# MERRIMACK COUNTY CUSTOMS SITE DEVELOPMENT - NH STATE ROUTE 114



NEW HAMPSHIRE

# BRADFORD, NEW HAMPSHIRE DECEMBER 2020



LOCATION PLAN SCALE: 1" = 2000'

**OWNER:** ALLEN REVOCABLE TRUST C/O JASON & SYDNEY ALLEN TRUST **135 EAST MAIN STREET** BRADFORD, NH 03221

(603) 877-0116

WETLANDS SCIENTIST: GOVE ENVIRONMENTAL SERVICES, INC. LUKE HURLEY, CWS 8 CONTINENTAL DRIVE, BLDG #2, UNIT H EXETER, NH 03883 (603) 778-0644

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# ENGINEER & SURVEYOR:



P.O. BOX 1825, 176 NEWPORT RD. NEW LONDON, NH 03257

> NG CONDITIONS SED SITE PLAN ON CONTROL NOTES & DETAILS RUCTION DETAILS (1 OF 2) RUCTION DETAILS (2 OF 2) NG ELEVATIONS

DATE OF PRINT **DECEMBER 22 2020** HORIZONS ENGINEERING

### **GENERAL NOTES**

1. OWNER OF RECORD

ALLEN REVOCABLE TRUST JASON D & SYDNEY L ALLEN, CO-TRUSTEES 135 EAST MAIN STREET BRADFORD, NH 03221

- 2. DEED REFERENCE:
- A. "FIDUCIARY DEED FROM GLENNA L. DANIELS, ADMINISTRATRIX OF THE ESTATE OF PATRICIA L. HALL TO JASON D. ALLEN & SYDNEY L. ALLEN, CO-TRUSTEES OF THE ALLEN REVOCABLE TRUST u/d/t 09/14/2016." DATED JANUARY 19, 2018. RECORDED JANUARY 19, 2018 AT THE MERRIMACK COUNTY REGISTRY OF DEEDS BOOK 3583 PAGE 2026.
- 3. PLAN REFERENCES:
- A. "BOUNDARY LINE ADJUSTMENT & SUBDIVISION FOR LOUISE R. HALL, ROUTE 114, BRADFORD, N.H.", PREPARED BY BRISTOL, SWEET & ASSOCIATES, INC, DATED 7/16/96 AND RECORDED IN THE MERRIMACK COUNTY REGISTRY OF DEEDS AS PLAN #13699.
- B. "SUBDIVISION PLAN OF THE LAND OF LOUISE R. HALL, BRADFORD, NH", PREPARED BY HOLDEN ENGINEERING & SURVEYING, INC., DATED 6-26-09 AND RECORDED IN THE MERRIMACK COUNTY REGISTRY OF DEEDS AS PLAN #11708.
- 4. THIS PLAN IS BASED ON A FIELD SURVEY COMPLETED IN NOVEMBER OF 2020 WITH A LEICA ZENO GPS RECEIVER AND A LEICA ROBOTIC TOTAL STATION.
- 5. THE BEARINGS SHOWN HEREON REFER TO THE NEW HAMPSHIRE COORDINATE SYSTEM, GRID NORTH. THE VERTICAL DATUM IS THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). TOPOGRAPHIC INFORMATION DEPICTED IS BASED ON LIDAR DATA OBTAINED FROM GRANIT.
- 6. THE PROPERTY BOUNDARY WAS RETRACED USING THE DEEDS OF RECORD, REFERENCE PLANS AND EVIDENCE FOUND IN THE FIELD. ABUTTING PROPERTY LINES ARE APPROXIMATE PER THE TOWN OF ALTON TAX MAPS.
- 7. THE WETLANDS WERE DELINEATED IN OCTOBER OF 2020 BY LUKE HURLEY, CERTIFIED WETLAND SCIENTIST, OF GOVE ENVIRONMENTAL SERVICES, ACCORDING TO THE DELINEATION STANDARDS IN THE REPORT "REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTH CENTRAL AND NORTHEAST REGION (VERSION 2.0-1/12) AND NH WETLANDS BUREAU RULES AND REGULATIONS. WETLAND FLAGS WERE LOCATED AT THE TIME OF THE FIELD SURVEY. WETLANDS ON-SITE WERE DELINEATED AS PSS1E (PALUSTRINE, SCRUB SHRUB, BROAD-LEAVED DECIDUOUS, SEASONALLY FLOODED/SATURATED) AND R4SB1,2 (RIVERINE, INTERMITTENT, STREAMBED, REDROCK, RUBBLE).
- 8. THE SURVEYED PARCEL IS MAPPED AS LYING OUTSIDE OF THE FLOOD ZONE PER F.E.M.A. FIRM MAP NUMBER 33013C0265E DATED APRIL 19, 2010.
- 9. THE PROPERTY IS LOCATED IN THE RESIDENTIAL BUSINESS DISTRICT AND THE RESIDENTIAL RURAL DISTRICT.
- 10. BUILDING SETBACKS: 50 FEET FROM THE EDGE OF THE RIGHT OF WAY OF AN ACCEPTED ROAD, 30 FEET FROM ABUTTERS' PROPERTY LINES.
- 11. MAXIMUM BUILDING HEIGHT 35 FEET.



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CRUSHED ROCK					
EVE SIZE	PERCENT FINER BY WEIGH				
50MM (6IN)	100				
00MM (4 IN)	0.0 - 25				
0.0MM (3/4 IN)	0.0 - 15				
75MM (NO. 4)	0.0 - 5.0				
5MM (NO. 200)	0.0 - 2.0				

## STONE SPECIFICATIONS

- 2.1 MATERIALS STONE FILL
- A. MATERIALS SHALL MEET THE REQUIREMENTS OF SECTION 585, STONE FILL, NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS (NHS) FOR THE APPROPRIATE ITEM AS INDICATED ON THE DRAWINGS.
- B. STONE FOR STONE FILL SHALL BE APPROVED QUARRY STONE, OR BROKEN ROCK OF A HARD, SOUND, AND DURABLE QUALITY. THE STONES AND SPALLS SHALL BE SO GRADED AS TO PRODUCE A DENSE FILL WITH A MINIMUM OF VOIDS.
  - 1. CLASS A STONE SHALL BE IRREGULAR IN SHAPE WITH APPROXIMATELY 50 % OF THE MASS HAVING A MINIMUM VOLUME OF 12 CUBIC FEET, APPROXIMATELY 30 % OF THE MASS RANGING BETWEEN 3 AND 12 CUBIC FEET, APPROXIMATELY 10 % OF THE MASS RANGING BETWEEN 1 AND 3 CUBIC FEET, AND THE REMAINDER OF THE MASS COMPOSED OF SPALLS.
  - 2. CLASS B STONE SHALL BE IRREGULAR IN SHAPE WITH APPROXIMATELY 50 % OF THE MASS HAVING A MINIMUM VOLUME OF 3 CUBIC FEET, APPROXIMATELY 40 % OF THE MASS RANGING BETWEEN 1 AND 3 CUBIC FEET, AND THE REMAINDER OF THE MASS COMPOSED OF SPALLS.
  - 3. CLASS C STONE SHALL CONSIST OF CLEAN, DURABLE FRAGMENTS OF LEDGE ROCK, OF UNIFORM QUALITY, REASONABLY FREE FROM THIN OR ELONGATED PIECES. THE STONE SHALL BE MADE FROM ROCK WHICH IS FREE FROM TOPSOIL AND OTHER ORGANIC MATERIAL. THE STONE SHALL BE GRADED AS FOLLOWS:

SIEVE SIZE	PERCENTAGE PASSING BY WEIGHT
12 INCH	100
4 INCH	50-90
1-1/2 INCH	0-30

3/4 INCH

4. CLASS D STONE SHALL CONSIST OF CRUSHED STONE, GRAVEL, OR OTHER APPROVED INERT MATERIALS WITH SIMILAR CHARACTERISTICS OR COMBINATIONS THEREOF, HAVING HARD, STRONG, DURABLE PARTICLES, FREE FROM SURFACE COATING AND INJURIOUS AMOUNTS OF SOFT, FRIABLE, OR LAMINATED PIECES, AND FREE OF ALKALINE, ORGANIC, OR OTHER HARMFUL MATTER. THE STONE SHALL BE STANDARD STONE SIZE 467 (NO. 4 TO 1-1/2").

0-10

- 5. **EROSION STONE** SHALL BE IRREGULAR IN SHAPE WITH APPROXIMATELY 50% OF THE MASS HAVING A MINIMUM DIMENSION BETWEEN 6-INCHES AND 8-INCHES, APPROXIMATELY 40% OF THE MASS HAVING A MINIMUM DIMENSION BETWEEN 2-INCHES AND 6-INCHES AND THE REMAINDER OF THE MASS COMPOSED OF SPALLS.
- 6. **SPALLS** FOR FILLING VOIDS SHALL CONSIST OF A MIXTURE OF STONES OR ROCK FRAGMENTS AND PARTICLES WITH 95 TO 100% PASSING THE 3-INCH SIEVE AND 25 TO 70% PASSING THE NO. 4 SIEVE.
- C. MINIMUM DEPTH OF STONE LAYER SHALL CONFORM TO THE FOLLOWING

STONE SIZE CLASS	MIN. DEPTH
EROSION STONE	12"
CLASS C	12"
CLASS B	18"
CLASS A	30"

1. BIORETENTION AREA PLANTINGS SHALL BE IN COMPLIANCE WITH NEW HAMPSHIRE STORMWATER MANUAL GUIDANCE FOR BIORETENION AREAS.

2. FILTER MEDIA SHALL MEET ONE OF THE FOLLOWING SPECIFICATIONS:

A. 50% TO 55% BY VOLUME SAND ALSO IDENTIFIED AS ASTM C-33 CONCRETE SAND, 20% TO 30% BY VOLUME OF LOAMY SAND TOPSOIL WITH 15% TO 25% FINES PASSING THE NUMBER 200 SIEVE, AND 20% TO 30% BY VOLUME MODERATELY FINE SHREDDED BARK OR WOOD FIBER MULCH WITH LESS THAN 5% PASSING THE NUMBER 200 SIEVE;

B. 20% TO 30% BY VOLUME OF MODERATELY FINE SHREDDED BARK OR WOOD FIBER MULCH THAT HAS NO MORE THAN 5% FINES PASSING THE NUMBER 200 SIEVE, WITH 70 TO 80% BY VOLUME LOAMY COARSE SAND USED IN THE MIXTURE MEETING THE FOLLOWING SIEVE ANALYSIS SPECIFICATION: 1. FROM 85 TO 100 PERCENT BY WEIGHT SHALL PASS THE NUMBER 10

- 2. FROM 70 TO 100 PERCENT BY WEIGHT SHALL PASS THE NUMBER 20
- 3. FROM 15 TO 40 PERCENT BY WEIGHT SHALL PASS THE NUMBER 60
- 4. FROM 8 TO 15 PERCENT BY WEIGHT SHALL PASS THE NUMBER 200

4. THE BIORETENTION AREA FUNCTIONS BY INFILTRATING STORMWATER. ENSURE THAT ANY ADJACENT FOUNDATION WALLS ARE ADEQUATELY WATERPROOFED FOR CONTINUAL CONTACT WITH SATURATED SOIL. SEE PLANS AND DETAILS BY



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TRENCH DETAIL TO SCALE		Interior NH NEWPORT VT   NEW LONDON NH POMFRET VT   KENNEBUNK ME KENNEBUNK ME   Interior NH POMFRET VT   KENNEBUNK ME KENNEBUNK ME   KENEBU											
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SOUTH ELEVATION

## NOTE: BUILDING HEIGHTS ARE PRELIMINARY AND SHOWN FOR REFERENCE ONLY; FINAL BUILDING HEIGHTS MAY VARY BUT TOTAL BUILDING HEIGHT WILL REMAIN <35 FT.

