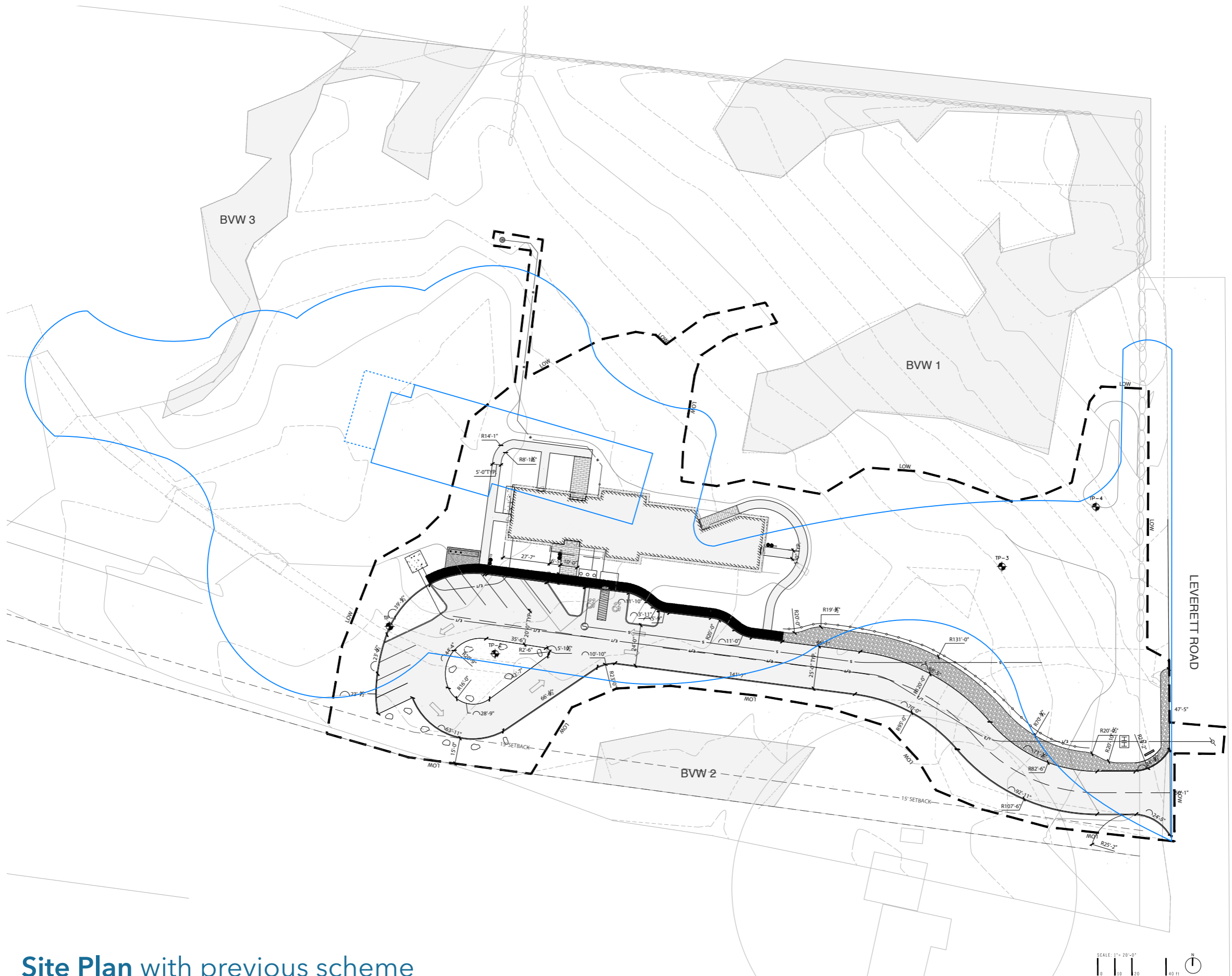




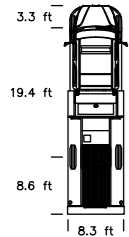
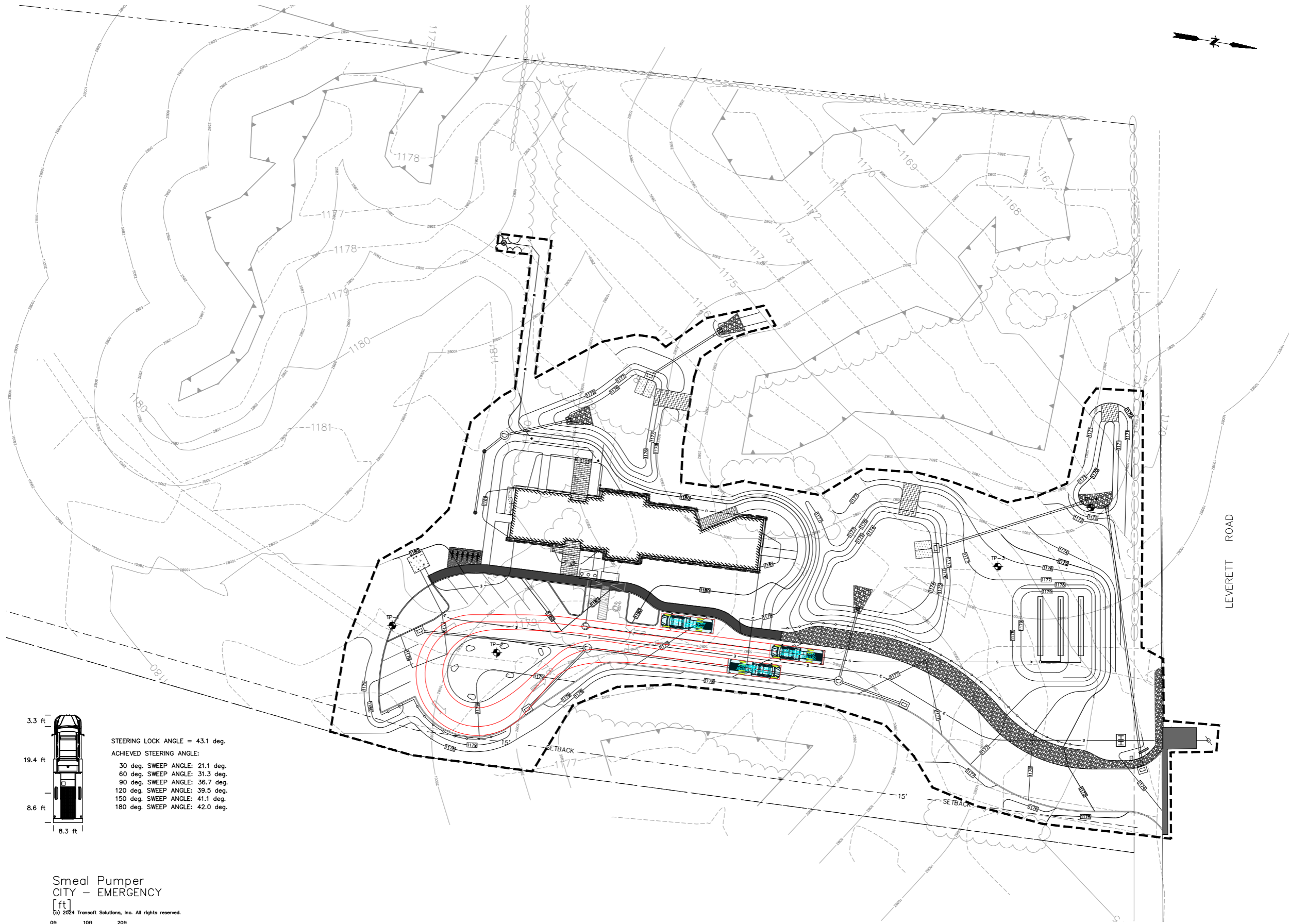
New Shutesbury Public Library

Oudens Ello Architecture

Town Agency Meeting: February 08, 2024



Site Plan with previous scheme



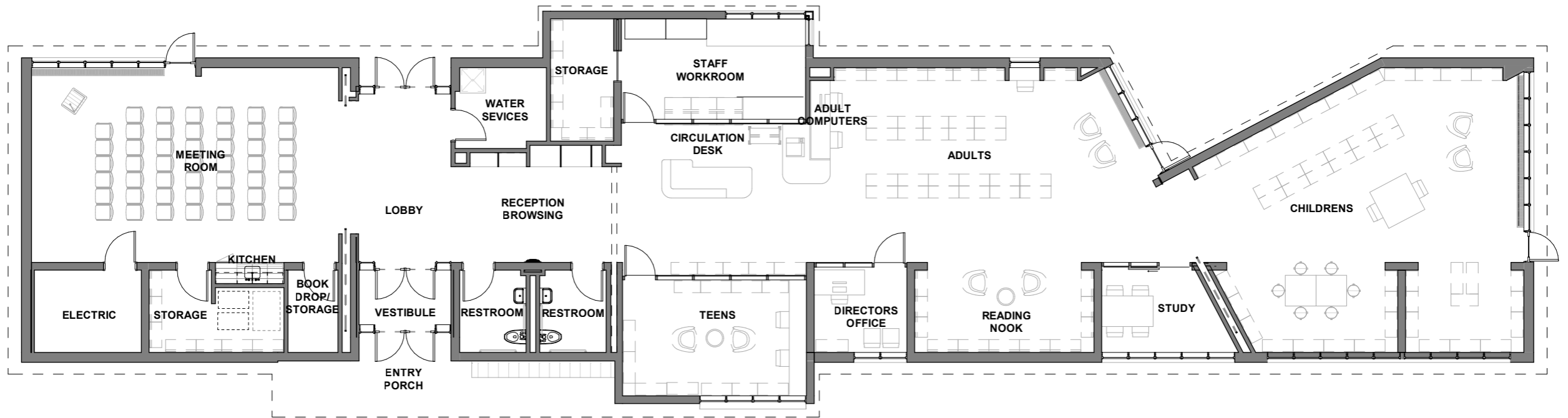
STEERING LOCK ANGLE = 43.1 deg.

ACHIEVED STEERING ANGLE:

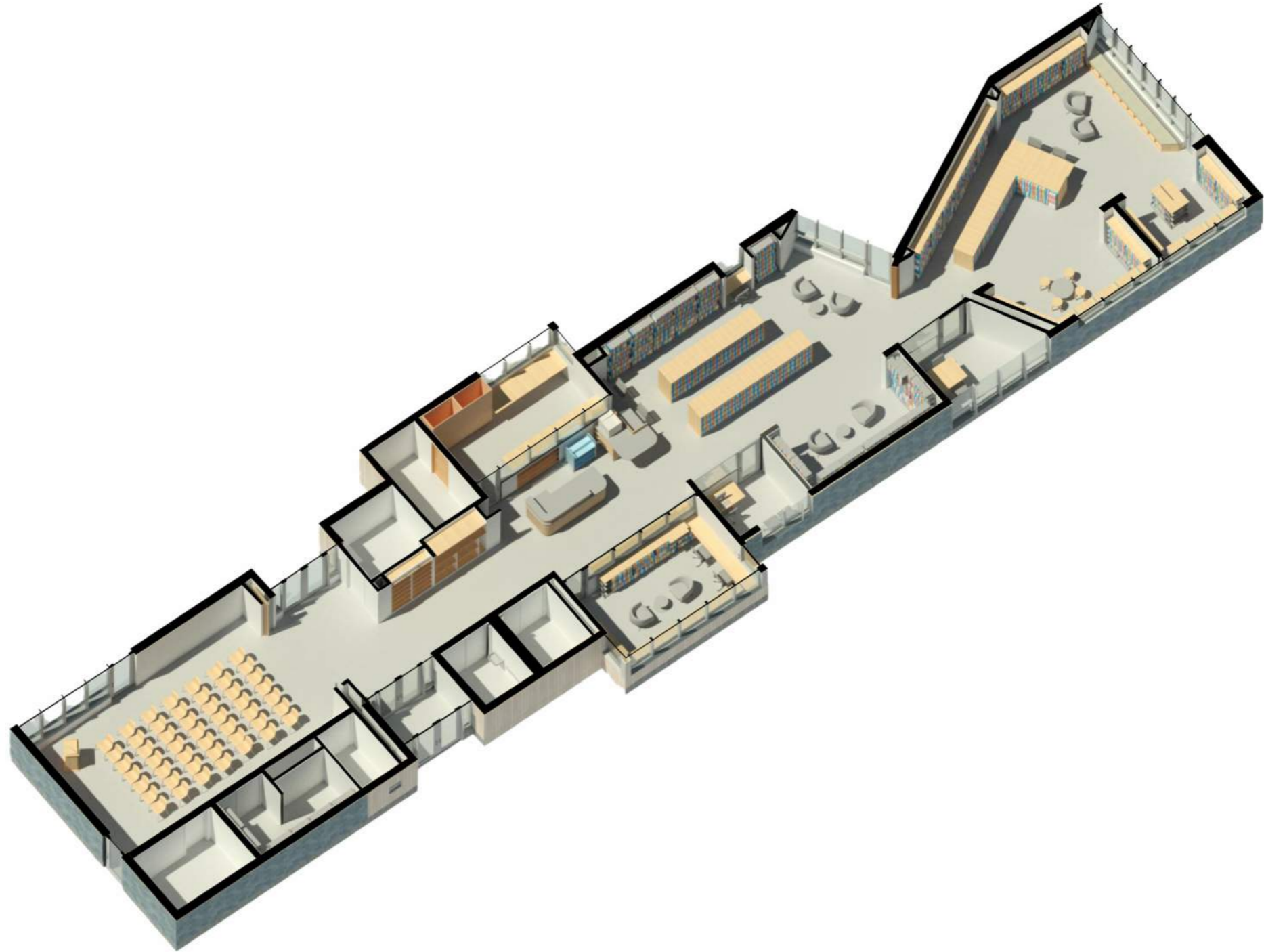
30 deg.	SWEEP ANGLE: 21.1 deg.
60 deg.	SWEEP ANGLE: 31.3 deg.
90 deg.	SWEEP ANGLE: 36.7 deg.
120 deg.	SWEEP ANGLE: 39.5 deg.
150 deg.	SWEEP ANGLE: 41.1 deg.
180 deg.	SWEEP ANGLE: 42.0 deg.

Smeal Pumper
 CITY – EMERGENCY
 [ft]
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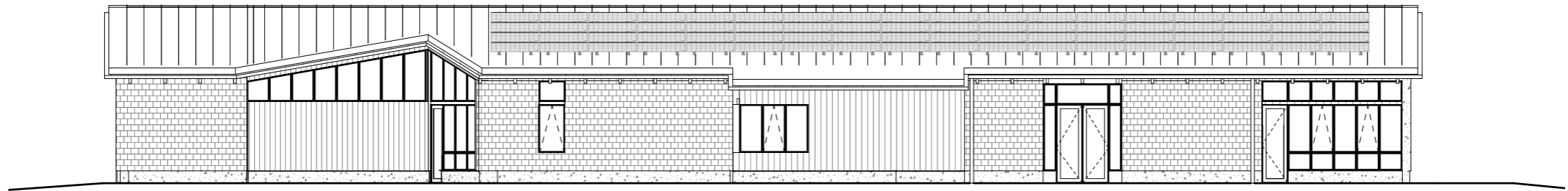
Site Plan Firetruck Turn Radius



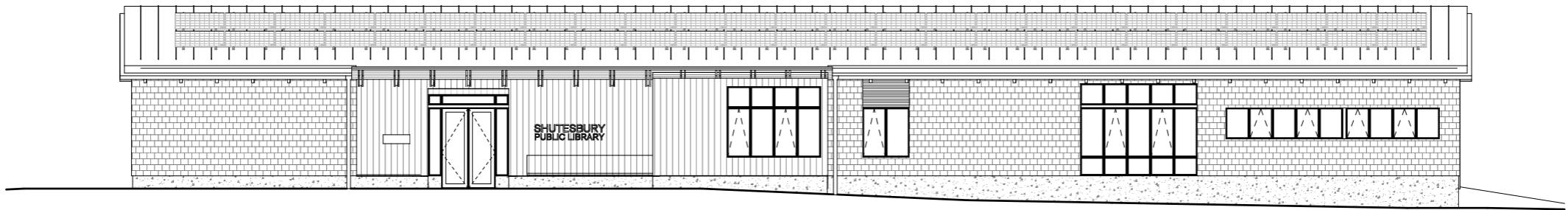
Library Plan



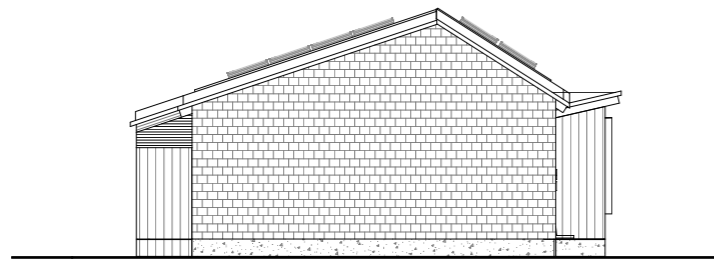
Library Pan Axonometric



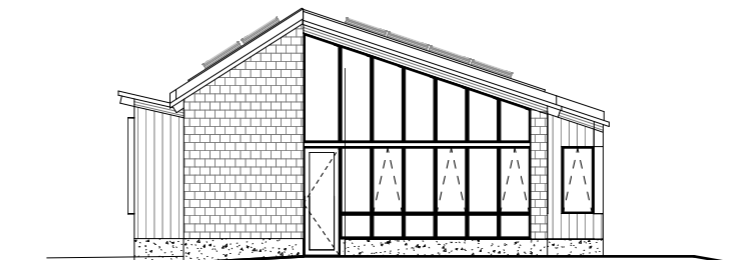
④ WEST ELEVATION



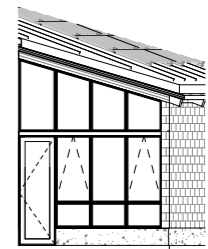
③ EAST ELEVATION



② SOUTH ELEVATION



① NORTH ELEVATION



⑤ ADULT ELEVATION

Library Elevations



Library Entry View



Library West View



Library Interior Meeting Room

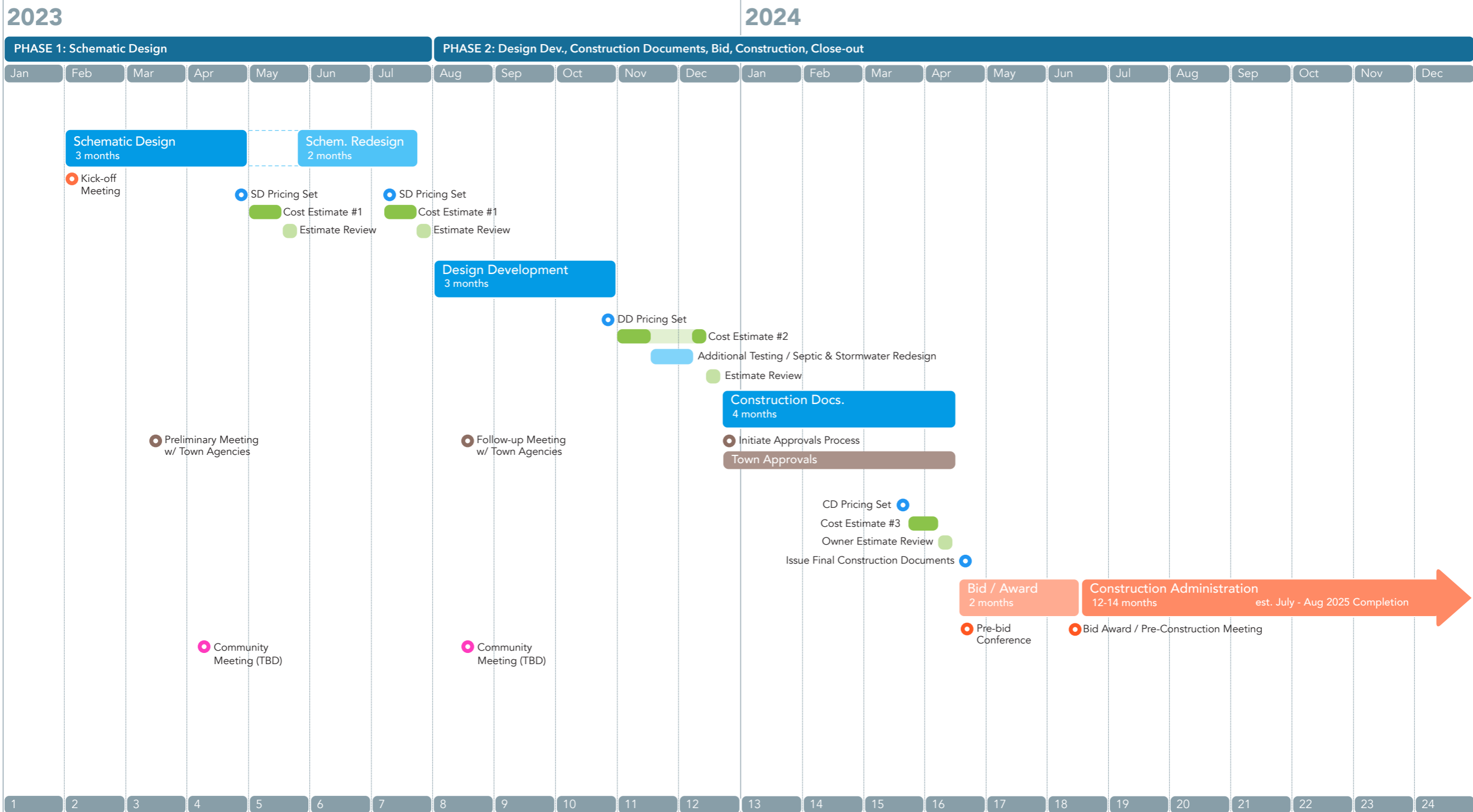


Library Interior Adult's Room



Library Interior Children's Room

Project Schedule



Design Development Schedule

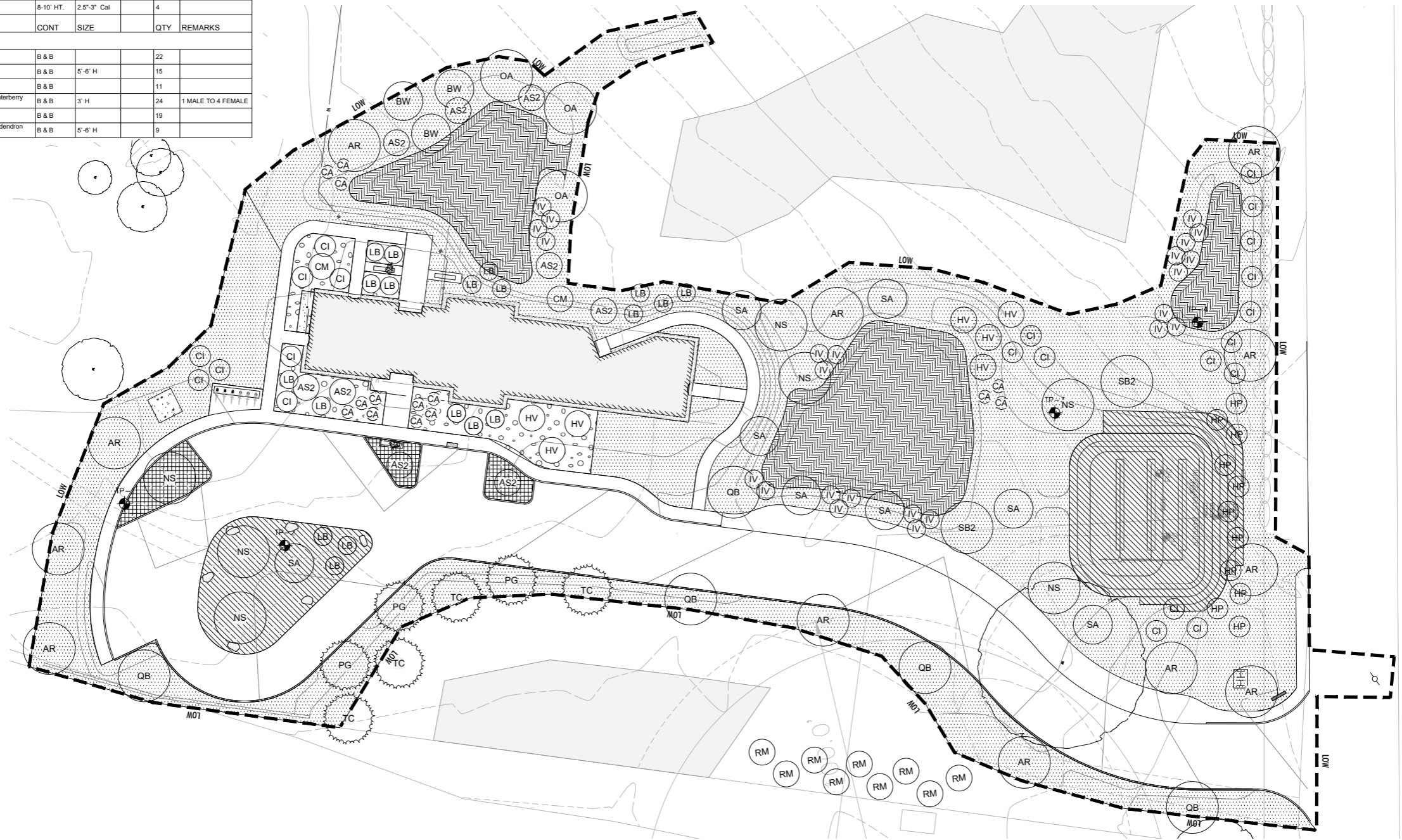


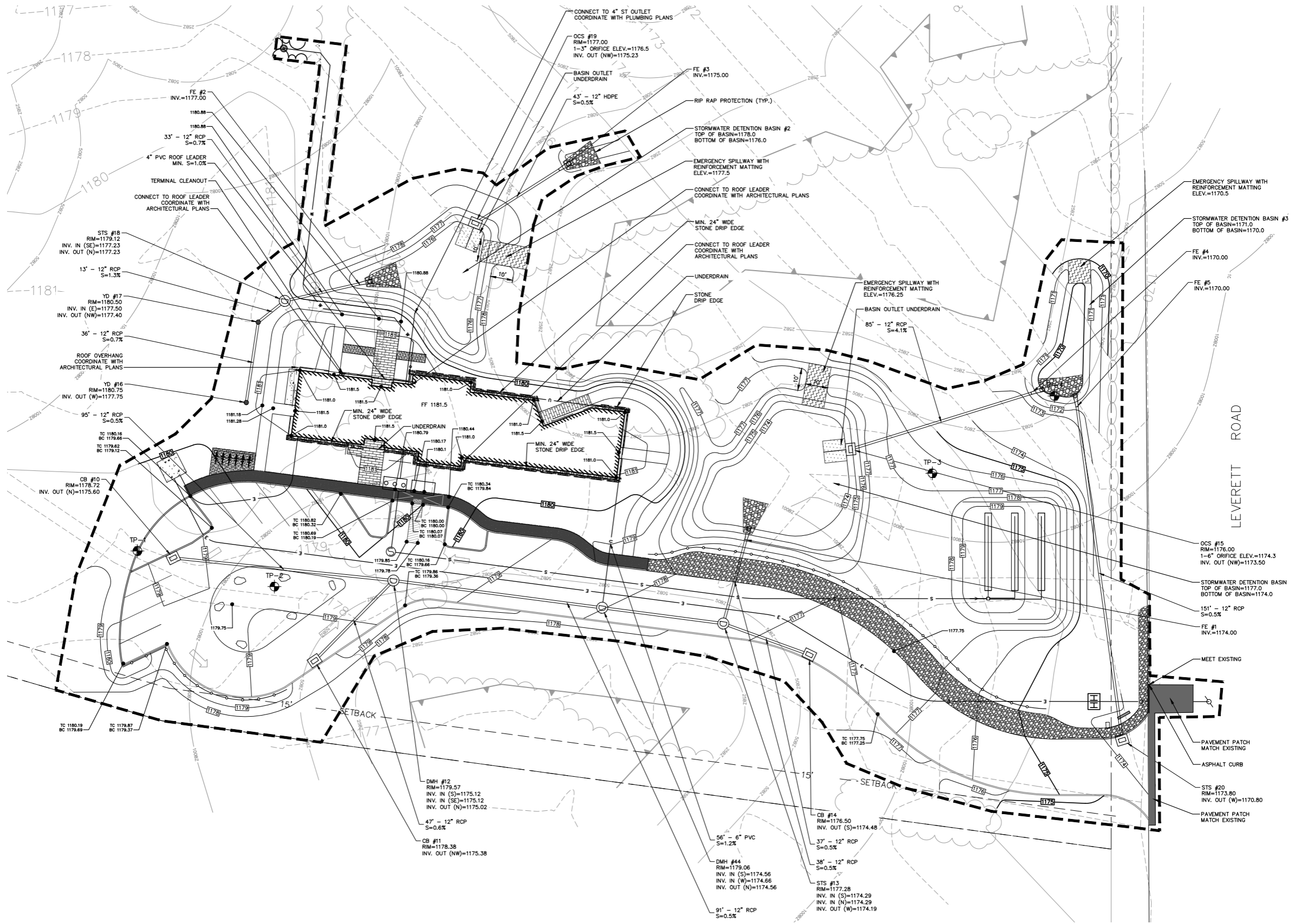
Oudens Ello Architecture



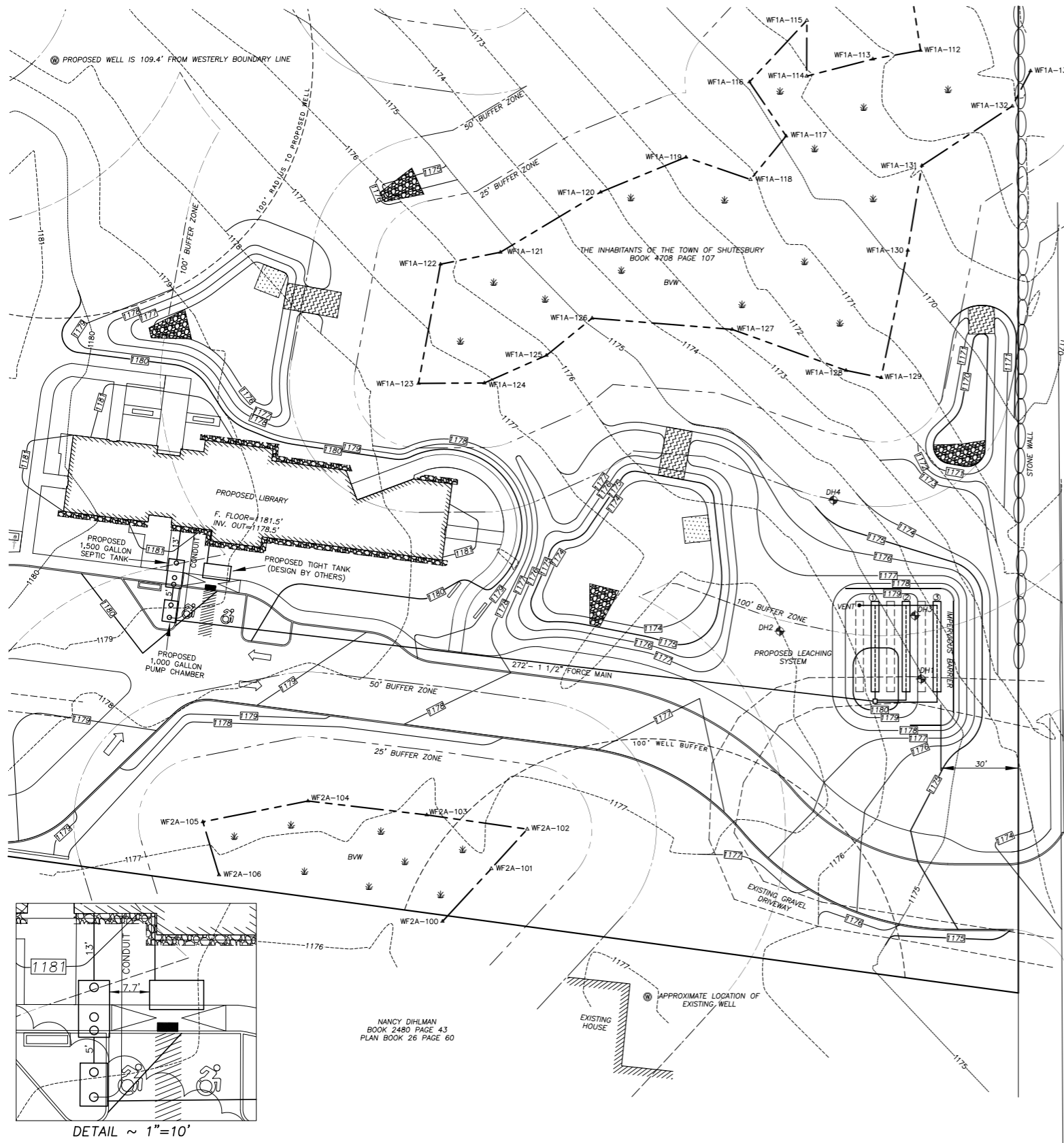
Library Planting Plan

PLANT SCHEDULE						
CODE	BOTANICAL / COMMON NAME	CONT	CAL	SIZE	QTY	REMARKS
TREES						
AR	Acer rubrum / Red Maple	B & B	2.5'-3" Cal		12	
AS2	Amelanchier alnifolia / Serviceberry	B & B		5'-6" H	9	
BW	Betula populifolia "Whitespire" / Whitespire Gray Birch	B & B	2.5'-3" Cal		3	
CM	Cornus mas / Cornelian Cherry	B & B		5'-6" H	2	
HV	Hamamelis virginiana / Common Witch Hazel	B & B		5'-6" H	7	
NS	Nyssa sylvatica / Tupelo	B & B	2.5'-3" Cal		7	
OA	Oxydendrum arboreum / Sourwood Tree	B & B	2.5'-3" Cal		3	
PG	Picea glauca / White Spruce	8-10' HT.	2.5'-3" Cal		3	
QB	Quercus bicolor / Swamp White Oak	B & B	2.5'-3" Cal		5	
SB2	Salix nigra / Black Willow	B & B	2.5'-3" Cal		2	
SA	Sassafras albidum / Sassafras	B & B	2.5'-3" Cal		8	
TC	Tsuga canadensis / Eastern Hemlock	8-10' HT.	2.5'-3" Cal		4	
SHRUBS						
CI	Celastrus occidentalis / Buttonbush	B & B			22	
CA	Clethra alnifolia / Summersweet Clethra	B & B		5'-6" H	15	
HP	Hydrangea paniculata / Panicle Hydrangea	B & B			11	
IV	Ilex verticillata "Red Sprite" / Red Sprite Winterberry	B & B		3' H	24	1 MALE TO 4 FEMALE
LB	Lindera benzoin / Spicebush	B & B			19	
RM	Rhododendron maximum / Rosebay Rhododendron	B & B		5'-6" H	9	





LEVERETT ROAD



LOCUS-NOT TO SCALE

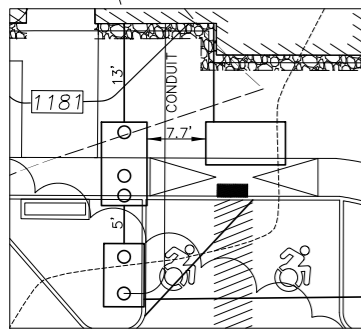
NOTES:
 1. SEE SHEET 2 FOR ADDITIONAL NOTES AND DETAILS.
 2. SEE FINAL APPROVED SHUTESBURY PUBLIC LIBRARY PLAN PREPARED BY FUSS & O'NEILL FOR EROSION CONTROL INFORMATION.

BENCHMARK: BENCHTIE IN UTILITY POLE #15
 ELEVATION=1171.71'
 NAVD88 VERTICAL DATUM

LEVERETT ROAD

LEGEND	
IRON PIPE FOUND	○
IRON BAR FOUND	◐
BOUND FOUND	□
1' CONTOUR INTERVAL	—
5' CONTOUR INTERVAL	—
1' PROPOSED CONTOUR INTERVAL	—
5' PROPOSED CONTOUR INTERVAL	—
BERM/CURB	—
UTILITY POLE	⊕
WELL	⊙
WETLAND DELINEATION FLAG	△
WETLAND BOUNDARY	—
25' BUFFER ZONE BOUNDARY	—
50' BUFFER ZONE BOUNDARY	—
100' BUFFER ZONE BOUNDARY	—

BENCHMARK: BENCHTIE IN UTILITY POLE #13
 ELEVATION=1175.89'
 NAVD88 VERTICAL DATUM



DETAIL ~ 1"=10'

NANCY DIHLMAN
 BOOK 2480 PAGE 43
 PLAN BOOK 26 PAGE 60

APPROXIMATE LOCATION OF EXISTING WELL

SHEET 1 OF 2

PLAN OF PROPOSED SEWAGE DISPOSAL SYSTEM IN SHUTESBURY, MASSACHUSETTS
 PREPARED FOR
SHUTESBURY PUBLIC LIBRARY
 66 LEVERETT ROAD

	DATE: JANUARY 24, 2024 SCALE: 1" = 20' HERITAGE LAND SURVEYING & ENGINEERING, INC. 241 COLLEGE HIGHWAY & CLARK STREET POST OFFICE BOX 90 SOUTHAMPTON, MASSACHUSETTS 01073-0001 (413) 527-3600	
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JOB # 8538-230818 DWG # 8538F002.DWG MAP # 8538-240124

DEPTH FROM SURFACE (INCHES)	SOIL HORIZON	SOIL TEXTURE (USDA)	SOIL COLOR (MUNSELL)	SOIL MOTTLING (MUNSELL)	OTHER (STRUCTURE, STONES, Boulders, CONSISTENCY, ROOTS)
0"-10"	A	LOAMY SAND	10YR 3/1		LOOSE, MOIST
10"-30"	B	LOAMY SAND	10YR 7/6		LOOSE, MOIST
30"-91"	C	LOAMY SAND	10YR 6/6	40*	LOOSE, MOIST

DEPTH TO GROUNDWATER
 STANDING WATER IN HOLE: 91"
 ESTIMATED SEASONAL HIGH GROUND WATER: 40"
 DEPTH TO BEDROCK: NONE
 WEEPING FROM FACE: 50"

DEPTH FROM SURFACE (INCHES)	SOIL HORIZON	SOIL TEXTURE (USDA)	SOIL COLOR (MUNSELL)	SOIL MOTTLING (MUNSELL)	OTHER (STRUCTURE, STONES, Boulders, CONSISTENCY, ROOTS)
0"-11"	A	LOAMY SAND	10YR 3/1		LOOSE, MOIST
11"-30"	B	LOAMY SAND	10YR 7/6		LOOSE, MOIST
30"-80"	C	LOAMY SAND	10YR 6/6	44*	LOOSE, MOIST

DEPTH TO GROUNDWATER
 STANDING WATER IN HOLE: 80"
 ESTIMATED SEASONAL HIGH GROUND WATER: 44"
 DEPTH TO BEDROCK: NONE
 WEEPING FROM FACE: 50"

DEPTH FROM SURFACE (INCHES)	SOIL HORIZON	SOIL TEXTURE (USDA)	SOIL COLOR (MUNSELL)	SOIL MOTTLING (MUNSELL)	OTHER (STRUCTURE, STONES, Boulders, CONSISTENCY, ROOTS)
0"-10"	A	LOAMY SAND	10YR 3/1		LOOSE, MOIST
10"-36"	B	LOAMY SAND	10YR 7/6		LOOSE, MOIST
36"-108"	C	LOAMY SAND	10YR 6/6	48*	LOOSE, MOIST

DEPTH TO GROUNDWATER
 STANDING WATER IN HOLE: 108"
 ESTIMATED SEASONAL HIGH GROUND WATER: 48"
 DEPTH TO BEDROCK: NONE
 WEEPING FROM FACE: 52"

DEPTH FROM SURFACE (INCHES)	SOIL HORIZON	SOIL TEXTURE (USDA)	SOIL COLOR (MUNSELL)	SOIL MOTTLING (MUNSELL)	OTHER (STRUCTURE, STONES, Boulders, CONSISTENCY, ROOTS)
0"-15"	A	LOAMY SAND	10YR 3/1		LOOSE, MOIST
15"-33"	B	LOAMY SAND	10YR 7/6		LOOSE, MOIST
33"-77"	C	LOAMY SAND	10YR 6/6	34*	LOOSE, MOIST

DEPTH TO GROUNDWATER
 STANDING WATER IN HOLE: 77"
 ESTIMATED SEASONAL HIGH GROUND WATER: 34"
 DEPTH TO BEDROCK: NONE
 WEEPING FROM FACE: 50"

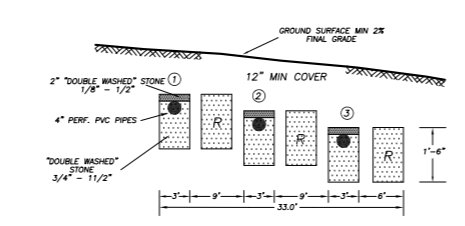
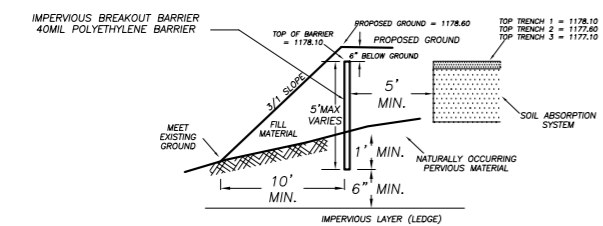
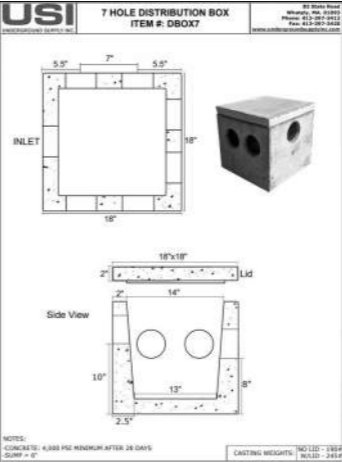
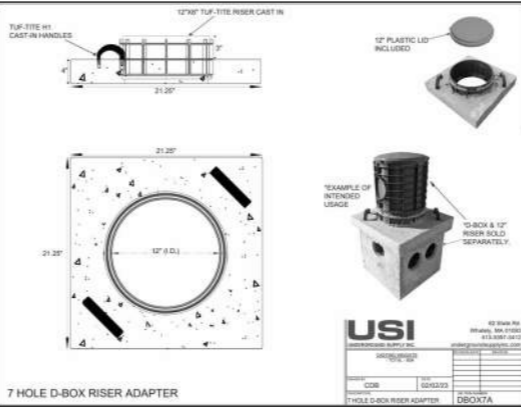
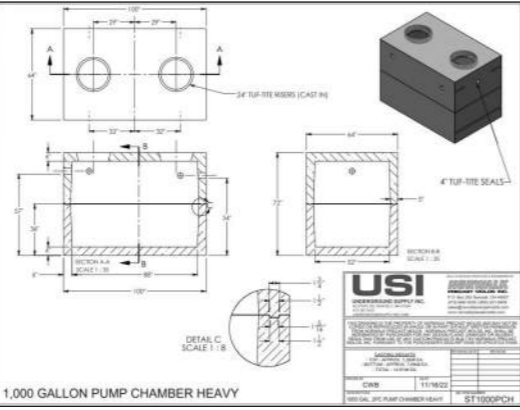
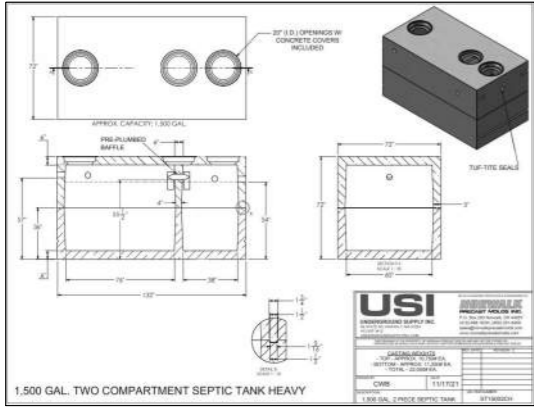
LEACHING TRENCH DESIGN REQUIREMENTS:
 SEWAGE FLOW ESTIMATE FOR PROPOSED LIBRARY
 CALCULATED FLOW (MIN. REQUIRED): 99 PEOPLE X 3 GAL/DAY
 297 GAL/DAY
 DESIGN FLOW PROVIDED:
 315 GPD
 PERCOLATION RATE:
 11 MIN/INCH
 .60 GPD/SQ.FT.
 LEACHING TRENCH DIMENSIONS:
 35' LONG, 36" WIDE, 12" DEPTH WITH STONE
 AREA CALCULATIONS:
 35' LONG X 1' EFFECTIVE DEPTH X 2 SIDES =
 35' LONG X 3' WIDE =
 TOTAL AREA PER TRENCH =
 TOTAL DESIGN CAPACITY:
 175 S.F. X .60 GAL/S.F. X 3 TRENCHES =
 315 GAL/DAY
 SEPTIC TANK REQUIREMENTS:
 1500 GALLON TANK
 W/ 1000 PUMP STRUCTURE

Time	Measurement
Begin saturation	10:12
End saturation	10:26 12"
9" depth Measurement	10:43 9"
6" depth Measurement	11:12 6"
Elapsed time 9" to 6"	29
Bottom of Percolation Test Hole:	31"
Percolation rate:	9 MIN/INCH

Time	Measurement
Begin saturation	11:47
End saturation	12:02 12"
9" depth Measurement	12:21 9"
6" depth Measurement	12:56 6"
Elapsed time 9" to 6"	35
Bottom of Percolation Test Hole:	33"
Percolation rate:	11 MIN/INCH

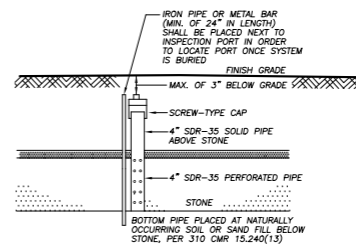
Test Location: 66 Leverett Road Shutesbury, MA 01072	Client: Town of Shutesbury Job # 8538-230818
Date of testing: 10/18/23	
Soil Evaluator: Ronald Laurin, SE# 13575	Board of Health Inspector: Claudia Sarti-Health Agent
Equipment Operator: Shutesbury DPW	Water supply: Proposed Well

- CONSTRUCTION NOTES:
- ALL WORK IS TO BE PERFORMED STRICTLY IN ACCORDANCE WITH MASS STATE ENVIRONMENTAL CODE, TITLE 5: MINIMUM REQUIREMENTS FOR THE SUBSURFACE DISPOSAL OF SANITARY SEWAGE, AND ADDITIONAL REGULATIONS OF THE TOWN OF SHUTESBURY BOARD OF HEALTH. SITE WORK MAY BE SUBJECT TO ADDITIONAL STATE AND LOCAL REGULATIONS.
 - THIS PLAN HAS BEEN PREPARED FOR THE PURPOSE OF OBTAINING A DISPOSAL SYSTEM CONSTRUCTION PERMIT FROM THE SHUTESBURY BOARD OF HEALTH. THIS PLAN SHOWS PROPOSED CONTOURS AND GRADES FOR THE PROPOSED SEWAGE DISPOSAL SYSTEM. OTHER SITE GRADING AND DESIGN SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
 - PRIOR TO THE START OF CONSTRUCTION A COPY OF THE BOARD OF HEALTH APPROVED DISPOSAL CONSTRUCTION PERMIT SHALL BE FORWARDED TO THIS OFFICE BY THE SITE CONTRACTOR OR SEPTIC INSTALLER.
 - SEWER PIPE FROM BUILDING TO SEPTIC TANK SHALL BE LAID AT A MINIMUM SLOPE OF 0.02 (1/4" PER FOOT). THE PIPE FROM THE SEPTIC TANK TO THE "D" BOX SHALL BE LAID AT A MINIMUM SLOPE OF 0.01 (1/8" PER FOOT). ALL EFFLUENT DISTRIBUTION LINES SHALL BE LAID AT A SLOPE OF .005 (1/16" PER FOOT).
 - LEACHING FACILITY SHALL BE NOT LESS THAN 25 FT. FROM THE NEAREST STORM DRAIN, 10 FT. FROM PROPERTY LINES, AND 100 FT. FROM ANY EXISTING OR PROPOSED WELLS ON THIS LOT OR ADJACENT LOTS.
 - PLAN SHOWS AN EXISTING WELL ON LAND OF NANCY DILMAN. THE PROPOSED LEACHING SYSTEM IS APPROXIMATELY 140' FROM THE EXISTING WELL.
 - A PORTION OF THE PROPOSED LEACHING SYSTEM & RESERVE AREA IS WITHIN THE 100' BUFFER ZONE OF THE WETLANDS. THE PROPOSED LEACHING SYSTEM & RESERVE AREA IS APPROXIMATELY 80' FROM THE WETLANDS.
 - THE OUTLET DISTRIBUTION LINES FROM THE DISTRIBUTION BOX SHALL BE LEVEL FOR A MINIMUM OF THE FIRST TWO FEET OF THEIR LENGTH AND THERE SHALL BE AT LEAST ONE OUTLET FOR EACH EFFLUENT DISTRIBUTION LINE ACCORDING TO 310 CMR 15.232(3)(c).
 - AGGREGATE AND STONE USED IN THE CONSTRUCTION OF ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM SHALL BE "DOUBLE WASHED" AND "FREE OF IRON, FINES AND DUST" AS STATED IN TITLE V (310 CMR 15.247).
 - ANY REPLACEMENT AND/OR ADDITION OF SOILS MUST BE CLEAN GRANULAR FILL MATERIAL MEETING THE SPECIFICATIONS OF 310 CMR 15.255(3).
 - THE SOIL PLACED AS BACKFILL OVER THE SYSTEM SHALL BE A MINIMUM OF NINE INCHES, EXCLUDING TOPSOIL, PLACED IN LIFTS AND SUFFICIENTLY COMPACTED TO PREVENT DEPRESSIONS DUE TO SETTLING WHICH MAY INTERCEPT OR COLLECT SURFACE WATER RUNOFF ABOVE THE SYSTEM. BACKFILL MUST BE CLEAN AND FREE OF STONES AND BOULDERS GREATER THAN SIX INCHES IN SIZE. TAILINGS, CLAY OR SIMILAR MATERIALS ARE PROHIBITED, ACCORDING TO 310 CMR 15.240(9).
 - FINAL COVER ABOVE THE SYSTEM SHALL BE GRADED TO REDUCE INFILTRATION OF SURFACE WATER AND MINIMIZE EROSION. FINISH GRADE SHALL HAVE A MINIMUM SLOPE OF 0.02 FEET PER FOOT, ACCORDING TO 310 CMR 15.240(10).
 - THE A & B LAYERS OF THE SOIL HORIZON, AS WELL AS ALL STUMPS, ROOTS AND ANY OTHER UNSUITABLE MATERIAL SHALL BE EXCAVATED. THIS EXCAVATION SHALL EXTEND A MINIMUM OF FIVE FEET LATERALLY IN ALL DIRECTIONS BEYOND THE OUTER PERIMETER OF THE PROPOSED LEACHING SYSTEM AND REPLACED WITH CLEAN GRANULAR SAND MATERIAL MEETING THE SPECIFICATIONS OF 310 CMR 15.255(3). THE EXCAVATED MATERIAL MAY BE USED ON SIDE SLOPES TO MEET BREAKOUT DISTANCE REQUIREMENTS.
 - FILTER BACKWASH FROM WATER FILTRATION SYSTEMS, BASEMENT SUMP PUMPS, AIR CONDITIONER CONDENSATE PIPES &/OR ANY OTHER NON-ON-SITE SEWAGE DISPOSAL SYSTEM COMPONENTS AS DEFINED IN 310 CMR 15.00 ARE NOT PERMITTED TO BE CONNECTED TO ANY SEWAGE DISPOSAL SYSTEM.
 - ALL SYSTEM COMPONENTS SHALL BE MARKED WITH MAGNETIC MARKING TAPE OR A COMPARABLE MEANS IN ORDER TO LOCATE THEM ONCE BURIED.
 - THIS DESIGN DOES NOT INCLUDE PROVISIONS FOR USE OF A GARBAGE GRINDER DISPOSAL UNIT.
 - THE DEPARTMENT OF ENVIRONMENTAL PROTECTION RECOMMENDS HAVING YOUR TANK PUMPED OUT AND SYSTEM INSPECTED EVERY THREE TO FIVE YEARS.
 - TO MAINTAIN A WELL FUNCTIONING SYSTEM, COMMERCIAL SEPTIC SYSTEM ADDITIVES SHOULD NOT BE USED.
 - TO MAINTAIN A PROPERLY FUNCTIONING SYSTEM, NO LARGE VEHICLES AND/OR HEAVY EQUIPMENT SHALL BE DRIVEN OVER OR PLACED ON TOP OF THE LEACHING SYSTEM. THIS MAY CAUSE COMPACTION OF THE SOIL. THE DISTRIBUTION BOX TO BECOME UNEVEN, OR ALTER THE SLOPE OF THE DISTRIBUTION LINES.
 - THE SUBSURFACE COMPONENTS OF THIS SYSTEM SHALL NOT BE BACKFILLED OR OTHERWISE CONCEALED FROM VIEW UNTIL A FINAL INSPECTION HAS BEEN CONDUCTED BY THE APPROVING AUTHORITY AND THIS OFFICE. THEN PERMISSION WILL BE GRANTED TO BACKFILL THE SYSTEM (310 CMR 15.021; CERTIFICATE OF COMPLIANCE).

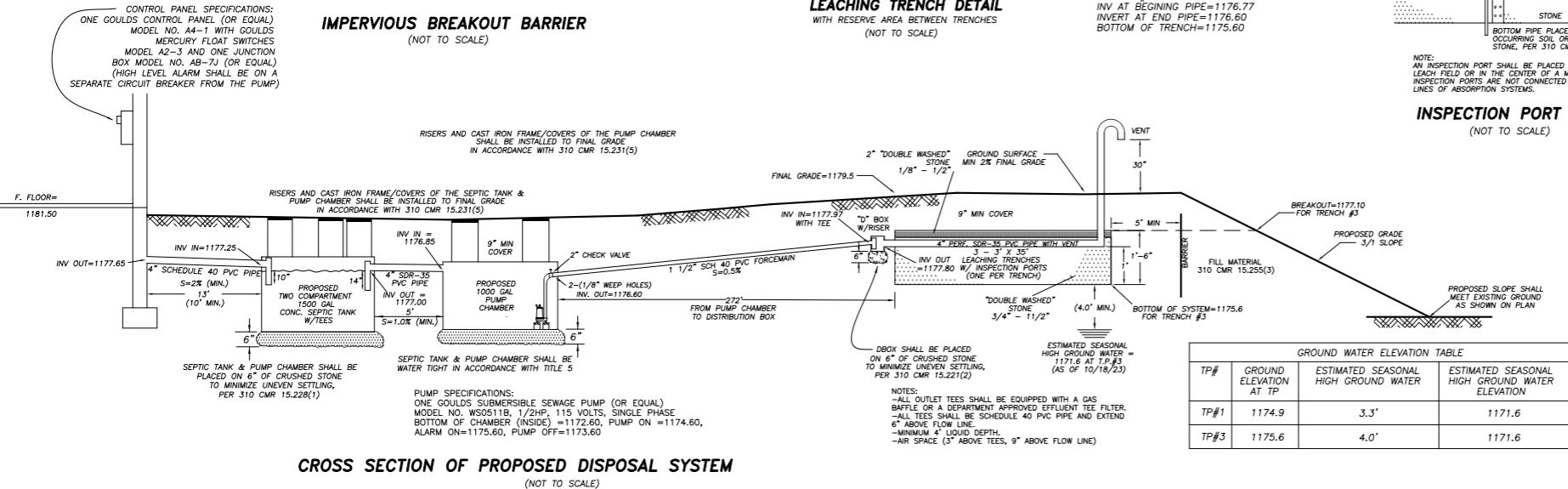


INVERT DATA FOR PROPOSED LEACHING TRENCHES

TRENCH #1	INV AT BEGINNING PIPE=1177.77
	INVERT AT END PIPE=1177.60
	BOTTOM OF TRENCH=1176.60
TRENCH #2	INV AT BEGINNING PIPE=1177.27
	INVERT AT END PIPE=1177.10
	BOTTOM OF TRENCH=1176.10
TRENCH #3	INV AT BEGINNING PIPE=1176.77
	INVERT AT END PIPE=1176.60
	BOTTOM OF TRENCH=1175.60



PRIOR TO INSTALLATION OF SEWAGE DISPOSAL SYSTEM THE CONTRACTOR SHALL CONTACT DIG-SAFE AT 1-888-344-7233.



TP#	GROUND ELEVATION AT TP	ESTIMATED SEASONAL HIGH GROUND WATER	ESTIMATED SEASONAL HIGH GROUND WATER ELEVATION
TP#1	1174.9	3.3'	1171.6
TP#3	1175.6	4.0'	1171.6

SHEET 2 OF 2

PLAN OF PROPOSED SEWAGE DISPOSAL SYSTEM IN
SHUTESBURY, MASSACHUSETTS
 PREPARED FOR
SHUTESBURY PUBLIC LIBRARY
 66 LEVERETT ROAD

DATE: JANUARY 24, 2024	SCALE: NOT TO SCALE
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HERITAGE
LAND SURVEYING & ENGINEERING, INC.
 241 COLLEGE HIGHWAY & CLARK STREET
 POST OFFICE BOX 90
 SOUTHAMPTON, MASSACHUSETTS 01073-0001
 (413) 527-3600

JOB # 8538-230818 DWG # 8538F002.DWG MAP # 8538-240124

Library Septic System