NATURE'S WILDERNESS CAMPGROUND

MARSTONS ROAD - WEST BALDWIN, MAINE

APPLICANT:
NATURE'S WILDERNESS, LLC
C/O MR. SCOTT EFRON
2 UPPER TWAIN ROAD
WEST BALDWIN, MAINE 04091

OWNER:
NATURE'S WILDERNESS, LLC
17569 MIDDLEBROOK WAY
BOCA RATON, FLORIDA 33496

PROJECT PARCEL SITE
TOWN OF BALDWIN TAX ASSESSOR'S MAP & LOT NUMBERS

MAP	LOT
7	22

LOCATION MAP
SCALE: 1"=1,000'

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LEGEND

- EXISTING PROPERTY LINE
- PROJECT SITE BOUNDARY
- EXISTING SETBACK LINE
- PROPOSED EASEMENT
- 124 EXISTING MINOR CONTOUR
- 124 EXISTING MAJOR CONTOUR
- 124 PROPOSED CONTOUR
- SD EXISTING STORMDRAIN
- SD PROPOSED STORMDRAIN
- S EXISTING SANITARY SEWER
- S PROPOSED SANITRY SEWER
- W EXISTING WATER LINE
- W PROPOSED WATER LINE
- UD EXISTING UNDERDRAIN
- UD PROPSED UNDERDRAIN
- OHE EXISTING OVERHEAD ELECTRIC & TELEPHONE
- OHE PROPOSED OVERHEAD ELECTRIC & TELEPHONE
- UGE EXISTING UNDERGROUND ELECTRIC & TELEPHONE
- UGE PROPOSED UNDERGROUND ELECTRIC & TELEPHONE
- EXISTING EDGE OF PAVEMENT
- PROPOSED EDGE OF PAVEMENT
- EXISTING EDGE OF GRAVEL
- PROPOSED EDGE OF GRAVEL
- EXISTING CURB
- PROPOSED CURB
- PROPOSED FENCE
- SF SILT FENCE
- TP-A TEST PIT
- EXISTING VALVE
- PROPOSED VALVE
- EXISTING HYDRANT
- EXISTING LIGHT POLE
- PROPOSED LIGHT POLE
- EXISTING UTILITY POLE
- EXISTING CATCH BASIN
- PROPOSED CATCH BASIN
- EXISTING DRAIN MANHOLE
- PROPOSED DRAIN MANHOLE
- EXISTING SEWER MANHOLE
- PROPOSED SEWER MANHOLE
- 30.20 EXISTING SPOT GRADE
- 30.20 PROPOSED SPOT GRADE
- SURVEY CONTROL POINT
- EXISTING MONUMENT
- EXISTING IRON PIPE
- EXISTING SIGN
- PROPOSED SIGN
- EXISTING BUILDING
- PROPOSED BUILDING
- PROPOSED CONCRETE PAD
- PROPOSED PAVEMENT
- PROPOSED ROOF DRAIN FILTER
- TURF REINFORCEMENT BLANKET
- RIPRAP

PERMITS

TYPE OF PERMIT	GOVERNING BODY	STATUS
SITE PLAN CONDITIONAL USE APPROVAL	TOWN OF BALDWIN, MAINE PLANNING DEPARTMENT 8 SCHOOL ROAD WINDHAM, ME 04062 TEL. 207-892-1900	SUBMITTED: 9/28/2017 APPROVED:
SITE LOCATION PERMIT	MAINE DEP 322 CANCO ROAD PORTLAND, ME 04103 TEL. 207-822-6300	SUBMITTED: APPROVED:

PREPARED BY:

CIVIL ENGINEER:
TERRADYN CONSULTANTS, LLC
P.O. BOX 339
NEW GLOUCESTER, MAINE 04260
(207) 632-9010

SURVEYOR:
STATEWIDE SURVEYS, INC.
35 EASTMAN ROAD
CAPE ELIZABETH, MAINE 04107
207-767-4200

SOIL SURVEY & WETLAND DELINEATION:
STATEWIDE SURVEYS, INC.
35 EASTMAN ROAD
CAPE ELIZABETH, MAINE 04107
207-767-4200

STATE OF MAINE
JEFFREY D. ADAMS
No. 10161
LICENSED
PROFESSIONAL ENGINEER

SIGNATURE DATE: 11/15/2018

NO.	DATE	REVISIONS	APP'D BY

TERRADYN CONSULTANTS, LLC
P.O. Box 339
111 Elderberry Lane
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Office: (207) 926-5111
Fax: (207) 221-1317
www.terradynconsultants.com
Civil Engineering - Land Planning - Stormwater Design - Environmental Permitting

SHEET DESCRIPTION
NATURE'S WILDERNESS
MARSTONS ROAD
COVER SHEET & LOCATION MAP

PREPARED FOR
MR. SCOTT EFRON
2 UPPER TWAIN ROAD
WEST BALDWIN, MAINE 04091

DATE:	11-08-2018
SCALE:	AS SHOWN
DESIGNED:	JDA
JOB NO:	1640
FILE: 1640 SK.DWG	
SHEET	C-0.0

STATE OF MAINE
JEFFREY D. JUMPS
No. 10167
LICENSED
PROFESSIONAL ENGINEER

SIGNATURE DATE: 6/26/2017

NO.	DATE	REVISIONS	APP'D BY

TERRADYN CONSULTANTS, LLC

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Civil Engineering - Land Planning - Stormwater Design - Environmental Permitting

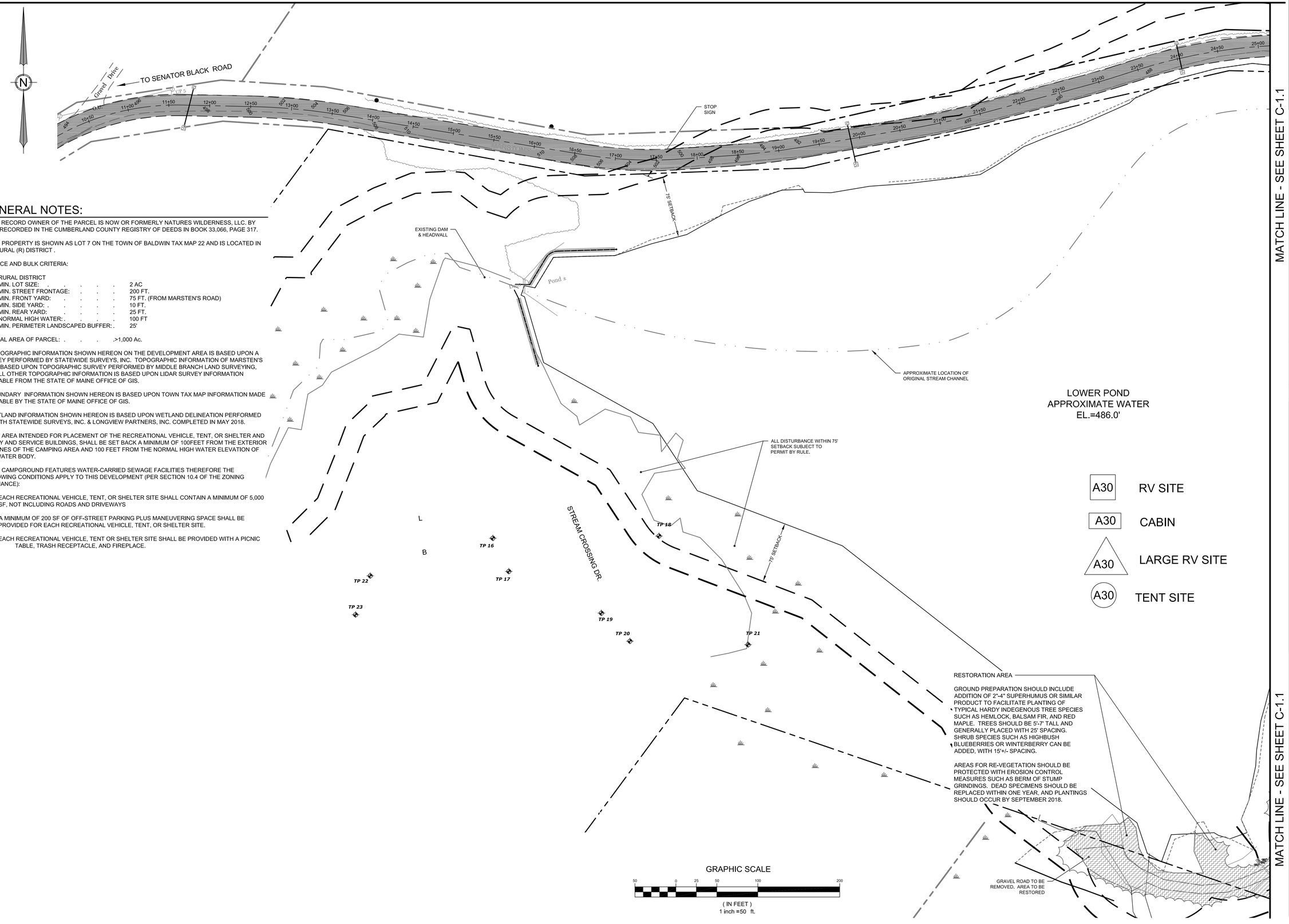
SHEET DESCRIPTION
NATURE'S WILDERNESS
MARSTON ROAD
EXISTING CONDITIONS PLAN

PREPARED FOR
MR. SCOTT EFRON
MARSTENS ROAD
BALDWIN, MAINE 04024

DATE:	6/14/2017
SCALE:	1"=100'
DESIGNED:	JDA
JOB NO:	1640
FILE: 1640 SK.DWG	
SHEET	S-1.0

MATCH LINE - SEE SHEET C-1.2

MATCH LINE - SEE SHEET C-1.2



GENERAL NOTES:

1. THE RECORD OWNER OF THE PARCEL IS NOW OR FORMERLY NATURES WILDERNESS, LLC. BY DEED RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN BOOK 33,066, PAGE 317.

2. THE PROPERTY IS SHOWN AS LOT 7 ON THE TOWN OF BALDWIN TAX MAP 22 AND IS LOCATED IN THE RURAL (R) DISTRICT .

3. SPACE AND BULK CRITERIA:

RURAL DISTRICT

MIN. LOT SIZE:	2 AC
MIN. STREET FRONTAGE:	200 FT.
MIN. FRONT YARD:	75 FT. (FROM MARSTEN'S ROAD)
MIN. SIDE YARD:	10 FT.
MIN. REAR YARD:	25 FT.
NORMAL HIGH WATER:	100 FT
MIN. PERIMETER LANDSCAPED BUFFER:	25'

4. TOTAL AREA OF PARCEL: . . . .>1,000 Ac.

5. TOPOGRAPHIC INFORMATION SHOWN HEREON ON THE DEVELOPMENT AREA IS BASED UPON A SURVEY PERFORMED BY STATEWIDE SURVEYS, INC. TOPOGRAPHIC INFORMATION OF MARSTEN'S ROAD BASED UPON TOPOGRAPHIC SURVEY PERFORMED BY MIDDLE BRANCH LAND SURVEYING, INC. ALL OTHER TOPOGRAPHIC INFORMATION IS BASED UPON LIDAR SURVEY INFORMATION AVAILABLE FROM THE STATE OF MAINE OFFICE OF GIS.

6. BOUNDARY INFORMATION SHOWN HEREON IS BASED UPON TOWN TAX MAP INFORMATION MADE AVAILABLE BY THE STATE OF MAINE OFFICE OF GIS.

7. WETLAND INFORMATION SHOWN HEREON IS BASED UPON WETLAND DELINEATION PERFORMED BY BOTH STATEWIDE SURVEYS, INC. & LONGVIEW PARTNERS, INC. COMPLETED IN MAY 2018.

8. THE AREA INTENDED FOR PLACEMENT OF THE RECREATIONAL VEHICLE, TENT, OR SHELTER AND UTILITY AND SERVICE BUILDINGS, SHALL BE SET BACK A MINIMUM OF 100FEET FROM THE EXTERIOR LOT LINES OF THE CAMPING AREA AND 100 FEET FROM THE NORMAL HIGH WATER ELEVATION OF ANY WATER BODY.

9. THE CAMPGROUND FEATURES WATER-CARRIED SEWAGE FACILITIES THEREFORE THE FOLLOWING CONDITIONS APPLY TO THIS DEVELOPMENT (PER SECTION 10.4 OF THE ZONING ORDINANCE):

A. EACH RECREATIONAL VEHICLE, TENT, OR SHELTER SITE SHALL CONTAIN A MINIMUM OF 5,000 SF, NOT INCLUDING ROADS AND DRIVEWAYS

B. A MINIMUM OF 200 SF OF OFF-STREET PARKING PLUS MANEUVERING SPACE SHALL BE PROVIDED FOR EACH RECREATIONAL VEHICLE, TENT, OR SHELTER SITE.

C. EACH RECREATIONAL VEHICLE, TENT OR SHELTER SITE SHALL BE PROVIDED WITH A PICNIC TABLE, TRASH RECEPTACLE, AND FIREPLACE.

MATCH LINE - SEE SHEET C-1.1

STATE OF MAINE JEFFREY D. JAMES No. 10161 LICENSED PROFESSIONAL ENGINEER

SIGNATURE DATE: 11/15/2018

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MATCH LINE - SEE SHEET C-1.1

SHEET DESCRIPTION
NATURE'S WILDERNESS
MARSTONS ROAD
SITE PLAN

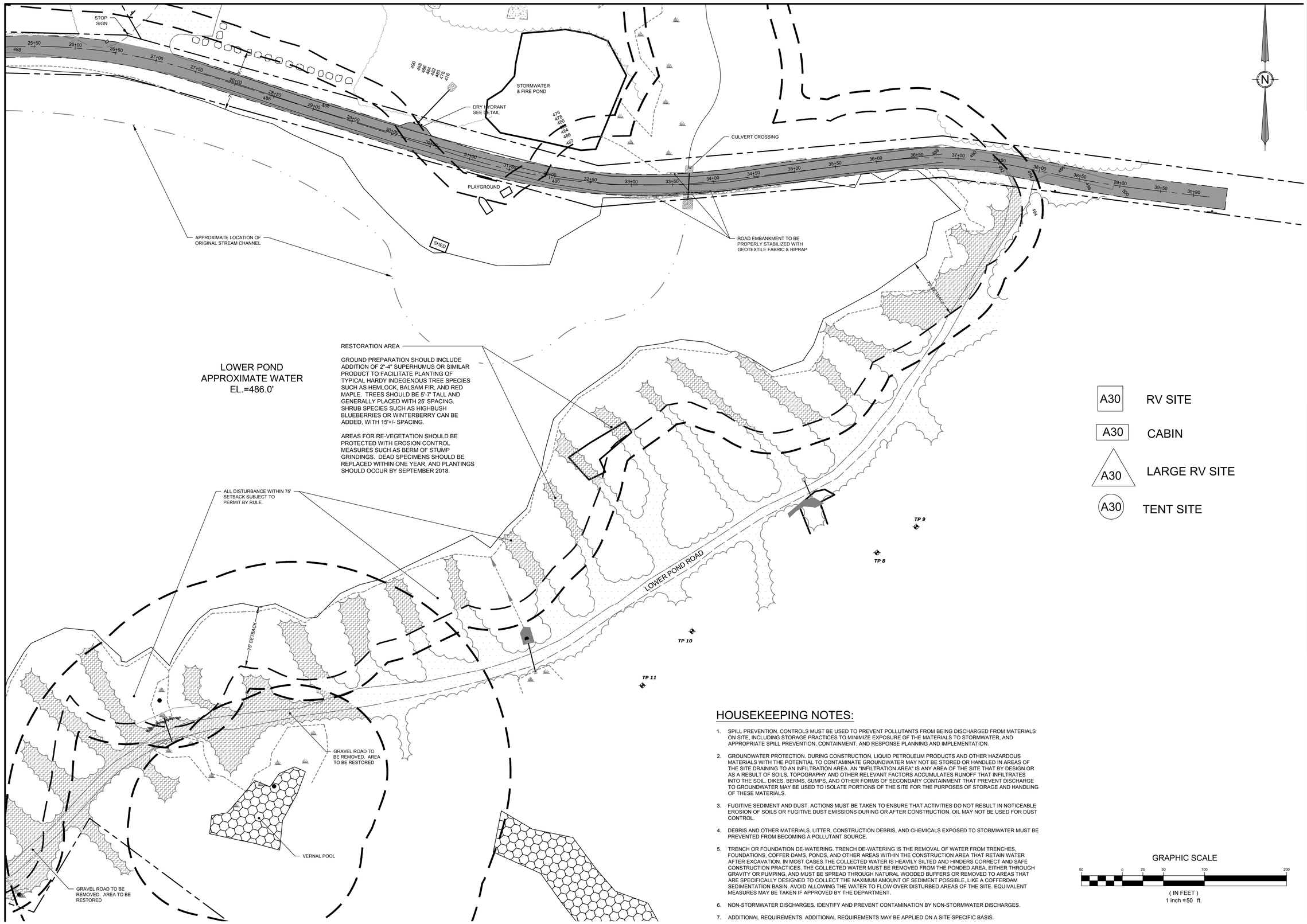
PREPARED FOR
MR. SCOTT EFRON
2 UPPER TWAIN ROAD
WEST BALDWIN, MAINE 04091

DATE:	9/27/2017
SCALE:	1"=50'
DESIGNED:	JDA
JOB NO:	1640
FILE: 1640 SK.DWG	
SHEET	C-1.0

MATCH LINE - SEE SHEET C-1.2

MATCH LINE - SEE SHEET C-1.2

MATCH LINE - SEE SHEET C-1.2



HOUSEKEEPING NOTES:

1. SPILL PREVENTION. CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM BEING DISCHARGED FROM MATERIALS ON SITE, INCLUDING STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER, AND APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING AND IMPLEMENTATION.
2. GROUNDWATER PROTECTION. DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO AN INFILTRATION AREA. AN "INFILTRATION AREA" IS ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF SOILS, TOPOGRAPHY AND OTHER RELEVANT FACTORS ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL. DIKES, BERMS, SUMPS, AND OTHER FORMS OF SECONDARY CONTAINMENT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS.
3. FUGITIVE SEDIMENT AND DUST. ACTIONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED FOR DUST CONTROL.
4. DEBRIS AND OTHER MATERIALS. LITTER, CONSTRUCTION DEBRIS, AND CHEMICALS EXPOSED TO STORMWATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.
5. TRENCH OR FOUNDATION DE-WATERING. TRENCH DE-WATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, COFFER DAMS, PONDS, AND OTHER AREAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION. IN MOST CASES THE COLLECTED WATER IS HEAVILY SILTED AND HINDERS CORRECT AND SAFE CONSTRUCTION PRACTICES. THE COLLECTED WATER MUST BE REMOVED FROM THE PONDED AREA, EITHER THROUGH GRAVITY OR PUMPING, AND MUST BE SPREAD THROUGH NATURAL WOODED BUFFERS OR REMOVED TO AREAS THAT ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE, LIKE A COFFERDAM SEDIMENTATION BASIN. AVOID ALLOWING THE WATER TO FLOW OVER DISTURBED AREAS OF THE SITE. EQUIVALENT MEASURES MAY BE TAKEN IF APPROVED BY THE DEPARTMENT.
6. NON-STORMWATER DISCHARGES. IDENTIFY AND PREVENT CONTAMINATION BY NON-STORMWATER DISCHARGES.
7. ADDITIONAL REQUIREMENTS. ADDITIONAL REQUIREMENTS MAY BE APPLIED ON A SITE-SPECIFIC BASIS.

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

STATE OF MAINE JEFFREY D. JAMES No. 10161 LICENSED PROFESSIONAL ENGINEER

SIGNATURE DATE:11/15/2018

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SHEET DESCRIPTION
NATURE'S WILDERNESS
MARSTONS ROAD
SITE PLAN

PREPARED FOR
MR. SCOTT EFRON
2 UPPER TWAIN ROAD
WEST BALDWIN, MAINE 04091

DATE:	9/27/2017
SCALE:	1"=50'
DESIGNED:	JDA
JOB NO:	1640
FILE: 1640 SK.DWG	
SHEET	C-1.1

MATCH LINE - SEE SHEET C-1.3

MATCH LINE - SEE SHEET C-1.3

A30 RV SITE

CABIN

A30 LARGE RV SITE

A30 TENT SITE

'A' ROAD

'B' ROAD

UPPER TWAIN ROAD

'D' ROAD

EXISTING RIPRAP SLOPE

SEPTIC AREA

TP 2

TP 3

TP 4

TP 5

TP 6

TP 7

STOP SIGN

CLUBHOUSE 4,480 SF

DECK

POOL 40'x82'

HANDICAPPED RAMP

HANDICAPPED PARKING SIGN

RESTORATION AREA

PROPOSED 4' BARK MULCH WALKING PATH

75' STREAM SETBACK

TENT SITE (TYP)

GRAVEL PARKING AREA FOR SITE D16 THRU D25

EXISTING BOULDER RETAINING WALL

AREA TO BE LOAMED, SEEDED & MULCHED

RV SITE (TYP)

PROPOSED WELL

LARGE CABIN SITE (TYP)

CABIN SITE (TYP)

HOUSE

GATE

SHED

FLAG POLE

A30

RESTORATION AREA

GROUND PREPARATION SHOULD INCLUDE ADDITION OF 2"-4" SUPERHUMUS OR SIMILAR PRODUCT TO FACILITATE PLANTING OF TYPICAL HARDY INDEGENOUS TREE SPECIES SUCH AS HEMLOCK, BALSAM FIR, AND RED MAPLE. TREES SHOULD BE 5'-7' TALL AND GENERALLY PLACED WITH 25' SPACING. SHRUB SPECIES SUCH AS HIGHBUSH BLUEBERRIES OR WINTERBERRY CAN BE ADDED, WITH 15'+/- SPACING.

AREAS FOR RE-VEGETATION SHOULD BE PROTECTED WITH EROSION CONTROL MEASURES SUCH AS BERM OF STUMP GRINDINGS. DEAD SPECIMENS SHOULD BE REPLACED WITHIN ONE YEAR, AND PLANTINGS SHOULD OCCUR BY SEPTEMBER 2018.

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

MATCH LINE - SEE SHEET C-1.0

MATCH LINE - SEE SHEET C-1.1

MATCH LINE - SEE SHEET C-1.1

STATE OF MAINE JEFFREY D. JAMES No. 10161 LICENSED PROFESSIONAL ENGINEER

SIGNATURE DATE: 11/15/2018

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MARSTONS ROAD
SITE PLAN

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2 UPPER TWAIN ROAD
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DATE:	9/27/2017
SCALE:	1"=50'
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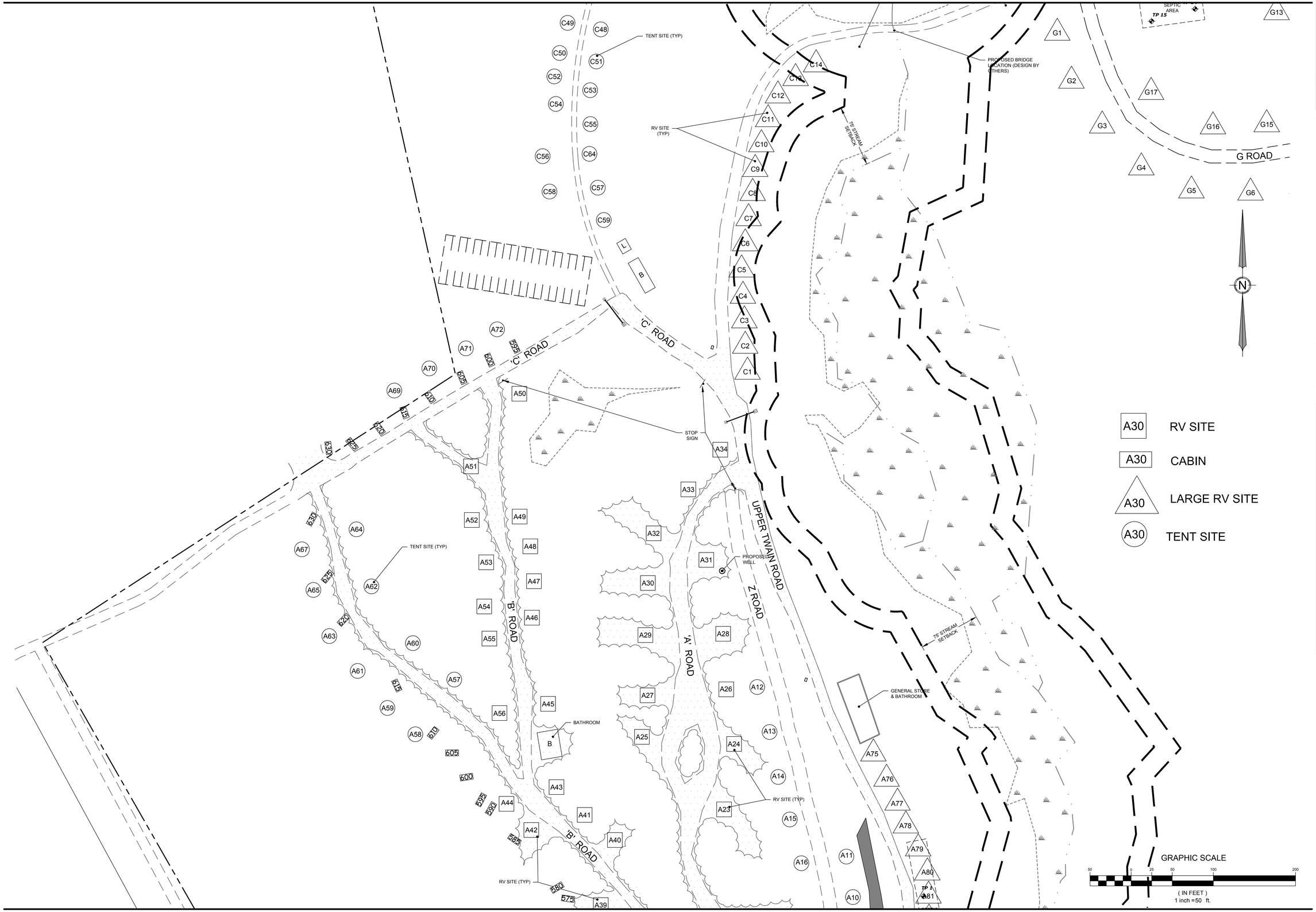
JOB NO:	1640
FILE: 1640 SK.DWG	

SHEET C-1.2

MATCH LINE - SEE SHEET C-1.4

MATCH LINE - SEE SHEET C-1.4



MATCH LINE - SEE SHEET C-1.2

MATCH LINE - SEE SHEET C-1.2

STATE OF MAINE
JEFFREY D. JAMES
No. 10161
LICENSED
PROFESSIONAL ENGINEER

SIGNATURE DATE: 7/5/2018

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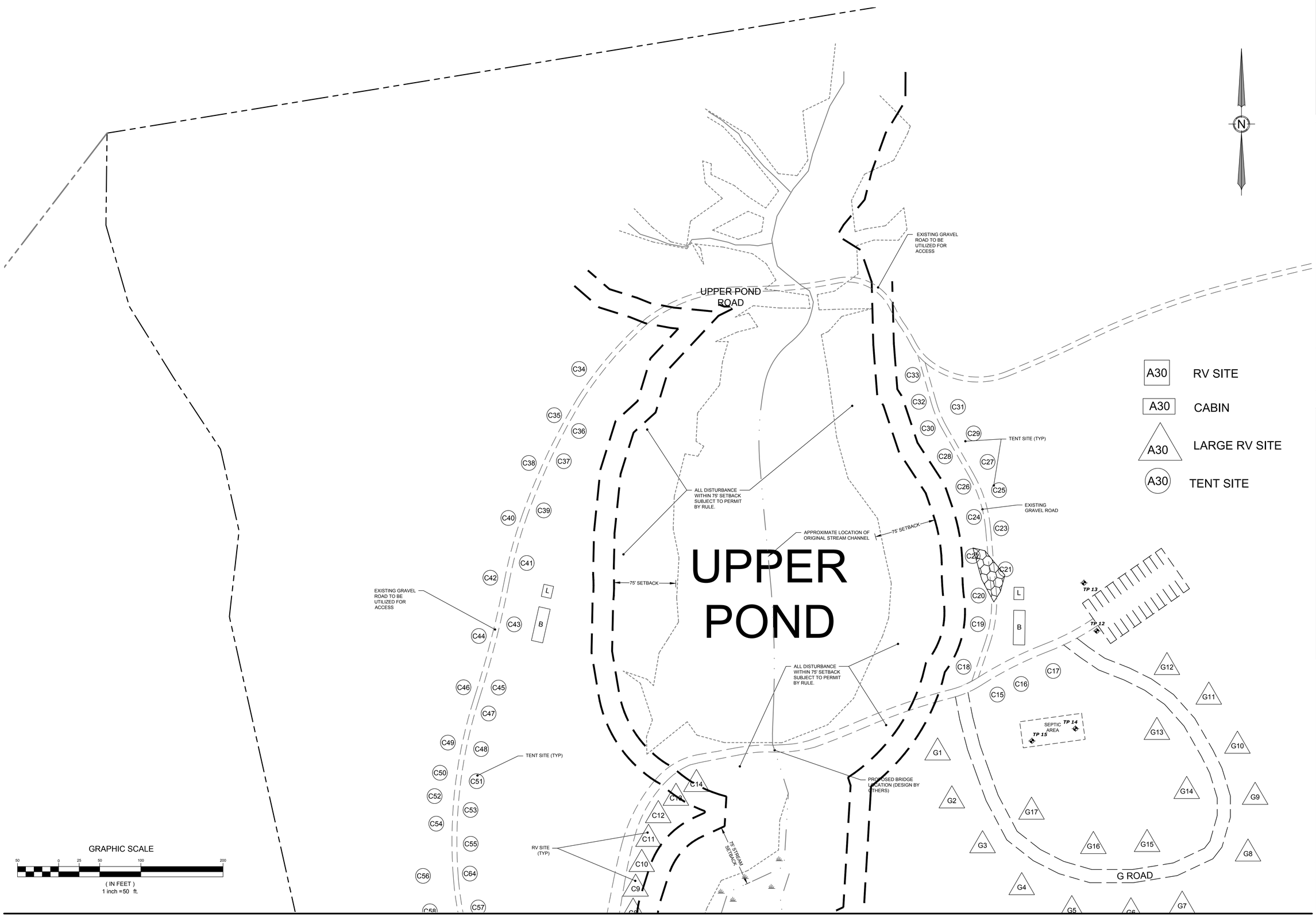
Civil Engineering - Land Planning - Stormwater Design - Environmental Permitting

SHEET DESCRIPTION
NATURE'S WILDERNESS
MARSTONS ROAD
SITE PLAN

PREPARED FOR
MR. SCOTT EFRON
2 UPPER TWAIN ROAD
WEST BALDWIN, MAINE 04091

DATE:	9/27/2017
SCALE:	1"=50'
DESIGNED:	JDA
JOB NO:	1640
FILE: 1640 SK.DWG	
SHEET	C-1.3



STATE OF MAINE
JEFFREY D. JAMES
No. 10161
LICENSED
PROFESSIONAL ENGINEER

SIGNATURE DATE: 11/15/2018

NO.	DATE	REVISIONS	APP'D BY

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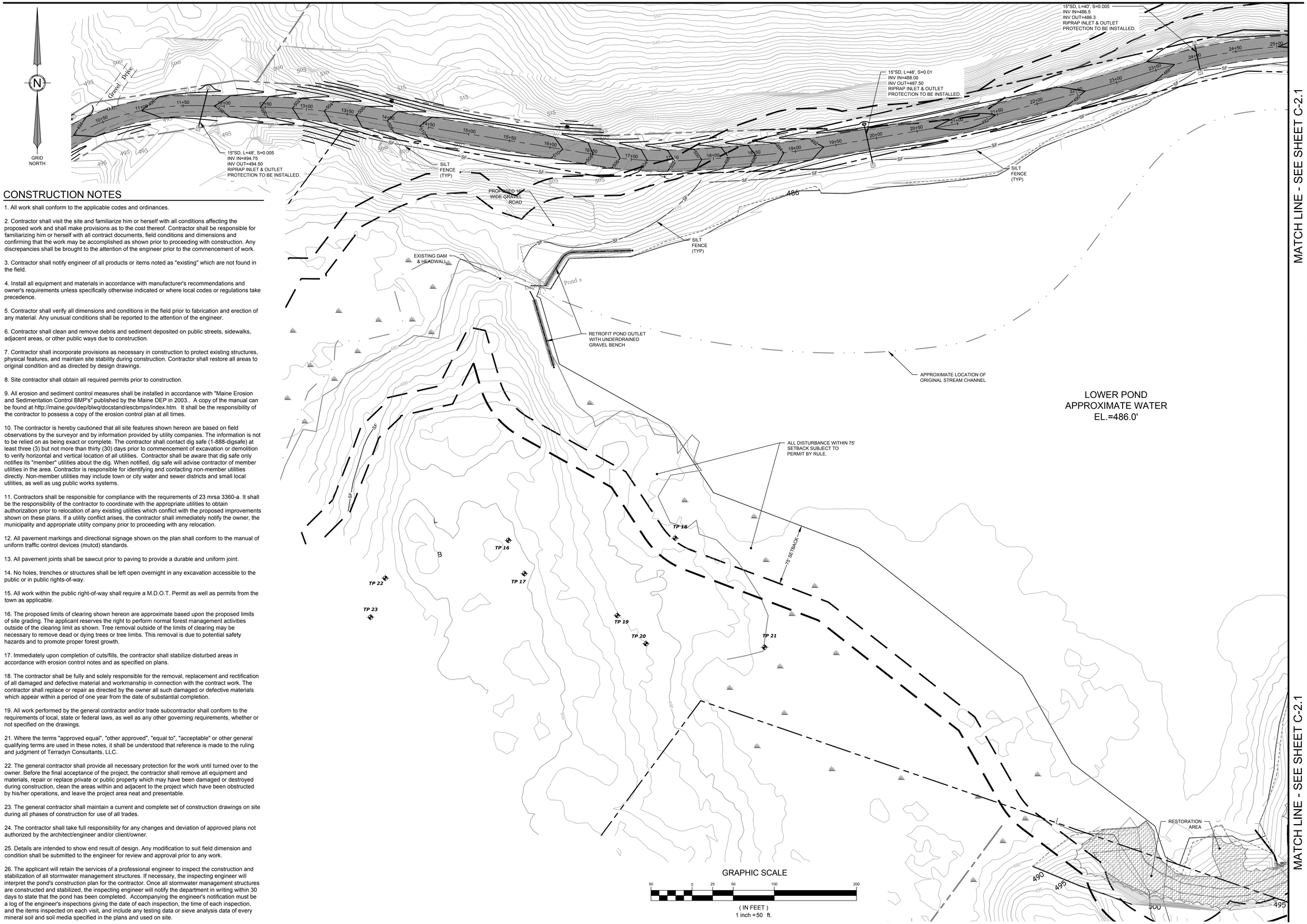
SHEET DESCRIPTION
NATURE'S WILDERNESS
MARSTONS ROAD
SITE PLAN

PREPARED FOR
MR. SCOTT EFRON
2 UPPER TWAIN ROAD
WEST BALDWIN, MAINE 04091

DATE:	9/27/2017
SCALE:	1"=50'
DESIGNED:	JDA
JOB NO:	1640
FILE: 1640 SK.DWG	
SHEET	C-1.4

MATCH LINE - SEE SHEET C-2.2



MATCH LINE - SEE SHEET C-2.2

CONSTRUCTION NOTES

1. All work shall conform to the applicable codes and ordinances.

2. Contractor shall visit the site and familiarize him or herself with all conditions affecting the proposed work and shall make provisions as to the cost thereof. Contractor shall be responsible for familiarizing him or herself with all contract documents, field conditions and dimensions and confirming that the work may be accomplished as shown prior to proceeding with construction. Any discrepancies shall be brought to the attention of the engineer prior to the commencement of work.

3. Contractor shall notify engineer of all products or items noted as "existing" which are not found in the field.

4. Install all equipment and materials in accordance with manufacturer's recommendations and owner's requirements unless specifically otherwise indicated or where local codes or regulations take precedence.

5. Contractor shall verify all dimensions and conditions in the field prior to fabrication and erection of any material. Any unusual conditions shall be reported to the attention of the engineer.

6. Contractor shall clean and remove debris and sediment deposited on public streets, sidewalks, adjacent areas, or other public ways due to construction.

7. Contractor shall incorporate provisions as necessary in construction to protect existing structures, physical features, and maintain site stability during construction. Contractor shall restore all areas to original condition and as directed by design drawings.

8. Site contractor shall obtain all required permits prior to construction.

9. All erosion and sediment control measures shall be installed in accordance with "Maine Erosion and Sedimentation Control BMP's" published by the Maine DEP in 2003.. A copy of the manual can be found at http://maine.gov/dep/blwq/docstand/escbmps/index.htm. It shall be the responsibility of the contractor to possess a copy of the erosion control plan at all times.

10. The contractor is hereby cautioned that all site features shown hereon are based on field observations by the surveyor and by information provided by utility companies. The information is not to be relied on as being exact or complete. The contractor shall contact dig safe (1-888-digsafe) at least three (3) but not more than thirty (30) days prior to commencement of excavation or demolition to verify horizontal and vertical location of all utilities. Contractor shall be aware that dig safe only notifies its "member" utilities about the dig. When notified, dig safe will advise contractor of member utilities in the area. Contractor is responsible for identifying and contacting non-member utilities directly. Non-member utilities may include town or city water and sewer districts and small local utilities, as well as usg public works systems.

11. Contractors shall be responsible for compliance with the requirements of 23 mrsa 3360-a. It shall be the responsibility of the contractor to coordinate with the appropriate utilities to obtain authorization prior to relocation of any existing utilities which conflict with the proposed improvements shown on these plans. If a utility conflict arises, the contractor shall immediately notify the owner, the municipality and appropriate utility company prior to proceeding with any relocation.

12. All pavement markings and directional signage shown on the plan shall conform to the manual of uniform traffic control devices (mutcd) standards.

13. All pavement joints shall be sawcut prior to paving to provide a durable and uniform joint.

14. No holes, trenches or structures shall be left open overnight in any excavation accessible to the public or in public rights-of-way.

15. All work within the public right-of-way shall require a M.D.O.T. Permit as well as permits from the town as applicable.

16. The proposed limits of clearing shown hereon are approximate based upon the proposed limits of site grading. The applicant reserves the right to perform normal forest management activities outside of the clearing limit as shown. Tree removal outside of the limits of clearing may be necessary to remove dead or dying trees or tree limbs. This removal is due to potential safety hazards and to promote proper forest growth.

17. Immediately upon completion of cuts/fills, the contractor shall stabilize disturbed areas in accordance with erosion control notes and as specified on plans.

18. The contractor shall be fully and solely responsible for the removal, replacement and rectification of all damaged and defective material and workmanship in connection with the contract work. The contractor shall replace or repair as directed by the owner all such damaged or defective materials which appear within a period of one year from the date of substantial completion.

19. All work performed by the general contractor and/or trade subcontractor shall conform to the requirements of local, state or federal laws, as well as any other governing requirements, whether or not specified on the drawings.

21. Where the terms "approved equal", "other approved", "equal to", "acceptable" or other general qualifying terms are used in these notes, it shall be understood that reference is made to the ruling and judgment of Terradyn Consultants, LLC.

22. The general contractor shall provide all necessary protection for the work until turned over to the owner. Before the final acceptance of the project, the contractor shall remove all equipment and materials, repair or replace private or public property which may have been damaged or destroyed during construction, clean the areas within and adjacent to the project which have been obstructed by his/her operations, and leave the project area neat and presentable.

23. The general contractor shall maintain a current and complete set of construction drawings on site during all phases of construction for use of all trades.

24. The contractor shall take full responsibility for any changes and deviation of approved plans not authorized by the architect/engineer and/or client/owner.

25. Details are intended to show end result of design. Any modification to suit field dimension and condition shall be submitted to the engineer for review and approval prior to any work.

26. The applicant will retain the services of a professional engineer to inspect the construction and stabilization of all stormwater management structures. If necessary, the inspecting engineer will interpret the pond's construction plan for the contractor. Once all stormwater management structures are constructed and stabilized, the inspecting engineer will notify the department in writing within 30 days to state that the pond has been completed. Accompanying the engineer's notification must be a log of the engineer's inspections giving the date of each inspection, the time of each inspection, and the items inspected on each visit, and include any testing data or sieve analysis data of every mineral soil and soil media specified in the plans and used on site.

MATCH LINE - SEE SHEET C-2.1

STATE OF MAINE
JEFFREY D. AMOS
No. 10161
LICENSED
PROFESSIONAL ENGINEER

SIGNATURE DATE:11/15/2018

NO.	DATE	REVISIONS	APP'D BY

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SHEET DESCRIPTION
NATURE'S WILDERNESS
MARSTONS ROAD
GRADING, UTILITY & E.C. PLAN

PREPARED FOR
MR. SCOTT EFRON
2 UPPER TWAIN ROAD
WEST BALDWIN, MAINE 04091

DATE:	9/27/2017
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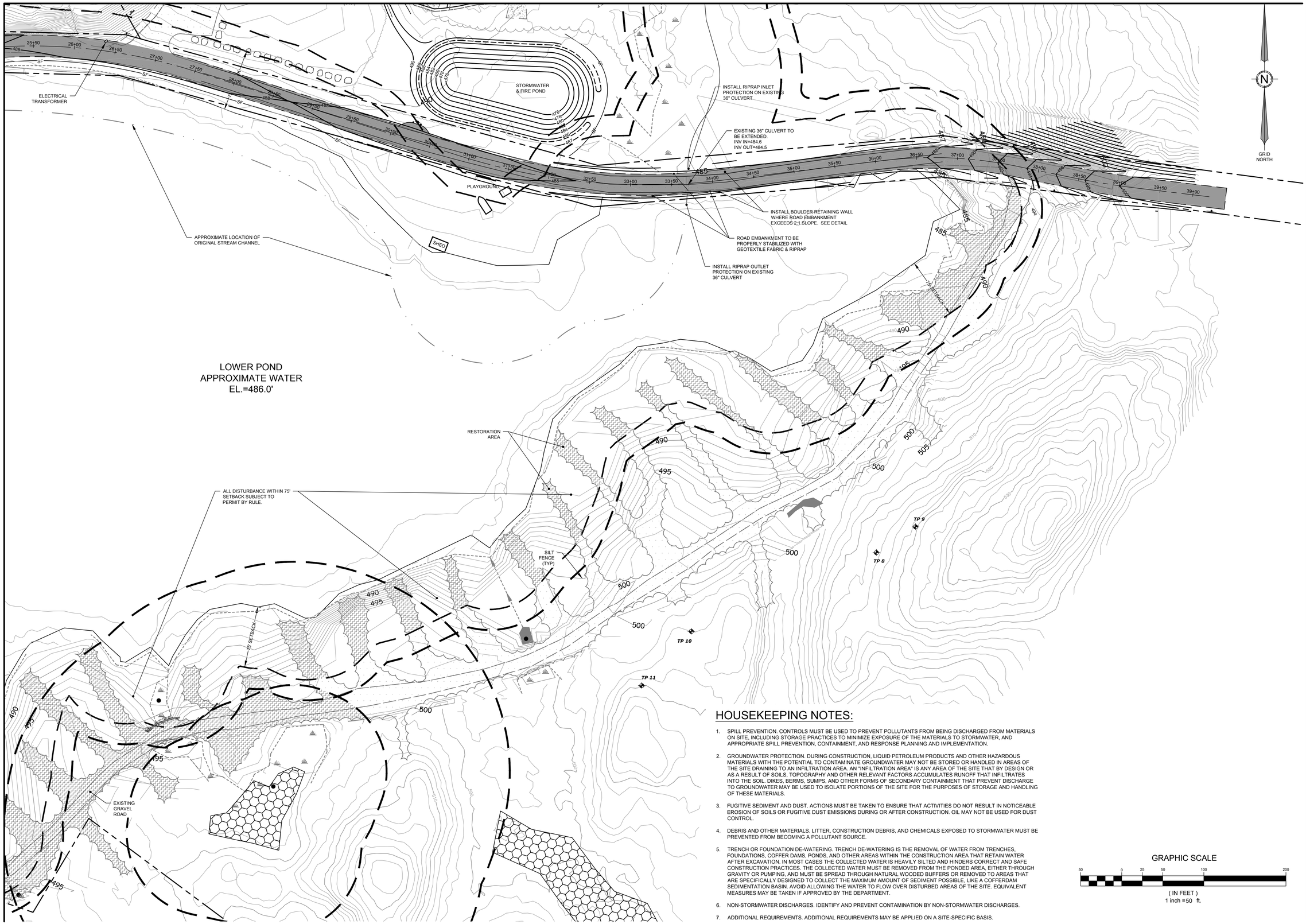
FILE: 1640 SK.DWG	
SHEET	C-2.0

MATCH LINE - SEE SHEET C-2.2

MATCH LINE - SEE SHEET C-2.2



HOUSEKEEPING NOTES:

1. SPILL PREVENTION. CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM BEING DISCHARGED FROM MATERIALS ON SITE, INCLUDING STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER, AND APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING AND IMPLEMENTATION.

2. GROUNDWATER PROTECTION. DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO AN INFILTRATION AREA. AN "INFILTRATION AREA" IS ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF SOILS, TOPOGRAPHY AND OTHER RELEVANT FACTORS ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL. DIKES, BERMS, SUMPS, AND OTHER FORMS OF SECONDARY CONTAINMENT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS.

3. FUGITIVE SEDIMENT AND DUST. ACTIONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED FOR DUST CONTROL.

4. DEBRIS AND OTHER MATERIALS. LITTER, CONSTRUCTION DEBRIS, AND CHEMICALS EXPOSED TO STORMWATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.

5. TRENCH OR FOUNDATION DE-WATERING. TRENCH DE-WATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, COFFER DAMS, PONDS, AND OTHER AREAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION. IN MOST CASES THE COLLECTED WATER IS HEAVILY SILTED AND HINDERS CORRECT AND SAFE CONSTRUCTION PRACTICES. THE COLLECTED WATER MUST BE REMOVED FROM THE PONDED AREA, EITHER THROUGH GRAVITY OR PUMPING, AND MUST BE SPREAD THROUGH NATURAL WOODED BUFFERS OR REMOVED TO AREAS THAT ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE, LIKE A COFFERDAM SEDIMENTATION BASIN. AVOID ALLOWING THE WATER TO FLOW OVER DISTURBED AREAS OF THE SITE. EQUIVALENT MEASURES MAY BE TAKEN IF APPROVED BY THE DEPARTMENT.

6. NON-STORMWATER DISCHARGES. IDENTIFY AND PREVENT CONTAMINATION BY NON-STORMWATER DISCHARGES.

7. ADDITIONAL REQUIREMENTS. ADDITIONAL REQUIREMENTS MAY BE APPLIED ON A SITE-SPECIFIC BASIS.

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

STATE OF MAINE JEFFREY D. AMOS No. 10161 LICENSED PROFESSIONAL ENGINEER

SIGNATURE DATE: 11/15/2018

NO.	DATE	REVISIONS	APP'D BY

TERRADYN CONSULTANTS, LLC
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New Gloucester, ME 04260
Office: (207) 926-5111
Fax: (207) 221-1317
www.terradynconsultants.com

Civil Engineering - Land Planning - Stormwater Design - Environmental Permitting

SHEET DESCRIPTION
NATURE'S WILDERNESS
MARSTONS ROAD
GRADING, UTILITY & E.C. PLAN

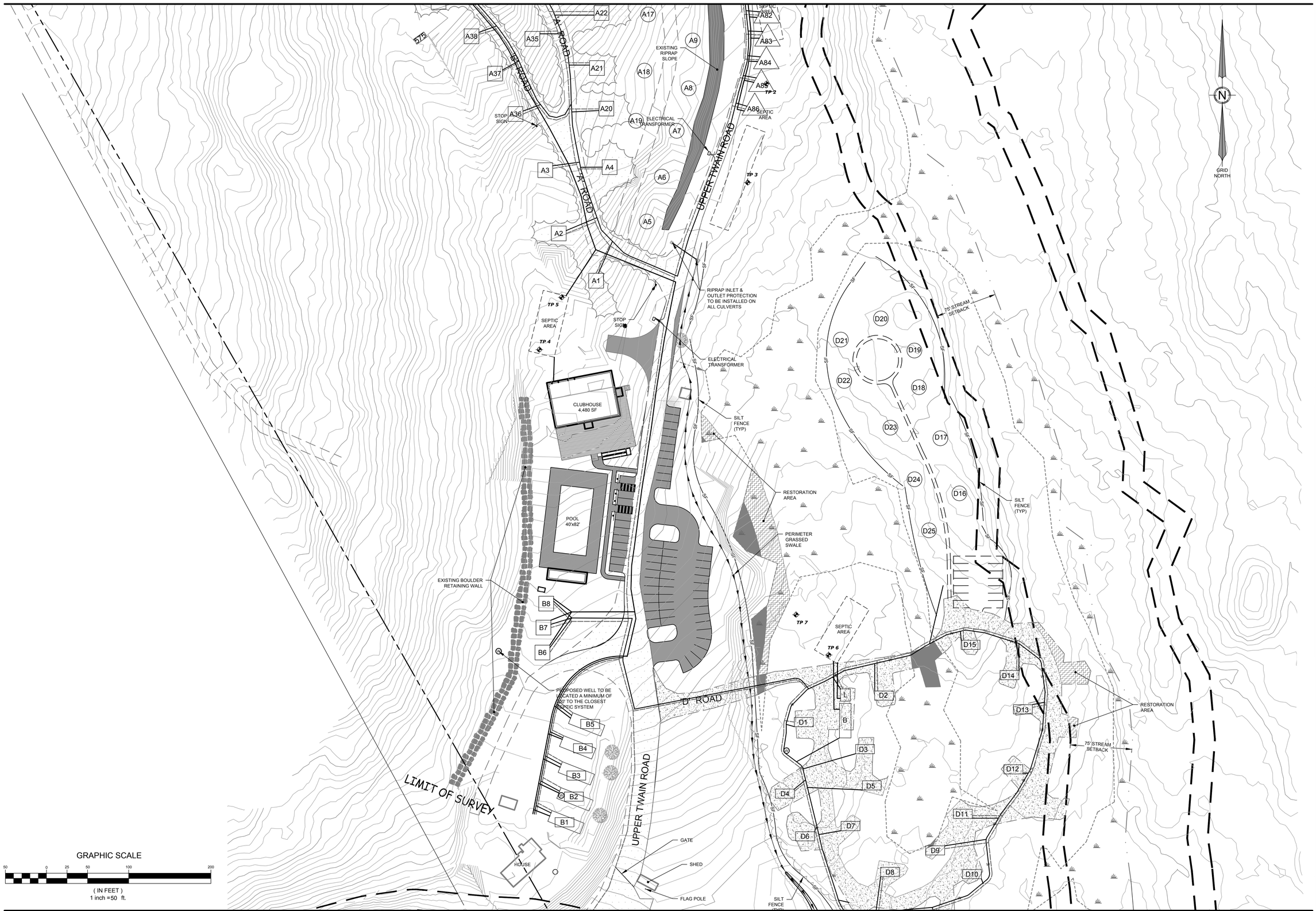
PREPARED FOR
MR. SCOTT EFRON
2 UPPER TWAIN ROAD
WEST BALDWIN, MAINE 04091

DATE:	9/27/2017
SCALE:	1"=50'
DESIGNED:	JDA
JOB NO:	1640
FILE: 1640 SK.DWG	
SHEET	C-2.1

MATCH LINE - SEE SHEET C-2.2

MATCH LINE - SEE SHEET C-2.3

MATCH LINE - SEE SHEET C-2.3



GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch =50 ft.

MATCH LINE - SEE SHEET C-2.0

MATCH LINE - SEE SHEET C-2.1

MATCH LINE - SEE SHEET C-2.1

STATE OF MAINE
JEFFREY D. JAMOS
No. 10161
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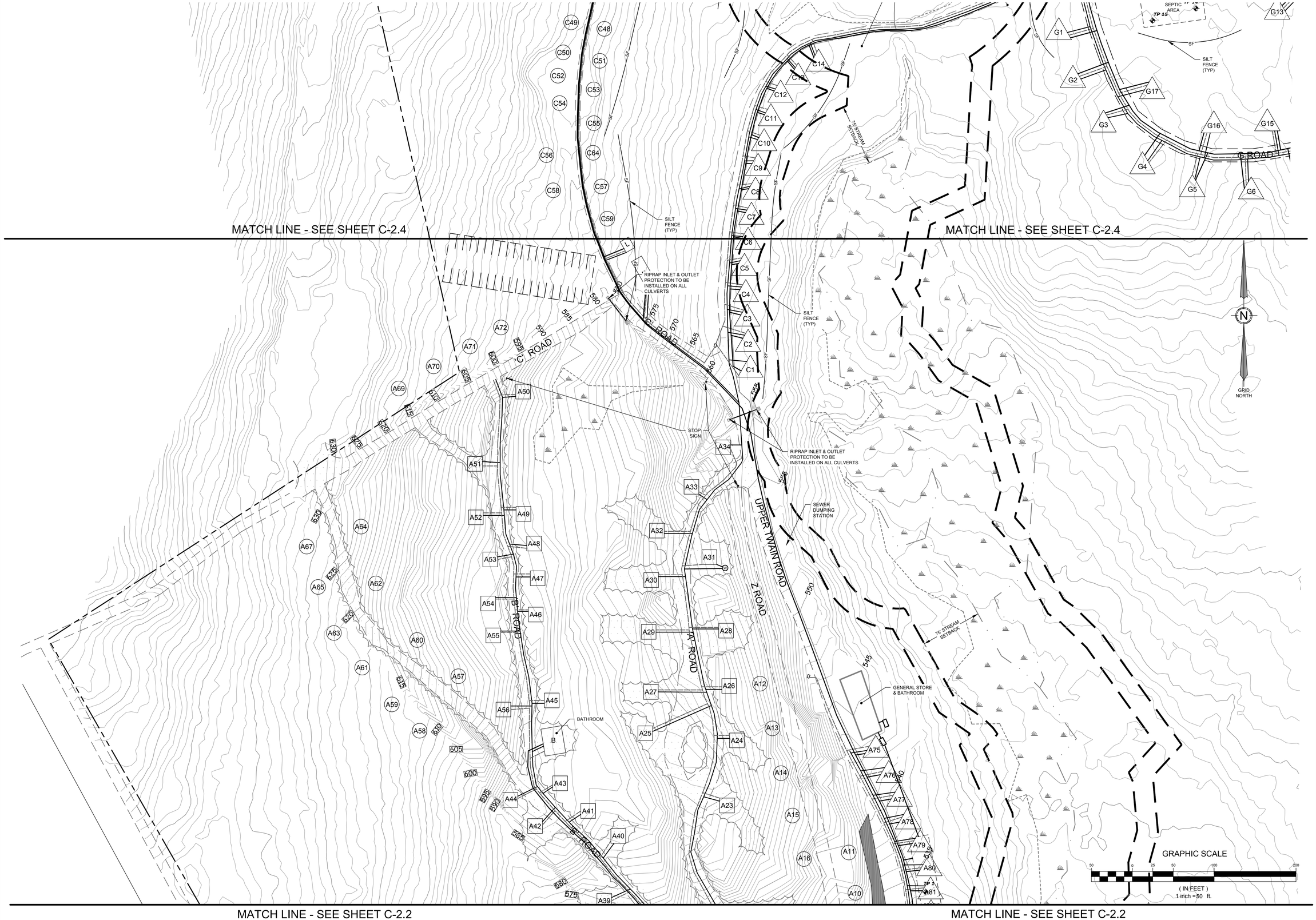
SHEET C-2.2



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WEST BALDWIN, MAINE 04091

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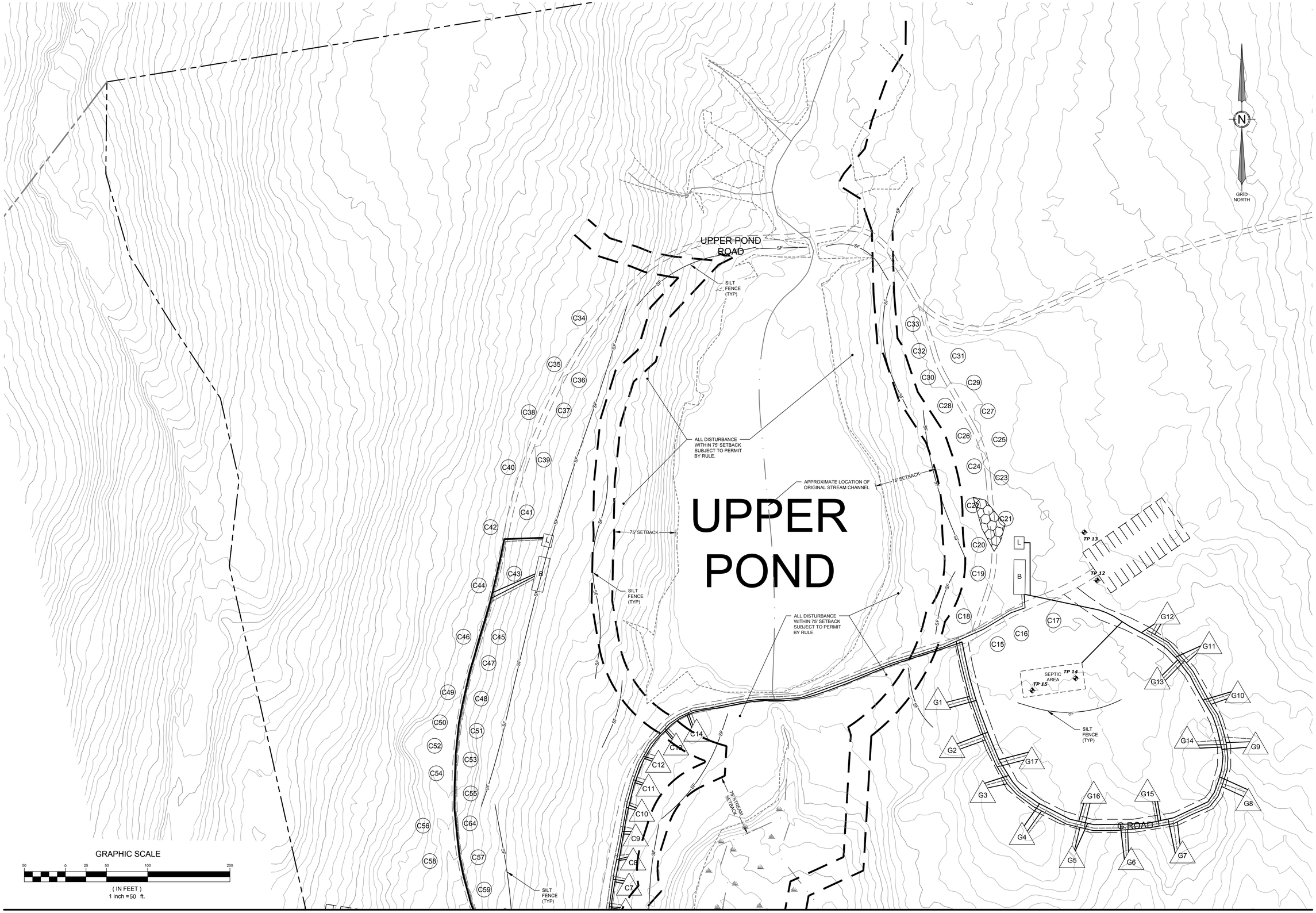
SHEET	C-2.3



MATCH LINE - SEE SHEET C-2.3

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STATE OF MAINE
JEFFREY D. TAMOS
No. 10161
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PROFESSIONAL ENGINEER

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SHEET DESCRIPTION
NATURE'S WILDERNESS
MARSTONS ROAD
GRADING, UTILITY & E.C. PLAN

PREPARED FOR
MR. SCOTT EFRON
2 UPPER TWAIN ROAD
WEST BALDWIN, MAINE 04091

DATE:	9/27/2017
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DESIGNED:	JDA
JOB NO:	1640
FILE: 1640 SK.DWG	
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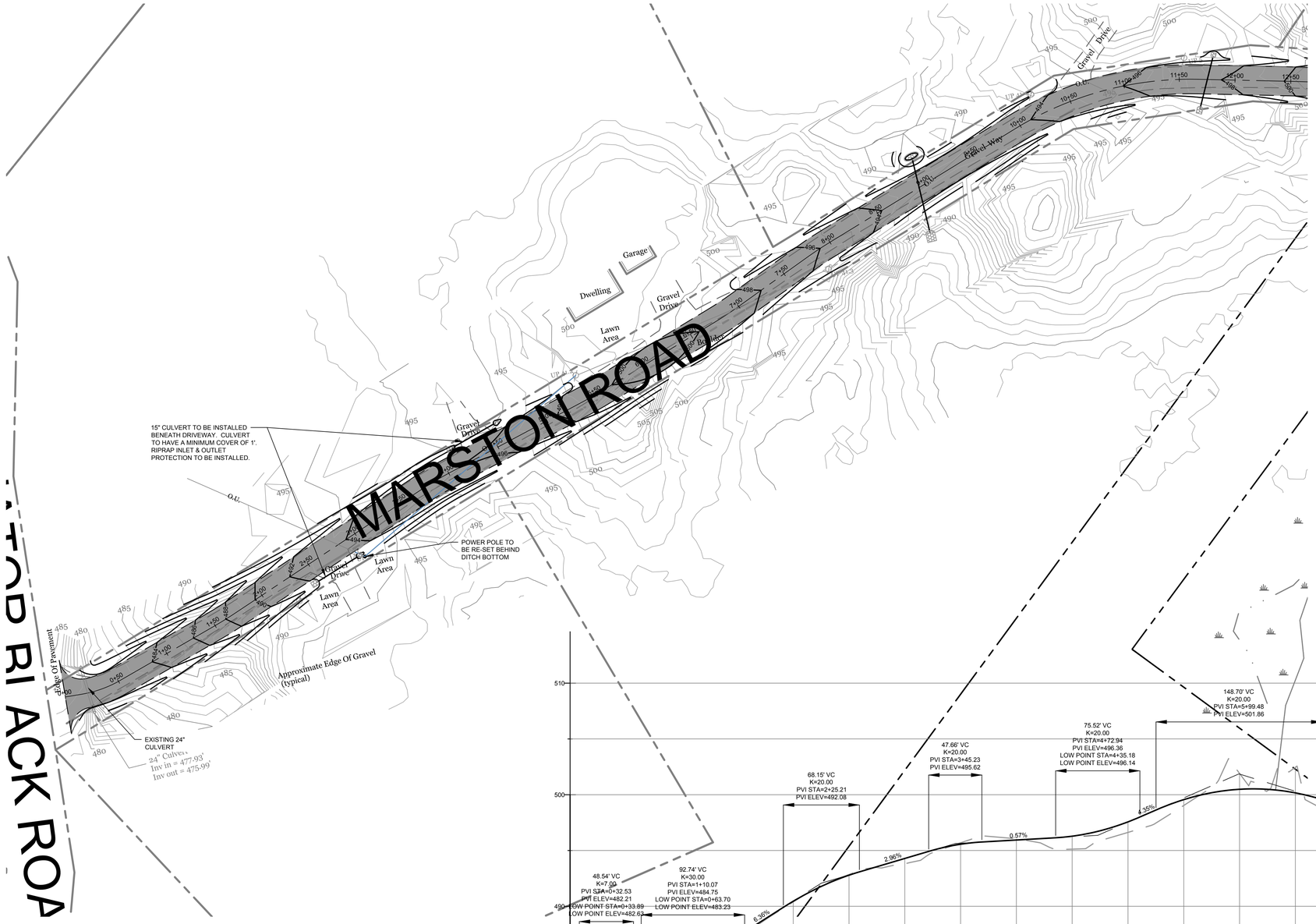

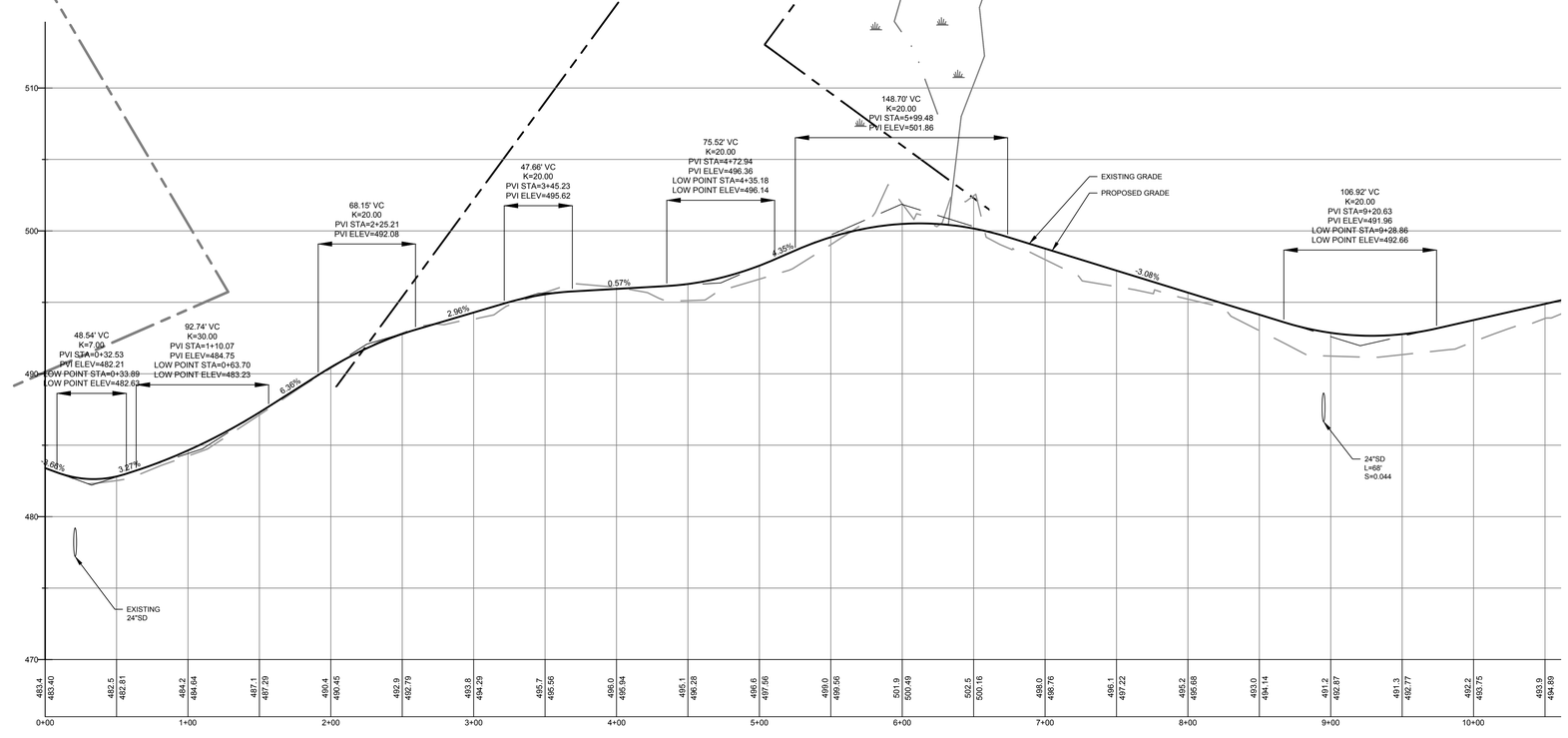

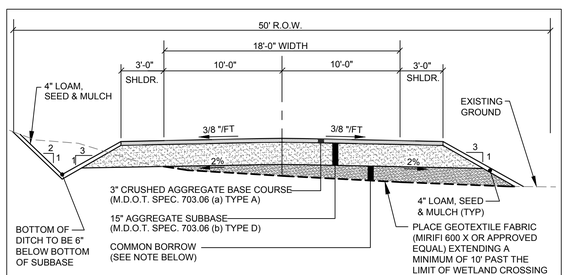

NOTE: FILL AREAS BENEATH DRIVING SURFACE SHALL BE GRANULAR BORROW. ALL OTHER FILL AREAS SHALL BE A COMMON BORROW MATERIAL SUITABLE FOR EMBANKMENT CONSTRUCTION, FREE FROM FROZEN MATERIAL, PERISHABLE RUBBLE, PEAT, ORGANICS, ROCKS LARGER THAN 12" IN DIAMETER, VEGETATION AND OTHER MATERIAL UNSUITABLE FOR ROADWAY AND SUB-GRADE CONSTRUCTION. EXCAVATED ONSITE MATERIALS MAY BE USED FOR FILL PROVIDED THE MATERIAL IS FREE FROM UNSUITABLE MATERIAL DESCRIBED IN THIS NOTE AND UPON APPROVAL OF THE ENGINEER. GRANULAR BORROW AND COMMON BORROW SHALL ADHERE TO MDOT SPECIFICATIONS 703.19 AND 703.18 RESPECTIVELY.

TYPICAL SECTION - MARSTON'S ROAD

NOT TO SCALE

GRID NORTH

STATE OF MAINE
JEFFREY D. JAMESON
No. 10167
LICENSED
PROFESSIONAL ENGINEER

SIGNATURE DATE: 7/5/2018

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www.terradynconsultants.com

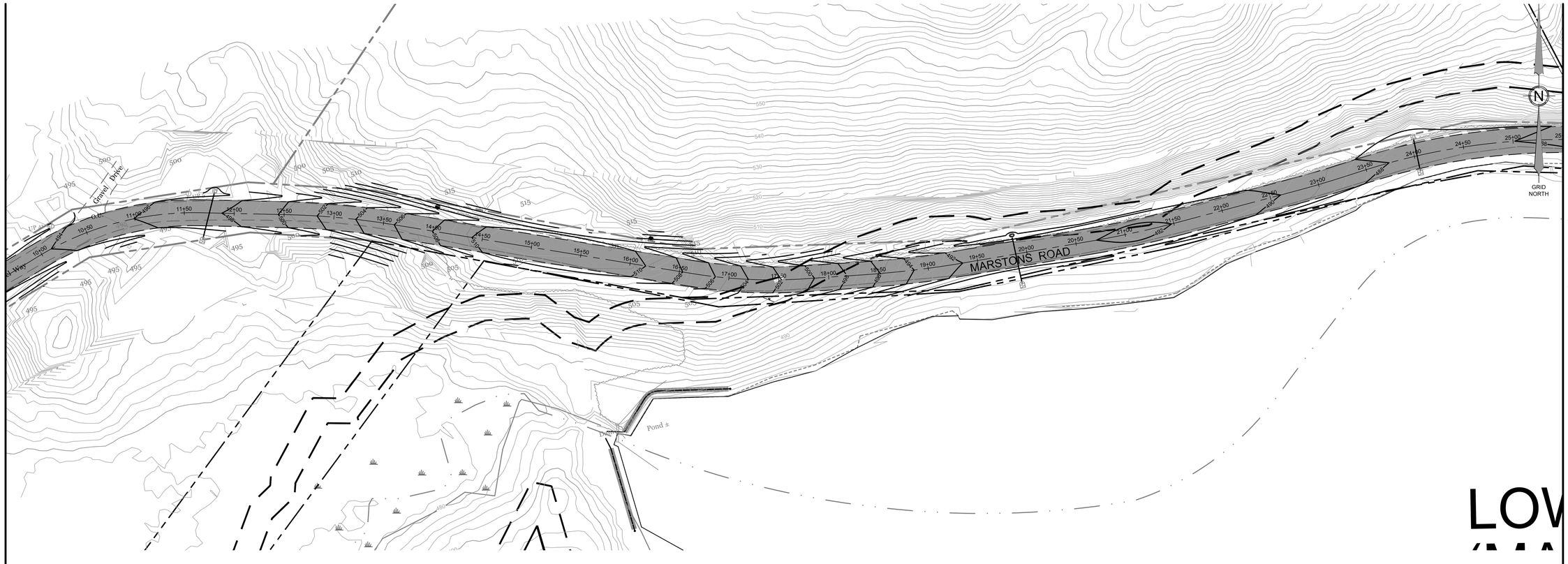
Civil Engineering - Land Planning - Stormwater Design - Environmental Permitting

SHEET DESCRIPTION
NATURE'S WILDERNESS
MARSTONS ROAD
PLAN & PROFILE

PREPARED FOR
MR. SCOTT EFRON
2 UPPER TWAIN ROAD
WEST BALDWIN, MAINE 04091

DATE:	9/27/2017
SCALE:	1"=50'
DESIGNED:	JDA
JOB NO:	1640
FILE: 1640 SK.DWG	
SHEET	C-3.0

MATCH LINE - SEE SHEET C-3.0



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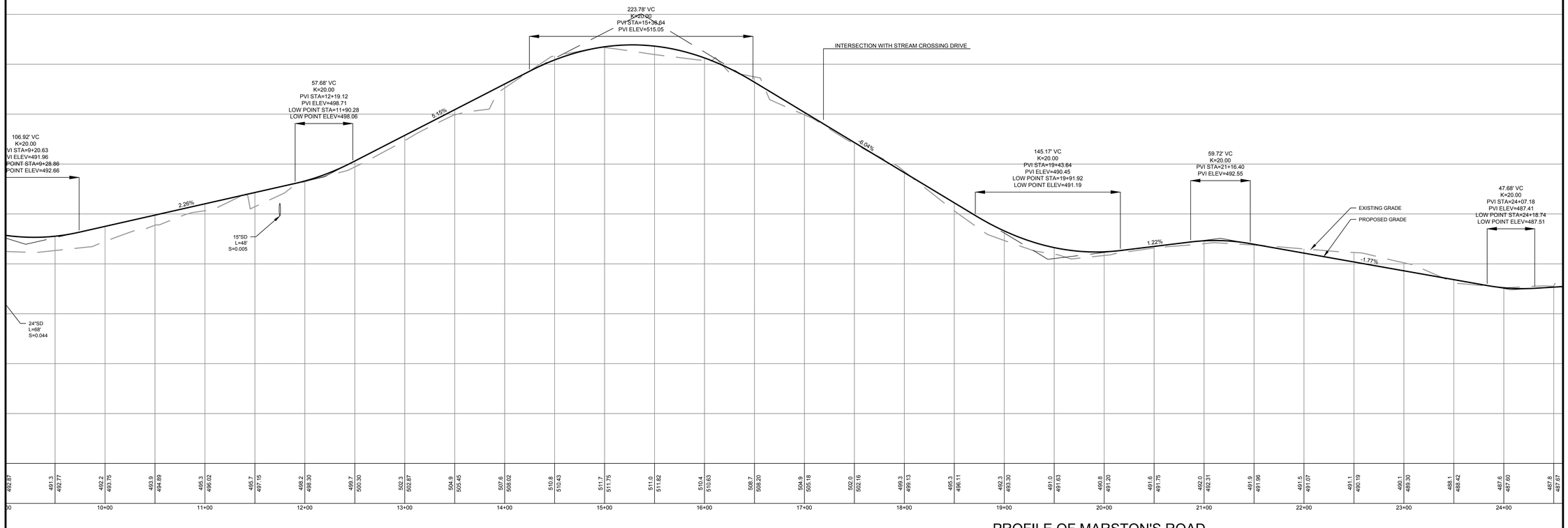

PROFILE OF MARSTON'S ROAD

MATCH LINE - SEE SHEET C-3.0

MATCH LINE - SEE SHEET C-3.2

STATE OF MAINE
JEFFREY D. ALWARD
No. 10167
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PROFESSIONAL ENGINEER

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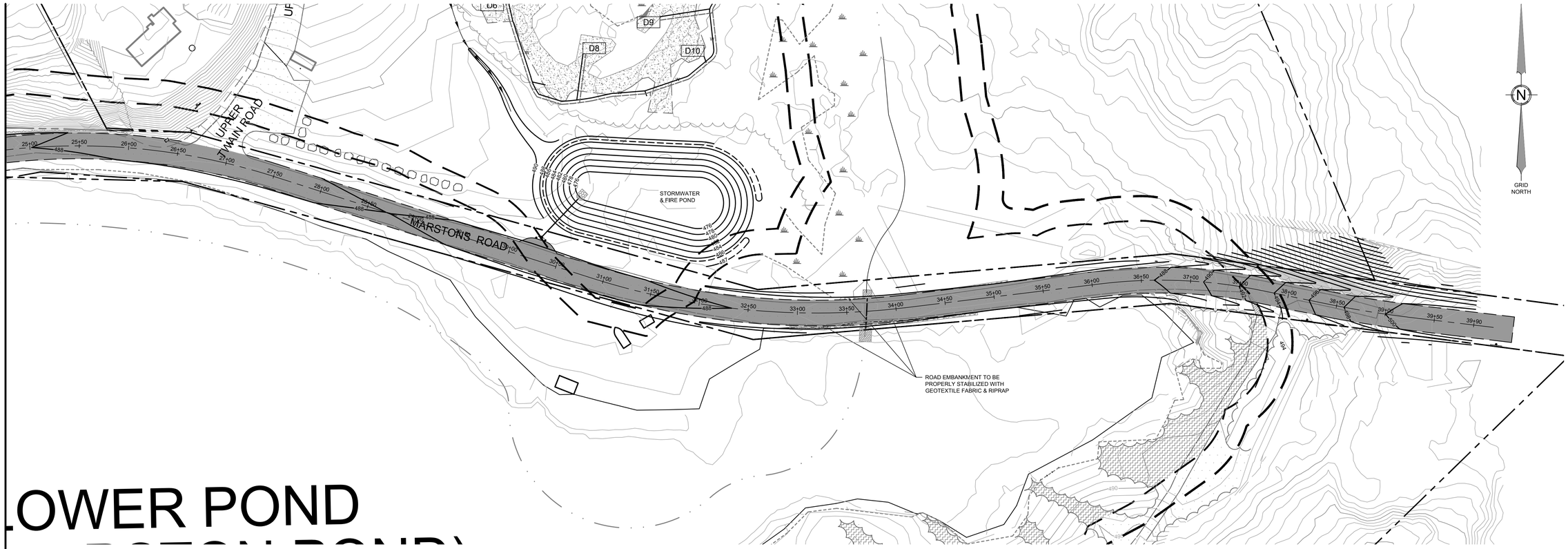
MARSTONS ROAD
PLAN & PROFILE

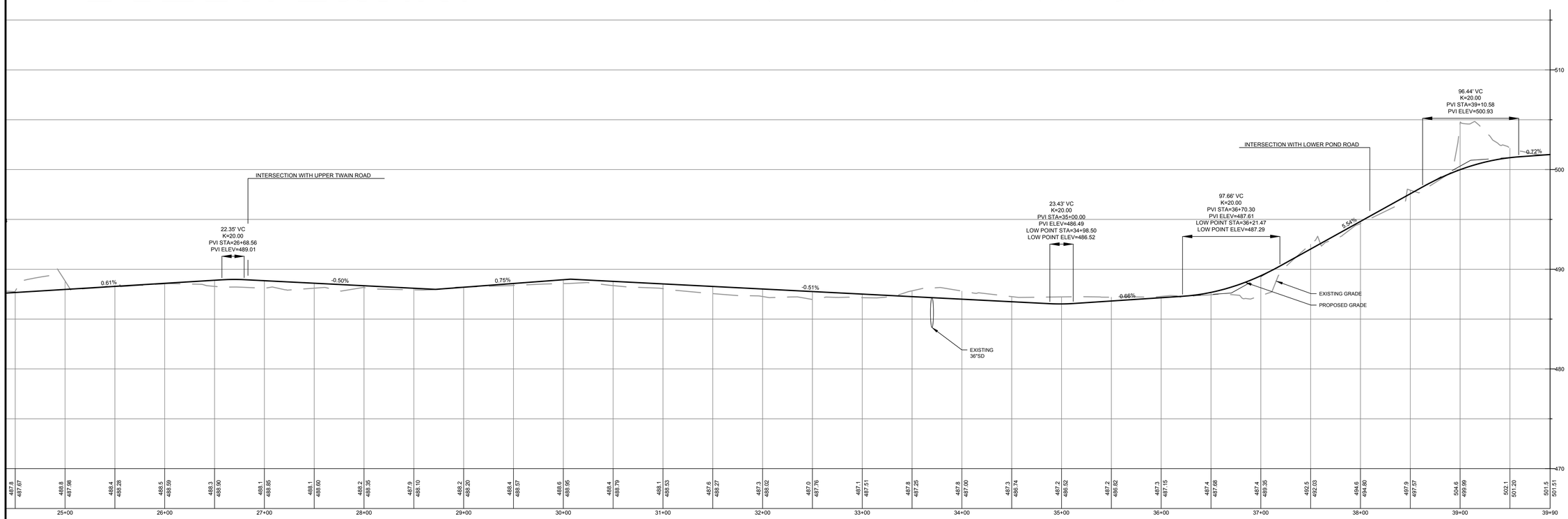
PREPARED FOR
MR. SCOTT EFRON
2 UPPER TWAIN ROAD
WEST BALDWIN, MAINE 04091

DATE:	9/27/2017
SCALE:	1"=50'
DESIGNED:	JDA
JOB NO:	1640
FILE:	1640 B.DWG
SHEET	C-3.1

MATCH LINE - SEE SHEET C-3.1



LOWER POND



MATCH LINE - SEE SHEET C-3.1

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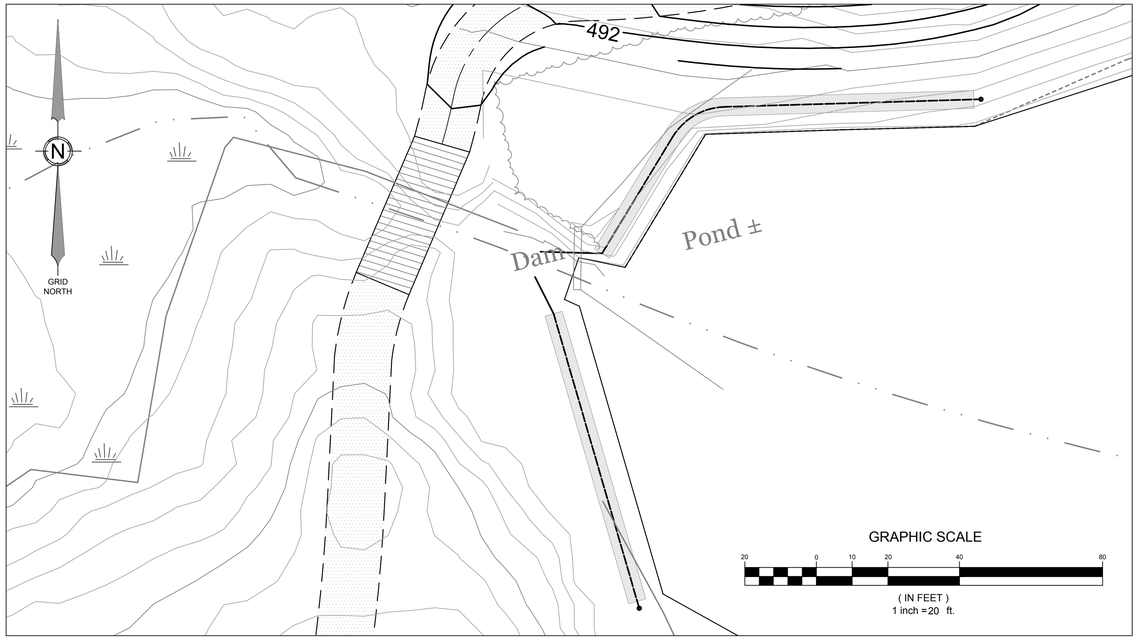
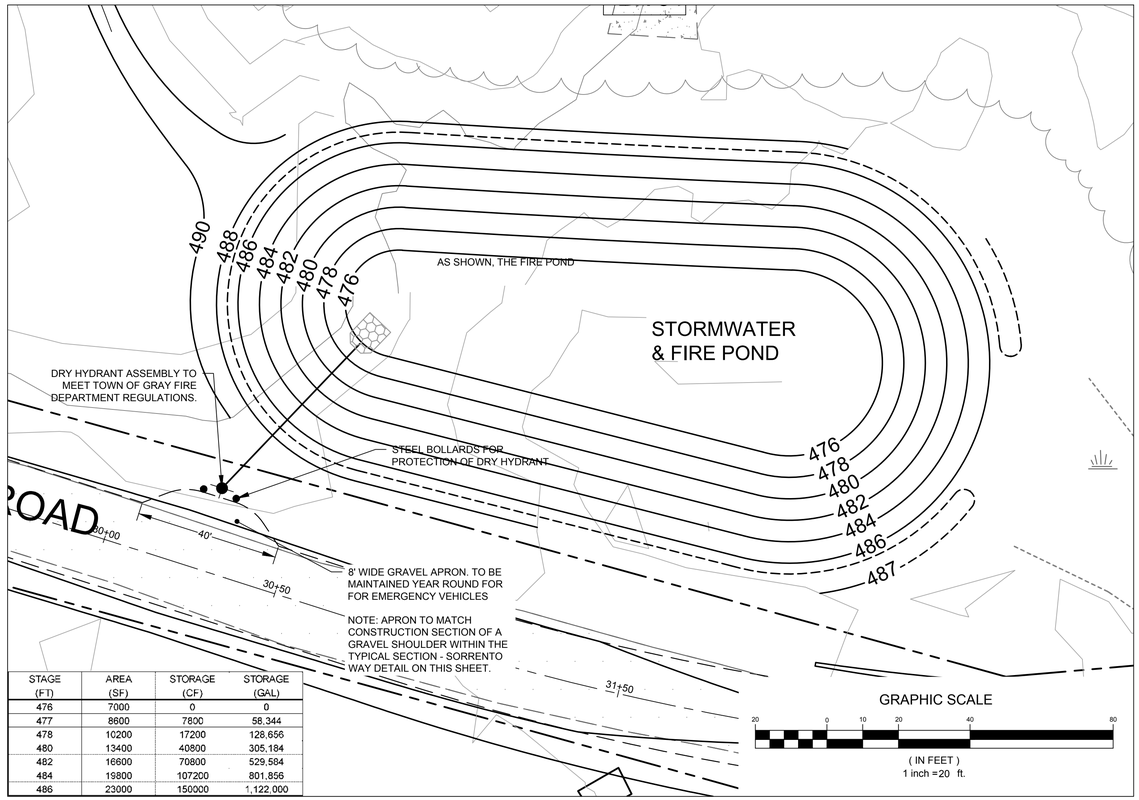


POND BENCH UNDERDRAINED GRAVEL PLAN DETAIL

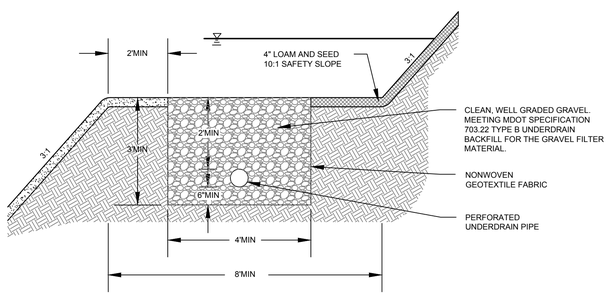
NOT TO SCALE



STAGE (FT)	AREA (SF)	STORAGE (CF)	STORAGE (GAL)
476	7000	0	0
477	8600	7800	58,344
478	10200	17200	128,656
480	13400	40800	305,184
482	16600	70800	529,584
484	19800	107200	801,856
486	23000	150000	1,122,000

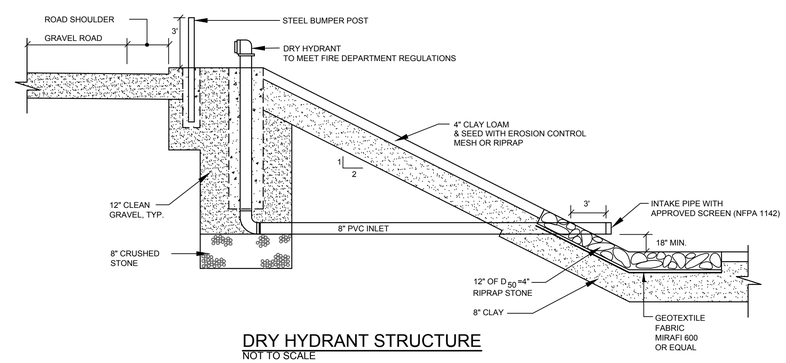
FIRE POND PLAN DETAIL

NOT TO SCALE



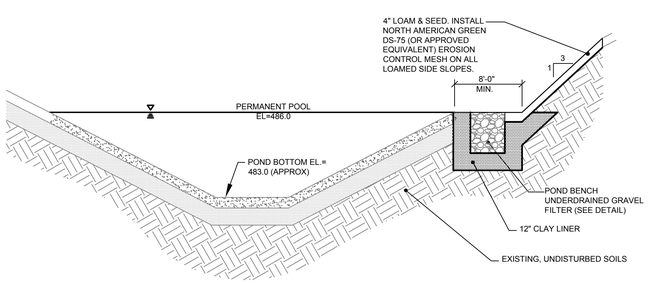
POND BENCH UNDERDRAINED GRAVEL FILTER DETAIL

NOT TO SCALE



DRY HYDRANT STRUCTURE

NOT TO SCALE



CONSTRUCTION NOTES:

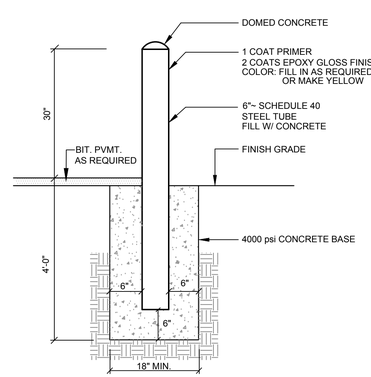
1. CONTRACTOR SHALL REMOVE ALL TOPSOIL AND ORGANIC MATERIAL FROM EMBANKMENT AND POND CONSTRUCTION AREA.
2. SCARIFY SUBGRADE TO ESTABLISH INTERFACE FOR ALL FILLS.
3. CONSTRUCTION MATERIAL SHALL MEET M.D.O.T. SPEC. 703.18
4. COMPACT IN 12" LIFTS TO 92% OF MAXIMUM DENSITY.
5. INSTALL RIPRAP AND EROSION MESH WHERE SPECIFIED.
6. LOAM, SEED & STABILIZE IN ACCORDANCE WITH SEDIMENTATION AND EROSION CONTROL PLAN.

POND CONSTRUCTION NOTES:

1. AN EARTHEN BERM SHALL BE INSTALLED SUCH THAT THE AREA TO BE RETROFIT CAN BE DEWATERED FOR THE DURATION OF CONSTRUCTION.
2. DEWATERING PROCEDURES SHALL BE CONDUCTED USING MDEP APPROVED TECHNIQUES AND SHALL INCLUDE THE USE OF A DIRT BAG SYSTEM. THE DIRT BAG SHALL BE USED ACCORDING TO MANUFACTURER INSTRUCTIONS.
3. CONSTRUCTION OF A POND SHALL NOT START AFTER THE DATE OF SEPTEMBER 1ST OR BEFORE JUNE 1ST OF THE CONSTRUCTION YEAR.
4. SEEDING OR STABILIZATION OF THE POND EMBANKMENTS SHALL OCCUR PRIOR TO SEPTEMBER 15TH OF THE CONSTRUCTION YEAR.
5. DEWATERING OF THE POND SHALL BE CONDUCTED SUCH THAT THE POND WILL NOT FILL WITH WATER UNTIL THE GRAVEL UNDERDRAINED BENCH AREA IS COMPLETED AND SIDESLOPES STABLIZED.

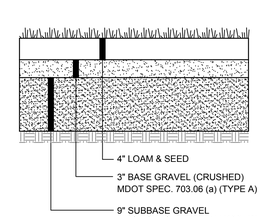
RETROFITTED POND CROSS SECTION VIEW

NOT TO SCALE



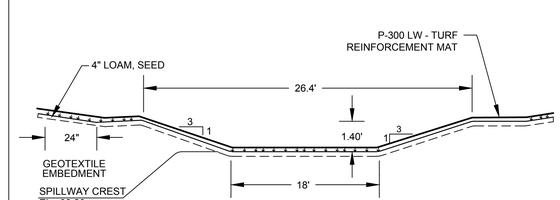
METAL BOLLARD

NOT TO SCALE



TYPICAL DETENTION BASIN ACCESS CROSS-SECTION

NOT TO SCALE



SPILLWAY CROSS-SECTION - POND #3

NOT TO SCALE

STATE OF MAINE
JEFFREY D. KAMPS
10167
LICENSED
PROFESSIONAL ENGINEER

SIGNATURE DATE:7/5/2018

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SHEET DESCRIPTION
NATURE'S WILDERNESS
MARSTONS ROAD
DETAILS & NOTES

PREPARED FOR
MR. SCOTT EFRON
2 UPPER TWAIN ROAD
WEST BALDWIN, MAINE 04091

DATE:	9/27/2017
SCALE:	AS SHOWN
DESIGNED:	JDA
JOB NO:	1640
FILE: 1640 SK.DWG	

SHEET C-4.0

EROSION AND SEDIMENT CONTROL PLAN

Pre-Construction Phase

A person who conducts, or causes to be conducted, an activity that involves filling, displacing or exposing soil or other earthen materials shall take measures to prevent unreasonable erosion of soil or sediment beyond the project site or into a protected natural resource as defined in 38 msa § 480-b. Erosion control measures must be in place before the activity begins. Measures must remain in place and functional until the site is permanently stabilized. Adequate and timely temporary and permanent stabilization measures must be taken. The site must be maintained to prevent unreasonable erosion and sedimentation. Minimize disturbed areas and protect natural downgradient buffer areas to the extent practicable.

BMP Construction Phase

A. Sediment barriers. Prior to the beginning of any construction, properly install sediment barriers at the edge of any downgradient disturbed area and adjacent to any drainage channels within the proposed disturbed area. Maintain the sediment barriers until the disturbed area is permanently stabilized.

B. Construction entrance: Prior to any clearing or grubbing, a construction entrance shall be constructed at the intersection with the proposed access drive and the existing roadway to avoid tracking of mud, dust and debris from the site.

C. Riprap: Since riprap is used where erosion potential is high, construction must be sequenced so that the riprap is put in place with the minimum delay. Disturbance of areas where riprap is to be placed should be undertaken only when final preparation and placement of the riprap can follow immediately behind the initial disturbance. Where riprap is used for outlet protection, the riprap should be placed before or in conjunction with the construction of the pipe or channel so that it is in place when the pipe or channel begins to operate. Maintain temporary riprap, such as temporary check dams until the disturbed area is permanently stabilized.

D. Temporary stabilization. Stabilize with temporary seeding, mulch, or other non-erodable cover any exposed soils that will remain unworked for more than 14 days except, stabilize areas within 100 feet of a wetland or waterbody within 7 days or prior to a predicted storm event, whichever comes first. If hay or straw mulch is used, the application rate must be 2 bales (70-90 pounds) per 1000 sf or 1.5 to 2 tons (90-100 bales) per acre to cover 75 to 90% of the ground surface. Hay mulch must be kept moist or anchored to prevent wind blowing. An erosion control blanket or mat shall be used at the base of grassed waterways, steep slopes (15% or greater) and on any disturbed soil within 100 feet of lakes, streams and wetlands. Grading shall be planned so as to minimize the length of time between initial soil exposure and final grading. On large projects this should be accomplished by phasing the operation and completing the first phase up to final grading and seeding before starting the second phase, and so on.

E. Vegetated waterway. Upon final grading, the disturbed areas shall be immediately seeded to permanent vegetation and mulched and will not be used as outlets until a dense, vigorous vegetative cover has been obtained. Once soil is exposed for waterway construction, it should be immediately shaped, graded and stabilized. Vegetated waterways need to be stabilized early during the growing season (prior to september 15). If final seeding of waterways is delayed past september 15, emergency provisions such as sod or riprap may be required to stabilize the channel. Waterways should be fully stabilized prior to directing runoff to them.

Permanent stabilization defined

A. Seeded areas. For seeded areas, permanent stabilization means an 90% cover of the disturbed area with mature, healthy plants with no evidence of washing or rilling of the topsoil.

B. Sodded areas. For sodded areas, permanent stabilization means the complete binding of the sod roots into the underlying soil with no slumping of the sod or die-off.

C. Permanent mulch. For mulched areas, permanent mulching means total coverage of the exposed area with an approved mulch material. Erosion control mix may be used as mulch for permanent stabilization according to the approved application rates and limitations.

D. Riprap. For areas stabilized with riprap, permanent stabilization means that slopes stabilized with riprap have an appropriate backing of a well-graded gravel or approved geotextile to prevent soil movement from behind the riprap. Stone must be sized appropriately. It is recommended that angular stone be used.

E. Agricultural use. For construction projects on land used for agricultural purposes (e.G., pipelines across crop land), permanent stabilization may be accomplished by returning the disturbed land to agricultural use.

F. Paved areas. For paved areas, permanent stabilization means the placement of the compacted gravel subbase is completed.

G. Ditches, channels, and swales. For open channels, permanent stabilization means the channel is stabilized with mature vegetation at least three inches in height, with well-graded riprap, or with another non-erosive lining capable of withstanding the anticipated flow velocities and flow depths without reliance on check dams to slow flow. There must be no evidence of slumping of the lining, undercutting of the banks, or down-cutting of the channel.

General Construction Phase

The following erosion control measures shall be followed by the contractor throughout construction of this project:

A. All topsoil shall be collected, stockpiled, seeded with rye at 3 pounds/1,000 sf and mulched, and reused as required. Silt fencing shall be placed down gradient from the stockpiled loam. Stockpile to be located by designation of the owner and inspecting engineer.

B. The inspecting engineer at his/her discretion, may require additional erosion control measures and/or supplemental vegetative provisions to maintain stability of earthworks and finish graded areas. The contractor shall be responsible for providing and installing any supplemental measures as directed by the inspecting engineer. Failure to comply with the engineer's directions will result in discontinuation of construction activities.

C. Erosion control mesh shall be applied in accordance with the plans over all finish seeded areas as specified on the design plans.

D. All graded or disturbed areas including slopes shall be protected during clearing and construction in accordance with the approved erosion and sediment control plan until they are adequately stabilized.

E. All erosion, and sediment control practices and measures shall be constructed, applied and maintained in accordance with the approved erosion and sediment control plan.

F. Areas to be filled shall be cleared, grubbed and stripped of topsoil to remove trees, vegetation, roots or other objectionable materials.

G. Areas shall be scarified to a minimum depth of 3 inches prior to placement of topsoil.

H. All fills shall be compacted as required to reduce erosion, slippage, settlement, subsidence or other related problems. Fill intended to support buildings, structures and conduits, etc., shall be compacted in accordance with local requirements or codes.

I. All fills shall be placed and compacted in layers not to exceed 8 inches in thickness.

J. Except for approved landfills or non-structural fills, fill material shall be free of brush, rubbish, rocks, logs, stumps, building debris and other objectionable materials that would interfere with or prevent construction of satisfactory lifts.

K. Frozen material or soft, mucky or highly compressible materials shall not be incorporated into fill slopes or structural fills.

L. Fill shall not be placed on a frozen foundation.

M. Seeps or springs encountered during construction shall be handled appropriately.

N. All graded areas shall be permanently stabilized immediately following finished grading.

O. Remove any temporary control measures, such as silt fence, within 30 days after permanent stabilization is attained. Remove any accumulated sediments and stabilize.

Permanent vegetation

Permanent vegetative cover should be established on disturbed areas where permanent, long lived vegetative cover is needed to stabilize the soil, to reduce damages from sediment and runoff, and to enhance the environment.

Seedbed preparation

A. Grade as feasible to permit the use of conventional equipment for seedbed preparation, seeding, mulch application and anchoring, and maintenance.

B. Apply limestone and fertilizer according to soil tests such as those offered by the university of maine soil testing laboratory. Soil sample mailers are available from the local cooperative extension service office. If soil testing is not feasible on small or variable sites, or where timing is critical, fertilizer may be applied at the rate of 800 pounds per acre or 18.4 pounds per 1,000 square feet using 10-20-20 (n-p2o5-k2o) or equivalent. Apply ground limestone (equivalent to 50% calcium plus magnesium oxide) at
a rate of 3 tons per acre (138 lb. Per 1,000 sq. Ft).

C. Work lime and fertilizer into the soil as nearly as practical to a depth of 4 inches with a disc, spring tooth harrow or other suitable equipment. The final harrowing operation should be on the general contour. Continue tillage until a reasonably uniform, fine seedbed is prepared. All but clay or silty soils and coarse sands should be rolled to firm the seedbed wherever feasible.D. Remove from the surface all stones 2 inches or larger in any dimension. Remove all other debris, such as wire, cable, tree roots, concrete, clods, lumps or other unsuitable material.

E. Inspect seedbed just before seeding. If traffic has left the soil compacted; the area must be tilled and firmed as above.

F. Permanent seeding should be made 45 days prior to the first killing frost or as a dormant seeding with mulch after the first killing frost and before snowfall. When crown vetch is seeded in later summer, at least 35% of the seed should be hard seed (unscarified). If seeding cannot be done within the seeding dates, mulch according to the temporary mulching bmp and overwinter stabilization and construction to protect the site and delay seeding until the next recommended seeding period.

G. Following seed bed prepartation, swale areas, fill areas and back slopes shall be seeded at a rate of 3 lbs./1,000 s.F. With a mixture of 35% creeping red h. Fescue, 6% red top, 24% kentucky bluegrass, 10% perennial ryegrass, 20% annual ryegrass and 5% white dutch clover.

I. Areas which have been temporarily or permanently seeded shall be mulched immediately following seeding.

J. Areas which cannot be seeded within the growing season shall be mulched for over-winter protection and the area should be seeded at the beginning of the growing season.

Winter construction phase

If an area is not stabilized with temporary or permanent measures by november 15, then the site must be protected with additional stabilization measures.

A. Permanent stabilization consists of at least 90% vegetation, pavement/gravel base or riprap.

B. Do not expose slopes or leave slopes exposed over the winter or for any other extended time of work suspension unless fully protected with mulch.

C. Apply hay mulch at twice the standard rate (150 lbs. Per 1,000 sf). The mulch must be thick enough such that the ground surface will not be visible and must be anchored.

D. Use mulch and mulch netting or an erosion control mulch blanket or all slopes greater than 8 % or other areas exposed to direct wind.

E. Install an erosion control blanket in all drainageways (bottom and sides) with a slope greater than 3 %.

F. See the vegetation measures for more information on seeding dates and types.

G. Winter excavation and earthwork shall be completed so that no more than 1 acre of the site is without stabilization at any one time.

H. An area within 100 feet of a protected natural resource must be protected with a double row of sediment barrier.

I. Temporary mulch must be applied within 7 days of soil exposure or prior to any storm event, but after every workday in areas within 100 feet from a protected natural resource.

J. Areas that have been brought to final grade must be permanently mulched that same day.

K. If snowfall is greater than 1 inch (fresh or cumulative), the snow shall be removed from the areas due to be seeded and mulched.

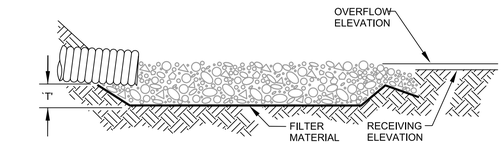
L. Loam shall be free of frozen clumps before it is applied.

M. All vegetated ditch lines that have not been stabilized by november 1, or will be worked during the winter construction period, must be stabilized with an appropriate stone lining backed by an appropriate gravel bed or geotextile unless specifically released from this standard by the department.

Maintenance and inspection phase

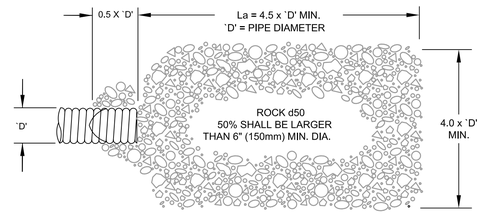
A. Contractor shall inspect disturbed and impervious areas, and erosion and stormwater control measures, areas used for storage that are exposed to precipitation, and locations where vehicles enter or exit the parcel at least once a week and before and after a storm event, prior to completion of permanent stabilization. A person with knowledge of erosion and stormwater must conduct the inspection. This person must be identified in the inspection log. If best management practices (bmps) need to be modified or if additional bmps are necessary, implementation must be completed within 7 calendar days and prior to any storm event (rainfall). All measures must be maintained in effective operating condition until areas are permanently stabilized.

B. A log (report) must be kept summarizing the scope of the inspection, name(s) and qualifications of the personnel making the inspection, the date(s) of the inspection, and major observations relating to operation of erosion and sedimentation controls and pollution prevention measures. Major observations must include: bmps that need to be maintained; location(s) of bmps that failed to operate as designed or proved inadequate for a particular location; and location(s) where additional bmps are needed that did not exist at the time of inspection. Follow-up to correct deficiencies or enhance controls must also be indicated in the log and dated, including what action was taken and when.



THICKNESS ('T') = 2.25 x D50 RIPRAP SIZING - 6" (150mm) MIN.

SECTION



PLAN

PIPE OUTLET PROTECTION SIZING TABLE

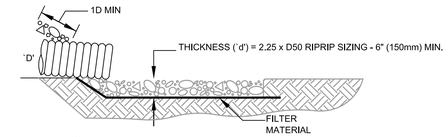
PIPE SIZE (IN)	RIP RAP SIZING (D50)	LENGTH (FT)	WIDTH (FT)
6	3	2.5	2.0
12	5	5.0	4.0
15	6	6.25	5.0
18	8	7.5	6.0
24	10	10.0	8.0
30	12	13.0	10.0
36	14	15.0	12.0

NOTES:

1. 'La' = LENGTH OF APRON. DISTANCE 'La' SHALL BE OF SUFFICIENT LENGTH TO DISSIPATE ENERGY.
2. APRON SHALL BE SET AT A ZERO GRADE AND ALIGNED STRAIGHT.
3. FILTER MATERIAL SHALL BE FILTER FABRIC (MIRAFI 600X OR APPROVED EQUAL) OR 6" (150mm) THICK MINIMUM GRADED GRAVEL LAYER.

PIPE OUTLET PROTECTION

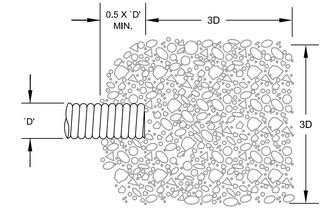
NOT TO SCALE



NOTE:

1. GEOTEXTILE FILTER FABRIC BENEATH STONE BASED ON UNDISTURBED SOILS, OR 6" OF 4" MINUS BAN RUN GRAVEL FREE OF FINES, CLAYS, SILTS.
2. GEOTEXTILE TO BE MIRAFI 600X OR APPROVED EQUAL.

SECTION



PLAN

PIPE INLET PROTECTION SIZING TABLE

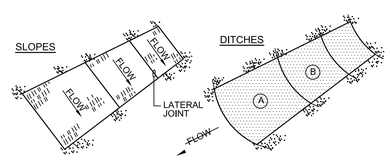
PIPE SIZE (IN)	RIRAP SIZING (D50)	LENGTH (FT)	WIDTH (FT)
6	3	2.0	1.5
12	5	3.5	3.0
15	6	4.5	3.75
18	8	5.25	4.5
24	10	7.0	6.0
30	12	8.75	7.5
36	14	10.5	9.0

NOTES:

1. IN DEFINED CHANNELS, APRON SHALL EXTEND FULL WIDTH OF BOTTOM AND ONE FOOT ABOVE MAX. HEADWATER OR UP TO BANK FULL, WHICHEVER IS LESS.

PIPE INLET PROTECTION

NOT TO SCALE

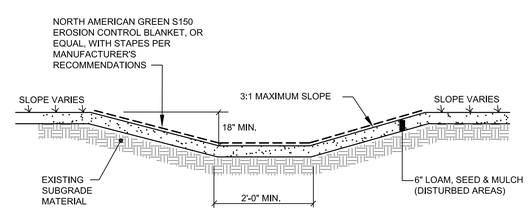


NOTES:

1. BURY THE TOP END OF THE MESH MATERIAL IN A 6" TRENCH AND BACKFILL AND TAMP TRENCHING SECURE END WITH STAPLES AT 6" SPACING, 4" DOWN FROM EXPOSED END.
2. FLOW DIRECTION JOINTS TO HAVE UPPER END OF LOWER STRIP BURIED WITH UPPER LAYERS OVERLAPPED 4" AND STAPLED. OVERLAP B OVER A.
3. LATERAL JOINTS TO HAVE 4" OVERLAP OF STRIPS. STAPLE 18" ON CENTER.
4. STAPLE OUTSIDE LATERAL EDGE 2' ON CENTER.
5. WIRE STAPLES TO BE MIN. OF #11 WIRE, 6" LONG & 1-1/2" WIDE.
6. USE NORTH AMERICAN GREEN DS 150 (OR APPROVED EQUAL) ON SLOPES BETWEEN 4:1-2:1. USE NORTH AMERICAN GREEN VMAX SC250 PERMANENT TURF REINFORCEMENT MAT (OR APPROVED EQUAL) ON SLOPES 2:1 AND STEEPER..

EROSION CONTROL BLANKET

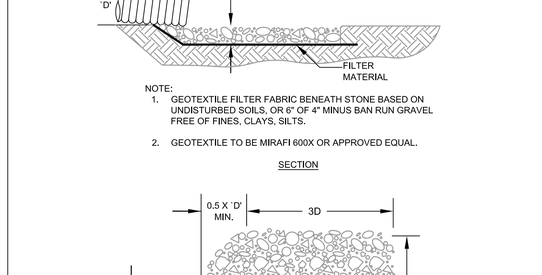
NOT TO SCALE



NOTE: REFER TO GRADING PLAN FOR DITCH WEDTH AND SIDE SLOPES

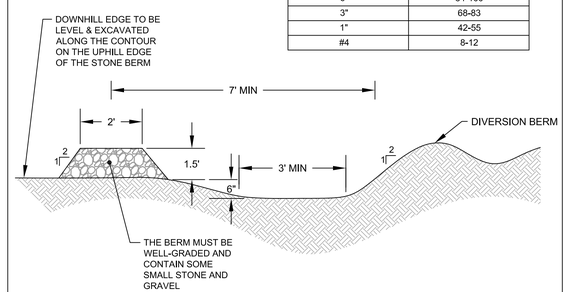
GRASSED SWALE

NOT TO SCALE



PLAN VIEW

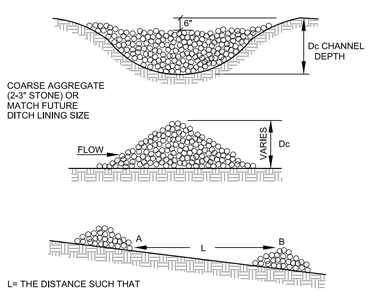
BERM STONE SIZE	
SIEVE DESIGNATION	% BY WEIGHT PASSING SQUARE MESH SIEVES
12"	100
6"	84-100
3"	68-83
1"	42-55
#4	8-12



SECTION A-A

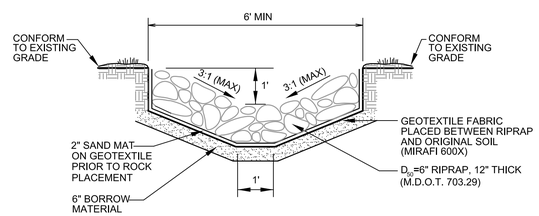
TYPICAL LEVEL LIP SPREADER

NOT TO SCALE



STONE CHECK DAM

NOT TO SCALE



RIPRAP SWALE

NOT TO SCALE

STATE OF MAINE
JEFFREY D. MOSS
10061
LICENSED
PROFESSIONAL ENGINEER

SIGNATURE DATE:7/5/2018

NO.	DATE	REVISIONS	APP'D BY

Civil Engineering - Land Planning - Stormwater Design - Environmental Permitting

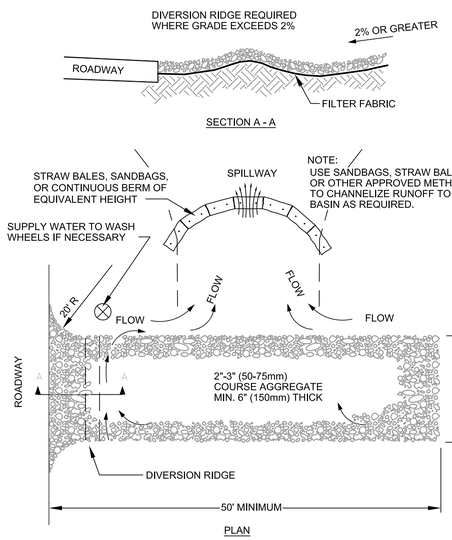
TERRADYN CONSULTANTS, LLC
P.O. Box 339
111 Elderberry Lane
New Gloucester, ME 04260
Office: (207) 926-5111
Fax: (207) 221-1317
www.terradynconsultants.com

SHEET DESCRIPTION
NATURE'S WILDERNESS
MARSTONS ROAD
DETAILS & NOTES

PREPARED FOR
MR. SCOTT EFRON
2 UPPER TWAIN ROAD
WEST BALDWIN, MAINE 04091

DATE:	9/27/2017
SCALE:	AS SHOWN
DESIGNED:	JDA
JOB NO:	1640
FILE: 1640 D.DWG	

SHEET C-4.1

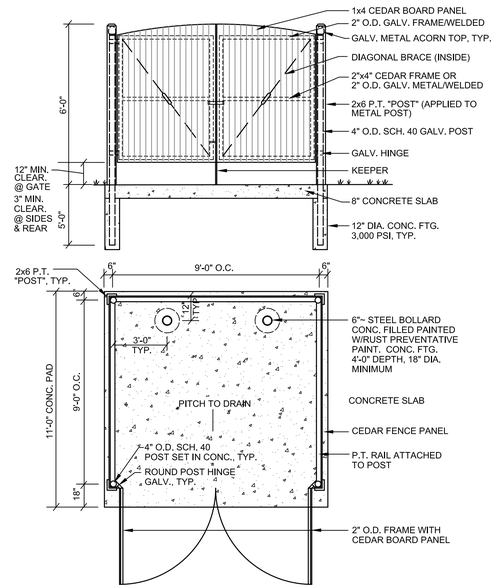


NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT.

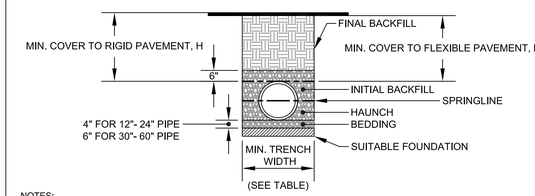
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.

3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE



TYPICAL DUMPSTER ENCLOSURE
NOT TO SCALE



NOTES:

1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST ADDITION

2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.

3. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER, AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.

4. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER, UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm); 6" (150mm) FOR 30"-60" (750mm-900mm).

5. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.

6. MINIMUM COVER: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 54"-60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.

RECOMMENDED MINIMUM TRENCH WIDTHS

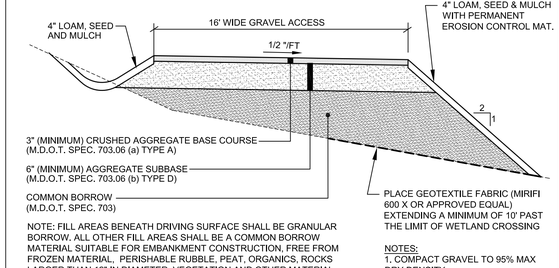
PIPE DIAM.	MIN. TRENCH WIDTH
4"	21"
6"	23"
8"	26"
10"	28"
12"	30"
15"	34"
18"	39"
24"	48"
30"	56"
36"	64"
42"	72"
48"	80"
54"	88"
60"	96"

MINIMUM RECOMMENDED COVER BASED ON VECHICLE LOADING CONDITIONS

	SURFACE LIVE LOADING CONDITION	
PIPE DIAM.	H-25	HEAVY CONSTRUCTION (75T AXLE LOAD) *
12" - 48"	12"	48"
54" - 60"	24"	60"

* VEHICLES IN EXCESS OF 75T MAY REQUIRE ADDITIONAL COVER

TYPICAL TRENCH DETAIL
NOT TO SCALE

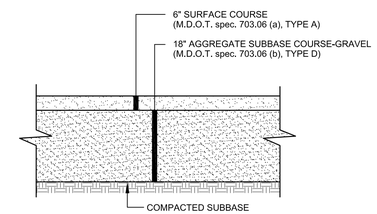


NOTE: FILL AREAS BENEATH DRIVING SURFACE SHALL BE GRANULAR BORROW. ALL OTHER FILL AREAS SHALL BE A COMMON BORROW MATERIAL SUITABLE FOR EMBANKMENT CONSTRUCTION, FREE FROM FROZEN MATERIAL, PERISHABLE RUBBLE, PEAT, ORGANICS, ROCKS LARGER THAN 12" IN DIAMETER, VEGETATION AND OTHER MATERIAL UNSUITABLE FOR ROADWAY AND SUB-GRADE CONSTRUCTION. EXCAVATED ONSITE MATERIALS MAY BE USED FOR FILL PROVIDED THE MATERIAL IS FREE FROM UNSUITABLE MATERIAL DESCRIBED IN THIS NOTE AND UPON APPROVAL OF THE ENGINEER. GRANULAR BORROW AND COMMON BORROW SHALL ADHERE TO MDOT SPECIFICATIONS 703.19 AND 703.18 RESPECTIVELY.

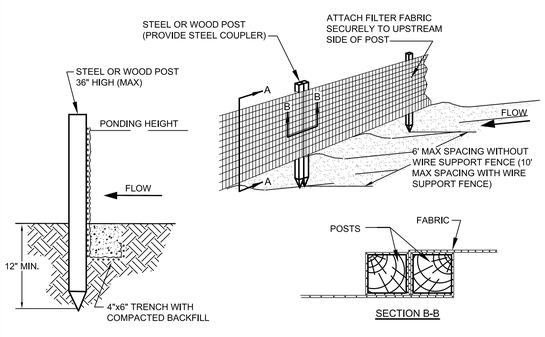
NOTES:
1. COMPACT GRAVEL TO 95% MAX DRY DENSITY.

2. COMPACT ALL UNDISTURBED MATERIAL PRIOR TO PLACEMENT OF SUBBASE COURSE FOR GRAVEL DRIVEWAY

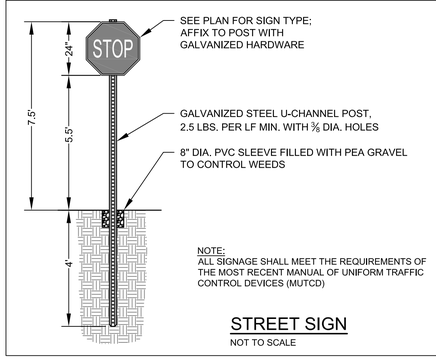
ACCESS ROAD CROSS SECTION
NOT TO SCALE



TYP. GRAVEL PARKING AREA
NOT TO SCALE

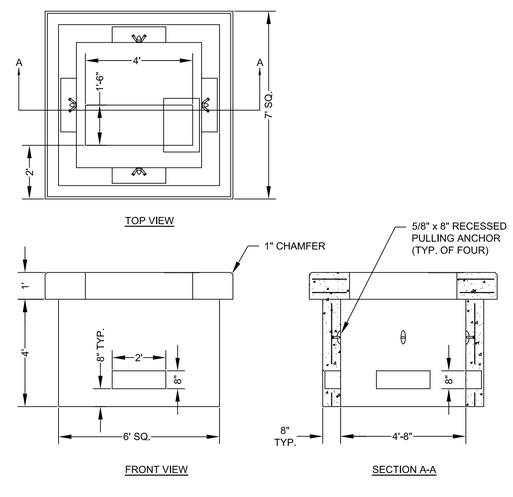


SILT FENCE
NOT TO SCALE



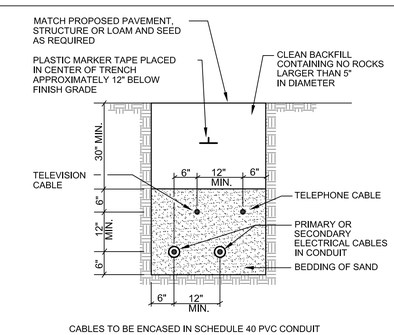
NOTE:
ALL SIGNAGE SHALL MEET THE REQUIREMENTS OF THE MOST RECENT MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)

STREET SIGN
NOT TO SCALE



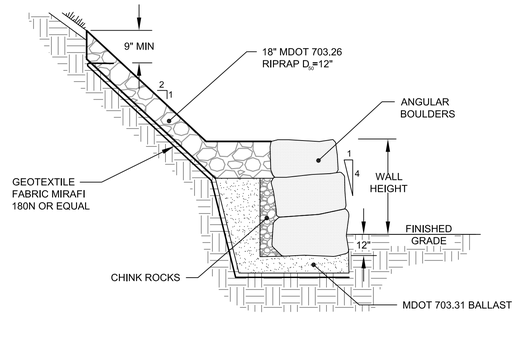
NOTES:
1. CONCRETE f'c=4000 psi. AT 28 DAYS.
2. REINF. PER CMP SPECIFICATIONS.
3. DUCT OPENINGS SHOWN ARE TYPICAL AND CAN BE MODIFIED PER REQUEST.
4. CENTRAL MAINE POWER CO. SPECIFICATION

7'X7' TRANSFORMER PAD (75-500 KVA)
NOT TO SCALE

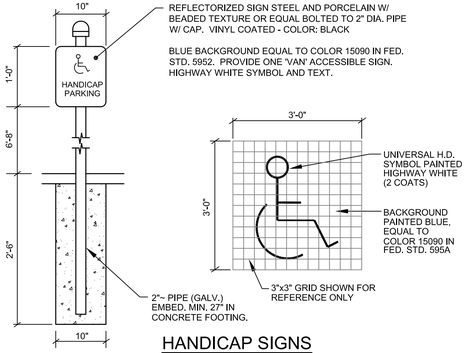


CABLES TO BE ENCASED IN SCHEDULE 40 PVC CONDUIT WHEN RUN BENEATH PAVED AREAS.

TYPICAL UNDERGROUND CABLE INSTALLATION
NOT TO SCALE



BOULDER WALL DETAIL
NOT TO SCALE



HANDICAP SIGNS
NOT TO SCALE

STATE OF MAINE
JEFFREY D. TERRADYN
No. 10167
PROFESSIONAL ENGINEER

SIGNATURE DATE: 7/5/2018

NO.	DATE	REVISIONS	APP'D BY

TERRADYN CONSULTANTS, LLC
P.O. Box 339
111 Elder Perry Lane
New Gloucester, ME 04260
Office: (207) 926-5111
Fax: (207) 221-1317
www.terradynconsultants.com
Civil Engineering - Land Planning - Stormwater Design - Environmental Permitting

SHEET DESCRIPTION
NATURE'S WILDERNESS
MARSTON ROAD
DETAILS & NOTES

PREPARED FOR
MR. SCOTT EFRON
MARSTENS ROAD
BALDWIN, MAINE 04024

DATE:	8/8/2017
SCALE:	AS SHOWN
DESIGNED:	JDA
JOB NO:	1640
FILE: 1640 D.DWG	

SHEET C-4.2