

CIVIL SITE CONSTRUCTION DRAWINGS 141 SOUTHWEST CUTOFF, WORCESTER MA

PREPARED FOR
RF. CARRIER REALTY LLC.
6 BRUSSELS ST. WORCESTER, MA

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OWNER

FRANK CARRIER
F. CARRIER REALTY LLC.
6 BRUSSELS ST
WORCESTER, MA
Phone: 774-262-3187

GENERAL CONTRACTOR

POULIN CONSTRUCTION
Contact: JOHN POULIN
299 PRINCETON RD
STERLING MA 01564
Phone: 978-422-3399

CIVIL ENGINEER

Burke Engineering Associates
Contact: MICHAEL BURKE
WORCESTER MA
Phone: (508) 757-6277

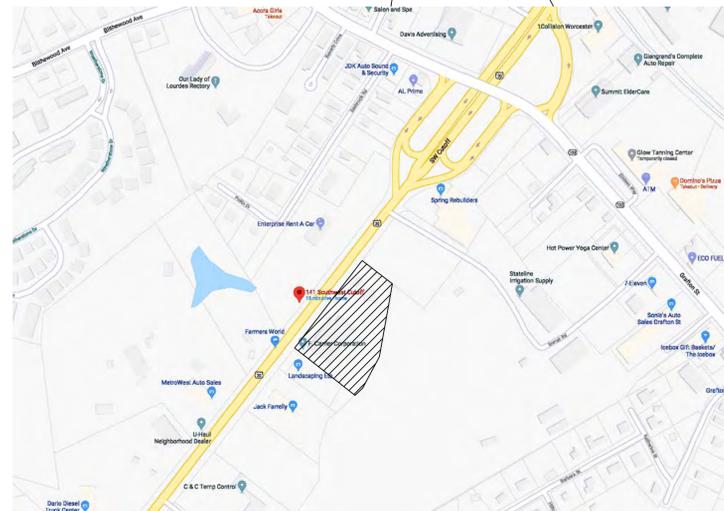
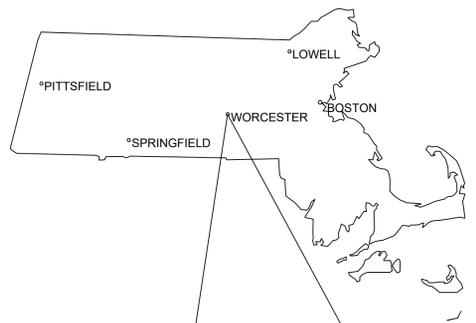
STRUCTURAL ENGINEER

FRANK P. HARRIGAN II
181 LITTLETON ROAD UNIT #225
CHELMSFORD, MA 01824
Phone: (508) 740-6190

LAND SURVEYOR

D.J. & ASSOCIATES
Contact: David Sadowski
7 Cedar Street
Clinton, MA
Phone: 978-875-0741

DRAWINGS NOT INCLUDED IN SUBMITTAL



SITE LOCATION MAP
(NOT TO SCALE)



IF THIS BAR DOES NOT EQUAL ONE INCH ADJUST SCALES ACCORDINGLY



COVER SHEET
ASSESSOR'S MAP 42, PARCEL 003-07+8A
LOCATION: 90 BROOKLINE STREET
WORCESTER, MA

OWNER: RAFAEL HERNANDEZ
18 DARBY ST
WORCESTER, MA

D.J. & ASSOCIATES
7 CEDAR STREET
CLINTON, MA

REV 3: MAY 16, 2020 STAFF REVIEW
REV 2: MAR 16, 2020 STAFF REVIEW
REV 1: FEB 18, 2020 ADD STREET UTILITIES
DATE: FEBRUARY 11, 2020

NO SCALE

GENERAL NOTES:

- ALL EARTHWORK SHALL BE PERFORMED IN ACCORDANCE WITH THE RECOMMENDATION PROVIDED IN THE SUBSURFACE EXPLORATION AND GEOTECHNICAL ENGINEERING REPORT DATED JULY 9, 2012 BY INBERG-MILLER ENGINEERS.
- REFER TO THE STRUCTURAL DRAWINGS FOR DETAILS OF THE EXTERIOR TANK FOUNDATIONS AND CONTAINMENT BERMS.
- FINAL SEEDING OF GRADED SLOPES AND AREAS NOT RECEIVING GRAVEL SHALL BE IN ACCORDANCE WITH THE SEEDING SPECIFICATIONS IN THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP).
- REFER TO DETAILS FOR BOLLARD CONSTRUCTION AT THE LOCATIONS INDICATED.
- TOPOGRAPHIC SURVEY PROVIDED BY INBERG-MILLER ENGINEERS. WHILE EVERY EFFORT HAS BEEN MADE TO INCLUDE ALL AVAILABLE UTILITY INFORMATION, IN NO WAY DOES THE ENGINEER OR OWNER IMPLY, SUGGEST, INFER, OR CONFIRM THAT UTILITIES SHOWN ARE INCLUSIVE OF ALL UTILITIES WITHIN THE PROJECT AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING (VERTICALLY AND HORIZONTALLY) ALL UTILITIES PRIOR TO ANY EARTH MOVING ACTIVITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING IN PLACE ALL UTILITIES. ANY DAMAGE OR LOSS TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. SHOULD ANY DAMAGE OR LOSS OCCUR AS A RESULT OF CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL REPLACE OR REPAIR TO THE FULL SATISFACTION OF THE UTILITY OWNER AT CONTRACTORS EXPENSE. FURTHERMORE, THE CONTRACTOR AGREES TO DEFEND, INDEMNIFY AND HOLD HARMLESS OWNER, AND ENGINEER FROM ANY AND ALL DAMAGES OR LOSS.
- SITE CONDITIONS - THE CONTRACTOR SHALL CONTINUALLY REVIEW JOB SITE CONDITIONS. CONDITIONS REQUIRING CONSTRUCTION DIFFERENT OF THAT SHOWN ON THE PLANS SHALL BE REPORTED TO THE ENGINEER PRIOR TO PROCEEDING WITH THE AFFECTED CONSTRUCTION.
- PROTECTION OF PROPERTY - THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF PUBLIC AND PRIVATE PROPERTY ADJACENT TO HIS WORK AND SHALL EXERCISE DUE CAUTION TO AVOID DAMAGE TO SUCH PROPERTY. THE CONTRACTOR SHALL REPLACE OR REPAIR TO THEIR ORIGINAL CONDITION, ALL IMPROVEMENTS WITHIN OR ADJACENT TO THE AREA OF WORK WHICH ARE NOT DESIGNATED FOR REMOVAL, AND WHICH ARE DAMAGED OR REMOVED AS A RESULT OF HIS OPERATIONS.
- SAFETY - NEITHER THE OWNER NOR THE ENGINEER OF RECORD WILL BE RESPONSIBLE FOR COMPLIANCE WITH SAFETY MEASURES OR REGULATIONS. THE CONTRACTOR SHALL DESIGN, CONSTRUCT, AND MAINTAIN ALL SAFETY DEVICES, AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE, FEDERAL, AND CONTRACTUAL SAFETY AND HEALTH STANDARDS, LAWS, AND REGULATIONS.
- STANDARDS SPECIFICATIONS - ALL CONSTRUCTION WORK AND INSTALLATION SHALL CONFORM TO THE PROJECT SPECIFICATIONS PROVIDED WITH THE CONTRACT DOCUMENTS AND ANY STANDARD SPECIFICATIONS AS INDICATED ON THESE PLANS.
- APPROVED PLANS - NO CONSTRUCTION SHALL BE STARTED WITHOUT PLANS. ANY CONSTRUCTION DONE WITHOUT APPROVED PLANS AND PRIOR TO NOTIFICATION TO THE INSPECTOR WILL BE AT THE CONTRACTOR'S RISK, UNLESS SPECIFICALLY DIRECTED BY THE OWNER IN WRITING. THE OWNER RESERVES THE RIGHT TO REJECT CONSTRUCTION DONE WITHOUT APPROVED PLANS. THE CONTRACTOR SHALL HAVE COPIES OF THE APPROVED PLANS FOR THIS PROJECT ON THE SITE AT ALL TIMES AND SHALL BE FAMILIAR WITH ALL APPLICABLE STANDARDS AND SPECIFICATIONS.
- INSPECTIONS - THE CONTRACTOR IS RESPONSIBLE FOR ARRANGING FOR REQUIRED INSPECTIONS. THE PRESENCE OR ABSENCE OF AN INSPECTOR WILL NOT RELIEVE THE CONTRACTOR OF FULL RESPONSIBILITY FOR THE PROPER PERFORMANCE OF WORK.
- THE CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST STANDARDS OF OSHA DIRECTIVES OR ANY OTHER AGENCY HAVING JURISDICTION FOR ALL ACTIVITIES ASSOCIATED WITH THIS PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH OSHA PERFORMANCE CRITERIA.
- ELECTRONIC FILES WILL BE PROVIDED TO THE CONTRACTOR UPON REQUEST FOR THE SOLE PURPOSE OF PROVIDING CONSTRUCTION STAKING FOR GRADING ACTIVITIES.

ABBREVIATIONS LIST

AS	ASRES
A.C.	ASPHALT CONCRETE
CF	CUBIC FOOT
CP	CONTROL POINT
CPEP	CORRUGATED POLYETHYLENE PIPE
CU. YD.	CUBIC YARD
DIA.	DIAMETER
E	EAST
ELEV	ELEVATION
FES	FLARED END SECTION
FFE	FINISHED FLOOR ELEVATION
FT	FOOT
HDPPE	HIGH DENSITY POLYETHYLENE
IE	INVERT ELEVATION
LF	LINEAR FEET
MAX	MAXIMUM
MIN	MINIMUM
N	NORTH
PRP	PROPERTY CORNER
PVC	POLYVINYL CHLORIDE
PVI	POINT OF VERTICAL INTERSECTION
R	RADIUS
ROW	RIGHT-OF-WAY
S	SOUTH
STA	STATION
VC	VERTICAL CURVE
W	WEST
YD	YARD

LEGEND

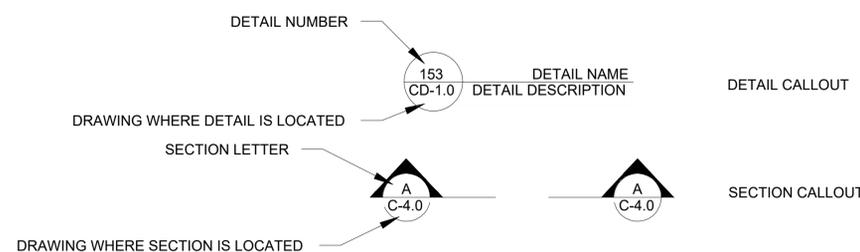
EXISTING FEATURES

	EXISTING TOPOGRAPHIC CONTOURS (1' INTERVAL)
	TOPOGRAPHIC CONTOURS AFTER REMOVAL OF 4" OF TOPSOIL (1' INTERVAL)
	EXISTING PROPERTY BOUNDARY
	EXISTING ROAD RIGHT-OF-WAY
	EXISTING FENCELINE
	EXISTING UNPAVED ROAD
	EXISTING CATTLE GUARD
	EXISTING DITCH CENTERLINE
	EXISTING GAS UTILITY
	EXISTING OVERHEAD ELECTRIC
	EXISTING UNDERGROUND ELECTRIC
	EXISTING STORM SEWER PIPE/CULVERT
	EXISTING WATER SPIGOT
	EXISTING BORE HOLE LOCATIONS
	EXISTING UTILITY POLE
	EXISTING STRUCTURE
	EXISTING SURVEY BENCHMARK
	SURVEY CONTROL POINT
	EXISTING SURVEY BRASS CAP MONUMENT

PROPOSED FEATURES

	PROPOSED TOPOGRAPHIC CONTOURS (1' INTERVAL)
	LIMITS OF GRADING
	PROPOSED 8' SECURITY FENCE
	PROPOSED 8' GAME FENCE
	PROPOSED BARBWIRE FENCE
	PROPOSED STORM SEWER CULVERT
	PROPOSED SANITARY SEWER PIPELINE
	PROPOSED OVERHEAD ELECTRIC
	PROPOSED UNDERGROUND ELECTRIC
	PROPOSED PHONE LINE
	PROPOSED DOMESTIC WATER PIPELINE
	PROPOSED DATA LINE
	PROPOSED CATTLE GUARD
	PROPOSED STRUCTURE
	PROPOSED CONCRETE RAMP/PASS
	PROPOSED LIMITS OF GRAVEL ROADWAY OR YARD AREA
	PROPOSED GRAVEL ROADWAY OR YARD AREA
	PROPOSED STORM DRAINAGE RIPRAP APRONS
	PROPOSED DOMESTIC WATER WELL

DETAIL/SECTION INDICATORS



C-2 GENERAL NOTE & LEGEND

ASSESSOR'S MAP 42, PARCEL 003-07+8A
LOCATION: 90 BROOKLINE STREET
WORCESTER, MA

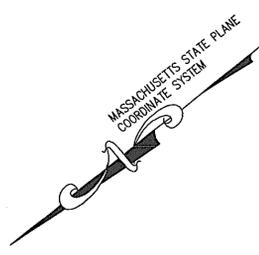
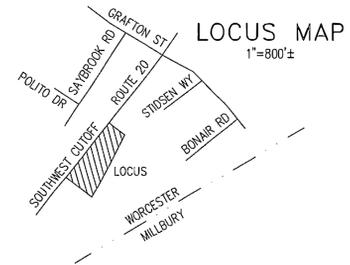
OWNER: RAFAEL HERNANDEZ
18 DARBY ST
WORCESTER, MA

D.J. & ASSOCIATES
7 CEDAR STREET
CLINTON, MA

REV 2: MAR 16, 2020 STAFF REVIEW
REV 1: FEB 18, 2020 ADD STREET UTILITIES
DATE: FEBRUARY 11, 2020

NO SCALE

ZONE: MG-2.0
 REQUIRED:
 MIN. FRONTAGE: N/A
 MIN. AREA: N/A
 FRONT SETBACK: 15'
 SIDE SETBACK: N/A
 REAR SETBACK: 15'
 FLOOR AREA RATIO (MAX.): 2 TO 1

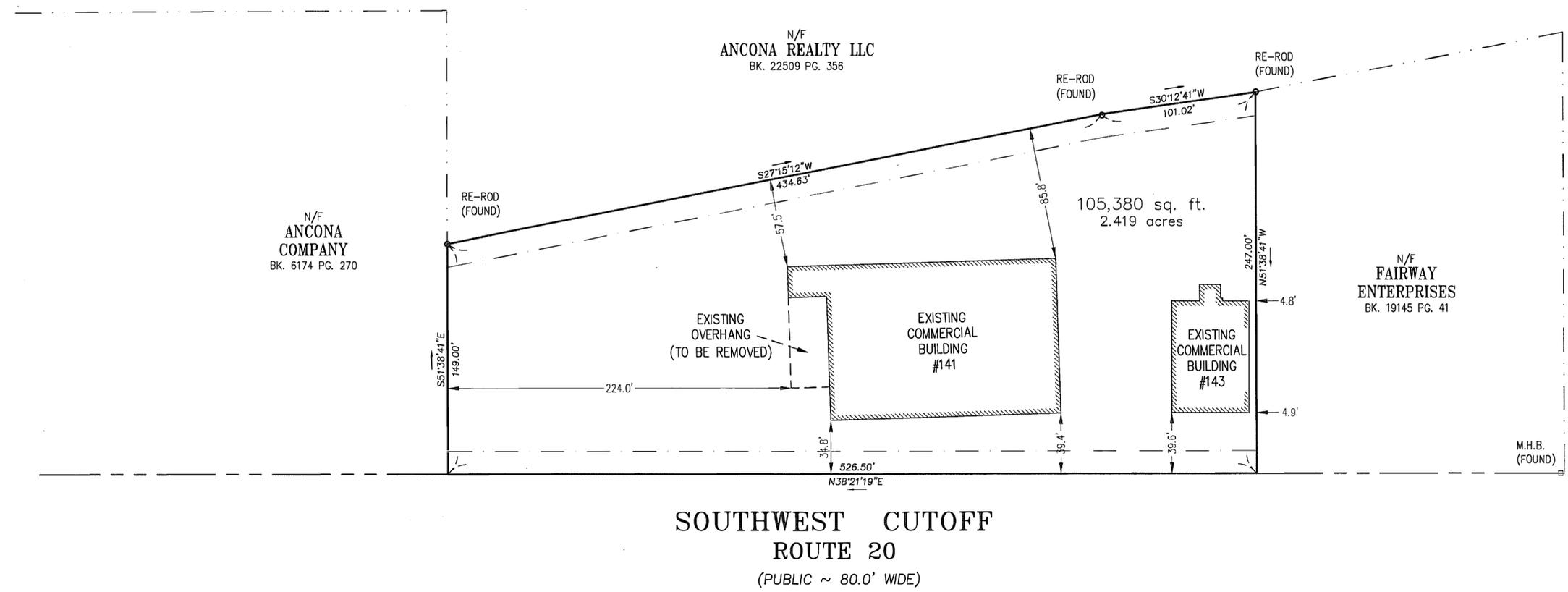


NOTES:
 THIS PLAN WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND IS SUBJECT TO ANY FINDINGS SUCH A REPORT MIGHT DISCLOSE.

REFERENCES:
 DEED BOOK 58476 PAGE 393
 ASSESSORS REFERENCE: 34-035-00013

ZONING:
 MG-2.0

ALL ABOVE DEEDS AND PLANS ARE RECORDED WITH THE WORCESTER DISTRICT REGISTRY OF DEEDS.

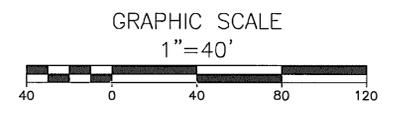


M.H.B. (FOUND)

M.H.B. (FOUND)

**SOUTHWEST CUTOFF
 ROUTE 20**
 (PUBLIC ~ 80.0' WIDE)

SHEET 1 OF 11
 EXISTING CONDITIONS BASE MAP



REGISTERED LAND SURVEYOR
 DATE: May 5, 2020

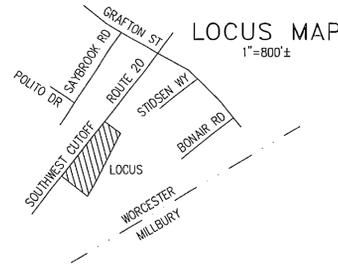
B&R SURVEY, INC.
 100 GROVE STREET
 WORCESTER, MA 01605
 TEL 508-756-8579
 FAX 508-421-4797

PROPOSED ADDITION PLAN
 LAND OWNED BY:
F. CARRIER REALTY LLC
 141 SOUTHWEST CUTOFF
 WORCESTER, MASSACHUSETTS

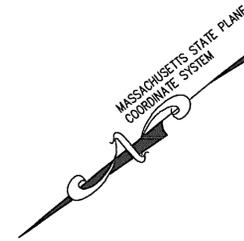
SCALE: 1"=40' DATE: MAY 5, 2020

FIELD: RJS	CALC: RPB	CHECK: RJS
SHEET 1 OF 10		JOB #20-108

ZONE: MG-2.0
 REQUIRED:
 MIN. FRONTAGE: N/A
 MIN. AREA: N/A
 FRONT SETBACK: 15'
 SIDE SETBACK: N/A
 REAR SETBACK: 15'
 FLOOR AREA RATIO (MAX.): 2 TO 1



FLOOR AREA RATIO CALCULATIONS:
 FLOOR AREA (EXISTING) 18,822 S.F. (#141)
 3,842 S.F. (#143)
 FLOOR AREA (PROPOSED) 70,764 S.F.
 18822+3842+70764=93428/105380=0.89

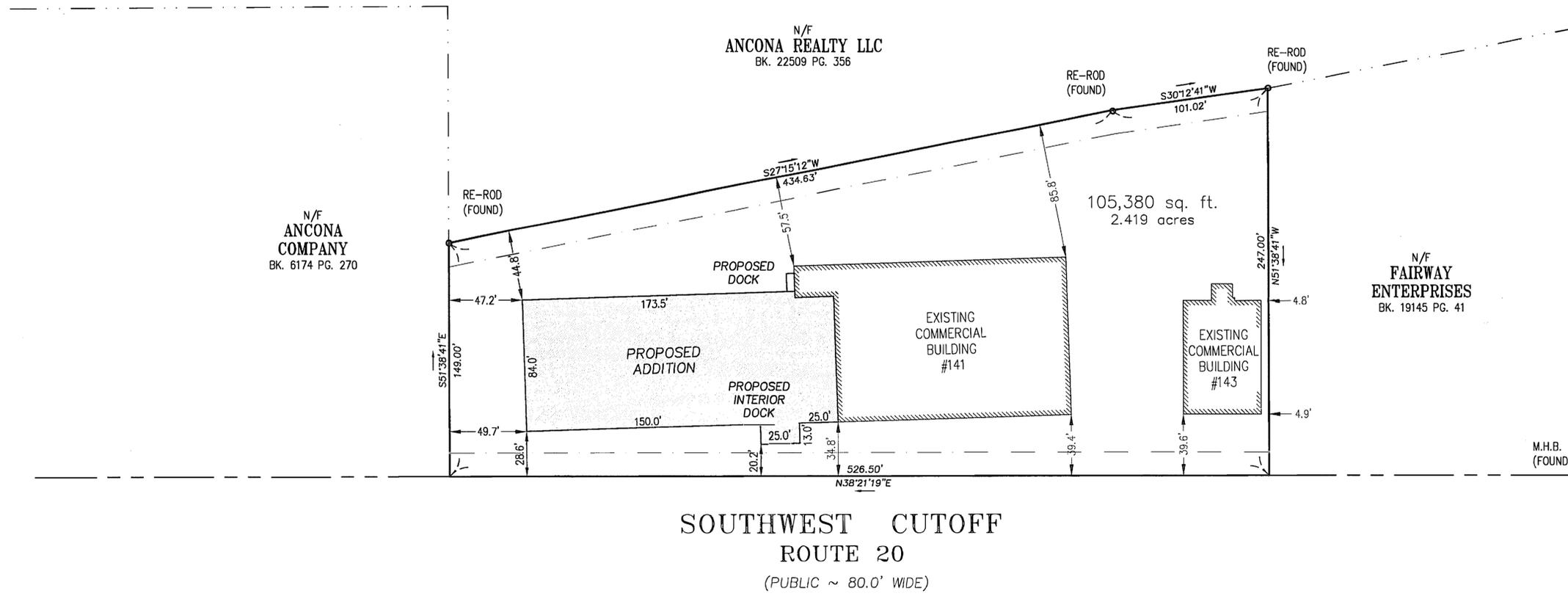


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REFERENCES:
 DEED BOOK 58476 PAGE 393
 ASSESSORS REFERENCE: 34-035-00013

ZONING:
 MG-2.0

ALL ABOVE DEEDS AND PLANS ARE RECORDED WITH THE WORCESTER DISTRICT REGISTRY OF DEEDS.



N/F ANCONA COMPANY
 BK. 6174 PG. 270

N/F ANCONA REALTY LLC
 BK. 22509 PG. 356

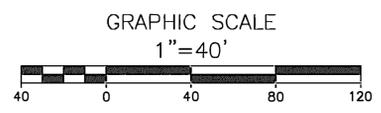
N/F FAIRWAY ENTERPRISES
 BK. 19145 PG. 41

M.H.B. (FOUND)

**SOUTHWEST CUTOFF
 ROUTE 20**
 (PUBLIC ~ 80.0' WIDE)

M.H.B. (FOUND)

SHEET 2 OF 11
 PROPOSED ADDITION LAYOUT



Robert J. Smith
 REGISTERED LAND SURVEYOR
 DATE: May 5, 2020

B&R SURVEY, INC.

100 GROVE STREET
 WORCESTER, MA 01605
 TEL 508-756-8579
 FAX 508-421-4797

PROPOSED ADDITION PLAN
 LAND OWNED BY:
F. CARRIER REALTY LLC
 141 SOUTHWEST CUTOFF
 WORCESTER, MASSACHUSETTS

SCALE: 1"=40' DATE: MAY 5, 2020

FIELD: RJS	CALC: RPB	CHECK: RJS
SHEET 2 OF 11		JOB #20-108

REFERENCES

LOCUS:

ASSESSORS MAP
MBL 34-035-00013

DEED:
BOOK 58476 - PG 393

PLANS:
PLAN BOOK 781, PLAN 103
PLAN BOOK 798, PLAN 121
PLAN BOOK 322, PLAN 43

LEGEND:

N/F=NOW OR FORMERLY
ETW = EDGE OF TRAVEL WAY
EOP = EDGE OF EXISTING PAVEMENT
EOP = EDGE OF PAVEMENT

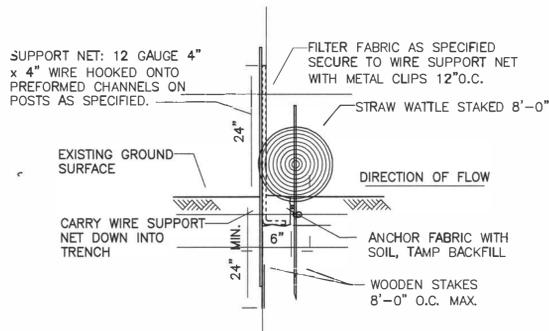
DMH = DRAIN MANHOLE
SMH = SEWER MANHOLE
FG = FINISH GRADE
FGX540 = FINISH GRADE (SPOT SHOT)

TOW = TOP OF WALL
BOW = BOTTOM OF WALL
S.F.=SQUARE FEET
PB = PLAN BOOK
PL = PLAN
BK = BOOK
P-B-3=NOTES A BORING
DTH = DEEP TEST HOLE
P= PERC TEST HOLE

PROP=PROPOSED
TEMP=TEMPORARY

PAR = PARCEL
B-3 = SOIL BORING (TYPICAL)

STRAW WATTLE INSTALLATION DETAIL



DEMOLITION NOTES:

1. THE TEMPORARY STRAW WATTLE ARE TO BE SECURELY IN PLACE PRIOR TO ANY WORK.
2. THE CITY OF WORCESTER DPRS IS TO BE NOTIFIED 48 HOURS PRIOR TO ANY DEMOLITION WORK AT THE SITE.
3. THE DPRS SHOULD INSPECT AND APPROVE THE STRAW WATTLE'S INSTALLATION AND PLACEMENT
4. ONCE THE DPRS HAS APPROVED THE STRAW WATTLE'S PLACEMENT, WORK ON THE DISASSEMBLY AND REMOVAL OF THE EXISTING OVERHANG ROOF CAN BEGIN.
5. THE DEBRIS FROM TAKING DOWN THE EXISTING OVERHANG ARE TO BE COMPLETELY REMOVED FROM THE SITE AND TRUCKED TO AN APPROVED DISPOSAL SITE.
6. REMOVAL OF SECTIONS OF THE NORTH END OF THE EXISTING BUILDING CAN BEGIN. THIS PROPOSED REMOVAL WILL BE NECESSARY IN ORDER TO CONNECT THE PROPOSED ADDITION TO THE EXISTING BUILDING.
7. THE EXISTING LOADING DOCK AT THE NORTH END OF THE # 141 BUILDING IS TO BE COMPLETELY REMOVED AND TRUCKED TO A SUITABLE DISPOSAL SITE.
8. THE UNDERGROUND HOLDING TANK IS BE PUMPED EMPTY PRIOR TO BEING EXCAVATED OUT FROM ITS UNDERGROUND POSITION AND DISPOSED OF PROPERLY.
9. ALL WORK MUST CONFORM TO THE STANDARDS CONTAINED IN THE CITY OF WORCESTER, DEPARTMENT OF PUBLIC WORKS & PARKS, ENGINEERING DIVISION, CONSTRUCTION MANAGEMENT SECTION, STANDARD SPECIFICATIONS & DETAILS.

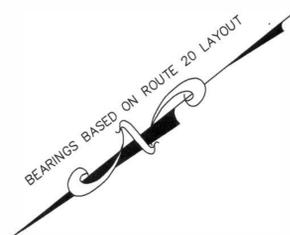
THE BUILDINGS FRONTAGE IS ON THE SOUTHWEST CUTOFF (ROUTE 20)

NOTES:

1. THERE ARE NO WETLANDS ANYWHERE ON THE SITE.
2. NO PORTION OF THE PROPERTY IS WITHIN THE 100 YEAR FLOOD PLAIN.

WAIVER:

1. IDENTIFICATION OF TREES OVER 9" IN DIAMETER.



CONSTRUCTION ENTRANCE NOTES:

1. PROVIDE APPROPRIATE TRANSITION BETWEEN STABILIZED CONSTRUCTION ENTRANCE AND UNDISTURBED ROADWAY.
2. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO UNDISTURBED ROADWAY.
3. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR ADDING STONE TO THE LENGTH OF THE ENTRANCE.
4. REPAIR AND CLEANOUT MEASURES USED TO TRAP SEDIMENT.
5. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO UNDISTURBED ROADWAY SHALL BE REMOVED AS DIRECTED BY THE ENGINEER.

34-035-00002
N/F ANCONA COMPANY
115 SOUTHWEST CUTOFF
BOOK 22509, PAGE 356

THIS IS THE CLOSEST CORNER
OF THE RESOURCE AREA.
DELINATION BY ALTON ENGINEERING
ON DEC. 22, 2019

EXISTING CONDITIONS NOTES:

IMPERVIOUS AREAS:
PAVEMENT - 55,077 S.F.
143 BUILDING - 3,842 S.F.
141 BUILDING - 15,577 S.F.
SITE TOTAL - 74,496 S.F.

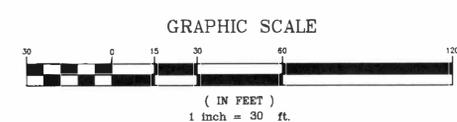
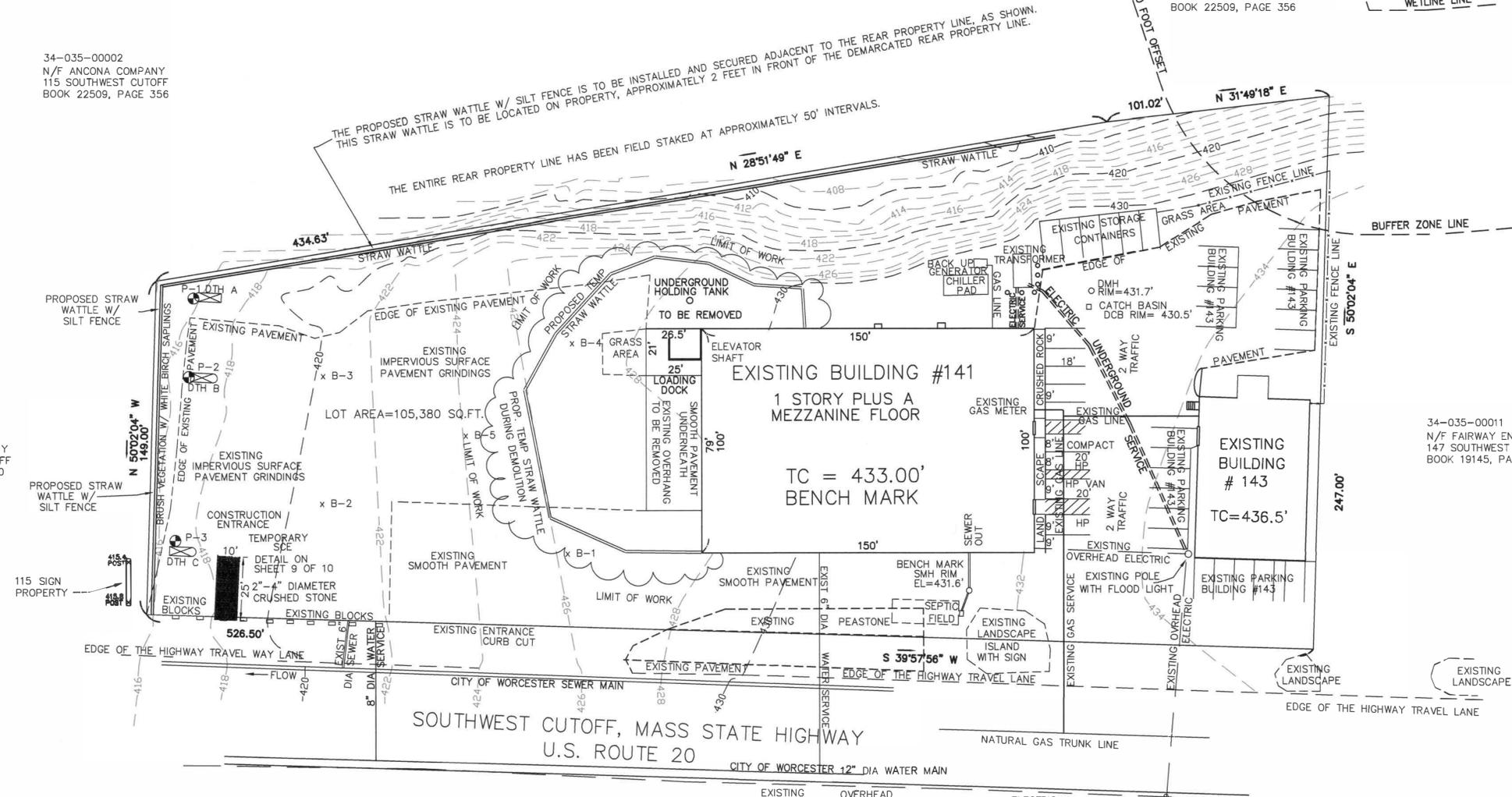
FROM SURVEY CALCULATION
SITE AREA=105,380 S.F.
2.419 (+/-) AC.

$\frac{74,496 \text{ S.F.}}{105,380 \text{ S.F.}} = 0.701$ PERCENT OF THE SITE WITH IMPERVIOUS COVER

34-035-00002
N/F ANCONA COMPANY
115 SOUTHWEST CUTOFF
BOOK 22509, PAGE 356

34-036-00056
N/F ANCONA COMPANY
131 SOUTHWEST CUTOFF
BOOK 6174, PAGE 270

34-035-00011
N/F FAIRWAY ENTERPRISES
147 SOUTHWEST CUTOFF
BOOK 19145, PAGE 41

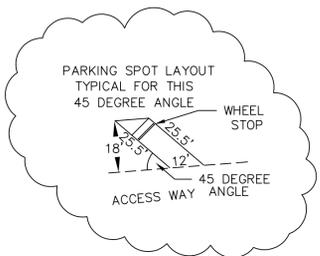


SHEET 4 OF 11
SITE PREPARATION AND DEMOLITION SHEET

PROPOSED ADDITION PLAN 141 SOUTHWEST CUTOFF WORCESTER, MASSACHUSETTS
F CARRIER REALTY LLC FRANK CARRIER, MANAGER OWNER OF: 141 SOUTHWEST CUTOFF WORCESTER, MA.
D. J. & ASSOCIATES 7 CEDAR STREET CLINTON, MA
DATE: MAY 10, 2020 SCALE: 1" = 30'

THE EXISTING TOPOGRAPHY AND THE SITE IMPROVEMENTS SHOWN ARE THE RESULT OF A FIELD SURVEY WHICH OCCURRED BETWEEN NOVEMBER 22, 2019 THROUGH APRIL 28, 2020.

DAVID TEACHOUT P.L.S. # 32659
David Teachout



LEGEND:

- DMH = DRAIN MANHOLE
- DCB = DRAIN CATCH BASIN
- SMH = SEWER MANHOLE
- N/F=NOW OR FORMERLY
- S.F.=SQUARE FEET
- FF = FINISH FLOOR
- ECB=EROSION CONTROL
- ETW = EDGE OF TRAVEL WAY
- EOP = EDGE OF PAVEMENT
- EOEP = EDGE OF EXISTING PAVEMENT
- FGX540 = FINISH GRADE (SPOT SHOT)
- FG = FINISH GRADE
- PROP = PROPOSED
- EXIST = EXISTING
- GEN = GENERATOR
- TRANS = TRANSFORMER
- TOW = TOP OF WALL
- BOW = BOTTOM OF WALL

34-035-00002
N/F ANCONA COMPANY
115 SOUTHWEST CUTOFF
BOOK 22509, PAGE 356

DUMPSTER BARRIER WITH LOCKED GATE.
STOCKADE FENCE - 9' WIDE X 23' LONG

PROPOSED 6" HIGH BERM TO
CONTROL STORMWATER
SEE FINISH GRADE ELEVATIONS
ON DETAIL SHEET 1

34-036-00056
N/F ANCONA COMPANY
131 SOUTHWEST CUTOFF
BOOK 6174, PAGE 270

115 SOUTH WEST CUTOFF
PROPERTY SIGN

PROPOSED 6" HIGH BERM TO
CONTROL STORMWATER &
POSSIBLE OVERFLOW. SEE FINISH
GRADE ELEVATIONS ON DETAIL SHEET 1

NORTH CURB CUT
SOUTHWEST CUTOFF

418.1
POLE 30

422.7
POLE 31

428.2
POLE 32

U.S. ROUTE 20

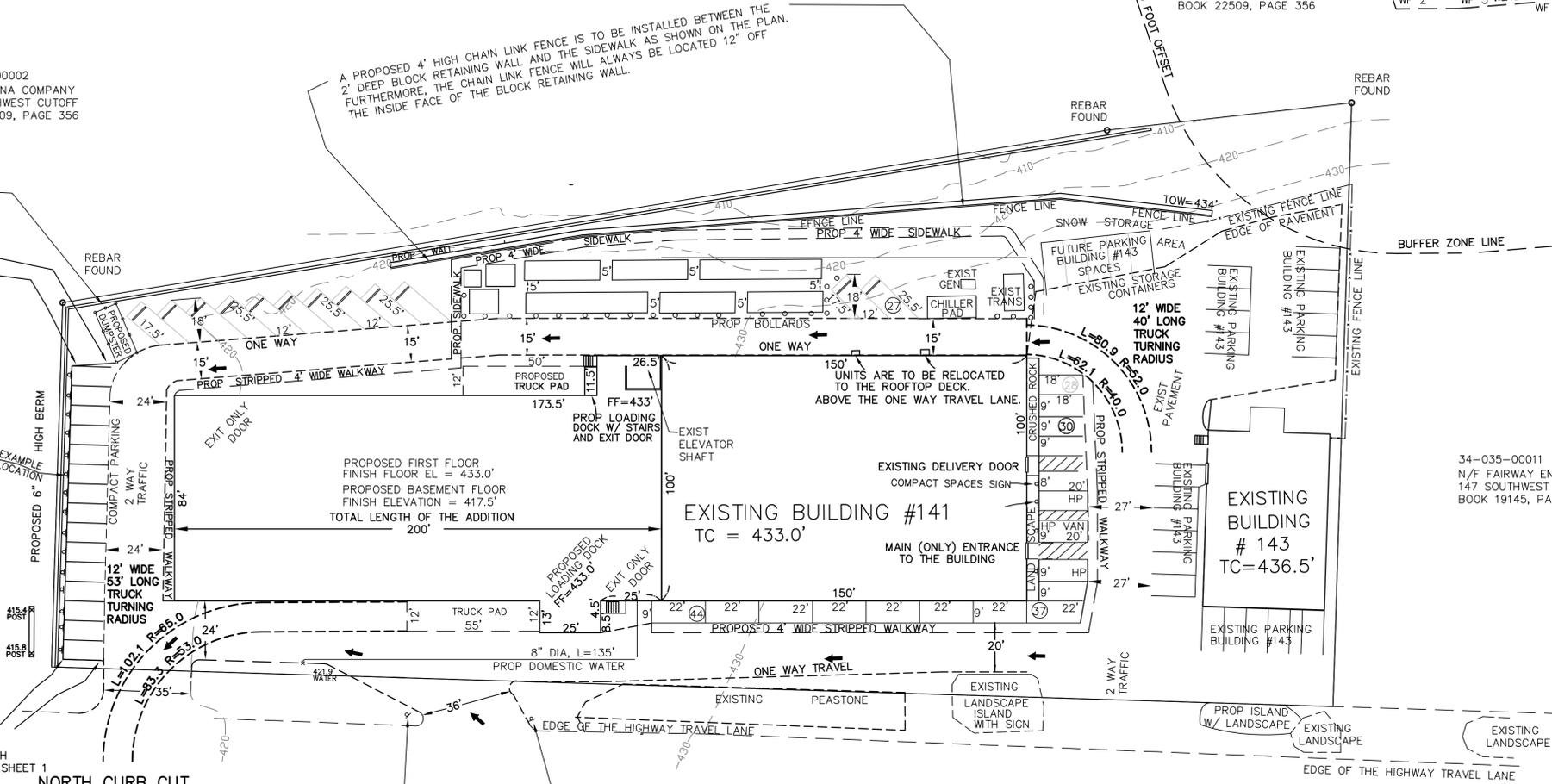
MASS STATE HIGHWAY

432.3
POLE 33

34-035-00002
N/F ANCONA COMPANY
115 SOUTHWEST CUTOFF
BOOK 22509, PAGE 356

WF 1 THIS IS THE CLOSEST CORNER
OF THE RESOURCE AREA.
DELINEATION BY ALTON ENGINEERING
ON DEC. 22, 2019
WF 2 WF 3 WETLINE LINE
WF 4

A PROPOSED 4' HIGH CHAIN LINK FENCE IS TO BE INSTALLED BETWEEN THE
2' DEEP BLOCK RETAINING WALL AND THE SIDEWALK AS SHOWN ON THE PLAN.
FURTHERMORE, THE CHAIN LINK FENCE WILL ALWAYS BE LOCATED 12" OFF
THE INSIDE FACE OF THE BLOCK RETAINING WALL.



34-035-00011
N/F FAIRWAY ENTERPRISES
147 SOUTHWEST CUTOFF
BOOK 19145, PAGE 41

THE BUILDINGS FRONTAGE IS ON THE SOUTHWEST CUTOFF (ROUTE 20)

TABLE 4.4: NOTE 5.- SETBACKS AND BUFFERS.
A 5' MINIMUM SET BACK SHALL BE APPLIED FOR VEHICLE PARKING
AREAS FROM ALL OF THE PROPERTY LINES.

DESIGNATION OF EXISTING BUILDING USE - SPACES REQUIRED
WAREHOUSE - 1 VEHICLE SPACE PER 3,000 SF IS REQUIRED
MANUFACTURING - 1 VEHICLE SPACE PER 1,000 SF IS REQUIRED

*ZONING ORDINANCE: ARTICLE IV, SECTION 7.A.5 REMOVAL OF ENERGY,
UTILITY, CORRIDOR, STAIRWAY, RESTROOM, & BUILDING MAINTENANCE
AREA WAS SUBTRACTED FROM THE RETAIL UNITS S.F. FLOOR SPACE.
GROSS - 18,390 SF OF FLOOR SPACE
NET - OFFICE 1,025 SF OF FLOOR SPACE = 4 VEHICLES
MANUFACTURING-13,135 SF OF FLOOR SPACE= 14 VEHICLES

DESIGNATION OF TOTAL ADDITION AREA - SPACES REQUIRED
GROSS FLOOR AREA = 52,474 SF OF FLOOR SPACE
NET-WAREHOUSE-CULTIVATION 44,320 SF OF FLOOR SPACE = 15 VEHICLES

TOTAL VEHICLE SPACES REQUIRED = 33 VEHICLE SPACES
TOTAL VEHICLE SPACES PROVIDED = 44 VEHICLE SPACES

HANDICAP VEHICLE REQUIREMENTS.
PARKING LOTS WHICH CONTAIN MORE THAN 40 VEHICLE SPACES BUT
LESS THAN 100 VEHICLE SPACES MUST PROVIDE A MINIMUM OF
THREE (3) HANDICAP SPACES.

PROPOSED: TWO (2) REGULAR HANDICAP SPACES PLUS ONE (1)
HANDICAP VAN SPACE WILL BE PROVIDED.

LOADING DOCKS:
IF THE EXISTING AND/OR PROPOSED ADDITION FLOOR AREA'S EXCEED
50,000 SF BUT ARE LESS THAN 100,000 SF, THAN THE BUILDING IS
REQUIRED TO HAVE TWO (2) LOADING DOCKS WITH APPROPRIATE
TRUCK LOADING PARKING SPACE.

EXISTING # 141 BUILDING - SPACES PROVIDED
VEHICLE SPACES EXISTING = 25 VEHICLE SPACES
PLUS ONE EXISTING LOADING DOCK

EXISTING AND PROPOSED VEHICLE SPACE COUNT
TOTAL VEHICLE SPACES ON SITE = 70 VEHICLE SPACES

PARKING SPACE REQUIREMENTS:
TABLE 4.4: NOTE 3b.-COMPACT SPACE-IN PARKING LOTS WITH OVER 10
SPACES, UP TO 25% CAN BE DESIGNATED COMPACT VEHICLE SPACES.
70 PARKING SPACES X 25% = ALLOWS 17 COMPACT VEHICLE SPACES

COMPACT SPACE LOCATION
PARKING SPACE NUMBERS 1-15, & 32-33 = 17 COMPACT SPACES

SHEET 5 OF 11
VEHICLE ACCESS W/ PARKING & UTILITY PADS

PROPOSED ADDITION PLAN
141 SOUTHWEST CUTOFF
WORCESTER, MASSACHUSETTS

PREPARED FOR:
OWNER OF:
F CARRIER REALTY LLC
FRANK CARRIER, MANAGER
141 SOUTHWEST CUTOFF
WORCESTER, MA.

D. J. & ASSOCIATES
7 CEDAR STREET
CLINTON, MA

REV 8: PER DPRS REVIEW
REV 7: FOUR ECONOMIZER LOCATIONS
DATE: DECEMBER 24, 2019

DATED: 5-10-20
DATED: 4-9-20
SCALE: 1" = 30'

THE PROPOSED ADDITION AND THE PROPOSED ASSOCIATED
INFRASTRUCTURE AND ASSOCIATED ANALYSES SHOWN ARE THE
RESULT OF THE INPUT OF VARIOUS CONTRACTORS INCLUDING
THIS FIRM WHICH HAS BEEN OCCURRING SINCE NOV. 2019
THROUGH MAY 5, 2020.

FOR REVIEW ONLY
NOT FOR CONSTRUCTION

MICHAEL B. P.E. # 23374

RETAINING WALL NOTES:

1. THE PROPOSED STONETERRA WALL SYSTEM BLOCKS ARE MANUFACTURED BY J.B. CONCRETE PRODUCTS, PUTNAM, CT.
2. A SEPARATE SHEET WILL BE PROVIDED BY THE ENGINEERING DEPARTMENT OF J.B. CONCRETE FOR THE DESIGN WORK OF THE PROPOSED WALL.
3. THE PROPOSED WALL DESIGN WILL BE STAMPED BY A PROFESSIONAL ENGINEER EMPLOYED BY J. B. CONCRETE PRODUCTS.
4. THIS PLAN SHOWS BOTH (TOW) TOP OF WALL AND (BOW) BOTTOM OF WALL ELEVATIONS AT VARIOUS SECTIONS OF THE WALL. EXISTING CONTOURS ALSO INDICATE THE GRADE AT THE BOTTOM OF THE PROPOSED WALL.
5. THE J. B. CONCRETE PRODUCTS PLAN WILL SHOW TOP AND BOTTOM WALL ELEVATIONS ALONG THE ENTIRE PROPOSED WALL LENGTH.
6. A FINISH GRADE PAD OF COMPACTED GRAVEL WILL BE CONSTRUCTED AT THE UNEVEN LOW SPOT OF THE WALL. THIS FINISH GRADE ELEVATION OF 412 WILL BE THE BASE OF THE PROPOSED WALL ELEVATIONS.
7. A FENCE WITH A MINIMUM HEIGHT OF 4' WILL BE REQUIRED. THIS FENCE WILL BE CONSTRUCTED 1' OFF THE INSIDE FACE OF THE RETAINING WALL FOR THE ENTIRE LENGTH OF THE WALL.
FENCE DETAILS WILL BE MADE AVAILABLE ON ONE OF THE DETAIL SHEETS.
8. BACK FILL MATERIAL WHICH IS TO BE PLACED BETWEEN THE EXISTING HILL SIDE AND THE PROPOSED RETAINING WALL IS TO BE GRAVEL TYPE SOIL.
9. THIS FILL MATERIAL IS TO BE PLACED IN A MAXIMUM 1' HIGH LIFT WHILE CONSTANTLY BEING DRIVEN OVER BY A PNEUMATIC VIBRATING COMPACTOR.
10. THE BACKFILLED MATERIAL MUST ACHIEVE 95 PERCENT COMPACTION OR THE WORK IS NOT TO BE ACCEPTED.
11. AN INDEPENDANT SOIL TESTING LAB, SUCH AS YANKEE ENGINEERING AND TESTING, MUST BE CONTRACTED. SAMPLES ARE TO BE TAKEN, AND THAT INFORMATION ALONG WITH SOIL LOGS IS TO BE SUBMITTED TO BOTH THE PROJECT ENGINEER AS THE WORCESTER DPW ENGINEERING DEPARTMENT.

J. B. CONCRETE PRODUCTS

& BOTTOM ELEVATIONS OF THE WALL ARE SHOWN AT VARIOUS LOCATIONS. SEE THE ADDENDUM SHEET ENTITLED "WALL PLAN & PROFILE" WHICH IS INCLUDED AT THE END OF THIS PLAN SET. AFTER PROJECT REVIEW HAS CONCLUDED AND NO FURTHER CHANGES ARE NEEDED, THAT PLAN WILL BE STAMPED BY THE MA. P.E. STRUCTURAL DISCIPLINE WHO DESIGNED THE PLAN.

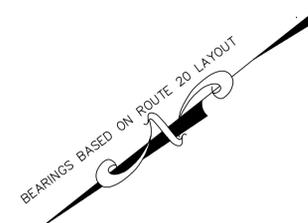
EROSION CONTROL WILL BE FACILITATED WITH STRAW WADDLE, WHICH IS TO BE INSTALLED PRIOR TO ANY CONSTRUCTION.

LANDSCAPE AND SITE NOTES:

3. IF EXISTING VEGETATION IS REMOVED TO THE EXTENT IT RENDERS THE SITE NON-COMPLIANT WITH THE LANDSCAPE DESIGN STANDARDS SET FORTH IN THE ZONING ORDINANCE PER ARTICLE V, SECTION-5(C), NEW TREES AND SHRUBS SHALL BE PLANTED IN ACCORDANCE THEREWITH.
4. ANY TREE PROFESSIONALS USED ARE TO BE CERTIFIED ASIAN LONG HORN BEETLE EXPERTS. 7 EASTON RED CIDER (3.5" CALIPER MIN) TREES ARE TO BE PLANTED.
5. JAPANESE HOLLY SHRUBS WHICH DO NOT EXCEED 4' IN HEIGHT SHALL BE PLANTED ON BOTH SIDES OF THE PROPOSED EASTON RED CIDER TREES. SEE THE PLAN & LEGEND.

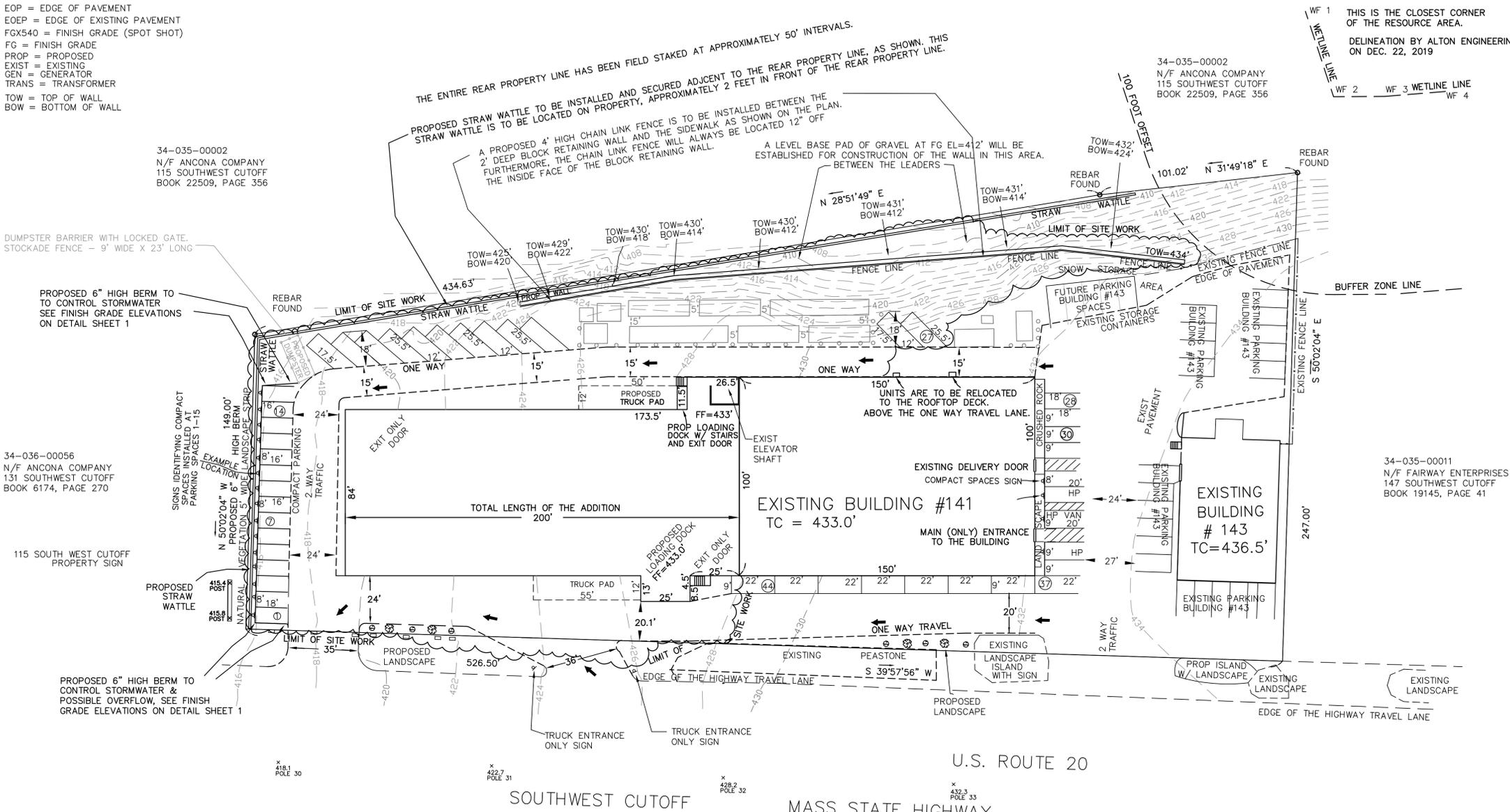
WAIVER: COMPLETE LANDSCAPE PLAN WITH TYPE, LOCATION AND QUANTITY OF ALL PLANT MATERIALS AND LOCATION, HEIGHT AND MATERIALS FOR FENCING OR SCREENING.

HOWEVER, ALONG THE HIGHWAY FRONTAGE LINE, VARIOUS TREES AND SHRUBS ARE CALLED OUT SHOWING LOCATION, TYPE AND HEIGHT WHILE CONSIDERING VISIBILITY OF ACCESS EGRESS TO THE HIGHWAY.



LEGEND:

- DMH = DRAIN MANHOLE
- DCB = DRAIN CATCH BASIN
- SMH = SEWER MANHOLE
- N/F=NOW OR FORMERLY
- S.F.=SQUARE FEET
- FF = FINISH FLOOR
- ECB=EROSION CONTROL
- ETW = EDGE OF TRAVEL WAY
- EOP = EDGE OF PAVEMENT
- EOEP = EDGE OF EXISTING PAVEMENT
- FGX540 = FINISH GRADE (SPOT SHOT)
- FG = FINISH GRADE
- PROP = PROPOSED
- EXIST = EXISTING
- GEN = GENERATOR
- TRANS = TRANSFORMER
- TOW = TOP OF WALL
- BOW = BOTTOM OF WALL



SHEET 6 OF 11
PROPOSED PARKING LAYOUT & LANDSCAPE SHEET

PROPOSED ADDITION PLAN 141 SOUTHWEST CUTOFF WORCESTER, MASSACHUSETTS
PREPARED FOR: OWNER OF: F CARRIER REALTY LLC FRANK CARRIER, MANAGER 141 SOUTHWEST CUTOFF WORCESTER, MA.
D. J. & ASSOCIATES 7 CEDAR STREET CLINTON, MA

THE PROPOSED ADDITION AND THE PROPOSED ASSOCIATED INFRASTRUCTURE AND ASSOCIATED AREAS SHOWN ARE THE RESULT OF THE INPUT OF VARIOUS CONTRACTORS INCLUDING THIS FIRM WHICH HAS BEEN OCCURRING SINCE NOVEMBER 2019 THROUGH MAY 5, 2020.

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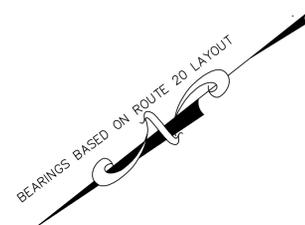
REV 8: PER DPRS REVIEW DATED: 5-10-20
REV 7: FOUR ECONOMIZER LOCATIONS DATED: 4-9-20
DATE: DECEMBER 24, 2019 SCALE: 1" = 30'

MICHAEL B. BROWN, P.E. # 23374

PRIOR TO ANY WORK AT THE SITE, CALL DIG SAFE 811

SITE NOTES:

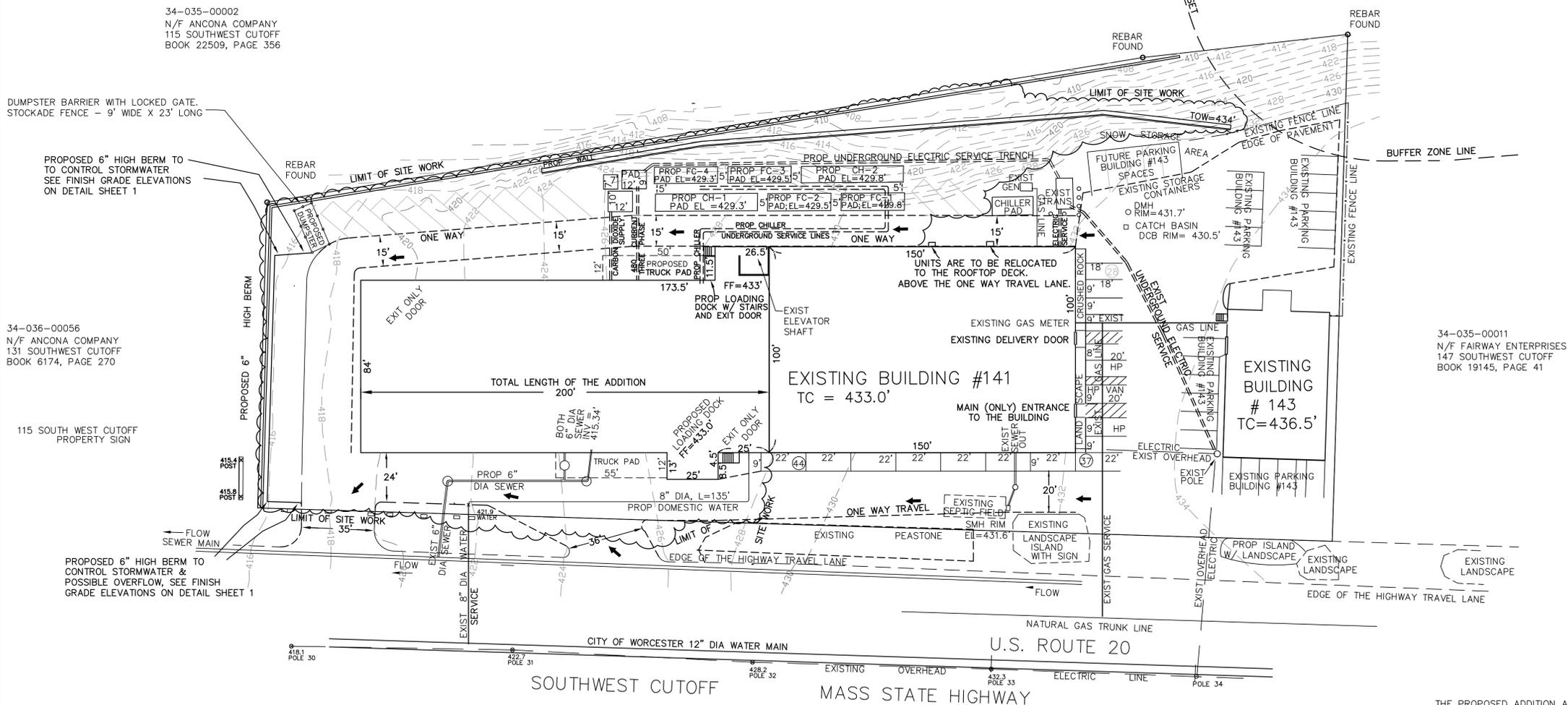
1. THERE ARE NO WETLANDS ANYWHERE ON THE SITE.
2. NO PORTION OF THE PROJECT IS WITHIN THE 100 YEAR FLOOD PLAIN.
3. SNOW STORAGE: THE SNOW STORAGE AREA HAS HAD ITS LOCATION CHANGED. IF THIS NEWLY CHOSEN AREA IS INSUFFICIENT FOR SNOW STORAGE, THEN THE REMAINING EXCESS SNOW SHALL BE TRUCKED OFF SITE.
4. UNDER NO CIRCUMSTANCES CAN THE EXCESS SNOW BE STORED ON ANY OF THE REQUIRED PARKING SPACES. SNOW CANNOT BE DEPOSITED
5. SNOW CANNOT BE DEPOSITED OR LEFT IN ANY OF THE REQUIRED PARKING SPACES.
6. ALL WORK MUST CONFORM TO THE STANDARDS CONTAINED IN THE CITY OF WORCESTER, DEPARTMENT OF PUBLIC WORKS & PARKS, ENGINEERING DIVISION, CONSTRUCTION MANAGEMENT SECTION, STANDARD SPECIFICATIONS & DETAILS.



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- TOW = TOP OF WALL
- BOW = BOTTOM OF WALL

DUMPSTER PRIVACY FENCING WITH LOCKING GATE.
STOCKADE FENCE - SECTIONS 8' LONG, 6' HIGH TO BE FASTENED TO METAL POSTS WHICH ARE TO BE ANCHORED INTO THE GROUND.



WF 1 THIS IS THE CLOSEST CORNER OF THE RESOURCE AREA.
DELINEATION BY ALTON ENGINEERING ON DEC. 22, 2019
WF 2 WF 3 WETLINE LINE WF 4

34-035-00002
N/F ANCONA COMPANY
115 SOUTHWEST CUTOFF
BOOK 22509, PAGE 356

34-036-00056
N/F ANCONA COMPANY
131 SOUTHWEST CUTOFF
BOOK 6174, PAGE 270

34-035-00011
N/F FAIRWAY ENTERPRISES
147 SOUTHWEST CUTOFF
BOOK 19145, PAGE 41

SHEET 8 OF 11
PROPOSED UTILITY PLAN

PROPOSED ADDITION PLAN
141 SOUTHWEST CUTOFF
WORCESTER, MASSACHUSETTS

PREPARED FOR:
OWNER OF:
F CARRIER REALTY LLC
FRANK CARRIER, MANAGER
141 SOUTHWEST CUTOFF
WORCESTER, MA.

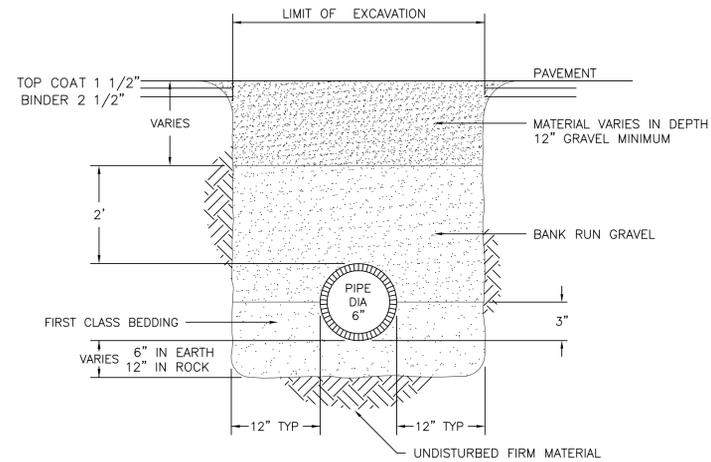
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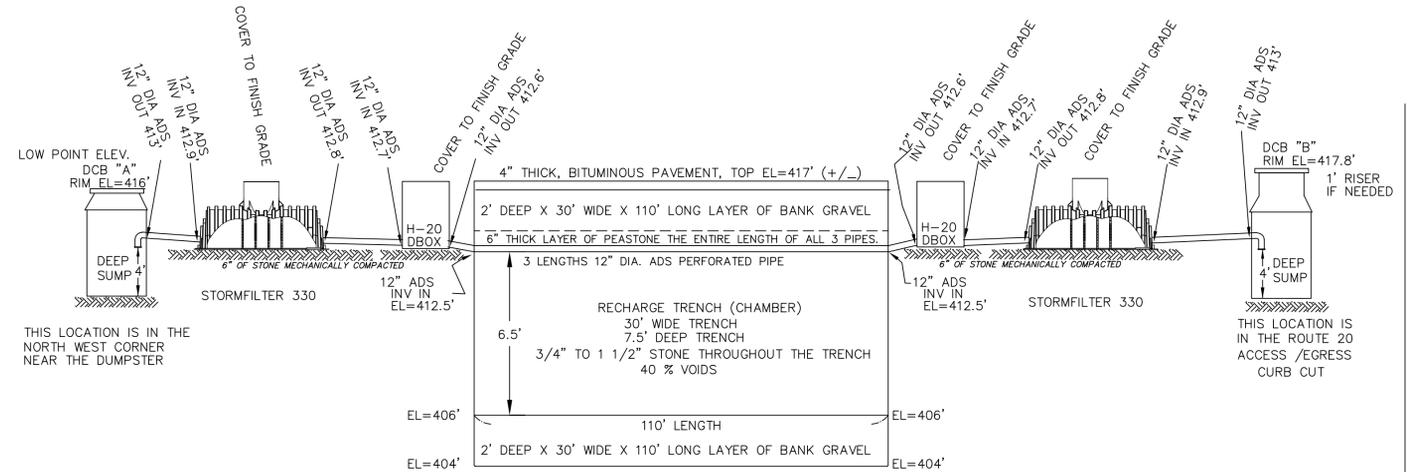
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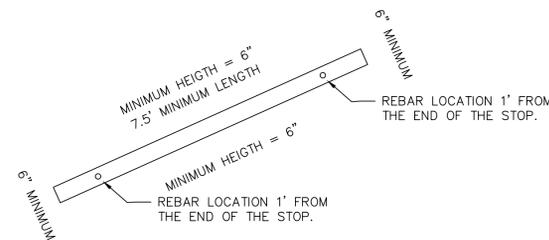
GENERAL NOTE:
 1. FINISH GRADE MATERIAL VARIES (PAVEMENT)
 2. RESTORE FINISH GRADE TO MATCH EXISTING

SANITARY SEWER AND DRAIN TRENCH DETAIL

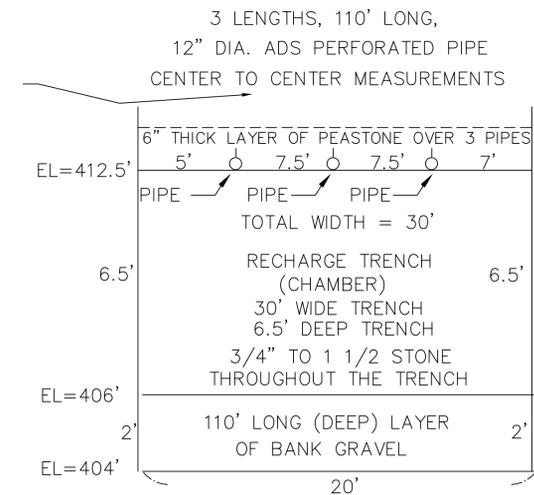


**RECHARGE TRENCH
 CROSS SECTION, SIDE VIEW
 LOOKING FROM THE SOUTH TO THE NORTH**

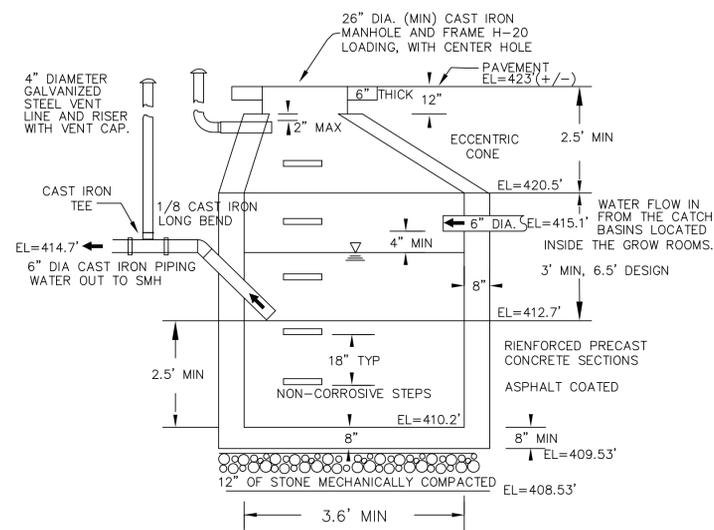
WHEEL STOP
 USE: WHEEL STOPS HELP PREVENT THE VEHICLE FROM ROLLING FORWARD.



GENERAL NOTES:
 1. WHEEL STOPS CAN BE CONSTRUCTED OF RUBBER OR CONCRETE.
 2. WHEEL STOPS ARE TO BE PLACED 3' FROM THE FRONT OF THE PARKING SPACE.
 3. HAMMER DRIVEN REBAR IS USED TO SECURE THE STOP TO THE PAVEMENT.
 4. TWO (2) REBARS PER STOP AS SHOWN ABOVE.
 5. EACH REBAR IS SECURED ONE (1) FOOT FROM THE END OF THE STOP.
 6. ALL THE ANGLED PARKING SPACES HAVE WHEEL STOPS DRAWN ON EACH SPACES.

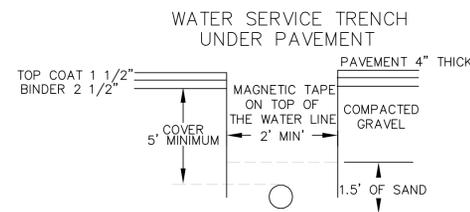


**CROSS SECTION AT THE START OF RECHARGE TRENCH
 VIEW FROM WEST TO EAST**



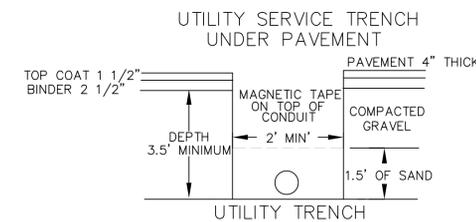
SIDE VIEW SOIL/WATER SEPARATOR MANHOLE

1. A SERIES OF FLOOR TROUGH, (ONE LOCATED IN EACH GROW ROOM) WILL COLLECT EXCESS FERTILIZED WATER, SOIL PARTICLES, AND PLANT PARTS FUNNELING THE COLLECTION INTO THE BUILDING SEWER SYSTEM. THE SEWER LINE COLLECTS FLOW FROM THE ENTIRE SERIES OF GROW ROOMS ULTIMATELY DIRECTING THAT BUILDING FLOW INTO THE SOIL/WATER SEPARATOR MANHOLE LOCATED OUTSIDE THE BUILDING. THE SEPARATED FLOW OF WATER WILL THEN FLOW INTO THE PUBLIC SEWER SYSTEM.
 2. A SEWERAGE HAULER WILL BE REQUIRED TO PUMP OUT THE SEPARATED SOIL AND PLANT PARTS FROM THE MANHOLE AND DISPOSE OF THE MIXTURE AT A DOCUMENTED SEWAGE PLANT.



**WATER SERVICE TRENCH
 UNDER PAVEMENT**

THE PROPOSED 8" DIAMETER WATER SERVICE DETAILS
 PLACE YELLOW CAUTION TAPE ON TOP OF THE SAND LAYER JUST PRIOR TO BACKFILL.
 BACKFILL WITH CLEAN GRAVEL. PAVEMENT AS REQUIRED



**UTILITY SERVICE TRENCH
 UNDER PAVEMENT**

THE PROPOSED CONDUIT PIPE SHOWN IS FOR ELECTRIC, GAS, CO 2 & CHILLER LINES

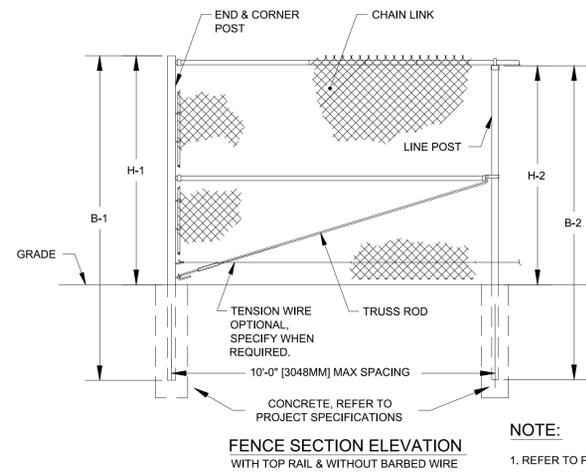
SHEET 10 OF 11
 PROPOSED DETAIL SHEET 2

PROPOSED ADDITION PLAN
 141 SOUTHWEST CUTOFF
 WORCESTER, MASSACHUSETTS

F CARRIER REALTY LLC
 FRANK CARRIER, MANAGER
 141 SOUTHWEST CUTOFF
 WORCESTER, MA.

D. J. & ASSOCIATES

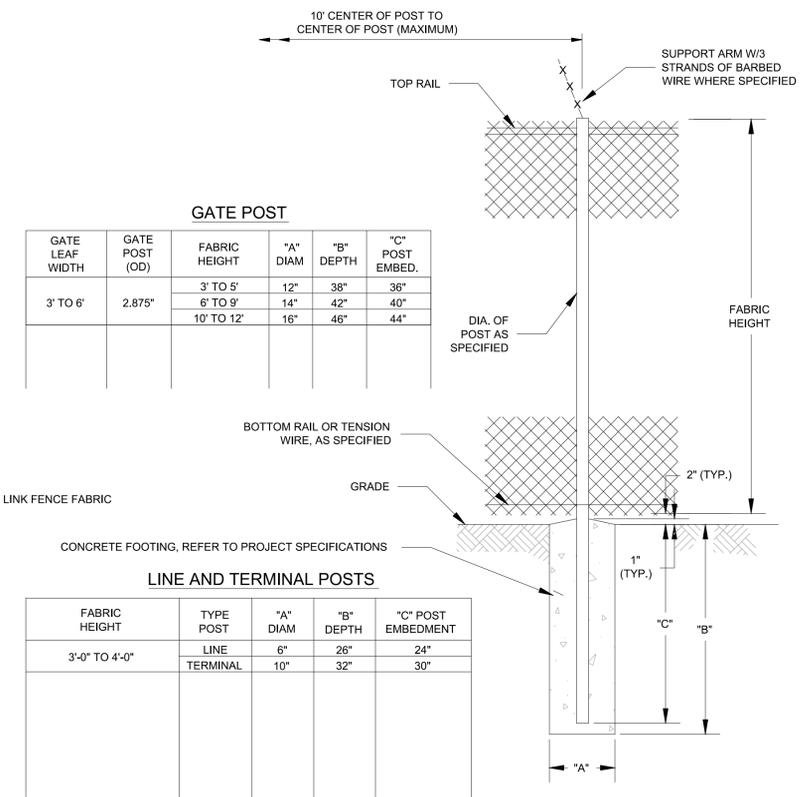
7 CEDAR STREET
 CLINTON, MA



NOTE:
1. REFER TO PROJECT SPECIFICATIONS FOR CHAIN LINK FENCE FABRIC

FENCE HEIGHT NOMINAL HEIGHT	END & CORNER POSTS		LINE POSTS	
	B-1 BAR LENGTH	H-1 HEIGHT ABOVE GRADE	B-2 BAR LENGTH	H-2 HEIGHT ABOVE GRADE
4'-0" [1217MM]	8'-0" [2438MM]	5'-0 5/8" [1540MM]	7'-8" [2337MM]	4'-8 7/8" [1445MM]

112 CHAIN LINK FENCE DETAIL
NON-SECURITY
NTS



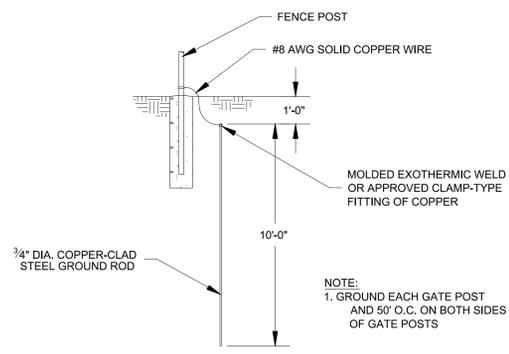
GATE LEAF WIDTH	GATE POST (OD)	FABRIC HEIGHT	"A" DIAM	"B" DEPTH	"C" POST EMBED.
3' TO 6'	2.875"	3' TO 5'	12"	38"	36"
		6' TO 9'	14"	42"	40"
		10' TO 12'	16"	46"	44"

CONCRETE FOOTING, REFER TO PROJECT SPECIFICATIONS

FABRIC HEIGHT	TYPE POST	"A" DIAM	"B" DEPTH	"C" POST EMBEDMENT
		LINE	6"	26"
3'-0" TO 4'-0"	TERMINAL	10"	32"	30"

NOTE:
1. REFER TO PROJECT SPECIFICATIONS FOR CHAIN LINK FENCE FABRIC

115 CHAIN LINK FENCE FOUNDATION DETAIL
TYPICAL
NTS



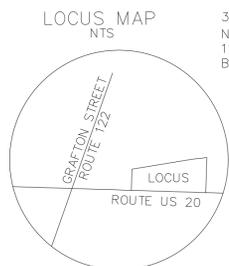
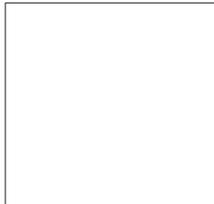
116 FENCE GROUNDING DETAIL
TYPICAL
NTS

PROPOSED ADDITION PLAN
141 SOUTHWEST CUTOFF
WORCESTER, MASSACHUSETTS

PREPARED FOR: F CARRIER REALTY LLC
OWNER OF: FRANK CARRIER, MANAGER
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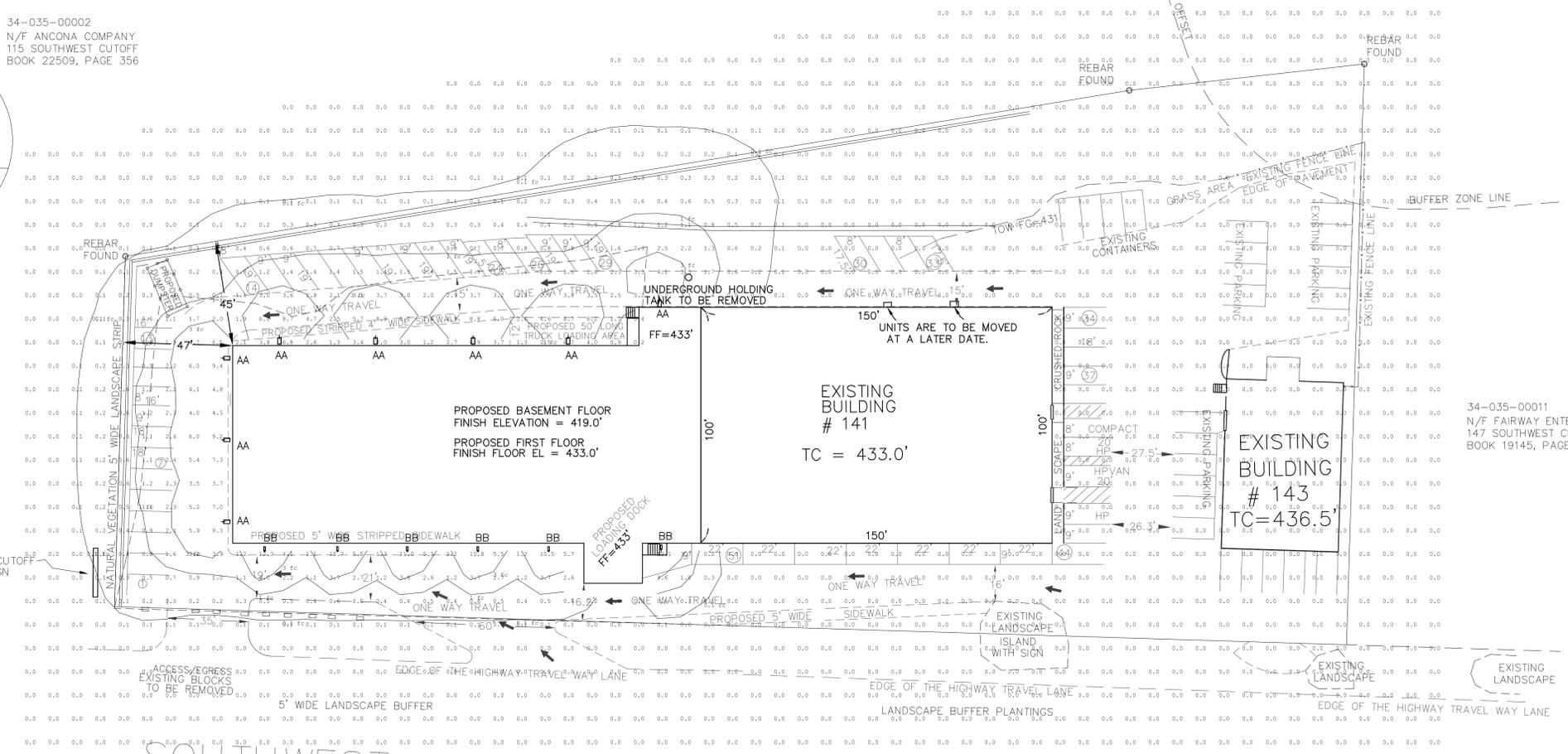
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CLINTON, MA

NO.	DATE:	REVISION:



34-035-00002
 N/F ANCONA COMPANY
 115 SOUTHWEST CUTOFF
 BOOK 22509, PAGE 356

34-036-00056
 N/F ANCONA COMPANY
 131 SOUTHWEST CUTOFF
 BOOK 6174, PAGE 270
 EXISTING PAVEMENT AREA = 32,774 S.F.



SOUTHWEST CUTOFF MASS STATE HIGHWAY ROUTE 20

SITE PLAN- PHOTOMETRIC LIGHTING
 SCALE: 1"=30'-0"

BUILDING ADDITION PARKING LOT
 Illuminance (Fc)
 Average = 2.92
 Maximum = 13.1
 Minimum = 0.0
 Avg/Min Ratio = N.A.
 Max/Min Ratio = N.A.

LIGHTING FIXTURE SCHEDULE							
TYPE	MANUFACTURER	CATALOGUE #	LAMPING			MOUNTING	REMARKS
			TYPE	WATTAGE	QUANTITY		
AA	LUMARK	XTOR6B	LED	58W		WALL	MOUNTED @ 16'-0" AFG
BB	LUMARK	XTOR3B	LED	25W		WALL	MOUNTED @ 10'-0" AFG

REFERENCES

LOCUS:

ASSESSORS MAP
MBL 34-035-00013

DEED:
BOOK 58476 - PG 393

PLANS:
PLAN BOOK 781, PLAN 103
PLAN BOOK 798, PLAN 121
PLAN BOOK 322, PLAN 43

LEGEND:

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DCB = DRAIN CATCH BASIN
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FG = FINISH GRADE
PROP = PROPOSED
EXIST = EXISTING
GEN = GENERATOR
TRANS = TRANSFORMER
TOW = TOP OF WALL
BOW = BOTTOM OF WALL

CALCULATIONS POST CONDITIONS:

POST-CATCHMENT ZONE A = 68,137 SF OR 1.56 AC
POST-CATCHMENT ZONE B = 26,870 SF OR 0.61 AC
POST-CATCHMENT ZONE C = 10,373 SF OR 0.24 AC

BREAK DOWN

POST-CATCHMENT ZONE PWS A-1.1= 59,338 SF OR 1.36 AC
GRASS = 12,186 SF -LESS THAN 5% SLOPE
IMPERVIOUS = 26,480 SF

POST-CATCHMENT ZONE PWS A-1.2= 41,588 SF OR 1.36 AC
IMPERVIOUS = 17,750 SF OR 0.41 AC

POST-CATCHMENT ZONE PWS A-2 = 11,297 SF OR 0.26 AC
IMPERVIOUS = 11,297 SF OR 0.26 AC

POST-CATCHMENT ZONE B = EXISTING BUILDING WITH PARKING
TOTAL AREA = 26,870 SF 0.19 AC
GRASS = 780 SF OR 0.02 AC-LESS THAN 5% SLOPE
IMPERVIOUS = 26,090 SF OR 0.59 AC

POST-CATCHMENT ZONE C = BANKING AND LEVEL BASE AREA
TOTAL AREA = 10,373 SF 0.24 AC
BANKING 45 % SLOPE; 6,251 SF OR 0.14 AC
BASE AREA 3% SLOPE; 2,862 SF OR 0.05 AC
IMPERVIOUS = 1,260 SF

FINISH GRADE NOTES:

1. THE EXISTING GROUND ELEVATION, ADJACENT TO THE SOUTH EASTERLY CORNER OF THE # 141 BUILDING, FROM THE PARKING LOT PAVEMENT TO THE PROPOSED 430 FINISH GRADE CONTOUR, MUST KEEP THE SAME EXISTING FINISH GROUND ELEVATION.
2. THIS SECTION OF THE SITE HAS EXISTING PADS, EQUIPMENT AND UNDERGROUND UTILITY LINES THAT ARE SET IN PLACE IN THIS AREA.
3. IN ORDER TO PAVE THIS AREA WHICH IS THE START OF THE 15' WIDE ONE WAY TRAVEL ACCESS WAY THE FOLLOWING STEPS MUST BE TAKEN.
4. EXCAVATION OF A 1' DEEP SECTION OF TOP AND SUB SOIL MUST OCCUR IN THIS PROPOSED ONE WAY TRAVEL ACCESS WAY.
5. WHEN EXCAVATION IS COMPLETE, AN 8" THICK LAYER OF COMPACTED GRAVEL AND A 4" THICK LAYER OF PAVEMENT WILL BE USED HERE.
6. THE EXISTING PAVEMENT ON THE WEST SIDE OF THE EXISTING #141 BUILDING IS TO REMAIN THE SAME GRADE AND ELEVATION. THIS AREA HAS TOP COAT PAVEMENT AND ALSO EXISTING UNDERGROUND UTILITIES.
7. ALL OF THE PROPOSED ADDITION SITE FINISH GRADE PAVEMENT IS TO BE SLOPED (DIRECTED) TOWARD EITHER CATCH BASIN, DEPENDING ON WHICH SIDE OF THE PROPOSED ADDITION THE STORMWATER FLOW WILL OCCUR.
8. ON THE NORTH SIDE OF THE PROPOSED ADDITION, STORMWATER FLOW IS TO BE DIRECTED AWAY FROM ROUTE 20 FROM WEST TO EAST USING FINISH GRADING OF THE PAVEMENT TOWARD PROPOSED CATCH BASIN "A".
9. FLOW (PAVEMENT PITCH) DIRECTION ARROWS ARE SHOWN ON THE PLAN AT THE NORTH END OF THE PROPOSED ADDITION.
10. OVERFLOW STORM WATER WILL BE HANDLED BY THE PROPOSED 6" HIGH CURBING WHICH WILL DIRECT STORM WATER FLOW TOWARD CATCH BASIN "A". (SEE THE CURBING WITH FINISH GRADE ELEVATIONS ON SHEET 9 OF 10).

DRAINAGE NOTES:

1. ALL STORMWATER COLLECTED IN BOTH CATCH BASINS WILL THEN FLOW INTO THE DBOXES WHERE THE WATER WILL BE FUNNELED INTO THE THREE (3) 12" DIA. SCH 40 PREFORATED PVC PIPES, WHICH ARE LOCATED ON THE TOP OF THE 30' WIDE BY 110' LONG STORMWATER TRENCH TO INFILTRATE AND RECHARGE THE AQUIFER.
2. FILTER FABRIC TO BE WRAPPED AROUND ALL 12" DIA. PREFORATED PVC PIPING.
3. BOTH DISTRIBUTION BOX (DBOX) COVERS SHALL BE SET NO MORE THAN 3" BELOW FINISH GRADE. AS NECESSARY, PROVIDE RISERS TO ACCOMPLISH THIS REQUIREMENT.

POST DEVELOPEMENT DESIGN NOTES:

IF THE SITE IS BUILT AS DESIGNED

IMPERVIOUS AREAS:

PAVEMENT - 40,120 S.F.
143 BUILDING - 3,842 S.F.
141 BUILDING - 15,577 S.F.
139 ADDITION - 17,175 S.F.
CONC. PADS - 2,130 S.F.
CONC. SIDEWALK - 1,116 S.F.
TOP OF WALL - 680 S.F.
SITE TOTAL - 80,640 S.F.

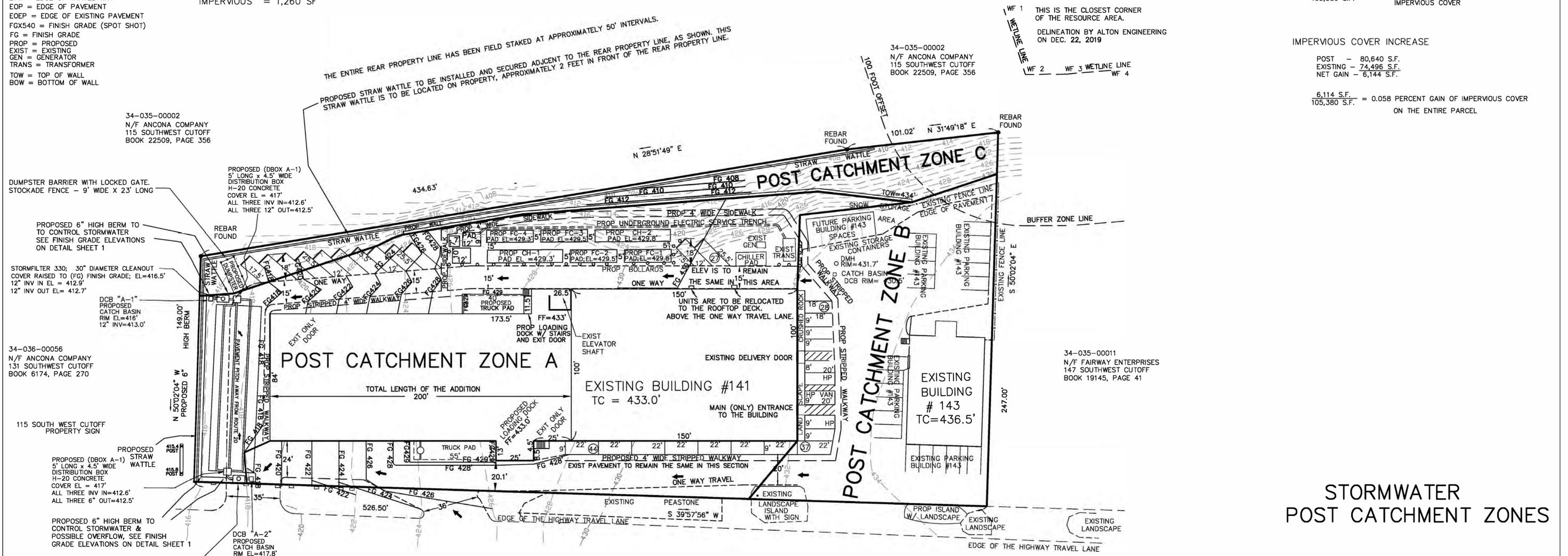
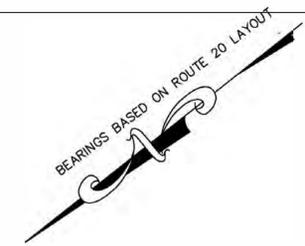
FROM SURVEY CALCULATION
SITE AREA=105,380 S.F.
2.419 (+/-) AC.

80,640 S.F. = 0.765 PERCENT OF THE SITE WITH IMPERVIOUS COVER
105,380 S.F.

IMPERVIOUS COVER INCREASE

POST - 80,640 S.F.
EXISTING - 74,496 S.F.
NET GAIN - 6,144 S.F.

6,144 S.F. = 0.058 PERCENT GAIN OF IMPERVIOUS COVER
105,380 S.F. ON THE ENTIRE PARCEL



U.S. ROUTE 20

SOUTHWEST CUTOFF

MASS STATE HIGHWAY

ON SITE
THE EXISTING GRADE 420 CONTOUR IS THE SAME ELEVATION AS THE FINISH GRADE 420 CONTOUR.

THE PROPOSED ADDITION AND THE PROPOSED ASSOCIATED INFRASTRUCTURE AND ASSOCIATED UTILITIES SHOWN ARE THE RESULT OF THE INPUT OF VARIOUS CONTRACTORS INCLUDING THIS FIRM WHICH HAS BEEN OCCURRING SINCE MAY 2019 THROUGH MAY 5, 2020.

FOR REVIEW ONLY
NOT FOR CONSTRUCTION

STORMWATER POST CATCHMENT ZONES

PROPOSED ADDITION PLAN 141 SOUTHWEST CUTOFF WORCESTER, MASSACHUSETTS
PREPARED FOR: OWNER OF: F CARRIER REALTY LLC FRANK CARRIER, MANAGER 141 SOUTHWEST CUTOFF WORCESTER, MA.
D. J. & ASSOCIATES 7 CEDAR STREET CLINTON, MA
REV 8: PER DPRS REVIEW REV 7: FOUR ECONOMIZER LOCATIONS DATE: DECEMBER 24, 2019
DATED: 5-10-20 DATED: 4-9-20 SCALE: 1" = 30'