

**OWNER**  
MAP 27 BLOCK A1 LOT 8  
UNITIL ENERGY SYSTEMS, LLC  
6 LIBERTY LANE W  
HAMPTON, NH 03842-1704

MAP 27 BLOCK A1 LOT 8  
UNITIL ENERGY SYSTEMS, LLC  
C/O NATE SHERWOOD  
6 LIBERTY LANE W  
HAMPTON, NH 03842-1704

MAP 27 BLOCK A1 LOT 8  
UNITIL ENERGY SYSTEMS, LLC  
6 LIBERTY LANE W  
HAMPTON, NH 03842-1704

PLANNING/ZONING DEPARTMENT  
41 GREEN STREET  
CONCORD, NH 03301  
603-225-8515  
HEATHER SHANK, CITY PLANNER

37 GREEN STREET  
CONCORD, NH 03301  
603-225-8580  
DARIO CARRARA, CHIEF BUILDING  
INSPECTOR

311 NORTH STATE STREET  
CONCORD, NH 03301  
603-228-2737

35 GREEN STREET  
CONCORD, NH 03301  
603-225-8600  
BRADLEY OSGOOD, CHIEF OF POLICE

24 HORSESHOES POND LANE  
CONCORD, NH 03301  
603-225-8650  
DANIEL ANDRUS, FIRE CHIEF

UNITIL ENERGY SYSTEMS, LLC  
8 LIBERTY LANE W  
HAMPTON, NH 03842-1704

125 HALL STREET  
CONCORD, NH 03301  
603-225-8691

LIBERTY UTILITIES  
116 NORTH MAIN STREET  
CONCORD, NH 03301  
800-833-4200

MAP 27 BLOCK A1 LOT 5  
MAP 21 BLOCK 1 LOT 1  
STATE/NH  
DEPT OF TRANS ROW  
PO BOX 483  
CONCORD, NH 03302-0483

BRIXMOR CAPITAL SC LLC  
450 LEXINGTON AVE FL13  
NEW YORK, NY 10017-3956

PFP ASSOCIATES LTD PARTNERSHIP  
56 KEARNEY RD #FL1  
NEEDHAM HGTS, MA 02494-2507

CAPITAL HOTEL COMPANY V LLC  
C/O FOXFIRE PROPERTY MANAGEMENT  
INC.

c/o PAN AM RAILWAYS INC.  
1700 IRON HORSE PARK  
NORTH BILLERICA, MA 01862-1641

# THEATRE STREET TO GULF STREET CONCORD, NEW HAMPSHIRE



HORIZONTAL SCALE 1"=500'

500 250 0 500

A horizontal scale bar with alternating black and white segments. The segments are labeled 500, 250, 0, and 500 from left to right, indicating distances in feet. The total length of the bar represents 1000 feet.

- Civil Engineers
- Structural Engineers
- Traffic Engineers
- Land Surveyors
- Landscape Architects
- Scientists

[illegible]

CONTACT DIG SAFE 72 BUSINESS  
HOURS PRIOR TO CONSTRUCTION

| <b>SHEET</b> | <b>SHEET TITLE</b>                |
|--------------|-----------------------------------|
| C-01         | COVER                             |
| C-02         | NOTES & LEGEND                    |
| SHEET 4 OF 6 | EXISTING CONDITIONS PLANS         |
| SHEET 5 OF 6 | EXISTING CONDITIONS PLANS         |
| C-03         | OVERALL WETLANDS IMPACT SITE PLAN |
| C-04         | WETLANDS IMPACT SITE PLAN         |
| C-05         | DETAILS                           |

| NUMBER                | APPROVED | EXPIRES |
|-----------------------|----------|---------|
| CITY OF CONCORD CUP   |          |         |
| NHDES WETLANDS PERMIT |          |         |



**UNITIL ENERGY SYSTEMS, INC.**  
**6 LIBERTY LANE, HAMPTON, NH**

SEPTEMBER 18, 2019



Civil Engineers  
Structural Engineers  
Traffic Engineers  
Land Surveyors  
Landscape Architects  
Scientists

48 Constitution Drive  
Bedford, NH 03110  
Phone (603) 472-4488  
Fax (603) 472-9747  
[www.tfmoran.com](http://www.tfmoran.com)

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Sep 19, 2019 - 9:36am  
F:\ITEM Projects\95945 Unittl - Switchgear Survey - Concord, NH\95945-01 Unittl - Gulf Street Substation - Concord, NH\95945-01 C3D\PRODUCTION\95945-01 Design Layout - 374 Line.dwg



Sep 18, 2019 - 2:34pm  
F:\TfM Projects\95945-01 Unitil - Switchgear Survey - Concord, NH\95945-01 Unitil - Gulf Street Substation - Concord, NH\95945-01\_C3D\PRODUCTION\95945-01 Design\_Layout - 374 Line.dwg

| LEDEND   |                                  |
|----------|----------------------------------|
| PROPOSED | PROPOSED                         |
|          | PROPERTY LINE                    |
|          | ZONING LINE                      |
|          | EASEMENT                         |
|          | BASELINE                         |
|          | FLOODPLAIN                       |
|          | EDGE OF WATERBODY                |
|          | EDGE OF WETLAND                  |
|          | SETBACK (WETLAND)                |
|          | SETBACK (STRUCTURE)              |
|          | SETBACK (PARKING)                |
|          | SETBACK (LANDSCAPE)              |
|          | GRAVEL ROAD                      |
|          | EDGE OF PAVEMENT                 |
|          | VERTICAL GRANITE CURB            |
|          | SLOPED GRANITE CURB              |
|          | CONCRETE CURB                    |
|          | INTEGRATED CONCRETE CURB         |
|          | BUTINOUS ASPHALT CURB            |
|          | CAPE COD BERM                    |
|          | SAWCUT                           |
|          | BUILDING                         |
|          | BUILDING ROOF OVERHANG           |
|          | BUILDING FOUNDATION              |
|          | BUILDING ENTRANCE                |
|          | OVERHEAD DOOR                    |
|          | TREE LINE                        |
|          | FENCE (CHAIN LINK)               |
|          | FENCE (WIRE)                     |
|          | FENCE (STOCKADE)                 |
|          | GUARDRAIL                        |
|          | STONE WALL                       |
|          | RETAINING WALL                   |
|          | SILT FENCE                       |
|          | SILT SOCK                        |
|          | SOIL BOUNDARY                    |
|          | LIMIT OF GRADING                 |
|          | CONTOUR                          |
|          | SPOT GRADE                       |
|          | PARKING COUNT                    |
|          | YELLOW DOUBLE SOLID LINE         |
|          | YELLOW SINGLE SOLID LINE         |
|          | WHITE SINGLE SOLID LINE          |
|          | WHITE SINGLE BROKEN LINE         |
|          | STOP BAR                         |
|          | CROSSWALK                        |
|          | ACCESSIBLE PARKING SYMBOL        |
|          | PAVEMENT ARROW                   |
|          | TRAFFIC FLOW ARROW (NOT PAINTED) |
|          | SIGN (SINGLE POST)               |
|          | SIGN (DOUBLE POST)               |
|          | SIGN (PYLON)                     |
|          | SIGN (MONUMENT)                  |
|          | BOLLARD                          |
|          | DUMPSTER PAD                     |

|  |                               |
|--|-------------------------------|
|  | CONCRETE                      |
|  | GRAVEL                        |
|  | HEAVY DUTY PAVEMENT           |
|  | CONSTRUCTION ENTRANCE         |
|  | SNOW STORAGE                  |
|  | RIPRAP                        |
|  | INLET PROTECTION              |
|  | DRAIN LINE                    |
|  | DRAINAGE SWALE                |
|  | STORMWATER BMP                |
|  | SEWER LINE                    |
|  | SEWER FORCE MAIN LINE         |
|  | WATER LINE                    |
|  | GAS LINE                      |
|  | OVERHEAD UTILITY LINE         |
|  | UNDERGROUND UTILITY LINE      |
|  | CATCH BASIN                   |
|  | DRAIN INLET                   |
|  | OUTLET CONTROL STRUCTURE      |
|  | ROOF DRAIN                    |
|  | DRAIN CLEANOUT                |
|  | DRAIN MANHOLE                 |
|  | FARED END SECTION             |
|  | SEWER CLEAN OUT               |
|  | SEWER MANHOLE                 |
|  | SEWER VENT                    |
|  | DRAIN/SEWER/WATER PLUG OR CAP |
|  | HYDRANT                       |
|  | WATER GATE VALVE              |
|  | WATER SHUTOFF                 |
|  | THRUST BLOCK                  |
|  | WATER METER                   |
|  | WATER MANHOLE                 |
|  | WELL                          |
|  | GAS GATE VALVE                |
|  | GAS SHUT OFF                  |
|  | GAS METER                     |
|  | TELEPHONE MANHOLE             |
|  | ELECTRIC MANHOLE              |
|  | TRAFFIC CONTROL CABINET       |
|  | ELECTRIC HANDHOLE             |
|  | ELECTRIC PULL BOX             |
|  | ELECTRIC METER                |
|  | FLOOD LIGHT                   |
|  | LIGHT POLE                    |
|  | UTILITY POLE                  |
|  | GUY POLE                      |
|  | TRANSFORMER PAD               |
|  | BORING LOCATION               |
|  | TEST PIT LOCATION             |
|  | INFILTRATION TEST LOCATION    |
|  | MONITORING WELL               |

## STORM WATER MANAGEMENT NOTES

STABILIZATION PRACTICES FOR EROSION AND SEDIMENTATION CONTROLS:

TEMPORARY STABILIZATION – TOPSOIL STOCKPILES AND DISTURBED AREAS OF THE CONSTRUCTION SITE THAT WILL NOT BE REDISTURBED FOR 21 DAYS OR MORE MUST BE STABILIZED BY THE 14TH DAY AFTER THE LAST DISTURBANCE. THE TEMPORARY SEED SHALL BE ANNUAL RYE APPLIED AT THE RATE OF 1.1 LBS PER 1,000 SQUARE FEET. PRIOR TO SEEDING, A MINIMUM OF 2 TONS PER ACRE OF AGRICULTURAL LIMESTONE AND 500 LBS PER ACRE OF 10–20–20 FERTILIZER SHALL BE APPLIED. AFTER SEEDING, EACH AREA SHALL BE MULCHED WITH 1.5 TONS PER ACRE OF HAY MULCH. MULCH TO BE ANCHORED IN PLACE WHERE NECESSARY. AREAS OF THE SITE THAT WILL BE PAVED WILL TEMPORARILY BE STABILIZED BY APPLYING GEOTEXTILES AND A STONE SUB-BASE UNTIL BITUMINOUS PAVEMENT CAN BE APPLIED. CALCIUM CHLORIDE SHALL BE USED FOR DUST CONTROL IF NEEDED.

PERMANENT STABILIZATION – DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES PERMANENTLY CEASES SHALL BE STABILIZED WITH PERMANENT SEED NO LATER THAN 3 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY. THE PERMANENT SEED MIX SHALL CONSIST OF 0.45 LBS/1,000 S.F. TALL FESCUE, 0.20 LBS/1,000 S.F. CREEPING RED FESCUE, AND 0.20 LBS/1,000 S.F. BIRDFOOT TREFOIL. PRIOR TO SEEDING, A MINIMUM OF 2 TONS PER ACRE OF AGRICULTURAL LIMESTONE AND 500 LBS PER ACRE IF 10–20–20 FERTILIZER SHALL BE APPLIED. AFTER SEEDING, EACH AREA SHALL BE MULCHED WITH 1.5 TONS PER ACRE OF HAY MULCH. MULCH TO BE ANCHORED IN PLACE WHERE NECESSARY.

STRUCTURAL PRACTICES FOR EROSION AND SEDIMENTATION CONTROL

PRE-FABRICATED MATS – WILL BE INSTALLED ALONG THE PROPOSED ACCESS PATH AS NOTED ON THE PLANS.

SILT SOCK OR SEDIMENT FENCE – WILL BE CONSTRUCTED DOWNSTREAM OF TEMPORARY STOCKPILE AREAS AND WHERE ADDITIONAL SEDIMENT CONTROL IS DEEMED NECESSARY DURING CONSTRUCTION.

a. THE SILT SOCK SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS AND SHALL BE INSPECTED FOR GAPS OR TEARS IN THE FABRIC, WHICH SHALL BE REPAIRED OR REPLACED IMMEDIATELY. ACCUMULATED SEDIMENT SHALL BE REMOVED ONCE IT REACHES ONE THIRD OF THE HEIGHT OF THE SILT SOCK.

b. THE SILT FENCE WILL BE INSTALLED BY STRETCHING REINFORCED FILTER FABRIC BETWEEN POSTS WITH AT LEAST 8 INCHES OF THE FABRIC BURIED BELOW THE GROUND SURFACE TO PREVENT GAPS FROM FORMING NEAR THE GROUND SURFACE. RUNOFF WILL FLOW THROUGH THE OPENINGS IN THE FILTER FABRIC WHILE RETAINING THE SEDIMENT WITHIN THE CONSTRUCTION AREA.

ALL CONSTRUCTION DEBRIS AND WASTE MATERIALS SHALL BE COLLECTED AND STORED IN SECURE DUMPSTERS OR APPROVED ENCLOSURE AND REMOVED FROM THE SITE ON A WEEKLY BASIS. NO CONSTRUCTION WASTE SHALL BE BURIED ON SITE. PORTABLE TOILET SANITARY WASTE FACILITIES WILL BE PROVIDED DURING CONSTRUCTION AND MAINTAINED/DISPOSED OF ON A REGULAR BASIS IN ACCORDANCE WITH TOWN AND STATE REGULATIONS.

## CONSTRUCTION SEQUENCE NOTES

- CONSTRUCT TEMPORARY AND PERMANENT EROSION CONTROL FACILITIES.
- INSTALL PROPOSED POLES AND OVERHEAD SERVICE LINES.
- ALL SLOPES DISTURBED DURING POLE INSTALLATION SHALL BE STABILIZED IMMEDIATELY. ALL DISTURBED AREAS SHALL BE STABILIZED NO LATER THAN 72 HOURS AFTER CONSTRUCTION ACTIVITY CEASES. IF EARTHWORK TEMPORARILY CEASES ON A PORTION OF OR THE ENTIRE SITE, AND WILL NOT RESUME WITHIN 21 DAYS, THE AREA SHALL BE STABILIZED.  
  
AN AREA SHALL BE CONSIDERED STABILIZED IF:  
A) BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;  
B) A MINIMUM OF 65% VEGETATED GROWTH HAS BEEN ESTABLISHED;  
C) A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH STONE OR RIPRAP HAS BEEN INSTALLED, OR  
D) EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
- INSPECT AND MAINTAIN ALL EROSION AND SEDIMENTATION CONTROL MEASURES PERIODICALLY AND IMMEDIATELY AFTER SIGNIFICANT STORM EVENTS.
- REMOVE TEMPORARY EROSION CONTROL MEASURES ONCE ALL AREAS ARE STABILIZED AND TEMPORARY SOIL STOCKPILES FROM POLE INSTALLATIONS HAVE BEEN APPROPRIATELY DISPOSED OF.
- REMOVE EXISTING UTILITY POLES AND OVERHEAD SERVICE LINES.

## EROSION CONTROL NOTES

DURING CONSTRUCTION AND THEREAFTER, EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED AS NOTED:

- EROSION CONTROLS INDICATED ON THESE PLANS SHALL BE CONSIDERED MINIMUM STANDARDS, ADDITIONAL CONTROLS MAY BE REQUIRED TO ENSURE PERMIT COMPLIANCE AND SHALL BE ADDED AS DEEMED NECESSARY BY THE OWNER/ENGINEER.
- INSTALLATION OF EROSION CONTROL MEASURES SHALL BE COMPLETED PRIOR TO THE START OF SITE WORK IN ANY GIVEN AREA AND INSTALLED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. EROSION CONTROL MEASURES SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EVERY RAINFALL.
- EXISTING VEGETATION IS TO REMAIN UNDISTURBED WHEREVER POSSIBLE.
- THE AREA OF LAND EXPOSED AND THE TIME OF EXPOSURE SHALL BE MINIMIZED. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 72 HOURS AFTER FINAL GRADING.
- HAY MULCH OR JUTE MATTING SHALL BE USED FOR TEMPORARY STABILIZATION IN ADDITION TO WHERE INDICATED ON THE PLANS. A MINIMUM OF 1.5 TONS OF MULCH PER ACRE SHALL BE APPLIED. MULCH SHALL BE ANCHORED IN PLACE WHERE NECESSARY. JUTE MATTING SHALL BE LAID IN THE DIRECTION OF RUNOFF FLOW AND APPLIED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- WATER SHALL BE USED FOR DUST CONTROL IN APPROPRIATE AREAS.
- SILT SOCK OR SILT FENCE SHALL BE USED FOR CONTAINMENT OF TEMPORARY SOIL STOCK PILES ASSOCIATED WITH POLE INSTALLATION.

## GENERAL NOTES

- THE CONTRACTOR SHALL INSTALL PRE-FABRICATED MATS ALONG THE PROPOSED ACCESS ROUTE. CONSTRUCTION VEHICLES SHALL USE THE PROPOSED MAT ACCESS ROUTE UNLESS OTHERWISE DIRECTED. ACCESS ROUTE IS PICTORIAL ONLY AND NOT INTENDED TO BE A CONSTRUCTED DRIVE.
- AREAS IMPACTED BY MATS SHALL BE STABILIZED IN ACCORDANCE WITH THE PROJECT EROSION CONTROL NOTES, SEE DETAILS FOR ADDITIONAL MAT INFORMATION.
- CONTRACTOR SHALL PROVIDE STREET SWEEPER OR OTHER MEANS TO KEEP ROADWAYS AND PARKING AREAS CLEAR OF CONSTRUCTION RELATED DEBRIS OR SEDIMENT AT ALL TIMES.
- THE CONTRACTOR SHALL BID AND PERFORM THE WORK IN ACCORDANCE WITH ALL LOCAL, STATE AND NATIONAL CODES, SPECIFICATIONS, REGULATIONS AND STANDARDS.
- WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL USE CAUTION WHEN SCALING REPRODUCED PLANS. IN CASE OF CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWING AND/OR SPECIFICATION, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR CONDITIONS AT THE SITE. THESE PLANS, PREPARED BY TFMORAN, INC., DO NOT EXTEND TO OR INCLUDE SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR THEIR EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL OF THE SURVEYOR OR ENGINEER HEREON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PREPARE OR OBTAIN THE APPROPRIATE SAFETY SYSTEMS WHICH MAY BE REQUIRED BY THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND/OR LOCAL REGULATIONS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE HIMSELF WITH THE SITE AND ALL EXISTING CONDITIONS SURROUNDING IT AND THEREON. THE CONTRACTOR SHALL ADVISE THE APPROPRIATE AUTHORITY OF HIS INTENTIONS AT LEAST 48 HOURS IN ADVANCE.
- THE CONTRACTOR SHALL MAINTAIN EMERGENCY ACCESS TO ALL AREAS AFFECTED BY HIS WORK AT ALL TIMES.
- SITE WORK SHALL BE CONSTRUCTED FROM A COMPLETE SET OF PLANS, NOT ALL FEATURES ARE DETAILED ON EVERY PLAN. THE ENGINEER IS TO BE NOTIFIED OF ANY CONFLICT WITHIN THIS PLAN SET.
- ALL WORK SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS OF THE RESPECTIVE TOWNS OF HAMPTON AND SHALL BE BUILT IN A WORKMANLIKE MANNER IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS, PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION BE AGREED TO BY THE ENGINEER BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT "DIGSAFE" (800-344-7233) AT LEAST 72 HOURS BEFORE DIGGING.
- THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES OWNING UTILITIES, EITHER OVERHEAD OR UNDERGROUND, WITHIN THE CONSTRUCTION AREA AND SHALL COORDINATE AS NECESSARY WITH THE UTILITY COMPANIES OF SAID UTILITIES. THE PROTECTION OR RELOCATION OF UTILITIES IS ULTIMATELY THE RESPONSIBILITY OF THE CONTRACTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING ALL EROSION AND SEDIMENT CONTROL DEVICES NECESSARY TO CONTROL EROSION THROUGHOUT THE DURATION OF THE PROJECT IN ACCORDANCE WITH APPLICABLE NHDES/EPA STANDARDS. THE DETAILS PROVIDED REPRESENT MINIMUM PERMITTED CONTROLS ONLY AND SHALL BE SUPPLEMENTED BY THE CONTRACTOR AS NECESSARY.
- ALL EXCAVATIONS SHALL BE THOROUGHLY SECURED ON A DAILY BASIS BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION OPERATIONS IN THE IMMEDIATE AREA.
- THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR THE CONDITIONS AT THE SITE. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND REPORT DISCREPANCIES TO THE ENGINEER.
- IN THE EVENT OF A CONFLICT BETWEEN PLANS, SPECIFICATIONS, AND DETAILS, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATION.
- IF CONDITIONS AT THE SITE ARE DIFFERENT THAN SHOWN ON THE PLANS, THE ENGINEER SHALL BE NOTIFIED PRIOR TO PROCEEDING WITH THE AFFECTED WORK.
- THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER. TFMORAN INC. ASSUMES NO LIABILITY AS A RESULT OF ANY CHANGES OR NON-CONFORMANCE WITH THESE PLANS EXCEPT UPON THE WRITTEN APPROVAL OF THE ENGINEER OF RECORD.
- TFMORAN INC. ASSUMES NO LIABILITY FOR WORK PERFORMED WITHOUT AN ACCEPTABLE PROGRAM OF TESTING AND INSPECTION AS APPROVED BY THE ENGINEER OF RECORD.
- EROSION CONTROL SYSTEMS SHALL BE INSTALLED AND MAINTAINED FOR THE DURATION OF THE PROJECT IN ACCORDANCE WITH APPLICABLE NHDES STANDARDS. THESE DETAILS SERVE AS A GUIDE ONLY.



## WETLAND IMPACT PLANS

UTILITY R.O.W  
**NOTES & LEGEND**  
**UNITIL 374 LINE**  
**THEATRE STREET TO GULF STREET**  
OWNED BY/PREPARED FOR  
**UNITIL ENERGY SYSTEMS, INC.**  
**6 LIBERTY LANE, HAMPTON, NH**

SCALE: NTS

SEPTEMBER 18, 2019



Civil Engineers  
Structural Engineers  
Traffic Engineers  
Land Surveyors  
Landscape Architects  
Scientists

48 Constitution Drive  
Bedford, NH 03110  
Phone (603) 472-4488  
Fax (603) 472-9747  
www.tfmoran.com

|      |          |             |    |    |   |      |
|------|----------|-------------|----|----|---|------|
| FILE | 95945-01 | DR          | CC | FB | - | C-02 |
| REV  | DATE     | DESCRIPTION | DR | CK |   |      |

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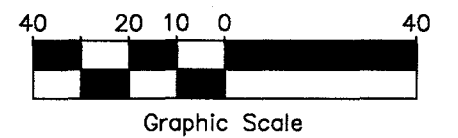
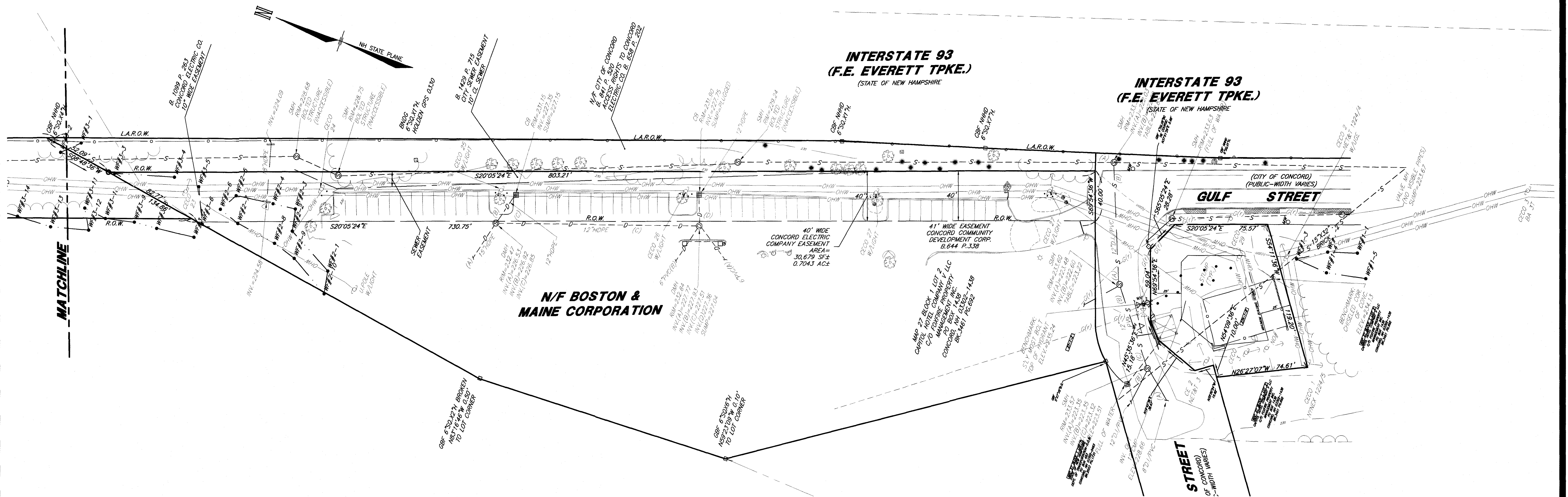


CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION









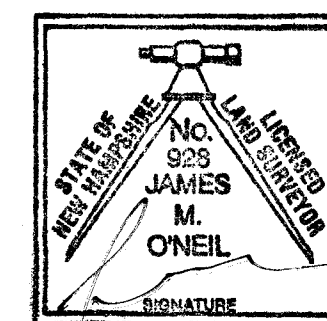
# **WETLANDS CERTIFICATION.**

JURISDICTIONAL WETLANDS SHOWN ON THIS PLAN WERE DELINEATED IN MAY, 2019 BY CHRISTOPHER K. DANFORTH CWS #077. THE WETLANDS WERE DELINEATED ACCORDING TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL (1987) AND THE REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION, VERSION 2, JANUARY 2012. DOMINANT HYDRIC SOILS WITHIN THE WETLAND(S) WERE IDENTIFIED USING "FIELD INDICATORS OF HYDRIC SOILS OF THE UNITED STATES" A GUIDE FOR IDENTIFYING AND DELINEATING HYDRIC SOILS, NRCS, VERSION 8.1, 2017. DOMINANCE OF HYDROPHYTIC VEGETATION WAS DETERMINED USING THE USACE NATIONAL WETLAND PLANT LIST, NWPL 2016 VERSION 3.3 HTTP://WETLAND\_PLANTS.USACE.ARMY.MIL.



I HEREBY CERTIFY THAT THIS SURVEY AND PLAT WERE PREPARED BY ME OR THOSE UNDER MY DIRECT SUPERVISION AND IS THE RESULT OF AN ACTUAL FIELD SURVEY MADE ON THE GROUND AND HAS AN ERROR OF CLOSURE OF GREATER ACCURACY THAN ONE PART IN TEN THOUSAND (1:10,000).

I CERTIFY THAT THIS SURVEY PLAT IS NOT A SUBDIVISION PURSUANT TO THIS TITLE AND THAT THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED AND THAT NO NEW WAYS ARE SHOWN. (RSA 676:18-10)



| REV. | DATE | DESCRIPTION | DR | CK |
|------|------|-------------|----|----|
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TAX MAP 27A, BLOCK 1, LOT 8  
TAX MAP 27A, BLOCK 1, LOT 2  
TAX MAP 45A, BLOCK 1, LOT 2

**EXISTING CONDITIONS PLAN**

**UNITIL -**  
**LOUDON ROAD TO GULF STREET**

PREPARED FOR  
**UNITIL ENERGY SYSTEMS, INC.**

SCALE: 1"=40' JUNE 20, 2009

Civil Engineers  
Structural Engineers  
Traffic Engineers  
Land Surveyors  
Landscape Architects  
Scientists

48 Constitution Drive  
Bedford, NH 03110  
Phone (603) 472-4488  
Fax (603) 472-9747  
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95945.00 DR XX FB CK JMO CADFILE **2095 & 2096** **95945-00 Survey**

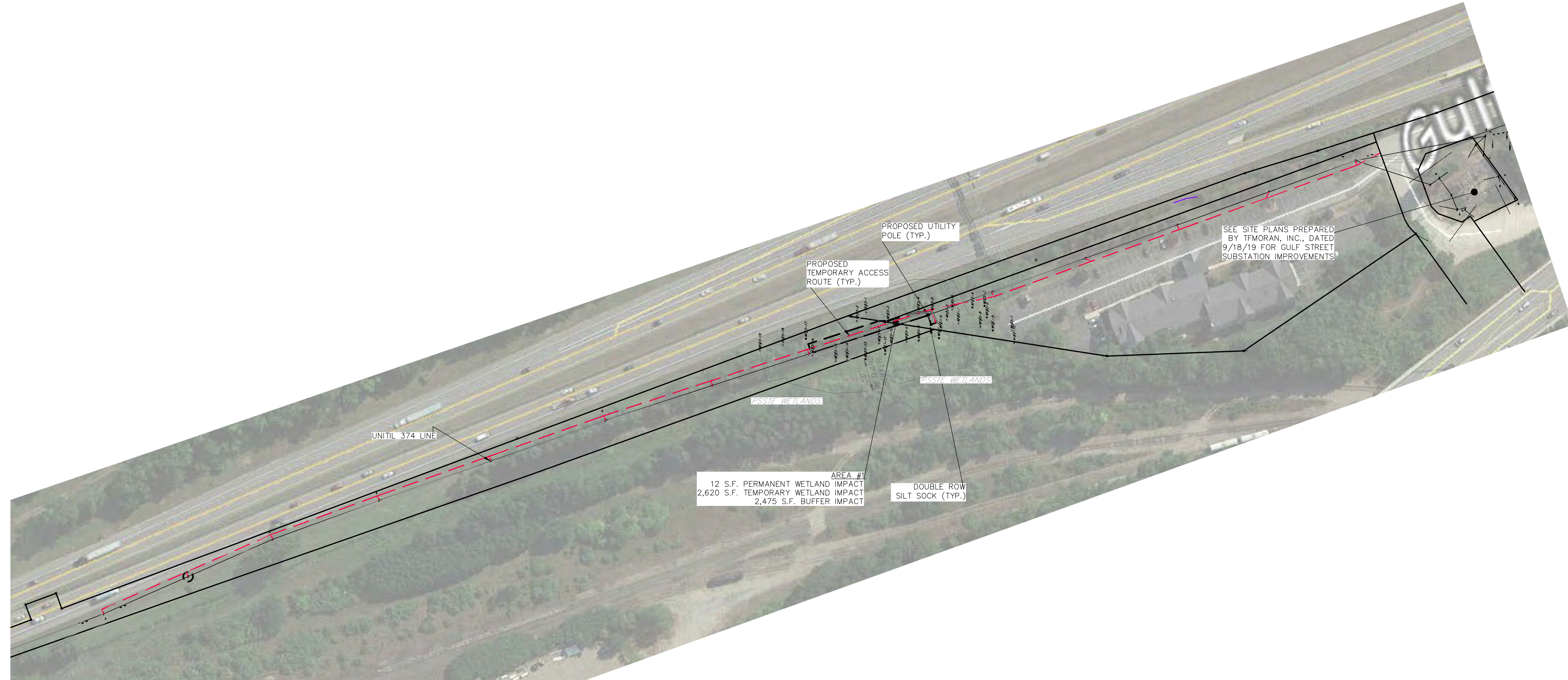
SHEET 5 OF 6

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## NOTES

1. THE PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED WETLAND IMPACT AREAS AND MAT ACCESS ROUTE IN THE PROJECT AREA, INCLUDING AN APPROXIMATE AERIAL OVERLAY FOR REFERENCE. SEE SUBSEQUENT 30 SCALE WETLANDS IMPACT SITE PLAN FOR ADDITIONAL DETAIL.
2. THE CONTRACTOR SHALL INSTALL PRE-FABRICATED MATS ALONG THE PROPOSED ACCESS ROUTE. CONSTRUCTION VEHICLES SHALL USE THE PROPOSED MAT ACCESS ROUTE. ACCESS ROUTE IS PICTORIAL ONLY AND NOT INTENDED TO BE A CONSTRUCTED DRIVE.
3. AREAS IMPACTED BY MATS SHALL BE STABILIZED IN ACCORDANCE WITH THE PROJECT EROSION CONTROL NOTES, SEE DETAILS FOR ADDITIONAL MAT INFORMATION.
4. CONTRACTOR SHALL PROVIDE STREET SWEEPER OR OTHER MEANS TO KEEP ROADWAYS AND PARKING AREAS CLEAR OF CONSTRUCTION RELATED DEBRIS OR SEDIMENT AT ALL TIMES.
5. FINAL LAYOUT OF TIMBER MATTERING BY CONTRACTOR. SHOULD LAYOUT OF TIMBER MATTING EXCEED AREA SHOWN ADDITIONAL PERMITTING SHALL BE REQUIRED.
6. SILT SOCK TO BE PLACED AT LIMITS OF ALL PERMANENT IMPACT AREAS, AREAS SHALL BE STABILIZED AT THE COMPLETION OF CONSTRUCTION WITH HAY MULCH AT A RATE OF 1.5 TONS OF MULCH PER ACRE AND SEED.
7. CONTRACTOR/OWNER SHALL COORDINATE ACCESS THROUGH HOTEL PARKING WITHIN EXISTING ROW
8. WETLAND CLASSIFICATION  
PS51E - PALUSTRINE SCRUB-SHRUB BROADLEAVED DECIDUOUS, SEASONALLY FLOODED-SATURATED

### WETLAND IMPACT NOTES

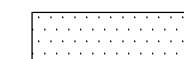
WETLAND IMPACTS FOR THE PROPOSED PROJECT:



PERMANENT WETLAND IMPACTS = 12 S.F. (TOTAL)

PERMANENT IMPACTS CONSIST OF:  
8 S.F. PER POLE, 4 S.F. PER GUY ANCHOR

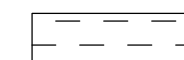
AREA 1 = 12 S.F.



TEMPORARY WETLAND IMPACTS = 2,620 S.F. (TOTAL)

TEMPORARY IMPACTS: FOR ACCESS FOR POLE INSTALLATION. IMPACT ONLY IF WINTER CONDITIONS ARE NOT ACCEPTABLE FOR CONSTRUCTION. MATS WILL BE USED TO MINIMIZE TEMPORARY IMPACT AREAS IF FROZEN CONDITIONS ARE NOT AVAILABLE.

AREA 1 = 2,620 S.F.



WETLAND BUFFER IMPACTS = 2,475 S.F. (TOTAL)

AREA 1 = 2,475 S.F.



## WETLAND IMPACT PLANS

UTILITY R.O.W

## **OVERALL WETLANDS IMPACT SITE PLAN**

UNITIL 374 LINE

**THEATRE STREET TO GULF STREET**

OWNED BY/PREPARED FOR

UNITIL ENERGY SYSTEMS, INC.

**6 LIBERTY LANE, HAMPTON, NH**

**SCALE: 1"=100'**

**SEPTEMBER 18, 2019**



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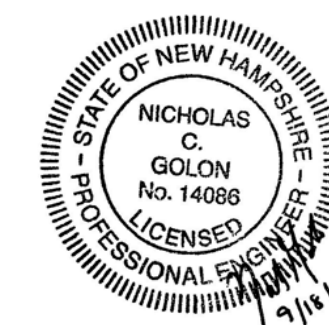
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HORIZONTAL SCALE 1"=30'

A horizontal scale bar with a black background and white markings. The bar is divided into three equal segments by white vertical lines. The segments are labeled '30', '15', and '0' from left to right. The '0' is at the center of the bar. The '30' is at the left end, and the '30' is at the right end. The text 'HORIZONTAL SCALE 1"=30'' is written above the bar.

[illegible]

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Traffic Engineers  
Land Surveyors  
Landscape Architects  
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|      |          |    |    |        |                                   |      |
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|      |          | CK | JB | CADFIG | 95945-01 DESIGN_LAYOUT - 374 LINE |      |





12 S.F. PERMANENT WETLAND IMPACT  
2,620 S.F. TEMPORARY WETLAND IMPACT  
2,475 S.F. BUFFER IMPACT



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| REV. | DATE | DESCRIPTION | DR | CR |
|------|------|-------------|----|----|
|------|------|-------------|----|----|



## NOTES

1. THE PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED WETLAND IMPACT AREAS AND MAT ACCESS ROUTE IN THE PROJECT AREA.
2. THE CONTRACTOR SHALL INSTALL PRE-FABRICATED MATS ALONG THE PROPOSED ACCESS ROUTE. CONSTRUCTION VEHICLES SHALL USE THE PROPOSED MAT ACCESS ROUTE. ACCESS ROUTE IS PICTORIAL ONLY.
3. AREAS IMPACTED BY MATS SHALL BE STABILIZED IN ACCORDANCE WITH THE PROJECT EROSION CONTROL NOTES, SEE SHEET 2 FOR ADDITIONAL MAT DETAILS.
4. CONTRACTOR SHALL PROVIDE STREET SWEEPER OR OTHER MEANS TO KEEP ROADWAYS AND PARKING AREAS CLEAR OF CONSTRUCTION RELATED DEBRIS OR SEDIMENT AT ALL TIMES.
5. FINAL LAYOUT OF TIMBER MATTERING BY CONTRACTOR, SHOULD LAYOUT OF TIMBER MATTING EXCEED AREA SHOWN ADDITIONAL PERMITTING SHALL BE REQUIRED.
6. SILT SOCK TO BE PLACED AT LIMITS OF ALL PERMANENT IMPACT AREAS. AREAS SHALL BE STABILIZED AT THE COMPLETION OF CONSTRUCTION WITH HAY MULCH AT A RATE OF 1.5 TONS OF MULCH PER ACRE AND SEED.

### WETLAND IMPACT NOTES

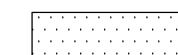
WETLAND IMPACTS FOR THE PROPOSED PROJECT:



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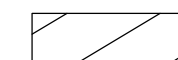
AREA 1 = 12 S.F.



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AREA 1 = 2,620 S.F.



WETLAND BUFFER IMPACTS = 2,475 S.F. (TOTAL)

AREA 1 = 2,475 S.F.



## WETLAND IMPACT PLANS

UTILITY R.O.W

## WETLANDS IMPACT SITE PLAN

UNTIL 374 LINE

**THEATRE STREET TO GULF STREET**

OWNED BY/PREPARED FOR

UNITIL ENERGY SYSTEMS, INC.

**SCALE: 1"=30'**

**SEPTEMBER 18, 2019**



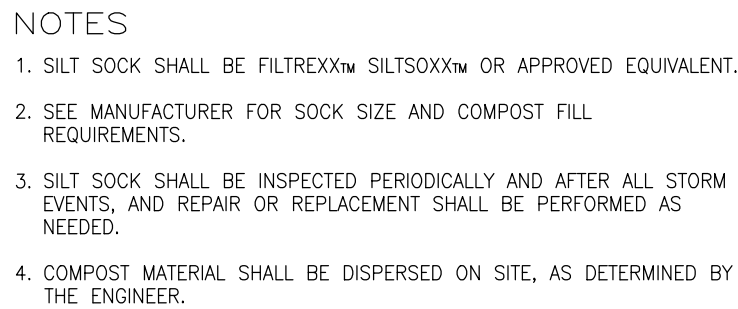
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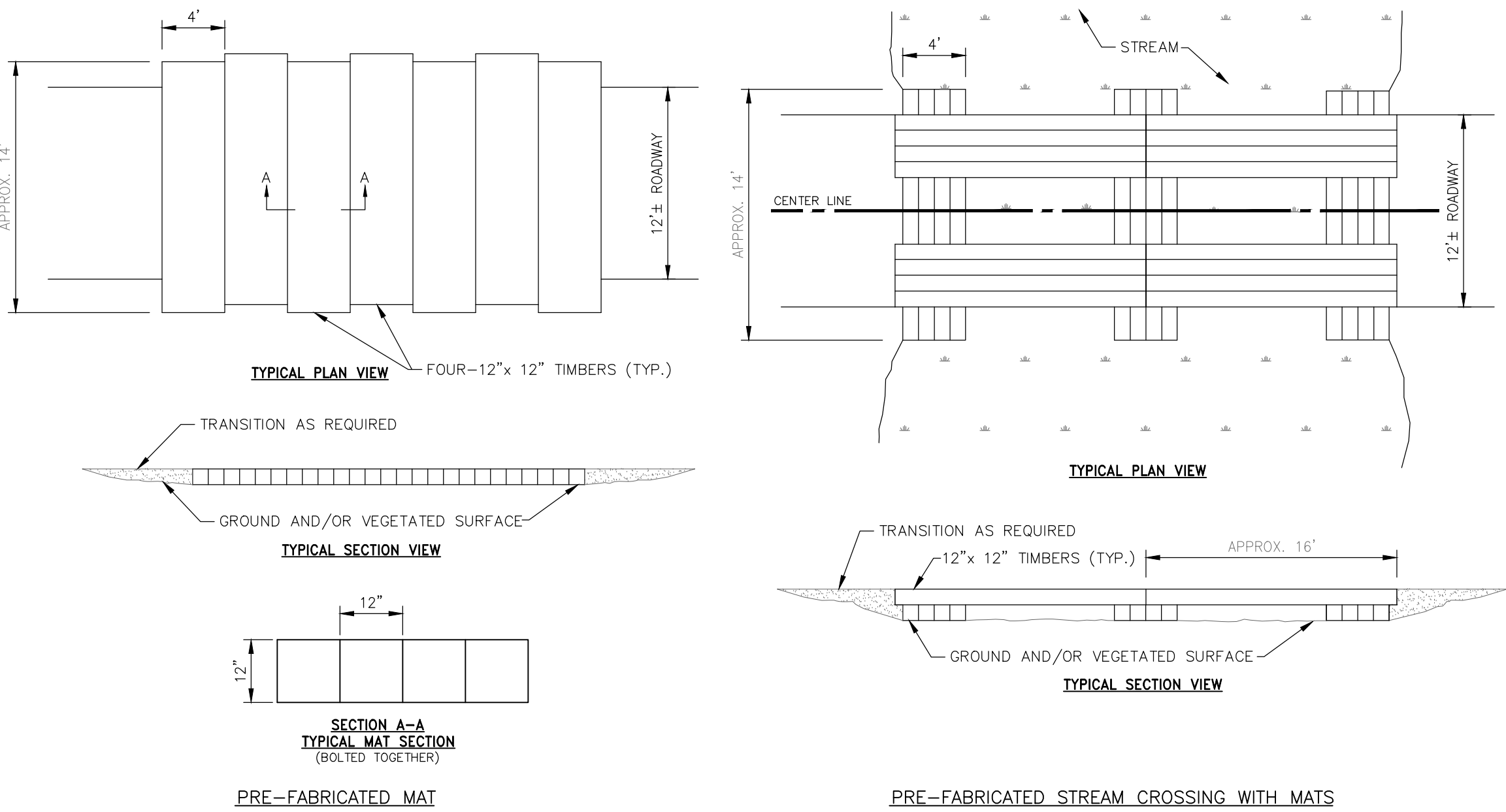
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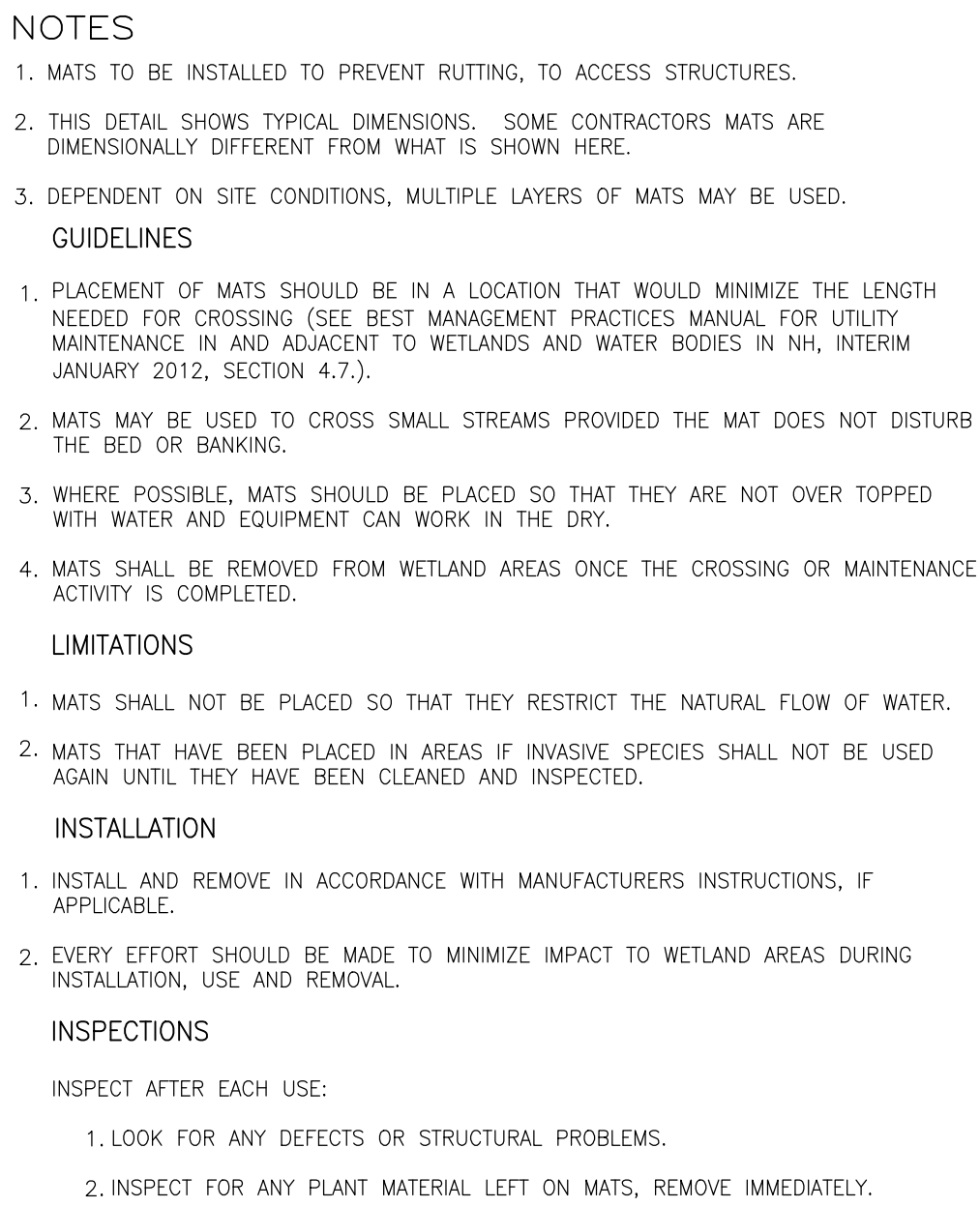




NOT TO SCALE



NOT TO SCALE



## UTILITY R.O.W

## DETAIL

UNITIL 374 LINE

## THEATRE STREET TO GULF STREET

OWNED BY/PREPARED FOR


UNITIL ENERGY SYSTEMS, INC.

**6 LIBERTY LANE, HAMPTON, NH**

**SCALE: NTS**

**SEPTEMBER 18, 2019**

|      |          |    |     |     |                            |      |
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| FILE | 95945-01 | DR | CC  | FB  | —                          | C-05 |
|      | CK       | NG | CAD | FIG | 945-01 DESIGN_LAYOUT - 374 |      |



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