Town of Nottingham, New Hampshire Highway Department Ledge Farm Road Improvements

Issued for Bidding - July 2019

Sheet Index

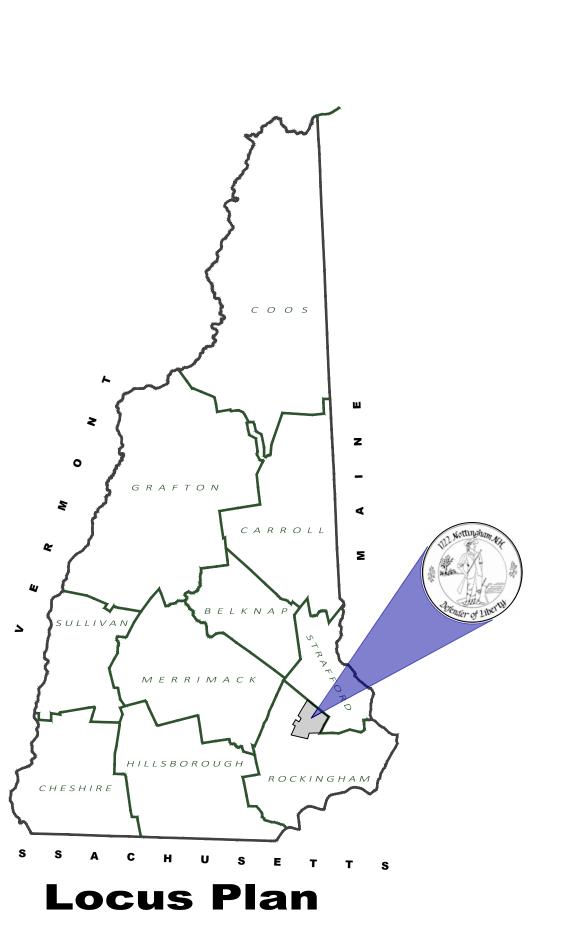
1 Cover Sheet

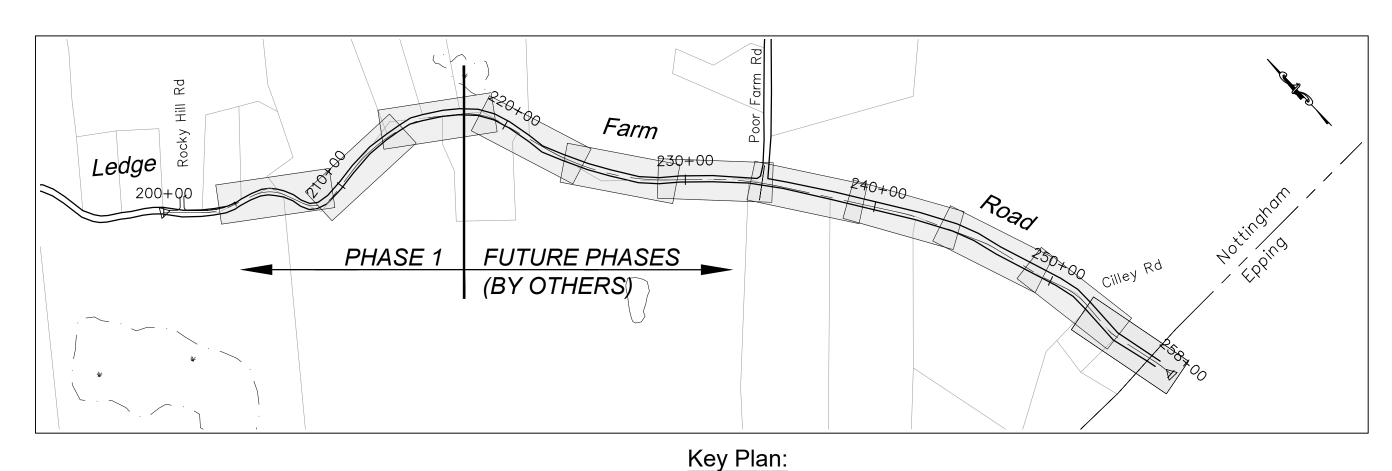
General Notes & Legend

8-4 Existing Conditions Plans

5-7 Plan & Profile

-9 Details





Prepared For:

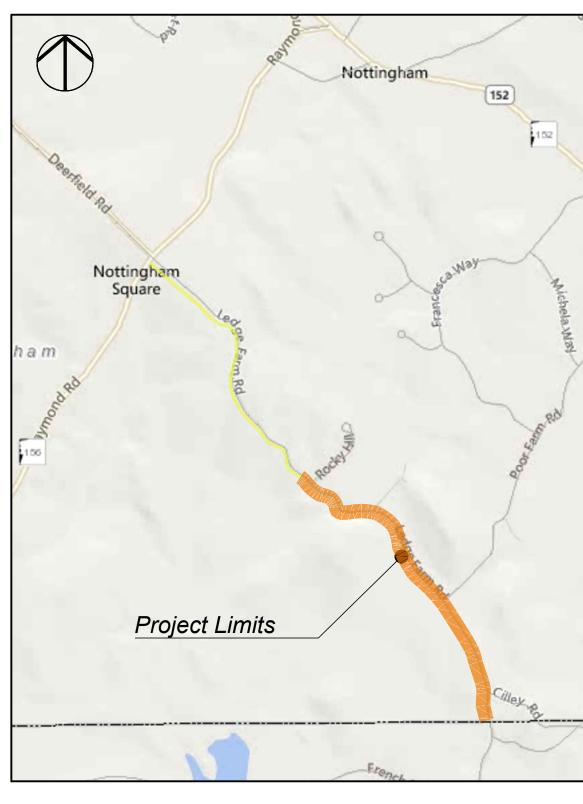
Town of Nottingham
139 Stage Road
Nottingham, New Hampshire 03290

Prepared By:



Portsmouth, NH 603/431-6196 Manchester, NH 603/627-0708 Portland, ME 603/627-0708 C m a e n g i n e e r s . c o m

DRAFT PLANS NOT FOR CONSTRUCTION



Project Location

Construction Notes:

- 1) ALL WORK SHALL BE IN CONFORMANCE WITH CURRENT NHDOT STANDARD SPECIFICATIONS AND DETAILS.
- 2) FOR STANDARD PLANS. SEE CURRENT NHDOT "STANDARD PLANS FOR ROAD CONSTRUCTION"
- 3) ENGINEER SHALL BE DEFINED AS THE RESIDENT ENGINEER/OWNER'S REPRESENTATIVE, WHO IS RESPONSIBLE FOR ENGINEERING OBSERVATION OF THE CONSTRUCTION. ACTING DIRECTLY OR THROUGH HIS DULY AUTHORIZED REPRESENTATIVES ON BEHALF OF THE TOWN OF NOTTINGHAM.
- 4) THE CONTRACTOR SHALL VERIFY ALL EXISTING UTILITY LOCATIONS, PUBLIC OR PRIVATE, SHOWN OR NOT SHOWN, ON THESE PLANS PRIOR TO CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION SHALL BE TAKEN BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL NOTIFY DIG-SAFE PRIOR TO CONSTRUCTION.
- 5) OVERHEAD UTILITY LINES ARE LOCATED THROUGHOUT THE PROJECT WITH CROSSINGS AT VARIOUS LOCATIONS AND RUNNING ALONG THE ROAD. THE CONTRACTOR IS ADVISED THAT EXTREME CAUTION WILL BE REQUIRED IN THE OPERATION OF EQUIPMENT, ESPECIALLY CRANES.
- 6) THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING THE HORIZONTAL AND VERTICAL CONTROL THROUGHOUT THE PROJECT.
- 7) THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING RESIDENTS OF ANY WORK RESTRICTING ACCESS TO ANY DRIVEWAY 24 HOURS IN ADVANCE.
- 8) APPARENT EDGE OF RIGHT-OF-WAY IS APPROXIMATE AND BASED ON TOWN TAX MAPS.
- CONTRACTOR SHALL PROTECT PRIVATE PROPERTY AND SHALL TAKE ALL NECESSARY MEASURES AND PRECAUTIONS TO AVOID DAMAGE TO EXISTING TREES, SHRUBS, LAWNS, PLANTINGS, ETC. THAT ARE OUTSIDE OF THE PROJECT'S WORK LIMITS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRS/REPLACEMENT OF ALL DAMAGED ITEMS.
- 10) THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL METHODS AND MATERIALS FOR CONSTRUCTION OF THIS PROJECT, INCLUDING COMPLIANCE WITH ALL APPLICABLE OSHA REGULATIONS. THE OWNER AND ENGINEER WILL PERIODICALLY REVIEW CONSTRUCTION FOR COMPLIANCE WITH THE PLANS AND SPECIFICATIONS. SUCH REVIEW DOES NOT IMPLY APPROVAL OF METHODS OF CONSTRUCTION.
- 11) THE CONTRACTOR SHALL NOTIFY DIG-SAFE AT 1-800-225-4977 AT LEAST 72 HOURS PRIOR TO BEGINNING WORK TO CONFIRM THE LOCATION OF UNDERGROUND UTILITIES.
- 12) THE CONTRACTOR SHALL EXERCISE CAUTION AND COMPLY WITH ALL APPLICABLE TRAFFIC LAWS AND REGULATIONS IN THE EXECUTION OF WORK. THE CONTRACTOR SHALL COORDINATE ACTIVITIES WITH THE TOWN'S POLICE AND FIRE DEPARTMENTS TO ENSURE ACCESS DURING CONSTRUCTION. THE CONTRACTOR SHALL FURNISH, ERECT, AND MAINTAIN BARRICADES, WARNING SIGNS, DELINEATORS, STRIPING, AND FLAGGERS IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE SPECIFICATIONS.
- 13) THE CONTRACTOR SHALL BEAR ALL EXPENSE OF MAINTAINING THE SECTION OF ROAD UNDERGOING IMPROVEMENT INCLUDING ALL TEMPORARY APPROACHES OR CROSSINGS AND INTERSECTIONS WITH TRAILS, ROADS, STREETS, BUSINESSES, PARKING LOTS, RESIDENCES, GARAGES, FARMS, AND OTHER FEATURES AS MAY BE NECESSARY. THE CONTRACTOR SHALL USE ALL NECESSARY MEANS TO CONTROL DUST DURING THE CONSTRUCTION PERIOD.
- 14) ALL EXISTING SIGNS THAT ARE REMOVED ARE TO BE STORED BY THE CONTRACTOR AND RESET AS DIRECTED. ANY EXISTING SIGNS TO BE RESET THAT ARE DAMAGED BY THE CONTRACTOR'S OPERATIONS ARE TO BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE TOWN.

Erosion Control Notes:

- 1) THE CONTRACTOR IS RESPONSIBLE FOR THE DEVELOPMENT AND APPROVAL OF THE EROSION AND SEDIMENT CONTROL PLAN.
- 2) PRIOR TO CONSTRUCTION AND THEREAFTER, EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED AS NECESSARY. THE SMALLEST PRACTICAL AREA OF LAND SHOULD BE EXPOSED AT ANY ONE TIME DURING CONSTRUCTION. WHEN LAND IS EXPOSED DURING CONSTRUCTION, THE EXPOSURE SHOULD BE KEPT TO THE SHORTEST PRACTICAL PERIOD OF TIME. ANY DISTURBED AREAS THAT ARE TO BE LEFT UN-STABILIZED LONGER THAN TWO WEEKS SHALL BE TEMPORARILY SEEDED AND MULCHED AT THE RATE OF 2 TONS PER ACRE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL REMEDIAL WORK REQUIRED TO REPAIR AREAS WHICH ARE DAMAGED BY EROSION.
- 3) HAY BALE BARRIERS SHALL BE INSTALLED AND MAINTAINED AT DRAIN INLETS AND OUTLETS AND ALONG LIMITS OF WORK WHERE NECESSARY. HAY BALE BARRIERS SHALL NOT BE PLACED CLOSER THAN 25-FEET TO DRAIN INLETS AND OUTLETS. ADDITIONAL HAY BALES SHALL BE ADDED AS REQUIRED BY THE ENGINEER HAY BALES WILL BE STAKED AND MAINTAINED PRIOR TO AND DURING CONSTRUCTION UNTIL DISTURBED AREAS HAVE A HEALTHY STAND OF GRASS.
- 4) ALL DISTURBED AREAS AND SIDE SLOPES THAT ARE AT ARE FINISH GRADED WITH NO FURTHER CONSTRUCTION TAKING PLACE SHALL BE TRACKED, SEEDED (IN ACCORDANCE WITH SECTION 644 OF THE STANDARD SPECIFICATIONS) AND MULCHED. ALL SEED, LIME AND FERTILIZER PROGRAMS SHALL CONFORM TO ALL APPLICABLE SECTIONS OF THE SPECIFICATIONS (SECTION 642 AND SECTION 643).
- 5) CONSTRUCTION TRAFFIC SHALL TRAVEL THE ROADBEDS OF EXISTING ROADS.
- 6) SILT FENCE SHALL BE INSTALLED AND MAINTAINED WHERE NECESSARY AND ADDITIONAL SILT FENCE ADDED AS REQUIRED BY THE ENGINEER PRIOR TO ANY ON-SITE GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL. GENERALLY, SILT FENCE SHALL BE INSTALLED TO PREVENT MIGRATION OF THE SEDIMENT FROM THE WORK AREA. IT SHOULD BE MAINTAINED DURING AND AFTER CONSTRUCTION TO REMOVE SEDIMENT FROM NATURAL DRAINAGE WAYS. THE SILT FENCE IS TO BE MAINTAINED AND CLEANED UNTIL ALL SLOPES HAVE A HEALTHY STAND OF GRASS.
- 7) AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED, THE TEMPORARY EROSION CONTROL MEASURES ARE TO BE REMOVED AND ACCUMULATED SEDIMENT DISPOSED OF IN A LOCATION DESIGNATED BY THE OWNER.
- 8) HAY BALES AND MULCH SHALL BE MOWINGS OF ACCEPTABLE HERBACEOUS GROWTH, FREE FROM NOXIOUS WEEDS OR WOODY STEMS AND SHALL BE DRY.
- 9) SILT FENCES SHALL BE A MINIMUM OF 36 INCHES HIGH WITH THE BOTTOM OF THE CLOTH KEYING INTO THE GROUND. POSTS SHALL BE OF WOOD OR STEEL.
- 10) THE EROSION CONTROL DEVICES DESCRIBED AND AS SPECIFIED IN THE SPECIFICATIONS REPRESENT THE MINIMUM REQUIRED MEASURES FOR EROSION CONTROL. THE CONTRACTOR SHALL ADD TO THESE DEVICES ANY OTHER MEASURES AS REQUIRED OR AS DIRECTED BY THE ENGINEER TO EFFECTIVELY PREVENT MIGRATION OF SEDIMENT FROM THE WORK AREA AND PROTECT WETLAND AREAS. WATERWAYS. EXISTING AND PROPOSED DRAINAGE FEATURES, SLOPES, LAWNS, AND PLANTS ADJACENT TO THE WORK AREA.
- 11) WELDED PLASTIC OR BIODEGRADABLE PLASTIC EROSION CONTROL NETTING SHALL NOT BE USED.

Traffic Control Notes:

- TRAFFIC CONTROL TYPICAL SECTIONS ARE GENERAL REPRESENTATIONS AND DO NOT DEPICT PROJECT SPECIFIC LOCATIONS. INFORMATION CONTAINED IN THEM SHALL BE APPLIED TO THE PROJECT.
- DIMENSIONS SHOWN ON THE TRAFFIC CONTROL TYPICAL SECTIONS ARE PREFERRED. ADDITIONAL WIDTH SHOULD BE PROVIDED IF AVAILABLE AND PRACTICAL.
- TRAFFIC CONTROL TYPICAL SECTIONS MAY BE NARROWED DURING DAILY WORK. ALL NARROWING SHALL BE RETURNED TO WIDTHS SHOWN IN THE TRAFFIC CONTROL TYPICAL SECTIONS. THE FOLLOWING ARE GUIDELINES FOR THE MINIMUM WIDTHS ALLOWED FOR DAILY NARROWING:

TWO WAY TRAFFIC: 22 FT. CURB/EDGE OF PAVEMENT TO FACE OF CHANNELING DEVICE ALTERNATING ONE WAY TRAFFIC: 14 FT. CURB/EDGE OF PAVEMENT TO FACE OF CHANNELING

- 4. W5-1 SIGN SHALL BE USED WHEN WIDTHS ARE NARROWED FROM THOSE DEPICTED IN THE TRAFFIC CONTROL TYPICAL SECTIONS.
- 5. CONTRACTOR MAY USE CHANNELING DEVICES OR TEMPORARY BARRIER.
- PEDESTRIAN TRAFFIC SHALL BE RETAINED AT ALL TIMES OR TEMPORARY PROVISIONS SHALL BE PUT IN PLACE PRIOR TO COMMENCING WORK.
- 7. ANY DEVIATION FROM WHAT IS SHOWN ON THE TRAFFIC CONTROL TYPICAL SECTIONS OR DOCUMENTED IN THE TRAFFIC CONTROL TYPICAL SECTION NOTES WILL ONLY BE ALLOWED BY APPROVAL OF THE ENGINEER.

Survey Notes:

Legend

- 1. THE PURPOSE OF THIS PLAN IS TO SHOW THE EXISTING CONDITIONS OF A PORTION OF LEDGE ROAD IN NOTTINGHAM NH.
- 2. THE VERTICAL DATUM IS NAVD88 BASED ON GLOBAL POSITIONING SURVEY. ALL DISTANCES ARE US SURVEY

Pavement Marking Notes:

PLACEMENT AND COLOR OF PAVEMENT MARKING LINES, SYMBOLS AND WORDS SHALL CONFORM TO THE LATEST EDITION OF MUTCD, SECTION 632 OF NHDOT STANDARD SPECIFICATIONS CONTRACT SUPPLEMENTAL SPECIFICATIONS, NHDOT STANDARD PLANS FOR ROAD CONSTRUCTION (2016).

Retroflective Paint Pavement Marking Key:

---- EXISTING 50-FT CONTOUR

- - - EXISTING EDGE OF GRAVEL

SIGN

LIGHT

TRAVERSE

UTILITY POLE

BORING LOCATION

IRON ROD FOUND

IRON PIPE FOUND

WETLAND SYMBOL

TEMPORARY BENCH MARK

_____ EXISTING TREE LINE

---- ohe ----

—()—

B-1

-0-

EXISTING 10-FT CONTOUR

EXISTING EDGE OF WETLAND

EXISTING EDGE OF STREAM

EXISTING EDGE OF PAVEMENT

EXISTING OVERHEAD ELECTRIC

ROADWAY CENTERLINE

EXISTING CULVERT

{}SSL()={SIZE IN INCHES} SINGLE SOLID LINE (COLOR) {}DSL()={SIZE IN INCHES} DOUBLE SOLID LINE (COLOR) {}SSBL()={SIZE IN INCHES} SINGLE SOLID W/BROKEN LINE (COLOR) {}SBL()={SIZE IN INCHES} SINGLE BROKEN LINE (COLOR) {}DBL()={SIZE IN INCHES} DOUBLE BROKEN LINE (COLOR) (W) = WHITE(Y) = YELLOW

DRAFT PLANS NOT FOR CONSTRUCTION

_	PROPOSED EDGE OF PAVEMENT PROPOSED CULVERT PROPOSED GUARDRAIL	designed by: JWB	drawn by:	AGL	approved by:
— ⊸	PROPOSED SLOPE IMPACTS PROPOSED SILT FENCE	date: July 2019	project no:	887	file name:
	PROPOSED SLOPE PROTECTION PROPOSED STONE APRON Proposed Paved Roadway Proposed Bituminous Curb Proposed Stone Lined Swale Proposed Grass Lined Swale	Town of Nottingham, New Hampshire	Highway Department	I edge Farm Road	
				dra	wir

sheet: ---- of

___ PROPOSED SLOPE IMPACTS

PROPOSED SILT FENCE

Abbreviations:

DEPT

DEPARTMENT

ABBREV.	MEANING	ABBREV.	MEANING	ABBREV.	MEANING	ABBREV.	MEANING
@	АТ	DH	DRILL HOLE	L	LEAVE	SPEC	SPECIFICATION
ABD	ABANDONED	DI	DUCTILE IRON	MBOX	MAIL BOX	SQ	SQUARE
ACP	ASBESTOS CEMENT PIPE	DICL	DUCTILE IRON	MHW	MEAN HIGH WATER	S	SANITARY SEWER
ADD'L	ADDITIONAL		CEMENT-LINED	MIN	MINIMUM	ST	STEEL
APPROX	APPROXIMATE	DIA	DIAMETER	MON	MONUMENT	STD	SINGLE TILE DUCT
ASTM	AMERICAN SOCIETY FOR	DISCH	DISCHARGE	NIC	NOT IN CONTRACT	STY	STORY
	TESTING AND MATERIALS	DMH	DRAIN MANHOLE	NO, #	NUMBER	SW	SIDEWALK
ВТМ	BOTTOM	DT	DRAIN TILE	NTS"	NOT TO SCALE	T&B.	TOP AND BOTTOM
BH	BRADLEY HEAD	DWG	DRAWING	PB	PULL BOX	TBC	TOP BACK OF CURB
BIT	BITUMINOUS CONCRETE	EA	EACH	PC	PRECAST CONCRETE	TCC	TRAFFIC CONTROL CABINET
BLDG	BUILDING	EF	EACH FACE		PRESTRESSED CONCRETE	TD	TELEDUCT
BMP	BUILDING MONITORING POINT	E-VAULT	ELECTRIC-VAULT	PCCP	CYLINDER PIPE		TELEPHONE CONDUIT/DUCT
BOW	BOTTOM OF WALL	EL, ELEV	ELEVATION	PCI	PIT CAST IRON	TEL	BANK
BR	BRICK	ELEC, E	ELECTRIC	PERF	PEFORATED	TH	TOP OF HATCH
CB	CATCH BASIN	EOP	EDGE OF PAVEMENT	PM	PARKING METER	TL	TRAFFIC LIGHT CONDUIT
C.B.	CONCRETE BOUND	EXIST	EXISTING	PROP	PROPOSED	TOW	TOP OF WALL
CBCI	CATCH BASIN WITH CURB	FA	FIRE ALARM	PSI	POUNDS PER SQUARE INCH	TRAF	TRAFFIC CONDUIT
	INLET	FD	FLOOR DRAIN	PT	POST TENSION	TS	TRAFFIC SIGNAL
CC	CAST-IN-PLACE CONCRETE	FED	FEDERAL	PVC	POLYVINYL CHLORIDE	TYP	TYPICAL
CEM	CEMENT	FG	FIBERGLASS	R	REMOVE/RELOCATE	UMP	UTILITY MONITORING POINT
CL	CLEAR	FM	FORCE MAIN	REC	RECORD INFORMATION	UNK	UNKNOWN
Ę	CENTER LINE	FND	FOUND	REINF	REINFORCEMENT	UP	UTILITY POLE
CLF	CHAIN LINK FENCE	FP	FLAG POLE	RES	REVERE EXTENSION SEWER	VC	VITRIFIED CLAY
CI	CAST IRON	FT	FOOT	RCP	REINFORCED CONCRETE PIPE	VERT	VERTICAL
CICL	CAST IRON CEMENT-LINED	GRAN	GRANITE	RS	RECEIVING SHAFT	VGC	VERTICAL GRANITE CURB
CIP	CAST IN PLACE	HDPE	HIGH DENSITY	ROW	RIGHT-OF-WAY	W	WATER
С.О.	CLEAN OUT		POLYETHYLENE	SB	STREET LIGHT BASE	W/	WITH
CONC	CONCRETE	HH	HAND HOLE	S.B.	STONE BOUND	WC	WYE CONNECTION
CONN	CONNECTION	HORIZ	HORIZONTAL	SD	STORM DRAIN	WIP	WROUGHT IRON PIPE
COR	CORNER	HYD	HYDRANT	SF	FIRE SERVICE	WM	WATER METER
CP	CONCRETE PIPE	H/C	HANDICAP	SGC	SLOPED GRANITE CURB	WMH	WATER MANHOLE
CMP	CORRUGATED METAL PIPE	INV	INVERT		STREET LIGHT CONTROL	WFLG	WETLAND FLAG
D	DRAIN	IN	INCHES	SLCC	CABINET	**1 LO	WEIL/ND IL/NO
		. —					

SMH

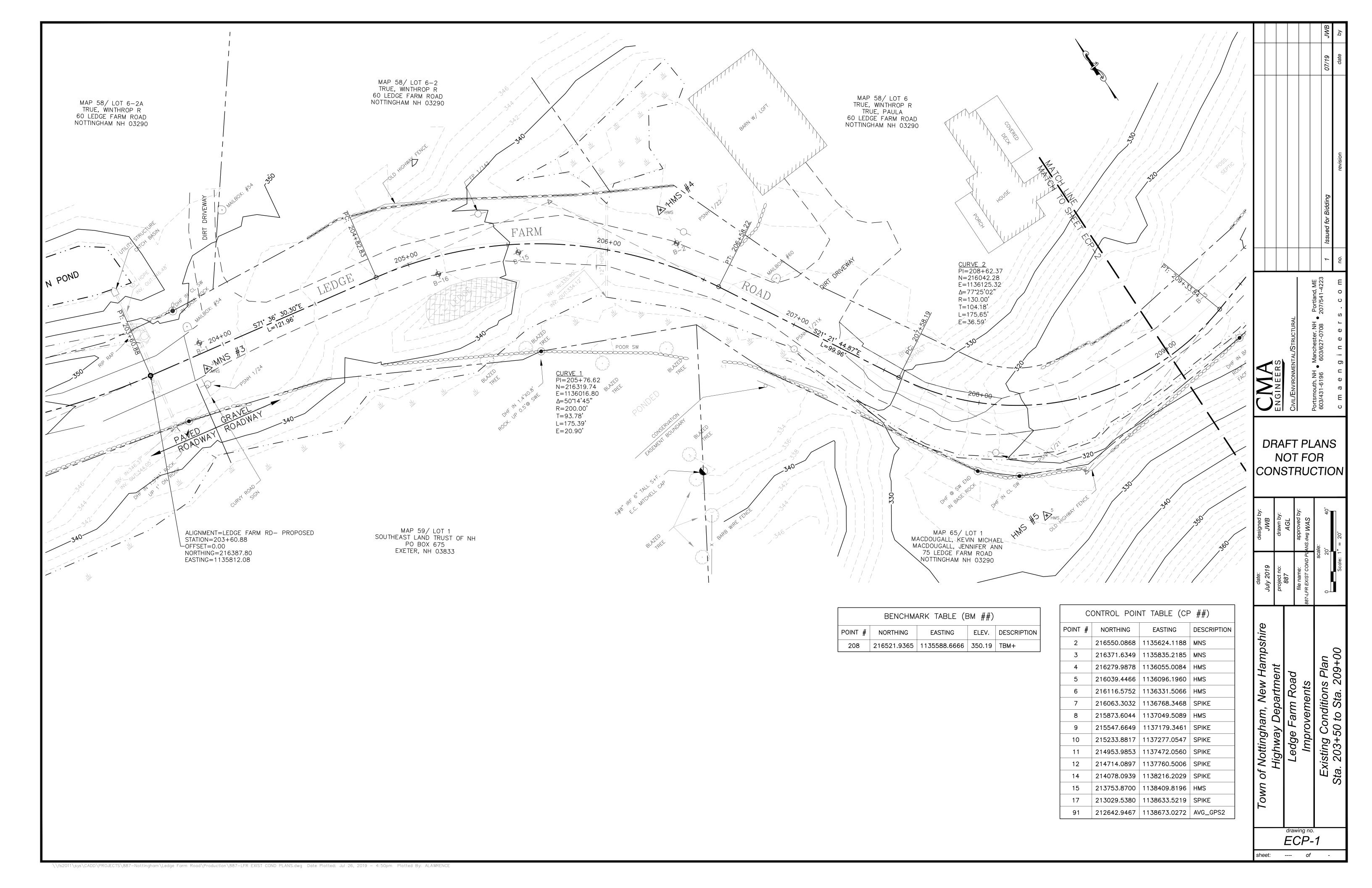
SEWER MANHOLE

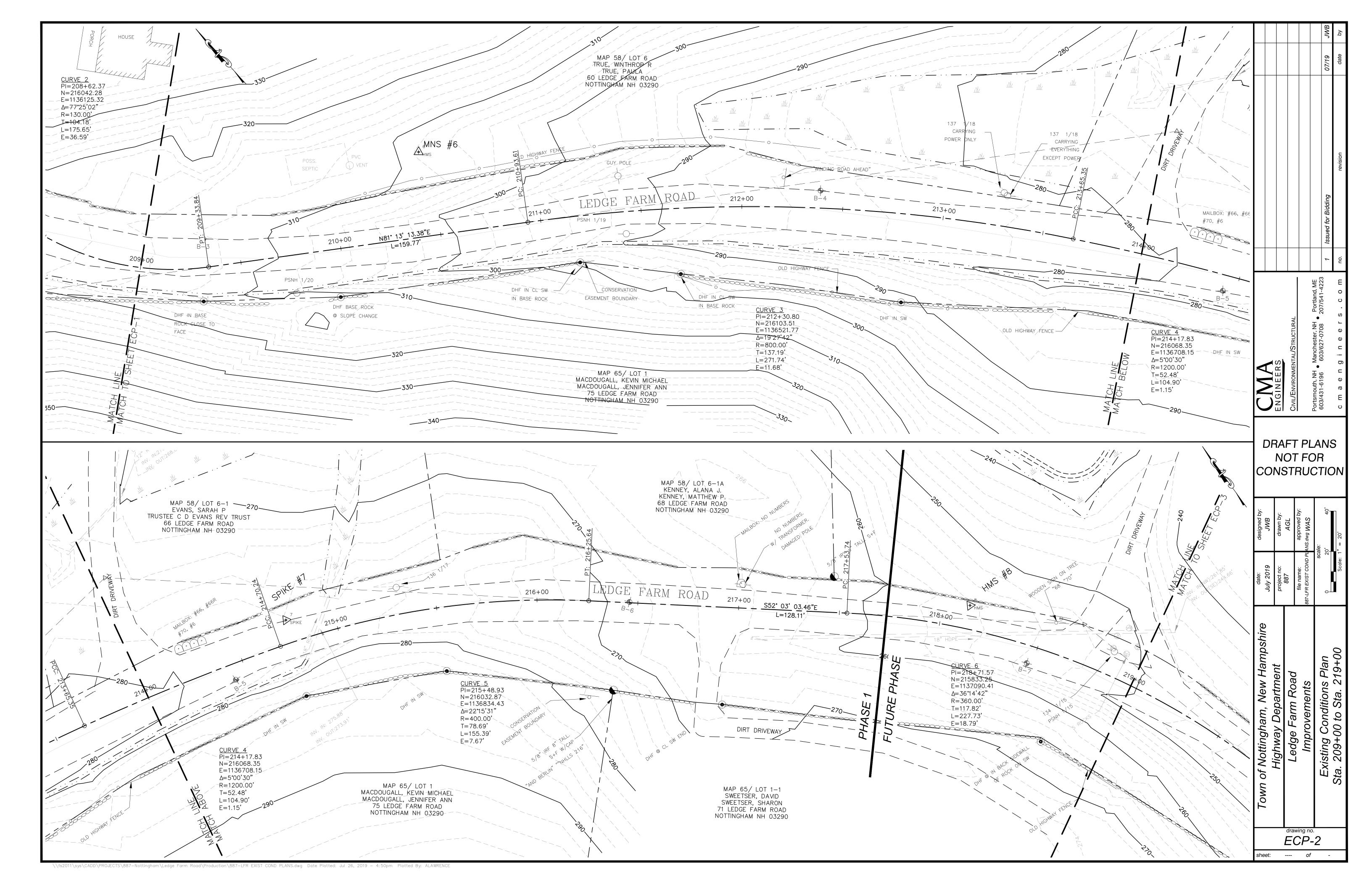
Po 207

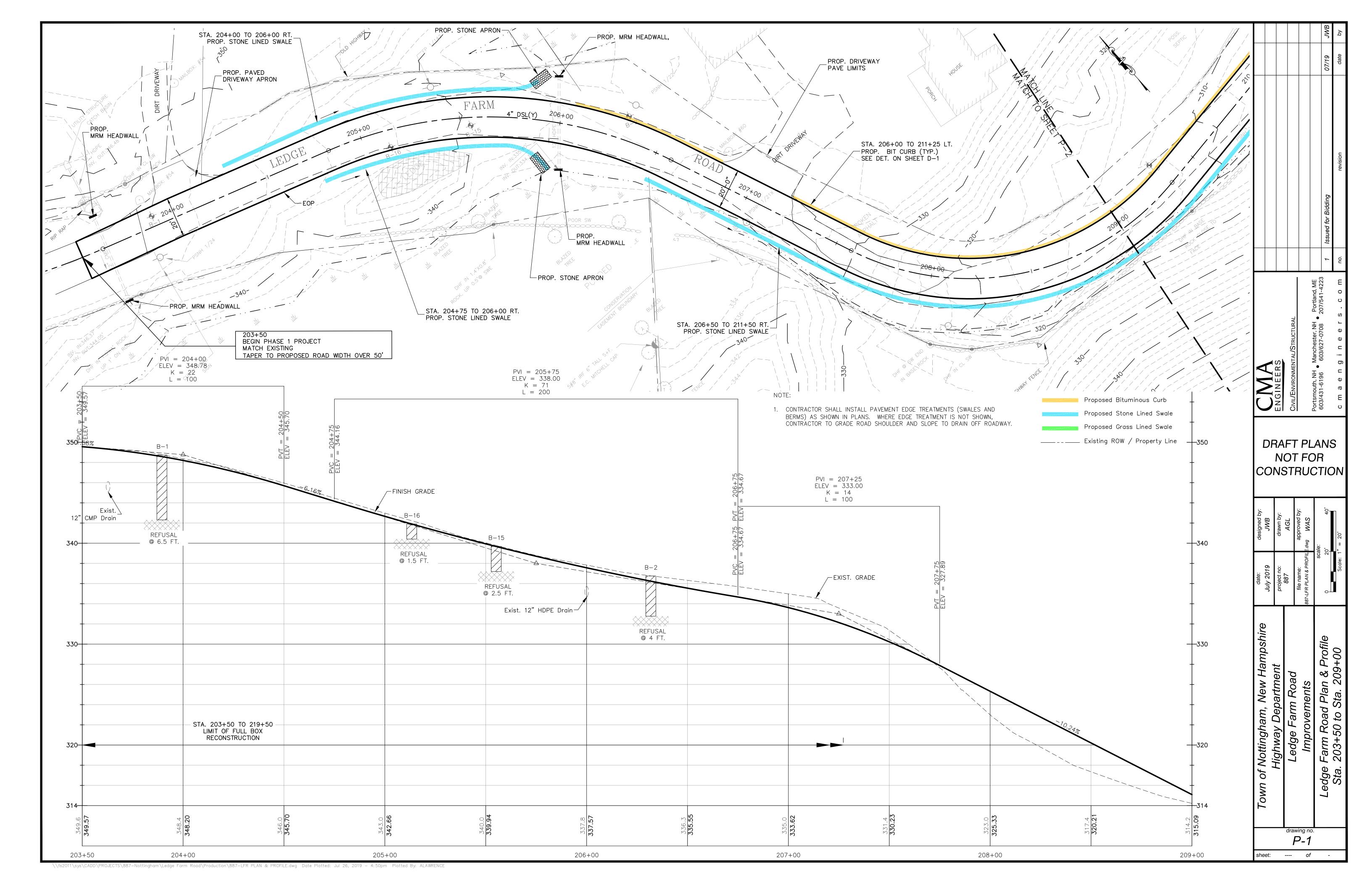
₩ 96

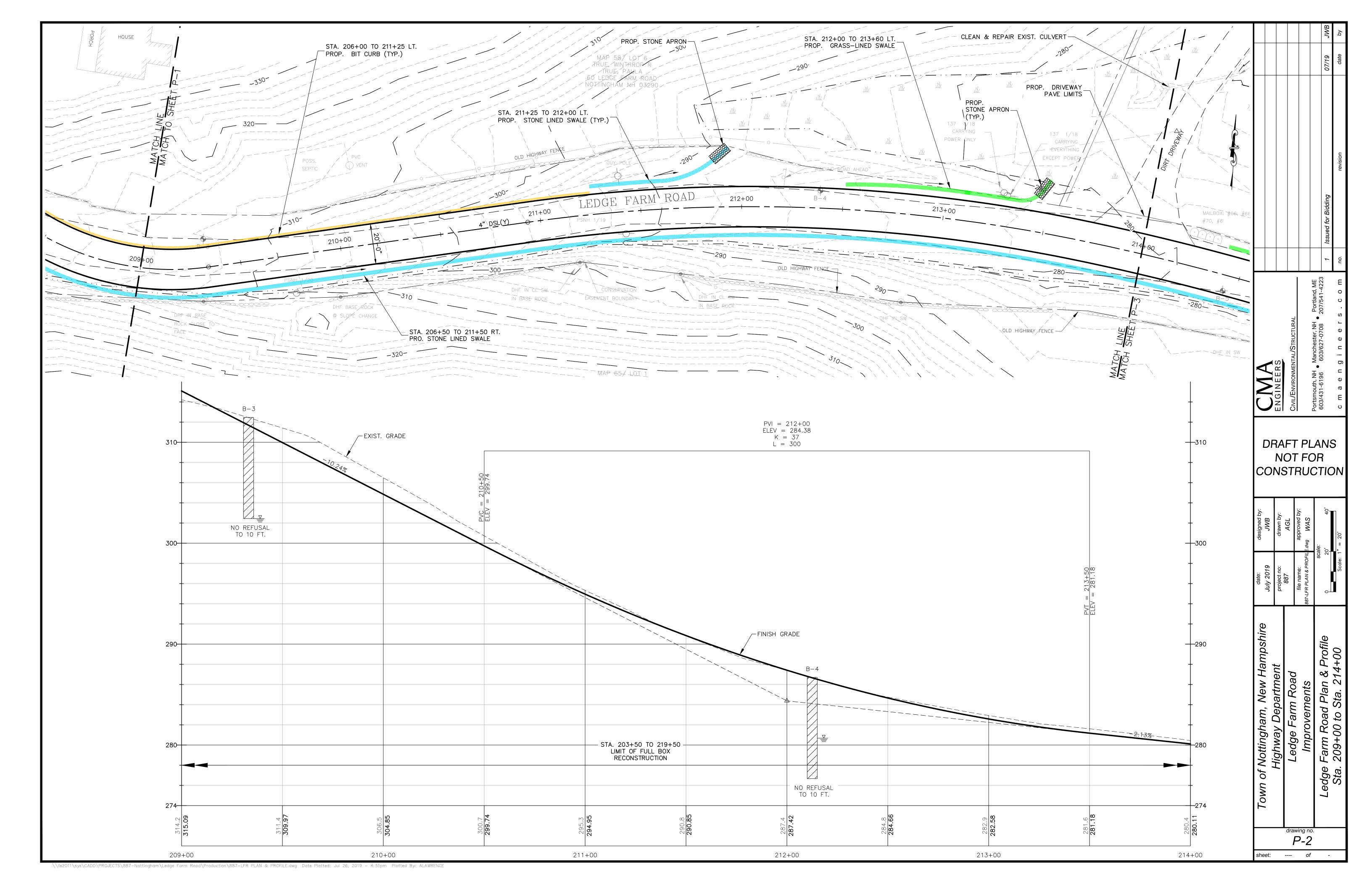
s2011\sys\CADD\PROJECTS\887—Nottingham\Ledge Farm Road\Production\887—LFR NOTES.dwg Date Plotted: Jul 26, 2019 — 4:50pm Plotted By: ALAWRENCE

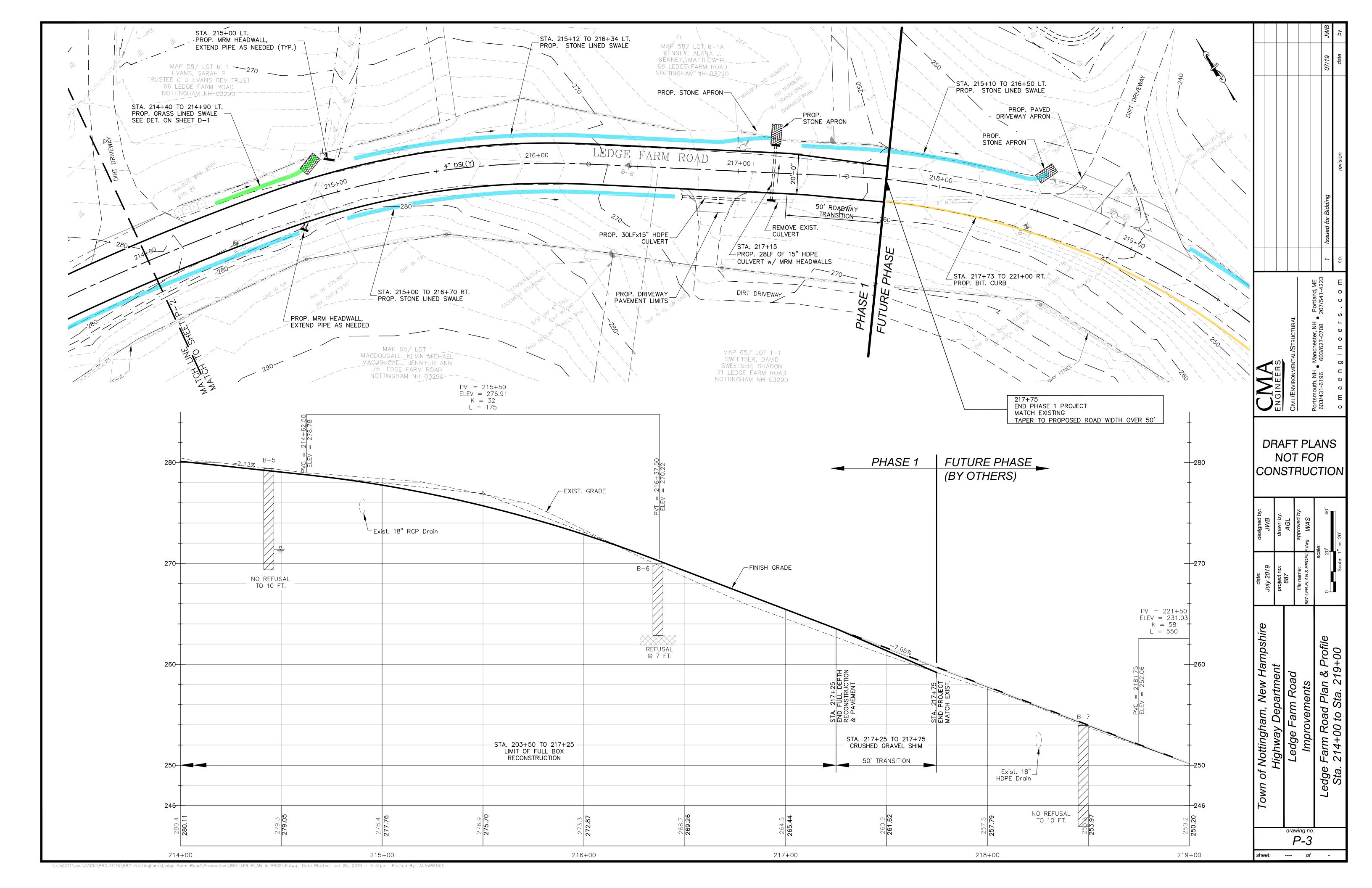
IRON PIPE

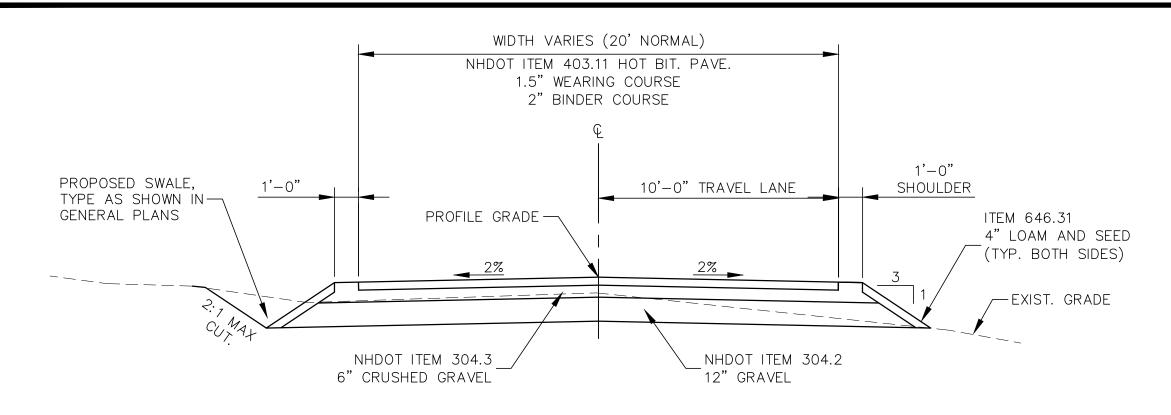






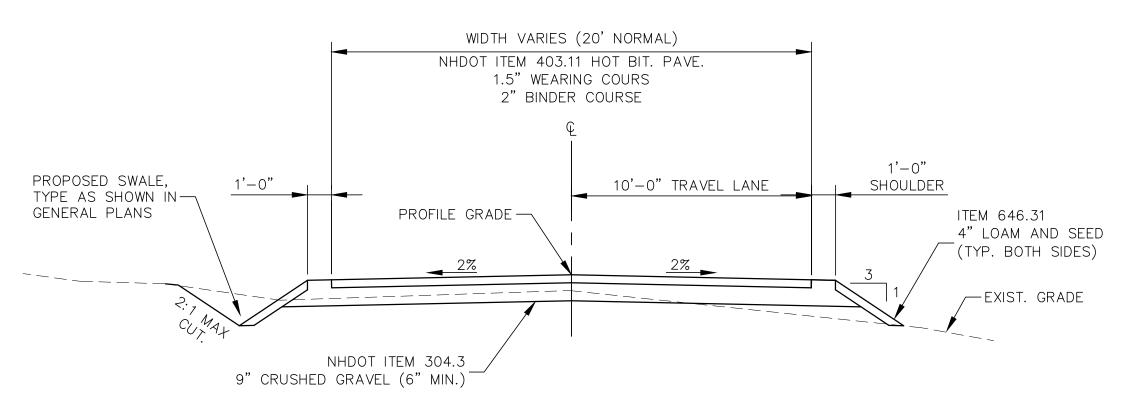






Paved Road Typical Section-Full Box Replacement

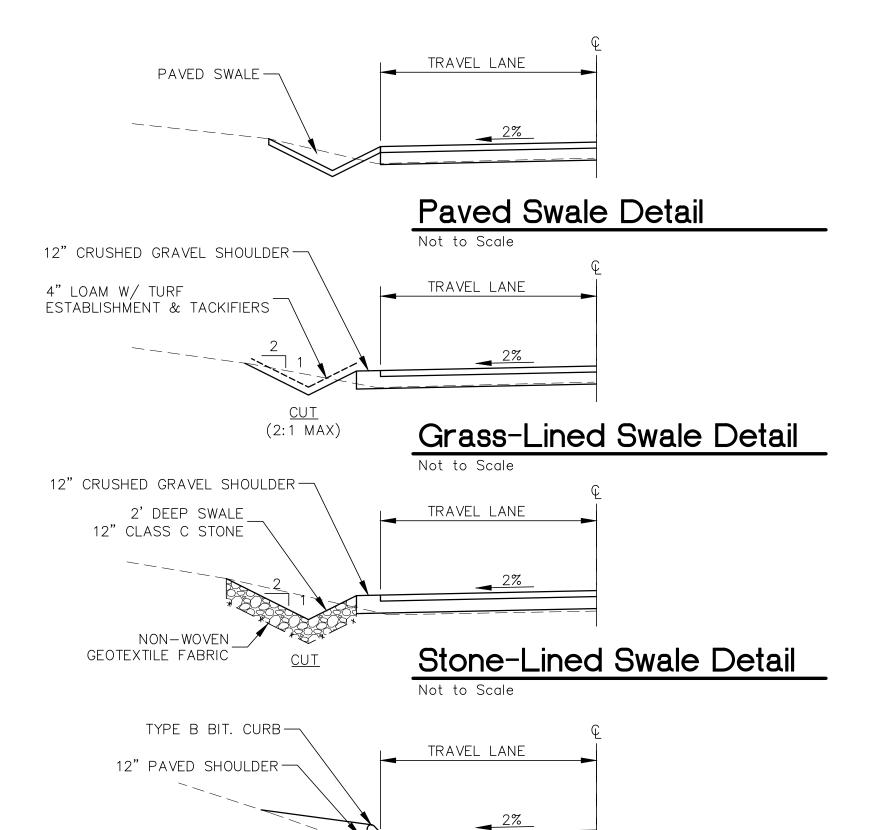
Scale: 1/4" = 1'-0"

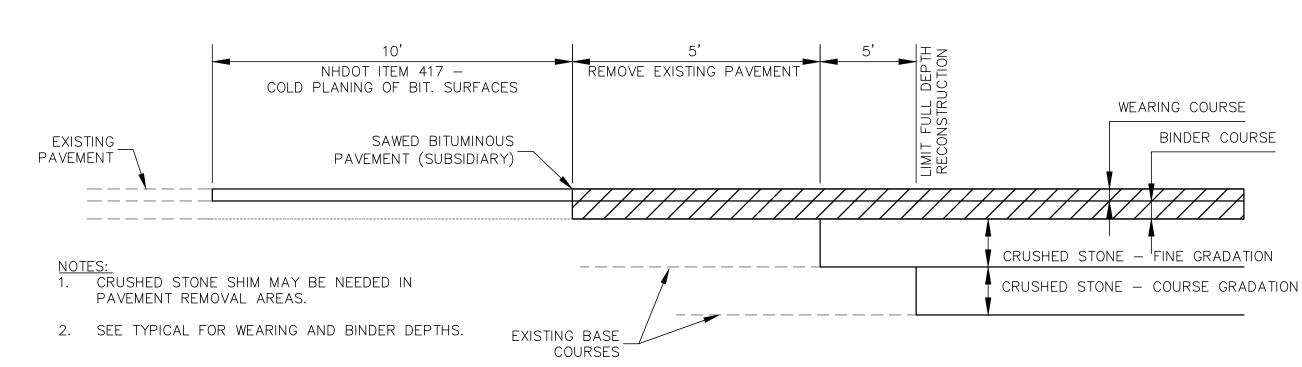


Paved Road Typical Section-Crushed Gravel Shim

Scale: 1/4" = 1'-0"

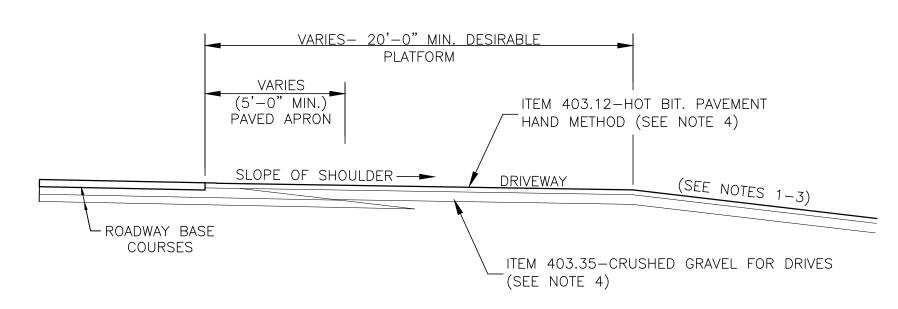
Bituminous Curb Detail





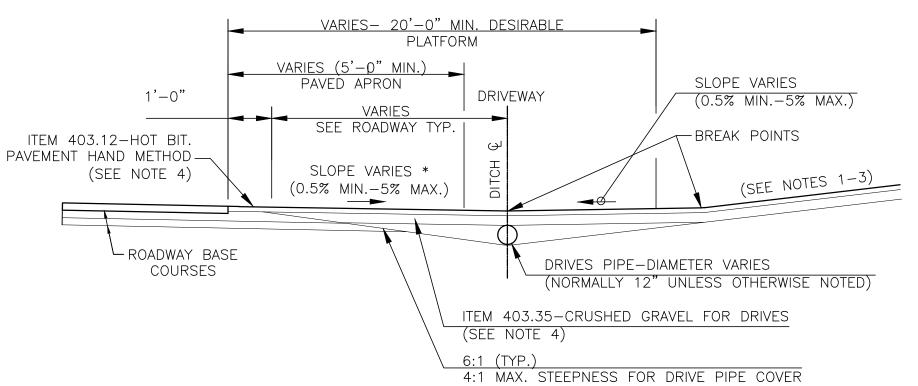
Pavement and Base Course Transitions

Not to Scale



Typical Driveway Section in Fill

Not to Scale



Typical Driveway Section in Cut

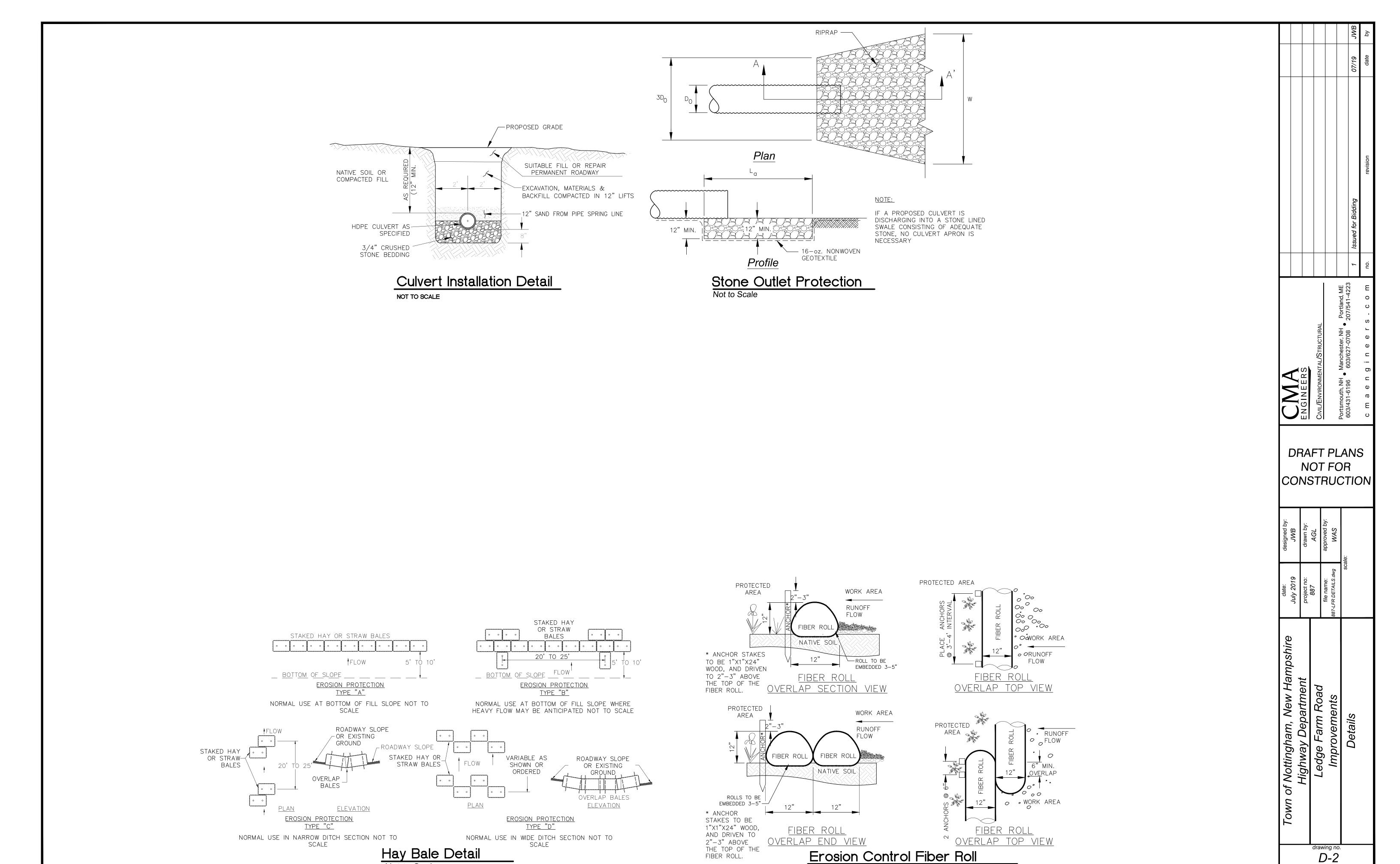
Not to Scale

- NOTES:
 1. GRADES OF MAJOR ENTRANCES BEYOND THE PLATFORM SHOULD NOT
- 2. GRADES OF OTHER DRIVES BEYOND THE PLATFORM SHOULD NOT EXCEED 15%.
- 3. THE ALGEBRAIC DIFFERENCE BETWEEN TWO ADJACENT GRADES SHOULD NOT EXCEED 10%.
- 4. PAVEMENT & BASE COURSE DEPTHS FOR RESIDENTIAL DRIVES SHALL BE 8" CRUSHED GRAVEL WITH 3" H.B.P. (HAND METHOD) PLACED IN TWO COURSES. IF THE DRIVE IS ADJACENT TO A ROADWAY WITH A CRUSHED STONE STRUCTURAL BOX, 6" OF CRUSHED STONE FINE GRADATION MAY BE SUBSTITUTED FOR THE 8" OF CRUSHED GRAVEL
- 5. PAVEMENT & BASE COURSE DEPTHS FOR COMMERCIAL DRIVES SHALL BE 12" CRUSHED GRAVEL WITH 3" H.B.P. (HAND METHOD) PLACED IN TWO COURSES. IF THE DRIVE IS ADJACENT TO A ROADWAY WITH A CRUSHED STONE STRUCTURAL BOX, 9" OF CRUSHED STONE FINE GRADATION MAY BE SUBSTITUTED FOR THE 12" OF CRUSHED GRAVEL
- 6. FOR UNPAVED DRIVES, THE PAVED APRON NORMALLY ENDS AT THE RADIUS TANGENT POINT.
- 7. DITCHES ARE RECOMMENDED FOR UNCURBED DRIVEWAYS IN CUT
- 8. THE CONTRACTOR SHALL LAYOUT PROPOSED DRIVEWAY RADIUS, FLARE, AND CURB TAPERS FOR REVIEW BY THE OWNER AND ENGINEER PRIOR

Portland, ME 207/541-4223

DRAFT PLANS **NOT FOR** CONSTRUCTION

designed by: JWB	drawn by: AGL		approved by:	WAS	scale:		
date: July 2019	project no: 887		file name:	887-LFR DETAILS.dwg	SCS		
Town of Nottingham, New Hampshire	нідпwау Deparment	l edge Farm Road	-	Improvements	Details		
	drawing no. D-1						
sheet: of -							



Not to Scale

sheet: ---- of -

Not to Scale