steep sloped areas or in vegetated channels, an erosion control mat shall be applied as specified in the plan.

**TREES AND SHRUBS**

- Plant trees no closer than 10-feet apart, shrubs no closer than 4-feet apart.
- Excavate holes at least 1-foot in all directions around root ball.
- Place plant in hole, remove burlap, backfill around root ball and lightly tamp.
- Place fertilizer stakes at drip zone per manufacturer's specifications.

NOTE: For Land Restoration follow procedures outlined in Penn State Extension Service's *Meadow and Prairie: Wildlife Friendly Alternatives to Lawns*, provided in the supplementary documents. The document provides suggested species as well as a list of available landscapers familiar with meadow planting.

**Pure Basin & Curb Inlet Filters**

Pure basin and curb inlet filters are the preferred choice for permanent inlet protection and stormwater runoff control. Constructed of versatile stainless steel, Pure inlet filters will fit any drainage structure and are available with site-specific filter bags providing various levels of filtration.

**Applications**

- Car washes
- Commercial
- Dock drains
- Industrial
- Gas stations
- Parking lots
- Dock drains
- Maintenance

**Features**

- Custom stainless steel frames are configured to fit into any drainage structure
- Flow and bypass rates meet specific inlet requirements
- Filter bags target site specific removal of trash, leaves, small particles, oil and grease
- Works below grade with bypass to drain area if bag is full
- Installs quickly and maintained with removal tool
- Stainless steel frame provides extended service life into any drainage structure
- Replaceable filter bags handle loads with a safety factor of five
- Meets stringent removal requirements:
  - FX bags rated >80% removal efficiency of street sweep-size particles
  - PC/PC+ bags have been tested to 99% TSS removal of OK-110 US Silica Sand and 97% TPH (total petroleum hydrocarbon) removal

NOTE: FX Filters to be used during construction. PC/PC+ Filters to be used post-construction.



SW-22

**Pure Inlet Filters Specification**

**Identification**

The installer shall inspect the plans and/or worksite to determine the quantity of each drainage structure casting type. The foundry casting number, exact grate size and clear opening size or other information will be necessary to finalize the part number and dimensions.

**Material and performance**

The filter is comprised of a stainless steel frame and a replaceable geotextile filter bag attached to the frame with a stainless steel locking band. The filter bag hangs suspended below the grate that shall allow full bypass flow into the drainage structure if the bag is completely filled with sediment. The standard woven polypropylene FX filter bags are rated for 200 gpm/sqft with a removal efficiency of 82% when filtering a USDA Sandy Loam sediment load. The post-construction PC filter bags are rated for 137 gpm/sqft and have been third-party tested at 99% TSS removal to 110 micron and 97% TPH removal of used motor oil hydrocarbon mix.

**Installation**

Remove the grate and clean the ledge of the frame to ensure it is free of stone and dirt. Hang the inlet filter's suspension hangers firmly on the casting's inside ledge. Replace the grate and confirm it is elevated no more than 1/8" (3 mm). For wall mount units, follow instructions for attaching the stainless steel mounting brackets using the provided concrete fasteners.

**Inspection Frequency**

Construction site inspection should occur following each 1/2" (12 mm) or more rain event. Post construction inspections should occur three times per year in areas with mild year round rainfall and four times per year in areas with summer rains. Industrial application site inspections should occur on a regular scheduled basis no less than three times per year.

**Maintenance guidelines**

Empty the filter bag if more than half filled with sediment and debris or as directed by the engineer. Remove the grate, engage the lifting bars or handles with the removal tool and lift from the structure. Dispose of the sediment or debris as directed by the engineer or maintenance contract in accordance with EPA guidelines.

As an alternative, an industrial vacuum may be used to collect the accumulated sediment. Remove any caked-on silt from the sediment bag and reverse flush the bag with medium spray for optimal filtration. Replace the bag if torn or punctured to 1/2" (12 mm) diameter or greater on the lower half of the bag. Post-construction PC/PC+ bags should be maintained prior to 50% oil saturation. The average 2'x2' PC filter bag will retain approximately 96 oz (2.8 l) of oil at which time it should be serviced or replaced. When utilizing the Clearcut Rubberizer Pouches in the PC+ bags note that these oil skimmers will gradually turn brown and solidify, indicating replacement is needed. Each pouch will absorb approximately 62 oz. (1.8 l) of oil before requiring replacement. The spent media may be recycled for its fuel value through waster to energy incineration. Dispose of oil-contaminated products in accordance with EPA guidelines.

**Filter bag replacement**

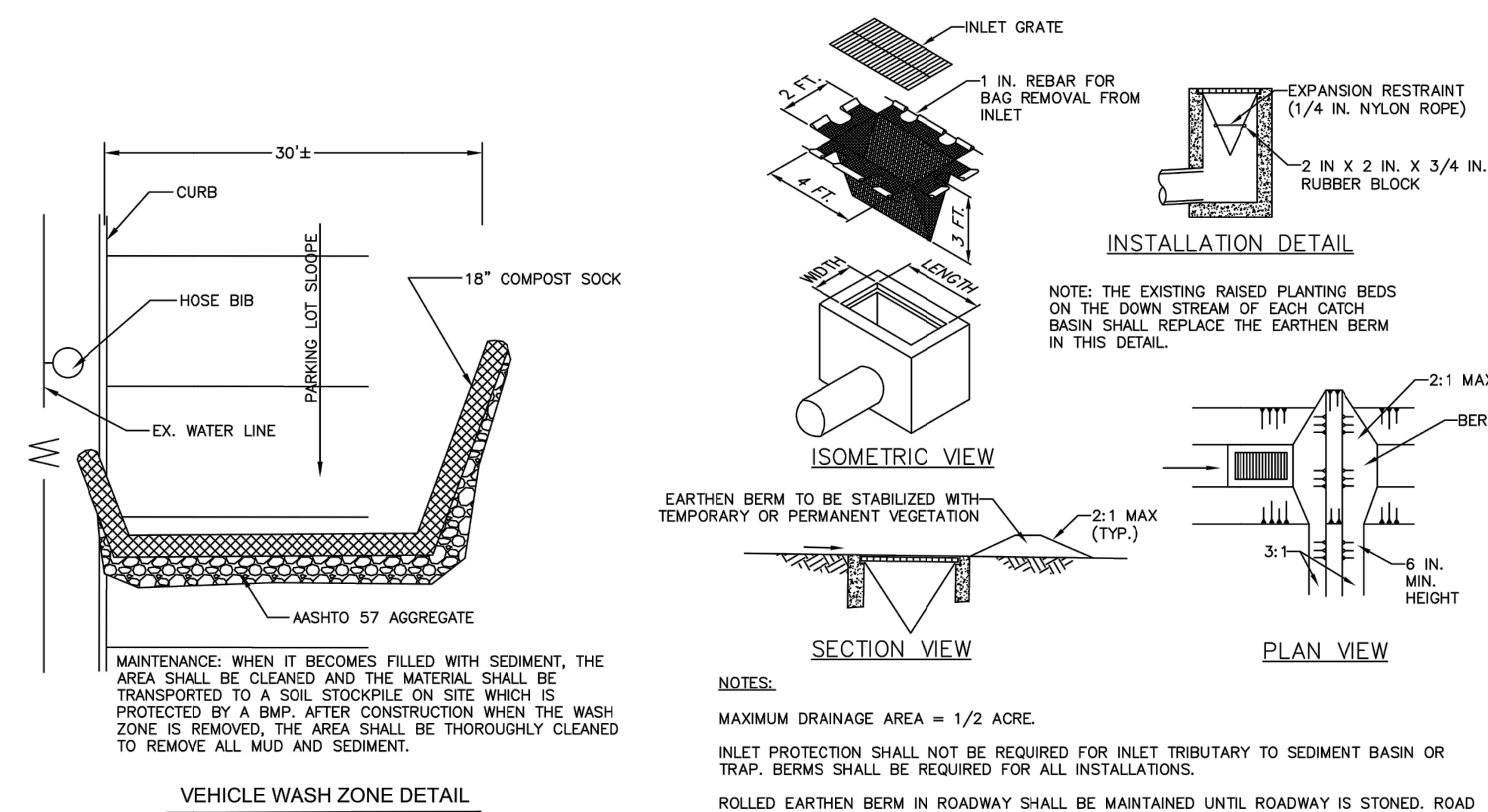
Remove the bag by loosening or cutting off the clamping band. Take the new filter bag, which is equipped with a stainless steel worm drive clamping band and use a screwdriver to tighten the bag around the frame channel. Ensure the bag is secure and there is not slack around the perimeter of the band.



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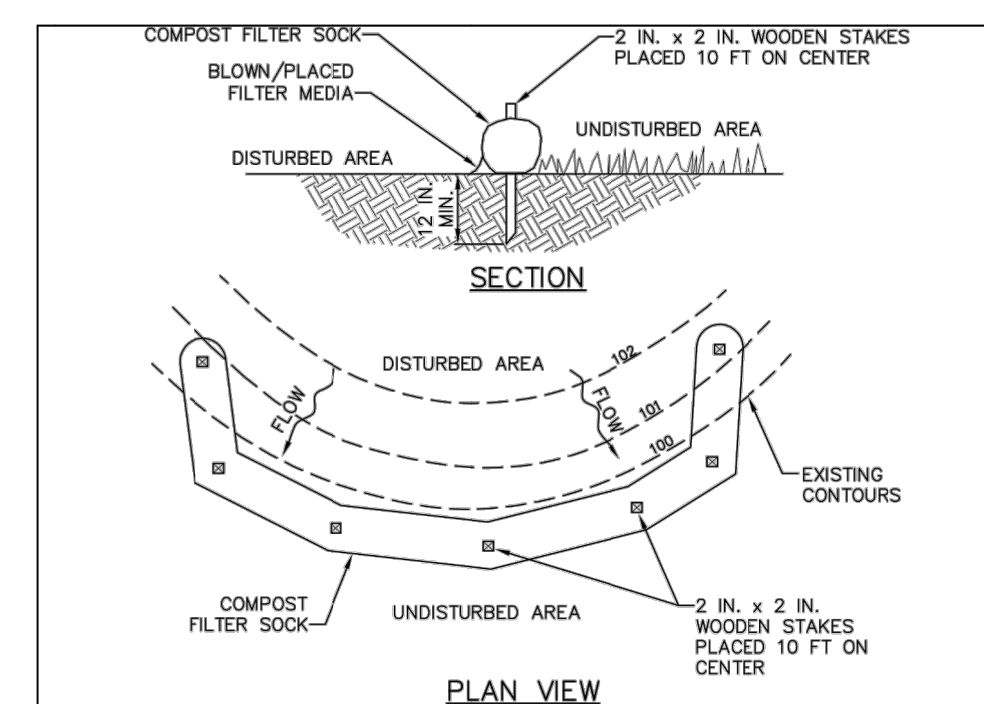
adspipe.com  
800-821-6710

SW-23



NOTE: MAXIMUM DRAINAGE AREA = 1/2 ACRE. INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS. ROLLED EARTHEN BERM IN ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR REMAIN PERMANENTLY. AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS. A MINIMUM BURST STRENGTH OF 220 LBS, AND A MINIMUM TRIANGULAR TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE. INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES. DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS. FILTERS SHALL REMAIN TO PROVIDE WATER QUALITY IMPROVEMENTS AFTER CONSTRUCTION.

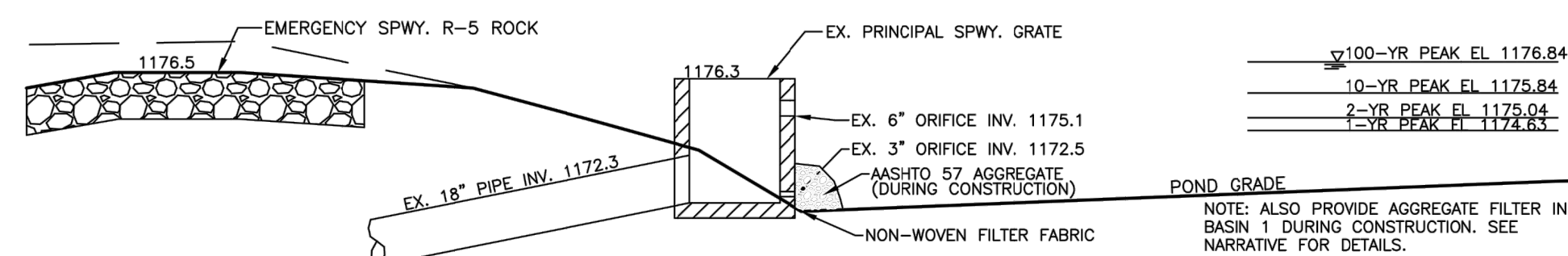
**STANDARD CONSTRUCTION DETAIL #4-16  
FILTER BAG INLET PROTECTION - TYPE M INLET**



NOTE: SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 40 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA. TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN. COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION. BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS. PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MESH SPREAD AS A SOIL SUPPLEMENT.

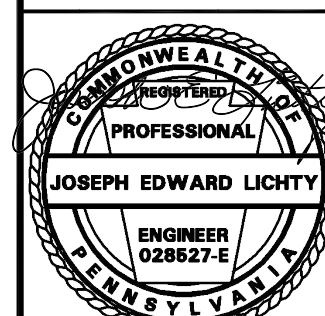
**STANDARD CONSTRUCTION DETAIL #4-1  
COMPOST FILTER SOCK**

NOT TO SCALE



**STORMWATER BASIN 2 DISCHARGE DETAILS  
TYPICAL EX. RETENTION BASIN OUTLET  
AGGREGATE FILTER DURING CONSTRUCTION**

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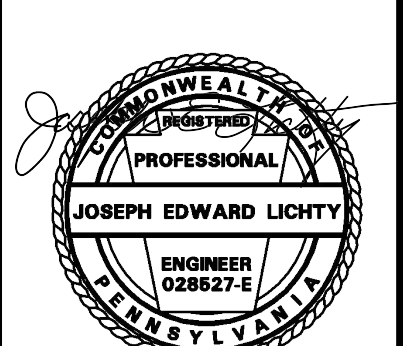
DRAWN BY: JEL  
1/22/2021

REVISIONS  
06/30/2022

SCALE: AS SHOWN

**Russian Church of Christ**  
3645 West College Ave - Ferguson Twp - Centre Co - PA  
**NPDES ESC PLAN - DETAILS SHEET**  
**FOR WEST COLLEGE AVENUE CHURCH IMPROVEMENTS**

2  
2



DRAWN BY: JEL  
11/10/2023

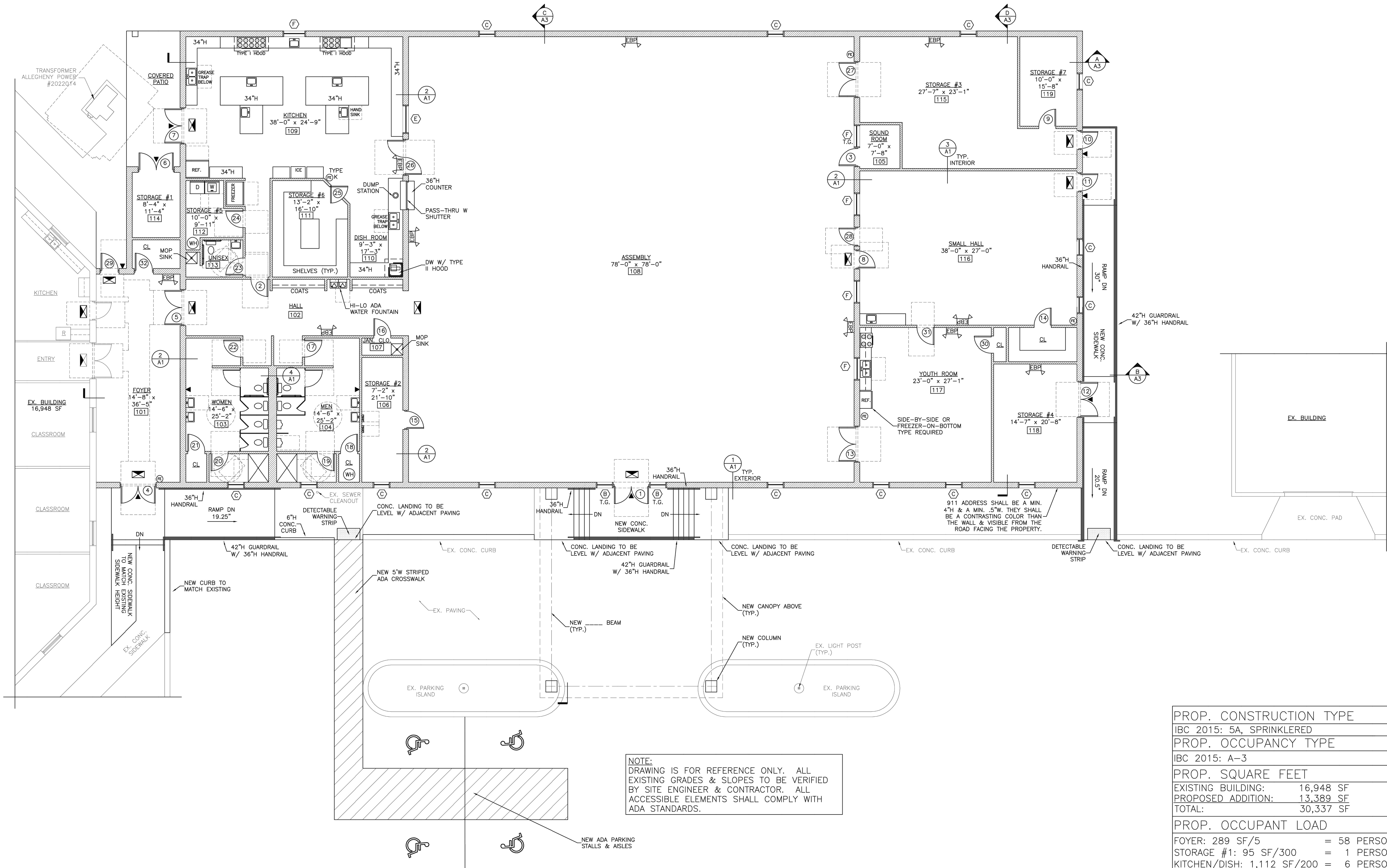
REVISIONS

SCALE: AS SHOWN

ORIGINAL DATE OF ZONING PERMIT APPLICATION  
02/09/2022

**SALVATION BAPTIST CHURCH**  
3645 West College Ave - Ferguson Twp - Centre Co - PA  
**FINAL LAND DEVELOPMENT PLAN UPDATE**  
**NPDES EROSION AND SEDIMENTATION CONTROL PLAN**  
**DETAILS SHEET**

7  
11



PROPOSED FLOOR PLAN  
SCALE: 1/8" = 1'-0"

NOTE:  
DRAWING IS FOR REFERENCE ONLY. ALL  
EXISTING GRADES & SLOPES TO BE VERIFIED  
BY SITE ENGINEER & CONTRACTOR. ALL  
ACCESSIBLE ELEMENTS SHALL COMPLY WITH  
ADA STANDARDS.

**LEGEND**

- NEW WALL
- EXIT SIGN
- EMERGENCY LIGHT BATTERY PACK
- REMOTE HEAD
- FIRE EXTINGUISHER

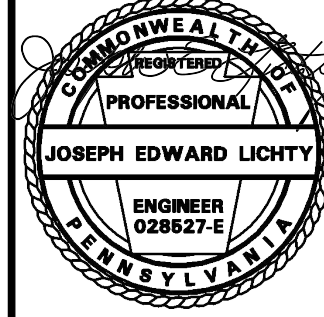
<b>PROP. CONSTRUCTION TYPE</b>	
IBC 2015: 5A, SPRINKLERED	
<b>PROP. OCCUPANCY TYPE</b>	
IBC 2015: A-3	
<b>PROP. SQUARE FEET</b>	
EXISTING BUILDING:	16,948 SF
PROPOSED ADDITION:	13,389 SF
TOTAL:	30,337 SF
<b>PROP. OCCUPANT LOAD</b>	
FOYER: 289 SF/5	= 58 PERSONS
STORAGE #1: 95 SF/300	= 1 PERSON
KITCHEN/DISH: 1,112 SF/200	= 6 PERSONS
STORAGE #5: 89 SF/300	= 1 PERSON
STORAGE #6: 213 SF/300	= 1 PERSON
SOUND: 54 SF/100	= 1 PERSON
STORAGE #2: 157 SF/300	= 1 PERSON
ASSEMBLY: 6,084 SF/15	=406 PERSONS
STORAGE #3: 650 SF/300	= 3 PERSONS
SMALL HALL: 1,026 SF/15	= 69 PERSONS
YOUTH ROOM: 623 SF/15	= 42 PERSONS
STORAGE #4: 302 SF/300	= 2 PERSONS
STORAGE #7: 157 SF/300	= 1 PERSON
TOTAL:	=592 PERSONS



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(814) 238-0710

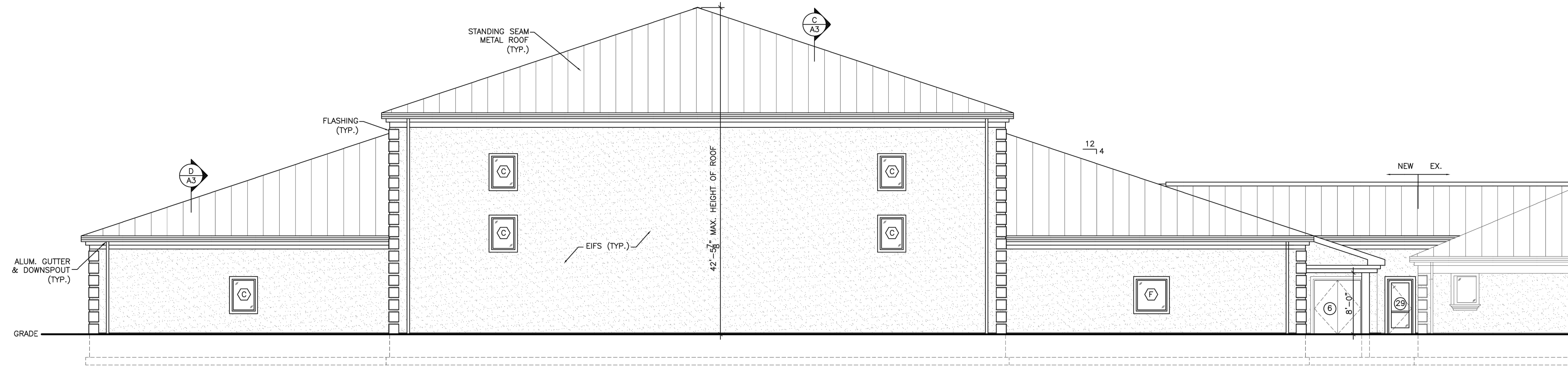
PROJECT  
RUSSIAN BAPTIST CHURCH ADDITION  
3645 W. COLLEGE AVE.  
STATE COLLEGE, PA 16801

REVISION DATE	
SHEET TITLE	PROP. FLOOR PLAN W/ RAMPS & STAIRS
DATE	07/12/21
SCALE	AS NOTED
DRAWN BY:	MTM
CHECKED BY:	AAD
SHEET NO.	A1
PROJECT #	020-141

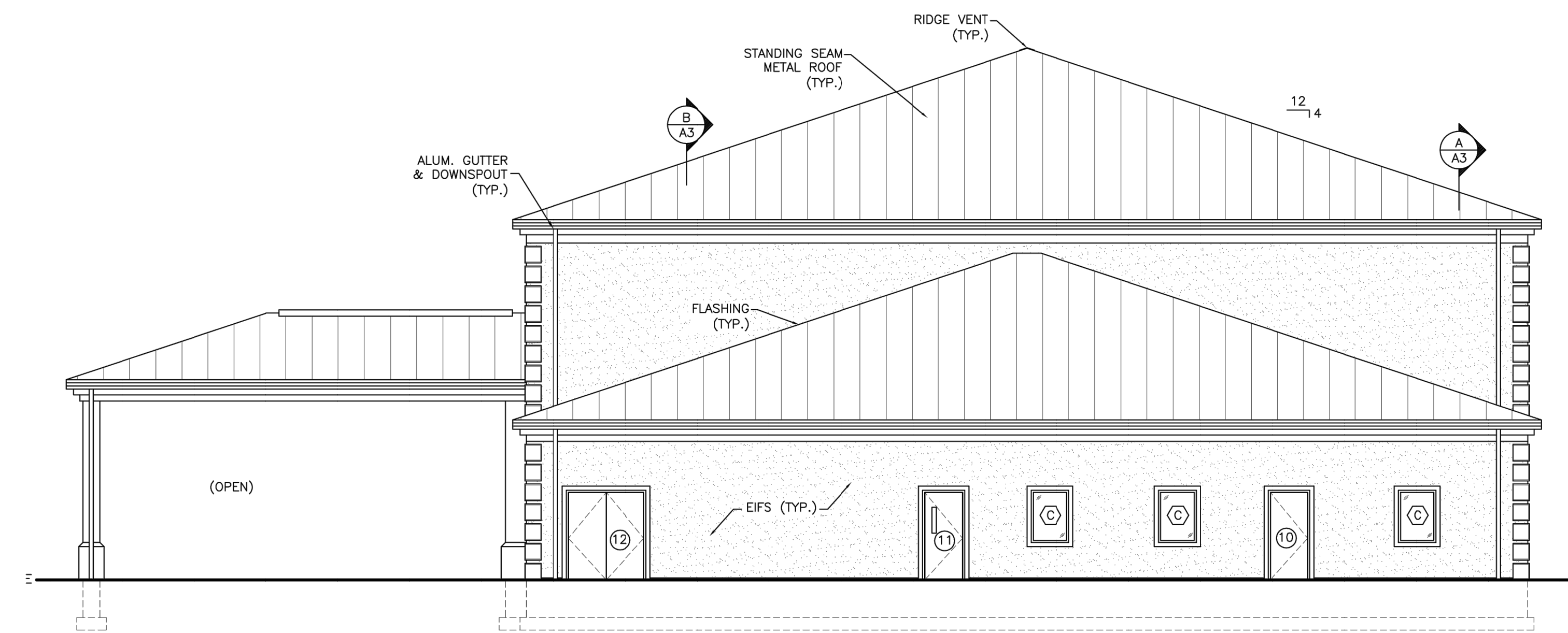


DRAWN BY: JEL	11/02/2023	SOURCE:	Albert A. Drobka, Architect
REVISIONS		SCALE:	AS SHOWN
ORIGINAL DATE OF ZONING PERMIT APPLICATION	02/09/2023		

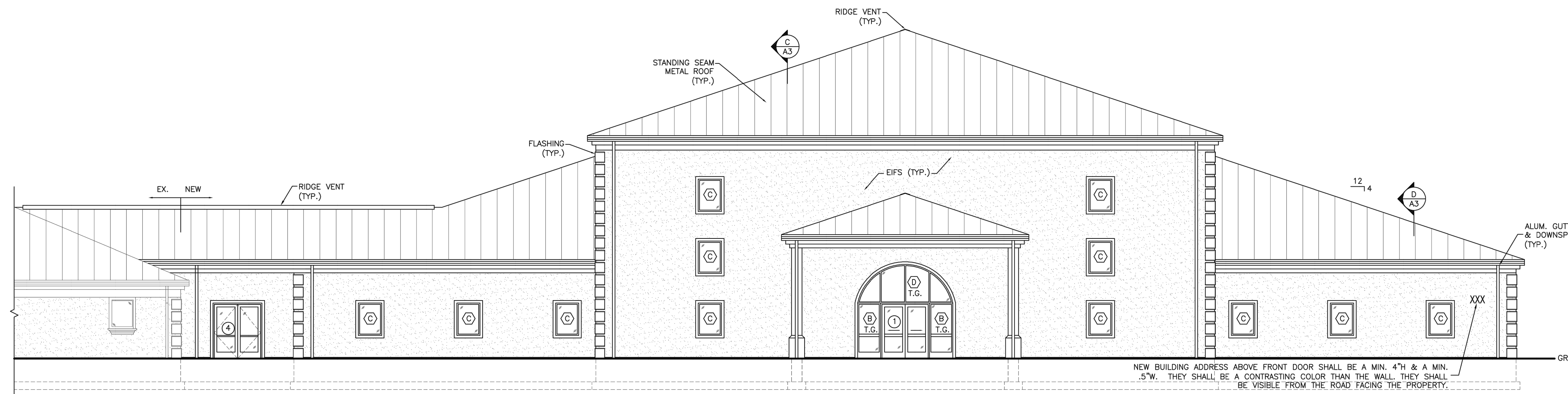




PROPOSED NORTH ELEVATION  
SCALE: 1/8" = 1'-0"



PROPOSED EAST ELEVATION  
SCALE: 1/8" = 1'-0"



PROPOSED SOUTH ELEVATION  
SCALE: 1/8" = 1'-0"



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STATE COLLEGE, PA.  
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PROJECT  
RUSSIAN BAPTIST CHURCH ADDITION  
3645 W. COLLEGE AVE.  
STATE COLLEGE, PA 16801

REVISION DATE

SHEET TITLE  
PROPOSED  
EXTERIOR  
ELEVATIONS

DATE  
02/11/21

SCALE  
AS NOTED

DRAWN BY:  
LDC

CHECKED BY  
AAD

SHEET NO.

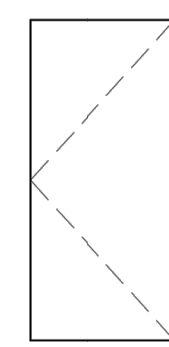
A2

PROJECT #

020-141

DOOR SCHEDULE											
#	TYPE	MATL	WIDTH	HEIGHT	THICK	FINISH	HDW	GRP	FRAME FINISH	LITE	REMARKS
1	B	INSULATED METAL	12'-0"	14'-0"	1 3/4"	PAINT	2		PAINT		OVERHEAD GARAGE DOOR
2	B	INSULATED METAL	12'-0"	14'-0"	1 3/4"	PAINT	2		PAINT		OVERHEAD GARAGE DOOR
3	B	INSULATED METAL	12'-0"	14'-0"	1 3/4"	PAINT	2		PAINT		OVERHEAD GARAGE DOOR
4	A	INSULATED METAL	3'-0"	6'-8"	1 3/4"	PAINT	1		PAINT		
5	A	INSULATED METAL	3'-0"	6'-8"	1 3/4"	PAINT	1		PAINT		

**DOOR TYPES**



DOOR TYPE: A  
3/0x6/8x1 3/4  
INSULATED METAL  
U-VALUE OF .77  
OR BETTER

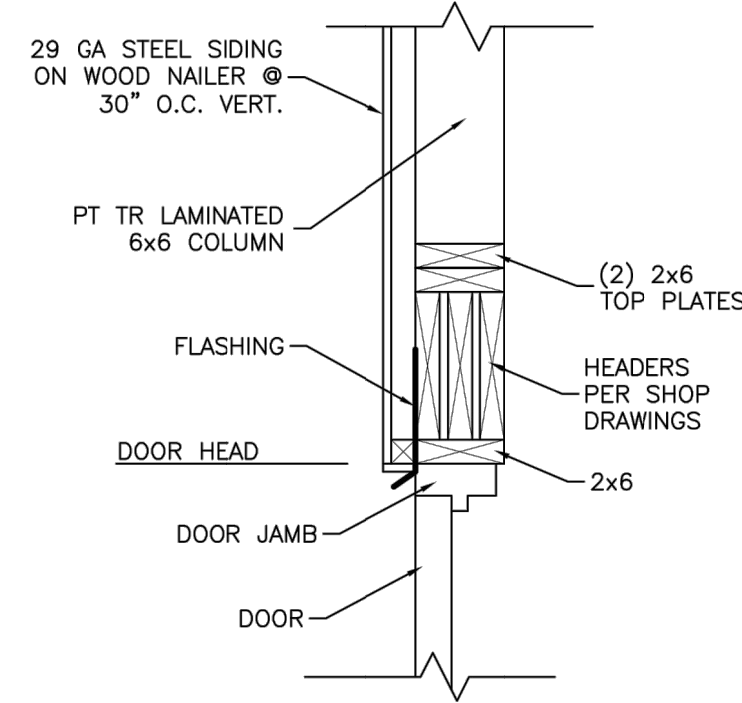


DOOR TYPE: B  
12'0x14'0x1 3/4  
HOLLOW METAL  
OVERHEAD DOOR  
U-VALUE OF .77  
OR BETTER

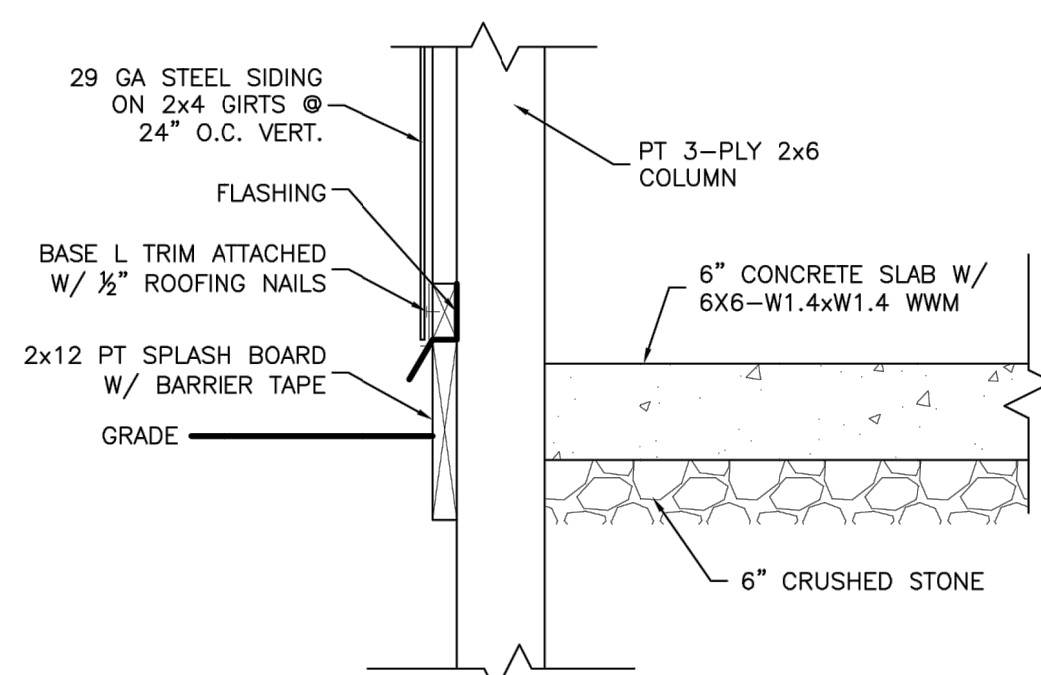
**HARDWARE TYPES**

**HARDWARE SET #1**  
3 EA. HINGES  
THRESHOLD  
WEATHER STRIPPING  
CLOSER  
LEVER HANDLES  
DEADBOLT

**HARDWARE SET #2**  
STANDARD HARDWARE  
FROM DOOR MANUFACT.



**DOOR FLASHING DETAIL**  
SCALE: 1" = 1'-0"

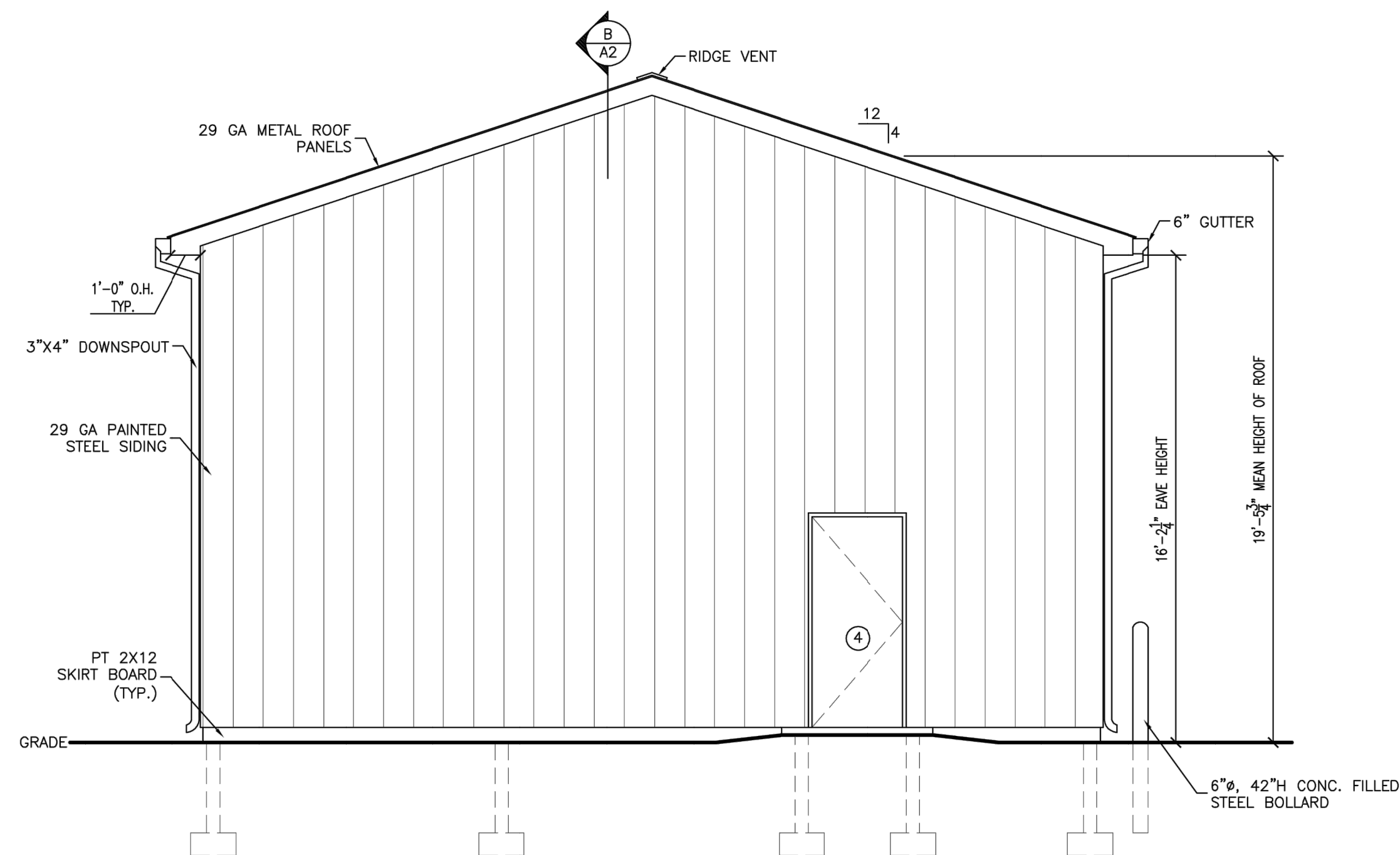


**FLOOR FLASHING DETAIL**  
SCALE: 1" = 1'-0"

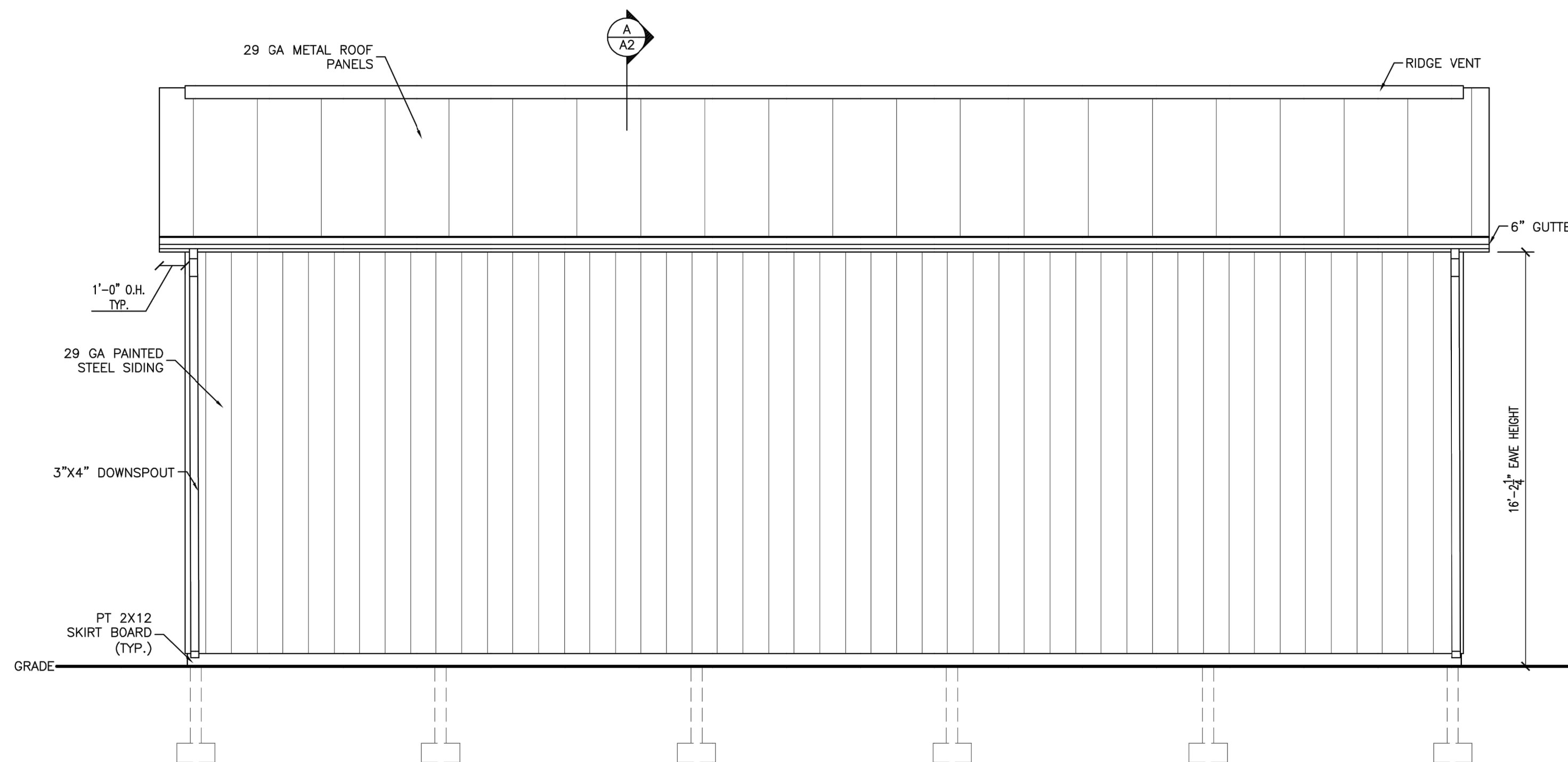
FINISH SCHEDULE									
ROOM	AREA	FLOOR	NORTH WALL	SOUTH WALL	EAST WALL	WEST WALL	CEILING	REMARKS	
		MATL	BASE	MATL	FINISH	MATL	FINISH	MATL	HEIGHT
100	GARAGE	CO	-	EXP	-	EXP	-	EXP	16'-0"

**ABBREVIATIONS**  
CO = CONCRETE  
EXP = EXPOSED

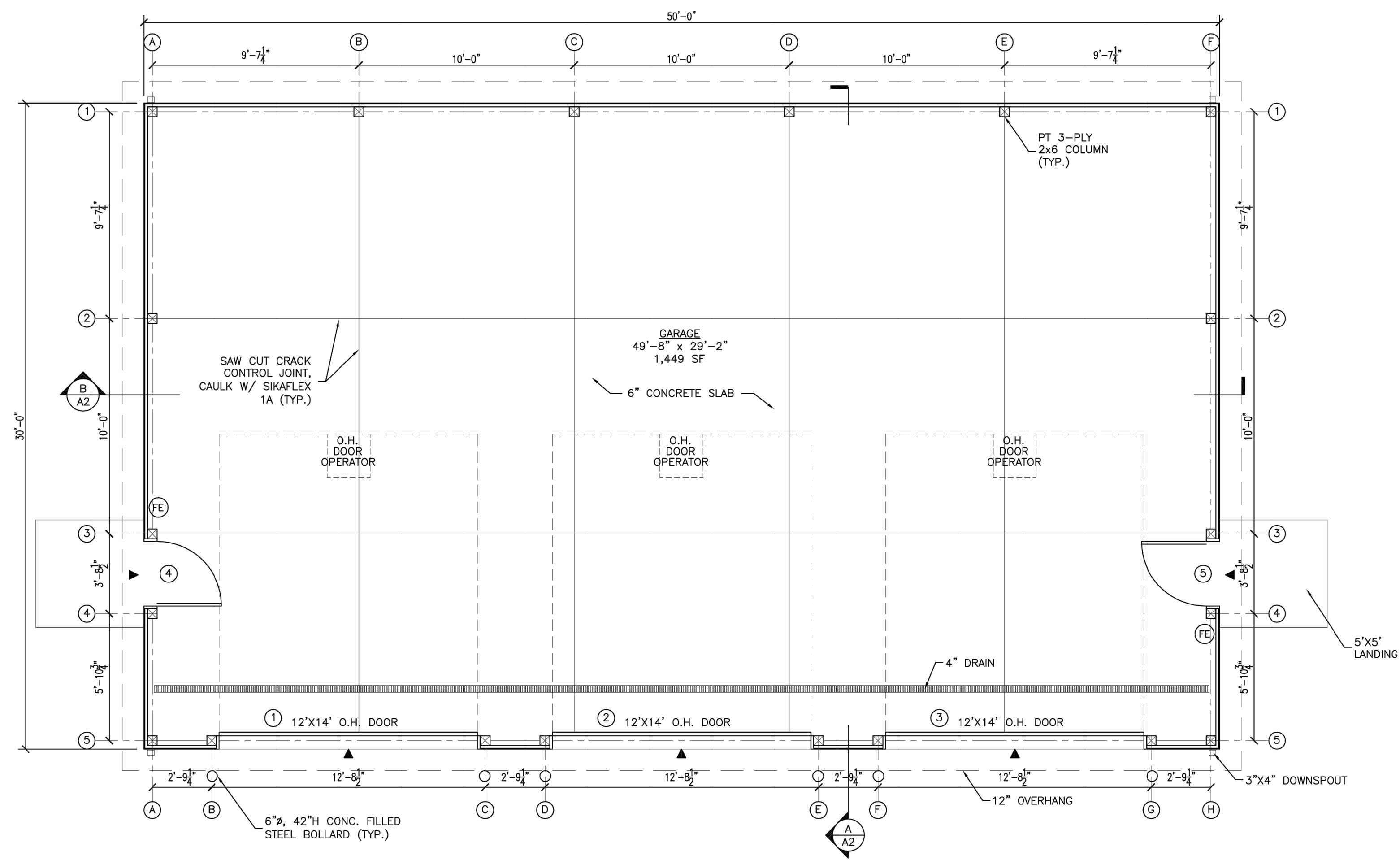
**NOTES:**  
1. ALL INTERIOR FINISHES SHALL HAVE A FLAME SPREAD OF 200 OR LESS.  
2. OWNER TO SELECT ALL COLORS & FINISHES, UNLESS OTHERWISE NOTED.



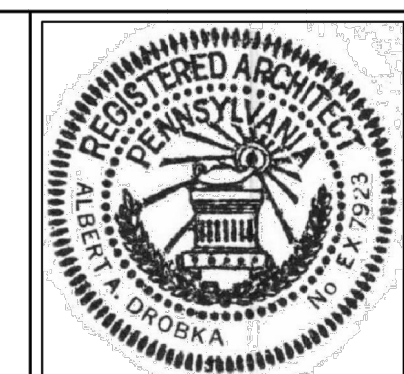
**PROPOSED NORTH ELEVATION**  
SCALE: 1/4" = 1'-0"



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



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



**ALBERT A. DROBKA ARCHITECT**  
P.O. BOX 256  
1352 S. ATHERTON ST.  
STATE COLLEGE, PA.  
(814) 238-0710

**PROJECT**  
RBC POLE BARN  
3645 W. COLLEGE AVE.  
STATE COLLEGE, PA 16801

**REVISION DATE**

**SHEET TITLE**  
PROPOSED  
FLOOR PLAN &  
ELEVATIONS

LEGEND	
(FE)	FIRE EXTINGUISHER
(RH)	REMOTE HEAD
CONSTRUCTION TYPE	DATE 01/19/21
IBC 2015: 5B	SCALE AS NOTED
OCCUPANCY TYPE	DRAWN BY: SN
IBC 2015: U	CHECKED BY: AAD
SQUARE FOOTAGE	SHEET NO.
1,449 SF	A1
OCCUPANT LOAD	PROJECT #
NO OCCUPANCY	021-05



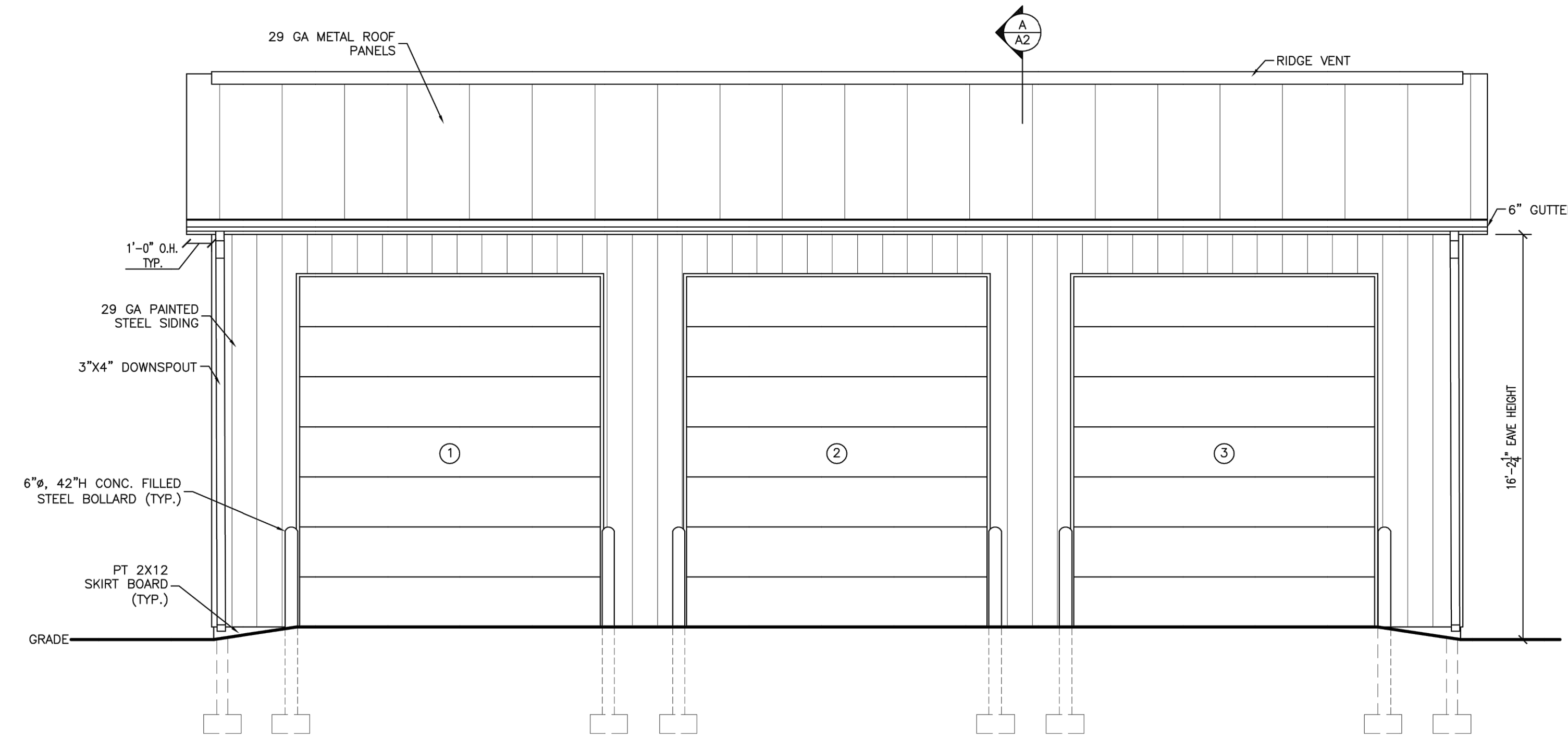
**DRAWN BY:** JEL  
11/10/2023

**REVISIONS**

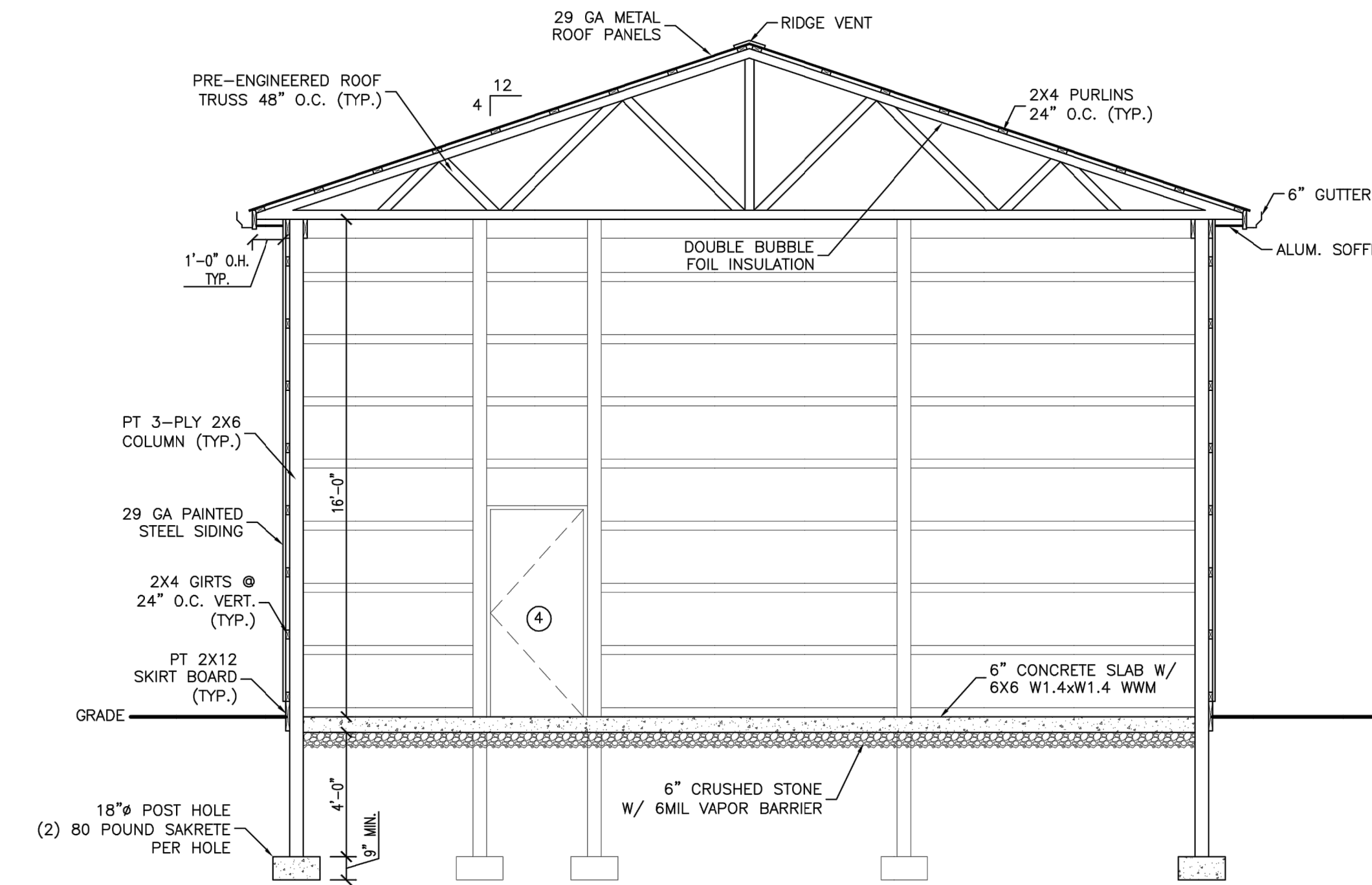
**ORIGINAL DATE OF ZONING PERMIT APPLICATION:**  
02/09/2023

Salvation Baptist Church  
3645 West College Ave - Ferguson Twp - Centre Co - PA

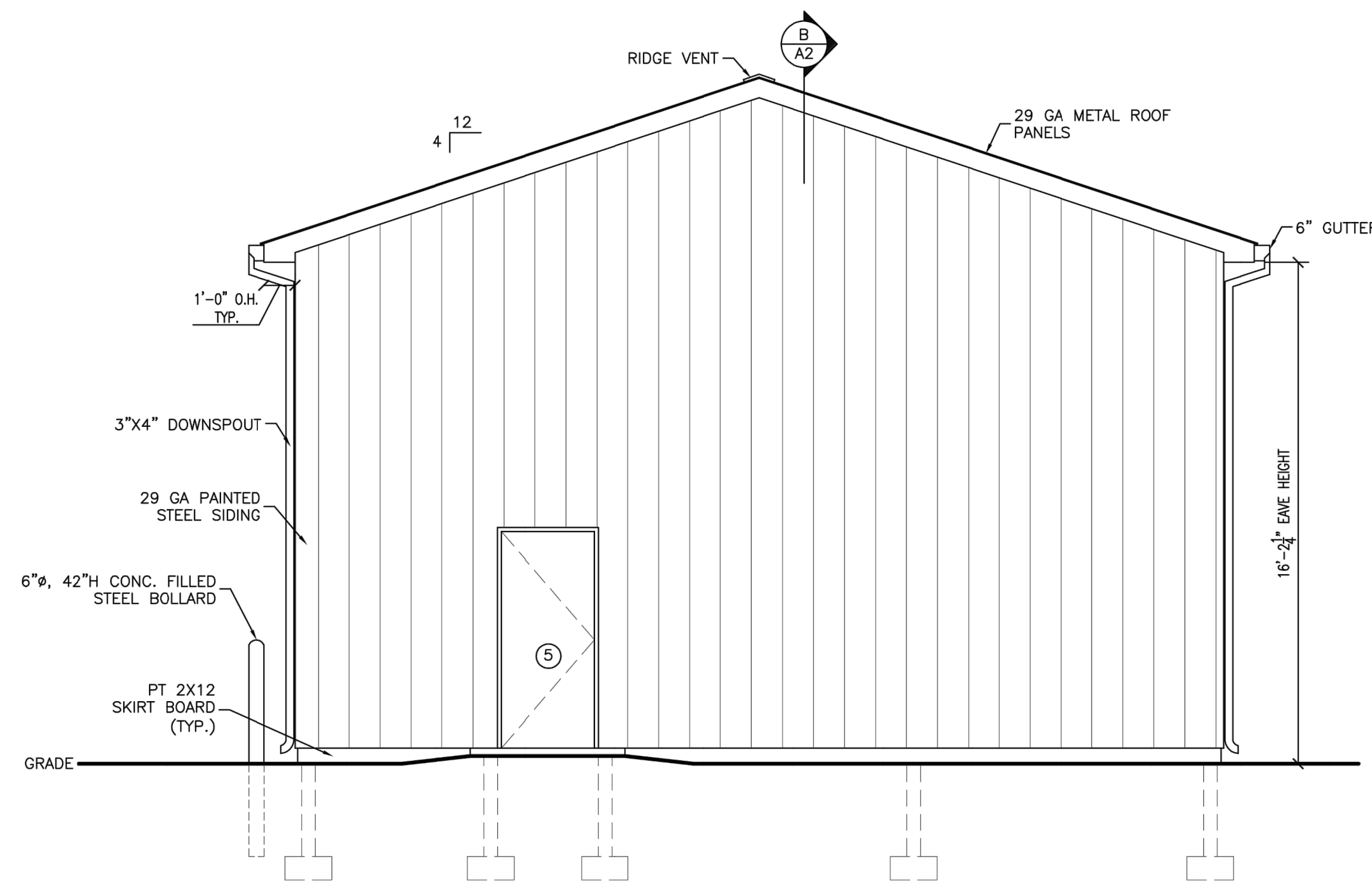
**FINAL LAND DEVELOPMENT PLAN UPDATE**  
**ARCHITECTURAL SHEET 3 - NEW GARAGE FLOOR PLAN**



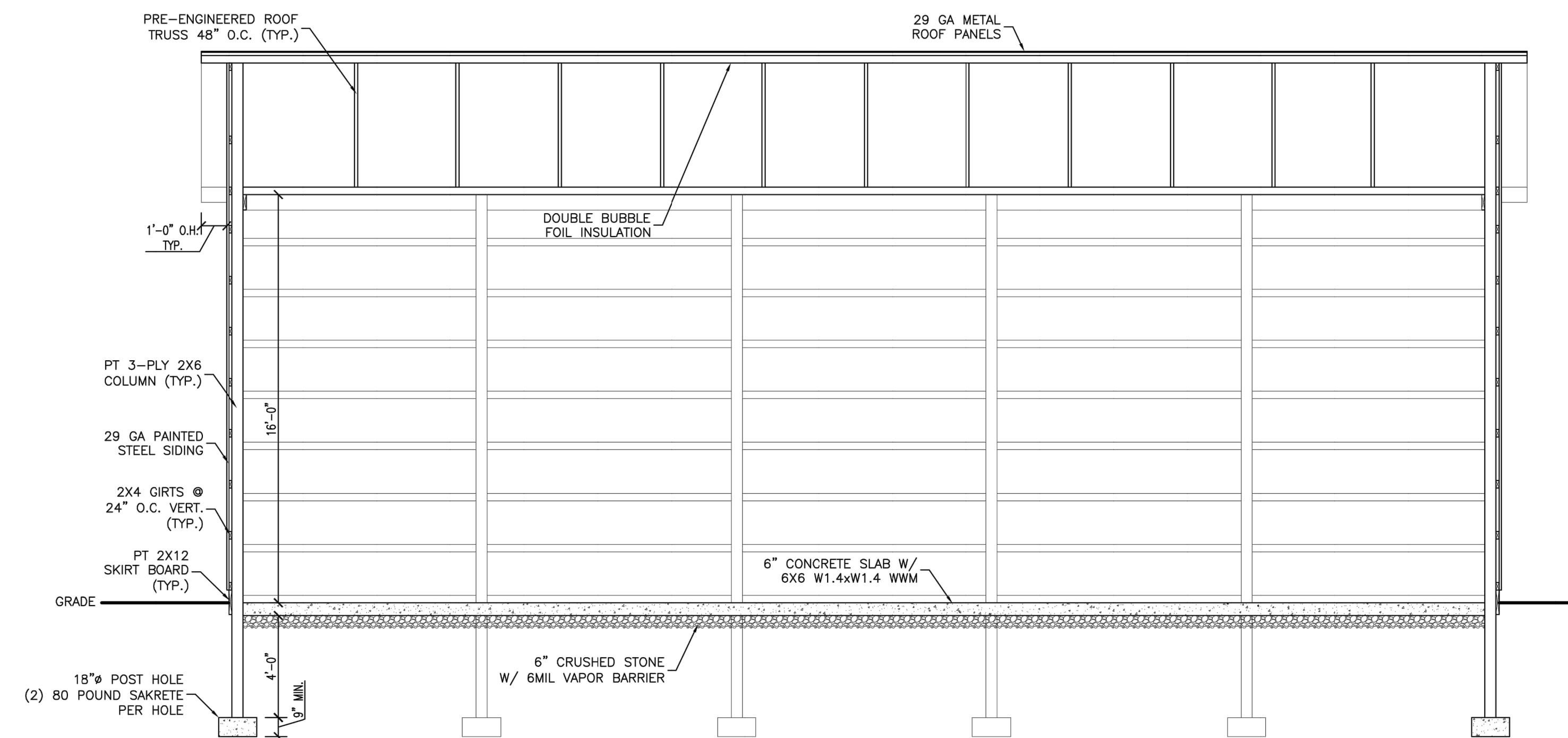
PROPOSED WEST ELEVATION  
SCALE: 1/4" = 1'-0"



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



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



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



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PROJECT  
RBC POLE BARN  
3645 W. COLLEGE AVE.  
STATE COLLEGE, PA 16801

REVISION DATE

SHEET TITLE  
PROPOSED SECTIONS & ELEVATIONS

DATE  
01/19/21  
SCALE  
AS NOTED  
DRAWN BY:  
SN  
CHECKED BY:  
AAD  
SHEET NO.

A2  
PROJECT #  
021-05