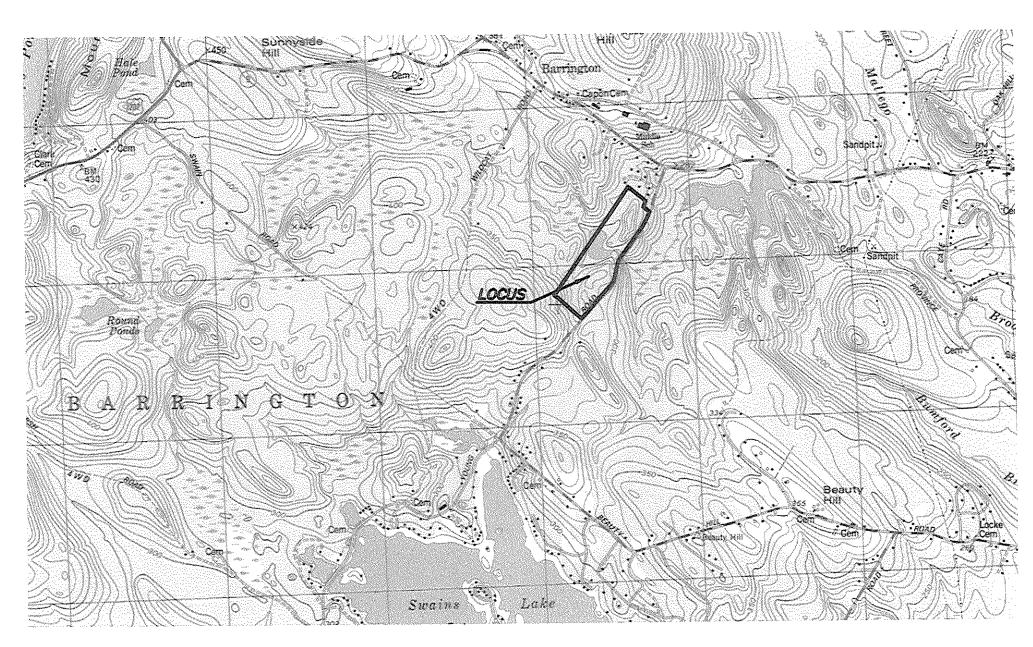
## Subdivision

Prepared for

# Fisheye Properties LLC



 $1" = 2,000'\pm$ 

Tax Map 240 / Lot 15
Young Road
Barrington

## New Hampshire

## SURVEYOR:

David W. Vincent, LLS

Land Surveying Services

19 Morgans Way

Barrington, NH 03825-3350

TEL: (603) 664-5786

FAX: (603) 664-3274

www.landsurveyingservices.net

## WETLAND/SOIL SCIENTIST:

John P. Hayes, III

400 Portsmouth Avenue, #1
Greenland, NH 03840
TEL: (603) 205-4396

## CISTERN ENGINEER: Haight Engineering, PLLC

PO Box 1166
Dover, NH 03821
TEL: (603) 750-4266
FAX: (603) 749-7348
haighteng.com

## ROAD EASEMENT ENGINEER:

Norway Plains Associates, Inc.

PO Box 249

Rochester, NH 03866-0249

TEL: (603) 335-3948

FAX: (603) 332-0098

### November 15, 2010

Revised 08/03/2011 add monuments

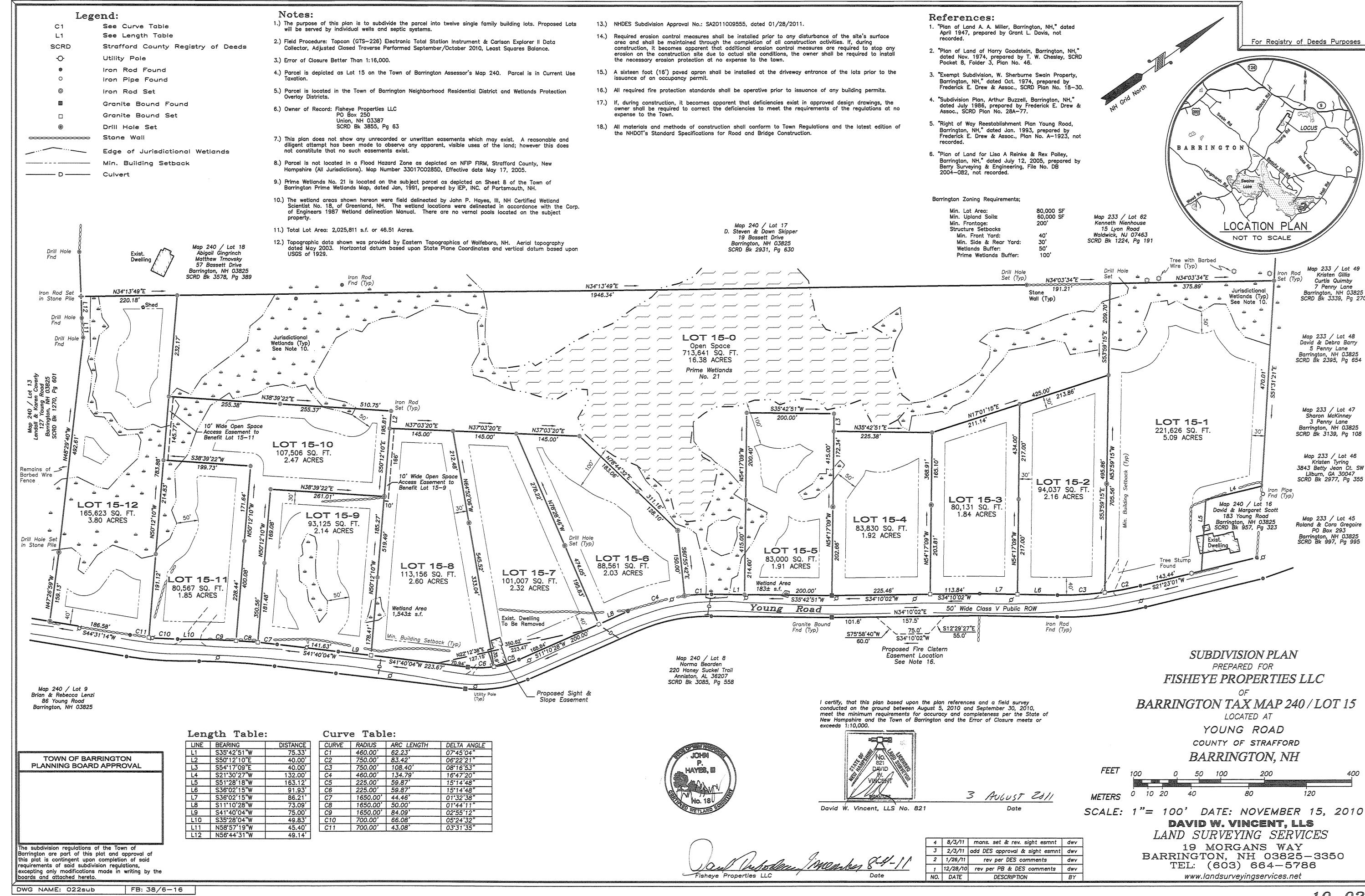
## INDEX:

Subdivision Plan:
Existing Conditions Plans:
Test Pit Sheet:
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Fire Cistern Site Plan:
Proposed Slope, Grading
& Sight Line Plan:

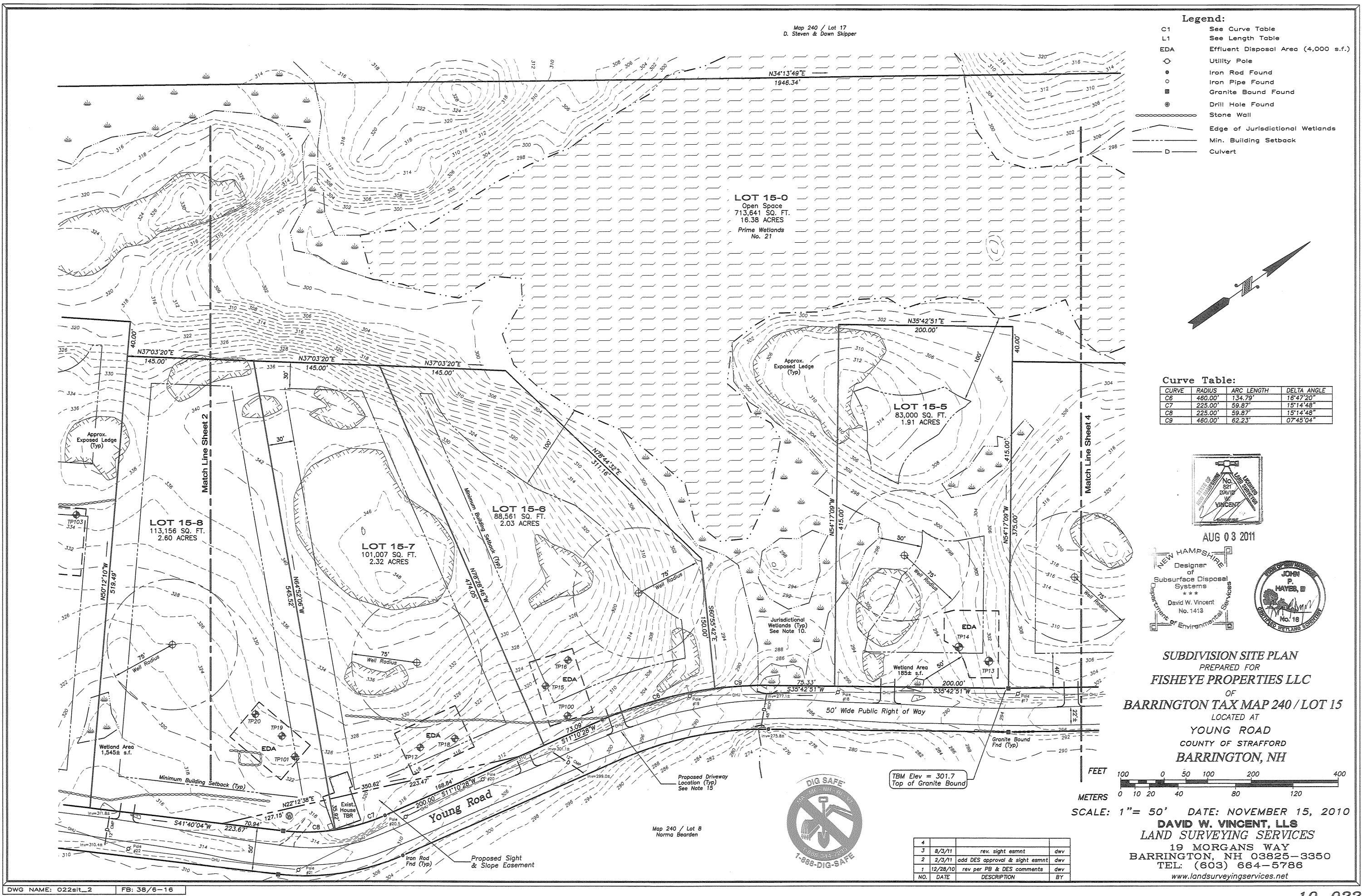
Sheet 1.
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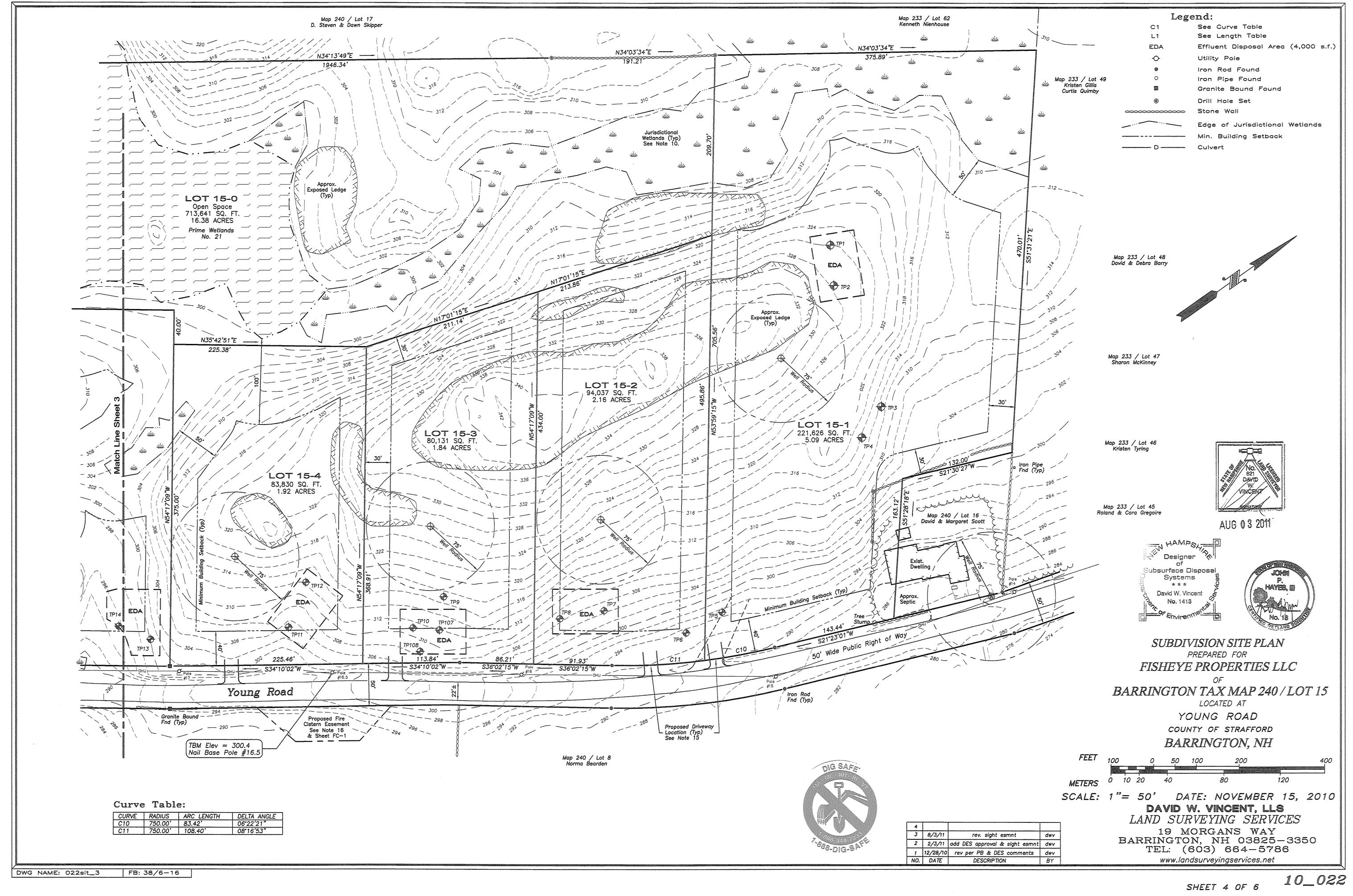
Sheet 6.
Sheet FC-1.

Sheet C-1.









RIPTION  t Mat Removed  3/3, Dark Brown, fine sandy loam, granular, friable  5/6, Light Olive Brown, fine sandy loam, granular, friable  5/4, Light Olive Brown, stony loamy fine sand, massive, firm  redox features  = none Restrictive layer = 23" Refusal = 72" Roots to 38"±	TEST PIT No. 2 DEPTH (in.)  00-03 03-21 21-57  ESHWT = 21" Observed	DESCRIPTION  Forest Mat Removed  10YR 3/2, Very Dark Yellowish Brown, fine sandy loam, granular, friable  10Y/R 6/6, Brownish Yellow, fine sandy loam, granular, friable  2.5Y 5/6, Light Olive Brown, stony loamy fine sand, massive, firm with redox features  ed water table = none Restrictive layer = 21" Refusal = 57" Roots to 31"±	TEST PIT No. 3 DEPTH (in.)  00-03 03-21 21-54	DESCRIPTION  Forest Mat Removed  10YR 3/3, Dark Brown, fine sandy loam, granular, friable  10YR 5/6, Yellowish Brown, loamy fine sand, granular, friable  2.5Y 6/4, Light Yellowish Brown, stony fine sandy loam, massive, firm with redox features	TEST PIT No. 4 DEPTH (in.)  00-14 14-23 23-72	DESCRIPTION  Forest Mat Removed  10YR 5/6, Yellowish Brown, fine sandy loam, granular, friable  2.5Y 5/6, Light Olive Brown, fine sandy loam, granular, friable	TEST PIT No. 5 DEPTH (in.) 00-26 26-64	DESCRIPTION  Forest Mat Removed  10YR 6/6, Brownish Yellow, fine sandy loam, granular, friable
t Mat Removed  3/3, Dark Brown, fine sandy loam, granular, friable  5/6, Light Olive Brown, fine sandy loam, granular, friable  5/4, Light Olive Brown, stony loamy fine sand, massive, firm  redox features	DEPTH (in.)  00-03  03-21  21-57	Forest Mat Removed  10YR 3/2, Very Dark Yellowish Brown, fine sandy loam, granular, friable  10Y/R 6/6, Brownish Yellow, fine sandy loam, granular, friable  2.5Y 5/6, Light Olive Brown, stony loamy fine sand, massive, firm with redox features	DEPTH (in.)  00-03  03-21  21-54	Forest Mat Removed  10YR 3/3, Dark Brown, fine sandy loam, granular, friable  10YR 5/6, Yellowish Brown, loamy fine sand, granular, friable  2.5Y 6/4, Light Yellowish Brown, stony fine sandy loam, massive, firm	DEPTH (in.) 00-14 14-23	Forest Mat Removed 10YR 5/6, Yellowish Brown, fine sandy loam, granular, friable	DEPTH (In.) 00—26	Forest Mat Removed
t Mat Removed  3/3, Dark Brown, fine sandy loam, granular, friable  5/6, Light Olive Brown, fine sandy loam, granular, friable  5/4, Light Olive Brown, stony loamy fine sand, massive, firm  redox features	00-03 03-21 21-57	Forest Mat Removed  10YR 3/2, Very Dark Yellowish Brown, fine sandy loam, granular, friable  10Y/R 6/6, Brownish Yellow, fine sandy loam, granular, friable  2.5Y 5/6, Light Olive Brown, stony loamy fine sand, massive, firm with redox features	00-03 03-21 21-54	Forest Mat Removed  10YR 3/3, Dark Brown, fine sandy loam, granular, friable  10YR 5/6, Yellowish Brown, loamy fine sand, granular, friable  2.5Y 6/4, Light Yellowish Brown, stony fine sandy loam, massive, firm	00 <b>–</b> 14 14 <b>–</b> 23	Forest Mat Removed 10YR 5/6, Yellowish Brown, fine sandy loam, granular, friable	00-26	Forest Mat Removed
3/3, Dark Brown, fine sandy loam, granular, friable 5/6, Light Olive Brown, fine sandy loam, granular, friable 5/4, Light Olive Brown, stony loamy fine sand, massive, firm redox features	03–21 21–57	10YR 3/2, Very Dark Yellowish Brown, fine sandy loam, granular, friable 10Y/R 6/6, Brownish Yellow, fine sandy loam, granular, friable 2.5Y 5/6, Light Olive Brown, stony loamy fine sand, massive, firm with redox features	03–21 21–54	10YR 3/3, Dark Brown, fine sandy loam, granular, friable  10YR 5/6, Yellowish Brown, loamy fine sand, granular, friable  2.5Y 6/4, Light Yellowish Brown, stony fine sandy loam, massive, firm	14-23	10YR 5/6, Yellowish Brown, fine sandy loam, granular, friable		
5/6, Light Olive Brown, fine sandy loam, granular, friable 5/4, Light Olive Brown, stony loamy fine sand, massive, firm redox features	03–21 21–57	10Y/R 6/6, Brownish Yellow, fine sandy loam, granular, friable 2.5Y 5/6, Light Olive Brown, stony loamy fine sand, massive, firm with redox features	03–21 21–54	10YR 5/6, Yellowish Brown, loamy fine sand, granular, friable 2.5Y 6/4, Light Yellowish Brown, stony fine sandy loam, massive, firm	14-23			101K 6/6, Brownish Tellow, fine sandy loam, granular, mable
5/4, Light Olive Brown, stony loamy fine sand, massive, firm redox features	21-57	2.5Y 5/6, Light Olive Brown, stony loamy fine sand, massive, firm with redox features	21-54	2.5Y 6/4, Light Yellowish Brown, stony fine sandy loam, massive, firm		2.5Y 5/6, Light Olive Brown, fine sandy loam, granular, friable	2664	and the second s
redox features		with redox features			23-72		20-04	2.5Y 5/6, Light Olive Brown, fine sandy loam, massive, firm
	ESHWT = 21" Observed					2.5Y 5/4, Light Olive Brown, stony loamy fins sand, massive, firm		with redox features
, and the second			FSHWT = 21" Observed	water table = none Restrictive layer = 21" Refusal = 54" Roots to 21"±	FSHWT = 23" Observed	with redox features  water table = none Restrictive layer = 72" Refusal = 27" Roots to 15"±	FSHWT = 26" Observer	d water table = none Restrictive layer = 26" Refusal = none Ro
			motive ( an ast opens to a	The state of the s	Per. Rate = 6 min./in. o		Per, Rate = 8 min./in.	•
							, , , , , , , , , , , , , , , , , , ,	
	TEST PIT No. 7		TEST PIT No. 8		TEST PIT No. 9		TEST PIT No. 10	
RIPTION	DEPTH (in.)	DESCRIPTION	DEPTH (in.)	DESCRIPTION	DEPTH (in.)	DESCRIPTION	DEPTH (in.)	DESCRIPTION
t Mat Removed	03-00	Forest Mat	03-00	Forest Mat	03-00	Forest Mat	03-00	Forest Mat
5/6, Yellowish Brown, fine sandy loam, granular, friable	00-21	10YR 5/6, Yellowish Brown, fine sandy loam, granular, friable	00–20	10YR 6/6, Brownish Yellow, fine sandy loam, granular, friable	00–20	10YR 5/6, Yellowish Brown, fine sandy loam, granular, friable	00-19	10YR 5/6, Brownish Yellow, fine sandy loam, granular, friable
5/6, Light Olive Brown, fine sandy loam, massive, firm	21-54	2.5Y 5/6, Light Olive Brown, loamy fine sand, massive firm	20-52		20-29		19-52	2.5Y 6/4, Light Yellowish Brown, loamy fine sand, massive, fi
redox features		with redox features		with redox features			10 02	with redox features
	ESHWT = 21" Observed				ESHWT = 20" Observed			With reducted
= none Restrictive layer = 20" Refusal = none Roots to 20"±	Per. Rate = 9 min./in.	. at 20 in.	ESHWT = 20" Observed	water table = none Restrictive layer = 20" Refusal = none Roots to 20"±		•	ESHWT = 19" Observed	d water table = none Restrictive layer = 19" Refusal = 52" Ro
			Per. Rate = 9 min./in.	at 30 in.	T De Commy and		Per. Rate = 9 min./in.	at 20 in.
DIDTON	TEST PIT No. 12		TEST PIT No. 13		TEST PIT No. 14		TEST PIT No. 15	
			DEPTH (in.)	DESCRIPTION	DEPTH (in.)			DESCRIPTION
st Mat			04-00	Forest Mat	04-00			Forest Mat
			00-23	10YR 5/6, Yellowish Brown, loarny fine sand, granular, friable	00–19	10YR 5/6, Yellowish Brown, fine sandy loam, granular, friable	03—11	7.5YR 5/6, Strong Brown, stony very fine sandy loam, granul
6/4, Yellowish Brown, loamy fine sand, massive, firm	23-53	2.5Y 5/46, Light Olive Brown, loamy fine sand, massive firm	23-53	2.5Y 5/46. Light Olive Brown, loamy fine sand, massive firm	19-51	2.5Y 5/4, Light Olive Brown, loamy fine sand, massive, firm	11-46	10YR 5/6, Yellowish Brown, stony very fine sandy loarn, grant
redox features		with redox features		with redox features		with redox features		
= none Restrictive lawer = 22" Refusal = 70" Roots to 22"±	FSHWT = 23° Observe	ed water table = name Restrictive layer = 23" Refusal = 53" Roots to 23"+	FSHWT - 20° Observed	water table - none Restrictive laws - 20° Refrest - 52° Roots to 22° t	FSHWT == 19° Observed	water table = none Restrictive lover = 19° Refusal = 51° Roote to 18"+	FSHWT - none Observe	red water table = none Restrictive layer = none Refusal = 46° i
Note to El I		·		·		•		·
	Per. Kote ≃ 10 mm./m	7. Ct 24 in.	Per. Rate ⇒ 10 min./in.	at 20 in.	Per. Rate = 8 min./in. (	at ou in.	Per. Kate = 10 min./in	n. at 30 m.
PIRTION	TEST PIT No. 17	DESCRIPTION	TEST PIT No. 18	DECORPORAL	TEST PIT No. 19	DESCRIPTION	TEST PIT No. 20	
								DESCRIPTION
t Mat					02-00			Forest Mat
								10YR 6/5. Dark Yellowish Brown, very fine sandy loam, gran
			03-20	2.5Y 6/4, Light Yellowish Brown, stony very fine sandy loam, massive, friable	03–20	10YR 6/6. Brownish Yellow, stony very fine sandy loam, granular, friable	03-20	10YR 6/6, Yellowish Brown, stony very fine sandy loam, gran
5/6, Yellowish Brown, stony very fine sandy loam, granular, friable	21-60	2.5Y 5/4, Rotten/fragmented ledge	20-50	2.5Y 6/8, Olive Yellow, loarny sand, massive, firm	20-45	2.5Y 6/4, Light Yellowish Brown, stony very fine sandy loam, massive, firm	20-54	2.5Y 6/4, Light Yellowish Brown, stony very fine sandy loam,
, , every -wy mos sensy (sensy granules titlette							ECHBIT Ob	
= none Restrictive layer = none Refusal = 44" Roots to 28"±	ESHWT = none Observ	rved water table = none Restrictive layer = 21" Refusal = 60" Roots to 40"±	ESHWT = none Observe	d water table = none Restrictive layer = 20" Refusal = 50" Roots to 36"±	ESHWT = none Observed	d water table = none Restrictive layer = 20" Refusal = 45" Roots to 30"±	ESHWI = none Observ	red water table = none Restrictive layer = 20° Refusal = 54° Re
t 5 5 m = R st 5 6 re	Mat Removed  5/6, Yellowish Brown, fine sandy loam, granular, friable  /6, Light Olive Brown, fine sandy loam, massive, firm edox features  none Restrictive layer = 20" Refusal = none Roots to 20"±  PTION  Mat  5/6, Yellowish Brown, fine sandy loam, granular, friable  /4, Yellowish Brown, loamy fine sand, massive, firm  adox features  none Restrictive layer = 22" Refusal = 70" Roots to 22"±	######################################	### DEPTH (in,)    DEPSCRIPTION   DESCRIPTION	### DEPH (in,)	### PROPRISE OF THE WORLD NOT CONTROL OF THE W	### CENT (A)   \$62 SEPTION   \$60 Per (A)   \$62 SEPTION   \$60 Per (A)   \$	Manual   Sir Au	### 1

10YR 5/6, Yellowish Brown, fine sandy loam, granular, friable

2.5Y 5/6, Light Olive Brown, fine sandy loam, massive, friable

ESHWT = 22" Observed water table = none Restrictive layer = 22" Refusal = 38" Roots to 15"±

2.5Y 5/6, Light Olive Brown, fine sandy loam, massive, firm in place, with redox features

Designer of Subsurface Disposal Systems

David W. Vincent No. 1413

No. 1413

JAN 06 2011

 4
 3

 2
 2

 1
 12/28/10 rev per PB & DES comments dwv

 NO. DATE
 DESCRIPTION

 BY

10YR 5/6, Yellowish Brown, fine sandy loam, granular, friable

ESHWT = 22" Observed water table = none Restrictive layer = none Refusal = 30" Roots to 22"±

2.5Y 6/4, Light Yellowish Brown, fine sandy loam, massive, firm in place, with redox features

03-22

Per. Rate = 12 min./in. at 24 in.

TEST PIT SHEET

PREPARED FOR

FISHEYE PROPERTIES LLC

OF

TAX MAP 240 / LOT 15

LOCATED AT

YOUNG ROAD

YOUNG ROAD

COUNTY OF STRAFFORD

BARRINGTON, NH

DATE: NOVEMBER 15, 2010

DAVID W. VINCENT, LLS

LAND SURVEYING SERVICES

19 MORGANS WAY

19 MORGANS WAY
BARRINGTON, NH 03825-3350
TEL: (603) 664-5786
www.landsurveyingservices.net

10YR 5/6, Yellowish Brown, very fine sandy loam, granular, friable

ESHWT = 14" Observed water table = none Restrictive layer = 14" Refusal = 26" Roots to 12"±

2.5Y 6/4, Light Yellowish Brown, very fine sandy loam, granular, friable

02-15

Per. Rate = 8 min./in. at 30 in.

10YR 5/6, Yellowish Brown, very fine sandy loam, granular, frieble

with redox features

ESHWT = 15" Observed water table = none Restrictive layer = 15" Refusal = 33" Roots to 15"±

2.5Y 6/4, Light Yellowish Brown, very fine sandy loam, massive, firm

06-12

12-22

Per. Rate = 12 min./in. at 24 in.

03-14

14-26

## TEST PIT DATA: Date: 20 July 2010 TEST PIT No. 25 DEPTH (in.) DESCRIPTION

00-07 10YR 6/2, Light Brownish Gray, very fine sandy loam, granular, friable 10YR 6/4, Light Yellowish Brown, stonyfine loamy sand, granular, friable 10YR 6/4,Light Yellowish Brown, stony loamy sand, massive, firm

ESHWT = 17" Observed water table = none Restrictive layer = 17" Refusal = 40" Roots to 12"±

TEST PIT No. 26 TEST PIT No. 27 DEPTH (in.) DESCRIPTION DEPTH (in.) Forest Mat Removed 02-00

10YR 3/3, Very Dark Brown, very fine sandy loam, granular, friable 10YR 3/4, Dark Yellowish Brown, very fine sandy loam, granular, friable 10Y/R 5/6, Yellowish Brown, very fine sandy loam, granular, friable 02-18 10YR 5/6, Yellowish Brown, very fine sandy loam, granular, friable 2.5Y 6/4, Light Yellawish Brown, stony very fine sandy loam, granular, friable ESHWT = none Observed water table = none Restrictive layer = none Refusal = 30" Roots to 12"±

Forest Mat

2.5Y 6/4, Light Yellowish Brown, very fine sandy loam, massive, firm ESHWT = 18" Observed water table = none Restrictive layer = 18" Refusal = 47" Roots to 37"± DEPTH (in.) DESCRIPTION Forest Mat 02-00 10YR 3/3, Dark Brown, very fine sandy loam, granular, friable 00-05 2.5Y 5/6, Light Olive Brown, very fine sandy loam, granular, friable 05-38

ESHWT = none Observed water table = none Restrictive layer = none Refusal = 38" Roots to 30"± Per. Rate = 8 min./in. at 27 in.

10YR 6/6, Brownish Yellow, fine sandy loam, granular, friable

10YR 6/6, Brownish Yellow, loamy fine sand, massive, firm

#### TEST PIT DATA: Date: 27 September 2010

TEST PIT No. 14A	
DEPTH (in.)	DESCRIPTION
02-00	Forest Mat
00-03	2.5Y 3/3, Dark Olive Brown, very fine sandy loam, granular, friable
03-24	10YR 5/6, Brownish Yellow, very fine sandy loam, granular, friable
24-68	2.5Y 5/6. Light Olive Brown, very fine sandy loam, massive, firm
	with Redox features
FSHWT = 24" Observed water	table = none Restrictive lawer = 24" Refusal = 68" Roote to 24"+

ESHWT = 24" Observed water table = none Restrictive layer = 24" Refusal = 68" Roots to 24"± Per. Rate = 8 min./in. at 24 in.

TEST PIT No. 148 DEPTH (in.) DESCRIPTION 02-00 Forest Mat 2.5Y 3/3, Dark Olive Brown, very fine sandy loam, granular, friable 10YR 6/6, Brownish Yellow, very fine sandy loam, granular, friable 2.5Y 5/6, Light Olive Brown, very fine sandy loam, massive, firm with redox features ESHWT = 25" Observed water table = none Restrictive layer = 25" Refusal = none Roots to 26"±

16-30

Per. Rate = 10 min./in. at 26 in.

TEST PIT No. 101

TEST PIT No. 105

TEST PIT No. 10A DEPTH (in.) DESCRIPTION 02-00 00-20 with reday features

10YR 6/6, Brownish Yellow, loamy fine sand, granular, friable 10YR 6/6, Brownish Yellow, loamy fine sand, massive firm ESHWT = 20" Observed water table = none Restrictive layer = 20" Refusal = 37" Roots to 20"±

ESHWT = 20" Observed water table = none Restrictive layer = 20" Refusal = 40" Roots to 20"±

Forest Mat

#### TEST PIT DATA: Date: 10 December 2010

TEST PIT No. 100	
DEPTH (in.)	DESCRIPTION
03-00	Forest Mat
00-03	2.5 Y $3/3$ , Dark Olive Brown, very fine sandy loam, granular, friable
03-28	10YR 5/6, Brownish Yellow, very fine sandy loam, granular, friable
28-52	2.5Y 5/6. Light Olive Brown, loamy sand, massive, firm

ESHWT = none Observed water table = none Restrictive layer = 28" Refusal = none Roots to 28"±

DEPTH (in.)	DESCRIPTION
02-00	Forest Mat
00-03	10YR 3/3, Very Dark Brown, very fine sandy loam, granular, friable
03-26	10YR 56/6, Yellowish Brown, very fine sandy loam, granular, friable
26-50	2.5Y 5/4, Light Olive Brown, loamy fine sand, massive, firm
	with redox features

ESHWT = 26" Observed water table = none Restrictive layer = 26" Refusal = none Roots to 26"±

#### TEST PIT No. 102

DEPTH (in.)	DESCRIPTION
03-00	Forest Mat
00-21	10YR 5/6, Yellowish Brown, fine sandy loam, granular, friable
21-28	2.5Y 5/4, Light Olive Brown, fine sandy loam granular, friable
28-47	2.5Y 5/4, Light Olive Brown, fine sandy loam, massive firm
	with redox features

ESHWT = 28" Observed water table = none Restrictive layer = 28" Refusal = none Roots to 24"±

### TEST PIT No. 103

Per. Rate = 10 min./in. at 20 in.

TEST PIT No. 108

DEPTH (in.)

02-00

TEST PIT No. 28

DEPTH (in.)	DESCRIPTION
04-00	Forest Met
00-25	10YR 6/6, Yellowish Brown, f

fine sandy loam, granular, friable 2.5Y 5/4, Light Olive Brownw, fine sandy loam, massive, firm with redox features

ESHWT = 25" Observed water table = none Restrictive layer = 25" Refusal = 40" Roots to 24"±

#### TEST PIT No. 104

DEPTH (in.)

03-00	Forest Mat
00-12	10YR 5/6, Yellowish Brown, very fine sandy loam, granular, friable
12-23	2.5Y 6/6, Olive Yellow, fine sandy loam, granular, friable
23-38	2.5Y 6/6, Olive Yellow, fine sandy loam, massive, firm
	with Redox features
ESHWT = 23" Observed water	table - none Restrictive lower - 23" Refued - 38" Poots to

ESHWT = 23" Observed water table = none Restrictive layer = 23" Refusal = 38" Roots to 18"±

#### TEST PIT No. 106 DESCRIPTION

DEPTH (in.)	DESCRIPTION	DEPTH (in.)	DESCRIPTION
02-00	Forest Mat	02-00	Forest Mat
00-18	10YR 5/6, Yellowish Brown, fine sandy loam, granular, friable	00-18	10YR 5/6, Yellow Brown, fine sand loam, granular, friable
18-38	2.5Y 5/6, Light Olive Brown, loamy sand, granular, friable	18-40	2.5Y 6/4, Light Yellowish Brown, loamy sand, massive, firm, some of
ESHWT = none Observed wate	r table = none Restrictive layer = none Refusal = 38" Roots to 28"±		with redox features

with redox features ESHWT = 18" Observed water table = none Restrictive layer = 18" Refusal = 40" Roots to 22"±

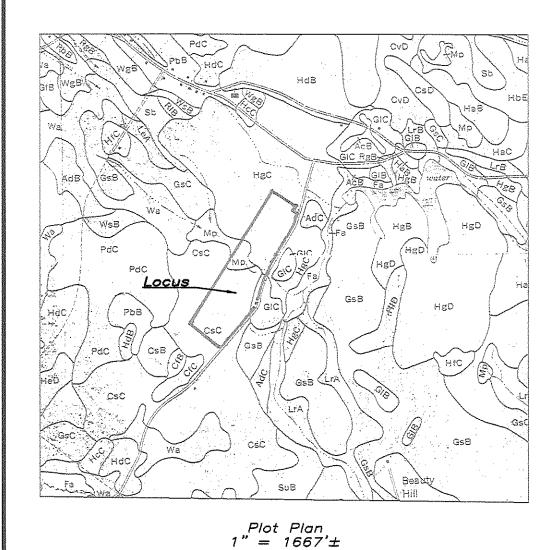
DEPTH (in.)	DESCRIPTION
03-00	Forest Mat
00-03	10YR 3/3, Dark Brown, fine sandy loam, granular, friable
03-23	10YR 5/6, Yellowish Brown, fine sandy loam, granular, friable
23-50	2.5Y 5/4, Light Olive Brown, loamy fine sand, massive, firm

with redox features

TEST PIT No. 108 DEPTH (in.) DESCRIPTION

7.5YR 5/6, Strong Brown, fine sandy loam, granular, friable 00-17 10YR 5/6, Yellowish Brown, stony fine sandy loam, granular, friable

ESHWT = none Observed water table = none Restrictive layer = none Refusal = 40" Roots to 30"± Per, Rate = 10 min./in. at 20 in.



SOILS DATA:

CsC — Charlton, Very stony fine sandy loam. 8 TO 15% SLOPES GIC — GLOUCESTER, Fine sandy loam. 8 TO 15% SLOPES

HgC — HOLLIS—GLOUCESTER, Very rocky fine sandy loam. 8 TO 15% SLOPES Mp — Muck and peat.

REFERENCE: SHEETS 22 & 26 SOIL SURVEY OF STRAFFORD COUNTY, NEW HAMPSHIRE, PREPARED BY U.S. DEPT. OF AGRICULTURE SOIL CONSERVATION SERVICE, ISSUE DATE MARCH 1973

#### Lot Loading Calculations:

Contiguous Uplands Excluding Wetlands, Exposed Ledge, Easements & Well Radii Lot 15-0 Non-buildable lot.  $\frac{164,190}{43,560}$  × 2,000 = 7,538  $\frac{7,538}{1.6}$  = 4,711 gpd  $\frac{39,610}{43,560}$  X 2,000 = 1,818  $\frac{1,818}{1.6}$  = 1,137 gpd  $\frac{26,265}{43,560}$  X 2,000 = 1,206  $\frac{1,206}{1.6}$  = 754 gpd

Lot 15-4  $\frac{62,300}{43,560}$  X 2,000 = 2,860  $\frac{2,860}{1.6}$  = 1,788 gpd  $\frac{56,685}{43,560}$  × 2,000 = 2,603  $\frac{2,603}{1.6}$  = 1,627 gpd

Lot 15-6  $\frac{52,490}{43,560} \times 2,000 = 2,401 \frac{2,401}{1.43} = 1,679 \text{ gpd}$  $\frac{52,590}{43,560}$  × 2,000 = 2,415  $\frac{2,415}{1,43}$  = 1,689 gpd

 $\frac{89,725}{43,560}$  × 2,000 = 4,120  $\frac{4,120}{1.43}$  = 2,881 gpd Lot 15-9  $\frac{69,950}{43.560} \times 2,000 = 3,212 \frac{3,212}{1.43} = 2,246 \text{ gpd}$ 

Lot 15-10  $\frac{74,035}{43,560}$  × 2,000 = 3,399  $\frac{3,399}{1.43}$  = 2,377 gpd

Lot 15-11  $\frac{53,920}{43,560} \times 2,000 = 2,475 = \frac{2,475}{1.43} = 1,731 \text{ gpd}$ 

Lot 15-12  $\frac{29,480}{43,560} \times 2,000 = 1,354 \frac{1,354}{1.43} = 947 \text{ gpd}$ 

#### Lot Area Calculations:

ESHWT = 23" Observed water table = none Restrictive layer = 23" Refusal = 50" Roots to 28"±

#### Upland Soils Excludes Hydric A Soils, Open Water, Bogs, Marshes, Rivers, Streams, or Exposed Ledge. CONTIGUOUS UPLAND SOILS TOTAL FRONTAGE

15-0	713,641 s.f.	324,810± s.f.	119,820± s.f.	137.56'
15-1	221,626 s.f.	175,735± s.f.	175,735± s.f.	226.85
15-2	94,037 s.f.	70,395± s.f.	57,280± s.f.	200.34'
15–3	80,131 s.f.	62,500,± s.f.	62,500± s.f.	200.04'
15-4	83,830 s.f.	77,530± s.f.	77,530± s.f.	225.46'
15-5	83,000 s.f.	73,425± s.f.	73,425± s.f.	200.00'
15-6	88,561 s.f.	83,325± s.f.	83,325± s.f.	207.88'
157	101,007 s.f.	73,100± s.f.	73,100± s.f.	200.00'
15–8	113,156 s.f.	109,925± s.f.	109,925± s.f.	283.54'
15-9	93,125 s.f.	93,125± s.f.	93,125± s.f.	216.63
15-10	89,975 s.f.	85,400± s.f.	85,400± s.f.	50.00'
15-11	80,567 s.f.	77,150± s.f.	77,150± s.f.	200.00*
15–12	165,623 s.f.	114,475± s.f.	39,115± s.f.	229.66'

1 | 12/28/10 | rev per PB & DES comments | dwv NO. DATE DESCRIPTION



TEST PIT & LOT CALCULATION SHEET PREPARED FOR

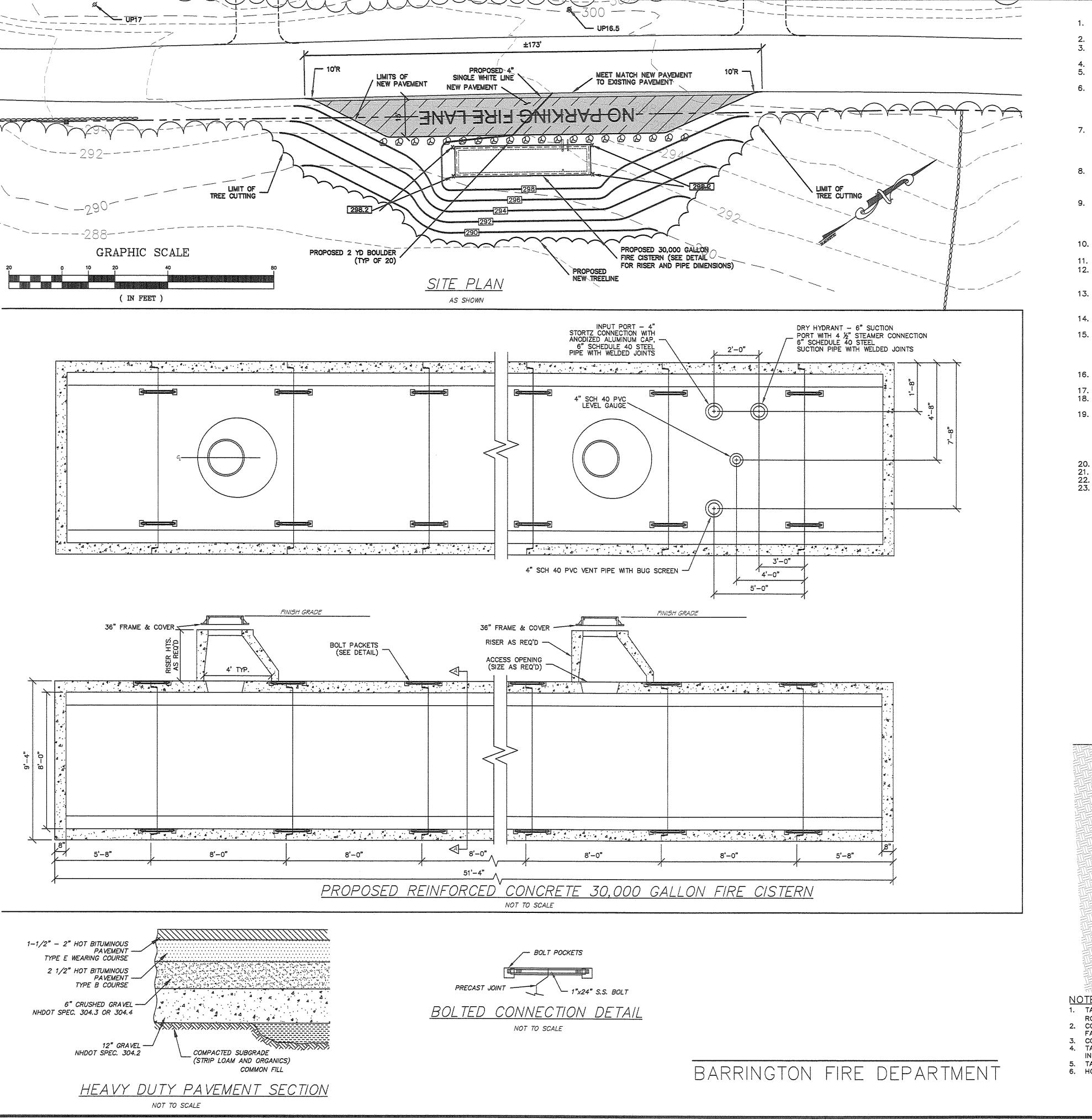
FISHEYE PROPERTIES LLC

*TAX MAP 240 / LOT 15* LOCATED AT

YOUNG ROAD COUNTY OF STRAFFORD BARRINGTON, NH

DATE: NOVEMBER 15, 2010

DAVID W. VINCENT, LLS LAND SURVEYING SERVICES 19 MORGANS WAY BARRINGTON, NH 03825-3350 TEL: (603) 664-5786 www.landsurveyingservices.net



- 1. All cisterns shall be constructed in accordance with current NFPA 1142, B.4.1 thru B.4.6 standards.
- 2. The minimum capacity shall be 30,000 gallons.

not intended for use as design.

- 3. The suction capacity shall be capable of delivering 1,000 gallons per minute (apm) for three-quarters of the cistern capacity.
- 4. The entire cistern and appurtenances shall be rated for HS-20 highway loading. 5. Drawings of the design are for estimating general requirement and design purposes only and are
- The cistern shall be designed, sited to the particular location, stamped by a registered engineer, and approved by the Fire Chief. Cisterns shall be installed to the manufactured specifications and verified by a professional engineer licensed in the State of New Hampshire. Proof of certification shall be provided to the Fire Chief, Deputy Fire Chief or their designate prior to the installation
- 7. All suction and piping shall be American Society for Testing Materials (ASTM) Schedule 40 steel.
  All vent piping shall be ASTM Schedule 40 PVC with glued joints. All piping location within the tank shall be ASTM Schedule 40 PVC with glued joints. All piping leading from the tank to the hydrant shall be ASTM Schedule 40 steel. All suction piping shall be six inches in diameter. A vortex plate shall be located directly below the suction piping at the bottom of the tank.
- 8. The final suction connection shall be 4.5" inch Steamer connection. The suction pipe shall be braced to ensure durability during pumping operations. The Fire Chief shall approve brace configuration and installation. The suction pipe connection shall be thirty inches above the level of the vehicle wheels when the cistern is in use.
- 9. The filler pipe shall be four-inch ASTM Schedule 40 steel with Stortz fitting. The filler pipe shall be braced to ensure durability during filling operations. The Fire Chief shall approve brace configuration and installation. The filler pipe shall be thirty inches above final backfill grade. A thirty-six inch diameter manhole with cover (2-each) shall be installed. The configuration of this
- manholes shall be approved by the Fire Chief, Deputy Fire Chief, or their designate. 10. The distance from the bottom of the suction pipe to the pumper connection shall not exceed fourteen (14) feet vertical.
- 11. All horizontal suction piping shall slope slightly uphill toward the pumper connection. 12. The concrete base and stainless steel tie downs (if required) shall be designed so that the tank
- will not float when empty. Calculations shall be provided to the Design Engineer prior to
- 13. Bedding for the cistern shall consist of a minimum of twelve inches of three—quarter to one and one—half inch crushed washed stone compacted. No fill shall be used under the stone. Over excavation shall be filled with the same bedding material.
- 14. All backfill materials shall be clean gravel with no stones larger than 2" and shall be compacted to 95 percent of its original volume in accordance with ASTM D 1557.
  15. If the top of the tank is less than four feet below grade, the top and sides of cistern shall be
- insulated with vermin resistant insulation to a depth of at least two feet. Foam used for this installation shall be closed cell polyurethane foam with an insulation factor of R=7 per inch. All backfill shall extend five feet beyond the edge of the cistern and then graded as shown, loam and seeded.
- 16. Before any backfilling is done the entire cistern shall be completed and inspected by the Fire
- 17. After backfilling, large boulders shall be placed to protect the tank and appurtenances.
  18. All construction, backfill, and grading materials shall be in accordance with proper construction
- practices and shall be acceptable to the Fire Chief.
- 19. The Fire Chief or designated representative of the Fire Dept. will be notified by the applicant to observe the following points of installation: Excavation complete. Deadmen in place (if applicable). Tank in place prior to backfilling. Backfilling of excavation. Backfilling complete after placement of insulation (if applicable). Piping (painted red), manways, and barriers in place. All backfilling, loam, seed, etc. complete with turnout gravel in place and graded. Pavement complete, and all other work 100 percent complete.
- 20. The Fire Chief shall be notified of the date that site work is to begin.
- 21. Concrete must have a minimum of 125 pcf. 22. Backfill must have a minimum of 120 pcf.
- 23. Installer is responsible for completely filling the cistern until the Fire Chief or his designate accepts the cistern.

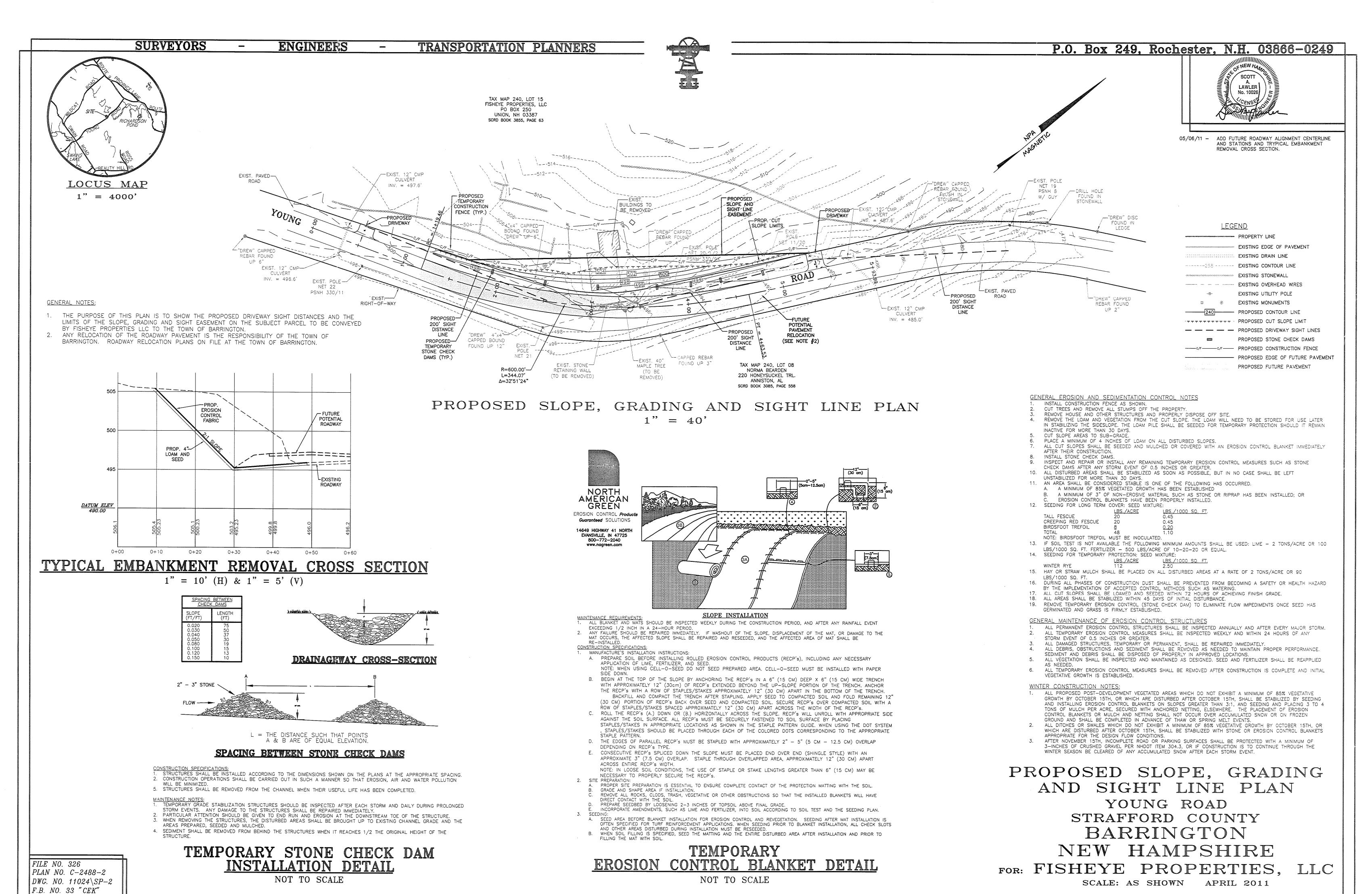
- FILL AND SUCTION PIPES PAINTED RED - 4" LEVEL GAGE - 4" VENT SLOPE 2% \_\_ S.S. CHAIN -PIPE SUPPORTS (AS REQ'D) ---(4)1/2" EXP - PAVEMENT 2" RIGID FOAM INSULATION A STATE OF THE STA 24" 24"x24"x12" CONCRETE FOOTING (MIN.) · EXCAVATION LIMITS CLEAN COMMON GRAVEL FILL COMPACTED IN 12"

1. TANK TO BE 30,000 GALLON FIRE CISTERN WITH H-20 DESIGN LOADING TO ASTM C-478 AS SUPPLIED BY GEORGE R.

- ROBERTS CO. (207) 324-6571 (OR APPROVED EQUAL)
  2. CONTRACTOR TO PROVIDE SITE SPECIFIC ENGINEERED SHOP DRAWINGS TO DESIGN ENGINEER FOR APPROVAL PRIOR TO
- 3. CONTRACTOR TO PROVIDE SITE SPECIFIC BOUYANCY CALCULATIONS TO DESIGN ENGINEER PRIOR TO INSTALLATION. TANK TO BE TESTED AND INSTALLED IN ACCORDANCE WITH GEROGE R. ROBERTS CO. SPECIFICATIONS AND PUBLISHED
- 5. TANK TO BE BACKFILLED WITH MIX OF CLEAN GRAVEL COMPACTED IN 12" LIFTS. 6. HOSE CONNECTIONS SHALL CONFORM TO BARRINGTON, NH FIRE DEPARTMENT REQUIREMENTS.

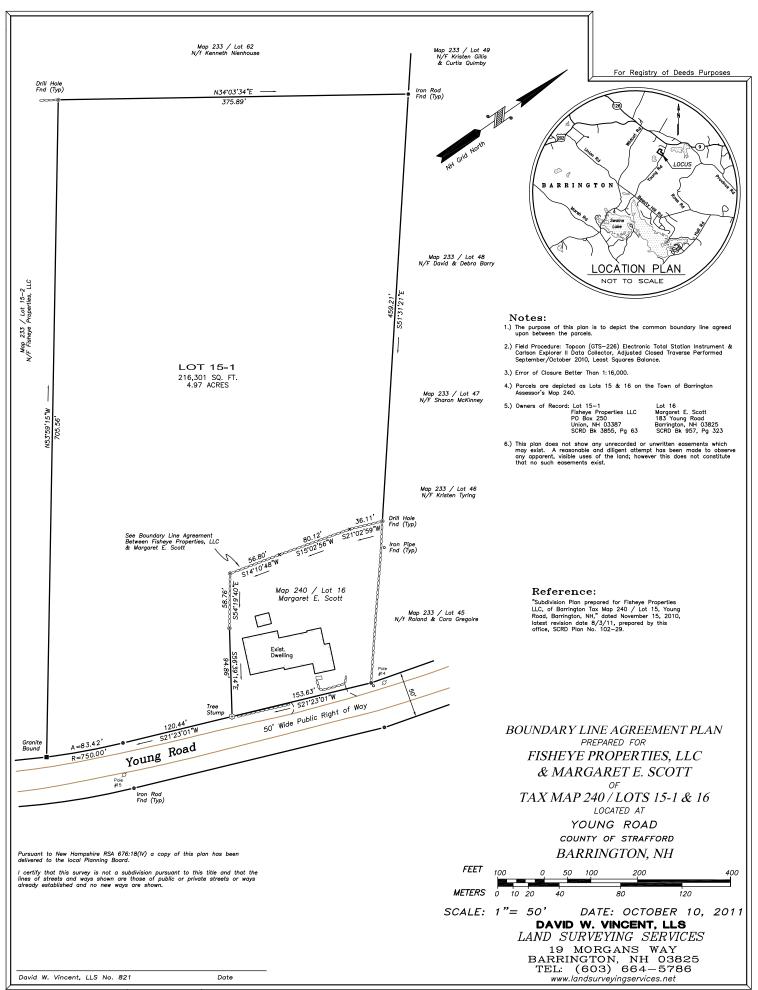
TYPICAL CISTERN CROSS SECTIN DETAIL 0 0 Ó FC-1

FIRE



INORWAY PLAINS ASSOCIATES, INC.

SHEET C-1



DWG NAME: 022bla FB: 38/6-16 10\_022

