STATE OF NEW HAMPSHIRE

Department of Natural and Cultural Resources - Division of Parks and Recreation

Jericho Mountain State Park: 298 Jericho Lake Road, Berlin, NH 03570

New RV Campground (Project No. ARP 2418)

CONTRACT SET

June 13, 2024

SHEET LIST

SHEET NO.	SHEET TITLE
G0.00	COVER SHEET
C1.00	OVERALL EXISTING CONDITIONS
C1.01	EXISTING CONDITIONS - AREA 1
C1.02	EXISTING CONDITIONS - AREA 2
C1.03	EXISTING CONDITIONS - AREA 3
C2.00	OVERALL SITE PLAN
C2.01	SITE PLAN - AREA 1
C2.02	SITE PLAN - AREA 2
C3.00	GRADING PLAN - AREA 1
C3.01	GRADING PLAN - AREA 2
C4.00	UTILITY PLAN - AREA 1
C5.00	EROSION CONTROL DETAILS
C5.01	STORMWATER DETAILS
C5.02	WATER DETAILS
C5.03	SEWER & ROAD DETAILS
C5.04	INFILTRATION SC-740 SYSTEM
C5.05	DETENTION MC-3500 SYSTEM
C6.00	PUBLIC WATER SUPPLY PLAN
C6.01	PUBLIC WATER SUPPLY DETAILS
C7.00	INDIVIDUAL SEWAGE DISPOSAL SYSTEM OVERVIEW PLAN
C7.01	INDIVIDUAL SEWAGE DISPOSAL SYSTEM OVERVIEW PLAN ENLARGEMENT
C7.02	INDIVIDUAL SEWAGE DISPOSAL SYSTEM OVERVIEW PLAN ENLARGEMENT
C7.03	INDIVIDUAL SEWAGE DISPOSAL SYSTEM DETAILS SHEET
L0.00	LANDSCAPE GENERAL LEGEND & NOTES
L1.00	OVERALL LANDSCAPE PLAN
L1.01	LANDSCAPE PLAN - AREA 1
L1.02	LANDSCAPE PLAN - AREA 2
L1.03	LANDSCAPE PLAN - AREA 3
L2.00	LANDSCAPE DETAILS
L2.01	LANDSCAPE DETAILS
L2.02	LANDSCAPE DETAILS
L2.03	LANDSCAPE DETAILS

SHEET NO.	SHEET TITLE
E1.01J	ELECTRICAL NOTES, SYMBOLS, SCHEDULES
E1.02J	ELECTRICAL SITE PLAN - AREA 1
E1.03J	ELECTRICAL SITE PLAN - AREA 2
E1.04J	ELECTRICAL RISERS AND DETAILS
A1	CAMPING SHELTER STANDARD STRUCTURES FILE
A2	CAMPING SHELTER STANDARD STRUCTURES FILE
1 OF 2	STANDARD STATE PARK KIOSK
2 OF 2	STANDARD STATE PARK KIOSK

SITE

LANDSCAPE ARCHITECT
SE GROUP
1 MILL STREET, SUITE 190
BURLINGTON, VT 05401
P. 802-862-0098
ATTN: ADAM PORTZ

CIVIL ENGINEER
HORIZONS ENGINEERING
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ADAM K. PORTZ 032 STATE OF NEW HAMPSHIRE

NH STATE PARKS
Campground Expansion Project PII
Jericho Mountain State Park
298 Jericho Lake Road
Berlin, NH
03570

Issue
CONTRACT SET

Graphic Scale

North

Scale:

Date: June 13, 2024

Drawn By: KS & BD

Checked By: PO & AP

Issues:

No.	Description	Date
1	Name	00/00/00

Title
COVER SHEET

Sheet Number:
G0.00

Project Number: 23045001
File: l0.00-cover sheet.dwg

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WILLIAM T. DAVIS
No. 11913
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PROFESSIONAL ENGINEER

NH STATE PARKS

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Issue

CONTRACT SET

Graphic Scale
0 50 100 200

North

Scale: 1" = 100'

Date: June 13, 2024

Drawn By: DW

Checked By: RH

Issues:

No	Description	Date

Title

OVERALL EXISTING CONDITIONS

Sheet Number:

C1.00

Project Number: 23045001

File: 220838-jericho-x-site 100p.dwg

n/f
STATE OF NEW HAMPSHIRE
DEPT OF NATURAL AND CULTURAL RESOURCES
TAX MAP 407 PARCEL 10
BOOK 1238 PAGE 415

n/f
SAVANNAHWOOD LLC
TAX MAP 402 PARCEL 15
BOOK 1460 PAGE 627

EXISTING WELL

JERICHO LAKE ROAD

OHU

TP14
TRAIL

18" HDPE CULV
TOP/INV IN: 1351.69
TOP INV OUT: 1349.68

PSNH
158/24
-24FP

24" METAL CULV
INV IN: 1340.49
INV OUT: 1340.13

PSNH
158/23
-23FP

299C
299B
559C
559D
559B
559E
55C
299E
64B
647B

WETLAND

EVENT MUD PITS

TP9 — NO LEDGE TO 5.8'
TP1 — NO LEDGE TO 8.1'
TP2 — NO LEDGE TO 6.7'
TP11 — LEDGE AT 4.4'
TP12 — LEDGE POSSIBLE - AT 3.8'
TP10 — LEDGE AT 3.3'
TP7 — LEDGE AT 4.0'
TP13 — NO LEDGE TO 8.2'
TP3 — NO LEDGE TO 8.7'
TP6 — LEDGE AT 3.3'
TP5 — NO LEDGE TO 5.3'
TP4 — NO LEDGE TO 6.5'
AH2

12" HDPE CULV
INV IN: 1307.64
IN

LEGEND

- MAJOR CONTOUR, 10-FOOT INTERVAL
- MINOR CONTOUR, 2-FOOT INTERVAL
- TREELINE
- OHE — OVERHEAD UTILITY LINE
- EDGE OF WETLAND
- EDGE OF VERNAL POOL
- FIELD SURVEY AND WETLAND DELINEATION LIMIT
- WETLAND FLAG AND FLAG ID #
- WOOD POST
- SIGN
- UTILITY POLE
- WATER SPIGOT
- GRAVEL
- PAVEMENT
- SOIL BOUNDARY
- TP3 — TEST PIT

GENERAL NOTES

1. THE HORIZONTAL DATUM IS ON THE NEW HAMPSHIRE STATE PLANE COORDINATE SYSTEM NAD83 (2011). THE VERTICAL DATUM IS THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
2. THIS PLAN IS BASED ON A FIELD SURVEY COMPLETED IN MAY OF 2023 WITH CARLSON BRX6 DUAL FREQUENCY SURVEY GRADE GPS RECEIVERS AND A LEICA TS12 ROBOTIC TOTAL STATION.
3. TOPOGRAPHY SHOWN HEREON IS BASED ON BARE EARTH DEM LiDAR DATA FILES DATED 2017 FROM THE STATE OF NEW HAMPSHIRE.
4. TREELINES DEPICTED HEREON OUTSIDE OF THE SURVEY LIMIT ARE APPROXIMATE BASED ON AERIAL IMAGERY.

Site-Specific Soil Map Legend

Map Unit Symbol[1,2,3]	Map Unit Name	Drainage Class	Ksat (in/hr) B Horizon	Ksat (in/hr) C Horizon	Hydrologic Group	HISS[1]
55C	Hermon fine sandy loam, very stony	Somewhat excessively drained	2.0 - 20.0	0.0 - 20.0	A	121CH
559_	Skerry fine sandy loam, very stony	Moderately well drained	0.6 - 2.0	0.06 - 0.6	C	323_H
647B/P	Pillsbury fine sandy loam (poorly drained), very stony	Poorly drained	0.6 - 2.0	0.06 - 0.2	C	523BH
299_/acaaa	Udorthents, Smoothed	Excessively drained	>1.4		A	161_H
299_/bcaaa	Udorthents, Smoothed	Somewhat excessively drained	>1.4		A	161_H
299B/dcdbc	Udorthents, Smoothed	Moderately well drained	0.014 - 1.4		C	363BH

1. The last character in the Map Unit Symbol numerator and the fourth character in the HISS designation identify the slope class as specified in the Slope Class table to the right. Note that in the above legend, an underscore (_) is used in place of the slope class for Map Unit Symbols and HISS designations that have multiple slope classes. The appropriate slope classes are shown in the Soil Map.

Slope Class			
A:	0-3%	D:	15-25%
B:	3-8%	E:	25-50%
C:	8-15%	F:	50%+

WETLAND NOTES

STATE AND FEDERAL JURISDICTIONAL WETLANDS WERE DELINEATED BY N.H. CERTIFIED WETLAND SCIENTIST, CAITLIN BANASZAK IN MAY 2022. WETLANDS MAPPING WAS DONE BY N.H. LICENSED LAND SURVEYORS, HORIZONS ENGINEERING, INC. IN ACCORDANCE WITH THE FOLLOWING GUIDANCE DOCUMENTS:

1. N.H. CODE OF ADMINISTRATIVE RULES (ENV-WT 301.01) WITH THE TECHNIQUES OUTLINED IN THE 1987 "U.S. ARMY CORPS OF ENGINEERS WETLAND DELINEATION MANUAL, TECHNICAL REPORT Y-87-1."
2. U.S. ARMY CORPS OF ENGINEERS. 2009. "REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION. U.S. ARMY CORPS OF ENGINEERS RESEARCH AND DEVELOPMENT CENTER, ENVIRONMENTAL LABORATORY ERDC/EL TR-09-19."
3. U.S. ARMY CORPS OF ENGINEERS. 2012. "NATIONAL LIST OF PLANT SPECIES THAT OCCUR IN WETLANDS: NORTHEAST REGION, U.S. ARMY CORPS OF ENGINEERS RESEARCH AND DEVELOPMENT CENTER, ENVIRONMENTAL LABORATORY.
4. N.H. CODE OF ADMINISTRATIVE RULES (ENV-WT 301.02) WITH THE U.S. FISH AND WILDLIFE SERVICE MANUAL FWS/OBS-79/31 ENTITLED "CLASSIFICATION OF WETLANDS AND DEEPWATER HABITATS OF THE UNITED STATES, COWARDIN ET AL, 1979."
5. NEW ENGLAND HYDRIC SOILS TECHNICAL COMMITTEE. 2004. 3RD ED., "FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND." NEW ENGLAND INTERSTATE WATER POLLUTION CONTROL COMMISSION, LOWELL, MA.
6. U.S. DEPARTMENT OF AGRICULTURE, NATURAL RESOURCE CONSERVATION SERVICE. 2010. "FIELD INDICATORS OF HYDRIC SOILS IN THE UNITED STATES, VERSION 7.0." L.M. VASILAS, G.W. HURT, AND C.V. NOBLE (EDS.). USDA, NRCS, IN COOPERATION WITH THE NATIONAL TECHNICAL COMMITTEE FOR HYDRIC SOILS.

STATE OF NEW HAMPSHIRE
CAITLIN BANASZAK
10/1/25
No. 311
CERTIFIED WETLAND SCIENTIST

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NH STATE PARKS

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Jericho Mountain State Park
298 Jericho Lake Road
Berlin, NH
03570

Issue
CONTRACT SET

Graphic Scale
0 20 40 80

North

Scale: 1" = 40'

Date: June 13, 2024

Drawn By: DW

Checked By: RH

Issues:

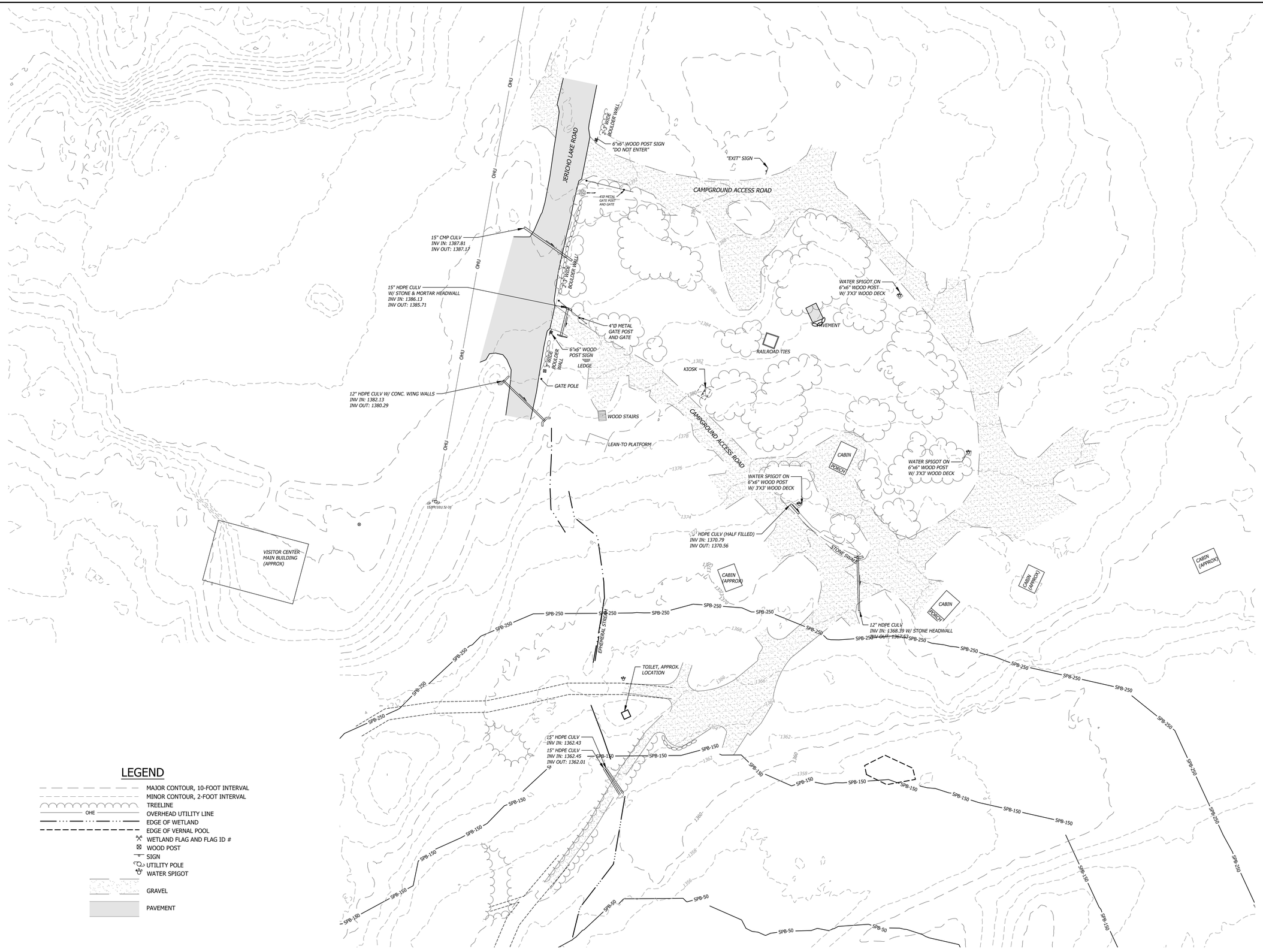
No.	Description	Date

Title
EXISTING CONDITIONS AREA 1

Sheet Number:
C1.01

Project Number: 23045001
File: 220838-jericho-100%.dwg

Z:\proj_2022\220838 SE Group - Campgrounds Ph II\Internal\Civil\Final\JERICHO\2024-0520 100%\220838-JERICHO-100%.dwg, C1.01, 6/13/2024 12:22:21 PM, DavidWheeler



LEGEND

- MAJOR CONTOUR, 10-FOOT INTERVAL
- MINOR CONTOUR, 2-FOOT INTERVAL
- TREELINE
- OHE — OVERHEAD UTILITY LINE
- EDGE OF WETLAND
- EDGE OF VERNAL POOL
- WETLAND FLAG AND FLAG ID #
- WOOD POST
- SIGN
- UTILITY POLE
- WATER SPIGOT
- GRAVEL
- PAVEMENT

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CONTRACT SET

Graphic Scale

0 15 30 60

North

Scale: 1" = 30'

Date: June 13, 2024

Drawn By: DW

Checked By: RH

Issues:

No.	Description	Date

Title

EXISTING CONDITIONS AREA 2

Sheet Number:

C1.02

Project Number: 23045001

File: 220838-jericho-x-site 100p.dwg

LEGEND

- MAJOR CONTOUR, 10-FOOT INTERVAL
- MINOR CONTOUR, 2-FOOT INTERVAL
- TREELINE
- OHE — OVERHEAD UTILITY LINE
- EDGE OF LAKE
- EDGE OF VERNAL POOL
- SPB-50 — 50' SHORELAND BUFFER
- WETLAND FLAG AND FLAG ID #
- WOOD POST
- SIGN
- UTILITY POLE
- WATER SPIGOT
- GRAVEL

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Issue

CONTRACT SET

Graphic Scale
0 10 20 40

North

Scale: 1" = 20'

Date: June 13, 2024

Drawn By: DW

Checked By: RH

Issues:

No.	Description	Date

Title

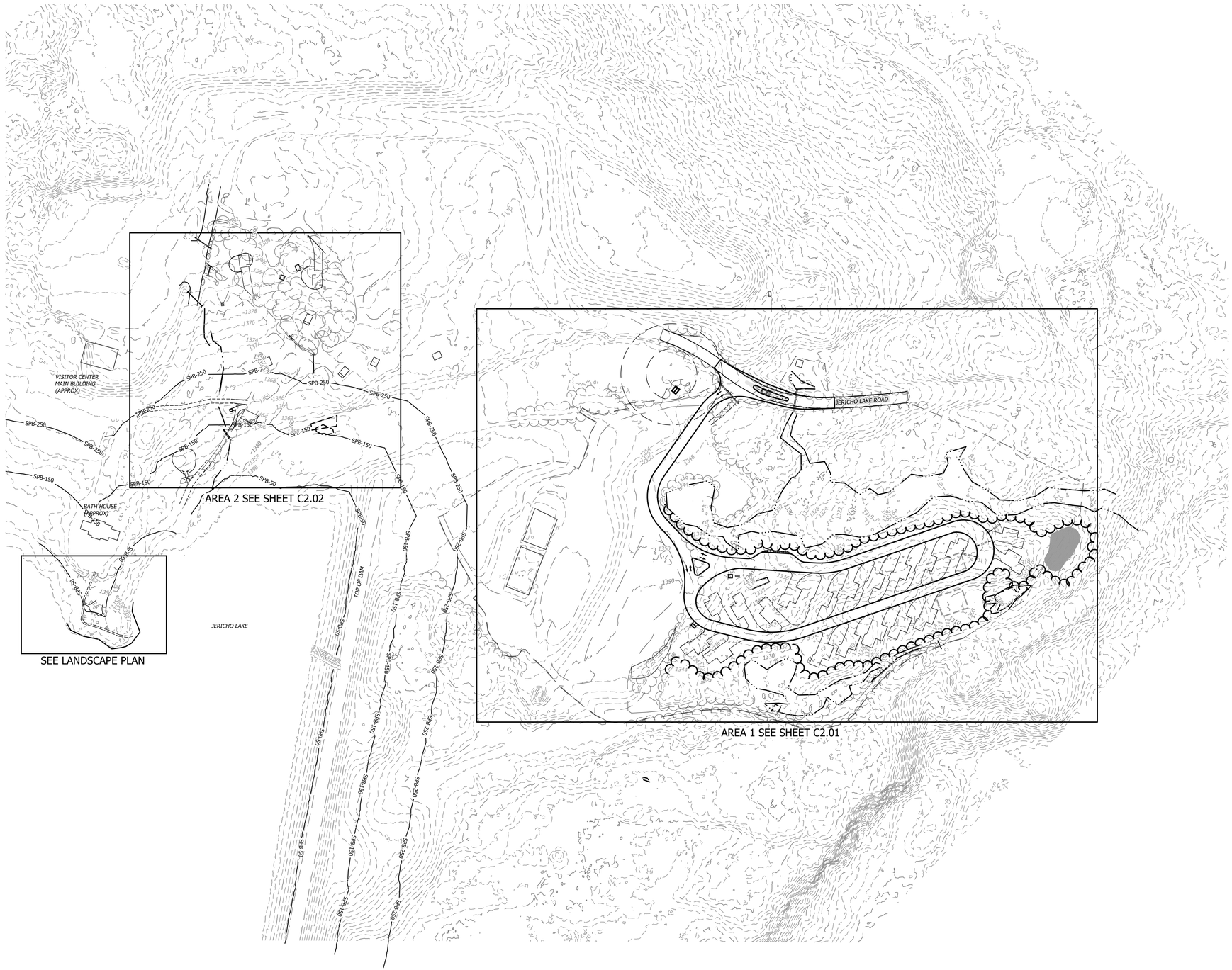
EXISTING CONDITIONS AREA 3

Sheet Number:

C1.03

Project Number: 23045001

File: 220838-jericho-x-site 100p.dwg



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CONTRACT SET

Graphic Scale
0 50 100 200

North

Scale: 1" = 100'

Date: June 13, 2024

Drawn By: DW

Checked By: RH

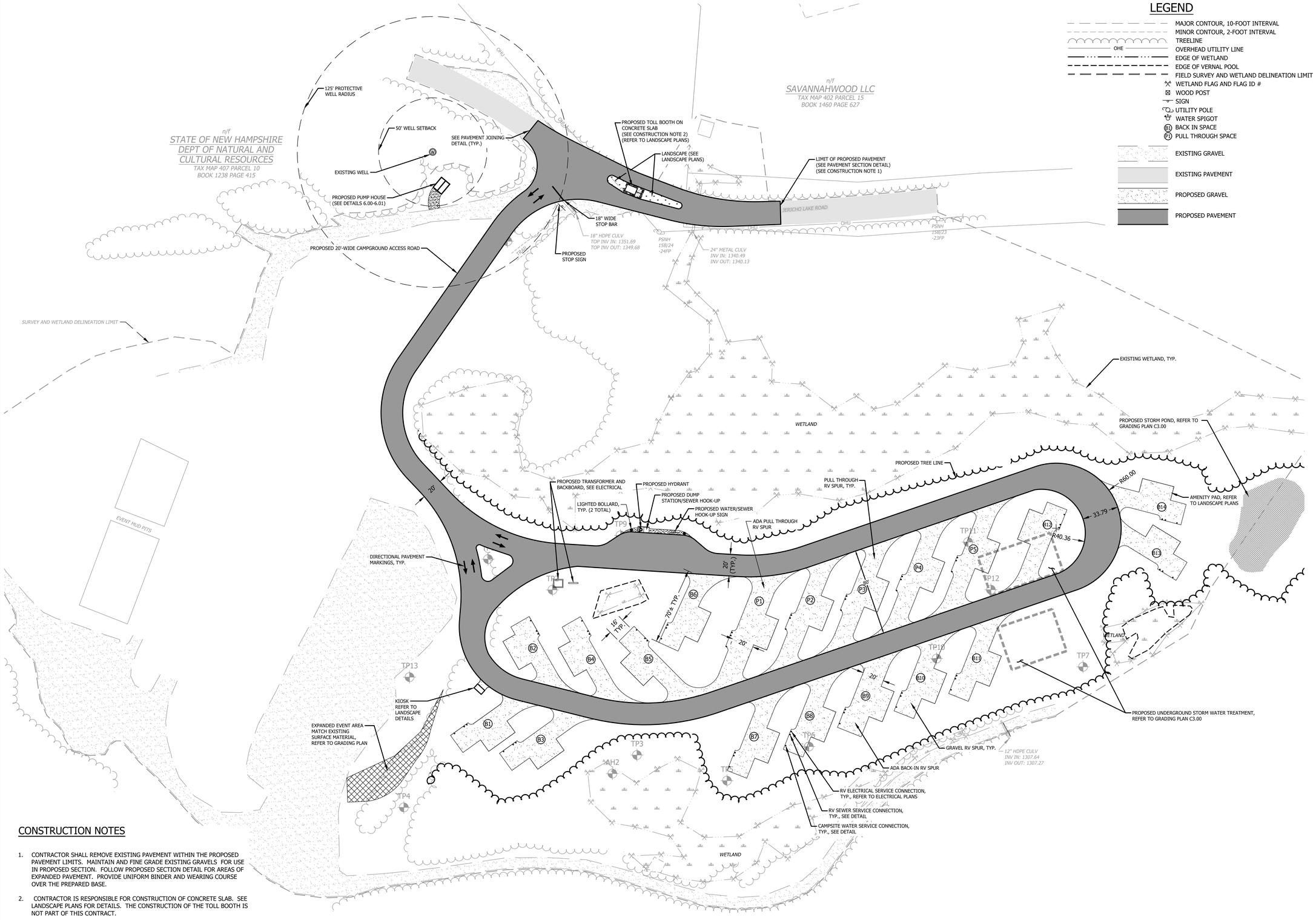
Issues:

No.	Description	Date

Title
OVERALL SITE PLAN

Sheet Number:
C2.00

Project Number: 23045001
File: 220838-jericho-x-site 100p.dwg



CONSTRUCTION NOTES

1. CONTRACTOR SHALL REMOVE EXISTING PAVEMENT WITHIN THE PROPOSED PAVEMENT LIMITS. MAINTAIN AND FINE GRADE EXISTING GRAVELS FOR USE IN PROPOSED SECTION. FOLLOW PROPOSED SECTION DETAIL FOR AREAS OF EXPANDED PAVEMENT. PROVIDE UNIFORM BINDER AND WEARING COURSE OVER THE PREPARED BASE.
2. CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION OF CONCRETE SLAB. SEE LANDSCAPE PLANS FOR DETAILS. THE CONSTRUCTION OF THE TOLL BOOTH IS NOT PART OF THIS CONTRACT.

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CONTRACT SET

Graphic Scale
0 20 40 80

North

Scale: 1" = 40'

Date: June 13, 2024

Drawn By: DW

Checked By: RH

Issues:

No.	Description	Date

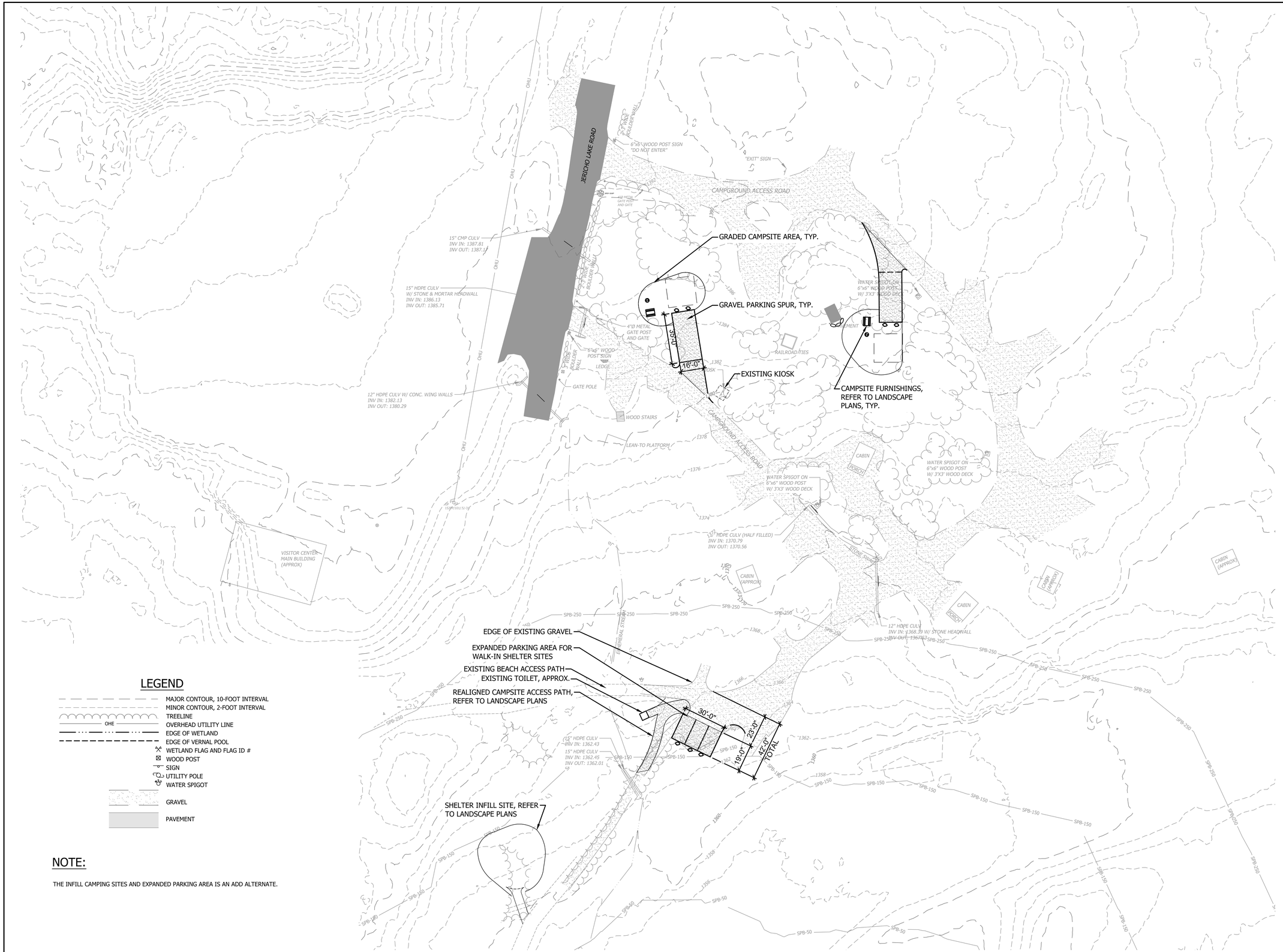
Title

SITE PLAN AREA 1

Sheet Number:

C2.01

Project Number: 23045001
File: 220838-jericho-x-site 100p.dwg



LEGEND

- MAJOR CONTOUR, 10-FOOT INTERVAL
- MINOR CONTOUR, 2-FOOT INTERVAL
- TREELINE
- OHE — OVERHEAD UTILITY LINE
- EDGE OF WETLAND
- EDGE OF VERNAL POOL
- WETLAND FLAG AND FLAG ID #
- WOOD POST
- SIGN
- UTILITY POLE
- WATER SPIGOT
- GRAVEL
- PAVEMENT

NOTE:

THE INFILL CAMPING SITES AND EXPANDED PARKING AREA IS AN ADD ALTERNATE.

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Graphic Scale
0 15 30 60

North

Scale: 1" = 30'

Date: June 13, 2024

Drawn By: DW

Checked By: RH

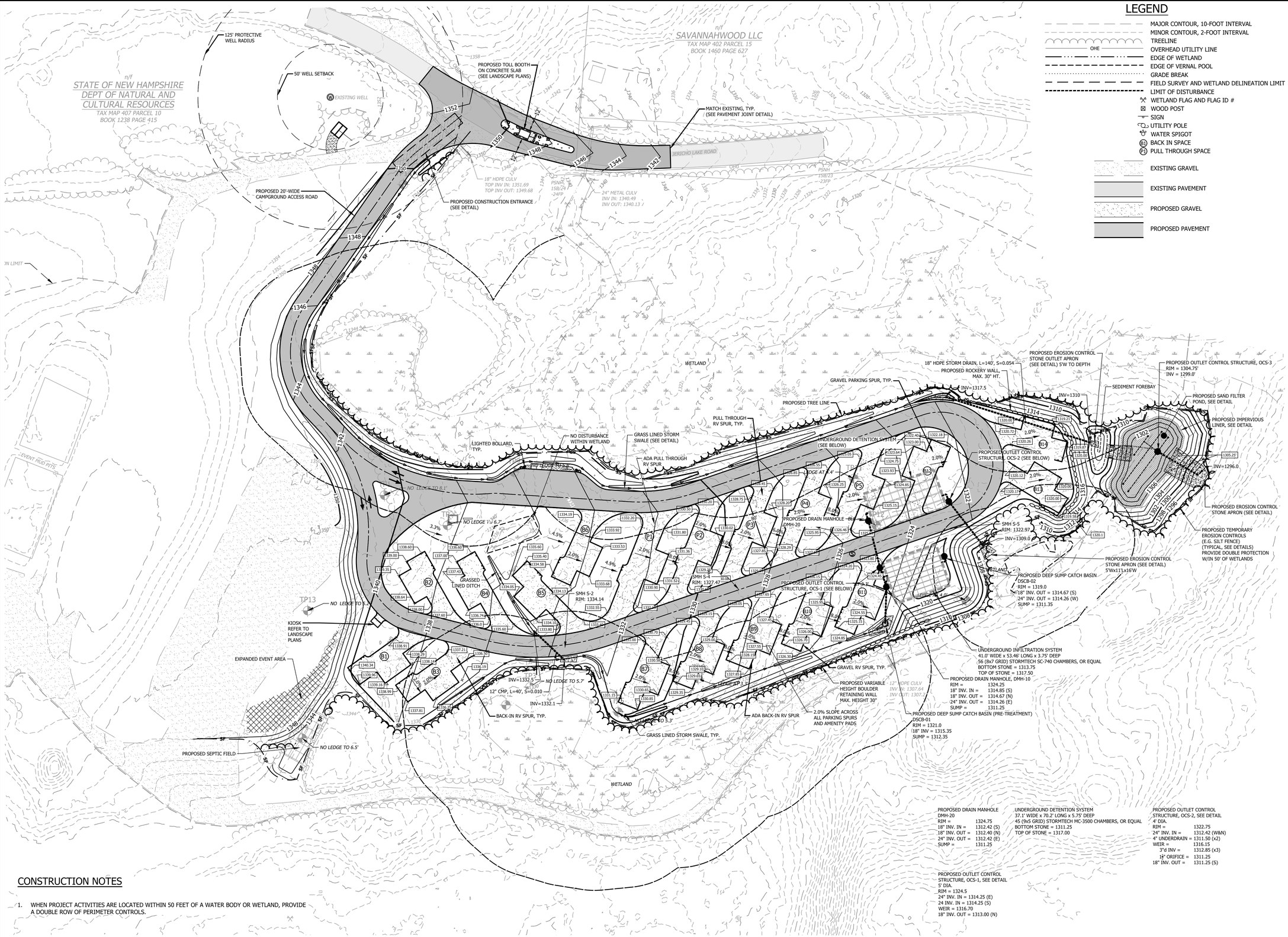
Issues:

No.	Description	Date

Title
SITE PLAN
AREA 2

Sheet Number:
C2.02

Project Number: 23045001
File: 220838-jericho-x-site 100p.dwg



LEGEND

- MAJOR CONTOUR, 10-FOOT INTERVAL
- MINOR CONTOUR, 2-FOOT INTERVAL
- TREELINE
- OHE — OVERHEAD UTILITY LINE
- EDGE OF WETLAND
- EDGE OF VERNAL POOL
- GRADE BREAK
- FIELD SURVEY AND WETLAND DELINEATION LIMIT
- LIMIT OF DISTURBANCE
- WETLAND FLAG AND FLAG ID #
- WOOD POST
- SIGN
- UTILITY POLE
- WATER SPIGOT
- BACK IN SPACE
- PULL THROUGH SPACE
- EXISTING GRAVEL
- EXISTING PAVEMENT
- PROPOSED GRAVEL
- PROPOSED PAVEMENT

CONSTRUCTION NOTES

1. WHEN PROJECT ACTIVITIES ARE LOCATED WITHIN 50 FEET OF A WATER BODY OR WETLAND, PROVIDE A DOUBLE ROW OF PERIMETER CONTROLS.

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CONTRACT SET

Graphic Scale: 0 20 40 80

North

Scale: 1" = 40'

Date: June 13, 2024

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Checked By: RH

Issues:

No.	Description	Date

Title

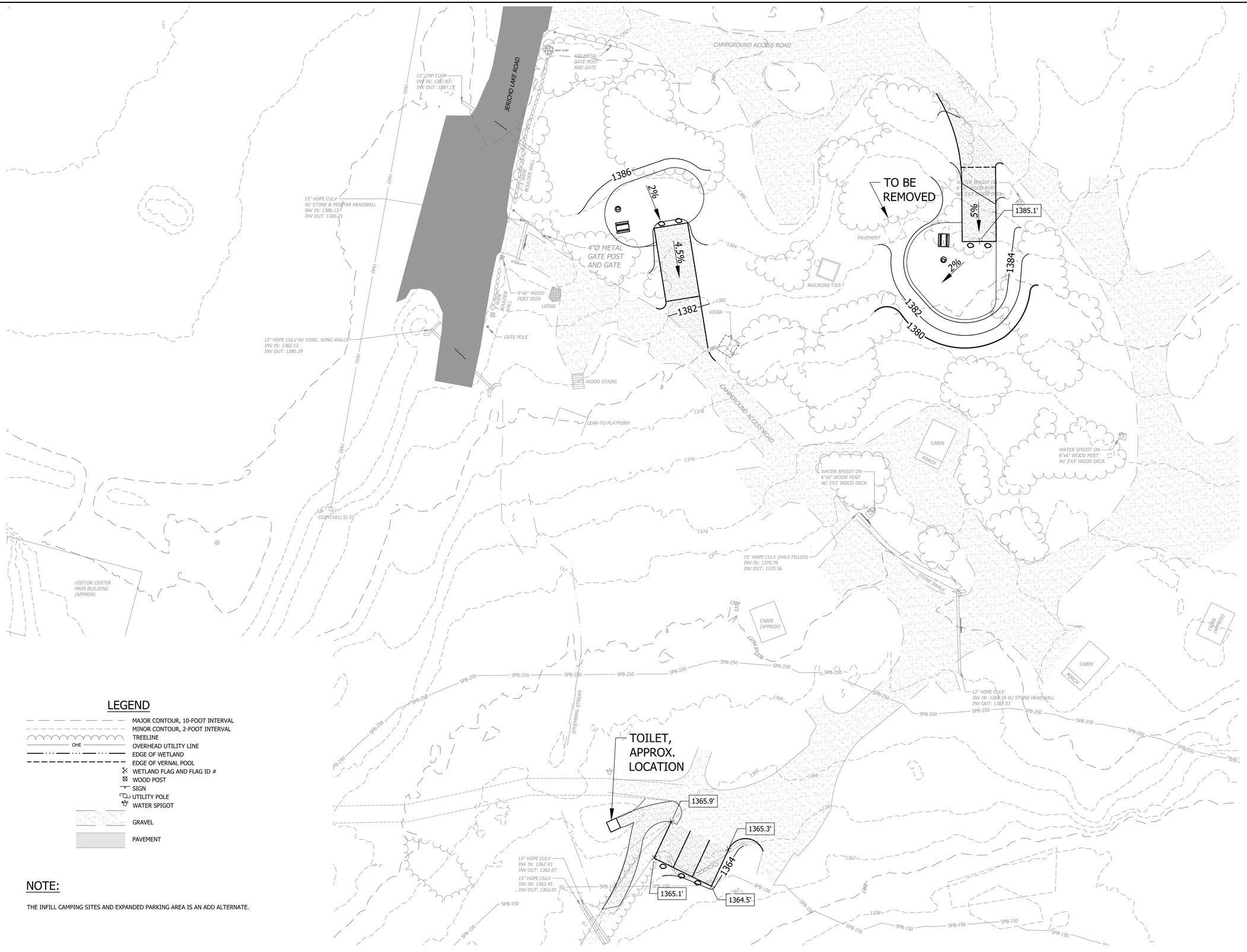
GRADING PLAN AREA 1

Sheet Number:

C3.00

Project Number: 23045001

File: 220838-jericho-100%.dwg



LEGEND

- MAJOR CONTOUR, 10-FOOT INTERVAL
- MINOR CONTOUR, 2-FOOT INTERVAL
- TREELINE
- OHE — OVERHEAD UTILITY LINE
- EDGE OF WETLAND
- EDGE OF VERNAL POOL
- WETLAND FLAG AND FLAG ID #
- WOOD POST
- SIGN
- UTILITY POLE
- WATER SPIGOT
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NOTE:

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0 10 20 40

North

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Date: June 13, 2024

Drawn By: DW

Checked By: RH

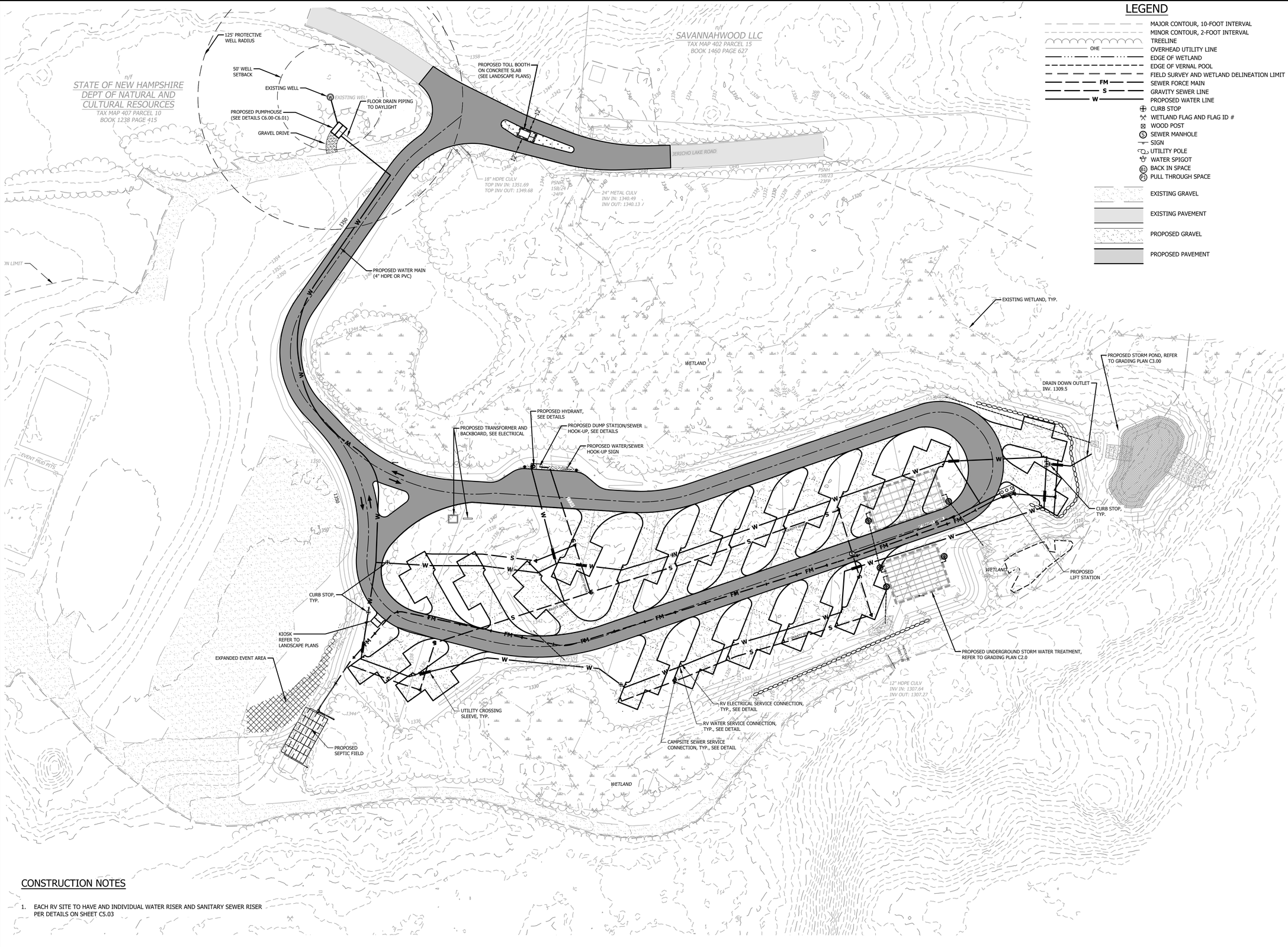
Issues:

No.	Description	Date
1	Name	00/00/00

Title
GRADING PLAN AREA 2

Sheet Number:
C3.01

Project Number: 23045001
File: 220838-jericho-x-site 100p.dwg



CONSTRUCTION NOTES

1. EACH RV SITE TO HAVE AND INDIVIDUAL WATER RISER AND SANITARY SEWER RISER PER DETAILS ON SHEET C5.03

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Issue

CONTRACT SET

Graphic Scale: 0 20 40 80

North

Scale: 1" = 40'

Date: June 13, 2024

Drawn By: DW

Checked By: RH

Issues:

No.	Description	Date

Title

UTILITY PLAN AREA 1

Sheet Number:

C4.00

Project Number: 23045001

File: 220838-jericho-100%.dwg

TEMPORARY 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 PRACTICAL.

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_2O_5), 100 LBS. PER ACRE OR 2.2 LBS. PER 1,000 SQ. FT.
-POTASH (K_2O), 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 5-10-10).

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:
SEE LANDSCAPE PLANS AND SPECIFICATIONS.

D. 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.

E. 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 15T 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.

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

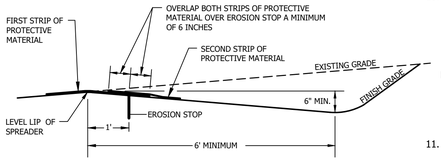
COLD WEATHER SITE STABILIZATION REQUIREMENTS

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:

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.
8. 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.

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

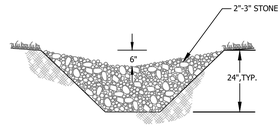
NO SCALE

SOURCE: ROCKINGHAM COUNTY CONSERVATION SERVICE

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.

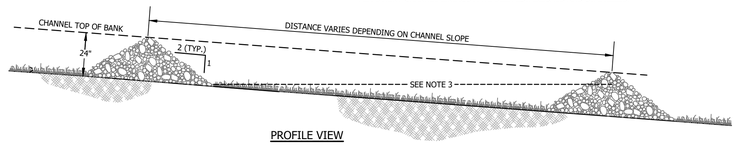
    AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
    A) BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
    B) A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
    C) A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED; OR
    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.



SECTION VIEW

NOTES

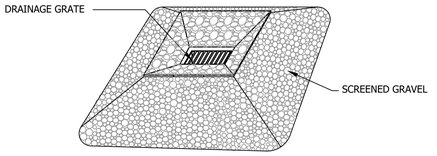
1. CONSTRUCT ROCK CHECK DAMS WHERE INDICATED ON THE PLANS OR AS NECESSARY.
2. CONSTRUCT SPILLWAY IN CENTER OF ROCK CHECK DAM 6" BELOW TOP OF CHANNEL.
3. THE MAXIMUM SPACING BETWEEN THE CHECK DAMS SHOULD BE SUCH THAT THE TOE OF THE UPSTREAM CHECK DAM IS AT THE SAME ELEVATION AS THE SPILLWAY ELEVATION OF THE DOWNSTREAM CHECK DAM, THIS WILL VARY DEPENDING ON THE SLOPE OF THE CHANNEL.
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.



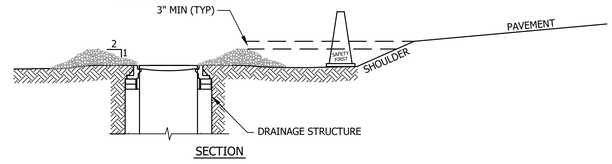
PROFILE VIEW

ROCK CHECK DAM DETAIL

NO SCALE



PERSPECTIVE VIEW



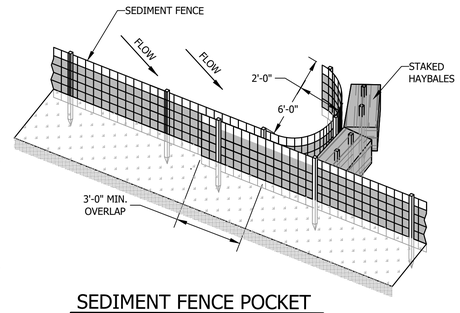
SECTION

MATERIALS SPECIFICATIONS:
1. SCREENED GRAVEL: UNIFORMLY GRADED 1" TO 4" DIA. STONE.

CONSTRUCTION SPECIFICATIONS:
1. INSTALL GRAVEL INLET PROTECTION WHERE INDICATED OR WARRANTED.
2. FOR ALL INSTALLATIONS WHERE INLET PROTECTION IS WITHIN 8' OF EDGE OF PAVEMENT, A ROADWAY CONE SHALL BE USED BETWEEN CATCH BASIN AND SHOULDER.
3. ENSURE CREST OF GRAVEL PLACED AROUND CATCH BASIN IS AT LEAST 3" BELOW ELEVATION OF EDGE OF PAVEMENT.

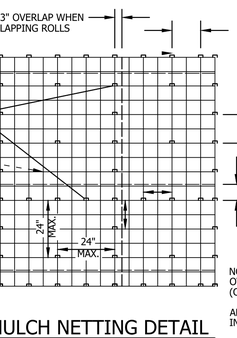
CATCH BASIN INLET PROTECTION DETAIL

NO SCALE



SEDIMENT FENCE POCKET

NO SCALE



MULCH NETTING DETAIL

SOURCE: USDA SOIL CONSERVATION SERVICE
NO SCALE

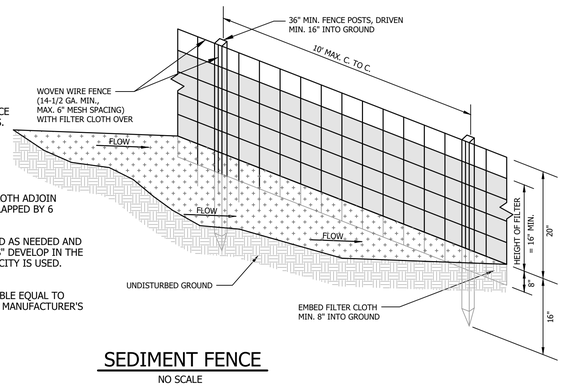
WILDLIFE PROTECTION NOTES

(ENV-WQ 1504.17)

1. ALL OBSERVATIONS OF THREATENED OR ENDANGERED SPECIES SHALL BE REPORTED IMMEDIATELY TO THE NEW HAMPSHIRE FISH AND GAME DEPARTMENT NONGAME AND ENDANGERED WILDLIFE ENVIRONMENTAL REVIEW PROGRAM BY PHONE AT 603-271-2461 AND BY EMAIL AT NHFGREVIEW@WILDLIFE.NH.GOV. EMAIL SUBJECT LINE: NHB23-3588, JERICHO MOUNTAIN STATE PARK CAMPGROUND, WILDLIFE SPECIES OBSERVATION.
2. PHOTOGRAPHS OF THE OBSERVED SPECIES AND NEARBY ELEMENTS OF HABITAT OR AREAS OF LAND DISTURBANCE SHALL BE PROVIDED TO NHF&G IN DIGITAL FORMAT FOR VERIFICATION AS FEASIBLE;
3. IN THE EVENT A THREATENED OR ENDANGERED SPECIES IS OBSERVED ON THE PROJECT SITE DURING THE TERM OF THE PERMIT, THE SPECIES SHALL NOT BE DISTURBED, HANDLED, OR HARMED IN ANY WAY PRIOR TO CONSULTATION WITH NHF&G AND IMPLEMENTATION OF CORRECTIVE ACTIONS RECOMMENDED BY NHF&G, IF ANY, TO ASSURE THE PROJECT DOES NOT APPRECIABLY JEOPARDIZE THE CONTINUED EXISTENCE OF THREATENED AND ENDANGERED SPECIES AS DEFINED IN FIS 1002.04
4. THE NHF&G, INCLUDING ITS EMPLOYEES AND AUTHORIZED AGENTS, SHALL HAVE ACCESS TO THE PROPERTY DURING THE TERM OF THE PERMIT.

CONSTRUCTION NOTES FOR SEDIMENT FENCE

1. WOVEN WIRE FENCE, IF REQUIRED, TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP, MID SECTION, AND BOTTOM.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6 INCHES, FOLDED AND STAPLED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SEDIMENT FENCE, OR 50% OF CAPACITY IS USED.
5. 12" DIAMETER FILTREXX SILTSOXX SHALL BE CONSIDERED AN ACCEPTABLE EQUAL TO SEDIMENT FENCE IF INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.



SEDIMENT FENCE

NO SCALE

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Civil and Structural Engineering
Land Surveying and Environmental Consulting
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STATE OF NEW HAMPSHIRE – WILLIAM T. DAVIS No. 11913 LICENSED PROFESSIONAL ENGINEER

NH STATE PARKS

Campground Expansion Project PII
Jericho Mountain State Park
298 Jericho Lake Road
Berlin, NH
03570

Issue
CONTRACT SET

Graphic Scale

North

Scale: AS NOTED

Date: June 13, 2024

Drawn By: DW

Checked By: RH

Issues:

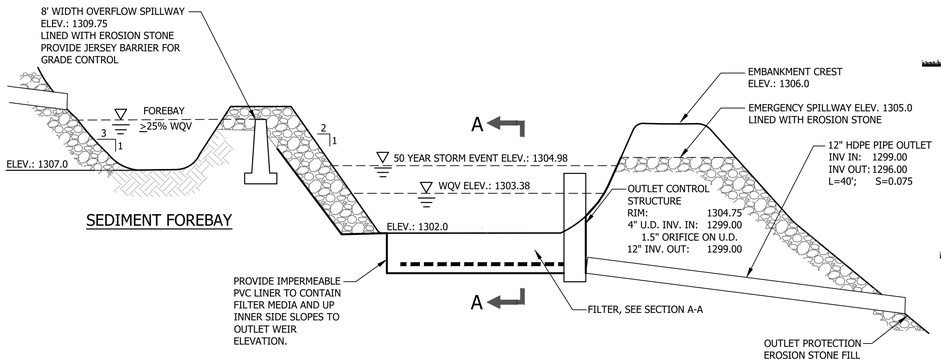
No.	Description	Date

Title
EROSION CONTROL DETAILS

Sheet Number:
C5.00

Project Number: 23045001

File: 220838-jericho-100%.dwg



FILTER POND DETAIL

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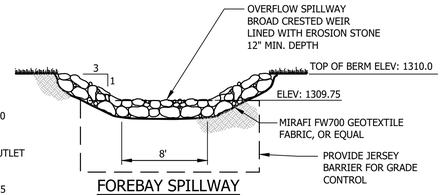
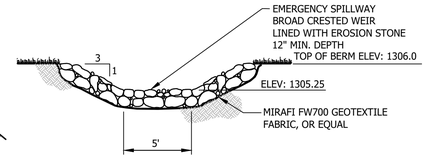
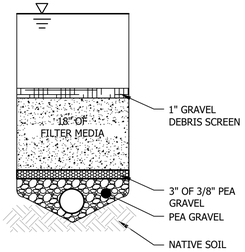


FOREBAY SPILLWAY



EMERGENCY SPILLWAY

TABLE 4.3.2, FILTER MEDIA			
COMPONENT MATERIAL	PERCENT OF MIXTURE BY VOLUME	GRADATION OF MATERIAL	
		SIEVE NO.	PERCENT BY WEIGHT PASSING STANDARD SIEVE
ASTM C-33 CONCRETE SAND	50 TO 55		
LOAMY SAND TOPSOIL, WITH FINES AS INDICATED	20 TO 30	200	15 TO 25
MODERATELY FINE SHREDDED BARK OR WOOD FIBER MULCH, WITH FINES AS INDICATED	20 TO 30	200	< 5



SECTION A-A

STONE SPECIFICATIONS

2.1 MATERIALS - STONE FILL

A. MATERIALS SHALL MEET THE REQUIREMENTS OF SECTION 585, STONE FILL, NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS (NHS) FOR THE APPROPRIATE ITEM AS INDICATED ON THE DRAWINGS.

B. STONE FOR STONE FILL SHALL BE APPROVED QUARRY STONE, OR BROKEN ROCK OF A HARD, SOUND, AND DURABLE QUALITY. THE STONES AND SPALLS SHALL BE SO GRADED AS TO PRODUCE A DENSE FILL WITH A MINIMUM OF VOIDS.

1. **CLASS A STONE** SHALL BE IRREGULAR IN SHAPE WITH APPROXIMATELY 50 % OF THE MASS HAVING A MINIMUM VOLUME OF 12 CUBIC FEET, APPROXIMATELY 30 % OF THE MASS RANGING BETWEEN 3 AND 12 CUBIC FEET, APPROXIMATELY 10 % OF THE MASS RANGING BETWEEN 1 AND 3 CUBIC FEET, AND THE REMAINDER OF THE MASS COMPOSED OF SPALLS.

2. **CLASS B STONE** SHALL BE IRREGULAR IN SHAPE WITH APPROXIMATELY 50 % OF THE MASS HAVING A MINIMUM VOLUME OF 3 CUBIC FEET, APPROXIMATELY 40 % OF THE MASS RANGING BETWEEN 1 AND 3 CUBIC FEET, AND THE REMAINDER OF THE MASS COMPOSED OF SPALLS.

3. **CLASS C STONE** SHALL CONSIST OF CLEAN, DURABLE FRAGMENTS OF LEDGE ROCK, OF UNIFORM QUALITY, REASONABLY FREE FROM THIN OR ELONGATED PIECES. THE STONE SHALL BE MADE FROM ROCK WHICH IS FREE FROM TOPSOIL AND OTHER ORGANIC MATERIAL. THE STONE SHALL BE GRADED AS FOLLOWS:

SIEVE SIZE	PERCENTAGE PASSING BY WEIGHT
12 INCH	100
4 INCH	50-90
1-1/2 INCH	0-30
3/4 INCH	0-10

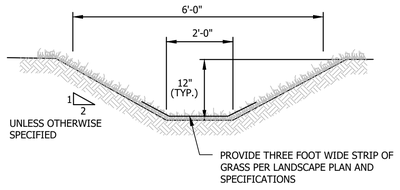
4. **CLASS D STONE** SHALL CONSIST OF CRUSHED STONE, GRAVEL, OR OTHER APPROVED INERT MATERIALS WITH SIMILAR CHARACTERISTICS OR COMBINATIONS THEREOF, HAVING HARD, STRONG, DURABLE PARTICLES, FREE FROM SURFACE COATING AND INJURIOUS AMOUNTS OF SOFT, FRIABLE, OR LAMINATED PIECES, AND FREE OF ALKALINE, ORGANIC, OR OTHER HARMFUL MATTER. THE STONE SHALL BE STANDARD STONE SIZE 467 (NO. 4 TO 1-1/2").

5. **EROSION STONE** SHALL BE IRREGULAR IN SHAPE WITH APPROXIMATELY 50% OF THE MASS HAVING A MINIMUM DIMENSION BETWEEN 6-INCHES AND 8-INCHES, APPROXIMATELY 40% OF THE MASS HAVING A MINIMUM DIMENSION BETWEEN 2-INCHES AND 6-INCHES AND THE REMAINDER OF THE MASS COMPOSED OF SPALLS.

6. **SPALLS** FOR FILLING VOIDS SHALL CONSIST OF A MIXTURE OF STONES OR ROCK FRAGMENTS AND PARTICLES WITH 95 TO 100% PASSING THE 3-INCH SIEVE AND 25 TO 70% PASSING THE NO. 4 SIEVE.

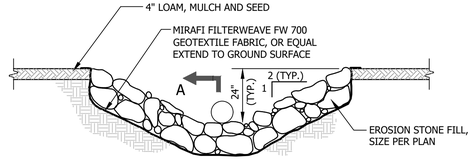
C. MINIMUM DEPTH OF STONE LAYER SHALL CONFORM TO THE FOLLOWING

STONE SIZE CLASS	MIN. DEPTH
EROSION STONE	12"
CLASS C	12"
CLASS B	18"
CLASS A	30"



GRASS LINED DITCH DETAIL

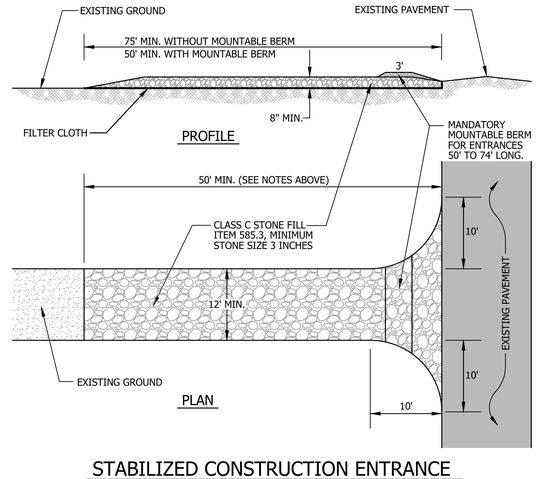
NOT TO SCALE



SECTION A-A

STONE LINED OUTLET DETAIL

NOT TO SCALE



STABILIZED CONSTRUCTION ENTRANCE

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NH STATE PARKS

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Jericho Mountain State Park
298 Jericho Lake Road
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Issue

CONTRACT SET

Graphic Scale

North

Scale: AS NOTED

Date: June 13, 2024

Drawn By: DW

Checked By: RH

Issues:

No.	Description	Date

Title

STORMWATER DETAILS

Sheet Number:

C5.01

Project Number: 23045001

File: 220838-jericho-100%.dwg

STANDARD TRENCH NOTES - WATER

1. ORDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE SHALL BE REPLACED WITH BEDDING MATERIAL. SEE ALSO NOTE 4.

2. BEDDING: SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM ORGANIC MATTER, CLAY, AND/OR LOAM MEETING ASTM C33 STONE SIZE NO. 67.

100% PASSING	1 INCH SCREEN
90-100% PASSING	¾ INCH SCREEN
20-55% PASSING	⅜ INCH SCREEN
0-10% PASSING	#4 SIEVE
0-5% PASSING	#8 SIEVE

3. SAND BLANKET: CLEAN SAND FREE FROM ORGANIC MATTER, SO GRADED THAT 100% PASSES A ½ INCH SIEVE AND NOT MORE THAN 15% PASSES A #200 SIEVE.

4. SUITABLE MATERIAL: IN ROADS, ROAD SHOULDERS, WALKWAYS, AND TRAVELED WAYS, SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED FROM THE TRENCH DURING THE COURSE OF CONSTRUCTION, AFTER EXCLUDING DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOP SOIL, WET OR SOFT MUCK, PEAT OR CLAY, EXCAVATED LEDGE MATERIAL, AND ALL ROCKS OVER SIX INCHES IN LARGEST DIMENSION, OR ANY MATERIAL NOT APPROVED BY THE ENGINEER.

   TRENCH BACKFILL IN CROSS-COUNTRY LOCATIONS SHALL BE SUITABLE MATERIAL AS DESCRIBED ABOVE, EXCEPT THAT TOP SOIL, LOAM, MUCK, OR PEAT MAY BE USED PROVIDED THAT THE COMPLETED CONSTRUCTION WILL BE STABLE AND ACCESS TO THE PIPE FOR MAINTENANCE AND RECONSTRUCTION IS PRESERVED. BACKFILL SHALL BE MOUNDED TO A HEIGHT OF SIX INCHES ABOVE THE ORIGINAL GROUND SURFACE

5. BASE COURSE FOR TRENCH REPAIR SHALL MEET THE REQUIREMENTS OF SECTION 300 OF THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION.

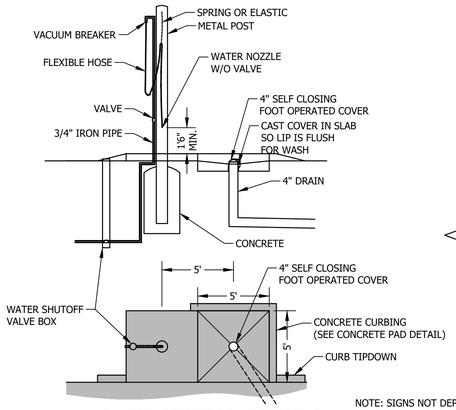
6. SHEETING: ALL TRENCH SUPPORTS SHALL CONFORM TO OSHA STANDARDS. CONTRACTOR IS RESPONSIBLE FOR OSHA COMPLIANCE AND WORKER SAFETY THROUGHOUT CONSTRUCTION.

7. TRENCH DIMENSIONS: W = MAXIMUM ALLOWABLE TRENCH WIDTH MEASURED 12 INCHES ABOVE THE PIPE. FOR PIPES 15 INCHES NOMINAL DIAMETER (D) OR LESS, W SHALL BE NO MORE THAN 36 INCHES; FOR PIPES GREATER THAN 15 INCHES NOMINAL DIAMETER, W SHALL BE 24 INCHES PLUS THE PIPE OUTSIDE DIAMETER. W SHALL ALSO BE THE PAYMENT WIDTH FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION BELOW GRADE. THE MAXIMUM ALLOWABLE TRENCH PAVEMENT PAYMENT WIDTH SHALL BE 8 FEET CENTERED OVER PIPE.

8. WATER/SEWER SEPARATION: WATER MAINS SHALL BE SEPARATED FROM SANITARY SEWER BY A MINIMUM OF 10 FEET HORIZONTALLY AND A MINIMUM OF 18 INCHES VERTICALLY, WITH THE WATER MAIN ABOVE THE SEWER.

9. PIPE COVER:
   COVER OVER WATER SHALL BE 6 FEET MINIMUM IN ALL LOCATIONS.

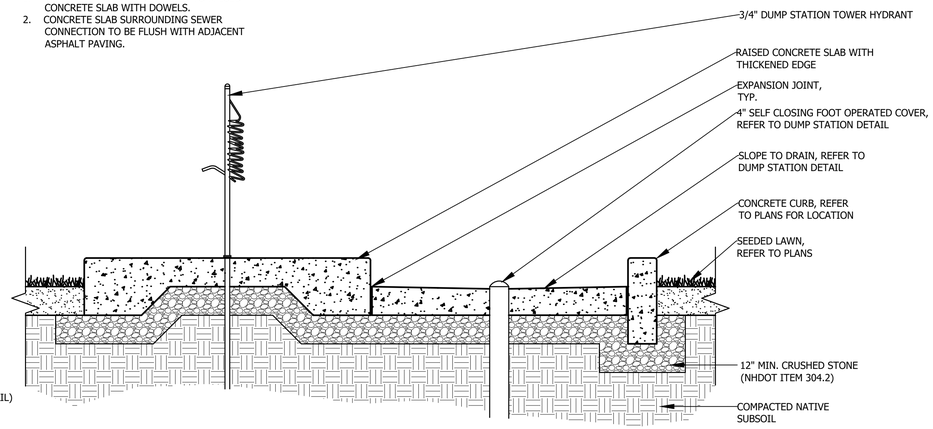
NOTE: MANUFACTURED TOWER HYDRANT, SUCH AS MURDOCK M-275-RV OR APPROVED EQUIVALENT, MAY BE SUBSTITUTED FOR SITE-CONSTRUCTED WASHOUT STATION DEPICTED BELOW



DUMP STATION DETAILS

NOT TO SCALE

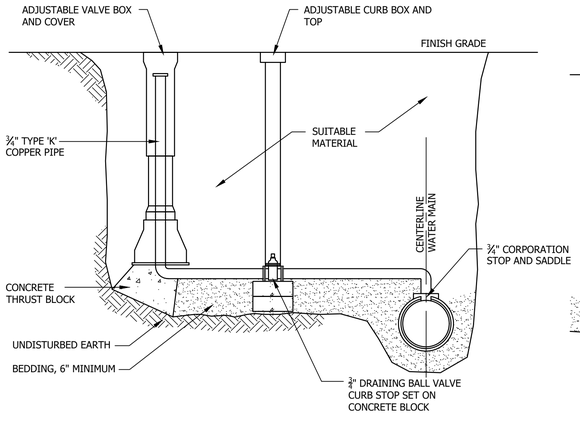
NOTES:
1. CONCRETE CURB TO BE PINNED TO RAISED CONCRETE SLAB WITH DOWELS.
2. CONCRETE SLAB SURROUNDING SEWER CONNECTION TO BE FLUSH WITH ADJACENT ASPHALT PAVING.



DUMP STATION CONCRETE PAD

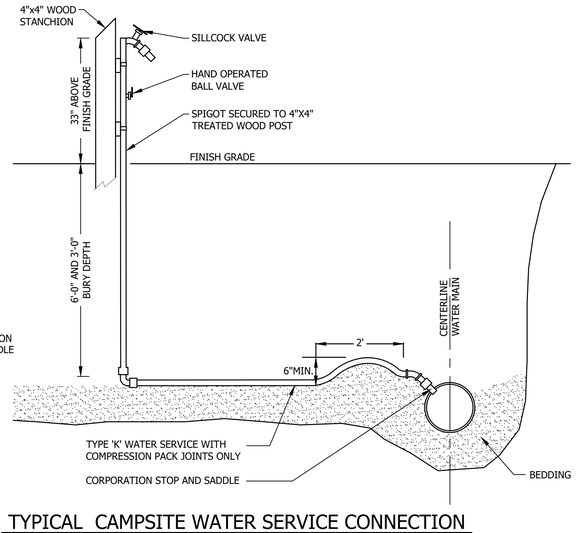
NOT TO SCALE

NOTE: SIGNS NOT DEPICTED IN THIS DETAIL
SEE SITE PLAN AND POLE MOUNTED SIGN DETAIL



AIR RELEASE DETAIL

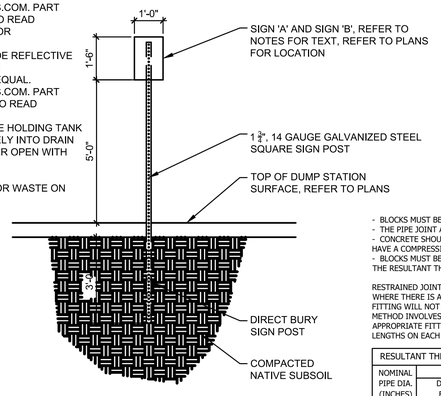
NOT TO SCALE



TYPICAL CAMPSITE WATER SERVICE CONNECTION

NOT TO SCALE

NOTES:
1. SIGN 'A' 12"X18" ENGINEER GRADE REFLECTIVE 63 MIL THICK ALUMINUM SIGN WITH SMARTSHIELD POF LAMINATE, OR EQUAL. AVAILABLE AT CAMPGROUNDSIGNS.COM. PART NO. K2-1794. SPN NO. 36XR. TEXT TO READ 'THIS WATER IS NOT TO BE USED FOR DOMESTIC/DRINKING PURPOSES.'
2. SIGN 'B' 12"X18" ENGINEER GRADE REFLECTIVE 63 MIL THICK ALUMINUM SIGN WITH SMARTSHIELD POF LAMINATE, OR EQUAL. AVAILABLE AT CAMPGROUNDSIGNS.COM. PART NO. K2-1791. SPN NO. 36WX. TEXT TO READ 'HOLDING TANK DISPOSAL.
   1. CONNECT YOUR HOSE TO THE HOLDING TANK
   2. PLACE END OF HOSE SECURELY INTO DRAIN HATCH WHILE HOLDING COVER OPEN WITH FOOT
   3. OPEN TRAILER TANK VALVE
   4. FLUSH AWAY ANY SPILLAGE OR WASTE ON CONCRETE INTO DRAIN."



POLE MOUNTED SIGNS AT DUMPSTATION

NOT TO SCALE

- BLOCKS MUST BE POURED AGAINST UNDISTURBED SOIL
- THE PIPE JOINT AND BOLTS MUST BE ACCESSIBLE.
- CONCRETE SHOULD BE CURED FOR AT LEAST 5 DAYS AND SHOULD HAVE A COMPRESSION STRENGTH OF 3,000 LBS. AT 28 DAYS.
- BLOCKS MUST BE POSITIONED TO COUNTERACT THE DIRECTION OF THE RESULTANT THRUST FORCE.

RESTRAINED JOINTS MAY BE USED FOR RESISTING THRUST FORCES WHERE THERE IS A SHORTAGE OF SPACE OR WHERE THE SOIL BEHIND A FITTING WILL NOT PROVIDE ADEQUATE SUPPORT. THIS RESTRAINING METHOD INVOLVES PLACEMENT OF THESE SPECIAL JOINTS AT APPROPRIATE FITTINGS AND FOR A PREDETERMINED NUMBER OF PIPE LENGTHS ON EACH SIDE, (MINIMUM 15 FEET).

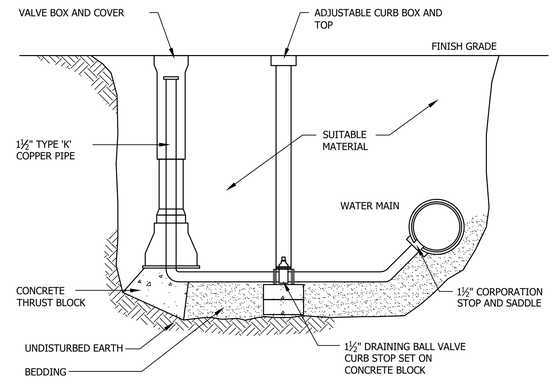
RESULTANT THRUST AT FITTINGS AT 100 PSI WATER PRESSURE					
NOMINAL PIPE DIA. (INCHES)	TOTAL THRUST (POUNDS)				
	DEAD END	90° BEND	45° BEND	22½° BEND	11¼° BEND
4	1,810	2,559	1,385	706	355
6	3,739	5,288	2,862	1,459	733
8	6,433	9,097	4,923	2,510	1,261
10	9,677	13,685	7,406	3,776	1,897
12	13,685	19,353	10,474	5,340	2,683
14	18,385	26,001	14,072	7,174	3,604
16	23,779	33,628	18,199	9,278	4,661
18	29,865	42,235	22,858	11,653	5,855
20	36,644	51,822	28,046	14,298	7,183
24	52,279	73,934	40,013	20,398	10,249

NOTE:
TO DETERMINE THRUST AT PRESSURES OTHER THAN 100 PSI, MULTIPLY THE THRUST OBTAINED IN THE TABLE BY THE RATIO OF THE PRESSURE TO 100. FOR EXAMPLE, THE THRUST ON A 12 INCH, 90° BEND AT 125 PSI IS:

$\frac{19,353 \times 125}{100}$ = 24,191 POUNDS

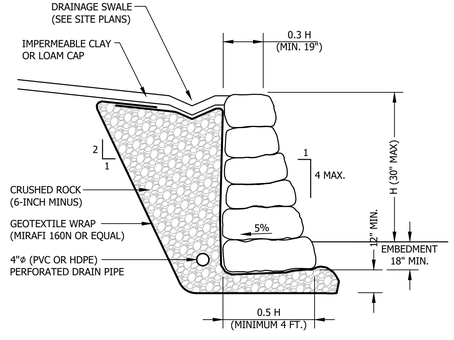
TO DETERMINE THE SIZE OF A CONCRETE THRUST BLOCK, DIVIDE THE TOTAL FORCE BY THE BEARING VALUE OF THE SOIL. THE QUOTIENT WILL BE THE SIZE OF THE BEARING AREA OF THE THRUST BLOCK IN SQUARE FEET. APPROXIMATE VALUES FOR VARIOUS TYPES OF SOIL ARE LISTED BELOW.

SOIL	BEARING LOAD (LBS./SQ. FT.)
MUCK	0
SOFT CLAY	1,000
SILT	1,500
SANDY SILT	3,000
SAND	4,000
SANDY CLAY	6,000



BLOWOFF DETAIL

NOT TO SCALE



ROCKERY WALL DETAIL

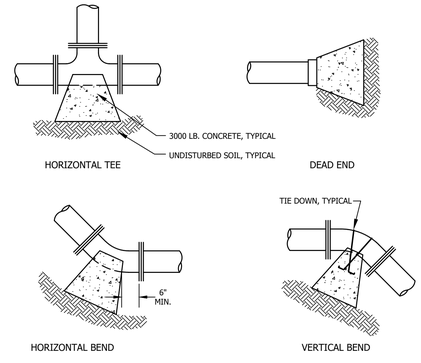
NOT TO SCALE

ROCKERY WALL NOTES

1. THE WALL DETAIL(S) DEPICTED ON THESE PLANS ARE CONCEPTUAL. SITE SPECIFIC DESIGN SHOULD BE COMPLETED BY A GEOTECHNICAL ENGINEER BASED ON SITE SPECIFIC SOIL AND GROUNDWATER CONDITIONS AT THE WALL LOCATIONS.
2. WALL CONSTRUCTION AND INSPECTION SHOULD BE COMPLETED IN ACCORDANCE WITH ROCKERY DESIGN AND CONSTRUCTION GUIDELINES, FHWA-CFL/TD-06-006, NOVEMBER 2006.
3. EXCAVATIONS SHALL BE EXTENDED TO AT LEAST 2.5 FEET BELOW FINISH GRADE TO ALLOW FOR WALL EMBEDMENT AND LEVELING COURSE. THE BASE OF THE EXCAVATION SHALL BE INCLINED BACK AWAY FROM THE FACE OF THE ROCKERY, AT 5 PERCENT.
4. ROCKS SHOULD BE PLACED IN ROWS SUCH THAT BASE ROCKS CONSIST OF LARGEST DIAMETER AND WEIGHT ROCKS AND EACH SUCCEEDING ROW CONSISTS OF SMALLER DIAMETER ROCKS. BASE ROCKS SHALL BE EQUAL TO ABOUT ½ THE WALL HEIGHT AND NOT LESS THAN 19 INCHES IN DIAMETER.
5. ROCKS SHALL BE HARD, ANGULAR AND DURABLE. THEY MUST BE ABLE TO RESIST PHYSICAL, CLIMATIC, AND CHEMICAL DECOMPOSITION. ROCKS SHOULD BE ROUGHLY RECTANGULAR, TABULAR OR CUBIC IN SHAPE. ROUNDED COBBLES OR BOULDERS MUST NOT BE USED.
6. ROCKS SHOULD BE PLACED WITH LONGEST DIMENSION PERPENDICULAR TO ROCKERY FACE. THE ROCKS SHOULD BE PLACED SUCH THAT THEY SLOPE DOWNWARD AT LEAST 5 PERCENT TOWARDS THE BACK OF THE ROCKERY.
7. THE ROCKERY FACE BATTER SHOULD BE 4V:1H OR FLATTER.
   - o EACH ROCK SHOULD BEAR ON AT LEAST TWO OTHER ROCKS.
   - o EACH ROCK SHOULD HAVE AT LEAST THREE BEARING POINTS – TWO IN FRONT AND ONE IN BACK.
   - o THE FRONT-MOST BEARING POINTS FOR EACH ROCK SHOULD BEWITHIN 150MM (6IN) OF THE AVERAGE FACE OF THE ROCKERY.
   - o THE REAR OF THE ROCKS SHOULD BE ALIGNED ALONG AN IMAGINARY VERTICAL PLANE. IF ROCKS LARGER THAN THE MINIMUM SPECIFIED BASE WIDTH (B) ARE USED, THEY CAN EXTEND BEYOND THIS IMAGINARY PLANE PROVIDED THEY DO NOT INTERFERE WITH ROCKERY DRAINAGE OR REINFORCED ZONE.
8. THERE SHOULD BE NO VERTICAL COLUMNS OF ROCK OR CONTINUOUS VERTICAL JOINTS BETWEEN MULTIPLE ROWS OF ROCKS.
9. ROCK WIDTH SHALL BE LARGE ENOUGH TO EXTEND FROM THE FRONT FACE TO THE BACK OF THE ROCKERY AT EACH LEVEL.
10. PLACE BASE, FACING AND CAP ROCKS SO THAT THEIR HEIGHT DIMENSION IS NOT GREATER THAN THEIR WIDTH. THE LONGEST DIMENSION OF THE BASE, FACING, AND CAP ROCKS IS PERPENDICULAR TO FACE OF ROCKERY.
11. VOIDS BETWEEN ROCKS SHOULD BE AVOIDED AS MUCH AS POSSIBLE. HOWEVER, IN AREAS WHERE VOIDS EXIST, THE VOIDS SHALL BE CHINKED. CHINK ROCKS SHOULD CONSIST OF SPALLS FROM THE PARENT (FACING) ROCK. CHINK ROCKS SHOULD NOT BE MOVABLE BY HAND AND SHOULD BE GROUTED IN PLACE WHERE APPROPRIATE. CHINKING ROCKS SHOULD NOT BE USED AS A MEANS OF SUPPORT FOR OVERLYING FACING ROCKS.
12. CAP ROCKS ARE THE TOP ROW OF FACING ROCKS FOR ROCKERIES. CAP ROCKS ARE TYPICALLY SMALLER AND FLATTER THAN THE OTHER FACING ROCKS USED IN THE ROCKERY. CAP ROCKS SHALL HAVE A WEIGHT OF AT LEAST 200 POUNDS. CAP ROCKS SHOULD NOT BE MOVABLE BY HAND. REGARDLESS OF SIZE, CAP ROCKS SHALL BE GROUTED IN PLACE TO REDUCE THE POTENTIAL FOR DISLODGING.
13. CRUSHED ROCK SHOULD CONSIST OF CRUSHED, WASHED, HARD, DURABLE ROCK MEETING THE FOLLOWING GRADATION REQUIREMENTS:

CRUSHED ROCK	
SIEVE SIZE	PERCENT FINER BY WEIGHT
150MM (6IN)	100
100MM (4 IN)	0.0 – 25
19.0MM (3/4 IN)	0.0 – 15
4.75MM (NO. 4)	0.0 – 5.0
75MM (NO. 200)	0.0 – 2.0

14. WHERE LOOSE, SOFT, OR OTHERWISE UNSUITABLE FOUNDATION SOIL CONDITIONS ARE ENCOUNTERED, CONTACT THE ENGINEER FOR SUPPLEMENTAL RECOMMENDATIONS.
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 FLOWS.
16. STABILITY OF TEMPORARY CUT SLOPES IS THE RESPONSIBILITY OF THE CONTRACTOR.
17. DO NOT CONSTRUCT ROCKERIES OR SLOPES EXCEEDING THE HEIGHTS SHOWN ON THE PLAN.



THRUST BLOCK NOTES & DETAILS

NOT TO SCALE

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NH STATE PARKS

Campground Expansion Project PII
Jericho Mountain State Park
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03570

Issue

CONTRACT SET

Graphic Scale

North

Scale: AS NOTED

Date: June 13, 2024

Drawn By: DW

Checked By: RH

Issues:

No.	Description	Date

Title

WATER DETAILS

Sheet Number:

C5.02

Project Number: 23045001

File: 220838-jericho-100%.dwg

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SEWER NOTES

1. GENERAL

   CONSTRUCTION OF ALL COMPONENTS OF THE SANITARY SEWER SYSTEM SHALL CONFORM TO THE MOST CURRENT VERSION OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES ENV-WQ 700 AND TECHNICAL SPECIFICATIONS ENTITLED "33 31 13 SANITARY SEWER MANHOLES".

2. TYPES OF SEWERS

   A. THERE SHALL BE NO CONNECTION BETWEEN SANITARY SEWERS AND STORM SEWERS.
   B. RUNOFF FROM ROOFS, STREETS, AND OTHER AREAS AND GROUNDWATER FROM FOUNDATION DRAINS, SUMP PUMPS, OR OTHER SUBSURFACE DRAINS SHALL BE EXCLUDED FROM SANITARY SEWERS.

3. SEWER SIZE AND COVER

   A. MINIMUM PIPE SIZE FOR GRAVITY SEWER MAINS SHALL BE 8 INCHES.
   B. MINIMUM PIPE SIZE FOR GRAVITY SEWER SERVICES SHALL BE 4 INCHES.
   C. MINIMUM PIPE SIZE FOR FORCE MAIN SEWER SERVICES SHALL BE 2 INCHES.
   D. SANITARY SEWERS SHALL HAVE 6 FEET MINIMUM COVER IN ALL ROADWAY LOCATIONS AND 4 FEET MINIMUM COVER IN ALL CROSS-COUNTRY LOCATIONS.

4. PIPE AND FITTING MATERIALS:

A. DUCTILE IRON PIPE

   DUCTILE IRON PIPE AND FITTINGS SHALL CONFORM TO THE FOLLOWING STANDARDS OF THE AMERICAN WATER WORKS ASSOCIATION:
   (1) AWWA C151 FOR DUCTILE IRON PIPE, CENTRIFUGALLY CAST IN METAL OR SAND LINED MOLDS, FOR WATER OR OTHER LIQUIDS;
   (2) AWWA C150 FOR THICKNESS DESIGN OF DUCTILE IRON PIPE AND WITH ASTM A 536 IRON CASTINGS; AND
   (3) JOINTS SHALL BE MECHANICAL TYPE, PUSH-ON TYPE, OR BALL-AND-SOCKET TYPE;

B. PVC (POLY VINYL CHLORIDE) PIPE

   PVC PIPE AND FITTINGS SHALL BE APPROVED FOR SEWAGE SERVICE AND CONFORM TO THE FOLLOWING:
   (1) PVC PIPE USED FOR GRAVITY SEWERS SHALL BE TYPE SDR 35 CONFORMING TO ASTM D3034;
   (2) PVC PIPE USED FOR FORCE MAINS SHALL BE TYPE SDR 26 CONFORMING TO ASTM D2241 OR ASTM D1785;
   (3) JOINTS SHALL BE PUSH-ON, BELL-AND-SPIGOT TYPE HAVING OIL RESISTANT COMPRESSION RINGS OF ELASTOMERIC MATERIAL CONFORMING TO ASTM D3212.

5. BEDDING

   PIPE BEDDING SHALL BE SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM ORGANIC MATTER, CLAY, AND/OR LOAM MEETING ASTM C33 STONE SIZE NO. 67. BEDDING SHALL EXTEND FROM THE SPRING LINE OF THE PIPE TO A MINIMUM DEPTH OF 6" BELOW THE BOTTOM OF THE PIPE OUTSIDE SURFACE.

100% PASSING	1 INCH SCREEN
90-100% PASSING	¾ INCH SCREEN
20-55% PASSING	⅜ INCH SCREEN
0-10% PASSING	#4 SIEVE
0-5% PASSING	#8 SIEVE

6. MANHOLES

   A. PRECAST CONCRETE BARREL SECTIONS, CONES, AND BASES SHALL CONFORM TO ASTM C478.
   B. MANHOLES SHALL BE DESIGNED FOR H-20 LOADING.
   C. HORIZONTAL JOINTS BETWEEN BARREL SECTIONS SHALL BE OF AN OVERLAPPING TYPE WHICH SHALL DEPEND UPON A DOUBLE ROW OF ELASTOMERIC OR MASTIC-LIKE SEALANT FOR WATER TIGHTNESS.
   D. PIPE TO MANHOLE JOINTS SHALL BE AS FOLLOWS:
      (1) ELASTOMERIC, RUBBER SLEEVE WITH WATERTIGHT JOINTS AT THE MANHOLE OPENING AND PIPE SURFACES;
      (2) CAST INTO THE WALL OR SECURED WITH STAINLESS STEEL CLAMPS;
      (3) ELASTOMERIC SEALING RING CAST IN THE MANHOLE OPENING WITH SEAL FORMED ON THE SURFACE OF THE PIPE BY COMPRESSION OF THE RING; AND
      (4) NON-SHRINK GROUTED JOINTS WHERE WATERTIGHT BONDING TO THE MANHOLE AND PIPE CAN BE OBTAINED.
   E. MANHOLES SHALL HAVE A BRICK PAVED SHELF AND INVERT CONSTRUCTED TO CONFORM TO THE SIZE OF PIPE AND FLOW. AT CHANGES IN DIRECTION, THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE SEWER PIPES. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE CROWN AND SLOPED TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL. UNDERLAYMENT OF INVERT AND SHELF SHALL CONSIST OF BRICK MASONRY. INVERTS AND SHELVES SHALL BE PLACED AFTER TESTING.

7. PROTECTION OF WATER SUPPLIES

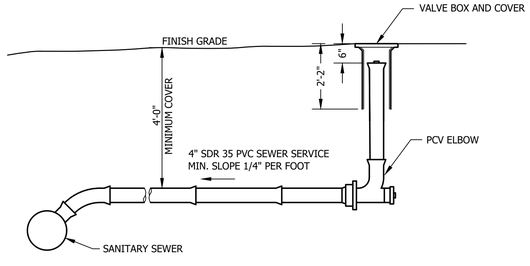
   A. THERE SHALL BE NO PHYSICAL CONNECTION BETWEEN A PUBLIC OR PRIVATE WATER SUPPLY SYSTEM AND A SEWER OR SEWER APPURTENANCE WHICH WOULD PERMIT THE PASSAGE OF SEWAGE OR POLLUTED WATER INTO THE POTABLE SUPPLY. NO WATER PIPE SHALL PASS THROUGH OR COME IN CONTACT WITH ANY PART OF A SEWER OR SEWER MANHOLE.

   B. NO SEWER SHALL BE LOCATED WITHIN THE WELL PROTECTIVE RADII ESTABLISHED IN ENV-WS 300 FOR ANY PUBLIC WATER SUPPLY WELLS OR WITHIN 100 FEET OF ANY PRIVATE WATER SUPPLY WELL.

   C. SEWERS SHALL BE LOCATED AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN.

   D. A DEVIATION FROM THE SEPARATION REQUIREMENTS OF (B) OR (C) ABOVE SHALL BE ALLOWED WHERE NECESSARY TO AVOID CONFLICT WITH SUBSURFACE STRUCTURES, UTILITY CHAMBERS, AND BUILDING FOUNDATIONS, PROVIDED THAT THE SEWER IS CONSTRUCTED IN ACCORDANCE WITH THE FORCE MAIN CONSTRUCTION REQUIREMENTS SPECIFIED IN ENV-WQ 704.06.

   E. WHENEVER SEWERS MUST CROSS WATER MAINS, THE SEWER SHALL BE CONSTRUCTED AS FOLLOWS:
      (1) VERTICAL SEPARATION OF THE SEWER AND WATER MAIN SHALL BE NOT LESS THAN 18 INCHES, WITH WATER ABOVE SEWER; AND
      (2) SEWER PIPE JOINTS SHALL BE LOCATED AT LEASE 6 FEET HORIZONTALLY FROM THE WATER MAIN.



RV SEWER SERVICE CONNECTION DETAIL

NOT TO SCALE

STANDARD TRENCH NOTES - SEWER

1. ORDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE SHALL BE REPLACED WITH BEDDING MATERIAL. SEE ALSO NOTE 4.

2. BEDDING: SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM ORGANIC MATTER, CLAY, AND/OR LOAM MEETING ASTM C33 STONE SIZE NO. 67.

100% PASSING	1 INCH SCREEN
90-100% PASSING	¾ INCH SCREEN
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0-10% PASSING	#4 SIEVE
0-5% PASSING	#8 SIEVE

3. SAND BLANKET: CLEAN SAND FREE FROM ORGANIC MATTER, SO GRADED THAT 100% PASSES A ½ INCH SIEVE AND NOT MORE THAN 15% PASSES A #200 SIEVE.

4. SUITABLE MATERIAL: IN ROADS, ROAD SHOULDERS, WALKWAYS, AND TRAVELED WAYS, SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED FROM THE TRENCH DURING THE COURSE OF CONSTRUCTION, AFTER EXCLUDING DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOP SOIL, WET OR SOFT MUCK, PEAT OR CLAY, EXCAVATED LEDGE MATERIAL, AND ALL ROCKS OVER SIX INCHES IN LARGEST DIMENSION, OR ANY MATERIAL NOT APPROVED BY THE ENGINEER.

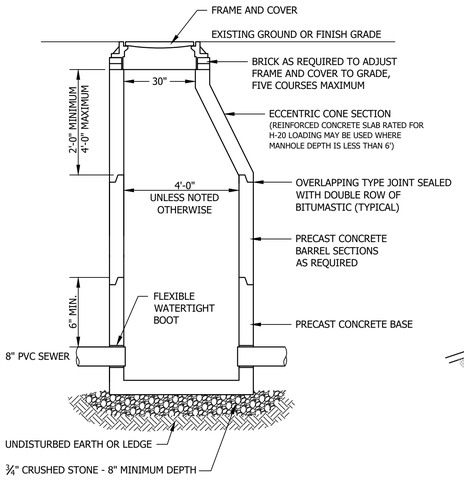
   TRENCH BACKFILL IN CROSS-COUNTRY LOCATIONS SHALL BE SUITABLE MATERIAL AS DESCRIBED ABOVE, EXCEPT THAT TOP SOIL, LOAM, MUCK, OR PEAT MAY BE USED PROVIDED THAT THE COMPLETED CONSTRUCTION WILL BE STABLE AND ACCESS TO THE PIPE FOR MAINTENANCE AND RECONSTRUCTION IS PRESERVED. BACKFILL SHALL BE MOUNDED TO A HEIGHT OF SIX INCHES ABOVE THE ORIGINAL GROUND SURFACE

5. BASE COURSE FOR TRENCH REPAIR SHALL MEET THE REQUIREMENTS OF SECTION 300 OF THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION.

6. SHEETING: ALL TRENCH SUPPORTS SHALL CONFORM TO OSHA STANDARDS. CONTRACTOR IS RESPONSIBLE FOR OSHA COMPLIANCE AND WORKER SAFETY THROUGHOUT CONSTRUCTION.

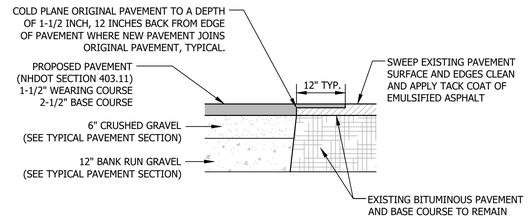
7. TRENCH DIMENSIONS: W = MAXIMUM ALLOWABLE TRENCH WIDTH MEASURED 12 INCHES ABOVE THE PIPE. FOR PIPES 15 INCHES NOMINAL DIAMETER (D) OR LESS, W SHALL BE NO MORE THAN 36 INCHES; FOR PIPES GREATER THAN 15 INCHES NOMINAL DIAMETER, W SHALL BE 24 INCHES PLUS THE PIPE OUTSIDE DIAMETER. W SHALL ALSO BE THE PAYMENT WIDTH FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION BELOW GRADE. THE MAXIMUM ALLOWABLE TRENCH PAVEMENT PAYMENT WIDTH SHALL BE 8 FEET CENTERED OVER PIPE.

8. PIPE INSULATION AT STORM DRAIN CROSSING: INSTALL 2" THICK RIGID FOAM INSULATION OVER SEWER AT STORM DRAIN CROSSINGS, EXTEND INSULATION 4 FEET EITHER SIDE OF STORM DRAIN ALONG SEWER.



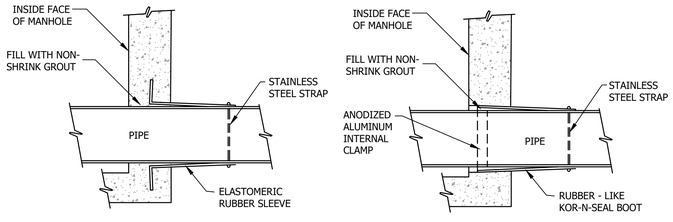
SANITARY SEWER MANHOLE DETAIL

NOT TO SCALE



PAVEMENT JOINING DETAIL

NOT TO SCALE

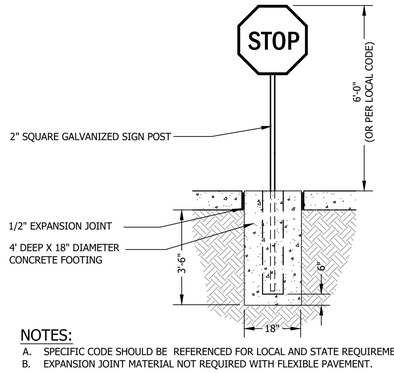


LOCK-JOINT FLEXIBLE MANHOLE SLEEVE

KOR-N-SEAL JOINT SLEEVE

JOINTING DETAILS

NOT TO SCALE

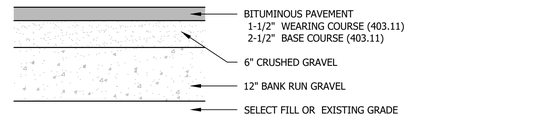


NOTES:

A. SPECIFIC CODE SHOULD BE REFERENCED FOR LOCAL AND STATE REQUIREMENTS.
B. EXPANSION JOINT MATERIAL NOT REQUIRED WITH FLEXIBLE PAVEMENT.

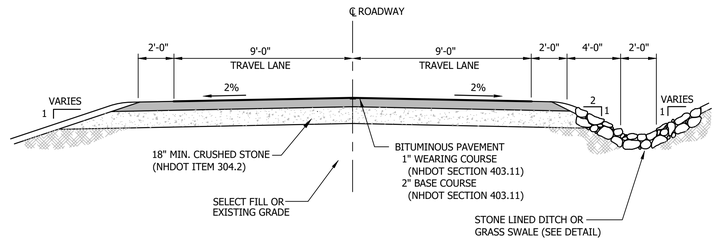
STOP SIGN DETAIL

NOT TO SCALE



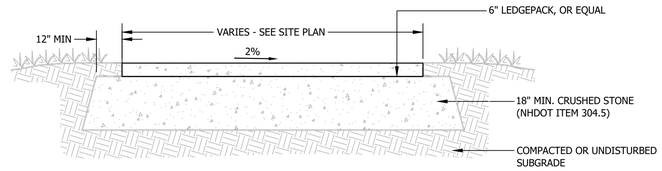
TYPICAL PAVEMENT SECTION

NOT TO SCALE



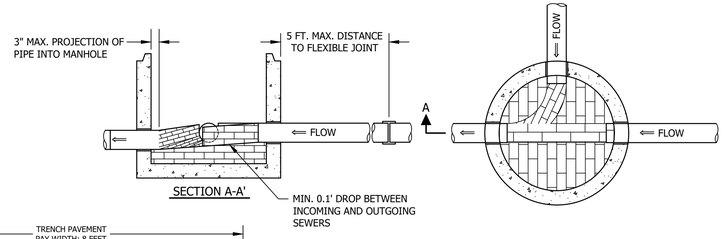
TYPICAL ROAD CROSS SECTION WITHOUT GUARD RAIL

NOT TO SCALE



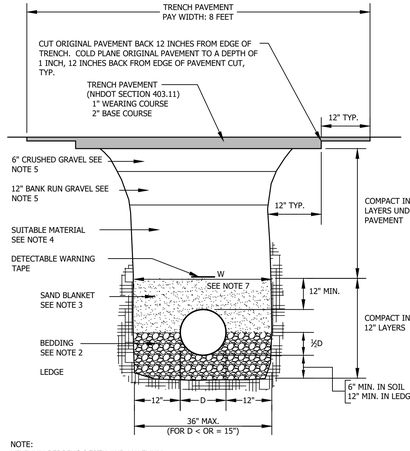
TYPICAL LEDGE PACK DETAIL - PARKING AREAS & GRAVEL DRIVES

NOT TO SCALE



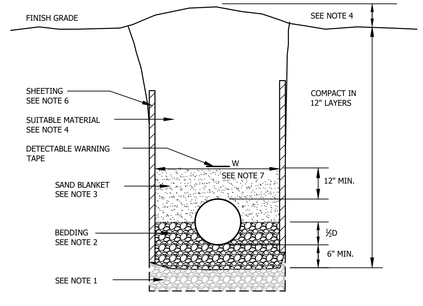
MANHOLE INVERT DETAILS

NOT TO SCALE



NOTE:
MINIMUM BEDDING DEPTH AND MAXIMUM PAYMENT LIMIT FOR LEDGE EXCAVATION = ½D (12" MINIMUM)

LEDGE/SUB PAVEMENT CONSTRUCTION



EARTH CONSTRUCTION WITH OR WITHOUT SHEETING

STANDARD TRENCH SECTIONS

NOT TO SCALE

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Issue

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Graphic Scale

North

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Date: June 13, 2024

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Title

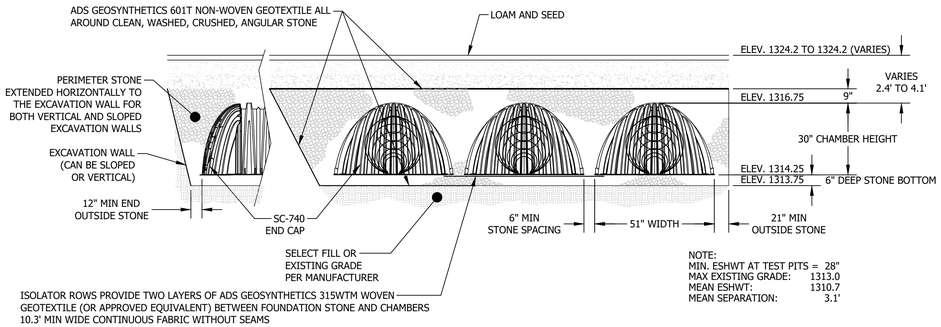
SEWER & ROAD DETAILS

Sheet Number:

C5.03

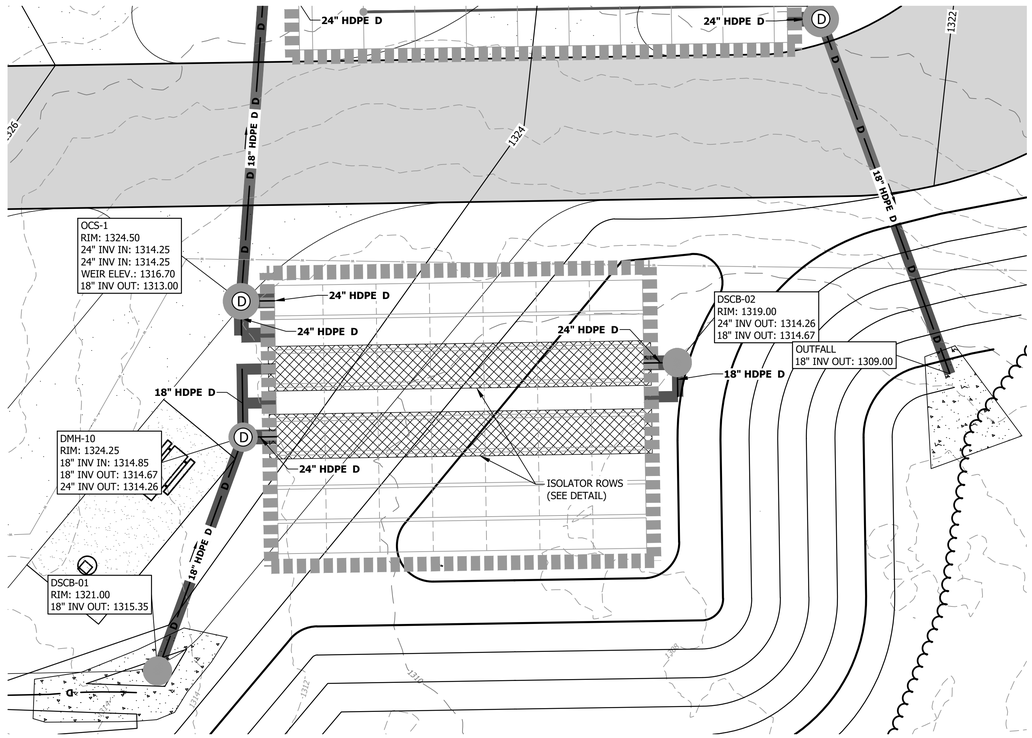
Project Number: 23045001

File: 220838-jericho-100%.dwg



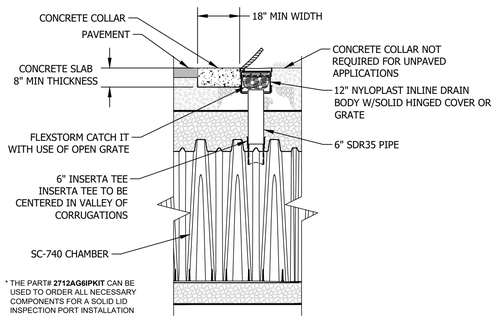
STORMTECH SC-740 CHAMBER SECTION

NOT TO SCALE



STORMWATER TREATMENT AREA PLAN

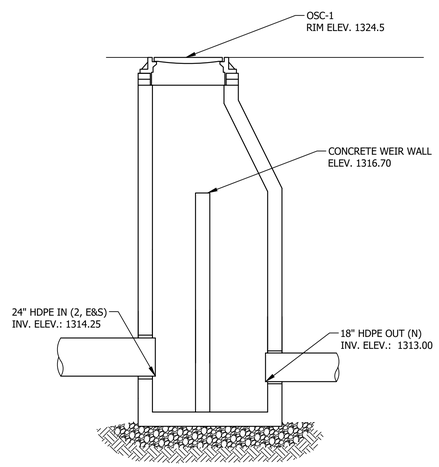
SCALE: 1" = 10'



NOTE: PROVIDE TWO INSPECTION PORTS FOR EACH ISOLATOR ROW AT APPROXIMATELY 1/3 AND 2/3 OF THE ROW LENGTH

STORMTECH SC-740 6" INSPECTION PORT

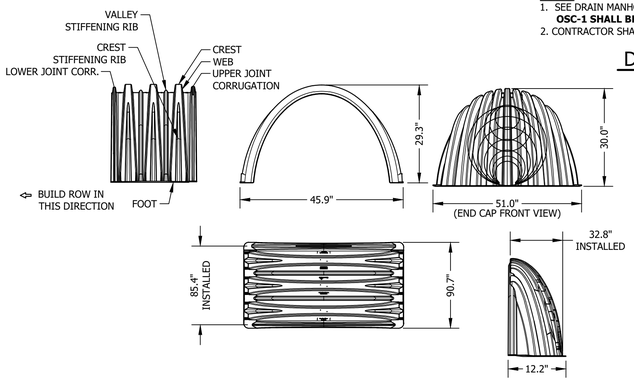
NOT TO SCALE



NOTES:
1. SEE DRAIN MANHOLE DETAIL FOR STANDARD DMH CONSTRUCTION REQUIREMENTS.
   OSC-1 SHALL BE A 5FT INNER DIAMETER STRUCTURE.
2. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS TO VERIFY DIAMETER, INVERTS, AND WEIR.

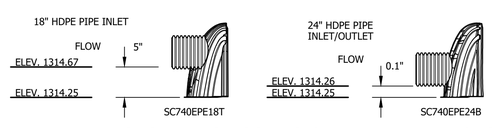
DRAIN MANHOLE OSC-1 DETAIL

NOT TO SCALE



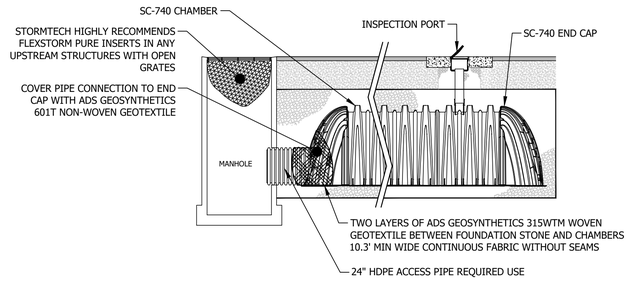
STORMTECH SC-740 CHAMBER DIMENSION

NOT TO SCALE



STORMTECH SC-740 CHAMBER INLET SECTION

NOT TO SCALE



STORMTECH SC-740 ISOLATOR ROW DETAIL

NOT TO SCALE

IMPORTANT NOTES

FOUNDATION AND EMBEDMENT STONE SHALL BE **CLEAN, WASHED, ANGULAR CRUSHED STONE**. ENGINEER SHALL INSPECT AND VERIFY MATERIAL PRIOR TO SYSTEM INSTALLATION.

THIS SYSTEM IS DESIGNED TO EXFILTRATE TO SOIL. IF SUBSURFACE CONDITIONS (INCLUDING LEDGE AND WATER TABLE) ARE FOUND TO BE DIFFERENT THAN PRESENTED ON THESE PLANS, IMMEDIATELY CEASE WORK AND CONTACT THE ENGINEER. A PVC LINER IS REQUIRED ALONG THE WALL FACE ADJACENT TO THE FILL SLOPE, BUT PROHIBITED IN ALL OTHER AREAS.

DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOFF, WATER FROM EXCAVATIONS) TO THE INFILTRATION SYSTEM.

DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION SYSTEM.

AFTER THE AREA IS EXCAVATED TO THE FINAL DESIGN ELEVATION, THE FLOOR SHOULD BE DEEPLY TILLED WITH A ROTARY TILLER OR DISC HARROW TO RESTORE INFILTRATION RATES, FOLLOWED BY A PASS WITH A LEVELING DRAG.

DO NOT PLACE INFILTRATION SYSTEMS INTO SERVICE UNTIL THE CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.

STORMTECH SC-740 CHAMBER SPECIFICATIONS

51.0" WIDE + 6.0" SPACING = 60.0" C-C ROW SPACING

56 CHAMBERS, 16 END CAPS
[7 CHAMBERS/ROW x 7.12' LONG] + [0.81' CAP LENGTH x 2] = 53.46' ROW LENGTH
+ [12.0" END STONE x 2] = 55.46' BASE LENGTH

[8 ROWS x 51.0" WIDE] + [6.0" SPACING X 7] + [21.0" SIDE STONE X 2] = 41.00' BASE WIDTH

[6.0" BASE + 30.0" CHAMBER HEIGHT + 9.0" COVER] = 3.75' FIELD HEIGHT

[56 CHAMBERS X 45.9 CF] = 2,572.6 CF CHAMBER STORAGE

8,527.0 CF FIELD - 2,572.6 CF CHAMBERS = 5,954.4CF STONE X 40.0% VOIDS = 2,381.8 CF STONE STORAGE

OVERALL
CHAMBER STORAGE + STONE STORAGE = 4,954.4 CF = 0.114AF
OVERALL STORAGE EFFICIENCY = 58.1%

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Issue

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Scale: AS NOTED

Date: June 13, 2024

Drawn By: DW

Checked By: RH

Issues:

No.	Description	Date

Title

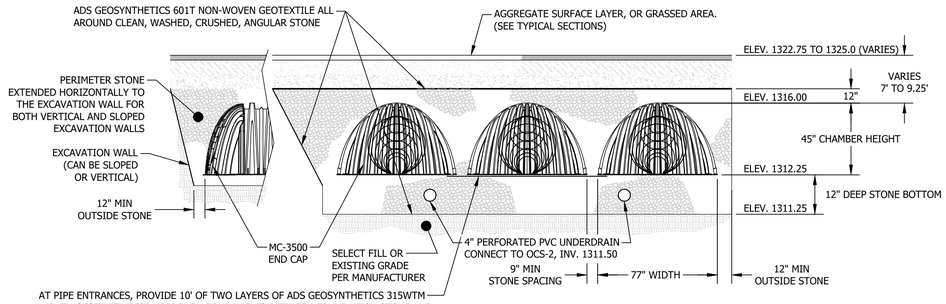
INFILTRATION SC-740 SYSTEM

Sheet Number:

C5.04

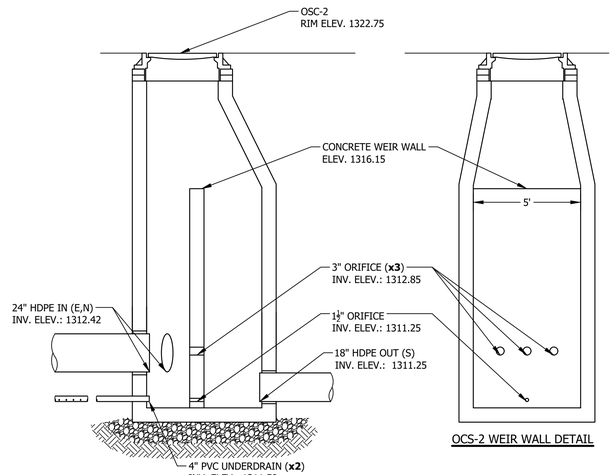
Project Number: 23045001

File: 220838-jericho-chamber-details-100%.dwg



STORMTECH MC-3500 CHAMBER SECTION

NOT TO SCALE

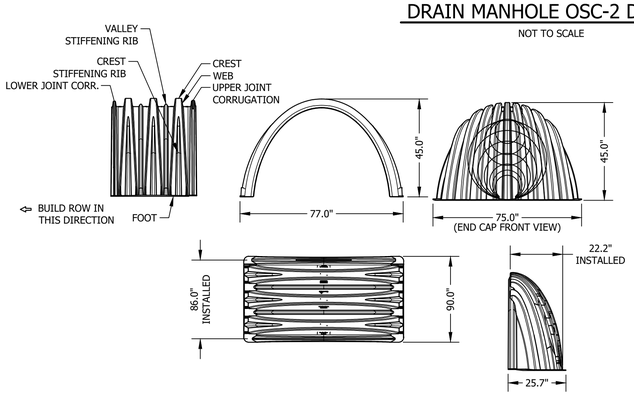


OCS-2 WEIR WALL DETAIL

NOTES:
1. SEE DRAIN MANHOLE DETAIL FOR STANDARD DMH CONSTRUCTION REQUIREMENTS.
   OCS-2 SHALL BE A 5FT INNER DIAMETER STRUCTURE.
2. NO TRASH RACK HAS BEEN SPECIFIED AS THE STRUCTURE HAS NO DIRECT CONNECTION TO UPSTREAM CONTAMINANT SOURCES.
3. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS TO VERIFY DIAMETER, INVERTS, AND WEIR.

DRAIN MANHOLE OSC-2 DETAIL

NOT TO SCALE

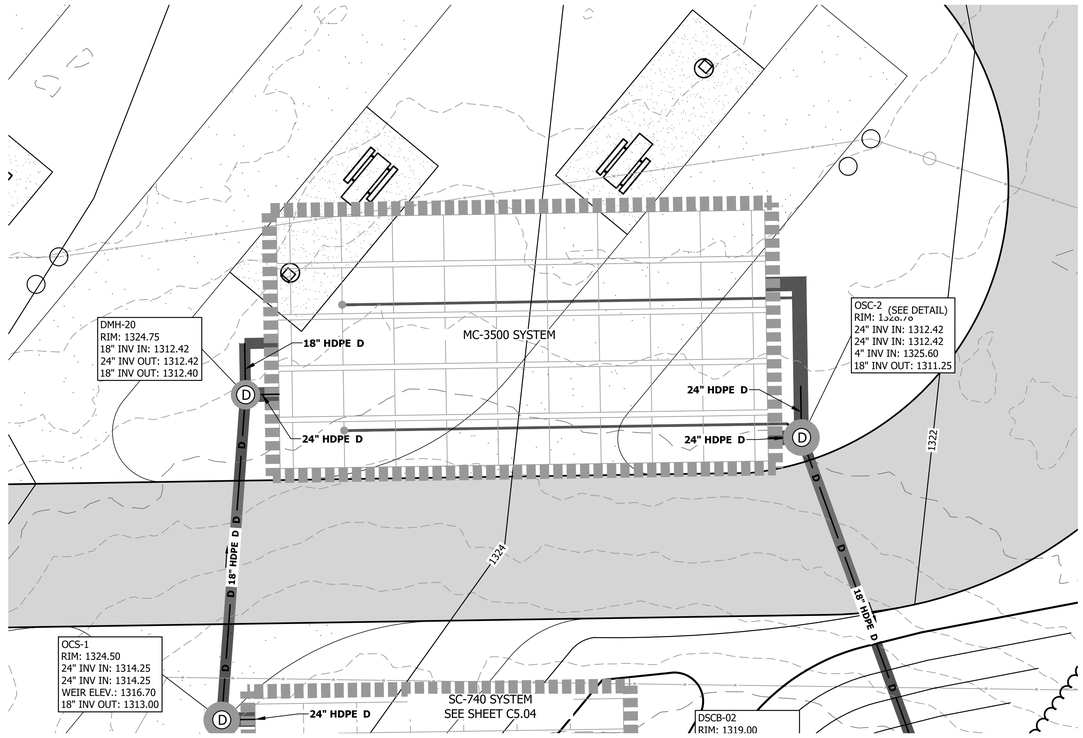


STORMTECH MC-3500 CHAMBER DIMENSION

NOT TO SCALE

STORMTECH MC-3500 CHAMBER INLET SECTION

NOT TO SCALE



STORMWATER TREATMENT AREA PLAN

SCALE: 1" = 10'

IMPORTANT NOTES

FOUNDATION AND EMBEDMENT STONE SHALL BE **CLEAN, WASHED, ANGULAR CRUSHED STONE**. ENGINEER SHALL INSPECT AND VERIFY MATERIAL PRIOR TO SYSTEM INSTALLATION.

THIS SYSTEM **IS NOT** DESIGNED TO EXFILTRATE TO SOIL. A PVC LINER IS REQUIRED IN ALL AREAS.

DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOFF, WATER FROM EXCAVATIONS) TO THE INFILTRATION SYSTEM.

DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION SYSTEM.

STORMTECH MC-3500 CHAMBER SPECIFICATIONS

77.0" WIDE + 9.0" SPACING = 86.0" C-C ROW SPACING

45 CHAMBERS, 10 END CAPS
[8 CHAMBERS/ROW x 7.17' LONG] + [1.85' CAP LENGTH x 2] = 68.23' ROW LENGTH
+ [12.0" END STONE x 2] = 70.23' BASE LENGTH

[4 ROWS x 77.0" WIDE] + [9.0" SPACING X 3] + [12.0" SIDE STONE X 2] = 37.08' BASE WIDTH

[9.0" BASE + 45.0" CHAMBER HEIGHT + 12.0" COVER] = 5.50' FIELD HEIGHT

[45 CHAMBERS X 110.0 CF + 14.9 CF CAP VOLUME x 2 x 5 ROWS] = 5,096.8 CF CHAMBER STORAGE

14,324.0 CF FIELD - 5,096.8 CF CHAMBERS = 9,227.2 CF STONE X 40.0% VOIDS = 3,690.9 CF STONE STORAGE

OVERALL
CHAMBER STORAGE + STONE STORAGE = 8,787.7 CF = 0.202AF
OVERALL STORAGE EFFICIENCY = 61.3%

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No.	Description	Date

Title

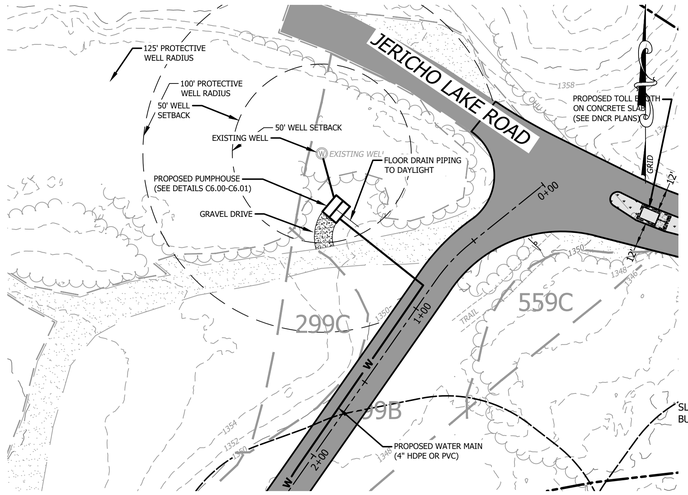
DETENTION MC-3500 SYSTEM

Sheet Number:

C5.05

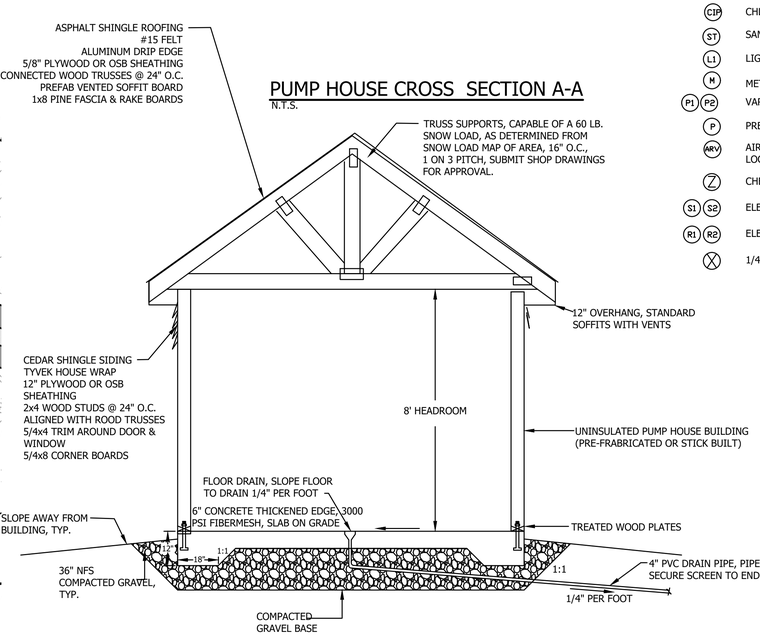
Project Number: 23045001

File: 220838-jericho-chamber-details-100%.dwg



PUMP HOUSE CROSS SECTION A-A

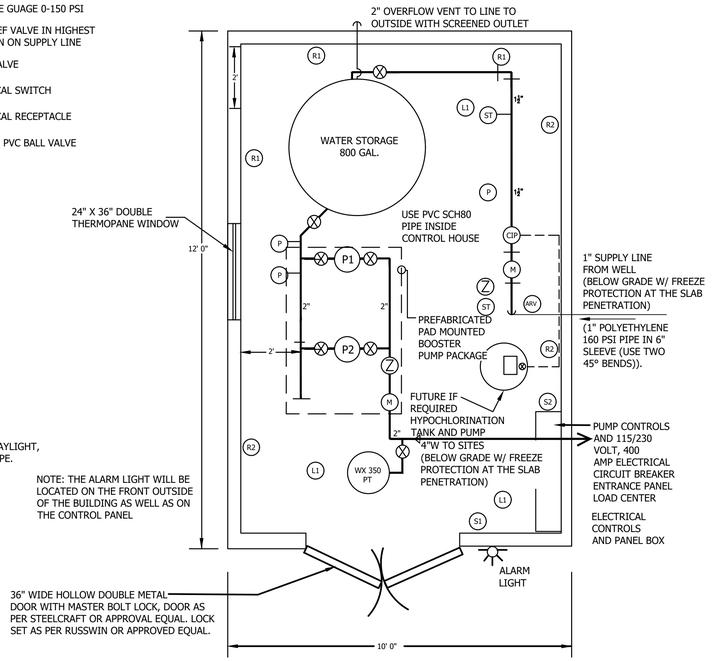
N.T.S.



CIP	CHLORINE INJECTION POINT
ST	SAMPLING TAP
L1	LIGHT
M	METER
P1 P2	VARIABLE SPEED DRIVE BOOSTER PUMPS
P	PRESSURE GUAGE 0-150 PSI
ARV	AIR RELIEF VALVE IN HIGHEST LOCATION ON SUPPLY LINE
Z	CHECK VALVE
S1 S2	ELECTRICAL SWITCH
R1 R2	ELECTRICAL RECEPTACLE
X	1/4 TURN PVC BALL VALVE

FLOOR PLAN AND ELECTRICAL LAYOUT

N.T.S.



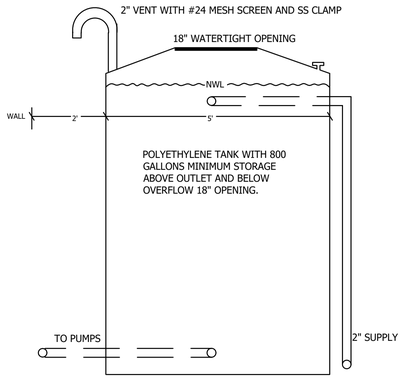
NOTE: THE ALARM LIGHT WILL BE LOCATED ON THE FRONT OUTSIDE OF THE BUILDING AS WELL AS ON THE CONTROL PANEL

WATER STORAGE TANK

N.T.S.

- NEED 800 GALLONS STORAGE
- PROVIDE 4" PIPE FLANGE FITTING FOR TANK FLOAT CONTROLS
- FLOAT CONTROL LEVEL SETTING:

  NWL - 3" BELOW "OFF" OVERFLOW INVERT
  HW ALARM - 1" BELOW OVERFLOW INVERT
  LW "ON" - 24" BELOW INVERT
  LW ALARM - 36" BELOW INVERT



DESIGN CRITERIA AND SIZING OF BOOSTER PUMPS, STORAGE TANK, PRESSURE TANKS FOR WATER SYSTEMS

UPRIGHT POLYETHYLENE STORAGE TANK, 1000 GALLON
- DESIGN FLOW = 19 CAMPING SITES WITH FULL HOOKUP AT 60 GALLONS PER SITE = 1,140 GPD
- AVERAGE DAY DEMAND = 1,140 GPD / 720 MINUTES = 1.58 GPM (12 HR)
- VOLUME STORAGE = 55% x DESIGN FLOW = 627 GALLONS
- INSTALL (1) 800 GALLON POLYETHYLENE VERTICAL STORAGE TANKS

PUMPS:
- PEAK FLOW 1.58 GPM X A FACTOR OF 10 = 15.8 GPM
- USE PUMPS RATED FOR 40 GPM AT 130 TDH
- USE DUAL ALTERNATING BOOSTER PUMPS, GOULDS MODEL HSC30, HORIZONTAL, SELF PRIMING, MULTISTAGE, VARIABLE FREQUENCY DRIVE, CONSTANT PRESSURE SYSTEM.
- SUBMIT PUMP CURVES FOR ENGINEER'S REVIEW AND APPROVAL.
- BOOSTER PUMP PACKAGE AS PER R.E. PRESCOTT CO. (REPCO) INC., OR APPROVED EQUAL.

MATERIALS AND EQUIPMENT SPECIFICATIONS

1. WELL PUMP
2. WATER PRESSURE TANKS AS PER WELL-X-TROL MODEL #WX-350.
3. WATER METER AS PER SENSUS W-350 DR 3" OR APPROVED EQUAL, FLOW PROPORTIONAL
4. AIR RELEASE VALVE TO APCO 141, 1/2" OR EQUAL.
5. SUBMIT SHOP DRAWINGS TO ENGINEER FOR REVIEW AND APPROVAL OF ALL MATERIALS.
6. MARVIN ULTREX IFDH2030 OR APPROVED EQUAL.

CONTROL HOUSE NOTES:

1. ALL ELECTRICAL WORK TO BE ACCOMPLISHED BY ELECTRICIAN. APPROVED BY THE ENGINEER, AND IN STRICT ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.
2. ALL CIRCUITS TO HAVE A GROUND WIRE; USE 3 WIRE CABLE, SIZED TO CARRY AMPERAGE INDICATED, USE MINIMUM NO. 12-3 WIRE.
3. ALL PIPING AND VALVES INSIDE TO BE SCHEDULE 80 PVC.
4. SET PRESSURE SWITCH TO OPERATE BETWEEN 50 AND 55 PSI.
5. PROVIDE RED LIGHT ALARM ON CONTROL PANEL AND OUTSIDE OF BUILDING FOR WELL PUMP FAILURE, LOW PRESSURE (BELOW 35 PSI), LOW WATER (STORAGE TANK), AND HIGH WATER (STORAGE TANK).
6. PROVIDE PIPE STANDS FOR PIPING @ 5' INTERVALS.
7. THE CONTRACTOR SHALL INSTALL AN AUXILIARY ELECTRICAL CONTROL PANEL BESIDE THE MAIN CIRCUIT BREAKER BOX FOR HOOKUP OF A PORTABLE EMERGENCY GENERATOR UNIT.
8. ALL PRESSURE GAUGES TO BE 4" MINIMUM DIAMETER, 0 - 100 PSI.
9. ALL SAMPLING TAPS TO BE SMOOTH NOSE, STANDARD GATE OR GLOBE VALVES.
10. ALL PIPING UNDER SLAB AND TO 5' OUTSIDE BUILDING TO BE AWWA 900 PLASTIC OR DUCTILE IRON PIPE (NO SOLVENT WELD UNDERGROUND ON WATER SYSTEM).

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Graphic Scale

North

Scale: AS NOTED

Date: June 13, 2024

Drawn By: DW

Checked By: RH

Issues:

No.	Description	Date

Title

PUBLIC WATER SUPPLY PLAN

Sheet Number:

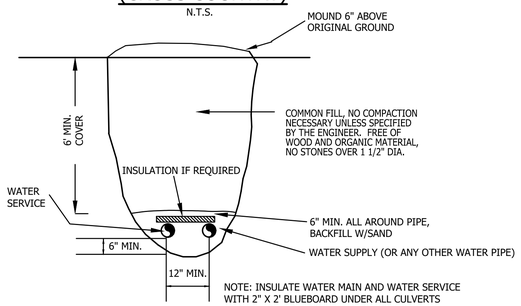
C6.00

Project Number: 23045001

File: 220838-jericho-100%.dwg

COMMON TRENCH DETAIL (CROSS COUNTRY)

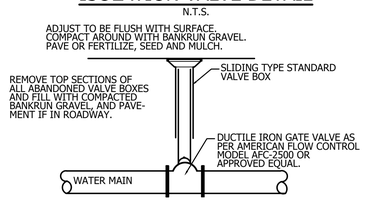
N.T.S.



NOTE: INSULATE WATER MAIN AND WATER SERVICE WITH 2" X 2' BLUEBOARD UNDER ALL CULVERTS AND WHEREVER LESS THAN 6' OF COVER CAN BE MAINTAINED. INSULATION TO BE 4' WIDE OVER PIPES, STAGGERED.

ISOLATION VALVE DETAIL

N.T.S.



WATER LINE DISINFECTION AND LEAKAGE TESTING:

DISINFECTING

1. DISINFECTION MAY BE DONE USING LIQUID CHLORINE AND SHALL BE APPLIED BY THE CONTINUOUS FEED METHOD SO THAT THE CHLORINE CONCENTRATION IN THE PIPE IS MAINTAINED AT A MINIMUM OF 50 MG/L. AFTER THE LINE IS FILLED, A 24 HOUR PERIOD SHALL ELAPSE BEFORE THE CHLORINE RESIDUAL IS DETERMINED; THE MINIMUM LIMIT BEING 10 MG/L. DISINFECTION SHALL BE PROVIDED IN ACCORDANCE WITH THE REQUIREMENTS PRESCRIBED BY THE AWWA STANDARD C651-86 PLUS THE LATEST EDITION, AND AS APPROVED BY THE OWNER. ALL VALVES IN THE LINES BEING STERILIZED SHALL BE OPENED AND CLOSED SEVERAL TIMES DURING THE CONTACT PERIOD.

2. SAMPLES OF WATER: SAMPLES OF WATER SHALL BE TAKEN BY THE CONTRACTOR AND A LABORATORY ANALYSIS PERFORMED BY AN INDEPENDENT LABORATORY SATISFACTORY TO THE ENGINEER AND QUALIFIED TO ANALYZE PUBLIC WATER SUPPLY SAMPLES AT THE CONTRACTOR'S EXPENSE TO DETERMINE THE EFFECTIVENESS OF DISINFECTION. THERE SHALL BE TWO SAMPLES TAKEN FROM EACH WATER LINE, ONE FROM MIDWAY AND ONE FROM THE FLUSHING HYDRANTS AT THE END OF THE LINE, IF THE SAMPLES TESTED FAIL TO MEET LABORATORY STANDARDS AS DETERMINED BY THE OWNER (0 COLIFORM), THE PIPELINES SHALL BE REPEATEDLY TREATED BY THE CONTRACTOR, AT NO ADDITIONAL EXPENSES TO THE OWNER, UNTIL THE DESIRED RESULTS ARE OBTAINED.

3. WATER SHALL BE FLUSHED FROM THE LINE TAKING CARE TO ALLOW CHLORINATED WATER TO FLOW OVER GRASSED AREAS, SEVERAL HUNDRED FEET FROM ANY STREAM SO AS TO ALLOW CHLORINE ABOVE 2 MG/L FROM ENTERING STREAMS.

LEAKAGE TEST:

1. ALL PIPES SHALL UNDERGO A HYDROSTATIC PRESSURE TEST FOR AT LEAST A 2 -HOUR PERIOD AT THE PIPE'S RATED PRESSURE, OR AT 150% OF THE WORKING PRESSURE, AS DETERMINED BY THE ENGINEER, WHICHEVER IS GRATER. LEAKAGE ALLOWED IN ALL PIPE TESTING SHALL BE CALCULATED BASED ON EQUATIONS IN AWWA C651 (LATEST EDITION). PIPE LINES SHALL BE FILLED WITH WATER, CARE BEING TAKEN IN THE FILLING PROCESS TO ELIMINATE ALL AIR POCKETS AND BUBBLES. AFTER THE PIPELINES HAVE BEEN FILLED, AND ALL AIR RELEASED, THE PRESSURE IN THE PIPING SHALL BE INCREASED UNTIL THE TEST PRESSURE, AS DETERMINED BY THE ENGINEER, HAS BEEN OBTAINED. THE PRESSURE SHALL BE MAINTAINED WITHIN 5 PSI OF THE TEST PRESSURE FOR AT LEAST 2 HOURS.

   THE LEAKAGE TEST SHALL BE PERFORMED SIMULTANEOUSLY WITH THE PRESSURE TEST. WATER SHALL BE PUMPED FROM A RESERVOIR OF KNOWN VOLUME INTO THE MAIN. THE AMOUNT OF WATER DRAWN FROM THE RESERVOIR WILL BE THE ACTUAL LEAKAGE. THE LEAKAGE SHALL NOT EXCEED 10 GALLONS PER INCH OF DIAMETER PER MILE OF PIPE PER 24 HOURS.

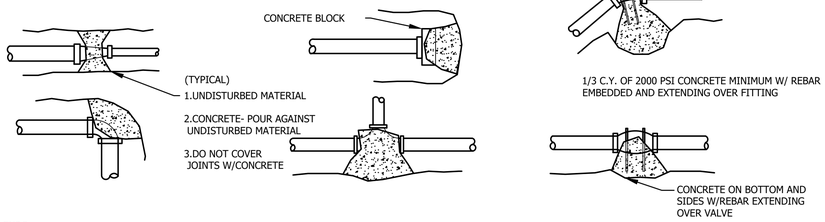
   ALL LEAKAGE TESTS SHALL BE CONDUCTED UNDER THE DIRECT SUPERVISION OF THE ENGINEER. THE OWNER, STATE AND ENGINEER SHALL BE FURNISHED A WRITTEN DOCUMENT OF ALL LEAKAGE TEST RESULTS. UNLESS OTHERWISE PERMITTED OR DIRECTED BY THE ENGINEER, TESTING SHALL BE DONE ON THE BURIED PIPE. THE LAST PIPE SECTION BEING AT LEAST PARTIALLY COVERED WITH BACKFILL.

2. EVALUATION OF RESULTS/CORRECTIVE ACTIONS: FOR LEAKING PIPE FITTINGS OR VALVES.

   A. PIPE FITTINGS OR VALVES FOUND DEFECTIVE SHALL BE REPLACED AND ALL LEAKING JOINTS SHALL BE MADE TIGHT, BY THE CONTRACTOR, AS DIRECTED BY THE OWNER. THE TESTS SHALL BE REPEATED AS OFTEN AS NECESSARY, AT NO ADDITIONAL EXPENSE TO THE OWNER, TO ASSURE THE OWNER THAT ALL PIPING, VALVES AND APPURTENANCES ARE FREE OF DEFECTS AND THAT ALL JOINTS ARE TIGHT. ALL VISIBLE LEAKS IN THE JOINTS SHALL BE STOPPED, AND ANY CRACKED OR DEFECTIVE PIPE, PIPE FITTING OR VALVE SHALL BE REMOVED AND REPLACED WITH NEW MATERIAL BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER. THE PRESSURE TEST SHALL BE MAINTAINED FOR A PERIOD OF NOT LESS THAN ONE HOUR AFTER ALL VISIBLE LEAKS IN THE PIPE HAVE BEEN STOPPED AD CORRECTIVE WORK HAS BEEN SATISFACTORILY COMPLETED.

THRUST BLOCK DETAILS (ALL WATER FITTINGS AND VALVES MUST HAVE THRUST BLOCKS AS DETAILED HERE.)

N.T.S.



ENDS & TEES

THRUST BLOCK BEARING REQUIREMENTS

USE 2000 PSI MIX MAXIMUM

MINIMUM AREA OF BEARING SURFACE OF CONC. THRUST BLOCKS (AREA AGAINST ORIGINAL GROUND)

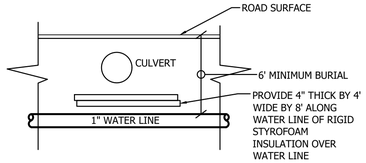
(SQUARE FEET)

3" ϕ				4" ϕ				6" ϕ				8" ϕ				12" ϕ				TYPICAL SOIL CONDITION	ASSUMED SAFE BEARING LOAD (PSI)
	90° ELB.	45° ELB.	22.5° ELB.	ENDS & TEES	90° ELB.	45° ELB.	22.5° ELB.	ENDS & TEES	90° ELB.	45° ELB.	22.5° ELB.	ENDS & TEES	90° ELB.	45° ELB.	22.5° ELB.	ENDS & TEES	90° ELB.	45° ELB.	22.5° ELB.		
0.5	0.5	0.5	0.5	0.5	1.0	0.5	0.5	1.0	1.5	1.0	0.5	2.0	2.5	1.5	1.0	4.0	5.5	3.0	1.5	SOUND SHALE	10,000
1.0	1.0	1.0	0.5	1.5	2.0	1.0	0.5	3.0	4.0	2.0	1.0	4.5	6.5	3.0	2.0	10.0	14.0	7.5	4.0	CEMENTED GRAVEL AND SAND	4,000
1.0	1.5	1.0	0.5	2.0	2.5	1.5	1.0	3.5	5.0	3.0	1.5	6.0	8.5	5.0	2.5	13.0	18.5	10.0	5.0	COMPACT HARD TYPE GRAVEL AND SAND	3,000
1.5	2.5	1.5	1.0	2.5	3.5	2.0	1.0	5.5	7.5	4.0	2.0	9.0	13.0	7.0	3.5	20.0	27.5	15.0	8.0	MEDIUM TO SOFT CLAY (BE BRACED)	2,000
3.0	4.5	2.5	1.5	5.0	7.0	4.0	2.0	10.5	15.0	8.0	4.0	18.0	25.0	14.0	7.0	39.0	55.0	30.0	15.0	SOFT CLAY	1,000

MAXIMUM WATER PRESSURE = 300 PSI NOTE: REDUCER BEARING AREA = 45° BEND, LARGER PIPE; GATE VALVE = END

STORM CULVERT/WATER LINE CROSSING

N.T.S.



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Campground Expansion Project PII
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298 Jericho Lake Road
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03570

Issue

CONTRACT SET

Graphic Scale

North

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Date: June 13, 2024

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PUBLIC WATER SUPPLY DETAILS

Sheet Number:

C6.01

Project Number: 23045001

File: 220838-jericho-100%.dwg

WETLAND NOTES

THE LIMITS OF THE JURISDICTIONAL WETLANDS DEPICTED HEREON ON EXISTING PARCEL 407-10ARE BASED ON FIELD DELINEATION BY CAITLIN BANASZAK IN OCTOBER 26 & 27, 2022. STATE AND FEDERAL JURISDICTIONAL WETLANDS WERE DELINEATED BY N.H. CERTIFIED WETLAND SCIENTIST, . WETLANDS MAPPING WAS DONE BY N.H. LICENSED LAND SURVEYORS, HORIZONS ENGINEERING, INC. IN ACCORDANCE WITH THE FOLLOWING GUIDANCE DOCUMENTS:

1. N.H. CODE OF ADMINISTRATIVE RULES (ENV-WT 301.01) WITH THE TECHNIQUES OUTLINED IN THE 1987 "U.S. ARMY CORPS OF ENGINEERS WETLAND DELINEATION MANUAL, TECHNICAL REPORT Y-87-1."
2. U.S. ARMY CORPS OF ENGINEERS. 2009. "REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION. U.S. ARMY CORPS OF ENGINEERS RESEARCH AND DEVELOPMENT CENTER, ENVIRONMENTAL LABORATORY ERDC/EL TR-09-19."
3. U.S. ARMY CORPS OF ENGINEERS. 2012. "NATIONAL LIST OF PLANT SPECIES THAT OCCUR IN WETLANDS: NORTHEAST REGION, U.S. ARMY CORPS OF ENGINEERS RESEARCH AND DEVELOPMENT CENTER, ENVIRONMENTAL LABORATORY.
4. N.H. CODE OF ADMINISTRATIVE RULES (ENV-WT 301.02) WITH THE U.S. FISH AND WILDLIFE SERVICE MANUAL FWS/OBS-79/31 ENTITLED "CLASSIFICATION OF WETLANDS AND DEEPWATER HABITATS OF THE UNITED STATES, COWARDIN ET AL, 1979."
5. NEW ENGLAND HYDRIC SOILS TECHNICAL COMMITTEE. 2004. 3RD ED., "FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND." NEW ENGLAND INTERSTATE WATER POLLUTION CONTROL COMMISSION, LOWELL, MA.
6. U.S. DEPARTMENT OF AGRICULTURE, NATURAL RESOURCE CONSERVATION SERVICE. 2010. "FIELD INDICATORS OF HYDRIC SOILS IN THE UNITED STATES, VERSION 7.0." L.M. VASILAS, G.W. HURT, AND C.V. NOBLE (EDS.). USDA, NRCS, IN COOPERATION WITH THE NATIONAL TECHNICAL COMMITTEE FOR HYDRIC SOILS.

LEGEND

- PROPERTY LINE
- TREELINE
- OHE — OVERHEAD UTILITY LINE
- EDGE OF WETLAND
- EDGE OF VERNAL POOL
- FIELD SURVEY AND WETLAND DELINEATION LIMIT
- WETLAND FLAG AND FLAG ID #
- WOOD POST
- SIGN
- UTILITY POLE
- WATER SPIGOT
- BACK IN SPACE
- PULL THROUGH SPACE
- EXISTING GRAVEL
- EXISTING PAVEMENT
- PROPOSED GRAVEL
- PROPOSED PAVEMENT
- SEWER MANHOLE
- FM — FORCE MAIN
- 55C — NRCS SOIL SYMBOL
- NRCS SOIL LINE

n/f
SAVANNAHWOOD LLC
TAX MAP 402 PARCEL 15
BOOK 1460 PAGE 627

n/f
STATE OF NEW HAMPSHIRE DEPT OF NATURAL AND CULTURAL RESOURCES
TAX MAP 407 PARCEL 10
BOOK 1238 PAGE 415

55C

PROPOSED COMBINATION TANK AND PUMP STATION

UNDERGROUND STORMWATER CHAMBERS

UNDERGROUND STORMWATER CHAMBERS

6" SEWER CLEANOUT

LOT LOADING AREA EXTENTS

LOT LOADING AREA EXTENTS

WETLAND SETBACKS (TYP)

GRAVEL AREA

4K AREA

EDA

75' WETLAND SETBACK

NITRATE SETBACKS

WETLAND SETBACKS (TYP)

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No.	Description	Date
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Title
I.S.D.S OVERVIEW PLAN
(INDIVIDUAL SEWAGE DISPOSAL SYSTEM)

Sheet Number:
C7.00

Project Number: 23045001
File: 220838 jericho isds_03.dwg

WETLAND AREA TO BE FILLED IN ACCORDANCE WITH AOT PERMIT

SEWER HOOK UP (TYP)

6" GRAVITY SEWER

UNDERGROUND STORMWATER CHAMBERS

SEWER CLEANOUT (TYP)

MATCH LINE SHEET 7.02

5 OUTLET DISTRIBUTION BOX

POTENTIAL LOCATION OF VENT

18 H-20 RATED, 8' X 8' CONCRETE CHAMBERS

POTENTIAL LOCATION OF VENT

WETLAND SETBACKS (TYP)

LEGEND

- PROPERTY LINE
- TREELINE
- OHE — OVERHEAD UTILITY LINE
- EDGE OF WETLAND
- EDGE OF VERNAL POOL
- FIELD SURVEY AND WETLAND DELINEATION LIMIT
- WETLAND FLAG AND FLAG ID #
- WOOD POST
- SIGN
- UTILITY POLE
- WATER SPIGOT
- (B) BACK IN SPACE
- (P) PULL THROUGH SPACE
- EXISTING GRAVEL
- EXISTING PAVEMENT
- PROPOSED GRAVEL
- PROPOSED PAVEMENT
- CLEANOUT

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I.S.D.S OVERVIEW PLAN

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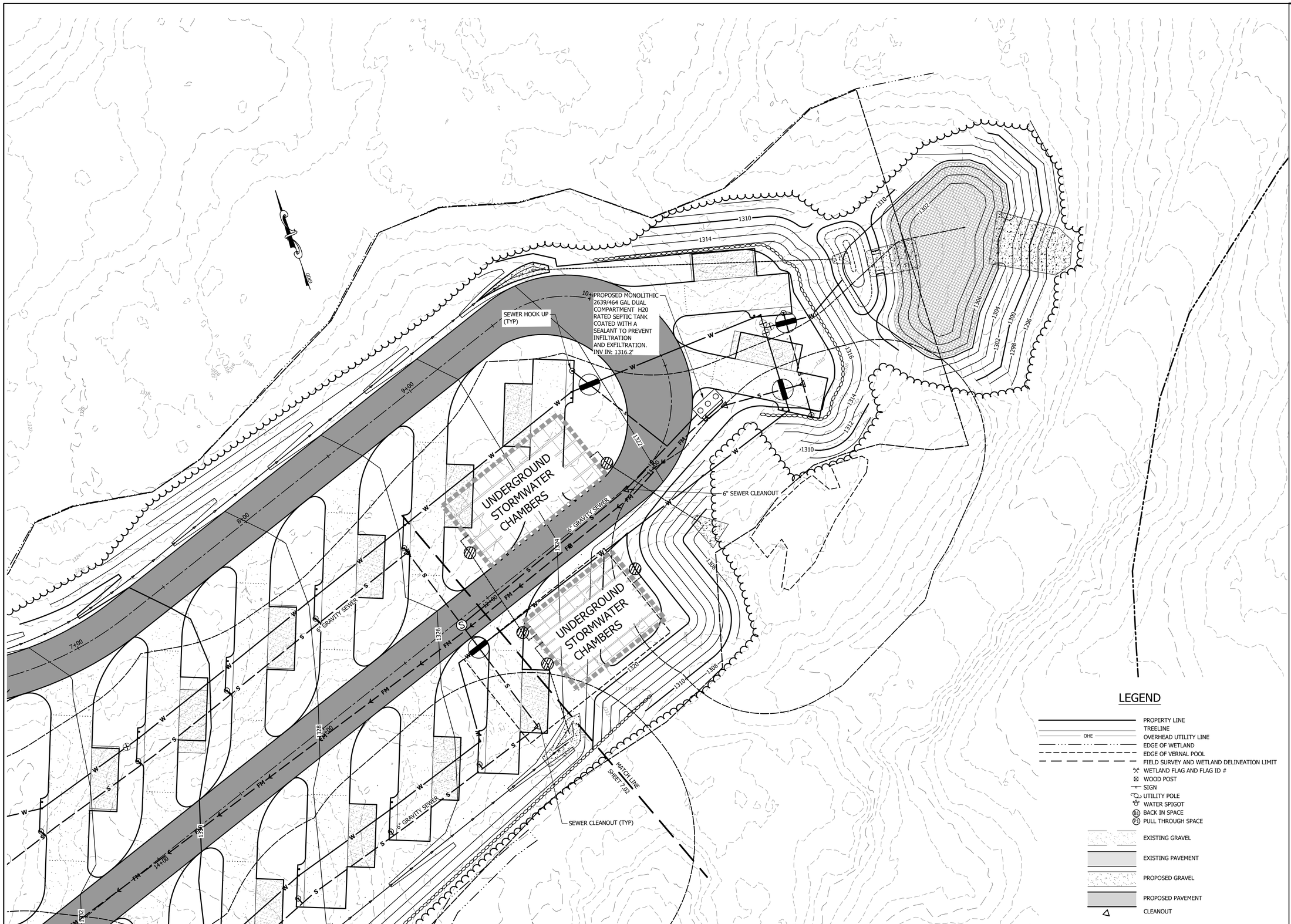

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North

Scale: 1" = 20'

Date: June 13, 2024

Drawn By: NO

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1	Name	00/00/00

Title

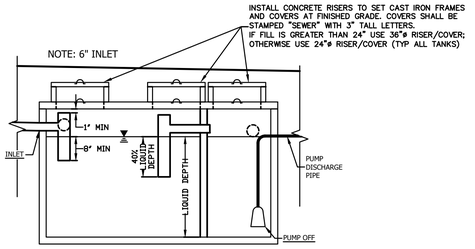
I.S.D.S OVERVIEW PLAN

Sheet Number:

C7.02

Project Number: 23045001

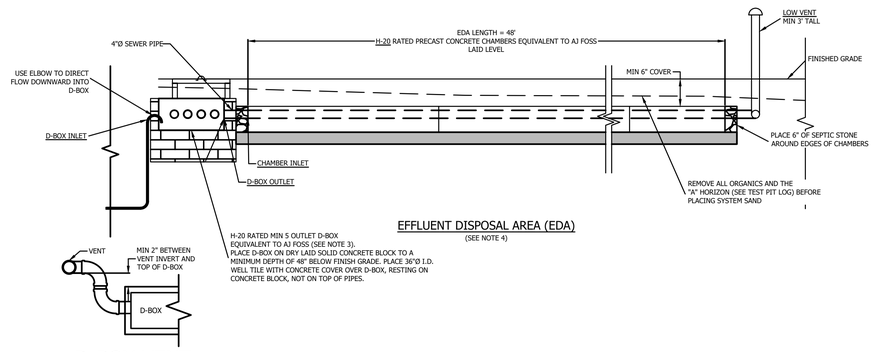
File: 220838 jericho isds_03.dwg



COMBINATION TANK

(SEE NOTE 3)

VENT PASSIVELY WHEN ACHIEVABLE; OTHERWISE VENT PUMP CHAMBER DIRECTLY.



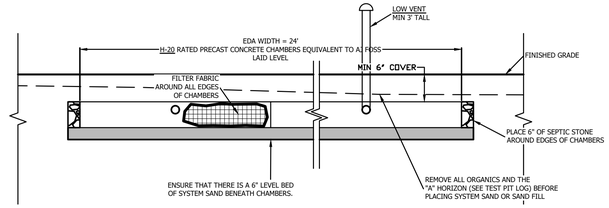
EFFLUENT DISPOSAL AREA (EDA)

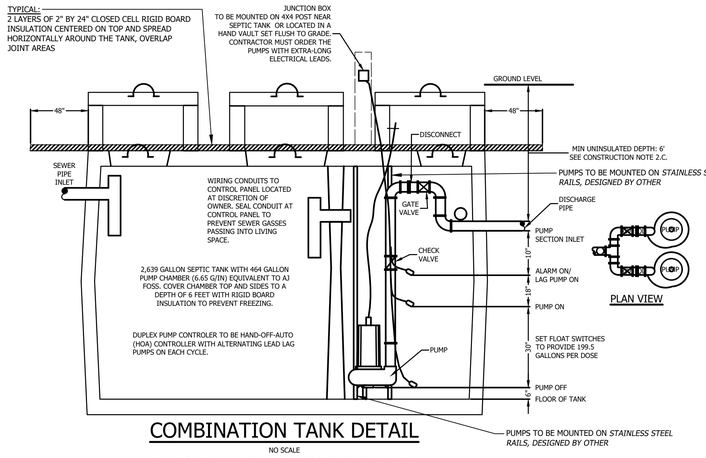
(SEE NOTE 4)

D-BOX VENT SECTION DETAIL

NO SCALE

TYPICAL OF ALL D-BOX VENT CONNECTIONS





COMBINATION TANK DETAIL

NO SCALE

SEPARATE ELECTRIC CIRCUITS SHALL BE PROVIDED FOR PUMP AND ALARM SYSTEM.

EACH PUMP SHALL HAVE AN ALARM THAT SIGNALS IF THE PUMP FAILS FOR ANY REASON.

HORIZONS ENGINEERING RECOMMENDS THAT THE PUMPS BE REMOVED AND THE TANK BE PUMPED AT THE END OF THE OPERATING SEASON TO PREVENT FREEZING AND POTENTIAL DAMAGE TO THE PUMPS AND TANK

PUMP CALCULATIONS

STATIC HEAD: D-BOX INLET: 1343.6 - PUMP OFF: 1308.4 = 35.2'

DISCHARGE PIPE: 2"Ø, 775' LONG (INCLUDES EQUIVALENT LENGTH OF 40')

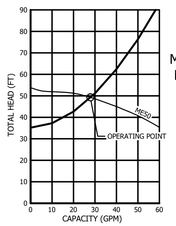
FRICTIONAL HEAD: 775 | 3.55 X 27.8 / 140 X 2.63 | 1.85 = 13.9'

TOTAL HEAD = 49.1'

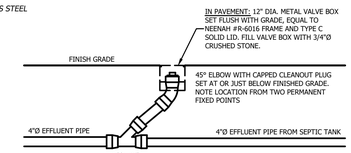
FITTINGS' HEAD: EQUIVALENT LENGTH METHOD USED

USE PUMP EQUIVALENT TO MYERS ME50.

OPERATING POINT = 27.8 GPM AT 49.1' TDH. ACTUAL PUMP TIME: 7 MIN., 11 SEC.



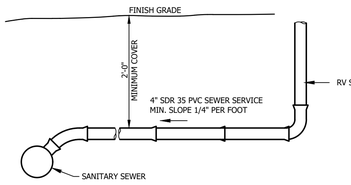
MYERS ME50



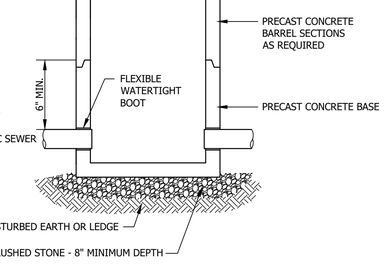
CLEANOUT DETAIL

NO SCALE

PROVIDE AT EACH CHANGE IN SLOPE AND DIRECTION

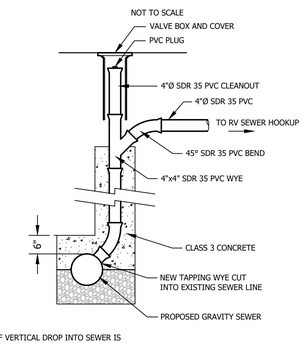


SEWER SERVICE DETAIL



SANITARY SEWER MANHOLE DETAIL

NOT TO SCALE



CHIMNEY AT NEW SEWER CONNECTION

NOT TO SCALE

LOT LOADING CAPACITY

LOT SIZE

TOTAL AREA USED FOR LOT LOADING:		226,109 SF	(5.19AC)
8-15% (GROUP 1)	FACTOR:1.1	44,245 SF	(1.016AC)
8-15% (GROUP 3)	FACTOR:1.76	181,864	(4.175AC)

SOIL TYPE

PER TEST PITS. GROUP 1&3

THEORETICAL LOT LOADING

Q=(1.016/1.1)*2000

= (4.175/1.76)*2000

= 6,591 GPD

PROPOSED LOADING, 1,140 GPD

GENERAL CONSTRUCTION NOTES

1. This subsurface disposal system has been designed in accordance with the rules, regulations, standards, and practices of the New Hampshire Department of Environmental Services (NHDES) and municipal regulations. Installation shall be done in accordance with this set of plans and any conditions listed on the NHDES Construction Approval. EDA = Effluent Disposal Area.
2. SEWER PIPE, EFFLUENT PIPE AND PUMP DISCHARGE PIPE
   - A. Sewer pipe, effluent pipe, pump discharge pipe and fittings shall be specified in Design Data.
   - B. Unless otherwise noted, minimum depth of cover of sewer and effluent pipes shall be 12". Where beneath an area to be clear of snow, pipes shall be protected from freezing by placement of 2" by 24" closed cell rigid board insulation centered on top of the pipe.
   - C. Pump discharge pipes shall be installed with a minimum uninsulated depth of cover of 6' to finish grade. In no situation, other than rise to Pump Chamber and D-box, shall pipes be installed at less than 36" depth of cover and shall be protected from freezing by placement of 4" by 24" closed cell rigid board insulation centered on top of the pipe.
   - D. Sewer or effluent pipe located within 75' of surface water, open drainage or private on-site well shall be SDR 26 or equivalent.
   - E. Where sewer pipes, effluent pipes or pump discharge pipes cross electric/communication cables or wetlands, pipes shall be sleeved in larger diameter schedule 40 PVC pipe; sleeves shall be made watertight by plastic solvent welded joints and sealing sleeve ends with a flexible rubber sealant. Sleeve ends' locations shall be recorded for future reference. Sleeve lengths for crossings shall be a minimum of 10' beyond both sides of the crossing.
3. SEPTIC TANKS, PUMP CHAMBERS AND DISTRIBUTION BOXES (D-BOX)
   - A. Unless noted otherwise, all septic tanks, pump chambers and d-boxes are to be watertight pre-cast concrete or high molecular weight HDPE and are to be set on firmly compacted ground to prevent differential settling with inlet and outlet inverts at elevations indicated.
   - B. Septic tank, pump chamber and distribution box shall have appropriate inlet and outlet baffles constructed from 4"Ø plastic tees secured to the pipe using stainless steel screws. The inlet baffles shall be constructed to divert incoming sewage and effluent downward. Use of 6"Ø inlet baffle riser is recommended. Access to each compartment and baffle shall be through a removable cover set directly on the tank or through a riser. At grade covers shall be protected against unauthorized opening by either locking, mechanically fasteners or constructed of cast iron or weight equivalent.
   - C. Connections between a septic tank and the inlet and outlet shall be sealed with a watertight, flexible joint connector that will accommodate normal movement of the septic tank without leaking or breaking.
   - D. Make abandoned inlet from existing building watertight.
4. The installer shall contact HORIZONS ENGINEERING, INC. prior to and/or during construction if any deviations between the site and this plan are noted or if any construction changes are required.
5. NHDES construction approvals expire 4 years from the date of issue.
6. HORIZONS ENGINEERING, INC. assumes no control over installation practices or the end use of the sewage disposal system and therefore cannot guarantee the proper operation of the disposal system or disposal system life expectancy.

INDIVIDUAL SEWAGE DISPOSAL SYSTEM DESIGN DATA

SOIL DATA

NRCS SOIL TYPE AT EDA: 55C (HERMON SANDY LOAM, 8 TO 15 PERCENT SLOPES, VERY STONY)
TEST PIT PERC RATE: 4 MINUTES/INCH
TEST PIT DEPTH TO ESHWT: 48"
TEST PIT DEPTH TO LEDGE: NONE OBSERVED"

SEWER MAIN PIPE REQUIREMENTS

USE 6"Ø SCHEDULE 40 PVC OR SDR 26 PLASTIC PIPE

SEPTIC TANK REQUIREMENTS

PER ENV-WQ 1010.02(B))
SEPTIC TANK SHALL 2X THE DAILY FLOW
1,140 GPD X 2 =2,280 GALLONS
PROVIDED - 2,639/464 GALLON 2 COMPARTMENT TANK W/ PUMP IN SECOND COMPARTMENT
EQUIVALENT TO AJ FOSS

PUMP CHAMBER REQUIREMENTS

- 2"Ø SCH 40 PVC OR GALVANIZED PIPE/FITTINGS FOR INTERNAL PLUMBING
- (2) PUMP EQUIVALENT TO MYERS ME50
- CONTROL PANEL EQUIVALENT TO SJE-RHOMBUS EZ SIMPLEX
- FLOAT SWITCHES EQUIVALENT SJE-RHOMBUS PUMPMASTER
- NEMA 4X NON-CORROSIVE PVC JUNCTION BOX
- 2"Ø DISCONNECT EQUIVALENT TO CAMPBELL/MARTINSON
- 2"Ø FLEXIBLE DISCHARGE PIPE (160 PSI RATED MIN)

EFFLUENT PIPE/FORCE MAIN REQUIREMENTS

- 2"Ø FLEXIBLE DISCHARGE PIPE (160 PSI RATED MIN) MUST BE CAPABLE OF BEARING VEHICULAR LOADS

EDA REQUIREMENTS

MIN. 5 OUTLET D-BOX EQUIVALENT TO AJ FOSS
8' X 8' CONCRETE CHAMBERS EQUIVALENT TO AJ FOSS
CAMP SITES SERVED: 19
REQUIRED SEWAGE LOADING: 19 SITES X 60 GPD/SITE = 1,140 GPD
DESIGN SEWAGE LOADING = 1,140 GPD
PERCOLATION RATE: 4 MINS / INCH
CONCRETE CHAMBERS USE TABLE 1016-1
140 SQ FT PER 100 GPD =(1,140/100) * 140 = 1,596 * 0.6
FOR CONCRETE CHAMBERS = 958 SQ FT
USE 18, 8'X8' CHAMBERS = 1,152 SQ FT PROVIDED

TABLE OF KEY ELEVATIONS

UNLESS OTHERWISE NOTED, ELEVATIONS LISTED ARE THE INVERT OF THE LISTED COMPONENT.

COMBIN. TANK	D-BOX	EDA
INLET: XXXX	INLET: 1343.7	PIPE INVERT: 1343.4
PUMP OFF: XXXX	OUTLET: 1343.5	BOTTOM OF CHAMBER: 1343.0

DESIGN INTENT: THE BOTTOM OF THE CHAMBER IS APPROXIMATELY 0.0 FEET (AT) EXISTING GRADE AT THE HIGH CONTOUR OF THE DESIGNED EFFLUENT DISPOSAL AREA.

SYSTEM SAND SPECIFICATIONS

MEDIUM TO COARSE TEXTURED SAND WITH AN EFFECTIVE SIZE OF 0.25 TO 2.0 MM, NO GREATER THAN 5% PASSING THE #200 SIEVE AND NO PARTICLE SIZE LARGER THAN ¾". ALTERNATIVELY, MATERIAL MEETING THE ASTM C-33 SPECIFICATION. FILL SHALL BE CLEAN BANK SAND SAND, FREE OF TOPSOIL, HUMUS, DREDGING, STONES, OR ORGANIC MATERIAL.

SEPTIC STONE SPECIFICATIONS

SIEVE SIZE	PERCENT PASSING (BY WEIGHT)
2 IN	100
1 IN	90 - 100
¾ IN	0 - 20
#4	0 - 5
#200	0 - 2

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Issue

CONTRACT SET

Graphic Scale 0 20 40 80

North

Scale: NO SCALE

Date: June 13, 2024

Drawn By: NO

Checked By: RH/ML

Issues:

No.	Description	Date
1	Name	00/00/00

Title

I.S.D.S DETAILS SHEET

Sheet Number:

C7.03

Project Number: 23045001

File: 220838 jericho isds_03.dwg

GENERAL NOTES

1. ALL CONTRACTORS ARE REQUIRED TO CONTACT DIG SAFE, THE MUNICIPALITIES PUBLIC WORKS DEPARTMENT, AND ANY OTHER PUBLIC OR PRIVATE AGENCIES NECESSARY FOR UTILITY LOCATION PRIOR TO ANY CONSTRUCTION.

2. UNDERGROUND UTILITIES WILL EXIST THROUGHOUT THIS SITE AND MUST BE LOCATED PRIOR TO CONSTRUCTION. WHERE UNDERGROUND UTILITIES EXIST, FIELD ADJUSTMENT MUST BE APPROVED BY A REPRESENTATIVE OF THE OWNER PRIOR TO INSTALLATION. NEITHER THE OWNER NOR THE LANDSCAPE ARCHITECT ASSUMES ANY RESPONSIBILITY WHATSOEVER, IN RESPECT TO THE CONTRACTORS ACCURACY IN LOCATING THE INDICATED ELEMENTS ON THE DRAWINGS.

3. THE LANDSCAPE ARCHITECT AND CONSULTANTS DO NOT WARRANT OR GUARANTEE THE ACCURACY AND COMPLETENESS OF THE WORK PRODUCT THEREIN BEYOND A REASONABLE DILIGENCE. IF ANY MISTAKES, OMISSIONS, OR DISCREPANCIES ARE FOUND TO EXIST WITH THE WORK PRODUCT, THE LANDSCAPE ARCHITECT SHALL BE PROMPTLY NOTIFIED SO THAT THEY MAY HAVE THE OPPORTUNITY TO TAKE ANY STEPS NECESSARY TO RESOLVE THE ISSUE. FAILURE TO PROMPTLY NOTIFY THE OWNER AND THE LANDSCAPE ARCHITECT OF SUCH CONDITIONS SHALL ABSOLVE THEM FROM ANY RESPONSIBILITY FOR THE CONSEQUENCES OF SUCH FAILURE. ACTIONS TAKEN WITHOUT THE KNOWLEDGE AND CONSENT OF THE OWNER AND THE LANDSCAPE ARCHITECT, OR IN CONTRADICTION TO THE OWNER AND THE LANDSCAPE ARCHITECTS WORK PRODUCT OR RECOMMENDATIONS, SHALL BECOME THE RESPONSIBILITY NOT OF THE OWNER AND THE LANDSCAPE ARCHITECT BUT FOR THE PARTIES RESPONSIBLE FOR THE TAKING OF SUCH ACTION.

4. IT IS SE GROUP'S UNDERSTANDING THAT THE BASE INFORMATION WAS PROVIDED BY A LICENSED LAND SURVEYOR. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE AND LANDSCAPE ARCHITECT OF ANY DISCREPANCIES AS SOON AS THEY ARE DISCOVERED AND PRIOR TO ANY ACTION BY THE CONTRACTOR.

5. CONTRACTOR TO DEVELOP PLAN WITH OWNER OR OWNERS REPRESENTATIVE FOR PROTECTION OF EXISTING TREES TO REMAIN.

LAYOUT NOTES

1. THE CONSULTANT DRAWINGS ARE SUPPLEMENTARY TO THE LANDSCAPE ARCHITECTURAL DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO CHECK WITH WITH LANDSCAPE ARCHITECTURAL DRAWINGS BEFORE INSTALLATION OF CONSULTANT WORK. SHOULD THERE BE A DISCREPANCY BETWEEN THE LANDSCAPE ARCHITECTURAL DRAWINGS AND THE DRAWINGS OF THE CONSULTING ENGINEERS, IT SHALL BE BROUGHT TO THE LANDSCAPE ARCHITECT'S ATTENTION FOR CLARIFICATION. ANY WORK INSTALLED IN CONFLICT WITH ANY OF THE DRAWINGS SHALL BE CORRECTED AT NO EXPENSETO THE OWNER OR DESIGN CONSULTANTS.

2. ALL SYMBOLS, ABBREVIATIONS AND MATERIAL INDICATIONS ARE CONSIDERED TO BE CONSTRUCTION STANDARDS. IF THE CONTRACTOR HAS QUESTIONS REGARDING THEIR EXACT MEANING, THE CONTRACTOR SHALL REQUEST THAT THE LANDSCAPE ARCHITECT ISSUE A CLARIFICATION.

3. DO NOT SCALE DRAWINGS. DIMENSIONS MISSING FROM PLANS OR NEEDED FOR EXECUTION OF THE WORK SHALL BE CLARIFIED OR PROVIDED BY THE LANDSCAPE ARCHITECT BEFORE THE WORK IS INSTALLED.
   a. ALL DIMENSIONS ARE TO FACE OF FINISH MATERIAL, UNLESS OTHERWISE NOTED.
   b. TAKE ALL DIMENSIONS PERPENDICULAR TO ANY REFERENCE LINE, WORK LINE, CENTERLINE, OR FACE OF BUILDING/STRUCTURE.
   c. ALL DIMENSIONS CALLED OUT AS "EQUAL" ARE CONSIDERED EQUIDISTANT MEASUREMENTS.

4. REFERENCE TO NORTH IS TRUE NORTH.

5. REFERENCE TO SCALE IS FOR FULL SIZED DRAWINGS, NOT REDUCED PLANS. DO NOT SCALE FROM DRAWINGS.

6. ANY CONFLICTS IN WHICH THE METHODS OR STANDARDS OF INSTALLATION OR MATERIALS SPECIFIED DO NOT EQUAL OR EXCEED THE REQUIREMENTS OF THE LAWS OR ORDINANCES GOVERNING THE PROJECT, THE LAWS AND ORDINANCES SHALL TAKE PRECEDENCE. NOTIFY THE LANDSCAPE ARCHITECT OF ALL CONFLICTS.

7. THE CONTRACTOR SHALL MAKE CERTAIN THAT THE WORK OF THE NEW CONSTRUCTION WILL NOT OBSTRUCT FIRE DEPARTMENT ACCESS TO NEARBY BUILDINGS. EXITS SHALL BE MAINTAINED CLEAR OF ALL OBSTRUCTIONS.

8. THE CONTRACTOR SHALL VERIFY THE EXISTING CONDITIONS AND NOTIFY THE LANDSCAPE ARCHITECT OF ANY CONDITIONS VARYING FROM INFORMATION HEREIN PRIOR TO PROCEEDING WITH WORK.

9. TO ESTABLISH LANDSCAPE ARCHITECTURAL INTENT, EVERY ATTEMPT HAS BEEN MADE TO IDENTIFY MOST CONDITIONS.

10. CONTRACTOR TO COMMUNICATE WITH CIVIL ENGINEER / SURVEYOR REGARDING SURVEY HORIZONTAL AND VERTICAL CONTROL. CIVIL ENGINEER CAN PROVIDE INFORMATION REQUIRED FOR SITE LAYOUT, AS NECESSARY.

PLANTING NOTES

1. ALL PLANT MATERIAL SHALL BE INSTALLED AS PER THE CONTRACT DOCUMENTS AND SPECIFICATIONS.

2. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE GENERAL CONTRACTOR AND IF NECESSARY OTHER SUB CONTRACTORS AS REQUIRED TO ACCOMPLISH PLANT MATERIAL INSTALLATION.

3. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE TO LOCATE ALL UNDERGROUND UTILITIES PRIOR TO STARTING WORK.

4. PLANT MATERIAL INSTALLATION SHALL NOT OCCUR BEFORE ROUGH GRADING HAS BEEN COMPLETED AND APPROVED BY LANDSCAPE ARCHITECT.

5. ALL PLANT MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE CURRENT AMERICAN STANDARD FOR NURSERY STOCK, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMAN. ALL TREES AND SHRUBS OF THE SAME SPECIES AND SIZE SHALL HAVE MATCHING HEIGHT AND FORM UNLESS OTHERWISE NOTED ON THE PLANS.

6. CONTRACTOR SHALL SUPPLY ALL PLANT MATERIAL IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTINGS SHOWN IN THE CONTRACT DOCUMENTS. DISCREPANCIES IN QUANTITIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT IMMEDIATELY.

7. STAKE LOCATIONS OF PROPOSED PLANT MATERIAL PRIOR TO EXCAVATING PLANT PITS. LOCATION OF ALL PLANT PITS TO BE DETERMINED IN THE FIELD WITH THE LANDSCAPE ARCHITECT. PAINT OUTLINES FOR PLANT BEDS AND GROUND COVER, FINAL LAYOUT TO BE APPROVED BY LANDSCAPE ARCHITECT.

8. CONTRACTOR SHALL FURNISH PLANT MATERIAL FREE OF PESTS OR PLANT DISEASES. PRESELECTED OR "TAGGED" MATERIAL MUST BE INSPECTED BY THE CONTRACTOR AND CERTIFIED PEST AND DISEASE FREE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO WARRANTY ALL PLANT MATERIAL BASED ON THE CONTRACT DOCUMENTS AND SPECIFICATIONS.

9. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OF ANY EXISTING HARDSCAPE OR SOFTSCAPE MATERIALS DAMAGED DURING PLANTING OPERATIONS.

10. ALL TREES, PLANT BEDS AND GROUNDCOVER SHALL BE COVERED WITH 2" OF ORGANIC BARK MULCH AS NOTED IN THE SPECIFICATIONS.

11. AREAS SHOWN AS GROUNDCOVER AT THE BASE OF TREES AND SHRUBS MUST CONFORM TO THE FOLLOWING CRITERIA. THERE SHALL BE NO GROUND COVER INSTALLED AT THE BASE OF TREES OR SHRUBS AS FOLLOWS:
   a. 4 FOOT RADIUS AROUND EVERGREENS.
   b. 3 FOOT RADIUS AROUND DECIDUOUS TREES.
   c. 2 FOOT RADIUS AROUND LARGE SHRUBS.

12. ALL SHRUBS AND GROUNDCOVER SHALL BE PLANTED USING A TRIANGULATED METHOD, REFER TO PLANT MATERIAL INSTALLATION DETAILS.

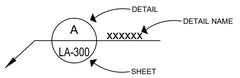
GRADING NOTES

1. REFER TO THE CIVIL ENGINEER'S DRAWINGS FOR GENERAL SITE GRADING AROUND THE PROJECT SITE.

LEGEND

		EXISTING CONTOURS
		PROPOSED CONTOURS
		SWALE
GB		GRADE BREAK
(430.50)	+	EXIST. SPOT GRADE
430.50	+	SPOT GRADE
TS	+	TOP OF STEP
BS	+	BOTTOM OF STEP
TW	+	TOP OF WALL
BW	+	BOTTOM OF WALL
TC	+	TOP OF CURB
BC	+	BOTTOM OF CURB
FC	+	FLUSH CURB
TR	+	TOP OF RAMP
BR	+	BOTTOM OF RAMP
HP	+	HIGH POINT
LP	+	LOW POINT
RE	+	RIM ELEVATION
CB	+	CATCH BASIN
AD	+	AREA DRAIN
TD	+	TRENCH DRAIN
PD	+	PLANTER DRAIN
SPD	+	SUB SURFACE PLANTER DRAIN

LANDSCAPE ARCHITECTURAL SYMBOLS



DETAIL BUBBLE

SECTION SYMBOL

ELEVATION


NORTH ARROW

BUILDING ELEVATION NOTATION

+ 1530.00

SPOT ELEVATION

+ (1530.00)

EXISTING SPOT ELEVATION

REVISION BUBBLE

DIMENSION
NOTE: ALL DIMENSIONS ARE TO OR FROM STRUCTRUAL GRID LINES OR FACE OF FINISH MATERIAL, U.O.N.

LANDSCAPE DRAWING ABBREVIATIONS

@	AT	HP	HIGH POINT
AD	AREA DRAIN	HT	HEIGHT
AL	ALIGN	I.D.	INSIDE DIAMETER
ALT	ALTERNATE	LP	LOW POINT
ASPH	ASPHALT	MAX	MAXIMUM
BC	BOTTOM OF CURB	MFR	MANUFACTURER
BLDG	BUILDING	MIN	MINIMUM
BS	BOTTOM OF STEP	NIC	NOT IN CONTRACT
BW	BOTTOM OF WALL	O.C.	ON CENTER
CB	CATCH BASIN	O.D.	OUTSIDE DIAMETER
CJ	CONTROL JOINT	QTY	QUANTITY
CL	CENTERLINE	R	RADIUS
CONC	CONCRETE	REINF	REINFORCED
CONST	CONSTRUCTION	REQ	REQUIRED
CONT	CONTINUOUS	SPECS	SPECIFICATIONS
CTR	CENTER	SS	STAINLESS STEEL
DIA	DIAMETER	STD	STANDARD
DIM	DIMENSION	TD	TRENCH DRAIN
DWG	DRAWING	TC	TOP OF CURB
EA	EACH	TS	TOP OF STEP
EJ	EXPANSION JOINT	TW	TOP OF WALL
ELEV	ELEVATION	TYP	TYPICAL
EOP	EDGE OF PAVEMENT	U.O.N.	UNLESS OTHERWISE NOTED
EQ	EQUAL	VIF	VERIFY IN FIELD
EW	EACH WAY	W/	WITH
FC	FLUSH CURB	W/O	WITHOUT
FF	FINISH FLOOR	WWF	WELDED WIRE FABRIC

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NH STATE PARKS

Campground Expansion Project PII
Jericho Mountain State Park
298 Jericho Lake Road
Berlin, NH
03570

Issue
CONTRACT SET

Graphic Scale

North

Scale:

Date: June 13, 2024

Drawn By: KS & BD

Checked By: PO & AP

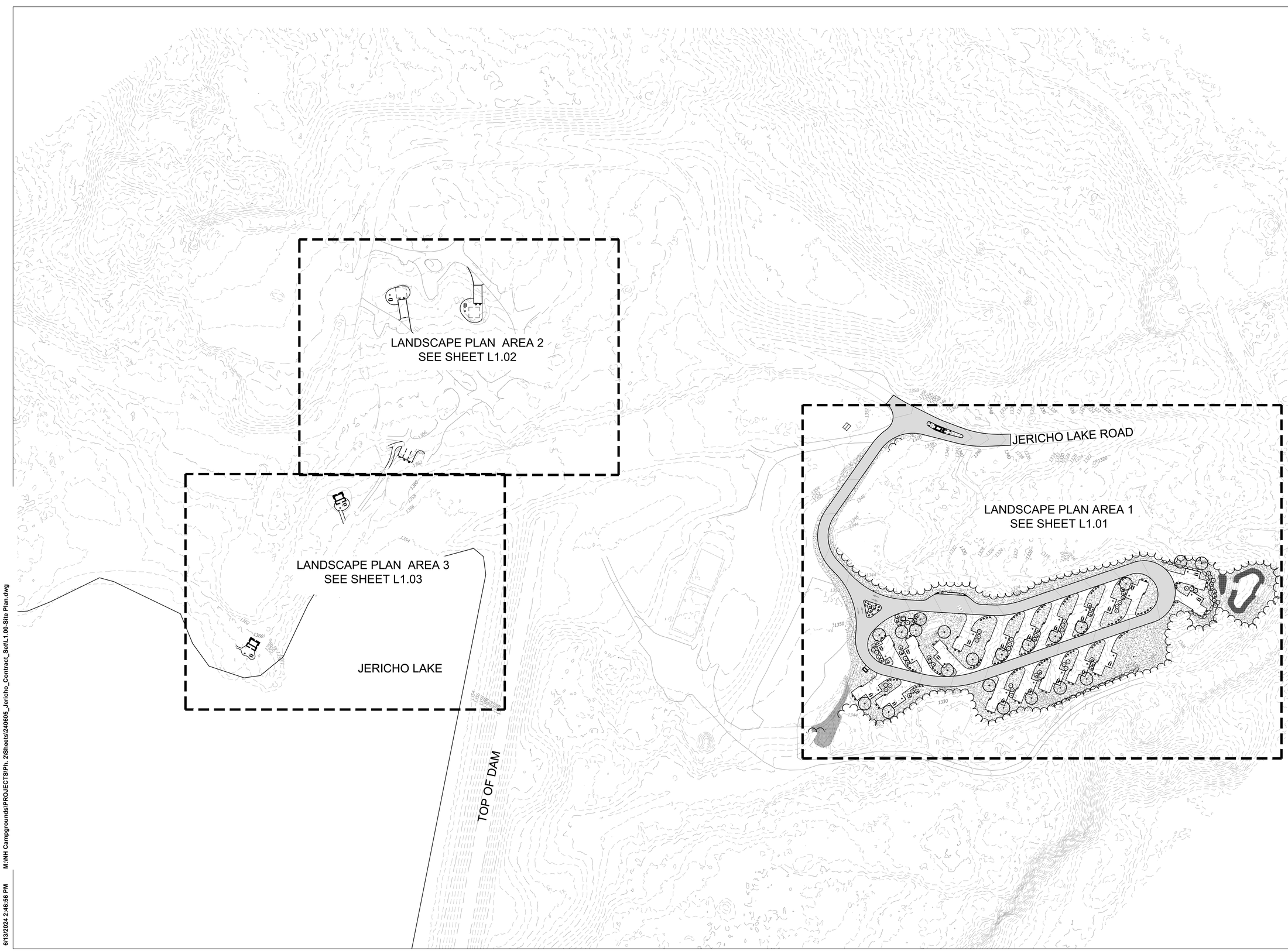
Issues:

No.	Description	Date
1	Name	00/00/00

Title
GENERAL LEGEND & NOTES

Sheet Number:
L0.00

Project Number: 23045001
File: l0.00-cover sheet.dwg



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Issue
CONTRACT SET

Graphic Scale
0 40' 80' 160'

North

Scale: 1" = 80'

Date: June 13, 2024

Drawn By: KS & BD

Checked By: PO & AP

Issues:

No.	Description	Date
1	Name	00/00/00

Title
OVERALL LANDSCAPE PLAN

Sheet Number:
L1.00

Project Number: 23045001
File: l1.00-site plan.dwg

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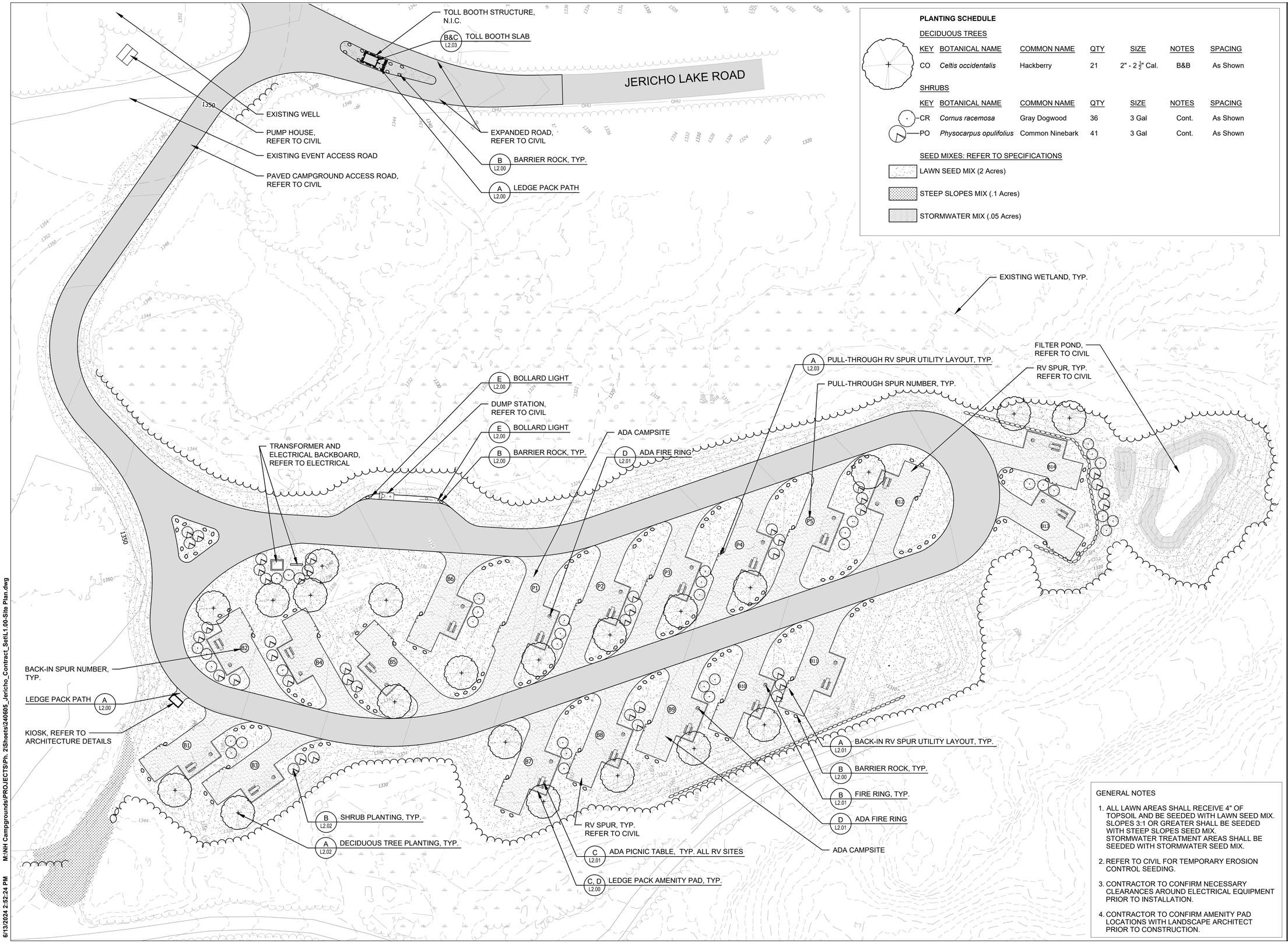

PLANTING SCHEDULE

DECIDUOUS TREES

KEY	BOTANICAL NAME	COMMON NAME	QTY	SIZE	NOTES	SPACING
CO	*Celtis occidentalis*	Hackberry	21	2" - 2 3/4" Cal.	B&B	As Shown

SHRUBS

KEY	BOTANICAL NAME	COMMON NAME	QTY	SIZE	NOTES	SPACING
CR	*Cornus racemosa*	Gray Dogwood	36	3 Gal	Cont.	As Shown
PO	*Physocarpus opulifolius*	Common Ninebark	41	3 Gal	Cont.	As Shown

SEED MIXES: REFER TO SPECIFICATIONS

- LAWN SEED MIX (2 Acres)
- STEEP SLOPES MIX (.1 Acres)
- STORMWATER MIX (.05 Acres)

GENERAL NOTES

1. ALL LAWN AREAS SHALL RECEIVE 4" OF TOPSOIL AND BE SEEDED WITH LAWN SEED MIX. SLOPES 3:1 OR GREATER SHALL BE SEEDED WITH STEEP SLOPES SEED MIX. STORMWATER TREATMENT AREAS SHALL BE SEEDED WITH STORMWATER SEED MIX.
2. REFER TO CIVIL FOR TEMPORARY EROSION CONTROL SEEDING.
3. CONTRACTOR TO CONFIRM NECESSARY CLEARANCES AROUND ELECTRICAL EQUIPMENT PRIOR TO INSTALLATION.
4. CONTRACTOR TO CONFIRM AMENITY PAD LOCATIONS WITH LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION.

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Issue

CONTRACT SET

Graphic Scale

0 15' 30' 60'

North

Scale: 1" = 30'

Date: June 13, 2024

Drawn By: KS & BD

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Issues:

No.	Description	Date
1	Name	00/00/00

Title

LANDSCAPE PLAN - AREA 1

Sheet Number:

L1.01

Project Number: 23045001

File: l1.00-site plan.dwg

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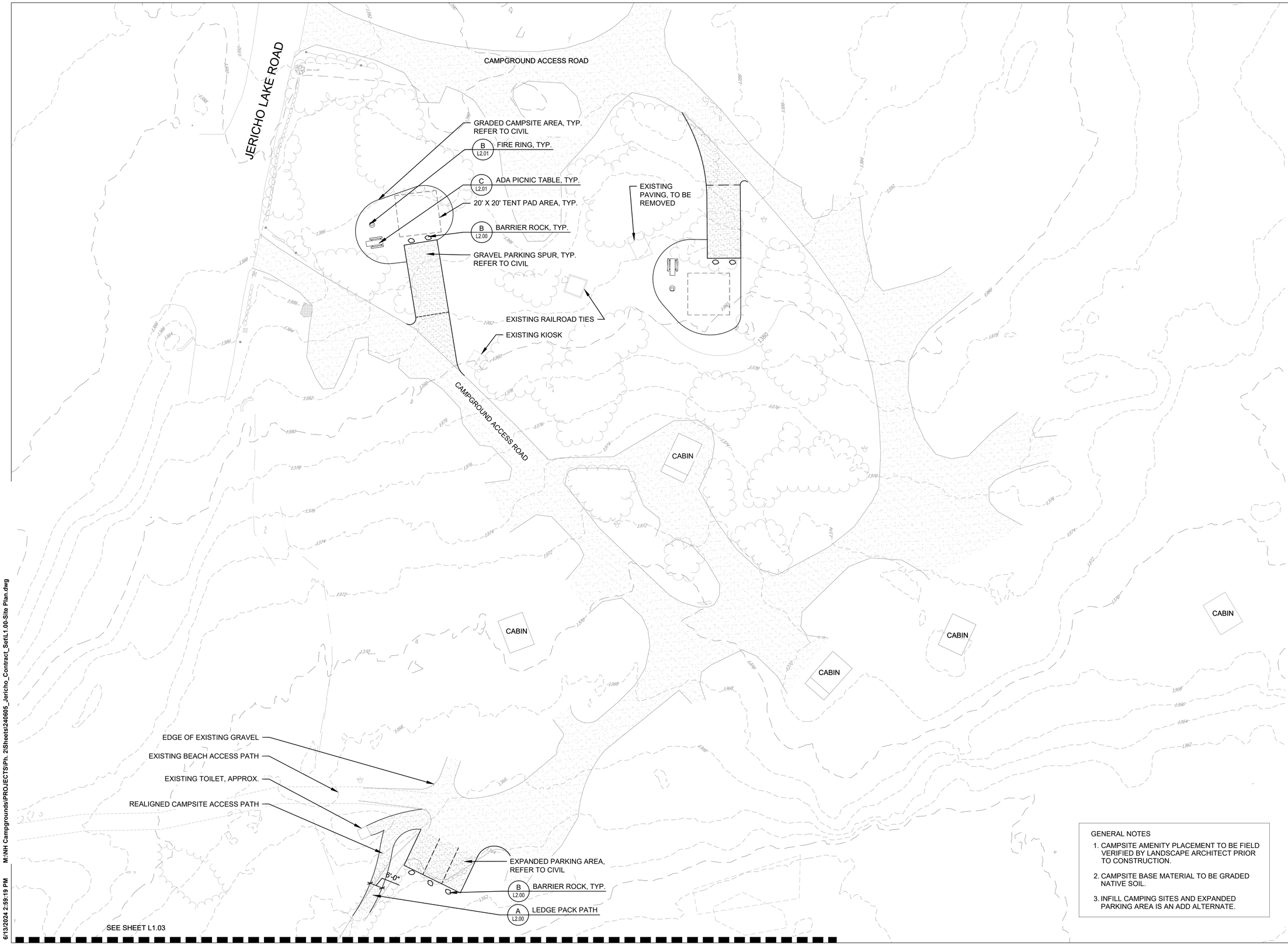

GENERAL NOTES

1. CAMPSITE AMENITY PLACEMENT TO BE FIELD VERIFIED BY LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION.
2. CAMPSITE BASE MATERIAL TO BE GRADED NATIVE SOIL.
3. INFILL CAMPING SITES AND EXPANDED PARKING AREA IS AN ADD ALTERNATE.

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Issue
CONTRACT SET

Graphic Scale
0 15' 20' 40'

North

Scale: 1" = 20'

Date: June 13, 2024

Drawn By: KS & BD

Checked By: PO & AP

Issues:

No.	Description	Date
1	Name	00/00/00

Title
LANDSCAPE PLAN - AREA 2

Sheet Number:
L1.02

Project Number: 23045001
File: l1.00-site plan.dwg

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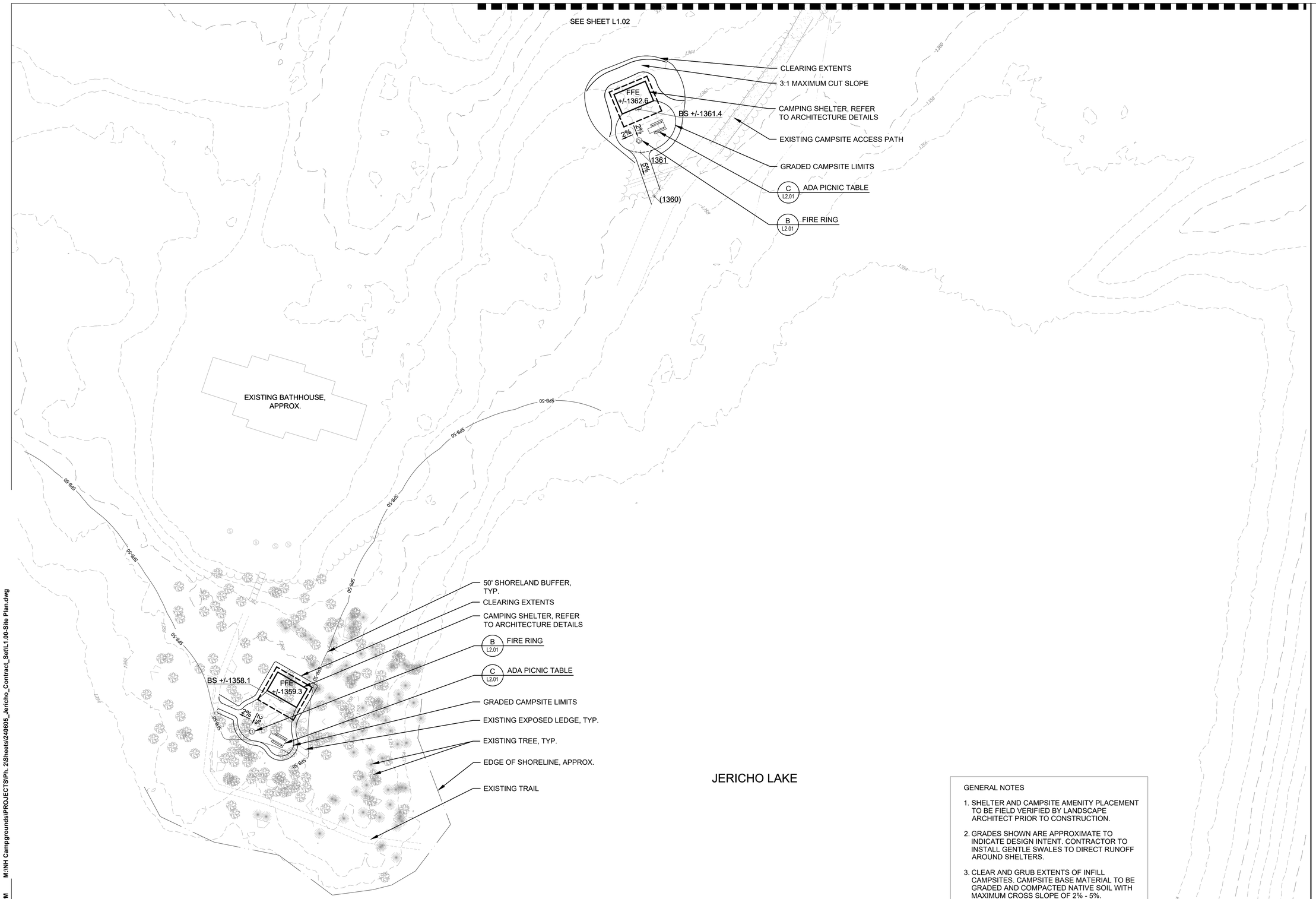

GENERAL NOTES

1. SHELTER AND CAMPSITE AMENITY PLACEMENT TO BE FIELD VERIFIED BY LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION.
2. GRADES SHOWN ARE APPROXIMATE TO INDICATE DESIGN INTENT. CONTRACTOR TO INSTALL GENTLE SWALES TO DIRECT RUNOFF AROUND SHELTERS.
3. CLEAR AND GRUB EXTENTS OF INFILL CAMPSITES. CAMPSITE BASE MATERIAL TO BE GRADED AND COMPACTED NATIVE SOIL WITH MAXIMUM CROSS SLOPE OF 2% - 5%.
4. REFER TO LANDSCAPE DETAILS FOR TREE PROTECTION.
5. CAMPING SHELTER INFILL SITES ARE AN ADD ALTERNATE.

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Issue

CONTRACT SET

Graphic Scale

0 15' 20' 40'

North

Scale: 1" = 20'

Date: June 13, 2024

Drawn By: KS & BD

Checked By: PO & AP

Issues:

No.	Description	Date
1	Name	00/00/00

Title

LANDSCAPE PLAN - AREA 3

Sheet Number:

L1.03

Project Number: 23045001

File: l1.00-site plan.dwg

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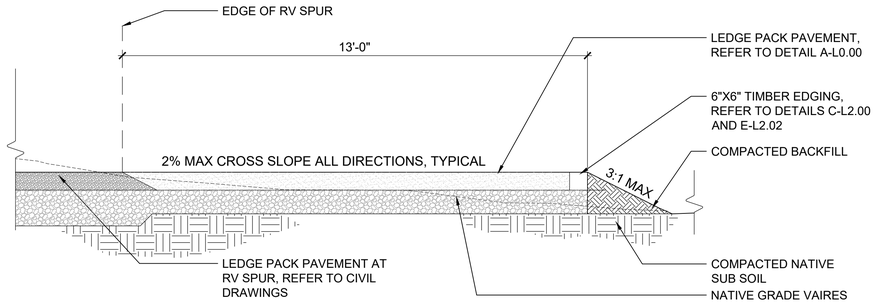
NOTE:
REFER TO CIVIL DRAWINGS FOR GRADING AT ALL RV SPURS AND AMENITY PADS.

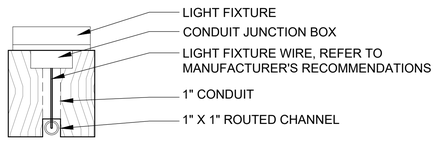


D SECTION: AMENITY PAD

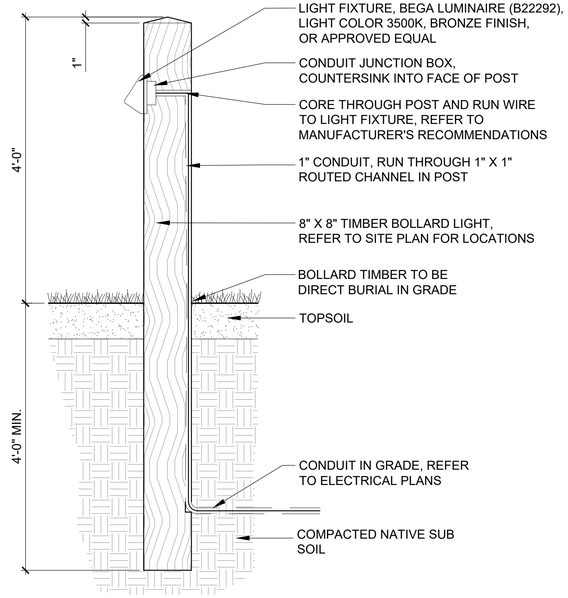
SCALE 1/2" = 1'-0"

d-amenity pad-section.dwg

NOTES:
1. ALL TIMBER TO BE BLACK LOCUST OR OTHER SUITABLE ROT RESISTANT WOOD.
2. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR REVIEW AND APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION



ENLARGEMENT - PLAN VIEW
SCALE 2"=1'-0"

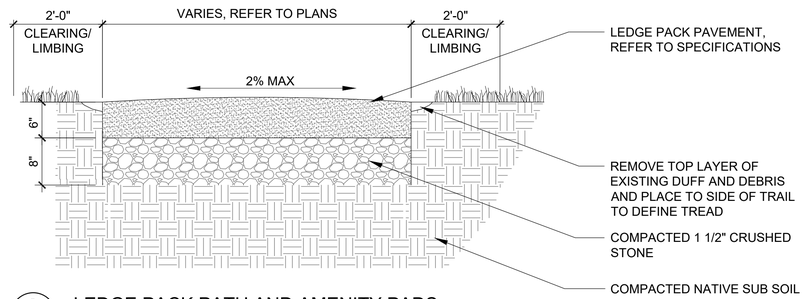


E BOLLARD LIGHT

SCALE 1" = 1'-0"

d-light fixture B-bollard light.dwg

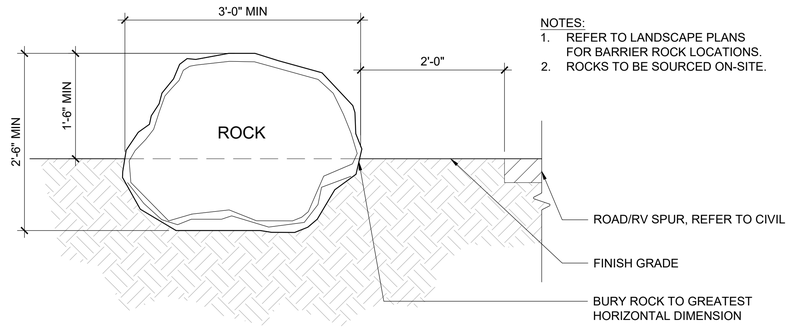
NOTES:
1. SUBMIT STONE MATERIAL SAMPLE TO LANDSCAPE ARCHITECT FOR APPROVAL.
2. PATH TO BE SET 1-2" ABOVE SURROUNDING GRADE. CREATE POSITIVE DRAINAGE AWAY FROM PATH.
3. LANDSCAPE ARCHITECT TO REVIEW AND APPROVE LAYOUT OF PATHS AND AMENITY PADS PRIOR TO FINAL INSTALLATION.
4. REMOVE BRUSH/UNDERSTORY AND LIMB UP TREES (AT LEAST 8'-0" ABOVE GRADE) WITHIN CLEARING/LIMBING ZONE. CARE SHALL BE TAKEN TO PROTECT ANY SIGNIFICANT SHADE TREES (CALIPER >12"). CONTRACTOR MUST VERIFY WITH LANDSCAPE ARCHITECT IF ANY SIGNIFICANT SHADE TREES ARE PROPOSED TO BE REMOVED PRIOR TO INSTALLATION.



A LEDGE PACK PATH AND AMENITY PADS

SCALE 1" = 1'-0"

d-gravel path.dwg



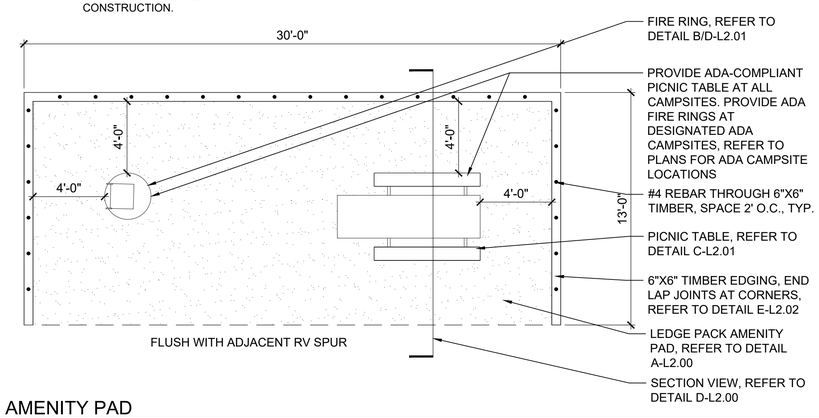
NOTES:
1. REFER TO LANDSCAPE PLANS FOR BARRIER ROCK LOCATIONS.
2. ROCKS TO BE SOURCED ON-SITE.

B BARRIER ROCK

SCALE 1" = 1'-0"

d-barrier rock.dwg

NOTES:
1. CONTRACTOR TO CONFIRM AMENITY PAD LOCATIONS WITH LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION.



C AMENITY PAD

SCALE 1/4" = 1'-0"

d-amenity pad.dwg

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ADAM K. PAUL 032 LICENSED LANDSCAPE ARCHITECT STATE OF NEW HAMPSHIRE

NH STATE PARKS

Campground Expansion Project PII
Jericho Mountain State Park
298 Jericho Lake Road
Berlin, NH
03570

Issue
CONTRACT SET

Graphic Scale

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Scale: AS NOTED

Date: June 13, 2024

Drawn By: KS & BD

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1	Name	00/00/00

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Project Number: 23045001
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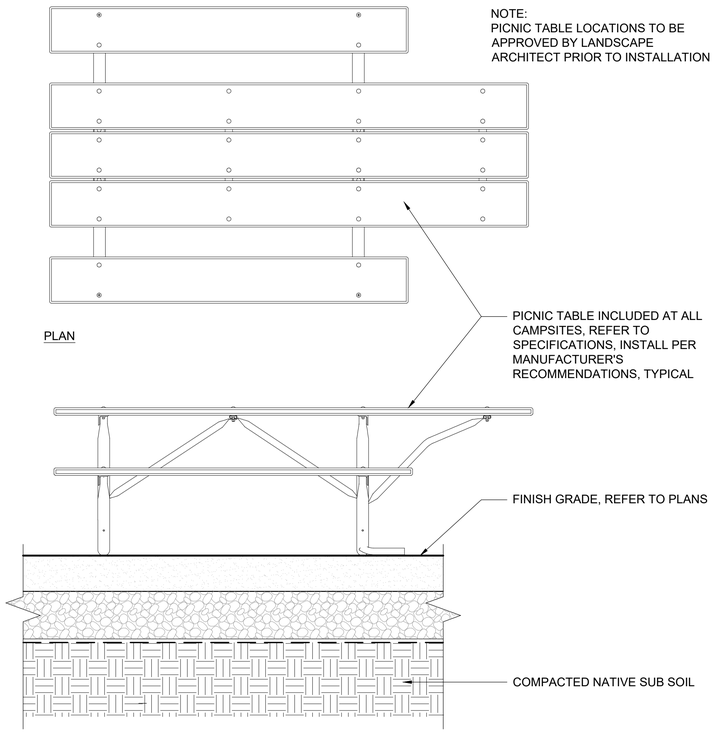
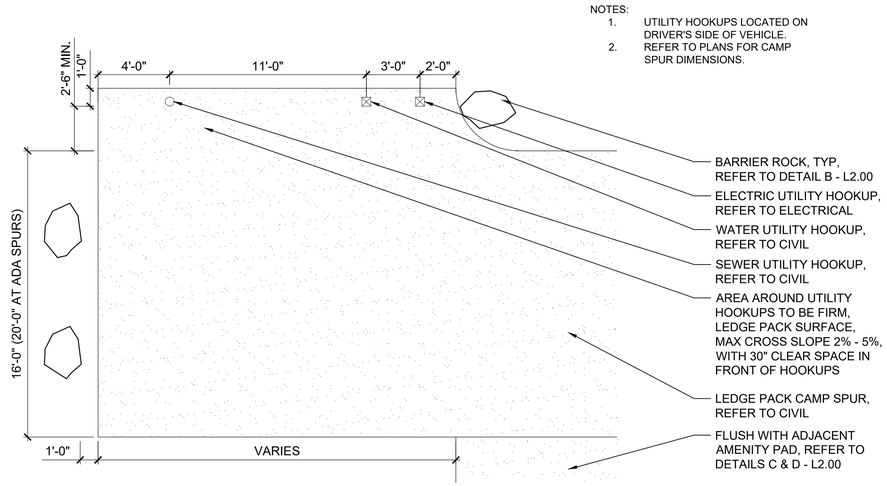


C ADA PICNIC TABLE

SCALE 1" = 1'-0"

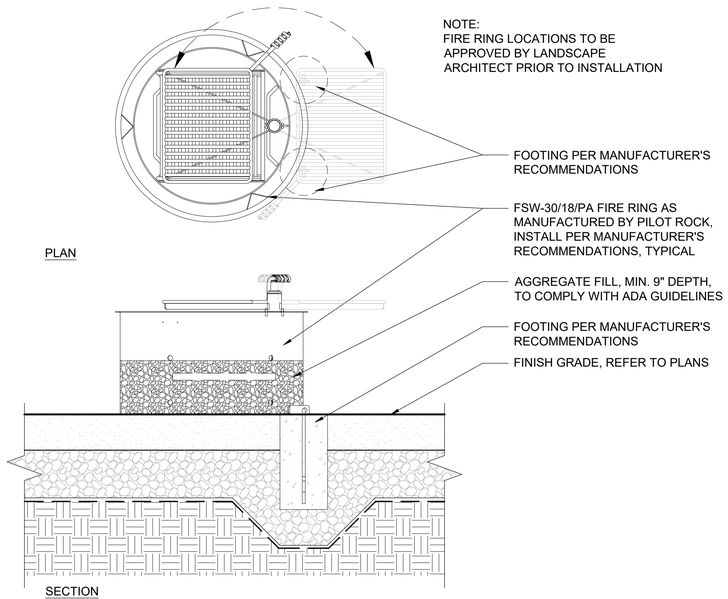
d-table-accessible.dwg



A BACK-IN RV SPUR UTILITY LAYOUT

SCALE 1/4" = 1'-0"

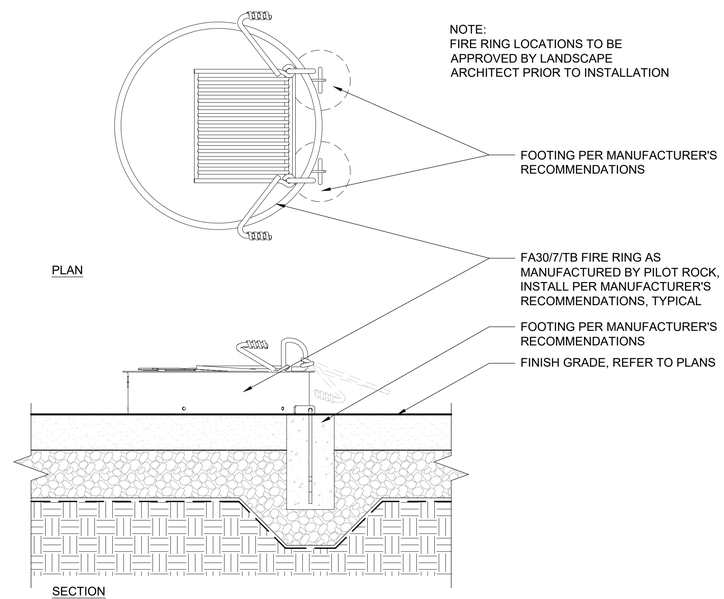
d-campspurlayout.dwg



D ADA FIRE RING

SCALE 1" = 1'-0"

d-fire ring-accessible.dwg



B FIRE RING

SCALE 1" = 1'-0"

d-fire ring.dwg

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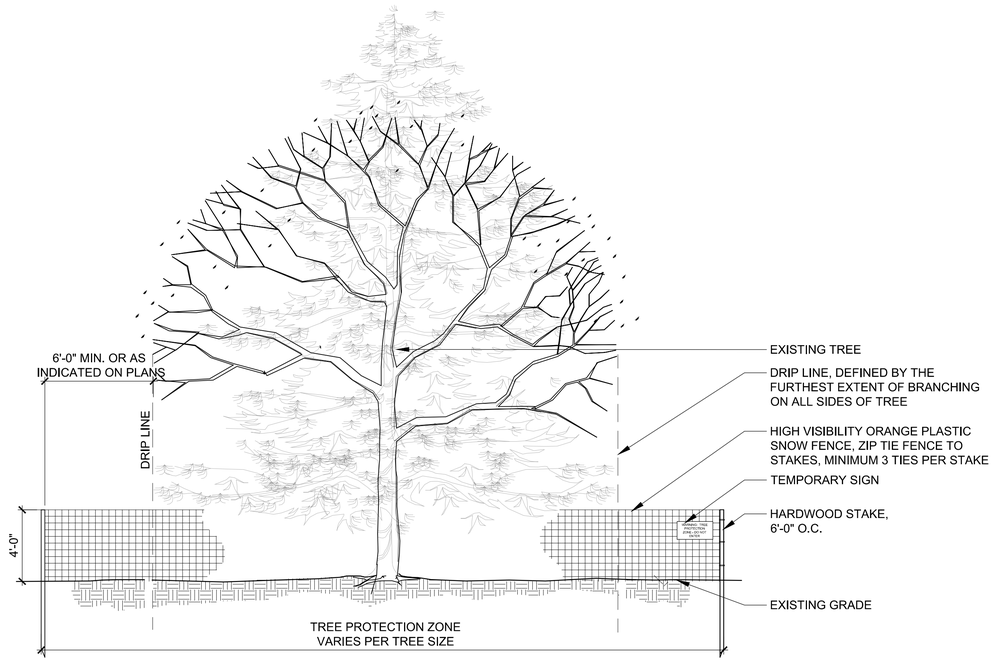
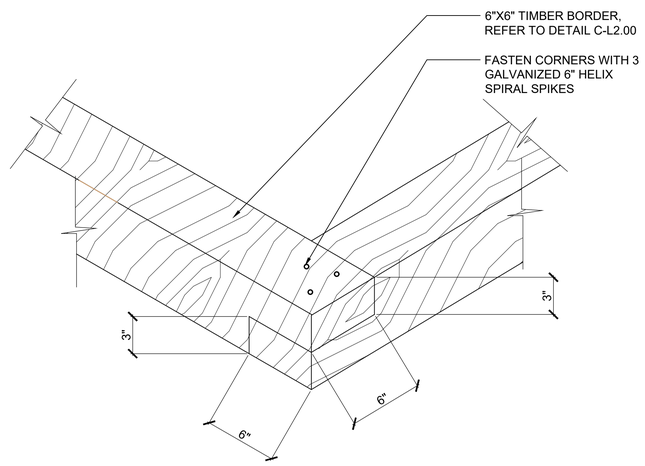


NOTES:
1. TREE PROTECTION FOR GROUPING OF MORE THAN ONE TREE MAY OCCUR, REFER TO DRAWINGS.
2. PRIOR TO STARTING WORK, THE OWNERS REPRESENTATIVE AND LANDSCAPE ARCHITECT SHALL BE NOTIFIED TO REVIEW TREE PROTECTION FENCING LAYOUT.
3. IF TREE PROTECTION FENCE CAN NOT EXTEND BEYOND THE DRIP LINE AS DETAILED DUE TO SITE CONDITIONS, CONTRACTOR SHALL MAKE BEST EFFORT TO PROTECT AS MUCH OF THE TREE PROTECTION ZONE AS POSSIBLE. NOTIFY OWNERS REPRESENTATIVE AND LANDSCAPE ARCHITECT IF FIELD ADJUSTMENTS TO TREE PROTECTION FENCE ARE REQUIRED.
4. TREE PROTECTION FENCE SHALL BE MAINTAINED IN AN UPRIGHT CONDITION THROUGHOUT THE EXECUTION OF THE WORK, WHETHER TEMPORARY, DEMOLITION OR NEW CONSTRUCTION.
5. WITHIN THE TREE PROTECTION ZONE PROHIBITED USES INCLUDE BUT ARE NOT LIMITED TO, EQUIPMENT AND VEHICLES PARKING, LAYDOWN AND STORAGE OF MATERIALS, AND CONSTRUCTION RELATED ACTIVITIES.
6. **REMOVAL OF EXISTING UNDERGROUND UTILITIES WITHIN THE TREE PROTECTION ZONE IS PROHIBITED.**
7. IF DAMAGE TO TREE(S) DOES OCCUR, OWNER'S REPRESENTATIVE AND LANDSCAPE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY.
8. PROVIDE 4'-0" FENCE OPENING FOR LAWN MOWING OPERATION, IF APPLICABLE.

D TREE PROTECTION

SCALE 1/4" = 1'-0"

d-tree protection.dwg



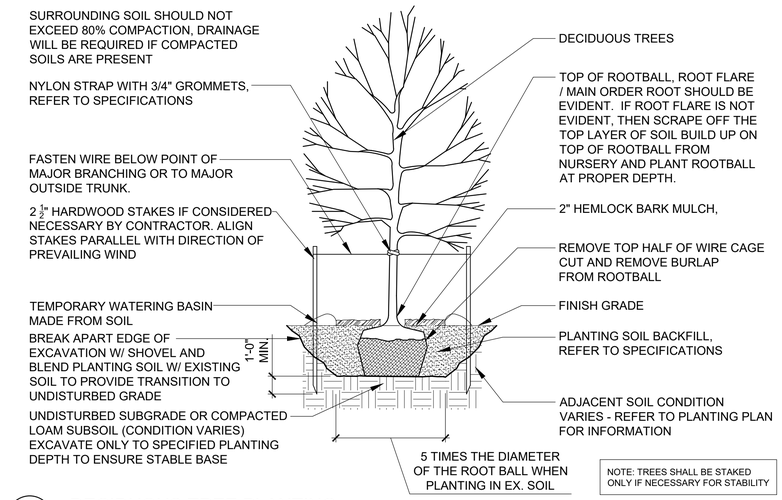
E AMENITY PAD LAP JOINTS

not to scale

d-amenity pad lap joints.dwg

NOTE: EXAMINE ENTIRE TREE AND REMOVE ALL NURSERY TAGS, ROPE, STRING, OR SURVEYORS TAPE TO PREVENT FUTURE GIRDLING.

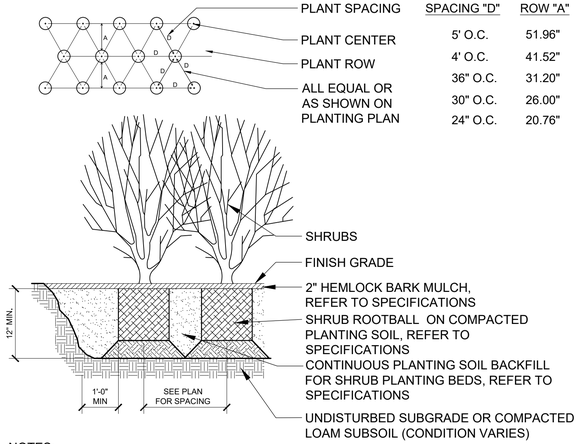
SURROUNDING SOIL SHOULD NOT EXCEED 80% COMPACTION, DRAINAGE WILL BE REQUIRED IF COMPACTED SOILS ARE PRESENT



A DECIDUOUS TREE PLANTING

SCALE NTS

p-decidtree.dwg



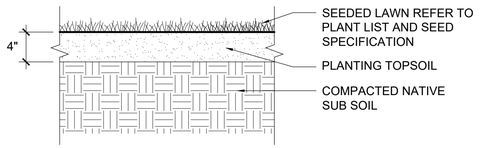
	SPACING "D"	ROW "A"
	5' O.C.	51.96"
	4' O.C.	41.52"
	36" O.C.	31.20"
	30" O.C.	26.00"
	24" O.C.	20.76"

NOTES:
1. SEE PLANTING PLAN FOR SPACING AND QUANTITIES.
2. PLANTS SHALL BE PLANTED IN CONTINUOUS PLANTING SOIL PER THE DEPTH INDICATED.

B SHRUB PLANTING

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

NOTES:
1. REFER TO PLANT LIST AND SPECIFICATIONS FOR SEEDING.
2. ALL LAWN AREAS TO BE STAKED AND MAINTAINED BY CONTRACTOR TO PREVENT PEDESTRIAN TRAFFIC. STAKES AND NETTING TO BE REMOVED BY CONTRACTOR PRIOR TO FIRST MOWING.



C LAWN

SCALE 1" = 1'-0"

p-lawn.dwg

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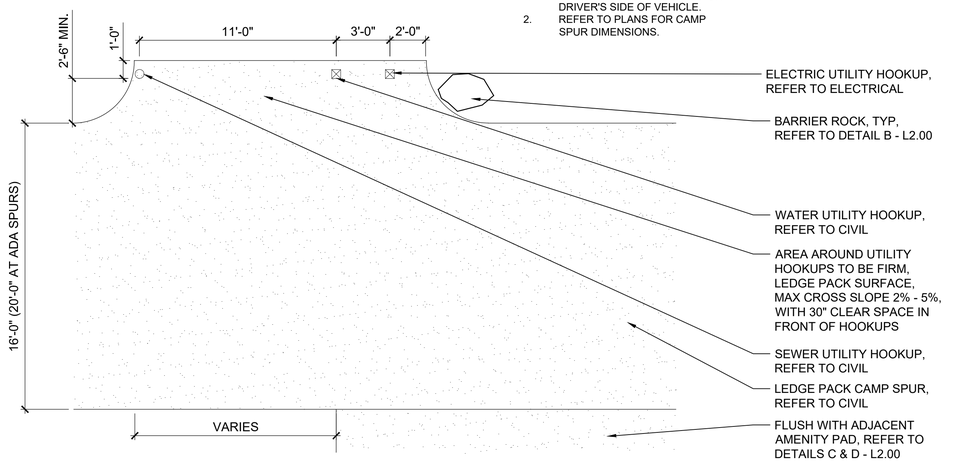
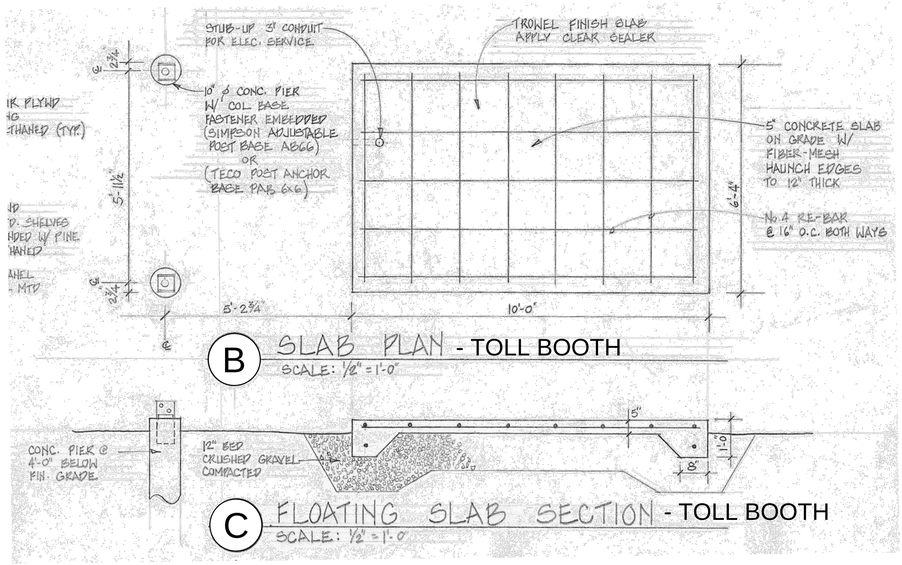
NOTES:
1. UTILITY HOOKUPS LOCATED ON DRIVER'S SIDE OF VEHICLE.
2. REFER TO PLANS FOR CAMP SPUR DIMENSIONS.



A PULL-THROUGH RV SPUR UTILITY LAYOUT
SCALE 1/4" = 1'-0"

d-campspurlayout.dwg



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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 STRINGENT.

   C. ALL WORK TO BE IN ACCORDANCE WITH 2020 NEC AND ALL APPLICABLE FEDERAL, STATE LOCAL CODES.
2. PERMITS:
   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. CONDUITS:
   A. THE TYPE OF CONDUIT SHALL BE AS FOLLOWS FOR ALL FEEDERS AND DISTRIBUTION CIRCUITS, UNLESS OTHERWISE SPECIFIED.

APPLICATION	TYPE OF CONDUIT
OUTDOORS	GALV. RIGID STEEL OR EMT W/ W.P. FITTINGS
BRANCH CIRCUITS (EXPOSED)	EMT
BRANCH CIRCUITS (CONCEALED)	MC
SUPPLY TO DISTRIBUTION PANEL	EMT
UNDERGROUND SERVICE ENTRANCE	PVC – SCHEDULE 40

5. WIRE:
   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. LIGHTING:
   A. LIGHTING FIXTURES AND LAMPS (UNLESS NOTED OTHERWISE) SHALL BE FURNISHED BY THE ELECTRICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL INSTALL ALL FIXTURES AND LAMPS.
7. WIRE DEVICES:
   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. SAFETY SWITCHES:
   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. BOXES:
   A. OUTLET BOXES AND COVERS SHALL BE GALVANIZED, ONE–PIECE PRESSED STEEL KNOCKOUT.
   B. JUNCTION, PULL BOXES AND COVERS SHALL BE GALVANIZED STEEL, CODE GAUGE SIZE.
10. INSTALLATION:
    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 REMAIN 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. GUARANTEE:
    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. FINALLY:
    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

AC	ABOVE COUNTER
AFF	ABOVE FINISHED FLOOR.
CB	CIRCUIT BREAKER.
EP	EXPLOSION PROOF.
GFI	GROUND FAULT CIRCUIT INTERRUPTER.
GND	GROUND.
HP	HORSEPOWER.
LP	LIGHTING PANEL.
MCC	MOTOR CONTROL CENTER.
MH	MOUNTING HEIGHT, MANHOLE.
NEC	NATIONAL ELECTRICAL CODE.
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOC.
NIC	NOT IN CONTRACT.
NL	NIGHT LIGHT.
PH	PHOTOELECTRIC SWITCH
PP	POWER PANEL.
RP	RECEPTACLE PANEL.
UG	UNDERGROUND.
UON	UNLESS OTHERWISE NOTED.
WP	WEATHER PROOF.

WIRING

#10 — 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

S* 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

D 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

E COMBINATION EMERGENCY LIGHTING FIXTURE ANG EXIT SIGN

A INDICATES FIXTURE TYPE; SEE SCHEDULE.

RECEPTACLES

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

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

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

PANELS AND MISC.

LIGHT OR POWER PANEL

FSS FUSED SAFETY (DISCONNECT) SWITCH

NFSS NON–FUSED SAFETY (DISCONNECT) SWITCH

J JUNCTION BOX

M 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.

CIRCUIT BREAKER PANEL NO: 'RV'

VOLTS: 120/240 WIRE: 3 KA RMS: 45 KAIC NEUTRAL BAR: YES BRANCH CB: BOLT-ON NEMA TYPE: 3R MF'R: SQUARE "D", G.E., SIEMENS OR EQUAL.
PHASE: 1 AMP: 800 MAIN CB AMP: 800 GROUND BAR: YES KEY LOCK: YES MOUNTING: SUFRACE

VOLT–AMPS(V–A) A	VOLT–AMPS(V–A) B	CIRCUIT DESCRIPTION	CONDUCTOR	POLES	C.B.	CK'T#		C.B.	POLES	CONDUCTOR	CIRCUIT DESCRIPTION	VOLT–AMPS(V–A) A	VOLT–AMPS(V–A) B
14000		RV SITES - P5, B12, B13, B14	(3)250KCMIL+#4G.	2	125	1	2	125	2	(3)250KCMIL+#4G.	RV SITES - P1, P2, P3, P4	14000	
	14000					3	4						14000
14000		RV SITES - B8, B9, B10, B11	(3)250KCMIL+#4G.	2	125	5	6	125	2	(3)250KCMIL+#4G.	RV SITES - B1, B3, B7	10500	
	14000					7	8						10500
14000		RV SITES - B2, B4, B5, B6	(3)250KCMIL+#4G.	2	125	9	10	20	2	(3)#10+#10G.	SEWAGE LIFT CONTROL	1800	
	14000					11	12				PANEL		1800
1800		WELL PUMP	(3)#4+#8G.	2	20	13	14	20	1	(2)#12+#12G.	LIGHTING - SEW. PUMP STAT.	100	
	1800					15	16	20	2	(3)#4	PANEL TB IN TOLL BOOTH		1600
20000		PANEL EV	(3)350KCMIL+#3G.	2	200	17	18					1000	
	20000					19	20				SPACE		
		SPACE				21	22				SPACE		
		SPACE				23	24				SPACE		
		SPACE				25	26				SPACE		
		SPACE				27	28				SPACE		
		SPACE				29	30				SPACE		
63800	63800	← TOTAL	TOTAL CONNECTED LOAD: 182900 V-A (762 A.)								TOTAL →	28300	27900

CIRCUIT BREAKER PANEL NO: 'CG'

VOLTS: 120/240 WIRE: 3 KA RMS: 45 KAIC NEUTRAL BAR: YES BRANCH CB: BOLT-ON NEMA TYPE: 3R MF'R: SQUARE "D", G.E., SIEMENS OR EQUAL.
PHASE: 1 AMP: 200 MAIN CB AMP: 200 GROUND BAR: YES KEY LOCK: YES MOUNTING: SUFRACE

VOLT–AMPS(V–A) A	VOLT–AMPS(V–A) B	CIRCUIT DESCRIPTION	CONDUCTOR	POLES	C.B.	CK'T#		C.B.	POLES	CONDUCTOR	CIRCUIT DESCRIPTION	VOLT–AMPS(V–A) A	VOLT–AMPS(V–A) B
2000		PANEL C3	3#6+#10G.	2	30	1	2	30	2	3#6+#10G.	PANEL C8	2000	
	2000					3	4						2000
2000		PANEL C4	3#6+#10G.	2	30	5	6	30	2	3#6+#10G.	PANEL C9	2000	
	2000					7	8						2000
2000		PANEL C7	3#6+#10G.	2	30	9	10				SPACE		
	2000						12				SPACE		
		SPACE				13	14				SPACE		
		SPACE				15	16				SPACE		
		SPACE				17	18				SPACE		
		SPACE				19	20				SPACE		
		SPACE				21	22				SPACE		
		SPACE				23	24				SPACE		
		SPACE				25	26				SPACE		
		SPACE				27	28				SPACE		
		SPACE				29	30				SPACE		
6000	6000	← TOTAL	TOTAL CONNECTED LOAD: 180200 V-A (84 A.)								TOTAL →	4000	4000

CIRCUIT BREAKER PANEL NO: 'TB'

NOTE: PROVIDE GROUNDING SYSTEM PER NEC.

VOLTS: 120/240 WIRE: 3 KA RMS: 10 KAIC NEUTRAL BAR: YES BRANCH CB: PLUG-IN NEMA TYPE: 3R MF'R: SQUARE "D", G.E., SIEMENS LOADCENTER, OR EQUAL
PHASE: 1 RATED AMP: 60 MAIN CB AMP: 20 GROUND BAR: YES KEY LOCK: YES MOUNTING: SUFRACE

VOLT–AMPS(V–A) A	VOLT–AMPS(V–A) B	CIRCUIT DESCRIPTION	CONDUCTOR	POLES	C.B.	CK'T#		C.B.	POLES	CONDUCTOR	CIRCUIT DESCRIPTION	VOLT–AMPS(V–A) A	VOLT–AMPS(V–A) B
1500		ELECTRIC CABINET HEATER	2#12+#12G.	1	20	1	2	20	1	2#12+#12G.	INTERIOR & EXTERIOR LGT.	100	
	1000	RECEPTACLE	2#12+#12G.	1	20	3	4				SPACE		
		SPACE				5	6				SPACE		
		SPACE				7	8				SPACE		
6000	6000	← TOTAL	TOTAL CONNECTED LOAD: 180200 V-A (84 A.)								TOTAL →	4000	4000

CHARLES P. BUCKLEY
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500 DEPOT ST.
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N.H. LIC. NO. 09198

STATE OF NEW HAMPSHIRE
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NO. 09198
LICENSED PROFESSIONAL ENGINEER

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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
Jericho Mountain State Park
298 Jericho Lake Road
Berlin, NH
03570

Issue

CONTRACT SET

Graphic Scale

North

Scale: As Indicated

Date: JUNE 13, 2024

Drawn By: CPB

Checked By: CPB

Issues:

No.	Description	Date

Title

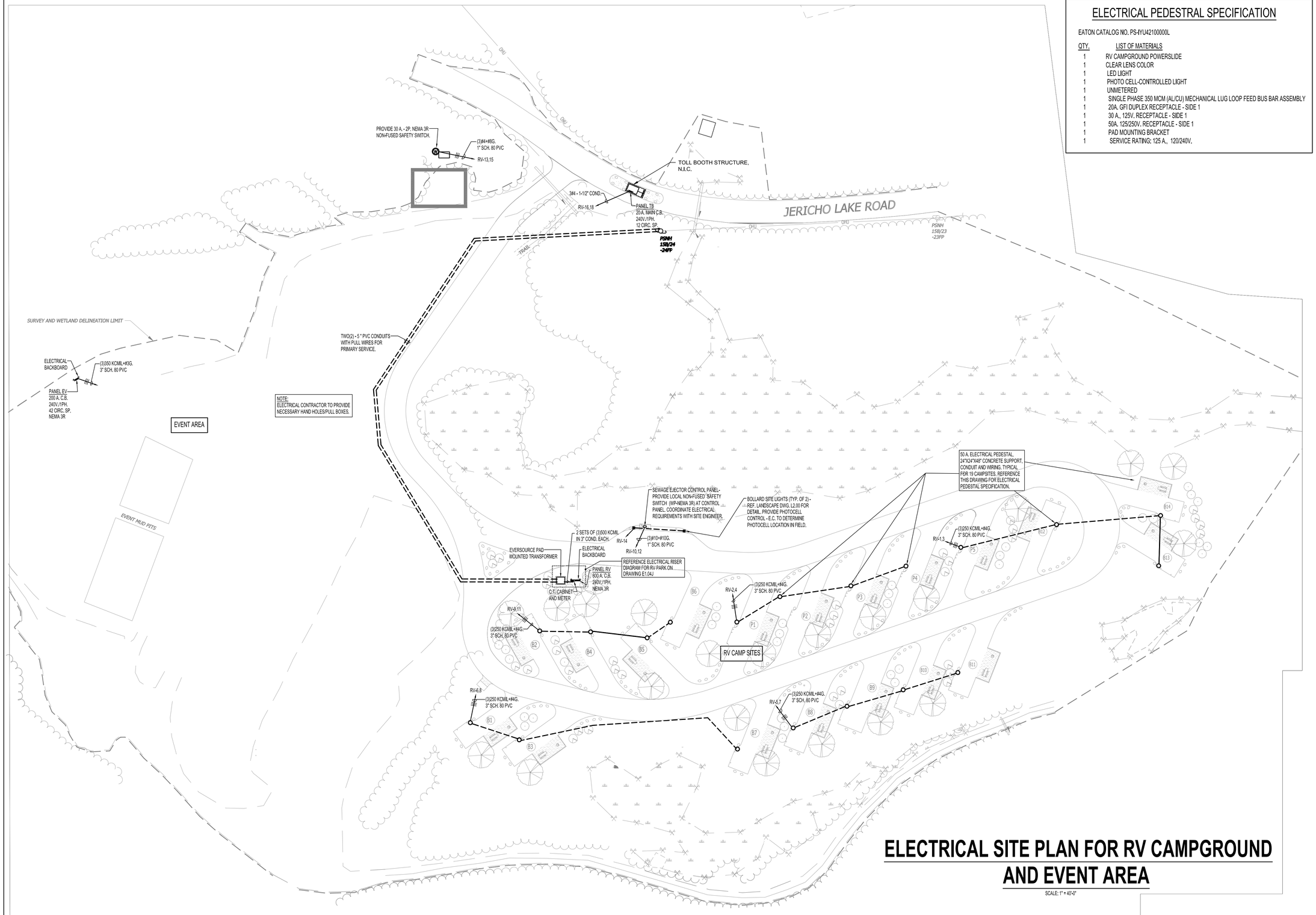
ELECTRICAL NOTES, SYMBOLS SCHEDULES

Sheet Number:

E1.01J

Project Number: 23045001

File:



ELECTRICAL SITE PLAN FOR RV CAMPGROUND AND EVENT AREA

SCALE: 1" = 40'-0"

ELECTRICAL PEDESTRAL SPECIFICATION

EATON CATALOG NO. PS-IYU42100000L

QTY.	LIST OF MATERIALS
1	RV CAMPGROUND POWERSLIDE
1	CLEAR LENS COLOR
1	LED LIGHT
1	PHOTO CELL-CONTROLLED LIGHT
1	UNMETERED
1	SINGLE PHASE 350 MCM (AL/CU) MECHANICAL LUG LOOP FEED BUS BAR ASSEMBLY
1	20A. GFI DUPLEX RECEPTACLE - SIDE 1
1	30 A., 125V. RECEPTACLE - SIDE 1
1	50A. 125/250V. RECEPTACLE - SIDE 1
1	PAD MOUNTING BRACKET
1	SERVICE RATING: 125 A., 120/240V.

C.P.B.

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NH STATE PARKS

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298 Jericho Lake Road
Berlin, NH
03570

Issue

CONTRACT SET

Graphic Scale: 0 20 40 80

North

Scale: 1" = 40'

Date: JUNE 13, 2024

Drawn By: CPB

Checked By: CPB

Issues:

No.	Description	Date
1	Name	00/00/00

Title

ELECTRICAL SITE PLAN - AREA 1

Sheet Number:

E1.02J

Project Number: 23045001

File: 220838-jericho-x-site 60p_02.dwg

ELECTRICAL SITE PLAN FOR CAMPGROUND

SCALE: 1" = 20'-0"

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Jericho Mountain State Park
298 Jericho Lake Road
Berlin, NH
03570

Issue
CONTRACT SET

Graphic Scale

North

Scale: 1" = 20'

Date: JUNE 13, 2024

Drawn By: CPB

Checked By: CPB

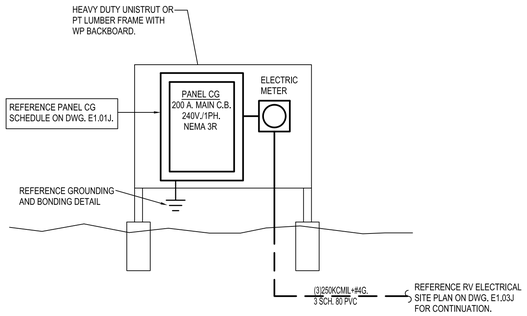
Issues:

No.	Description	Date
1	Name	00/00/00

Title
ELECTRICAL SITE PLAN - AREA 2

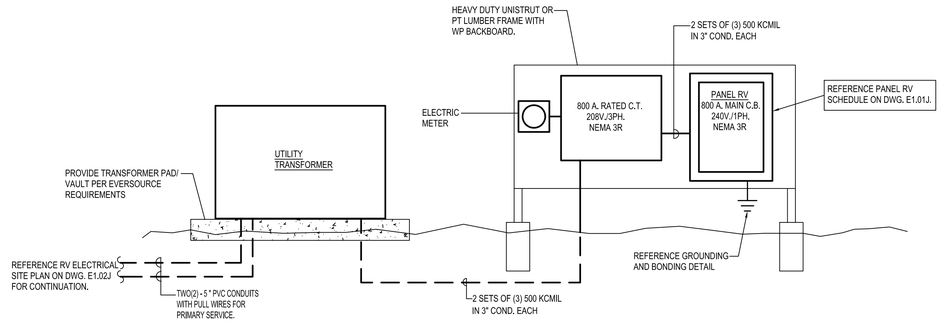
Sheet Number:
E1.03J

Project Number: 23045001
File: 220838-jericho-x-site 60p_02.dwg



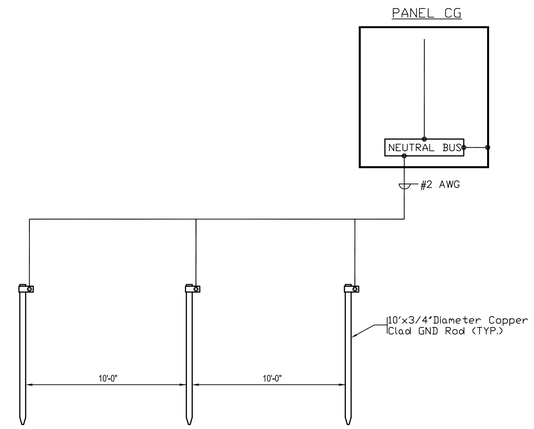
ELECTRICAL RISER DIAGRAM - CAMPGROUND ELECTRICAL SERVICE

NOT TO SCALE



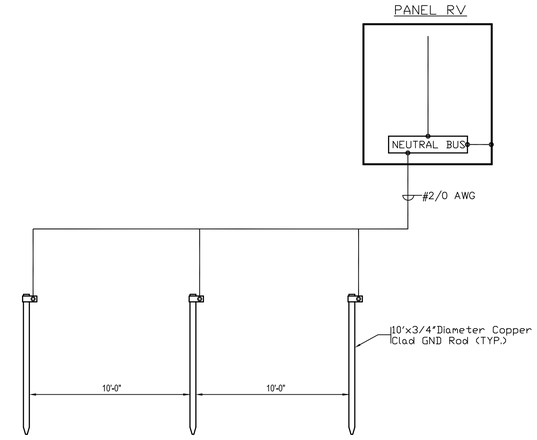
ELECTRICAL RISER DIAGRAM - RV PARK ELECTRICAL SERVICE

NOT TO SCALE



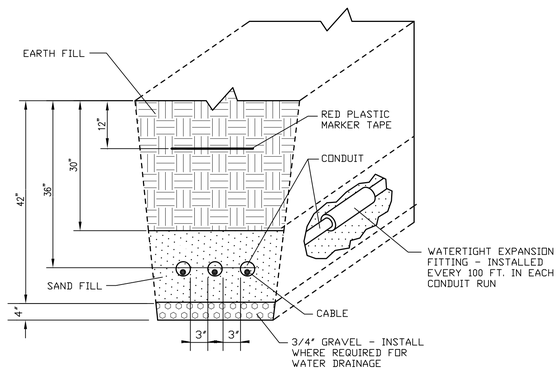
GROUNDING & BONDING DETAIL - CAMPGROUND ELECTRICAL SERVICE

NOT TO SCALE



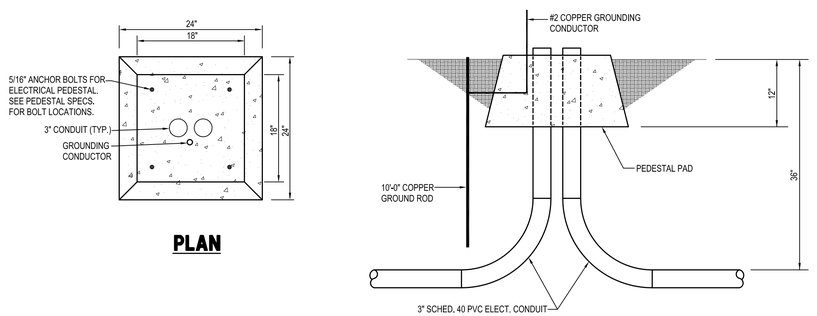
GROUNDING & BONDING DETAIL - RV PARK ELECTRICAL SERVICE

NOT TO SCALE



INSTALLATION OF UNDERGROUND CONDUITS

NOT TO SCALE



PLAN

ELEVATION

ELECTRICAL PEDESTAL PAD DETAILS FOR RV PARK

NOT TO SCALE

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Berlin, NH
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Issue

CONTRACT SET

Graphic Scale

North

Scale: As indicated

Date: JUNE 13, 2024

Drawn By: CPB

Checked By: CPB

Issues:

No.	Description	Date

Title

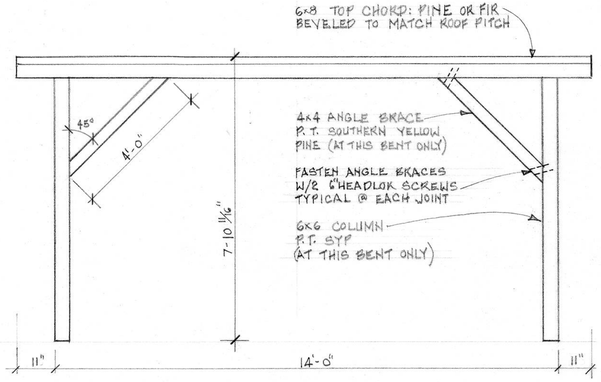
ELECTRICAL RISERS AND DETAILS

Sheet Number:

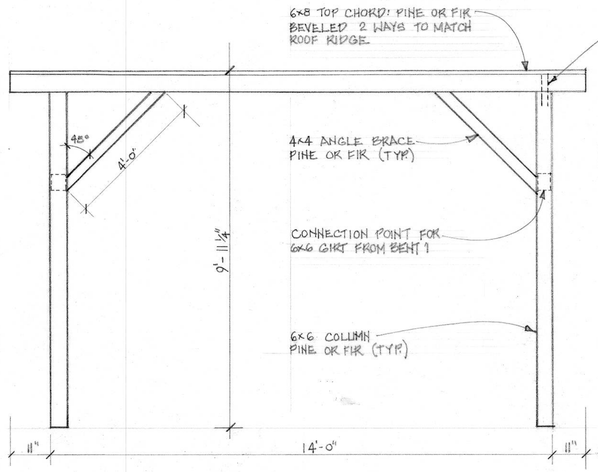
E1.04J

Project Number: 23045001

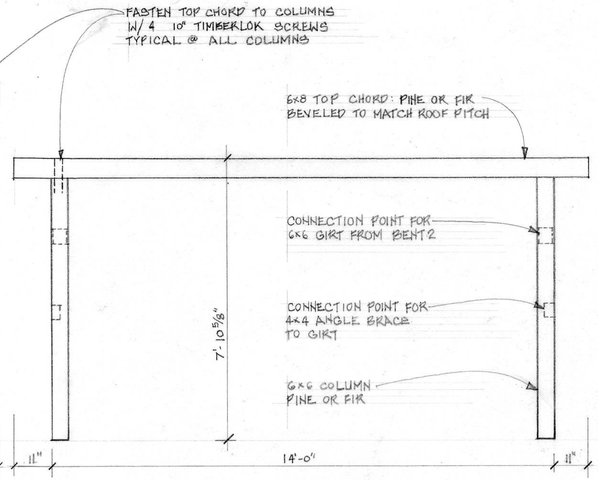
File:



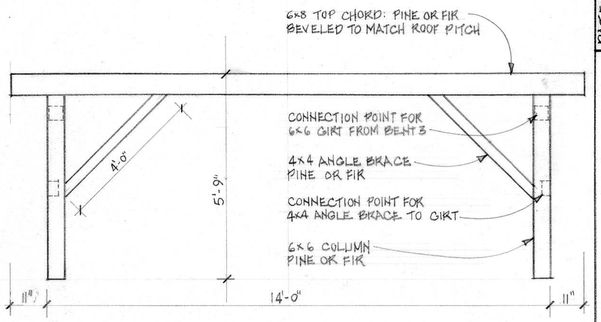
1 / A1 BENT 1
SCALE: 1/2" = 1'-0"



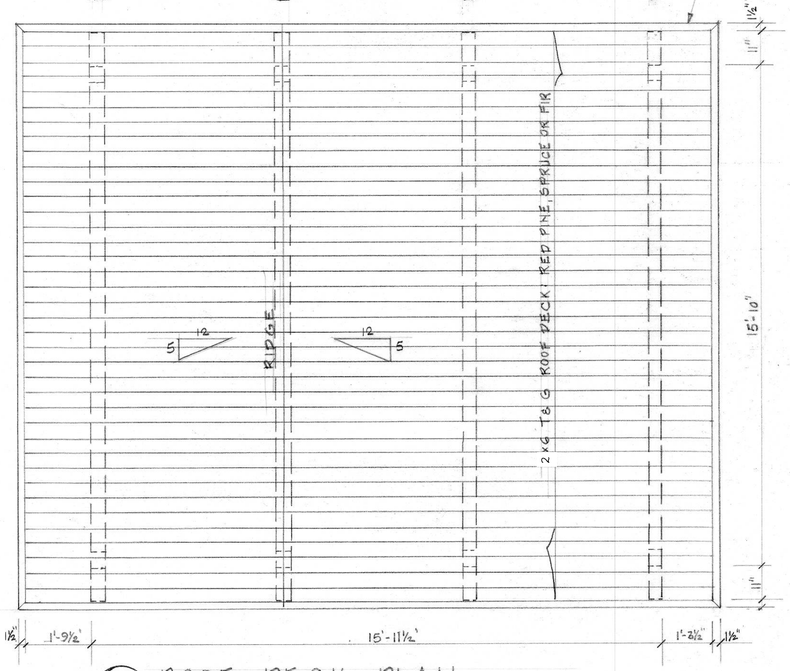
2 / A1 BENT 2
SCALE: 1/2" = 1'-0"



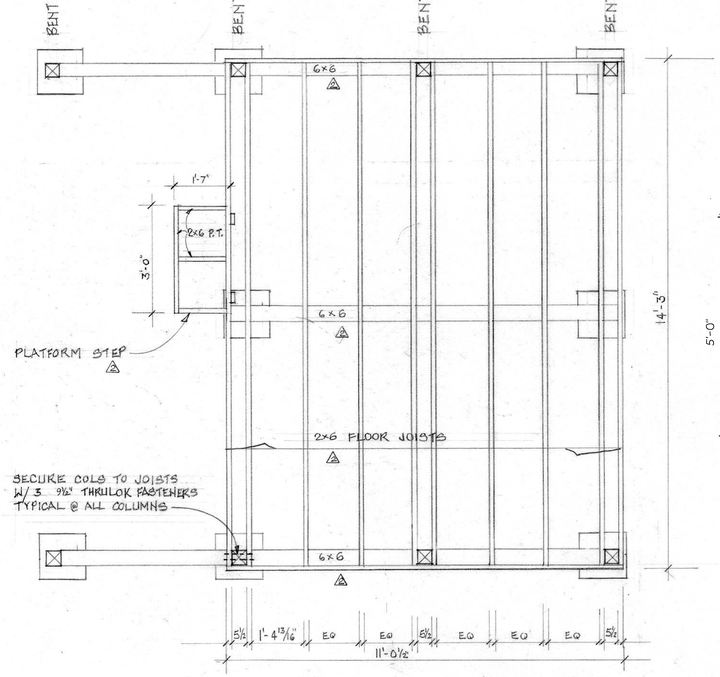
3 / A1 BENT 3
SCALE: 1/2" = 1'-0"



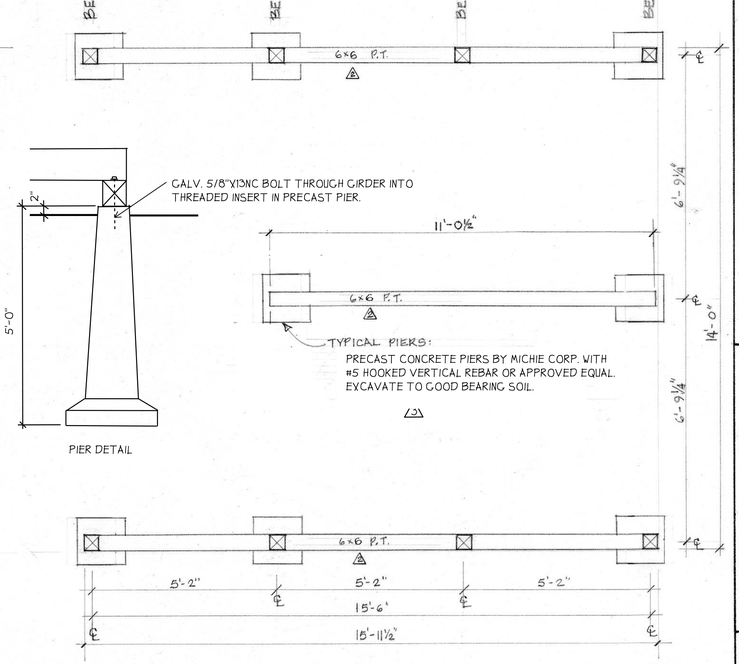
4 / A1 BENT 4
SCALE: 1/2" = 1'-0"



5 / A1 ROOF DECK PLAN
SCALE: 1/2" = 1'-0"



6 / A1 FLOOR FRAMING PLAN
SCALE: 1/2" = 1'-0"



7 / A1 FOUNDATION PLAN
SCALE: 1/2" = 1'-0"

PIER DETAIL

PROJECT No.: CAP 1473
DATE: JUNE 4, 2015
BY: TCM
REVISIONS:
1 JULY 13, 2015
2 MAY 2, 2023
3 JUNE 13, 2024
SCALE: 1/2" = 1'-0"

PLANS & BENT ELEVATIONS

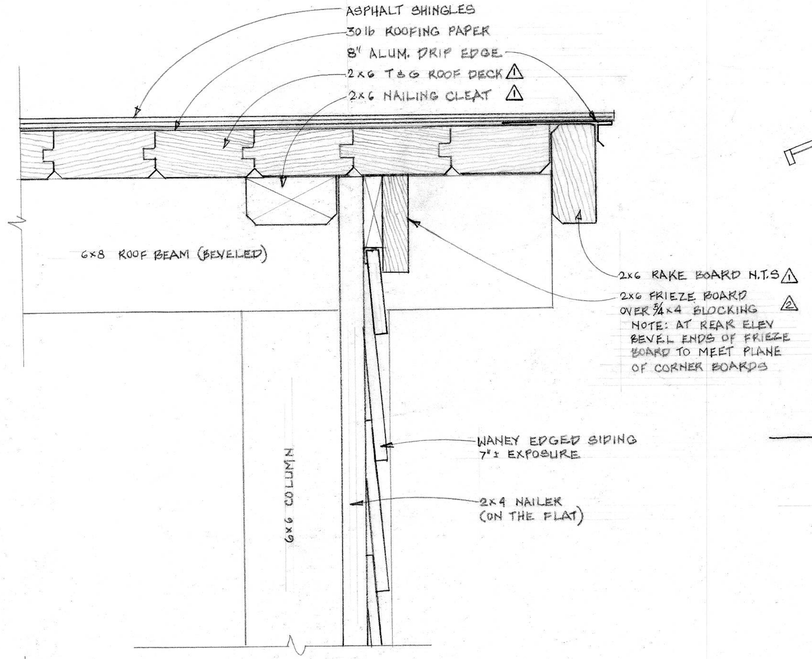
ARCHITECTURAL

CAMPING SHELTER

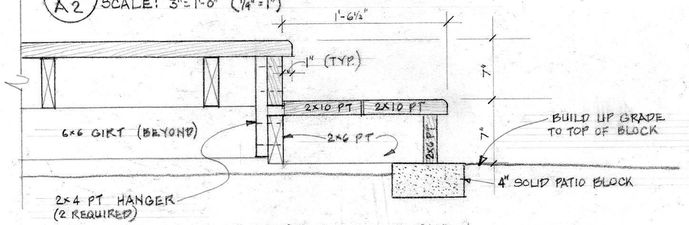
STANDARD STRUCTURES FILE

P D & M
PLANNING & DEVELOPMENT
SECTION
172 PEMBROKE ROAD, CONCORD

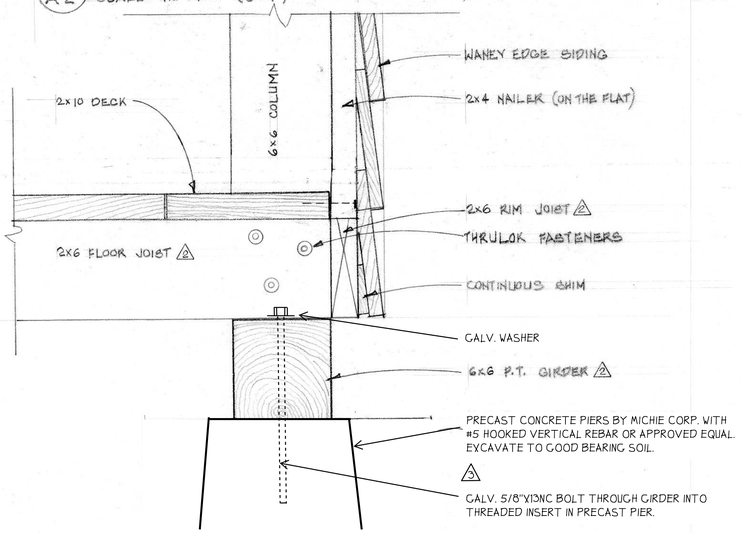
A 1



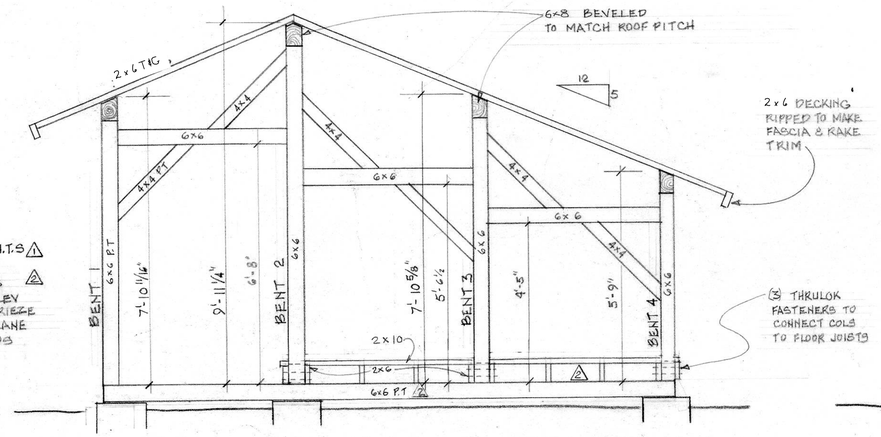
1 A2 RAKE SECTION
SCALE: 3" = 1'-0" (1/4" = 1")



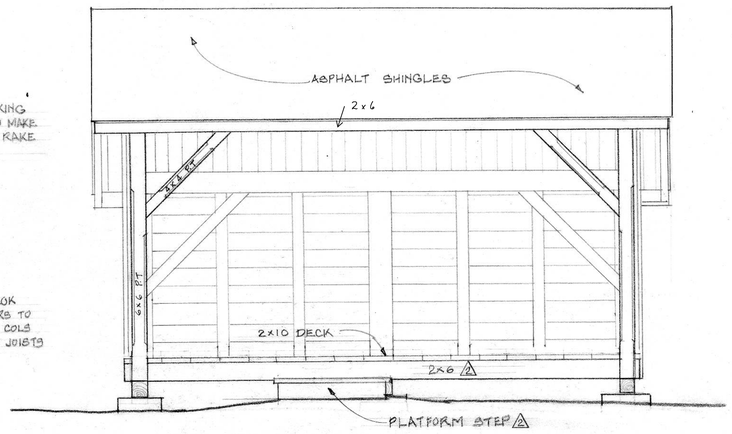
9 A2 PLATFORM STEP SECTION ⚠2
SCALE: 1½" = 1'-0" (⅛" = 1")



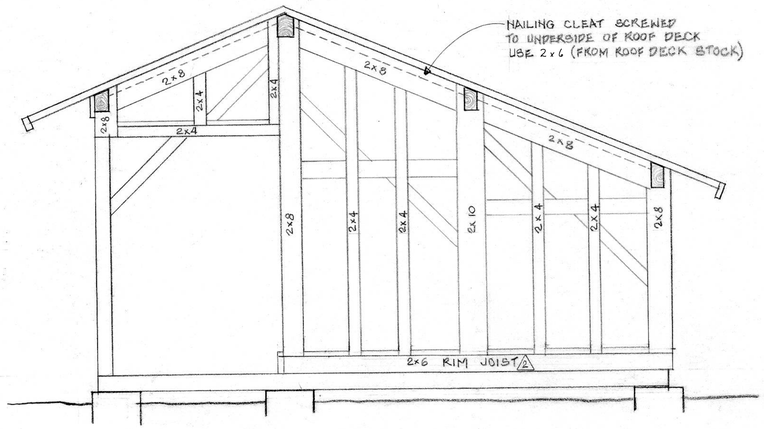
6 A2 SILL SECTION
SCALE: 3" = 1'-0" (1/4" = 1")



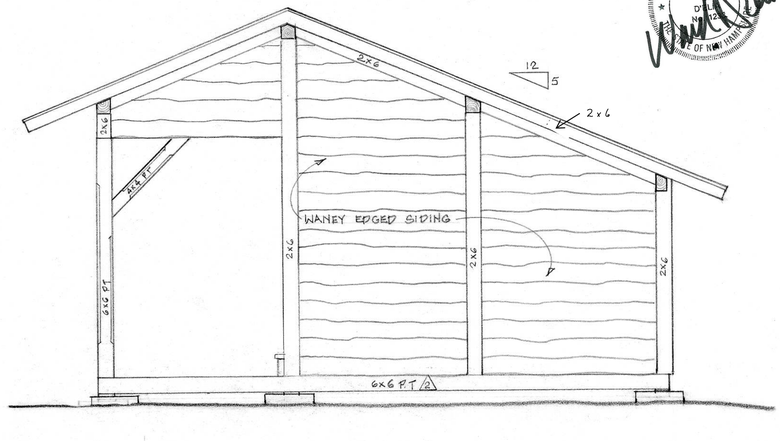
2 A2 TIMBER FRAME ELEVATION: SIDE VIEW
SCALE: ½" = 1'-0"



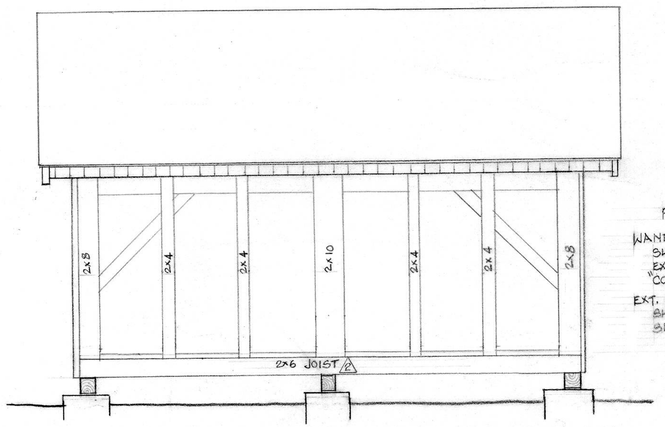
3 A2 FRONT ELEVATION
SCALE: ½" = 1'-0"



4 A2 NAILERS FOR WANEY EDGED SIDING
SCALE: ½" = 1'-0"

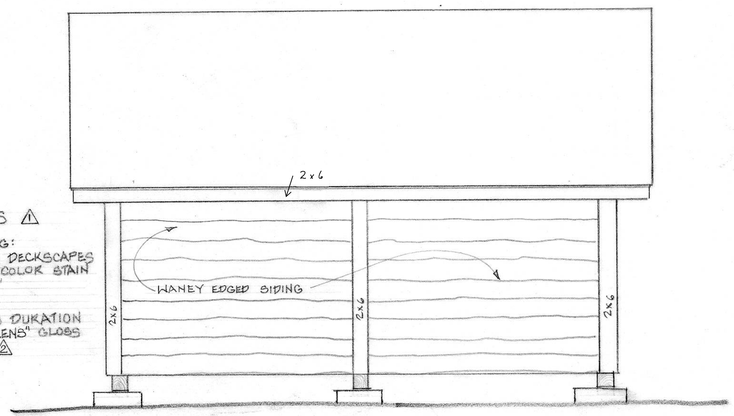


5 A2 SIDE ELEVATION
SCALE: ½" = 1'-0"



7 A2 REAR ELEVATION: NAILERS FOR SIDING
SCALE: ½" = 1'-0"

PAINT COLORS ⚠1
WANEY EDGED SIDING:
SHERWIN WILLIAMS DECKSCAPES EXT. ACRYLIC SOLID COLOR STAIN "CORDOVIAN BROWN"
EXT. TRIM
SHERWIN WILLIAMS DURATION SW 6447 "EVERGREENS" GLOSS ⚠2



8 A2 REAR ELEVATION
SCALE: ½" = 1'-0"

PROJECT No.: CAP 1473
REVISIONS: ⚠1 JULY 13, 2016 ⚠2 MAY 2, 2023 ⚠3 JUNE 13, 2024
DATE: JUNE 4, 2015
BY: TCM
SCALE: ½" = 1'-0"

ELEVATIONS & DETAILS

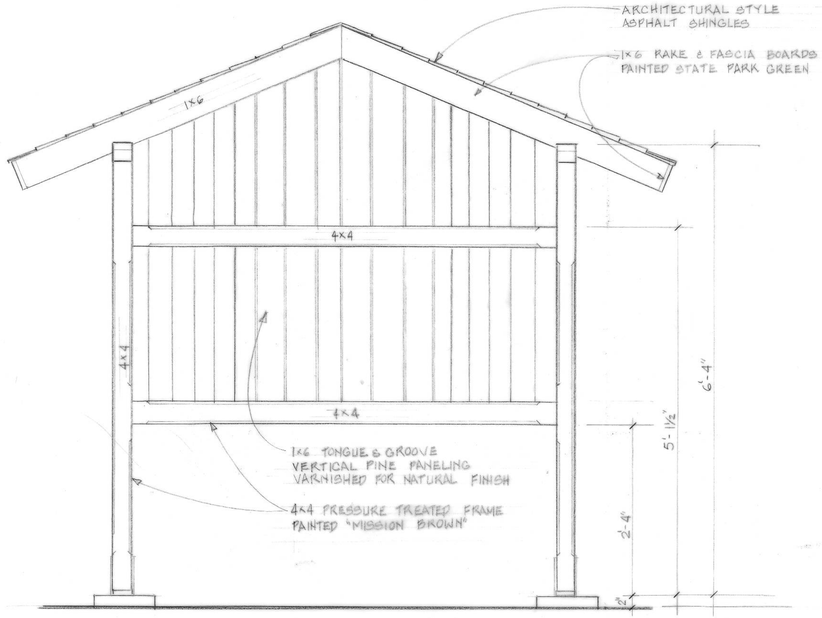
ARCHITECTURAL

CAMPING SHELTER

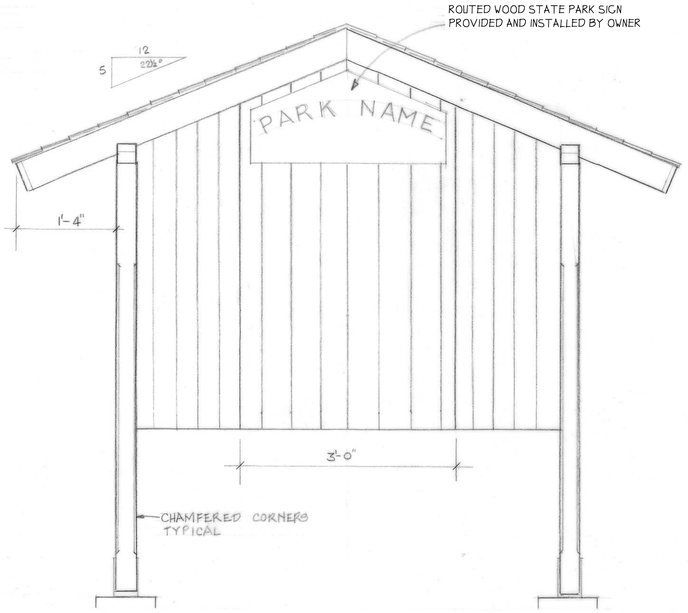
STANDARD STRUCTURES FILE

D.D.E.M
PLANNING & DEVELOPMENT
SECTION
172 PEMBROKE ROAD, CONCORD

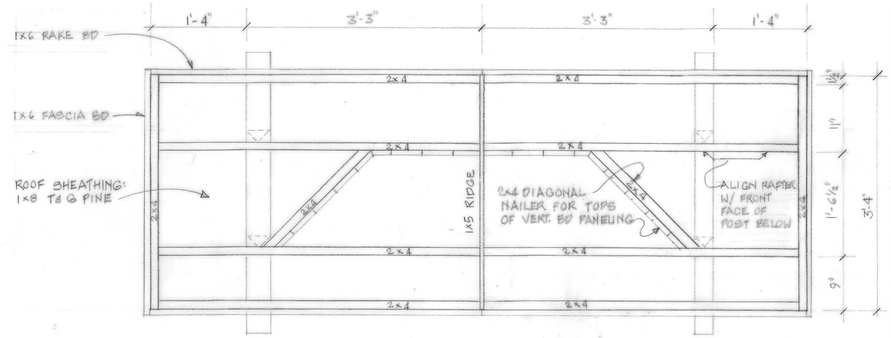
A2



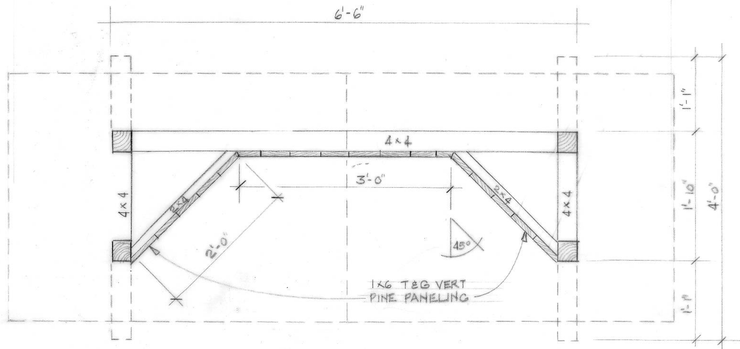
1/1 REAR ELEVATION
SCALE: 1"=1'-0"



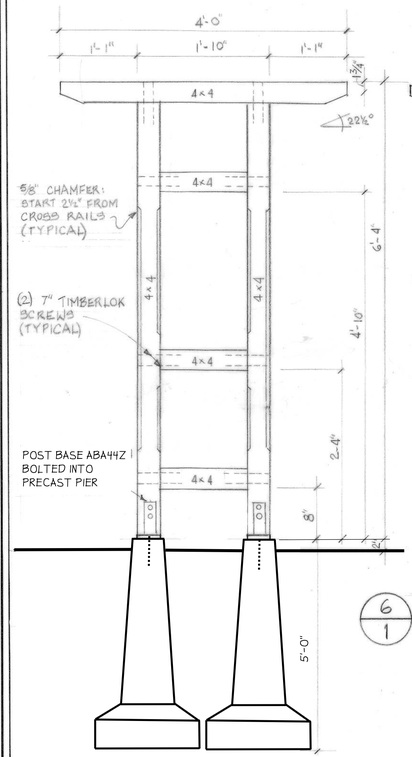
2/1 FRONT ELEVATION
SCALE: 1"=1'-0"



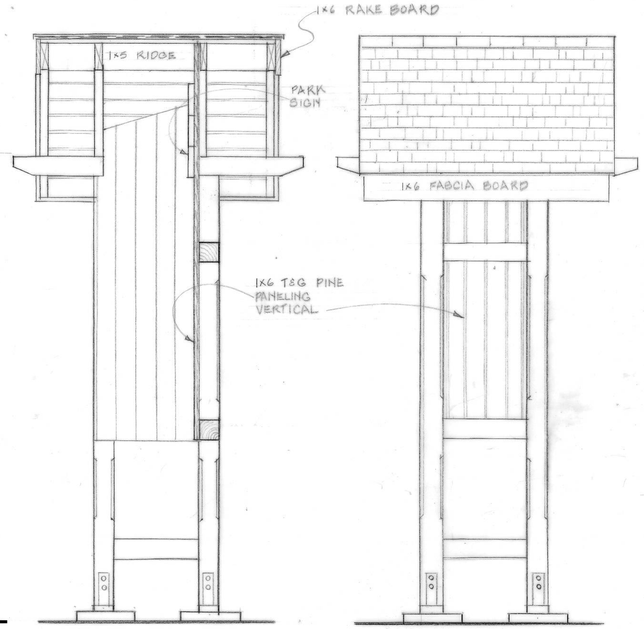
3/1 ROOF FRAMING PLAN
SCALE: 1"=1'-0"



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

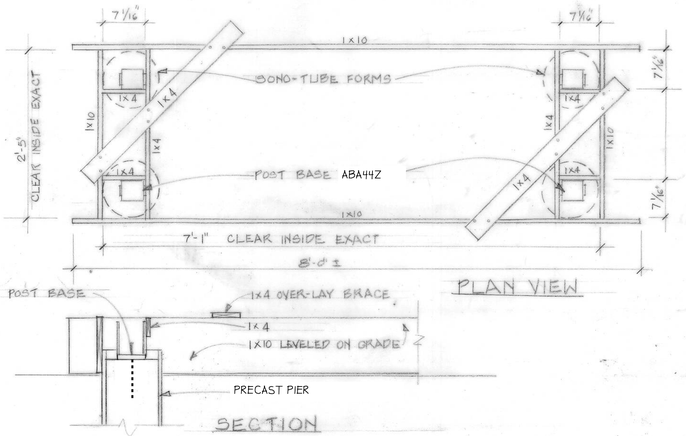


5/1 SIDE SUPPORT FRAME
SCALE: 1"=1'-0"



6/1 CROSS SECTION
SCALE: 1"=1'-0"

9/1 FOUNDATION PLAN
SCALE: 1"=1'-0"



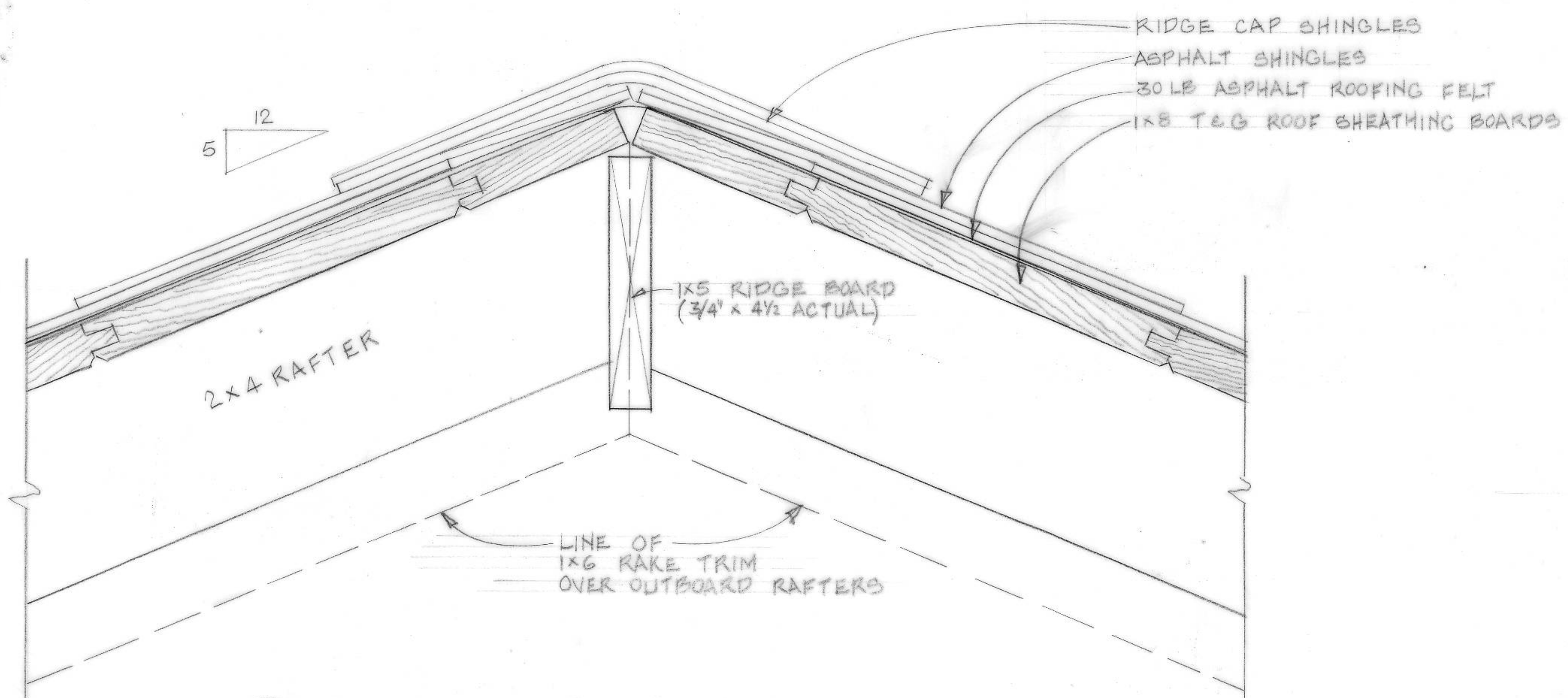
7/1 SIDE ELEVATION
SCALE: 1"=1'-0"

8/1 TEMPORARY JIG TO ALIGN PIER FORMS
SCALE: 1"=1'-0"

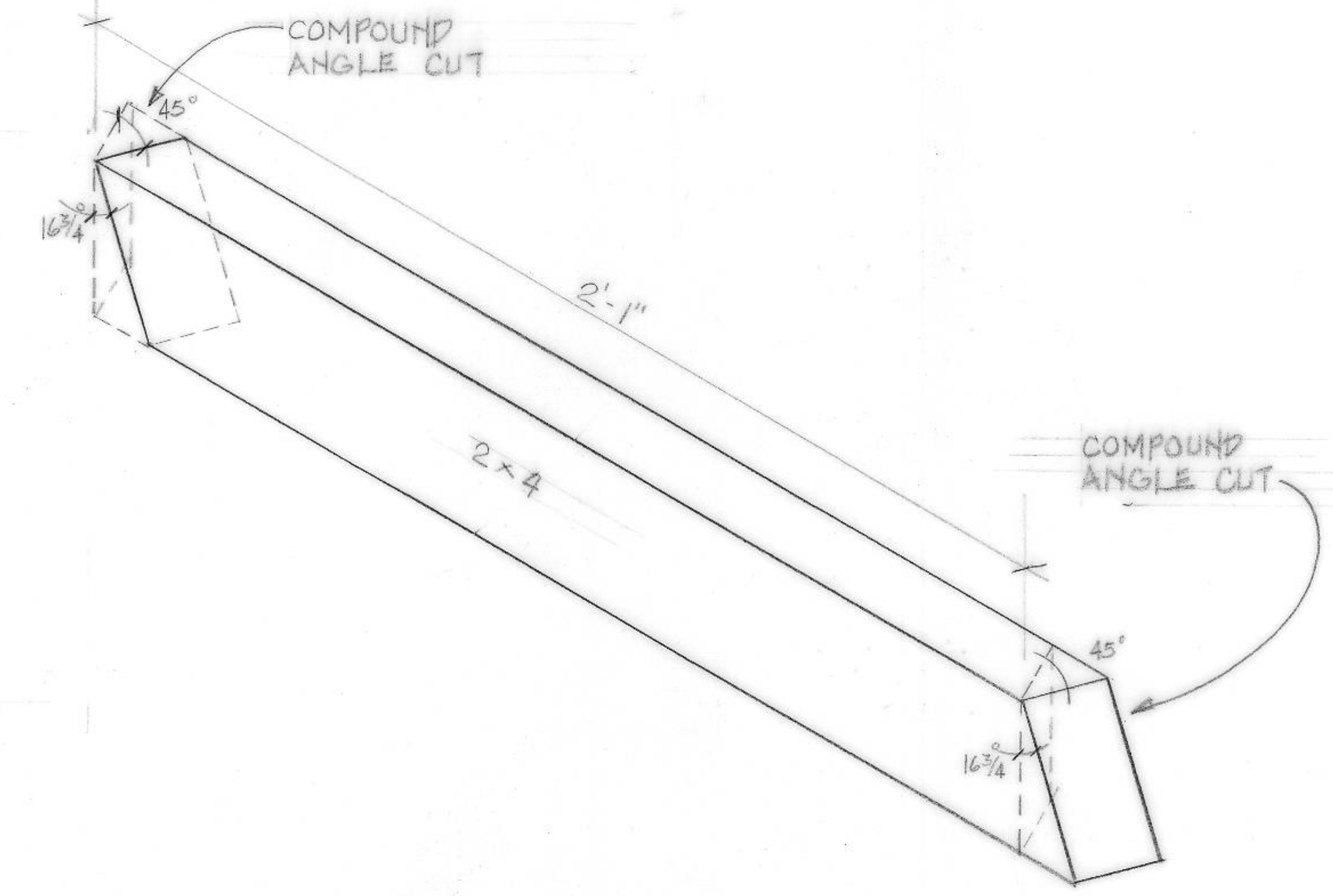
STATE OF NEW HAMPSHIRE
DEPARTMENT OF RESOURCES AND ECONOMIC DEVELOPMENT
DESIGN DEVELOPMENT AND MAINTENANCE

STANDARD STATE PARK KIOSK

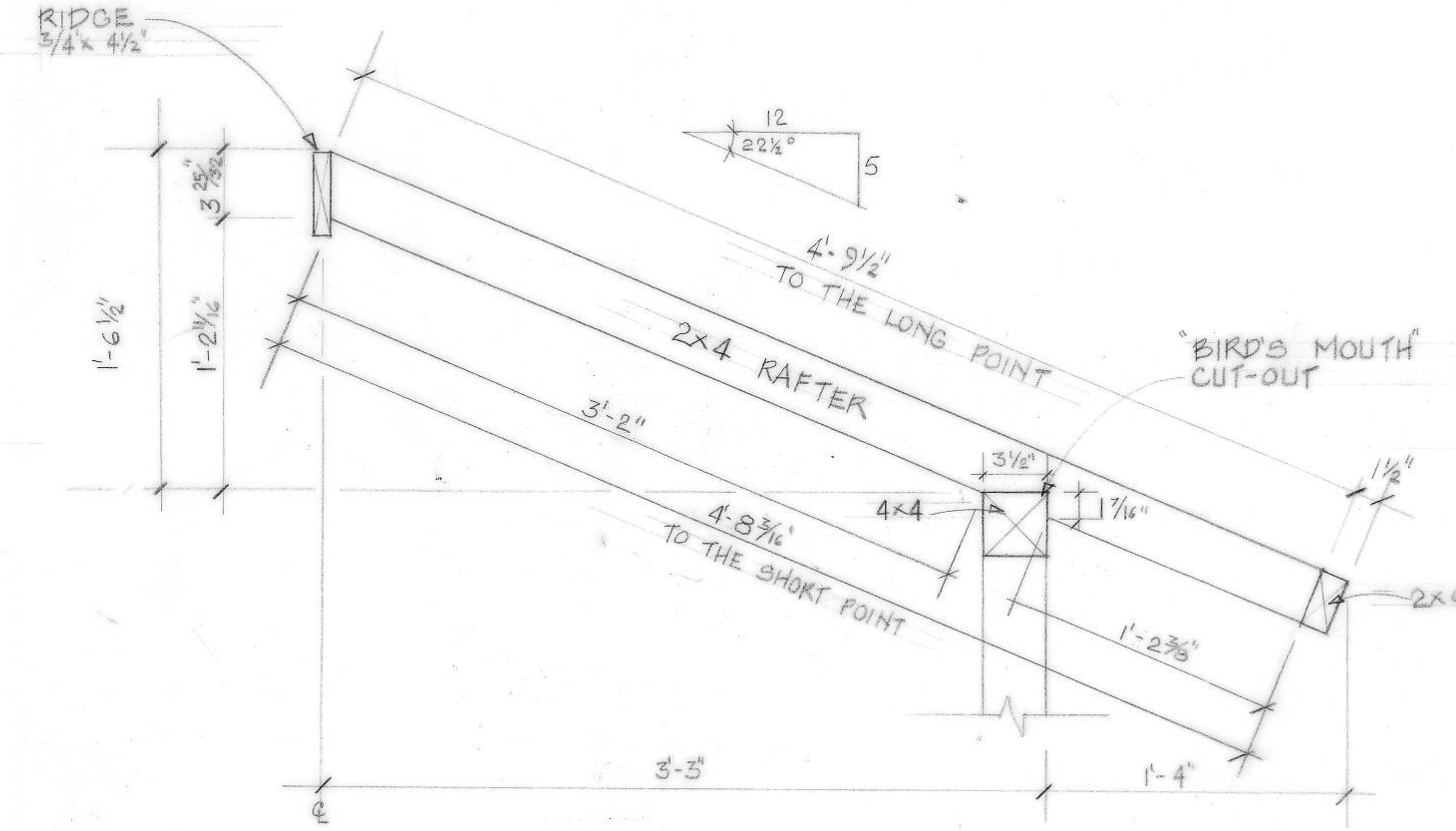
SURVEYED BY:	SCALE: 1"=1'-0"
DRAWN BY: T. MANSFIELD	PROJECT NO.
CHECKED BY:	SHEET NO. 1 OF 2
APPROVED BY:	DATE: JUNE 13, 2024



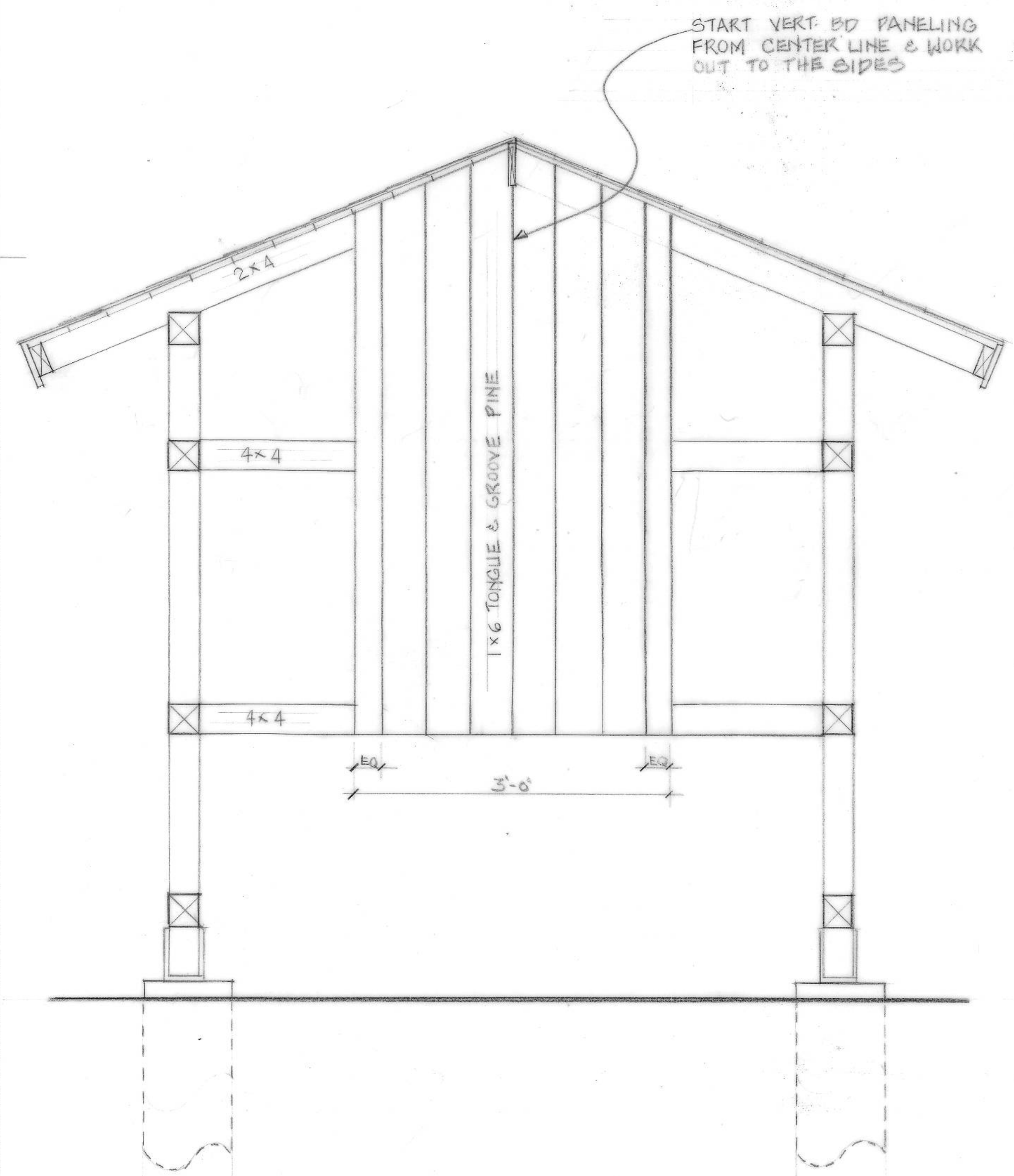
1/2 ROOF SECTION @ RIDGE
HALF SIZE



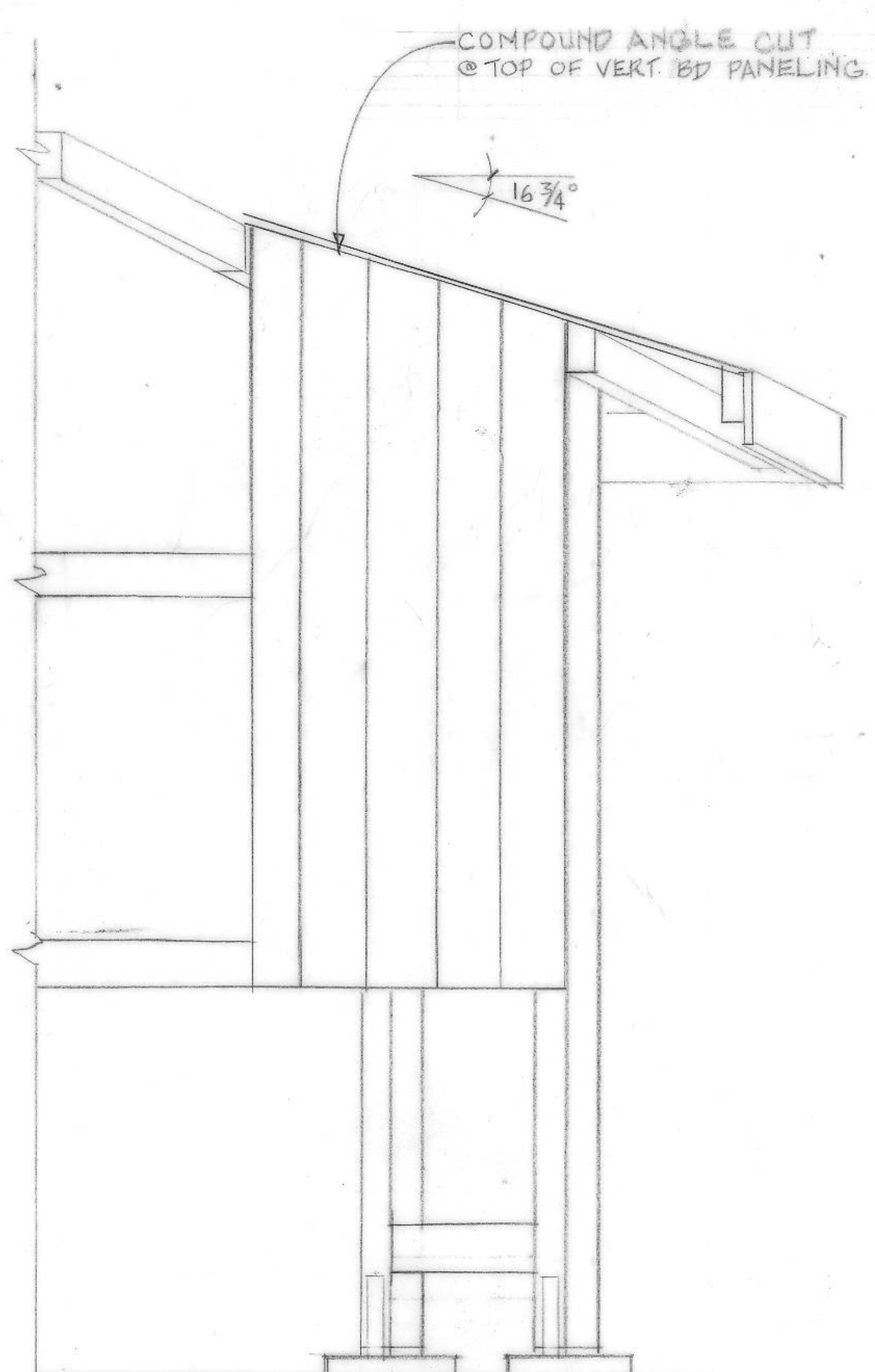
2/2 DIAGONAL NAILER BETWEEN RAFTERS
ISOMETRIC VIEW
SCALE: ¼" = 1"



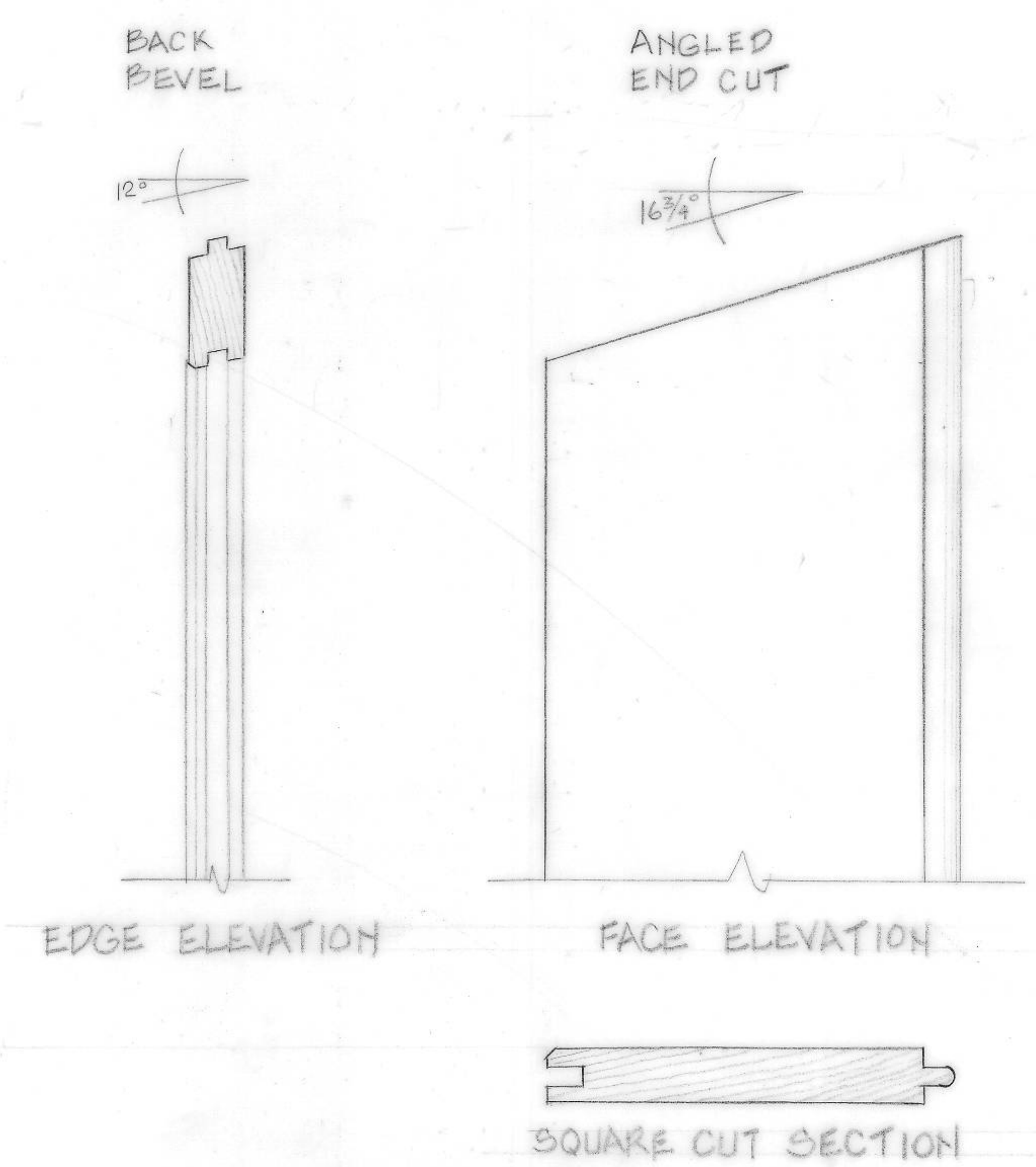
3/2 TYPICAL RAFTER
8 REQUIRED
SCALE: ⅛" = 1"



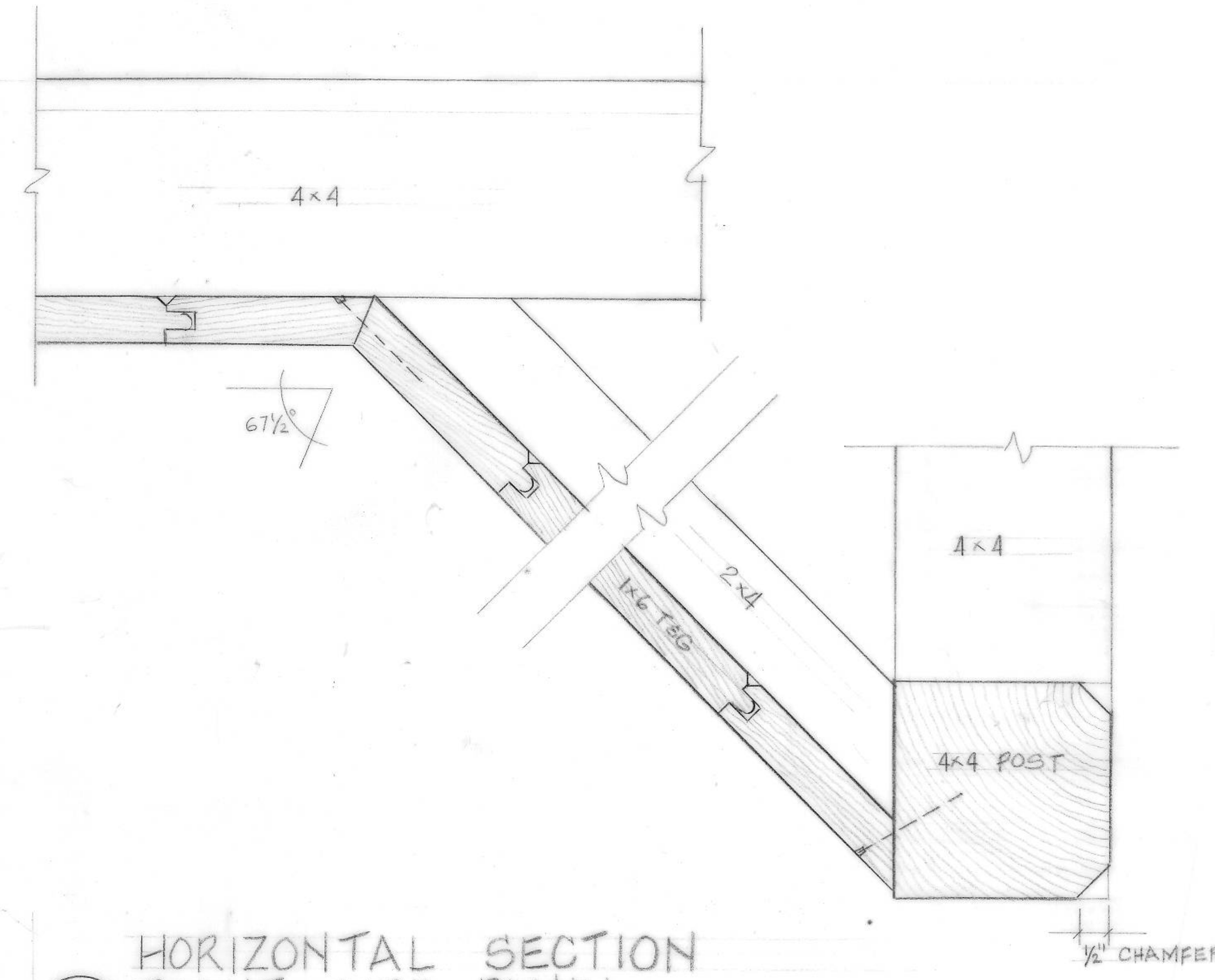
4/2 ELEVATION: NOTICE BOARD CENTER PANEL
SCALE: 1" = 1'-0"



5/2 SIDE PANEL ELEVATION
SCALE: 1" = 1'-0"



6/2 COMPOUND ANGLE TOP CUT @ LEFT SIDE PANEL VERT. BD FACING
HALF SIZE



7/2 HORIZONTAL SECTION RIGHT SIDE PANEL
HALF SIZE

STATE OF NEW HAMPSHIRE
DEPARTMENT OF RESOURCES AND ECONOMIC DEVELOPMENT
DESIGN DEVELOPMENT AND MAINTENANCE

STANDARD STATE PARK KIOSK

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