	REQUIRED	PROPOSED
MIN. LOT AREA:	17,000 SF	126,176 SF
MIN. LOT FRONTAGE	64 FT	>64 FT
MIN. LOT WIDTH	80 FT	>80 FT
MAX. BUILDING HEIGHT	29 FT (PRIMARY) 40 FT (SECONDARY)	<29 FT (PRIMARY) <36 FT (EXISTING)
MAX. FLOOR AREA RATIO	EXISTING	EXISTING
MAX. LOT COVERAGE	(0.7) (138,794) = 97,156 SF	35,292 SF (25.43% IMPERVIOUS)
BUILDING SETBACK		
MIN. FRONT STREET YARD SETBACK	28 FT	41.69 FT (MIN. EXIST.)
MIN. SIDE YARD SETBACK	14 FT	N/A
MIN. SOLAR (NORTHERN REAR) YARD SETBACK	17 FT	93.1 FT (EXIST.)
BUFFERYARD SETBACK		
MIN. FRONT YARD SETBACK	N/A	N/A
MIN. SIDE YARD SETBACK	20 FT	20 FT / MODIFIED BUFFER
MIN. REAR YARD SETBACK	N/A	N/A
VEHICLE PARKING	36 (EXISTING)	36 (EXISTING)
BICYCLE PARKING	8	8
TOTAL IMPERVIOUS AREA (OF GLA)	97,156 SF MAX. / 25,850 SF (EXISTING)	28,145 SF (20.27%)
IMPERVOUS AREA INCREASE		2,295 SF
TOTAL LAND DISTURBANCE AREA		6,769 SF (5.36% PROPOSED) 19,162 SF (15.19 % TOTAL)
SLOPE CATEGORY	DELINEATED AREAS	DISTURBED AREAS
0% TO 10%	66,800 SF (52.9%)	3,583 SF (52.9%)
10.01% TO 15%	38,014 SF (30.2%)	1,213 SF (17.9%)
10.5.01% TO 25%	12,403 SF (9.8%)	1,453 SF (21.5%)
25.01% & GREATER	8,959 SF (7.1%)	520 SF (7.7%)
GROSS LAND AREA (GLA)	126,176 sf x 1.10 = 138,794 sf	

ST. THOMAS MORE - SOUTH CAMPUS - PHASE I

ADMINISTRATIVE ZONING COMPLIANCE PERMIT PLANS
REDEVELOPMENT OF SOUTH CAMPUS

632 LAUREL HILL ROAD, CHAPEL HILL, N.C.

CHAPEL HILL, ORANGE COUNTY, NORTH CAROLINA

2018-07-31

REVISED: 2018-10-01

PREPARED FOR:

OWNER/DEVELOPER

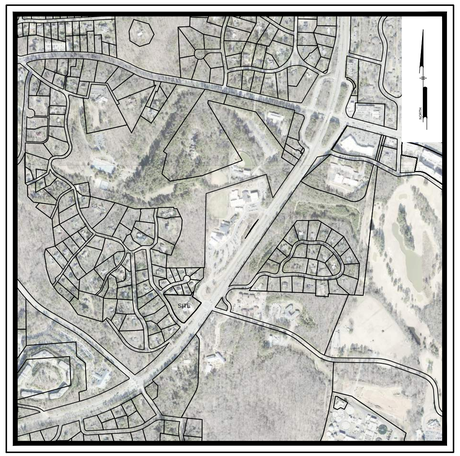
THE CATHOLIC COMMUNITY OF ST. THOMAS MORE

940 CARMICHAEL STREET

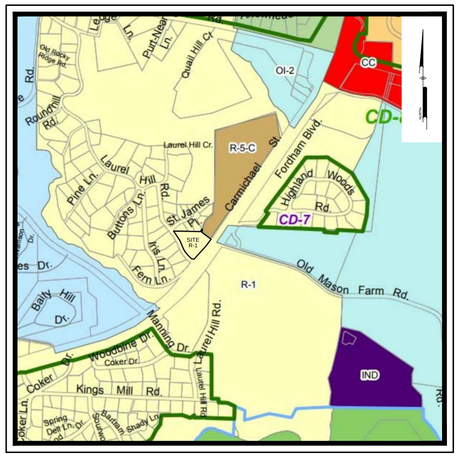
CHAPEL HILL, NC 27514

SHEET LIST TABLE				
SHEET	PAGE	DESCRIPTION	DATE SUBMITTED	DATE REVISED
CS0001	1	COVER SHEET	7/31/2018	10/1/2018
CS0002	2	GENERAL NOTES AND LEGEND	7/31/2018	10/1/2018
CS0201	3	EXISTING CONDITIONS	7/31/2018	10/1/2018
CS0202	4	SLOPE ANALYSIS MAP	7/31/2018	10/1/2018
CS0501	5	DEMOLITION PLAN	7/31/2018	10/1/2018
CS1001	6	SITE PLAN	7/31/2018	10/1/2018
CS1501	7	GRADING & DRAINAGE PLAN	7/31/2018	10/1/2018
CS2001	8	LANDSCAPE PLAN	7/31/2018	10/1/2018
CS6002	9	SITE DETAILS	7/31/2018	10/1/2018
CS8001	10	EROSION CONTROL PLAN	7/31/2018	10/1/2018
CS8501	11	EROSION & SEDIMENT CONTROL DETAILS	7/31/2018	10/1/2018

SOILS MAP
Scale: 1" = 500'



LOCATION MAP
Scale: 1" = 1000'



ZONING MAP
Scale: 1" = 1,000'

USGS MAP
Scale: 1" = 1,000'

PREPARED BY:

PENNONI ASSOCIATES INC.

Pennoni

Firm License
F-1267

401 Providence Road #200
Chapel Hill, NC 27514
T 919.929.1173
F 919.493.6548

North Carolina 811
www.nc811.org

PRELIMINARY
NOT FOR CONSTRUCTION

ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 033040 PETER C. BELTON 10/8/18

ST. THOMAS MORE - SOUTH CAMPUS - PHASE I
632 LAUREL HILL ROAD
CHAPEL HILL, NC 27514

COVER SHEET

THE CATHOLIC COMMUNITY OF ST. THOMAS MORE
940 CARMICHAEL STREET
CHAPEL HILL, NC 27514

NO.	DATE	REVISIONS	BY
1	10/1/2018	Revised Per Chapel Hill Comments	CJJ

PROJECT	TMCC1701
DATE	2018-10-01
DRAWING SCALE	AS SHOWN
DRAWN BY	CJJ
APPROVED BY	PCB

CS0001

SHEET 1 OF 11

PLOTTED: 10/8/2018 2:02 PM, BY: Carol Jamula PLOTSTYLE: Pennoni-NCS.ctb PROJECT STATUS: REDEVELOPMENT OF UNITED METHODIST CHURCH SITE

L:\Projects\TMCC\TMCC1701-St Thomas More - Aldengate\DESIGN\CS\ADMIN_ZCP\ZCPCS0001.dwg

LEGEND

EXISTING	PROPOSED	DESCRIPTION
		CABLE TV, JUNCTION BOX
		CABLE TV, MANHOLE
OC — OC	OC — OC	CABLE TV, OVERHEAD
		CABLE TV, PANEL BOX
		CABLE TV, PEDESTAL
		CABLE TV, STUB OUT
UC — UC	UC — UC	CABLE TV, UNDERGROUND
		CABLE TV, WITNESS POST
		CHANNEL
		COMMUNICATION, HANDHOLE
		COMMUNICATION, JUNCTION BOX
		COMMUNICATION, MANHOLE
OC — OC	OC — OC	COMMUNICATION, OVERHEAD
		COMMUNICATION, PANEL BOX
		COMMUNICATION, PEDESTAL
		COMMUNICATION, STUB OUT
UC — UC	UC — UC	COMMUNICATION, UNDERGROUND
		COMMUNICATION, WITNESS POST
		CONTROL, BENCHMARK
		CONTROL, GPS
		CONTROL, MAPPING
		CONTROL, REFERENCE
		CONTROL, TRAVERSE
		CURB
		CURB DEPRESSION
		EDGE OF PAVEMENT
		EDGE OF GRAVEL
		EASEMENT
		FENCE
		FIBER OPTIC, HANDHOLE
		FIBER OPTIC, JUNCTION BOX
		FIBER OPTIC, MANHOLE
FO — FO	FO — FO	FIBER OPTIC, OVERHEAD
		FIBER OPTIC, PANEL BOX
		FIBER OPTIC, PEDESTAL
		FIBER OPTIC, STUB OUT
FO — FO	FO — FO	FIBER OPTIC, UNDERGROUND
		FIBER OPTIC, WITNESS POST
		FLOODPLAIN
		FUEL, MANHOLE
OFG — OFG	OFG — OFG	FUEL, OVERHEAD
		FUEL, PLUG
		FUEL, PUMP
UFG — UFG	UFG — UFG	FUEL, UNDERGROUND
		GUIDE RAIL
	LOD	LIMITS OF DISTURBANCE
		MARKING, HANDICAP PARKING
		NATURAL GAS, METER
		NATURAL GAS, MANHOLE
OG — OG	OG — OG	NATURAL GAS, OVERHEAD
		NATURAL GAS, STUB OUT
		NATURAL GAS, VALVE UNDERGROUND
UG — UG	UG — UG	NATURAL GAS, WITNESS POST
		PHONE, HANDHOLE
		PHONE, JUNCTION BOX
		PHONE, MANHOLE
		PHONE, OVERHEAD
OT — OT	OT — OT	PHONE, PANEL BOX
		PHONE, PEDESTAL
		PHONE, STUB OUT
		PHONE, UNDERGROUND
UT — UT	UT — UT	PHONE, WITNESS POST
		POWER, GUY POLE
		POWER, GUY WIRE
		POWER, HANDHOLE
		POWER, JUNCTION BOX
		POWER, SINGLE HEAD LIGHT
		POWER, DOUBLE HEAD LIGHT
		POWER, THREE HEAD LIGHT
		POWER, FOUR HEAD LIGHT
		POWER, LIGHT
		POWER, SPOT LIGHT
		POWER, LIGHT POLE SINGLE
		POWER, LIGHT POLE DOUBLE
		POWER, MANHOLE
OE — OE	OE — OE	POWER, OVERHEAD
		POWER, METER
		POWER, PANEL BOX
		POWER, PEDESTAL
		POWER, STUB OUT
		POWER, TRANSFORMER
UE — UE	E — E	POWER, UNDERGROUND
		POWER, UTILITY POLE
		POWER, WITNESS POST
		POWER, YARD LIGHT
		PROPERTY, LINE
		LEGAL RIGHT-OF-WAY
		PROPERTY, CORNER FOUND
		PROPERTY, CORNER FOUND (OTHERS)
		PROPERTY, CONCRETE MONUMENT
		PROPERTY, ADJOINING LINED
		PROPERTY, LINE RESERVED
		RAIL, MILE MARKER
		RAIL, PANEL BOX
		RAIL, TRACK
		SITE, AIR COMPRESSOR
		SITE, AIR CONDITIONER
		SITE, BOLLARD
		SITE, BORING LOCATION
		BUILDING
		SITE, FLAG POLE
		SITE, HEAD STONE
		SITE, MAIL BOX
		SITE, MONITOR WELL
		SITE, PARKING METER
		SITE, POST
		SITE, SIGN POST AND BOARD
		SITE, TRAFFIC SIGN
		SOIL BOUNDARY
WaC		SOIL LABEL

GENERAL NOTES:

1. APPLICANT: THE CATHOLIC COMMUNITY OF ST. THOMAS MORE, 940 CARMICHAEL STREET, CHAPEL HILL, NC 27514
   RESPONSIBLE OFFICER: CARLOS LIMA

2. BOUNDARY:
   A. BOUNDARY INFORMATION TAKEN FROM A PLAN ENTITLED, "BOUNDARY SURVEY, ALDERSGATE METHODIST CHURCH, 632 LAUREL HILL RD., CHAPEL HILL, N.C.",DATED JANUARY 2, 2018, AS PREPARED BY PENNONI ASSOCIATES.
   B. EXISTING TOPOGRAPHICAL INFORMATION OBTAINED BY PENNONI ASSOCIATES BETWEEN SEPTEMBER 22, 2017 AND OCTOBER 3, 2017.

3. UTILITY NOTES:
   A. COMPLETENESS OR ACCURACY OF LOCATION AND DEPTH OF UNDERGROUND UTILITIES AND STRUCTURES IS NOT GUARANTEED.
   B. LOCATION OF ALL EXISTING AND PROPOSED SERVICES ARE APPROXIMATE AND SHALL BE CONFIRMED INDEPENDENTLY WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION. SANITARY SEWER AND ALL OTHER UTILITY SERVICE CONNECTION POINTS SHALL BE CONFIRMED INDEPENDENTLY BY THE CONTRACTOR IN THE FIELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ALL DISCREPANCIES SHALL BE REPORTED IMMEDIATELY IN WRITING TO THE ENGINEER. CONSTRUCTION SHALL COMMENCE BEGINNING AT THE LOWEST INVERT (POINT OF CONNECTION) AND PROGRESS UP GRADIENT. PROPOSED INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY TEST PIT PRIOR TO COMMENCEMENT OF CONSTRUCTION.
   C. ALL UTILITIES AND SERVICES INCLUDING BUT NOT LIMITED TO GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC, ETC. WITHIN THE LIMITS OF DISTURBANCE SHALL BE VERTICALLY AND HORIZONTALLY LOCATED. THE CONTRACTOR SHALL USE AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL THE UNDERGROUND UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING UTILITIES DURING CONSTRUCTION AT NO COST TO THE OWNER.

4. AS SHOWN ON THE FLOOD INSURANCE RATE MAP FOR ORANGE COUNTY, NC, MAP #43710978800K , EFFECTIVE DATE 11/11/2017 THE SITE AREA PROPOSED TO BE DEVELOPED LIES WITHIN "ZONE X" DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 100 YEAR FLOOD PLAIN.

5. FIRE WATCH; DURING CONSTRUCTION AND DEMOLITION WHERE HOT WORK, MATERIALS SUBJECT TO SPONTANEOUS COMBUSTION, OR OTHER HAZARDOUS CONSTRUCTION OR DEMOLITION IS OCCURRING, THE OWNER OR THEIR DESIGNEE SHALL BE RESPONSIBLE FOR MAINTAINING A FIRE WATCH. THE FIRE WATCH SHALL CONSIST OF AT LEAST ONE PERSON WITH A MEANS OF COMMUNICATING AN ALARM TO 911, SHALL A WRITTEN ADDRESS POSTED IN A CONSPICUOUS LOCATION AND SHALL MAINTAIN CONSTANT PATROLS. NC FPC 2012 SECTION 1404.

6. CONSTRUCTION / DEMOLITION; ALL CONSTRUCTION AND DEMOLITION CONDUCTED SHALL BE IN COMPLIANCE OF THE CURRENT EDITION OF CHAPTER 14 OF THE NC FPC.

7. PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY APPLICANT SHALL REPLACE ANY TREES SHOWN AS PRESERVED-PROTECTED ON THE LANDSCAPE PROTECTION PLAN THAT HAVE DIED OR ARE IN POOR HEALTH AS A RESULT OF LAND DISTURBING ACTIVITIES.

8. SITE LAND DISTURBANCE CALCULATIONS
   A. PREVIOUSLY APPROVED SITE DISTURBANCE: 12,393 SQ.FT.
   B. PROPOSED PHASE 1 SITE LAND DISTURBANCE: 6,769 SQ.FT.
   C. TOTAL LAND DISTURBANCE: 19,162 SQ.FT.

9. ARCHITECTURAL INFORMATION PROVIDED TO PENNONI BY LITTLE DIVERSIFIED ARCHITECTURAL CONSULTING ON 09/17/2018.

LEGEND

EXISTING	PROPOSED	DESCRIPTION
		SANITARY SEWER, CLEAN-OUT
FM — FM	FM — FM	SANITARY SEWER, FORCE MAIN
		SANITARY SEWER, FORCE MAIN MANHOLE
		SANITARY SEWER, FORCE STUB OUT
S — S — S		SANITARY SEWER, LATERAL
		SANITARY SEWER, MANHOLE
S — S	S — S	SANITARY SEWER, UNDERGROUND (4" DIA TO 10" DIA)
		SANITARY SEWER, SEPTIC TANK
		SANITARY SEWER, STUB OUT
		SANITARY SEWER, VALVE
		SANITARY SEWER, WITNESS POST
		STREAM
		STORM SEWER, INLET
		STORM SEWER,HEADWALL
		STORM SEWER, MANHOLE
D — D		STORM SEWER, UNDERGROUND
		STORM SEWER, DOWNSPOUT LOCATION
	RD — RD — RD	STORM SEWER, ROOF DRAIN LINE
		STORM SEWER, STAND PIPE
		STORM SEWER, CLEAN-OUT
		STORM SEWER, WITNESS POST
101	101	MINOR CONTOUR
100	100	MAJOR CONTOUR
x 100.5	100.5	SPOT ELEVATION
	T.B.R.	TO BE REMOVED
		TRAFFIC, PAVEMENT MARKING, BIKE LANE
		TRAFFIC, PAVEMENT MARKING, TURN ARROWS
		TRAFFIC, PAVEMENT MARKING, HOV LANE
		TRAFFIC, HAND HOLE
		TRAFFIC, JUNCTION BOX
		TRAFFIC, MANHOLE
		TRAFFIC, PANEL BOX
		TRAFFIC, PEDESTAL
		TRAFFIC, PEDESTRIAN SIGNAL
		TRAFFIC, SIGNAL POLE
		TRAFFIC, SIGNAL POLE & LIGHT ARM
		TRAFFIC, STUB OUT
		VEGETATION, SHRUB
		VEGETATION, GRASS LINE / LANDSCAPED AREA
		VEGETATION, DECIDUOUS SHOWING CANOPY
		VEGETATION, CONIFEROUS SHOWING CANOPY
		VEGETATION, TREE LINE
		WATER, HOSE BIB
		WATER, FIRE HYDRANT
		WATER, IRRIGATION HEAD
		WATER, IRRIGATION VALVE BOX
		WATER, MANHOLE
		WATER, METER
		WATER, POST INDICATOR VALVE
		WATER, SIAMESE CONNECTION
		WATER, STUB OUT
W — W	W — W	WATER, UNDERGROUND
F — F	F — F	WATER, UNDERGROUND FIRE
		WATER, VALVE
		WATER, WITNESS POST

GENERAL CONSTRUCTION AND GRADING NOTES:

1. ALL WORK SHALL COMPLY WITH APPLICABLE STATE, FEDERAL AND LOCAL CODES AND OSHA STANDARDS ALL NECESSARY LICENSES AND PERMITS SHALL BE OBTAINED BY THE CONTRACTOR AT HIS EXPENSE UNLESS PREVIOUSLY OBTAINED BY THE OWNER/DEVELOPER.
2. THE CONTRACTOR SHALL BE REQUIRED TO REVIEW AND ABIDE BY SPECIFICATIONS OF THE PLAN AND ALL SUPPORTING DOCUMENTS, PERMITS, AND REPORTS FOR THIS SITE, INCLUDING NOT BUT NOT LIMITED TO:
   - EROSION AND SEDIMENTATION CONTROL PLAN
   - STORMWATER MANAGEMENT PLAN.
3. THE CONTRACTOR SHALL IMMEDIATELY INFORM THE ENGINEER OF ANY DISCREPANCIES OR ERROR THEY DISCOVER IN THE PLANS.
4. DEVIATION FROM THESE PLANS AND NOTES WITHOUT THE PRIOR CONSENT OF THE OWNER OR HIS REPRESENTATIVE OR THE ENGINEER MAY BE CAUSE OF THE WORK TO BE UNACCEPTABLE.
5. UTILITY COORDINATION SHALL BE INCLUDED IN THE PROJECT SCHEDULE AND IT IS THE EXPLICIT RESPONSIBILITY OF THE CONTRACTOR TO ASSURE THAT THE PROJECT SCHEDULE INCLUDES THE NECESSARY RELOCATIONS. THE CONTRACTOR WILL NOT BE PAID ADDITIONALLY FOR THIS COORDINATION. THE CONTRACTOR SHOULD SEEK ASSISTANCE FROM ALL UTILITY COMPANIES TO LOCATE AND PROTECT THEIR FACILITIES. IF CONFLICTS ARE FOUND, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER AND DESIGN ENGINEER FOR INSTRUCTION BEFORE PROCEEDING WITH WORK.
6. ALL MATERIALS SHALL BE NEW UNLESS USED OR SALVAGED MATERIALS ARE AUTHORIZED BY THE OWNER AND APPLICANT.
7. TRAFFIC CONTROL METHODS, SUCH AS BARRICADES, SUFFICIENT LIGHTS, SIGNS, ETC., MAY BE NECESSARY FOR THE PROTECTION AND SAFETY OF THE PUBLIC SHALL BE PROVIDED AND MAINTAINED THROUGHOUT THE CONSTRUCTION IN ACCORDANCE WITH CURRENT AND NCDOT STANDARDS.
8. CONTRACTOR SHALL FURNISH AND MAINTAIN ALL NECESSARY BARRICADES, FENCING AND OTHER APPROPRIATE SAFETY ITEMS/MEASURES NECESSARY TO PROTECT THE PUBLIC FROM THE WORK AREA CONSTRUCTION ACTIVITIES.
9. HIGH INTENSITY LIGHTING FACILITIES SHALL BE SO ARRANGED THAT THE SOURCE OF ANY LIGHT IS CONCEALED FROM PUBLIC VIEW AND FROM ADJACENT RESIDENTIAL PROPERTY AND DOES NOT INTERFERE WITH TRAFFIC.
10. THE CONTRACTOR SHALL MAINTAIN ACCESS FOR EMERGENCY VEHICLES AROUND AND TO ALL BUILDINGS NEAR CONSTRUCTION. IN TIME OF RAIN OR MUD, ROADS SHALL BE ABLE TO CARRY A FIRE TRUCK BY BEING PAVED OR HAVING A CRUSHED STONE BASE, ETC., WITH A MINIMUM WIDTH OF 20 FEET. ACCESS TO BUILDINGS THAT HAVE SPRINKLER OR STANDPIPE SYSTEMS SHALL BE WITHIN 40 FEET OF THE FIRE DEPARTMENT CONNECTOR. (NFPA 1141 3-1)
11. BEDDING REQUIREMENTS SPECIFIED HEREIN ARE TO BE CONSIDERED AS MINIMUMS FOR RELATIVELY DRY, STABLE EARTH CONDITIONS. ADDITIONALLY BEDDING SHALL BE REQUIRED FOR ROCK TRENCHES AND WET AREAS. CONTRACTOR SHALL HAVE THE RESPONSIBILITY TO PROVIDE SUCH ADDITIONAL BEDDING AS MAY BE REQUIRED TO PROPERLY CONSTRUCT THE WORK.
12. BACKFILL OF ALL TRENCHES SHALL BE COMPACTED TO THE DENSITY OF 95% OF THEORETICAL MAXIMUM DRY DENSITY (ASTM D698). BACKFILL MATERIAL SHALL BE FREE FROM ROOTS, STUMPS, OR OTHER FOREIGN DEBRIS AND SHALL BE PLACED IN LAYERS NOT TO EXCEED SIX (6) INCHES IN COMPACTED FILL THICKNESS. A REPORT FROM A GEOTECHNICAL ENGINEER MAY BE REQUIRED BY THE PUBLIC WORKS INSPECTOR. CORRECTION OF ANY TRENCH SETTLEMENT WITHIN A YEAR FROM THE DATE OF APPROVAL WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
13. THE CONTRACTOR WILL ENSURE THAT POSITIVE AND ADEQUATE DRAINAGE IS MAINTAINED AT ALL TIMES WITHIN THE PROJECT LIMITS. THIS MAY INCLUDE, BUT NOT BE LIMITED TO, A) REPLACEMENT OR RECONSTRUCTION OF EXISTING DRAINAGE STRUCTURES THAT HAVE BEEN DAMAGED OR REMOVED, OR B) REGRADING AS REQUIRED BY THE ENGINEER, EXCEPT FOR THOSE DRAINAGE ITEMS SHOWN AT SPECIFIC LOCATIONS AND HAVING SPECIFIC PAY ITEMS IN THE DETAILED ESTIMATE. NO SEPARATE PAYMENT WILL BE MADE FOR ANY COSTS INCURRED TO COMPLY WITH THIS REQUIREMENT.
14. THE CONTRACTOR SHALL PROVIDE ANY AND ALL EXCAVATION AND MATERIAL SAMPLES NECESSARY TO CONDUCT REQUIRED SOIL TESTS. ALL ARRANGEMENTS AND SCHEDULING FOR THE TESTING SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
15. SOIL TESTING AND ON-SITE INSPECTION SHALL BE PERFORMED BY AN INDEPENDENT GEOTECHNICAL ENGINEER. A GEOTECHNICAL ENGINEER IS REQUIRED TO INSPECT, TEST AND CERTIFY TO THE COMPACTION OF ALL LOAD BEARING FILLS. THE GEOTECHNICAL ENGINEER SHALL PROVIDE COPIES OF TEST REPORTS TO THE CONTRACTOR, THE OWNER AND TO THE OWNER'S REPRESENTATIVE AND SHALL PROMPTLY NOTIFY THE OWNER, HIS REPRESENTATIVE AND THE CONTRACTOR, SHOULD WORK PERFORMED BY THE CONTRACTOR FAIL TO MEET THESE SPECIFICATIONS.
16. ALL PERMITS MUST BE OBTAINED PRIOR TO THE START OF CONSTRUCTION.
17. ALL PAVEMENT MARKINGS AND REGULATORY SIGNS ON PRIVATE PROPERTY SHALL CONFORM TO CURRENT MUTCD STANDARDS.

WATER AND SEWER SERVICE NOTES:

1. HORIZONTAL AND VERTICAL SEPARATION

1.1. SANITARY SEWERS SHALL BE LAID AT LEAST 10-FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. IN CASES WHERE IT IS NOT PRACTICAL TO MAINTAIN A 10-FOOT SEPARATION, THE PUBLIC WORKS SUPPLY MAY ALLOW DEVIATION A CASE-BY-CASE BASIS, IF SUPPORTED BY DATA FROM THE DESIGN ENGINEER. SUCH DEVIATION ON MAY ALLOW THE INSTALLATION OF THE SANITARY SEWER CLOSER TO A WATER MAIN, PROVIDED THAT THE WATER MAIN IS IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SANITARY SEWER AND AT AN ELEVATION SO THE BOTTOM OF THE WATER MAIN IS AT LEAST 18-INCHES ABOVE THE TOP OF THE SEWER.

1.2. IF IT IS IMPOSSIBLE TO OBTAIN PROPER HORIZONTAL AND VERTICAL SEPARATION AS DESCRIBED ABOVE OR ANYTIME THE SANITARY SEWER IS OVER THE WATER MAIN, BOTH THE WATER MAIN AND SANITARY SEWER MUST BE CONSTRUCTED OF FERROUS PIPE COMPLYING WITH THE PUBLIC WATER SUPPLY DESIGN STANDARDS AND BE PRESSURE TESTED TO 150PSI TO ASSURE WATER TIGHTNESS BEFORE BACKFILLING.

1.3. A 24-INCH VERTICAL SEPARATION SHALL BE PROVIDED BETWEEN STORM SEWER AND SANITARY SEWER LINES OR FERROUS PIPE SPECIFIED. A 12-INCH VERTICAL SEPARATION SHALL BE PROVIDED BETWEEN STORM SEWER AND WATER MAIN.

1.3.1. IF A 12-INCH VERTICAL SEPARATION IS NOT MAINTAINED AT A CROSSING BETWEEN STORM SEWER AND WATER MAINS (OR PRESSURE SEWERS). THE WATER MAIN SHALL BE CONSTRUCTED OF FERROUS PIPE AND A CONCRETE COLLAR SHALL BE POURED AROUND WATER MAINS AND STORM SEWER TO IMMOBILIZE THE CROSSING.

2. CROSSINGS

1.1. SANITARY SEWER CROSSING WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18-INCHES BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE SANITARY SEWER. THE CROSSING SHALL BE ARRANGED SO THAT THE SANITARY SEWER JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE WATER MAIN JOINTS.

1.2. WHEN IT IS IMPOSSIBLE TO OBTAIN PROPER HORIZONTAL AND VERTICAL SEPARATION AS STIPULATED ABOVE, ONE OF THE FOLLOWING METHODS MUST BE SPECIFIED:

1.1.1. THE SANITARY SEWER SHALL BE DESIGNED AND CONSTRUCTED OF FERROUS PIPE AND SHALL BE PRESSURE TESTED AT 150-PSI TO ASSURE WATER TIGHTNESS PRIOR TO BACKFILLING, OR

1.1.2. EITHER THE WATER MAIN OR THE SANITARY SEWER LINE MAY BE ENCASED IN A WATERTIGHT CARRIER PIPE, WHICH EXTENDS 10-FEET ON BOTH SIDES OF THE CROSSING, MEASURED PERPENDICULAR TO THE WATER MAIN. THE CARRIER PIPE SHALL BE OF MATERIALS APPROVED BY THE PUBLIC WATER SUPPLY FOR USE IN WATER MAIN CONSTRUCTION.

GENERAL UTILITY NOTES:

1. ALL UTILITIES AND SERVICES INCLUDING BUT NOT LIMITED TO GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC, ETC. WITHIN THE LIMITS OF DISTURBANCE SHALL BE VERTICALLY AND HORIZONTALLY LOCATED. THE CONTRACTOR SHALL USE AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL THE UNDERGROUND UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING UTILITIES DURING CONSTRUCTION AT NO COST TO THE OWNER.
2. UTILITY COORDINATION SHALL BE INCLUDED IN THE PROJECT SCHEDULE AND IT IS THE EXPLICIT RESPONSIBILITY OF THE CONTRACTOR TO ASSURE THAT THE PROJECT SCHEDULE INCLUDES THE NECESSARY RELOCATIONS. THE CONTRACTOR WILL NOT BE PAID ADDITIONALLY FOR THIS COORDINATION.
3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE LOCATIONS AND DEPTHS OF ALL EXISTING UNDERGROUND UTILITIES AND STRUCTURES BEFORE THE START OF WORK AND TO TAKE WHATEVER STEPS NECESSARY TO PROVIDE FOR THEIR PROTECTION. THE ENGINEER HAS DILIGENTLY ATTEMPTED TO LOCATE AND INDICATE ALL EXISTING FACILITIES ON THESE PLANS; HOWEVER, THIS INFORMATION IS SHOWN FOR THE CONTRACTOR'S CONVENIENCE ONLY. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS OF UTILITIES SHOWN OR NOT SHOWN. COMPLETENESS OR ACCURACY OF LOCATION AND DEPTH OF UNDERGROUND UTILITIES AND STRUCTURES IS NOT GUARANTEED.
4. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES FOR EXACT LOCATION AND PROTECTION OF THEIR UTILITIES PRIOR TO STARTING CONSTRUCTION. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR AND REPLACE ANY AND ALL DAMAGE MADE TO UTILITIES BY THE CONTRACTOR.
5. CONTRACTOR MUST APPLY FOR ALL UTILITY CONNECTION APPLICATIONS. CONTRACTOR IS RESPONSIBLE FOR ALL UTILITY CONNECTION FEES FOR CONSTRUCTION. REFER TO COVER SHEET FOR AVAILABLE UTILITY COMPANY LIST.
6. CONTRACTOR MUST OBTAIN ANY REQUIRED UTILITY DETAILS FOR RECONNECTION OF EXISTING SERVICES OR NEW SERVICE AND IS RESPONSIBLE FOR THE CONSTRUCTION OF EACH NEW SERVICE PER THE APPROPRIATE UTILITY COMPANY'S SPECIFICATIONS.
7. THE CONTRACTOR SHALL COORDINATE LOCATION AND INSTALLATION OF ALL UNDERGROUND UTILITIES AND APPURTENANCES TO MINIMIZE DISTURBANCE TO CURBING, PAVING, AND COMPACTED SUB-GRADE.
8. IF CONFLICTS ARE FOUND, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER AND ENGINEER FOR INSTRUCTION BEFORE PROCEEDING WITH WORK.
9. ALL PIPE LENGTHS AND DISTANCES BETWEEN STRUCTURES ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE ALONG A HORIZONTAL PLANE.
10. THE CONTRACTOR SHALL PROVIDE ANY AND ALL EXCAVATION AND MATERIAL SAMPLES NECESSARY TO CONDUCT REQUIRED SOIL TESTS. ALL ARRANGEMENTS AND SCHEDULING FOR THE TESTING SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
11. SOILS TESTING AND ON-SITE INSPECTION SHALL BE PERFORMED BY AN INDEPENDENT GEOTECHNICAL ENGINEER. THE SOILS ENGINEER SHALL PROVIDE COPIES OF TEST REPORTS TO THE CONTRACTOR, THE OWNER AND THE OWNER'S REPRESENTATIVE AND SHALL PROMPTLY NOTIFY THE OWNER, HIS REPRESENTATIVE AND THE CONTRACTOR SHOULD WORK PERFORMED BY THE CONTRACTOR FAIL TO MEET THESE SPECIFICATIONS.
12. CONTRACTOR SHALL EXCAVATE ONLY ENOUGH TRENCH FOR WHICH PIPE CAN BE INSTALLED AND TRENCH BACKFILLED BY THE END OF EACH WORK DAY.
13. BEDDING REQUIREMENTS SPECIFIED HEREIN ARE TO BE CONSIDERED AS MINIMUMS FOR RELATIVELY DRY, STABLE EARTH CONDITIONS. ADDITIONAL BEDDING SHALL BE REQUIRED FOR ROCK TRENCHES AND WET AREAS. CONTRACTOR SHALL HAVE THE RESPONSIBILITY TO PROVIDE SUCH ADDITIONAL BEDDING AS MAY BE REQUIRED TO PROPERLY CONSTRUCT THE WORK.
14. COMPACTION OF THE BACKFILL OF ALL TRENCHES SHALL BE COMPACTED TO THE DENSITY OF 95% OF THEORETICAL MAXIMUM DRY DENSITY (ASTM D698). BACKFILL MATERIAL SHALL BE FREE FROM ROOTS, STUMPS, OR OTHER FOREIGN DEBRIS AND SHALL BE PLACED IN LIFTS NOT TO EXCEED 6 INCHES IN COMPACTED FILL THICKNESS. A REPORT FROM A GEOTECHNICAL ENGINEER MAY BE REQUIRED BY THE PUBLIC WORKS INSPECTOR. CORRECTION OF ANY TRENCH SETTLEMENT WITHIN A YEAR FROM THE DATE OF APPROVAL WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
15. RUNOFF FROM IMPERVIOUS AREAS SHALL NOT BE DIRECTED INTO THE SANITARY SEWER NOR ONTO ADJACENT PROPERTIES.
16. ALL JOINTS ON THE STORM WATER CONVEYANCE SYSTEM SHALL BE WATERTIGHT.
17. ALL CONSTRUCTION ASSOCIATED WITH WATER AND SANITARY SEWER SHALL BE IN ACCORDANCE WITH O.W.A.S.A. STANDARDS AND SPECIFICATIONS.
18. ALL ELECTRICAL SERVICE LINES TO OR AROUND THE PROPOSED STRUCTURE SHALL BE UNDERGROUND.

ADA INSTRUCTIONS TO CONTRACTOR:

CONTRACTORS MUST EXERCISE APPROPRIATE CARE AND PRECISION IN CONSTRUCTION OF ADA (HANDICAP) ACCESSIBLE COMPONENTS AND ACCESS ROUTES FOR THE SITE. THESE COMPONENTS, AS CONSTRUCTED, MUST COMPLY WITH THE CURRENT ADA STANDARDS AND REGULATIONS' BARRIER FREE ACCESS AND ANY MODIFICATIONS, REVISIONS OR UPDATES TO SAME. FINISHED SURFACES ALONG THE ACCESSIBLE ROUTE OF TRAVEL FROM PARKING SPACE(S), PUBLIC TRANSPORTATION, PEDESTRIAN ACCESS, INTER-BUILDING ACCESS, TO POINTS OF ACCESSIBLE BUILDING ENTRANCE/EXIT, MUST COMPLY WITH THESE ADA CODE REQUIREMENTS. THESE INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:

1. PARKING SPACES AND PARKING AISLES - SLOPE SHALL NOT EXCEED 1:50 (1/4" PER FOOT OR NOMINALLY 2.0%) IN ANY DIRECTION.
2. CURB RAMPS - SLOPE MUST NOT EXCEED 1:12 (8.3%) FOR A MAXIMUM OF SIX (6) FEET.
3. LANDINGS - MUST BE PROVIDED AT EACH END OF RAMPS, MUST PROVIDE POSITIVE DRAINAGE, AND MUST NOT EXCEED 1:50 (1/4" PER FOOT OR NOMINALLY 2.0%) IN ANY DIRECTION.
4. PATH OF TRAVEL ALONG ACCESSIBLE ROUTE - MUST PROVIDE A 48-INCH OR GREATER UNOBSTRUCTED WIDTH OF TRAVEL (CAR OVERHANGS AND/OR HANDRAILS CANNOT REDUCE THIS MINIMUM WIDTH). THE SLOPE MUST BE NO GREATER THAN 1:20 (5.0%) IN THE DIRECTION OF TRAVEL, AND MUST NOT EXCEED 1:50 (1/4" PER FOOT OR NOMINALLY 2.0%) IN CROSS SLOPE. WHERE PATH OF TRAVEL WILL BE GREATER THAN 1:20 (5.0%), ADA RAMP REGULATIONS MUST BE ADHERED TO. A MAXIMUM SLOPE OF 1:12 (8.3%), FOR A MAXIMUM RISE OF 2.5 FEET, MUST BE PROVIDED. THE RAMP MUST HAVE ADA HAND RAILS AND "LEVEL" LANDINGS ON EACH END THAT ARE CROSS SLOPED NO MORE THAN 1:50 IN ANY DIRECTION (1/4" PER FOOT OR NOMINALLY 2.0%) FOR POSITIVE DRAINAGE.
5. DOORWAYS - MUST HAVE A "LEVEL" LANDING AREA ON THE EXTERIOR SIDE OF THE DOOR THAT IS SLOPED AWAY FROM THE DOOR NO MORE THAN 1:50 (1/4" PER FOOT OR NOMINALLY 2.0%) FOR POSITIVE DRAINAGE. THIS LANDING AREA MUST BE NO LESS THAN 60 INCHES (5 FEET) WIDE, EXCEPT WHERE OTHERWISE PERMITTED BY ADA STANDARDS FOR ALTERNATIVE DOORWAY OPENING CONDITIONS. (SEE ICC/ANSI A117.1-2003 AND OTHER REFERENCED INCORPORATED BY COD.)
6. WHEN THE PROPOSED CONSTRUCTION INVOLVES RECONSTRUCTION, MODIFICATION, REVISION OR EXTENSION OF OR TO ADA COMPONENTS FROM EXISTING DOORWAYS OR SURFACES, CONTRACTOR MUST VERIFY EXISTING ELEVATIONS SHOWN ON THE PLAN. NOTE THAT TABLE 405.2 OF THE DEPARTMENT OF JUSTICE'S ADA STANDARDS FOR ACCESSIBLE DESIGN ALLOWS FOR STEEPER RAMP SLOPES, IN RARE CIRCUMSTANCES. PRIOR TO THE COMMENCEMENT OF WORK, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE DESIGN ENGINEER IN WRITING OF ANY DISCREPANCIES AND/OR FIELD CONDITIONS THAT DIFFER IN ANY WAY OR ANY RESPECT FROM WHAT IS SHOWN ON THE PLANS, IN WRITING, BEFORE COMMENCEMENT OF WORK. CONSTRUCTED IMPROVEMENTS MUST FALL WITHIN THE MAXIMUM AND MINIMUM LIMITATIONS IMPOSED BY THE BARRIER FREE REGULATIONS AND THE ADA REQUIREMENTS.
7. THE CONTRACTOR MUST VERIFY THE SLOPES OF CONTRACTOR'S FORMS PRIOR TO POURING CONCRETE. IF ANY NON-CONFORMANCE IS OBSERVED OR EXISTS, CONTRACTOR MUST IMMEDIATELY NOTIFY THE ENGINEER PRIOR TO POURING CONCRETE. CONTRACTOR IS RESPONSIBLE FOR ALL COSTS TO REMOVE, REPAIR AND REPLACE NON-CONFORMING CONCRETE.
8. THE SITE SHALL BE FULLY COMPLIANT WITH THE NORTH CAROLINA ACCESSIBILITY CODES (ANSI 117.1 -2009 AND CHAPTER 11 OF THE NCBC) UNLESS AND EXCEPT IN AREAS WHERE AN APPROVED STATEMENT FROM A SITE ENGINEER, SURVEYOR OR ARCHITECT VERIFIES THAT SITE CONDITIONS EXIST WHERE THE TOPOGRAPHY OF THE SITE IS EXTREME AND ONLY ALTERNATE METHODS OF COMPLIANCE ARE POSSIBLE.
9. ACCESSIBILITY REQUIREMENTS: THAT PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY, THE APPLICANT SHALL PROVIDE THE MINIMUM REQUIRED HANDICAPPED PARKING SPACES AND DESIGN ALL HANDICAPPED PARKING SPACES, RAMPS, AND CROSSWALKS, AND ASSOCIATED INFRASTRUCTURE ACCORDING TO AMERICANS WITH DISABILITIES ACT STANDARDS, NORTH CAROLINA BUILDING CODE, AMERICAN NATIONAL STANDARDS INSTITUTE ANSI CODE, AND TOWN STANDARD.1. PARKING - NUMBER OF SPACES TO COMPLY WITH NCBC 2012 SECTION 1106.1, 1 PER 6 COMPLIANT SPACES OR PORTION THEREOF MUST BE VAN ACCESSIBLE, NO SLOPE TO EXCEED 2 PERCENT IN ANY DIRECTION. SIGNAGE PER NC REQUIREMENTS, MUT-CD AND ICC A 117.1.2. CURB CUTS AND ACCESSIBLE ROUTES PER ICC A117.1 2009 ED. CROSS SLOPE LIMITED TO 2 PERCENT, CALL FOR INSPECTION BEFORE PLACEMENT OF CONCRETE.Â€¢ SLOPE GREATER THAN 5 PERCENT REQUIRES CONSTRUCTION AS A RAMP.

IT IS STRONGLY RECOMMENDED THAT THE CONTRACTOR REVIEW THE INTENDED CONSTRUCTION WITH THE LOCAL BUILDING CODE PRIOR TO COMMENCEMENT OF CONSTRUCTION.

ORANGE COUNTY SOLID WASTE NOTES

1. CONSTRUCTION WASTE
   a. ALL EXISTING STRUCTURES 500 SQUARE FEET AND LARGER SHALL BE ASSESSED PRIOR TO THE ISSUANCE OF A DEMOLITION PERMIT TO ENSURE COMPLIANCE WITH THE COUNTY'S REGULATED RECYCLABLE MATERIALS ORDINANCE (RRMO) AND TO ASSESS THE POTENTIAL FOR DECONSTRUCTION AND/OR THE REUSE OF SALVAGEABLE MATERIALS..
   b. PURSUANT TO THE COUNTY'S RRMO, CLEAN WOOD WASTE, SCRAP METAL, AND CORRUGATED CARDBOARD PRESENT IN CONSTRUCTION OR DEMOLITION WASTE MUST BE RECYCLED.
   c. PURSUANT TO THE COUNTY'S RRMO, ALL HAULERS OF MIXED CONSTRUCTION AND DEMOLITION WASTE WHICH INCLUDES ANY REGULATED RECYCLABLE MATERIALS SHALL BE LICENSED BY ORANGE COUNTY.
   d. PRIOR TO ANY DEMOLITION OR CONSTRUCTION ACTIVITY ON THE SITE, THE APPLICANT SHALL HOLD A PRE-DEMOLITION/PRE-CONSTRUCTION CONFERENCE WITH SOLID WASTE STAFF. THIS MAY BE THE SAME PRE-CONSTRUCTION MEETING HELD WITH OTHER DEVELOPMENT/ENFORCEMENT OFFICIALS.
   e. THE PRESENCE IF ANY ASBESTOS CONTAINING MATERIALS (ACM) AND/OR OTHER HAZARDOUS MATERIALS SHALL BE HANDLED IN ACCORDANCE WITH ANY AND ALL LOCAL, STATE, AND FEDERAL REGULATIONS AND GUIDELINES.

INSPECTION NOTES

1. A SINGLE ELECTRICAL SERVICE SHALL BE PROVIDED TO SERVE THE STRUCTURE WITH THE EXCEPTION IF A FIRE PUMP WAS REQUIRED. ARTICLE 230.2 A 2014 EDITION OF NORTH CAROLINA ELECTRIC CODE.
2. ADDRESS NUMBERS MUST BE A MINIMUM OF 4 INCHES HIGH AND OF CONTRASTING COLOR TO THEIR BACKGROUND. REFLECTIVE NUMBERS ARE PREFERRED. WHEN THE DISTANCE FROM THE STREET OR FIRE DEPARTMENT ACCESS LANE TO THE FRONT OR ADDRESS SIDE OF THE BUILDING EXCEEDS 25 FEET, LARGER NUMBERS ARE REQUIRED. 26 FEET TO 50 FEET SHALL HAVE 8 INCH NUMBERS, 51-75 FEET SHALL HAVE 12 INCH NUMBERS AND OVER 75 FEET SHALL HAVE 18 INCH NUMBERS. WHERE ACCESS IS BY PRIVATE MEANS OF A PRIVATE ROAD AND THE BUILDING CANNOT BE VIEWED FROM THE PUBLIC WAY, A MONUMENT, POLE OR OTHER SIGN OR MEANS SHALL BE USED TO IDENTIFY THE STRUCTURE.
3. KEY BOXES SHALL BE REQUIRED ON ANY BUILDING THAT HAS A FIRE ALARM SYSTEM, A FIRE SPRINKLER SYSTEM, AN ELEVATOR, OR SPECIAL LOCKING ARRANGEMENTS. THE KEY BOX SHALL BE OF AN APPROVED TYPE AS REQUIRED FROM THE CHAPEL HILL FIRE DEPARTMENT. THE SIZE OF THE KEY BOX WILL BE DETERMINED BY THE NUMBER OF KEYS NECESSARY TO MITIGATE ANY EMERGENCY SITUATION BASED ON THE BUILDING AND ITS OCCUPANCY. AN APPROVED LOCK SHALL BE INSTALLED ON GATES OR SIMILAR BARRIERS WHEN REQUIRED BY THE FIRE CODE OFFICIAL. KEYS SHALL BE CHANGED OUT IMMEDIATELY IF THE LOCKS ARE CHANGED OR REKEYED
4. ALL FENCE GATES IN PLAYGROUND AREA SHALL OPEN IN THE DIRECTION OF EGRESS TRAVEL WITH PANIC HARDWARE.
5. OWASA REQUIRES A LEAD-FREE RPZ WITH BYPASS FOR THE BACKFLOW PROTECTION. ENSURE AT LEAST 18 INCHES OF WORKING CLEARANCE IS PROVIDED AROUND OR MORE IF MANUFACTURER'S INSTRUCTIONS REQUIRE MORE.
6. DEMOLITION OF THE EXISTING STRUCTURES WILL REQUIRE AN ASBESTOS TEST PRIOR TO DEMOLITION AND A SECOND ASBESTOS TEST OF THE SOIL AFTER THEY HAVE BEEN REMOVED.
7. THE PROPOSED BUILDING SHALL BE PROTECTED BY NFPA 13 SPRINKLER SYSTEM

FIRE DEPARTMENT NOTES

1. FIRE APPARATUS ACCESS ROADS; ANY FIRE APPARATUS ACCESS ROADS, ANY PUBLIC/PRIVATE STREET, PARKING LOT ACCESS, FIRE LANES AND ACCESS ROADWAYS, USED FOR FIRE DEPARTMENT ACCESS SHALL BE ALL WEATHER AND DESIGNED TO CARRY THE IMPOSED LOAD OF FIRE APPARATUS WEIGHING AT LEAST 80,000 LBS. FIRE APPARATUS ACCESS ROADS SHALL HAVE A MINIMUM WIDTH OF 20' EXCLUSIVE OF SHOULDERS WITH AN OVERHEAD CLEARANCE OF AT LEAST 13'-6" FOR STRUCTURES NOT EXCEEDING 30' IN HEIGHT AND SHALL PROVIDE ACCESS TO WITHIN 150' OF ALL EXTERIOR PORTIONS OF THE BUILDING. STRUCTURES EXCEEDING 30' IN HEIGHT SHALL BE PROVIDED WITH AN AERIAL APPARATUS ACCESS ROAD 26' IN WIDTH IN THE IMMEDIATE VICINITY OF THE BUILDING OR PORTION THEREOF AND SHALL PROVIDE AT LEAST ONE OF THE REQUIRED ACCESS ROADS TO BE LOCATED NOT LESS THAN 15' AND NOT MORE THAN 30' FROM THE STRUCTURE PARALLEL TO ONE ENTIRE SIDE OF THE STRUCTURE. NC FPC 2012 502.1,503.1.1, 503.2.1, D102.1
2. GRADE AND APPROACH; FIRE APPARATUS ACCESS ROADS SHALL NOT EXCEED 10% IN GRADE UNLESS APPROVED BY THE FIRE CHIEF AND ALL APPROACH AND DEPARTURE ANGLES SHALL BE WITHIN THE LIMITS ESTABLISHED BASED ON THE DEPARTMENT'S APPARATUS. NC FPC 2012, 503.2.7, 503.2.8 and D103.2
3. GATES AND BARRICADES; WHERE REQUIRED OR AUTHORIZED BY THE FIRE CODE OFFICIAL AND PERMANENT OR TEMPORARY CONSTRUCTION, ANY GATES ACROSS FIRE APPARATUS ACCESS ROADS SHALL BE A MINIMUM WIDTH OF 20 FEET, BE OF SWINGING OR SLIDING TYPE, HAVE AN EMERGENCY MEANS OF OPERATION, SHALL BE OPENABLE BY EITHER FORCIBLE ENTRY OR KEYED, CAPABLE OF BEING OPERATED BY ONE PERSON, AND SHALL BE INSTALLED AND MAINTAINED ACCORDING TO UL 325 and ASTM F 2200. NC FPC 2012, 503.5, 503.6, D103.5
4. FIRE LANES; WHERE REQUIRED, APPROVED MARKING SIGNS INCLUDING THE WORDS, NO PARKING-FIRE LANE SIGNS SHALL BE PROVIDED FOR FIRE APPARATUS ACCESS ROADS TO IDENTIFY SUCH ROADS. NC FPC 2012, 503.3, D103.6, D103.6.1, D103.6.2
5. PREMISE IDENTIFICATION; APPROVED BUILDING ADDRESS NUMBERS, PLACED IN ACCEPTABLE POSITION TO THE FIRE CODE OFFICIAL, SHALL BE REQUIRED ON ALL NEW BUILDINGS. NC FPC 2012, 505.1
6. KEY BOXES; WHERE REQUIRED BY THE FIRE CODE OFFICIAL, A SECURE KEY BOX, MOUNTED ON THE ADDRESS SIDE OF THE BUILDING, NEAR THE MAIN ENTRANCE, SHALL BE PROVIDED TO ENSURE ADEQUATE ACCESS TO THE BUILDING BASED ON LIFE SAFETY AND/OR FIRE PROTECTION NEEDS. NC FPC 2012, 506
7. FIRE HYDRANTS; THE ADDITION OF ANY REQUIRED HYDRANTS TO SERVE THE SUBMITTED BUILDING MUST FLOW A MINIMUM OF 2500 GPM PER TOWN ENGINEERING STANDARDS UNLESS APPROVED BY THE FIRE CODE OFFICIAL. THE FARTHEST HYDRANT SERVING A PROPOSED STRUCTURE MUST BE NO MORE THAN 500 FEET DISTANT. A MAXIMUM DISTANCE OF 500 FEET SPACING BETWEEN HYDRANTS MUST BE MAINTAINED UNLESS OTHERWISE APPROVED BY THE FIRE CODE OFFICIAL. LESSER SPACING DISTANCES MAY BE REQUIRED. A MINIMUM WORKING SPACE OF 3 FEET MUST BE MAINTAINED AROUND ALL HYDRANTS. WHERE HYDRANTS ARE SUBJECT TO PHYSICAL IMPACT, PHYSICAL PROTECTION MAY BE REQUIRED, NC FPC 2012, 507.5.6. THE MINIMUM NUMBER OF REQUIRED HYDRANTS AND THEIR SPACING MUST MEET NC FPC 2012, APPENDIX C, TABLE C 105.1
8. FIRE DEPARTMENT CONNECTIONS, LOCATIONS; ANY REQUIRED FDCS FOR ANY BUILDINGS SHALL MEET THE DESIGN AND INSTALLATION REQUIREMENTS FOR THE CURRENT, APPROVED EDITION OF NFPA 13, 13D, 13R, OR 14 OF THE NC FPC 2012 AND TOWN ORDINANCES; 7-38 FOR LOCATION. FDCS SHALL BE INSTALLED ON THE STREET/ ADDRESS SIDE OF THE BUILDING AND WITHIN 100' OF A HYDRANT OR UNLESS OTHERWISE APPROVED BY THE FIRE CODE OFFICIAL AND SHALL NOT BE OBSTRUCTED OR HINDERED BY PARKING OR LANDSCAPING. FDC'S SHALL BE EQUIPPED WITH NST.
9. FIRE DEPARTMENT CONNECTIONS, INSTALLATION; A WORKING SPACE OF NOT LESS THAN 36 INCHES IN WIDTH AND DEPTH AND A WORKING SPACE OF 78 INCHES IN HEIGHT SHALL BE PROVIDED ON ALL SIDES WITH THE EXCEPTION OF WALL MOUNTED FDC'S UNLESS OTHERWISE APPROVED BY THE FIRE CODE OFFICIAL. THE FDC'S WHERE REQUIRED MUST BE PHYSICALLY PROTECTED BY AN APPROVED BARRIER FROM IMPACTS. NC FPC 2012, 912.1, 912.2 912.2.1, 912.3.2, 312

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Pennoni
Firm License F-1267
PENNONI ASSOCIATES INC.
401 Providence Road #200
Chapel Hill, NC 27514
T 919.929.1173 F 919.493.6548

ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK

NORTH CAROLINA PROFESSIONAL SEAL 033040 ENGINEER PETER C. BELLANTONI
10/8/18

ST. THOMAS MORE - SOUTH CAMPUS - PHASE I
632 LAUREL HILL ROAD
CHAPEL HILL, NC 27514

GENERAL NOTES AND LEGENDS

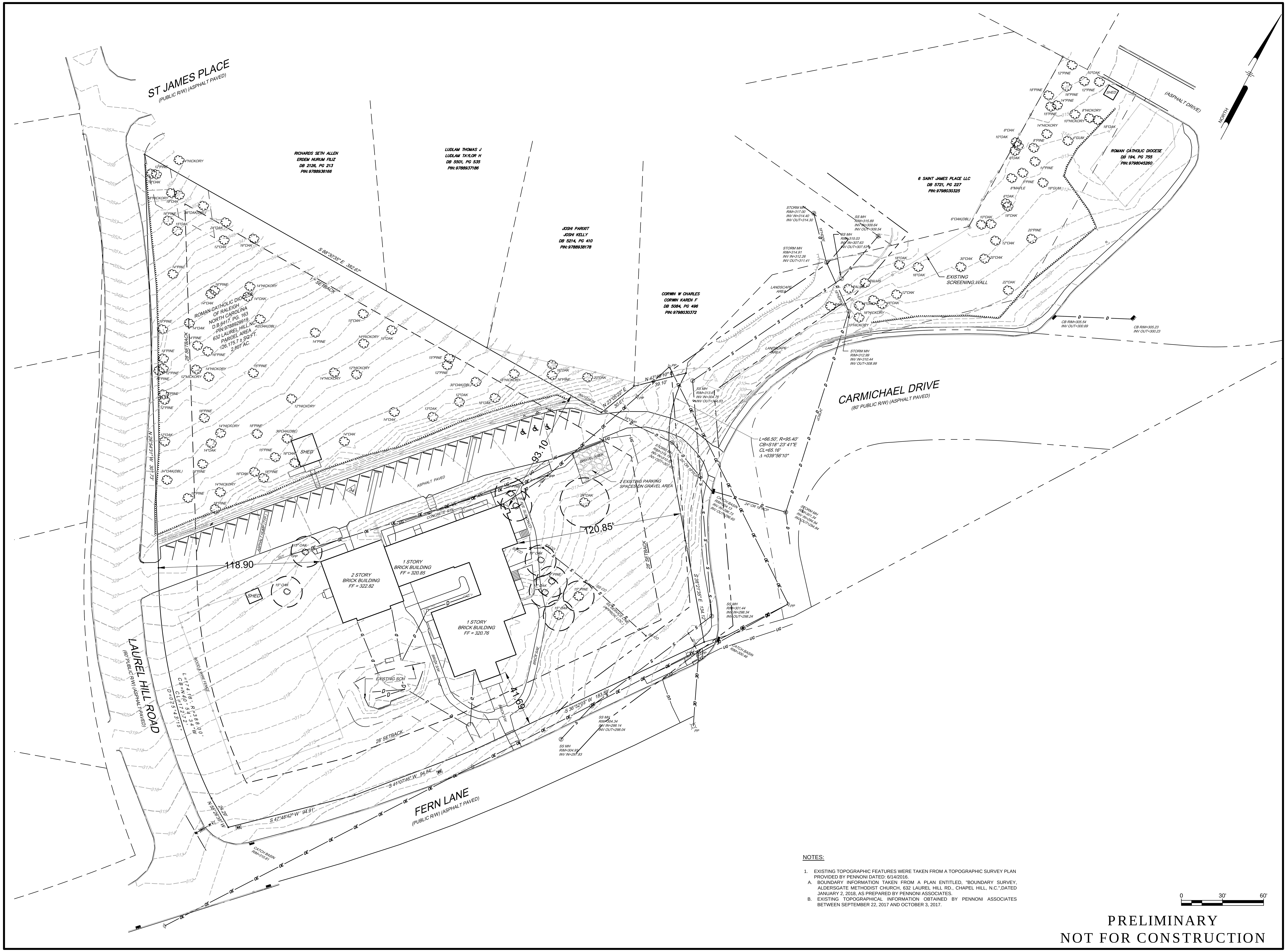
THE CATHOLIC COMMUNITY OF ST. THOMAS MORE
940 CARMICHAEL STREET
CHAPEL HILL, NC 27514

DATE	NO.	REVISIONS	BY
10/1/2018	1	Revised Per Chapel Hill Comments	CJJ

PROJECT	TMCC1701
DATE	2018-10-01
DRAWING SCALE	1"=30'
DRAWN BY	CJJ
APPROVED BY	PCB

CS0002

L:\Projects\TMCC\TMCC1701-St Thomas More - Aldersgate\DESIGN\CS\ADMIN_ZCP\ZCP\CS0002.dwg PLOTTED: 10/8/2018 1:25 PM, BY: Carol Jemiolo PLOTSTYLE: Pennoni NCS.stb PROJECT STATUS: REDEVELOPMENT OF UNITED METHODIST CHURCH SITE



NOTES:

1. EXISTING TOPOGRAPHIC FEATURES WERE TAKEN FROM A TOPOGRAPHIC SURVEY PLAN PROVIDED BY PENNONI DATED: 6/14/2016.
   A. BOUNDARY INFORMATION TAKEN FROM A PLAN ENTITLED, "BOUNDARY SURVEY, ALDERSGATE METHODIST CHURCH, 632 LAUREL HILL RD., CHAPEL HILL, N.C.",DATED JANUARY 2, 2018, AS PREPARED BY PENNONI ASSOCIATES.
   B. EXISTING TOPOGRAPHICAL INFORMATION OBTAINED BY PENNONI ASSOCIATES BETWEEN SEPTEMBER 22, 2017 AND OCTOBER 3, 2017.

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Firm License F-1267
PENNONI ASSOCIATES INC.
401 Providence Road #200
Chapel Hill, NC 27514
T 919.929.1173 F 919.493.6548

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CHAPEL HILL, NC 27514

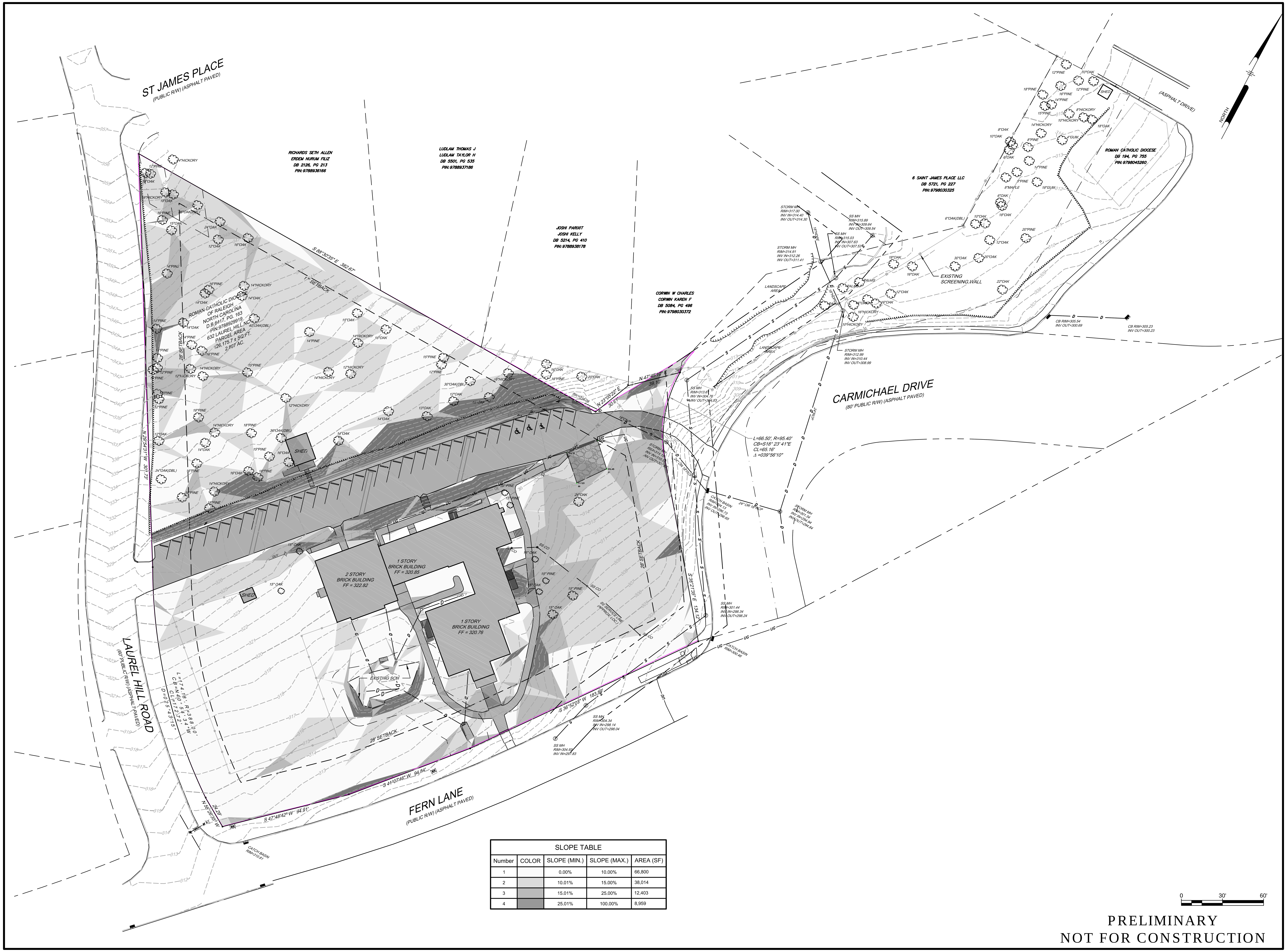
EXISTING CONDITIONS PLAN

THE CATHOLIC COMMUNITY OF ST. THOMAS MORE
940 CARMICHAEL STREET
CHAPEL HILL, NC 27514

DATE	NO.	REVISIONS	BY
10/1/2018	1	Revised Per Chapel Hill Comments	CJJ

PROJECT	TMCC1701
DATE	2018-07-31
DRAWING SCALE	1"=30'
DRAWN BY	CJJ
APPROVED BY	PCB

CS0201



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DATE	NO.	REVISIONS	BY
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SLOPE TABLE				
Number	COLOR	SLOPE (MIN.)	SLOPE (MAX.)	AREA (SF)
1		0.00%	10.00%	66,800
2		10.01%	15.00%	38,014
3		15.01%	25.00%	12,403
4		25.01%	100.00%	8,959

0 30' 60'

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PENNONI ASSOCIATES INC.
401 Providence Road #200
Chapel Hill, NC 27514
T 919.929.1173 F 919.493.6548

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10/8/18

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632 LAUREL HILL ROAD
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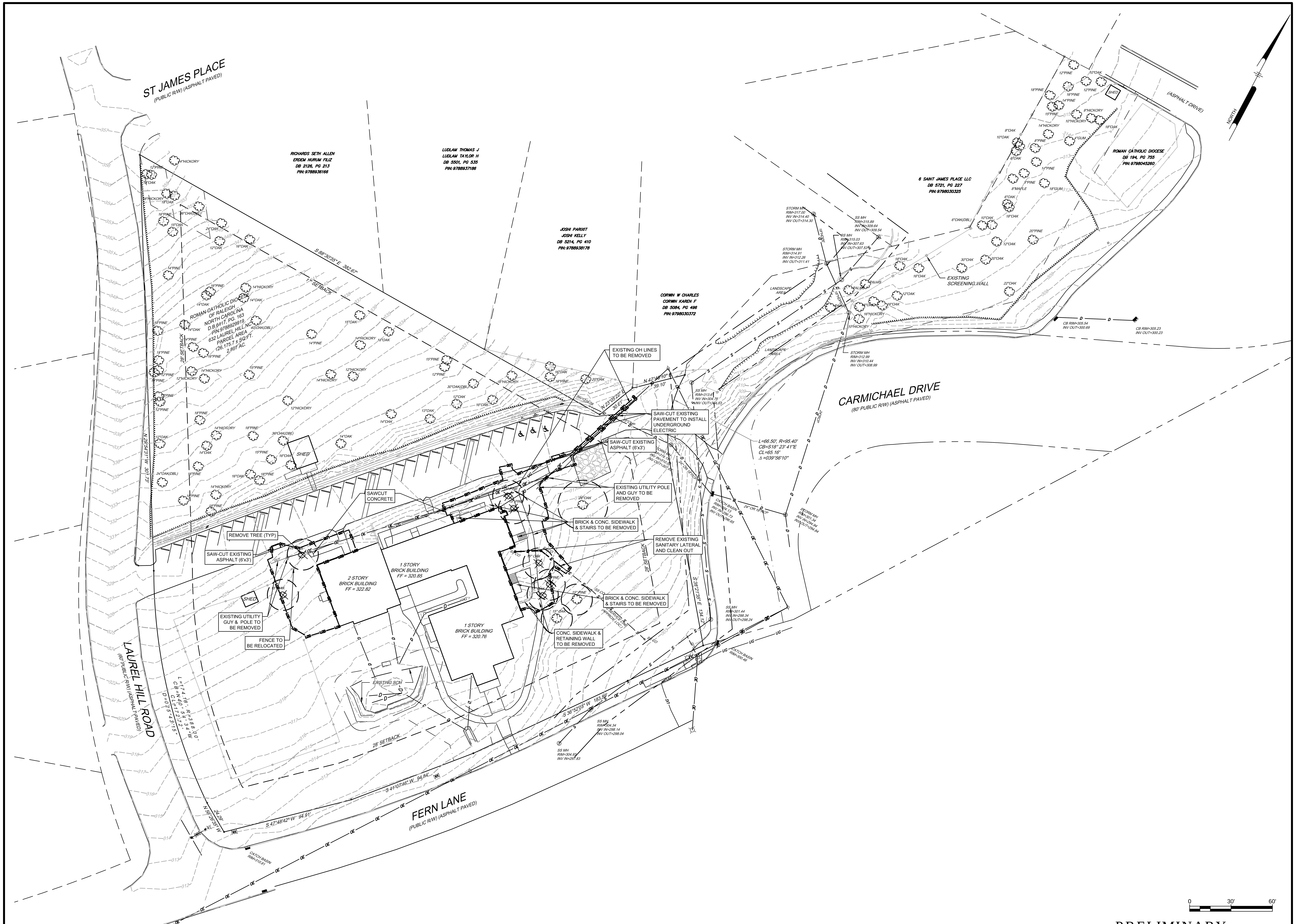
SLOPE ANALYSIS PLAN

THE CATHOLIC COMMUNITY OF ST. THOMAS MORE
940 CARMICHAEL STREET
CHAPEL HILL, NC 27514

PROJECT	TMCC1701
DATE	2018-07-31
DRAWING SCALE	1"=30'
DRAWN BY	DMC
APPROVED BY	PCB

CS0202



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PENNONI ASSOCIATES INC.
401 Providence Road #200
Chapel Hill, NC 27514
T 919.929.1173 F 919.493.6548
Firm License F-1267

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NORTH CAROLINA PROFESSIONAL SEAL 033040 ENGINEER PETER C. BELL

ST. THOMAS MORE - SOUTH CAMPUS - PHASE I

632 LAUREL HILL ROAD
CHAPEL HILL, NC 27514

DEMOLITION PLAN

THE CATHOLIC COMMUNITY OF ST. THOMAS MORE
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CHAPEL HILL, NC 27514

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10/31/2018	1	Revised Per Chapel Hill Comments	CJJ

PROJECT	TMCC1701
DATE	2018-07-31
DRAWING SCALE	1"=30'
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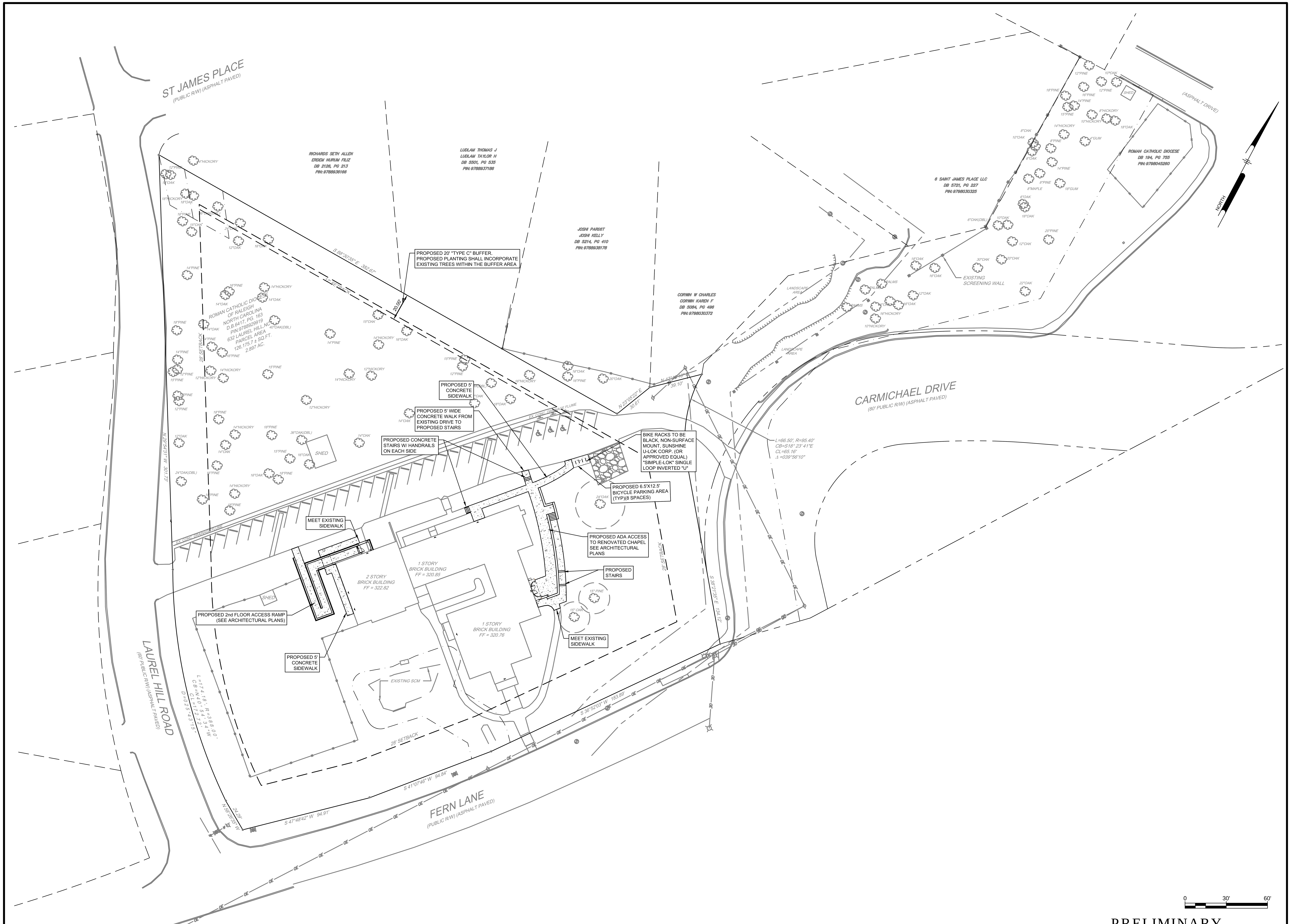
APPROVED BY	PCB

CS0501



PRELIMINARY
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ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK

NORTH CAROLINA PROFESSIONAL SEAL 033040 ENGINEER PETER C. BELLANTONI 10/8/18

ST. THOMAS MORE - SOUTH CAMPUS - PHASE I

632 LAUREL HILL ROAD
CHAPEL HILL, NC 27514

SITE PLAN

THE CATHOLIC COMMUNITY OF ST. THOMAS MORE
940 CARMICHAEL STREET
CHAPEL HILL, NC 27514

DATE	NO.	REVISIONS	BY
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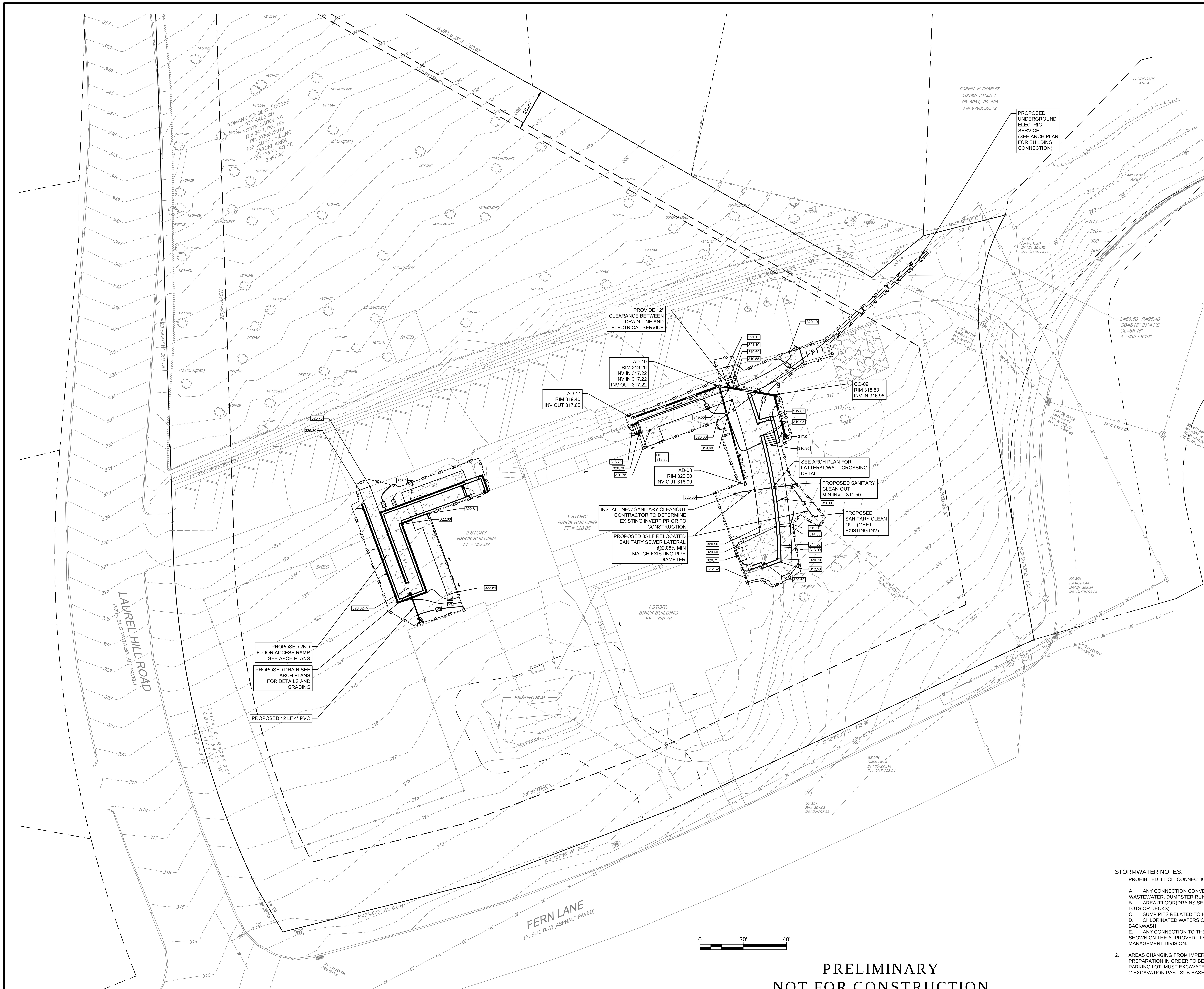
PROJECT	TMCC1701
DATE	2018-07-31
DRAWING SCALE	1"=30'
DRAWN BY	CJJ
APPROVED BY	PCB

CS1001



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STORMWATER NOTES:

1. PROHIBITED ILLICIT CONNECTIONS INCLUDE, BUT ARE NOT LIMITED TO:

   A. ANY CONNECTION CONVEYING DISCHARGES OF SANITARY SEWERAGE, PROCESS WASTEWATER, DUMPSTER RUNOFF, COOLING OR BOILING WATER
   B. AREA (FLOOR)DRAINS SERVING INTERIOR COVERED SPACES (SUCH AS PARKING LOTS OR DECKS)
   C. SUMP PITS RELATED TO HYDRAULIC OR MECHANICAL EQUIPMENT (ELEVATORS)
   D. CHLORINATED WATERS OR SALTWATER FROM POOL DISCHARGE; POOL FILTER BACKWASH
   E. ANY CONNECTION TO THE TOWN'S STORM DRAINAGE NETWORK THAT IS NOT SHOWN ON THE APPROVED PLAN SET IS NOT APPROVED BY THE STORMWATER MANAGEMENT DIVISION.

2. AREAS CHANGING FROM IMPERVIOUS TO PERVIOUS MUST UNDERGO THE PROPER PREPARATION IN ORDER TO BE COUNTED AS PERVIOUS (MUST REMOVE SUB-BASE) OF PARKING LOT; MUST EXCAVATE TO NATIVE SOIL CONDITIONS IF POSSIBLE, TYPICALLY > 1' EXCAVATION PAST SUB-BASE; MUST INCLUDE SOIL RIPPING PRIOR TO FILL, ETC.

Pennoni
PENNONI ASSOCIATES INC.
401 Providence Road #200
Chapel Hill, NC 27514
T 919.929.1173 F 919.493.6548
Firm License F-1267

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NORTH CAROLINA PROFESSIONAL SEAL 033040 ENGINEER PETER C. BELL

ST. THOMAS MORE - SOUTH CAMPUS - PHASE I

632 LAUREL HILL ROAD
CHAPEL HILL, NC 27514

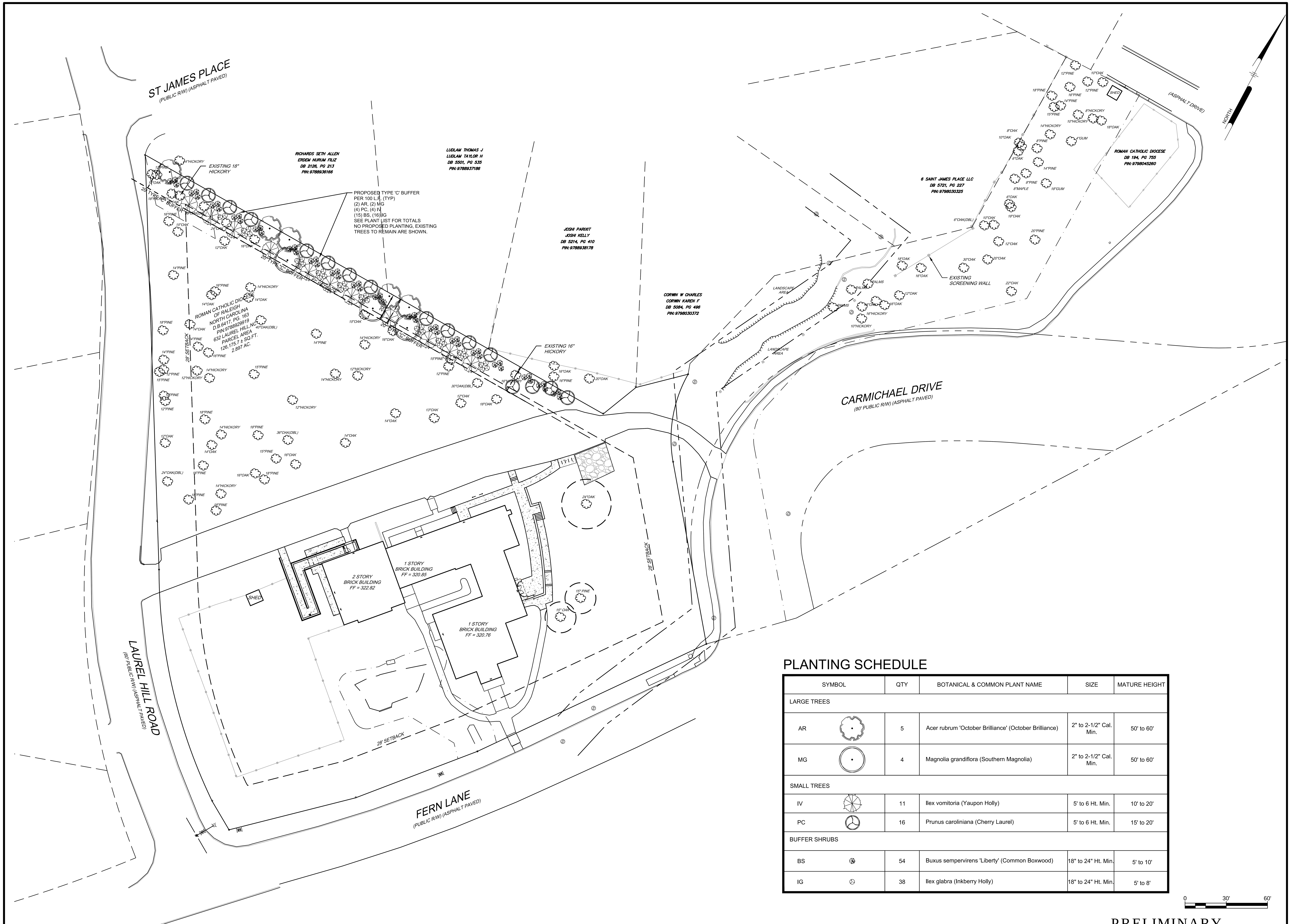
GRADING & DRAINAGE PLAN

THE CATHOLIC COMMUNITY OF ST. THOMAS MORE
940 CARMICHAEL STREET
CHAPEL HILL, NC 27514

DATE	NO.	REVISIONS	BY
10/1/2018	1	Revised Per Chapel Hill Comments	CJJ

PROJECT	TMCC1701
DATE	2018-07-31
DRAWING SCALE	1"=20'
DRAWN BY	CJJ
APPROVED BY	PCB

CS1501



PLANTING SCHEDULE

SYMBOL		QTY	BOTANICAL & COMMON PLANT NAME	SIZE	MATURE HEIGHT
LARGE TREES					
AR		5	Acer rubrum 'October Brilliance' (October Brilliance)	2" to 2-1/2" Cal. Min.	50' to 60'
MG		4	Magnolia grandiflora (Southern Magnolia)	2" to 2-1/2" Cal. Min.	50' to 60'
SMALL TREES					
IV		11	Ilex vomitoria (Yaupon Holly)	5' to 6 Ht. Min.	10' to 20'
PC		16	Prunus caroliniana (Cherry Laurel)	5' to 6 Ht. Min.	15' to 20'
BUFFER SHRUBS					
BS		54	Buxus sempervirens 'Liberty' (Common Boxwood)	18" to 24" Ht. Min.	5' to 10'
IG		38	Ilex glabra (Inkberry Holly)	18" to 24" Ht. Min.	5' to 8'

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PENNONI ASSOCIATES INC.
401 Providence Road #200
Chapel Hill, NC 27514
T 919.929.1173 F 919.493.6548
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ST. THOMAS MORE - SOUTH CAMPUS - PHASE I

632 LAUREL HILL ROAD
CHAPEL HILL, NC 27514

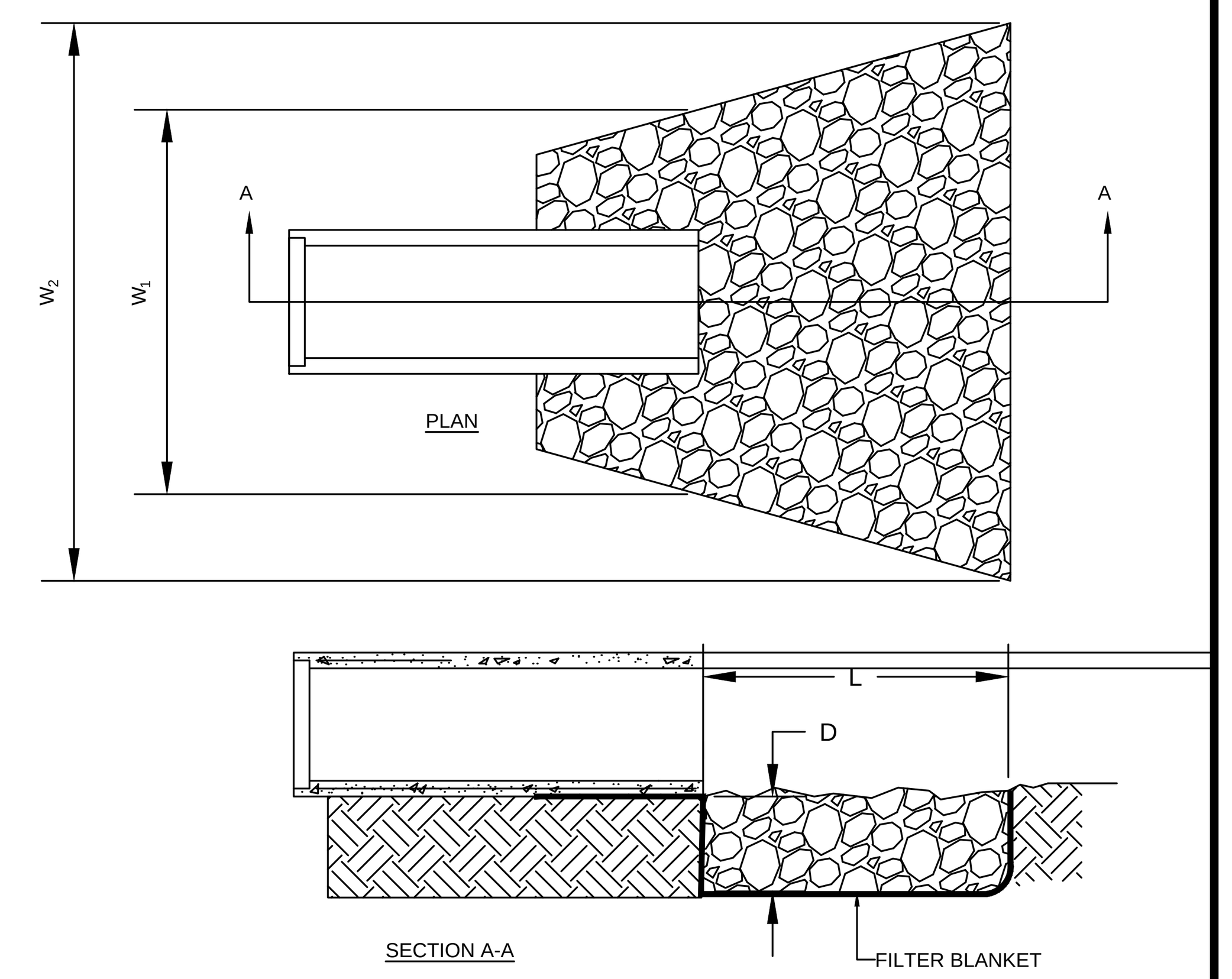
LANDSCAPE PLAN

THE CATHOLIC COMMUNITY OF ST. THOMAS MORE
940 CARMICHAEL STREET
CHAPEL HILL, NC 27514

DATE	NO.	REVISIONS	BY
2018-06-25	1	AS PER TOWN COMMENTS	PCB

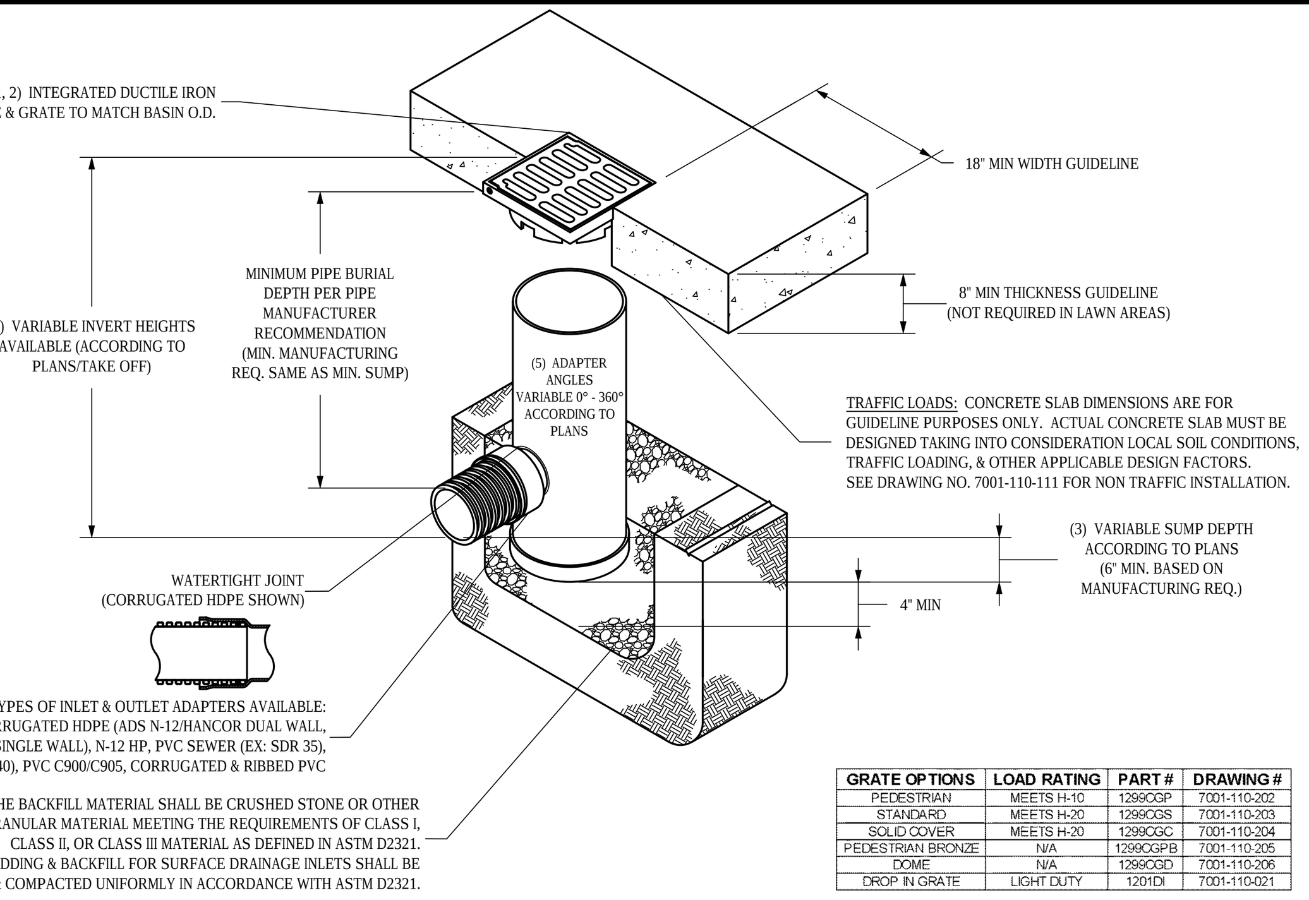
PROJECT	TMCC1701
DATE	2018-07-31
DRAWING SCALE	1"=30'
DRAWN BY	DMC
APPROVED BY	PCB

CS2001



OUTLET NO.	OUTLET PIPE		RIP-RAP		APRON		
	PIPE DIA Pd (IN)	PIPE SLOPE (FT/FT)	STONE DIAMETER (IN)	THICK. d (IN)	INITIAL WIDTH W_1 (FT)	TERMINAL WIDTH W_2 (FT)	LENGTH L (FT)
FES 1	8	0.005	4	8	2	2	2

RIP RAP OUTLET DETAIL

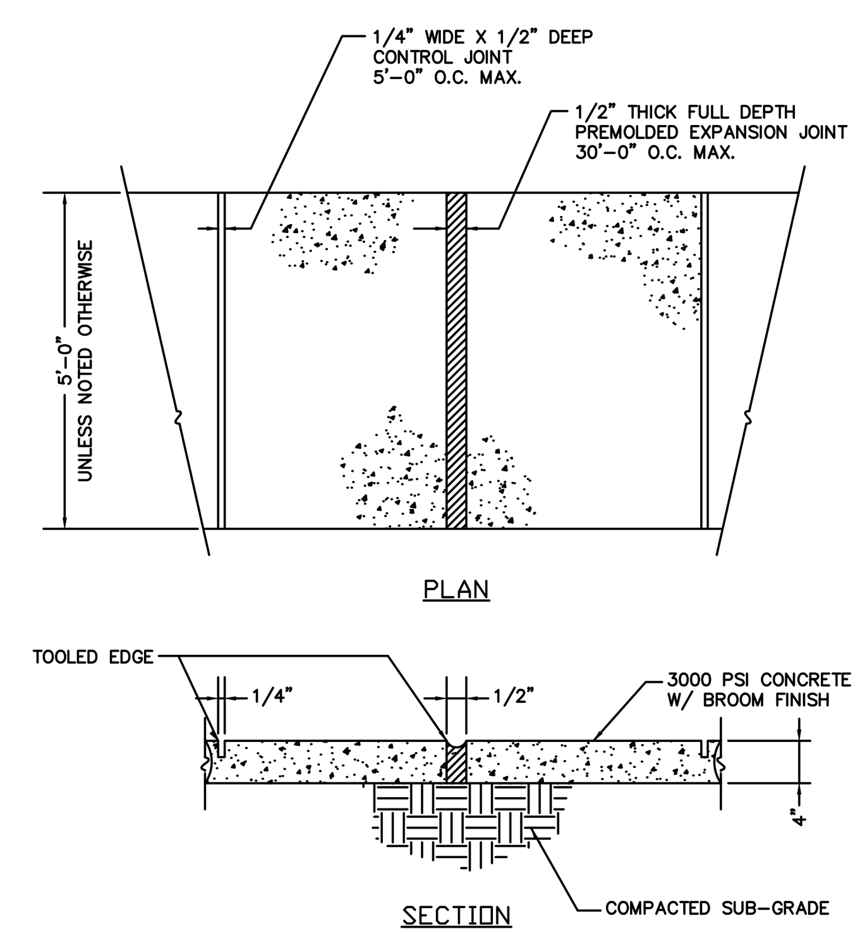


GRATE OPTIONS	LOAD RATING	PART #	DRAWING #
PEDESTRIAN	MEETS H-10	1299CGP	7001-110-202
STANDARD	MEETS H-20	1299CGS	7001-110-203
SOLID COVER	MEETS H-20	1299CGC	7001-110-204
PEDESTRIAN BRONZE	N/A	1299CGPB	7001-110-205
DOME	N/A	1299CGD	7001-110-206
DROP IN GRATE	LIGHT DUTY	1201DI	7001-110-021

1 - GRATES/SOLID COVER SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05, WITH THE EXCEPTION OF THE BRONZE GRATE.
2 - FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
3 - DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS. SEE DRAWING NO. 7001-110-065
4 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP, & PVC SEWER.
5 - ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012.

NYLOPLAST BASIN INSTALLATION DETAIL

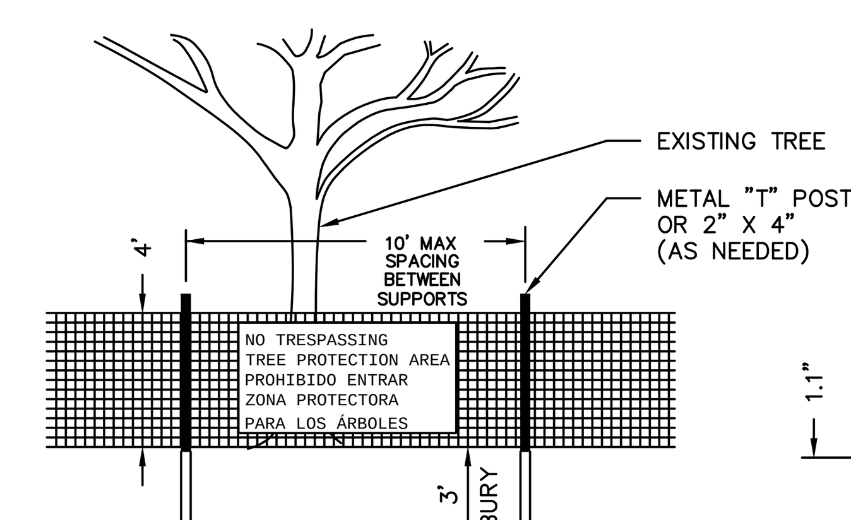
Not to Scale

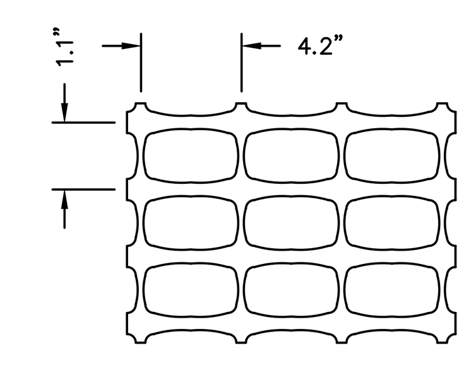


NOTE: SIDEWALKS SHALL INCREASE TO 6" THROUGH DRIVEWAYS. SEAL EXPANSION JOINTS PER NCDOT SPECS.

SIDEWALK DETAIL

NOT TO SCALE





TYPICAL FENCING FABRIC

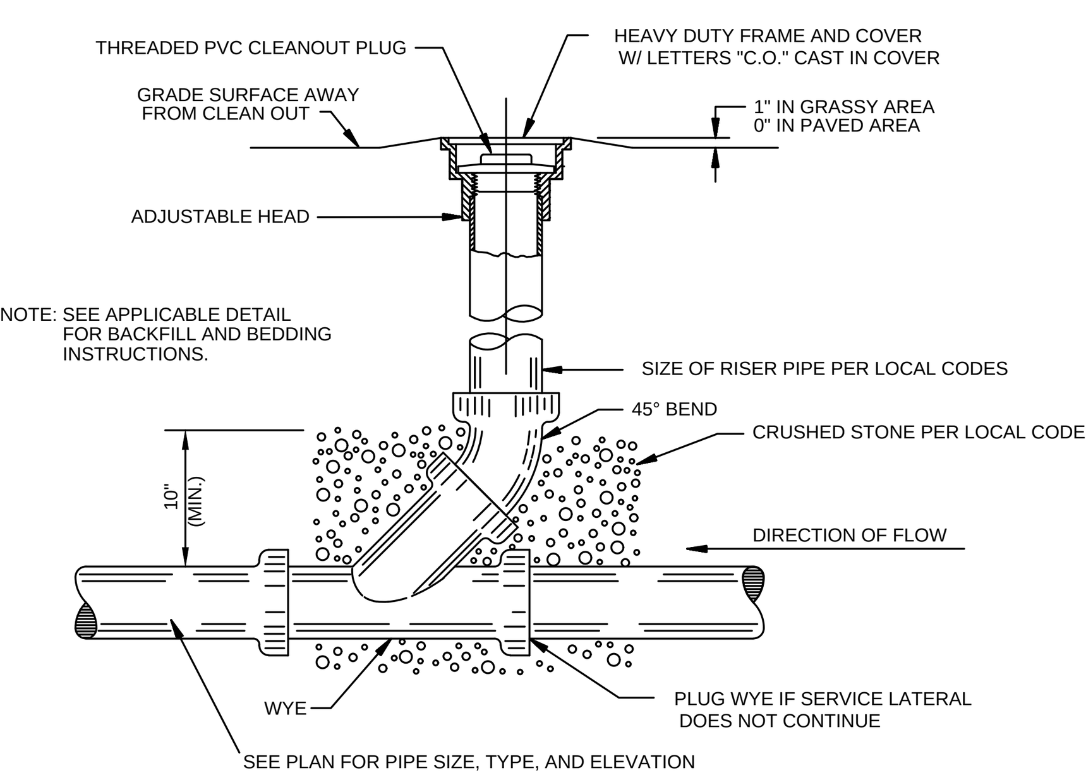
SEE NOTE #3.

NOTES:

1. PLACE CONTINUOUS RUN OF FENCE MATERIAL AS SHOWN ON PLANS.
2. ATTACH AT 10' MAXIMUM INTERVALS TO 2x4 POSTS. DO NOT STAPLE TO TREES.
3. FENCE MATERIAL SHALL BE 'TENSAR' HIGH STRENGTH POLYMER GEOGRID FABRIC BY TENSAR CORPORATION, MORROW, GEORGIA, OR EQUAL, BRIGHT ORANGE COLOR.
4. AT 100' O.C., PLACE SIGNS IN ENGLISH AND SPANISH: "NO TRESPASSING – TREE PROTECTION AREA" and "PROHIBIDO ENTRAR – ZONA PROTECTORA PARA LOS ARBOLES"
5. A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD WITH THE PROJECT MANAGER AND THE TOWN'S LANDSCAPE ARCHITECT BEFORE ANY SITE WORK BEGINS.
6. ANY TREE ROOTS EXPOSED BY CONSTRUCTION SHALL BE SEVERED CLEANLY WITH A PRUNING TOOL.
7. THE SOIL WITHIN THE PROTECTED AREA AROUND EXISTING TREES SHALL NOT BE DRIVEN UPON AFTER FENCE REMOVAL FOR THE PURPOSE OF INSTALLING LANDSCAPING.

TREE PROTECTION FENCE

NOT TO SCALE



SANITARY SEWER CLEANOUT DETAIL

N.T.S.

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401 Providence Road #200
Chapel Hill, NC 27514
T 919.929.1173 F 919.493.6548
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ST. THOMAS MORE - SOUTH CAMPUS - PHASE I

632 LAUREL HILL ROAD
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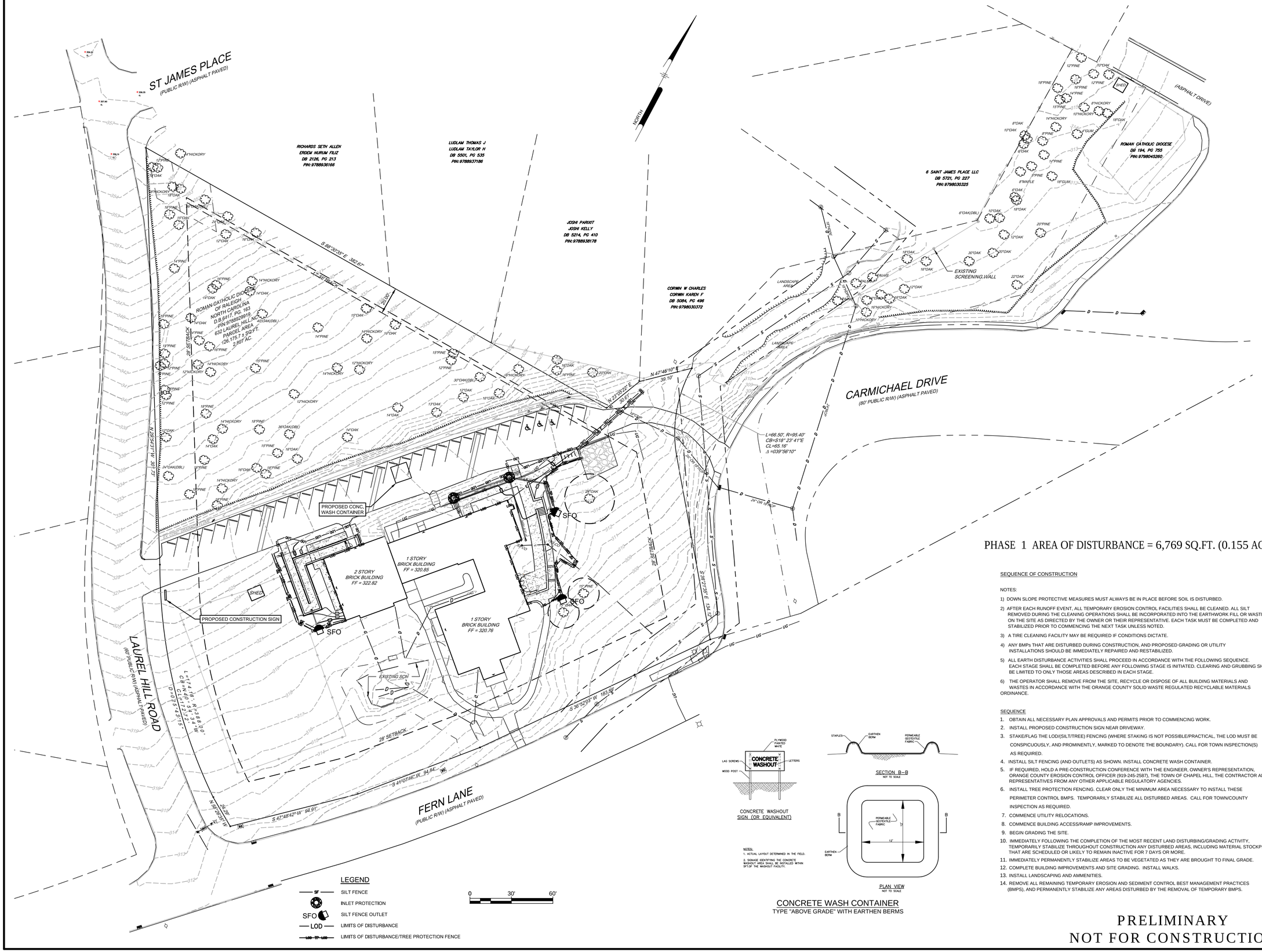
SITE DETAILS

THE CATHOLIC COMMUNITY OF ST. THOMAS MORE
940 CARMICHAEL STREET
CHAPEL HILL, NC 27514

DATE	NO.	REVISIONS	BY
10/1/2018	1	Revised Per Chapel Hill Comments	CJJ

PROJECT	TMCC1701
DATE	2018-07-31
DRAWING SCALE	NTS
DRAWN BY	CJJ
APPROVED BY	PCB

CS6001



LEGEND

- SILT FENCE
- INLET PROTECTION
- SFO — SILT FENCE OUTLET
- LOD — LIMITS OF DISTURBANCE
- LOD TP LOD — LIMITS OF DISTURBANCE/TREE PROTECTION FENCE

CONCRETE WASH CONTAINER
TYPE "ABOVE GRADE" WITH EARTHEN BERMS

PHASE 1 AREA OF DISTURBANCE = 6,769 SQ.FT. (0.155 AC.)

SEQUENCE OF CONSTRUCTION

NOTES:

1) DOWN SLOPE PROTECTIVE MEASURES MUST ALWAYS BE IN PLACE BEFORE SOIL IS DISTURBED.
2) AFTER EACH RUNOFF EVENT, ALL TEMPORARY EROSION CONTROL FACILITIES SHALL BE CLEANED. ALL SILT REMOVED DURING THE CLEANING OPERATIONS SHALL BE INCORPORATED INTO THE EARTHWORK FILL OR WASTED ON THE SITE AS DIRECTED BY THE OWNER OR THEIR REPRESENTATIVE. EACH TASK MUST BE COMPLETED AND STABILIZED PRIOR TO COMMENCING THE NEXT TASK UNLESS NOTED.
3) A TIRE CLEANING FACILITY MAY BE REQUIRED IF CONDITIONS DICTATE.
4) ANY BMPs THAT ARE DISTURBED DURING CONSTRUCTION, AND PROPOSED GRADING OR UTILITY INSTALLATIONS SHOULD BE IMMEDIATELY REPAIRED AND RESTABILIZED.
5) ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED TO ONLY THOSE AREAS DESCRIBED IN EACH STAGE.
6) THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE ORANGE COUNTY SOLID WASTE REGULATED RECYCLABLE MATERIALS ORDINANCE.

SEQUENCE

1. OBTAIN ALL NECESSARY PLAN APPROVALS AND PERMITS PRIOR TO COMMENCING WORK.
2. INSTALL PROPOSED CONSTRUCTION SIGN NEAR DRIVEWAY.
3. STAKE/FLAG THE LOD/(SILT/TREE) FENCING (WHERE STAKING IS NOT POSSIBLE/PRACTICAL, THE LOD MUST BE CONSPICUOUSLY, AND PROMINENTLY, MARKED TO DENOTE THE BOUNDARY). CALL FOR TOWN INSPECTION(S) AS REQUIRED.
4. INSTALL SILT FENCING (AND OUTLETS) AS SHOWN. INSTALL CONCRETE WASH CONTAINER.
5. IF REQUIRED, HOLD A PRE-CONSTRUCTION CONFERENCE WITH THE ENGINEER, OWNER'S REPRESENTATION, ORANGE COUNTY EROSION CONTROL OFFICER (919-245-2587), THE TOWN OF CHAPEL HILL, THE CONTRACTOR AND REPRESENTATIVES FROM ANY OTHER APPLICABLE REGULATORY AGENCIES.
6. INSTALL TREE PROTECTION FENCING. CLEAR ONLY THE MINIMUM AREA NECESSARY TO INSTALL THESE PERIMETER CONTROL BMPS. TEMPORARILY STABILIZE ALL DISTURBED AREAS. CALL FOR TOWN/COUNTY INSPECTION AS REQUIRED.
7. COMMENCE UTILITY RELOCATIONS.
8. COMMENCE BUILDING ACCESS/RAMP IMPROVEMENTS.
9. BEGIN GRADING THE SITE.
10. IMMEDIATELY FOLLOWING THE COMPLETION OF THE MOST RECENT LAND DISTURBING/GRADING ACTIVITY, TEMPORARILY STABILIZE THROUGHOUT CONSTRUCTION ANY DISTURBED AREAS, INCLUDING MATERIAL STOCKPILES THAT ARE SCHEDULED OR LIKELY TO REMAIN INACTIVE FOR 7 DAYS OR MORE.
11. IMMEDIATELY PERMANENTLY STABILIZE AREAS TO BE VEGETATED AS THEY ARE BROUGHT TO FINAL GRADE.
12. COMPLETE BUILDING IMPROVEMENTS AND SITE GRADING. INSTALL WALKS.
13. INSTALL LANDSCAPING AND AMMENITIES.
14. REMOVE ALL REMAINING TEMPORARY EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPS), AND PERMANENTLY STABILIZE ANY AREAS DISTURBED BY THE REMOVAL OF TEMPORARY BMPS.

PRELIMINARY
NOT FOR CONSTRUCTION

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Firm License F-1267
PENNONI ASSOCIATES INC.
401 Providence Road #200
Chapel Hill, NC 27514
T 919.929.1173 F 919.493.6548

ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 033040 PETER C. BELTZ 10/01/18

ST. THOMAS MORE - SOUTH CAMPUS - PHASE I
632 LAUREL HILL ROAD
CHAPEL HILL, NC 27514

EROSION AND SEDIMENTATION CONTROL PLAN

THE CATHOLIC COMMUNITY OF ST. THOMAS MORE
940 CARMICHAEL STREET
CHAPEL HILL, NC 27514

NO.	DATE	REVISIONS	BY
1	10/1/2018	Revised Per Chapel Hill Comments	CJJ

PROJECT	TMCC1701
DATE	2018-07-31
DRAWING SCALE	1"=30'
DRAWN BY	CJJ
APPROVED BY	PCB

CS8001

SHEET 10 OF 11

L:\Projects\TMCC\TMCC1701-St Thomas More - Allen\plan\DESIGN\CS\ADMIN_ZCP\ZCP-CS8001.dwg PLOTTED: 10/8/2018 1:27 PM, BY: Carol Jaenicke PLOTSTYLE: Pennoni NCS.stb PROJECT STATUS: REDEVELOPMENT OF UNITED METHODIST CHURCH SITE

GRAVEL CONSTRUCTION EXIT

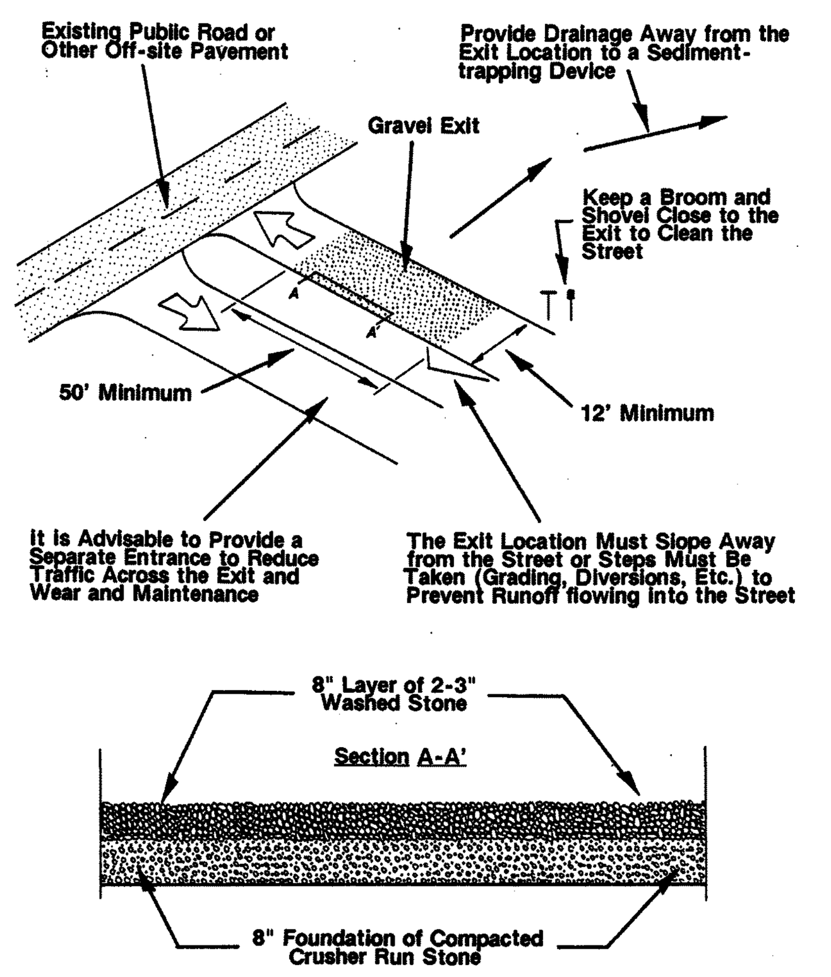


Figure 1: Illustration of a Gravel Construction Exit.

INSTRUCTIONS FOR

GRAVEL CONSTRUCTION EXIT

INSTALLATION

1. REFER TO PLANS FOR LOCATION AND SPECIFICATIONS. IF THERE ARE QUESTIONS OR PROBLEMS WITH THE LOCATION OR METHODS OF INSTALLATION CONTACT THE ENGINEER, ARCHITECT, OR RESPONSIBLE PERSONNEL ON THE SITE FOR ASSISTANCE. EROSION CONTROL PERSONNEL HAVE COPIES OF INSTRUCTIONS AND PHOTOGRAPHS OF PROPERLY INSTALLED EXITS AS AN AID TO INSTALLATION.

   IF THE CONSTRUCTION EXIT IS NOT INSTALLED CORRECTLY THE FIRST TIME, IT WILL HAVE TO BE REBUILT.

2. DETERMINE THE LOCATION ON THE GROUND, TAKING INTO CONSIDERATION:

* THE CONSTRUCTION EXIT MUST BE IN PLACE DURING ALL PHASES OF CONSTRUCTION; IF THE LOCATION IS TO BE GRADED, THE EXIT MUST BE INSTALLED FOR THE INITIAL WORK, REMOVED TO ALLOW GRADING OF THE LOCATION, AND REPLACED IMMEDIATELY AFTER GRADING SO THAT IT IS IN PLACE AND FUNCTIONING AT ALL TIMES.
* IF THE SITE WILL HAVE A LARGE NUMBER OF VEHICLES USING THE EXIT, IT IS ADVISABLE TO HAVE A DIVIDED ENTRANCE THAT DIRECTS ENTERING TRAFFIC THROUGH A SEPARATE TRAVELWAY PARALLEL TO THE GRAVEL CONSTRUCTION EXIT IN ORDER TO REDUCE THE NUMBER OF TRIPS OVER THE STONE, INCREASING THE LIFE OF THE GRAVEL, AND REDUCING MAINTENANCE. REFER TO THE ILLUSTRATION FOR DETAILS.
* RUNOFF AND SEDIMENT FROM THE SITE MUST BE DIRECTED AWAY FROM THE EXIT SO THAT IT DOES NOT FLOW INTO THE STREET OR OTHER OFF-SITE AREA; CHOOSE A LOCATION FOR THE EXIT THAT WILL MAKE IT EASY TO DIVERT THE RUNOFF TO SEDIMENT-TRAPPING DEVICES.
* IF THE GRAVEL CONSTRUCTION EXIT DOES NOT FUNCTION TO KEEP MUD AND DUST ON-SITE, THEN ANY SOIL OR DEBRIS TRACKED FROM THE SITE MUST BE PHYSICALLY REMOVED FROM THESE AREAS BY FIRST USING A SHOVEL AND BROOM AND THEN WASHING THE PAVEMENT.
* **IF THE PERSON RESPONSIBLE FOR THE DISTURBANCE FAILS TO TAKE INITIATIVE TO KEEP SOIL AND DEBRIS ON THE SITE ENFORCEMENT ACTION MAY BE TAKEN AGAINST THE SITE AND THE GRADING PERMIT REVOKED AND/OR A STOP WORK ORDER ISSUED.**

3. CLEAR THE LOCATION OF THE EXIT, REMOVING STUMPS, ROOTS, AND OTHER VEGETATION IN ORDER TO PROVIDE A FIRM FOUNDATION SO THAT THE STONE IS NOT PRESSED INTO SOFT GROUND. CLEAR ENOUGH WIDTH TO ALLOW PASSAGE OF LARGE VEHICLES, BUT CLEAR ONLY WHAT IS NECESSARY FOR THE EXIT. DO NOT CLEAR ADJACENT AREAS UNTIL THE REQUIRED EROSION CONTROL DEVICES ARE IN PLACE.

   IF THE SOIL AT THE LOCATION IS SOFT IT IS ADVISABLE TO PLACE A 6 TO 8 INCH LAYER OF CRUSHER RUN STONE DOWN FIRST TO PROVIDE A FIRM FOUNDATION AND PREVENT THE WASHED STONE BEING PRESSED INTO THE GROUND.

4. AT THE LOCATION OF THE EXIT, PLACE AN 8-INCH LAYER OF WASHED STONE 2 TO 3 INCHES IN DIAMETER AT LEAST 50 FEET LONG AND AS WIDE AS THE FULL WIDTH OF THE EXIT OR AT LEAST 10 FEET WIDE. FLARE THE END OF THE STONE WHERE IT MEETS THE PAVEMENT SO THAT THE WHEELS OF TURNING VEHICLES REMAIN ON STONE AND DO NOT TRAVEL OVER UNPROTECTED SOIL.

5. A SQUARE-EDGED SHOVEL AND BROOM WITH STIFF BRISTLES MUST BE PROVIDED AT THE EXIT FOR REMOVING ANY MUD THAT MAY BE TRACKED INTO THE STREET.

USE

1. AS VEHICLES LEAVING THE SITE DRIVE ACROSS THE WASHED STONE THE ABRASIVE ACTION OF THE WASHED STONE SHOULD REMOVE SEDIMENT FROM THE TIRES. IT MAY BE NECESSARY TO USE A SHOVEL TO REMOVE MUD TRAPPED BETWEEN DUAL WHEELS.
2. ANY SOIL TRACKED FROM THE SITE MUST BE REMOVED IMMEDIATELY. A SHOVEL AND BROOM MUST BE USED TO REMOVE AS MUCH SOIL AS POSSIBLE BEFORE WASHING THE PAVEMENT.

MAINTENANCE

MATERIALS, EQUIPMENT, AND PERSONNEL MUST BE AVAILABLE FOR MAINTENANCE AT ALL TIMES.

1. WHEN THE STONE IN THE EXIT BECOMES CONTAMINATED WITH SOIL AND ITS FUNCTION IS REDUCED TO WHERE SEDIMENT IS BEING TRACKED INTO THE STREET, A 4-INCH LAYER OF CLEAN STONE MUST BE ADDED.
2. DIVERSIONS USED TO DIRECT RUNOFF AWAY FROM THE EXIT TO SEDIMENT-TRAPPING DEVICES MUST BE MAINTAINED ACCORDING TO SPECIFICATIONS FOR THOSE DEVICES.
3. THE GRAVEL CONSTRUCTION EXIT MUST BE MAINTAINED SO THAT MUD AND DUST ARE KEPT ON-SITE. PROBLEMS MUST BE ANTICIPATED AND PREVENTIVE MAINTENANCE MUST BE PERFORMED.

REMOVAL

1. WHEN THE GRAVEL CONSTRUCTION EXIT IS NO LONGER NEEDED, WHEN THE TRAVELWAYS HAVE BEEN STABILIZED AND THE POTENTIAL FOR TRACKING SOIL AND DEBRIS INTO THE STREET HAS BEEN REMOVED, THE GRAVEL CONSTRUCTION EXIT MAY BE REMOVED.
2. THE STONE AND ANY SEDIMENT SHOULD BE REMOVED AND PROPERLY DISPOSED OF WHERE THEY WILL NOT CREATE AN EROSION HAZARD.

INSTRUCTIONS FOR TEMPORARY STABILIZATION USING

VEGETATION

INSTALLATION

1. REFER TO PLANS FOR LOCATION, EXTENT, AND SPECIFICATIONS. IF THERE ARE QUESTIONS OR PROBLEMS WITH THE LOCATION, EXTENT, OR METHODS OF INSTALLATION, CONTACT THE ENGINEER, ARCHITECT, OR RESPONSIBLE PERSONNEL ON THE SITE FOR ASSISTANCE. EROSION CONTROL PERSONNEL HAVE COPIES OF INSTRUCTIONS AND MAY BE ABLE TO OFFER ASSISTANCE.

   IF THE DISTURBANCE IS NOT PROPERLY STABILIZED THE FIRST TIME SO THAT EROSION IS RESTRAINED, THE SEEDING WILL HAVE TO BE REPEATED.

2. USE THE APPLICATION RATES FOR LIME, FERTILIZER, SEED, MULCH, ETC. SPECIFIED IN THE PLAN, OR USE THE RATES BELOW FOR THE APPROPRIATE SEASON.

ALL SEASONS:

LIME: 90 POUNDS PER 1000 SQUARE FEET (2 TONS PER ACRE).
FERTILIZER: 10-10-10; 16 POUNDS PER 1000 SQUARE FEET (700 POUNDS PER ACRE).
STRAW MULCH: 80 POUNDS PER 1000 SQUARE FEET (1.5 TO 2 TONS PER ACRE); USE ENOUGH STRAW TO COVER 75% OF THE GROUND.

MARCH - MAY

RYE GRAIN: 3 POUNDS PER 1000 SQUARE FEET (150 POUNDS PER ACRE).
OR
SPRING OATS: 3 POUNDS PER 1000 SQUARE FEET (125 POUNDS PER ACRE).

MAY - AUGUST

MILLET: 1 POUND PER 1000 SQUARE FEET (40 POUNDS PER ACRE).
OR
SORGHUM HYBRIDS: 1 POUND PER 1000 SQUARE FEET (40 POUNDS PER ACRE).

AUGUST 15 - NOVEMBER 15

OATS: BEFORE OCTOBER 1: 2.5 POUNDS PER 1000 SQUARE FEET (125 POUNDS PER ACRE).
OR
WHEAT: AFTER OCTOBER 1: 3 POUNDS PER 1000 SQUARE FEET (180 POUNDS PER ACRE).

NOVEMBER 15 - FEBRUARY

VEGETATION IS NOT AN APPROPRIATE STABILIZATION DURING THESE SEASONS; USE ANOTHER TYPE OF TEMPORARY GROUND COVER, SUCH AS MULCHING.

3. **SEEDBED PREPARATION:** REMOVE ROCKS, STUMPS, ROOTS, ETC. SINCE THEY WILL INTERFERE WITH SEEDING AND MAINTENANCE. THE SMOOTH, COMPACTED SURFACE OF CUT AND FILL SLOPES IS NOT A GOOD SEED BED; APPLY LIME AND FERTILIZER, THEN RIP THE SOIL 4-6 INCHES TO MIX THE NUTRIENTS INTO THE SOIL AND TO LOOSEN AND ROUGHEN IT TO RECEIVE THE SEED.
4. **SEEDING:** APPLY SEED AT THE RECOMMENDED RATE, AND GO OVER THE SURFACE WITH A CULTIPACKER WHERE POSSIBLE TO BRING THE SEED INTO CONTACT WITH THE SOIL.
5. **MULCHING:** THE AREA SEEDED MUST BE MULCHED TO PROTECT THE BARE SOIL UNTIL THE VEGETATION IS ESTABLISHED AND TO RETAIN MOISTURE TO PROMOTE SEED GERMINATION AND PLANT GROWTH. APPLY ENOUGH MULCH TO COVER 75% OF THE SOIL SURFACE. TO KEEP IT IN PLACE AND PREVENT WIND OR WATER FROM DISLODGING IT, THE MULCH SHOULD BE HELD IN PLACE BY TACKING IT WITH ASPHALT OR COVERING IT WITH NETTING.

MAINTENANCE

AREAS MUST BE RESEEDED AND MULCHED WHERE THE VEGETATION FAILS TO ESTABLISH ITSELF OR IS DAMAGED BY RUNOFF OR CONSTRUCTION ACTIVITY. IF THE TEMPORARY VEGETATION SHOULD FAIL FOR ANY REASON BEFORE THE PERMANENT STABILIZATION IS PROVIDED, IT MUST BE REPLACED WITH AN APPROPRIATE TYPE OF COVER SUFFICIENT TO RESTRAIN EROSION.

INSTRUCTIONS FOR PERMANENT STABILIZATION USING

VEGETATION

INSTALLATION

1. REFER TO PLANS FOR LOCATION, EXTENT, AND SPECIFICATIONS. IF THERE ARE QUESTIONS OR PROBLEMS WITH THE LOCATION, EXTENT, OR METHODS OF INSTALLATION, CONTACT THE ENGINEER, ARCHITECT, OR RESPONSIBLE PERSONNEL ON THE SITE FOR ASSISTANCE. EROSION CONTROL PERSONNEL HAVE COPIES OF INSTRUCTIONS AND MAY BE ABLE TO OFFER ASSISTANCE.

   IF THE DISTURBANCE IS NOT PROPERLY STABILIZED THE FIRST TIME SO THAT EROSION IS RESTRAINED, THE SEEDING WILL HAVE TO BE REPEATED UNTIL IT IS SUCCESSFUL.

2. USE THE APPLICATION RATES FOR LIME, FERTILIZER, SEED, MULCH, ETC. SPECIFIED IN THE PLAN, OR USE THE RATES BELOW FOR THE APPROPRIATE SEASON. IF SEEDING IS TO BE DONE IN A SEASON NOT LISTED BELOW, USE VEGETATION COMPATIBLE WITH THAT SEASON OR ANOTHER METHOD OF PERMANENT STABILIZATION.

3. TALL FESCUE:

   SEEDING DATES: FEBRUARY 15 - MAY, OR AUGUST 15 - OCTOBER 15

   LIME: 135 POUNDS PER 1000 SQUARE FEET (3 TONS PER ACRE)

   FERTILIZER: 10-10-10; 23 POUNDS PER 1000 SQUARE FEET (1000 POUNDS PER ACRE). A SPLIT APPLICATION OF 500 POUNDS PER ACRE INITIALLY AND ANOTHER 500 POUNDS IN THE SPRING OR FALL IS PREFERABLE. ADD 500 POUNDS PER ACRE SUPER PHOSPHATE WHERE THE SUBSOIL IS EXPOSED.

   SEED: 1.5 POUNDS PER 1000 SQUARE FEET (60 POUNDS PER ACRE)

   MULCH: 80 POUNDS OF SMALL GRAIN STRAW PER 1000 SQUARE FEET (APPROXIMATELY 2 BALES) OR 1.5 -2 TONS PER ACRE; USE ENOUGH STRAW TO COVER 75% OF THE GROUND.

   TEMPORARY COVER: 0.5 POUNDS OF GERMAN OR BROWNTOP MILLET PER 1000 SQUARE FEET (20 POUNDS PER ACRE)

3. SEEDBED PREPARATION: REMOVE ROCKS, STUMPS, ROOTS, ETC. SINCE THEY WILL INTERFERE WITH SEEDING AND MAINTENANCE. THE SMOOTH, COMPACTED SURFACE OF CUT AND FILL SLOPES IS NOT A GOOD SEEDBED; APPLY LIME AND FERTILIZER, THEN RIP THE SOIL 4 TO 6 INCHES TO MIX THE NUTRIENTS INTO THE SOIL AND TO LOOSEN AND ROUGHEN IT TO RECEIVE THE SEED.
4. SEEDING: APPLY SEED AT THE RECOMMENDED RATE, AND GO OVER THE SURFACE WITH A CULTIPACKER WHERE POSSIBLE TO BRING THE SEED INTO CONTACT WITH THE SOIL.
5. MULCHING: THE AREA SEEDED MUST BE MULCHED TO PROTECT THE BARE SOIL UNTIL THE VEGETATION IS ESTABLISHED AND TO RETAIN MOISTURE TO PROMOTE SEED GERMINATION AND PLANT GROWTH. APPLY ENOUGH MULCH TO COVER 75% OF THE SURFACE. TO KEEP IT IN PLACE AND PREVENT WIND OR WATER FROM DISLODGING IT, THE MULCH SHOULD BE HELD IN PLACE BY TACKING IT WITH ASPHALT, CUTTING IT WITH A STRAIGHT-SET DISK, OR COVERING IT WITH NETTING.

MAINTENANCE

ANY PLACES WHERE THE VEGETATION FAILS TO ESTABLISH ITSELF OR IS DAMAGED BY RUNOFF OR CONSTRUCTION ACTIVITY MUST BE RESEEDED. WHERE THE VEGETATION FAILS TO RESTRAIN EROSION, OTHER EROSION CONTROL MEASURES MUST BE INSTALLED.

SILT FENCE

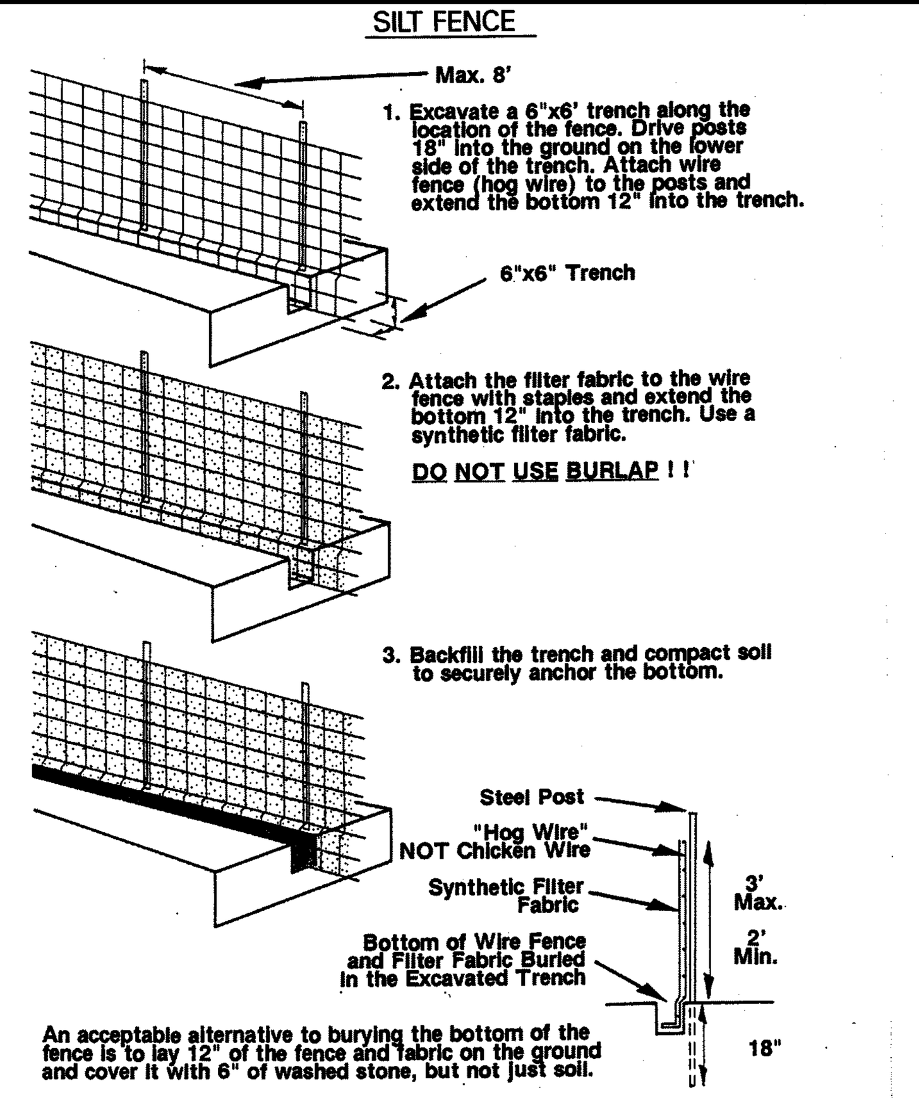


Figure 1: Illustration of Silt Fence Installation.

INSTRUCTIONS FOR

SILT FENCE

INSTALLATION

1. REFER TO THE PLANS FOR LOCATION, EXTENT, AND SPECIFICATIONS. IF THERE ARE QUESTIONS OF PROBLEMS WITH THE LOCATION, EXTENT, OR METHODS OF INSTALLATION, CONTACT THE ENGINEER, ARCHITECT, OR RESPONSIBLE PERSONNEL ON THE SITE FOR ASSISTANCE. EROSION CONTROL PERSONNEL HAVE COPIES OF INSTRUCTIONS AND MAY HAVE PHOTOGRAPHS OF PROPERLY INSTALLED SILT FENCES AS AN AID TO INSTALLATION.

   IF THE SILT FENCE IS NOT INSTALLED CORRECTLY THE FIRST TIME, IT WILL HAVE TO BE REBUILT.

2. DETERMINE THE LOCATION ON THE GROUND TAKING INTO CONSIDERATION:

* **A SILT BARRIER (PREFABRICATED SILT FENCE) CANNOT BE SUBSTITUTED! !** THE SILT FENCE MUST BE CONSTRUCTED AS DESCRIBED IN THESE INSTRUCTIONS.
* ALLOW SUFFICIENT SPACE FOR MAINTENANCE, GRADING, FILLING, AND OTHER CONSTRUCTION ACTIVITY BETWEEN THE SILT FENCE AND THE CONSTRUCTION SITE. IF NECESSARY, HAVE SLOPE STAKES, BUILDING CORNERS, STORM DRAINS, ETC. SURVEYED BEFORE CLEARING TO GUIDE INSTALLATION. KNOW WHERE THE TOE OF FILL SLOPES WILL EXTEND SO THAT SUFFICIENT ROOM IS LEFT BETWEEN THE TOE AND SILT FENCE FOR MAINTENANCE, REPAIR, AND REMOVAL.
* ALLOW AT LEAST:

  15 FEET BETWEEN THE FENCE AND SINGLE-STORY BUILDINGS.

  25 FEET BETWEEN THE FENCE AND MULTIPLE-STORY BUILDINGS.

  10 FEET BETWEEN THE FENCE AND THE TOE OF FILL SLOPES.

* WHERE POSSIBLE, INSTALL THE SILT FENCE ON THE CONTOUR SO THAT RUNOFF GOES THROUGH THE SILT FENCE AND DOES NOT FLOW ALONG THE SILT FENCE AND POND AT THE LOWEST POINT. WHERE PONDING DOES OCCUR, SILT FENCE OUTLETS MAY BE NECESSARY SO THAT THE FENCE DOES NOT COLLAPSE.

3. CLEAR THE LOCATION OF THE SILT FENCE, CLEARING ONLY WHAT IS NEEDED TO PROVIDE ACCESS TO PERSONNEL AND EQUIPMENT FOR INSTALLATION. IT IS PERMISSIBLE TO PLACE THE SILT FENCE IN THE EDGE OF EXISTING TREES AS LONG AS THE OWNER ALLOWS IT AND CARE IS TAKEN TO PROTECT THESE TREES DURING INSTALLATION, MAINTENANCE, AND REMOVAL IF THE TREES ARE TO REMAIN AFTER CONSTRUCTION. DO NOT ATTACH THE FILTER FABRIC TO THE TREES, AS IT MAKES BURYING THE TOE IMPOSSIBLE.
4. EXCAVATE A 6 X 6-INCH TRENCH ALONG THE LOCATION OF THE FENCE. USING A "DITCH WITCH" IS HELPFUL.
5. ALONG THE LOWER SIDE OF THE TRENCH, PLACE STEEL FENCE POSTS NO MORE THAN 8 FEET APART AND DRIVE THEM 18 INCHES INTO THE GROUND.
6. ATTACH WIRE FENCE ("HOG WIRE" OF MINIMUM 14 GAUGE WITH MAXIMUM MESH OF 6 INCHES) TO THE UPHILL SIDE OF THE POSTS, AND PLACE 12 INCHES OF THE BOTTOM OF THE FENCE INTO THE TRENCH. DO NOT USE "CHICKEN WIRE." USE WIRE TO FASTEN THE FENCE TO THE POSTS. THE COMPLETED FENCE MUST BE AT LEAST 2 FEET HIGH AND NOT MORE THAN 3 FEET HIGH.
7. ATTACH SYNTHETIC FILTER FABRIC TO THE UPHILL SIDE OF THE WIRE FENCE WITH STAPLES A MAXIMUM 12 INCHES APART, AND PLACE 12 INCHES OF THE FABRIC INTO THE TRENCH WITH THE WIRE FENCE. USE ROLLS OF FABRIC AND CUT TO THE NECESSARY LENGTH IN ORDER TO MINIMIZE THE NUMBER OF JOINTS.
8. BACKFILL THE TRENCH AND TAMP THE FILL TO FIRMLY ANCHOR THE BOTTOM OF THE FILTER FABRIC AND WIRE FENCE TO PREVENT WATER FROM FLOWING UNDER THE FENCE; MAKE IT GO THROUGH THE FILTER FABRIC.
9. WHERE IT IS IMPOSSIBLE TO INSTALL THE SILT FENCE ON THE CONTOUR, RUNOFF WILL FLOW ALONG THE FENCE AND POND AT THE LOWEST POINT. WHERE THE TOTAL DRAINAGE AREA TO THE POINT OF PONDING IS GREATER THAN 5,000 SQUARE FEET (FOR EXAMPLE: A SQUARE 70 FEET ON A SIDE), A SILT FENCE OUTLET IS REQUIRED; WHERE THE DRAINAGE AREA IS GREATER THAN 10,000 SQUARE FEET (FOR EXAMPLE: A SQUARE 100 FEET ON A SIDE), A SEDIMENT TRAP IS NECESSARY. THE LOCATION OF THIS OUTLET MAY BE SHOWN ON THE PLAN, BUT CHECK THE INSTALLATION IN THE FIELD WHEN THE WIRE FENCE IS UP TO DETERMINE IF ADDITIONAL OUTLETS ARE NEEDED. SEE THE DETAILS OF THE SILT FENCE OUTLET FOR INSTRUCTIONS.

MAINTENANCE

MATERIALS, EQUIPMENT, AND PERSONNEL MUST BE AVAILABLE FOR MAINTENANCE AT ALL TIMES.

1. INSPECT THE SILT FENCE:

* DURING CONSTRUCTION: TO SEE IF MACHINERY OR FALLING TREES HAVE DAMAGED THE SILT FENCE; IF DAMAGED, REPAIR IT. TO SEE THAT FILL MATERIAL HAS NOT ACCUMULATED AGAINST THE FENCE; IF IT HAS, REMOVE THE MATERIAL, REPAIR THE FENCE, AND MOVE THE FENCE OR FILL SO THAT IT DOES NOT HAPPEN AGAIN.
* AFTER EACH RAINFALL: TO SEE THAT RUNOFF IS NOT FLOWING UNDER THE FENCE; IF IT IS, BURY THE BOTTOM OF THE FENCE CORRECTLY. TO SEE THAT RUNOFF HAS NOT TOPPED THE FENCE IN LOW POINTS; IF IT HAS, AN OUTLET MAY BE NEEDED AT THAT POINT TO PREVENT FUTURE FAILURES.

2. CLEAN OUT ACCUMULATED SEDIMENT WHEN IT REACHES A DEPTH OF ONE-HALF THE HEIGHT OF THE FILTER FABRIC. PLACE THE SEDIMENT IN A DISPOSAL AREA OR, IF APPROPRIATE, MIX IT WITH DRY SOIL ON THE SITE.

   DO NOT DISPOSE OF SEDIMENT IN A MANNER THAT WILL CREATE AN EROSION HAZARD. DO NOT ERECT A NEW SILT FENCE ON TOP OF ACCUMULATED SEDIMENT BEHIND THE FENCE.

3. IF SILT FENCE OUTLETS ARE USED, REMOVE AND REPLACE THE STONE FILTER WITH CLEAN, WASHED STONE WHEN THE FILTER BECOMES CLOGGED. DISPOSE OF ANY CONTAMINATED STONE PROPERLY.
4. REPAIR ANY BREAKS OR ROTTEN PLACES IN THE FILTER FABRIC.
5. IF THE FENCE IS SAGGING BETWEEN POSTS, INSTALL ADDITIONAL POSTS.
6. WHEN MAKING REPAIRS, ALWAYS RESTORE THE SILT FENCE TO ITS ORIGINAL DESIGN CONFIGURATION.

REMOVAL

1. WHEN GRADING IN THE DRAINAGE AREA ABOVE THE SILT FENCE HAS BEEN FINISHED AND DISTURBED AREAS SUFFICIENTLY STABILIZED TO RESTRAIN EROSION, THE SILT FENCE AND ANY OUTLETS MUST BE REMOVED.
2. REMOVE ANY ACCUMULATED SEDIMENT AND DISPOSE OF IT PROPERLY.
3. REMOVE POSTS, FENCE, AND FABRIC; DISPOSE OF THEM PROPERLY.
4. STABILIZE THE DISTURBED AREA WHERE THE FENCE WAS LOCATED.

SILT FENCE OUTLET

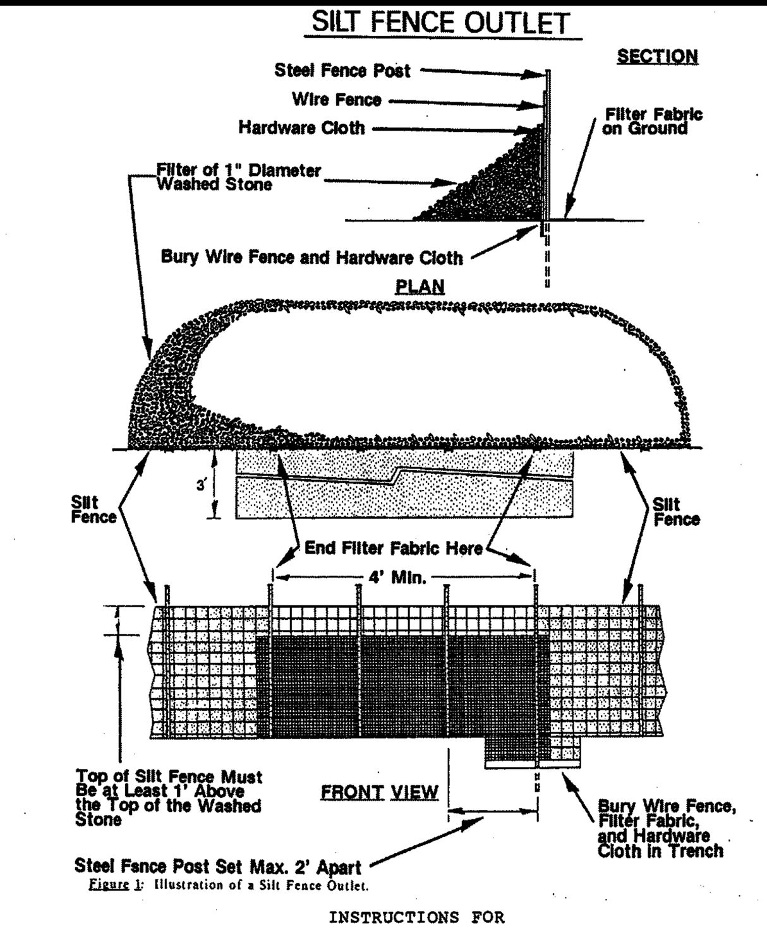


Figure 1: Illustration of a Silt Fence Outlet.

INSTRUCTIONS FOR

SILT FENCE OUTLET

INSTALLATION

1. REFER TO THE PLANS FOR LOCATIONS AND SPECIFICATIONS. DURING INSTALLATION OF THE SILT BARRIER OR SILT FENCE, INSPECT THE INSTALLATION TO DETERMINE IF OUTLETS ARE NEEDED ACCORDING TO THE CRITERIA SET FORTH IN THE SPECIFICATIONS FOR THE BARRIER AND FENCE. IF THERE ARE QUESTIONS OR PROBLEMS WITH THE LOCATION, EXTENT, OR METHOD OF INSTALLATION, CONTACT THE ENGINEER, ARCHITECT, OR RESPONSIBLE PERSONNEL ON THE SITE FOR ASSISTANCE. EROSION CONTROL PERSONNEL HAVE COPIES OF INSTRUCTIONS AND MAY HAVE PHOTOGRAPHS OF PROPERLY INSTALLED OUTLETS AS AN AID TO INSTALLATION.

   IF THE SILT FENCE OUTLET IS NOT INSTALLED CORRECTLY THE FIRST TIME, IT WILL HAVE TO BE REBUILT.

2. DETERMINE THE EXACT LOCATION OF THE OUTLET BEFORE COMPLETING INSTALLATION OF THE SILT BARRIER OR SILT FENCE, TAKING INTO CONSIDERATION:

* INSTALL THE OUTLET AT THE LOWEST POINT(S) IN THE BARRIER OR FENCE WHERE WATER WILL POND.
* INSTALL THE OUTLET WHERE IT IS ACCESSIBLE FOR INSTALLATION, MAINTENANCE, AND REMOVAL.
* ALLOW AT LEAST:

  15 FEET BETWEEN THE BARRIER OR FENCE AND SINGLE-STORY BUILDINGS.

  25 FEET FOR FORK LIFTS BETWEEN THE BARRIER OR FENCE AND MULTIPLE-STORY BUILDINGS.

  10 FEET BETWEEN THE BARRIER OR FENCE AND THE TOE OF FILL SLOPES.

* PLACE THE OUTLET SO THAT WATER FLOWING THROUGH IT WILL NOT CREATE AN EROSION HAZARD BELOW: AVOID STEEP SLOPES BELOW THE OUTLET AND AREAS WITHOUT PROTECTIVE VEGETATION. USE SLOPE DRAINS IF NECESSARY.
* DETERMINE THE LOCATION OF THE OUTLET: FOR A SILT BARRIER, WHEN THE TRENCH IS DUG TO BURY THE BOTTOM OF THE FABRIC BECAUSE THE BARRIER WILL BE OMITTED AT THE OUTLET; FOR A SILT FENCE, WHEN THE WIRE FENCE IS IN PLACE BECAUSE THE FILTER FABRIC WILL BE OMITTED AT THE OUTLET.

3. REFER TO THE ILLUSTRATIONS OF THE OUTLET IN THE PLAN.
4. CLEAR STUMPS AND ROOTS FROM THE LOCATION OF THE OUTLET. CLEAR ADEQUATE ACCESS FOR THE EQUIPMENT NEEDED FOR INSTALLATION, MAINTENANCE, AND REMOVAL.
5. FOR A SILT BARRIER:

* JUST BELOW THE GAP IN THE BARRIER, PLACE A LAYER OF FILTER FABRIC ON THE GROUND TO PROTECT THE SOIL FROM EROSION BY OUTFLOW FROM THE OUTLET; PLACE 6 INCHES OF THE UPPER EDGE IN THE TRENCH. STAKE THE REMAINING EDGES OF THE FABRIC TO HOLD IT IN PLACE.
* ALONG THE GAP WHERE THE OUTLET WILL GO, PLACE STEEL FENCE POSTS FOR STRENGTH. THE POSTS MUST BE A MAXIMUM OF 2 FEET APART AND DRIVEN INTO SOLID GROUND AT LEAST 18 INCHES.
* PLACE HARDWARE CLOTH [WELDED GALVANIZED SCREEN WITH SQUARE 1/4 - 1/2-INCH HOLES] ON THE UPHILL SIDE OF THE POSTS TO HOLD THE WASHED STONE IN PLACE. PUT 6 INCHES OF THE BOTTOM OF THE CLOTH IN THE TRENCH AND FASTEN IT TO THE POSTS WITH LENGTHS OF WIRE.
* BURY THE BOTTOM OF THE HARDWARE CLOTH AND THE UPPER EDGE OF THE FILTER FABRIC BELOW THE OUTLET IN THE TRENCH AND COMPACT THE FILL.
* PLACE A FILTER OF 1-INCH DIAMETER WASHED STONE ON THE UPHILL SIDE OF THE OUTLET. PILE THE STONE UP TO THE TOP OF THE HARDWARE CLOTH AND OVER THE JOINT BETWEEN THE OUTLET AND THE BARRIER.

6. FOR A SILT FENCE:

* JUST BELOW THE GAP IN THE FENCE, PLACE A LAYER OF FILTER FABRIC ON THE GROUND TO PROTECT THE SOIL FROM EROSION BY OUTFLOW FROM THE OUTLET; PLACE 6 INCHES OF THE UPPER EDGE IN THE TRENCH. STAKE THE OTHER EDGES OF THE FABRIC TO HOLD IT IN PLACE.
* ALONG THE GAP WHERE THE OUTLET WILL GO, PLACE ADDITIONAL STEEL FENCE POSTS FOR STRENGTH. THE POSTS MUST BE A MAXIMUM OF 2 FEET APART AND DRIVEN INTO SOLID GROUND AT LEAST 18 INCHES.
* PLACE HARDWARE CLOTH [WELDED GALVANIZED SCREEN WITH SQUARE 1/4 - 1/2-INCH HOLES] ON THE UPHILL SIDE OF THE POSTS TO HOLD THE WASHED STONE IN PLACE. PUT 6 INCHES OF THE BOTTOM OF THE CLOTH IN THE TRENCH AND FASTEN IT TO THE POSTS WITH LENGTHS OF WIRE.
* BURY THE BOTTOM OF THE HARDWARE CLOTH, THE UPPER EDGE OF THE FILTER FABRIC BELOW THE OUTLET, AND THE WIRE FENCE IN THE TRENCH AND COMPACT THE FILL.
* PLACE A FILTER OF 1-INCH DIAMETER WASHED STONE ON THE UPHILL SIDE OF THE OUTLET. PILE THE STONE UP TO THE TOP OF THE HARDWARE CLOTH AND OVER THE JOINT BETWEEN THE OUTLET AND THE SILT FENCE.

MAINTENANCE

MATERIALS, EQUIPMENT, AND PERSONNEL MUST BE AVAILABLE FOR MAINTENANCE AT ALL TIME.

1. INSPECT THE SILT FENCE OUTLET:

* DURING CONSTRUCTION: TO DETERMINE IF MACHINERY, FALLING TREES, ETC. HAVE DAMAGED THE BARRIER, FENCE, OR OUTLET; IF DAMAGED, MAKE REPAIRS. TO SEE THAT FILL MATERIAL HAS NOT ACCUMULATED AGAINST THE OUTLET, BLOCKING OUTFLOW; IF IT HAS, REMOVE THE MATERIAL, REPAIR THE DAMAGE, AND MOVE THE FENCE OR FILL SO THAT IT DOES NOT HAPPEN AGAIN.
* AFTER EACH RAINFALL: TO DETERMINE IF RUNOFF FLOWING THROUGH THE OUTLET HAS CAUSED DAMAGE BY UNDERMINING THE FENCE OR OUTLET, OR IF ACCUMULATED WATER HAS COLLAPSED THE OUTLET; IF IT HAS, MAKE REPAIRS OR INSTALL A SEDIMENT TRAP IF NECESSARY TO PREVENT FUTURE FAILURES.

2. CLEAN OUT ACCUMULATED SEDIMENT WHEN IT REACHES A DEPTH OF ONE-HALF THE HEIGHT OF THE OUTLET. PLACE THE SEDIMENT IN A DISPOSAL AREA, OR MIX IT WITH DRY SOIL ON THE SITE IF APPROPRIATE.

   DO NOT DISPOSE OF SEDIMENT IN A MANNER THAT WILL CREATE AN EROSION HAZARD.

3. WHEN THE STONE FILTER BECOMES CLOGGED, PREVENTING FLOW THROUGH THE FILTER, REMOVE THE CONTAMINATED STONE, DISPOSE OF IT PROPERLY, AND REPLACE IT WITH CLEAN WASHED STONE.
4. REPAIR THE OUTLET IF DAMAGED BY USE OR DURING MAINTENANCE. REBUILD IT TO THE ORIGINAL CONFIGURATION.

REMOVAL

1. WHEN GRADING IN THE DRAINAGE AREA ABOVE THE OUTLET HAS BEEN COMPLETED AND THE DISTURBED AREA SUFFICIENTLY STABILIZED TO RESTRAIN EROSION, THE OUTLET MUST BE REMOVED.
2. CLEAN OUT ACCUMULATED SEDIMENT AND DISPOSE OF IT PROPERLY.
3. REMOVE POSTS, FENCE, FABRIC, WIRE, AND WASHED STONE; DISPOSE OF THEM PROPERLY.
4. GRADE THE LOCATION AS NECESSARY.
5. STABILIZE THE DISTURBED AREA WHERE THE OUTLET WAS LOCATED.

DIVERSION DIKE

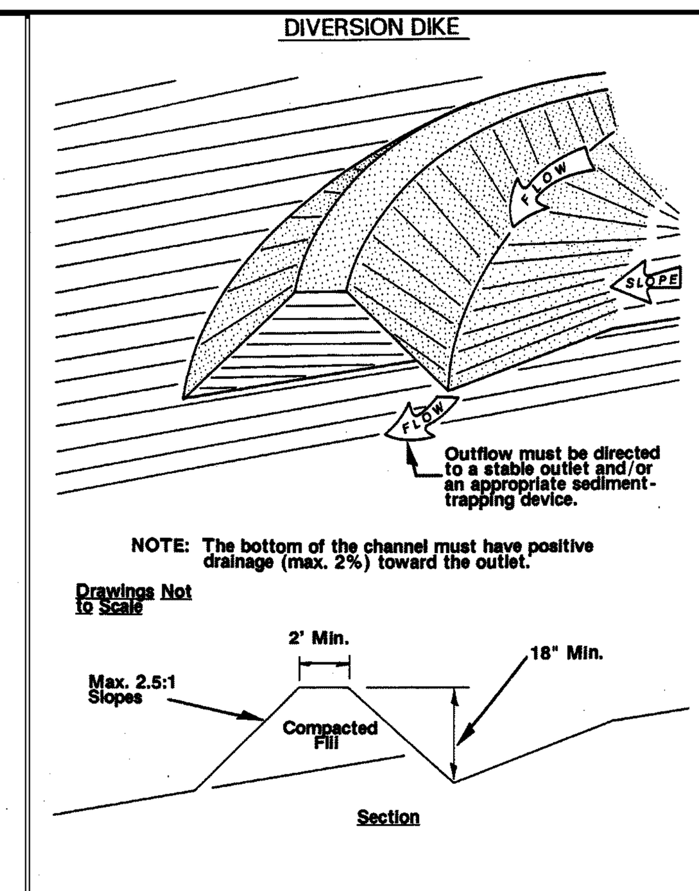


Figure 1: Illustration of a Diversion Dike.

INSTRUCTIDNS FDR

DIVERSION DIKE

INSTALLATION

1. REFER TO PLANS FDR LOCATIDN, EXTENT, AND SPECIFICATIDNS. IF THERE ARE QUESTIDNS DR PRDBLEMS WITH THE LOCATIDN, EXTENT, DR METHDDS DF INSTALLATIDN, CDNTACT THE ENGINEER, ARCHITECT, DR RESPDNSIBLE PERSDNNEL DN THE SITE FDR ASSISTANCE. ERDSIDN CDNTRDL PERSDNNEL HAVE CDPIES DF INSTRUCTIDNS AND MAY HAVE PHDTOGRAPHS DF PRDPERLY INSTALLED DIVERSIDNS AS AN AID TD INSTALLATIDN.

   IF THE DIVERSION DIKE IS NOT INSTALLED CORRECTLY THE FIRST TIME IT WILL HAVE TO BE REPLACED.

2. DETERMINE THE LOCATIDN DN THE GROUND TAKING INTO CDNSIDERATIDN:

* CDNSIDER THE LOCATIDNS OF THE SEDIMENT-TRAPPING DEVICES (SEDIMENT TRAP OR PDND) WHEN LOCATING AND BUILDING THE DIVERSIDN. THE DIVERSIDN MUST DRAIN TO THE DEVICES.
* THE DIVERSIDN MUST HAVE POSITIVE DRAINAGE TD THE SEDIMENT-TRAPPING DEVICES. THE MAXIMUM GRADE IS 2%.
* ALLDW SUFFICIENT SPACE FDR MAINTENANCE AND REMDVAL BETWEEN THE TDE DF THE FILL SLDPE AND THE DIVERSIDN. IF NECESSARY, HAVE SLOPES STAKES, BUILDING CDRNERS, STORM DRAINS, ETC. SURVEYED BEFORE CLEARING TD GUIDE INSTALLATIDN.

3. CLEAR THE LOCATIDN FDR THE DIVERSIDN, CLEARING DNLY WHAT IS NEEDED TO PRDVIDE ACCESS FDR PERSDNNEL AND EQUIPMENT FDR INSTALLATIDN. DO NDT CLEAR THE DRAINAGE AREA ABDVE UNTIL THE DIVERSIDN AND SEDIMENT-TRAPPING DEVICES ARE IN PLACE.
4. REMDVE ROOTS, STUMPS, AND DTHER DEBRIS AND DISPOSE OF THEM PRDPERLY. **DO NOT USE DEBRIS TO BUILD THE DIKE.**
5. GRADE THE CHANNEL AND BUILD THE RIDGE; CDMPACT THE FILL. THE SIDES DF THE CHANNEL AND THE BACK DF THE RIDGE MUST BE ND STEEPER THAN A 3:1 SLOPE. THE CDMPLETED DIVERSIDN MUST BE AT LEAST 18 INCHES DEEP, MEASURED FRDM THE BDTTOM DF THE CHANNEL TD THE TOP OF THE RIDGE.
6. CHECK THE BDTTOM OF THE CHANNEL TO ENSURE PDSITIVE DRAINAGE IN THE DESIRED DIRECTIDN.

MAINTENANCE

MATERIALS, EQUIPMENT, AND PERSONNEL MUST BE AVAILABLE FOR MAINTENANCE AT ALL TIMES.

1. INSPECT THE DIVERSIDN DIKE:

* DURING CONSTRUCTION: TD SEE IF MACHINERY, FALLING TREES, ETC. HAVE DAMAGED THE DIKE; IF DAMAGED, MAKE REPAIRS. TO SEE THAT FILL MATERIAL HAS NOT BLOCKED THE CHANNEL; IF IT HAS, REMDVE THE FILL TO CLEAR IT.
* AFTER EACH RAINFALL: TO SEE THAT RUNOFF IS FLOWING TO THE SEDIMENT-TRAPPING DEVICES; IF NOT, CHANGE THE GRADE SD THAT IT WILL.

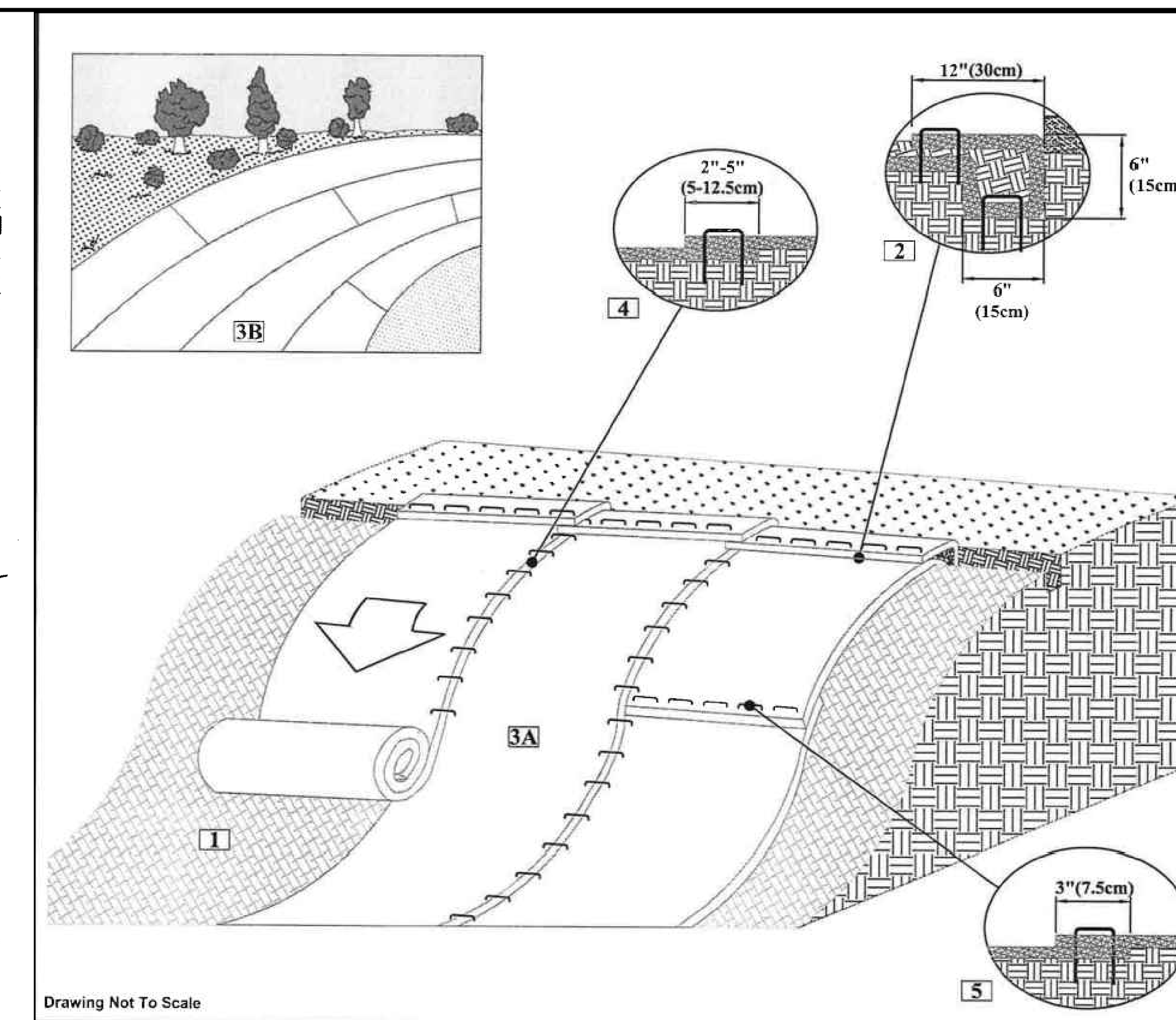
2. IF SEDIMENT ACCUMULATES IN THE CHANNEL, REMOVE IT SD THAT ITS CAPACITY IS NOT REDUCED, CAUSING IT TD FAIL.

   DO NOT DISPOSE OF THE SEDIMENT IN A MANNER THAT WILL CREATE AN EROSION HAZARD.

3. REPAIR ANY PLACES IN THE RIDGE THAT ARE WEAKENED AND WHICH THREATEN TO CAUSE FAILURE OF THE DIVERSION.

REMOVAL

1. WHEN THE GRADING ABDVE THE DIVERSIDN IS FINISHED AND THE AREA IS STABILIZED, IT MUST BE REMDVED.
2. REMDVE ACCUMULATED SEDIMENT AND DISPOSE DF IT PRDPERLY.
3. GRADE THE AREA AND SMOOTH IT OUT IN PREPARATION FDR STABILIZATIDN.
4. STABILIZE THE AREA AS SPECIFIED IN THE PLAN.



SLOPE INSTALLATION DETAIL

1. Prepare soil before installing rolled erosion control products (RECPs), including any necessary application of lime, fertilizer, and seed.
2. Begin at the top of the slope by anchoring the RECPs in a 6"(15cm) deep X 6"(15cm) wide trench with approximately 12" (30cm) of RECPs extended beyond the up-slope portion of the trench. Anchor the RECPs with a row of staples/stakes approximately 12" (30cm) apart in the bottom of the trench. Backfill and compact the trench after stapling. Apply seed to the compacted soil and fold the remaining 12"(30cm) portion of RECPs back over the seed and compacted soil. Secure RECPs over compacted soil with a row of staples/stakes spaced approximately 12"(30cm) apart across the width of the RECPs.
3. Roll the RECPs (A) down or (B) horizontally across the slope. RECPs will unroll with appropriate side against the soil surface. All RECPs must be securely fastened to soil surface by placing staples/stakes in appropriate locations as shown in the staple pattern guide.
4. The edges of parallel RECPs must be stapled with approximately 2" - 5" (5-12.5cm) overlap depending on the RECPs type.
5. Consecutive RECPs spliced down the slope must be end over end (Shingle style) with an approximate 3"(7.5cm) overlap. Staple through overlapped area, approximately 12"(30cm) apart across entire RECPs width.

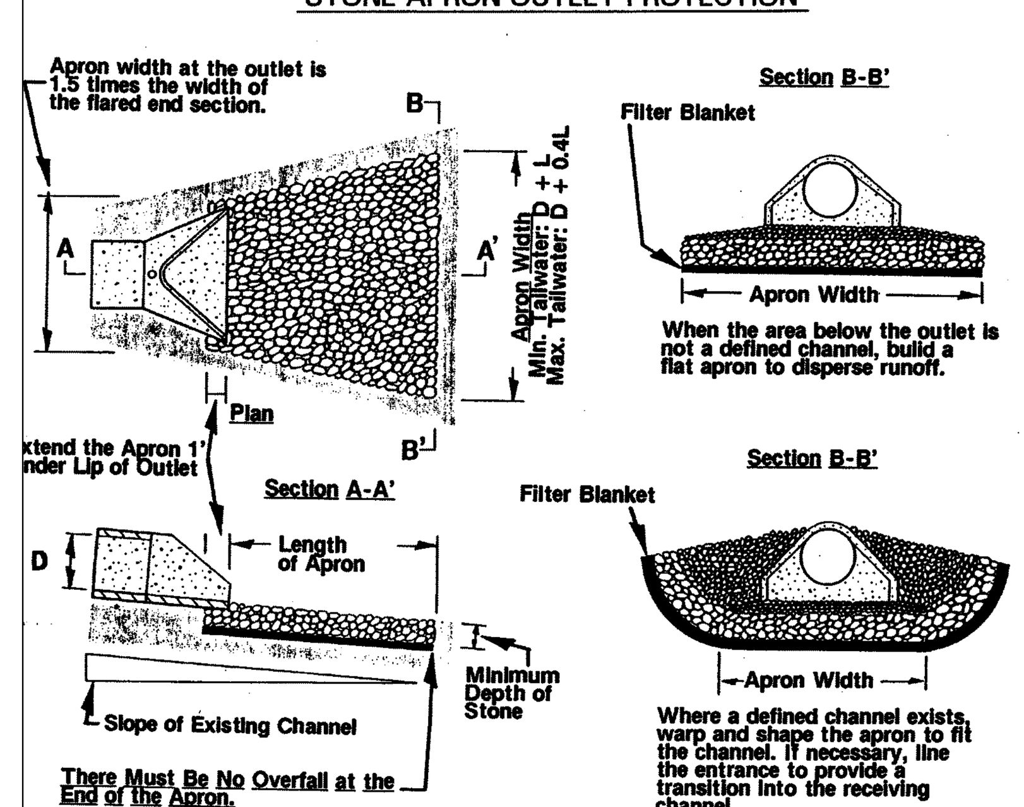
*NOTE:
In loose soil conditions, the use of staple or stake lengths greater than 6"(15cm) may be necessary to properly secure the RECP's.

Tensar | NORTH AMERICAN GREEN
5401 St. Wendel - Cynthiana Rd.
Poseyville, IN 47633
PH: 800-722-2040
www.nagreen.com

Disclaimer:
The information presented herein is general design information only. For specific applications, consult an independent professional for further design guidance.

Drawn on: 3-16-11

STONE APRON OUTLET PROTECTION



INSTRUCTIONS FOR

STONE APRON OUTLET PROTECTION

INSTALLATION

1. REFER TO THE PLANS FOR LOCATION, EXTENT, AND SPECIFICATIONS. IF THERE ARE QUESTIONS OR PROBLEMS WITH THE LOCATION, EXTENT, OR METHOD OF INSTALLATION, CONTACT THE ENGINEER, ARCHITECT, OR RESPONSIBLE PERSONNEL ON THE SITE FOR ASSISTANCE. EROSION CONTROL PERSONNEL HAVE COPIES OF INSTRUCTIONS AND MAY HAVE PHOTOGRAPHS OF PROPERLY INSTALLED APRONS AS AN AID TO INSTALLATION.

   IF THE STONE APRON IS NOT INSTALLED CORRECTLY THE FIRST TIME, IT WILL HAVE TO BE REBUILT.

2. DETERMINE THE LOCATION ON THE GROUND TAKING INTO CONSIDERATION:

* DECIDE HOW EQUIPMENT AND MATERIAL WILL REACH THE LOCATION TO CONSTRUCT THE APRON. DO NOT "PAINT YOURSELF INTO A CORNER" AND PLACE FILL, STRUCTURES, ETC. THAT COULD BLOCK ACCESS.
* THE LOCATION OF THE APRON MUST BE SOLID GROUND. IT MAY BE NECESSARY TO EXCAVATE THE LOCATION TO REMOVE MUD AND THEN BACKFILL WITH GOOD MATERIAL. THIS IS NECESSARY SO THE STONE DOES NOT DISAPPEAR INTO THE MUD, WHICH WOULD REQUIRE MUCH MORE STONE TO COMPLETE THE APRON AND MAKE INSTALLATION DIFFICULT.

3. CLEAR THE LOCATION OF THE APRON. LEAVE AS MUCH OF THE EXISTING VEGETATION AS POSSIBLE AROUND THE LOCATION TO HOLD THE SOIL IN PLACE AND REDUCE THE AREA THAT WILL HAVE TO BE STABILIZED AFTERWARD.
4. EXCAVATE THE BOTTOM TO THE REQUIRED DEPTH TO ACCEPT THE STONE AND THE FILTER BLANKET. WHEN FINISHED, THE BOTTOM OF THE APRON MUST BE LEVEL WITH THE BOTTOM OF THE CHANNEL; THERE CANNOT BE AN OVERFALL AT THE END OF THE APRON.
5. PLACE THE FILTER BLANKET, AS SPECIFIED IN THE PLAN, OVER THE LOCATION AND UNDER THE LIP OF THE FLARED END SECTION.
6. PLACE THE SPECIFIED STONE TO THE REQUIRED DIMENSIONS AND SHAPE IT TO THE CONFIGURATION SHOWN IN THE PLAN.
7. STABILIZE THE AREA AROUND THE APRON THAT WAS DISTURBED DURING CONSTRUCTION. USE ADDITIONAL STONE OR VEGETATION, WHICHEVER IS APPROPRIATE FOR THE SITUATION.

BLOCK AND GRAVEL FILTER

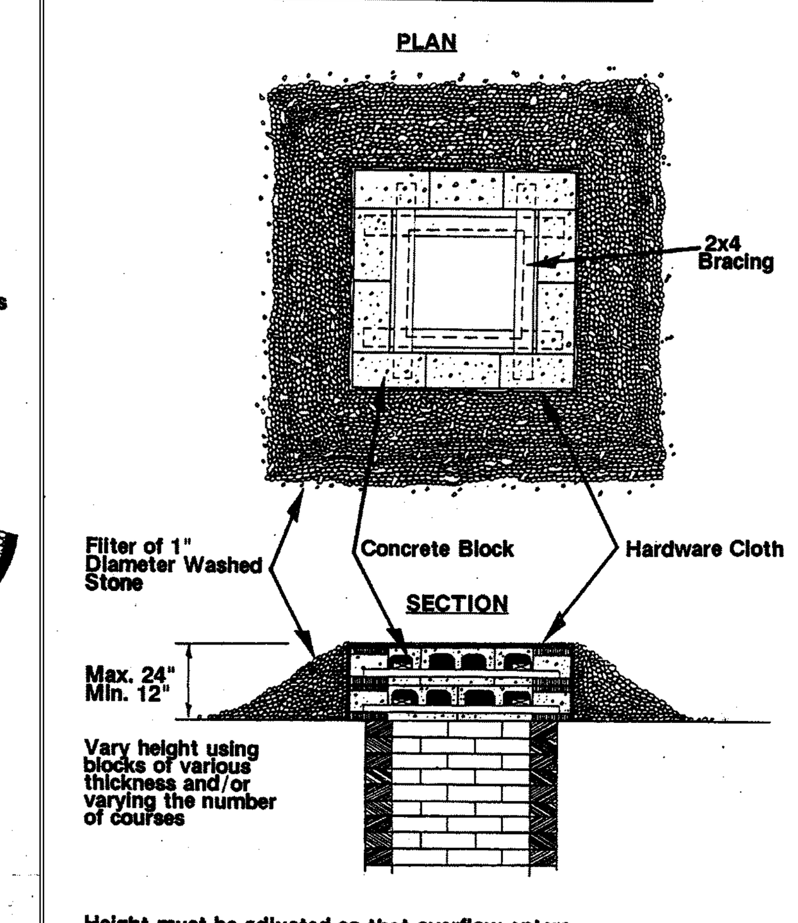


Figure 1: Illustration of a Block and Gravel Filter.

INSTRUCTIONS FOR STORM DRAIN INLET PROTECTION USING A

BLOCK AND GRAVEL FILTER

INSTALLATION

1. REFER TO THE PLANS FOR LOCATIONS AND SPECIFICATIONS. IF THERE ARE QUESTIONS OR PROBLEMS WITH THE LOCATION OR METHODS OF INSTALLATION, CONTACT THE ENGINEER, ARCHITECT, OR RESPONSIBLE PERSONNEL ON THE SITE FOR ASSISTANCE. EROSION CONTROL PERSONNEL HAVE COPIES OF INSTRUCTIONS AND MAY HAVE PHOTOGRAPHS OF PROPERLY INSTALLED BLOCK AND GRAVEL FILTERS AS AN AID TO INSTALLATION.

   IF THE INLET PROTECTION IS NOT INSTALLED CORRECTLY THE FIRST TIME, IT WILL HAVE TO BE REBUILT.

2. DETERMINE THE LOCATION ON THE GROUND, TAKING INTO CONSIDERATION:

* DIVERSIONS AND/OR BERMS MUST BE USED TO FORCE RUNOFF THROUGH THE FILTER INTO THE INLET SO THAT IT DOES NOT BY-PASS THE INLET AND CAUSE PROBLEMS ELSEWHERE.
* IF THE INLET IS TO BE RAISED IN STAGES AS THE FILL IS BROUGHT UP AROUND IT, THE FILTER MUST BE REMOVED FOR GRADING AND REPLACED IMMEDIATELY SO THAT THE INLET IS ALWAYS PROTECTED FROM THE ENTRY OF UNFILTERED RUNOFF.

3. REFER TO ILLUSTRATIONS IN THE PLAN TO ASSIST INSTALLATION.
4. PLACE CONCRETE BLOCKS AROUND THE OPENING OF THE INLET WITH THE HOLES IN THE BLOCK PARALLEL TO THE GROUND SO THAT WATER CAN FLOW THROUGH THE HOLES. VARY THE NUMBER OF COURSES TO BUILD THE FILTER TO THE REQUIRED HEIGHT. IT MUST BE AT LEAST 12 INCHES HIGH.
5. INSTALL 2 X 4'S AS SHOWN IN THE ILLUSTRATION FOR REINFORCEMENT.
6. WRAP HARDWARE CLOTH AROUND THE OUTSIDE OF THE BLOCKS AND ON THE GROUND. HARDWARE CLOTH IS WELDED, GALVANIZED WIRE FABRIC WITH 1/4 - 1/2-INCH SQUARE HOLES.
7. PILE CLEAN WASHED STONE (1-INCH DIAMETER) AROUND THE OUTSIDE OF THE BLOCKS AND ON TOP OF THE HARDWARE CLOTH.
8. WHERE POSSIBLE, DIG A SMALL PIT AROUND THE FILTER TO STORE SEDIMENT.
9. IT IS ADVISABLE TO PLACE GUARD STAKES AROUND THE FILTER TO ALERT MACHINERY OPERATORS OF ITS LOCATION AND PREVENT DAMAGE TO IT.
10. DIVERSIONS AND/OR BERMS MUST BE USED TO DIRECT RUNOFF TO THE FILTER AND INTO THE INLET. RUNOFF MUST NOT BE ALLOWED TO BY-PASS THE INLET AS IT WILL CREATE PROBLEMS DOWNHILL. REFER TO SPECIFIC DETAILS IN THE PLAN.

MAINTENANCE

MATERIALS, EQUIPMENT, AND PERSONNEL MUST BE AVAILABLE FOR MAINTENANCE AT ALL TIMES.

1. INSPECT THE BLOCK AND GRAVEL FILTER:

* DURING CONSTRUCTION: TO SEE IF MACHINERY OR CONSTRUCTION ACTIVITY HAVE DAMAGED THE FILTER; IF DAMAGED, REPAIR IT. TO SEE IF CONSTRUCTION TRAFFIC HAS DAMAGED OR REDUCED THE CAPACITY OF THE BERMS AND DIVERSIONS DIRECTING RUNOFF TO THE FILTER; IF SO, MAKE REPAIRS.
* AFTER EACH RAINFALL: TO SEE IF RUNOFF IS BY-PASSING THE INLET OR TOPPING THE BERMS OR DIVERSIONS BELOW THE FILTER; IF SO, INCREASE THEIR CAPACITY TO PREVENT IT.

2. WHEN THE STONE FILTER BECOMES COVERED WITH SEDIMENT AND CLOGGED SO THAT RUNOFF CANNOT FLOW THROUGH IT, THE CONTAMINATED STONE MUST BE REMOVED, DISPOSED OF PROPERLY, AND REPLACED WITH CLEAN WASHED STONE.

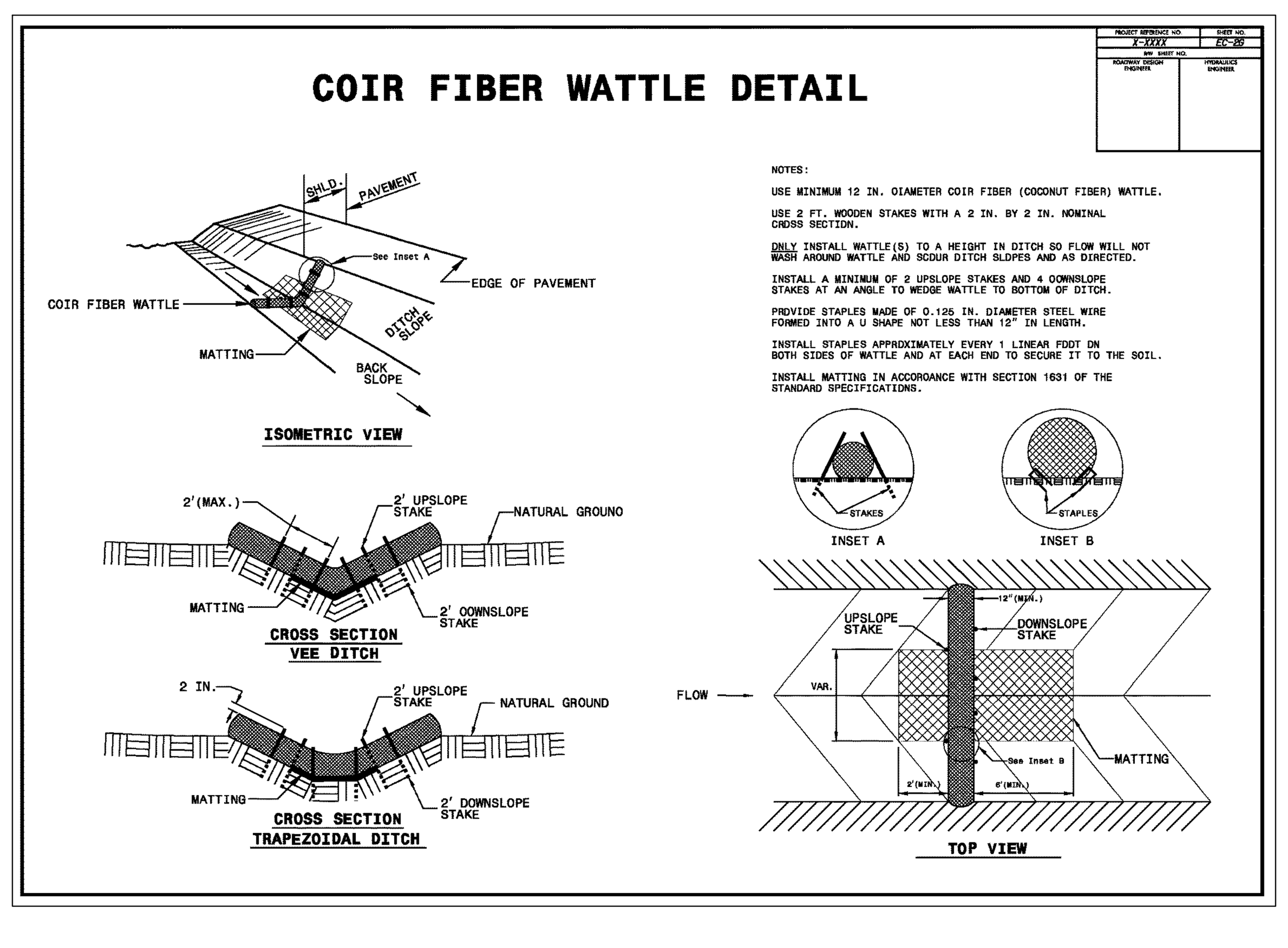
   DO NOT DISPOSE OF SEDIMENT IN A MANNER THAT WILL CREATE AN EROSION HAZARD.

3. IF THE FILTER IS DAMAGED, IF THE BLOCKS ARE DISLOCATED OR BROKEN, OR IF THE REINFORCEMENT IS DAMAGED, REBUILD THE FILTER TO ITS ORIGINAL DESIGN CONFIGURATION.

REMOVAL

1. WHEN GRADING IN THE DRAINAGE AREA ABOVE THE INLET HAS BEEN FINISHED AND THE DISTURBED AREAS STABILIZED, THE BLOCK AND GRAVEL FILTER MUST BE REMOVED.
2. REMOVE ANY ACCUMULATED SEDIMENT AND DISPOSE OF IT PROPERLY.
3. REMOVE THE STONE, HARDWARE CLOTH, BLOCK, AND 2 X 4'S, AND DISPOSE OF THEM PROPERLY.
4. STABILIZE THE DISTURBED AREA AS REQUIRED.

COIR FIBER WATTLE DETAIL



NOTES:

USE MINIMUM 12 IN. DIAMETER COIR FIBER (COCONUT FIBER) WATTLE.

USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.

ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.

PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.

NPDES Stormwater Discharge Permit for Construction Activities (NCGO1) | NCDENR/Division of Water Quality

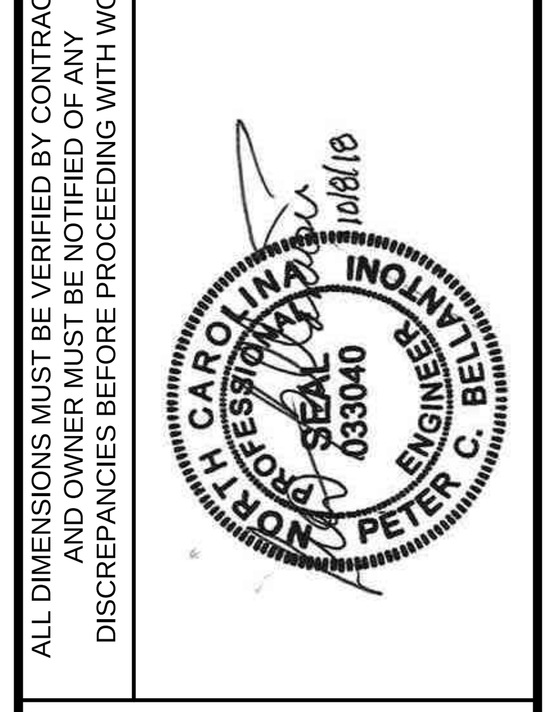
NEW STABILIZATION TIMEFRAMES
(Effective Aug. 3, 2011)

Site Area Description	Stabilization	Timeframe Exceptions
Perimeter dikes, swales, ditches, slopes	7 days	None
High Quality Water (HQW) Zones	7 days	None
Slopes steeper than 3:1	7 days	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed.
Slopes 3:1 or flatter	14 days	7 days for slopes greater than 50' in length.
All other areas with slopes flatter than 4:1	14 days	None, except for perimeters and HQW Zones.

PRELIMINARY
NOT FOR CONSTRUCTION

Pennoni
Firm License F-1267
PENNONI ASSOCIATES INC.
401 Providence Road #200
Chapel Hill, NC 27514
T 919.929.1173 F 919.493.6548

ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK



ST. THOMAS MORE - SOUTH CAMPUS - PHASE I
632 LAUREL HILL ROAD
CHAPEL HILL, NC 27514

EROSION & SEDIMENTATION CONTROL DETAILS

THE CATHOLIC COMMUNITY OF ST. THOMAS MORE
940 CARMICHAEL STREET
CHAPEL HILL, NC 27514

DATE	NO.	REVISIONS	BY
10/1/2018	1	Revised Per Chapel Hill Comments	CJJ

PROJECT	TMCC1701
DATE	2018-07-31
DRAWING SCALE	NTS
DRAWN BY	CJJ
APPROVED BY	PCB

CS8501

L:\Projects\TMCC\TMCC1701-St Thomas More - Aldersgate\DESIGN\CS\ADMIN_ZCP\ZCP\CS8501.dwg PLOTTED: 10/8/2018 1:27 PM, BY: Carol Jemiolo PLOTSTYLE: Pennoni NCS.stb PROJECT STATUS: REDEVELOPMENT OF UNITED METHODIST CHURCH SITE