

HARVEST CHRISTIAN FELLOWSHIP

PREPARED FOR HARVEST CHRISTIAN FELLOWSHIP OF NIANTIC, INC.

NORTH BRIDE BROOK ROAD -- MAP 24 LOT 76

EAST LYME, CONNECTICUT

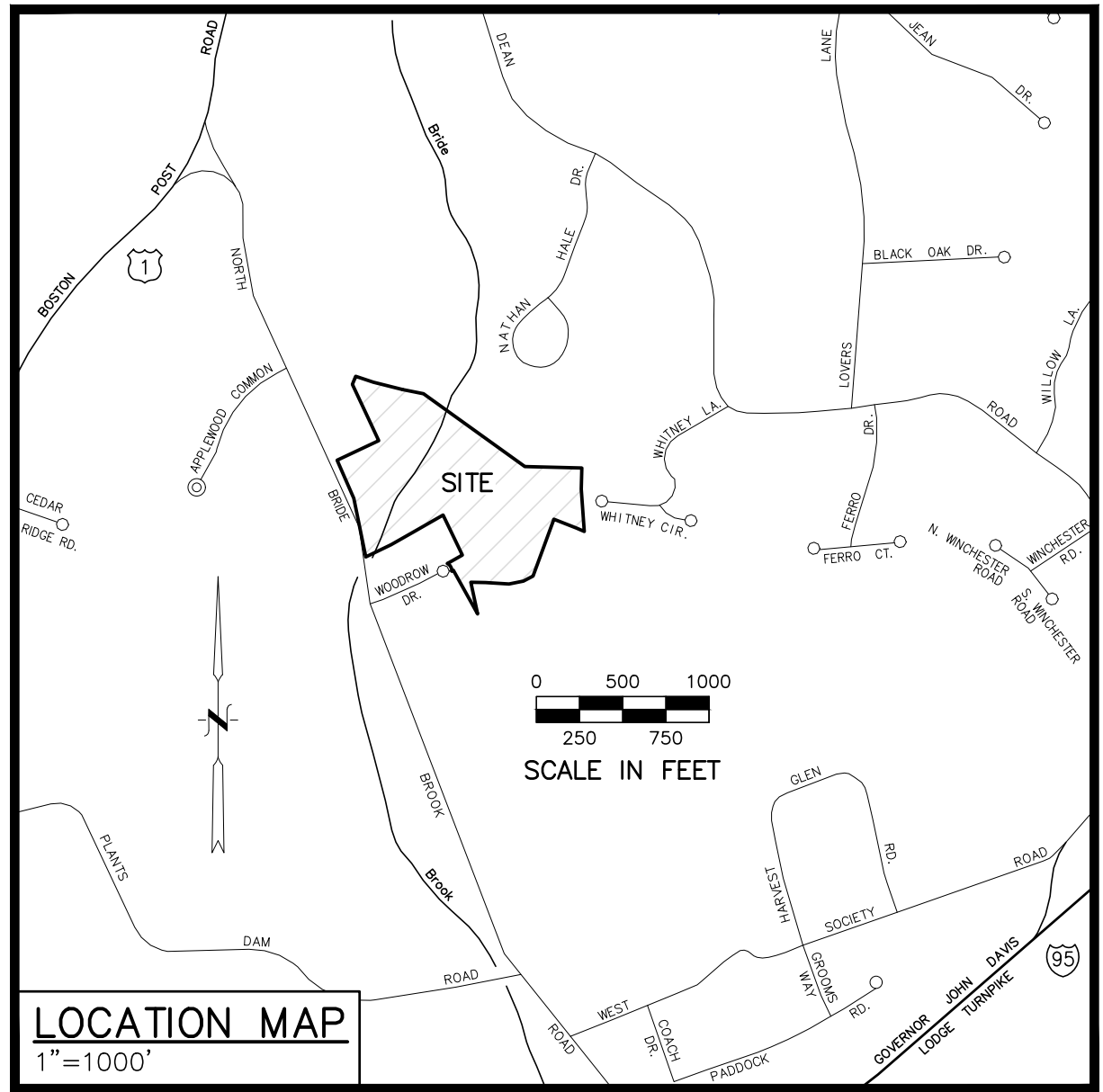
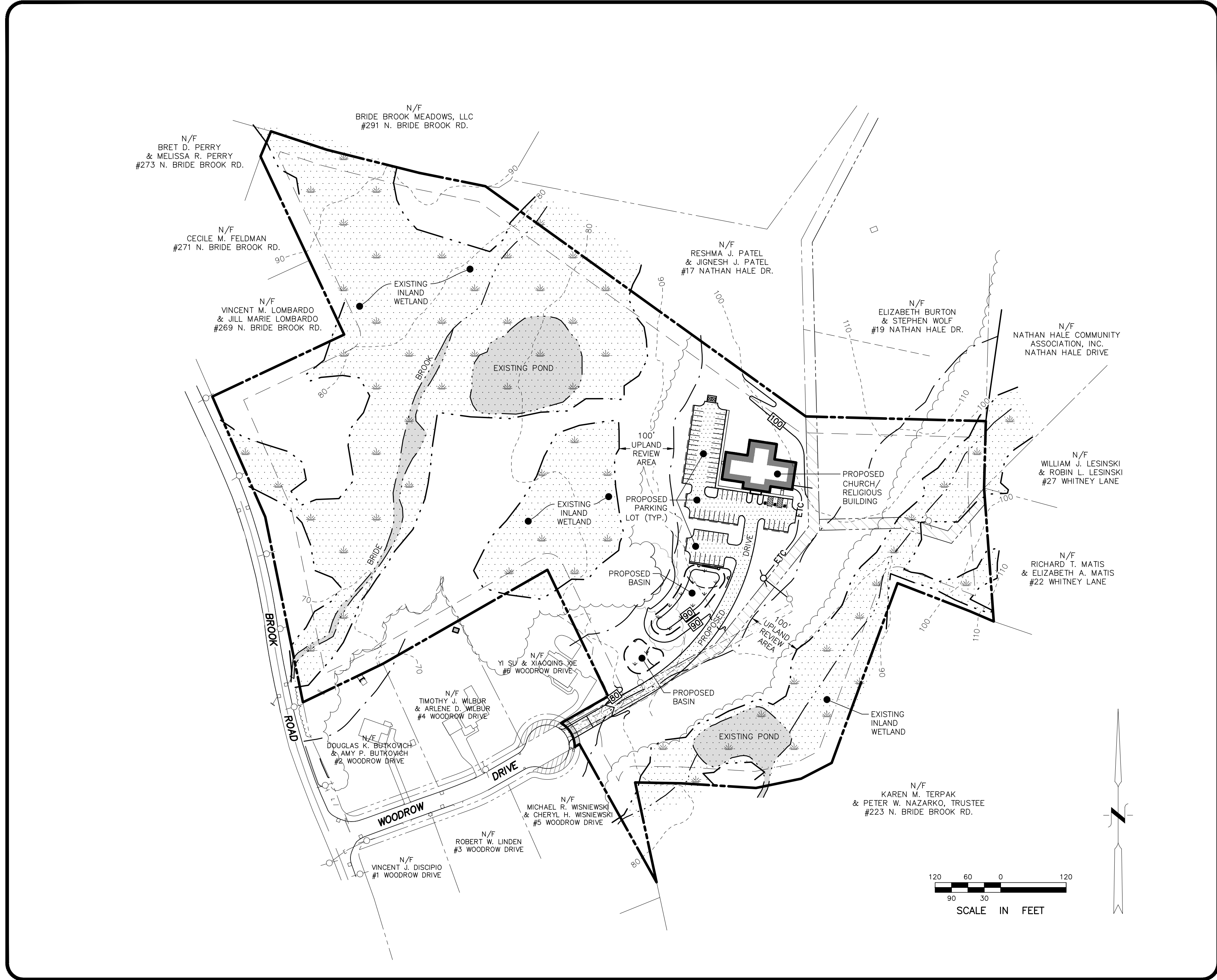
DRAWING INDEX:

TITLE	DWG. NO.	SHEET NO.
SITE PLAN	SP-1	1 OF 10
GRADING & UTILITY PLAN	GU-1	2 OF 10
DRIVEWAY PROFILE	DP-1	3 OF 10
SIGHT LINE PLAN & PROFILE (LOOKING RIGHT)	SL-1	4 OF 10
SEPTIC SYSTEM PLAN	SS-1	5 OF 10
SOIL TESTING & SEPTIC DESIGN CRITERIA	ST-1	6 OF 10
SEPTIC SYSTEM DETAILS	SD-1	7 OF 10
CONSTRUCTION DETAILS	CD-1	8 OF 10
CONSTRUCTION DETAILS	CD-2	9 OF 10
E&S NARRATIVE AND CONSTRUCTION DETAILS	ES-1	10 OF 10

**ORIGINAL PLAN SET DATED
9/8/2020**

**FOR WETLANDS REVIEW -
NOT FOR CONSTRUCTION**

#	DATE	DESCRIPTION	BY
1	11/13/2020	GENERAL REVISIONS	RG



LEGEND

	EXISTING PROPERTY/STREET LINE
	BUILDING SETBACK LINE
	EXISTING OVERHEAD WIRES
	EXISTING WATER LINE
	PROPOSED BUILDING
	EXISTING CONTOUR
	PROPOSED CONTOUR
	PROPOSED SILT FENCE
	PROPOSED WATER SERVICE LINE
	PROPOSED GAS LINE
	PROPOSED UNDERGROUND ELECTRIC, TELEPHONE & CABLE SERVICES IN SCH. 40 PVC CONDUITS
	PROPOSED DRAINAGE LINE
	PROPOSED ROOF LEADER
	TEST PIT LOCATION
	PERCOLATION TEST LOCATION
	BORE HOLE LOCATION
	UTILITY POLE
	IRON PIPE/PIN
	EXISTING MONUMENT
	PROPOSED SPOT GRADE
	GRADE TO DRAIN
	PROPOSED AIR CONDENSING UNIT

LAND SURVEYOR

ANNINO SURVEY, LLC
 DAVID ANNINO, L.S.
 222 OLD BOSTON POST ROAD, SUITE 3
 OLD SAYBROOK, CT 06475

CIVIL ENGINEER

INDIGO LAND DESIGN, LLC
 JOE WREN, P.E.
 40 ELM STREET, 2ND FLOOR
 OLD SAYBROOK, CONNECTICUT 06475

THE EMBOSSED SEAL OF THE ENGINEER MUST BE AFFIXED HERE FOR THIS MAP TO BE VALID

PROPERTY OWNER/APPLICANT

HARVEST CHRISTIAN FELLOWSHIP OF NIANTIC, INC.
 5 FREEDOM WAY
 NIANTIC, CT 06357

GENERAL NOTES:

- THIS PLAN WAS COMPILED USING THE FOLLOWING REFERENCE INFORMATION:
 - A CLASS A-2 SURVEY MAP ENTITLED "PROPERTY/TOPOGRAPHIC SURVEY, LAND OF HARVEST CHRISTIAN FELLOWSHIP OF NANTIC, INC., TAX MAP 24 LOT 76, NORTH BRIDE BROOK ROAD AND WOODROW DRIVE, EAST LYME, CONNECTICUT", SCALE: 1"=80', DATED NOVEMBER 27, 2013 WITH REVISIONS THROUGH APRIL 16, 2020, PREPARED BY ANNINO SURVEY, LLC.
 - AN ARCHITECTURAL PLAN ENTITLED "NEW FACILITY FOR: HARVEST CHRISTIAN FELLOWSHIP, NANTIC, CT, SCALE: 1/4" = 1'-0", PREPARED BY RICK JACK, ARCHITECT.
 - A REPORT ENTITLED "GEO TECHNICAL ENGINEERING ASSESSMENT, PROPOSED NEW CHURCH FACILITY, NORTH BRIDE BROOK ROAD, EAST LYME, CONNECTICUT", DATED: OCTOBER 21, 2019, PREPARED BY GEOSIGHT.
- THE PROPERTY OWNER AND APPLICANT IS HARVEST CHRISTIAN FELLOWSHIP OF NANTIC, INC.
- THE SUBJECT PARCEL IS IDENTIFIED AS LOT 76 ON TAX ASSESSOR'S MAP 24. THE DEED REFERENCE OF THE PROPERTY IS VOLUME 921 PAGE 294. THE AREA OF THE PARCEL IS 946,479± S.F. OR 21.7± ACRES.
- THE SUBJECT PROPERTY IS LOCATED WITHIN THE "RU-40" RURAL ZONING DISTRICT. THE PARCEL IS NOT LOCATED WITHIN THE COASTAL AREA MANAGEMENT ZONE.
- THE APPLICANT IS PROPOSING TO CONSTRUCT A 8,450 S.F. CHURCH / RELIGIOUS INSTITUTION, INSTALL A PAVED DRIVEWAY AND PARKING AREA, CONSTRUCT STORMWATER BASINS AND IMPLEMENT OTHER LOW IMPACT DEVELOPMENT MEASURES AS SHOWN, INSTALL A 100% CONNECTICUT PUBLIC HEALTH CODE COMPLIANT SEPTIC SYSTEM, CONNECT TO PUBLIC UTILITIES WITHIN THE ROAD AND OTHER ASSOCIATED IMPROVEMENTS. CHURCHES AND RELIGIOUS INSTITUTIONS ARE PERMITTED AS OF RIGHT PER SECTION 20.1.2.A OF THE ZONING REGULATIONS.
- THE SOLE PURPOSE OF THIS PLAN IS FOR REVIEW BY THE TOWN OF EAST LYME INLAND WETLAND AGENCY.
- THIS PROPERTY WILL BE SERVED BY PUBLIC WATER AND A SUBSURFACE SEWAGE DISPOSAL SYSTEM. THERE ARE NO KNOWN WELLS OR ANY OTHER KNOWN DESIGN CONFLICTS WITHIN 75 FEET OF THE PROPOSED SEPTIC SYSTEM OR RESERVE LEACHING SYSTEM AREA.
- REFER TO ARCHITECTURAL DRAWINGS (REFERENCE PLAN B) FOR ADDITIONAL PROPOSED BUILDING INFORMATION.
- INLAND WETLAND LIMITS DEPICTED HEREON WITH NUMBERS WERE DELINEATED BY RICHARD SNARSKI, SOIL SCIENTIST, ON AUGUST 20, 2019 AND LOCATED IN THE FIELD BY ANNINO SURVEY, LLC. INLAND WETLAND LIMITS DEPICTED HEREON WITHOUT NUMBERS WERE TAKEN FROM THE MAPS REFERENCED IN REFERENCE MAP A. WETLANDS WERE DELINEATED AT THE TIME OF THE REFERENCE MAPS BY RICHARD SNARSKI, SOIL SCIENTIST. INLAND WETLANDS LABELED AS VERIFIED WERE CHECKED BY RICHARD SNARSKI, SOIL SCIENTIST IN NOVEMBER 2013.
- ALL ELEVATIONS AND CONTOURS SHOWN HEREON ARE BASED UPON REFERENCE MAP A.

THE UNDERSIGNED HAS MARKED THE WETLANDS LIMITS IN THE FIELD AND CERTIFIES THAT THE WETLANDS LIMITS SHOWN ON THIS MAP APPEAR TO BE ACCURATE.

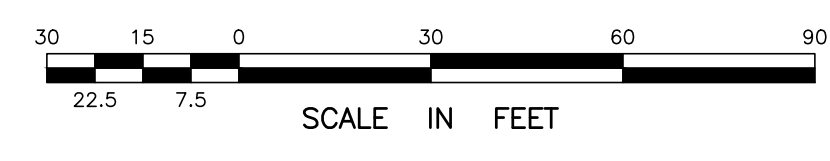
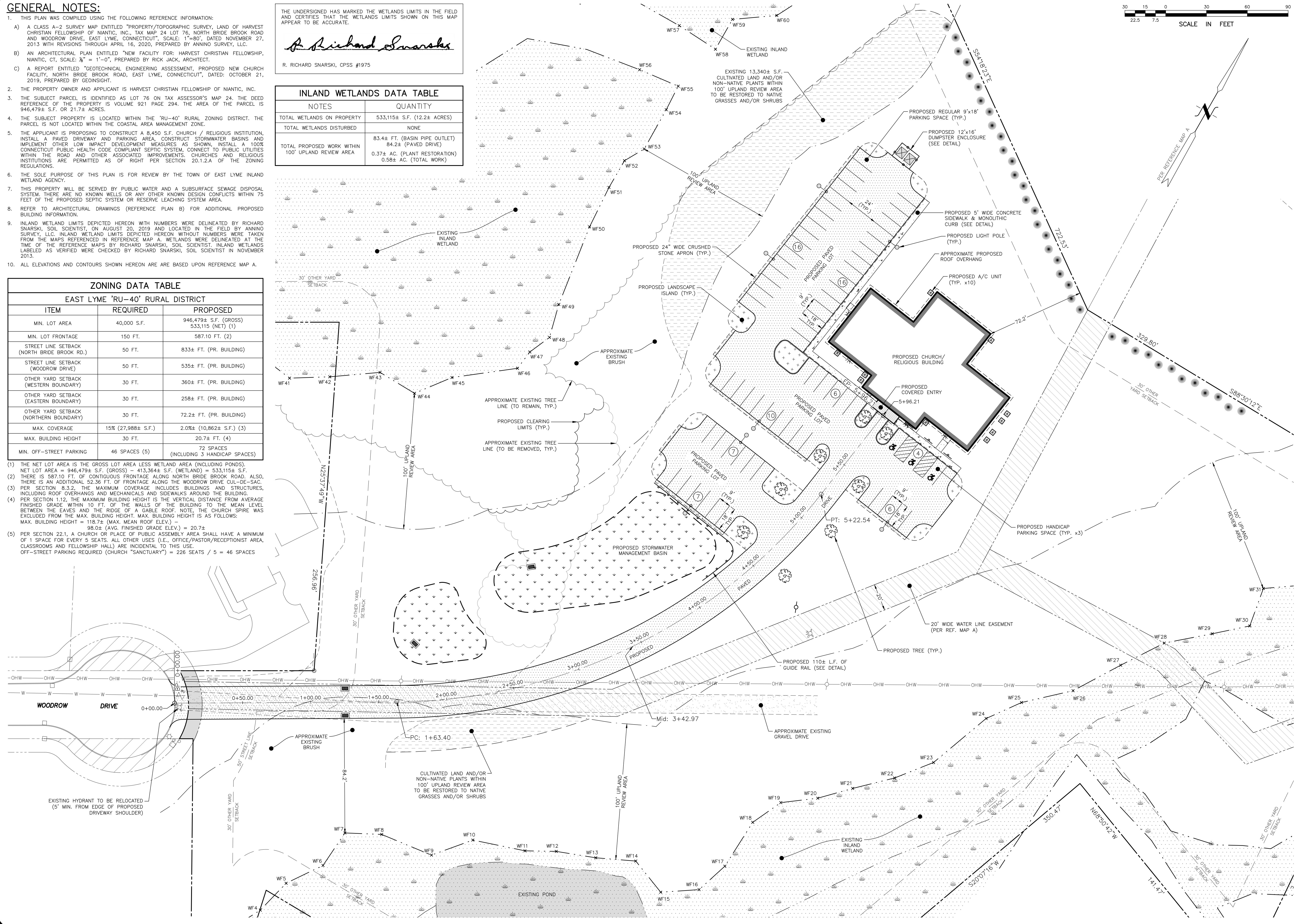
R. Richard Snarski

R. RICHARD SNARSKI, CPSS #1975

INLAND WETLANDS DATA TABLE	
NOTES	QUANTITY
TOTAL WETLANDS ON PROPERTY	533,115± S.F. (12.2± ACRES)
TOTAL WETLANDS DISTURBED	NONE
TOTAL PROPOSED WORK WITHIN 100' UPLAND REVIEW AREA	83.4± FT. (BASIN PIPE OUTLET) 84.2± (PAVED DRIVE) 0.37± AC. (PLANT RESTORATION) 0.58± AC. (TOTAL WORK)

ZONING DATA TABLE		
EAST LYME 'RU-40' RURAL DISTRICT		
ITEM	REQUIRED	PROPOSED
MIN. LOT AREA	40,000 S.F.	946,479± S.F. (GROSS) 533,115 (NET) (1)
MIN. LOT FRONTAGE	150 FT.	587.10 FT. (2)
STREET LINE SETBACK (NORTH BRIDE BROOK RD.)	50 FT.	833± FT. (PR. BUILDING)
STREET LINE SETBACK (WOODROW DRIVE)	50 FT.	535± FT. (PR. BUILDING)
OTHER YARD SETBACK (WESTERN BOUNDARY)	30 FT.	360± FT. (PR. BUILDING)
OTHER YARD SETBACK (EASTERN BOUNDARY)	30 FT.	258± FT. (PR. BUILDING)
OTHER YARD SETBACK (NORTHERN BOUNDARY)	30 FT.	72.2± FT. (PR. BUILDING)
MAX. COVERAGE	15% (27,988± S.F.)	2.0%± (10,862± S.F.) (3)
MAX. BUILDING HEIGHT	30 FT.	20.7± FT. (4)
MIN. OFF-STREET PARKING	46 SPACES (5)	72 SPACES (INCLUDING 3 HANDICAP SPACES)

- THE NET LOT AREA IS THE GROSS LOT AREA LESS WETLAND AREA (INCLUDING PONDS). NET LOT AREA = 946,479± S.F. (GROSS) - 413,364± S.F. (WETLAND) = 533,115± S.F.
- THERE IS 587.10 FT. OF CONTIGUOUS FRONTAGE ALONG NORTH BRIDE BROOK ROAD. ALSO, THERE IS AN ADDITIONAL 52.36 FT. OF FRONTAGE ALONG THE WOODROW DRIVE CURVE-DE-SAC. PER SECTION 8.3.2, THE MAXIMUM COVERAGE INCLUDES BUILDINGS AND STRUCTURES, INCLUDING ROOF OVERHANGS AND MECHANICALS AND SIDEWALKS AROUND THE BUILDING.
- PER SECTION 1.12, THE MAXIMUM BUILDING HEIGHT IS THE VERTICAL DISTANCE FROM AVERAGE FINISHED GRADE WITHIN 10 FT. OF THE WALLS OF THE BUILDING TO THE MEAN LEVEL BETWEEN THE EAVES AND THE RIDGE OF A GABLE ROOF. NOTE, THE CHURCH SPIRE WAS EXCLUDED FROM THE MAX. BUILDING HEIGHT. MAX. BUILDING HEIGHT IS AS FOLLOWS: MAX. BUILDING HEIGHT = 118.7± (MAX. MEAN ROOF ELEV.) - 98.0± (AVG. FINISHED GRADE ELEV.) = 20.7±
- PER SECTION 22.1, A CHURCH OR PLACE OF PUBLIC ASSEMBLY AREA SHALL HAVE A MINIMUM OF 1 SPACE FOR EVERY 5 SEATS. ALL OTHER USES (I.E., OFFICE/PASTOR/RECEPTIONIST AREA, CLASSROOMS AND FELLOWSHIP HALL) ARE INCIDENTAL TO THIS USE. OFF-STREET PARKING REQUIRED (CHURCH "SANCTUARY") = 226 SEATS / 5 = 46 SPACES



PLAN PREPARED BY:
INDIGO LAND DESIGN, LLC
1000 WOODROW DRIVE
EAST LYME, CT 06425
PHONE: (860) 388-9943
FAX: (860) 391-8854

THE EMPLOYED SEAL OF THE PROFESSIONAL ENGINEER IS AFFIXED HERE FOR THIS MAP TO BE VALID

NO.	DATE	DESCRIPTION
1	11/13/2020	GENERAL REVISIONS

SITE PLAN
PREPARED FOR HARVEST CHRISTIAN FELLOWSHIP OF NANTIC, INC.
NORTH BRIDE BROOK ROAD -- MAP 24 LOT 76
EAST LYME, CONNECTICUT

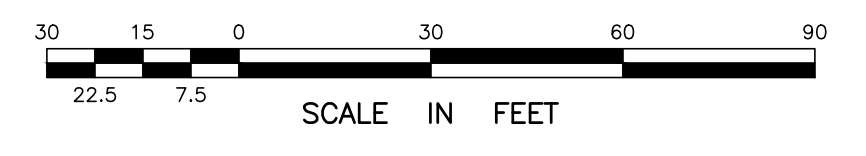
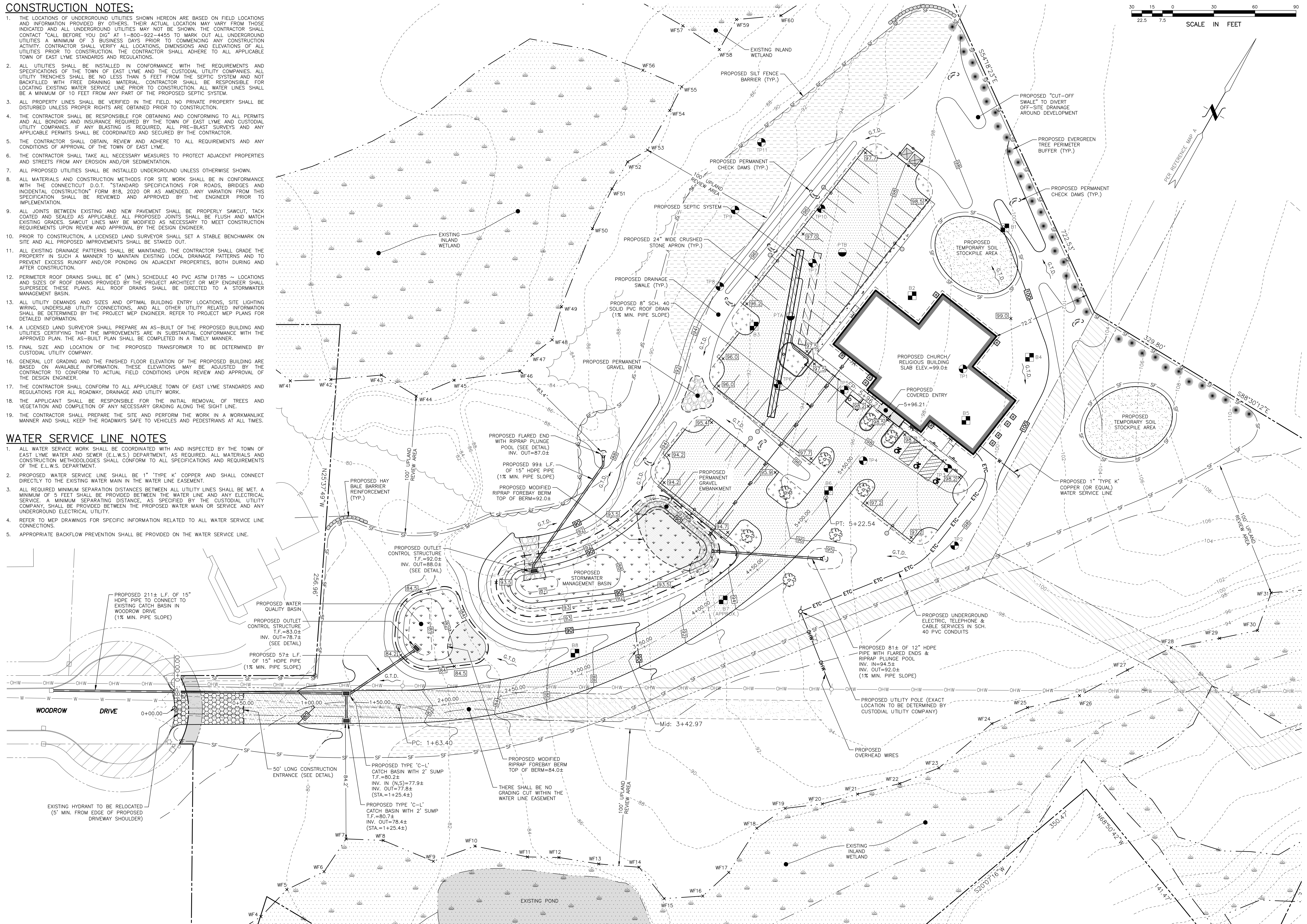
DATE: SEPTEMBER 8, 2020
SCALE: 1"=30'
DRAWN BY: RG
CHECKED BY: JW
DWG. NO.: SP-1
SHEET NO.: 1 of 10
JOB NO.: 2019-545

CONSTRUCTION NOTES:

- THE LOCATIONS OF UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON FIELD LOCATIONS AND INFORMATION PROVIDED BY OTHERS. THEIR ACTUAL LOCATION MAY VARY FROM THOSE INDICATED AND ALL UNDERGROUND UTILITIES MAY NOT BE SHOWN. THE CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" AT 1-800-922-4455 TO MARK OUT ALL UNDERGROUND UTILITIES A MINIMUM OF 3 BUSINESS DAYS PRIOR TO COMMENCING ANY CONSTRUCTION ACTIVITY. CONTRACTOR SHALL VERIFY ALL LOCATIONS, DIRECTIONS AND ELEVATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL ADHERE TO ALL APPLICABLE TOWN OF EAST LYME STANDARDS AND REGULATIONS.
- ALL UTILITIES SHALL BE INSTALLED IN CONFORMANCE WITH THE REQUIREMENTS AND SPECIFICATIONS OF THE TOWN OF EAST LYME AND THE CUSTODIAL UTILITY COMPANIES. ALL UTILITY TRENCHES SHALL BE NO LESS THAN 5 FEET FROM THE SEPTIC SYSTEM AND NOT BACKFILLED WITH FREE DRAINING MATERIAL. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING EXISTING WATER SERVICE LINE PRIOR TO CONSTRUCTION. ALL WATER LINES SHALL BE A MINIMUM OF 10 FEET FROM ANY PART OF THE PROPOSED SEPTIC SYSTEM.
- ALL PROPERTY LINES SHALL BE VERIFIED IN THE FIELD. NO PRIVATE PROPERTY SHALL BE DISTURBED UNLESS PROPER RIGHTS ARE OBTAINED PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND CONFORMING TO ALL PERMITS AND ALL BONDING AND INSURANCE REQUIRED BY THE TOWN OF EAST LYME AND CUSTODIAL UTILITY COMPANIES. IF ANY BLASTING IS REQUIRED, ALL PRE-BLAST SURVEYS AND ANY APPLICABLE PERMITS SHALL BE COORDINATED AND SECURED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL OBTAIN, REVIEW AND ADHERE TO ALL REQUIREMENTS AND ANY CONDITIONS OF APPROVAL OF THE TOWN OF EAST LYME.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO PROTECT ADJACENT PROPERTIES AND STREETS FROM ANY EROSION AND/OR SEDIMENTATION.
- ALL PROPOSED UTILITIES SHALL BE INSTALLED UNDERGROUND UNLESS OTHERWISE SHOWN.
- ALL MATERIALS AND CONSTRUCTION METHODS FOR SITE WORK SHALL BE IN CONFORMANCE WITH THE CONNECTICUT D.O.T. "STANDARD SPECIFICATIONS FOR ROADS, BRIDGES AND INCIDENTAL CONSTRUCTION" FORM 818, 2020 OR AS AMENDED. ANY VARIATION FROM THIS SPECIFICATION SHALL BE REVIEWED AND APPROVED BY THE ENGINEER PRIOR TO IMPLEMENTATION.
- ALL JOINTS BETWEEN EXISTING AND NEW PAVEMENT SHALL BE PROPERLY SAWCUT, TACK COATED AND SEALED AS APPLICABLE. ALL PROPOSED JOINTS SHALL BE FLUSH AND MATCH EXISTING GRADES. SAWCUT LINES MAY BE MODIFIED AS NECESSARY TO MEET CONSTRUCTION REQUIREMENTS UPON REVIEW AND APPROVAL BY THE DESIGN ENGINEER.
- PRIOR TO CONSTRUCTION, A LICENSED LAND SURVEYOR SHALL SET A STABLE BENCHMARK ON SITE AND ALL PROPOSED IMPROVEMENTS SHALL BE STAKED OUT.
- ALL EXISTING DRAINAGE PATTERNS SHALL BE MAINTAINED. THE CONTRACTOR SHALL GRADE THE PROPERTY IN SUCH A MANNER TO MAINTAIN EXISTING LOCAL DRAINAGE PATTERNS AND TO PREVENT EXCESS RUNOFF AND/OR PONDING ON ADJACENT PROPERTIES, BOTH DURING AND AFTER CONSTRUCTION.
- PERIMETER ROOF DRAINS SHALL BE 6" (MIN.) SCHEDULE 40 PVC ASTM D1785 ~ LOCATIONS AND SIZES OF ROOF DRAINS PROVIDED BY THE PROJECT ARCHITECT OR MEP ENGINEER SHALL SUPERSEDE THESE PLANS. ALL ROOF DRAINS SHALL BE DIRECTED TO A STORMWATER MANAGEMENT BASIN.
- ALL UTILITY DEMANDS AND SIZES AND OPTIMAL BUILDING ENTRY LOCATIONS, SITE LIGHTING WIRING, UNDERSLAB UTILITY CONNECTIONS, AND ALL OTHER UTILITY RELATED INFORMATION SHALL BE DETERMINED BY THE PROJECT MEP ENGINEER. REFER TO PROJECT MEP PLANS FOR DETAILED INFORMATION.
- A LICENSED LAND SURVEYOR SHALL PREPARE AN AS-BUILT OF THE PROPOSED BUILDING AND UTILITIES CERTIFYING THAT THE IMPROVEMENTS ARE IN SUBSTANTIAL CONFORMANCE WITH THE APPROVED PLAN. THE AS-BUILT PLAN SHALL BE COMPLETED IN A TIMELY MANNER.
- FINAL SIZE AND LOCATION OF THE PROPOSED TRANSFORMER TO BE DETERMINED BY CUSTODIAL UTILITY COMPANY.
- GENERAL LOT GRADING AND THE FINISHED FLOOR ELEVATION OF THE PROPOSED BUILDING ARE BASED ON AVAILABLE INFORMATION. THESE ELEVATIONS MAY BE ADJUSTED BY THE CONTRACTOR TO CONFORM TO ACTUAL FIELD CONDITIONS UPON REVIEW AND APPROVAL OF THE DESIGN ENGINEER.
- THE CONTRACTOR SHALL CONFORM TO ALL APPLICABLE TOWN OF EAST LYME STANDARDS AND REGULATIONS FOR ALL ROADWAY, DRAINAGE AND UTILITY WORK.
- THE APPLICANT SHALL BE RESPONSIBLE FOR THE INITIAL REMOVAL OF TREES AND VEGETATION AND COMPLETION OF ANY NECESSARY GRADING ALONG THE SIGHT LINE.
- THE CONTRACTOR SHALL PREPARE THE SITE AND PERFORM THE WORK IN A WORKMANLIKE MANNER AND SHALL KEEP THE ROADWAYS SAFE TO VEHICLES AND PEDESTRIANS AT ALL TIMES.

WATER SERVICE LINE NOTES

- ALL WATER SERVICE WORK SHALL BE COORDINATED WITH AND INSPECTED BY THE TOWN OF EAST LYME WATER DEPARTMENT (E.L.W.S.) DEPARTMENT AS REQUIRED. MATERIALS AND CONSTRUCTION METHODOLOGIES SHALL CONFORM TO ALL SPECIFICATIONS AND REQUIREMENTS OF THE E.L.W.S. DEPARTMENT.
- PROPOSED WATER SERVICE LINE SHALL BE 1" TYPE 'K' COPPER AND SHALL CONNECT DIRECTLY TO THE EXISTING WATER MAIN IN THE WATER LINE EASEMENT.
- ALL REQUIRED MINIMUM SEPARATION DISTANCES BETWEEN ALL UTILITY LINES SHALL BE MET. A MINIMUM OF 5 FEET SHALL BE PROVIDED BETWEEN THE WATER LINE AND ANY ELECTRICAL SERVICE. A MINIMUM SEPARATION DISTANCE AS SPECIFIED BY THE CUSTODIAL UTILITY COMPANY, SHALL BE PROVIDED BETWEEN THE PROPOSED WATER MAIN OR SERVICE AND ANY UNDERGROUND ELECTRICAL UTILITY.
- REFER TO MEP DRAWINGS FOR SPECIFIC INFORMATION RELATED TO ALL WATER SERVICE LINE CONNECTIONS.
- APPROPRIATE BACKFLOW PREVENTION SHALL BE PROVIDED ON THE WATER SERVICE LINE.



PLAN PREPARED BY:
INDIGO LAND DESIGN, LLC
INDIGO LAND DESIGN, LLC
200 W. MAIN STREET, 2ND FLOOR
MIDDLETOWN, CT 06457
PHONE: (860) 388-9343
FAX: (860) 391-8854

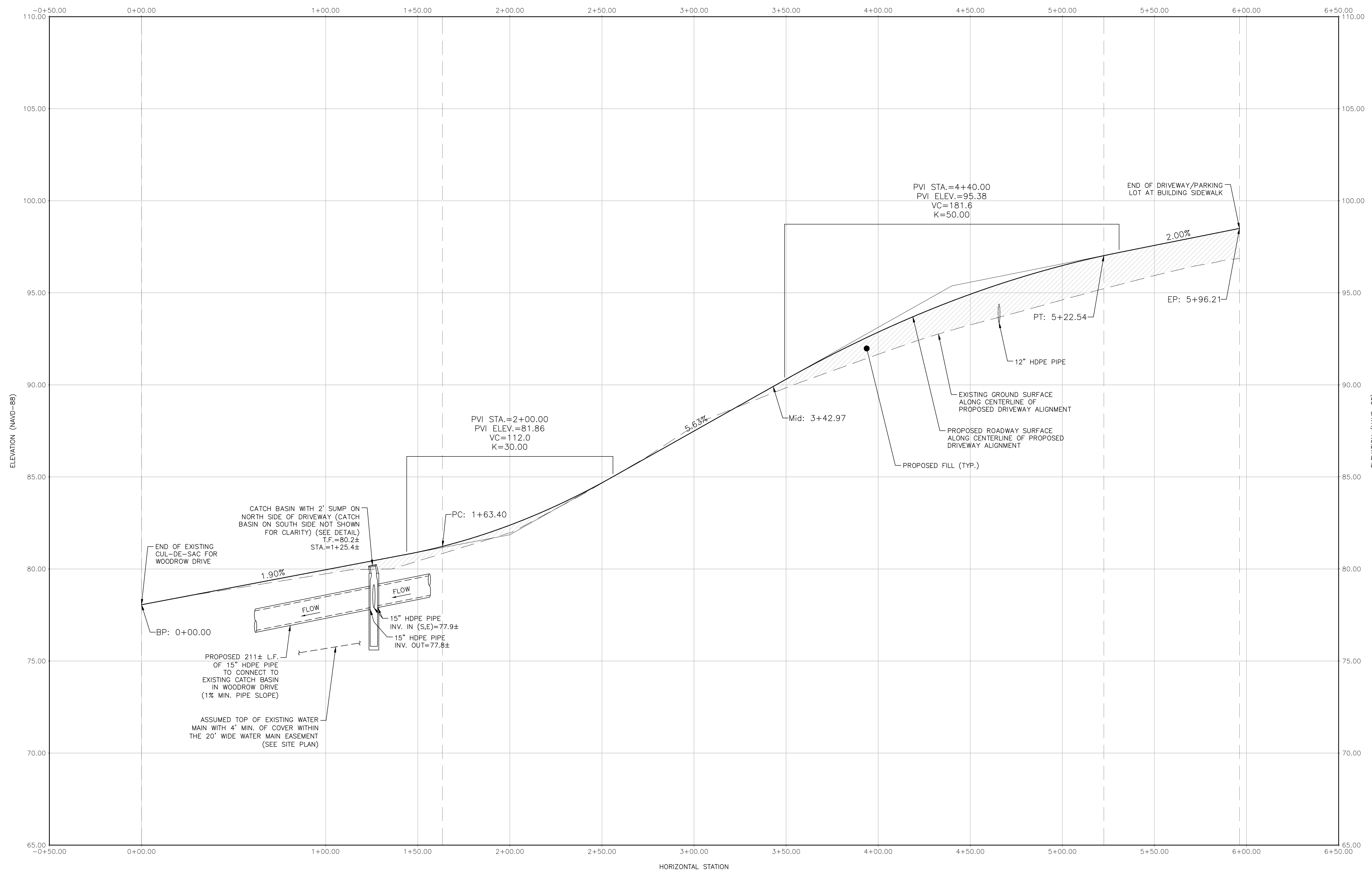
THE EMBOSSED SEAL OF THE PROFESSIONAL ENGINEER AFFIXED HERE FOR THIS MAP TO BE VALID

GENERAL REVISIONS	DATE	DESCRIPTION
1	11/13/2020	

GRADING & UTILITY PLAN
PREPARED FOR HARVEST CHRISTIAN FELLOWSHIP OF NANTIC, INC.
NORTH BRIDE BROOK ROAD -- MAP 24 LOT 76
EAST LYME, CONNECTICUT

DATE:	SEPTEMBER 8, 2020
SCALE:	1"=30'
DRAWN BY:	RG
CHECKED BY:	JW
DWG. NO.:	GU-1
SHEET NO.:	2 of 10
JOB NO.:	2019-545

PROFILE VIEW OF PROPOSED DRIVEWAY ALIGNMENT



HORIZONTAL SCALE: 1"=30'
VERTICAL SCALE: 1"=3'

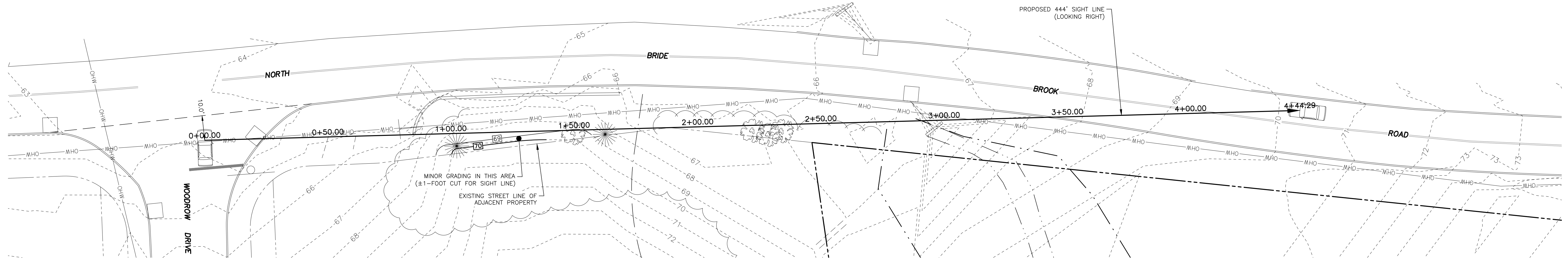
PLAN PREPARED BY:
INDIGO LAND DESIGN, LLC
INDIGO LAND DESIGN, LLC
1177 W. MAIN STREET, SUITE 200
OLD SAYBROOK, CT 06475
PHONE: (860) 388-9343
FAX: (860) 391-8854

THE ENGINEER'S SEAL OF
THE PROFESSIONAL SEAL OF
AFFIXED HERE FOR THIS
MAP TO BE VALID

#	DATE	DESCRIPTION	BY
1	11/13/2020	GENERAL REVISIONS	RG

DRIVEWAY PROFILE
PREPARED FOR HARVEST CHRISTIAN FELLOWSHIP OF NANTIC, INC.
NORTH BRIDE BROOK ROAD -- MAP 24 LOT 76
EAST LYME, CONNECTICUT

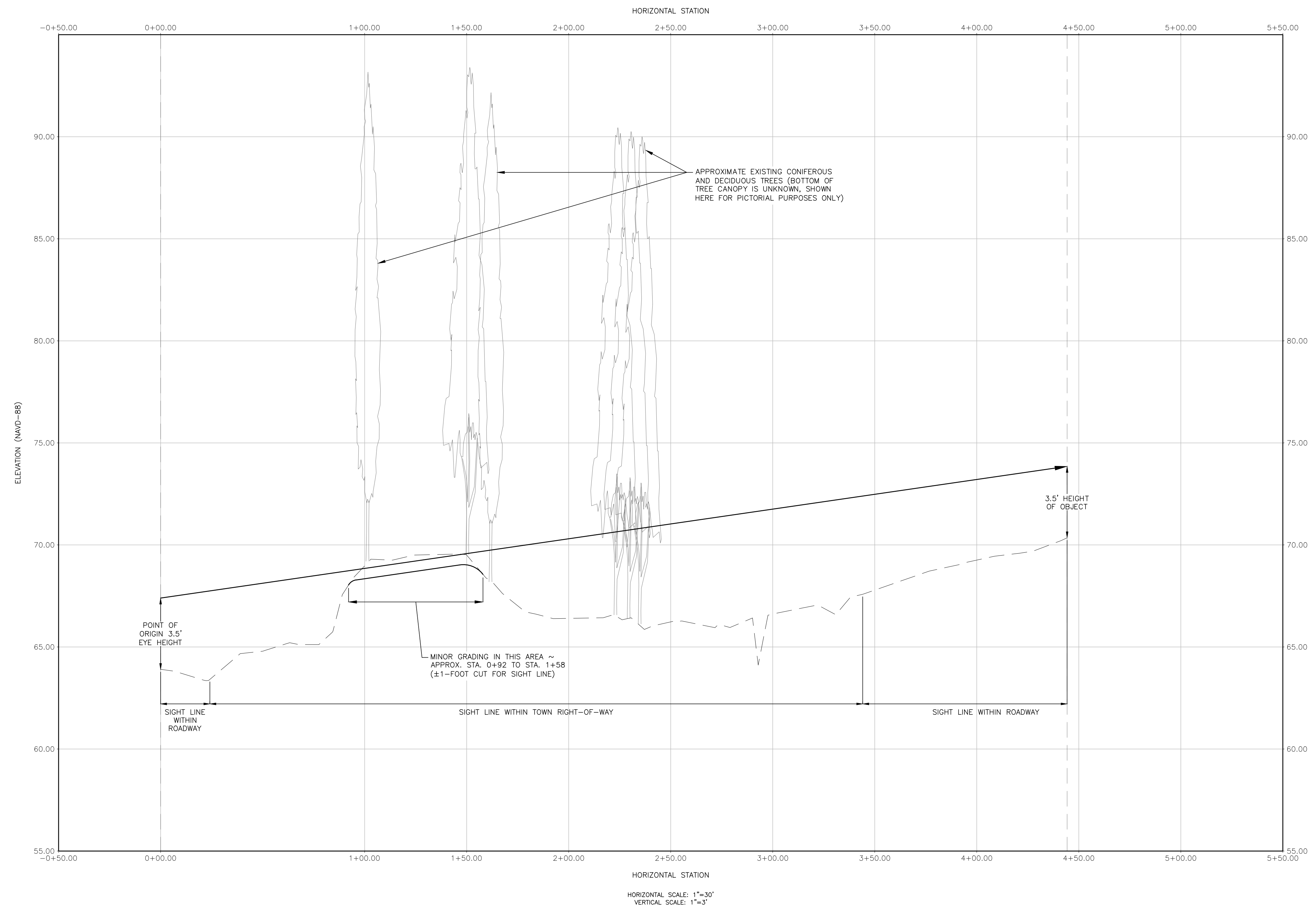
DATE:	SEPTEMBER 8, 2020
SCALE:	AS NOTED
DRAWN BY:	RG
CHECKED BY:	JW
DWG. NO.:	DP-1
SHEET NO.:	3 of 10
JOB NO.:	2019-545



PLAN VIEW OF PROPOSED SIGHT LINE (LOOKING RIGHT)

SCALE: 1"=30'

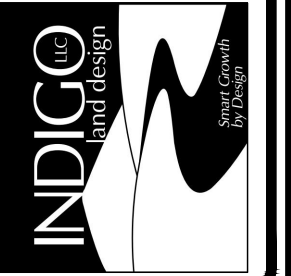
PROFILE VIEW OF PROPOSED SIGHT LINE (LOOKING RIGHT)



HORIZONTAL STATION

HORIZONTAL SCALE: 1"=30'
VERTICAL SCALE: 1"=3'

PLAN PREPARED BY:
INDIGO LAND DESIGN, LLC
1177 W. MAIN ST., SUITE 100
CT REG. NO. 2100
40 ELM STREET, 2ND FLOOR
OLD SAYBROOK, CT 06475
PHONE: (860) 388-9343
FAX: (860) 391-8854



THE EMBOSSED SEAL OF THE PROFESSIONAL ENGINEER AFFIXED HERE FOR THIS MAP TO BE VALID

NO.	DATE	REVISIONS	DESCRIPTION
1	11/13/2020	RG	GENERAL REVISIONS

SIGHT LINE PLAN & PROFILE (LOOKING RIGHT)
PREPARED FOR HARVEST CHRISTIAN FELLOWSHIP OF NANTIC, INC.
NORTH BRIDE BROOK ROAD -- MAP 24 LOT 76
EAST LYME, CONNECTICUT

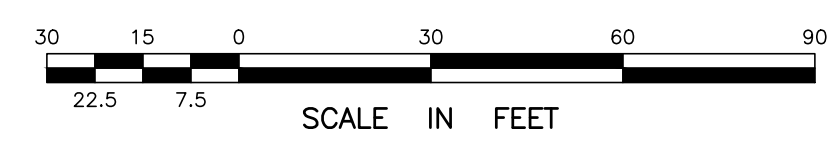
DATE: SEPTEMBER 8, 2020
SCALE: AS NOTED
DRAWN BY: RG
CHECKED BY: JW
DWG. NO.: SL-1
SHEET NO.: 4 of 10
JOB NO.: 2019-545

SEPTIC SYSTEM KEY

- (A) 10.5' L.F. OF 6" SCH. 40 PVC ASTM D1785 BUILDING SEWER PIPE, MIN. SLOPE OF 1/8" PER FT. AND 12" MIN. COVER TO BE PROVIDED.
- (B) 1,500-GALLON H-20 RATED CONCRETE SEPTIC TANK (JOLLEY PRECAST OR APPROVED EQUAL) (SEE DETAIL).*
- (C) 4" SCH. 40 PVC ASTM D1785 DISTRIBUTION PIPE TO CONNECT TO D-BOX.
- (D) "6-HOLE" H-20 RATED CONCRETE DISTRIBUTION BOX (JOLLEY PRECAST OR APPROVED EQUAL).*
- (E) 4" SCH. 40 PVC ASTM D1785 PIPE TO CONNECT TO DISTRIBUTION TEE (TYP. x3).
- (F) 4" SCH. 40 PVC ASTM D1785 DISTRIBUTION TEE TO CONNECT TO LEACHING SYSTEM PER MANUFACTURER'S SPECIFICATIONS. (TYP. x3).
- (G) 124.0 L.F. OF 4" SCH. 40 PVC ASTM D1785 PERFORATED PIPE (WITH H-20 PROVISIONS - SEE DETAIL) (PIPE TEES TO CONNECT AT 20.67± FT. FROM EACH END AND AT THE CENTER AS SHOWN).
- (H) 124.0 L.F. (SIXTY-TWO 2' UNITS) OF GEOMATRIX GST6212 LEACHING ROW (WITH H-20 PROVISIONS - SEE DETAIL).
- (I) 4" SCH. 40 PVC ASTM D1785 INSPECTION PORT - GEOMATRIX PART NO.: IPGST15.*

*PROPOSED SEPTIC TANK AND DISTRIBUTION BOX SHALL HAVE H-20 RISERS TO FINISHED GRADE AND PROVISIONS ADDED TO PREVENT UNAUTHORIZED ACCESS. INSPECTION PORT SHALL HAVE AN H-20 RISER AND VALVE COVER TO FINISHED GRADE. CONTRACTOR SHALL VERIFY THAT THE SEPTIC TANK AND DISTRIBUTION BOX ARE WATERTIGHT PRIOR TO INSTALLATION.

REFER TO SEPTIC SYSTEM INVERT TABLE ON SHEET ST-1 FOR PROPOSED INVERT ELEVATIONS.



PLAN PREPARED BY:
INDIGO
 LAND DESIGN, LLC
 40 ELM STREET, 2ND FLOOR
 OLD SAYBROOK, CT 06475
 PHONE: (860) 388-9343
 FAX: (860) 391-8854

THE EMBOSSED SEAL OF
 PROFESSIONAL REGISTERED
 ENGINEER MUST BE
 AFFIXED HERE FOR THIS
 MAP TO BE VALID

#	DATE	BY	DESCRIPTION
1	11/13/2020	RG	GENERAL REVISIONS

SEPTIC SYSTEM PLAN
 PREPARED FOR HARVEST CHRISTIAN FELLOWSHIP OF NANTIC, INC.
 NORTH BRIDE BROOK ROAD -- MAP 24 LOT 76
 EAST LYME, CONNECTICUT

DATE: SEPTEMBER 8, 2020
 SCALE: 1"=30'
 DRAWN BY: RG
 CHECKED BY: JW
 DWG. NO.: SS-1
 SHEET NO.: 5 of 10
 JOB. NO.: 2019-545

WOODROW DRIVE

EXISTING HYDRANT TO BE RELOCATED (5' MIN. FROM EDGE OF PROPOSED DRIVEWAY SHOULDER)

EXISTING POND

EXISTING INLAND WETLAND

DEEP TEST PIT DATA

DATE: 7/25/2013
 WITNESSED BY: JOE WREN, P.E. (INDIGO)
 EXCAVATED BY: NORMAN WOOD EXCAVATION
 RECORDED BY: KIM WHITE (LLHD)

TP #1
 EXISTING GRADE = ELEV. 98.7±
 0-14" TOPSOIL, DARK BROWN FINE SANDY LOAM
 13"-35" YELLOW-BROWN FINE SANDY LOAM, WITH GRAY AND STRONG BROWN
 35"-108" GRAY SANDY LOAM WITH LITTLE GRAVEL
 NO REFUSAL
 GROUNDWATER @ 94"
 SEEPAGE @ 69"
 MOTTLING @ 24" (ELEV. 89.0±)

TP #2
 EXISTING GRADE = ELEV. 98.8±
 0-12" TOPSOIL, DARK BROWN FINE SANDY LOAM
 12"-49" YELLOW-BROWN FINE SANDY LOAM, WITH GRAY AND STRONG BROWN
 49"-103" GRAY SANDY LOAM WITH LITTLE GRAVEL
 NOTE: NO SUBSOIL - POSSIBLY REMOVED BY FARMING, DENSE LAYER @ 49"
 NO REFUSAL
 GROUNDWATER @ 103"
 MOTTLING @ 17" (ELEV. 97.4±)

TP #3
 EXISTING GRADE = ELEV. 98.8±
 0-12" TOPSOIL, DARK BROWN FINE SANDY LOAM
 12"-24" YELLOW-BROWN FINE SANDY LOAM, WITH GRAY AND STRONG BROWN
 24"-106" GRAY SANDY LOAM WITH LITTLE GRAVEL
 NO REFUSAL
 NO GROUNDWATER
 MOTTLING @ 17" (ELEV. 97.4±)

TP #4
 EXISTING GRADE = ELEV. 96.4±
 0-16" TOPSOIL, DARK BROWN FINE SANDY LOAM
 16"-22" YELLOW-BROWN FINE SANDY LOAM, WITH GRAY AND STRONG BROWN
 22"-107" GRAY SANDY LOAM WITH LITTLE GRAVEL
 NO REFUSAL
 GROUNDWATER @ 107"
 SEEPAGE @ 70"
 MOTTLING @ 22" (ELEV. 94.6±)

TP #5
 EXISTING GRADE = ELEV. 95.2±
 0-18" TOPSOIL, DARK BROWN FINE SANDY LOAM
 18"-29" YELLOW-BROWN FINE SANDY LOAM, WITH GRAY AND STRONG BROWN
 29"-100" GRAY SANDY LOAM WITH LITTLE GRAVEL
 NO REFUSAL
 GROUNDWATER @ 94"
 SEEPAGE @ 80"
 MOTTLING @ XX"

TP #6
 EXISTING GRADE = ELEV. 93.0±
 0-12" TOPSOIL, DARK BROWN FINE SANDY LOAM
 12"-27" YELLOW-BROWN FINE SANDY LOAM, WITH GRAY AND STRONG BROWN
 27"-109" GRAY SANDY LOAM WITH LITTLE GRAVEL
 NO REFUSAL
 GROUNDWATER @ 104"
 SEEPAGE @ 72"
 MOTTLING @ 19" (ELEV. 91.4±)

TP #7
 EXISTING GRADE = ELEV. 93.5±
 0-10" TOPSOIL, DARK BROWN FINE SANDY LOAM
 10"-19" YELLOW-BROWN FINE SANDY LOAM, WITH GRAY AND STRONG BROWN
 19"-110" GRAY SANDY LOAM WITH LITTLE GRAVEL
 NO REFUSAL
 GROUNDWATER @ 94"
 SEEPAGE @ 74"
 MOTTLING @ 19" (ELEV. 91.9±)

TP #8
 EXISTING GRADE = ELEV. 91.0±
 0-13" TOPSOIL, DARK BROWN FINE SANDY LOAM
 13"-35" YELLOW-BROWN FINE SANDY LOAM, WITH GRAY AND STRONG BROWN
 35"-108" GRAY SANDY LOAM WITH LITTLE GRAVEL
 NO REFUSAL
 GROUNDWATER @ 94"
 SEEPAGE @ 69"
 MOTTLING @ 24" (ELEV. 89.0±)

TP #9
 EXISTING GRADE = ELEV. 90.5±
 0-10" TOPSOIL, DARK BROWN FINE SANDY LOAM
 10"-26" YELLOW-BROWN FINE SANDY LOAM, WITH GRAY AND STRONG BROWN
 26"-113" GRAY SANDY LOAM WITH LITTLE GRAVEL
 NO REFUSAL
 GROUNDWATER @ 110"
 SEEPAGE @ 56"
 MOTTLING @ 21" (ELEV. 88.8±)

TP #10
 EXISTING GRADE = ELEV. 93.4±
 0-14" TOPSOIL, DARK BROWN FINE SANDY LOAM
 14"-38" YELLOW-BROWN FINE SANDY LOAM, WITH GRAY AND STRONG BROWN
 38"-110" GRAY SANDY LOAM WITH LITTLE GRAVEL
 NO REFUSAL
 GROUNDWATER @ 100"
 MOTTLING @ 19" (ELEV. 91.8±)

TP #11
 EXISTING GRADE = ELEV. 90.6±
 0-12" TOPSOIL, DARK BROWN FINE SANDY LOAM
 12"-40" YELLOW-BROWN FINE SANDY LOAM, WITH GRAY AND STRONG BROWN
 40"-98" GRAY SANDY LOAM WITH LITTLE GRAVEL
 NO REFUSAL
 GROUNDWATER @ 87"
 MOTTLING @ 27" (ELEV. 88.4±)

PERCOLATION TEST DATA
 CONDUCTED BY: ROSS GLADSTONE, E.I.T. (INDIGO)

TIME (MINUTE)	DEPTH (INCHES)	DROP (INCHES)	PERC RATE (MIN./IN.)
0	7 1/2	2	5.0
10	9 1/2	1	10.0
20	10 1/2	3/4	13.3
30	11 1/4	5/8	16.0
40	11 7/8	5/8	16.0
50	12 1/2	5/8	16.0
60	13 1/8	5/8	16.0

PERCOLATION RATE: 16.0 MIN./INCH

PERCOLATION TEST DATA
 CONDUCTED BY: ROSS GLADSTONE, E.I.T. (INDIGO)

TIME (MINUTE)	DEPTH (INCHES)	DROP (INCHES)	PERC RATE (MIN./IN.)
0	8	8	8.0
10	9 7/8	1 7/8	5.3
20	10 3/4	7/8	11.4
30	11 5/8	7/8	11.4
40	12 1/2	7/8	11.4
50	13 1/4	3/4	13.3
60	13 7/8	5/8	16.0

PERCOLATION RATE: 16.0 MIN./INCH

GENERAL NOTES (SEPTIC SYSTEM):

- THE APPLICANT IS PROPOSING TO CONSTRUCT A 8,450 S.F. CHURCH / RELIGIOUS INSTITUTION, INSTALL A PAVED DRIVEWAY AND PARKING AREA, CONSTRUCT STORMWATER BASINS AND IMPLEMENT OTHER LOW IMPACT DEVELOPMENT MEASURES AS SHOWN, INSTALL A 100% CONNECTICUT PUBLIC HEALTH CODE COMPLIANT SEPTIC SYSTEM, CONNECT TO PUBLIC UTILITIES WITHIN THE ROAD AND OTHER ASSOCIATED IMPROVEMENTS. CHURCHES AND RELIGIOUS INSTITUTIONS ARE PERMITTED AS OF RIGHT PER SECTION 20.1.2.A OF THE ZONING REGULATIONS.
- THIS PROPERTY WILL BE SERVED BY PUBLIC WATER AND A SUBSURFACE SEWAGE DISPOSAL SYSTEM. THERE ARE NO KNOWN WELLS OR ANY OTHER KNOWN DESIGN CONFLICTS WITHIN 75 FEET OF THE PROPOSED SEPTIC SYSTEM OR RESERVE LEACHING SYSTEM AREA.
- THE USE OF A GARBAGE DISPOSAL IS NOT RECOMMENDED. IF A GARBAGE DISPOSAL OR A TUB OVER 100 GALLONS IS INSTALLED, THE PROPOSED SEPTIC TANK SIZE SHALL BE INCREASED IN CONFORMANCE WITH THE PUBLIC HEALTH CODE. ANY WATER SOFTENER SHALL NOT DISCHARGE TO THE SEPTIC SYSTEM.
- THE PROPOSED BUILDING WILL BE CONSTRUCTED ON SLAB AND WILL NOT HAVE FOOTING DRAINS. THERE ARE NO KNOWN DOWNGRADE SEPTIC SYSTEM COMPONENTS WITHIN 25 FEET OF ANY UPGRADE GROUNDWATER DRAINS OR ANY UPGRADE SEPTIC SYSTEM COMPONENTS WITHIN 50 FEET OF ANY DOWNGRADE GROUNDWATER DRAINS.
- ALL UTILITY WORK SHALL BE INSTALLED IN CONFORMANCE WITH THE REQUIREMENTS AND SPECIFICATIONS OF THE TOWN OF EAST LYME AND THE CUSTODIAL UTILITY COMPANIES. ALL UTILITY TRENCHES SHALL BE NO LESS THAN 3 FEET FROM THE SEPTIC SYSTEM AND NOT BACKFILLED WITH FREE DRAINING MATERIAL. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING EXISTING WATER SERVICE LINE PRIOR TO CONSTRUCTION. ALL WATER LINES SHALL BE A MINIMUM OF 10 FEET FROM ANY PART OF THE PROPOSED SEPTIC SYSTEM.

GENERAL CONSTRUCTION NOTES (SEPTIC SYSTEM):

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT CONNECTICUT PUBLIC HEALTH CODE, AS AMENDED.
- A LICENSED SURVEYOR SHALL SET A STABLE SITE BENCHMARK (ON THE SAME DATUM AS REF. MAP A) AND SHALL FIELD STAKE THE LOCATION OF THE PROPOSED SEPTIC SYSTEM PRIOR TO CONSTRUCTION.
- NO WORK SHALL COMMENCE IN THE SYSTEM AREA UNTIL A SEPTIC PERMIT HAS BEEN TAKEN OUT BY THE LICENSED INSTALLER.
- THE LICENSED INSTALLER SHALL PERFORM SITE PREPARATION AND SHOULD CONTACT "CALL BEFORE YOU DIG" AT 1-800-922-4455 TO VERIFY ALL UTILITY LOCATIONS PRIOR TO ANY CONSTRUCTION.
- THE LICENSED INSTALLER SHALL BE ON SITE DURING SYSTEM CONSTRUCTION. THE SYSTEM SHALL BE INSTALLED IN CONFORMANCE TO THESE PLANS. ANY REQUESTED MODIFICATIONS SHALL BE DISCUSSED WITH THE ENGINEER PRIOR TO CONSTRUCTION. ALL MODIFICATIONS MUST BE APPROVED BY THE ENGINEER AND TOWN SANITARIAN PRIOR TO CONSTRUCTION.
- A MINIMUM OF 24 HOURS NOTICE SHALL BE GIVEN BY THE LICENSED INSTALLER TO THE ENGINEER AND TOWN SANITARIAN BEFORE ANY STRIPPING IS DONE FOR THE SYSTEM. STRIP INSPECTIONS WILL BE PERFORMED BY THE ENGINEER AND SANITARIAN.
- THE LICENSED INSTALLER SHALL BE RESPONSIBLE FOR PREPARING THE LEACHING AREA IN A WORKMANLIKE MANNER. ALL NECESSARY STEPS SHALL BE TAKEN TO PROTECT THE UNDERLYING NATURALLY OCCURRING SOILS FROM OVER COMPACTION AND SILTATION ONCE EXPOSED.
- THE INSTALLER SHALL NOTIFY THE ENGINEER AND SANITARIAN AT LEAST 24 HOURS IN ADVANCE OF BEING READY FOR A FINAL INSPECTION. THE ENGINEER AND SANITARIAN SHALL CONDUCT THE FINAL INSPECTION TOGETHER WITH THE LICENSED INSTALLER. NO DEVIATION FROM THE PLAN APPROVED BY THE SANITARIAN SHALL BE ALLOWED WITHOUT PRIOR APPROVAL FROM THE SANITARIAN. THE SYSTEM SHALL NOT BE BACKFILLED WITHOUT THE APPROVAL OF THE SANITARIAN.
- A LICENSED ENGINEER OR SURVEYOR SHALL PREPARE A SEPTIC SYSTEM AS-BUILT DRAWING CERTIFYING THE SYSTEM IS CODE-COMPLIANT. THIS PLAN SHALL INCLUDE ALL ESSENTIAL ACCESS POINTS INCLUDING TANK MANHOLES, DISTRIBUTION BOX AND LEACHING SYSTEM ENDS. THE AS-BUILT PLAN SHALL BE COMPLETED IN A TIMELY MANNER.
- THE LEACHING SYSTEM SHALL BE PROPERLY COVERED BY THE LICENSED SYSTEM INSTALLER WITHIN TWO (2) WORKING DAYS FOLLOWING THE LOCAL HEALTH DEPARTMENT'S FINAL INSPECTION AND APPROVAL.
- NO HEAVY EQUIPMENT SHALL BE DRIVEN OVER THE INSTALLED LEACHING SYSTEM AREA.
- THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER IF HE WISHES TO CHANGE THE LOCATION OR ELEVATION OF ANY PROPOSED SEPTIC SYSTEM COMPONENT PRIOR TO CONSTRUCTION.
- THE LICENSED INSTALLER IS RESPONSIBLE TO INSTALL THE SUBSURFACE SEWAGE DISPOSAL SYSTEM IN ACCORDANCE WITH THE APPROVED PLAN.
- THE PROPOSED SEPTIC TANK AND DISTRIBUTION BOX SHALL HAVE H-20 RISERS TO FINISHED GRADE AND PROVISIONS ADDED TO PREVENT UNAUTHORIZED ACCESS. THE INSPECTION PORT SHALL HAVE AN H-20 RISER AND VALVE COVER TO FINISHED GRADE. CONTRACTOR SHALL VERIFY THAT THE SEPTIC TANK AND DISTRIBUTION BOX ARE WATERTIGHT PRIOR TO INSTALLATION.
- THE PROPOSED LEACHING SYSTEM, GEOMATRIX GST6212 (WITH H-20 PROVISIONS AS SHOWN), SHALL BE INSTALLED IN CONFORMANCE WITH ALL MANUFACTURER'S SPECIFICATIONS. A GEOMATRIX SYSTEMS REPRESENTATIVE WILL DELIVER THE GEOMATRIX GST FORMS TO THE SITE AND WILL BE ON SITE DURING INSTALLATION OF THE SYSTEM TO ENSURE PROPER INSTALLATION. THE INSTALLER SHALL OBTAIN, REVIEW AND STRICTLY ADHERE TO THE ALL INSTALLATION INSTRUCTIONS AND MATERIAL SPECIFICATIONS. MORE INFORMATION CAN BE OBTAINED FROM THE MANUFACTURER, GEOMATRIX SYSTEMS, LLC - 114 MILL ROCK ROAD EAST, OLD SAYBROOK, CT - 860-510-0730 OR AT WWW.GEOMATRIXSYSTEMS.COM.
- A TWO-PART CONCRETE SEPTIC TANK SHALL BE USED BUT MUST BE MADE 100% WATERTIGHT BY GASKETING AND MORTARING ALL JOINTS. IF A TWO-PART TANK IS USED, IT SHALL BE FILLED WITH WATER ABOVE THE JOINT AND INSPECTED BY THE ENGINEER AND/OR THE TOWN SANITARIAN WITHIN 24 HOURS. THE CONTRACTOR SHALL MONITOR THE WATER LEVEL IN THE TANK DURING THIS PERIOD AND SHALL PERMANENTLY REPAIR ANY LEAKS TO THE SATISFACTION OF THE ENGINEER AND THE TOWN SANITARIAN.
- THE LICENSED INSTALLER SHALL CONFIRM THAT NO LEDGE IS PRESENT WITHIN 48 INCHES BELOW THE BOTTOM OF THE PROPOSED LEACHING SYSTEM.
- THE CONTRACTOR SHALL GRADE THE AREA IN THE VICINITY OF THE LEACHING FIELD IN SUCH A MANNER THAT ALL SURFACE RUNOFF IS SUFFICIENTLY DIRECTED AWAY FROM THE LEACHING FIELD AREA AND NOT RESULT IN PONDING ON THE SUBJECT PROPERTY OR ANY ADJACENT PROPERTY OR ROADWAY.
- THE LICENSED INSTALLER SHALL INCLUDE ALL ADEQUATE PROVISIONS FOR FREEZE PROTECTION FOR ALL PIPING AND JUNCTIONS.
- THE LICENSED INSTALLER SHALL PROVIDE SIEVE ANALYSES FOR SELECT FILL AND C-33 SAND PRIOR TO CONSTRUCTION.
- THERE IS AN OLD FOUNDATION ON SITE BUT THE LOCATION OF ANY EXISTING SEPTIC SYSTEM IS UNKNOWN. IF ANY SEPTIC SYSTEM IS ENCOUNTERED DURING CONSTRUCTION, ALL EXISTING SEPTIC SYSTEM COMPONENTS SHALL BE PUMPED DRY AS NECESSARY AND REMOVED IN ACCORDANCE WITH THE CONNECTICUT PUBLIC HEALTH CODE AND ALL APPLICABLE LOCAL REGULATIONS. SELECT FILL SHALL BE USED TO BACKFILL THE AREA OF THE REMOVED SEPTIC SYSTEM AND/OR ANY UNSUITABLE SOIL ENCOUNTERED WITHIN THE LEACHING SYSTEM AREA (SEE FILL AND GRADING NOTES ON SHEET 7 OF 10).
- THE CONTRACTOR SHALL FULLY COORDINATE WITH GEOMATRIX SYSTEMS, LLC (GEOMATRIX) AND SHALL ABIDE BY ALL SPECIFICATIONS AND INSTRUCTIONS FOR INSTALLATION OF THE GEOMATRIX GST6212 LEACHING SYSTEM. IT IS STRONGLY RECOMMENDED, ALTHOUGH NOT REQUIRED BY THE PUBLIC HEALTH CODE, TO INSTALL A SOLAIR SYSTEM ON THE PROPOSED LEACHING SYSTEM. AT A MINIMUM, SOIL AIR PIPING SHALL BE INSTALLED TO FACILITATE POTENTIAL FUTURE SOIL AIR BLOWER CONNECTIONS. IF SOIL AIR SYSTEM IS NOT INSTALLED, GEOMATRIX WILL REQUIRE OWNER TO SIGN A DISCLAIMER AGREEMENT.
- THE CONTRACTOR SHALL COORDINATE WITH GEOMATRIX, LLC - 860-510-0730 REGARDING THE DOSE VOLUME OF THE HYAIR VESSEL. THE DOSE VOLUME OF THE 'HA239' HYAIR VESSEL SHALL BE SET AT 200 GALLONS PER DOSE. THE DOSE VOLUME DOES NOT EXCEED 225 GALLONS (20% OF THE TOTAL STORAGE VOLUME OF THE LEACHING SYSTEM) AS RECOMMENDED BY THE CONNECTICUT PUBLIC HEALTH CODE.

SANITARY SYSTEM DESIGN CRITERIA

DESIGN PERC RATE	BUILDING USE	REQUIRED LEACHING AREA	LEACHING SYSTEM TYPE	EFFECTIVE LEACHING AREA	LEACHING AREA PROVIDED	REQUIRED TANK CAPACITY	TANK CAPACITY PROVIDED
10.1-20.0 MINS./INCH	CHURCH/RELIGIOUS BUILDING	941.67 S.F. (2)	124.0 L.F. OF GEOMATRIX GST6212 LEACHING SYSTEM	10 S.F./L.F.	1,240.0 S.F. (124.0 L.F. x 10.0 S.F./L.F.)	1,130 GALLONS (3)	1,500 GALLONS (3)

(1) THE PROPOSED BUILDING IS A CHURCH/RELIGIOUS BUILDING WITH A SANCTUARY AREA CONSISTING OF 226 SEATS TOTAL (INCLUDING 4 DESIGNATED HANDICAP WHEELCHAIR AREAS). ALL OTHER USES (I.E., OFFICE/PASTOR/RECEPTIONIST AREA, CLASSROOMS AND FELLOWSHIP HALL) ARE INCIDENTAL TO THIS USE. A DESIGN FLOW OF 5 GPD PER SEAT WAS USED BASED ON A "SOCIAL EVENT" FOR A CHURCH/RELIGIOUS BUILDING.
 (2) DESIGN FLOW ("SOCIAL EVENT") = 5 GPD PER SEAT x 226 SEATS = 1,130 GPD
 REQUIRED E.L.A. = 1,130 GPD / 1.2 (APPLICATION RATE) = 941.67 GPD
 (3) MINIMUM TANK SIZING SHALL BE EQUAL TO OR GREATER THAN THE 24-HOUR DESIGN FLOW (1,000 GALLONS MINIMUM).
 REQUIRED SEPTIC TANK CAPACITY = 1,130 GPD x 1 DAY = 1,130 GALLONS - USE A 1,500-GALLON (MIN.) SEPTIC TANK

MLSS COMPUTATIONS

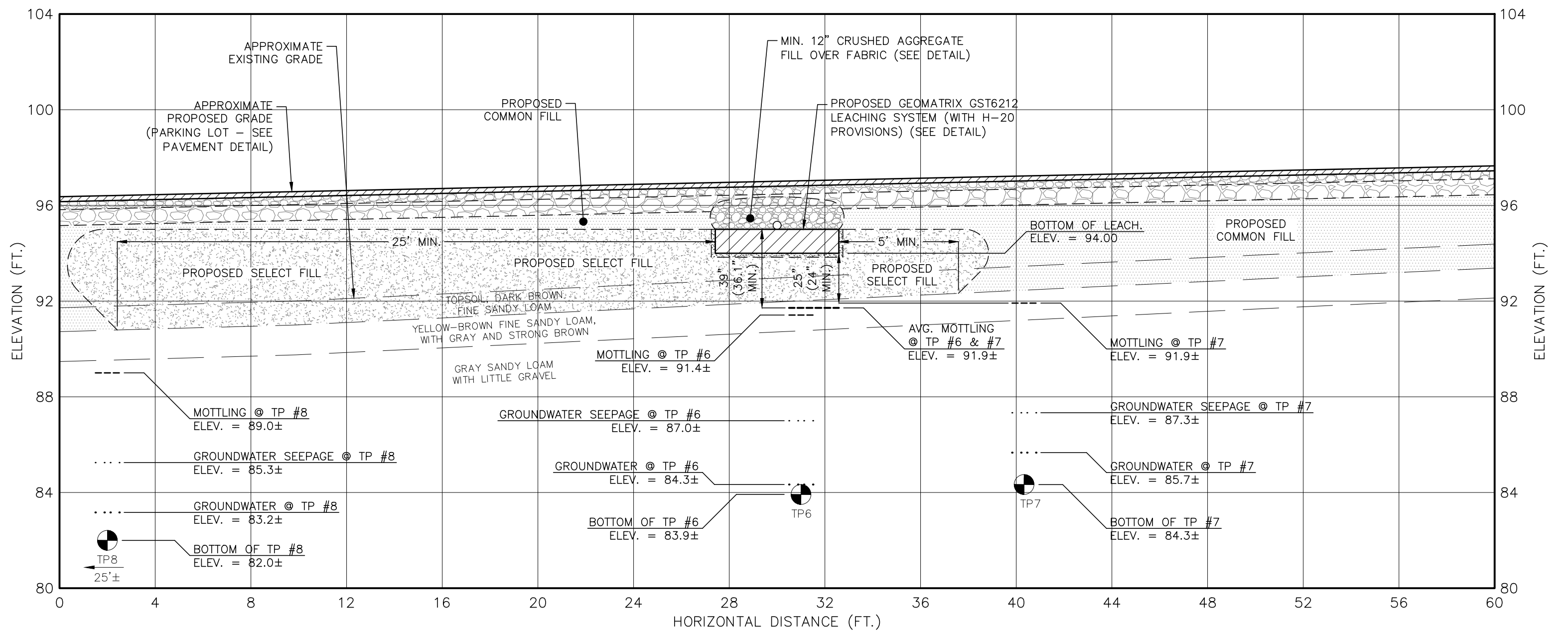
DESIGN PERC RATE	BUILDING USE	RECEIVING SOIL DEPTH	HYDRAULIC GRADIENT	HYDRAULIC FACTOR (HF)	FLOW FACTOR (FF)	PERCOLATION FACTOR (PF)	MLSS REQUIRED (HFxFFxPF)	MLSS PROVIDED
10.1-20.0 MINS./INCH	CHURCH/RELIGIOUS BUILDING	36.1-42.0 INCHES (2)	4.1-6.0%	26	3.77 (3)	1.25	122.53 FT.	124.0 FT.

(1) THE PROPOSED BUILDING IS A CHURCH/RELIGIOUS BUILDING WITH A SANCTUARY AREA CONSISTING OF 226 SEATS TOTAL (INCLUDING 4 DESIGNATED HANDICAP WHEELCHAIR AREAS). ALL OTHER USES (I.E., OFFICE/PASTOR/RECEPTIONIST AREA, CLASSROOMS AND FELLOWSHIP HALL) ARE INCIDENTAL TO THIS USE. A DESIGN FLOW OF 5 GPD PER SEAT WAS USED BASED ON A "SOCIAL EVENT" FOR A CHURCH/RELIGIOUS BUILDING.
 (2) THE TOP OF THE PROPOSED LEACHING SYSTEM ROW IS ABOVE EXISTING NATURAL GRADE AND THEREFORE, PER THE CT PUBLIC HEALTH CODE, RECEIVING SOIL SHALL BE MEASURED FROM THE TOP OF THE LEACHING SYSTEM DOWN TO THE AVERAGE RESTRICTIVE LAYER AND MAY INCLUDE UP TO 24" (MAX.) OF SELECT FILL. THE CALCULATIONS ARE AS FOLLOWS:
 (2) DESIGN FLOW ("SOCIAL EVENT") = 5 GPD PER SEAT x 226 SEATS = 1,130 GPD
 FLOW FACTOR = 1,130 GPD / 300 (APPLICATION RATE) = 3.77 GPD

SANITARY SYSTEM PIPE INVERT TABLE

STRUCTURE	PIPE AT BUILDING (A)	SEPTIC TANK (B)	D-BOX (D)	LEACHING ROW (G & H)
INV. IN (FT.)	---	96.05	95.50	95.00
INV. OUT (FT.)	96.20 (2)	95.80	95.40 (5)	---

(1) FOR CLARITY, SEPTIC SYSTEM LABELS ARE SHOWN IN EACH COLUMN AND ARE REFERENCED TO THE SEPTIC SYSTEM KEY ON THE SEPTIC SYSTEM PLAN. SEE SEPTIC SYSTEM KEY FOR MORE INFORMATION.
 (2) 6" SCH. 40 PVC ASTM D1785 BUILDING SEWER PIPE @ 1/8" PER FT. MIN. SLOPE AND 12" MIN. COVER TO BE PROVIDED.
 PIPE SLOPE = (ELEV. 96.20 - ELEV. 96.05) / 10.5' ± = 1.43% ± > 1.04% --- O.K.
 (3) FOR ALL PIPES, A MIN. OF 15" OF COVER SHALL BE PROVIDED.
 (4) BOTTOM OF LEACHING SYSTEM SHALL BE SET LEVEL AND AT ELEVATION 94.00'.
 (5) ALL PIPES EXITING THE D-BOX SHALL BE SET LEVEL FOR THE FIRST 10 FT. TO PROMOTE EVEN DISTRIBUTION. AFTER THE FIRST 10 FT. THEY SHALL HAVE POSITIVE PITCH TOWARD THE LEACHING SYSTEM.



PROPOSED LEACHING SYSTEM PROFILE - X-SECTION A-A
 HORIZ. SCALE = VERT. SCALE = 1"=4"

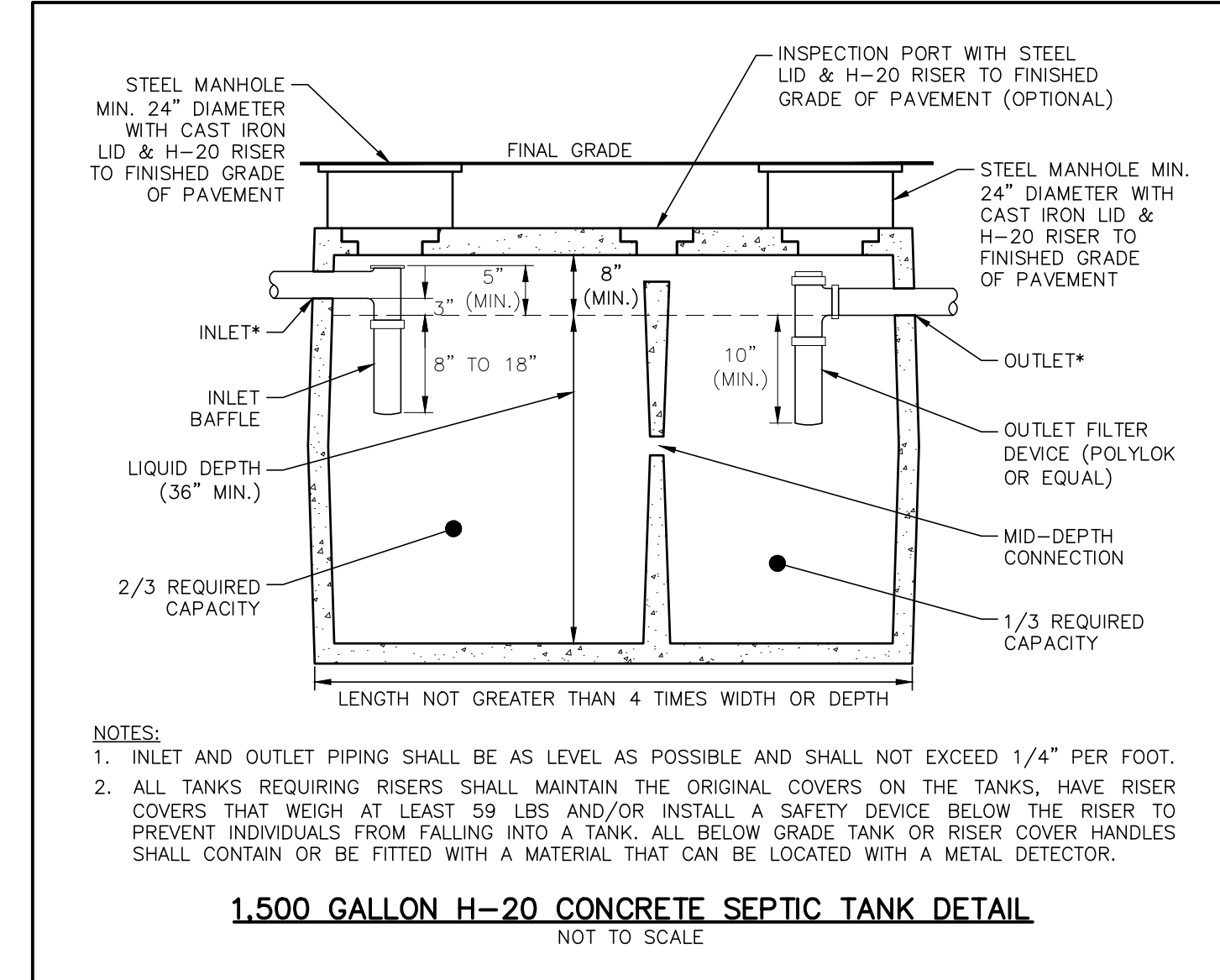
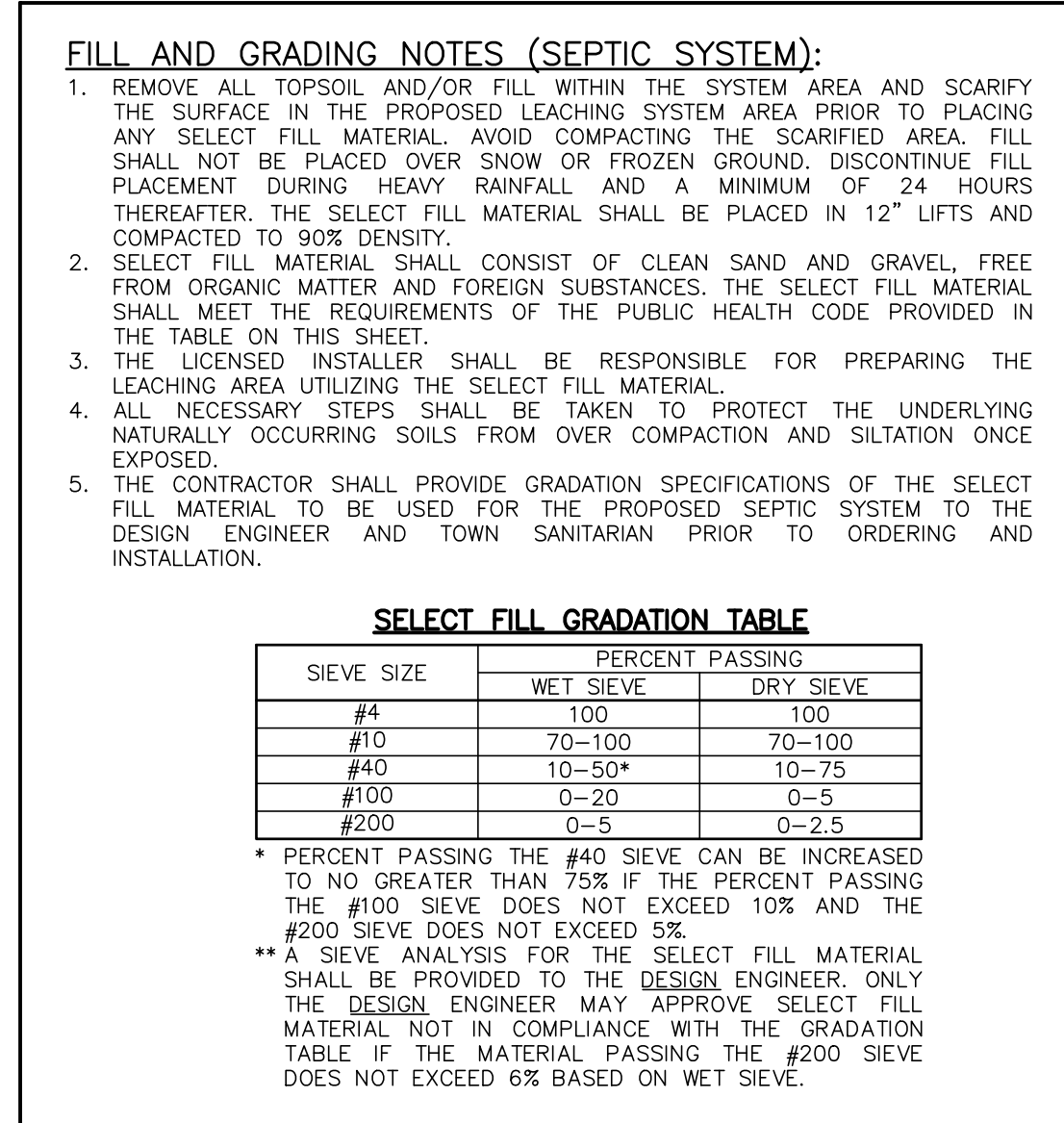
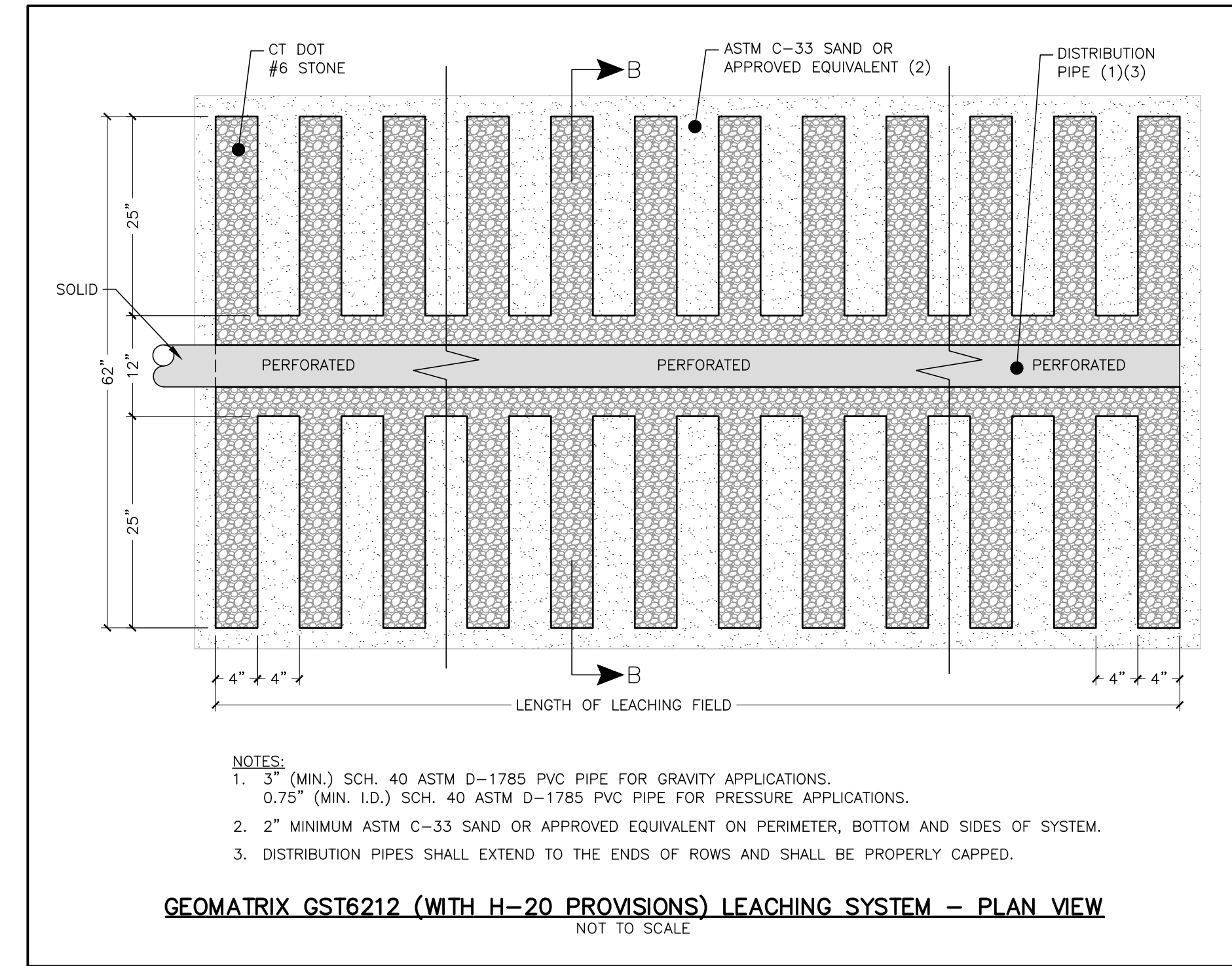
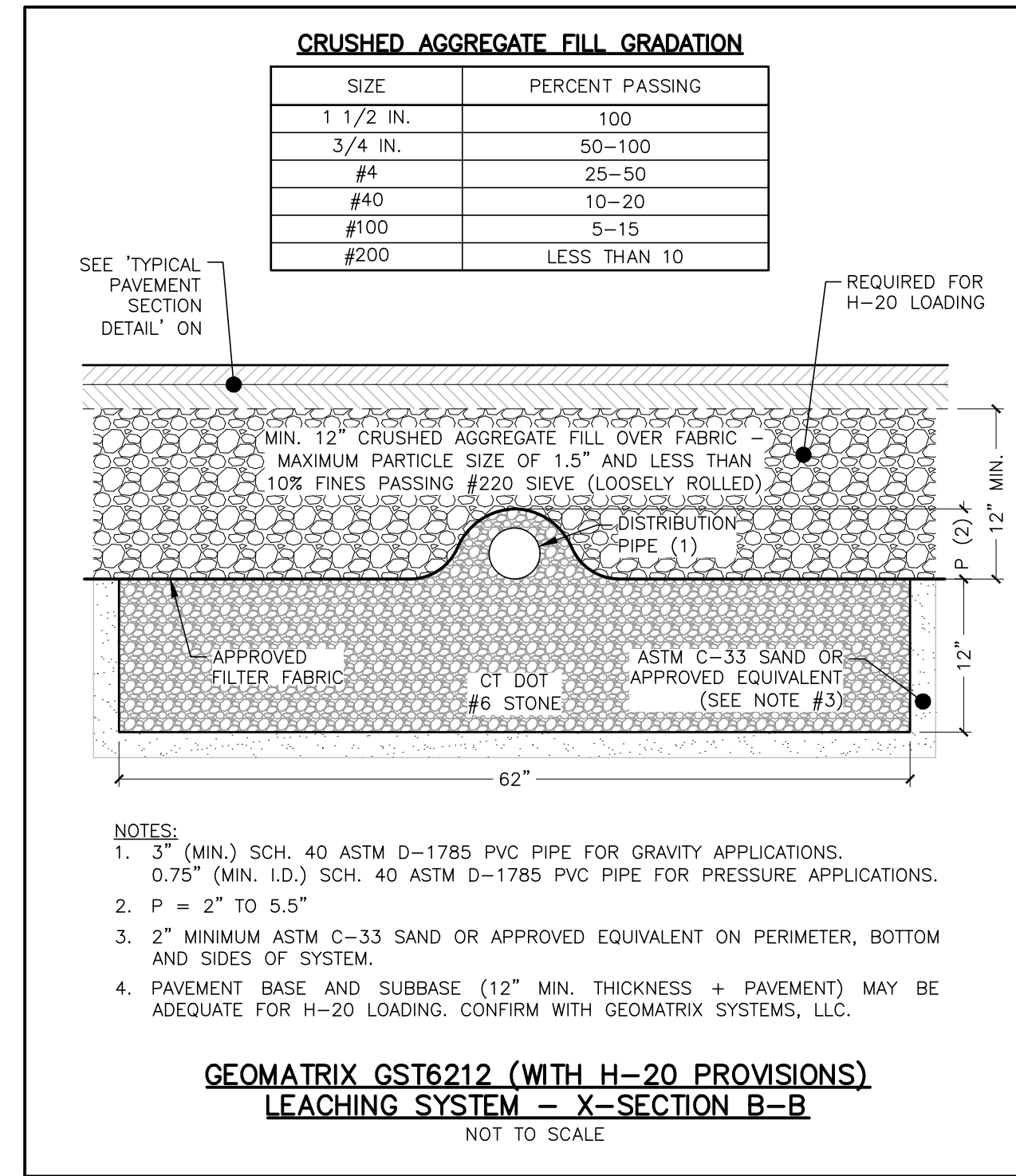
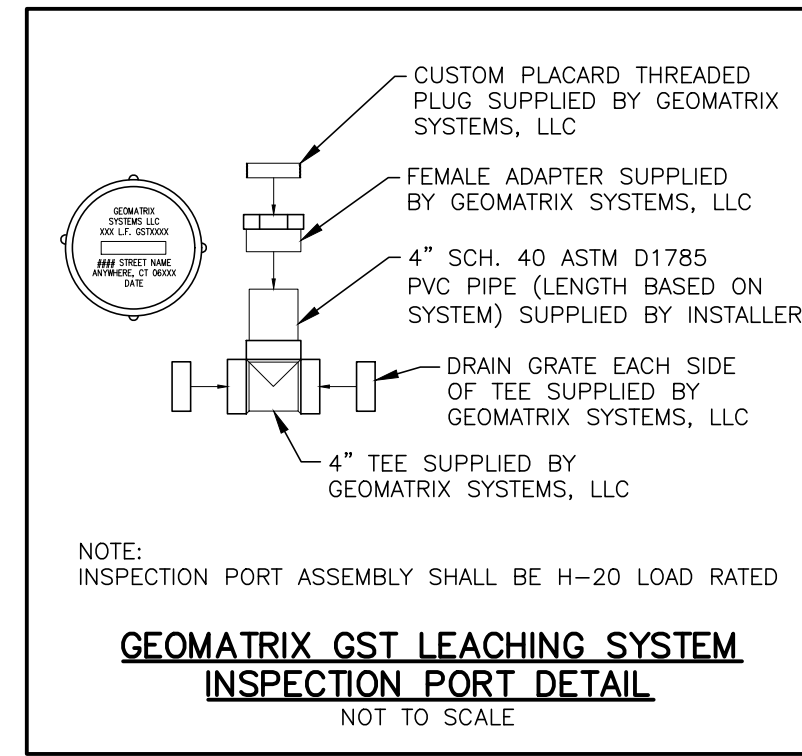
PLAN PREPARED BY:
 INDIGO LAND DESIGN, LLC
 40 ELM STREET, 2ND FLOOR
 OLD SAYBROOK, CT 06475
 PHONE: (860) 388-9343
 FAX: (860) 391-8854

THE EMPLOYED SEAL OF THE REGISTERED PROFESSIONAL ENGINEER IS AFFIXED HERE FOR THIS MAP TO BE VALID

NO.	DATE	REVISIONS	DESCRIPTION
1	11/13/2020	RG	GENERAL REVISIONS

SOIL TESTING & SEPTIC DESIGN CRITERIA
 PREPARED FOR HARVEST CHRISTIAN FELLOWSHIP OF NANTIC, INC.
 NORTH BRIDE BROOK ROAD -- MAP 24 LOT 76
 EAST LYME, CONNECTICUT

DATE: SEPTEMBER 8, 2020
 SCALE: 1"=4'
 DRAWN BY: RG
 CHECKED BY: JW
 DWG. NO.: ST-1
 SHEET NO.: 6 of 10
 JOB NO.: 2019-545



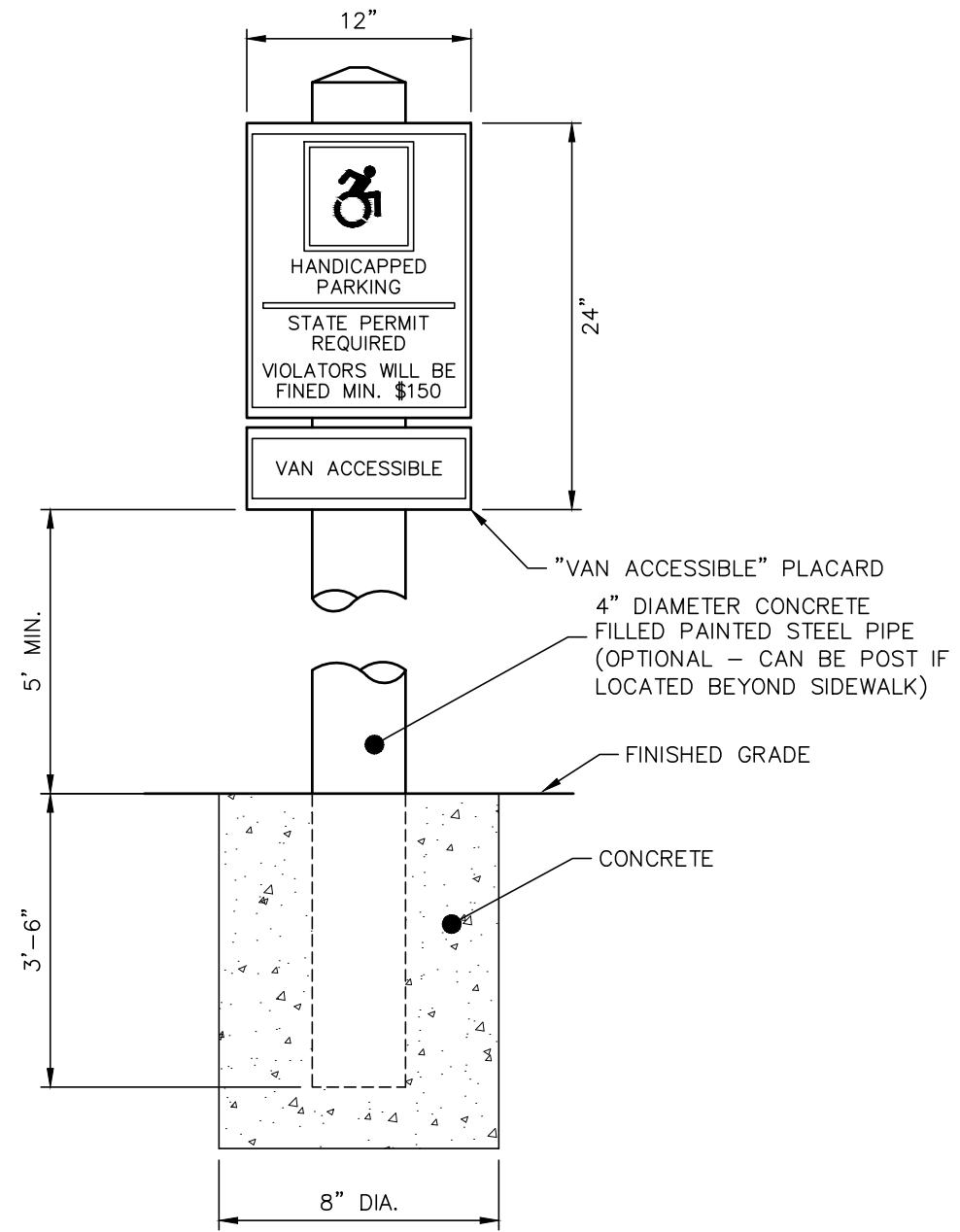
PLAN PREPARED BY:
INDIGO LAND DESIGN, LLC
INDIGO LAND DESIGN, LLC
CT REG. NO. 2108
40 ELM STREET, 2ND FLOOR
OLD SAYBROOK, CT 06475
PHONE: (860) 388-9343
FAX: (860) 391-8854

THE EMBOSSED SEAL OF THE REGISTERED PROFESSIONAL ENGINEER MUST BE AFFIXED HERE FOR THIS MAP TO BE VALID

NO.	DATE	REVISIONS	BY
1	11/13/2020	GENERAL REVISIONS	RG

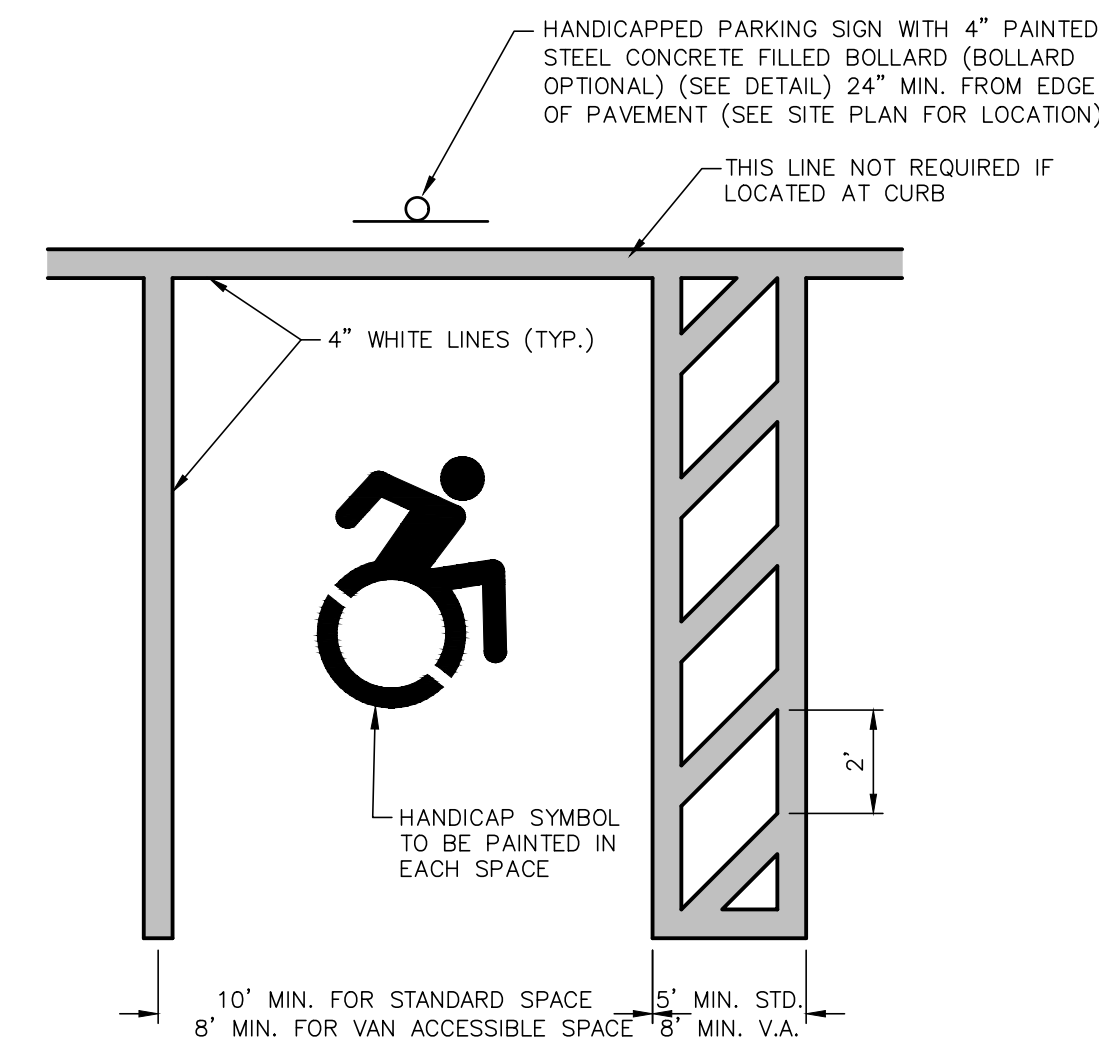
SEPTIC DESIGN DETAILS
PREPARED FOR HARVEST CHRISTIAN FELLOWSHIP OF NANTIC, INC.
NORTH BRIDE BROOK ROAD -- MAP 24 LOT 76
EAST LYME, CONNECTICUT

DATE:
SEPTEMBER 8, 2020
SCALE:
NOT TO SCALE
DRAWN BY:
RG
CHECKED BY:
JW
DWG. NO.:
SD-1
SHEET NO.:
7 of 10
JOB. NO.:
2019-545

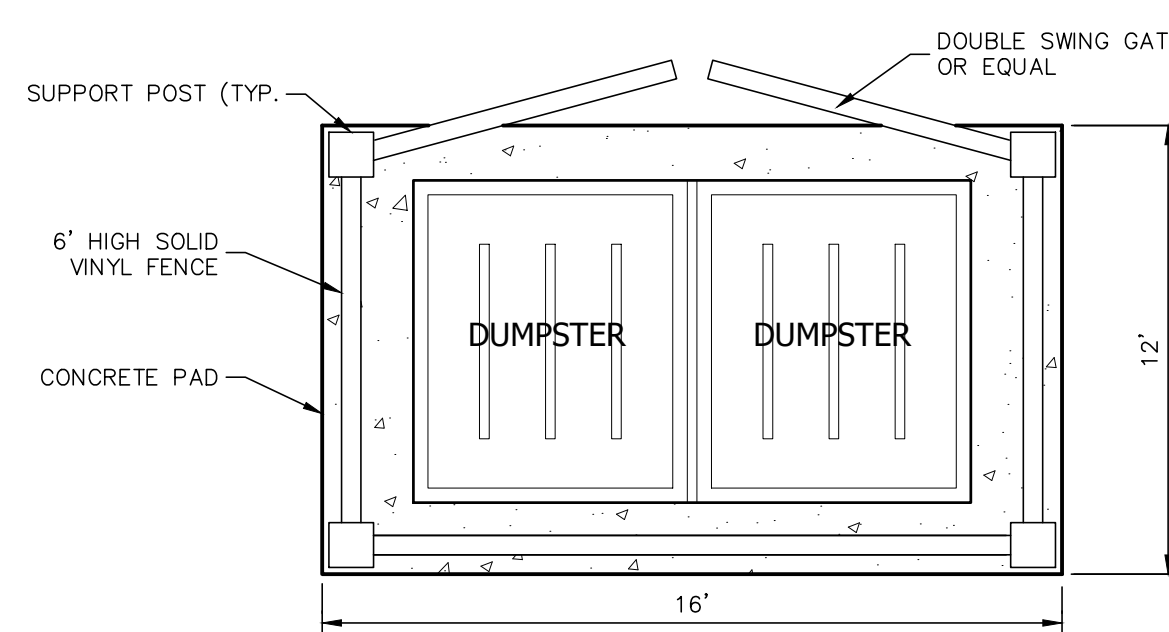


- NOTES:
- EMBLEM AND LETTERING TO BE WHITE ON A BLUE BACKGROUND.
 - SIGN TO BE EMBOSSED GALVANIZED STEEL WITH BAKED ENAMEL FINISH.
 - INSTALL SIGNS IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL REQUIREMENTS (2001 MUTCD STANDARDS OR AS AMENDED).
 - SHOP DRAWINGS REQUIRED.
 - SEE SITE DEVELOPMENT PLAN AND HANDICAPPED PARKING STALL DETAIL FOR LOCATION OF SIGN.

HANDICAPPED PARKING SIGN (WITH OPTIONAL BOLLARD) DETAIL
NOT TO SCALE

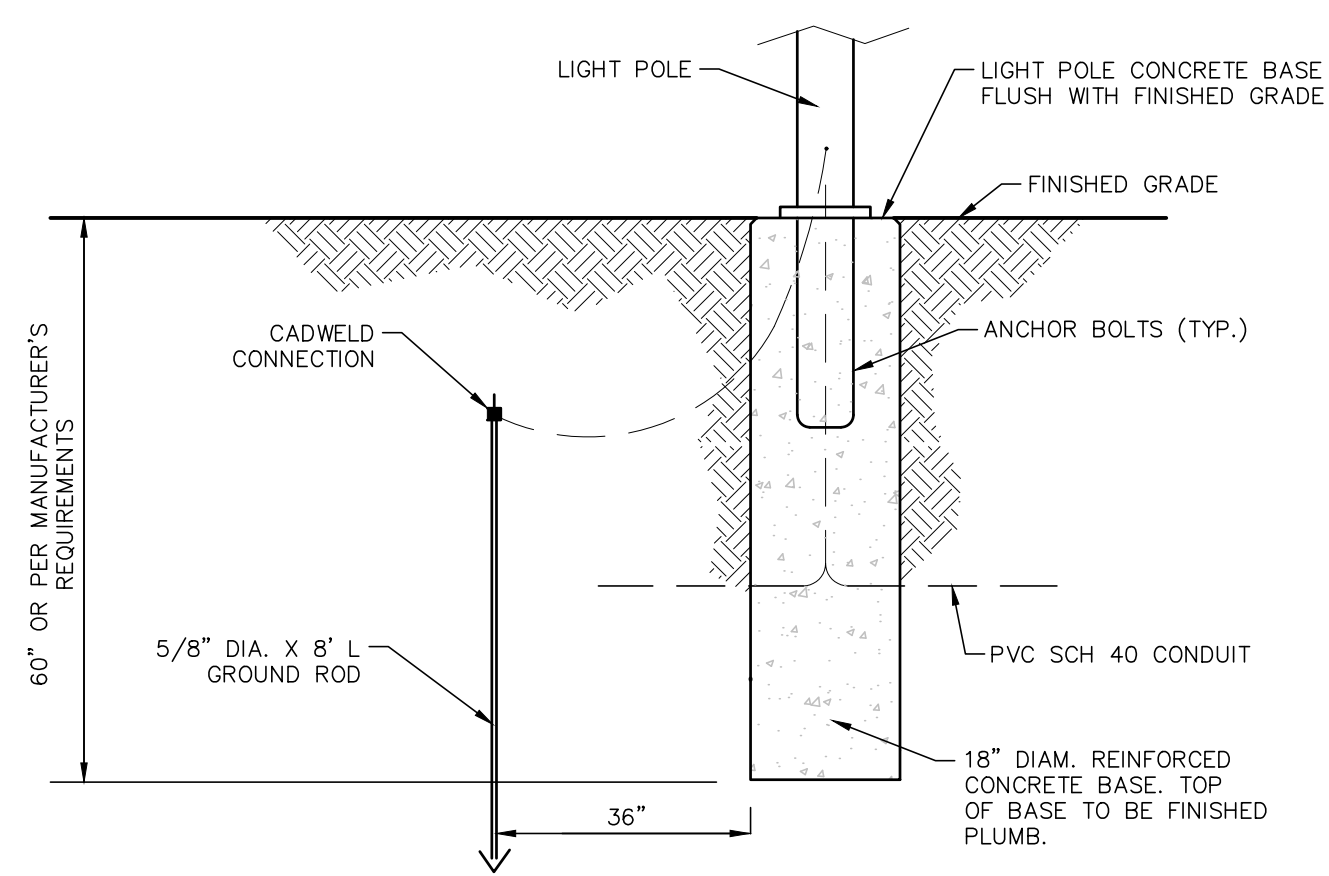


HANDICAPPED PARKING STALL DETAIL
NOT TO SCALE



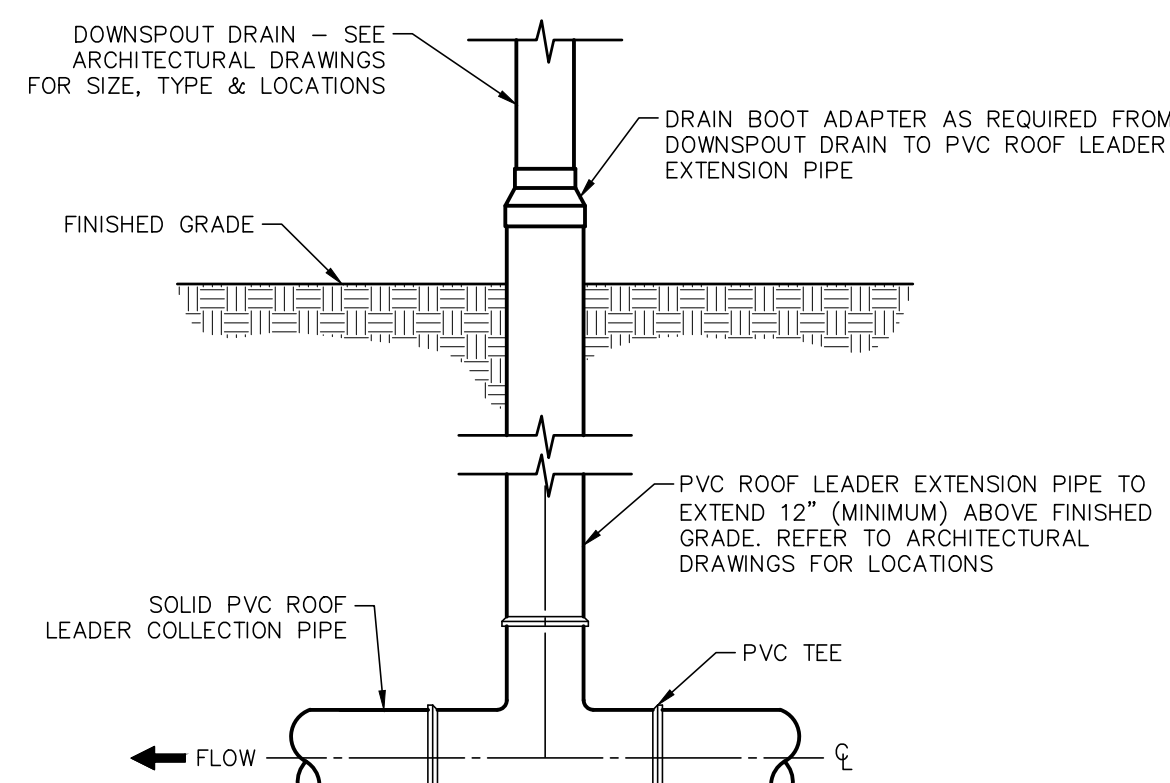
- NOTES:
- MATERIAL AND COLOR FOR DOUBLE SWING GATES AS SELECTED BY PROJECT ARCHITECT.
 - FENCING SHALL NOT EXCEED 6 FEET IN HEIGHT MEASURED FROM GRADE.
 - ALL DIMENSIONS ARE APPROXIMATE AND ARE INTENDED TO ACCOMMODATE THE PROPOSED DUMPSTER.

DUMPSTER ENCLOSURE DETAIL
NOT TO SCALE



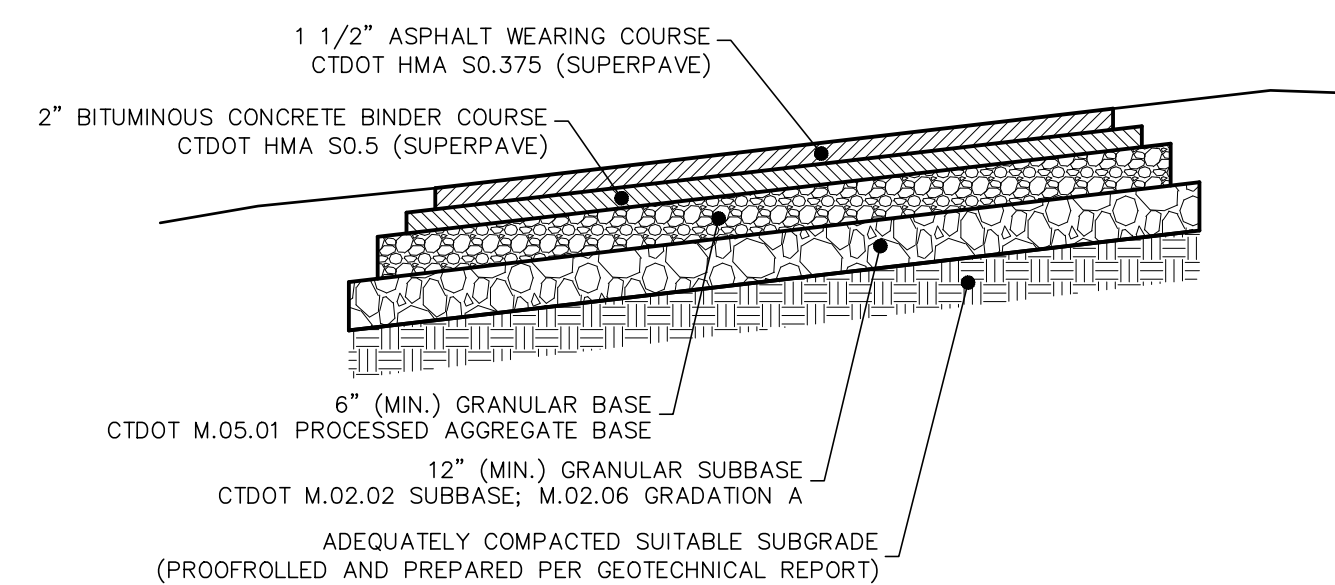
- NOTES:
- REFER TO ALL LIGHT POLE AND FIXTURE MANUFACTURER SPECIFICATIONS FOR ADDITIONAL INFORMATION. ALL MANUFACTURER REQUIREMENTS SUPERSEDE INFORMATION SHOWN IN THIS DETAIL.
 - CONCRETE BASES SHALL BE FLUSH WITH THE GROUND SURFACE AND PAINTED A DARK COLOR. CONCRETE BASES SHALL BE LOCATED A MINIMUM OF 5 FEET FROM THE EDGE OF THE PARKING AREA IF FEASIBLE.

LIGHT POLE CONCRETE BASE DETAIL
NOT TO SCALE



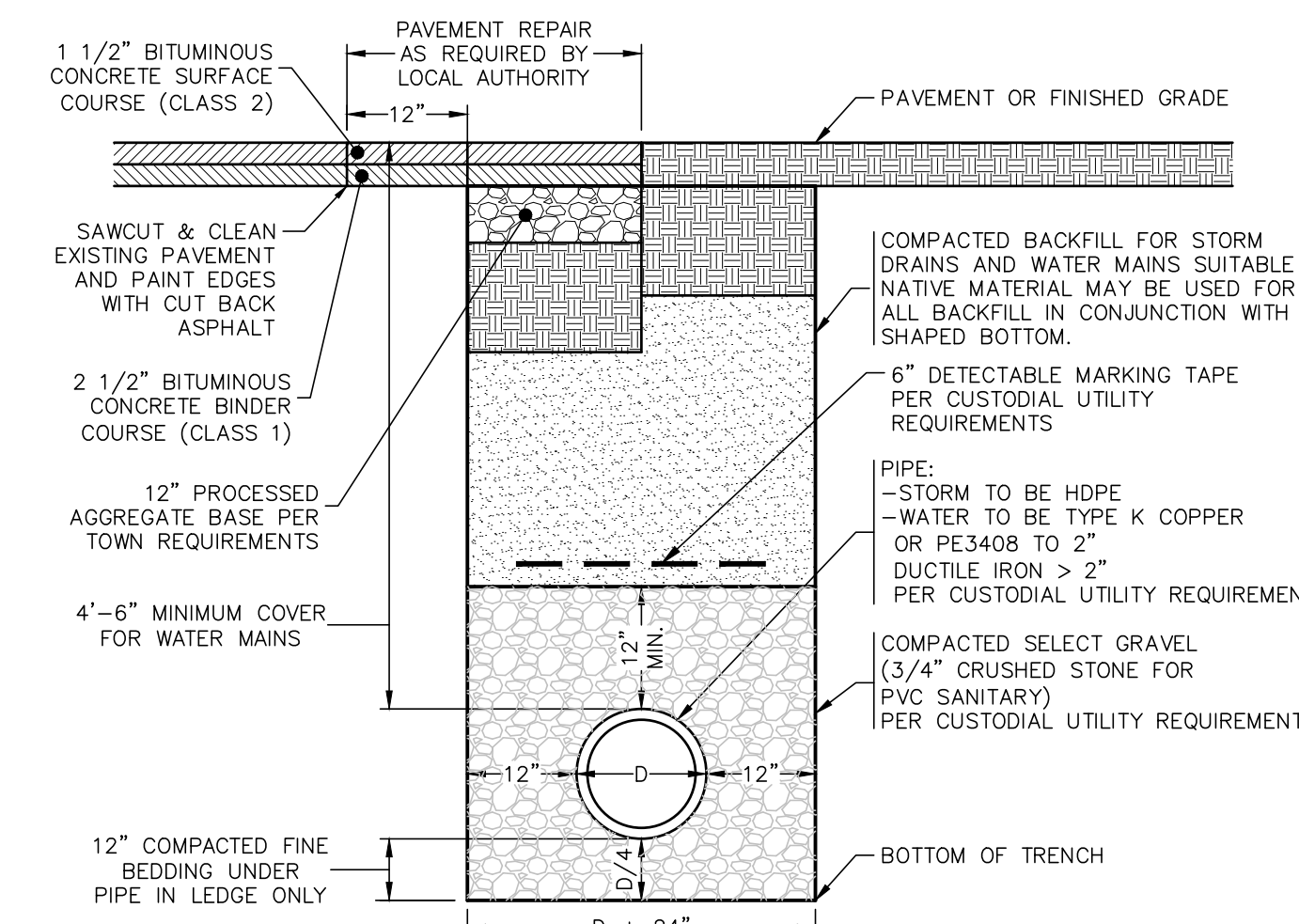
- NOTES:
- ALL PVC DRAINAGE PIPE SHALL BE 6" SCHEDULE 40 ASTM D1785 OR APPROVED EQUAL.
 - DOWNSPOUT DETAILS OR SIZES PROVIDED ON ARCHITECTURAL DRAWINGS SHALL SUPERSEDE INFORMATION INCLUDED IN THIS DETAIL.

DOWNSPOUT CONNECTION DETAIL & PERIMETER ROOF DRAIN
NOT TO SCALE



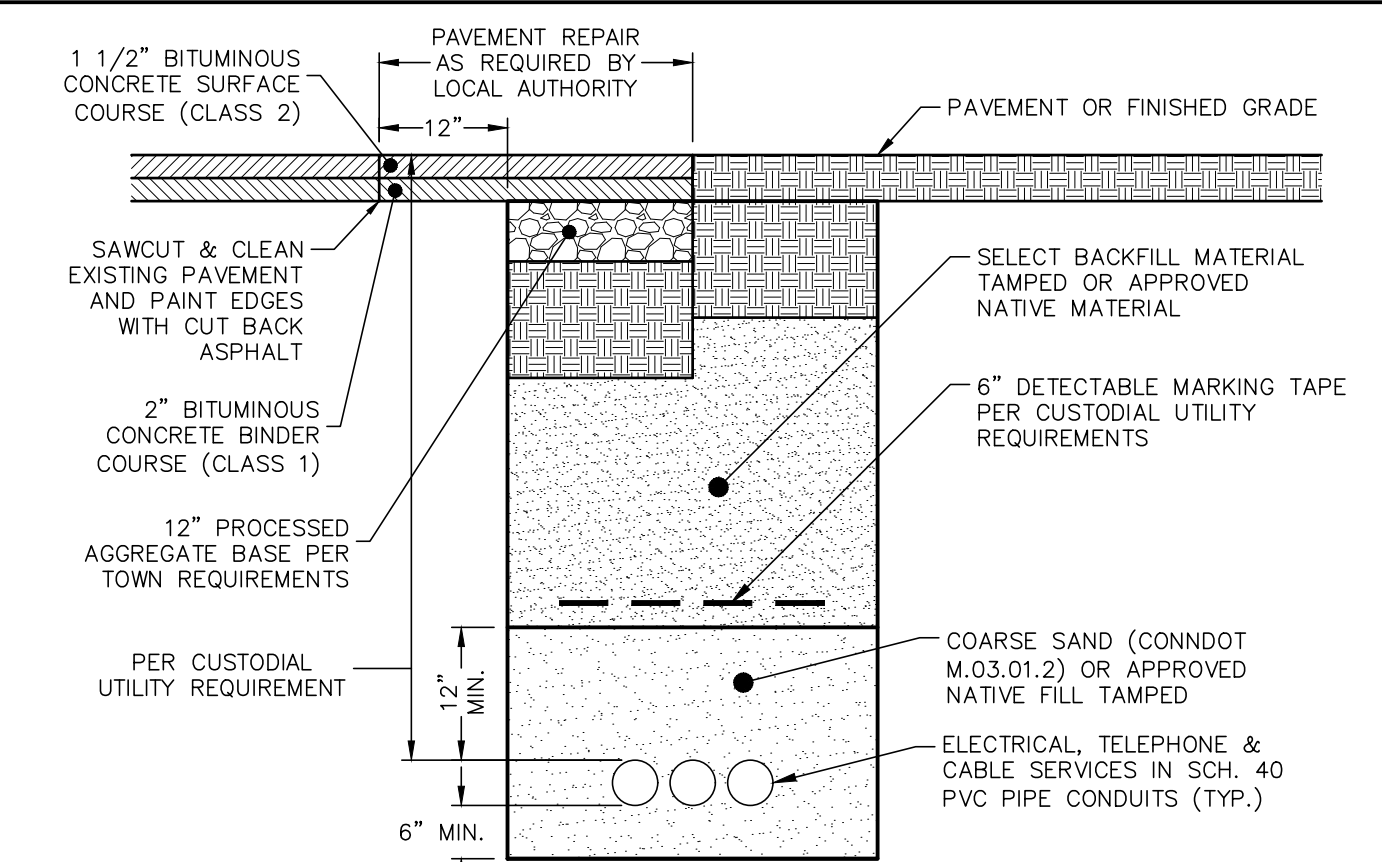
- NOTES:
- SUBBASE MUST BE SHAPED AND PROPERLY COMPACTED PRIOR TO THE PLACEMENT OF BASE.
 - ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO CONNECTICUT D.O.T. STANDARD SPECIFICATIONS.
 - COMPACTION OF ALL BASE AND SUBBASE MATERIALS SHALL MEET OR EXCEED 95% PROCTOR.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MATERIALS AND COMPACTION TESTING AND SHALL SUBMIT DOCUMENTATION FOR REVIEW.
 - EXISTING EXCAVATED MATERIALS MAY BE REUSED FOR SUBBASE IF MATERIAL IS TESTED AND CONFIRMED TO BE IN SUBSTANTIAL CONFORMANCE WITH THE PROVIDED CONNDOT SPECIFICATIONS.
 - IF SHALLOW LEDGE IS ENCOUNTERED, CONTRACTOR SHALL CONSULT WITH DESIGN ENGINEER TO MAKE APPROPRIATE ADJUSTMENTS.

TYPICAL PAVEMENT SECTION DETAIL
NOT TO SCALE



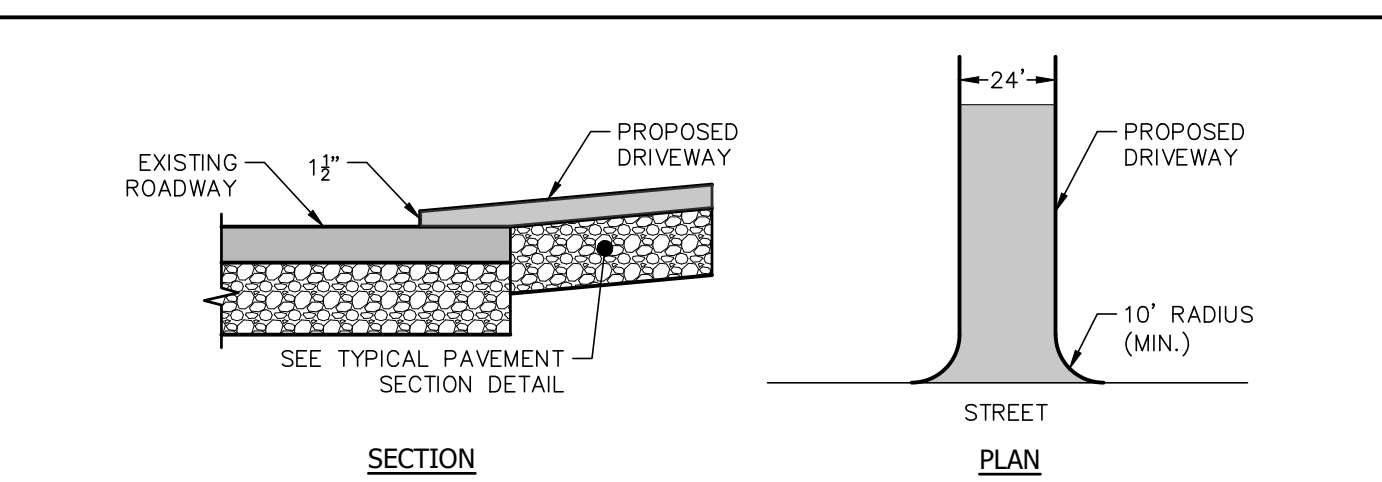
- NOTES:
- SELECT BACKFILL MATERIAL SHALL BE BANK-RUN GRAVEL GRADATION C, FORM 818, 2020, OR PROCESSED AGGREGATE CAN BE USED IN LIEU OF BANK-RUN GRAVEL OR APPROVED NATIVE MATERIAL.
 - ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO CONNECTICUT DOT STANDARD SPECIFICATIONS FOR ROADS, BRIDGES AND INCIDENTAL CONSTRUCTION FORM 818, 2020 OR AS AMENDED.
 - ALL UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH ALL TOWN OF OLD SAYBROOK AND CUSTODIAL UTILITY COMPANY SPECIFICATIONS.
 - ALL PROPOSED MATERIALS SHALL BE INSTALLED AS SHOWN OR AS APPROVED BY THE TOWN OF EAST LYME AND/OR CUSTODIAL UTILITY COMPANY.

TYPICAL TRENCH DETAIL
NOT TO SCALE

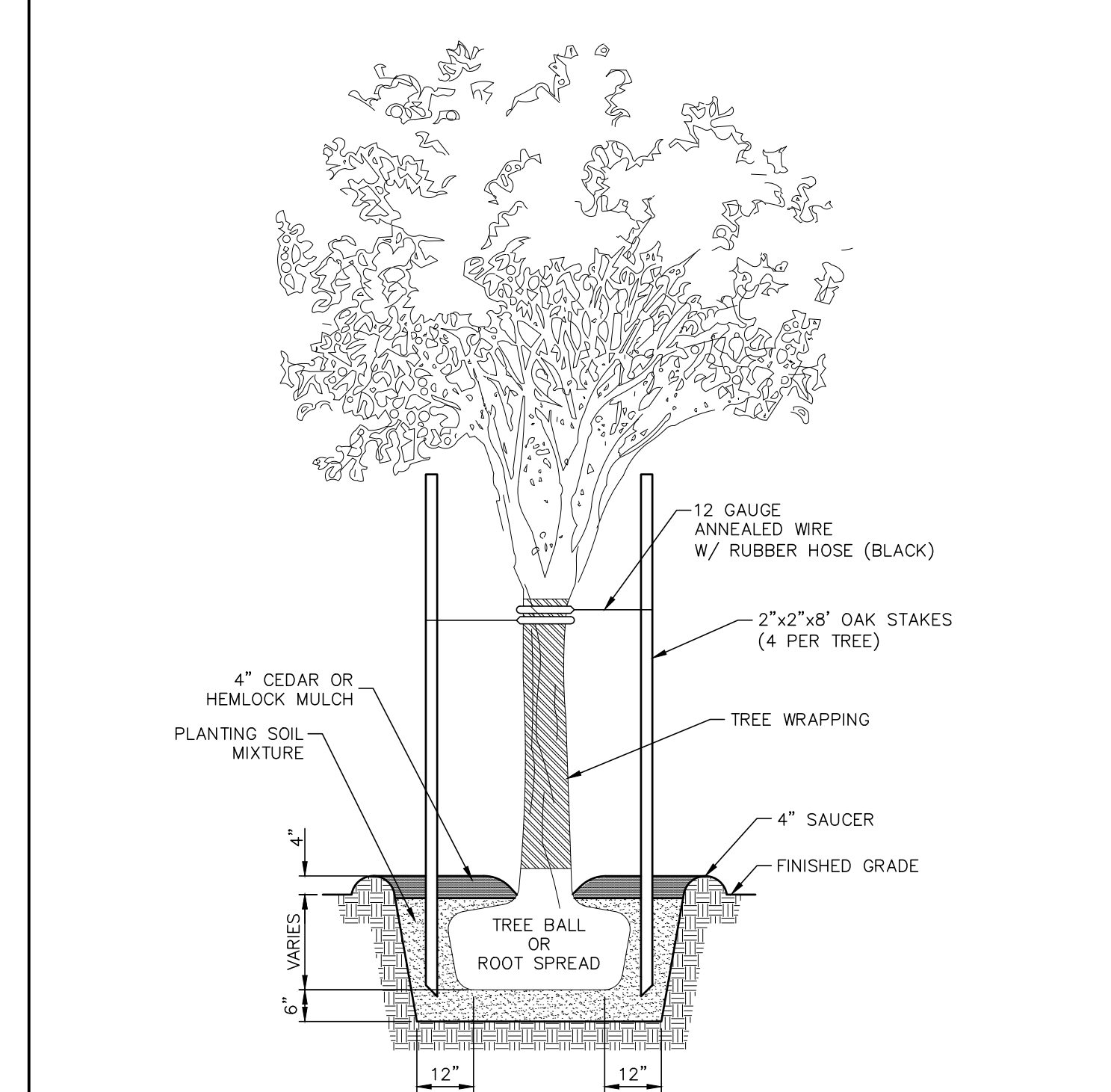


- NOTES:
- SELECT BACKFILL MATERIAL SHALL BE BANK-RUN GRAVEL GRADATION C, FORM 818, 2020, OR PROCESSED AGGREGATE CAN BE USED IN LIEU OF BANK-RUN GRAVEL OR APPROVED NATIVE MATERIAL.
 - ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO CONNECTICUT DOT STANDARD SPECIFICATIONS FOR ROADS, BRIDGES AND INCIDENTAL CONSTRUCTION FORM 818, 2020 OR AS AMENDED.
 - ALL UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH ALL TOWN OF OLD SAYBROOK AND CUSTODIAL UTILITY COMPANY SPECIFICATIONS.
 - ALL PROPOSED MATERIALS SHALL BE INSTALLED AS SHOWN OR AS APPROVED BY THE TOWN OF EAST LYME AND/OR CUSTODIAL UTILITY COMPANY.

TYPICAL UNDERGROUND UTILITY TRENCH CROSS SECTION
NOT TO SCALE

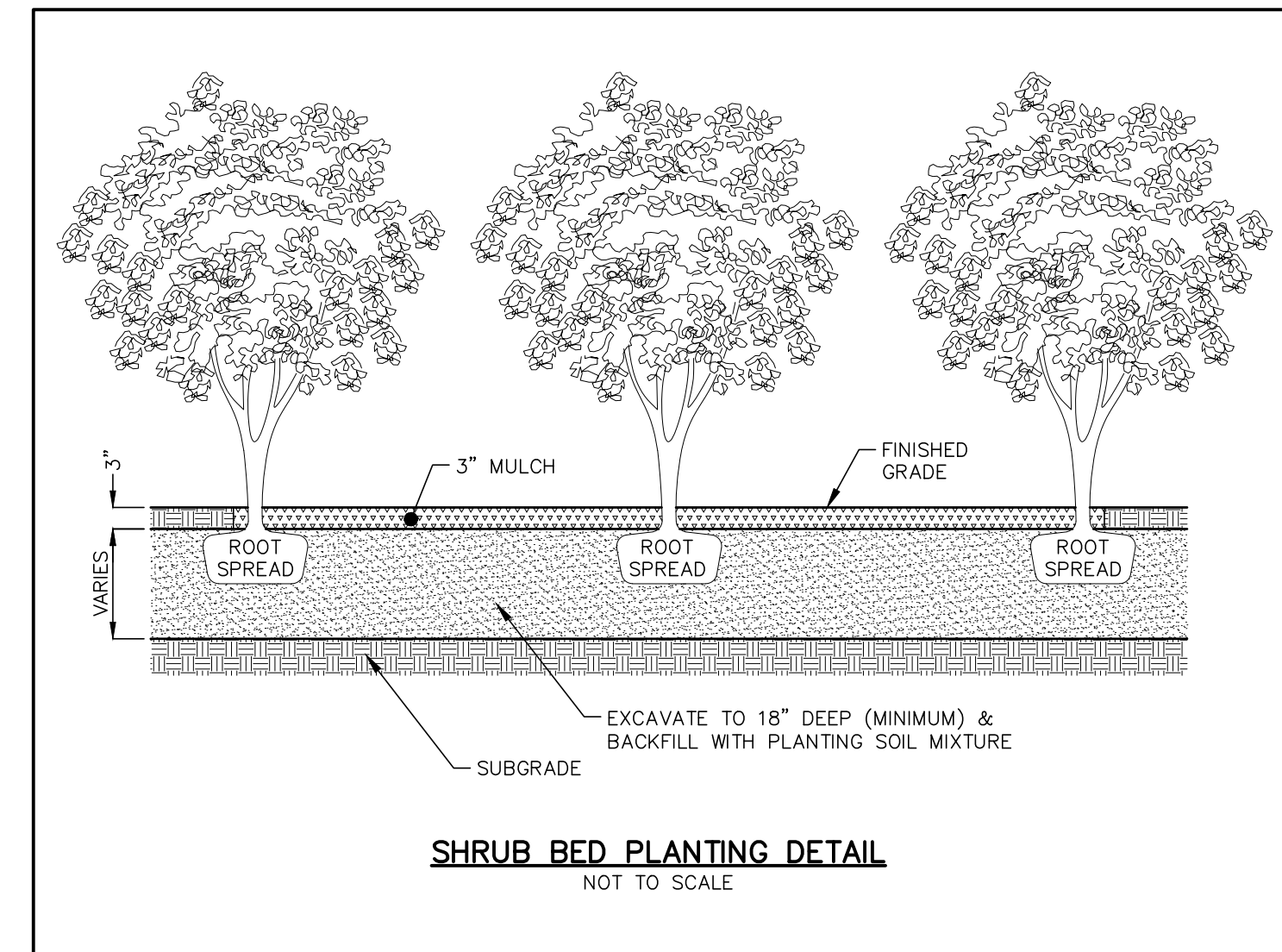


DRIVEWAY ENTRANCE DETAIL
NOT TO SCALE

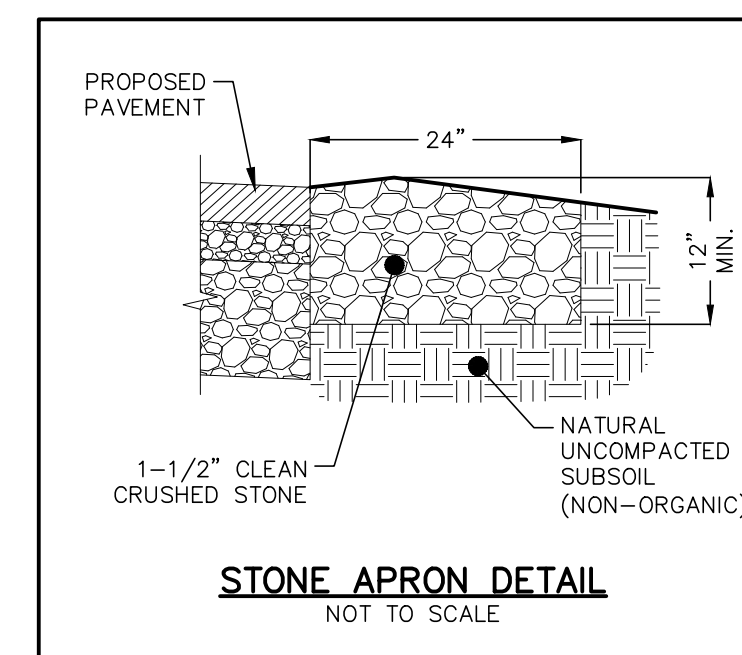


- NOTE:
- MULCH SHALL NOT BE PILED AROUND THE BASE OF THE TREE.

TREE PLANTING DETAIL
NOT TO SCALE



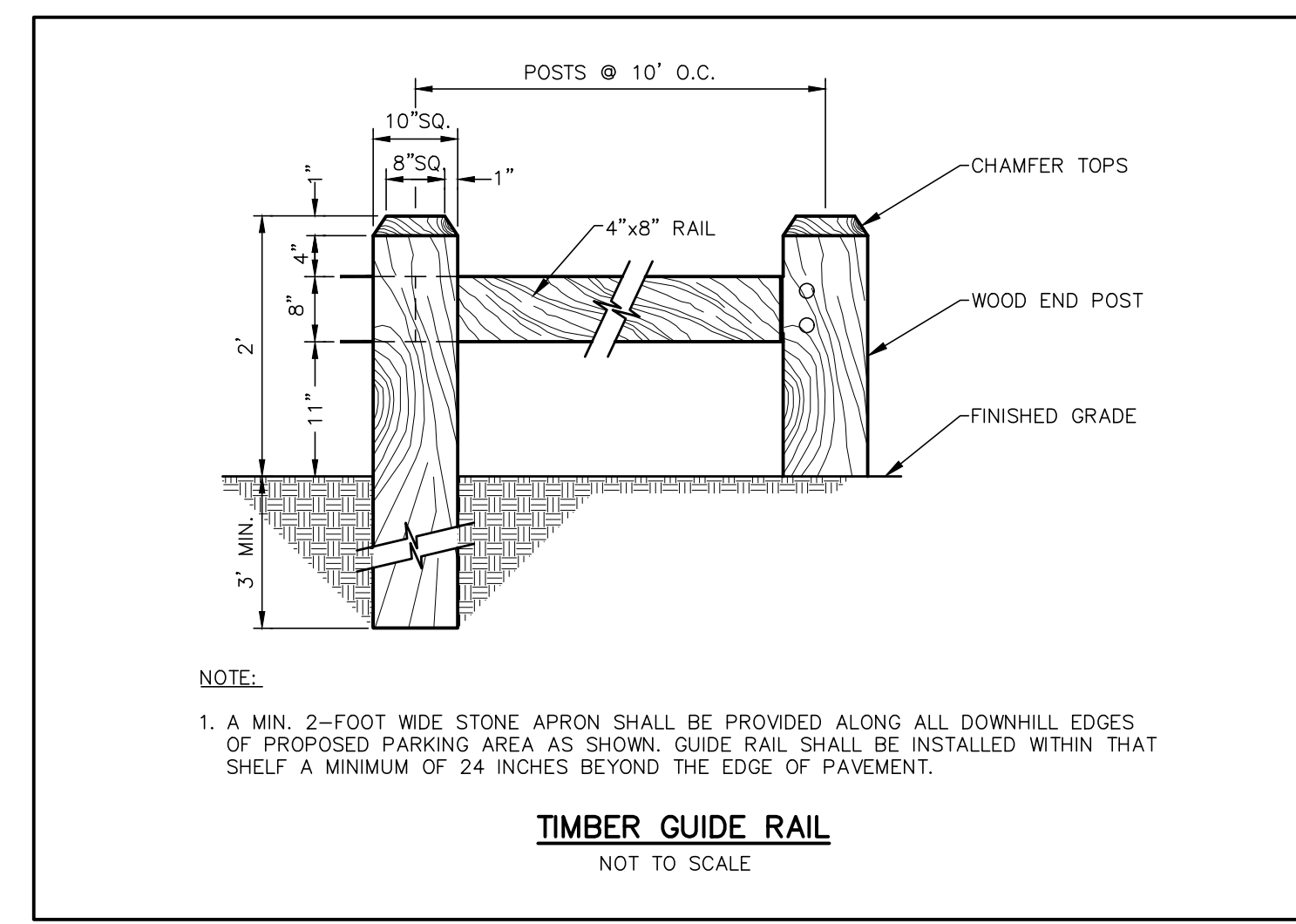
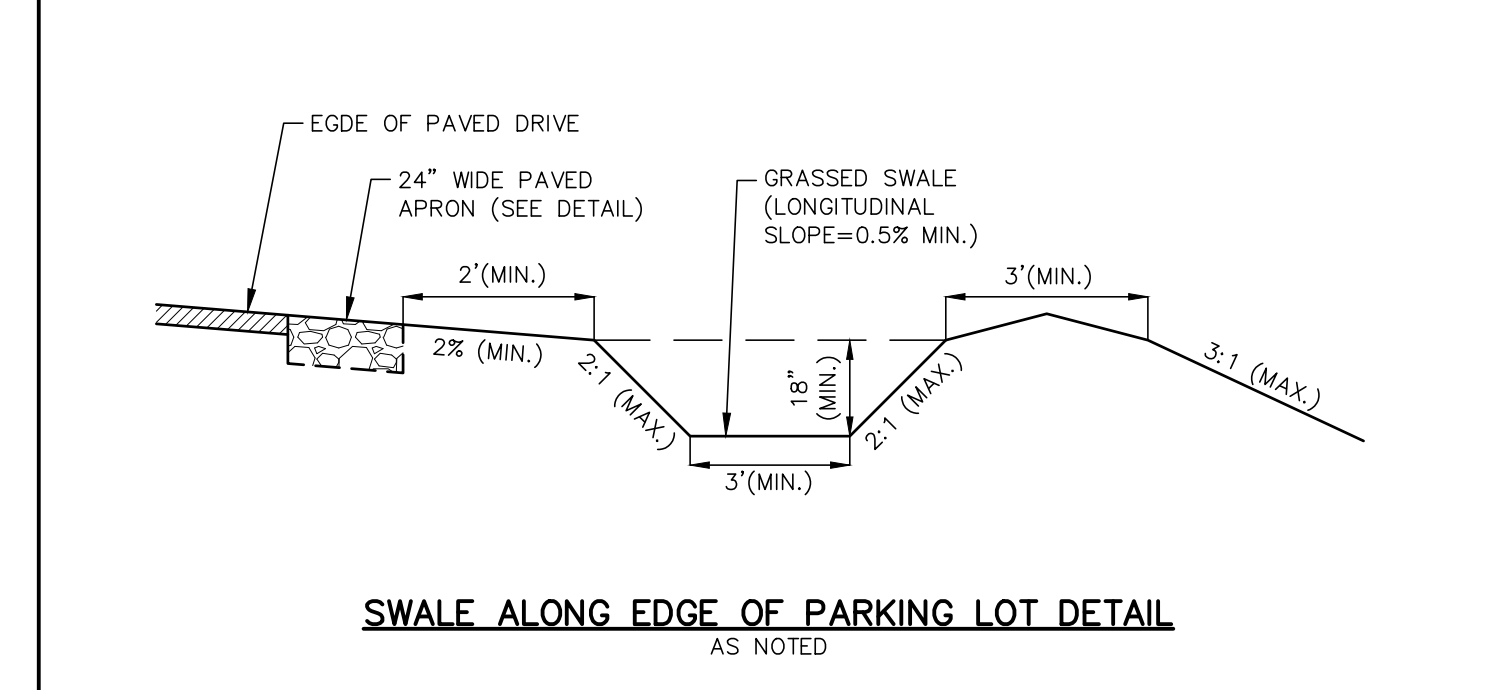
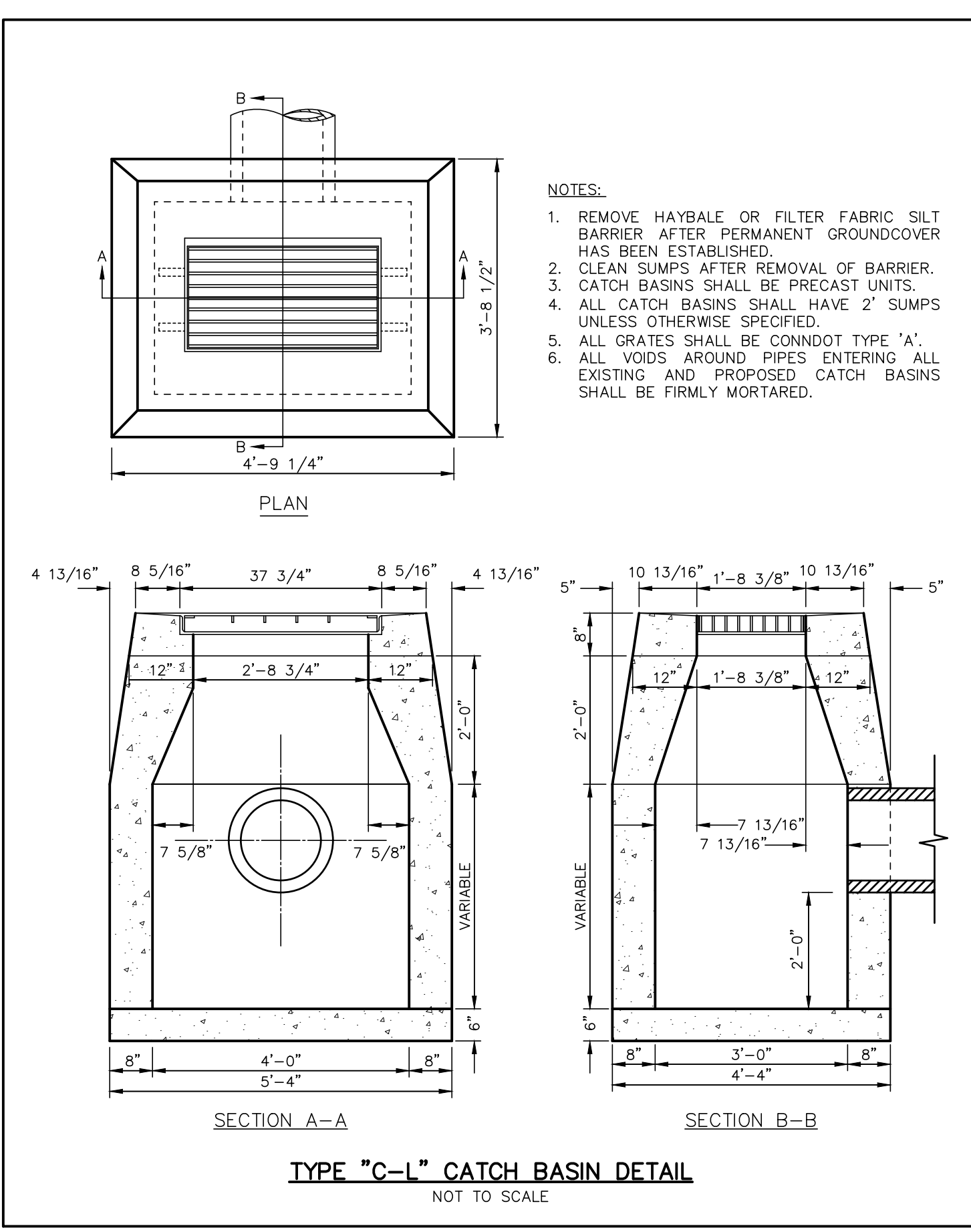
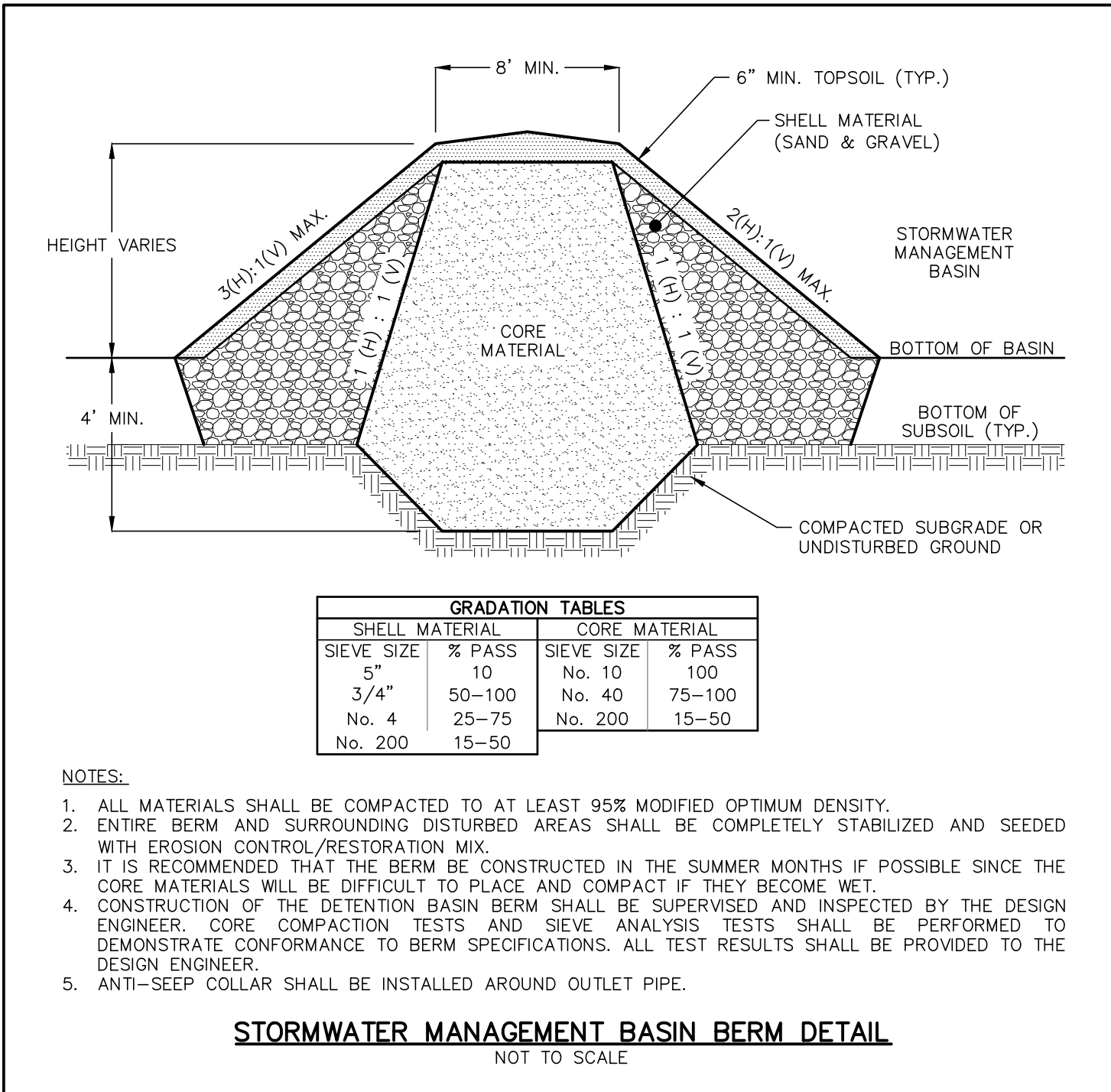
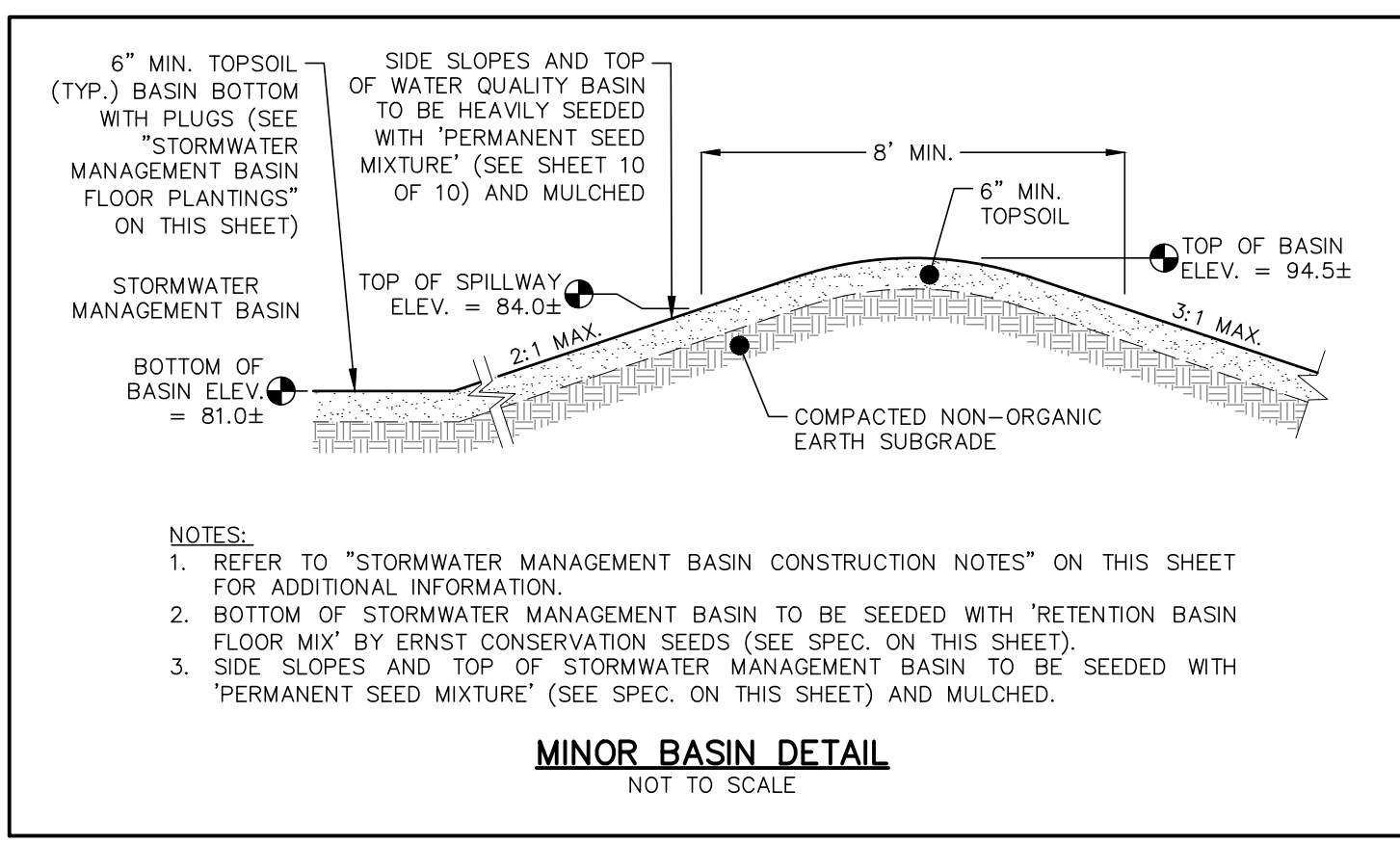
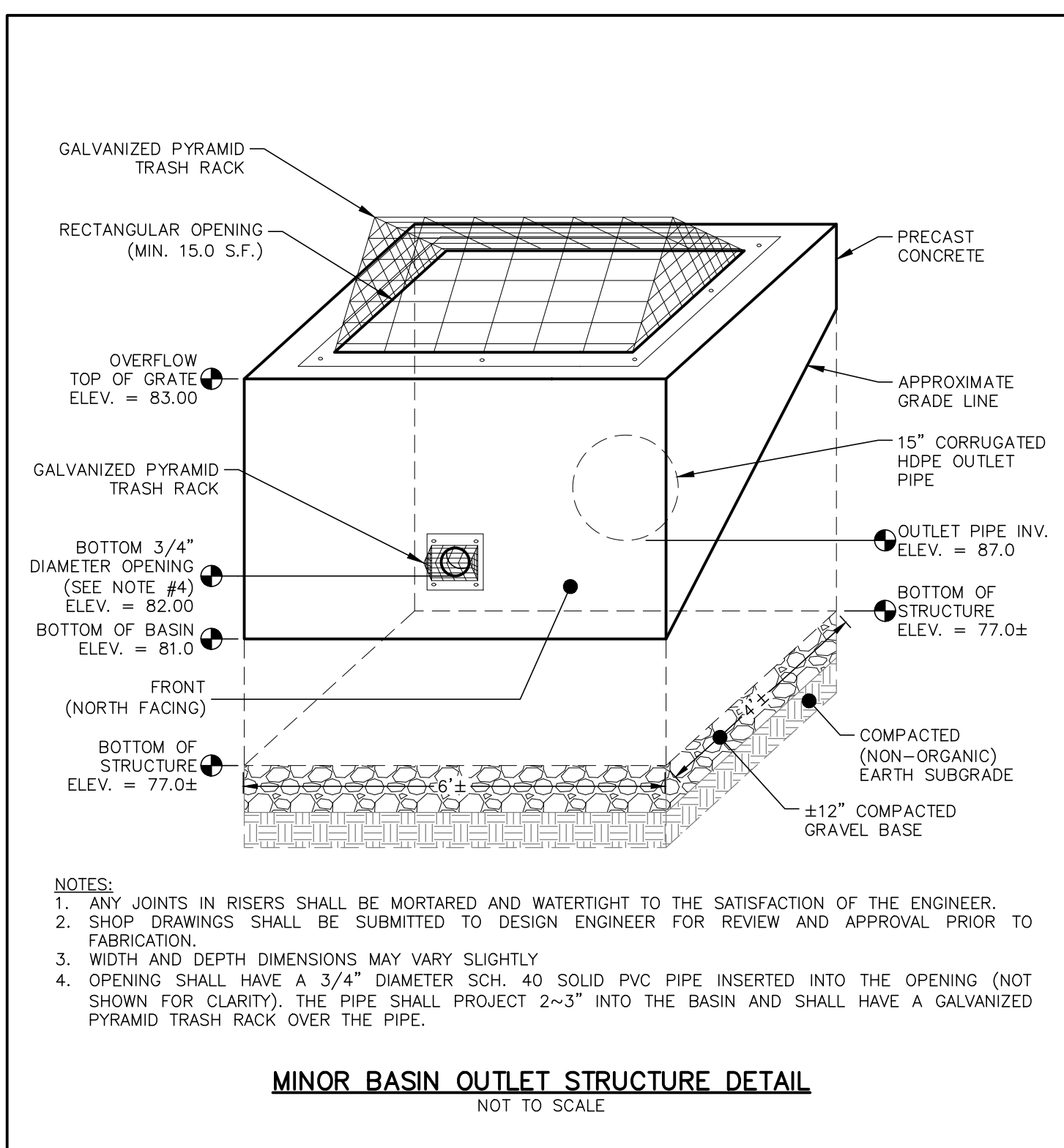
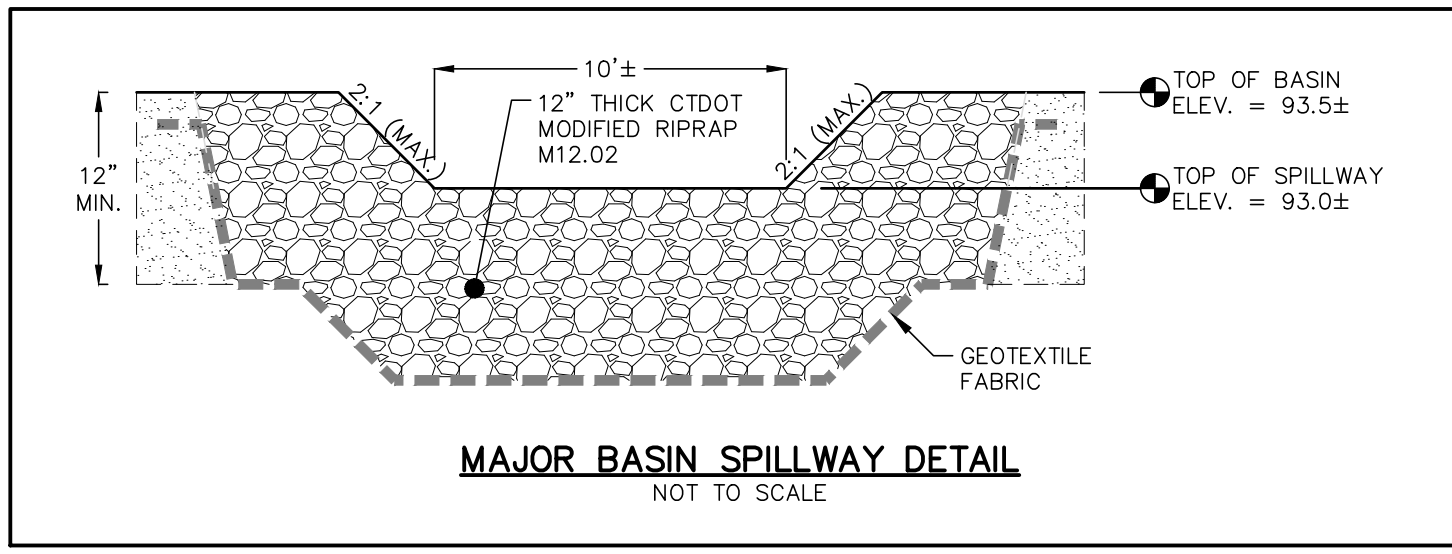
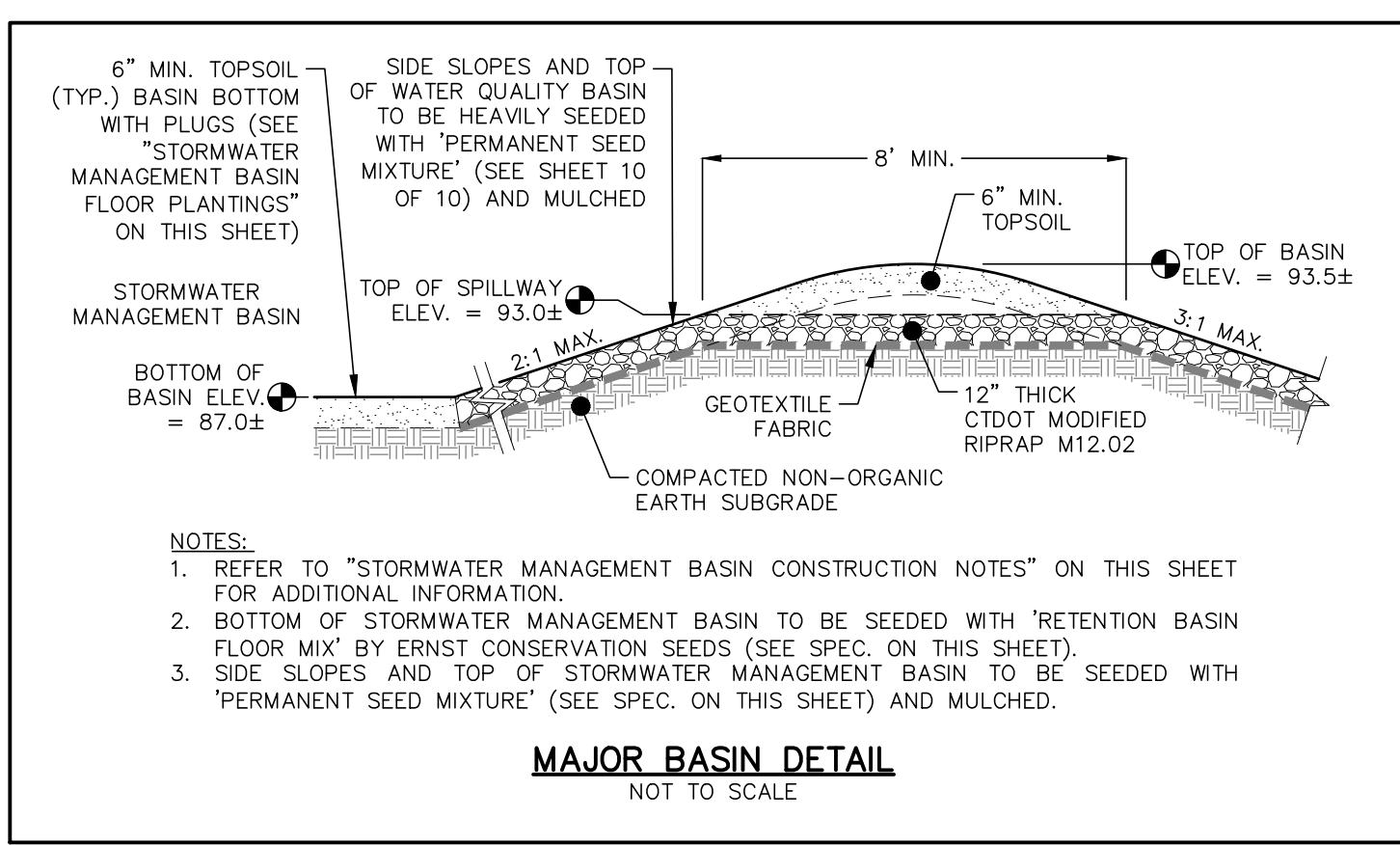
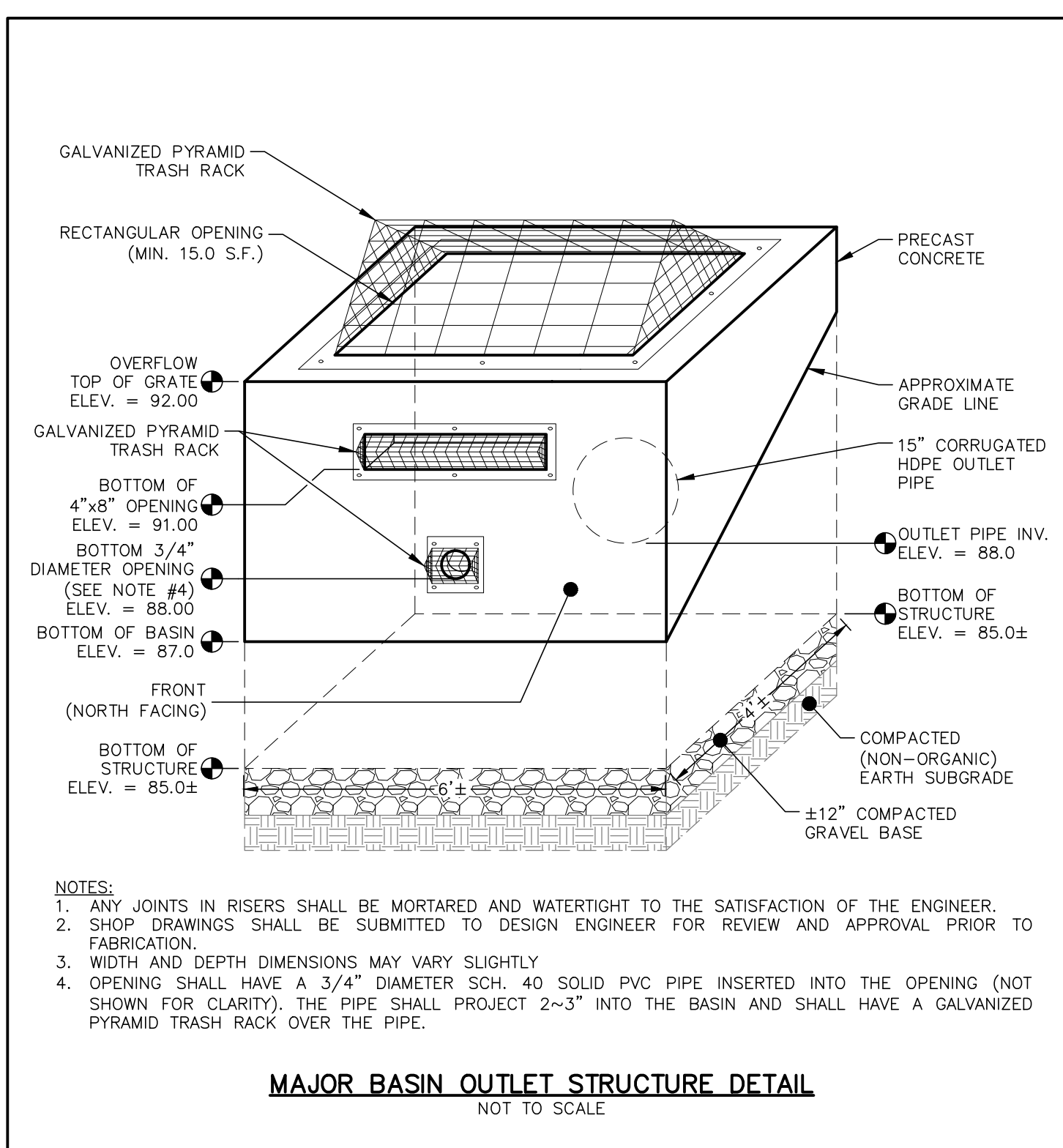
SHRUB BED PLANTING DETAIL
NOT TO SCALE



STONE APRON DETAIL
NOT TO SCALE

NO.	DATE	DESCRIPTION	BY
1	11/13/2020	GENERAL REVISIONS	RG

NO.	DATE	DESCRIPTION
1	11/7/2020	GENERAL REVISIONS



STORMWATER MANAGEMENT BASIN CONSTRUCTION NOTES

- AFTER ROUGH GRADING AND SHAPING, THE AREA OF THE BASIN SHALL BE MARKED OFF BY APPROPRIATE FENCING TO PREVENT THE MOVEMENT OF CONSTRUCTION VEHICLES OVER AND THE POSSIBLE OVER COMPACTION OF THE UNDERLYING NATURAL SOILS.
- BASIN SHALL NEVER BE USED FOR SEDIMENT CONTROL DURING AN ACTIVE CONSTRUCTION PERIOD.
- DURING CONSTRUCTION, SEDIMENT SHALL BE PREVENTED FROM ENTERING THE AREA OF THE BASIN. THE CONTRACTOR SHALL ENSURE THAT THE AREAS DRAINING TO THE BASIN ARE STABILIZED IN A TIMELY MANNER AND MAINTAINED OVER THE ENTIRE AREA DRAINING TO THE BASIN.
- THE DESIGN ENGINEER SHALL MONITOR THE CONSTRUCTION OF THE STORMWATER MANAGEMENT BASIN. WILL PERFORM ALL FOLLOW UP INSPECTIONS, ASSESSMENTS AND REPORTS AND REMEDIATION WORK (IF NECESSARY) AND SHALL PROVIDE CERTIFICATION THAT THE SYSTEM WAS INSTALLED IN SUBSTANTIAL CONFORMANCE WITH THE APPROVED PLANS. A LICENSED LAND SURVEYOR SHALL PREPARE AN AS-BUILT OF THE CONSTRUCTED STORMWATER MANAGEMENT BASIN AREAS. THIS PLAN SHALL INCLUDE THE LOCATION AND INVERTS OF ANY ROOF DRAIN, DRAINAGE PIPE, CATCH BASIN AND OUTLET CONTROL STRUCTURE.
- ALL DISTURBED AREAS SHALL BE FINE GRADED WITH 6" TOPSOIL, BAKED, SEEDING AND MULCHED IN A TIMELY MANNER. THE BOTTOM OF THE BASINS SHALL HAVE PLUGS AS SPECIFIED BY RICH SNARSKI, C.W.S., C.P.S.S. (SEE "STORMWATER MANAGEMENT BASIN FLOOR PLANTINGS" BELOW). THE SIDE SLOPES AND BERMS OF THE BASINS SHALL BE HEAVILY SEEDING WITH 'PERMANENT SEED MIXTURE' (SEE SHEET 10 OF 10) AND MULCHED ACCORDINGLY. PLUGS AND SEEDINGS SHALL BE QUICKLY ESTABLISHED AND MAINTAINED TO PREVENT ANY SILT ACCUMULATION ALONG THE BOTTOM OF THE BASIN. IF NECESSARY, THE CONTRACTOR SHALL INSTALL TEMPORARY STONE CHECK DAMS TO PREVENT SILT FROM ENTERING THE BASIN AREA DURING CONSTRUCTION. MINIMUM VEGETATIVE COVERAGE OF 100% SHALL BE MAINTAINED.
- THE PLUGS AND SEED BED SHALL BE WATERED AS NEEDED IN ORDER FOR THE SOIL TO REMAIN MOIST UNTIL THE PLANTINGS ARE 4" TO 6" IN HEIGHT.

STORMWATER MANAGEMENT BASIN MAINTENANCE PLAN

- VEGETATION ALONG THE SIDE SLOPES SHALL BE MOWED TO 4" TO 6" HEIGHT AS NEEDED. GRASS CLIPPINGS, LEAVES AND ACCUMULATED SEDIMENT AND DEBRIS SHALL BE REMOVED AT LEAST TWICE PER YEAR. MOWING SHOULD NOT BE PERFORMED WHEN GROUND IS SOFT TO AVOID CREATION OF RUTS AND COMPACTION. ANY WOODY VEGETATION SHALL BE REMOVED.
- NO PESTICIDES OR NON-ORGANIC FERTILIZERS SHALL BE USED WITHIN THE STORMWATER MANAGEMENT BASIN.
- IF THERE IS AN ACCUMULATION OF ORGANIC DEBRIS OR SEDIMENT ON THE FLOOR OF THE BASIN OR IF PONDING WATER IS REGULARLY OBSERVED MORE THAN 48 HOURS AFTER A RAINFALL EVENT, THE TOP 6" SHALL BE REMOVED AND THE EXPOSED SOIL SURFACE ROTOULLED TO A DEPTH OF 12". SEDIMENTATION SHOULD BE REMOVED WHEN IT IS VISIBLY DRY AND READILY SEPARATES FROM THE BASIN FLOOR TO MINIMIZE SMEARING. AFTER THIS WORK HAS BEEN DONE, THE BOTTOM OF THE BASIN SHALL BE RESTORED TO ITS ORIGINAL CONDITION.
- ROUTINE INSPECTIONS OF THE BASIN, SIDE SLOPES, STONE SPILLWAY AND BERM SHALL BE MADE AFTER ANY SIGNIFICANT RAINFALL EVENT AND AT LEAST TWICE PER YEAR. INSPECTIONS SHALL INCLUDE CHECKING FOR ACCUMULATED SEDIMENT AND LEAVES & DEBRIS AND HEALTH OF THE BASIN VEGETATION. ANY ACCUMULATED SEDIMENTS, DEBRIS OR WOODY VEGETATION SHALL BE REMOVED.

STORMWATER MANAGEMENT BASIN FLOOR PLANTINGS
 RETENTION BASIN FLOOR MIX PER RICH SNARSKI, C.W.S., C.P.S.S.
 ALL PLANTS SHALL BE 2" PLUGS WITH 18" SPACING
 50% SCIRPUS CYPERNUS (WOOL SEDGE)
 50% JUNCUS EFFUSUS (SOFT RUSH)

SOIL EROSION & SEDIMENTATION CONTROL PLAN NARRATIVE

THE SITE CONTRACTOR MUST FOLLOW ALL GUIDELINES SET FORTH IN THE MANUAL ENTITLED "2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL" PUBLISHED BY THE CONNECTICUT COUNCIL ON SOIL AND WATER CONSERVATION IN COOPERATION WITH THE CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION. THIS MANUAL IS ALSO KNOWN AS DEP BULLETIN 34.

PROJECT DESCRIPTION

THE APPLICANT IS PROPOSING TO CONSTRUCT A 8,450 S.F. CHURCH / RELIGIOUS INSTITUTION. INSTALL A PAVED DRIVEWAY AND PARKING AREA. CONSTRUCT STORMWATER BASINS AND IMPLEMENT OTHER LOW IMPACT DEVELOPMENT MEASURES AS SHOWN. INSTALL A 100% CONNECTICUT PUBLIC HEALTH CODE COMPLIANT SEPTIC SYSTEM, CONNECT TO PUBLIC UTILITIES WITHIN THE ROAD AND OTHER ASSOCIATED IMPROVEMENTS. CHURCHES AND RELIGIOUS INSTITUTIONS ARE PERMITTED AS OF RIGHT PER SECTION 20.1.2.A OF THE ZONING REGULATIONS.

CONSTRUCTION IS ANTICIPATED TO COMMENCE IN SPRING 2021. ALL EROSION AND SEDIMENT CONTROLS SHALL BE INSTALLED PRIOR TO CONSTRUCTION ACTIVITIES. E & S CONTROLS SHALL BE MAINTAINED AND REPAIRED OR REPLACED AS NEEDED THROUGHOUT THE CONSTRUCTION DURATION. ALL E & S CONTROLS SHALL BE REMOVED AND PROPERLY DISPOSED OF AS SOON AS THE SITE IS COMPLETELY STABILIZED.

CONSTRUCTION SEQUENCE

- CONTACT "CALL BEFORE YOU DIG" TO MARK OUT ALL UTILITY LOCATIONS PRIOR TO ANY CONSTRUCTION ACTIVITIES.
- ENSURE ALL LAND USE PERMITS HAVE BEEN SECURED. OBTAIN ALL NECESSARY PERMITS.
- LAND SURVEYOR TO STAKE OUT CLEARING LIMITS & PROPOSED IMPROVEMENTS.
- INSTALL ALL EROSION AND SEDIMENT CONTROLS AND CONSTRUCTION ENTRANCE.
- REMOVE ALL TREES, BRUSH AND STUMPS WITHIN CLEARING LIMITS.
- STRIP AND STOCKPILE TOPSOIL AND OTHER EXCAVATED SOILS IN AREA(S) SHOWN ON PLAN. APPLY TEMPORARY SEED MIXTURE TO PILES IF THEY WILL NOT BE DISTURBED FOR MORE THAN 30 DAYS.
- ROUGH GRADE DRIVEWAY AND PARKING AREA.
- CONSTRUCT THE FOUNDATION FOR THE PROPOSED BUILDING.
- FRAME AND CONSTRUCT THE PROPOSED BUILDING.
- INSTALL ALL UTILITIES.
- FINISH GRADE DRIVEWAY AND PARKING AREA AND PAVE PER PLAN (BINDER COURSE ONLY).
- CONSTRUCT STORMWATER BASINS.
- FINISH GRADE, SEED AND MULCH ALL DISTURBED AREAS AS REQUIRED.
- INSTALL ALL LANDSCAPING AND LIGHTING POLES/FIXTURES. (INSTALL SURFACE COURSE PAVEMENT AND STRIPE PARKING LOT.)
- REMOVE ALL EROSION AND SEDIMENT CONTROLS ONCE SITE IS COMPLETELY STABILIZED. DISPOSE OF PROPERLY.

LAND DISTURBANCE

- ALL EXISTING VEGETATION OUTSIDE OF THE CLEARING LIMITS SHALL BE PROTECTED. EXISTING VEGETATION SHALL BE REMOVED ONLY IN AREAS NECESSARY FOR SITE CONSTRUCTION ACTIVITIES. ANY ADDITIONAL CLEARING OUTSIDE OF THE PROPOSED CLEARING LIMITS SHALL BE APPROVED BY TOWN STAFF PRIOR TO CLEARING.
- ALL AREAS SHALL REMAIN UNDISTURBED UNTIL IMMEDIATELY PRIOR TO SITE DEVELOPMENT.
- ALL CONSTRUCTION EQUIPMENT, MATERIALS AND STOCKPILES SHALL NOT BE PLACED OUTSIDE OF THE DISTURBED AREAS.
- ALL TREES, BRUSH, STUMPS, WOOD CHIPS OR OTHER ORGANIC MATTER SHALL BE DISPOSED OF PROPERLY OFF-SITE. WOOD CHIPS MAY BE USED AS A SILTATION BARRIER DURING CONSTRUCTION AND SPREAD AFTER SITE IS STABILIZED. NO ORGANIC MATTER INCLUDING TREES, BRUSH AND STUMPS SHALL BE BURIED ON-SITE.

STRIPPING AND STOCKPILING

ALL STOCKPILES THAT CONSIST OF ERODIBLE MATERIALS SHALL BE LOCATED WITHIN AREAS AS SHOWN ON THE SITE PLAN AND SURROUNDED BY A SILTATION BARRIER. ANY STOCKPILE THAT WILL REMAIN UNDISTURBED FOR A PERIOD LONGER THAN 30 DAYS SHALL BE SEED WITH A TEMPORARY GRASS SEED MIXTURE TO PREVENT EXCESSIVE EROSION AND SEDIMENTATION.

TRENCH EXCAVATION AND BACKFILL

THE CONTRACTOR SHALL PROPERLY MAINTAIN ALL BACKFILLED EXCAVATIONS. ANY DEPRESSIONS DUE TO SETTLING IN THESE AREAS SHALL BE FILLED AND RESEDED AS NECESSARY.

THE WIDTH OF ALL EXCAVATED TRENCHES SHALL BE KEPT AS NARROW AS PRACTICABLE TO ACCOMMODATE THE WORK. ALL MATERIALS EXCAVATED FROM TRENCHES SHALL BE STOCKPILED AND USED AS TRENCH BACKFILL MATERIAL UNLESS IT IS DETERMINED TO BE UNSUITABLE BY THE ENGINEER. EXCESS MATERIALS SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR.

SOIL EROSION AND SEDIMENT CONTROLS

ALL ADJACENT PROPERTIES AND RECEIVING WATERCOURSES AND / OR WETLAND AREAS SHALL BE ADEQUATELY PROTECTED FROM SOIL EROSION AND SEDIMENTATION BOTH DURING AND AFTER CONSTRUCTION.

ADDITIONAL EROSION AND SEDIMENT CONTROLS MAY BE REQUIRED BY THE TOWN AND SHALL BE INSTALLED AND MAINTAINED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROLS BEFORE, DURING AND AFTER CONSTRUCTION. THE CONTRACTOR IS ALSO RESPONSIBLE FOR THE PROPER REMOVAL AND DISPOSAL OF ALL EROSION AND SEDIMENT CONTROLS ONCE THE SITE IS COMPLETELY STABILIZED.

ALL EROSION AND SEDIMENT CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER ALL RAINFALL EVENTS. E & S CONTROLS SHALL BE REPAIRED OR REPLACED AS NECESSARY WITHIN 24 HOURS THROUGHOUT THE CONSTRUCTION DURATION.

IF NECESSARY, A TEMPORARY FILTER FABRIC SILT BARRIER SHALL BE PLACED BENEATH THE GRATE OF THE PROPOSED CATCH BASIN TO PREVENT ANY SILTATION OF THE DRAINAGE SYSTEM. THE FILTER FABRIC SHALL BE REMOVED IMMEDIATELY AFTER THE SURROUNDING AREAS ARE ADEQUATELY STABILIZED.

ALL ACCUMULATED SEDIMENTS AT ALL EROSION AND SEDIMENT CONTROLS SHALL BE PERIODICALLY REMOVED AND SPREAD IN AREAS THAT ARE NOT SUBJECT TO EROSION.

THE CONTRACTOR SHALL EMPLOY BEST MANAGEMENT PRACTICES TO CONTROL STORMWATER DISCHARGES AND TO PREVENT EROSION AND SEDIMENTATION AND TO OTHERWISE PREVENT POLLUTION OF WETLANDS OR WATERCOURSES OR PRIVATE PROPERTY. THE CONTRACTOR SHALL IMMEDIATELY INFORM THE TOWN OF ANY PROBLEMS INVOLVING EROSION AND/OR SEDIMENTATION THAT HAVE DEVELOPED IN THE COURSE OF, OR THAT ARE CAUSED BY, THE AUTHORIZED WORK.

THE RESPONSIBLE CONTACT PERSON FOR THE INSTALLATION AND MAINTENANCE OR EROSION AND SEDIMENTATION CONTROLS ON THIS PROJECT WILL BE THE SITE CONTRACTOR AND / OR THE GENERAL CONTRACTOR. ONCE THE GENERAL CONTRACTOR IS SELECTED, CONTACT INFORMATION WILL BE PROVIDED TO THE TOWN.

VEGETATIVE TURF ESTABLISHMENT PROCEDURE

SCARIFY ALL AREAS TO BE TOPSOILED AND SEED. APPLY A MINIMUM OF 4 INCHES OF TOPSOIL ON ALL AREAS TO BE SEED. APPLY GRASS SEED, LIME, FERTILIZER AND MULCH ACCORDING TO THE FOLLOWING SCHEDULE:

PERMANENT SEED MIXTURE:	
CREEPING RED FESCUE	0.45 LBS. PER 1,000 SQ. FT.
REDTOP	0.05
TALL FESCUE	0.45
TOTAL	0.95

FERTILIZER:
10-10-10 APPLY AT 7.5 LBS. PER 1,000 SQ. FT.

LIMESTONE:
APPLY AT 150 LBS. PER 1,000 SQ. FT.

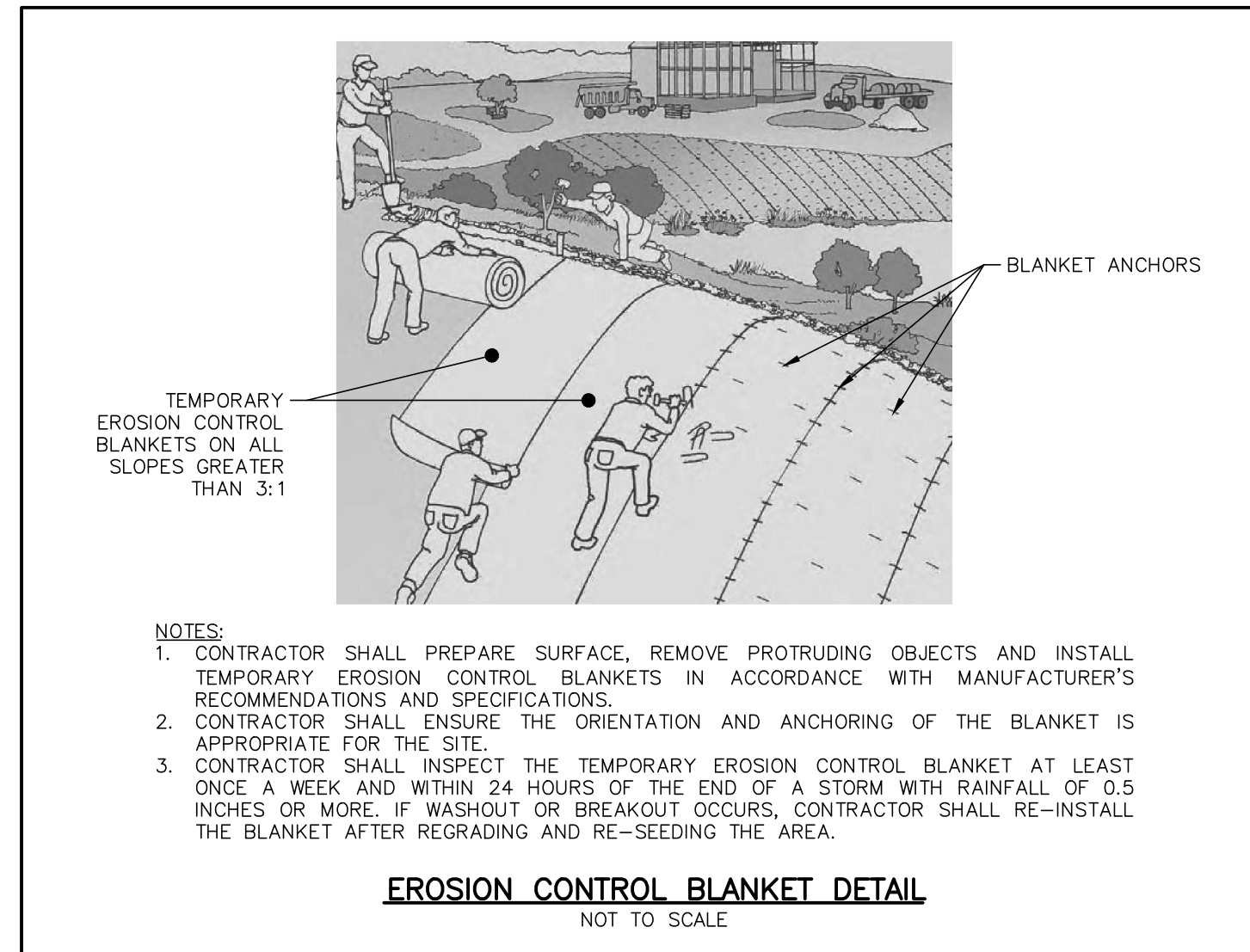
MULCHING:
SPREAD HAY OR STRAW OVER ALL AREAS AFTER SEEDING. USE 1 1/2 TO 2 BALES PER 1,000 SQ. FT. TARGET FOR 100% COVERAGE. ANCHOR BY USING NETTING OR TRACKING AS NECESSARY.

TEMPORARY EROSION CONTROL BLANKETS:
USE TEMPORARY EROSION CONTROL BLANKETS ON ALL SEEDED SLOPES STEEPER THAN 3 (H) TO 1 (V) AND/OR AS DIRECTED BY THE DESIGN ENGINEER.

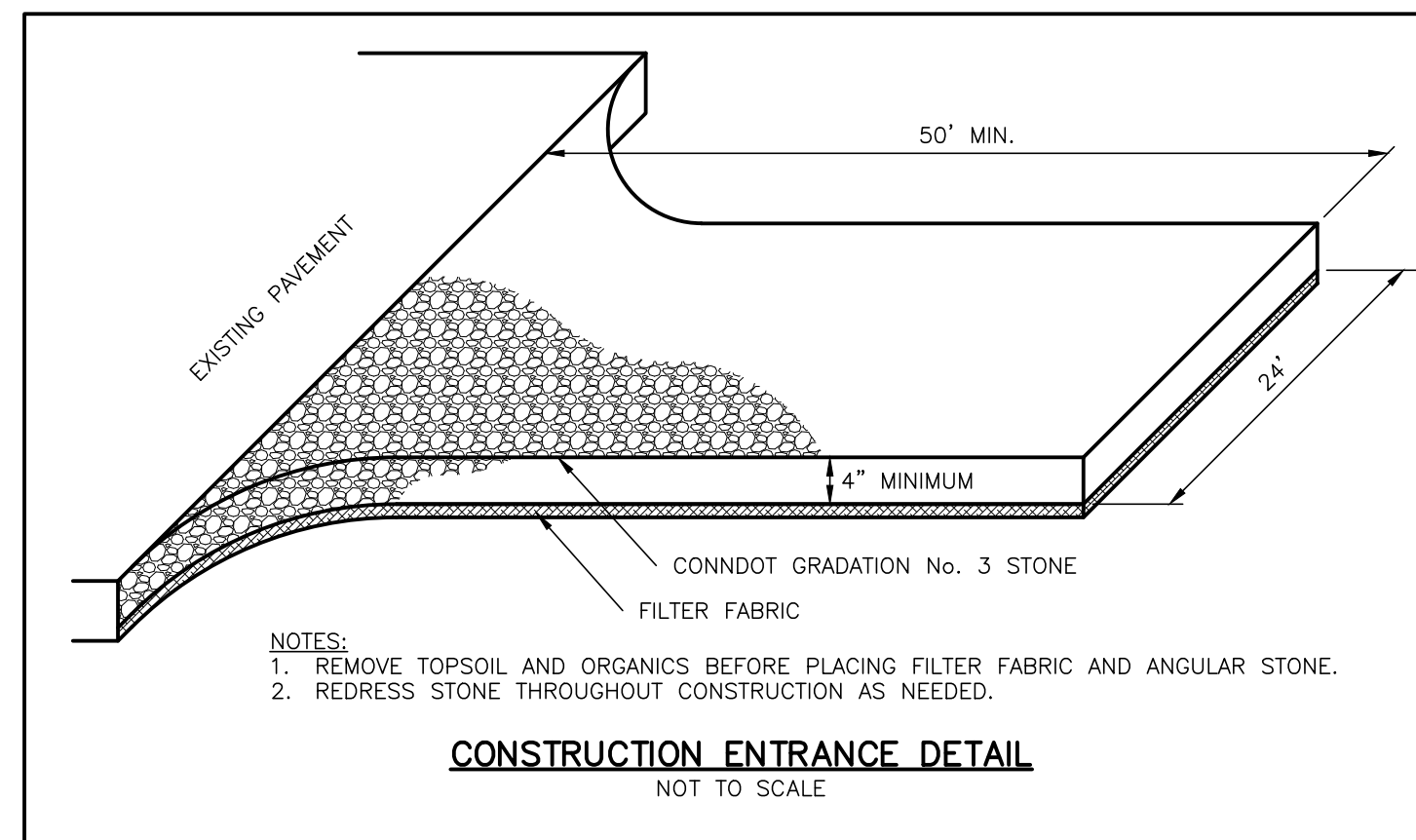
SEEDING DATES:
SEEDING DATES IN CONNECTICUT ARE NORMALLY APRIL 1 THROUGH JUNE 15 AND AUGUST 15 THROUGH OCTOBER 1. SEED GERMINATION NORMALLY CANNOT BE EXPECTED FROM NOVEMBER THROUGH FEBRUARY. IF ADEQUATE SEED GERMINATION IS NOT POSSIBLE DUE TO TIME OF YEAR CONSTRAINTS, MULCHING SHALL BE ADEQUATELY PROVIDED TO PROTECT THE SEED FROM WIND AND SURFACE EROSION UNTIL THE WEATHER IMPROVES AND THE SEEDING BECOMES WELL ESTABLISHED.

DRAINAGE SYSTEM MAINTENANCE

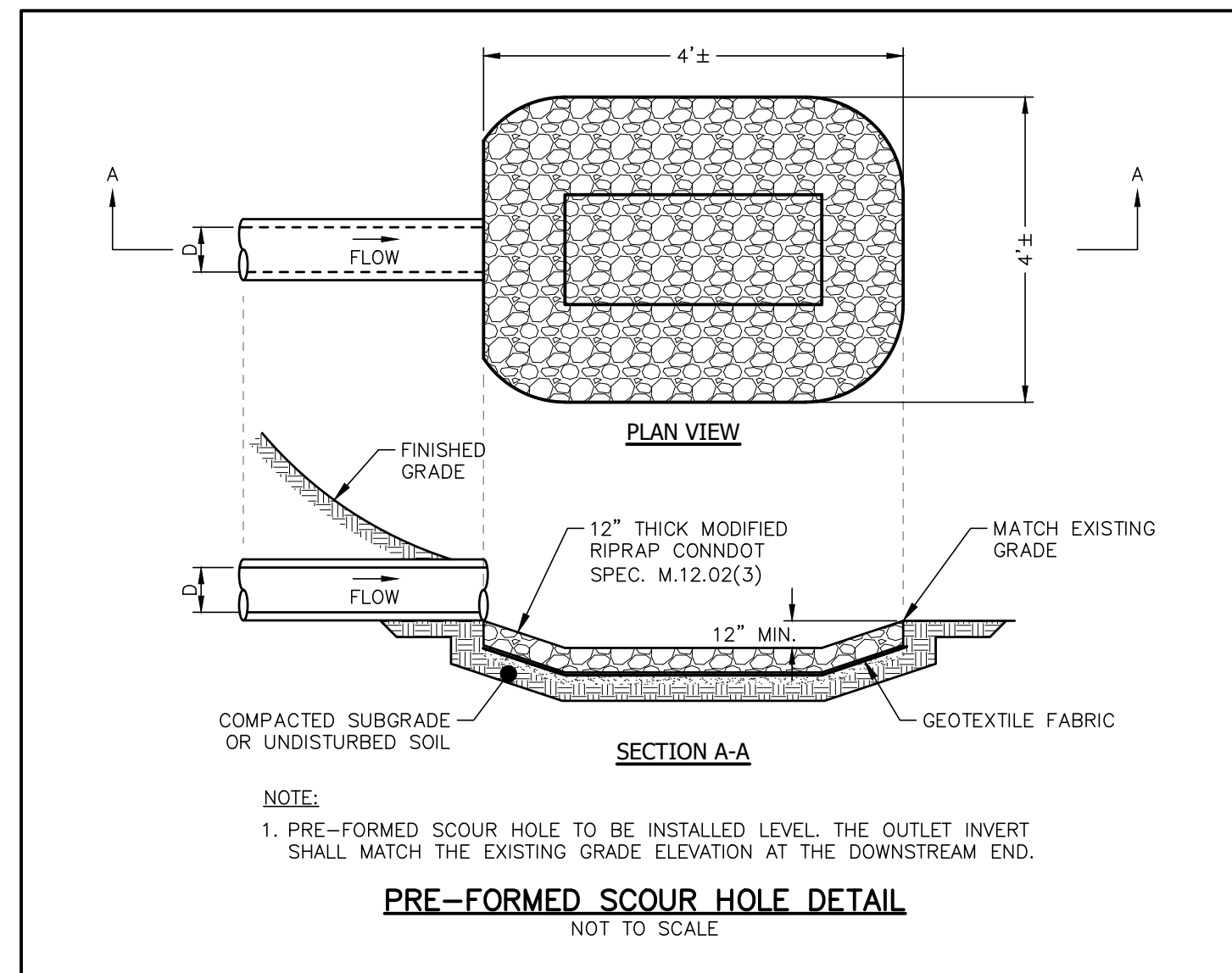
IT SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER TO MAINTAIN THE DRAINAGE SYSTEM AND STORMWATER MANAGEMENT BASINS TO ENSURE PROPER FUNCTION AND EFFICIENT OPERATION.



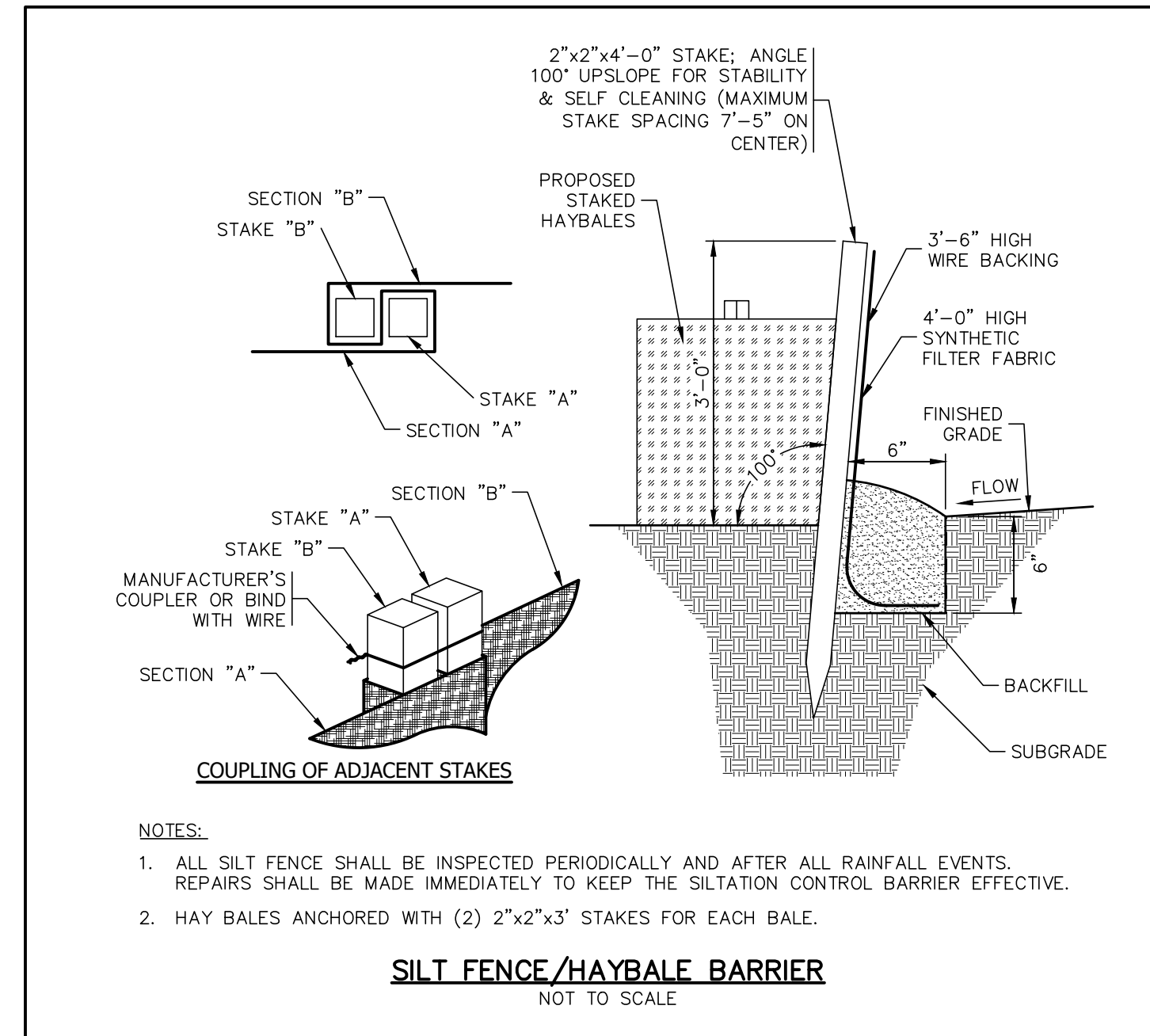
EROSION CONTROL BLANKET DETAIL
NOT TO SCALE



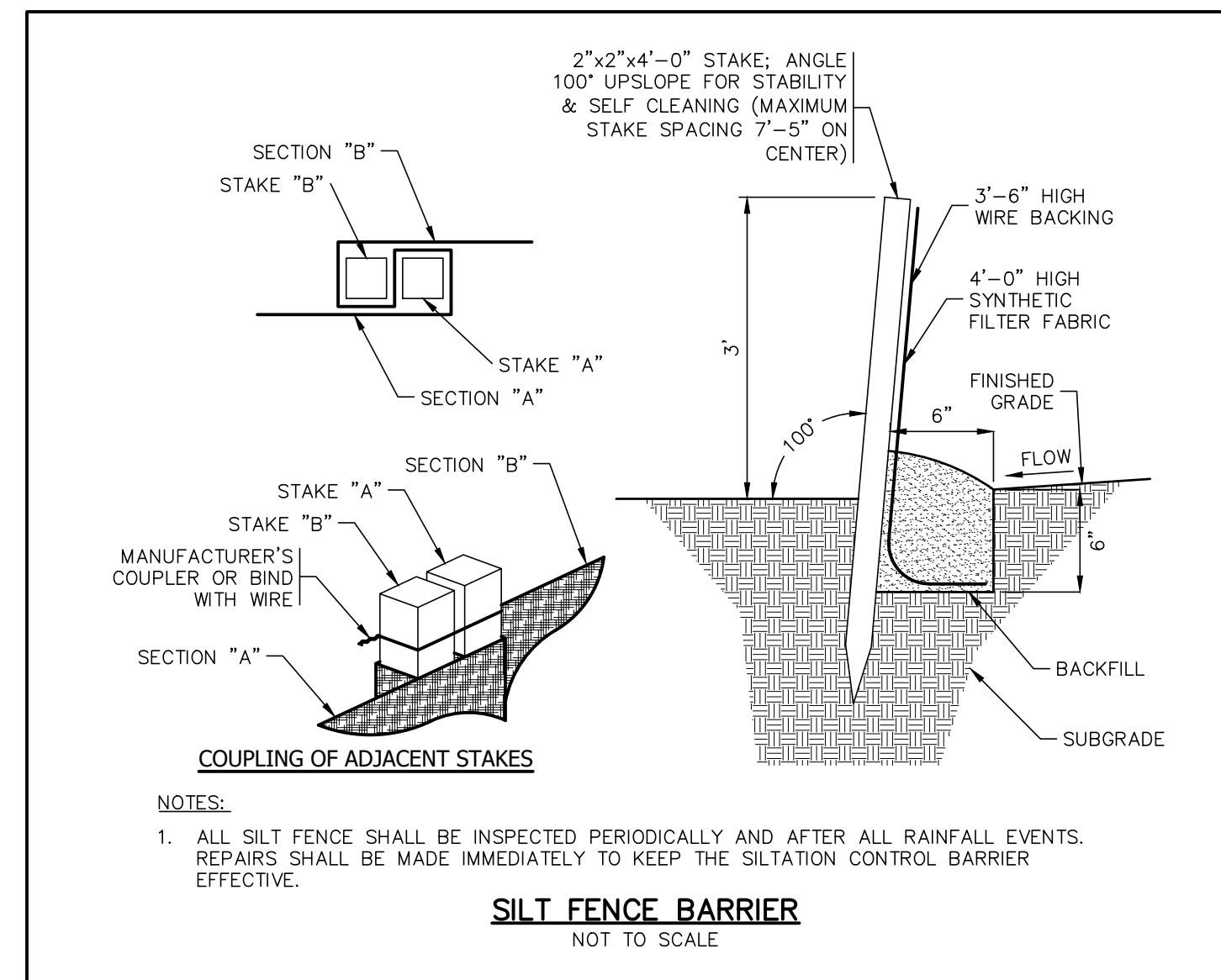
CONSTRUCTION ENTRANCE DETAIL
NOT TO SCALE



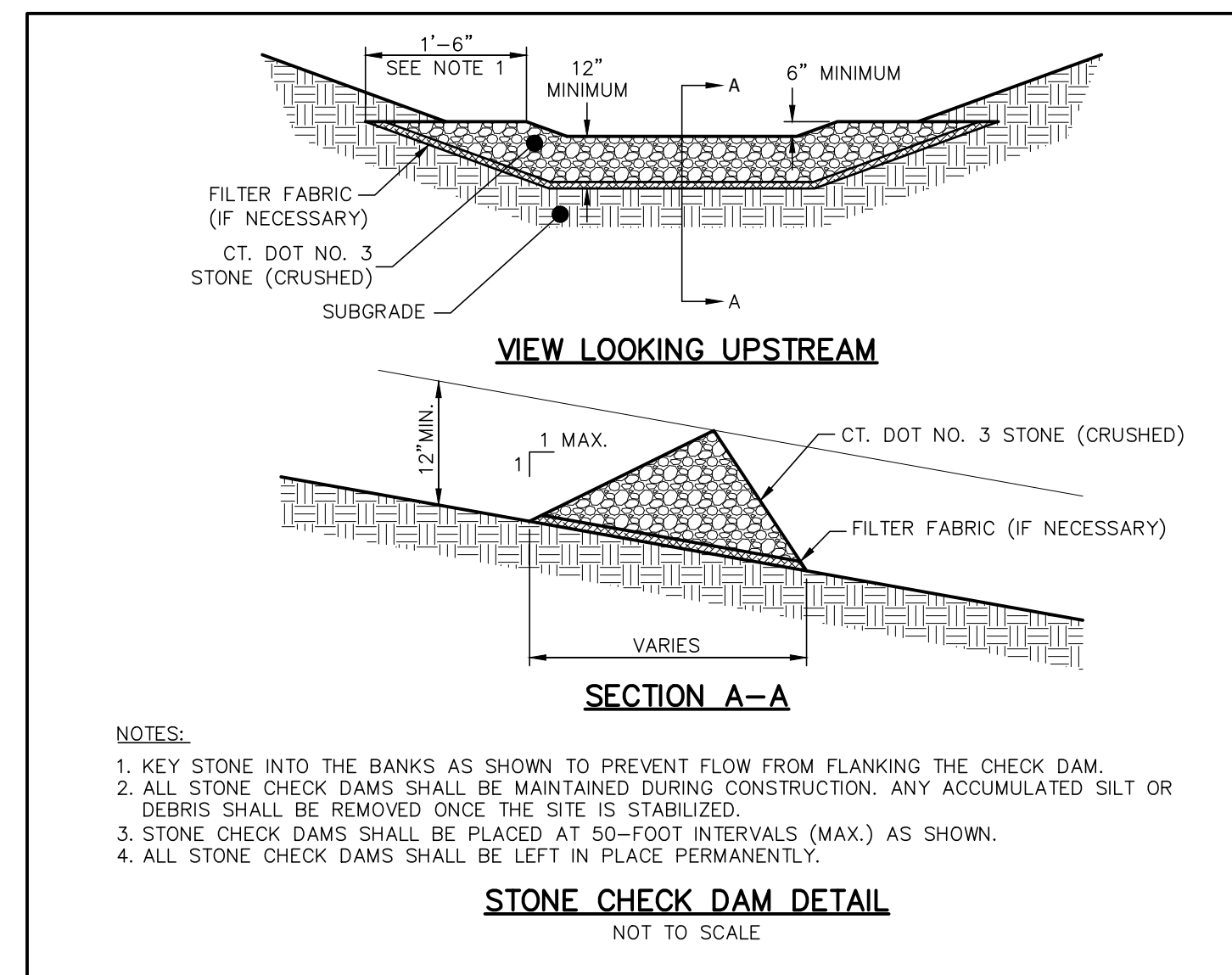
PRE-FORMED SCOUR HOLE DETAIL
NOT TO SCALE



SILT FENCE/HAYBALE BARRIER
NOT TO SCALE



SILT FENCE BARRIER
NOT TO SCALE



STONE CHECK DAM DETAIL
NOT TO SCALE

PLAN PREPARED BY:
INDIGO LAND DESIGN, LLC
1000 STATE ST. #100
40 ELM STREET, 2ND FLOOR
OLD SAYBROOK, CT 06475
PHONE: (860) 388-9343
FAX: (860) 391-8854

THE EMPLOYED SEAL OF THE PROFESSIONAL ENGINEER IS AFFIXED HERE FOR THIS MAP TO BE VALID

#	DATE	REVISIONS	DESCRIPTION	BY
1	11/13/2020	RG	GENERAL REVISIONS	

E&S NARRATIVE AND CONSTRUCTION DETAILS
PREPARED FOR HARVEST CHRISTIAN FELLOWSHIP OF NANTIC, INC.
NORTH BRIDE BROOK ROAD -- MAP 24 LOT 76
EAST LYME, CONNECTICUT

DATE:
SEPTEMBER 8, 2020

SCALE:
NOT TO SCALE

DRAWN BY:
RG

CHECKED BY:
JW

DWG. NO.:

ES-1

SHEET NO.:

10 of 10

JOB. NO.:

2019-545