

CITY OF NEWBURYPORT
DEPARTMENT OF PUBLIC SERVICES

16A PERRY WAY
NEWBURYPORT, MA 01950


ANTHONY J. FURNARI, DIRECTOR
JAMIE TUCCOLO, DEPUTY DIRECTOR/DIRECTOR OF OPERATIONS

PHONE: 978-465-4463/4464
FAX : 978 462 2063

MEMORANDUM

DATE: May 8, 2020

TO: Katelyn Sullivan, Planning

FROM: Jon-Eric White, City Engineer 

COPY: Tony Furnari, DPS Director
Jamie Tuccolo, DPS Deputy Director

SUBJECT: Graf Road Medical Facility – Site Plan Review
Engineering Review Comments

We provide the following comments to the subject project. These comments are based on the Plans titled *Site Development Plans, Proposed Medical Building, 20 Henry Graf Jr. Road in Newburyport, Massachusetts*, Plans dated April 29, 2020, Rev 1.

Our comments are as redmarked on the enclosed PDF-version of the Plans and as follows:

General:

- Upon approval of permit approvals with the Planning Board and Conservation Commission, the Applicant will need to apply for our local Stormwater Management Permit prior to construction to address issues related to erosion during construction. Rules and an application form is on our DPS/Engineering website <https://www.cityofnewburyport.com/department-of-public-services/engineering-division/pages/stormwater-management>

Sh C-1 Site Layout Plan:

- We recommend not installing a sidewalk. The City's requirement that new developments install sidewalks is applauded in concept but it is very difficult to achieve on roads that currently do not have any. Piecemealing sections of sidewalk inevitably results in constructing them in an improper horizontal location but more importantly, an improper vertical location. Future sidewalks on either side will likely have difficulty meeting this sidewalk's location without reconstruction, for numerous reasons. The result is an inconsistent roadway cross-section that may not function properly and will certainly look dysfunctional.

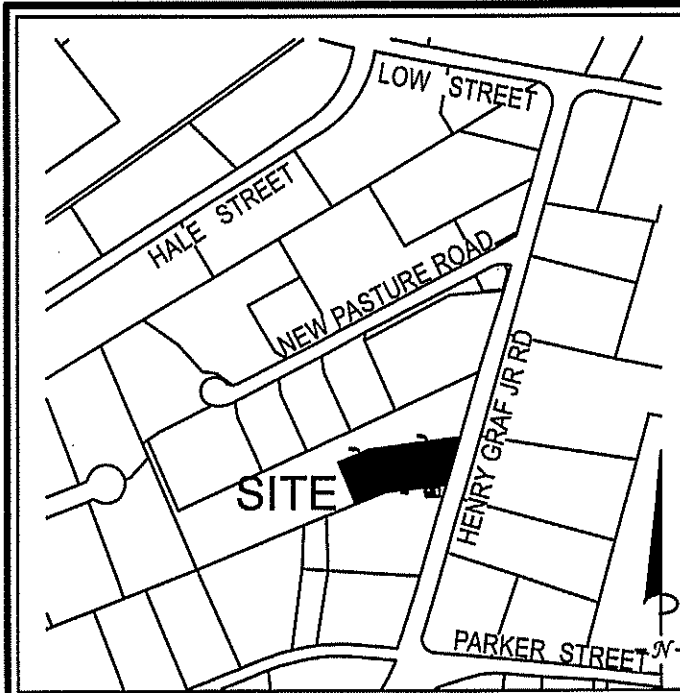
In this case, the guard rail will have to be removed or realigned in order to properly fit the sidewalk. If it remains, then the back of the sidewalk will be overhanging into the swale, thereby requiring a steeper sideslope of the swale, which will require a fence or guard rail to prevent people from falling in. That would require a wider area at the back of sidewalk to install it, which results in more

steepening of the sideslope, which reduces the hydraulic carrying capacity of the swale, so a wall will end up being needed. With every wall come risks.

Sh C-2 Grading and Drainage Plan:

- The driveway entrance has approximately a 10% grade with virtually no vertical-curve type of transition at the top. I do not need to see a profile but this should be flattened out to prevent long trailers from bottoming-out.
- A guard rail is needed on both sides due to the drainage culvert below the drive. I highly recommend to extend both culvert ends and re-grade the sideslope to 3:1. This will prevent a wall to support the guardrail and these types of walls are an unnecessary expense. The ConCom should allow work within this swale.
- The gutter in Graf Road should be maintained to the same grades and the driveway should be superelevated in the same direction (southerly) so the driveway entrance doesn't result in a long, flat area that will pond. ADD a note to the drawing.

End of Comments



LOCUS MAP
Not to Scale

N/F
APN 82-2-1/32
AIRPARK INDUSTRIAL CONDOMINIUM TRS.
18 HENRY GRAF JR. ROAD
DEED BK. 18489 PG. 142

APN 82-2-B
HARTNETT JOHN D. TRS. &
OCEAN REALTY TRS.
20 HENRY GRAF JR. ROAD
87,165± S.F. / 2.0 ACRES

N/F
APN 82-2-C
SAVROS AGGANIS TRS
22 HENRY GRAF JR. ROAD
DEED BK 35177 PG. 292

ABBREVIATIONS

FFE	FIRST FLOOR ELEVATION
BIT CONC.	BITUMINOUS CONCRETE PAVEMENT
CCB	CAPE COD BERM
EP	EDGE OF PAVEMENT
BC	BITUMINOUS CONCRETE CURB
(AM)	AS MEASURED
CALC.	CALCULATED
RET WALL	RETAINING WALL
CONC.	CONCRETE
RCP	REINFORCED CONCRETE PIPE
VCC	VERTICAL GRANITE CURB
VCC	VERTICAL CONCRETE CURB

LEGEND

SURVEY SYMBOLS

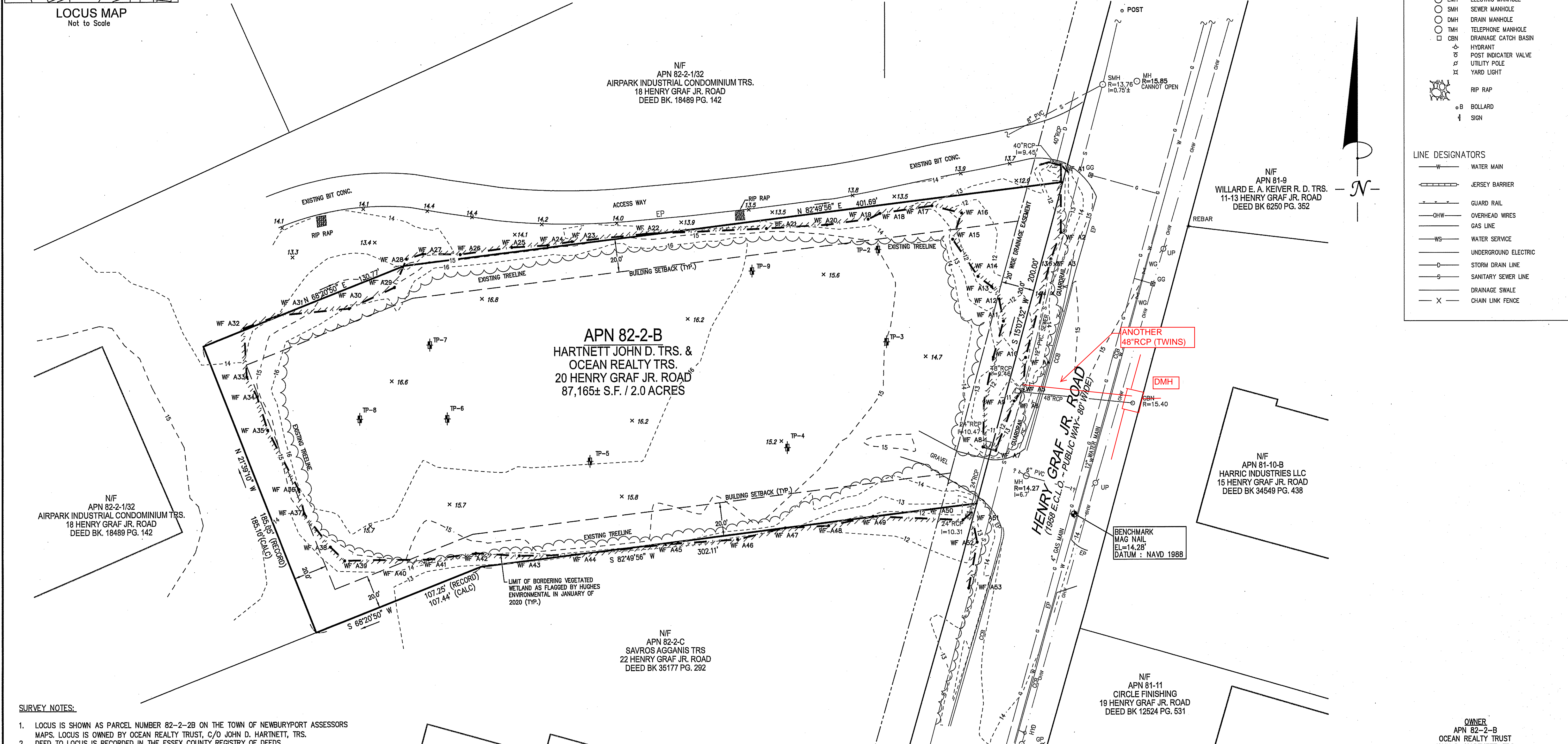
•	REBAR
□	CONCRETE BOUND WITH DRILL HOLE
SB	STONE BOUND
SE/DH	STONE BOUND

UTILITY SYMBOLS

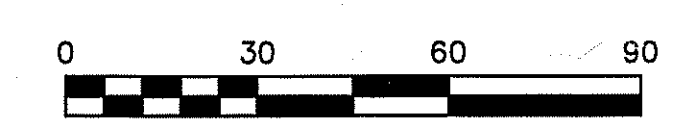
⊗	ELECTRIC HAND HOLE
⊗	GUY POLE
-GW	GUY WIRE
⊗	HVAC UNIT
⊗	TRANSFORMER
⊗	WATER GATE
⊗	ELECTRIC MANHOLE
⊗	SEWER MANHOLE
⊗	DRAIN MANHOLE
⊗	TELEPHONE MANHOLE
⊗	DRAINAGE CATCH BASIN
⊗	HYDRANT
⊗	POST INDICATOR VALVE
⊗	UTILITY POLE
⊗	YARD LIGHT
⊗	RIP RAP
⊗	BOLLARD
⊗	SIGN

LINE DESIGNATORS

—	WATER MAIN
—	JERSEY BARRIER
—	GUARD RAIL
—	OVERHEAD WIRES
—	GAS LINE
—	WATER SERVICE
—	UNDERGROUND ELECTRIC
—	STORM DRAIN LINE
—	SANITARY SEWER LINE
—	DRAINAGE SWALE
—	CHAIN LINK FENCE



- SURVEY NOTES:**
- LOCUS IS SHOWN AS PARCEL NUMBER 82-2-2B ON THE TOWN OF NEWBURYPORT ASSESSORS MAPS. LOCUS IS OWNED BY OCEAN REALTY TRUST, C/O JOHN D. HARTNETT, TRS. DEED TO LOCUS IS RECORDED IN THE ESSEX COUNTY REGISTRY OF DEEDS AT BOOK 12598, PAGE 271.
 - THIS SURVEY WAS MADE ON THE GROUND IN OCTOBER OF 2019 BY MCKENZIE ENGINEERING GROUP, INC.
 - ELEVATIONS SHOWN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988. BORDERING VEGETATED WETLANDS DELINEATED BY HUGHES ENVIRONMENTAL CONSULTING IN JANUARY OF 2020 (SERIES A1 - A53).
 - LOCUS IS ZONED INDUSTRIAL - I1
 - MINIMUM SETBACK REQUIREMENTS:
FRONT YARD 20'
SIDE YARD 20'
REAR YARD 20'
 - LOCUS IS SITUATED IN ZONE X AS SHOWN ON F.I.R.M. No 25009C0117G, EFFECTIVE 7/16/2014.
 - LOCUS IS NOT LOCATED IN A DEP ZONE 2 AND TOWN OF NEWBURYPORT AQUIFER PROTECTION DISTRICT ZONE.
 - UTILITY INFORMATION FROM ABOVE GROUND OBSERVED EVIDENCE IN CONJUNCTION WITH DIG SAFE MARKINGS AND RECORD PLANS. THE LAND SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN HEREON COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE LAND SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. BEFORE CONSTRUCTION CALL DIG SAFE SYSTEMS, INC. AT 1-888-344-7233.
 - PLAN REFERENCES:
PB 451 PG 5



© MCKENZIE ENGINEERING GROUP, INC.

REV	DATE	DESCRIPTION	BY	APP

MCKENZIE ENGINEERING GROUP
Assinippi Office Park
150 Longwater Drive, Suite 101
Norwell, MA 02061
P: 781.792.3900
F: 781.792.0333
www.mckeng.com

20 HENRY GRAF JR. ROAD
NEWBURYPORT, MASSACHUSETTS

PROFESSIONAL SURVEYOR:
RICHARD HODD
REGISTERED PROFESSIONAL LAND SURVEYOR

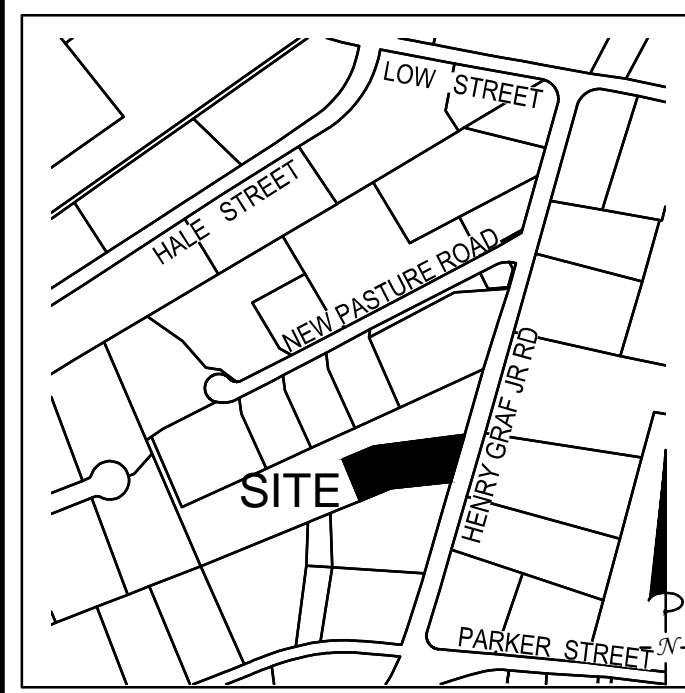
APPLICANT:
SPORTS MEDICINE NORTH ORTHOPEDIC SURGERY, INC.
110 STATE ROAD
SAGAMORE BEACH, MASSACHUSETTS

DRAWN BY: ESS
DESIGNED BY: RTLS
CHECKED BY: RTLS
APPROVED BY: RJH
DATE: MARCH 17, 2020
SCALE: 1"=30'
PROJECT NO.: 219-180
DWG. TITLE:

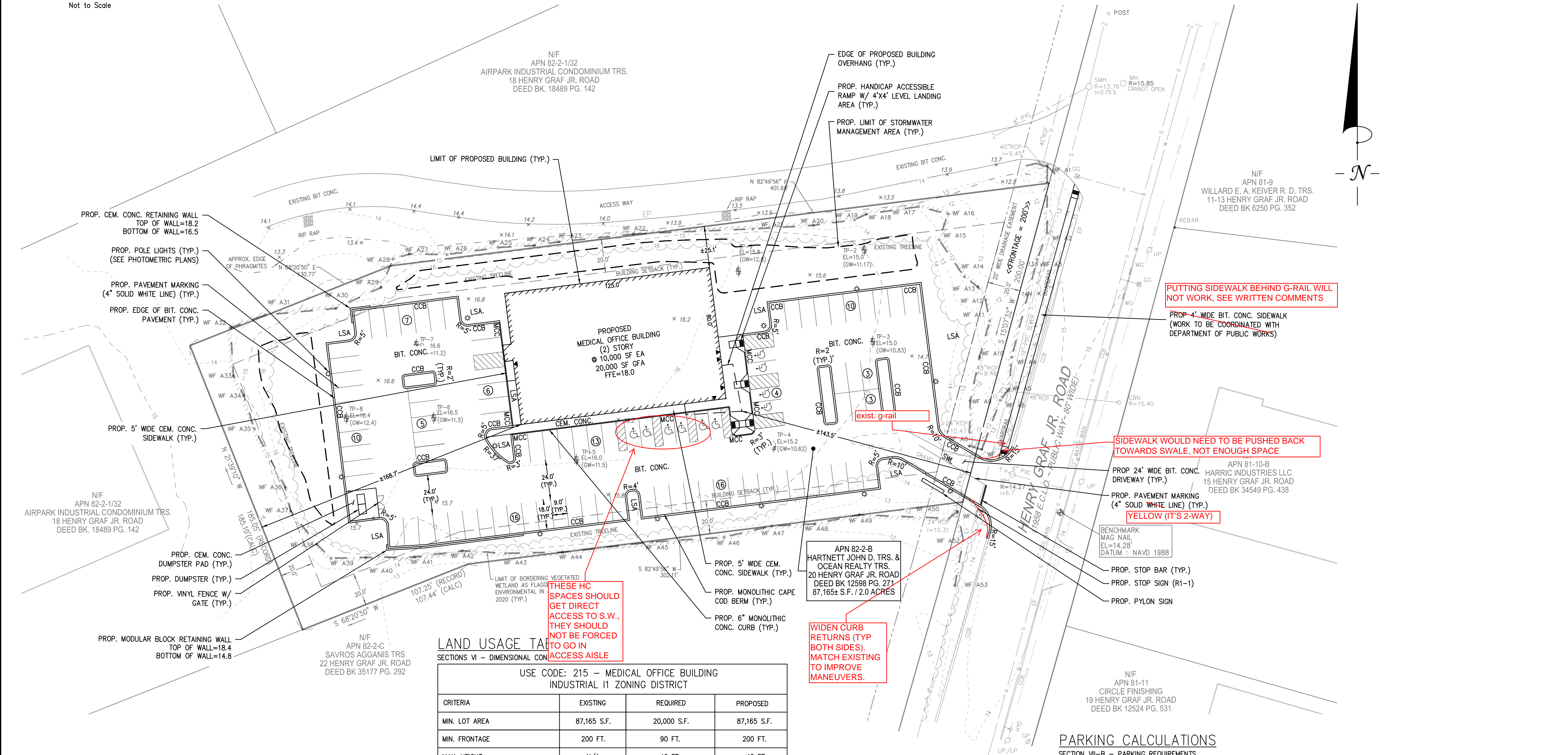
EXISTING CONDITIONS PLAN

DWG. NO: **EX-1**

CONSERV - NBP\DWGS\219-180 EC.DWG



LOCUS MAP
Not to Scale

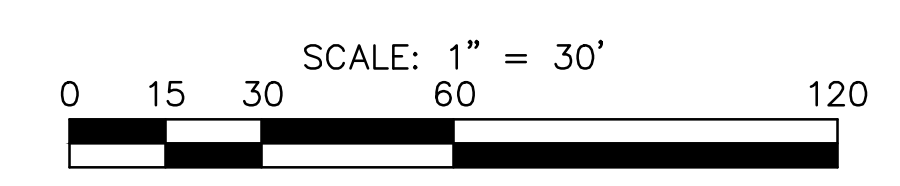


LAND USAGE TABLE
SECTIONS VI - DIMENSIONAL CONTROL

USE CODE: 215 - MEDICAL OFFICE BUILDING
INDUSTRIAL 11 ZONING DISTRICT

CRITERIA	EXISTING	REQUIRED	PROPOSED
MIN. LOT AREA	87,165 S.F.	20,000 S.F.	87,165 S.F.
MIN. FRONTAGE	200 FT.	90 FT.	200 FT.
MAX. HEIGHT	N/A	40 FT.	<40 FT.
MAX. % LOT COVERAGE	N/A	50%	12.0%
OPEN SPACE	N/A	N/A	N/A
MIN. FRONT YARD	N/A	20 FT.	±143.5 FT.
MIN. SIDE YARD	N/A	20 FT.	±25.1 FT.
MIN. REAR YARD	N/A	20 FT.	±168.7 FT.

NOTES:
 1. SECTION XV-Hd.1. - A LANDSCAPED BUFFER STRIP AT LEAST 20' IN WIDTH SHALL BE ESTABLISHED ADJACENT TO ANY PUBLIC ROAD.
 2. SECTION XV-Hd.4. - AT LEAST 5% OF THE INTERIOR OF THE PARKING AREA SHALL BE MAINTAINED WITH LANDSCAPING, INCLUDING TREES, IN LANDSCAPE ISLANDS OR PLOTS OF AT LEAST NINE FEET IN WIDTH WITH NO MORE THAN 20 PARKING SPACES BETWEEN EACH ISLAND OR PLOT. (6.3% PROVIDED BY THIS SUBMISSION)



PARKING CALCULATIONS
SECTION VII-B - PARKING REQUIREMENTS

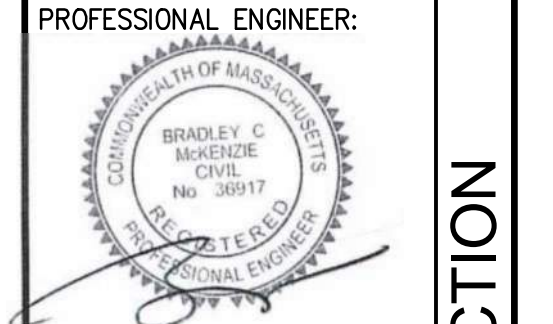
CRITERIA	REQUIRED (NEWBURYPORT ZONING ORDINANCE)	REQUIRED	PROPOSED
USE CODE 215: MEDICAL OFFICE BUILDING	1 SPACE/2 EMPLOYEES = 40 EMPLOYEES/2 EMPLOYEES PER SPACE = 20 SPACES 1 SPACE/300 SF GFA = 20,000 SF. GFA/300 SF GFA PER SPACE = 67 SPACES 20 + 67 = 87 SPACES	87 SPACES	93 SPACES

PARKING NOTES:
 1. SPECIALIZED MEDICAL FACILITIES: OUTPATIENT UNITS AND FACILITIES: 10% OF THE TOTAL NUMBER OF PARKING SPACES PROVIDED TO SERVE EACH SUCH OUTPATIENT UNIT OR FACILITY SHALL BE ACCESSIBLE (521 CMR: ARCHITECTURAL ACCESS BOARD).
 2. 93 TOTAL SPACES INCLUDES 10 AAB ACCESSIBLE 9' X 18' WITH 4 - 8' X 18' ACCESS AREA (VAN ACCESSIBLE SPACE) (521 CMR: ARCHITECTURAL ACCESS BOARD) ACCESSIBLE SPACES REQUIRED = 10 (10% OF 93 TOTAL SPACES)

REV	DATE	DESCRIPTION	BY	APP
1	4/29/20	REVIEW COMMENTS	ESS	BCM



**SITE DEVELOPMENT PLANS
PROPOSED MEDICAL BUILDING
20 HENRY GRAF JR. ROAD
NEWBURYPORT, MASSACHUSETTS**



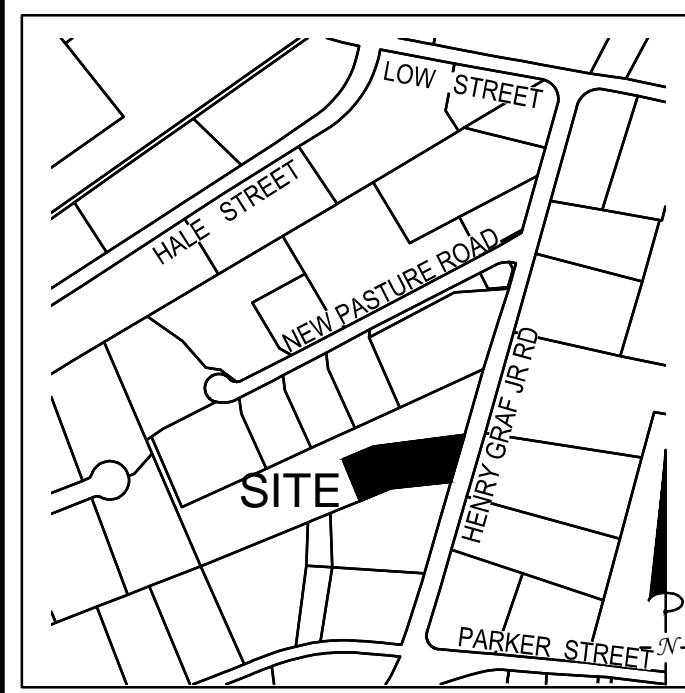
APPLICANT:
SPORTS MEDICINE NORTH
ORTHOPEDIC SURGERY, INC.
C/O CONSERV GROUP, INC.
110 STATE ROAD
SAGAMORE BEACH, MASSACHUSETTS 02562

DESIGNED BY: ESS
CHECKED BY: BCM
APPROVED BY: BCM
DATE: MARCH 17, 2020
SCALE: 1" = 30'
PROJECT NO.: 219-180
DWG. TITLE:

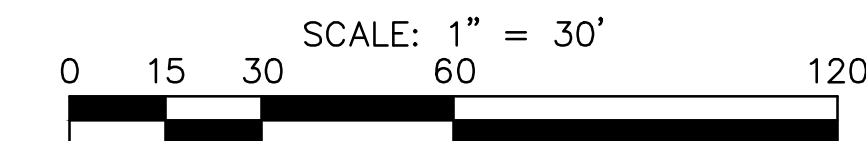
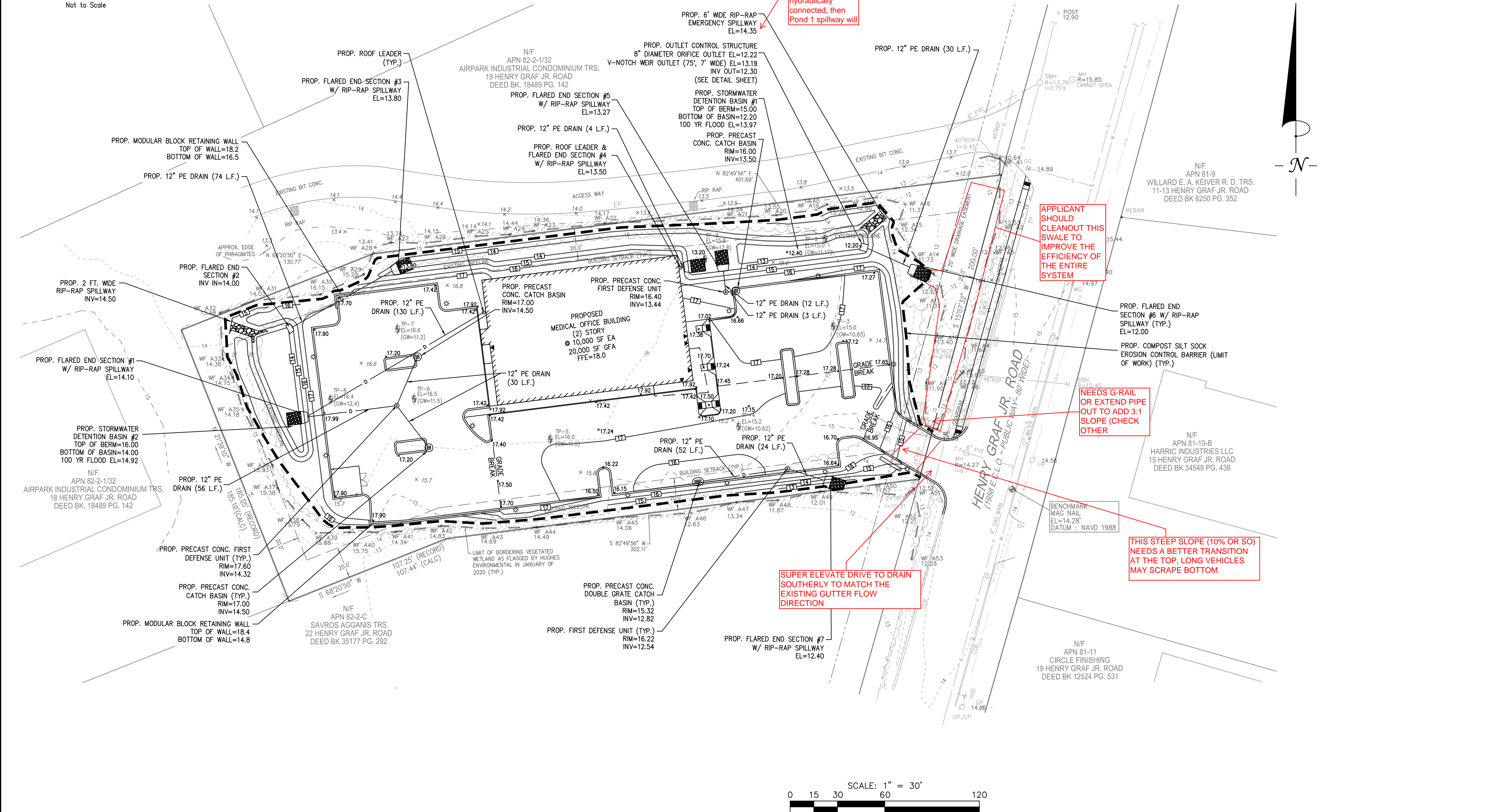
**SITE LAYOUT
PLAN**

DWG. NO.: **C-1**

NOT FOR CONSTRUCTION



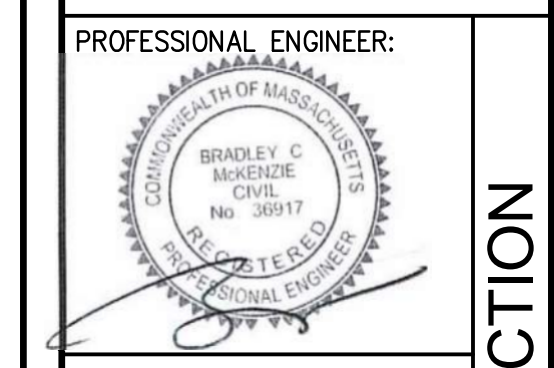
LOCUS MAP
Not to Scale



REV	DATE	DESCRIPTION	BY	APP
1	4/29/20	REVIEW COMMENTS	ESS	BCM



**SITE DEVELOPMENT PLANS
PROPOSED MEDICAL BUILDING
20 HENRY GRAF JR. ROAD
NEWBURYPORT, MASSACHUSETTS**



APPLICANT:
**SPORTS MEDICINE NORTH
ORTHOPEDIC SURGERY, INC.
C/O CONSERV GROUP, INC.
110 STATE ROAD
SAGAMORE BEACH, MASSACHUSETTS 02562**

DESIGNED BY: ESS
CHECKED BY: BCM
APPROVED BY: BCM
DATE: MARCH 17, 2020
SCALE: 1" = 30'
PROJECT NO.: 219-180
DWG. TITLE:
**GRADING AND
DRAINAGE
PLAN**

DWG. NO.:
C-2

NOT FOR CONSTRUCTION