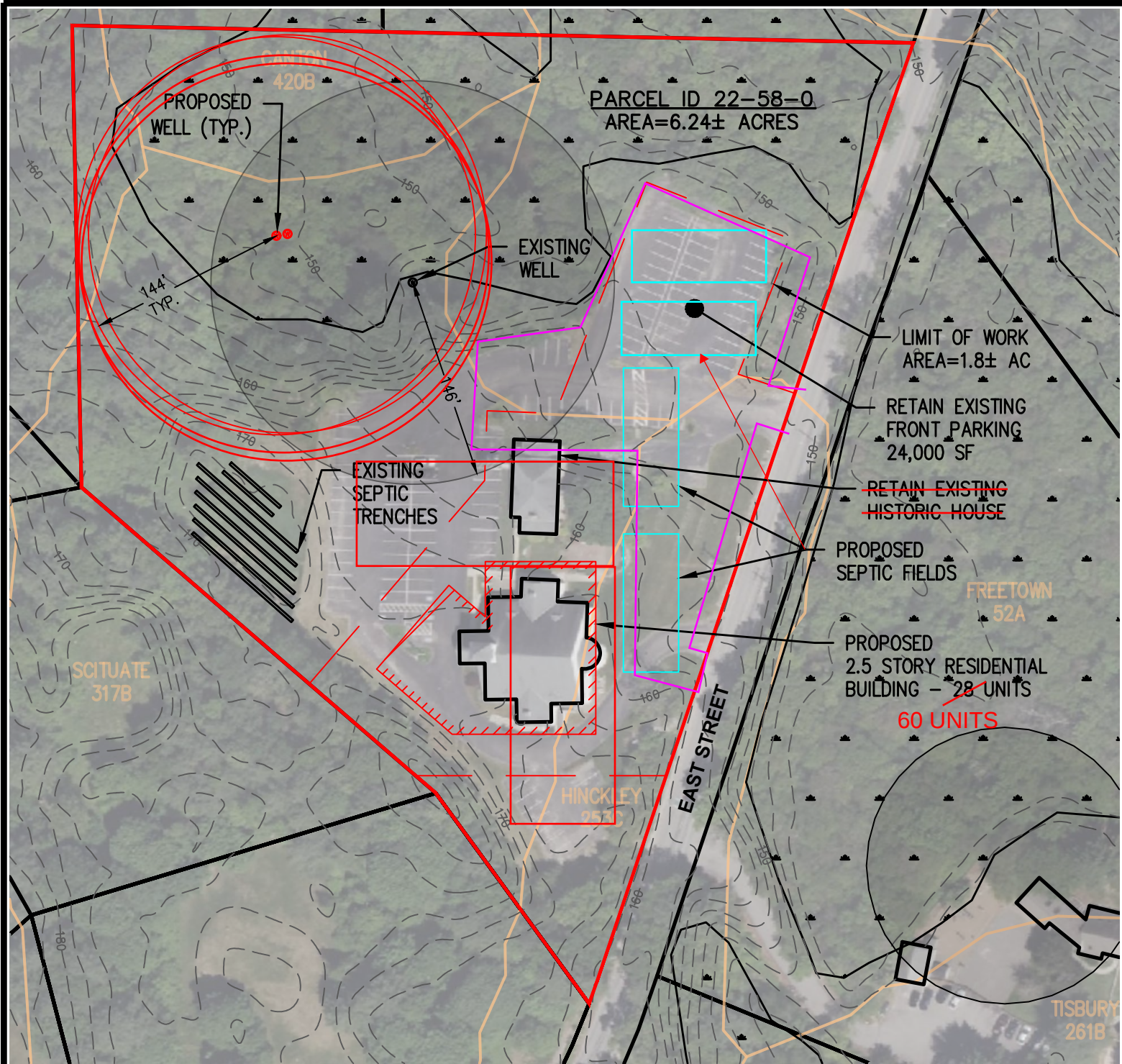




MASSACHUSETTS STATE PLANE COORDINATE SYSTEM (NAD 83)

ASSESSORS:

MAP 22, BLOCK 58, LOT 0

RECORD OWNER:

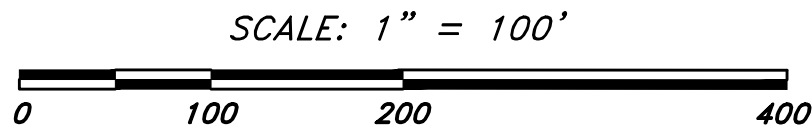
ROMAN CATHOLIC ARCHBISHOP OF BOSTON
SAINT IRENE PARISH
187 EAST STREET
CARLISLE, MA 01741

PLAN INTENT

THE PURPOSE OF THIS PLAN IS TO SHOW A CONCEPTUAL DEVELOPMENT OPTION AND IS MEANT FOR DISCUSSION ONLY. THIS PLAN IS NOT INTENDED FOR PERMITTING OR CONSTRUCTION.

NOTES

- 1) EXISTING CONDITIONS SHOWN HEREON ARE FROM MASSMAPPER AND LIDAR. A DETAIL SURVEY IS RECOMMENDED FOR ACCURACY
- 2) PROPOSED SITE IS A 30 UNIT DEVELOPMENT INCLUDING A NEW 2.5 STORY ~~15,300 SF~~ ^{30,600} BUILDING WITH 28 UNITS AND ONE EXISTING HISTORIC 2 STORY HOUSE WITH TOTAL AREA OF ~~3,900 SF~~ ⁹⁰. 2 UNITS AREA PROPOSED IN THE EXISTING HISTORIC HOUSE. THERE ARE 50 BEDROOMS TOTAL.
- 3) ONE EXISTING WELLS IS TO BE USED AND TWO NEW WELLS ARE PROPOSED. EXISTING ZONE I R=146'.
EXISTING FLOW CALCULATION: $10^{(146+350)/150}=2,026$ GPD
PROPOSED FLOW CALCULATION: 54×110 GPD = ~~5,940~~ ^{9,900} GPD
 $5,940$ GPD - $2,026$ GPD = $3,914$ GPD. PROPOSE 2 WELLS AT 1,957 GPD EACH
PROPOSED ZONE I RADIUS: $(150 \times \log(1,957))-350 = 144'$
- 4) EXISTING SEPTIC SYSTEM: 7 TRENCHES (2'Wx2'Dx96'). $6' \times 96' = 4,032$ SF
~~4,032 SF X 0.74 GPD/SF = 2,983 GPD (18 BEDROOMS)~~ ⁹⁰
- 5) PROPOSED SEPTIC CAPACITY: $(54 \times 165$ GPD) - $2,983$ GPD = ~~5,927~~ ^{11,867} GPD
PROPOSED LEACHING FIELD CALCULATION: ~~5,927~~ ^{11,987} GPD / 0.74 GPD/SF = ~~8,009~~ ^{16,036} SF. 2 (40'x100') FIELDS ARE PROPOSED.
- 6) PER NRCS WEB SOIL SURVEY, SOIL TYPE IN PROPOSED SEPTIC LOCATION IS HINCKLEY 253C. THE SOIL IS CONSIDERED EXCESSIVELY DRAINED, WITH DEPTH TO GROUNDWATER GREATER 0-60" AND DEPTH TO LEDGE GREATER THAN 80".
- 7) PARKING CALCULATION: 1.75×30 UNITS X 320 SF/SPACE = ~~16,800~~ ^{38,400} SF
- 8) NITROGEN LOADING: 54×110 GPD = ~~5,940~~ ^{9,900} GPD
~~13.5~~ ^{22.5} AC @ 440 GPD/AC WILL REQUIRE A NITROGEN AGGREGATIC SITE OF AT LEAST ~~7.25~~ ^{16.26} AC.



DATE: 09/10/25
LAYOUT: CSP
DESIGN: PSL
DRAWN: PSL
SCALE: 1"=100'
DWG: 28460-csp187.

CONCEPT SITE PLAN
187 EAST STREET
CARLISLE, MASSACHUSETTS

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SHEET
1 OF 1

JOB
NO.
28460