

STONE BOUND

SLOPED GRANITE EDGING

STATE HIGHWAY LAYOUT

SUBDRAIN

SHOULDER

STOP LINE

STATION

STONE

**STAIRS** 

SIDEWALK

**TANGENT** 

**TEMPORARY** 

TOP OF RAIL

**TYPICAL** 

VAULT

WOOD

**VARIABLE** 

VINYL FENCE

WESTBOUND

WOOD FENCE

SEWER MANHOLE

SOLID WHITE LINE

SOLID YELLOW LINE

TANGENT DISTANCE

**TELEPHONE MANHOLE** 

VITRIFIED CLAY PIPE

WHEELCHAIR RAMP

WROUGHT IRON FENCE

WROUGHT IRON PIPE

TRAFFIC SIGNAL CONDUIT

VERTICAL GRANITE CURB

SKEW

SHLD

SMH

TAN

TYP

VCP

WDF

WIF

**TEMP** 

**ABBREVIATIONS** 

RIGHT OF WAY

RAILROAD SPIKE

SOUTHBOUND

S BD

#### **UTILITY NOTES:**

- 1. ALL UNDERGROUND UTILITIES AS SHOWN WERE COMPILED USING FIELD SURVEY INFORMATION AND AVAILABLE RECORD INFORMATION.
- 2. RECORD UTILITY INFORMATION FROM THE VARIOUS UTILITY COMPANIES AND PUBLIC AGENCIES, ARE APPROXIMATE ONLY AND ACTUAL LOCATIONS MUST BE DETERMINED IN THE FIELD.
- 3. ALL UTILITY COMPANIES, PUBLIC AND PRIVATE MUST BE NOTIFIED, INCLUDING THOSE IN CONTROL OF UTILITIES NOT SHOWN ON THIS PLAN, (SEE CHAPTER 370, ACTS OF 1963, MASSACHUSETTS) PRIOR TO DESIGNING, EXCAVATING, BLASTING, INSTALLING, BACKFILLING, GRADING, PAVEMENT RESTORING OR REPAVING.
- 4. THE LOCATION OF EXISTING PIPES OR OTHER UNDERGROUND STRUCTURES OR PROPERTY LINES ARE NOT WARRANTED TO BE EXACT, NOR IS IT WARRANTED THAT ALL UNDERGROUND PIPES OR STRUCTURES ARE SHOWN. THE CONTRACTOR SHALL CALL "DIG SAFE" (1-888-344-7233) 72 HOURS (EXCLUDING SATURDAYS, SUNDAYS AND HOLIDAYS) PRIOR TO ANY EXCAVATION TO OBTAIN ACCURATE UTILITY LOCATIONS.
- 5. SUBSURFACE UTILITY LOCATIONS HAVE BEEN PLOTTED TO MEET UTILITY QUALITY LEVEL "C" AS DESCRIBED IN ASCE STANDARD 38-02 AND SUMMARIZED BELOW. THE UNDERGROUND UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS BASED ON ABOVE-GROUND FIELD OBSERVATION AND EXISTING RECORD INFORMATION RECEIVED FROM UTILITY STAKE-HOLDERS. UTILITY RECORD PLANS WERE REQUESTED AND RECEIVED FROM THE FOLLOWING UTILITY COMPANIES/AGENCIES/MUNICIPALITIES:
- 6. INVERTS SHOWN ON PLAN ARE NOT GUARANTEED TO BE ACCURATE. DUE TO THE LIMITATIONS OF FIELD OBSERVATION AND SURVEY TECHNIQUES THE INVERTS ARE SHOWN AS APPROXIMATE ONLY AND SHALL NOT BE WARRANTED TO BE CORRECT. ADDITIONAL FIELD INVESTIGATION IS NECESSARY WHERE ACCURATE MEASUREMENTS ARE REQUIRED FOR DESIGN OF CRITICAL AREAS.
- 7. THE EXISTING CONDITIONS PLAN IS TO BE USED FOR THE SPECIFIED PROJECT ONLY AND IS NOT WARRANTED TO BE COMPLETE FOR ANY OTHER FUTURE PROJECTS.

#### SUMMARY OF UTILITY MAPPING QUALITY LEVELS:

THE FOLLOWING IS A SUMMARY OF THE SURVEY MAPPING LEVELS FOR UTILITIES AS DESCRIBED IN ASCE STANDARD 38-02, "STANDARD GUIDELINE FOR THE DEPICTION OF EXISTING SUBSURFACE UTILITY DATA". THESE GUIDELINES ARE MORE FULLY DESCRIBED IN THE ASCE STANDARD.

### UTILITY QUALITY LEVEL A:

PRECISE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES OBTAINED BY THE ACTUAL EXPOSURE (OR VERIFICATION OF PREVIOUSLY EXPOSED AND SURVEYED UTILITIES) AND SUBSEQUENT MEASUREMENT OF SUBSURFACE UTILITIES, USUALLY AT A SPECIFIC POINT. MINIMALLY INTRUSIVE EXCAVATION EQUIPMENT IS TYPICALLY USED TO MINIMIZE THE POTENTIAL FOR UTILITY DAMAGE. A PRECISE HORIZONTAL AND VERTICAL LOCATION, AS WELL AS OTHER UTILITY ATTRIBUTES, IS SHOWN ON PLAN DOCUMENTS. ACCURACY IS TYPICALLY SET TO 15-MM VERTICAL AND TO APPLICABLE HORIZONTAL SURVEY AND MAPPING ACCURACY AS DEFINED OR EXPECTED BY THE PROJECT OWNER.

## UTILITY QUALITY LEVEL B:

INFORMATION OBTAINED THROUGH THE APPLICATION OF APPROPRIATE SURFACE GEOPHYSICAL METHODS TO DETERMINE THE EXISTENCE AND APPROXIMATE HORIZONTAL POSITION OF SUBSURFACE UTILITIES. QUALITY LEVEL B DATA SHOULD BE REPRODUCIBLE BY SURFACE GEOPHYSICS AT ANY POINT OF THEIR DEPICTION. THIS INFORMATION IS SURVEYED TO APPLICABLE TOLERANCES DEFINED BY THE PROJECT AND REDUCED ONTO PLAN DOCUMENTS.

### UTILITY QUALITY LEVEL C:

INFORMATION OBTAINED BY SURVEYING AND PLOTTING VISIBLE ABOVE-GROUND UTILITY FEATURES AND BY USING PROFESSIONAL JUDGMENT IN CORRELATING THIS INFORMATION TO QUALITY LEVEL D INFORMATION.

## UTILITY QUALITY LEVEL D:

INFORMATION DERIVED FROM EXISTING RECORDS OR ORAL RECOLLECTIONS.INFORMATION DERIVED FROM EXISTING RECORDS OR ORAL RECOLLECTIONS.

## LEGEND

AUX	AUXILIARY	GIP	GALVANIZED IRON PIPE
BD	BOUND	GMH	GAS MANHOLE
BIT	BITUMINOUS	GRAN	GRANITE
B <u>.</u>	BASELINE	GRAV	GRAVEL
BLDG	BUILDING	GRD	GUARD
ВМ	BENCHMARK	GRL	GUARDRAIL
BR	BRIDGE	HDW	HEADWALL
BRK	BRICK	HYD	HYDRANT
BWL	BROKEN WHITE LINE	INV	INVERT
BYL	BROKEN YELLOW LINE	IP	IRON PIPE
CAB	CABINET	JB	JERSEY BARRIER
СВ	CATCH BASIN	L	LENGTH OF CURVE
CC	CEMENT CONCRETE	LB	LEACHING BASIN
CCB	CAPE COD BERM	LC	LAND COURT
CEN	CENTER	LCB	LAND COURT BOUND
CI	CURB INLET	LCD	LAND COURT DISK
	CAST IRON PIPE	LO	LAYOUT
CIP		LP	LIGHT POLE
Œ.	CENTER LINE	LPD	LIGHT POLE DOUBLE LIGHT
CLF	CHAIN LINK FENCE	LSA	LANDSCAPED AREA
CMH	CABLE MANHOLE	MAG	MAG NAIL
CMP	CORRUGATED METAL PIPE	MBE	MIDDLE BACK EDGE
CO	COUNTY	MED	MEDIAN
CO BD	COUNTY BOUND	MH	MANHOLE
CON	CONIFEROUS	MP	MILE POST
CONC	CONCRETE	MTL	METAL
CPP	CORRUGATED PLASTIC PIPE	N/F	NOW OR FORMERLY
CSP	CORRUGATED STEEL PIPE		
CULV	CULVERT	NB	NORTHBOUND
CW	CROSSWALK	OH	OVERHANG
DBWL	DOUBLE WHITE LINE	OHW	OVERHEAD WIRE
DBYL	DOUBLE YELLOW LINE	PC	POINT OF CURVATURE
DEC	DECIDUOUS	PCC	POINT OF COMPOUND CURVATURE
DEL	DELENEATOR/REFLECTOR POST	PED	PEDESTRIAN
DH	DRILL HOLE	PI	POINT OF INTERSECTION
DI	DROP INLET	PK	PK NAIL
DIA	DIAMETER	ዊ	PROPERTY LINE
DIP	DUCTILE IRON PIPE	PP	PRICK PUNCH
DMH	DRAIN MANHOLE	PRC	POINT OF REVERSE CURVATURE
DSK	DISK	PRF	POST AND RAIL FENCE
DWL	DOTTED WHITE LINE	PRK	PARKING
DVL	DOTTED WHITE LINE DOTTED YELLOW LINE	PT	POINT OF TANGENCY
EB	EASTBOUND	PVC	POLYVINYL CHLORIDE PIPE
EL	ELEVATION	PVMT	PAVEMENT
EMH	ELECTRIC MANHOLE	PWW	PAVED WATERWAY
EMIH EP	EDGE OF PAVEMENT	PZ	PIEZOMETER
		R	RADIUS OF CURVATURE
EPLP	ESCUTCHEON PIN IN LEAD PLUG	RB	REBAR
ETW	EDGE OF TRAVELED WAY	RC	REINFORCED CONCRETE
EX	EXISTING	RCP	REINFORCED CONCRETE PIPE
FF	FINISH FLOOR	RET	RETAINING
FGS	FLAGSTONE	ROW	
	LLCNAU INIE	11170	13153111 521 VV/1

FLOWLINE

**GARAGE** 

GROUND

FLDSTN FIELDSTONE

GAR

GD

BANK FLAG BUSH BENCHMARK BOLLARD O BOL BOUND (CONC, STONE, LAND COURT, ETC.) CABLE MANHOLE CATCH BASIN - SQUARE CATCH BASIN - D-FRAME **CATCH BASIN - ROUND** DELINEATOR / REFLECTOR POST DISK (CA/T, USC&GS, LAND COURT, ETC.) DRAIN MANHOLE ELECTRIC HANDHOLE □ EHH ELECTRIC MANHOLE o EM **ELECTRIC METER** EPLP ESCUTCHEON PIN IN LEAD PLUG FLASHING BEACON ⊠ FB FLARED END SECTION ⊕ FP FLAG POLE • GF GAS FILL o GG GAS GATE ⊡ GM **GAS METER** G GP GAS PUMP GAS MANHOLE **GUY POLE** O− GPL HANDICAP SYMBOL **GUY WIRE ANCHOR** HIGH TENSION POWER POLE FIRE HYDRANT **IRON PIPE** OIP LIGHT POLE LIGHT POLE DOUBLE LIGHT

MAG MAIL BOX MISCELLANEOUS GATE MASSACHUSETTS HIGHWAY BOUND → MW MONITORING WELL O OIL OIL FILL OTHER MANHOLE  $\square$  PB **PULL BOX** PEDESTRIAN SIGNAL PHOTO CONTROL - H & V PHOTO CONTROL - V ONLY O PK PK NAIL PARKING METER O PM O POST CIRCULAR POST □ POST SQUARE POST • WSO O RB REBAR/IRON PIN ⊕ WELL ROCK O WF# RAILROAD SPIKE X X-CUT RAILROAD SIGNAL ⊠ RRSW RAILROAD SWITCH  $oldsymbol{\square}$  SN STAKE AND NAIL O SP STAND PIPE SEWER MANHOLE STEAM MANHOLE TACKTILE/DETECTABLE WARNING PAD ■ TB TOWN LINE BOUND (CORNER) TRAFFIC SIGNAL CONTROL CABINET TELEPHONE MANHOLE ☑ TFMR TRANSFORMER TOWN LINE ROAD STONE TEST PIT TROLLEY POLE -O TPL TRAVERSE POINT

TREE TRAFFIC SIGNAL TRAFFIC SIGNAL MAST ARM/SPAN WIRE POLE o ts  $\overline{\phantom{a}}$ SIGN - DOUBLE POST • UG **UNKNOWN GATE** \_\_\\_\_UFB# UTILITY POLE W/ FIRE PULL BOX UTILITY POLE W/ LIGHT UTILITY POLE W/ DOUBLE LIGHT --O- UPL# UTILITY POLE O VP VENT PIPE WATER MANHOLE • WG WATER GATE o wm WATER METER

WATER SHUTOFF

WELL (POTABLE)

WETLAND FLAG

X-CUT

## **DEED REFERENCES**

BOOK 26646 PAGE 34 BOOK 45946 PAGE 88 (EASEMENT GRANT) BOOK 53276 PAGE 393 (EASEMENT GRANT)

### **PLAN REFERENCES**

PLAN NUMBER 646 OF 1953 PLAN NUMBER 1037 OF 1975 **PLAN NUMBER 1183 OF 2005** PLAN NUMBER 184 OF 2008 PLAN NUMBER 466 OF 2009

### **SURVEY NOTES**

- 1. THE EXISTING CONDITIONS SHOWN ON THIS BASE MAP ARE THE RESULT OF AN ON-THE-GROUND INSTRUMENT SURVEY PERFORMED BETWEEN JULY 22, 2020 AND AUGUST 11, 2020 BY GREEN INTERNATIONAL AFFILIATES, INC. (GREEN).
- 2. HORIZONTAL AND VERTICAL CONTROL WAS ESTABLISHED BY GREEN, ON JULY 23, 2020. HORIZONTAL DATUM IS BASED ON THE MASSACHUSETTS STATE PLANE COORDINATE SYSTEM (MAINLAND) NAD83 (2011), 2010.00 EPOCH. VERTICAL DATUM IS NAVD88 (COMPUTED USING GEOID18B)
- 3. PROPERTY LINES SHOWN ARE THE DIRECT RESULT OF AN INSTRUMENT SURVEY PERFORMED ON-THE-GROUND BY GREEN INTERNATIONAL AFFILIATES, INC. WITH AN ERROR OF CLOSURE OF 1 IN 38,668. PRIVATE PROPERTY LINES HAVE NOT BEEN SURVEYED, THEY ARE COMPILED FROM DEED AND RECORD PLAN INFORMATION AND SHOULD BE CONSIDERED APPROXIMATE.

# TRACK ROAD SURVEY AND **DESIGN**

DESIGN SUBMISSION:

**EXISTING CONDITIONS SURVEY** 

PREPARED FOR: TOWN OF STOW

380 GREAT RD

STOW, MASSACHUSETTS





































