

CMA ENGINEERS, INC. CIVIL | ENVIRONMENTAL | STRUCTURAL

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December 11, 2023

Maxim Zakian, Town Planner Town of Kittery 200 Rogers Road Kittery, Maine 03904

RE: Town of Kittery, Planning Board Services
Major Site Plan Review – Review #2
Rooming House Redevelopment, 17 & 25 Route 236, Tax Map 20, Lot 12 and Tax Map 21, Lot 20
CMA #591.165

Dear Max:

CMA Engineers has received the following information for Assignment #165 for review #2 for the proposed redevelopment and rooming house construction at 17 & 25 Route 236 in Kittery (Tax Map 20, Lot 12 and Tax Map 21, Lot 20).

- 1) Response to peer review memorandum by Civil Consultants dated 11/2/2023.
- 2) Plan set entitled "Site Plan Land of 25 & 17 Route 236, LLC" by Civil Consultants dated 8/18/2023 revised 11/22/23.
- 3) Sheet L5 revised 12/06/2023.

The proposed project will construct a new 3-story, 6,789-ft² rooming house, with drainage and parking, for the primary use of employees of the property owner. There is an existing 2-story, 3,543-ft² seven-unit apartment building with associated parking and drainage on-site. Access to the new building is proposed through the existing apartment building parking lot. There are no wetland impacts proposed.

We have reviewed the information submitted for conformance with the Kittery Land Use and Development Code (LUDC) and general engineering practices and offer the comments below that correspond directly to the Town's Ordinances.

16.7 General Development Requirements

16.7.11 Performance Standards and Approval Criteria

16.7.11.A. Water Supply

We note that the water supply design is not finalized and that review and coordination with the Kittery Water District is ongoing.

16.7.11.B Sewage Disposal

We note that the sewer design is not finalized and that review and coordination with the sewer services department is ongoing.

Site Plan Comments

We have the following comments with respect to the site plans.

- 1. The applicant has indicated that an added sheet, Sheet ECSP, contains all known utility information. This sheet was not provided.
- 2. The applicant has provided a detail for the detention pond on Sheet L5. Is the overflow weir intended to be below the rim elevation of CB #4?
- 3. The plans should provide details on the existing on-site sewer components to the extent practicable.

Should you have any questions, please do not hesitate to call.

Very truly yours, CMA ENGINEERS, INC.

Godie Bray Strickland, P.E.

Project Manager

Attachment

cc: Geoffrey Aleva, P.E., Civil Consultants

Granttickland



CIVIL CONSULTANTS MEMORANDUM

TO:	CMA Engineers-Jodie Bray Strickland-PE		FROM:	Geoff Aleva, PE	DATE:	12/11/2023
SUBJECT:		Major Site Plan Review – Review #2 Rooming House Redevelopment, 17 & 25 Route 236, Tax Map 20, Lot 12 and Tax Map 21, Lot 20 CMA #591.165				
PROJECT: Major Site Plan Revi Rooming House Redo			17 & 25 Route 236 CC Projec	et 2218000)		

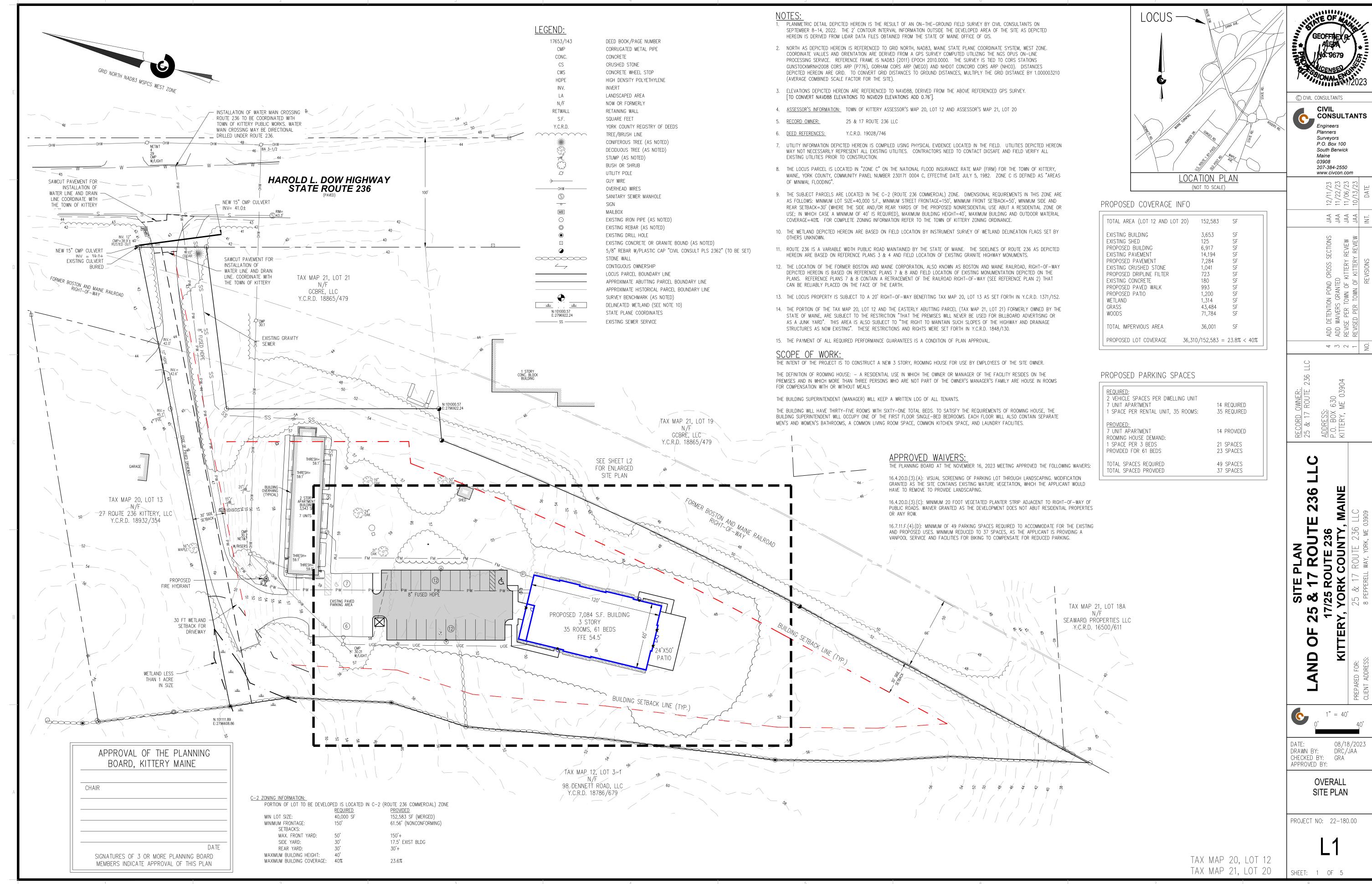
Following please find CIVIL CONSULTANTS's responses to the memorandum from CMA Engineers dated 12/11/2023.

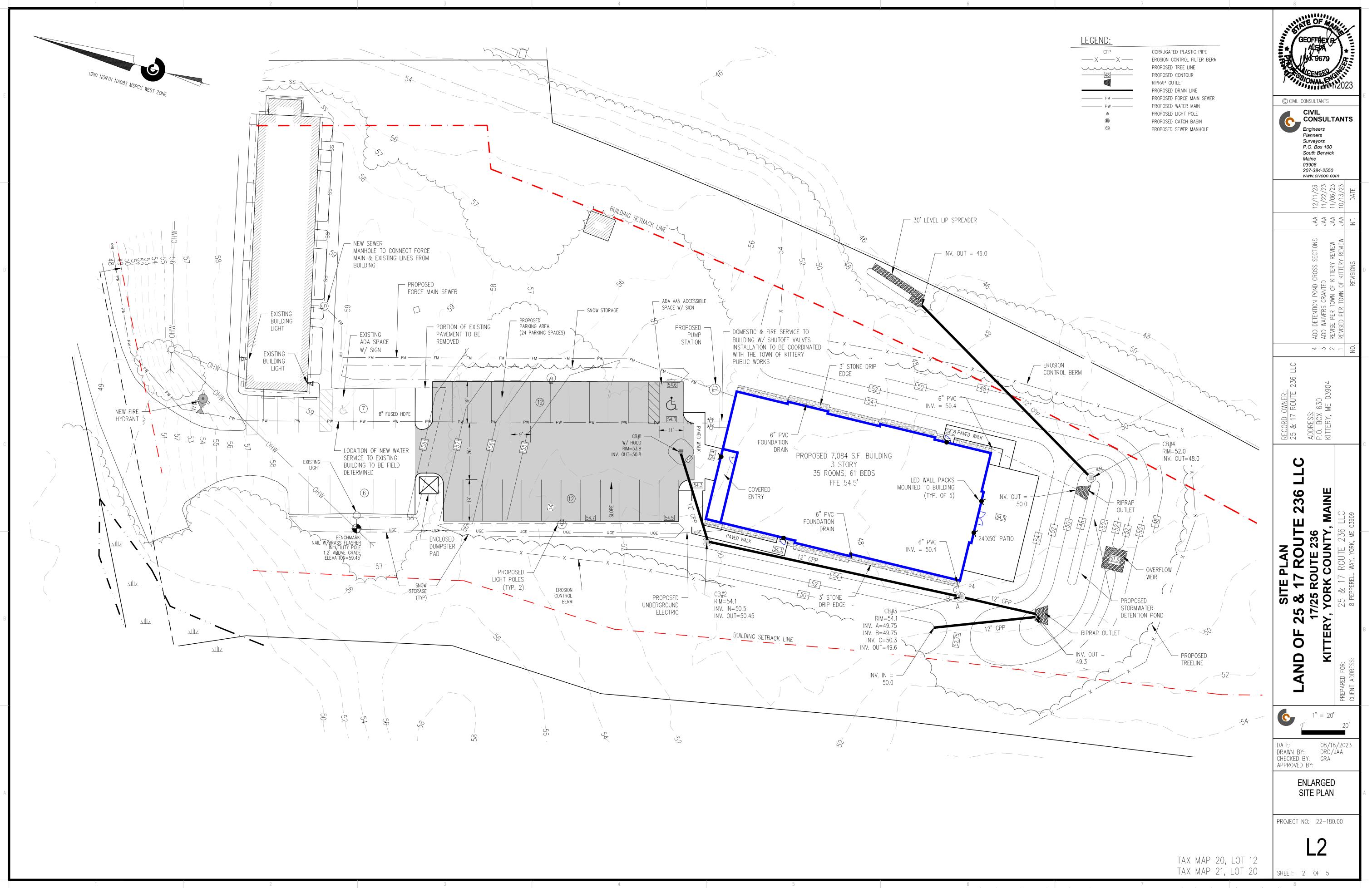
COMMENT	RESPONSE		
16.7 General Development Requirements			
16.7.11 Performance Standards and Approval Criteria 16.7.11.A. Water Supply We note that the water supply design is not finalized and that review and coordination with the Kittery Water District is ongoing.	No comment required at this time, as the applicant will work with the Kittery Water District on the development of the plans.		
16.7.11.B Sewage Disposal We note that the sewer design is not finalized and that review and coordination with the sewer services department is ongoing.	We will work with the Kittery Sewer Department with the connection details for the project.		
Site Plan Comments			
 We have the following comments with respect to the site plans. The applicant has indicated that an added sheet, Sheet ECSP, contains all known utility information. This sheet was not provided. The applicant has provided a detail for the detention pond on Sheet L5. Is the overflow weir intended to be below the rim elevation of CB #4? The plans should provide details on the existing on-site sewer components to the extent practicable. 	 Please see the attached plan set that has the existing conditions with known utilities. CB#4 is set higher than the overflow. The intent is to have the overflow control in the extreme condition. The stormwater analysis indicates that the 50 yr storm does not top the proposed overflow. 		
	 Please see attached information provided by the Kittery Sewer District pertaining to the existing sewer on the property. 		

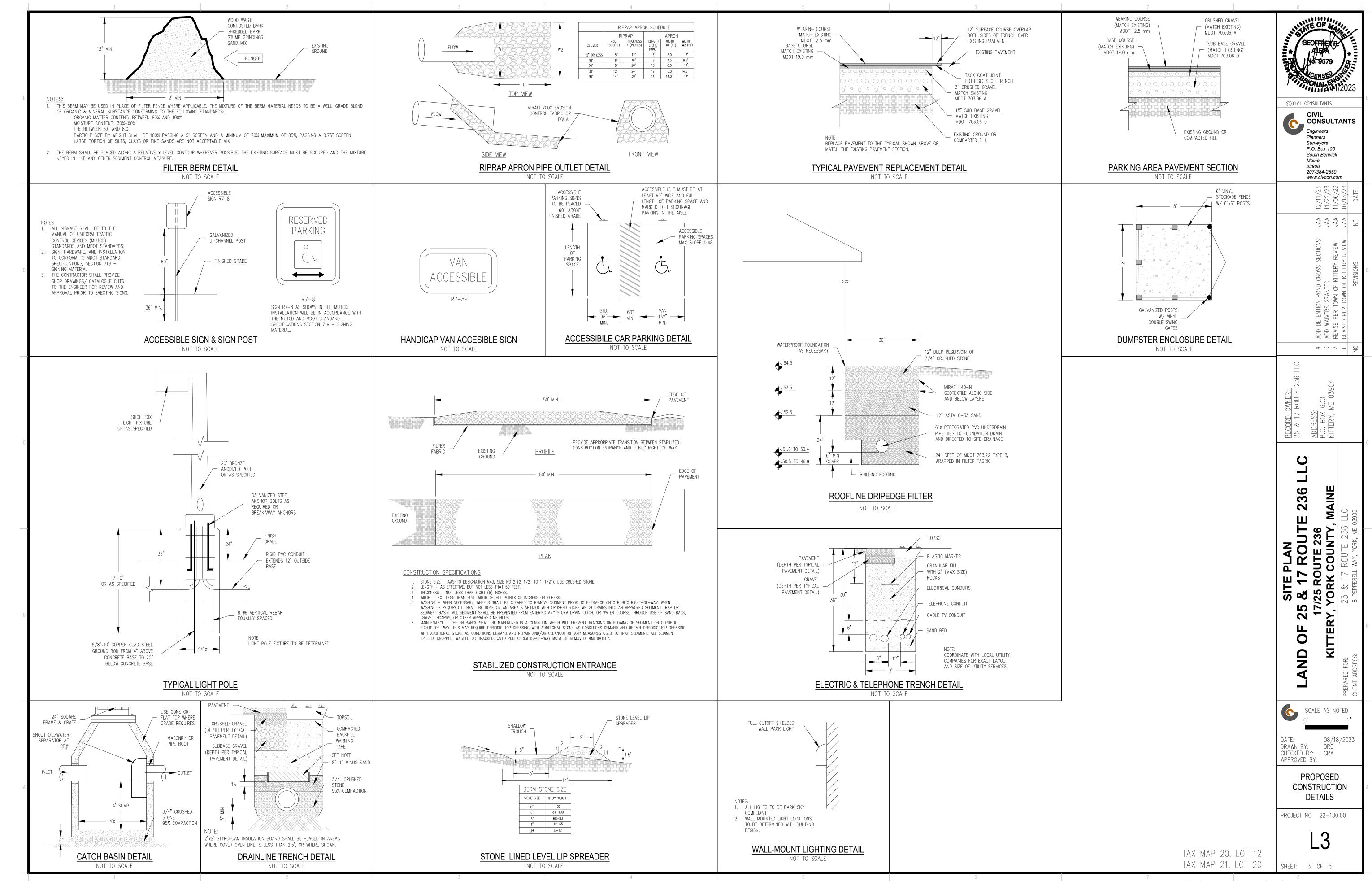
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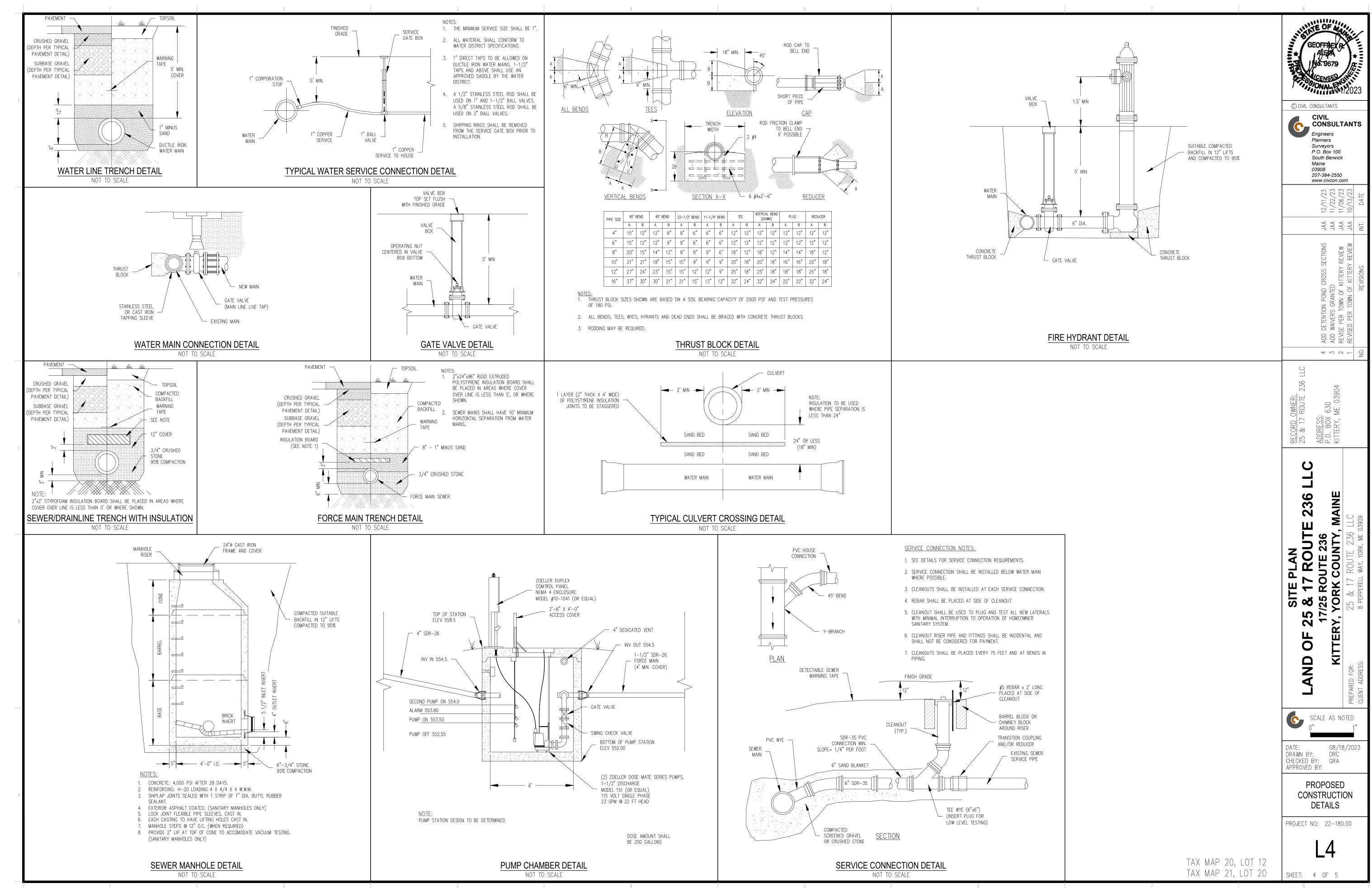
ATTACHMENTS:

- Revised Final Plan Set dated 12-11-2023
- Kittery Sewer Department Provided Sewer Information









MAINTENANCE PROCEDURES

THE FOLLOWING PROCEDURES ARE BASED ON THE MAINE STORMWATER MANAGEMENT DESIGN MANUAL, TECHNICAL DESIGN MANUAL VOLUME III, MAY 2016. MAINTENANCE PROCEDURES WILL BE FOLLOWED FOR INITIAL AND LONG TERM MAINTENANCE OF THE STORMWATER MANAGEMENT. FACILITIES AT THIS SITE, NOTE: FOR THE PURPOSES OF THESE PROCEDURES, A MAJOR STORM EVENT IS CLASSIFIED AS A RAINFALL EXCEEDING 3.0 INCHES. A SIGNIFICANT RAINFALL IS 1/2" IN A 24

DETENTION BASINS SHOULD BE INSPECTED ANNUALLY FOR EROSION. THEREAFTER, DESTABILIZATION OF SIDE SLOPES EMBANKMENT SETTLING AND OTHER SIGNS OF STRUCTURE FAILURE, AND LOSS OF STORAGE VOLUME DUE TO SEDIMENT ACCUMULATION. CORRECTIVE ACTION SHOULD BE TAKEN IMMEDIATELY UPON IDENTIFICATION

MAINTENANCE AGREEMENT: A LEGAL ENTITY SHOULD BE ESTABLISHED OR INSPECTING AND MAINTAINING ANY DETENTION BASIN. THE LEGAL AGREEMENT SHOULD LIST SPECIFIC MAINTENANCE RESPONSIBILITIES (INCLUDING TIMETABLES) AND PROVIDE FOR THE FUNDING TO OVER LONG-TERM INSPECTION AND MAINTENANCE.

INLET AND OUTLET INSPECTIONS: THE INLET AND OUTLET OF THE BASIN SHOULD BE CHECKED PERIODICALLY TO ENSURE THAT FLOW STRUCTURES ARE NOT BLOCKED BY DEBRIS. INSPECTIONS SHOULD BE CONDUCTED MONTHLY DURING WET WEATHER CONDITIONS (MARCH TO NOVEMBER). FLOW STRUCTURES SHOULD BE EASILY ACCESSIBLE FOR INSPECTION AND THE REMOVAL OF DEBRIS BLOCKAGE DURING STORM CONDITIONS.

EMBANKMENT MAINTENANCE: EMBANKMENTS SHOULD BE MAINTAINED TO PRESERVE THEIR INTEGRITY AS IMPOUNDMENT STRUCTURES, INCLUDING: MOWING, CONTROL OF WOODY VEGETATION, RODENT, AND OUTLET MAINTENANCE AND REPAIR. BASINS SHOULD BE MOWED NO MORE THAN TWICE A YEAR DURING THE GROWING SEASON TO MAINTAIN MAXIMUM GRASS HEIGHTS LESS THAN 12 INCHES. ALL ACCUMULATED TRASH AND DEBRIS SHOULD BE REMOVED.

SEDIMENT REMOVAL: SEDIMENT SHOULD BE REMOVED FROM THE PRETREATMENT STRUCTURE AT LEAST ANNUALLY AND FROM THE BASIN WHEN NECESSARY.

INFILTRATION BASINS, DRY WELLS AND INFILTRATION TRENCHES

PROPOSED 7,084 S.F. BUILDING

3 STORY

35 ROOMS, 61 BEDS

FFE 54.5'

FOUNDATION

£52}

DETENTION POND SITE PLAN

SCALE: 1"=20'

7- 3' STONE

DRIP EDGE

DRAIN

MAINTENANCE: PREVENTIVE MAINTENANCE IS VITAL FOR THE LONG-TERM EFFECTIVENESS OF AN INFILTRATION SYSTEM. SINCE INFILTRATION IS LESS CONSPICUOUS THAN MOST BMPS, IT IS EASY TO OVERLOOK DURING MAINTENANCE INSPECTIONS. THE FOLLOWING CRITERIA APPLY TO ALL INFILTRATION SYSTEMS.

FERTILIZATION: FERTILIZATION OF THE AREA OVER THE INFILTRATION BED SHOULD BE AVOIDED UNLESS ABSOLUTELY NECESSARY TO ESTABLISH VEGETATION.

SNOW STORAGE: SNOW REMOVED FROM ANY ON-SITE OR OFF-SITE AREAS MAY NOT BE STORED OVER AN INFILTRATION AREA, WITH THE EXCEPTION OF STORAGE ON PERMEABLE PAVEMENT.

MONITORING AND INSPECTIONS: INSPECT THE INFILTRATION SYSTEM SEVERAL TIMES IN THE FIRST YEAR OF OPERATION AND AT LEAST ANNUALLY THEREAFTER.

CONDUCT THE INSPECTIONS AFTER LARGE STORMS TO CHECK FOR SURFACE PONDING AT THE INLET THAT MAY INDICATE CLOGGING. WATER LEVELS IN THE OBSERVATION WELL SHOULD BE RECORDED OVER SEVERAL DAYS AFTER THE STORM TO ENSURE THAT THE SYSTEM DRAINS WITHIN 24 TO 48 HOURS AFTER FILLING. THE BASIN WILL NEED TO BE REHABILITATED IF IT FAILS TO DRAIN BEFORE THE NEXT RAIN EVENT OF 72 HOURS.

POLLUTION-CONTROL DEVICES: POLLUTION-CONTROL DEVICES SUCH AS OIL-WATER SEPARATORS, SKIMMERS, AND BOOMS SHOULD BE INSPECTED REGULARLY TO DETERMINE IF THEY NEED TO BE CLEANED OR REPLACED.

SEDIMENT REMOVAL AND MAINTENANCE OF SYSTEM PERFORMANCE: SEDIMENT MUST BE REMOVED FROM THE SYSTEM AT LEAST ANNUALLY TO PREVENT DETERIORATION OF SYSTEM PERFORMANCE. THE PRE-TREATMENT INLETS SHOULD BE CHECKED AND CLEANED OUT WHEN ACCUMULATED SEDIMENT OCCUPIES MORE THAN 10% OF THE AVAILABLE CAPACITY. THIS CAN BE DONE MANUALLY OR BY A VACUUM PUMP. INLET AND OUTLET PIPES SHOULD BE CHECKED FOR CLOGGING. ACCUMULATED GREASE AND OIL FROM SEPARATOR DEVICES SHOULD BE REMOVED FREQUENTLY AND DISPOSED OF IN ACCORDANCE WITH APPLICABLE STATE AND LOCAL REGULATIONS. THE SYSTEM MUST BE REHABILITATED OR REPLACED IF ITS PERFORMANCE IS DEGRADED TO THE POINT THAT APPLICABLE STORMWATER STANDARDS ARE NOT MET.

PRETREATMENT BUFFER STRIPS: IF A GRASS BUFFER STRIP IS USED IN CONJUNCTION WITH THE INFILTRATION BMP IT SHOULD HAVE VIGOROUS AND DENSE VEGETATION. BARE SPOTS OR ERODED AREAS SHOULD BE REPAIRED AND/OR RE-SEEDED OR RE-SODDED. WATERING AND/OR FERTILIZATION SHOULD BE PROVIDED DURING THE FIRST FEW MONTHS AFTER THE STRIP IS ESTABLISHED, AND MAY BE NEEDED IN TIMES OF DROUGHT. GRASS FILTER STRIPS SHOULD BE MOWED REGULARLY TO PREVENT THE UNCONTROLLED GROWTH OF WEEDS, BUT FILTER STRIP PERFORMANCE WILL BE IMPAIRED IF THE GRASS IS CUT TOO SHORT.

LED WALL PACKS —

(TYP. OF 5)

INV. OUT

54.5

24'X50' PATIO

MOUNTED TO BUILDING

6" PVC —

INV. = 50.4

CB#3

RIM = 54.1

INV. A = 49.75

INV. B=49.75

INV. C=50.3

INV. OUT=49.6

INV. IN =

50.0

MAINTENANCE: A DRIPLINE FILTER BED NEEDS TO BE MAINTAINED LIKE ANY OTHER FILTER BASIN. THE MAINTENANCE ACTIVITIES FOR FILTRATION BMPS LISTED IN CHAPTER 7.2 OF THE BMP MANUAL APPLY EQUALLY TO THIS TYPE OF STRUCTURE. ANY DEBRIS MUST BE REMOVED FROM THE RESERVOIR COURSE. THE MAINTENANCE PLAN NEEDS TO ADDRESS THAT THESE STRUCTURES ARE PART OF THE STORMWATER MANAGEMENT PLAN FOR THE PROJECT, CANNOT BE PAVED OVER 1. STABILIZATION OF DITCHES AND CHANNELS OR ALTERED IN ANYWAY. NO GUTTER MAY BE INSTALLED ON THE ROOF LINE.

MAINTENANCE: THE AREA SHOULD BE INSPECTED FOR FAILURES FOLLOWING HEAVY RAINFALL AND REPAIRED AS NECESSARY FOR NEWLY FORMED CHANNELS OR GULLIES. BARE SPOTS SHOULD BE RESEEDED OR RESODDED. TRASH, LEAVES AND/OR ACCUMULATED SEDIMENTS SHOULD BE REMOVED. WOODY OR OTHER UNDESIRABLE VEGETATION SHOULD BE CONTROLLED. CHECK DAM INTEGRITY SHOULD BE CHECKED.

- AERATION: THE BUFFER STRIP MAY REQUIRE PERIODIC MECHANICAL AERATION (BY ROTOTILLING OR OTHER) TO RESTORE INFILTRATION CAPACITY. THIS AFRATION MUST BE DONE DURING A TIME WHEN THE AREA CAN BE RESERVED AND MULCHED PRIOR TO ANY SIGNIFICANT RAINFALL
- MOWING: GRASS SHOULD NOT BE TRIMMED EXTREMELY SHORT. AS THIS WILL REDUCE THE FILTERING EFFECT OF THE SWALE (MPCA. 1989). THE CUT VEGETATION SHOULD BE REMOVED TO PREVENT THE DECAYING ORGANIC LITTER FROM ADDING POLLUTANTS TO THE DISCHARGE FROM THE SWALE, MOWED HEIGHT OF THE GRASS SHOULD BE 2-4 INCHES TALLER THAN THE MAXIMUM FLOW DEPTH OF THE DESIGN WATER QUALITY STORM. A MINIMUM MOW HEIGHT OF 6 INCHES IS GENERALLY RECOMMENDED (GALLI, 1993).
- EROSION: IT IS IMPORTANT TO INSTALL EROSION AND SEDIMENT CONTROL MEASURES TO STABILIZE THIS AREA AS SOON AS POSSIBLE AND RETAIN ANY.
- ORGANIC MATTER IN THE BOTTOM OF THE TRENCH. • FERTILIZATION: ROUTINE FERTILIZATION AND/OR PESTICIDE USE IS STRONGLY DISCOURAGED. IF COMPLETE RESEEDING IS NECESSARY, HALF THE ORIGINAL
- RECOMMENDED RATE OF FERTILIZER SHOULD BE APPLIED WITH A FULL RATE OF SEED. SEDIMENT REMOVAL: LEVEL OF SEDIMENT DEPOSITION IN THE CHANNEL SHOULD BE MONITORED REGULARLY, AND REMOVED FROM GRASSED CHANNELS BEFORE

MAINTENANCE: LONG TERM MAINTENANCE OF THE LEVEL SPREADER IS ESSENTIAL TO ENSURE ITS EFFECTIVENESS. SPREADERS CONSTRUCTED OF WOOD, ASPHALT, STONE OR CONCRETE CURBING ALSO REQUIRE INSPECTION AND MAINTENANCE.

- INSPECTIONS: AT LEAST ONCE A YEAR AND FOLLOWING MAJOR STORMS, THE LEVEL SPREADER POOL SHOULD BE INSPECTED FOR SAND ACCUMULATION AND
- DEBRIS THAT MAY REDUCE ITS CAPACITY. • SEDIMENT REMOVAL: SEDIMENT BUILD-UP WITHIN THE SWALE SHOULD BE REMOVED WHEN IT HAS ACCUMULATED TO APPROXIMATELY 25% OF DESIGN VOLUME
- OR CHANNEL CAPACITY. DISPOSE OF THE SEDIMENTS APPROPRIATELY. DEBRIS: REMOVE DEBRIS SUCH AS LEAF LITTER, BRANCHES AND TREE GROWTH FROM THE SPREADER.

CHANNEL WHEN IT REDUCES THE CAPACITY OF THE CHANNEL.

INV. OUT=48.0

PROPOSED

TREELINE

- OVERFLOW

WEIR

PROPOSED

RIPRAP OUTLET

INV. OUT =

49.3

STORMWATER

DETENTION POND

- MOWING: VEGETATED SPREADERS MAY REQUIRE MOWING.
- SNOW STORAGE: DO NOT STORE SNOW WITHIN THE AREA OF THE LEVEL SPREADER. LEVEL SPREADER REPLACEMENT: THE RECONSTRUCTION OF THE LEVEL SPREADER MAY BE NECESSARY WHEN SHEET FLOW FROM THE SPREADER CHANNELIZE

RIPRAP OUTLET

MAINTENANCE: SEDIMENT REMOVAL FROM THE SUMP AND ANY FLOATING DEBRIS AND PRODUCTS IS IMPERATIVE FOR THE CONTINUITY OF THE EFFECTIVENESS OF THE

MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS GROW AT LEAST THREE INCHES OR COVER AT LEAST 75% OF THE STRUCTURE. THE SUMP NEEDS CLEANING WHEN SEDIMENTS ARE VISIBLE AT THE BOTTOM OF THE OUTLET PIPE.

- INSPECTION: WATER QUALITY INLETS SHOULD BE INSPECTED THREE TO FOUR TIMES ANNUALLY.
- SEDIMENT REMOVAL: SEDIMENT SHOULD BE REMOVED WHEN ACCUMULATION IS WITHIN 6 INCHES OF THE BOTTOM OF THE HOOD.

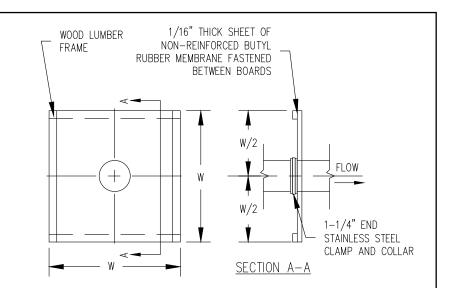


TABLE OF QUANTITIES (PER COLLAR)

PIPE DIA. (INCHES)	W (FEET)	BUTYL SHEET (SQ.FT.)	STAINLESS STEEL STRAP	LUMBER FOR FRAME (LIN. FEET)
ESS THAN 6"	2.5	6.3	1	10
6" TO 15"	5.0	25.0	1	20

- COAT PIPE AT COLLAR WITH BUTYL RUBBER ROOF PATCH CEMENT SEALER OR OTHER BUTYL RUBBER SEALER. (DO NOT USE ASPHALT ROOF PATCH).
- COMPLETED INSTALLATION MUST BE WATER TIGHT. FORCE BUTYL RUBBER SHEET OVER UPDTREAM END OF PIPE AND OVER BUTYL RUBBER SEALER
- INSTALL A 1-1/4" WIDE STAINLESS STEEL STRAP. CLAMP AROUND PIPE OBER BUTYL RUBBER SHEET AND TIGHTEN UNTIL SEALER IS FORCED OUT.
- 5. STAPLE BUTYL RUBBER SHEET TO LUMBER FRAME. FOR PIPE DIAMETER OF LESS THAN 6" CUT A HOLE (CENTERED) IN BUTYL RUBBER SHEET, APPROXIMATELY 1/2" DIAMETER, AND FOR PIPE DIAMETER 8" TO 15" CUT A HOLE 3" SMALLER THAN THE PIPE DIAMETER AND FORCE BUTYL RUBBER SHEET OVER UPSTREAM END OF PIPE AND OVER BUTYL ROOF
- 7. THE WOOD FRAME SHALL BE CONSTRUCTED FROM EITHER 1"X4" OR 2"X2" LUMBER AND SHALL BE GOOD ENOUGH TO WITHSTAND BACKFILL OPERATIONS.

ANTI-SEEPAGE COLLAR

NOT TO SCALE

OVERWINTER STABILIZATION

MAINE EROSION AND SEDIMENT CONTROL BMP (3/2016)

ALL STONE-LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED BY NOVEMBER 15. ALL GRASS-LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED BY SEPTEMBER 1. IF A DITCH OR CHANNEL IS NOT GRASS-LINED BY SEPTEMBER 1, THEN ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE DITCH FOR LATE FALL AND WINTER MUST BE TAKEN.

SOD LINING: A DITCH OR CHANNEL MUST BE LINED WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES: PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL. WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL, AND ANCHORING THE SOD AT THE BASE OF THE DITCH WITH JUTE OR PLASTIC MESH TO PREVENT THE SOD FROM SLOUGHING DURING FLOW CONDITIONS.

STONE LINING: A DITCH OR CHANNEL MUST BE LINED WITH STONE RIPRAP BY NOVEMBER 15. A REGISTERED PROFESSIONAL ENGINEER MUST DETERMINE THE STONE SIZE AND LINING THICKNESS NEEDED TO WITHSTAND THE ANTICIPATED FLOW VELOCITIES AND FLOW DEPTHS WITHIN THE DITCH. IF NECESSARY, THE CONTRACTOR WILL REGRADE THE DITCH PRIOR TO PLACING THE STONE LINING TO PREVENT THE STONE LINING FROM REDUCING THE DITCH'S CROSS-SECTIONAL AREA. . STABILIZATION OF DISTURBED SLOPES

ALL STONE-COVERED SLOPES MUST BE CONSTRUCTED AND STABILIZED BY NOVEMBER 15. ALL SLOPES TO BE VEGETATED MUST BE SEEDED AND MULCHED BY SEPTEMBER 1. THE DEPARTMENT WILL CONSIDER ANY AREA HAVING A GRADE GREATER THAN 15% TO BE A SLOPE. IF A SLOPE TO BE VEGETATED IS NOT STABILIZED BY SEPTEMBER 1, THEN ONE OF THE FOLLOWING ACTIONS MUST BE TAKEN TO STABILIZE THE SLOPE FOR LATE FALL

TEMPORARY VEGETATION AND EROSION CONTROL MATS: BY OCTOBER 1, THE DISTURBED SLOPE MUST BE SEEDED WITH WINTER RYE AT A SEEDING PERMANENT DAMAGE IS DONE TO THE GRASSED VEGETATION, OR IF INFILTRATION TIMES ARE LONGER THAN 12 HOURS. SEDIMENT SHOULD BE REMOVED FROM A RATE OF 3 POUNDS PER 1,000 SQUARE FEET FOLLOWED BY INSTALLATION OF EROSION CONTROL MATS OR ANCHORED MULCH OVER THE SEEDING. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR FAILS TO COVER AT LEAST 75% OF THE SLOPE BY NOVEMBER 1, THEN THE CONTRACTOR WILL COVER THE SLOPE WITH A LAYER OF EROSION CONTROL MIX OR STONE RIPRAP AS DESCRIBED IN THE FOLLOWING STANDARDS.

SOD: THE DISTURBED SLOPE MUST BE STABILIZED WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE

CONTRACTOR PINNING THE SOD ONTO THE SLOPE WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL. THE CONTRACTOR WILL NOT USE LATE-SEASON SOD INSTALLATION TO STABILIZE SLOPES HAVING A GRADE GREATER THAN 33% (3H:1V) OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE. EROSION CONTROL MIX: EROSION CONTROL MIX MUST BE PROPERLY INSTALLED BY NOVEMBER 15. THE CONTRACTOR WILL NOT USE EROSION CONTROL MIX TO STABILIZE SLOPES HAVING GRADES GREATER THAT 50% (2H:1V) OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.

STONE RIPRAP: PLACE A LAYER OF STONE RIPRAP ON THE SLOPE BY NOVEMBER 15. THE DEVELOPMENT'S OWNER WILL HIRE A REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE NEEDED FOR STABILITY ON THE SLOPE AND TO DESIGN A FILTER LAYER TO BE INSTALLED BENEATH THE RIPRAP.

3. STABILIZATION OF DISTURBED SOILS

TEMPORARY VEGETATION: BY OCTOBER 1, SEED THE DISTURBED SOIL WITH WINTER RYE AT A SEEDING RATE OF 3-LBS PER 1,000 SQUARE FEET, LIGHTLY MULCH THE SEEDED SOIL WITH HAY OR STRAW AT 75-LBS PER 1,000 SQUARE FEET, AND ANCHOR THE MULCH WITH PLASTIC NETTING. DISTURBED SOIL BEFORE NOVEMBER 1. THEN MULCH THE AREA FOR OVERWINTER PROTECTION AS FOLLOWS.

MULCH: BY NOVEMBER 15, MULCH THE DISTURBED SOIL BY SPREADING HAY OR STRAW AT A RATE OF AT LEAST 150-LBS PER 1,000 SQUARE FEET ON THE AREA SO THAT NO SOIL IS VISIBLE THROUGH THE MULCH. IMMEDIATELY AFTER APPLYING THE MULCH, ANCHOR THE MULCH WITH PLASTIC NETTING TO PREVENT WIND FROM MOVING THE MULCH OFF THE DISTURBED SOIL. MAINTENANCE

MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION SEASON. AFTER EACH RAINFALL, SNOW STORM OR PERIOD OF THAWING AND RUNOFF. THE SITE CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES AND PERFORM REPAIRS AS NEEDED TO INSURE THEIR CONTINUOUS FUNCTION. FOLLOWING THE TEMPORARY AND OR FINAL SEEDING AND MULCHING, THE CONTRACTOR SHALL IN THE SPRING INSPECT AND REPAIR ANY DAMAGES AND/OR BARE SPOTS. AN ESTABLISHED VEGETATIVE COVER MEANS A MINIMUM OF 85% TO 90% OF AREAS VEGETATED WITH VIGOROUS GROWTH.

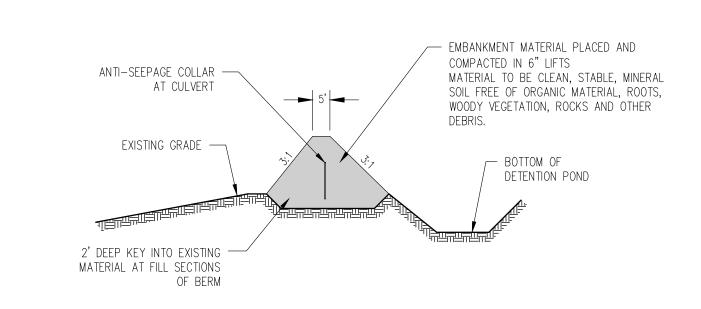
STABILIZATION SCHEDULE BEFORE WINTER

SEPTEMBER 15 ALL DISTURBED AREAS MUST BE SEEDED AND MULCHED. ALL SLOPES MUST BE STABILIZED. SEEDED AND MULCHED. ALL GRASS-LINED DITCHES AND CHANNELS MUST BE STABILIZED WITH MULCH OR AN EROSION CONTROL BLANKET.

OCTOBER 1 IF THE SLOPE IS STABILIZED WITH AN EROSION CONTROL BLANKET AND SEEDED. ALL DISTURBED AREAS TO BE PROTECTED WITH ANNUAL GRASS MUST BE SEEDED AT A SEEDING RATE OF 3-LBS PER 1,000 SQUARE FEET AND MULCHED.

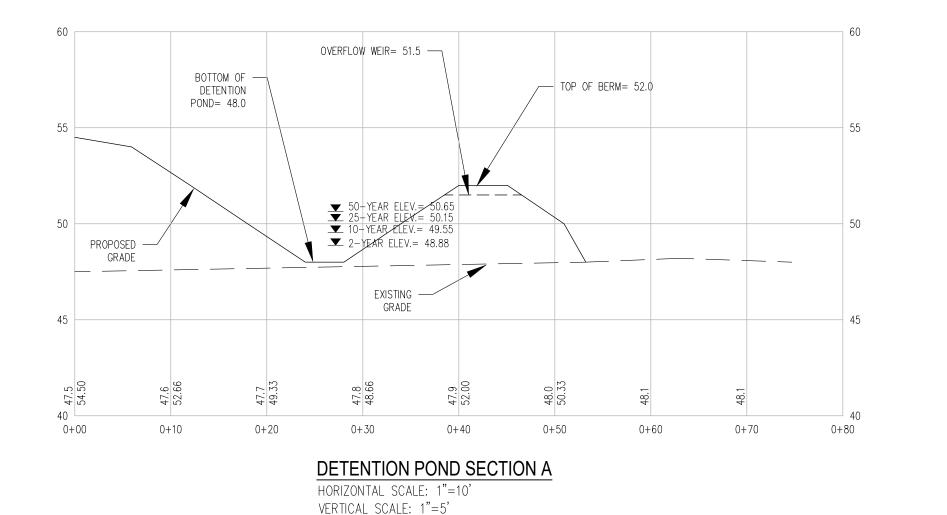
NOVEMBER 15 ALL STONE-LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED. SLOPES THAT ARE COVERED WITH RIPRAP MUST BE CONSTRUCTED BY THIS DATE.

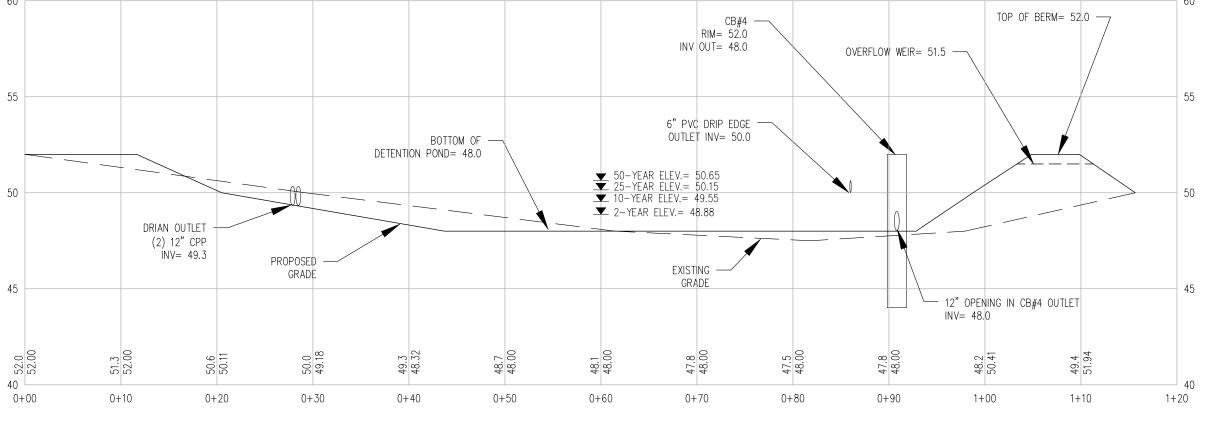
DECEMBER 1 ALL DISTURBED AREAS WHERE GROWTH OF VEGETATION FAILS TO BE AT LEAST THREE INCHES TALL OR AT LEAST 75% OF THE DISTURBED SOIL IS COVERED VEGETATION, MUST BE PROTECTED FOR OVER-WINTER. NOTE: THE DATES GIVEN ARE FOR PROJECTS IN SOUTH-CENTRAL MAINE.



DETENTION POND EMBANKMENT DETAIL







DETENTION POND SECTION B HORIZONTAL SCALE: 1"=10' VERTICAL SCALE: 1"=5"

EROSION AND SEDIMENT CONTROL PRACTICES

BLANKET, OR OTHER COMPARABLE MEASURES.

- NO SOIL SHALL BE DISTURBED DURING THE PERIOD OF MARCH 1 THROUGH APRIL 15, NOR DURING ANY OTHER PERIOD WHEN SOILS ARE SATURATED DUE TO RAIN OR SNOW MELT.
- 2. DISTURBED SOILS SHALL BE STABILIZED WITHIN ONE (1) WEEK FROM THE TIME IT WAS LAST ACTIVELY WORKED USING TEMPORARY OR PERMANENT MEASURES SUCH AS PLACEMENT OF RIPRAP, MULCH OR EROSION CONTROL
- 3. HAY OR STRAW MULCH SHALL BE APPLIED AT A RATE OF AT LEAST ONE (1) BALE PER 500 SQUARE FEET (1-2 TONS PER ACRE).
- 4. IF MULCH IS LIKELY TO BE REMOVED DUE TO TO STEEP SLOPES OR WIND, IT SHALL BE ANCHORED WITH NETTING, PEG OR TWINE, OR OTHER SUITABLE METHOD AND SHALL BE MAINTAINED UNTIL A CATCH OF VEGETATION IS ESTABLISHED OVER THE ENTIRE DISTURBED AREA.
- 5. IN ADDITION TO PLACEMENT OF RIPRAP, MULCH OR EROSION CONTROL BLANKETS, ADDITIONAL STEPS SHALL BE TAKEN WHERE NECESSARY IN ORDER TO PREVENT SEDIMENTATION OF THE WATER. EVIDENCE OF SEDIMENTATION INCLUDES VISIBLE GULLY EROSION. DISCOLORATION OF WATER BY SUSPENDED PARTICLES AND SLUMPING OF BANKS, SILT FENCES STAKED HAY BALES AND OTHER SEDIMENTATION CONTROL MEASURES, WHERE PLANNED FOR, SHALL BE IN PLACE PRIOR TO COMMENCEMENT OF WORK, BUT SHALL ALSO BE INSTALLED WHEREVER NECESSARY DUE TO SEDIMENTATION.
- MULCH OR OTHER TEMPORARY MEASURES SHALL BE MAINTAINED UNTIL THE SITE IS PERMANENTLY STABILIZED WITH VEGETATION OR OTHER PERMANENT CONTROL MEASURES AFTER WHICH TEMPORARY MEASURES WILL BE REMOVED.
- PERMANENT RE-VEGETATION OF ALL DISTURBED AREAS, USING NATIVE PLANT MATERIAL WHEN POSSIBLE, SHALL OCCUR WITHIN 30 DAYS FROM THE TIME THE AREAS WERE LAST ACTIVELY WORKED, OR FOR FALL AND WINTER ACTIVITIES, BY JUNE 15, EXCEPT WHERE PRECLUDED BY THE TYPE OF ACTIVITY (E.G. RIRRAP, ROAD SURFACES, ETC.). THE VEGETATIVE COVER SHALL BE MAINTAINED.
- 8. DISPOSAL OF COLLECTED DEBRIS MUST BE IN CONFORMANCE WITH MAINE SOLID WASTE LAW, TITLE 38 MRSA SECTION 1301 ET. SEQ.
- 9. LIME AND FERTILIZER APPLICATION RATES SHALL NOT EXCEED THE FOLLOWING:

GROUND LIMESTONE: 3 TONS/ACRE (130 LBS./1000 S.F.) FERTILIZER, 10-10-10 OF EQUIVALENT: 600 LBS./ACRE (14 LBS./1000 S.F.)

FERTILIZER SHALL NOT BE APPLIED BEFORE START OF THE GROWING SEASON NOR AFTER SEPTEMBER 30. FERTILIZED AREAS SHALL BE MULCHED TO REDUCE OFF-SITE TRANSPORT OF NUTRIENTS UNTIL USED BY VEGETATIVE

SEEDING MIXTURE AND SCHEDULE:

SPREAD TOPSOIL UNIFORMLY 6" DEEP OVER AREAS TO BE RECLAIMED. THE FOLLOWING SEED MIXTURE SHALL BE USED:

KENTUCKY BLUEGRASS 0.46 LBS./1000 S.F. CREEPING RED FESCUE 0.46 LBS./1000 S.F. PERENNIAL RYE GRASS 0.11 LBS./1000 S.F. TOTAL 1.03 LBS./1000 S.F.

APPLY LIME AND FERTILIZER AS SPECIFIED UNDER THE EROSION AND SEDIMENTATION CONTROL NOTES. WORK INTO THE TOP (4) INCHES OF SOIL PRIOR TO SEEDING. AFTER SEEDING, APPLY MULCH HAY AS SPECIFIED. ON FLAT AREAS AND NOT EXPOSED TO WIND, THE MULCH WILL BE ANCHORED BY WETTING DOWN. IN OTHER AREAS, JUTE NETTING SHALL BE USED FOR ANCHORAGE. THE ABOVE SEEDING SCHEDULE IS APPLICABLE IF SEEDING DURING THE GROWING SEASON (APRIL 15 TO JUNE 15 AND AUGUST 30 TO SEPTEMBER 30). BETWEEN JUNE 15 AND AUGUST 30, SEEDING WILL BE DELAYED UNTIL AUGUST 30. IF SOIL IS DISTURBED BETWEEN OCTOBER AND NOVEMBER 1, DELAY SEEDING UNTIL NOVEMBER 1. AFTER NOVEMBER AND BEFORE A SNOW COVER FORMS, THE SAME PROCEDURE WILL BE FOLLOWED EXCEPT THE SEED RATE WILL BE DOUBLED. AFTER SNOW COVER AND BEFORE APRIL 15, SEEDING WILL BE DELAYED UNTIL APRIL 15. HAY MULCH WILL BE APPLIED AT A RATE OF 150 LBS./1000 SQUARE FEET. THIS WILL BE ANCHORED BY NON-ASPHALTIC TACKIFIER SPRAYED ON LAWNS AND JUTE NETTING IN DRAINAGE WAYS AND OTHER AREAS.

PREPARED FOR REVIEW 12/11/2023

© CIVIL CONSULTANTS **CONSULTANTS** Engineers Planners Surveyors P.O. Box 100 South Berwick 207-384-2550 www.civcon.com

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SITE PLAN & 17 ROUT 25 ROUTE 236 YORK COUNTY SITE & 17 25 R(5 0

AND

SCALE AS NOTED 08/18/2023

DRC

CHECKED BY: GRA APPROVED BY: MAINTENANCE **NOTES & DETENTION** POND SECTIONS

PROJECT NO: 22-180.00

DRAWN BY:

SHEET: 5 OF 5

CHAIR

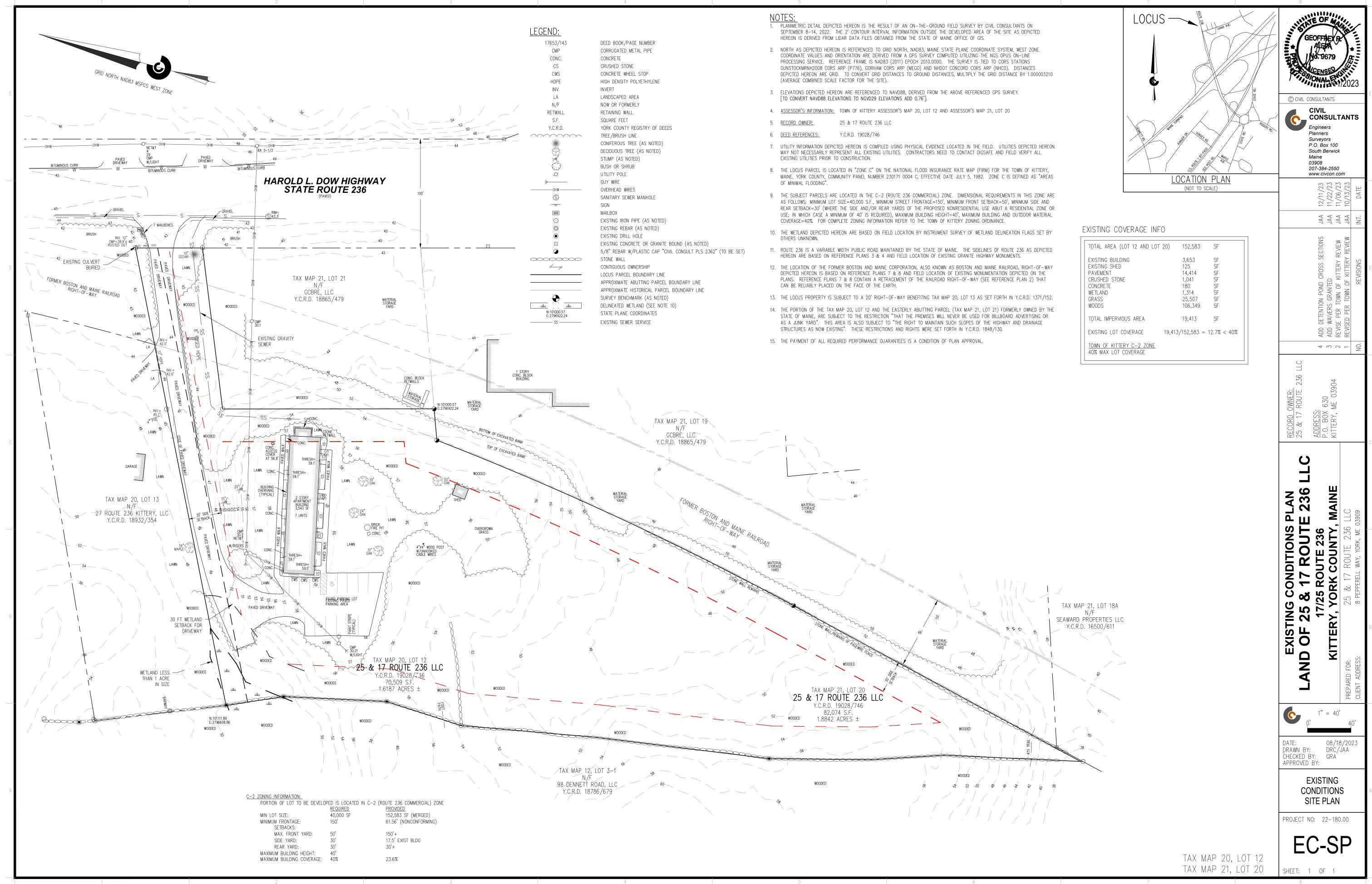
APPROVAL OF THE PLANNING

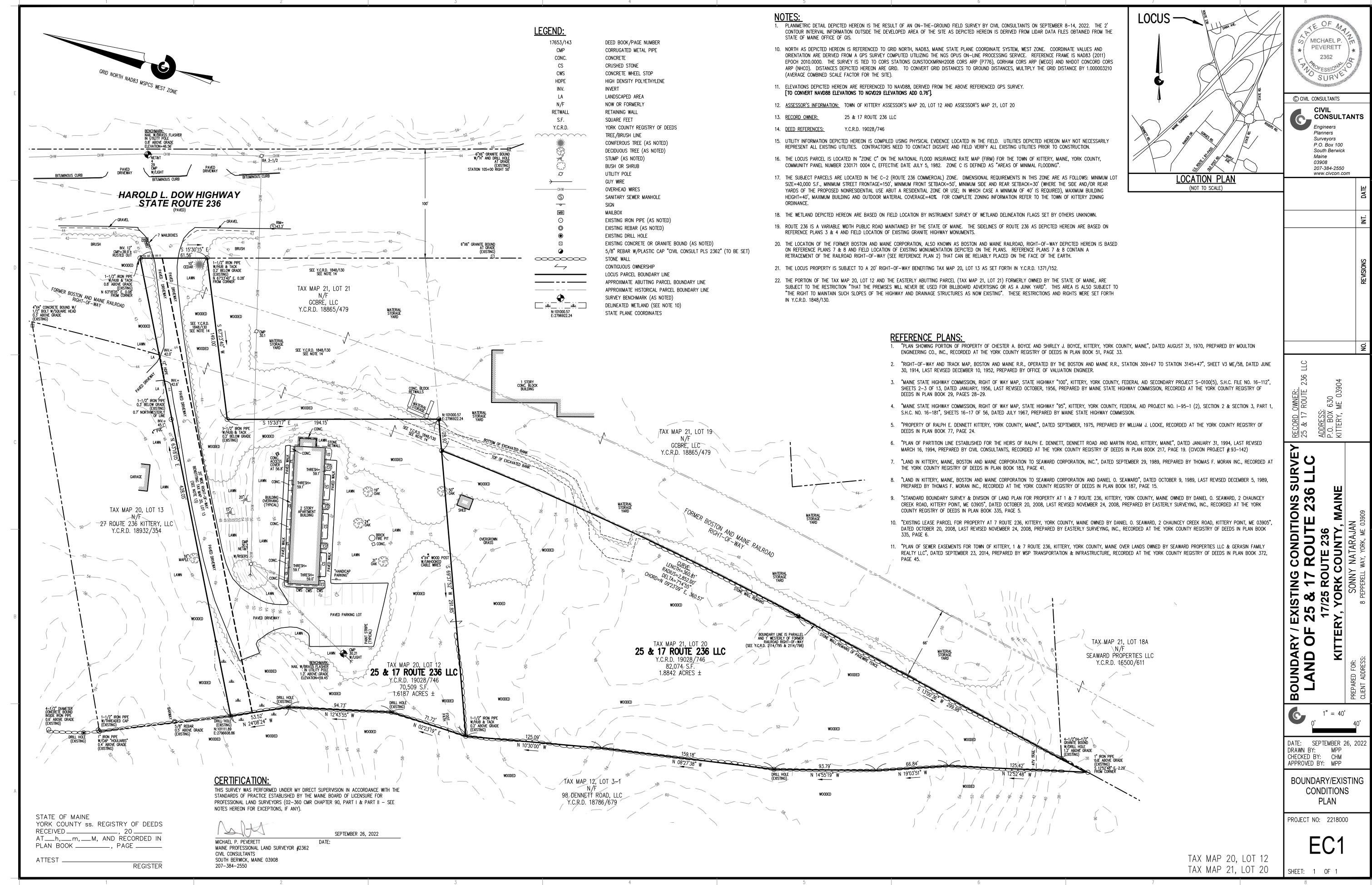
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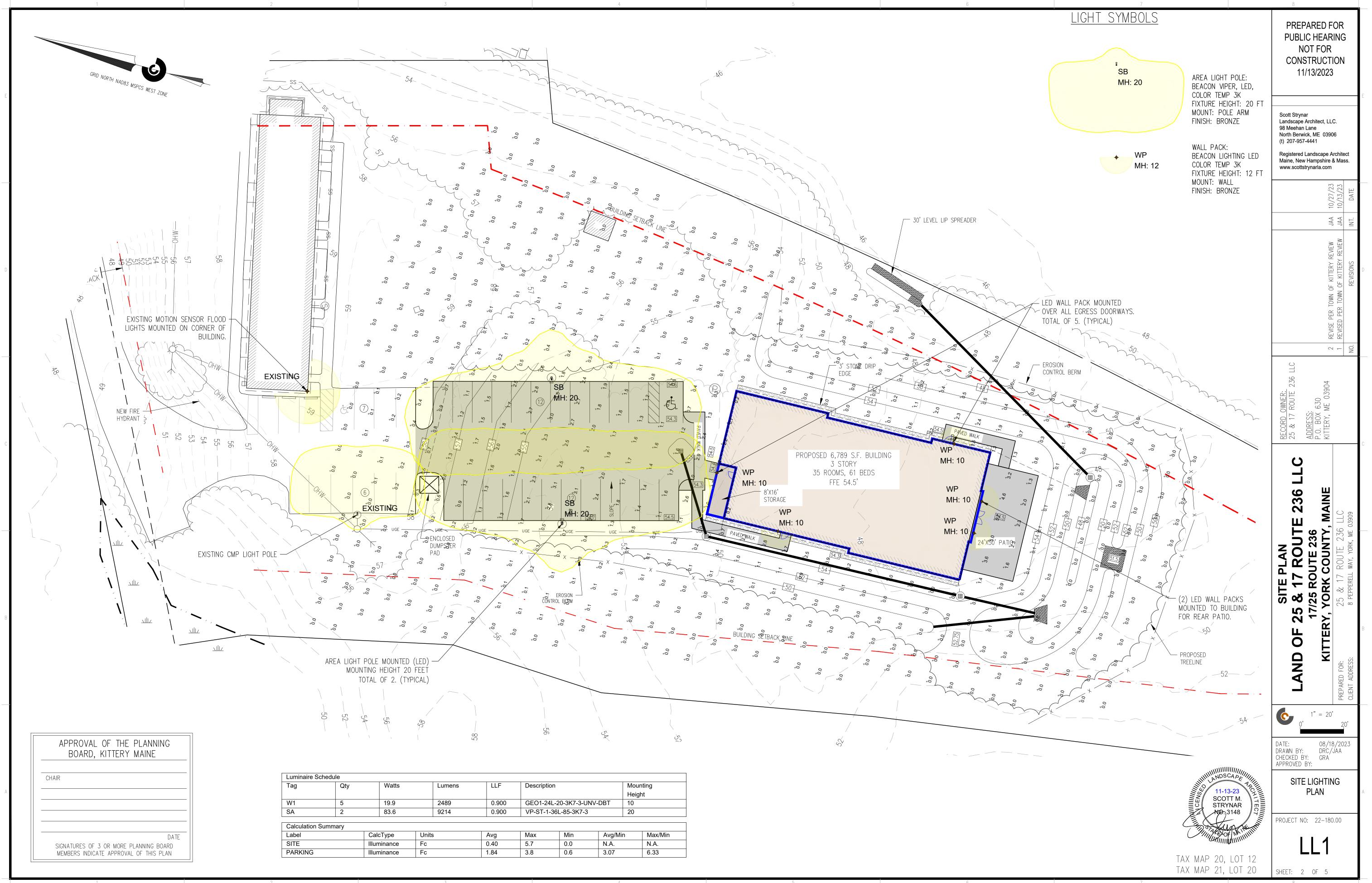
TAX MAP 20, LOT 12

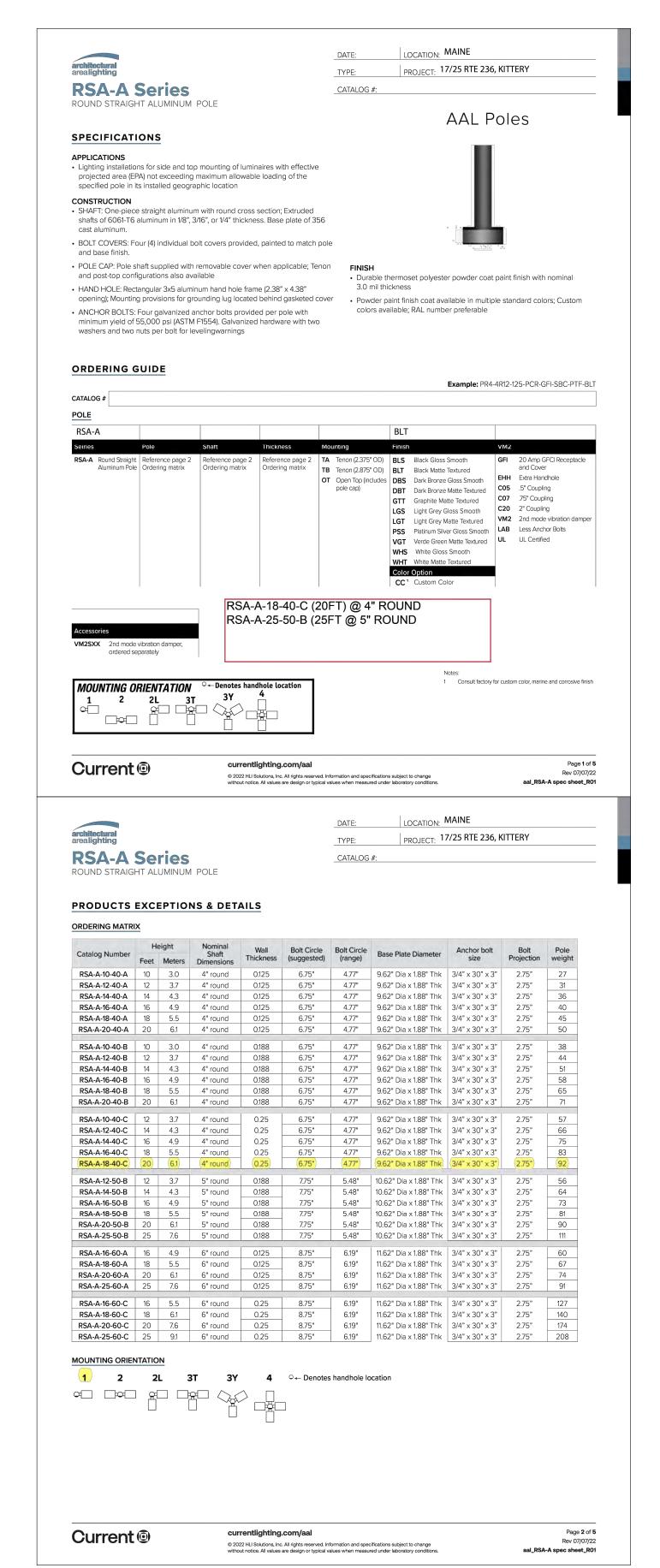
TAX MAP 21, LOT 20

BOARD, KITTERY MAINE









POSTS FOR POLE MOUNTED AREA LIGHTS

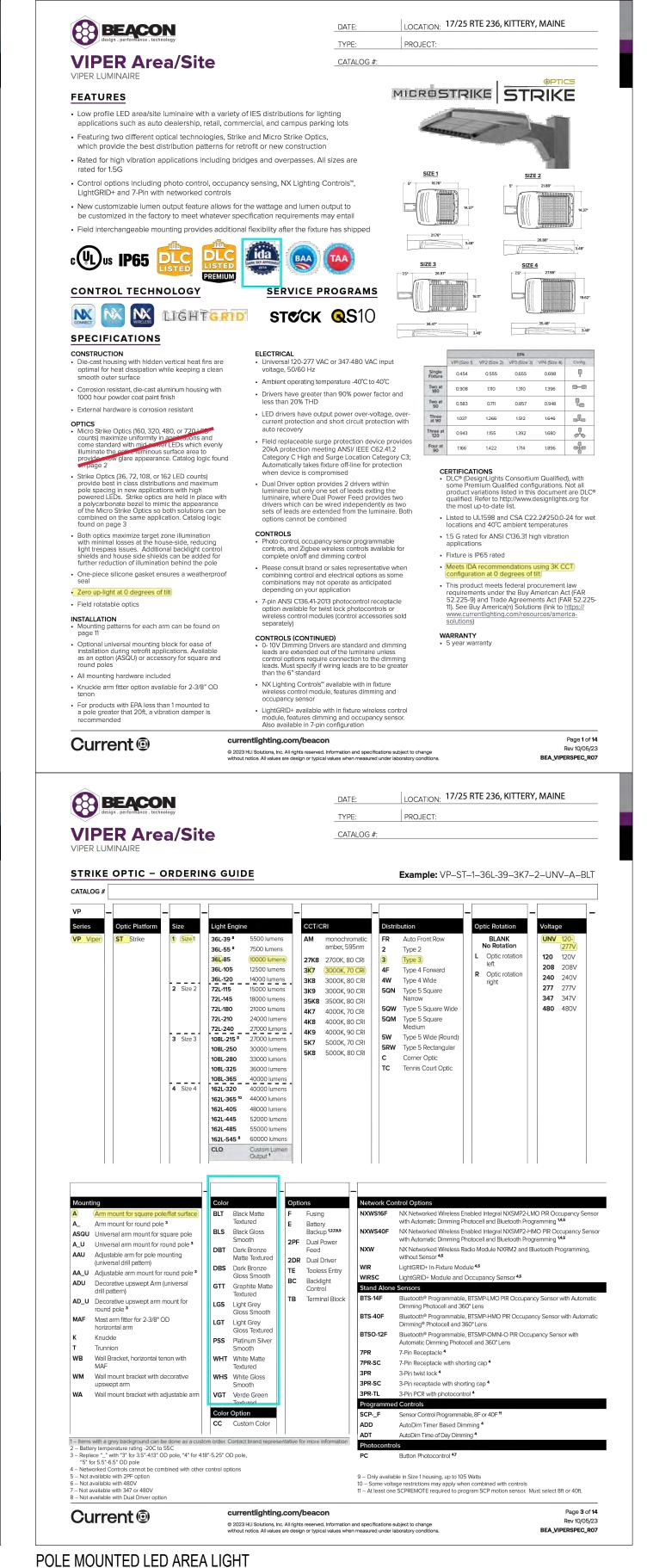
APPROVAL OF THE PLANNING

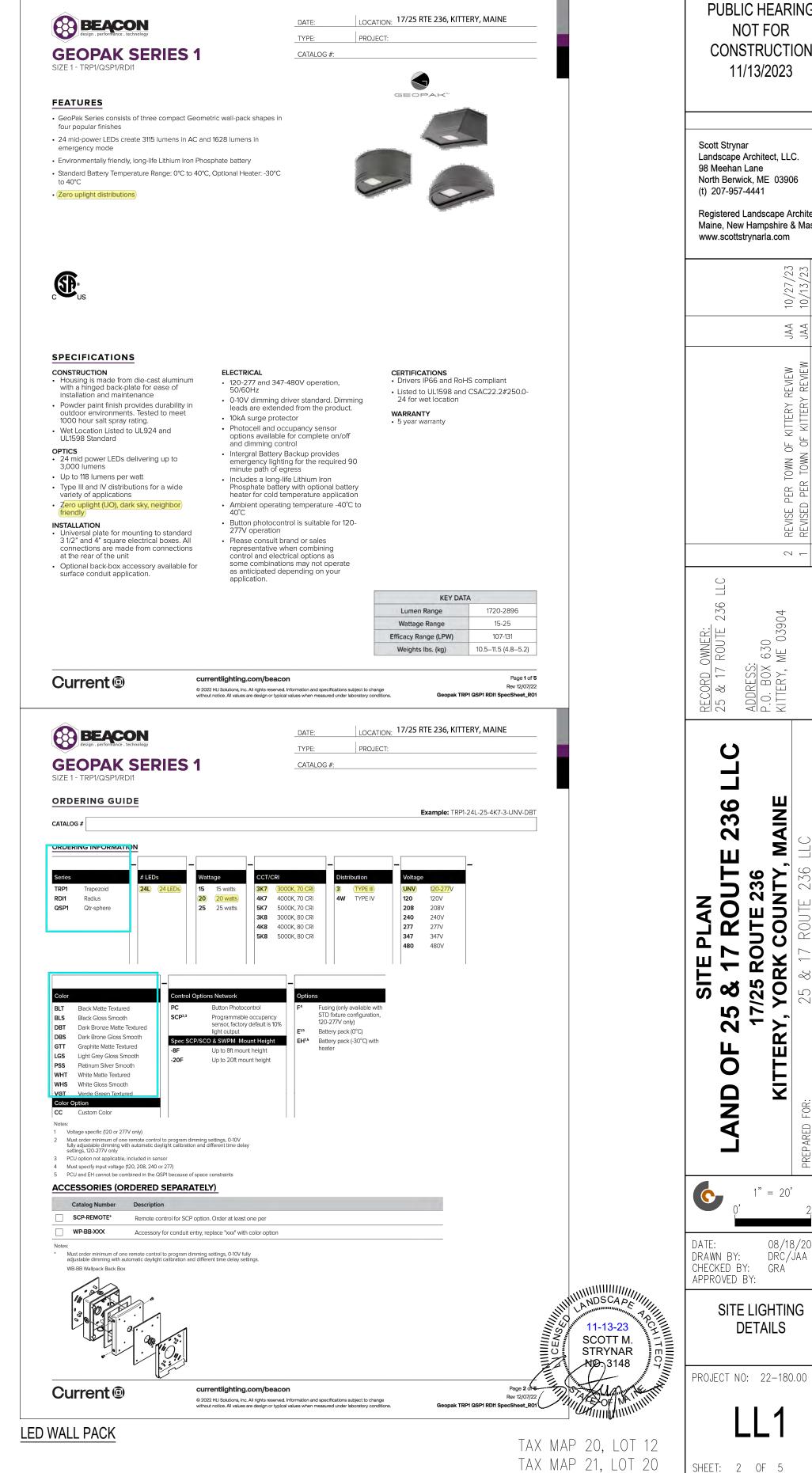
SIGNATURES OF 3 OR MORE PLANNING BOARD

MEMBERS INDICATE APPROVAL OF THIS PLAN

BOARD, KITTERY MAINE

CHAIR





Scott Strynar Landscape Architect, LLC. 98 Meehan Lane North Berwick, ME 03906 (t) 207-957-4441 Registered Landscape Architect Maine, New Hampshire & Mass. www.scottstrynarla.com 7 7 OWNER: ROUTE 17

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AND

1 KITTERY,

1" = 20'

SITE LIGHTING

DETAILS

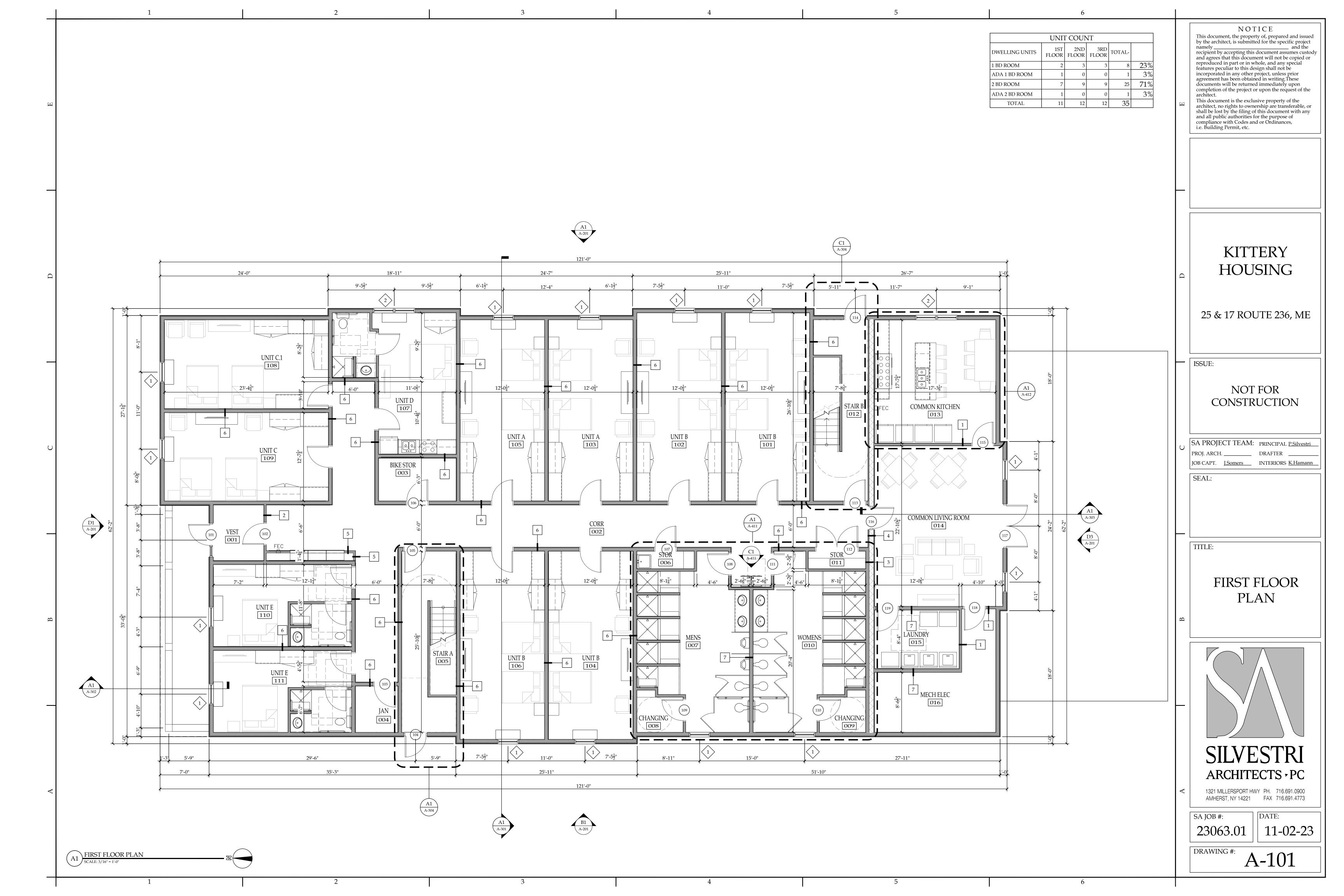
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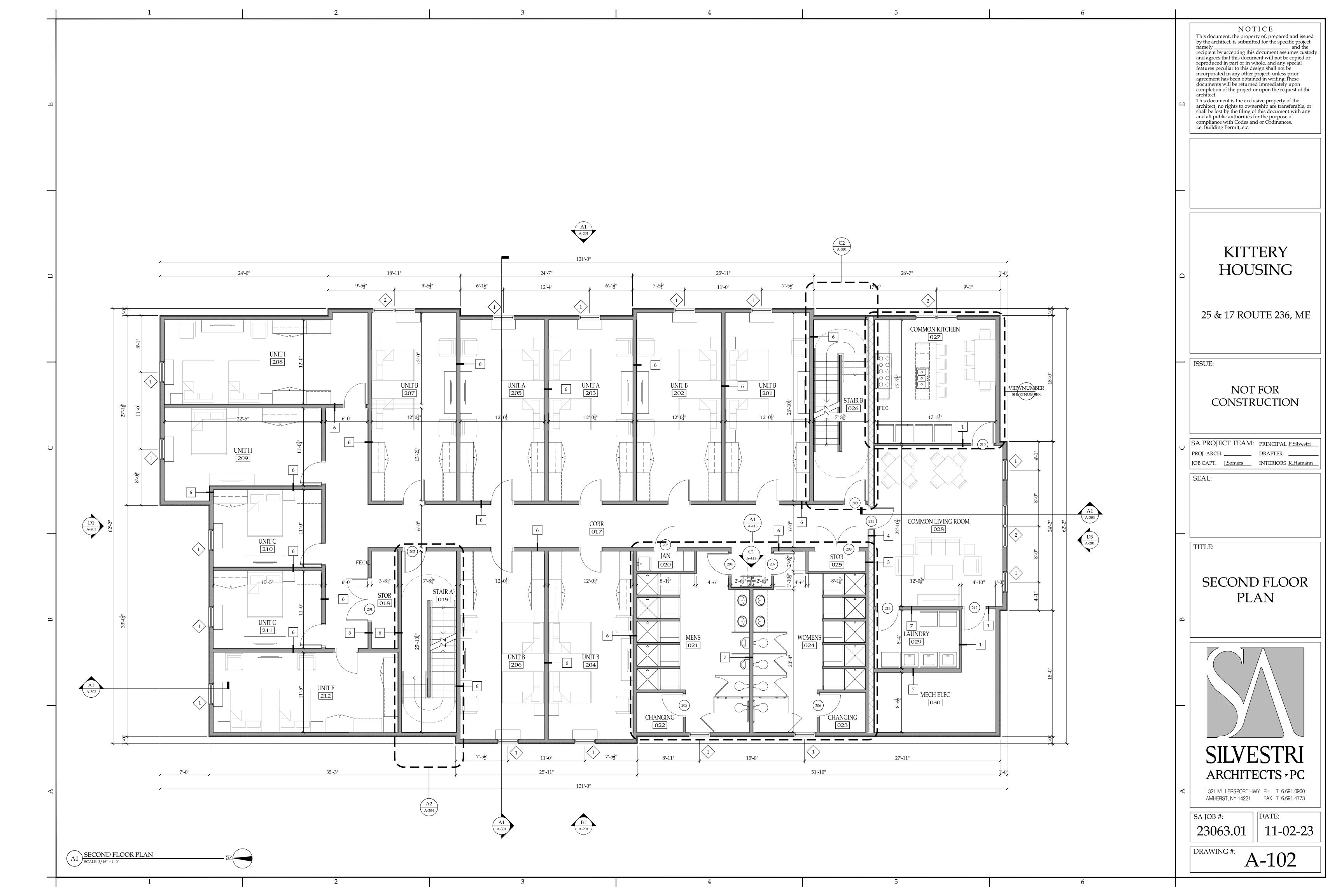
PREPARED FOR

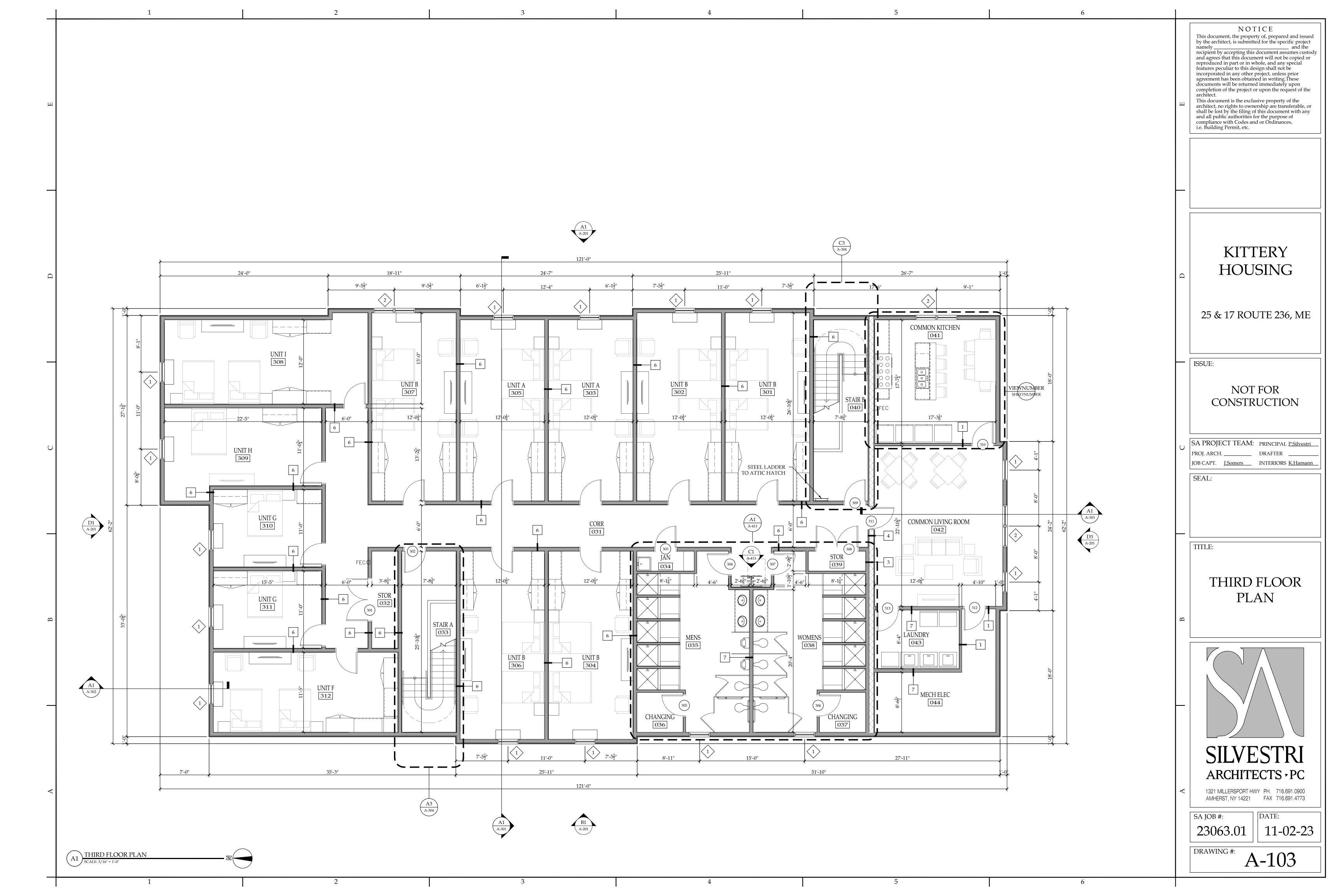
PUBLIC HEARING

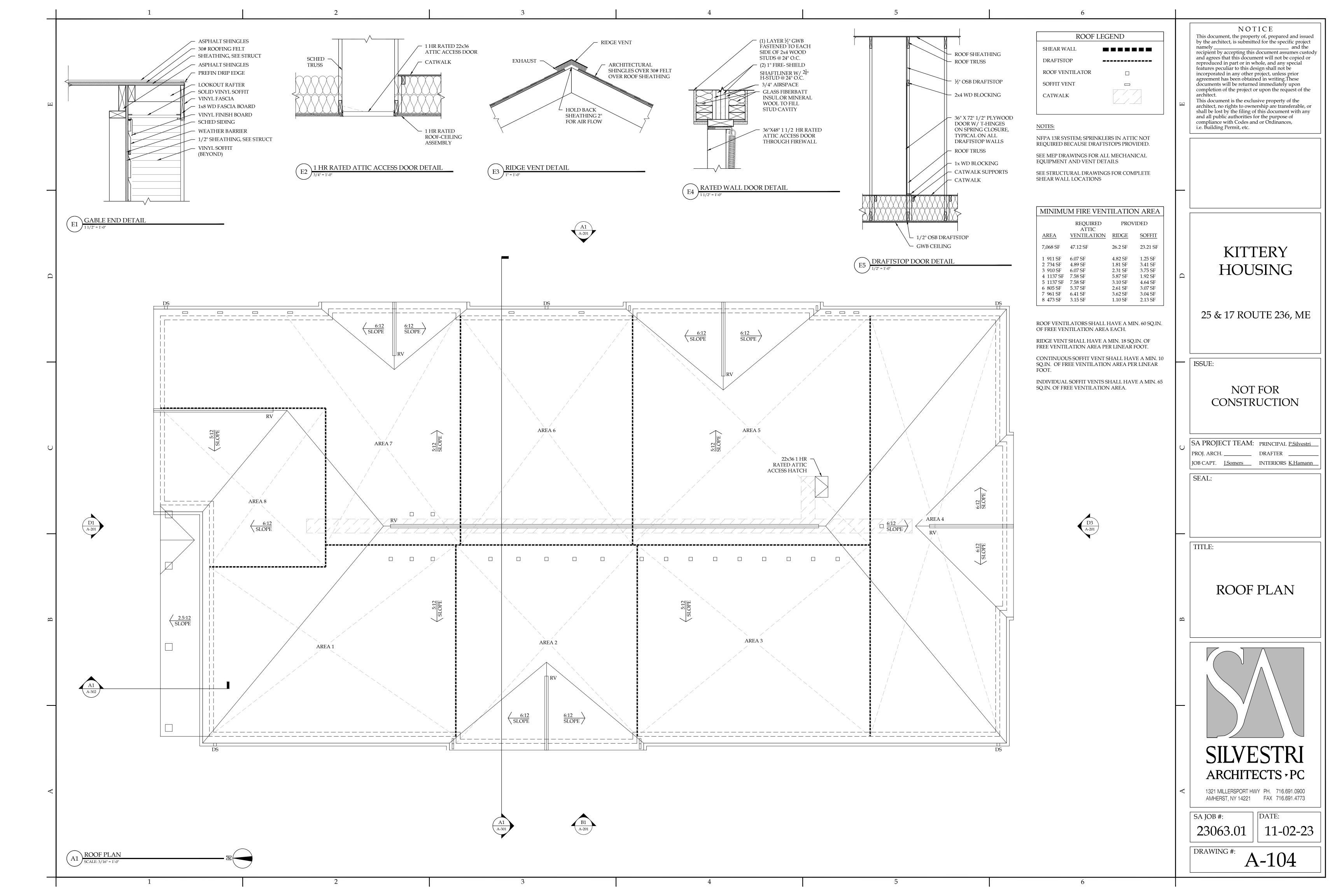
CONSTRUCTION

11/13/2023











ay. 2' Dur 137' 236 et

Ecconstruction LC 2014157703

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Sewer Service Tie Sheet

Excellence for Generalins	D	ate:	4-27-15		
	Fo	Rob Wilson	*******		
Project:	Town of	Town of Kittery - Route 236 Sewer Extensions			
Street Name & House #:	#25 R+ 236	(APT BLDG))		
Wye Location:	STA 215+65	Service Size/Material:	6" sor 35	***************************************	
Wye Elevation:	37.54	Closest SMH to Wye:	5m 424	-	
Service Length (Wye to Cap):	26 LF	End Cap Elevation:	38.53		
End Cap Surveyed?:	YES NO	Surveyor:		Management .	
	SKETCH OF SEWER SERVICE	E END CAP LOCATION			
4.49th Depth of Bud Co	September 1977 - Alagoria and State 1977 - A		58 5mH 21	TRICE ST	
Notes:			APT BLD		
Approved by:	For Owner Date		For Contractor Date		