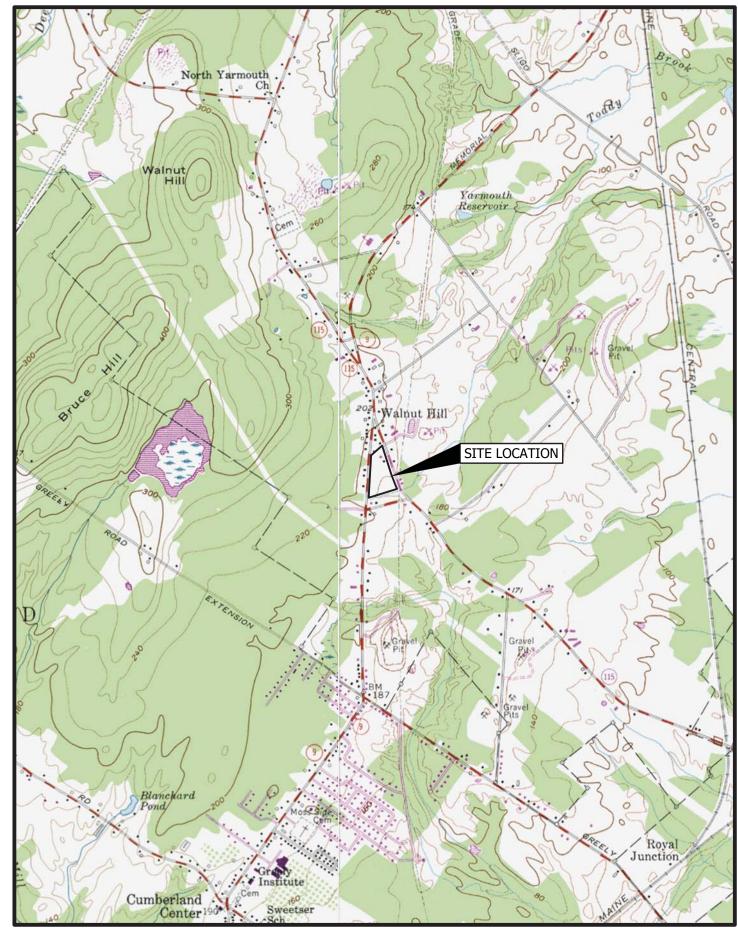
WALNUT HILL INVESTMENTS CROSSROAD APARTMENTS 352 WALNUT HILL ROAD NORTH YARMOUTH, MAINE

LOCATION MAP



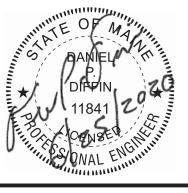
1000 0 2000 FE

TITLE	DWG NO
COVER SHEET	
GENERAL NOTES, LEGEND, AND ABBREVIATIONS	C-100
EXISTING CONDITIONS PLAN	C-101
SUBDIVISION PLAN	C-102
SITE LAYOUT PLAN	C-103
SITE UTILITIES PLAN	C-104
GRADING, DRAINAGE, AND EROSION CONTROL PLAN	C-105
EROSION CONTROL NOTES AND DETAILS	C-300
SECTIONS AND DETAILS	C-301
SECTIONS AND DETAILS	C-302
STORMWATER MANAGEMENT PLAN - PRE-DEVELOPMENT CONDITIONS	D-100
STORMWATER MANAGEMENT PLAN - POST DEVELOPMENT CONDITIONS	D-101
BOUNDARY SURVEY	Drwg. No. 1



ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE

4 Blanchard Road, PO Box 85A, Cumberland Center, Maine 04021 Phone 207.829.5016 • Fax 207.829.5692 • smemaine.com



GENERAL SITE NOTES:

- 1. EXISTING TOPOGRAPHY FROM PLAN TITLED "BOUNDARY SURVEY ON ROUTE 9 & ROUTE 115, NORTH YARMOUTH, MAINE, MADE FOR ROBERT C. HAZELTON, 352 WALNUT HILL ROAD, NORTH YARMOUTH, MAINE, PREPARED BY OWEN HASKELL, INC., DATED AUGUST 27, 2017, LATEST REVISION, 1/24/2020. STRUCTURES AND VEGETATION HAVE BEEN REMOVED SINCE SURVEY WAS PERFORMED, FIELD VERIFY PRIOR TO CONSTRUCTION.
- 2. EXCAVATE AND STOCKPILE ON-SITE TOPSOIL. TOPSOIL IS TO REMAIN THE PROPERTY OF THE OWNER DURING CONSTRUCTION, AND SHALL NOT BE REMOVED FROM THE SITE. AFTER FINAL LOAM AND SEED EXCESS TOPSOIL SHALL BE REMOVED FROM SITE BY CONTRACTOR.
- 3. PAVEMENT EDGES SHALL BE TRUE TO LINE. SAWCUT EXISTING PAVEMENT IN SMOOTH STRAIGHT LINE WHERE NEW PAVEMENT JOINS, PROVIDE TACK COAT LAYER AS SPECIFIED.
- 4. PROVIDE TRAFFIC CONTROL SIGNAGE AND STRIPING AS SHOWN AND IN ACCORDANCE WITH U.S.D.O.T. MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MDOT MOST RECENT VERSION).
- 5. HORIZONTAL DATUM: ASSUMED. VERTICAL DATUM: NAVD 88. THE EXISTING CONTOURS SHOWN ARE TAKEN FROM LIDAR AS AVAILABLE FROM MAINE GIS WEBSITE. NORTH ROTATION IS MAGNETIC, 1984.

GRADING NOTES:

- 1. ADD 4" LOAM, SEED AND MULCH TO DISTURBED AREAS UNLESS OTHERWISE NOTED. PROVIDE EROSION CONTROL MESH ON ALL SLOPES STEEPER THAN 3:1, AND ALONG DITCH CHANNELS.
- 2. MAINTAIN TEMPORARY EROSION CONTROL MEASURES FOR THE FULL DURATION OF CONSTRUCTION. INSPECT WEEKLY AND AFTER EACH STORM AND REPAIR AS NEEDED. REMOVE SEDIMENTS FROM THE SITE. PLACE IN AREA OF LOW EROSION POTENTIAL, AND STABILIZE WITH SEED AND MULCH.
- 3. PLACE TEMPORARY SOIL STABILIZATION WITHIN 7 DAYS OF INITIAL DISTURBANCE. PLACE PERMANENT SOIL STABILIZATION WITHIN 7 DAYS OF FINAL GRADING.

UTILITY NOTES:

- 1. THE ACCURACY AND COMPLETENESS OF SUBSURFACE INFORMATION IS NOT GUARANTEED. VERIFY SITE CONDITIONS INCLUDING TEST PITS FOR LOCATIONS AND INVERTS OF UTILITIES AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO PROCEEDING WITH THAT PORTION OF THE WORK.
- 2. COORDINATE WORK ON UTILITY LINES OR WITHIN ROAD RIGHT-OF-WAY WITH THE UTILITY COMPANIES AND TOWN ROAD DEPARTMENT AND STATE MDOT.
- 3. ALL PIPING AND DRAINAGE STRUCTURES SHALL BE INSTALLED IN ACCORDANCE WITH THE TOWN OF NORTH YARMOUTH MUNICIPAL STANDARDS.

SURVEYORS NOTES:

1. OWNER OF RECORD:

BRUCE W. HAZELTON 352 WALNUT HILL ROAD, NORTH YARMOUTH, MAINE TAX MAP 4 LOT 18 CCRD BOOK 2851 PAGE 356

- 2. BEARINGS ARE BASED ON PLAN REFERENCE 1, MAGNETIC 1984.
- 3. ROUTE 9 RIGHT OF WAY IS BASED ON MARKERS FOUND ON PLAN REFERENCE 2. ROUTE 115 RIGHT OF WAY IS BASED ON AN ASSUMED SIDELINE AND PLAN REFERENCE 1.
- 4. WETLANDS AND TEST PIT DATA PROVIDED BY MARK CENCI GEOLOGIC, INC. ON JULY 10, 2017.

SURVEYOR PLAN REFERENCES:

- 1. STANDARD BOUNDARY SURVEY ON ROUTE 115, NORTH YARMOUTH, MAINE MADE FOR ROBERT W. HAZELTON BY OWEN HASKELL, INC. DATED AUGUST 24, 1998.
- 2. STATE OF MAINE DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP STATE AID HIGHWAY NO. 2 (ROUTE 9) NORTH YARMOUTH CUMBERLAND COUNTY DATED JUNE 2004 D.O.T. FILE NO. 3-506

YARMOUTH WATER DISTRICT GENERAL NOTES:

- 1. THE DEVELOPER SHALL BE RESPONSIBLE FOR OBTAINING ROAD OPENING PERMITS. THE DISTRICT WILL OBTAIN LOCATION PERMITS AS NECESSARY.
- 2. ALL WORK AND MATERIALS SHALL MEET APPLICABLE AWWA/ANSI STANDARDS UNLESS OTHERWISE MODIFIED BY THE DISTRICT IN THE DISTRICT'S GUIDELINES, POLICIES, DETAILS, OR MATERIAL SPECIFICATIONS.
- 3. TEST PITS SHALL BE EXCAVATED AT CROSSINGS WITH OTHER UTILITIES IN ADVANCE OF WATER MAIN CONSTRUCTION TO DETERMINE LOCATION AND DEPTH SUFFICIENTLY TO PERMIT ADJUSTMENT OF WATER MAIN ALIGNMENT AND DEPTH BY PIPE DEFLECTION.
- 4. MINIMUM DEPTH OF COVER FOR ALL WATER MAINS AND SERVICES SHALL BE 5.5' 6' FROM FINISHED GRADE UNLESS OTHERWISE DIRECTED BY THE DISTRICT.
- 5. PROPOSED PIPELINE, VALVE, AND HYDRANT LOCATIONS ARE APPROXIMATE. FINAL LOCATION MAY BE ADJUSTED, WITH WRITTEN DISTRICT PERMISSION, AS REQUIRED TO AVOID CONFLICTS WITH OTHER UTILITIES AND STRUCTURES.
- 6. EXISTING WATER MAINS TO BE ABANDONED IN PLACE SHALL BE CUT AND CAPPED WITH END PLUG OR END CAP.
- 7. ALL FITTINGS, VALVES, AND HYDRANTS SHALL HAVE MECHANICAL JOINTS RESTRAINED WITH "GRIP-RING", "MEGALUG", "ROMAGRIP", OR OTHER PREVIOUSLY APPROVED RESTRAINERS.
- 8. ANY PUSH-ON BELL JOINT WITHIN TWENTY FEET OF A FITTING REQUIRES A FIELD-LOK GASKET.
- 9. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING THE MAIN IN ACCORDANCE WITH AWWA C600, EXCEPTING THAT MAXIMUM PIPE DEFLECTION SHALL NOT EXCEED 75 PERCENT OF THE MAXIMUM ALLOWABLE DEFLECTION SPECIFIED.
- 10. THE COMPLETED PIPING SYSTEM SHALL BE FILLED, FLUSHED, PRESSURE TESTED, AND DISINFECTED BY THE CONTRACTOR IN THAT ORDER. THESE TESTS ARE DETAILED IN ANSI/AWWA C651 AND AWWA C600. ONCE ALL TESTS HAVE PASSED THE MAIN CAN BE ACTIVATED. CHLORINATED WATER SHALL BE DECHLORINATED AND DISCHARGED IN COMPLIANCE WITH ALL LOCAL, STATE, AND FEDERAL STANDARDS AND REGULATIONS.
- 11. THE CONTRACTOR SHALL NOT OPERATE ANY DISTRICT VALVE OR HYDRANT WITHOUT THE EXPRESSED PRIOR PERMISSION OF THE DISTRICT.

DIG SAFE NOTES:

FOLLOWING MINIMUM MEASURES:

- KNOW WHERE TO MARK THEIR LINES.

- AS-BUILT DRAWINGS.
- OTHER REASON.
- REQUIREMENTS.
- SAFEGUARD HEALTH AND PROPERTY.
- PUC AT 1-800-452-4699.

TYPICAL ABBREVIATIONS:

DN

DR

DWG

DOWN

DRAIN

DRAWING

	AL ABBREVI
ACCMP ACP AGG ALUM APPD APPROX ARMH ASB ASP AUTO AUX AVE AZ	ASPHALT COATED CMP ASBESTOS CEMENT PIPE ACRE AGGREGATE ALUMINUM APPROVED APPROXIMATE AIR RELEASE MANHOLE ASBESTOS ASPHALT AUTOMATIC AUXILIARY AVENUE AZIMUTH
BCCMP BM BIT BLDG BOT BRG BV	BITUMINOUS COATED CMP BENCH MARK BITUMINOUS BUILDING BOTTOM BEARING BALL VALVE
CB CEN CEM LIN CMP CO CF CFS CI CL CONC CONST CONTR CS CTR CTS CU CY	CATCH BASIN CENTER CEMENT LINED CORRUGATED METAL PIPE CLEAN OUT CUBIC FEET CUBIC FEET PER SECOND CAST IRON CLASS CONCRETE CONSTRUCTION CONTRACTOR CURB STOP CENTER COPPER TUBING SIZE COPPER CUBIC YARD
D DBL DEG OR ° DEPT DI DIA OR DIA OR DIM DIST	DEGREE OF CURVE DOUBLE DEGREE DEPARTMENT DUCTILE IRON DIAMETER DIMENSION DISTANCE

PRIOR TO EXCAVATION, VERIFY THE UNDERGROUND UTILITIES, PIPES, STRUCTURES AND FACILITIES. PROVIDE THE

1. PRE-MARK THE BOUNDARIES OF PLANNED EXCAVATION WITH WHITE PAINT, FLAGS OR STAKES, SO UTILITY CREWS

CALL DIG SAFE, AT 811, AT LEAST THREE BUSINESS DAYS - BUT NO MORE THAN 30 CALENDAR DAYS - BEFORE STARTING WORK. DO NOT ASSUME SOMEONE ELSE WILL MAKE THE CALL.

3. IF BLASTING, NOTIFY DIG SAFE AT LEAST ONE BUSINESS DAY IN ADVANCE.

4. WAIT THREE BUSINESS DAYS FOR LINES TO BE LOCATED AND MARKED WITH COLOR-CODED PAINT, FLAGS OR STAKES. NOTE THE COLOR OF THE MARKS AND THE TYPE OF UTILITIES THEY INDICATE. TRANSFER THESE MARKS TO THE

CONTACT THE LANDOWNER AND OTHER "NON-MEMBER" UTILITIES (WATER, SEWER, GAS, ETC.). FOR THEM TO MARK THE LOCATIONS OF THEIR UNDERGROUND FACILITIES. TRANSFER THESE MARKS TO THE AS-BUILT DRAWINGS.

6. RE-NOTIFY DIG SAFE AND THE NON-MEMBER UTILITIES IF THE DIGGING, DRILLING OR BLASTING DOES NOT OCCUR WITHIN 30 CALENDAR DAYS, OR IF THE MARKS ARE LOST DUE TO WEATHER CONDITIONS, SITE WORK ACTIVITY OR ANY

7. HAND DIG WITHIN 18 INCHES IN ANY DIRECTION OF ANY UNDERGROUND LINE UNTIL THE LINE IS EXPOSED. MECHANICAL METHODS MAY BE USED FOR INITIAL SITE PENETRATION, SUCH AS REMOVAL OF PAVEMENT OR ROCK.

8. DIG SAFE REQUIREMENTS ARE IN ADDITION TO TOWN, CITY, AND/OR STATE DOT STREET OPENING PERMIT

FOR COMPLETE DIG SAFE REQUIREMENTS, CALL THE PUC OR VISIT THEIR WEBSITE.

NOW OR FORMERLY

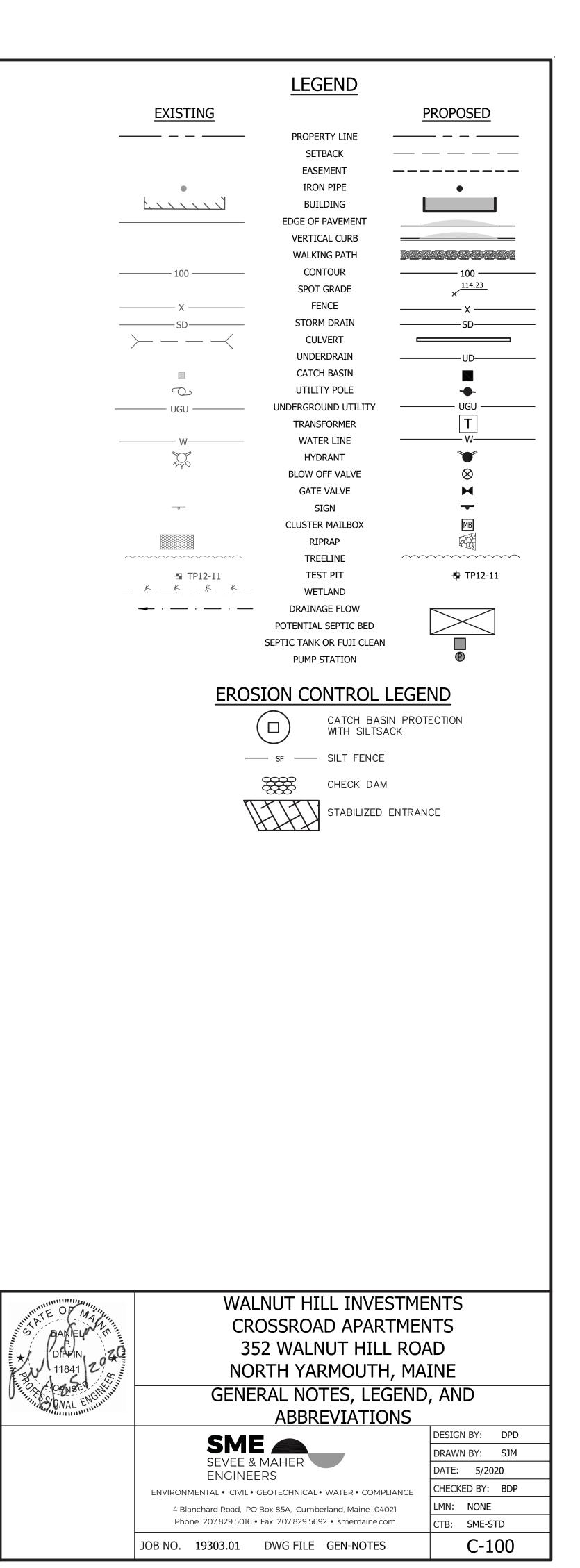
NO OR # NUMBER

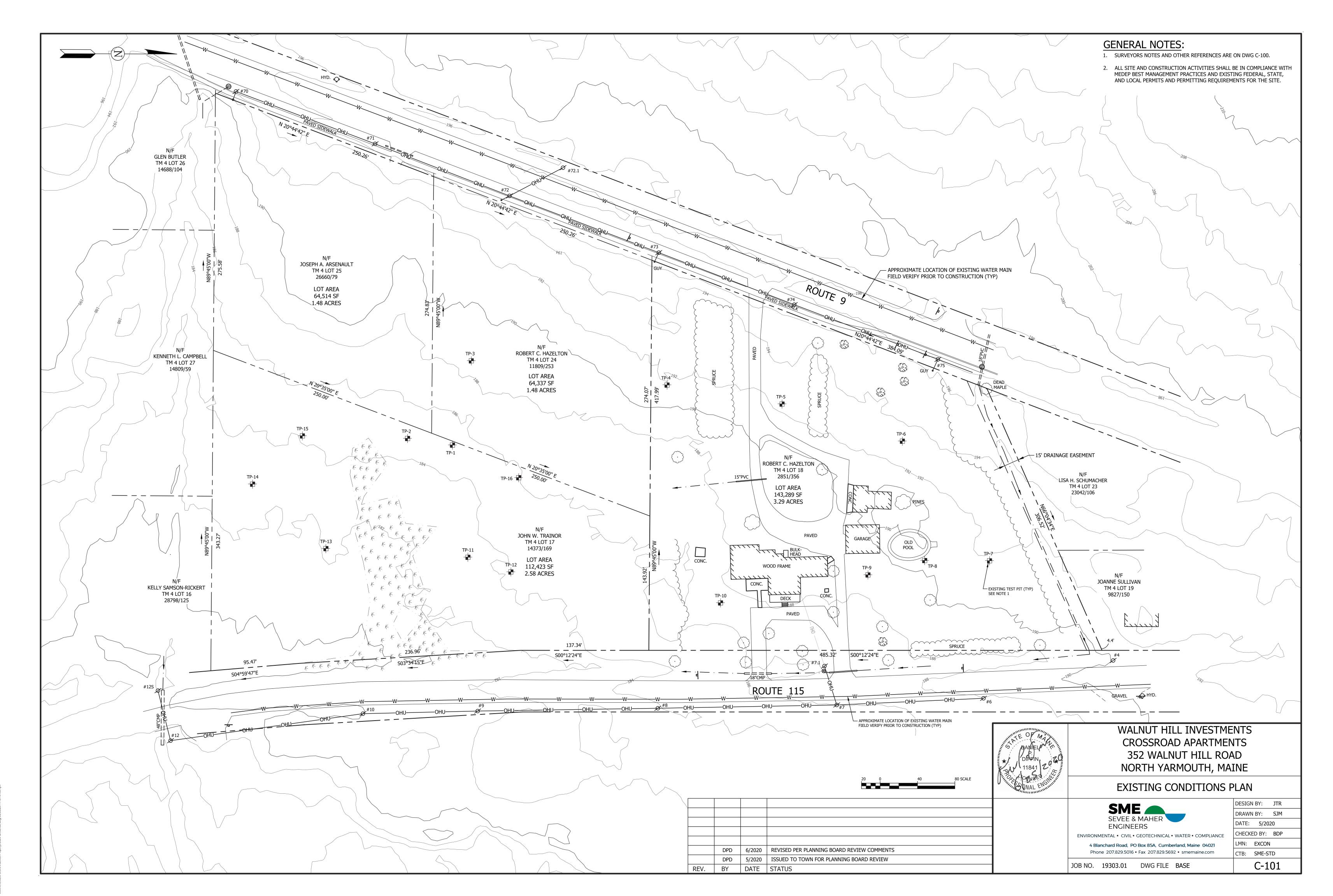
10. IF YOU DAMAGE, DISLOCATE OR DISTURB ANY UNDERGROUND UTILITY LINE, IMMEDIATELY NOTIFY THE AFFECTED UTILITY. IF DAMAGE CREATES SAFETY CONCERNS, CALL THE FIRE DEPARTMENT AND TAKE IMMEDIATE STEPS TO

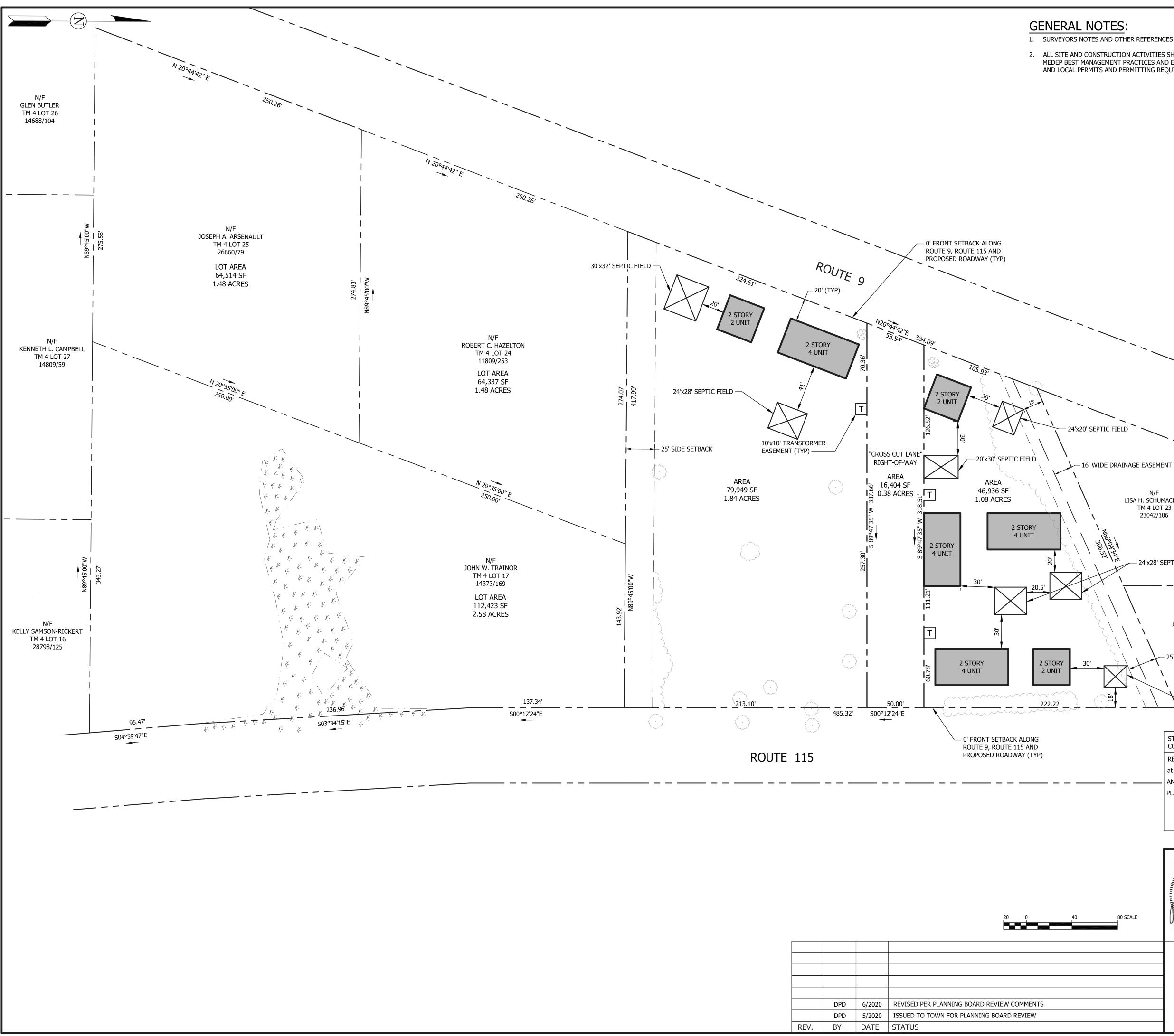
11. ANY TIME AN UNDERGROUND LINE IS DAMAGED OR DISTURBED OR IF LINES ARE IMPROPERLY MARKED, YOU MUST FILE AN INCIDENT REPORT WITH THE P.U.C. FOR AN INCIDENT REPORT FORM VISIT WWW.STATE.ME.US/MPUC OR CALL THE

EA	EACH	OC	ON CENTER
EG	EXISTING GROUND OR GRADE	OD	OUTSIDE DIAMETER
ELEC	ELECTRIC		
EL	ELEVATION	PC	POINT OF CURVE
ELB	ELBOW	PD	PERIMETER DRAIN
EOP	EDGE OF PAVEMENT	PI	POINT OF INTERSECTION
EQUIP	EQUIPMENT	PIV	POST INDICATOR VALVE
EST	ESTIMATED	PJ	PACK JOINT
EXC	EXCAVATE	PT	POINT OF TANGENT
EXIST	EXISTING	PERF	PERFORATED
		PP	POWER POLE
FI	FIELD INLET	PSI	POUNDS PER SQUARE INCH
FG	FINISH GRADE	PVC	POLYVINYL CHLORIDE
FBRGL	FIBERGLASS	PVMT	PAVEMENT
FDN	FOUNDATION		
FLEX	FLEXIBLE		
FLG	FLANGE	QTY	QUANTITY
FLR	FLOOR	RCP	REINFORCED CONCRETE DIDE
FPS	FEET PER SECOND		REINFORCED CONCRETE PIPE
FT OR '	FEET	ROW	RIGHT OF WAY
FTG	FOOTING	RAD	RADIUS
		REQD	REQUIRED
GA	GAUGE	RT	RIGHT
GAL	GALLON	RTE	ROUTE
GALV	GALVANIZED	S	SLOPE
GPD	GALLONS PER DAY	SCH	SCHEDULE
GPM	GALLONS PER MINUTE	SF	SQUARE FEET
		SHT	SHEET
HDPE	HIGH DENSITY POLYETHYLENE	SMH	SANITARY MANHOLE
HORIZ	HORIZONTAL	ST	STREET
HP	HORSEPOWER	STA	STATION
HYD	HYDRANT	SY	SQUARE YARD
		_	-
ID	INSIDE DIAMETER	TAN	TANGENT
IN OR "		TDH	TOTAL DYNAMIC HEAD
INV	INVERT	TEMP	TEMPORARY
INV EL	INVERT ELEVATION	TYP	TYPICAL
	POLIND	UD	UNDERDRAIN
LB LC	POUND LEACHATE COLLECTION	V	VOLTS
LD	LEAK DETECTION	VA TEE	VALVE ANCHORING TEE
LE	LINEAR FEET	VERT	VALVE ANCHORING TEE
LOC	LOCATION	VLNI	VERTICAL
LUC	LEACHATE TRANSPORT		
LI		WG	WATER GATE
MH	MANHOLE	W/	WITH
MJ	MECHANICAL JOINT	W/O	WITHOUT
MATL	MATERIAL		
MAX	MAXIMUM	YD	YARD
MFR	MANUFACTURE		
MIN	MINIMUM		
MIP	MALE IRON PIPE		
MISC	MISCELLANEOUS		
MON	MONUMENT		
NITC	NOT IN THIS CONTRACT		
NTS	NOT TO SCALE		

	DPD	6/2020	REVISED PER PLANNING BOARD REVIEW COMMENTS
	DPD	5/2020	ISSUED TO TOWN FOR PLANNING BOARD REVIEW
REV.	BY	DATE	STATUS







	DPD	6/2020	REVISED PER PLANNING BOARD REVIEW COMMENTS
	DPD	5/2020	ISSUED TO TOWN FOR PLANNING BOARD REVIEW
REV.	BY	DATE	STATUS

1. SURVEYORS NOTES AND OTHER REFERENCES ARE ON DWG C-100.

N/F

TM 4 LOT 23 23042/106

24'x28' SEPTIC FIELD (TYP)

N/F

JOANNE SULLIVAN

TM 4 LOT 19 9827/150

- 25' SIDE SETBACK

LISA H. SCHUMACHER

306.52

30'

2. ALL SITE AND CONSTRUCTION ACTIVITIES SHALL BE IN COMPLIANCE WITH MEDEP BEST MANAGEMENT PRACTICES AND EXISTING FEDERAL, STATE, AND LOCAL PERMITS AND PERMITTING REQUIREMENTS FOR THE SITE.

ZONING NOTES:

- 1. PROPERTY OWNERS: RICHARD C. HAZELTON
- 2. APPLICANT: WALNUT HILL INVESTMENTS 82 DOUGHTY ROAD

NORTH YARMOUTH, MAINE 04097

- 3. PROPOSED USE: RESIDENTIAL (7 APARTMENT BUILDINGS, 22 UNITS)
- 4. LOT INFORMATION: TAX MAP 4 LOT 18 (C.C.R.D. BOOK 2851 PAGE 356)
- 5. ZONING DISTRICT: VILLAGE CENTER ZONE AND GROUNDWATER PROTECTION OVERLAY DISTRICT
- 6. ZONING REQUIREMENTS: DIMENSIONAL STANDARDS TO BE IN ACCORDANCE WITH THE APPROVED ZONE AS SHOWN BELOW:

	<u>VILLAGE C</u> REQUIRED	<u>ENTER</u> PROVIDED
MINIMUM LOT SIZE	20,000 SF*	143,289 SF
MAXIMUM RESIDENTIAL DENSITY	N/A	N/A
MINIMUM STREET FRONTAGE	20-100 FEET	>20 FEET
MINIMUM FRONT YARD SETBACK	0-20 FEET MAX	0-20 FEET
MINIMUM SIDE SETBACK	25 FEET MAX	25 FEET
MINIMUM REAR SETBACK	5 FEET MIN	>5 FEET
MAXIMUM BUILDING HEIGHT	50 FEET	<50 FEET
MAXIMUM LOT COVERAGE	70%	<70%

*THE MINIMUM LOT SIZE CAN BE REDUCED TO 20,000 SF IN THE VILLAGE CENTER DISTRICT WHEN THE LOT IS SERVED BY AN ADVANCED WASTEWATER TREATMENT SYSTEM.

- 7. ALL APARTMENTS WILL BE SERVED BY AN ADVANCED WASTEWATER TREATMENT SYSTEM WITH PRETREATMENT THAT PROVIDES A MINIMUM OF 50 PERCENT REDUCTION IN NITRATES AND HAS DEMONSTRATED THAT WATER QUALITY WILL NOT BE DEGRADED.
- 8. WETLANDS DELINEATED BY CENCI, DATED JULY 2017. NO WETLAND IMPACTS PROPOSED.
- SITE UTILITIES WILL BE PROVIDED AS FOLLOWS: ELECTRIC/COMMUNICATIONS: EXISTING SERVICE WATER SUPPLY: PUBLIC WATER SEWER SERVICE: INDIVIDUAL SEPTIC SYSTEMS WITH PRE-TREATMENT
- 10. EXISTING IMPERVIOUS AREA = 17,988 SF (0.41 ACRES) PROPOSED IMPERVIOUS AREA= 40,883 SF (0.94 ACRES)
- 11. THE PROPERTY IS NOT WITHIN A FLOODPLAIN OR SHORELAND ZONE.
- 12. THE PROPOSED ROADWAY WILL BE PRIVATE.
- 13. NET RESIDENTIAL DENSITY CALCULATIONS: MAXIMUM RESIDENTIAL DENSITY NOT APPLICABLE IN VILLAGE CENTER ZONE.
- 14. THE TOWN OF NORTH YARMOUTH SHALL NOT BE RESPONSIBLE FOR THE MAINTENANCE, REPAIR, PLOWING, OR SIMILAR SERVICES FOR THE PRIVATE STREET SHOWN ON THIS PLAN.
- 15. THERE IS NO SIGNAGE PROPOSED FOR THIS PROJECT.
- 16. PARKING REQUIREMENTS: 1.75 SPACE PER 2 BEDROOM UNIT (MULTIPLIER)

SPACES REQUIRED: 38.5 SPACES SPACES PROVIDED: 42 SPACES

SUBDIVISION PLAN, APPROVED BY THE TOWN OF NORTH YARMOUTH PLANNING BOARD

STATE OF MAINE, CUMBERLAND COUNTY REGISTRY OF DEEDS RECEIVED _____ m ____ M AND RECORDED IN Plan Book _____ PAGE ____

- 19'x20' SEPTIC FIELD

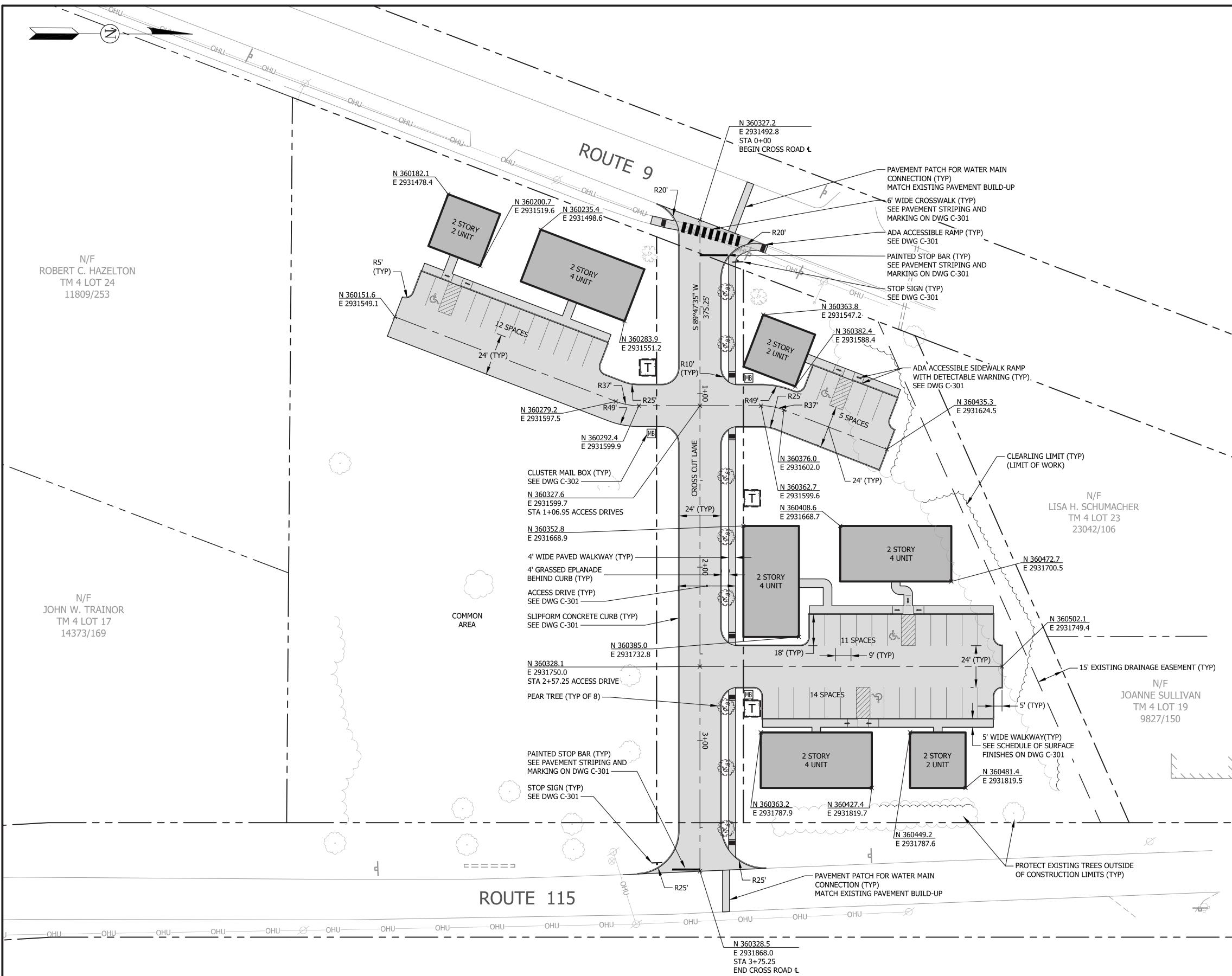
REGISTER

DATE

C-102

WALNUT HILL INVESTMENTS CROSSROAD APARTMENTS 352 WALNUT HILL ROAD NORTH YARMOUTH, MAINE 80 SCALI SUBDIVISION PLAN DESIGN BY: JTR SME DRAWN BY: SJM SEVEE & MAHER DATE: 5/2020 ENGINEERS CHECKED BY: BDP ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE LMN: SUBD 4 Blanchard Road, PO Box 85A, Cumberland, Maine 04021 Phone 207.829.5016 • Fax 207.829.5692 • smemaine.com CTB: SME-STD

JOB NO. 19303.01 DWG FILE BASE

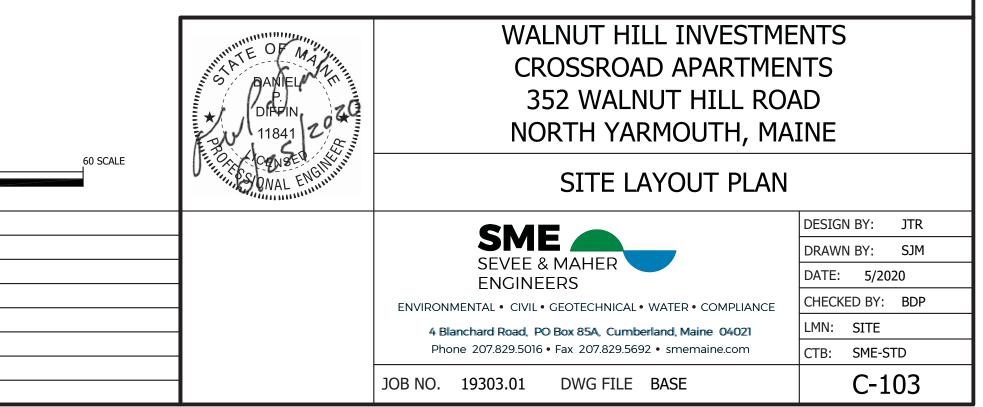


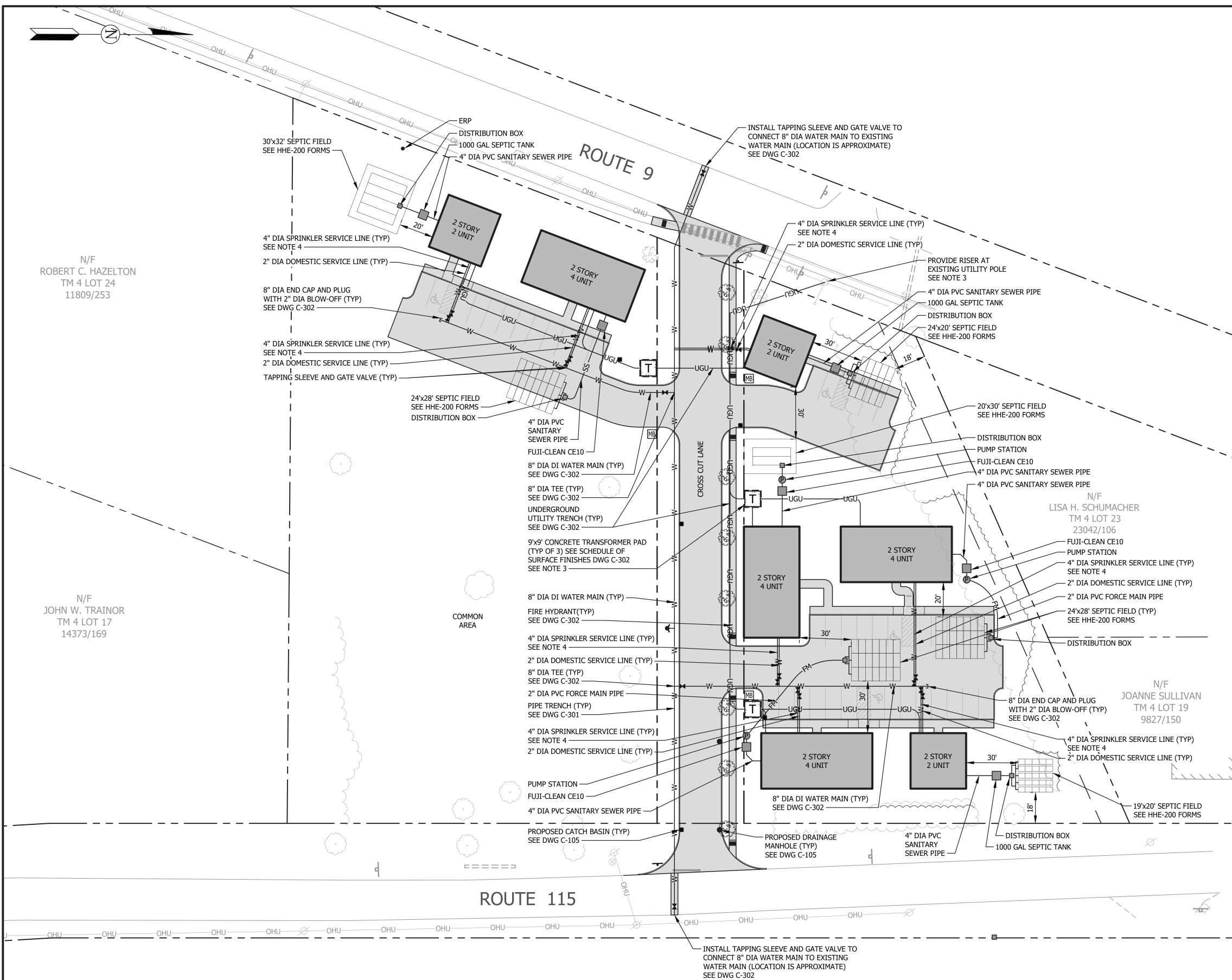
	DPD	6/2020	REVISED PER PLANNING BOARD REVIEW COMMENTS
	DPD	5/2020	ISSUED TO TOWN FOR PLANNING BOARD REVIEW
REV.	BY	DATE	STATUS

GENERAL NOTES:

1. SURVEYORS NOTES AND OTHER REFERENCES ARE ON DWG C-100.

2. ALL SITE AND CONSTRUCTION ACTIVITIES SHALL BE IN COMPLIANCE WITH MEDEP BEST MANAGEMENT PRACTICES AND EXISTING FEDERAL, STATE, AND LOCAL PERMITS AND PERMITTING REQUIREMENTS FOR THE SITE.





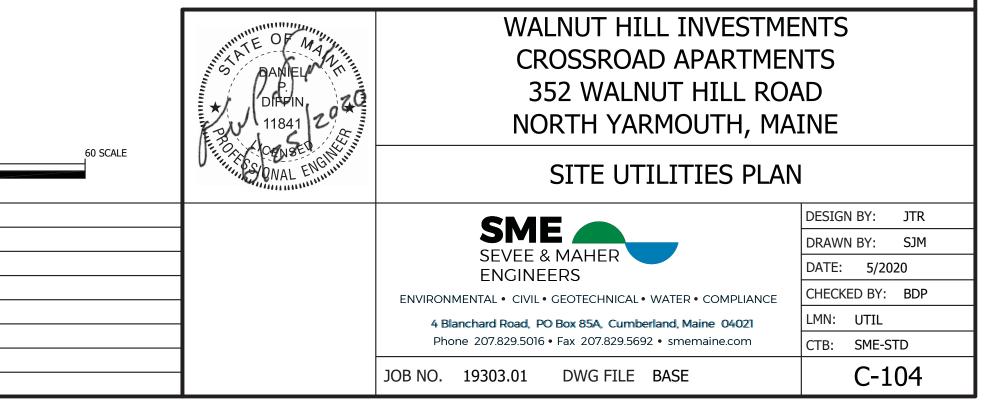
	DPD	6/2020	REVISED PER PLANNING BOARD REVIEW COMMENTS
	DPD	5/2020	ISSUED TO TOWN FOR PLANNING BOARD REVIEW
REV.	BY	DATE	STATUS

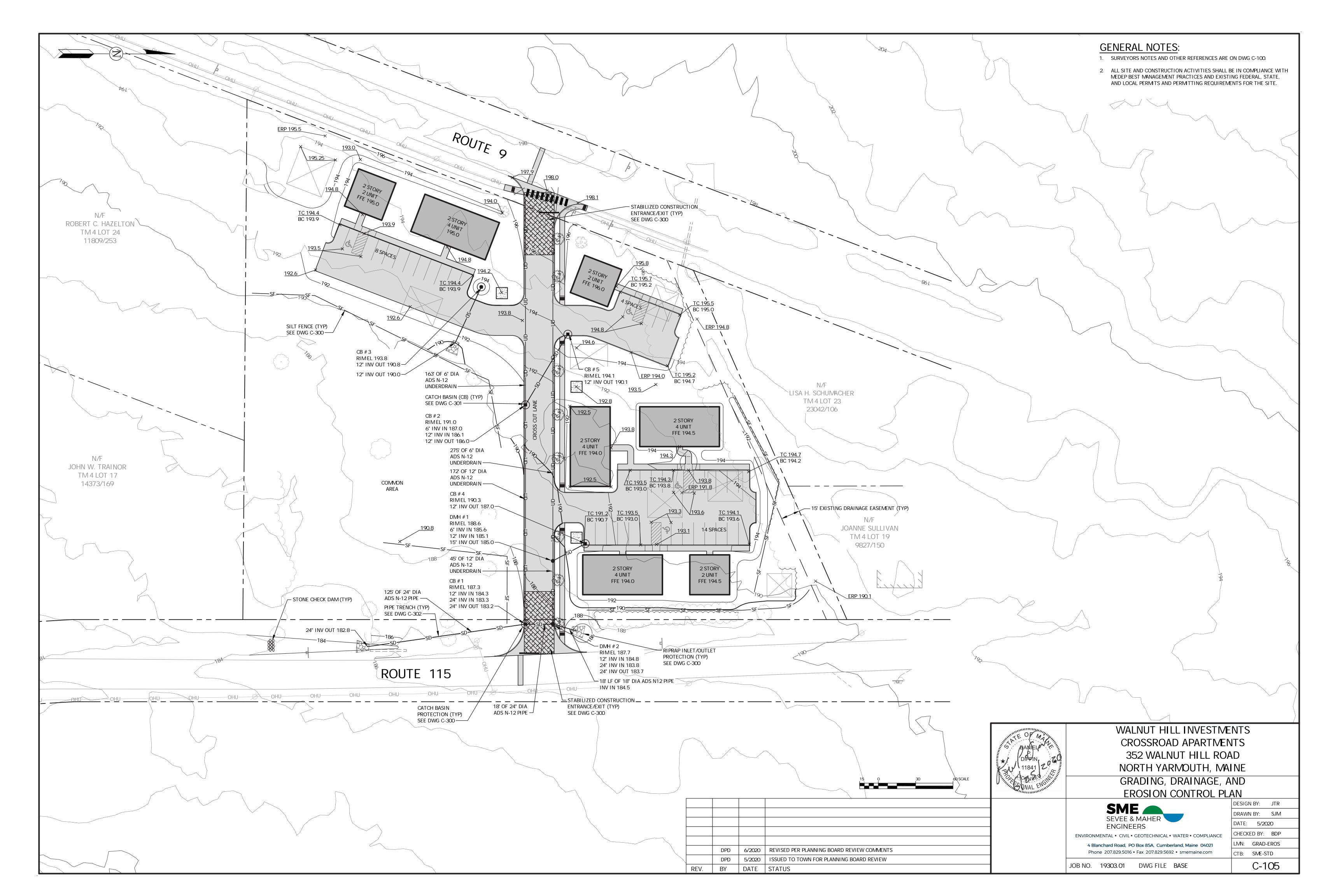
15 0

GENERAL NOTES:

1. SURVEYORS NOTES AND OTHER REFERENCES ARE ON DWG C-100.

- 2. ALL SITE AND CONSTRUCTION ACTIVITIES SHALL BE IN COMPLIANCE WITH MEDEP BEST MANAGEMENT PRACTICES AND EXISTING FEDERAL, STATE, AND LOCAL PERMITS AND PERMITTING REQUIREMENTS FOR THE SITE.
- 3. COORDINATE FINAL RISER POLE CONNECTION AND TRANSFORMER LOCATIONS WITH UTILITY COMPANY PRIOR TO START OF CONSTRUCTION.
- 4. VERIFY SIZE OF SPRINKLER SERVICE LINE WITH SPRINKLER SYSTEM DESIGNER AND INSTALLER PRIOR TO INSTALLATION.





EROSION CONTROL NOTES:

A. GENERAL

- 1. All soil erosion and sediment control will be done in accordance with: (1) the Maine Erosion and Sediment Control Handbook: Best Management Practices, Maine Department of Environmental Protection (MEDEP), October 2016.
- 2. The site Contractor (to be determined) will be responsible for the repair/replacement/maintenance of all erosion control measures until all disturbed areas are stabilized.
- 3. Disturbed areas will be permanently stabilized within 7 days of final grading. Disturbed areas not to be worked upon within 14 days of disturbance will be temporarily stabilized within 7 days of the disturbance.
- 4. In all areas, removal of trees, bushes and other vegetation, as well as disturbance of topsoil will be kept to a minimum while allowing proper site operations.
- 5. Any suitable topsoil will be stripped and stockpiled for reuse as directed by the Owner. Topsoil will be stockpiled in a manner such that natural drainage is not obstructed and no off-site sediment damage will result. In any event, stockpiles will not be located within 100 feet of wetlands and will be at least 50 feet upgradient of the stockpile's perimeter silt fence. The sideslopes of the topsoil stockpile will not exceed 2:1. Silt fence will be installed around the perimeter of all topsoil stockpiles. Topsoil stockpiles will be surrounded with siltation fencing and will be temporarily seeded with Aroostook rye, annual or perennial ryegrass within 7 days of formation, or temporarily mulched.
- **B. TEMPORARY MEASURES**
- 1. STABILIZED CONSTRUCTION ENTRANCE/EXIT

A crushed stone stabilized construction entrance/exit will be placed at any point of vehicular access to the site, in accordance with the detail shown on this sheet.

- 2. SILT FENCE
- a. Silt fence will be installed prior to all construction activity, where soil disturbance may result in erosion. Silt fence will be erected at locations shown on the plans and/or downgradient of all construction activity.
- b. Silt fences will be removed when they have served their useful purpose, but not before the upgradient areas have been permanently stabilized.
- c. Silt fences will be inspected immediately after each rainfall and at least daily during prolonged rainfall. They will be inspected if there are any signs of erosion or sedimentation below them. Any required repairs will be made immediately. If there are signs of undercutting at the center or the edges, or impounding of large volumes of water behind them, they will be replaced with a temporary crushed stone check dam.
- d. Sediment deposits will be removed after each storm event if significant build-up has occurred or if deposits exceed half the height of the barrier.
- 3. STONE CHECK DAMS
- Stone check dams will be installed in grass-lined swales and ditches during construction.
- 4. BARK MULCH SEDIMENT BARRIER
- a. Where approved, bark mulch sediment barriers may be used as a substitute for silt fence. See the details in this drawing set for specifications.
- b. Rock Filter Berms: To provide more filtering capacity or to act as a velocity check am, a berm's center can be composed of clean crusned rock ranging in size from the french drain stone to riprap.
- 5. TEMPORARY SEEDING

Stabilize disturbed areas that will not be brought to final grade for a year or less and reduce problems associated with mud and dust production from exposed soil surface during construction with temporary vegetation.

- 6. TEMPORARY MULCHING
- Use temporary mulch in the following locations and/or circumstances:
- In sensitive areas (within 100 feet of streams, wetlands and in lake watersheds) temporary mulch will be applied within 7 days of exposing spill or prior to any
- storm event. • Apply temporary mulch within 14 days of disturbance or prior to any storm event in all other areas.
- Areas which have been temporarily or permanently seeded will be mulched
- immediately following seeding. • Areas which cannot be seeded within the growing season will be mulched for
- over-winter protection and the area will be seeded at the beginning of the growing season.
- Mulch can be used in conjunction with tree, shrub, vine, and ground cover plantings
- Mulch anchoring will be used on slopes greater than 5 percent in late fall (past October 15), and over-winter (October 15 - April 15).
- The following materials may be used for temporary mulch:
- a. Hay or Straw material shall be air-dried, free of seeds and coarse material. Apply 2 bales/1,000 sf or 1.5 to 2 tons/acre to cover 90% of ground surface.
- b. Erosion Control Mix: It can be used as a stand-alone reinforcement:
- on slopes 2 horizontal to 1 vertical or less; on frozen ground or forested areas; and
- at the edge of gravel parking areas and areas under construction.
- c. Erosion control mix alone is not suitable: on slopes with groundwater seepage;
- at low points with concentrated flows and in gullies;
- at the bottom of steep perimeter slopes exceeding 100 feet in length;
- below culvert outlet aprons; and around catch basins and closed storm systems.
- d. Chemical Mulches and Soil Binders: Wide ranges of synthetic spray-on materials are marketed to protect the soil surface. These are emulsions that are mixed with water and applied to the soil. They may be used alone, but most often are used to hold wood fiber, hydro-mulches or straw to the soil surface.
- e. Erosion Control Blankets and Mats: Mats are manufactured combinations of mulch and netting designed to retain soil moisture and modify soil temperature. During the growing season (April 15 to October 15) use mats indicated on drawings or North American Green (NAG) S75 (or mulch and netting) on:
- the base of grassed waterways; • steep slopes (15 percent or greater); and
- any disturbed soil within 100 feet of lakes, streams, or wetlands.

During the late fall and winter (October 15 to April 15) use heavy grade mats indicated on drawings for NAG SC250 on all areas noted above plus use lighter grade mats NAG S75 (or mulch and netting) on:

• sideslopes of grassed waterways; and moderate slopes (between 8 and 15 percent).

C. TEMPORARY DUST CONTROL

To prevent the blowing and movement of dust from exposed soil surfaces, and reduce the presence of dust, use water or calcium chloride to control dusting by preserving the moisture level in the road surface materials.

- D. CONSTRUCTION DE-WATERING
- 1. Water from construction de-watering operations shall be cleaned of sediment before reaching wetlands, water bodies, streams or site boundaries. Utilize temporary sediment basins, erosion control soil filter berms backed by staked hay bales, A Dirt Bag 55" sediment filter bag by ACF Environmental, or other approved Best Management Practices (BMP's).
- 2. In sensitive areas near streams or ponds, discharge the water from the de-watering operation into a temporary sediment basin created by a surrounding filter berm of uncompacted erosion control mix immediately backed by staked hay bales (see the site details). Locate the temporary sediment basin at lease 100 feet from the nearest water body, such that the filtered water will flow through undisturbed vegetated soil areas prior to reaching the water body or property line.
- E. PERMANENT MEASURES
- 1. Riprapped Aprons: All storm drain pipe outlets and the inlet and outlet of culverts will have riprap aprons to protect against scour and deterioration.
- 2. Topsoil, Seed, and Mulch: All areas disturbed during construction, but not subject to other restoration (paving, riprap, etc.) will be loamed, limed, fertilized, seeded, and mulched.

Seeded Preparation: Use stockpiled materials spread to the depths shown on the plans, if available. Approved topsoil substitutes may be used. Grade the site as needed.

a. Seeding will be completed by August 15 of each year. Late season seeding may be done between August 15 and October 15. Areas not seeded or which do not obtain satisfactory growth by October 15, will be seeded with Aroostook Rye or mulched. After November 1, or the first killing frost, disturbed areas will be seeded at double the specified application rates, mulched, and anchored.

PERMANENT SEEDING SPECIFICATIONS

Mixture:	Roadside (lbs/acre)	Lawn (Ibs/acre)
Kentucky Bluegrass	20	55
White Clover	5	0
Creeping Red Fescue	20	55
Perennial Ryegrass	5	15

b. Mulch in accordance with specifications for temporary mulching.

- ar regegiuss 5 c. If permanent vegetated stabilization cannot be established due to the season of the year, all exposed and disturbed areas not to undergo further disturbance are to have dormant seeding applied and be temporarily mulched to protect the site.
- 3. Ditches and Channels: All ditches on-site will be lined with North American Green S75 erosion control mesh (or an approved equal) upon installation of loam and seed.
- F. WINTER CONSTRUCTION AND STABILIZATION
- 1. Winter excavation and earthwork will be completed so as to minimize exposed areas while satisfactorily completing the project. Limit exposed areas to those areas in which work is to occur during the following 15 days and that can be mulched in one day prior to any snow event. All areas will be considered denuded until the subbase gravel is installed in roadway areas or the areas of future loam and seed have been loamed, seeded, and mulched.

Install any added measures necessary to control erosion/sedimentation. The particular measure used will be dependent upon site conditions, the size of the area to be protected, and weather conditions.

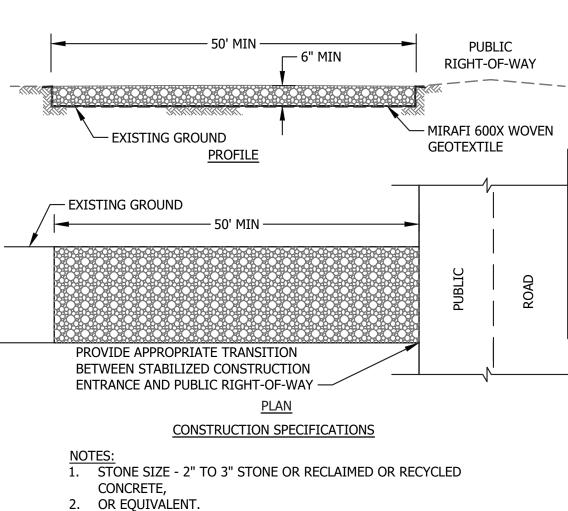
To minimize areas without erosion control protection, continuation of earthwork operations on additional areas will not begin until the exposed soil surface on the area being worked has been stabilized.

- 2. Natural Resource Protection: During winter construction, a double-row of sediment barriers (i.e., silt fence backed with hay bales or erosion control mix) will be placed between any natural resource and the disturbed area. Projects crossing the natural resource will be protected a minimum distance of 100 feet on either side from the resource.
- 3. Sediment Barriers: During frozen conditions, sediment barriers may consist of erosion control mix berms or any other recognized sediment barriers as frozen soil prevents the proper installation of hay bales or silt fences.
- 4. Mulching:
- All areas will be considered to be denuded until seeded and mulched. Hay and straw mulch will be applied at a rate of twice the normal accepted rate.
- Mulch will not be spread on top of snow. • After each day of final grading, the area will be properly stabilized with anchored hay or straw or erosion control matting.
- Between the dates of November 1 and April 15, all mulch will be anchored by either mulch netting, emulsion chemical, tracking or wood cellulose fiber.
- 5. Soil Stockpiling: Stockpiles of soil or subsoil will be mulched for over-winter protection with hay or straw at twice the normal rate or with a 4-inch layer of erosion control mix. This will be done within 24 hours of stocking and re-established prior to any rainfall or snowfall. Any soil stockpiles shall not be placed (even covered with mulch) within 100 feet from any natural resources.
- 6. Seeding: Dormant seeding may be placed prior to the placement of mulch or erosion control blankets. If dormant seeding is used for the site, all disturbed areas will receive 4 inches of loam and seed at an application rate of three times the rate for permanent seeding. All areas seeded during the winter will be inspected in the spring for adequate catch. All areas insufficiently vegetated (less than 75 percent catch) will be revegetated by replacing loam, seed, and mulch.

If dormant seeding is not used for the site, all disturbed areas will be

- revegetated in the spring. 7. Maintenance: Maintenance measures will be applied as needed during the entire construction season. After each rainfall, snow storm, or period of thawing and runoff, the site Contractor will perform a visual inspection of all installed erosion control measures and perform repairs as needed to ensure their continuous function.
- Following the temporary and/or final seeding and mulching, the Contractor will, in the spring, inspect and repair any damages and/or bare spots. An established vegetative cover means a minimum of 85 to 90 percent of areas vegetated with vigorous growth.
- G. OVER-WINTER CONSTRUCTION EROSION CONTROL MEASURES
- 1. Stabilization of Disturbed Soil: By October 15, all disturbed soils on areas having a slope less than 15 percent will be seeded and mulched. If the Contractor fails to stabilize these soils by this date, then the Contractor shall stabilize the soil for late fall and winter, by using either temporary seeding or mulching.

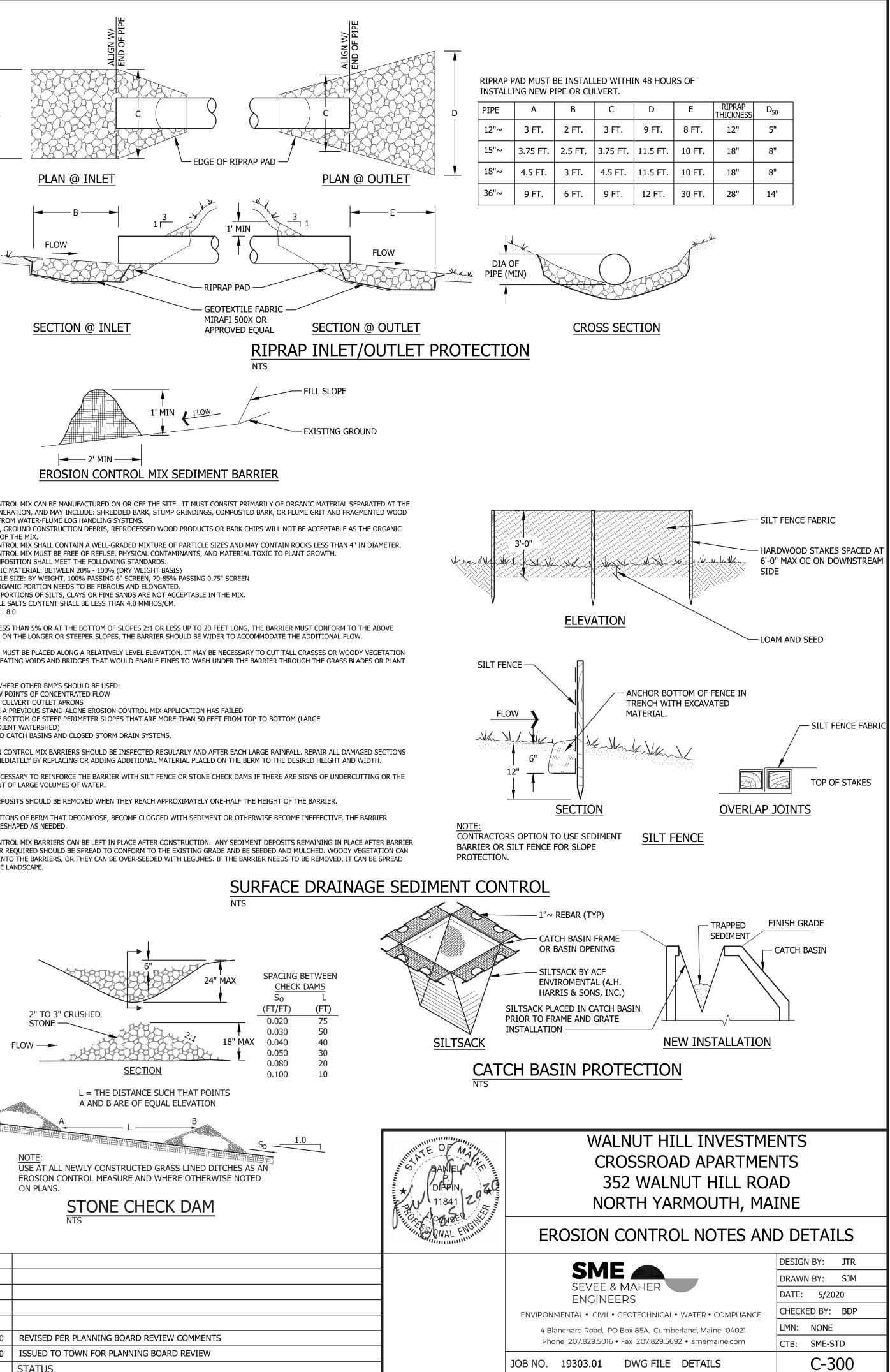
- 2. Stabilization of Disturbed Slopes: All slopes to be vegetated will be completed by October 15. The Owner will consider any area having a grade greater than 15 percent (6.5H:1V) to be a slope. Slopes not vegetated by October 15 will receive one of the following actions to stabilize the slope for late fall and winter: a. Stabilize the soil with temporary vegetation and erosion control mesh. b. Stabilize the slope with erosion control mix. c. Stabilize the slope with stone riprap.
- 3. Stabilization of Ditches and Channels: All stone-lined ditches and channels to be used to convey runoff through the winter will be constructed and stabilized by November 15. Grass-lined ditches and channels will be complete by September 15. Grass-lined ditches not stabilized by September 15 shall be lined with either sod or riprap.
- H. MAINTENANCE PLAN
- 1. Routine Maintenance: Inspection will be performed as outlined in the project's Erosion Control Plan. Inspection will be by a qualified person during wet weather to ensure that the facility performs as intended. Inspection priorities will include checking erosion controls for accumulation of sediments.
- I. Housekeeping
- 1. Spill prevention. Controls must be used to prevent pollutants from being discharged from materials on site, including storage practices to minimize exposure of the materials to stormwater, and appropriate spill prevention, containment, and response planning and implementation.
- 2. Groundwater protection. During construction, liquid petroleum products and other hazardous materials with the potential to contaminate groundwater may not be stored or handled in areas of the site draining to an infiltration area. An "infiltration area" is any area of the site that by design or as a result of soils, topography and other relevant factors accumulates runoff that infiltrates into the soil. Dikes, berms, sumps, and other forms of secondary containment that prevent discharge to groundwater may be used to isolate portions of the site for the purposes of storage and handling of these materials.
- 3. Fugitive sediment and dust. Actions must be taken to ensure that activities do not result in noticeable erosion of soils or fugitive dust emissions during or after construction. Oil may not be used for dust control.
- 4. Debris and other materials. Litter, construction debris, and chemicals exposed to stormwater must be prevented from becoming a pollutant source.
- 5. Trench or foundation de-watering. Trench de-watering is the removal of water from trenches, foundations, coffer dams, ponds, and other areas within the construction area that retain water after excavation. In most cases the collected water is heavily silted and hinders correct and safe construction practices. The collected water must be removed from the ponded area, either through gravity or pumping, and must be spread through natural wooded buffers or removed to areas that are specifically designed to collect the maximum amount of sediment possible, like a cofferdam sedimentation basin. Avoid allowing the water to flow over disturbed areas of the site. Equivalent measures may be taken if approved by the department.
- 6. Non-stormwater discharges. Identify and prevent contamination by non-stormwater discharges.
- 7. Additional requirements. Additional requirements may be applied on a site-specific basis.
- J. CONSTRUCTION SEQUENCE
- In general, the expected sequence of construction for each phase is provided below. Construction is proposed to start in Spring 2019 and be complete in Fall 2019.
- Mobilization
- Install temporary erosion control measures
- Clearing and grubbing • Construct access drive, site drainage, and utilities
- Site stabilization, pavement, loam and seed, clean and
- complete installation of level spreader • Remove temporary erosion control measures after site stabilization



- 3. LENGTH AS EFFECTIVE, BUT NOT LESS THAN 50 FEET.
- 4. THICKNESS NOT LESS THAN SIX (6) INCHES.

NTS

- 5. WIDTH 10 FEET MINIMUM, OR NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
- 6. MAINTENANCE THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC REPAIR AND TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
 - STABILIZED CONSTRUCTION **ENTRANCE/EXIT**



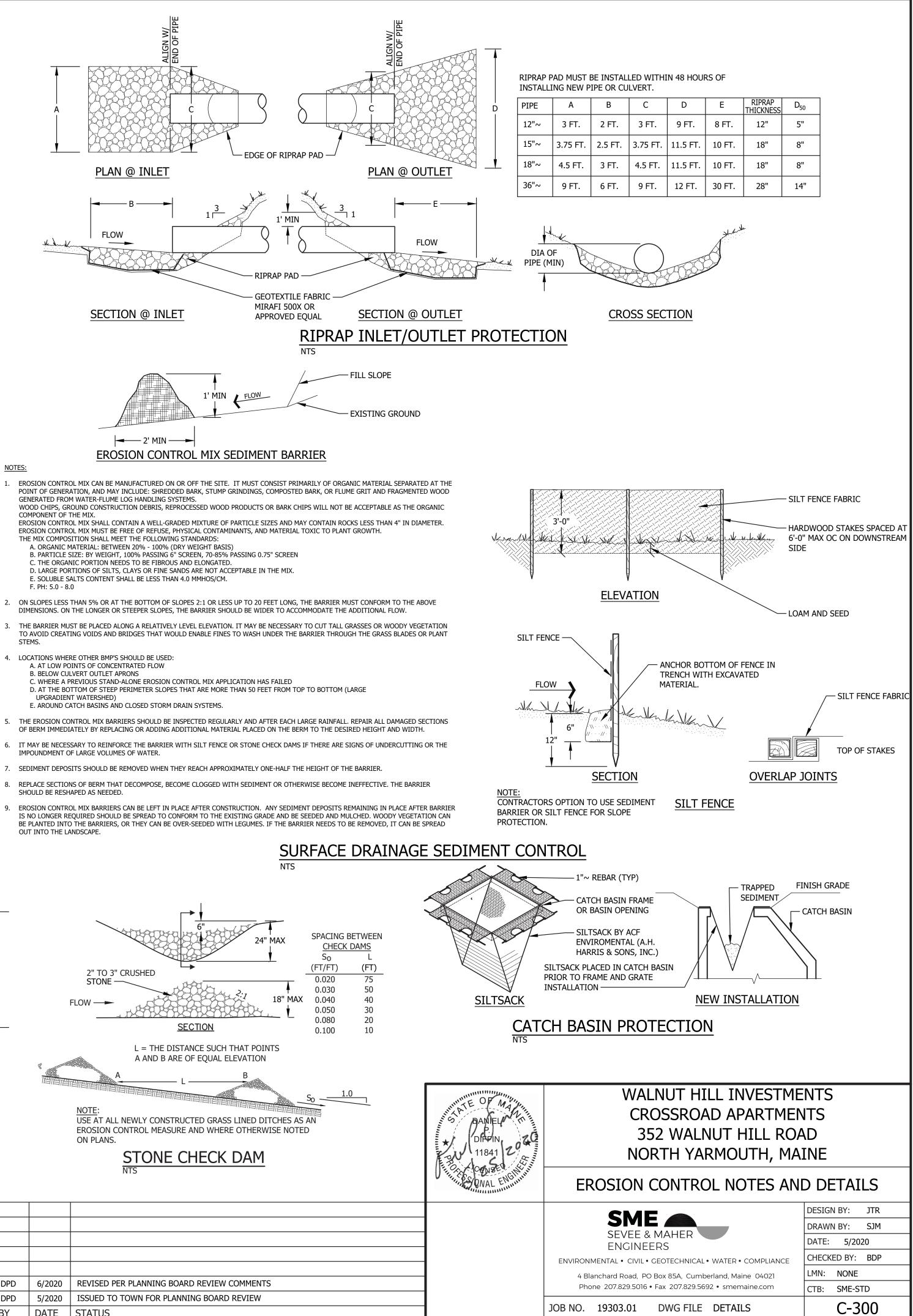
- THE MIX COMPOSITION SHALL MEET THE FOLLOWING STANDARDS: A. ORGANIC MATERIAL: BETWEEN 20% - 100% (DRY WEIGHT BASIS) B. PARTICLE SIZE: BY WEIGHT, 100% PASSING 6" SCREEN, 70-85% PASSING 0.75" SCREEN C. THE ORGANIC PORTION NEEDS TO BE FIBROUS AND ELONGATED.
- E. SOLUBLE SALTS CONTENT SHALL BE LESS THAN 4.0 MMHOS/CM. F. PH: 5.0 - 8.0

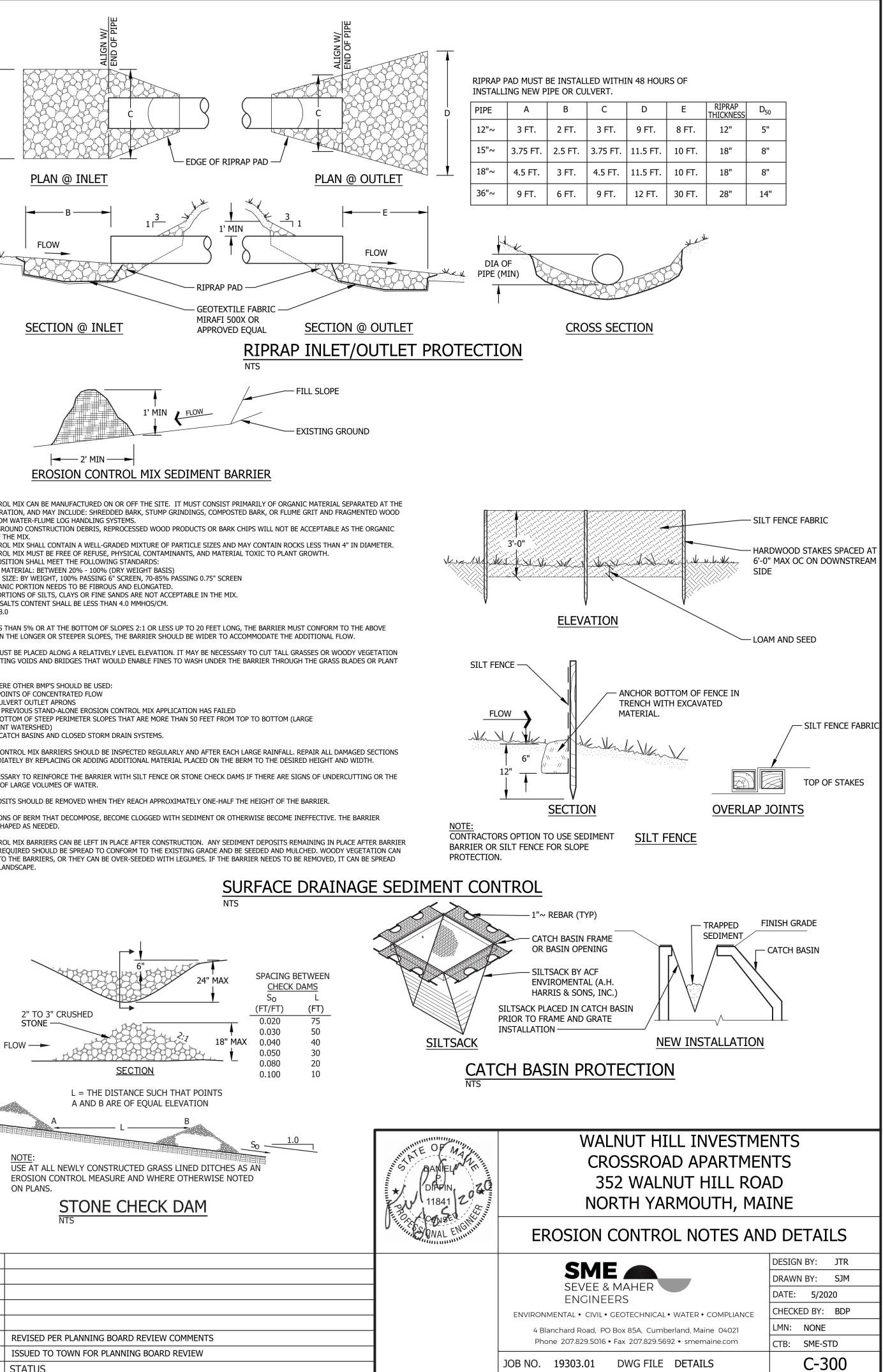
- 4. LOCATIONS WHERE OTHER BMP'S SHOULD BE USED:

NOTES:

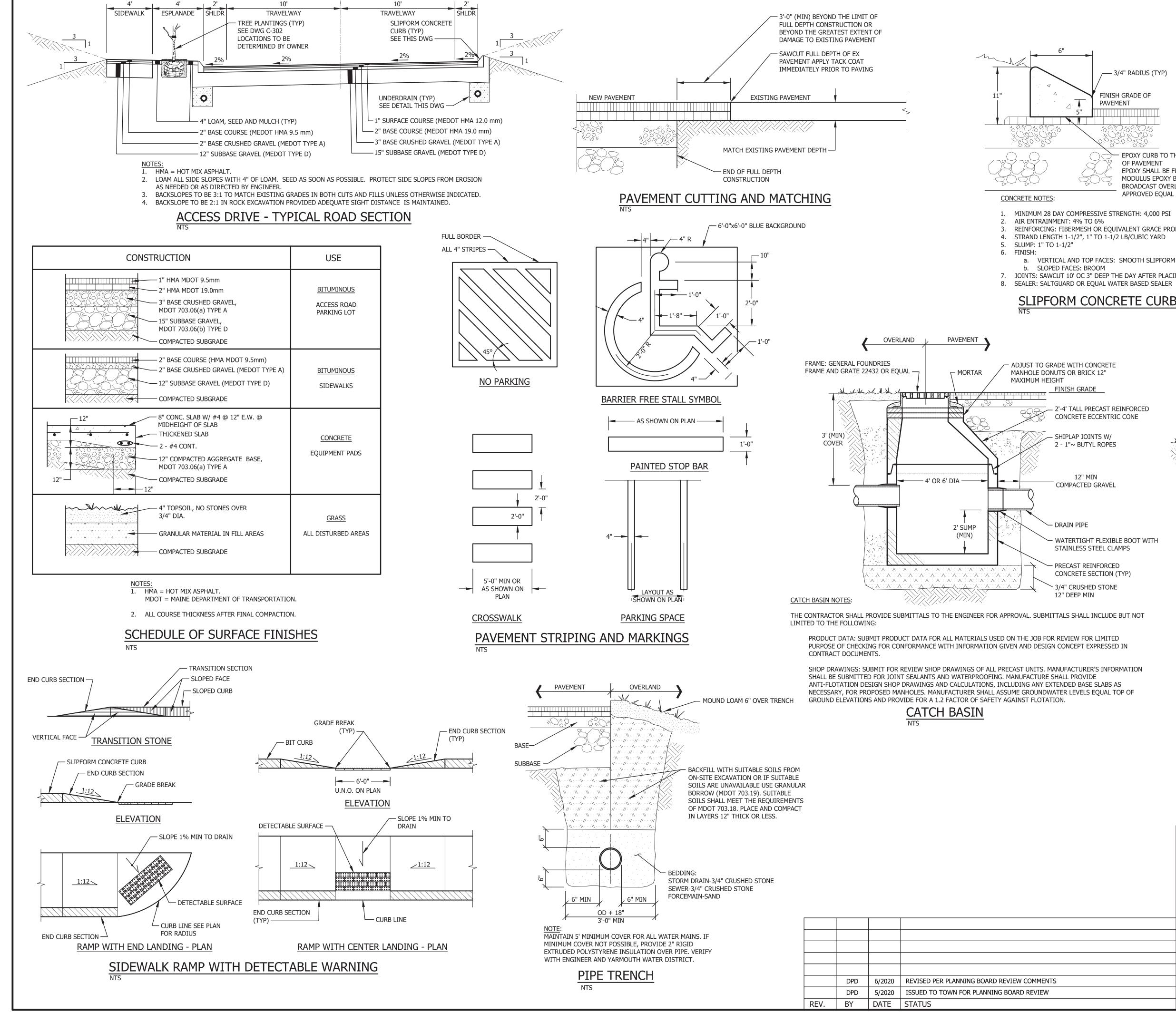
- **B. BELOW CULVERT OUTLET APRONS** . WHERE A PREVIOUS STAND-ALONE EROSION CONTROL MIX APPLICATION HAS FAILED UPGRADIENT WATERSHED

- IMPOUNDMENT OF LARGE VOLUMES OF WATER
- SHOULD BE RESHAPED AS NEEDED
- OUT INTO THE LANDSCAPE.





	DPD	6/2020	REVISED PER PLANNING BOARD REVIEW COMMENTS
	DPD	5/2020	ISSUED TO TOWN FOR PLANNING BOARD REVIEW
REV.	BY	DATE	STATUS



€ RANGEWAY LANE

MATE OF MA	WALNUT HILL INVESTME CROSSROAD APARTMEN				
DANIEL NORTH	352 WALNUT HILL ROA				
DIAPIN 2020	NORTH YARMOUTH, MAINE				
ONAL ENGINEER	SECTIONS AND DETAILS				
	SME	DESIGN BY: JTR			
	SIVIE SEVEE & MAHER	DRAWN BY: SJM			
	ENGINEERS	DATE: 5/2020			
	ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE	CHECKED BY: BDP			
	4 Blanchard Road, PO Box 85A, Cumberland, Maine 04021	LMN: NONE			
	Phone 207.829.5016 • Fax 207.829.5692 • smemaine.com	CTB: SME-STD			
	JOB NO. 19303.01 DWG FILE DETAILS	C-301			

DRAINAGE MANHOLE

WATERTIGHT FLEXIBLE BOOT WITH

SLIPFORM CONCRETE CURB

a. VERTICAL AND TOP FACES: SMOOTH SLIPFORM 7. JOINTS: SAWCUT 10' OC 3" DEEP THE DAY AFTER PLACING

MINIMUM 28 DAY COMPRESSIVE STRENGTH: 4,000 PSI REINFORCING: FIBERMESH OR EQUIVALENT GRACE PRODUCT

EPOXY CURB TO THE BASE COURSE OF PAVEMENT EPOXY SHALL BE FLEXOLITH LOW MODULUS EPOXY BINDER AND BROADCAST OVERLAY SYSTEM OR APPROVED EQUAL

OVERLAND

-Markansk-Mash

PAVEMENT

– 4' DIA -

 Λ

. V . . V . . V . . V . . V . . V . . V . . V . . V . . V . . V . . V . . V . . V . . . V . . . V . . . V . . . V

FINISH GRADE OF PAVEMENT

_____ 3/4" RADIUS (TYP)

ROAD SIGN LEGEND

- MORTAR

MAXIMUM HEIGHT

FINISH GRADE

— SHIPLAP JOINTS W/

SECTIONS

2 - 1"~ BUTYL ROPES

HEIGHT AT TOP OF PIPE

PRECAST CONCRETE

└── 3/4" CRUSHED STONE 12" DEEP MIN

- WATERTIGHT FLEXIBLE BOOT

EXTERIOR OF THE MANHOLE

5. POSTS IN THE PUBLIC RIGHT-OF-WAY TO BE ON BREAKAWAY POSTS AS SPECIFIED IN SECTION 720 OF THE MDOT STANDARD SPECIFICATIONS.

– FRAME AND COVER 12441 GENERAL

– ADJUST TO GRADE WITH CONCRETE

MANHOLE DONUTS OR BRICK 12"

- 2'-4' TALL PRECAST REINFORCED

- PRECAST REINFORCED CONCRETE

- COMPACTED GRAVEL 12" MIN

- SLOPE BENCH TOWARD INVERT BENCH

- INVERT AND TABLE TO BE COMPLETELY

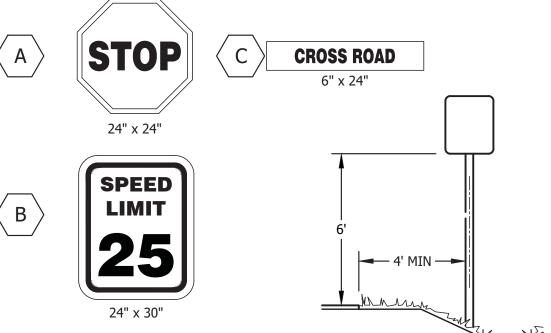
CONSTRUCTED OF BRICK MASONRY OR

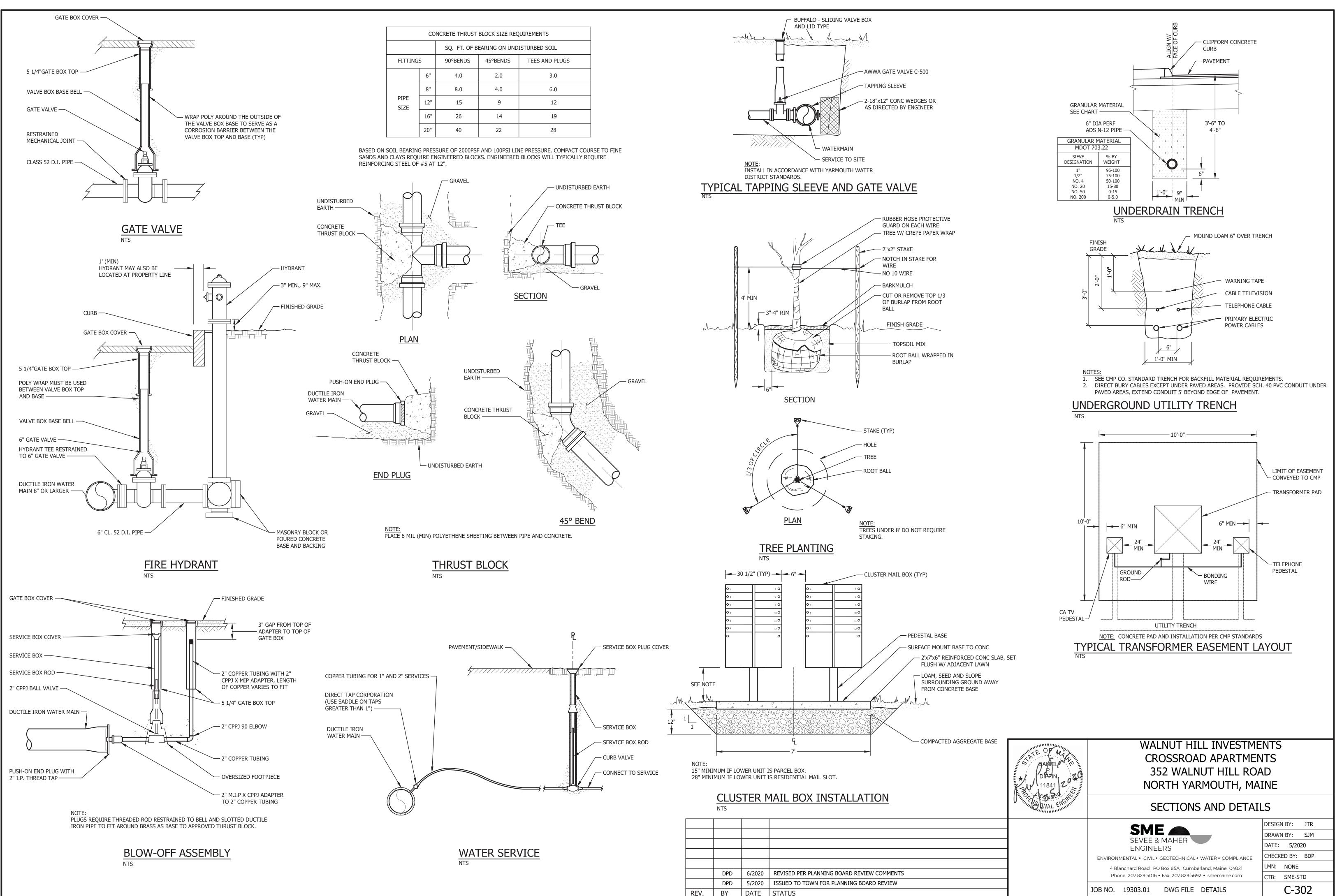
- APPLY DAMPPROOFING COMPOUND TO THE

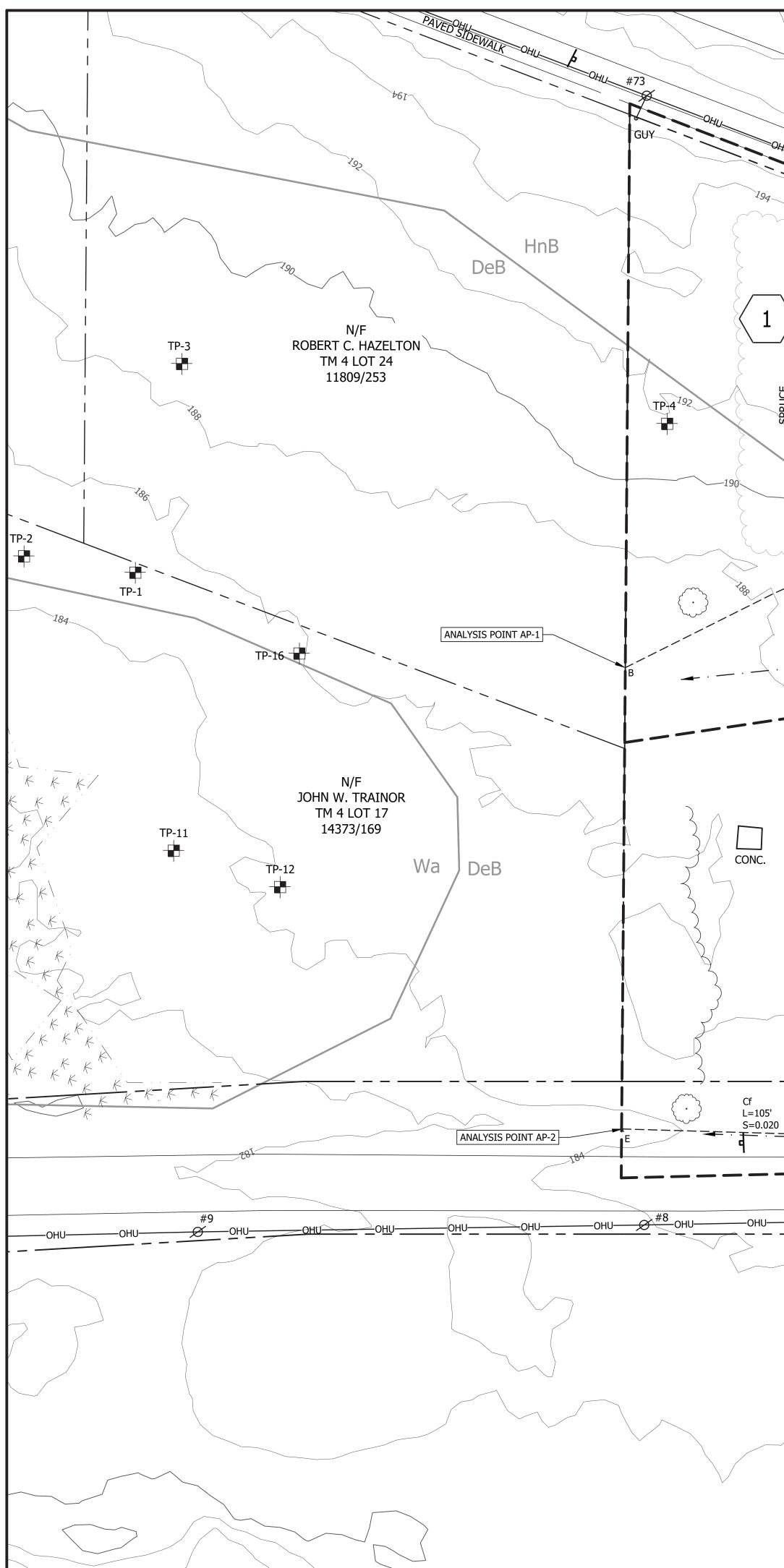
CONCRETE ECCENTRIC CONE

FOUNDRIES OR EQUAL MARKED "DRAIN"

- 4. POSTS SHALL BE METAL CHANNELS AS SPECIFIED IN SECTION 720.08. ALTERNATE POSTS MAY BE 4"x6" WOOD AS SPECIFIED IN SECTION 720.12, AS APPROVED BY ENGINEER.
- 3. SIGN MATERIAL SHALL BE AS SPECIFIED IN SECTION 719 OF THE MDOT STANDARD SPECIFICATIONS.
- 2. ALL PERMANENT SIGNS ON THIS PROJECT ARE CLASSIFIED UNDER SECTION 645.03(b) TYPE 1 REGULATORY WARNING AND ROUTE MARKER ASSEMBLY SIGNS.
- 1. SIGNS SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH MAINE BRIDGES REVISION OF DECEMBER 2002, SECTION 645.
- NOTES: DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, HIGHWAYS AND







		\backslash		
			\frown	
			$(\ $	
OHU ROUTE 9 PAVED SIDEVIAL				
PAVED SIDEWATK OHU				200
	~ <		A	
TA OHU A OHU				
	OHU			
		OHL		
	2022 2022 2022	G	#75	
UDRAGS / L=100' tc(1) / S=0.058				DEAD
B B C C C C C C C C C C C C C C C C C C	- v av	4	\langle	MAPLE
TP-5				Sht
				L=100' S=0.058
	TP-6	5		
Shc L=172'	TP-6	_		
S=0.027				194-B 11.
		192		
15"PVC		192		
	7			
	3	RINES		
	Л	Γ		
PAVED	190			
BULK-		old Ool		
			TP-8	
WOOD FRAME TP-9				
TP-10 DECK 188				
PAVED E				
	3			\mathbb{Z}
			\sim	190 Shc L=455' S=0.015
	,,, 			SPRUCE
$\begin{array}{c c} & & & \\ 20 & & & \\ \hline \\ \hline$				
			88	DeB HnB
ROUTE 115				
OHUOHUOHUOHUOHU	-OHU-	0	HU	—они #6
		$\langle \rangle$		
	\setminus			
		DPD	6/2020	REVISED PER PLANNING BOARD REVIEW COMMENTS
	REV.	DPD BY	5/2020 DATE	ISSUED TO TOWN FOR PLANNING BOARD REVIEW STATUS

