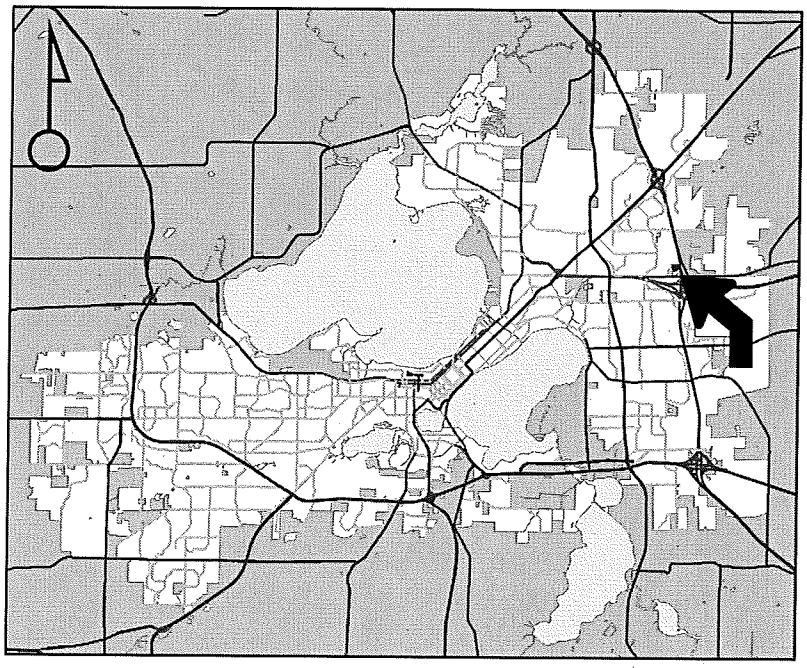
City of Madison

Conditional Use



Location
734 Holy Cross Way

Project Name
Holy Cross Lutheran Building Addition

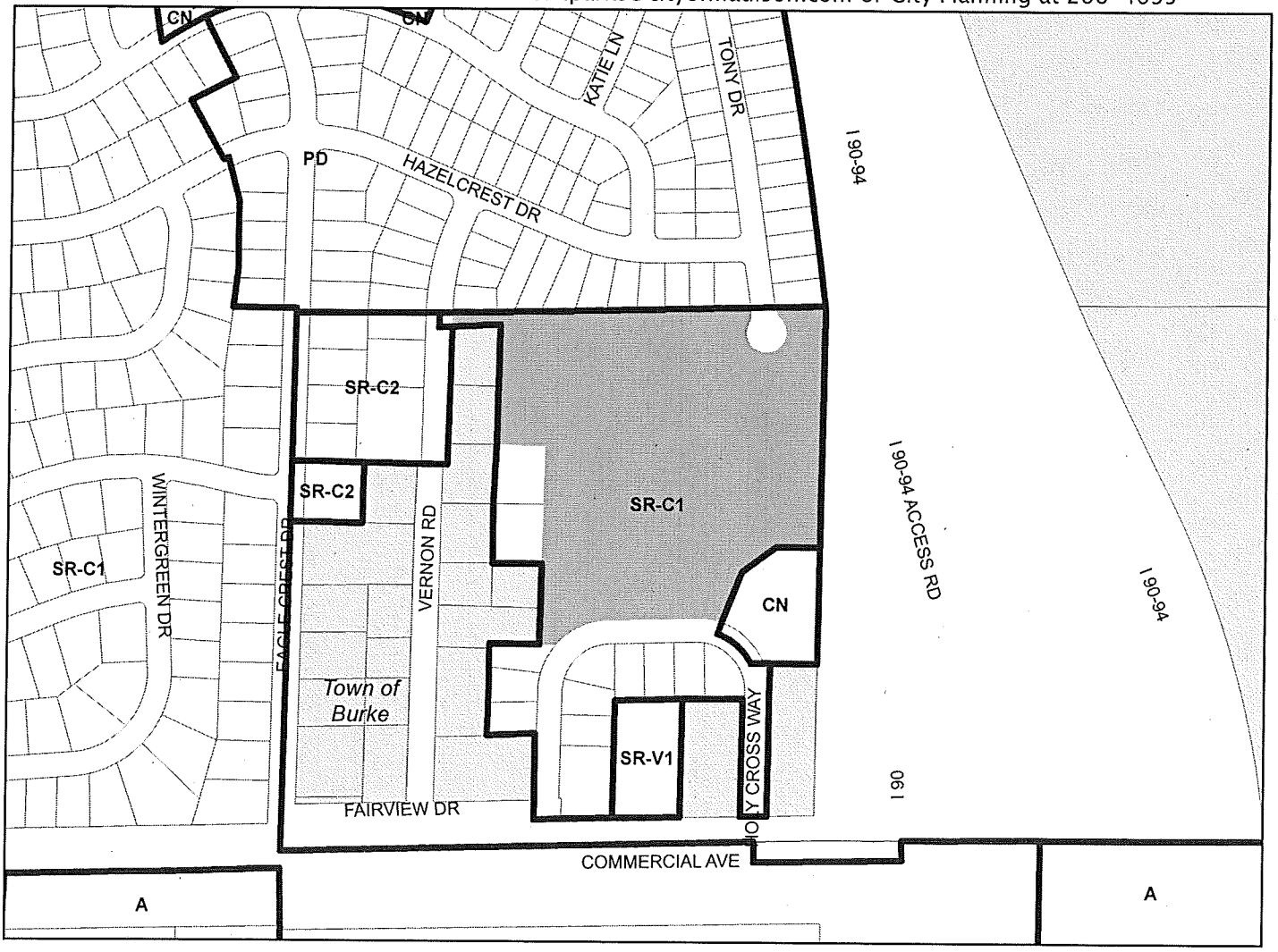
Applicant
Pastor Mark Bartels, Jason Daye, Excel Engineering

Existing Use
Church

Proposed Use
Construct addition to place of worship and school exceeding 10,000 sq. ft.

Public Hearing Date
Plan Commission
05 June 2017

For Questions Contact: Tim Parks at: 261-9632 or tparks@cityofmadison.com or City Planning at 266-4635

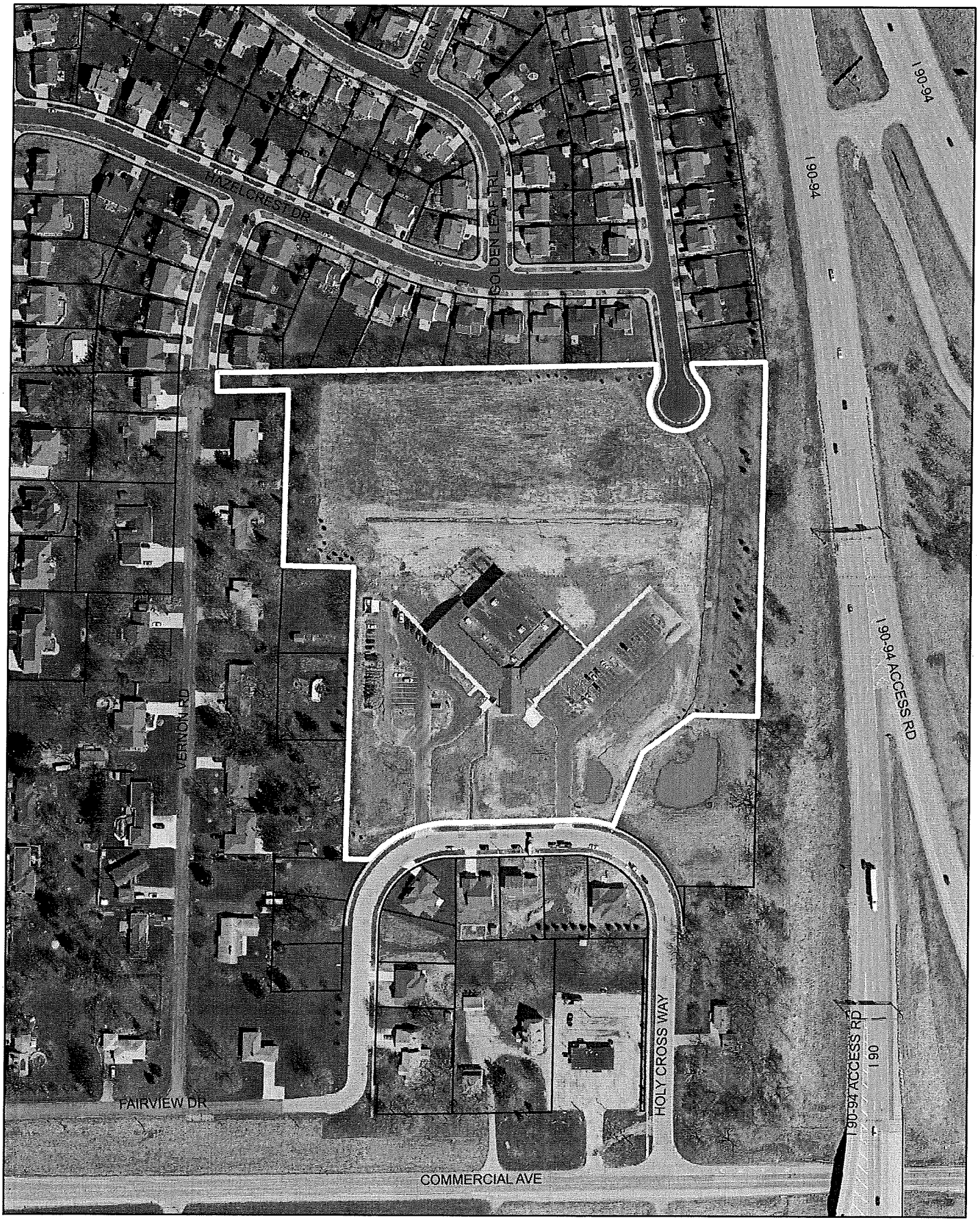


Scale : 1" = 400'

City of Madison, Planning Division : PPE : Date : 30 May 2017

City of Madison

734 Holy Cross Way



Date of Aerial Photography : Spring 2016

LAND USE APPLICATION LND-B

City of Madison
Planning Division
126 S. Hamilton St.
P.O. Box 2985
Madison, WI 53701-2985
(608) 266-4635

FOR OFFICE USE ONLY:

Paid $950 Receipt # 029191-0006

Date received 4/19/17

Received by

Parcel # 0810-344-0414-5

Aldermanic district 17 - Baldeh

Zoning district SR-C1

Special requirements Gx. Cu

Review required by

☐ UDC ☐ PC

☐ Common Council ☐ Other

Reviewed By

All Land Use Applications must be filed with the Zoning Office at the above address.

This completed form is required for all applications for Plan Commission review except subdivisions or land divisions, which should be filed using the Subdivision Application found on the City's web site.

1. Project Information

Address: 734 Holy Cross Way

Title: Holy Cross Lutheran Building Addition

2. This is an application for (check all that apply)

☐ Zoning Map Amendment (rezoning) from _____ to _____

☐ Major Amendment to an Approved Planned Development-General Development Plan (PD-GDP) Zoning

☐ Major Amendment to an Approved Planned Development-Specific Implementation Plan (PD-SIP)

☐ Review of Alteration to Planned Development (PD) (by Plan Commission)

☒ Conditional Use or Major Alteration to an Approved Conditional Use

☐ Demolition Permit

☐ Other requests

3. Applicant, Agent and Property Owner Information

Applicant name Pastor Mark Bartels Company Holy Cross Lutheran Church

Street address 2670 Milwaukee Street City/State/Zip Madison, WI 53704

Telephone 608-249-3101 Email mbartels@holycrossmadison.org

Project contact person Jason Daye Company Excel Engineering, Inc.

Street address 100 Camelot Drive City/State/Zip Fond du Lac, WI 54935

Telephone 920-926-9800 Email jason.d@excelengineer.com

Property owner (if not applicant) Same as applicant

Street address _____ City/State/Zip _____

Telephone _____ Email _____

4. Project Description

Provide a brief description of the project and all proposed uses of the site:

Project is a 13,660 SF building addition to be used for worship. A drive-up lane and pedestrian access will also be provided.

Scheduled start date 8/1/2017 Planned completion date 7/30/2018

5. Required Submittal Materials

Refer to the Land Use Application Checklist for detailed submittal requirements.

☒ Filing fee	☒ Pre-application notification	☒ Land Use Application Checklist (LND-C)
☒ Land Use Application	☒ Vicinity map	☒ Supplemental Requirements
☒ Letter of intent	☒ Survey or existing conditions site plan	☒ Electronic Submittal*
☒ Legal description	☒ Development plans	

**Electronic copies of all items submitted in hard copy are required. Individual PDF files of each item submitted should be compiled on a CD or flash drive, or submitted via email to pcapplications@cityofmadison.com. The email must include the project address, project name, and applicant name. Electronic submittals via file hosting services (such as Dropbox.com) are not allowed. Applicants who are unable to provide the materials electronically should contact the Planning Division at (608) 266-4635 for assistance.*

For concurrent UDC applications a separate pre-application meeting with the UDC Secretary is required prior to submittal. Following the pre-application meeting, a complete UDC Application form and all other submittal requirements must be submitted to the UDC Secretary. An electronic submittal, as noted above, is required. Electronic submittals should be compiled on a CD or flash drive, or sent via email to udcapplications@cityofmadison.com.

6. Applicant Declarations

☒ **Pre-application meeting with staff.** Prior to preparation of this application, the applicant is strongly encouraged to discuss the proposed development and review process with Zoning and Planning Division staff. Note staff persons and date.

Planning staff Tim Parks Date 03/02/2017

Zoning staff Jenny Kirchgatter Date 03/02/2017

☐ Demolition Listserv

☐ Public subsidy is being requested (indicate in letter of intent)

☒ **Pre-application notification:** The zoning code requires that the applicant notify the district alder and any nearby neighborhood and business associations **in writing** no later than **30 days prior to FILING this request.** List the alderperson, neighborhood association(s), business association(s), AND the dates you sent the notices:

02/20/2017 - Alderperson Baldeh

02/20/2017 - Ridgewood Neighborhood Association

The alderperson and the Director of Planning & Community & Economic Development may reduce the 30-day requirement or waive the pre-application notification requirement altogether. Evidence of the pre-application notification is required as part of the application materials. A copy of the notification letters or any correspondence granting a waiver is required as part of the application materials.

The applicant attests that this form is accurately completed and all required materials are submitted:

Name of applicant Pastor Mark Bartels Relationship to property Owner

Authorizing signature of property owner Pastor Mark Bartels Date 3/30/17

April 18, 2017

City of Madison
215 Martin Luther King Jr. Blvd.
Madison, WI 53701-2985

Attn: Kevin Firchow
Re: Holy Cross Lutheran Church Building Addition - Letter of Intent

Mr. Firchow,

The following is a brief Narrative of the proposed project for Holy Cross Lutheran Church on Holy Cross Way.

Holy Cross Lutheran Church is requesting approval of a building addition totaling 13,660s.f. with a canopy and new drive up entrance. The 12.29 acre site is located at 734 Holy Cross Way in Madison, Wisconsin. Excel Engineering is acting as the architect and engineers for the project. Catalyst Construction will perform the construction. Below is the contact information each party.

Land Owner:
Holy Cross Lutheran
Pastor Mark Bartels
P: 602.249.3101
2370 Milwaukee St
Madison, WI 53704

Contractor:
Catalyst Construction
Contact: Jeff Wheeler
P: 414.727.6840
833 E. Michigan St
Milwaukee, WI 53202

Architect/Engineer
Excel Engineering, Inc.
Engineer: Elizabeth LeRoy
P: 920.322.1692
Architect: David Vanden Avond
P: 920.322.1674
100 Camelot Drive
Fond du Lac, WI 54935

The existing site was recently developed with a school, gymnasium, and a temporary worship space with plans to provide a building expansion to house the permanent sanctuary in the near future. The existing site provides 86 parking stalls located on the eastern and western sides of the existing 29,812s.f. building. Two drive entrances off of Holy Cross Way provides access to the site. In addition to the sanctuary addition, the existing site was developed with plans to provide two additional building additions off of the existing structure.

The proposed building addition will provide a large worship space along with a conference room, gathering space, and fireside room. The building addition exterior materials will be cohesive with the existing structure. A drop off lane will be provided under the canopy of the west side of the building near the main entrance. Two pedestrian sidewalks will be extended from the site to the public sidewalk along Holy Cross Way. In addition to the existing 86 parking stalls onsite, 14 bike stalls will be

provided. Additionally, site landscaping will be provided to enhance the overall site appearance.

Existing Site Data			
	Area (ac)	Area (sf)	Ratio
Project Site	12.29	535,428	
Building Floor Area	0.68	29,812	5.6%
Pavement	1.60	69,540	13.0%
Total Impervious	2.28	99,352	18.6%
Landscape/Open Space	10.01	436,076	81.4%
Proposed Site Data			
	Area (ac)	Area (sf)	Ratio
Project Site	12.29	535,428	
Building Floor Area	1.00	43,472	8.1%
Pavement	1.69	73,554	13.7%
Total Impervious	2.69	117,026	21.9%
Landscape/Open Space	9.61	418,402	78.1%

A regional stormwater management pond located to the east of the site was designed to include the proposed development and provides water quality and peak discharge reduction. The regional pond does not provide infiltration therefore, the original site design provides two biofiltration basins to meet this requirement. The biofiltration basins are located on the north and southeastern corner of the site and were sized to include all future developments. All post construction stormwater management requirements are met. The storm sewer was designed per DCOMM requirements and using Manning's Equation. The basin map, DCOMM calculations, and pipe sizing schedule is enclosed for reference.

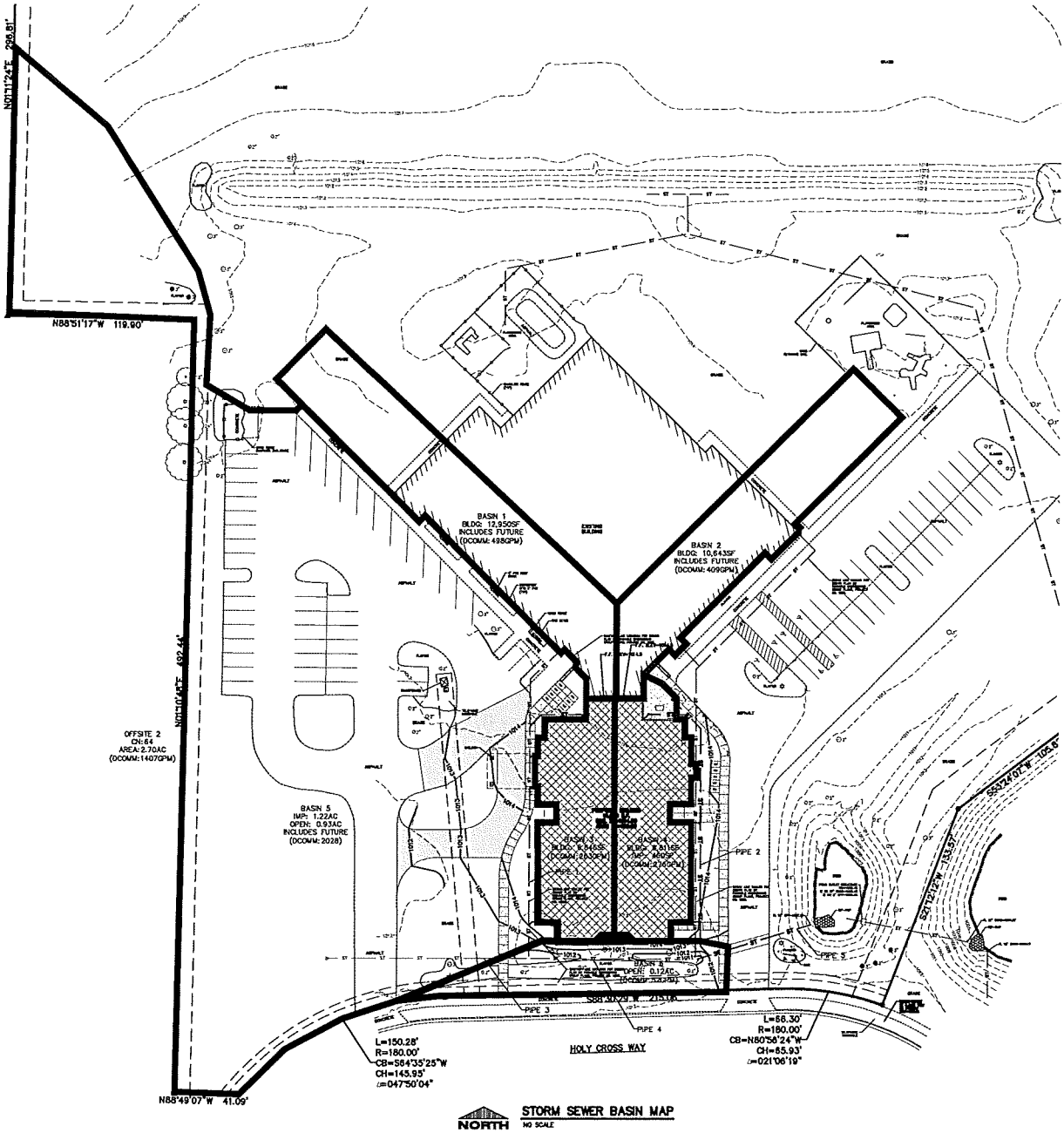
The construction for the development is planned to commence on August 1, 2017 and completed by July 21, 2018. The estimated project cost is $3,000,000.

If you have any questions or need any additional information please contact me at any time.

Sincerely,

Excel Engineering, Inc.

Elizabeth LeRoy


N01°11'24"E 299.61'
N88°51'17"W 119.90'
N01°10'45"E 692.44'
N88°49'07"W 41.09'
OFFSITE 2
CN=84
AREA: 2.70AC
(DCOMM: 1407GPM)
BASIN 1
BLDG: 12,950SF
INCLUDES FUTURE
(DCOMM: 498GPM)
BASIN 2
BLDG: 10,643SF
INCLUDES FUTURE
(DCOMM: 409GPM)
BASIN 5
IMP: 1.22AC
OPEN: 0.93AC
INCLUDES FUTURE
(DCOMM: 2028)
BASIN 3
BLDG: 8,944SF
(DCOMM: 344GPM)
BASIN 4
BLDG: 8,911SF
INCL. AMDSF
(DCOMM: 274GPM)
BASIN 6
OPEN: 0.17AC
(DCOMM: 242GPM)
PIPE 1
PIPE 2
PIPE 3
PIPE 4
PIPE 5
S88°40'09"E 215.18'
S01°01'12"W 783.37'
S55°04'01"W 105.8'
L=150.28'
R=180.00'
CB=S64°35'25"W
CH=145.95'
Δ=047°50'04"
HOLY CROSS WAY
L=56.30'
R=180.00'
CB=N80°56'24"W
CH=55.93'
Δ=021°06'19"
NORTH
STORM SEWER BASIN MAP
NO SCALE

Basin	1	2	3	4	5	6	Offsite 2
Bldg Area (ac)	12950	10643	6846	6811	0	0	9583
Imp Area (ac)	0	0	0	460	53255	0	0
Open Area (ac)	0	0	0	0	40471	5392	108028
DCOMM GPM	**498**	**409**	**263**	**276**	**2028**	**52**	**1407**

Basin	Sized Per	Discharge (gpm)	Discharge (cfs)
1	DCOMM	498	1.11
2	DCOMM	409	0.91
3	DCOMM	263	0.59
4	DCOMM	276	0.61
5	DCOMM	2028	4.52
6	DCOMM	52	0.12
Offsite 2	DCOMM	1407	3.14

All basins includes future

Pipe	Basin's to pipe	Size	Slope	Total Flow (gpm)	Total Flow (cfs)	Pipe Capacity (gpm)	Pipe Capacity (cfs)
1	1,3	10	0.50%	761	1.70	930	2.07
2	4	8	1.00%	276	0.61	595	1.33
3	5, offiste 2	18	0.70%	3435	7.65	4273	9.52
4	1,3,5, offsite 2	18	0.70%	4196	9.35	4273	9.52
5	1,2,3,4,5,6, offsite 2	24	0.56%	4933	10.99	8007	17.84

PROPOSED BUILDING ADDITION FOR:
HOLY CROSS LUTHERAN
MADISON, WISCONSIN

LEGEND

- 000.00 PROPOSED SPOT ELEVATIONS (FLOW LINE OF CURB UNLESS OTHERWISE SPECIFIED)
- 000.00 TR / 000.00 BR PROPOSED SPOT ELEVATIONS (TOP OF RETAINING WALL, TOP OF SURFACE GRADE AT BOTTOM OF WALL)
- 000.00 TC / 000.00 BC PROPOSED SPOT ELEVATIONS (TOP OF CURB, BOTTOM OF CURB)
- 000.00 TW / 000.00 BW PROPOSED SPOT ELEVATIONS (TOP OF WALK, BOTTOM OF WALK)
- EXISTING WATER VALVE IN BOX
- PROPOSED WATER VALVE IN BOX
- EXISTING WATER VALVE IN MANHOLE
- EXISTING WATER SERVICE VALVE
- EXISTING TELEPHONE MANHOLE
- EXISTING ROUND CATCH BASIN
- PROPOSED ROUND CATCH BASIN
- EXISTING SQUARE CATCH BASIN
- EXISTING CURB INLET
- PROPOSED CURB INLET
- EXISTING UTILITY POLE
- EXISTING UTILITY POLE WITH GUY WIRE
- EXISTING STREET LIGHT
- EXISTING TELEPHONE PEDESTAL
- EXISTING ELECTRIC PEDESTAL
- EXISTING ELECTRIC BOX
- EXISTING CABLE TV PEDESTAL
- PROPOSED DRAINAGE FLOW
- 1-1/4" REBAR SET WEIGHING 4.30 LB/FT.
- 3/4" REBAR SET WEIGHING 1.50 LB/FT.
- 1-1/4" REBAR FOUND
- 3/4" REBAR FOUND
- 2" IRON PIPE FOUND
- 1" IRON PIPE FOUND
- EXISTING FLOOD LIGHT
- SECTION CORNER
- PROPOSED APRON ENDWALL
- EXISTING MARSH AREA
- EXISTING DECIDUOUS TREE WITH TRUNK DIAMETER

- EXISTING CONIFEROUS TREE
- EXISTING SHRUB
- EXISTING STUMP
- SOIL BORING
- EXISTING WELL
- PROPOSED WELL
- EXISTING LIGHT POLE
- EXISTING SIGN
- CENTER LINE
- EXISTING HANDICAP PARKING STALL
- PROPOSED HANDICAP PARKING STALL
- EXISTING GAS VALVE
- EXISTING WOODED AREA
- EXISTING HEDGE
- EXISTING CHAINLINK FENCE
- EXISTING WOOD FENCE
- EXISTING BARBED WIRE FENCE
- PROPERTY LINE
- EXISTING GUARD RAIL
- ST — EXISTING STORM SEWER AND MANHOLE
- ST — PROPOSED STORM SEWER AND MANHOLE
- SA — EXISTING SANITARY SEWER AND MANHOLE
- SA — PROPOSED SANITARY SEWER AND MANHOLE
- W — EXISTING WATER LINE AND HYDRANT
- W — PROPOSED WATER LINE AND HYDRANT
- OU — EXISTING OVERHEAD UTILITY LINE
- FO — EXISTING UNDERGROUND FIBER OPTIC LINE
- E — EXISTING UNDERGROUND ELECTRIC CABLE
- T — EXISTING UNDERGROUND TELEPHONE CABLE
- G — EXISTING UNDERGROUND GAS LINE
- PROPOSED CURB AND GUTTER
- EXISTING CURB AND GUTTER
- GRADING/SEEDING LIMITS
- RIGHT-OF-WAY LINE
- PROPERTY LINE
- RAILROAD TRACKS
- 800 — EXISTING GROUND CONTOUR
- 800 — PROPOSED GROUND CONTOUR

CONSTRUCTION STAKING SERVICES

CONSTRUCTION STAKING SHALL BE COMPLETED BY EXCEL ENGINEERING AS REQUESTED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. CONTRACTOR TO CONTACT RYAN WILGREEN AT 920-926-9800 TO GET STAKING PRICE TO INCLUDE IN BID TO OWNER. PAYMENT OF STAKING COSTS ABOVE AND BEYOND THE BASE PRICE DUE TO RESTAKING WILL BE THE RESPONSIBILITY OF THE CONTRACTOR, NOT THE OWNER. CAD DRAWING FILES AND SURVEY CONTROL WILL NOT BE PROVIDED FOR STAKING PURPOSES.

GENERAL PROJECT NOTES

1. ALL DRIVEWAYS AND CURB CUTS TO BE CONSTRUCTED ACCORDING TO LOCAL ORDINANCES. CONTRACTOR TO OBTAIN ALL NECESSARY PERMITS.
2. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL WORK IN ROW PERMITS.

CIVIL SHEET INDEX

TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

CALL DIGGERS HOTLINE
1-800-242-8511

TOLL FREE
TELEFAX (414) 259-0947
TDD (FOR THE HEARING IMPAIRED) 1-800 542-2289

WISCONSIN STATUTE 182.0175 (1974) REQUIRES MINIMUM OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE

PLAN SPECIFICATIONS (BASED ON CSI FORMAT)

DIVISION 31 EARTH WORK

31 10 00 SITE CLEARING (DEMOLITION)

A. CONTRACTOR SHALL CALL DIGGER'S HOT LINE AND CONDUCT A PRIVATE UTILITY LOCATE AS REQUIRED TO ENSURE THAT ALL UTILITIES HAVE BEEN LOCATED BEFORE STARTING SITE DEMOLITION. DESIGN ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES BETWEEN PLAN AND FIELD CONDITIONS PRIOR TO CONSTRUCTION.
B. DEMOLITION PLAN IS AN OVERVIEW OF DEMOLITION TO TAKE PLACE ON SITE. CONTRACTOR TO FIELD VERIFY EXISTING SITE CONDITIONS PRIOR TO BIDDING. CONTRACTOR SHALL REMOVE, REPLACE, OR DEMOLISH ALL ITEMS AS NEEDED DURING CONSTRUCTION.
C. CONTRACTOR TO PROTECT EXISTING IMPROVEMENTS THAT ARE SCHEDULED TO REMAIN. ANY DAMAGE TO EXISTING FACILITIES SHALL BE REPLACED AT CONTRACTORS EXPENSE.
D. ALL CONCRETE NOTED TO BE REMOVED SHALL BE REMOVED TO THE NEAREST CONTROL JOINT.

31 20 00 EARTH MOVING

A. CONTRACTOR SHALL CALL DIGGER'S HOT LINE AND CONDUCT A PRIVATE UTILITY LOCATE AS REQUIRED TO ENSURE THAT ALL UTILITIES HAVE BEEN LOCATED BEFORE STARTING EXCAVATION. DESIGN ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES BETWEEN PLAN AND FIELD CONDITIONS PRIOR TO CONSTRUCTION.
B. PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT FOR ALL EXCAVATION, GRADING, FILL AND BACKFILL WORK AS REQUIRED TO COMPLETE THE GENERAL CONSTRUCTION WORK. ALL EXCAVATION AND BACKFILL FOR ELECTRICALS AND MECHANICALS ARE THE RESPONSIBILITY OF THE RESPECTIVE CONTRACTOR.
C. ALL ORGANIC TOPSOIL INSIDE THE BUILDING AREA, UNDER PAVED AREAS, AND AT SITE FILL AREAS SHALL BE REMOVED. PROOF ROLL SUBGRADES BEFORE PLACING FILL WITH HEAVY PNEUMATIC-TIRED EQUIPMENT, SUCH AS A FULLY-LOADED TANDEM AXLE DUMP TRUCK, TO IDENTIFY SOFT POCKETS AND AREAS OF EXCESS YIELDING. CONTRACTOR SHALL VERIFY TOPSOIL DEPTHS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REVIEW AND FOLLOW THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT AND ACCOUNT FOR EXISTING CONDITIONS PRIOR TO SUBMITTING BID FOR THE PROJECT. EXCESS MATERIALS SHALL BE REMOVED FROM THE SITE UNLESS OTHERWISE DIRECTED IN THE PLANS OR BY LOCAL ZONING REQUIREMENTS.
D. PLACE AND COMPACT FILL MATERIAL IN LAYERS TO REQUIRED ELEVATIONS. UNIFORMLY MOISTEN OR AERATE SUBGRADE AND EACH SUBSEQUENT FILL OR BACKFILL LAYER BEFORE COMPACTION AS RECOMMENDED TO ACHIEVE SPECIFIED DRY DENSITY. REMOVE AND REPLACE, OR SCARIFY AND AIR DRY, OTHERWISE SATISFACTORY SOIL MATERIAL THAT IS TOO WET TO COMPACT TO SPECIFIED DRY DENSITY.
E. PLACE BACKFILL AND FILL MATERIALS IN LAYERS NOT MORE THAN 8" IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT, AND NOT MORE THAN 4" IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND-OPERATED TAMPERS.
F. COMPACT THE SOIL TO NOT LESS THAN THE FOLLOWING PERCENTAGES OF MAXIMUM DRY DENSITY ACCORDING TO ASTM D 698, STANDARD PROCTOR TEST. FILL MAY NOT BE PLACED ON FROZEN GROUND AND NO FROZEN MATERIALS MAY BE USED FOR BACK FILL. APPLY THE MORE STRINGENT REQUIREMENTS WHEN COMPARING BETWEEN THE FOLLOWING AND THE GEOTECHNICAL REPORT.
   1. UNDER FOUNDATIONS - SUBGRADE, AND EACH LAYER OF BACKFILL OR FILL MATERIAL, TO NOT LESS THAN 98 PERCENT.
   2. UNDER INTERIOR SLAB-ON-GRADE WHERE GROUNDWATER IS MORE THAN 3 FEET BELOW THE SLAB - PLACE A DRAINAGE COURSE LAYER OF 3/4" CRUSHED STONE, WITH 5% TO 12% FINES, PER THICKNESS INDICATED ON FOUNDATION PLANS ON PREPARED SUBGRADE. COMPACT THE SUBGRADE AND DRAINAGE COURSE TO NOT LESS THAN 95 PERCENT.
   3. UNDER INTERIOR SLAB-ON-GRADE WHERE GROUNDWATER IS WITHIN 3 FEET OF THE SLAB SURFACE- PLACE A DRAINAGE COURSE LAYER OF CLEAN 3/4" CRUSHED STONE, WITH NO MORE THAN 5% FINES, PER THICKNESS INDICATED ON FOUNDATION PLANS ON PREPARED SUBGRADE. COMPACT THE SUBGRADE AND DRAINAGE COURSE TO NOT LESS THAN 95 PERCENT.
   4. UNDER EXTERIOR CONCRETE AND ASPHALT PAVEMENTS - COMPACT THE SUBGRADE AND EACH LAYER OF BACKFILL OR FILL MATERIAL TO NOT LESS THAN 95 PERCENT.
   5. UNDER WALKWAYS - COMPACT SUBGRADE AND EACH LAYER OF BACKFILL OR FILL MATERIAL TO NOT LESS THAN 95 PERCENT.
   6. UNDER LAWN OR UNPAVED AREAS - COMPACT SUBGRADE AND EACH LAYER OF BACKFILL OR FILL MATERIAL, TO NOT LESS THAN 85 PERCENT.
G. CONTRACTOR SHALL ENGAGE A QUALIFIED INDEPENDENT TESTING AND INSPECTING AGENCY TO PERFORM FIELD TESTS AND INSPECTIONS. IT IS SUGGESTED THAT THE GEOTECHNICAL FIRM USED TO PERFORM THE SUBSURFACE SOIL INVESTIGATION BE ENGAGED FOR THE FIELD QUALITY CONTROL TESTS. THE GEOTECHNICAL REPORT WAS PERFORMED BY PROFESSIONAL SERVICE INDUSTRIES, INC.
H. ALLOW THE TESTING AGENCY TO TEST AND INSPECT SUBGRADES AND EACH FILL OR BACKFILL LAYER. PROCEED WITH SUBSEQUENT EARTHWORK ONLY AFTER TEST RESULTS FOR PREVIOUSLY COMPLETED WORK COMPLY WITH REQUIREMENTS. PROVIDE ONE TEST FOR EVERY 2000 SQUARE FEET OF PAVED AREA OR BUILDING SLAB, ONE TEST FOR EACH SPREAD FOOTING, AND ONE TEST FOR EVERY 50 LINEAR FEET OF WALL STRIP FOOTING.
I. WHEN THE TESTING AGENCY REPORTS THAT SUBGRADES, FILLS, OR BACKFILLS HAVE NOT ACHIEVED DEGREE OF COMPACTION SPECIFIED, SCARIFY AND MOISTEN OR AERATE, OR REMOVE AND REPLACE SOIL TO DEPTH REQUIRED; RECOMPACT AND RETEST UNTIL SPECIFIED COMPACTION IS OBTAINED.
J. THE BUILDING SITE SHALL BE GRADED TO PROVIDE DRAINAGE AWAY FROM THE BUILDING AS INDICATED ON THE PLANS. SITE EARTHWORK SHALL BE GRADED TO WITHIN 0.10' OF REQUIRED EARTHWORK ELEVATIONS ASSUMING POSITIVE DRAINAGE IS MAINTAINED IN ACCORDANCE WITH THE GRADING PLAN.

31 30 00 EROSION CONTROL

A. THE GRADING PLAN REFLECTS 32,000 S.F. (0.73 ACRES) OF DISTURBED AREA. THE SITE IS THEREFORE EXEMPT FROM WISCONSIN DEPARTMENT OF NATURAL RESOURCES NR 151 NOTICE OF INTENT REQUIREMENTS. THE DESIGN ENGINEER SHALL PREPARE AN EROSION CONTROL PLAN TO MEET NR 151.105 CONSTRUCTION SITE PERFORMANCE STANDARDS FOR NON-PERMITTED SITES.
B. EROSION AND SEDIMENT CONTROL IMPLEMENTED DURING CONSTRUCTION SHALL STRICTLY COMPLY WITH THE GUIDELINES AND REQUIREMENTS SET FORTH IN WISCONSIN ADMINISTRATIVE CODE (W.A.C.) NR 151, THE STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES RUNOFF MANAGEMENT PERFORMANCE STANDARDS. TECHNICAL STANDARDS PUBLISHED BY THE WISCONSIN DNR SHALL ALSO BE UTILIZED TO IMPLEMENT THE REQUIRED PERFORMANCE STANDARDS. THE METHODS AND TYPES OF EROSION CONTROL WILL BE DEPENDENT ON THE LOCATION AND TYPE OF WORK INVOLVED. ALL SEDIMENT CONTROL MEASURES SHALL BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF CONSTRUCTION, AND INSTALLED PRIOR TO ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL. BELOW IS A LIST OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES TO ACHIEVE THE PERFORMANCE STANDARDS REQUIRED.
   1. SILT FENCE SHALL BE PLACED ON SITE AT LOCATIONS SHOWN ON THE EROSION CONTROL PLAN. SILT FENCE SHALL ALSO BE PROVIDED AROUND THE PERIMETER OF ALL SOIL STOCKPILES. FOLLOW PROCEDURES FOUND IN WISCONSIN DNR TECHNICAL STANDARD 1056.
   2. STONE TRACKING PADS SHALL BE PLACED AT ALL CONSTRUCTION SITE ENTRANCES AND SHALL BE INSTALLED PRIOR TO ANY TRAFFIC LEAVING THE CONSTRUCTION SITE. SEE THE EROSION CONTROL PLAN FOR LOCATIONS. THE AGGREGATE USED SHALL BE 3 TO 6 INCH CLEAR OR WASHED STONE, AND SHALL BE PLACED IN A LAYER AT LEAST 12 INCHES THICK. THE STONE SHALL BE UNDERLAIN WITH A WISDOT TYPE R GEOTEXTILE FABRIC. THE TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT, AND SHALL BE A MINIMUM OF 50 FEET LONG. SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FOLLOW PROCEDURES FOUND IN WISCONSIN DNR TECHNICAL STANDARD 1057.
   3. STORM DRAIN INLET PROTECTION SHALL BE PROVIDED FOR ALL NEW AND DOWNSTREAM STORM CATCH BASINS AND CURB INLETS. TYPE B OR C PROTECTION SHOULD BE PROVIDED AND SHALL BE IN CONFORMANCE WITH WISCONSIN DNR TECHNICAL STANDARD 1060.
   4. DUST CONTROL MEASURES SHALL BE PROVIDED TO REDUCE OR PREVENT THE SURFACE AND AIR TRANSPORT OF DUST DURING CONSTRUCTION. CONTROL MEASURES INCLUDE APPLYING MULCH AND ESTABLISHING VEGETATION, WATER SPRAYING, SURFACE ROUGHENING, APPLYING POLYMERS, SPRAY-ON TACKIFIERS, CHLORIDES, AND BARRIERS. SOME SITES MAY REQUIRE AN APPROACH THAT UTILIZES A COMBINATION OF MEASURES FOR DUST CONTROL. FOLLOW PROCEDURES FOUND IN WISCONSIN DNR TECHNICAL STANDARD 1068.
   5. THE USE, STORAGE, AND DISPOSAL OF CHEMICALS, CEMENT, AND OTHER COMPOUNDS AND MATERIALS USED ON SITE SHALL BE MANAGED DURING THE CONSTRUCTION PERIOD TO PREVENT THEIR TRANSPORT BY RUNOFF INTO WATERS OF THE STATE.
   6. CONTRACTOR SHALL PROVIDE AN OPEN AGGREGATE CONCRETE TRUCK WASHOUT AREA ON SITE. CONTRACTOR TO ENSURE THAT CONCRETE WASHOUT SHALL BE CONTAINED TO THIS DESIGNATED AREA AND NOT BE ALLOWED TO RUN INTO STORM INLETS OR INTO THE OVERLAND STORMWATER DRAINAGE SYSTEM. WASHOUT AREA SHALL BE REMOVED UPON COMPLETION OF CONSTRUCTION.
   7. TEMPORARY SITE RESTORATION SHALL TAKE PLACE IN DISTURBED AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE OR ON WHICH LAND DISTURBING ACTIVITIES WILL NOT BE PERFORMED FOR A PERIOD GREATER THAN 14 DAYS AND REQUIRES VEGETATIVE COVER FOR LESS THAN ONE YEAR. THIS TEMPORARY SITE RESTORATION REQUIREMENT ALSO APPLIES TO SOIL STOCKPILES THAT EXIST FOR MORE THAN 7 DAYS. PERMANENT RESTORATION APPLIES TO AREAS WHERE PERENNIAL VEGETATIVE COVER IS NEEDED TO PERMANENTLY STABILIZE AREAS OF EXPOSED SOIL. PERMANENT STABILIZATION SHALL OCCUR WITHIN 3 WORKING DAYS OF FINAL GRADING. TOPSOIL, SEED, AND MULCH SHALL BE IN GENERAL CONFORMANCE WITH TECHNICAL STANDARDS 1058 AND 1059 AND SHALL MEET THE SPECIFICATIONS FOUND IN THE LANDSCAPING AND SITE STABILIZATION SECTION OF THIS CONSTRUCTION DOCUMENT. ANY SOIL EROSION THAT OCCURS AFTER FINAL GRADING AND/OR FINAL STABILIZATION MUST BE REPAIRED AND THE STABILIZATION WORK REDONE.
   8. IF SITE DEWATERING IS REQUIRED TO REMOVE SEDIMENT FROM CONSTRUCTION SITE STORMWATER PRIOR TO DISCHARGING OFF-SITE OR TO WATERS OF THE STATE, FOLLOW PROCEDURES FOUND IN TECHNICAL STANDARD 1061.
   9. ALL OFF-SITE SEDIMENT DEPOSITS OCCURRING AS A RESULT OF CONSTRUCTION WORK OR A STORM EVENT SHALL BE CLEANED UP BY THE END OF EACH WORKING DAY. FLUSHING SHALL NOT BE ALLOWED.
C. ALL EROSION CONTROL DEVICES SHALL AT A MINIMUM BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES 0.5 INCHES OF RAIN OR MORE DURING A 24 HOUR PERIOD. MAINTENANCE SHALL BE PERFORMED PER WISCONSIN ADMINISTRATIVE CODE (W.A.C.) NR 151 STORMWATER MANAGEMENT TECHNICAL STANDARD REQUIREMENTS.
D. EROSION CONTROL MEASURES SHALL NOT BE REMOVED UNTIL THE AREA(S) SERVED HAVE ESTABLISHED VEGETATIVE COVER.
E. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL LOCAL EROSION CONTROL PERMITS.

DIVISION 32 EXTERIOR IMPROVEMENTS

32 10 00 AGGREGATE BASE & ASPHALT PAVEMENT

A. CONTRACTOR TO PROVIDE COMPACTED AGGREGATE BASE AND HOT MIX ASPHALT PAVEMENT WHERE INDICATED ON THE PLANS. ALL AGGREGATE PROVIDED MUST COMPLY WITH SECTION 305 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION. PROVIDE HOT MIX ASPHALT MIXTURE TYPES PER SECTION 460 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION. CONTRACTOR TO PROVIDE AGGREGATE BASE AND HOT MIX ASPHALT PAVEMENT TYPES AND DEPTHS AS INDICATED BELOW.

   STANDARD ASPHALT PAVING
   1-1/2" SURFACE COURSE (5 lt 58-28s)
   2" BINDER COURSE (3 lt 58-28s)
   4" OF 1-1/4" CRUSHED AGGREGATE
   6" OF 3" CRUSHED AGGREGATE

B. CONTRACTOR TO COMPACT THE AGGREGATE BASE, ASPHALT BINDER COURSE, AND ASPHALT SURFACE COURSE TO AN AVERAGE DENSITY PER WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION. ALL ASPHALT PAVEMENT AREAS SHALL BE PAVED TO WITHIN 0.10' OF DESIGN SURFACE GRADES WITH POSITIVE DRAINAGE BEING MAINTAINED IN ACCORDANCE WITH DESIGN PLANS. A MINIMUM OF 1% SLOPE SHALL BE MAINTAINED IN ALL ASPHALT PAVEMENT AREA.
C. HOT MIX ASPHALT CONSTRUCTION TO BE PROVIDED PER MORE STRINGENT REQUIREMENTS OF GEOTECHNICAL REPORT OR CONSTRUCTION DOCUMENTS.
D. CONTRACTOR TO PROVIDE 4" WIDE YELLOW PAINTED STRIPING FOR PARKING STALLS, TRAFFIC LANES, AND NO PARKING AREAS. YELLOW PAINT MARKINGS SHALL ALSO BE PROVIDED FOR H.C. ACCESSIBLE SYMBOLS, TRAFFIC ARROWS, AND TRAFFIC MESSAGES.

32 20 00 CONCRETE AND AGGREGATE BASE

A. CONTRACTOR TO PROVIDE CRUSHED AGGREGATE BASE AND CONCRETE WHERE INDICATED ON THE PLANS.
B. ALL AGGREGATE PROVIDED MUST COMPLY WITH SECTION 305 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION. ALL AGGREGATE PLACED MUST BE COMPACTED TO AN AVERAGE DENSITY PER WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
C. DESIGN AND CONSTRUCTION OF ALL CAST-IN-PLACE EXTERIOR CONCRETE FLAT WORK SHALL CONFORM TO ACI 330R-08.
D. EXTERIOR CONCRETE FLAT WORK CONSTRUCTION TO BE PROVIDED PER MORE STRINGENT REQUIREMENTS OF THE GEOTECHNICAL REPORT OR THIS SPECIFICATION. CONCRETE FLAT WORK CONSTRUCTION IS AS FOLLOWS:
   1. SIDEWALK CONCRETE - 4" OF CONCRETE OVER 4" OF 3/4" CRUSHED AGGREGATE BASE. CONTRACTION JOINTS SHALL CONSIST OF 1/8" WIDE BY 1" DEEP TOOLED JOINT WHERE INDICATED ON THE PLANS.
E. DESIGN MIXES SHALL BE IN ACCORDANCE WITH ASTM C94
   1. STRENGTH TO BE MINIMUM OF 4,000 PSI AT 28 DAYS FOR EXTERIOR CONCRETE.
   2. SLUMP SHALL NOT EXCEED 4" FOR EXTERIOR CONCRETE FLAT WORK
   3. SLUMP SHALL BE 2.5" OR LESS FOR SLIP-FORMED CURB AND GUTTER
   4. SLUMP SHALL BE BETWEEN 1.5" TO 3" FOR NON SLIP-FORMED CURB AND GUTTER.
   5. ALL EXTERIOR CONCRETE SHALL BE AIR ENTRAINED WITH 4% TO 7% AIR CONTENT. NO OTHER ADMIXTURES SHALL BE USED WITHOUT APPROVAL OF EXCEL ENGINEERING, INC. CALCIUM CHLORIDE SHALL NOT BE USED.
   6. MAXIMUM AGGREGATE SIZE FOR ALL EXTERIOR CONCRETE SHALL BE 0.75 INCHES.
F. VERIFY EQUIPMENT CONCRETE PAD SIZES WITH RESPECTIVE CONTRACTORS. PADS SHALL HAVE FIBERMESH 300 FIBERS AT A RATE OF 1.5 LBS/CU. YD. OR 6 X 6-W1.4 X W1.4 WELDED WIRE MESH WITH MINIMUM 1 INCH COVER. EQUIPMENT PADS SHALL BE 3.5 INCHES THICK WITH 1 INCH CHAMFER UNLESS SPECIFIED OTHERWISE. COORDINATE ADDITIONAL PAD REQUIREMENTS WITH RESPECTIVE CONTRACTOR.
G. ALL CONCRETE FLAT WORK SURFACES AND CONCRETE CURB FLOWLINES SHALL BE CONSTRUCTED TO WITHIN 0.05' OF DESIGN SURFACE AND FLOWLINE GRADES ASSUMING POSITIVE DRAINAGE IS MAINTAINED IN ACCORDANCE WITH THE DESIGN PLANS.
H. CONCRETE FLAT WORK SHALL HAVE CONSTRUCTION JOINTS OR SAW CUT JOINTS PLACED AS INDICATED ON THE PLANS OR PER THIS SPECIFICATION. SAWCUTS SHALL BE DONE AS SOON AS POSSIBLE, BUT NO LATER THAN 24 HOURS AFTER CONCRETE IS PLACED. CONCRETE CURB AND GUTTER JOINTING SHALL BE PLACED EVERY 10' OR CLOSER (6' MIN.). ALL EXTERIOR CONCRETE SHALL HAVE A LIGHT BROOM FINISH UNLESS NOTED OTHERWISE. A UNIFORM COAT OF A HIGH SOLIDS CURING COMPOUND MEETING ASTM C309 SHOULD BE APPLIED TO ALL EXPOSED CONCRETE SURFACES. ALL CONCRETE IS TO BE CURED FOR 7 DAYS. EXTERIOR CONCRETE SHALL BE SEPARATED FROM BUILDINGS WITH CONTINUOUS 0.5 INCH FIBER EXPANSION JOINT AND/OR 0.25 INCH FIBER EXPANSION JOINT AT DECORATIVE MASONRY UNITS.
I. ALL REINFORCING BARS SHALL BE ASTM A615 GRADE 60. THICKNESS OF CONCRETE COVER OVER REINFORCEMENT SHALL BE NOT LESS THAN 3" WHERE CONCRETE IS DEPOSITED AGAINST THE GROUND WITHOUT THE USE OF FORMS AND NOT LESS THAN 1.5" IN ALL OTHER LOCATIONS. ALL REINFORCING SHALL BE LAPPED 36 DIAMETERS FOR UP TO #6 BARS, 60 DIAMETERS FOR #7 TO #10 BARS OR AS NOTED ON THE DRAWINGS AND EXTENDED AROUND CORNERS WITH CORNER BARS. PLACING AND DETAILING OF STEEL REINFORCING AND REINFORCING SUPPORTS SHALL BE IN ACCORDANCE WITH CRSI AND ACI MANUAL AND STANDARD PRACTICES. THE REINFORCEMENT SHALL NOT BE PAINTED AND MUST BE FREE OF GREASE/OIL, DIRT OR DEEP RUST WHEN PLACED IN THE WORK. ALL WELDED WIRE FABRIC SHALL MEET THE REQUIREMENTS OF ASTM A 185. WELDED WIRE FABRIC SHALL BE PLACED 2" FROM TOP OF SLAB, UNLESS INDICATED OTHERWISE.
J. CONTRACTOR SHALL ENGAGE A QUALIFIED INDEPENDENT TESTING AND INSPECTING AGENCY TO SAMPLE MATERIALS, PERFORM TESTS, AND SUBMIT TEST REPORTS DURING CONCRETE PLACEMENT. TESTS WILL BE PERFORMED ACCORDING TO ACI 301. CAST AND LABORATORY CURE ONE SET OF FOUR STANDARD CYLINDERS FOR EACH COMPOSITE SAMPLE FOR EACH DAY'S POUR OF EACH CONCRETE MIX EXCEEDING 5 CU. YD., BUT LESS THAN 25 CU. YD., PLUS ONE SET FOR EACH ADDITIONAL 50 CU. YD. OR FRACTION THEREOF. PERFORM COMPRESSIVE-STRENGTH TESTS ACCORDING TO ASTM C 39. TEST TWO SPECIMENS AT 7 DAYS AND TWO SPECIMENS AT 28 DAYS. PERFORM SLUMP TESTING ACCORDING TO ASTM C 143. PROVIDE ONE TEST AT POINT OF PLACEMENT FOR EACH COMPOSITE SAMPLE, BUT NOT LESS THAN ONE TEST FOR EACH DAY'S POUR OF EACH CONCRETE MIX. PERFORM ADDITIONAL TESTS WHEN CONCRETE CONSISTENCY APPEARS TO CHANGE.
K. PROTECT FRESHLY PLACED CONCRETE FROM PREMATURE DRYING AND EXCESSIVE COLD OR HOT TEMPERATURES. IN HOT, DRY, AND WINDY WEATHER, APPLY AN EVAPORATION-CONTROL COMPOUND ACCORDING TO MANUFACTURER'S INSTRUCTIONS AFTER SCREEDING AND BULL FLOATING, BUT BEFORE POWER FLOATING AND TROWELLING.
L. LIMIT MAXIMUM WATER-CEMENTIOUS RATIO OF CONCRETE EXPOSED TO FREEZING, THAWING AND DEICING SALTS TO 0.45.
M. TEST RESULTS WILL BE REPORTED IN WRITING TO THE DESIGN ENGINEER, READY-MIX PRODUCER, AND CONTRACTOR WITHIN 24 HOURS AFTER TESTS. REPORTS OF COMPRESSIVE STRENGTH TESTS SHALL CONTAIN THE PROJECT IDENTIFICATION NAME AND NUMBER, DATE OF CONCRETE PLACEMENT, NAME OF CONCRETE TESTING SERVICE, CONCRETE TYPE AND CLASS, LOCATION OF CONCRETE BATCH IN STRUCTURE, DESIGN COMPRESSIVE STRENGTH AT 28 DAYS, CONCRETE MIX PROPORTIONS AND MATERIALS, COMPRESSIVE BREAKING STRENGTH, AND TYPE OF BREAK FOR BOTH 7-DAY TESTS AND 28-DAY TESTS.

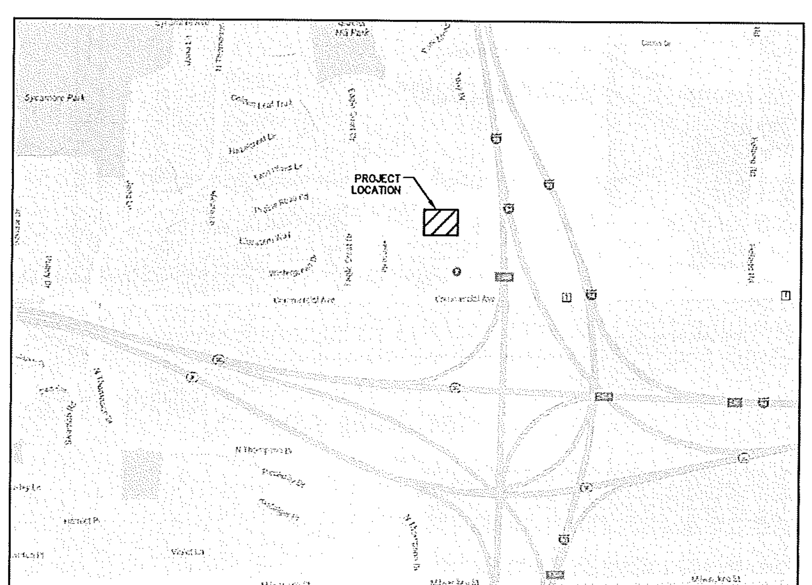
32 30 00 LANDSCAPING AND SITE STABILIZATION

A. EROSION MATTING:
   1. CONTRACTOR TO PROVIDE EROSION CONTROL MATTING (NORTH AMERICAN GREEN S150) OR EQUIVALENT ON ALL SLOPES THAT ARE 4:1 AND GREATER OUTSIDE OF STORMWATER CONVEYANCE SWALES AND STORMWATER MANAGEMENT BASINS.
   2. CONTRACTOR TO PROVIDE EROSION MATTING (NORTH AMERICAN GREEN C125) OR EQUIVALENT IN ALL SWALE BOTTOMS AND SIDE SLOPES AS WELL AS STORMWATER MANAGEMENT BASIN BOTTOMS AND SIDE SLOPES AS REQUIRED.

DIVISION 33 UTILITIES

33 10 00 SITE UTILITIES

A. CONTRACTOR TO FIELD VERIFY ALL EXISTING UNDERGROUND UTILITIES ON SITE. CONTRACTOR TO VERIFY PIPE LOCATIONS, SIZES, AND DEPTHS AT POINT OF PROPOSED CONNECTIONS AND VERIFY PROPOSED UTILITY ROUTES ARE CLEAR (PER CODE) OF ALL EXISTING UTILITIES AND OTHER OBSTRUCTIONS PRIOR TO CONSTRUCTION. COSTS INCURRED FOR FAILURE TO DO SO SHALL BE THE CONTRACTORS RESPONSIBILITY.
B. ALL PROPOSED SANITARY PIPE SHALL BE SDR-35 PVC
C. CLEANOUTS SHALL BE PROVIDED FOR THE SANITARY SERVICE AT LOCATIONS INDICATED ON THE UTILITY PLAN. THE CLEANOUT SHALL CONSIST OF A COMBINATION WYE FITTING IN LINE WITH THE SANITARY SERVICE WITH THE CLEANOUT LEG OF THE COMBINATION WYE FACING STRAIGHT UP. THE CLEANOUT SHALL CONSIST OF A 4" VERTICAL PVC PIPE WITH A WATER TIGHT REMOVABLE CLEANOUT PLUG. AN 8" PVC FROST SLEEVE SHALL BE PROVIDED. THE BOTTOM OF THE FROST SLEEVE SHALL TERMINATE 12" ABOVE THE TOP OF THE SANITARY LATERAL OR AT LEAST 6" BELOW THE PREDICTED FROST DEPTH, WHICHEVER IS SHALLOWER. THE CLEANOUT SHALL EXTEND JUST ABOVE THE SURFACE GRADE IN LAWN OR LANDSCAPE AREAS WITH THE FROST SLEEVE TERMINATING AT THE GRADE SURFACE. THE CLEANOUT SHALL EXTEND TO 4 INCHES BELOW SURFACE GRADE IN PAVED SURFACES WITH A ZURN (Z-1474-N) HEAVY DUTY CLEANOUT HOUSING PLACED OVER THE TOP OF THE CLEANOUT FLUSH WITH THE SURFACE GRADE. IN PAVED SURFACES, THE FROST SLEEVE SHALL TERMINATE IN A CONCRETE PAD AT LEAST 6" THICK AND EXTENDING AT LEAST 9" FROM THE SLEEVE ON ALL SIDES, SLOPING AWAY FROM THE SLEEVE. THE CLEANOUT HOUSING SHALL BE CONSTRUCTED PER MANUFACTURERS REQUIREMENTS.
D. ALL PROPOSED HDPE STORM PIPE SHALL BE IN ACCORDANCE WITH ASTM F2648. ALL CONCRETE STORM PIPING SHALL BE IN ACCORDANCE WITH ASTM C14 AND ASTM C76. SEE UTILITY PLANS FOR ALL STORM PIPE MATERIAL TYPES TO BE USED. PIPE SHALL BE PLACED MIN. 8' HORIZONTALLY FROM FOUNDATION WALLS.
E. SANITAR AND STORM UTILITY PIPE INVERTS SHALL BE CONSTRUCTED WITHIN 0.10' OF DESIGN INVERT ELEVATIONS ASSUMING PIPE SLOPE AND SEPARATION IS MAINTAINED PER THE UTILITY DESIGN PLANS AND STATE REQUIREMENTS.
F. SITE UTILITY CONTRACTOR SHALL RUN SANITARY SERVICE TO A POINT WHICH IS A MINIMUM OF 5' FROM THE EXTERIOR WALL OF THE FOUNDATION. SITE UTILITY CONTRACTOR SHALL RUN WATER SERVICE TO A POINT WITHIN THE FOUNDATION SPECIFIED BY THE PLUMBING PLANS. CONTRACTOR TO CUT AND CAP WATER SERVICE 12" ABOVE FINISHED FLOOR ELEVATION.
G. ALL UTILITIES SHALL BE INSTALLED WITH PLASTIC COATED TRACER WIRE (10 TO 14 GAUGE SOLID COPPER, OR COPPER COATED STEEL WIRE). PLASTIC WIRE MAY BE TAPED TO PLASTIC WATER OR SEWER PIPE. IF ATTACHED, THE TRACER WIRE SHALL BE SECURED EVERY 6 TO 20 FEET AND AT ALL BENDS. TRACER WIRE SHALL HAVE ACCESS POINTS AT LEAST EVERY 300 FEET.
H. ALL UTILITIES SHALL BE INSTALLED PER STATE, LOCAL, AND INDUSTRY STANDARDS. WATER, SANITARY, AND STORM SEWER SHALL BE INSTALLED PER "STANDARD SPECIFICATION FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN". THE DESIGN ENGINEER SHALL BE RESPONSIBLE FOR OBTAINING STATE PLUMBING REVIEW APPROVAL. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL OTHER PERMITS REQUIRED TO INSTALL WATER, SANITARY AND STORM SEWER.
I. SEE PLANS FOR ALL OTHER UTILITY SPECIFICATIONS AND DETAILS.



PROJECT LOCATION MAP

CONSTRUCTION SEQUENCE

PHASE	TYPE OF ACTION
1. PRE-CONSTRUCTION ACTION	1. CONTRACTOR TO CALL DIGGERS HOTLINE AT A MINIMUM OF 3 DAYS PRIOR TO CONSTRUCTION.
	2. PLACE ALL SILT FENCE.
	3. CONSTRUCT TRACKING STONE ENTRANCES AND ANY TEMPORARY CONSTRUCTION ROADWAYS AS REQUIRED.
	4. CONSTRUCT PERMANENT STORMWATER CONVEYANCE SYSTEMS.
	5. CONSTRUCT ANY TEMPORARY STORMWATER CONVEYANCE SYSTEMS AS NEEDED.
	6. STABILIZE ALL TEMPORARY AND PERMANENT EROSION CONTROL AND STORMWATER CONVEYANCE SYSTEMS BEFORE TOPSOIL CAN BE STRIPPED.
2. CONSTRUCTION ACTION	1. SITE DEMOLITION AS REQUIRED.
	2. STRIP AND RELOCATE TOPSOIL TO THE DESIGNATED TOPSOIL STOCKPILE. LOCATION BY OWNER.
	3. BEGIN MASS EARTH WORK FOR THE BUILDING PAD AND PAVEMENT AREAS.
	4. CONSTRUCT ANY REMAINING STORMWATER CONVEYANCE SYSTEMS, AND INSTALL ALL OTHER UTILITIES ON SITE.
	5. DIG AND POUR ALL BUILDING FOOTINGS.
	6. PLACE GRAVEL FOR ALL PROPOSED PAVEMENT AREAS.
	7. TOPSOIL, SEED, AND MULCH ALL DISTURBED AREAS OUTSIDE THE BUILDING AND PROPOSED PAVEMENT AREAS.
	8. CONSTRUCT BUILDING ADDITION.
	9. PAVE DRIVEWAYS AND PARKING AREAS.
	10. TOPSOIL, SEED, AND MULCH ALL OTHER DISTURBED AREAS. PLACE EROSION MATTING.
3. POST CONSTRUCTION ACTION	1. CONTRACTOR TO REMOVE TEMPORARY EROSION CONTROL MEASURES UPON SITE STABILIZATION.

CONTRACTOR TO FOLLOW THE EROSION CONTROL SPECIFICATIONS FOR CONSTRUCTION EROSION CONTROL INSPECTION AND MAINTENANCE.

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PROJECT INFORMATION
PROJECT NUMBER 1626620

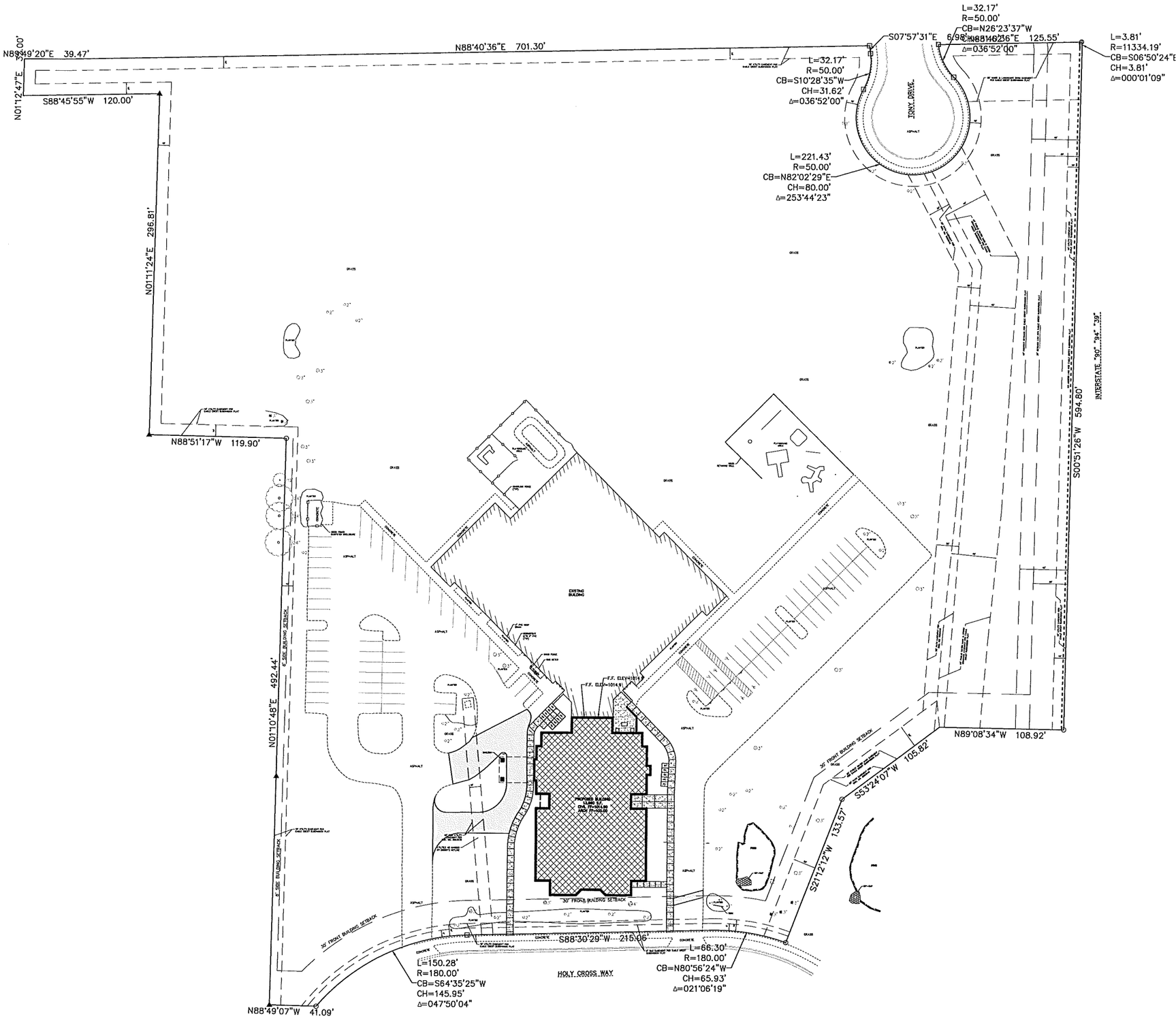
PROPOSED BUILDING ADDITION FOR:
HOLY CROSS LUTHERAN
734 HOLY CROSS WAY • MADISON, WI 53704

PROFESSIONAL SEAL
WISCONSIN JASON DAYE 38777-006 FOND DU LAC WISCONSIN PROFESSIONAL ENGINEER

PRELIMINARY DATES
APR. 18, 2017

NOT FOR CONSTRUCTION

SHEET INFORMATION
CIVIL COVER AND SPECIFICATION SHEET
SHEET NUMBER
C1.0



NORTH

SCALE: 1"=40'-0"

1"= 40' SCALE 40' 0 40' 80' FEET

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PROPOSED BULDING ADDITION FOR:

HOLY CROSS LUTHERAN

734 HOLY CROSS WAY • MADISON, WI 53704

PROFESSIONAL SEAL

PRELIMINARY DATES

FEB. 28, 2017
APR. 18, 2017

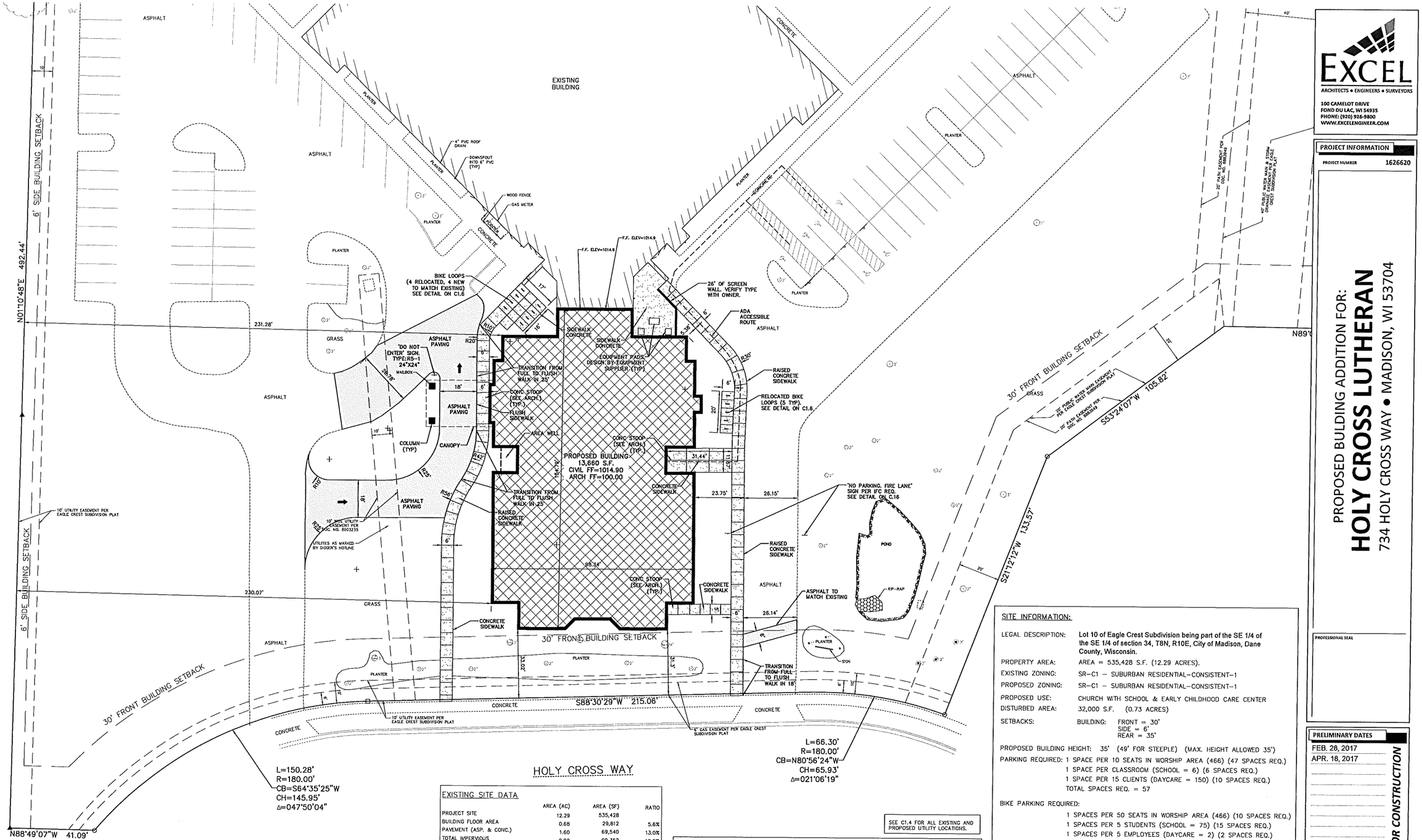
NOT FOR CONSTRUCTION

SHEET INFORMATION

SITE PLAN - OVERALL

SHEET NUMBER

C1.2A



HOLY CROSS WAY

EXISTING SITE DATA

	AREA (AC)	AREA (SF)	RATIO
PROJECT SITE	12.29	535,428	
BUILDING FLOOR AREA	0.68	29,812	5.6%
PAVEMENT (ASP. & CONC.)	1.60	69,540	13.0%
TOTAL IMPERVIOUS	2.28	99,352	18.6%
LANDSCAPE/ OPEN SPACE	10.01	436,076	81.4%

PROPOSED SITE DATA

	AREA (AC)	AREA (SF)	RATIO
PROJECT SITE	12.29	535,428	
BUILDING FLOOR AREA	1.00	43,472	8.1%
PAVEMENT (ASP. & CONC.)	1.69	73,554	13.7%
TOTAL IMPERVIOUS	2.69	117,026	21.9%
LANDSCAPE/ OPEN SPACE	9.61	418,402	78.1%

SEE C1.4 FOR ALL EXISTING AND PROPOSED UTILITY LOCATIONS.

PROJECT NOTES

1. THE CONTRACTOR SHALL REPLACE ALL SIDEWALK AND CURB & GUTTER WHICH ABUTS THE PROPERTY WHICH IS DAMAGED BY THE CONSTRUCTION.
2. ALL WORK IN THE PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED BY A CITY LICENSED CONTRACTOR.
3. ALL DAMAGE TO THE PAVEMENT ON HOLY CROSS WAY SHALL BE RESTORED IN ACCORDANCE WITH THE CITY OF MADISON'S PAVEMENT PATCHING CRITERIA.
4. UTILITY CONTRACTOR SHALL OBTAIN A CONNECTION PERMIT AND EXCAVATION PERMIT PRIOR TO COMMENCING THE STORM SEWER CONSTRUCTION.

SITE INFORMATION:

LEGAL DESCRIPTION:	**Lot 10 of Eagle Crest Subdivision being part of the SE 1/4 of the SE 1/4 of section 34, T8N, R10E, City of Madison, Dane County, Wisconsin.**
PROPERTY AREA:	AREA = 535,428 S.F. (12.29 ACRES).
EXISTING ZONING:	SR-C1 – SUBURBAN RESIDENTIAL-CONSISTENT-1
PROPOSED ZONING:	SR-C1 – SUBURBAN RESIDENTIAL-CONSISTENT-1
PROPOSED USE:	CHURCH WITH SCHOOL & EARLY CHILDHOOD CARE CENTER
DISTURBED AREA:	32,000 S.F. (0.73 ACRES)
SETBACKS:	BUILDING: FRONT = 30' SIDE = 6' REAR = 35'

PROPOSED BUILDING HEIGHT: 35' (49' FOR STEEPLE) (MAX. HEIGHT ALLOWED 35')

PARKING REQUIRED: 1 SPACE PER 10 SEATS IN WORSHIP AREA (466) (47 SPACES REQ.)
1 SPACE PER CLASSROOM (SCHOOL = 6) (6 SPACES REQ.)
1 SPACE PER 15 CLIENTS (DAYCARE = 150) (10 SPACES REQ.)
TOTAL SPACES REQ. = 57

BIKE PARKING REQUIRED:
1 SPACES PER 50 SEATS IN WORSHIP AREA (466) (10 SPACES REQ.)
1 SPACES PER 5 STUDENTS (SCHOOL = 75) (15 SPACES REQ.)
1 SPACES PER 5 EMPLOYEES (DAYCARE = 2) (2 SPACES REQ.)
TOTAL SPACES REQ. = 26

PARKING PROVIDED: 86 SPACES (6 H.C. ACCESSIBLE)

HANDICAP STALLS REQUIRED: 4, HANDICAP STALLS PROVIDED: 6

BUILDING OCCUPANCY CLASSIFICATION = A3

CLASS OF BUILDING CONSTRUCTION = VB

NORTH
SCALE: 1"=20'-0"
1"= 20' SCALE
20' 0 20' 40' FEET

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PROJECT INFORMATION

PROJECT NUMBER 1626620

PROPOSED BUILDING ADDITION FOR:
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734 HOLY CROSS WAY • MADISON, WI 53704

PROFESSIONAL SEAL

PRELIMINARY DATES

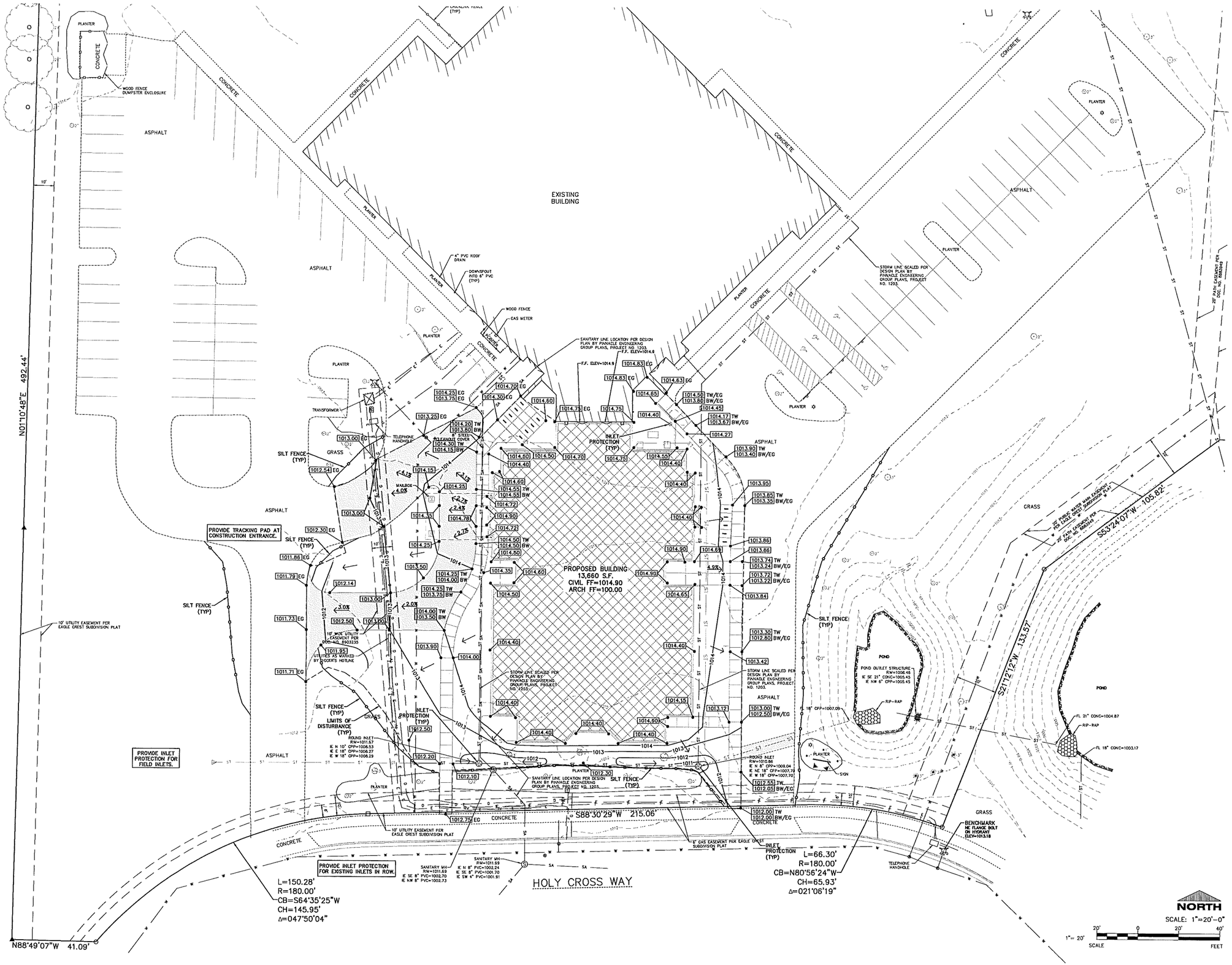
FEB. 28, 2017
APR. 18, 2017

NOT FOR CONSTRUCTION

SHEET INFORMATION

SITE PLAN

SHEET NUMBER
C1.2B



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HOLY CROSS LUTHERAN

734 HOLY CROSS WAY • MADISON, WI 53704

PROFESSIONAL SEAL

PRELIMINARY DATES

APR. 18, 2017

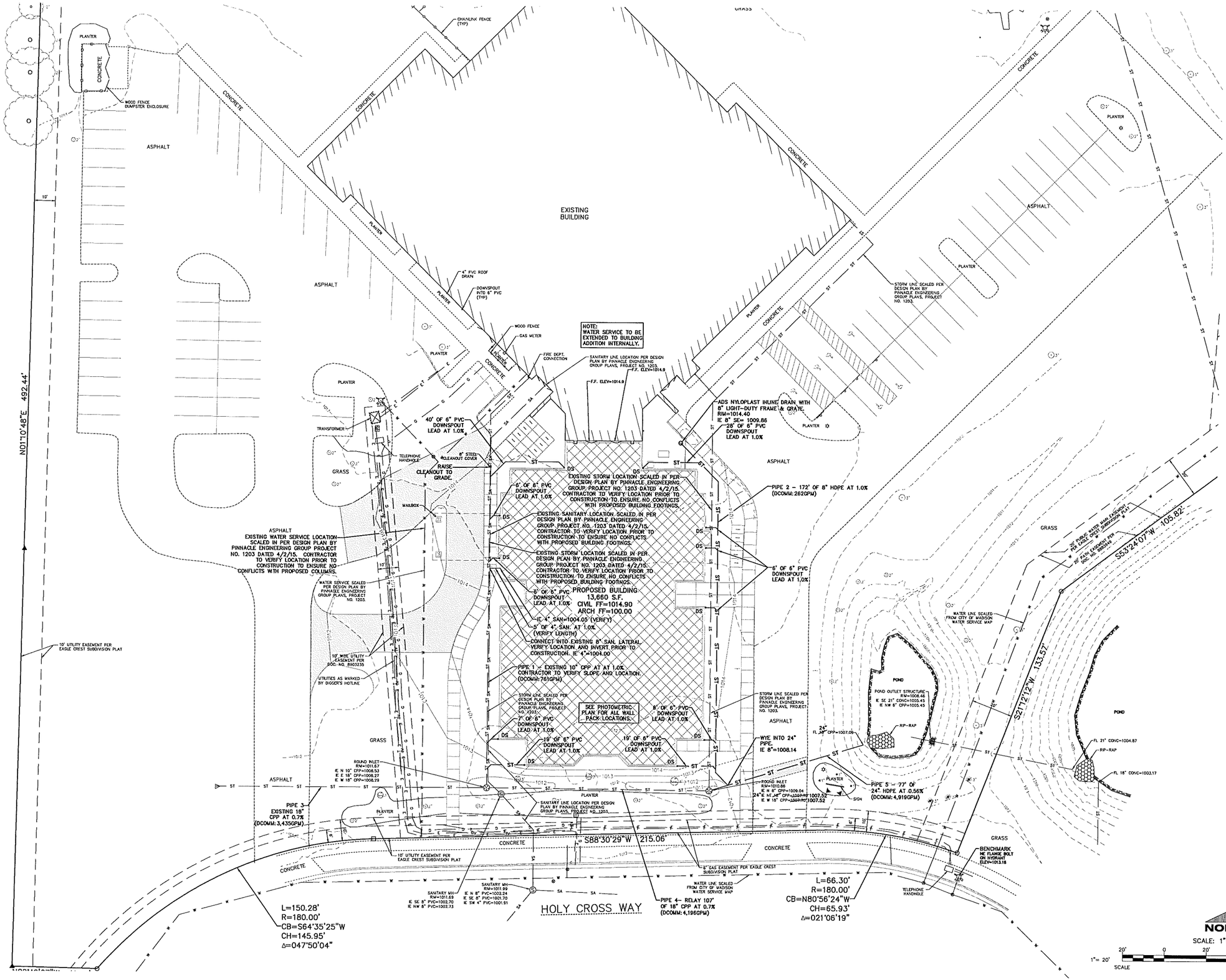
NOT FOR CONSTRUCTION

SHEET INFORMATION

GRADING AND EROSION CONTROL PLAN

SHEET NUMBER

C1.3



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PROPOSED BULDING ADDITION FOR:
HOLY CROSS LUTHERAN
734 HOLY CROSS WAY • MADISON, WI 53704

PROFESSIONAL SEAL

PRELIMINARY DATES

MAR. 2, 2017

APR. 18, 2017

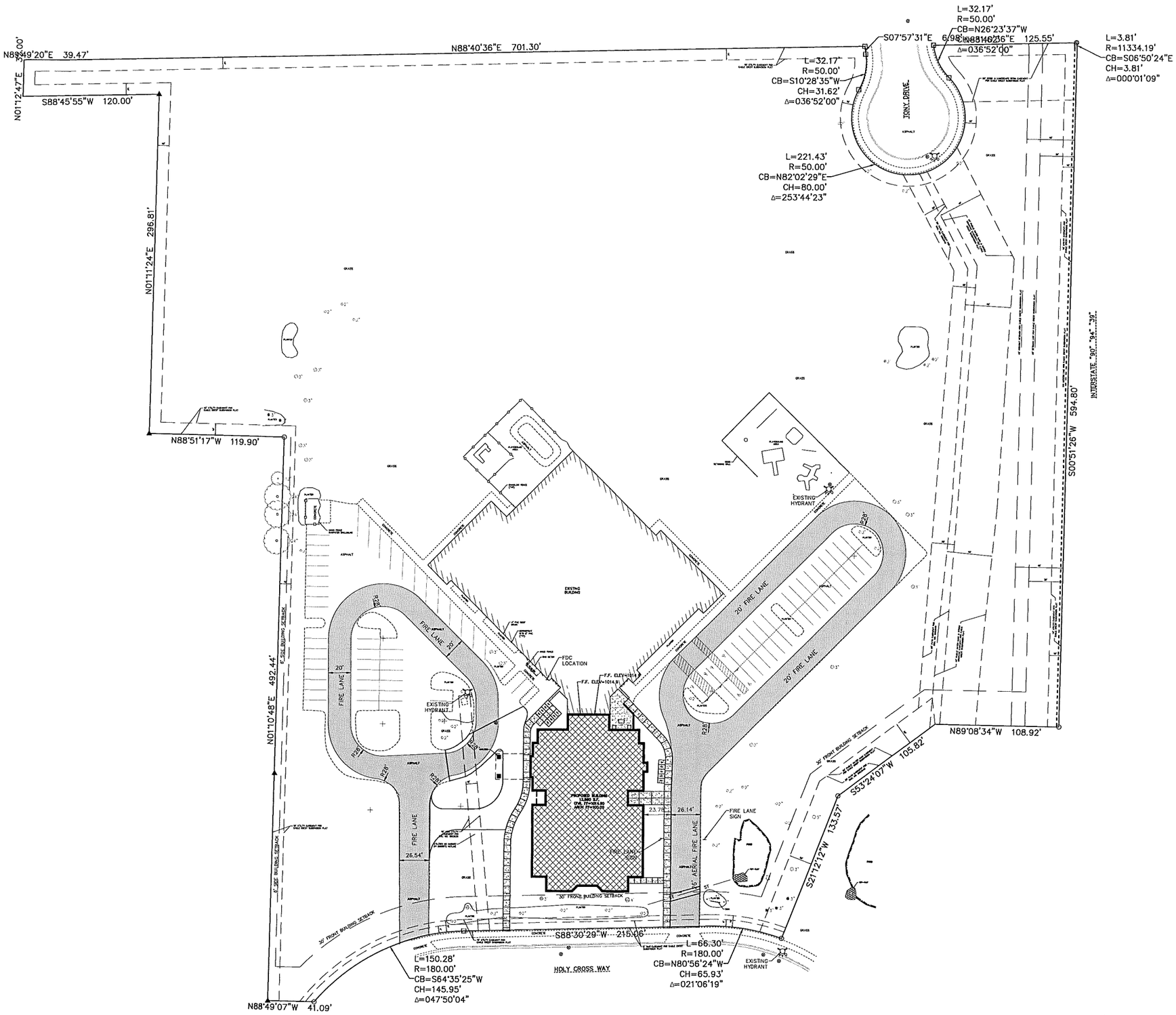
NOT FOR CONSTRUCTION

SHEET INFORMATION

UTILITY PLAN

SHEET NUMBER

C1.4



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PROJECT INFORMATION

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PROPOSED BUILDING ADDITION FOR:

HOLY CROSS LUTHERAN

734 HOLY CROSS WAY • MADISON, WI 53704

PROFESSIONAL SEAL

PRELIMINARY DATES

FEB. 28, 2017

APR. 18, 2017

NOT FOR CONSTRUCTION

SHEET INFORMATION

FIRE PROTECTION PLAN

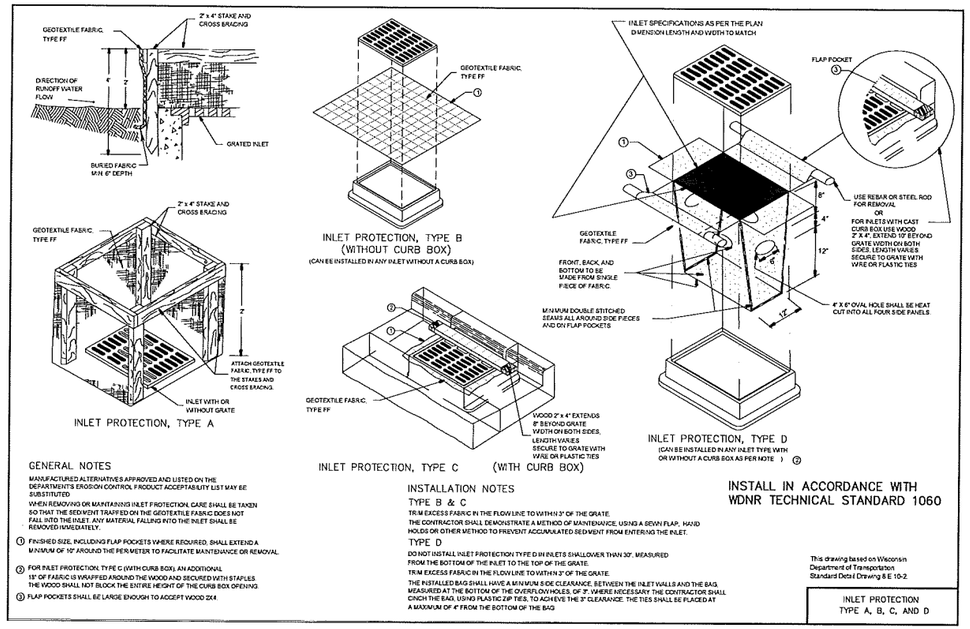
SHEET NUMBER

C1.5

NORTH

SCALE: 1"=40'-0"

1"= 40' SCALE 40' 0 40' 80' FEET



GENERAL NOTES

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PER METER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 15" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A BEVEL FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

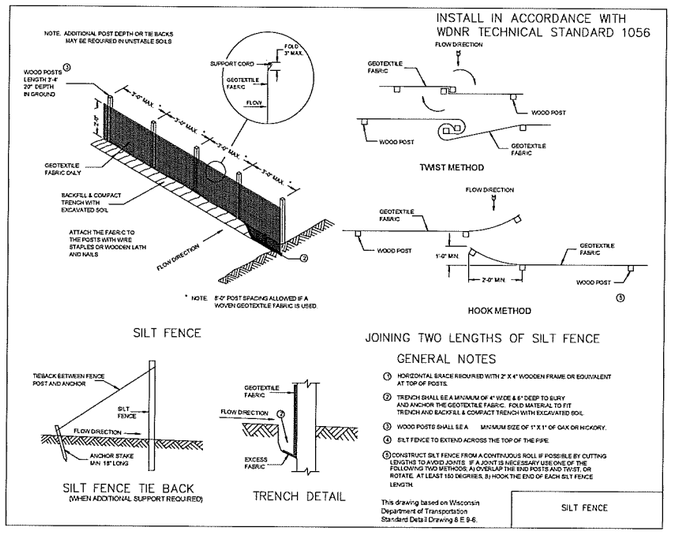
INSTALL IN ACCORDANCE WITH WDNR TECHNICAL STANDARD 1060

This drawing based on Wisconsin Department of Transportation Standard Detail Drawing 8 E 10-2.

INLET PROTECTION TYPE A, B, C, AND D

INLET PROTECTION DETAILS

NO SCALE



GENERAL NOTES

① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

② TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.

③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1" X 1" OF OAK OR HICKORY.

④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.

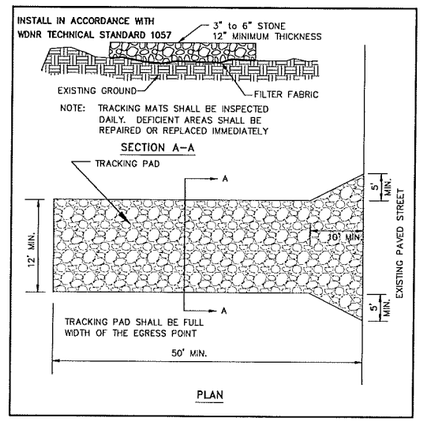
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS: A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES. B) HOOK THE END OF EACH SILT FENCE LENGTH.

This drawing based on Wisconsin Department of Transportation Standard Detail Drawing 8 E 9-6.

SILT FENCE

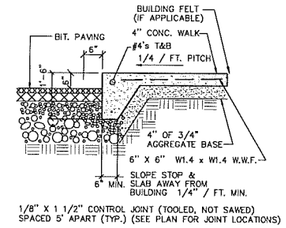
SILT FENCE – INSTALLATION DETAIL

NO SCALE



TRACKPAD DETAILS

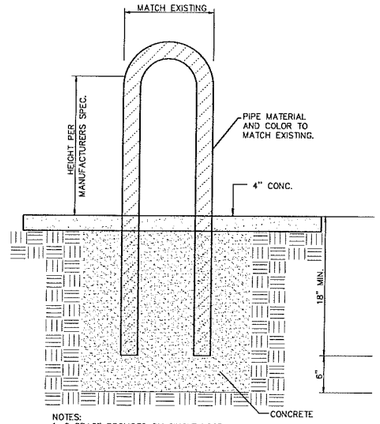
NO SCALE



1/8" X 1 1/2" CONTROL JOINT (TOOLED, NOT SAWED) SPACED 5' APART (TYP.) (SEE PLAN FOR JOINT LOCATIONS)

RAISED WALK DETAIL

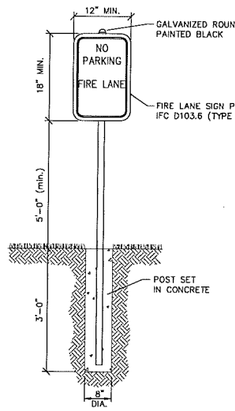
NO SCALE



NOTES:
1. 2 SPACE PROVIDED BY SINGLE LOOP
2. BIKE LOOP TO MATCH EXISTING.

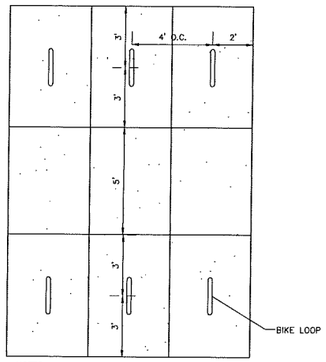
SINGLE LOOP BIKE RACK

NO SCALE



FIRE LANE SIGNAGE DETAIL

NO SCALE



NOTES:
1. 2 SPACE PROVIDED BY SINGLE LOOP
2. BIKE LOOP TO MATCH EXISTING.
3. 1 BIKE STALL IS 2'x6'.

TYPICAL BIKE STALL LAYOUT

NO SCALE

EXCEL
ARCHITECTS • ENGINEERS • SURVEYORS
100 CAMELOT DRIVE
FOND DU LAC, WI 54935
PHONE: (920) 926-9800
WWW.EXCELENGINEER.COM

PROJECT INFORMATION

PROJECT NUMBER 1626620

PROPOSED BULDING ADDITION FOR:

HOLY CROSS LUTHERAN

734 HOLY CROSS WAY • MADISON, WI 53704

PROFESSIONAL SEAL

PRELIMINARY DATES

APR. 18, 2017

NOT FOR CONSTRUCTION

SHEET INFORMATION

DETAILS

SHEET NUMBER

C1.6

PHASE 1 Landscape Plantings Displaced by PHASE 2 Construction:

	QUANTITY		POINT VALUE EACH	POINT VALUE TOTAL
Canopy / Small Trees	4	Trees	15	60
Deciduous Shrubs	30	Shrubs	3	90
Evergreen Shrubs	18	Shrubs	4	72
Ornamental Grasses / Perennials	39	Plants	2	78
Total Point Value of Displaced Plantings:				**300**

PHASE 2 Landscape Planting (as depicted on this Landscape Plan Set):

	QUANTITY		POINT VALUE EACH	POINT VALUE TOTAL
Canopy Tree	2	Trees	35	70
Canopy / Small Trees	5	Trees	15	75
Deciduous Shrubs	46	Shrubs	3	138
Evergreen Shrubs	38	Shrubs	4	152
Ornamental Grasses / Perennials	102	Plants	2	204
Total Point Value of Replacement Plantings:				569
NET ADDITIONAL POINTS FROM PHASE 2 PLANTINGS:				269

Code Compliance Data Table

City of Madison, Wisconsin
Landscape Plan Code Compliance

Landscape Calculations & Distribution:

Total Lot Area:	535,419	SF
Proposed Number of Parking Stalls:	97	Stalls
Proposed Developed Area:	29,848	SF
Total Required Landscape Points (first 5 Acres):	3,630	Points
Excess Lot (Beyond 5 Acres):	317,619	SF
One (1) Landscape Point per 100 SF:	3,176	Points
Total Required Landscape Points:	**6,806.19**	**Points**

Development Frontage Landscaping:

Lot Frontage on Transport Court:	431	LF
Required Overstory Trees:	14.4	Trees
Required Shrubs:	**71.8**	**Shrubs**

Interior Parking Lot Landscaping:

Total Asphalt / Concrete Area:	59,814	SF
PHASE 2 Additional Asphalt / Concrete Area:	2,715	SF
Required Interior Landscaped Areas:	5,002	SF
Total Proposed Parking Spaces:	83	Spaces
Total Required Trees:	31	Trees
Total Required Trees (all areas):	**46**	**Trees**

LANDSCAPE POINT VALUES:

Canopy Tree:	2.5" caliper	35
Canopy / Small Tree:	1.5" caliper	15
Evergreen Tree:	5-6' tall	35
Upright Evergeen Shrub:	3-4' tall	10
Deciduous Shrub:	#3 (12-24")	3
Evergreen Shrub:	#3 (12-24")	4
Ornamental Grass/Perennia	# 1 gallon	2

Decorative Wall or Fence:	4	per 10 LF
Earthen Berm:	5	Avg. Height 30"; per 10 LF
	2	Avg. Height 15"; per 10 LF

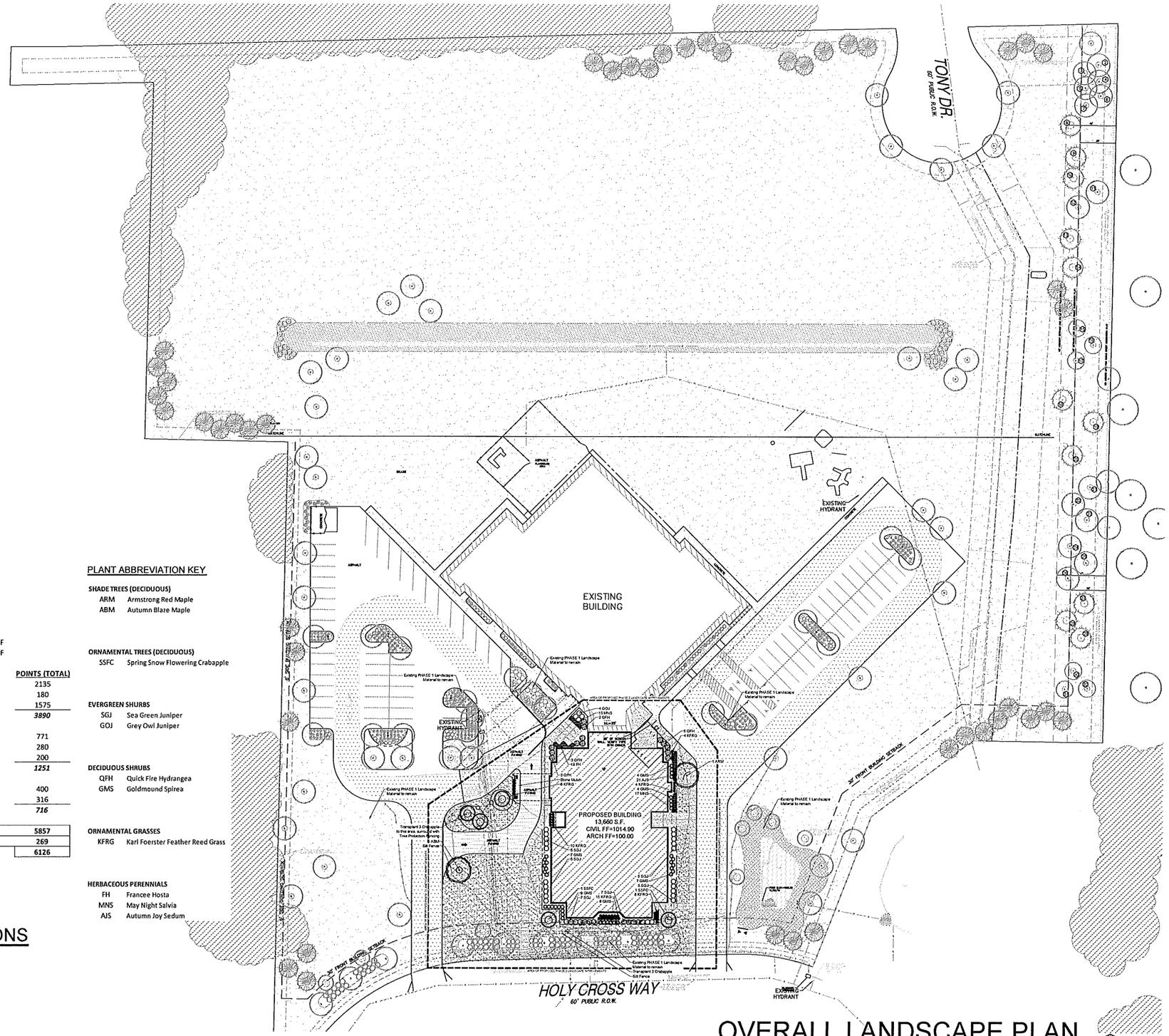
PLANT MATERIAL SHOWN ON PLAN:	QTY	POINTS (EA)	POINTS (TOTAL)
Canopy Tree:	61	35	2135
Canopy / Small Tree:	12	15	180
Evergreen Tree:	45	35	1575
Total Points (trees):			***3890***
Deciduous Shrub:	257	3	771
Upright Evergreen Tree:	28	10	280
Evergreen Shrub:	50	4	200
Total Points (shrubs):			***1251***
Ornamental Grasses:	200	2	400
Perennials:	158	2	316
Total Points (perennials & grasses)			***716***

Total Points Shown on ORIGINAL APPROVED Landscape Plan:	**TOTAL:**	5857
NET ADDITIONAL POINTS FROM PHASE 2 PLANTINGS:		269
	4/18/2017 TOTAL:	6126

TOTAL TREES SHOWN:

Canopy Tree:	63
Canopy / Small Tree:	13
Evergreen Tree:	45
Total:	*121*

CODE COMPLIANCE CALCULATIONS



PLANT ABBREVIATION KEY

SHADE TREES (DECIDUOUS)
ARM Armstrong Red Maple
ABM Autumn Blaze Maple

ORNAMENTAL TREES (DECIDUOUS)
SSFC Spring Snow Flowering Crabapple

EVERGREEN SHRUBS
SGJ Sea Green Juniper
GOJ Grey Owl Juniper

DECIDUOUS SHRUBS
QFH Quick Fire Hydrangea
GMS Goldmound Spirea

ORNAMENTAL GRASSES
KFRG Karl Foerster Feather Reed Grass

HERBACEOUS PERENNIALS
FH Francee Hosta
MNS May Night Salvia
AJS Autumn Joy Sedum

OVERALL LANDSCAPE PLAN

Scale: 1" = 40'0"

NORTH

1"= 40 SCALE 40 0 40 80 FEET

TO OBTAIN LOCATIONS OF PARTICIPANTS UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN
DIGGERS HOTLINE
CALL DIGGERS HOTLINE
811 or 1-800-242-8511
MILW. AREA 259-1181
WIS STATUTE 182.0175(1974)
REQUIRES MIN. 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE

HELLER & ASSOCIATES, LLC
LANDSCAPE ARCHITECTURE
One Redwood Court
Racine, Wisconsin 53402
ph 262.639.9733
fx 262.639.9737
david@wdavidheller.com

EXCEL
100 CAMELOT DRIVE
FOND DU LAC, WI 54935
PHONE: (920) 926-9400
WWW.EXCELENGINEER.COM

PROJECT INFORMATION
PROJECT NUMBER 1626620

PROPOSED BUILDING ADDITION FOR:
HOLY CROSS LUTHERAN
734 HOLY CROSS WAY • MADISION, WI 53704

PROFESSIONAL SEAL

PREMINARY DATES
APRIL 18, 2017

NOT FOR CONSTRUCTION

SHEET INFORMATION
LANDSCAPE PLAN
SHEET NUMBER
L1.0

TO OBTAIN LOCATIONS OF PARTICIPANTS UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

DIGGERS HOTLINE

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SHADE TREES (DECIDUOUS)
- ARM Armstrong Red Maple
- ABM Autumn Blaze Maple

ORNAMENTAL TREES (DECIDUOUS)
- SSFC Spring Snow Flowering Crabapple

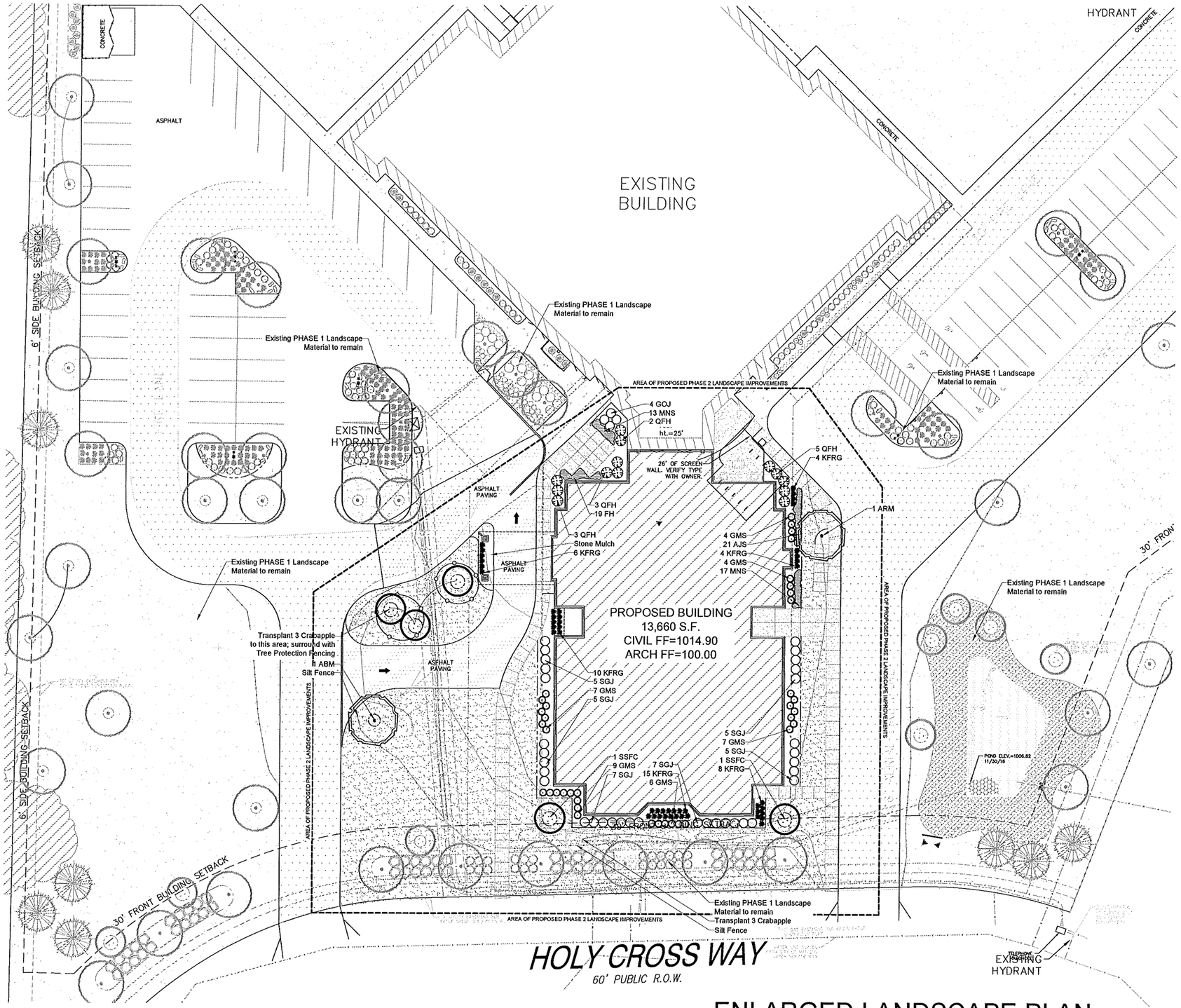
EVERGREEN SHURBS
- SGJ Sea Green Juniper
- GOJ Grey Owl Juniper

DECIDUOUS SHRUBS
- QFH Quick Fire Hydrangea
- GMS Goldmound Spirea

ORNAMENTAL GRASSES
- KFRG Karl Foerster Feather Reed Grass

HERBACEOUS PERENNIALS
- FH Francee Hosta
- MNS May Night Salvia
- AJS Autumn Joy Sedum

PLANT ABBREVIATION KEY



ENLARGED LANDSCAPE PLAN

Scale: 1" = 20'0"

NORTH

1"= 20' SCALE 20' 0 20' 40' FEET

HELLER & ASSOCIATES, LLC
LANDSCAPE ARCHITECTURE
One Redwood Court
Racine, Wisconsin 53402
ph 262.639.9733
fx 262.639.9737
david@wdavidheller.com

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100 CAMELOT DRIVE
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PROJECT INFORMATION
PROJECT NUMBER 1626620

PROPOSED BUILDING ADDITION FOR:
HOLY CROSS LUTHERAN
734 HOLY CROSS WAY • MADISON, WI 53704

PROFESSIONAL SEAL

PRELIMINARY DATES
APRIL 18, 2017

NOT FOR CONSTRUCTION

SHEET INFORMATION
LANDSCAPE PLAN
SHEET NUMBER
L1.1

TO OBTAIN LOCATIONS OF PARTICIPANTS UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

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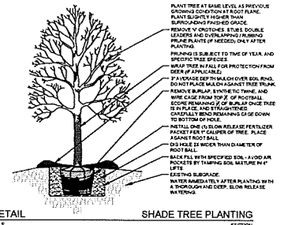
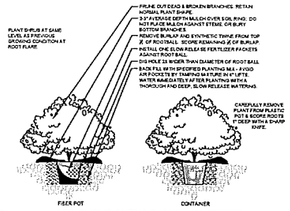
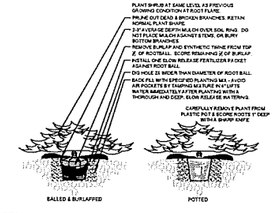


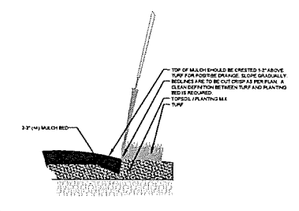
1 DETAIL N.T.S. SHADE TREE PLANTING SECTION



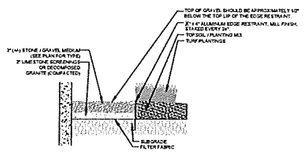
2 DETAIL N.T.S. DECIDUOUS SHRUB PLANTING (POTTED) SECTION



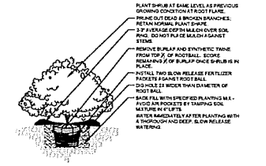
3 DETAIL N.T.S. EVERGREEN SHRUB PLANTING SECTION



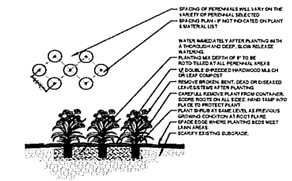
4 DETAIL N.T.S. SPADE EDGE PLANT BED EDGE DETAIL SECTION



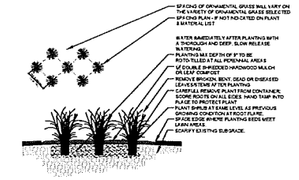
5 DETAIL N.T.S. STONE MAINTENANCE DRIP EDGE DETAIL SECTION



6 DETAIL N.T.S. DECIDUOUS SHRUB PLANTING (B&B) SECTION

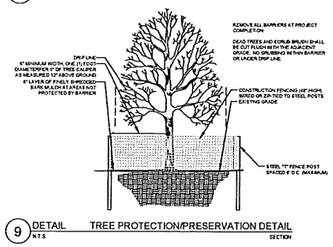


7 DETAIL N.T.S. GROUNDCOVER / PERENNIAL PLANTING SECTION



8 DETAIL N.T.S. ORNAMENTAL GRASS PLANTING SECTION

LANDSCAPE & HARDSCAPE DETAILS



9 DETAIL N.T.S. TREE PROTECTION/PRESERVATION DETAIL SECTION

PLANT KEY	QUANTITY	PLANT MATERIAL PROPOSED BOTANICAL NAME	COMMON NAME	CALIPER SIZE	ROOT	SPECIFICATION / NOTES
Proposed Landscape Construction Preparation						
TRANS	3	Transplant Existing Ornamental Flowering Trees (Crabapple)		6-7'		SEE OVERALL LANDSCAPE PLAN FOR AREA OF REPLANTING

PLANT KEY	QUANTITY	PLANT MATERIAL PROPOSED BOTANICAL NAME	COMMON NAME	CALIPER/HEIGHT SIZE	ROOT	SPECIFICATION / NOTES
Proposed Landscape Materials						
SHADE TREES (DECIDUOUS)						
ARM	1	Acer xfreemanii 'Armstrong'	Armstrong Red Maple	2.5"	B&B	Straight central leader, full and even crown. Prune only after planting
ABM	1	Acer xfreemanii 'Autumn Blaze'	Autumn Blaze Maple	2.5"	B&B	Straight central leader, full and even crown. Prune only after planting

PLANT KEY	QUANTITY	PLANT MATERIAL PROPOSED BOTANICAL NAME	COMMON NAME	CALIPER/HEIGHT SIZE	ROOT	SPECIFICATION / NOTES
ORNAMENTAL TREES (DECIDUOUS)						
SSFC	2	Malus x 'Spring Snow'	Spring Snow Flowering Crabapple	7-8' H	B&B	Well balanced multi-stemmed tree with minimum four canes, and full appearance

PLANT KEY	QUANTITY	PLANT MATERIAL PROPOSED BOTANICAL NAME	COMMON NAME	SHRUB SIZE (HEIGHT)	ROOT/ CONT.	SPECIFICATION / NOTES
EVERGREEN SHURBS						
SGJ	34	Juniperus chinensis 'Sea Green'	Sea Green Juniper	24"W	Cont.	Full rounded well branched shrub
GOJ	4	Juniperus virginiana 'Grey Owl'	Grey Owl Juniper	24"W	Cont.	Full rounded well branched shrub

PLANT KEY	QUANTITY	PLANT MATERIAL PROPOSED BOTANICAL NAME	COMMON NAME	SHRUB SIZE (HEIGHT)	ROOT/ CONT.	SPECIFICATION / NOTES
DECIDUOUS SHRUBS						
QFH	13	Hydrangea paniculata 'Quick Fire'	Quick Fire Hydrangea	36"	Cont.	Full, well rooted plant, evenly shaped
GMS	33	Spirea xbumalda 'Goldmound'	Goldmound Spirea	24"	Cont.	Full, well rooted plant, evenly shaped

PLANT KEY	QUANTITY	PLANT MATERIAL PROPOSED BOTANICAL NAME	COMMON NAME	CONTAINER SIZE		SPECIFICATION / NOTES
ORNAMENTAL GRASSES						
KFRG	32	Calamagrostis acutiflora 'Karl Foerster'	Karl Foerster Feather Reed Grass	#1	Cont.	Full, well rooted plant

PLANT KEY	QUANTITY	PLANT MATERIAL PROPOSED BOTANICAL NAME	COMMON NAME	CONTAINER SIZE		SPECIFICATION / NOTES
HERBACEOUS PERENNIALS						
FH	19	Hosta fortunei 'Francee'	Francee Hosta	#1	Cont.	Full, well rooted plant, evenly shaped
MNS	30	Salvia xsupeba 'May Night'	May Night Salvia	#1	Cont.	Full, well rooted plant, evenly shaped
AJS	21	Sedum spectable 'Autumn Joy'	Autumn Joy Sedum	#1	Cont.	Full, well rooted plant, evenly shaped
LAWN	1315	Lawn Establishment Area / Grading Area			SY	Cedar Creek Premium Blue Tag Seed Mix (Ph: 888-313-6807)
	11817	Erosion Matting for sloped seeded areas	*see plan for area delineation*		SF	EroTex DS75 Erosion Control Blanket (or approved equal)
Hardscape Materials						
	2	Heritage River Gravel Mulch (1.0-1.5" pieces)	*150 SF*		TN	*2" depth*
	35	Aluminum Edge Restraint (gravel areas)	Permaloc ProSlide 3/16"x5.5" Black Duraflex Finish		LF	
	150	Landscape Fabric	*SF*		SF	
	40	Tree Protection Fencing	*see plan for area delineation*		LF	
	23	Shredded Hardwood Mulch (3" depth)	*2,500 SF*		CY	Bark Mulch; apply Preemergent after installation of mulch
	15	Soil Amendments (2" depth)	*2,500 SF*		CY	
	36	Pulverized Topsoil (Lawn Area)	*11,850 SF*		CY	
	15	Pulverized Topsoil (2" over bed areas)	*2,500 SF*		CY	

*Landscape counts & quantities are provided as a service to the Landscape Contractor; Landscape Contractor is responsible for verifying these counts and quantities in order to provide a complete landscape installation as outlined on this Landscape Master Plan. In the event that a discrepancy occurs between this schedule and the Landscape Master Plan, the Landscape Master Plan- including the graphics and notations depicted therein- shall govern.

Seed Compositions:

Cedar Creek Premium Blue Tag (Ph: 888-313-6807): — Seed at rate of 3# per 1000 SF

- 10% Mid Atlantic Kentucky Bluegrass
- 10% Atlantis Kentucky Bluegrass
- 20% Merit Kentucky Bluegrass
- 10% Dragon Kentucky Bluegrass
- 20% Boreal Red Fescue
- 10% Palmer III Fine Perennial Ryegrass
- 20% Pennant Fine Perennial Ryegrass

LANDSCAPE GENERAL NOTES

1. Contractor responsible for contacting Diggers Hotline (811 or 800-242-8511) to have site marked prior to excavation or planting.

2. Contractor to verify all plant quantities shown on Plant & Material List and landscape planting symbols and report any discrepancies to Landscape Architect or General Contractor.

3. All plantings shall comply with standards as described in American Standard of Nursery Stock - Z60.1 ANSI (latest version). Landscape Architect reserves the right to inspect, and potentially reject any plants that are inferior, compromised, undersized, diseased, improperly transported, installed incorrectly or damaged. No sub-standard "B Grade" or "Park Grade" plant material shall be accepted. Plant material shall originate from nursery(ies) with a similar climate as the planting site.

4. Any potential plant substitutions must be approved by Landscape Architect or Owner. All plants must be installed as per sizes indicated on Plant & Material Schedule, unless approved by Landscape Architect. Any changes to sizes shown on plan must be submitted in writing to the Landscape Architect prior to installation.

5. Topsoil in Parking Lot Islands (if applicable): All parking lot islands to be backfilled with topsoil to a minimum depth of 18" to insure long-term plant health. Topsoil should be placed within 3" of finish grade by General Contractor / Excavation Contractor during rough grading operations/activity. The landscape contractor shall be responsible for the fine grading of all disturbed areas, planting bed areas, and lawn areas. Crown all parking lot islands a minimum of 6" to provide proper drainage, unless otherwise specified.

6. Tree Planting: Plant all trees slightly higher than finished grade at the root flare. Remove excess soil from the top of the root ball, if needed. Remove and discard non-biodegradable ball wrapping and support wire. Removed biodegradable burlap and wire cage (if present) from the top ⅔ of the rootball and carefully bend remaining wire down to the bottom of the hole. Once the tree has been placed into the hole and will no longer be moved, score the remaining ⅓ of the burlap and remove the twine. Provide one slow release fertilizer packets (per 1" caliper) for each tree planted.

7. Tree Planting: Backfill tree planting holes 80% existing soils removed from excavation and 20% Soil Amendments (see Note 11). Avoid air pockets and do not tamp soil down. Discard any gravel, rocks, heavy clay, or concrete pieces. When hole is ⅔ full, trees shall be watered thoroughly, and water left to soak in before proceeding to fill the remainder of the hole. Water again to full soak in the new planting. Each tree shall receive a 3" deep, 4-5' diameter (see planting details or planting plan) shredded hardwood bark mulch ring / saucer around all trees. Do not build up any mulch onto the trunk of any tree. Trees that are installed incorrectly will be replaced at the time and expense of the Landscape Contractor.

8. Shrub Planting: All shrubs to be planted in groupings as indicated on the Landscape Plan. Install with the planting of shrubs a 50/50 mix of Soil Amendments with blended, pulverized topsoil. Install topsoil into all plant beds as needed to achieve proper grade and displace undesirable soils (see planting detail). Remove all excessive gravel, clay and stones from plant beds prior to planting. When hole(s) are ⅔ full, shrubs shall be watered thoroughly, and water left to soak in before proceeding. Provide slow-release fertilizer packets at the rater of 1 per 24" height/diamter of shrub at planting.

9. Mulching: All tree rings to receive a 3" deep layer of high quality shredded hardwood bark mulch (not pigment dyed or enviro-mulch). All shrub planting and perennial planting bed areas (groupings) shall receive a 2-3" layer of shredded hardwood bark mulch, and groundcover areas a 1-2" layer of the same mulch. Do not mulch annual flower beds (if applicable). Do not allow mulch to contact plant stems and tree trunks.

10. Edging: All planting beds shall be edged with a 4" deep spade edge using a flat landscape spade or a mechanical edger. Bedlines are to be cut crisp, smooth as per plan. A clean definition between landscape beds and lawn is required. Pack mulch against lawn edge to hold in place.

11. Plant bed preparation/Soil Amendment composition: All perennial, groundcover and annual areas (if applicable) are required to receive a blend of organic soil (Soil Amendments) amendments prior to installation. Roto-till the following materials at the following ratio, into existing soil beds or installed topsoil beds to a depth of approximately 8"-10". Containerized and balled & burlapped plant material should be back-filled with amended soil:

Per 100 SF of bed area (Soil Amendment composition):
¾ CY Peat Moss or Mushroom Compost
¾ CY blended/pulverized Topsoil
¼ CY composted manure

In roto-tilled beds only, also include in above mixture:
2 lbs Starter Fertilizer

12. Installation preparation for all seeded areas: remove/kill off any existing unwanted vegetation prior to seeding. Prepare the topsoil (if adequate or provide as in item #6 above) and seed bed by removing all surface stones 1" or larger. Apply a starter fertilizer (20-10-5, or approved comparable) and specified seed uniformly at the specified rate, and provide mulch covering suitable to germinate and establish turf. Provide seed and fertilizer specifications to Landscape Architect and Owner prior to installation. Erosion control measures are to be used in swales and on slopes in excess of 1:3 and where applicable (see Civil Engineering Drawings). Methods of installation may vary are the discretion of the Landscape Contractor on his/her responsibility to establish and guarantee a smooth, uniform, quality turf. A minimum of 2" of blended, prepared and non-compacted topsoil is required for all lawn areas. If straw mulch is used as a mulch covering, a tackifier may be necessary to avoid wind dispersal of mulch covering. Marsh hay containing reed canary grass is NOT acceptable as a mulch covering.

An acceptable quality seed installation is defined as having:
No bare spots larger than one (1) square foot
No more than 10% of the total area with bare areas larger than one (1) square foot
A uniform coverage through all turf areas

13. Warranty and Replacements: All plantings are to be watered thoroughly at the time of planting, through construction and upon completion of project as required. Trees, Evergreens, and Shrubs (deciduous and evergreen) shall be guaranteed (100% replacement) for a minimum of one (1) year from the date of project completion. Perennials, groundcovers, and ornamental grasses shall be guaranteed for a minimum of one (1) growing season. Perennials, groundcovers, and ornamental grasses planted after September 15th shall be guaranteed through May 31st of the following year. Only one replacement per plant will be required during the warranty period, except for losses or replacements due to failure to comply with specified requirements. Watering and general ongoing maintenance instructions are to be supplied by the Landscape Contractor to the Owner upon completion of the project.

14. The Landscape Contractor is responsible for the watering and maintenance of all landscape areas for a period of 45 days after the substantial completion of the landscape installation. This shall include all trees, shrubs, evergreens, perennials, ornamental grasses, turf grass, no-mow grass, and native prairie seed mix / stormwater seed mix. Work also includes weeding, edging, mulching (only if required), fertilizing, trimming, sweeping up grass clippings, pruning and deadheading.

15. Project Completion: Landscape Contractor is responsible to conduct a final review of the project, upon completion, with the Landscape Architect, Client or Owner / Client Representative, and the General Contractor to answer questions, provide written care instructions for new plantings and turf, and insure that all specifications have been met.

PLANT & MATERIAL SCHEDULE

HELLER & ASSOCIATES, LLC
LANDSCAPE ARCHITECTURE
One Redwood Court
Racine, Wisconsin 53402
ph 262.639.9733
fx 262.639.9737
david@wdavidheller.com

EXCEL ENGINEERING
100 CAMELOT DRIVE
FOND DU LAC, WI 54935
PHONE: (920) 926-9800
WWW.EXCELENGINEER.COM

PROJECT INFORMATION
PROJECT NUMBER 1626620

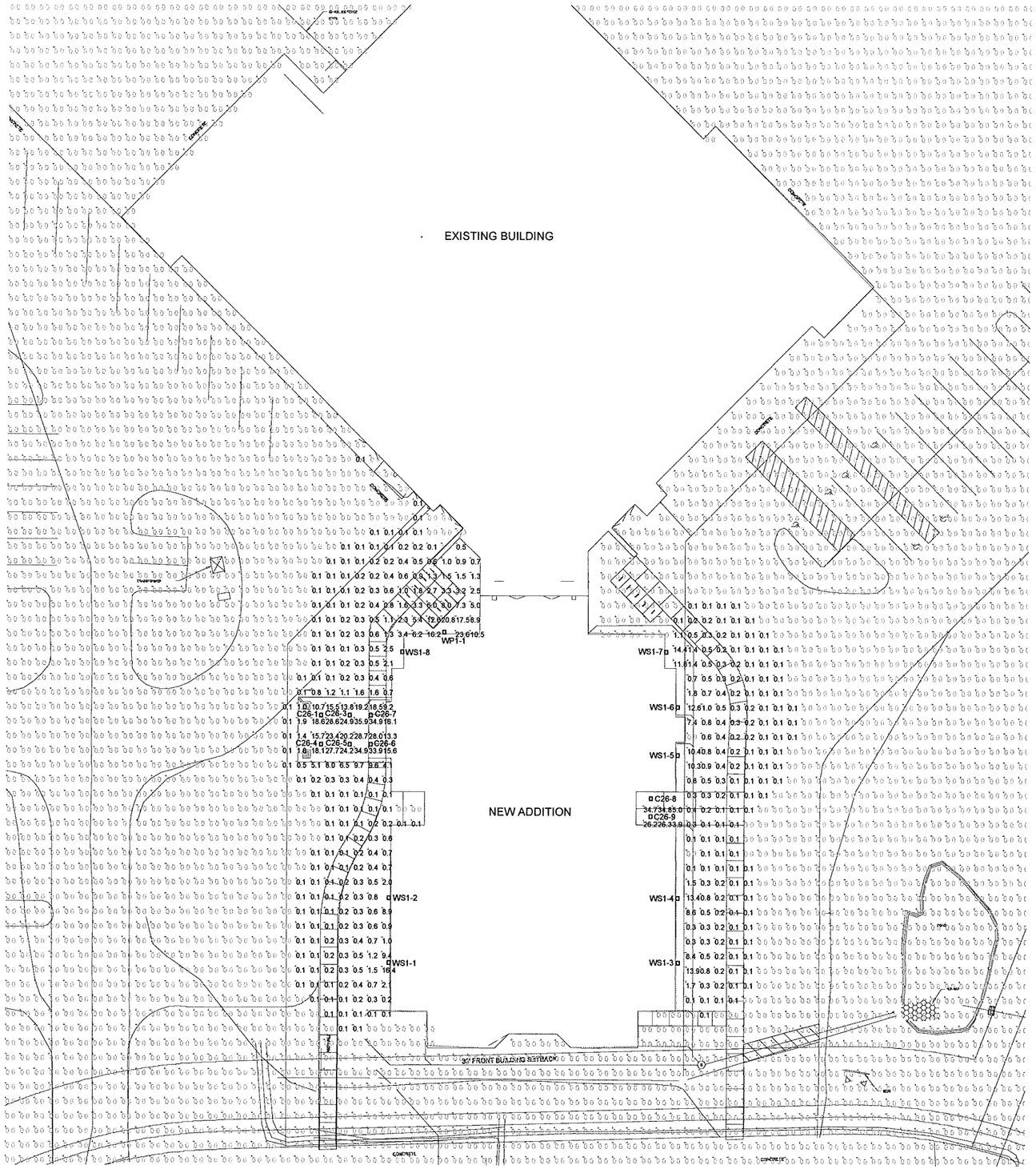
PROPOSED BUILDING ADDITION FOR:
HOLY CROSS LUTHERAN
734 HOLY CROSS WAY • MADISON, WI 53704

PROFESSIONAL SEAL

PRELIMINARY DATES
APRIL 18, 2017

NOT FOR CONSTRUCTION

SHEET INFORMATION
LANDSCAPE DETAILS
SHEET NUMBER
L1.2



NORTH

SITE PLAN - ELECTRICAL

SCALE: 1" = 20'

20' 0 20' 40'

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PROJECT INFORMATION

PROJECT NUMBER 1626620

PROPOSED BULDING ADDITION FOR:

HOLY CROSS LUTHERAN

734 HOLY CROSS WAY • MADISON, WI 53704

PROFESSIONAL SEAL

PRELIMINARY DATES

APR. 18, 2017

NOT FOR CONSTRUCTION

SHEET INFORMATION

SITE PLAN - PHOTOMETRIC

SHEET NUMBER

PXP1

FIXTURE TYPE: WS1

WS1 - EXTERIOR WALL SCONCE TO MATCH EXISTING

E-S11, E-S12, E-S13 Series

LED Decorative Wall Sconce - Up or Down - Small, Medium, Large
Replaces 60W / 100W Incandescent , 70W PSMH

EXTERIOR ACCENTS

Recommended Use
- Steps
- Walkways
- Entryways

Input Voltage
- Universal (120V through 277V Operation)

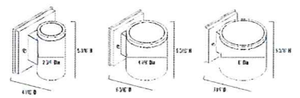
Certifications

e-conolight® Making LED easy.

1500 90th Street, Sturtevant, WI 53177 | Phone (800) 243-8440 | Fax (262) 554-5438 | www.e-conolight.com

FIXTURE TYPE: WS1

E-S11, E-S12, E-S13 Series



Series Overview

DIMENSIONS	PRODUCT WEIGHT	MOUNTING HEIGHT	SPACING
4 1/2" W x 5 3/16" H x 7 3/4" Dia (Small) 6 3/16" W x 5 3/16" H x 8 3/4" Dia (Medium) 7 1/4" W x 5 3/16" H x 9" Dia (Large)	13 lbs (Small) 13 lbs (Medium) 15 lbs (Large)	8 to 10 feet	16 to 20 times the mounting height

Fixture Specifications

HOUSING	Die-cast aluminum mounting box with extruded aluminum housing. Available in black or white polyurethane powder-coat finish.
LENS ASSEMBLY	Tempered glass lens in charcoal, clear & opal translucent
MOUNTING	Mounting box accommodates ½" square (5-3/8" with gasket) & 4" octagonal junction box. Silicone gasket provides a water-tight seal

Electrical Performance

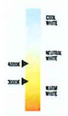
OPERATING RANGE	EXTERIOR AMBIENT TEMP	POWER FACTOR	TOTAL HARMONIC DISTORTION	DIMMABLE
3LED LED7W - 40°C (40°F)	Extended 100,000 Hours	>0.9	<20%	With most 0-10V dimmers

INPUT VOLTAGE	120V	208V	240V	277V
Current Draw (Amps)	0.05A (Small) 0.44A (Medium) 0.25A (Large)	0.27A (Small) 0.25A (Medium) 0.15A (Large)	0.24A (Small) 0.22A (Medium) 0.13A (Large)	0.44A (Small) 0.21A (Medium) 0.18A (Large)

Warranty & Certifications

WARRANTY	ETL LISTED	DLC	ENERGY STAR
5 Year Limited	Wet Location	—	—

CORRELATED COLOR TEMPERATURE (CCT)



EXTERIOR ACCENTS

e-conolight

FIXTURE TYPE: WP1

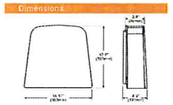
WP1 - EXTERIOR WALL SCONCE TO MATCH EXISTING

LED-2850

This newly designed luminaire featuring its versatility that can be served as wall light, flood light and etc. Incorporated with high performance Led modules along with high-quality optical reflector, this fixture performs efficiently and staunchly, against harsh outdoor environment.

Optional Kelvin color* with adder.

Dimensions



Line Drawing

Features

- UL and CUL listed for wet locations
- Solid construction die-cast aluminum body
- UV stabilized powder coated finish
- High-impact resistant tempered glass
- Optional photo control with adder
- Finish - Bronze. Color options with adder.

Specification

Model No.	System watts	Lumen Output	Color	MA	Input Voltage	CRI	Starting Temp	Equivalent
LED-2650	68	7152lm**	4000K	500MA	120~277V	70+	+0°C	250W MH
LED-2650	150	15492lm**	5000K	900MA	120~277V	70+	+0°C	250W~400W MH

* Different LED Kelvin temperatures available with 5-7 week lead time. Please call for a quote.
** Actual LED lumen output may vary due to manufacturing tolerances. Lumen output listed is for 25°C (77°F) ambient temperature and may vary from the values published here by up to 10%.

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Primary Catalog No.

64

FIXTURE TYPE: C26

Portfolio

Catalog #	Type
Project	
Comments	Date
Prepared by	

SPECIFICATION FEATURES

Lumen Shielding Reflector
Patented die-cast aluminum or spun aluminum trims reflector with a tested upper optical chamber providing superior lumen output and glare control. Specular Spun reflectors are offered in all Portfolio Absolut+ finishes. Available with diamond-cut low gloss or satin, Reflector is polished with four to six spring-holding the flange tight to the finished ceiling surface.

Plaster Frame / Collar
Die-cast aluminum 1-1/2" deep collar accommodates ceiling materials up to 2" (thickness). Available in white, black, bronze, CHTL, C-channel and bar hangers and will pivot 5° vertically from above and below the ceiling.

Junction Box
Listed for (6) #12 AWG (four in, two out) conductors. Integral strain relief knockouts for 1/2" and 3/4" trade size grip-nuts positioned to allow straight conduit runs.

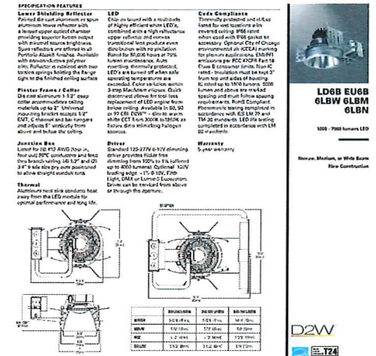
Thermal
Aluminum heat sink conducts heat away from the LED module to optimal performance and long life.

LED
Chip on board with a multitude of highly efficient white LED's, combined with a high reflective upper reflector and narrow aperture, provides excellent glare distribution with no pixilation. Rated for 50,000 hours at 70% lumen maintenance. Auto resetting thermally protected, LED's are turned off when safe operating temperature are exceeded. Driver is field replaceable 2-step Mac-Adam ellipse. Quick disconnect allows for tool-less replacement of LED engine from below ceiling. Available in 80, 90 and 95 CRI 2,700°K – 6500°K warm-white CCT from 3000K to 5000K as fixture data-controlling halogen luminaire.

Driver
Standard 120-277V 0-10V dimming driver standard. Capable of dimming from 100% to 1% (offered up to 4000 lumens). Optional 120V leading edge +1% -5 VAC Electronic Light, DMX or Lumen-2 Ecosystem. Driver can be replaced from above or through the aperture.

Code Compliance
Thermally protected and rated for wet locations with inverted ceiling. IP66 rated when used with IP66 gasket kit. Suitable for use in 1 hr. fire ceilings. Environmental air (ASTM) marking for plenum applications. ENERGY emissions per ICC #1291 Part 18 Class B consumer limits. Non-IC rated - insulation must be kept 3" from top and sides of housing. Meets ASTM E84 when lumen and above are marked spacing and must follow spacing requirements. RoHS Compliant. Photometric testing completed in accordance with IES LM-79 and TM-30 standards. LED life testing completed in accordance with LM-80 standards.

Warranty
5-year warranty.



LD6B EU6B
6LBW 6LBM
6LBN

1000 - 7000 lumens LED

Narrow, Medium, or Wide Beam
Flow Construction

	ENCLOSURE	ENCLOSURE	ENCLOSURE
6BBW	6.5" W x 6.5" L	7.5" W x 7.5" L	6.5" W x 6.5" L
6BLW	7.5" W x 7.5" L	8.5" W x 8.5" L	7.5" W x 7.5" L
4BE	4.5" W x 4.5" L	5.5" W x 5.5" L	4.5" W x 4.5" L
8BLW	9.5" W x 9.5" L	10.5" W x 10.5" L	9.5" W x 9.5" L

E·T·N

T2020FEB
2EPC (1.27) 14-2020

FIXTURE TYPE: C26

ORDERING INFORMATION

SAMPLE NUMBER: LD6B 1000 FMDWD

Housing	Aperture	Wattage	Driver	Options
LD6B 6.5" Wide Straight 4" Aperture Aluminum Housing LD6BW 6.5" Wide Straight 4" Aperture Aluminum, Optional Flange	4BE 4" Aperture 6BBW 6" Aperture 6BLW 6" Aperture 8BLW 8" Aperture	Blank 1000 - 7000 Lumens LP Low Profile Driver	1000 - 4000 Lumens 4000 - 7000 Lumens DFMTD 0-10V Dimming 1% to 100%, 120 to 277V DFMTD-E 0-10V Driver Dimming 1% to 100%, 120 to 277V DDBXD 0-10V Dimming 1% to 100%, 120 to 277V DLD 0-10V Digital Dimming 1% to 100%, 120 to 277V DMX DMX Dimming 1% to 100%, 120 to 277V PLDD Lutron® Hi-Lume® Preset Digital Dimming 1% to 100%, 120 to 277V PLMD Lutron® Hi-Lume® Preset Digital Dimming 1% to 100%, 120 to 277V ELCD Lutron® Ecosystem Digital Dimming 1% to 100%, 120 to 277V ELCL Lutron® Ecosystem Digital Dimming 1% to 100%, 120 to 277V DALD 0-10V Dimming 1% to 100%, 120 to 277V DALDE 0-10V Dimming 1% to 100%, 120 to 277V DSD 0-10V Dimming 1% to 100%, 120 to 277V DSDE 0-10V Dimming 1% to 100%, 120 to 277V DMX DMX Dimming 1% to 100%, 120 to 277V PLMD Lutron® Hi-Lume® Preset Digital Dimming 1% to 100%, 120 to 277V ELCD Lutron® Ecosystem Digital Dimming 1% to 100%, 120 to 277V ELCL Lutron® Ecosystem Digital Dimming 1% to 100%, 120 to 277V DALD 0-10V Dimming 1% to 100%, 120 to 277V DALDE 0-10V Dimming 1% to 100%, 120 to 277V DSD 0-10V Dimming 1% to 100%, 120 to 277V DSDE 0-10V Dimming 1% to 100%, 120 to 277V	ENSD Nightlight Emergency Module with Remote Test Switch ENTD Emergency Module with Remote Test Switch ENTDE Emergency Module with Remote Test Switch ENSDE Battery Emergency Module with Integral Test Switch ENTD-E Emergency Module and Relay w/ Test Switch ENTDE-E Emergency Module and Relay w/ Test Switch

SAMPLE NUMBER: 6LBW LED

Power Options	Luminaire Lengths	CRI	Color
6LBW 6" Luminaire LED Module	6BBW 14.5", 17.5", 20.5" 6BLW 14.5", 17.5", 20.5" 6BBW-MIXED 14.5", 17.5", 20.5" Luminaire Lengths 6BLW-MIXED 14.5", 17.5", 20.5" Luminaire Lengths	4K 4000 CRI Minimum 5K 5000 CRI Minimum 8K 8000 CRI Minimum 8K-HCRI 8000 CRI Minimum 9K 9000 CRI Minimum 9K-HCRI 9000 CRI Minimum WHMC Warm Dim Module with Integral Fuse	27 27K 30 30K 35 3500K 40 4000K 50 5000K 65 6500K 80 8000K 90 9000K

SAMPLE NUMBER: 8LBW LED

Finish	Trim	Flange	Optical
WH Matte White BZ Bronze BK Black SV Silver CH Chrome MB Matte Black MC Matte Champagne CU Custom	WH Matte White BZ Bronze BK Black SV Silver CH Chrome MB Matte Black MC Matte Champagne CU Custom	WH Matte White BZ Bronze BK Black SV Silver CH Chrome MB Matte Black MC Matte Champagne CU Custom	SD Specular Diffuse SC Specular Clear SDBK Matte Black SDWH Matte White SDSV Satin Silver SDMC Champagne Bronze SDMB Matte Black SDCU Custom

Accessories	Accessories
HBBK Column Bar Hanger, 90° Swing Arm HBBK Column Bar Hanger, 90° Long Arm PMBKD 20mm Post Bar Hanger, Direct Mount PMBKDF 20mm Post Bar Hanger, Direct Mount Flange PCPLUS Pendant Power Supply PCPLUSTR Pendant Power Supply Transformer	HSBK Aluminum Bar Hanger, Mounting Specific Shape TSBK Adjustable Bar Hanger, Directly Direct PMBK Pendant Mount 20" Stem PMBKF Pendant Mount Flange STK Decal Kit

Notes:
1. Fixtures ordered with any dimming option shall be supplied with 0-10V dimming wires for use with dimming controls (by others).
2. Suitable for use in damp locations.
3. Suitable for use in wet locations when installed with optional gasket.
4. Fixtures are IC rated.
5. Fixtures are suitable for use in 1 hour fire rated ceiling assemblies.
6. Fixtures are shipped standard with 10' of cable. Consult factory for longer cable lengths.
7. Fixtures are shipped standard with 3 wire grounding cable.
8. Fixtures are UL and cUL listed.
9. Fixtures are suitable for use in enclosed and gasketed luminaires.
10. Fixtures are shipped standard with 3 wire grounding cable.
11. Fixtures are shipped standard with 3 wire grounding cable.
12. Fixtures are shipped standard with 3 wire grounding cable.

ENERGY

Efficacy (LPW)					
Color Temperature (CCT)	2700K	3000K	3500K	4000K	5000K
Minimum CRI	80	80	80	80	80
Efficacy (LPW)	80	80	80	80	80

Efficacy (LPW)					
Color Temperature (CCT)	2700K	3000K	3500K	4000K	5000K
Minimum CRI	90	90	90	90	90
Efficacy (LPW)	70	70	70	70	70

Efficacy (LPW)					
Color Temperature (CCT)	2700K	3000K	3500K	4000K	5000K
Minimum CRI	90	90	90	90	90
Efficacy (LPW)	70	70	70	70	70

E·T·N

Notes:
1. Specifications are subject to change without notice.
2. Consult factory for custom options.

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PROJECT INFORMATION

PROJECT NUMBER 1626620

PROPOSED BULDING ADDITION FOR:
HOLY CROSS LUTHERAN
734 HOLY CROSS WAY • MADISON, WI 53704

PROFESSIONAL SEAL

PRELIMINARY DATES

APR. 18, 2017

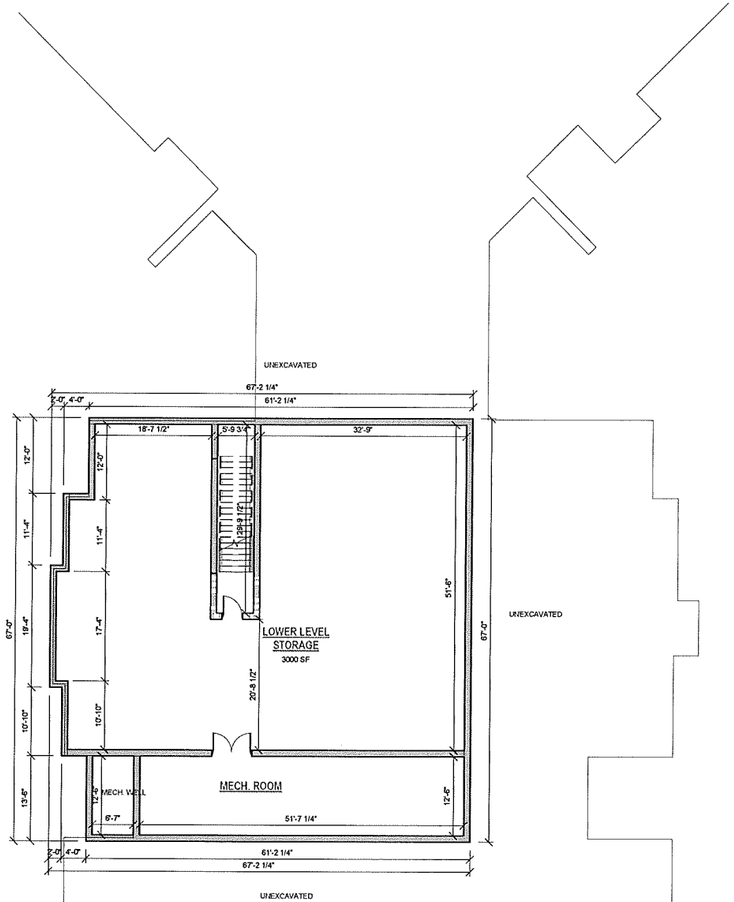
NOT FOR CONSTRUCTION

SHEET INFORMATION

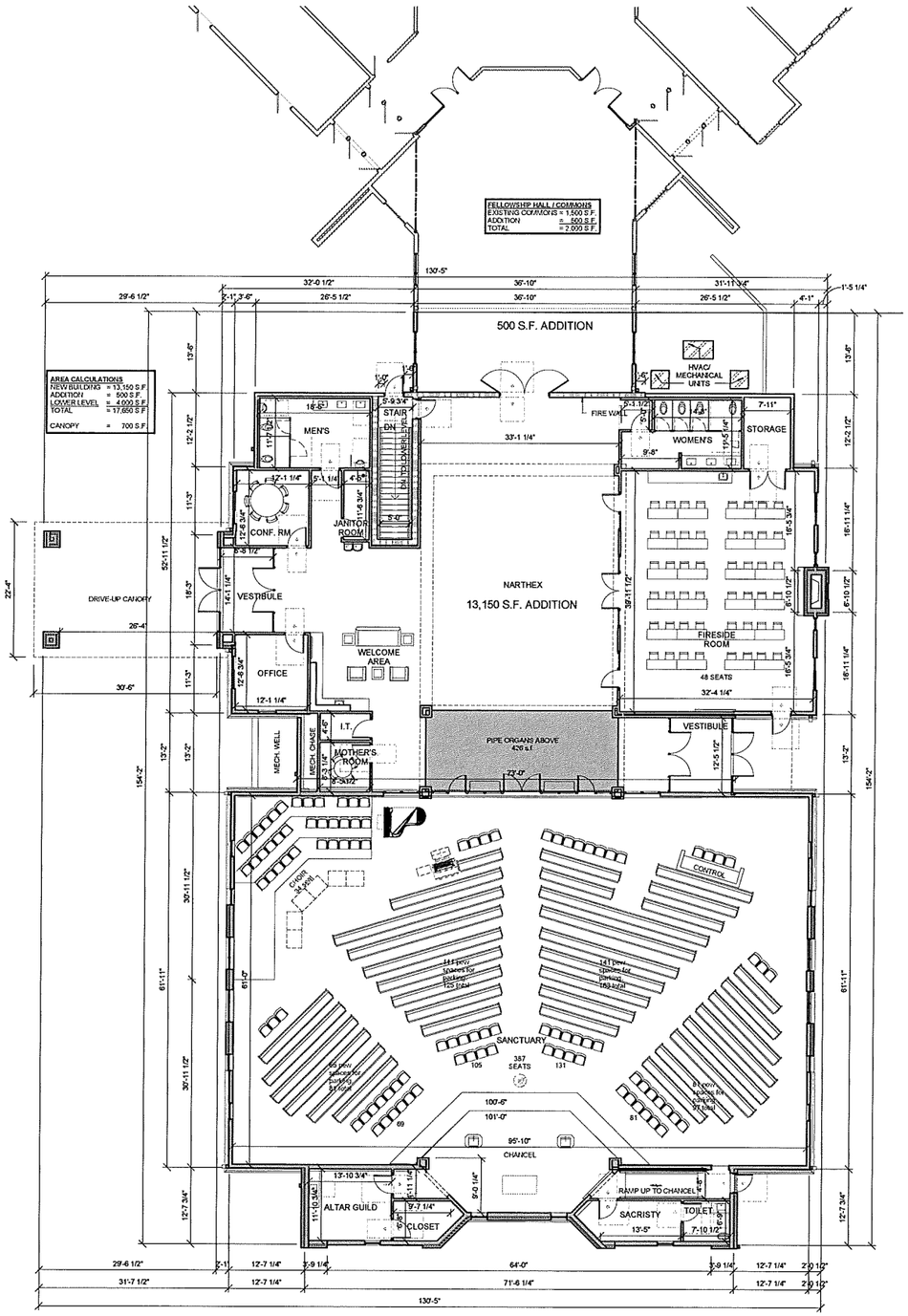
LIGHT FIXTURE CUT SHEETS

SHEET NUMBER

PXP2



2 A1.1a LOWER LEVEL
SCALE: 3/32" = 1'-0"



1 A1.1a FIRST FLOOR
SCALE: 3/32" = 1'-0"

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PROFESSIONAL SEAL

PRELIMINARY DATES
APR. 05, 2017

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SHEET INFORMATION
FIRST FLOOR PLAN
SHEET NUMBER
A1.1a

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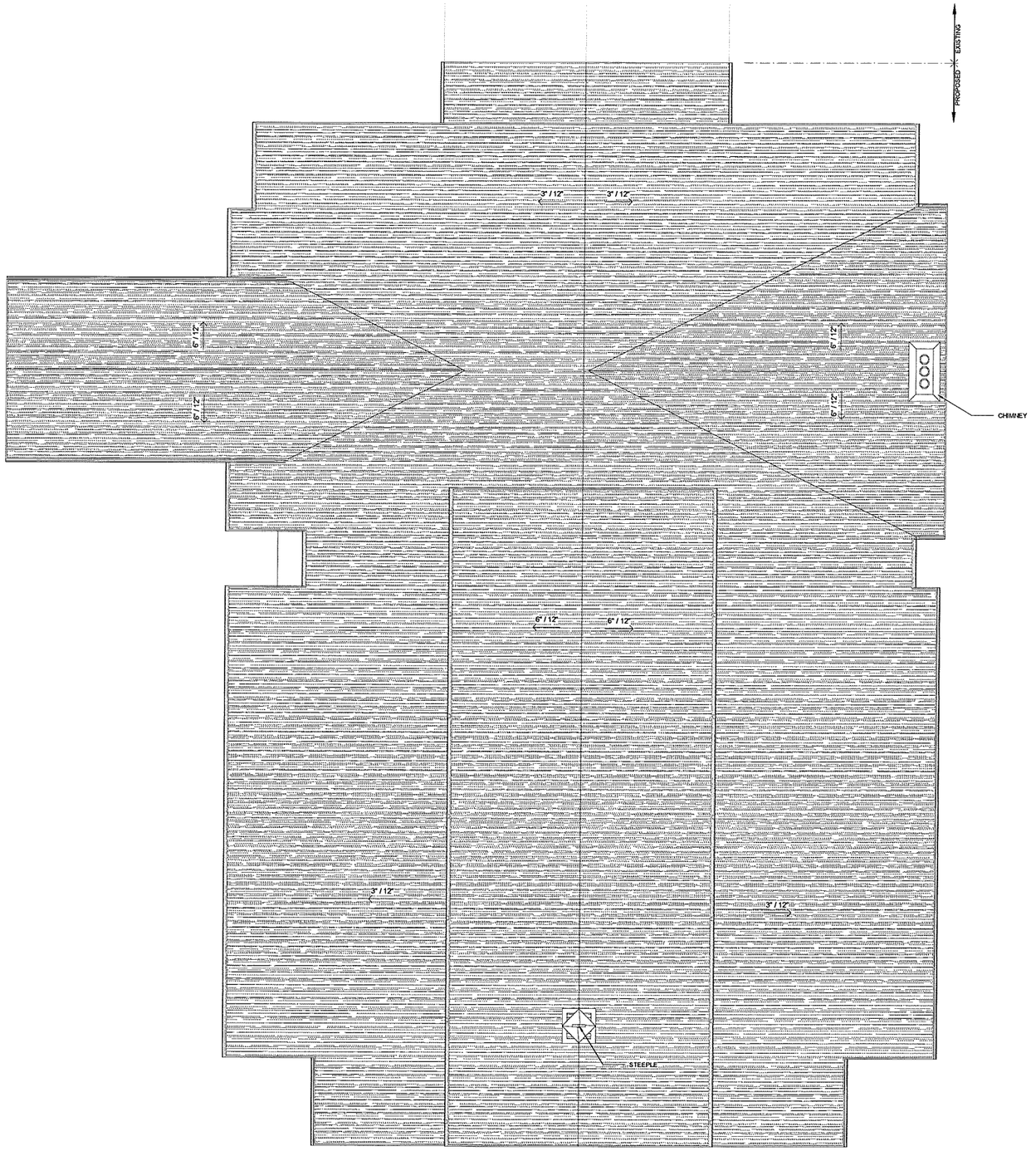

1 A1.3a ROOF PLAN
SCALE: 1/8" = 1'-0"

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PROFESSIONAL SEAL

PRELIMINARY DATES
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SHEET INFORMATION
ROOF PLAN
SHEET NUMBER
A1.3a

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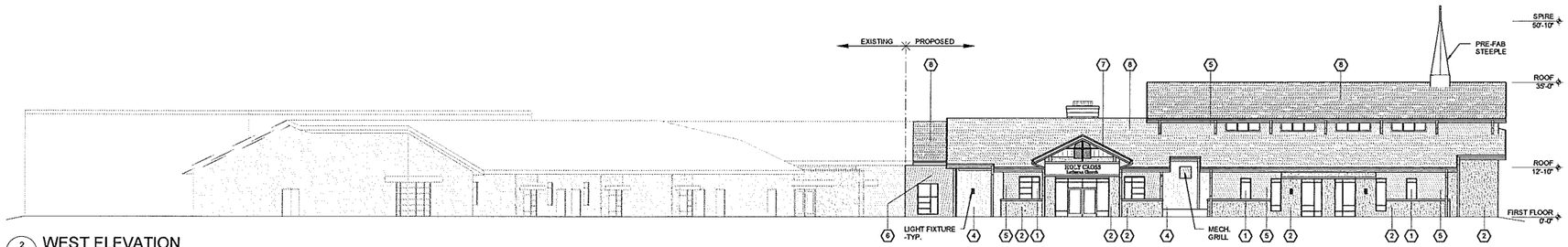
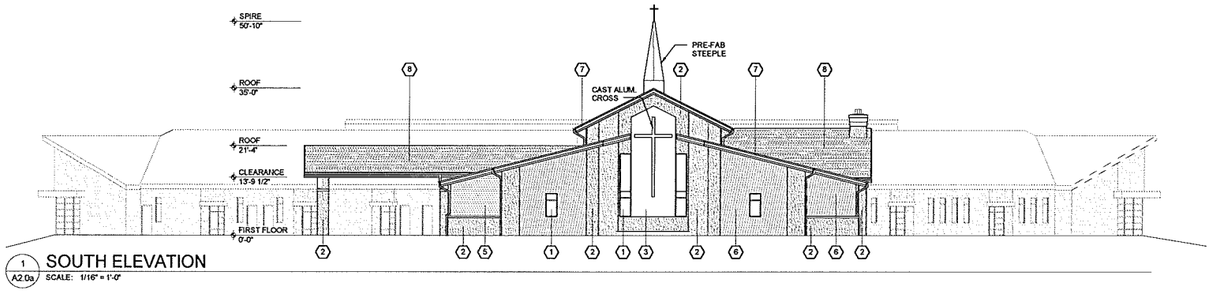
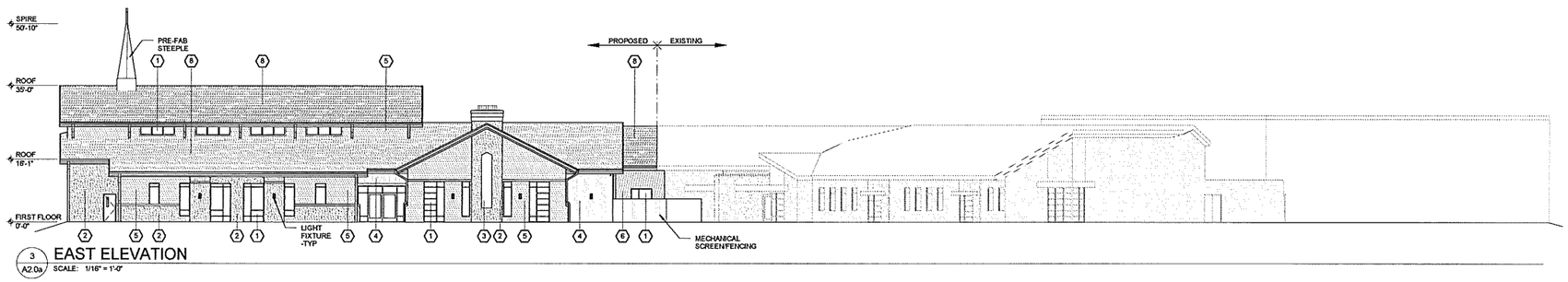


2 A2.0a WEST ELEVATION
SCALE: 1/16" = 1'-0"



1 A2.0a SOUTH ELEVATION
SCALE: 1/16" = 1'-0"



3 A2.0a EAST ELEVATION
SCALE: 1/16" = 1'-0"

EXTERIOR FINISH KEY

1. ALUMINUM FRAMED GLAZING
   THERMALLY BROKEN W/ INSULATED GLAZING
2. MASONRY
   STONE VENEER
   -TO MATCH EXISTING
3. MASONRY
   CAST STONE
4. SIDING
   VERTICAL CEMENTBOARD
5. SIDING
   HORIZONTAL CEMENTBOARD
6. SIDING
   VINYL
   -TO MATCH EXISTING
7. METAL
   FASCIA TRIM
8. ROOFING
   ARCHITECTURAL ASPHALT SHINGLES

NOTES:
- ALL FINISHES / COLORS ARE FOR BASIS OF DESIGN ONLY. FINAL SELECTION BY ARCHITECT/OWNER.
- SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- ARCHITECT / OWNER TO SELECT COLOR OF ALL EXTERIOR MEP PENETRATIONS.

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SHEET INFORMATION
EXTERIOR ELEVATIONS
SHEET NUMBER
A2.0a

AXON VIEW 1a

PERSPECTIVE VIEW 1a

PERSPECTIVE VIEW 2a

AXON VIEW 2a

PERSPECTIVE VIEW 3a

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PROJECT INFORMATION

PROJECT NUMBER 1626620

PROPOSED BUILDING ADDITION FOR:
HOLY CROSS LUTHERAN
734 HOLY CROSS WAY • MADISON, WI 53704

PROFESSIONAL SEAL

PRELIMINARY DATES

NOT FOR CONSTRUCTION

SHEET INFORMATION

EXTERIOR VIEWS

SHEET NUMBER

A2.1a