# STATE OF NEW HAMPSHIRE

Department of Administrative Services

DIVISION OF PUBLIC WORKS DESIGN & CONSTRUCTION

# ARPA-CAMPGROUND EXPANSION PROJECTS

A FEDERAL AID PROJECT

PAWTUCKAWAY STATE PARK:TOILET BUILDING REPLACEMENT Park Office-7 Pawtuckaway Road, Nottingham, NH DPW Project #81205R Contract B Department of Natural & Cultural Resources

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Littleton, NH 03561
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LANDSCAPE ARCHITECT

SE GROUP 1 Chase Mill, Suite 190 Burlington, VT 05401 p. 802-862-0098

e. polstad@segroup.com



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0 603-271-3516 f 603-271-3515

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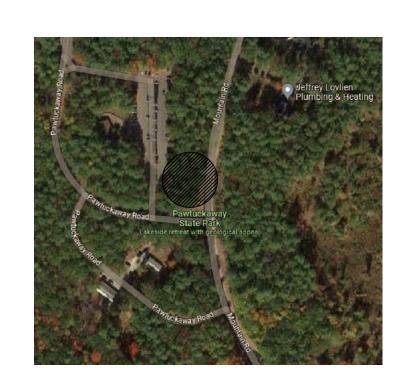
DIRECTOR-DIVISION OF PUBLIC WORKS

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COMMISSIONER-DEPARTMENT OF

NATURE DA

#### LOCUS MAP



REVISIONS	
DATE	SYMBOL
DESCRIPTION	
DATE	SYMBOL
DESCRIPTION	
DATE	SYMBOL
DESCRIPTION	

PROJECT NAME
ARPA-Campground
Expansion Projects

PROJECT NUMBER 81205R-B

3/15/2024

SHEET NUMBER

T-1

# PAWTUCKAWAY STATE PARK

# TOILET BUILDING RENOVATIONS - 100% CONSTRUCTION DOCUMENTS

7 Pawtuckaway Road Nottingham, NH 03590

# SHEET LIST

SHEET NO.	SHEET TITLE
G0.00	COVER SHEET
C1.00	OVERALL PLAN
C1.01	BIG ISLAND ROAD EXISTING CONDITIONS
C1.02	DUMP STATION EXISTING CONDITIONS
C1.03	BATHHOUSE 7 EXISTING CONDITIONS
C1.04	BATHHOUSE 8 EXISTING CONDITIONS
C1.05	BATHHOUSE 9 EXISTING CONDITIONS
C1.06	BATHHOUSE 5 EXISTING CONDITIONS
C1.07	BATHHOUSE 6 EXISTING CONDITIONS
C2.02	DUMP STATION DEMOLITION PLAN
C2.03	BATHHOUSE 7 DEMOLITION PLAN
C2.04	BATHHOUSE 8 DEMOLITION PLAN
C2.05	BATHHOUSE 9 DEMOLITION PLAN
C2.06	BATHHOUSE 5 DEMOLITION PLAN
C2.07	BATHHOUSE 6 DEMOLITION PLAN
C3.02	DUMP STATION GRADING AND UTILITY PLAN
C3.03	BATHHOUSE 7 SITE PLAN
C3.04	BATHHOUSE 8 SITE PLAN
C3.05	BATHHOUSE 9 SITE PLAN
C3.06	BATHHOUSE 5 SITE PLAN
C3.07	BATHHOUSE 6 SITE PLAN
C3.08	WATER SYSTEM SITE PLAN AND NOTES
C4.02	DUMP STATION I.S.D.S. PLAN AND DETAILS
C4.03	BATHHOUSE 7 I.S.D.S. PLAN AND DETAILS
C4.04	BATHHOUSE 8 I.S.D.S. PLAN AND DETAILS
C4.05	BATHHOUSE 9 I.S.D.S. PLAN AND DETAILS
C4.06	BATHHOUSE 5 I.S.D.S. PLAN AND DETAILS
C4.07	BATHHOUSE 6 I.S.D.S. PLAN AND DETAILS
C5.00	DETAILS - EROSION CONTROL
C5.01	DETAILS - MISCELLANEOUS
C5.02	DETAILS - MISCELLANEOUS
A0.01	ARCHITECTURAL GENERAL NOTES, ABBREVIATIONS,
	ANNOTATIONS, LEGENDS AND WALL TYPES
A1.01	MAIN FLOOR PLAN
A1.02	REFLECTED CEILING PLAN AND ROOF PLAN
A2.01	EXTERIOR ELEVATIONS

SHEET NO.	SHEET TITLE
A3.01	BUILDING AND WALL SECTIONS
A4.01	INTERIOR ELEVATIONS
A5.01	SCHEDULES
S0.01	STRUCTURAL NOTES
S1.01	FOUNDATION PLAN AND DETAILS
S2.01	ROOF FRAMING PLAN AND FRAMING SECTION
S3.01	TRUSS DIAGRAMS AND DETAILS
M1.01P	MECHANICAL PLAN AND DETAILS
E1.01P	ELECTRICAL PLAN AND DETAILS
E1.02P	ELECTRICAL RISERS
P1.01P	PLUMBING NOTES, DETAILS AND SCHEDULES
P1.02P	PLUMBING PLANS
P1.03P	PLUMBING DETAILS



LANDSCAPE ARCHITECT SE GROUP 1 MILL STREET, SUITE 190 BURLINGTON, VT 05401

CIVIL ENGINEER HORIZONS ENGINEERING 8836 POMFRET ROAD, SUITE 2A NORTH POMFRET, VT 05053

**ARCHITECT** SAMYN-D'ELIA ARCHITECTS, P.A. 6 CENTRAL HOUSE ROAD HOLDERNESS, NH 03245

ELECTRICAL CPB & ASSOCIATES **500 DEPOT STREET** RUMNEY, NH 03266

#### **SE GROUP** Landscape Architects and Planners 1 Mill Street, Suite 190 Burlington, VT 05401 tel: 8 0 2. 8 6 2. 0 0 9 8 fax: 8 0 2. 8 6 5. 2 4 4 0 www.segroup.com

# **NH STATE PARKS**

**Campground Expansion Project PII Pawtuckaway State Park** 7 Pawtuckaway Road Nottingham, NH

## **Issue** 100% Construction **Documents**

Graphic Scale

Date: March 15, 2024

Drawn By: KS

Checked By: PO

issues.			
No.	Descriptio	n Date	
1	Name	00/00/00	
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**COVER SHEET** 

G0.00

Project Number: 23045001 File: I0.00-cover sheet.dwg

Civil and Structural Engineering
Land Surveying and Environmental Consulting

176 Newport Road, Suite 8; New London NH 03255 (603) 877-0116 www.horizonsengineering.com

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# NH STATE PARKS

Campground Expansion Project PII
Pawtuckaway State Park 7 Pawtuckaway Road Nottingham, NH 03290

#### **100% CONSTRUCTION**



Scale: 1" = 150'

Date: March 15, 2024

Drawn By: SJB

Checked By: WTD

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No.	Description	Date			
1	Name	00/00/00			

OVERALL PLAN

Sheet Number:

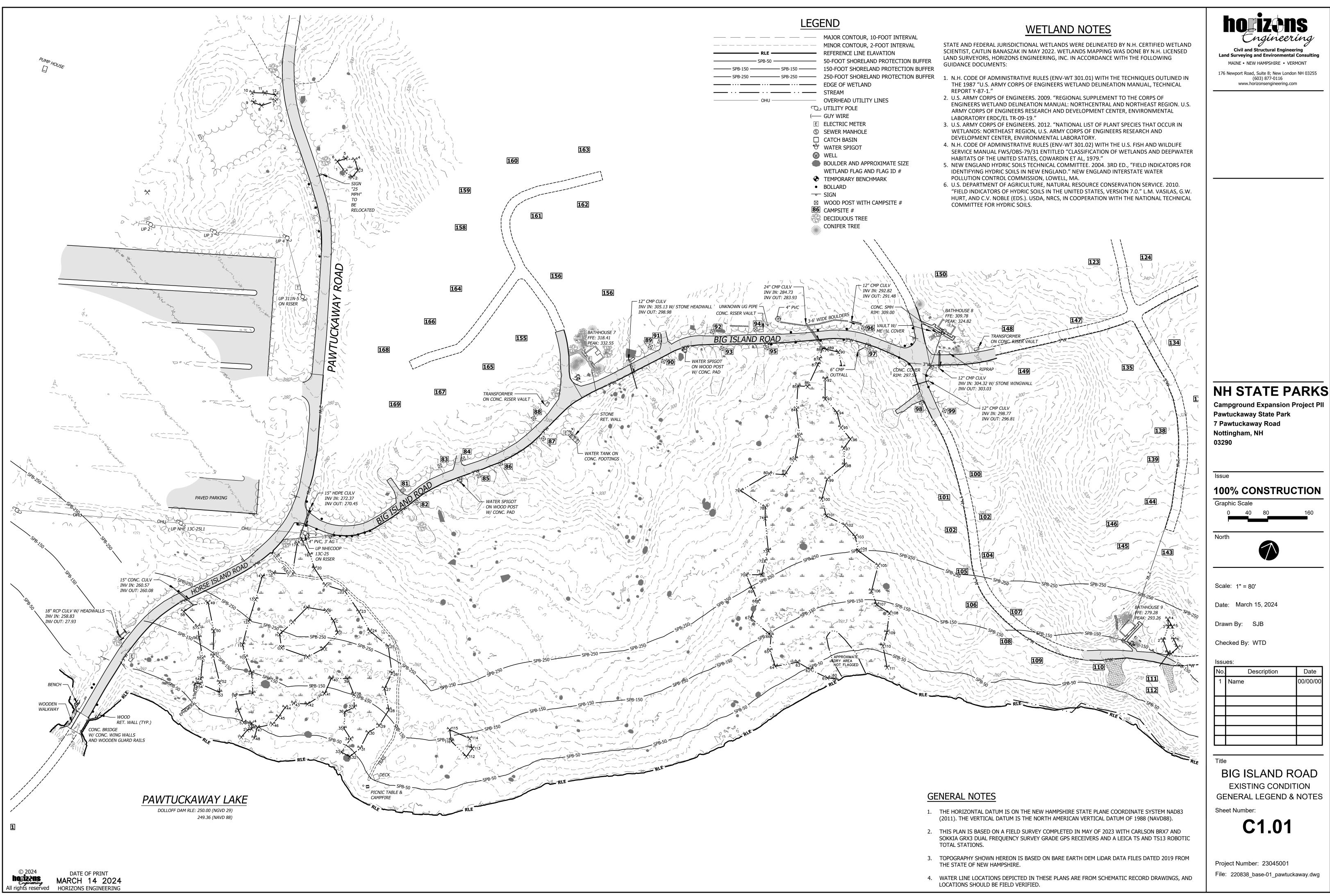
C1.00

Project Number: 23045001 File: 220838\_base-01\_pawtuckaway.dwg

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MARCH 14 2024

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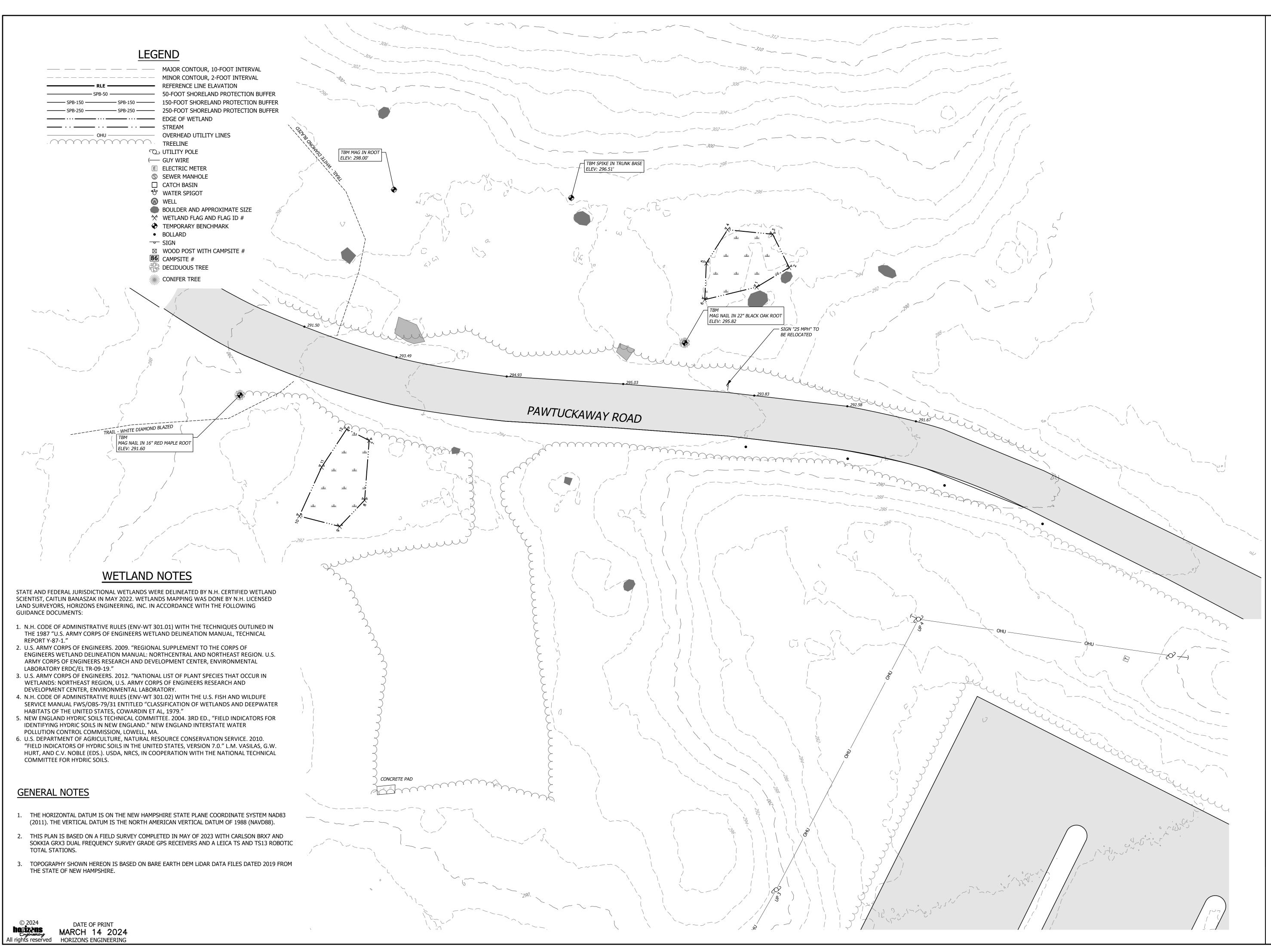


MAINE • NEW HAMPSHIRE • VERMONT

**100% CONSTRUCTION** 

Date

**BIG ISLAND ROAD EXISTING CONDITION** 



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# NH STATE PARKS

Campground Expansion Project PII
Pawtuckaway State Park
7 Pawtuckaway Road
Nottingham, NH
03290

sue

#### **100% CONSTRUCTION**

Graphic Scale

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Scale: 1" = 20'

Date: March 15, 2024

Drawn By: SJB

Checked By: WTD

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No.	Description	Date		
1	Name	00/00/00		
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Title

DUMP STATION

EXISTING CONDITION

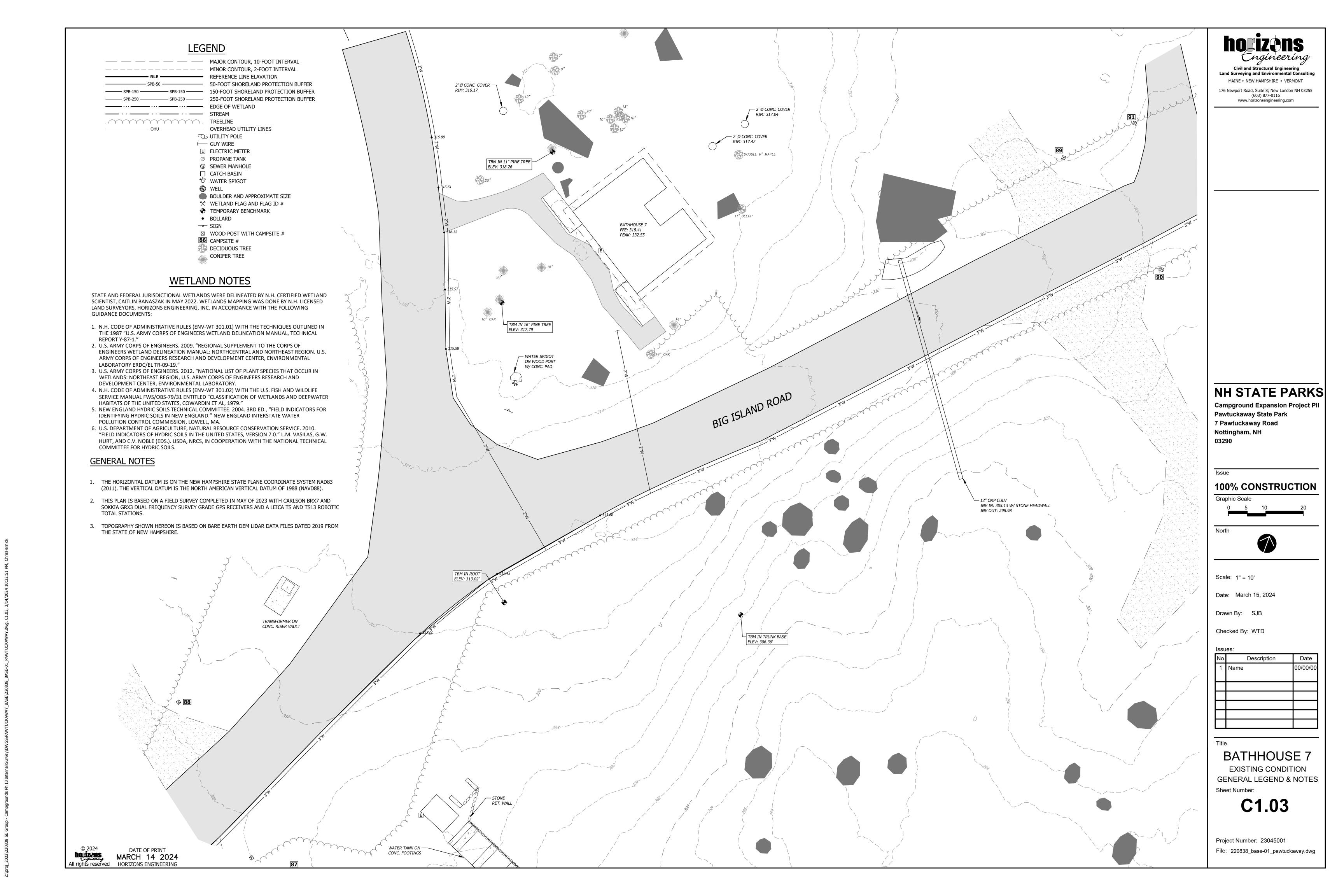
GENERAL LEGEND & NOTES

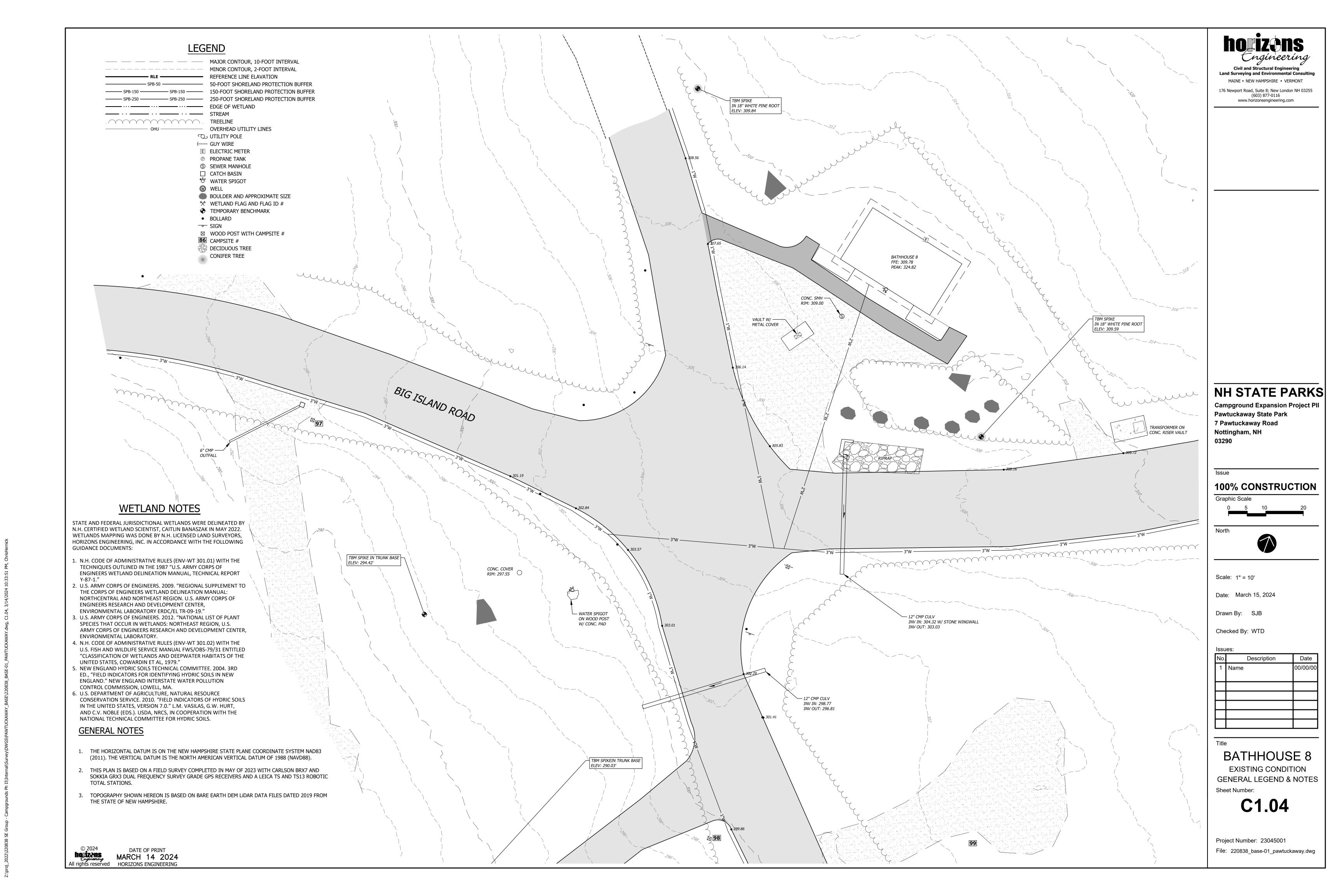
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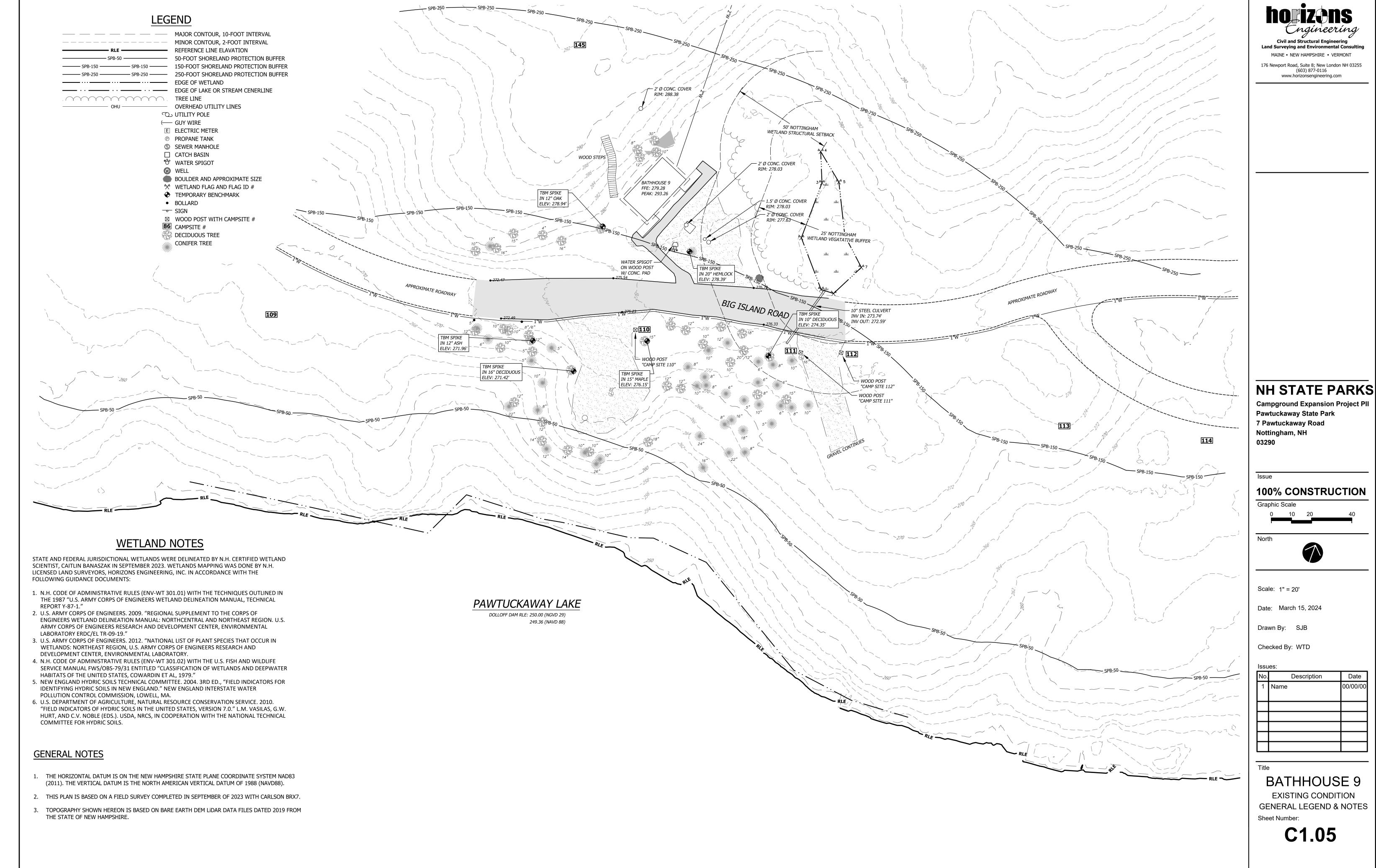
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Project Number: 23045001

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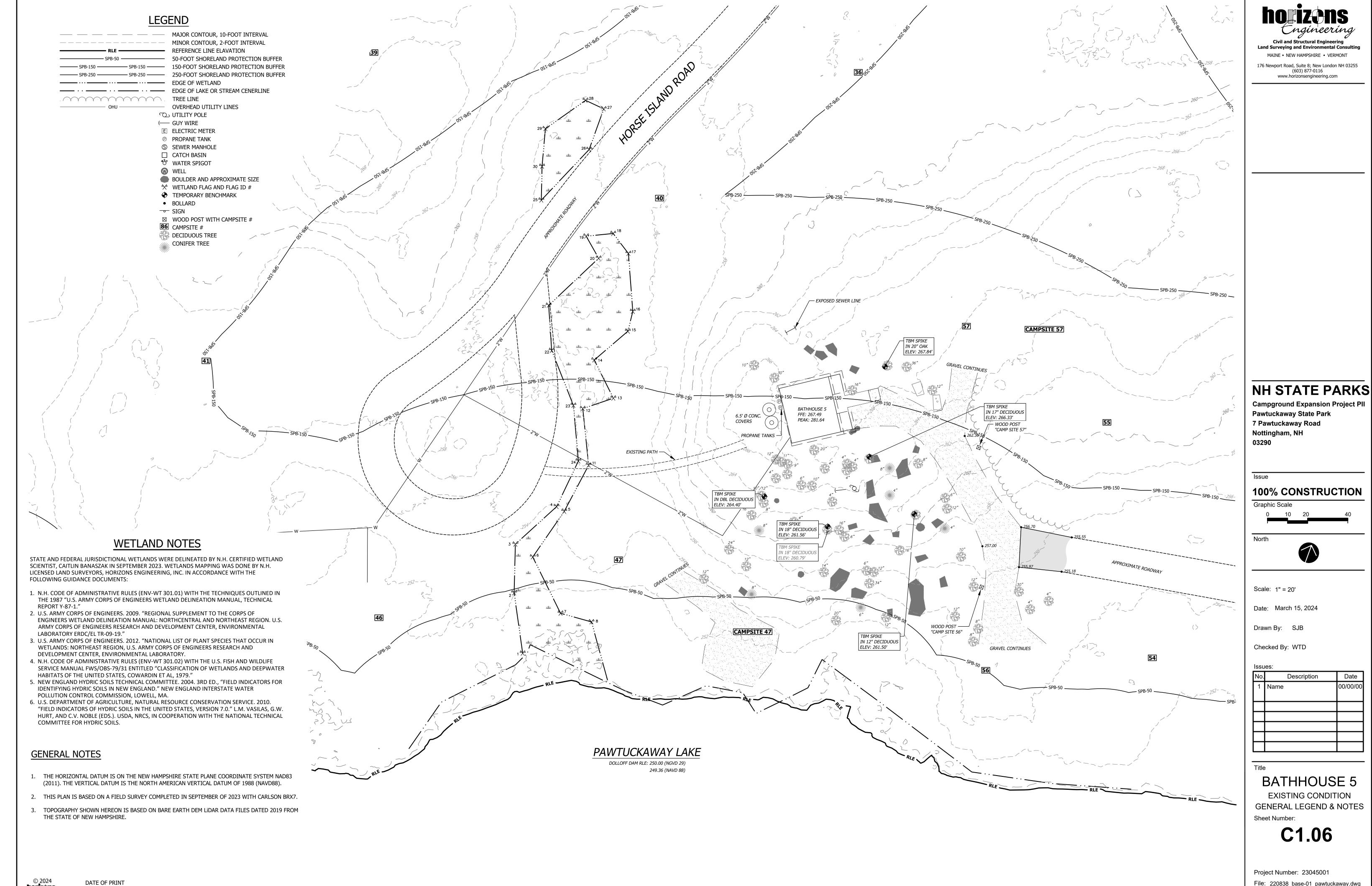
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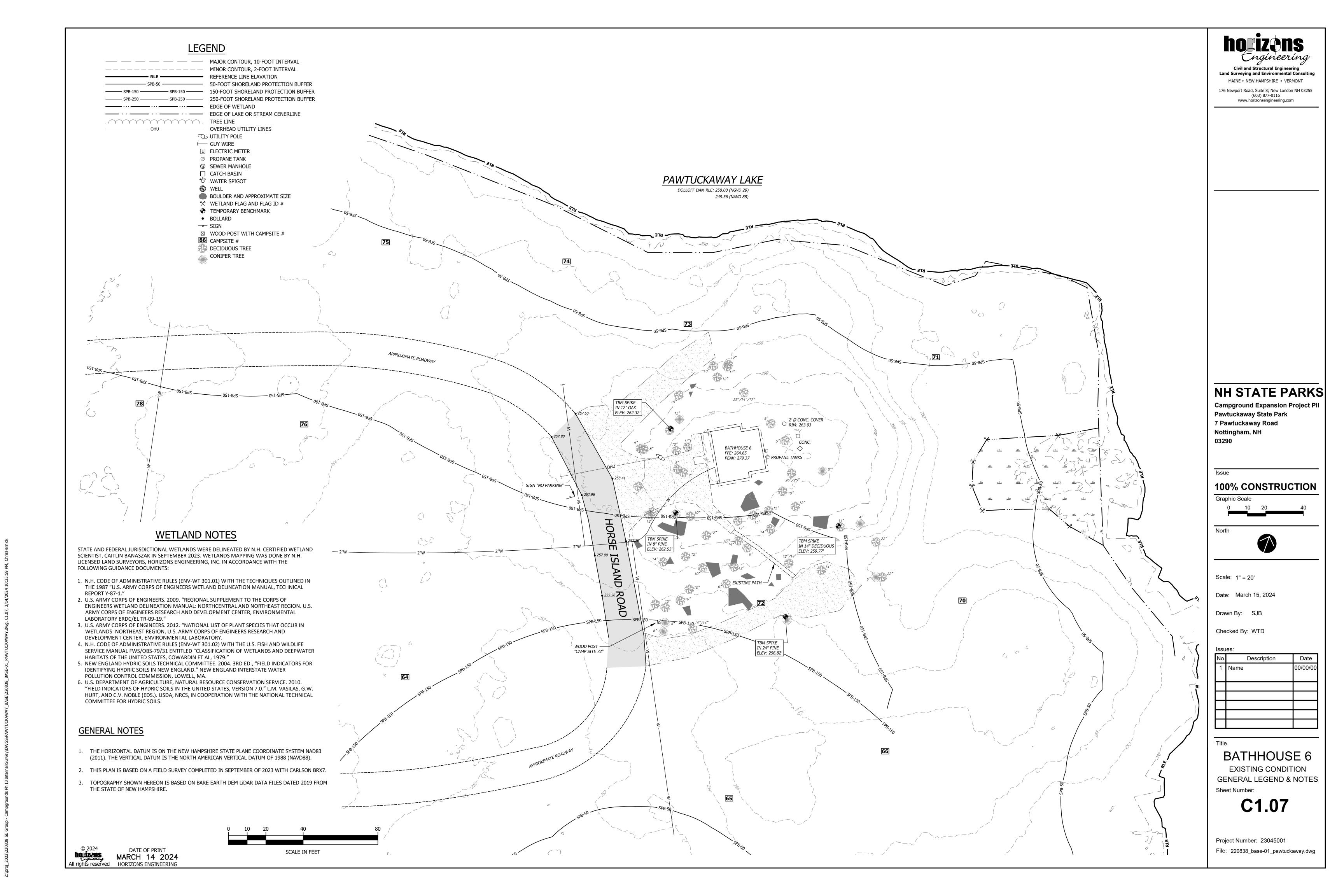
Project Number: 23045001

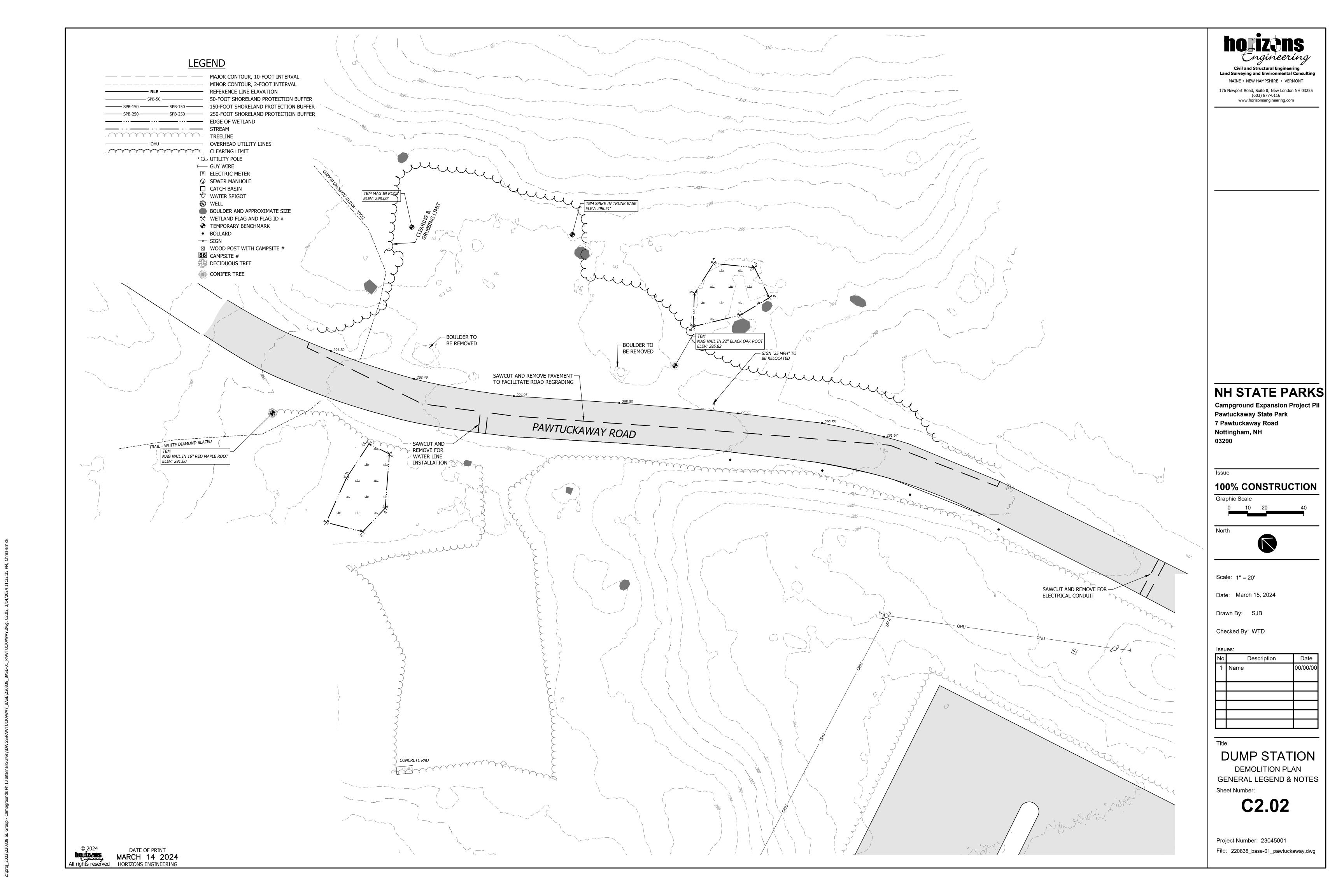
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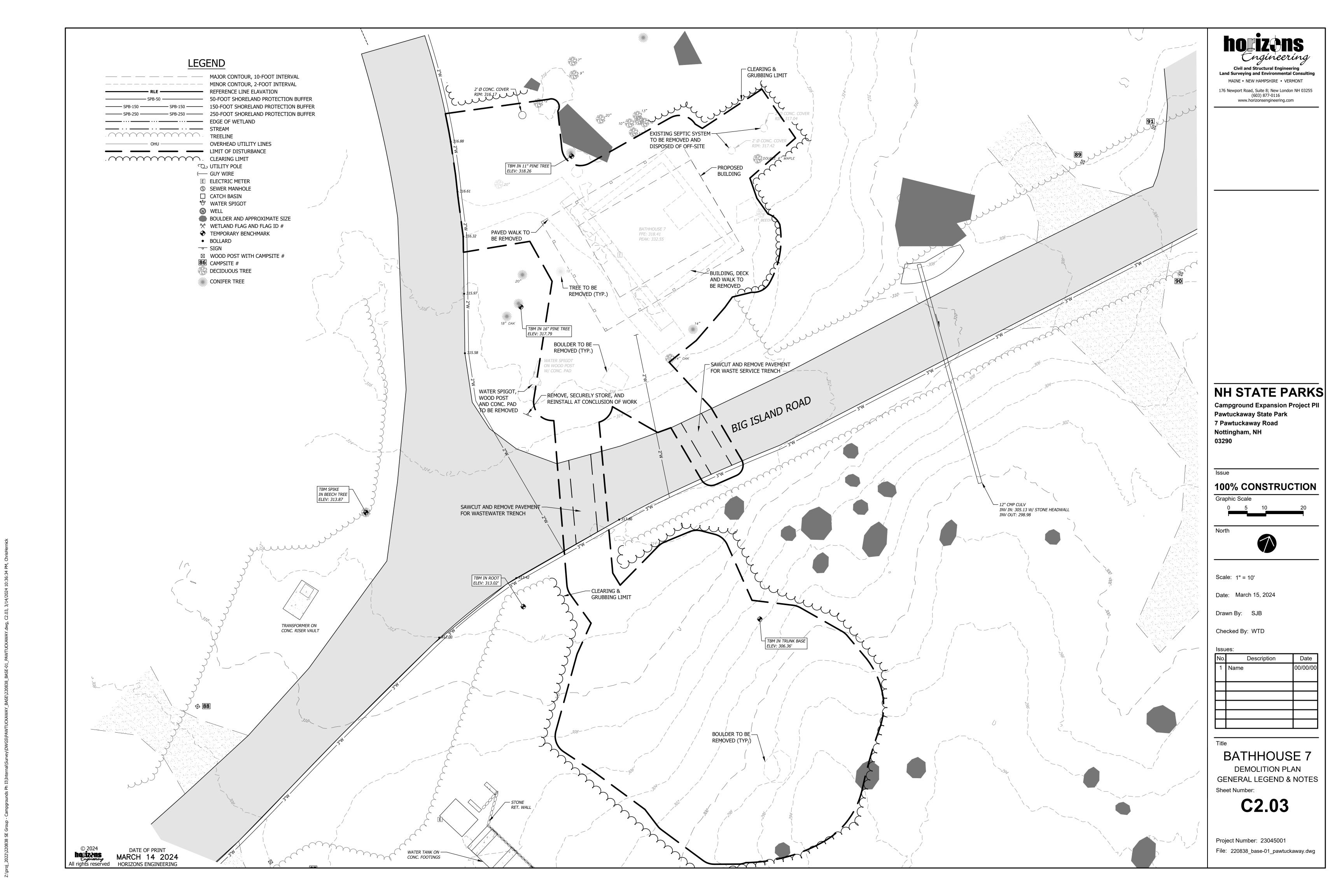


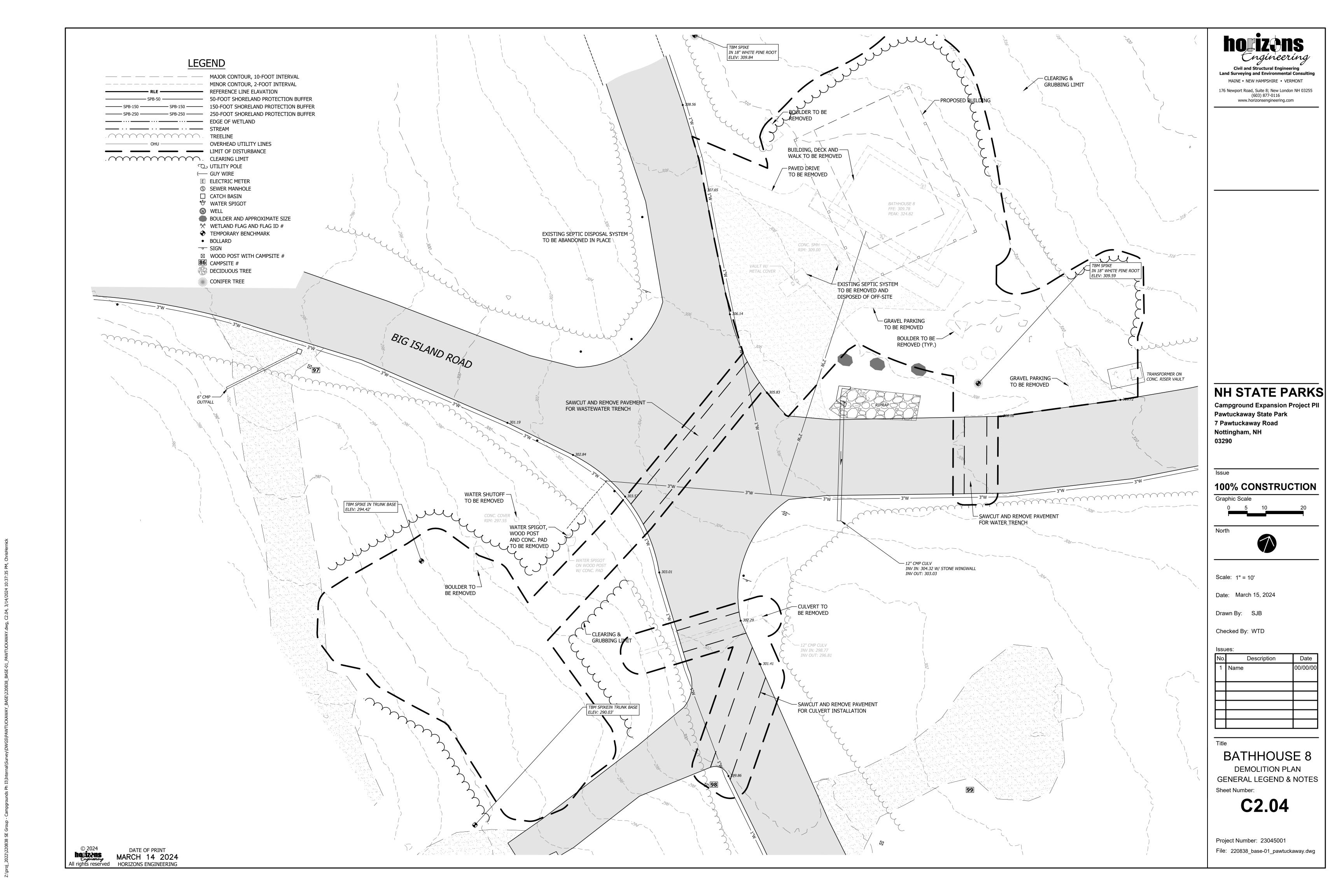
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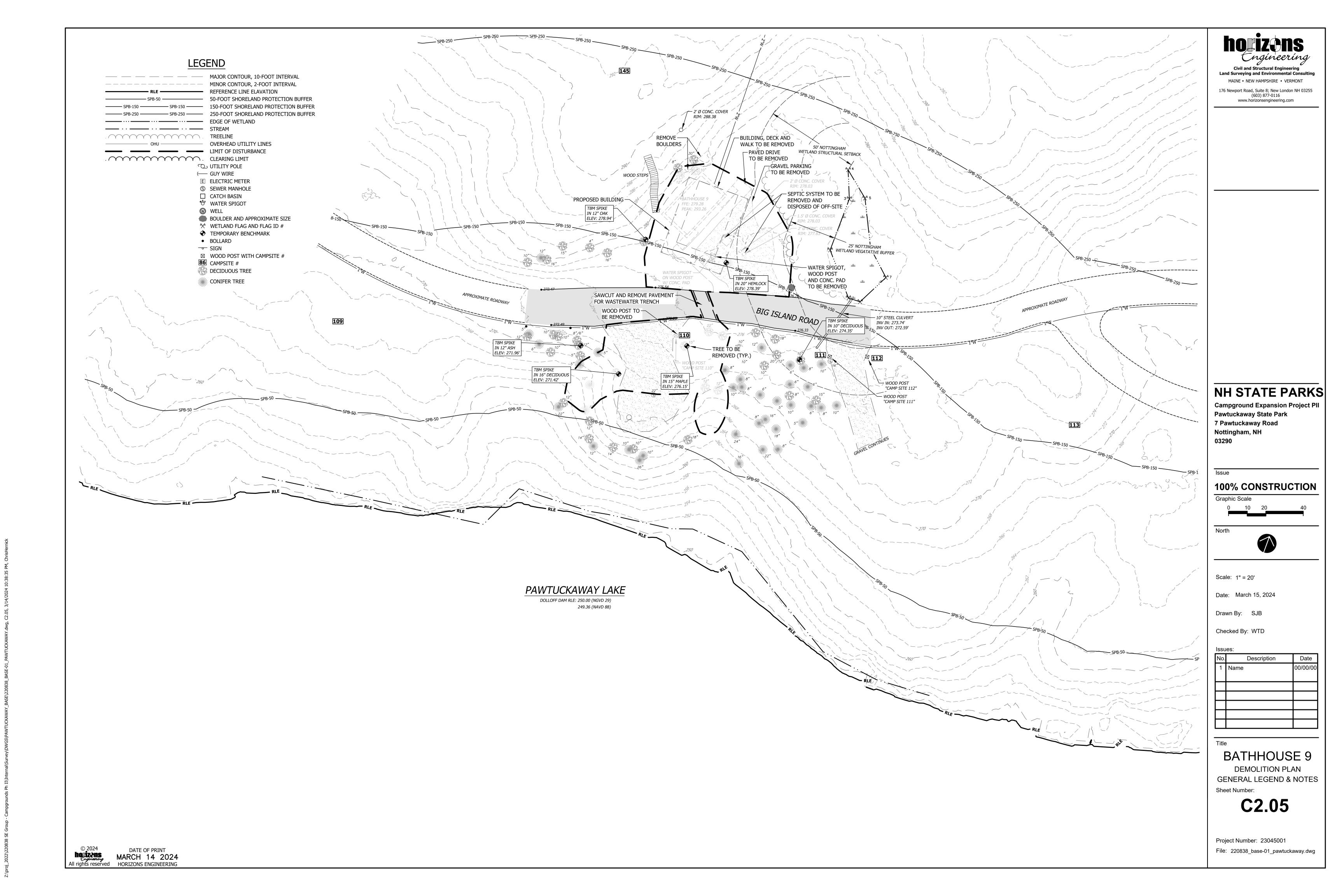
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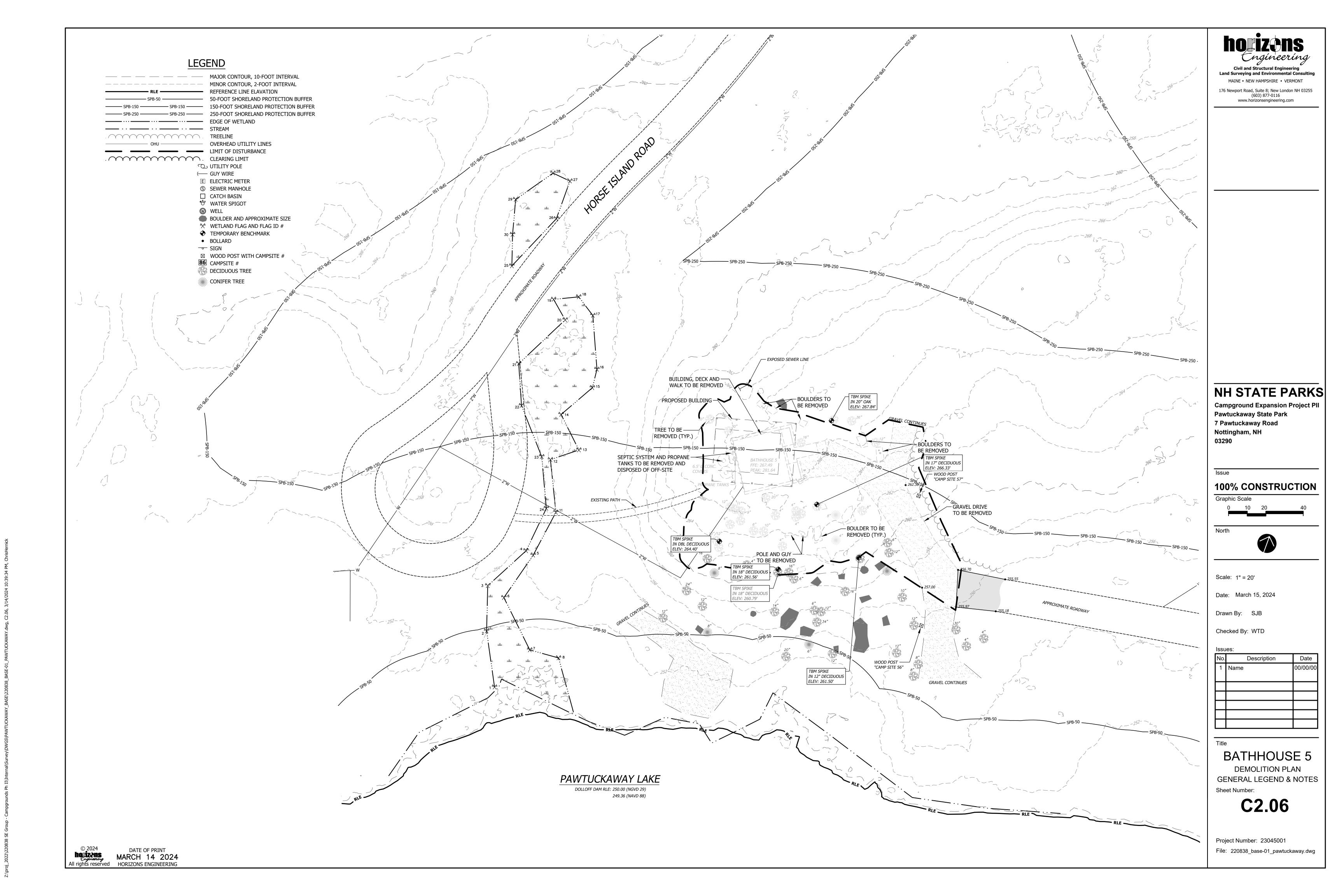


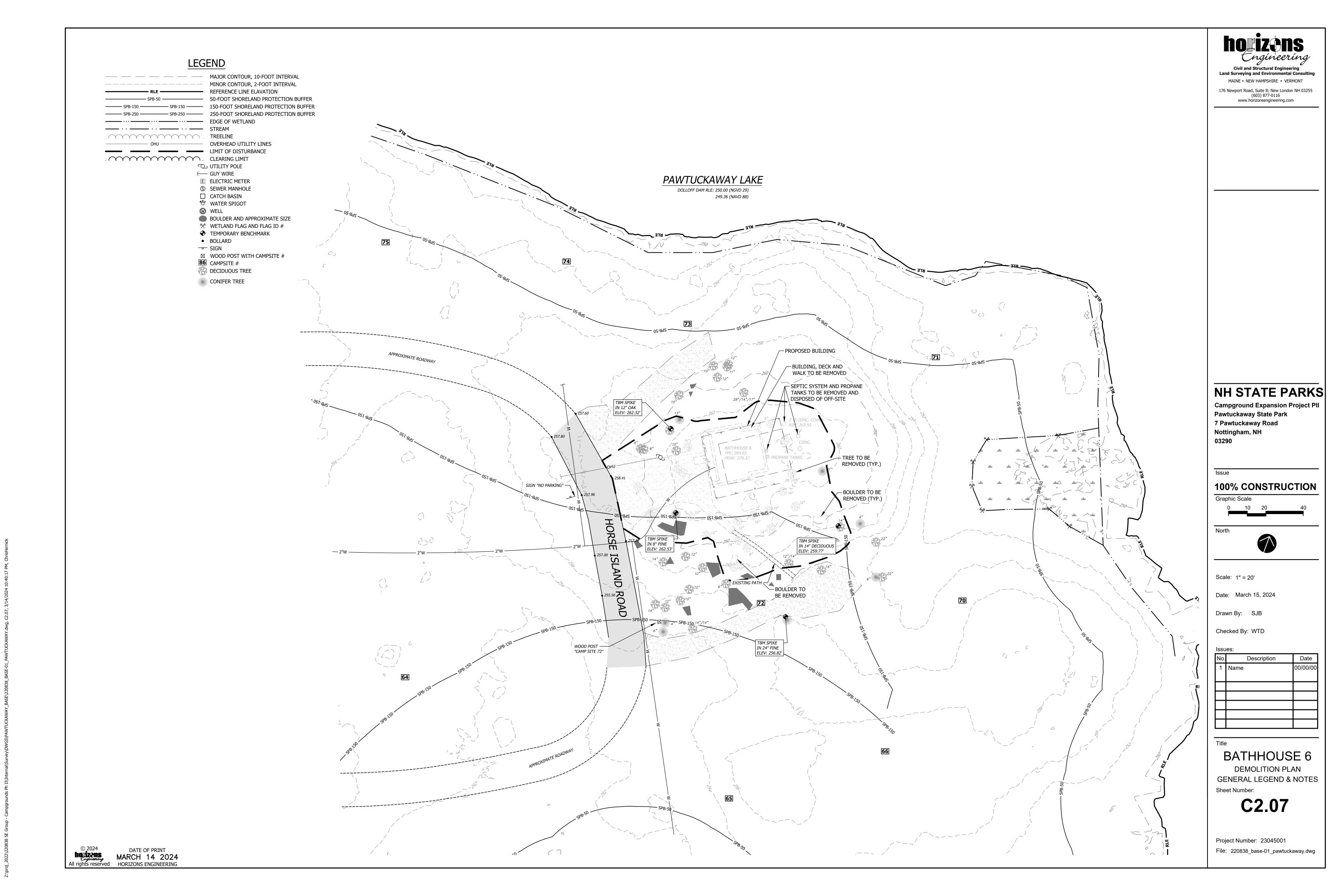


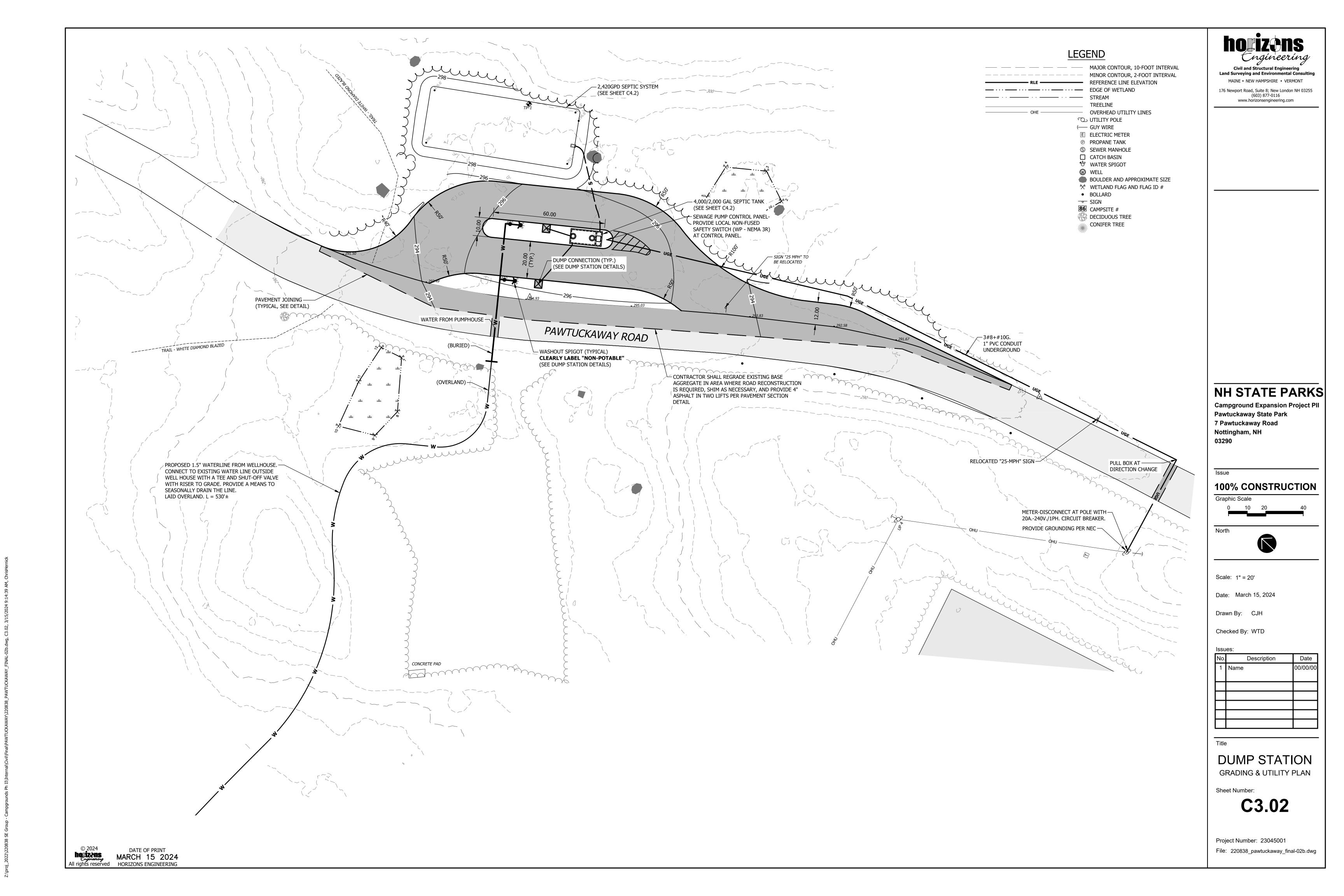


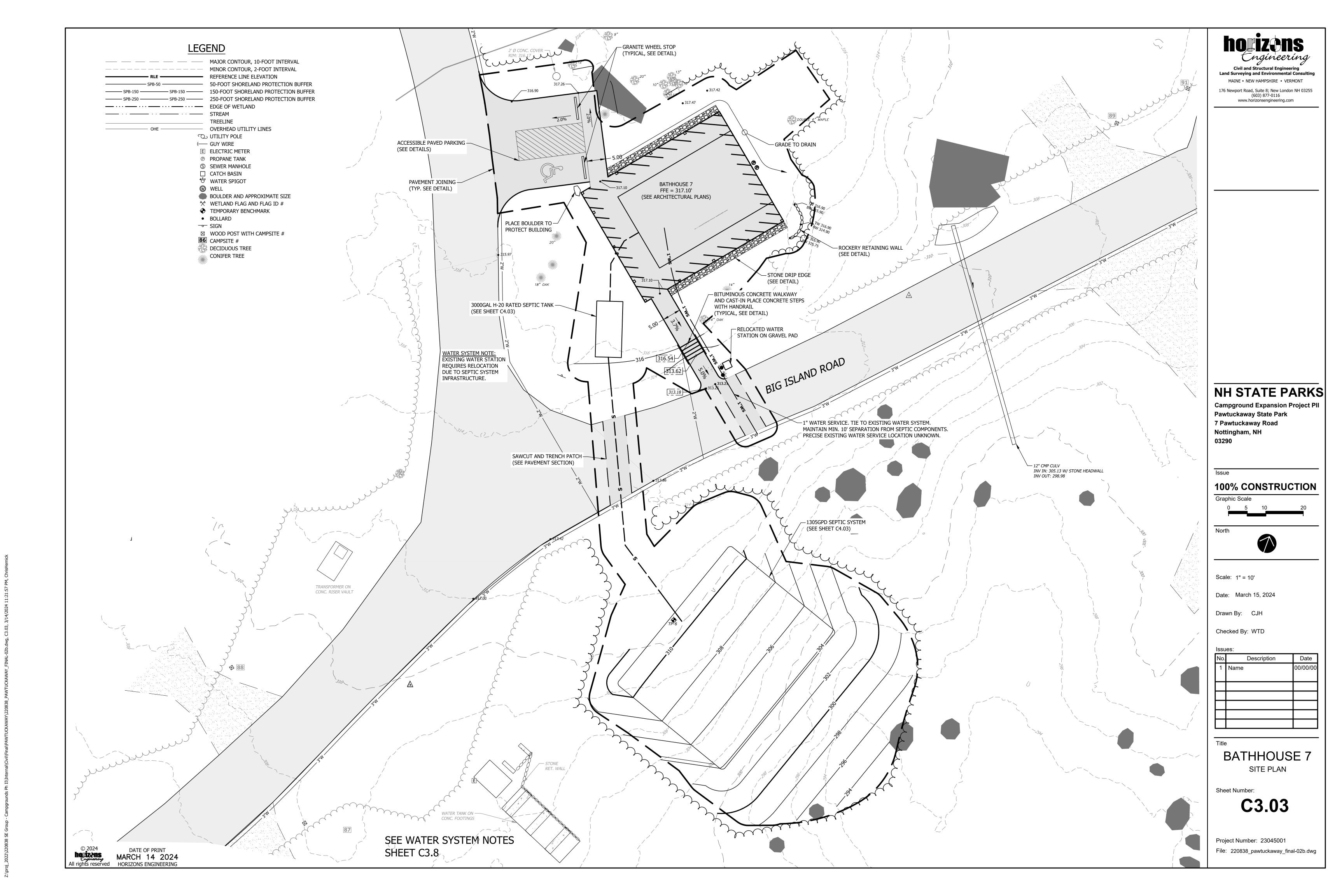


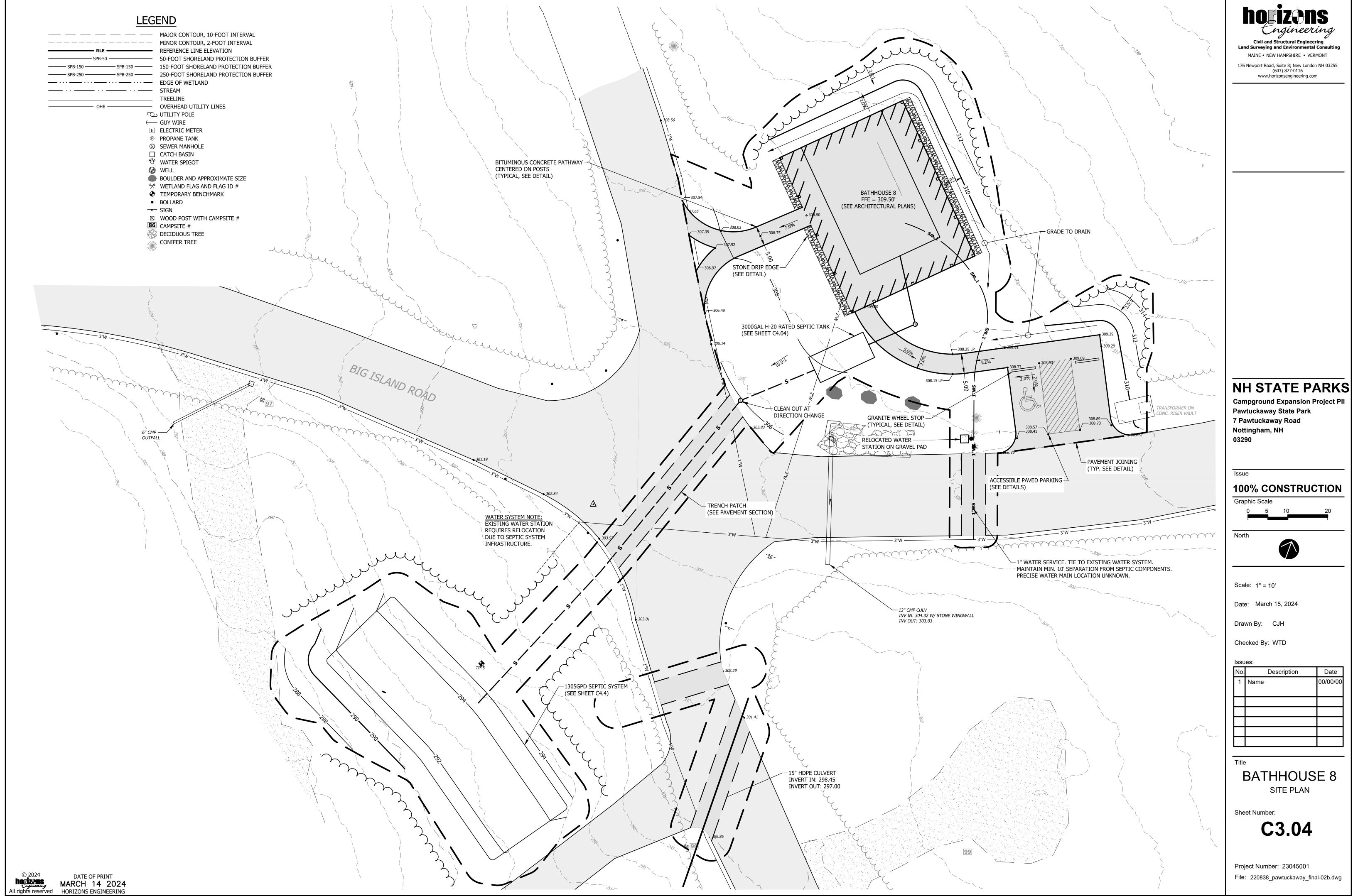




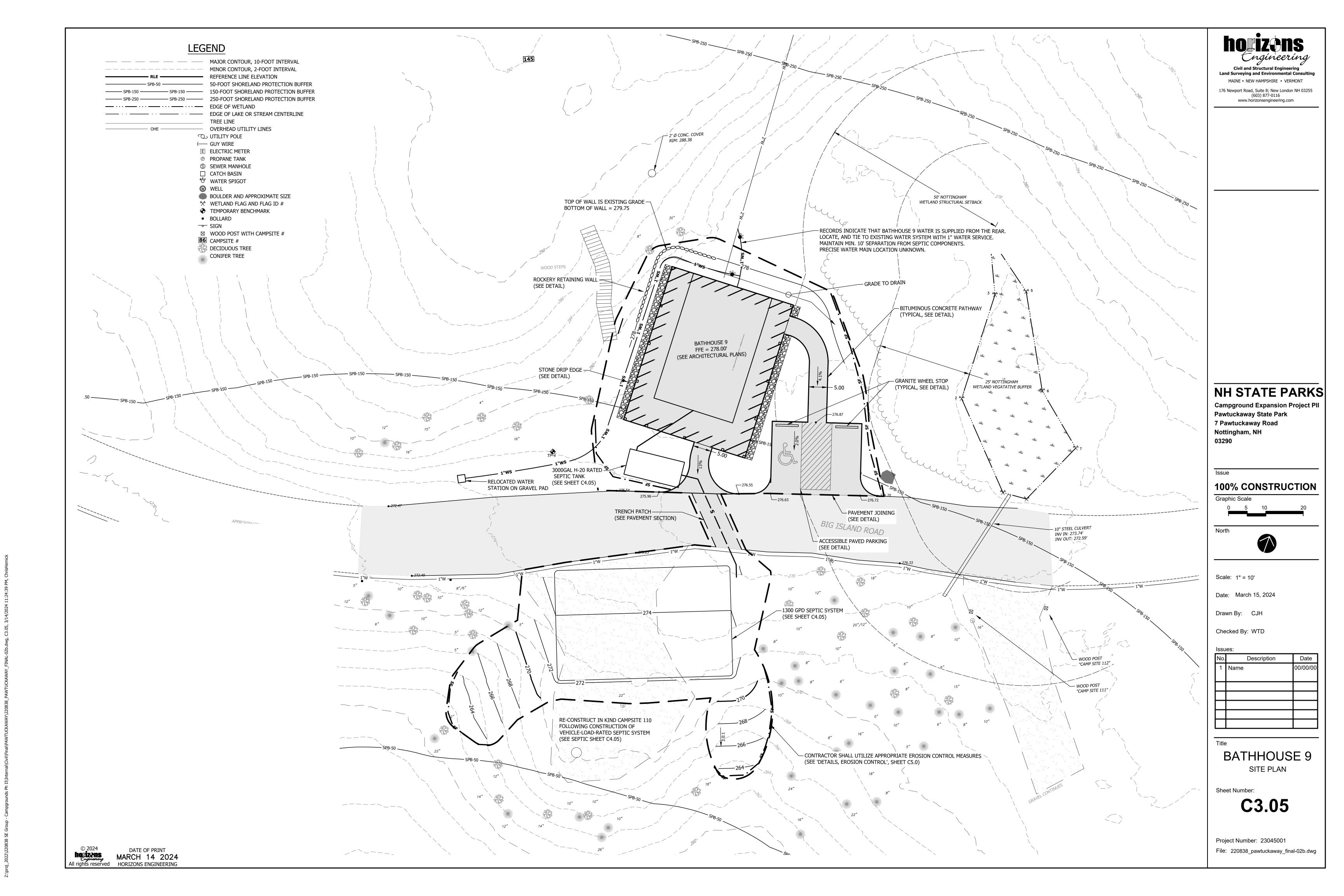


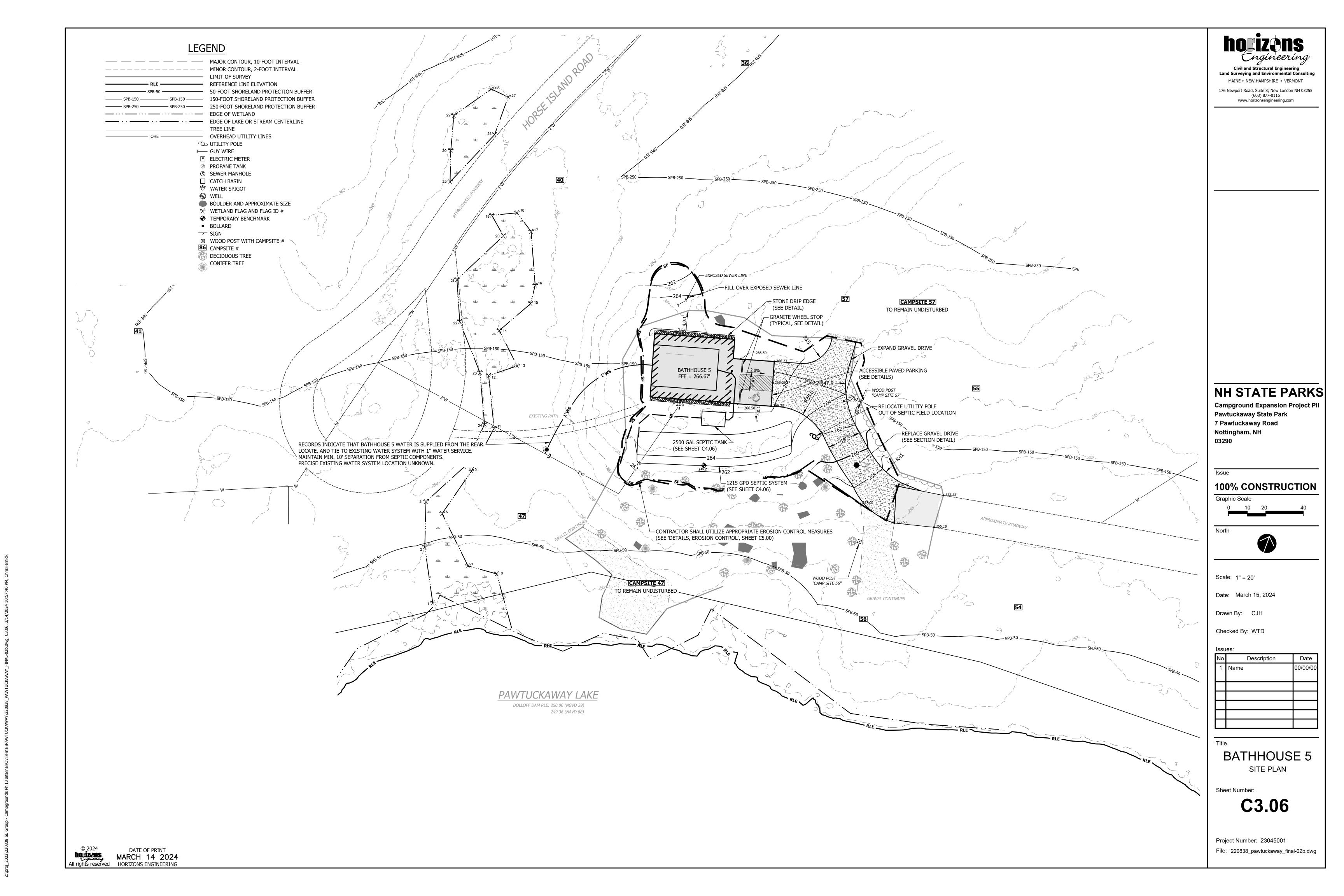


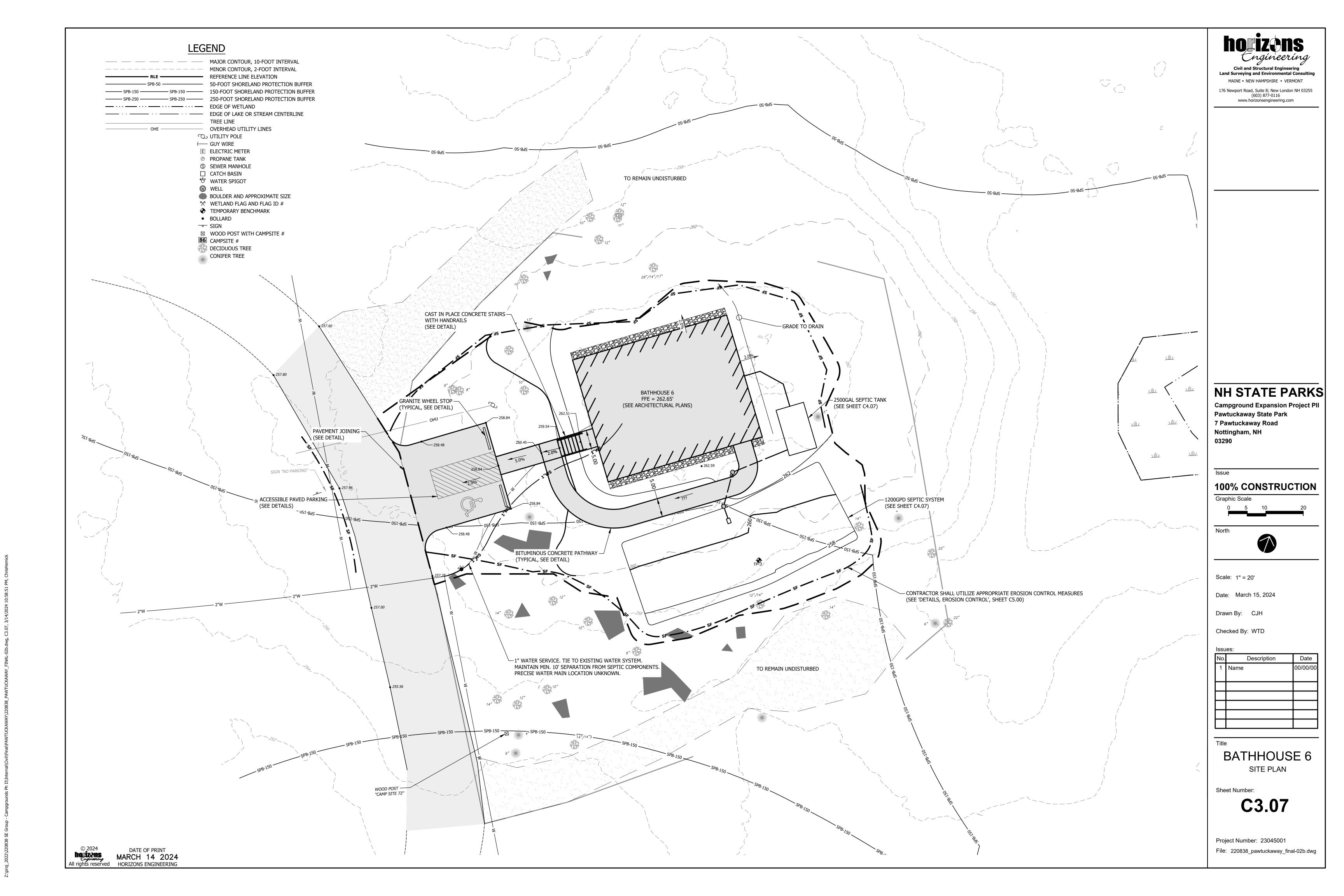


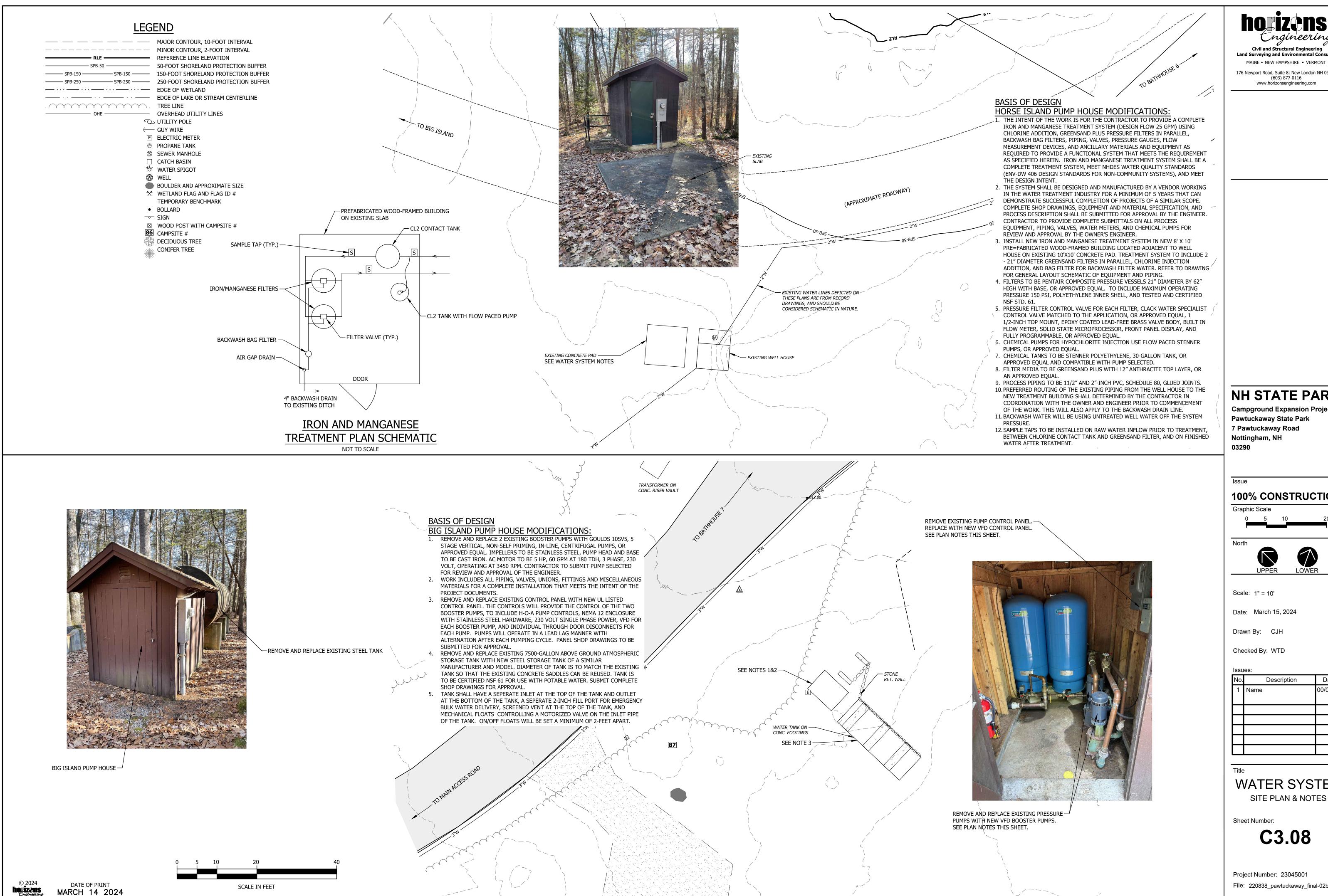


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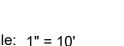
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# **NH STATE PARKS**

**Campground Expansion Project PII Pawtuckaway State Park** 7 Pawtuckaway Road Nottingham, NH

**100% CONSTRUCTION** 





Scale: 1" = 10'

Date: March 15, 2024

Drawn By: CJH

Checked By: WTD

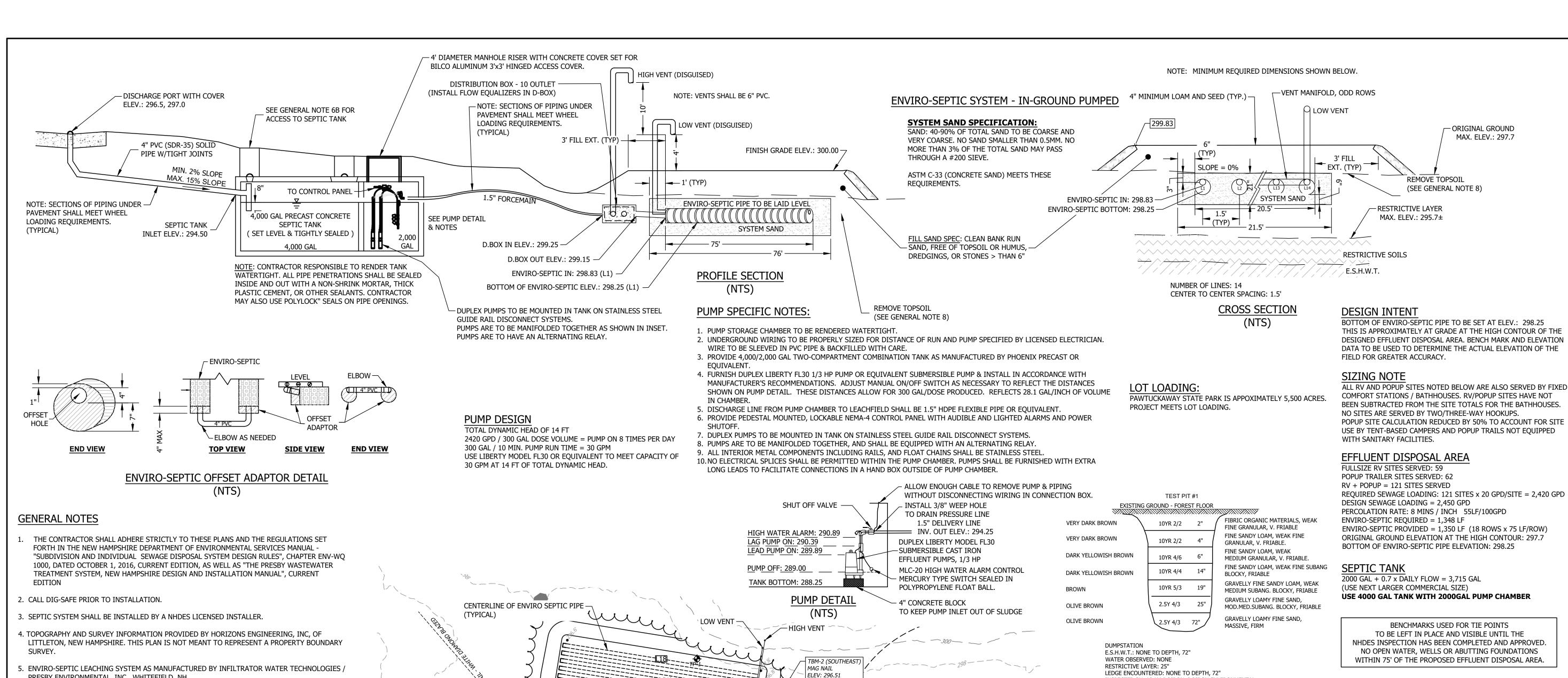
Date Description

WATER SYSTEM SITE PLAN & NOTES

Sheet Number:

C3.08

Project Number: 23045001 File: 220838\_pawtuckaway\_final-02b.dwg



0-OUTLET DISTRIBUTION BOX

 $\stackrel{\checkmark}{\longrightarrow}$  1.5" FORCEMAIN

- GRAVITY COLLECTION

PAWTUCKAWAY ROAD

**NON-POTABLE** 

SPIGOT (TYP.)

WASH-OUT

DRAINED WETLANDS

MAG NAIL IN 22" BLACK OAK ROOT

4,000 / 2,000 GALLON

DUPLEX SEPTIC PUMPS

TWO COMPARTMENT SEPTIC TANK

BE RELOCATED

ELEV: 295.82

6. COVER OVER PROPOSED SYSTEM: A. 18" MINIMUM COVER SHALL BE PROVIDED OVER THE PIPE FROM THE BATHHOUSE TO THE SEPTIC TANK OR THE PIPE SHALL BE INSULATED.

B. IF THE FINISH GRADE OVER THE SEPTIC TANK IS GREATER THAN 24" PROVIDE 30" HDPE RISER AND COVER TO BE SET OVER TANK OPENINGS FOR FUTURE ACCESS TO THE TANK COVERS FOR MAINTENANCE. RISER AND COVERS SHALL EXTEND TO FINISHED GRADE. EFFLUENT DISPOSAL AREA: MINIMUM COVER TO BE 6" WITH AVERAGE COVER BEING 12". THE

FINISH GRADE IS TO BE SLOPED TO DRAIN OFF THE TOP OF THE SYSTEM AT MINIMUM OF 1%. MAINTAIN 2' OF COVER OVER THE PIPE FROM THE SEPTIC TANK TO THE ENVIRO-SEPTIC PIPE OR THE PIPE SHALL BE INSULATED.

7. IF THE CONTRACTOR DETERMINES THAT EXISTING FIELD CONDITIONS ARE OTHER THAN SHOWN ON THESE PLANS, HE SHALL STOP WORK IMMEDIATELY AND NOTIFY THE OWNER AND DESIGNER FOR DIRECTIONS. IF CONTRACTOR ENCOUNTERS EXISTING SEPTIC TANK OR MATERIALS, HE SHALL REMOVE THEM OFF SITE WITH RESPECT TO CURRENT LOCAL AND STATE REGULATIONS.

. ALL TREES, ROOTS, LOAM AND OTHER ORGANIC MATTER SHALL BE REMOVED FROM UNDER LEACHFIELD AND SLOPE EXTENSIONS PRIOR TO PLACING FILL. PLACE FILL IN 16" LIFTS, CONSOLIDATE AND RAKE BACKFILL. SCARIFY SUBGRADE SOIL.

9. FILL USED TO RAISE THE EFFLUENT DISPOSAL AREA SHALL BE CLEAN BANK RUN SAND, FREE FROM TOPSOIL, HUMUS, DREDGINGS, OR STONES OR MATERIAL MORE THAN 6" IN DIAMETER.

10. ALL DISTURBED AREA SHALL BE LOAMED, SEEDED, FERTILIZED AND MULCHED (GRADE LOAM TO DRAIN 1% MIN SLOPE FROM TOP OF LEACHFIELD)

11. RECOMMENDED OPERATING PROCEDURES: A. PUMP SEPTIC TANKS ONCE EVERY TWO YEARS. B. USE BIODEGRADABLE DETERGENTS.

PRESBY ENVIRONMENTAL, INC., WHITEFIELD, NH.

C. PAPER PRODUCTS ONLY TO BE FLUSHED. FLUSHABLE BATHROOM PRODUCTS CAN CLOG THE SEPTIC SYSTEM. D. WATER SAVING DEVICES AND PROCEDURES ARE RECOMMENDED.

E. ANY FUTURE REPLACEMENT SYSTEM, IF NEEDED, SHALL BE LOCATED IN THE SAME LOCATION AS THIS DESIGN UNLESS CONDITIONS AT THE TIME OF REPLACEMENT DICTATE OTHERWISE. F. THE TANK SIZE SHALL BE INCREASED BY 50% IF A GARBAGE GRINDER IS TO BE INSTALLED.

12. PIPES AND CONNECTIONS OUTSIDE OF THE LEACHING AREA SHALL BE MADE WATER TIGHT. THE CONNECTIONS SHALL BE SEALED WITH NON-SHRINK HYDRAULIC CEMENT OR FLEXIBLE JOINT CONNECTORS.

13. THE DISTRIBUTION BOX SHALL HAVE S.S.I. INC. FLOW EQUALIZERS INSTALLED IN THE OUTLET

14. THIS SYSTEM HAS NOT BEEN DESIGNED FOR VEHICULAR TRAFFIC. THEREFORE, THE SYSTEM SHOULD BE PROTECTED FROM ANY WHEEL VEHICLES.

15. THE SITE IS NOT LOCATED WITHIN THE NHDES PROTECTIVE SHORELAND.

16. WETLANDS ON THE PROJECT SITE HAVE BEEN DELINEATED IN ACCORDANCE WITH ENV-WO 1014.06. THERE ARE POORLY DRAINED JURISDICTIONAL WETLANDS WITHIN 75' OF, BUT GREATER THAN 50' FROM, THE SYSTEM.

17. THERE ARE NO KNOWN BURIAL SITES, BURIAL GROUNDS, OR CEMETERIES WITHIN 25' OF THE SYSTEM OR ON THE PROPERTY.

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ITIES LOCATED NEAR THE EDA FIELD MUST BE RELOCATED BY THE INSTALLER/CONTRACTOR PRIOR ALL TREES WITHIN 10 FEET OF TO INSTALLATION. CONTRACTOR IS RESPONSIBLE TO VERIFY ALL UTILIT PROPOSED EDA TO BE REMOVED AND DISPOSED OF OFF SITE BY LOCATIONS PRIOR TO DEMOLITION THE INSTALLER/CONTRACTOR.

TBM-1 (NORTHWEST

MAG NAIL

ELEV: 298.00

DUMP STATION L14 PIPE END Α В TBM-1 (SOUTHEAST) 5.0 77.1 21.0 79.8 TBM-2 (NORTHWEST) 84.7 16.6 84.2 14.0

TIE TABLE

LEDGE ENCOUNTERED: NONE TO DEPTH, 72" INSPECTED BY: ADAM DOIRON, DOIRON ENVIRONMENTAL DATE: 3 OCTOBER 2023 SOILS TYPE: 343C CANTON GRAVELY FINE SANDY LOAM, EXTREMELY BOULDERY REFERENCE: NRCS WEB SOIL SURVEY, ROCKINGHAM COUNTY NH (NH015)

LOCATION MAP

DIRECTIONS: FROM NH-101 EXIT 5, NORTH ON NH-107. AFTER 0.6MI,

LEFT TO REMAIN ON NH-107. AFTER 0.1MI, RIGHT ONTO NH-156N.

AFTER 2.0MI, LEFT ON MOUNTAIN ROAD. AFTER 2.0MI LEFT ON

PAWTUCKAWAY ROAD. APPROX 2.1MI TO SITE ON THE LEFT.

RATE: 8 MIN./INCH

VENT REQUIREMENTS AND PLACEMENT WHERE SHOWN, LOW AND HIGH VENTS ARE REQUIRED TO ENSURE THAT AIR IS DRAWN COMPLETELY THROUGH THE ENTIRE SYSTEM. NO ADDITIONAL VENTS MAY BE LOCATED BETWEEN THE HIGH VENT AND LOW VENT. HIGH VENTS MUST PROVIDE AT LEAST THE SAME FLOW CAPACITY AS LOW VENTS: CONNECTIONS WITHIN THE SYSTEM MUST ALSO HAVE SIMILAR CAPACITIES. PER THE MANUFACTURER'S REQUIRMENTS, ALL VENTS SHALL HAVE A MINIMUM DIAMETER OF 6 INCHES. THE OPENING OF THE HIGH VENT MUST BE AT LEAST 10 FEET ABOVE THE OPENING OF THE LOW VENT.

LOW VENTS ARE INSTALLED THROUGH AN OFFSET ADAPTER AT THE END OF EACH SERIAL SYSTEM OR BED.

VENT LOCATIONS SHOWN ARE APPROXIMATE AND CAN BE RELOCATED SO LONG AS THEY ARE LAID LEVEL OR PITCHED BACK TO THE EDA. VENTS SHOULD BE PLACED IN LOCATIONS WHERE AESTHETIC IMPACT IS MINIMAL. AS NECESSARY, ADD SHRUBS OR OTHER VEGETATION TO SCREEN VENTS. "CANDY CANE" STYLE VENT COVERS ARE NOT PREFERRED; USE "MUSHROOM" STYLE VENT COVERS OR VENT COVERS THAT CAMOUFLAGE THE EDA VENT.

SHALL BE INSTALLED IN THE SYSTEM. PRIOR TO BACKFILLING THE SYSTEM CONTRACTOR SHALL PERFORM A SMOKE TEST AT THE D-BOX AND LOW VEN HOUSE VENT. IF NO CLEAR SIGNS OF AIR FLOW ARE OBSERVED, CONTRACTO SHALL CONTACT DESIGNER OR SYSTEM MANUFACTURER BEFORE BACKFILLING **NH STATE PARKS** 

**Civil and Structural Engineering** 

Land Surveying and Environmental Consulting

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THAMPS~

Designer

Subsurface Disposal

Systems

\*\*\*

Mark Lucy

New

No. 211

**Campground Expansion Project PII Pawtuckaway State Park** 7 Pawtuckaway Road Nottingham, NH 03290

**100% CONSTRUCTION** 

Graphic Scale

North

Scale: 1" = 20'

Date: March 15, 2024

Drawn By: CJH

Checked By: WTD

Issues Date Description Name

**ENVIRO-SEPTIC SYSTEM** PUMPED, IN-GROUND BED CAMPGROUND DESIGN (2,420 GPD)

NEW HAMPSHIRE DPMT OF NATURAL & CULTURAL RESOURCES 172 PEMBROKE ROAD CONCORD, NH 03301

PREVIOUS APPROVAL #: NONE

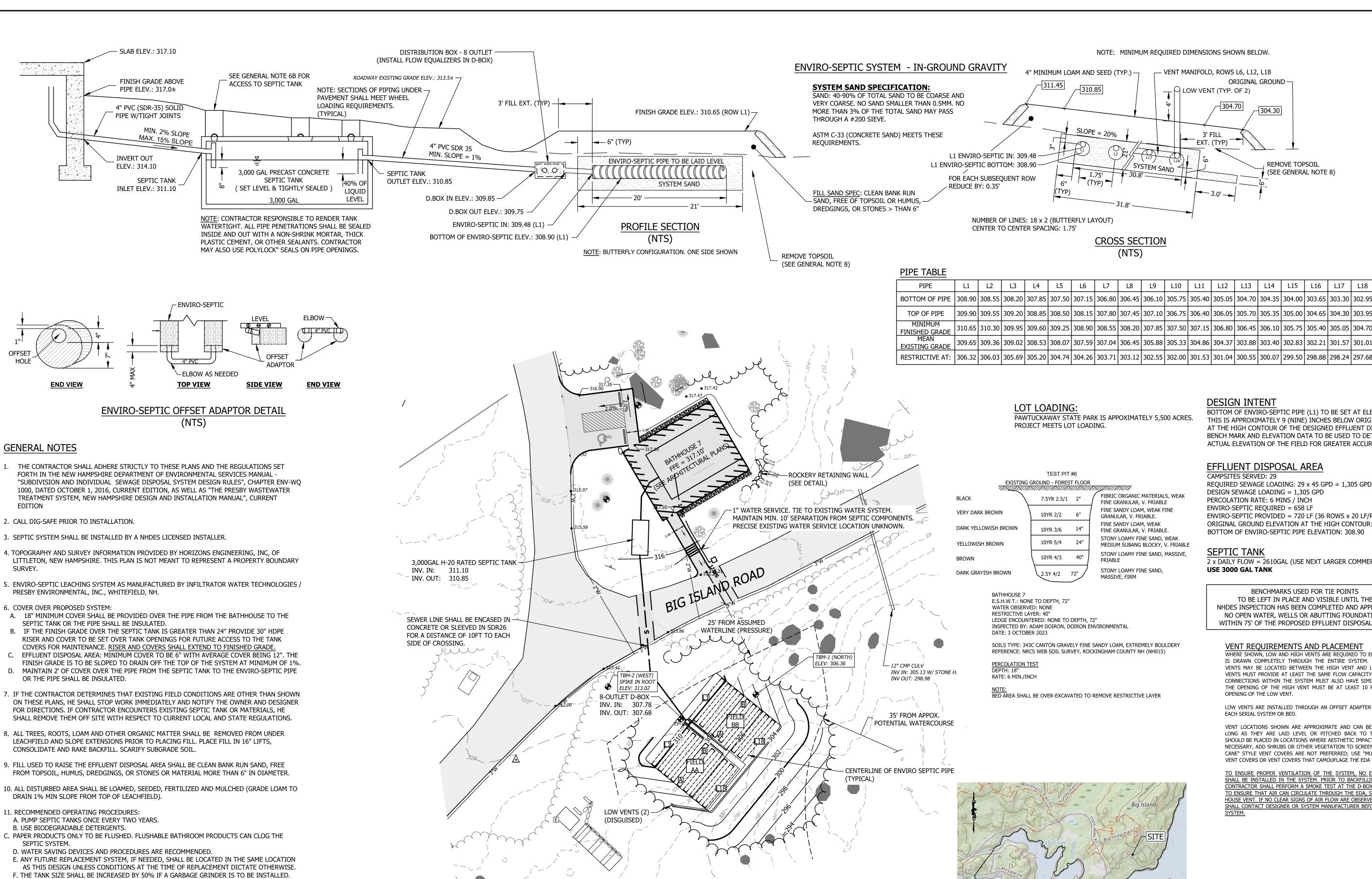
PAWTUCKAWAY ROAD NOTTINGHAM, NEW HAMPSHIRE

TAX MAP: 76 PARCEL: 2 COUNTY: ROCKINGHAM SUBDIVISION NAME: n/a SUBDIVISION APPROVAL: EXEMPT >5AC **DUMP STATION** I.S.D.S. PLAN AND DETAILS

Sheet Number:

C4.02

Project Number: 23045001 File: 220838\_pawtuckaway\_final-02b.dwg



TIE TABLE

BATHHOUSE 7 FIELD AA	L	1	L18	
PIPE END	А	В	А	В
M-1 (NORTH)	52.9	34.3	29.1	16.4
M-2 (WEST)	37.7	36.1	66.5	65.5
BATHHOUSE 7 FIELD BB	L1		L18	
PIPE END	А	В	А	В
M-1 (NORTH)	29.1	16.4	28.2	14.7
M-2 (WFST)	37 7	48.4	66.5	73.0

#### **LOCATION MAP**

DIRECTIONS: FROM NH-101 EXIT 5, NORTH ON NH-107, AFTER 0.6MI, LEFT TO REMAIN ON NH-107. AFTER 0.1MI, RIGHT ONTO NH-156N. AFTER 2.0MI, LEFT ON MOUNTAIN ROAD. AFTER 2.0MI LEFT ON PAWTUCKAWAY ROAD. AFTER 2.3MI, LEFT ON BIG ISLAND CAMPGROUND ROAD. APPROX 0.15MI TO SITE.

#### DESIGN INTENT

BOTTOM OF ENVIRO-SEPTIC PIPE (L1) TO BE SET AT ELEV.: 308.90 THIS IS APPROXIMATELY 9 (NINE) INCHES BELOW ORIGINAL GROUND AT THE HIGH CONTOUR OF THE DESIGNED EFFLUENT DISPOSAL AREA. BENCH MARK AND ELEVATION DATA TO BE USED TO DETERMINE THE ACTUAL ELEVATION OF THE FIELD FOR GREATER ACCURACY.

#### EFFLUENT DISPOSAL AREA

304.30

REMOVE TOPSOIL

(SEE GENERAL NOTE 8)

CAMPSITES SERVED: 29 REQUIRED SEWAGE LOADING:  $29 \times 45 \text{ GPD} = 1,305 \text{ GPD}$ DESIGN SEWAGE LOADING = 1,305 GPD PERCOLATION RATE: 6 MINS / INCH

ENVIRO-SEPTIC REQUIRED = 658 LF ENVIRO-SEPTIC PROVIDED = 720 LF (36 ROWS x 20 LF/ROW) ORIGINAL GROUND ELEVATION AT THE HIGH CONTOUR: 310.16 (@ L1) BOTTOM OF ENVIRO-SEPTIC PIPE ELEVATION: 308.90 (@ L:

#### SEPTIC TANK

2 x DAILY FLOW = 2610GAL (USE NEXT LARGER COMMERCIAL SIZE) **USE 3000 GAL TANK** 

BENCHMARKS USED FOR TIE POINTS TO BE LEFT IN PLACE AND VISIBLE UNTIL THE NHDES INSPECTION HAS BEEN COMPLETED AND APPROVED. NO OPEN WATER, WELLS OR ABUTTING FOUNDATIONS WITHIN 75' OF THE PROPOSED EFFLUENT DISPOSAL AREA.

VENT REQUIREMENTS AND PLACEMENT

WHERE SHOWN, LOW AND HIGH VENTS ARE REQUIRED TO ENSURE THAT AIR IS DRAWN COMPLETELY THROUGH THE ENTIRE SYSTEM. NO ADDITIONAL VENTS MAY BE LOCATED BETWEEN THE HIGH VENT AND LOW VENT. HIGH VENTS MUST PROVIDE AT LEAST THE SAME FLOW CAPACITY AS LOW VENTS: CONNECTIONS WITHIN THE SYSTEM MUST ALSO HAVE SIMILAR CAPACITIES. THE OPENING OF THE HIGH VENT MUST BE AT LEAST 10 FEET ABOVE THE OPENING OF THE LOW VENT.

LOW VENTS ARE INSTALLED THROUGH AN OFFSET ADAPTER AT THE END OF EACH SERIAL SYSTEM OR BED.

VENT LOCATIONS SHOWN ARE APPROXIMATE AND CAN BE RELOCATED SO LONG AS THEY ARE LAID LEVEL OR PITCHED BACK TO THE EDA. VENTS SHOULD BE PLACED IN LOCATIONS WHERE AESTHETIC IMPACT IS MINIMAL. AS NECESSARY, ADD SHRUBS OR OTHER VEGETATION TO SCREEN VENTS. "CANDY CANE" STYLE VENT COVERS ARE NOT PREFERRED; USE "MUSHROOM" STYLE VENT COVERS OR VENT COVERS THAT CAMOUFLAGE THE EDA VENT.

TO ENSURE PROPER VENTILATION OF THE SYSTEM, NO EFFLUENT FILTER SHALL BE INSTALLED IN THE SYSTEM. PRIOR TO BACKFILLING THE SYSTEM, CONTRACTOR SHALL PERFORM A SMOKE TEST AT THE D-BOX AND LOW VENT O ENSURE THAT AIR CAN CIRCULATE THROUGH THE EDA, SEPTIC TANK AND HOUSE VENT. IF NO CLEAR SIGNS OF AIR FLOW ARE OBSERVED, CONTRACTOR SHALL CONTACT DESIGNER OR SYSTEM MANUFACTURER BEFORE BACKFILLING

# **NH STATE PARKS**

Land Surveying and Environmental Consulting

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HAMPSW-

Subsurface Disposal

Systems

Mark Lucy

No. 211

**Campground Expansion Project PII Pawtuckaway State Park** 7 Pawtuckaway Road Nottingham, NH 03290

**100% CONSTRUCTION** 

Graphic Scale

North

Scale: 1" = 20'

Date: March 15, 2024

Drawn By: CJH

Checked By: WTD

Date Description

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	1	Name	00/00/00
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**ENVIRO-SEPTIC SYSTEM** SLOPED, IN-GROUND BED CAMPGROUND DESIGN (1,305 GPD)

NEW HAMPSHIRE DPMT OF NATURAL & CULTURAL RESOURCES 172 PEMBROKE ROAD CONCORD, NH 03301

PREVIOUS APPROVAL #: NONE

BIG ISLAND CAMPGROUND ROAD NOTTINGHAM, NEW HAMPSHIRE

COUNTY: ROCKINGHAM SUBDIVISION NAME: n/a SUBDIVISION APPROVAL: EXEMPT >5AC

TAX MAP: 76 PARCEL: 2

**BATHHOUSE 7** I.S.D.S. PLAN AND DETAILS

Sheet Number:

C4.03

Project Number: 23045001 File: 220838\_pawtuckaway\_final-02b.dwg

SYSTEM OR ON THE PROPERTY. DATE OF PRINT **hogizens** MARCH 14 2024

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SHOULD BE PROTECTED FROM ANY WHEEL VEHICLES.

15. THE SITE IS NOT LOCATED WITHIN THE NHDES PROTECTIVE SHORELAND.

CONNECTORS.

12. PIPES AND CONNECTIONS OUTSIDE OF THE LEACHING AREA SHALL BE MADE WATER TIGHT. THE CONNECTIONS SHALL BE SEALED WITH NON-SHRINK HYDRAULIC CEMENT OR FLEXIBLE JOINT

13. THE DISTRIBUTION BOX SHALL HAVE S.S.I. INC. FLOW EQUALIZERS INSTALLED IN THE OUTLET

14. THIS SYSTEM HAS NOT BEEN DESIGNED FOR VEHICULAR TRAFFIC. THEREFORE, THE SYSTEM

16. WETLANDS ON THE PROJECT SITE HAVE BEEN DELINEATED IN ACCORDANCE WITH ENV-WQ

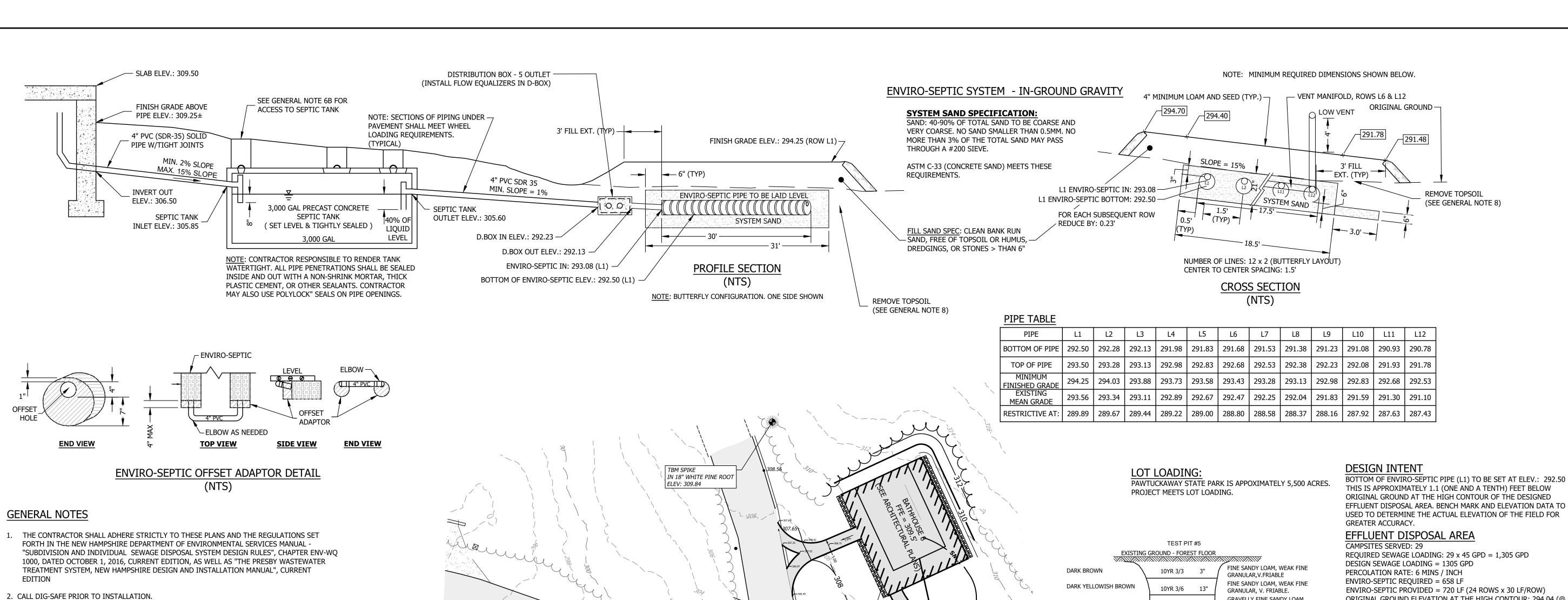
17. THERE ARE NO KNOWN BURIAL SITES, BURIAL GROUNDS, OR CEMETERIES WITHIN 25' OF THE

1014.06. THERE ARE NO JURISDICTIONAL WETLANDS ON WITHIN 75' OF THE SYSTEM.

ALL TREES WITHIN 10 FEET OF PROPOSED EDA TO BE REMOVED AND DISPOSED OF OFF SITE BY THE INSTALLER/CONTRACTOR.

ITILITIES NOTE: ANY UTILITIES LOCATED NEAR THE EDA FIELD MUST BE RELOCATED BY THE INSTALLER/CONTRACTOR PRIOR TO INSTALLATION. CONTRACTOR IS RESPONSIBLE TO VERIFY ALL UTILITY LOCATIONS PRIOR TO DEMOLITION

||TBM-



3,000GAL H-20 RATED -

INV. IN: 306.00

INV. OUT: 305.75

SEPTIC TANK

IN 18" WHITE PINE ROOT

- SEWER LINE SHALL BE ENCASED IN

CONCRETE OR SLEEVED IN SDR26

FOR A DISTANCE OF 10FT TO EACH

L12

ELEV: 309.59

SIDE OF CROSSINGS.

BIG ISLAND ROAD

TIE TABLE

BATHHOUSE 8 -- FIELD AA

5-OUTLET D-BOX

INV. IN: 292.23

INV. OUT: 292.13

#### 3. SEPTIC SYSTEM SHALL BE INSTALLED BY A NHDES LICENSED INSTALLER.

- 4. TOPOGRAPHY AND SURVEY INFORMATION PROVIDED BY HORIZONS ENGINEERING, INC, OF LITTLETON, NEW HAMPSHIRE. THIS PLAN IS NOT MEANT TO REPRESENT A PROPERTY BOUNDARY
- 5. ENVIRO-SEPTIC LEACHING SYSTEM AS MANUFACTURED BY INFILTRATOR WATER TECHNOLOGIES / PRESBY ENVIRONMENTAL, INC., WHITEFIELD, NH.

#### 6. COVER OVER PROPOSED SYSTEM:

- A. 18" MINIMUM COVER SHALL BE PROVIDED OVER THE PIPE FROM THE BATHHOUSE TO THE SEPTIC TANK OR THE PIPE SHALL BE INSULATED.
- B. IF THE FINISH GRADE OVER THE SEPTIC TANK IS GREATER THAN 24" PROVIDE 30" HDPE
- RISER AND COVER TO BE SET OVER TANK OPENINGS FOR FUTURE ACCESS TO THE TANK COVERS FOR MAINTENANCE. RISER AND COVERS SHALL EXTEND TO FINISHED GRADE.
- EFFLUENT DISPOSAL AREA: MINIMUM COVER TO BE 6" WITH AVERAGE COVER BEING 12". THE FINISH GRADE IS TO BE SLOPED TO DRAIN OFF THE TOP OF THE SYSTEM AT MINIMUM OF 1%.
- MAINTAIN 2' OF COVER OVER THE PIPE FROM THE SEPTIC TANK TO THE ENVIRO-SEPTIC PIPE OR THE PIPE SHALL BE INSULATED.
- 7. IF THE CONTRACTOR DETERMINES THAT EXISTING FIELD CONDITIONS ARE OTHER THAN SHOWN ON THESE PLANS, HE SHALL STOP WORK IMMEDIATELY AND NOTIFY THE OWNER AND DESIGNER FOR DIRECTIONS. IF CONTRACTOR ENCOUNTERS EXISTING SEPTIC TANK OR MATERIALS, HE SHALL REMOVE THEM OFF SITE WITH RESPECT TO CURRENT LOCAL AND STATE REGULATIONS.
- 8. ALL TREES, ROOTS, LOAM AND OTHER ORGANIC MATTER SHALL BE REMOVED FROM UNDER LEACHFIELD AND SLOPE EXTENSIONS PRIOR TO PLACING FILL. PLACE FILL IN 16" LIFTS,
- 9. FILL USED TO RAISE THE EFFLUENT DISPOSAL AREA SHALL BE CLEAN BANK RUN SAND, FREE FROM TOPSOIL, HUMUS, DREDGINGS, OR STONES OR MATERIAL MORE THAN 6" IN DIAMETER.
- 10. ALL DISTURBED AREA SHALL BE LOAMED, SEEDED, FERTILIZED AND MULCHED (GRADE LOAM TO
- DRAIN 1% MIN SLOPE FROM TOP OF LEACHFIELD)

CONSOLIDATE AND RAKE BACKFILL. SCARIFY SUBGRADE SOIL.

- 11. RECOMMENDED OPERATING PROCEDURES:
- A. PUMP SEPTIC TANKS ONCE EVERY TWO YEARS. B. USE BIODEGRADABLE DETERGENTS.
- C. PAPER PRODUCTS ONLY TO BE FLUSHED. FLUSHABLE BATHROOM PRODUCTS CAN CLOG THE
- SEPTIC SYSTEM.
- D. WATER SAVING DEVICES AND PROCEDURES ARE RECOMMENDED. E. ANY FUTURE REPLACEMENT SYSTEM, IF NEEDED, SHALL BE LOCATED IN THE SAME LOCATION AS THIS DESIGN UNLESS CONDITIONS AT THE TIME OF REPLACEMENT DICTATE OTHERWISE.
- 12. PIPES AND CONNECTIONS OUTSIDE OF THE LEACHING AREA SHALL BE MADE WATER TIGHT. THE CONNECTIONS SHALL BE SEALED WITH NON-SHRINK HYDRAULIC CEMENT OR FLEXIBLE JOINT CONNECTORS.

F. THE TANK SIZE SHALL BE INCREASED BY 50% IF A GARBAGE GRINDER IS TO BE INSTALLED.

- 13. THE DISTRIBUTION BOX SHALL HAVE S.S.I. INC. FLOW EQUALIZERS INSTALLED IN THE OUTLET
- 14. THIS SYSTEM HAS NOT BEEN DESIGNED FOR VEHICULAR TRAFFIC. THEREFORE, THE SYSTEM SHOULD BE PROTECTED FROM ANY WHEEL VEHICLES.
- 15. THE SITE <u>IS NOT LOCATED</u> WITHIN THE NHDES PROTECTIVE SHORELAND.
- 16. WETLANDS ON THE PROJECT SITE HAVE BEEN DELINEATED IN ACCORDANCE WITH ENV-WQ 1014.06. THERE ARE NO JURISDICTIONAL WETLANDS ON WITHIN 75' OF THE SYSTEM.
- 17. THERE ARE NO KNOWN BURIAL SITES, BURIAL GROUNDS, OR CEMETERIES WITHIN 25' OF THE SYSTEM OR ON THE PROPERTY.

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ALL TREES WITHIN 10 FEET OF PROPOSED EDA TO BE REMOVED AND DISPOSED OF OFF SITE BY THE INSTALLER/CONTRACTOR.

EDA FIELD MUST BE RELOCATED BY THE INSTALLER/CONTRACTOR PRIOR TO INSTALLATION. CONTRACTOR IS RESPONSIBLE TO VERIFY ALL UTILITY LOCATIONS PRIOR TO DEMOLITION AND CONSTRUCTION

75' FROM VERY

POORLY DRAINED \

WETLANDS

CENTERLINE OF

**ENVIRO SEPTIC** 

PIPE (TYPICAL)

LOW VENTS (2)

(DISGUISE)

#### PIPE END В В TBM-1 (SPIKE NORTH) 0.9 30.7 16.0 34.6 TBM-2 (SPIKE SITE 98) 71.8 49.6 64.3 37.8 BATHHOUSE 8 -- FIELD BB L12 PIPE END Α В TBM-1 (SPIKE NORTH) 67.3 67.8 37.5 38.4 TBM-2 (SPIKE SITE 98) 45.5 34.9 34.5 18.4

25' FROM ASSUMED

WATERLINE (PRESSURE)

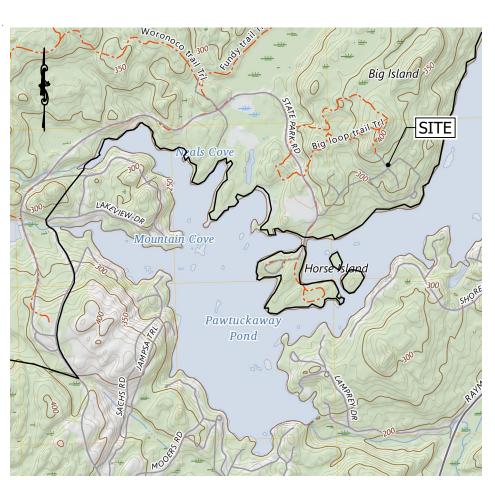
GRAVELLY FINE SANDY LOAM, YELLOWISH BROWN 10YR 5/4 24' WEAK FINE GRANULAR, V. FRIABLE GRAVELLY FINE SANDY LOAM, DARK YELLOWISH BROWN MASSIVE, FRIABLE GRAVELLY FINE SANDY LOAM, 2.5Y 4/3 MASSIVE, FIRM & FRIABLE

> BATHHOUSE 8 E.S.H.W.T.: 68" WATER OBSERVED: NONE RESTRICTIVE LAYER: 44" LEDGE ENCOUNTERED: NONE TO DEPTH, 82" INSPECTED BY: ADAM DOIRON, DOIRON ENVIRONMENTAL DATE: 2 OCTOBER 2023

SOILS TYPE: 343C CANTON GRAVELY FINE SANDY LOAM, EXTREMELY BOULDERY REFERENCE: NRCS WEB SOIL SURVEY, ROCKINGHAM COUNTY NH (NH015)

RATE: 6 MIN./INCH

BED AREA SHALL BE OVER-EXCAVATED TO REMOVE RESTRICTIVE LAYER



#### **LOCATION MAP**

DIRECTIONS: FROM NH-101 EXIT 5, NORTH ON NH-107. AFTER 0.6MI, LEFT TO REMAIN ON NH-107. AFTER 0.1MI, RIGHT ONTO NH-156N. AFTER 2.0MI, LEFT ON MOUNTAIN ROAD. AFTER 2.0MI LEFT ON PAWTUCKAWAY ROAD. AFTER 2.3MI, LEFT ON BIG ISLAND CAMPGROUND ROAD. APPROX 0.25MI TO SITE.

EFFLUENT DISPOSAL AREA. BENCH MARK AND ELEVATION DATA TO BE USED TO DETERMINE THE ACTUAL ELEVATION OF THE FIELD FOR

ORIGINAL GROUND ELEVATION AT THE HIGH CONTOUR: 294.04 (@ L1) BOTTOM OF ENVIRO-SEPTIC PIPE ELEVATION: 292.50

#### SEPTIC TANK

2 x DAILY FLOW = 2610GAL (USE NEXT LARGER COMMERCIAL SIZE) **USE 3000 GAL TANK** 

BENCHMARKS USED FOR TIE POINTS TO BE LEFT IN PLACE AND VISIBLE UNTIL THE NHDES INSPECTION HAS BEEN COMPLETED AND APPROVED. NO OPEN WATER, WELLS OR ABUTTING FOUNDATIONS WITHIN 75' OF THE PROPOSED EFFLUENT DISPOSAL AREA.

### VENT REQUIREMENTS AND PLACEMENT

WHERE SHOWN, LOW AND HIGH VENTS ARE REQUIRED TO ENSURE THAT AIR IS DRAWN COMPLETELY THROUGH THE ENTIRE SYSTEM. NO ADDITIONAL VENTS MAY BE LOCATED BETWEEN THE HIGH VENT AND LOW VENT. HIGH VENTS MUST PROVIDE AT LEAST THE SAME FLOW CAPACITY AS LOW VENTS: CONNECTIONS WITHIN THE SYSTEM MUST ALSO HAVE SIMILAR CAPACITIES. THE OPENING OF THE HIGH VENT MUST BE AT LEAST 10 FEET ABOVE THE OPENING OF THE LOW VENT.

LOW VENTS ARE INSTALLED THROUGH AN OFFSET ADAPTER AT THE END OF EACH SERIAL SYSTEM OR BED.

VENT LOCATIONS SHOWN ARE APPROXIMATE AND CAN BE RELOCATED SO LONG AS THEY ARE LAID LEVEL OR PITCHED BACK TO THE EDA. VENTS SHOULD BE PLACED IN LOCATIONS WHERE AESTHETIC IMPACT IS MINIMAL. AS NECESSARY, ADD SHRUBS OR OTHER VEGETATION TO SCREEN VENTS. "CANDY CANE" STYLE VENT COVERS ARE NOT PREFERRED; USE "MUSHROOM" STYLE

VENT COVERS OR VENT COVERS THAT CAMOUFLAGE THE EDA VENT.

TO ENSURE PROPER VENTILATION OF THE SYSTEM, NO EFFLUENT FILTER SHALL BE INSTALLED IN THE SYSTEM. PRIOR TO BACKFILLING THE SYSTEM, CONTRACTOR SHALL PERFORM A SMOKE TEST AT THE D-BOX AND LOW VENT O ENSURE THAT AIR CAN CIRCULATE THROUGH THE EDA, SEPTIC TANK AND HOUSE VENT. IF NO CLEAR SIGNS OF AIR FLOW ARE OBSERVED, CONTRACTOR SHALL CONTACT DESIGNER OR SYSTEM MANUFACTURER BEFORE BACKFILLING

**NH STATE PARKS** 

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MAINE • NEW HAMPSHIRE • VERMONT

176 Newport Road, Suite 8; New London NH 03255

(603) 877-0116

www.horizonsengineering.com

HAMPS\_

Designer

Subsurface Disposal

Systems

Mark Lucy

No. 211

**Campground Expansion Project PII Pawtuckaway State Park** 7 Pawtuckaway Road Nottingham, NH 03290

**100% CONSTRUCTION** 

Graphic Scale

North

Scale: 1" = 20'

Date: March 15, 2024

Drawn By: CJH

Checked By: WTD

No.	Description	Date
1	Name	00/00/00
		·

**ENVIRO-SEPTIC SYSTEM** SLOPED, IN-GROUND BED CAMPGROUND DESIGN (1,305 GPD)

NEW HAMPSHIRE DPMT OF NATURAL & CULTURAL RESOURCES 172 PEMBROKE ROAD

PREVIOUS APPROVAL #: NONE

BIG ISLAND CAMPGROUND ROAD NOTTINGHAM, NEW HAMPSHIRE TAX MAP: 76 PARCEL: 2

CONCORD, NH 03301

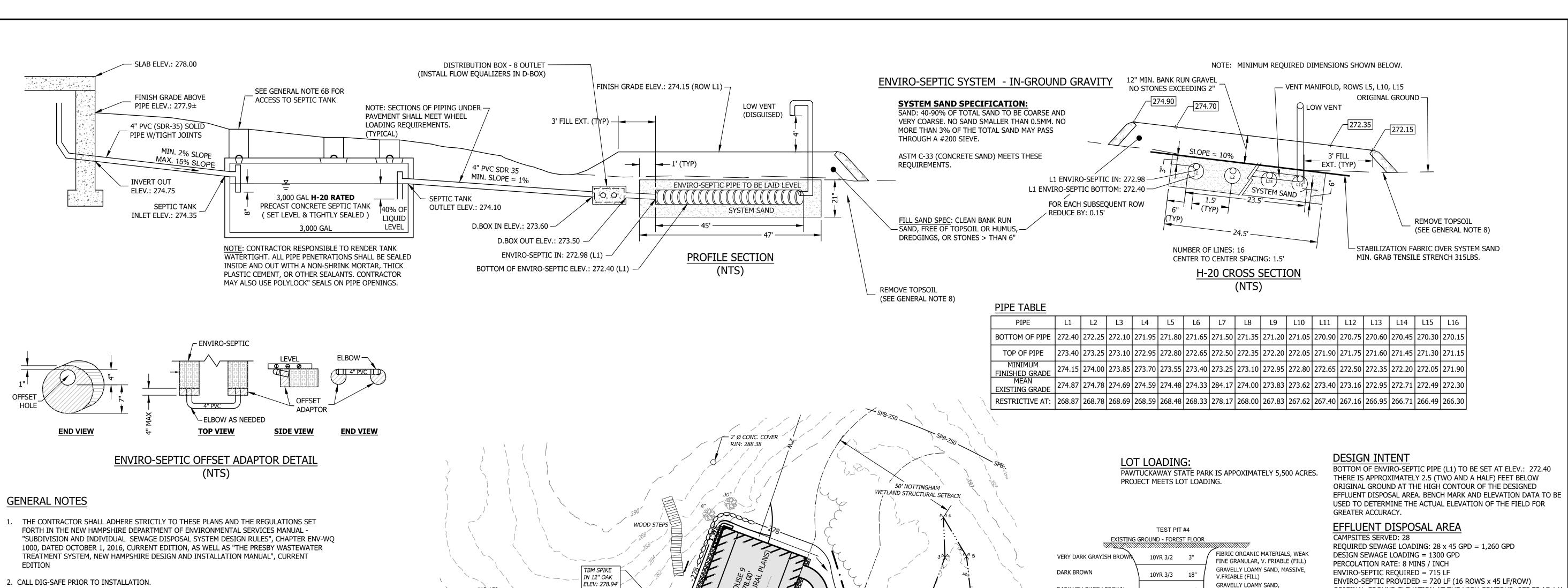
COUNTY: ROCKINGHAM SUBDIVISION NAME: n/a SUBDIVISION APPROVAL: EXEMPT >5AC

BATHHOUSE 8 I.S.D.S. PLAN AND DETAILS

Sheet Number:

C4.04

Project Number: 23045001 File: 220838 pawtuckaway final-02b.dwg



TBM SPIKE

BIG ISLAND ROAD

35' FROM CULVERT

8-OUTLET D-BOX

INV. OUT: 273.50 18"

TBM-2 SPIKE

-LOW VENT

(DISGUISE)

CENTERLINE OF ENVIRO SEPTIC PIPE

-SPB-50 × (TYPICAL)

ELEV: 274.35'

IN 10" DECIDUOUS

INV. IN: 273.60 276.33

I 20" HEMLOCK

WETLAND VEGATATIVE BUFFER -

- 10" STEEL CULVERT

INV IN: 273.74'

INV OUT: 272.59'

→ WOOD POST

- WOOD POST

"CAMP SITE 112"

"CAMP SITE 111"

- SEWER LINE SHALL BE ENCASED IN

CONCRETE OR SLEEVED IN SDR26

SIDE OF CROSSING.

FOR A DISTANCE OF 10FT TO EACH

- 3. SEPTIC SYSTEM SHALL BE INSTALLED BY A NHDES LICENSED INSTALLER.
- 4. TOPOGRAPHY AND SURVEY INFORMATION PROVIDED BY HORIZONS ENGINEERING, INC, OF LITTLETON, NEW HAMPSHIRE. THIS PLAN IS NOT MEANT TO REPRESENT A PROPERTY BOUNDARY
- 5. ENVIRO-SEPTIC LEACHING SYSTEM AS MANUFACTURED BY INFILTRATOR WATER TECHNOLOGIES / PRESBY ENVIRONMENTAL, INC., WHITEFIELD, NH.

#### 6. COVER OVER PROPOSED SYSTEM:

- A. 18" MINIMUM COVER SHALL BE PROVIDED OVER THE PIPE FROM THE BATHHOUSE TO THE
- SEPTIC TANK OR THE PIPE SHALL BE INSULATED. B. IF THE FINISH GRADE OVER THE SEPTIC TANK IS GREATER THAN 24" PROVIDE 30" HDPE
- RISER AND COVER TO BE SET OVER TANK OPENINGS FOR FUTURE ACCESS TO THE TANK COVERS FOR MAINTENANCE. RISER AND COVERS SHALL EXTEND TO FINISHED GRADE.
- EFFLUENT DISPOSAL AREA: MINIMUM COVER TO BE 6" WITH AVERAGE COVER BEING 12". THE FINISH GRADE IS TO BE SLOPED TO DRAIN OFF THE TOP OF THE SYSTEM AT MINIMUM OF 1%.
- MAINTAIN 2' OF COVER OVER THE PIPE FROM THE SEPTIC TANK TO THE ENVIRO-SEPTIC PIPE OR THE PIPE SHALL BE INSULATED.
- 7. IF THE CONTRACTOR DETERMINES THAT EXISTING FIELD CONDITIONS ARE OTHER THAN SHOWN ON THESE PLANS, HE SHALL STOP WORK IMMEDIATELY AND NOTIFY THE OWNER AND DESIGNER FOR DIRECTIONS. IF CONTRACTOR ENCOUNTERS EXISTING SEPTIC TANK OR MATERIALS, HE SHALL REMOVE THEM OFF SITE WITH RESPECT TO CURRENT LOCAL AND STATE REGULATIONS.
- . ALL TREES, ROOTS, LOAM AND OTHER ORGANIC MATTER SHALL BE REMOVED FROM UNDER LEACHFIELD AND SLOPE EXTENSIONS PRIOR TO PLACING FILL. PLACE FILL IN 16" LIFTS, CONSOLIDATE AND RAKE BACKFILL. SCARIFY SUBGRADE SOIL.
- 9. FILL USED TO RAISE THE EFFLUENT DISPOSAL AREA SHALL BE CLEAN BANK RUN SAND, FREE FROM TOPSOIL, HUMUS, DREDGINGS, OR STONES OR MATERIAL MORE THAN 6" IN DIAMETER.
- 10. ALL DISTURBED AREA SHALL BE LOAMED, SEEDED, FERTILIZED AND MULCHED (GRADE LOAM TO
- DRAIN 1% MIN SLOPE FROM TOP OF LEACHFIELD)
- 11. RECOMMENDED OPERATING PROCEDURES: A. PUMP SEPTIC TANKS ONCE EVERY TWO YEARS.
- B. USE BIODEGRADABLE DETERGENTS.
- C. PAPER PRODUCTS ONLY TO BE FLUSHED. FLUSHABLE BATHROOM PRODUCTS CAN CLOG THE SEPTIC SYSTEM.
- D. WATER SAVING DEVICES AND PROCEDURES ARE RECOMMENDED. E. ANY FUTURE REPLACEMENT SYSTEM, IF NEEDED, SHALL BE LOCATED IN THE SAME LOCATION AS THIS DESIGN UNLESS CONDITIONS AT THE TIME OF REPLACEMENT DICTATE OTHERWISE.

F. THE TANK SIZE SHALL BE INCREASED BY 50% IF A GARBAGE GRINDER IS TO BE INSTALLED.

- 12. PIPES AND CONNECTIONS OUTSIDE OF THE LEACHING AREA SHALL BE MADE WATER TIGHT. THE CONNECTIONS SHALL BE SEALED WITH NON-SHRINK HYDRAULIC CEMENT OR FLEXIBLE JOINT CONNECTORS.
- 13. THE DISTRIBUTION BOX SHALL HAVE S.S.I. INC. FLOW EQUALIZERS INSTALLED IN THE OUTLET
- 14. THIS SYSTEM HAS BEEN DESIGNED FOR VEHICULAR TRAFFIC.
- 15. THE SITE <u>IS LOCATED</u> WITHIN THE NHDES PROTECTIVE SHORELAND.
- 16. WETLANDS ON THE PROJECT SITE HAVE BEEN DELINEATED IN ACCORDANCE WITH ENV-WQ 1014.06. THERE ARE POORLY DRAINED JURISDICTIONAL WETLANDS WITHIN 75' OF, BUT GREATER THAN 50' FROM, THE SYSTEM.
- 17. THERE ARE NO KNOWN BURIAL SITES, BURIAL GROUNDS, OR CEMETERIES WITHIN 25' OF THE SYSTEM OR ON THE PROPERTY.

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BATHHOUSE 9	L1		L16	
PIPE END	А	В	А	В
TBM-1 (SPIKE IN 12" ASH)	24.3	68.6	27.6	69.8
TBM-2 (SPIKE IN 10" DECID.)	95.0	50.8	94.7	50.2

TBM-1 SPIKE

IN 12" ASH

ELEV: 271.96'

TIE POINT #1

75' FROM SURFACE WATER

3,000GAL H-20 RATED

INV. IN: 274.35

INV. OUT: 274.10

SEPTIC TANK

MATE ROADWAY

ILITIES LOCATED NEAR THE EDA FIELD MUST BE RELOCATED BY THE INSTALLER/CONTRACTOR PRIOR ALL TREES WITHIN 10 FEET OF TO INSTALLATION. CONTRACTOR IS RESPONSIBLE TO VERIFY ALL UTILITY PROPOSED EDA TO BE REMOVED AND DISPOSED OF OFF SITE BY LOCATIONS PRIOR TO DEMOLITION AND CONSTRUCTION. THE INSTALLER/CONTRACTOR.

TIE TABLE

EXISTING GROUND - FOREST FLOOR							
ERY DARK GRAYISH BROWN	10YR 3/2	3"	FIBRIC ORGANIC MATERIALS, WEAK FINE GRANULAR, V. FRIABLE (FILL)				
ARK BROWN	10YR 3/3	18"	GRAVELLY LOAMY SAND, MASSIVE, V.FRIABLE (FILL)				
ARK YELLOWISH BROWN	10YR 3/4	26"	GRAVELLY LOAMY SAND, SINGLE GRAIN, LOOSE (FILL)				
ERY DARK GRAYISH BROWN	10YR 3/2	27"	GRAVELLY FINE SANDY LOAM, WEAI FINE GRANULAR, V.FRIABLE (MIXIN				
ARK YELLOWISH BROWN	10YR 4/6	35"	GRAVELLY FINE SANDY LOAM, MOD.MED.SUBANG.BLOCKY, FRIABL				
ARK YELLOWISH BROWN	10YR 4/4	47"	LOAMY FINE SAND, MOD.MED.SUBA BLOCKY, FRIABLE				

BATHHOUSE 9 E.S.H.W.T.: NONE TO DEPTH, 72" WATER OBSERVED: NONE RESTRICTIVE LAYER: NONE LEDGE ENCOUNTERED: NONE TO DEPTH, 72" INSPECTED BY: ADAM DOIRON, DOIRON ENVIRONMENTAL DATE: 2 OCTOBER 2023

**LOCATION MAP** 

DIRECTIONS: FROM NH-101 EXIT 5, NORTH ON NH-107, AFTER 0.6MI, LEFT

TO REMAIN ON NH-107. AFTER 0.1MI, RIGHT ONTO NH-156N. AFTER 2.0MI,

LEFT ON MOUNTAIN ROAD. AFTER 2.0MI LEFT ON PAWTUCKAWAY ROAD.

AFTER 2.3MI, LEFT ON BIG ISLAND CAMPGROUND ROAD. AFTER 0.25MI,

RIGHT ON LOOP ROAD. APPROX 0.15MI TO SITE.

10YR 4/4 72"

SOILS TYPE: 343D CANTON GRAVELY FINE SANDY LOAM, EXTREMELY BOULDERY REFERENCE: NRCS WEB SOIL SURVEY, ROCKINGHAM COUNTY NH (NH015)

FINE SANDY LOAM, MASSIVE,

RATE: 8 MIN./INCH

DARK YELLOWISH BROWN

ORIGINAL GROUND ELEVATION AT THE HIGH CONTOUR: 275.75 (@ L1)

SEPTIC TANK 2 x DAILY FLOW = 2600GAL (USE NEXT LARGER COMMERCIAL SIZE)

BOTTOM OF ENVIRO-SEPTIC PIPE ELEVATION: 272.40

**USE 3000 GAL TANK** 

BENCHMARKS USED FOR TIE POINTS TO BE LEFT IN PLACE AND VISIBLE UNTIL THE NHDES INSPECTION HAS BEEN COMPLETED AND APPROVED. NO OPEN WATER, WELLS OR ABUTTING FOUNDATIONS WITHIN 75' OF THE PROPOSED EFFLUENT DISPOSAL AREA.

# VENT REQUIREMENTS AND PLACEMENT

WHERE SHOWN, LOW AND HIGH VENTS ARE REQUIRED TO ENSURE THAT AIR IS DRAWN COMPLETELY THROUGH THE ENTIRE SYSTEM. NO ADDITIONAL VENTS MAY BE LOCATED BETWEEN THE HIGH VENT AND LOW VENT. HIGH VENTS MUST PROVIDE AT LEAST THE SAME FLOW CAPACITY AS LOW VENTS; CONNECTIONS WITHIN THE SYSTEM MUST ALSO HAVE SIMILAR CAPACITIES. THE OPENING OF THE HIGH VENT MUST BE AT LEAST 10 FEET ABOVE THE OPENING OF THE LOW VENT.

LOW VENTS ARE INSTALLED THROUGH AN OFFSET ADAPTER AT THE END OF EACH SERIAL SYSTEM OR BED.

VENT LOCATIONS SHOWN ARE APPROXIMATE AND CAN BE RELOCATED SO LONG AS THEY ARE LAID LEVEL OR PITCHED BACK TO THE EDA. VENTS SHOULD BE PLACED IN LOCATIONS WHERE AESTHETIC IMPACT IS MINIMAL. AS NECESSARY, ADD SHRUBS OR OTHER VEGETATION TO SCREEN VENTS. "CANDY CANE" STYLE VENT COVERS ARE NOT PREFERRED; USE "MUSHROOM" STYLE VENT COVERS OR VENT COVERS THAT CAMOUFLAGE THE EDA VENT.

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# **NH STATE PARKS**

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176 Newport Road, Suite 8; New London NH 03255

(603) 877-0116

www.horizonsengineering.com

HAMPSW-

Designer

Subsurface Disposal

Systems

Mark Lucy

No. 211

**Campground Expansion Project PII Pawtuckaway State Park** 7 Pawtuckaway Road Nottingham, NH 03290

**100% CONSTRUCTION** 

Graphic Scale

North



Scale: 1" = 20'

Date: March 15, 2024

Drawn By: CJH

Checked By: WTD

Date Description Name

**ENVIRO-SEPTIC SYSTEM** SLOPED, IN-GROUND BED CAMPGROUND DESIGN (1,300 GPD)

NEW HAMPSHIRE DPMT OF NATURAL & CULTURAL RESOURCES 172 PEMBROKE ROAD CONCORD, NH 03301

PREVIOUS APPROVAL #: NONE

BIG ISLAND CAMPGROUND LOOP NOTTINGHAM, NEW HAMPSHIRE TAX MAP: 76 PARCEL: 2

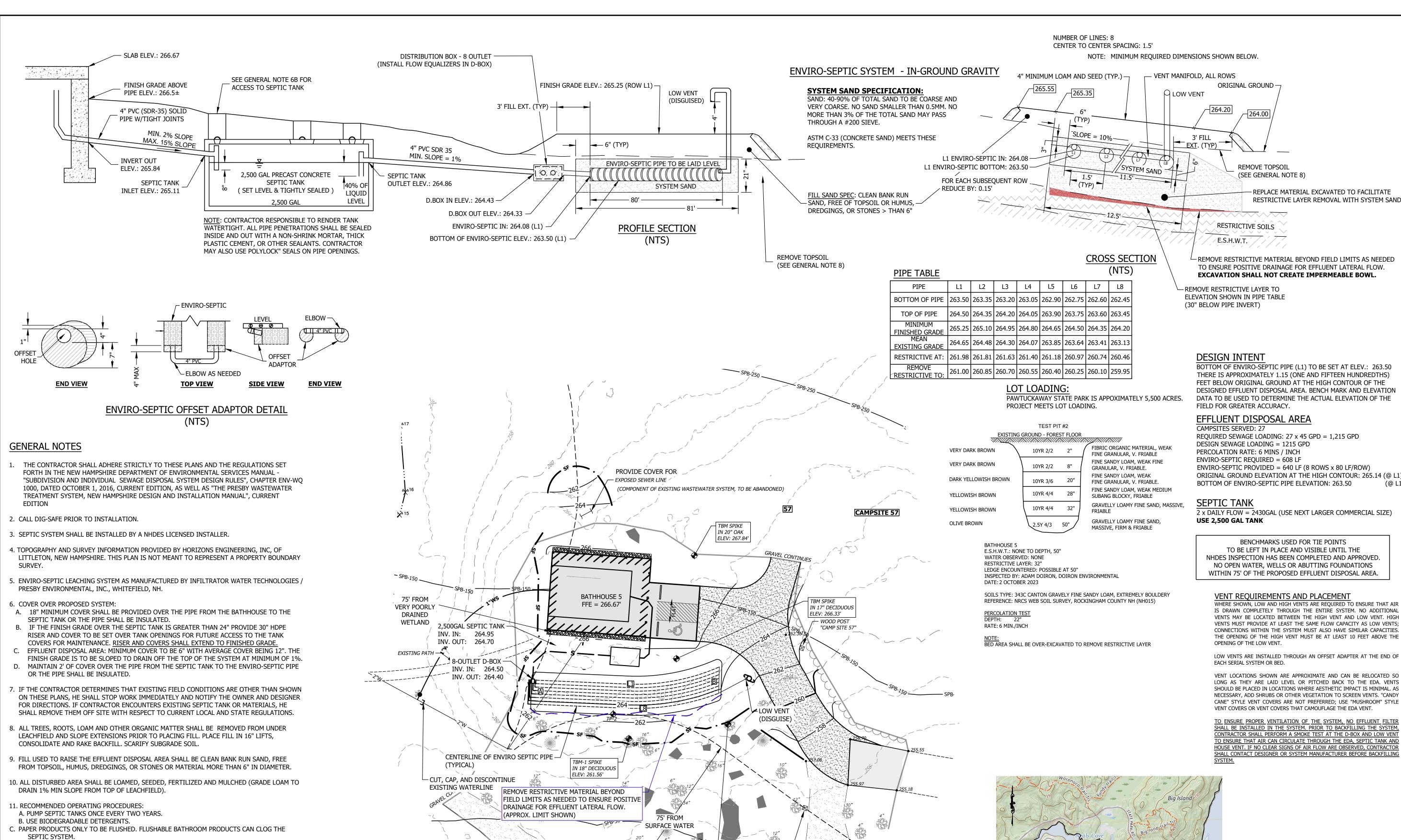
COUNTY: ROCKINGHAM SUBDIVISION NAME: n/a SUBDIVISION APPROVAL: EXEMPT >5AC

BATHHOUSE 9 I.S.D.S. PLAN AND DETAILS

Sheet Number:

C4.05

Project Number: 23045001 File: 220838\_pawtuckaway\_final-02b.dwg



WOOD POST ----

"CAMP SITE 56"

TBM-2 SPIKE

IN 12" DECIDUOUS ELEV: 261.50'

TIE TABLE

BATHHOUSE 5	L1		L8	
PIPE END	А	В	А	В
TBM-1 (SPIKE IN 18" DECIDUOUS)	47.4	49.7	43.3	43.2
TBM-2 (SPIKE IN 12" DECIDUOUS)	85.3	25.1	84.2	14

CAMPSITE 47

17. THERE ARE NO KNOWN BURIAL SITES, BURIAL GROUNDS, OR CEMETERIES WITHIN 25' OF THE SYSTEM OR ON THE PROPERTY.

16. WETLANDS ON THE PROJECT SITE HAVE BEEN DELINEATED IN ACCORDANCE WITH ENV-WQ

1014.06. THERE ARE NO JURISDICTIONAL WETLANDS ON WITHIN 75' OF THE SYSTEM.

E. ANY FUTURE REPLACEMENT SYSTEM, IF NEEDED, SHALL BE LOCATED IN THE SAME LOCATION

F. THE TANK SIZE SHALL BE INCREASED BY 50% IF A GARBAGE GRINDER IS TO BE INSTALLED.

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D. WATER SAVING DEVICES AND PROCEDURES ARE RECOMMENDED.

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15. THE SITE <u>IS LOCATED</u> WITHIN THE NHDES PROTECTIVE SHORELAND

DATE OF PRINT **hogizens** MARCH 14 2024 All rights reserved HORIZONS ENGINEERING

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EDA FIELD MUST BE RELOCATED BY THE INSTALLER/CONTRACTOR PRIOR TO INSTALLATION. CONTRACTOR IS RESPONSIBLE TO VERIFY ALL UTILITY LOCATIONS PRIOR TO DEMOLITION

# LOCATION MAP

DIRECTIONS: FROM NH-101 EXIT 5, NORTH ON NH-107, AFTER 0.6MI, LEFT TO REMAIN ON NH-107. AFTER 0.1MI, RIGHT ONTO NH-156N. AFTER 2.0MI, LEFT ON MOUNTAIN ROAD. AFTER 2.0MI LEFT ON PAWTUCKAWAY ROAD. AFTER 2.5MI, LEFT ON HORSE ISLAND CAMPGROUND ROAD. AFTER 0.1MI, RIGHT AT TEE. APPROX 0.05MI TO SITE.

#### 7 Pawtuckaway Road Nottingham, NH

**NH STATE PARKS** 

**Campground Expansion Project Pl** 

Land Surveying and Environmental Consulting

MAINE • NEW HAMPSHIRE • VERMONT

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HAMPS~

Designer

Subsurface Disposal

Systems

Mark Lucy

No. 211

**Pawtuckaway State Park** 03290

**100% CONSTRUCTION** 

Graphic Scale

North

OPENING OF THE LOW VENT. LOW VENTS ARE INSTALLED THROUGH AN OFFSET ADAPTER AT THE END OF

VENT LOCATIONS SHOWN ARE APPROXIMATE AND CAN BE RELOCATED SO LONG AS THEY ARE LAID LEVEL OR PITCHED BACK TO THE EDA. VENTS SHOULD BE PLACED IN LOCATIONS WHERE AESTHETIC IMPACT IS MINIMAL. AS NECESSARY, ADD SHRUBS OR OTHER VEGETATION TO SCREEN VENTS. "CANDY CANE" STYLE VENT COVERS ARE NOT PREFERRED; USE "MUSHROOM" STYLE

TO ENSURE PROPER VENTILATION OF THE SYSTEM, NO EFFLUENT FILTER SHALL BE INSTALLED IN THE SYSTEM. PRIOR TO BACKFILLING THE SYSTEM, ONTRACTOR SHALL PERFORM A SMOKE TEST AT THE D-BOX AND LOW VEN <u>O ENSURE THAT AIR CAN CIRCULATE THROUGH THE EDA, SEPTIC TANK AND</u> HOUSE VENT. IF NO CLEAR SIGNS OF AIR FLOW ARE OBSERVED, CONTRACTO SHALL CONTACT DESIGNER OR SYSTEM MANUFACTURER BEFORE BACKFILLING Scale: 1" = 20'

Date: March 15, 2024

Drawn By: CJH

Checked By: WTD

Issues:				
No.	Description	Date		
1	Name	00/00/00		
		+		

**ENVIRO-SEPTIC SYSTEM** SLOPED, IN-GROUND BED CAMPGROUND DESIGN (1,215 GPD)

NEW HAMPSHIRE DPMT OF NATURAL & CULTURAL RESOURCES 172 PEMBROKE ROAD CONCORD, NH 03301

PREVIOUS APPROVAL #: NONE

HORSE ISLAND CAMPGROUND SPUR NOTTINGHAM, NEW HAMPSHIRE TAX MAP: 76 PARCEL: 2

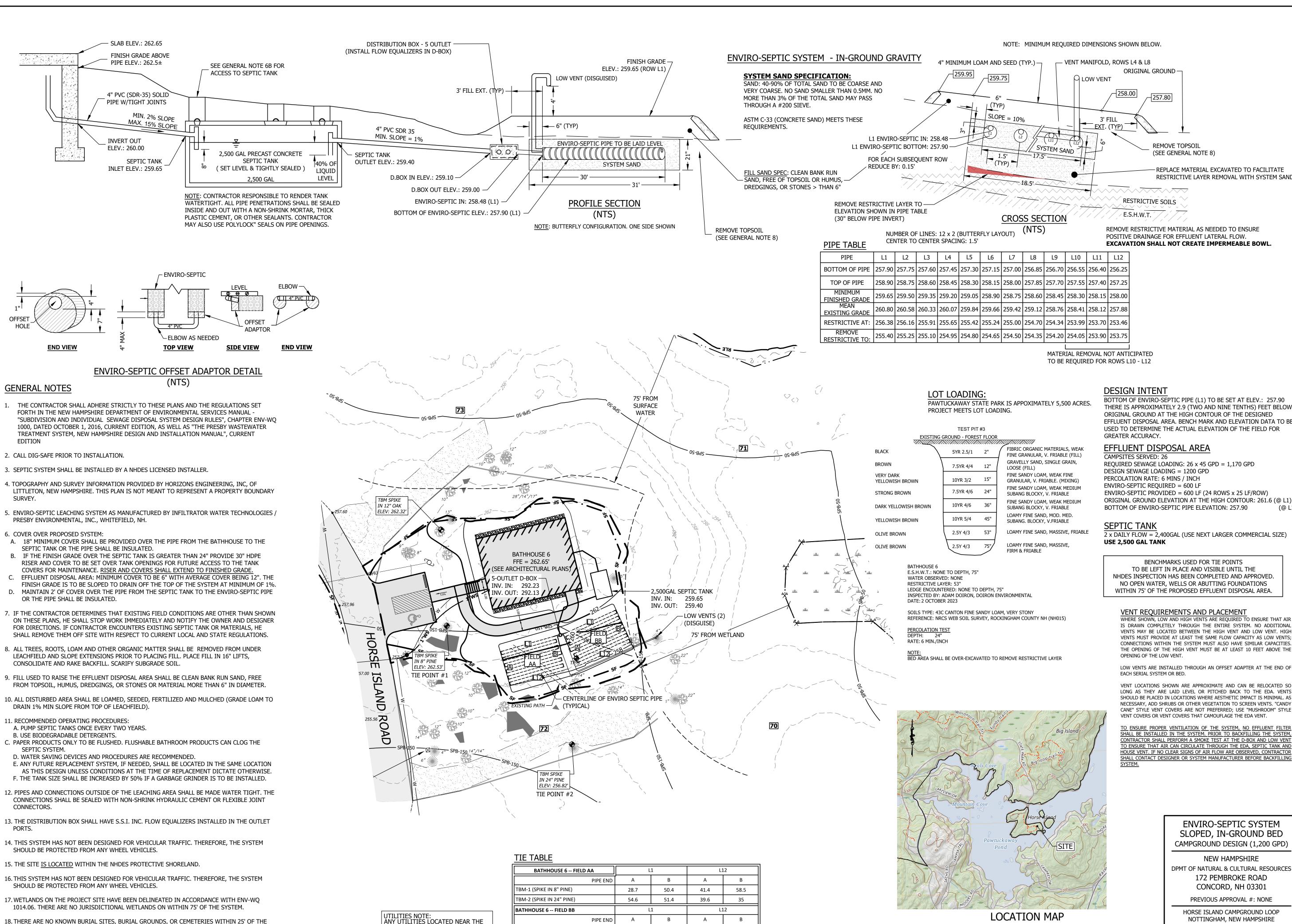
COUNTY: ROCKINGHAM SUBDIVISION NAME: n/a SUBDIVISION APPROVAL: EXEMPT >5AC **BATHHOUSE 5** 

I.S.D.S. PLAN AND DETAILS Sheet Number:

Project Number: 23045001 File: 220838\_pawtuckaway\_final-02b.dwg

C4.06

CONNECTORS.



EDA FIELD MUST BE RELOCATED BY

ALL TREES WITHIN 10 FEET OF

THE INSTALLER/CONTRACTOR.

PROPOSED EDA TO BE REMOVED AND DISPOSED OF OFF SITE BY

THE INSTALLER/CONTRACTOR PRIOR TO INSTALLATION. CONTRACTOR IS RESPONSIBLE TO VERIFY ALL UTILITY LOCATIONS PRIOR TO DEMOLITION

TBM-1 (SPIKE IN 8" PINE)

TRM-2 (SPIKE IN 24" PINE)

65.4

37.5

56

52.4

78.9

65.7

85.8

54.6

SYSTEM OR ON THE PROPERTY.

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hogiz<del>ens</del>

DATE OF PRINT

MARCH 14 2024

Land Surveying and Environmental Consulting

MAINE • NEW HAMPSHIRE • VERMONT 176 Newport Road, Suite 8; New London NH 03255 (603) 877-0116 www.horizonsengineering.com

> $\frac{1}{1}$   $^{\prime}$   $^{\prime}$   $^{\prime}$   $^{\prime}$   $^{\prime}$ Designer Subsurface Disposal Systems Mark Lucy No. 211

# **NH STATE PARKS**

**Campground Expansion Project PII Pawtuckaway State Park** 7 Pawtuckaway Road Nottingham, NH 03290

**100% CONSTRUCTION** 

Scale: 1" = 20'

Drawn By: CJH

Checked By: WTD

Date: March 15, 2024

Graphic Scale BENCHMARKS USED FOR TIE POINTS TO BE LEFT IN PLACE AND VISIBLE UNTIL THE

NO OPEN WATER, WELLS OR ABUTTING FOUNDATIONS WITHIN 75' OF THE PROPOSED EFFLUENT DISPOSAL AREA.

VENT REQUIREMENTS AND PLACEMENT WHERE SHOWN, LOW AND HIGH VENTS ARE REQUIRED TO ENSURE THAT AIR IS DRAWN COMPLETELY THROUGH THE ENTIRE SYSTEM. NO ADDITIONAL VENTS MAY BE LOCATED BETWEEN THE HIGH VENT AND LOW VENT. HIGH VENTS MUST PROVIDE AT LEAST THE SAME FLOW CAPACITY AS LOW VENTS; CONNECTIONS WITHIN THE SYSTEM MUST ALSO HAVE SIMILAR CAPACITIES. THE OPENING OF THE HIGH VENT MUST BE AT LEAST 10 FEET ABOVE THE

REMOVE TOPSOIL

(SEE GENERAL NOTE 8)

REPLACE MATERIAL EXCAVATED TO FACILITATE

RESTRICTIVE LAYER REMOVAL WITH SYSTEM SAND

LOW VENTS ARE INSTALLED THROUGH AN OFFSET ADAPTER AT THE END OF EACH SERIAL SYSTEM OR BED.

VENT LOCATIONS SHOWN ARE APPROXIMATE AND CAN BE RELOCATED SO LONG AS THEY ARE LAID LEVEL OR PITCHED BACK TO THE EDA. VENTS SHOULD BE PLACED IN LOCATIONS WHERE AESTHETIC IMPACT IS MINIMAL. AS NECESSARY, ADD SHRUBS OR OTHER VEGETATION TO SCREEN VENTS. "CANDY CANE" STYLE VENT COVERS ARE NOT PREFERRED; USE "MUSHROOM" STYLE VENT COVERS OR VENT COVERS THAT CAMOUFLAGE THE EDA VENT.

TO ENSURE PROPER VENTILATION OF THE SYSTEM, NO EFFLUENT FILTER SHALL BE INSTALLED IN THE SYSTEM. PRIOR TO BACKFILLING THE SYSTEM, CONTRACTOR SHALL PERFORM A SMOKE TEST AT THE D-BOX AND LOW VENT O ENSURE THAT AIR CAN CIRCULATE THROUGH THE EDA, SEPTIC TANK AND HOUSE VENT. IF NO CLEAR SIGNS OF AIR FLOW ARE OBSERVED, CONTRACTOR SHALL CONTACT DESIGNER OR SYSTEM MANUFACTURER BEFORE BACKFILLING Description Date

**ENVIRO-SEPTIC SYSTEM** SLOPED, IN-GROUND BED CAMPGROUND DESIGN (1,200 GPD)

NEW HAMPSHIRE DPMT OF NATURAL & CULTURAL RESOURCES 172 PEMBROKE ROAD

CONCORD, NH 03301 PREVIOUS APPROVAL #: NONE

HORSE ISLAND CAMPGROUND LOOP NOTTINGHAM, NEW HAMPSHIRE TAX MAP: 76 PARCEL: 2

COUNTY: ROCKINGHAM SUBDIVISION NAME: n/a SUBDIVISION APPROVAL: EXEMPT >5AC

DIRECTIONS: FROM NH-101 EXIT 5, NORTH ON NH-107. AFTER 0.6MI, LEFT TO

REMAIN ON NH-107. AFTER 0.1MI, RIGHT ONTO NH-156N. AFTER 2.0MI, LEFT

2.5MI, LEFT ON HORSE ISLAND CAMPGROUND ROAD. AFTER 0.05MI, LEFT ON

ON MOUNTAIN ROAD. AFTER 2.0MI LEFT ON PAWTUCKAWAY ROAD. AFTER

CAMPGROUND LOOP. APPROX 0.05MI TO SITE.

BATHHOUSE 6 I.S.D.S. PLAN AND DETAILS

Sheet Number:

C4.07

Project Number: 23045001 File: 220838\_pawtuckaway\_final-02b.dwg

#### SEEDING RECOMMENDATIONS

#### 1. GRADING AND SHAPING

A. SLOPES SHALL NOT BE STEEPER THAN 2:1; 3:1 SLOPES OR FLATTER ARE PREFERRED. WHERE MOWING WILL BE DONE, 3:1 SLOPES OR FLATTER ARE RECOMMENDED.

#### 2. SEEDBED PREPARATION

- A. SURFACE AND SEEPAGE WATER SHOULD BE DRAINED OR DIVERTED FROM THE SITE TO PREVENT DROWNING OR WINTER KILLING OF THE PLANTS.
- B. STONES LARGER THAN 4 INCHES AND TRASH SHOULD BE REMOVED BECAUSE THEY INTERFERE WITH SEEDING AND FUTURE MAINTENANCE OF THE AREA. WHERE FEASIBLE, THE SOIL SHOULD BE AMENDED WITH ORGANIC MATTER AND TILLED TO A DEPTH OF ABOUT 4 INCHES TO PREPARE A SEEDBED AND MIX FERTILIZER AND LIME THOROUGHLY INTO THE SOIL. THE SEEDBED SHOULD BE LEFT IN A REASONABLY FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHEREVER

#### 3. ESTABLISHING VEGETATION

A. LIME AND FERTILIZER SHOULD BE APPLIED PRIOR TO OR AT THE TIME OF SEEDING AND INCORPORATED INTO THE SOIL. KINDS AND AMOUNTS OF LIME AND FERTILIZER SHOULD BE BASED ON AN EVALUATION OF SOIL TESTS. WHEN A SOIL TEST IS NOT AVAILABLE, THE FOLLOWING MINIMUM AMOUNTS SHOULD BE APPLIED:

-AGRICULTURAL LIMESTONE, 2 TONS PER ACRE OR 100 LBS. PER 1,000 SQ. FT.

-NITROGEN (N), 50 LBS., PER ACRE OR 1.1 LBS. PER 1,000 SQ. FT.

-PHOSPHATE (P<sub>2</sub>O<sub>5</sub>), 100 LBS. PER ACRE OR 2.2 LBS. PER 1,000 SQ. FT. -POTASH (K<sub>2</sub>0), 100 LBS. PER ACRE OR 2.2 LBS. PER 1,000 SQ. FT.

(NOTE: THIS IS THE EQUIVALENT OF 500 LBS. PER ACRE OF 10-20-20 FERTILIZER OR 1,000 LBS. PER ACRE OF

B. SEED SHOULD BE SPREAD UNIFORMLY BY THE METHOD MOST APPROPRIATE FOR THE SITE. METHODS INCLUDE BROADCASTING, DRILLING, AND HYDROSEEDING. WHERE BROADCASTING IS USED, COVER SEED WITH .25 INCH OF SOIL OR LESS, BY CULTIPACKING OR RAKING.

#### C. SEEDING GUIDE:

C. SELDING GOIDE.	I	I			1
	SEEDING		SOIL TYPE		
USE	MIXTURE (SEE 3D)	DROUGHTY	WELL DRAINED	MOD. WELL DRAINED	POORLY DRAINED
STEEP CUTS AND FILLS, BORROW AND DISPOSAL AREAS	A B C	FAIR POOR FAIR	GOOD GOOD EXCELLENT	GOOD FAIR EXCELLENT	FAIR FAIR POOR
WATERWAYS, EMERGENCY SPILL- WAYS, AND OTHER CHANNELS WITH FLOWING WATER	А	GOOD	GOOD	GOOD	FAIR
LIGHTLY USED PARKING LOTS, ODD AREAS, UNUSED LANDS, AND LOW INTENSITY USE RECREATION SITES	A B	GOOD GOOD	GOOD GOOD	GOOD FAIR	FAIR POOR

#### D. SEEDING RATES:

MIXTURE	POUNDS PER ACRE	POUNDS PER 1,000 SQ. FT.
A TALL FESCUE CREEPING RED FESCUE REDTOP TOTAL:	20 20 2 42	0.45 0.45 0.05 0.95
B TALL FESCUE CREEPING RED FESCUE CROWN VETCH <b>OR</b> FLATPEA TOTAL:	15 10 15 <b>OR</b> 30 40 <b>OR</b> 55	0.35 0.25 0.35 <b>OR</b> 0.75 0.95 <b>OR</b> 1.35
C TALL FESCUE FLATPEA TOTAL:	20 30 50	0.45 0.75 1.20

E. WHEN SEEDED AREAS ARE MULCHED, PLANTINGS MAY BE MADE FROM EARLY SPRING TO SEPTEMBER 15. WHEN SEEDED AREAS ARE NOT MULCHED, PLANTINGS SHOULD BE MADE FROM EARLY SPRING TO MAY 20 OR FROM AUGUST 10 TO SEPTEMBER 1.

#### F. TEMPORARY SEEDING RATES:

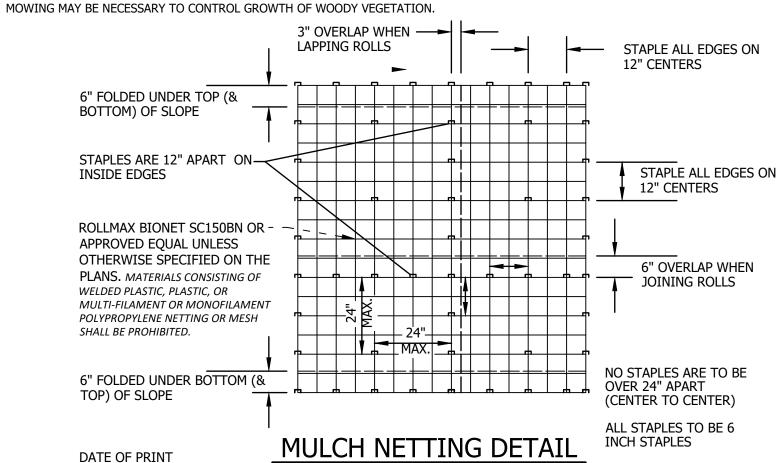
SPECIES	POUNDS PER ACRE	POUNDS PER 1,000 SQ. FT.	REMARKS
WINTER RYE	112	2.5	BEST FOR FALL SEEDING. SEED FROM AUGUST TO SEPTEMBER 5TH FOR BEST COVER. SEED TO A DEPTH OF 1 INCH.
OATS	80	2.0	BEST FOR SPRING SEEDING. SEED NO LATER THAN MAY 15TH FOR SUMMER PROTECTION. SEED TO A DEPTH OF 1 INCH.
ANNUAL RYEGRASS	40	1.0	GROWS QUICKLY, BUT IS OF SHORT DURATION. USE WHERE APPEARANCES ARE NOT IMPORTANT. SEED EARLY SPRING AND/OR BETWEEN AUGUST 15TH AND SEPTEMBER 15TH. COVER SEED WITH NO MORE THAN 0.25 INCH OF SOIL.
PERENNIAL RYEGRASS	30	0.7	GOOD COVER WHICH IS LONGER LASTING THAN ANNUAL RYEGRASS. SEED BETWEEN APRIL 1ST AND JUNE 1ST AND/OR BETWEEN AUGUST 15TH AND SEPTEMBER 15TH. MULCHING WILL ALLOW SEEDING THROUGHOUT THE GROWING SEASON. SEED TO A DEPTH OF APPROXIMATELY 0.5 INCH.

#### 4. MULCH

- A. HAY, STRAW, OR OTHER MULCH, WHEN NEEDED, SHOULD BE APPLIED IMMEDIATELY AFTER SEEDING.
- B. MULCH WILL BE HELD IN PLACE USING APPROPRIATE TECHNIQUES FROM THE BEST MANAGEMENT PRACTICE FOR MULCHING.

#### 5. MAINTENANCE TO ESTABLISH A STAND

- A. PLANTED AREAS SHOULD BE PROTECTED FROM DAMAGE BY FIRE, GRAZING, TRAFFIC, AND DENSE WEED
- B. FERTILIZATION NEEDS SHOULD BE DETERMINED BY ON SITE INSPECTIONS. SUPPLEMENTAL FERTILIZER IS USUALLY THE KEY TO FULLY COMPLETE THE ESTABLISHMENT OF THE STAND BECAUSE MOST PERENNIALS TAKE 2 TO 3 YEARS TO BECOME ESTABLISHED.
- C. IN WATERWAYS, CHANNELS, OR SWALES WHERE UNIFORM FLOW CONDITIONS ARE ANTICIPATED, OCCASIONAL



# **EROSION CONTROL GENERAL NOTES**

#### A. KEEP SITE MODIFICATION TO A MINIMUM

- 1. CONSIDER FITTING THE BUILDINGS AND STREETS TO THE NATURAL TOPOGRAPHY. THIS REDUCES THE NEED FOR CUTS AND FILLS. AVOID EXTENSIVE GRADING THAT WOULD ALTER DRAINAGE PATTERNS OR CREATE VERY STEEP SLOPES.
- 2. EXPOSE AREAS OF BARE SOIL TO EROSIVE ELEMENTS FOR THE SHORTEST TIME POSSIBLE.
- 3. SAVE AND PROTECT DESIRABLE EXISTING VEGETATION WHERE POSSIBLE. ERECT BARRIERS TO PREVENT DAMAGE FROM CONSTRUCTION EQUIPMENT.
- 4. LIMIT THE GRADES OF SLOPES SO VEGETATION CAN BE EASILY ESTABLISHED AND
- 5. AVOID SUBSTANTIAL INCREASE IN RUNOFF LEAVING THE SITE.

#### **B. MINIMIZE POLLUTION OF WATER DURING CONSTRUCTION ACTIVITIES**

- 1. STOCKPILE TOPSOIL REMOVED FROM CONSTRUCTION AREA AND SPREAD OVER ANY DISTURBED AREAS PRIOR TO REVEGETATION. TOPSOIL STOCKPILES MUST BE PROTECTED
- 2. PROTECT BARE SOIL AREAS EXPOSED BY GRADING ACTIVITIES WITH TEMPORARY VEGETATION OR MULCHES.
- 3. USE SEDIMENT BASINS TO TRAP DEBRIS AND SEDIMENT WHICH WILL PREVENT THESE MATERIALS FROM MOVING OFF SITE.
- 4. USE DIVERSIONS TO DIRECT WATER AROUND THE CONSTRUCTION AREA AND AWAY FROM EROSION PRONE AREAS TO POINTS OF SAFE DISPOSAL.
- 5. USE TEMPORARY CULVERTS OR BRIDGES WHEN CROSSING STREAMS WITH EQUIPMENT.
- 6. PLACE CONSTRUCTION FACILITIES, MATERIALS, AND EQUIPMENT STORAGE AND MAINTENANCE AREAS AWAY FROM DRAINAGE WAYS.

#### C. PROTECT AREA AFTER CONSTRUCTION.

- 1. ESTABLISH GRASS OR OTHER SUITABLE VEGETATION ON ALL DISTURBED AREAS. SELECT SPECIES ADAPTED TO THE SITE CONDITIONS AND THE FUTURE USE OF THE AREA. FINAL GRADES SHALL BE SEEDED WITHIN 72 HOURS. STABILIZATION SHALL BE DEFINED AS 85% VEGETATIVE COVER.
- 2. MAINTAIN VEGETATED AREAS USING PROPER VEGETATIVE 'BEST MANAGEMENT PRACTICES' DURING THE CONSTRUCTION PERIOD.
- 3. MAINTAIN NEEDED STRUCTURAL 'BEST MANAGEMENT PRACTICES' AND REMOVE SEDIMENT FROM DETENTION PONDS AND SEDIMENT BASINS AS NEEDED.
- 4. DETERMINE RESPONSIBILITY FOR LONG TERM MAINTENANCE OF PERMANENT 'BEST MANAGEMENT PRACTICES'.
- 5. IF CONSTRUCTION IS ANTICIPATED DURING WINTER MONTHS, REFER TO 'COLD WEATHER SITE STABILIZATION REQUIREMENTS'.

#### D. INVASIVE SPECIES AND FUGITIVE DUST

1. THE PROJECT SHALL NOT CONTRIBUTE TO THE SPREAD OF INVASIVE SPECIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EVALUATE WORK AREAS FOR THE PRESENCE OF INVASIVE SPECIES, AND IF FOUND SHALL TAKE NECESSARY MEASURES TO PREVENT THEIR SPREAD IN ACCORDANCE WITH RSA 430:51-57 AND AGR 3800. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO PREVENT THE INTRODUCTION OF INVASIVE SPECIES BY INSPECTING AND CLEANING ALL EQUIPMENT ARRIVING ON SITE.

WOVEN WIRE FENCE -

MAX. 6" MESH SPACING) WITH FILTER CLOTH OVER

<u>+ FLOW+ +</u>

UNDISTURBED GROUND -

SEDIMENT FENCE

NO SCALE

— 2"-3" STONE, TYP.

(14-1/2 GA. MIN.,

**SECTION VIEW** 

CHANNEL TOP OF BANK

2. FUGITIVE DUST SHALL BE CONTROLLED IN ACCORDANCE WITH ENV-A 1000.

**CONSTRUCTION NOTES** 

FOR SEDIMENT FENCE

2. FILTER CLOTH TO BE FASTENED

. WOVEN WIRE FENCE, IF REOUIRED,

TO BE FASTENED SECURELY TO FENCE

POSTS WITH WIRE TIES OR STAPLES.

SECURELY TO WOVEN WIRE FENCE

WITH TIES SPACED EVERY 24" AT

TOP, MID SECTION, AND BOTTOM.

INCHES, FOLDED AND STAPLED.

5. 12" DIAMETER FILTREXX SILTSOXX

RECOMMENDATIONS.

3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6

4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND

SHALL BE CONSIDERED AN ACCEPTABLE EQUAL TO

MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SEDIMENT FENCE, OR 50% OF CAPACITY IS USED.

SEDIMENT FENCE IF INSTALLED PER MANUFACTURER'S

#### COLD WEATHER SITE STABILIZATION REQUIREMENTS

- TO ADEQUATELY PROTECT WATER QUALITY DURING COLD WEATHER AND DURING SPRING RUNOFF, THE FOLLOWING ADDITIONAL STABILIZATION TECHNIQUES SHALL BE EMPLOYED DURING THE PERIOD FROM OCTOBER 15 THROUGH MAY 1:
- THE AREA OF EXPOSED, UNSTABILIZED SOIL SHALL BE LIMITED TO 1 ACRE AND SHALL BE PROTECTED AGAINST EROSION BY THE METHODS DESCRIBED IN THIS SECTION PRIOR TO ANY THAW OR SPRING MELT EVENT. THE ALLOWABLE AREA OF EXPOSED SOIL MAY BE INCREASED IF A WINTER CONSTRUCTION PLAN, DEVELOPED BY A QUALIFIED ENGINEER OR A CPESC SPECIALIST, IS REVIEWED AND APPROVED BY NHDES.
- 2. ALL PROPOSED VEGETATED AREAS HAVING A SLOPE OF LESS THAN 15% WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE SEEDED AND COVERED WITH 3 TO 4 TONS OF HAY OR STRAW MULCH PER ACRE, SECURED WITH ANCHORED NETTING OR TACKIFIER, OR 2 INCHES OF EROSION CONTROL MIX MEETING THE CRITERIA OF ENV-WQ 1506.05(D) THROUGH (H).
- 3. ALL PROPOSED VEGETATED AREAS HAVING A SLOPE OF GREATER THAN 15% WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE SEEDED AND COVERED WITH PROPERLY INSTALLED AND ANCHORED EROSION CONTROL MATTING OR WITH A MINIMUM 4 INCH THICKNESS OF EROSION CONTROL MIX MEETING THE CRITERIA OF ENV-WQ 1506.05(D) THROUGH (H).
- 4. INSTALLATION OF ANCHORED HAY MULCH OR EROSION CONTROL MIX, MEETING THE CRITERIA OF ENV-WQ 1506.05(D) THROUGH (H), SHALL NOT OCCUR OVER SNOW OF GREATER THAN 1 INCH IN DEPTH.
- 5. INSTALLATION OF EROSION CONTROL MATTING SHALL NOT OCCUR OVER SNOW OF GREATER THAN ONE INCH IN DEPTH OR ON FROZEN GROUND.
- 6. ALL PROPOSED STABILIZATION IN ACCORDANCE WITH NOTES 2 OR 3 ABOVE, SHALL BE COMPLETED WITHIN 1 DAY OF ESTABLISHING THE GRADE THAT IS FINAL OR THAT OTHERWISE WILL EXIST FOR MORE THAN 5 DAYS.
- 7. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS, AS DETERMINED BY THE OWNER'S ENGINEERING CONSULTANT.
- 3. AFTER OCTOBER 15, INCOMPLETE ROAD OR PARKING AREAS WHERE ACTIVE CONSTRUCTION OF THE ROAD OR PARKING AREA HAS STOPPED FOR THE WINTER SEASON SHALL BE PROTECTED WITH A MINIMUM 3 INCH LAYER OF BASE COURSE GRAVELS MEETING THE GRADATION REQUIREMENTS OF NHDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, 2016, ITEM NO. 304.1 OR 304.2.

— 36" MIN. FENCE POSTS, DRIVEN

EMBED FILTER CLOTH -

1. CONSTRUCT ROCK CHECK DAMS WHERE INDICATED ON THE PLANS OR AS NECESSARY

2. CONSTRUCT SPILLWAY IN CENTER OF ROCK CHECK DAM 6" BELOW TOP OF CHANNEL

3. THE MAXIMUM SPACING BETWEEN THE CHECK DAMS SHOULD BE SUCH THAT THE TOE OF THE UPSTREAM CHECK DAM IS AT THE SAME ELEVATION AS THE SPILLWAY ELEVATION OF THE DOWNSTREAM CHECK DAM, THIS WILL VARY DEPENDING ON THE

4. ROCK CHECK DAMS SHALL CONSIST OF A WELL GRADED MIXTURE OF 2" - 3" STONE.

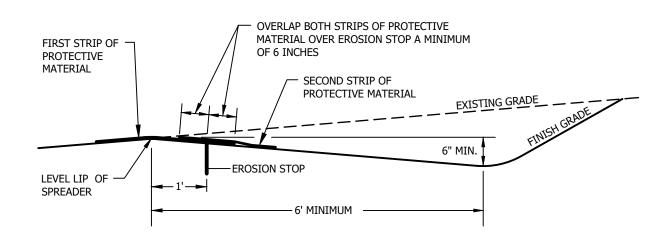
5. REMOVE ROCK CHECK DAMS AND ANY ACCUMULATED SILT IN CHANNEL ONCE

PERMANENT CHANNEL LININGS HAVE BEEN ESTABLISHED AND STABILIZED.

MIN. 8" INTO GROUND

# LEVEL LIP SPREADER INSTALLATION

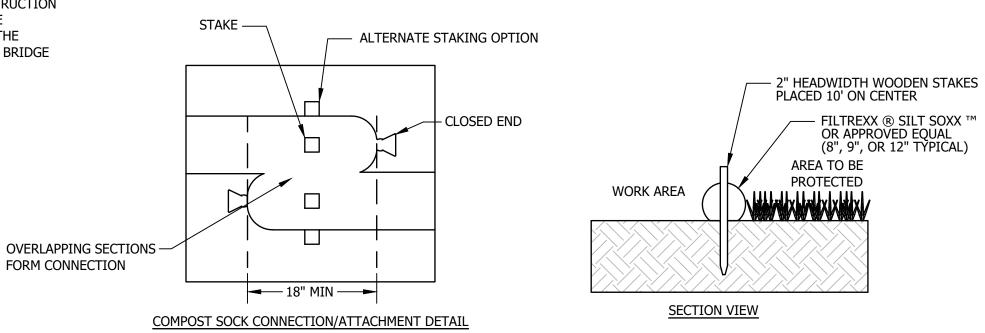
- 1. CONSTRUCT THE LEVEL SPREADER LIP ON A ZERO PERCENT GRADE TO INSURE UNIFORM SPREADING OF RUNOFF.
- 2. LEVEL SPREADER SHALL BE CONSTRUCTED ON UNDISTURBED SOIL AND NOT ON FILL.
- 3. AN EROSION STOP SHALL BE PLACED VERTICALLY A MINIMUM OF SIX INCHES DEEP IN A SLIT TRENCH ONE FOOT BACK OF THE LEVEL LIP AND PARALLEL TO THE LIP. THE EROSION STOP SHALL EXTEND THE ENTIRE LENGTH OF THE LEVEL LIP.
- 4. THE ENTIRE LEVEL LIP AREA SHALL BE PROTECTED BY PLACING TWO STRIPS OF JUTE OR EXCELSIOR MATTING ALONG THE LIP. EACH STRIP SHALL OVERLAP THE EROSION STOP BY AT LEAST SIX INCHES.
- 5. THE ENTRANCE CHANNEL TO THE LEVEL SPREADER SHALL NOT EXCEED A 1 PERCENT GRADE FOR AT LEAST 50 FEET BEFORE ENTERING INTO THE SPREADER.
- 6. THE FLOW FROM THE LEVEL SPREADER SHALL OUTLET ONTO STABILIZED AREAS. WATER SHOULD NOT RE-CONCENTRATE IMMEDIATELY BELOW THE SPREADER.
- 7. PERIODIC INSPECTION AND REQUIRED MAINTENANCE SHALL BE PERFORMED.
- 8. PROTECTIVE MATERIAL AND EROSION STOP SHALL BE NORTH AMERICAN GREEN C125 EROSION CONTROL BLANKET OR APPROVED EQUAL.

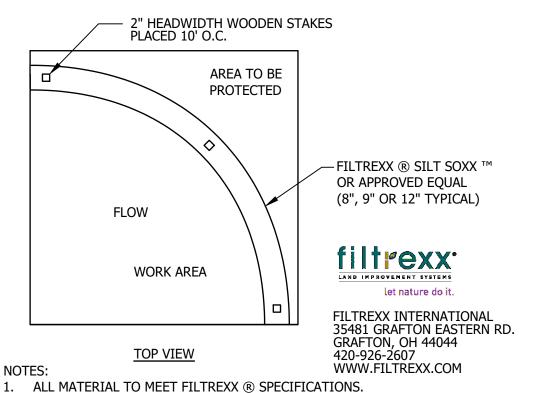


# LEVEL SPREADER DETAIL

SOURCE: ROCKINGHAM COUNTY CONSERVATION SERVICE

NO SCALE





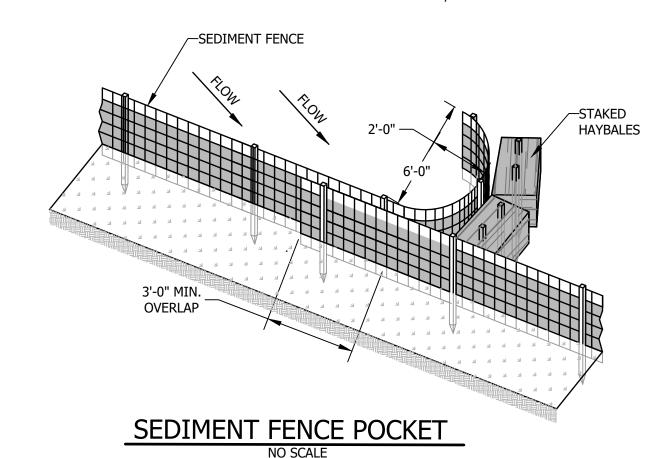
3. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.

#### FILTREXX® SILT SOXX™ DETAILS

SILT SOXX ™ FILL TO MEET APPLICATION REQUIREMENTS.

NOT TO SCALE

SOURCE: https://www.filtrexx.com/en/resources/design-specs-cads/filtrexx-cad-files THIS DETAIL IS ADAPTED FROM "FILTREXX ® SILT SOXX ™ & SEDIMENT TRAPP ™ DETAILS" SHEET AND IS THE SOLE PROPERTY OF FILTREXX INTERNATIONAL, LLC.



#### NH STATE PARKS Campground Expansion Project Pl

Land Surveying and Environmental Consulting

MAINE • NEW HAMPSHIRE • VERMONT

176 Newport Road, Suite 8; New London NH 03255

(603) 877-0116 www.horizonsengineering.com

**Pawtuckaway State Park** 7 Pawtuckaway Road Nottingham, NH 03290

**100% CONSTRUCTION** 

Graphic Scale

North

Scale: Varies

Drawn By: SJB

Date: March 15, 2024

Checked By: WTD

Issu	es:	
No.	Description	Date
1	Name	00/00/0

Title

**DETAILS EROSION CONTROL** 

Sheet Number:

C5.00

Project Number: 23045001 File: 220838\_base-01\_pawtuckaway.dwg

# ROCK CHECK DAM DETAIL

horizens

DATE OF PRINT MARCH 14 2024 All rights reserved HORIZONS ENGINEERING

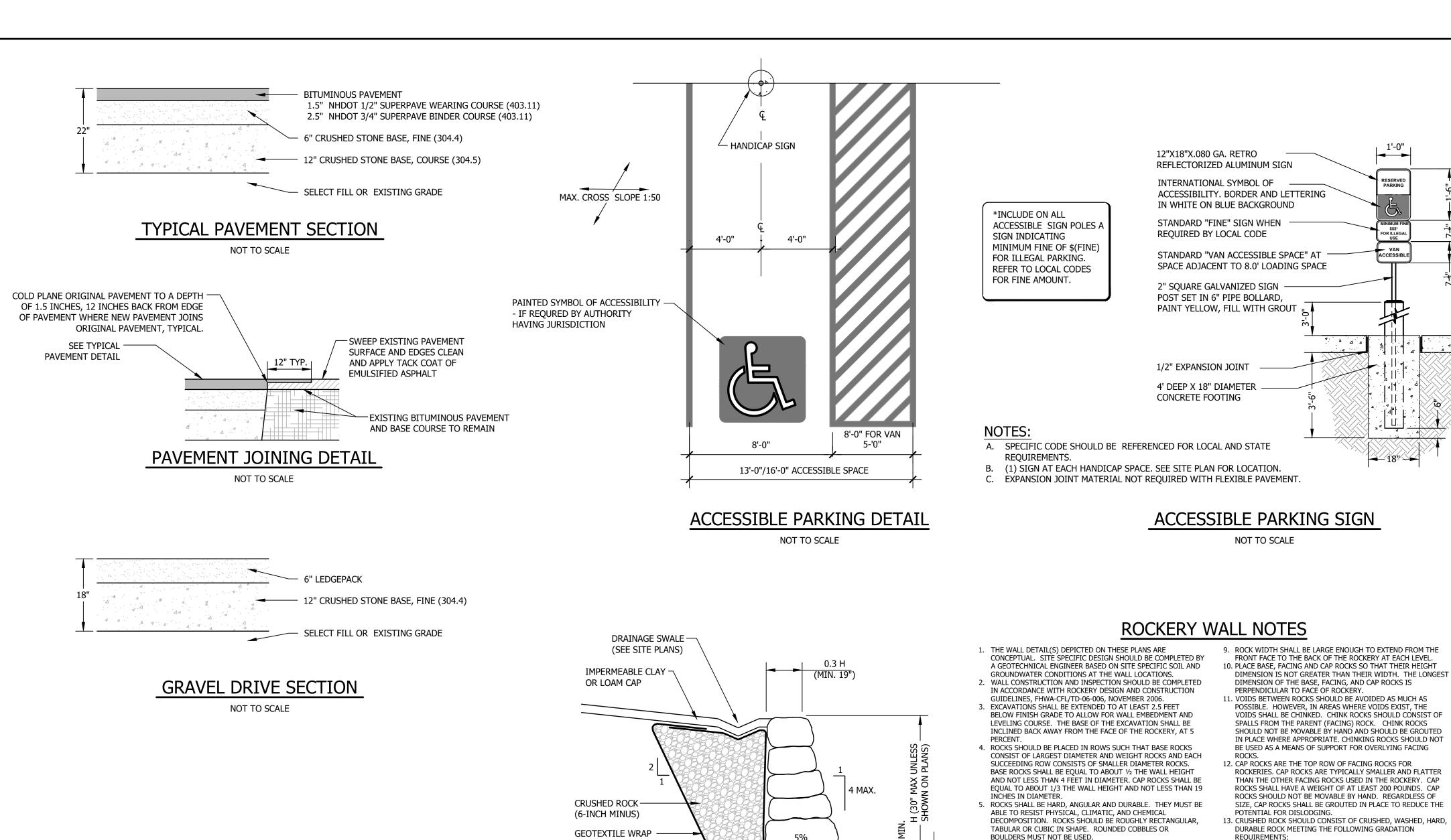
NO SCALE

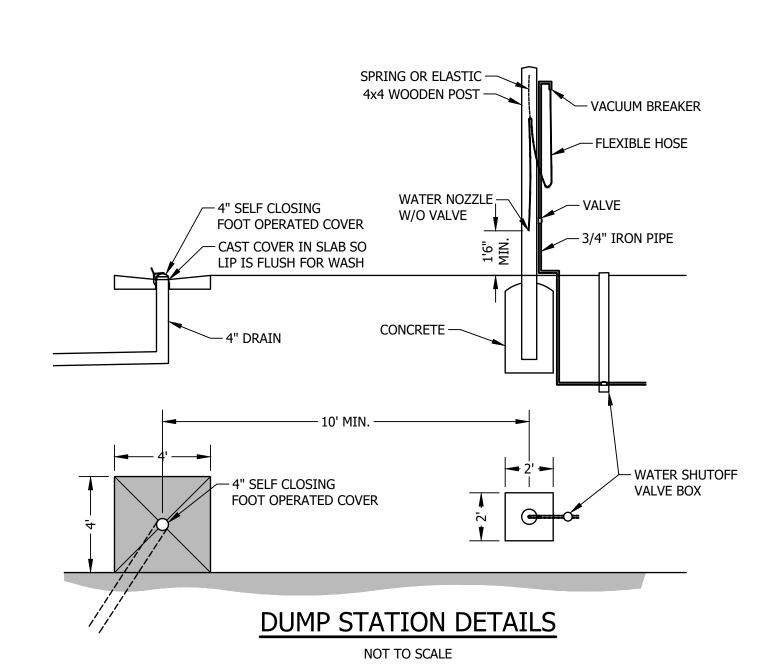
SOURCE: USDA SOIL CONSERVATION SERVICE

NO SCALE

PROFILE VIEW

SLOPE OF THE CHANNEL





# ROCKERY WALL DETAIL

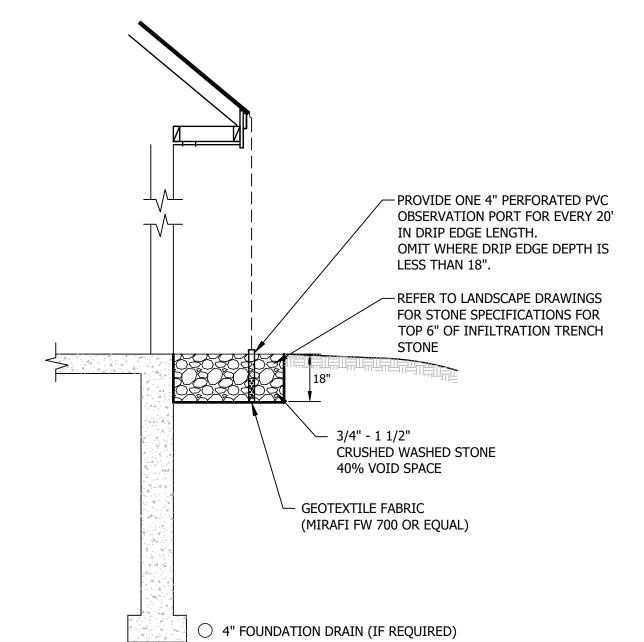
# (MIRAFI 160N OR EQUAL) **EMBEDMENT** 4"ø (PVC OR HDPE) -PERFORATED DRAIN PIPE

0.5 H

(MINIMUM 4 FT.)

# CONSTRUCTION SEQUENCE

- 1. PREPARE AN EROSION CONTROL PLAN OR A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS.
- 2. INSTALL CONSTRUCTION ENTRANCE, SEE DETAIL.
- 3. CUT AND CLEAR TREES WITHIN THE CLEARING LIMITS
- 4. INSTALL SEDIMENT FENCES, ROCK CHECK DAMS, AND OTHER APPROPRIATE EROSION CONTROL MEASURES AT LOCATIONS SHOWN ON THE PLANS AND AS NEEDED.
- 5. GRUB SITE WITHIN GRADING LIMITS.
- 6. STRIP AND STOCKPILE TOPSOIL AND INSTALL EROSION CONTROL MEASURES.
- 7. INSTALL/ADJUST SEDIMENT FENCE, CHECK DAMS, AND HAYBALES, AS REQUIRED.
- 8. CONSTRUCT PERMANENT STORMWATER CONTROLS AS SOON AS PRACTICAL. DO NOT DIRECT STORMWATER TOWARD TREATMENT BASINS, PONDS, SWALES, DITCHES AND LEVEL SPREADERS UNTIL THEY HAVE BEEN STABILIZED.
- 9. PROCEED WITH WORK, LIMITING THE DURATION OF DISTURBANCE. THE MAXIMUM OF UNCOVERED DISTURBED EARTH AT ANY ONE TIME IS FIVE ACRES. THE MAXIMUM LENGTH OF TIME THAT DISTURBED EARTH MAY BE LEFT UNSTABILIZED IS 45 DAYS.
- 10. BEGIN SEEDING AND MULCHING IMMEDIATELY AFTER GRADING. ALL DISTURBED AREAS SHALL BE STABILIZED WITH APPROVED METHODS WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
- AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED: A) BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED; B) A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED: C) A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED; OR
- D) EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
- 11. INSPECT ALL EROSION CONTROL MEASURES ON A DAILY BASIS AND AFTER EVERY 0.5 INCHES OF PRECIPITATION. MAINTAIN SEDIMENT FENCE, SEDIMENT TRAPS, HAY BALES, ETC., AS NECESSARY.
- 12. PAVE ROADWAYS AND/OR PARKING AREAS.
- 13. PLACE TOPSOIL, SEED AND MULCH.
- 14. COMPLETE ALL REMAINING PERMANENT EROSION CONTROL STRUCTURES.
- 15. MONITOR THE SITE AND MAINTAIN STRUCTURES AS NEEDED UNTIL FULL VEGETATION IS ESTABLISHED.



#### INFILTRATION STONE DRIP EDGE DETAIL NOT TO SCALE

#### **NH STATE PARKS Campground Expansion Project PII**

Land Surveying and Environmental Consulting

MAINE • NEW HAMPSHIRE • VERMONT

176 Newport Road, Suite 8; New London NH 03255

(603) 877-0116

www.horizonsengineering.com

**Pawtuckaway State Park** 7 Pawtuckaway Road Nottingham, NH 03290

# **100% CONSTRUCTION**

Graphic Scale

North

Scale: Varies

Drawn By: SJB

Date: March 15, 2024

Checked By: WTD

Issues:

1330	issues.					
No.	Description	Date				
1	Name	00/00/00				

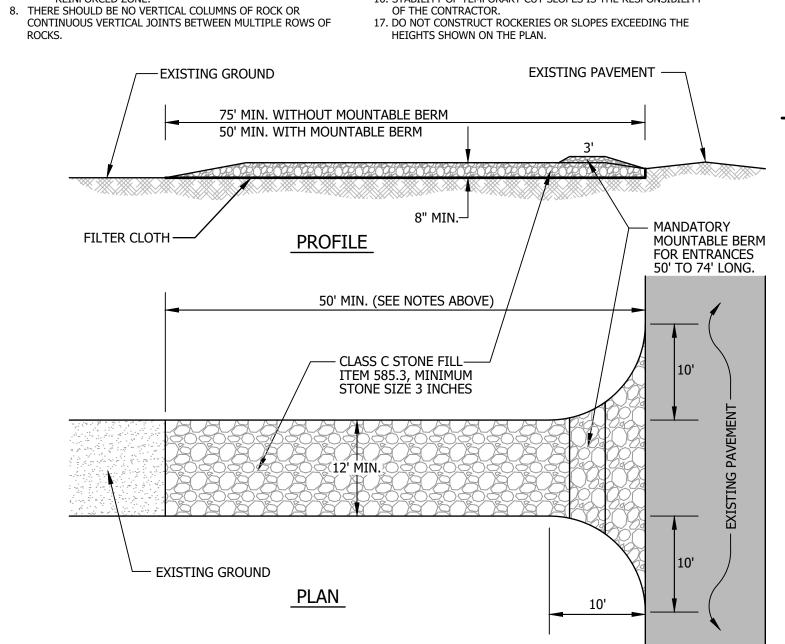
Title

**DETAILS MISCELLANEOUS** 

Sheet Number:

C5.01

Project Number: 23045001 File: 220838\_base-01\_pawtuckaway.dwg



CRUSHED ROCK
PERCENT FINER BY WEIGHT

0.0 - 15

0.0 - 2.0

100MM (4 IN)

19.0MM (3/4 IN)

4.75MM (NO. 4)

FOR SUPPLEMENTAL RECOMMENDATIONS.

OF THE CONTRACTOR.

75MM (NO. 200)

14. WHERE LOOSE, SOFT, OR OTHERWISE UNSUITABLE FOUNDATION

15. DISCHARGE OUTLET PIPES TO A PROTECTED OUTLET OR OTHER

PERMANENET DRAINAGE STRUCTURE AT LOW POINTS IN THE

ROCKERY. DRAIN OUTLETS SHOULD NOT EMPTY INTO STORM

DRAINS THAT ARE DESIGNED TO BACK-UP DURING HEAVY

16. STABILITY OF TEMPORARY CUT SLOPES IS THE RESPONSIBILITY

SOIL CONDITIONS ARE ENCOUNTERED, CONTACT THE ENGINEER

ROCKS SHOULD BE PLACED WITH LONGEST DIMENSION

PERCENT TOWARDS THE BACK OF THE ROCKERY.

THE ROCKERY.

REINFORCED ZONE.

PERPENDICULAR TO ROCKERY FACE. THE ROCKS SHOULD BE

PLACED SUCH THAT THEY SLOPE DOWNWARD AT LEAST 5

THE ROCKERY FACE BATTER SHOULD BE 4V:1H OR FLATTER.

POINTS - TWO IN FRONT AND ONE IN BACK.

o EACH ROCK SHOULD BEAR ON AT LEAST TWO OTHER

o EACH ROCK SHOULD HAVE AT LEAST THREE BEARING

o THE FRONT-MOST BEARING POINTS FOR EACH ROCK

DO NOT INTERFERE WITH ROCKERY DRAINAGE OR

SHOULD BEWITHIN 150MM (6IN) OF THE AVERAGE FACE OF

IMAGINARY VERTICAL PLANE. IF ROCKS LARGER THAN THE

MINIMUM SPECIFIED BASE WIDTH (B) ARE USED. THEY CAN

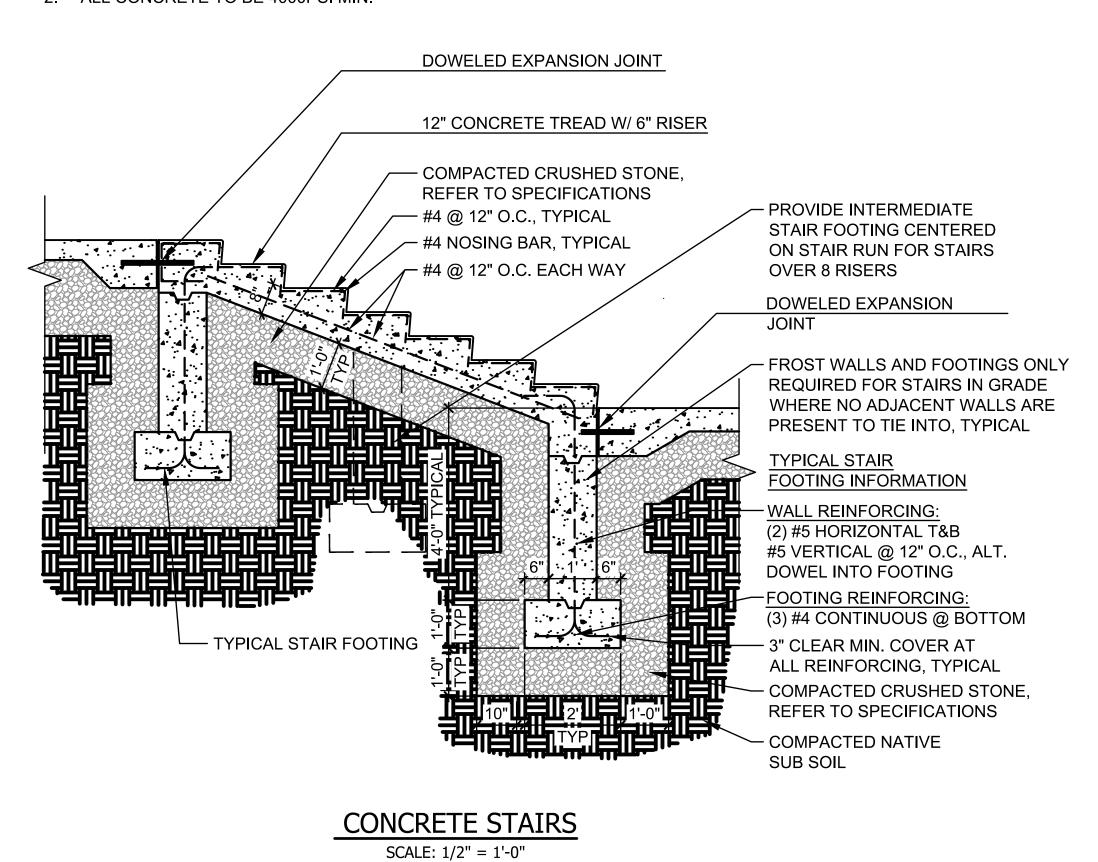
EXTEND BEYOND THIS IMAGINARY PLANE PROVIDED THEY

o THE REAR OF THE ROCKS SHOULD BE ALIGNED ALONG AN

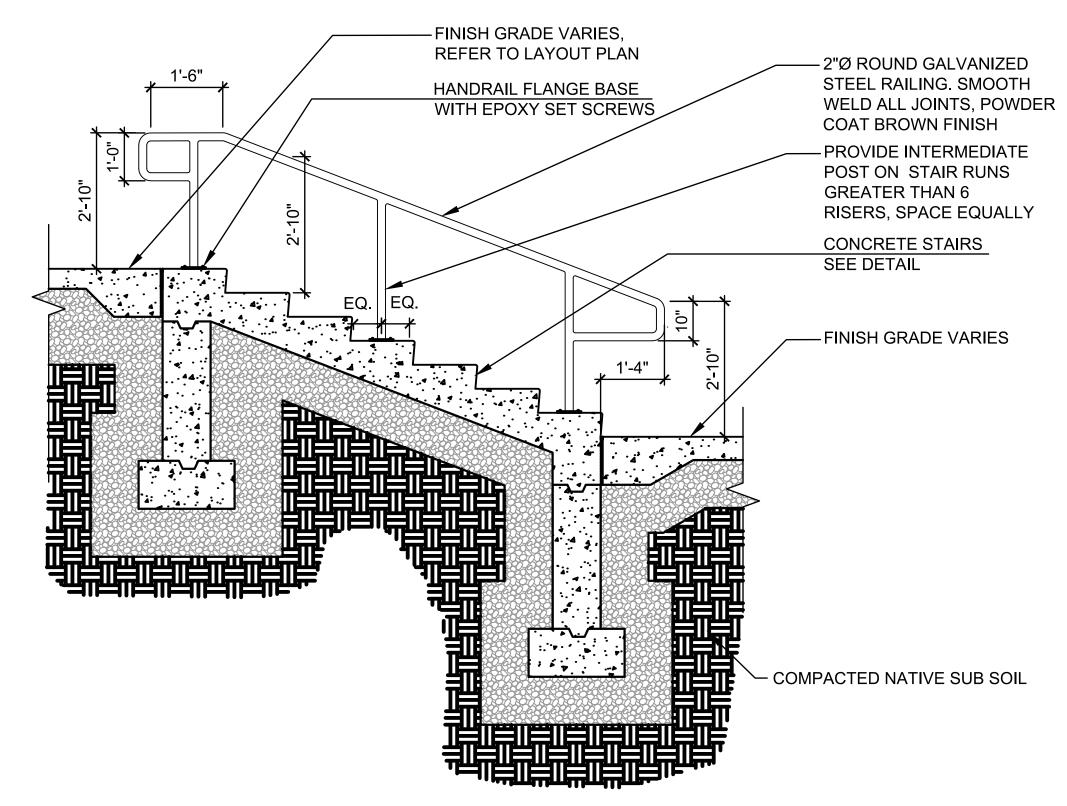
STABILIZED CONSTRUCTION EXIT

DATE OF PRINT **hogizens** MARCH 14 2024 All rights reserved HORIZONS ENGINEERING

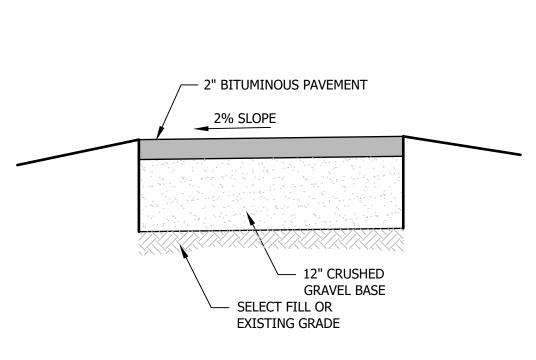
- 1. CONTRACTOR TO VERIFY NUMBER OF TREADS/RISERS ON LAYOUT AND GRADING PLANS.
- 2. ALL CONCRETE TO BE 4000PSI MIN.



NOTES: 1. CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR HANDRAILS.

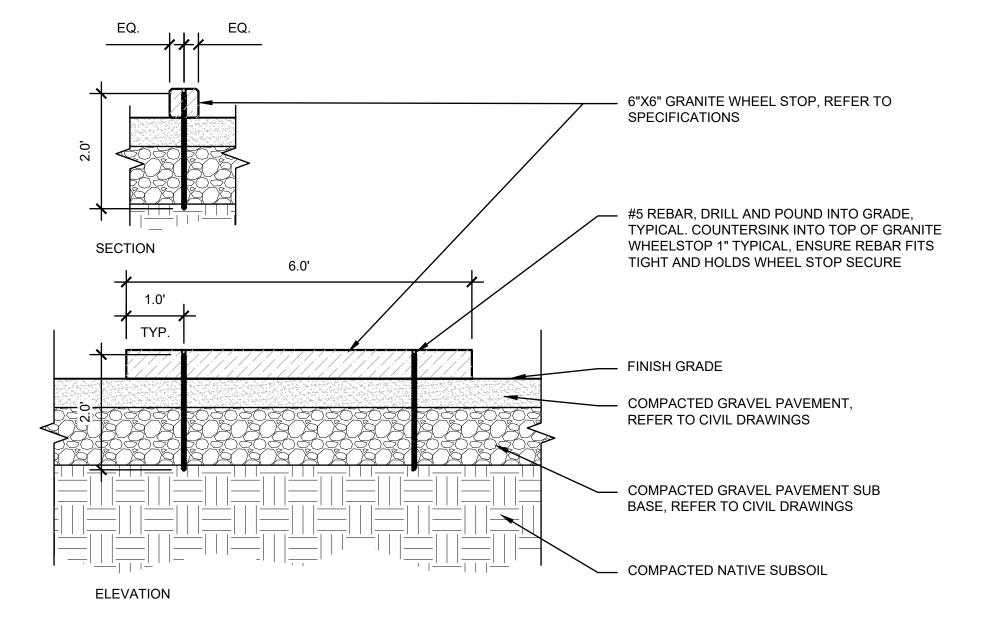


HANDRAIL AT STAIRS SCALE: 1/2" = 1'-0"



BITUMINOUS CONCRETE PATHWAY

NOT TO SCALE



**GRANITE WHEEL STOP DETAIL** 

1'' = 2.0'

# **NH STATE PARKS**

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**Campground Expansion Project PII** Pawtuckaway State Park 7 Pawtuckaway Road Nottingham, NH 03290

**100% CONSTRUCTION** 

Graphic Scale

Scale: Varies

Date: March 15, 2024

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Checked By: WTD

Issues:

No.	Description	Date
1	Name	00/00/00

Title

**DETAILS MISCELLANEOUS** 

Sheet Number:

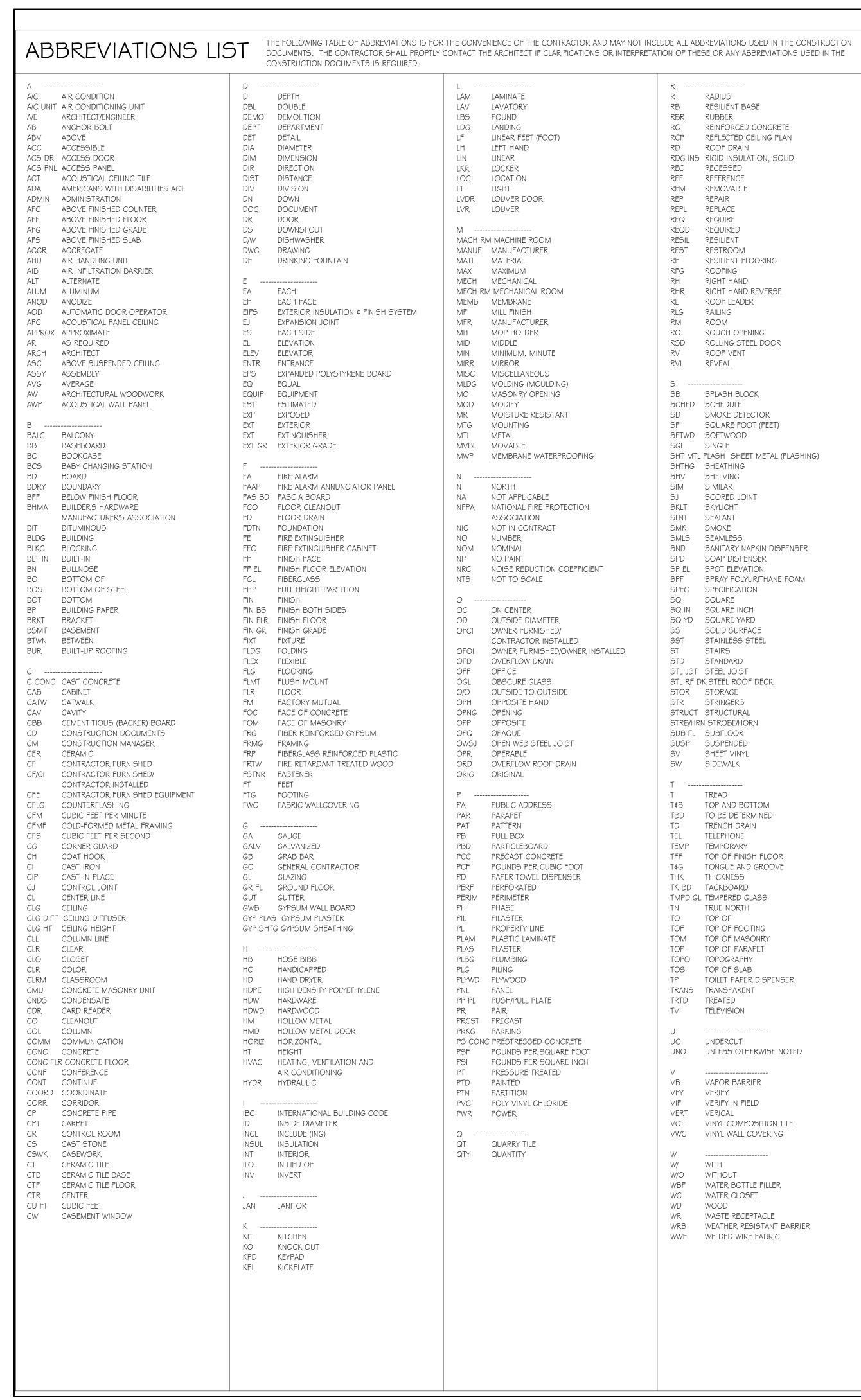
C5.02

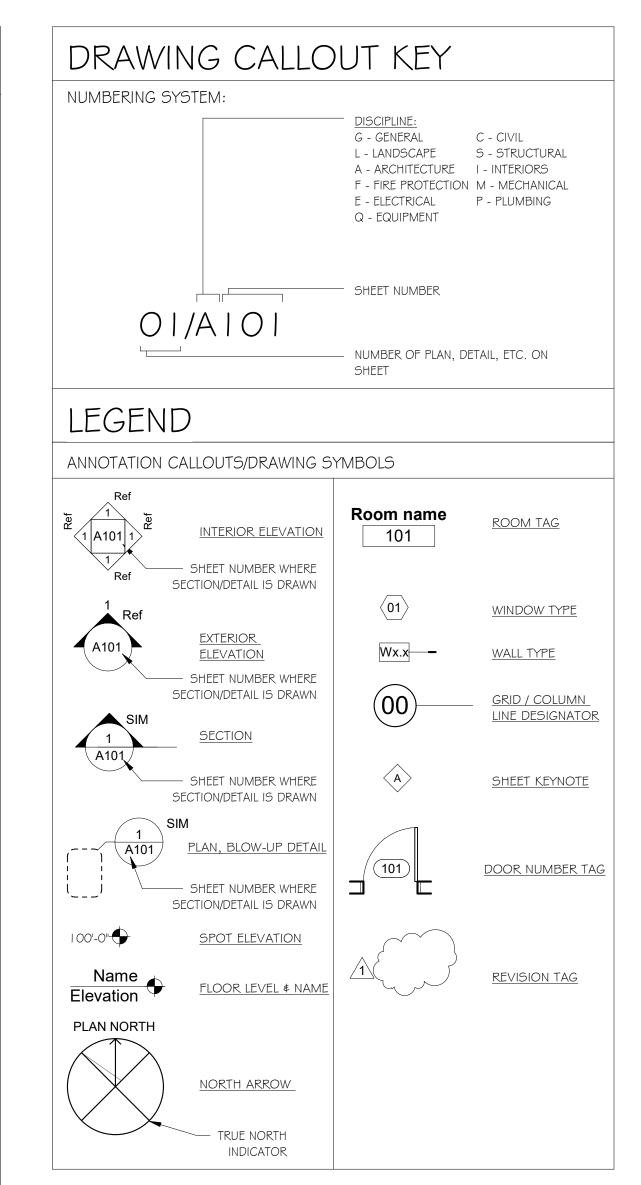
Project Number: 23045001 File: 220838\_base-01\_pawtuckaway.dwg

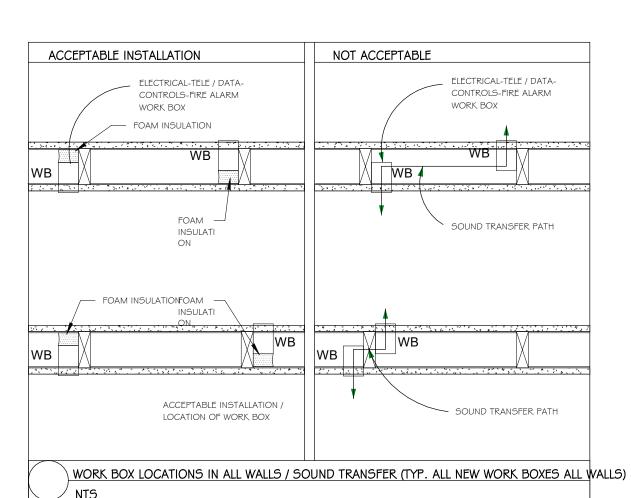
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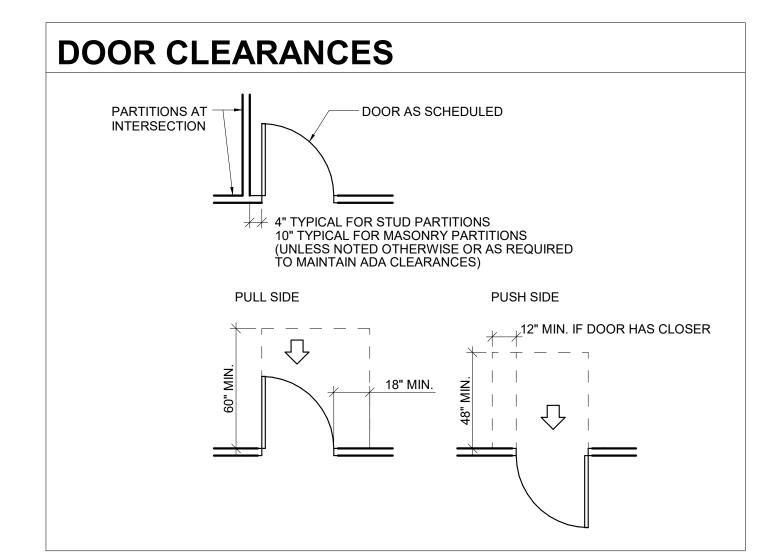
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SAMYN - D'ELIA ARCHITECTS, P.A.

P.O. Box 229 Holderness, NH 03245 tel: (603) 968-7133

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MAR. 8, 2023

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HVAC, Elec. & Plumb. Engineer: Charles P. Buckley, P.E. 500 Depot Street Rumney, NH 03266 tel: (603) 786-9992

Structural Engineer:
Fisher Engineering, P.C.
686 Belknap Mountain Road
Gilford, NH 03249
tel: (603) 528-7641

# **NH STATE PARKS**

Campground Expansion Project PII
Pawtuckaway State Park
7 Pawtuckaway Road
Nottingham, NH
03290

Issue

100% CHECK SET

Graphic Scale

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Scale: As indicated

Date: Mar. 15, 2025

Drawn By: MR

Checked By: WD

noonou by. Wb

No. Description Date

Γitle

GENERAL NOTES, ABBREVIATIONS, ANNOTATIONS LEGENDS, & WALL TYPES Sheet Number:

A0.01

Project Number: 2136A

File:

- ~ NEW HAMPSHIRE SAF-C 6000 FIRE CODE
- NFPA | FIRE CODE 2018 EDITION - NFPA 101 LIFE SAFETY CODE - 2018 EDITION - CHAPTER 36, "NEW MERCANTILE"
- ~ INTERNATIONAL ENERGY CONSERVATION CODE (IECC) 2018 EDITION
- ~ INTERNATIONAL PLUMBING CODE (IPC) 2018 EDITION ~ INTERNATIONAL MECHANICAL CODE (IMC) - 2018 EDITION ~ NATIONAL ELECTRIC CODE (NEC) - 2020
- ~ APPLICABLE ACCESSIBILITY CODES \$ STANDARDS:
- ICC A1 17.1-2003 ACCESSIBLE & USABLE BUILDINGS & FACILITIES

#### PROPOSED FACILITY:

- ~ OVERALL FACILITY FIRE PROTECTION
- SPRINKLER SYSTEM NOT REQUIRED (IBC 903.2.7) - FIRE EXTINGUISHERS COMPLYING WITH IBC 906. I
- ~ OCCUPANCY CLASSIFICATION: IBC BUSINESS (B); LSC CHAPTER 38, "NEW BUSINESS OCCUPANCIES"
- ~ CONSTRUCTION CLASSIFICATION: TYPE VB (COMBUSTIBLE, NO RATING)
- ~ BUILDING STORIES \$ HEIGHT (IBC TABLES 504.3 \$ 504.4)
- ALLOWABLE STORIES: 2 STORIES
- PROPOSED STORIES: | STORY = <u>COMPLIES</u>
- ALLOWABLE HEIGHT: 40'-0" (TO AVERAGE HEIGHT OF HIGHEST ROOF PLANE) - PROPOSED HEIGHT: 15'-0" = COMPLIES
- ~ BUILDING AREA (IBC TABLE 506.2)
- ALLOWABLE AREA (IST FLOOR PLAN): 9,000 GSF - PROPOSED AREA (IST FLOOR PLAN): 1,431 GSF = COMPLIES
- STREET FRONTAGE INCREASE (IBC 506.2) NOT REQUIRED
- SPRINKLER INCREASE (IBC 506.3) NOT REQUIRED
- ENCLOSED FLOOR AREA: 747 SF
- COVERED PORCH AREA: 684 SF - TOTAL PROPOSED GROSS FLOOR AREAS: 1,431 SF

#### FIRE RESISTANCE RATINGS REQUIREMENTS:

- ~ BUILDING ELEMENTS (TABLE 601) - PRIMARY STRUCTURAL FRAME: O HR - EXTERIOR BEARING WALLS: O HR
- INTERIOR BEARING WALLS: O HR - EXTERIOR NON-BEARING WALLS: O HR - INTERIOR NON-BEARING WALLS: O HR - FLOOR CONSTRUCTION: O HR
- MEANS OF EGRESS REQUIREMENTS:

- ROOF CONSTRUCTION:

- MAXIMUM TRAVEL DISTANCE: 200 FEET (38.2.6.3) - MAXIMUM DEAD-END CORRIDOR LENGTH: 20 FEET (38.2.5.2) - MAXIMUM COMMON PATH OF TRAVEL: 75 FEET (38.2.5.3.1) - INTERIOR FINISH, FLOORS: NO REQUIREMENTS (38.3.3.3)

- INTERIOR FINISH, WALLS AND CEILING: A, B, or C (38.3.3)

0 HR

ENERGY CODE - MINIMUM THERMAL ENVELOPE REQUIREMENTS:

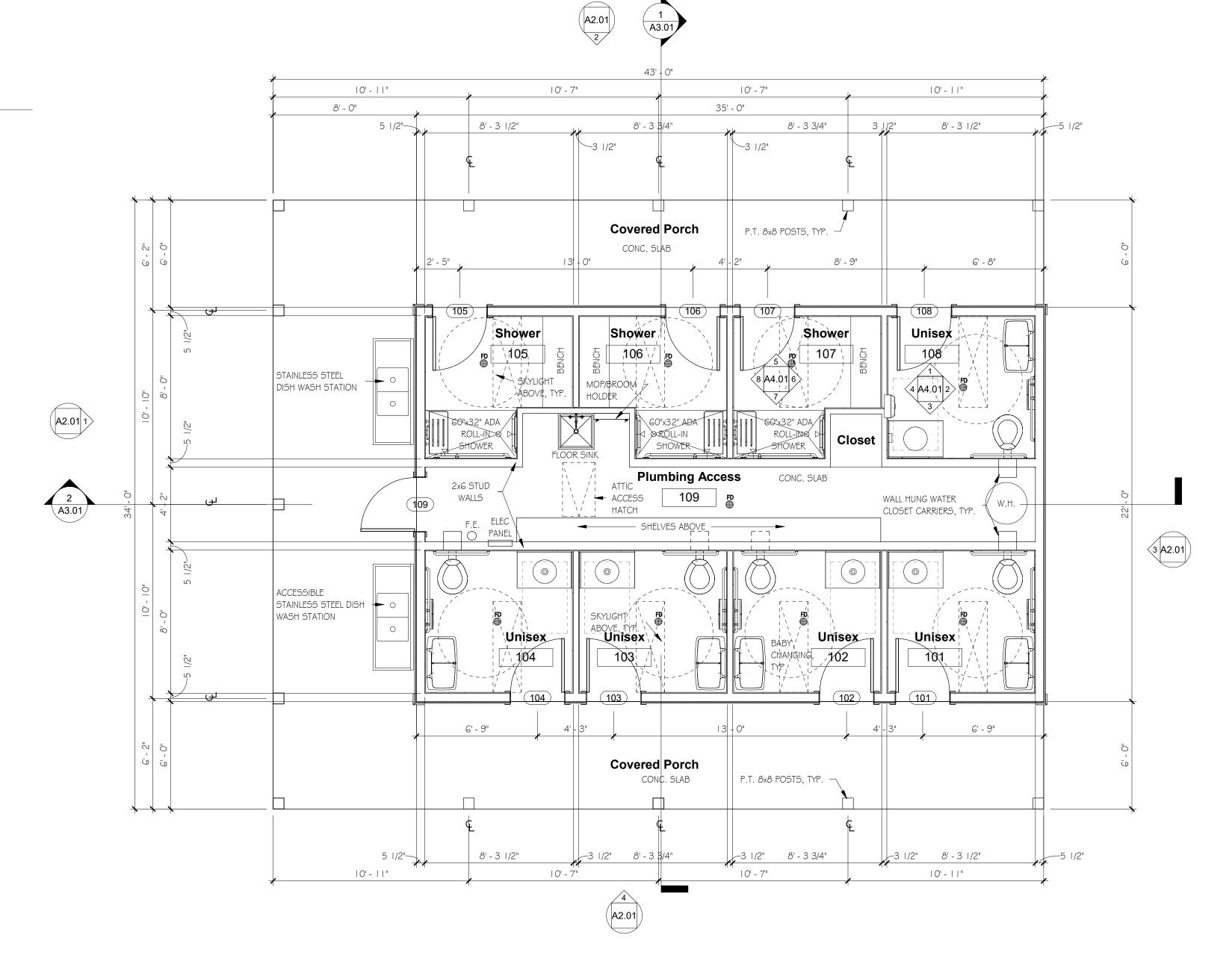
#### - BUILDING IS UNWINTERIZED

#### PLUMBING REQUIREMENTS:

- 5 UNISEX - WATER CLOSETS: - LAVATORIES: 5 UNISEX - SHOWERS:
- ACCESSIBLE TOILET ROOMS: ALL NEW TOILET \$ SHOWER ROOMS ARE REQUIRED TO BE ACCESSIBLE (IBC CHAPTER 11). NH AMENDMENT TO IBC: SINGLE OCCUPANCY TOILETS MAY BE UNISEX PROVIDED THE NUMBER OF WATER CLOSETS COMPLIES WITH
- TABLE 2902.1.

- SERVICE SINK:

# **CODE SUMMARY**



Enclosed floor area: 747 sq. ft. Covered porch area: 684 sq. ft. Total building area: 1,431 sq. ft. SAMYN - D'ELIA ARCHITECTS, P.A.

P.O. Box 229 Holderness, NH 03245 tel: (603) 968-7133

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MAR. 8, 2023

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Structural Engineer:

Fisher Engineering, P.C. 686 Belknap Mountain Road Gilford, NH 03249 tel: (603) 528-7641

# **NH STATE PARKS**

Campground Expansion Project PII Pawtuckaway State Park 7 Pawtuckaway Road Nottingham, NH 03290

100% CHECK SET

Graphic Scale

Scale: As indicated

Drawn By: MR

Date: Mar. 15, 2025

Checked By: WD

ISSU	<del>2</del> 8.	
No.	Description	Date

MAIN FLOOR PLAN

Sheet Number:

A1.01

Project Number: 2136A

VERIFY SKYLIGHT LOCATIONS WITH ROOF FRAMING - SEE STRUCTURAL

--- Ix6 PINE T&G PLANKS

SHAFTS

Ix6 PINE T&G SOFFIT

PIPE SLEEVE/FIRESTOP AT CEILING

— WOOD WRAPPED BEAMS

SKYLIGHTS, TYP.

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# NH STATE PARKS

Campground Expansion Project PII
Pawtuckaway State Park
7 Pawtuckaway Road
Nottingham, NH
03290

Issue

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North

Scale: 1/4" = 1'-0"

Date: Mar. 15, 2025

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Title

REFLECTED CEILING PLAN & ROOF PLAN

Sheet Number:

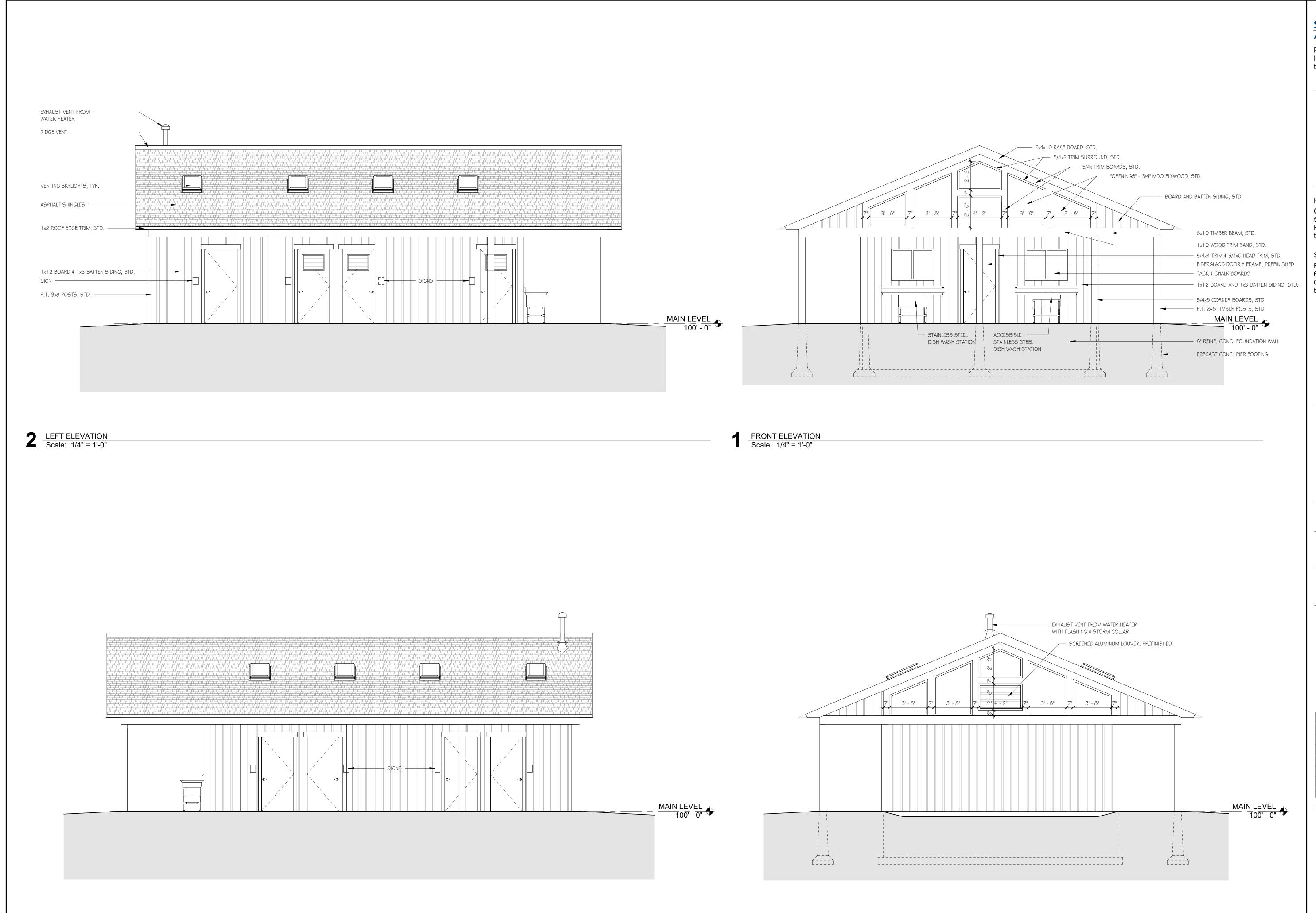
A1.02

Project Number: 2136A

File:

PM C:\Users\Mike\Documents\Pawtuckaway Bathhouse Architraye34 ryt

ROOF PLAN
Scale: 1/4" = 1'-0"



RIGHT ELEVATION
Scale: 1/4" = 1'-0"

REAR ELEVATION
Scale: 1/4" = 1'-0"

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Nottingham, NH
03290

Issue

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Graphic Scale

North

Scale: 1/4" = 1'-0"

Date: Mar. 15, 2025

Drawn By: MR

Checked By: WD

No. Description Date

Title

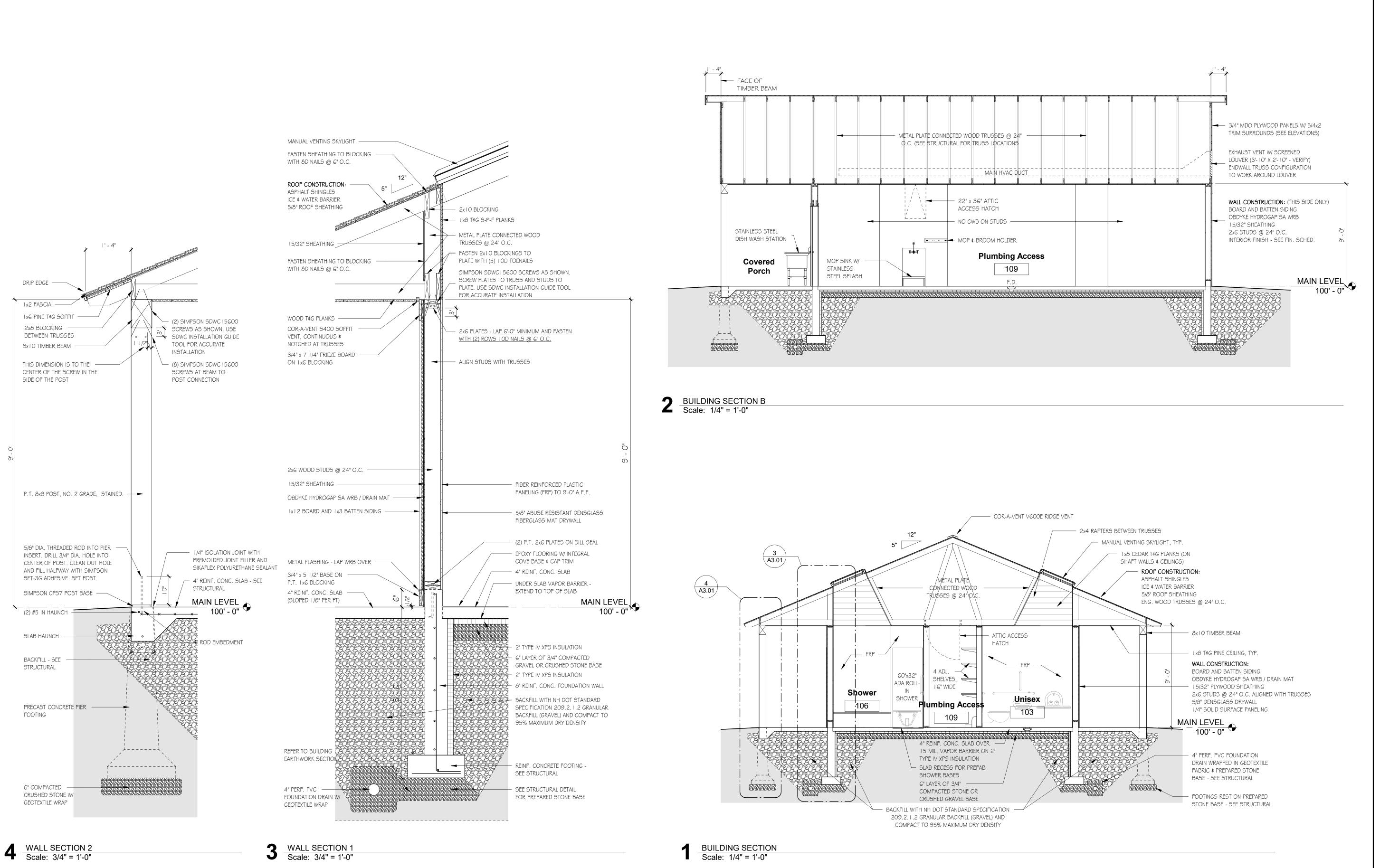
EXTERIOR ELEVATIONS

Sheet Number:

A2.01

Project Number: 2136A

File:



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Title

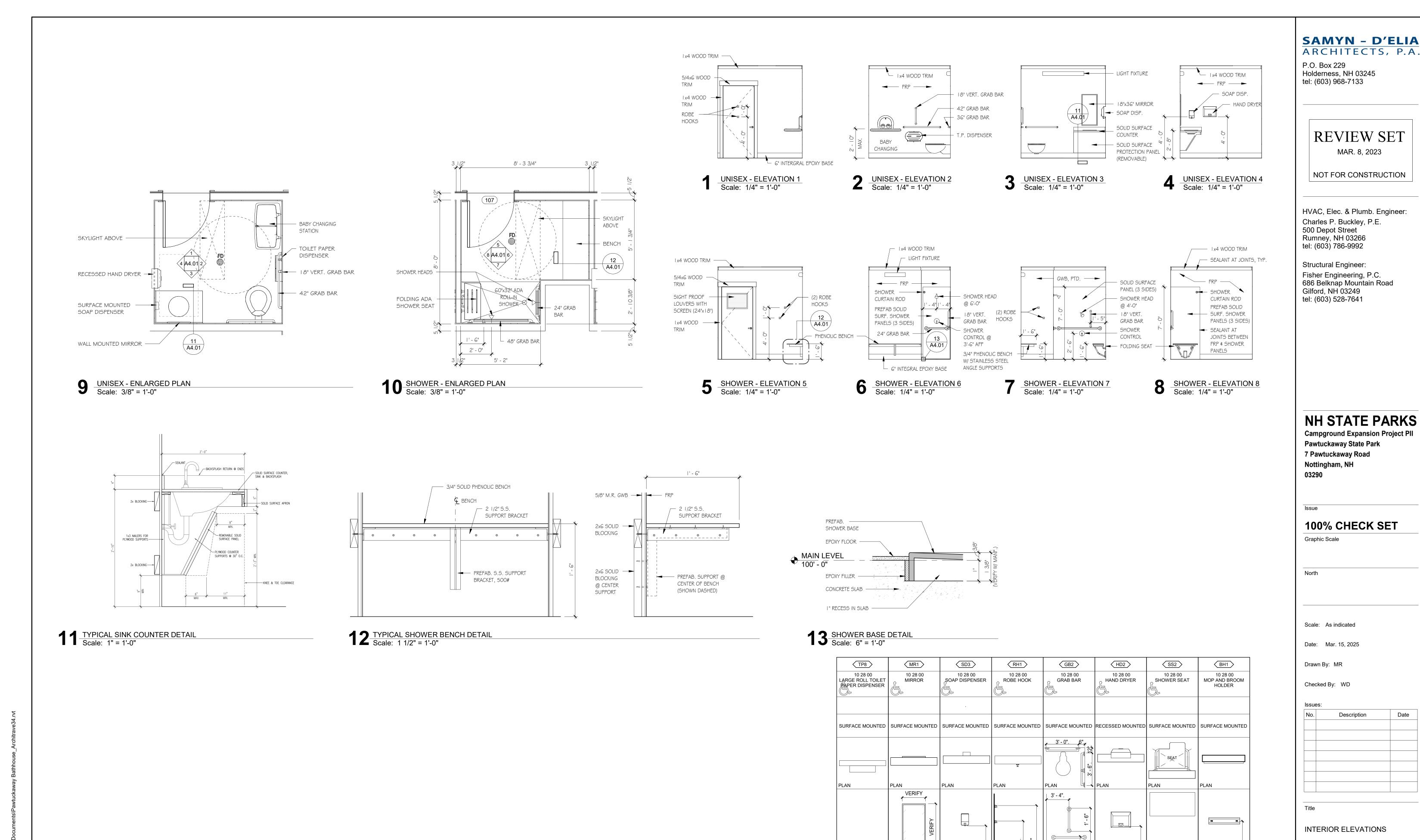
BUILDING & WALL SECTIONS

Sheet Number:

A3.01

Project Number: 2136A

ile<sup>.</sup>



A4.01

Project Number: 2136A

Sheet Number:

Date

**ACCESSORIES - TOILETS & SHOWERS** 

SIDE ELEVATION

ELEVATION

ELEVATION

ELEVATION

ELEVATION

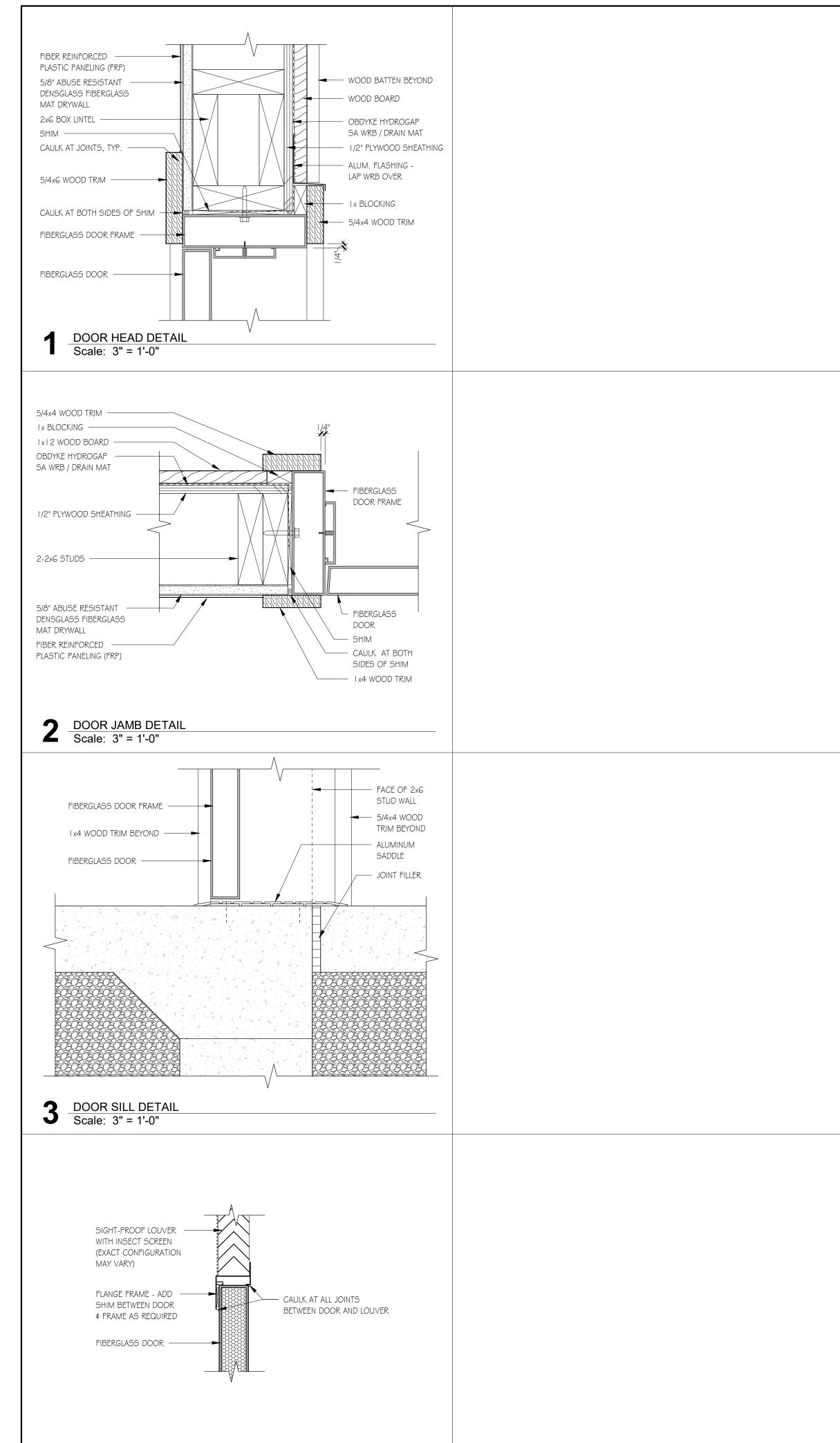
ELEVATION

ELEVATION



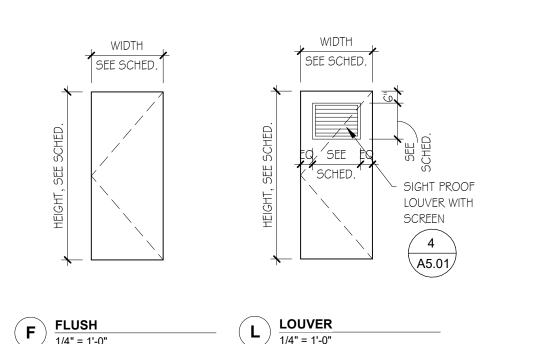


DOOR LOUVER DETAIL
Scale: 3" = 1'-0"



	FINISH SCHEDULE								
ROOM NUMBER	ROOM NAME	FLOOR FINISH	BASE FINISH	NORTH WALL	EAST WALL	SOUTH WALL	WEST WALL	CEILING FINISH	COMMENTS
101	Unisex	EPOXY	INTEGRAL EPOXY	FRP ON GWB	FRP ON GWB	FRP ON GWB	FRP ON GWB	I xG T#G PLANKS	
102	Unisex	EPOXY	INTEGRAL EPOXY	FRP ON GWB	FRP ON GWB	FRP ON GWB	FRP ON GWB	Ix6 T&G PLANKS	
103	Unisex	EPOXY	INTEGRAL EPOXY	FRP ON GWB	FRP ON GWB	FRP ON GWB	FRP ON GWB	I x6 T&G PLANKS	
104	Unisex	EPOXY	INTEGRAL EPOXY	FRP ON GWB	FRP ON GWB	FRP ON GWB	FRP ON GWB	Ix6 T&G PLANKS	
105	Shower	EPOXY	INTEGRAL EPOXY	FRP ON GWB	FRP ON GWB	FRP ON GWB	FRP ON GWB	Ix6 T&G PLANKS	SOLID SURFACE SHOWER WALL PANELS
106	Shower	EPOXY	INTEGRAL EPOXY	FRP ON GWB	FRP ON GWB	FRP ON GWB	FRP ON GWB	Ix6 T&G PLANKS	SOLID SURFACE SHOWER WALL PANELS
107	Shower	EPOXY	INTEGRAL EPOXY	FRP ON GWB	FRP ON GWB	FRP ON GWB	FRP ON GWB	Ix6 T&G PLANKS	SOLID SURFACE SHOWER WALL PANELS
108	Unisex	EPOXY	INTEGRAL EPOXY	FRP ON GWB	FRP ON GWB	FRP ON GWB	FRP ON GWB	I x6 T&G PLANKS	
109	Plumbing Access	SEALED CONCRETE	-	-	-	-	-	5/8" GWB	NO GWB ON STUDS

DOOR SCHEDULE									
OPENING	WIDTH	HEIGHT	THICKNESS	DOOR TYPE	MATERIAL	FRAME MATERIAL	COMMENTS		
			_						
101	3' - 0"	7' - 0"	1 3/4"	SOLID CORE	FIBERGLASS	FIBERGLASS			
102	3' - 0"	7' - 0"	1 3/4"	SOLID CORE	FIBERGLASS	FIBERGLASS			
103	3' - 0"	7' - 0"	1 3/4"	SOLID CORE	FIBERGLASS	FIBERGLASS			
104	3' - 0"	7' - 0"	1 3/4"	SOLID CORE	FIBERGLASS	FIBERGLASS			
105	3' - 0"	7' - 0"	1 3/4"	SOLID CORE	FIBERGLASS	FIBERGLASS	24" x 18" LOUVERS WITH SCREENS		
106	3' - 0"	7' - 0"	1 3/4"	SOLID CORE	FIBERGLASS	FIBERGLASS	24" x 18" LOUVERS WITH SCREENS		
107	3' - 0"	7' - 0"	1 3/4"	SOLID CORE	FIBERGLASS	FIBERGLASS	24" x 18" LOUVERS WITH SCREENS		
108	3' - 0"	7' - 0"	1 3/4"	SOLID CORE	FIBERGLASS	FIBERGLASS			
109	3' - 0"	7' - 0"	1 3/4"	SOLID CORE	FIBERGLASS	FIBERGLASS			





N	WIDTH SEE SCHED.	5/4x6 WOOD - HEAD CASING W/ 1/2" OVERLAP
JAMB CASING	1 A5.01	FIBERGLASS FRAME BEHIND I x4 TRIM  2  A5.01
F1 FRAME TYPE	≣ F1	

<b>FRAME</b>	<b>TYPES</b>
--------------	--------------

			WINDOW SC	CHEDULE		
MARK	WIDTH	HEIGHT	TYPE	MODEL	COMMENTS	COUNT
	1' <sub>-</sub> 9"	3' - 1 7/8"		VS	SKYLIGHT BASIS-OF-DESIGN: VELLIX VS-C04	

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# NH STATE PARKS

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7 Pawtuckaway Road
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03290

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Date: Mar. 15, 2025

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No.	Description	Date

Title

SCHEDULES

Sheet Number:

A5.01

Project Number: 2136A

ile:

NOTES AND DETAILS SHOWN ARE INTENDED TO BE TYPICAL FOR SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.

THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS, AS-BUILT OR OTHERWISE, PRIOR TO PROCEEDING WITH THE WORK.

THE DRAWINGS ARE INTENDED TO SHOW THE DESIGN CONCEPT AND ARE NOT TO BE USED AS SHOP DRAWINGS. COMMENTS MADE ON THE SHOP DRAWINGS, OR ON OTHER SUBMITTALS, DURING THE REVIEW DO NOT RELIEVE THE CONTRACTOR FROM COMPLIANCE WITH THE REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS. REVIEW IS SPECIFICALLY FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR: CONFIRMING AND CORRELATING ALL QUANTITIES AND DIMENSIONS; SELECTING THE FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION; COORDINATING HIS OR HER WORK WITH THAT OF ALL OTHER TRADES; AND COMPLETING THE WORK AS SET FORTH IN THE CONTRACT

THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO AVOID DAMAGE TO EXISTING STRUCTURES INCLUDING BUT NOT LIMITED TO: PROHIBITING CRANES OR OTHER HEAVY EQUIPMENT FROM BEING PLACED ON SLABS OR ADJACENT TO FOUNDATIONS WALLS, PROHIBITING THE PLACEMENT OF CONCENTRATED LOADS ON SLABS OR FLOORS, AND PROHIBITING THE MODIFICATION OF STRUCTURAL MEMBERS IN ANY WAY OTHER THAN AS SHOWN ON THE STRUCTURAL DRAWINGS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL BRACING AND SHORING REQUIRED TO COMPLETE THE WORK. THIS RESPONSIBILITY INCLUDES RETAINING AN ENGINEER TO DESIGN ALL NECESSARY BRACING. SHORING OR UNDERPINNING FOR EXISTING STRUCTURES.

#### STRUCTURAL DESIGN CRITERIA

THE STRUCTURAL DESIGN IS BASED ON THE 2018 INTERNATIONAL BUILDING CODE. ALL CONSTRUCTION SHALL COMPLY WITH THIS AND ALL OTHER APPLICABLE CODES AND STANDARDS.

LIVE LOADS:	SLAB-ON-GRADE	100	PSF
ELEVATION ADJ FLAT-ROOF SNO SNOW EXPOSUR	OW LOAD (Pf) RE FACTOR (Ce) PORTANCE FACTOR (I)	65 63 55 1.0 1.2	PSF PSF
RISK CATEGORY WIND EXPOSUR		90 M II B 0.18	IPH
1.0 SECOND SPE SITE CLASS D DESIGN SHORT DESIGN 1.0 SEC SEISMIC DESIGN RESPONSE MOD SEISMIC BASE S BASIC SEISMIC-I	TANCE FACTOR SPECTRAL RESPONSE ACCEL. ECTRAL RESPONSE ACCEL. PERIOD SPECTRAL RESP. COEF. OND SPECTRAL RESP. COEF. I CATEGORY DIFICATION FACTOR SHEAR FORCE-RESISTING SYSTEM: I'ALLS WITH SHEAR PANELS	0.08 F. 0.37	1 76 29

#### **FOUNDATION NOTES**

**EQUIVALENT LATERAL FORCE PROCEDURE** 

FOOTINGS AND SLABS HAVE BEEN DESIGNED TO BEAR ON SOILS WITH A MINIMUM ALLOWABLE BEARING CAPACITY OF 2000 PSF PER THE GEOTECHNICAL ENGINEERING REPORT BY SW COLE ENGINEERING. INC DATED OCTOBER 16, 2023, REFER TO THE GEOTECHNICAL ENGINEERING REPORT FOR ADDITIONAL RECOMMENDATIONS REGARDING SUB-GRADE PREPARATION, FILL AND COMPACTION REQUIREMENTS, DEWATERING, AND TEST PIT INFORMATION.

EXCAVATION, FILL PLACEMENT, AND COMPACTION IS TO BE PERFORMED IN THE DRY AND IN UNFROZEN GROUND. THE CONTRACTOR SHALL PERFORM DEWATERING AS REQUIRED TO MAINTAIN THE GROUNDWATER LEVEL 1 FOOT BELOW THE BOTTOM OF THE EXCAVATION. CONTACT THE ENGINEER IF UNSTABLE, SATURATED OR WEAVING SOILS ARE ENCOUNTERED.

REMOVE ALL DELETERIOUS MATERIALS SUCH AS EXISTING FILL MATERIAL. TOP SOIL. BOULDERS, STUMPS AND OTHER ORGANICS FROM BENEATH NEW SLABS AND FOOTINGS. CARE SHALL BE TAKEN NOT TO DISTURB SOILS BELOW LINES AND GRADES REQUIRED FOR STRUCTURAL FILL PLACEMENT OR FOOTING BEARING.

THE CONTRACTOR SHALL PROTECT FOOTING AND SLAB BEARING SURFACES FROM FREEZING, BOTH BEFORE AND AFTER CONCRETE PLACEMENT. SLABS AND FOOTINGS WHICH MOVE DUE TO FROST ACTION SHALL BE REPLACED AT THE CONTRACTOR'S

PRIOR TO FILL PLACEMENT, AND FOOTING CASTING, COMPACT THE EXISTING MATERIAL WITH A VIBRATORY ROLLER OR PLATE COMPACTOR. NOTIFY THE ENGINEER IF NOTICEABLE DEPRESSIONS OR PUMPING OCCURS DURING COMPACTION, OR IF LOOSE SANDS ARE ENCOUNTERED.

THE GEOTECHNICAL ENGINEER WHO PREPARED THE GEOTECHNICAL ENGINEERING REPORT IS TO EXAMINE SUBGRADE PRIOR TO FILL PLACEMENT AND CONCRETE PLACEMENT. THE PLACEMENT, COMPACTION AND TESTING FILL IS TO BE PERFORMED UNDER THE SUPERVISION OF A GEOTECHNICAL ENGINEER OR QUALIFIED SOILS OR GEOTECHNICAL ENGINEERING TECHNICIAN. THE FREQUENCY OF COMPACTION TESTING IS TO BE DETERMINED BY THE GEOTECHNICAL ENGINEER. SUBMIT COMPACTION TEST RESULTS TO THE ARCHITECT AND ENGINEER PRIOR TO CONCRETE PLACEMENT.

FILL REQUIRED BELOW FOOTINGS SHALL BE CRUSHED GRAVEL MEETING THE REQUIREMENTS OF NHDOT SPECIFICATIONS ITEM NUMBER 304.3 MODIFIED CRUSHED GRAVEL. PLACE AND COMPACT MATERIAL IN 3 TO 6-INCH LOOSE LIFTS, DEPENDING ON EQUIPMENT USED FOR COMPACTION. COMPACT MATERIAL TO 95% DENSITY AT OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D 1557 METHOD C.

FOOTINGS ARE TO BE CENTERED UNDER WALLS AND COLUMNS UNLESS NOTED OTHERWISE.

FOUNDATION WALLS SHALL BE BACKFILLED SUCH THAT THE TOP OF FILL DOES NOT VARY BY MORE THAN 16-INCHES FROM ONE SIDE TO THE OTHER. THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO PREVENT MOVEMENT OF FOUNDATION WALLS WHILE BACKFILLING.

#### CONCRETE AND REINFORCING STEEL NOTES

ALL CONCRETE CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE" EXCEPT AS MODIFIED BY THE PROJECT SPECIFICATIONS.

CONCRETE DESIGN MIXES SHALL BE PREPARED IN ACCORDANCE WITH ACI 211, ACI 318, THE PROJECT SPECIFICATIONS AND SHALL HAVE THE FOLLOWING STRENGTHS AND

#### LOCATIOSTRENGTH AT 28 DAYS (f'c)

CONCRETE SLABS ALL OTHER CONCRETE 3000 PSI

(f'c) CEMENT/YD	MAX	W/C RATI	<u>O BY WT.</u>	MAX SLUMP
3500 PSI 3000 PSI	564 517	POUNDS POUNDS	0.48 0.55	5"
CONCRETE FOR WALLS	AND E	XTERIOR SI AI	RS SHALL BE	AIR ENTRAINED TO 6+1%

THE CONCRETE MIX DESIGN SHALL BE BASED ON THE SLUMP AND THE W/C RATIO'S

GIVEN ABOVE. PROVIDE WATER REDUCING ADMIXTURE AS REQUIRED.

REINFORCING STEEL SHALL CONFORM TO ASTM A 615 GRADE 60 SPECIFICATIONS, FABRICATED IN ACCORDANCE WITH THE MANUAL OF STANDARD PRACTICE OF THE CONCRETE REINFORCING STEEL INSTITUTE AND PLACED IN ACCORDANCE WITH A.C.I.

315 AND A.C.I. MANUAL OF STANDARD PRACTICE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 GRADE 65 AND BE FURNISHED IN FLAT SHEETS. LAP ALL W.W.F. EDGES TWO SQUARES.

SUPPORT W.W.F. USING UPPER TYPE CONTINUOUS HIGH CHAIRS AT 3 FEET ON-CENTER TO MAINTAIN THE W.W.F. AT THE CENTER OF THE SLAB, UNLESS SHOWN OTHERWISE.

MAINTAIN THE FOLLOWING CONCRETE COVER OVER REINFORCING UNO: CONCRETE CAST AGAINST EARTH 3" FORMED CONCRETE EXPOSED TO EARTH OR WEATHER COLUMNS AND BEAMS NOT EXPOSED TO EARTH OR WEATHER SLABS AND WALLS NOT EXPOSED TO EARTH OR WEATHER

PROVIDE CORNER BARS TO MATCH SIZE AND SPACING OF ALL DISCONTINUOUS REINFORCING IN WALLS AND FOOTINGS.

ALL HOOK BARS SHALL HAVE STANDARD 90 DEGREE HOOKS WITH MAXIMUM EMBEDMENT UNLESS NOTED OTHERWISE.

SPLICE LENGTH STRAIGHT BAR EMBEDMENT LENGTH

REINFORCING SHALL BE SPLICED AND EMBEDDED AS FOLLOWS:

PRFC	AUTIONS FO	OR CONCRETE PLACEMEN	Т
#5	2'-6"	1'-6"	
#4	2'-0"	1'-4"	
#3	1'-6"	1'-0"	
	<u> </u>		

#### (ECAUTIONS FOR CONCRETE PLACEIVILINT **DURING COLD WEATHER**

WHEN THE AVERAGE OF THE HIGHEST AND LOWEST AMBIENT TEMPERATURE IS EXPECTED. TO BE BELOW 40 DEGREES F FOR MORE THAN THREE SUCCESSIVE DAYS, PRECAUTIONS AS RECOMMENDED IN ACI 306 "COLD WEATHER CONCRETING" SHALL BE TAKEN TO PREVENT CONCRETE FREEZING. THE FOLLOWING IS BASED ON ACI 306:

#### ADDITIONAL MIX REQUIREMENTS

-ALL CONCRETE FOR FOOTINGS AND WALLS IS TO BE AIR ENTRAINED. -ALL CONCRETE IS TO CONTAIN A SET ACCELERATING ADMIXTURE. SUCH AS POLARSET. -MINIMUM CONCRETE TEMPERATURE WHEN PLACED IS 55 DEGREES F. -MAXIMUM CONCRETE TEMPERATURE WHEN PLACE IS 75 DEGREES F

#### SUBGRADE REQUIREMENTS

MINIMUM TEMPERATURE OF SUB-GRADE FOR PLACEMENT OF FOOTING AND SLAB CONCRETE IS 35 DEGREES F. -DO NOT ALLOW FROST TO OCCUR IN FOOTING AND SLAB SUBGRADE. -SUBGRADE WHICH IS ALLOWED TO FREEZE SHALL BE RE-COMPACTED AFTER IT THAWS.

#### THERMAL PROTECTION REQUIREMENTS

-THE CONCRETE PLACED SHALL BE THERMALLY PROTECTED AS INDICATED BELOW SUCH THAT THE CONCRETE SURFACE TEMPERATURE IS MAINTAINED AT A MINIMUM OF 50 DEGREES F -MAINTAIN PROTECTION FOR A PERIOD OF NOT LESS THAN 4 DAYS. -MEASURE AND RECORD THE SURFACE TEMPERATURE OF THE CONCRETE AT LEAST TWICE A DAY FOR THE DURATION OF THE PROTECTION PERIOD.

-MAINTAIN PROTECTION SUCH THAT OUTSIDE AIR DOES NOT PENETRATE THE THERMAL PROTECTION. -MAXIMUM DROP IN CONCRETE SURFACE TEMPERATURE AFTER THE REQUIRED PROTECTION PERIOD WITHIN 24 HOURS SHALL BE 40 DEGREES F.

#### INSULATION REQUIREMENTS DURING PROTECTION PERIOD (IN ADDITION TO R-VALUE OF FORMS:

IF THE AVERAGE EXPECTED	<b>USE PROTECTION WHICH PROVIDE</b>
AMBIENT TEMPERATURE IS:	A MINIMUM R-VALUE OF:
30 TO 40 DEGREES F	4
20 TO 29 DEGREES F	6
10 TO 19 DEGREES F	8
-PLACE INSULATION IN DIRECT CONTACT V	VITH CONCRETE AND FORMS.
-PROVIDE A HEATED ENCLOSURE FOR AM	BIENT TEMPERATURES BELOW 10 DEGREES F.
SLABS-ON-GRADE	
-A HEATED SPACE WILL BE NECESSARY.	

#### -COVER SLAB WITH PLASTIC OR THERMAL BLANKETS TO PREVENT RAPID DRYING OR

EXPOSURE TO HEATER EXHAUST FUMES. SUBMITTALS AND OBSERVATIONS

SHOP DRAWINGS AND SUBMITTALS SHALL BE PREPARED IN ACCORDANCE WITH THE

-MAINTAIN THE CONCRETE SURFACE TEMPERATURE AT A MINIMUM OF 55 DEGREES.

THE CONTRACTOR ASSUMES FULL RESPONSIBILITY TO VERIFY THAT ALL REQUIRED SHOP DRAWINGS AND OTHER SUBMITTALS HAVE BEEN REVIEWED PRIOR TO THE START OF

THE FOLLOWING IS A LIST OF SUBMITTALS REQUIRED:

GRADATION TEST FOR EACH FILL TYPE AND SOURCE

APPLICABLE INDUSTRY STANDARD.

MIX DESIGNS AND SUBSTANTIATING DATA MANUFACTURER'S TECHNICAL DATA FOR ADMIXTURES AND GROUT

#### REINFORCING STEEL PLACING DRAWINGS

#### SHOP-FABRICATED WOOD TRUSSES

REFER TO SPECIFICATIONS

IN ADDITION TO THE TESTING AND INSPECTION REQUIREMENTS IN THE SPECIFICATIONS. THE CONTRACTOR IS TO COORDINATE THE ENGINEER'S OBSERVATION OF CONSTRUCTION AFTER COMPLETION OF ROUGH FRAMING

#### **WOOD FRAMING NOTES**

WOOD FRAME CONSTRUCTION SHALL COMPLY WITH THE 2018 INTERNATIONAL BUILDING CODE, FOLLOW THE FASTENING SCHEDULE IN TABLE 2304.10.1 UNLESS NOTED

DIMENSIONED LUMBER SHALL CONFORM TO THE LATEST EDITION OF N.F.P.A. "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" AND ITS SUPPLEMENTS. PROVIDE SPRUCE-PINE-FIR NORTH, NO. 2 GRADE OR BETTER.

EACH PIECE OF LUMBER SHALL BEAR THE GRADE MARK OF A RECOGNIZED AGENCY OR INDEPENDENT INSPECTION SERVICE CERTIFIED BY THE BOARD OF REVIEW, AMERICAN LUMBER STANDARDS COMMITTEE. GRADE MARK TO INDICATED SPECIES, GRADE, AND MANUFACTURER'S NUMBER.

PRESSURE TREATED LUMBER SHALL BE SOUTHERN PINE NO. 2 GRADE EXCEPT BEAMS AND POSTS SHALL BE NO. 1 GRADE, AWPA UC4A. PRESSURE TREAT WITH ACQ-A OR ACQ-D (NO AMMONIA) WITH A MINIMUM RETENTION OF 0.40 POUNDS PER CUBIC-FOOT IN ACCORDANCE WITH AWPA STANDARD C2/C9. JOBSITE FABRICATION CUTS AND BORINGS SHOULD BE FIELD TREATED WITH COPPER NAPHTHENATE HAVING A MINIMUM 2% METALLIC SOLUTION IN ACCORDANCE WITH AWPA STANDARD M4.

SHEATHING SHALL BE DOUGLAS FIR PLYWOOD COMPLYING WITH VOLUNTARY PRODUCT STANDARD PS 2 "PERFORMANCE STANDARD FOR WOOD-BASED STRUCTURAL USE PANELS" AND AS FOLLOWS:

15/32" MINIMUM APA 32/16 RATED PLYWOOD SHEATHING, EXTERIOR GRADE; OR 1/2" ADVANTECH BY HUBER. 19/32" MINIMUM APA 40/20 RATED SHEATHING, 5 PLY, EXTERIOR; OR 5/8" T&G ADVANTECH OR ZIP PANELS BY HUBER

ROOF SHEATHING IS TO BE INSTALLED WITH THE LONG DIMENSION PERPENDICULAR TO THE SUPPORTS AND CONTINUOUS OVER THREE SPANS. PROVIDE A 1/8" GAP AT THE ENDS AND EDGES OF ALL PANELS. HORIZONTAL JOINTS IN WALL SHEATHING ARE TO BE BLOCKED AND NAILED.

NAIL ALL SHEATHING PANEL EDGES WITH 8d NAILS @ 6"O.C. UNO. NAIL INTERIOR AREA OF SHEATHING PANELS WITH 8d NAILS @ 12"O.C. UNO. REFER TO SECTIONS AND DETAILS FOR ADDITIONAL NAILING REQUIREMENTS.

NAILS SHALL MEET THE REQUIREMENTS OF ASTM F1667 AND AS FOLLOWS: 8D NAILS 0.131" DIA X 2 1/2" 10D NAILS 0.148" DIA X 3" 16D NAILS 0.162" DIA X 3 1/2"

PNEUMATICALLY DRIVEN NAILS SHALL BE FULL HEAD NAILS AS MANUFACTURED BY SENCO OR STANLEY-BOSTITCH, OR EQUIVALENT. NAILS IN CONTACT WITH PRESSURE TREATED WOOD (SUCH AS SILL PLATE) SHALL BE HOT DIP GALVANIZED, ZMAX COATED OR STAINLESS STEEL. CLIPPED HEAD NAILS SHALL NOT BE USED. NAILS SHALL BE DRIVEN FLUSH WITH SURFACE, OVERDRIVEN NAILS SHALL BE REPLACED.

WOOD CONNECTOR DESIGN IS BASED ON SIMPSON STRONG-TIE COMPANY PRODUCTS. SUBSTITUTION SHALL BE APPROVED BY THE ENGINEER PRIOR TO USE. ALL CONNECTORS AND FASTENERS IN CONTACT WITH PRESSURE TREATED WOOD SHALL BE HOT DIP GALVANIZED, STAINLESS STEEL, OR Z-MAX COATED.

STEEL FOR BOLTS, NUTS, WASHERS, BRIDGING, METAL CONNECTORS, AND LAG BOLTS TO CONFORM TO ASTM A 307. HOT-DIP GALVANIZE ALL EXPOSED STEEL AND STEEL IN CONTACT WITH PRESSURE TREATED WOOD IN ACCORDANCE WITH ASTM A 123.

THROUGH BOLTS SHALL BE INSERTED IN PRE-DRILLED HOLES WITH DIAMETER EQUAL TO THE BOLT DIAMETER PLUS 1/16". LAG BOLTS GREATER THAN 3/8" DIAMETER SHALL BE SCREWED INTO PRE-DRILLED LEAD HOLES WITH DIAMETER EQUAL TO ONE-HALF THE LAG BOLT

NO BEAMS, HEADERS, JOISTS, OR STUDS SHALL BE CUT, NOTCHED, OR BORED TO CLEAR PIPES, WIRE, CONDUIT, OR FOR OTHER PURPOSE MEMBERS IS NOT PERMITTED UNLESS NOTED OTHERWISE.

#### **SHOP-FABRICATED WOOD TRUSS NOTES**

DESIGN TRUSSES FOR THE FOLLOWING MINIMUM LOADS AND DEFLECTION

UNIFORM SNOW LOAD: **UNBALANCED SNOW LOAD:** PER ASCE 7 TOP CHORD DEAD LOAD: 10 PSF **BOTTOM CHORD DEAD LOAD:** 10 PSF PER PER ASCE 7 WITH A MAXIMUM WIND LOAD: RESISTING DEAD LOAD OF 10 PSF

**DEFLECTION LIMITATION:** L/360 REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION

#### ABBREVIATIONS AND LEGEND

```
AMERICAN CONCRETE INSTITUTE
        AMERICAN INSTITUTE OF STEEL CONSTRUCTION
        ASTM INTERNATIONAL
        BIG FOOT STYLE FOOTING
        BASE PLATE
BRP
        BEARING PLATE
        BEARING
CMU
        CONCRETE MASONRY UNIT(S)
CONT
        CONTINUOUS
        CONTRACTION JOINT
        DIAMETER
        EACH
        ELEVATION
ELEV
        EACH WAY
        FLOOR DRAIN
        FINISH FLOOR
FTG
        FOOTING
GALV
        GALVANIZE(D)
HDG
        HOT DIP GALVANIZE(D)
HORIZ
        HORIZONTAL
        INTERNATIONAL BUILDING CODE
        NEUTRAL AXIS
NTS
        NOT DRAWN TO SCALE
        ON CENTER
OC
REINF
        REINFORCE(D)(ING)
REQD
        REQUIRED
SDI
        STEEL DECK INSTITUTE
        SECTION
SIM
        SIMILAR
        STEEL JOIST INSTITUTE
        STAINLESS STEEL
         TOP OF CONCRETE
        TOP OF CONCRETE PIER
        TOP OF CONCRETE WALL
TOCW
TOS
        TOP OF STEEL
        TYPICAL
        UNLESS NOTED OTHERWISE
UNO
        VERTICAL
        VERIFY IN THE FIELD
        BOISE VERSALAM
        WELDED WIRE FABRIC
        SIZE OF REINFORCING BAR
        INDICATES QUANTITY
        INDICATES DRAWING NOTE KEYED TO PLAN
```

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Structural Engineer:

Fisher Engineering, P.C. 686 Belknap Mountain Road Gilford, NH 03249 tel: (603) 528-7641

# **NH STATE PARKS**

**Campground Expansion Project PII** Pawtuckaway State Park 7 Pawtuckaway Road Nottingham, NH 03290

100% CHECK SET

Graphic Scale

Scale: 1/8" = 1'-0"

Date: Mar. 15, 2025

Drawn By: MR

Checked By: JF

Issues: Date Description

STRUCTURAL NOTES

Sheet Number:

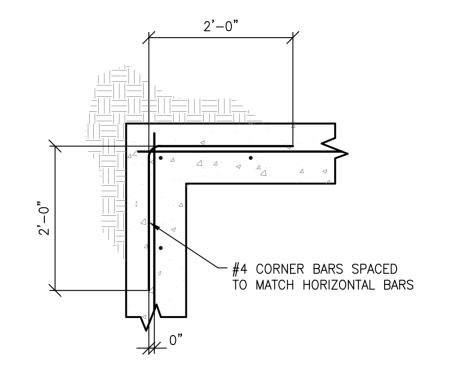
**S0.01** 

Project Number: 2136A

\_15 MIL MOISTSTOP REINFORCED VAPOR BARRIER OR EQUIVALENT. T4" TYPE IV EXTRUDED POLYSTYRENE INSULATION INTERIOR ONLY -6X6-W1.4XW1.4 WWF REINFORCING CENTERED IN SLAB \_2" TALL CONTINUOUS HIGH CHAIRS (UPPER TYPE) @ 3' O.C.

CONCRETE SLAB-ON-GRADE DETAIL

Scale: N.T.S.



5 CORNER REINFORCING DETAIL Scale: N.T.S.

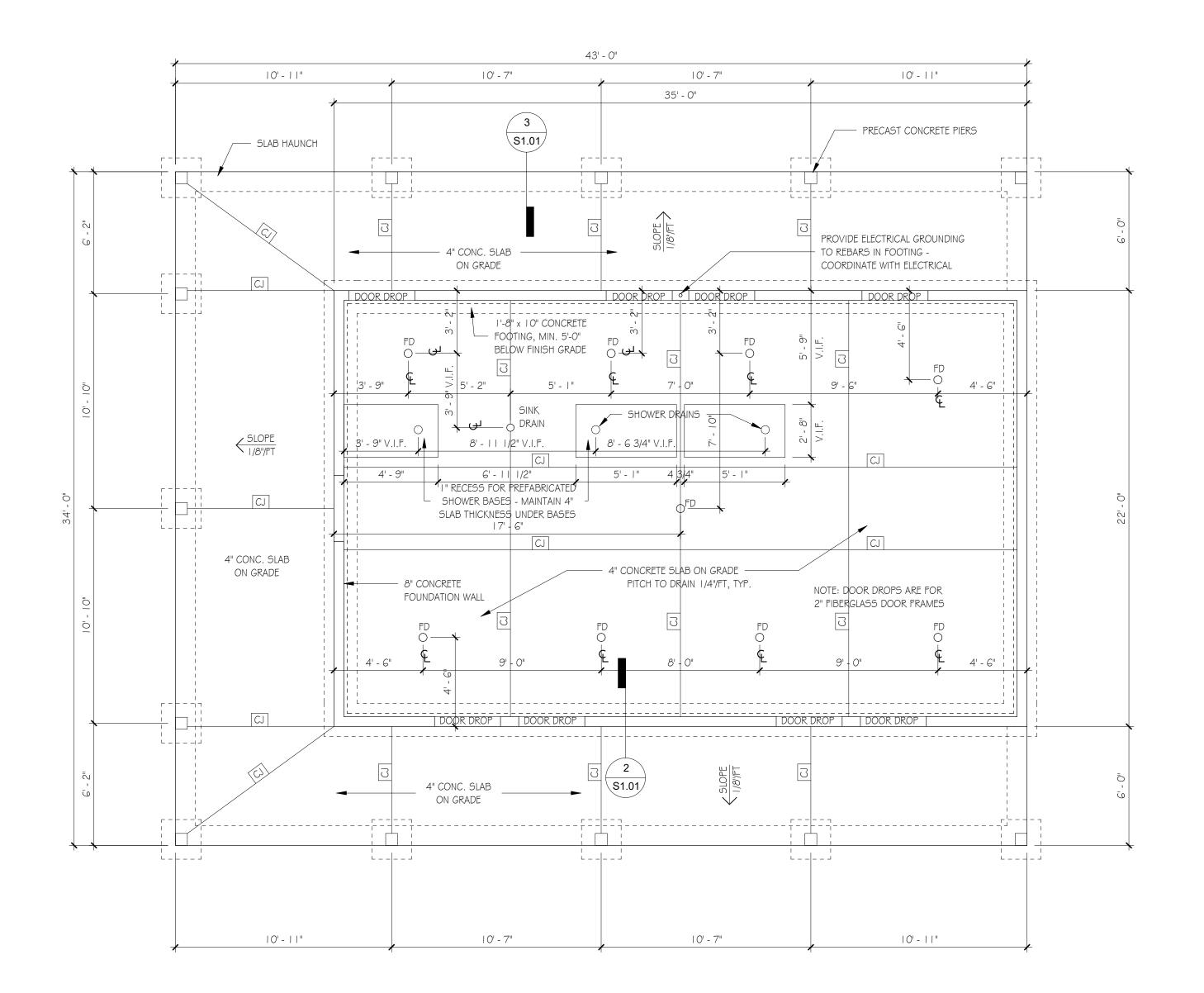
SAWCUT 14" X 11" JOINT IN SLAB WITHIN 12 HOURS OF FINISHING: FILL JOINT WITH GRAY POLYURETHANE SEALANT IN AREAS TO BE LEFT EXPOSED. FILL JOINT WITH NON-SHRINK GROUT IN AREAS SCHEDULED TO RECEIVE A FLOOR ALLOW SLAB TO CURE AS LONG AS PRACTICAL PRIOR TO FILLING JOINTS. CUT EVERY OTHER WIRE 2" FROM JOINT

HVAC, Elec. & Plumb. Engineer: Charles P. Buckley, P.E. 500 Depot Street Rumney, NH 03266

Fisher Engineering, P.C. 686 Belknap Mountain Road Gilford, NH 03249

DENOTED ON PLAN AS CJ SCALE DRAWINGS FOR LOCATIONS

SEE ARCH. FOR WALL CONSTRUCTION P.T. (2) 2x6 SILL PLATES — PREMOLDED JOINT FILLER SILL SEAL -4" REINFORCED CONC. SLAB PREMOLDED JOINT FILLER #4 DOWELS @ 24" O.C. — - 15 MIL. UNDER SLAB VAPOR BARRIER 4" CONC. SLAB WITH ----MAIN LEVEL \_\_\_ 100' - 0" 1/8"/FT SLOPE SOS SEAL FACE OF WALL AND TOP OF SOS SOS SEAL OSOS EXTERIOR SLABS WITH 2 COATS SOSOSOSOSOS SILANE-SILOXANE SEALER 8" CONCRETE FOUNDATION WALL BACKFILL WITH NH DOT STANDARD #4 HORIZONTAL @ | 2" O.C. A PSP SPECIFICATION 209.2.1.2 GRANULAR BACKFILL WITH NH DOT STANDARD BACKFILL (GRAVEL) AND COMPACT TO 95% MAXIMUM DRY DENSITY SPECIFICATION 209.2.1.2 GRANULAR \$655555 BACKFILL (GRAVEL) AND COMPACT TO \$ 85% MAXIMUM DRY DENSITY ANY STRUCTURAL FILL REQUIRED BENEATH FOOTINGS SHALL BE CRUSHED GRAVEL COMPACTED TO 95% MAXIMUM DRY DENSITY. A MINIMUM OF 12" OF CRUSHED GRAVEL IS REQUIRED OVER BEDROCK 4" PERF. PVC PIPE - HOLES DOWN. UNLESS ALL FOOTINGS BEAR ON BEDROCK. DISCHARGE 20' MIN. FROM BLDG TO DAYLIGHT EXISTING UNDISTURBED GROUND WRAP NO. 67 STONE W/ ----REMOVE ALL FILL MIRAFI 140N - 6" TO 12" COMPACTED, CRUSHED STONE MAINTAIN GROUND WATER I' ---WRAPPED IN MIRAFI 140N FABRIC BELOW BOTTOM OF EXCAVATION — COMPACT SUBGRADE PRIOR TO PLACING FILL OR CONCRETE



NOTE: VERIFY DRAIN LOCATIONS WITH PLUMBING MANUFACTURER SPECIFICATIONS

FOUNDATION PLAN Scale: 1/4" = 1'-0"

2 TYPICAL FOUNDATION DETAIL Scale: 3/4" = 1'-0"

**REVIEW SET** MAR. 8, 2023

NOT FOR CONSTRUCTION

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**NH STATE PARKS** 

Campground Expansion Project PII Pawtuckaway State Park 7 Pawtuckaway Road Nottingham, NH 03290

North

100% CHECK SET

Graphic Scale

Scale: As indicated

Date: Mar. 15, 2025

Checked By: JF

Drawn By: MR

Issues: Description Date

FOUNDATION PLAN AND **DETAILS** 

Sheet Number:

**S1.01** 

Project Number: 2136A

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# NH STATE PARKS

Campground Expansion Project PII
Pawtuckaway State Park
7 Pawtuckaway Road
Nottingham, NH
03290

Issue

100% CHECK SET

Graphic Scale

North

Scale: As indicated

Date: Mar. 15, 2025

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Drawn By: MR

No. Description Date

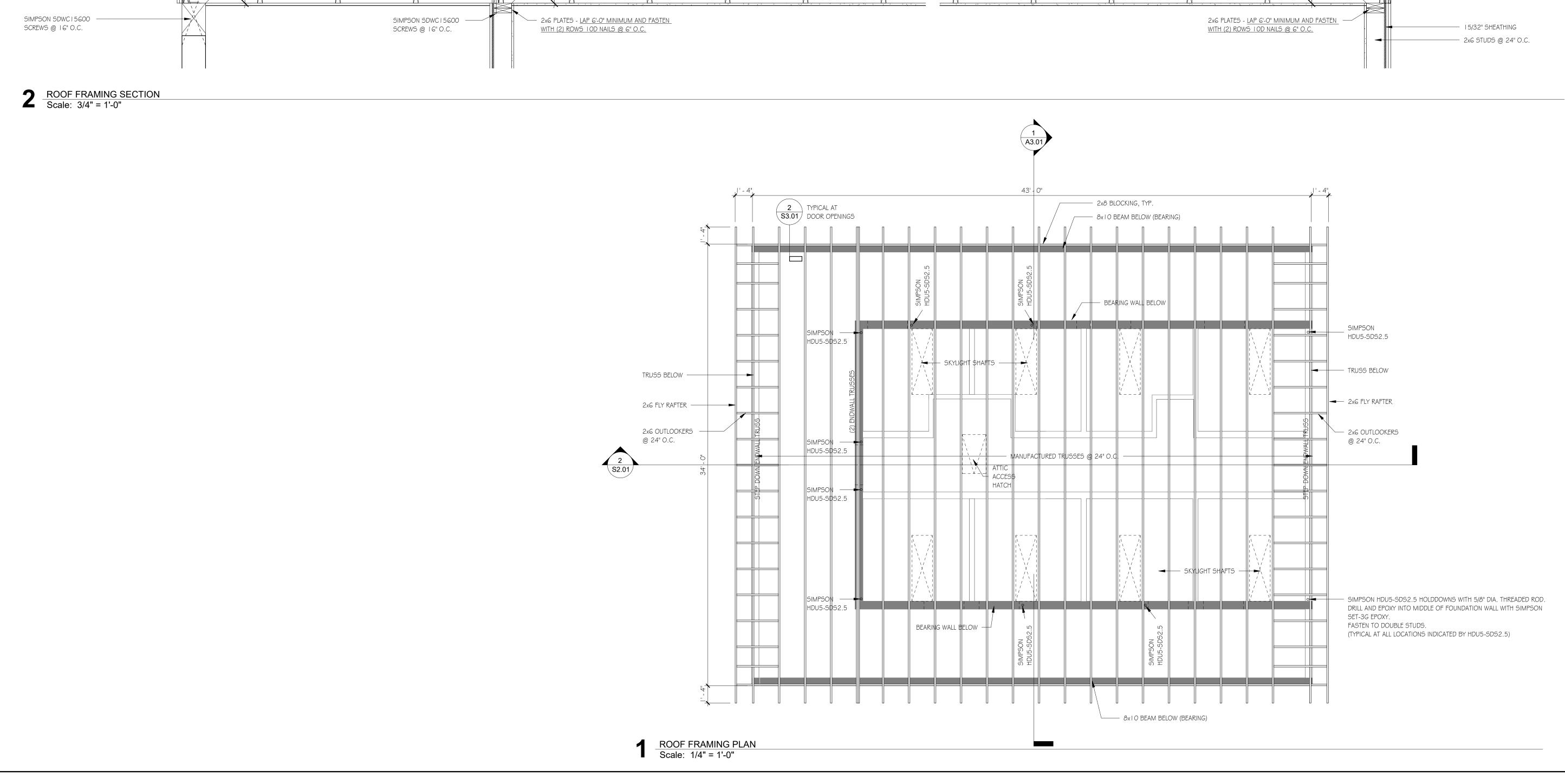
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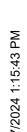
ROOF FRAMING PLAN AND FRAMING SECTION

Sheet Number:

**S2.01** 

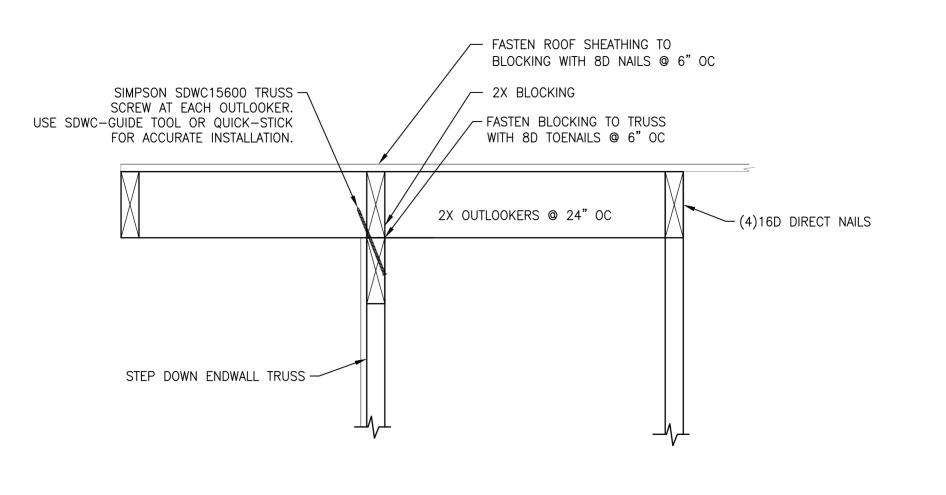
Project Number: 2136A





3 TYPICAL DETAILS AT ROOF CORNERS Scale: N.T.S.

RAKE DETAIL Scale: N.T.S.



FASTEN PLATES WITH
10D NAILS © 6" OC

NAIL STUD TO EACH PLY OF
HEADER WITH (3)10D NAILS

NAIL STUD TO EACH PLY OF
HEADER WITH (3)10D NAILS

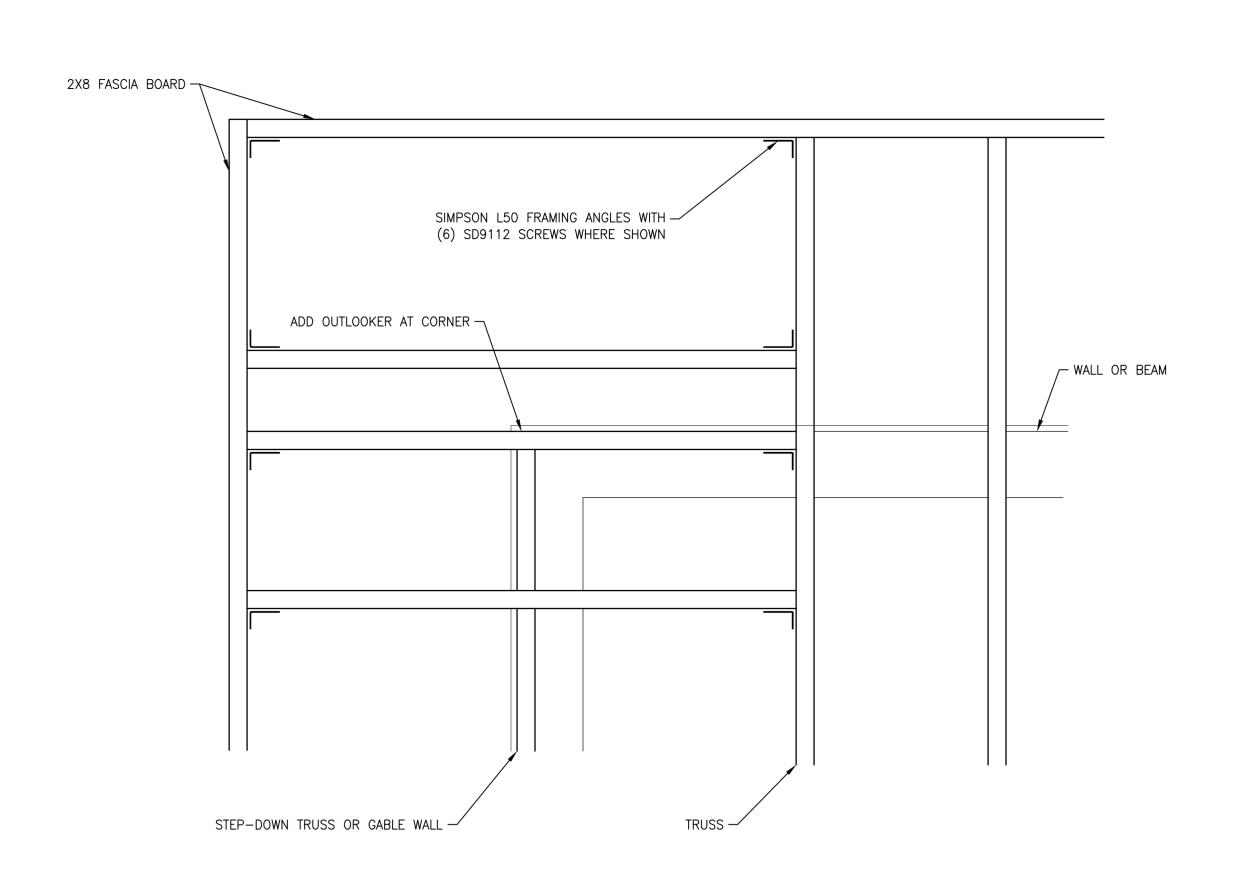
NAIL STUD TO EACH
PLATE WITH (3)10D NAILS

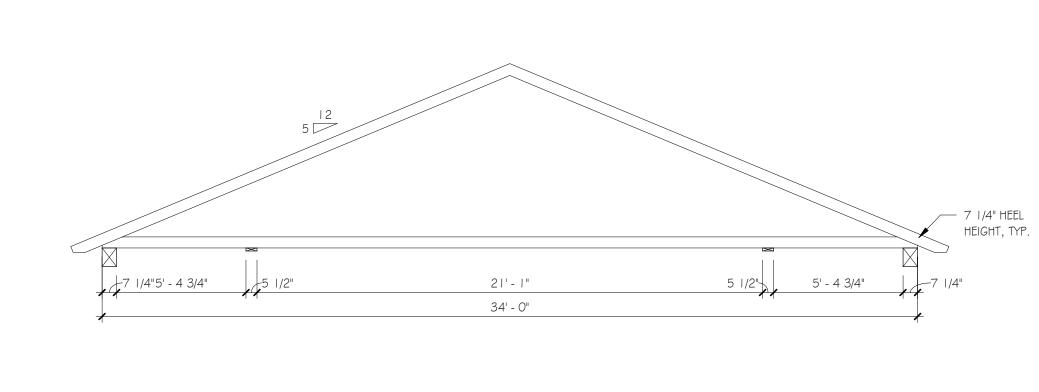
FASTEN STUDS TOGETHER WITH
(2) ROWS 10D NAILS © 6" OC

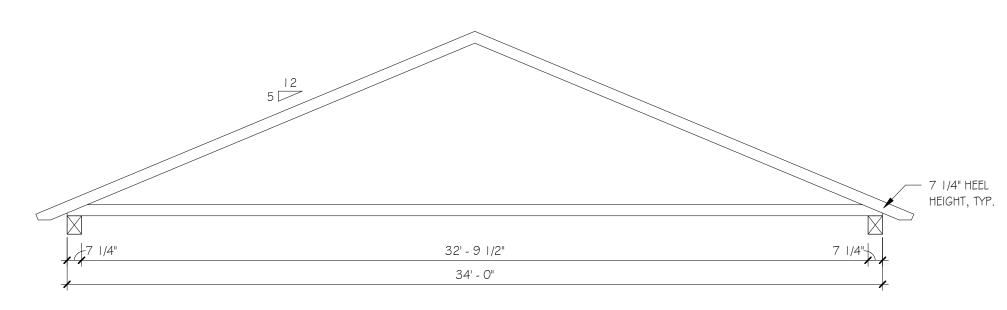
JACK STUD TO BE
CONTINUOUS PAST SILL

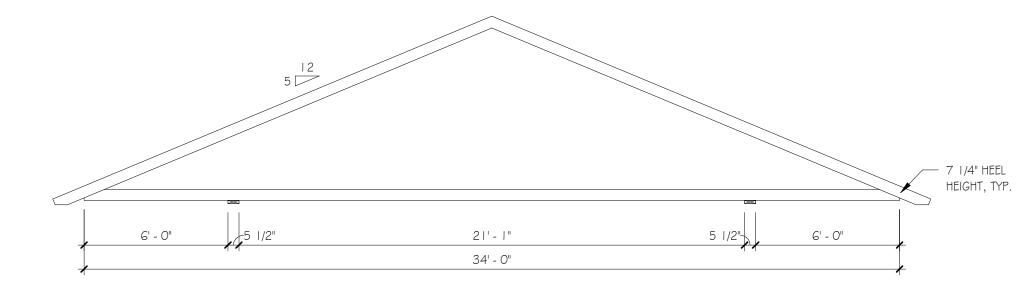
SIMPSON L50 FRAMING ANGLE WITH
(6) 10D X 1½" NAILS, OR CRIPPLE STUD

TYPICAL DOOR WINDOW OPENING/HEADER DETAILS Scale: N.T.S.









NOTE: TRUSSES ARE TO BE DESIGNED FOR THE WORST CASE OF THE THREE BEARING CONDITIONS SHOWN.
SUBMIT TRUSS DESIGNS FOR EACH OF THE THREE BEARING CONDITIONS. ENDWALL TRUSS CONFIGURATION
TO WORK AROUND LOUVER.

TRUSS DIAGRAMS
Scale: 1/4" = 1'-0"

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REVIEW SET

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# NH STATE PARKS

Campground Expansion Project PII
Pawtuckaway State Park
7 Pawtuckaway Road
Nottingham, NH
03290

Issue

100% CHECK SET

Graphic Scale

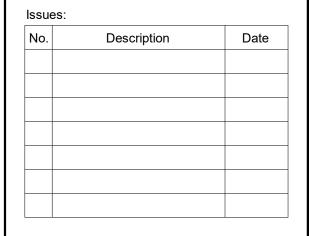
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Scale: 1/4" = 1'-0"

Date: Mar. 15, 2025

Drawn By: MR

Checked By: JF



Title

TRUSS DIAGRAMS AND DETAILS

Sheet Number:

**S3.01** 

Project Number: 2136A

### **HVAC NOTES**

#### 1. <u>SCOPE OF WORK</u>

- A. THE CONTRACTOR IS RESPONSIBLE FOR ALL WORK, MATERIALS, AND LABOR TO SATISFY A COMPLETE WORKING SYSTEM WHETHER SPECIFIED OR IMPLIED.
- B. ALL WORK IS TO BE PERFORMED IN STRICT COMPLIANCE WITH THE INTERNATIONAL MECHANICAL CODE 2018, ALL LOCAL AND ALL OTHER REGULATION GOVERNING WORK OF THIS NATURE.
- C. THE CONTRACTOR SHALL, BEFORE SUBMITTING ANY PROPOSAL, EXAMINE THE PROPOSED SITE AND SHALL DETERMINE FOR HIMSELF THE CONDITIONS THAT MAY EFFECT THE WORK. NO ALLOWANCE SHALL BE MADE IF THE CONTRACTOR FAILS TO MAKE SUCH EXAMINATIONS.
- D. ALL EQUIPMENT AND MATERIALS SHALL BE AS SPECIFIED OR "APPROVED EQUAL" BY THE ENGINEER OR ARCHITECT.

#### 2. <u>PERMITS</u>

A. THE CONTRACTOR SHALL SECURE ALL PERMITS OR APPLICA—
TIONS AND PAY ANY AND ALL FEES.

#### 3. <u>SHOP DRAWINGS</u>

A. SUBMIT MATERIAL LIST AND SHOP DRAWINGS FOR MAJOR EQUIPMENT TO THE ACHITECT/ENGINEER FOR APPROVAL. THE CONTRACTOR SHALL SUBMIT FIVE SETS OF SHOP DRAWINGS AND THEY SHALL BE CLEARLY LABELED.

#### 4. <u>DUCTWORK</u>

- A. THE DUCTWORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "SMACNA" APPLICABLE MANUALS. ALL DUCTWORK SHALL BE THE LOW VELOCITY TYPE, UNLESS SPECIFIED OTHERWISE.
- B. CONTRACTOR SHALL PROVIDE AND INSTALL APPROVED FIRE DAMPERS AND ACCESS PANELS IN ANY AND ALL DUCTWORK WHICH PENETRATES A HORIZONTAL OR VERTICAL FIRE PARTITION, OR AS OTHERWISE SHOWN ON DRAWINGS.
- C. ALL BRANCH DUCTS TO HAVE VOLUME DAMPERS.
- D. SMOOTH TURN RADIUS DUCTWORK OR TURNING VANES SHALL BE USED THROUGHOUT WHERE FLOW EXCEEDS 150 CFM.
- E. ALL DUCT JOINTS TO BE SEALED IN ACCORDANCE WITH "SMACNA" STANDARDS AND ACCEPTED GOOD PRACTICE.
- F. ALL DUCT DIMENSIONS SHOWN ARE NET INSIDE VALUES.

  DIMENSIONS MAY BE CHANGED SO LONG AS THE NET FREE
  FACE AREA IS MAINTAINED.

#### 5. <u>HVAC CONTROLS</u>

A. CONTRACTOR TO SUPPLY AND INSTALL ALL CONTROL WIRING AND THERMOSTATS AS REQUIRED.

#### 6. <u>ELECTRICAL</u>

A. CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR FOR LOCATION OF WIRING FOR EACH HVAC UNIT.

#### 7. <u>MISCELLANEOUS</u>

- A. ALL EXTERIOR OPENINGS TO BE PROPERLY CAULKED AND SEALED WITH A SEALANT OF HIGH QUALITY AND LONG LIFE, TO PREVENT INFILTRATION OF OUTSIDE AIR INTO CONDITIONED SPACE.
- B. DO NOT SCALE THIS DRAWING FOR EXACT DIMENSIONS.

  VERIFY ALL FIGURES, CONDITIONS, AND DIMENSIONS

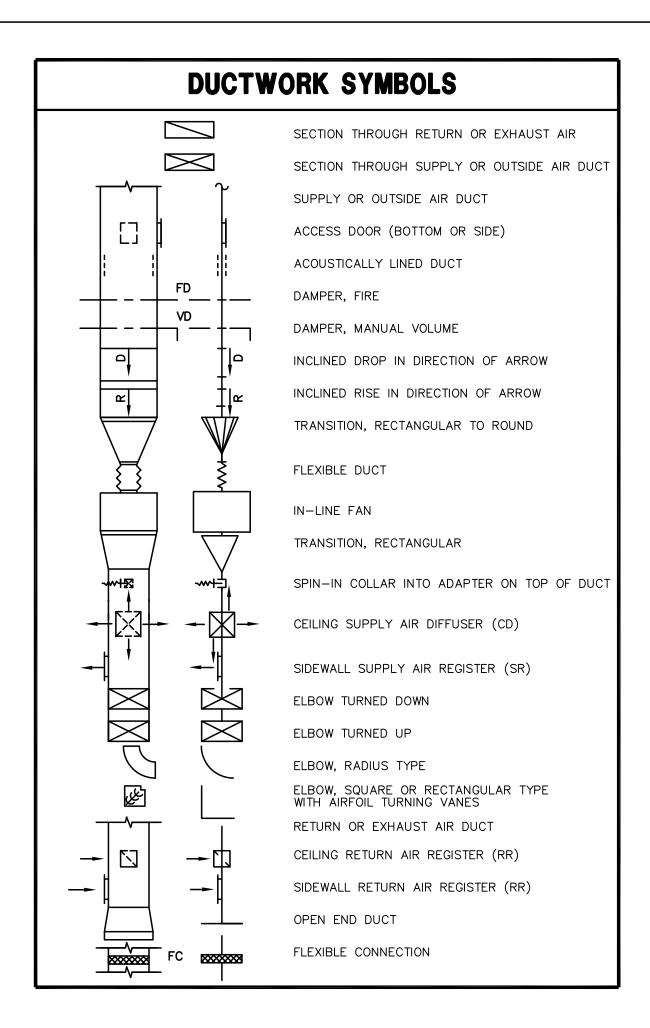
  AT THE JOB SITE.
- C. THE MECHANICAL PLANS ARE INTENDED TO BE DIAGRAM—MATIC AND ARE BASED ON ONE MANUFACTURE'S EQUIP—MENT. THEY ARE NOT INTENDED TO SHOW EVERY ITEM IN ITS EXACT LOCATION, THE EXACT DIMENSIONS, OR ALL THE DETAILS OF THE EQUIPMENT. THE CONTRACTOR SHALL VERIFY THE ACTUAL DIMENSIONS OF THE EQUIP—MENT PROPOSED TO ENSURE THAT THE EQUIPMENT WILL FIT IN THE AVAILABLE SPACE.

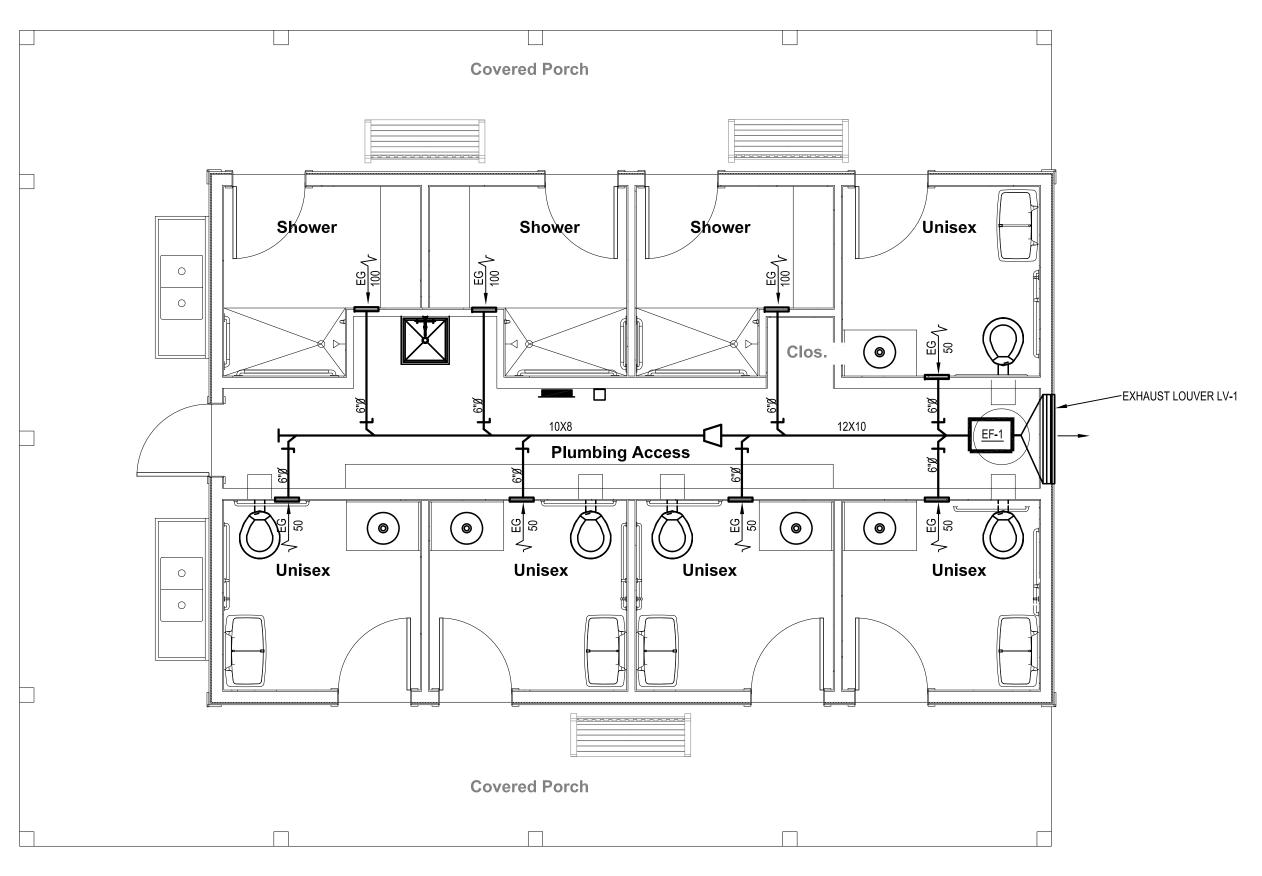
#### 8. <u>TESTING AND BALANCING</u>

A. THE HVAC SYSTEM SHALL BE TESTED AND AND BALANC— ED BY AN INDEPENDENT AGENCY, UNDER THE SUPER— VISION OF A LICENSED PROFESSIONAL ENGINEER. A SEALED TYPE WRITTEN REPORT SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER FOR REVIEW AND APPROVAL.

#### 9. <u>GUARANTEE</u>

- A. MATERIALS, EQUIPMENT AND INSTALLATION SHALL BE GUARANTEED FOR A PERIOD OF ONE(1) YEAR FROM DATE OF ACCEPTANCE. DEFECTS WHICH APPEAR DURING THAT PERIOD SHALL BE CORRECTED AT THIS CONTRACTOR'S EXPENSE.
- B. FOR THE SAME PERIOD, THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO PREMISES CAUSED BY DEFECTS IN WORKMANSHIP OR IN THE WORK OR EQUIPMENT FURNISHED AND/OR INSTALLED BY HIM.





# **MECHANICAL PLAN**

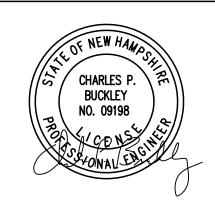
SCALE: 1/4" = 1'-0"

	LOUVER SCHEDULE								
EQUIPMENT NO.	SERVICE	WIDTH	HEIGHT	THICKNESS OF WALL	MATERIAL	SCREEN	MANUFACTURER & MODEL	OPTIONS-ACCESSORIES	
LV-1	BATH HOUSE	21"	16"	7-3/8"	ALUMINUM	INSECT	GREENHECK MODEL ESD, OR EQUAL.	● FIXED ALUMINUM LOUVER  ● COLOR TO BE SELECTED BY ARCHITECT	
NOTES:									

				FAN	N SCH	EDUL	.E			
MARK	SERVICE	LOCATION	CFM	STATIC PRESS.	MOTOR			MANUFACTURE & MODEL	NOTES	
				(IN. W.G.)	HP	RPM VOLT-PHASE				
EF-1	BATH HOUSE	CHASE	550	0.75	1/4	1800	115–1	GREENHECK SQ-100-VG4X-QD		

# CHARLES P. BUCKLEY PROFESSIONAL ENGINEER 500 DEPOT ST. RUMNEY, N.H. 03266 TEL.(603)786-9992 FAX.(603)786-2365

N.H. LIC. NO. 09198



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Structural Engineer:
Fisher Engineering, P.C.
686 Belknap Mountain Road
Gilford, NH 03249
tel: (603) 528-7641

## **NH STATE PARKS**

Campground Expansion Project PII
Pawtuckaway State Park
7 Pawtuckaway Road
Nottingham, NH
03290

Issue

#### 100% CHECK SET

Graphic Scale

North

Date: MARCH 15, 2024

Scale: As indicated

Drawn By: CPB

Checked By: CPB

Issue	es:	
No.	Description	Date

Title

MECHANICAL PLAN AND DETAILS

Sheet Number:

M1.01P

Project Number: 2136

#### **ELECTRICAL NOTES**

#### 1. SCOPE OF WORK:

- A. CONTRACTOR SHALL VISIT SITE PRIOR TO BIDDING. BIDS SHALL SERVE AS EVIDENCE OF KNOWLEDGE OF EXISTING CONDITIONS. FIELD VERIFY ALL ELECTRICAL EQUIPMENT.
- B. FURNISH ALL LABOR, MATERIALS, EQUIPMENT AND TOOLS TO PERFORM ELECTRICAL WORK SHOWN, NOTED OR SCHEDULED FOR A COMPLETE AND FINISHED INSTALLATION.
- MATERIALS, PRODUCTS AND EQUIPMENT, INCLUDING ALL COMPONENTS THEREOF, SHALL BE NEW AND SUCH AS APPEAR ON THE UNDERWRITERS LABORATORIES LIST OF APPROVED ITEMS AND SHALL BE SIZED IN CONFORMITY WITH REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE AND OTHER APPLICABLE CODES, WHICHEVER ARE MORE
- C. ALL WORK TO BE IN ACCORDANCE WITH 2020 NEC AND ALL APPLICABLE FEDERAL, STATE

#### 2. <u>PERMITS:</u>

A. SECURE AND PAY FOR ALL REQUIRED PERMITS AND INSPECTION CERTIFICATES.

#### 3. SHOP DRAWINGS:

A. SUBMIT MATERIAL LIST AND SHOP DRAWINGS FOR MAJOR EQUIPMENT TO THE ARCHITECT FOR APPROVAL. SUBMITTALS SHALL BE IN ACCORDANCE WITH GENERAL CONDITIONS AND SHALL BEAR STAMP OF THE GENERAL CONTRACTOR SHOWING THAT HE HAS REVIEWED AND APPROVED THEM. LACK OF SUCH CONTRACTOR'S APPROVAL WILL BE CAUSE FOR REJECTION WITHOUT REVIEW BY THE ARCHITECT OR ENGINEER.

#### 4. <u>CONDUITS:</u>

A. THE TYPE OF CONDUIT SHALL BE AS FOLLOWS FOR ALL FEEDERS AND DISTRIBUTION CIRCUITS, UNLESS OTHERWISE SPECIFIED.

OUTDOORS BRANCH CIRCUITS (EXPOSED) BRANCH CIRCUITS (CONCEALED)

TYPE OF CONDUIT
GALV. RIGID STEEL OR EMT W/ W.P. FITTINGS

SUPPLY TO DISTRIBUTION PANEL UNDERGROUND SERVICE ENTRANCE PVC - SCHEDULE 40

#### 5. <u>WIRE:</u>

- A. WIRE SHALL BE SINGLE CONDUCTOR COPPER WITH 600 VOLT INSULATION. MINIMUM WIRE SIZE SHALL BE #12 EXCEPT #14 MAY BE USED FOR CONTROL. ALL WIRE AND CABLE SHALL BE NEW AND SHALL BE BROUGHT TO THE SITE IN UNBROKEN PACKAGES.
- GENERAL WIRING SHALL BE THW OR THHN (ALUMINUM CONDUCTORS ARE NOT PERMITTED).
- B. WIRE CONNECTORS SHALL BE EQUAL BY SCOTCHLOCK FOR #6 AND SMALLER AND T & B "LOCK-LITE" FOR #6 AND LARGER.

#### 6. <u>LIGHTING:</u>

A. LIGHTING FIXTURES AND LAMPS (UNLESS NOTED OTHERWISE) SHALL BE FURNISHED BY THE ELECTRICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL INSTALL ALL FIXTURES AND LAMPS.

#### 7. <u>WIRE DEVICES:</u>

- A. RECEPTACLES SHALL BE 20 AMP, 3-WIRE GROUNDING TYPE EQUAL TO HUBBELL 5362 (MOUNTING @ 18"A.F.F.).
- B. SWITCHES SHALL BE STANDARD GRADE RATED 20 AMP AT 120 VOLT (MOUNTING @48"A.F.F.) C. SPECIAL DEVICES SHALL BE A SPECIFICATION GRADE.

## 8. <u>SAFETY SWITCHES:</u>

A. PROVIDE SAFETY AND DISCONNECT SWITCHES, FUSED OR NONFUSED, AS CALLED FOR ON DRAWINGS AND AS REQUIRED BY CODE. SWITCHES SHALL BE HEAVY DUTY, LOAD AND HORSEPOWER RATED AS MANUFACTURED BY SQUARE D, GOULD, ITE OR EQUAL.

#### 9. <u>BOXES:</u>

- A. OUTLET BOXES AND COVERS SHALL BE GALVANIZED, ONE-PIECE PRESSED STEEL
- B. JUNCTION, PULL BOXES AND COVERS SHALL BE GALVANIZED STEEL, CODE GAUGE SIZE.

#### 10. <u>INSTALLATION:</u>

KNOCKOUT.

- A. ALL ELECTRICAL WORK SHALL BE INSTALLED SO AS TO BE READILY ACCESSIBLE FOR OPERATING, SERVICING, MAINTAINING AND REPAIRING. HANGERS SHALL INCLUDE ALL MISCELLANEOUS STEEL SUCH AS CHANNELS, RODS, ETC., NECESSARY FOR THE INSTALLATION OF WORK AND SHALL BE FASTENED TO STEEL, CONCRETE OR WOOD, BUT NOT TO PIPING. ALL CONDUIT SHALL BE CONCEALED WHEREVER POSSIBLE. EXPOSED CONDUIT SHALL BE IN STRAIGHT LINES PARALLEL WITH OR AT RIGHT ANGLES TO COLUMN LINES OR BEAMS AND SEPARATED AT LEAST 3 INCHES FROM WATER LINES WHEREVER THEY RUN ALONG SIDE OR ACROSS SUCH LINES. CONDUCTORS SHALL BE IN CONDUIT. DUCTS OR APPROVED RACEWAYS.
- B. THE CONTRACTOR SHALL DO ALL CUTTING, CHASING OR CHANNELING AND PATCHING REQUIRED FOR ANY WORK UNDER THIS DIVISION. SLEEVES SHALL EXTEND AT LEAST TWO (2") INCHES ABOVE FINISHED FLOOR AND ALL SLEEVES, OPENINGS, ETC., THROUGH FIRE RATED WALLS AND FLOORS SHALL BE SEALED AFTER CONDUIT INSTALLATION TO RETAIN THEIR FIRE RATING.
- C. THE FOLLOWING EQUIPMENT SHALL BE IDENTIFIED WITH ENGRAVED BAKELITE NAMEPLATES AS TO NAME AND/OR FUNCTION: DISTRIBUTION PANELS AND DISCONNECT SWITCHES.
- D. THE LOCATION OF OUTLETS AND EQUIPMENT SHOWN ON THE DRAWINGS ARE APPROXIMATE AND THE ARCHITECT SHALL HAVE THE RIGHT TO RELOCATE ANY OUTLETS OR FIXTURES BEFORE THEY ARE INSTALLED WITHOUT ADDITIONAL COST.
- E. ELECTRICAL CONTRACTOR SHALL RECORD ALL FIELD CHANGES IN HIS WORK AS THE JOB PROGRESSES.

#### 11. <u>GUARANTEE:</u>

- A. MATERIALS, EQUIPMENT AND INSTALLATION SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM DATE OF ACCEPTANCE. DEFECTS WHICH APPEAR DURING THAT PERIOD SHALL BE CORRECTED AT THIS CONTRACTOR'S EXPENSE.
- B. FOR THE SAME PERIOD, THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO PREMISES CAUSED BY DEFECTS IN WORKMANSHIP OR IN THE WORK OR EQUIPMENT FURNISHED AND/OR INSTALLED BY HIM.

#### 12. <u>FINALLY:</u>

A. IT IS THE INTENT THAT THE FOREGOING WORK SHALL BE COMPLETE IN EVERY RESPECT AND THAT ANY MATERIAL OR WORK NOT SPECIFICALLY MENTIONED OR SHOWN ON THE DRAWINGS, BUT NECESSARY TO FULLY COMPLETE THE WORK SHALL BE FURNISHED.

#### **ELECTRICAL SYMBOLS**

#### **ABBREVIATIONS**

ABOVE COUNTER ABOVE FINISHED FLOOR. CIRCUIT BREAKER. EXPLOSION PROOF. GROUND FAULT CIRCUIT INTERRUPTER. GND GROUND. HORSEPOWER. LIGHTING PANEL. MCC MOTOR CONTROL CENTER. MOUNTING HEIGHT, MANHOLE. NEC NATIONAL ELECTRICAL CODE. NEMA NATIONAL ELECTRICAL MANUFACTURERS ASSOC. NIC NOT IN CONTRACT. NIGHT LIGHT. PHOTOELECTRIC SWITCH POWER PANEL. RECEPTACLE PANEL. UG UNDERGROUND. UON UNLESS OTHERWISE NOTED. WEATHER PROOF.

#### WIRING



WIRING CONCEALED IN CEILING OR WALLS; SLASH MARKS INDICATE NUMBER OF CONDUCTORS EXCLUDING GROUNDS; CONDUCTOR SIZE AS MARKED: #12 AWG UON.

UNDERGROUND CABLE OR DUCT; TYPE, SIZE, CONDUCTORS, AND ARRANGEMENT BY NOTATION OR SCHEDULE.

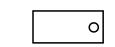
WIRING RUN EXPOSED.

#### **SWITCHES**

SWITCH OUTLET; MOUNTED 48" AFF UON; SINGLE POLE UON; LOWER CASE LETTER, WHEN PRESENT. INDICATES OUTLETS CONTROLLED.

- \* ABBREVIATIONS FOR SWITCH OUTLETS
- 2 DOUBLE POLE SWITCH
- 4 4-WAY SWITCH K KEY OPERATED SWITCH
- D DOOR SWITCH
- DIMMER SWITCH; MOUNTED 48" AFF UON; LOWER CASE LETTER, WHEN PRESENT, INDICATES OUTLETS CONTROLLED.

#### **LIGHTING**



FLUORESCENT LIGHT FIXTURE - RECESSED, SURFACE, OR PENDENT MOUNTED



RECESSED MOUNTED CEILING FIXTURE



SURFACE MOUNTED CEILING FIXTURE



INCANDESCENT FIXTURE, WALL



SURFACE OR PENDANT MOUNT EXIT SIGN FIXTURE; ARROWS INDICATE REQUIRED SIGN ARROWS.



BATTERY POWERED EMERGENCY LIGHTING FIXTURE



COMBINATION EMERGENCY LIGHTING FIXTURE ANG EXIT SIGN

INDICATES FIXTURE TYPE; SEE SCHEDULE.

### **RECEPTACLES**



GROUNDED DUPLEX RECEPTACLE (NEMA 5-20R); MOUNTED 18" AFF UON; NUMBER INDICATES CIRCUIT.

GROUNDED QUADRUPLEX RECEPTACLE (NEMA 5-20R); MOUNTED 18" AFF UON.

SPECIAL PURPOSE RECEPTACLE; LETTER INDICATES TYPE; TYPE DEFINED BY NOTATION OR SCHEDULE; MOUNTED 18" AFF UON.

#### PANELS AND MISC.

LIGHT OR POWER PANEL

NON-FUSED SAFETY (DISCONNECT) SWITCH

FUSED SAFETY (DISCONNECT) SWITCH

L\_\_\_HNFSS

JUNCTION BOX

MOTOR



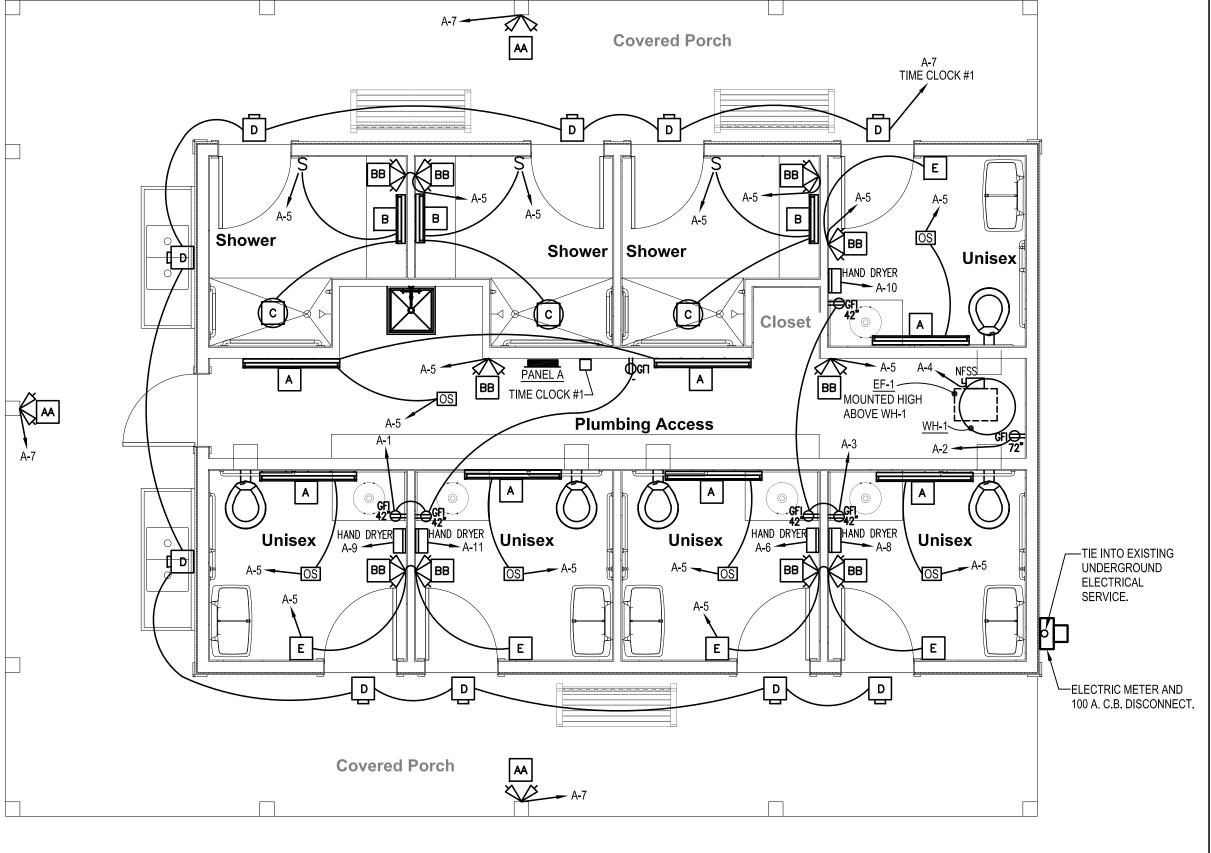
TELEPHONE OUTLET - WALL - MOUNTED 18" AFF, UON PROVIDE 4X4 OUTLET BOX IN WALL WITH 3/4" CONDUIT TO ABOVE CEILING WITH PULL WIRE. WIRING BY OTHERS.



COMPUTER OUTLET - WALL - MOUNTED 18" AFF UON. PROVIDE 4X4 OUTLET BOX IN WALL WITH 3/4" CONDUIT TO ABOVE CEILING WITH PULL WIRE, WIRING BY OTHERS.

#### **ELECTRICAL NOTES**

- VERIFY CONDITION AND CAPACITY OF EXISTING ELECTRICAL SERVICE (MINIMUM 100 AMP SERVICE). REMOVE AND REPLACE AS REQUIRED. PROVIDE NEW LIGHTING, POWER AND CONTROL
- CIRCUITING AS REQUIRED ALL WORK TO BE PERFORMED IN ACCORDANCE WITH ALL CURRENT
- ELECTRICAL CODES. EXTERIOR LIGHTING TO BE CONTROLLED BY TIMECLOCK. INTERMATIC
- MODEL T101 OR APPROVED EQUAL PROVIDE LOW VOLTAGE CEILING MOUNTED ULTRASONIC MOTION DETECTOR. GREENGATE MODEL OAC-U-1000-R+SP20-MV OR APPROVED EQUAL. OS



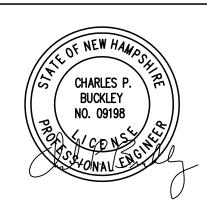
# **ELECTRICAL PLAN**

MARK	MANUFACTURER	FIXTURE MAKE/MODEL	LAMPING	MOUNTING
		1	1	
A	METALUX	4-BCLED-LD4-28SL-F-UNV-L830-CD-1	32W LED	WALL MOUNTED @ 8'-0" AFF
В	METALUX	2-BCLED-LD4-16SL-F-UNV-L830-CD-1	18W LED	WALL MOUNTED @ 8'-0" AFF
С	HALO	SLD606-8-30-WH	12.5W LED	CEILING MOUNTED
D	RAB	BRISKS17L-730	14W LED	ABOVE DOOR/BEHIND BEAM/POST
E	LEGRAND	TMHWLECC	1/4W LED	MOUNT 24" AFF
AA	DUAL-LITE	DYN 6	2-3W. LED	MOUNT TOP 6" T.O. WALL
BB	DUAL-LITE	LZ25DI (25 WATT BATTERY)	2-5W/MR16	MOUNT TOP 6" BELOW CEILING

VOLTS: 120/240		WIRE: 3 KA RMS: 1		10 KAIC	NEUTRAL BAR: YES		BRANCH CB: BOLT-ON			BOLT-ON	NEMA TYPE: 1	1 MF'R: SQUARE "D", G.E., SIEMENS OR EQUAL.		
PHASE: 1		AMP: 100 MAIN CB		AMP: 100 (	GROUND BAR: YES		KEY LOCK: YES				MOUNTING: SU	JRFACE		
OLT-7 A	AMPS(V-A) B	CIRCUIT DESC	CRIPTION	CONDUCTOR	POLES	C.B.	CK'	T#	C.B.	POLES	CONDUCTOR	CIRCUIT DESCRIPTION	VOLT-AM A	IPS(V-A B
1000		RECEPT.		2#12+#12G.	1	20	1	2	20	1	2#12+#12G.	RECEPT WH-1	1000	>
$>\!<$	1000	RECEPT.		2#12+#12G.	1	20	3	4	20	1	2#12+#12G.	EF-1	> <	600
400		LIGHTING		2#12+#12G.	1	20	5	6	20	1	2#12+#12G.	HAND DRYER	1500	$\bigwedge$
$>\!<$	200	LIGHTING		2#12+#12G.	1	20	7	8	20	1	2#12+#12G.	HAND DRYER	$>\!\!<$	1500
1500		HAND DRYER		2#12+#12G.	1	20	9	10	20	1	2#12+#12G.	HAND DRYER	1500	$\bigwedge$
><	1500	HAND DRYER		2#12+#12G.	1	20	11	12				SPACE	$>\!\!<$	
		SPACE					13	14				SPACE		$\bigwedge$
><		SPACE					15	16	•		_	SPACE	> <	
		SPACE					17	18				SPACE		>>
> <		SPACE					19	20				SPACE	$\overline{}$	



N.H. LIC. NO. 09198



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Structural Engineer: Fisher Engineering, P.C. 686 Belknap Mountain Road Gilford, NH 03249 tel: (603) 528-7641

#### **NH STATE PARKS Campground Expansion Project PII**

Pawtuckaway State Park 7 Pawtuckaway Road Nottingham, NH 03290

100% CHECK SET

North

Graphic Scale

Scale: As indicated

Date: MARCH 15, 2024

Drawn By: CPB

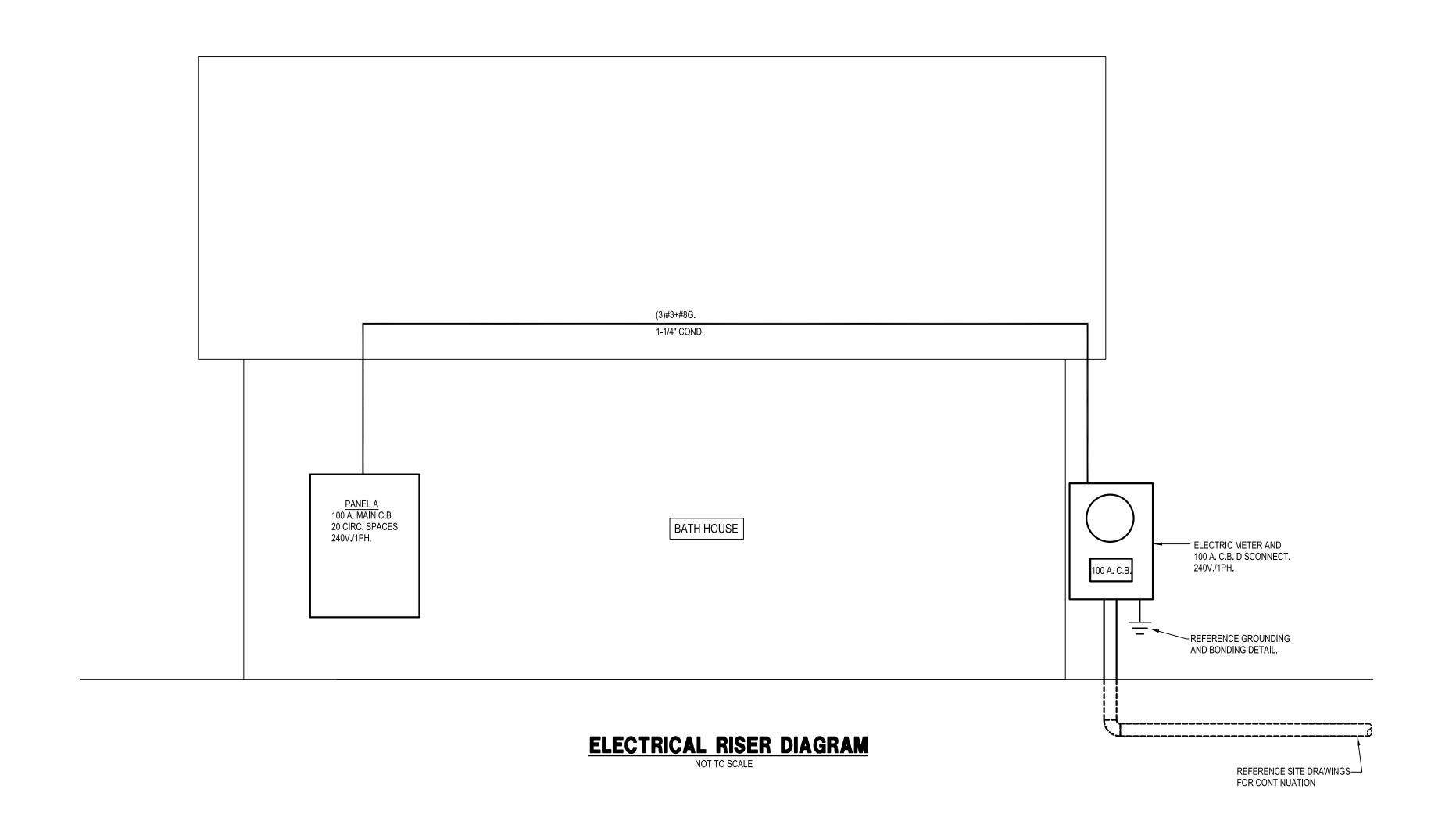
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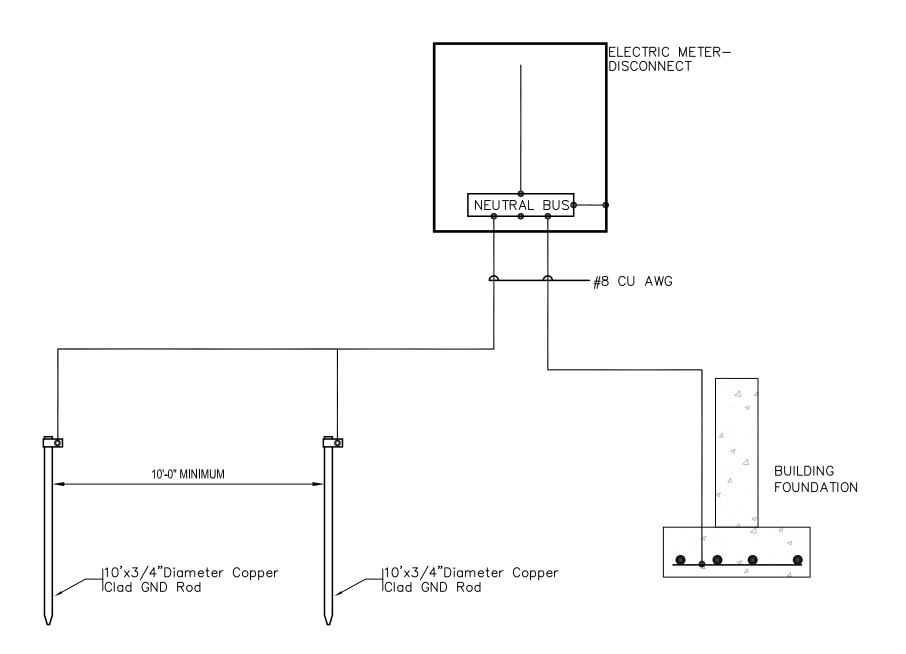
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ELECTRICAL PLAN AND DETAILS

Sheet Number:

Project Number: 2136

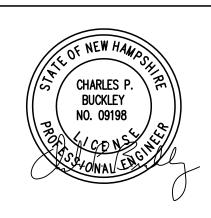




# GROUNDING & BONDING DETAIL NOT TO SCALE

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# **NH STATE PARKS**

Campground Expansion Project PII
Pawtuckaway State Park
7 Pawtuckaway Road
Nottingham, NH
03290

Iss

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Graphic Scale

Scale: As indicated

Date: MARCH 15, 2024

Checked By: CPB

Drawn By: CPB

No. Description Date

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ELECTRICAL RISERS

Sheet Number:

E1.02P

Project Number: 2136

#### PLUMBING SYMBOLS <u>SYMBOL</u> <u>DESCRIPTION</u> <u>SYMBOL</u> <u>DESCRIPTION</u> —————— SOIL OR WASTE PIPE (BELOW GROUND) VACUUM BREAKER SOIL OR WASTE PIPE (ABOVE GROUND) PRESSURE GAGE ----- VENT PIPE (V) TEMPERATURE GAGE ----- COLD WATER PIPE (CW) PRESSURE REDUCING VALVE ------ HOT WATER PIPE (HW) GAS COCK —---— HOT WATER RETURN (HWR) VENT THROUGH ROOF VTR LAV LAVATORY WATER CLOSET **──O** FD FLOOR DRAIN URINAL $\longrightarrow$ co CLEAN-OUT(FLOOR) GAS REGULATOR CLEAN-OUT(WALL OR ABOVE CLG.) **─**♣ GAS COCK (WH)HOT WATER HEATER C.S. IN CRAWL SPACE $\rightarrow \bowtie$ GATE VALVE GV ELECTRIC GAS VALVE FOR PIPING UNDER HOODS -CHECK VALVE 1/1 TIE INTO ANSUL SYSTEM TEMP./PRESS. RELIEF VALVE FIXTURE ISOLATION VALVE BALL VALVE

## **GENERAL LP PIPING NOTES**

- 1. GAS PIPING HAS BEEN DESIGNED AND SHALL BE INSTALLED IN ACCORDANCE WITH INTERNATIONAL FUEL GAS CODE 2018 AND NFPA 58 STANDARD FOR THE STORAGE AND HANDLING OF LIQUIFIED PETROLEUM GASES (LATEST
- 2. GAS PIPING INSTALLED ON THE EXTERIOR OF THE BUILDING AND ABOVE GRADE SHALL BE SCHEDULE 40 BLACK STEEL PIPE (ASTM A53,A106) AND HAVE THREADED JOINTS (ASME B1.20.1). THE BLACK STEEL PIPE SHALL BE COVERED WITH 2 COATS OF A WATERPROOF ASPHALTIC COATING (OR EQUAL) TO PREVENT CORROSION OF THE PIPE.
- 3. GAS PIPING INSTALLED ON THE INTERIOR OF THE BUILDING SHALL BE SCHEDULE 40 BLACK STEEL PIPE (ASTM A53, A106) AND HAVE THREADED JOINTS (ASME B1.20.1).
- 4. JOINTS BETWEEN DIFFERENT PIPING MATERIALS SHALL BE MADE WITH APPROVED ADAPTER FITTINGS.
- 5. ALL PENETRATIONS OF GAS PIPING THROUGH SLABS AND FOUNDATION WALLS SHALL BE SLEEVED WITH A PIPE SLEEVE.
- 6. PROPANE GAS SUPPLIER SHALL PROVIDE ALL NECESSARY REGULATORS, PRESSURE GAUGES, VALVES AND LEVEL GAUGES AT PROPANE TANKS.
- 7. GAS SUPPLY PRESSURE = 11 INCHES WATER GAUGE.
- 8. GAS PIPE SIZING IS BASED ON TABLE 402.4(24) IN THE INTERNATIONAL FUEL GAS CODE 2018. A MAXIMUM PIPE LENGTH OF 40 FT. HAS BEEN USED FOR THIS DESIGN.

#### **PLUMBING NOTES**

4. SANITARY/STORM DRAINAGE AND VENT PIPING

#### SCOPE OF WORK

- A. THE CONTRACTOR IS RESPONSIBLE FOR ALL WORK, MATERIALS, AND LABOR TO SATISFY A COMPLETE WORKING SYSTEM WHETHER SPECIFIED OR IMPLIED.
- B. ALL WORK IS TO BE PERFORMED IN STRICT COMPLIANCE WITH THE INTERNATIONAL PLUMBING CODE (2018).
- C. THE CONTRACTOR SHALL, BEFORE SUBMITTING ANY PROPOSAL, EXAMINE THE PROPOSED SITE AND SHALL DETERMINE FOR HIMSELF THE CONDITIONS THAT MAY EFFECT THE WORK. NO ALLOWANCE SHALL BE MADE IF THE CONTRACTOR FAILS TO MAKE SUCH EXAMINATIONS.
- D. ALL EQUIPMENT AND MATERIALS SHALL BE AS SPECIFIED OR "APPROVED EQUAL" BY ENGINEER OR ARCHITECT.

#### SHOP DRAWINGS

A. SUBMIT MATERIAL LIST AND SHOP DRAWINGS FOR MAJOR EQUIPMENT/FIXTURES TO THE ARCHITECT OR ENGINEER FOR APPROVAL. THE SHOP DRAWINGS SHALL BE CLEARLY TAGGED AND HIGHLIGHTED.

#### 3. <u>DOMESTIC WATER SUPPLY PIPING</u>

- A. ABOVE GROUND: MAINS AND BRANCHES COPPER PIPE WITH SOLDER JOINTS.

  BRANCHES PEX WITH PEX FITTINGS.
- B. ALL HOT WATER PIPING TO BE INSULATED WITH 1" FIBERGLASS INSULATION.
- C. ALL COLD WATER PIPING TO BE INSULATED WITH 1/2" FOAM INSULATION.
- D. PROVIDE DOMESTIC WATER SHUT-OFFS AT EACH PLUMBING FIXTURE.

- A. ABOVE GRADE:
- -2" AND BELOW: SCH. 40 PVC WITH SOLVENT JOINTS.
  -3" AND ABOVE: SCH. 40 PVC WITH SOLVENT JOINTS.
- B. BELOW GRADE: SCH. 40 PVC WITH SOLVENT JOINTS.
- C. PVC PIPING SHALL NOT BE USED IN AIR PLENUM CEILINGS AND SHALL NOT CROSS FIRE RATED WALLS, CEILINGS, OR FLOORS.
- D. DRAINAGE PIPING SHALL BE RUN AS STRAIGHT AS POSSIBLE AND SHALL HAVE LONG TURN FITTINGS.

E. DRAINAGE PIPING 3" SIZE AND SMALLER SHALL RUN AT A

- UNIFORM GRADE OF AT LEAST 1/4" PER FOOT, AND PIPING LARGER THAN 3" SHALL BE RUN AT A GRADE OF NO LESS THAN 1/8" PER FOOT.
- F. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER FLASHING OF THE VENT PIPING RUN THROUGH THE ROOF.
- 5. ALL STUB-INS AND/OR SLAB OR WALL PENETRATION TO BE PER INTERNATIONAL PLUMBING CODE. ALL PIPING PENETRATIONS OF BUILDING FOUNDATIONS, FOOTINGS AND WALLS SHALL BE SLEEVED.

#### 6. <u>PIPE SUPPORTS</u>

A. ABOVE GRADE

ALL PIPE SHALL BE SUPPORTED FROM THE BUILDING

STRUCTURE IN A NEAT AND WORKMANLIKE MANNER.

THE USE OF WIRE AND PERFORMED METAL TO SUPPORT

PIPES WILL NOT BE PERMITTED. SPACING OF PIPE SUPPORTS

SHALL BE AS SPECIFIED IN THE INTERNATIONAL

PLUMBING CODE.

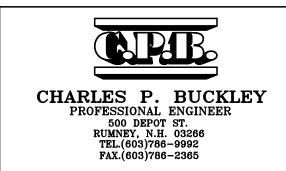
#### 7. MISCELLANEOUS

- A. COORDINATE INSTALLATION OF ALL ROOF FLASHING AT ROOF PENETRATION.
- B. DO NOT SCALE THIS DRAWING FOR EXACT DIMENSIONS.
  VERIFY ALL FIGURES, CONDITIONS, AND DIMENSIONS
  AT THE JOB SITE.
- C. THE PLUMBING PLANS ARE INTENDED TO BE DIAGRAMATIC AND ARE BASED ON ONE MANUFACTURE'S EQUIP—MENT. THEY ARE NOT INTENDED TO SHOW EVERY ITEM IN ITS EXACT LOCATION, THE EXACT DIMENSIONS, OR ALL THE DETAILS OF THE EQUIPMENT. THE CONTRACTOR SHALL VERIFY THE ACTUAL DIMENSIONS OF THE EQUIP—MENT PROPOSED TO ENSURE THAT THE EQUIPMENT WILL FIT IN THE AVAILABLE SPACE.
- D. SEAL AND FLASH ALL WALL PENETRATIONS AIR AND WEATHER—TIGHT.

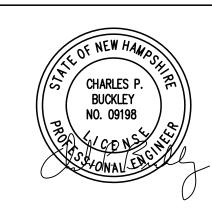
#### 8. <u>TESTING AND DISINFECTION</u>

A. PLUMBING SYSTEMS SHALL BE FLOW AND PRESSURE TESTED & DISINFECTED IN ACCORDANCE WITH STANDARD PRACTICE AND THE INTERNATIONAL PLUMBING CODE.

#### PLUMBING FIXTURE SCHEDULE MARK DESCRIPTION MANUFACTURER - MODEL # COLOR & FINISH ACCESSORIES & NOTES NOTES TRAP S/W VENT C.W. ACCESSIBLE TOILET AMERICAN STANDARD: AFWALL MILLENIUM FLOWISE 1.28 GPF FLUSHOMETER FLUSH VALVE: AMERICAN STANDARD MODEL 6047.121.002 2" INTEGRAL TOILET SEAT: AMERICAN STANDARD MODEL #5901.100 (COLOR: BLACK) MODEL: 2856.128 CARRIER: JAY R. SMITH, OR EQUAL. COUNTER SINK CORIAN: ADA-COMPLIANT FAUCET: SYMMONS SYMMETRIX S-20-2-0.5, TRAP: CHROME PLATED, MIXING VALVE: SYMMONS MAXLINE 7-210-CK-W, PIPE COVERS: AS SELECTED BY 1-1/2" | 1-1/2" | 1-1/2" | 1/2" TRUEBRO LAV GUARD 2 E-Z SERIES MODEL #810 SHOWER PAN: SWAN FBF-3060L/R VERITEK BARRIER-FREE SHOWER PAN WITH FIT-FLO DRAIN. ACCESSIBLE CUSTOM AS SELECTED BY DRAIN: WATTS FD-1100-A-2-NH-A5-7, HEAD: SYMMONS SAFETYMIX 4-151 (2 HEADS @ ADA), CONTROLS: SYMMONS SAFETYMIX 2" | 1-1/2" | 1/2" SHOWER 4-500-BX-VP, DIVERTER VALVE: SYMMONS MODEL 2DIV. FLOOR DRAIN ZURN: MODEL FD2-TSP-VP TRAP SEAL: ZURN Z1072 ZSHIELD BARRIER TRAP SEAL DEVICE 2" | 1-1/2" ● FAUCET: FIAT MODEL 830AA MS-1 | MOP SINK FIAT MODEL MSB2424 3" | 1-1/2" | 1/2" | 1/2" ● MOP HANGER: FIAT MODEL889CC FIAT STAINLESS BUMPER GUARD • FAUCET: ADVANCE TABCO HEAVY DUTY MODEL K-1118 SPASH MOUNTED FAUCETS, 8" CTRS., SINK-1 DISH WASHING ADVANCE TABCO MODEL VKCT-246 WITH SWING NOZZLE, 12" SPOUT. 2" | 1-1/2" | 1/2" | 1/2" 14" DEEP BOWL TA-11A-2 BOWLS AND ADJUSTABLE LEGS STAINLESS STEEL STRAINER AND DRAIN BODY. MOUNTED AT ACCESSIBLE HEIGHT PROVIDE 1 FAUCET PER EACH BOWL. (MOUNTING AT BARRIER-FREE HEIGHT). ● ADVANCED TABCO BOWL MODEL TA-11A-2 - TWO 8" DEEP BOWLS. • FAUCET: ADVANCE TABCO HEAVY DUTY MODEL K-1118 SPASH MOUNTED FAUCETS, 8" CTRS., SINK-2 DISH WASHING | ADVANCE TABCO MODEL VKCT-246 WITH TA-11B-2 BOWLS 2" | 1-1/2" | 1/2" | 1/2" SWING NOZZLE, 12" SPOUT. 12" DEEP BOWL AND ADJUSTABLE LEGS. • STAINLESS STEEL STRAINER AND DRAIN BODY. PROVIDE 1 FAUCET PER EACH BOWL. • ADVANCED TABCO BOWL MODEL TA-11B-2 - TWO 12" DEEP BOWLS. NOTES: (1) SCHEDULE INDICATES FIXTURES SELECTED AS THE BASIS OF DESIGN, ALTERNATIVES WILL BE ACCEPTED (3) WATER PIPING SHALL BE INSTALLED TO ALLOW FOR SEASONAL DRAIN DOWN OF THE WATER SYSTEM. IF EQUAL OR BETTER QUALITY. PROVIDE DRAIN VALVES AS REQUIRED AT LOW POINTS. DRAIN VALVES SHALL BE LOCATED TO LIMIT PUBLIC 2) PROVIDE ALL NECESSARY TRIM AND FITTINGS REQUIRED FOR A COMPLETE INSTALLATION



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Structural Engineer:
Fisher Engineering, P.C.
686 Belknap Mountain Road
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tel: (603) 528-7641

#### **NH STATE PARKS**

Campground Expansion Project PII
Pawtuckaway State Park
7 Pawtuckaway Road
Nottingham, NH
03290

Issue

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Graphic Scale

Scale: As indicated

Date: MARCH 15, 2024

Checked By: CPB

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Title

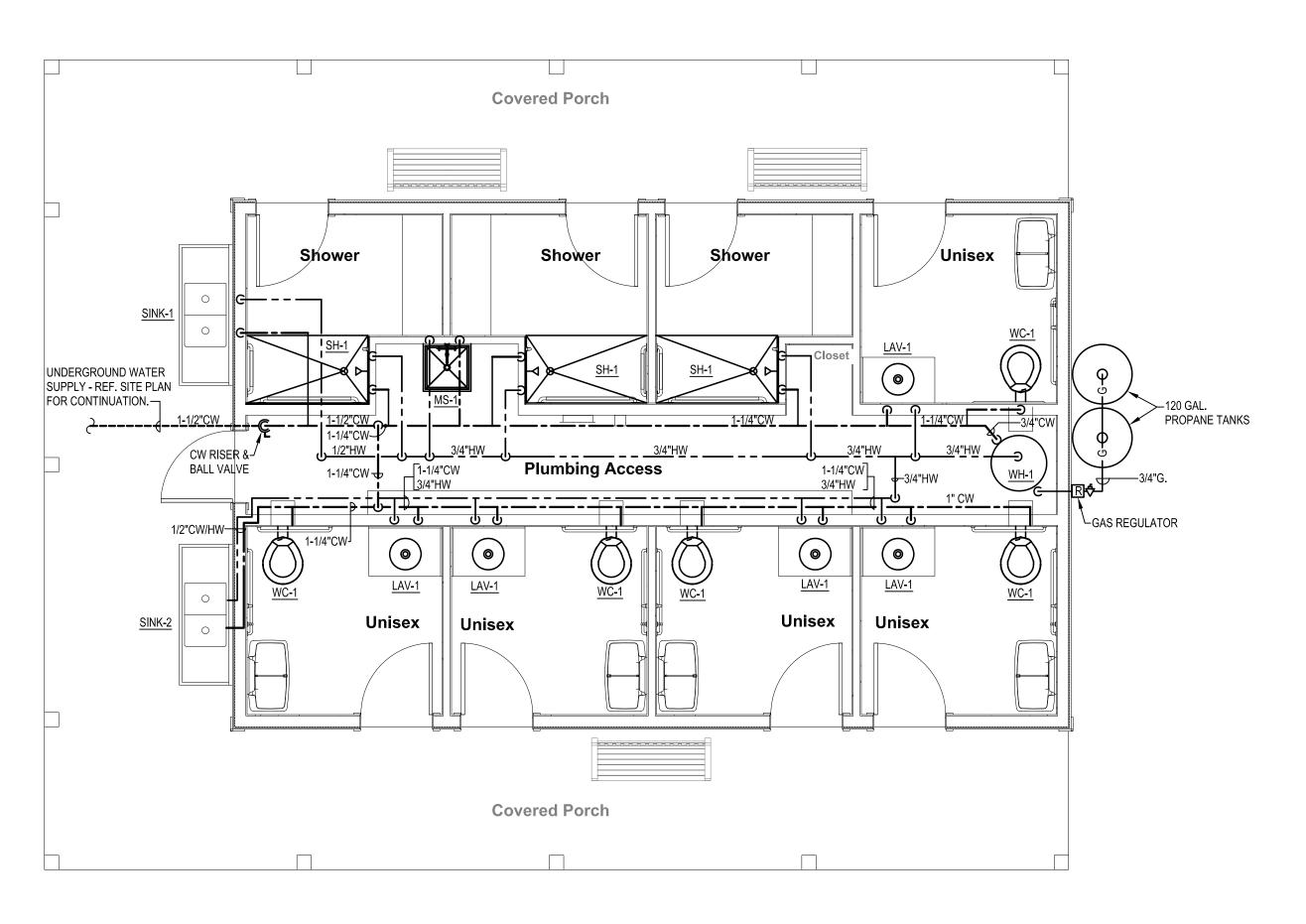
PLUMBING NOTES, DETAILS AND SCHEDULES

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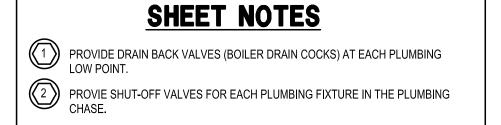
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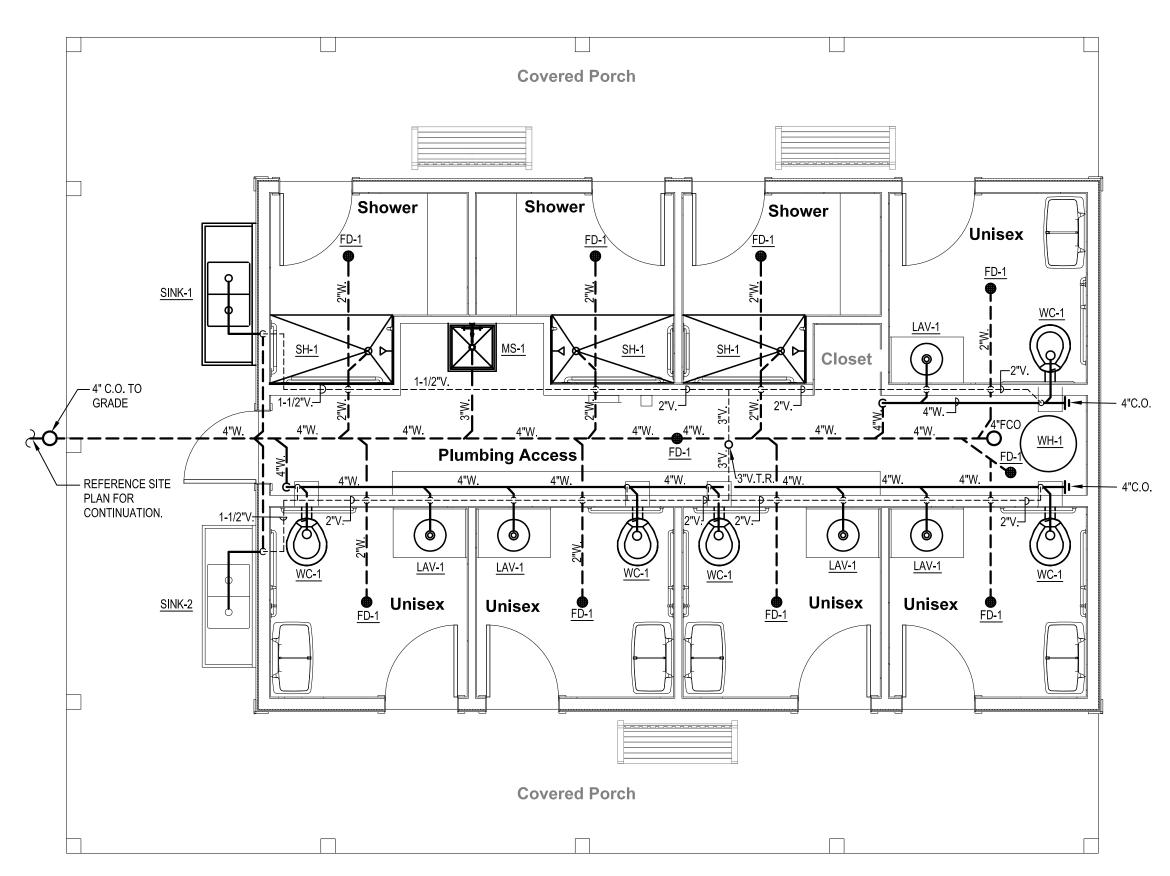
# PLUMBING PLAN - DOMESTIC WATER AND GAS



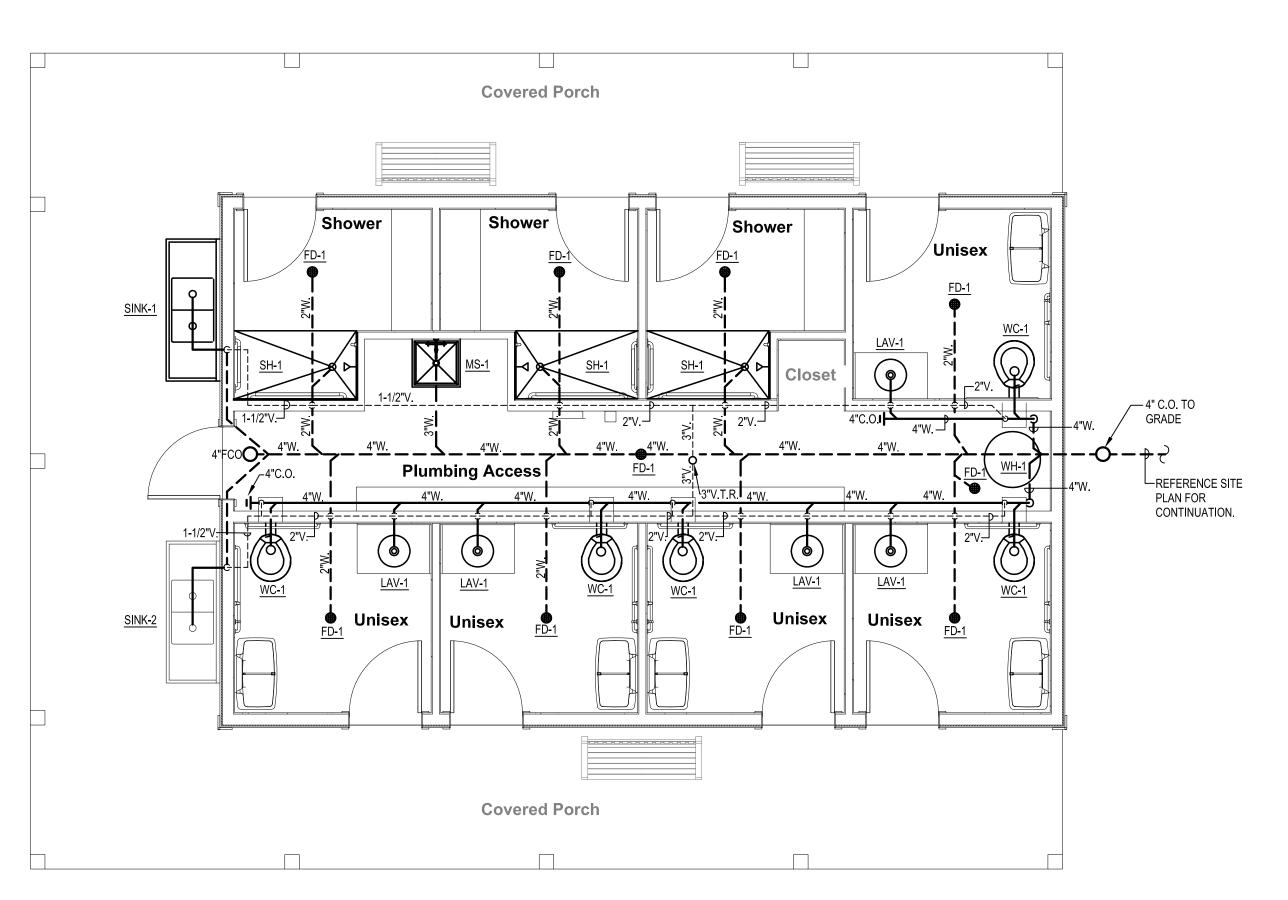
#### PLUMBING NOTES

- TIE NEW WATER AND SEWER TO EXISTING SERVICE ENTRANCES.
  PROVIDE CONNECTIONS APPROPRIATE TO TYPE AND MATERIALS OF
  EXISTING SYSTEMS TO REMAIN.
- 2. LAYOUT WATER LINES TO PITCH TO DRAIN VALVES TO FACILITATE SEASONAL DRAIN DOWN.

  3. PEMOVE ALL EXISTING PLUMBING FLYTURES AND INSTALL
- 3. REMOVE ALL EXISTING PLUMBING FIXTURES AND INSTALL NEW AS SHOWN



# PLUMBING PLAN - WASTE & VENT FOR BATHHOUSES \*5, 7, 8 & 9 (SANITARY WASTE OUT FRONT OF BUILDING) SCALE: 1/4" = 1'-0"



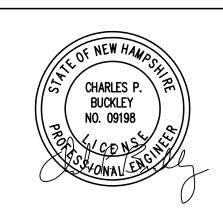
PLUMBING PLAN - WASTE & VENT
FOR BATHHOUSE \*6

(SANITARY WASTE OUT REAR OF BUILDING)

SCALE: 1/4" = 1'-0"

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# **NH STATE PARKS**

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7 Pawtuckaway Road
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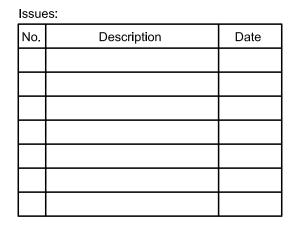
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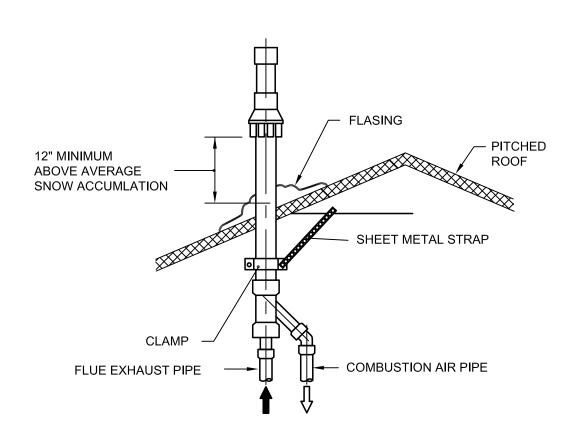
PLUMBING PLANS

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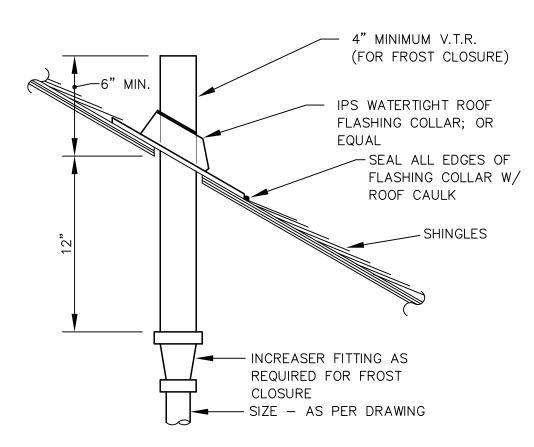
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Project Number: 2136

			W	ATER	HEATE	R SCH	HEDULE			
MARK	CAPACITY	RECOVERY ©	BTU PER HR.	GAS	WATER	ELECTRIC		MANUFACTURE	REMARKS	
		100 DEG. F. RISE		CONN.	CONN.	AMPS	VOLT-PHASE	- & MODEL		
WH-1	100 GAL.	235 GAL.	199,000	3/4"	1-1/4"	10.0	120-1	A.O. SMITH MODEL BTH-199	-PROPANE FIRED -POWER VENTED -4" VENT & COMB. AIR PIPES -140 DEG F. DISCHARGE TEMF	

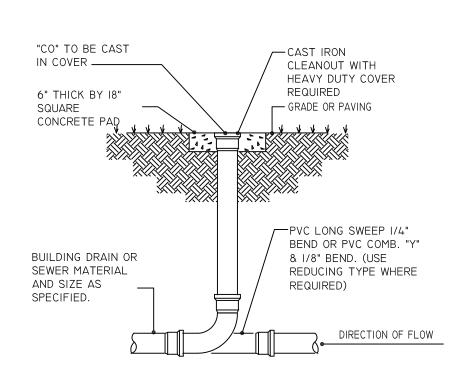






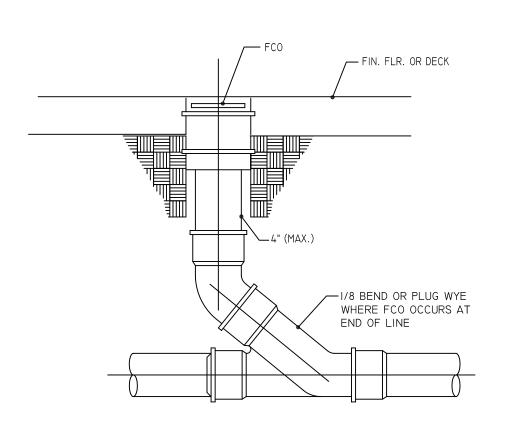
VENT THRU ROOF DETAIL

NOT TO SCALE



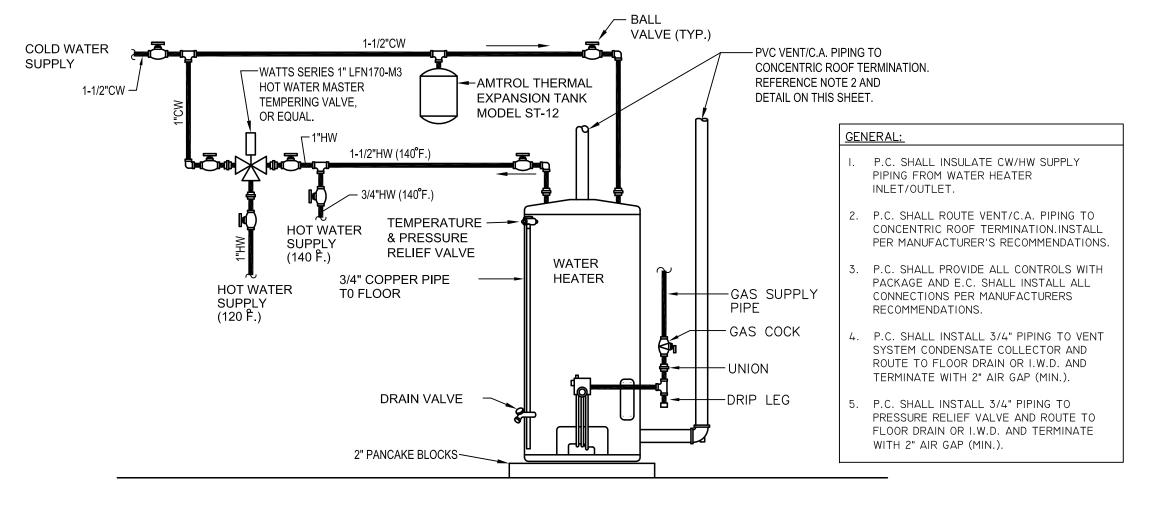
GRADE CLEANOUT DETAIL

NOT TO SCALE



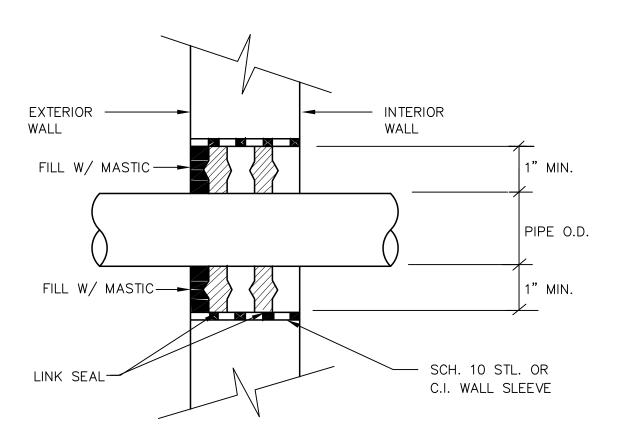
FLOOR CLEANOUT DETAIL

NOT TO SCALE



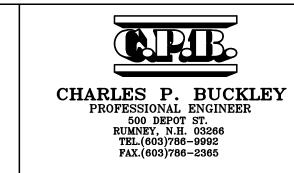
## WATER HEATER WITH MIXING VALVE DETAIL

NOT TO SCALE

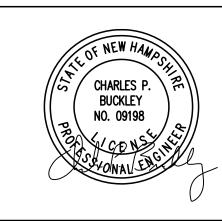


#### **EXTERIOR WALL SLEEVE DETAIL**

NOT TO SCALE



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PLUMBING DETAILS

Sheet Number:

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Project Number: 2136