

# HARVEST CHRISTIAN FELLOWSHIP

PREPARED FOR HARVEST CHRISTIAN FELLOWSHIP OF NIANTIC, INC.

NORTH BRIDE BROOK ROAD -- MAP 24 LOT 76

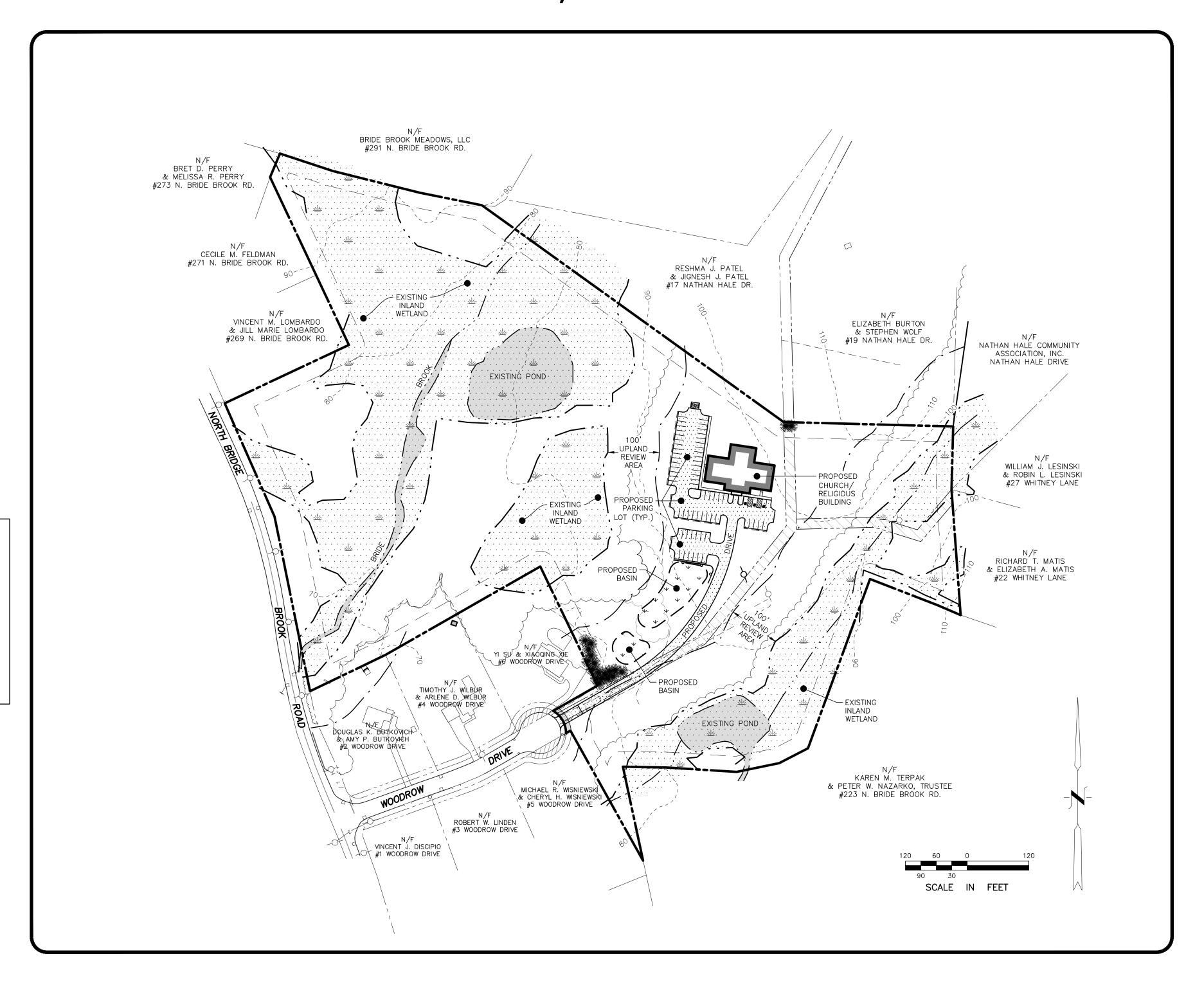
EAST LYME, CONNECTICUT

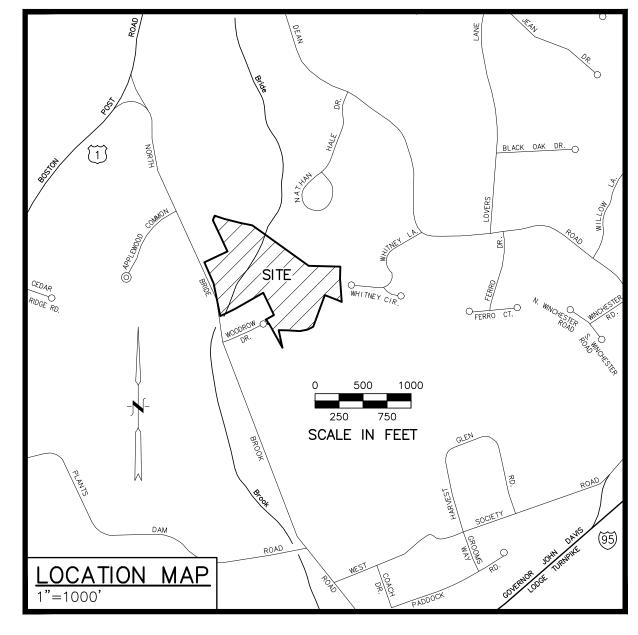
TITLE	DWG. NO.	SHI	EET I	VO.
SITE PLAN	SP-1	1	OF	10
GRADING & UTILITY PLAN	GU-1	2	OF	10
DRIVEWAY PROFILE	DP-1	3	OF	10
SIGHT LINE PLAN & PROFILE (LOOKING RIGHT)	SL-1	4	OF	10
SEPTIC SYSTEM PLAN	SS-1	5	OF	10
SOIL TESTING & SEPTIC DESIGN CRITERIA	ST-1	6	OF	10
SEPTIC SYSTEM DETAILS	SD-1	7	OF	10
CONSTRUCTION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

PLAN SET REV#3 DATED 7/30/2021

FOR ZONING REVIEW - NOT FOR CONSTRUCTION

3	7/30/2021	REVISIONS FOR ZONING SUBMITTAL	JG
2	12/10/2020	MINOR REVISIONS PER TOWN ENGINEER COMMENTS	RG
1	11/13/2020	GENERAL REVISIONS	RG
#	DATE	DESCRIPTION	BY



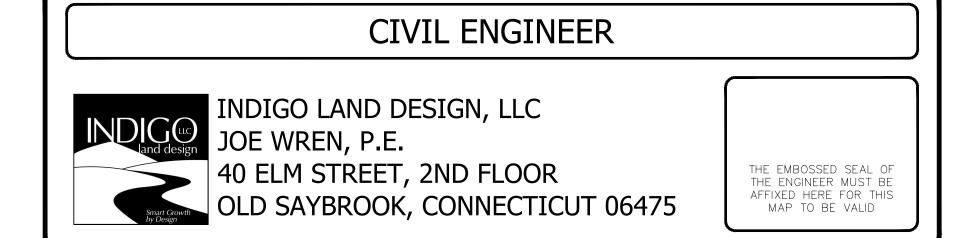


### LEGEND EXISTING PROPERTY/STREET LINE BUILDING SETBACK LINE EXISTING OVERHEAD WIRES EXISTING WATER LINE PROPOSED BUILDING EXISTING CONTOUR PROPOSED CONTOUR PROPOSED SILT FENCE PROPOSED WATER SERVICE LINE PROPOSED GAS LINE PROPOSED UNDERGROUND ELECTRIC, TELEPHONE & CABLE SERVICES IN SCH. 40 PVC CONDUITS PROPOSED DRAINAGE LINE PROPOSED ROOF LEADER TEST PIT LOCATION PERCOLATION TEST LOCATION BORE HOLE LOCATION UTILITY POLE IRON PIPE/PIN EXISTING MONUMENT × 98.5 PROPOSED SPOT GRADE G.T.D. GRADE TO DRAIN

PROPOSED AIR CONDENSING UNIT

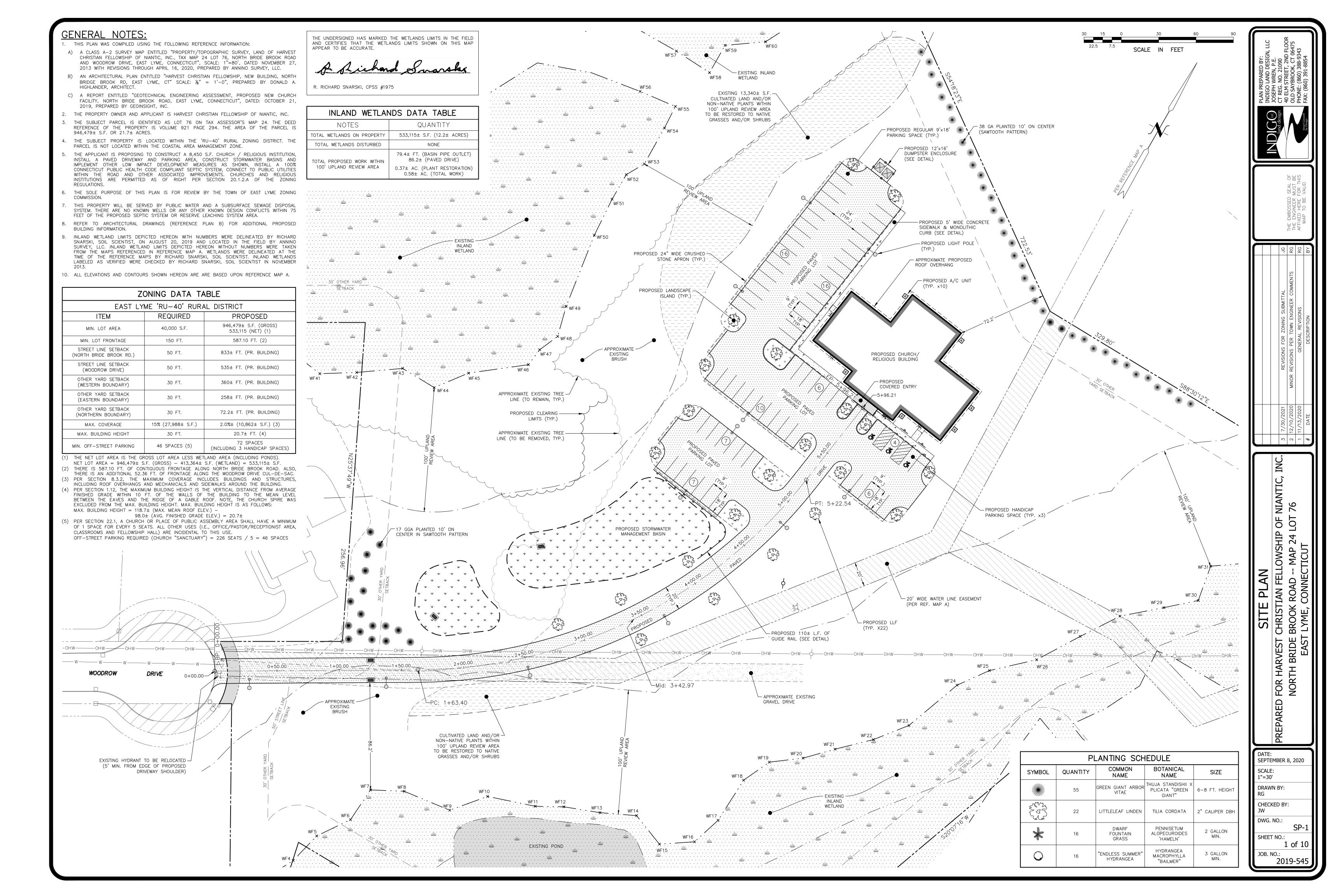
# LAND SURVEYOR

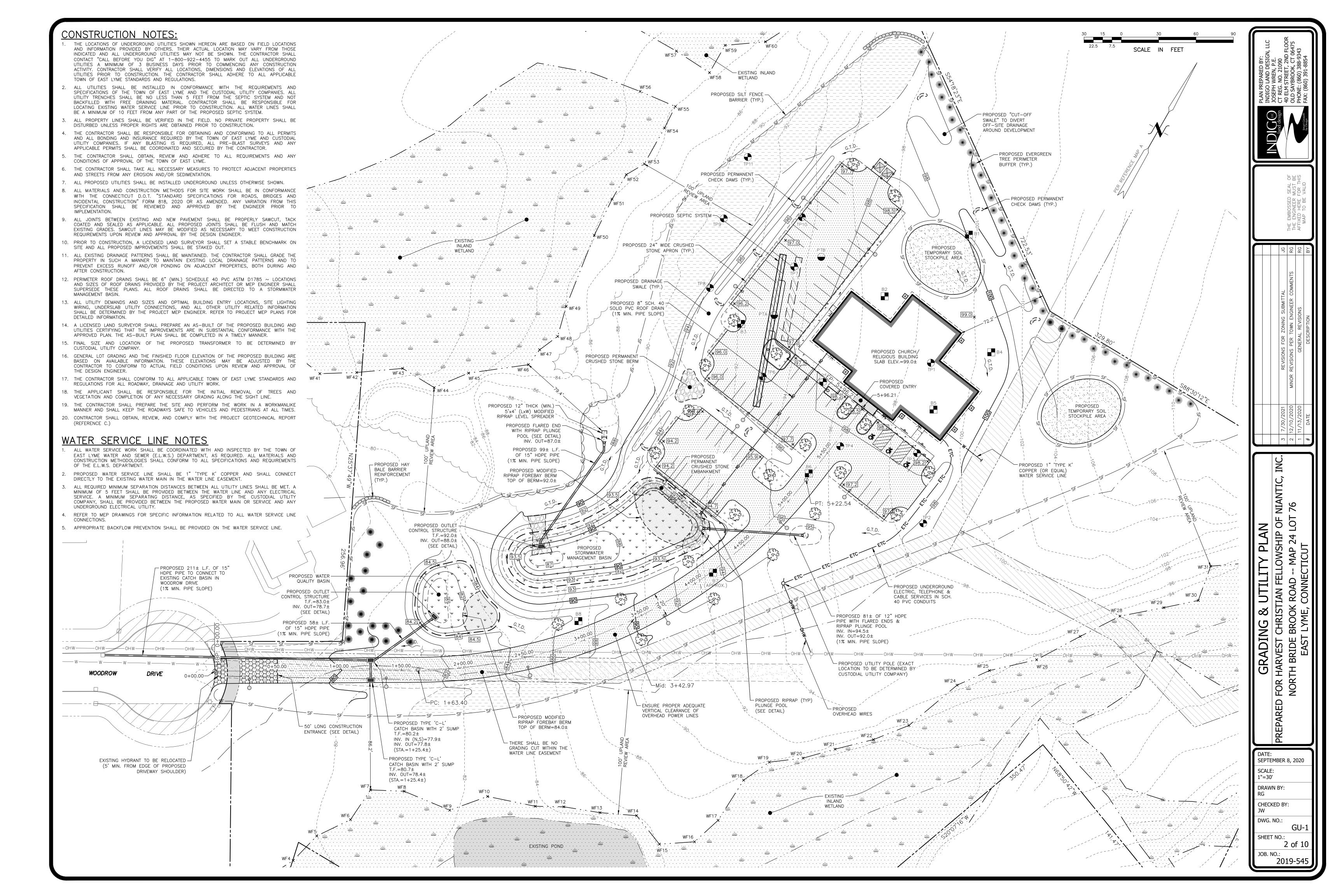
ANNINO SURVEY, LLC DAVID ANNINO, L.S. 222 OLD BOSTON POST ROAD, SUITE 3 OLD SAYBROOK, CT 06475



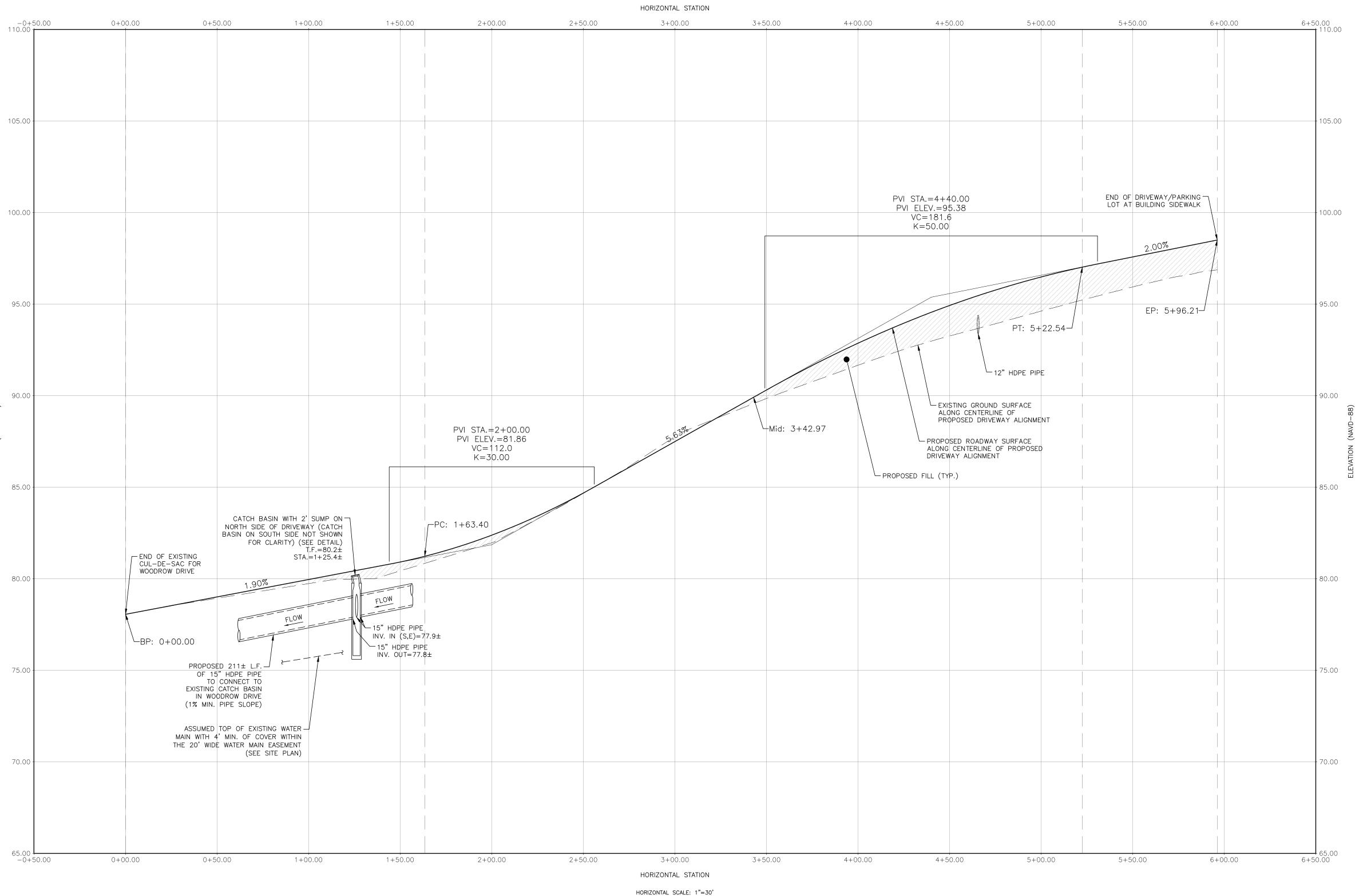
# PROPERTY OWNER/APPLICANT

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





### PROFILE VIEW OF PROPOSED DRIVEWAY ALIGNMENT



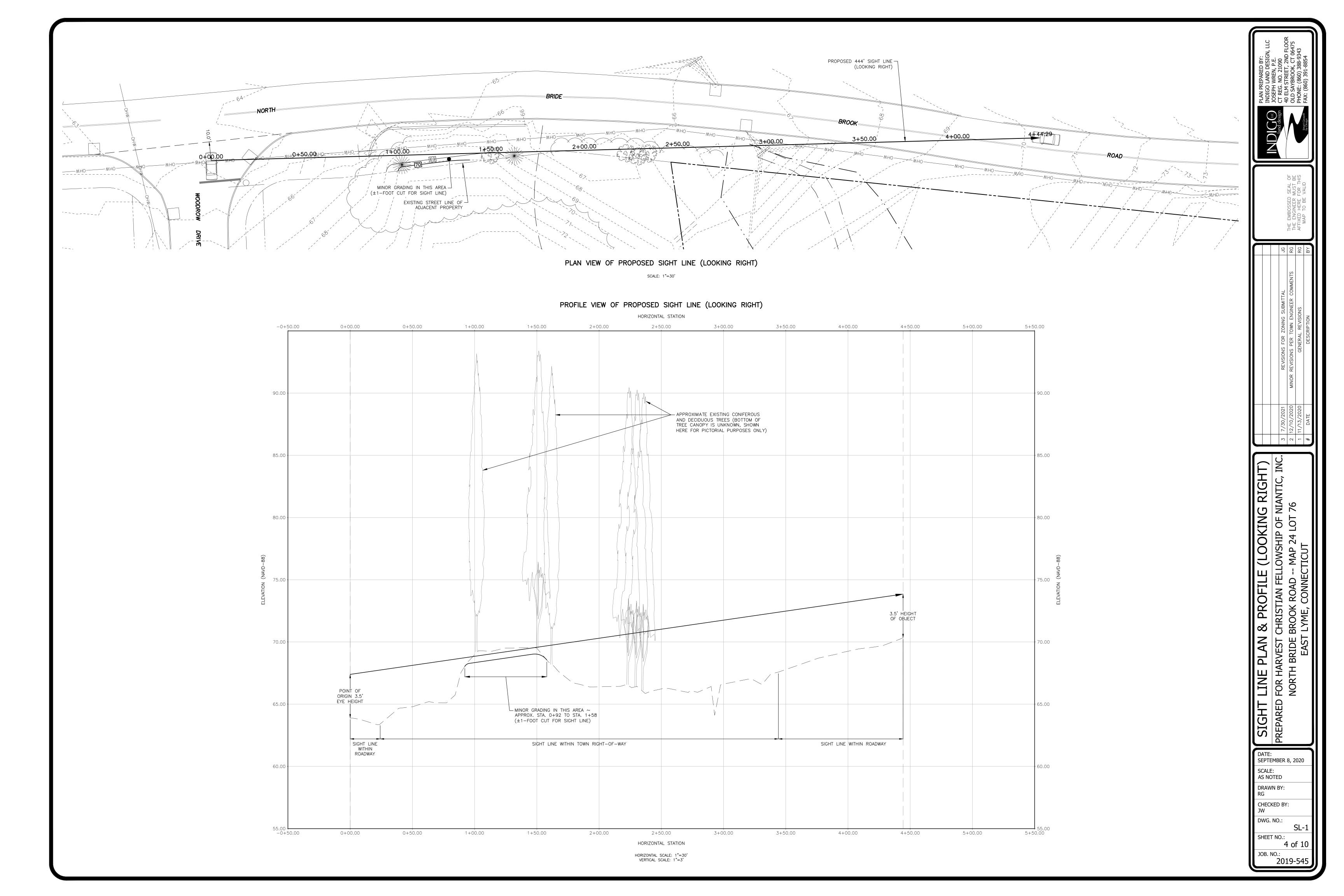
HORIZONTAL SCALE: 1"=30' VERTICAL SCALE: 1"=3'

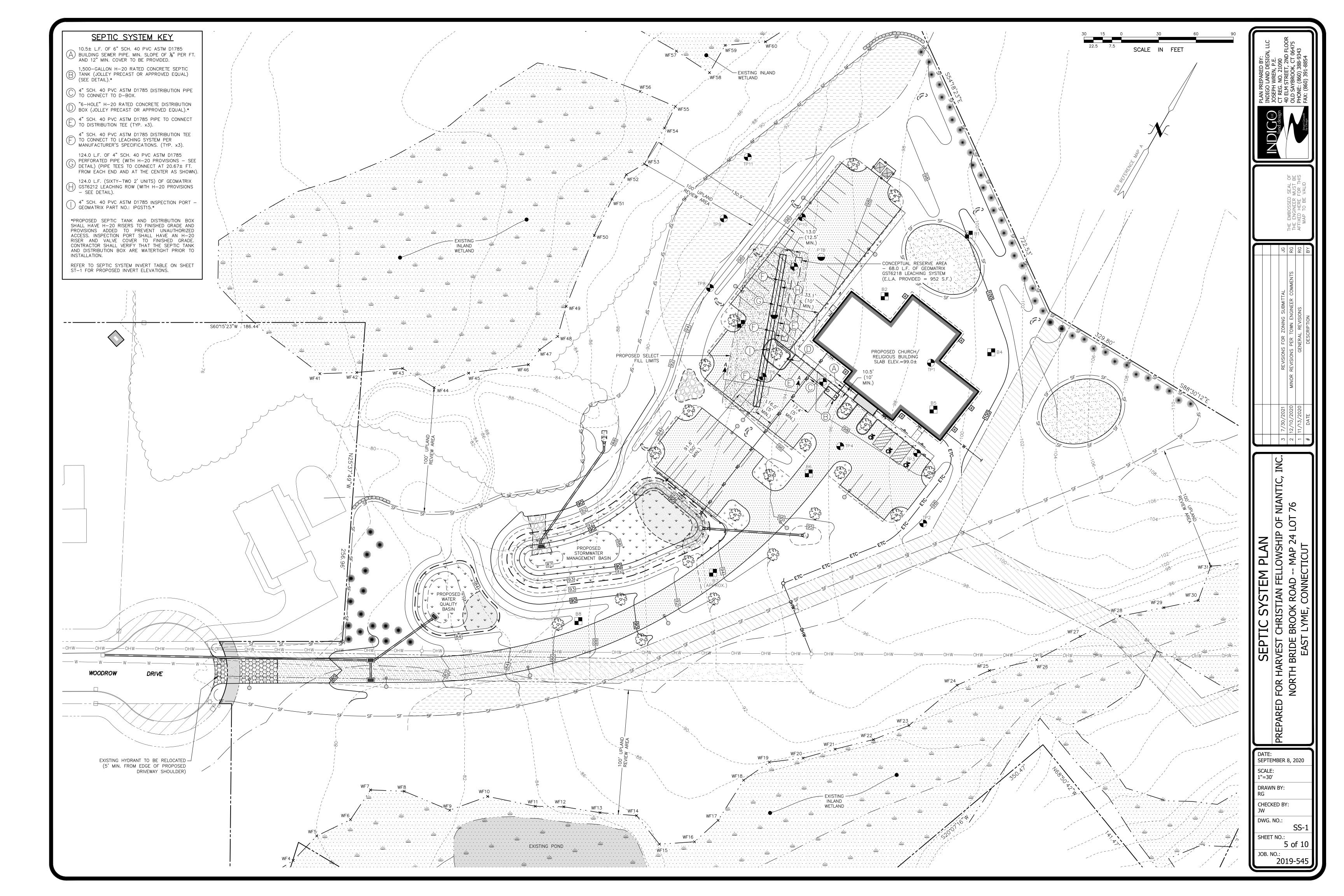
NIANTIC, 0F | PREPARED FOR HARVEST CHRISTIAN FINDE BROOK ROAD EAST LYME, CONNI

SEPTEMBER 8, 2020 SCALE: AS NOTED DRAWN BY:

CHECKED BY:

DWG. NO.: SHEET NO.:





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)

EXISTING GRADE = ELEV.  $98.7\pm$ 

TOPSOIL, DARK BROWN FINE SANDY LOAM

YELLOW-BROWN FINE SANDY LOAM, WITH GRAY AND STRONG BROWN

22"-105" GRAY SANDY LOAM WITH LITTLE GRAVEL

NO REFUSAL GROUNDWATER @ 105" SEEPAGE @ 94" MOTTLING @ 22" (ELEV. 96.9±)

| TP #2

EXISTING GRADE = ELEV.  $98.8\pm$ 

TOPSOIL, DARK BROWN FINE SANDY LOAM ELLOW-BROWN FINE SANDY LOAM, WITH GRAY

49"-103" GRAY SANDY LOAM WITH LITTLE GRAVEL

NOTE: NO SUBSOIL - POSSIBLY REMOVED BY FARMING. DENSE LATER @ 49"

GROUNDWATER @ 103" NO MOTTLING

AND STRONG BROWN

EXISTING GRADE = ELEV.  $98.8\pm$ 

TOPSOIL, DARK BROWN FINE SANDY LOAM

ELLOW-BROWN FINE SANDY LOAM, WITH GRAY AND STRONG BROWN

GRAY SANDY LOAM WITH LITTLE GRAVEL

NO REFUSAL NO GROUNDWATER" MOTTLING @ 17" (ELEV. 97.4±)

EXISTING GRADE = ELEV.  $96.4\pm$ 

「OPSOIL. DARK BROWN FINE SANDY LOAM ELLOW-BROWN FINE SANDY LOAM, WITH GRAY

GRAY SANDY LOAM WITH LITTLE GRAVEL

O REFUSAL

AND STRONG BROWN

GROUNDWATER @ 107" SEEPAGE @ 70" MOTTLING @ 22" (ELEV. 94.6±)

TP #5

EXISTING GRADE = ELEV.  $95.2\pm$ 

TOPSOIL, DARK BROWN FINE SANDY LOAM

YELLOW-BROWN FINE SANDY LOAM, WITH GRAY

AND STRONG BROWN

GRAY SANDY LOAM WITH LITTLE GRAVEL

NO REFUSAL GROUNDWATER @ 94" SEEPAGE @ 80" MOTTLING @( XX")

EXISTING GRADE = ELEV.  $93.0\pm$ 

TOPSOIL, DARK BROWN FINE SANDY LOAM YELLOW-BROWN FINE SANDY LOAM, WITH GRAY AND STRONG BROWN

27"-109" GRAY SANDY LOAM WITH LITTLE GRAVEL

GROUNDWATER @ 104" SEEPAGE @ 72" MOTTLING @ 19" (ELEV. 91.4±)

EXISTING GRADE = ELEV.  $93.5\pm$ 

TOPSOIL, DARK BROWN FINE SANDY LOAM

YELLOW-BROWN FINE SANDY LOAM, WITH GRAY AND STRONG BROWN

19"-110" GRAY SANDY LOAM WITH LITTLE GRAVEL

GROUNDWATER @ 94"

SEEPAGE @ 74" MOTTLING @ 19" (ELEV. 91.9±)

#### TP #8

EXISTING GRADE = ELEV.  $91.0\pm$ 

TOPSOIL, DARK BROWN FINE SANDY LOAM

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.  $90.5\pm$ 

TOPSOIL, DARK BROWN FINE SANDY LOAM 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.  $93.4\pm$ 

TOPSOIL, DARK BROWN FINE SANDY LOAM YELLOW-BROWN FINE SANDY LOAM, WITH GRAY AND STRONG BROWN

GRAY SANDY LOAM WITH LITTLE GRAVEL NO REFUSAL GROUNDWATER @ 100" MOTTLING @ 19" (ELEV. 91.8±)

#### | TP #11

38"-110"

EXISTING GRADE = ELEV.  $90.6\pm$ 

TOPSOIL, DARK BROWN FINE SANDY LOAM YELLOW-BROWN FINE SANDY LOAM, WITH GRAY

AND STRONG BROWN GRAY SANDY LOAM WITH LITTLE GRAVEL

GROUNDWATER @ 87" MOTTLING @ 27" (ELEV. 88.4±)

### CONDUCTED BY: ROSS GLADSTONE, E.I.T. (INDIGO)

PT A DATE: 11/10/2020

NO REFUSAL

ı	DEPTH: 19 1/2"±						
I	TIME (MINUTE)		DEPTH (INCHES)	DROP (INCHES)	PERC RATE (MIN./IN.)		
I	0	0	7 1/2				
I	10	0	9 1/2	2	5.0		
I	20	0	10 1/2	1	10.0		
I	30	@	11 1/4	3/4	13.3		
I	40	@	11 7/8	5/8	16.0		
I	50	@	12 1/2	5/8	16.0		
I	60	@	13 1/8	5/8	16.0		

PERCOLATION TEST DATA

PERCOLATION RATE: 16.0 MIN./INCH

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

DATE: 11/10/2020 DEPTH: 19 1/2"±

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

### <u>GENERAL NOTES (SEPTIC SYSTEM):</u>

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

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.

3. 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.

4. THE PROPOSED BUILDING WILL BE CONSTRUCTED ON SLAB AND WILL NOT HAVE FOOTING DRAINS. THERE ARE NO KNOWN DOWNGRADIENT SEPTIC SYSTEM COMPONENTS WITHIN 25 FEET OF ANY UPGRADIENT GROUNDWATER DRAINS OR ANY UPGRADIENT SEPTIC SYSTEM COMPONENTS WITHIN 50 FEET OF ANY DOWNGRADIENT GROUNDWATER DRAINS.

5. 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 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.

#### GENERAL CONSTRUCTION NOTES (SEPTIC SYSTEM):

RECOMMENDED BY THE CONNECTICUT PUBLIC HEALTH CODE.

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT CONNECTICUT PUBLIC HEALTH CODE, AS AMENDED.

2. 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 SEPTICE SYSTEM PRIOR TO CONSTRUCTION.

3. NO WORK SHALL COMMENCE IN THE SYSTEM AREA UNTIL A SEPTIC PERMIT HAS BEEN TAKEN OUT BY THE LICENSED INSTALLER.

4. 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

5. 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

6. 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.

9. 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.

10. 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.

11. NO HEAVY EQUIPMENT SHALL BE DRIVEN OVER THE INSTALLED LEACHING SYSTEM AREA. 12. 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. 13. THE LICENSED INSTALLER IS RESPONSIBLE TO INSTALL THE SUBSURFACE SEWAGE DISPOSAL SYSTEM IN ACCORDANCE WITH THE APPROVED PLAN.

14. 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.

15. 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

16. 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.

17. THE LICENSED INSTALLER SHALL CONFIRM THAT NO LEDGE IS PRESENT WITHIN 48 INCHES BELOW THE BOTTOM OF THE PROPOSED LEACHING SYSTEM.

18. 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.

19. THE LICENSED INSTALLER SHALL INCLUDE ALL ADEQUATE PROVISIONS FOR FREEZE PROTECTION FOR ALL PIPING AND JUNCTIONS.

20. 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).

22. THE CONTRACTOR SHALL FULLY COORDINATE WITH GEOMATRIX SYSTEMS, LLC (GEOMATRIX) AND SHALL ABIDE BY ALL SPECIFICATIONS AND INSTRUCTIONS FOR INSTALLATION OF THE GEOMATRIX GST6218 LEACHING SYSTEM. IT IS STRONGLY RECOMMENDED, ALTHOUGH NOT REQUIRED BY THE PUBLIC HEALTH CODE, TO INSTALL A SOILAIR 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.

23. 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

### SANITARY SYSTEM DESIGN CRITERIA

DESIGN	BUILDING USE	REQUIRED	LEACHING	EFFECTIVE	LEACHING	REQUIRED TANK	TANK CAPACITY
PERC RATE		LEACHING AREA	SYSTEM TYPE	LEACHING AREA	AREA PROVIDED	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) TTHE 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	SEPTIC TANK	D-BOX	LEACHING ROW
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.

- MIN. 12" CRUSHED AGGREGATE APPROXIMATE FILL OVER FABRIC (SEE DETAIL) EXISTING GRADE PROPOSED GEOMATRIX GST6212 APPROXIMATE COMMON FILI LEACHING SYSTEM (WITH H-20 PROPOSED GRADE PROVISIONS) (SEE DETAIL) (PARKING LOT - SEE PAVEMENT DETAIL) BOTTOM OF I FACH PROPOSED 25' MIN. \_\_\_\_5" MIN. <del>- < →</del> PROPOSED SELECT FILL PROPOSED -PROPOSED SELECT FILL SELECT FILL FINE SANDY LOAM YELLOW-BROWN FINE SANDY LOAM, AVG. MOTTI INC WITH GRAY AND STRONG BROWN @ TP #6 & #7 MOTTLING @ TP #7 MOTTLING @ TP #6 ELEV. = 91.4±  $FIFV. = 91.9 \pm$ GRAY SANDY LOAM WITH LITTLE GRAVEL \_\_\_ GROUNDWATER SEEPAGE @ TP #7 ELEV. = 87.3± MOTTLING @ TP #8 ELEV. = \$9.0± GROUNDWATER SEEPAGE @ TP #6 ELE∜. = 87.0± GROUNDWATER SEEPAGE @ TP #8 GROUNDWATER @ TP #7 GROUNDWATER @ TP #6 ELEV. =  $84.3 \pm$ ELEV. =  $85.7 \pm$ GROUNDWATER @ TP #8 ELEV. =  $83.2 \pm$ BOTTOM OF TP # ELEV. = 84.3±  $\frac{\text{BOTTOM OF TP } \#6}{\text{ELEV.}} = 83.9\pm$ 32 56 12 16 20 36 HORIZONTAL DISTANCE (FT.)

PROPOSED LEACHING SYSTEM PROFILE - X-SECTION A-A

HORIZ. SCALE = VERT. SCALE = 1"=4"

CRITERIA OF NIANTIC, 0  $\infty$ RVEST NOR.

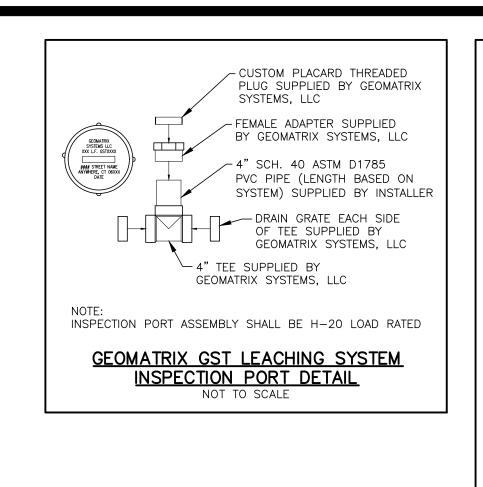
SEPTEMBER 8, 2020 SCALE: 1"=4"

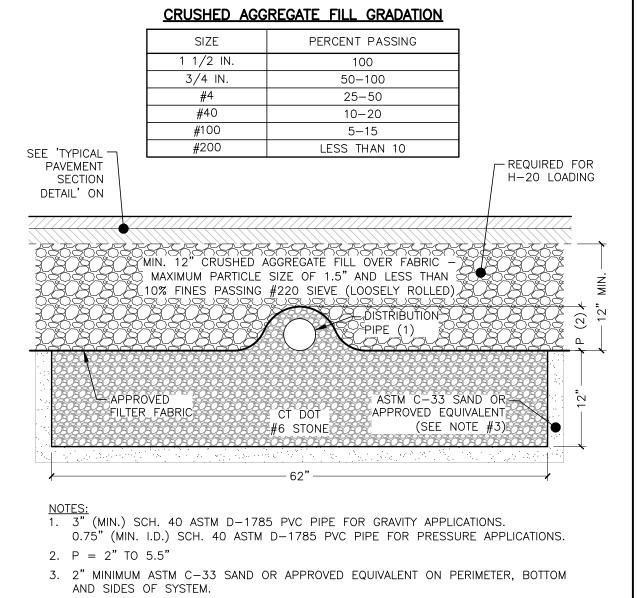
CHECKED BY: DWG. NO.: ST-:

DRAWN BY:

SHEET NO. 6 of 10

JOB. NO.: 2019-545



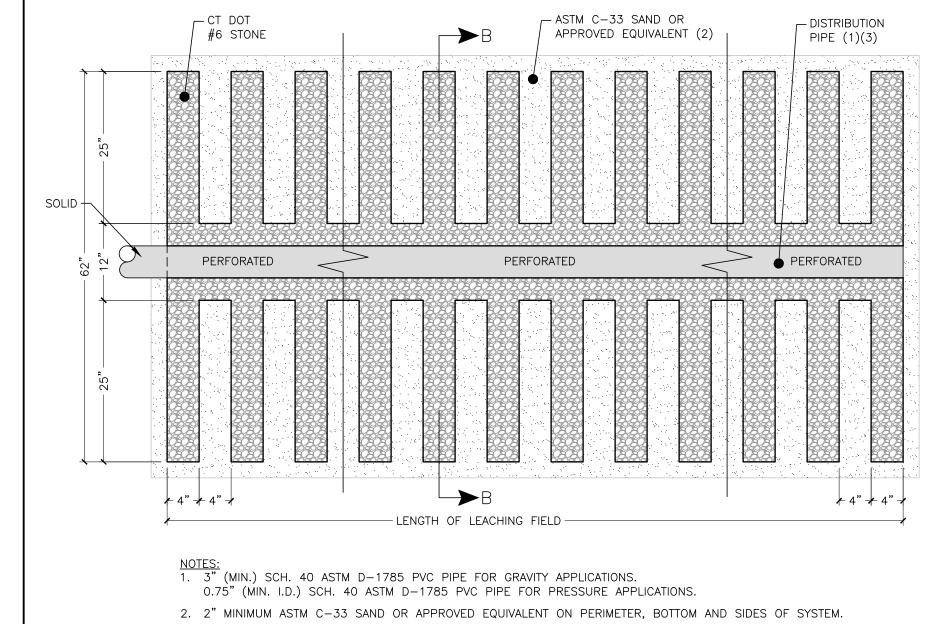


4. PAVEMENT BASE AND SUBBASE (12" MIN. THICKNESS + PAVEMENT) MAY BE

GEOMATRIX GST6212 (WITH H-20 PROVISIONS) LEACHING SYSTEM - X-SECTION B-B

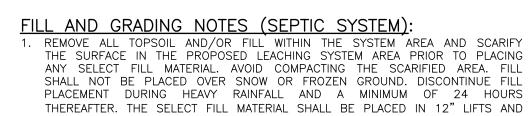
NOT TO SCALE

ADEQUATE FOR H-20 LOADING. CONFIRM WITH GEOMATRIX SYSTEMS, LLC.



3. DISTRIBUTION PIPES SHALL EXTEND TO THE ENDS OF ROWS AND SHALL BE PROPERLY CAPPED.

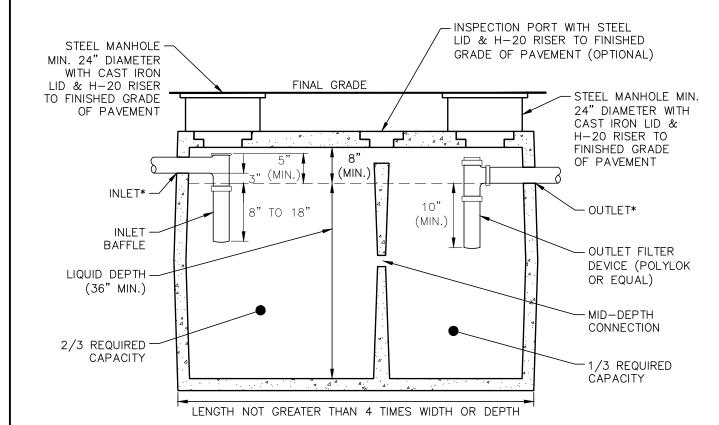
GEOMATRIX GST6212 (WITH H-20 PROVISIONS) LEACHING SYSTEM - PLAN VIEW



- COMPACTED TO 90% DENSITY. 2. SELECT FILL MATERIAL SHALL CONSIST OF CLEAN SAND AND GRAVEL, FREE FROM ORGANIC MATTER AND FOREIGN SUBSTANCES. THE SELECT FILL MATERIAL SHALL MEET THE REQUIREMENTS OF THE PUBLIC HEALTH CODE PROVIDED IN
- THE TABLE ON THIS SHEET. 3. THE LICENSED INSTALLER SHALL BE RESPONSIBLE FOR PREPARING THE
- LEACHING AREA UTILIZING THE SELECT FILL MATERIAL. 4. ALL NECESSARY STEPS SHALL BE TAKEN TO PROTECT THE UNDERLYING NATURALLY OCCURRING SOILS FROM OVER COMPACTION AND SILTATION ONCE
- 5. THE CONTRACTOR SHALL PROVIDE GRADATION SPECIFICATIONS OF THE SELECT FILL MATERIAL TO BE USED FOR THE PROPOSED SEPTIC SYSTEM TO THE DESIGN ENGINEER AND TOWN SANITARIAN PRIOR TO ORDERING AND INSTALLATION.

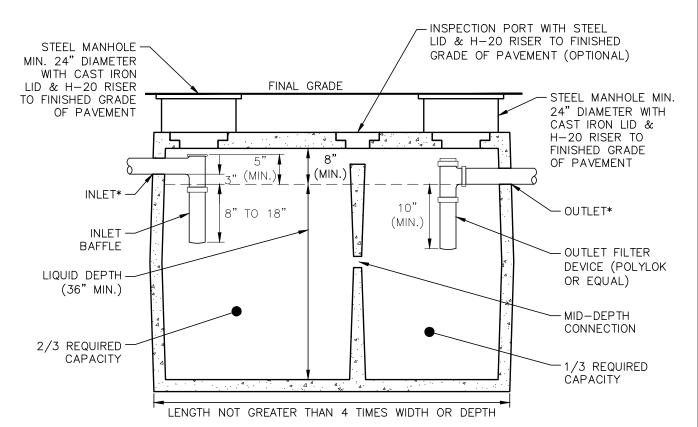
SELECT FILL GRADATION TABLE							
SIEVE SIZE	PERCENT	PASSING					
SIEVE SIZE	WET SIEVE	DRY SIEVE					
#4	100	100					
#10	70-100	70-100					
#40	10-50*	10-75					
#100	0-20	0-5					
#200	0-5	0-2.5					
	NG THE #40 SIEVE CAN BE INCREAS						

TO NO GREATER THAN 75% IF THE PERCENT PASSING THE #100 SIEVE DOES NOT EXCEED 10% AND THE #200 SIEVE DOES NOT EXCEED 5%. \*\* A SIEVE ANALYSIS FOR THE SELECT FILL MATERIAL SHALL BE PROVIDED TO THE <u>DESIGN</u> ENGINEER. ONLY THE <u>DESIGN</u> ENGINEER MAY APPROVE SELECT FILL MATERIAL NOT IN COMPLIANCE WITH THE GRADATION TABLE IF THE MATERIAL PASSING THE #200 SIEVE DOES NOT EXCEED 6% BASED ON WET SIEVË.



1. INLET AND OUTLET PIPING SHALL BE AS LEVEL AS POSSIBLE AND SHALL NOT EXCEED 1/4" PER FOOT. 2. ALL TANKS REQUIRING RISERS SHALL MAINTAIN THE ORIGINAL COVERS ON THE TANKS, HAVE RISER COVERS THAT WEIGH AT LEAST 59 LBS AND/OR INSTALL A SAFETY DEVICE BELOW THE RISER TO PREVENT INDIVIDUALS FROM FALLING INTO A TANK. ALL BELOW GRADE TANK OR RISER COVER HANDLES SHALL CONTAIN OR BE FITTED WITH A MATERIAL THAT CAN BE LOCATED WITH A METAL DETECTOR.

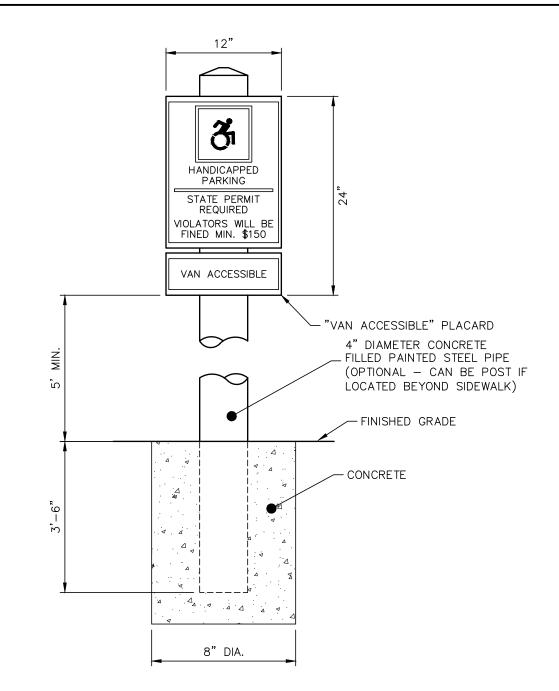
> 1.500 GALLON H-20 CONCRETE SEPTIC TANK DETAIL NOT TO SCALE



NIANT P SEPTIC HARVEST CHATH BRIDE BF FOR HAF 

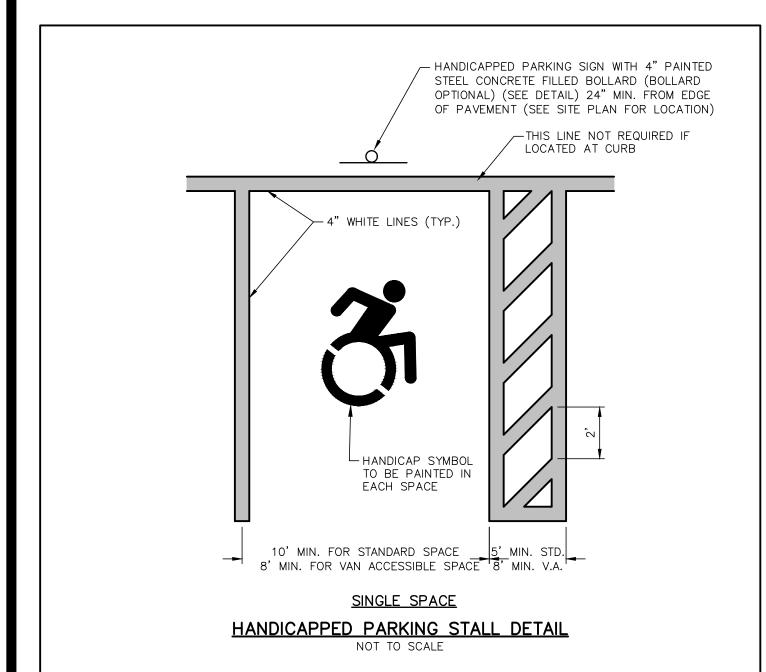
SEPTEMBER 8, 2020 NOT TO SCALE DRAWN BY: CHECKED BY: DWG. NO.:

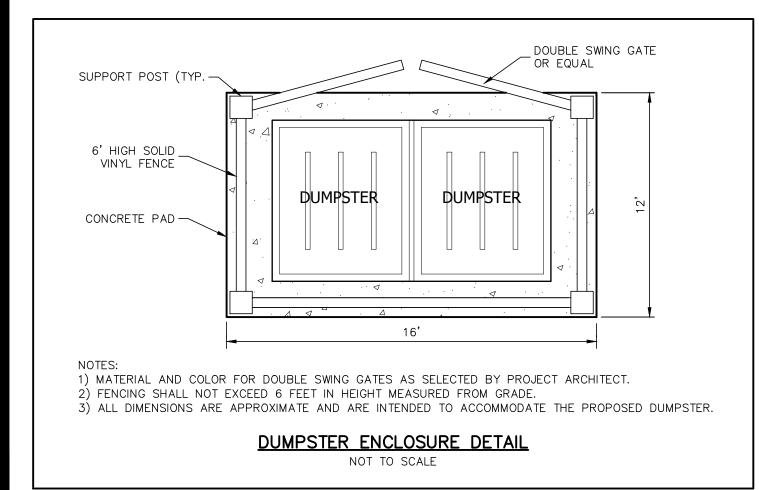
SHEET NO. 2019-545

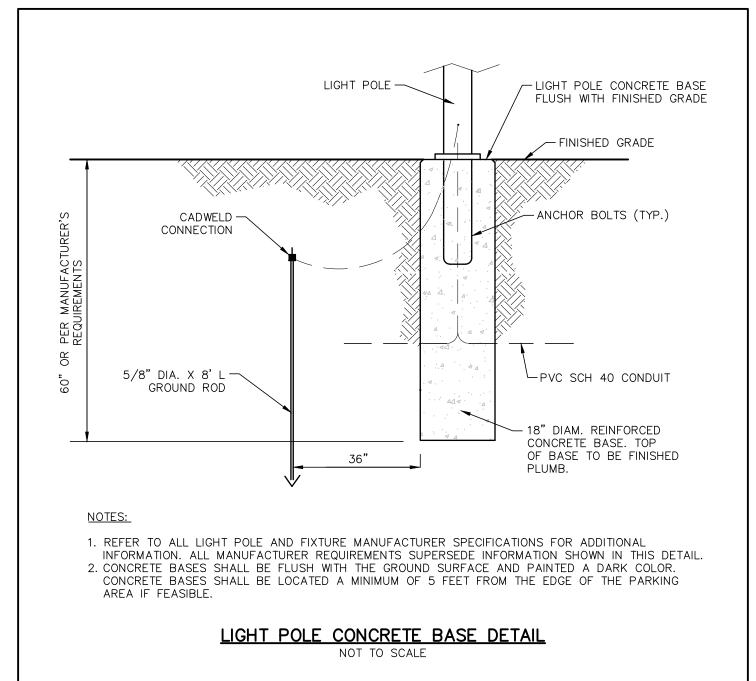


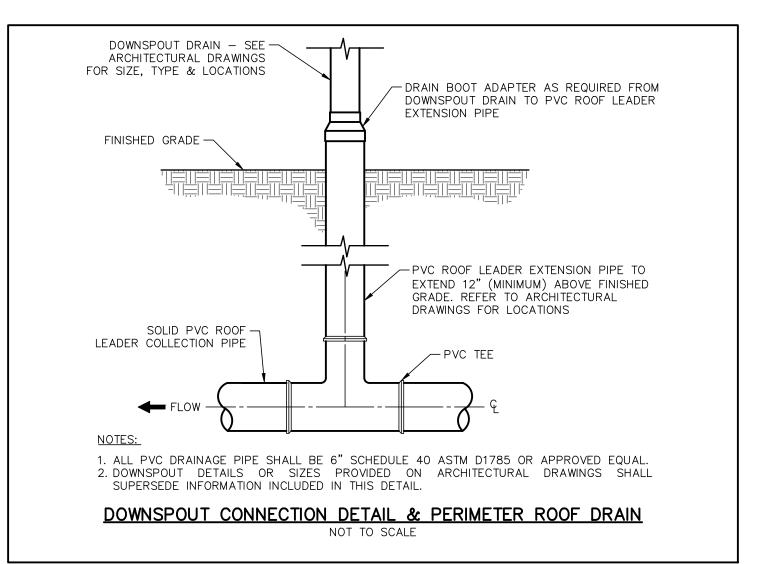
- 1. EMBLEM AND LETTERING TO BE WHITE ON A BLUE BACKGROUND. 2. SIGN TO BE EMBOSSED GALVANIZED STEEL WITH BAKED ENAMEL FINISH.
- 3. INSTALL SIGNS IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL REQUIREMENTS (2001 MUTCD STANDARDS OR AS AMENDED).
- 4. SHOP DRAWINGS REQUIRED. 5. SEE SITE DEVELOPMENT PLAN AND HANDICAPPED PARKING STALL DETAIL FOR LOCATION OF

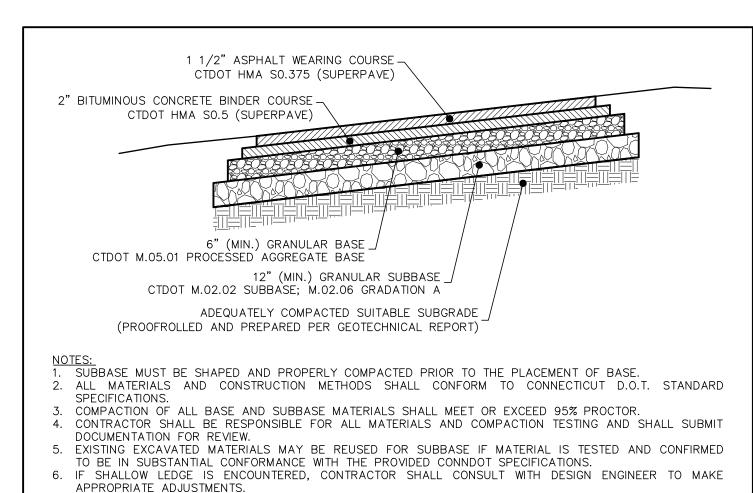
## HANDICAPPED PARKING SIGN (WITH OPTIONAL BOLLARD) DETAIL





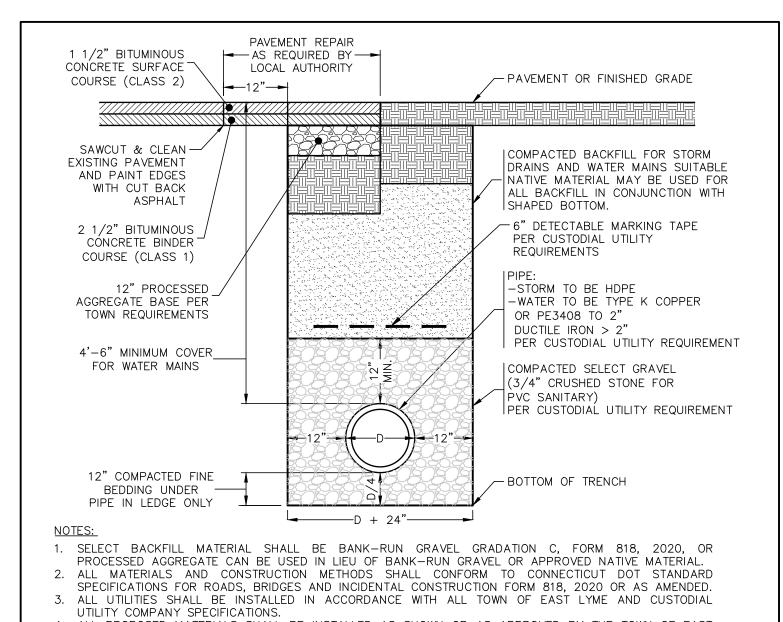






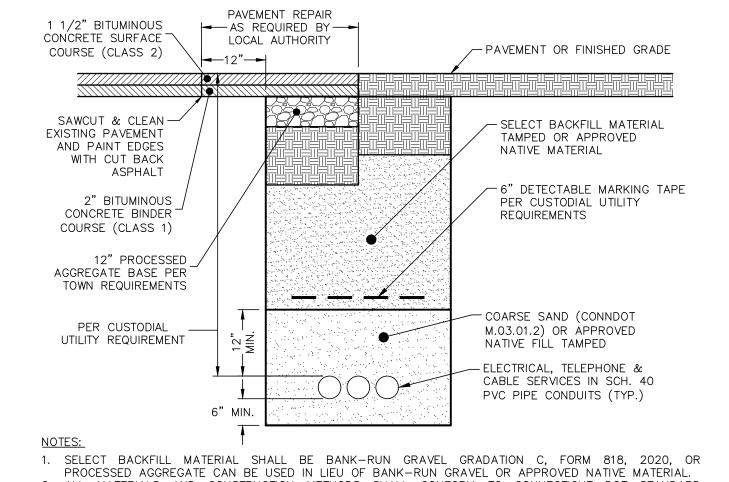
TYPICAL PAVEMENT SECTION DETAIL

NOT TO SCALE

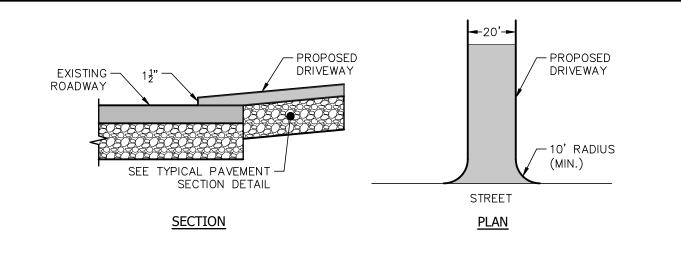


4. ALL PROPOSED MATERIALS SHALL BE INSTALLED AS SHOWN OR AS APPROVED BY THE TOWN OF EAST LYME AND/OR CUSTODIAL UTILITY COMPANY.

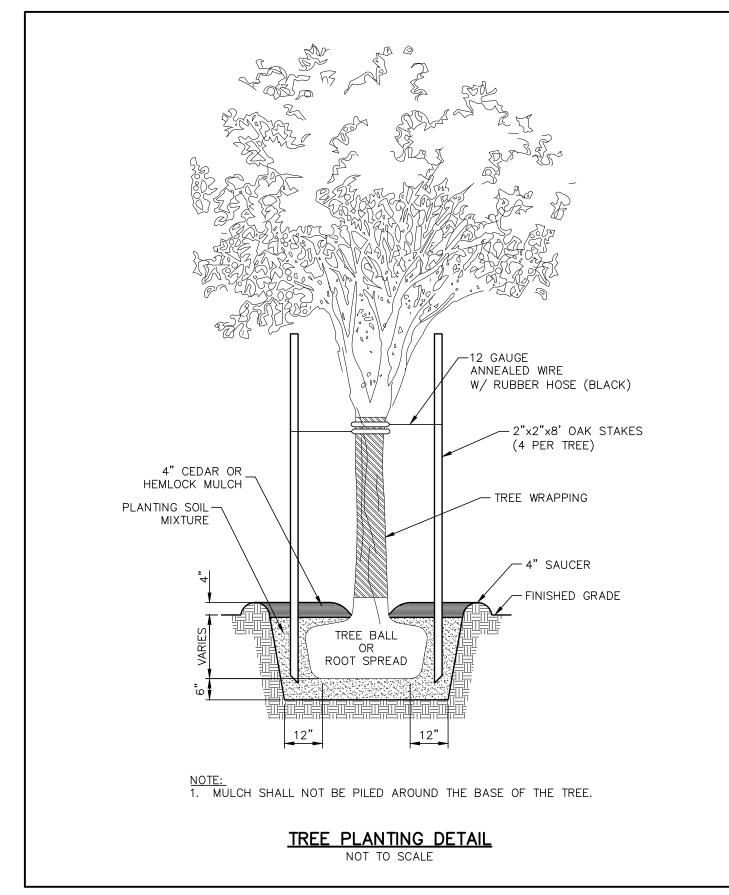
#### TYPICAL TRENCH DETAIL NOT TO SCALE

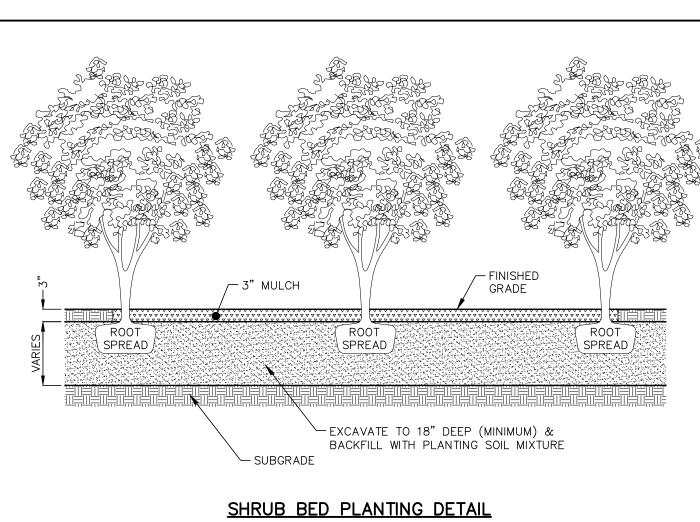


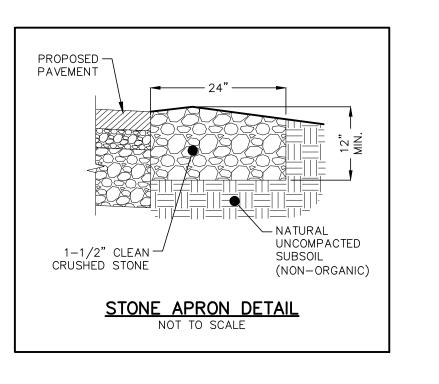
- 2. ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO CONNECTICUT DOT STANDARD SPECIFICATIONS FOR ROADS, BRIDGES AND INCIDENTAL CONSTRUCTION FORM 818, 2020 OR AS AMENDED.
- 3. ALL UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH ALL TOWN OF EAST LYME AND CUSTODIAL UTILITY COMPANY SPECIFICATIONS. 4. 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













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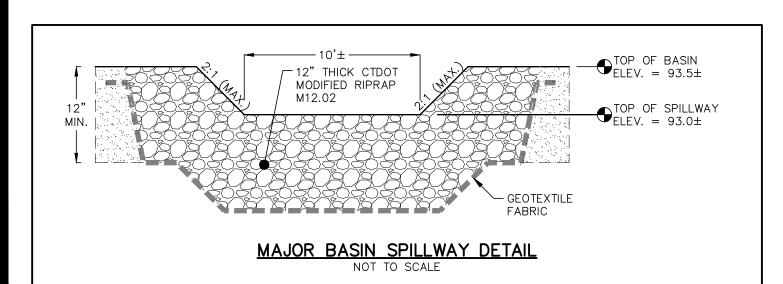
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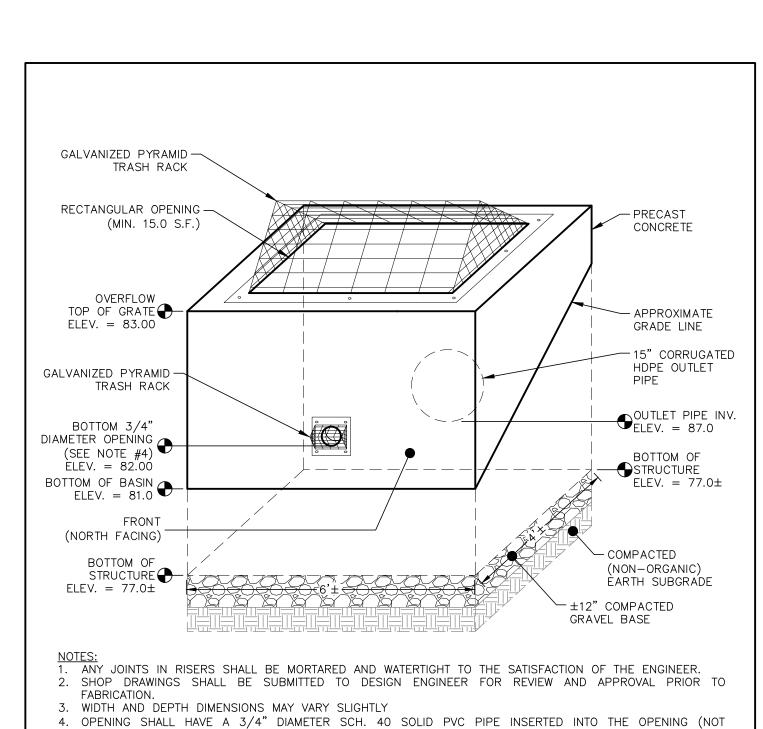
#### SIDE SLOPES AND TOP-6" MIN. TOPSOIL -OF WATER QUALITY BASIN (TYP.) BASIN BOTTOM TO BE HEAVILY SEEDED WITH PLUGS (SEE WITH 'PERMANENT SEED "STORMWATER MIXTURE' (SEE SHEET 10 MANAGEMENT BASIN OF 10) AND MULCHED FLOOR PLANTINGS" TOPSOIL ON THIS SHEET) TOP OF BASIN ELEV. = 93.5± TOP OF SPILLWAY ELEV. = 93.0± STORMWATER MANAGEMENT BASIN BOTTOM OF 12" THICK BASIN ELEV. GEOTEXTILE — CTDOT MODIFIED RIPRAP M12.02 - COMPACTED NON-ORGANIC EARTH SUBGRADE 1. REFER TO "STORMWATER MANAGEMENT BASIN CONSTRUCTION NOTES" ON THIS SHEET FOR ADDITIONAL INFORMATION. 2. BOTTOM OF STORMWATER MANAGEMENT BASIN TO BE SEEDED WITH 'RETENTION BASIN FLOOR MIX' BY ERNST CONSERVATION SEEDS (SEE SPEC. ON THIS SHEET).

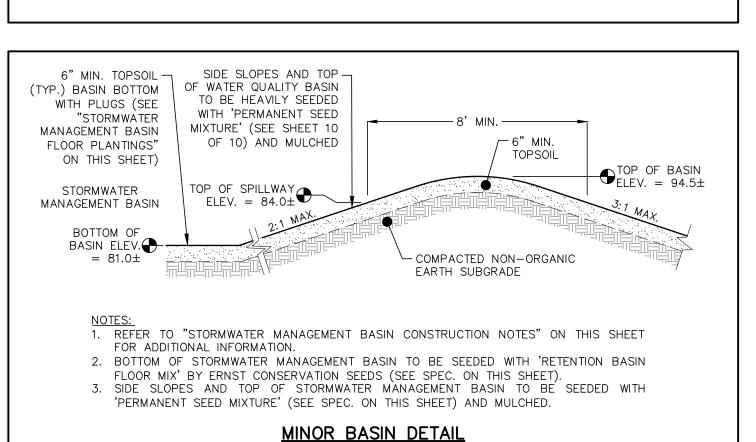
MAJOR BASIN OUTLET STRUCTURE DETAIL

3. SIDE SLOPES AND TOP OF STORMWATER MANAGEMENT BASIN TO BE SEEDED WITH 'PERMANENT SEED MIXTURE' (SEE SPEC. ON THIS SHEET) AND MULCHED.

### MAJOR BASIN DETAIL





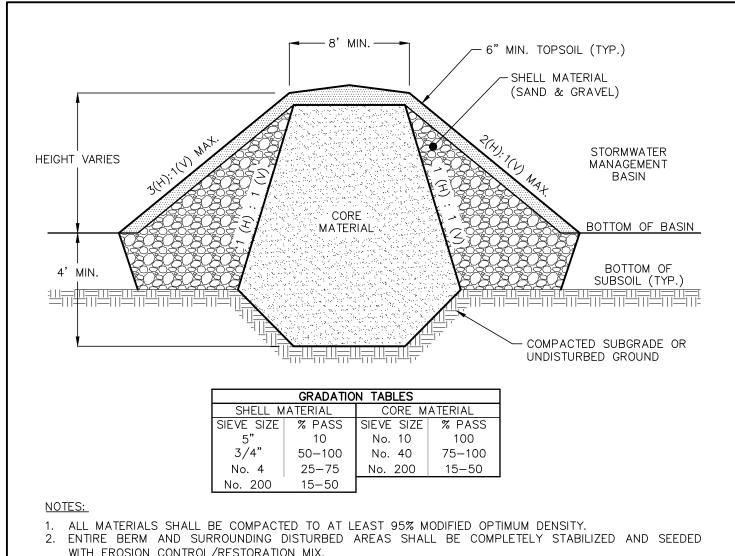


SHOWN FOR CLARITY). THE PIPE SHALL PROJECT 2~3" INTO THE BASIN AND SHALL HAVE A GALVANIZED

MINOR BASIN OUTLET STRUCTURE DETAIL

NOT TO SCALE

PYRAMID TRASH RACK OVER THE PIPE.

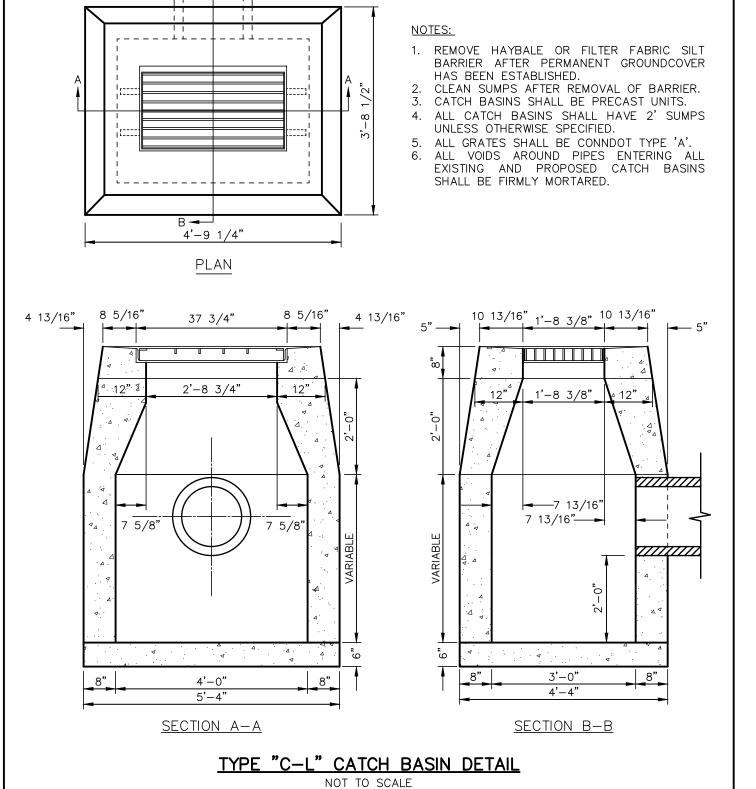


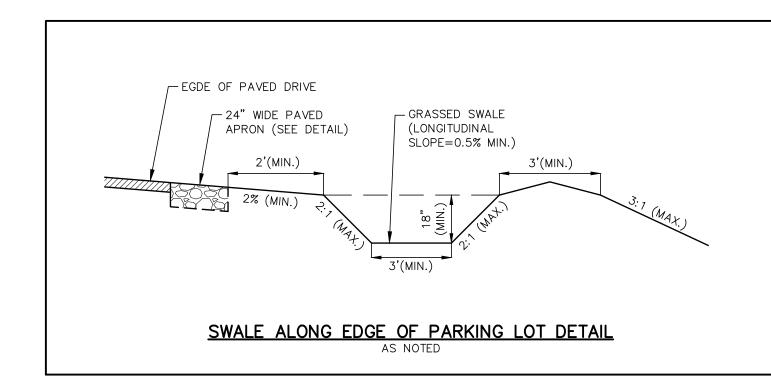
WITH EROSION CONTROL/RESTORATION MIX.

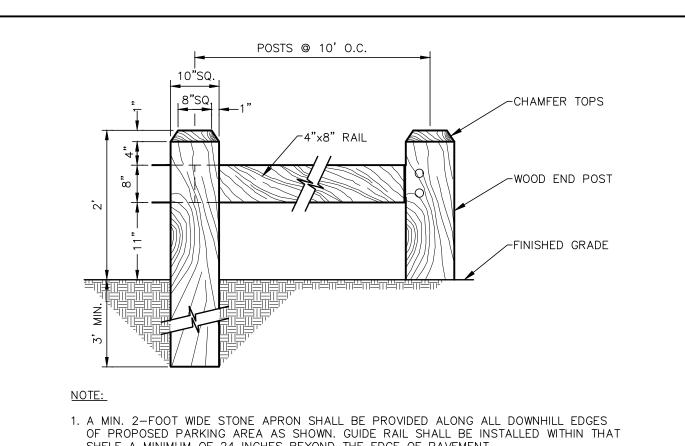
3. IT IS RECOMMENDED THAT THE BERM BE CONSTRUCTED IN THE SUMMER MONTHS IF POSSIBLE SINCE THE CORE MATERIALS WILL BE DIFFICULT TO PLACE AND COMPACT IF THEY BECOME WET. 4. CONSTRUCTION OF THE DETENTION BASIN BERM SHALL BE SUPERVISED AND INSPECTED BY THE DESIGN ENGINEER. CORE COMPACTION TESTS AND SIEVE ANALYSIS TESTS SHALL BE PERFORMED TO DEMONSTRATE CONFORMANCE TO BERM SPECIFICATIONS. ALL TEST RESULTS SHALL BE PROVIDED TO THE

DESIGN ENGINEER. 5. ANTI-SEEP COLLAR SHALL BE INSTALLED AROUND OUTLET PIPE.

# <u>STORMWATER MANAGEMENT BASIN BERM DETAIL</u>







SHELF A MINIMUM OF 24 INCHES BEYOND THE EDGE OF PAVEMENT.

TIMBER GUIDE RAII NOT TO SCALE

### STORMWATER MANAGEMENT BASIN CONSTRUCTION NOTES

- 1. 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.
- 2. BASIN SHALL NEVER BE USED FOR SEDIMENT CONTROL DURING AN ACTIVE CONSTRUCTION PERIOD.
- 3. 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.
- 4. 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.
- 4. ALL DISTURBED AREAS SHALL BE FINE GRADED WITH 6" TOPSOIL, RAKED, SEEDED AND MULCHED IN A TIMELY MANNER. THE BOTTOM OF THE BASINS SHALL HAVE PLUGS AS SPECIFIED BY RICH SNARKSI, 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 SEEDED WITH 'PERMANENT SEED MIXTURE' (SEE SHEET 10 OF 10) AND MULCHED ACCORDINGLY. PLUGS AND SEEDLINGS 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%
- 5. 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.

### <u>STORMWATER MANAGEMENT BASIN MAINTENANCE PLAN</u>

- 1. 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
- 2. NO PESTICIDES OR NON-ORGANIC FERTILIZERS SHALL BE USED WITHIN THE STORMWATER MANAGEMENT BASIN.
- 3. IF THERE IS AN ACCUMULATION OF ORGANIC DEBRIS OR SEDIMENT ON THE FLOOR OF THE BASIN OR IF PONDED WATER IS REGULARLY OBSERVED MORE THAN 48 HOURS AFTER A RAINFALL EVENT, THE TOP 6" SHALL BE REMOVED AND THE EXPOSED SOIL SURFACE ROTOTILLED 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.
- 4. 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)

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SEPTEMBER 8, 2020

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#### 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.

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 2022. 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.

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.

B. CONSTRUCT THE FOUNDATION FOR THE PROPOSED BUILDING. ). FRAME AND CONSTRUCT THE PROPOSED BUILDING.

10. INSTALL ALL UTILITIES.

11. FINISH GRADE DRIVEWAY AND PARKING AREA AND PAVE PER PLAN (BINDER COURSE ONLY).

12. CONSTRUCT STORMWATER BASINS. 13. FINISH GRADE, SEED AND MULCH ALL DISTURBED AREAS AS REQUIRED.

14. INSTALL ALL LANDSCAPING AND LIGHTING POLES/FIXTURES. (INSTALL SURFACE COURSE PAVEMENT AND STRIPE PARKING LOT.) 15. REMOVE ALL EROSION AND SEDIMENT CONTROLS ONCE SITE IS COMPLETELY STABILIZED. DISPOSE OF PROPERLY.

. 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.

4. 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 SEEDED 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 RESEEDED 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,

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.

DURING AND AFTER CONSTRUCTION. THE CONTRACTOR IS ALSO RESPONSIBLE FOR THE PROPER REMOVAL AND DISPOSAL OF ALL EROSION AND

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

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

SEDIMENT CONTROLS ONCE THE SITE IS COMPLETELY STABILIZED.

0.45 LBS. PER 1,000 SQ. FT.

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

PERMANENT SEED MIXTURE: CREEPING RED FESCUE

REDTOP TALL FESCUE 0.45 0.95

FERTILIZER:

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

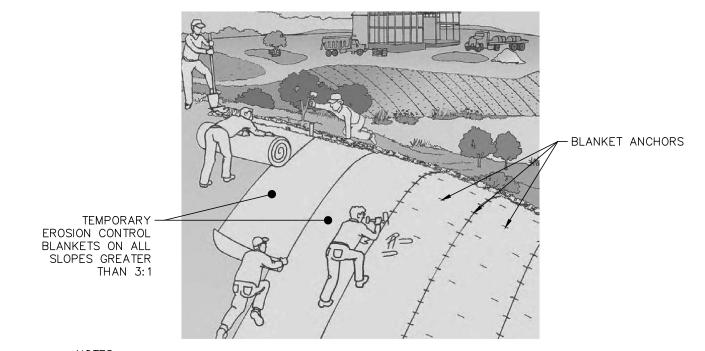
APPLY AT 150 LBS. PER 1,000 SQ. FT.

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 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.

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.

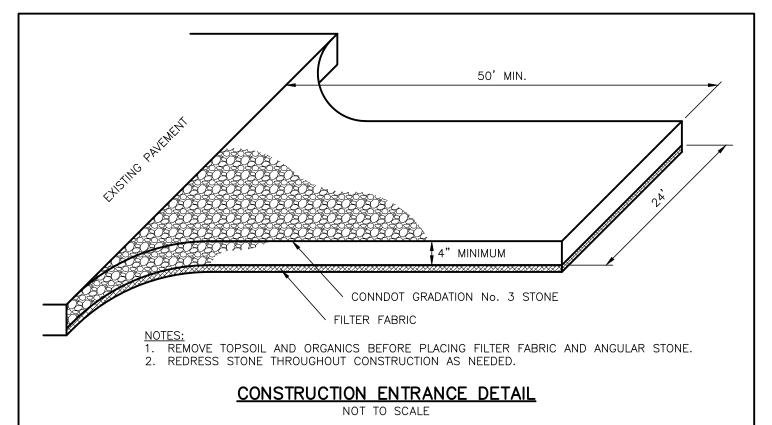


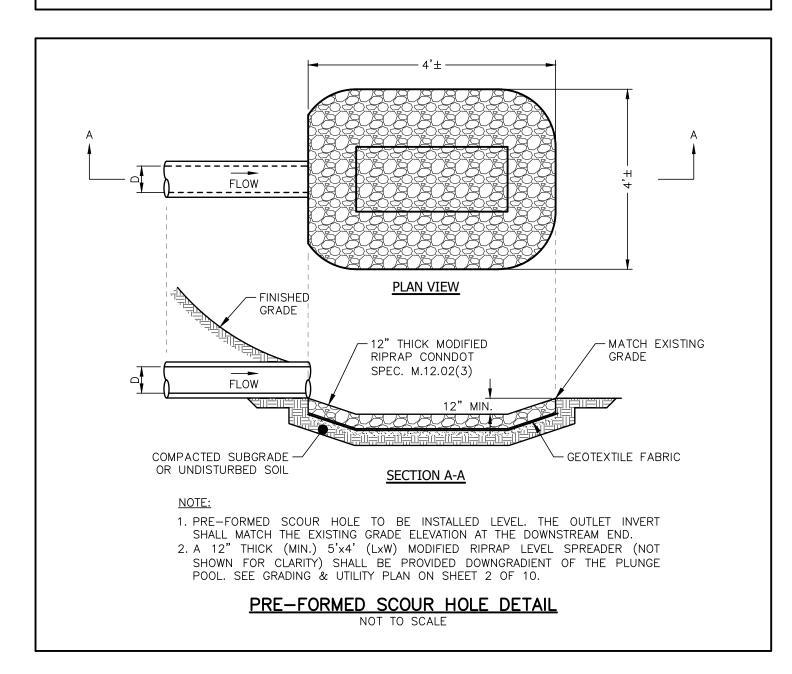
. CONTRACTOR SHALL PREPARE SURFACE, REMOVE PROTRUDING OBJECTS AND INSTALL TEMPORARY EROSION CONTROL BLANKETS IN ACCORDANCE WITH MANUFACTURER'S

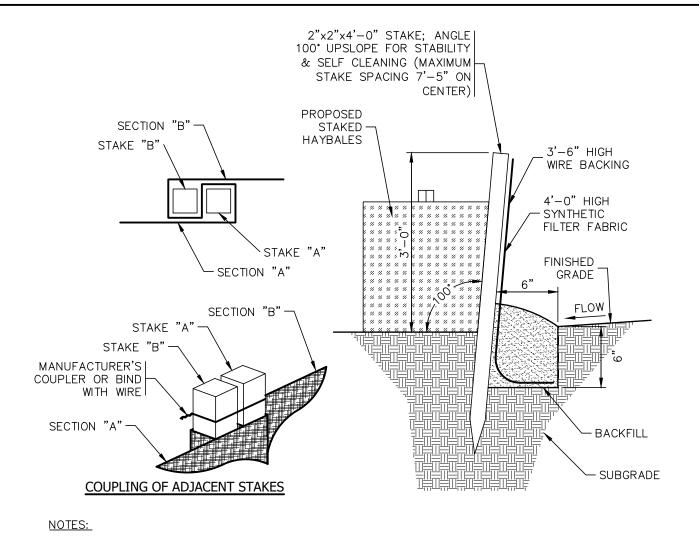
RECOMMENDATIONS AND SPECIFICATIONS. 2. CONTRACTOR SHALL ENSURE THE ORIENTATION AND ANCHORING OF THE BLANKET IS

APPROPRIATE FOR THE SITE. 3. CONTRACTOR SHALL INSPECT THE TEMPORARY EROSION CONTROL BLANKET AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH RAINFALL OF 0.5 INCHES OR MORE. IF WASHOUT OR BREAKOUT OCCURS, CONTRACTOR SHALL RE-INSTALL THE BLANKET AFTER REGRADING AND RE-SEEDING THE AREA.

#### EROSION CONTROL BLANKET DETAIL NOT TO SCALE



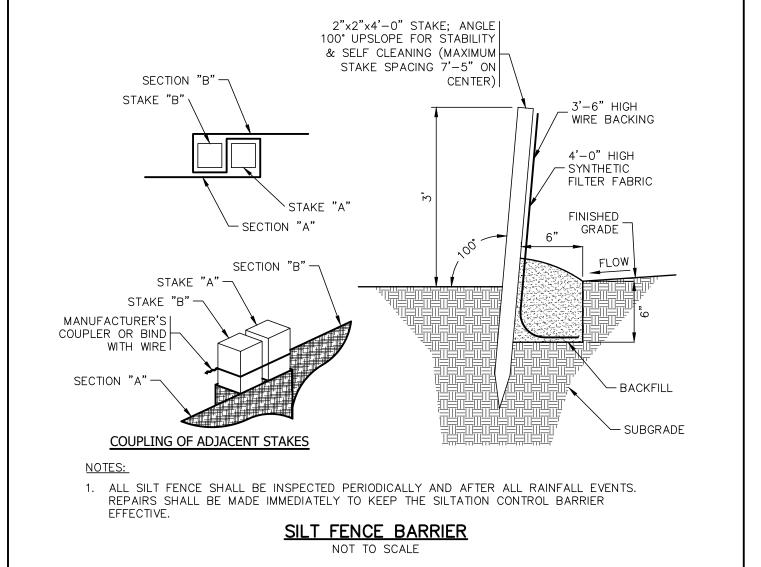


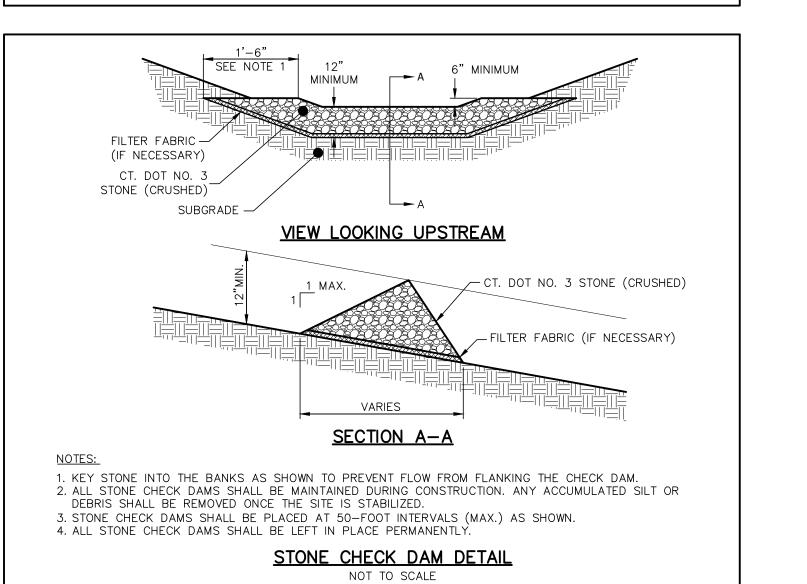


1. ALL SILT FENCE SHALL BE INSPECTED PERIODICALLY AND AFTER ALL RAINFALL EVENTS. REPAIRS SHALL BE MADE IMMEDIATELY TO KEEP THE SILTATION CONTROL BARRIER EFFECTIVE.

2. HAY BALES ANCHORED WITH (2) 2"x2"x3' STAKES FOR EACH BALE.

# SILT FENCE/HAYBALE BARRIER





AND CHRIS BRIDE NARRATIVE RED FOR HARVEST NORTH

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