PROPOSED GREENVILLE HOUSE PRC
(PROCESS REHABILITATION CENTER)
TAX MAP 5, LOTS 32 & 32-1
OLD MILL, 21 CHAMBERLIN STREET,
GREENVILLE, HILLSBOROUGH COUNTY, NH 03048
DATE: NOVEMBER 9, 2022

Applicant:
GEORGE'S REALTY, LLC
c/o Wilsoney Georges
100 Carl Drive, Unit 11a
Manchester, New Hamphire 03103

Owner:
McKENAN PROPERTIES, LLC
100 Carl Drive, Unit 8
Manchester, New Hamphire 03103

Architect:
LAUER ARCHITECTS, PA
118 Paige Hill Road
Goffstown, New Hamphire 03045

Surveyor & Civil Engineer:
ECKMAN ENGINEERING, LLC
1950 Lafayette Road
Portsmouth, New Hampshire 03802

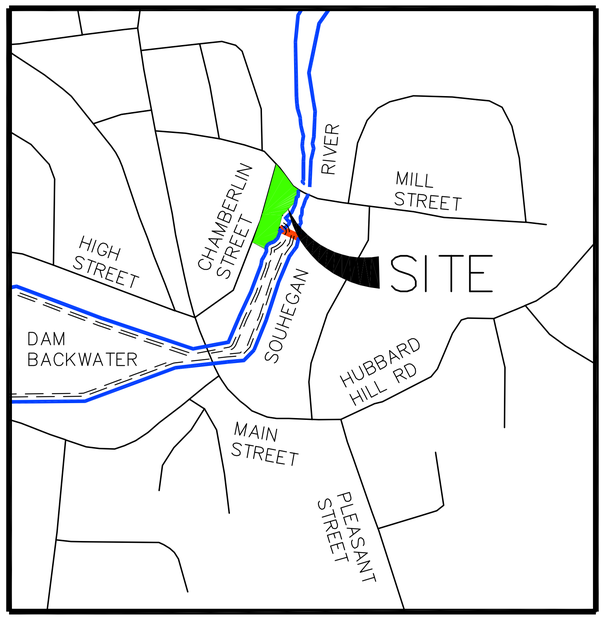
Wetlands/Environ. Scientist:
RCS DESIGNS
P.O. BOX 487
Bradford, New Hampshire 03221

Geotechnical Engineer:
GEOTECHNICAL SERVICES, INC
55 N STARK HIGHWAY
Weare, New Hampshire 03281

Traffic Engineer:
TEPP, LLC
93 Stiles Road, Suite 201
Salem, NH 03079

Landscape Architect:
JSLA, LLC
72 Shaker Street
Sutton, New Hampshire 03260

Lighting Design Consultant:
VISIBLE LIGHT, INC.
24 Stickney Terrace, Suite 6
Hampton, New Hamphire 03842



LOCUS (NTS)

INDEX

	SHEET NO.(S)
Cover Sheet	
Boundary Retracement Plan	BND-1
Existing Conditions & Wetland Location Plan	EX-1
Overall Existing Conditions & Offsite Parking Plan	EX-2
Site Layout Plan	C-1
Grading, Drainage, Erosion & Sediment Control Plan	C-2
Utility Plan	C-3
Landscape and Lighting Plan	C-4
Detail Sheets	D-1 thru D-7
Architectural Exist. Floor Plans	Ex. 1st & Ex. 2nd
Architectural Exist. Floor Plan	Ex. 3rd & Ex. Roof
Architectural Exist. Elevations	Ex. Elev 1 & Ex. Elev 2
Architectural Floor Plans	1st & 2nd
Architectural Floor Plan	3rd & Roof
Architectural Elevations	Elev 1 & Elev 2

STATE OF NEW HAMPSHIRE
DAVID E. ECKMAN
LICENSED PROFESSIONAL ENGINEER
11/10/22

PLAN SIZE:
FULL SIZE PLANS ARE 24x36
11x17 ARE APPROXIMATE HALF SCALES

FOR APPROVAL ONLY
NOT FOR CONSTRUCTION

OWNER:
McKENAN PROPERTIES, LLC
100 CARL DRIVE
UNIT #8
MANCHESTER, NH. 03103

APPLICANT:
GEORGES REALTY, LLC
c/o WIL GEORGES
100 CARL DRIVE, 11a
MANCHESTER, NH. 03103

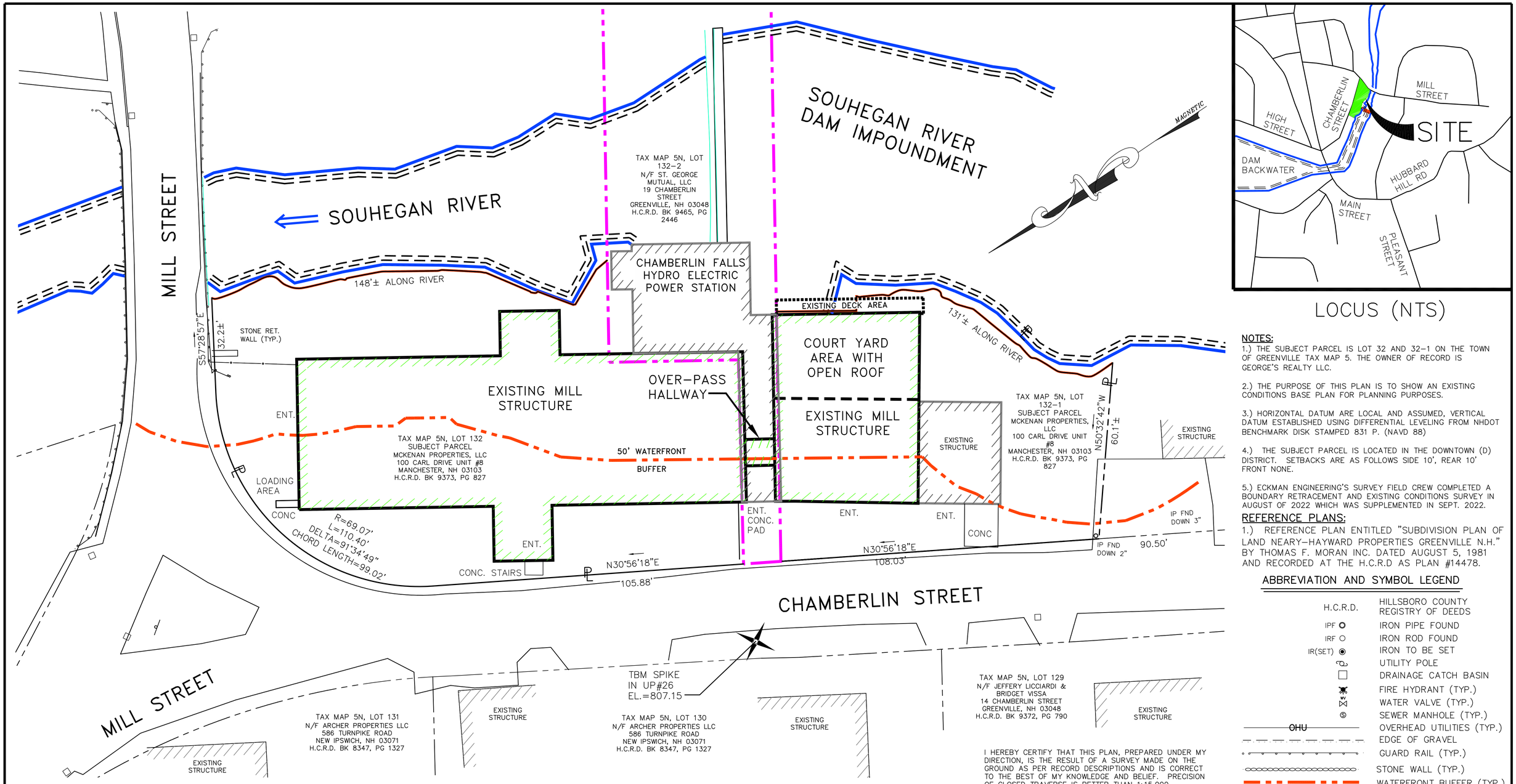
ECKMAN Engineering, LLC
1950 Lafayette Road Unit 210, PO Box 8025
Portsmouth, New Hampshire 03802
Phone: (603) 433-1354
Fax: (603) 433-2367

No.	DESCRIPTION	BY	DATE
	REVISIONS		
1	PROJECT TEAM LIST ADDITIONS/EDITS	DEE	1/23

GREENVILLE HOUSE PRC – OLD MILL REHABILITATION
TOWN GREENVILLE, NEW HAMPSHIRE BRIDGE NO. ----
FEDERAL PROJECT ---- NHDOT PROJECT N/A
LOCATION TOWN OF GREENVILLE TAX MAP 5, LOTS 32 & 32-1, OLD MILL
OLD MILL, 21 CHAMBERLIN ST., GREENVILLE, HILLSBORO COUNTY, NH 03048
COVER SHEET

	BY	DATE		BY	DATE
DESIGNED	SRP	10/22	CHECKED	DEE	11/22
DRAWN	JJM	10/22	CHECKED	DEE	11/22
TRACED	———		CHECKED	———	
QUANTITIES			CHECKED		

EE PROJ. NO. 22-105
DWG FILE 22-105_ENG
REVIEWED BY:
NHDOT PROJ. NO. NA



LOCUS (NTS)

GRAPHIC SCALE

15 0 7.5 15 30 60

(IN FEET)
1 inch = 15 ft.

NOTES:

1.) THE SUBJECT PARCEL IS LOT 32 AND 32-1 ON THE TOWN OF GREENVILLE TAX MAP 5. THE OWNER OF RECORD IS GEORGE'S REALTY LLC.

2.) THE PURPOSE OF THIS PLAN IS TO SHOW AN EXISTING CONDITIONS BASE PLAN FOR PLANNING PURPOSES.

3.) HORIZONTAL DATUM ARE LOCAL AND ASSUMED, VERTICAL DATUM ESTABLISHED USING DIFFERENTIAL LEVELING FROM NHDOT BENCHMARK DISK STAMPED 831 P. (NAVD 88)

4.) THE SUBJECT PARCEL IS LOCATED IN THE DOWNTOWN (D) DISTRICT. SETBACKS ARE AS FOLLOWS SIDE 10', REAR 10' FRONT NONE.

5.) ECKMAN ENGINEERING'S SURVEY FIELD CREW COMPLETED A BOUNDARY RETRACEMENT AND EXISTING CONDITIONS SURVEY IN AUGUST OF 2022 WHICH WAS SUPPLEMENTED IN SEPT. 2022.

REFERENCE PLANS:

1.) REFERENCE PLAN ENTITLED "SUBDIVISION PLAN OF LAND NEARY-HAYWARD PROPERTIES GREENVILLE N.H." BY THOMAS F. MORAN INC. DATED AUGUST 5, 1981 AND RECORDED AT THE H.C.R.D AS PLAN #14478.

ABBREVIATION AND SYMBOL LEGEND

H.C.R.D.	HILLSBORO COUNTY REGISTRY OF DEEDS
IPF	IRON PIPE FOUND
IRF	IRON ROD FOUND
IR(SET)	IRON TO BE SET
	UTILITY POLE
	DRAINAGE CATCH BASIN
	FIRE HYDRANT (TYP.)
	WATER VALVE (TYP.)
S	SEWER MANHOLE (TYP.)
OHU	OVERHEAD UTILITIES (TYP.)
	EDGE OF GRAVEL
	GUARD RAIL (TYP.)
	STONE WALL (TYP.)
	WATERFRONT BUFFER (TYP.)
	NHDES REF LINE (TYP.)
PL	PROPERTY LINE (TYP.)
	SHORELINE (TYP.)

I HEREBY CERTIFY THAT THIS PLAN, PREPARED UNDER MY DIRECTION, IS THE RESULT OF A SURVEY MADE ON THE GROUND AS PER RECORD DESCRIPTIONS AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. PRECISION OF CLOSED TRAVERSE IS BETTER THAN 1:15,000.

I CERTIFY THAT THIS SURVEY PLAT IS NOT A SUBDIVISION PURSUANT TO THIS TITLE AND THAT THE LINES OF STREETS OR WAYS SHOWN ARE THOSE ALREADY ESTABLISHED AND THAT NO NEW WAYS ARE SHOWN. I FURTHER CERTIFY THAT I HAVE FILED A COPY OF THIS PLAN WITH THE PLANNING BOARD OF GREENVILLE IN ACCORDANCE WITH RSA 676:18.

STATE OF NEW HAMPSHIRE — No. 919 PAUL F. ZUZGO — LICENSED LAND SURVEYOR — SIGNATURE

PAUL F. ZUZGO L.L.S. #919 — 8/25/22 DATE

PLAN SIZE:
FULL SIZE PLANS ARE 24x36
11x17 ARE APPROXIMATE HALF SCALES

FOR APPROVAL ONLY
NOT FOR CONSTRUCTION

OWNER:
MCKENAN PROPERTIES, LLC
100 CARL DRIVE
UNIT #8
MANCHESTER, NH. 03103

APPLICANT:
GEORGES REALTY, LLC
c/o WIL GEORGES
100 CARL DRIVE, 11a
MANCHESTER, NH. 03103

ECKMAN Engineering, LLC
1950 Lafayette Road Unit 210, PO Box 8025
Portsmouth, New Hampshire 03802
Phone: (603) 433-1354
Fax: (603) 433-2367

No.	DESCRIPTION	BY	DATE
	REVISIONS		
1	MISCELLANEOUS BUILDING & PLAN NOTE UPDATES	DEE	12/22

GREENVILLE HOUSE PRC – OLD MILL REHABILITATION

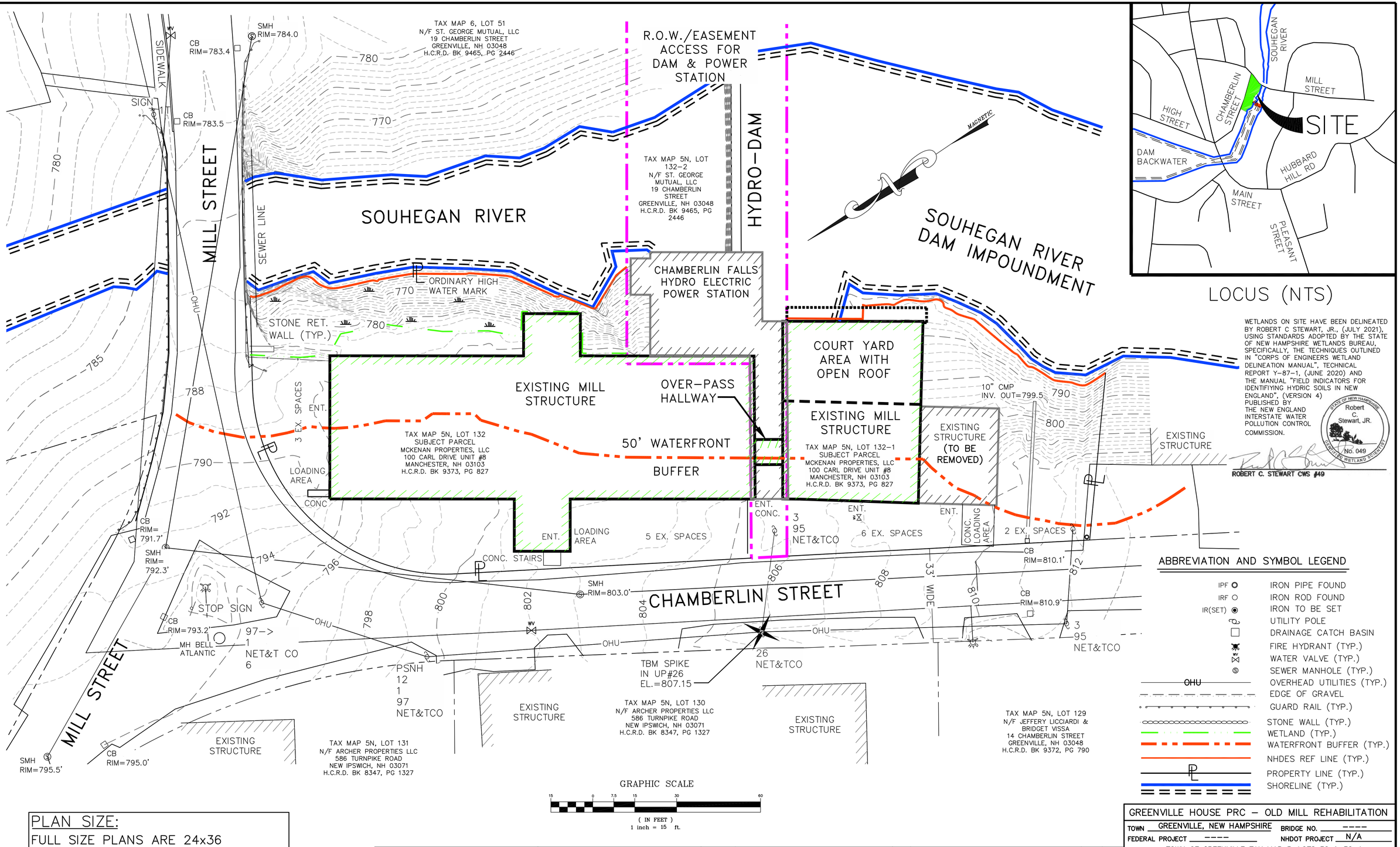
TOWN GREENVILLE, NEW HAMPSHIRE — BRIDGE NO. ----
FEDERAL PROJECT ---- — NHDOT PROJECT N/A
LOCATION TOWN OF GREENVILLE TAX MAP 5, LOTS 32 & 32-1
OLD MILL, CHAMBERLIN ST., GREENVILLE, HILLSBOROUGH, NH

BOUNDARY RETRACEMENT PLAN

	BY	DATE		BY	DATE	
DESIGNED	SRP	8/22	CHECKED	DEE/PFZ	8/22	EE PROJ. NO. 22-105
DRAWN	JJM	8/22	CHECKED	PFZ	8/22	
TRACED			CHECKED			DWG FILE 22-105_ENG
QUANTITIES			CHECKED			

REVIEWED BY:
NHDOT PROJ. NO. NA

BND-1



LOCUS (NTS)

WETLANDS ON SITE HAVE BEEN DELINEATED BY ROBERT C STEWART, JR., (JULY 2021), USING STANDARDS ADOPTED BY THE STATE OF NEW HAMPSHIRE WETLANDS BUREAU, SPECIFICALLY, THE TECHNIQUES OUTLINED IN "CORPS OF ENGINEERS WETLAND DELINEATION MANUAL", TECHNICAL REPORT Y-87-1, (JUNE 2020) AND THE MANUAL "FIELD INDICATORS FOR IDENTIFIYING HYDRIC SOILS IN NEW ENGLAND", (VERSION 4) PUBLISHED BY THE NEW ENGLAND INTERSTATE WATER POLLUTION CONTROL COMMISSION.

STATE OF NEW HAMPSHIRE Robert C. Stewart, JR. No. 049 CERTIFIED WETLAND SCIENTIST

ROBERT C. STEWART CWS #49

ABBREVIATION AND SYMBOL LEGEND

IPF	IRON PIPE FOUND
IRF	IRON ROD FOUND
IR(SET)	IRON TO BE SET
	UTILITY POLE
	DRAINAGE CATCH BASIN
	FIRE HYDRANT (TYP.)
WV	WATER VALVE (TYP.)
S	SEWER MANHOLE (TYP.)
OHU	OVERHEAD UTILITIES (TYP.)
	EDGE OF GRAVEL
	GUARD RAIL (TYP.)
	STONE WALL (TYP.)
	WETLAND (TYP.)
	WATERFRONT BUFFER (TYP.)
	NHDES REF LINE (TYP.)
PL	PROPERTY LINE (TYP.)
	SHORELINE (TYP.)

PLAN SIZE:
FULL SIZE PLANS ARE 24x36
11x17 ARE APPROXIMATE HALF SCALES

FOR APPROVAL ONLY
NOT FOR CONSTRUCTION

OWNER:
MCKENAN PROPERTIES, LLC
100 CARL DRIVE
UNIT #8
MANCHESTER, NH. 03103

APPLICANT:
GEORGES REALTY, LLC
c/o WIL GEORGES
100 CARL DRIVE, 11a
MANCHESTER, NH. 03103

ECKMAN Engineering, LLC
1950 Lafayette Road Unit 210, PO Box 8025
Portsmouth, New Hampshire 03802
Phone: (603) 433-1354
Fax: (603) 433-2367

No.	DESCRIPTION REVISIONS	BY	DATE
1	MISCELLANEOUS BUILDING & PLAN NOTE UPDATES	DEE	12/22

GREENVILLE HOUSE PRC – OLD MILL REHABILITATION

TOWN GREENVILLE, NEW HAMPSHIRE BRIDGE NO. ----
FEDERAL PROJECT ---- NHDOT PROJECT N/A
LOCATION TOWN OF GREENVILLE TAX MAP 5, LOTS 32 & 32-1
OLD MILL, CHAMBERLIN ST., GREENVILLE, HILLSBOROUGH, NH

EXISTING CONDITIONS & WETLAND LOCATION PLAN

	BY	DATE		BY	DATE	
DESIGNED	SRP	10/22	CHECKED	DEE	11/22	EE PROJ. NO. 22-105
DRAWN	JJM	10/22	CHECKED	DEE	11/22	
TRACED			CHECKED			DWG FILE 22-105_ENG
QUANTITIES			CHECKED			
REVIEWED BY:			NHDOT PROJ. NO. NA			EX-1

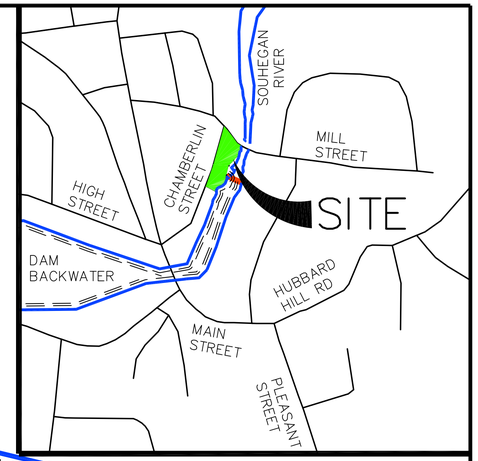
NOTES:

1.) THE SUBJECT PARCEL IS LOT 32 AND 32–1 ON THE TOWN OF GREENVILLE TAX MAP 5. THE OWNER OF RECORD IS GEORGES REALTY LLC.

2.) BOUNDARY LINES SHOWN ARE ESTABLISHED BY TYING INTO REFERENCE PLAN #14478 FROM HILLSBOROUGH COUNTY REGISTRY OF DEEDS.

3.) THE PURPOSE OF THIS PLAN IS TO SHOW AN EXISTING CONDITIONS BASE PLAN FOR PLANNING PURPOSES.

3.) HORIZONTAL DATUM ARE LOCAL AND ASSUMED, VERTICAL DATUM ESTABLISHED USING DIFFERENTIAL LEVELING FROM NHDOT BENCHMARK DISK STAMPED 831 P. (NAVD 88)



LOCUS (NTS)

OFF–SITE PROPERTY WITH 20 RESERVED PARKING SPACES (BY AGREEMENT)

TAX MAP 6, LOT 52
N/F CHAMBERLIN MILL, LLC
32 MILL STREET
GREENVILLE, NH 03048

PAVED PARKING

EXISTING STRUCTURE

SIGN

1T

OHU

SIDEWALK

MILL STREET

SEWER LINE

TAX MAP 6, LOT 51
N/F ST. GEORGE MUTUAL, LLC
19 CHAMBERLIN STREET
GREENVILLE, NH 03048
H.C.R.D. BK 9465, PG 2446

780

770

SOUHEGAN RIVER

R.O.W./EASEMENT ACCESS FOR DAM & POWER STATION

TAX MAP 5N, LOT 132–2
N/F ST. GEORGE MUTUAL, LLC
19 CHAMBERLIN STREET
GREENVILLE, NH 03048
H.C.R.D. BK 9465, PG 2446

HYDRO–DAM

SOUHEGAN RIVER DAM IMPOUNDMENT

CHAMBERLIN FALLS HYDRO ELECTRIC POWER STATION

770 ORDINARY HIGH WATER MARK

780

STONE RET. WALL (TYP.)

TAX MAP 3, LOT 1
N/F MJC REALTY TRUST
MARSHALL CAIN TRUSTEE
DUNSTER HILL
GREENVILLE, NH 03048

TAX MAP 6, LOT 51
N/F ST. GEORGE MUTUAL, LLC
19 CHAMBERLIN STREET
GREENVILLE, NH 03048
H.C.R.D. BK 9465, PG 2446

785

790

ENT.

EXISTING MILL STRUCTURE

TAX MAP 5N, LOT 132
SUBJECT PARCEL
MCKENAN PROPERTIES, LLC
100 CARL DRIVE UNIT #8
MANCHESTER, NH 03103
H.C.R.D. BK 9373, PG 827

LOADING AREA

CONC.

800

ENT.

CONC. STAIRS

COURT YARD AREA WITH OPEN ROOF

EXISTING MILL STRUCTURE
TAX MAP 5N, LOT 132–1
SUBJECT PARCEL
MCKENAN PROPERTIES, LLC
100 CARL DRIVE UNIT #8
MANCHESTER, NH 03103
H.C.R.D. BK 9373, PG 827

ENT. CONC.

ENT.

EXISTING STRUCTURE (TO BE REMOVED)

ENT.

CONC

10" CMP

790

800

EXISTING STRUCTURE

CHAMBERLIN STREET

810

97–1–6 NET&T CO

OHU

MAGNETIC

ABBREVIATION AND SYMBOL LEGEND

IPF	IRON PIPE FOUND
IRF	IRON ROD FOUND
IR(SET)	IRON TO BE SET
	UTILITY POLE
	DRAINAGE CATCH BASIN
	FIRE HYDRANT (TYP.)
	WATER VALVE (TYP.)
	SEWER MANHOLE (TYP.)
OHU	OVERHEAD UTILITIES (TYP.)
	EDGE OF GRAVEL
	GUARD RAIL (TYP.)
	STONE WALL (TYP.)
	WETLAND (TYP.)
	WATERFRONT BUFFER (TYP.)
	NHDES REF LINE (TYP.)
PL	PROPERTY LINE (TYP.)
	SHORELINE (TYP.)

PLAN SIZE:
FULL SIZE PLANS ARE 24x36
11x17 ARE APPROXIMATE HALF SCALES

FOR APPROVAL ONLY
NOT FOR CONSTRUCTION

OWNER:
MCKENAN PROPERTIES, LLC
100 CARL DRIVE
UNIT #8
MANCHESTER, NH. 03103

APPLICANT:
GEORGES REALTY, LLC
c/o WIL GEORGES
100 CARL DRIVE, 11a
MANCHESTER, NH. 03103

ECKMAN Engineering, LLC
1950 Lafayette Road Unit 210, PO Box 8025
Portsmouth, New Hampshire 03802
Phone: (603) 433–1354
Fax: (603) 433–2367

No.	DESCRIPTION	BY	DATE
	REVISIONS		
1	MISCELLANEOUS BUILDING & PLAN NOTE UPDATES	DEE	12/22

GREENVILLE HOUSE PRC – OLD MILL REHABILITATION

TOWN GREENVILLE, NEW HAMPSHIRE BRIDGE NO. ----

FEDERAL PROJECT ----- NHDOT PROJECT N/A

LOCATION TOWN OF GREENVILLE TAX MAP 5, LOTS 32 & 32–1
OLD MILL, CHAMBERLIN ST., GREENVILLE, HILLSBOROUGH, NH

OVERALL EXISTING COND. & OFFSITE PARKING PLAN

	BY	DATE		BY	DATE
DESIGNED	SRP	10/22	CHECKED	DEE	11/22
DRAWN	JJM	10/22	CHECKED	DEE	11/22
TRACED			CHECKED		
QUANTITIES			CHECKED		

EE PROJ. NO. 22–105

DWG FILE 22–105_ENG

REVIEWED BY:

NHDOT PROJ. NO. NA

EX–2

DOWNTOWN (D) DISTRICT: SITE DATA BLOCK			
DESCRIPTION	REQUIREMENT	EXISTING	PROPOSED
MAX. STORIES	2 1/2	2 1/2N/A	2 1/2
SIDE SETBACK	10'	38.84'±	38.84'
REAR SETBACK	10'	34.96'±	34.96'
FRONT SETBACK	NONE	N/A	N/A
MAX BLDG COVERAGE %	NONE	N/A	N/A
GREEN SPACE BELT WIDTH	NONE	N/A	N/A
MINIMUM GREEN SPACE	NONE	N/A	N/A
MINIMUM FRONTAGE ON TOWN SEWER LINE	35'	352.13'±	352.13'
MINIMUM FRONTAGE OFF TOWN SEWER LINE	N/A	N/A	N/A
MINIMUM AREA ON TOWN SEWER LINE	EXISITING	9,000 S.F.±	19,000 SF
MINIMUM AREA OFF TOWN SEWER LINE	N/A	N/A	N/A
GREENVILLE HOUSE PROCESS REHABILITATION CENTER (PRC) PARKING REQUIREMENTS	9 DIRECT CARE STAFF 6 THERAPISTS 3 CASE MANAGERS 3 DIRECTORS 7 SUPPORT STAFF 28 SPACES	16 SPACES	12 ON-SITE SPACES 20 OFF-SITE SPACES 32 SPACES PROVIDED

APPROVED BY THE
GREENVILLE, NH PLANNING BOARD

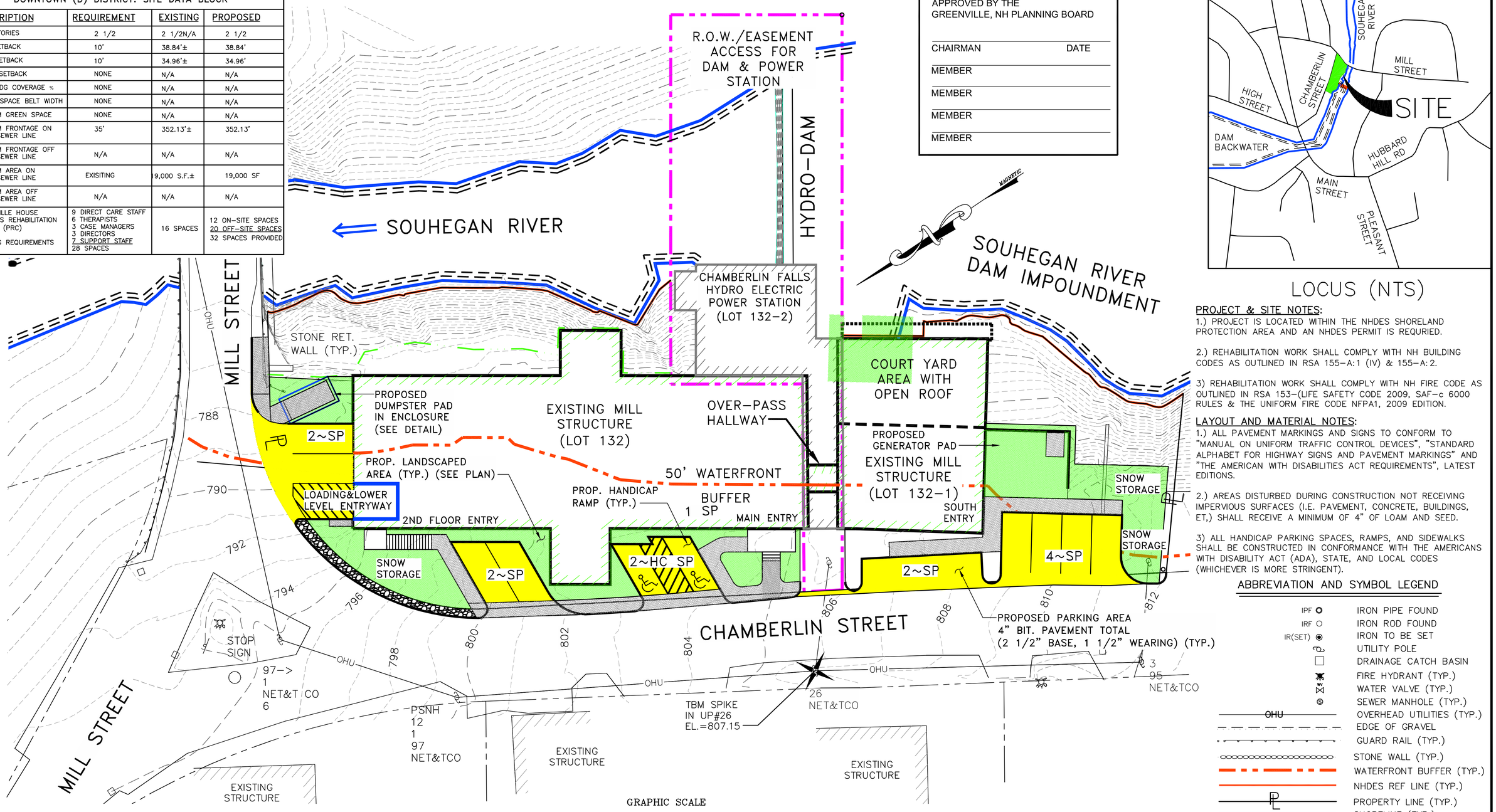
CHAIRMAN DATE

MEMBER

MEMBER

MEMBER

MEMBER



LOCUS (NTS)

GRAPHIC SCALE

15 0 7.5 15 30 60

(IN FEET)
1 inch = 15 ft.

NOTE:
35 PARKING SPACES PROVIDED (15 ON-SITE SPACES ALONG WITH 20 OFF-SITE SPACES RESERVED BY AGREEMENT ON TAX MAP 6, LOT 52 WHICH IS 250-FEET FROM ENTRANCE TO BUILDING).

PROJECT & SITE NOTES:

1.) PROJECT IS LOCATED WITHIN THE NHDES SHORELAND PROTECTION AREA AND AN NHDES PERMIT IS REQURIED.

2.) REHABILITATION WORK SHALL COMPLY WITH NH BUILDING CODES AS OUTLINED IN RSA 155-A:1 (IV) & 155-A:2.

3) REHABILITATION WORK SHALL COMPLY WITH NH FIRE CODE AS OUTLINED IN RSA 153-(LIFE SAFETY CODE 2009, SAF-c 6000 RULES & THE UNIFORM FIRE CODE NFPA1, 2009 EDITION.

LAYOUT AND MATERIAL NOTES:

1.) ALL PAVEMENT MARKINGS AND SIGNS TO CONFORM TO "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", "STANDARD ALPHABET FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS" AND "THE AMERICAN WITH DISABILITIES ACT REQUIREMENTS", LATEST EDITIONS.

2.) AREAS DISTURBED DURING CONSTRUCTION NOT RECEIVING IMPERVIOUS SURFACES (I.E. PAVEMENT, CONCRETE, BUILDINGS, ET,) SHALL RECEIVE A MINIMUM OF 4" OF LOAM AND SEED.

3) ALL HANDICAP PARKING SPACES, RAMPS, AND SIDEWALKS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE AMERICANS WITH DISABILITY ACT (ADA), STATE, AND LOCAL CODES (WHICHEVER IS MORE STRINGENT).

ABBREVIATION AND SYMBOL LEGEND

IPF	IRON PIPE FOUND
IRF	IRON ROD FOUND
IR(SET)	IRON TO BE SET
	UTILITY POLE
	DRAINAGE CATCH BASIN
	FIRE HYDRANT (TYP.)
	WATER VALVE (TYP.)
	SEWER MANHOLE (TYP.)
OHU	OVERHEAD UTILITIES (TYP.)
	EDGE OF GRAVEL
	GUARD RAIL (TYP.)
	STONE WALL (TYP.)
	WATERFRONT BUFFER (TYP.)
	NHDES REF LINE (TYP.)
PL	PROPERTY LINE (TYP.)
	SHORELINE (TYP.)

PLAN SIZE:
FULL SIZE PLANS ARE 24x36
11x17 ARE APPROXIMATE HALF SCALES

FOR APPROVAL ONLY
NOT FOR CONSTRUCTION

OWNER:
MCKENAN PROPERTIES, LLC
100 CARL DRIVE
UNIT #8
MANCHESTER, NH. 03103

CLIENT:
GEORGES REALTY, LLC
c/o WIL GEORGES
100 CARL DRIVE, 11a
MANCHESTER, NH. 03103

ECKMAN Engineering, LLC
1950 Lafayette Road Unit 210, PO Box 8025
Portsmouth, New Hampshire 03802
Phone: (603) 433-1354
Fax: (603) 433-2367

No.	DESCRIPTION	BY	DATE
	REVISIONS		
2	PER 12-7-22 PLANNING BOARD MTG COMMENTS	DEE	12/22
1	MISCELLANEOUS PARKING, PLAN & NOTE UPDATES	DEE	12/22

GREENVILLE HOUSE PRC – OLD MILL REHABILITATION

TOWN GREENVILLE, NEW HAMPSHIRE BRIDGE NO. ----

FEDERAL PROJECT ---- NHDOT PROJECT N/A

LOCATION TOWN OF GREENVILLE TAX MAP 5, LOTS 32 & 32-1
OLD MILL, CHAMBERLIN ST., GREENVILLE, HILLSBOROUGH, NH

SITE LAYOUT PLAN

	BY	DATE		BY	DATE
DESIGNED	SRP	10/22	CHECKED	DEE	11/22
DRAWN	JJM	10/22	CHECKED	DEE	11/22
TRACED			CHECKED		
QUANTITIES			CHECKED		

EE PROJ. NO. 22-105

DWG FILE 22-105_ENG

REVIEWED BY:

NHDOT PROJ. NO. NA

C-1

ABBREVIATION AND SYMBOL LEGEND

790.3 x — PROPOSED SPOT ELEVATION (TYP.)

PROPOSED LEACHING CATCH BASIN

CRUSHED STONE INLET PROTECTION

DRAINAGE FLOW ARROWS

CRUSHED STONE CHECK DAMS

SILT FENCE OR SILT SOCK

EDGE OF GRAVEL

GUARD RAIL (TYP.)

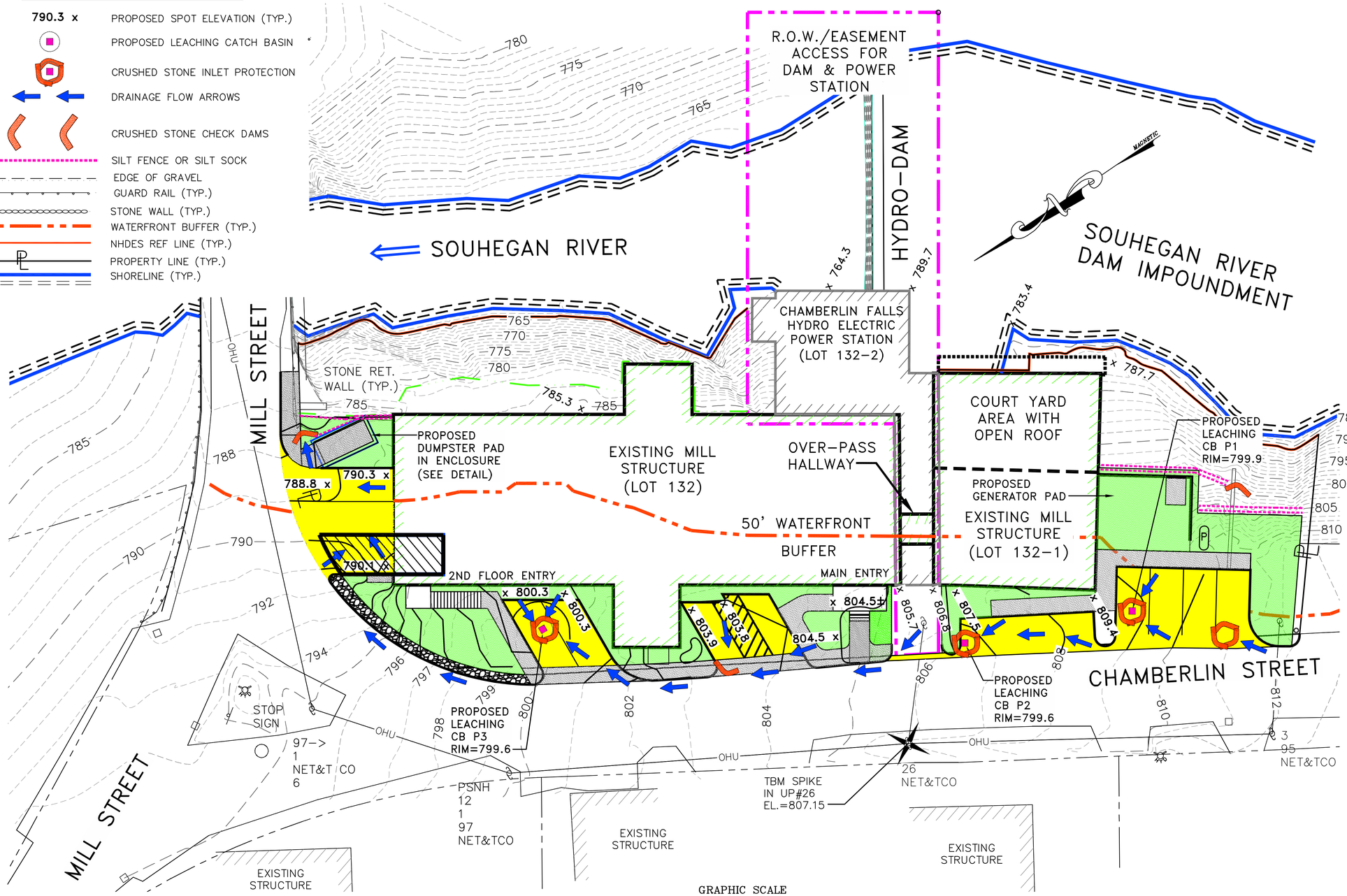
STONE WALL (TYP.)

WATERFRONT BUFFER (TYP.)

NHDES REF LINE (TYP.)

PROPERTY LINE (TYP.)

SHORELINE (TYP.)



GRAPHIC SCALE

15 0 7.5 15 30 60

(IN FEET)
1 inch = 15 ft.

GRADING NOTES

1.) LOW SPOTS CAUSING AREAS OF PONDING SHALL BE ELIMINATED AT TIME OF FINAL GRADING.

2.) PROPOSED RIM/GRATE ELEVATIONS ARE APPROXIMATE FINAL ELEVATIONS, TO BE SET FLUSH WITH FINISH GRADES. ADJUST ALL OF THE RIM ELEVATIONS AND VALVE COVERS TO FINISHED GRADE WITHIN LIMITS OF WORK.

3.) PRIOR TO STARTING ANY OTHER WORK ON SITE, THE CONTRACTOR SHALL NOTIFY APPROPRIATE AGENCIES AND SHALL INSTALL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS AND AS IDENTIFIED IN FEDERAL, STATE AND LOCAL APPROVAL DOCUMENTS PERTAINING TO THIS PROJECT.

4.) THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL CONSTRUCTION SUCH THAT SEDIMENTATION SHALL NOT AFFECT REGULATORY PROTECTED AREAS, REGARDLESS IF SEDIMENTATION IS CAUSED BY WATER, WIND OR DIRECT DEPOSIT.

5.) DUST SHALL BE CONTROLLED WITH WATER OR BY OTHER EFFECTIVE METHODS.

6.) AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:

A.) BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
B.) A MINIMUM 85% VEGETATED GROWTH HAS OCCURRED;
C.) A MINIMUM 3" OF NON-EROSIVE MATERIAL SUCH AS RIP RAP OR STONE HAS BEEN INSTALLED; OR
D.) EROSION CONTROL BLANKETS HAVE BEEN INSTALLED.

7.) THE CONTRACTOR SHALL PROVIDE TEMPORARY DIVERSION SWALES AND TEMPORARY SEDIMENTATION BASINS TO CONTROL SEDIMENTATION AND STORMWATER RUNOFF DURING THE CONSTRUCTION PERIOD, AND TO INSURE SURFACE WATER RUN-OFF FROM UNSTABILIZED AREAS DOES NOT CARRY SILT, SEDIMENT, AND DEBRIS OUTSIDE THE LIMITS OF WORK.

8.) EROSION CONTROL BLANKETS SHALL BE INSTALLED ON ALL SLOPES STEEPER THAN 3-FT HORIZONTAL TO 1-FT VERTICAL. EROSION CONTROL BLANKETS SHALL BE NORTH AMERICAN GREEN SC150RN, OR APPROVED EQUAL.

9.) STABILIZATION MEASURES SHALL BE INSTALLED WITHIN 72-HOURS OF ACHIEVING FINAL GRADE.

10.) PERMANENT SEEDING SHALL OCCUR BETWEEN APRIL 1 AND JUNE 1 AND/OR BETWEEN AUGUST 15 AND OCTOBER 15. ALL SEEDING AFTER AND INCLUDING OCTOBER 15 SHALL BE TEMPORARY SEED AND BE COVERED WITH HAY MULCH.

11.) UPON COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF PERMANENT GROUND COVER, THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL TEMPORARY EROSION CONTROL MEASURES AND CLEAN SEDIMENT AND DEBRIS FROM THE ENTIRE DRAINAGE SYSTEM.

PLAN SIZE:
FULL SIZE PLANS ARE 24x36
11x17 ARE APPROXIMATE HALF SCALES

FOR APPROVAL ONLY
NOT FOR CONSTRUCTION

OWNER:
MCKENAN PROPERTIES, LLC
100 CARL DRIVE
UNIT #8
MANCHESTER, NH. 03103

CLIENT:
GEORGES REALTY, LLC
c/o WIL GEORGES
100 CARL DRIVE, 11a
MANCHESTER, NH. 03103

ECKMAN Engineering, LLC
1950 Lafayette Road Unit 210, PO Box 8025
Portsmouth, New Hampshire 03802
Phone: (603) 433-1354
Fax: (603) 433-2367

No.	DESCRIPTION REVISIONS	BY	DATE

GREENVILLE HOUSE PRC – OLD MILL REHABILITATION

TOWN GREENVILLE, NEW HAMPSHIRE — BRIDGE NO. ----

FEDERAL PROJECT ---- — NHDOT PROJECT N/A

LOCATION TOWN OF GREENVILLE TAX MAP 5, LOTS 32 & 32-1
OLD MILL, CHAMBERLIN ST., GREENVILLE, HILLSBOROUGH, NH

GRADING, DRAINAGE, EROS. & SED. CONTROL PLAN

	BY	DATE		BY	DATE
DESIGNED	SRP	10/22	CHECKED	DEE	11/22
DRAWN	JJM	10/22	CHECKED	DEE	11/22
TRACED	----		CHECKED		
QUANTITIES			CHECKED		

EE PROJ. NO. 22-105

DWG FILE 22-105_ENG

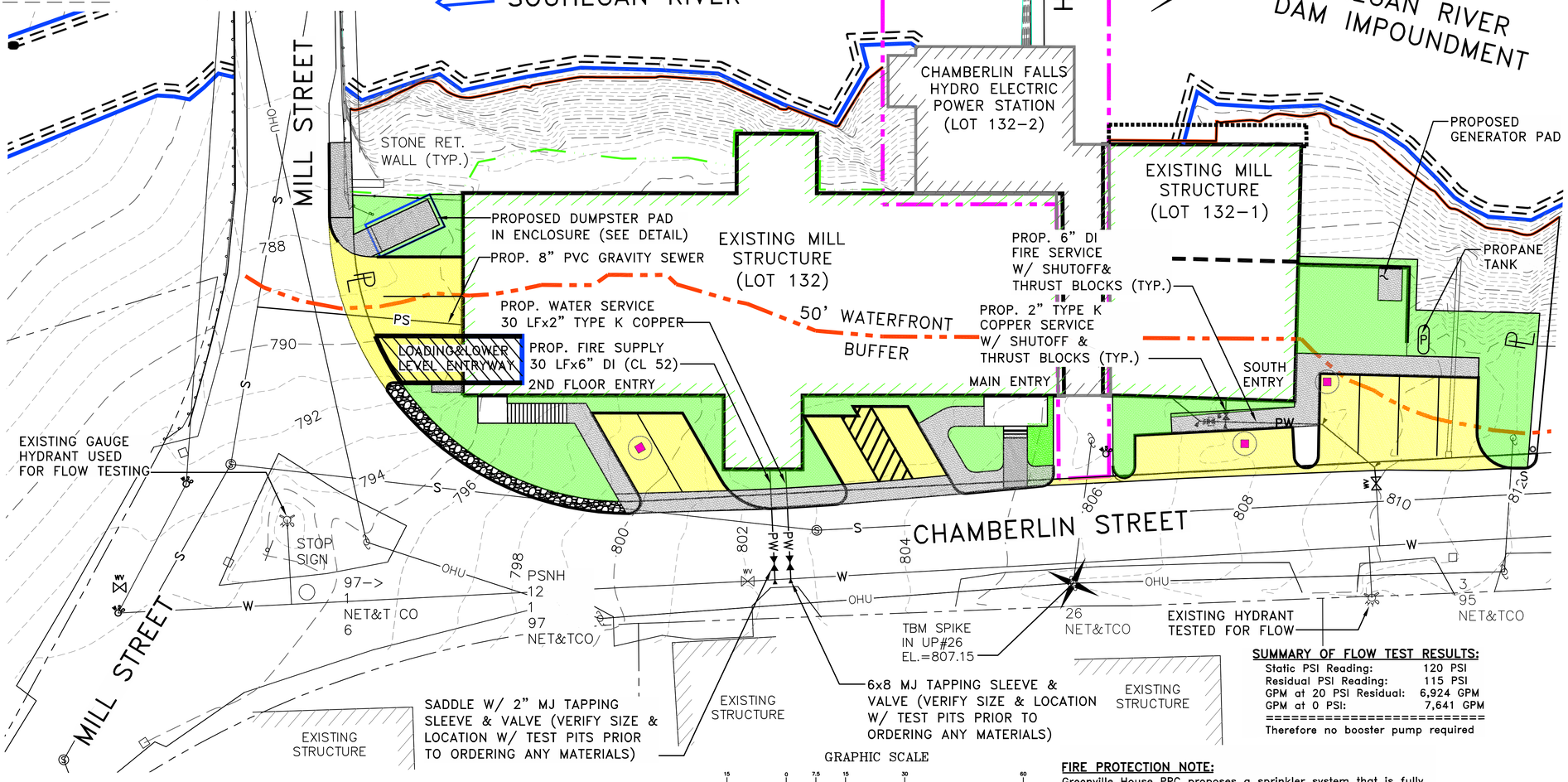
REVIEWED BY:

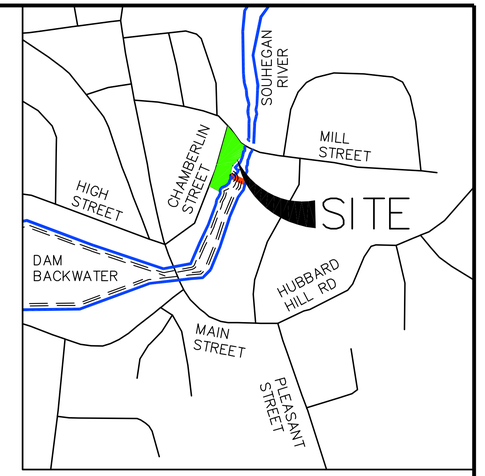
NHDOT PROJ. NO. NA

C-2

ABBREVIATION AND SYMBOL LEGEND

- IPF — IRON PIPE FOUND
- IRF — IRON ROD FOUND
- IR(SET) — IRON TO BE SET
- UTILITY POLE
- DRAINAGE CATCH BASIN
- FIRE HYDRANT (TYP.)
- WATER VALVE (TYP.)
- SEWER MANHOLE (TYP.)
- OHU — OVERHEAD UTILITIES (TYP.)
- EDGE OF GRAVEL
- GUARD RAIL (TYP.)
- STONE WALL (TYP.)
- WATERFRONT BUFFER (TYP.)
- NHDES REF LINE (TYP.)
- PL — PROPERTY LINE (TYP.)
- SHORELINE (TYP.)





LOCUS (NTS)

GRAPHIC SCALE

15 0 7.5 15 30 60

(IN FEET)
1 inch = 15 ft.

SUMMARY OF FLOW TEST RESULTS:

Static PSI Reading:	120 PSI
Residual PSI Reading:	115 PSI
GPM at 20 PSI Residual:	6,924 GPM
GPM at 0 PSI:	7,641 GPM

Therefore no booster pump required

FIRE PROTECTION NOTE:

Greenville House PRC proposes a sprinkler system that is fully compliant with NH Fire Code which per RSA 153 must adhere to: Life Safety Code 2009, Saf-C 6000 Rules & the Uniform Fire Code NFPA1, 2009 edition and potentially other municipal code where in all cases the most stringent code shall apply.

UTILITY NOTES

1.) CONTRACTOR SHALL COORDINATE ALL UTILITY PENETRATIONS (ELEVATIONS, LOCATIONS) AND UTILITY SIZES WITH ARCHITECTURAL PLANS AND LICENSED MEP CONTRACTORS OR PROJECT TEAM CONSULTANTS

2.) THE LOCATIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE AND HAVE NOT BEEN FIELD VERIFIED BY THE OWNER OR ITS REPRESENTATIVES. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND SHALL BE FULLY RESPONSIBLE FOR ANY DAMAGES WHICH MAY OCCUR BY THE CONTRACTORS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY UNDERGROUND UTILITIES. ALL REPAIRS SHALL BE MADE AT THE CONTRACTORS EXPENSE.

3.) THE CONTRACTOR SHALL NOTIFY "DIGSAFE" AT 1-888-344-7233 AT LEAST 72 HOURS IN ADVANCE AND WAIT UNTIL ALL UTILITIES HAVE MARKED ON THE SITE PRIOR TO ANY EXCAVATION.

4.) THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION, SIZE, INVERTS, AND TYPES OF EXISTING PIPES AT ALL PROPOSED POINTS OF CONNECTION PRIOR TO ORDERING MATERIALS. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK THE LOCATION, SIZE, MATERIAL AND ELEVATION OF THE UTILITY SHALL BE DETERMINED WITHOUT DELAY BY THE CONTRACTOR AND FURNISHED TO OWNERS REPRESENTATIVES IN WRITING FOR THE RESOLUTION OF THE CONFLICT.

5.) THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS AND BE RESPONSIBLE FOR PAYING ALL FEES FOR ANY ALTERATION, MOVEMENT, OR ADJUSTMENT OF GAS, ELECTRIC, TELECOMMUNICATIONS, CABLE TV, FIRE ALARM, WATER, SEWER OR ANY OTHER PUBLIC OR PRIVATE UTILITY.

6.) ALL PROPOSED ONSITE UTILITIES SHALL BE UNDERGROUND EXCEPT POWER, INTERNET, FIRE ALARM & CABLE.

7.) THE LOCATION, DEPTH, SIZE AND SPECIFICATIONS FOR CONSTRUCTION OF PROPOSED PRIVATE UTILITY SERVICES SHALL BE ACCORDING TO THE REQUIREMENTS PROVIDED BY AND APPROVED BY, THE RESPECTIVE UTILITY (GAS, TELEPHONE, ELECTRIC AND FIRE ALARM) AND IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY THIS INFORMATION PRIOR TO CONSTRUCTION.

8.) UTILITY MATERIALS SHALL BE, UNLESS OTHERWISE NOTED:

A) SEWER: GRAVITY SEWER (8" SCH. 40) POLYVINYL CHLORIDE (PVC)

B) WATER:
==>FIRE-6" CLASS 52 DUCTILE IRON (ANSI/AWWA C151/A21.51) WITH DUCTILE IRON FITTINGS (ANSI/AWWA C110/A21.10)
==>FACILITY SERVICE-2" 200PSI (MUNICIPEX SDR9) (ASTMF876).

PLAN SIZE:
FULL SIZE PLANS ARE 24x36
11x17 ARE APPROXIMATE HALF SCALES

FOR APPROVAL ONLY
NOT FOR CONSTRUCTION

OWNER:
MCKENAN PROPERTIES, LLC
100 CARL DRIVE
UNIT #8
MANCHESTER, NH. 03103

CLIENT:
GEORGES REALTY, LLC
c/o WIL GEORGES
100 CARL DRIVE, 11a
MANCHESTER, NH. 03103

ECKMAN Engineering, LLC
1950 Lafayette Road Unit 210, PO Box 8025
Portsmouth, New Hampshire 03802
Phone: (603) 433-1354
Fax: (603) 433-2367

No.	DESCRIPTION	BY	DATE
	REVISIONS		
1	MISCELLANEOUS PARKING, PLAN & NOTE UPDATES	DEE	12/22

GREENVILLE HOUSE PRC - OLD MILL REHABILITATION

TOWN GREENVILLE, NEW HAMPSHIRE — BRIDGE NO. ----
FEDERAL PROJECT ---- — NHDOT PROJECT N/A
LOCATION TOWN OF GREENVILLE TAX MAP 5, LOTS 32 & 32-1
OLD MILL, CHAMBERLIN ST., GREENVILLE, HILLSBOROUGH, NH

UTILITY PLAN

	BY	DATE
DESIGNED	SRP	10/22
DRAWN	JJM	10/22
TRACED		
QUANTITIES		

	BY	DATE
CHECKED	DEE	11/22
CHECKED	DEE	11/22
CHECKED		
CHECKED		

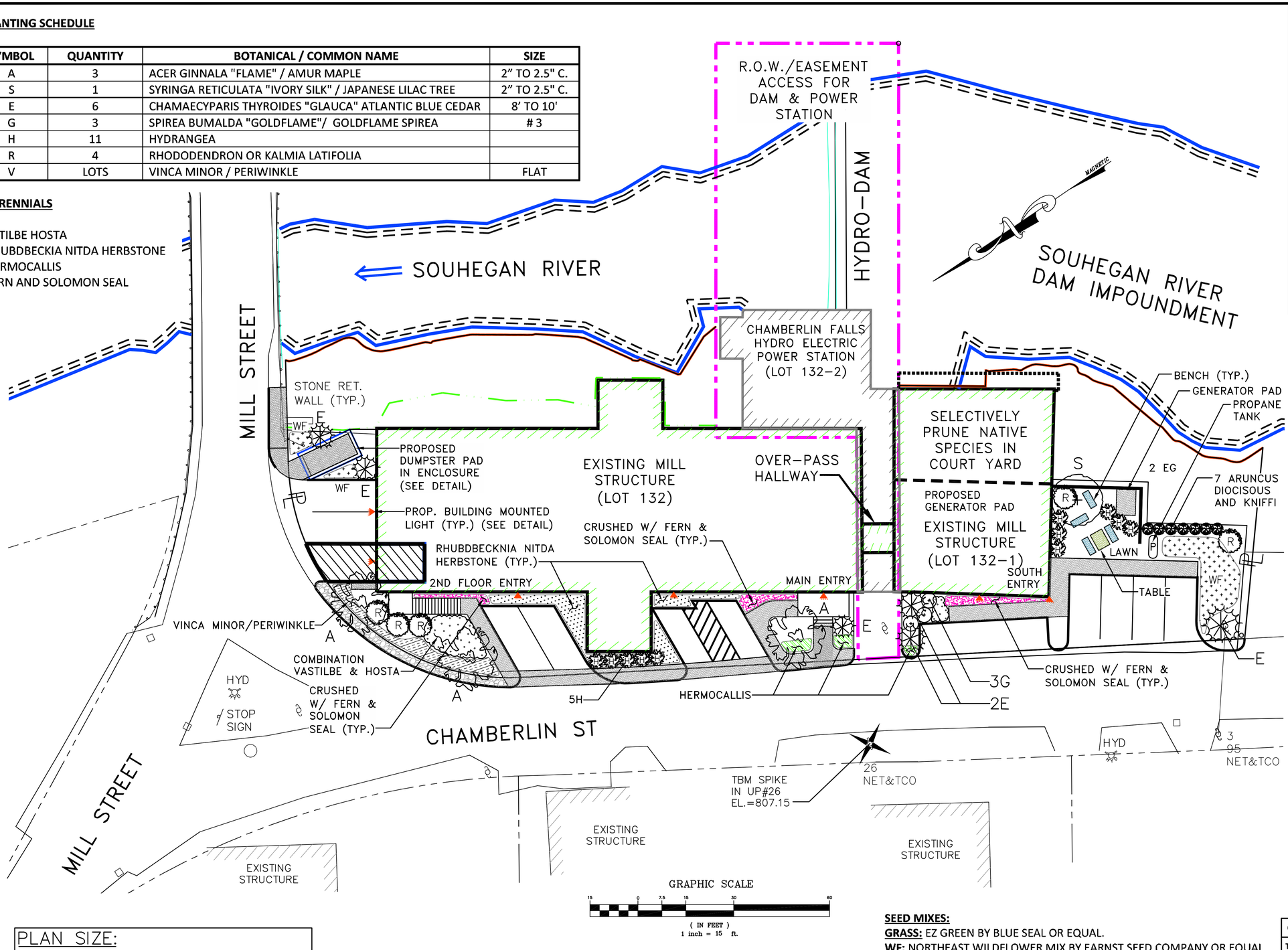
EE PROJ. NO. 22-105
DWG FILE 22-105_ENG
REVIEWED BY:
NHDOT PROJ. NO. NA
C-3

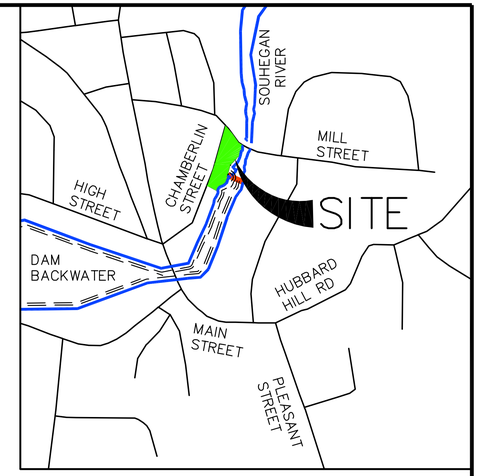
PLANTING SCHEDULE

SYMBOL	QUANTITY	BOTANICAL / COMMON NAME	SIZE
A	3	ACER GINNALA "FLAME" / AMUR MAPLE	2" TO 2.5" C.
S	1	SYRINGA RETICULATA "IVORY SILK" / JAPANESE LILAC TREE	2" TO 2.5" C.
E	6	CHAMAECYPARIS THYROIDES "GLAUCA" ATLANTIC BLUE CEDAR	8' TO 10'
G	3	SPIREA BUMALDA "GOLDFLAME"/ GOLDFLAME SPIREA	# 3
H	11	HYDRANGEA	
R	4	RHODODENDRON OR KALMIA LATIFOLIA	
V	LOTS	VINCA MINOR / PERIWINKLE	FLAT

PERENNIALS

ASTILBE HOSTA
RHUBDBECKIA NITDA HERBSTONE
HERMOCALLIS
FERN AND SOLOMON SEAL





LOCUS (NTS)

GRAPHIC SCALE
15 0 7.5 15 30 60
(IN FEET)
1 inch = 15 ft.

PLANTING NOTES:

1.) AREAS DISTURBED DURING CONSTRUCTION NOT RECEIVING IMPERVIOUS SURFACES (I.E. PAVEMENT, CONCRETE, BUILDINGS, ET,) SHALL RECEIVE A MINIMUM OF 4" OF LOAM AND SEED.

2. CONTRACTOR TO REMOVE ALL DEBRIS GENERATED BY PLANT INSTALLATION. DEBRIS TO BE DISPOSED OF IN A LEGAL MANNER.

3. ALL PLANT MATERIAL SHALL BE GUARANTEED TO BE IN GOOD, HEALTHY & FLOURISHING CONDITION FOR ONE YEAR FROM THE DATE OF FINAL INSTALLATION APPROVAL BY L.A. CONTRACTOR SHALL REPLACE, WITHOUT COST TO OWNER, AND AS SOON AS WEATHER CONDITIONS PERMIT, ALL DEAD AND NON-FLOURISHING PLANTS AS DETERMINED BY THE L.A. REPLACEMENT PLANTS SHALL BE BE GUARANTEED IDENTICALLY TO ORIGINAL PLANTS, TIME PERIOD COMMENCING FROM DATE OF REPLACEMENT PLANTING APPROVAL BY L.A.

4. ALL BEDS TO BE MULCHED WITH 4" DEPTH SHREDDED BARK MULCH UNLESS NOTED OTHERWISE.

5. CONTRACTOR TO PROVIDE NECESSARY TEMPORARY IRRIGATION IF NEEDED BASED ON TIME OF YEAR THE PROJECT IS IMPLEMENTED.

6. SEE SHEET C-4 FOR LAYOUT OF PLANT MATERIAL.

ABBREVIATION AND SYMBOL LEGEND

IPF	IRON PIPE FOUND
IRF	IRON ROD FOUND
IR(SET)	IRON TO BE SET
	UTILITY POLE
	DRAINAGE CATCH BASIN
	FIRE HYDRANT (TYP.)
WV	WATER VALVE (TYP.)
S	SEWER MANHOLE (TYP.)
OHU	OVERHEAD UTILITIES (TYP.)
	EDGE OF GRAVEL
	GUARD RAIL (TYP.)
	STONE WALL (TYP.)
	WATERFRONT BUFFER (TYP.)
	NHDES REF LINE (TYP.)
PL	PROPERTY LINE (TYP.)
	SHORELINE (TYP.)

PLAN SIZE:
FULL SIZE PLANS ARE 24x36
11x17 ARE APPROXIMATE HALF SCALES

FOR APPROVAL ONLY
NOT FOR CONSTRUCTION

SEED MIXES:
GRASS: EZ GREEN BY BLUE SEAL OR EQUAL.
WF: NORTHEAST WILDFLOWER MIX BY EARNST SEED COMPANY OR EQUAL

OWNER:
MCKENAN PROPERTIES, LLC
100 CARL DRIVE
UNIT #8
MANCHESTER, NH. 03103

CLIENT:
GEORGES REALTY, LLC
c/o WIL GEORGES
100 CARL DRIVE, 11a
MANCHESTER, NH. 03103

ECKMAN Engineering, LLC
1950 Lafayette Road Unit 210, PO Box 8025
Portsmouth, New Hampshire 03802
Phone: (603) 433-1354
Fax: (603) 433-2367

No.	DESCRIPTION	BY	DATE
	REVISIONS		
1	PER 12-7-22 PLANNING BOARD MTG COMMENTS	DEE	12/22

GREENVILLE HOUSE PRC – OLD MILL REHABILITATION
TOWN GREENVILLE, NEW HAMPSHIRE BRIDGE NO. ----
FEDERAL PROJECT ---- NHDOT PROJECT N/A
LOCATION TOWN OF GREENVILLE TAX MAP 5, LOTS 32 & 32-1
OLD MILL, CHAMBERLIN ST., GREENVILLE, HILLSBOROUGH, NH

LANDSCAPING & LIGHTING PLAN

	BY	DATE		BY	DATE
DESIGNED	SRP	10/22	CHECKED	DEE	11/22
DRAWN	JJM	10/22	CHECKED	DEE	11/22
TRACED			CHECKED		
QUANTITIES			CHECKED		

EE PROJ. NO. 22-105
DWG FILE 22-105_ENG
REVIEWED BY:
NHDOT PROJ. NO. NA
C-4

PROJECT NAME AND LOCATION

GREENVILLE HOUSE PRC (PROCESS RECOVERY CENTER)
OLD MILL, 21 CHAMBERLIN STREET, GREENVILLE, NEW HAMPSHIRE 03048
TAX MAP 5, LOTS 32 & 32–1
HILLSBOROUGH COUNTY NEW HAMPSHIRE

DISTURBED AREA

The total area to be disturbed is approximately 9,000 SF (0.2067± acres).

SEQUENCE OF MAJOR ACTIVITIES

1. Install temporary erosion control silt socks, inlet protection, and construction entrance.
2. Complete building demolition & pavement removal activities.
3. Grub brush grass to minimum limits required to complete construction activities.
4. Complete fine grading and install leaching catchbasins.
5. Construct drives, pull–offs and parking area base courses.
6. Adjust silt socks & silt fence as required. Install stone check dams in ditches & at inlets.
7. Complete installation of walkways, landscaping and lighting.
8. Complete paving, loam placement, and seed all disturbed areas.
9. When permanent erosion control measures are in place and/or all construction activity is complete and site is stabilized, remove temporary erosion control measures and all sediment that has been trapped by these devices.

EROSION AND SEDIMENT CONTROLS AND STABILIZATION PRACTICES

Stabilization shall be initiated on all loam stockpiles and disturbed areas where construction activity will not occur for more than twenty one (21) calendar days by the third (3) day after construction activity has permanently or temporarily ceased in that area.
Stabilization measures to be used include:

a. Temporary seeding.
b. Mulching.
c. Stone rip rap.

During construction, runoff will be diverted around the site with earth dikes, piping or stabilized channels where possible. Sheet runoff from the site will be filtered through straw bale barriers and/or silt fences. Concentrated runoff will be directed through stone check dams wrapped in medium weight geosynthetic filter fabric. All storm drain inlets shall be provided with barrier filters (silt sacks). Riprap shall be provided at the outlets of drainage pipes where erosive velocities are encountered. All erosion control measures shall be stabilized prior to directing runoff to them.

INSTALLATION, MAINTENANCE AND INSPECTION PROCEDURES OF EROSION AND SEDIMENT CONTROLS

A. GENERAL

These are the general inspection and maintenance practices that will be used to implement the plan.

- The smallest practical portion of the site will be denuded at one time. At no time shall the total disturbed area be greater than 5 acres
- All control measures will be inspected daily or as required and following any storm event of 0.5 inches or greater.
- All measures will be maintained in good working order; if a repair is necessary, it will be initiated within 24 hours of report.
- Built up sediment will be removed from silt fence or straw bale barriers when it has reached one third the height of the fence or bale.
- All diversion dikes will be inspected and any breaches promptly repaired.
- Temporary seeding and planting will be inspected for bare spots, washouts, and unhealthy growth.
- A maintenance inspection report will be made after each inspection.
- The Contractor's site superintendent will be responsible for inspections, maintenance and repair activities, and filling out the inspection and maintenance report.
- An Owner's Representative shall inspect the site on a periodic basis to assure compliance with the Plan.

B. FILTERS

1. Straw Bales
   a. Sheet Flow Applications
      1. Bales shall be placed in a single row, lengthwise on the contour, with ends of adjacent bales tightly abutting one another.
      2. All bales shall be either wire–bound or string–tied. Bales shall be installed so that bindings are oriented around the sides rather than along the tops and bottoms of the bales to prevent deterioration of the bindings.
      3. The barrier shall be entrenched and backfilled. A trench shall be excavated the width of a bale and the length of the proposed barrier to a minimum depth of four (4) inches. After the bales are staked and chinked, the excavated soil shall be backfilled against the barrier. Backfill soil shall conform to the ground level on the downhill side and shall be built up to four (4) inches against the uphill side of the barrier. Ideally, bales should be placed ten (10) feet away from the toe of slope.
      4. Each bale shall be securely anchored by at least two (2) stakes or rebars driven through the bale. The first sake in each bale shall be driven toward the previously laid bale to force the bales together. Stakes or re–bars shall be driven deep enough into the ground to securely anchor the bales.
      5. The gaps between bales shall be chinked (filled by wedging) with straw to prevent water from escaping between the bales.
2. Silt Fence
   a. Synthetic filter fabric shall be a pervious sheet of propylene, nylon, polyester or ethylene yarn and shall be certified by the manufacturer or supplier as conforming to the following requirements:

Physical Property	Test	Requirements
Filtering Efficiency	VTM–51	75% minimum
Tensile Strength at 20% Maximum Elongation*	VTM–52	Extra Strength 50 lb/lin in (min) Standard Strength 30 lb/lin in (min)
Flow Rate	VTM–51	0.3 gal/sf/min (min)

* Requirements reduced by 50 percent after six (6) months of installation.

Synthetic filter fabric shall contain ultraviolet ray inhibitors and stabilizers to provide a minimum of six (6) months of expected usable

   b. The height of a silt fence shall not exceed thirty–six (36) inches.
   c. The filter fabric shall be purchased in a continuous roll cut to the length of the barrier to avoid the use of joints. When joints are necessary, filter cloth shall be spliced together only at support post, with a minimum six (6) inch overlap, and securely sealed.
   d. Posts shall be spaced a maximum of ten (10) feet apart at the barrier location and driven securely into the ground (minimum of 16 inches).
   e. A trench shall be excavated approximately six (6) inches wide and six (6) inches deep along the line of posts and upslope from the barrier.
   f. When standard strength filter fabric is used, a wire mesh support fence shall be fastened securely to the upslope side of the posts using heavy duty wire staples at least one (1) inch long, tie wires or hog rings. The wire shall extend no more than 36 inches above the original ground surfaces.
   g. The "standard strength" filter fabric shall be stapled or wired to the fence, and eight (8) inches of the fabric shall be extended into the trench. The fabric shall not extend more than 36 inches above the original ground surface. Filter fabric shall not be stapled to existing trees.
   h. When extra strength filter fabric and closer post spacing are used, the wire mesh support fence may be eliminated. In such a case, the filter fabric is stapled or wired directly to the posts with all other provisions of item (g) applying.
   i. The trench shall be backfilled and the soil compacted over the filter fabric.
   j. Silt fences shall be removed when they have served their useful purpose, but not before the upslope areas have been permanently stabilized.
3. Sequence of Installation

   Sediment barriers shall be installed prior to any soil disturbance of the contributing drainage area above them.
4. Maintenance
   a. Straw bale barrier and silt fence barriers shall be inspected immediately after each rainfall and at least daily during prolonged rainfall. They shall be repaired if there are any signs of erosion or sedimentation below them. Any required repairs shall be made immediately. If there are signs of undercutting at the center or the edges, or impounding of large volumes of water behind them, sediment barriers shall be replaced with a temporary check dam.
   b. Should the fabric on a silt fence or filter barrier decompose or become ineffective prior to the end of the expected usable life and the barrier still is necessary, the fabric shall be replaced promptly.
   c. Sediment deposits should be removed after each storm event. They must be removed when deposits reach approximately one third (1/3) the height of the barrier.
   d. Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required shall be dressed to conform with the existing grade, prepared and seeded.

C. MULCHING

1. Timing

   In order for mulch to be effective, it must be in place prior to major storm events. There are two (2) types of standards which shall be used to assure this.
   a. Apply mulch prior to any storm event.

      This is applicable when working within 100 feet of wetlands. It will be necessary to closely monitor weather predictions, usually by contacting the National Weather Service in Concord, to have adequate warning of significant storms.
   b. Required Mulching within a specified time period.

      All cut and fill slopes require a minimum of 4 inches of loam and shall be seeded and mulched within 72 hours of their construction.
2. Guidelines for Winter Mulch Application.

   When mulch is applied to provide protection over winter (past the growing season) it shall be at a rate of 6,000 pounds of hay or straw per acre. A tackifier may be added to the mulch.
3. Maintenance

   All mulches must be inspected periodically, in particular after rainstorms, to check for rill erosion. If less than 90% of the soil surface is covered by mulch, additional mulch shall be immediately applied.

D. TEMPORARY GRASS COVER

1. Seedbed Preparation

   Apply fertilizer at the rate of 600 pounds per acre of 10–10–10. Apply limestone (equivalent to 50 percent calcium plus magnesium oxide) at a rate of three (3) tons per acre.
2. Seeding
   a. Utilize annual rye grass at a rate of 40 lbs/acre.
   b. Where the soil has been compacted by construction operations, loosen soil to a depth of two (2) inches before applying fertilizer, lime and seed.
   c. Apply seed uniformly by hand, cyclone seeder, or hydroseeder (slurry including seed and fertilizer). Hydroseedings, which include mulch, may be left on soil surface. Seeding rates must be increased 10% when hydroseeding.
3. Maintenance

   Temporary seedings shall be periodically inspected. At a minimum, 95% of the soil surface should be covered by vegetation. If any evidence of erosion or sedimentation is apparent, repairs shall be made and other temporary measures used in the interim (mulch, filter barriers, check dams, etc.).

E. PERMANENT GRASS COVER

1. Seedbed Preparation

   Slopes shall not be steeper than 2:1 with 3:1 or steeper slopes preferred. Surface and seepage water shall be drained or diverted from the site. Stones larger than 4" and trash shall be removed from the site. Till soil to a depth of 4" to prepare seedbed and mix fertilizer and lime into soil.
2. Establishing a Stand
   a. Apply fertilizer at the rate of 500 pounds per acre of 10–20–20. Apply agricultural limestone at a rate of two (2) tons per acre.
   b. Seed type shall be a mixture of Tall Fescue, Creeping Red Fescue, and Redtop at a total seed rate of 42 pounds per acre. The seed distribution shall be:
      Tall Fescue = 20 pounds per acre,
      Creeping Red Fescue = 20 pounds per acre,
      Redtop = 2 pounds per acre,
   c. Seed should be spread uniformly by appropriate method based on site including, broadcasting, drilling, and hydroseeding. Cover seed with 0.25" of soil when broadcasting is incorporated.
   d. Seeded areas shall be mulched with straw to allow planting from early spring to early October. Mulch shall be held in place using appropriate techniques from the Best Management Practice for mulching.
3. Maintenance

   Planted areas shall be protected from damage by fire, grazing, traffic, and dense weed growth. Waterways, channels, and swales may require occasional mowing to control growth of woody vegetation.

WINTER NOTES

The following are the winter erosion control practices implemented to protect the areas of disturbance during the winter period.

- All proposed vegetated areas which do not exhibit a minimum of 85% vegetative growth by October 15th, or which are disturbed after October 15th, shall be stabilized by seeding and installing erosion control blankets on slopes greater than 3:1, and seeding and placing 3 to 4 tons of mulch per acre, secured with anchored netting, elsewhere. The installation of erosion control blankets or mulch and netting shall not occur over accumulated snow or on frozen ground and shall be completed in advance of thaw or spring melt events.
- All ditches or swales which do not exhibit a minimum of 85% vegetative growth by October 15th, or which are disturbed after October 15th, shall be stabilized temporarily with stone or erosion control blankets appropriate for the design flow conditions.
- After November 15th, incomplete road or parking surfaces, where work has stopped for the winter season, shall be protected with a minimum of 3 inches of crushed gravel per NHDOT Item 304.3.

WASTE DISPOSAL

A. WASTE MATERIALS

All waste materials will be collected and stored in securely lidded receptacles. All trash and construction debris from the site will be deposited in a dumpster. No construction waste materials will be buried on site. All personnel will be instructed regarding the correct procedure for waste disposal by the superintendent.

B. HAZARDOUS WASTE

All hazardous waste materials will be disposed of in the manner specified by local or state regulation or by the manufacturer. Site personnel will be instructed in these practices by the superintendent.

C. SANITARY WASTE

All sanitary waste will be collected from the portable units a minimum of once per week by a licensed sanitary waste management contractor.

SPILL PREVENTION

A. MATERIAL MANAGEMENT PRACTICES

The following are the material management practices that will be used to reduce the risk of spills or other accidental exposure of materials and substances during construction to stormwater runoff:

Good Housekeeping:

The following good housekeeping practices will be followed on site during the construction project:

- An effort will be made to store only sufficient amounts of products to do the job.
- All materials stored on site will be stored in a neat, orderly manner in their proper (original if possible) containers and, if possible, under a roof or other enclosure.
- Manufacturer's recommendations for proper use and disposal will be followed.
- The site superintendent will inspect daily to ensure proper use and disposal of materials.
- Substances will not be mixed with one another unless recommended by the manufacturer.
- Whenever possible all of a product will be used up before disposing of the container.

Hazardous Products:

The following practices will be used to reduce the risks associated with hazardous materials:

- Products will be kept in their original containers unless they are not resealable.
- Original labels and material safety data will be retained for important product information.
- Surplus product that must be disposed of will be discarded according to the manufacturer's recommended methods of disposal.

B. PRODUCT SPECIFICATION PRACTICES

The following product specific practices will be followed on site:

Petroleum Products:

All on site vehicles will be monitored for leaks and receive regular preventive maintenance to reduce leakage. Petroleum products will be stored in tightly sealed containers which are clearly labeled. Any asphalt based substances used on site will be applied according to the manufacturer's recommendations.

Fertilizers:

Fertilizers used will be applied only in the minimum amounts directed by the specifications. Once applied, fertilizer will be worked into the soil to limit exposure to stormwater. Storage will be in a covered shed or enclosed trailers. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.

Paints:

All containers will be tightly sealed and stored when not required for use. Excess paint will not be discharged to the storm sewer system but will be disposed of properly according to manufacturer's instructions or state and local regulations.

Concrete Trucks:

Concrete trucks will discharge and wash out surplus concrete or drum wash water in a contained area on site.

C. SPILL CONTROL PRACTICES

In addition to good housekeeping and material management practices discussed in the previous section the following practices will be followed for spill prevention and cleanup:

- Manufacturer's recommended methods for spill cleanup will be clearly posted and site personnel will be made aware of the procedures and the location of the information and cleanup supplies.
- Materials and equipment necessary for spill cleanup will be kept in the material storage area on site. Equipment and materials will include but not be limited to brooms, dustpans, mops, rags, gloves, goggles, kitty litter, sand, sawdust and plastic or metal trash containers specifically for this purpose.
- All spills will be cleaned up immediately after discovery.
- The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- Spills of toxic or hazardous material will be reported to the appropriate state or local government agency, regardless of the size.
- The spill prevention plan will be adjusted to include measures to prevent this type of spill from recurring and how to cleanup the spill if it recurs. A description of the spill, its cause, and the cleanup measures will be included.
- The site superintendent responsible for day–to–day site operations will be the spill prevention and cleanup coordinator.

TIMING OF CONTROLS/MEASURES

As indicated in the sequence of Major Activities the straw bales and/or silt fences shall be installed prior to commencing any clearing or grading of the site. Structural controls shall be installed concurrently with the applicable activity. Areas where construction activity temporarily ceases for more than twenty one (21) days will be stabilized with a temporary seed and mulch within three (3) days of the last disturbance. Permanent stabilization measures shall be installed within 72 hours of achieving final grade. Once construction activity ceases permanently in an area, silt fences and/or straw bale barriers and any earth/dikes will be removed once permanent measures are established. Disturbed area resulting from the silt fence and/or straw bale barriers shall be permanently seeded and all accumulated sediment properly disposed of.

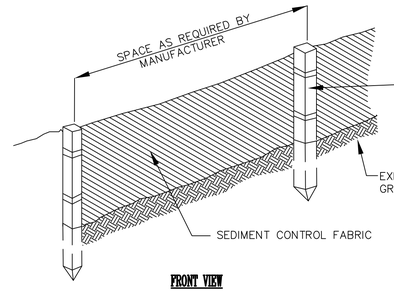
SPECIAL NOTES:

1. An area shall be considered stable if one of the following has occured:
   a) Base course gravels have been installed in areas to be paved,
   b) A minimum of 85% vegetated growth has been established,
   c) Permanent stone lining has been properly installed,
   d) Erosion control blankets have been properly installed.

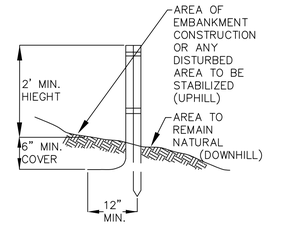
1. Any top soil, fill material (free from organic material), or debris stock–piled on–site shall have a temporary silt fence placed around it. this sediment barrier shall be constructed in accordance with details provided or as specified within the construction documents.

2. The erosion and sediment control program was designed based upon the site plans prepared by Eckman Engineering, LLC. if design revisions occur, the program proposed shall be revised accordingly.

3. The contractor's superintendent shall monitor the erosion control measures daily. repairs and/or adjustments to the system shall be made immediately as required to insure proper function of the measures.



FRONT VIEW

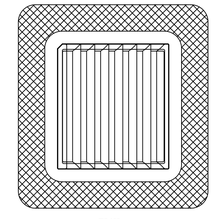


SIDE VIEW

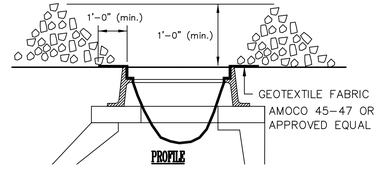
NOTES:

1. THE GEOTEXTILE FABRIC SHALL MEET THE DESIGN CRITERIA FOR BEST MANAGEMENT PROACTICE FOR SILT FENCES, OF THE "STORMWATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE" PREPARED BY ROCKINGHAM COUNTY CONSERVATION DISTRICT, DATE AUGUST 1992.
2. THE HEIGHT OF THE BARRIER SHALL NOT EXCEED 36 INCHES.
3. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6–INCH OVERLAP, AND SECURELY SEALED. SEE MANUFACTURER'S RECOMMENDATIONS.
4. POSTS SHALL BE SPACED A MAXIMUM OF 10 FEET APART AT THE BARRIER LOCATION AND DRIVEN SECURELY INTO THE GROUND (MINIMUM OF 16 INCHES). WHEN EXTRA STRENGTH FABRIC IS USED WITHOUT THE WIRE SUPPORT FENCE, POST SPACING SHALL BE AS MANUFACTURER RECOMMENDS.
5. A TRENCH SHALL BE EXCAVATED APPROXIMATELY 6 INCHES WIDE AND 6 INCHES DEEP ALONG THE LINE OF POSTS AND UPSLOPE FROM THE BARRIER IN ACCORDANCE WITH RECOMMENDATIONS.
6. THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE, AND WILL EXTEND TO A MINIMUM OF 8 INCHES INTO THE TRENCH. FILTER FABRIC SHALL NOT BE STAPLED INTO EXISTING TREES.
7. THE TRENCH SHALL BE BACKFILLED AND THE SOIL COMPACTED OVER THE FILTER FABRIC.
8. FILTER BARRIERS SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.
9. FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL, AND AT LEAST DAILY DURING PROLONGED RAINFALL, ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
10. SHOULD THE FABRIC DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL BE NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
11. SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE–THIRD THE HEIGHT OF THE BARRIER.
12. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED, SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

SILT FENCE



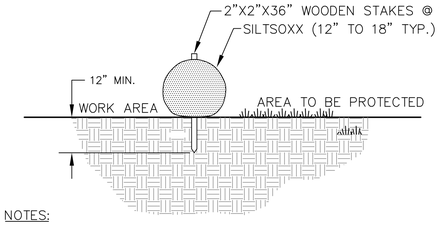
PLAN



PROFILE

STONE CHECK DAM AND SILT SACK AROUND CATCH BASIN

NOT TO SCALE



NOTES:

1. SILTSOXX TO BE FILTREXX SILTSOXX OR APPROVED EQUAL
2. ADJACENT TO WETLANDS OR WATER BODIES A DOUBLE ROW OF PERIMETER BARRIER SILT SOCK OR APPROVED EQUAL IS REQURIED.

SILT SOCK DETAIL

NOT TO SCALE

PLAN SIZE:
FULL SIZE PLANS ARE 24x36
11x17 ARE APPROXIMATE HALF SCALES

FOR APPROVAL ONLY
NOT FOR CONSTRUCTION

OWNER:
MCKENAN PROPERTIES, LLC
100 CARL DRIVE
UNIT #8
MANCHESTER, NH. 03103

APPLICANT:
GEORGES REALTY, LLC
c/o WIL GEORGES
100 CARL DRIVE, 11a
MANCHESTER, NH. 03103

ECKMAN Engineering, LLC
1950 Lafayette Road Unit 210, PO Box 8025
Portsmouth, New Hampshire 03802
Phone: (603) 433–1354
Fax: (603) 433–2367

No.	DESCRIPTION REVISIONS	BY	DATE

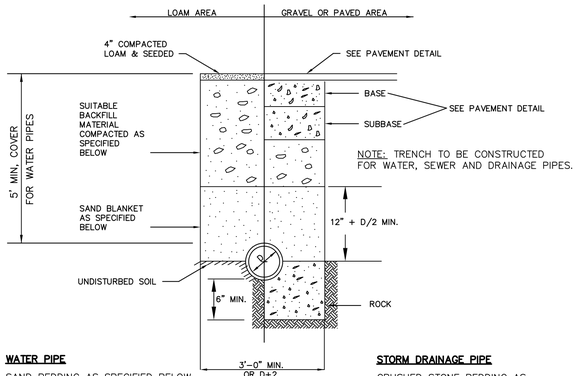
GREENVILLE HOUSE PRC – OLD MILL REHABILITATION

TOWN GREENVILLE, NEW HAMPSHIRE BRIDGE NO. ----
FEDERAL PROJECT ---- NHDOT PROJECT N/A
LOCATION TOWN OF GREENVILLE TAX MAP 5, LOTS 32 & 32–1
OLD MILL, CHAMBERLIN ST., GREENVILLE, HILLSBOROUGH, NH

DETAILS (EROSION & SEDIMENT CONTROL NOTES)

	BY	DATE		BY	DATE
DESIGNED	SRP	10/22	CHECKED	DEE	11/22
DRAWN	JJM	10/22	CHECKED	DEE	11/22
TRACED			CHECKED		
QUANTITIES			CHECKED		

EE PROJ. NO. 22–105
DWG FILE 22–105_ENG
REVIEWED BY:
NHDOT PROJ. NO. NA
D–1



WATER PIPE

SAND BEDDING AS SPECIFIED BELOW FOR FULL WIDTH OF THE TRENCH UP TO SPRINGLINE OF PIPE, 6" BELOW PIPE IN EARTH AND 12" BELOW PIPE IN ROCK

STORM DRAINAGE PIPE

CRUSHED STONE BEDDING AS SPECIFIED BELOW FOR FULL WIDTH OF THE TRENCH UP TO SPRINGLINE OF PIPE, 6" BELOW PIPE IN EARTH AND 12" BELOW PIPE IN ROCK

BACKFILL MATERIAL BELOW PAVED OR CONCRETE AREAS, BEDDING MATERIAL, AND SAND BLANKET SHALL BE COMPACTED TO NOT LESS THAN 95% OF AASHTO T 99, METHOD C. SUITABLE BACKFILL MATERIAL BELOW LOAM AREAS SHALL BE COMPACTED TO NOT LESS THAN 90% OF AASHTO T 99, METHOD C.

SAND BLANKET & BEDDING

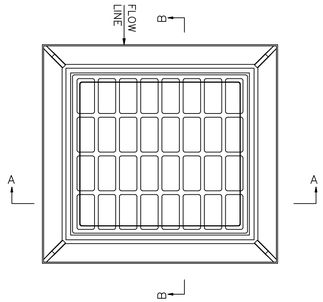
SIEVE SIZE	% FINER BY WEIGHT
1/2"	90 – 100
200	0 – 15

CRUSHED STONE BEDDING

SIEVE SIZE	% FINER BY WEIGHT
1"	100
3/4"	90 – 100
3/8"	0 – 75
# 4	0 – 25
# 10	0 – 5

UTILITY TRENCH

NOT TO SCALE



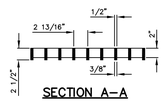
PLAN

TYPE "B" FRAME & GRATE

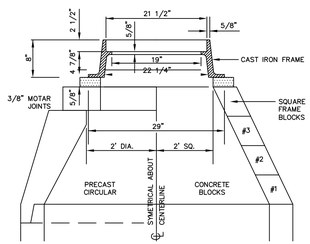
GENERAL NOTES

1. ALL DIMENSIONS ARE NOMINAL.
2. FRAME AVAILABLE IN 100 OR 200 mm HEIGHTS.
3. FREE OPEN AREA = 0.22 m .
4. USE 3–FLANGE FRAME IF INSTALLED ADJACENT TO GRANITE CURB.
5. FRAME AND GRATE SHALL BE PER NHDOT SPECIFICATIONS.

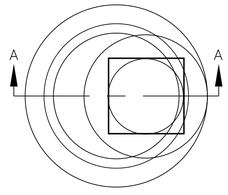
NOTE:
1. TYPE "B" GRATE USED IN PAVEMENT.
2. REFER TO NHDOT STANDARD HIGHWAY DETAILS FOR DIMENSIONS OF THE GRATES TO THE LEFT.



SECTION A–A



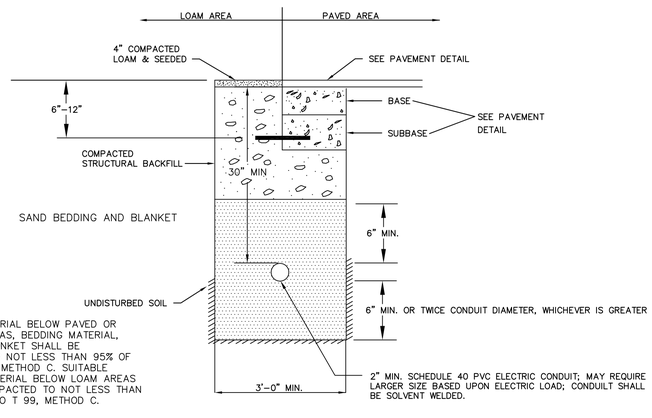
SECTION B–B
GRATE & FRAME DETAIL



NOTE:
1. ALL SECTIONS SHALL BE CONCRETE CLASS AA(4000 psi).
2. CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQ.IN. PER LINEAR FT. IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL.
3. THE TONGUE OR GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTTIAL REINFORCEMENT EQUAL TO 0.12 SQ. IN. PER LINEAR FT.
4. RISERS OF 1', 2', 3' & 4' CAN BE USED TO REACH DESIRED DEPTH.
5. THE STRUCTURES SHALL BE DESIGNED FOR H20 LOADING.
5. THE STRUCTURES SHALL BE DESIGNED FOR H20 LOADING.
6. CATCH BASIN FRAME & GRATE SHALL BE SET IN A FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYP., 5 BRICK COURSES MAXIMUM).
7. JOINT SEALANT BETWEEN SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
8. PROVIDE "V" KNOCKOUTS FOR PIPES WITH 2' MAXIMUM CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS.

CATCH BASIN FRAME & GRATE

(NOT TO SCALE)



SAND BEDDING

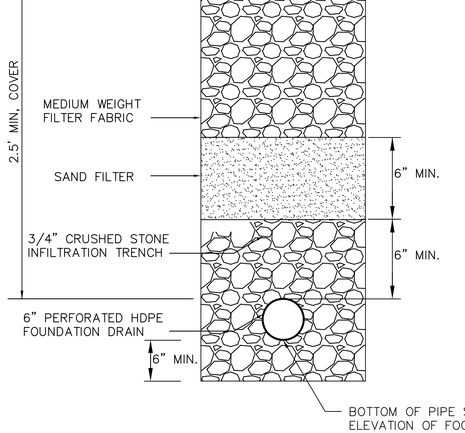
SIEVE	% PASSING
1 INCH	95–100
1/2 INCH	75–100
NO. 4	50–100
NO. 20	15–80
NO. 50	0–15
NO. 200	0–5

STRUCTURAL BACKFILL

SIEVE	% PASSING
4 INCH	100
3 INCH	95–100
1/4 INCH	25–80
NO. 40	0–30
NO. 200	0–5

ELECTRIC, CABLE, INTER–NET, PHONE & FIRE CONDUITS

NOT TO SCALE



CRUSHED STONE FILL

SIEVE SIZE	% FINER BY WEIGHT
1"	100
3/4"	90 – 100
3/8"	0 – 75
# 4	0 – 25
# 10	0 – 5

STORMWATER INFILTRATION TRENCH

NOT TO SCALE

4' DIAMETER LEACHING CATCH BASIN

NOT TO SCALE

FOR APPROVAL ONLY
NOT FOR CONSTRUCTION

PLAN SIZE:
FULL SIZE PLANS ARE 24x36
11x17 ARE APPROXIMATE HALF SCALES

OWNER:
MCKENAN PROPERTIES, LLC
100 CARL DRIVE
UNIT #8
MANCHESTER, NH. 03103

APPLICANT:
GEORGES REALTY, LLC
c/o WIL GEORGES
100 CARL DRIVE, 11a
MANCHESTER, NH. 03103

ECKMAN Engineering, LLC
1950 Lafayette Road Unit 210, PO Box 8025
Portsmouth, New Hampshire 03802
Phone: (603) 433–1354
Fax: (603) 433–2367

No.	DESCRIPTION	BY	DATE
	REVISIONS		
1	ADD 4' DIA. LEACHING CATCH BASIN DETAIL	DEE	12/22

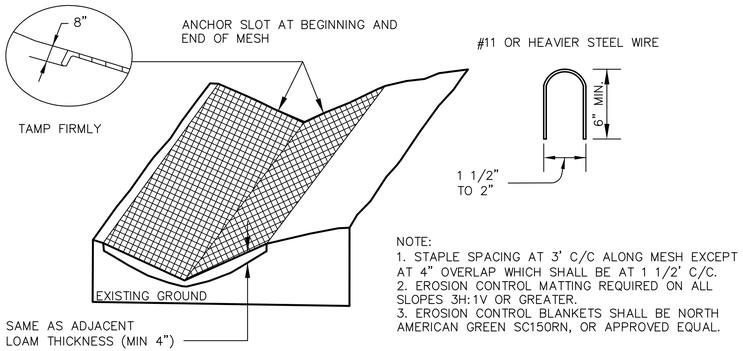
TOWN GREENVILLE, NEW HAMPSHIRE BRIDGE NO. ----
FEDERAL PROJECT ---- NHDOT PROJECT N/A
LOCATION TOWN OF GREENVILLE TAX MAP 5, LOTS 32 & 32–1
OLD MILL, CHAMBERLIN ST., GREENVILLE, HILLSBOROUGH, NH

DETAILS (DRAINAGE & UTILITIES)

	BY	DATE		BY	DATE
DESIGNED	SRP	10/22	CHECKED	DEE	11/22
DRAWN	JJM	10/22	CHECKED	DEE	11/22
TRACED			CHECKED		
QUANTITIES			CHECKED		

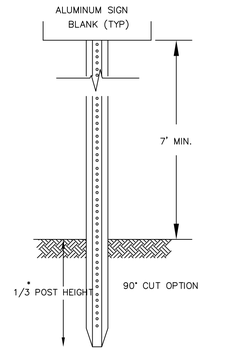
REVIEWED BY:

EE PROJ. NO. 22–105
DWG FILE 22–105_ENG
NHDOT PROJ. NO. NA



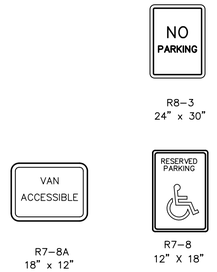
NOTE:
1. STAPLE SPACING AT 3' C/C ALONG MESH EXCEPT AT 4" OVERLAP WHICH SHALL BE AT 1 1/2' C/C.
2. EROSION CONTROL MATTING REQUIRED ON ALL SLOPES 3H:1V OR GREATER.
3. EROSION CONTROL BLANKETS SHALL BE NORTH AMERICAN GREEN SC150RN, OR APPROVED EQUAL.

EROSION CONTROL MATTING
NOT TO SCALE



* IN LEDGE DRILL & GROUT TO A MIN OF 2'

STANDARD POST
NOT TO SCALE



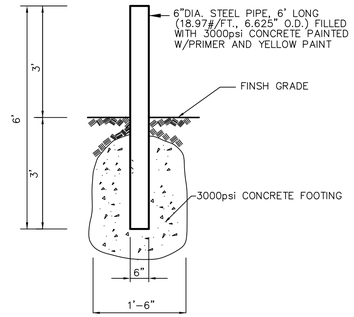
SIGNS

NOTES:

ALL SIGNS TO BE INSTALLED AS INDICATED IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST EDITION.

LENGTH: AS REQUIRED
WEIGHT PER LINEAR FOOT: 2.50 LBS (MIN.)
HOLES: 3/8" DIAMETER, 1" C-C FULL LENGTH
STEEL: SHALL CONFORM TO ASTM A-499 (GRADE 60) OR ASTM A-576(GRADE 1070 - 1080)
FINISH: SHALL BE PAINTED WITH TWO COATS OF AN APPROVED BAKED ON OR AIR DRIED, PAINT OF WEATHER RESISTANT QUALITY. ALL FABRICATION SHALL BE COMPLETE BEFORE PAINTING.

TRAFFIC SIGN DETAILS
NOT TO SCALE



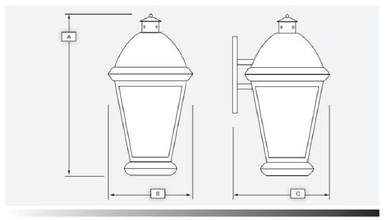
BOLLARD
NOT TO SCALE

EVERGREEN LIGHTING

TUSCANY

Catalog #		Type	
Project			
Description		Date	

ARM MOUNT



Standard Features

Material
Paintlok sheet; Standard Powdercoat Finish, White Acrylic Lens; .125 thickness, ETL Wet Location.

Installation
Mounting/wireway hole in center of backplate. Supplied with standard mounting hardware to mount to a 4" J-box or plaster ring.

Optics*
Contact Evergreen Lighting for complete photometrics.

LED Features

LED
Alta LED #AL-R-1W-30LED array to be mounted onto an Aluminum MPCB Board configured to the proper wattage. The LED arrays will be centered within the Lens area and mounted on a white aluminum reflective plate.

Driver
Specific Drivers will be matched with each different LED array configuration/wattage.
Standard Driver Features:
- Constant Current
- 3 / 5 year warranty
- 120/277 multi-voltage power supplies
- Kelvin - 2700K, 3000K, 3500K, 4100K, 5000K

Fluorescent Features

Ballast
SC programmed electronic high power factor ballast, multivoltage 120V/277V.
Lamps not included

Finishes

Ballast

Architectural Bronze (AB)	Textured Gold (TG)
Textured Bronze (TBR)	Metallic Nickel (MN)
Matte Black (MBK)	Textured Verde Patina (TVP)
Semi Gloss Black (GBK)	Satin Brass (SB)
Textured Black (TBK)	Copper Vein (CV)
Textured Rust (TR)	Gold Vein (GV)
Matte White (MW)	Silver Vein (SV)
Textured White (TW)	Chrome (CH)
Gloss White (GW)	Oil Rubbed Bronze (ORB)
Metallic Grey (MG)	

Options*

Emergency (EMR)	Special Lens
Photocell (PC)	Incandescent
Lamp Sources	
Size Modifications	
Vandal Proof Enclosure (VPE)	

Sample Spec Number: TUS2103Q-AB-A

Part #	Lamp/Watts	Lumens	A	B	C
TUS2103Q	13Q	800	19	9	11
TUS2105T	26T	1800	19	9	11
TUS2104Q	2-13Q	1600	19	9	11
TUS2105	26Q	1800	19	9	11
TUS2211	32T	2200	21 1/2	10	12
TUS2204Q	2-13Q	1600	21 1/2	10	12
TUS2206	2-26Q	3600	21 1/2	10	12
TUS2222	42T	3200	21 1/2	10	12
TUS2106L	6LED	600	19	9	11
TUS2110L	10LED	1000	19	9	11
TUS2112L	12LED	1200	19	9	11
TUS2220L	20LED	2000	21 1/2	10	12
TUS2224L	24LED	2400	21 1/2	10	12
TUS2240L	40LED	4000	21 1/2	10	12
DARK SKY					
TUS2109LS	9LED	900	19	9	11
TUS2115LS	15LED	1500	19	9	11
TUS2220LS	20LED	2000	21 1/2	10	12

*Consult Factory

MADE IN CALIFORNIA

Evergreen Lighting
1379 Ridgeway Street, Pomona, CA 91768
Ph: 909-865-5599 Fax: 909-865-5539
www.evergreenlighting.com

BUILDING MOUNTED HISTORIC LANTERN

VK 2600 LED Series — Alumilite

Features and Characteristics

Alumilite designs reliable products produced with the best available materials, and we stand behind them with superior customer service. Please contact us for more information.

Housing: A heavy duty spun aluminum shroud has a solid center section with vertical slots. Housing is secured to dome with three internal stainless steel rods.

Dome Cap: Cast aluminum dome is secured to housing and arm with stainless steel fasteners.

Lens Assembly: Clear tempered glass lens is gasketed and secured to aluminum frame with four fasteners. Frame is hinged and secured to the housing with four stainless steel screws.

Mounting Bracket: A 2" diameter extruded aluminum arm with 12" radius bend is welded to cast back plate. Arm slips over the tenon on cap and is secured with 3 stainless steel fasteners. A heavy duty steel zinc plated bracket mounts to the J-Box and wall surface and is attached to the inside of cast plate with two stainless steel fasteners. Direct mount to pole is optional."PM"

Module/Driver: HP Winner LED Modules have high quality Lumiled LED's with an IP-68 rating and waterproof connectors. They are available in type 3, 4 and 5 distributions with 35w/4500lm, 55w/6100lm, 70w/9000lm and 110w/12,200lm. Modules are available in 3000, 4000 and 5000k and have a minimum CRI of 80. Drivers are 0-10v dimming with universal voltage. Extruded aluminum heat sinking system provides optimal thermal management. Five years warranty provided on modules and driver.

Finish: Polyester powder coating on all metal parts. Color to be specified.

Listing: Luminaire is ETL listed for wet locations.

Specifications

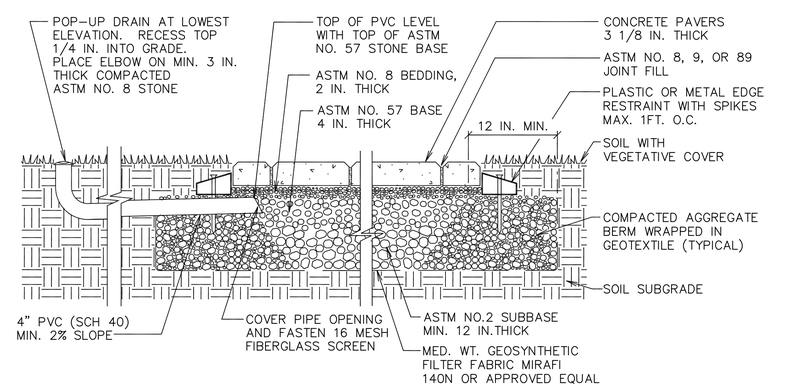
Series	Wattage/Lamp	Volts
VK-26	35w/LED = 35/LED	UV
VK-26	55w/LED = 55/LED	UV
VK-26	70w/LED = 70/LED	UV
VK-26	110w/LED = 11/LED	UV

Options		Finish
WM = Wall Mount		BZ = Bronze
1A = Single Pole Mount		BK = Black
2A = Twin Pole Mount		WH = White
30k = 3000k	R3 = Type 3	SL = Silver
40k = 4000k	R4 = Type 4	CC = Custom Color
50k = 5000k	R5 = Type 5	

Example
70 Watt LED, 120 Volts, Single Pole Mount, 5000k, Type 3, Bronze
VK-2670/LED-UV/WM/50k/R3/BZ

5322 A Rafe Banks Drive | Flowery Branch, Georgia 30542 | 770.967.7050 | Fax 770.967.7030 | alumiliteinc.com

BUILDING MOUNTED DOWNWARD THROW



NOTES:
1. DESIGN, MATERIAL, AND CONSTRUCTION GUIDELINES TO FOLLOW ICPI GUIDE SPECIFICATIONS
2. DAYLIGHT DRAIN PIPE TO DRAINAGE SWALE. USE POP-UP DRAIN IN YARD (AS SHOWN) OR CONNECT TO STORM SEWER.
3. APPLY WATERPROOF MEMBRANE VERTICALLY AGAINST HOUSE FOUNDATION PRIOR TO PLACING SUBBASE AND BASE.
4. ALL SOIL SUBGRADES SHALL SLOPE TOWARD STREET.
5. SUBGRADE SOIL MAXIMUM CROSS SLOPE IS 0.5%. MAXIMUM LONGITUDINAL SLOPE IS 2% TOWARD STREET.
6. USE SOIL BERMS FOR LONGITUDINAL SOIL SUBGRADE SLOPES EXCEEDING 2% TOWARD STREET.
7. 5% MAXIMUM SURFACE SLOPE.
8. THICKER SUBBASE AND/OR ADDITIONAL DRAIN PIPES MAY BE REQUIRED IF DRIVEWAY RECEIVES RUNOFF FROM ADJACENT IMPERVIOUS SURFACES OR ROOFS.
9. NO. 2 STONE MAY BE SUBSTITUTED WITH NO.3 OR NO.4 STONE.

PERMEABLE PAVERS
(NOT TO SCALE)

FOR APPROVAL ONLY
NOT FOR CONSTRUCTION

PLAN SIZE:
FULL SIZE PLANS ARE 24x36
11x17 ARE APPROXIMATE HALF SCALES

OWNER:
MCKENAN PROPERTIES, LLC
100 CARL DRIVE
UNIT #8
MANCHESTER, NH. 03103

APPLICANT:
GEORGES REALTY, LLC
c/o WIL GEORGES
100 CARL DRIVE, 11a
MANCHESTER, NH. 03103

ECKMAN Engineering, LLC
1950 Lafayette Road Unit 210, PO Box 8025
Portsmouth, New Hampshire 03802
Phone: (603) 433-1354
Fax: (603) 433-2367

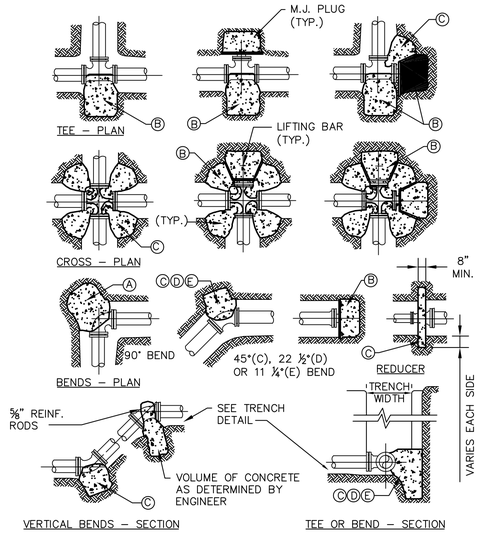
No.	DESCRIPTION	BY	DATE
	REVISIONS		

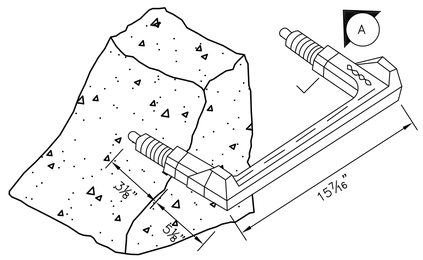
TOWN GREENVILLE, NEW HAMPSHIRE — BRIDGE NO. ----
FEDERAL PROJECT ---- — NHDOT PROJECT N/A
LOCATION TOWN OF GREENVILLE TAX MAP 5, LOTS 32 & 32-1
OLD MILL, CHAMBERLIN ST., GREENVILLE, HILLSBOROUGH, NH

DETAILS (SIGNS, LIGHTING & MATTING)

	BY	DATE		BY	DATE
DESIGNED	SRP	10/22	CHECKED	DEE	11/22
DRAWN	JJM	10/22	CHECKED	DEE	11/22
TRACED			CHECKED		
QUANTITIES			CHECKED		

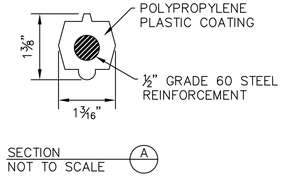
EE PROJ. NO. 22-105
DWG FILE 22-105_ENG
REVIEWED BY:
NHDOT PROJ. NO. NA
D-3

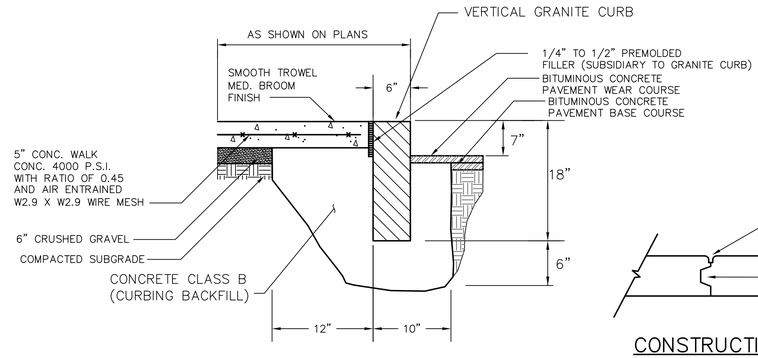


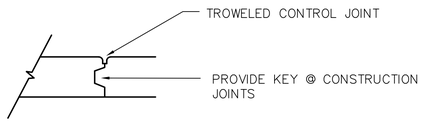


MANHOLE STEP DETAIL

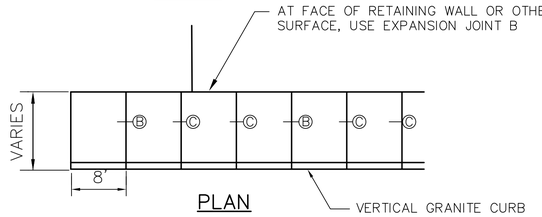
NOT TO SCALE

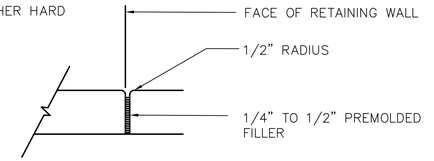






CONSTRUCTION CONTROL JOINT C





EXPANSION JOINT B

CONCRETE WALKWAY WITH VERTICAL GRANITE CURB

NOT TO SCALE

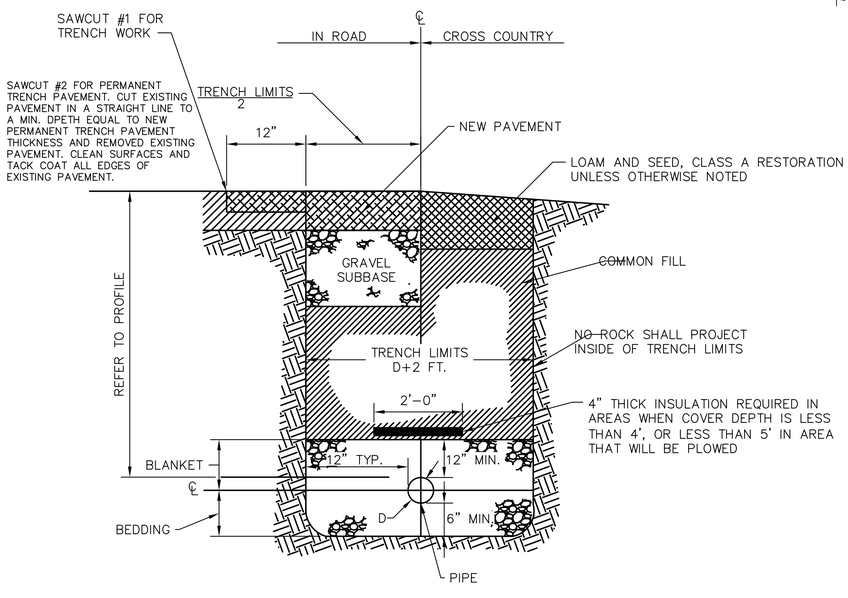
THRUST BLOCK SCHEDULE SQUARE FEET OF CONCRETE THRUST BLOCKING BEARING ON UNDISTURBED MATERIAL														
REACTION TYPE		PIPE SIZE												
		4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	30"	36"	48"
TEST PRESSURE = 100 PSIG	A	1.71	2.49	4.29	6.45	9.12	12.26	15.85	19.91	24.43	34.85	53.62	76.81	135.12
	B	1.21	3.53	6.06	9.12	12.70	17.33	22.42	28.16	34.55	49.29	75.83	108.62	191.09
	C	0.92	0.95	3.28	4.94	6.98	9.38	12.13	15.24	18.70	26.68	41.04	58.78	103.42
	D	0.47	0.97	1.67	2.52	3.56	4.78	6.19	7.77	9.53	13.60	20.92	29.97	52.72
	E	0.24	0.49	0.84	1.26	1.79	2.40	3.41	3.90	4.79	6.83	10.51	15.06	26.49
OTHER TEST PRESSURES FOR THE ABOVE REACTIONS		TEST PRESSURE TO BE 200 PSI MIN. AT LOW END OF THE TEST SECTION. SQUARE FEET OF CONCRETE THRUST BLOCKING FOR OTHER TEST PRESSURES IS DIRECTLY PROPORTIONAL TO THE ABOVE TABLE. FOR INSTANCE, AT 200 PSI TEST PRESSURE FOR ABOVE NUMBERS DOUBLE.												

NOTES:

1) POUR THRUST BLOCKS AGAINST UNDISTURBED MATERIAL. WHERE TRENCH WALL HAS BEEN DISTURBED, EXCAVATE LOOSE MATERIAL AND EXTEND THRUST BLOCK TO UNDISTURBED MATERIAL. NO JOINTS SHALL BE COVERED WITH CONCRETE.
2) ON BENDS AND TEES, EXTEND THRUST BLOCKS FULL LENGTH OF FITTING.
3) PLACE CONCRETE PATIO BLOCKS IN FRONT OF ALL PLUGS BEFORE POURING THRUST BLOCK.
4) REQUIREMENTS OF THE ABOVE TABLE PRESUME MINIMUM SOIL BEARING OF 1 TON PER SQUARE FOOT, AND MAY BE VARIED BY THE ENGINEER TO MEET OTHER CONDITIONS ENCOUNTERED.
5) MEGA-LUG RETAINER GLANDS WITH MEGA-BOND ARE REQUIRED FOR MECHANICAL JOINTS. THESE GLANDS DO NOT REDUCE THE REQUIREMENTS FOR THRUST RESTRAINT.
6) ALL FITTINGS SHALL BE WRAPPED IN POLYETHYLENE OR BUILDING PAPER PRIOR TO INSTALLATION OF CONCRETE RESTRAINT.
7) THREADED ROD SHALL BE ANSI 1242 FY50 PIPE RESTRAINT NUTS TO MATCH AWWA C111. THREADED RODS AND NUT TO BE FIELD COATED WITH BITUMINOUS PAINT.
8) THRUST RESTRAINT IS REQUIRED FOR ALL TEES, BENDS, REDUCERS, CAPS, PLUGS, OR CROSSES.
9) INSTALL LIFT HOOKS INTO THRUST BLOCKS AT END CAPS AND PLUGS.
10) THRUST BLOCK AREA IS BASED ON SILT SOIL WITH A BEARING STRENGTH OF 1500 PSF AND A SAFETY FACTOR OF 1.5.
11) PRE-FORMED AND PRE-POURED THRUST BLOCKS ARE NOT ACCEPTABLE.

THRUST BLOCK DETAILS AND NOTES

NOT TO SCALE



SANITARY SEWER TYPICAL TRENCH DETAIL

NOT TO SCALE

NOTES:

1) WHERE PIPE IS INSTALLED IN GRAVEL SHOULDER OR IN GRAVELED ROAD, GRAVEL SUBBASE SHALL BE 18" THICK FOR THE WIDTH OF THE TRENCH.
2) REFER TO SPECIFICATIONS FOR PAVEMENT THICKNESS REQUIREMENTS.
3) REFER TO SPECIFICATIONS FOR COMMON FILL BLANKET, BEDDING, AND SUBBASE MATERIAL AND THICKNESS.
4) DEPTH AT TOP OF PIPE SHALL NEVER BE LESS THAN 3' EVEN WITH INSULATION.
5) TRENCH LIMITS SHOWN ARE NOT PAY LIMITS.
6) REFER TO THE SPECIFICATIONS FOR COMPACTION.

PLAN SIZE:
FULL SIZE PLANS ARE 24x36
11x17 ARE APPROXIMATE HALF SCALES

FOR APPROVAL ONLY
NOT FOR CONSTRUCTION

OWNER:
MCKENAN PROPERTIES, LLC
100 CARL DRIVE
UNIT #8
MANCHESTER, NH. 03103

APPLICANT:
GEORGES REALTY, LLC
c/o WIL GEORGES
100 CARL DRIVE, 11a
MANCHESTER, NH. 03103

ECKMAN Engineering, LLC
1950 Lafayette Road Unit 210, PO Box 8025
Portsmouth, New Hampshire 03802
Phone: (603) 433-1354
Fax: (603) 433-2367

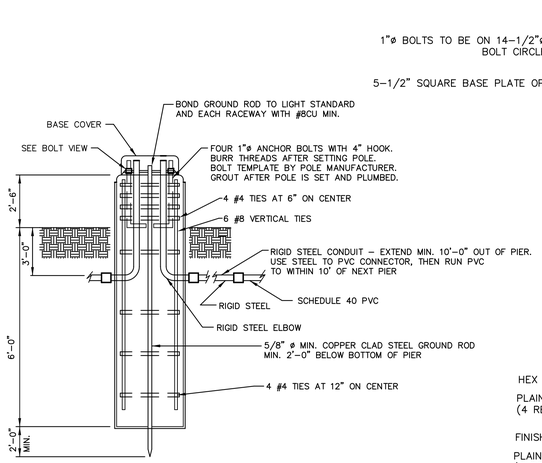
No.	DESCRIPTION REVISIONS	BY	DATE

TOWN GREENVILLE, NEW HAMPSHIRE BRIDGE NO. ----
FEDERAL PROJECT ---- NHDOT PROJECT N/A
LOCATION TOWN OF GREENVILLE TAX MAP 5, LOTS 32 & 32-1
OLD MILL, CHAMBERLIN ST., GREENVILLE, HILLSBOROUGH, NH

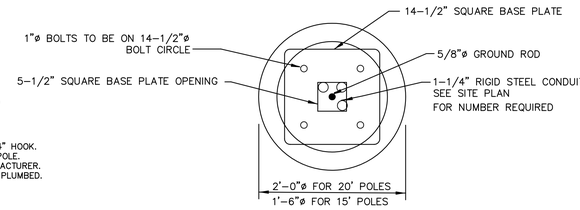
DETAILS – (SEWER & WATER)

	BY	DATE		BY	DATE
DESIGNED	SRP	10/22	CHECKED	DEE	11/22
DRAWN	JJM	10/22	CHECKED	DEE	11/22
TRACED			CHECKED		
QUANTITIES			CHECKED		

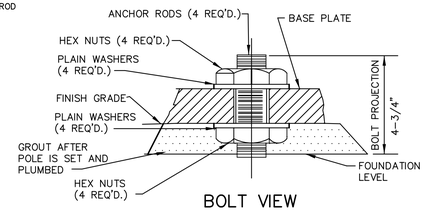
EE PROJ. NO. 22-105
DWG FILE 22-105_ENG
REVIEWED BY:
NHDOT PROJ. NO. NA



SECTION



PLAN VIEW



BOLT VIEW

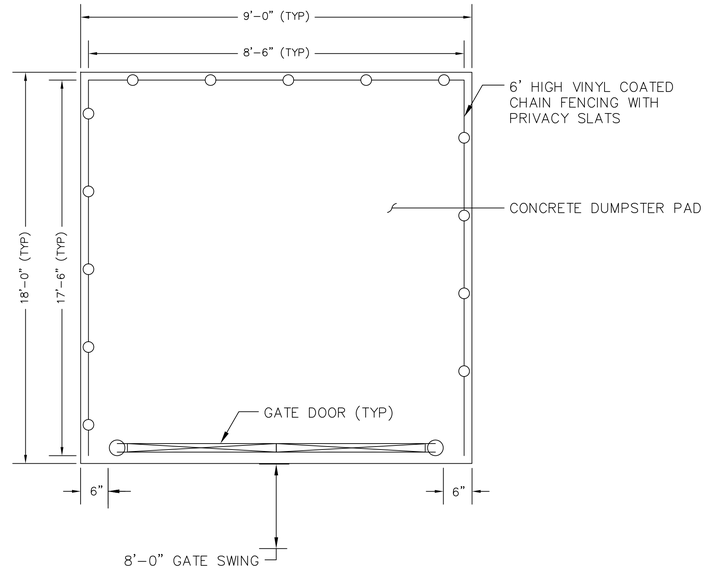
NOTES:

1. PAINT BASE SAFETY YELLOW
2. CONCRETE TO BE CLASS A, 4000 PSI

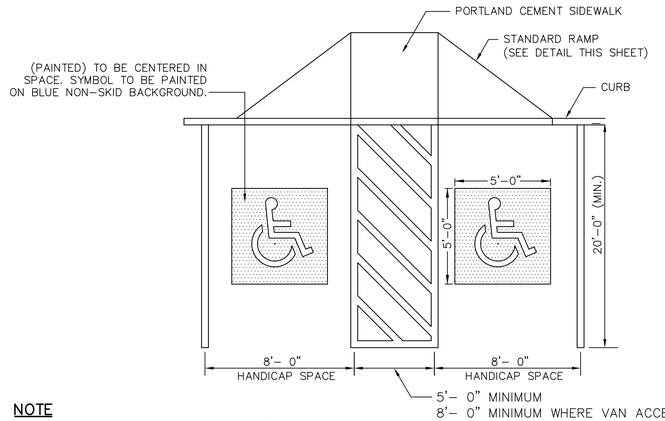
LIGHT POLE BASE
NOT TO SCALE

GENERAL NOTES

1. DETAILS ARE FROM NH DOT STANDARD PLANS.
2. ALL LIGHT POLES, LUMINAIRES, AND WIRE TO BE FURNISHED AND INSTALLED BY THE POWER COMPANY, UNLESS OTHERWISE DIRECTED.
3. ANCHOR BOLTS, GROUND ROD & GROUND WIRE TO BE FURNISHED BY THE POWER COMPANY AND INSTALLED BY THE CONTRACTOR, UNLESS OTHERWISE DIRECTED.
4. BOLT CIRCLE DIAMETER SHALL BE VERIFIED WITH THE POWER COMPANY.
5. ALL BASES SHALL BE LOCATED 3.0 m (TO CENTER) FROM FACE OF CURB OR EDGE OF PAVED SHOULDER, UNLESS OTHERWISE NOTED.
6. REINFORCEMENT SHALL CONFORM TO SECTION 544 OF THE STANDARD SPECIFICATIONS.
7. ANY ANCHOR BOLTS DAMAGED DURING INSTALLATION SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE ENGINEER.
8. UPON INSTALLATION, ANCHOR BOLT THREADS SHALL BE CLEANED WITH A WIRE BRUSH.
9. TERRAIN SURROUNDING BASE MUST BE GRADED AS SHOWN IN DETAIL "A" TO PREVENT IMPACTING VEHICLES FROM SNAGGING ON BASE.
10. ITEM NO. 625.2 OR 625.22



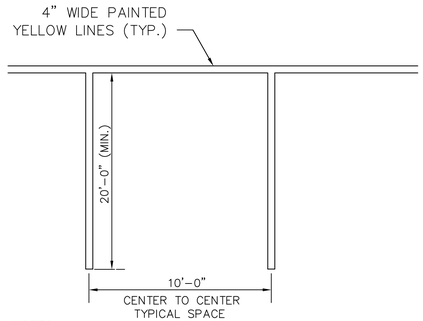
DUMPSTER ENCLOSURE PLAN
NOT TO SCALE



NOTE

ALL PAVEMENT MARKINGS TO CONFORM TO "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND "STANDARD ALPHABET FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS", LATEST EDITIONS.

HANDICAP PARKING STALL
NOT TO SCALE



NOTES

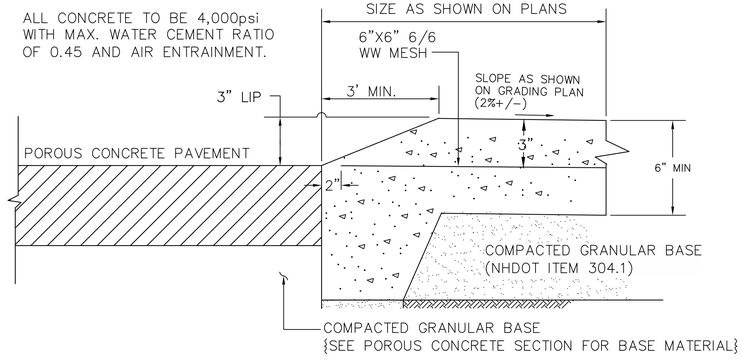
ALL PAINT SHALL BE FAST DRYING TRAFFIC PAINT, MEETING AASHTO M248 TYPE F REQUIREMENTS

PAINT SHALL BE APPLIED ACCORDING TO MANUFACTURERS SPECIFICATIONS 2.

SINGLE STRIPPED PARKING STALL
NOT TO SCALE

NOTES:

ALL CONCRETE TO BE 4,000psi WITH MAX. WATER CEMENT RATIO OF 0.45 AND AIR ENTRAINMENT.



CONCRETE DUMPSTER PAD
NOT TO SCALE

FOR APPROVAL ONLY
NOT FOR CONSTRUCTION

PLAN SIZE:
FULL SIZE PLANS ARE 24x36
11x17 ARE APPROXIMATE HALF SCALES

OWNER:
MCKENAN PROPERTIES, LLC
100 CARL DRIVE
UNIT #8
MANCHESTER, NH. 03103

APPLICANT:
GEORGES REALTY, LLC
c/o WIL GEORGES
100 CARL DRIVE, 11a
MANCHESTER, NH. 03103

ECKMAN Engineering, LLC
1950 Lafayette Road Unit 210, PO Box 8025
Portsmouth, New Hampshire 03802
Phone: (603) 433–1354
Fax: (603) 433–2367

No.	DESCRIPTION REVISIONS	BY	DATE

TOWN GREENVILLE, NEW HAMPSHIRE BRIDGE NO. ----
FEDERAL PROJECT ---- NHDOT PROJECT N/A
LOCATION TOWN OF GREENVILLE TAX MAP 5, LOTS 32 & 32–1
OLD MILL, CHAMBERLIN ST., GREENVILLE, HILLSBOROUGH, NH

DETAILS – (PARKING, POLE BASE & DUMPSTER)

	BY	DATE		BY	DATE
DESIGNED	SRP	10/22	CHECKED	DEE	11/22
DRAWN	JJM	10/22	CHECKED	DEE	11/22
TRACED			CHECKED		
QUANTITIES			CHECKED		

EE PROJ. NO. 22–105
DWG FILE 22–105_ENG
REVIEWED BY:
NHDOT PROJ. NO. NA

GENERAL NOTES

1. VERIFY LOCATIONS, ELEVATIONS, AND DIMENSIONS IN THE FIELD, PRIOR TO CONSTRUCTION. VERIFY FIELD CONDITIONS RELATING TO WORK TO BE INSTALLED. NOTIFY LANDSCAPE ARCHITECT OF ANY UNUSUAL OR DIFFICULT CONDITIONS IN A TIMELY FASHION PRIOR TO CONSTRUCTION CONCERNING THE CONDITION IN QUESTION.

2. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE TOWN OF GREENVILLE & STATE OF NH. NOTIFY APPROPRIATE AGENCIES AT LEAST 48 HOURS PRIOR TO PERFORMING THE WORK UNDER THEIR JURISDICTION.

3. CONTRACTOR IS RESPONSIBLE FOR SECURING AND PAYING FOR ALL CONSTRUCTION PERMITS AND LICENSES REQUIRED TO COMPLETE SITE WORK. CONTRACTOR IS RESPONSIBLE FOR ALL APPROPRIATE INSPECTIONS OF HIS/HER WORK.

4. ALL WORK SHALL BE OF WORKMANLIKE QUALITY AND IN CONFORMANCE WITH ALL APPLICABLE CODES. CONTRACTOR SHALL READ ALL ZONING AND ENVIRONMENTAL PERMITS WHICH PERTAIN TO THE PROJECT AND SHALL COMPLY WITH ALL THE CONDITIONS THEREIN.

5. NOTIFY LANDSCAPE ARCHITECT AT LEAST 72 HOURS PRIOR TO ANY ROUTINE REQUIRED FIELD OBSERVATION. OBTAIN LANDSCAPE ARCHITECT'S APPROVAL OF THE LAYOUT OF ALL IMPROVEMENTS PRIOR TO CONSTRUCTION.

6. CONTRACTOR IS RESPONSIBLE FOR REPAIR OF DAMAGE OR DISTURBANCE TO OTHER AREAS WHICH MAY OCCUR AS THE RESULT OF HIS/HER WORK WHETHER WITHIN OR OUTSIDE OF THE CONTRACT LIMIT LINES.

7. CONSTRUCTION SHALL FOLLOW THE SEQUENCES AND CONDITIONS ESTABLISHED IN THE SPECIFICATIONS AND PERMITS.

8. IT IS INTENDED THAT THE WORK BE EXECUTED IN ACCORDANCE WITH THE BEST CUSTOMARY BUILDING PRACTICES. IF WORK IS REQUIRED IN A MANNER TO MAKE IT IMPOSSIBLE TO PRODUCE FIRST-CLASS WORK OR IF ERRORS, CONFLICTS OR DISCREPANCIES APPEAR AMONG THE CONTRACT DOCUMENTS, INFORM THE LANDSCAPE ARCHITECT IMMEDIATELY AND REQUEST INTERPRETATION BEFORE PROCEEDING WITH THE WORK.

9. IF CONTRACTOR FAILS TO MAKE SUCH A STATEMENT AND REQUEST, NO EXCUSE WILL THEREAFTER BE ENTERTAINED, NOR ADDITIONAL EXPENSE BE ACCEPTED, FOR FAILURE TO CARRY OUT WORK IN A SATISFACTORY MANNER. SHOULD CONFLICT OCCUR IN OR BETWEEN DRAWINGS AND SPECIFICATIONS, CONTRACTOR IS DEEMED TO HAVE ESTIMATED ON THE MORE EXPENSIVE WAY OF DOING WORK UNLESS HE/SHE SHALL HAVE OBTAINED A WRITTEN DECISION, BEFORE SUBMITTING HIS BID, AS TO WHICH METHOD OR MATERIALS WILL BE REQUIRED.

10. CONTRACTOR IS RESPONSIBLE FOR ALL MATERIALS AND EQUIPMENT STORED AT SITE.

11. EROSION AND SEDIMENTATION CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE COMMENCEMENT OF ANY WORK.

12. ANY DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE LANDSCAPE ARCHITECT FOR DIRECTION AND RESOLUTION PRIOR TO ANY FURTHER WORK.

13. VISIBLE EXISTING CONDITIONS WHERE FIELD LOCATED, AND UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE. SITE SUBCONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS, DIMENSIONS, AND GRADES. PRIOR TO START OF ANY FOUNDATION OR UTILITY WORK.

14. 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 LANDSCAPE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATIONS.

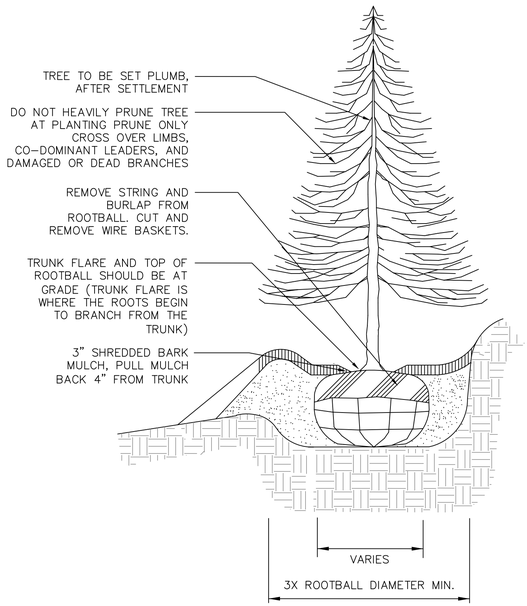
15. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR CONDITIONS AT THE SITE. THESE PLANS, PREPARED BY TERRAIN PLANNING & DESIGN LLC, DO NOT EXTEND TO OR INCLUDE SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR THEIR EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL OF THE SURVEYOR,ENGINEER OR LANDSCAPE ARCHITECT 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.

16 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.

17 THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL LANDSCAPE ARCHITECT. NO LIABILITY AS A RESULT OF ANY CHANGES OR NON-CONFORMANCE WITH THESE PLANS EXCEPT UPON THE WRITTEN APPROVAL OF THE LANDSCAPE ARCHITECT OF RECORD.

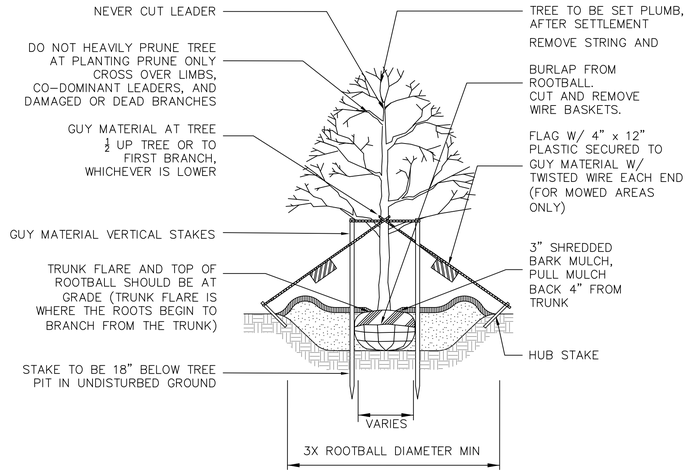
18. PREPARATION UNDER ALL HARD SURFACES TO BE COMPACTED TO 98% STANDARD PROCTOR DENSITY.

19. SITE CONTRACTOR IS RESPONSIBLE FOR CONTACTING DIG SAFE PRIOR TO ANY EXCAVATION, 1-888-DIG-SAFE.



NOTES:
1. DO NOT STAKE EVERGREEN TREES.
2. LOAM FOR BACKFILLING SHALL BE AMENDED AS REQUIRED BY LANDSCAPE ARCHITECT.
3. TAMP BACKFILL SOIL AROUND ROOTBALL FIRMLY TO MINIMIZE ROOTBALL SHIFT.

EVERGREEN TREE PLANTING

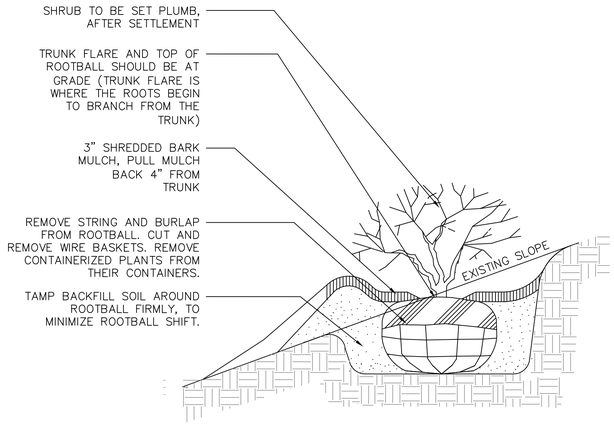


NOTES:
1. GUYING AND STAKING TO BE DETERMINED IN THE FIELD BY THE LANDSCAPE ARCHITECT. LOCAL FIELD CONDITIONS AS WELL AS PLANT CHARACTERISTICS WILL DETERMINE THE NECESSITY OF GUYING AND STAKING.
2. TYPICALLY ONLY TREES WITH A 3" OR GREATER CALIPER NEED TO BE STAKED. TREES

WITH LESS THAN A 3" CALIPER NEED TO BE STAKED ONLY AS REQUIRED BY LANDSCAPE ARCHITECT.
3. ONLY WRAP TREE TRUNKS AS REQUIRED BY LANDSCAPE ARCHITECT.
4. TREE SHALL BE SET PLUMB, AFTER SETTLEMENT.
5. LOAM FOR BACKFILLING SHALL BE AMENDED AS REQUIRED BY LANDSCAPE ARCHITECT.
6. CITY TREES PLANTED ON PRIVATE PROPERTY, ADJACENT TO A PUBLIC RIGHT-OF-WAY,

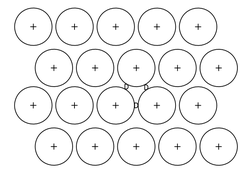
NEED TO BE PLANTED A MINIMUM OF 5 FEET FROM THE EDGE OF THE CITY SIDEWALK.

DECIDUOUS TREE PLANTING



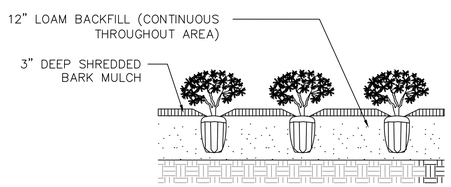
NOTE:
1. DO NOT HEAVILY PRUNE SHRUB AT PLANTING, PRUNE ONLY CROSSOVER LIMBS AND DAMAGED OR DEAD BRANCHES.
2. BACKFILL WITH LOAM, AMEND AS REQUIRED BY LANDSCAPE ARCHITECT.
3. SHRUBS & GROUNDCOVER PLANTED ADJACENT TO CITY SIDEWALKS NEED TO BE PLACED SO THE PLANTS, AT THEIR MATURE HEIGHT & WIDTH, WILL NOT ENCROACH INTO THE CITY'S SIDEWALK.

TYPICAL SHRUB PLANTING



TYPICAL BED PLANT SPACING

NOTE:
D = DIMENSION OF PLANT SPACING (SHRUB OR GROUNDCOVER AS INDICATED ON PLANS)



TYPICAL PERENNIAL PLANTING

FOR APPROVAL ONLY
NOT FOR CONSTRUCTION

PLAN SIZE:
FULL SIZE PLANS ARE 24x36
11x17 ARE APPROXIMATE HALF SCALES

OWNER:
MCKENAN PROPERTIES, LLC
100 CARL DRIVE
UNIT #8
MANCHESTER, NH. 03103

APPLICANT:
GEORGES REALTY, LLC
c/o WIL GEORGES
100 CARL DRIVE, 11a
MANCHESTER, NH. 03103

ECKMAN Engineering, LLC
1950 Lafayette Road Unit 210, PO Box 8025
Portsmouth, New Hampshire 03802
Phone: (603) 433-1354
Fax: (603) 433-2367

No.	DESCRIPTION	BY	DATE
	REVISIONS		

TOWN GREENVILLE, NEW HAMPSHIRE BRIDGE NO. ----
FEDERAL PROJECT ---- NHDOT PROJECT N/A
LOCATION TOWN OF GREENVILLE TAX MAP 5, LOTS 32 & 32-1
OLD MILL, CHAMBERLIN ST., GREENVILLE, HILLSBOROUGH, NH

DETAILS (BMP'S FOR INVASIVE SPECIES)

	BY	DATE		BY	DATE
DESIGNED	SRP	10/22	CHECKED	DEE	11/22
DRAWN	JJM	10/22	CHECKED	DEE	11/22
TRACED	———		CHECKED	———	
QUANTITIES			CHECKED		

EE PROJ. NO. 22-105
DWG FILE 22-105_ENG
REVIEWED BY:
NHDOT PROJ. NO. NA

BEST MANAGEMENT PRACTICES FOR COMMON INVASIVE SPECIES

Eckman Engineering was on-site late fall well after the growing season amd while no invasive species were identified on site it is important that the contractor have Best management Practices available to deal with invasive species should they be encounted. BMPs are therfore provided to deal with several common invasive species that are frequently encountered in the State of New Hampshire. Prior to begining work the contractor shall have a profesional qualified to identify invasive species check the proposed excavation areas of the site.
The contactor shall apply or hire someone experienced to apply the following BMPif required:

Knotweed

Knotweed BMP #1: Any treatment or control of knotweed should take place prior to seed maturation (late August). While knotweed spreads primarily via vegetative reproduction, it does produce viable seeds that can germinate in the wild.

Knotweed BMP #2: Do not mow knotweed, especially if it is growing near a ditch line, wetland, or surface water. Mowing knotweed creates small stem fragments that can be spread by the mowing equipment or moving water. These fragments can sprout and start new populations of knotweed.

Knotweed BMP #3: If knotweed must be removed (i.e. for safety reasons), a control plan should be implemented using preferred control methods (see following page). If a control plan is not implemented, the preferred method of removal is hand cutting, especially near water.

Knotweed BMP #4: If hand cutting is not feasible and mowing equipment must be used, the site should be raked immediately after mowing and as much plant material as possible should be collected and rendered nonviable. All mowing equipment should be cleaned prior to leaving the site. Note that cutting, whether manual or mechanical, is generally not an effective method for eradicating knotweed.

Knotweed BMP #5: If excavation will occur in areas containing knotweed, one or more of the following methods must be used to avoid spreading viable plant material:
a) Treat all knotweed stems with herbicide. This control method should be carried out at least two years prior to excavation in order to allow time to perform an adequate number of herbicide treatments to kill the entire root system.
b) Excavate as needed and spread all material containing roots and stems on an impervious surface. Care must be taken not to spread plant material during excavation and transport. Root material should be broken up as much as possible to promote a faster drying time. Once material has completely dried out, it is nonviable and can be used or disposed of on or off site.
c) If the above methods are not feasible, excavated material can be buried at the site of infestation at least five feet below grade.

Knotweed Control Option #1: Chemical Control
Herbicide treatment is the most effective way to eradicate knotweed. The best time to apply herbicide is late summer or early fall, when the plants are just starting to flower. The following application methods are effective; however, treatments will likely be required for at least two consecutive years, regardless of the method used.
Effective herbicide treatments:
a) Early summer cut followed by a late summer/early fall foliar spray – best for small to medium sized populations.
b) Foliar spray twice in one growing season – best for large, dense populations
c) Stem injection – best for small to medium sized populations
d) Cut & fill (stem cut and filled with herbicide) – best for small to medium sized populations

Important considerations:
§ Any method that requires cutting the knotweed stems necessitates proper disposal of the cut stems.
§ Presently, the NH Department of Agriculture Division of Pesticides requires knotweed to be listed on the herbicide label as a target species for a specific application method.
§ A permit from the Division of Pesticides must be obtained prior to applying herbicide. Application of herbicide must be consistent with herbicide label and carried out by a licensed applicator.
§ Currently, the Division of Pesticides allows only cut stem treatments along public road rights-of-way during the period of green foliage.
§ Applying herbicide to the right-of-way between June 1st and October 15th requires going through a public notification process to obtain a permit. However, cut stem treatments do not require public notification.
§ Avoid herbicide drift and spillage to minimize impacts to non-target species.

Knotweed Control Option #2: Mechanical Control
If herbicide treatment is not an option, cutting is sometimes successful in eradicating knotweed, but only with small, young populations, and only when done repeatedly (at least 4 times each growing season) for several years. Cutting by hand with a scythe or loppers is preferable to mowing. Cut material should be destroyed and all equipment should be cleaned prior to leaving the site.

Purple Loosestrife

Loosestrife BMP #1: Any treatment or control of loosestrife should take place prior to seed maturation (early August). A mature loosestrife plant can produce more than 2 million seeds.

Loosestrife BMP #2: Do not mow loosestrife if it can be avoided. Mowing loosestrife creates small stem fragments that can be spread by the mowing equipment or moving water. These fragments can sprout and start new populations of loosestrife.

Loosestrife BMP #3: If excavation will occur in areas containing purple loosestrife, one or more of the following methods must be used to avoid spreading viable plant material:
a) Treat all loosestrife stems with herbicide. This control method should be carried out at least two years prior to excavation in order to allow time to perform an adequate number of herbicide treatments to kill the entire root system.
b) Excavate as needed and spread all material containing roots and stems on an impervious surface. Care must be taken not to spread plant material during excavation and transport. Root material should be broken up as much as possible to promote a faster drying time. Once material has completely dried out, it is nonviable and can be used or disposed of on or off site.
c) Excavated material can be buried on or off site at least three feet below grade.

Loosestrife Control Option #1: Mechanical Control
Cutting or pulling by hand can be effective in eradicating small, young populations. However, this treatment must be continued for several years and any disturbed soil must be stabilized. Any material that is cut or pulled must be rendered non-viable. Both stem and root fragments can sprout new plants.

Loosestrife Control Option #2: Biological Control
Biological control measures have been developed for loosestrife and consist of leaf-feeding and root-feeding beetles. This control method is best for large, dense populations. More information about this option can be obtained from the NHDOT Bureau of Environment or the NH Department of Agriculture.

Loosestrife Control Option #3: Chemical Control
Herbicide can be applied in late July. The selected herbicide must be approved for use in wetlands. Treatments will likely be required for at least two consecutive years, regardless of the method used.
Effective herbicide treatments:
a) Foliar spray
b) Cut stem

Important considerations:
§ Presently, the NH Department of Agriculture Division of Pesticides requires loosestrife to be listed on the herbicide label as a target species for a specific application method.
§ A permit from the Division of Pesticides must be obtained prior to applying herbicide. Application of herbicide must be consistent with herbicide label and carried out by a licensed applicator.
§ Currently, the Division of Pesticides allows only cut stem treatments along public road rights-of-way during the period of green foliage.
§ Applying herbicide to the right-of-way between June 1st and October 15th requires going through a public notification process to obtain a permit. However, cut stem treatments do not require public notification.
§ Avoid herbicide drift and spillage to minimize impacts to non-target species.

Phragmites

Phragmites BMP #1: Do not mow phragmites if it can be avoided. Phragmites spreads vigorously by vegetative reproduction. Mowing phragmites creates small stem fragments that can be spread by the mowing equipment or moving water. These fragments can sprout and start new populations.

Phragmites BMP #2: Cutting by any method, when done at the wrong time, can increase stand density. Cutting should be timed to coincide with tasseling (when flowers begin to develop at the top of stem – late July/early August). This is when most of the plant's food reserves are aboveground.

Phragmites BMP #3: If excavation will occur in areas containing phragmites, one or more of the following methods must be used to avoid spreading viable plant material:
a) Treat all phragmites stems with herbicide. This control method should be carried out at least two years prior to excavation in order to allow time to perform an adequate number of herbicide treatments to kill the entire root system.
b) Excavate as needed and spread all material containing roots and stems on an impervious surface. Care must be taken not to spread plant material during excavation and transport. Root material should be broken up as much as possible to promote a faster drying time. Once material has completely dried out, it is non-viable and can be used or disposed of on or off site.
c) Excavated material can be buried on or off site at least three feet below grade.

Phragmites Control Option #1: Mechanical Control
Cutting by hand, pulling, or digging can be effective in eradicating small, new populations. These methods should be used in late July or early August when the plants are close to or in tasseling stage. This treatment must be continued for several years and any disturbed soil must be stabilized. Any material that is removed must be rendered non-viable. Both stem and root fragments can sprout into new plants.

Phragmites Control Option #2: Chemical Control
Herbicide can be applied in late summer (after tasseling). The selected herbicide must be approved for use in wetlands. Treatments will likely be required for at least two consecutive years, regardless of the method used.
Effective herbicide treatments:
a) Foliar spray
b) Stem injection

Important considerations:
Presently, the NH Department of Agriculture Division of Pesticides requires phragmites to be listed on the herbicide label as a target species for a specific application method.
A permit from the Division of Pesticides must be obtained prior to applying herbicide.
Application of herbicide must be consistent with herbicide label and carried out by a licensed applicator.
Currently, the Division of Pesticides allows only cut stem treatments along public road rights-of-way during the period of green foliage.
Applying herbicide to the right-of-way between June 1st and October 15th requires going through a public notification process to obtain a permit. However, cut stem treatments do not require public notification.
Avoid herbicide drift and spillage to minimize impacts to non-target species.

FOR APPROVAL ONLY
NOT FOR CONSTRUCTION

PLAN SIZE:
FULL SIZE PLANS ARE 24x36
11x17 ARE APPROXIMATE HALF SCALES

OWNER:
MCKENAN PROPERTIES, LLC
100 CARL DRIVE
UNIT #8
MANCHESTER, NH. 03103

APPLICANT:
GEORGES REALTY, LLC
c/o WIL GEORGES
100 CARL DRIVE, 11a
MANCHESTER, NH. 03103

ECKMAN Engineering, LLC
1950 Lafayette Road Unit 210, PO Box 8025
Portsmouth, New Hampshire 03802
Phone: (603) 433-1354
Fax: (603) 433-2367

No.	DESCRIPTION	BY	DATE
	REVISIONS		

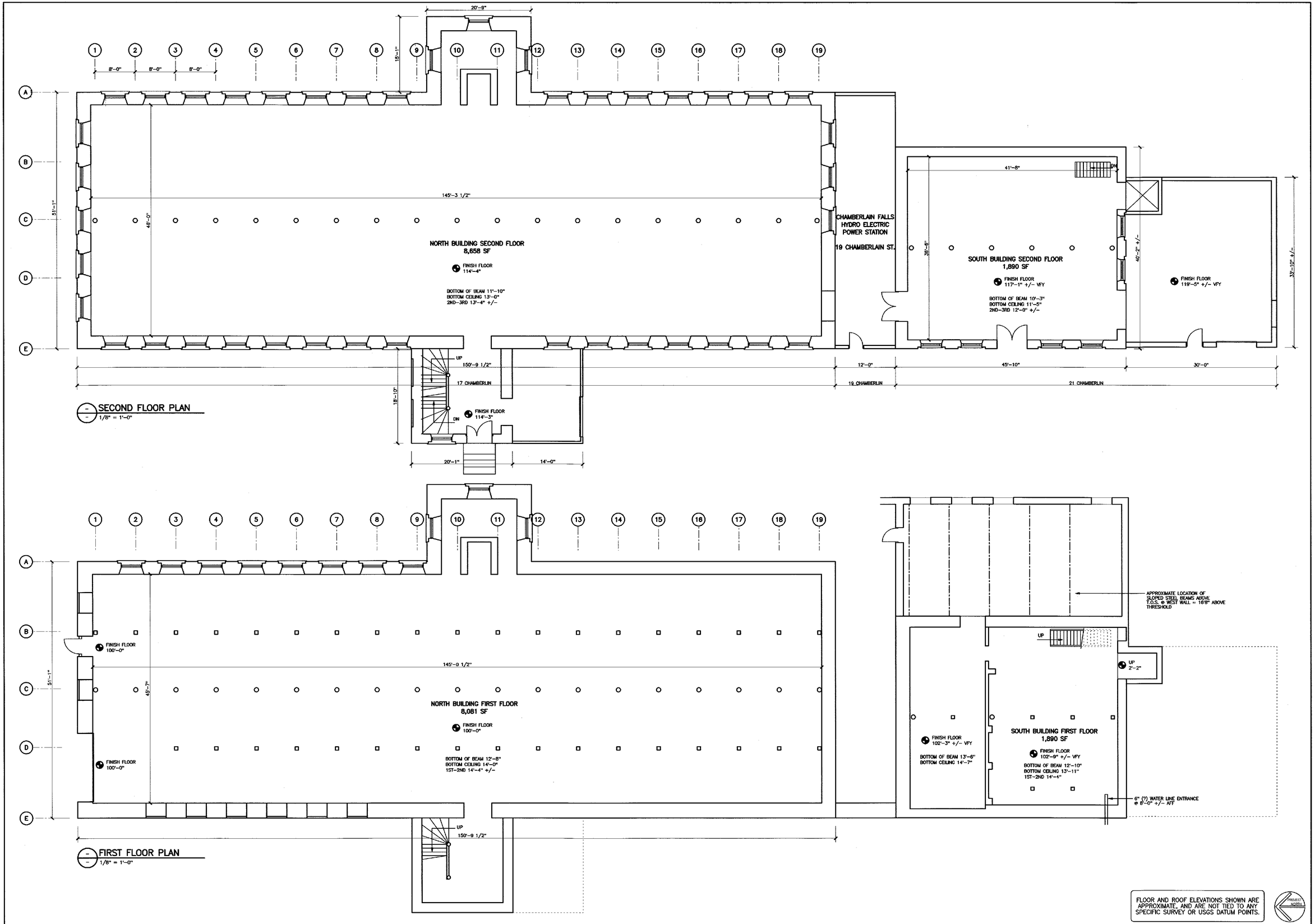
TOWN GREENVILLE, NEW HAMPSHIRE BRIDGE NO. ----
FEDERAL PROJECT ---- NHDOT PROJECT N/A
LOCATION TOWN OF GREENVILLE TAX MAP 5, LOTS 32 & 32-1
OLD MILL, CHAMBERLIN ST., GREENVILLE, HILLSBOROUGH, NH

DETAILS (BMP'S FOR INVASIVE SPECIES)

	BY	DATE		BY	DATE
DESIGNED	SRP	10/22	CHECKED	DEE	11/22
DRAWN	JJM	10/22	CHECKED	DEE	11/22
TRACED	———		CHECKED	———	
QUANTITIES			CHECKED		

REVIEWED BY:

EE PROJ. NO. 22-105
DWG FILE 22-105_ENG
NHDOT PROJ. NO. NA



FLOOR AND ROOF ELEVATIONS SHOWN ARE APPROXIMATE, AND ARE NOT TIED TO ANY SPECIFIC SURVEY OR USGS DATUM POINTS.

LAUER ARCHITECTS, P.A.
118 PAGE HILL RD., GOFFSTOWN, NH 03045
Tel. 603-497-8441
lauerarchitects@concast.net

PROPOSED IMPROVEMENTS AT:

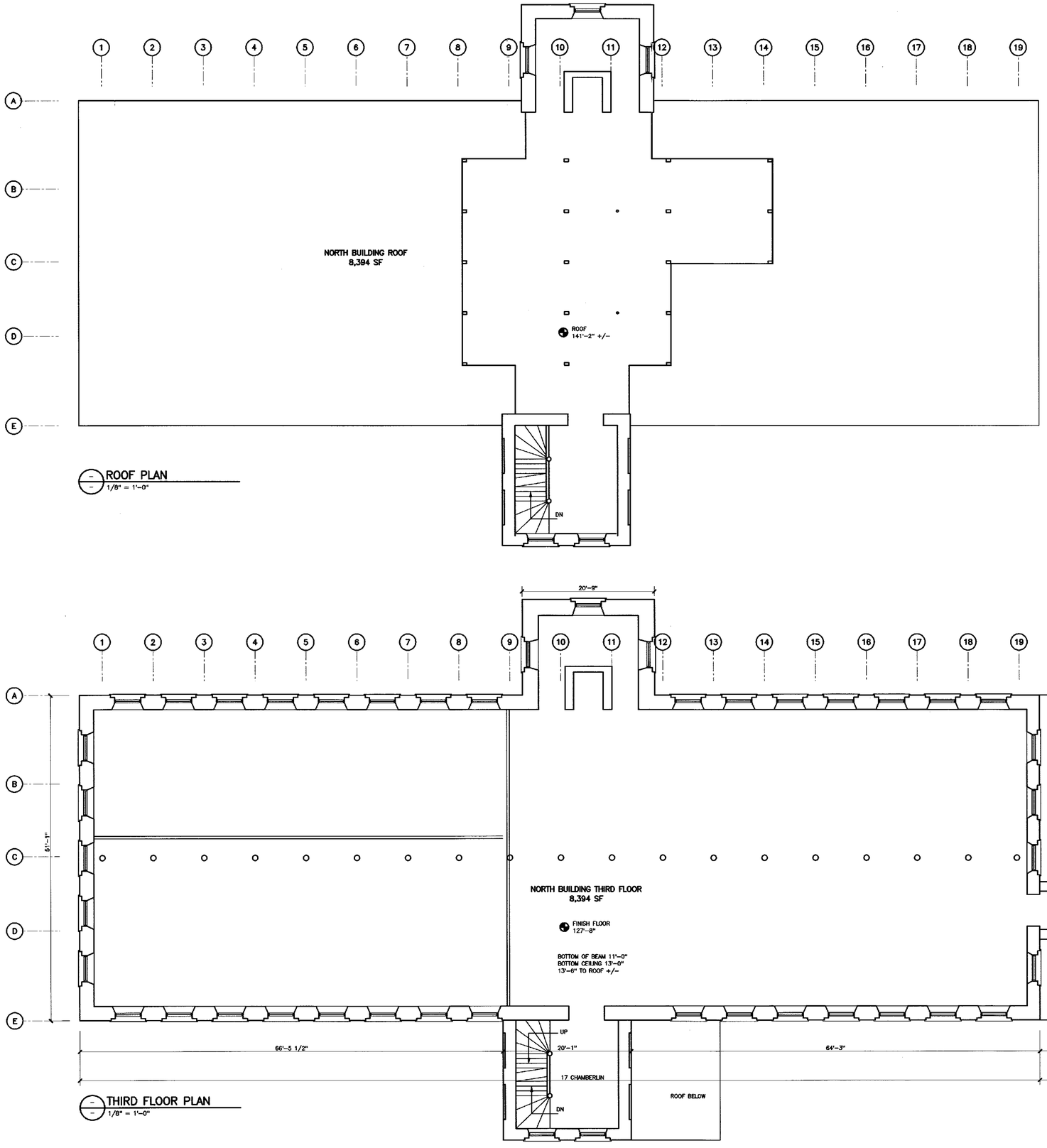
17 & 21 CHAMBERLIN STREET

GREENVILLE, NH 03048

EXISTING
FIRST and
SECOND
FLOOR PLANS
@ 1/8" = 1'-0"

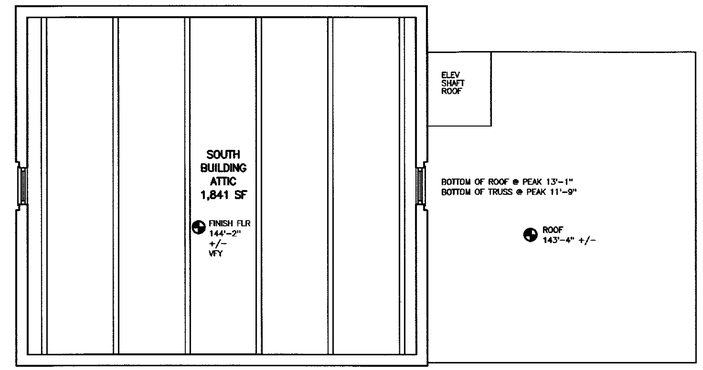
DATE: OCT. 10, 2022
FILE: 2229\GEORGES\
EX1-2

EX 1ST
EX 2ND



ROOF PLAN
1/8" = 1'-0"

THIRD FLOOR PLAN
1/8" = 1'-0"



FLOOR AND ROOF ELEVATIONS SHOWN ARE APPROXIMATE, AND ARE NOT TIED TO ANY SPECIFIC SURVEY OR USGS DATUM POINTS.

PROJECT NORTH

LAUER ARCHITECTS, P.A.
118 PAGE HILL RD., GOFFSTOWN, NH 03045
Tel. 603-497-9441
lauerarchitects@comcast.net

PROPOSED IMPROVEMENTS AT:

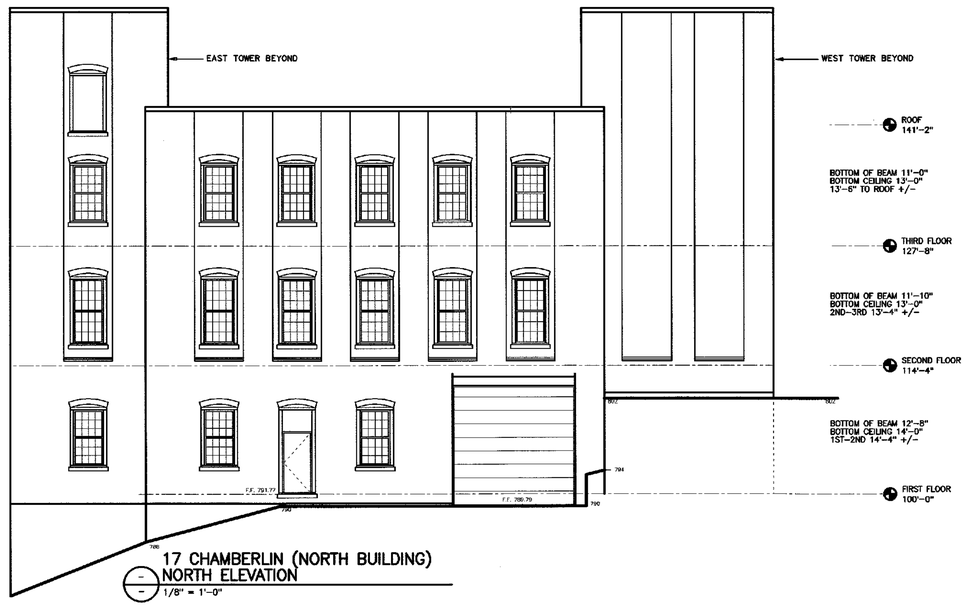
17 & 21 CHAMBERLIN STREET

GREENVILLE, NH 03048

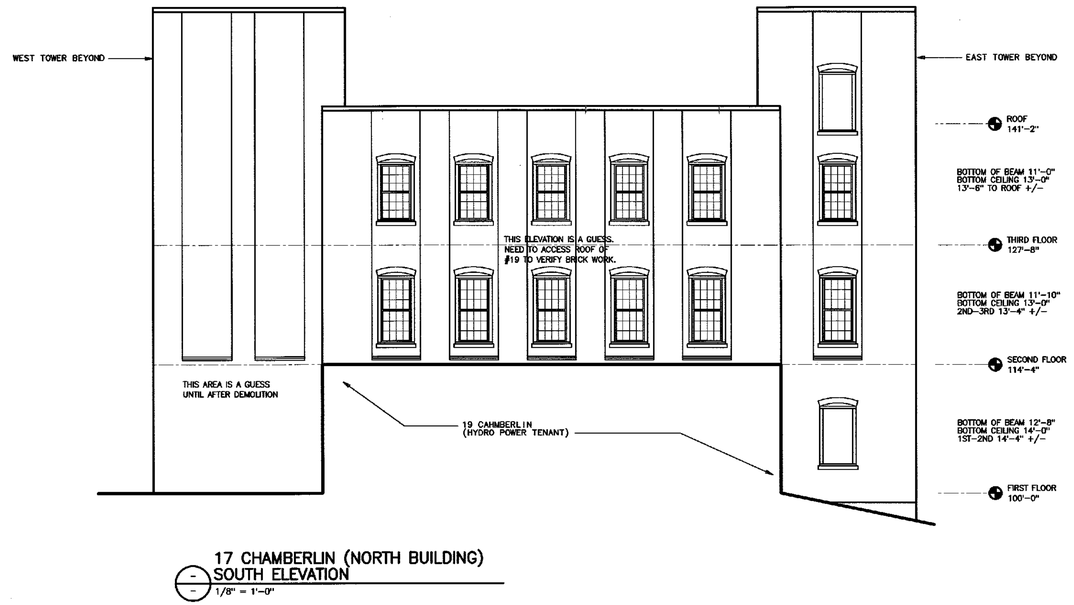
EXISTING
THIRD FLOOR
and ROOF
PLANS
@ 1/8" = 1'-0"

DATE: OCT. 10, 2022
FILE: 2229\GEORGES\
EX3-R

EX 3RD
EX ROOF



17 CHAMBERLIN (NORTH BUILDING)
NORTH ELEVATION
1/8" = 1'-0"



17 CHAMBERLIN (NORTH BUILDING)
SOUTH ELEVATION
1/8" = 1'-0"

17 & 21 CHAMBERLIN
WEST ELEVATION
1/8" = 1'-0"

FLOOR AND ROOF ELEVATIONS SHOWN ARE APPROXIMATE, AND ARE NOT TIED TO ANY SPECIFIC SURVEY OR USGS DATUM POINTS.

LAUER ARCHITECTS, P.A.
118 PAGE HILL RD., GOFFSTOWN, NH 03045
Tel. 603-497-8441
lauerarchitects@comcast.net

PROPOSED IMPROVEMENTS AT:

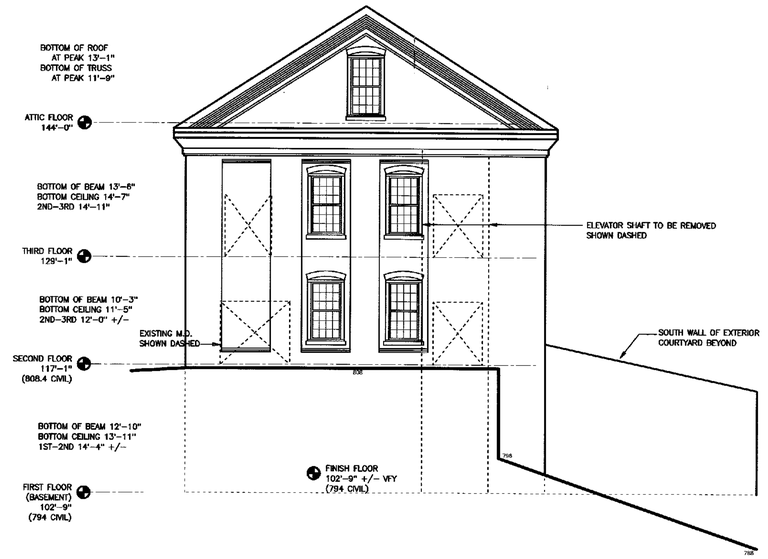
17 & 21 CHAMBERLIN STREET

GREENVILLE, NH 03048

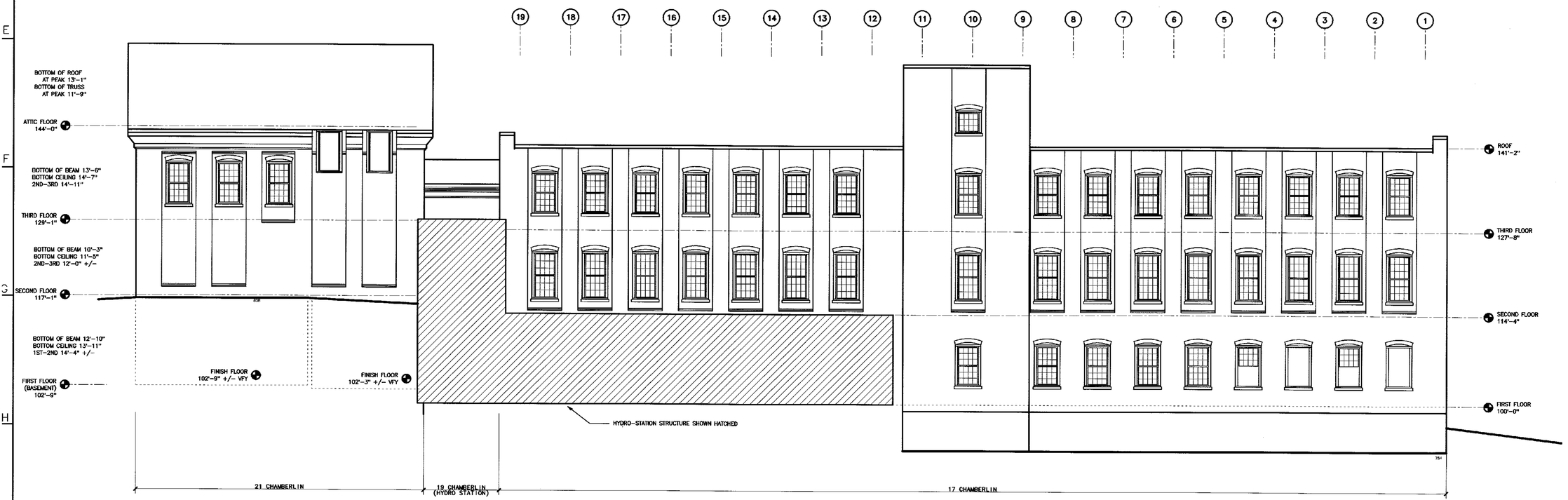
EXISTING
EXTERIOR
ELEVATIONS
@ 1/8" = 1'-0"

DATE: OCT. 10, 2022
FILE: 2229\GEORGES\
EXELEV1

EX ELEV 1



21 CHAMBERLIN (SOUTH BUILDING)
SOUTH ELEVATION
1/8" = 1'-0"



17 & 21 CHAMBERLIN
EAST ELEVATION
1/8" = 1'-0"

FLOOR AND ROOF ELEVATIONS SHOWN ARE APPROXIMATE, AND ARE NOT TIED TO ANY SPECIFIC SURVEY OR USGS DATUM POINTS.

LAUER ARCHITECTS, P.A.
118 PAGE HILL RD., GOFFSTOWN, NH 03045
Tel. 603-497-8441
lauerarchitects@comcast.net

PROPOSED IMPROVEMENTS AT:

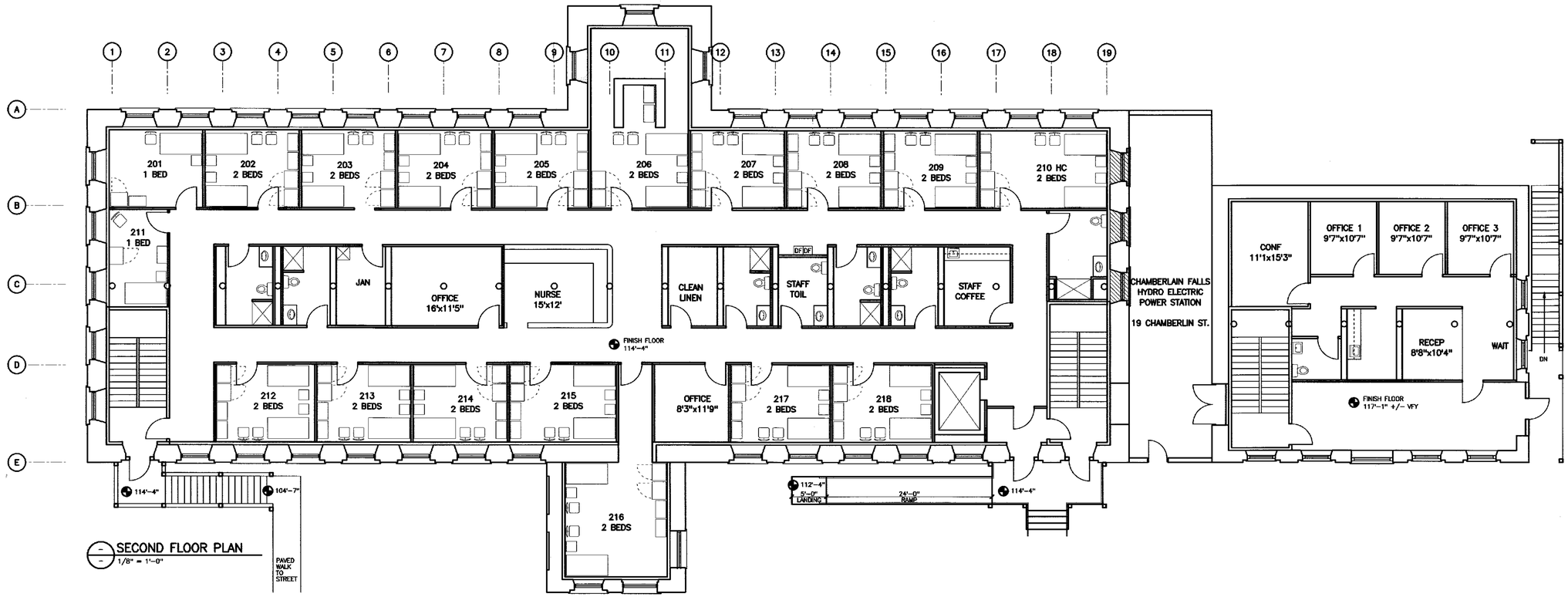
17 & 21 CHAMBERLIN STREET

GREENVILLE, NH 03048

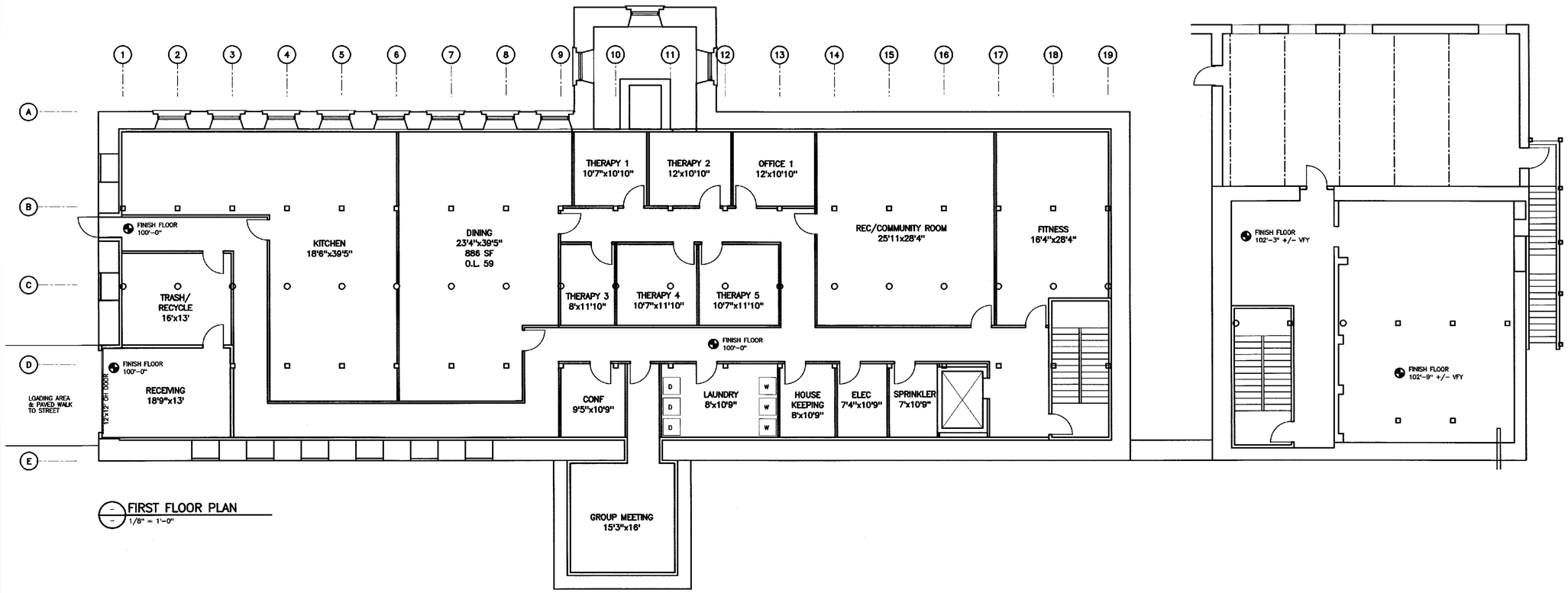
EXISTING EXTERIOR ELEVATIONS @ 1/8" = 1'-0"

DATE: OCT. 10, 2022
FILE: 2229\GEORGES\EXELEV2

EX ELEV 2



SECOND FLOOR PLAN
1/8" = 1'-0"



FIRST FLOOR PLAN
1/8" = 1'-0"

PROJECT NORTH

LAUER ARCHITECTS, P.A.
118 PAGE HILL RD., GOFFSTOWN, NH 03045
Tel. 603-497-8441
lauerarchitects@comcast.net

PROPOSED IMPROVEMENTS AT:

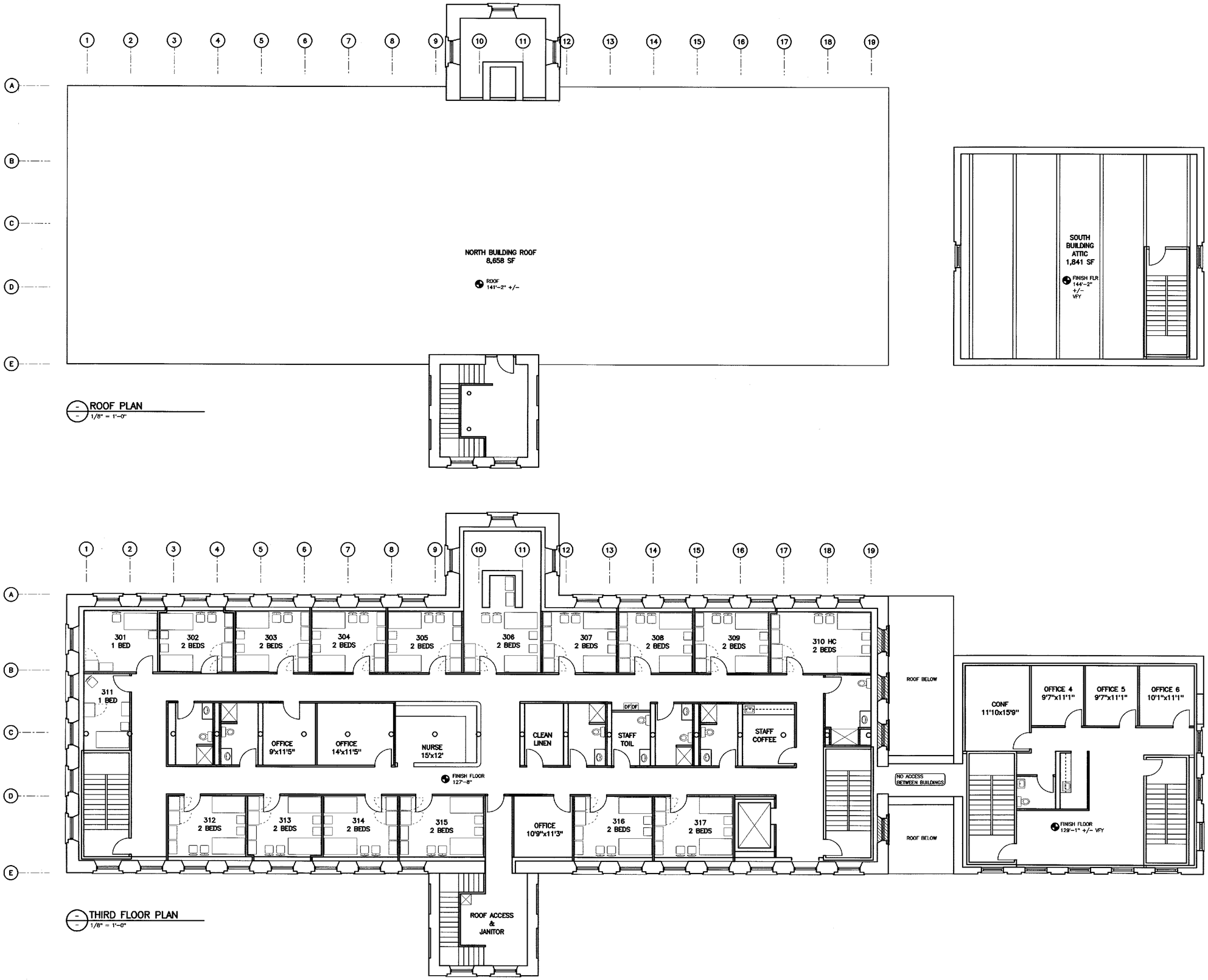
17 & 21 CHAMBERLIN STREET

GREENVILLE, NH 03048

FIRST
and SECOND
FLOOR PLANS
@ 1/8" = 1'-0"

DATE: OCT. 27, 2022
FILE: 2229\GEORGES\
PB1-2

1st & 2nd



ROOF PLAN
1/8" = 1'-0"

THIRD FLOOR PLAN
1/8" = 1'-0"

LAUER ARCHITECTS, P.A.
118 PAGE HILL RD., GOFFSTOWN, NH 03045
Tel. 603-497-8441
lauerarchitects@comcast.net

PROPOSED IMPROVEMENTS AT:

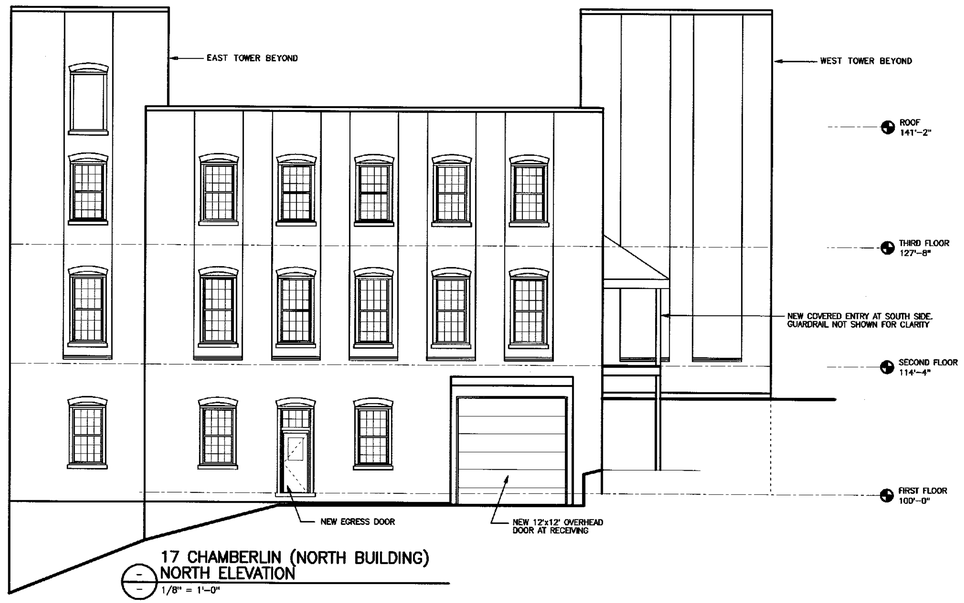
17 & 21 CHAMBERLIN STREET

GREENVILLE, NH 03048

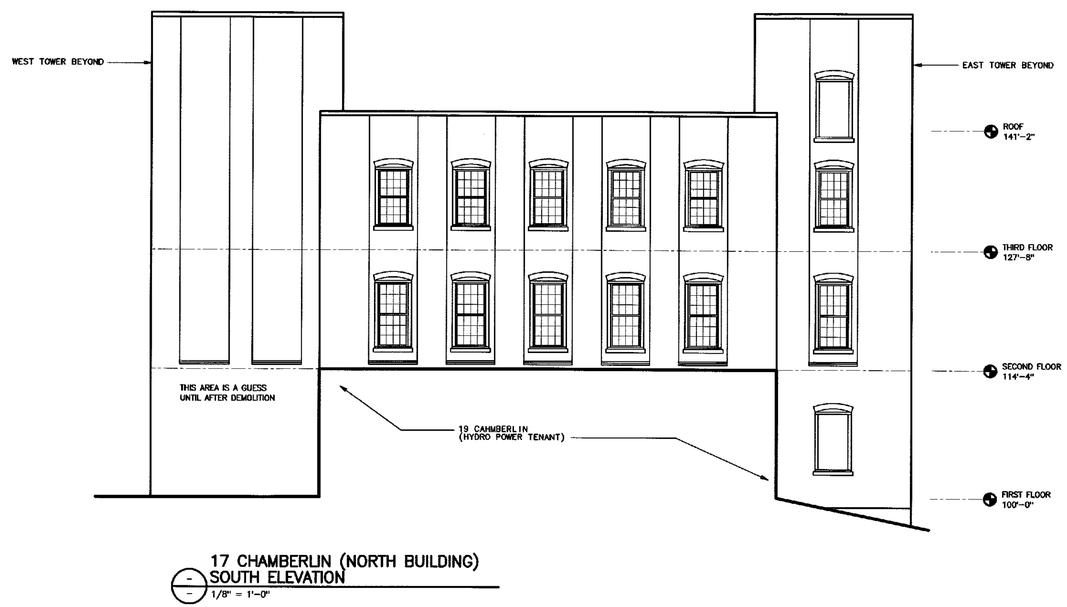
THIRD FLOOR
and ROOF
PLANS
@ 1/8" = 1'-0"

DATE: OCT. 27, 2022
FILE: 2229\GEORGES\
PB3-R

3rd &
ROOF



17 CHAMBERLIN (NORTH BUILDING)
NORTH ELEVATION
1/8" = 1'-0"



17 CHAMBERLIN (NORTH BUILDING)
SOUTH ELEVATION
1/8" = 1'-0"

17 & 21 CHAMBERLIN
WEST ELEVATION
1/8" = 1'-0"

FLOOR AND ROOF ELEVATIONS SHOWN ARE APPROXIMATE, AND ARE NOT TIED TO ANY SPECIFIC SURVEY OR USGS DATUM POINTS.

LAUER ARCHITECTS, P.A.
118 PAGE HILL RD., GOFFSTOWN, NH 03045
Tel. 603-497-8441
lauerarchitects@comcast.net

PROPOSED IMPROVEMENTS AT:

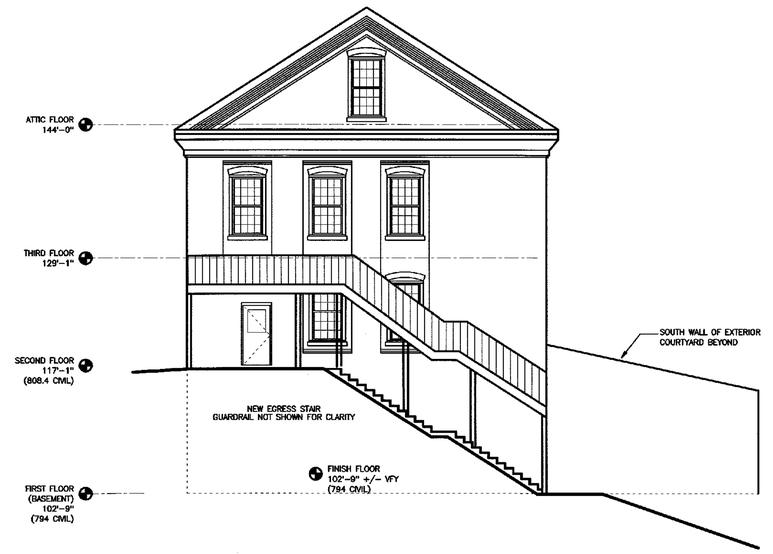
17 & 21 CHAMBERLIN STREET

GREENVILLE, NH 03048

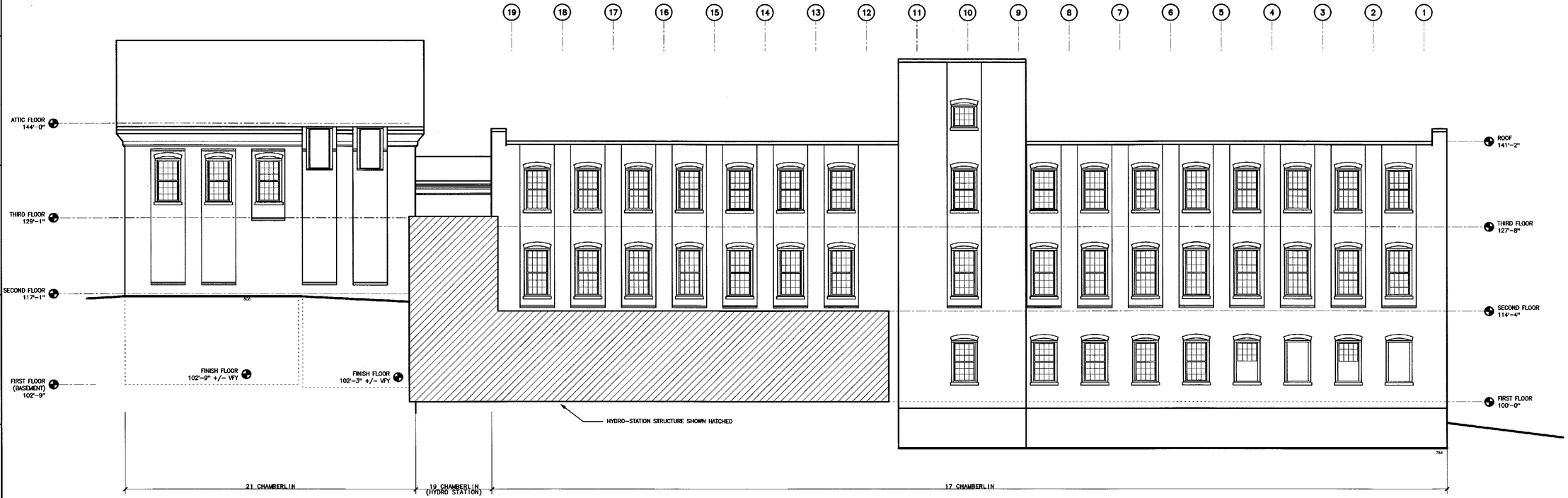
EXTERIOR ELEVATIONS
@ 1/8" = 1'-0"

DATE: OCT. 27, 2022
FILE: 2229\GEORGES\PBELEV1

ELEV 1



21 CHAMBERLIN (SOUTH BUILDING)
SOUTH ELEVATION
1/8" = 1'-0"



17 & 21 CHAMBERLIN
EAST ELEVATION
1/8" = 1'-0"

FLOOR AND ROOF ELEVATIONS SHOWN ARE APPROXIMATE, AND ARE NOT TIED TO ANY SPECIFIC SURVEY OR USGS DATUM POINTS.

LAUER ARCHITECTS, P.A.
118 PAGE HILL RD., GOFFSTOWN, NH 03045
Tel. 603-497-9441
lauerarchitects@comcast.net

PROPOSED IMPROVEMENTS AT:

17 & 21 CHAMBERLIN STREET

GREENVILLE, NH 03048

EXTERIOR
ELEVATIONS
@ 1/8" = 1'-0"

DATE: OCT. 27, 2022
FILE: 2229\GEORGES\
PBELEV2

ELEV 2