

# PLANNING BOARD APPLICATION FORM



## INSTRUCTIONS

*This application form must be filled out completely and accurately for any application to the Planning Board. Attach additional information, plans, studies, etc. as required.*

## PROJECT INFORMATION

Project Name: Electric Light Building Addition

Project Description: 48 X 125' garage/shop addition to existing structure  
with site improvements including landscape buffers  
and drainage.

Street Address: 1 Morgan Way

Tax Map(s) & Lot(s): 99/44

## AUTHORIZED REPRESENTATIVE

*Identify the one person who will be the primary contact for this project.*

Name: Tim DeCoteau

e-mail: tim.maine207@gmail.com Phone #: 207-850-0558

## PROPERTY OWNER(S)

*Identify the owner or owners of all property involved in this application. Attach additional sheets if necessary. The property owner is the applicant.*

Name: BKR LLC

Mailing Address: 1 Morgan Way Cape Neddick, ME 03092

By signing, I certify that the information provided is true and accurate, and that my authorized representative, if applicable, has my consent to represent this application.

Owner's Signature: [Signature] President Date: January 30, 2024

*In the event there is more than one owner, all must sign. Attach additional sheets if necessary.*



# ELECTRIC LIGHT COMPANY, INC.

1 MORGAN WAY, CAPE NEDDICK, MAINE 03902

## TOWN OF YORK NOTES

1. APPLICATION ACCEPTANCE. THE PLAN WAS INITIALLY ACCEPTED FOR REVIEW BY THE PLANNING BOARD ON --/--. THE REGULATIONS IN EFFECT AS OF THIS DATE SHALL APPLY.
2. ZONING. THE PROPERTY IS LOCATED IN THE FOLLOWING BASE ZONE(S): GEN-2.
3. USE. THE EXISTING USE OF THE PROPERTY IS INDUSTRIAL (WOOD MANUFACTURING AND FABRICATION). THE PROPOSED USE OF THE PROPERTY IS INDUSTRIAL (WOOD MANUFACTURING AND FABRICATION).
4. SUPPLEMENTAL PLANS. THE FOLLOWING ARE THE TITLES AND MOST RECENT DATES OF REVISION FOR EACH PAGE OF THE PLAN SET:

1.) COVER

2.) SITE PLAN

3.) EXITING CONDITIONS PLAN

4.) GRADING & UTILITY PLAN

5.) EXISTING STORMWATER PLAN

6.) DEVELOPED STORMWATER PLAN

7.) SITE DETAILS

8.) SITE DETAILS
5. FIELD CHANGES. DURING CONSTRUCTION, THE APPLICANT MAY PROPOSE FIELD CHANGES NECESSARY TO CORRECT MINOR CONSTRUCTION-RELATED ERRORS ON THE DESIGN PLANS OR TO ACCOUNT FOR UNEXPECTED SITE CONDITIONS. FIELD CHANGES SHALL BE PREPARED IN WRITING AND CERTIFIED BY THE APPLICANT'S PROFESSIONAL ENGINEER (WHERE APPROPRIATE), AND SHALL BE PRESENTED TO THE PLANNING BOARD. FIELD CHANGES SHALL BE LIMITED TO CHANGES THAT DO NOT MATERIALLY ALTER THE VISUAL APPEARANCE OF THE PROJECT (SUCH AS BUT NOT LIMITED TO BUILDING DESIGN, LANDSCAPE DESIGN, OUTDOOR LIGHTING, ETC.) AND THAT DO NOT MATERIALLY ALTER THE APPROVED DESIGN OF THE PROJECT (SUCH AS BUT NOT LIMITED TO LAYOUT, TRAFFIC CIRCULATION, STORMWATER DRAINAGE, ETC.). THE BOARD SHALL CONSIDER THE FIELD CHANGES AT ITS NEXT MEETING, AND SHALL EITHER ACCEPT OR REJECT IT. CONSTRUCTION MUST COMPLY WITH THE DECISION OF THE BOARD. WORK BASED ON A FIELD CHANGE THAT IS DENIED SHALL BE REMOVED.
6. DEED RESTRICTIONS. THE FOLLOWING DEED RESTRICTIONS ARE ESTABLISHED PURSUANT TO THIS APPROVAL, AND SHALL BE INCORPORATED IN THE DEED OF EACH PARCEL: N/A
7. COVENANTS. COVENANTS DATED ARE CONSIDERED PART OF THIS APPROVAL BY REFERENCE. N/A
8. EASEMENTS. THE FOLLOWING EASEMENTS ARE ESTABLISHED PURSUANT TO THIS PLAT: N/A
9. OFF-SITE IMPROVEMENTS. THE FOLLOWING OFF-SITE IMPROVEMENTS ARE REQUIRED IN CONJUNCTION WITH THIS APPLICATION: N/A
10. BLASTING. BLASTING SHALL BE PERFORMED BY A MAINE-LICENSED BLASTING CONTRACTOR IN ACCORDANCE WITH APPLICABLE STATE REQUIREMENTS. BLASTING ACTIVITIES SHALL BE CONDUCTED IN ACCORDANCE WITH THE TOWN NOISE ORDINANCE. A MINIMUM OF THREE DAYS PRIOR TO BLASTING, THE POLICE DEPARTMENT, FIRE DEPARTMENT AND ALL ABUTTERS TO THIS PROJECT SHALL BE NOTIFIED.
11. TOPSOIL. NO TOPSOIL SHALL BE REMOVED FROM THIS SITE.
12. CONSTRUCTION DEBRIS. NO CONSTRUCTION OR DEMOLITION DEBRIS, STUMPS, OR OTHER WASTES GENERATED DURING SITE WORK OR BUILDING CONSTRUCTION SHALL BE DISPOSED OF ON-SITE.
13. FLOOD-PRONE LOTS. ON LOTS WHOLLY OR PARTIALLY WITHIN A SPECIAL FLOOD HAZARD AREA, ALL STRUCTURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH ARTICLE VI OF YORK'S FLOODPLAIN MANAGEMENT ORDINANCE. ALL SUCH REQUIREMENTS SHALL BE INCLUDED IN ANY DEED, LEASE, PURCHASE AND SALE AGREEMENT, OR DOCUMENT TRANSFERRING OR EXPRESSING AN INTENT TO TRANSFER ANY INTEREST IN REAL ESTATE OR STRUCTURE, INCLUDING BUT NOT LIMITED TO A TIME-SHARE INTEREST. THE CONDITIONS SHALL CLEARLY ARTICULATE THAT THE TOWN MAY ENFORCE ANY VIOLATION OF THE CONSTRUCTION REQUIREMENT AND THAT FACT ALSO BE INCLUDED IN THE DEED OR ANY OTHER DOCUMENT PREVIOUSLY DESCRIBED. THE CONSTRUCTION REQUIREMENT SHALL ALSO BE CLEARLY STATED ON ANY MAP, PLAT, OR PLAN TO BE SIGNED BY THE PLANNING BOARD AS PART OF THE APPROVAL PROCESS.
14. EXPIRATION OF APPROVAL. PER SITE PLAN & SUBDIVISION REGULATION §5.5.5, THIS APPROVAL SHALL EXPIRE AFTER THREE YEARS IF THE DEVELOPER HAS NOT COMMENCED SUBSTANTIAL CONSTRUCTION OF REQUIRED IMPROVEMENTS. GRADING AND EARTHMOVING ALONE SHALL NOT CONSTITUTE SUBSTANTIAL CONSTRUCTION. SUBSTANTIAL CONSTRUCTION SHALL NOT BE DEEMED TO HAVE TAKEN PLACE UNTIL THE APPLICANT HAS CONSTRUCTED IMPROVEMENTS THAT USE 25% OF THE MATERIALS NEEDED FOR REQUIRED PUBLIC IMPROVEMENTS. IN THE EVENT THE APPROVAL EXPIRES, THE PLANNING BOARD SHALL PLACE A NOTICE IN THE REGISTRY OF DEEDS TO THAT EFFECT.
15. RESTRICTIONS WITHIN A PROTECTIVE WELL RADIUS. WITHIN THE DESIGNATED PROTECTIVE RADIUS AROUND EACH WELL THERE SHALL BE NO SEPTIC SYSTEMS, UNDERGROUND STORAGE TANKS OR ROADS.
16. RESTRICTIONS WITHIN A SEPTIC OR BACK-UP SEPTIC AREA. AREAS RESERVED FOR SEPTIC SYSTEM USE ON EACH LOT SHALL NOT BE USED FOR ANY BUILDING, CONSTRUCTION, OR OTHER LAND USE THAT IS INCOMPATIBLE WITH THE SEPTIC SYSTEM FUNCTION.
17. PERFORMANCE GUARANTEE. PRIOR TO THE ISSUANCE OF A BUILDING PERMIT, THE DEVELOPER SHALL PROVIDE THE TOWN OF YORK A PERFORMANCE GUARANTEE.
18. PRE-CONSTRUCTION MEETING. NO CONSTRUCTION SHALL COMMENCE UNTIL A PRE-CONSTRUCTION MEETING IS HELD BETWEEN TOWN STAFF, THE TOWN'S INSPECTION ENGINEER (IF ONE IS NEEDED), THE DEVELOPER, REPRESENTATIVES OF EACH DESIGN PROFESSIONAL WHO CERTIFIED ANY OF THE PLANS, AND THE CONTRACTOR. PRIOR TO SCHEDULING THIS MEETING, THE APPLICANT SHALL:

· PROVIDE TO THE TOWN FOUR PLAN SETS, AS APPROVED AND RECORDED AT THE YORK COUNTY REGISTRY OF DEEDS;

· PROVIDE EVIDENCE THAT ANY TREES TO BE PROTECTED ON THE SITE HAVE BEEN MARKED BY THE LANDSCAPE ARCHITECT; AND

· HAVE PAID THE PERFORMANCE GUARANTEE AND OR AN INSPECTION FEE.

· HAVE PAID ANY OUTSTANDING FEES INCURRED DURING THE REVIEW PROCESS
19. BUILDING PERMITS. BUILDING PERMITS SHALL BE ISSUED IN ACCORDANCE WITH THE FOLLOWING:

A. NO PERMIT SHALL BE ISSUED UNTIL A PROJECT PRE-CONSTRUCTION MEETING HAS OCCURRED.

B. BUILDING PERMITS SHALL BE ISSUED SUBJECT TO THE TOWN'S STANDARD EROSION AND SEDIMENTATION CONTROL REQUIREMENTS.

C. WHEN LOT LINES ARE TO BE CHANGED OR NEW LOTS CREATED NO PERMIT SHALL BE ISSUED UNTIL THE SURVEYOR PROVIDES A CERTIFICATE OF MONUMENT INSTALLATION VERIFYING THAT ALL SURVEY MONUMENTATION SHOWN ON THE PLAN HAS BEEN INSTALLED.

D. NO PERMIT SHALL BE ISSUED UNTIL THE APPLICANT PROVIDES DOCUMENTATION OF THE COMMITMENT FROM A FINANCIAL INSTITUTION TO PROVIDE FUNDS TO COMPLETE THE PROJECT.
20. PRIVATE FIRE HYDRANTS. THE PROPERTY OWNER(S) SHALL BE RESPONSIBLE FOR PAYMENT OF WATER SERVICE COSTS FOR EACH FIRE HYDRANT ON PRIVATE PROPERTY. IN THE EVENT THAT REQUIRED WATER CHARGES ARE NOT PAID, THE TOWN SHALL LIEN EACH AFFECTED PROPERTY TO ENSURE CONTINUED OPERATION OF EACH HYDRANT. THE TOWN SHALL CHARGE EACH PROPERTY OWNER THEIR RESPECTIVE SHARE OF THE COSTS, PLUS A 25% PENALTY TO HELP COVER ADMINISTRATIVE COSTS.
21. ARCHEOLOGICAL FINDINGS. IF, DURING EXCAVATIONS, ANY ARCHEOLOGICAL FINDINGS ARE UNCOVERED, ALL WORK SHALL STOP AND THE STATE ARCHEOLOGIST BE CONSULTED, AND MAY COMMENCE AGAIN ONLY AFTER CONSERVATION OF THE RESOURCES IS ADDRESSED TO THE SATISFACTION OF THE STATE ARCHEOLOGIST.
22. OCCUPANCY PERMITS. THE APPLICANT SHALL BE REQUIRED TO PROVIDE TO THE CEO AND PLANNING BOARD A CERTIFICATION OF COMPLETION FROM EACH STATE-LICENSED DESIGN PROFESSIONAL (PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT) WHO CERTIFIED ANY DESIGN-COMPONENT OF THIS PLAN SET (IDENTIFY EACH HERE IN THE FINAL VERSION OF THE PLAN NOTE). (ANOTHER EQUALLY-QUALIFIED LICENSED PROFESSIONAL MAY PROVIDE THE CERTIFICATION IF SO AUTHORIZED BY THE PLANNING BOARD.) THE CERTIFICATION SHALL BE A REPORT THAT STATES WHETHER OR NOT THE PROJECT HAS BEEN BUILT IN FULL COMPLIANCE WITH THE APPROVED PLANS, AND IDENTIFIES ANY AREAS WHERE THE ACTUAL CONSTRUCTION DEVIATES FROM THE APPROVED PLANS. EACH DESIGN PROFESSIONAL SHALL ATTEST ONLY TO THOSE ASPECTS OF THE PLAN FOR WHICH THEY ARE RESPONSIBLE FOR THE DESIGN (FOR EXAMPLE, THE PROFESSIONAL ENGINEER ATTESTS ONLY TO ENGINEERING-RELATED ISSUES, THE ARCHITECT ATTESTS ONLY TO ARCHITECTURAL ISSUES, AND SO FORTH). THIS CERTIFICATION SHALL BE CERTIFIED BY STAMP AND SIGNATURE OF THE PROFESSIONAL. AS THE TOWN IS RELYING ON THE STATE LICENSED PROFESSIONALS TO SELF-POLICE THEIR PROJECTS, ANY MIS-REPRESENTATION IN A CERTIFICATION SHALL BE REPORTED BY THE PLANNING BOARD TO THE RELEVANT STATE LICENSING BOARD.

· FINAL OCCUPANCY PERMIT. IN ORDER FOR A FINAL OCCUPANCY PERMIT TO BE ISSUED, THE CERTIFICATION OF COMPLETION MUST INDICATE EACH DESIGN PROFESSIONAL'S EVALUATION THAT THE PROJECT HAS BEEN COMPLETED IN FULL COMPLIANCE WITH THE APPROVED PLANS, AND THE CEO AND/OR TOWN'S INSPECTION ENGINEER MUST CONCUR.

· NON-COMPLIANT PROJECTS. IN THE EVENT THERE ARE DIFFERENCES IN THE COMPLETED PROJECT AND THE APPROVED PLANS, THE CERTIFICATION OF COMPLETION SHALL INDICATE EACH POINT OF DIFFERENCE. IN THIS EVENT, THE PLANNING BOARD SHALL EVALUATE THE SIGNIFICANCE OF THE DIFFERENCE, AND IF THE CHANGES ARE ACCEPTABLE TO THE BOARD, MAY PROVIDE WRITTEN AUTHORIZATION TO THE CEO TO ISSUE A FINAL OCCUPANCY PERMIT. IF THE CHANGES ARE NOT ACCEPTABLE TO THE BOARD, THE BOARD SHALL DECIDE HOW TO RESOLVE THE MATTER.

· TEMPORARY OCCUPANCY PERMIT. IN THE EVENT THE APPLICANT SEEKS TO OBTAIN A TEMPORARY OCCUPANCY PERMIT PRIOR TO COMPLETION OF ALL WORK, EACH DESIGN PROFESSIONAL MAY SUBMIT AN INTERIM CERTIFICATION OF COMPLETION WHICH EVALUATES COMPLIANCE OF WORK COMPLETED TO DATE, IDENTIFIES WORK REMAINING, AND ADDRESSES MEANS OF ENSURING TIMELY COMPLETION. THE CEO MAY ISSUE A TEMPORARY OCCUPANCY PERMIT ONLY WHEN ALL WORK TO DATE HAS BEEN CERTIFIED AS FULLY COMPLIANT, AND REMAINING INCOMPLETE WORK WILL NOT ADVERSELY AFFECT PUBLIC HEALTH OR SAFETY. THE TEMPORARY OCCUPANCY PERMIT SHALL BE ISSUED FOR A PERIOD NOT EXCEEDING 6 MONTHS. THE CEO SHALL NOT GRANT ANY EXTENSIONS OR ISSUE SUCH PERMITS FOR LONGER DURATION WITHOUT EXPRESS AUTHORIZATION OF THE PLANNING BOARD.

23. OCCUPANCY PERMITS RELATING TO ROAD CONSTRUCTION. IN ADDITION TO GENERAL STANDARDS RELATING TO A OCCUPANCY PERMITS, NO TEMPORARY OR PERMANENT OCCUPANCY PERMIT SHALL BE ISSUED FOR DEVELOPMENT ON A LOT ACCESSING A NEW ROAD UNTIL THE ROAD HAS BEEN COMPLETED THROUGH BASE PAVING, AND CONSTRUCTION TO THAT POINT HAS BEEN INSPECTED AND APPROVED BY THE TOWN'S INSPECTION ENGINEER AND THE DESIGN ENGINEER HAS PROVIDED AN INTERIM CERTIFICATION OF COMPLETION.
24. SIGNED PLANS. A COPY OF THE SIGNED PLANS WILL BE KEPT ON-SITE UNTIL AN OCCUPANCY PERMIT IS ISSUED/ROAD WORK IS COMPLETED.
25. MAINTENANCE OF STORMWATER FACILITIES: IT SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER, OR DRAINAGE EASEMENT HOLDER IF APPLICABLE, TO INSPECT AND MAINTAIN ALL STORMWATER MANAGEMENT FACILITIES ON THE PROPERTY.
26. HIGH WATER TABLE AREAS. ANY CONSTRUCTION WITHIN THE AREAS IDENTIFIED ON THE PLAN AS HAVING HIGH WATER TABLES MAY REQUIRE SPECIAL CONSTRUCTION PRACTICES TO PREVENT FUTURE WATER DAMAGE.
27. SUBDIVISION PHASING: N/A
28. AS-BUILT PLAN. AN AS-BUILT PLAN SHOWING THE FOOTPRINT OF THE BUILDINGS, PAVED SURFACES AND THE LOCATIONS OF ALL UTILITIES ON THE PROPERTY SHALL BE PROVIDED TO THE CEO PRIOR TO THE ISSUANCE OF THE OCCUPANCY PERMIT. THE AS-BUILT PLAN SHALL BE SUBMITTED IN PAPER FORM, AND IN A DIGITAL FORMAT THAT CAN BE CONVERTED TO THE TOWN'S GIS SOFTWARE.
29. REPLACEMENT OF PLANTINGS. REQUIRED PLANTINGS THAT DIE SHALL BE REPLACED WITHIN ONE GROWING SEASON.
30. HOURS OF OPERATION. HOURS OF OPERATION MUST BE IN COMPLIANCE WITH THE TOWN NOISE ORDINANCE.
31. EXTERIOR LIGHTING. ALL EXTERIOR LIGHTING SHALL BE DIRECTED AND SHIELDED TO PREVENT GLARE ON NEARBY LOTS AND STREETS.

FEES: ANY AND ALL OUTSTANDING FEES BE PAID TO THE TOWN OF YORK AND UTILITY DISTRICTS BEFORE SIGNING OF MYLAR FROM THE PLANNING BOARD. THIS MAY INCLUDE BUT IS NOT LIMITED TO OUTSTANDING FEES FROM OUTSOURCED ENGINEER REVIEW(S).

## APPROVAL OF THE PLANNING BOARD OF YORK, MAINE DATE

CHAIR

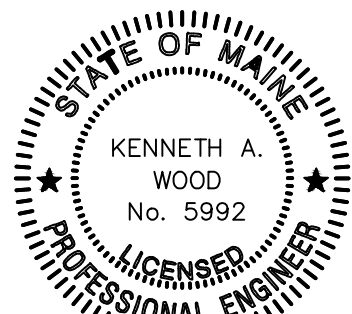
THE SIGNATURES OF 3 OR MORE PLANNING BOARD MEMBERS INDICATE APPROVAL OF THIS PLAN.

## FIRE DEPARTMENT NOTES

1. NEW BUILDINGS AND ADDITIONS SHALL BE EQUIPPED WITH A SMOKE DETECTION SYSTEM CONNECTED TO A CENTRAL STATION ANSWERING/MONITORING STATION. SUCH SYSTEMS INSTALLED IN ADDITIONS SHALL INCLUDE THE EXISTING BUILDING.
2. FIRE EXTINGUISHERS SHALL BE KEPT IN ALL BUILDINGS AND SHALL BE INSPECTED MONTHLY BY THE OWNER.
3. FLAMMABLE PRODUCTS SUCH AS SOLVENTS, LACQUERS, THINNERS OR OIL BASED PRODUCTS SHALL BE STORED IN FIREPROOF CABINETS.
4. ONE KNOX BOX CONTAINING KEYS TO ALL ON-SITE BUILDINGS SHALL BE INSTALLED AT A LOCATION APPROVED BY THE FIRE CHIEF.
5. AREAS IMMEDIATELY ADJACENT TO BUILDINGS SHALL BE KEPT CLEAR OF OBSTRUCTIONS THAT WOULD PREVENT ACCESS FOR EMERGENCY PERSONNEL AND EQUIPMENT.

STATE OF MAINE - YORK COUNTY  
ss. REGISTRY OF DEEDS  
RECEIVED \_\_\_\_\_, 20\_\_\_\_  
AT \_\_\_\_\_h\_\_\_\_m\_\_\_\_M, AND RECORDED IN  
PLAN BOOK \_\_\_\_\_, PAGE \_\_\_\_\_  
ATTEST \_\_\_\_\_REGISTER

D	PLANNING BOARD REVS	10/23/25
C	PLANNING BOARD REVS	9/5/25
B	PLANNING BOARD REVS	1/6/24
A	TOWN PLANNER REVS	7/24/24
NO.	DESCRIPTION	DATE
REVISIONS		



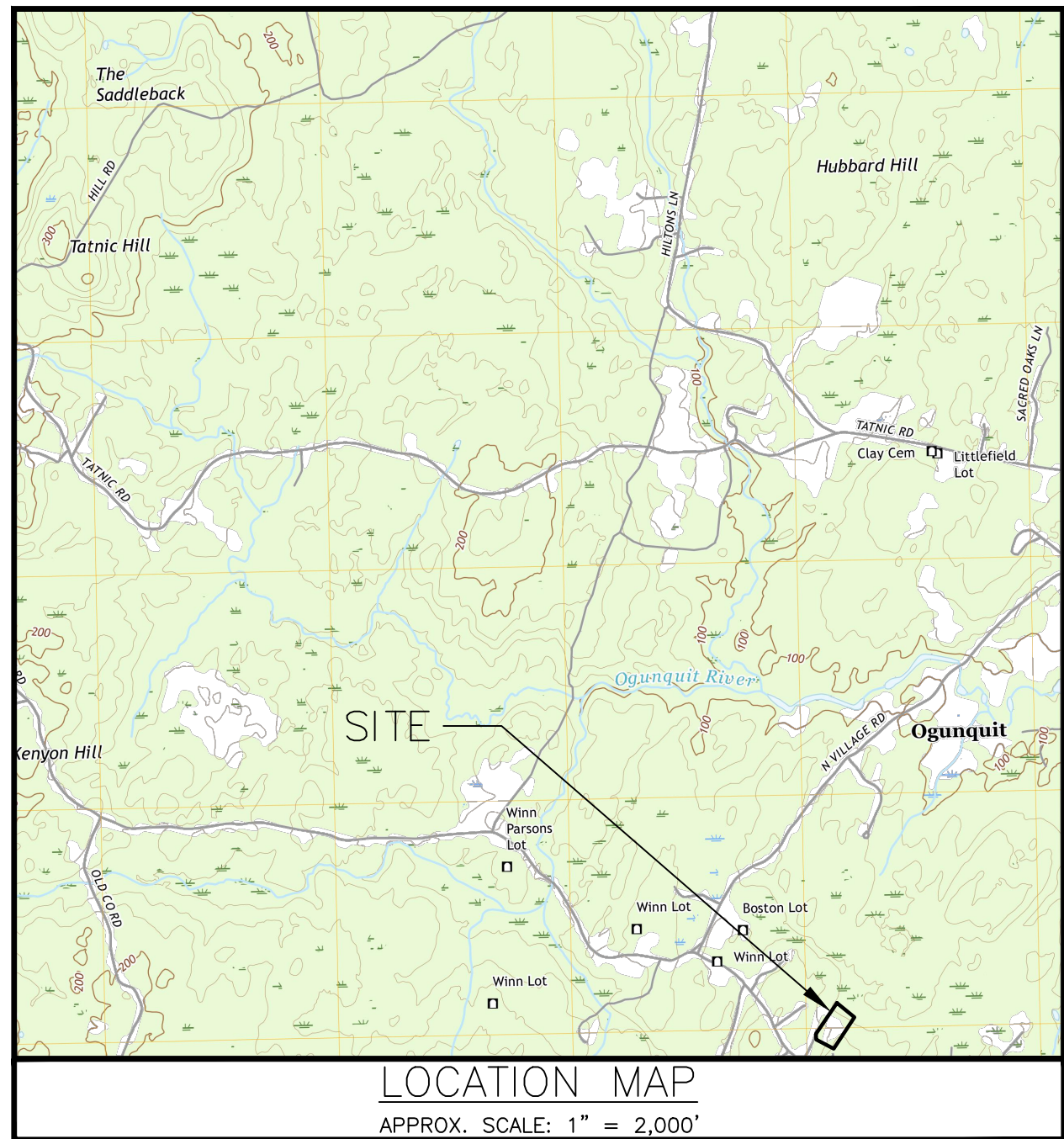
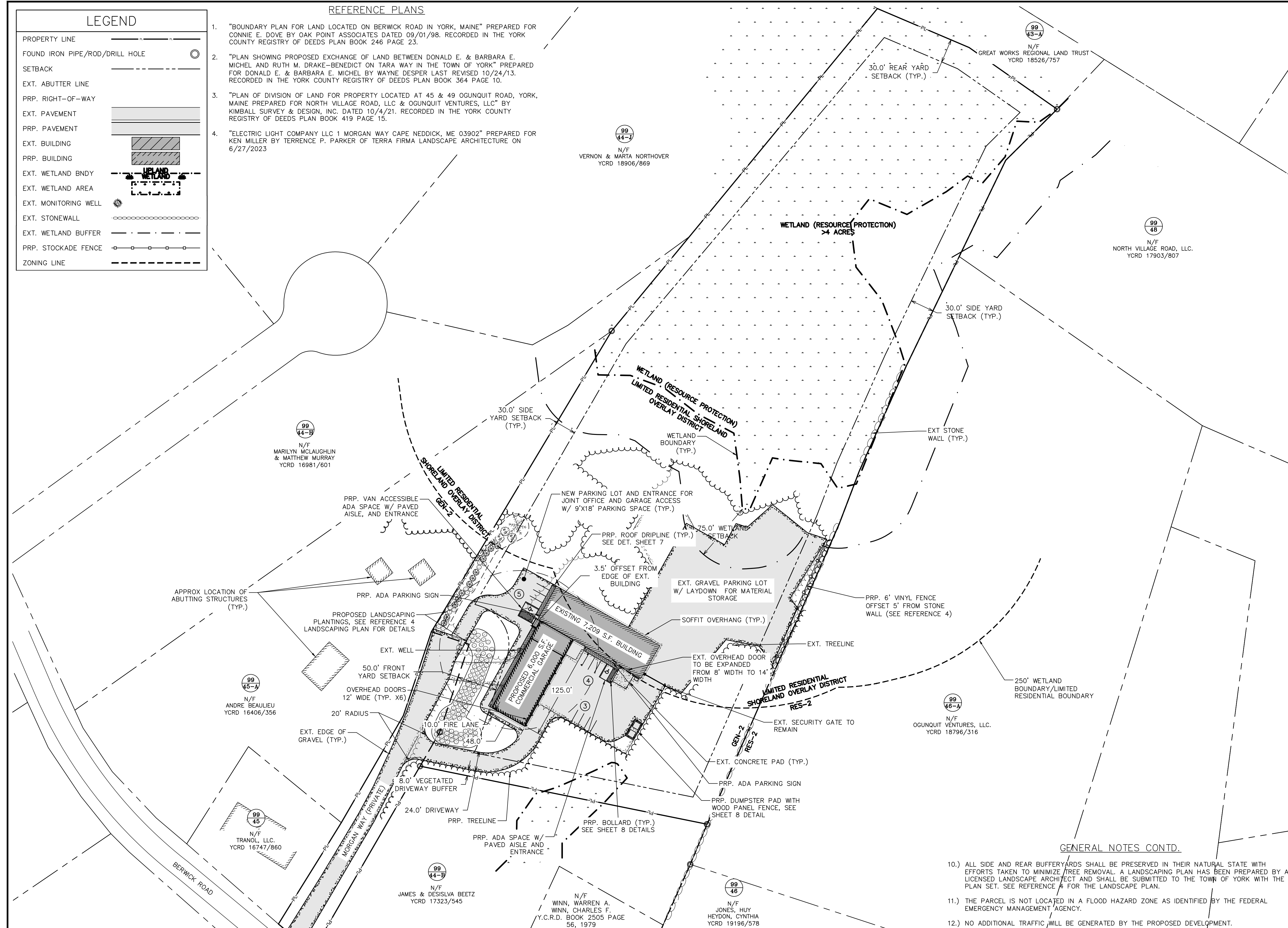
COVER SHEET ELECTRIC LIGHT COMPANY, INC. 1 MORGAN WAY, CAPE NEDDICK, ME		
FOR: KEN MILLER 1 MORGAN WAY CAPE NEDDICK, ME 03902		
ATTAR ENGINEERING, INC. CIVIL ♦ STRUCTURAL ♦ MARINE ♦ SURVEYING 1284 STATE ROAD - ELIOT, MAINE 03903 PHONE: (207)439-6023 FAX: (207)439-2128		
SCALE: 1" = 40'	APPROVED BY:	DRAWN BY: WRP
DATE: 1/3/2024		REVISION DATE: E : 11/26/2025
JOB NO: C334-22	FILE: ELECTRIC LIGHT BASE.DWG	SHEET: 1



REFERENCE PLANS

- "BOUNDARY PLAN FOR LAND LOCATED ON BERWICK ROAD IN YORK, MAINE" PREPARED FOR CONNIE E. DOVE BY OAK POINT ASSOCIATES DATED 09/01/98. RECORDED IN THE YORK COUNTY REGISTRY OF DEEDS PLAN BOOK 246 PAGE 23.
- "PLAN SHOWING PROPOSED EXCHANGE OF LAND BETWEEN DONALD E. & BARBARA E. MICHEL AND RUTH M. DRAKE-BENEDICT ON TARA WAY IN THE TOWN OF YORK" PREPARED FOR DONALD E. & BARBARA E. MICHEL BY WAYNE DESPER LAST REVISED 10/24/13. RECORDED IN THE YORK COUNTY REGISTRY OF DEEDS PLAN BOOK 364 PAGE 10.
- "PLAN OF DIVISION OF LAND FOR PROPERTY LOCATED AT 45 & 49 OGUNQUIT ROAD, YORK, MAINE PREPARED FOR NORTH VILLAGE ROAD, LLC & OGUNQUIT VENTURES, LLC" BY KIMBALL SURVEY & DESIGN, INC. DATED 10/4/21. RECORDED IN THE YORK COUNTY REGISTRY OF DEEDS PLAN BOOK 419 PAGE 15.
- "ELECTRIC LIGHT COMPANY LLC 1 MORGAN WAY CAPE NEDDICK, ME 03902" PREPARED FOR KEN MILLER BY TERRENCE P. PARKER OF TERRA FIRMA LANDSCAPE ARCHITECTURE ON 6/27/2023

LEGEND	
PROPERTY LINE	---
FOUND IRON PIPE/ROD/DRILL HOLE	○
SETBACK	---
EXT. ABUTTER LINE	---
PRP. RIGHT-OF-WAY	---
EXT. PAVEMENT	---
PRP. PAVEMENT	---
EXT. BUILDING	---
PRP. BUILDING	---
EXT. WETLAND BNDY	---
EXT. WETLAND AREA	---
EXT. MONITORING WELL	○
EXT. STONEWALL	---
EXT. WETLAND BUFFER	---
PRP. STOCKADE FENCE	---
ZONING LINE	---



LOCATION MAP

APPROX. SCALE: 1" = 2,000'

GENERAL NOTES

- THIS PLAN DEPICTS THE DEVELOPMENT OF THE SUBJECT PARCEL CONTAINING AN INDUSTRIAL FACILITY CONSISTING OF A SINGLE 7,209 S.F. BUILDING WITH ASSOCIATED GRAVEL PARKING. THE PROPOSED DEVELOPMENT SHALL EXPAND THE EXISTING USE OF THE INDUSTRIAL FACILITY BY ADDING AN ADDITIONAL 6,000 S.F. GARAGE BUILDING EXPANSION WITH ACCOMPANYING FACILITIES AND SITE IMPROVEMENTS.
- THE SUBJECT PARCEL, LOCATED OFF OF MORGAN WAY, IS IDENTIFIED AS LOT 44 ON MAP 99, CONSISTING OF 8.20 ACRES IN AREA, AND IS LOCATED IN THE GENERAL DEVELOPMENT 2 (GEN-2) BASE ZONING DISTRICT, WETLAND (RESOURCE PROTECTION) OVERLAY, AND LIMITED RESIDENTIAL (LR) OVERLAY DISTRICTS. DEVELOPMENT IN THE LR ZONE IS LIMITED TO STORMWATER MANAGEMENT AND NO DEVELOPMENT IS PROPOSED IN THE WETLAND (RP) OVERLAY ZONE.
- DIMENSIONAL REQUIREMENTS  
GENERAL DEVELOPMENT 2 (GEN-2) DISTRICT AS PER ARTICLE 5 §5.2.2  
LOT SIZE: 130,680 S.F.  
FRONT YARD SETBACK: 50'  
SIDE YARD SETBACK: 30'  
REAR YARD SETBACK: 30'  
MAXIMUM BUILDING HEIGHT: 35'  
MAXIMUM LOT COVERAGE: 25%  
20% (SHORELAND OVERLAY ZONES INCL. NON-VEGETATED AREAS)  
MINIMUM STREET FRONTAGE: 200'
- SITE TOPOGRAPHY AND EXISTING CONDITIONS PREPARED FROM STATE OF MAINE ORTHOIMAGERY, LIDAR CONTOURS, STATE AND TOWN GIS IMAGERY, AND ARE BASED ON MAINE WEST STATE PLANE COORDINATE SYSTEM, NAD83 AS DERIVED BY GPS OBSERVATION. EXISTING CONDITIONS OF ABUTTING PROPERTIES ARE APPROXIMATE.
- LOT COVERAGE AND NET BUILDABLE AREA CALCULATION AS PER ARTICLE 6 §6.3.25  
TOTAL LOT SIZE: 363,291 S.F. (8.2 A.C.)  
NET BUILDABLE AREA REDUCTIONS (NOT ON SEWER):  
POORLY/SOMEWHAT POORLY DRAINED COUNTS FOR 50% (80,296 S.F. X 0.5)  
VERY POORLY DRAINED COUNTS FOR 25% (123,392 S.F. X 0.25)  
SLOPES GREATER THAN 33% COUNTS FOR 50% (9,058 S.F. X 0.5)  
NET BUILDABLE AREA: =226,070 S.F.  
LOT COVERAGE:  
EXT. BUILDING & UTIL COVERAGE: =8,082 S.F.  
EXT. GRAVEL AREA COVERAGE (TOTAL): 52,688 S.F. X 0.75 = 39,516 S.F.  
EXT. LOT COVERAGE: (8,082 + 39,516) / 226,070 =21.1% (WHOLE LOT) MEETS REQ.  
PRP. BUILDING & UTIL COVERAGE: =15,469 S.F.  
PRP. GRAVEL AREA COVERAGE (TOTAL): 53,696 S.F. X 0.75 = 40,272 S.F.  
PRP. LOT COVERAGE: (15,469 + 40,272) / 226,070 =24.7% (WHOLE LOT) MEETS REQ.  
PRP. SHORELAND ZONE COVERAGE: (37,708 S.F. IMPERVIOUS / 283,172 S.F.) =13.3% (SHORELAND) MEETS REQ.

NOTE: NO ADDITIONAL IMPERVIOUS AREA IS PROPOSED IN THE SHORELAND OVERLAY ZONING DISTRICTS ASIDE FROM NECESSARY RIP RAP AND LEVEL SPREADER SURFACES FOR STORMWATER MANAGEMENT

- PARKING CALCULATION (AS PER ARTICLE 15 §15.1.2.h):  
INDUSTRIAL 0.6 SPACES/EMPLOYEE X 19 EMPLOYEES = 12 SPACES  
TOTAL REQUIRED SPACES = 12 SPACES  
TOTAL SPACES = 12 REQUIRED WITH 12 PROVIDED (2 ADA)
- WETLANDS WERE IDENTIFIED AND LOCATED BY KENNETH A. WOOD, P.E., C.W.S. OF ATTAR ENGINEERING ON 4/22/2023. NO EVIDENCE OF VERNAL POOLS WAS PRESENT. THE WETLAND BOUNDARY AGREED WITH FORMER WETLAND FLAGS FOUND IN THE FIELD.
- THE CONTRACTOR MUST CONTACT DIG SAFE AND ALL LOCAL UTILITIES PRIOR TO THE START OF CONSTRUCTION TO VERIFY THE LOCATION OF EXISTING SUBSURFACE UTILITIES AND CONDITIONS. LOCATING AND PROTECTING ANY UNDERGROUND OR ABOVE-GROUND UTILITY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- THE PROPOSED DEVELOPMENT SHALL BE SERVICED BY PRIVATE WATER AND PRIVATE SEPTIC. THE NUMBER OF EMPLOYEES THE FACILITIES SUPPORT REMAINS UNCHANGED.

GENERAL NOTES CONTD.

- ALL SIDE AND REAR BUFFERYARDS SHALL BE PRESERVED IN THEIR NATURAL STATE WITH EFFORTS TAKEN TO MINIMIZE TREE REMOVAL. A LANDSCAPING PLAN HAS BEEN PREPARED BY A LICENSED LANDSCAPE ARCHITECT AND SHALL BE SUBMITTED TO THE TOWN OF YORK WITH THE PLAN SET. SEE REFERENCE 4 FOR THE LANDSCAPE PLAN.
- THE PARCEL IS NOT LOCATED IN A FLOOD HAZARD ZONE AS IDENTIFIED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.
- NO ADDITIONAL TRAFFIC WILL BE GENERATED BY THE PROPOSED DEVELOPMENT.

APPROVAL OF THE PLANNING BOARD OF YORK, MAINE DATE

TOWN DEPARTMENT REVIEWS DATE

YORK POLICE DEPARTMENT  
YORK VILLAGE FIRE DEPARTMENT  
YORK PUBLIC WORKS DEPARTMENT

THIS APPLICATION HAS BEEN REVIEWED BY THESE DEPARTMENTS WHICH HAVE OFFERED COMMENTS TO THE PLANNING BOARD.

STATE OF MAINE - YORK COUNTY  
ss. REGISTRY OF DEEDS  
RECEIVED \_\_\_\_\_, 20\_\_\_\_  
AT \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_  
PLAN BOOK \_\_\_\_\_, PAGE \_\_\_\_\_  
ATTEST \_\_\_\_\_ REGISTER

THE SIGNATURES OF 3 OR MORE PLANNING BOARD MEMBERS INDICATE APPROVAL OF THIS PLAN.

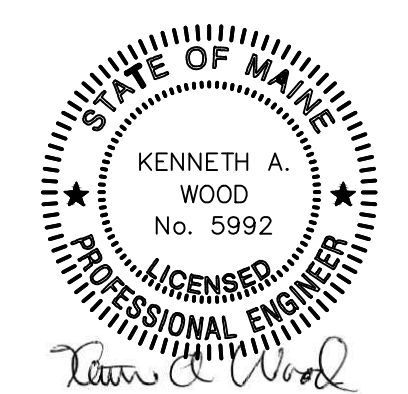
TAX MAP 99, LOT 44

SITE PLAN  
ELECTRIC LIGHT COMPANY, INC.  
1 MORGAN WAY, CAPE NEDDICK, ME

FOR: KEN MILLER  
1 MORGAN WAY  
CAPE NEDDICK, ME 03902

ATTAR ENGINEERING, INC.  
CIVIL ♦ STRUCTURAL ♦ MARINE ♦ SURVEYING  
1284 STATE ROAD - ELIOT, MAINE 03903  
PHONE: (207)439-6023 FAX: (207)439-2128

SCALE: 1" = 60'  
DATE: 1/3/2024  
JOB NO: C334-22  
FILE: ELECTRIC LIGHT BASE.DWG  
SHEET: 2



NO.	DESCRIPTION	DATE
D	PLANNING BOARD REVS	10/23/25
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NO.	DESCRIPTION	DATE
REVISIONS		



GRAPHIC SCALE

0 60 120 180 240 (FEET)







LEGEND

PROPERTY LINE

SETBACK

EXT. ABUTTER LINE

PRP. RIGHT-OF-WAY

CENTERLINE OF ROAD

EXT. GRAVEL

PRP. PAVEMENT

PRP. GRAVEL

EXT. BUILDING

PRP. BUILDING

PRP. PARKING

EXT. MAJOR CONTOUR

EXT. MINOR CONTOUR

PRP. MAJOR CONTOUR

PRP. MINOR CONTOUR

EXT. SPOT GRADE

PRP. SPOT GRADE

EXT. STONEWALL

EXT. WETLAND BNDY

EXT. WETLAND AREA

EXT. WETLAND BUFFER

PRP. STOCKADE FENCE

EXT. STORM LINE

PRP. STORM LINE

PRP. SILTATION BARRIER

EXT. MONITORING WELL

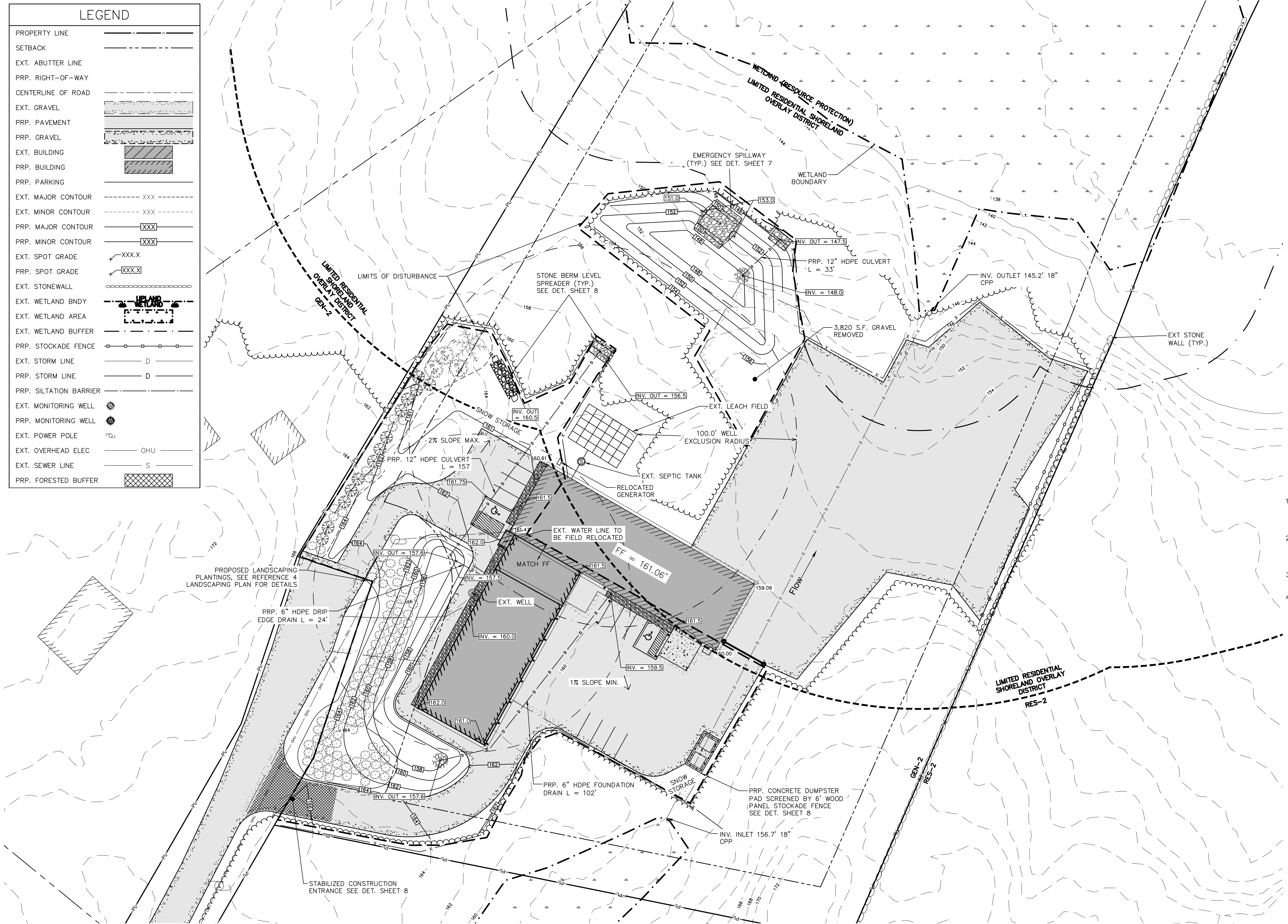
PRP. MONITORING WELL

EXT. POWER POLE

EXT. OVERHEAD ELEC

EXT. SEWER LINE

PRP. FORESTED BUFFER



- GRADING & UTILITY NOTES
- 1.) ALL STORM DRAINS SHALL BE ADS N-12 (HDPE) OR APPROVED EQUAL (UNLESS NOTED OTHERWISE). PROPER TRENCHING AND BACKFILLING ARE VITAL TO THE LONG TERM PERFORMANCE AND DURABILITY OF HDPE CULVERT INSTALLATIONS. SEE HDPE CULVERT TRENCH DETAIL.

2.) SNOW STORAGE LOCATIONS ARE DEPICTED ON THE PLANS. ROADSIDE SNOW STORAGE IS LOCATED NEXT TO THE DUMPSTER PAD AS WELL AS ON THE NORTH-EAST EDGE OF THE NEW PARKING AREA. IN AN INSTANCE WHERE THE DEVELOPED LOT REACHES ITS CAPACITY FOR SNOW STORAGE, ALL EXCESS SNOW SHALL BE CARRIED OFF-SITE.

3.) CENTRAL MAINE POWER COMPANY WILL PREPARE THE ELECTRICAL PLAN FOR CONSTRUCTION. ALL ELECTRICAL, TELEPHONE, AND CABLE SERVICES WILL BE UNDERGROUND.

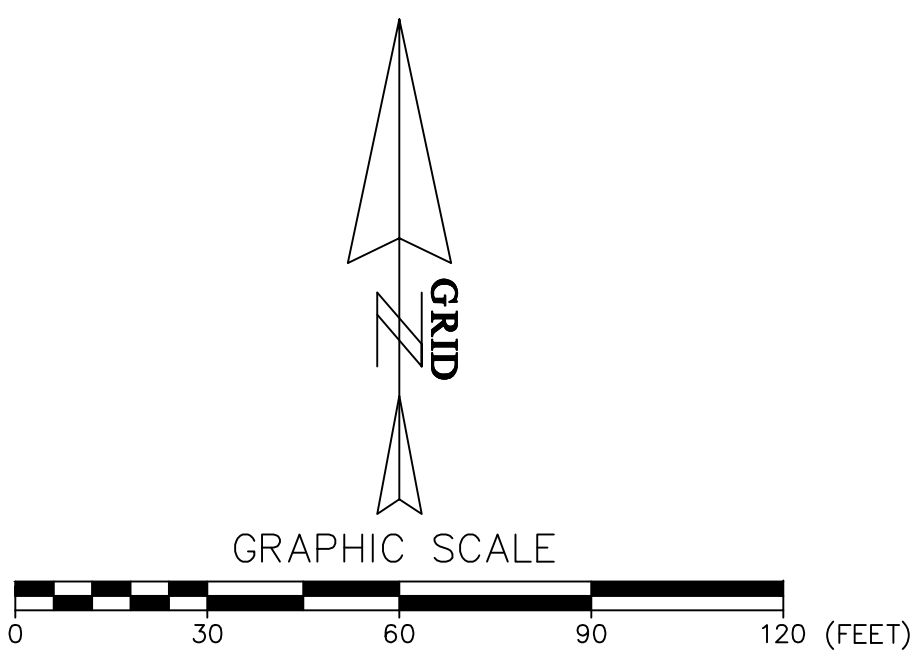
4.) THE LIMITS OF DISTURBANCE MUST BE VISUALLY DELINEATED IN THE FIELD.

SIGNATURE

DATE

CHAIR

STATE OF MAINE – YORK COUNTY  
ss. REGISTRY OF DEEDS  
RECEIVED \_\_\_\_\_, 20\_\_\_\_  
AT \_\_\_\_\_h\_\_\_\_m\_\_\_\_M\_\_\_\_, AND RECORDED IN  
PLAN BOOK \_\_\_\_\_, PAGE \_\_\_\_\_  
ATTEST \_\_\_\_\_ REGISTER



NO.	DESCRIPTION	DATE
E	ADDED LEVEL SPREADER TO SWALE AS PER GP	11/26/25
D	PLANNING BOARD REVS	10/23/25
C	PLANNING BOARD REVS	9/5/25
B	PLANNING BOARD REVS	1/6/25
A	TOWN PLANNER REVS	7/24/24
NO.	DESCRIPTION	DATE



GRADING & UTILITY PLAN  
ELECTRIC LIGHT COMPANY, INC.  
1 MORGAN WAY, CAPE NEDDICK, ME

TAX MAP 99, LOT 44

FOR: KEN MILLER  
1 MORGAN WAY  
CAPE NEDDICK, ME 03902

ATTAR ENGINEERING, INC.  
CIVIL ♦ STRUCTURAL ♦ MARINE ♦ SURVEYING  
1284 STATE ROAD – ELIOT, MAINE 03903  
PHONE: (207)439-6023 FAX: (207)439-2128

SCALE: 1" = 30'

DATE: 1/3/2024

APPROVED BY:

DRAWN BY: WRP

REVISION DATE: E : 11/26/2025

JOB NO: C334-22

FILE: ELECTRIC LIGHT BASE.DWG

SHEET: 4





SOILS LEGEND		HSG	SLOPES
Bm	BIDDEFORD MUCKY PEAT	D	0-3%
BsB	BRAYTON & WESTBURY VERY FINE SANDY LOAMS	D	0-8%
LyB	LYMAN-ROCK OUTCROP COMPLEX	D	3-8%
LyC	LYMAN-ROCK OUTCROP COMPLEX	D	8-15%
MaB	MADAWASKA FINE SANDY LOAM	B	0-8%

FLOW TYPES	
SF	SHEET FLOW
SCF	SHALLOW CONCENTRATED FLOW
CF	CHANNEL FLOW

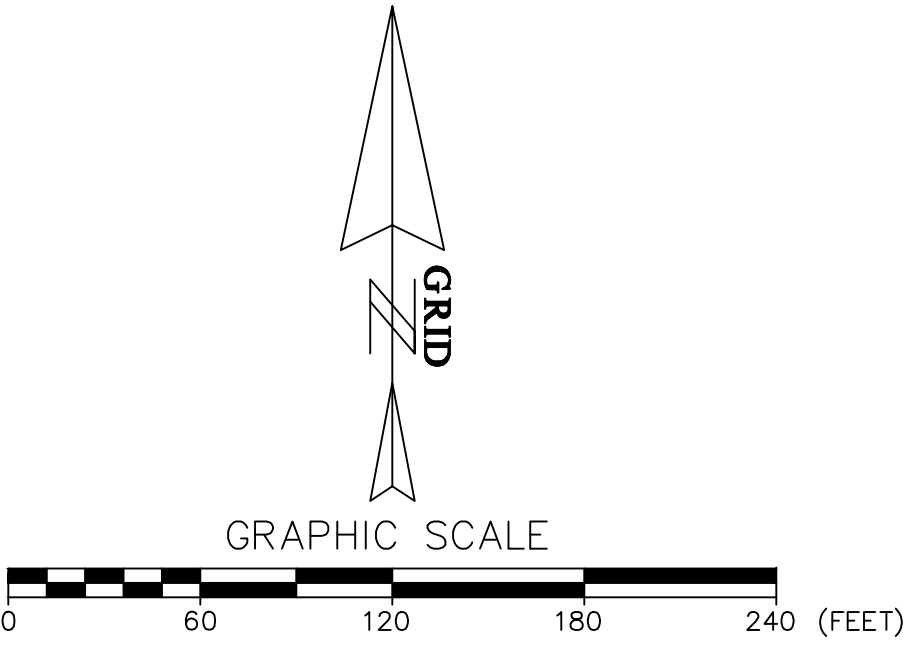
NOTE: SOILS INFORMATION IS TAKEN FROM CUSTOM SOIL RESOURCE REPORT FOR YORK COUNTY, MAINE, MEDIUM INTENSITY, INFORMATION GATHERED FROM THE NATIONAL RESOURCES CONSERVATION SERVICE (NRCS). SURVEY AREA DATA IS VERSION 21, DATED 08/30/2022.

LEGEND	
EXT. MAJOR CONTOUR	--- XXX ---
EXT. MINOR CONTOUR	----- XXX -----
EXT. SPOT GRADE	←XXX.X
EXT. SUBCATCHMENT	=====
EXT. Tc FLOW LINE	○-----→
EXT. Tc GRADE CALC	SF=XXX' ● X.XXX%
EXT. WETLAND BNDY	WETLAND
EXT. WETLAND AREA	WETLAND
EXT. WETLAND BUFFER	WETLAND
SOIL TYPE BOUNDARY	=====

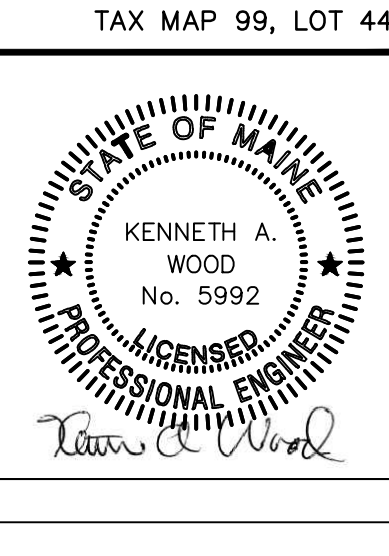
1S	SUBCATCHMENT
1R	REACH
1	POND
1L	ANALYSIS POINT

SIGNATURE	DATE
CHAIR	

STATE OF MAINE - YORK COUNTY  
ss. REGISTRY OF DEEDS  
RECEIVED \_\_\_\_\_, 20\_\_\_\_  
AT \_\_\_\_\_h\_\_\_\_m\_\_\_\_M, AND RECORDED IN  
PLAN BOOK \_\_\_\_\_, PAGE \_\_\_\_\_  
ATTEST \_\_\_\_\_REGISTER

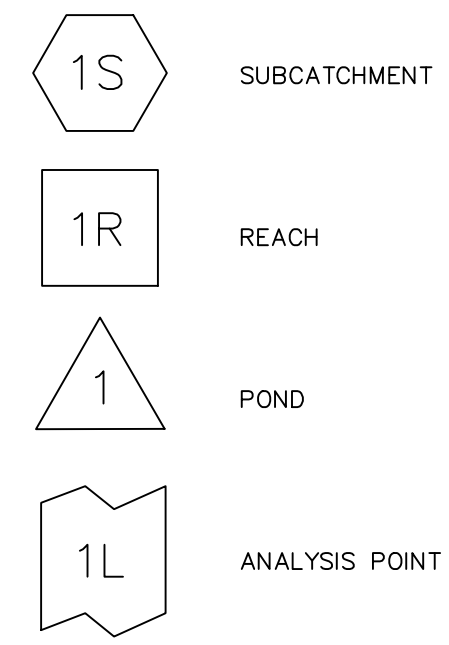
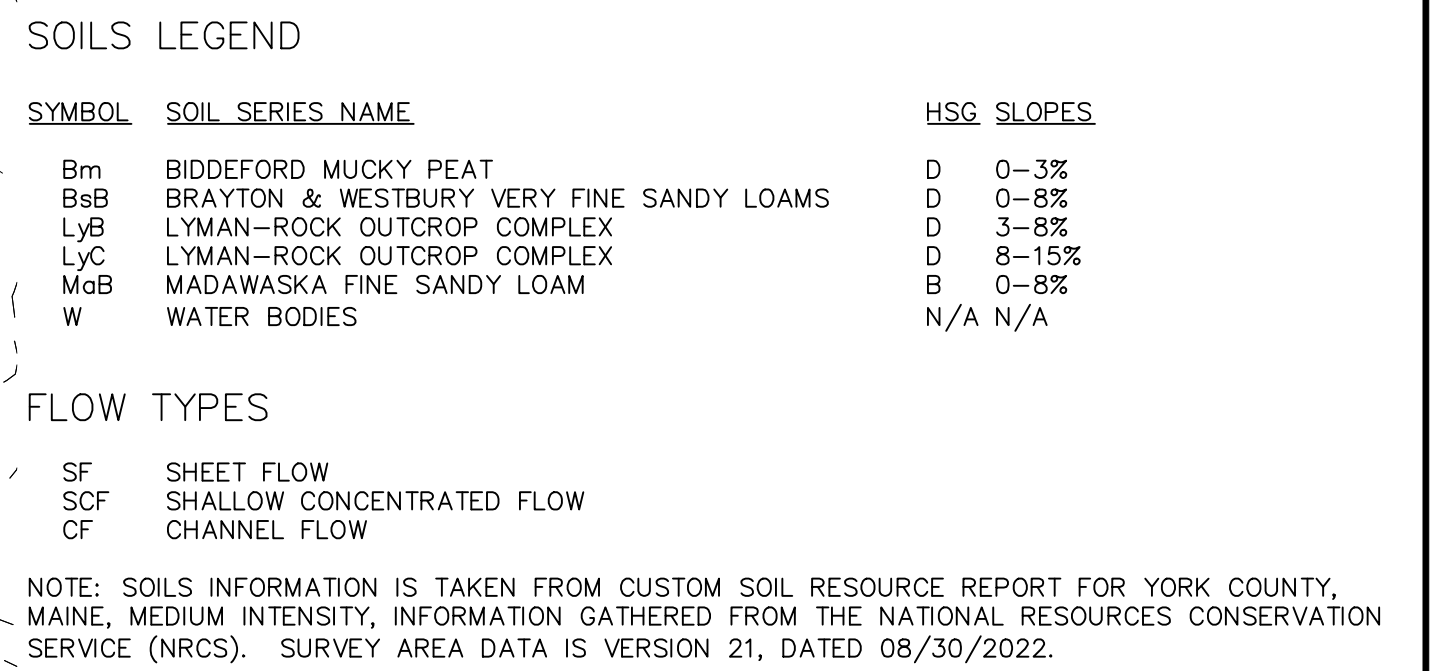


B	PLANNING BOARD REVS	1/6/25
NO.	DESCRIPTION	DATE
	REVISIONS	











TAX MAP 99, LOT 44		
EXISTING STORMWATER PLAN ELECTRIC LIGHT COMPANY, INC. 1 MORGAN WAY, CAPE NEDDICK, ME		
FOR: KEN MILLER 1 MORGAN WAY CAPE NEDDICK, ME 03902		
ATTAR ENGINEERING, INC. CIVIL ♦ STRUCTURAL ♦ MARINE ♦ SURVEYING 1284 STATE ROAD - ELIOT, MAINE 03903 PHONE: (207)439-6023 FAX: (207)439-2128		
SCALE: 1" = 60'	APPROVED BY:	DRAWN BY: WRP
DATE: 1/3/2024		REVISION DATE: E : 11/26/2025
JOB NO: C334-22	FILE: ELECTRIC LIGHT BASE.DWG	SHEET: 5



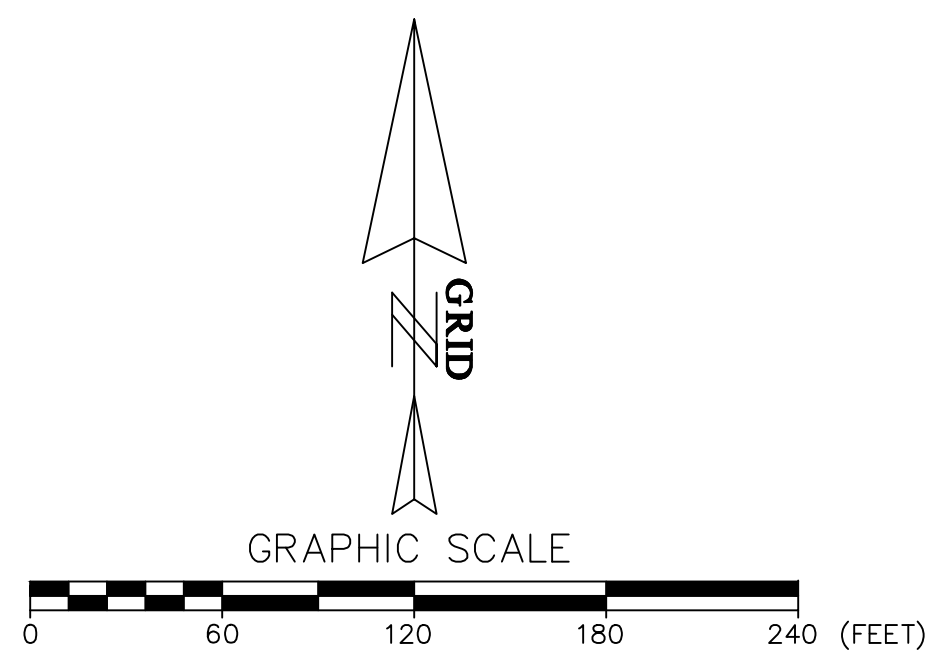


## LEGEND

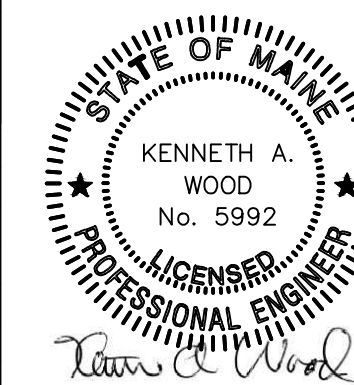
EXT. MAJOR CONTOUR	----- XXX -
EXT. MINOR CONTOUR	----- XXX -
PRP. MAJOR CONTOUR	----- [XXX] -----
PRP. MINOR CONTOUR	----- [XXX] -----
EXT. SPOT GRADE	↘ XXX.X
PRP. SPOT GRADE	↘ [XXX.X]
PRP. SUBCATCHMENT	
PRP. Tc FLOW LINE	
PRP. Tc GRADE CALC	<div style="text-align: center;"> <math>S^* = 100 \times</math>    <math>\times 1000 \%</math> </div>
EXT. WETLAND BNDY	
EXT. WETLAND AREA	
EXT. WETLAND BUFFER	
SOIL TYPE BOUNDARY	
PRP. SILTATION BARRIER	----- x ----- x ----- x -----
PRP. FORESTED BUFFER	


SIGNATURE	DATE
CHAIR	

STATE OF MAINE - YORK COUNTY  
ss. REGISTRY OF DEEDS  
RECEIVED \_\_\_\_\_, 20\_\_\_\_  
AT \_\_\_\_\_h, \_\_\_\_\_m, \_\_\_\_\_M, AND RECORDED IN  
PLAN BOOK \_\_\_\_\_, PAGE \_\_\_\_\_  
ATTEST \_\_\_\_\_ REGISTER



E	ADDED LEVEL SPREADER TO SWALE AS PER GP	11/26/21
D	PLANNING BOARD REVS	10/23/21
C	PLANNING BOARD REVS	9/5/21
B	PLANNING BOARD REVS	1/6/21
NO.	DESCRIPTION	DATE
	REVISIONS	



DEVELOPED STORMWATER PLAN ELECTRIC LIGHT COMPANY, INC. 1 MORGAN WAY, CAPE NEDDICK, ME		
FOR: KEN MILLER 1 MORGAN WAY CAPE NEDDICK, ME 03902		
 <b>ATTAR ENGINEERING, INC.</b> CIVIL ♦ STRUCTURAL ♦ MARINE ♦ SURVEYING 1284 STATE ROAD – ELIOT, MAINE 03903 PHONE: (207)439-6023 FAX: (207)439-2128		
SCALE: 1" = 60'	APPROVED BY:	DRAWN BY: WRP
DATE: 1/3/2024		REVISION DATE: E : 11/26/2025
JOB NO: C334-22	FILE: ELECTRIC LIGHT BASE.DWG	SHEET: 6



EROSION & SEDIMENTATION CONTROL NOTES

1. SEDIMENT BARRIERS SHALL BE INSTALLED PARALLEL TO CONTOURS DOWNSLOPE OF ALL STRIPPING OR CONSTRUCTION OPERATIONS, PRIOR TO THE START OF CONSTRUCTION. A DOUBLE SILT FENCE BARRIER SHALL BE INSTALLED DOWNSLOPE OF ANY SOIL MATERIAL STOCKPILES (STORMWATER SHALL BE PREVENTED FROM DRAINING TOWARD STOCKPILES). SILT FENCES SHALL BE INSPECTED AFTER EACH RAIN EVENT AND DAILY DURING PROLONGED RAIN. SILT AND SOIL PARTICLES ACCUMULATING BEHIND THE FENCE SHALL BE REMOVED AFTER EACH SIGNIFICANT RAIN EVENT AND IN NO INSTANCE SHOULD ACCUMULATION EXCEED 1/2 THE HEIGHT OF THE FENCE. TORN OR DAMAGED AREAS SHALL BE REPAIRED.

2. TEMPORARY AND PERMANENT VEGETATION AND MULCHING IS AN INTEGRAL COMPONENT OF THE EROSION AND SEDIMENTATION CONTROL PLAN. ALL AREAS SHALL BE INSPECTED AND MAINTAINED UNTIL THE DESIRED VEGETATIVE COVER IS ESTABLISHED. THESE CONTROL MEASURES ARE ESSENTIAL TO EROSION PREVENTION AND ALSO REDUCE COSTLY REWORK OF GRADED AND SHAPED AREAS. THE MAXIMUM AREA THAT CAN BE EXPOSED, AND NOT TEMPORARILY OR PERMANENTLY STABILIZED, AT ONE TIME SHALL BE LIMITED TO 10 ACRES.

3. SEEDING, FERTILIZER AND LIME RATES AND TIME OF APPLICATION WILL BE DEPENDENT ON SOIL REQUIREMENTS. TEMPORARY VEGETATION SHALL BE MAINTAINED IN THESE AREAS UNTIL PERMANENT SEEDING IS APPLIED. ADDITIONALLY, EROSION AND SEDIMENTATION MEASURES SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED.

4. ALL LAWN AREA, OUTER POND SIDE SLOPES AND SWALES SHALL BE PERMANENTLY SEEDED WITH THE FOLLOWING MIXTURE: 20 LB/ACRE CREEPING RED FESCUE, 2 LB/ACRE REDTOP AND 20 LB/ACRE TALL FESCUE FOR A TOTAL OF 42 LB/ACRE. FERTILIZER AND LIME RATES SHALL BE DEPENDENT ON SOIL TESTING. IN THE ABSENCE OF SOIL TESTS, FERTILIZE WITH 10-20-20 (N-P205-K20I) AT 800 LB/ACRE AND LIME AT 3 TONS/ACRE. MULCH WITH HAY AT 70-90 LB/1000 S.F. 4" OF LOAM SHALL BE APPLIED PRIOR TO SEEDING.

5. POND BOTTOMS AND INNER POND SIDESLOPES SHALL BE PERMANENTLY SEEDED WITH THE FOLLOWING MIXTURE: 20 LB/ACRE CREEPING RED FESCUE, 8 LB/ACRE BIRDSFOOT TREFOIL AND 20 LB/ACRE TALL FESCUE FOR A TOTAL OF 48 LB/ACRE. SEE THE ABOVE NOTE FOR FERTILIZER, LIME AND MULCHING RATES.

6. TEMPORARY VEGETATION OF ALL DISTURBED AREAS, MATERIAL STOCKPILES AND OTHER SUCH AREAS SHALL BE ESTABLISHED BY SEEDING WITH EITHER WINTER RYE AT A RATE OF 112 LB/ACRE OR ANNUAL RYEGRASS AT A RATE OF 40 LB/ACRE. WINTER RYE SHALL BE USED FOR FALL SEEDING AND ANNUAL RYEGRASS FOR SHORT DURATION SEEDING. SEEDING SHALL BE ACCOMPLISHED BEFORE OCTOBER 1. TEMPORARY STABILIZATION WITH MULCH OF DISTURBED AREAS SHALL TAKE PLACE WITHIN 7 DAYS OF THE CESSATION OF CONSTRUCTION ACTIVITIES IN AN AREA THAT WILL NOT BE WORKED FOR MORE THAN 7 DAYS. AREAS WITHIN 75 FEET OF A WETLAND OR WATERBODY SHALL BE TEMPORARILY STABILIZED WITH MULCH WITHIN 48 HOURS OF THE INITIAL DISTURBANCE OR PRIOR TO ANY STORM EVENT, WHICHEVER COMES FIRST.

7. TEMPORARY SEEDING OF DISTURBED AREAS SHALL BE ACCOMPLISHED BEFORE OCTOBER 1. PERMANENT SEEDING SHALL BE ACCOMPLISHED BEFORE SEPTEMBER 15.

8. ALL SEEDED AREAS SHALL BE MULCHED WITH HAY AT A RATE OF 2 BALES (70-90 LB) PER 1000 S.F. OF SEEDED AREA.

9. ALL DISTURBED AREAS ON THE SITE SHALL BE PERMANENTLY STABILIZED WITHIN 7 DAYS OF FINAL GRADING OR TEMPORARILY STABILIZED PER E&S NOTE 6. PERMANENT STABILIZATION MEANS 90% COVER WITH MATURE, HEALTHY PLANTS FOR PLANTED AREAS AND FOR SODDED AREAS, COMPLETE BINDING OF SOD ROOTS INTO THE UNDERLYING SOIL WITH NO SLUMPING OF THE SOD OR DIE-OFF.

10. A STABILIZED CONSTRUCTION ENTRANCE SHALL BE INSTALLED AT ALL ACCESSES TO PUBLIC ROADS (SEE PLAN). TEMPORARY CULVERTS SHALL BE PROVIDED AS REQUIRED.

11. SLOPES BETWEEN 3H:1V AND 2H:1V SHALL BE TREATED WITH POLYJUTE OPEN WEAVE GEOTEXTILE (OR EQUIVALENT) AFTER SEEDING. JUTE MATS SHALL BE ANCHORED PER MANUFACTURER'S SPECIFICATIONS. SLOPES 2H:1V TO SLOPES AS STEEP AS 1.5H:1V SHALL BE TREATED WITH RIP RAP AS DEPICTED ON THE PLANS/DETAILS. SLOPES STEEPER THAN 1.5H:1V ARE PROHIBITED.

12. EXCESSIVE DUST CAUSED BY CONSTRUCTION OPERATIONS SHALL BE CONTROLLED BY APPLICATION OF WATER OR CALCIUM CHLORIDE.

13. THE CONTRACTOR MAY OPT TO USE EROSION CONTROL MIX BERM AS A SEDIMENT BARRIER IN LIEU OF SILTATION FENCE OR HAY BALE BARRIERS WITH APPROVAL FROM THE INSPECTING ENGINEER.

14. TEMPORARY E&S CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS OF PERMANENT STABILIZATION. ACCUMULATED SEDIMENTS SHALL BE REMOVED AND THE AREA STABILIZED.

15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATE HOUSEKEEPING PRACTICES DURING THE CONSTRUCTION OF THE PROJECT. THESE STANDARDS CAN BE FOUND IN THE FOLLOWING DOCUMENT: MDEP CHAPTER 500 (STORMWATER MANAGEMENT), APPENDIX C. HOUSEKEEPING. HOUSEKEEPING PRACTICES INCLUDE, BUT ARE NOT LIMITED TO, SPILL PREVENTION, GROUNDWATER PROTECTION, FUGITIVE SEDIMENT AND DUST, DEBRIS AND OTHER MATERIALS, EXCAVATION DEWATERING, AUTHORIZED NON-STORMWATER DISCHARGES (SEE NOTE 18) AND UNAUTHORIZED NON-STORMWATER DISCHARGES (SEE NOTE 19). ANY SPILL OR RELEASE OF HAZARDOUS SUBSTANCES MUST BE REPORTED TO THE MDEP; FOR OIL SPILLS, CALL 1-800-482-0777; FOR SPILLS OF TOXIC OR HAZARDOUS MATERIAL, CALL 1-800-452-4664.

16. WHENEVER PRACTICABLE, NO DISTURBANCE ACTIVITIES SHOULD TAKE PLACE WITHIN 50 FEET OF ANY PROTECTED NATURAL RESOURCE. IF DISTURBANCE ACTIVITIES TAKE PLACE WITHIN 75' OF ANY PROTECTED NATURAL RESOURCE, AND STORMWATER DISCHARGES THROUGH THE DISTURBED AREAS TOWARD THE PROTECTED NATURAL RESOURCE, PERIMETER EROSION CONTROLS MUST BE DOUBLED. IF DISTURBANCE ACTIVITIES TAKE PLACE LESS THAN 30 FEET FROM ANY PROTECTED NATURAL RESOURCE, AND STORMWATER DISCHARGES THROUGH THE DISTURBED AREAS TOWARD THE PROTECTED NATURAL RESOURCE, PERIMETER EROSION CONTROLS MUST BE DOUBLED AND DISTURBED AREAS MUST BE TEMPORARILY OR PERMANENTLY STABILIZED WITHIN 7 DAYS.

VEGETATED SWALE DETAIL

NTS

VARIES

18" (MIN)

1

3

2

3

1

LOAM, SEED AND MULCH PER E&S NOTES

STATE OF MAINE — YORK COUNTY

ss. REGISTRY OF DEEDS

RECEIVED \_\_\_\_\_, 20\_\_

AT \_\_\_\_\_h, \_\_\_\_\_m, \_\_\_\_\_M, AND RECORDED IN

PLAN BOOK \_\_\_\_\_, PAGE \_\_\_\_\_

ATTEST \_\_\_\_\_REGISTER

EROSION & SED. CONTROL NOTES (CONT.)

1. AUTHORIZED NON-STORMWATER DISCHARGES. IDENTIFY AND PREVENT CONTAMINATION BY NONSTORMWATER DISCHARGES. WHERE ALLOWED NON-STORMWATER DISCHARGES EXIST, THEY MUST BE IDENTIFIED AND STEPS SHOULD BE TAKEN TO ENSURE THE IMPLEMENTATION OF APPROPRIATE POLLUTION PREVENTION MEASURES FOR THE NON-STORMWATER COMPONENT(S) OF THE DISCHARGE. AUTHORIZED NONSTORMWATER DISCHARGES ARE:  
(A) DISCHARGES FROM FIREFIGHTING ACTIVITY;  
(B) FIRE HYDRANT FLUSHINGS;  
(C) VEHICLE WASHWATER IF DETERGENTS ARE NOT USED AND WASHING IS LIMITED TO THE EXTERIOR OF VEHICLES (ENGINE, UNDERCARRIAGE AND TRANSMISSION WASHING IS PROHIBITED);  
(D) DUST CONTROL RUNOFF IN ACCORDANCE WITH PERMIT CONDITIONS AND APPENDIX C(3);  
(E) ROUTINE EXTERNAL BUILDING WASHDOWN, NOT INCLUDING SURFACE PAINT REMOVAL, THAT DOES NOT INVOLVE DETERGENTS;  
(F) PAVEMENT WASHWATER (WHERE SPILLS/LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED, UNLESS ALL SPILLED MATERIAL HAD BEEN REMOVED) IF DETERGENTS ARE NOT USED;  
(G) UNCONTAMINATED AIR CONDITIONING OR COMPRESSOR CONDENSATE;  
(H) UNCONTAMINATED GROUNDWATER OR SPRING WATER;  
(I) FOUNDATION OR FOOTER DRAIN-WATER WHERE FLOWS ARE NOT CONTAMINATED;  
(J) UNCONTAMINATED EXCAVATION DEWATERING (SEE REQUIREMENTS IN APPENDIX C(5));  
(K) POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS;  
(L) LANDSCAPE IRRIGATION.

2. UNAUTHORIZED NON-STORMWATER DISCHARGES. THE DEPARTMENT'S APPROVAL UNDER THIS CHAPTER DOES NOT AUTHORIZE A DISCHARGE THAT IS MIXED WITH A SOURCE OF NONSTORMWATER, OTHER THAN THOSE DISCHARGES IN COMPLIANCE WITH APPENDIX C(6). SPECIFICALLY, THE DEPARTMENT'S APPROVAL DOES NOT AUTHORIZE DISCHARGES OF THE FOLLOWING:  
(A) WASTEWATER FROM THE WASHOUT OR CLEANOUT OF CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS OR OTHER CONSTRUCTION MATERIALS;  
(B) FUELS, OILS OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE;  
(C) SOAPS, SOLVENTS, OR DETERGENTS USED IN VEHICLE AND EQUIPMENT WASHING; AND  
(D) TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER RELEASE.

E&S INSPECTION/MAINTENANCE DURING CONSTRUCTION

THE SITE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FOLLOWING:  

A. INSPECTION AND CORRECTIVE ACTION. INSPECT DISTURBED AND IMPERVIOUS AREAS, EROSION CONTROL MEASURES, MATERIALS STORAGE AREAS THAT ARE EXPOSED TO PRECIPITATION, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE. INSPECT THESE AREAS AT LEAST ONCE A WEEK AS WELL AS BEFORE AND WITHIN 24 HOURS AFTER A STORM EVENT OF MORE THAN 0.5" IN A CONSECUTIVE 24 HOUR PERIOD, AND PRIOR TO COMPLETING PERMANENT STABILIZATION MEASURES. A PERSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL, INCLUDING THE STANDARDS AND CONDITIONS IN THE PERMIT, SHALL CONDUCT THE INSPECTIONS.

B. MAINTENANCE. IF BEST MANAGEMENT PRACTICES (BMPs) NEED TO BE REPAIRED, THE REPAIR WORK SHOULD BE INITIATED UPON DISCOVERY OF THE PROBLEM BUT NO LATER THAN THE END OF THE NEXT WORKDAY. IF ADDITIONAL BMPs OR SIGNIFICANT REPAIR OF BMPs ARE NECESSARY, IMPLEMENTATION MUST BE COMPLETED WITHIN 7 CALENDAR DAYS AND PRIOR TO ANY STORM EVENT (RAINFALL). ALL MEASURES MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION UNTIL AREAS ARE PERMANENTLY STABILIZED.

C. DOCUMENTATION. KEEP A LOG (REPORT) SUMMARIZING THE INSPECTIONS AND ANY CORRECTIVE ACTION TAKEN. THE LOG MUST INCLUDE THE NAME(S) AND QUALIFICATIONS OF THE PERSON MAKING THE INSPECTIONS, THE DATE(S) OF THE INSPECTIONS, AND MAJOR OBSERVATIONS ABOUT THE OPERATION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS, MATERIALS STORAGE AREAS, AND VEHICLES ACCESS POINTS TO THE PARCEL. MAJOR OBSERVATIONS MUST INCLUDE BMPs THAT NEED MAINTENANCE, BMPs THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION, AND LOCATION(S) WHERE ADDITIONAL BMPs ARE NEEDED. FOR EACH BMP REQUIRING MAINTENANCE, BMP NEEDING REPLACEMENT, AND LOCATION NEEDING ADDITIONAL BMPs, NOTE IN THE LOG THE CORRECTIVE ACTION TAKEN AND WHEN IT WAS TAKEN. THE LOG MUST BE MADE ACCESSIBLE TO DEPARTMENT STAFF AND A COPY MUST BE PROVIDED UPON REQUEST. THE PERMITTEE SHALL RETAIN A COPY OF THE LOG FOR A PERIOD OF AT LEAST THREE YEARS FROM THE COMPLETION OF PERMANENT STABILIZATION.

EMERGENCY SPILLWAY DETAIL

NTS

SEE SH. 4

18"

2

1

RIP RAP d50 = 6"

SINGLE LAYER GEOTEXTILE FABRIC NICOLON/MIRAFI 180N OR EQUIVALENT

POND EMBANKMENT

LOAM AND SEED ABOVE CLAY BARRIER

RIP RAP d50 = 6"

POND ELEVATION VARIES

1.5'

3.0'

1.5'

FLOW

SEE POND EMBANKMENT DETAIL FOR SIDE SLOPES

TRANSITION TO EXISTING GRADE

CLAY BARRIER

KEY CLAY 6" INTO POND EMBANKMENT/ EXISTING SOIL

CULVERT INLET/OUTLET PROTECTION DETAIL

NTS

DRIVEWAY STRUCTURE

SIDE SLOPE VARIES (2:1 MAX.)

18"

4"

15"

RIP RAP d50 = 6" 4" WIDE

GEOTEXTILE LAYER NICOLON/MIRAFI 180N OR EQUAL

CULVERT (SIZE VARIES)

PAVEMENT SECTION CONSTRUCTION NOTES

1. DRIVEWAYS AND PARKING AREAS TO BE CONSTRUCTED IN ACCORDANCE WITH THE APPROPRIATE CROSS SECTION DETAIL. GRAVEL FILL TO BE COMPACTED TO 95% MODIFIED PROCTOR IN ACCORDANCE WITH ASTM D 1557. LIFT THICKNESSES TO BE A MAXIMUM OF 6".

2. ALL STUMPS, ORGANIC MATERIAL, ROCKS AND BOULDERS TO BE REMOVED TO A MINIMUM DEPTH OF 24" BELOW SUBBASE.

3. ALL STUMPS, LEDGE AND LARGE BOULDERS TO BE REMOVED FROM THE CONSTRUCTION AREA. THE CONSTRUCTION AREA SHALL BE CLEARED AND ROUGH GRADED.

4. ALL CULVERTS TO BE ADS N-12 (HOPE) OR APPROVED EQUAL. CULVERT INLETS AND OUTLETS TO BE PROTECTED IN ACCORDANCE WITH THE CULVERT INLET/OUTLET PROTECTION DETAIL.

5. THE CONTRACTOR MUST CONTACT DIG SAFE AND ALL LOCAL UTILITIES PRIOR TO THE START OF CONSTRUCTION TO VERIFY THE LOCATION OF EXISTING SUBSURFACE UTILITIES AND CONDITIONS. LOCATING AND PROTECTING ANY UNDERGROUND OR ABOVE GROUND UTILITY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

6. THE CONTRACTOR MUST KEEP ROADWAY TRANSITIONS FROM NEW TO EXISTING PAVEMENT CLEAN TO ENSURE NO SEDIMENT OR DEBRIS LEAVES THE SITE.

WINTER CONSTRUCTION NOTES

1. AN AREA SHALL BE CONSIDERED STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH HAY AT A RATE OF 100 LB/1000 S.F. OR DORMANT SEEDED, MULCHED AND ADEQUATELY ANCHORED BY AN APPROVED ANCHORING TECHNIQUE. IN ALL CASES, MULCH SHALL BE APPLIED SO THAT THE SOIL SURFACE IS NOT VISIBLE THROUGH THE MULCH.

2. FROM OCTOBER 15 TO APRIL 1, LOAM AND SEED WILL NOT BE REQUIRED. DURING PERIODS OF TEMPERATURES ABOVE FREEZING, DISTURBED AREAS SHALL BE FINE GRADED AND PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL PERMANENT SEEDING CAN BE APPLIED. AFTER NOVEMBER 1, DISTURBED AREAS MAY BE LOAMED, FINE GRADED AND DORMANT SEEDED AT A RATE 200-300% HIGHER THAN THE SPECIFIED PERMANENT SEEDING RATE. IF CONSTRUCTION CONTINUES DURING FREEZING WEATHER, DISTURBED AREAS SHALL BE GRADED BEFORE FREEZING AND TEMPORARILY STABILIZED WITH MULCH. DISTURBED AREAS SHALL NOT BE LEFT OVER THE WINTER OR FOR ANY OTHER EXTENDED PERIOD OF TIME UNLESS STABILIZED WITH MULCH.

3. FROM NOVEMBER 1 TO APRIL 15 ALL MULCH SHALL BE ANCHORED BY EITHER PEG LINE, MULCH NETTING, TRACKING OR WOOD CELLULOSE FIBER. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH SLOPES GREATER THAN 3%. SLOPES EXPOSED TO DIRECT WINDS AND FOR SLOPES GREATER THAN 8%. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL AREAS WITH SLOPES GREATER THAN 15%. AFTER OCTOBER 1, THE SAME APPLIES TO ALL SLOPES GREATER THAN 8%.

4. SNOW SHALL BE REMOVED FROM AREAS OF SEEDING AND MULCHING PRIOR TO PLACEMENT.

5. FOR WINTER STABILIZATION, HAY MULCH SHALL BE APPLIED AT TWICE THE STANDARD TEMPORARY STABILIZATION RATE. AT THE END OF EACH CONSTRUCTION DAY, AREAS THAT HAVE BEEN BROUGHT TO FINAL GRADE SHALL BE STABILIZED. MULCH SHALL NOT BE SPREAD ON TOP OF SNOW.

6. ALL AREAS WITHIN 75 FEET OF A PROTECTED NATURAL RESOURCE SHALL BE PROTECTED WITH A DOUBLE ROW OF SEDIMENT BARRIERS.

7. ALL VEGETATED DITCH LINES THAT HAVE NOT BEEN STABILIZED BY NOVEMBER 1, OR WILL BE WORKED DURING THE WINTER CONSTRUCTION PERIOD, SHALL BE STABILIZED WITH AN APPROPRIATE STONE LINING BACKED BY AN APPROPRIATE GRAVEL BED OR GEOTEXTILE UNLESS SPECIFICALLY RELEASED FROM THIS STANDARD BY THE MDEP.

8. MULCH NETTING SHALL BE USED TO ANCHOR MULCH ON ALL SLOPES GREATER THAN 8% UNLESS EROSION CONTROL BLANKETS OR EROSION CONTROL MIX IS BEING USED ON SUCH SLOPES.

EROSION CONTROL MIX BERM (NTS)

20' (MAX)

TOP OF SLOPE

2

1 (MAX)

RUNOFF WITH SEDIMENT

12" (MIN)

EROSION CONTROL MIX

FILTERED WATER

24" (MIN)

5% (MAX)

RUNOFF WITH SEDIMENT

12" (MIN)

EROSION CONTROL MIX

FILTERED WATER

24" (MIN)

EROSION CONTROL MIX COMPOSITION STANDARDS:

- THE ORGANIC MATTER CONTENT SHALL BE BETWEEN 80 AND 100%, DRY WEIGHT BASIS.

- PARTICLE SIZE BY WEIGHT SHALL BE 100% PASSING A 6" SCREEN AND A MINIMUM OF 70%, MAXIMUM OF 85% PASSING A 0.75" SCREEN.

- THE ORGANIC PORTION NEEDS TO BE FIBROUS AND ELONGATED

- LARGE PORTIONS OF SILTS, CLAYS OR FINE SANDS ARE NOT ACCEPTABLE IN THE MIX

- SOLUBLE SALTS CONTENT SHALL BE <4.0 mmhos/cm

- THE pH SHOULD FALL BETWEEN 5.0 AND 8.0

ROOF DRIPLINE DETAIL (NTS)

4.0'

BUILDING FOUNDATION

4" MIN. RESERVOIR LAYER (MEDOT 703.22 TYPE C UNDERDRAIN MATERIAL OR 3/4" DIA. CRUSHED STONE)

12" MIN. FILTER LAYER (SANDY SOIL WITH 4-7% FINES - BACKFILL MAY BE APPROPRIATE)

6" MIN DIA. PERFORATED PIPE (FOOTING DRAIN)

8-12" UNDERDRAIN LAYER (MEDOT 703.22 TYPE C UNDERDRAIN MATERIAL OR 3/4" DIA. CRUSHED STONE)

STORMWATER RESERVOIR

UTILITY CONDUIT TRENCH DETAIL (NTS)

PAVED AREA

FINISH SURFACE AS INDICATED ON PLANS

12"

2'-6" (MIN)

UTILITY MARKER TAPE

COMPACTED BACKFILL 12" MAX. LIFTS.

COMPACTED SAND BEDDING 6" MAX. LIFTS

PIPE O.D.

PIPE OD + 12"

TOP VIEW (CONNECTION)

SUPPORT FENCE (IF REQUIRED)

GEOTEXTILE

WOOD, METAL, OR SYNTHETIC POST OR STAKE.

DIRECTION OF RUNOFF

18" (MIN)

6" (MIN)

6" (MIN)

GEOTEXTILE ANCHORAGE TRENCH. BACKFILL WITH COMPACTED NATURAL SOIL.

POLES

SECTION A

SECTION B

TEMPORARY SILT FENCE — NTS

TOE — IN METHOD

COUPLER

SECTION A

SECTION B

JOINING SECTIONS

THE COUPLER CAN BE ANY ACCEPTABLE DEVICE USED TO TIE THE POLES TOGETHER

NOTES

1. DEPENDING UPON THE CONFIGURATION, ATTACH GEOTEXTILE TO WIRE MESH WITH HOG RINGS, TO STEEL POSTS WITH THE WIRES, AND TO WOOD POSTS WITH STAPLES.

2. POSTS MAY BE WIRED TOGETHER WHEN JOINING SECTIONS.

TAX MAP 89, LOT 43A

STATE OF MAINE

KENNETH A WOOD

No. 5992

PROFESSIONAL ENGINEER

*Kenneth A Wood*

C

PLANNING BOARD REVS

9/5/25

NO.

DESCRIPTION

DATE

REVISIONS

JOB NO: C340-22

FILE: ELECTRIC LIGHT DET.DWG

SHEET: 7

SITE DETAILS

ELECTRIC LIGHT COMPANY, INC.

1 MORGAN WAY, CAPE NEDDICK, ME

FOR:

KEN MILLER

1 MORGAN WAY

CAPE NEDDICK, ME 03902

ATTAR ENGINEERING, INC.

CIVIL ♦ STRUCTURAL ♦ MARINE ♦ SURVEYING

1284 STATE ROAD — ELIOT, MAINE 03903

PHONE: (207)439-6023 FAX: (207)439-2128

SCALE:

—

DATE:

1/3/2024

APPROVED BY:

DRAWN BY:

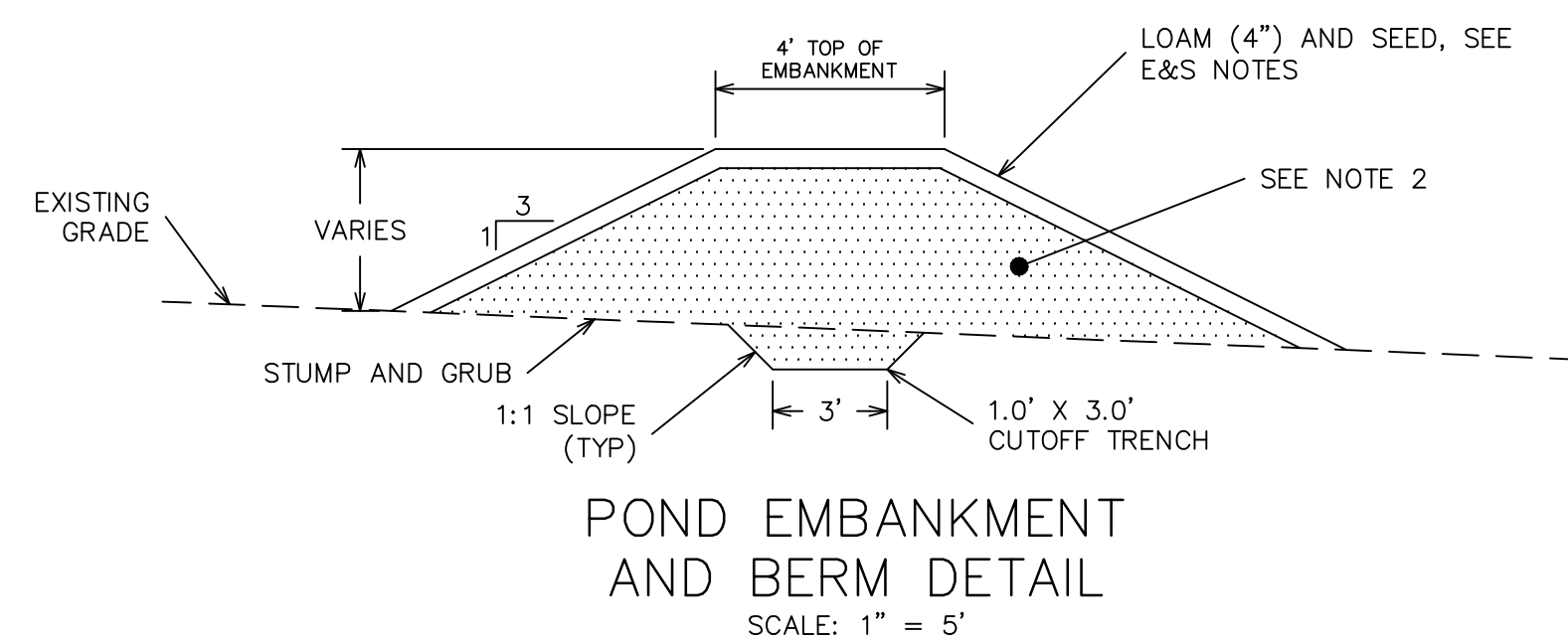
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REVISION DATE:

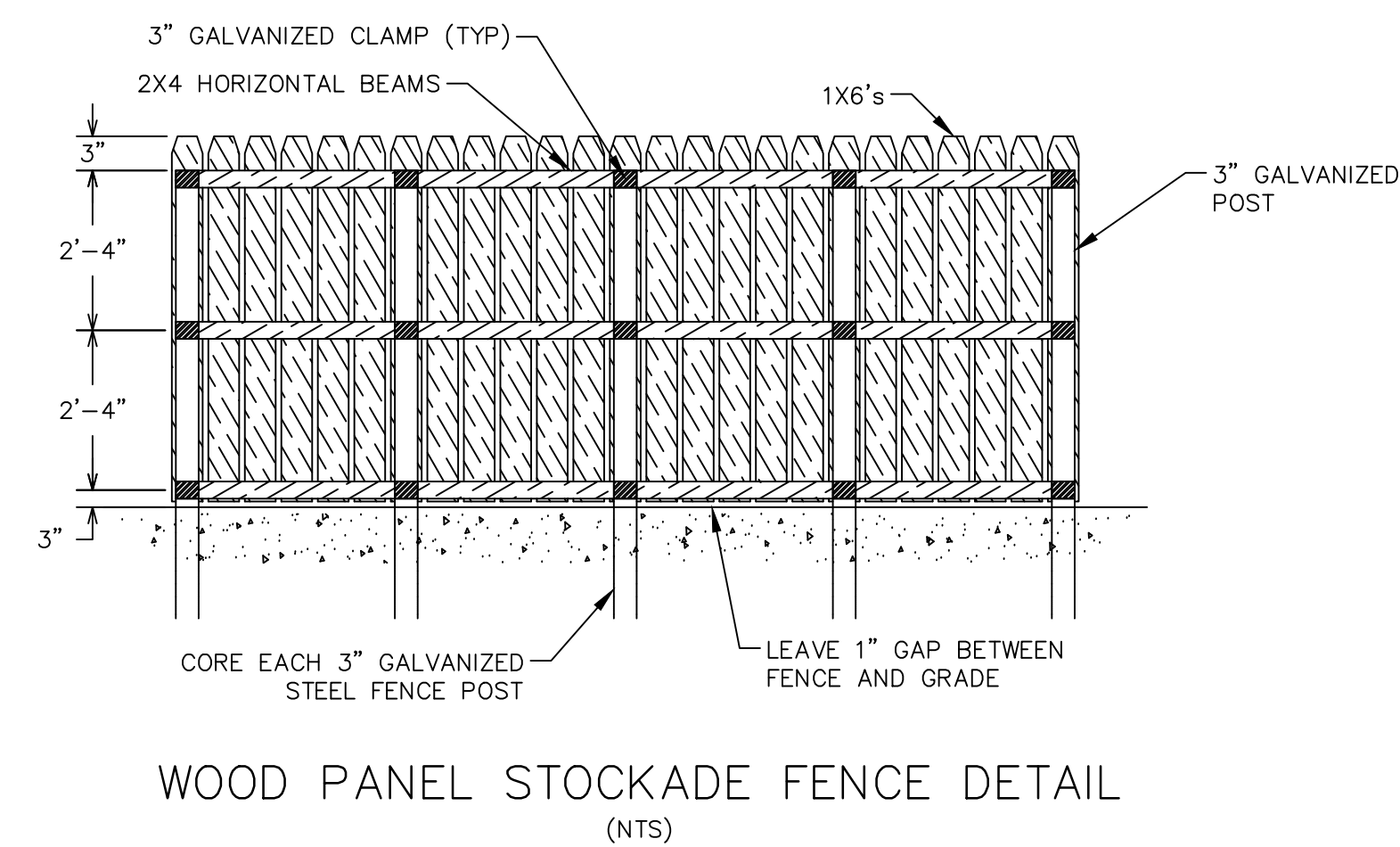
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Exhibit 1 Plan Sheet 7





3. DETENTION BASIN AND ALL EXCAVATIONS SHALL BE KEPT FREE OF WATER DURING CONSTRUCTION.





LEGEND

PROPERTY LINE

FOUND IRON PIPE/ROD/DRILL HOLE

SETBACK

EXT. ABUTTER LINE

PRP. RIGHT-OF-WAY

EXT. PAVEMENT

PRP. PAVEMENT

EXT. BUILDING

PRP. BUILDING

EXT. WETLAND BNDY

EXT. WETLAND AREA

EXT. MONITORING WELL

EXT. STONEWALL

EXT. WETLAND BUFFER

PRP. STOCKADE FENCE

ZONING LINE



LIGHTING NOTES

1. PHOTOMETRICS PREPARED BY EXPOSURE LIGHTING.

OFFICE PARKING SPACES

Illuminance (Fc)  
Average = 1.10  
Maximum = 2.0  
Minimum = 0.4  
Avg/Min Ratio = 2.75  
Max/Min Ratio = 5.00

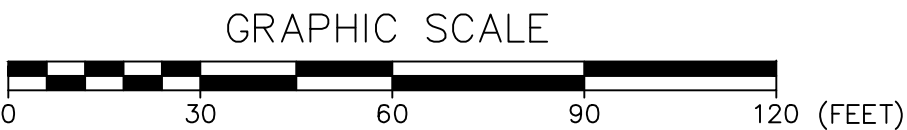
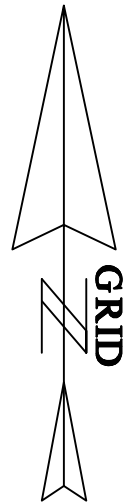
TRUCK YARD

Illuminance (Fc)  
Average = 0.55  
Maximum = 2.3  
Minimum = 0.0  
Avg/Min Ratio = N.A.  
Max/Min Ratio = N.A.

Luminaire Schedule									
Symbol	Qty	Label	Arrangement	Description	Tag	Luminaire Lumens	Luminaire Watts	Total Watts	BUG Rating
	5	W	Single	XWS-LED-03L-SIL-FT-30-70CRI-IMSBT1-CXX	WALL MOUNTED 12' AFG	2822	19	95	B1-U0-G1

SIGNATURE	DATE
CHAIR	

STATE OF MAINE - YORK COUNTY  
ss. REGISTRY OF DEEDS  
RECEIVED \_\_\_\_\_, 20\_\_\_\_  
AT \_\_\_\_\_h\_\_\_\_m\_\_\_\_M, AND RECORDED IN  
PLAN BOOK \_\_\_\_\_, PAGE \_\_\_\_\_  
ATTEST \_\_\_\_\_REGISTER



NO.			DESCRIPTION	DATE
			REVISIONS	



PHOTOMETRIC PLAN  
ELECTRIC LIGHT COMPANY, INC.  
1 MORGAN WAY, CAPE NEDDICK, ME

FOR: KEN MILLER  
1 MORGAN WAY  
CAPE NEDDICK, ME 03902

ATTAR ENGINEERING, INC.  
CIVIL ♦ STRUCTURAL ♦ MARINE ♦ SURVEYING  
1284 STATE ROAD - ELIOT, MAINE 03903  
PHONE: (207)439-6023 FAX: (207)439-2128

SCALE:  
1" = 30'

DATE:  
3/5/2024

APPROVED BY:

DRAWN BY:  
WRP

REVISION DATE:  
E : 11/26/2025

JOB NO: C334-22

FILE: ELECTRIC LIGHT BASE.DWG

SHEET: 9





SHEET INDEX	
SHEET#	DESCRIPTION
GA1 OF GA1	SPECIFICATIONS & SHEET INDEX
A1 OF A3	INTERIOR PLAN
A2 OF A3	ELEVATIONS
A3 OF A3	FIRE WALL DETAILS

BUILDING DESIGN CRITERIA	
USE GROUP	B/S-1
CONSTRUCTION TYPE	VB
RISK CATEGORY	II
BUILDING #1 EXISTING FLOOR AREA	7,200 SQ. FT.
BUILDING #1 PROPOSED FLOOR AREA	1,152 SQ. FT.
TOTAL BUILDING #1 AREA	8,352 SQ. FT.
BUILDING #2 PROPOSED FLOOR AREA	4,848 SQ. FT.
TOTAL PROJECT AREA	13,200 SQ. FT.


SITE PLAN PROVIDED BY:  
ATTAR ENGINEERING, INC.  
1284 STATE ROAD  
ELIOT, MAINE  
PHONE: 207-439-6023  
DATE: 1/3/2024

PHOTOMETRIC PLAN PROVIDED BY:  
ATTAR ENGINEERING, INC.  
1284 STATE ROAD  
ELIOT, MAINE  
PHONE: 207-439-6023  
DATE: 3/5/2024

DESIGN AND EXPLANATORY NOTES

- 1.) ALL PLOT PLANS AND RELATED DETAILS SHALL BE PROVIDED BY OWNER UNLESS INCORPORATED AS PART OF THESE DRAWINGS.
- 2.) NO ONE MAY ALTER ANY ARCHITECTURAL ITEM UNLESS ACTING UNDER THE DIRECTION OF THE LICENSED / REGISTERED ARCHITECT.
- 3.) THE PROPOSED MIXED USE GROUP BUILDING HAS BEEN DESIGNED WITHOUT FIRE BARRIERS TO SEPARATE OCCUPANCIES SATISFYING THE PROVISIONS OF I.B.C. SECTION 508.3 NONSEPARATED OCCUPANCIES.
- 4.) LIMITATIONS FOR S-1 USE GROUP INCLUDE:
- A. ALL CHEMICALS STORED IN THIS BUILDING SHALL MEET THE REQUIREMENTS OF USE GROUP S-1 AS DESCRIBED IN IBC SECTION 307. ALL CHEMICALS ABOVE THE MAXIMUM ALLOWABLE QUANTITIES PER TABLES 307.1(1) AND 307.1(2) SHALL HAVE A CLOSED CUP FLASH POINT AT OR ABOVE 200 DEGREES F, MEET THE LD50 AND LC50 TOXICITY REQUIREMENTS (ORAL, DERMAL, AND INHALATION) FOR NONTOXIC CHEMICALS, MEET THE REQUIREMENT FOR NONCORROSIVE CHEMICALS, AND WILL MEET ALL OF THE OTHER LIMITS FOR MODERATE HAZARD STORAGE AS SPECIFIED IN SECTION 307 FOR HIGH-HAZARD STORAGE.
- B. STORAGE AND REPAIR OF COMMERCIAL MOTOR VEHICLES AND BUSES SHALL BE LIMITED TO VEHICLES WITH A GROSS VEHICLE WEIGHT RATING OF LESS THAN 10,000 LBS. OR VEHICLES DESIGNED TO TRANSPORT 15 OR LESS PASSENGERS INCLUDING THE DRIVER.
- C. HIGH - PILED COMBUSTIBLE STORAGE, WHERE THE TOP OF STORAGE IS GREATER THAN 12 FEET IN HEIGHT, IS NOT ALLOWED.
- 5.) ♦ THE PRECEDING SYMBOL IDENTIFIES ITEMS THROUGHOUT THE PLANS THAT ARE NOT PROVIDED BY MORTON BUILDINGS, INC. OR MORTON BUILDINGS' SUBCONTRACTORS AND ARE THE OWNER'S RESPONSIBILITY.

I HEREBY CERTIFY THAT THE ARCHITECTURAL DESIGN FOR THIS BUILDING WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED/REGISTERED ARCHITECT.

  
KEVIN E. CONLEY, ARCHITECT  
kevin.conley@allieddesignnotes.com  
DATE: 3/19/24 REG. #5481

OFFICE:	MANCHESTER, NH
JOB NO.	118-131341

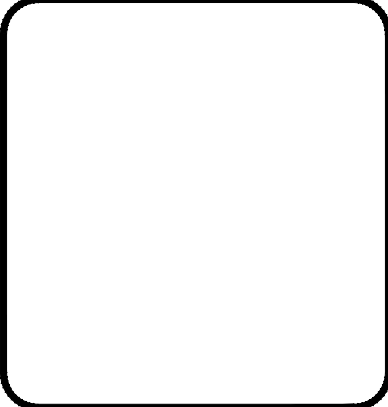
ELECTRIC LIGHT COMPANY, INC.

CAPE NEDDICK, ME

ALLIED DESIGN ARCHITECTURAL & ENGINEERING GROUP, P.C.

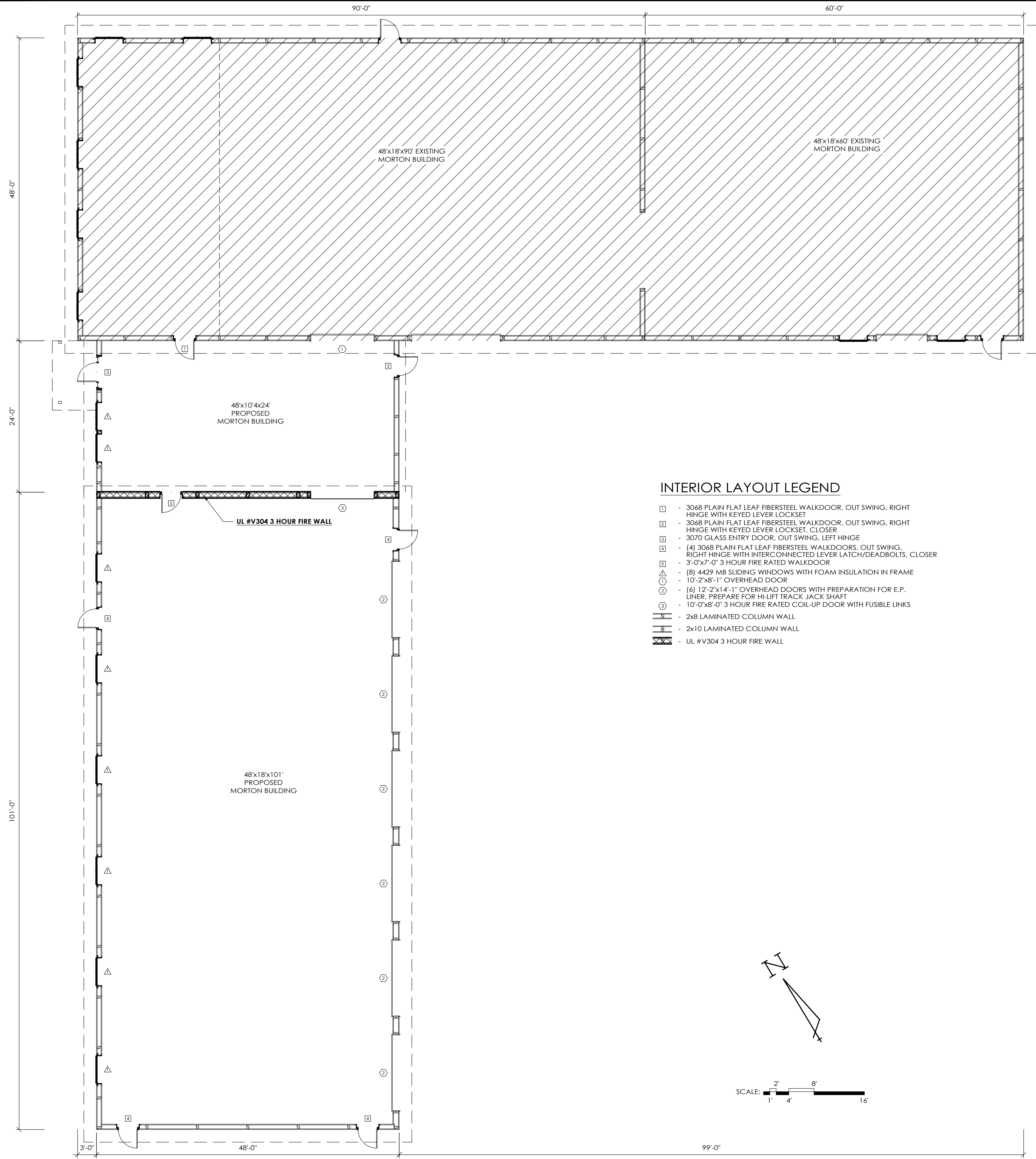
100 S. PESSHING P.O. BOX 110 MORTON, IL 61550 PHONE NUMBER: 309-243-4105

DRAWN BY:	RKS
DATE:	3/15/2024
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SCALE: AS NOTED	
SHEET NO:	OF:
GA1	GA1





INTERIOR LAYOUT LEGEND

- ① - 3068 PLAIN FLAT LEAF FIBERSTEEL WALKDOOR, OUT SWING, RIGHT HINGE WITH KEYED LEVER LOCKSET
- ② - 3068 PLAIN FLAT LEAF FIBERSTEEL WALKDOOR, OUT SWING, RIGHT HINGE WITH KEYED LEVER LOCKSET, CLOSER
- ③ - 3070 GLASS ENTRY DOOR, OUT SWING, LEFT HINGE
- ④ - (4) 3068 PLAIN FLAT LEAF FIBERSTEEL WALKDOORS, OUT SWING, RIGHT HINGE WITH INTERCONNECTED LEVER LATCH/DEADBOLTS, CLOSER
- ⑤ - 3'-0"x7'-0" 3 HOUR FIRE RATED WALKDOOR
- △ - (8) 4429 MB SLIDING WINDOWS WITH FOAM INSULATION IN FRAME
- ⑦ - 10'-2"x8'-1" OVERHEAD DOOR
- ⑧ - (6) 12'-2"x14'-1" OVERHEAD DOORS WITH PREPARATION FOR E.P. LINER, PREPARE FOR HI-LIFT TRACK JACK SHAFT
- ⑨ - 10'-0"x8'-0" 3 HOUR FIRE RATED COIL-UP DOOR WITH FUSIBLE LINKS
- N - 2x8 LAMINATED COLUMN WALL
- H - 2x10 LAMINATED COLUMN WALL
- - UL #V304 3 HOUR FIRE WALL

DESIGN AND EXPLANATORY NOTES

FLOOR PLAN ACCESSIBILITY

- ACCESSIBILITY SHALL COMPLY WITH ICC/ANSI 117.1
- SINKS.
  - SINKS SHALL BE MOUNTED WITH RIM NO HIGHER THAN 34 INCHES ABOVE FINISHED FLOOR.
  - KNEE CLEARANCE AT LEAST 27 INCHES HIGH, 30 INCHES WIDE AND 17 INCHES DEEP SHALL BE PROVIDED UNDERNEATH SINKS.
  - SINKS SHALL BE A MAXIMUM OF 6-1/2 INCHES DEEP.
  - WATER SUPPLY AND DRAINPIPES UNDER LAVATORIES AND SINKS SHALL BE INSULATED OR OTHERWISE CONFIGURED TO PROTECT AGAINST CONTACT. THERE WILL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORIES AND SINKS.
  - FAUCETS SHALL BE LEVER-OPERATED OR AUTOMATED.
  - A CLEAR FLOOR SPACE AT LEAST 30 INCHES WIDE BY 48 INCHES DEEP SHALL BE PROVIDED IN FRONT OF SINKS TO ALLOW FOR FORWARD APPROACH, WHEN FORWARD APPROACH IS REQUIRED. THE CLEAR FLOOR SPACE SHALL EXTEND A MAXIMUM OF 19 INCHES UNDERNEATH THE SURFACE.
- DOORS.
  - DOOR HARDWARE THROUGHOUT BUILDING SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND DOES NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST TO OPERATE. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5 LB/FT.
  - ALL DOORS REQUIRED TO BE ACCESSIBLE, SHALL BE PROVIDED WITH LEVER HANDLES OR PUSH/PULL HARDWARE.
  - DOOR CLOSERS AND GATE CLOSERS SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 90 DEGREES, THE TIME REQUIRED TO MOVE THE DOOR TO A POSITION OF 12 DEGREES FROM THE LATCH IS 5 SECONDS MINIMUM.
  - THE MAXIMUM FORCE FOR PUSHING OR PULLING OPEN ACCESSIBLE INTERIOR HINGED DOORS SHALL BE 5 LB/FT.
  - HARDWARE REQUIRED FOR ACCESSIBLE DOOR PASSAGE SHALL BE MOUNTED 34 INCHES MINIMUM TO 48 INCHES MAXIMUM ABOVE THE FINISHED FLOOR.
  - THE UNLATCHING OF ANY DOOR OR LEAF SHALL NOT REQUIRE MORE THAN ONE OPERATION.
  - DOORS SHALL BE READILY OPERABLE FROM THE EGRESS SIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT
  - GLAZING IN DOORS AND SIDELITES SHALL BE SAFETY GLAZING. WINDOW GLAZING WITHIN TWO FEET OF ANY VERTICAL EDGE OF A DOOR IN A CLOSED POSITION SHALL ALSO BE SAFETY GLAZED.
- DINING / WORK SURFACES.
  - THE TOP OF THE COUNTER, TABLE, OR WORK STATION RESERVED FOR HANDICAPPED PERSONS SHALL BE 28 TO 34 INCHES ABOVE THE FINISHED FLOOR HEIGHT WITH A MINIMUM WORK SURFACE OF 36 INCHES LONG FOR SIDE APPROACH OR 30 INCHES LONG FOR FRONT APPROACH. KNEE AND TOE CLEARANCE SHALL BE PROVIDED UNDER THE WORKING SURFACES.
  - FLOOR SURFACES WITHIN MANEUVERING CLEARANCES SHALL HAVE A SLOPE NOT STEEPER THAN 1:48.
- SALES AND SERVICE COUNTERS.
  - PARALLEL APPROACH:
    - A PORTION OF THE COUNTER SURFACE 36 INCHES MINIMUM IN LENGTH AND 36 INCHES MAXIMUM IN HEIGHT ABOVE THE FLOOR SHALL BE PROVIDED.
    - WHERE THE COUNTER SURFACE IS LESS THAN 36 INCHES IN LENGTH, THE ENTIRE COUNTER SURFACE SHALL BE 36 INCHES MAXIMUM IN HEIGHT ABOVE THE FLOOR.
    - A CLEAR FLOOR SPACE POSITIONED FOR A PARALLEL APPROACH ADJACENT TO THE ACCESSIBLE COUNTER SHALL BE PROVIDED.
  - FORWARD APPROACH:
    - A PORTION OF THE COUNTER SURFACE 30 INCHES MINIMUM IN LENGTH AND 36 INCHES MAXIMUM IN HEIGHT ABOVE THE FLOOR SHALL BE PROVIDED.
    - A CLEAR FLOOR SPACE POSITIONED FOR A FORWARD APPROACH TO THE ACCESSIBLE COUNTER SHALL BE PROVIDED.
    - KNEE AND TOE CLEARANCE SHALL BE PROVIDED UNDER THE ACCESSIBLE COUNTER.
- SIGNAGE.
  - SIGNAGE IS REQUIRED AT THE FOLLOWING LOCATIONS:
    - AT ALL NON-ACCESSIBLE ENTRANCES INDICATING THE LOCATION OF THE ACCESSIBLE ENTRANCES.
    - SIGNS STATING "EXIT" SHALL BE PROVIDED ADJACENT TO EACH DOOR THAT LEADS TO A CORRIDOR, STAIRWELL, OR TO THE EXTERIOR OF THE BUILDING.
    - SIGNAGE SHOWING THE INTERNATIONAL SYMBOL OF ACCESSIBILITY SHALL BE LOCATED AT ALL RESTROOMS.
  - ALL SIGNS SHALL INCLUDE TACTILE SIGNAGE INCLUDING ANY OPTIONAL INTERIOR AND EXTERIOR SIGNAGE IDENTIFYING PERMANENT ROOMS AND SPACES.
  - TACTILE AND BRAILLE SIGNAGE SHALL BE LOCATED 48 INCHES MINIMUM ABOVE THE FLOOR OR GROUND SURFACE, MEASURED TO THE BASELINE OF THE LOWEST TACTILE LETTER TO 60 INCHES MAXIMUM ABOVE THE FLOOR OR GROUND SURFACE, MEASURED TO THE BASE LINE OF THE HIGHEST TACTILE LETTER.
  - TACTILE SIGNAGE SHALL BE LOCATED AT THE LATCH SIDE OF A DOORWAY. AT DOUBLE DOORS SIGNAGE SHALL BE PROVIDED ON THE SIDE OF ANY INACTIVE LEAF. IF BOTH DOORS ARE ACTIVE THE SIGNAGE SHALL BE PLACED TO THE RIGHT SIDE OF THE DOORWAY. IF SPACE IS NOT AVAILABLE FOR SIGNAGE IN THESE LOCATIONS, SIGNAGE SHALL BE LOCATED ON THE NEAREST ADJACENT WALL TO THE AREA SPECIFIED.
  - A MINIMUM 18 INCHES x18 INCHES CLEAR FLOOR AREA CENTERED ON THE TACTILE SIGNAGE SHALL BE PROVIDED BEYOND THE ARC OF THE DOORWAY. SIGNAGE SHALL BE ALLOWED ON THE PUSH SIDE OF DOORS WITH CLOSERS WITHOUT HOLD OPEN DEVICES.
  - NEW AND EXISTING BUILDINGS SHALL HAVE APPROVED ADDRESS NUMBERS, BUILDING NUMBERS OR APPROVED BUILDING IDENTIFICATION PLACED IN A POSITION THAT IS PLAINLY LEGIBLE AND VISIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY.
  - STREET ADDRESS SHALL BE POSTED IN NOT LESS THAN 4 INCH HIGH LETTERS/NUMBERS (6 INCH RECOMMENDED) WITH A MINIMUM STROKE DEPTH OF 0.5 INCH ON THE BUILDING.
- SURFACES.
  - FLOOR SURFACE SHALL BE STABLE, FIRM AND SLIP RESISTANT.
  - FLOOR SURFACES OF A CLEAR FLOOR SPACE SHALL HAVE A SLOPE NOT STEEPER THAN 1:48.
- ROOMS AND ENCLOSED SPACES SHALL HAVE WALL AND CEILING FINISHES WITH A MINIMUM CLASS C RATING (FLAME SPREAD INDEX 76-200 AND SMOKE DEVELOPED INDEX 0-450). CORRIDORS AND STAIRWAYS SHALL HAVE A MINIMUM CLASS A RATING (FLAME SPREAD INDEX 0-25 AND SMOKE DEVELOPED INDEX 0-450).

OFFICE: MANCHESTER, NH  
JOB NO. 118-131341

ELECTRIC LIGHT COMPANY, INC.  
CAPE NEDDICK, ME

ALLIED DESIGN ARCHITECTURAL & ENGINEERING GROUP, P.C.  
100 S. PERSHING P.O. BOX 110 MORTON, IL 61550  
PHONE NUMBER: 309-243-4105

DRAWN BY: RKS  
DATE: 3/15/2024  
CHECKED BY: ---  
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REVISED DATE: ---  
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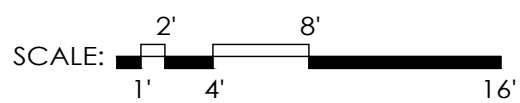
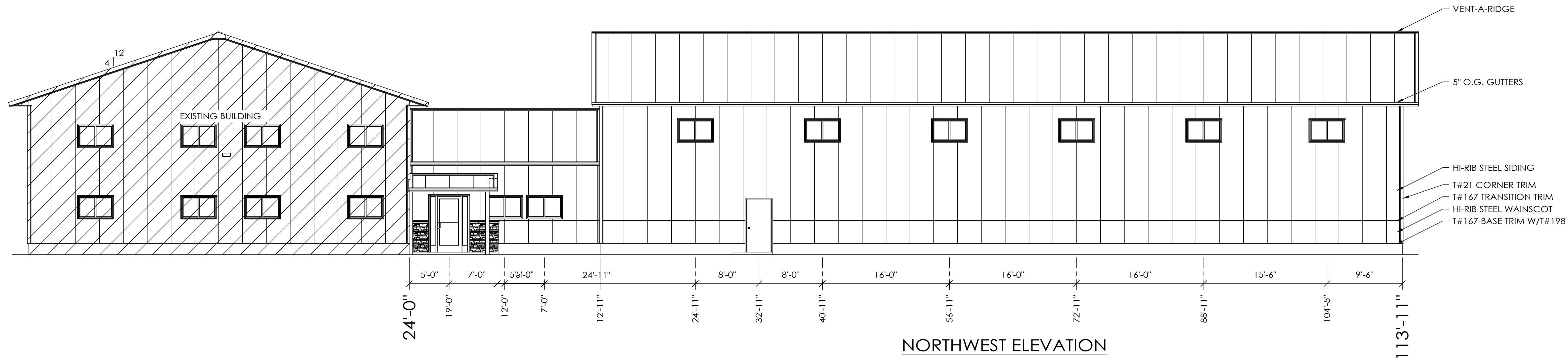
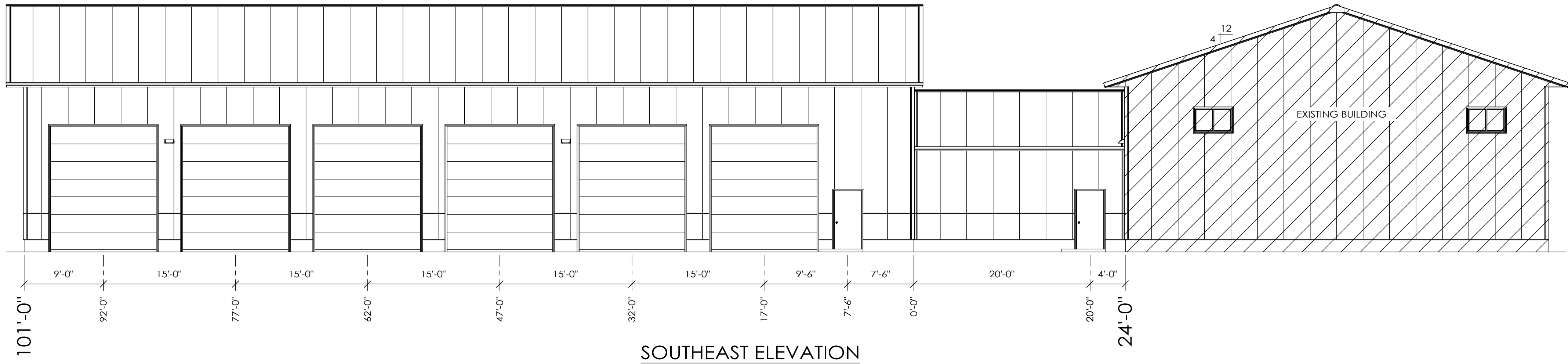
LICENSED ARCHITECT  
KEVIN EGAN CONLEY  
No. 5481  
STATE OF MAINE  
3/19/24

SCALE: AS NOTED  
SHEET NO: A1 OF: A3



DESIGN AND EXPLANATORY NOTES

1.) EXTERIOR DOOR AND WINDOW LOCATIONS ARE TAKEN FROM THE EXTERIOR FACE OF THE NAILERS AND ARE TO THE CENTER OF THE DOOR AND WINDOW UNITS. VERIFY ALL DOOR AND WINDOW LOCATIONS WITH THE OWNER.



OFFICE: MANCHESTER, NH  
JOB NO. 118-131341

ELECTRIC LIGHT COMPANY, INC.  
CAPE NEDDICK, ME

ALLIED DESIGN ARCHITECTURAL & ENGINEERING GROUP, P.C.  
100 S. PERSHING P.O. BOX 110 MORTON, IL 61550  
PHONE NUMBER: 309-263-4105

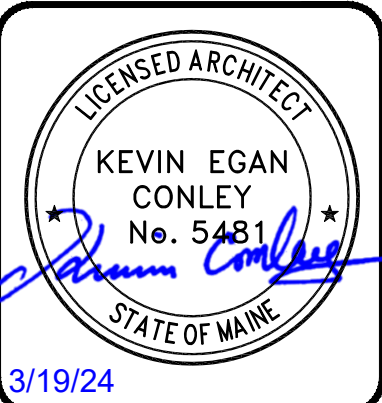
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DATE: 3/15/2024  
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DATE: ---  
REVISED DATE: ---  
REVISED DATE: ---  
REVISED DATE: ---

LICENSED ARCHITECT  
KEVIN EGAN CONLEY  
No. 5481  
STATE OF MAINE  
3/19/24

SCALE: AS NOTED  
SHEET NO: A2 OF: A3

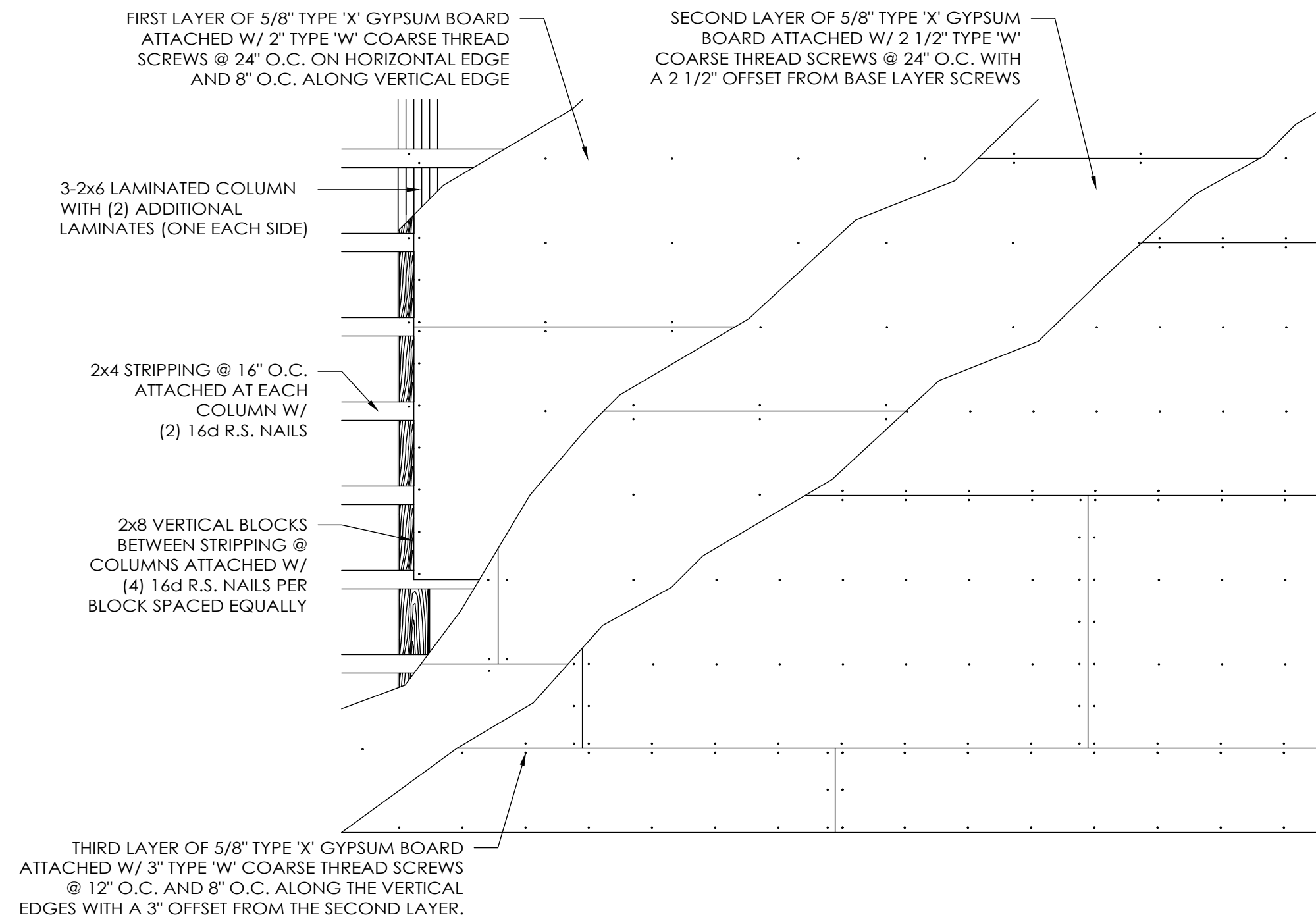
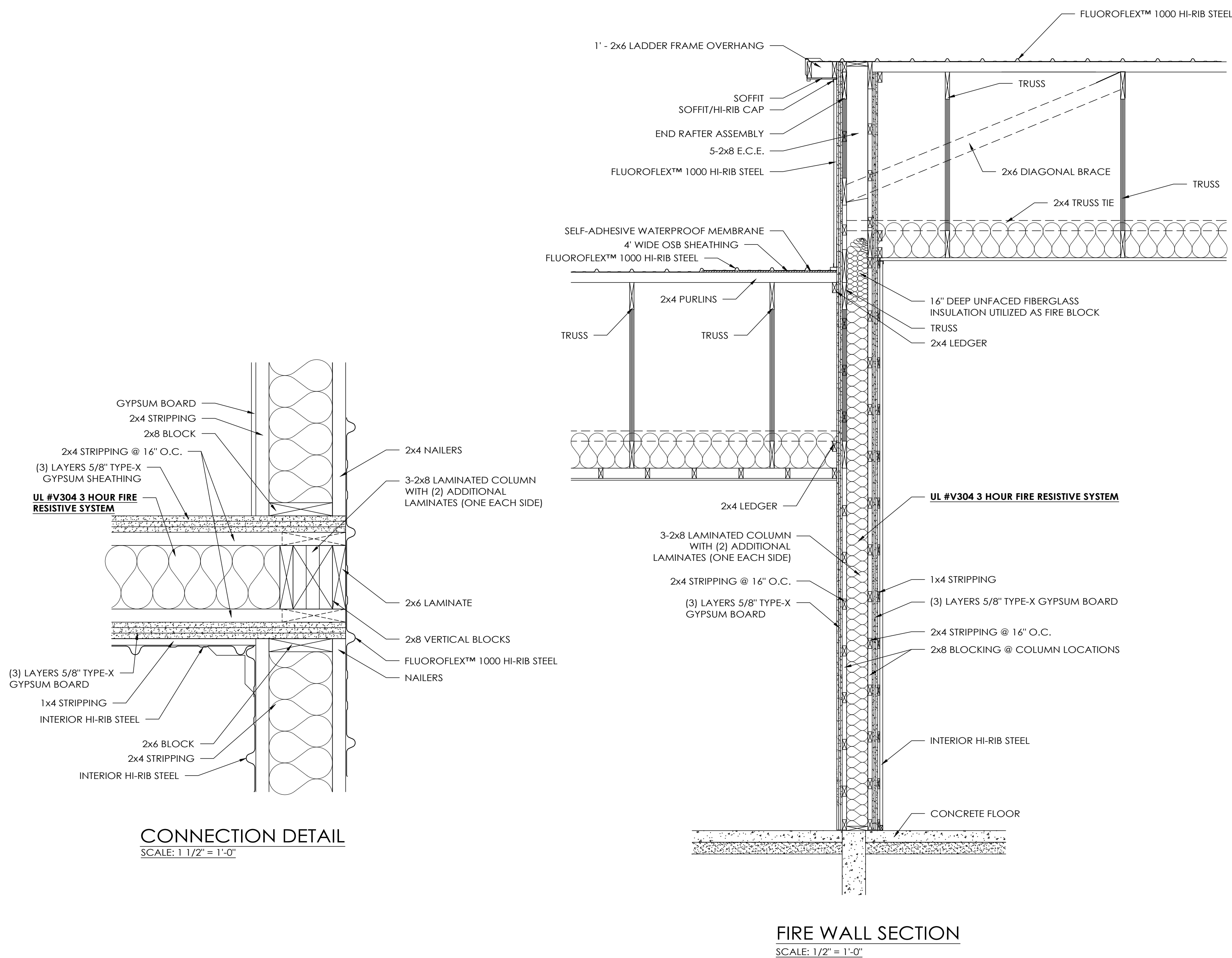


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DATE:	3/15/2024
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REVISED DATE:	----



3/19/24

SCALE: AS NOTED	OF:
SHEET NO: A3	A3



#### TYPICAL GYPSUM BOARD INSTALLATION ELEVATION DETAIL

SCALE: 1/2\" = 1'-0"

- NOTES:
1. PANELS ARE TO BE INSTALLED HORIZONTALLY.
  2. PANELS ARE TO BE STAGGERED. VERTICAL JOINTS ARE TO BE OFFSET A MINIMUM OF 16\" FROM EACH OTHER SO THAT NO SEAMS ARE ALIGNED (SEE DETAIL).
  3. FIRST LAYER JOINTS TO TERMINATE @ VERTICAL BLOCKING PROVIDED AT COLUMN LOCATIONS.
  4. HORIZONTAL JOINTS TO BE STAGGERED A MINIMUM OF 16\" PER LAYER. HORIZONTAL JOINTS TO BE LOCATED AT A NAILER LOCATION.
  5. JOINT COMPOUND AND TAPE - (OPTIONAL - NOT SHOWN) - JOINTS MAY OR MAY NOT BE COVERED WITH JOINT COMPOUND AND PAPER OR MESH TAPE. FASTENER HEADS MAY OR MAY NOT BE COVERED WITH ONE LAYER OF JOINT COMPOUND.



#### 3 HOUR FIRE BARRIER DETAIL

SCALE: 3/4\" = 1'-0" 3 HOUR FIRE WALL PER UL #V304



Plant List				
ID	Qty	Botanical Name	Common Name	Scheduled Size
BA	1	Betula alleghensis	Yellow Birch	8-10' Clump
COP	20	Comptonia peregrina	Sweetfern	24" HT.
CSA	144	Cornus sericea 'Arctic Fire'	Arctic Fire Dogwood	2" Cal.
FG	60	Fothergilla gardenii	Dwarf Fothergilla	24" HT
JES	23	Juniperus virginiana 'Emerald Sentinel'	Emerald Sentinel Red Cedar	2" Cal.
JHC	20	Juniperus chinensis 'Hetzi Columnaris'	Columnar Hetzi Juniper	6-7' HT
JV	1	Juniperus virginiana	Red Cedar	6-8'
NS	2	Nyssa sylvetica	Black Tupelo	2" Cal.
PG	3	Picea glauca 'Densata'	White Spruce	2" Cal.
RGL	18	Rhus aromatica 'Grow Low'	Grow Low Sumac	18"x HT.
TGG	3	Thuja plicata 'Green Giant'	Green Giant Western Red Cedar	8' HT
TJG	33	Thuja plicata 'Junior Giant'	Junior Giant Western Arborvitae	6' HT.
UAP	2	Ulmus americana 'Princeton'	Princeton Elm	2"

LANDSCAPE NOTES:

1. THE CONTRACTOR SHALL LOCATE AND VERIFY THE EXISTENCE OF ALL UTILITIES PRIOR TO STARTING WORK.
2. THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTINGS SHOWN ON THE DRAWINGS.
3. ALL MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE CURRENT AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
4. ALL PLANT SUBSTITUTIONS MUST BE APPROVED BY THE LANDSCAPE ARCHITECT.
5. ALL PLANT MATERIALS SHALL BE EXACTLY AS SPECIFIED BY THE LANDSCAPE ARCHITECT. IF PLANT SPECIES CULTIVARS ARE FOUND TO VARY FROM THAT SPECIFIED AT ANY TIME DURING THE GUARANTEE PERIOD, THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO HAVE THE CONTRACTOR REPLACE THAT PLANT MATERIAL. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT ANY PLANT DELIVERED TO THE SITE FOR AESTHETIC REASONS BEFORE PLANTING. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR THE QUALITY FOR ALL THE PLANTS.
6. PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL AT THE PLACE OF GROWTH, UPON DELIVERY OR AT THE JOB SITE WHILE WORK IS ON-GOING TO CONFORMITY TO SPECIFIED QUALITY, SIZE AND VARIETY.
7. PLANTS FURNISHED IN CONTAINERS SHALL HAVE THE ROOTS WELL ESTABLISHED IN THE SOIL MASS AND SHALL HAVE AT LEAST ONE (1) GROWING SEASON. ROOT-BOUND PLANTS OR INADEQUATELY SIZED CONTAINERS TO SUPPORT THE PLANT MAY BE DEEMED UNACCEPTABLE.
8. NO PLANT SHALL BE PUT IN THE GROUND BEFORE GRADING HAS BEEN FINISHED AND APPROVED BY THE LANDSCAPE ARCHITECT.
9. ALL PLANTS SHALL BE INSTALLED AND DETAILED PER PROJECT SPECIFICATIONS.
10. ALL PLANTS SHALL BE WATERED THOROUGHLY TWICE DURING THE FIRST 24-HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL BE WATERED WEEKLY, OR MORE OFTEN IF NECESSARY, DURING THE FIRST GROWING SEASON, WITH TREES BEING WATERED FOR 1 YEAR PER INCH OF CALIPER AT TIME OF PLANTING. IF TEMPORARY IRRIGATION SYSTEMS ARE TO BE USED, THEY SHALL BE DESIGNED AND INSTALLED FOR EFFICIENT AND EFFECTIVE WATER USE TO LANDSCAPED AREAS FOR A LIMITED PERIOD OF TIME DETERMINED BY THE PLANT MATERIAL AND SITE CONDITIONS.
11. ALL PLANTS SHALL BE GUARANTEED BY THE CONTRACTOR FOR NOT LESS THAN ONE FULL YEAR FROM THE TIME OF PROVISIONAL ACCEPTANCE. DURING THIS TIME, THE OWNER SHALL MAINTAIN ALL PLANT MATERIALS IN THE ABOVE MANNER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSPECT THE PLANTS TO ENSURE PROPER CARE. IF THE CONTRACTOR IS DISSATISFIED WITH THE CARE GIVEN, HE SHALL IMMEDIATELY, AND IN SUFFICIENT TIME TO PERMIT THE CONDITION TO BE RECTIFIED, NOTIFY THE LANDSCAPE ARCHITECT IN WRITING OR OTHERWISE FORFEIT HIS CLAIM. LANDSCAPE CONTRACTOR SHALL PRUNE PLANTINGS OF DEAD LIMBS OR TWIGGS DURING THE FIRST YEAR OF GROWTH.
12. FINAL ACCEPTANCE BY THE LANDSCAPE ARCHITECT WILL BE MADE UPON THE CONTRACTOR'S REQUEST AFTER ALL CORRECTIVE WORK HAS BEEN COMPLETED.
13. LANDSCAPE CONTRACTOR SHOULD REPLACE DEAD PLANTINGS IMMEDIATELY UPON OWNER DIRECTION WITHIN THE WARRANTY PERIOD AND AGAIN AT THE END OF THE GUARANTEE PERIOD, THE CONTRACTOR SHALL HAVE REPLACED ANY PLANT MATERIAL THAT IS MISSING, NOT TRUE TO SIZE AS SPECIFIED, THAT HAVE DIED, THAT HAVE LOST THEIR NATURAL SHAPE DUE TO DEAD BRANCHES, EXCESSIVE PRUNING OR INADEQUATE OR IMPROPER CARE, OR THAT ARE, IN THE OPINION OF THE LANDSCAPE ARCHITECT, IN UNHEALTHY OR UNSIGHTLY CONDITION.
14. ALL LANDSCAPE AREAS TO BE GRASS COMMON TO REGION EXCEPT FOR INTERIOR LANDSCAPED ISLANDS OR WHERE OTHER PLANT MATERIAL IS CALLED FOR.
15. ALL TREES AND SHRUBS TO BE PLANTED IN MULCH BEDS WITH DEFINED AND CUT EDGES TO SEPARATE TURF GRASS AREAS.
16. FOR ANY LANDSCAPE AREA SO DESIGNATED TO REMAIN, WHETHER ON OR OFF-SITE, REMOVE WEEDS, ROCKS, CONSTRUCTION ITEMS, ETC., THEN APPLY GRASS SEED OR PINE BARK MULCH AS DEPICTED ON PLANS.
17. LANDSCAPE CONTRACTOR SHALL FEED AND PRUNE EX. TREES, ON OR JUST OFF SITE, THAT HAVE EXPERIENCED ROOT BASE INTRUSION OR DAMAGE DURING CONSTRUCTION IMMEDIATELY AND FOR THE DURATION OF THE WARRANTY PERIOD AT THE DIRECTION OF THE LANDSCAPE ARCHITECT.
18. EXISTING TREES TO REMAIN SHALL BE PROTECTED WITH TEMPORARY SNOW FENCING AT THE EDGE OF THE EX. TREE CANOPY. THE CONTRACTOR SHALL NOT STORE VEHICLES OR MATERIALS WITHIN THE LANDSCAPED AREAS. ANY DAMAGE TO EXISTING TREES, SHRUBS OR LAWN SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
19. ALL MULCH AREAS SHALL RECEIVE A 3" LAYER OF SHREDDED PINE BARK MULCH, AND MULCH SHALL NOT BE IN CONTACT WITH STEMS OR TRUNKS OF SHRUBS AND TREES.
20. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH PROJECT SPECIFICATIONS.

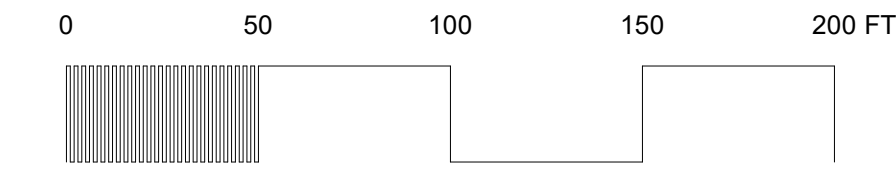
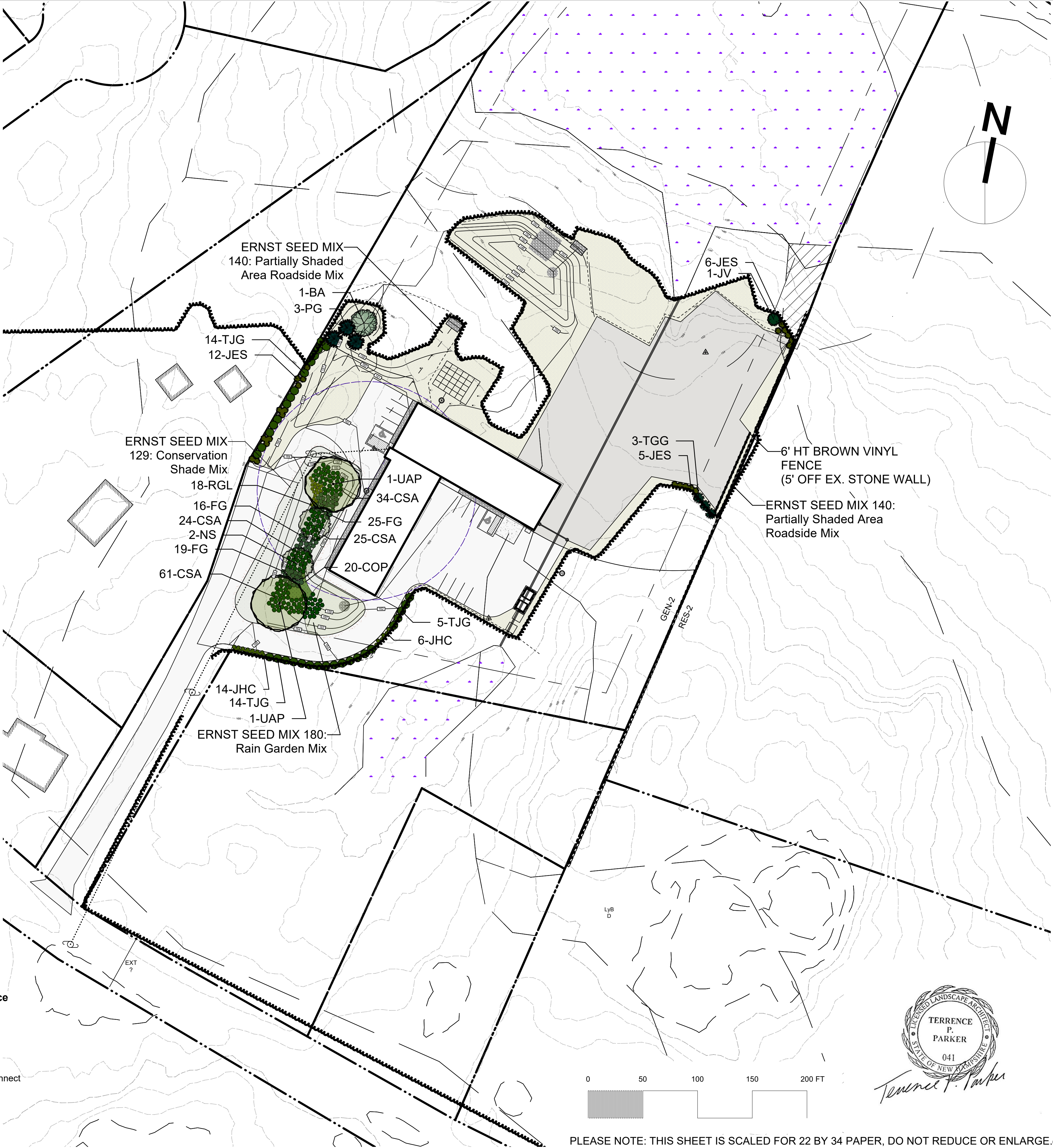
Maintenance Plan

Installation of all new plants or replacement plants shall be planted during the growing season from April to October. Plants shall be planted in accordance with the Landscape Notes on the planting plan. All plants shall be watered 2x per week during the first growing season. Watering shall saturate the soil around the root ball. The proper use and regular refilling of 'Gator' bags is acceptable. Trees shall be watered for a period of one year per inch of caliper at planting. If temporary irrigation systems are to be used, they shall be designed and installed for efficient and effective water use to landscaped area for a limited period of time determined by the plant material and site conditions. Aged and organic compost mulch shall be used to a 3" depth shall be maintained around root ball, but kept away from stems and trunks. Do not stack mulch in mounds deeper than 3". Planting beds shall be kept free of weeds on a biweekly schedule. Bed edges shall be maintained to keep lawn mowers from damaging trees and shrubs. Lawn areas shall be mowed on a weekly schedule. Broken or dead limbs of all plant materials shall be removed close to trunk, but not damaging trunk of plant with clean sharp shears. Severely injured, diseased, or dead plant material shall be replaced in kind in perpetuity. Aged organic compost mulch is preferred, but an owner may use a low phosphorous and slow release nitrogen organic fertilizer as needed. The owner shall be responsible for continued inspection and maintenance. Snow Storage to occur on grassed and/or non-living landscape. If ownership of a site is conveyed to a new property owner, the new owner shall be responsible for maintaining all landscaping in accordance with the approved final landscaping plan.



**Chesapeake Privacy Fence**  
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**Double Dutch**  
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<https://walpoleoutdoors.com/connect>

1  
L-1  
6' HT BROWN VINYL FENCE DETAIL  
SCALE: NTS



PLEASE NOTE: THIS SHEET IS SCALED FOR 22 BY 34 PAPER, DO NOT REDUCE OR ENLARGE.

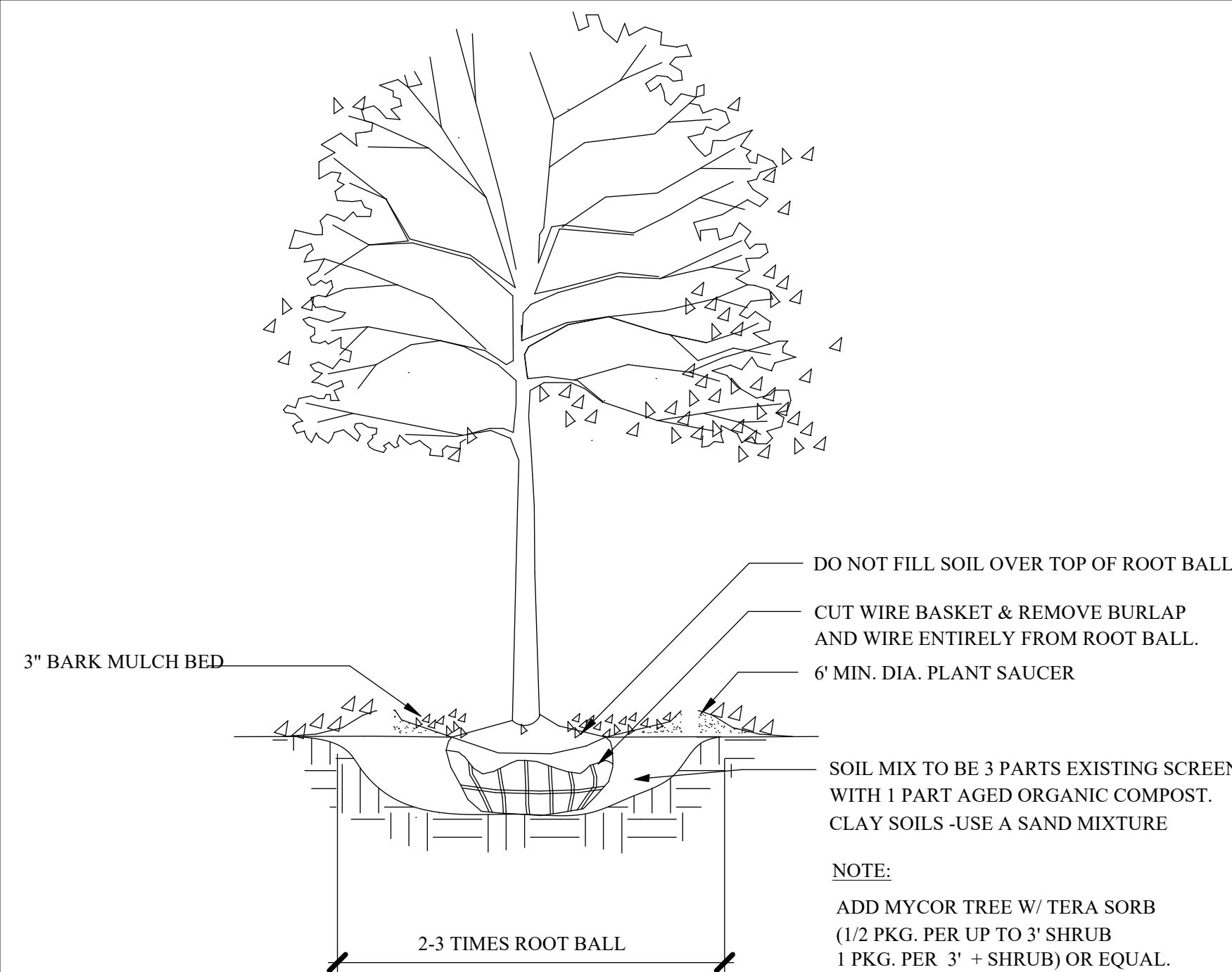
terra firma  
landscape architecture



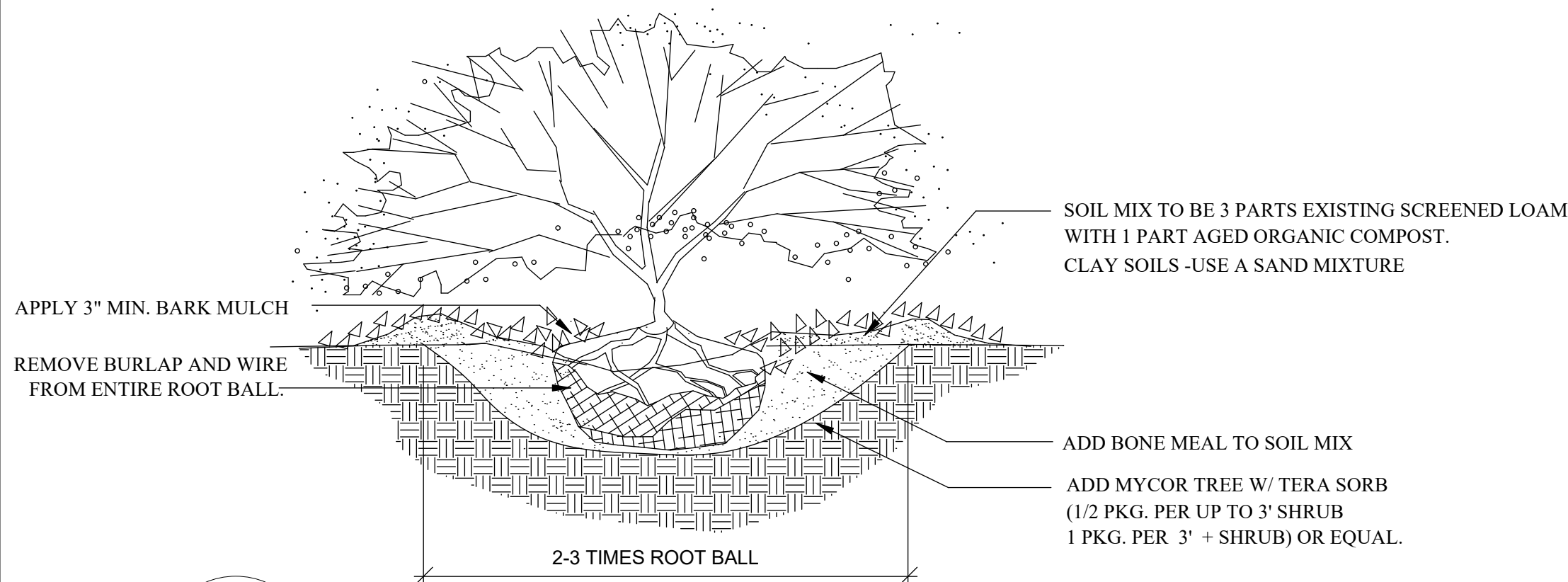
163.a Court Street - Portsmouth, NH 03801  
office: 603.430.8888 | [terrence@terrafirmalandscape.com](mailto:terrence@terrafirmalandscape.com)

No.	Date	By	Revision Notes

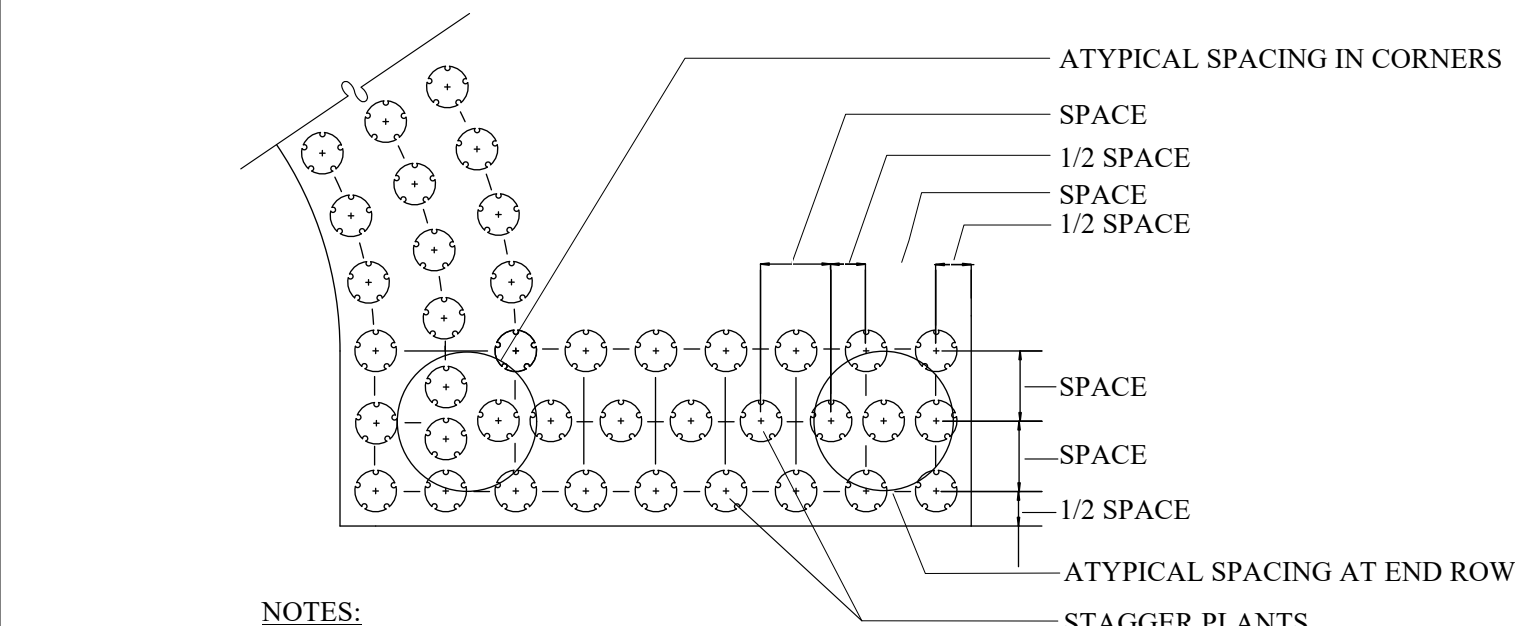




1  
L-2  
TREE PLANTING - 2"+ CAL.  
SCALE: NTS

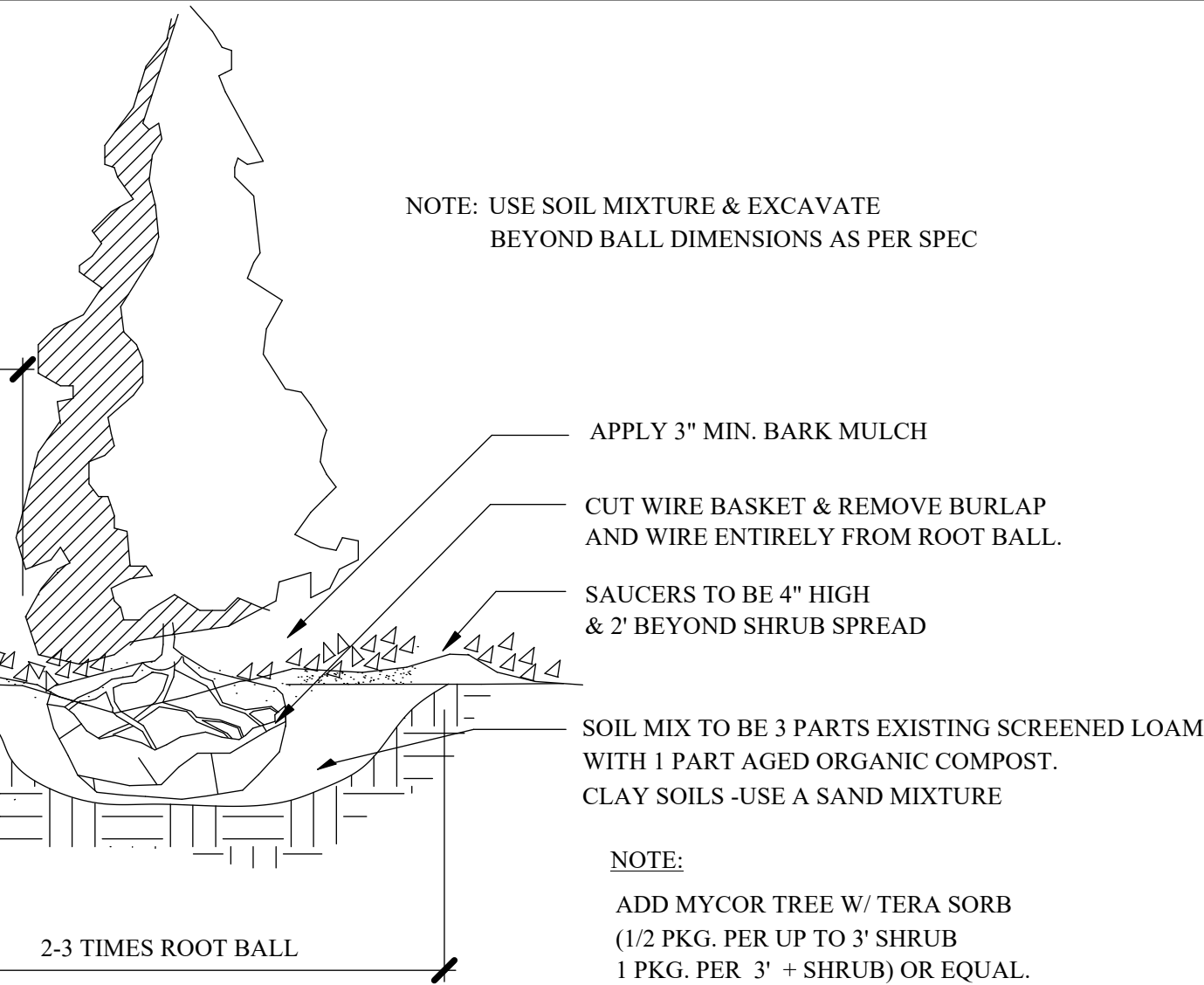


2  
L-2  
PYRAMIDAL EVERGREEN TREE PLANTING  
SCALE: NTS




3  
L-2  
SHRUB/GROUND COVER PLANTING DETAIL  
SCALE: NTS

4  
L-2  
B&B SHRUB PLANTING  
SCALE: NTS



4  
L-2  
B&B SHRUB PLANTING  
SCALE: NTS



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**Partially Shaded Area Roadside Mix - ERNMX-140**


Botanical Name	Common Name
46.90 % <i>Schizachyrium scoparium</i> , Fort Indiantown Gap-PA Ecotype	Little Bluestem, Fort Indiantown Gap-PA Ecotype
18.30 % <i>Elymus virginicus</i> , PA Ecotype	Virginia Wildrye, PA Ecotype
9.50 % <i>Echinacea purpurea</i>	Purple Coneflower
6.80 % <i>Elymus hystrix</i> , PA Ecotype	Bottlebrush Grass, PA Ecotype
3.00 % <i>Chamaecrista fasciculata</i> , PA Ecotype	Partridge Pea, PA Ecotype
3.00 % <i>Rudbeckia hirta</i>	Blackeyed Susan
1.80 % <i>Helopsis helanthoides</i> , PA Ecotype	Oxeye Sunflower, PA Ecotype
1.10 % <i>Geum canadense</i> , PA Ecotype	White Avers, PA Ecotype
1.00 % <i>Liatris spicata</i>	Marsh Blazing Star
1.00 % <i>Penstemon digitalis</i> , PA Ecotype	Tall White Beardtongue, PA Ecotype
1.00 % <i>Zizia aurea</i> , PA Ecotype	Golden Alexanders, PA Ecotype
0.60 % <i>Baptisia australis</i> , Southern WV Ecotype	Blue False Indigo, Southern WV Ecotype
0.50 % <i>Anemone virginiana</i> , PA Ecotype	Thimbleweed, PA Ecotype
0.50 % <i>Gaura biennis</i> , PA Ecotype	Biennial Beeblossom, PA Ecotype
0.50 % <i>Rudbeckia triloba</i> , WV Ecotype	Browneyed Susan, WV Ecotype
0.40 % <i>Asclepias tuberosa</i> , PA Ecotype	Butterfly Milkweed, PA Ecotype
0.40 % <i>Aster macrophyllus</i> , PA Ecotype	Bigleaf Aster, PA Ecotype
0.40 % <i>Aster pilosus</i> , PA Ecotype	Heath Aster, PA Ecotype
0.40 % <i>Pycnanthemum incanum</i> , MD Ecotype	Hoary Mountainmint, MD Ecotype
0.40 % <i>Pycnanthemum tenuifolium</i>	Narrowleaf Mountainmint
0.30 % <i>Asclepias syriaca</i> , PA Ecotype	Common Milkweed, PA Ecotype
0.30 % <i>Monarda fistulosa</i> , Fort Indiantown Gap-PA Ecotype	Wild Bergamot, Fort Indiantown Gap-PA Ecotype
0.30 % <i>Solidago bicolor</i> , PA Ecotype	White Goldenrod, PA Ecotype
0.20 % <i>Aquilegia canadensis</i>	Eastern Columbine
0.20 % <i>Aster novae-angliae</i> , PA Ecotype	New England Aster, PA Ecotype
0.20 % <i>Aster prnanthoides</i> , PA Ecotype	Zigzag Aster, PA Ecotype
0.20 % <i>Penstemon laevigatus</i> , PA Ecotype	Appalachian Beardtongue, PA Ecotype
0.20 % <i>Solidago nemoralis</i> , PA Ecotype	Gray Goldenrod, PA Ecotype
0.20 % <i>Tradescantia ohiensis</i> , PA Ecotype	Ohio Spiderwort, PA Ecotype
0.10 % <i>Oenothera fruticosa</i> var. <i>fruticosa</i>	Sundrops
0.10 % <i>Penstemon hirsutus</i>	Hairy Beardtongue
0.10 % <i>Solidago juncea</i> , PA Ecotype	Early Goldenrod, PA Ecotype
0.10 % <i>Solidago odora</i> , PA Ecotype	Licorice Scented Goldenrod, PA Ecotype

**100.00 %**

**Seeding Rate:** 20 lbs/acre with 30 lbs/acre of a cover crop. For a cover crop use either grain oats (1 Jan to 31 Jul) or grain rye (1 Aug to 31 Dec).

Grasses & Grass-like Species - Herbaceous Perennial: Herbaceous Flowering Species - Herbaceous Perennial: Pollinator Favorites: Woodland Openings

The native grasses and forbs are ideal for roadside areas and woodland margins. Mix formulations are subject to change without notice depending on the availability of existing and new products. While the formula may change, the guiding philosophy and function of the mix will not.



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**Conservation Shade Mix - ERNMX-129**

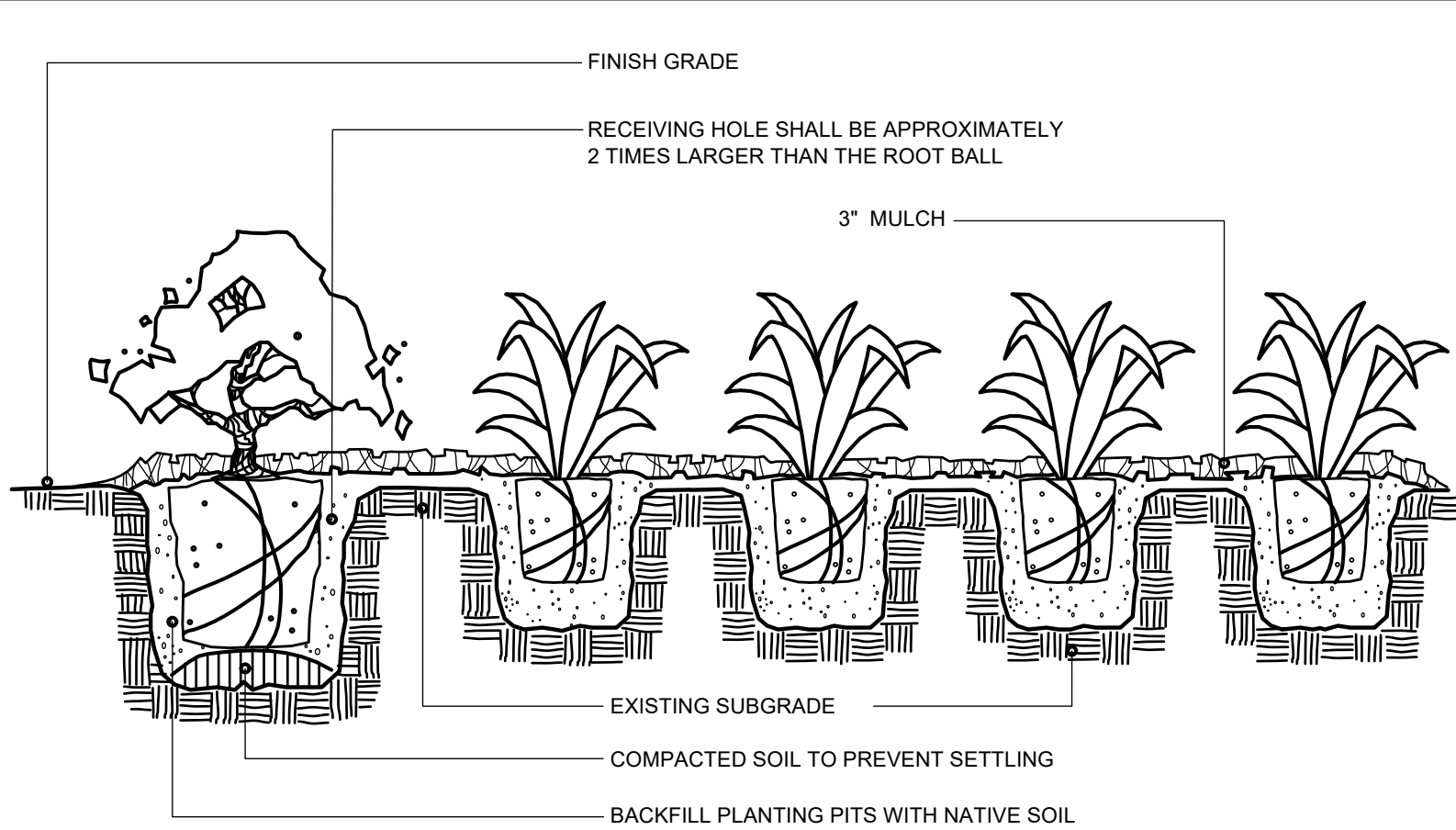
Botanical Name	Common Name
30.00 % <i>Festuca rubra</i>	Creeping Red Fescue
30.00 % <i>Festuca rubra</i> ssp. <i>commutata</i>	Chewings Fescue
20.00 % <i>Lolium multiflorum</i>	Annual Ryegrass
10.00 % <i>Poa pratensis</i> , 'Maverick'	Kentucky Bluegrass, 'Maverick'
10.00 % <i>Poa trivialis</i>	Rough Bluegrass

**100.00 %**


**Seeding Rate:** 100-200 lb per acre, or 3-5 lb per 1,000 sq ft

Grasses & Grass-like Species - Herbaceous Perennial: Lawn & Turfgrass Sites

While designed for deep-shaded areas, this mix requires at least 2 hours of sunlight daily. The fescues and bluegrasses are shade tolerant and blend very well together. Mix formulations are subject to change without notice depending on the availability of existing and new products. While the formula may change, the guiding philosophy and function of the mix will not.



5  
L-2  
GROUND COVER SPACING DETAIL  
SCALE: NTS



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**Rain Garden Mix - ERNMX-180**

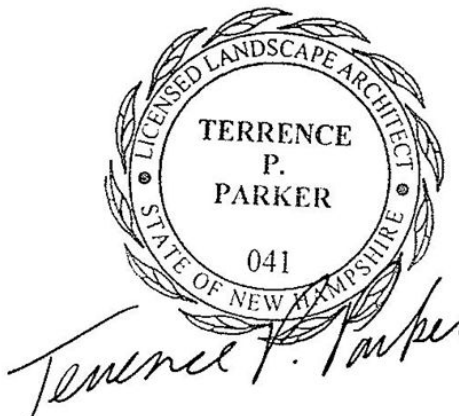
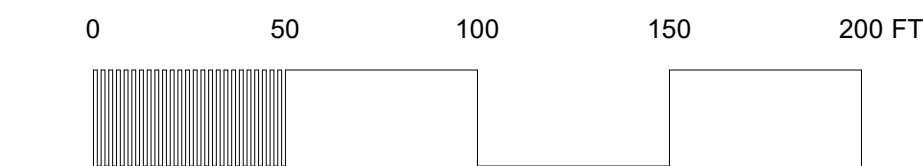
Botanical Name	Common Name
29.00 % <i>Schizachyrium scoparium</i> , Fort Indiantown Gap-PA Ecotype	Little Bluestem, Fort Indiantown Gap-PA Ecotype
20.00 % <i>Elymus virginicus</i> , PA Ecotype	Virginia Wildrye, PA Ecotype
7.50 % <i>Echinacea purpurea</i>	Purple Coneflower
7.00 % <i>Carex vulpinoidea</i> , PA Ecotype	Fox Sedge, PA Ecotype
5.80 % <i>Panicum rigidulum</i> , PA Ecotype	Redtop Panicgrass, PA Ecotype
5.00 % <i>Chasmanthium latifolium</i> , WV Ecotype	River Oats, WV Ecotype
3.00 % <i>Chamaecrista fasciculata</i> , PA Ecotype	Partridge Pea, PA Ecotype
3.00 % <i>Coreopsis lanceolata</i>	Lanceleaf Coreopsis
3.00 % <i>Rudbeckia hirta</i>	Blackeyed Susan
2.10 % <i>Verbena hastata</i> , PA Ecotype	Blue Vervain, PA Ecotype
2.00 % <i>Penicum clandestinum</i> , Toga	Oertongue, Toga
1.80 % <i>Helopsis helanthoides</i> , PA Ecotype	Oxeye Sunflower, PA Ecotype
1.50 % <i>Asclepias incarnata</i> , PA Ecotype	Swamp Milkweed, PA Ecotype
1.00 % <i>Carex scoparia</i> , PA Ecotype	Blunt Broom Sedge, PA Ecotype
1.00 % <i>Penstemon digitalis</i> , PA Ecotype	Tall White Beardtongue, PA Ecotype
1.00 % <i>Senna hebecarpa</i> , VA & WV Ecotype	Wild Senna, VA & WV Ecotype
0.90 % <i>Pycnanthemum tenuifolium</i>	Narrowleaf Mountainmint
0.90 % <i>Zizia aurea</i> , PA Ecotype	Golden Alexanders, PA Ecotype
0.50 % <i>Baptisia australis</i> , Southern WV Ecotype	Blue False Indigo, Southern WV Ecotype
0.50 % <i>Geum canadense</i> , PA Ecotype	White Avers, PA Ecotype
0.50 % <i>Juncus effusus</i>	Soft Rush
0.50 % <i>Juncus tenuis</i> , PA Ecotype	Path Rush, PA Ecotype
0.50 % <i>Vernonia noveboracensis</i> , PA Ecotype	New York Ironweed, PA Ecotype
0.40 % <i>Monarda fistulosa</i> , Fort Indiantown Gap-PA Ecotype	Wild Bergamot, Fort Indiantown Gap-PA Ecotype
0.30 % <i>Aster novae-angliae</i> , PA Ecotype	New England Aster, PA Ecotype
0.20 % <i>Aster lanceolatus</i>	Lance Leaved Aster
0.20 % <i>Aster prnanthoides</i> , PA Ecotype	Zigzag Aster, PA Ecotype
0.20 % <i>Helenium autumnale</i> , PA Ecotype	Common Sneezeweed, PA Ecotype
0.20 % <i>Solidago nemoralis</i> , PA Ecotype	Gray Goldenrod, PA Ecotype
0.10 % <i>Aster lateriflorus</i>	Calico Aster
0.10 % <i>Aster pilosus</i> , PA Ecotype	Heath Aster, PA Ecotype
0.10 % <i>Eupatorium perfoliatum</i> , PA Ecotype	Boneset, PA Ecotype
0.10 % <i>Mimulus ringens</i> , PA Ecotype	Square Stemmed Monkeyflower, PA Ecotype
0.10 % <i>Solidago rugosa</i> , PA Ecotype	Wrinkleleaf Goldenrod, PA Ecotype

**100.00 %**

**Seeding Rate:** 20 lb per acre with a cover crop. For sites that drain within 24 hours of a rain event use one of the following cover crops: Oats (1 Jan to 31 Jul; 30 lbs/acre), Japanese Millet (1 May to 31 Aug; 10 lbs/acre), or grain rye (1 Aug to 31 Dec; 30 lbs/acre).

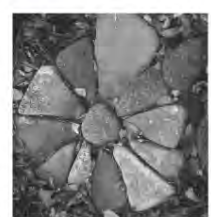
Grasses & Grass-like Species - Herbaceous Perennial: Herbaceous Flowering Species - Herbaceous Perennial: Stormwater Management: Uplands & Meadows

The native perennial forbs and grasses provide food and cover for rain garden biodiversity. Mix formulations are subject to change without notice depending on the availability of existing and new products. While the formula may change, the guiding philosophy and function of the mix will not.



PLEASE NOTE: THIS SHEET IS SCALED FOR 22 BY 34 PAPER, DO NOT REDUCE OR ENLARGE.

terra firma  
landscape architecture



163.a Court Street - Portsmouth, NH 03801  
office 603.430.8888 | terrence@terralfirmalandscape.com

No.	Date	By	Revision Notes

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No.	Date	Issue Notes

Design Firm  
**terra firma landscape architecture**  
163.a Court Street  
Portsmouth, NH

Consultant

Project Title  
**Electric Light Company LLC**  
1 Morgan Way  
Cape Neddick, ME 03902

Sheet Title	
Landscape Details	
Project Manager	Project ID Electric Light Company LLC
Drawn By TC	Scale 1:600
Reviewed By TP	Sheet No. <b>L-2</b> of 2
Date 11/15/2023	
CAD File Name electriclightcompany_v2024.kwx	



COMPLIANCE  
REVIEW LETTER

July 3, 2025

York Planning Board  
Brendan Summerville, Town Planner  
Town of York  
186 York Street  
York, Maine 03909

Application: Electric Light Company Building Addition — BKR, LLC  
1 Morgan Way, Cape Neddick (Tax Map 99 Lot 44)

**Site Plan Review**

Review Status: New Preliminary Application  
Comments in **red** are current and since 9/19/2024.  
Board members and Mr. Summerville,

The following information has been provided for preliminary and final plan review:

1. Application form dated 1/30/2024.
2. Application submittal information: *Electric Light Company preliminary Site Plan Application Plan, 1 Morgan Way, Cape Neddick, York, ME...* Prepared by Tim DeCoteau. Includes preliminary submittal checklist, performance standard (Sec. 6.1) compliance; traffic impact assessment; deed; stormwater report, site and building plans; photometrics plan, landscape plan; correspondence with agencies and town departments; and other information.
3. Plan set entitled: *Electric Light Company, Inc., 1 Morgan Way, Cape Neddick, Maine 03902, Preliminary & Final Plan*. Prepared by Attar Engineering, Inc. Revision date 7/24/2024.  
**Revision date 1/6/2025.**
4. **Response to Comments to review letter dated September 19, 2024. Prepared by Tim DeCoteau.**
5. **Stormwater Management Plan, prepared by ATTAR Engineering, Inc. dated 1/6/2025.**
6. **Waiver Requests dated 2/28/2025**

With review of the above information and the Town's Zoning ordinance and the Site Plan and Subdivision regulations, I offer the following comments on compliance with the Town's ordinances.

**Exhibit 4-1**



## **PROJECT DESCRIPTION**

The 8.2± acre parcel includes an existing building that is being used by Electric Light Company, a business that installs and services traffic signals. It's vehicles, equipment, and materials are housed in the existing building and outside in a large yard/gravel area. The applicant is seeking approval to construct a 6,000 SF single story addition to house the vehicle fleet. The site is located in the General Development -2 (GEN-2) zoning district, and the Shoreland Overlay District (Limited Residential) with no access to public water or sewer.

## **REVIEW SUMMARY/HIGHLIGHTS**

The application is before the Planning Board as required by the Zoning Ordinance (Sec. 18.15) for review of a non-residential development (site plan) that includes greater than 5,000 SF of gross floor area. The following is a summary of the review comments:

1. The preliminary application appears to be complete for review considering the requested waiver. **The Board accepted the application at the September meeting in 2024.**
2. More information and/or clarification of the actual existing and proposed use would be helpful. The parking and traffic calculations/assessment are based on warehousing/industrial use. The described existing use (*installs and services traffic signals* is stated in the correspondence) is more akin to a service business than an industrial manufacturing or warehousing; **The Planning Board, perhaps with review by the Code Enforcement Officer, need to make a determination on what the use category should be.**
3. It is stated that the existing business is not expanding, the addition is only to house the existing vehicle fleet, so that they are response ready 24hrs a day. The applicant should explain the need for additional parking. It appears that a portion of a required vegetated buffer along the abutting residential property is being removed for the additional parking. **The Planning Board needs to determine if this appropriate or not.**
4. The proposed landscaped buffer along the above-mentioned abutting property is not entirely the 20-wide buffer that is required (Sec. 6.1.8.3 YZO), otherwise a written waiver is required. **A waiver is requested (see Ex. 15 (last page) of application submittal)**
5. The proposed stormwater management development that includes new clearing and grading may not be permissible in the Shoreland Overlay District since, per Sec. 8.3.3 YZO, clearing within the 75-foot buffer (Sec. 8.3.3.2) and elsewhere in the overlay zone (Sec. 8.3.3.3). It does not appear from Sec. 8.2.1.B that the current/proposed use is permitted in the Limited Residential subdistrict. **The Planning Board, perhaps with review by the Code Enforcement Officer, need to make a determination.**
6. Demonstration of total impervious surface ratio and coverage is not entirely clear and needs further clarity and information. **The plans have been revised. The additional calculations, however, (Plan Note 5 on sheet 2) are not clear. (see comment 2.b below)**

## **Exhibit 4-2**



## **COMPLETENESS REVIEW**

The applicant has submitted a checklist for submittal information required by Preliminary Plan Review Section 6.3 (Site/Subd Regs) and has requested a single waiver request: **The Board accepted the application at the September meeting in 2024.**

1. 6.3.32 A high intensity soil survey signed and sealed by a Maine Certified Soil Scientist, indicating the suitability of soil conditions for the uses proposed shall be submitted. A waiver is requested.

## **COMPLIANCE WITH THE TOWN'S ORDINANCES**

### **ZONING ORDINANCE**

1. GEN-2 (Sec. 4.1.2). The current and proposed use is identified as industrial. The applicant has based calculations for parking traffic impact on warehousing/industrial use. The described existing use by the Electric Light Company (*installs and services traffic signals* is stated in the correspondence) seems to be more akin to a service business than an industrial manufacturing or warehousing. It's assumed the business assembles lighting and signal parts and installs them for municipalities and also service and repairs the signals. This type of business appears to be less than a manufacturer, but more like a commercial business. Under the Commercial Use Category *Service Businesses* and *Plumbing, Electrical or Carpentry Shop or **Other Similar Service***... might be a category that could accommodate the existing and proposed use. The applicant and Planning Board should discuss and determine the best use category. [The cover sheet of the engineering plans needs to be corrected and strike 'wood manufacturing and fabrication' under use.] **The applicant feels the Industrial Use Category, specifically 'wood manufacturing and fabrication' is more aligned with the proposed use because the business serves municipalities rather than the general public. Article 4 does not make this distinction. The use, per the ordinance, should be more aligned with the activity(s) rather than the clientele. The services listed on business's website appear to be more aligned with electrical or construction than with Industrial and manufacturing, especially wood fabrication. In the absence of a previously approved site plan that ties the current business with 'wood manufacturing and fabrication', it seems prudent for the Board to make a determination as to the most appropriate use category for the current business as part of this site plan review and approval.**
2. Dimensional Requirements (Sec. 5.2.4).
  - a. The proposed stormwater design includes features, basin, piping and rip-rap, within the front yard setback. This is not permissible per footnote 'k' under the Schedule of Dimensional Regulations. **The applicant states that the proposed stormwater features located within the setback conform to Sec. 5.2.4 footnote k (below), however, the ordinance explicitly states otherwise.**

**Exhibit 4-2**



*Stormwater Management Facilities, as defined in this ordinance, shall be exempt from yard setbacks **except** for the following types of stormwater facilities:*

- i Stormwater wet ponds, detention ponds, basins, and retention ponds.*
- i Any above ground or above finished grade stormwater management facility structures that may include piping (including outfall pipes), concrete, riprap, or other similar constructed infrastructure intended to control stormwater runoff quantity or quality. - AMENDED 05/17/2008, 11/03/2020, 05/22/2021*

The proposed culvert daylights with riprap in the setback. The plan details support this. This does not appear to be permitted, the plans should be revised.

- b. In the GEN-2 zone there is a requirement not to exceed 25% impervious surface ratio for the lot. [and 20% for the area within the Shoreland Overlay Zone subdistrict Limited Residential per Article 8]. The plans (Sheet 2, Site Plan) appear to only include the buildings in the coverage calculations. See the Definitions section of the Zoning Ordinance for more information on calculating 'Impervious Surface Ratio'. The applicant has revised the plan, however, the calculations, (Plan Note 5 on sheet 2) reflect only gravel area for coverage (under 'PRP. SHORELAND..') and the note below states 'no additional impervious area' in the shoreland zone. The plans reflect approximately half the existing building within the shoreland zone, but the area doesn't appear to be reflected in the shoreland calculations. The riprap associated with the stormwater pond should be reflected in the total coverage amounts. The Applicant should confirm and revise accordingly.
3. Non-residential Performance Standards (Sec. 6.1). The applicant has provided a narrative addressing these standards in writing, some items may need more information. The applicant and Planning Board should review these standards and determine if have been met; specifically Sec. 6.1.8 Setbacks and Screening and Sec. 6.1.10 Preservation of Landscape.
- a. Sec. 6.1.8.3 anticipates screening at least 20 feet in depth, though the planted buffer proposed is less than 10 feet wide per the Landscape Plan, located along the abutting property line to the northwest. [Note that the limits of pavement differ between the landscape plan and the site plan, this should be rectified.]. A waiver is requested (see Ex. 15 (last page) of application submittal).
  - b. The site design includes a new five car parking lot on the northwesterly side of the existing building. The associated clearing and grading for this results in the loss of a natural vegetated buffer between the non-residential use and the abutting residential use. Though the applicant has proposed a landscaped vegetated and fenced buffer, perhaps the applicant should confirm the need for the parking spaces in this vicinity and/or determine if the extent of the proposed paving is necessary. With regard to the latter, the proposed parking affords a 50-foot aisle when only 24 feet is required. The applicant states that the new parking is needed to separate office workers and visitors from the garage side of the facility. The Board should determine if this need is commensurable to the proposed clearing and the waiver request. There appears

Exhibit 4-2



to be space to provide the necessary parking with safe connections elsewhere on the site.

4. Shoreland Overlay District (Article 8). The proposed stormwater management development includes new clearing and grading within the Shoreland Overlay District's 75-foot buffer which is not permitted per Sec. 8.3.3; see clearing under Sec. 8.3.3.2 and Sec. 8.3.3.3 for aggregate clearing greater than 25% of the shoreland lot area. The latter should be demonstrated. It does not appear from Sec. 8.2.1.B that the current/proposed use is permitted in the Limited Residential subdistrict, so the associated stormwater improvements wouldn't be as well, as required under Sec. 8.3.3.2. **The plans have been revised, and the stormwater basin is no longer in the 75-foot principal setback and buffer. The applicant states that the proposed stormwater pond is permitted under the Miscellaneous Use Category; 'Filling or Other Earthmoving activities. As the name implies, this is more like an activity than a land use, however, perhaps the Town has applied it in this manner.**

#### SITE PLAN AND SUBDIVISION REGULATIONS

There are standards that are applicable to the proposed development that In the meantime the following may want to be looked at earlier than later.

5. Peer-review Engineering related comments: Gorrill Palmer and Integrated Environmental Engineering have reviewed the application and plans, and their comments are attached [Gorrill Palmer's is forthcoming]. **Comments from Gorrill Palmer and Integrated Environmental Engineering are forthcoming.**

#### **WAIVER REQUESTS**

The applicant has provided a list as part of the application of all requested waivers from submittal requirements. The list should include any standard/provision requirements if there to be any.

**The applicant has provided written waiver requests, see Exhibit 15 (at the end of the recent pdf submittal)**

#### **CONCLUSION**

The application submittal does appear to be complete for preliminary review, however, there are a number of potential issues that need to be addressed related to the site design and demonstrating conformance to performance and shoreland overlay standards.

Feel free to contact me with questions.

Best regards,



Christopher Di Matteo,  
Principal

**Exhibit 4-2**





Mr. Brendan Summerville  
York Town Planner

July 3, 2025

And Chris Dimatteo, Long Meadow Planning & Landscape  
Architecture

Provided via email

[bsummerville@yorkmaine.org](mailto:bsummerville@yorkmaine.org) c/o [cdimatteo@longmeadowpla.com](mailto:cdimatteo@longmeadowpla.com)

**Subject: Review of Post Construction Stormwater Inspection & Maintenance Plan for Electric Light Company, 1 Morgan Way, Cape Neddick, Maine 03902 Map 99 Lot 044**

Dear Mr. Summerville:

As you requested, this letter provides a review of the subject property submittals related to post construction stormwater issues. We note that this site is located outside the Town's Urbanized Area, and has applied for a Maine DEP Chapter 500 Stormwater Permit-by-Rule, because it will disturb one or more acres of land. The comments contained in this letter are based on review of the following elements of the Site Plan Application for the project:

- Site Plan drawings and details dated 1/6/2025
- Stormwater Management Plan dated 1/10/2025
- Operation and Maintenance Plan for Stormwater Management BMPs (1/6/2025)

Our comments are provided here:

- a. The application shows stormwater management system will consist of a new detention pond, a new forested buffer, a drainage swale discharging to a level spreader, two new roof

**Exhibit 5-1**



- drip edges and an existing 18-inch culvert.
- b. There appear to be three roof drip edges on the site as shown on the Grading and Utility Plan. Please clarify if the hydrocad analysis included all three lengths of drip edge.
    - i. This comment was addressed (2 new drip edges and one existing drip edge).
  - c. Because more than one acre of land will be disturbed, the project is subject to the Post Construction Stormwater Management Ordinance.
    - i. The Operation and Maintenance Plan must be updated to state that an Annual Inspection Report and Certification are required to be provided to the Town, that the Annual Inspection must be conducted by a Qualified Post Construction Stormwater Inspector, and that any identified maintenance issues must be corrected within 60 days of identification.
    - ii. The other inspections identified in the plan may be completed by the owner throughout the year.
      - 1. These comments (c. I and c.ii) have not been addressed. Additionally, the O&M Plan does not include maintenance requirements for the roof drip edges or level spreader.**
  - d. The application does not include a Low Impact Development statement as required by section 9.8.13 of the Town's Site Plan and Subdivision Ordinance. Please provide the required statement.
    - i. This comment was addressed.
  - e. The Town's Site Plan and Subdivision Ordinance was updated 2/23/2023 to require a note on the plan that the limit of disturbance will be visually delineated in the field prior to disturbance and a preconstruction meeting with code enforcement is required. The Town's ordinance also requires showing the limits of disturbance on the plans. Please add the limits of disturbance to the plans and add the note that limit of disturbance must be visually delineated in the field.  
(6.4.15.1)
    - i. This comment has been addressed on Sheet 4.



If you have any questions about this information, please call me at [207-415-5830](tel:207-415-5830) or email [krabasca@integratedenv.com](mailto:krabasca@integratedenv.com).

Sincerely,

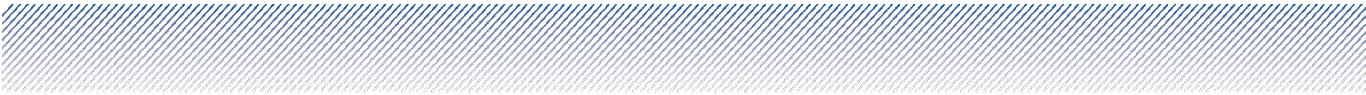
***Integrated Environmental Engineering, Inc.***

Kristie L. Rabasca, P.E.

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Page 1 of 3





April 10, 2024

Mr. Wyatt Page  
Project Engineer  
Attar Engineering, Inc.  
1284 State Road  
Eliot, Maine 03903

**RE: TRAFFIC IMPACT ASSESSMENT FOR ELECTRIC LIGHT  
COMPANY EXPANSION IN YORK, MAINE**

**INTRODUCTION**

This memorandum summarizes trip generation and traffic impact assessment for local Town of York approval of a proposed expansion of the Electric Light Company building. The building is located at 1 Morgan Way in Cape Neddick. The site plan, prepared by Attar Engineering, Inc. and dated 1/3/2024, provides for a 6,000 square foot (S.F.) addition to the existing building. It is understood that the new space will be utilized for vehicles and storage.

**TRIP GENERATION ANALYSIS**

The number of trips to be generated by the proposed expansion, to provide for storage purposes, was estimated utilizing the most recent Institute of Transportation Engineers (ITE) “Trip Generation, 11<sup>th</sup> edition” since it is derived from the largest data base and reflects the most current information. Land use code (LUC) 150 – Warehousing was utilized on the basis of the 6,000 S.F. The results are summarized below:

ITE Trip Generation (one-way trip-ends)	
<u>Time Period</u>	<u>Total Trips</u>
Weekday	10
AM Peak Hour	1
Entering	1
Exiting	0





<u>Time Period</u>	<u>Total Trips</u>
PM Peak Hour	1
Entering	0
Exiting	1

Based upon the above results, the expansion to provide garage and storage space, will generate just 10 one-way trips (5 roundtrips) daily. Based upon the results, the building expansion will generate a single one-way trip in peak hours. This is in similar to what Electric Light Company projects since they anticipate no increase in trips since they are not adding any employees.

This level of traffic will not have any significant impact on off-site traffic operations. Generally, a project will not have a significant impact unless it generates more than 25 trips in a left turn lane or 50 trips in a through or right turn lane. The proposed expansion will generate just one trip in peak hours. As a result, the remainder of this assessment will focus upon safety.

## SAFETY ANALYSES

### ACCIDENT REVIEW

The Maine Department of Transportation (MaineDOT) uses two criteria to determine high crash locations (HCLs). The first is the critical rate factor (CRF), which is a measure of the accident rate. A CRF greater than one indicates a location which has a higher than expected accident rate. The expected rate is calculated as a statewide average of similar facilities.

The second criterion, which must also be met, is based upon the number of accidents that occur at a particular location. Eight or more accidents must also occur over the three-year study period for the location to be considered a high crash location.

Accident data was obtained from MaineDOT for all of Ogunquit Road in York, from the South Berwick town line to the Ogunquit town line for the most recent three-year period (2021 – 2023). The crash information is summarized in the following table:



<u>Ogunquit Road Location</u>	<u># of Crashes</u>	<u>CRF</u>
Between Ogunquit town line and No. Village Road	2	0.48
Intersection of No. Village Road	4	3.55
Between No. Village Road and Josiah Norton Road	2	0.40
Intersection of Josiah Norton Road	1	0.94
Between Josiah Norton Road and Boston Road	1	0.39
Between Boston Road and Ogunquit River	3	0.66
Between Ogunquit River and South Berwick town line	1	0.33

As seen above, there are no high crash locations, or locations approaching both criteria, in the vicinity of the site so no further accident evaluation is needed.

## DRIVEWAY SIGHT DISTANCE

One of the most important safety factors to consider for a project with limited trip generation is sight distance from the access drives. This sight distance is measured ten feet back from the edge of travel way at a driver's eye height of 3.5 feet to an object height of 4.25 feet.

Based upon a Google Earth review, Ogunquit Road is posted at 35 mph in the vicinity of Morgan Way. Sewall recommends 350' of sight distance for this speed limit. Attar Engineering measured the sight distances and reported the following:

<u>Drive Location</u>	<u>Recommended</u>	<b>Available Sight Distance</b>		
		<u>To Left</u>	<u>To Right</u>	<u>Adequate</u>
Morgan Way at Ogunquit Road	350'	450'+	375'	Yes

As seen above, based upon Attar's measurements, sight distance from Morgan Way exceeds the recommended minimum. As a result, there are no sight distance concerns. No signage or landscaping should be located in the driveway sight triangles which could obscure or limit sight distances in the future. Sewall has not performed a field visit to verify the above sight distances but based upon Google Earth they appear accurate.



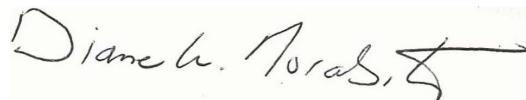
## SUMMARY

To summarize, the proposed expansion of the Electric Light Company building is expected to generate 10 one-way trips daily and just 1 trip in peak hours. This level of traffic will have no significant impact off-site beyond the access drive on capacity or traffic operations. In terms of safety, there are no high crash locations within the vicinity of the site and sight distances from Morgan Way exceed the recommended minimum. It is important that no signage or landscaping be located in the driveway sight triangles which could obscure sight distances in the future.

As always, please do not hesitate to contact Sewall if you or the Town of York have any questions or concerns regarding my findings.



Sincerely,



A handwritten signature in black ink that reads "Diane W. Morabito" followed by a stylized flourish.

Diane W. Morabito, P.E. PTOE  
Vice President Traffic Engineering



# Electric Light Company 99/44

6.4 SUBMISSIONS FOR FINAL PLAN A complete Final Plan shall include the following:

6.4.1 All information presented on the Preliminary Plan and any amendments or conditions requested or required by the Board must appear on the Final Plan.

The Final Plan includes all of the amendments and conditions requested or required by the Planning Board.

6.4.2 An internal survey of the proposed development showing bearings and distances for all lot lines, and the precise area of net developable acreage shall be submitted.

The Final Plan includes bearings and distances for all lot lines and net developable acreage.

6.4.3 The water supply system design contained in the Site Plan or Subdivision Plan shall be approved in writing by the appropriate agency or individual, and shall be submitted with the Final Plan.

The approval sought is for Site Plan approval, the water supply is a private well. Water consumption is minimal as the existing and proposed building expansion does not increase water usage.

6.4.3.1 Public Water Supply - The servicing Water District must approve in writing all specifications for water supply system that appear on the plan.

This property is not connected to a public water supply.

6.4.3.2 Private Wells – The required protective radius shall be delineated around each well. Restrictions pertaining to the well protection area shall be indicated on the plan.

The required well protection area is shown in the Final Plan.

6.4.3.3 Central Water Supply - The State of Maine Department of Human Services must approve all proposals for a central water supply system, and the written approval of that agency shall be submitted.

No Central Water Supply is proposed.

6.4.4 The sewage disposal system design contained in the Site Plan or Subdivision Plan shall be properly endorsed and approved in writing by the appropriate agency, as listed below.

The Code Enforcement Officer/ Local Plumbing Inspector has reviewed and determined that the existing septic system is adequate for the proposed use.

6.4.4.1 Public Sewage Disposal - The York Sewer District must approve all plans that will connect to the public sewer line and all sewer line extensions. This approval will cover issues of capacity as well as piping and pump station specifications.

N/A

6.4.4.2 Private Sewage Disposal – Areas designated for primary and back-up septic system locations per Section 7.9.2.1 shall be precisely delineated, located, and labeled on the plan. The restriction on uses in these areas shall be documented in a note on the plan.

The existing septic system has been deemed adequate for the expanded building and use.



The area shown for the existing septic would be rehabilitated and reused if the existing septic fails. The 8.2 acre lot size provides many other possible locations for the septic system replacement if replacement in place is otherwise not workable.

6.4.4.3 Engineered Septic Systems - For any system having a capacity of 2,000 gallons per day or more, the system design must be submitted, and the Local Plumbing Inspector (LPI) must verify in writing that the system is in compliance with all local codes. Additionally, written approval of the Maine Department of Human Services must be submitted.

N/A

6.4.5 The developer shall submit dated evidence that they have submitted copies of the approved Preliminary Plan and any other relevant materials to the Superintendent of Public Works, School Superintendent (residential development only), Police Chief and Fire Chief (Beach or Village, as appropriate). This shall include information on the number of dwelling units proposed, the length of roadways, the size and construction characteristics of any multi-family, commercial or industrial buildings, and other relevant information. The applicant shall request that these officials submit an advisory opinion within 30 days. Such advisory opinions shall be based on the department's ability to service the proposed development.

This Site Plan is for a non-residential use and does not require review by the School Superintendent. The Site Plan and a request for comment has been sent to the Superintendent of Public Works, the Police Chief and the York Beach Fire Chief. Positive responses were provided by all except the Superintendent of Public Works who has not responded to requests for comment. A traffic study has been provided to the Planning Board by Diane W. Morabito, P.E. PTOE.

6.4.6 A landscaping plan meeting the standards of Section 7.17 as well as all of the Ordinances of the Town of York shall be submitted. This submission shall include identification of species to be used, the size of the planting to be used, and the plan spacing being proposed. On wooded sites, the Plan shall indicate the area where clearing for lawns and structures shall be permitted.

A landscape plan for this project has been provided by terra firma landscape architecture Terrance Parker, Landscape Architect. See Exhibit Sheet 1 & 2.

6.4.7 A plan illustrating the location and dimensions of all proposed development improvements and alterations including the limits of the areas that will be disturbed during construction.

The Grading and Utility Plan show the limits of construction. See Exhibit 1 Plan Sheet 4.

6.4.8 Reserved.

6.4.9 The plan shall contain sufficient data to allow the location, bearing and length of every street, lot line, and boundary line to be readily determined and be reproduced upon the ground. These lines shall be tied to reference points previously established. The length of all straight lines, the deflection angles radii, length of curves and central angles of curves, tangent distances and tangent bearings for each street shall be included.

N/A No lot line changes are proposed.

6.4.10 By proper designation, all public open space for which offers of cession are made by the developer and those spaces to which title is reserved by the developer, or areas which are to be commonly held by a condominium or owner's association shall be noted on the plan.



N/A No public areas are proposed.

6.4.11 Written offers of cession to the municipality of all public open space shown on the Plan, and copies of agreements or other documents showing the manner in which those areas to which title is reserved by the developer, or to which title is to be held commonly by an owner's association are to be maintained, shall be submitted.

N/A

6.4.12 Written evidence that the municipal officers are satisfied with the legal sufficiency of the document referred to in Section 6.4.11 shall be submitted. Such written evidence shall not constitute an acceptance by the Town of any public open space referred to in Section 6.4.11.

N/A

6.4.13 The locations permanent reference monuments shall appear on the Final Plan.

See final plan.

6.4.14 The Plan shall contain detailed drawings showing the specifications for the street and storm drainage design. The information submitted shall include the following:

6.4.14.1 Plan view of all proposed roadways including all existing streets within 300 feet of any proposed intersections.

There are no new roadways proposed.

6.4.14.2 Cross sections of streets every 50 feet along the entire street proposed in the development.

N/A

6.4.14.3 A longitudinal profile along the roadway center line.

N/A

6.4.14.4 Date, scale and magnetic or true north point on all plan pages.

The data required by section 6.4.14.4 is shown on all relevant plan pages.

6.4.14.5 Roadway and right-of-way limits including edge of pavement, edge of shoulder, sidewalks and curbs.

N/A No roadways are proposed.

The limits of areas which will be disturbed by construction, on the same plan where topographic lines, proposed buildings, structures, roads, and existing surface waters and wetlands are shown including a note that the limits of disturbance will be visually delineated in the field prior to disturbance, and that a preconstruction meeting with Code Enforcement is required.

The location of all permanent and temporary Erosion and Sedimentation Controls Best Management Practices proposed to be used including but not limited to buffer strips, grassed and riprapped ditches, hay bale barriers, stone check dams, silt fencing, excavation dewatering areas, concrete washout areas, waste storage, and/or sedimentation basins. The location of all permanent and temporary Erosion and Sedimentation Controls Best Management Practices proposed to be used including but not limited to buffer strips, grassed and riprapped ditches, hay bale barriers, stone



check dams, silt fencing, excavation dewatering areas, concrete washout areas, waste storage, and/or sedimentation basins

6.4.14.6 Type, size, location, material, profile and cross-section of all existing and proposed drainage structures and their location with respect to the existing natural waterways and proposed drainage ways.

The roadway is already existing and there are no proposed changes to the roadway. The existing driveway location will be relocated further south.

6.4.14.7 Complete curve data shall be indicated for all horizontal and vertical curves.

N/A No new roads are proposed.

6.4.14.8 Turning radii at all intersections.

N/A No new roads are proposed

6.4.14.9 Centerline gradients.

N/A No new roads are proposed

6.4.14.10. Locations of all existing and proposed overhead and underground utilities, including but not limited to water, sewer, fire hydrants or dry hydrants, street lights, electricity, telephone, lighting, and cable television.

N/A No new roads are proposed

6.4.14.11 The anticipated beginning and end dates of each major phase of street construction.

N/A No new roads are proposed

6.4.14.12 The street numbers of the lots, laid out in accordance with the street plan of the Town of York.

N/A No new roads are proposed

6.4.1.13 The location of all street name signs and traffic signs that will be installed at the expense of the developer.

N/A No new roads are proposed.

6.4.14.14 The location and design of all driveways (that portion within the right-ofway only), and related plan notes, to reflect the requirements of §9.5.12.

The relocated driveway has been designed by the project engineer and it is include in calculations for the Stormwater Control Plan.

6.4.15 Soil Erosion and Sedimentation Control Plan. The Soil Erosion and Sedimentation Control Plan, shall contain detailed drawings illustrating erosion and sedimentation control Best Management Practices (BMP) and details meeting the standards in Section 9.10 which are suitable and specific to the site and the development proposed. The Soil Erosion and Sedimentation Control Plan must include the following items:

6.4.15.1 The limits of areas which will be disturbed by construction, on the same plan where topographic lines, proposed buildings, structures, roads, and existing surface waters and wetlands



are shown including a note that the limits of disturbance will be visually delineated in the field prior to disturbance, and that a preconstruction meeting with Code Enforcement is required.

A pre-construction meeting with the Code Enforcement Officer will be completed prior to the commencement of construction. Erosion control will be in place and inspected as soon after the pre-construction as possible. Erosion control and the limits of construction are shown on Exhibit 1 Plan Sheet 4.

6.4.15.2 The location of all permanent and temporary Erosion and Sedimentation Controls Best Management Practices proposed to be used including but not limited to buffer strips, grassed and riprapped ditches, hay bale barriers, stone check dams, silt fencing, excavation dewatering areas, concrete washout areas, waste storage, and/or sedimentation basins.

See plan sheets 7&8. Erosion control locations are shown on Exhibit 1 Plan Sheet 4

6.4.15.3 Erosion control notes which specify temporary and permanent stabilization measures for exposed soil, including types and application rates for all seeding, lime, fertilizer and mulch.

See plan sheets 7&8.

6.4.15.4 A schedule and procedure for installation, inspections by the contractor, and maintenance. This schedule will outline the erosion control and construction sequence, final seeding dates, maximum time period after completion of work that the site will remain unstabilized, and frequency of erosion control and sedimentation control maintenance.

See plan sheets 7&8.

6.4.15.5 Details for all permanent and temporary Erosion and Sedimentation Control Best Management Practices.

See plan sheets 7&8.

6.4.16 Stormwater Management Plan - The developer shall submit a plan and design for the collection and management of surface drainage waters prepared by a Registered Engineer, and which meets all the requirements of Sections 9.8 and 9.9. See Stormwater Plan Exhibit 15.

6.4.16.1 The drainage plan shall include sufficient detail to insure that the drainage system proposed by the engineer will be properly constructed in the field and to allow technical evaluation of its adequacy. This shall include drainage calculations, delineation of drainage area and sub-area boundaries, all man-made and natural drainage ways, locations of all existing and proposed culverts and/or underground piping, culvert and piping sizes, cross sections of all existing and proposed drainage structures, downgrade and slide slopes, lining material (i.e. vegetation, fabric, riprap, etc.) and other dimensional characteristics necessary for construction and evaluation.

The drainage plan has been reviewed by an engineer hired by the town and has been updated to include those recommendations. See Exhibit 15.

6.4.16.2 The developer must submit a statement from a Professional Engineer which describes the measures taken for control of erosion, drainage, and sedimentation and which certifies that the proposed development will not create erosion, ponding, or flooding, either within the development or on other properties, as well as the calculations that support this conclusion.



See the Stormwater Plan. See Exhibit 15.

6.4.17 A hydrogeologic assessment must be submitted when the Site Plan or Subdivision Plan is not served by public sewer and; a) any part of the site is located over a sand and gravel aquifer, as shown on a map entitled “Hydrogeologic Data for Significant Sand and Gravel Aquifers”, by the Maine Geological Survey, Map Numbers 1 and 2; or b) the site has an average density of less than 100,000 square feet per dwelling unit, or c) when the Planning Board, after consultation with the Town Engineer, determines such information is necessary to adequately evaluate the impact on ground or surface waters. The hydrogeologic assessment shall be prepared by a Maine Certified Geologist or Mainelicensed Professional Engineer, provided that the professional has at least three years experience in hydrogeology and shall meet the standards of both this Section and Section 7.16. (MAJOR)

N/A The neighboring lots are generally 3 acres or larger. There is at least 100,000sq ft per dwelling adjacent to this property. The construction is not located on a sand and gravel aquifer.

6.4.17.1 A high intensity soil survey map meeting the standards of Article 6.3.32.

A waiver was granted for a High Intensity Soil Survey at the August 8, 2025 Planning Board meeting.

6.4.17.2 The depth to the water table at representative points throughout the subdivision.

N/A This is not a subdivision, it is a site plan review.

6.4.17.2 Drainage conditions throughout the subdivision.

Drainage is shown on the Site Plan and documented in the Stormwater Management Plan.

6.4.17.4 Data on the existing ground water quality, either from test wells in the subdivision or from existing wells on neighboring properties.

N/A This is not a subdivision. There is no change in the operation of the Electric Light Company that would effect ground water quality.

6.4.17.5 An analysis and evaluation of the effect of the proposed development on ground water resources. In the case of residential developments, the evaluation shall, at a minimum, include a projection of post development nitrate-nitrogen concentrations at any wells within the subdivision, at the subdivision boundaries and at a distance of 1,000 feet from potential contamination sources, whichever is the shorter distance. For developments within the watershed of a lake, projections of the development’s impact on ground water phosphate concentrations shall also be provided.

N/A This is not a residential development.

6.4.17.6 A map showing the location of any subsurface wastewater disposal systems and any existing or proposed drinking water wells within the development and within 200 feet of the development boundaries.

The existing well and septic system are low volume equaling the volume of a single 3 bedroom single family dwelling. We are requesting a waiver due to the low volume and desire to disturb the neighbor as little as possible.

A list of construction items with cost estimates for all public improvements proposed by the developer shall be submitted. This shall include, but not be limited to: a) streets; b) drainage



facilities; c) sewer and water mains; d) erosion and sedimentation control plans; e) recreational areas and parks. This submission shall include a critical path method construction schedule, cost estimates for each major phase of construction taking into account inflation, provisions for inspections of each phase of construction, and a completion date after which the developer will be in default and the Town shall have the option to access the funds in the performance guarantee to finish construction.

N/A There are no public improvements required by this building expansion.

A cost estimate for erosion control has been prepared and a \$10,000. Bond secured.

6.4.19 A copy of covenants and deed restrictions as are intended to cover all or part of the tract shall be submitted.

N/A There are no covenants or deed restrictions proposed in this Site Plan.

6.4.20 The Final Plan shall show 2 foot contour lines of both existing and proposed topography in relation to the NGVD of 1929.

Waiver requested separately to use the state adopted NAD83 which is now in common use for construction projects. A waiver would help avoid conversion errors during construction.

Existing and proposed 2 foot contours are shown on Exhibit 1 Plan Sheet 4.

6.4.21 To aid the Board's understanding of a development, elevation view drawings may accompany the proposal.

Building elevations are provided for this building addition. See Exhibit 2 Sheet 3.

6.4.22 The plot plan must be prepared with a signature block for the signatures of the Planning Board upon approval. This page will be filed by the developer in the Registry of Deeds. If necessary, more than one page will be signed by the Board and filed at the Registry.

The Site Plan has signature blocks for Planning Board members to sign showing approval.

6.4.23 All requests for waivers from strict compliance with any of these regulations shall be submitted in writing. All such waiver requests must refer to the section of these Regulations for which the waiver is being requested, and shall contain an explanation of the reasons such waiver is considered necessary and why the granting of such a waiver would be consistent with these Regulations.

A waiver for a High Intensity Soil Survey was granted at the August 8, 2025 Planning Board. The following waivers were requested at the final review: Waiver to use the most current vertical datum NAD83.

6.4.24 Elevation drawings for each side of each non-residential building if the building is either new or is to be altered pursuant to this application.

Elevation drawings have been provided for the addition showing the 3 visible facades.

6.4.25 Identification of the type and amount of the required performance guarantee.

The performance guarantee will be presented at the Planning Board meeting September 25, 2025. A bond has been secured in the amount of \$10,000.00 to cover erosion control if not completed by the property owner. See Exhibit 11-1 & 11-2.

6.4.26 The Board shall require submittal of all information necessary to determine compliance with other codes. This includes, but is not limited to: Zoning Ordinance, including overlay districts: Floodplain Management Ordinance; Well Ordinance; and Wireless Communications Facilities



DATE: September 5, 2025

FROM: The Electric Light Company  
1 Morgan Way  
Cape Neddick, ME 03902

TO Town of York Planning Board  
186 York Street  
York, ME 03909

RE: Waiver to allow NAD83 instead of NGVD1929 Map 99 Lot 44

A waiver is requested by the Electric Light Company to use NAD 83 in place of NGVD1929 for topography.

NGVD1929 has been superseded by the current vertical datum NAD83. This has been adopted by the State of Maine, is used generally in construction and is required for flood Elevation Certificates. Using the older vertical datum can cause errors during construction or converting one vertical datum to the other.

The Town of York Planning Board at the September 25, 2025 meeting discussed the waiver and voted to grant the requested waiver to use NAD 83 for topography/elevations.

REFERENCE:

6.3.3.A.2 Site Plan Subdivision Regulations

Tim DeCoteau



DATE: February 28, 2025

FROM: The Electric Light Company  
1 Morgan Way  
Cape Neddick, ME 03902

TO Town of York Planning Board  
186 York Street  
York, ME 03909

RE: Waiver for 24" BHT shown on Survey                      Map 99 Lot 44

#### High Impact Soil Survey Waiver Requested by the Electric Light Company

The Electric Light Company is proposing to build a 6,000 sq ft addition to their existing building . The applicant is requesting a waiver from identifying 24"DBH trees on the survey. Approximately half of the lot is wetland and there is to be no construction or cutting activities in the wetland. I measured the trees in the area to be affected by the proposed addition and construction there are no 24" DBH trees in that area.

The Town of York Planning Board at the (date) 2025 meeting discussed a waiver from identifying 24"DBH trees of the survey required by 6.3.3.A.4 and voted to grant the requested waiver.

#### REFERENCE:

##### 6.3.3.A.4

4. vegetation in general, specifically noting any trees larger than 24" in diameter at breast height;

Tim DeCoteau



DATE: February 28, 2025

FROM: The Electric Light Company  
1 Morgan Way  
Cape Neddick, ME 03902

TO Town of York Planning Board  
186 York Street  
York, ME 03909

RE: Waiver for High Intensity Soil Survey                      Map 99 Lot 44

#### High Impact Soil Survey Waiver Requested by the Electric Light Company

The Electric Light Company is proposing to build a 6,000 sq ft addition to their existing building . The applicant is requesting a waiver from a High Intensity Soil Survey. The existing building is approximately the same size and built on the same soils. The existing soils have supported the existing building without shifting or showing signs of failure to completely support the existing structure and uses. It is unlikely that any new and pertinent information would be found with a High Intensity Soil Survey for the proposed building addition.

The Town of York Planning Board at the (date) 2025 meeting discussed a waiver from a High Intensity Soil Survey required by 6.6.32 and voted to grant the requested waiver.

#### REFERENCE:

6.3.32 - A high intensity soil survey signed and sealed by a Maine Certified Soil Scientist, indicting the suitability of soil conditions for the uses proposed shall be submitted. This report must meet the Maine Association of Professional Soil Scientists Standards for Soil Surveys for a Class A Soil Survey (04/04/89 and as amended). The HISS plan shall indicate areas subject to the requirements of Article 7.4.2.

Tim DeCoteau



DATE: September 5, 2025

FROM: The Electric Light Company  
1 Morgan Way  
Cape Neddick, ME 03902

TO Town of York Planning Board  
186 York Street  
York, ME 03909

RE: Waiver the requirement to include wells and septic system within 200 ft of the property on the survey/site plan

Map 99 Lot 44

A waiver is requested by the Electric Light Company to not show the septic system and well on the neighboring property to the west owned by Andre Beaulieu. The well and septic system for the Electric Light Company have existed for more than 2 decades without any discernible affect on the neighboring property. Both wells and septic systems met the setback requirements when they were installed. It would be disruptive to the neighbor and provide no new and useful information.

The Town of York Planning Board at the September 25, 2025 meeting discussed the waiver and voted to grant the requested waiver to not to show the neighbors well and septic system.

REFERENCE:

6.4.17.6 Site Plan Subdivision Regulations

Tim DeCoteau



**Opinion of Cost - Electric Light Company E&S Control  
Morgan Way, Cape Neddick, ME**

**11/11/2025**

Excludes: blasting / lot development / slope reclamation

<u>Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Price</u>
Rip Rap Protection	77	SY	\$21	\$1,594
Topsoil, Seed, Mulch	19.9	MSF	\$173	\$3,433
Siltation Fence/Bulk Mulch	1,172	LF	\$3	\$4,043
Stabilized Construction Entrance	1	EA	\$920	\$920
<b>Subtotal 1</b>				<b>\$9,990</b>
Contingency (10% of Subtotal 1)				\$999
<b>Total</b>				<b>\$10,989</b>





702 Oberlin Road, Raleigh, NC 27605 Phone: (800)448-4642

LICENSE AND/OR PERMIT BOND

Bond No: 3000974

KNOW ALL MEN BY THESE PRESENTS:

That Electric Light Company, Inc., One Morgan Way, Cape Neddick, ME 03902 as Principal, and  
Harco National Insurance Company as Surety, are held and firmly bound  
unto Town of York, ME as Oblige, in the full and just sum  
of Ten Thousand and 00/100ths 10,000.00 Dollars (\$ \_\_\_\_\_),  
lawful money of the United States, to the payment of which sum, well and truly to be made, the Principal and Surety bind themselves  
and each of their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the above bounden Principal has obtained or is about to obtain from the said Oblige a Erosion Control  
License or Permit,  
the term of which is as indicated opposite the block checked below:

- ☐ Beginning \_\_\_\_\_ and ending \_\_\_\_\_  
☒ Continuous beginning November 24, 2025

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, That if the above bounden Principal as such licensee or permittee shall indemnify said Oblige against all loss, costs, expenses or damage to it caused by said Principal's non-compliance with or breach of any laws, statutes, ordinances, rules or regulations pertaining to such license or permit issued to the Principal, which said breach or non-compliance shall occur during the term of this bond, then this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED, that if this bond is for a fixed term it may be continued by Certificate executed by the Surety hereof; and

PROVIDED FURTHER, That regardless of the number of years this bond shall continue or be continued in force and of the number of premiums that shall be payable or paid, the Surety shall not be liable hereunder for a larger amount, in the aggregate, than the amount of this bond; and

PROVIDED FURTHER, that if this is a continuous bond as the Surety shall so elect, this bond may be canceled by the Surety as to subsequent liability by giving thirty (30) days notice in writing to said Oblige.

Signed, sealed and dated November 24, 2025

Gabe Checker  
Gabe Checker  
Senior Project Manager  
(Witness)

Electric Light Company, Inc.  
(Principal) (Seal)  
By [Signature]  
(Title)  
Harco National Insurance Company  
(Surety)  
By Hannah Abbott  
Hannah Abbott Attorney-in-Fact



**POWER OF ATTORNEY**  
**HARCO NATIONAL INSURANCE COMPANY**  
**INTERNATIONAL FIDELITY INSURANCE COMPANY**

Bond # 3000974

Member companies of IAT Insurance Group, Headquartered: 4200 Six Forks Rd, Suite 1400, Raleigh, NC 27609

**KNOW ALL MEN BY THESE PRESENTS:** That **HARCO NATIONAL INSURANCE COMPANY**, a corporation organized and existing under the laws of the State of Illinois, and **INTERNATIONAL FIDELITY INSURANCE COMPANY**, a corporation organized and existing under the laws of the State of New Jersey, and having their principal offices located respectively in the cities of Rolling Meadows, Illinois and Newark, New Jersey, do hereby constitute and appoint

**MICHAEL P. O'BRIEN, RYAN M. STEVENS, MATTHEW R. BLAISDELL, MARK J. STEVENS, JACLYN BUCCIGROSS, HANNAH ABBOTT, GARY P. LAPIERRE, PAULA J. CANTARA**

Concord, NH

their true and lawful attorney(s)-in-fact to execute, seal and deliver for and on its behalf as surety, any and all bonds and undertakings, contracts of indemnity and other writings obligatory in the nature thereof, which are or may be allowed, required or permitted by law, statute, rule, regulation, contract or otherwise, and the execution of such instrument(s) in pursuance of these presents, shall be as binding upon the said **HARCO NATIONAL INSURANCE COMPANY** and **INTERNATIONAL FIDELITY INSURANCE COMPANY**, as fully and amply, to all intents and purposes, as if the same had been duly executed and acknowledged by their regularly elected officers at their principal offices.

This Power of Attorney is executed, and may be revoked, pursuant to and by authority of the By-Laws of **HARCO NATIONAL INSURANCE COMPANY** and **INTERNATIONAL FIDELITY INSURANCE COMPANY** and is granted under and by authority of the following resolution adopted by the Board of Directors of **INTERNATIONAL FIDELITY INSURANCE COMPANY** at a meeting duly held on the 13th day of December, 2018 and by the Board of Directors of **HARCO NATIONAL INSURANCE COMPANY** at a meeting held on the 13th day of December, 2018.

"**RESOLVED**, that (1) the Chief Executive Officer, President, Executive Vice President, Senior Vice President, Vice President, or Secretary of the Corporation shall have the power to appoint, and to revoke the appointments of, Attorneys-in-Fact or agents with power and authority as defined or limited in their respective powers of attorney, and to execute on behalf of the Corporation and affix the Corporation's seal thereto, bonds, undertakings, recognizances, contracts of indemnity and other written obligations in the nature thereof or related thereto; and (2) any such Officers of the Corporation may appoint and revoke the appointments of joint-control custodians, agents for acceptance of process, and Attorneys-in-fact with authority to execute waivers and consents on behalf of the Corporation; and (3) the signature of any such Officer of the Corporation and the Corporation's seal may be affixed by facsimile to any power of attorney or certification given for the execution of any bond, undertaking, recognizance, contract of indemnity or other written obligation in the nature thereof or related thereto, such signature and seals when so used whether heretofore or hereafter, being hereby adopted by the Corporation as the original signature of such officer and the original seal of the Corporation, to be valid and binding upon the Corporation with the same force and effect as though manually affixed."

IN WITNESS WHEREOF, **HARCO NATIONAL INSURANCE COMPANY** and **INTERNATIONAL FIDELITY INSURANCE COMPANY** have each executed and attested these presents on this 31st day of December, 2024



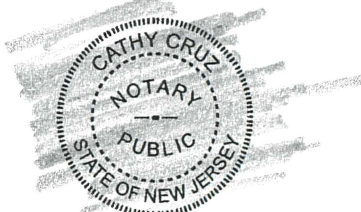
STATE OF NEW JERSEY  
County of Essex

Michael F. Zurcher  
Executive Vice President, Harco National Insurance Company  
and International Fidelity Insurance Company

STATE OF ILLINOIS  
County of Cook



On this 31st day of December, 2024, before me came the individual who executed the preceding instrument, to me personally known, and, being by me duly sworn, said he is the therein described and authorized officer of **HARCO NATIONAL INSURANCE COMPANY** and **INTERNATIONAL FIDELITY INSURANCE COMPANY**; that the seals affixed to said instrument are the Corporate Seals of said Companies; that the said Corporate Seals and his signature were duly affixed by order of the Boards of Directors of said Companies.



IN TESTIMONY WHEREOF, I have hereunto set my hand affixed my Official Seal, at the City of Newark, New Jersey the day and year first above written.

Cathy Cruz a Notary Public of New Jersey  
My Commission Expires April 16, 2029

**CERTIFICATION**

I, the undersigned officer of **HARCO NATIONAL INSURANCE COMPANY** and **INTERNATIONAL FIDELITY INSURANCE COMPANY** do hereby certify that I have compared the foregoing copy of the Power of Attorney and affidavit, and the copy of the Sections of the By-Laws of said Companies as set forth in said Power of Attorney, with the originals on file in the home office of said companies, and that the same are correct transcripts thereof, and of the whole of the said originals, and that the said Power of Attorney has not been revoked and is now in full force and effect.

IN TESTIMONY WHEREOF, I have hereunto set my hand on this day, November 24, 2025

A00677

Irene Martins, Assistant Secretary

**Exhibit 11-2**



## **Electric Light Company Article 6 Supplemental Use Regulations**

6.1 This property is in zone GEN-2 and the supplemental use regulations and 6.1 are applicable.

6.1.1 Traffic study has been provided by Diane W, Morabito, P.E. PTOE. Exhibit #4

6.1.2 The noise produced by this business is minimal and is in compliance with the Town of York Noise Ordinance

6.1.3 Dust fumes vapors and gases which could damage health are not produced or used by the Electric Light Company. There are no known complaints concerning dust, fumes, vapors, and gases related to the existing use.

6.1.4 There is no discernible odor produced by this business.

6.1.5 There is a photometric plan produced by Exposure Lighting that shows compliance with the town of York lighting regulations. Exhibit #2 Sheet 9

6.1.6 There is a stormwater study produced by Attar engineering which shows that the stormwater runoff will not increase during a hundred year storm due to the expansion of this building and related parking. A stormwater detention basin will attenuate the stormwater runoff. Exhibit #2 Sheet 4 + Exhibit #12

6.1.7 Attar Engineering has produced an erosion control plan that is compliant with section 6.5 of the town of York Zoning ordinance. Exhibit #2 Sheets 6-8

6.1.8 Exposed storage areas are screened from abutting property owners boundaries with existing residential properties are screened by either a dense evergreen hedge, natural vegetation, or a solid 6 foot high fence. Parking lots are landscaped with shrubbery or fencing along all lot lines. The dumpsters are enclosed with 6 foot high solid fences. Exhibit #3 L-1, L-2

6.1.9 There are no explosive materials are stored on site.

6.1.10 the landscape has been preserved in its natural state inasmuch as is practicable. Exhibit #3 L-1, L-2

6.1.11 There are minimal amounts of chemicals and fuels stored on site with relation to this traffic control systems business.



## Electric Light Company Article 6 Supplemental Use Regulations

6. 1.12 The Electric Light Company is in zone GEN-2 a general use zone. The building is in keeping with the existing structure, similar uses, and is not visible from any public road.

6.1.13 refuse disposal is accomplished by a private contractor who removes all trash.

6.1.14 refuse and recycling facilities the dumpster will be enclosed with a solid 6 foot high fence. Exhibit #3 L-1, L-2

6.1.15 This project has two different parking areas, one is for the office and any visitors while the work area is located separately. The traffic circulation was designed by Antar engineering and is shown on the site plan. Exhibit #2



DATE: February 28, 2025

FROM: The Electric Light Company  
1 Morgan Way  
Cape Neddick, ME 03902

TO Town of York Planning Board  
186 York Street  
York, ME 03909

RE: Waiver for selected buffer requirements Map 99 Lot 44

A waiver is requested from the vegetated buffer requirements for 2 areas by the Electric Light Company

The first area is at the end of the right-of-way that will lead to the proposed office parking. Putting the parking area in front of the existing building creates a safer environment for office workers and visitors by separating them from the large service trucks and trailer delivery trucks. The proposed reduction in the vegetated buffer has been discussed with the affected neighbors who has signed a letter supporting the waiver. The letter is attached to this waiver requests partial waiver is also behind requested along part of the easterly border. The abutter cleared up to the common property line and the existing grade at the property line slopes down toward the building location. A fence along the high grade at the property line would provide a better visual buffer than a vegetated buffer sloping downward from the property line.

The Town of York Planning Board at the (date) 2025 meeting discussed a partial waiver waiver from the before requirements of section 6.1.8.3 of the town of York Zoning Ordinance. and voted to grant the requested waiver.

REFERENCE:

6.1.8.3 Boundaries with existing residential properties shall be screened with a dense evergreen hedge 6 feet or more in height. Non-residential developments shall have screening at least twenty (20) feet in depth along all side and rear lot lines. Screening may include, but not be limited to, evergreen shrubs, trees, fences, earth or wall berms or any combination thereof, forming a visual barrier not less than six (6) feet in height. (Except, chain-link fencing that includes interwoven plastic or metallic slats or interwoven fabric shall be prohibited.) The Planning Board, by written waiver, may reduce the depth of screening to eight (8) feet, if the Planning Board determines that the results of such waiver will not be inconsistent with the purposes of this ordinance, that the public's health, safety and general welfare will be adequately protected and that reduction will not significantly deprive neighboring properties of the protections provided by this ordinance. YVC-1 and YVC-2 districts are exempt from this provision except for lots within those districts that are adjacent to a residential district; or historic district, site or landmark as designated in Article 12-Historic and Archeological Resources of this ordinance. - AMENDED 05/21/2016

Tim DeCoteau



November 25,2025

I, Andre Beaulieu, own and reside at the property on the opposite side of Morgan Way from the Electric Light Company. I have reviewed the plans for the proposed construction and feel that the relocated main driveway may actually reduce the amount of stray light that might affect my home. I have an excellent relationship with the Electric Light Company and it's President Ken Miller. I have been assured that the Electric Light Company will, if necessary, add additional buffering to address stray light adversely affecting my property. I will make this determination once the Town of York has granted an occupancy permit and the landscaping has been completed. I am satisfied that Ken Miller and the Electric Light Company will satisfactorily address this if it becomes an issue.

A handwritten signature in cursive script, reading "Andre Beaulieu", followed by a long horizontal flourish.

Andre Beaulieu abutter





# ATTAR

ENGINEERING, INC

CIVIL ♦ STRUCTURAL ♦ MARINE

## **STORMWATER MANAGEMENT PLAN INDUSTRIAL FACILITY – ELECTRIC LIGHT COMPANY, INC. 1 MORGAN WAY, CAPE NEDDICK, MAINE**

Project No.: C334-22

November 26<sup>th</sup>, 2025

### **♦ Scope**

This stormwater management plan has been prepared for the proposed expansion of an existing industrial building located at 1 Morgan Way in Cape Neddick, Maine. The project consists of an addition to an existing industrial building to be used as a garage and associated site improvements on an 8.2-acre lot.

The project will be constructed on Tax Map 99, Lot 44, located in the GEN-2 base zoning district, Wetland (Resource Protection) Overlay, and Limited Residential (LR) Overlay districts at the above noted address. The existing development includes approximately 2.5 acres of developed land area and 1.46 acres of impervious area. The proposed project will create approximately 0.33 acres of impervious area, resulting in a total of 1.79 acres of impervious area. The project will result in more than 1 acre of disturbed area; therefore, a Maine Department of Environmental Protection Chapter 500 (Stormwater Management) Permit-By-Rule is required.

The project must meet the stormwater management requirements outlined in the York Site Plan and Subdivision Regulations (Sections 9.8 and 9.9).

### **♦ Site and Watershed Description**

The project site is located on the east side of Morgan Way, approximately 0.2 miles from the Berwick Road and N Village Road intersection. A 7½ minute series U.S.G.S. map of the project area is attached. The site has been used for commercial and industrial warehouse purposes since the existing building's construction in 1988. The existing facility and gravel parking lot and laydown area is bordered by a wetland area to the north of the gravel laydown yard and parking area in the rear of the existing building and is otherwise bordered by wooded, undeveloped land. A lightly wooded area in the rear of the building contains an existing septic system to remain in use.

The site is in the Ogunquit River watershed (source: US EPA Watershed Report – NHDPlus Version 2). The site drains from Morgan Way in a generally Northerly direction to the wetland through which it exits the property to the north. Ogunquit River is tributary to the Atlantic Ocean.

The topography of the site is generally moderately sloped (existing grades from 3% to 15%) with limited areas of steeper slope (approx. 33%) on the forested knoll in the South-East corner of the property as well as around the swale connecting the rear of the developed area to the wetland. On-site elevations (datum is NAVD 1988) range from approximately 136' in the wetland in the North end of the property line to approximately 173' at the site's high point on the knoll in the South-East corner.

The site is not located within a 100-Year Special Flood Hazard Area per the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) 2301590010D (effective date 6/17/02).

**Exhibit 15**



Proposed cuts and fills are generally between 0 and 3 feet.

#### ◆ **Soils/Hydrologic Soil Groups**

Soil types and their respective Hydrologic Soil Groups (HSG) were determined from the Soil Survey of York County, Maine. Site soils consist of Biddeford Mucky Peat (HSG D), Brayton and Westbury Very Fine Sandy Loams (HSG D), Lyman-Rock Outcrop Complex (HSG D), and Madawaska Fine Sandy Loam (HSG B). In an undisturbed condition, these soil types typically have slopes of 0-3% (Bm), 0-8% (BsB & MaB), 3-8% (LyB) and 8-15% (LyC). The water table can get to be within 1 ft. in select areas of proposed development. This limitation can be overcome by appropriate construction techniques.

#### ◆ **Methodology**

The stormwater quantity analysis was conducted using the HydroCAD Stormwater Modeling System by Applied Microcomputer Systems. The analysis was accomplished to determine the "Existing Condition" and "Developed Condition" stormwater flows. Both cases were analyzed for the 2, 10, 50, and 100 year, 24-hour frequency storm events. The Existing Condition analyzes the site in its current state with existing industrial developments. The Developed Condition models the site with the proposed industrial development described above.

#### ◆ **Water Quantity Analysis and Results**

##### Existing Condition

The site was modeled as two subcatchments (SC) for the Existing Condition analysis.

An Analysis Point (AP) was selected at the edge of the wetland where all water eventually flows to. The Analysis Point is located downstream of the proposed developed area and provides a convenient location to compare Existing Condition flows to Developed Condition flows.

SC1 (tributary to AP1) includes the front portion of the property uphill from the existing building and flows to an existing 18" wetland culvert flowing under the driveway down to the wetland analysis point.

SC2 (tributary to AP1) includes the remainder of the lot downhill from the existing building and includes the rear laydown yard, woods, and wetland.

##### Developed Condition

The Developed Condition analysis consists of six subcatchments. Other features such as a pond, swales, and reaches were added to account for on-site routing and detention of stormwater. The proposed project will utilize the existing wetland culvert (Node 1), a drainage swale (Node 2) routing water to a level spreader, a proposed detention pond (Node 3), and two roofline drip strips (Nodes 5 and 6). The detention pond is considered a Best Management Practice (BMP) which provides retention (peak flow reduction) of stormwater and outlets to level spreader that returns channelized flow to sheet flow. All Developed Condition flows are routed to AP1, described above.

Tables showing Existing Condition peak flows, Developed Condition peak flows and the change in peak flow from Existing Condition to Developed Condition are presented on a separate page.

The analysis indicates decreases in peak flow at AP1 for all storm events.

Runoff from the detention pond BMP will be routed through a culvert and level spreader prior to discharge to undisturbed, on-site areas.



◆ **Summary**

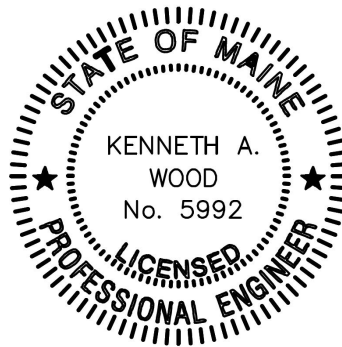
The use of the swales and detention pond to attenuate peak flows results in no significant increase in peak runoff quantity from the proposed Commercial Development. No adverse effects are anticipated on any downstream properties or drainage structures for the analyzed storm events. **Low Impact Development practices**, including roof drip strips and vegetated swales are included in the design to meet Town of York Site Plan and Subdivision Regulations section 9.8.13.

Respectfully submitted;

*Wyatt Page*

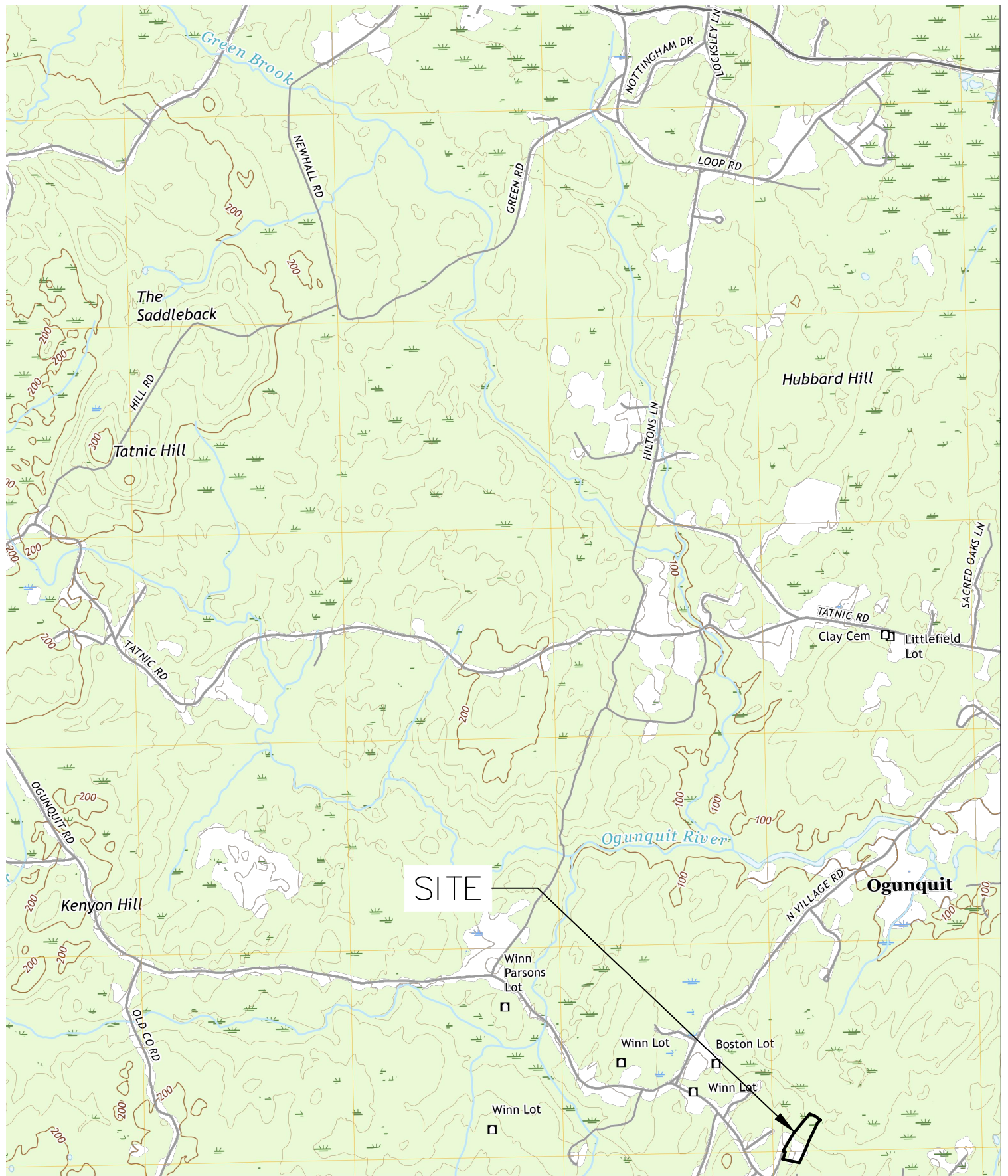
Wyatt R. Page, E.I.

C334-22\_SW.Doc



*Kenneth A. Wood*





**ATTAR ENGINEERING, INC.**  
 CIVIL ♦ STRUCTURAL ♦ MARINE ♦ SURVEYING  
 1284 STATE ROAD - ELIOT, MAINE 03903  
 PHONE: (207)439-6023 FAX: (207)439-2128

**LOCATION:**  
 ELECTRIC LIGHT COMPANY, INC.  
 1 MORGAN WAY  
 TAX MAP 99, LOT 44

KEN MILLER  
 1 MORGAN WAY  
 CAPE NEDDICK, ME 03902

**INFORMATION:**  
 USGS LOCATION MAP  
 7.5-MINUTE SERIES  
 NORTH BERWICK QUADRANGLES

SCALE: 1" = 2000'	APPROVED BY:	DRAWN BY: WRP
DATE: 12/28/2023		REVISION DATE: - : -
JOB NO: C334-22	FILE: ELECTRIC LIGHT BASE.DWG	SHEET: 1

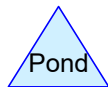
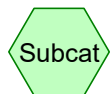
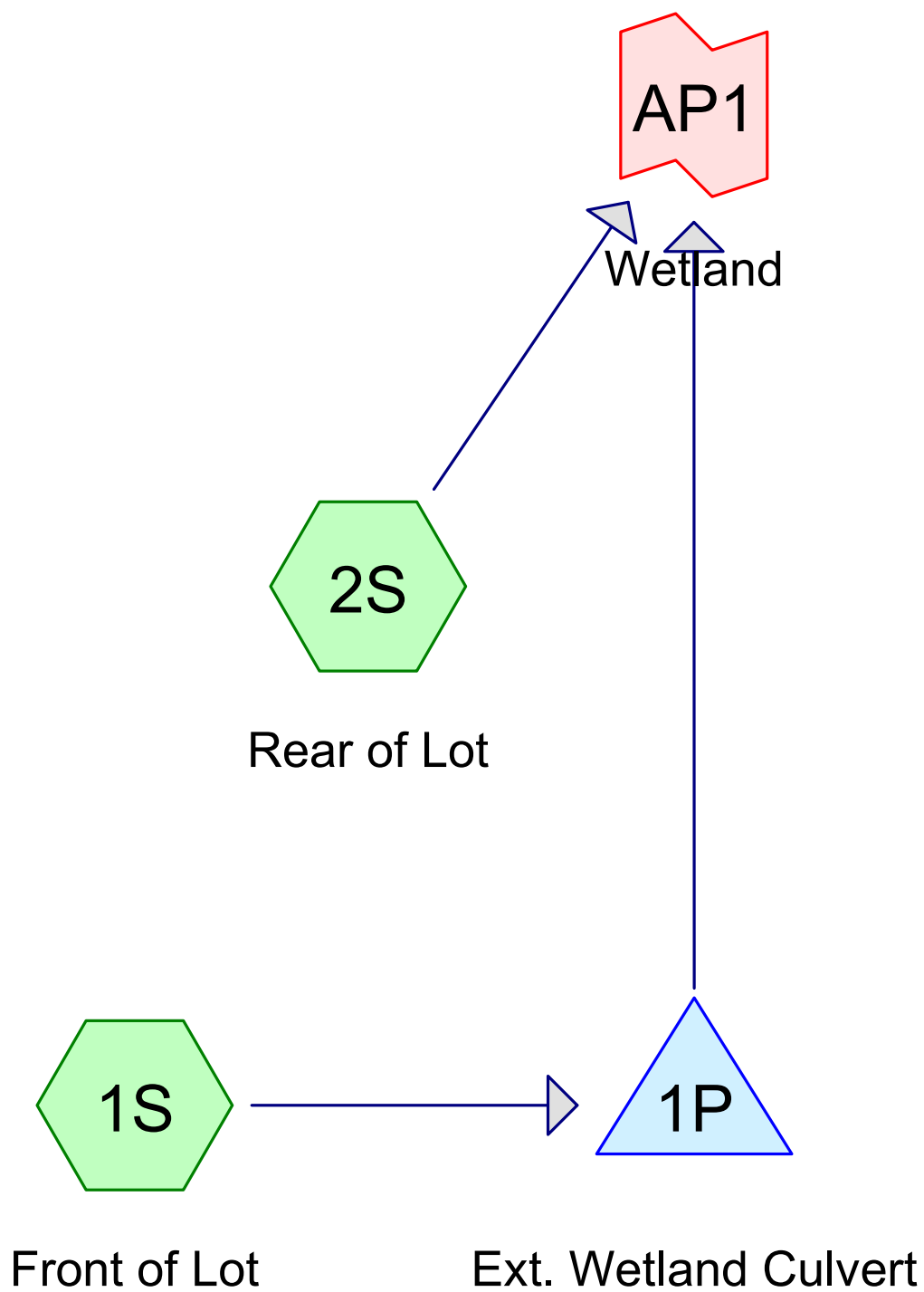






## **EXISTING CONDITION CALCULATIONS**





**Routing Diagram for Electric Light EXT**

Prepared by Attar Engineering, Printed 12/29/2023

HydroCAD® 10.00-26 s/n 01988 © 2020 HydroCAD Software Solutions LLC



## Electric Light EXT

Prepared by Attar Engineering

HydroCAD® 10.00-26 s/n 01988 © 2020 HydroCAD Software Solutions LLC

Printed 12/29/2023

Page 2

### Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.004	61	>75% Grass cover, Good, HSG B (2S)
0.470	80	>75% Grass cover, Good, HSG D (1S, 2S)
0.002	98	Impervious Area, HSG B (2S)
1.455	98	Impervious Area, HSG D (1S, 2S)
0.043	55	Woods, Good, HSG B (2S)
2.990	77	Woods, Good, HSG D (1S, 2S)
0.014	55	Woods/Wetland, Good, HSG B (2S)
3.477	77	Woods/Wetland, Good, HSG D (1S, 2S)
<b>8.455</b>	<b>81</b>	<b>TOTAL AREA</b>



## Electric Light EXT

Type III 24-hr 2-YR Storm Rainfall=3.30"

Prepared by Attar Engineering

Printed 12/29/2023

HydroCAD® 10.00-26 s/n 01988 © 2020 HydroCAD Software Solutions LLC

Page 3

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

### Subcatchment 1S: Front of Lot

Runoff Area=60,154 sf 38.58% Impervious Runoff Depth>1.71"  
Flow Length=311' Tc=25.6 min CN=85 Runoff=1.81 cfs 0.197 af

### Subcatchment 2S: Rear of Lot

Runoff Area=308,148 sf 13.06% Impervious Runoff Depth>1.36"  
Flow Length=393' Tc=18.3 min CN=80 Runoff=8.45 cfs 0.802 af

### Pond 1P: Ext. Wetland Culvert

Peak Elev=157.35' Storage=1,028 cf Inflow=1.81 cfs 0.197 af  
18.0" Round Culvert n=0.013 L=359.0' S=0.0320 '/' Outflow=1.60 cfs 0.193 af

### Link AP1: Wetland

Inflow=9.54 cfs 0.995 af  
Primary=9.54 cfs 0.995 af

**Total Runoff Area = 8.455 ac Runoff Volume = 0.999 af Average Runoff Depth = 1.42"**  
**82.78% Pervious = 6.999 ac 17.22% Impervious = 1.456 ac**



## Electric Light EXT

Type III 24-hr 10-YR Storm Rainfall=4.90"

Prepared by Attar Engineering

Printed 12/29/2023

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Page 4

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

### Subcatchment 1S: Front of Lot

Runoff Area=60,154 sf 38.58% Impervious Runoff Depth>3.06"  
Flow Length=311' Tc=25.6 min CN=85 Runoff=3.19 cfs 0.352 af

### Subcatchment 2S: Rear of Lot

Runoff Area=308,148 sf 13.06% Impervious Runoff Depth>2.61"  
Flow Length=393' Tc=18.3 min CN=80 Runoff=16.23 cfs 1.538 af

### Pond 1P: Ext. Wetland Culvert

Peak Elev=157.60' Storage=1,651 cf Inflow=3.19 cfs 0.352 af  
18.0" Round Culvert n=0.013 L=359.0' S=0.0320 ' Outflow=2.82 cfs 0.347 af

### Link AP1: Wetland

Inflow=18.24 cfs 1.886 af  
Primary=18.24 cfs 1.886 af

**Total Runoff Area = 8.455 ac Runoff Volume = 1.890 af Average Runoff Depth = 2.68"**  
**82.78% Pervious = 6.999 ac 17.22% Impervious = 1.456 ac**



## Electric Light EXT

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Type III 24-hr 25-YR Storm Rainfall=6.20"

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

### Subcatchment 1S: Front of Lot

Runoff Area=60,154 sf 38.58% Impervious Runoff Depth>4.21"  
Flow Length=311' Tc=25.6 min CN=85 Runoff=4.33 cfs 0.485 af

### Subcatchment 2S: Rear of Lot

Runoff Area=308,148 sf 13.06% Impervious Runoff Depth>3.70"  
Flow Length=393' Tc=18.3 min CN=80 Runoff=22.84 cfs 2.182 af

### Pond 1P: Ext. Wetland Culvert

Peak Elev=157.78' Storage=2,192 cf Inflow=4.33 cfs 0.485 af  
18.0" Round Culvert n=0.013 L=359.0' S=0.0320 '/' Outflow=3.79 cfs 0.479 af

### Link AP1: Wetland

Inflow=25.58 cfs 2.662 af  
Primary=25.58 cfs 2.662 af

**Total Runoff Area = 8.455 ac Runoff Volume = 2.667 af Average Runoff Depth = 3.79"**  
**82.78% Pervious = 6.999 ac 17.22% Impervious = 1.456 ac**



**Electric Light EXT***Type III 24-hr 50-YR Storm Rainfall=7.30"*

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment 1S: Front of Lot**

Runoff Area=60,154 sf 38.58% Impervious Runoff Depth>5.20"  
Flow Length=311' Tc=25.6 min CN=85 Runoff=5.30 cfs 0.599 af

**Subcatchment 2S: Rear of Lot**

Runoff Area=308,148 sf 13.06% Impervious Runoff Depth>4.66"  
Flow Length=393' Tc=18.3 min CN=80 Runoff=28.51 cfs 2.746 af

**Pond 1P: Ext. Wetland Culvert**

Peak Elev=157.92' Storage=2,685 cf Inflow=5.30 cfs 0.599 af  
18.0" Round Culvert n=0.013 L=359.0' S=0.0320 '/' Outflow=4.58 cfs 0.593 af

**Link AP1: Wetland**

Inflow=31.84 cfs 3.340 af  
Primary=31.84 cfs 3.340 af

**Total Runoff Area = 8.455 ac Runoff Volume = 3.345 af Average Runoff Depth = 4.75"**  
**82.78% Pervious = 6.999 ac 17.22% Impervious = 1.456 ac**



## Electric Light EXT

Type III 24-hr 100-YR Storm Rainfall=8.70"

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

### Subcatchment 1S: Front of Lot

Runoff Area=60,154 sf 38.58% Impervious Runoff Depth>6.48"  
Flow Length=311' Tc=25.6 min CN=85 Runoff=6.53 cfs 0.746 af

### Subcatchment 2S: Rear of Lot

Runoff Area=308,148 sf 13.06% Impervious Runoff Depth>5.90"  
Flow Length=393' Tc=18.3 min CN=80 Runoff=35.75 cfs 3.480 af

### Pond 1P: Ext. Wetland Culvert

Peak Elev=158.11' Storage=3,391 cf Inflow=6.53 cfs 0.746 af  
18.0" Round Culvert n=0.013 L=359.0' S=0.0320 '/' Outflow=5.48 cfs 0.740 af

### Link AP1: Wetland

Inflow=39.80 cfs 4.220 af  
Primary=39.80 cfs 4.220 af

**Total Runoff Area = 8.455 ac Runoff Volume = 4.226 af Average Runoff Depth = 6.00"**  
**82.78% Pervious = 6.999 ac 17.22% Impervious = 1.456 ac**



**Electric Light EXT**

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Type III 24-hr 100-YR Storm Rainfall=8.70"

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**Summary for Subcatchment 1S: Front of Lot**

Runoff = 6.53 cfs @ 12.34 hrs, Volume= 0.746 af, Depth&gt; 6.48"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-YR Storm Rainfall=8.70"

	Area (sf)	CN	Description
*	23,207	98	Impervious Area, HSG D
	31,506	77	Woods, Good, HSG D
	2,886	80	>75% Grass cover, Good, HSG D
*	2,555	77	Woods/Wetland, Good, HSG D
	60,154	85	Weighted Average
	36,947		61.42% Pervious Area
	23,207		38.58% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.1	100	0.0200	0.08		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.30"
2.1	108	0.0283	0.84		<b>Shallow Concentrated Flow,</b> Woodland Kv= 5.0 fps
2.4	103	0.0200	0.71		<b>Shallow Concentrated Flow,</b> Woodland Kv= 5.0 fps
25.6	311	Total			

**Summary for Subcatchment 2S: Rear of Lot**

Runoff = 35.75 cfs @ 12.25 hrs, Volume= 3.480 af, Depth&gt; 5.90"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-YR Storm Rainfall=8.70"

	Area (sf)	CN	Description
	98,736	77	Woods, Good, HSG D
	1,876	55	Woods, Good, HSG B
*	40,158	98	Impervious Area, HSG D
	181	61	>75% Grass cover, Good, HSG B
*	74	98	Impervious Area, HSG B
*	617	55	Woods/Wetland, Good, HSG B
*	148,914	77	Woods/Wetland, Good, HSG D
	17,592	80	>75% Grass cover, Good, HSG D
	308,148	80	Weighted Average
	267,916		86.94% Pervious Area
	40,232		13.06% Impervious Area



**Electric Light EXT**

Type III 24-hr 100-YR Storm Rainfall=8.70"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.7	100	0.0500	0.11		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.30"
3.6	293	0.0734	1.35		<b>Shallow Concentrated Flow,</b> Woodland Kv= 5.0 fps
18.3	393	Total			

**Summary for Pond 1P: Ext. Wetland Culvert**

[82] Warning: Early inflow requires earlier time span

Inflow Area = 1.381 ac, 38.58% Impervious, Inflow Depth > 6.48" for 100-YR Storm event  
 Inflow = 6.53 cfs @ 12.34 hrs, Volume= 0.746 af  
 Outflow = 5.48 cfs @ 12.50 hrs, Volume= 0.740 af, Atten= 16%, Lag= 9.3 min  
 Primary = 5.48 cfs @ 12.50 hrs, Volume= 0.740 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 158.11' @ 12.50 hrs Surf.Area= 4,214 sf Storage= 3,391 cf

Plug-Flow detention time= 13.8 min calculated for 0.740 af (99% of inflow)  
 Center-of-Mass det. time= 10.4 min ( 784.4 - 774.0 )

Volume	Invert	Avail.Storage	Storage Description
#1	156.50'	18,921 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
156.50	190	0	0
158.00	3,770	2,970	2,970
160.00	12,181	15,951	18,921

Device	Routing	Invert	Outlet Devices
#1	Primary	156.70'	<b>18.0" Round Culvert</b> L= 359.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 156.70' / 145.20' S= 0.0320 ' S= 0.0320 ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

**Primary OutFlow** Max=5.48 cfs @ 12.50 hrs HW=158.10' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 5.48 cfs @ 3.19 fps)

**Summary for Link AP1: Wetland**

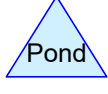
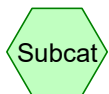
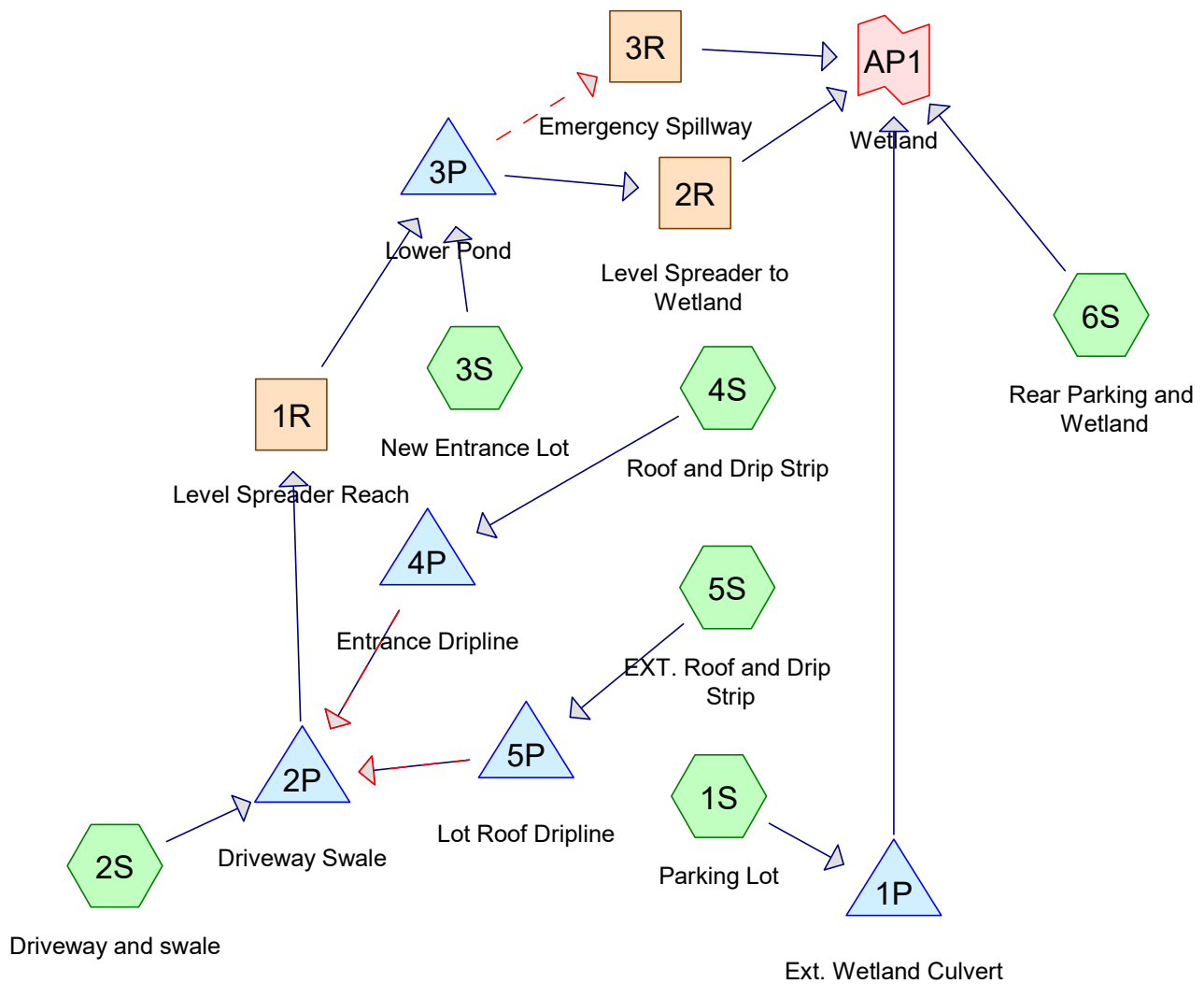
Inflow Area = 8.455 ac, 17.22% Impervious, Inflow Depth > 5.99" for 100-YR Storm event  
 Inflow = 39.80 cfs @ 12.26 hrs, Volume= 4.220 af  
 Primary = 39.80 cfs @ 12.26 hrs, Volume= 4.220 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs



## **DEVELOPED CONDITION CALCULATIONS**







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### Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.005	61	>75% Grass cover, Good, HSG B (6S)
0.940	80	>75% Grass cover, Good, HSG D (1S, 2S, 3S, 6S)
0.002	98	Impervious Area, HSG B (6S)
1.641	98	Impervious Area, HSG D (1S, 2S, 3S, 4S, 5S, 6S)
0.042	55	Woods, Good, HSG B (6S)
2.157	77	Woods, Good, HSG D (1S, 3S, 6S)
0.014	55	Woods/Wetland, Good, HSG B (6S)
3.477	77	Woods/Wetland, Good, HSG D (1S, 6S)
0.176	79	Woods/grass comb., Good, HSG D (2S, 3S)
<b>8.454</b>	<b>81</b>	<b>TOTAL AREA</b>



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Type III 24-hr 2-YR Storm Rainfall=3.30"

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points  
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
 Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

<b>Subcatchment 1S: Parking Lot</b>	Runoff Area=33,888 sf 43.19% Impervious Runoff Depth>1.79" Flow Length=259' Tc=20.1 min CN=86 Runoff=1.17 cfs 0.116 af
<b>Subcatchment 2S: Driveway and swale</b>	Runoff Area=19,976 sf 43.44% Impervious Runoff Depth>1.96" Flow Length=110' Tc=4.7 min CN=88 Runoff=1.14 cfs 0.075 af
<b>Subcatchment 3S: New Entrance Lot</b>	Runoff Area=35,989 sf 14.99% Impervious Runoff Depth>1.49" Flow Length=267' Tc=32.1 min CN=82 Runoff=0.86 cfs 0.102 af
<b>Subcatchment 4S: Roof and Drip Strip</b>	Runoff Area=4,446 sf 100.00% Impervious Runoff Depth>2.87" Flow Length=37' Tc=6.0 min CN=98 Runoff=0.32 cfs 0.024 af
<b>Subcatchment 5S: EXT. Roof and Drip</b>	Runoff Area=2,670 sf 100.00% Impervious Runoff Depth>2.87" Flow Length=33' Tc=6.0 min CN=98 Runoff=0.19 cfs 0.015 af
<b>Subcatchment 6S: Rear Parking and</b>	Runoff Area=271,308 sf 13.17% Impervious Runoff Depth>1.36" Flow Length=206' Tc=14.0 min CN=80 Runoff=8.25 cfs 0.708 af
<b>Reach 1R: Level Spreader Reach</b>	Avg. Flow Depth=0.25' Max Vel=0.15 fps Inflow=0.97 cfs 0.110 af n=0.800 L=62.0' S=0.0565 ' ' Capacity=12.64 cfs Outflow=0.90 cfs 0.109 af
<b>Reach 2R: Level Spreader to Wetland</b>	Avg. Flow Depth=0.22' Max Vel=0.19 fps Inflow=1.58 cfs 0.208 af n=0.800 L=83.0' S=0.0964 ' ' Capacity=26.40 cfs Outflow=1.52 cfs 0.206 af
<b>Reach 3R: Emergency Spillway</b>	Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0.000 af n=0.800 L=88.0' S=0.0966 ' ' Capacity=26.43 cfs Outflow=0.00 cfs 0.000 af
<b>Pond 1P: Ext. Wetland Culvert</b>	Peak Elev=157.20' Storage=726 cf Inflow=1.17 cfs 0.116 af 18.0" Round Culvert n=0.013 L=359.0' S=0.0320 ' ' Outflow=1.00 cfs 0.112 af
<b>Pond 2P: Driveway Swale</b>	Peak Elev=158.08' Storage=800 cf Inflow=1.40 cfs 0.113 af 12.0" Round Culvert n=0.013 L=175.0' S=0.0057 ' ' Outflow=0.97 cfs 0.110 af
<b>Pond 3P: Lower Pond</b>	Peak Elev=148.79' Storage=989 cf Inflow=1.75 cfs 0.212 af Primary=1.58 cfs 0.208 af Secondary=0.00 cfs 0.000 af Outflow=1.58 cfs 0.208 af
<b>Pond 4P: Entrance Dripline</b>	Peak Elev=160.31' Storage=245 cf Inflow=0.32 cfs 0.024 af Primary=0.19 cfs 0.024 af Secondary=0.00 cfs 0.000 af Outflow=0.19 cfs 0.024 af
<b>Pond 5P: Lot Roof Dripline</b>	Peak Elev=159.78' Storage=67 cf Inflow=0.19 cfs 0.015 af Primary=0.16 cfs 0.014 af Secondary=0.00 cfs 0.000 af Outflow=0.16 cfs 0.014 af
<b>Link AP1: Wetland</b>	Inflow=9.16 cfs 1.026 af Primary=9.16 cfs 1.026 af

**Total Runoff Area = 8.454 ac Runoff Volume = 1.040 af Average Runoff Depth = 1.48"**  
**80.57% Pervious = 6.812 ac 19.43% Impervious = 1.642 ac**



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Type III 24-hr 10-YR Storm Rainfall=4.90"

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points  
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
 Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

<b>Subcatchment 1S: Parking Lot</b>	Runoff Area=33,888 sf 43.19% Impervious Runoff Depth>3.16" Flow Length=259' Tc=20.1 min CN=86 Runoff=2.05 cfs 0.205 af
<b>Subcatchment 2S: Driveway and swale</b>	Runoff Area=19,976 sf 43.44% Impervious Runoff Depth>3.37" Flow Length=110' Tc=4.7 min CN=88 Runoff=1.91 cfs 0.129 af
<b>Subcatchment 3S: New Entrance Lot</b>	Runoff Area=35,989 sf 14.99% Impervious Runoff Depth>2.78" Flow Length=267' Tc=32.1 min CN=82 Runoff=1.58 cfs 0.191 af
<b>Subcatchment 4S: Roof and Drip Strip</b>	Runoff Area=4,446 sf 100.00% Impervious Runoff Depth>4.33" Flow Length=37' Tc=6.0 min CN=98 Runoff=0.48 cfs 0.037 af
<b>Subcatchment 5S: EXT. Roof and Drip</b>	Runoff Area=2,670 sf 100.00% Impervious Runoff Depth>4.33" Flow Length=33' Tc=6.0 min CN=98 Runoff=0.29 cfs 0.022 af
<b>Subcatchment 6S: Rear Parking and</b>	Runoff Area=271,308 sf 13.17% Impervious Runoff Depth>2.61" Flow Length=206' Tc=14.0 min CN=80 Runoff=15.82 cfs 1.356 af
<b>Reach 1R: Level Spreader Reach</b>	Avg. Flow Depth=0.34' Max Vel=0.18 fps Inflow=1.62 cfs 0.183 af n=0.800 L=62.0' S=0.0565 ' ' Capacity=12.64 cfs Outflow=1.54 cfs 0.182 af
<b>Reach 2R: Level Spreader to Wetland</b>	Avg. Flow Depth=0.30' Max Vel=0.22 fps Inflow=2.60 cfs 0.369 af n=0.800 L=83.0' S=0.0964 ' ' Capacity=26.40 cfs Outflow=2.56 cfs 0.366 af
<b>Reach 3R: Emergency Spillway</b>	Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0.000 af n=0.800 L=88.0' S=0.0966 ' ' Capacity=26.43 cfs Outflow=0.00 cfs 0.000 af
<b>Pond 1P: Ext. Wetland Culvert</b>	Peak Elev=157.39' Storage=1,104 cf Inflow=2.05 cfs 0.205 af 18.0" Round Culvert n=0.013 L=359.0' S=0.0320 ' ' Outflow=1.75 cfs 0.201 af
<b>Pond 2P: Driveway Swale</b>	Peak Elev=158.30' Storage=1,190 cf Inflow=2.33 cfs 0.187 af 12.0" Round Culvert n=0.013 L=175.0' S=0.0057 ' ' Outflow=1.62 cfs 0.183 af
<b>Pond 3P: Lower Pond</b>	Peak Elev=149.26' Storage=1,763 cf Inflow=3.08 cfs 0.373 af Primary=2.60 cfs 0.369 af Secondary=0.00 cfs 0.000 af Outflow=2.60 cfs 0.369 af
<b>Pond 4P: Entrance Dripline</b>	Peak Elev=160.41' Storage=326 cf Inflow=0.48 cfs 0.037 af Primary=0.30 cfs 0.036 af Secondary=0.00 cfs 0.000 af Outflow=0.30 cfs 0.036 af
<b>Pond 5P: Lot Roof Dripline</b>	Peak Elev=159.86' Storage=86 cf Inflow=0.29 cfs 0.022 af Primary=0.25 cfs 0.022 af Secondary=0.00 cfs 0.000 af Outflow=0.25 cfs 0.022 af
<b>Link AP1: Wetland</b>	Inflow=17.67 cfs 1.923 af Primary=17.67 cfs 1.923 af

**Total Runoff Area = 8.454 ac Runoff Volume = 1.940 af Average Runoff Depth = 2.75"**  
**80.57% Pervious = 6.812 ac 19.43% Impervious = 1.642 ac**

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*Type III 24-hr 25-YR Storm Rainfall=6.20"*

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points  
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
 Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

<b>Subcatchment 1S: Parking Lot</b>	Runoff Area=33,888 sf 43.19% Impervious Runoff Depth>4.32" Flow Length=259' Tc=20.1 min CN=86 Runoff=2.76 cfs 0.280 af
<b>Subcatchment 2S: Driveway and swale</b>	Runoff Area=19,976 sf 43.44% Impervious Runoff Depth>4.55" Flow Length=110' Tc=4.7 min CN=88 Runoff=2.54 cfs 0.174 af
<b>Subcatchment 3S: New Entrance Lot</b>	Runoff Area=35,989 sf 14.99% Impervious Runoff Depth>3.89" Flow Length=267' Tc=32.1 min CN=82 Runoff=2.20 cfs 0.268 af
<b>Subcatchment 4S: Roof and Drip Strip</b>	Runoff Area=4,446 sf 100.00% Impervious Runoff Depth>5.51" Flow Length=37' Tc=6.0 min CN=98 Runoff=0.61 cfs 0.047 af
<b>Subcatchment 5S: EXT. Roof and Drip</b>	Runoff Area=2,670 sf 100.00% Impervious Runoff Depth>5.51" Flow Length=33' Tc=6.0 min CN=98 Runoff=0.36 cfs 0.028 af
<b>Subcatchment 6S: Rear Parking and</b>	Runoff Area=271,308 sf 13.17% Impervious Runoff Depth>3.71" Flow Length=206' Tc=14.0 min CN=80 Runoff=22.25 cfs 1.924 af
<b>Reach 1R: Level Spreader Reach</b>	Avg. Flow Depth=0.39' Max Vel=0.20 fps Inflow=2.06 cfs 0.244 af n=0.800 L=62.0' S=0.0565 ' ' Capacity=12.64 cfs Outflow=1.99 cfs 0.243 af
<b>Reach 2R: Level Spreader to Wetland</b>	Avg. Flow Depth=0.34' Max Vel=0.24 fps Inflow=3.29 cfs 0.506 af n=0.800 L=83.0' S=0.0964 ' ' Capacity=26.40 cfs Outflow=3.26 cfs 0.502 af
<b>Reach 3R: Emergency Spillway</b>	Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0.000 af n=0.800 L=88.0' S=0.0966 ' ' Capacity=26.43 cfs Outflow=0.00 cfs 0.000 af
<b>Pond 1P: Ext. Wetland Culvert</b>	Peak Elev=157.51' Storage=1,413 cf Inflow=2.76 cfs 0.280 af 18.0" Round Culvert n=0.013 L=359.0' S=0.0320 ' ' Outflow=2.36 cfs 0.276 af
<b>Pond 2P: Driveway Swale</b>	Peak Elev=158.47' Storage=1,528 cf Inflow=3.08 cfs 0.248 af 12.0" Round Culvert n=0.013 L=175.0' S=0.0057 ' ' Outflow=2.06 cfs 0.244 af
<b>Pond 3P: Lower Pond</b>	Peak Elev=149.72' Storage=2,638 cf Inflow=4.14 cfs 0.510 af Primary=3.29 cfs 0.506 af Secondary=0.00 cfs 0.000 af Outflow=3.29 cfs 0.506 af
<b>Pond 4P: Entrance Dripline</b>	Peak Elev=160.49' Storage=393 cf Inflow=0.61 cfs 0.047 af Primary=0.37 cfs 0.046 af Secondary=0.00 cfs 0.000 af Outflow=0.37 cfs 0.046 af
<b>Pond 5P: Lot Roof Dripline</b>	Peak Elev=159.93' Storage=102 cf Inflow=0.36 cfs 0.028 af Primary=0.31 cfs 0.028 af Secondary=0.00 cfs 0.000 af Outflow=0.31 cfs 0.028 af
<b>Link AP1: Wetland</b>	Inflow=24.93 cfs 2.702 af Primary=24.93 cfs 2.702 af

**Total Runoff Area = 8.454 ac Runoff Volume = 2.721 af Average Runoff Depth = 3.86"**  
**80.57% Pervious = 6.812 ac 19.43% Impervious = 1.642 ac**



**Electric Light DEV**

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Type III 24-hr 50-YR Storm Rainfall=7.30"

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points  
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
 Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

<b>Subcatchment 1S: Parking Lot</b>	Runoff Area=33,888 sf 43.19% Impervious Runoff Depth>5.32" Flow Length=259' Tc=20.1 min CN=86 Runoff=3.36 cfs 0.345 af
<b>Subcatchment 2S: Driveway and swale</b>	Runoff Area=19,976 sf 43.44% Impervious Runoff Depth>5.56" Flow Length=110' Tc=4.7 min CN=88 Runoff=3.08 cfs 0.213 af
<b>Subcatchment 3S: New Entrance Lot</b>	Runoff Area=35,989 sf 14.99% Impervious Runoff Depth>4.86" Flow Length=267' Tc=32.1 min CN=82 Runoff=2.72 cfs 0.335 af
<b>Subcatchment 4S: Roof and Drip Strip</b>	Runoff Area=4,446 sf 100.00% Impervious Runoff Depth>6.51" Flow Length=37' Tc=6.0 min CN=98 Runoff=0.71 cfs 0.055 af
<b>Subcatchment 5S: EXT. Roof and Drip</b>	Runoff Area=2,670 sf 100.00% Impervious Runoff Depth>6.51" Flow Length=33' Tc=6.0 min CN=98 Runoff=0.43 cfs 0.033 af
<b>Subcatchment 6S: Rear Parking and</b>	Runoff Area=271,308 sf 13.17% Impervious Runoff Depth>4.66" Flow Length=206' Tc=14.0 min CN=80 Runoff=27.76 cfs 2.421 af
<b>Reach 1R: Level Spreader Reach</b>	Avg. Flow Depth=0.42' Max Vel=0.21 fps Inflow=2.35 cfs 0.296 af n=0.800 L=62.0' S=0.0565 ' ' Capacity=12.64 cfs Outflow=2.29 cfs 0.294 af
<b>Reach 2R: Level Spreader to Wetland</b>	Avg. Flow Depth=0.37' Max Vel=0.25 fps Inflow=3.79 cfs 0.624 af n=0.800 L=83.0' S=0.0964 ' ' Capacity=26.40 cfs Outflow=3.76 cfs 0.619 af
<b>Reach 3R: Emergency Spillway</b>	Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0.000 af n=0.800 L=88.0' S=0.0966 ' ' Capacity=26.43 cfs Outflow=0.00 cfs 0.000 af
<b>Pond 1P: Ext. Wetland Culvert</b>	Peak Elev=157.61' Storage=1,678 cf Inflow=3.36 cfs 0.345 af 18.0" Round Culvert n=0.013 L=359.0' S=0.0320 ' ' Outflow=2.87 cfs 0.341 af
<b>Pond 2P: Driveway Swale</b>	Peak Elev=158.62' Storage=1,851 cf Inflow=3.73 cfs 0.300 af 12.0" Round Culvert n=0.013 L=175.0' S=0.0057 ' ' Outflow=2.35 cfs 0.296 af
<b>Pond 3P: Lower Pond</b>	Peak Elev=150.11' Storage=3,506 cf Inflow=4.98 cfs 0.629 af Primary=3.79 cfs 0.624 af Secondary=0.00 cfs 0.000 af Outflow=3.79 cfs 0.624 af
<b>Pond 4P: Entrance Dripline</b>	Peak Elev=160.57' Storage=454 cf Inflow=0.71 cfs 0.055 af Primary=0.42 cfs 0.054 af Secondary=0.00 cfs 0.000 af Outflow=0.42 cfs 0.054 af
<b>Pond 5P: Lot Roof Dripline</b>	Peak Elev=159.99' Storage=116 cf Inflow=0.43 cfs 0.033 af Primary=0.36 cfs 0.033 af Secondary=0.00 cfs 0.000 af Outflow=0.36 cfs 0.033 af
<b>Link AP1: Wetland</b>	Inflow=31.13 cfs 3.381 af Primary=31.13 cfs 3.381 af

**Total Runoff Area = 8.454 ac Runoff Volume = 3.402 af Average Runoff Depth = 4.83"**  
**80.57% Pervious = 6.812 ac 19.43% Impervious = 1.642 ac**

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*Type III 24-hr 100-YR Storm Rainfall=8.70"*

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points  
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
 Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

<b>Subcatchment 1S: Parking Lot</b>	Runoff Area=33,888 sf 43.19% Impervious Runoff Depth>6.61" Flow Length=259' Tc=20.1 min CN=86 Runoff=4.13 cfs 0.428 af
<b>Subcatchment 2S: Driveway and swale</b>	Runoff Area=19,976 sf 43.44% Impervious Runoff Depth>6.85" Flow Length=110' Tc=4.7 min CN=88 Runoff=3.75 cfs 0.262 af
<b>Subcatchment 3S: New Entrance Lot</b>	Runoff Area=35,989 sf 14.99% Impervious Runoff Depth>6.12" Flow Length=267' Tc=32.1 min CN=82 Runoff=3.39 cfs 0.421 af
<b>Subcatchment 4S: Roof and Drip Strip</b>	Runoff Area=4,446 sf 100.00% Impervious Runoff Depth>7.78" Flow Length=37' Tc=6.0 min CN=98 Runoff=0.85 cfs 0.066 af
<b>Subcatchment 5S: EXT. Roof and Drip</b>	Runoff Area=2,670 sf 100.00% Impervious Runoff Depth>7.78" Flow Length=33' Tc=6.0 min CN=98 Runoff=0.51 cfs 0.040 af
<b>Subcatchment 6S: Rear Parking and</b>	Runoff Area=271,308 sf 13.17% Impervious Runoff Depth>5.91" Flow Length=206' Tc=14.0 min CN=80 Runoff=34.80 cfs 3.068 af
<b>Reach 1R: Level Spreader Reach</b>	Avg. Flow Depth=0.45' Max Vel=0.21 fps Inflow=2.69 cfs 0.362 af n=0.800 L=62.0' S=0.0565 ' ' Capacity=12.64 cfs Outflow=2.64 cfs 0.360 af
<b>Reach 2R: Level Spreader to Wetland</b>	Avg. Flow Depth=0.39' Max Vel=0.26 fps Inflow=4.33 cfs 0.775 af n=0.800 L=83.0' S=0.0964 ' ' Capacity=26.40 cfs Outflow=4.31 cfs 0.770 af
<b>Reach 3R: Emergency Spillway</b>	Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0.000 af n=0.800 L=88.0' S=0.0966 ' ' Capacity=26.43 cfs Outflow=0.00 cfs 0.000 af
<b>Pond 1P: Ext. Wetland Culvert</b>	Peak Elev=157.73' Storage=2,024 cf Inflow=4.13 cfs 0.428 af 18.0" Round Culvert n=0.013 L=359.0' S=0.0320 ' ' Outflow=3.50 cfs 0.423 af
<b>Pond 2P: Driveway Swale</b>	Peak Elev=158.81' Storage=2,293 cf Inflow=4.50 cfs 0.366 af 12.0" Round Culvert n=0.013 L=175.0' S=0.0057 ' ' Outflow=2.69 cfs 0.362 af
<b>Pond 3P: Lower Pond</b>	Peak Elev=150.61' Storage=4,745 cf Inflow=6.00 cfs 0.781 af Primary=4.33 cfs 0.775 af Secondary=0.00 cfs 0.000 af Outflow=4.33 cfs 0.775 af
<b>Pond 4P: Entrance Dripline</b>	Peak Elev=160.67' Storage=534 cf Inflow=0.85 cfs 0.066 af Primary=0.48 cfs 0.065 af Secondary=0.00 cfs 0.000 af Outflow=0.48 cfs 0.065 af
<b>Pond 5P: Lot Roof Dripline</b>	Peak Elev=160.07' Storage=136 cf Inflow=0.51 cfs 0.040 af Primary=0.42 cfs 0.039 af Secondary=0.00 cfs 0.000 af Outflow=0.42 cfs 0.039 af
<b>Link AP1: Wetland</b>	Inflow=39.02 cfs 4.262 af Primary=39.02 cfs 4.262 af

**Total Runoff Area = 8.454 ac Runoff Volume = 4.285 af Average Runoff Depth = 6.08"**  
**80.57% Pervious = 6.812 ac 19.43% Impervious = 1.642 ac**



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Type III 24-hr 100-YR Storm Rainfall=8.70"

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**Summary for Subcatchment 1S: Parking Lot**

Runoff = 4.13 cfs @ 12.27 hrs, Volume= 0.428 af, Depth&gt; 6.61"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-YR Storm Rainfall=8.70"

Area (sf)	CN	Description
14,635	98	Impervious Area, HSG D
2,181	80	>75% Grass cover, Good, HSG D
14,518	77	Woods, Good, HSG D
* 2,554	77	Woods/Wetland, Good, HSG D
33,888	86	Weighted Average
19,253		56.81% Pervious Area
14,635		43.19% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.2	82	0.0300	0.13		<b>Sheet Flow, Roadside Swale</b> Grass: Dense n= 0.240 P2= 3.30"
4.6	18	0.0300	0.07		<b>Sheet Flow, Woods</b> Woods: Light underbrush n= 0.400 P2= 3.30"
0.7	56	0.0714	1.34		<b>Shallow Concentrated Flow, Wooded SCF</b> Woodland Kv= 5.0 fps
4.6	103	0.0223	0.37		<b>Shallow Concentrated Flow, Wetland SCF</b> Forest w/Heavy Litter Kv= 2.5 fps
20.1	259	Total			

**Summary for Subcatchment 2S: Driveway and swale**

[49] Hint: Tc&lt;2dt may require smaller dt

Runoff = 3.75 cfs @ 12.07 hrs, Volume= 0.262 af, Depth&gt; 6.85"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-YR Storm Rainfall=8.70"

Area (sf)	CN	Description
* 8,677	98	Impervious Area, HSG D
4,809	79	Woods/grass comb., Good, HSG D
6,490	80	>75% Grass cover, Good, HSG D
19,976	88	Weighted Average
11,299		56.56% Pervious Area
8,677		43.44% Impervious Area

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.7	47	0.0200	1.20		<b>Sheet Flow,</b> Smooth surfaces n= 0.011 P2= 3.30"
4.0	63	0.0700	0.26		<b>Sheet Flow,</b> Grass: Short n= 0.150 P2= 3.30"
4.7	110	Total			

**Summary for Subcatchment 3S: New Entrance Lot**

Runoff = 3.39 cfs @ 12.43 hrs, Volume= 0.421 af, Depth&gt; 6.12"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-YR Storm Rainfall=8.70"

Area (sf)	CN	Description
* 5,393	98	Impervious Area, HSG D
17,051	80	>75% Grass cover, Good, HSG D
10,698	77	Woods, Good, HSG D
2,847	79	Woods/grass comb., Good, HSG D
35,989	82	Weighted Average
30,596		85.01% Pervious Area
5,393		14.99% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.9	100	0.0350	0.10		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.30"
2.7	67	0.0070	0.42		<b>Shallow Concentrated Flow,</b> Woodland Kv= 5.0 fps
12.5	100	0.0750	0.13		<b>Sheet Flow, new level spreader</b> Woods: Light underbrush n= 0.400 P2= 3.30"
32.1	267	Total			

**Summary for Subcatchment 4S: Roof and Drip Strip**

Runoff = 0.85 cfs @ 12.09 hrs, Volume= 0.066 af, Depth&gt; 7.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-YR Storm Rainfall=8.70"

Area (sf)	CN	Description
* 4,446	98	Impervious Area, HSG D
4,446		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	37		0.10		<b>Direct Entry,</b>



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**Summary for Subcatchment 5S: EXT. Roof and Drip Strip**

Runoff = 0.51 cfs @ 12.09 hrs, Volume= 0.040 af, Depth&gt; 7.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-YR Storm Rainfall=8.70"

Area (sf)	CN	Description
* 2,670	98	Impervious Area, HSG D
2,670		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	33		0.09		<b>Direct Entry,</b>

**Summary for Subcatchment 6S: Rear Parking and Wetland**

Runoff = 34.80 cfs @ 12.19 hrs, Volume= 3.068 af, Depth&gt; 5.91"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-YR Storm Rainfall=8.70"

Area (sf)	CN	Description
15,236	80	>75% Grass cover, Good, HSG D
35,647	98	Impervious Area, HSG D
68,763	77	Woods, Good, HSG D
* 148,914	77	Woods/Wetland, Good, HSG D
1,845	55	Woods, Good, HSG B
212	61	>75% Grass cover, Good, HSG B
74	98	Impervious Area, HSG B
* 617	55	Woods/Wetland, Good, HSG B
271,308	80	Weighted Average
235,587		86.83% Pervious Area
35,721		13.17% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.8	100	0.0700	0.13		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.30"
1.2	106	0.0943	1.54		<b>Shallow Concentrated Flow,</b> Woodland Kv= 5.0 fps
14.0	206	Total			

**Summary for Reach 1R: Level Spreader Reach**

[79] Warning: Submerged Pond 2P Primary device # 1 OUTLET by 0.45'

Inflow Area = 0.622 ac, 58.29% Impervious, Inflow Depth > 6.99" for 100-YR Storm event  
 Inflow = 2.69 cfs @ 12.21 hrs, Volume= 0.362 af  
 Outflow = 2.64 cfs @ 12.37 hrs, Volume= 0.360 af, Atten= 2%, Lag= 9.5 min

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Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Max. Velocity= 0.21 fps, Min. Travel Time= 4.8 min

Avg. Velocity = 0.09 fps, Avg. Travel Time= 11.9 min

Peak Storage= 762 cf @ 12.29 hrs

Average Depth at Peak Storage= 0.45'

Bank-Full Depth= 1.00' Flow Area= 38.0 sf, Capacity= 12.64 cfs

18.00' x 1.00' deep channel, n= 0.800 Sheet flow: Woods+dense brush

Side Slope Z-value= 20.0 '/' Top Width= 58.00'

Length= 62.0' Slope= 0.0565 '/'

Inlet Invert= 156.50', Outlet Invert= 153.00'



### Summary for Reach 2R: Level Spreader to Wetland

[79] Warning: Submerged Pond 3P Primary device # 1 OUTLET by 0.39'

Inflow Area = 1.448 ac, 33.59% Impervious, Inflow Depth > 6.43" for 100-YR Storm event

Inflow = 4.33 cfs @ 12.70 hrs, Volume= 0.775 af

Outflow = 4.31 cfs @ 12.85 hrs, Volume= 0.770 af, Atten= 1%, Lag= 9.1 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Max. Velocity= 0.26 fps, Min. Travel Time= 5.3 min

Avg. Velocity = 0.11 fps, Avg. Travel Time= 12.4 min

Peak Storage= 1,364 cf @ 12.76 hrs

Average Depth at Peak Storage= 0.39'

Bank-Full Depth= 1.00' Flow Area= 60.0 sf, Capacity= 26.40 cfs

30.00' x 1.00' deep channel, n= 0.800 Sheet flow: Woods+dense brush

Side Slope Z-value= 30.0 '/' Top Width= 90.00'

Length= 83.0' Slope= 0.0964 '/'

Inlet Invert= 147.50', Outlet Invert= 139.50'





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**Summary for Reach 3R: Emergency Spillway**

Inflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af  
 Outflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min

Avg. Velocity= 0.00 fps, Avg. Travel Time= 0.0 min

Peak Storage= 0 cf @ 5.00 hrs

Average Depth at Peak Storage= 0.00'

Bank-Full Depth= 1.00' Flow Area= 60.0 sf, Capacity= 26.43 cfs

30.00' x 1.00' deep channel, n= 0.800 Sheet flow: Woods+dense brush

Side Slope Z-value= 30.0 ' Top Width= 90.00'

Length= 88.0' Slope= 0.0966 ' / '

Inlet Invert= 148.00', Outlet Invert= 139.50'

**Summary for Pond 1P: Ext. Wetland Culvert**

[82] Warning: Early inflow requires earlier time span

Inflow Area = 0.778 ac, 43.19% Impervious, Inflow Depth &gt; 6.61" for 100-YR Storm event

Inflow = 4.13 cfs @ 12.27 hrs, Volume= 0.428 af

Outflow = 3.50 cfs @ 12.39 hrs, Volume= 0.423 af, Atten= 15%, Lag= 7.4 min

Primary = 3.50 cfs @ 12.39 hrs, Volume= 0.423 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 157.73' @ 12.39 hrs Surf.Area= 3,114 sf Storage= 2,024 cf

Plug-Flow detention time= 16.6 min calculated for 0.423 af (99% of inflow)

Center-of-Mass det. time= 11.9 min ( 779.4 - 767.5 )

Volume	Invert	Avail.Storage	Storage Description
#1	156.50'	18,921 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
156.50	190	0	0
158.00	3,770	2,970	2,970
160.00	12,181	15,951	18,921

Device	Routing	Invert	Outlet Devices
#1	Primary	156.70'	<b>18.0" Round Culvert</b>

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L= 359.0' CPP, projecting, no headwall, Ke= 0.900  
 Inlet / Outlet Invert= 156.70' / 145.20' S= 0.0320 ' / ' Cc= 0.900  
 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

**Primary OutFlow** Max=3.49 cfs @ 12.39 hrs HW=157.72' (Free Discharge)↑**1=Culvert** (Inlet Controls 3.49 cfs @ 2.72 fps)**Summary for Pond 2P: Driveway Swale**

[82] Warning: Early inflow requires earlier time span

[79] Warning: Submerged Pond 4P Primary device # 1 OUTLET by 1.21'

[79] Warning: Submerged Pond 5P Primary device # 1 OUTLET by 1.21'

Inflow Area = 0.622 ac, 58.29% Impervious, Inflow Depth > 7.07" for 100-YR Storm event  
 Inflow = 4.50 cfs @ 12.07 hrs, Volume= 0.366 af  
 Outflow = 2.69 cfs @ 12.21 hrs, Volume= 0.362 af, Atten= 40%, Lag= 8.5 min  
 Primary = 2.69 cfs @ 12.21 hrs, Volume= 0.362 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 158.81' @ 12.21 hrs Surf.Area= 2,420 sf Storage= 2,293 cf

Plug-Flow detention time= 19.5 min calculated for 0.361 af (99% of inflow)  
 Center-of-Mass det. time= 14.6 min ( 765.9 - 751.3 )

Volume	Invert	Avail.Storage	Storage Description
#1	157.50'	5,899 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
157.50	1,101	0	0
158.00	1,579	670	670
160.00	3,650	5,229	5,899

Device	Routing	Invert	Outlet Devices
#1	Primary	157.50'	<b>12.0" Round Culvert</b> L= 175.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 157.50' / 156.50' S= 0.0057 ' / ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

**Primary OutFlow** Max=2.68 cfs @ 12.21 hrs HW=158.81' (Free Discharge)↑**1=Culvert** (Inlet Controls 2.68 cfs @ 3.42 fps)**Summary for Pond 3P: Lower Pond**

Inflow Area = 1.448 ac, 33.59% Impervious, Inflow Depth > 6.47" for 100-YR Storm event  
 Inflow = 6.00 cfs @ 12.41 hrs, Volume= 0.781 af  
 Outflow = 4.33 cfs @ 12.70 hrs, Volume= 0.775 af, Atten= 28%, Lag= 17.2 min  
 Primary = 4.33 cfs @ 12.70 hrs, Volume= 0.775 af  
 Secondary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs



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Peak Elev= 150.61' @ 12.70 hrs Surf.Area= 2,723 sf Storage= 4,745 cf

Plug-Flow detention time= 15.4 min calculated for 0.773 af (99% of inflow)

Center-of-Mass det. time= 12.5 min ( 793.8 - 781.2 )

Volume	Invert	Avail.Storage	Storage Description
#1	148.00'	13,649 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
148.00	1,016	0	0
150.00	2,230	3,246	3,246
152.00	3,858	6,088	9,334
153.00	4,771	4,315	13,649

Device	Routing	Invert	Outlet Devices
#1	Primary	148.00'	<b>12.0" Round Culvert</b> L= 32.7' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 148.00' / 147.50' S= 0.0153 ' S= 0.0153 ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#2	Secondary	151.00'	<b>24.0' long x 14.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.64 2.67 2.70 2.65 2.64 2.65 2.65 2.63

**Primary OutFlow** Max=4.33 cfs @ 12.70 hrs HW=150.61' (Free Discharge)↑**1=Culvert** (Inlet Controls 4.33 cfs @ 5.52 fps)**Secondary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=148.00' (Free Discharge)↑**2=Broad-Crested Rectangular Weir** ( Controls 0.00 cfs)**Summary for Pond 4P: Entrance Dripline**

[82] Warning: Early inflow requires earlier time span

Inflow Area = 0.102 ac, 100.00% Impervious, Inflow Depth > 7.78" for 100-YR Storm event  
 Inflow = 0.85 cfs @ 12.09 hrs, Volume= 0.066 af  
 Outflow = 0.48 cfs @ 12.21 hrs, Volume= 0.065 af, Atten= 43%, Lag= 7.5 min  
 Primary = 0.48 cfs @ 12.21 hrs, Volume= 0.065 af  
 Secondary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 160.67' @ 12.21 hrs Surf.Area= 795 sf Storage= 534 cf

Plug-Flow detention time= 33.1 min calculated for 0.065 af (98% of inflow)

Center-of-Mass det. time= 24.1 min ( 756.9 - 732.8 )

Volume	Invert	Avail.Storage	Storage Description
#1	160.00'	1,590 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)

**Electric Light DEV**

Type III 24-hr 100-YR Storm Rainfall=8.70"

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Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
160.00	795	0	0
162.00	795	1,590	1,590

Device	Routing	Invert	Outlet Devices
#1	Primary	160.00'	<b>6.0" Round Culvert</b> L= 24.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 160.00' / 157.60' S= 0.1000 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#2	Secondary	161.90'	<b>44.0' long x 0.5' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

**Primary OutFlow** Max=0.48 cfs @ 12.21 hrs HW=160.67' (Free Discharge)↑**1=Culvert** (Inlet Controls 0.48 cfs @ 2.46 fps)**Secondary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=160.00' (Free Discharge)↑**2=Broad-Crested Rectangular Weir** ( Controls 0.00 cfs)**Summary for Pond 5P: Lot Roof Dripline**

[82] Warning: Early inflow requires earlier time span

Inflow Area = 0.061 ac, 100.00% Impervious, Inflow Depth > 7.78" for 100-YR Storm event  
 Inflow = 0.51 cfs @ 12.09 hrs, Volume= 0.040 af  
 Outflow = 0.42 cfs @ 12.14 hrs, Volume= 0.039 af, Atten= 17%, Lag= 3.5 min  
 Primary = 0.42 cfs @ 12.14 hrs, Volume= 0.039 af  
 Secondary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 160.07' @ 12.14 hrs Surf.Area= 238 sf Storage= 136 cf

Plug-Flow detention time= 12.6 min calculated for 0.039 af (99% of inflow)

Center-of-Mass det. time= 9.0 min ( 741.8 - 732.8 )

Volume	Invert	Avail.Storage	Storage Description
#1	159.50'	476 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
159.50	238	0	0
161.50	238	476	476

Device	Routing	Invert	Outlet Devices
#1	Primary	159.50'	<b>6.0" Round Culvert</b> L= 102.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 159.50' / 157.60' S= 0.0186 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#2	Secondary	160.90'	<b>48.0' long x 0.5' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00



## Electric Light DEV

Type III 24-hr 100-YR Storm Rainfall=8.70"

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Coef. (English) 2.80 2.92 3.08 3.30 3.32

**Primary OutFlow** Max=0.42 cfs @ 12.14 hrs HW=160.07' (Free Discharge)

↑**1=Culvert** (Inlet Controls 0.42 cfs @ 2.14 fps)

**Secondary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=159.50' (Free Discharge)

↑**2=Broad-Crested Rectangular Weir** ( Controls 0.00 cfs)

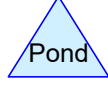
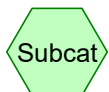
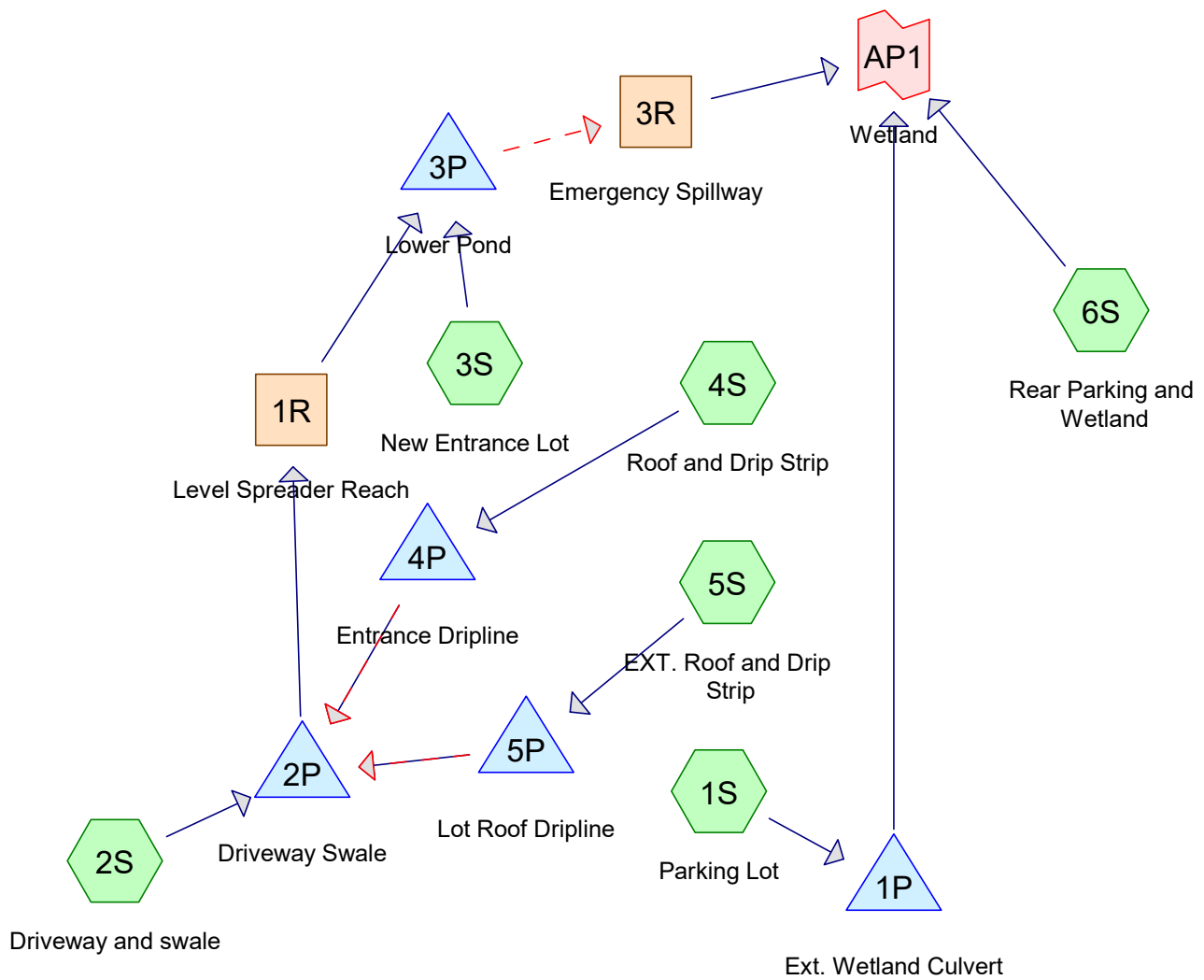
### Summary for Link AP1: Wetland

Inflow Area = 8.454 ac, 19.43% Impervious, Inflow Depth > 6.05" for 100-YR Storm event

Inflow = 39.02 cfs @ 12.20 hrs, Volume= 4.262 af

Primary = 39.02 cfs @ 12.20 hrs, Volume= 4.262 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs





## Electric Light DEV Clogged

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### Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.005	61	>75% Grass cover, Good, HSG B (6S)
0.940	80	>75% Grass cover, Good, HSG D (1S, 2S, 3S, 6S)
0.002	98	Impervious Area, HSG B (6S)
1.641	98	Impervious Area, HSG D (1S, 2S, 3S, 4S, 5S, 6S)
0.042	55	Woods, Good, HSG B (6S)
2.157	77	Woods, Good, HSG D (1S, 3S, 6S)
0.014	55	Woods/Wetland, Good, HSG B (6S)
3.477	77	Woods/Wetland, Good, HSG D (1S, 6S)
0.176	79	Woods/grass comb., Good, HSG D (2S, 3S)
<b>8.454</b>	<b>81</b>	<b>TOTAL AREA</b>

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Type III 24-hr 2-YR Storm Rainfall=3.30"

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points  
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
 Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

<b>Subcatchment 1S: Parking Lot</b>	Runoff Area=33,888 sf 43.19% Impervious Runoff Depth>1.79" Flow Length=259' Tc=20.1 min CN=86 Runoff=1.17 cfs 0.116 af
<b>Subcatchment 2S: Driveway and swale</b>	Runoff Area=19,976 sf 43.44% Impervious Runoff Depth>1.96" Flow Length=110' Tc=4.7 min CN=88 Runoff=1.14 cfs 0.075 af
<b>Subcatchment 3S: New Entrance Lot</b>	Runoff Area=35,989 sf 14.99% Impervious Runoff Depth>1.49" Flow Length=288' Tc=20.0 min CN=82 Runoff=1.05 cfs 0.103 af
<b>Subcatchment 4S: Roof and Drip Strip</b>	Runoff Area=4,446 sf 100.00% Impervious Runoff Depth>2.87" Flow Length=37' Tc=6.0 min CN=98 Runoff=0.32 cfs 0.024 af
<b>Subcatchment 5S: EXT. Roof and Drip</b>	Runoff Area=2,670 sf 100.00% Impervious Runoff Depth>2.87" Flow Length=33' Tc=6.0 min CN=98 Runoff=0.19 cfs 0.015 af
<b>Subcatchment 6S: Rear Parking and</b>	Runoff Area=271,308 sf 13.17% Impervious Runoff Depth>1.36" Flow Length=206' Tc=14.0 min CN=80 Runoff=8.25 cfs 0.708 af
<b>Reach 1R: Level Spreader Reach</b>	Avg. Flow Depth=0.25' Max Vel=0.15 fps Inflow=0.97 cfs 0.110 af n=0.800 L=62.0' S=0.0565 '/' Capacity=12.64 cfs Outflow=0.90 cfs 0.109 af
<b>Reach 3R: Emergency Spillway</b>	Avg. Flow Depth=0.24' Max Vel=0.20 fps Inflow=1.86 cfs 0.212 af n=0.800 L=88.0' S=0.0966 '/' Capacity=26.43 cfs Outflow=1.72 cfs 0.209 af
<b>Pond 1P: Ext. Wetland Culvert</b>	Peak Elev=157.20' Storage=726 cf Inflow=1.17 cfs 0.116 af 18.0" Round Culvert n=0.013 L=359.0' S=0.0320 '/' Outflow=1.00 cfs 0.112 af
<b>Pond 2P: Driveway Swale</b>	Peak Elev=158.08' Storage=800 cf Inflow=1.40 cfs 0.113 af 12.0" Round Culvert n=0.013 L=175.0' S=0.0057 '/' Outflow=0.97 cfs 0.110 af
<b>Pond 3P: Lower Pond</b>	Peak Elev=151.11' Storage=6,212 cf Inflow=1.87 cfs 0.212 af Outflow=1.86 cfs 0.212 af
<b>Pond 4P: Entrance Dripline</b>	Peak Elev=160.31' Storage=245 cf Inflow=0.32 cfs 0.024 af Primary=0.19 cfs 0.024 af Secondary=0.00 cfs 0.000 af Outflow=0.19 cfs 0.024 af
<b>Pond 5P: Lot Roof Dripline</b>	Peak Elev=159.78' Storage=67 cf Inflow=0.19 cfs 0.015 af Primary=0.16 cfs 0.014 af Secondary=0.00 cfs 0.000 af Outflow=0.16 cfs 0.014 af
<b>Link AP1: Wetland</b>	Inflow=9.35 cfs 1.029 af Primary=9.35 cfs 1.029 af

**Total Runoff Area = 8.454 ac Runoff Volume = 1.040 af Average Runoff Depth = 1.48"**  
**80.57% Pervious = 6.812 ac 19.43% Impervious = 1.642 ac**



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Type III 24-hr 10-YR Storm Rainfall=4.90"

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points  
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
 Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

<b>Subcatchment 1S: Parking Lot</b>	Runoff Area=33,888 sf 43.19% Impervious Runoff Depth>3.16" Flow Length=259' Tc=20.1 min CN=86 Runoff=2.05 cfs 0.205 af
<b>Subcatchment 2S: Driveway and swale</b>	Runoff Area=19,976 sf 43.44% Impervious Runoff Depth>3.37" Flow Length=110' Tc=4.7 min CN=88 Runoff=1.91 cfs 0.129 af
<b>Subcatchment 3S: New Entrance Lot</b>	Runoff Area=35,989 sf 14.99% Impervious Runoff Depth>2.79" Flow Length=288' Tc=20.0 min CN=82 Runoff=1.95 cfs 0.192 af
<b>Subcatchment 4S: Roof and Drip Strip</b>	Runoff Area=4,446 sf 100.00% Impervious Runoff Depth>4.33" Flow Length=37' Tc=6.0 min CN=98 Runoff=0.48 cfs 0.037 af
<b>Subcatchment 5S: EXT. Roof and Drip</b>	Runoff Area=2,670 sf 100.00% Impervious Runoff Depth>4.33" Flow Length=33' Tc=6.0 min CN=98 Runoff=0.29 cfs 0.022 af
<b>Subcatchment 6S: Rear Parking and</b>	Runoff Area=271,308 sf 13.17% Impervious Runoff Depth>2.61" Flow Length=206' Tc=14.0 min CN=80 Runoff=15.82 cfs 1.356 af
<b>Reach 1R: Level Spreader Reach</b>	Avg. Flow Depth=0.34' Max Vel=0.18 fps Inflow=1.62 cfs 0.183 af n=0.800 L=62.0' S=0.0565 '/' Capacity=12.64 cfs Outflow=1.54 cfs 0.182 af
<b>Reach 3R: Emergency Spillway</b>	Avg. Flow Depth=0.33' Max Vel=0.24 fps Inflow=3.38 cfs 0.373 af n=0.800 L=88.0' S=0.0966 '/' Capacity=26.43 cfs Outflow=3.20 cfs 0.370 af
<b>Pond 1P: Ext. Wetland Culvert</b>	Peak Elev=157.39' Storage=1,104 cf Inflow=2.05 cfs 0.205 af 18.0" Round Culvert n=0.013 L=359.0' S=0.0320 '/' Outflow=1.75 cfs 0.201 af
<b>Pond 2P: Driveway Swale</b>	Peak Elev=158.30' Storage=1,190 cf Inflow=2.33 cfs 0.187 af 12.0" Round Culvert n=0.013 L=175.0' S=0.0057 '/' Outflow=1.62 cfs 0.183 af
<b>Pond 3P: Lower Pond</b>	Peak Elev=151.16' Storage=6,378 cf Inflow=3.41 cfs 0.374 af Outflow=3.38 cfs 0.373 af
<b>Pond 4P: Entrance Dripline</b>	Peak Elev=160.41' Storage=326 cf Inflow=0.48 cfs 0.037 af Primary=0.30 cfs 0.036 af Secondary=0.00 cfs 0.000 af Outflow=0.30 cfs 0.036 af
<b>Pond 5P: Lot Roof Dripline</b>	Peak Elev=159.86' Storage=86 cf Inflow=0.29 cfs 0.022 af Primary=0.25 cfs 0.022 af Secondary=0.00 cfs 0.000 af Outflow=0.25 cfs 0.022 af
<b>Link AP1: Wetland</b>	Inflow=18.16 cfs 1.927 af Primary=18.16 cfs 1.927 af

**Total Runoff Area = 8.454 ac Runoff Volume = 1.941 af Average Runoff Depth = 2.75"**  
**80.57% Pervious = 6.812 ac 19.43% Impervious = 1.642 ac**

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Type III 24-hr 25-YR Storm Rainfall=6.20"

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points  
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
 Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

<b>Subcatchment 1S: Parking Lot</b>	Runoff Area=33,888 sf 43.19% Impervious Runoff Depth>4.32" Flow Length=259' Tc=20.1 min CN=86 Runoff=2.76 cfs 0.280 af
<b>Subcatchment 2S: Driveway and swale</b>	Runoff Area=19,976 sf 43.44% Impervious Runoff Depth>4.55" Flow Length=110' Tc=4.7 min CN=88 Runoff=2.54 cfs 0.174 af
<b>Subcatchment 3S: New Entrance Lot</b>	Runoff Area=35,989 sf 14.99% Impervious Runoff Depth>3.90" Flow Length=288' Tc=20.0 min CN=82 Runoff=2.70 cfs 0.269 af
<b>Subcatchment 4S: Roof and Drip Strip</b>	Runoff Area=4,446 sf 100.00% Impervious Runoff Depth>5.51" Flow Length=37' Tc=6.0 min CN=98 Runoff=0.61 cfs 0.047 af
<b>Subcatchment 5S: EXT. Roof and Drip</b>	Runoff Area=2,670 sf 100.00% Impervious Runoff Depth>5.51" Flow Length=33' Tc=6.0 min CN=98 Runoff=0.36 cfs 0.028 af
<b>Subcatchment 6S: Rear Parking and</b>	Runoff Area=271,308 sf 13.17% Impervious Runoff Depth>3.71" Flow Length=206' Tc=14.0 min CN=80 Runoff=22.25 cfs 1.924 af
<b>Reach 1R: Level Spreader Reach</b>	Avg. Flow Depth=0.39' Max Vel=0.20 fps Inflow=2.06 cfs 0.244 af n=0.800 L=62.0' S=0.0565 '/' Capacity=12.64 cfs Outflow=1.99 cfs 0.243 af
<b>Reach 3R: Emergency Spillway</b>	Avg. Flow Depth=0.40' Max Vel=0.26 fps Inflow=4.56 cfs 0.511 af n=0.800 L=88.0' S=0.0966 '/' Capacity=26.43 cfs Outflow=4.35 cfs 0.507 af
<b>Pond 1P: Ext. Wetland Culvert</b>	Peak Elev=157.51' Storage=1,413 cf Inflow=2.76 cfs 0.280 af 18.0" Round Culvert n=0.013 L=359.0' S=0.0320 '/' Outflow=2.36 cfs 0.276 af
<b>Pond 2P: Driveway Swale</b>	Peak Elev=158.47' Storage=1,528 cf Inflow=3.08 cfs 0.248 af 12.0" Round Culvert n=0.013 L=175.0' S=0.0057 '/' Outflow=2.06 cfs 0.244 af
<b>Pond 3P: Lower Pond</b>	Peak Elev=151.20' Storage=6,492 cf Inflow=4.60 cfs 0.511 af Outflow=4.56 cfs 0.511 af
<b>Pond 4P: Entrance Dripline</b>	Peak Elev=160.49' Storage=393 cf Inflow=0.61 cfs 0.047 af Primary=0.37 cfs 0.046 af Secondary=0.00 cfs 0.000 af Outflow=0.37 cfs 0.046 af
<b>Pond 5P: Lot Roof Dripline</b>	Peak Elev=159.93' Storage=102 cf Inflow=0.36 cfs 0.028 af Primary=0.31 cfs 0.028 af Secondary=0.00 cfs 0.000 af Outflow=0.31 cfs 0.028 af
<b>Link AP1: Wetland</b>	Inflow=25.71 cfs 2.707 af Primary=25.71 cfs 2.707 af

**Total Runoff Area = 8.454 ac Runoff Volume = 2.722 af Average Runoff Depth = 3.86"**  
**80.57% Pervious = 6.812 ac 19.43% Impervious = 1.642 ac**



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Type III 24-hr 50-YR Storm Rainfall=7.30"

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points  
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
 Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

<b>Subcatchment 1S: Parking Lot</b>	Runoff Area=33,888 sf 43.19% Impervious Runoff Depth>5.32" Flow Length=259' Tc=20.1 min CN=86 Runoff=3.36 cfs 0.345 af
<b>Subcatchment 2S: Driveway and swale</b>	Runoff Area=19,976 sf 43.44% Impervious Runoff Depth>5.56" Flow Length=110' Tc=4.7 min CN=88 Runoff=3.08 cfs 0.213 af
<b>Subcatchment 3S: New Entrance Lot</b>	Runoff Area=35,989 sf 14.99% Impervious Runoff Depth>4.88" Flow Length=288' Tc=20.0 min CN=82 Runoff=3.34 cfs 0.336 af
<b>Subcatchment 4S: Roof and Drip Strip</b>	Runoff Area=4,446 sf 100.00% Impervious Runoff Depth>6.51" Flow Length=37' Tc=6.0 min CN=98 Runoff=0.71 cfs 0.055 af
<b>Subcatchment 5S: EXT. Roof and Drip</b>	Runoff Area=2,670 sf 100.00% Impervious Runoff Depth>6.51" Flow Length=33' Tc=6.0 min CN=98 Runoff=0.43 cfs 0.033 af
<b>Subcatchment 6S: Rear Parking and</b>	Runoff Area=271,308 sf 13.17% Impervious Runoff Depth>4.66" Flow Length=206' Tc=14.0 min CN=80 Runoff=27.76 cfs 2.421 af
<b>Reach 1R: Level Spreader Reach</b>	Avg. Flow Depth=0.42' Max Vel=0.21 fps Inflow=2.35 cfs 0.296 af n=0.800 L=62.0' S=0.0565 '/' Capacity=12.64 cfs Outflow=2.29 cfs 0.294 af
<b>Reach 3R: Emergency Spillway</b>	Avg. Flow Depth=0.44' Max Vel=0.28 fps Inflow=5.51 cfs 0.629 af n=0.800 L=88.0' S=0.0966 '/' Capacity=26.43 cfs Outflow=5.25 cfs 0.624 af
<b>Pond 1P: Ext. Wetland Culvert</b>	Peak Elev=157.61' Storage=1,678 cf Inflow=3.36 cfs 0.345 af 18.0" Round Culvert n=0.013 L=359.0' S=0.0320 '/' Outflow=2.87 cfs 0.341 af
<b>Pond 2P: Driveway Swale</b>	Peak Elev=158.62' Storage=1,851 cf Inflow=3.73 cfs 0.300 af 12.0" Round Culvert n=0.013 L=175.0' S=0.0057 '/' Outflow=2.35 cfs 0.296 af
<b>Pond 3P: Lower Pond</b>	Peak Elev=151.22' Storage=6,575 cf Inflow=5.53 cfs 0.630 af Outflow=5.51 cfs 0.629 af
<b>Pond 4P: Entrance Dripline</b>	Peak Elev=160.57' Storage=454 cf Inflow=0.71 cfs 0.055 af Primary=0.42 cfs 0.054 af Secondary=0.00 cfs 0.000 af Outflow=0.42 cfs 0.054 af
<b>Pond 5P: Lot Roof Dripline</b>	Peak Elev=159.99' Storage=116 cf Inflow=0.43 cfs 0.033 af Primary=0.36 cfs 0.033 af Secondary=0.00 cfs 0.000 af Outflow=0.36 cfs 0.033 af
<b>Link AP1: Wetland</b>	Inflow=32.18 cfs 3.386 af Primary=32.18 cfs 3.386 af

**Total Runoff Area = 8.454 ac Runoff Volume = 3.403 af Average Runoff Depth = 4.83"**  
**80.57% Pervious = 6.812 ac 19.43% Impervious = 1.642 ac**

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Type III 24-hr 100-YR Storm Rainfall=8.70"

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points  
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
 Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

<b>Subcatchment 1S: Parking Lot</b>	Runoff Area=33,888 sf 43.19% Impervious Runoff Depth>6.61" Flow Length=259' Tc=20.1 min CN=86 Runoff=4.13 cfs 0.428 af
<b>Subcatchment 2S: Driveway and swale</b>	Runoff Area=19,976 sf 43.44% Impervious Runoff Depth>6.85" Flow Length=110' Tc=4.7 min CN=88 Runoff=3.75 cfs 0.262 af
<b>Subcatchment 3S: New Entrance Lot</b>	Runoff Area=35,989 sf 14.99% Impervious Runoff Depth>6.14" Flow Length=288' Tc=20.0 min CN=82 Runoff=4.16 cfs 0.423 af
<b>Subcatchment 4S: Roof and Drip Strip</b>	Runoff Area=4,446 sf 100.00% Impervious Runoff Depth>7.78" Flow Length=37' Tc=6.0 min CN=98 Runoff=0.85 cfs 0.066 af
<b>Subcatchment 5S: EXT. Roof and Drip</b>	Runoff Area=2,670 sf 100.00% Impervious Runoff Depth>7.78" Flow Length=33' Tc=6.0 min CN=98 Runoff=0.51 cfs 0.040 af
<b>Subcatchment 6S: Rear Parking and</b>	Runoff Area=271,308 sf 13.17% Impervious Runoff Depth>5.91" Flow Length=206' Tc=14.0 min CN=80 Runoff=34.80 cfs 3.068 af
<b>Reach 1R: Level Spreader Reach</b>	Avg. Flow Depth=0.45' Max Vel=0.21 fps Inflow=2.69 cfs 0.362 af n=0.800 L=62.0' S=0.0565 ' ' Capacity=12.64 cfs Outflow=2.64 cfs 0.360 af
<b>Reach 3R: Emergency Spillway</b>	Avg. Flow Depth=0.49' Max Vel=0.30 fps Inflow=6.64 cfs 0.782 af n=0.800 L=88.0' S=0.0966 ' ' Capacity=26.43 cfs Outflow=6.38 cfs 0.776 af
<b>Pond 1P: Ext. Wetland Culvert</b>	Peak Elev=157.73' Storage=2,024 cf Inflow=4.13 cfs 0.428 af 18.0" Round Culvert n=0.013 L=359.0' S=0.0320 ' ' Outflow=3.50 cfs 0.423 af
<b>Pond 2P: Driveway Swale</b>	Peak Elev=158.81' Storage=2,293 cf Inflow=4.50 cfs 0.366 af 12.0" Round Culvert n=0.013 L=175.0' S=0.0057 ' ' Outflow=2.69 cfs 0.362 af
<b>Pond 3P: Lower Pond</b>	Peak Elev=151.25' Storage=6,672 cf Inflow=6.67 cfs 0.783 af Outflow=6.64 cfs 0.782 af
<b>Pond 4P: Entrance Dripline</b>	Peak Elev=160.67' Storage=534 cf Inflow=0.85 cfs 0.066 af Primary=0.48 cfs 0.065 af Secondary=0.00 cfs 0.000 af Outflow=0.48 cfs 0.065 af
<b>Pond 5P: Lot Roof Dripline</b>	Peak Elev=160.07' Storage=136 cf Inflow=0.51 cfs 0.040 af Primary=0.42 cfs 0.039 af Secondary=0.00 cfs 0.000 af Outflow=0.42 cfs 0.039 af
<b>Link AP1: Wetland</b>	Inflow=40.45 cfs 4.268 af Primary=40.45 cfs 4.268 af

**Total Runoff Area = 8.454 ac Runoff Volume = 4.286 af Average Runoff Depth = 6.08"**  
**80.57% Pervious = 6.812 ac 19.43% Impervious = 1.642 ac**



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Type III 24-hr 100-YR Storm Rainfall=8.70"

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**Summary for Subcatchment 1S: Parking Lot**

Runoff = 4.13 cfs @ 12.27 hrs, Volume= 0.428 af, Depth&gt; 6.61"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-YR Storm Rainfall=8.70"

Area (sf)	CN	Description
14,635	98	Impervious Area, HSG D
2,181	80	>75% Grass cover, Good, HSG D
14,518	77	Woods, Good, HSG D
* 2,554	77	Woods/Wetland, Good, HSG D
33,888	86	Weighted Average
19,253		56.81% Pervious Area
14,635		43.19% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.2	82	0.0300	0.13		<b>Sheet Flow, Roadside Swale</b> Grass: Dense n= 0.240 P2= 3.30"
4.6	18	0.0300	0.07		<b>Sheet Flow, Woods</b> Woods: Light underbrush n= 0.400 P2= 3.30"
0.7	56	0.0714	1.34		<b>Shallow Concentrated Flow, Wooded SCF</b> Woodland Kv= 5.0 fps
4.6	103	0.0223	0.37		<b>Shallow Concentrated Flow, Wetland SCF</b> Forest w/Heavy Litter Kv= 2.5 fps
20.1	259	Total			

**Summary for Subcatchment 2S: Driveway and swale**

[49] Hint: Tc&lt;2dt may require smaller dt

Runoff = 3.75 cfs @ 12.07 hrs, Volume= 0.262 af, Depth&gt; 6.85"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-YR Storm Rainfall=8.70"

Area (sf)	CN	Description
* 8,677	98	Impervious Area, HSG D
4,809	79	Woods/grass comb., Good, HSG D
6,490	80	>75% Grass cover, Good, HSG D
19,976	88	Weighted Average
11,299		56.56% Pervious Area
8,677		43.44% Impervious Area

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.7	47	0.0200	1.20		<b>Sheet Flow,</b> Smooth surfaces n= 0.011 P2= 3.30"
4.0	63	0.0700	0.26		<b>Sheet Flow,</b> Grass: Short n= 0.150 P2= 3.30"
4.7	110	Total			

**Summary for Subcatchment 3S: New Entrance Lot**

Runoff = 4.16 cfs @ 12.27 hrs, Volume= 0.423 af, Depth&gt; 6.14"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-YR Storm Rainfall=8.70"

Area (sf)	CN	Description
* 5,393	98	Impervious Area, HSG D
17,051	80	>75% Grass cover, Good, HSG D
10,698	77	Woods, Good, HSG D
2,847	79	Woods/grass comb., Good, HSG D
35,989	82	Weighted Average
30,596		85.01% Pervious Area
5,393		14.99% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.9	100	0.0350	0.10		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.30"
3.1	188	0.0397	1.00		<b>Shallow Concentrated Flow,</b> Woodland Kv= 5.0 fps
20.0	288	Total			

**Summary for Subcatchment 4S: Roof and Drip Strip**

Runoff = 0.85 cfs @ 12.09 hrs, Volume= 0.066 af, Depth&gt; 7.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-YR Storm Rainfall=8.70"

Area (sf)	CN	Description
* 4,446	98	Impervious Area, HSG D
4,446		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	37		0.10		<b>Direct Entry,</b>



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**Summary for Subcatchment 5S: EXT. Roof and Drip Strip**

Runoff = 0.51 cfs @ 12.09 hrs, Volume= 0.040 af, Depth&gt; 7.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-YR Storm Rainfall=8.70"

Area (sf)	CN	Description
* 2,670	98	Impervious Area, HSG D
2,670		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	33		0.09		<b>Direct Entry,</b>

**Summary for Subcatchment 6S: Rear Parking and Wetland**

Runoff = 34.80 cfs @ 12.19 hrs, Volume= 3.068 af, Depth&gt; 5.91"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-YR Storm Rainfall=8.70"

Area (sf)	CN	Description
15,236	80	>75% Grass cover, Good, HSG D
35,647	98	Impervious Area, HSG D
68,763	77	Woods, Good, HSG D
* 148,914	77	Woods/Wetland, Good, HSG D
1,845	55	Woods, Good, HSG B
212	61	>75% Grass cover, Good, HSG B
74	98	Impervious Area, HSG B
* 617	55	Woods/Wetland, Good, HSG B
271,308	80	Weighted Average
235,587		86.83% Pervious Area
35,721		13.17% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.8	100	0.0700	0.13		<b>Sheet Flow,</b> Woods: Light underbrush n= 0.400 P2= 3.30"
1.2	106	0.0943	1.54		<b>Shallow Concentrated Flow,</b> Woodland Kv= 5.0 fps
14.0	206	Total			

**Summary for Reach 1R: Level Spreader Reach**

[79] Warning: Submerged Pond 2P Primary device # 1 OUTLET by 0.45'

Inflow Area = 0.622 ac, 58.29% Impervious, Inflow Depth > 6.99" for 100-YR Storm event  
 Inflow = 2.69 cfs @ 12.21 hrs, Volume= 0.362 af  
 Outflow = 2.64 cfs @ 12.37 hrs, Volume= 0.360 af, Atten= 2%, Lag= 9.5 min

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Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Max. Velocity= 0.21 fps, Min. Travel Time= 4.8 min

Avg. Velocity = 0.09 fps, Avg. Travel Time= 11.9 min

Peak Storage= 762 cf @ 12.29 hrs

Average Depth at Peak Storage= 0.45'

Bank-Full Depth= 1.00' Flow Area= 38.0 sf, Capacity= 12.64 cfs

18.00' x 1.00' deep channel, n= 0.800 Sheet flow: Woods+dense brush

Side Slope Z-value= 20.0 '/' Top Width= 58.00'

Length= 62.0' Slope= 0.0565 '/'

Inlet Invert= 156.50', Outlet Invert= 153.00'



### Summary for Reach 3R: Emergency Spillway

Inflow = 6.64 cfs @ 12.32 hrs, Volume= 0.782 af

Outflow = 6.38 cfs @ 12.47 hrs, Volume= 0.776 af, Atten= 4%, Lag= 9.1 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Max. Velocity= 0.30 fps, Min. Travel Time= 5.0 min

Avg. Velocity = 0.11 fps, Avg. Travel Time= 13.1 min

Peak Storage= 1,906 cf @ 12.38 hrs

Average Depth at Peak Storage= 0.49'

Bank-Full Depth= 1.00' Flow Area= 60.0 sf, Capacity= 26.43 cfs

30.00' x 1.00' deep channel, n= 0.800 Sheet flow: Woods+dense brush

Side Slope Z-value= 30.0 '/' Top Width= 90.00'

Length= 88.0' Slope= 0.0966 '/'

Inlet Invert= 148.00', Outlet Invert= 139.50'





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**Summary for Pond 1P: Ext. Wetland Culvert**

[82] Warning: Early inflow requires earlier time span

Inflow Area = 0.778 ac, 43.19% Impervious, Inflow Depth > 6.61" for 100-YR Storm event  
 Inflow = 4.13 cfs @ 12.27 hrs, Volume= 0.428 af  
 Outflow = 3.50 cfs @ 12.39 hrs, Volume= 0.423 af, Atten= 15%, Lag= 7.4 min  
 Primary = 3.50 cfs @ 12.39 hrs, Volume= 0.423 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 157.73' @ 12.39 hrs Surf.Area= 3,114 sf Storage= 2,024 cf

Plug-Flow detention time= 16.6 min calculated for 0.423 af (99% of inflow)  
 Center-of-Mass det. time= 11.9 min ( 779.4 - 767.5 )

Volume	Invert	Avail.Storage	Storage Description
#1	156.50'	18,921 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
156.50	190	0	0
158.00	3,770	2,970	2,970
160.00	12,181	15,951	18,921

Device	Routing	Invert	Outlet Devices
#1	Primary	156.70'	<b>18.0" Round Culvert</b> L= 359.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 156.70' / 145.20' S= 0.0320 ' S= 0.0320 ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

**Primary OutFlow** Max=3.49 cfs @ 12.39 hrs HW=157.72' (Free Discharge)↑ **1=Culvert** (Inlet Controls 3.49 cfs @ 2.72 fps)**Summary for Pond 2P: Driveway Swale**

[82] Warning: Early inflow requires earlier time span

[79] Warning: Submerged Pond 4P Primary device # 1 OUTLET by 1.21'

[79] Warning: Submerged Pond 5P Primary device # 1 OUTLET by 1.21'

Inflow Area = 0.622 ac, 58.29% Impervious, Inflow Depth > 7.07" for 100-YR Storm event  
 Inflow = 4.50 cfs @ 12.07 hrs, Volume= 0.366 af  
 Outflow = 2.69 cfs @ 12.21 hrs, Volume= 0.362 af, Atten= 40%, Lag= 8.5 min  
 Primary = 2.69 cfs @ 12.21 hrs, Volume= 0.362 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 158.81' @ 12.21 hrs Surf.Area= 2,420 sf Storage= 2,293 cf

Plug-Flow detention time= 19.5 min calculated for 0.361 af (99% of inflow)  
 Center-of-Mass det. time= 14.6 min ( 765.9 - 751.3 )

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Volume	Invert	Avail.Storage	Storage Description
#1	157.50'	5,899 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
157.50	1,101	0	0
158.00	1,579	670	670
160.00	3,650	5,229	5,899

Device	Routing	Invert	Outlet Devices
#1	Primary	157.50'	<b>12.0" Round Culvert</b> L= 175.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 157.50' / 156.50' S= 0.0057 ' S= 0.0057 ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

**Primary OutFlow** Max=2.68 cfs @ 12.21 hrs HW=158.81' (Free Discharge)↑**1=Culvert** (Inlet Controls 2.68 cfs @ 3.42 fps)**Summary for Pond 3P: Lower Pond**

Inflow Area = 1.448 ac, 33.59% Impervious, Inflow Depth > 6.48" for 100-YR Storm event  
 Inflow = 6.67 cfs @ 12.29 hrs, Volume= 0.783 af  
 Outflow = 6.64 cfs @ 12.32 hrs, Volume= 0.782 af, Atten= 0%, Lag= 1.5 min  
 Secondary = 6.64 cfs @ 12.32 hrs, Volume= 0.782 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Starting Elev= 151.00' Surf.Area= 3,044 sf Storage= 5,883 cf

Peak Elev= 151.25' @ 12.32 hrs Surf.Area= 3,248 sf Storage= 6,672 cf (789 cf above start)

Plug-Flow detention time= 84.8 min calculated for 0.646 af (83% of inflow)

Center-of-Mass det. time= 2.6 min ( 778.6 - 776.0 )

Volume	Invert	Avail.Storage	Storage Description
#1	148.00'	13,649 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
148.00	1,016	0	0
150.00	2,230	3,246	3,246
152.00	3,858	6,088	9,334
153.00	4,771	4,315	13,649

Device	Routing	Invert	Outlet Devices
#1	Secondary	151.00'	<b>20.0' long x 14.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.64 2.67 2.70 2.65 2.64 2.65 2.65 2.63

**Secondary OutFlow** Max=6.60 cfs @ 12.32 hrs HW=151.25' (Free Discharge)↑**1=Broad-Crested Rectangular Weir** (Weir Controls 6.60 cfs @ 1.32 fps)



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**Summary for Pond 4P: Entrance Dripline**

[82] Warning: Early inflow requires earlier time span

Inflow Area = 0.102 ac, 100.00% Impervious, Inflow Depth > 7.78" for 100-YR Storm event  
 Inflow = 0.85 cfs @ 12.09 hrs, Volume= 0.066 af  
 Outflow = 0.48 cfs @ 12.21 hrs, Volume= 0.065 af, Atten= 43%, Lag= 7.5 min  
 Primary = 0.48 cfs @ 12.21 hrs, Volume= 0.065 af  
 Secondary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 160.67' @ 12.21 hrs Surf.Area= 795 sf Storage= 534 cf

Plug-Flow detention time= 33.1 min calculated for 0.065 af (98% of inflow)  
 Center-of-Mass det. time= 24.1 min ( 756.9 - 732.8 )

Volume	Invert	Avail.Storage	Storage Description
#1	160.00'	1,590 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
160.00	795	0	0
162.00	795	1,590	1,590

Device	Routing	Invert	Outlet Devices
#1	Primary	160.00'	<b>6.0" Round Culvert</b> L= 24.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 160.00' / 157.60' S= 0.1000 ' S= 0.1000 ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#2	Secondary	161.90'	<b>44.0' long x 0.5' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

**Primary OutFlow** Max=0.48 cfs @ 12.21 hrs HW=160.67' (Free Discharge)  
 ↑1=Culvert (Inlet Controls 0.48 cfs @ 2.46 fps)

**Secondary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=160.00' (Free Discharge)  
 ↑2=Broad-Crested Rectangular Weir ( Controls 0.00 cfs)

**Summary for Pond 5P: Lot Roof Dripline**

[82] Warning: Early inflow requires earlier time span

Inflow Area = 0.061 ac, 100.00% Impervious, Inflow Depth > 7.78" for 100-YR Storm event  
 Inflow = 0.51 cfs @ 12.09 hrs, Volume= 0.040 af  
 Outflow = 0.42 cfs @ 12.14 hrs, Volume= 0.039 af, Atten= 17%, Lag= 3.5 min  
 Primary = 0.42 cfs @ 12.14 hrs, Volume= 0.039 af  
 Secondary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

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Peak Elev= 160.07' @ 12.14 hrs Surf.Area= 238 sf Storage= 136 cf

Plug-Flow detention time= 12.6 min calculated for 0.039 af (99% of inflow)

Center-of-Mass det. time= 9.0 min ( 741.8 - 732.8 )

Volume	Invert	Avail.Storage	Storage Description
#1	159.50'	476 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
159.50	238	0	0
161.50	238	476	476

Device	Routing	Invert	Outlet Devices
#1	Primary	159.50'	<b>6.0" Round Culvert</b> L= 102.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 159.50' / 157.60' S= 0.0186 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#2	Secondary	160.90'	<b>48.0' long x 0.5' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

**Primary OutFlow** Max=0.42 cfs @ 12.14 hrs HW=160.07' (Free Discharge)↑**1=Culvert** (Inlet Controls 0.42 cfs @ 2.14 fps)**Secondary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=159.50' (Free Discharge)↑**2=Broad-Crested Rectangular Weir** ( Controls 0.00 cfs)**Summary for Link AP1: Wetland**

Inflow Area = 7.006 ac, 16.50% Impervious, Inflow Depth > 7.31" for 100-YR Storm event  
 Inflow = 40.45 cfs @ 12.20 hrs, Volume= 4.268 af  
 Primary = 40.45 cfs @ 12.20 hrs, Volume= 4.268 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs



## **BMP CALCULATIONS**

**Electric Light - Existing Condition Peak Flows**

Analysis Point	2 Year Storm (cfs)	10 Year Storm (cfs)	25 Year Storm (cfs)	50 Year Storm (cfs)	100 Year Storm (cfs)
AP1	9.54	18.24	25.88	31.84	39.80

Rainfall Event Totals (in.)	
2-Year	3.30
10-Year	4.90
25-Year	6.20
50-Year	7.30
100-Year	8.70

**Electric Light - Developed Condition Peak Flows**

Analysis Point	2 Year Storm (cfs)	10 Year Storm (cfs)	25 Year Storm (cfs)	50 Year Storm (cfs)	100 Year Storm (cfs)
AP1	9.16	17.67	24.93	31.13	39.02

**Electric Light - Change in Peak Flows**

Analysis Point	2 Year Storm (cfs)	10 Year Storm (cfs)	25 Year Storm (cfs)	50 Year Storm (cfs)	100 Year Storm (cfs)
AP1	-0.38	-0.57	-0.95	-0.71	-0.78



## **OPERATION AND MAINTENANCE PROGRAM**



# ATTAR

ENGINEERING, INC

CIVIL ♦ STRUCTURAL ♦ MARINE

**ELECTRIC LIGHT COMPANY, INC.  
1 MORGAN WAY  
CAPE NEDDICK, MAINE 03902**

## **OPERATION AND MAINTENANCE PLAN STORMWATER MANAGEMENT BMP's**

This project contains specific Best Management Practices (BMP's) for the conveyance, storage, and treatment of stormwater and the prevention of erosion. These BMP's consist of swales, culverts, ponds, and drip strips. All components should be inspected quarterly, and after every significant rain event of 1" in any 24-hour period.

The party responsible for implementing this Operation and Maintenance (O&M) Plan shall be the property owner, to be Ken Miller after project approval.

Inspections associated with this O&M plan shall be conducted by individuals with knowledge of erosion and sedimentation control. Any Annual Inspection Reports and Certifications must be conducted by a Qualified Post Construction Stormwater Inspector. Any identified maintenance issues must be corrected within 60 days of identification.

### **Swales**

All swales should be inspected for accumulation of debris, which could adversely affect the function of this BMP. These areas should be cleaned annually and maintained to have gradual slopes, which prevent channeling of stormwater and erosion of the bottom and sides of the swales.

### **Culverts**

Culvert inlets and outlets should be inspected for debris, which could clog the BMP. Additionally, the placement of riprap should be inspected to ensure that all areas remain smooth and no areas exhibit erosion in the form of rills or gullies.

### **Detention Pond**

The detention pond shall be inspected to ensure that there is no channeling of stormwater and that no debris accumulates within the detention areas. The vegetative cover conditions shall be maintained. The inlets and outlets shall be inspected for erosion and any evidence of debris that could clog the outlet structures and culverts. Emergency spillways and level spreaders shall be inspected for any evidence of rilling and channeling and shall be maintained to promote a level, sheet-flow discharge. Pond embankments and side slopes shall be inspected for erosion, destabilization of side slopes and evidence of embankment settling; corrective action shall be taken immediately to correct such issues. The height of grass shall be maintained at a maximum of 12"; mowing shall be limited to no more than two times during the growing season.

### **Snow Removal**

Snow shall be stockpiled only in the approved snow storage areas. Plowing of snow into wetland areas or detention ponds shall be avoided. Additionally, a mostly sand mix (reduced salt) shall be applied during winter months to prevent excessive salt from

**Exhibit 12**



leaching into wetland areas. Excess sand shall be removed from the storage areas, all paved surfaces and adjacent areas each spring.

### **Seeding, Fertilizing and Mulching**

All exposed soil materials and stockpiles must be either temporarily or permanently seeded, fertilized and mulched in accordance with plan specifications. This is one of the most important features of the Erosion Control Plan, which will provide both temporary and permanent stabilization. Eroded or damaged lawn areas must be repaired until a 75% effective growth of vegetation is established and permanently maintained.

### **Record Keeping**

Routine maintenance and inspections will be accomplished by the future property owner [Ken Miller, 1 Morgan Way, Cape Neddick, ME 03902], or third party contracted by the property owner. All inspections accomplished in accordance with this program shall be documented on the attached Inspection & Maintenance Log. Copies of the Log shall be kept by the property owner or condominium association and be made available to the Town of York, upon request. All records associated with this O&M plan shall be retained for a minimum of 5 years. The Annual Inspection Report and Certification must be provided to the town

Prepared by: Wyatt R. Page, E.I.

**STORMWATER INSPECTION & MAINTENANCE LOG**  
**ELECTRIC LIGHT COMPANY, INC.**  
**GENERAL INSPECTION**

Date	Purpose <sup>1</sup>	Maintenance Done <sup>2</sup>	By

1. Purpose is the reason for the inspection. For example, "quarterly" or "after a significant rain event."
2. Maintenance Done means any maintenance required because of the inspection, such as trash removal or re-seeding of areas.



# **DRAFT**

## **Findings of Fact, Conclusions of Law, & Decisions**

### **Planning Board, Town of York, Maine**

**September 25, 2025**

Regarding the application by

**Electric Light Company**

**Tax Map 99 /Lot 44**

**1 Morgan Way**

#### **Findings of Fact**

**Property address: 1 Morgan Way**

**Property Owner: BKR LLC**

**Other parties to the application: abutters Andre Beaulieu, James Beetz, neighbor Huw Jones.**

**Current use of the property: The existing use of the property is a 7,200 sq ft metal building that houses the Electric Light Company. The primary business of the Electric Light is to install and service traffic signal for government entities. The employees partially assemble traffic signals on site and install these traffic signals in Northern New England.**

**Proposed expansion: The Electric Light Company is proposing a 6,000 sq ft garage addition to protect its expensive and specialized equipment and to be able to respond to emergencies as quickly as possible. The specialized service equipment has been mostly stored outdoors extending response time and reducing life expectancy for this specialized equipment.**

**Base Zoning District: BUS-2, all of the building expansion is in the BUS-2 Zone.**

**Other zoning districts: Limited Residential Subdistrict of the Shoreland Zone for some of the northern portion of the lot.**

**Other Zoning Requirements: 6.1 Non-Residential Performance Standards**



**List of materials submitted:** Planning Board application  
Agent authorization  
cover sheet Attar Engineering  
existing conditions plan/survey  
proposed site plan  
Grading & Utility Plan  
Existing Stormwater Plan  
Developed Stormwater Plan  
Site Details sheet 5 & 6  
Cover sheet Allied Designs  
Building footprint  
Building elevations  
Building fire separation  
Landscape Plan  
Planting details  
Photometric Plan  
Traffic study  
email to DPW  
Resonse DPW  
Property deed  
Easement deed CMP  
Ken Miller is representative of property owner BRK LLC  
Watershed map  
HDC response  
Maine Historic Preservation response  
Habitat maps  
GIS flood data  
Existing septic system design  
Septic capacity from Harry Norton, Jr.  
response from York Beach Fire Chief  
response from the Police Chief  
Stormwater Management Plan Attar Engineering  
Waiver requests, High Intensity Soil Survey, document 24"  
BDH trees, and buffer requirements

**Dates of Planning Board consideration:**

November 2024  
August 8, 2025  
September 25, 2025

**Public Hearings:**

August 8, 2025  
September 25, 2025



**Public Hearings:** At the August 8, 2025 public hearing an abutter and a neighbor spoke concerning possible light pollution and noise

**Information from the Public Hearing:**

A photometric plan showed no light leaving the property. Noise should be reduced during overnight equipment departures due to vehicles stored inside and requiring less warmup time. Vehicles will also be backed in to eliminate back up alarms during the overnight.

**Conclusions of Law**

**Jurisdiction:** Town of York Zoning Ordinance section 18.15 Delegation of Site plan Review  
**Authority for buildings over 5,000 sq ft.**

Shoreland review under section 18.1.4.2 ,18.2.5.3 concurrent review and Article 8  
6.1 Non-residential Performance Standards.  
Site Plan Subdivision Regulations.

**Code Compliance:**

**6.1 Non-Residential Performance Standards**

**6.1.1 Traffic-**a traffic study was completed that showed minimal traffic increase.

**6.1.2 Noise-**noise levels are consistent with the noise and will be reduced by garaging the specialty trucks used by the company.

**6.1.3 Dust, Fumes, Vapors and Gases-**no contaminants leave the proposed garage.

**6.1.4 Odor-** there is no odor perceptible beyond the lot line.

**6.1.5 Glare-** All lights will be shielded down facing lights and a photometric plan shows not light spillover on to neighboring lots.

**6.1.6 Water Run-off-**a Stormwater plan has been designed to control Stormwater runoff in 2 and 50 year storms.

**6.1.7 Erosion Control-**there is an engineer designed erosion control plan .

**6.1.8 Setbacks and Screening-** screening is provided along residential property lines to minimize visual impact. Parking areas either have a natural buffer or are landscaped for 8 ft as approved by the Planning Board. The neighbor most impacted agreed in writing to the reduction to 8 ft.

**6.1.9 Explosive Materials-** all highly flammable or explosive materials will be stored a minimum of 75 ft from any lot line.

**6.1.10 Preservation of Landscape-** only necessary changes to the landscape are proposed.

**6.1.11 Chemical/Fuel Storage-** there is no outdoor storage of chemicals or fuel proposed.

**6.1.12 Relation of Proposed Building to Environment-**the proposed addition will match the existing building and has a significant buffer from most abutters.

**6.1.13 Refuse Disposal-** trash is to be kept in enclosed dumpsters and removed by



a private trash hauler.

**6.1.14 Refuse and Recycling Facilities-**all refuse and recycling containers will be enclosed in a 6' tall wooden stockade fence.

**6.1.15 Drives, Parking, and Circulation-** special attention has been given to separate office workers and visitors from shipping and receiving areas.

**Shoreland Standards that apply:**

**8.1.1.D-** This lot exceeds the 60,000 sq ft and 300 ft of shore frontage.

**8.1.3.b-** has less than 20% coverage in the Shoreland portion of this lot.

**8.2.1.B Miscellaneous Use Category-** Filling and Earthmoving Activities are an allowed use allowing for construction of a required detention pond.

**8.3.11.2 Limited Residential Subdistrict setback-** the required detention pond is setback 75 ft from a 4-10 acre wetland.

**8.3.13 Water Quality Protection-** temporary and permanent erosion control and the detention pond will protect water quality.

**8.3.19 Revegetation Requirements-** the erosion and sedimentation control plan requires revegetation.

**Site Plan Subdivision Regulations:**

**6.3-** Plans and other required submissions for the preliminary plan were reviewed by both the Planning Board and other professional hired by the town. The submissions were found to be complete and the required changes were incorporated into the plans and submissions.

**6.4** The revised Plans and additional submissions were provided to show compliance with section 6.4.

## **DECISIONS**

**1.**The Planning Board voted that the application complete and was accepted for review on August 8, 2025.

**2.**Waivers Granted:

**High Intensity Soil Survey**

**Section 6.3.32.** There is an existing 7,200 sq ft building with no evidence of soil failure. It was felt that a HISS would not provide additional useful information.

**Trees of 24" or greater DBH to be shown on the survey-section 6.3.A.4 .**

**There are no trees with a diameter greater than 24" DBH in the area of construction. Wetland areas, 3-4 acres, will not be disturbed during construction.**



### **Vegetated Buffer**

A request to reduced the vegetated buffers to 8 ft in 2 areas and to allow a 6 ft vinyl fence along a third area. Buffers are required in section 6.1.8.3 of the zoning ordinance. This waiver was granted for numerous reasons including a heavily wooded area along one property line, an abutter who agreed with the reduced landscaped buffer adjacent to his property line and the vinyl fence was allowed at the top of a slope overlooking the Electric Light Company property. A vegetated buffer following the slope down hill would provide less of a visual buffer than a solid fence at the top of the slope.

### **Waiver to use NAD83 instead of NGVD1929**

Section 6.3.3.A.2 requires the use of NGVD1929 for topography. The State of Maine has adopted NAD83 as its standard vertical datum, most engineering plans now use NAD83. To avoid confusion and conversion we are requesting a waiver to use NAD83.

### **Waiver to not show well and septic within 200 ft. Site Plan Subdivision Regulations section 6.4.17.6.**

A waiver is requested to not disturb the neighbor to locate well and septic system possibly within 200 ft of this property. The wells and septic systems on both properties were installed more than 2 decades ago and have had not detectable effect on each other in that time.

The Planning Board voted to approve the application of the Electric Light Company to build a 6,000 sq ft addition to the existing structure at their September 25,2025 meeting subject to the Conditions of Approval and the submissions provided by the applicant.

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**Planning Board Chair**

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**Date**





September 8, 2025

Town of York  
186 York Street  
York, ME 03909

RE: Electric Light Company, Inc., Kenneth Miller's request to expand his commercial building located at One Morgan Way, Cape Neddick, Maine

To Whom it May Concern:

As per the request of Kenneth Miller, owner of the above-mentioned company, this letter is to accompany their request for their proposed expansion project located at One Morgan Way, Cape Neddick, Maine.

I am a Senior Vice President of Commercial Lending with Machias Savings Bank and have personally had a commercial lending relationship with Ken Miller for more than 6 years. I have financed numerous commercial real estate loans and various business loans for the company over the years. I have the utmost confidence in the Miller's ability to deliver a quality project on time and on budget. The Millers have excellent credit and have handled all loan obligations as agreed. Additionally, Electric Light Company has an excellent reputation in their industry.

The Millers have discussed their concept of this project with Machias Savings Bank and once their final plans are completed and permitted, they will be ready to begin the financing process. Based on my extensive experience with the company, my knowledge of their financial status and the preliminary information of their project plans for this project, Machias Savings Bank is looking forward to the possibility of working closely with the Millers on the financing of this project.

If you have any further questions or concerns at this time, please feel free to contact me directly at (207) 561-3937.

Sincerely,

*Francine V. Cram*

Francine V. Cram  
Senior Vice President  
Senior Commercial Lending Officer

4 Center Street, PO Box 318 | Machias, ME 04654-0318

{T} 1-866-416-9302 | {F} 1-207-255-9345 | {W} [www.machiassavings.bank](http://www.machiassavings.bank)

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Exhibit 17