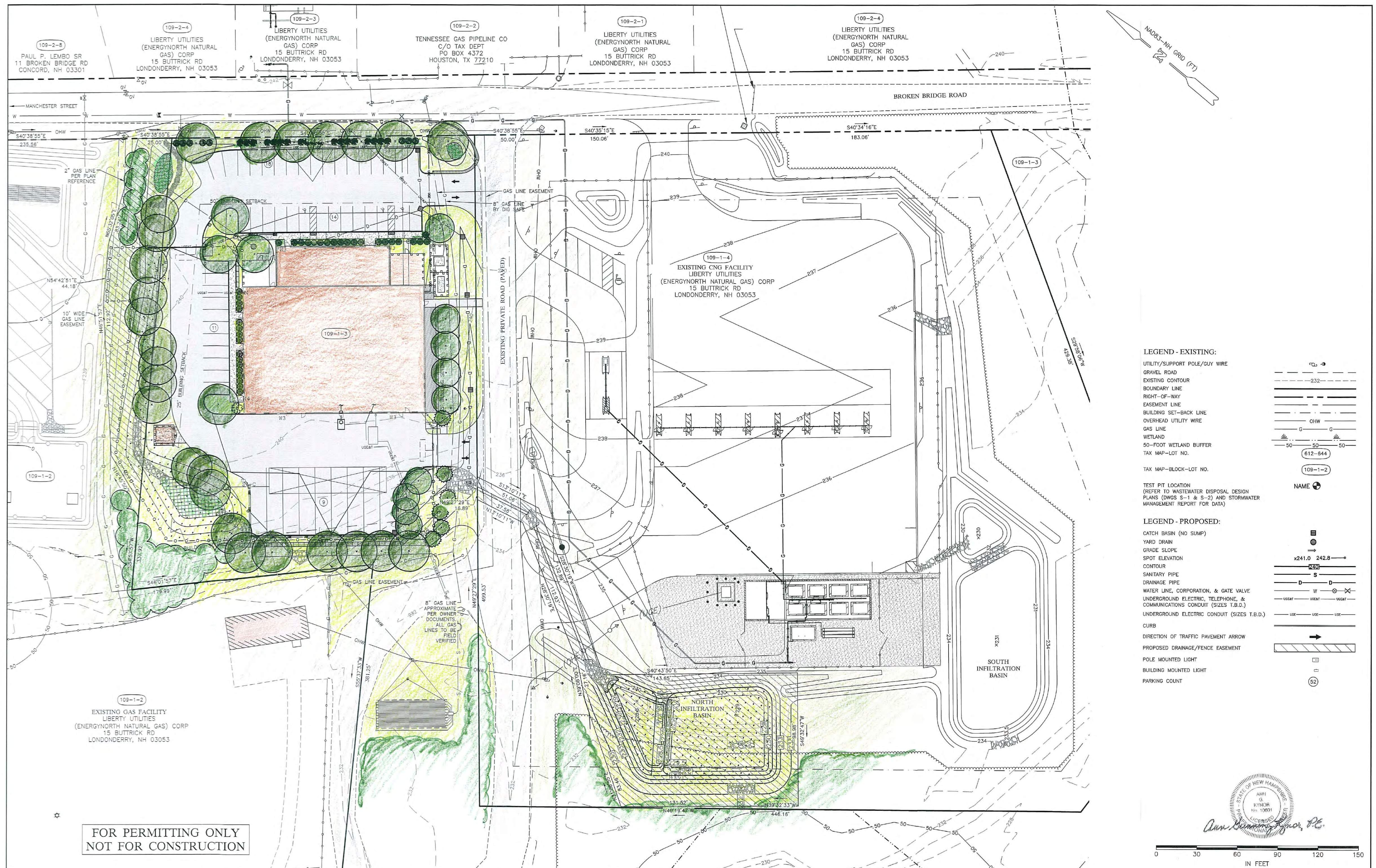
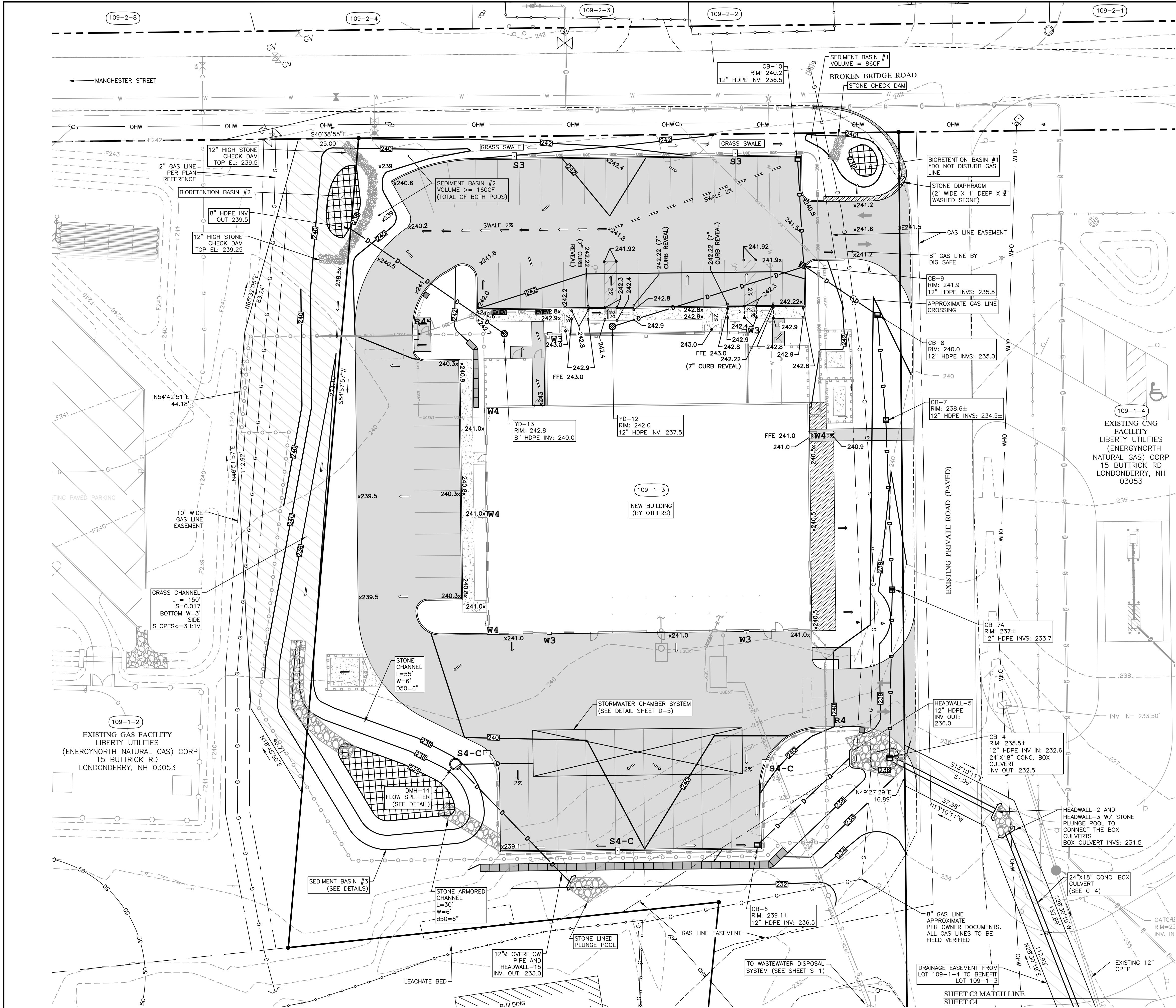




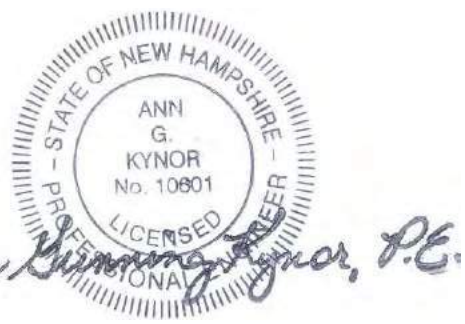
						COLORED OVERALL SITE PLAN FOR LIBERTY UTILITIES FACILITIES AND TESTING LAB 14 BROKEN BRIDGE ROAD, CONCORD, NEW HAMPSHIRE	LAUER ARCHITECTS, P.A. 118 PAIGE HILL ROAD GOFFSTOWN, NEW HAMPSHIRE 03045 (603) 497-8441	PATHWAYS CONSULTING, LLC 240 MECHANIC STREET, SUITE 100 LEBANON, NEW HAMPSHIRE 03766 (603) 448-2200	SCALE: AS SHOWN	CO-1 SHEET 31 OF 36
	DESIGNED BY: AGK									
	DRAWN BY: DPM									
	CHECKED BY:									
1	10-01-19	STAFF REVIEW	DPM	AGK						
REVISION NO.	DATE	DESCRIPTION	MADE BY	CHECKED BY	APPROVED BY					



- LEGEND - EXISTING:
- UTILITY/SUPPORT POLE/GUY WIRE
 - GRAVEL ROAD
 - EXISTING CONTOUR
 - BOUNDARY LINE
 - RIGHT-OF-WAY
 - EASEMENT LINE
 - BUILDING SET-BACK LINE
 - OVERHEAD UTILITY WIRE
 - GAS LINE
 - WETLAND
 - 50-FOOT WETLAND BUFFER
 - TAX MAP-LOT NO.

- LEGEND - PROPOSED:
- CATCH BASIN (NO SUMP)
 - YARD DRAIN
 - GRADE SLOPE
 - SPOT ELEVATION
 - CONTOUR
 - SANITARY PIPE
 - DRAINAGE PIPE
 - WATER LINE, CORPORATION, & GATE VALVE
 - UNDERGROUND ELECTRIC, TELEPHONE, & COMMUNICATIONS CONDUIT (SIZES T.B.D.)
 - UNDERGROUND ELECTRIC CONDUIT (SIZES T.B.D.)
 - CURB
 - DIRECTION OF TRAFFIC PAVEMENT ARROW
 - PROPOSED DRAINAGE/FENCE EASEMENT
 - POLE MOUNTED LIGHT
 - BUILDING MOUNTED LIGHT
 - ELECTRIC VEHICLE CHARGING STATION
 - PROPOSED WORK

NOTE: CATCH BASINS SHALL NOT HAVE SUMPS PER NH FISH & GAME GAME DIRECTIONS.



FOR PERMITTING ONLY
NOT FOR CONSTRUCTION



REVISION NO.	DATE	DESCRIPTION	MADE BY	CHECKED BY	APPROVED BY
1	10-01-19	STAFF REVIEW	DPM	AGK	

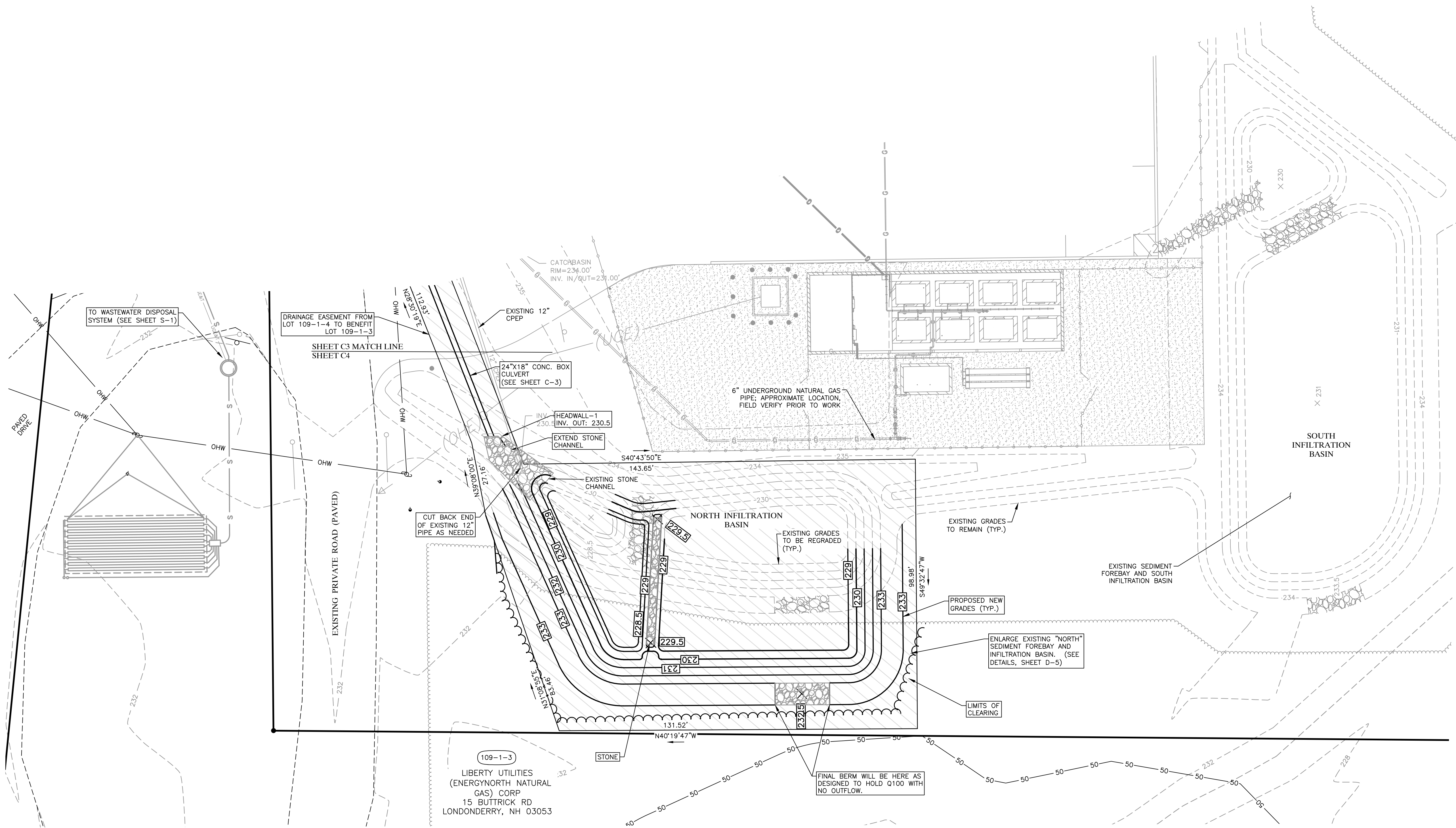
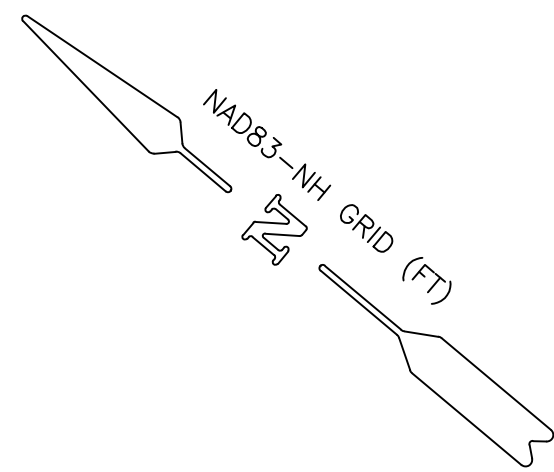
GRADING AND DRAINAGE PLAN (1 OF 2) FOR
LIBERTY UTILITIES FACILITIES AND TESTING LAB
14 BROKEN BRIDGE ROAD, CONCORD, NEW HAMPSHIRE

LAUER ARCHITECTS, P.A.
118 PAIGE HILL ROAD
GOFFSTOWN, NEW HAMPSHIRE 03045
(603) 497-8441

PATHWAYS CONSULTING, LLC
240 MECHANIC STREET, SUITE 100
LEBANON, NEW HAMPSHIRE 03766
(603) 448-2200

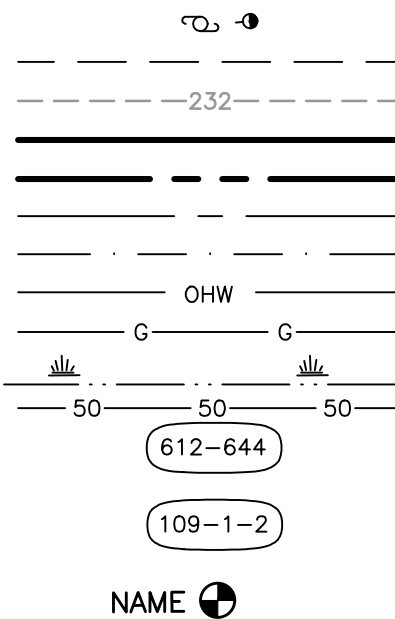
SCALE: AS SHOWN
DESIGNED BY: AGK
DRAWN BY: DPM
CHECKED BY:
DATE: 07-16-19
PROJ. NO. 12869
SHEET 6 OF 36

C-3



LEGEND - EXISTING:

- UTILITY/SUPPORT POLE/GUY WIRE
- GRAVEL ROAD
- EXISTING CONTOUR
- BOUNDARY LINE
- RIGHT-OF-WAY
- EASEMENT LINE
- BUILDING SET-BACK LINE
- OVERHEAD UTILITY WIRE
- GAS LINE
- WETLAND
- 50-FOOT WETLAND BUFFER
- TAX MAP-LOT NO.

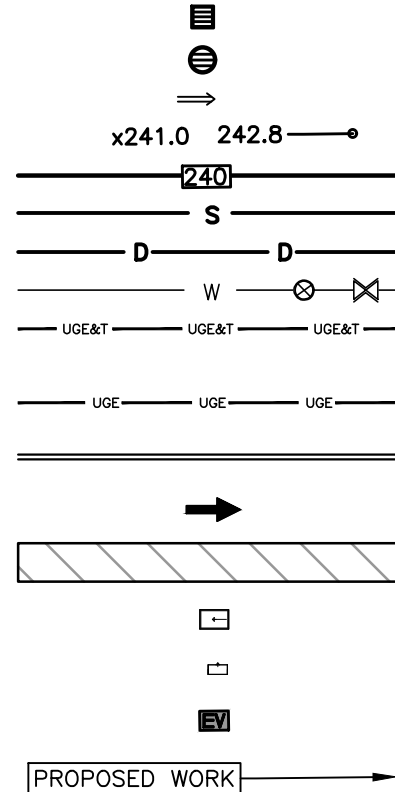


TAX MAP-BLOCK-LOT NO.

TEST PIT LOCATION
(REFER TO WASTEWATER DISPOSAL DESIGN
PLANS (DWGS S-1 & S-2) AND STORMWATER
MANAGEMENT REPORT FOR DATA)

LEGEND - PROPOSED:

- CATCH BASIN (NO SUMP)
- YARD DRAIN
- GRADE SLOPE
- SPOT ELEVATION
- CONTOUR
- SANITARY PIPE
- DRAINAGE PIPE
- WATER LINE, CORPORATION, & GATE VALVE
- UNDERGROUND ELECTRIC, TELEPHONE, &
COMMUNICATIONS CONDUIT (SIZES T.B.D.)
- UNDERGROUND ELECTRIC CONDUIT (SIZES T.B.D.)
- CURB
- DIRECTION OF TRAFFIC PAVEMENT ARROW
- PROPOSED DRAINAGE/FENCE EASEMENT
- POLE MOUNTED LIGHT
- BUILDING MOUNTED LIGHT
- ELECTRIC VEHICLE CHARGING STATION
- PROPOSED WORK



NOTES:

- EXISTING CNG FACILITY DESIGN BY SANBORN HEAD PER DRAWING ENTITLED "MAJOR SITE PLAN REVIEW
- BROKEN BRIDGE - CNG FACILITY DESIGN - LIBERTY UTILITIES (ENERGY NORTH NATURAL GAS)
CORP.," DATED JULY 18, 2014, LAST REV. AUGUST 27, 2015.



FOR PERMITTING ONLY
NOT FOR CONSTRUCTION



REVISION NO.	DATE	DESCRIPTION	MADE BY	CHECKED BY	APPROVED BY
1	10-01-19	STAFF REVIEW	DPM	AGK	

GRADING AND DRAINAGE PLAN (2 OF 2) FOR
LIBERTY UTILITIES FACILITIES AND TESTING LAB

14 BROKEN BRIDGE ROAD, CONCORD, NEW HAMPSHIRE

LAUER ARCHITECTS, P.A.

118 PAIGE HILL ROAD
GOFFSTOWN, NEW HAMPSHIRE 03045
(603) 497-8441

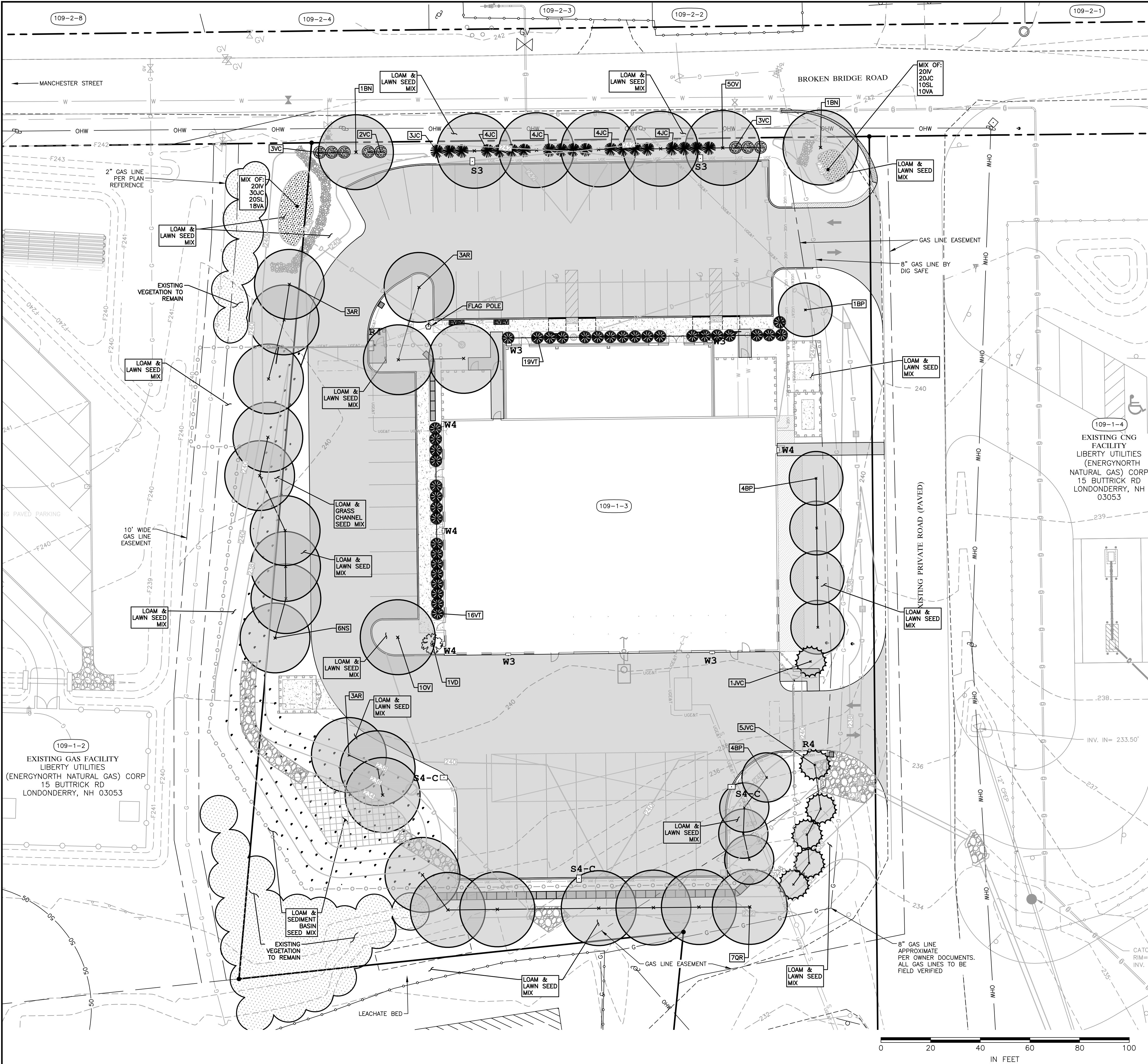
PATHWAYS CONSULTING, LLC

240 MECHANIC STREET, SUITE 100
LEBANON, NEW HAMPSHIRE 03766
(603) 448-2200

SCALE: AS SHOWN
DESIGNED BY: AGK
DRAWN BY: DPM
CHECKED BY:
DATE: 07-16-19
PROJ. NO. 12869

C-4

SHEET 7 OF 36



PLANT LIST						
SYMBOL	KEY	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	COMMENT
TREES						
AR	9	Acer rubrum 'Redpointe'	REDPOINTE RED MAPLE	2½' - 3' Cal.	B & B	AS SHOWN
BN	2	Betula nigra 'Heritage'	HERITAGE RIVER BIRCH	2½' - 3' Cal.	B & B	AS SHOWN
BP	9	Betula papyrifera	PAPER BIRCH	2½' - 3' Cal.	B & B	AS SHOWN
JVC	6	Juniperus virginiana 'Canaerti'	CANAERTI EASTERN RED CEDAR	7' - 8' High	B & B	AS SHOWN
NS	6	Nyssa sylvatica	TUPELO	2½' - 3' Cal.	B & B	AS SHOWN
OV	6	Ostrya virginiana	AMERICAN HOPHORNBEAM	2½' - 3' Cal.	B & B	AS SHOWN
QR	7	Quercus rubra	RED OAK	2½' - 3' Cal.	B & B	AS SHOWN
SHRUBS						
JC	16	Juniperus chinensis 'Pfitzeriana Compacta'	COMPACT PFITZER JUNIPER	36" High	B & B	AS SHOWN
VD	1	Viburnum dentatum	ARROWWOOD VIBURNUM	5' High	B & B	AS SHOWN
VC	8	Vaccinium corymbosum	HIGHBUSH BLUEBERRY	36" High	B & B	AS SHOWN
VT	35	Viburnum trilobum 'Compacta'	COMPACT AMERICAN CRANBERRY BUSH	36" High	B & B	AS SHOWN
PERENNIALS/ WOODY GROUND COVERS						
IV	40	Iris versicolor	BLUE FLAG IRIS	#1	CONT.	18" O.C.
JC	50	Juncus canadensis	CANADA RUSH	#1	CONT.	18" O.C.
SL	30	Spirea latifolia	MEADOWSWEET	#1	CONT.	18" O.C.
VA	28	Vaccinium angustifolium	LOWBUSH BLUEBERRY	#1	CONT.	18" O.C.

LANDSCAPE REGULATIONS
SITE PLAN REGULATIONS
SECTION 18.17 TREE PLANTINGS
1 TREE/1000 SQ. FT. OF PARKING AREA = 34,000 SQ. FT./1000 SQ. FT. = 34 TREES

LEGEND - EXISTING:

UTILITY/SUPPORT POLE/GUY WIRE
GRAVEL ROAD
EXISTING CONTOUR
BOUNDARY LINE
RIGHT-OF-WAY
EASEMENT LINE
BUILDING SET-BACK LINE
OVERHEAD UTILITY WIRE
GAS LINE
WETLAND
50-FOOT WETLAND BUFFER
TAX MAP-LOT NO.

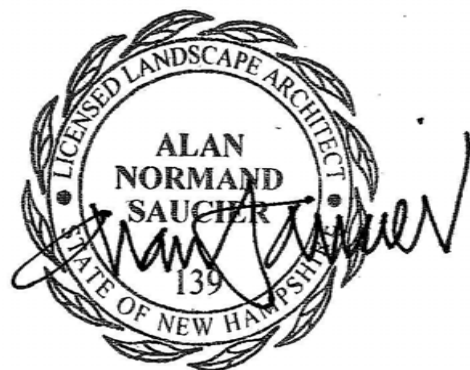
TAX MAP-BLOCK-LOT NO.

TEST PIT LOCATION
(REFER TO WASTEWATER DISPOSAL DESIGN PLANS (DWGS S-1 & S-2) AND STORMWATER MANAGEMENT REPORT FOR DATA)

LEGEND - PROPOSED:

CATCH BASIN (NO SUMP)
YARD DRAIN
GRADE SLOPE
SPOT ELEVATION
CONTOUR
SANITARY PIPE
DRAINAGE PIPE
WATER LINE, CORPORATION, & GATE VALVE
UNDERGROUND ELECTRIC, TELEPHONE, & COMMUNICATIONS CONDUIT (SIZES T.B.D.)
UNDERGROUND ELECTRIC CONDUIT (SIZES T.B.D.)
CURB
DIRECTION OF TRAFFIC PAVEMENT ARROW
PROPOSED DRAINAGE/FENCE EASEMENT
POLE MOUNTED LIGHT
BUILDING MOUNTED LIGHT
ELECTRIC VEHICLE CHARGING STATION
PROPOSED WORK
SEDIMENT BASIN, GRASS CHANNEL, OR INFILTRATION BASIN SEED MIX AS SPECIFIED ON SHEETS C-6 AND C-7 (SEE SHEET D-10 FOR SEED MIXES)

FOR PERMITTING ONLY
NOT FOR CONSTRUCTION



REVISION NO.	DATE	DESCRIPTION	MADE BY	CHECKED BY	APPROVED BY
1	10-01-19	STAFF REVIEW	DPM	AGK	

LANDSCAPE PLAN FOR
LIBERTY UTILITIES FACILITIES AND TESTING LAB

14 BROKEN BRIDGE ROAD, CONCORD, NEW HAMPSHIRE

LAUER ARCHITECTS, P.A.

118 PAIGE HILL ROAD
GOFFSTOWN, NEW HAMPSHIRE 03045
(603) 497-8441

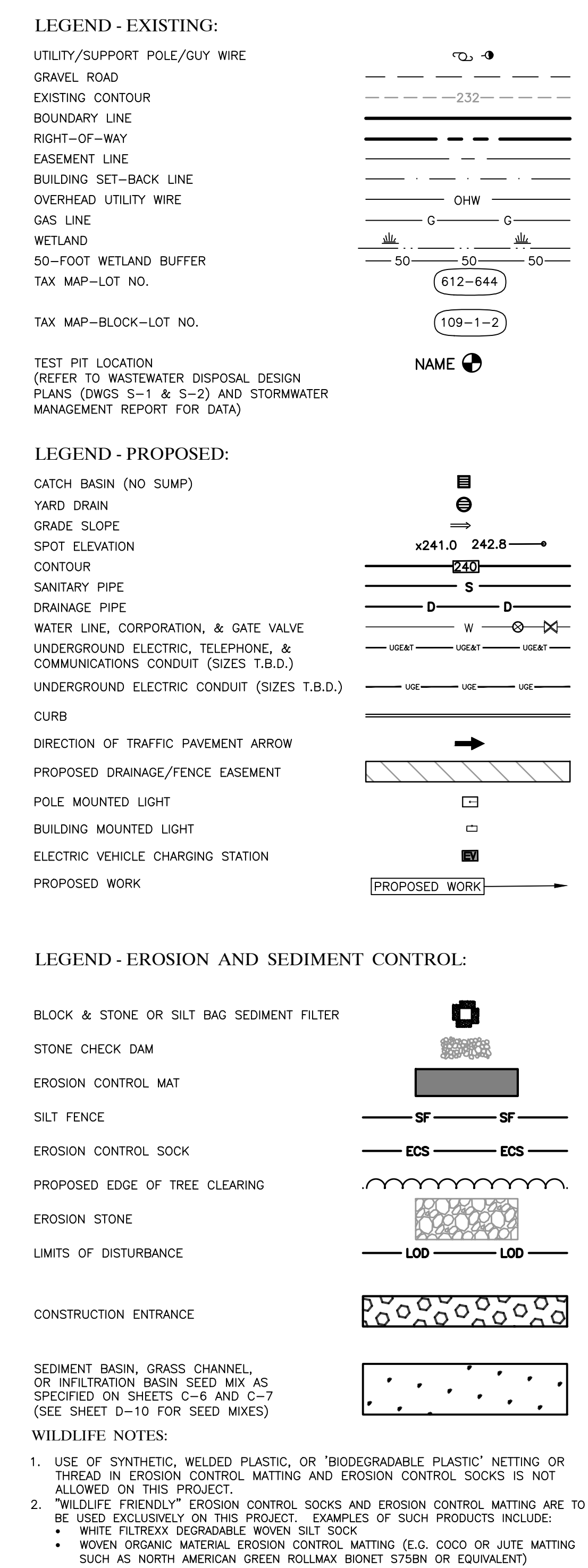
PATHWAYS CONSULTING, LLC

240 MECHANIC STREET, SUITE 100
LEBANON, NEW HAMPSHIRE 03766
(603) 448-2200

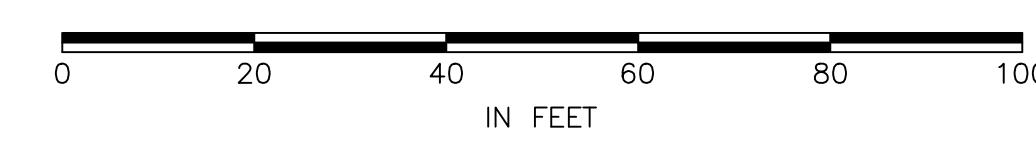
SCALE: AS SHOWN
DESIGNED BY: AGK
DRAWN BY: DPM
CHECKED BY:
DATE: 07-16-19
PROJ. NO. 12869

C-6

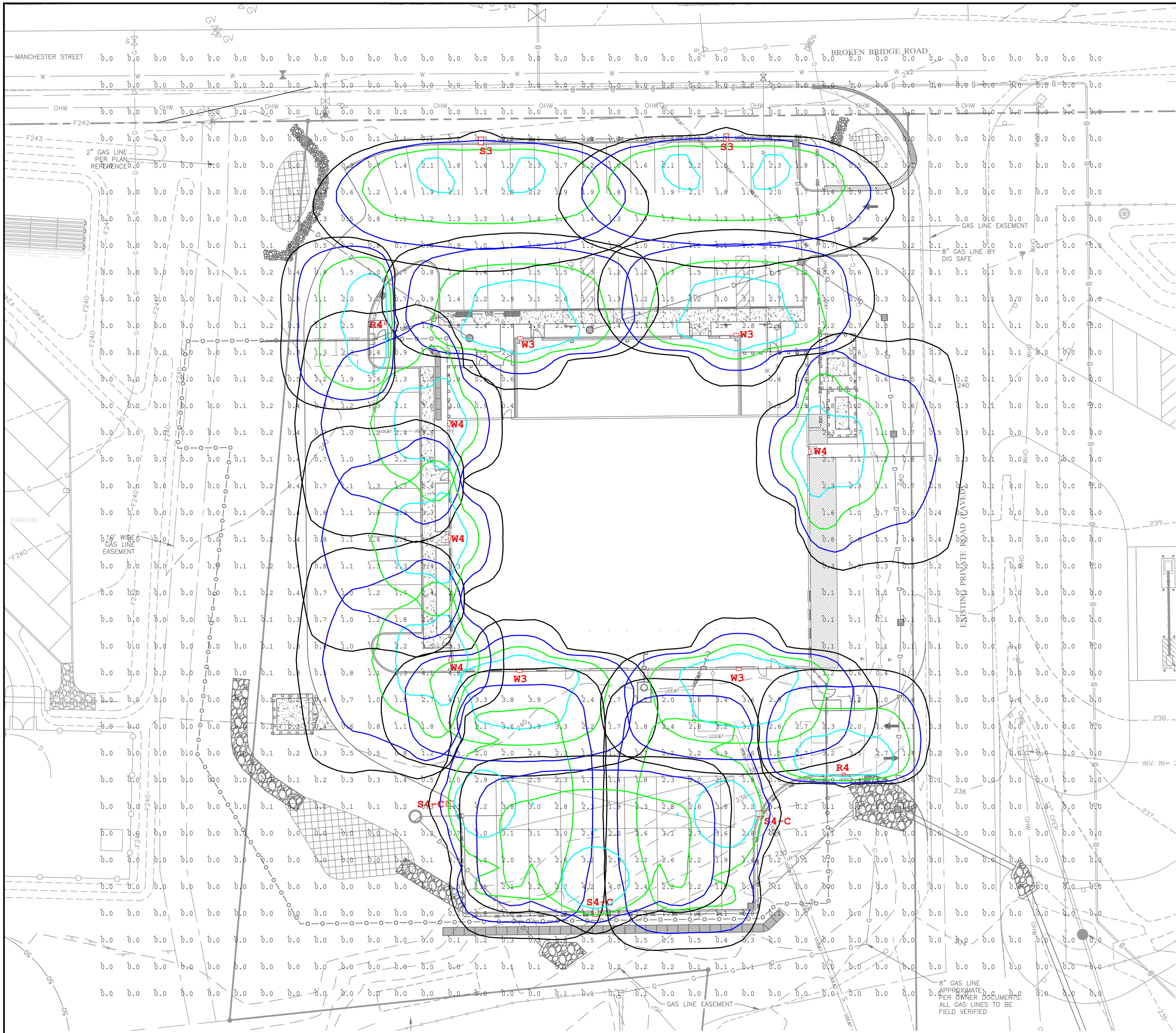
SHEET 9 OF 36



FOR PERMITTING ONLY
NOT FOR CONSTRUCTION



						LANDSCAPE & EROSION AND SEDIMENT CONTROL AT CNG SITE PLAN FOR LIBERTY UTILITIES FACILITIES AND TESTING LAB 14 BROKEN BRIDGE ROAD, CONCORD, NEW HAMPSHIRE	LAUER ARCHITECTS, P.A. 118 PAIGE HILL ROAD GOFFSTOWN, NEW HAMPSHIRE 03045 (603) 497-8441	PATHWAYS CONSULTING, LLC 240 MECHANIC STREET, SUITE 100 LEBANON, NEW HAMPSHIRE 03766 (603) 448-2200	SCALE: AS SHOWN	
					DESIGNED BY: AGK					
					DRAWN BY: DPM					
					CHECKED BY:					
					DATE: 07-16-19					
1	10-01-19	STAFF REVIEW	DPM	AGK					PROJ. NO. 12869	SHEET 10 OF 36
REVISION NO.	DATE	DESCRIPTION	MADE BY	CHECKED BY	APPROVED BY					



LEGEND - EXISTING:

- UTILITY/SUPPORT POLE/GUY WIRE
- GRAVEL ROAD
- EXISTING CONTOUR
- BOUNDARY LINE
- RIGHT-OF-WAY
- EASEMENT LINE
- BUILDING SET-BACK LINE
- OVERHEAD UTILITY WIRE
- GAS LINE
- WETLAND
- 50-FOOT WETLAND BUFFER
- TAX MAP-LOT NO.

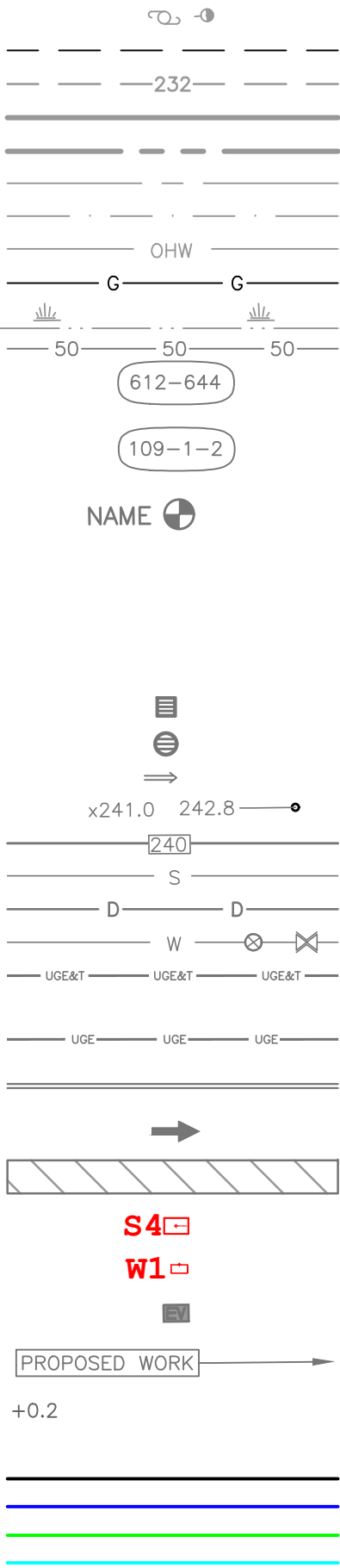
TAX MAP-BLOCK-LOT NO.

TEST PIT LOCATION
(REFER TO WASTEWATER DISPOSAL DESIGN
PLANS (DWGS S-1 & S-2) AND STORMWATER
MANAGEMENT REPORT FOR DATA)

LEGEND - PROPOSED:

- CATCH BASIN (NO SUMP)
- YARD DRAIN
- GRADE SLOPE
- SPOT ELEVATION
- CONTOUR
- SANITARY PIPE
- DRAINAGE PIPE
- WATER LINE, CORPORATION, & GATE VALVE
- UNDERGROUND ELECTRIC, TELEPHONE, &
COMMUNICATIONS CONDUIT (SIZES T.B.D.)
- UNDERGROUND ELECTRIC CONDUIT (SIZES T.B.D.)
- CURB
- DIRECTION OF TRAFFIC PAVEMENT ARROW
- PROPOSED DRAINAGE/FENCE EASEMENT
- POLE MOUNTED LIGHT
- BUILDING MOUNTED LIGHT
- ELECTRIC VEHICLE CHARGING STATION
- PROPOSED WORK
- APPROXIMATE ILLUMINATION VALUE
(FOOT CANDLE)

FOOT CANDLE ISOBAR



NOTES:

1. LIGHTING DESIGN AND PHOTOMETRIC PLAN WAS PREPARED AND PROVIDED BY CHARRON, INC. P.O. BOX 4550, MANCHESTER, N.H. 03108. WWW.CHARRONINC.COM.
2. SEE LIGHTING DETAIL SHEET FOR LIGHTING FIXTURE IMAGES AND DIMENSIONS, SHEET D-8.

FOR PERMITTING ONLY
NOT FOR CONSTRUCTION



StatArea 1
ENTIRE SITE
Illuminance (Fc)
Average = 1.82
Maximum = 4.2
Minimum = 0.5
Avg/Min Ratio = 3.64
Max/Min Ratio = 8.40

Luminaire Schedule

Symbol	Qty	Label	Arrangement	Description
	2	R4	SINGLE	GPC-AF-01-LED-E1-SL4-600-HSS/ SSS4A10SFN1 (2' PED BY OTHERS) 12' AFG
	2	S3	SINGLE	TLM-F04-LED-E1-SL3-HSS/ SSS4A18SFM1 (2' PED BY OTHERS) 20' AFG
	3	S4-C	SINGLE	TLM-F04-LED-E1-SL4-HSS-C/ SSS4A18SFM1 (2' PED BY OTHERS) 20' AFG
	4	W3	SINGLE	ISS-AF-1000-LED-E1-T3/ WALL MTD 15' AFG
	4	W4	SINGLE	ISS-AF-1000-LED-E1-T4FT/ WALL MTD 15' AFG

LIGHTING PLAN FOR

LIBERTY UTILITIES FACILITIES AND TESTING LAB

14 BROKEN BRIDGE ROAD, CONCORD, NEW HAMPSHIRE

LAUER ARCHITECTS, P.A.

118 PAIGE HILL ROAD
GOFFSTOWN, NEW HAMPSHIRE 03045
(603) 497-8441

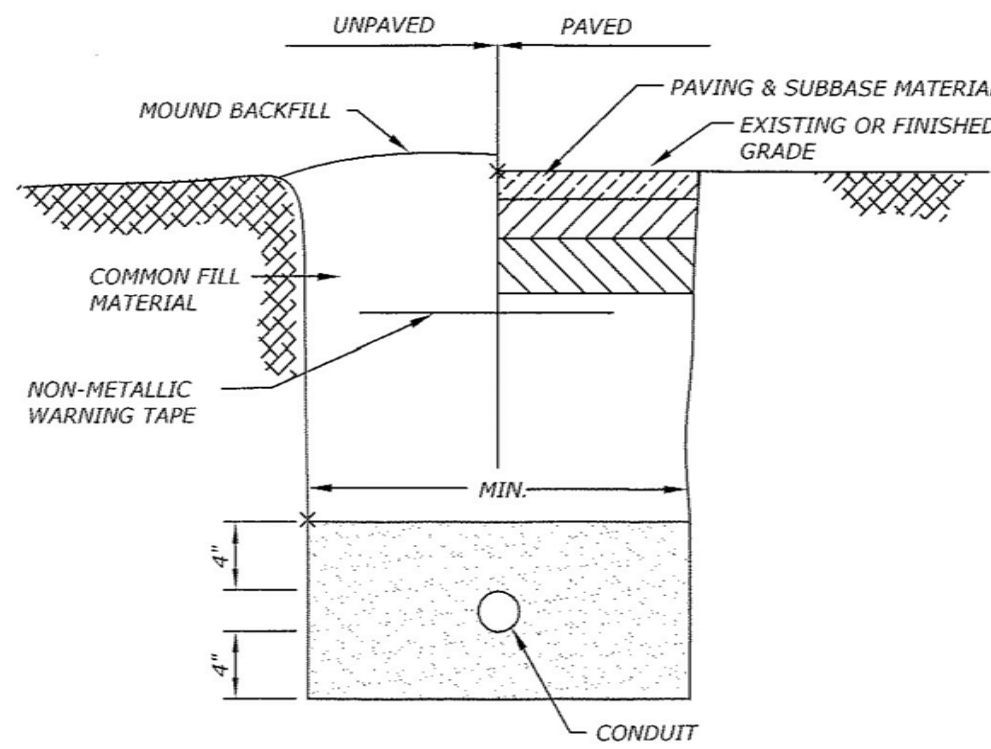
PATHWAYS CONSULTING, LLC

240 MECHANIC STREET, SUITE 100
LEBANON, NEW HAMPSHIRE 03766
(603) 448-2200

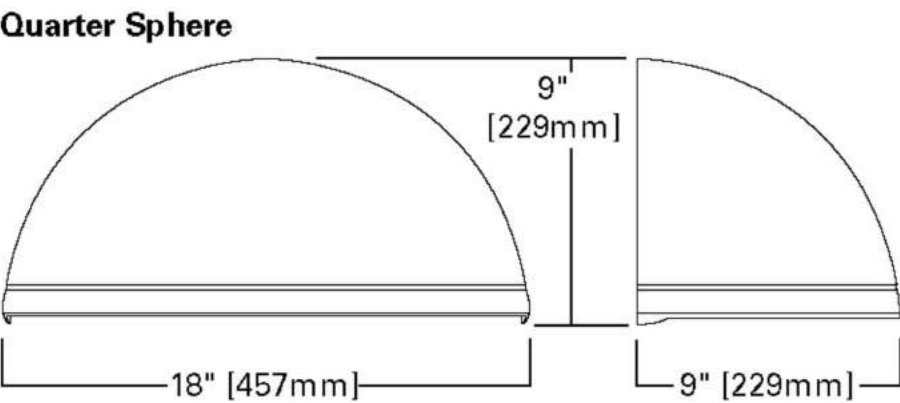
SCALE: AS SHOWN
DESIGNED BY: AGK
DRAWN BY: DPM
CHECKED BY:
DATE: 07-16-19
PROJ. NO. 12869

C-9

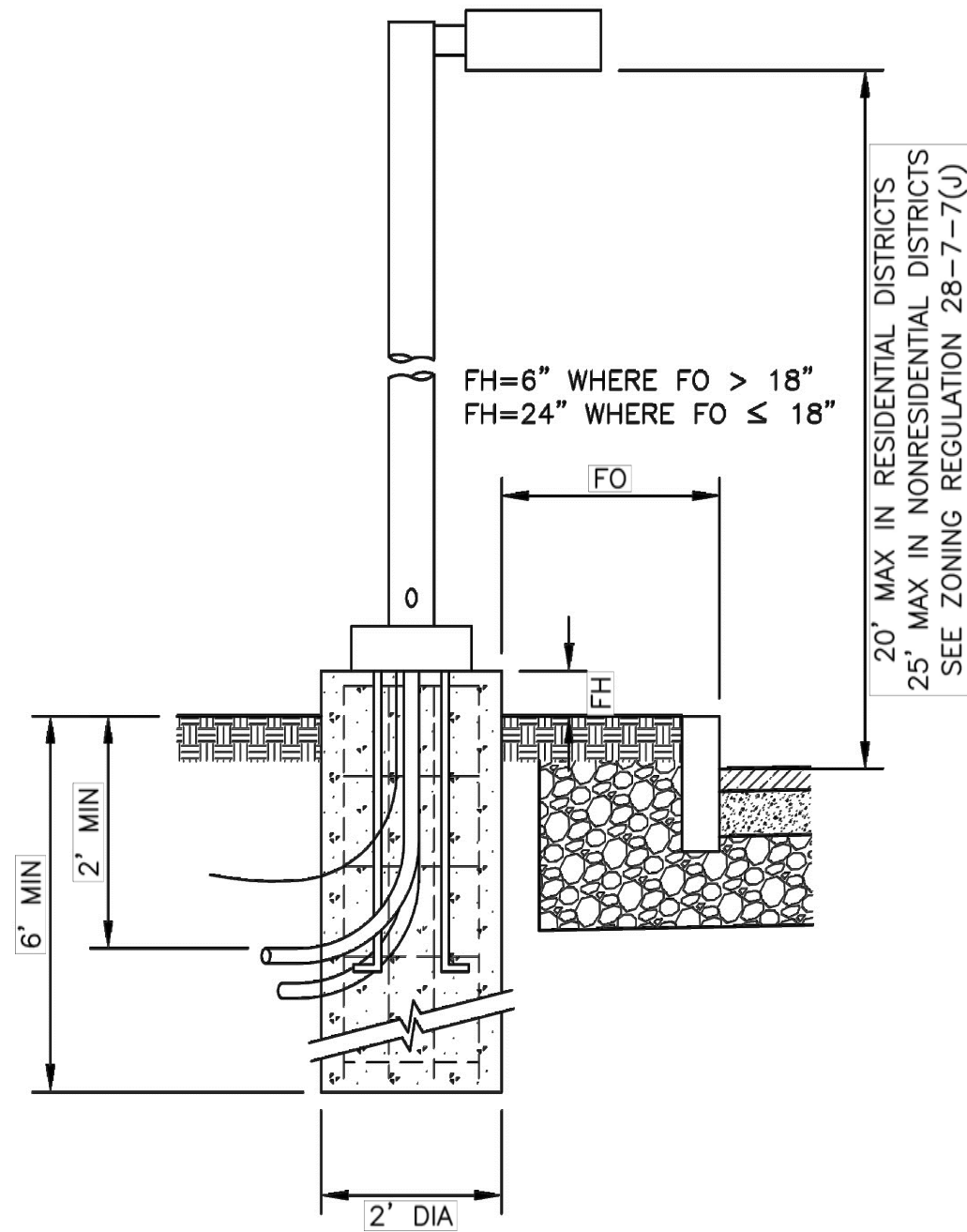
SHEET 12 OF 36



SITE LIGHTING TRENCH SECTION TYP.
OBTAINED FROM REFERENCE 1A. SEE REFERENCES ON SHEET 0A-1
N.T.S

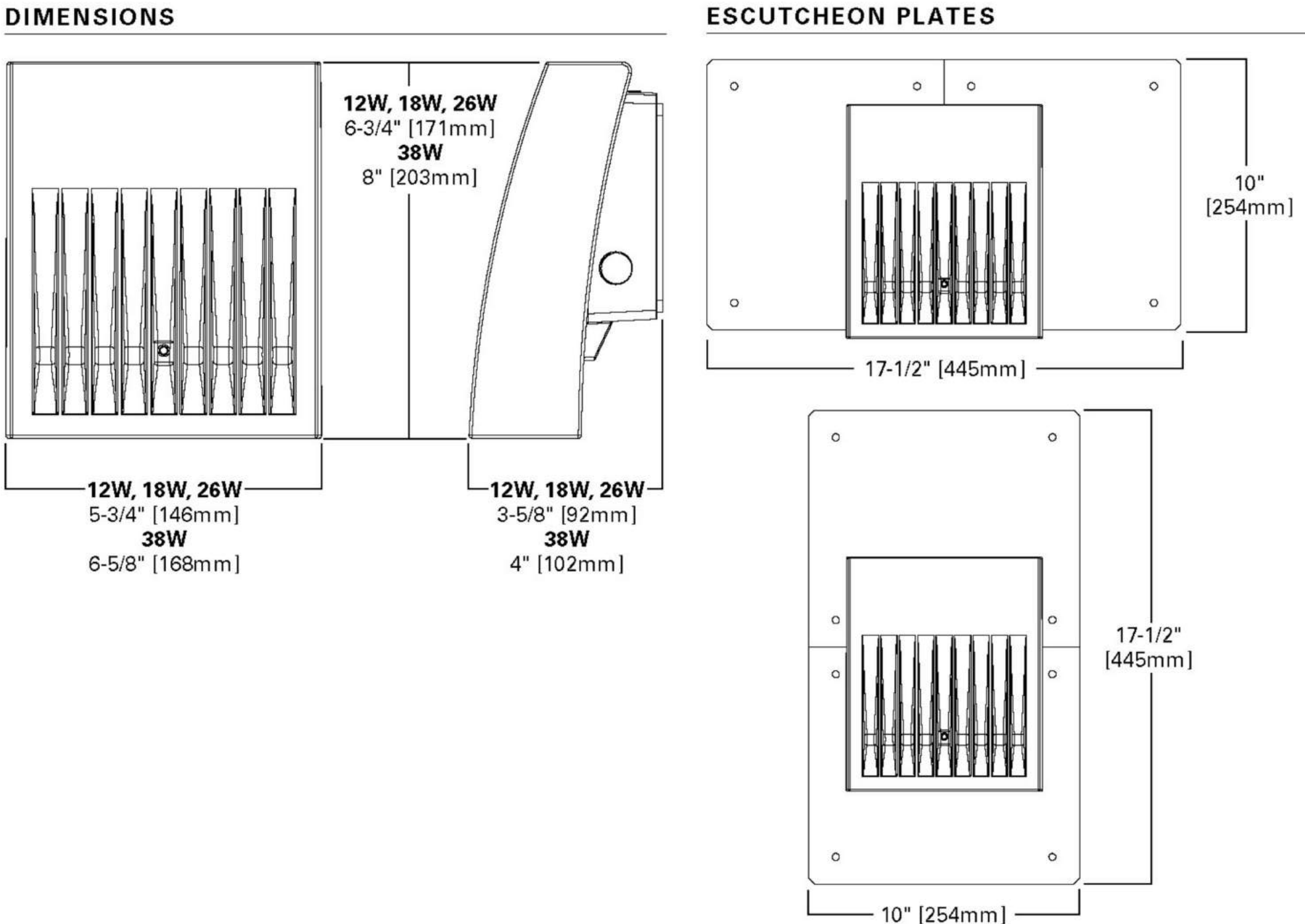


ISS IMPACT ELITE QUARTER SPHERE LED
OBTAINED FROM EATON, MCGRAW-EDISON BRAND
N.T.S

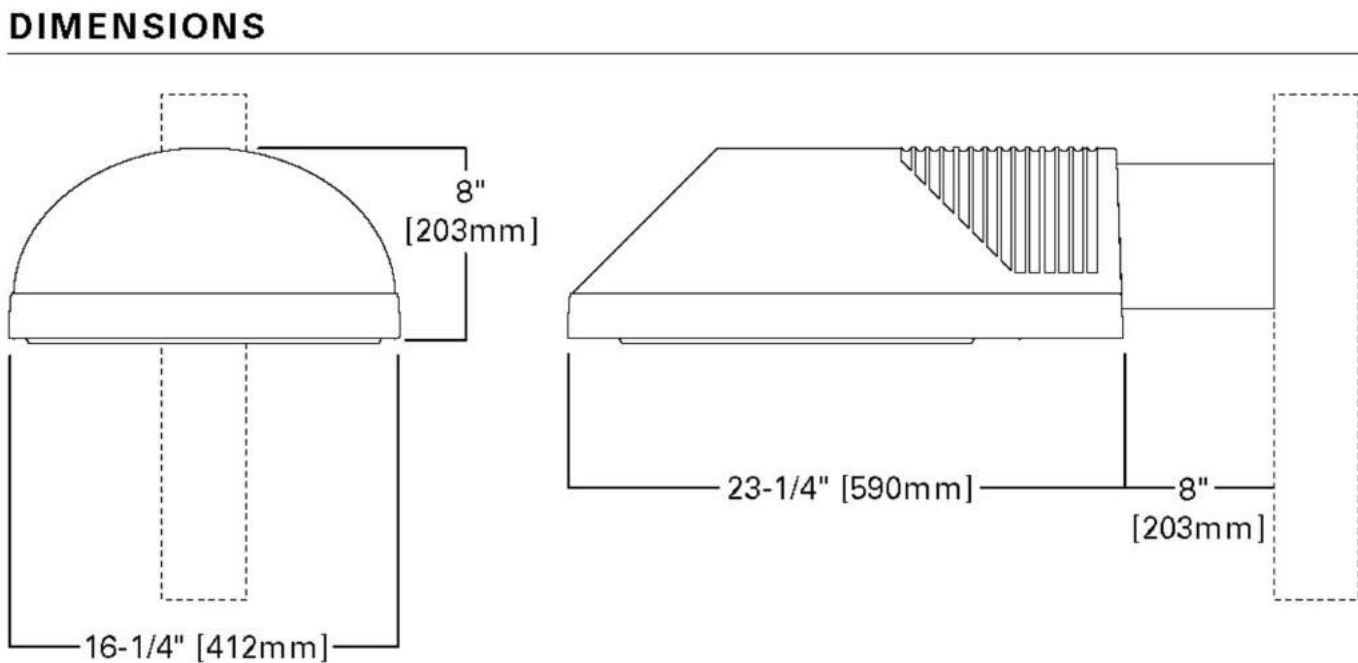


THIS INFORMATION MAY NOT CONTAIN ALL DETAILS REQUIRED FOR CONSTRUCTION.
APPROPRIATE MODIFICATION MAY BE REQUIRED TO ENSURE SUITABILITY OF THESE
DRAWINGS FOR THE SPECIFIC APPLICATION. IT IS THE USER'S RESPONSIBILITY TO
ENSURE INSTALLATION OF THE EQUIPMENT/SYSTEM IN ACCORDANCE WITH
BUILDING/PROJECT SPECIFICATIONS, APPLICABLE CODES AND STANDARDS.

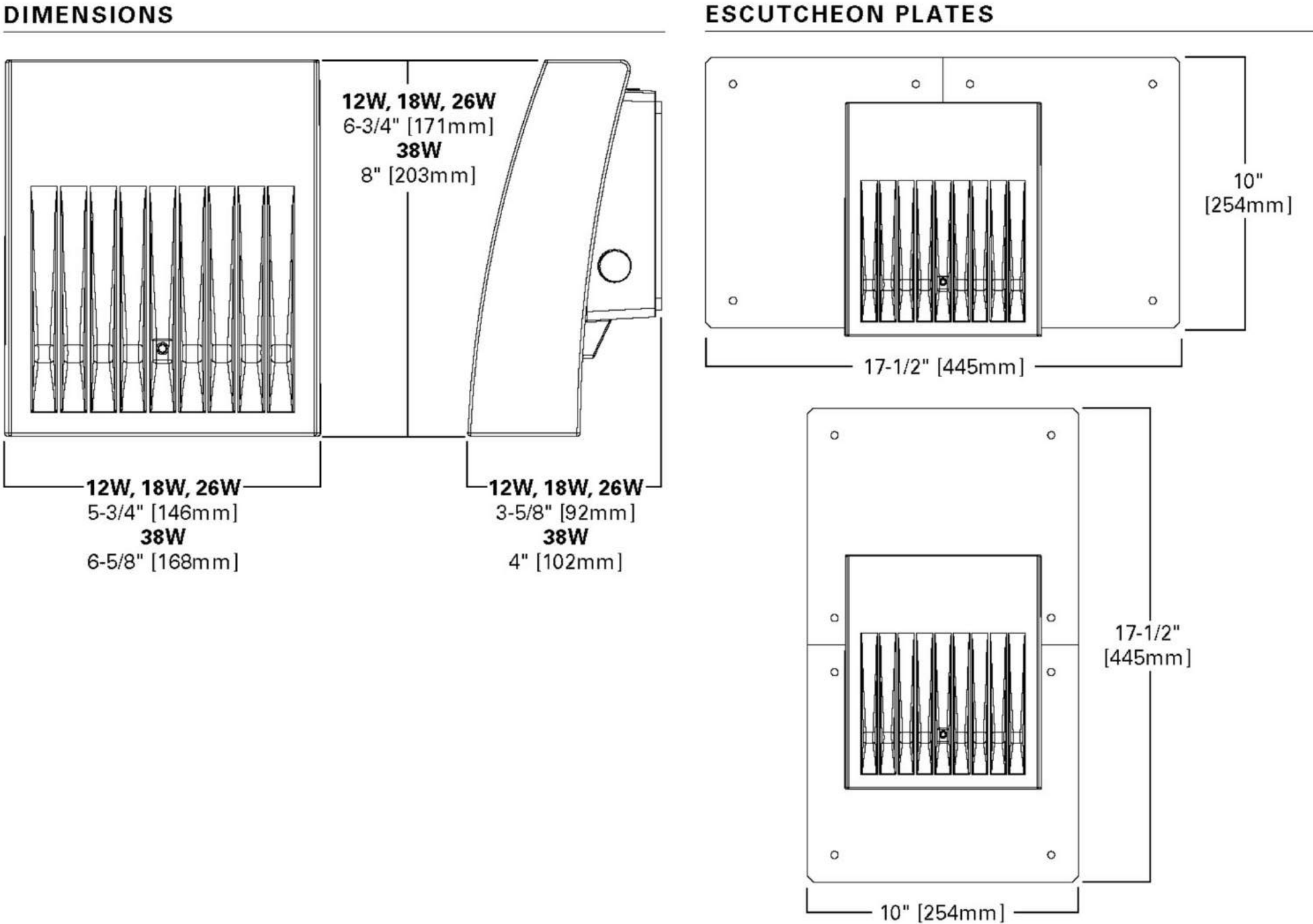
TYPICAL LIGHT POLE AND FOUNDATION
CITY OF CONCORD DETAIL M-13
N.T.S



XTOR CROSSTOUR LED
OBTAINED FROM EATON, LUMARK BRAND
N.T.S

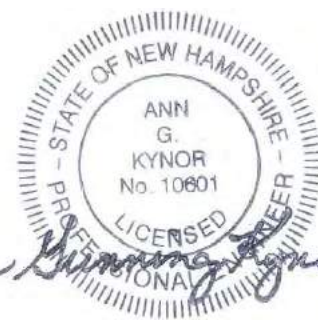


TLM TALON MEDIUM LED
OBTAINED FROM EATON, MCGRAW-EDISON BRAND
N.T.S



GPC GALLEON PEDESTRIAN COMPANION
OBTAINED FROM EATON, MCGRAW-EDISON BRAND
N.T.S

FOR PERMITTING ONLY
NOT FOR CONSTRUCTION



1	10-01-19	ADDED GPC GALLEON PEDESTRIAN COMPANION DETAIL	DPM	AGK	
REVISION NO.	DATE	DESCRIPTION	MADE BY	CHECKED BY	APPROVED BY

LIGHTING DETAILS FOR					
LIBERTY UTILITIES FACILITIES AND TESTING LAB					
14 BROKEN BRIDGE ROAD, CONCORD, NEW HAMPSHIRE					

LAUER ARCHITECTS, P.A.	
118 PAIGE HILL ROAD	
GOFFSTOWN, NEW HAMPSHIRE 03045	
(603) 497-8441	

PATHWAYS CONSULTING, LLC	
240 MECHANIC STREET, SUITE 100	
LEBANON, NEW HAMPSHIRE 03766	
(603) 448-2200	

SCALE: AS SHOWN
DESIGNED BY: AGK
DRAWN BY: DPM
CHECKED BY:
DATE: 07-16-19
PROJ. NO. 12869

D-8
SHEET 22 OF 36