

# MASSACHUSETTS DEPARTMENT OF TRANSPORTATION HIGHWAY DIVISION

MENDON ROUTE 16			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	1	116
PROJECT FILE NO.		608491	

TITLE SHEET & INDEX

PLAN AND PROFILE OF  
UXBRIDGE ROAD, HASTINGS STREET, MILFORD STREET (ROUTE 16)

IN THE TOWN OF

MENDON

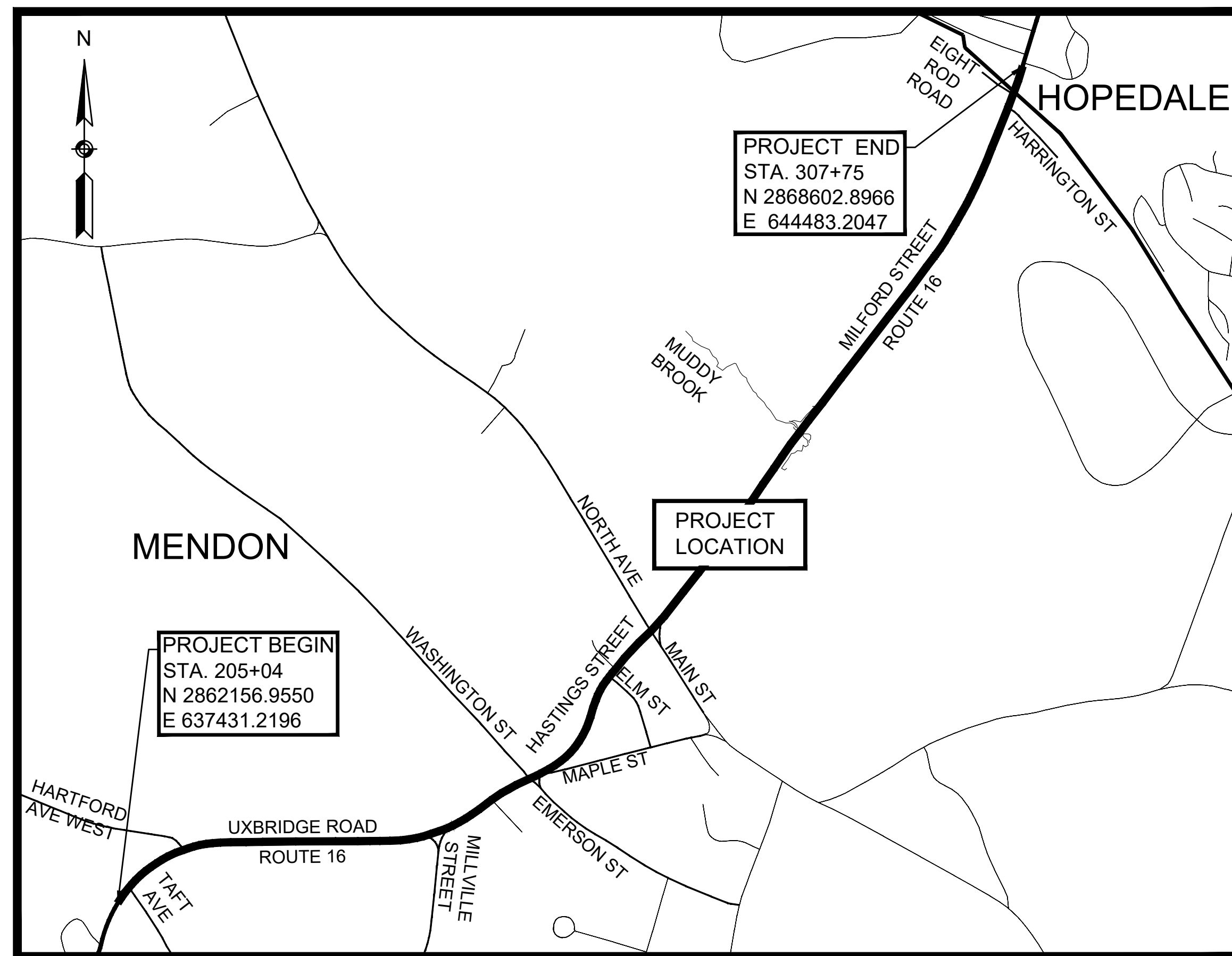
WORCESTER COUNTY

FEDERAL AID PROJECT NO.

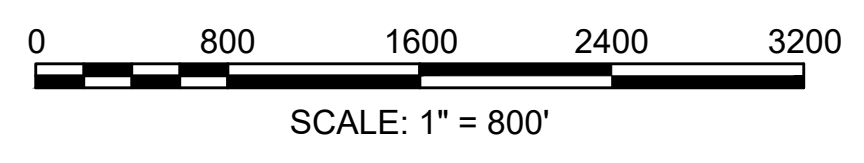
## 25% SUBMITTAL

THESE PLANS ARE SUPPLEMENTED BY THE OCTOBER 2017 CONSTRUCTION STANDARD DETAILS, THE 2015 OVERHEAD SIGNAL STRUCTURE AND FOUNDATION STANDARD DRAWINGS, MASSDOT TRAFFIC MANAGEMENT PLANS AND DETAIL DRAWINGS, THE 1990 STANDARD DRAWINGS FOR SIGNS AND SUPPORTS, THE 1968 STANDARD DRAWINGS FOR TRAFFIC SIGNALS AND HIGHWAY LIGHTING, AND THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK.



INDEX	
SHEET NO.	DESCRIPTION
1	TITLE SHEET & INDEX
2	LEGEND & ABBREVIATIONS
3	GENERAL NOTES
4	KEY PLAN
5 - 11	TYPICAL SECTIONS
12 - 17	CONSTRUCTION BASELINE TIE PLANS
18 - 38	CONSTRUCTION PLANS
39 - 48	PROFILES
49 - 50	SIDE STREET PROFILES
51 - 71	DRAINAGE & UTILITY PLANS
72 - 91	TRAFFIC SIGNS & PAVEMENT MARKINGS
92 - 95	TRAFFIC SIGN SUMMARY
96 - 101	TRAFFIC SIGNAL PLANS
102 - 103	TRAFFIC DETAILS
104 - 109	TTCP DETAILS
110 - 111	CONSTRUCTION DETAILS
112 - 114	WHEELCHAIR RAMP AND DRIVEWAY DETAILS
115 - 116	CRITICAL CROSS SECTIONS



DESIGN DESIGNATION (ROUTE 16)	
DESIGN SPEED	40-50 MPH
ADT (2019)	18,300
ADT (2031)	19,300
K	8.0%
D	74.60% EB
T (PEAK HOUR)	3.2%
T (AVERAGE DAY)	2.9%
DHV	1,441
DDHV	1,075 EB
FUNCTIONAL CLASSIFICATION	URBAN ARTERIAL



LENGTH OF PROJECT = 10,271 FEET = 1.945 MILES

	DATE	DESCRIPTION	REV #
			
	APPROVED _____ CHIEF ENGINEER		
31 ST. JAMES AVE SUITE 300 BOSTON, MA 02116		_____ DATE	

GENERAL SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
		JERSEY BARRIER
		CATCH BASIN
		CATCH BASIN CURB INLET
		FLAG POLE
		GAS PUMP
		MAIL BOX
		POST SQUARE
		POST CIRCULAR
		WELL
		ELECTRIC HANDHOLE
		FENCE GATE POST
		GAS GATE
		BORING HOLE
		MONITORING WELL
		TEST PIT
		HYDRANT
		LIGHT POLE
		COUNTY BOUND
		GPS POINT
		CABLE MANHOLE
		DRAINAGE MANHOLE
		ELECTRIC MANHOLE
		GAS MANHOLE
		MISC MANHOLE
		SEWER MANHOLE
		TELEPHONE MANHOLE
		WATER MANHOLE
		MASSACHUSETTS HIGHWAY BOUND
		MONUMENT
		STONE BOUND
		TOWN OR CITY BOUND
		TRAVERSE OR TRIANGULATION STATION
		TROLLEY POLE OR GUY POLE
		TRANSMISSION POLE
		UTILITY POLE W/ FIREBOX
		UTILITY POLE WITH DOUBLE LIGHT
		UTILITY POLE W / 1 LIGHT
		UTILITY POLE
		BUSH
		TREE
		STUMP
		SWAMP / MARSH
		WATER GATE
		PARKING METER
		OVERHEAD CABLE/WIRE
		CURBING
		CONTOURS (ON-THE-GROUND SURVEY DATA)
		CONTOURS (PHOTOGRAMMETRIC DATA)
		UNDERGROUND DRAIN PIPE (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND ELECTRIC DUCT (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND GAS MAIN (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND SEWER MAIN (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND TELEPHONE DUCT (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND WATER MAIN (DOUBLE LINE 24 INCH AND OVER)
		BALANCED STONE WALL
		GUARD RAIL - STEEL POSTS
		GUARD RAIL - WOOD POSTS
		GUARD RAIL - DOUBLE FACE - STEEL POSTS
		GUARD RAIL - DOUBLE FACE - WOOD POSTS
		CHAIN LINK OR METAL FENCE
		WOOD FENCE
		SEDIMENT CONTROL BARRIER
		TREE LINE
		SAWCUT LINE
		TOP OR BOTTOM OF SLOPE
		LIMIT OF EDGE OF PAVEMENT OR COLD PLANE AND OVERLAY
		BANK OF RIVER OR STREAM
		BORDER OF WETLAND
		100 FT WETLAND BUFFER
		200 FT RIVERFRONT BUFFER
		STATE HIGHWAY LAYOUT
		TOWN OR CITY LAYOUT
		COUNTY LAYOUT
		RAILROAD SIDELINE
		TOWN OR CITY BOUNDARY LINE
		PROPERTY LINE OR APPROXIMATE PROPERTY LINE
		EASEMENT

TRAFFIC SYMBOLS

EXISTING (REM)	PROPOSED	DESCRIPTION
		CONTROLLER PHASE ACTUATED
		TRAFFIC SIGNAL HEAD (SIZE AS NOTED)
		WIRE LOOP DETECTOR
		VIDEO DETECTION ZONE
		VIDEO DETECTION CAMERA
		PEDESTRIAN PUSH BUTTON, SIGN, AND SADDLE
		EMERGENCY PREEMPTION CONFIRMATION STROBE LIGHT
		VEHICULAR SIGNAL HEAD
		PEDESTRIAN SIGNAL HEAD
		SIGNAL POST AND BASE
		MAST ARM, SHAFT AND BASE (ARM LENGTH AS NOTED)
		SPAN POLE
		SIGN AND POST
		SIGN AND POST (2 POSTS)
		OPTICAL PRE-EMPTION DETECTOR
		CONTROL CABINET, GROUND MOUNTED
		PULL BOX 12"x12" (OR AS NOTED)
		ELECTRIC HANDHOLE 12"x24" (OR AS NOTED)
		TRAFFIC SIGNAL CONDUIT

PAVEMENT MARKINGS SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
		PAVEMENT ARROW - WHITE
		LEGEND "ONLY" - WHITE
		STOP LINE
		CROSSWALK
		SOLID WHITE LINE
		SOLID YELLOW LINE
		BROKEN WHITE LINE
		BROKEN YELLOW LINE
		DOTTED WHITE LINE
		DOTTED YELLOW LINE
		DOTTED WHITE LINE EXTENSION
		DOTTED YELLOW LINE EXTENSION
		DOUBLE WHITE LINE
		DOUBLE YELLOW LINE
		YIELD LINE

ABBREVIATIONS

GENERAL	
AADT	ANNUAL AVERAGE DAILY TRAFFIC
ABAN	ABANDON
ADJ	ADJUST
APPROX.	APPROXIMATE
A.C.	ASPHALT CONCRETE
ACCM PIPE	ASPHALT COATED CORRUGATED METAL PIPE
BIT.	BITUMINOUS
BC	BOTTOM OF CURB
BD.	BOUND
BL	BASELINE
BLDG	BUILDING
BM	BENCHMARK
BO	BY OTHERS
BOS	BOTTOM OF SLOPE
BR.	BRIDGE
CB	CATCH BASIN
CBCI	CATCH BASIN WITH CURB INLET
CC	CEMENT CONCRETE
CCM	CEMENT CONCRETE MASONRY
CEM	CEMENT
CI	CURB INLET
CIP	CAST IRON PIPE
CLF	CHAIN LINK FENCE
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CSP	CORRUGATED STEEL PIPE
CO.	COUNTY
CONC	CONCRETE
CONT	CONTINUOUS
CONST	CONSTRUCTION
CR GR	CROWN GRADE
DHV	DESIGN HOURLY VOLUME
DI	DROP INLET
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DW	STEADY DON'T WALK - PORTLAND ORANGE
DWY	DRIVEWAY
ELEV (or EL.)	ELEVATION
EMB	EMBANKMENT
EOP	EDGE OF PAVEMENT
EXIST (or EX)	EXISTING
EXC	EXCAVATION
F&C	FRAME AND COVER
F&G	FRAME AND GRATE
FDN.	FOUNDATION
FLDSTN	FIELDSTONE
GAR	GARAGE
GD	GROUND
GG	GAS GATE
GI	GUTTER INLET
GIP	GALVANIZED IRON PIPE
GRAN	GRANITE
GRAV	GRAVEL
GRD	GUARD
HDW	HEADWALL
HMA	HOT MIX ASPHALT
HOR	HORIZONTAL
HYD	HYDRANT
INV	INVERT
JCT	JUNCTION
L	LENGTH OF CURVE
LSA	LANDSCAPE AREA
LB	LEACH BASIN
LP	LIGHT POLE
LT	LEFT
MAX	MAXIMUM
MB	MAILBOX
MH	MANHOLE
MHB	MASSACHUSETTS HIGHWAY BOUND
MIN	MINIMUM
NIC	NOT IN CONTRACT
NO.	NUMBER
NTS	NOT TO SCALE
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
P.G.L.	PROFILE GRADE LINE
PI	POINT OF INTERSECTION
POC	POINT ON CURVE
POT	POINT ON TANGENT
PRC	POINT OF REVERSE CURVATURE
PROJ	PROJECT
PROP	PROPOSED
PSB	PLANTABLE SOIL BORROW
PT	POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY

MENDON ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	2	116

PROJECT FILE NO. 608491

LEGEND & ABBREVIATIONS

ABBREVIATIONS (cont.)

GENERAL	
PVMT	PAVEMENT
PWW	PAVED WATERWAY
R	RADIUS OF CURVATURE
R&D	REMOVE AND DISPOSE
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
RDWY	ROADWAY
REM	REMOVE
RET	RETAIN
RET WALL	RETAINING WALL
ROW	RIGHT OF WAY
RR	RAILROAD
R&R	REMOVE AND RESET
R&S	REMOVE AND STACK
RT	RIGHT
SB	STONE BOUND
SHLD	SHOULDER
SMH	SEWER MANHOLE
ST	STREET
STA	STATION
SSD	STOPPING SIGHT DISTANCE
SHLO	STATE HIGHWAY LAYOUT LINE
SUP	SHARED USE PATH
SW	SIDEWALK
T	TANGENT DISTANCE OF CURVE/TRUCK %
TAN	TANGENT
TEMP	TEMPORARY
TC	TOP OF CURB
TOS	TOP OF SLOPE
TYP	TYPICAL
UP	UTILITY POLE
VAR	VARIES
VERT	VERTICAL
VC	VERTICAL CURVE
WCR	WHEEL CHAIR RAMP
WG	WATER GATE
WIP	WROUGHT IRON PIPE
WM	WATER METER/WATER MAIN
X-SECT	CROSS SECTION

TRAFFIC SIGNAL ABBREVIATIONS

CAB	CABINET
CCVE	CLOSED CIRCUIT VIDEO EQUIPMENT
DW	STEADY UPRAISED HAND
FDW	FLASHING UPRAISED HAND
FRL	FLASHING CIRCULAR RED
FRL	FLASHING RED LEFT ARROW
FRR	FLASHING RED RIGHT ARROW
FY	FLASHING CIRCULAR YELLOW
FYL	FLASHING YELLOW LEFT ARROW
FYR	FLASHING YELLOW RIGHT ARROW
G	STEADY CIRCULAR GREEN
GL	STEADY GREEN LEFT ARROW
GR	STEADY GREEN RIGHT ARROW
GSL	STEADY GREEN SLASH LEFT ARROW
GSR	STEADY GREEN SLASH RIGHT ARROW
GV	STEADY GREEN VERTICAL ARROW
OL	OVERLAP
PED	PEDESTRIAN
PTZ	PAN, TILT, ZOOM
R	STEADY CIRCULAR RED
RL	STEADY RED LEFT ARROW
RR	STEADY RED RIGHT ARROW
TR SIG	TRAFFIC SIGNAL
TSC	TRAFFIC SIGNAL CONDUIT
W	STEADY WALKING PERSON
Y	STEADY CIRCULAR YELLOW
YL	STEADY YELLOW LEFT ARROW



MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	3	116
PROJECT FILE NO.		608491	

GENERAL NOTES

GENERAL NOTES

- THIS PLAN WAS PREPARED BY NITSCH ENGINEERING IN JULY-SEPTEMBER, 2018, UTILIZING VARIOUS SURVEY EQUIPMENT TO INCLUDE LEICA TPS 1200 TOTAL STATION, LEICA GS14 GPS AND TERRESTRIAL MOBILE LIDAR. FIELD UPDATES AND ADDITIONAL TOPOGRAPHIC DATA WAS COLLECTED IN OCTOBER 2020.
- WETLANDS WERE DELINEATED BY HNTB IN ACCORDANCE WITH THE MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION BETWEEN AUGUST 7, 2020 AND OCTOBER 1, 2020.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY EXISTING GRADES AND ELEVATIONS. THE CONTRACTOR SHALL INFORM THE ENGINEER OF ANY GRADE DISCREPANCIES PRIOR TO CONSTRUCTION.
- AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION.
- THE CONTRACTOR SHALL CAUSE AS LITTLE INTERFERENCE AND INCONVENIENCE AS POSSIBLE TO ADJUTERS. THE CONTRACTOR SHALL MAINTAIN SAFE AND CONVENIENT ACCESS TO PRIVATE PROPERTY AT ALL TIMES. EMERGENCY VEHICLE ACCESS SHALL BE MAINTAINED AT ALL TIMES.
- CONTRACTOR SHALL BE LIMITED TO CONSTRUCTION ACTIVITIES WITHIN THE IDENTIFIED LIMITS OF WORK AS SHOWN ON THE PLANS, OR AS DIRECTED TO DO SO BY THE ENGINEER.
- CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FROM THE TOWN AND APPLICABLE AGENCIES PRIOR TO COMMENCING WORK.
- CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITY SERVICES AND HIGHWAY LIGHTING THROUGHOUT CONSTRUCTION UNTIL AND UNLESS THEY ARE REPLACED PER THE CONTRACT.
- ALL GRANITE CURB THAT IS REMOVED SHALL BE RESET OR DISCARDED AS REQUIRED BY THE ENGINEER. GRANITE CURB THAT IS TO BE RESET SHALL NOT BE RANDOMLY MIXED WITH NEW CURB, BUT SHALL BE RESET SO AS TO GIVE A UNIFORM APPEARANCE.
- DEWATERING IS LIKELY TO BE REQUIRED FOR THE CULVERT EXTENSIONS AND WORK ON THE DRAINAGE IMPROVEMENTS. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXTENT OF DEWATERING REQUIRED AND TO PROPOSE THE MOST APPROPRIATE METHODS AND MATERIALS FOR DEWATERING THAT WILL ULTIMATELY BE APPROVED BY THE MASSDOT PROJECT ENGINEER. PLANS AND CALCULATIONS FOR ALL WATER CONTROL MEASURES WILL BE DEVELOPED BY THE CONTRACTOR, STAMPED BY A PROFESSIONAL CIVIL ENGINEER REGISTERED IN THE COMMONWEALTH, AND SUBMITTED TO MASSDOT'S PROJECT ENGINEER FOR APPROVAL PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- ALL DEWATERING AND/OR PUMP-AROUND RELATED EARTHWORK WILL BE CONDUCTED IN SUCH A MANNER AS TO PREVENT POTENTIAL SILTATION AND CONTAMINATION OF THE WETLANDS AND WATERWAYS WITHIN THE PROJECT LIMITS. ANY PUMPING DISCHARGE WILL NOT BE ALLOWED TO ENTER DIRECTLY INTO STREAMS OR ADJACENT WETLAND RESOURCE AREAS. WATER FROM THE WORK AREA WILL BE PUMPED TO A SEDIMENT FILTER BAG, WHICH WILL BE PLACED IN AN UPLAND AREA AND ENCIRCLED WITH COMPOST FILTER TUBES OR STRAW WATTLES. DEWATERING WILL BE CAREFULLY MONITORED TO ENSURE THAT THE WATER IS NOT PUMPED FASTER THAN IT CAN BE TREATED AND WILL BE TIMED TO AVOID PERIODS OF HIGH FLOW. ALL FILTERED SEDIMENTS WILL BE REMOVED FROM THE PROJECT AREA AND DISPOSED OFF-SITE. ONCE ALL CONSTRUCTION IN DEWATERED AREAS IS COMPLETE, THE ENTIRE WATER CONTROL SYSTEM STRUCTURE WILL BE REMOVED FROM THE SITE.

DRAINAGE NOTES

- CONTRACTOR SHALL VERIFY THE LOCATION OF THE EXISTING DRAINAGE SYSTEMS THAT ARE SHOWN ON THE DRAINAGE PLANS. WHERE EXISTING DRAINAGE IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION, AND SIZE SHALL BE ACCURATELY DETERMINED AND THE CONTRACTOR SHALL CONFIRM WHETHER THE DRAINAGE SYSTEM IS STILL ACTIVE. THE INFORMATION SHALL BE FURNISHED TO THE ENGINEER FOR RESOLUTION OF THE CONFLICT. ALL ACTIVE DRAINAGE SYSTEMS IN CONFLICT WITH THE PROPOSED WORK SHALL BE RELOCATED IN KIND IN SUCH A MANNER AS TO AVOID IMPACTS TO PROPOSED ITEMS AND UTILITIES AS WELL AS IMPACTS TO EXISTING ITEMS AND UTILITIES TO REMAIN. IF DRAINAGE SYSTEM IS FOUND TO BE INACTIVE IT SHALL BE REMOVED OR FILLED IN-PLACE PER THE APPROVAL OF THE ENGINEER.
- NO EXISTING DRAINAGE SYSTEMS SHALL BE ABANDONED, PLUGGED OR REMOVED WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.
- PRECAST DRAINAGE STRUCTURES SHALL COMPLY WITH ASTM C-478 (CIRCULAR MANHOLES AND CATCH BASINS) AND ASTM C-913 (RECTANGULAR MANHOLES AND CATCH BASINS) AND ALL APPLICABLE ASSOCIATED ASTM STANDARDS.
- PRECAST CONCRETE RINGS OR NON-SHRINK GROUT SHALL BE USED FOR GRADE ADJUSTMENTS.
- CONTRACTOR SHALL CLEAN AND MAKE FUNCTIONAL ALL EXISTING STRUCTURES AND PIPING WITHIN THE LIMIT OF WORK. ALL EXISTING AND/OR PROPOSED DRAINAGE STRUCTURES AND PIPES WITHIN THE LIMIT OF WORK SHALL AGAIN BE CLEANED PRIOR TO CONCLUSION OF THE CONTRACT.
- SHOULD DAMAGE OF ANY KIND OCCUR TO EXISTING PIPES AND STRUCTURES, THE CONTRACTOR SHALL MAKE REPAIRS, AT HIS OR HER OWN EXPENSE, TO THE SATISFACTION OF THE ENGINEER AND UTILITY OWNER.
- GRADING SHALL PROVIDE POSITIVE DRAINAGE TO ALL DRAIN INLET STRUCTURES.
- DURING CONSTRUCTION, ALL STRUCTURES OF THE EXISTING SYSTEM AND NEW SYSTEM OF DRAINS SHALL BE PROTECTED AGAINST SEDIMENTATION AND DEBRIS.
- ALL DRAINAGE STRUCTURES AND PIPING SHALL BE DESIGNED AND CONSTRUCTED TO WITHSTAND REQUIRED LOADING, AS SHOWN IN THE CONTRACT DOCUMENTS.
- PROPOSED INVERTS ON PLANS ARE SHOWN FOR BIDDING PURPOSES ONLY. ACTUAL INVERT ELEVATIONS WILL BE CONFIRMED IN THE FIELD.

- DRAINAGE ELEVATIONS ARE PROVIDED FOR DESIGN PURPOSES ONLY. THE CONTRACTOR SHALL VERIFY, BY TEST PIT, THE LOCATIONS OF EXISTING UTILITIES WHICH MAY CONFLICT WITH THE PROPOSED DRAINAGE DESIGN. ANY FIELD ADJUSTMENTS REQUIRED WILL BE MADE AS APPROVED OR DIRECTED BY THE ENGINEER. ONLY AFTER THE CONTRACTOR VERIFIES THE ELEVATIONS FOR THE CONSTRUCTABILITY OF THE DRAINAGE SYSTEM SHALL ANY STRUCTURES BE ORDERED. ANY FIELD ADJUSTMENTS TO LINE & GRADE UP TO A DEPTH OF 5' SHALL BE INCLUDED IN THE COST OF THE PIPE. PIPE EXCAVATION GREATER THAN 5' WILL BE PAID UNDER CLASS B TRENCH EXCAVATION.

UTILITY NOTES

- ALL UNDERGROUND UTILITIES AS SHOWN WERE COMPILED USING FIELD SURVEY INFORMATION AND AVAILABLE RECORD INFORMATION.
- RECORD UTILITY INFORMATION FROM THE VARIOUS UTILITY COMPANIES AND PUBLIC AGENCIES, ARE APPROXIMATE ONLY AND ACTUAL LOCATIONS MUST BE DETERMINED IN THE FIELD.
- ALL UTILITY COMPANIES, PUBLIC AND PRIVATE MUST BE NOTIFIED, INCLUDING THOSE IN CONTROL OF UTILITIES NOT SHOWN ON THIS PLAN, (SEE CHAPTER 370, ACTS OF 1963, MASSACHUSETTS) PRIOR TO DESIGNING, EXCAVATING, BLASTING, INSTALLING, BACKFILLING, GRADING, PAVEMENT RESTORING OR REPAVING.
- THE LOCATION OF EXISTING PIPES OR OTHER UNDERGROUND STRUCTURES OR PROPERTY LINES ARE NOT WARRANTED TO BE EXACT, NOR IS IT WARRANTED THAT ALL UNDERGROUND PIPES OR STRUCTURES ARE SHOWN. THE CONTRACTOR SHALL CALL "DIG SAFE" (1-888-344-7233) 72 HOURS (EXCLUDING SATURDAYS, SUNDAYS AND HOLIDAYS) PRIOR TO ANY EXCAVATION TO OBTAIN ACCURATE UTILITY LOCATIONS.
- SUBSURFACE UTILITY LOCATIONS HAVE BEEN PLOTTED TO MEET UTILITY QUALITY LEVEL "C" AS DESCRIBED IN ASCE STANDARD 38-02 AND SUMMARIZED HERE. THE UNDERGROUND UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS BASED ON ABOVE-GROUND FIELD OBSERVATION AND EXISTING RECORD INFORMATION RECEIVED FROM UTILITY STAKE-HOLDERS.
- IN ACCORDANCE WITH MGL CHAPTER 82, SECTION 40, 40A-40E INCLUDING AMENDMENTS, THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES, TOWN OF MENDON AND HOPEDALE, AND GOVERNMENT AGENCIES INCLUDED IN THIS PROJECT IN WRITING PRIOR TO ANY EXCAVATION WORK. CALL "DIG SAFE" AT 1-888-344-7233 AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK.
- INVERTS SHOWN ON PLAN ARE NOT GUARANTEED TO BE ACCURATE. DUE TO THE LIMITATIONS OF FIELD OBSERVATION AND SURVEY TECHNIQUES THE INVERTS ARE SHOWN AS APPROXIMATE ONLY AND SHALL NOT BE WARRANTED TO BE CORRECT. ADDITIONAL FIELD INVESTIGATION IS NECESSARY WHERE ACCURATE MEASUREMENTS ARE REQUIRED FOR DESIGN OF CRITICAL AREAS.
- THE EXISTING CONDITIONS PLAN IS TO BE USED FOR THE SPECIFIED PROJECT ONLY AND IS NOT WARRANTED TO BE COMPLETE FOR ANY OTHER FUTURE PROJECTS.
- CONTRACTOR SHALL CONDUCT SUBSURFACE INVESTIGATIONS TO IDENTIFY GROUND WATER ELEVATION PRIOR TO CONSTRUCTION.

SURVEY NOTES

- THE HORIZONTAL DATUM SHOWN HEREON REFERENCES THE MASSACHUSETTS STATE PLANE COORDINATE SYSTEM, MAINLAND ZONE, NAD83(2011) EPOCH 2010.0 IN US SURVEY FOOT.
- THE VERTICAL DATUM SHOWN HEREON REFERENCES NAVD88, GEOID 12B.
- GROUND CONTROL PROVIDED BY MASSDOT.
- ABUTTERS PROPERTY LINES DEPICTED HEREON ARE APPROXIMATE ONLY AND ARE BASED A COMPILATION OF RECORD DEEDS AND PLANS.
- THE BASE PLAN WAS PREPARED WITHOUT THE BENEFIT OF A TITLE SEARCH AND MAY NOT DISCLOSE ANY MATTERS THAT MAY BE REVEALED BY ONE.
- THE BASE PLAN DOES NOT SHOW UNWRITTEN OR UNRECORDED EASEMENTS WHICH MAY EXIST. A REASONABLE AND DILIGENT ATTEMPT HAS BEEN MADE TO OBSERVE ANY APPARENT AND VISIBLE USES OF THE LAND. THE BASE PLAN DOES NOT GUARANTEE THAT NO SUCH EASEMENTS EXIST.
- LEGAL STATUS OF EASEMENTS, WAYS AND RESTRICTIONS NOT DETERMINED BY THE SURVEY.
- TITLE TO LAND IN THE ABUTTING WAYS IS NOT SHOWN AND HAS NOT BEEN DETERMINED AS A RESULT OF THE SURVEY.
- THE RIGHT-OF-WAY LINES AND BASELINES SHOWN ON THE BASE PLAN ARE BASED ON STATE HIGHWAY LAYOUTS. THE MONUMENTS FOUND MARKING THE LAYOUT PLAN WERE FIELD LOCATED AND USED TO ESTABLISH THE RIGHT-OF-WAY LINES UTILIZING A BEST FIT SOLUTION.
- DASHED BUILDING LINES ARE FROM MASSGIS AND ARE SHOWN FOR GRAPHICAL REFERENCE ONLY.

TRAFFIC NOTES

- THE MINIMUM MOUNTING HEIGHT OF POST-MOUNTED SIGNS, MEASURED VERTICALLY FROM THE BOTTOM OF THE SIGN TO THE TOP OF THE CURB OR SIDEWALK, OR THE ELEVATION OF THE NEAR EDGE OF THE TRAVELED WAY, SHALL BE 7 FEET NEAR SIDEWALK AND 8 FEET NEAR SHARED USE PATH UNLESS OTHERWISE SPECIFIED ON THE PLANS.
- TRAFFIC SIGNAL CONDUIT SHALL BE 3" SCHEDULE 80 PVC UNLESS OTHERWISE NOTED.

TEMPORARY TRAFFIC CONTROL

- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR TRAFFIC MANAGEMENT AND TO COMPLY WITH CONDITIONS OUTLINED WITHIN THE SPECIFICATIONS AND MASSDOT HIGHWAY DIVISION STANDARD DETAILS AND DRAWINGS FOR THE DEVELOPMENT OF TRAFFIC MANAGEMENT PLANS MANUAL.
- CONTRACTOR SHALL SUBMIT TO THE RESIDENT ENGINEER TRAFFIC MANAGEMENT PLANS FOR REVIEW AND APPROVAL BY MASSDOT HIGHWAY DIVISION. CONTRACTOR SHALL COORDINATE THE CONSTRUCTION EFFORT WITH OTHER PROJECTS IN THE VICINITY IN ORDER TO MINIMIZE POTENTIAL TRAFFIC IMPACTS.
- PLACEMENT OF CONSTRUCTIONS SIGNING, TRAFFIC CONTROL DEVICES AND TEMPORARY PAVEMENT MARKINGS FOR EACH SET UP SHALL BE COMPLETED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- TYPICAL DAYTIME WORK HOURS ARE FROM 9:00 AM TO 3:00 PM ON WEEKDAYS, UNLESS OTHERWISE PERMITTED BY MASSDOT HIGHWAY DIVISION. WORK SHALL NOT BE PERFORMED THE DAY BEFORE OR THE DAY AFTER A HOLIDAY WEEKEND, UNLESS OTHERWISE PERMITTED BY MASSDOT HIGHWAY DIVISION. ALL WORK SCHEDULES SHALL BE PRE-APPROVED BY THE DEPARTMENT PRIOR TO BEGINNING WORK.

TEMPORARY TRAFFIC CONTROL - CHANNELIZATION

- CHANNELIZATION SHALL BE ACCOMPLISHED THROUGH THE USE OF REFLECTORIZED PLASTIC DRUMS IN ACCORDANCE WITH THE CURRENT M.U.T.C.D. THE FIRST 10 DRUMS OF A TAPER SHALL BE MOUNTED WITH SEQUENTIAL FLASHING TYPE A LIGHTS.
- ALL DRUMS SHALL BE PLACED AND MOVED AS NECESSARY TO MAINTAIN ADEQUATE ABUTTER ACCESS AT ALL TIMES. WORK MAY REQUIRE ADDITIONAL SIGNS, DRUMS, AND OTHER TRAFFIC CONTROL DEVICES.
- THE SPACING BETWEEN CHANNELIZATION DEVICES (DRUMS OR CONES) SHALL NOT EXCEED 45 FEET.

TEMPORARY TRAFFIC CONTROL - GRADE DIFFERENCES

- WHERE THERE IS A LONGITUDINAL DIFFERENCE IN ELEVATION BETWEEN EXISTING PAVEMENT AND MILLED OR NEW PAVEMENT, THE CONTRACTOR SHALL PATCH A TEMPORARY HMA WEDGE WITH A 12:1 (OR FLATTER) SLOPE FOR A SMOOTH TRANSITION.
- CROSS-SECTIONAL GRADE DIFFERENCE IN EXCESS OF 2" DURING NON-WORKING HOURS WILL REQUIRE DELINEATION BY USE OF REFLECTORIZED DRUMS OR CONES, AS DIRECTED BY MASSDOT HIGHWAY DIVISION.
- CROSS-SECTIONAL GRADE DIFFERENCES IN EXCESS OF 4" DURING NON-WORKING HOURS SHALL BE PROTECTED BY BACKFILLING WITH A WEDGE OF EARTHWORK TO BE COMPACTED AT 4:1 SLOPE AND WILL ALSO REQUIRE DELINEATION BY USE OF DRUMS.



STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	5	116
PROJECT FILE NO.		608491	

TYPICAL SECTIONS  
SHEET 1 OF 7

PAVEMENT NOTES

PROPOSED PAVEMENT STANDARD MILLING & OVERLAY

SURFACE COURSE: 1½" SUPERPAVE SURFACE COURSE - 12.5 POLYMER (SSC-12.5-P) OVER ASPHALT EMULSION FOR TACK COAT  
 INTERMEDIATE COURSE: 2½" SUPERPAVE INTERMEDIATE COURSE - 19.0 (SIC-19.0) OVER ASPHALT EMULSION FOR TACK COAT  
 MILLING: 1½" PAVEMENT STANDARD MILLING

PROPOSED FULL DEPTH PAVEMENT

SURFACE COURSE: 1½" SUPERPAVE SURFACE COURSE - 12.5 POLYMER (SSC-12.5-P) OVER ASPHALT EMULSION FOR TACK COAT  
 INTERMEDIATE COURSE: 2½" SUPERPAVE INTERMEDIATE COURSE - 19.0 (SIC-19.0) OVER ASPHALT EMULSION FOR TACK COAT  
 BASE: 3½" SUPERPAVE BASE COURSE 37.5 (SBC-37.5) OVER  
 SUB-BASE: 4" DENSE GRADED CRUSHED STONE FOR SUB-BASE OVER 8" GRAVEL BORROW (TYPE b)

PROPOSED HMA PAVEMENT WIDENING - LESS THAN 4 FEET

SURFACE COURSE: 1½" SUPERPAVE SURFACE COURSE - 12.5 POLYMER (SSC -12.5-P) OVER ASPHALT EMULSION FOR TACK COAT  
 INTERMEDIATE COURSE: 2½" SUPERPAVE INTERMEDIATE COURSE 19.0 (SIC-19.0) OVER ASPHALT EMULSION FOR TACK COAT  
 BASE: 8" HIGH EARLY STRENGTH CEMENT CONCRETE  
 SUB-BASE: 8" GRAVEL BORROW (TYPE b)

PROPOSED HMA DRIVEWAY

SURFACE COURSE: 1½" SUPERPAVE SURFACE COURSE - 12.5 (SSC-12.5) OVER ASPHALT EMULSION FOR TACK COAT  
 INTERMEDIATE COURSE: 2½" SUPERPAVE SURFACE COURSE - 12.5 (SSC-12.5) OVER  
 FOUNDATION: 8" GRAVEL BORROW, TYPE b

PROPOSED CEMENT CONCRETE DRIVEWAY

SURFACE: 6" CEMENT CONCRETE OVER  
 FOUNDATION: 8" GRAVEL BORROW, TYPE b

PROPOSED CEMENT CONCRETE SIDEWALK

SURFACE: 4" CEMENT CONCRETE  
 FOUNDATION: 8" GRAVEL BORROW, TYPE B

PROPOSED HMA SUP (SHARED USE PATH)

SURFACE: 1½" SUPERPAVE SURFACE COURSE-9.5 (SSC-9.5) OVER ASPHALT EMULSION FOR TACK COAT  
 INTERMEDIATE COURSE: 2½" SUPERPAVE INTERMEDIATE COURSE - 19.0 (SIC-19.0) OVER

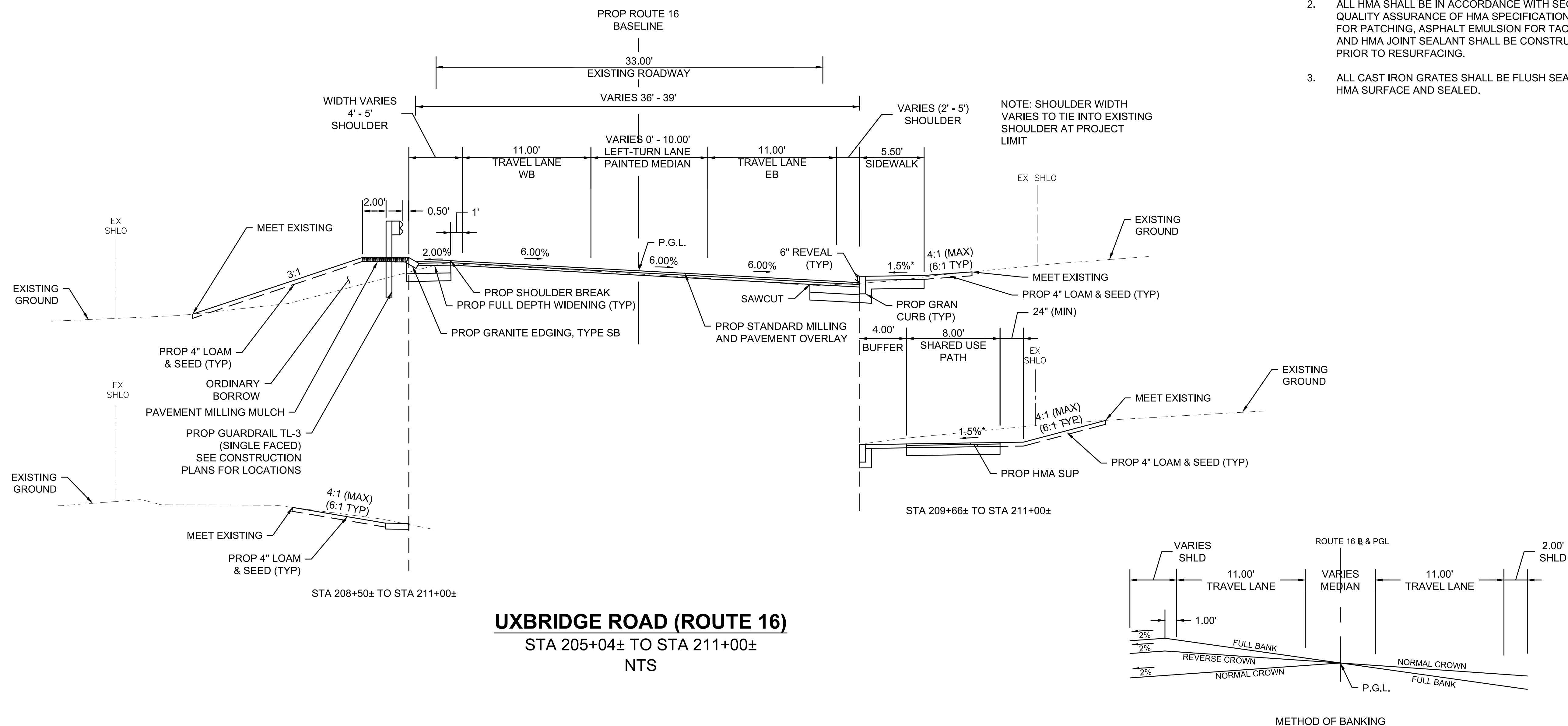
FOUNDATION: 8" GRAVEL BORROW, TYPE B

PROPOSED HMA SIDEWALK

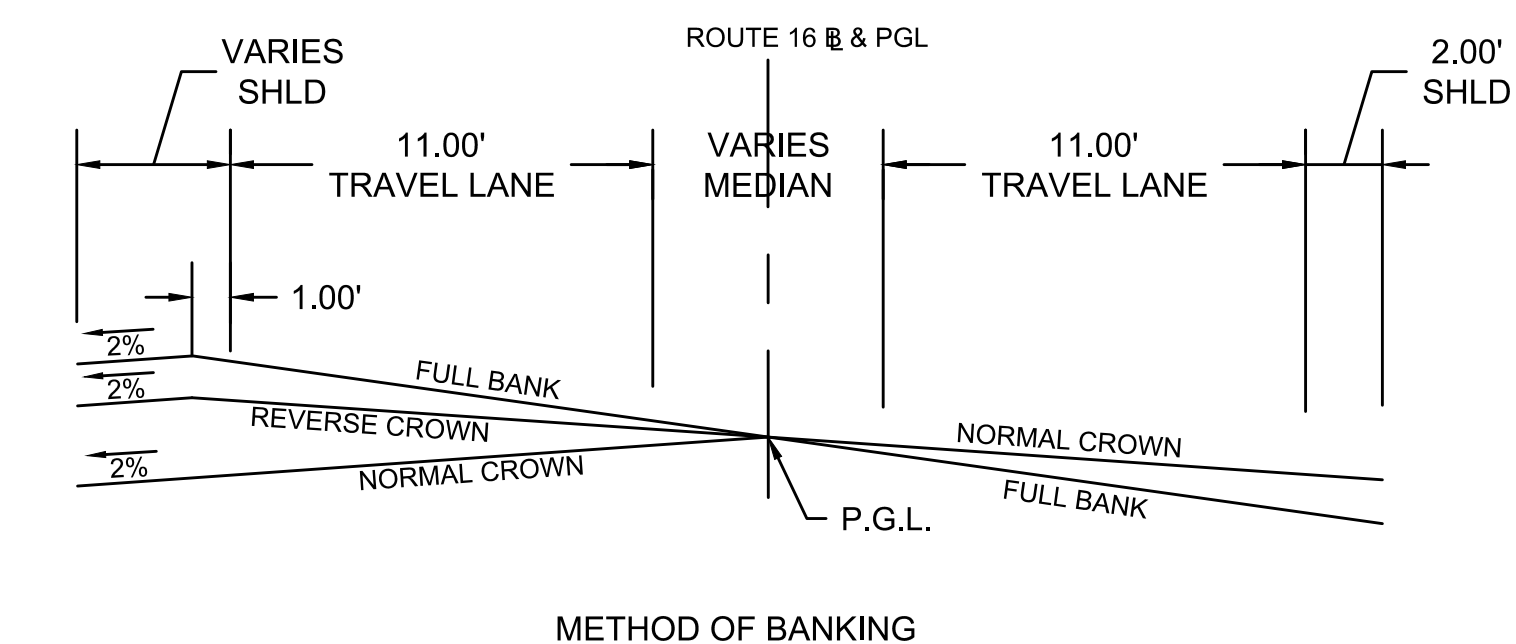
SURFACE COURSE: 1¼" SUPERPAVE SURFACE COURSE - 9.5 (SSC-9.5) OVER ASPHALT EMULSION FOR TACK COAT  
 INTERMEDIATE COURSE: 1¾" SUPERPAVE SURFACE COURSE - 12.5 (SSC-12.5) OVER  
 FOUNDATION: 8" GRAVEL BORROW, TYPE b

NOTES

- REFER TO THE 2021 STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGES.
- ALL HMA SHALL BE IN ACCORDANCE WITH SECTION 450 QUALITY ASSURANCE OF HMA SPECIFICATIONS. HMA FOR PATCHING, ASPHALT EMULSION FOR TACK COAT AND HMA JOINT SEALANT SHALL BE CONSTRUCTED PRIOR TO RESURFACING.
- ALL CAST IRON GRATES SHALL BE FLUSH SEALED WITH HMA SURFACE AND SEALED.



UXBRIDGE ROAD (ROUTE 16)  
 STA 205+04± TO STA 211+00±  
 NTS



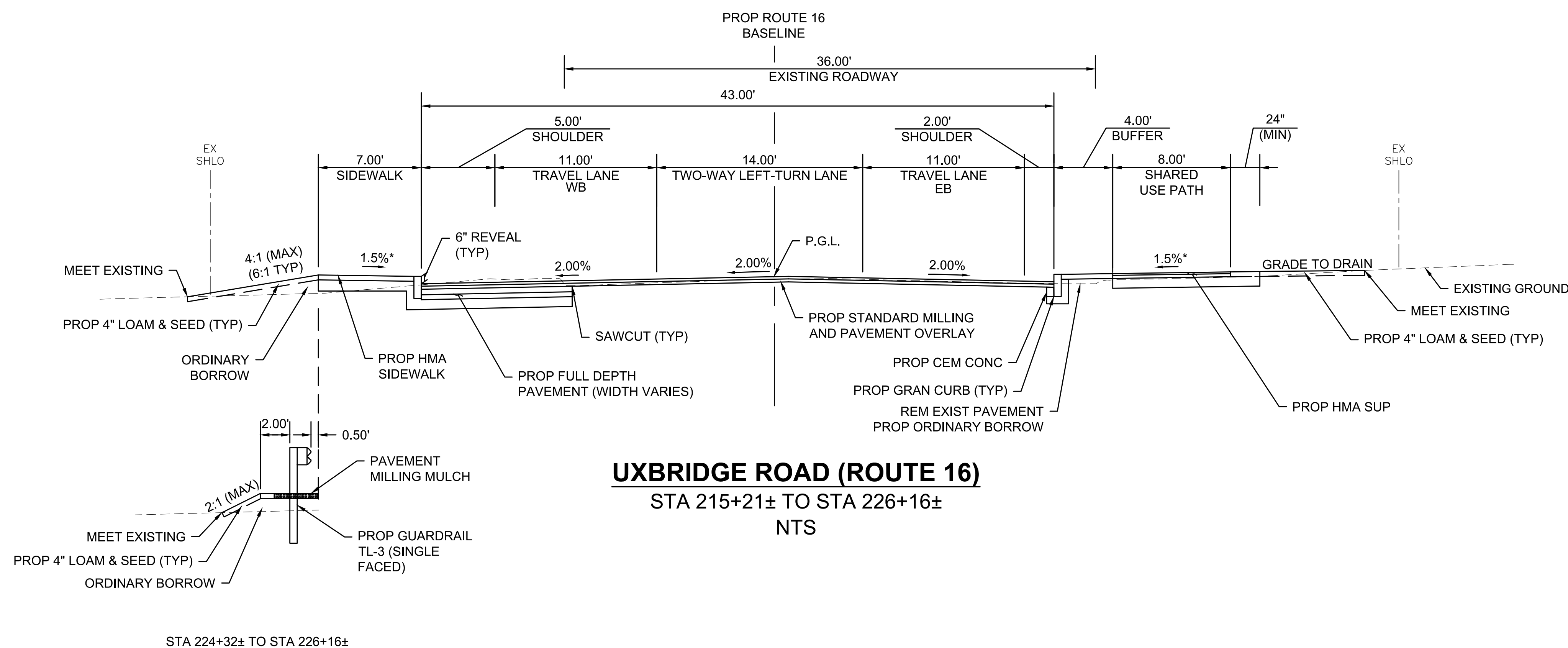
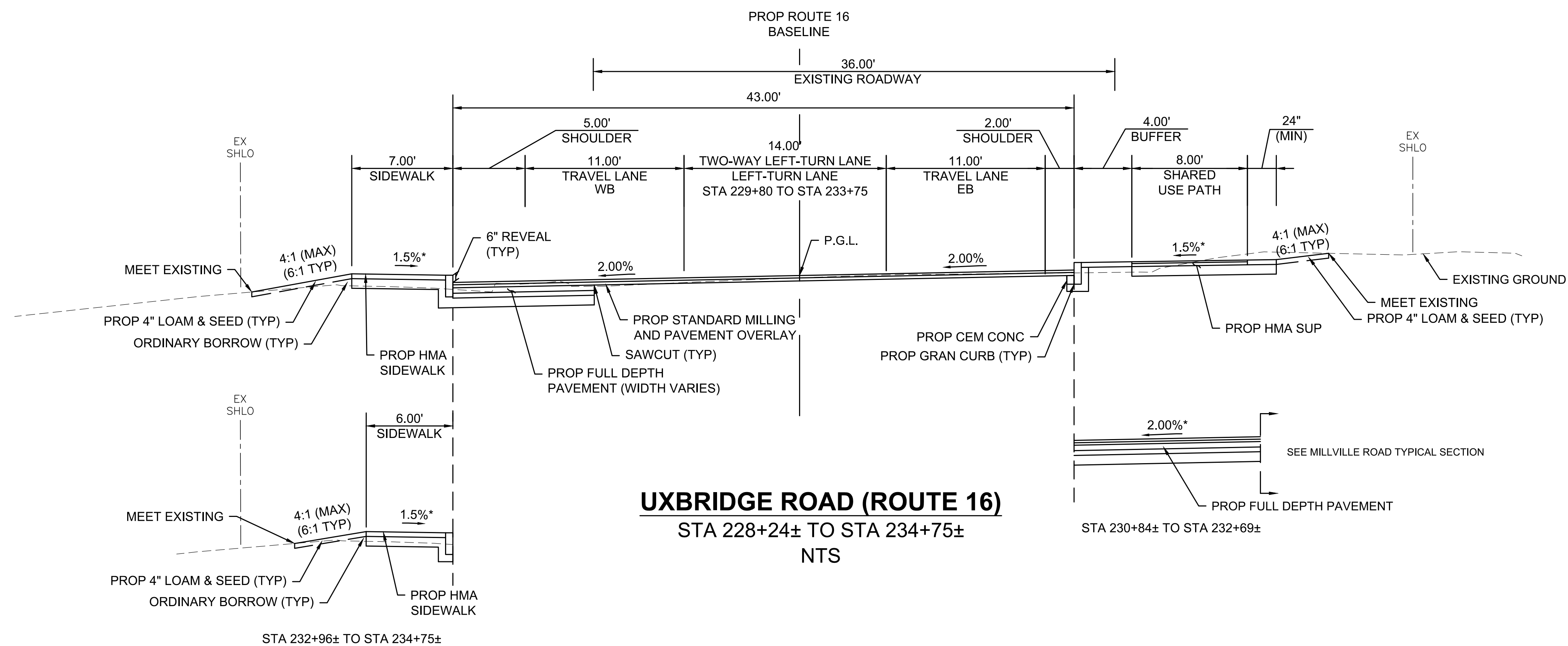
\*TOLERANCE FOR CONSTRUCTION +/- 0.5%



MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	6	116
PROJECT FILE NO.		608491	

TYPICAL SECTIONS  
SHEET 2 OF 7



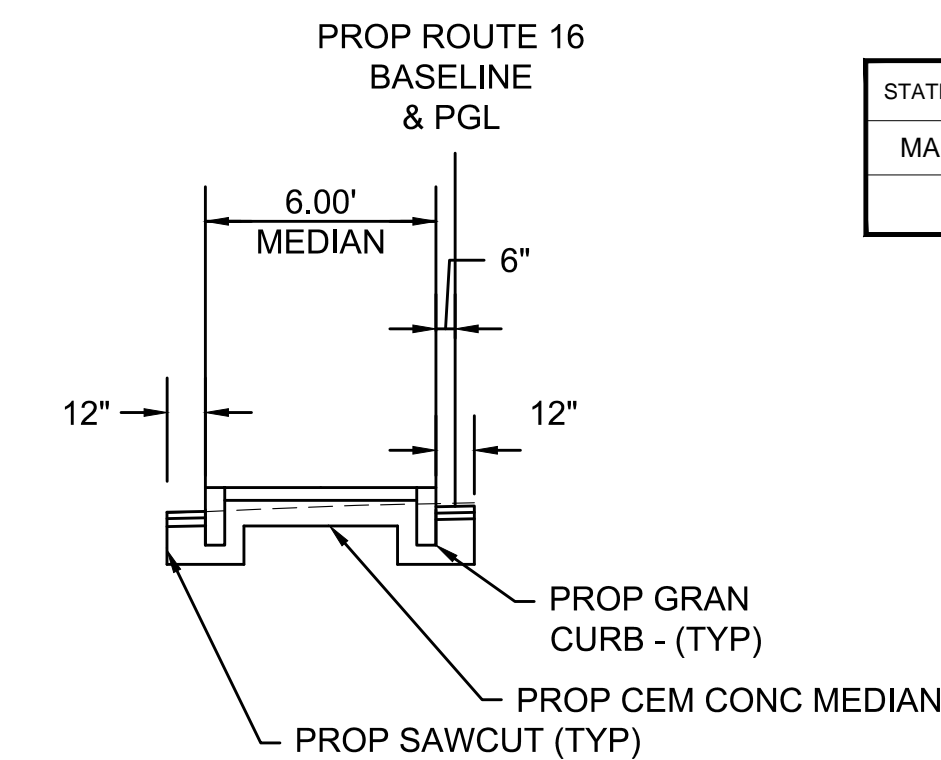
\*TOLERANCE FOR CONSTRUCTION +/- 0.5%



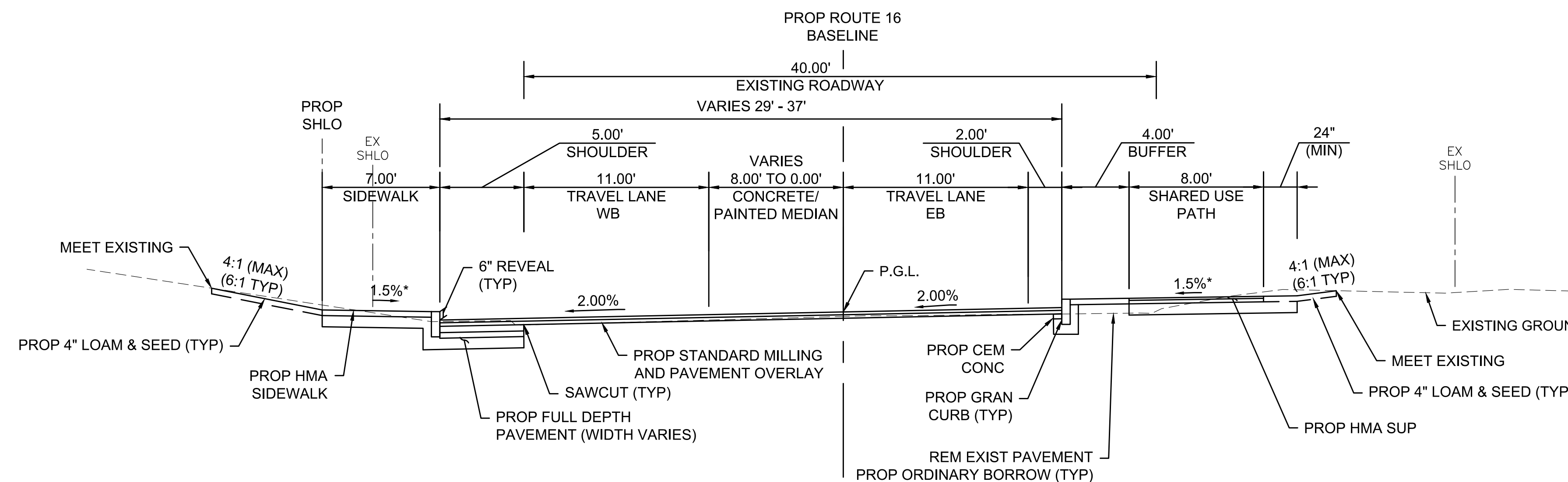
**MENDON  
ROUTE 16**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	7	116
PROJECT FILE NO. 608491			

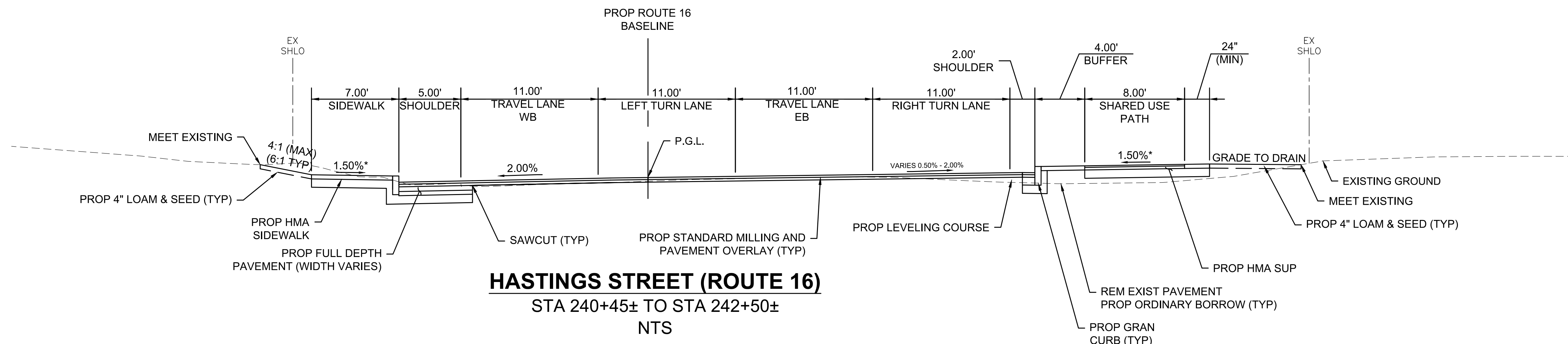
**TYPICAL SECTIONS  
SHEET 3 OF 7**



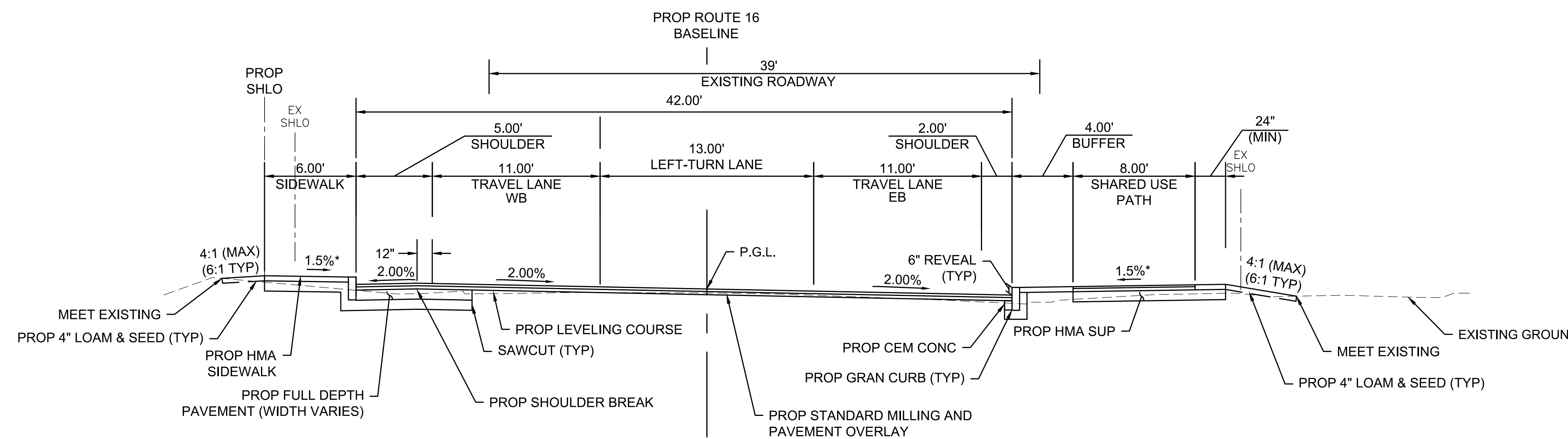
**MEDIAN DETAIL**  
STA 242+78± TO STA 243+43±  
NTS



**HASTINGS STREET (ROUTE 16)**  
STA 242+50± TO STA 246+59±  
NTS



**HASTINGS STREET (ROUTE 16)**  
STA 240+45± TO STA 242+50±  
NTS



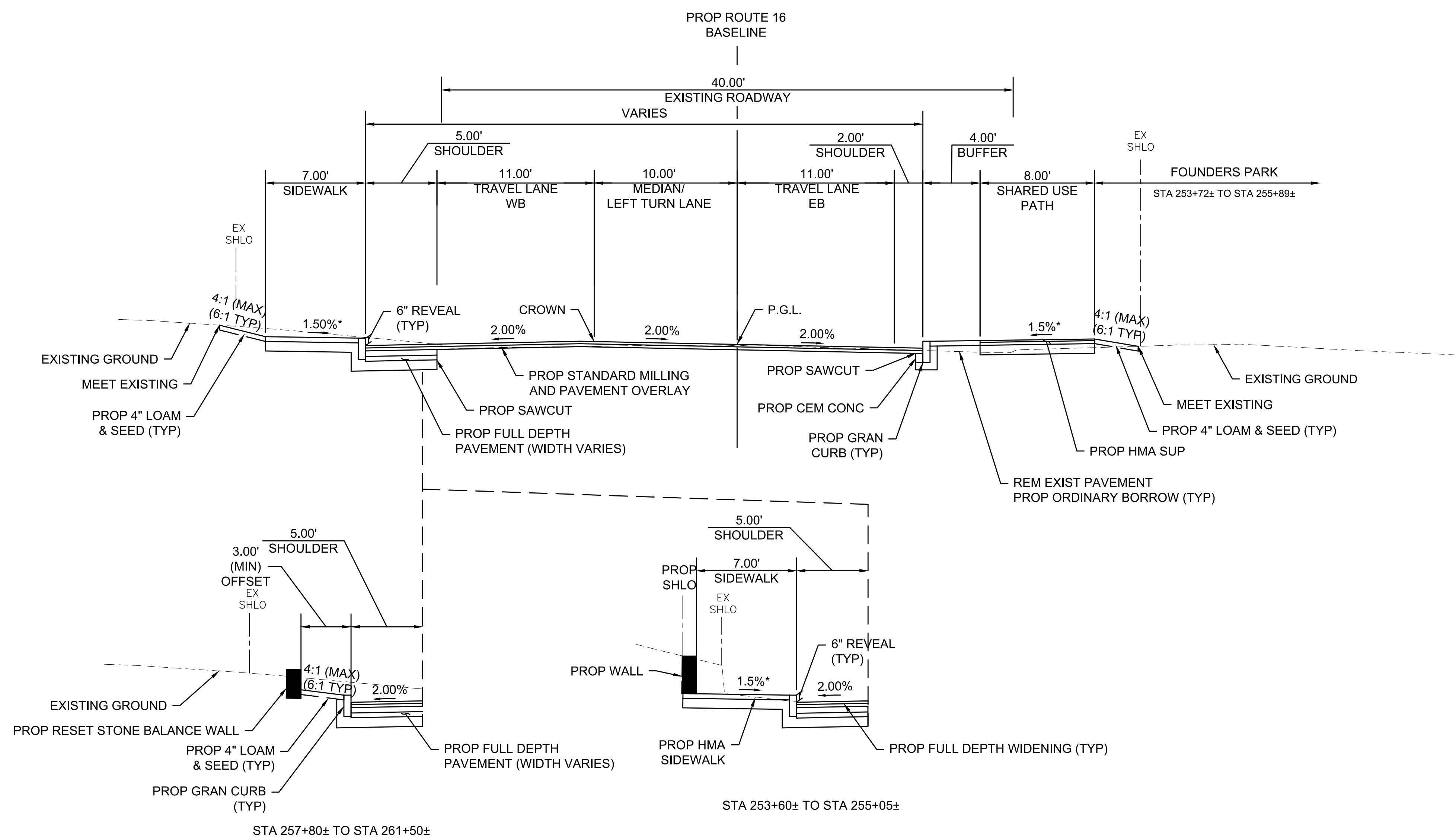
**HASTINGS STREET (ROUTE 16)**  
STA 237+71± TO STA 240+44±  
NTS

\*TOLERANCE FOR CONSTRUCTION +/- 0.5%

MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	8	116
PROJECT FILE NO.		608491	

TYPICAL SECTIONS  
SHEET 4 OF 7

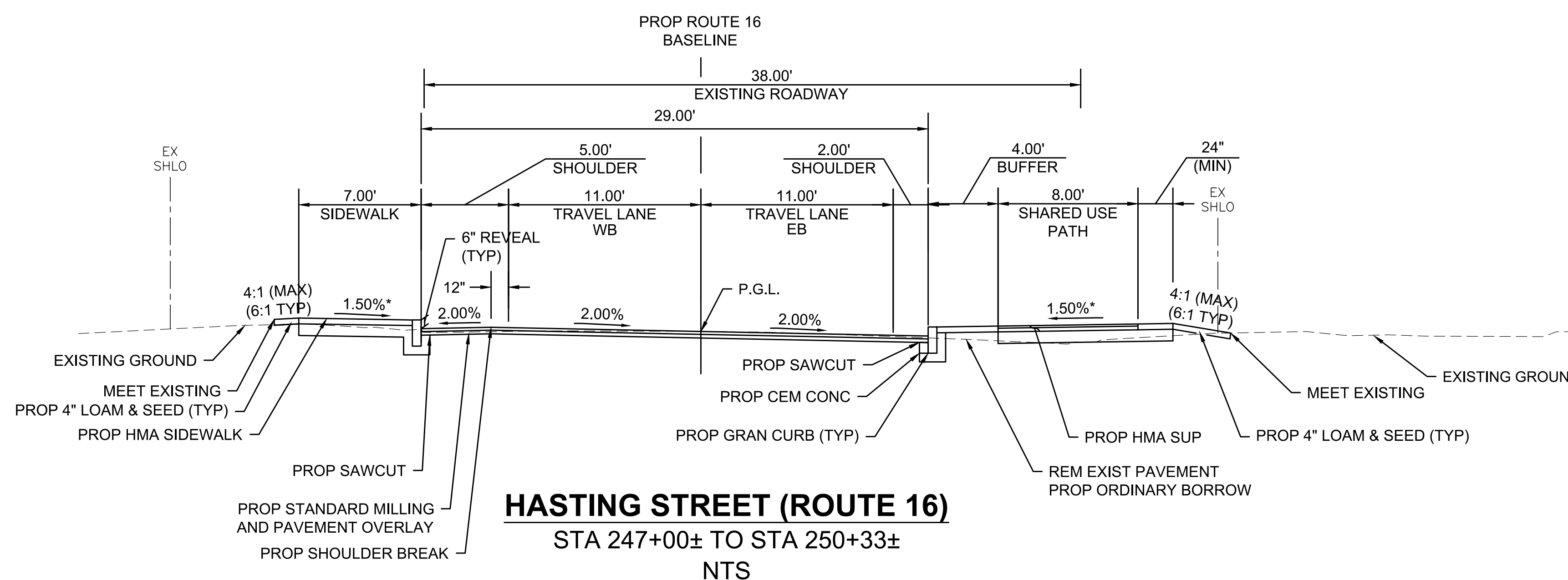


**HASTINGS STREET (ROUTE 16)**

STA 252+00± TO STA 255+05±

STA 257+00± TO STA 261+50±

NTS



**HASTING STREET (ROUTE 16)**

STA 247+00± TO STA 250+33±

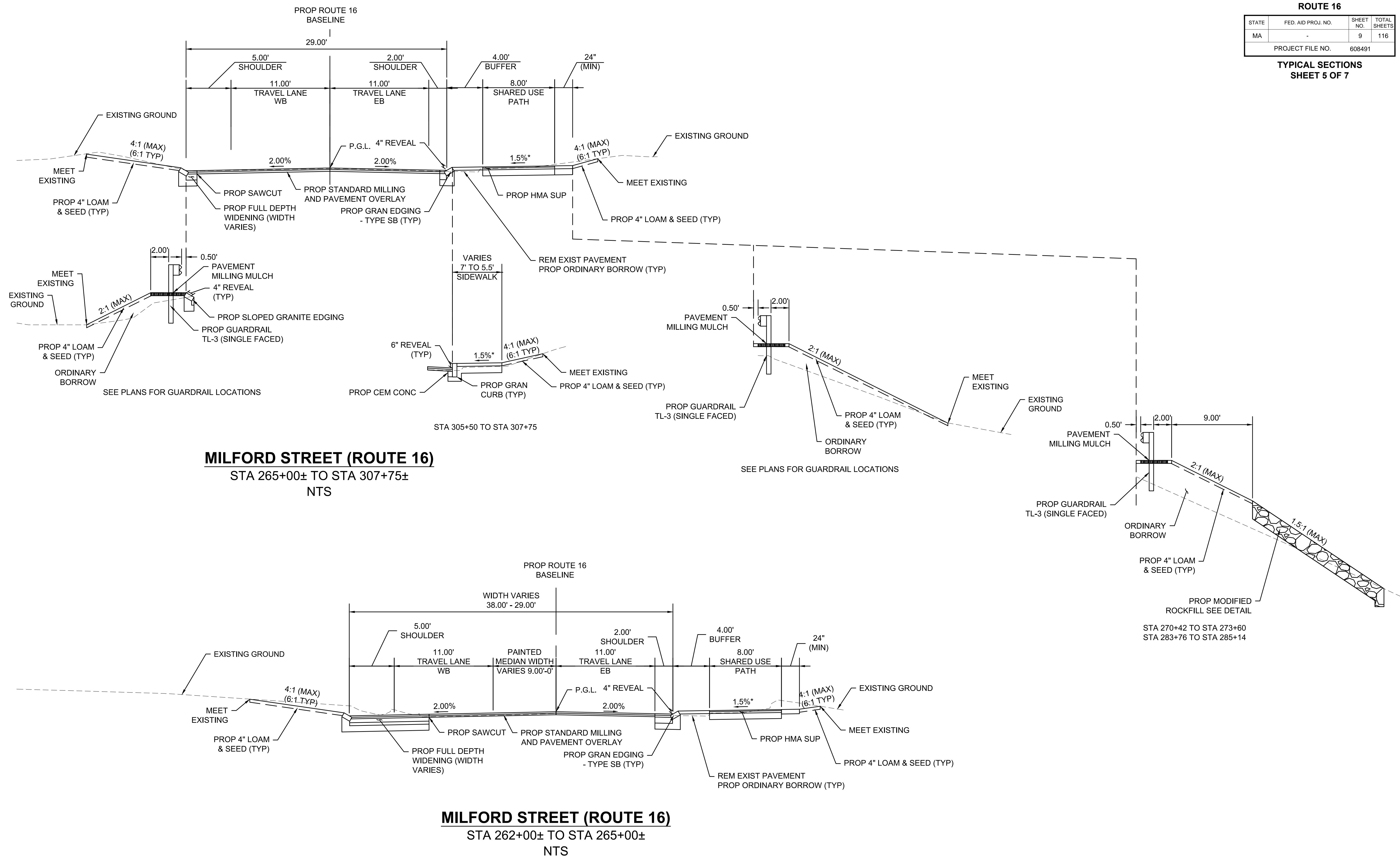
NTS

\*TOLERANCE FOR CONSTRUCTION +/- 0.5%

**MENDON  
ROUTE 16**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	9	116
PROJECT FILE NO.		608491	

**TYPICAL SECTIONS  
SHEET 5 OF 7**

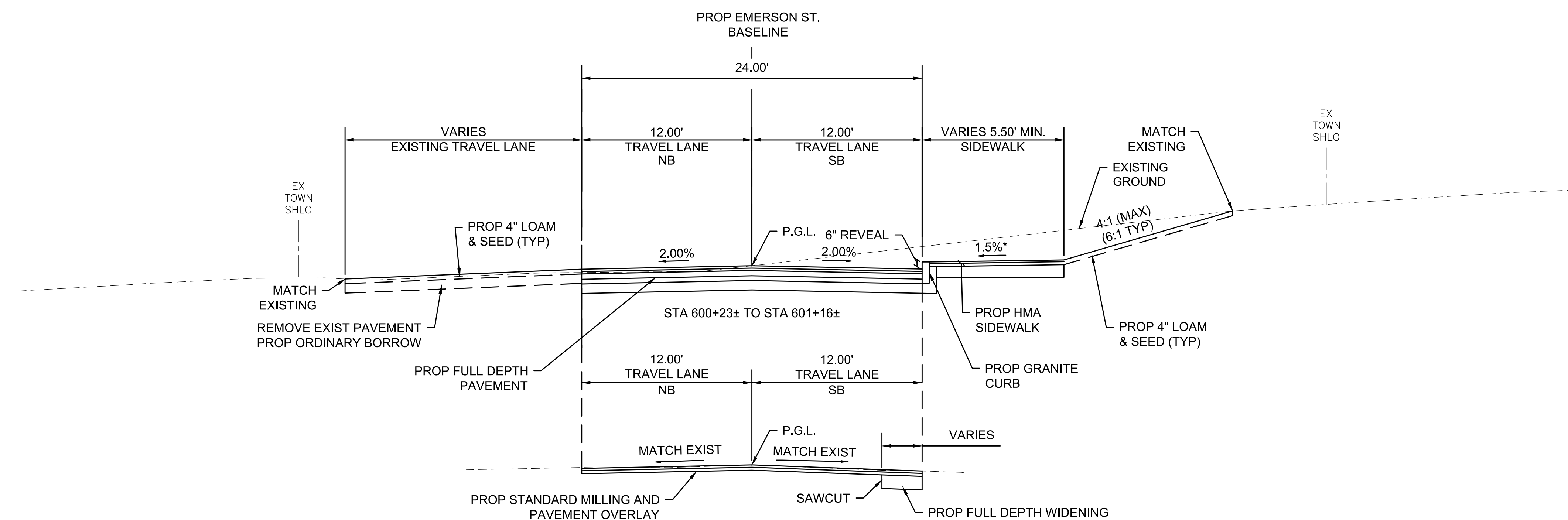


\*TOLERANCE FOR CONSTRUCTION +/- 0.5%

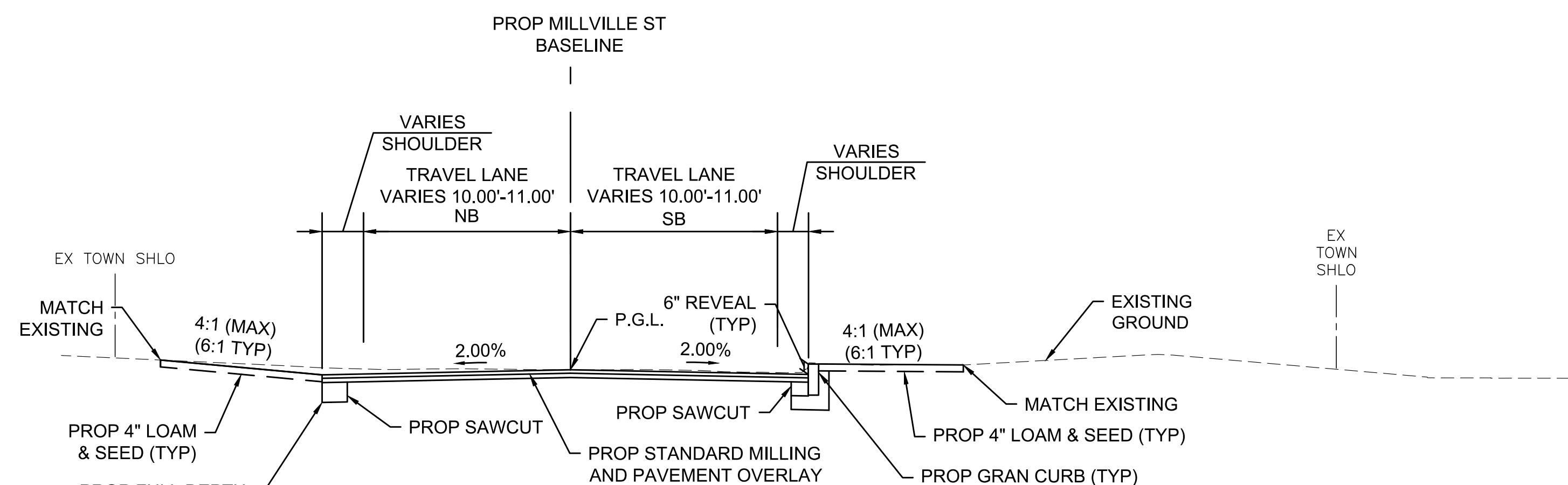
**MENDON  
ROUTE 16**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	10	116
PROJECT FILE NO.		608491	

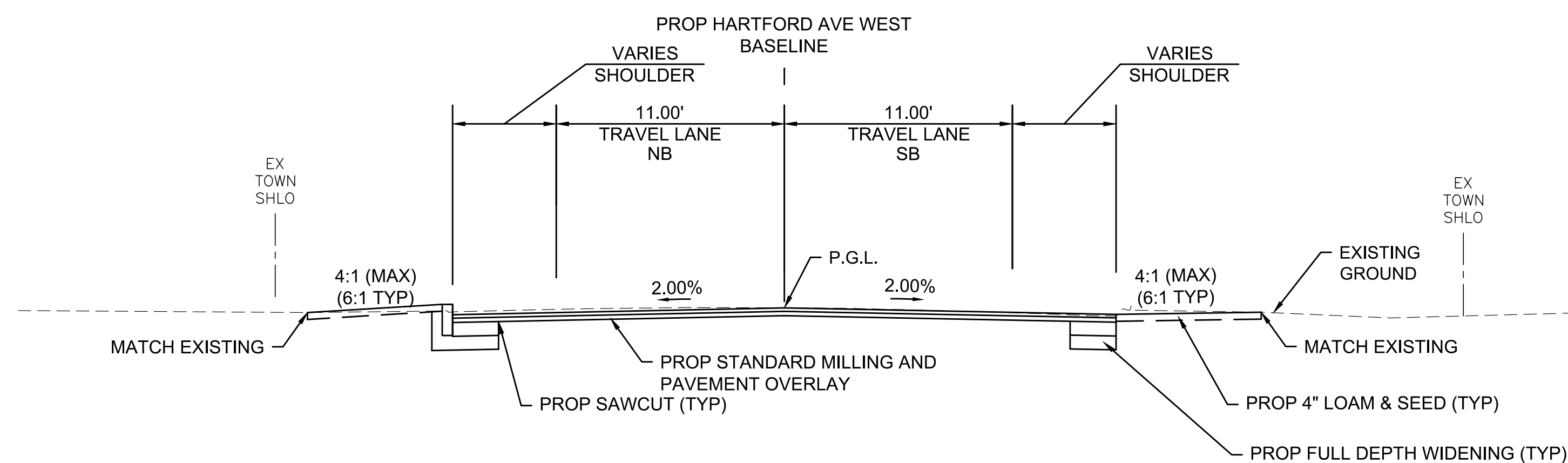
**TYPICAL SECTIONS  
SHEET 6 OF 7**



**EMERSON STREET  
STA 601+16± TO STA 602+20±  
NTS**



**MILLVILLE STREET  
STA 400+84± TO STA 401+66±  
NTS**



**HARTFORD AVENUE WEST  
STA 1100+30± TO STA 1102+00±  
NTS**

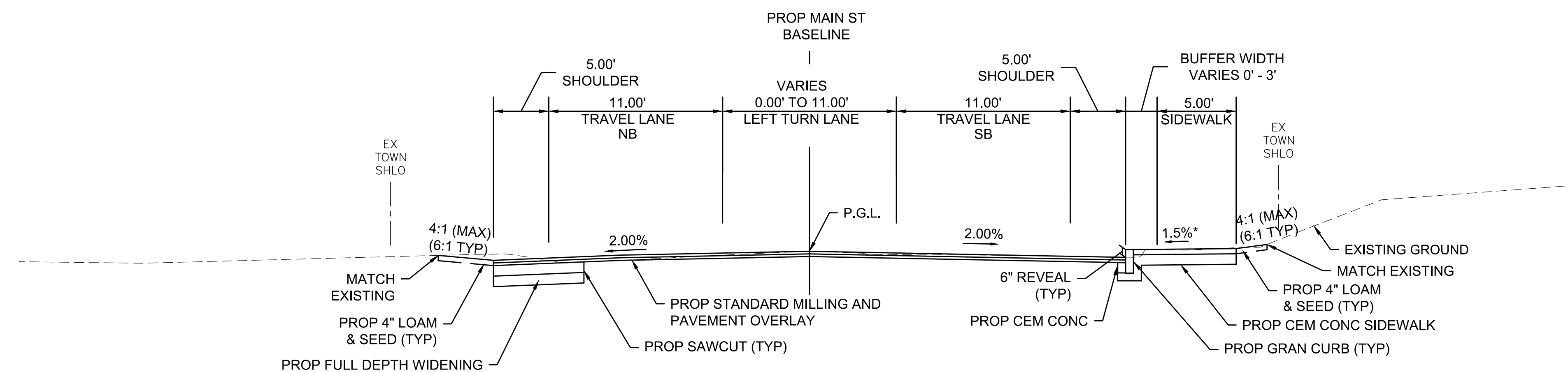
\*TOLERANCE FOR CONSTRUCTION +/- 0.5%



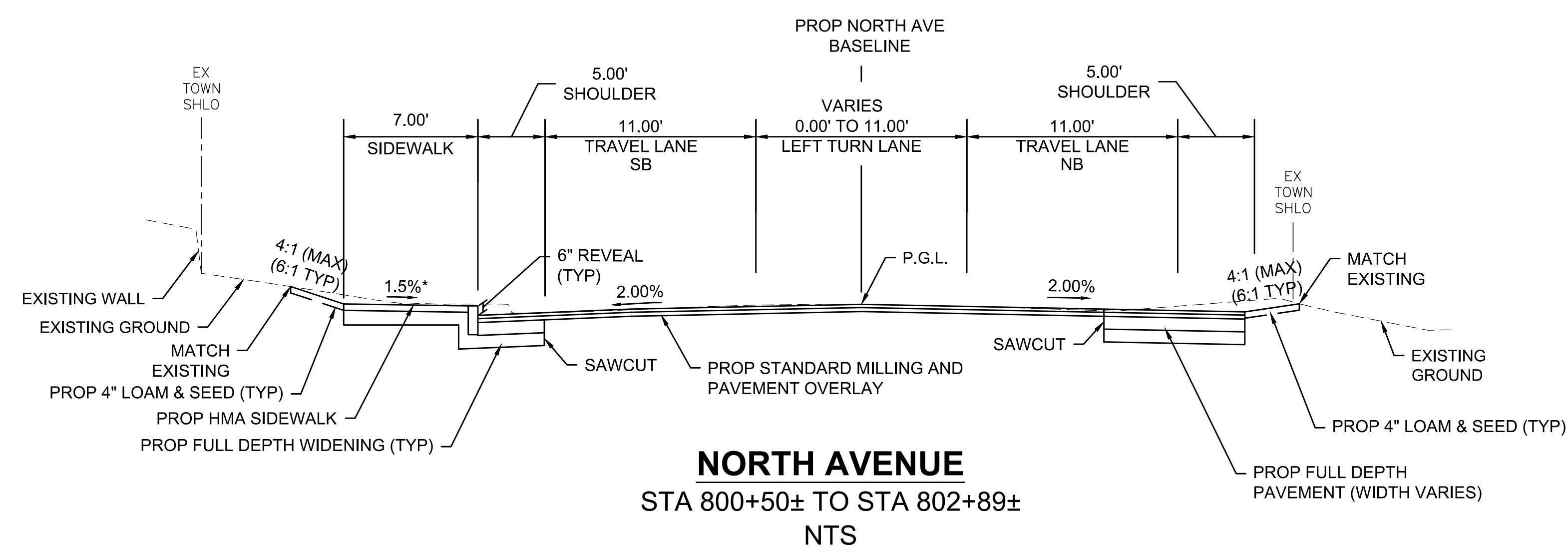
MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	11	116
PROJECT FILE NO.		608491	

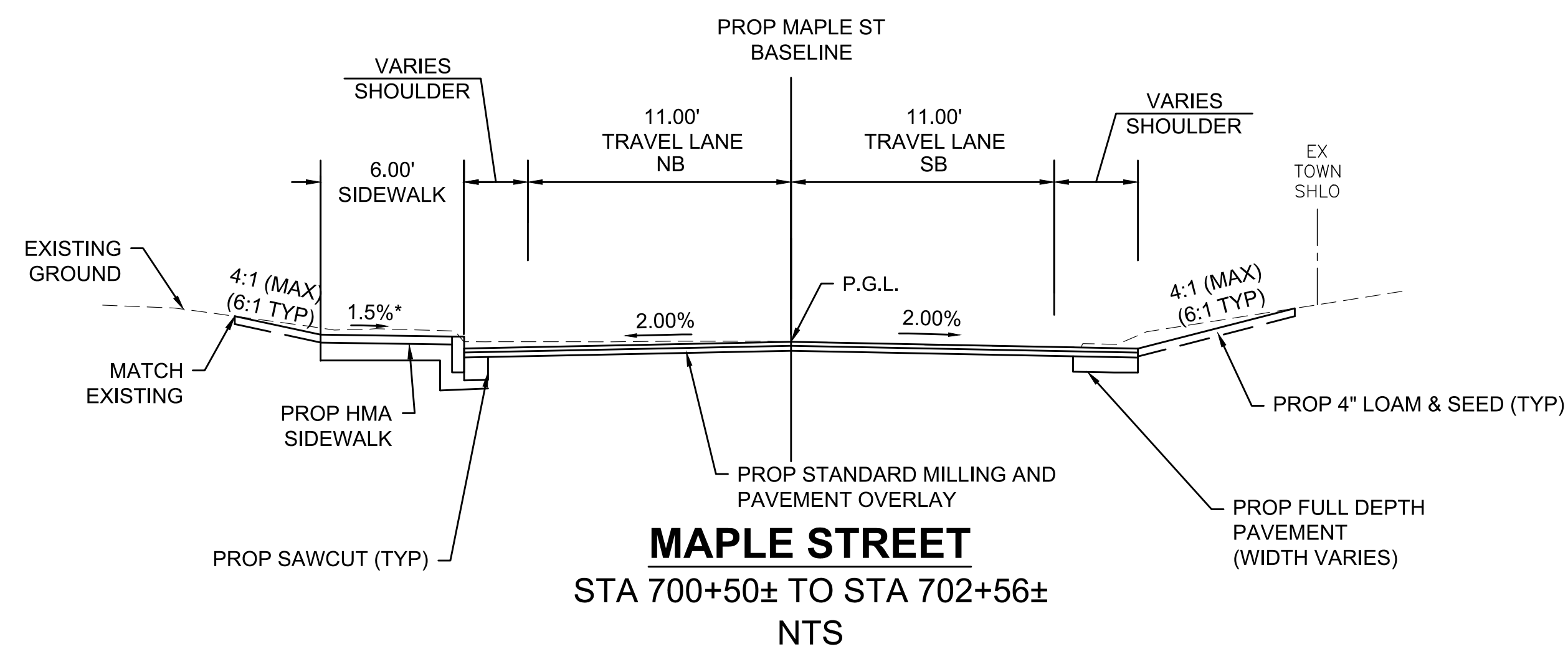
TYPICAL SECTIONS  
SHEET 7 OF 7



**MAIN STREET**  
STA 900+50± TO STA 903+65±  
NTS



**NORTH AVENUE**  
STA 800+50± TO STA 802+89±  
NTS



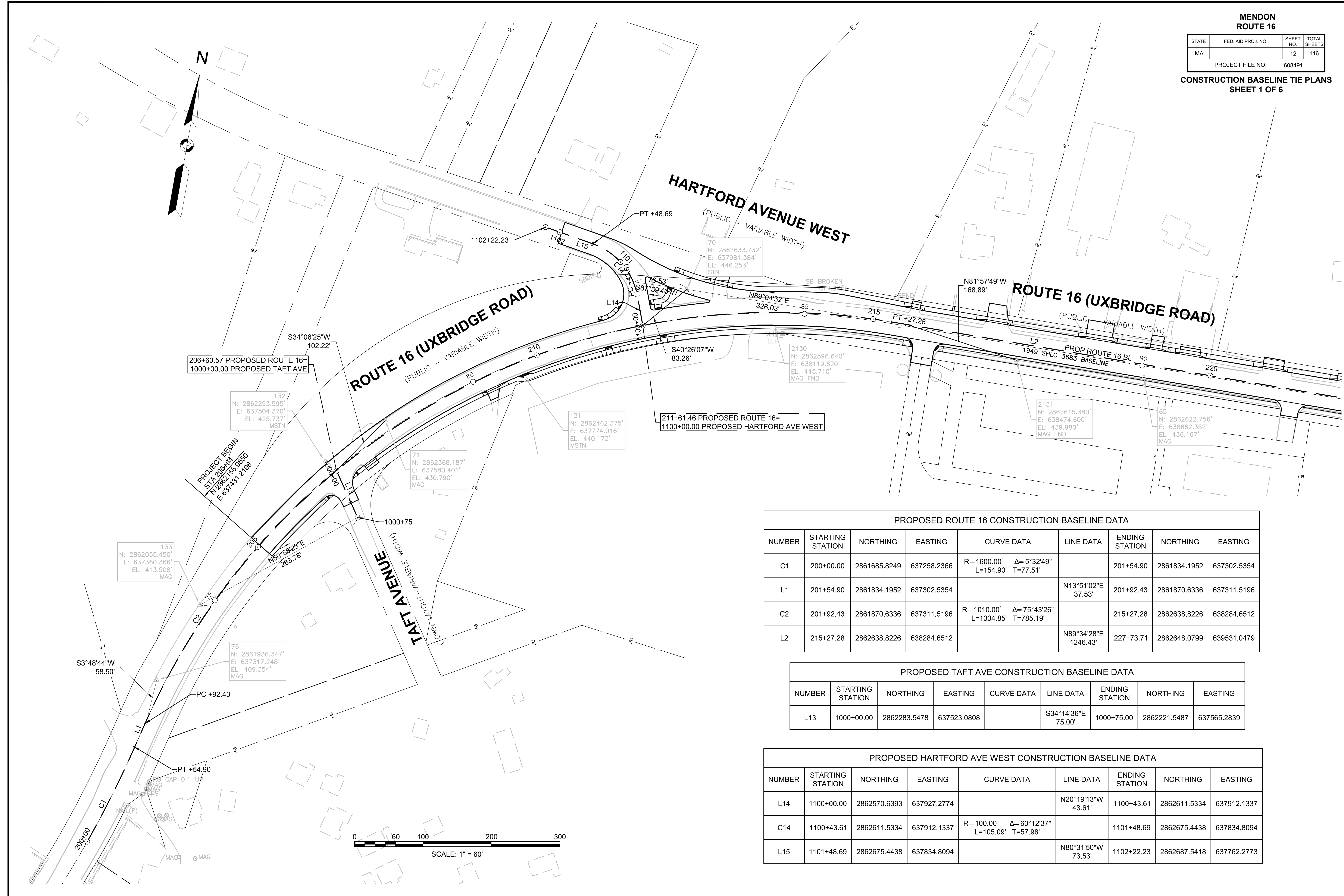
**MAPLE STREET**  
STA 700+50± TO STA 702+56±  
NTS

\*TOLERANCE FOR CONSTRUCTION +/- 0.5%

MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	12	116
PROJECT FILE NO. 608491			

CONSTRUCTION BASELINE TIE PLANS  
SHEET 1 OF 6



PROPOSED ROUTE 16 CONSTRUCTION BASELINE DATA

NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
C1	200+00.00	2861685.8249	637258.2366	R=1600.00' Δ=5°32'49" L=154.90' T=77.51'		201+54.90	2861834.1952	637302.5354
L1	201+54.90	2861834.1952	637302.5354		N13°51'02"E 37.53'	201+92.43	2861870.6336	637311.5196
C2	201+92.43	2861870.6336	637311.5196	R=1010.00' Δ=75°43'26" L=1334.85' T=785.19'		215+27.28	2862638.8226	638284.6512
L2	215+27.28	2862638.8226	638284.6512		N89°34'28"E 1246.43'	227+73.71	2862648.0799	639531.0479

PROPOSED TAFT AVE CONSTRUCTION BASELINE DATA

NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L13	1000+00.00	2862283.5478	637523.0808		S34°14'36"E 75.00'	1000+75.00	2862221.5487	637565.2839

PROPOSED HARTFORD AVE WEST CONSTRUCTION BASELINE DATA

NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L14	1100+00.00	2862570.6393	637927.2774		N20°19'13"W 43.61'	1100+43.61	2862611.5334	637912.1337
C14	1100+43.61	2862611.5334	637912.1337	R=100.00' Δ=60°12'37" L=105.09' T=57.98'		1101+48.69	2862675.4438	637834.8094
L15	1101+48.69	2862675.4438	637834.8094		N80°31'50"W 73.53'	1102+22.23	2862687.5418	637762.2773

CONTINUED ON  
SHEET NO. 13

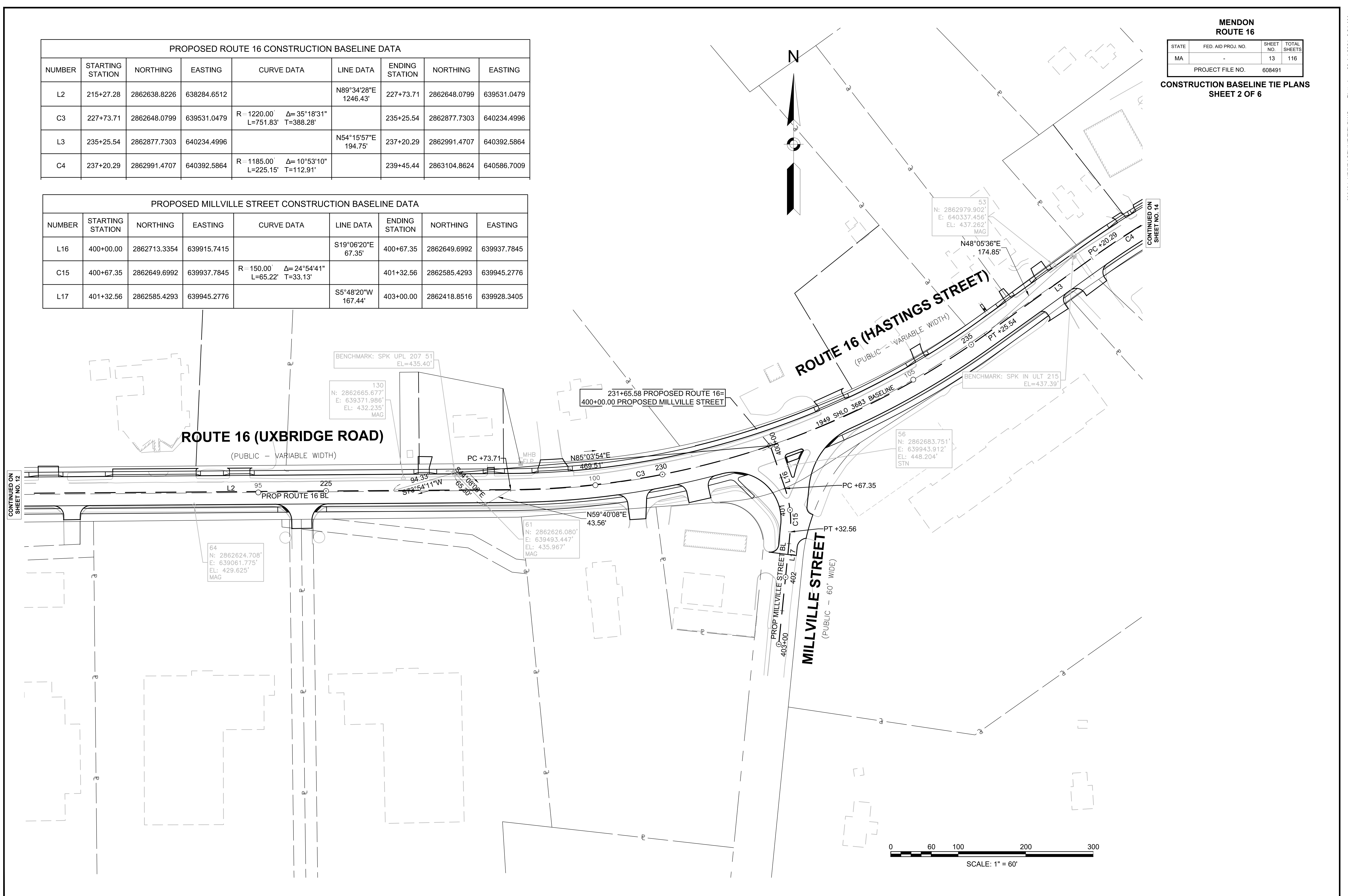
MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	13	116
PROJECT FILE NO.		608491	

CONSTRUCTION BASELINE TIE PLANS  
SHEET 2 OF 6

PROPOSED ROUTE 16 CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L2	215+27.28	2862638.8226	638284.6512		N89°34'28"E 1246.43'	227+73.71	2862648.0799	639531.0479
C3	227+73.71	2862648.0799	639531.0479	R = 1220.00' Δ = 35°18'31" L = 751.83' T = 388.28'		235+25.54	2862877.7303	640234.4996
L3	235+25.54	2862877.7303	640234.4996		N54°15'57"E 194.75'	237+20.29	2862991.4707	640392.5864
C4	237+20.29	2862991.4707	640392.5864	R = 1185.00' Δ = 10°53'10" L = 225.15' T = 112.91'		239+45.44	2863104.8624	640586.7009

PROPOSED MILLVILLE STREET CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L16	400+00.00	2862713.3354	639915.7415		S19°06'20"E 67.35'	400+67.35	2862649.6992	639937.7845
C15	400+67.35	2862649.6992	639937.7845	R = 150.00' Δ = 24°54'41" L = 65.22' T = 33.13'		401+32.56	2862585.4293	639945.2776
L17	401+32.56	2862585.4293	639945.2776		S5°48'20"W 167.44'	403+00.00	2862418.8516	639928.3405





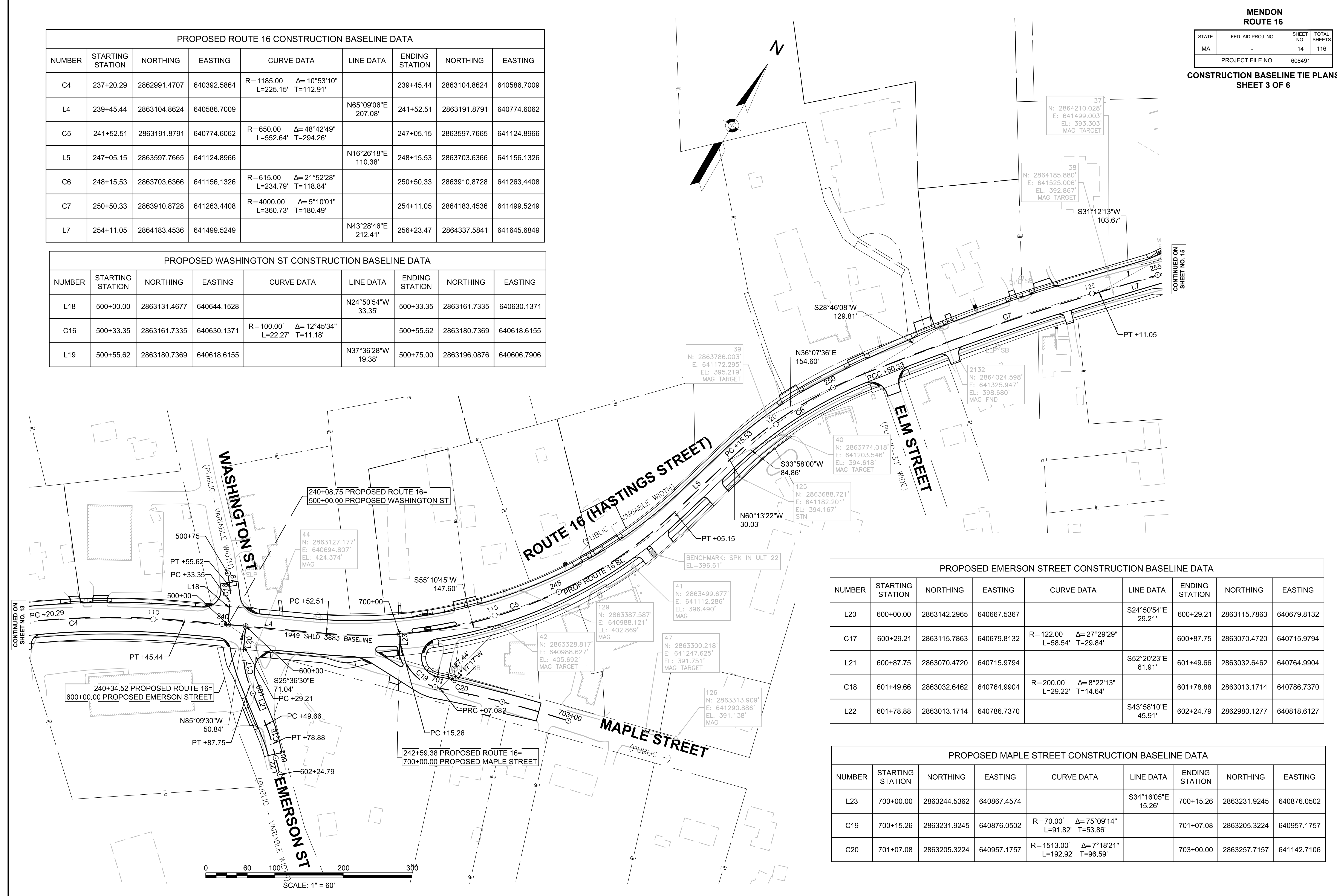
MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	14	116
PROJECT FILE NO.		608491	

CONSTRUCTION BASELINE TIE PLANS  
SHEET 3 OF 6

PROPOSED ROUTE 16 CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
C4	237+20.29	2862991.4707	640392.5864	R = 1185.00' Δ = 10°53'10" L = 225.15' T = 112.91'		239+45.44	2863104.8624	640586.7009
L4	239+45.44	2863104.8624	640586.7009		N65°09'06"E 207.08'	241+52.51	2863191.8791	640774.6062
C5	241+52.51	2863191.8791	640774.6062	R = 650.00' Δ = 48°42'49" L = 552.64' T = 294.26'		247+05.15	2863597.7665	641124.8966
L5	247+05.15	2863597.7665	641124.8966		N16°26'18"E 110.38'	248+15.53	2863703.6366	641156.1326
C6	248+15.53	2863703.6366	641156.1326	R = 615.00' Δ = 21°52'28" L = 234.79' T = 118.84'		250+50.33	2863910.8728	641263.4408
C7	250+50.33	2863910.8728	641263.4408	R = 4000.00' Δ = 5°10'01" L = 360.73' T = 180.49'		254+11.05	2864183.4536	641499.5249
L7	254+11.05	2864183.4536	641499.5249		N43°28'46"E 212.41'	256+23.47	2864337.5841	641645.6849

PROPOSED WASHINGTON ST CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L18	500+00.00	2863131.4677	640644.1528		N24°50'54"W 33.35'	500+33.35	2863161.7335	640630.1371
C16	500+33.35	2863161.7335	640630.1371	R = 100.00' Δ = 12°45'34" L = 22.27' T = 11.18'		500+55.62	2863180.7369	640618.6155
L19	500+55.62	2863180.7369	640618.6155		N37°36'28"W 19.38'	500+75.00	2863196.0876	640606.7906



PROPOSED EMERSON STREET CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L20	600+00.00	2863142.2965	640667.5367		S24°50'54"E 29.21'	600+29.21	2863115.7863	640679.8132
C17	600+29.21	2863115.7863	640679.8132	R = 122.00' Δ = 27°29'29" L = 58.54' T = 29.84'		600+87.75	2863070.4720	640715.9794
L21	600+87.75	2863070.4720	640715.9794		S52°20'23"E 61.91'	601+49.66	2863032.6462	640764.9904
C18	601+49.66	2863032.6462	640764.9904	R = 200.00' Δ = 8°22'13" L = 29.22' T = 14.64'		601+78.88	2863013.1714	640786.7370
L22	601+78.88	2863013.1714	640786.7370		S43°58'10"E 45.91'	602+24.79	2862980.1277	640818.6127

PROPOSED MAPLE STREET CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L23	700+00.00	2863244.5362	640867.4574		S34°16'05"E 15.26'	700+15.26	2863231.9245	640876.0502
C19	700+15.26	2863231.9245	640876.0502	R = 70.00' Δ = 75°09'14" L = 91.82' T = 53.86'		701+07.08	2863205.3224	640957.1757
C20	701+07.08	2863205.3224	640957.1757	R = 1513.00' Δ = 7°18'21" L = 192.92' T = 96.59'		703+00.00	2863257.7157	641142.7106



MENDON  
ROUTE 16

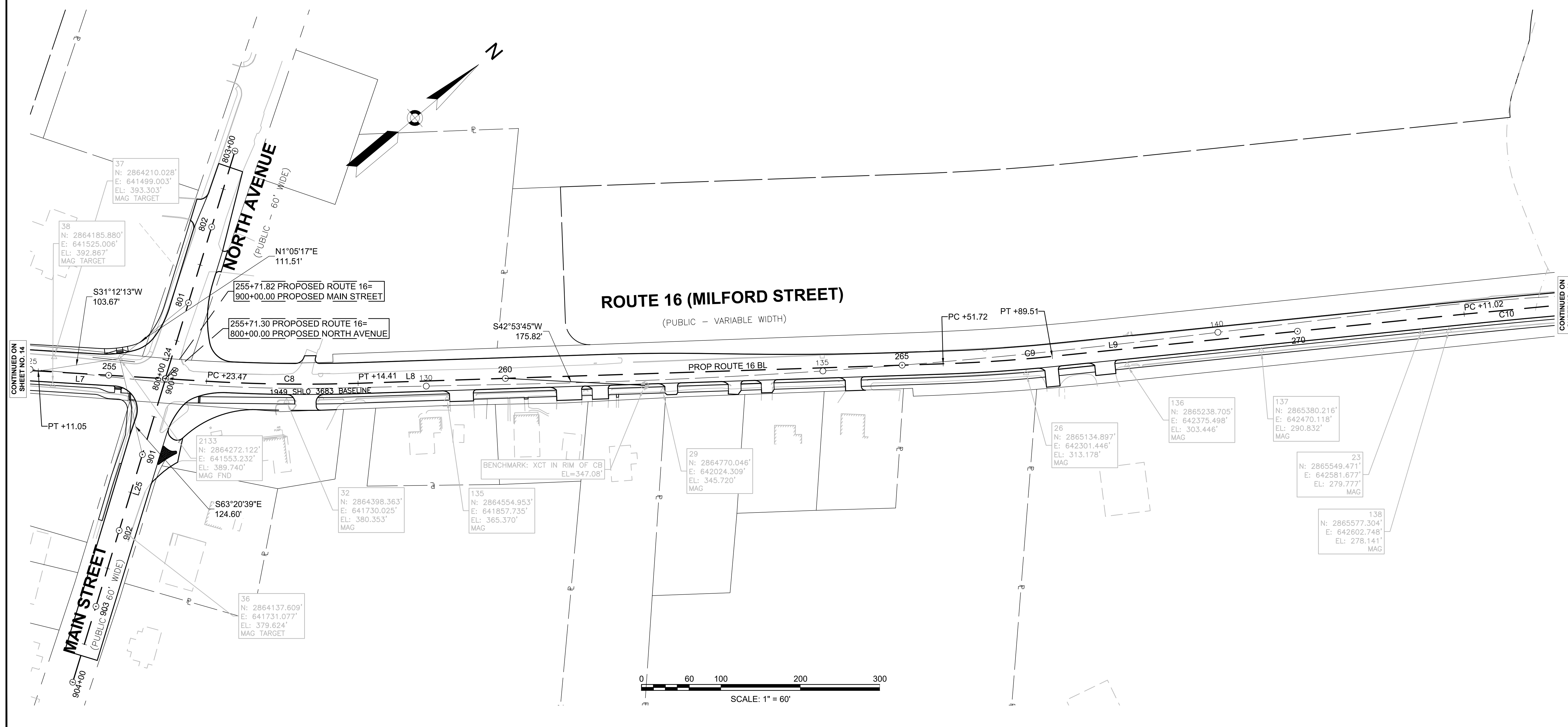
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	15	116
PROJECT FILE NO.		608491	

CONSTRUCTION BASELINE TIE PLANS  
SHEET 4 OF 6

PROPOSED ROUTE 16 CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L7	254+11.05	2864183.4536	641499.5249		N43°28'46"E 212.41'	256+23.47	2864337.5841	641645.6849
C8	256+23.47	2864337.5841	641645.6849	R=2030.00' Δ=5°23'22" L=190.95' T=95.54'		258+14.41	2864482.1088	641770.3689
L8	258+14.41	2864482.1088	641770.3689		N38°05'25"E 737.30'	265+51.72	2865062.3958	642225.2121
C9	265+51.72	2865062.3958	642225.2121	R=2000.00' Δ=3°56'51" L=137.80' T=68.93'		266+89.51	2865173.6881	642306.4168
L9	266+89.51	2865173.6881	642306.4168		N34°08'34"E 521.51'	272+11.02	2865605.3132	642599.1180
C10	272+11.02	2865605.3132	642599.1180	R=7900.00' Δ=3°37'41" L=500.24' T=250.20'		277+11.26	2866010.1693	642892.7958

PROPOSED NORTH AVENUE CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L24	800+00.00	2864299.7326	641609.7908		N32°59'05"W 300.00'	803+00.00	2864551.3774	641446.4662

PROPOSED MAIN STREET CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L25	900+00.00	2864300.1058	641610.1447		S32°59'05"E 400.00'	904+00.00	2863964.5795	641827.9108

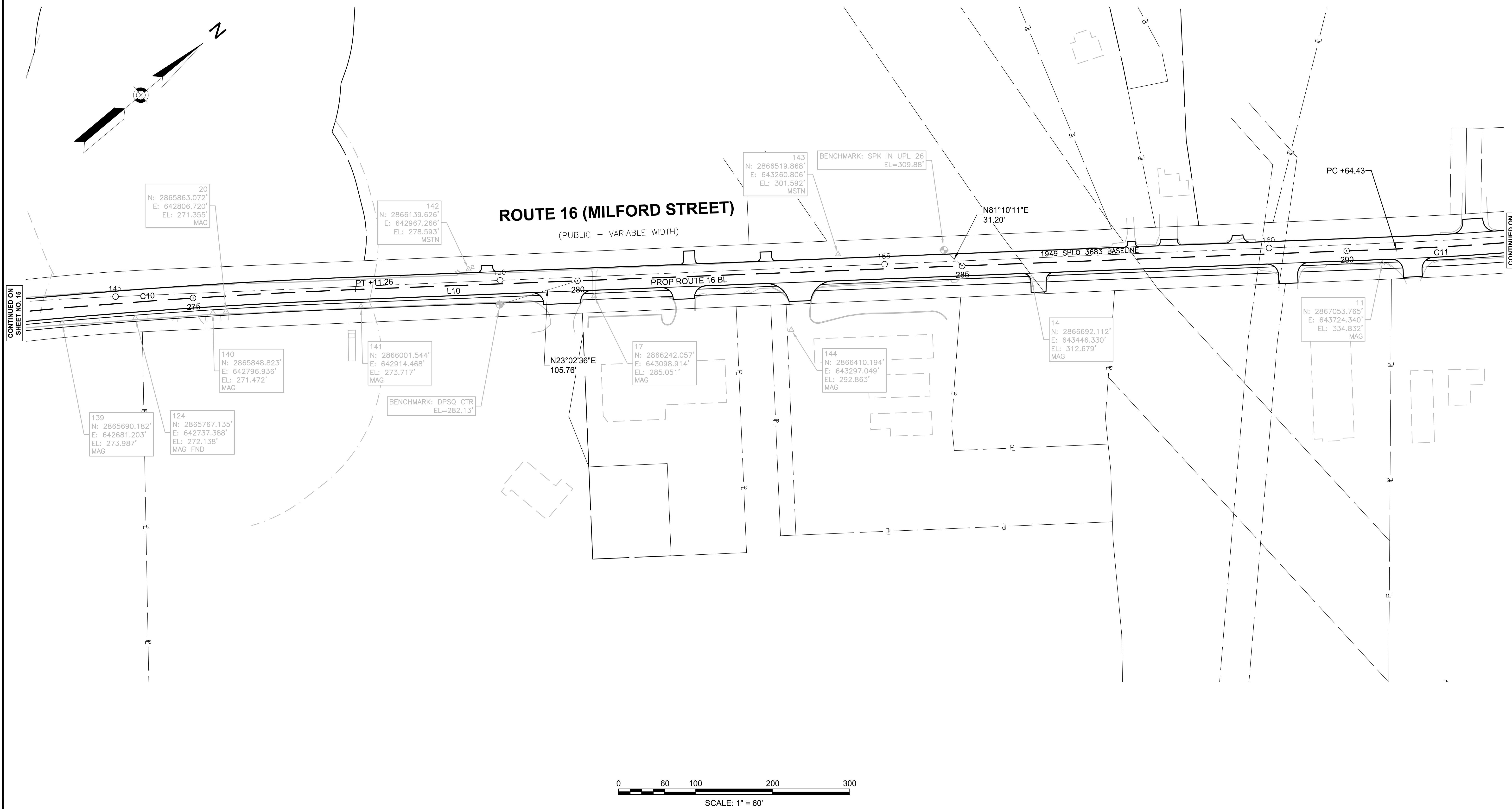


MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	16	116
PROJECT FILE NO.		608491	

CONSTRUCTION BASELINE TIE PLANS  
SHEET 5 OF 6

PROPOSED ROUTE 16 CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
C10	272+11.02	2865605.3132	642599.1180	R=7900.00' Δ=3°37'41" L=500.24' T=250.20'		277+11.26	2866010.1693	642892.7958
L10	277+11.26	2866010.1693	642892.7958		N37°46'15"E 1353.17'	290+64.43	2867079.8089	643721.6180
C11	290+64.43	2867079.8089	643721.6180	R=3750.00' Δ=15°27'34" L=1011.82' T=509.00'		300+76.26	2867953.0566	644226.6204



CONTINUED ON  
SHEET NO. 15

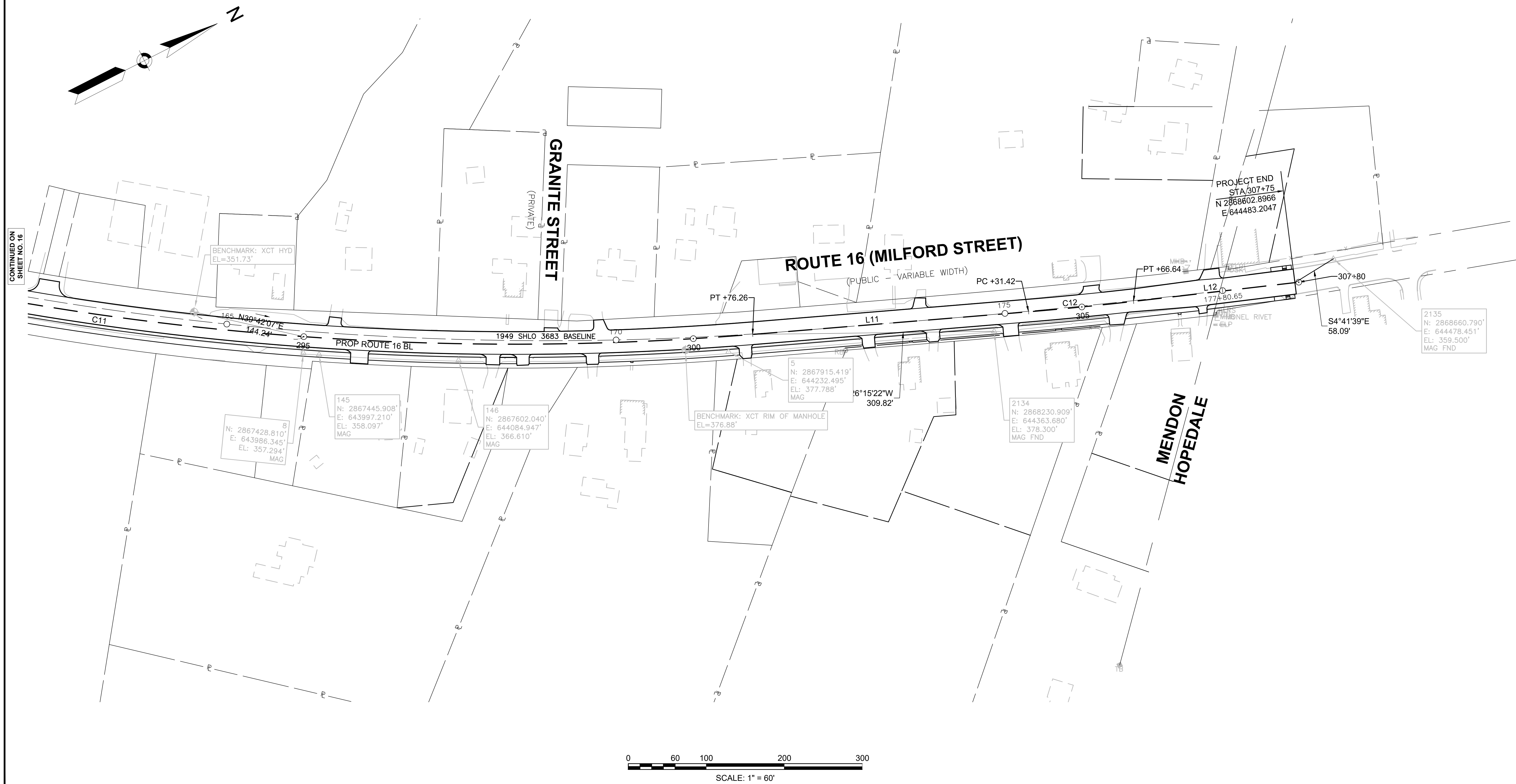
CONTINUED ON  
SHEET NO. 17

MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	17	116
PROJECT FILE NO.		608491	

CONSTRUCTION BASELINE TIE PLANS  
SHEET 6 OF 6

PROPOSED ROUTE 16 CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
C11	290+64.43	2867079.8089	643721.6180	R=3750.00' Δ=15°27'34" L=1011.82' T=509.00'		300+76.26	2867953.0566	644226.6204
L11	300+76.26	2867953.0566	644226.6204		N22°18'40"E 355.16'	304+31.42	2868281.6269	644361.4520
C12	304+31.42	2868281.6269	644361.4520	R=4000.00' Δ=1°56'13" L=135.23' T=67.62'		305+66.64	2868407.5735	644410.6647
L12	305+66.64	2868407.5735	644410.6647		N20°22'27"E 213.36'	307+80.00	2868607.5838	644484.9455





**HIGHWAY GUARD DETAILS**

TRANSITION TO NCHRP 350 GUARDRAIL  
 GUARDRAIL, TL-3 (SINGLE FACED)  
 LENGTH OF NEED

**TRAFFIC SIGNAL CONDUIT**

STA 205+04.0 TO 205+24.3 LT  
 STA 205+24.3 TO 208+51.14 LT  
 STA 205+24.3 TO 208+37.2 LT

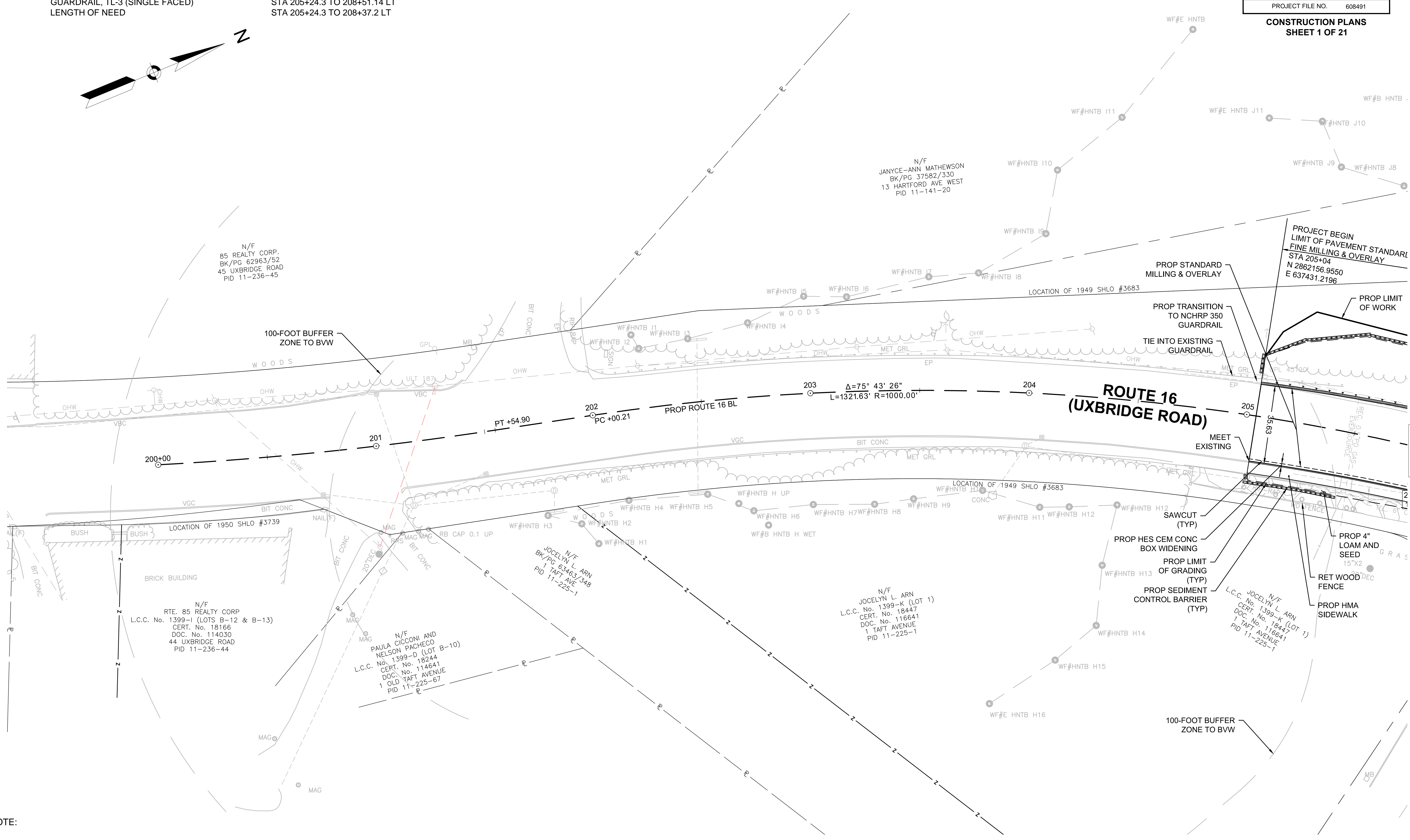
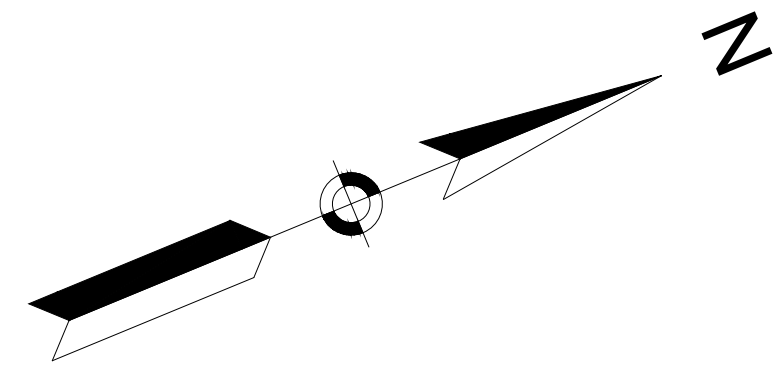
**DRAINAGE DETAILS**

SEE SHEET 51

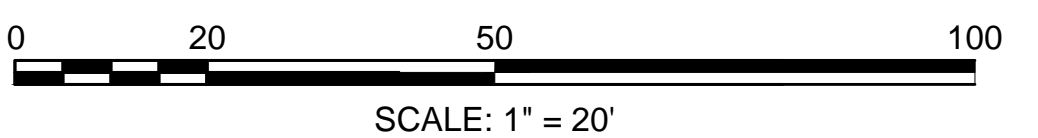
**MENDON  
 ROUTE 16**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	18	116
PROJECT FILE NO. 608491			

**CONSTRUCTION PLANS  
 SHEET 1 OF 21**



- NOTE:**
1. THIS SHEET IS PROVIDED FOR REFERENCE TO ROADWAY LOW POINT.
  2. TREE TRIMMING AND SELECTIVE THINNING SHOULD OCCUR AT ANY NEW UTILITY POLE AND PROVIDE 15' CLEAR WIDTH OF ALL OVERHEAD WIRES (OHW). CONTRACTOR TO CONFIRM CLEARING AND TREE TRIMMING LIMITS AT A FIELD MEETING WITH NATIONAL GRID AND MASSDOT TO STAKE ALL POLE LOCATIONS AND STAKING CUTTING LIMITS TO MINIMIZE TRIMMING TO THE MAXIMUM EXTENT POSSIBLE.



FOR PROFILE SEE SHEET: 39

CONTINUED ON SHEET NO. 19



**MENDON  
ROUTE 16**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	19	116
PROJECT FILE NO. 608491			

**CONSTRUCTION PLANS  
SHEET 2 OF 21**

**HIGHWAY GUARD DETAILS**

TRANSITION TO NCHRP 350 GUARDRAIL  
GUARDRAIL, TL-3 (SINGLE FACED)  
GUARDRAIL TANGENT END TREATMENT, TL-3

STA 204+90 TO 205+24 LT  
STA 205+24 TO 208+13 LT  
STA 208+13 TO 208+50 LT

**TRAFFIC SIGNAL CONDUIT**

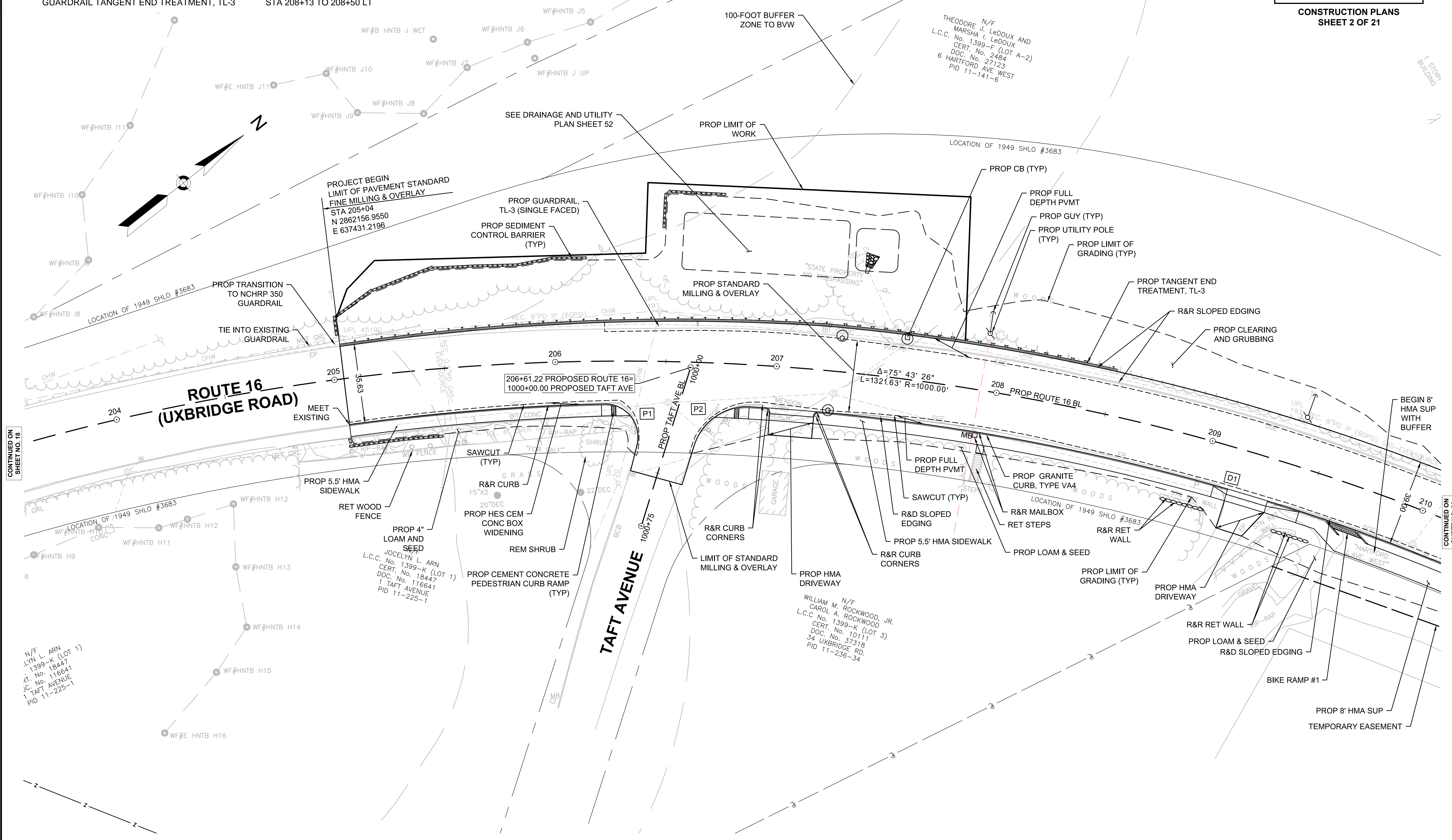
SEE SHEET 96

**TRAFFIC SIGN & PAVEMENT MARKING PLANS**

SEE SHEET 72

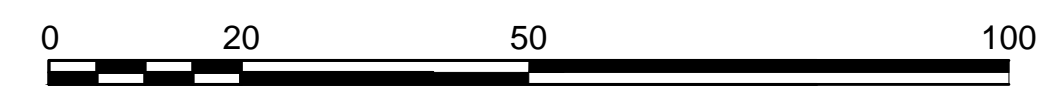
**DRAINAGE DETAILS**

SEE SHEET 52



CONTINUED ON  
SHEET NO. 18

CONTINUED ON  
SHEET NO. 20



SCALE: 1" = 20'

FOR PROFILE SEE SHEET: 39



**MENDON  
ROUTE 16**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	20	116
PROJECT FILE NO. 608491			

**CONSTRUCTION PLANS  
SHEET 3 OF 21**

608491\_HDA(CONST PLANS).DWG Plotted on 17-Sep-2022 6:55 PM

CONTINUED ON SHEET NO. 21

**HIGHWAY GUARD DETAILS**

NONE  
N/F  
DONNA R. COTE AND  
JESSICA E. SMITH  
BK/PG 63700/332  
13 HARTFORD AVE WEST  
PID 11-141-13

**TRAFFIC SIGNAL CONDUIT**

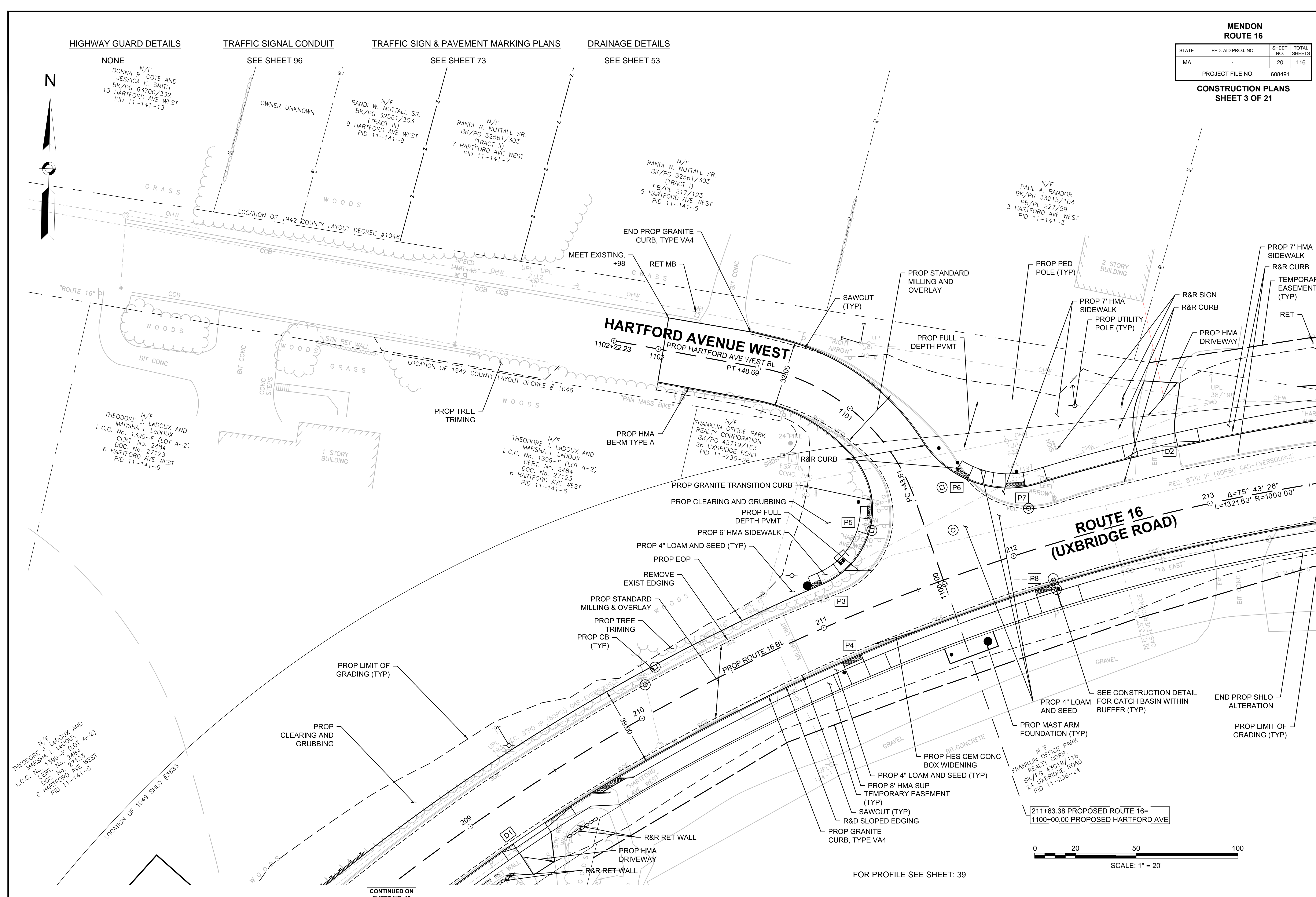
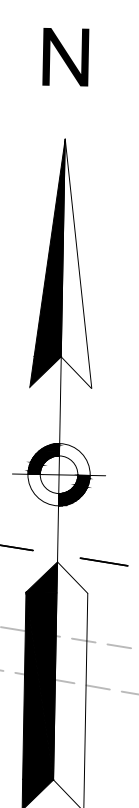
SEE SHEET 96

**TRAFFIC SIGN & PAVEMENT MARKING PLANS**

SEE SHEET 73

**DRAINAGE DETAILS**

SEE SHEET 53



N/F  
THEODORE J. LeDOUX AND  
MARSHA I. LeDOUX  
L.C.C. No. 1399-F (LOT A-2)  
CERT. No. 2484  
DOC. No. 27123  
6 HARTFORD AVE WEST  
PID 11-141-6

N/F  
THEODORE J. LeDOUX AND  
MARSHA I. LeDOUX  
L.C.C. No. 1399-F (LOT A-2)  
CERT. No. 2484  
DOC. No. 27123  
6 HARTFORD AVE WEST  
PID 11-141-6

N/F  
THEODORE J. LeDOUX AND  
MARSHA I. LeDOUX  
L.C.C. No. 1399-F (LOT A-2)  
CERT. No. 2484  
DOC. No. 27123  
6 HARTFORD AVE WEST  
PID 11-141-6

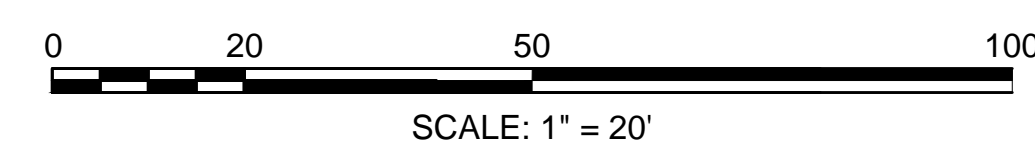
N/F  
PAUL A. RANDOR  
BK/PG 33215/104  
PB/PL 227/59  
3 HARTFORD AVE WEST  
PID 11-141-3

N/F  
RANDI W. NUTTALL SR.  
BK/PG 32561/303  
(TRACT I)  
PB/PL 217/123  
5 HARTFORD AVE WEST  
PID 11-141-5

N/F  
RANDI W. NUTTALL SR.  
BK/PG 32561/303  
(TRACT III)  
9 HARTFORD AVE WEST  
PID 11-141-9

N/F  
RANDI W. NUTTALL SR.  
BK/PG 32561/303  
(TRACT II)  
7 HARTFORD AVE WEST  
PID 11-141-7

211+63.38 PROPOSED ROUTE 16=  
1100+00.00 PROPOSED HARTFORD AVE



FOR PROFILE SEE SHEET: 39

CONTINUED ON SHEET NO. 19







HIGHWAY GUARD DETAILS

NONE

TRAFFIC SIGNAL CONDUIT

NONE

TRAFFIC SIGN & PAVEMENT MARKING PLANS

SEE SHEET 75

DRAINAGE DETAILS

SEE SHEET 55

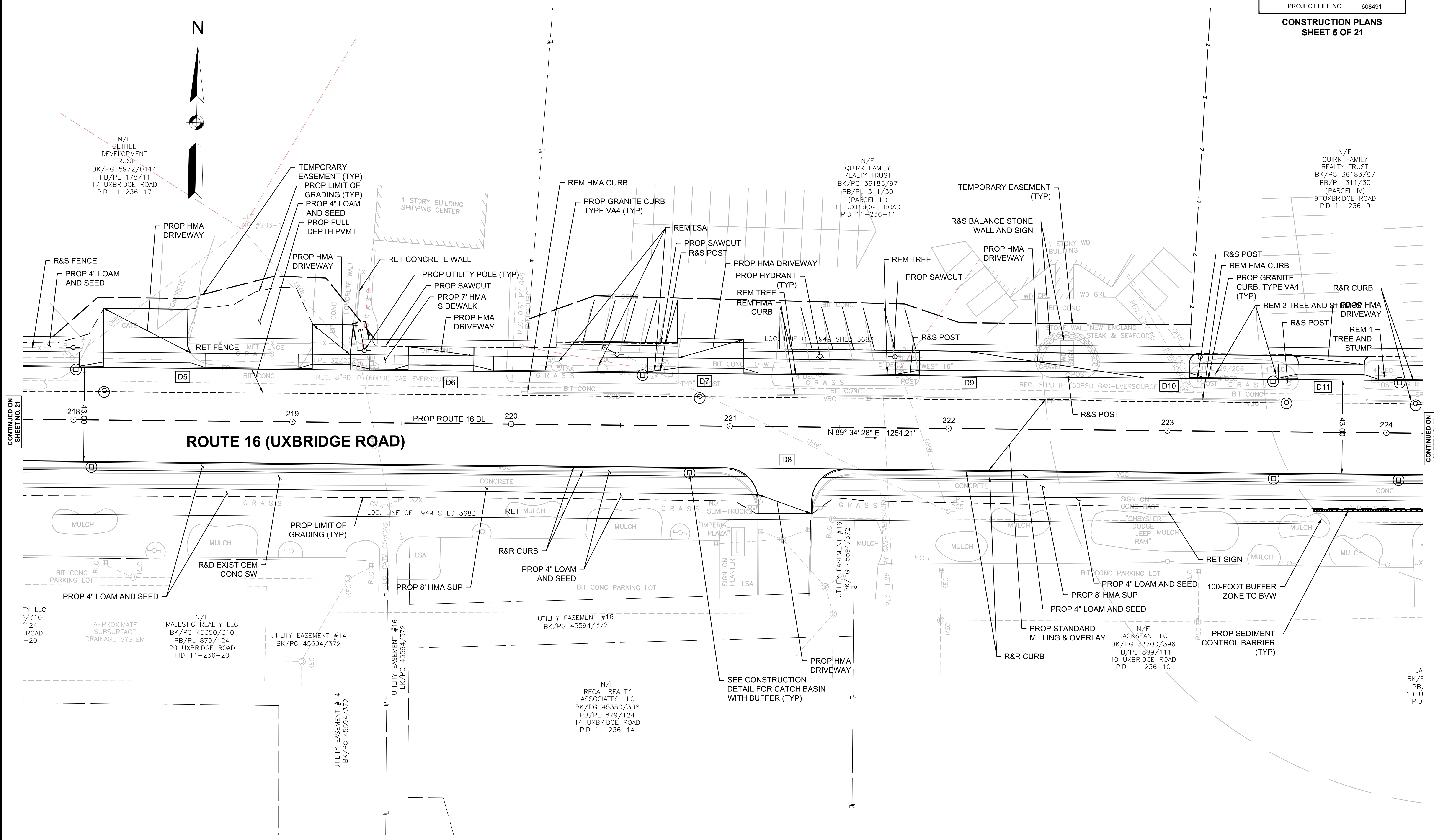
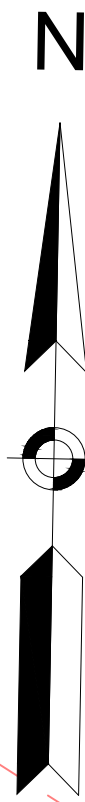
WATER SUPPLY ALTERATIONS

SEE SHEET 55

MENDON  
ROUTE 16

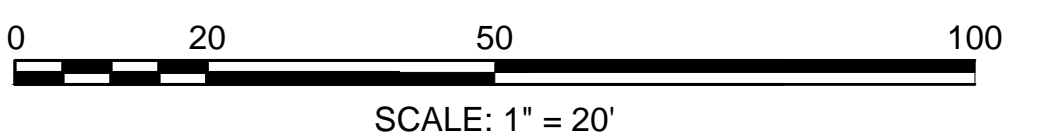
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	22	116
PROJECT FILE NO. 608491			

CONSTRUCTION PLANS  
SHEET 5 OF 21



CONTINUED ON  
SHEET NO. 21

CONTINUED ON  
SHEET NO. 23



FOR PROFILE SEE SHEET: 40

JA  
BK/F  
PB,  
10 U  
PID

608491\_HD(CONST PLANS).DWG Plotted on 17-Sep-2022 6:55 PM



**MENDON  
ROUTE 16**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	23	116
PROJECT FILE NO.		608491	

**CONSTRUCTION PLANS  
SHEET 6 OF 21**

**HIGHWAY GUARD DETAILS**

TRAILING ANCHORAGE  
GUARDRAIL, TL-3 (SINGLE FACED)  
GUARDRAIL TANGENT END TREATMENT, TL-3  
LENGTH OF NEED

**TRAFFIC SIGNAL CONDUIT**

NONE

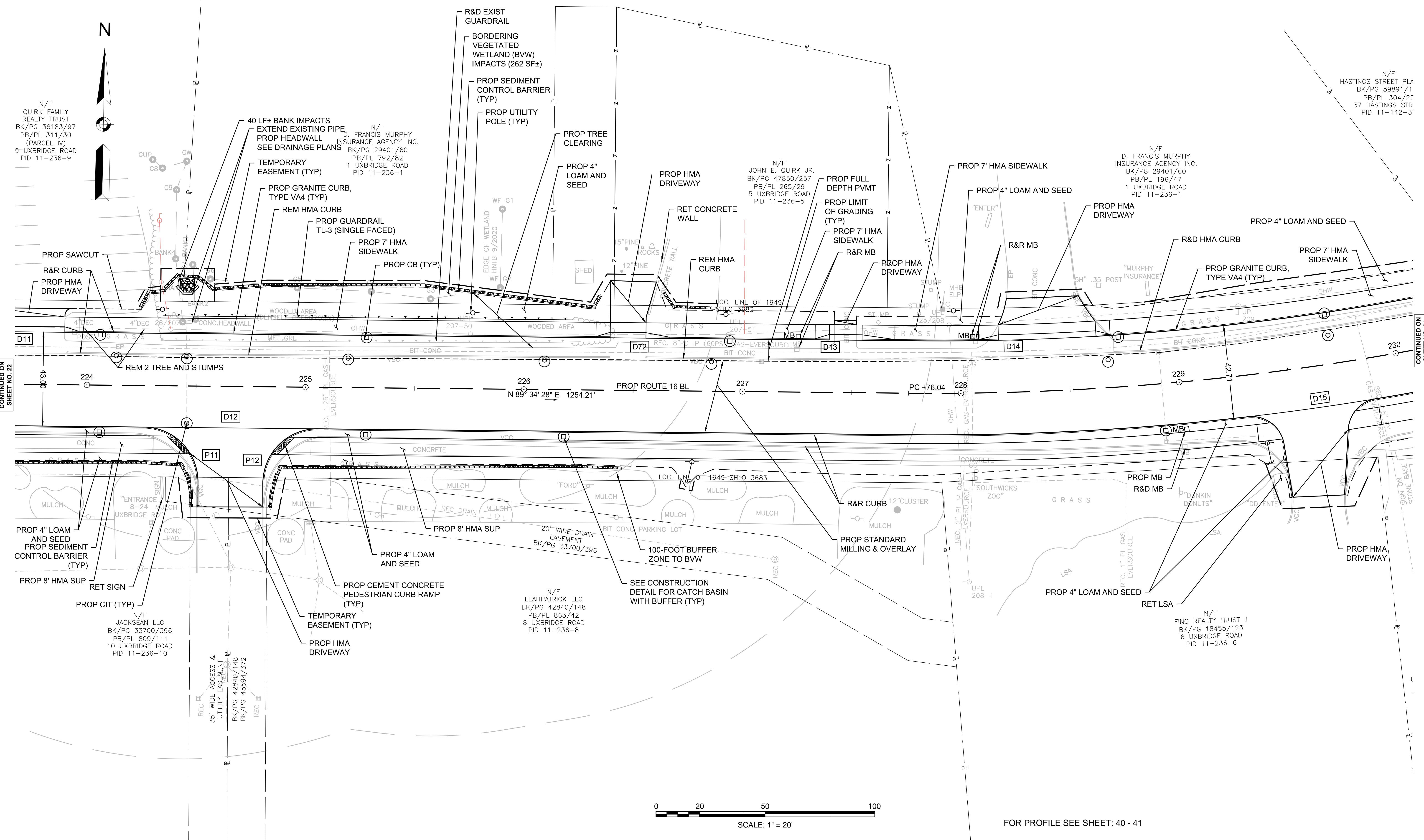
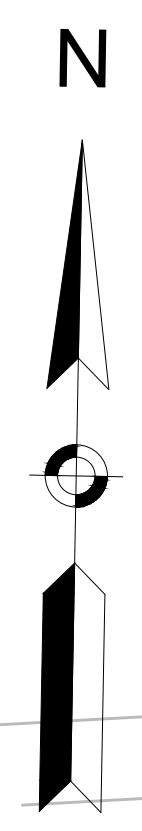
**TRAFFIC SIGN & PAVEMENT MARKING PLANS**

SEE SHEET 76

**DRAINAGE DETAILS**

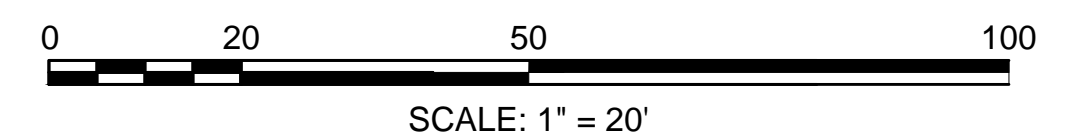
SEE SHEET 56

STA 224+34.6 TO STA 224+43.9 LT  
STA 224+43.9 TO STA 224+10.7 LT  
STA 224+10.7 TO STA 226+25.7 LT  
STA 224+48.0 TO STA 226+06.4 LT



CONTINUED ON SHEET NO. 22

CONTINUED ON SHEET NO. 24



FOR PROFILE SEE SHEET: 40 - 81



HIGHWAY GUARD DETAILS

NONE

TRAFFIC SIGNAL CONDUIT

NONE

TRAFFIC SIGN & PAVEMENT MARKING PLANS

SEE SHEET 77

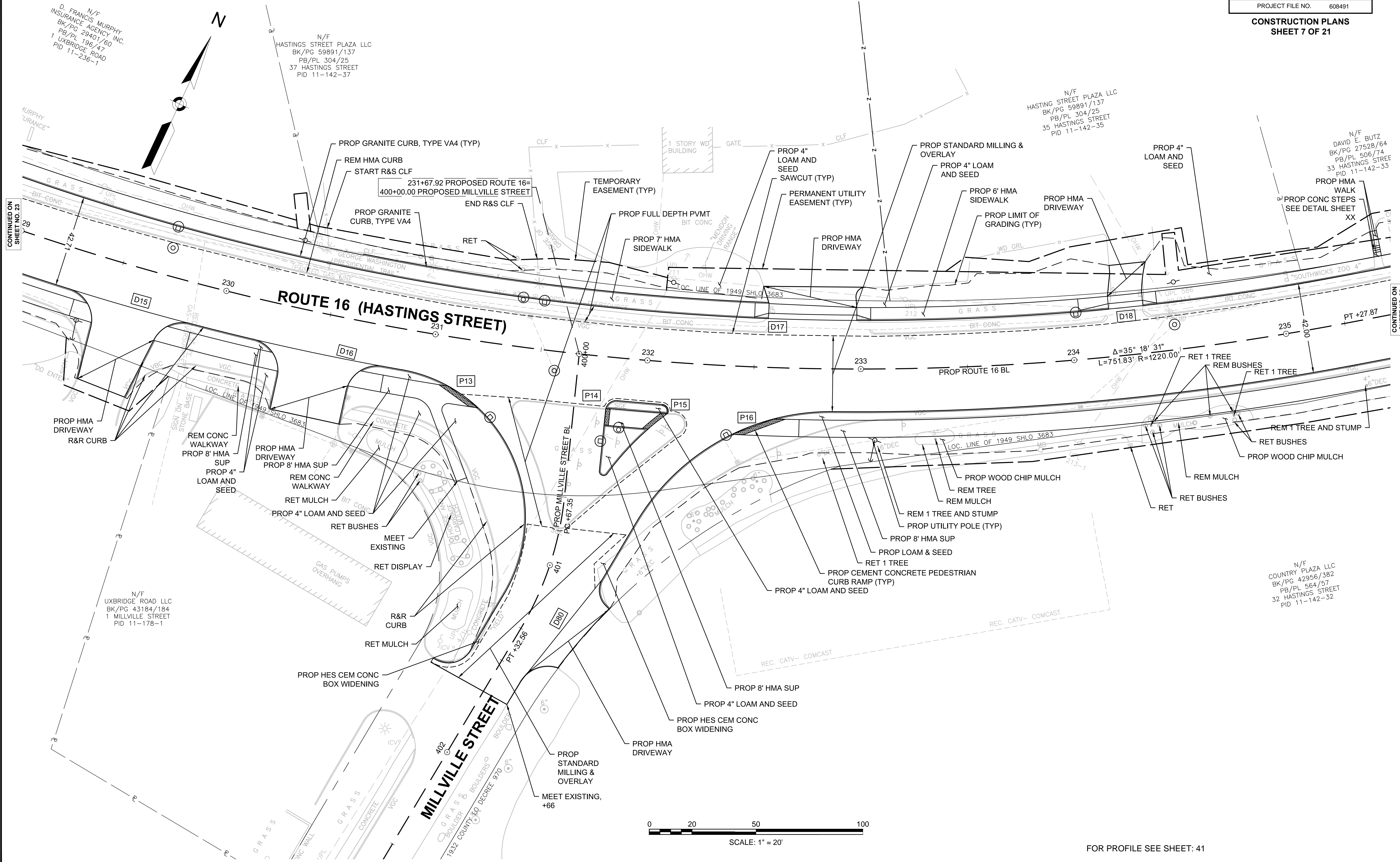
DRAINAGE DETAILS

SEE SHEET 57

MENDON ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	24	116
PROJECT FILE NO. 608491			

CONSTRUCTION PLANS SHEET 7 OF 21



CONTINUED ON SHEET NO. 23

CONTINUED ON SHEET NO. 25

FOR PROFILE SEE SHEET: 41



HIGHWAY GUARD DETAILS

NONE

TRAFFIC SIGNAL CONDUIT

NONE

TRAFFIC SIGN & PAVEMENT MARKING PLANS

SEE SHEET 78

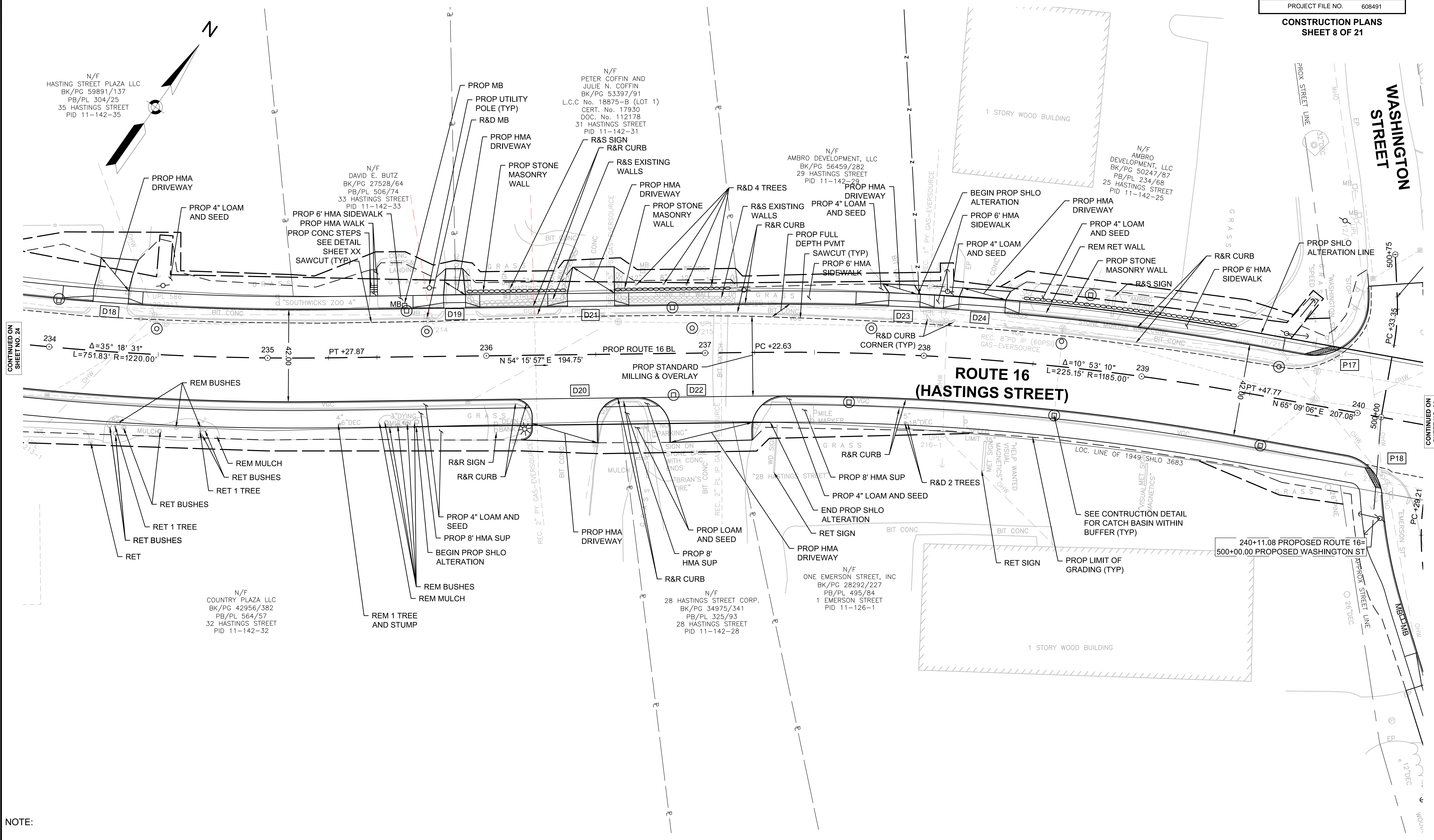
DRAINAGE DETAILS

SEE SHEET 58

MENDON ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	25	116
PROJECT FILE NO.		608491	

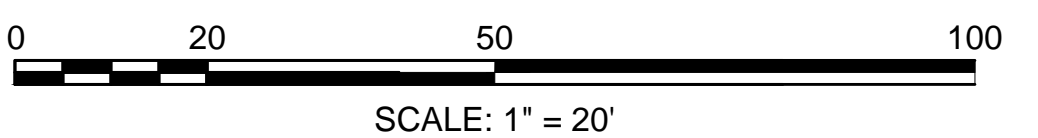
CONSTRUCTION PLANS SHEET 8 OF 21



CONTINUED ON SHEET NO. 24

CONTINUED ON SHEET NO. 26

- NOTE:
1. CONTRACTOR TO REMOVE AND STACK EXISTING TOWN OF MENDON BANNERS ON UTILITY POLES. CONTRACTOR TO LEAVE ALL BANNERS AND BRACKETS AT THE TOWN HIGHWAY DEPARTMENT, ADDRESS 66 PROVIDENCE ST. MENDON, MA. 01756



FOR PROFILE SEE SHEET: 41 - 42



**MENDON  
ROUTE 16**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	26	116
PROJECT FILE NO. 608491			

**CONSTRUCTION PLANS  
SHEET 9 OF 21**

HIGHWAY GUARD DETAILS

NONE

TRAFFIC SIGNAL CONDUIT

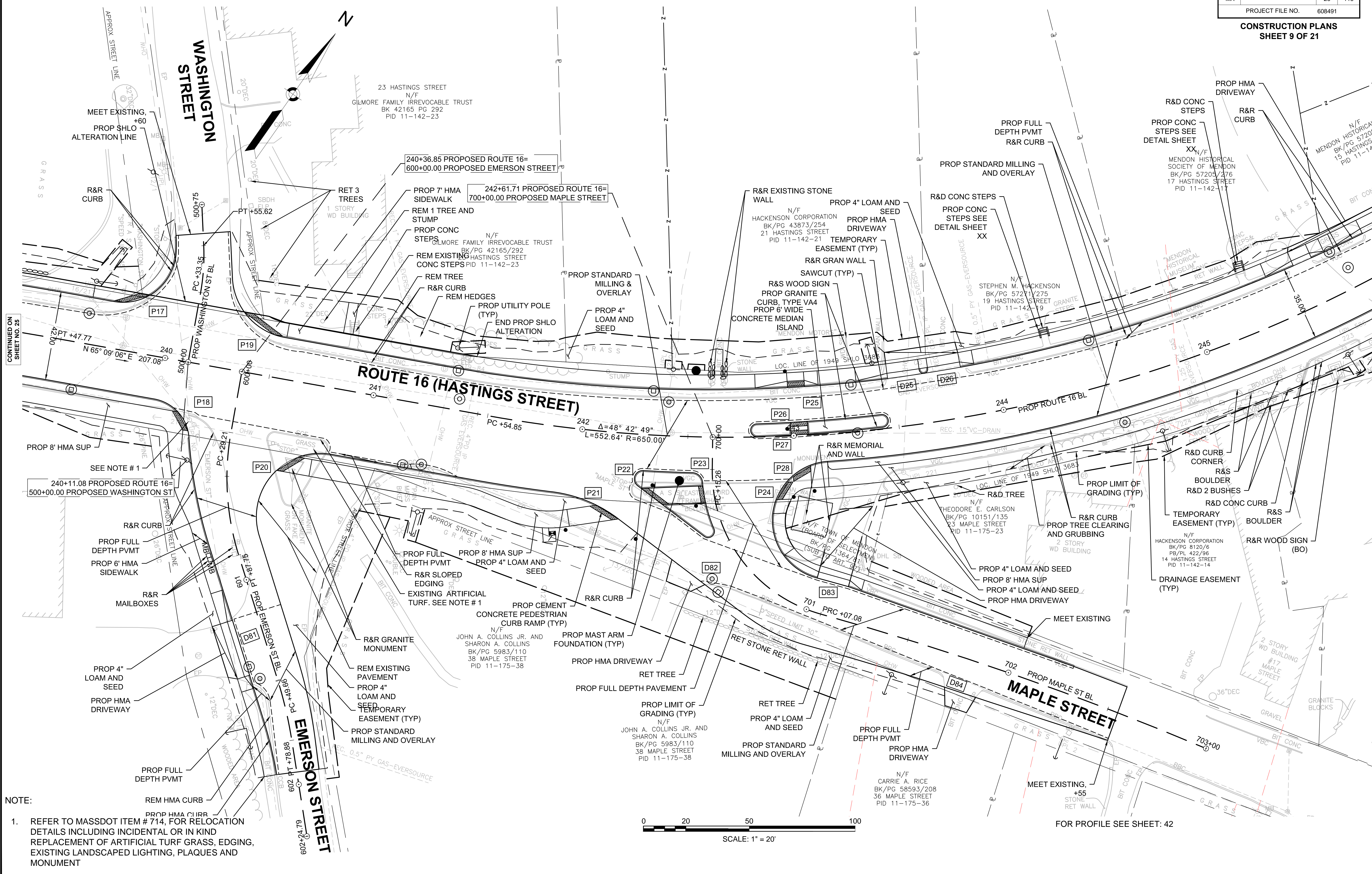
SEE SHEET 98

TRAFFIC SIGN & PAVEMENT MARKING PLANS

SEE SHEET 79

DRAINAGE DETAILS

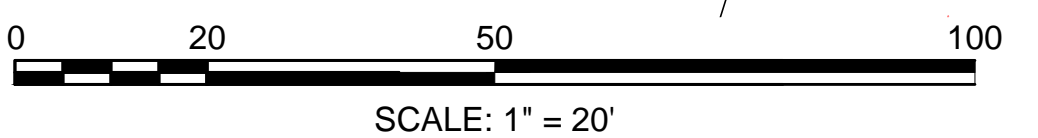
SEE SHEET 59



CONTINUED ON SHEET NO. 25

CONTINUED ON SHEET NO. 27

NOTE:  
1. REFER TO MASSDOT ITEM # 714, FOR RELOCATION DETAILS INCLUDING INCIDENTAL OR IN KIND REPLACEMENT OF ARTIFICIAL TURF GRASS, EDGING, EXISTING LANDSCAPED LIGHTING, PLAQUES AND MONUMENT



FOR PROFILE SEE SHEET: 42



HIGHWAY GUARD DETAILS

NONE

TRAFFIC SIGNAL CONDUIT

NONE

TRAFFIC SIGN & PAVEMENT MARKING PLANS

SEE SHEET 80

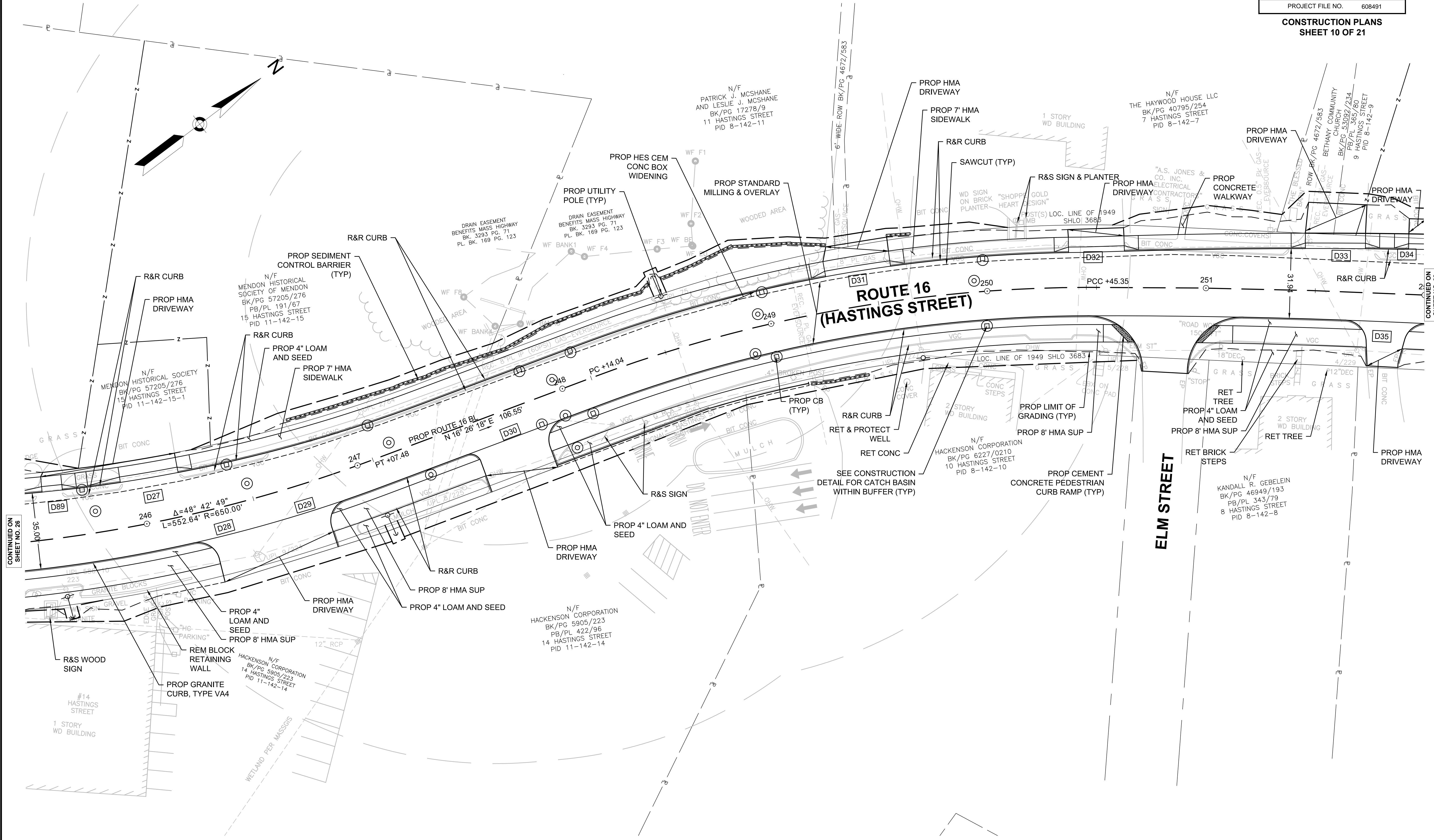
DRAINAGE DETAILS

SEE SHEET 60

MENDON  
ROUTE 16

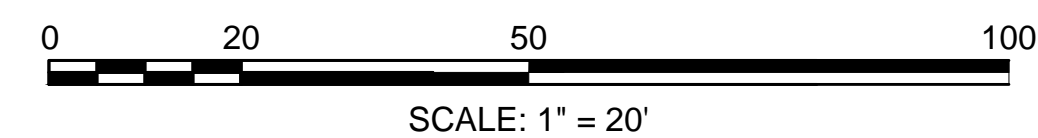
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	27	116
PROJECT FILE NO.		608491	

CONSTRUCTION PLANS  
SHEET 10 OF 21



CONTINUED ON SHEET NO. 26

CONTINUED ON SHEET NO. 28



FOR PROFILE SEE SHEET: 42 - 43



HIGHWAY GUARD DETAILS

NONE

TRAFFIC SIGNAL CONDUIT

SEE SHEET 100

TRAFFIC SIGN & PAVEMENT MARKING PLANS

SEE SHEET 81

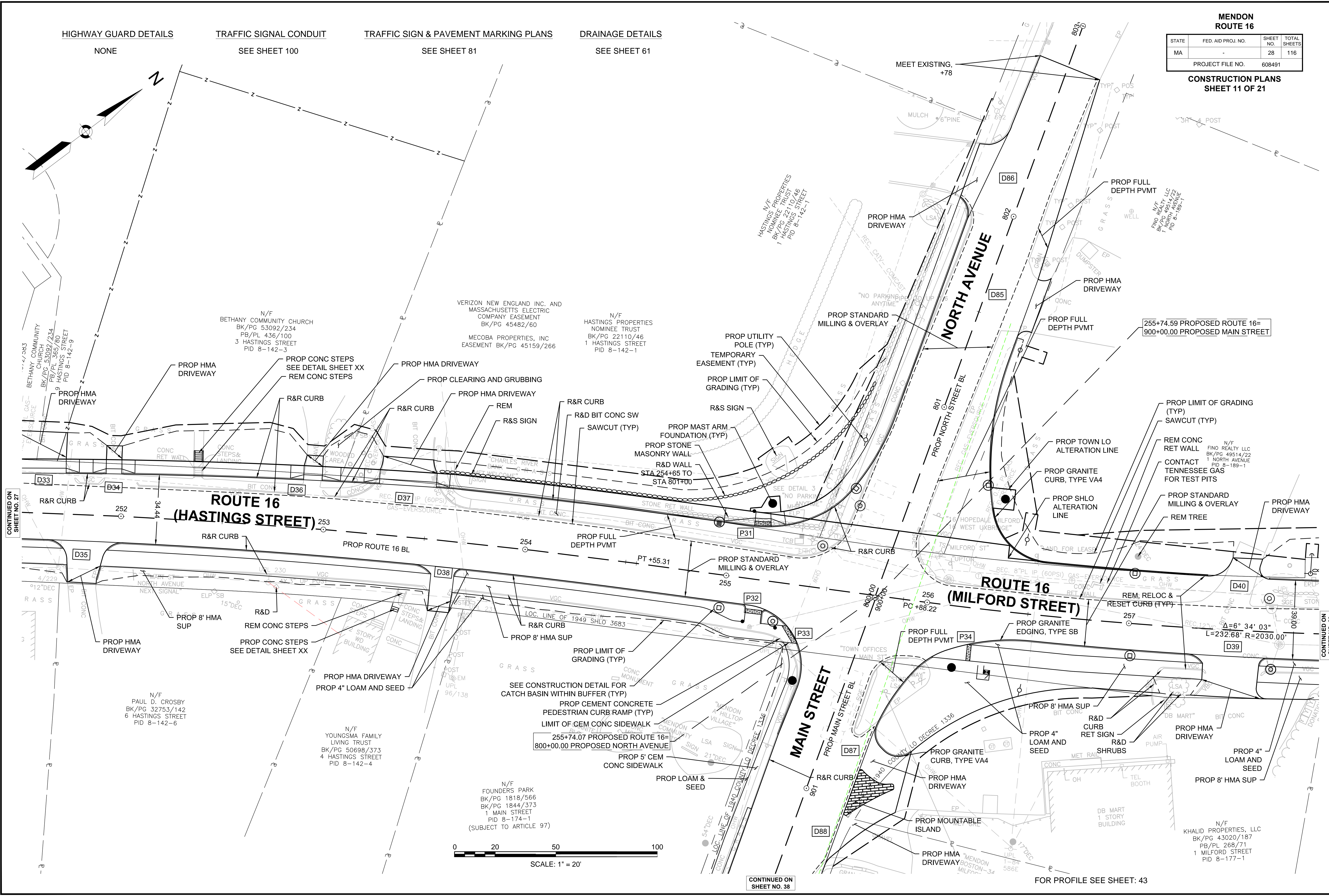
DRAINAGE DETAILS

SEE SHEET 61

MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	28	116
PROJECT FILE NO.		608491	

CONSTRUCTION PLANS  
SHEET 11 OF 21



CONTINUED ON  
SHEET NO. 27

CONTINUED ON  
SHEET NO. 29

CONTINUED ON  
SHEET NO. 38

FOR PROFILE SEE SHEET: 43



HIGHWAY GUARD DETAILS

NONE

TRAFFIC SIGNAL CONDUIT

NONE

TRAFFIC SIGN & PAVEMENT MARKING PLANS

SEE SHEET 82

DRAINAGE DETAILS

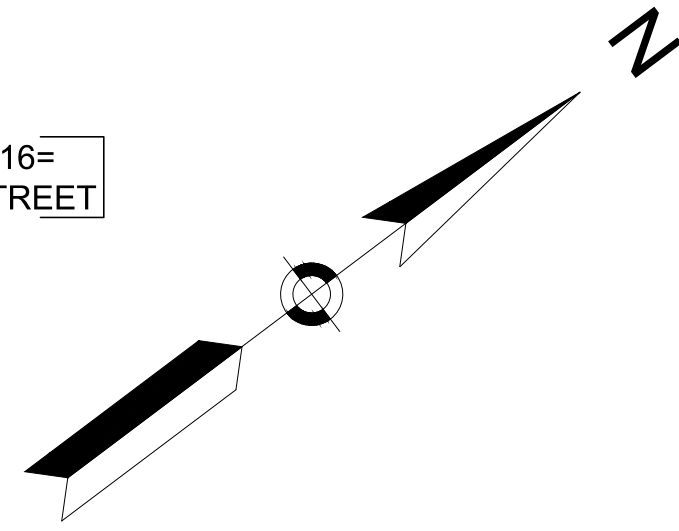
SEE SHEET 62

MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	29	116
PROJECT FILE NO.		608491	

CONSTRUCTION PLANS  
SHEET 12 OF 21

D ROUTE 16=  
D MAIN STREET



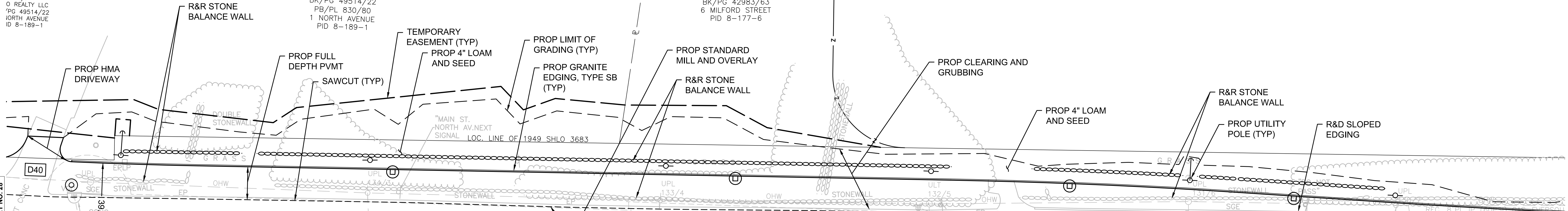
"MUDDY BROOK NORTH CONSERVATION AREA"  
METACOMET LAND TRUST, INC  
CONSERVATION RESTRICTION  
SUBJECT TO ARTICLE 97  
BK/PG 52480/277

N/F  
TOWN OF MENDON  
(CONSERVATION COMMISSION)  
BK/PG 42983/63  
20 MILFORD STREET  
PID 9-177-20

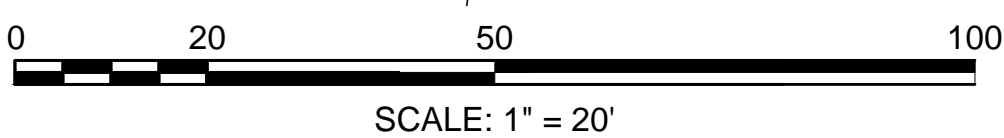
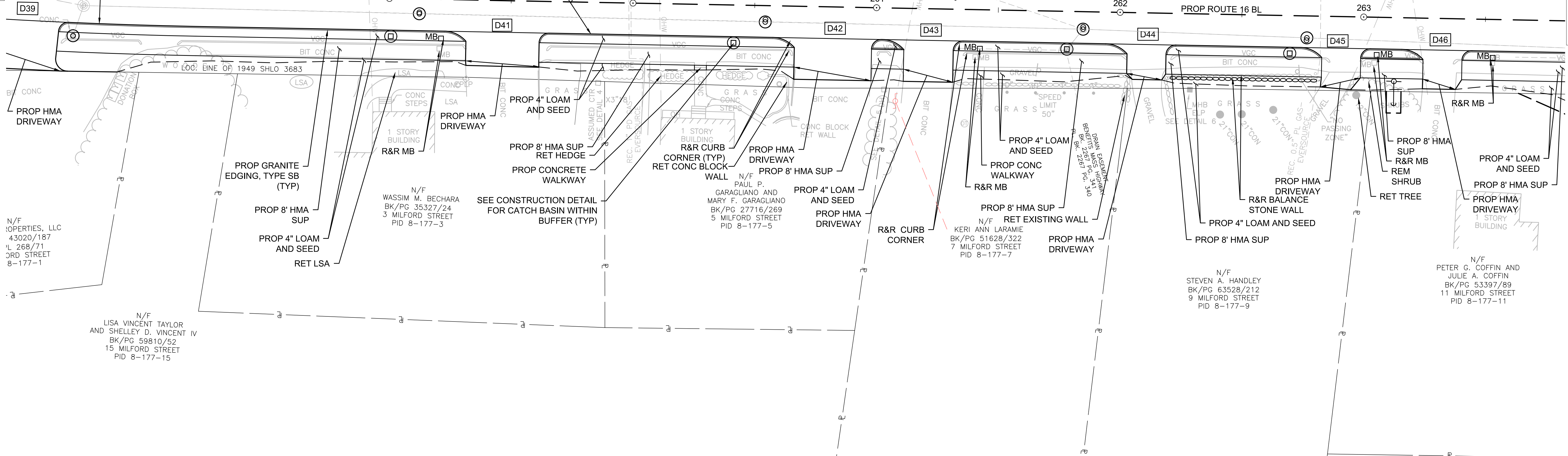
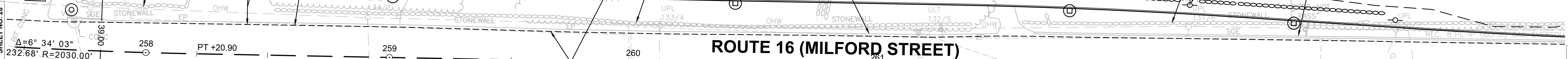
N/F  
O REALTY LLC  
PG 49514/22  
107 NORTH AVENUE  
ID 8-189-1

N/F  
FINO REALTY LLC  
BK/PG 49514/22  
PB/PL 830/80  
1 NORTH AVENUE  
PID 8-189-1

N/F  
TOWN OF MENDON  
(CONSERVATION COMMISSION)  
BK/PG 42983/63  
6 MILFORD STREET  
PID 8-177-6



ROUTE 16 (MILFORD STREET)



FOR PROFILE SEE SHEET: 43 - 44

CONTINUED ON  
SHEET NO. 28

CONTINUED ON  
SHEET NO. 30

608491\_HD(CONST PLANS).DWG Plotted on 17-Sep-2022 6:56 PM

**HIGHWAY GUARD DETAILS**

TRAILING ANCHORAGE  
 GUARDRAIL TANGENT END TREATMENT, TL-3  
 GUARDRAIL, TL-3 (SINGLE FACED)  
 LENGTH OF NEED

STA 269+65.8 TO STA 269+75.8 LT  
 STA 267+69.8 TO STA 267+84.7 RT  
 STA 267+84.7 TO STA 279+42.6 RT  
 STA 267+83.4 TO STA 279+57.6 RT

**TRAFFIC SIGNAL CONDUIT**

NONE

**TRAFFIC SIGN & PAVEMENT MARKING PLANS**

SEE SHEET 83

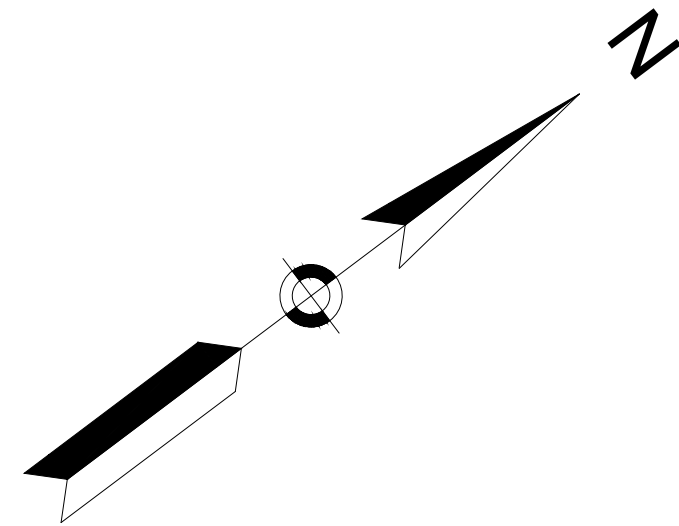
**DRAINAGE DETAILS**

SEE SHEET 63

**MENDON  
 ROUTE 16**

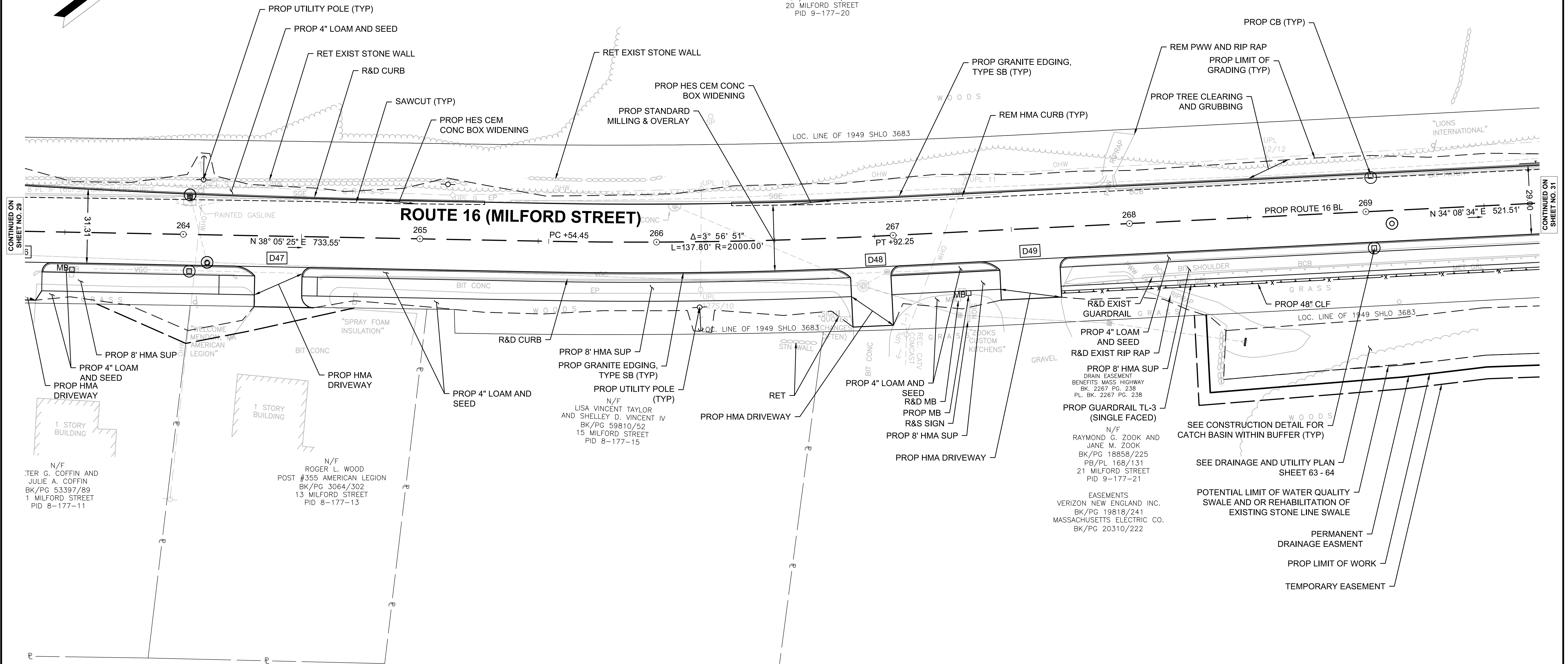
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	30	116
PROJECT FILE NO. 608491			

**CONSTRUCTION PLANS  
 SHEET 13 OF 21**



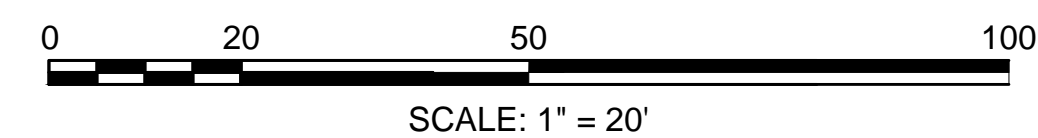
"MUDDY BROOK NORTH CONSERVATION AREA"  
 METACOMET LAND TRUST, INC  
 CONSERVATION RESTRICTION  
 SUBJECT TO ARTICLE 97  
 BK/PG 52480/277

N/F  
 TOWN OF MENDON  
 (CONSERVATION COMMISSION)  
 BK/PG 42983/63  
 20 MILFORD STREET  
 PID 9-177-20



CONTINUED ON  
SHEET NO. 29

CONTINUED ON  
SHEET NO. 31



FOR PROFILE SEE SHEET: 44

N/F  
 TER G. COFFIN AND  
 JULIE A. COFFIN  
 BK/PG 53397/89  
 1 MILFORD STREET  
 PID 8-177-11

N/F  
 ROGER L. WOOD  
 POST #355 AMERICAN LEGION  
 BK/PG 3064/302  
 13 MILFORD STREET  
 PID 8-177-13

N/F  
 LISA VINCENT TAYLOR  
 AND SHELLEY D. VINCENT IV  
 BK/PG 59810/52  
 15 MILFORD STREET  
 PID 8-177-15

N/F  
 RAYMOND G. ZOOK AND  
 JANE M. ZOOK  
 BK/PG 18858/225  
 PB/PL 168/131  
 21 MILFORD STREET  
 PID 9-177-21

EASEMENTS  
 VERIZON NEW ENGLAND INC.  
 BK/PG 19818/241  
 MASSACHUSETTS ELECTRIC CO.  
 BK/PG 20310/222



HIGHWAY GUARD DETAILS

TRAILING ANCHORAGE  
GUARDRAIL, TL-3 (SINGLE FACED)

STA 269+65.8 TO STA 269+75.8 LT  
STA 269+75.8 TO STA 278+29.8 LT STA 267+84.7 TO STA 279+42.6 RT

TRAFFIC SIGNAL CONDUIT

NONE

TRAFFIC SIGN & PAVEMENT MARKING PLANS

SEE SHEET 84

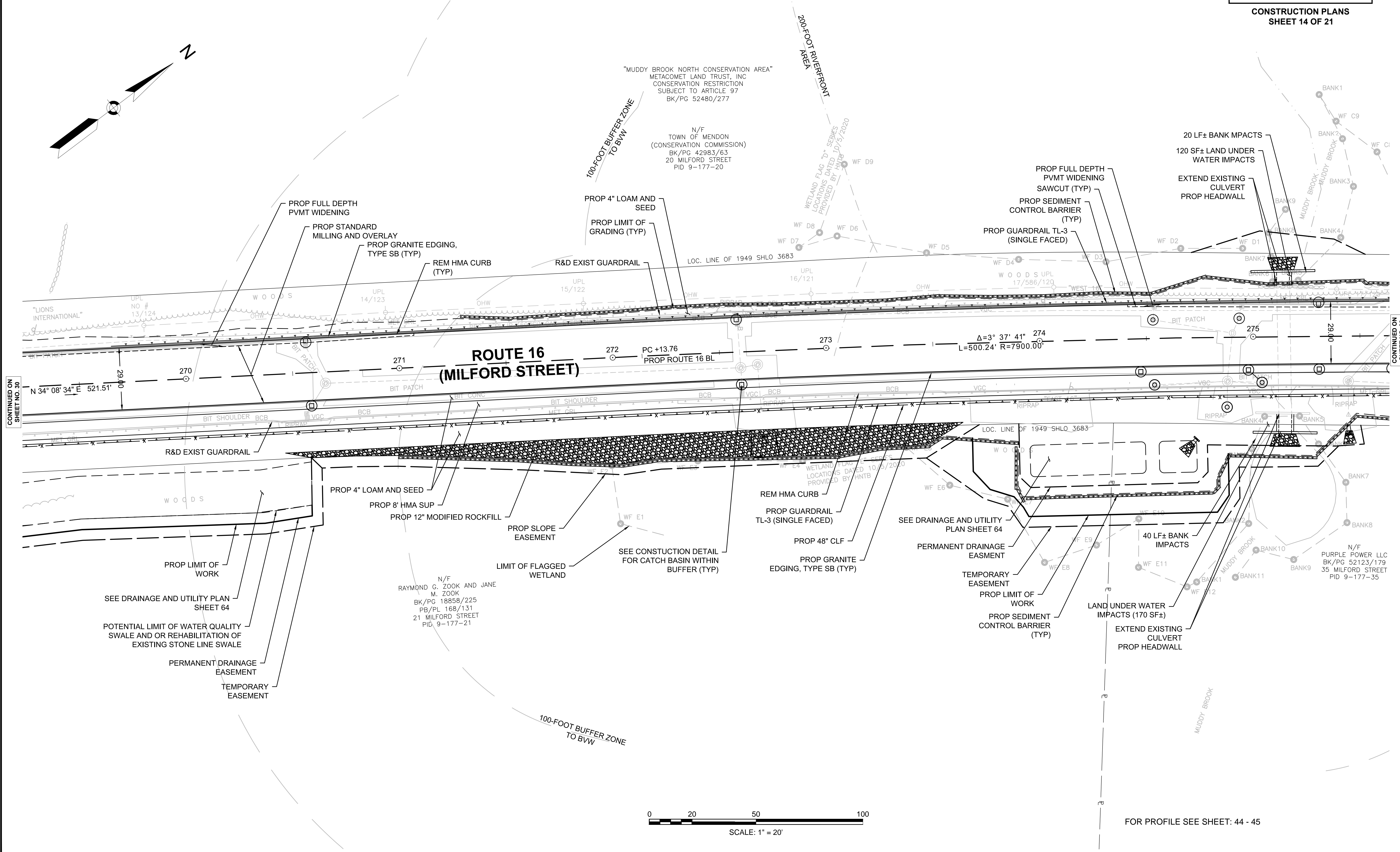
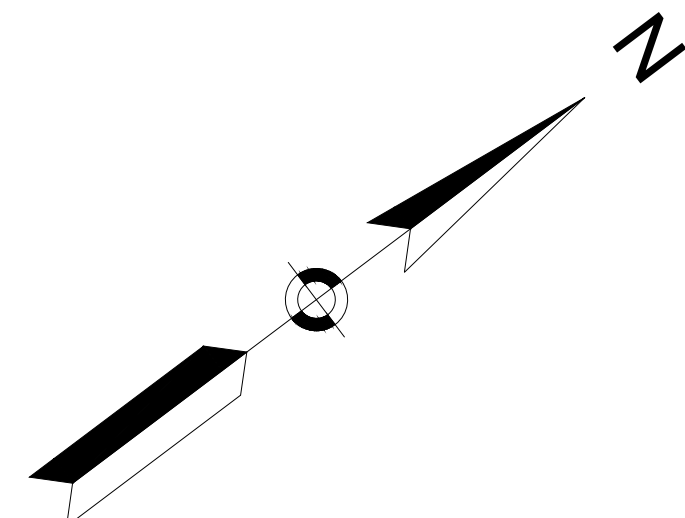
DRAINAGE DETAILS

SEE SHEET 64

MENDON  
ROUTE 16

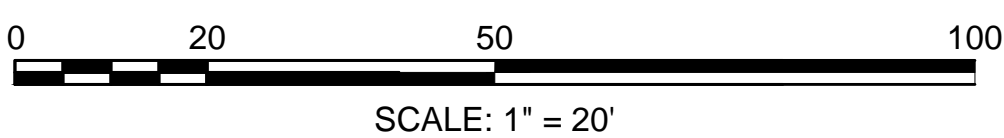
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	31	116
PROJECT FILE NO.		608491	

CONSTRUCTION PLANS  
SHEET 14 OF 21



CONTINUED ON SHEET NO. 30

CONTINUED ON SHEET NO. 32



FOR PROFILE SEE SHEET: 44 - 45

**HIGHWAY GUARD DETAILS**

GUARDRAIL, TL-3 (SINGLE FACED)  
 GUARDRAIL TANGENT END TREATMENT, TL-3  
 TRAILING ANCHORAGE  
 GUARDRAIL, TL-3 (SINGLE FACED)  
 GUARDRAIL TANGENT END TREATMENT, TL-3  
 LENGTH OF NEED

STA 267+84.7 TO STA 279+42.6 LT    STA 267+84.7 TO STA 279+42.6 RT  
 STA 278+29.8 TO STA 278+44.8 LT    STA 279+42.6 TO STA 279+57.6 RT  
 STA 279+13.2 TO STA 279+23.2 LT    STA 279+23.2 TO STA 280+66.4 LT  
 STA 280+66.4 TO STA 280+81.4 LT    STA 267+83.4 TO STA 279+44.3 RT  
 STA 269+84.9 TO STA 278+31.7 LT

**TRAFFIC SIGNAL CONDUIT**

NONE

**TRAFFIC SIGN & PAVEMENT MARKING PLANS**

SEE SHEET 85

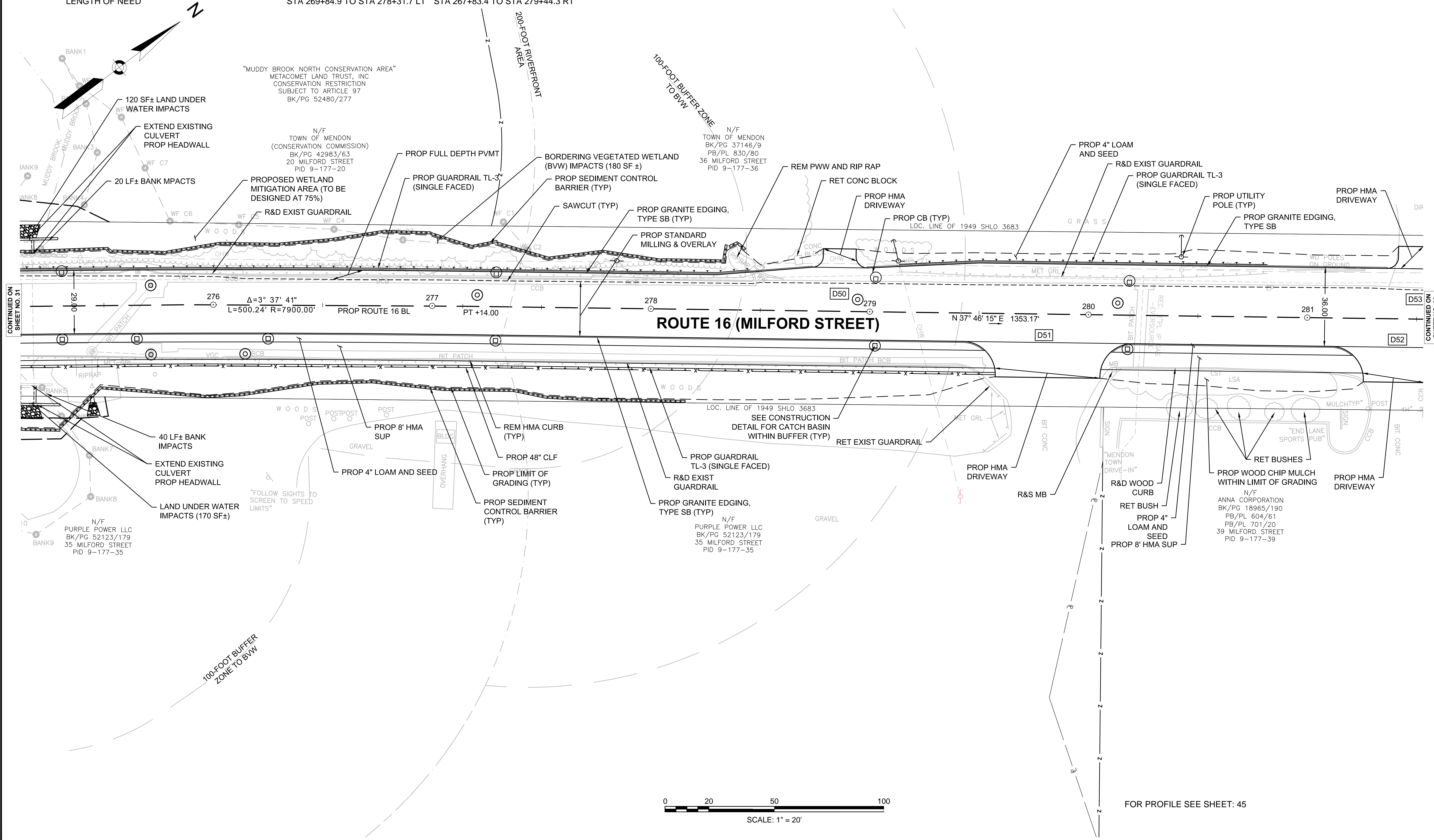
**DRAINAGE DETAILS**

SEE SHEET 65

**MENDON  
 ROUTE 16**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	32	116
PROJECT FILE NO.		608491	

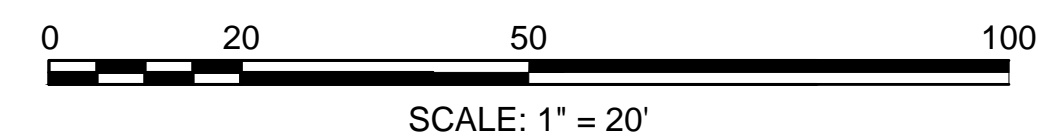
**CONSTRUCTION PLANS  
 SHEET 15 OF 21**



CONTINUED ON SHEET NO. 31

CONTINUED ON SHEET NO. 33

**ROUTE 16 (MILFORD STREET)**



FOR PROFILE SEE SHEET: 45



HIGHWAY GUARD DETAILS

GUARDRAIL TANGENT END TREATMENT, TL-3  
 GUARDRAIL, TL-3 (SINGLE FACED)  
 TRAILING ANCHORAGE  
 GUARDRAIL, TL-3 (SINGLE FACED)  
 GUARDRAIL TANGENT END TREATMENT, TL-3

TRAFFIC SIGNAL CONDUIT

NONE

TRAFFIC SIGN & PAVEMENT MARKING PLANS

SEE SHEET 86

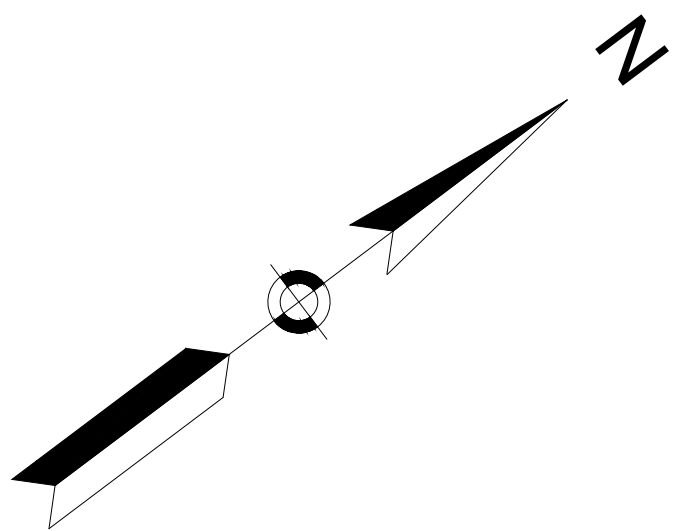
DRAINAGE DETAILS

SEE SHEET 66

MENDON  
 ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	33	116
PROJECT FILE NO.		608491	

CONSTRUCTION PLANS  
 SHEET 16 OF 21



STA 284+52 TO STA 284+61 LT  
 STA 284+61 TO STA 285+89 LT  
 STA 285+89 TO STA 286+26 LT

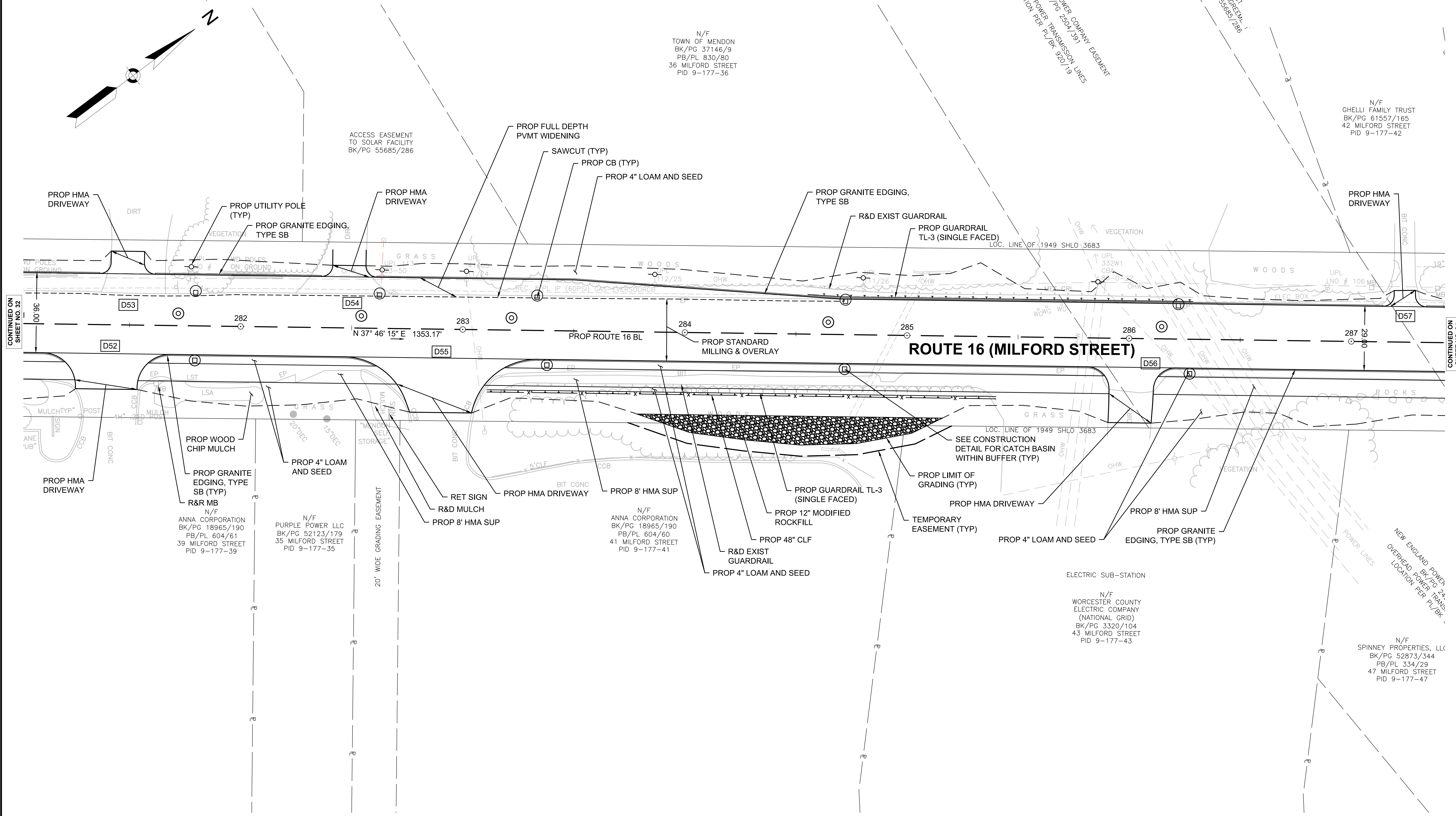
STA 283+09 TO STA 283+46 RT  
 STA 283+46 TO STA 285+29 RT  
 STA 285+29 TO STA 285+38 RT

N/F  
 TOWN OF MENDON  
 BK/PG 37146/9  
 PB/PL 830/80  
 36 MILFORD STREET  
 PID 9-177-36

NEW ENGLAND POWER COMPANY EASEMENT  
 VERIFIED POWER TRANSMISSION LINES  
 LOCATION PER PL/BK 920/19

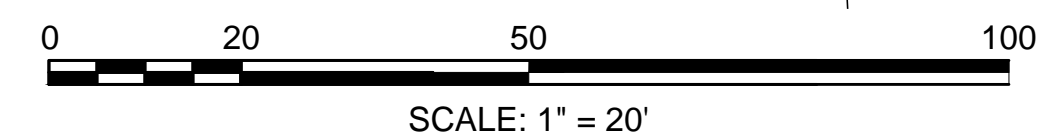
SUBJECT TO  
 ASSESSMENT  
 BK/PG 55685/286

N/F  
 GHELLI FAMILY TRUST  
 BK/PG 61557/165  
 42 MILFORD STREET  
 PID 9-177-42



CONTINUED ON  
 SHEET NO. 32

CONTINUED ON  
 SHEET NO. 34



FOR PROFILE SEE SHEET: 45 - 46

**HIGHWAY GUARD DETAILS**

TRAILING ANCHORAGE  
GUARDRAIL, TL-3 (SINGLE FACED)  
GUARDRAIL TANGENT END TREATMENT, TL-3  
TRAILING ANCHORAGE  
GUARDRAIL, TL-3 (SINGLE FACED)  
GUARDRAIL TANGENT END TREATMENT, TL-3

STA 289+25 TO STA 289+34 LT  
STA 289+34 TO STA 291+01 LT  
STA 291+01 TO STA 291+38 LT  
STA 291+95 TO STA 292+04 LT  
STA 292+04 TO STA 292+80 LT  
STA 292+80 TO STA 293+17 LT

STA 291+01 TO STA 291+38 RT  
STA 291+38 TO STA 294+03 RT

**TRAFFIC SIGNAL CONDUIT**

NONE

**TRAFFIC SIGN & PAVEMENT MARKING PLANS**

SEE SHEET 87

MASSACHUSETTS ELECTRIC  
COMPANY  
EASEMENT  
L.C. DOC No. 80464

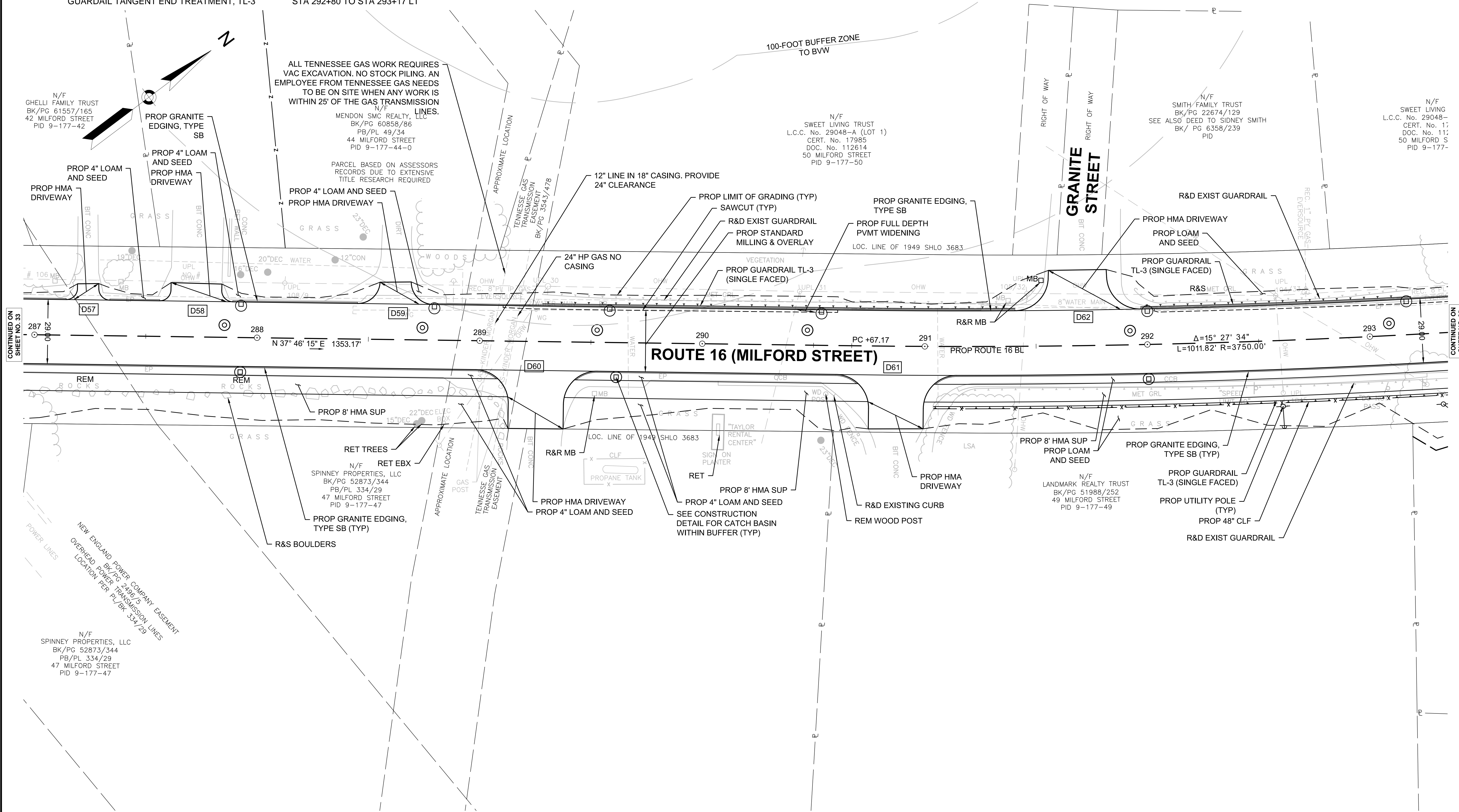
**DRAINAGE DETAILS**

SEE SHEET 67

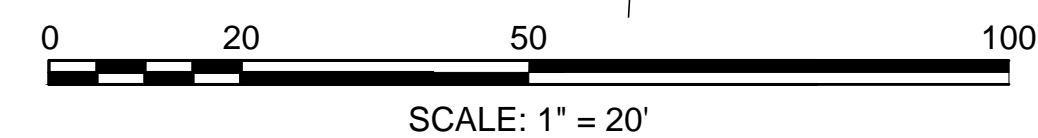
**MENDON  
ROUTE 16**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	34	116
PROJECT FILE NO. 608491			

**CONSTRUCTION PLANS  
SHEET 17 OF 21**



**ROUTE 16 (MILFORD STREET)**



FOR PROFILE SEE SHEET: 46

CONTINUED ON  
SHEET NO. 33

CONTINUED ON  
SHEET NO. 35

608491\_HD(CONST PLANS).DWG Plotted on 17-Sep-2022 6:57 PM







**HIGHWAY GUARD DETAILS**

TRAILING ANCHORAGE  
GUARDRAIL, TL-3 (SINGLE FACED)  
GUARDRAIL TANGENT END TREATMENT, TL-3  
LENGTH OF NEED

STA 303+08.5 TO STA 303+18.5 LT  
STA 303+18.5 TO STA 304+29.6 LT  
STA 304+29.6 TO STA 304+44.6 LT  
STA 303+22.6 TO STA 304+20.3 LT

**TRAFFIC SIGNAL CONDUIT**

NONE

**TRAFFIC SIGN & PAVEMENT MARKING PLANS**

SEE SHEET 89

**DRAINAGE DETAILS**

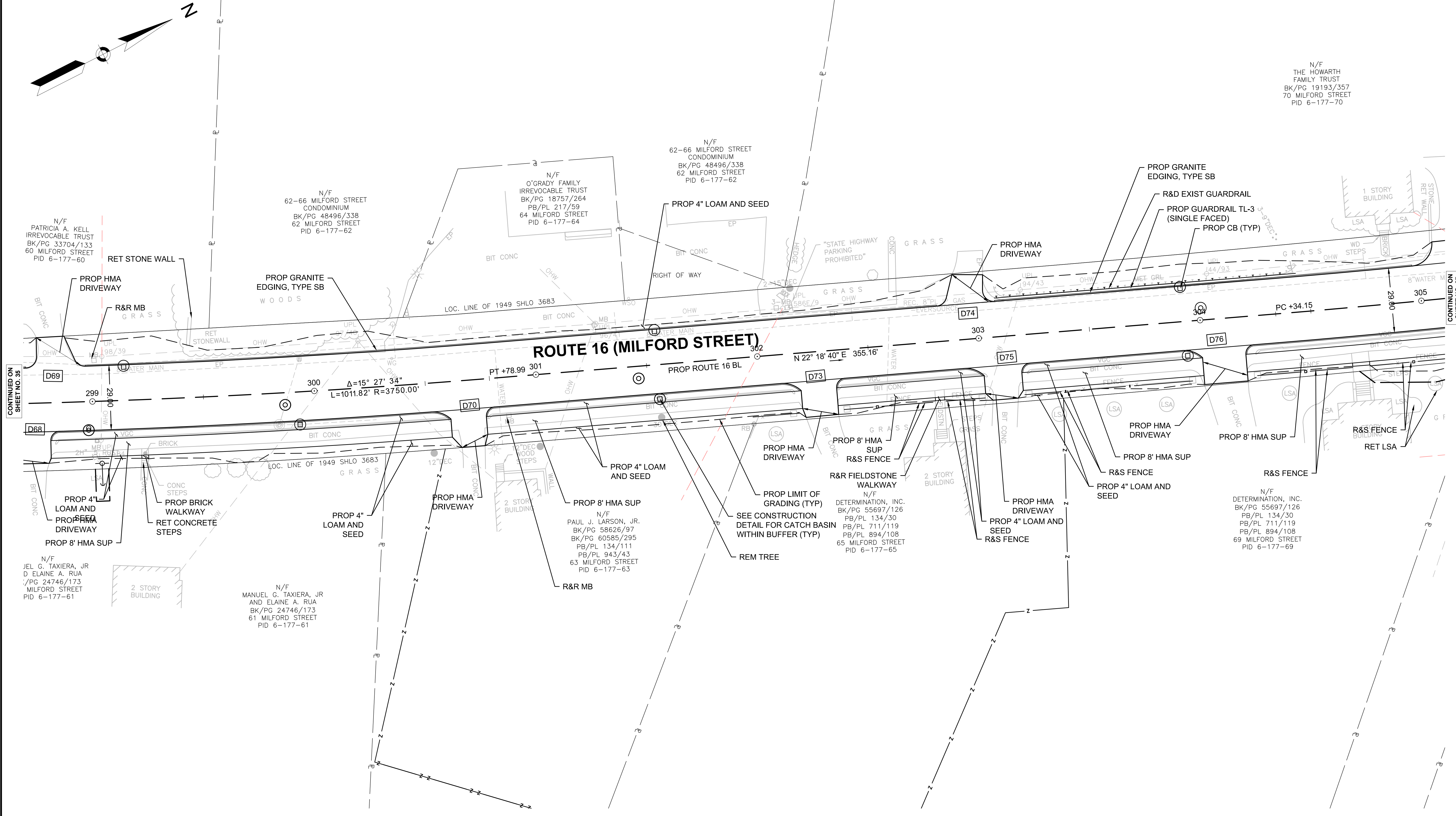
SEE SHEET 69

**MENDON  
ROUTE 16**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	36	116
PROJECT FILE NO. 608491			

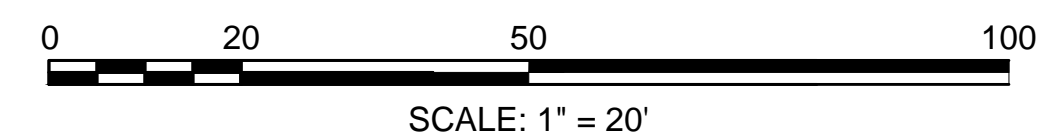
**CONSTRUCTION PLANS  
SHEET 19 OF 21**

N/F  
THE HOWARTH  
FAMILY TRUST  
BK/PG 19193/357  
70 MILFORD STREET  
PID 6-177-70



CONTINUED ON  
SHEET NO. 35

CONTINUED ON  
SHEET NO. 37



FOR PROFILE SEE SHEET: 47

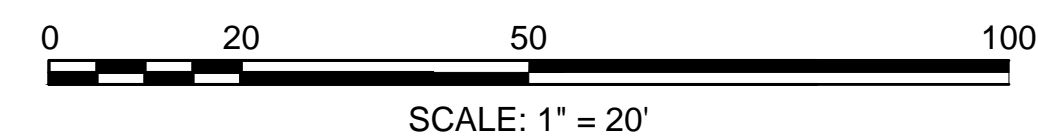
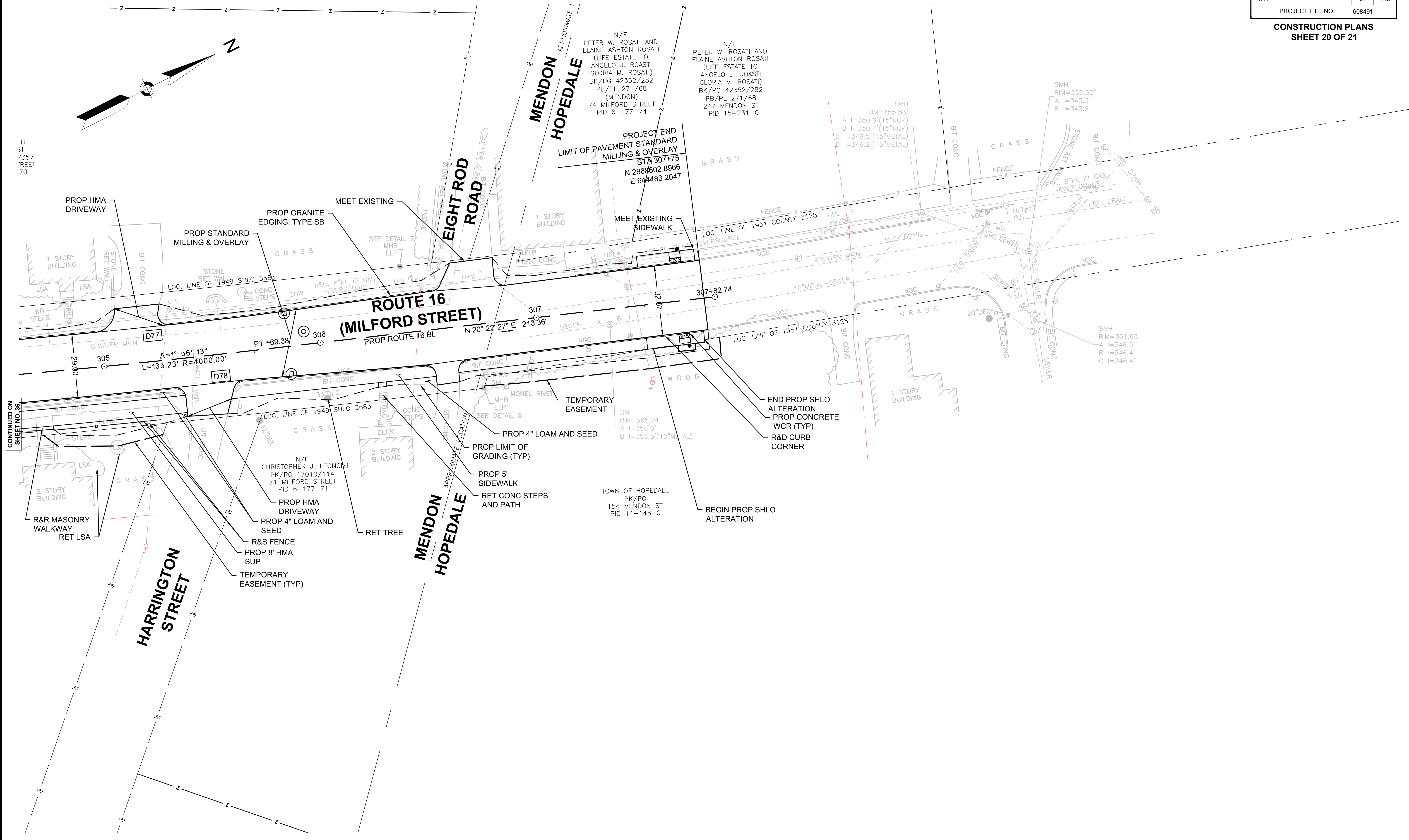


**MENDON  
ROUTE 16**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	37	116
PROJECT FILE NO.		608491	

**CONSTRUCTION PLANS  
SHEET 20 OF 21**

HIGHWAY GUARD DETAILS NONE TRAFFIC SIGNAL CONDUIT NONE TRAFFIC SIGN & PAVEMENT MARKING PLANS SEE SHEET 90 DRAINAGE DETAILS SEE SHEET 70



FOR PROFILE SEE SHEET: 47

CONTINUED ON SHEET NO. 36

608491\_HD(CONST PLANS).DWG Plotted on 17-Sep-2022 6:58 PM

HIGHWAY GUARD DETAILS

NONE

TRAFFIC SIGNAL CONDUIT

NONE

TRAFFIC SIGN & PAVEMENT MARKING PLANS

SEE SHEET 91

DRAINAGE DETAILS

SEE SHEET 71

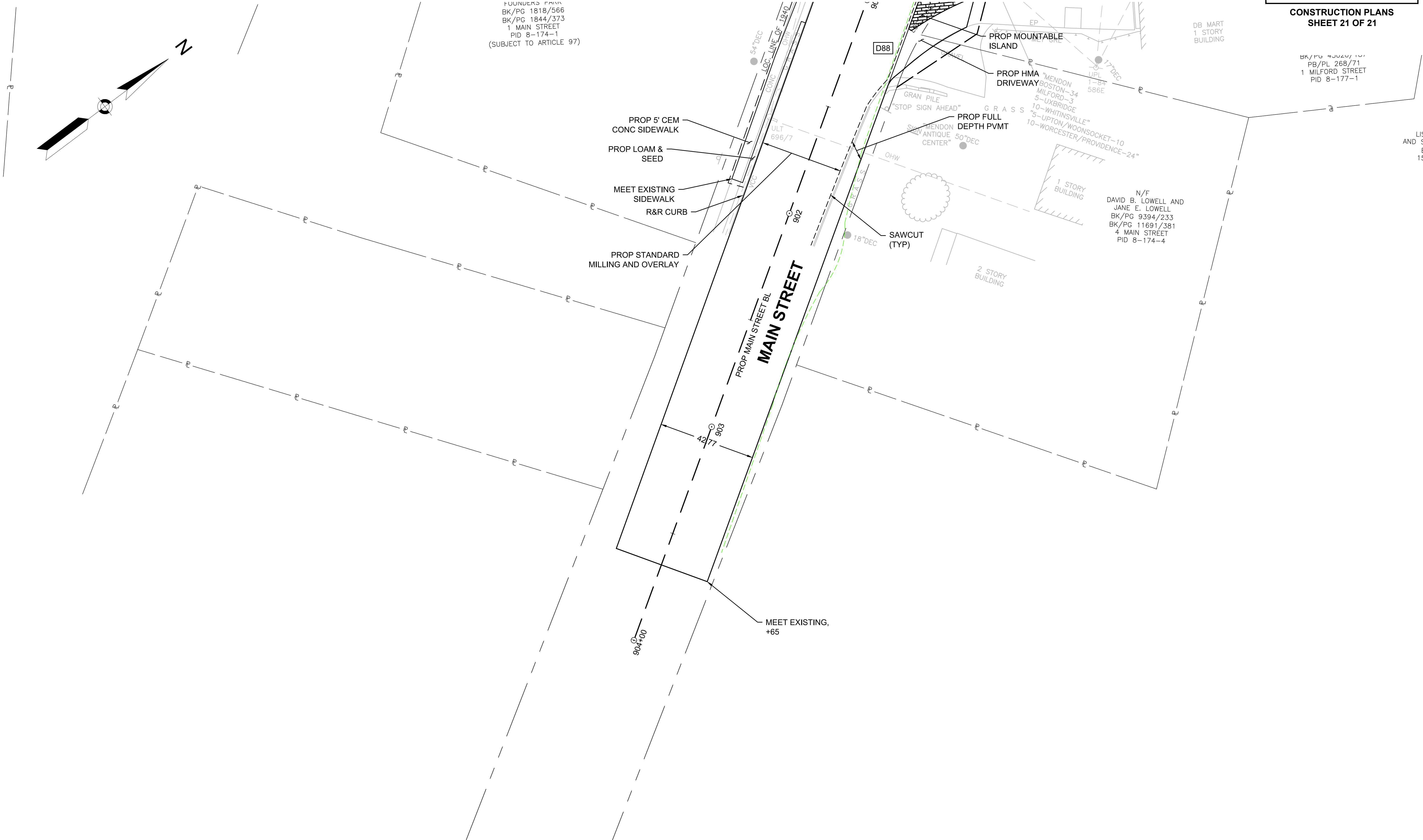
MENDON ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	38	116
PROJECT FILE NO.		608491	

CONSTRUCTION PLANS SHEET 21 OF 21

BR/PG 40020/101  
PB/PL 268/71  
1 MILFORD STREET  
PID 8-177-1

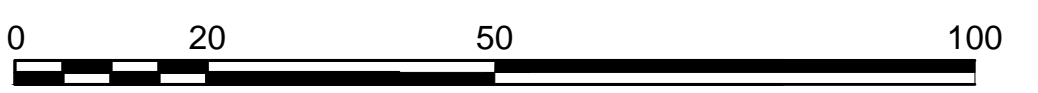
LISA V  
AND SHEL  
BK/F  
15 MII  
PID



FOUNDERS PARK  
BK/PG 1818/566  
BK/PG 1844/373  
1 MAIN STREET  
PID 8-174-1  
(SUBJECT TO ARTICLE 97)

N/F  
DAVID B. LOWELL AND  
JANE E. LOWELL  
BK/PG 9394/233  
BK/PG 11691/381  
4 MAIN STREET  
PID 8-174-4

CONTINUED ON SHEET NO. 28



SCALE: 1" = 20'



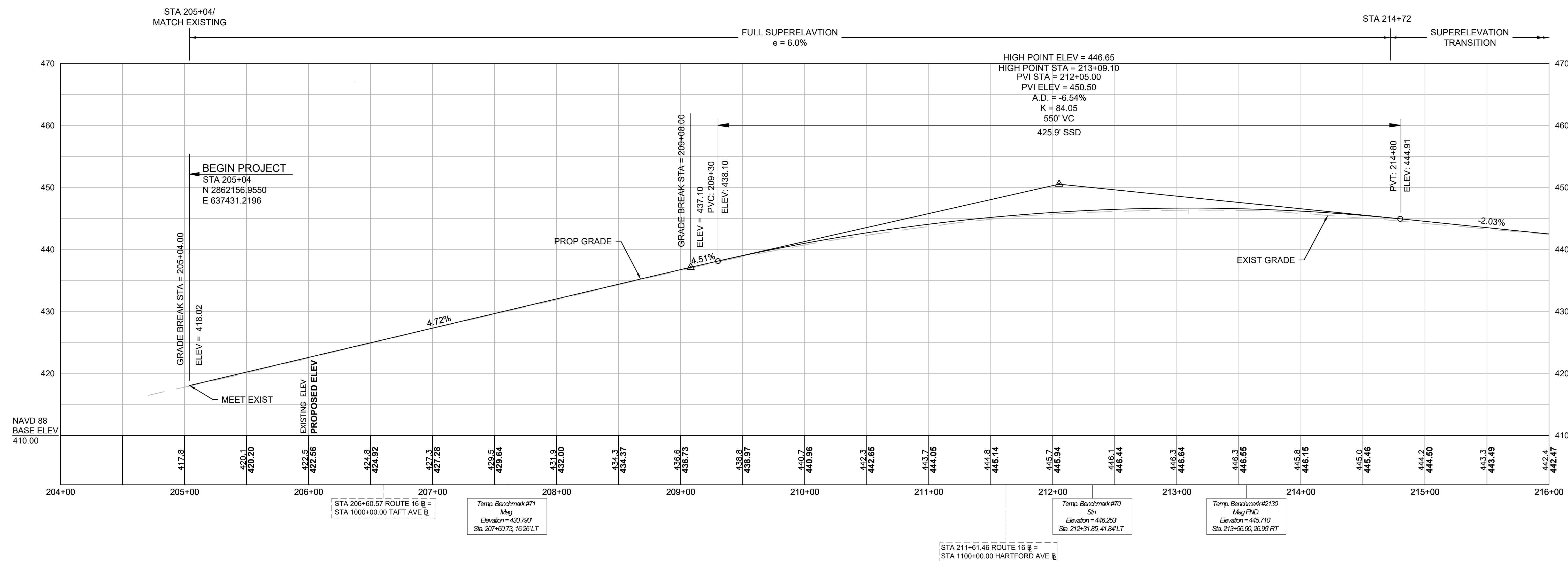
**MENDON  
ROUTE 16**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	39	116
PROJECT FILE NO.		608491	

**PROFILES  
SHEET 1 OF 10**

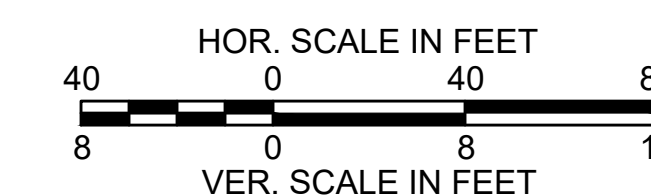
**PROPOSED ROUTE 16**

DESIGN SPEED = 50 MPH



CONTINUED ON  
SHEET NO. 40

FOR CONSTRUCTION PLANS:  
SEE SHEET NOS. 18 - 21



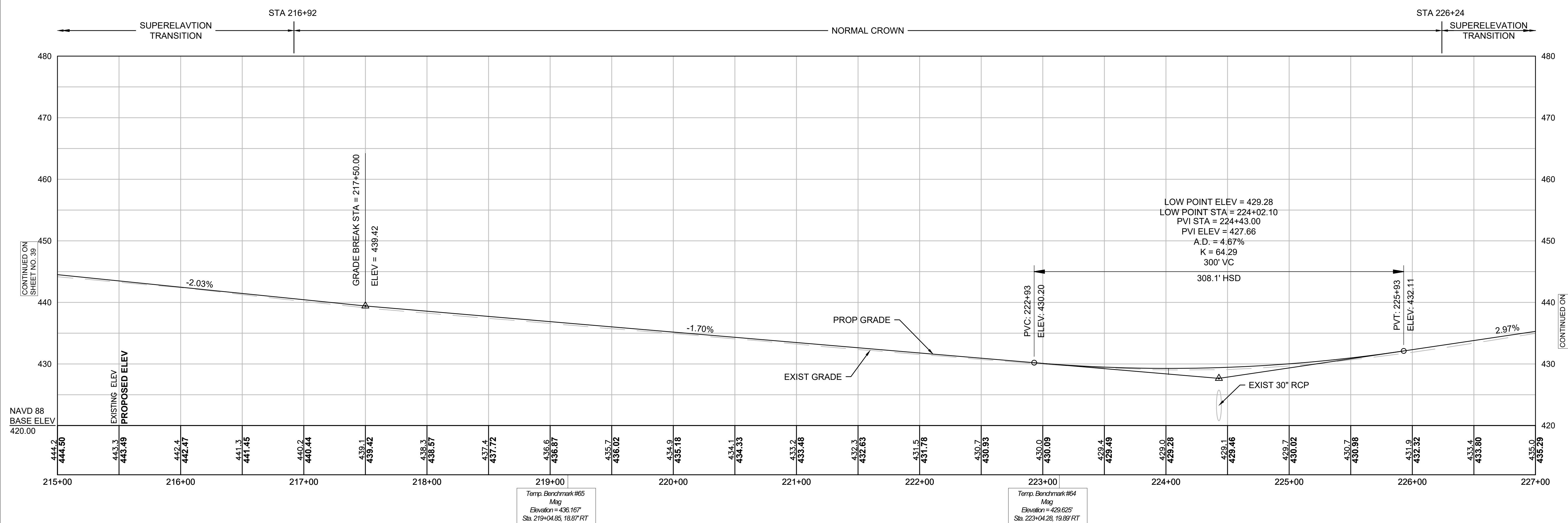
MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	40	116
PROJECT FILE NO.		608491	

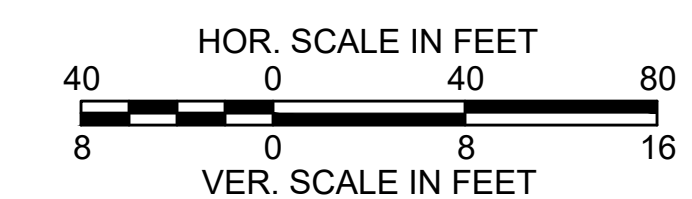
PROFILES  
SHEET 2 OF 10

PROPOSED ROUTE 16

DESIGN SPEED = 50 MPH



FOR CONSTRUCTION PLANS:  
SEE SHEET NOS. 21 - 23





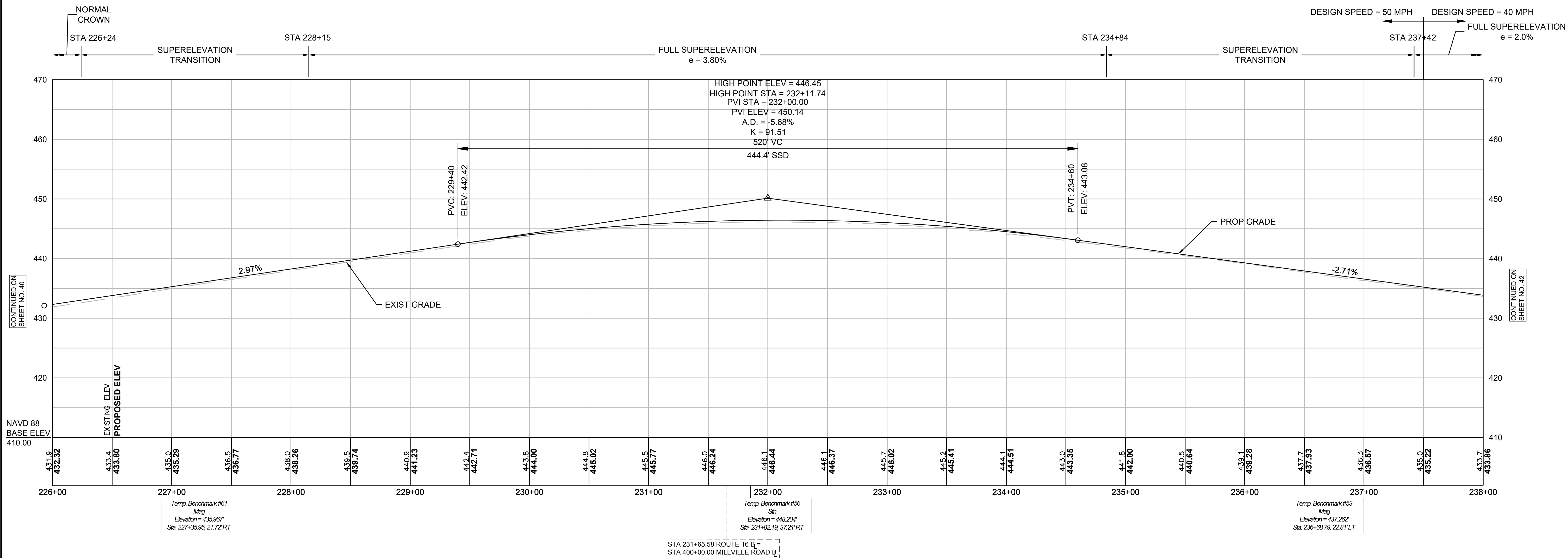
**MENDON  
ROUTE 16**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	41	116

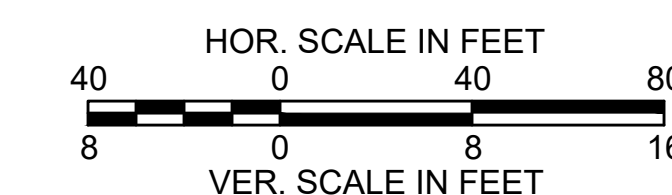
PROJECT FILE NO. 608491  
**PROFILES  
SHEET 3 OF 10**

**PROPOSED ROUTE 16**

DESIGN SPEED = 50 MPH



FOR CONSTRUCTION PLANS:  
SEE SHEET NOS. 23 - 25



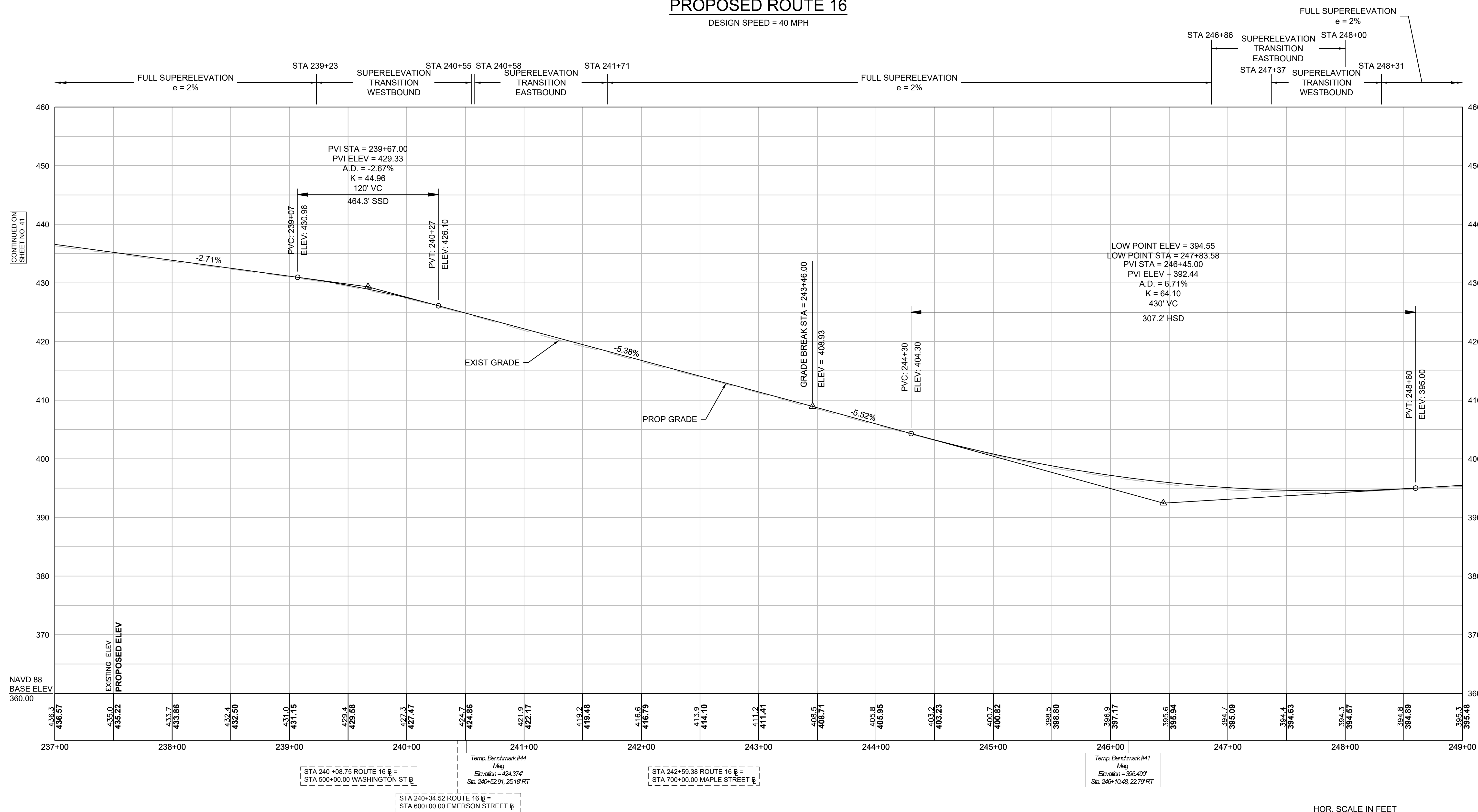
MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	42	116
PROJECT FILE NO. 608491			

PROFILES  
SHEET 4 OF 10

PROPOSED ROUTE 16

DESIGN SPEED = 40 MPH



Temp. Benchmark #44  
Mig  
Elevation = 424.374  
Sta. 240+52.91, 25.18' RT

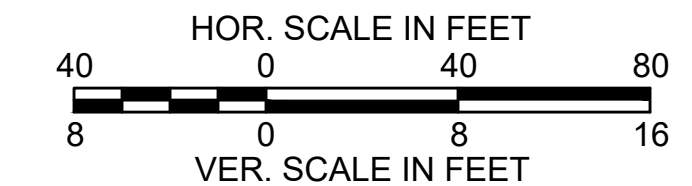
Temp. Benchmark #41  
Mig  
Elevation = 396.400  
Sta. 246+10.48, 22.79' RT

STA 240+08.75 ROUTE 16 B =  
STA 500+00.00 WASHINGTON ST B

STA 240+34.52 ROUTE 16 B =  
STA 600+00.00 EMERSON STREET B

STA 242+59.38 ROUTE 16 B =  
STA 700+00.00 MAPLE STREET B

FOR CONSTRUCTION PLANS:  
SEE SHEET NOS. 25 - 27





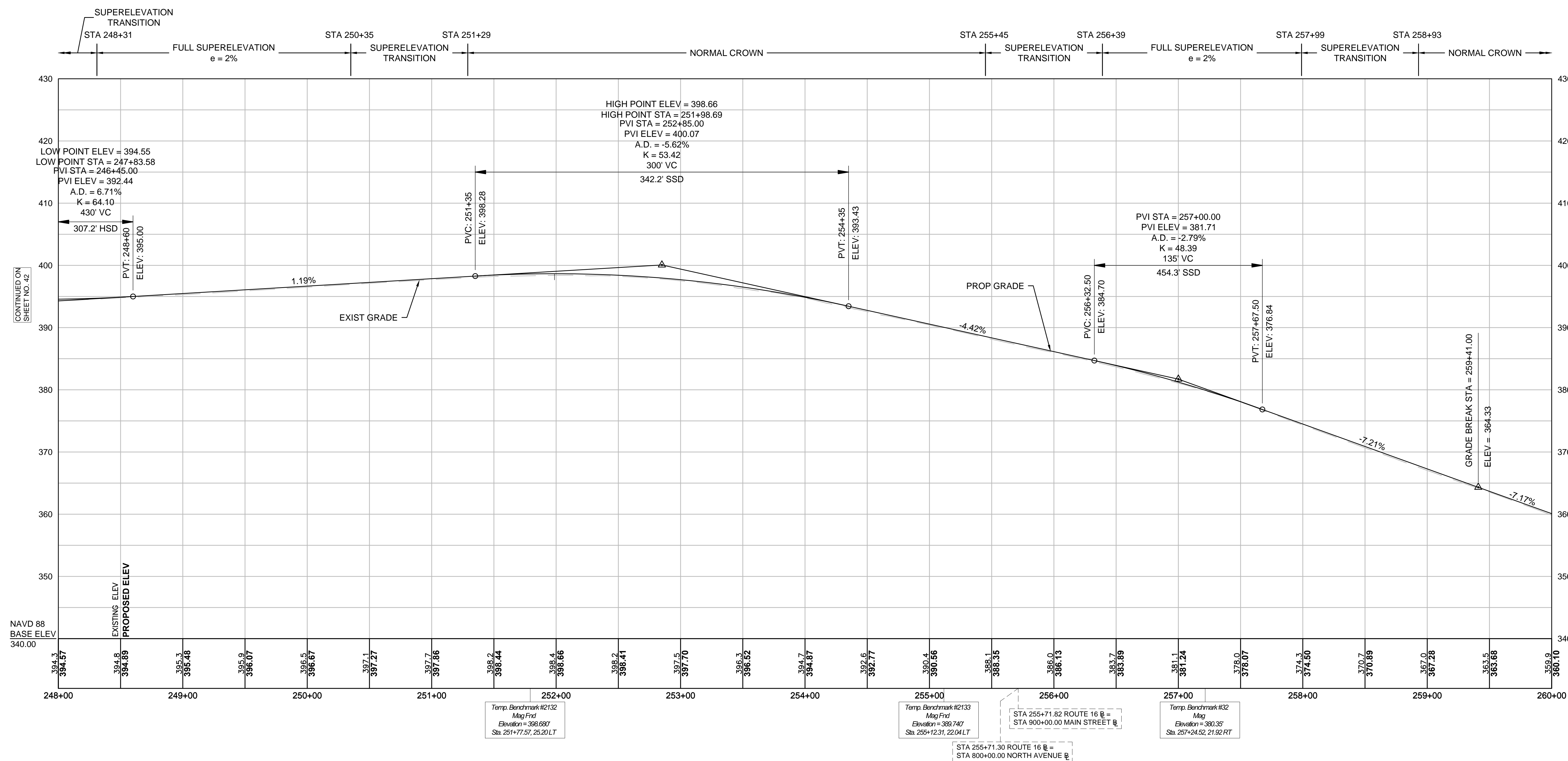
MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	43	116
PROJECT FILE NO.		608491	

PROFILES  
SHEET 5 OF 10

PROPOSED ROUTE 16

DESIGN SPEED = 40 MPH



CONTINUED ON  
SHEET NO. 42

CONTINUED ON  
SHEET NO. 44

NAVD 88  
BASE ELEV  
340.00

Temp. Benchmark #2132  
Mag. Find  
Elevation = 398.680'  
Sta. 251+77.57, 25.20 LT

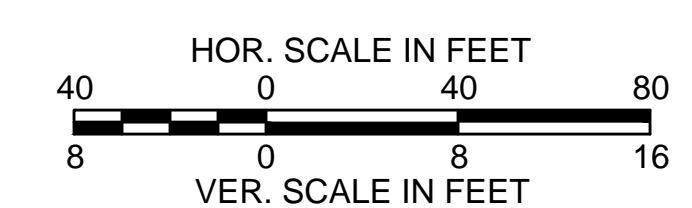
Temp. Benchmark #2133  
Mag. Find  
Elevation = 389.740'  
Sta. 255+12.31, 22.04 LT

STA 255+71.82 ROUTE 16 @  
STA 900+00.00 MAIN STREET @

Temp. Benchmark #32  
Mag.  
Elevation = 380.35'  
Sta. 257+24.52, 21.92 RT

STA 255+71.30 ROUTE 16 @  
STA 800+00.00 NORTH AVENUE @

FOR CONSTRUCTION PLANS:  
SEE SHEET NOS. 27 - 29



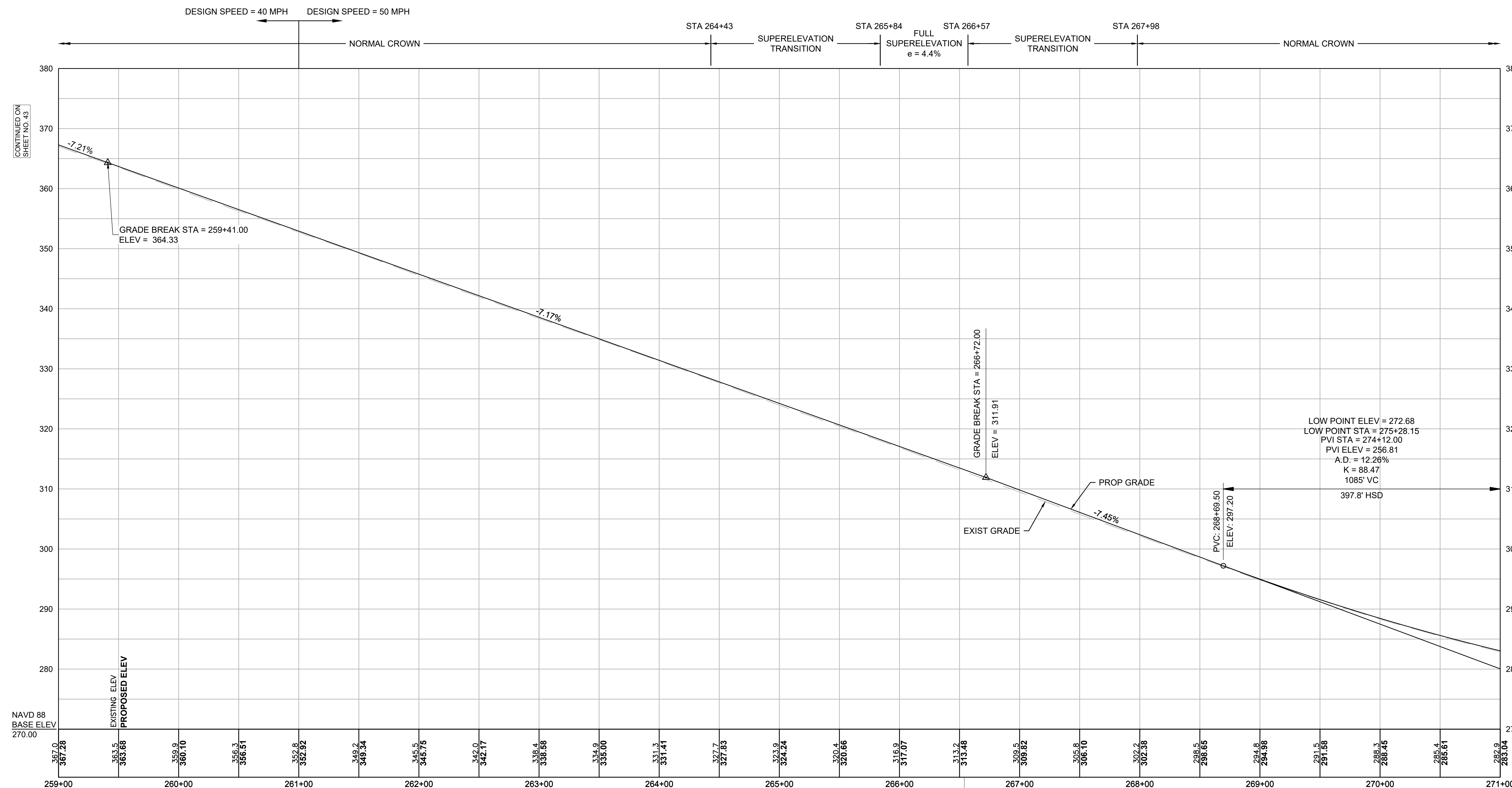
MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	44	116
PROJECT FILE NO.		608491	

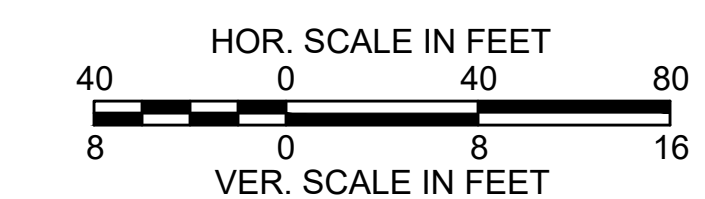
PROFILES  
SHEET 6 OF 10

PROPOSED ROUTE 16

DESIGN SPEED = 50 MPH



FOR CONSTRUCTION PLANS:  
SEE SHEET NOS. 29 - 31



CONTINUED ON  
SHEET NO. 45



MENDON  
ROUTE 16

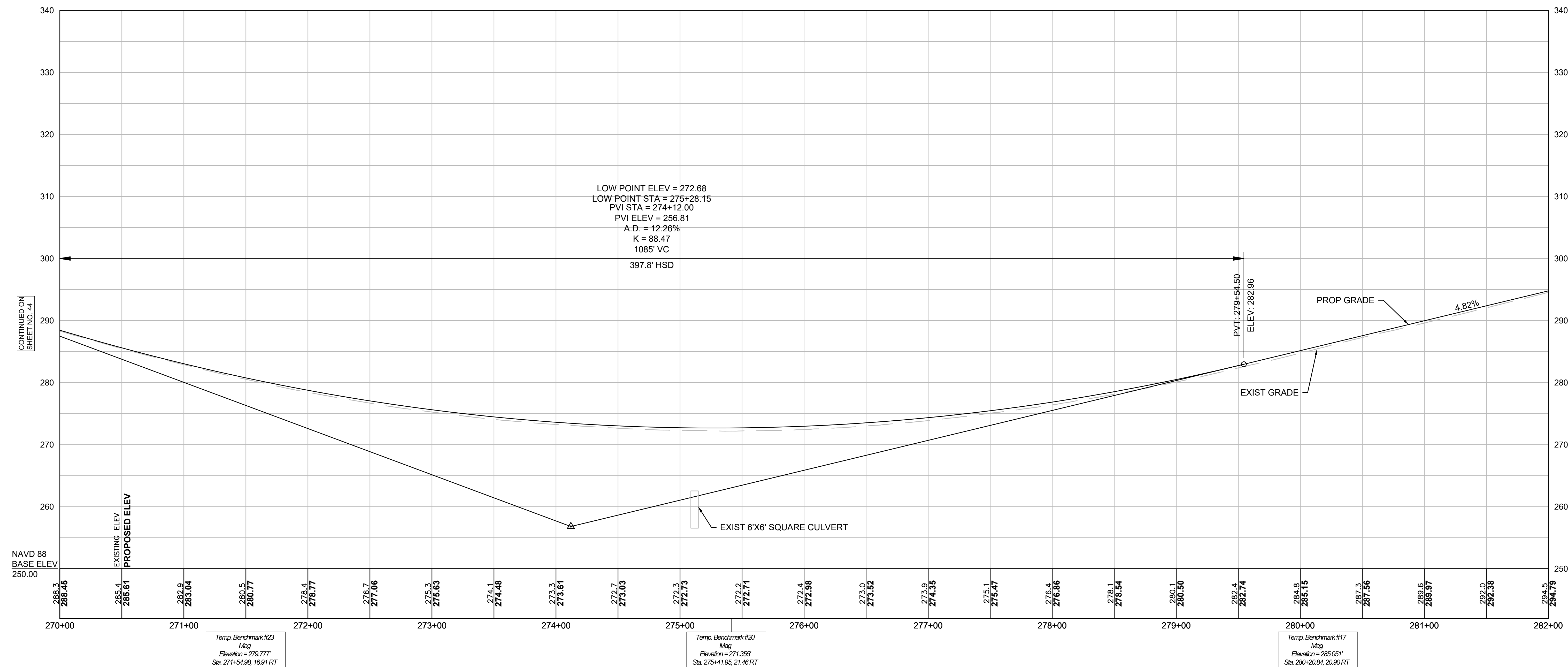
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	45	116
PROJECT FILE NO.		608491	

PROFILES  
SHEET 7 OF 10

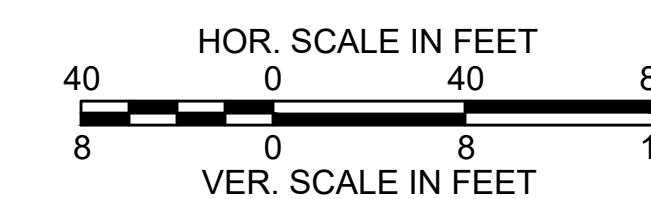
PROPOSED ROUTE 16

DESIGN SPEED = 50 MPH

NORMAL CROWN



FOR CONSTRUCTION PLANS:  
SEE SHEET NOS. 31 - 33



**MENDON  
ROUTE 16**

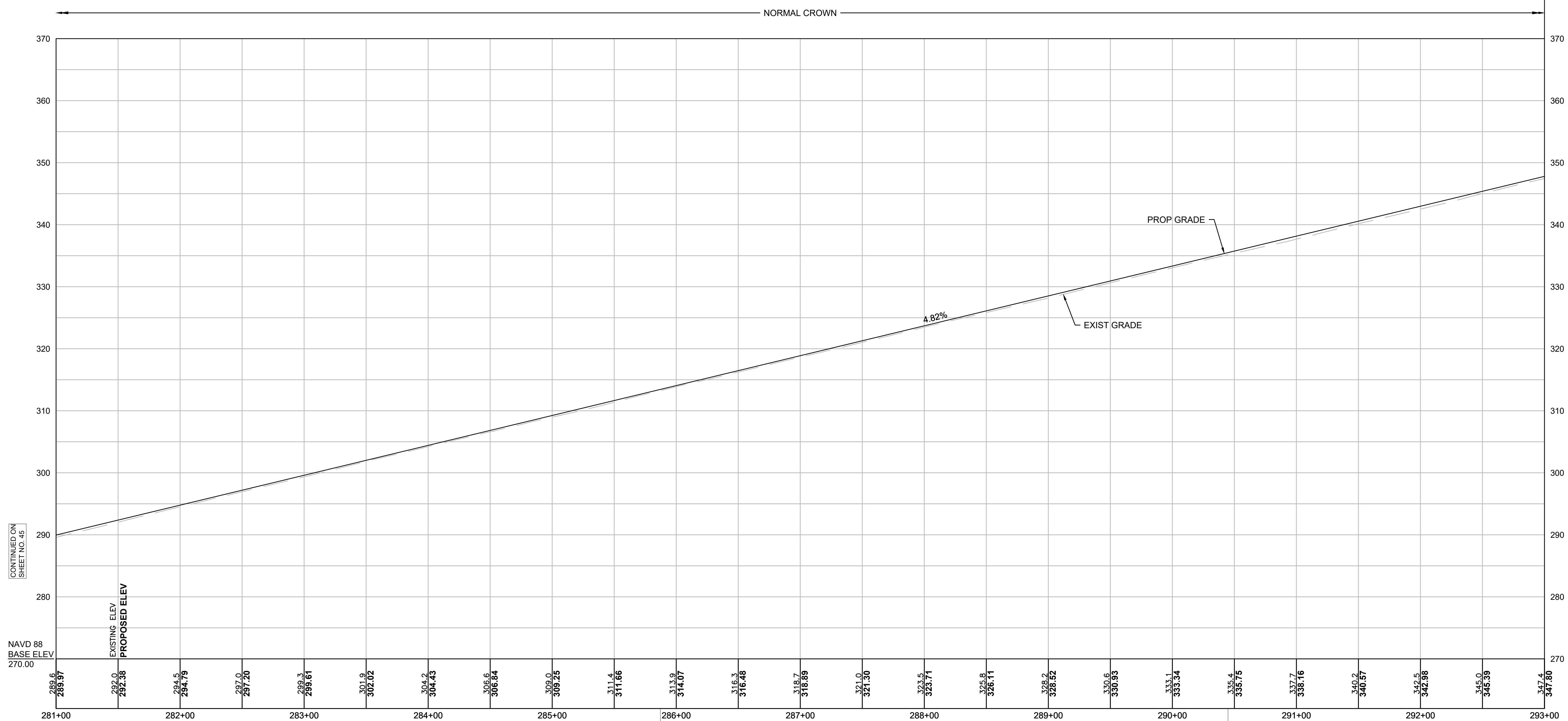
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	46	116

PROJECT FILE NO. 608491  
**PROFILES  
SHEET 8 OF 10**

**PROPOSED ROUTE 16**

DESIGN SPEED = 50 MPH

DESIGN SPEED = 50 MPH      DESIGN SPEED = 45 MPH



CONTINUED ON  
SHEET NO. 45

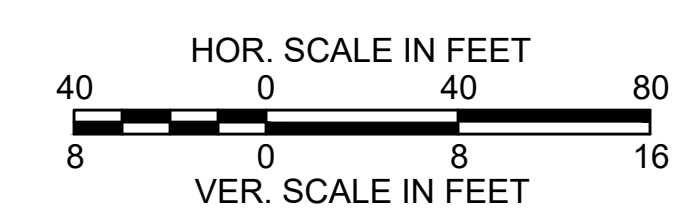
CONTINUED ON  
SHEET NO. 47

NAVD 88  
BASE ELEV  
270.00

Temp. Benchmark #14  
Mag  
Elevation = 312.68'  
Sta. 285+99.38, 19.86 RT

Temp. Benchmark #11  
Mag  
Elevation = 334.832'  
Sta. 290+45.54, 18.10 RT

FOR CONSTRUCTION PLANS:  
SEE SHEET NOS. 33 - 35





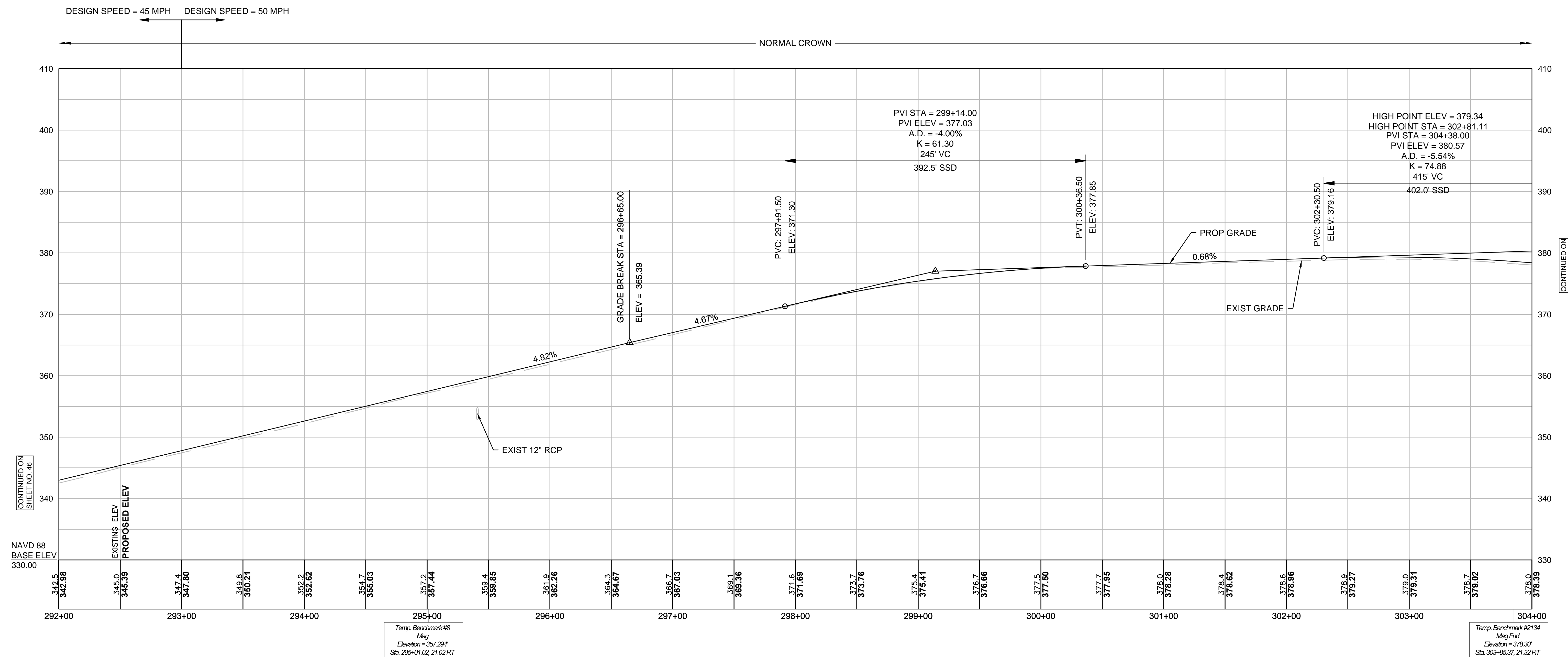
MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	47	116
PROJECT FILE NO.		608491	

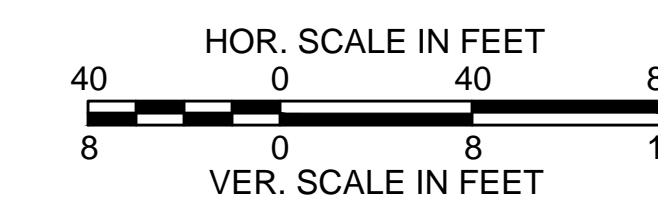
PROFILES  
SHEET 9 OF 10

PROPOSED ROUTE 16

DESIGN SPEED = 45 MPH



FOR CONSTRUCTION PLANS:  
SEE SHEET NOS. 35 - 37



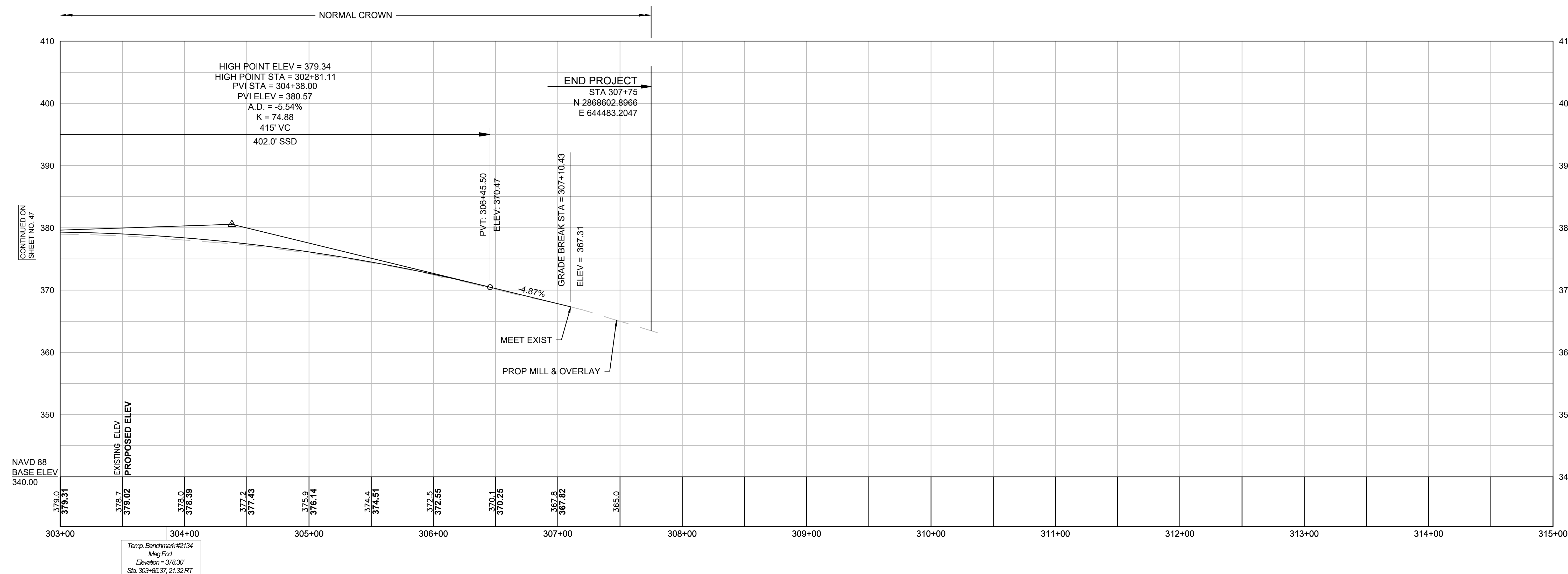
MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	48	116
PROJECT FILE NO.		608491	

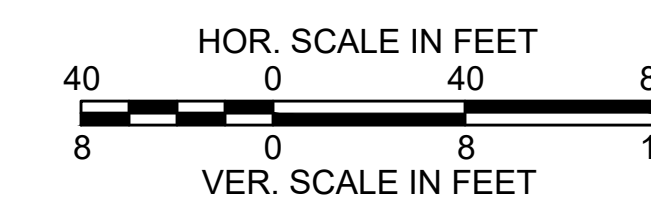
PROFILES  
SHEET 10 OF 10

PROPOSED ROUTE 16

DESIGN SPEED = 45 MPH



FOR CONSTRUCTION PLANS:  
SEE SHEET NOS. 37





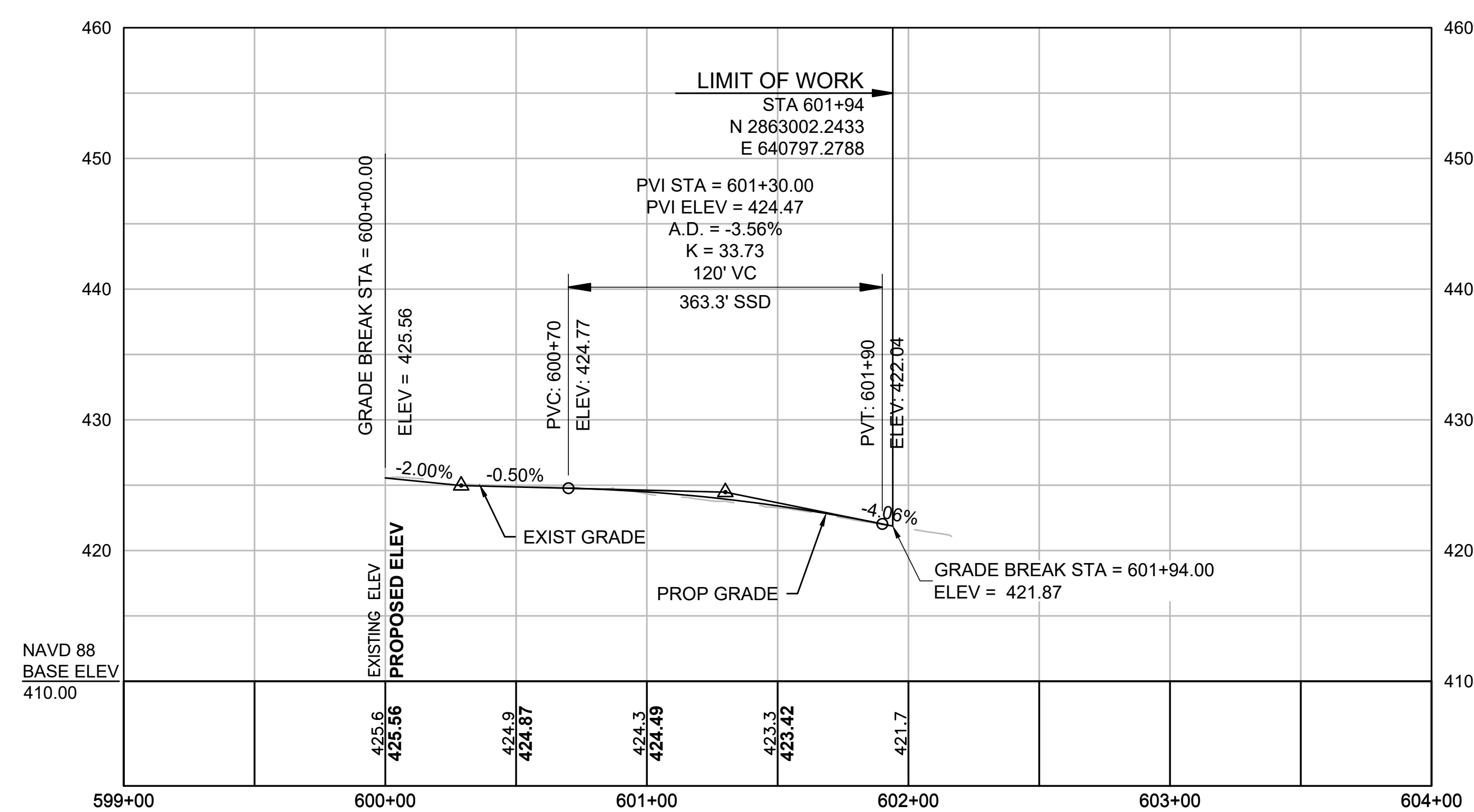


MENDON  
ROUTE 16

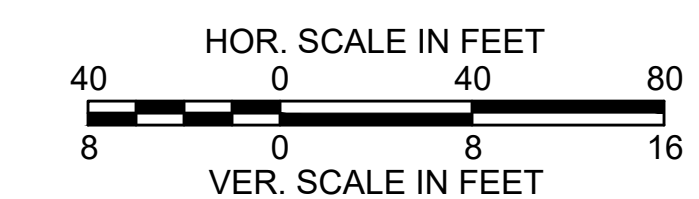
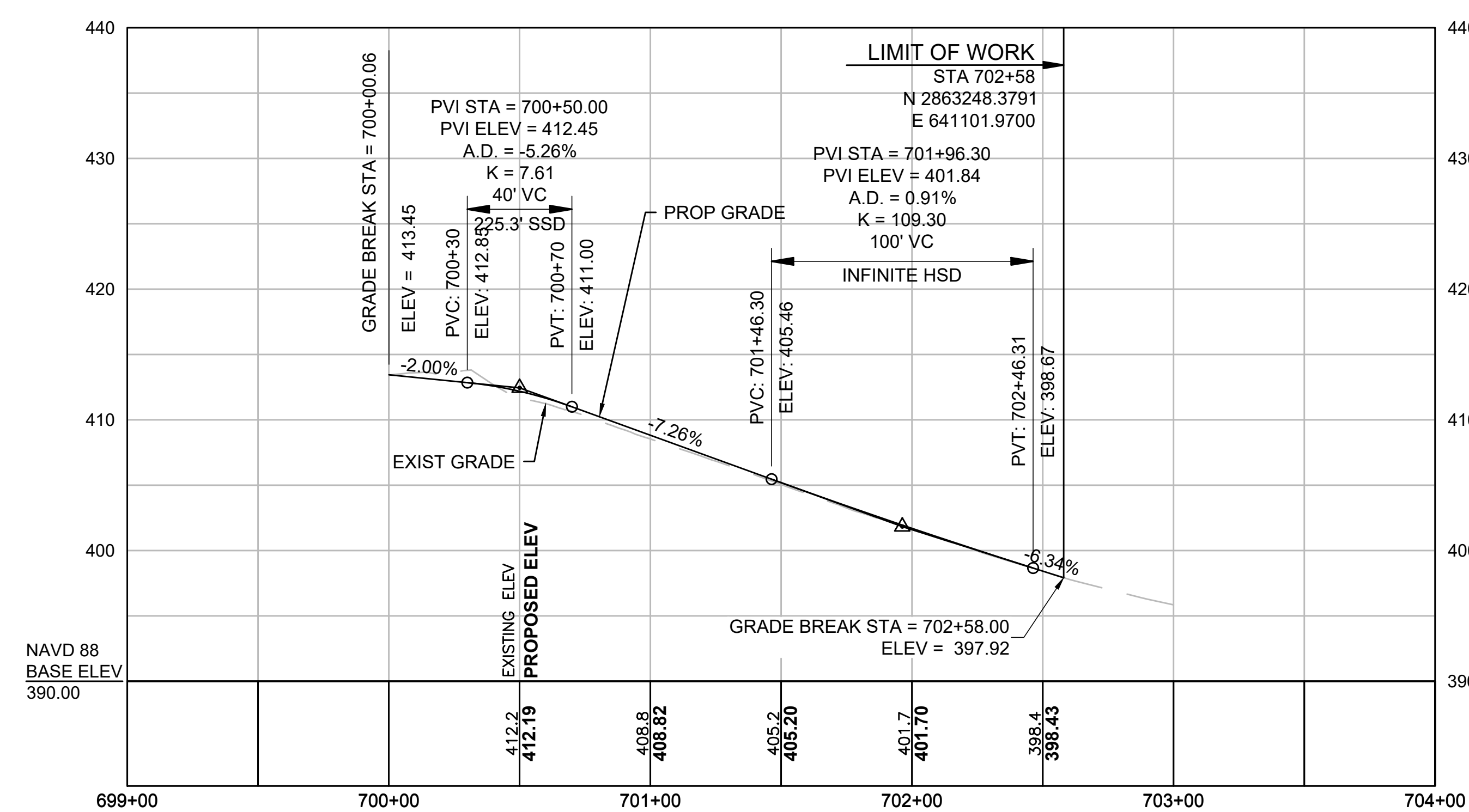
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	50	116
PROJECT FILE NO.		608491	

SIDE STREET PROFILES  
SHEET 2 OF 2

PROPOSED EMERSON STREET



PROPOSED MAPLE STREET





WATER SUPPLY & SEWER ALTERATIONS

NONE

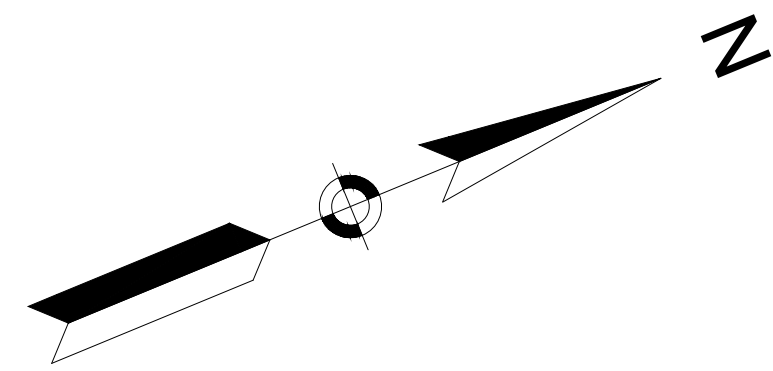
CONSTRUCTION PLANS

SEE SHEET 18

MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	51	116
PROJECT FILE NO.		608491	

DRAINAGE & UTILITY PLANS  
SHEET 1 OF 21



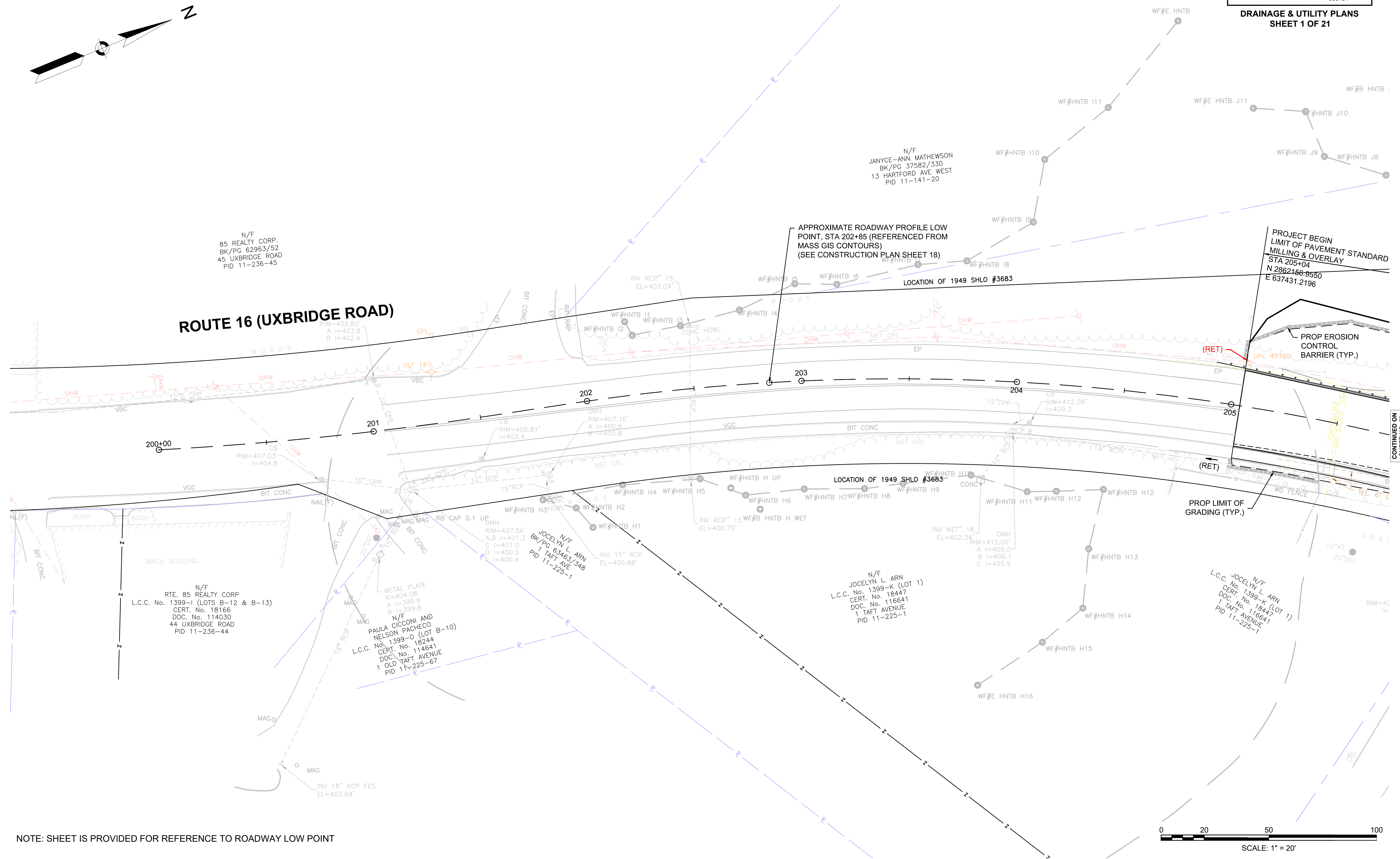
N/F  
JANYCE-ANN MATHEWSON  
BK/PG 37582/330  
13 HARTFORD AVE WEST  
PID 11-141-20

N/F  
85 REALTY CORP.  
BK/PG 62963/52  
45 UXBRIDGE ROAD  
PID 11-236-45

APPROXIMATE ROADWAY PROFILE LOW  
POINT, STA 202+85 (REFERENCED FROM  
MASS GIS CONTOURS)  
(SEE CONSTRUCTION PLAN SHEET 18)

PROJECT BEGIN  
LIMIT OF PAVEMENT STANDARD  
MILLING & OVERLAY  
STA 205+04  
N 2862166.9550  
E 637431.2196

ROUTE 16 (UXBRIDGE ROAD)



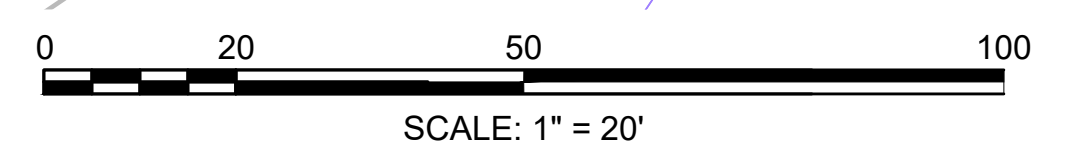
N/F  
RTE. 85 REALTY CORP  
L.C.C. No. 1399-I (LOTS B-12 & B-13)  
CERT. No. 18166  
DOC. No. 114030  
44 UXBRIDGE ROAD  
PID 11-236-44

N/F  
PAULA CIOCONI AND  
NELSON PACHECO  
L.C.C. No. 1399-D (LOT B-10)  
CERT. No. 18244  
DOC. No. 114641  
1 OLD TAFT AVENUE  
PID 11-225-67

N/F  
JOCELYN L. ARN  
L.C.C. No. 1399-K (LOT 1)  
CERT. No. 18447  
DOC. No. 116641  
1 TAFT AVENUE  
PID 11-225-1

N/F  
JOCELYN L. ARN  
L.C.C. No. 1399-K (LOT 1)  
CERT. No. 18447  
DOC. No. 116641  
1 TAFT AVENUE  
PID 11-225-1

NOTE: SHEET IS PROVIDED FOR REFERENCE TO ROADWAY LOW POINT



CONTINUED ON  
SHEET NO. 62



WATER SUPPLY & SEWER ALTERATIONS

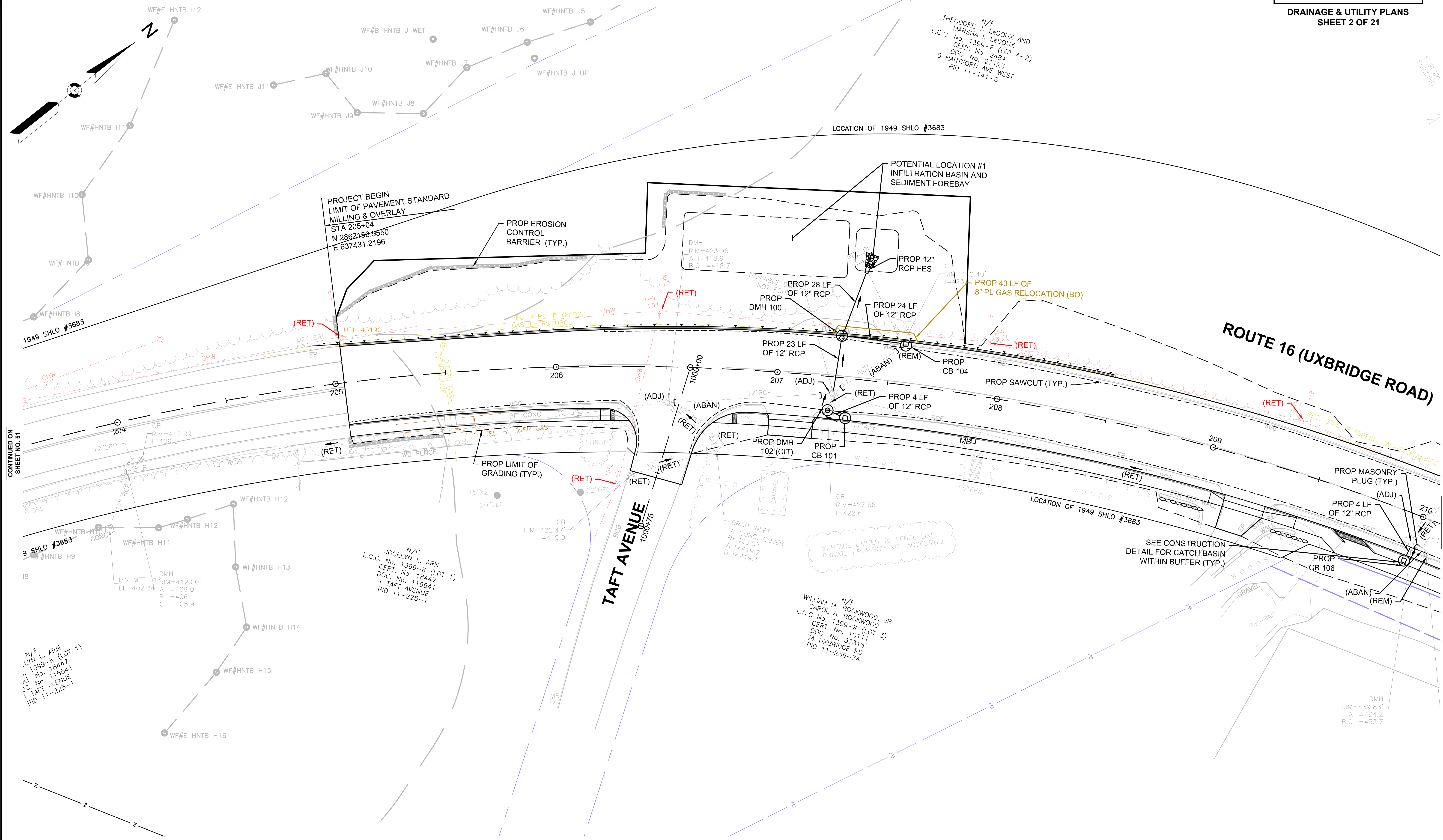
CONSTRUCTION PLANS

TRAFFIC SIGN & PAVEMENT MARKING PLANS

MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	52	116
PROJECT FILE NO. 608491			

DRAINAGE & UTILITY PLANS  
SHEET 2 OF 21



CONTINUED ON SHEET NO. 51

CONTINUED ON SHEET NO. 53





WATER SUPPLY & SEWER ALTERATIONS

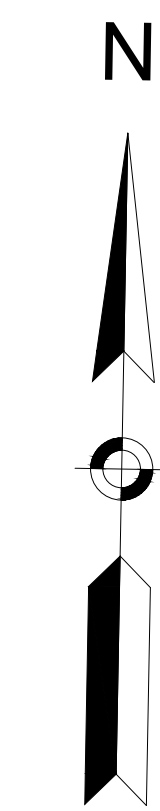
CONSTRUCTION PLANS

TRAFFIC SIGN & PAVEMENT MARKING PLANS

MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	53	116
PROJECT FILE NO.		608491	

DRAINAGE & UTILITY PLANS  
SHEET 3 OF 21



NONE  
JUNNA R. COTE AND  
JESSICA E. SMITH  
BK/PG 63700/332  
13 HARTFORD AVE WEST  
PID 11-141-13

SEE SHEET 20

SEE SHEET 73

OWNER UNKNOWN

N/F  
RANDI W. NUTTALL SR.  
BK/PG 32561/303  
(TRACT III)  
9 HARTFORD AVE WEST  
PID 11-141-9

N/F  
RANDI W. NUTTALL SR.  
BK/PG 32561/303  
(TRACT II)  
7 HARTFORD AVE WEST  
PID 11-141-7

N/F  
RANDI W. NUTTALL SR.  
BK/PG 32561/303  
(TRACT I)  
5 HARTFORD AVE WEST  
PID 11-141-5

N/F  
PAUL A. RANDOR  
BK/PG 33215/104  
PB/PL 227/59  
3 HARTFORD AVE WEST  
PID 11-141-3

HARTFORD AVENUE WEST

ROUTE 16 (UXBRIDGE ROAD)

N/F  
THEODORE J. LeDOUX AND  
MARSHA I. LeDOUX  
L.C.C. No. 1399-F (LOT A-2)  
DOC. No. 2484  
6 HARTFORD AVE WEST  
PID 11-141-6

N/F  
THEODORE J. LeDOUX AND  
MARSHA I. LeDOUX  
L.C.C. No. 1399-F (LOT A-2)  
DOC. No. 2484  
6 HARTFORD AVE WEST  
PID 11-141-6

N/F  
FRANKLIN OFFICE PARK  
REALTY CORPORATION  
BK/PG 45719/163  
26 UXBRIDGE ROAD  
PID 11-236-26

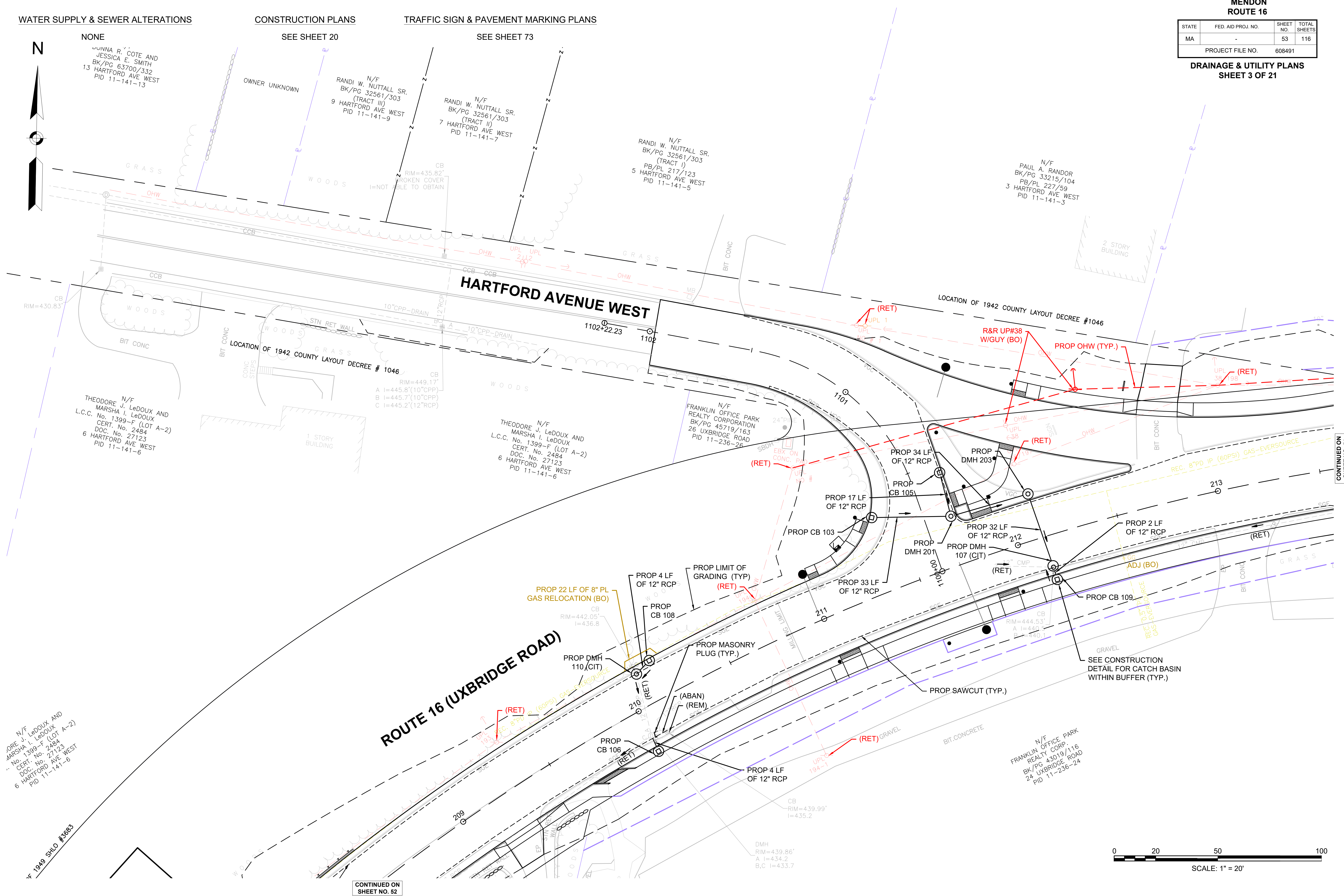
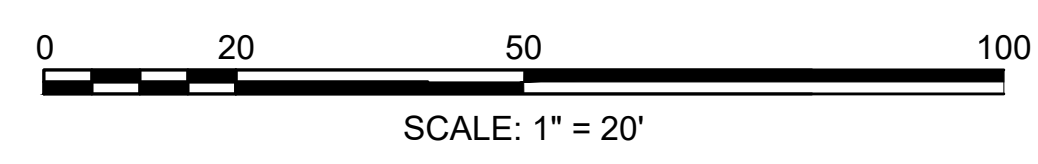
N/F  
FRANKLIN OFFICE PARK  
REALTY CORP.  
BK/PG 43019/116  
24 UXBRIDGE ROAD  
PID 11-236-24

N/F  
THEODORE J. LeDOUX AND  
MARSHA I. LeDOUX  
L.C.C. No. 1399-F (LOT A-2)  
DOC. No. 2484  
6 HARTFORD AVE WEST  
PID 11-141-6

1949 SHLO #3683

CONTINUED ON  
SHEET NO. 52

CONTINUED ON  
SHEET NO. 54









WATER SUPPLY & SEWER ALTERATIONS

NONE

CONSTRUCTION PLANS

SEE SHEET 22

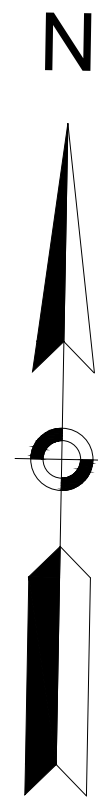
TRAFFIC SIGN & PAVEMENT MARKING PLANS

SEE SHEET 75

MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	55	116
PROJECT FILE NO.		608491	

DRAINAGE & UTILITY PLANS  
SHEET 5 OF 21



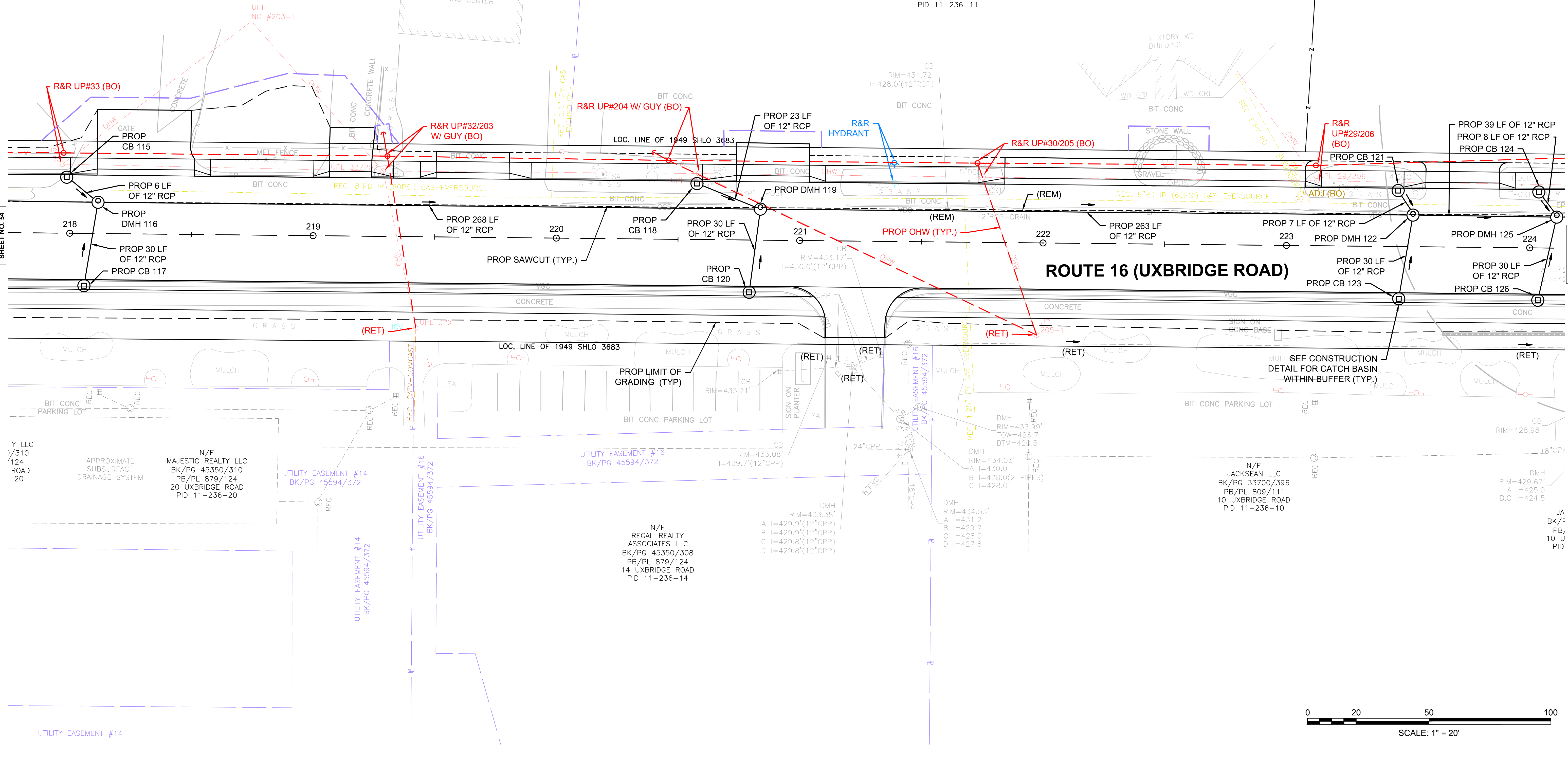
N/F  
BETHEL  
DEVELOPMENT  
TRUST  
BK/PG 5972/0114  
PB/PL 178/11  
17 UXBRIDGE ROAD  
PID 11-236-17

N/F  
QUIRK FAMILY  
REALTY TRUST  
BK/PG 36183/97  
PB/PL 311/30  
(PARCEL III)  
11 UXBRIDGE ROAD  
PID 11-236-11

N/F  
QUIRK FAMILY  
REALTY TRUST  
BK/PG 36183/97  
PB/PL 311/30  
(PARCEL IV)  
9 UXBRIDGE ROAD  
PID 11-236-9

CONTINUED ON  
SHEET NO. 54

CONTINUED ON  
SHEET NO. 56



UTILITY EASEMENT #14



JA  
BK/F  
PB,  
10 U  
PID



WATER SUPPLY & SEWER ALTERATIONS

CONSTRUCTION PLANS

TRAFFIC SIGN & PAVEMENT MARKING PLANS

NONE

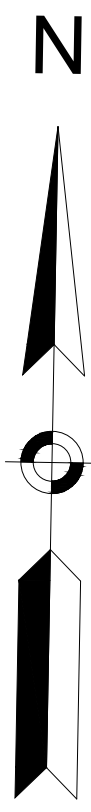
SEE SHEET 23

SEE SHEET 76

MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	56	116
PROJECT FILE NO. 608491			

DRAINAGE & UTILITY PLANS  
SHEET 6 OF 21



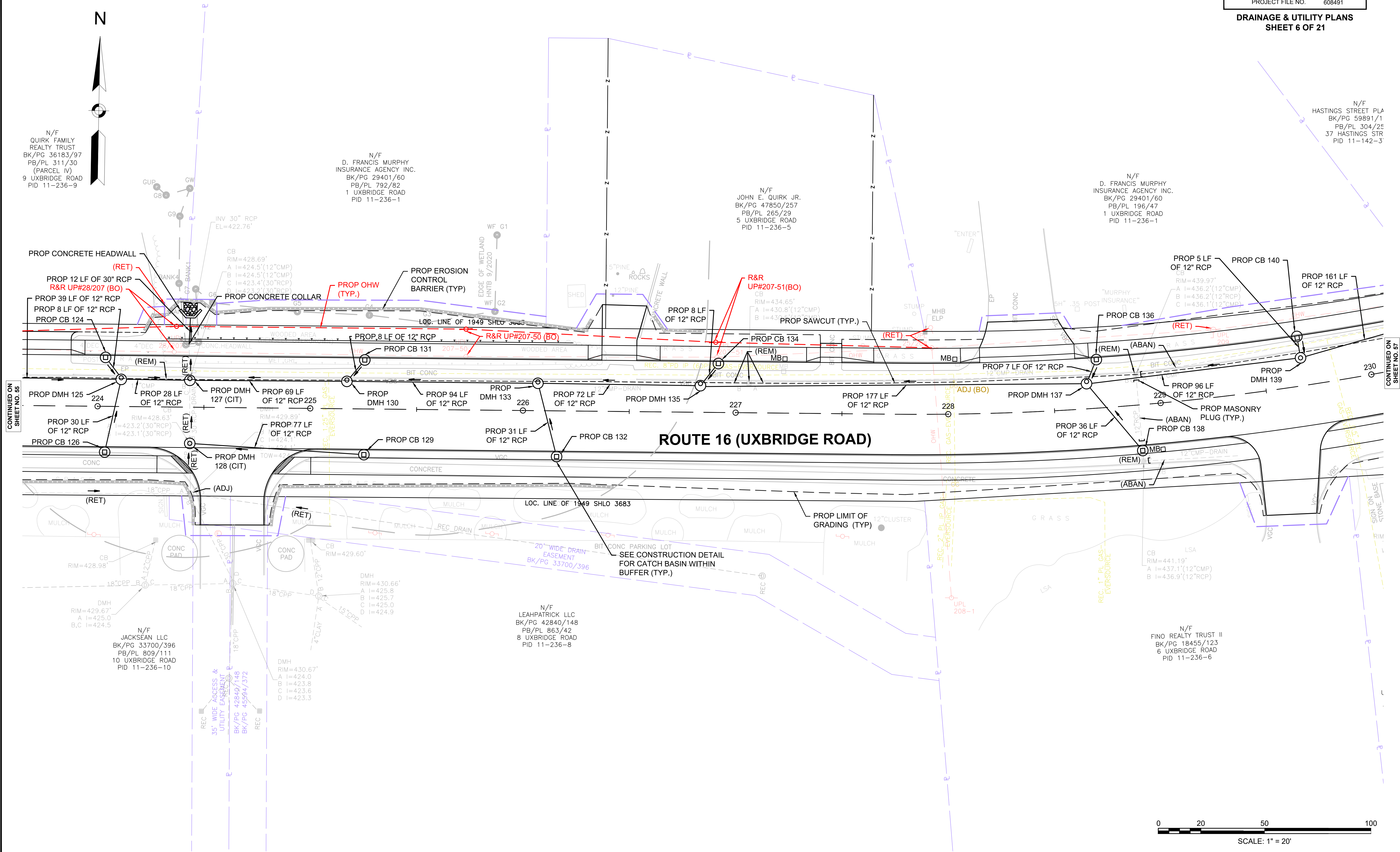
N/F  
QUIRK FAMILY  
REALTY TRUST  
BK/PG 36183/97  
PB/PL 311/30  
(PARCEL IV)  
9 UXBRIDGE ROAD  
PID 11-236-9

N/F  
D. FRANCIS MURPHY  
INSURANCE AGENCY INC.  
BK/PG 29401/60  
PB/PL 792/82  
1 UXBRIDGE ROAD  
PID 11-236-1

N/F  
JOHN E. QUIRK JR.  
BK/PG 47850/257  
PB/PL 265/29  
5 UXBRIDGE ROAD  
PID 11-236-5

N/F  
D. FRANCIS MURPHY  
INSURANCE AGENCY INC.  
BK/PG 29401/60  
PB/PL 196/47  
1 UXBRIDGE ROAD  
PID 11-236-1

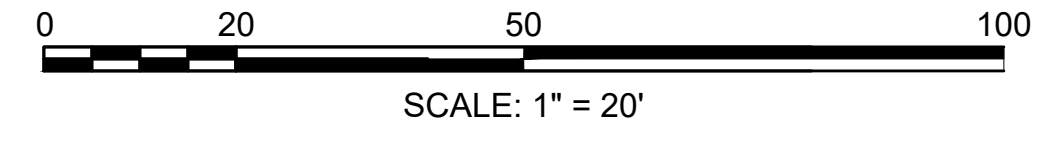
N/F  
HASTINGS STREET PL  
BK/PG 59891/1  
PB/PL 304/25  
37 HASTINGS STR  
PID 11-142-3



CONTINUED ON  
SHEET NO. 55

CONTINUED ON  
SHEET NO. 57

ROUTE 16 (UXBRIDGE ROAD)





**MENDON  
ROUTE 16**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	57	116
PROJECT FILE NO.		608491	

**DRAINAGE & UTILITY PLANS  
SHEET 7 OF 21**

**WATER SUPPLY & SEWER ALTERATIONS**

NONE

**CONSTRUCTION PLANS**

SEE SHEET 24

PB/PL 304/25  
37 HASTINGS STREET  
PID 11-142-37

**TRAFFIC SIGN & PAVEMENT MARKING PLANS**

SEE SHEET 77

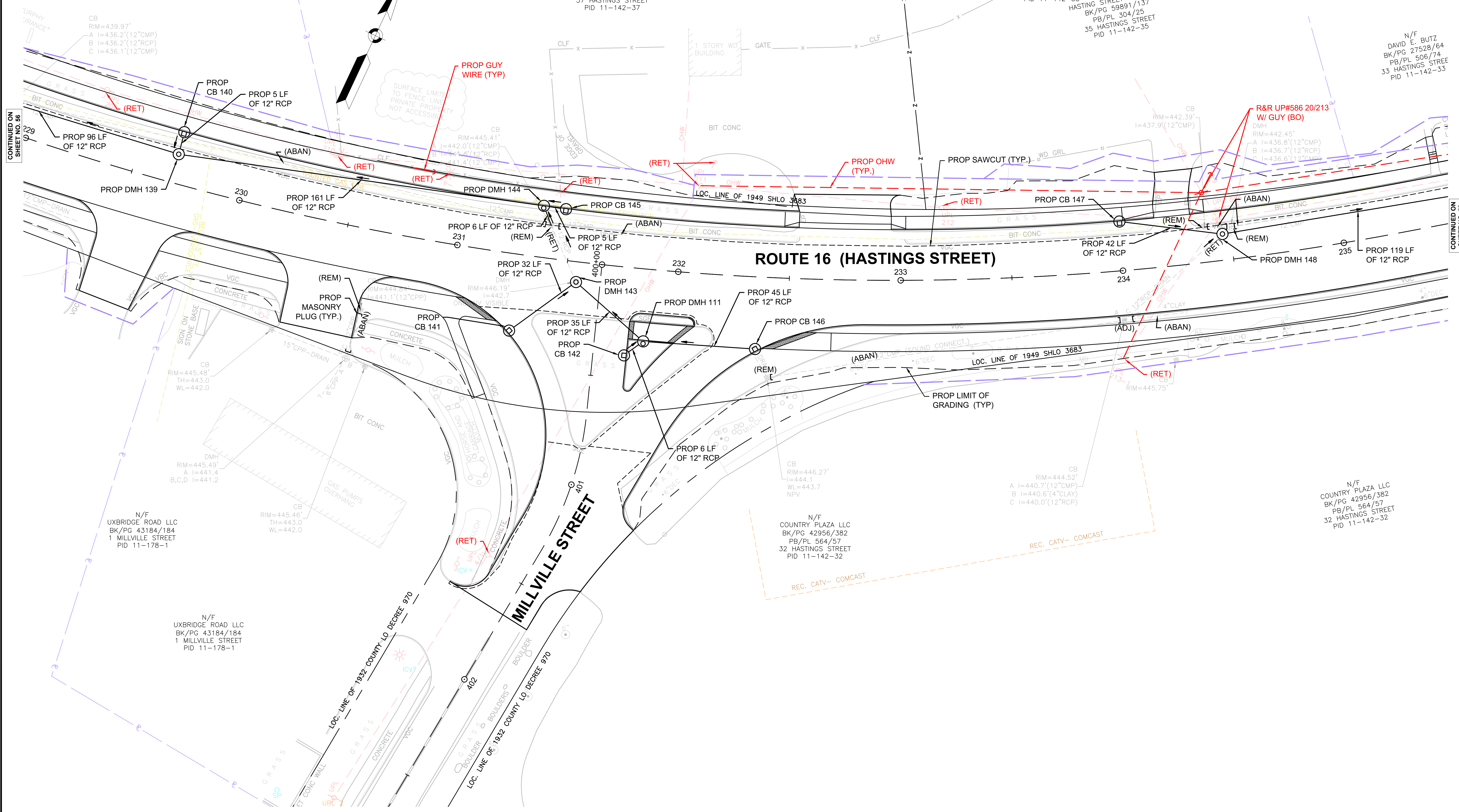
N/F  
HASTINGS STREET PLAZA LLC  
BK/PG 59891/137  
PB/PL 304/25  
37 HASTINGS STREET  
PID 11-142-37

N/F  
HASTING STREET PLAZA LLC  
BK/PG 59891/137  
PB/PL 304/25  
35 HASTINGS STREET  
PID 11-142-35

N/F  
HASTING STREET PLAZA LLC  
BK/PG 59891/137  
PB/PL 304/25  
35 HASTINGS STREET  
PID 11-142-35

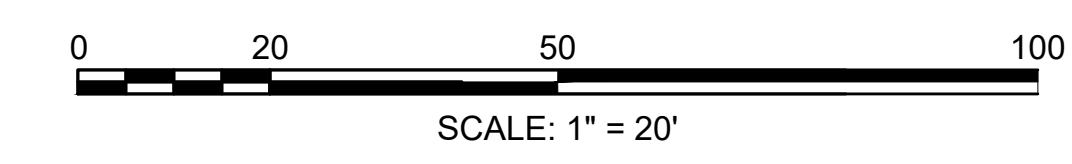
N/F  
DAVID E. BUTZ  
BK/PG 27528/64  
PB/PL 506/74  
33 HASTINGS STREET  
PID 11-142-33

N/F  
COUNTRY PLAZA LLC  
BK/PG 42956/382  
PB/PL 564/57  
32 HASTINGS STREET  
PID 11-142-32



CONTINUED ON  
SHEET NO. 56

CONTINUED ON  
SHEET NO. 58





WATER SUPPLY & SEWER ALTERATIONS

CONSTRUCTION PLANS

TRAFFIC SIGN & PAVEMENT MARKING PLANS

NONE

SEE SHEET 25

SEE SHEET 78

MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	58	116
PROJECT FILE NO.		608491	

DRAINAGE & UTILITY PLANS  
SHEET 8 OF 21

N/F  
TREET PLAZA LLC  
59891/137  
PL 304/25  
HASTINGS STREET  
11-142-35

N/F  
HASTING STREET PLAZA LLC  
BK/PG 59891/137  
PB/PL 304/25  
35 HASTINGS STREET  
PID 11-142-35



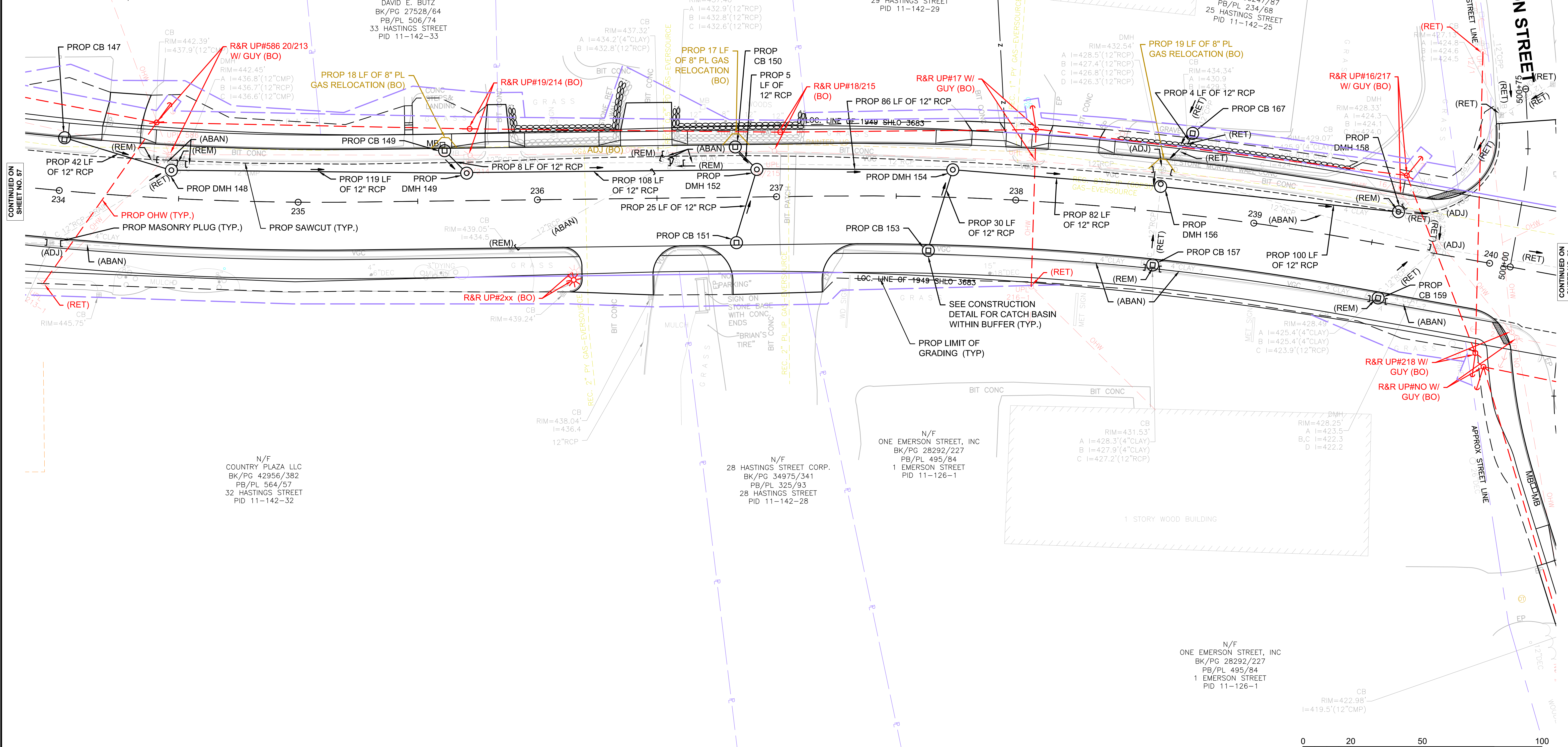
N/F  
DAVID E. BUTZ  
BK/PG 27528/64  
PB/PL 506/74  
33 HASTINGS STREET  
PID 11-142-33

N/F  
PETER COFFIN AND  
JULIE N. COFFIN  
BK/PG 53397/91  
L.C.C No. 18875-B (LOT 1)  
CERT. No. 17930  
DOC. No. 112178  
31 HASTINGS STREET  
PID 11-142-31

N/F  
AMBRO DEVELOPMENT, LLC  
BK/PG 56459/282  
29 HASTINGS STREET  
PID 11-142-29

N/F  
AMBRO DEVELOPMENT, LLC  
BK/PG 50247/87  
PB/PL 234/68  
HASTINGS STREET  
BK/PG 50247/87  
PB/PL 234/68  
25 HASTINGS STREET  
PID 11-142-25

### ROUTE 16 (HASTINGS STREET)



CONTINUED ON  
SHEET NO. 57

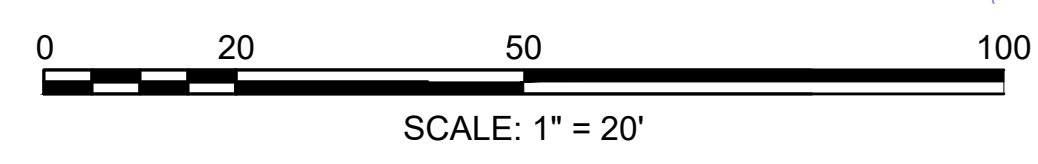
CONTINUED ON  
SHEET NO. 59

N/F  
COUNTRY PLAZA LLC  
BK/PG 42956/382  
PB/PL 564/57  
32 HASTINGS STREET  
PID 11-142-32

N/F  
28 HASTINGS STREET CORP.  
BK/PG 34975/341  
PB/PL 325/93  
28 HASTINGS STREET  
PID 11-142-28

N/F  
ONE EMERSON STREET, INC  
BK/PG 28292/227  
PB/PL 495/84  
1 EMERSON STREET  
PID 11-126-1

N/F  
ONE EMERSON STREET, INC  
BK/PG 28292/227  
PB/PL 495/84  
1 EMERSON STREET  
PID 11-126-1









WATER SUPPLY & SEWER ALTERATIONS

CONSTRUCTION PLANS

TRAFFIC SIGN & PAVEMENT MARKING PLANS

NONE

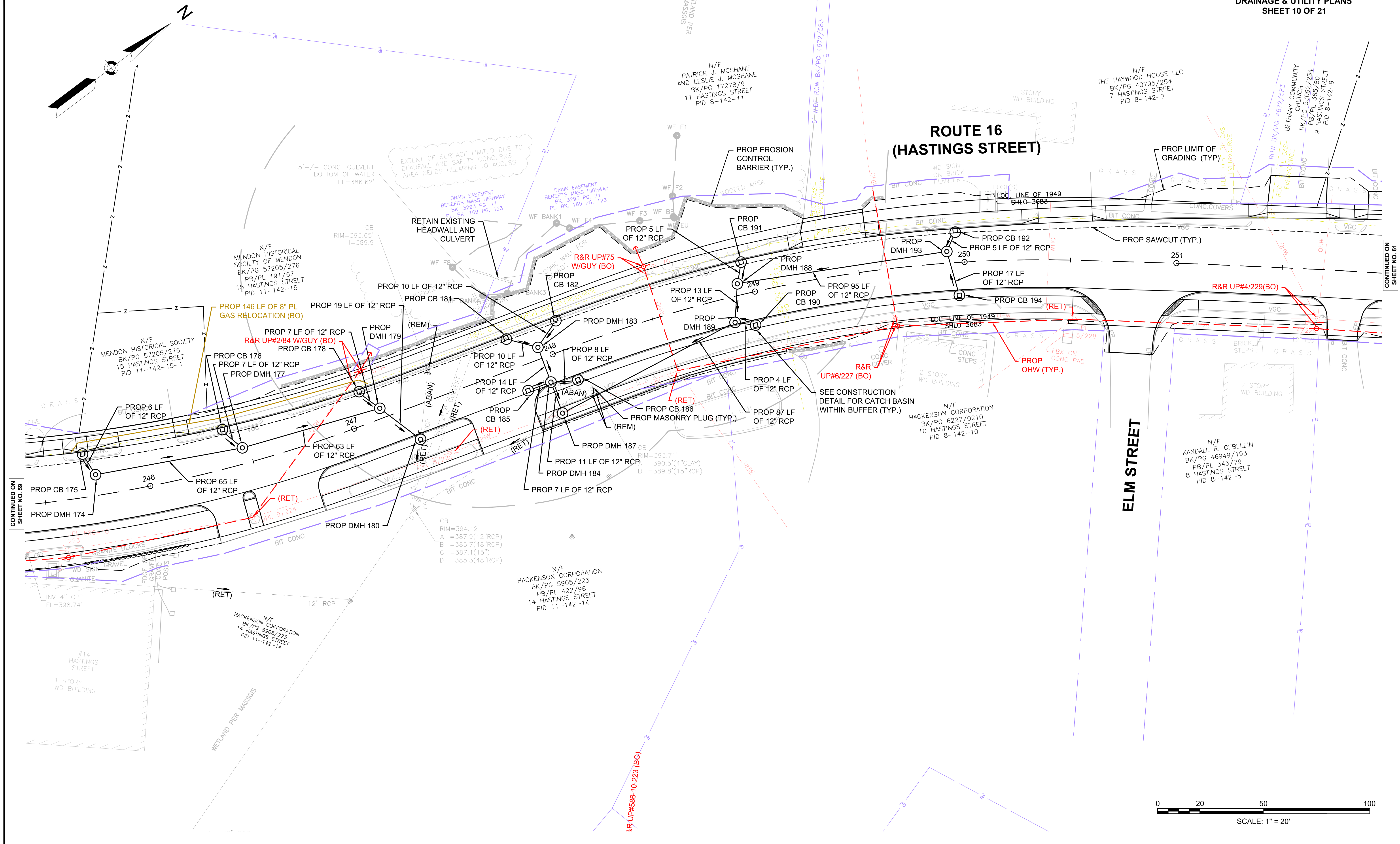
SEE SHEET 27

SEE SHEET 80

MENDON ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	60	116
PROJECT FILE NO. 608491			

DRAINAGE & UTILITY PLANS SHEET 10 OF 21



CONTINUED ON SHEET NO. 59

CONTINUED ON SHEET NO. 61





WATER SUPPLY & SEWER ALTERATIONS

CONSTRUCTION PLANS

TRAFFIC SIGN & PAVEMENT MARKING PLANS

NONE

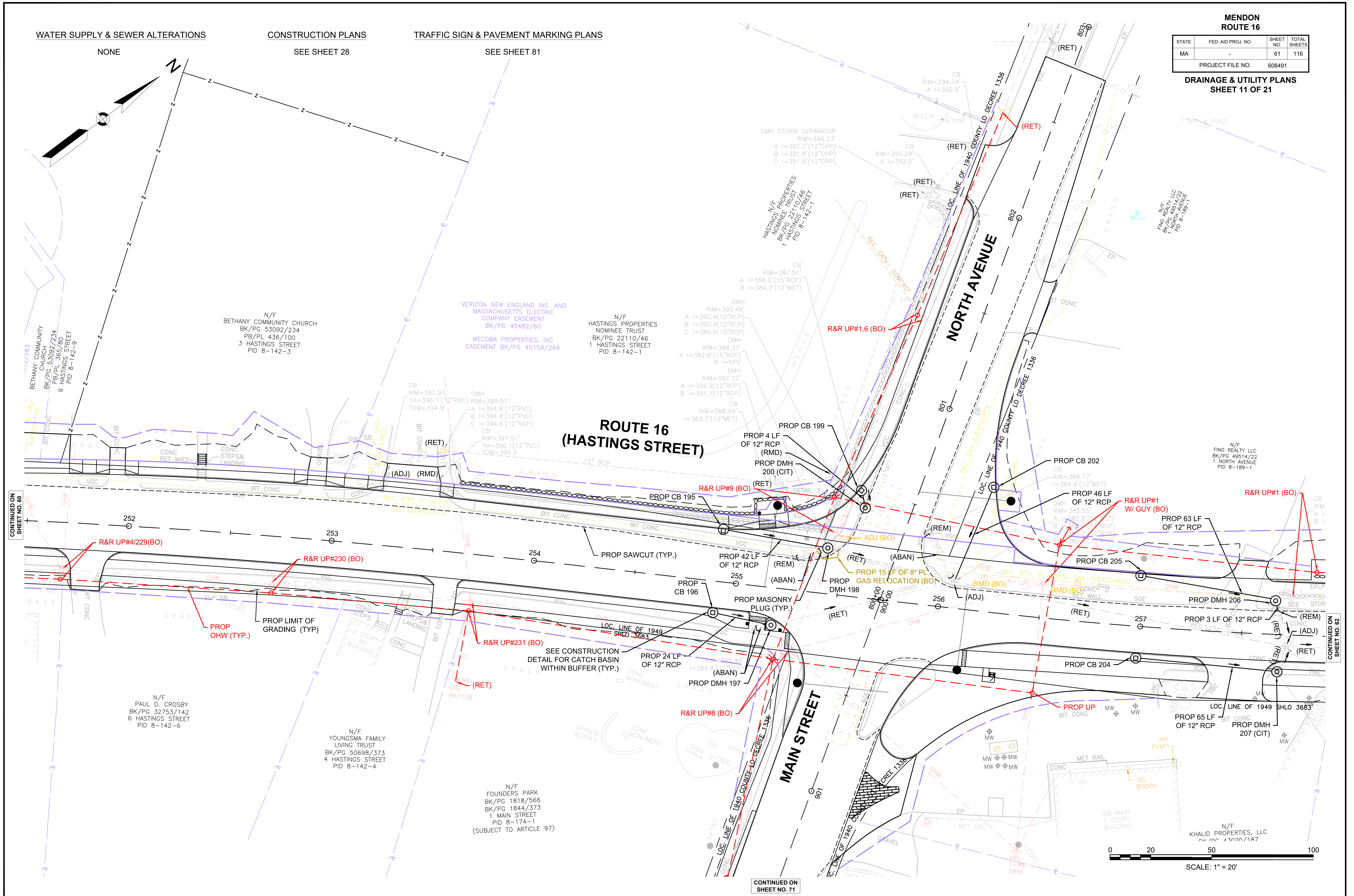
SEE SHEET 28

SEE SHEET 81

MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	61	116
PROJECT FILE NO.		608491	

DRAINAGE & UTILITY PLANS  
SHEET 11 OF 21



CONTINUED ON  
SHEET NO. 60

CONTINUED ON  
SHEET NO. 62

CONTINUED ON  
SHEET NO. 71

0 20 50 100  
SCALE: 1" = 20'



WATER SUPPLY & SEWER ALTERATIONS

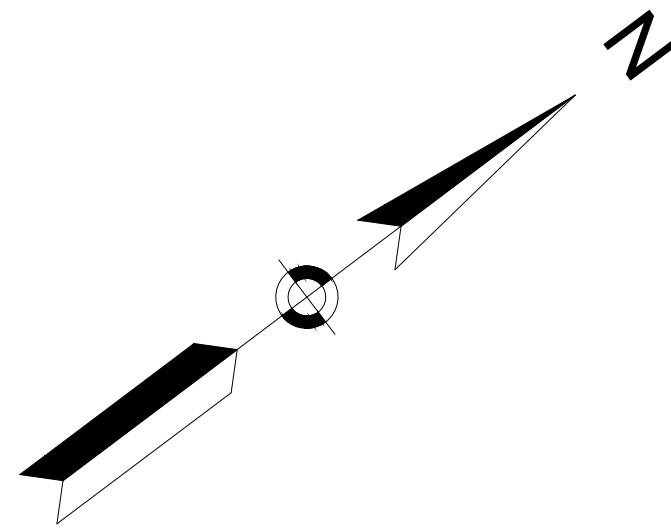
CONSTRUCTION PLANS

TRAFFIC SIGN & PAVEMENT MARKING PLANS

NONE

SEE SHEET 29

SEE SHEET 82



**MENDON  
ROUTE 16**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	62	116
PROJECT FILE NO. 608491			

**DRAINAGE & UTILITY PLANS  
SHEET 12 OF 21**

"MUDDY BROOK NORTH CONSERVATION AREA"  
METACOMET LAND TRUST, INC  
CONSERVATION RESTRICTION  
SUBJECT TO ARTICLE 97  
BK/PG 52480/277

N/F  
TOWN OF MENDON  
(CONSERVATION COMMISSION)  
BK/PG 42983/63  
20 MILFORD STREET  
PID 9-177-20

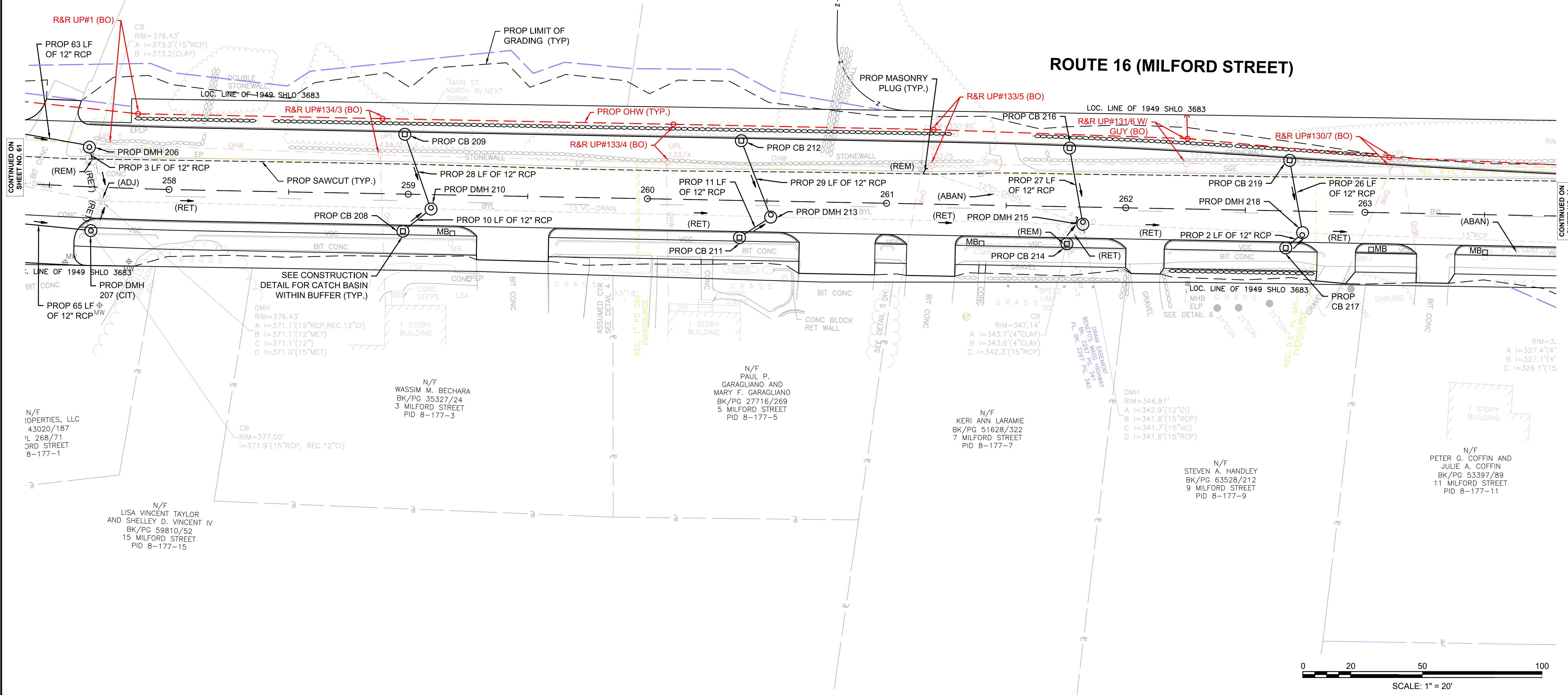
"MUDDY BROOK NORTH CONSERVATION AREA"  
METACOMET LAND TRUST, INC  
CONSERVATION RESTRICTION  
SUBJECT TO ARTICLE 97  
BK/PG 52480/277

N/F  
TOWN OF MENDON  
(CONSERVATION COMMISSION)  
BK/PG 42983/63  
6 MILFORD STREET  
PID 8-177-6

N/F  
FINO REALTY LLC  
BK/PG 49514/22  
PB/PL 830/80  
1 NORTH AVENUE  
PID 8-189-1

N/F  
O REALTY LLC  
PG 49514/22  
1078 AVENUE  
ID 8-189-1

### ROUTE 16 (MILFORD STREET)



CONTINUED ON SHEET NO. 81

CONTINUED ON SHEET NO. 83

SEE CONSTRUCTION  
DETAIL FOR CATCH BASIN  
WITHIN BUFFER (TYP.)

DMH  
RIM=376.43'  
A I=371.1'(15"RCP, REC.12"C)  
B I=371.1'(12"MET)  
C I=371.1'(12")  
D I=371.0'(15"MET)

N/F  
WASSIM M. BECHARA  
BK/PG 35327/24  
3 MILFORD STREET  
PID 8-177-3

N/F  
PAUL P. CARAGLIANO AND  
MARY F. CARAGLIANO  
BK/PG 27716/269  
5 MILFORD STREET  
PID 8-177-5

N/F  
KERI ANN LARAMIE  
BK/PG 51628/322  
7 MILFORD STREET  
PID 8-177-7

DMH  
RIM=346.81'  
A I=342.9'(12"C)  
B I=341.8'(15"RCP)  
C I=341.7'(15"VC)  
D I=341.6'(15"RCP)

N/F  
STEVEN A. HANDLEY  
BK/PG 63528/212  
9 MILFORD STREET  
PID 8-177-9

N/F  
PETER G. COFFIN AND  
JULIE A. COFFIN  
BK/PG 53397/89  
11 MILFORD STREET  
PID 8-177-11

N/F  
PROPERTIES, LLC  
43020/187  
11 268/71  
3RD STREET  
8-177-1

N/F  
LISA VINCENT TAYLOR  
AND SHELLEY D. VINCENT IV  
BK/PG 59810/52  
15 MILFORD STREET  
PID 8-177-15





WATER SUPPLY & SEWER ALTERATIONS

NONE

CONSTRUCTION PLANS

SEE SHEET 30

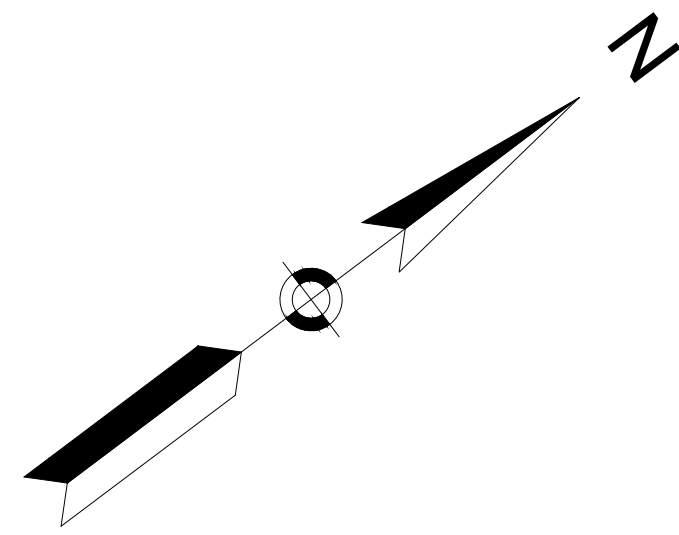
TRAFFIC SIGN & PAVEMENT MARKING PLANS

SEE SHEET 83

MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	63	116
PROJECT FILE NO.		608491	

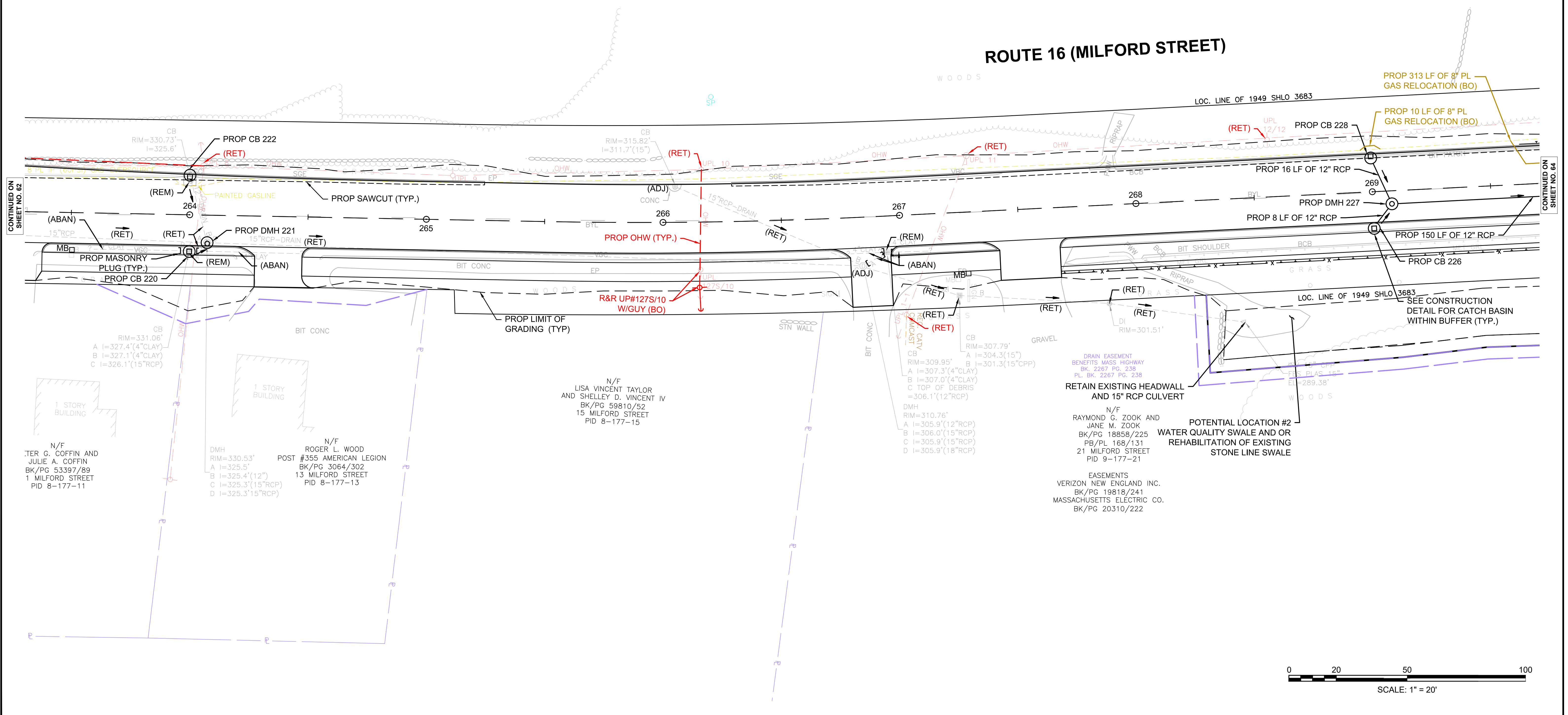
DRAINAGE & UTILITY PLANS  
SHEET 13 OF 21



"MUDDY BROOK NORTH CONSERVATION AREA"  
METACOMET LAND TRUST, INC  
CONSERVATION RESTRICTION  
SUBJECT TO ARTICLE 97  
BK/PG 52480/277

N/F  
TOWN OF MENDON  
(CONSERVATION COMMISSION)  
BK/PG 42983/63  
20 MILFORD STREET  
PID 9-177-20

### ROUTE 16 (MILFORD STREET)



CONTINUED ON SHEET NO. 62

CONTINUED ON SHEET NO. 64

N/F  
TER G. COFFIN AND  
JULIE A. COFFIN  
BK/PG 53397/89  
1 MILFORD STREET  
PID 8-177-11

DMH  
RIM=330.53'  
A I=325.5'  
B I=325.4'(12")  
C I=325.3'(15"RCP)  
D I=325.3'(15"RCP)

N/F  
ROGER L. WOOD  
POST #355 AMERICAN LEGION  
BK/PG 3064/302  
13 MILFORD STREET  
PID 8-177-13

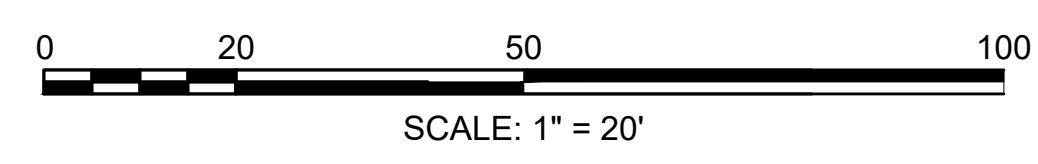
N/F  
LISA VINCENT TAYLOR  
AND SHELLEY D. VINCENT IV  
BK/PG 59810/52  
15 MILFORD STREET  
PID 8-177-15

DMH  
RIM=310.76'  
A I=305.9'(12"RCP)  
B I=306.0'(15"RCP)  
C I=305.9'(15"RCP)  
D I=305.9'(18"RCP)

DRAIN EASEMENT  
BENEFITS MASS. HIGHWAY  
BK. 2267 PG. 238  
PL. BK. 2267 PG. 238

N/F  
RAYMOND G. ZOOK AND  
JANE M. ZOOK  
BK/PG 18858/225  
PB/PL 168/131  
21 MILFORD STREET  
PID 9-177-21

EASEMENTS  
VERIZON NEW ENGLAND INC.  
BK/PG 19818/241  
MASSACHUSETTS ELECTRIC CO.  
BK/PG 20310/222





WATER SUPPLY & SEWER ALTERATIONS

NONE

CONSTRUCTION PLANS

SEE SHEET 31

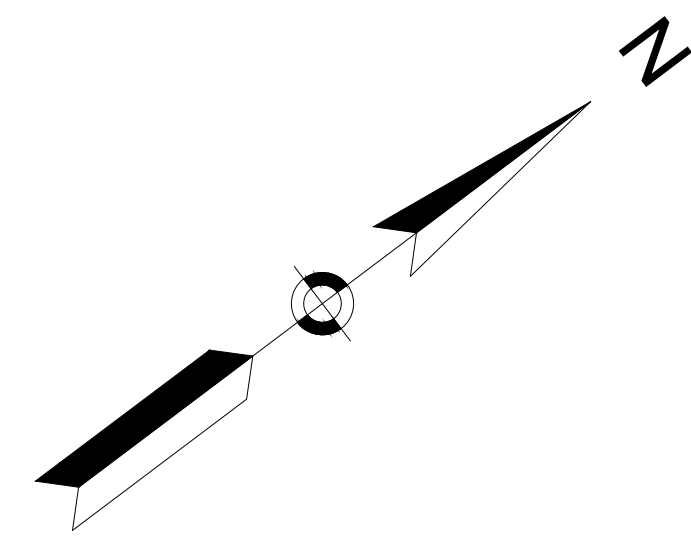
TRAFFIC SIGN & PAVEMENT MARKING PLANS

SEE SHEET 84

MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	64	116
PROJECT FILE NO.		608491	

DRAINAGE & UTILITY PLANS  
SHEET 14 OF 21

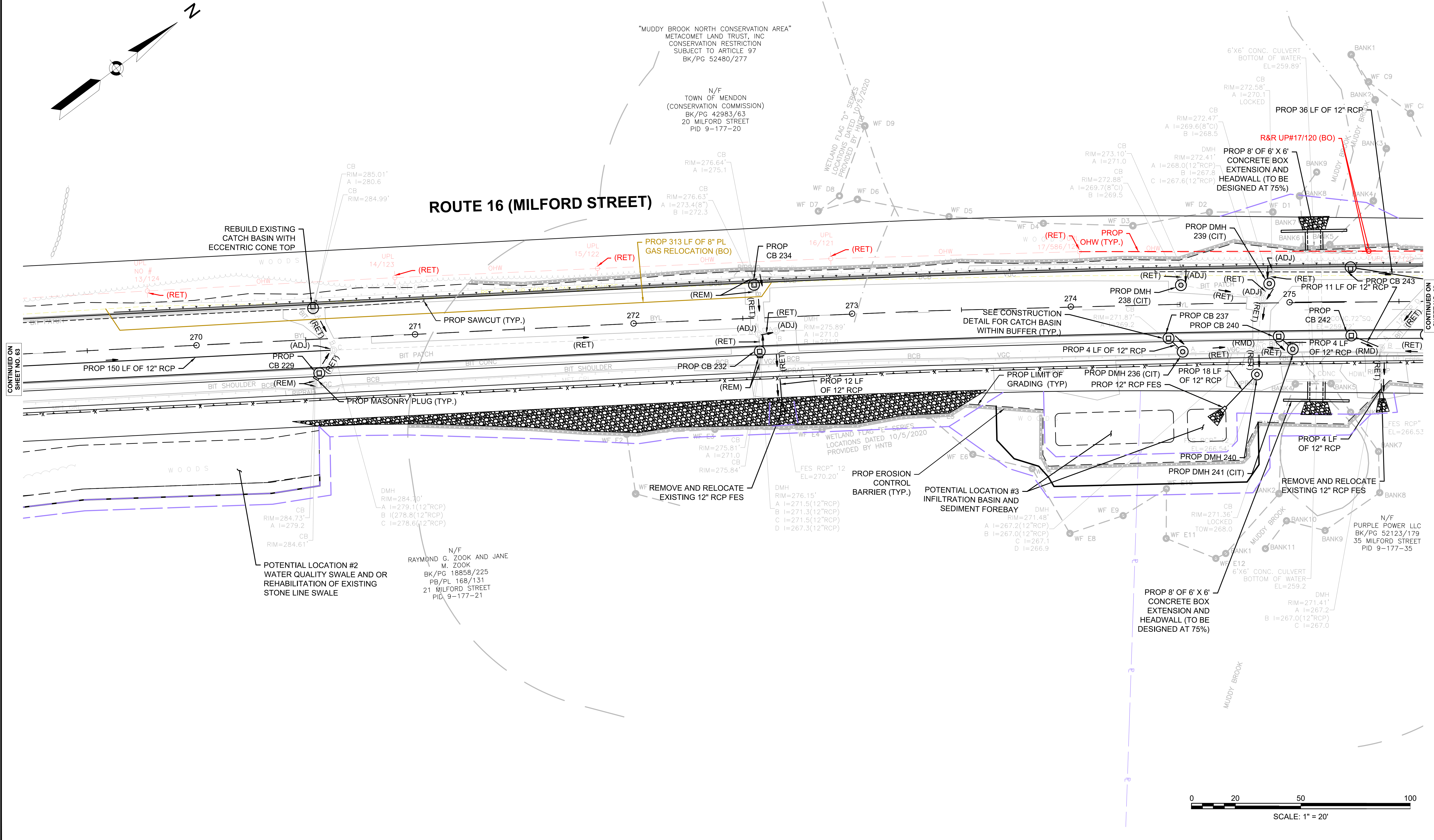


ROUTE 16 (MILFORD STREET)

"MUDDY BROOK NORTH CONSERVATION AREA"  
METACOMET LAND TRUST, INC  
CONSERVATION RESTRICTION  
SUBJECT TO ARTICLE 97  
BK/PG 52480/277

N/F  
TOWN OF MENDON  
(CONSERVATION COMMISSION)  
BK/PG 42983/63  
20 MILFORD STREET  
PID 9-177-20

WETLAND FLAG "D" SERIES  
LOCATIONS DATED 10/5/2020  
PROVIDED BY HNTB



CONTINUED ON SHEET NO. 63

CONTINUED ON SHEET NO. 65

POTENTIAL LOCATION #2  
WATER QUALITY SWALE AND OR  
REHABILITATION OF EXISTING  
STONE LINE SWALE

N/F  
RAYMOND G. ZOOK AND JANE  
M. ZOOK  
BK/PG 18858/225  
PB/PL 168/131  
21 MILFORD STREET  
PID 9-177-21

WF REMOVE AND RELOCATE  
EXISTING 12" RCP FES

POTENTIAL LOCATION #3  
INFILTRATION BASIN AND  
SEDIMENT FOREBAY

PROP 8' OF 6' X 6'  
CONCRETE BOX  
EXTENSION AND  
HEADWALL (TO BE  
DESIGNED AT 75%)





WATER SUPPLY & SEWER ALTERATIONS

CONSTRUCTION PLANS

TRAFFIC SIGN & PAVEMENT MARKING PLANS

NONE

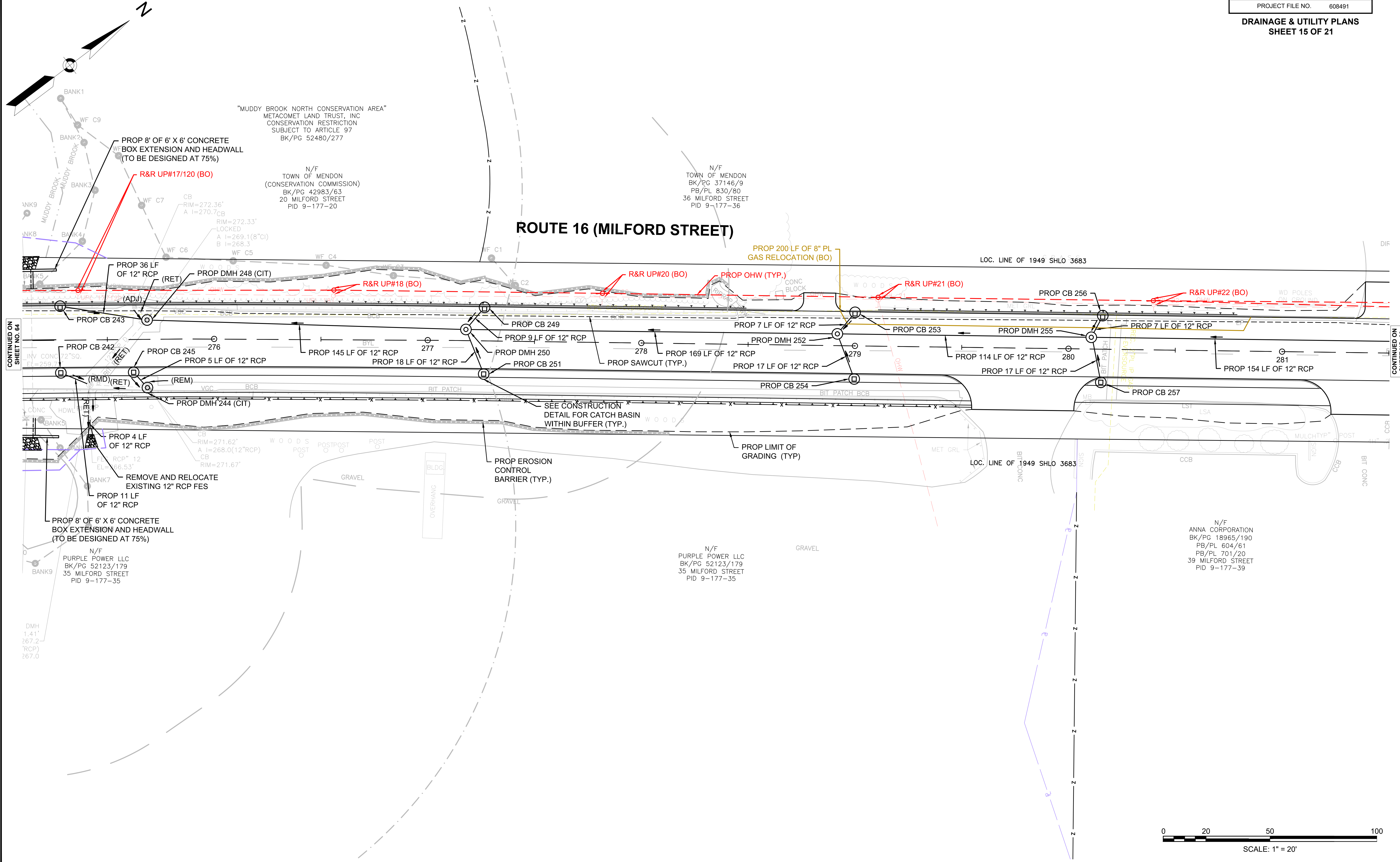
SEE SHEET 32

SEE SHEET 85

MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	65	116
PROJECT FILE NO.		608491	

DRAINAGE & UTILITY PLANS  
SHEET 15 OF 21



CONTINUED ON SHEET NO. 64

CONTINUED ON SHEET NO. 66





WATER SUPPLY & SEWER ALTERATIONS

NONE

CONSTRUCTION PLANS

SEE SHEET 33

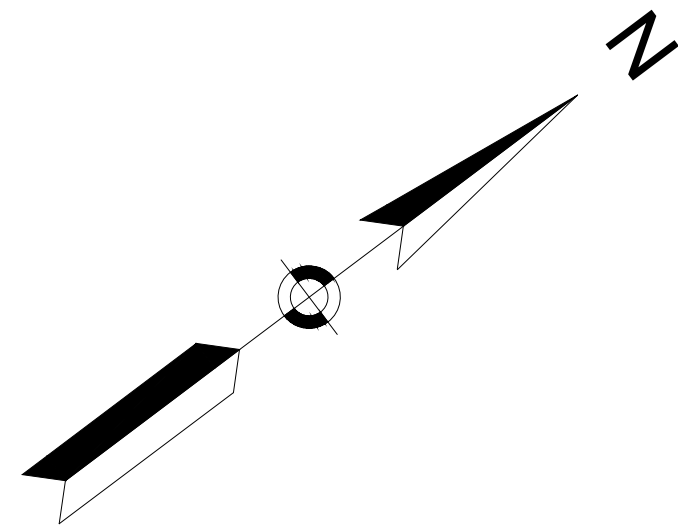
TRAFFIC SIGN & PAVEMENT MARKING PLANS

SEE SHEET 86

MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	66	116
PROJECT FILE NO.		608491	

DRAINAGE & UTILITY PLANS  
SHEET 16 OF 21



N/F  
TOWN OF MENDON  
BK/PG 37146/9  
PB/PL 830/80  
36 MILFORD STREET  
PID 9-177-36

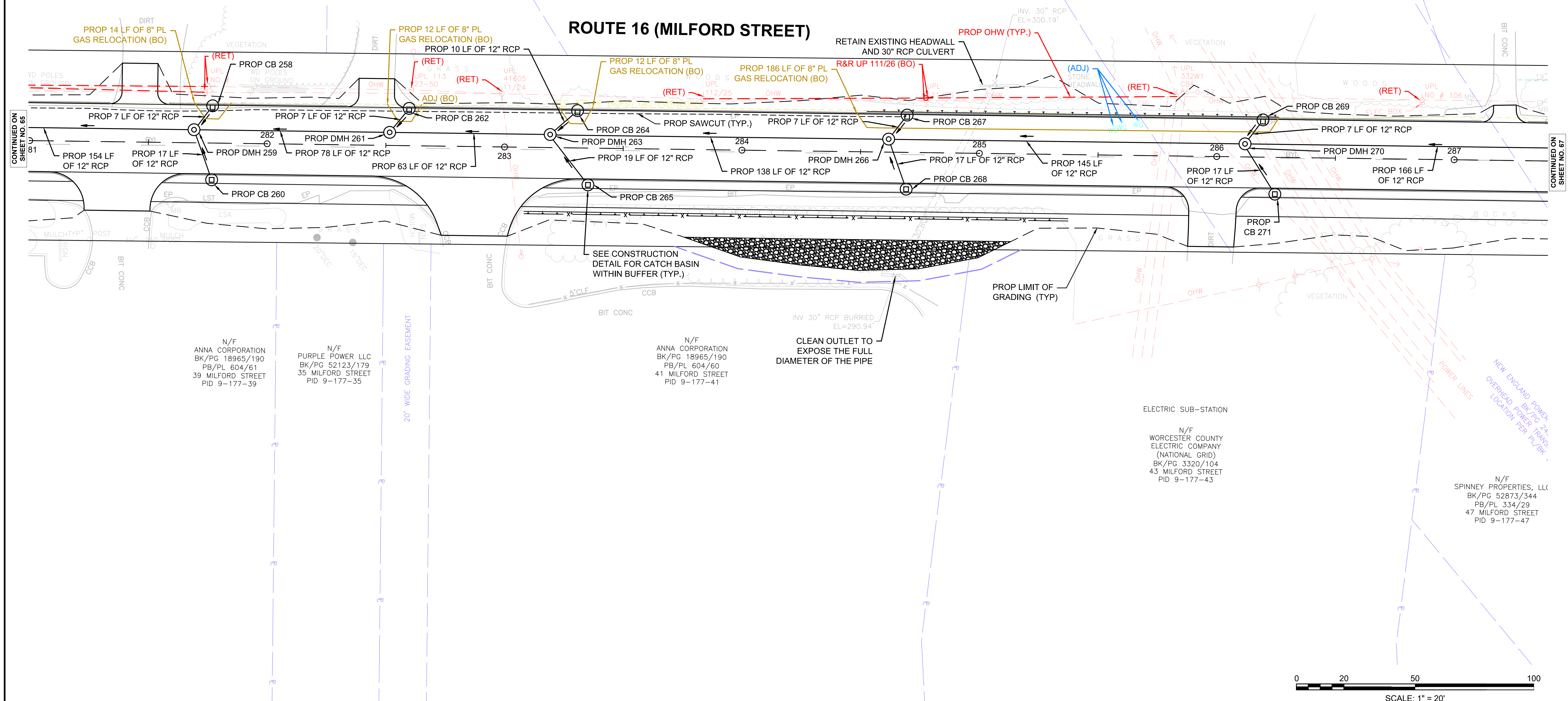
ACCESS EASEMENT  
TO SOLAR FACILITY  
BK/PG 55685/286

N/F  
GHELLI FAMILY TRUST  
BK/PG 61557/165  
42 MILFORD STREET  
PID 9-177-42

NEW ENGLAND POWER COMPANY EASEMENT  
OVERHEAD POWER TRANSMISSION LINES  
LOCATION PER PL/BK 920/19

SUBJECT TO GREENE  
BK/PG 55685/286

### ROUTE 16 (MILFORD STREET)



CONTINUED ON SHEET NO. 65

CONTINUED ON SHEET NO. 67





WATER SUPPLY & SEWER ALTERATIONS

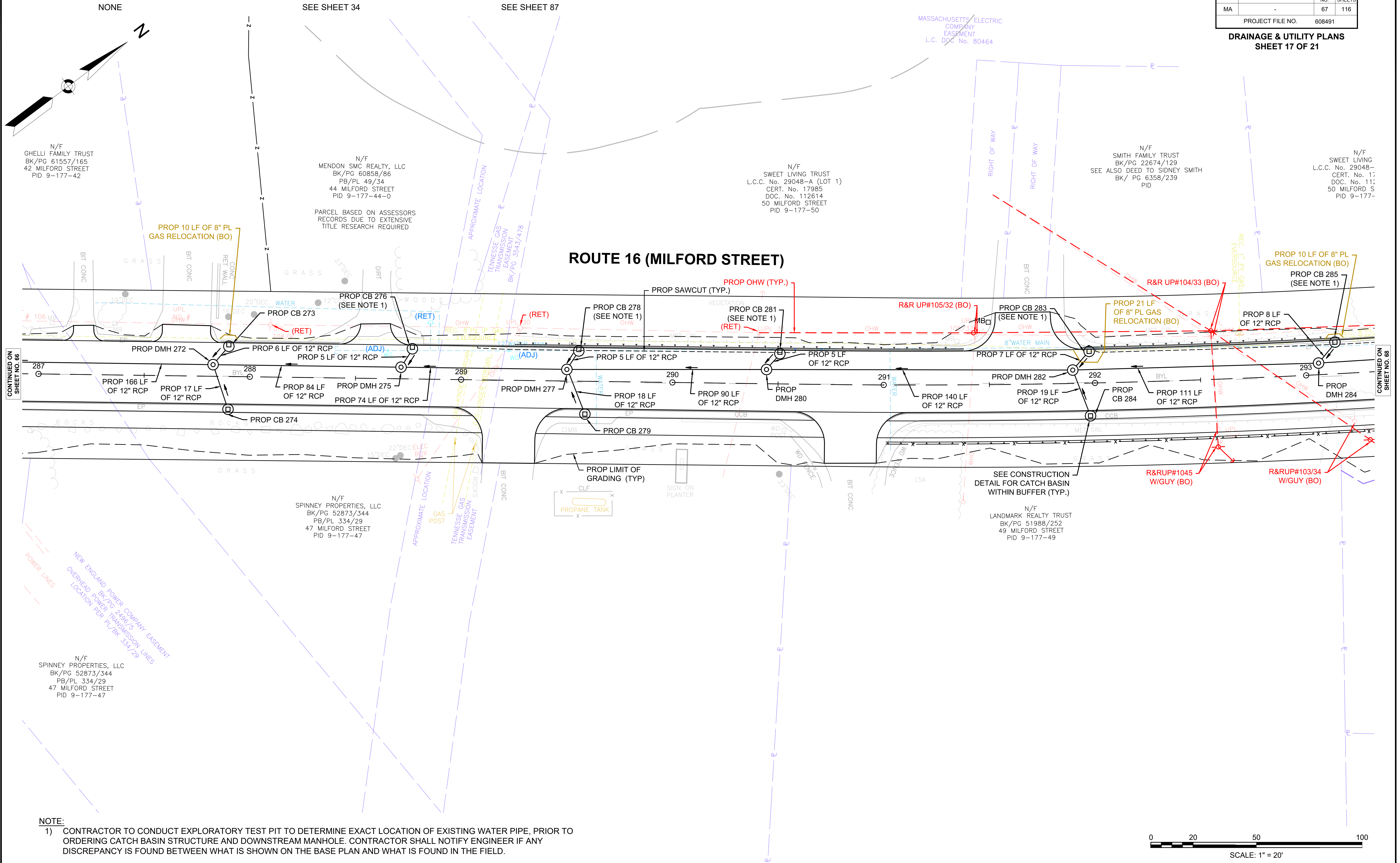
CONSTRUCTION PLANS

TRAFFIC SIGN & PAVEMENT MARKING PLANS

MENDON ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	67	116
PROJECT FILE NO.		608491	

DRAINAGE & UTILITY PLANS SHEET 17 OF 21



N/F  
GHELLI FAMILY TRUST  
BK/PG 61557/165  
42 MILFORD STREET  
PID 9-177-42

N/F  
MENDON SMC REALTY, LLC  
BK/PG 60858/86  
PB/PL 49/34  
44 MILFORD STREET  
PID 9-177-44-0

N/F  
SWEET LIVING TRUST  
L.C.C. No. 29048-A (LOT 1)  
CERT. No. 17985  
DOC. No. 112614  
50 MILFORD STREET  
PID 9-177-50

N/F  
SMITH FAMILY TRUST  
BK/PG 22674/129  
SEE ALSO DEED TO SIDNEY SMITH  
BK/ PG 6358/239  
PID

N/F  
SWEET LIVING  
L.C.C. No. 29048-  
CERT. No. 17  
DOC. No. 117  
50 MILFORD S  
PID 9-177-

N/F  
SPINNEY PROPERTIES, LLC  
BK/PG 52873/344  
PB/PL 334/29  
47 MILFORD STREET  
PID 9-177-47

SEE CONSTRUCTION  
DETAIL FOR CATCH BASIN  
WITHIN BUFFER (TYP.)

N/F  
LANDMARK REALTY TRUST  
BK/PG 51988/252  
49 MILFORD STREET  
PID 9-177-49

NOTE:  
1) CONTRACTOR TO CONDUCT EXPLORATORY TEST PIT TO DETERMINE EXACT LOCATION OF EXISTING WATER PIPE, PRIOR TO ORDERING CATCH BASIN STRUCTURE AND DOWNSTREAM MANHOLE. CONTRACTOR SHALL NOTIFY ENGINEER IF ANY DISCREPANCY IS FOUND BETWEEN WHAT IS SHOWN ON THE BASE PLAN AND WHAT IS FOUND IN THE FIELD.





WATER SUPPLY & SEWER ALTERATIONS

CONSTRUCTION PLANS

TRAFFIC SIGN & PAVEMENT MARKING PLANS

NONE

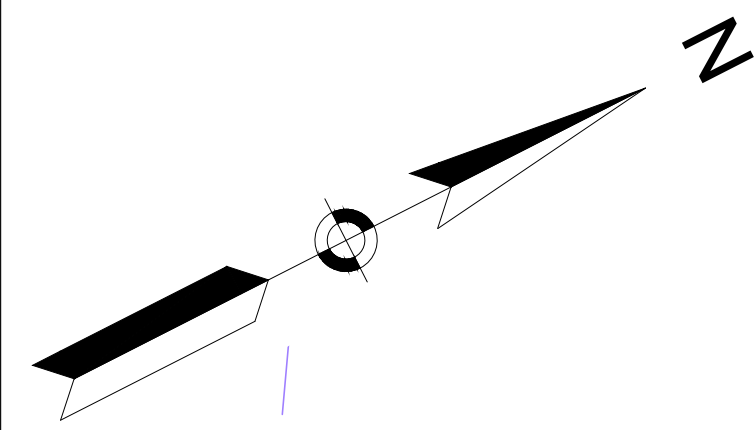
SEE SHEET 35

SEE SHEET 88

MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	68	116
PROJECT FILE NO. 608491			

DRAINAGE & UTILITY PLANS  
SHEET 18 OF 21



N/F  
SWEET LIVING TRUST  
L.C.C. No. 29048-A (LOT 1)  
CERT. No. 17985  
DOC. No. 112614  
50 MILFORD STREET  
PID 9-177-50

N/F  
LISA M. MAY  
BK/PG 24170/34  
54 MILFORD STREET  
PID 9-177-54

N/F  
DAVID M. SPENCE AND  
NATALIA SPENCE  
L.C.C. No. 29048-A (LOT 2)  
CERT. No. 14765  
DOC. No. 78408  
56 MILFORD STREET  
PID 9-177-56

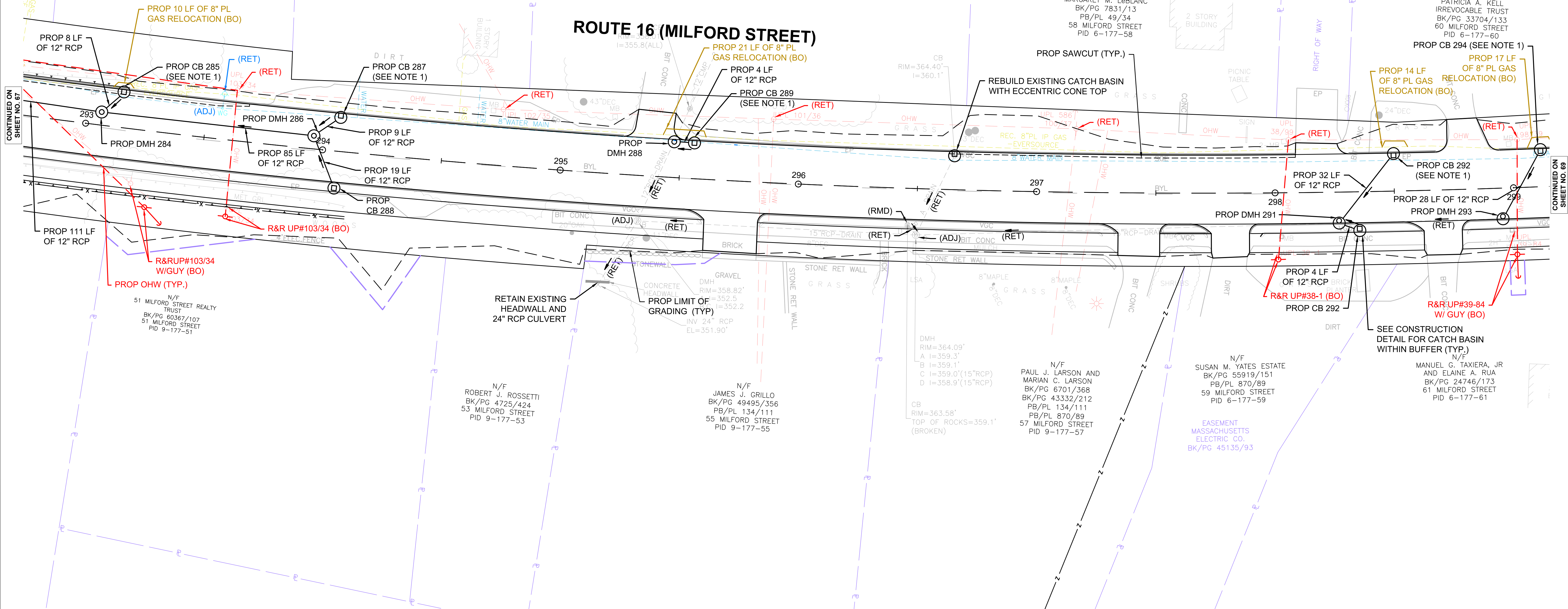
N/F  
WILLIAM A. VINCENT AND  
MARGARET M. LeBLANC  
BK/PG 7831/13  
PB/PL 49/34  
58 MILFORD STREET  
PID 6-177-58

N/F  
MENDON SMC REALTY, LLC  
BK/PG 80859/26  
44 MILFORD STREET  
PID 9-177-44-0

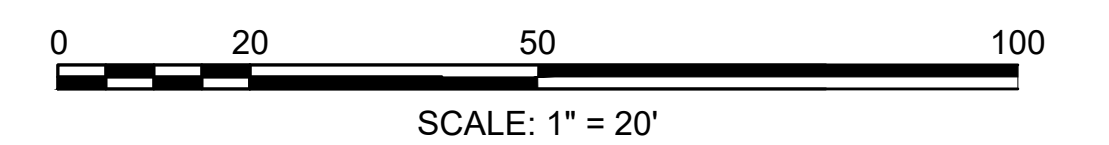
GRANITE STREET

N/F  
PATRICIA A. KELL  
IRREVOCABLE TRUST  
BK/PG 33704/133  
60 MILFORD STREET  
PID 6-177-60

### ROUTE 16 (MILFORD STREET)



NOTE:  
1) CONTRACTOR TO CONDUCT EXPLORATORY TEST PIT TO DETERMINE EXACT LOCATION OF EXISTING WATER PIPE, PRIOR TO ORDERING CATCH BASIN STRUCTURE AND DOWNSTREAM MANHOLE. CONTRACTOR SHALL NOTIFY ENGINEER IF ANY DISCREPANCY IS FOUND BETWEEN WHAT IS SHOWN ON THE BASE PLAN AND WHAT IS FOUND IN THE FIELD.





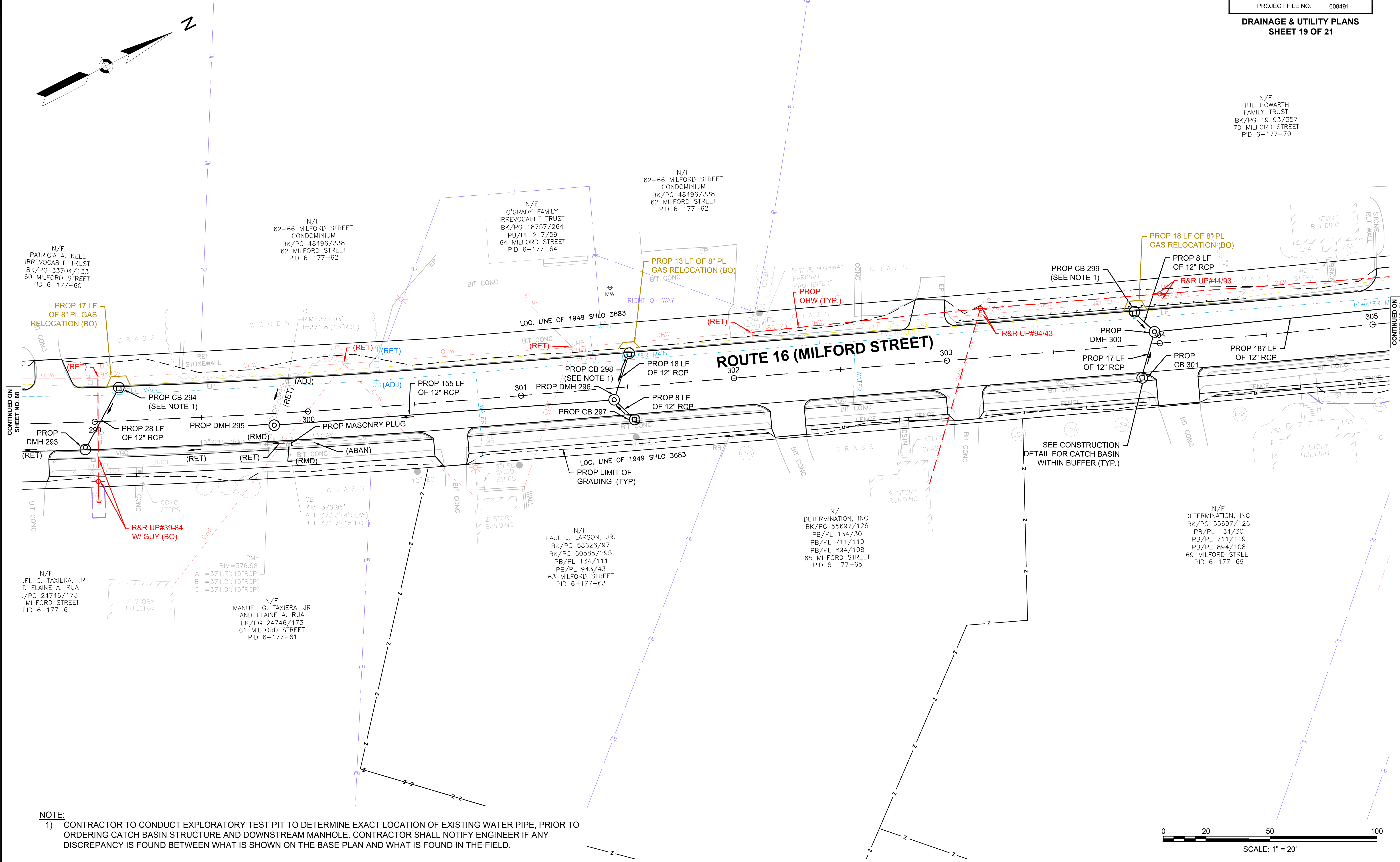
**MENDON  
ROUTE 16**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	69	116
PROJECT FILE NO. 608491			

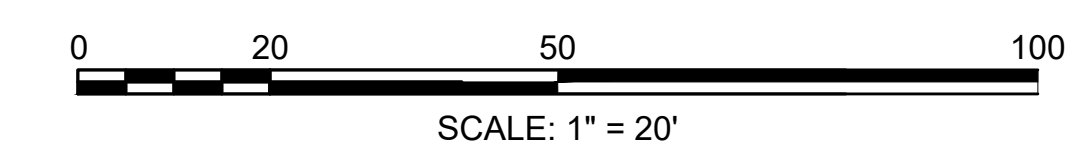
**DRAINAGE & UTILITY PLANS  
SHEET 19 OF 21**

WATER SUPPLY & SEWER ALTERATIONS NONE  
 CONSTRUCTION PLANS SEE SHEET 36  
 TRAFFIC SIGN & PAVEMENT MARKING PLANS SEE SHEET 89

N/F  
 THE HOWARTH  
 FAMILY TRUST  
 BK/PG 19193/357  
 70 MILFORD STREET  
 PID 6-177-70



**NOTE:**  
 1) CONTRACTOR TO CONDUCT EXPLORATORY TEST PIT TO DETERMINE EXACT LOCATION OF EXISTING WATER PIPE, PRIOR TO ORDERING CATCH BASIN STRUCTURE AND DOWNSTREAM MANHOLE. CONTRACTOR SHALL NOTIFY ENGINEER IF ANY DISCREPANCY IS FOUND BETWEEN WHAT IS SHOWN ON THE BASE PLAN AND WHAT IS FOUND IN THE FIELD.



CONTINUED ON  
SHEET NO. 68

CONTINUED ON  
SHEET NO. 70







WATER SUPPLY & SEWER ALTERATIONS

NONE

CONSTRUCTION PLANS

SEE SHEET 38

TRAFFIC SIGN & PAVEMENT MARKING PLANS

SEE SHEET 91

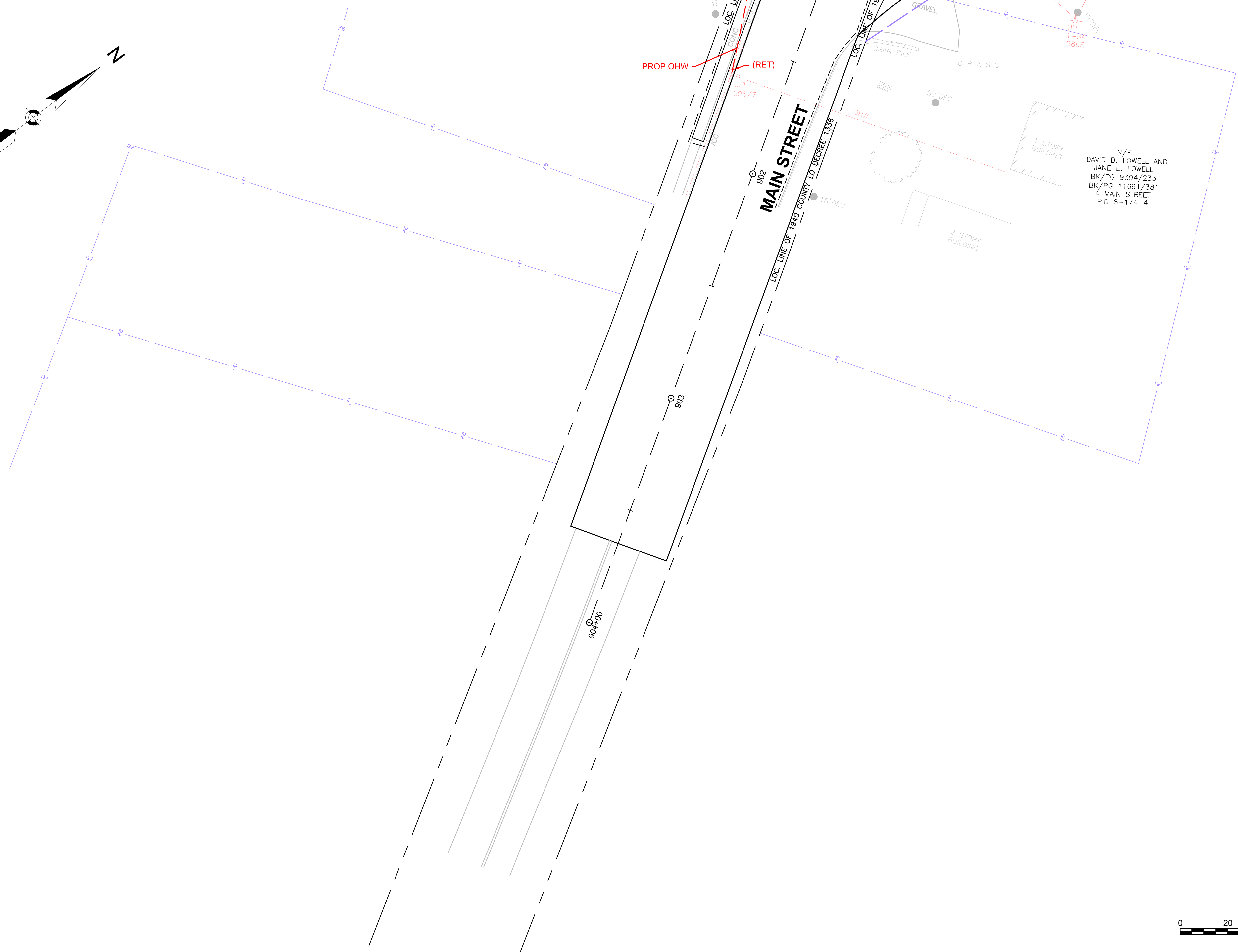
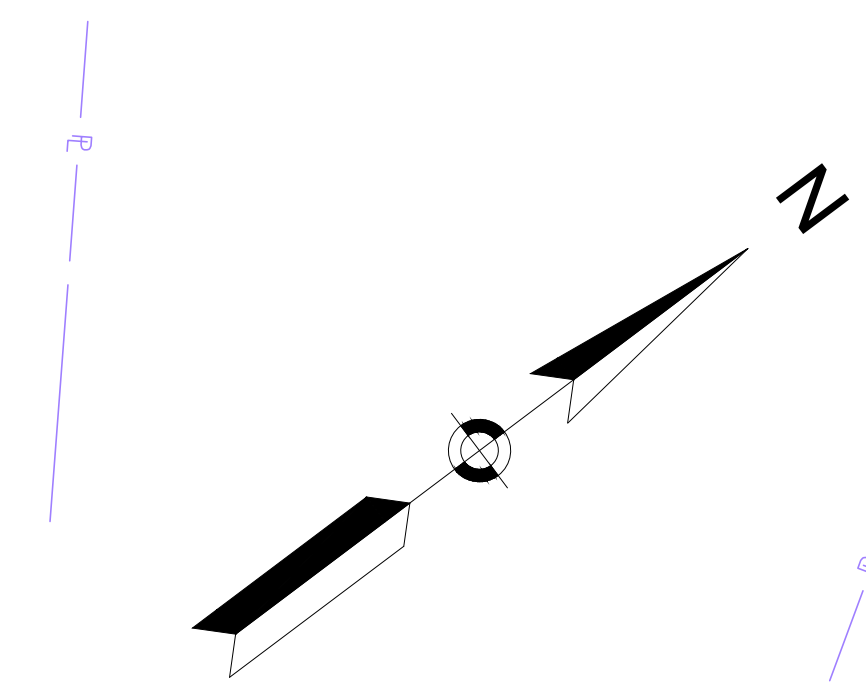
CONTINUED ON SHEET NO. 61

MENDON ROUTE 16

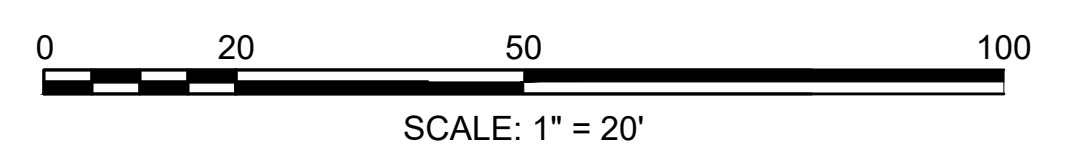
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	71	116
PROJECT FILE NO.		608491	

DRAINAGE & UTILITY PLANS SHEET 21 OF 21

LISA V AND SHEL BK/1 15 MI PID



N/F  
 DAVID B. LOWELL AND  
 JANE E. LOWELL  
 BK/PG 9394/233  
 BK/PG 11691/381  
 4 MAIN STREET  
 PID 8-174-4



CONSTRUCTION PLANS  
SEE SHEET 19

DRAINAGE AND UTILITY PLANS  
SEE SHEET 52

SIGN SUMMARY  
SEE SHEET 92

MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	72	116
PROJECT FILE NO.		608491	

TRAFFIC SIGNS & PAVEMENT MARKINGS  
SHEET 1 OF 20

THEODORE N/F  
MARSHA J. LeDOUX AND  
L.C.C. No. 1399-F (LOT A-2)  
CERT. No. 2484  
DOC. No. 27123  
6 HARTFORD AVE WEST  
PID 11-141-6

1 STORY  
BUILDING

1949 SHLO NO. 3683

PROJECT BEGIN  
ROUTE 16  
MEET EXIST  
STA 205+05  
N 2862155.9412  
E 637432.8868

PROP RUMBLE STRIP WITH  
SLOTTED PAVEMENT MARKERS  
(TYP) (SEE DETAIL ON SHEET 103)

12" YELLOW GORE LINES  
10' O.C.  
30 DEG (TYP)

UPL 45190

PROP ROUTE 16 CONST BL

ROUTE 16 (UXBRIDGE ROAD)

TAFT AVENUE

1949 SHLO  
NO. 3683  
R&D 'MENDON TOWN BEACH'  
R&D STOP  
R&D 'TAFT AVE'

R&D LEFT TURN  
R&D 'HARTFORD AVE W'

Taft Ave  
STOP  
MA-D3-1(A)  
R1-1

Hartford Ave W  
W3-3  
W16-8P

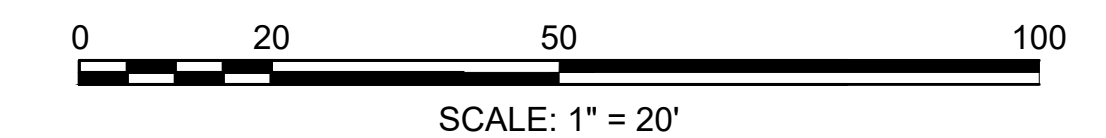
D11-1a  
M6-1R

N/F  
JOCELYN L. ARN  
L.C.C. No. 1399-K (LOT 1)  
CERT. No. 18447  
DOC. No. 116641  
1 TAFT AVENUE  
PID 11-225-1

N/F  
WILLIAM M. ROCKWOOD, JR.  
CAROL A. ROCKWOOD  
L.C.C. No. 1399-K (LOT 3)  
CERT. No. 10111  
DOC. No. 37318  
34 UXBRIDGE RD.  
PID 11-236-34

N/F  
LYN L. ARN  
L.C.C. No. 1399-K (LOT 1)  
CERT. No. 18447  
DOC. No. 116641  
1 TAFT AVENUE  
PID 11-225-1

MATCH TO EXISTING  
PAVEMENT MARKINGS



CONTINUED ON  
SHEET NO. 73



**MENDON  
ROUTE 16**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	73	116
PROJECT FILE NO. 608491			

**TRAFFIC SIGNS & PAVEMENT MARKINGS  
SHEET 2 OF 20**

CONSTRUCTION PLANS SEE SHEET 20  
DRAINAGE AND UTILITY PLANS SEE SHEET 53  
SIGN SUMMARY SEE SHEET 92  
TRAFFIC SIGNAL PLANS SEE SHEET 96

SEE SHEET 20  
N/F  
DONNA R. COTE AND  
JESSICA E. SMITH  
BK/PG 63700/332  
13 HARTFORD AVE WEST  
PID 11-141-13

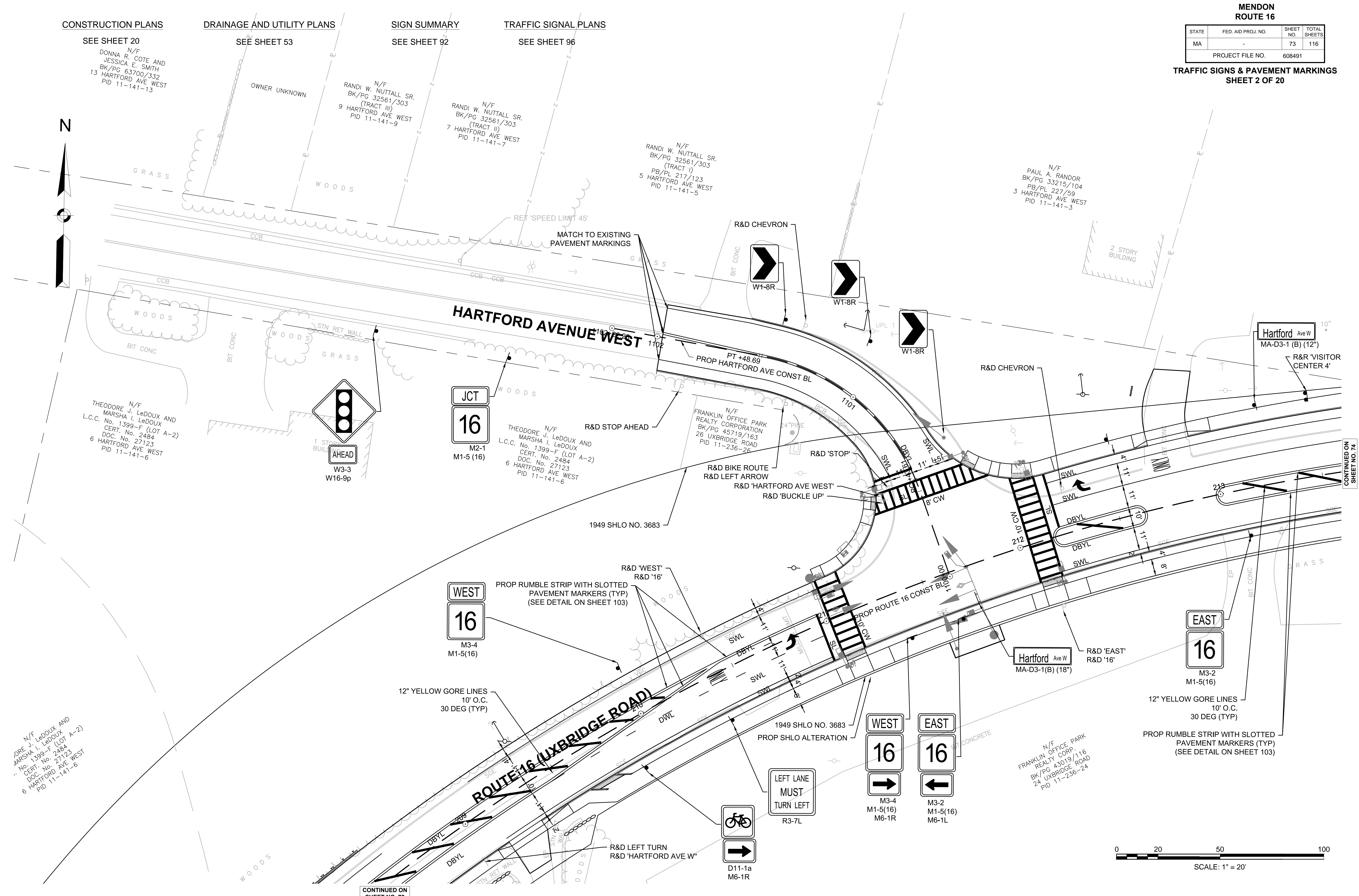
OWNER UNKNOWN

N/F  
RANDI W. NUTTALL SR.  
BK/PG 32561/303  
(TRACT III)  
9 HARTFORD AVE WEST  
PID 11-141-9

N/F  
RANDI W. NUTTALL SR.  
BK/PG 32561/303  
(TRACT II)  
7 HARTFORD AVE WEST  
PID 11-141-7

N/F  
RANDI W. NUTTALL SR.  
BK/PG 32561/303  
(TRACT I)  
PB/PL 217/123  
5 HARTFORD AVE WEST  
PID 11-141-5

N/F  
PAUL A. RANDOR  
BK/PG 33215/104  
PB/PL 227/59  
3 HARTFORD AVE WEST  
PID 11-141-3



N/F  
THEODORE J. LeDOUX AND  
MARSHA I. LeDOUX  
L.C.C. No. 1399-F (LOT A-2)  
CERT. No. 2484  
DOC. No. 27123  
6 HARTFORD AVE WEST  
PID 11-141-6

N/F  
THEODORE J. LeDOUX AND  
MARSHA I. LeDOUX  
L.C.C. No. 1399-F (LOT A-2)  
CERT. No. 2484  
DOC. No. 27123  
6 HARTFORD AVE WEST  
PID 11-141-6

N/F  
FRANKLIN OFFICE PARK  
REALTY CORPORATION  
BK/PG 45719/163  
26 UXBRIDGE ROAD  
PID 11-236-26

N/F  
FRANKLIN OFFICE PARK  
REALTY CORP.  
BK/PG 43019/116  
24 UXBRIDGE ROAD  
PID 11-236-24

N/F  
THEODORE J. LeDOUX AND  
MARSHA I. LeDOUX  
L.C.C. No. 1399-F (LOT A-2)  
CERT. No. 2484  
DOC. No. 27123  
6 HARTFORD AVE WEST  
PID 11-141-6

CONTINUED ON  
SHEET NO. 74

CONTINUED ON  
SHEET NO. 72

CONSTRUCTION PLANS  
SEE SHEET 21

DRAINAGE AND UTILITY PLANS  
SEE SHEET 54

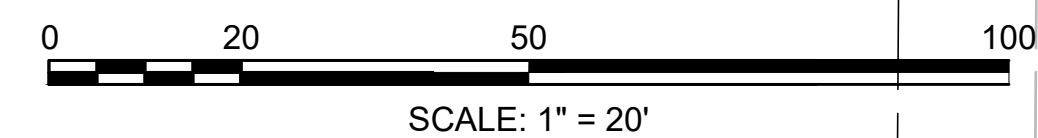
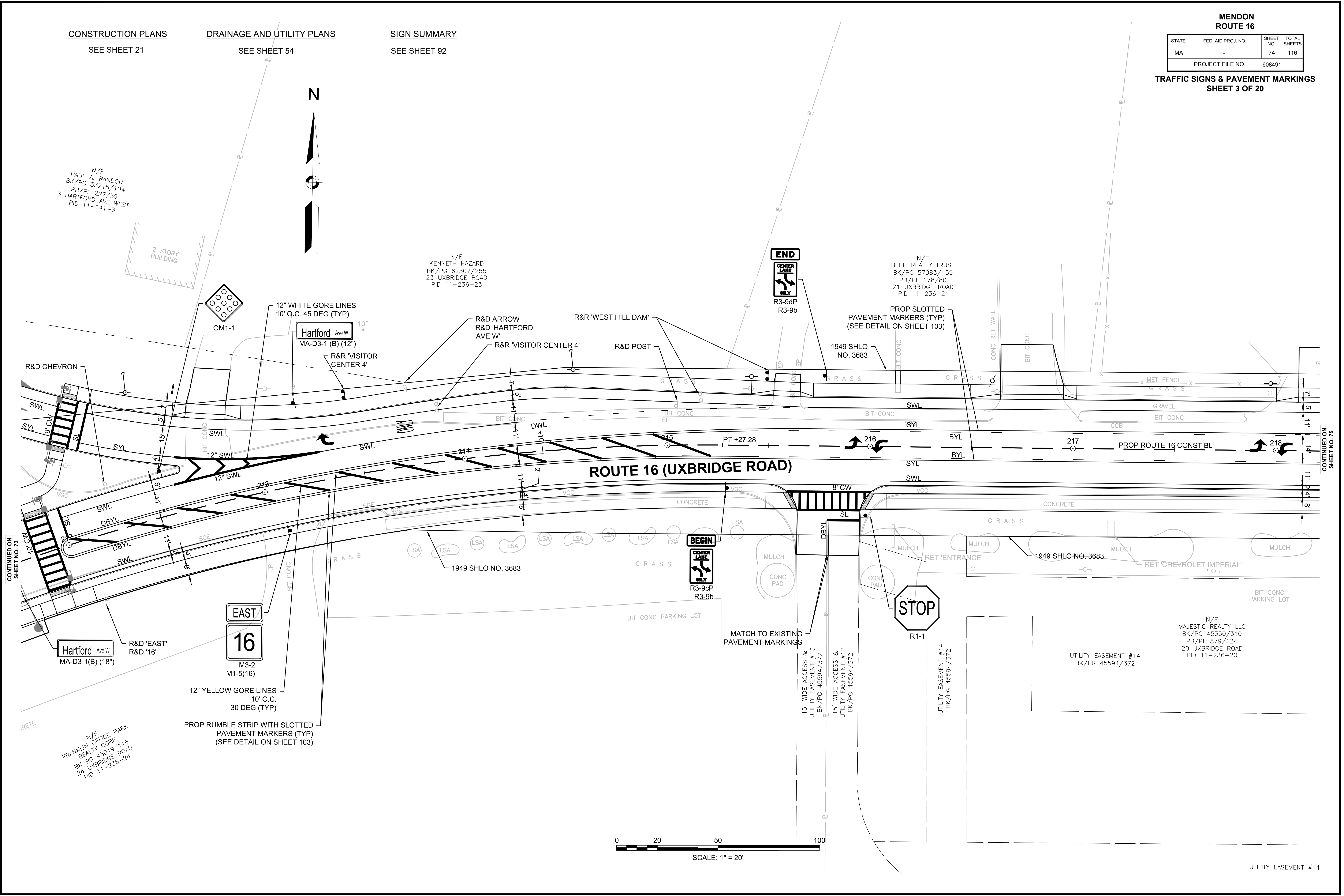
SIGN SUMMARY  
SEE SHEET 92

MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	74	116
PROJECT FILE NO. 608491			

TRAFFIC SIGNS & PAVEMENT MARKINGS  
SHEET 3 OF 20

608491\_TR1(PAVT MARKS)DWG Picked on: 29-Jul-2021 9:35 AM



CONTINUED ON SHEET NO. 73

CONTINUED ON SHEET NO. 75

UTILITY EASEMENT #14



CONSTRUCTION PLANS  
SEE SHEET 22

DRAINAGE AND UTILITY PLANS  
SEE SHEET 55

SIGN SUMMARY  
SEE SHEET 92

MENDON  
ROUTE 16

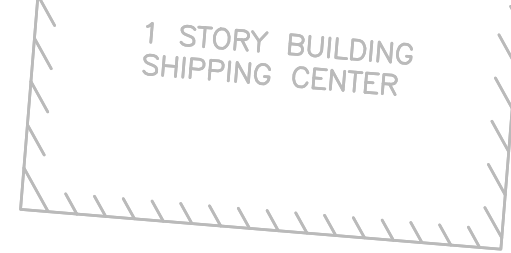
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	75	116
PROJECT FILE NO.		608491	

TRAFFIC SIGNS & PAVEMENT MARKINGS  
SHEET 4 OF 20

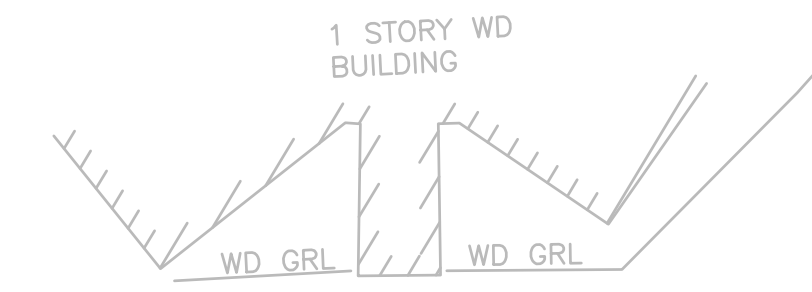
N



N/F  
BETHEL  
DEVELOPMENT  
TRUST  
BK/PG 5972/0114  
PB/PL 178/11  
17 UXBRIDGE ROAD  
PID 11-236-17



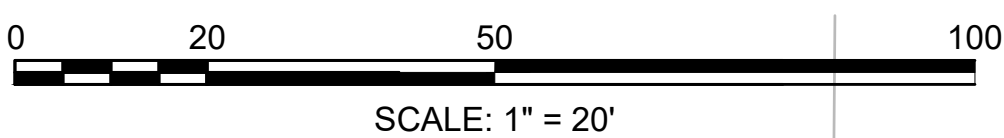
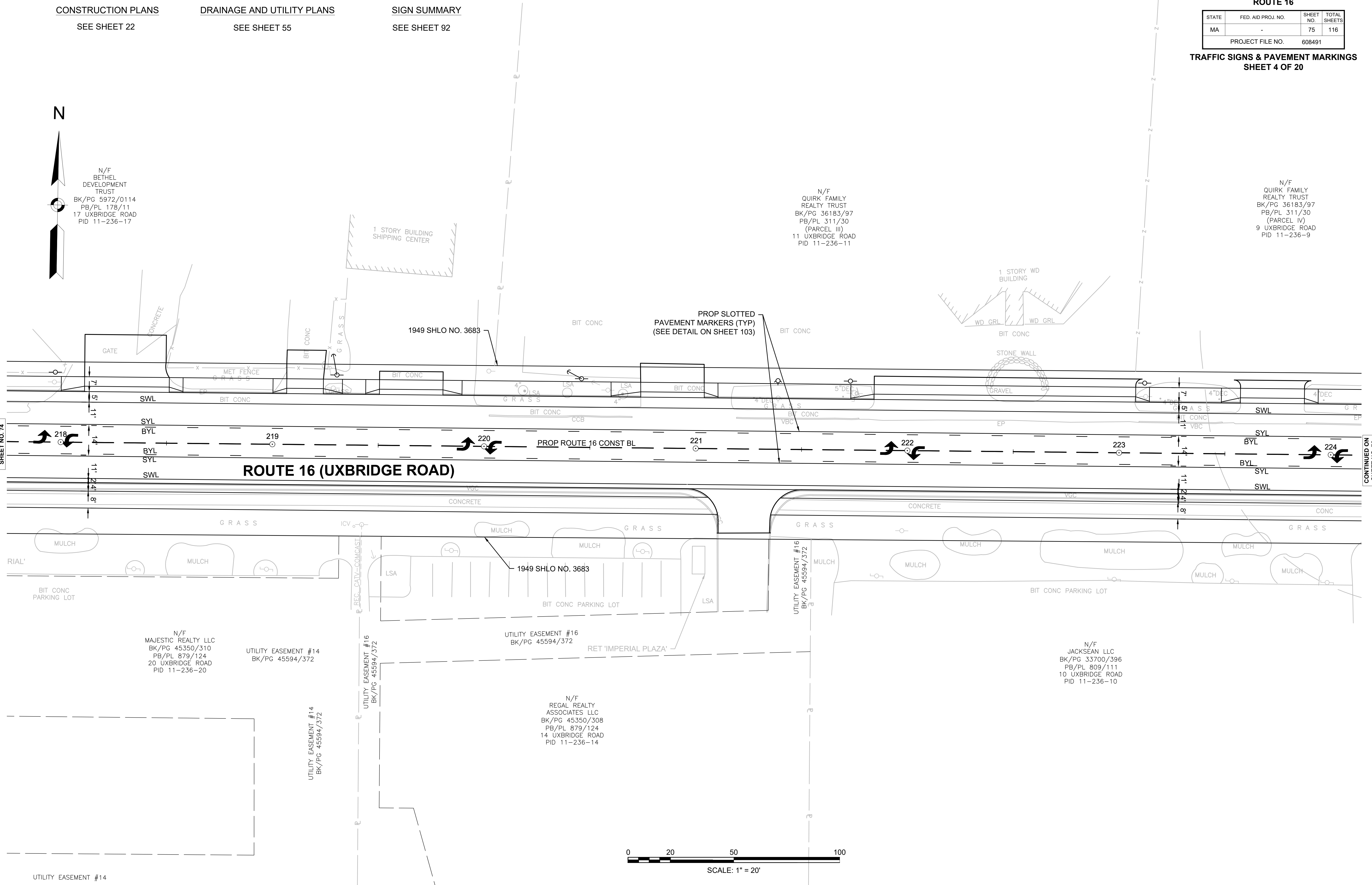
N/F  
QUIRK FAMILY  
REALTY TRUST  
BK/PG 36183/97  
PB/PL 311/30  
(PARCEL III)  
11 UXBRIDGE ROAD  
PID 11-236-11



N/F  
QUIRK FAMILY  
REALTY TRUST  
BK/PG 36183/97  
PB/PL 311/30  
(PARCEL IV)  
9 UXBRIDGE ROAD  
PID 11-236-9

CONTINUED ON  
SHEET NO. 74

CONTINUED ON  
SHEET NO. 76



SCALE: 1" = 20'

**MENDON  
ROUTE 16**

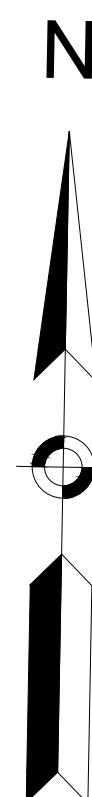
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	76	116
PROJECT FILE NO.		608491	

**TRAFFIC SIGNS & PAVEMENT MARKINGS  
SHEET 5 OF 20**

CONSTRUCTION PLANS  
SEE SHEET 23

DRAINAGE AND UTILITY PLANS  
SEE SHEET 56

SIGN SUMMARY  
SEE SHEET 92



N/F  
QUIRK FAMILY  
REALTY TRUST  
BK/PG 36183/97  
PB/PL 311/30  
(PARCEL IV)  
9 UXBRIDGE ROAD  
PID 11-236-9

N/F  
D. FRANCIS MURPHY  
INSURANCE AGENCY INC.  
BK/PG 29401/60  
PB/PL 792/82  
1 UXBRIDGE ROAD  
PID 11-236-1

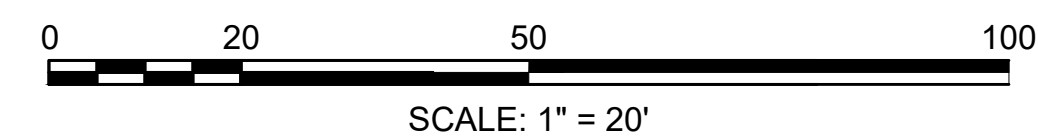
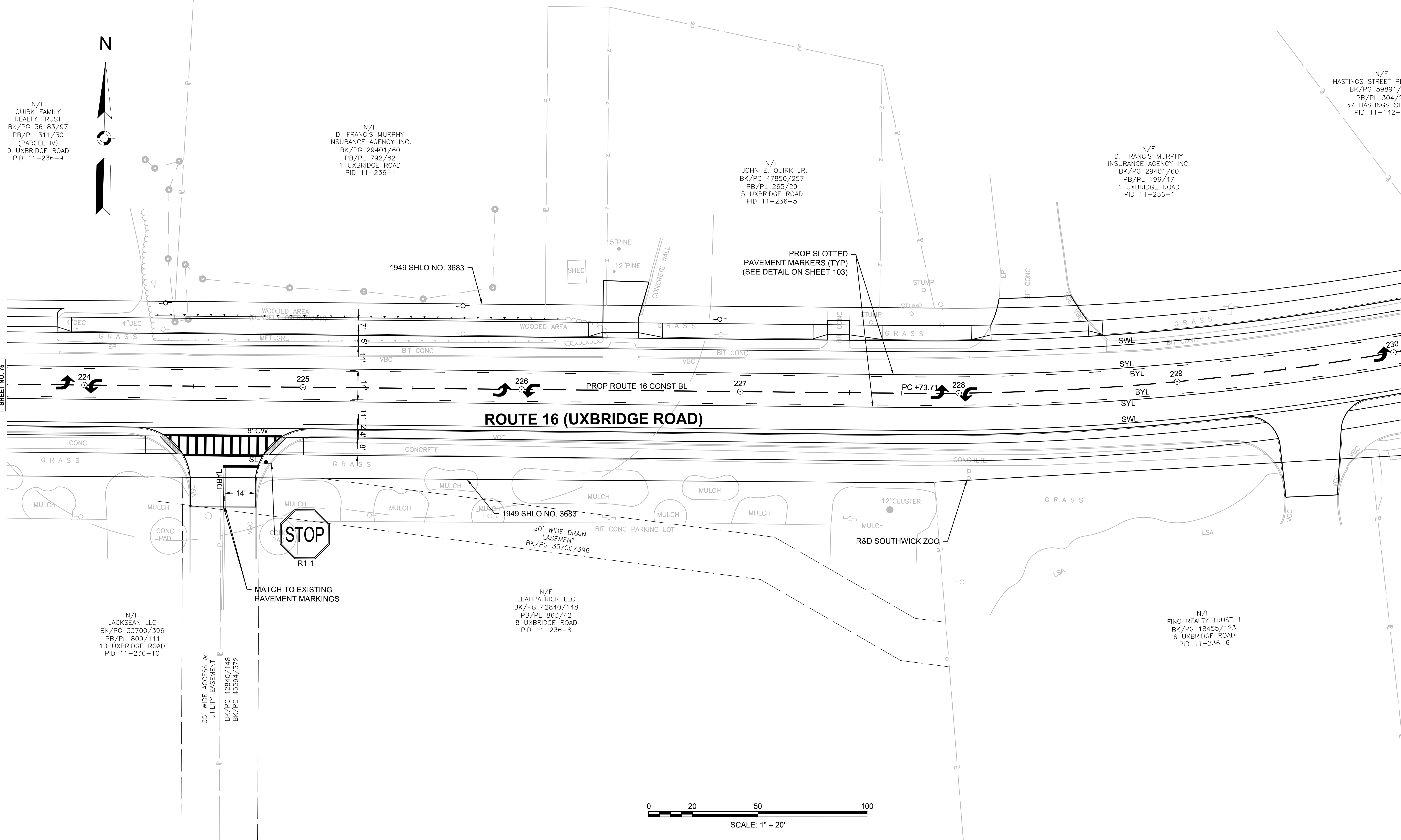
N/F  
JOHN E. QUIRK JR.  
BK/PG 47850/257  
PB/PL 265/29  
5 UXBRIDGE ROAD  
PID 11-236-5

N/F  
D. FRANCIS MURPHY  
INSURANCE AGENCY INC.  
BK/PG 29401/60  
PB/PL 196/47  
1 UXBRIDGE ROAD  
PID 11-236-1

N/F  
HASTINGS STREET PL  
BK/PG 59891/1  
PB/PL 304/25  
37 HASTINGS STR  
PID 11-142-3

CONTINUED ON  
SHEET NO. 75

CONTINUED ON  
SHEET NO. 77







CONSTRUCTION PLANS

SEE SHEET 25

DRAINAGE AND UTILITY PLANS

SEE SHEET 58

SIGN SUMMARY

SEE SHEET 92

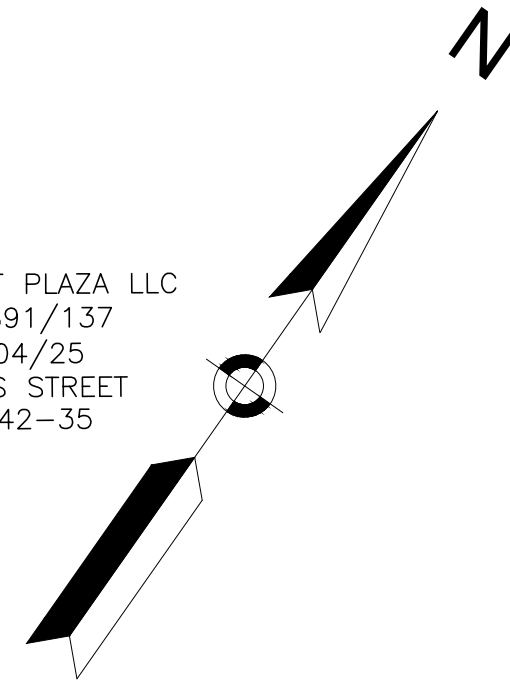
MENDON ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	78	116
PROJECT FILE NO.		608491	

TRAFFIC SIGNS & PAVEMENT MARKINGS SHEET 7 OF 20

N/F  
TREET PLAZA LLC  
59891/137  
PL 304/25  
STINGS STREET  
11-142-35

N/F  
HASTING STREET PLAZA LLC  
BK/PG 59891/137  
PB/PL 304/25  
35 HASTINGS STREET  
PID 11-142-35

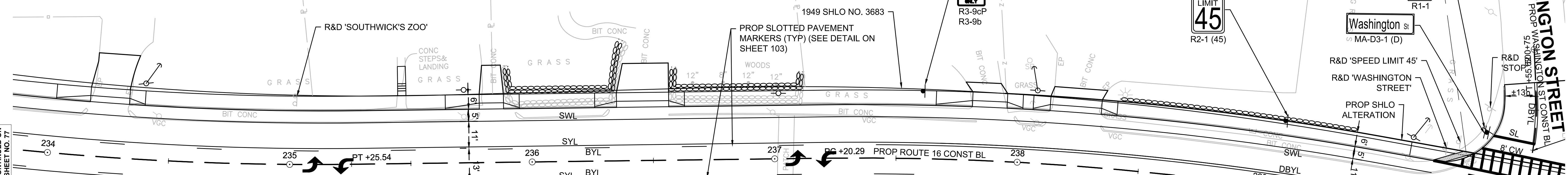


N/F  
PETER COFFIN AND  
JULIE N. COFFIN  
BK/PG 53397/91  
L.C.C No. 18875-B (LOT 1)  
CERT. No. 17930  
DOC. No. 112178  
31 HASTINGS STREET  
PID 11-142-31

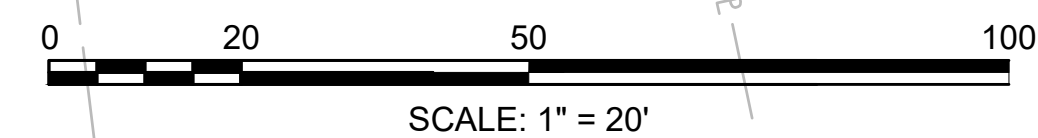
N/F  
DAVID E. BUTZ  
BK/PG 27528/64  
PB/PL 506/74  
33 HASTINGS STREET  
PID 11-142-33

N/F  
AMBRO DEVELOPMENT, LLC  
BK/PG 56459/282  
29 HASTINGS STREET  
PID 11-142-29

N/F  
AMBRO DEVELOPMENT, LLC  
BK/PG 50247/87  
BK/PL 234/68  
DEVELOPMENT, LLC  
BK/PG 50247/87  
PB/PL 234/68  
25 HASTINGS STREET  
PID 11-142-25



ROUTE 16 (HASTINGS STREET)



CONTINUED ON SHEET NO. 77

CONTINUED ON SHEET NO. 79



CONSTRUCTION PLANS  
SEE SHEET 26

DRAINAGE AND UTILITY PLANS  
SEE SHEET 59

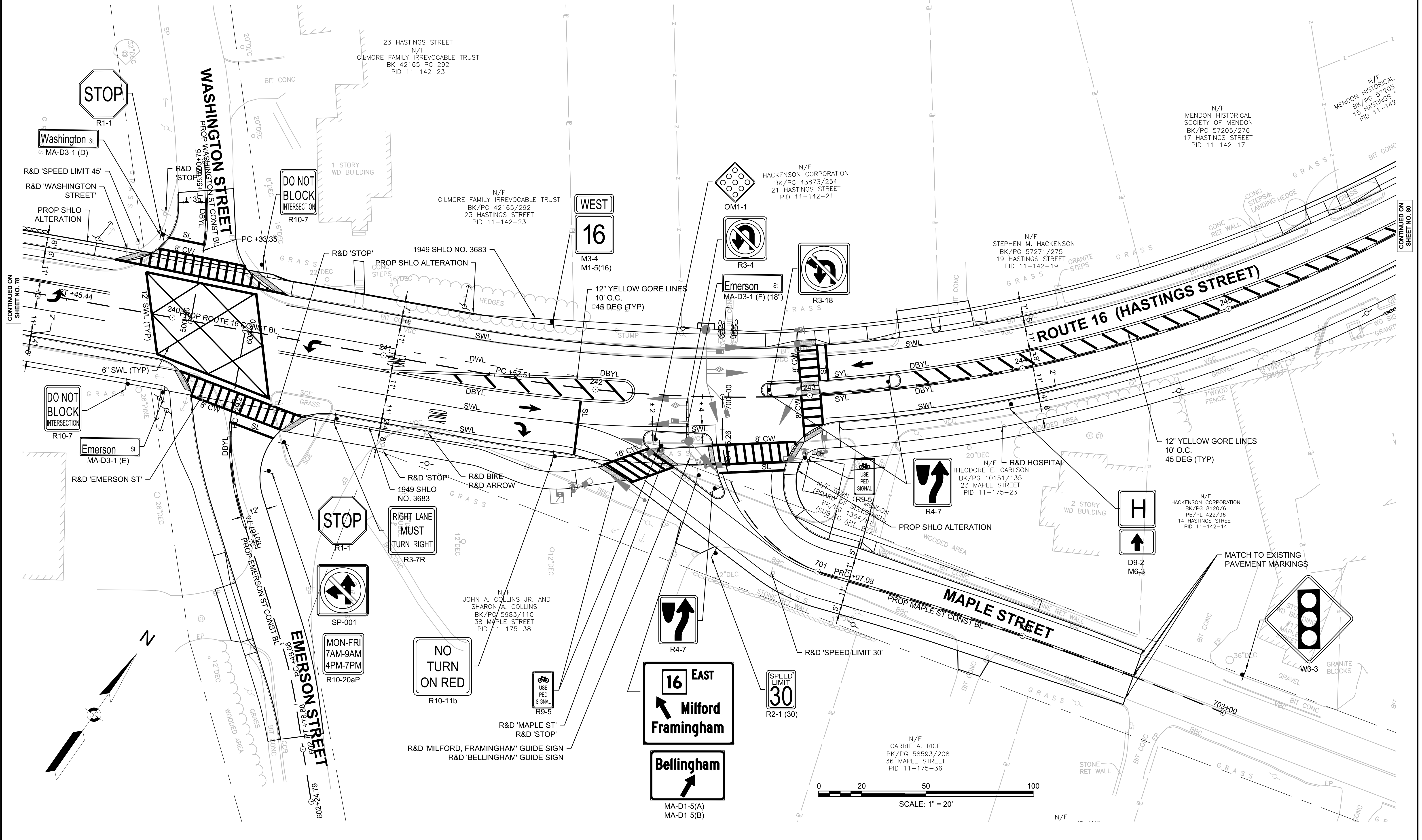
SIGN SUMMARY  
SEE SHEET 92

TRAFFIC SIGNAL PLANS  
SEE SHEET 98

MENDON  
ROUTE 16

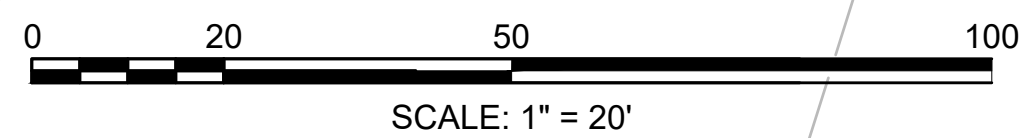
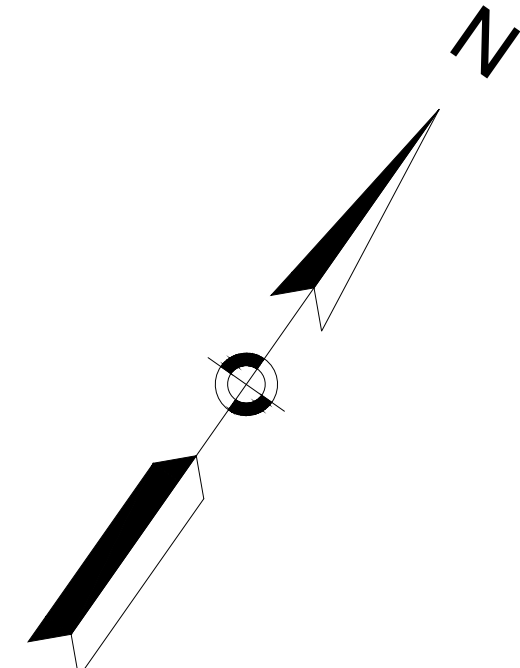
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	79	116
PROJECT FILE NO.		608491	

TRAFFIC SIGNS & PAVEMENT MARKINGS  
SHEET 8 OF 20



CONTINUED ON SHEET NO. 78

CONTINUED ON SHEET NO. 80



CONSTRUCTION PLANS  
SEE SHEET 27

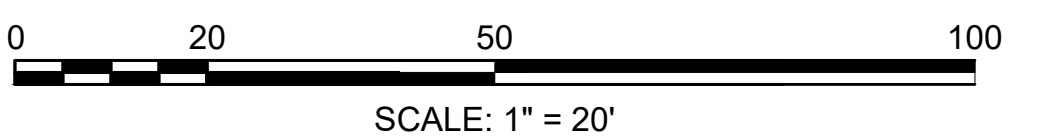
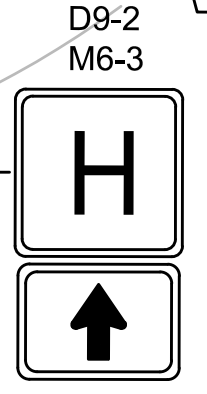
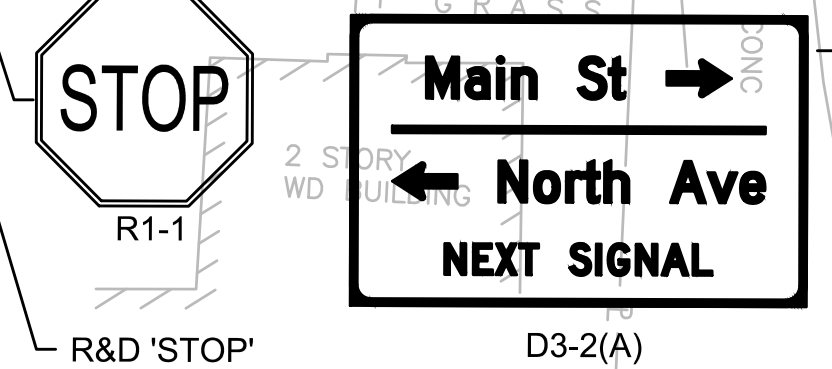
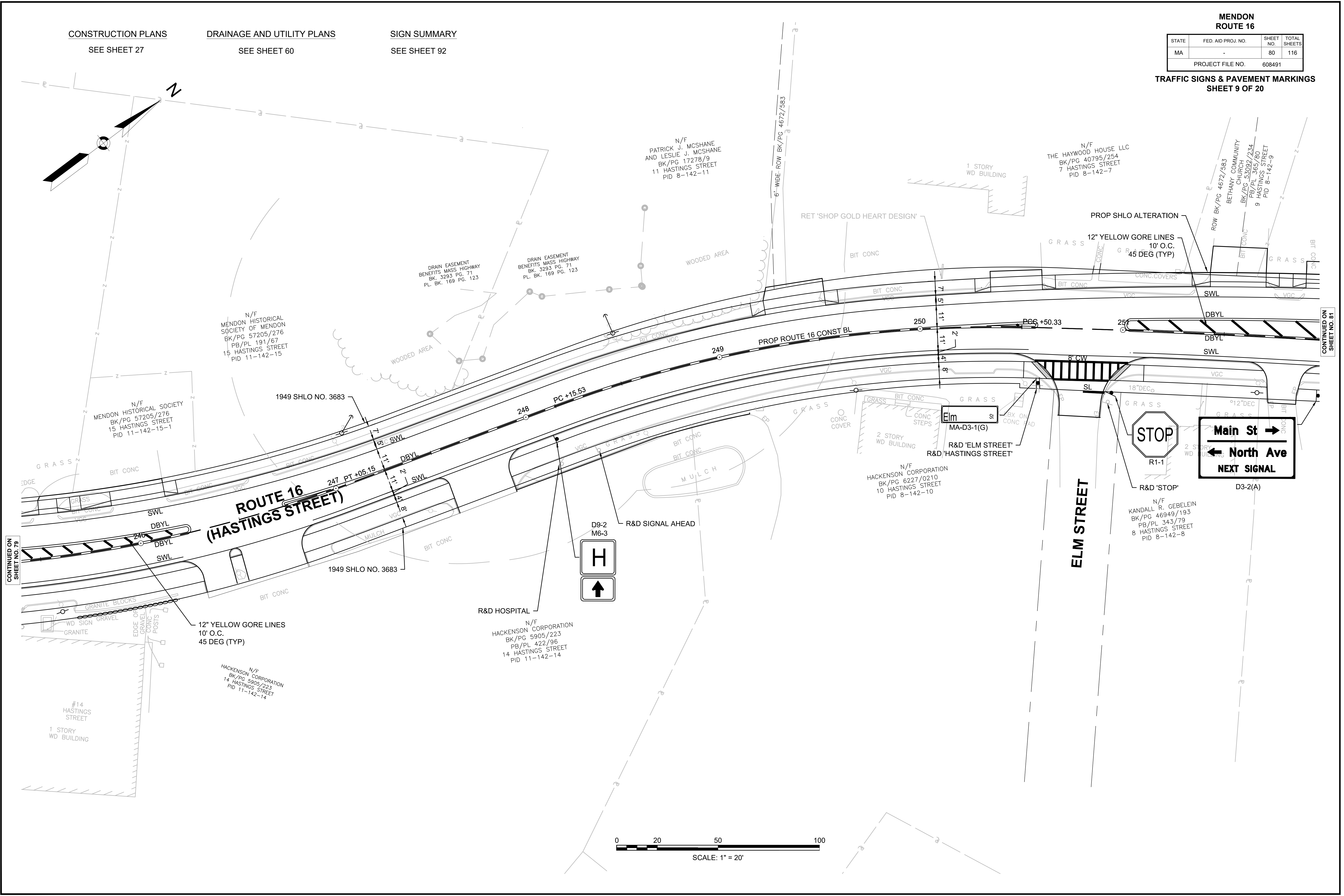
DRAINAGE AND UTILITY PLANS  
SEE SHEET 60

SIGN SUMMARY  
SEE SHEET 92

MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	80	116
PROJECT FILE NO.		608491	

TRAFFIC SIGNS & PAVEMENT MARKINGS  
SHEET 9 OF 20



CONTINUED ON  
SHEET NO. 79

CONTINUED ON  
SHEET NO. 81

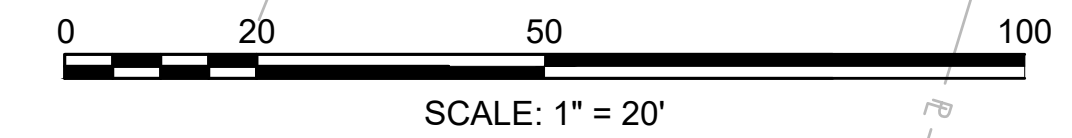
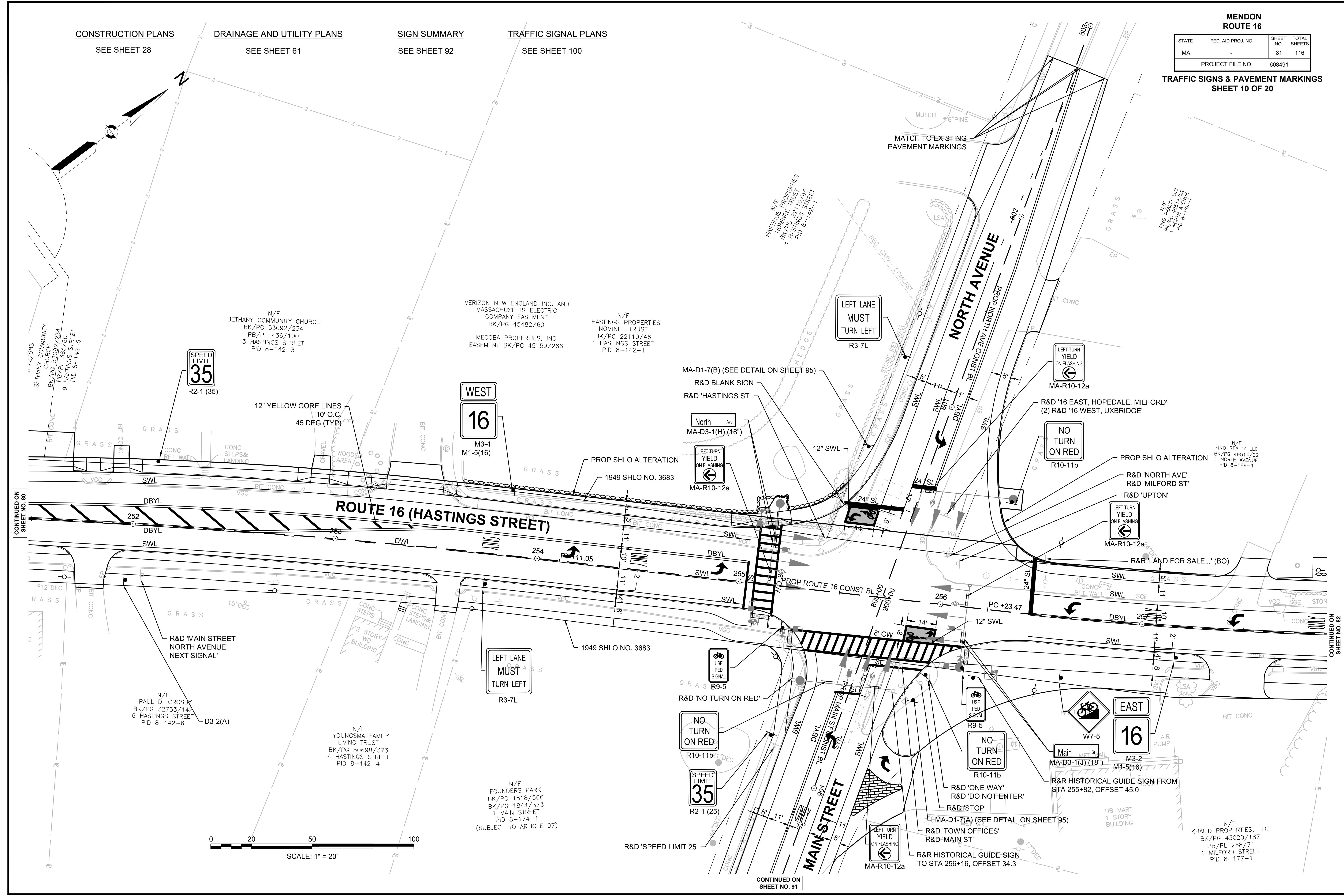


**MENDON  
ROUTE 16**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	81	116
PROJECT FILE NO.		608491	

**TRAFFIC SIGNS & PAVEMENT MARKINGS  
SHEET 10 OF 20**

CONSTRUCTION PLANS SEE SHEET 28  
DRAINAGE AND UTILITY PLANS SEE SHEET 61  
SIGN SUMMARY SEE SHEET 92  
TRAFFIC SIGNAL PLANS SEE SHEET 100



CONTINUED ON  
SHEET NO. 80

CONTINUED ON  
SHEET NO. 82

CONTINUED ON  
SHEET NO. 91

CONSTRUCTION PLANS  
SEE SHEET 29

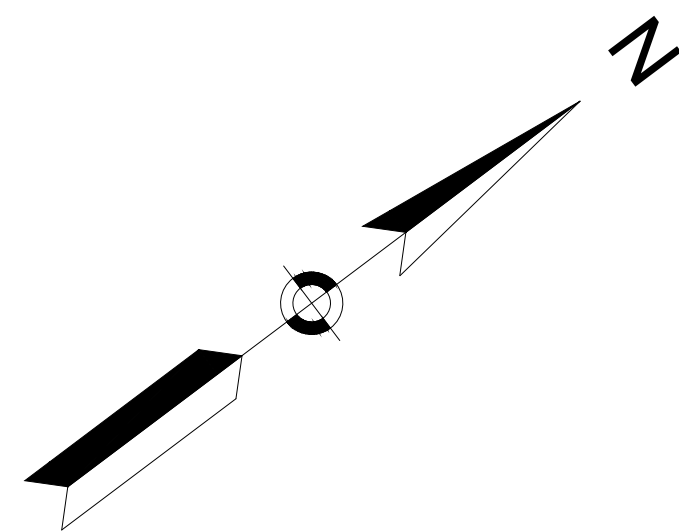
DRAINAGE AND UTILITY PLANS  
SEE SHEET 62

SIGN SUMMARY  
SEE SHEET 92

MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	82	116
PROJECT FILE NO.		608491	

TRAFFIC SIGNS & PAVEMENT MARKINGS  
SHEET 11 OF 20



N/F  
FINO REALTY LLC  
BK/PG 49514/22  
PB/PL 830/80  
1 NORTH AVENUE  
PID 8-189-1

← Main St  
North Ave →  
NEXT SIGNAL  
D3-2(B)

LEFT LANE  
MUST  
TURN LEFT  
R3-7L

SPEED  
LIMIT  
35  
R2-1 (35)

PROP RUMBLE STRIP WITH SLOTTED  
PAVEMENT MARKERS (TYP)  
(SEE DETAIL ON SHEET 103)

R&D 'DO NOT PASS'

"MUDDY BROOK NORTH CONSERVATION AREA"  
METACOMET LAND TRUST, INC  
CONSERVATION RESTRICTION  
SUBJECT TO ARTICLE 97  
BK/PG 52480/277

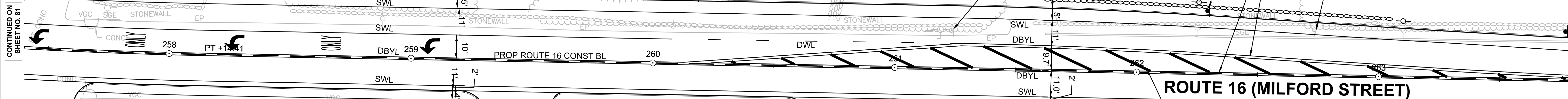
N/F  
TOWN OF MENDON  
(CONSERVATION COMMISSION)  
BK/PG 42983/63  
20 MILFORD STREET  
PID 9-177-20

"MUDDY BROOK NORTH CONSERVATION AREA"  
METACOMET LAND TRUST, INC  
CONSERVATION RESTRICTION  
SUBJECT TO ARTICLE 97  
BK/PG 52480/277

N/F  
TOWN OF MENDON  
(CONSERVATION COMMISSION)  
BK/PG 42983/63  
6 MILFORD STREET  
PID 8-177-6

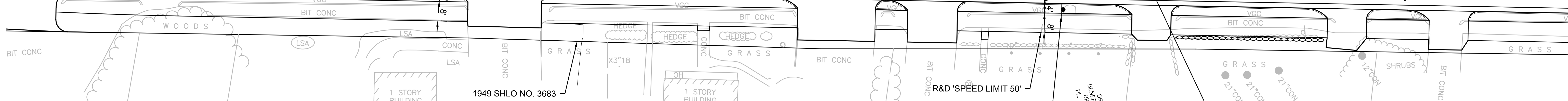
1949 SHLO NO. 3683

R&D 'SPEED LIMIT 35'



CONTINUED ON  
SHEET NO. 81

CONTINUED ON  
SHEET NO. 83



1949 SHLO NO. 3683

R&D 'SPEED LIMIT 50'

SPEED  
LIMIT  
50  
R2-1 (50)

12" YELLOW GORE LINES  
10' O.C.  
30 DEG (TYP)

N/F  
WASSIM M. BECHARA  
BK/PG 35327/24  
3 MILFORD STREET  
PID 8-177-3

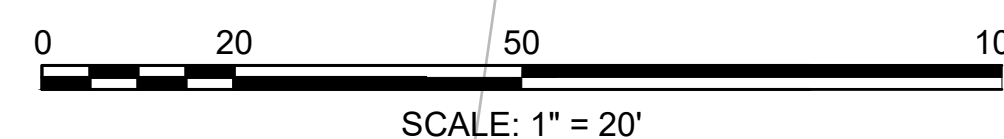
N/F  
PAUL P. CARAGLIANO AND  
MARY F. CARAGLIANO  
BK/PG 27716/269  
5 MILFORD STREET  
PID 8-177-5

N/F  
KERI ANN LARAMIE  
BK/PG 51628/322  
7 MILFORD STREET  
PID 8-177-7

N/F  
STEVEN A. HANDLEY  
BK/PG 63528/212  
9 MILFORD STREET  
PID 8-177-9

N/F  
PETER G. COFFIN AND  
JULIE A. COFFIN  
BK/PG 53397/89  
11 MILFORD STREET  
PID 8-177-11

N/F  
LISA VINCENT TAYLOR  
AND SHELLEY D. VINCENT IV  
BK/PG 59810/52  
15 MILFORD STREET  
PID 8-177-15





CONSTRUCTION PLANS  
SEE SHEET 30

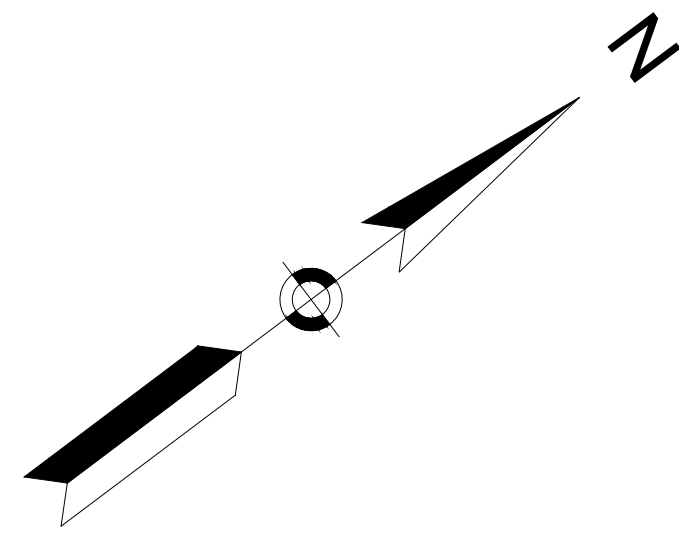
DRAINAGE AND UTILITY PLANS  
SEE SHEET 63

SIGN SUMMARY  
SEE SHEET 92

MENDON  
ROUTE 16

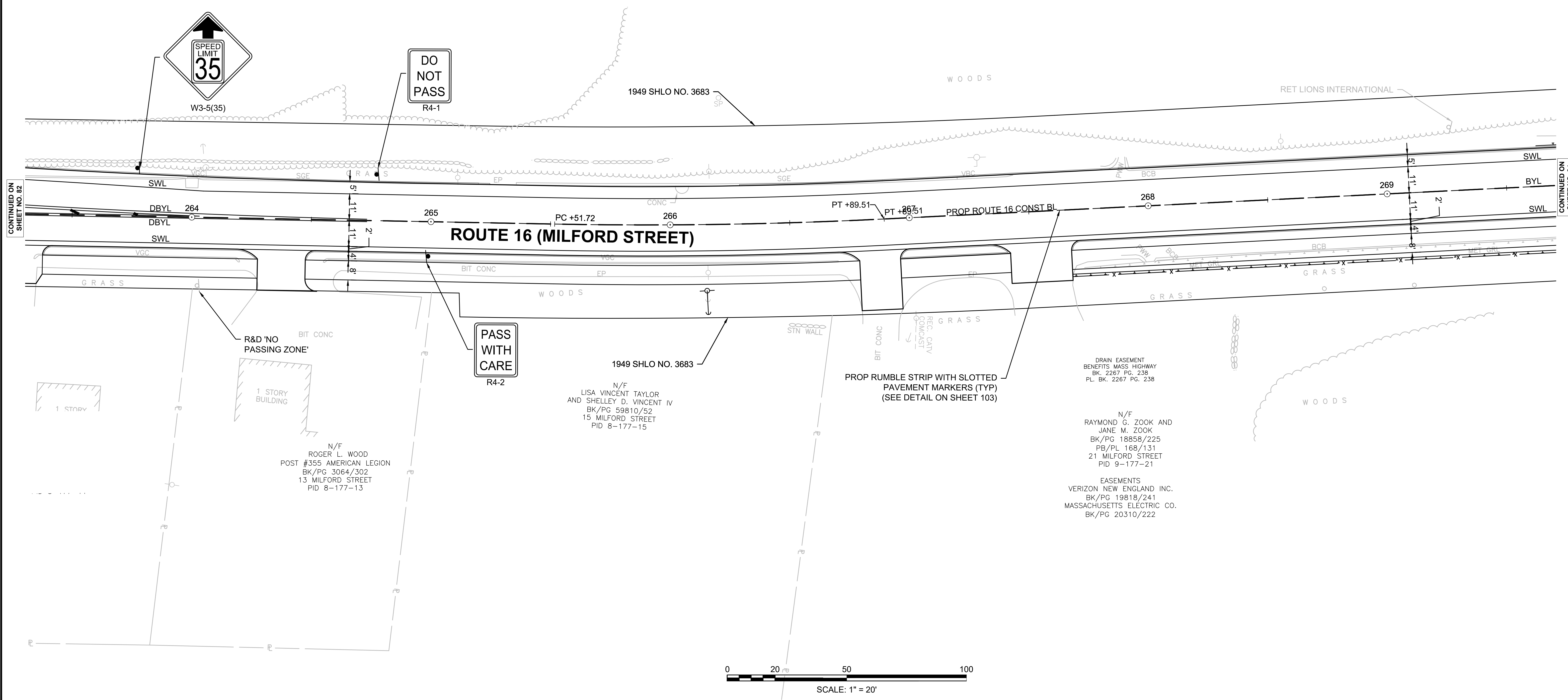
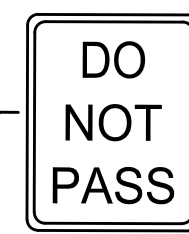
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	83	116
PROJECT FILE NO.		608491	

TRAFFIC SIGNS & PAVEMENT MARKINGS  
SHEET 12 OF 20



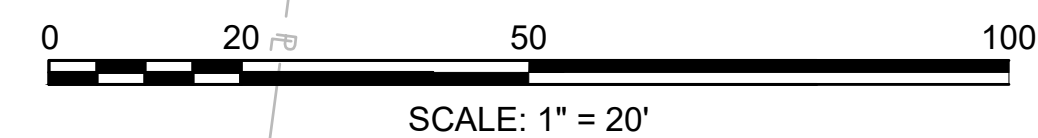
"MUDDY BROOK NORTH CONSERVATION AREA"  
METACOMET LAND TRUST, INC  
CONSERVATION RESTRICTION  
SUBJECT TO ARTICLE 97  
BK/PG 52480/277

N/F  
TOWN OF MENDON  
(CONSERVATION COMMISSION)  
BK/PG 42983/63  
20 MILFORD STREET  
PID 9-177-20



CONTINUED ON  
SHEET NO. 82

CONTINUED ON  
SHEET NO. 84



CONSTRUCTION PLANS

DRAINAGE AND UTILITY PLANS

SIGN SUMMARY

SEE SHEET 31

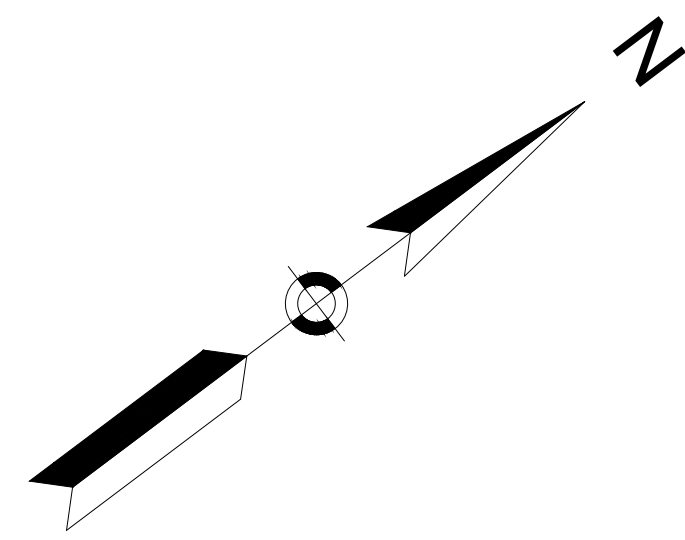
SEE SHEET 64

SEE SHEET 92

MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	84	116
PROJECT FILE NO.		608491	

TRAFFIC SIGNS & PAVEMENT MARKINGS  
SHEET 13 OF 20



"MUDDY BROOK NORTH CONSERVATION AREA"  
METACOMET LAND TRUST, INC  
CONSERVATION RESTRICTION  
SUBJECT TO ARTICLE 97  
BK/PG 52480/277

N/F  
TOWN OF MENDON  
(CONSERVATION COMMISSION)  
BK/PG 42983/63  
20 MILFORD STREET  
PID 9-177-20



M3-4  
M1-5(16)

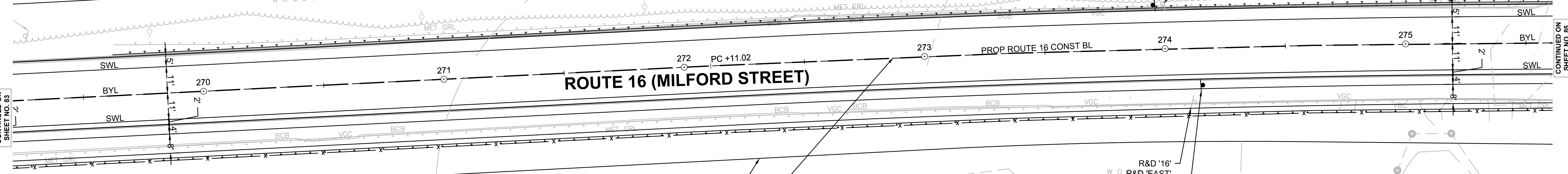
R&D WEST 16

1949 SHLO NO. 3683

WOODS

WOODS

MUDDY BROOK  
MUDDY BROOK



ROUTE 16 (MILFORD STREET)

PROP ROUTE 16 CONST BL

272 PC +11.02

273

274

275

SWL

BYL

SWL

CONTINUED ON  
SHEET NO. 85

CONTINUED ON  
SHEET NO. 83

WOODS

1949 SHLO NO. 3683

PROP RUMBLE STRIP WITH SLOTTED  
PAVEMENT MARKERS (TYP)  
(SEE DETAIL ON SHEET 103)



M3-2  
M1-5(16)

R&D '16'  
W O R&D 'EAST'

N/F  
RAYMOND G. ZOOK AND JANE  
M. ZOOK  
BK/PG 18858/225  
PB/PL 168/131  
21 MILFORD STREET  
PID 9-177-21

N/F  
PURPLE POWER LLC  
BK/PG 52123/179  
35 MILFORD STREET  
PID 9-177-35



SCALE: 1" = 20'



CONSTRUCTION PLANS

SEE SHEET 32

DRAINAGE AND UTILITY PLANS

SEE SHEET 65

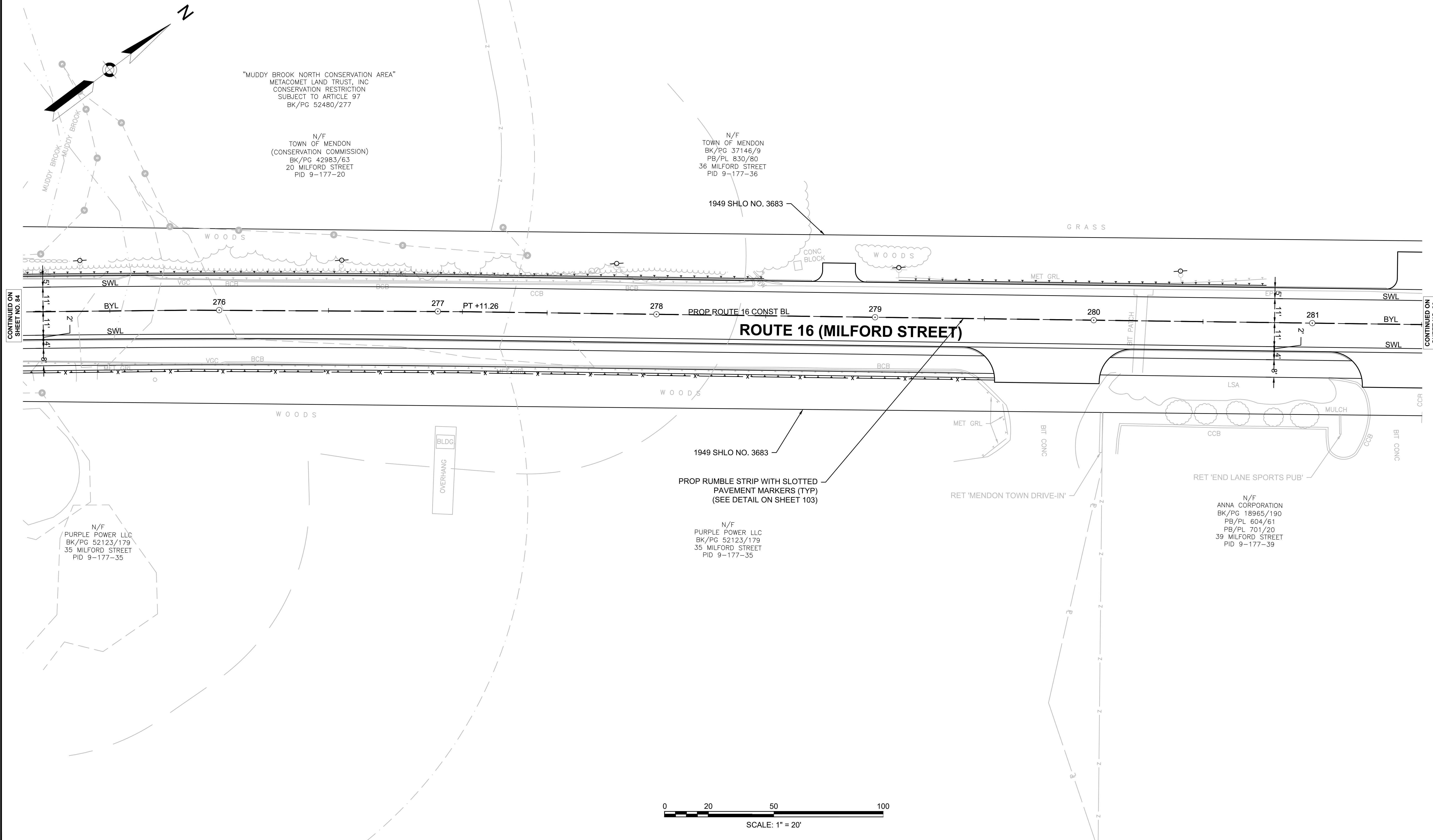
SIGN SUMMARY

SEE SHEET 92

MENDON  
ROUTE 16

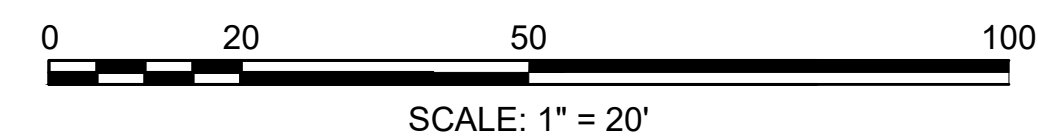
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	85	116
PROJECT FILE NO.		608491	

TRAFFIC SIGNS & PAVEMENT MARKINGS  
SHEET 14 OF 20



CONTINUED ON SHEET NO. 84

CONTINUED ON SHEET NO. 86



CONSTRUCTION PLANS  
SEE SHEET 33

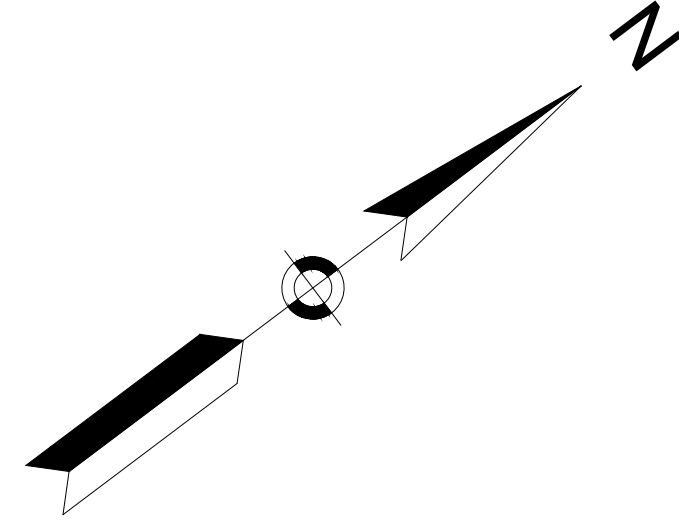
DRAINAGE AND UTILITY PLANS  
SEE SHEET 66

SIGN SUMMARY  
SEE SHEET 92

MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	86	116
PROJECT FILE NO. 608491			

TRAFFIC SIGNS & PAVEMENT MARKINGS  
SHEET 15 OF 20



N/F  
TOWN OF MENDON  
BK/PG 37146/9  
PB/PL 830/80  
36 MILFORD STREET  
PID 9-177-36

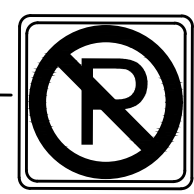
ACCESS EASEMENT  
TO SOLAR FACILITY  
BK/PG 55685/286

NEW ENGLAND POWER COMPANY EASEMENT  
OVERHEAD POWER TRANSMISSION LINES  
LOCATION PER PL/BK 920/19

SUBJECT AGREEMENT  
BK/PG 55685/286

N/F  
GHELLI FAMILY TRUST  
BK/PG 61557/165  
42 MILFORD STREET  
PID 9-177-42

R&D 'NO PARKING  
ANY TIME'



1949 SHLO NO. 3683

ROUTE 16 (MILFORD STREET)

PROP RUMBLE STRIP WITH SLOTTED  
PAVEMENT MARKERS (TYP)  
(SEE DETAIL ON SHEET 103)

N/F  
ANNA CORPORATION  
BK/PG 18965/190  
PB/PL 604/61  
39 MILFORD STREET  
PID 9-177-39

N/F  
PURPLE POWER LLC  
BK/PG 52123/179  
35 MILFORD STREET  
PID 9-177-35

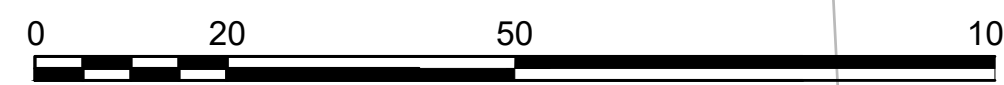
N/F  
ANNA CORPORATION  
BK/PG 18965/190  
PB/PL 604/60  
41 MILFORD STREET  
PID 9-177-41

ELECTRIC SUB-STATION

N/F  
WORCESTER COUNTY  
ELECTRIC COMPANY  
(NATIONAL GRID)  
BK/PG 3320/104  
43 MILFORD STREET  
PID 9-177-43

N/F  
SPINNEY PROPERTIES, LLC  
BK/PG 52873/344  
PB/PL 334/29  
47 MILFORD STREET  
PID 9-177-47

NEW ENGLAND POWER  
OVERHEAD POWER TRANS.  
LOCATION PER PL/BK



SCALE: 1" = 20'

CONTINUED ON  
SHEET NO. 85

CONTINUED ON  
SHEET NO. 87



**MENDON  
ROUTE 16**

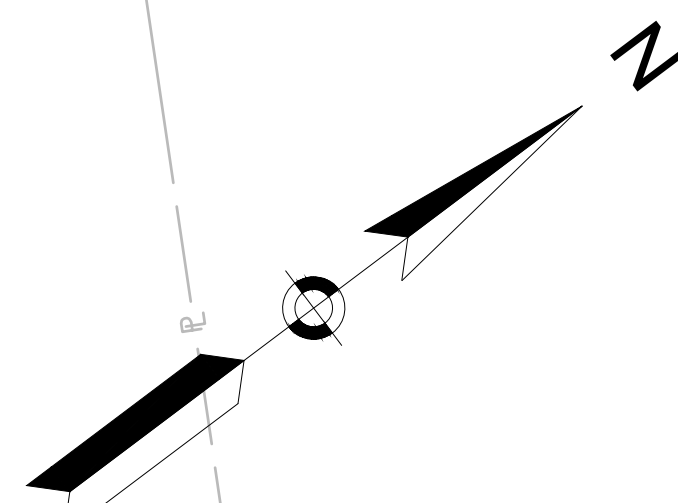
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	87	116
PROJECT FILE NO.		608491	

**TRAFFIC SIGNS & PAVEMENT MARKINGS  
SHEET 16 OF 20**

CONSTRUCTION PLANS  
SEE SHEET 34

DRAINAGE AND UTILITY PLANS  
SEE SHEET 67

SIGN SUMMARY  
SEE SHEET 92



N/F  
GHELLI FAMILY TRUST  
BK/PG 61557/165  
42 MILFORD STREET  
PID 9-177-42

N/F  
MENDON SMC REALTY, LLC  
BK/PG 60858/86  
PB/PL 49/34  
44 MILFORD STREET  
PID 9-177-44-0

PARCEL BASED ON ASSESSORS  
RECORDS DUE TO EXTENSIVE  
TITLE RESEARCH REQUIRED

N/F  
SWEET LIVING TRUST  
L.C.C. No. 29048-A (LOT 1)  
CERT. No. 17985  
DOC. No. 112614  
50 MILFORD STREET  
PID 9-177-50

N/F  
SMITH FAMILY TRUST  
BK/PG 22674/129  
SEE ALSO DEED TO SIDNEY SMITH  
BK/ PG 6358/239  
PID

N/F  
SWEET LIVING  
L.C.C. No. 29048-  
CERT. No. 17  
DOC. No. 11;  
50 MILFORD S  
PID 9-177-

MASSACHUSETTS ELECTRIC  
COMPANY  
EASEMENT  
L.C. DOC No. 80464

**GRANITE STREET**

**NO  
PASSING  
ZONE**  
W14-3

1949 SHLO NO. 3683

VEGETATION

GRASS

MET GRL

SWL

BYL

SWL

**ROUTE 16 (MILFORD STREET)**

CONTINUED ON  
SHEET NO. 86

CONTINUED ON  
SHEET NO. 88

N/F  
SPINNEY PROPERTIES, LLC  
BK/PG 52873/344  
PB/PL 334/29  
47 MILFORD STREET  
PID 9-177-47

RET 'TAYLOR RENTAL CENTER'

1949 SHLO NO. 3683

PROP RUMBLE STRIP WITH SLOTTED  
PAVEMENT MARKERS (TYP)  
(SEE DETAIL ON SHEET 103)

N/F  
LANDMARK REALTY TRUST  
BK/PG 51988/252  
49 MILFORD STREET  
PID 9-177-49

**SPEED  
LIMIT  
40**  
R2-1 (40)

R&D 'DO NOT PASS'

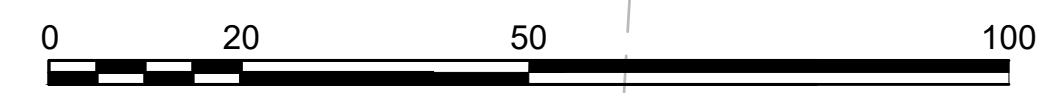
R&R 'MENDON COMMUNITY CHURCH' (BO)

R&D 'SPEED LIMIT 40'

**DO  
NOT  
PASS**  
R4-1

NEW ENGLAND POWER COMPANY EASEMENT  
OVERHEAD POWER TRANSMISSION LINES  
LOCATION PER PL/PG 334/29

N/F  
SPINNEY PROPERTIES, LLC  
BK/PG 52873/344  
PB/PL 334/29  
47 MILFORD STREET  
PID 9-177-47



SCALE: 1" = 20'





CONSTRUCTION PLANS  
SEE SHEET 36

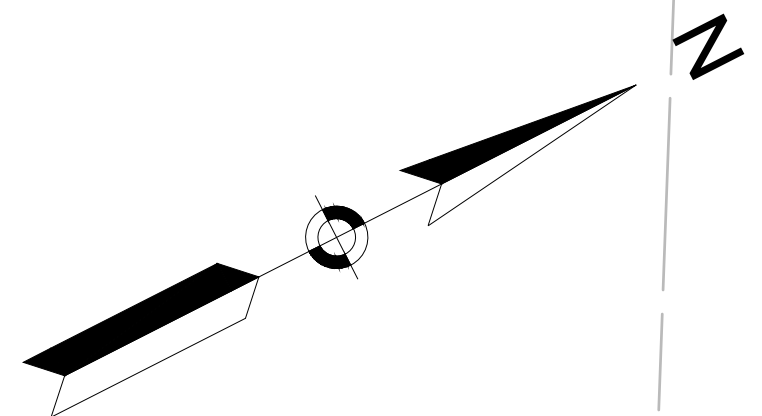
DRAINAGE AND UTILITY PLANS  
SEE SHEET 69

SIGN SUMMARY  
SEE SHEET 92

MENDON  
ROUTE 16

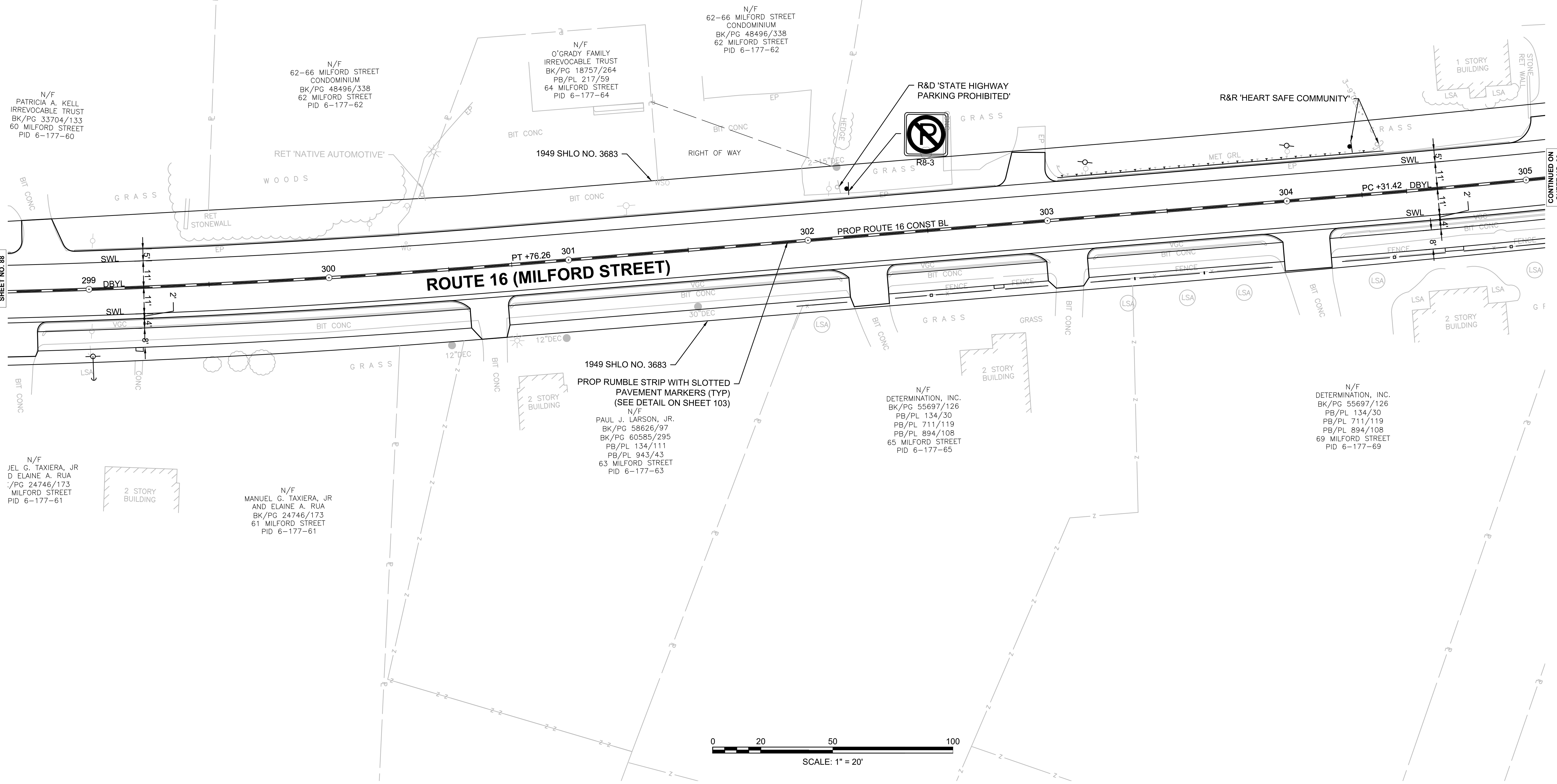
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	89	116
PROJECT FILE NO. 608491			

TRAFFIC SIGNS & PAVEMENT MARKINGS  
SHEET 18 OF 20



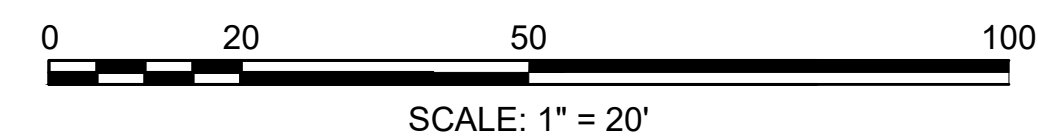
N/F  
THE HOWARTH  
FAMILY TRUST  
BK/PG 19193/357  
70 MILFORD STREET  
PID 6-177-70

PI



CONTINUED ON  
SHEET NO. 88

CONTINUED ON  
SHEET NO. 90







CONSTRUCTION PLANS  
SEE SHEET 28

DRAINAGE AND UTILITY PLANS  
SEE SHEET 61

SIGN SUMMARY  
SEE SHEET 92

FOUNDERS PARK  
BK/PG 1818/566  
BK/PG 1844/373  
1 MAIN STREET  
PID 8-174-1  
(SUBJECT TO ARTICLE 97)

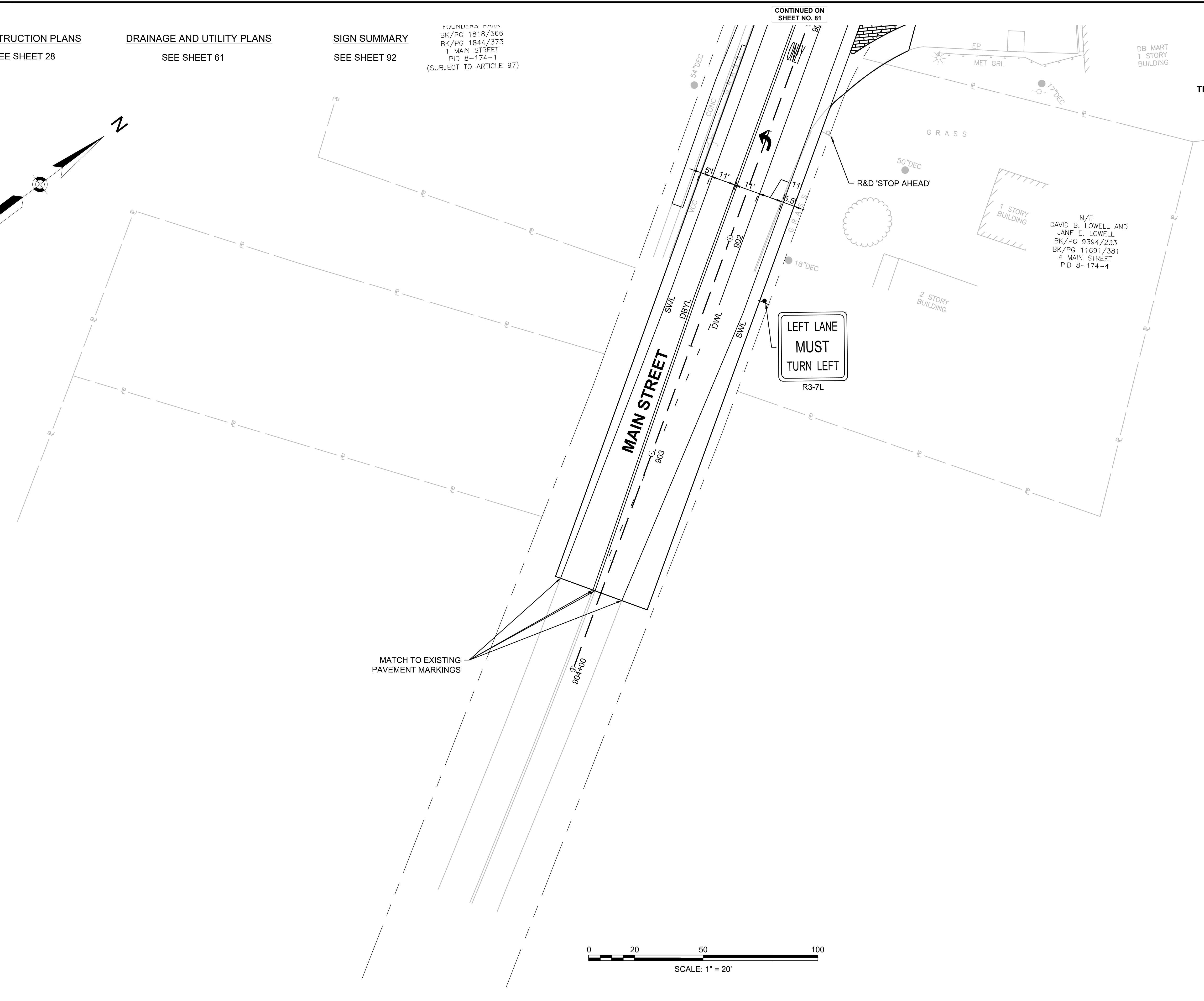
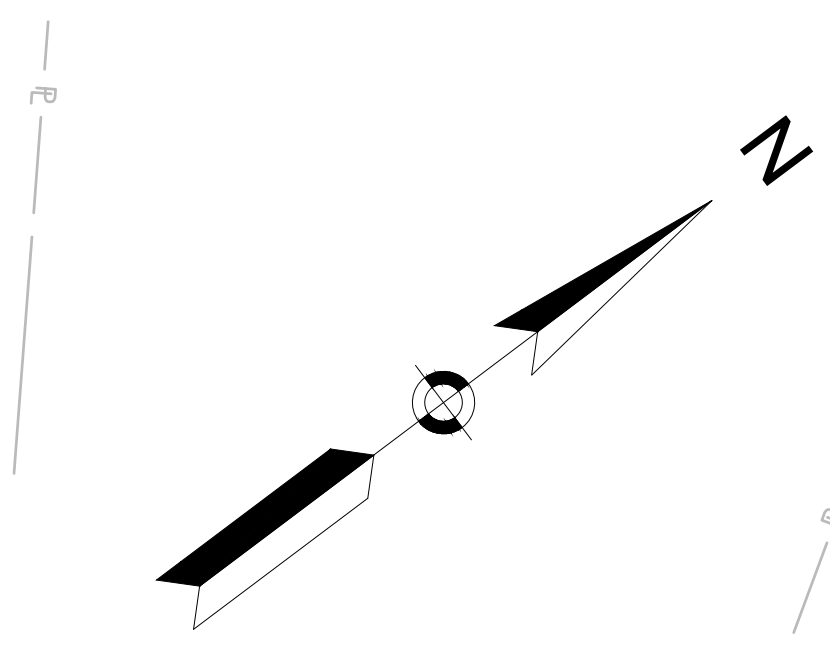
CONTINUED ON  
SHEET NO. 81

MENDON  
ROUTE 16

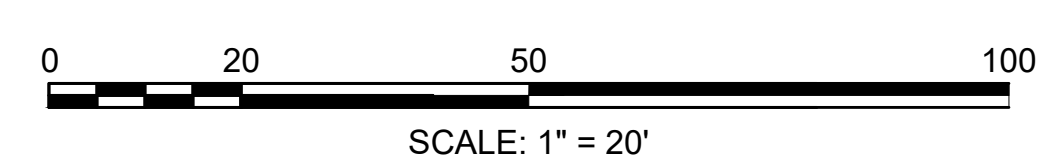
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	91	116

PROJECT FILE NO. 608491  
TRAFFIC SIGNS & PAVEMENT MARKINGS  
SHEET 20 OF 20

LISA V  
AND SHEL  
BK/1  
15 MI  
PID



MATCH TO EXISTING  
PAVEMENT MARKINGS



# TRAFFIC SIGN SUMMARY SHEET

**MENDON  
ROUTE 16**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	92	116
PROJECT FILE NO.		608491	

**TRAFFIC SIGN SUMMARY  
SHEET 1 OF 2**

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			NUMBER OF SIGNS REQUIRED	COLOR			POST SIZE AND NUMBER REQUIRED	UNIT AREA (S.F.)	AREA IN SQUARE FEET
	WIDTH (IN)	HEIGHT (IN)		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACK-GROUND	LEGEND	BORDER			
R1-1	30	30		①	①	①	8	RED	WHITE	WHITE	P-5: 8	6.25	50.00
R1-2	24	24		①	①	①	1	RED	WHITE	WHITE	P-5: 1	4.00	4.00
R2-1 (30)	30	36		①	①	①	2	WHITE	BLACK	BLACK	P-5: 2	7.5	15.00
R2-1 (35)	30	36		①	①	①	2	WHITE	BLACK	BLACK	P-5: 2	7.5	15.00
R2-1 (45)	30	36		①	①	①	2	WHITE	BLACK	BLACK	P-5: 2	7.5	15.00
R2-1 (50)	30	36		①	①	①	2	WHITE	BLACK	BLACK	P-5: 2	7.5	15.00
R3-2	24	24		①	①	①	2	WHITE	RED/BLACK	BLACK	P-5: 1	9.00	18.00
R3-4	24	24		①	①	①	1	WHITE	RED/BLACK	BLACK	P-5: 1	9.00	9.00
R3-7L	30	30		①	①	①	7	WHITE	BLACK	BLACK	P-5: 7	6.25	43.75
R3-9b	24	36		①	①	①	8	WHITE	BLACK	BLACK	P-5: 8	6.00	48.00
R3-9cP	30	12		①	①	①	4	WHITE	BLACK	BLACK	MTD W/ R3-9b: 4	2.50	10.00
R3-9dP	30	12		①	①	①	4	WHITE	BLACK	BLACK	MTD W/ R3-9b: 4	2.50	10.00
R3-18	24	24		①	①	①	1	WHITE	RED/BLACK	BLACK	P-5: 1	9.00	9.00
R4-1	24	30		①	①	①	2	WHITE	BLACK	BLACK	P-5: 2	5.00	10.00
R4-2	24	30		①	①	①	2	WHITE	BLACK	BLACK	P-5: 2	5.00	10.00
R4-7R	24	30		①	①	①	4	WHITE	BLACK	BLACK	P-5: 4	5.00	20.00
R8-3	24	24		①	①	①	1	WHITE	RED	RED	P-5: 1	9.00	9.00
R9-5	12	18		①	①	①	5	WHITE	BLACK	BLACK	MTD ON SIGNAL POST: 4, MTD ON MAST ARM: 1	1.50	7.50

**NOTES**

1. ALL P-5 POSTS SHALL BE TELESCOPIC SQUARE POSTS.
2. QUANTITIES OF SIGNS AND POSTS SHOWN ON THIS SHEET MAY DIFFER FROM THE TRAFFIC SIGN & PAVEMENT MARKING PLANS. WHERE DIFFERENCES OCCUR, THE TRAFFIC SIGN & PAVEMENT MARKING PLANS SHALL PREVAIL.
3. MA-D3-1 "STREET NAME" SHALL BE POS (PRINTED ONE SIDE)

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			NUMBER OF SIGNS REQUIRED	COLOR			POST SIZE AND NUMBER REQUIRED	UNIT AREA (S.F.)	AREA IN SQUARE FEET
	WIDTH (IN)	HEIGHT (IN)		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACK-GROUND	LEGEND	BORDER			
R10-7	24	30		①	①	①	1	WHITE	BLACK	BLACK	P-5: 1	5.00	5.00
R10-11b	36	36		①	①	①	5	WHITE	BLACK	BLACK	MTD ON SIGNAL POST: 3, P-5: 2	9.00	45.0
R10-20aP	24	24		①	①	①	1	WHITE	BLACK	BLACK	MTD W/ SP-001: 1	9.00	45.0
S3-1	30	30		①	①	①	1	YELLOW	BLACK	BLACK	P-5: 1	6.25	6.25
W1-8R	18	24		①	①	①	3	YELLOW	BLACK	BLACK	P-5: 3	3.00	9.00
W3-3	30	30		①	①	①	4	YELLOW	BLACK	BLACK	P-5: 4	6.25	25.00
W7-5	18	18		①	①	①	1	YELLOW	BLACK	BLACK	P-5: 1	2.25	2.25
W3-5	36	36		①	①	①	1	YELLOW	BLACK	BLACK	P-5: 1	6.25	6.25
W11-2	30	30		①	①	①	6	FLUORESCENT YELLOW GREEN	BLACK	BLACK	P-5: 2, MTD ON SIGNAL POST: 4	6.25	37.5
W14-1	30	30		①	①	①	1	YELLOW	BLACK	BLACK	MTD W/ R1-1: 1	6.25	6.25
W14-3	24	36		①	①	①	1	YELLOW	BLACK	BLACK	P-5: 1	6.00	6.00
W16-7PL	24	12		①	①	①	2	FLUORESCENT YELLOW GREEN	BLACK	BLACK	MTD W/ W11-2: 2	2.00	4.00
W16-7PR	24	12		①	①	①	2	FLUORESCENT YELLOW GREEN	BLACK	BLACK	MTD W/ W11-2: 2	2.00	4.00
W16-8P	VARIES	8		①	①	①	1	YELLOW	BLACK	BLACK	MTD W/ W3-3: 1	VAR	VAR
W16-9P	21	15		①	①	①	2	FLUORESCENT YELLOW GREEN	BLACK	BLACK	MTD W/ W11-2: 2, MTD W/ W3-3: 1	2.19	6.56
D11-1a	24	18		①	①	①	1	GREEN	WHITE	WHITE	P-5: 1	3.00	3.00
D9-2	24	24		①	①	①	2	BLUE	WHITE	WHITE	P-5: 2	4.00	8.00
M1-5 (16)	24	24		①	①	①	11	WHITE	BLACK	BLACK	P-5: 11	4.00	44.00

- ① SEE MUTCD 2009 EDITION, 2004 STD. HWY. SIGNS (SHS), 2012 SHS SUPPLEMENT, AND SECTION M9.30.0 TYPE III OF THE MASSDOT STANDARD SPECIFICATION FOR TEXT DIMENSIONS.
- ② SEE MASSDOT STANDARD SIGN BOOK, CURRENT EDITION FOR TEXT DIMENSIONS.

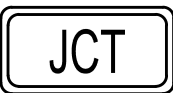



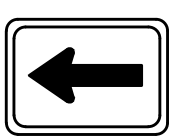

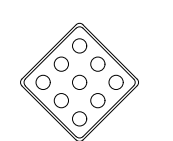








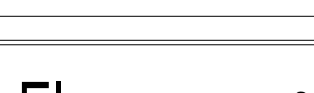







# TRAFFIC SIGN SUMMARY SHEET

**MENDON  
ROUTE 16**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	93	116
PROJECT FILE NO.		608491	

**TRAFFIC SIGN SUMMARY  
SHEET 2 OF 2**

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			NUMBER OF SIGNS REQUIRED	COLOR			POST SIZE AND NUMBER REQUIRED	UNIT AREA (S.F.)	AREA IN SQUARE FEET
	WIDTH (IN)	HEIGHT (IN)		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACK-GROUND	LEGEND	BORDER			
M2-1	21	15		①	①	①	1	WHITE	BLACK	BLACK	MTD W/ M1-5 (16): 1	2.19	2.19
M3-2	24	12		①	①	①	4	WHITE	BLACK	BLACK	MTD W/ M1-5 (16): 4	2.00	8.00
M3-4	24	12		①	①	①	6	WHITE	BLACK	BLACK	MTD W/ M1-5 (16): 6	2.00	12.00
M6-1R	21	15		①	①	①	2 1	WHITE GREEN	BLACK WHITE	BLACK WHITE	MTD W/ M1-5 (16): 2 2, MTD W/ D11-1a: 1	2.19	6.56
M6-1L	21	15		①	①	①	1	WHITE	BLACK	BLACK	MTD W/ M1-5 (16): 1	2.19	2.19
M6-3	21	15		①	①	①	1	BLUE	WHITE	WHITE	MTD W/ D9-2: 2	2.19	2.19
OM1-1	30	30		①	①	①	2	YELLOW	YELLOW	YELLOW	P-5: 2	6.25	12.5
MA-R10-12a	30	36		②	②	②	4	WHITE	BLACK	BLACK	MTD ON MAST ARM: 4	7.50	30
MA-D3-1(A)	VARIABLES	12		②	②	②	2	GREEN	WHITE	WHITE	MTD W/ R1-1: 2	VAR	VAR
MA-D3-1(B)	VARIABLES	12		②	②	②	1	GREEN	WHITE	WHITE	P-5: 1	VAR	VAR
MA-D3-1(B)	VARIABLES	18		②	②	②	1	GREEN	WHITE	WHITE	MTD ON MAST ARM: 1	VAR	VAR
MA-D3-1(C)	VARIABLES	12		②	②	②	2	GREEN	WHITE	WHITE	P-5: 1	VAR	VAR
MA-D3-1(D)	VARIABLES	12		②	②	②	1	GREEN	WHITE	WHITE	P-5: 1	VAR	VAR
MA-D3-1(E)	VARIABLES	12		②	②	②	1	GREEN	WHITE	WHITE	P-5: 1	VAR	VAR
MA-D3-1(F)	VARIABLES	18		②	②	②	1	GREEN	WHITE	WHITE	MTD ON MAST ARM: 1	VAR	VAR
MA-D3-1(G)	VARIABLES	12		②	②	②	2	GREEN	WHITE	WHITE	P-5: 1	VAR	VAR

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			NUMBER OF SIGNS REQUIRED	COLOR			POST SIZE AND NUMBER REQUIRED	UNIT AREA (S.F.)	AREA IN SQUARE FEET
	WIDTH (IN)	HEIGHT (IN)		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACK-GROUND	LEGEND	BORDER			
MA-D3-1(H)	VARIABLES	18		②	②	②	2	GREEN	WHITE	WHITE	MTD ON MAST ARM: 2	VAR	VAR
MA-D3-1(J)	VARIABLES	18		②	②	②	2	GREEN	WHITE	WHITE	MTD ON MAST ARM: 2	VAR	VAR
MA-D3-1(K)	VARIABLES	12		②	②	②	2	GREEN	WHITE	WHITE	P-5: 1	VAR	VAR
MA-D3-1(L)	VARIABLES	12		②	②	②	2	GREEN	WHITE	WHITE	P-5: 1	VAR	VAR
SP-001	24	24		①	①	①	1	WHITE	RED/BLACK	BLACK	P-5: 1	9.00	9.00

① SEE MUTCD 2009 EDITION, 2004 STD. HWY. SIGNS (SHS), 2012 SHS SUPPLEMENT, AND SECTION M9.30.0 TYPE III OF THE MASSDOT STANDARD SPECIFICATION FOR TEXT DIMENSIONS.

② SEE MASSDOT STANDARD SIGN BOOK, CURRENT EDITION FOR TEXT DIMENSIONS.

**NOTES**

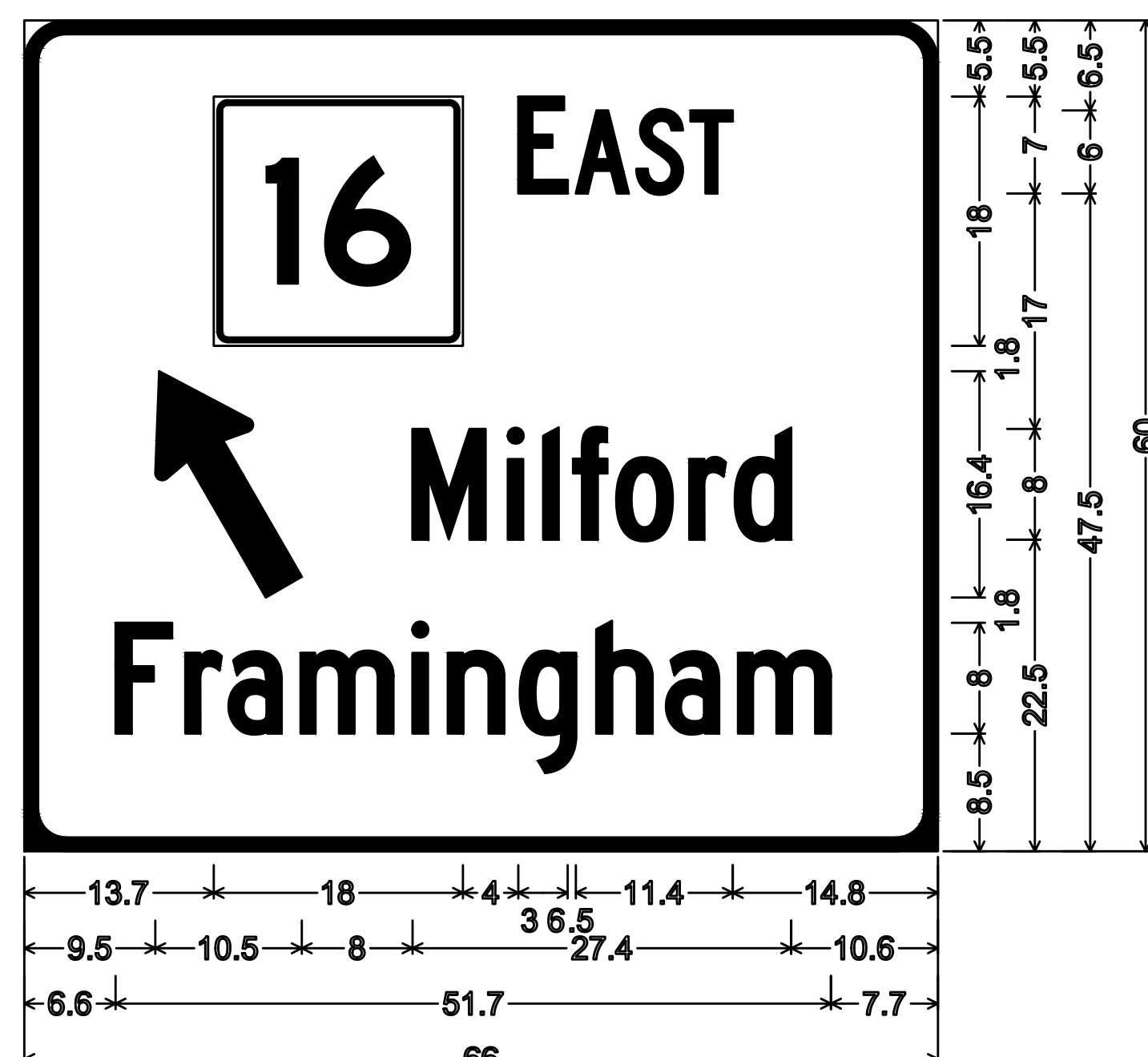
1. ALL P-5 POSTS SHALL BE TELESCOPIC SQUARE POSTS.
2. QUANTITIES OF SIGNS AND POSTS SHOWN ON THIS SHEET MAY DIFFER FROM THE TRAFFIC SIGN & PAVEMENT MARKING PLANS. WHERE DIFFERENCES OCCUR, THE TRAFFIC SIGN & PAVEMENT MARKING PLANS SHALL PREVAIL.
3. MA-D3-1 "STREET NAME" SHALL BE POS (PRINTED ONE SIDE)

MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	94	116
PROJECT FILE NO.		608491	

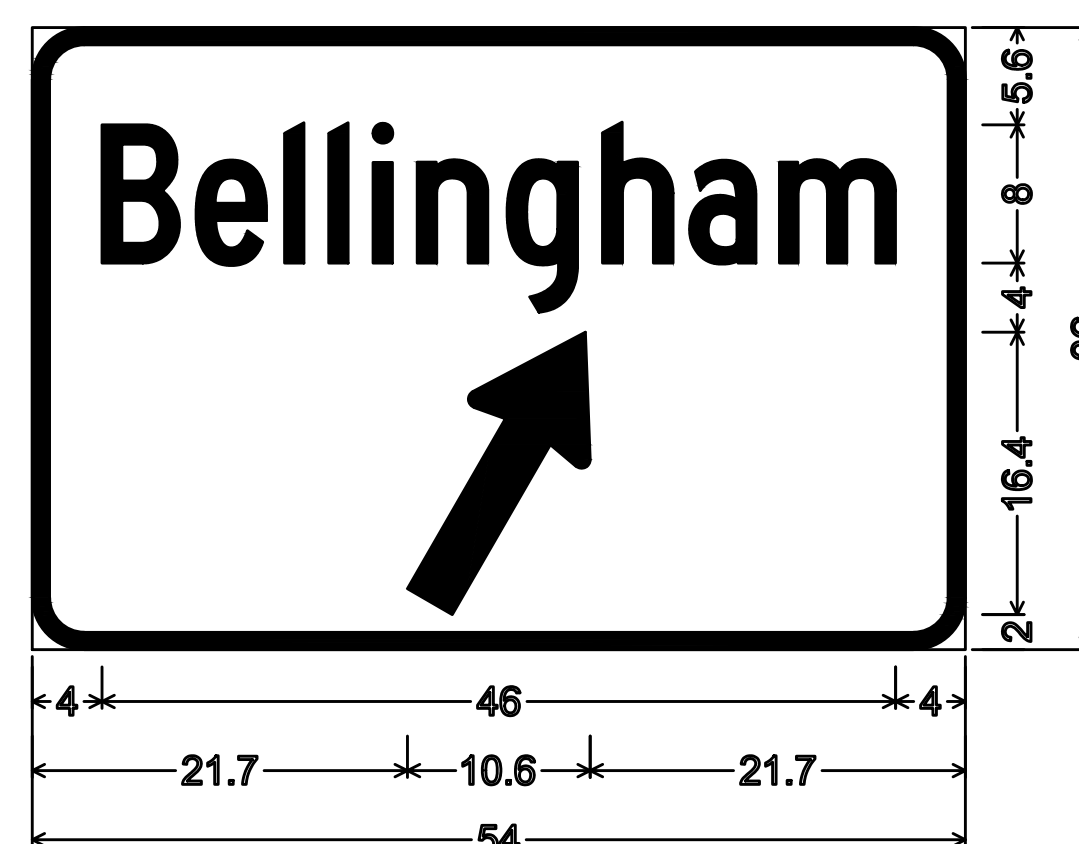
TRAFFIC SIGN SUMMARY  
GUIDESIGN DETAILS

MA-D1-5A		
5.5'	5'	27.5 SF
SIGNS REQUIRED		1
TOTAL AREA		27.5 SF
GREEN REFL.	SILVER WHITE	SILVER WHITE



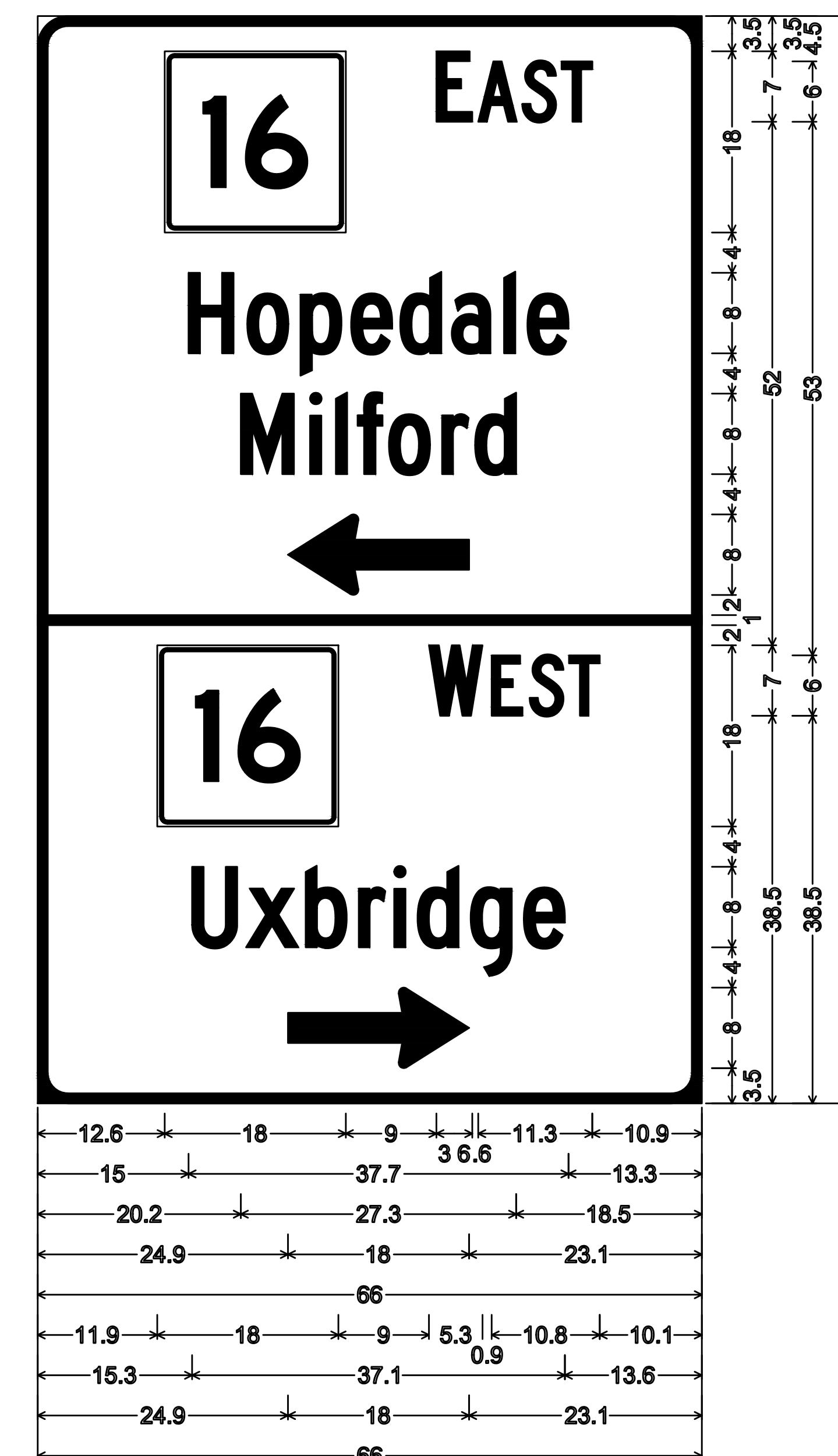
3.0" Radius, 1.0" Border, White on Green;  
State Highway 16 M1-5; "EAST" C 2K;  
Arrow Custom - 18.0" 120"; "Milford" C 2K;  
"Framingham" C 2K;

MA-D1-5B		
4.5'	3'	13.5 SF
SIGNS REQUIRED		1
TOTAL AREA		13.5 SF
GREEN REFL.	SILVER WHITE	SILVER WHITE



3.0" Radius, 1.0" Border, White on Green;  
"Bellingham" C 2K; Arrow Custom - 18.0" 60°;

MA-D1-7(A)		
5.5'	9.0'	49.5 SF
SIGNS REQUIRED		1
TOTAL AREA		49.5 SF
GREEN REFL.	SILVER WHITE	SILVER WHITE



3.0" Radius, 1.0" Border, White on Green;  
State Highway 16 M1-5; "EAST" C 2K; "Hopedale" C 2K;  
"Milford" C 2K; Arrow Custom - 18.0" 180°;  
State Highway 16 M1-5; "WEST" C 2K; "Uxbridge" C 2K;  
Arrow Custom - 18.0" 0°;

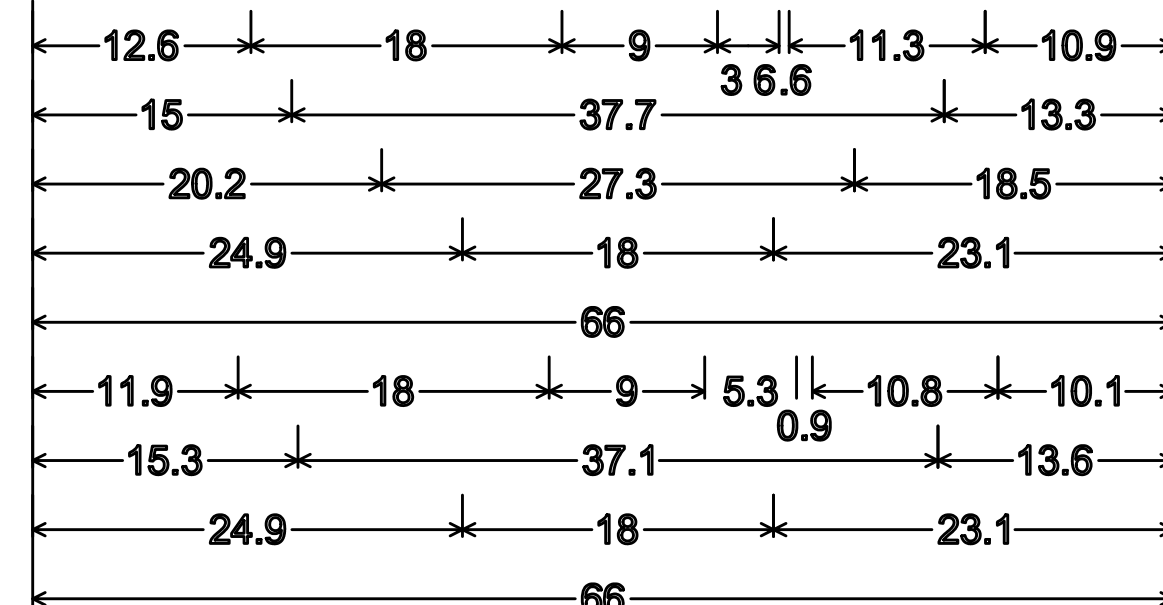
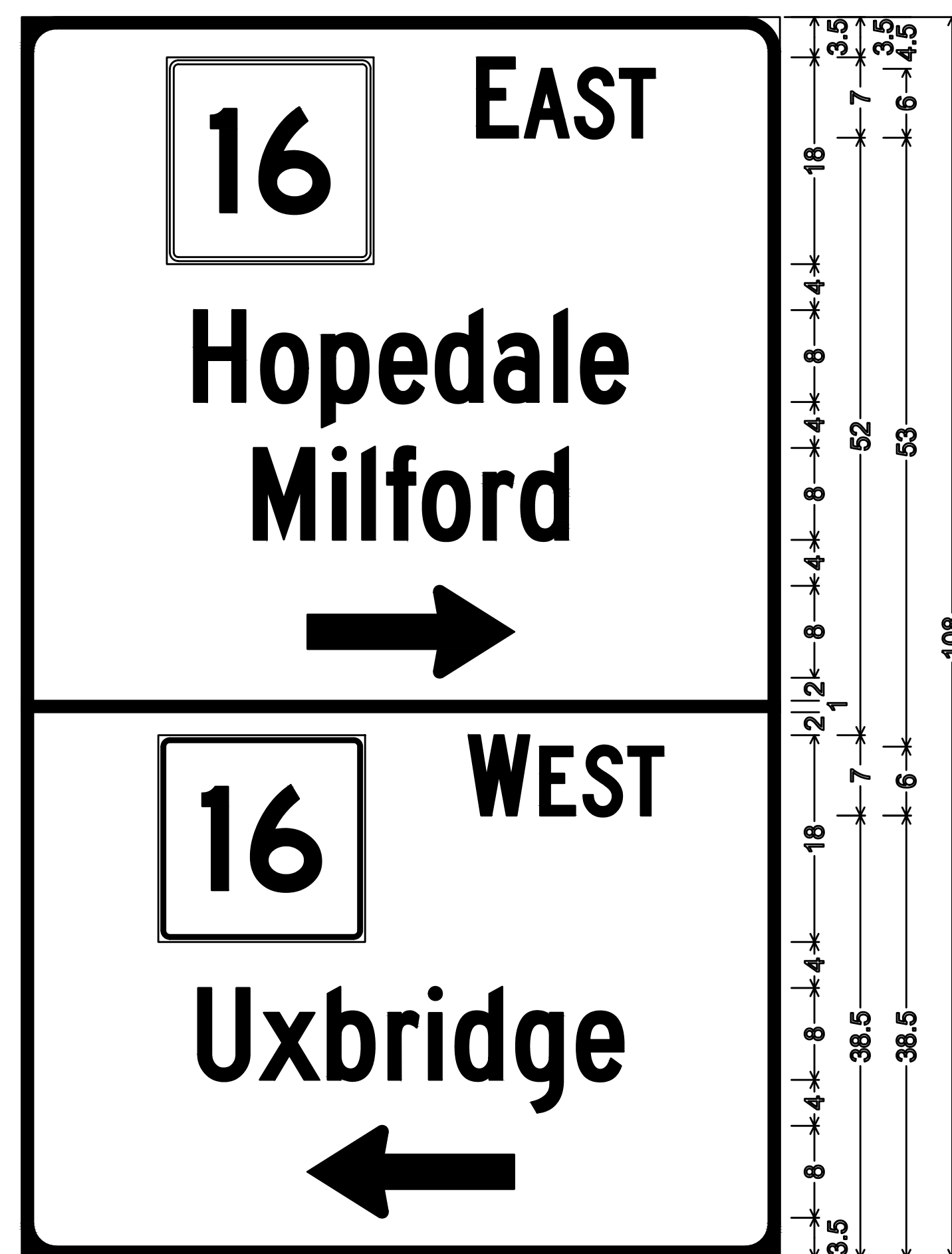


MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	95	116
PROJECT FILE NO.		608491	

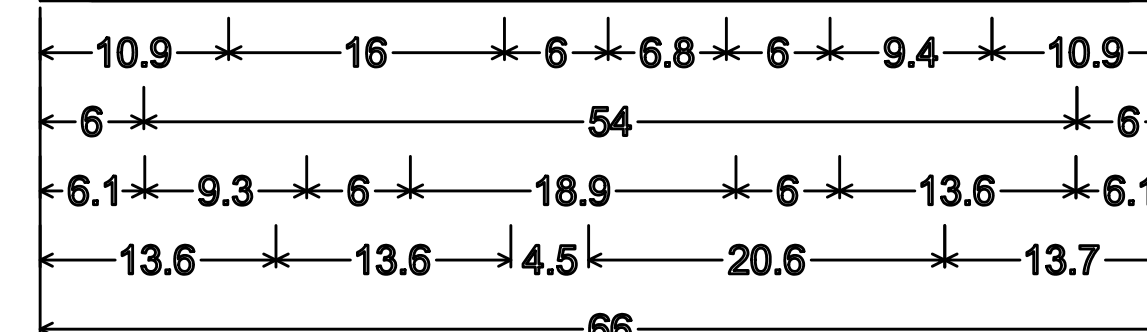
TRAFFIC SIGN SUMMARY  
GUIDESIGN DETAILS

MA-D1-7(B)		
5.5'	9.0'	49.5'
SIGNS REQUIRED		1
TOTAL AREA		49.5 SF
GREEN REFL.	SILVER WHITE	SILVER WHITE



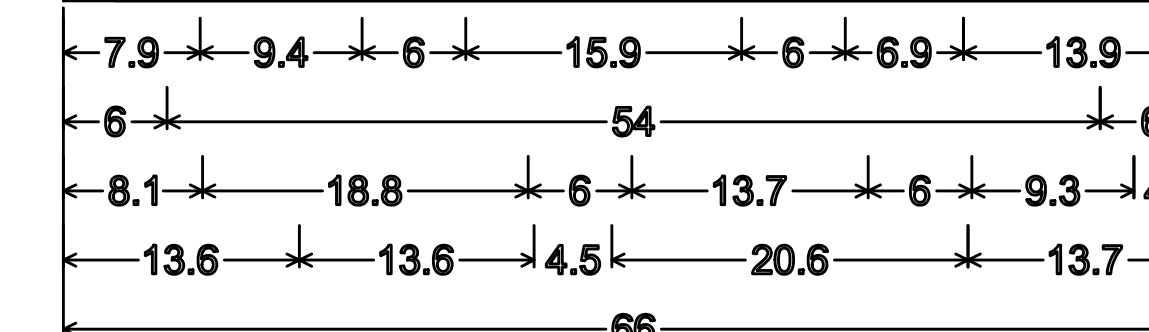
3.0" Radius, 1.0" Border, White on Green;  
State Highway 16 M1-5; "EAST" C 2K; "Hopedale" C 2K;  
"Milford" C 2K; Arrow Custom - 18.0" 0°;  
State Highway 16 M1-5; "WEST" C 2K; "Uxbridge" C 2K;  
Arrow Custom - 18.0" 180°;

D3-2(A)		
5.5'	3.5'	19.25 SF
SIGNS REQUIRED		1
TOTAL AREA		19.25 SF
GREEN REFL.	SILVER WHITE	SILVER WHITE



3.0" Radius, 1.0" Border, White on Green;  
"Main St" D 2K; Standard Arrow Custom 9.4" X 5.4" 0°;  
Standard Arrow Custom 9.4" X 5.4" 180°;  
"North Ave" D 2K; "NEXT SIGNAL" D 2K;

D3-2(B)		
5.5'	3.5'	19.25 SF
SIGNS REQUIRED		1
TOTAL AREA		19.25 SF
GREEN REFL.	SILVER WHITE	SILVER WHITE



3.0" Radius, 1.0" Border, White on Green;  
Standard Arrow Custom 9.4" X 5.4" 180°; "Main St" D 2K;  
"North Ave" D 2K; Standard Arrow Custom 9.4" X 5.4" 0°;  
"NEXT SIGNAL" D 2K;

CONSTRUCTION PLANS

SEE SHEET 19

DRAINAGE AND UTILITY PLANS

SEE SHEET 52

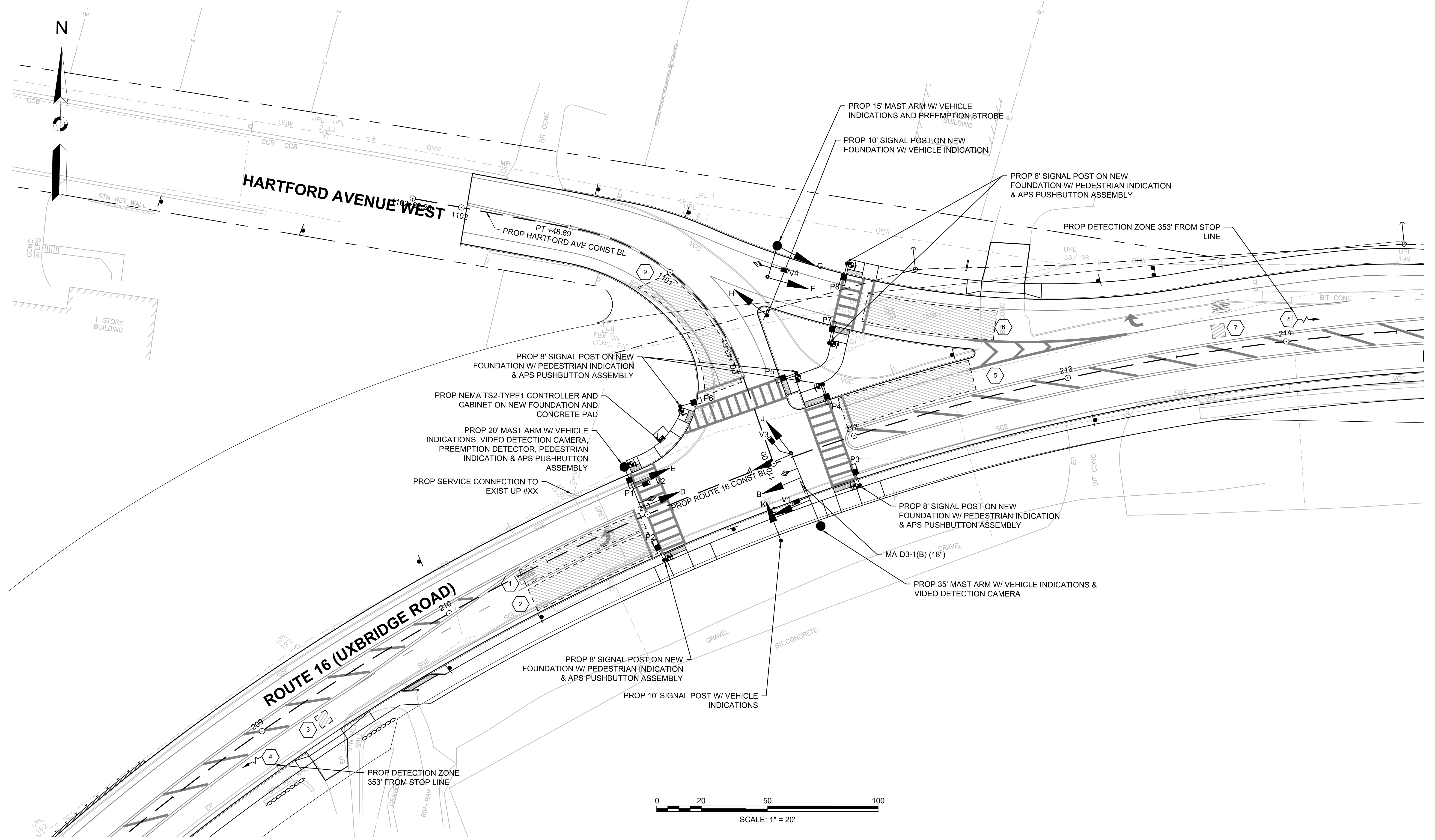
TRAFFIC SIGN AND PAVEMENT MARKING PLANS

SEE SHEET 92

MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	96	116
PROJECT FILE NO.		608491	

TRAFFIC SIGNAL PLANS  
ROUTE 16 AT HARTFORD AVE WEST LAYOUT



608491\_TFC(SIGNAL PLANS).DWG Plotted on 29-Jul-2021 8:38 AM

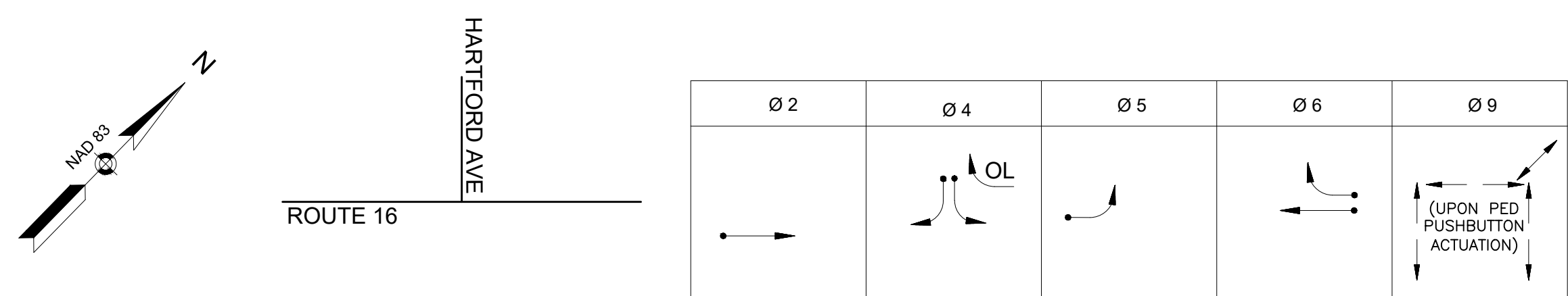


MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	97	116
PROJECT FILE NO.		608491	

TRAFFIC SIGNAL PLANS  
ROUTE 16 AT HARTFORD AVE WEST DATA

LOCATION NO. 1  
ROUTE 16 (UXBRIDGE ROAD)  
AT HARTFORD AVENUE WEST



SEQUENCE AND TIMING FOR FULLY ACTUATED CONTROL (ISOLATED)																		
STREET	DIRECTION	HOUSINGS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	FLASH OPER.
ROUTE 16	EB	A	RL	RL	RL	RL	RL	RL	GL	YL	RL	RL	RL	RL	RL	RL	RL	FYL
ROUTE 16	EB	B, C	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	FY
ROUTE 16	WB	D, E	R	R	R	R	R	R	R	R	R	GV	Y	R	R	R	R	FY
ROUTE 16	WB	F, G	RSR	RSR	RSR	GSR	YSR	RSR	RSR	RSR	RSR	GSR	YSR	RSR	RSR	RSR	RSR	FRSR
HARTFORD AVE	SB	H, J, K	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	FRL
PEDESTRIANS	ALL	P1 - P8	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	W	FDW	DW	DW	OUT

TIMING IN SECONDS																		
MINIMUM GREEN (INITIAL)	10											10						
PASSAGE TIME (VEHICLE)	2											2						
MAXIMUM 1 (ALL OTHER TIMES)	43											29						
MAXIMUM 2 (MON-FRI, 6:00 AM-10:00 AM)	59											47						
YELLOW CLEARANCE			4				4						4					
RED CLEARANCE				2				2						2				
WALK (W)															7			
PEDESTRIAN CLEARANCE																9	4	

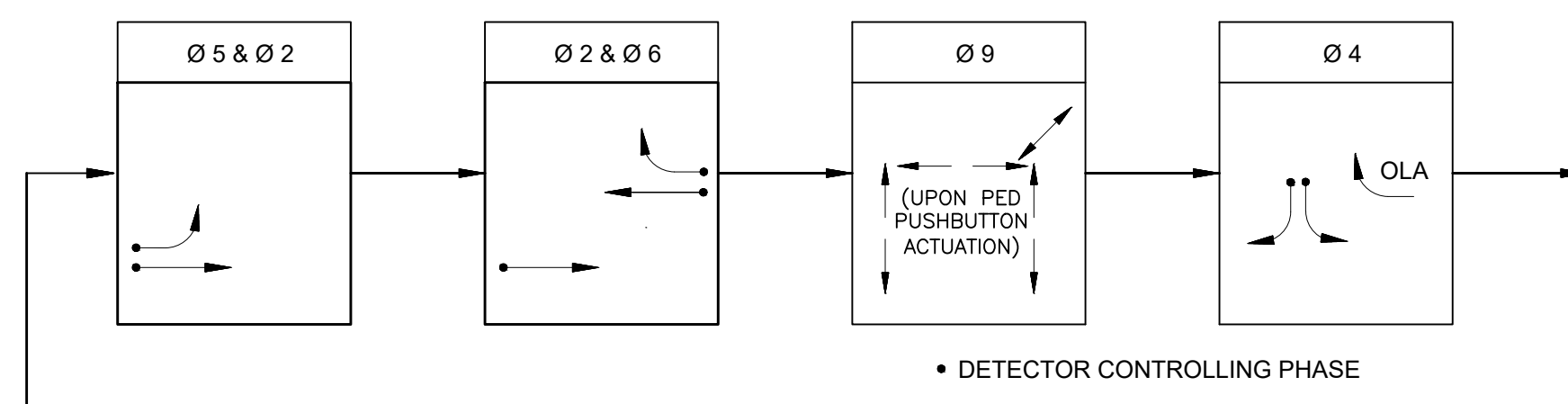
RECALL	MIN	OFF	OFF	MIN	OFF
MEMORY	NON-LOCKING	NON-LOCKING	NON-LOCKING	NON-LOCKING	LOCKING

DETECTOR DATA  
DELAY TIME EFFECTIVE ONLY DURING CALLED Ø RED. TIME IN SEC.

DETECTOR NUMBER	CAMERA NUMBER	Ø CALLED	Ø EXT.	MODE A=PULSE B=PRES.	DELAY TIME	EXT. TIME
1	V1	Ø5	Ø5	B	-	-
2	V1	Ø2	Ø2	B	-	-
3	V1	Ø2	Ø2	A	-	2
4	V1	Ø2	Ø2	A	-	2
5	V2	Ø6	Ø6	B	-	-
6	V4	Ø6	Ø6	B	-	-
7	V2	Ø6	Ø6	A	-	2
8	V2	Ø6	Ø6	A	-	2
9	V3	Ø4	Ø4	B	-	-

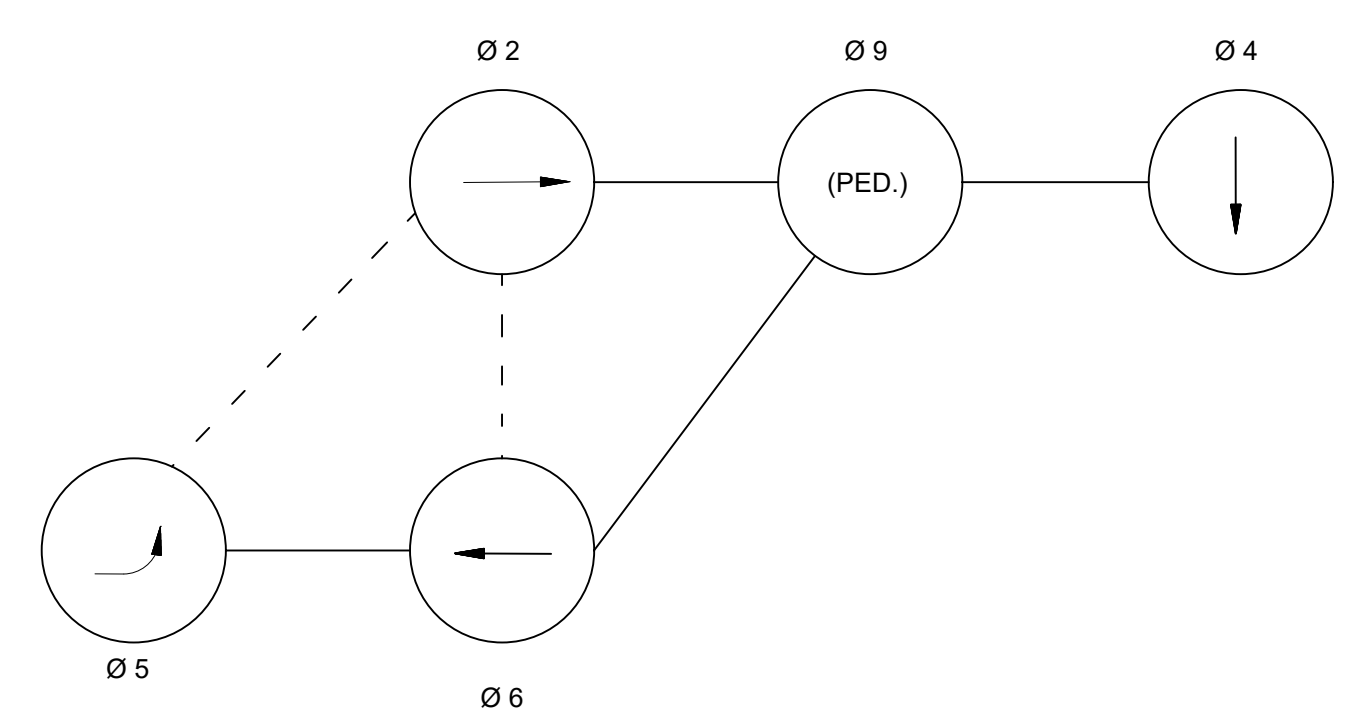
MAJOR ITEMS REQUIRED		
PAY ITEM	QUANTITY	ITEM
816.01	1	NEMA 8 PHASE TS2-TYPE1 CABINET ON PROP FDN AND CONC PAD, COMPLETE WITH ADVANCED TRAFFIC CONTROLLER (ATC) UNIT
	1	SERVICE CONNECTION (OVERHEAD FROM UTILITY POLE #XX)
	7	8' SIGNAL POST, BASE, & FDN.
	1	10' SIGNAL POST, BASE, & FDN.
	2	15' MAST ARM, BASE & FDN.
	1	20' MAST ARM, BASE & FDN.
	1	35' MAST ARM, BASE & FDN.
	10	SIGNAL HEAD, 3 SECTION (12" L.E.D)
	8	PEDESTRIAN SIGNAL HOUSING WITH COUNTDOWN TIMER (16" L.E.D)
	8	AUDIBLE & VIBRO TACTILE PEDESTRIAN PUSH BUTTON (APS) AND INTEGRATED R10-3e SIGN & SADDLE w/LED CONFIRMATION LIGHT
	3	UNIDIRECTIONAL SINGLE CHANNEL PREEMPTION DETECTOR
	2	PREEMPTION CONFIRMATION STROBE (WHITE)
	2	PREEMPTION 2-CHANNEL PHASE SELECTOR
	1	DETECTION SYSTEM WITH CAMERA(S) AND PROCESSORS CAPABLE OF STOP LINE PRESENCE DETECTION, HIGH SPEED DILEMMA ZONE DETECTION, BICYCLE DETECTION AS SHOWN ON THE PLANS
811.31	8	12" X 12" PULLBOX
		PLUS ALL NECESSARY DUCT, CABLE, LABOR, MISCELLANEOUS MATERIAL AND EQUIPMENT TO COMPLETE THE INSTALLATION.

PREFERENTIAL PHASING SEQUENCE



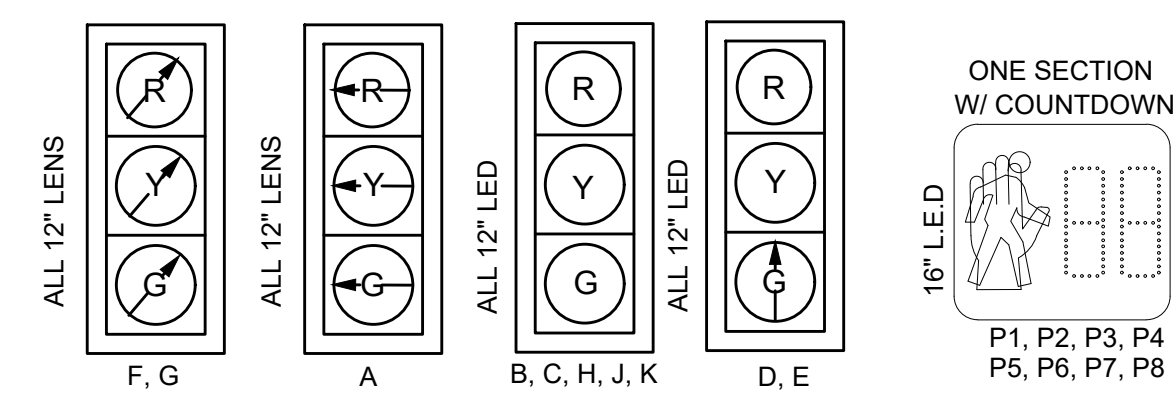
NOTES:  
1. Ø9 SHALL BE ACTUATED BY PUSH BUTTON ONLY

NEMA DUAL RING PHASING NOTES:



- PHASES ASSOCIATED BY A SOLID LINE SHALL NOT OPERATE CONCURRENTLY.
- PHASES ASSOCIATED BY A DASHED LINE MAY OPERATE CONCURRENTLY.
- THROUGH MOVEMENTS MAY INCLUDE RIGHT TURNS.
- IF THE ASSIGNED RIGHT OF WAY FOR ANY TRAFFIC MOVEMENT IS TO REMAIN IN EFFECT DURING THE NEXT CALLED PHASE, THE SIGNAL INDICATIONS FOR THAT TRAFFIC MOVEMENT SHALL NOT CHANGE DURING THE CHANGE INTERVAL(S) UNLESS OTHERWISE NOTED.

SIGNAL IDENTIFICATION



- NOTES:
- ALL PROP. SIGNAL HEADS SHALL BE EQUIPPED WITH 5" NON-LOUVERED BACK PLATES WITH 3" RETRO-REFLECTIVE BORDERS
  - ALL PROP. SIGNAL HEADS SHALL HAVE ¾ TUNNEL VISORS.

EMERGENCY PREEMPTION SCHEDULE

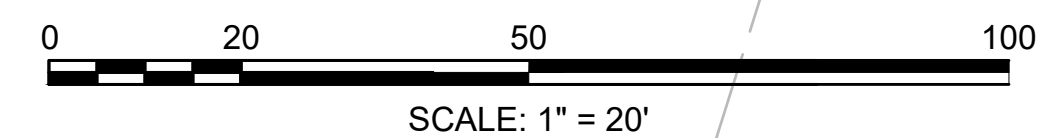
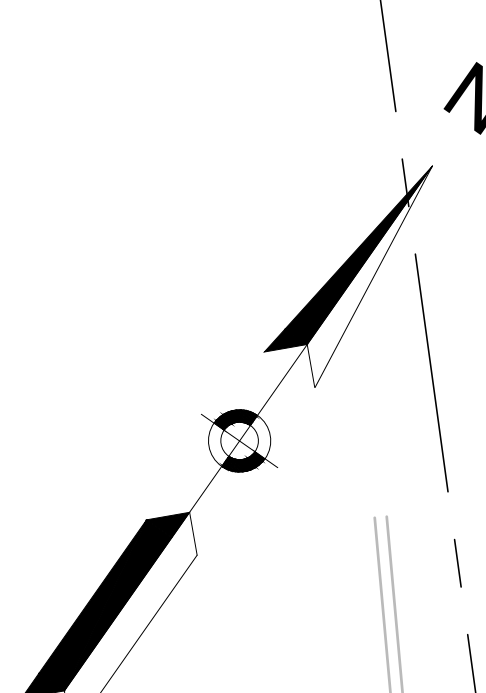
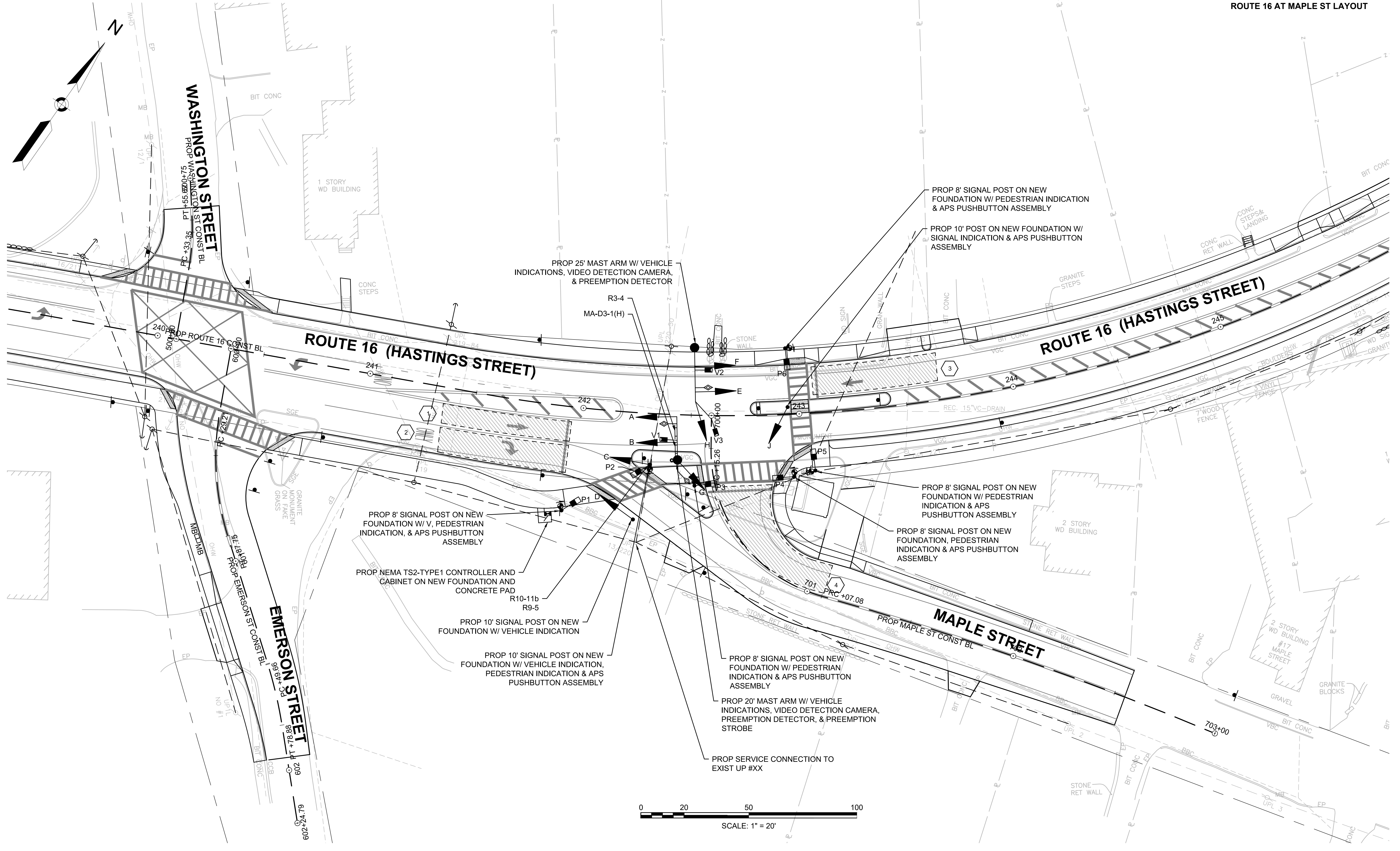
APPROACH	PREEMPTION PHASE	NEXT PHASE
SOUTHBOUND	4	2+6
WESTBOUND	6	4
EASTBOUND	2+5	4

EMERGENCY VEHICLE PREEMPTION OPERATION:

- EMERGENCY VEHICLE PREEMPTION SHALL BE ACTUATED BY AN OPTICAL SIGNAL FROM AN OPTICAL EMITTER MOUNTED ON AN EMERGENCY VEHICLE AND RECEIVED BY AN OPTICAL DETECTOR LOCATED AT INTERSECTION. A SEPARATE RECEIVING DETECTOR IS REQUIRED FOR EACH DETECTED APPROACH.
- PREEMPTION SIGNALS FROM MULTIPLE APPROACHES SHALL BE SERVICED ON A FIRST DETECTED FIRST SERVED BASIS.
- IN RESPONSE TO A PREEMPTION SIGNAL RECEIVED AT AN INTERSECTION BY AN OPTICAL DETECTOR, THE CONTROLLER SHALL TIME THE CLEARANCE INTERVALS OF THE ACTIVE PHASE (IF DIFFERENT THAT TO BE SERVICED) AND ADVANCE TO AND/OR HOLD IN EMERGENCY VEHICLE PREEMPTION PHASE UNTIL PREEMPTION SIGNAL CEASES. THE CONTROLLER SHALL THEN TIME CLEARANCES AND SIMILARLY SERVICE OTHER EMERGENCY VEHICLE PREEMPTION SEQUENCES IN THE ORDER RECEIVED (IF RECEIVED) OTHERWISE, RESUME NORMAL PREFERENTIAL PHASE SEQUENCE.
- PREEMPTION MINIMUM GREENS SHALL BE TEN SECONDS.
- NORMAL CLEARANCES SHALL BE PROVIDED ON PHASES THAT ARE TERMINATED BY PREEMPTION DEMAND.
- ACTUAL TIMING FOR PREEMPTION SHALL BE DETERMINED IN THE FIELD IN COORDINATION WITH THE FIRE DEPARTMENT AND SHALL BE APPROVED BY MASSDOT PRIOR TO OPERATION.

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	98	116
PROJECT FILE NO.		608491	

TRAFFIC SIGNAL PLANS  
ROUTE 16 AT MAPLE ST LAYOUT





MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	99	116
PROJECT FILE NO.		608491	

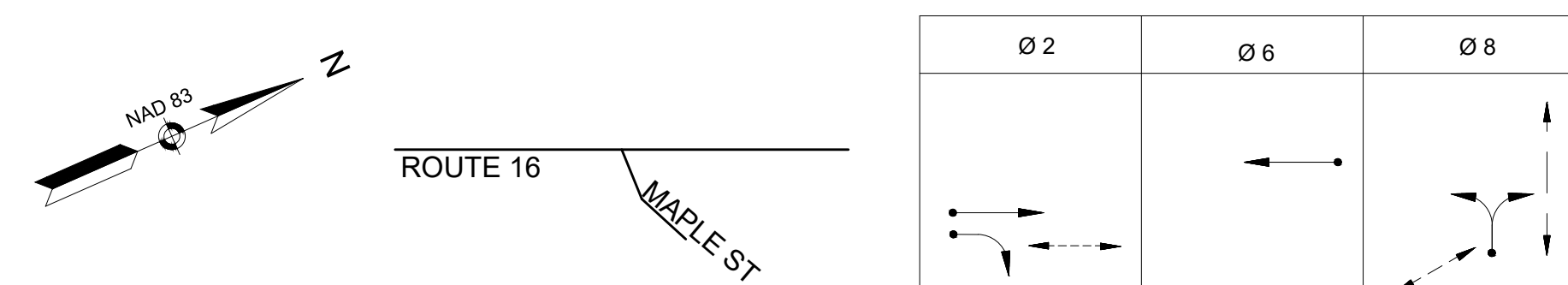
TRAFFIC SIGNAL PLANS  
ROUTE 16 AT MAPLE ST DATA

LOCATION NO. 2  
ROUTE 16 (UXBRIDGE ROAD)  
AT MAPLE STREET

DETECTOR DATA

DELAY TIME EFFECTIVE ONLY DURING CALLED Ø RED. TIME IN SEC.

DETECTOR NUMBER	CAMERA NUMBER	Ø CALLED	Ø EXT.	MODE A=PULSE B=PRES.	DELAY TIME	EXT. TIME
1	V1	Ø2	Ø2	B	-	-
2	V1	Ø2	Ø2	B	-	-
3	V2	Ø6	Ø6	B	-	-
4	V3	Ø8	Ø8	B	-	-



SEQUENCE AND TIMING FOR FULLY ACTUATED CONTROL (ISOLATED)												
STREET	DIRECTION	HOUSINGS	1	2	3	4	5	6	7	8	9	FLASH OPER.
ROUTE 16	EB	A, B	GV	Y	R	R	R	R	R	R	R	FY
ROUTE 16	EB	C, D	GR	YR	RR	RR	RR	RR	RR	RR	RR	FYR
ROUTE 16	WB	E, F	R	R	R	GV	Y	R	R	R	R	FY
MAPLE STREET	NB	G, H, J	R	R	R	R	R	R	G	Y	R	FYR
PEDESTRIANS	EB/WB	P3-P4	<sup>W</sup> / <sub>FDW</sub>	DW	DW	DW	DW	DW	<sup>W</sup> / <sub>FDW</sub>	DW	DW	OUT
PEDESTRIANS	NB/SB	P1, P2, P5, P6	DW	DW	DW	DW	DW	DW	<sup>W</sup> / <sub>FDW</sub>	DW	DW	OUT

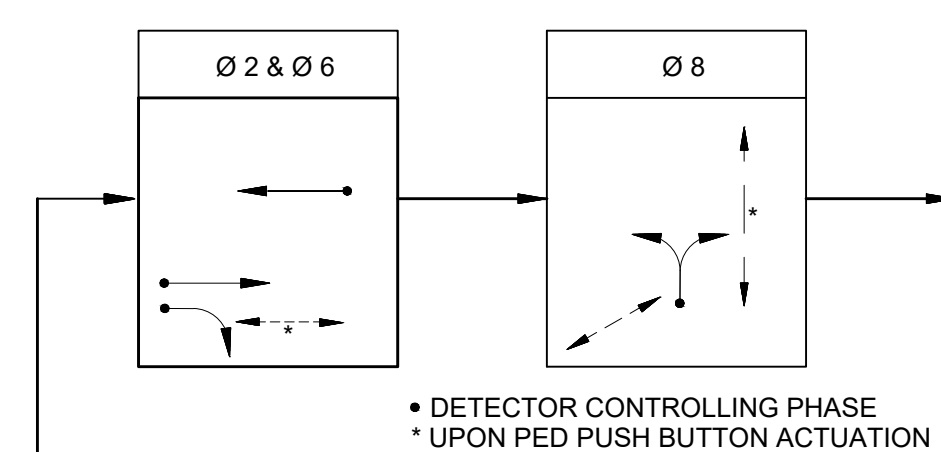
TIMING IN SECONDS												
MINIMUM GREEN (INITIAL)	10			10						8		
PASSAGE TIME (VEHICLE)	2			2					2			
MAXIMUM 1 (ALL OTHER TIMES)	44			44					14			
MAXIMUM 2 (MON-FRI, 3:00 PM-7:00 PM)	44			44					14			
YELLOW CLEARANCE			4			4					4	
RED CLEARANCE				2				2				2
WALK (W)	7								7			
PEDESTRIAN CLEARANCE	6	4	2						6	4	2	

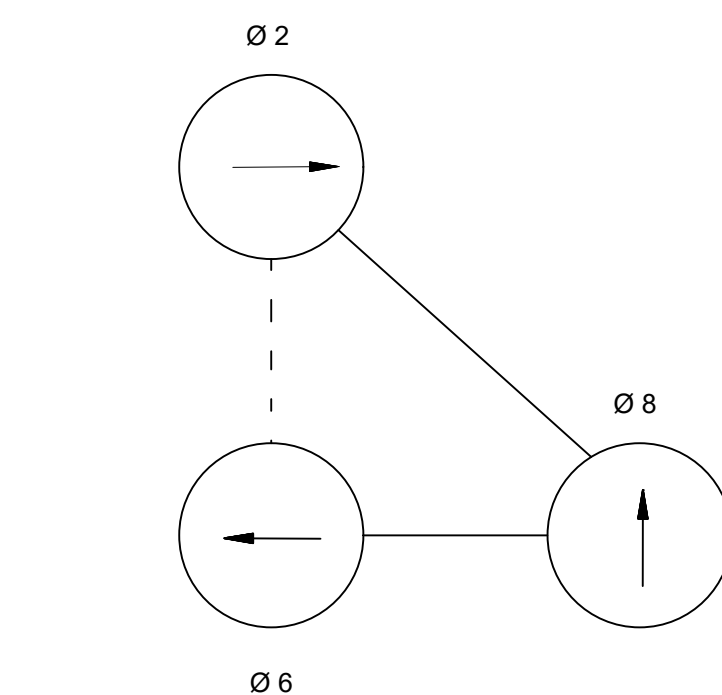
RECALL	MIN	MIN	OFF
MEMORY	NON-LOCKING	NON-LOCKING	NON-LOCKING

MAJOR ITEMS REQUIRED		
PAY ITEM	QUANTITY	ITEM
816.01	1	NEMA 8 PHASE TS2-TYPE1 CABINET ON PROP FDN AND CONC PAD, COMPLETE WITH ADVANCED TRAFFIC CONTROLLER (ATC) UNIT
	1	SERVICE CONNECTION (OVERHEAD FROM UTILITY POLE #XX)
	4	8' SIGNAL POST, BASE, & FDN.
	3	10' SIGNAL POST, BASE, & FDN.
	1	20' MAST ARM, BASE & FDN.
	1	25' MAST ARM, BASE & FDN.
	9	SIGNAL HEAD, 3 SECTION (12" L.E.D)
	6	PEDESTRIAN SIGNAL HOUSING WITH COUNTDOWN TIMER (16" L.E.D)
	6	AUDIBLE & VIBRO TACTILE PEDESTRIAN PUSH BUTTON (APS) AND INTEGRATED R10-3e SIGN & SADDLE w/LED CONFIRMATION LIGHT
	3	UNIDIRECTIONAL SINGLE CHANNEL PREEMPTION DETECTOR
	1	PREEMPTION CONFIRMATION STROBE (WHITE)
	2	PREEMPTION 2-CHANNEL PHASE SELECTOR
	1	DETECTION SYSTEM WITH CAMERA(S) AND PROCESSORS CAPABLE OF STOP LINE PRESENCE DETECTION AND BICYCLE DETECTION AS SHOWN ON THE PLANS
811.31	6	12" X 12" PULLBOX
		PLUS ALL NECESSARY DUCT, CABLE, LABOR, MISCELLANEOUS MATERIAL AND EQUIPMENT TO COMPLETE THE INSTALLATION.

PREFERENTIAL PHASING SEQUENCE

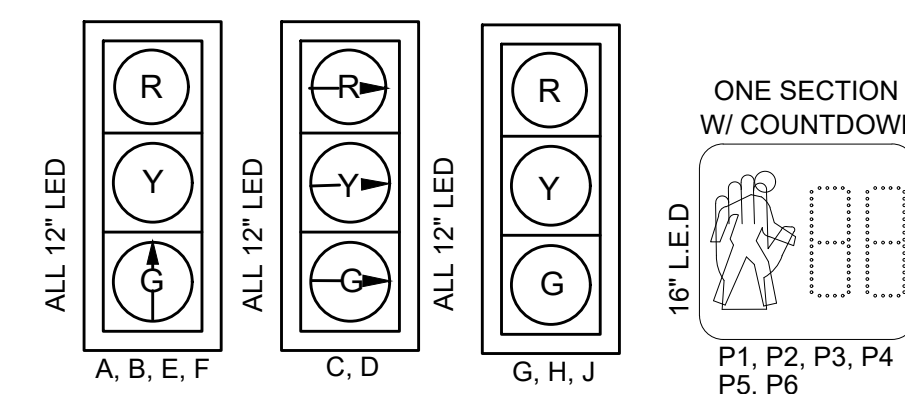


NEMA DUAL RING PHASING NOTES:



- PHASES ASSOCIATED BY A SOLID LINE SHALL NOT OPERATE CONCURRENTLY.
- PHASES ASSOCIATED BY A DASHED LINE MAY OPERATE CONCURRENTLY.
- THROUGH MOVEMENTS MAY INCLUDE RIGHT TURNS.
- IF THE ASSIGNED RIGHT OF WAY FOR ANY TRAFFIC MOVEMENT IS TO REMAIN IN EFFECT DURING THE NEXT CALLED PHASE, THE SIGNAL INDICATIONS FOR THAT TRAFFIC MOVEMENT SHALL NOT CHANGE DURING THE CHANGE INTERVAL(S) UNLESS OTHERWISE NOTED.

SIGNAL IDENTIFICATION



- NOTES:
- ALL PROP. SIGNAL HEADS SHALL BE EQUIPPED WITH 5" NON-LOUVERED BACK PLATES WITH 3" RETRO-REFLECTIVE BORDERS
  - ALL PROP. SIGNAL HEADS SHALL HAVE ¾ TUNNEL VISORS.

EMERGENCY PREEMPTION SCHEDULE

APPROACH	PREEMPTION PHASE	NEXT PHASE
NORTHBOUND	8	2+6
WESTBOUND	6	8
EASTBOUND	2	8

EMERGENCY VEHICLE PREEMPTION OPERATION:

- EMERGENCY VEHICLE PREEMPTION SHALL BE ACTUATED BY AN OPTICAL SIGNAL FROM AN OPTICAL EMITTER MOUNTED ON AN EMERGENCY VEHICLE AND RECEIVED BY AN OPTICAL DETECTOR LOCATED AT INTERSECTION. A SEPARATE RECEIVING DETECTOR IS REQUIRED FOR EACH DETECTED APPROACH.
- PREEMPTION SIGNALS FROM MULTIPLE APPROACHES SHALL BE SERVICED ON A FIRST DETECTED FIRST SERVED BASIS.
- IN RESPONSE TO A PREEMPTION SIGNAL RECEIVED AT AN INTERSECTION BY AN OPTICAL DETECTOR, THE CONTROLLER SHALL TIME THE CLEARANCE INTERVALS OF THE ACTIVE PHASE (IF DIFFERENT THAT TO BE SERVICED) AND ADVANCE TO AND/OR HOLD IN EMERGENCY VEHICLE PREEMPTION PHASE UNTIL PREEMPTION SIGNAL CEASES. THE CONTROLLER SHALL THEN TIME CLEARANCES AND SIMILARLY SERVICE OTHER EMERGENCY VEHICLE PREEMPTION SEQUENCES IN THE ORDER RECEIVED (IF RECEIVED) OTHERWISE, RESUME NORMAL PREFERENTIAL PHASE SEQUENCE.
- PREEMPTION MINIMUM GREENS SHALL BE TEN SECONDS.
- NORMAL CLEARANCES SHALL BE PROVIDED ON PHASES THAT ARE TERMINATED BY PREEMPTION DEMAND.
- ACTUAL TIMING FOR PREEMPTION SHALL BE DETERMINED IN THE FIELD IN COORDINATION WITH THE FIRE DEPARTMENT AND SHALL BE APPROVED BY MASSDOT PRIOR TO OPERATION.

CONSTRUCTION PLANS

SEE SHEET 28

DRAINAGE AND UTILITY PLANS

SEE SHEET 61

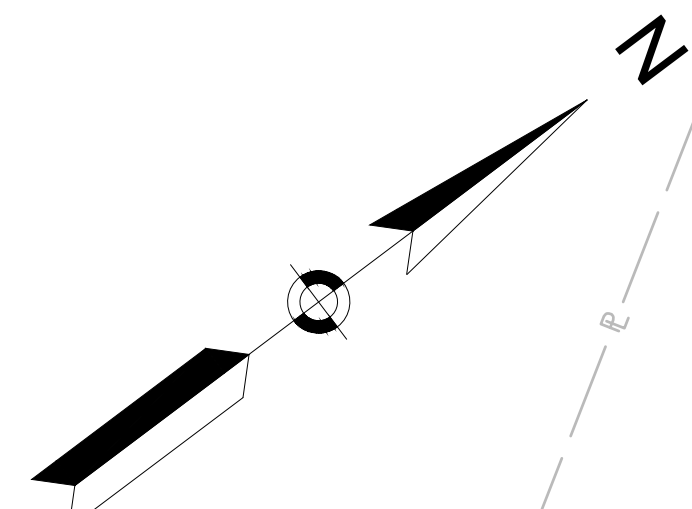
TRAFFIC SIGN AND PAVEMENT MARKING PLANS

SEE SHEET 92

MENDON  
ROUTE 16

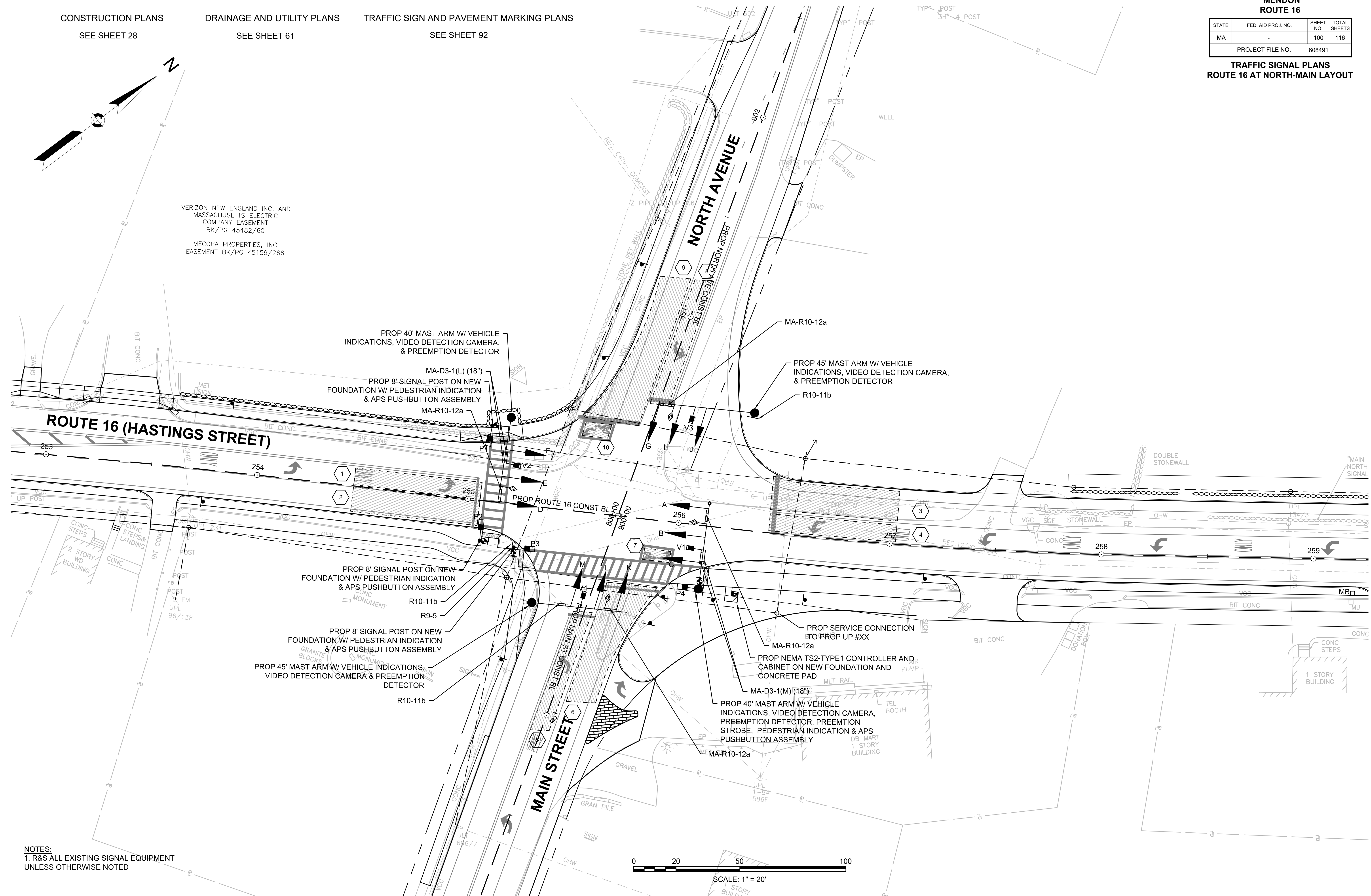
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	100	116
PROJECT FILE NO.		608491	

TRAFFIC SIGNAL PLANS  
ROUTE 16 AT NORTH-MAIN LAYOUT

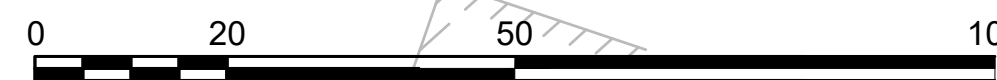


VERIZON NEW ENGLAND INC. AND MASSACHUSETTS ELECTRIC COMPANY EASEMENT BK/PG 45482/60

MCOBA PROPERTIES, INC EASEMENT BK/PG 45159/266



NOTES:  
1. R&S ALL EXISTING SIGNAL EQUIPMENT UNLESS OTHERWISE NOTED



SCALE: 1" = 20'

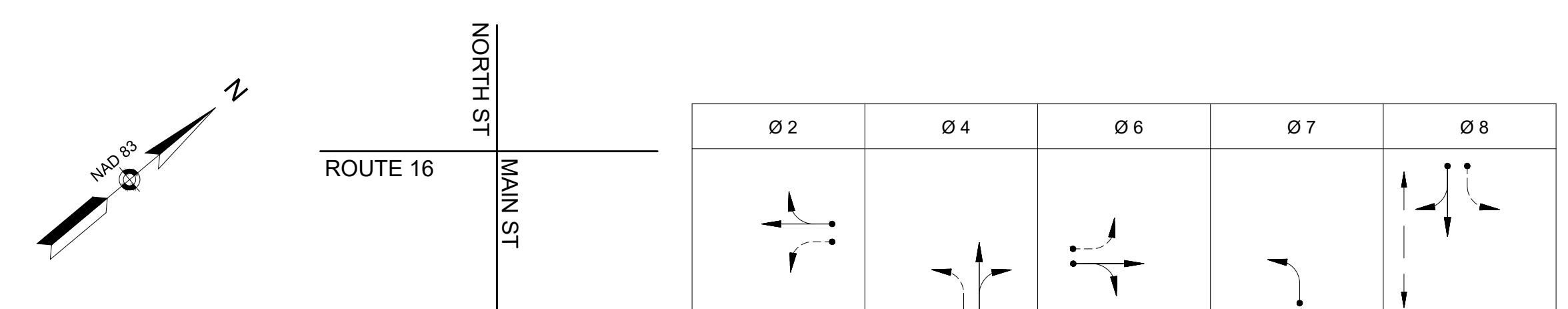


**MENDON  
ROUTE 16**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	101	116
PROJECT FILE NO.		608491	

**TRAFFIC SIGNAL PLANS  
ROUTE 16 AT NORTH-MAIN DATA**

**LOCATION NO. 3  
ROUTE 16 (UXBRIDGE ROAD)  
AT NORTH STREET/MAIN STREET**



**SEQUENCE AND TIMING FOR FULLY ACTUATED CONTROL (ISOLATED)**

STREET	DIRECTION	HOUSINGS	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	FLASH OPER.
ROUTE 16	EB	A	RL	RL	RL	RL	RL	RL	FYL	YL	RL	RL	RL	RL	RL	RL	RL	FYL
ROUTE 16	EB	B, C	R	R	R	R	R	R	G	Y	R	R	R	R	R	R	R	FY
ROUTE 16	WB	D	FYL	YL	RL	RL	RL	RL	RL	RL	RL	RL	RL	RL	RL	RL	RL	FYL
ROUTE 16	WB	E, F	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	FY
MAIN ST	NB	G	RL	RL	RL	FYL	YL	RL	RL	RL	RL	GL	YL	RL	RL	RL	RL	FRL
MAIN ST	NB	H, J	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	FR
NORTH ST	SB	K	RL	RL	RL	RL	RL	RL	RL	RL	RL	RL	RL	RL	FYL	YL	RL	FRL
NORTH ST	SB	L, M	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	FR
PEDESTRIANS	NB/SB	P1, P2	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	W/ FDW	DW	DW	OUT
PEDESTRIANS	EB/WB	P3, P4	DW	DW	DW	DW	DW	DW	W/ FDW	DW	DW	DW	DW	DW	DW	DW	DW	OUT

TIMING IN SECONDS		EMERGENCY ONLY	
MINIMUM GREEN (INITIAL)	10		10
PASSAGE TIME (VEHICLE)	2		2
MAXIMUM 1 (ALL OTHER TIMES)	46		46
MAXIMUM 2 (MON-FRI, 6:00 AM-10:00 AM)	37		37
YELLOW CLEARANCE		4	4
RED CLEARANCE			2
WALK (W)			7
PEDESTRIAN CLEARANCE			15
			4
			2
			8
			4
			2

RECALL	MIN	OFF	MIN	OFF	OFF
MEMORY	NON-LOCKING	NON-LOCKING	NON-LOCKING	NON-LOCKING	NON-LOCKING

PAY ITEM	QUANTITY	MAJOR ITEMS REQUIRED
	1	NEMA 8 PHASE TS2-TYPE1 CABINET ON PROP FDN, COMPLETE WITH ADVANCED TRAFFIC CONTROLLER (ATC) UNIT
	1	SERVICE CONNECTION (OVERHEAD FROM UTILITY POLE #XX)
	3	8' SIGNAL POST, BASE, & FDN.
	2	40' MAST ARM, BASE & FDN.
	2	45' MAST ARM, BASE & FDN.
	11	SIGNAL HEAD, 3 SECTION (12" L.E.D)
	1	SIGNAL HEAD, 4 SECTION (12" L.E.D)
	4	PEDESTRIAN SIGNAL HOUSING WITH COUNTDOWN TIMER (16" L.E.D)
	4	AUDIBLE & VIBRO TACTILE PEDESTRIAN PUSH BUTTON (APS) AND INTEGRATED R10-3e SIGN & SADDLE w/LED CONFIRMATION LIGHT
	4	UNIDIRECTIONAL SINGLE CHANNEL PREEMPTION DETECTOR
	1	PREEMPTION CONFIRMATION STROBE (CLEAR)
	2	PREEMPTION 2-CHANNEL PHASE SELECTOR
816.04	1	DETECTION SYSTEM WITH CAMERA(S) AND PROCESSORS CAPABLE OF STOP LINE PRESENCE DETECTION, BICYCLE DETECTION AS SHOWN ON THE PLANS
811.31	10	12" X 12" PULLBOX
PLUS ALL NECESSARY DUCT, CABLE, LABOR, MISCELLANEOUS MATERIAL AND EQUIPMENT TO COMPLETE THE INSTALLATION.		

**EMERGENCY PREEMPTION SCHEDULE**

APPROACH	PREEMPTION PHASE	NEXT PHASE
NORTHBOUND	4+7	2+6
SOUTHBOUND	8	2+6
EASTBOUND	6	4+8
WESTBOUND	2	4+8

**DETECTOR DATA**

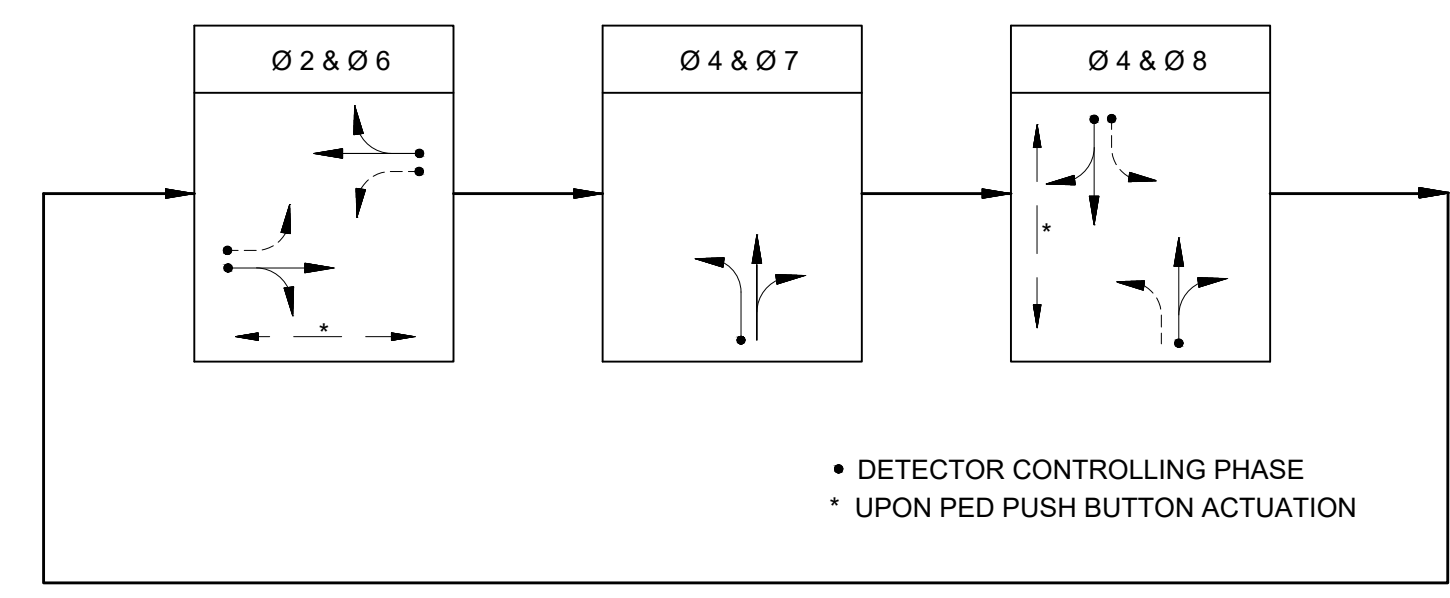
DELAY TIME EFFECTIVE ONLY DURING CALLED Ø RED. TIME IN SEC.

DETECTOR NUMBER	CAMERA NUMBER	Ø CALLED	Ø EXT.	MODE A=PULSE B=PRES.	DELAY TIME	EXT. TIME
1	V1	Ø6	Ø6	B	-	-
2	V1	Ø6	Ø6	B	-	-
3	V2	Ø2	Ø2	B	-	-
4	V2	Ø2	Ø2	B	-	-
5	V3	Ø7	Ø7	B	-	-
6	V3	Ø4	Ø4	B	-	-
7	V3	Ø4	Ø4	B	-	-
8	V4	Ø8	Ø8	B	-	-
9	V4	Ø8	Ø8	B	-	-
10	V4	Ø8	Ø8	B	-	-

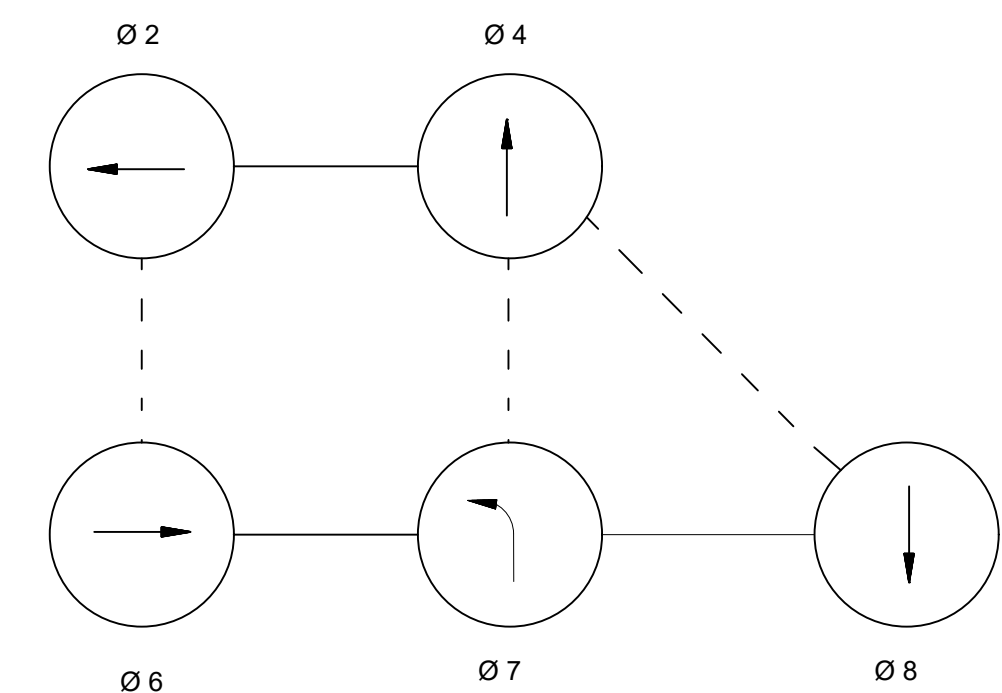
**EMERGENCY VEHICLE PREEMPTION OPERATION:**

- EMERGENCY VEHICLE PREEMPTION SHALL BE ACTUATED BY AN OPTICAL SIGNAL FROM AN OPTICAL EMITTER MOUNTED ON AN EMERGENCY VEHICLE AND RECEIVED BY AN OPTICAL DETECTOR LOCATED AT INTERSECTION. A SEPARATE RECEIVING DETECTOR IS REQUIRED FOR EACH DETECTED APPROACH. PREEMPTION SIGNALS FROM MULTIPLE APPROACHES SHALL BE SERVICED ON A FIRST DETECTED FIRST SERVED BASIS.
- IN RESPONSE TO A PREEMPTION SIGNAL RECEIVED AT AN INTERSECTION BY AN OPTICAL DETECTOR, THE CONTROLLER SHALL TIME THE CLEARANCE INTERVALS OF THE ACTIVE PHASE (IF DIFFERENT THAT TO BE SERVICED) AND ADVANCE TO AND/OR HOLD IN EMERGENCY VEHICLE PREEMPTION PHASE UNTIL PREEMPTION SIGNAL CEASES. THE CONTROLLER SHALL THEN TIME CLEARANCES AND SIMILARLY SERVICE OTHER EMERGENCY VEHICLE PREEMPTION SEQUENCES IN THE ORDER RECEIVED (IF RECEIVED) OTHERWISE, RESUME NORMAL PREFERENTIAL PHASE SEQUENCE.
- PREEMPTION MINIMUM GREENS SHALL BE TEN SECONDS. NORMAL CLEARANCES SHALL BE PROVIDED ON PHASES THAT ARE TERMINATED BY PREEMPTION DEMAND.
- ACTUAL TIMING FOR PREEMPTION SHALL BE DETERMINED IN THE FIELD IN COORDINATION WITH THE FIRE DEPARTMENT AND SHALL BE APPROVED BY MASSDOT PRIOR TO OPERATION.

**PREFERENTIAL PHASING SEQUENCE**

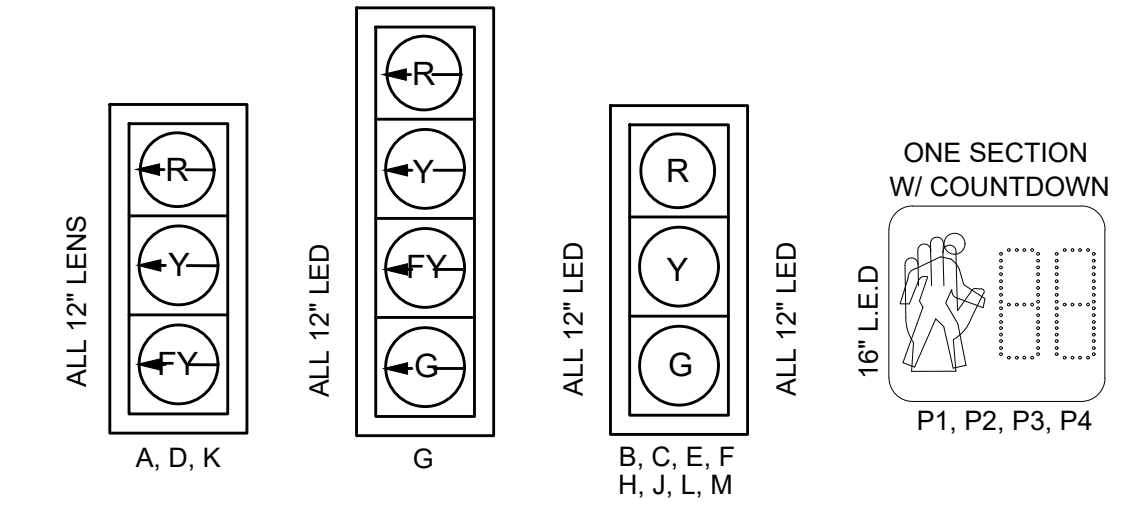


**NEMA DUAL RING PHASING NOTES:**



- PHASES ASSOCIATED BY A SOLID LINE SHALL NOT OPERATE CONCURRENTLY.
- PHASES ASSOCIATED BY A DASHED LINE MAY OPERATE CONCURRENTLY.
- THROUGH MOVEMENTS MAY INCLUDE RIGHT TURNS.
- IF THE ASSIGNED RIGHT OF WAY FOR ANY TRAFFIC MOVEMENT IS TO REMAIN IN EFFECT DURING THE NEXT CALLED PHASE, THE SIGNAL INDICATIONS FOR THAT TRAFFIC MOVEMENT SHALL NOT CHANGE DURING THE CHANGE INTERVAL(S) UNLESS OTHERWISE NOTED.

**SIGNAL IDENTIFICATION**



- NOTES:**
- ALL PROP. SIGNAL HEADS SHALL BE EQUIPPED WITH 5" NON-LOUVERED BACK PLATES WITH 3" RETRO-REFLECTIVE BORDERS
  - ALL PROP. SIGNAL HEADS SHALL HAVE ¾ TUNNEL VISORS.

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	102	116
PROJECT FILE NO.		608491	

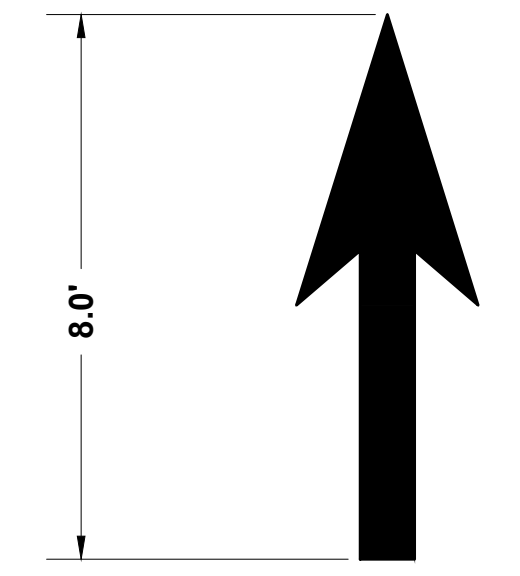
TRAFFIC DETAILS  
SHEET 1 OF 2

PAVEMENT MARKING NOTES:

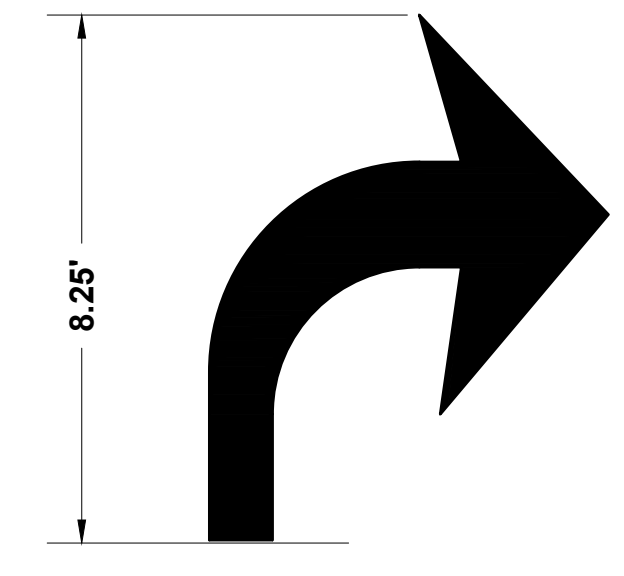
1. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO PLACING PAVEMENT MARKINGS OR SYMBOLS AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO START OF WORK. WHEN THESE PLANS ARE IN CONFLICT WITH ACTUAL SITE CONDITIONS, PROPOSED PAVEMENT MARKINGS MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER.
2. WHERE PROPOSED PAVEMENT MARKINGS CONFLICT WITH EXISTING PAVEMENT MARKINGS, REMOVE ANY CONFLICTING EXISTING MARKINGS BY APPROVED METHOD.
3. PROPOSED PAVEMENT MARKINGS (LEGENDS AND ARROWS) SHALL BE INSTALLED IN ACCORDANCE WITH THE MUTCD AND MASSDOT 1996 STANDARD CONSTRUCTION AND TRAFFIC DETAILS, AS AMENDED. TEXT, ARROWS, AND BIKE LANE SYMBOLS SHALL BE WHITE. SEE DRAWINGS FOR SYMBOL LOCATIONS.

TRAFFIC NOTES

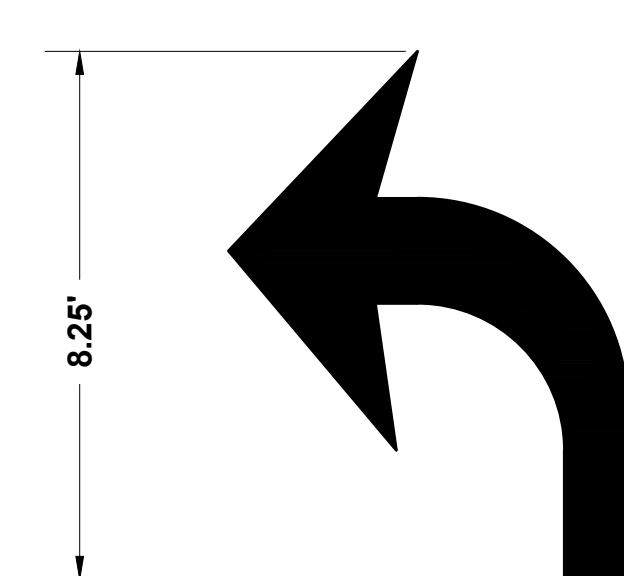
1. THE MINIMUM MOUNTING HEIGHT OF POST-MOUNTED SIGNS, MEASURED VERTICALLY FROM THE BOTTOM OF THE SIGN TO THE TOP OF THE CURB OR SIDEWALK, OR THE ELEVATION OF THE NEAR EDGE OF THE TRAVELED WAY, SHALL BE 7 FEET UNLESS OTHERWISE SPECIFIED ON THE PLANS.
2. TRAFFIC SIGNAL CONDUIT SHALL BE 3" SCHEDULE 80 PVC UNLESS OTHERWISE NOTED.
3. STOP LINES SHOULD BE PLACED A MINIMUM OF 4' IN ADVANCE TO NEAREST CROSSWALK LINES.



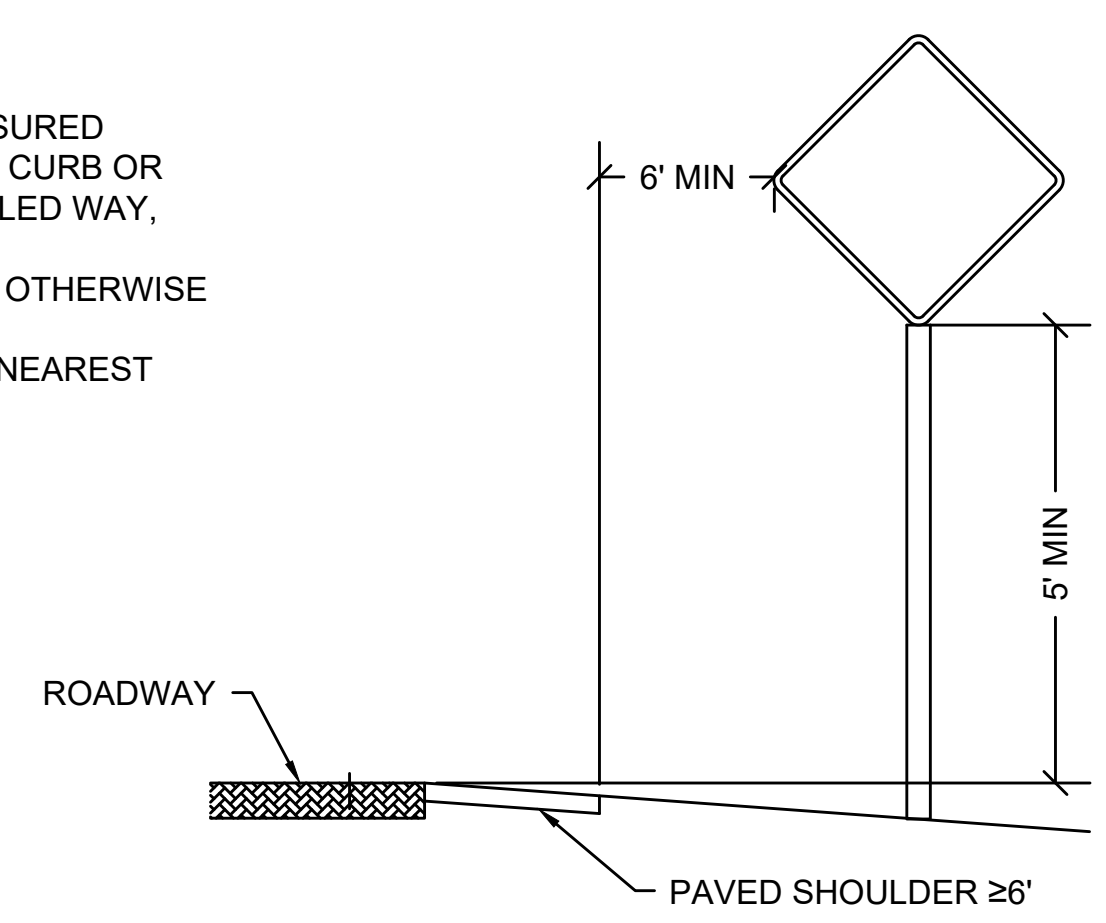
THROUGH LANE DESIGNATION MARKING DETAIL  
NOT TO SCALE



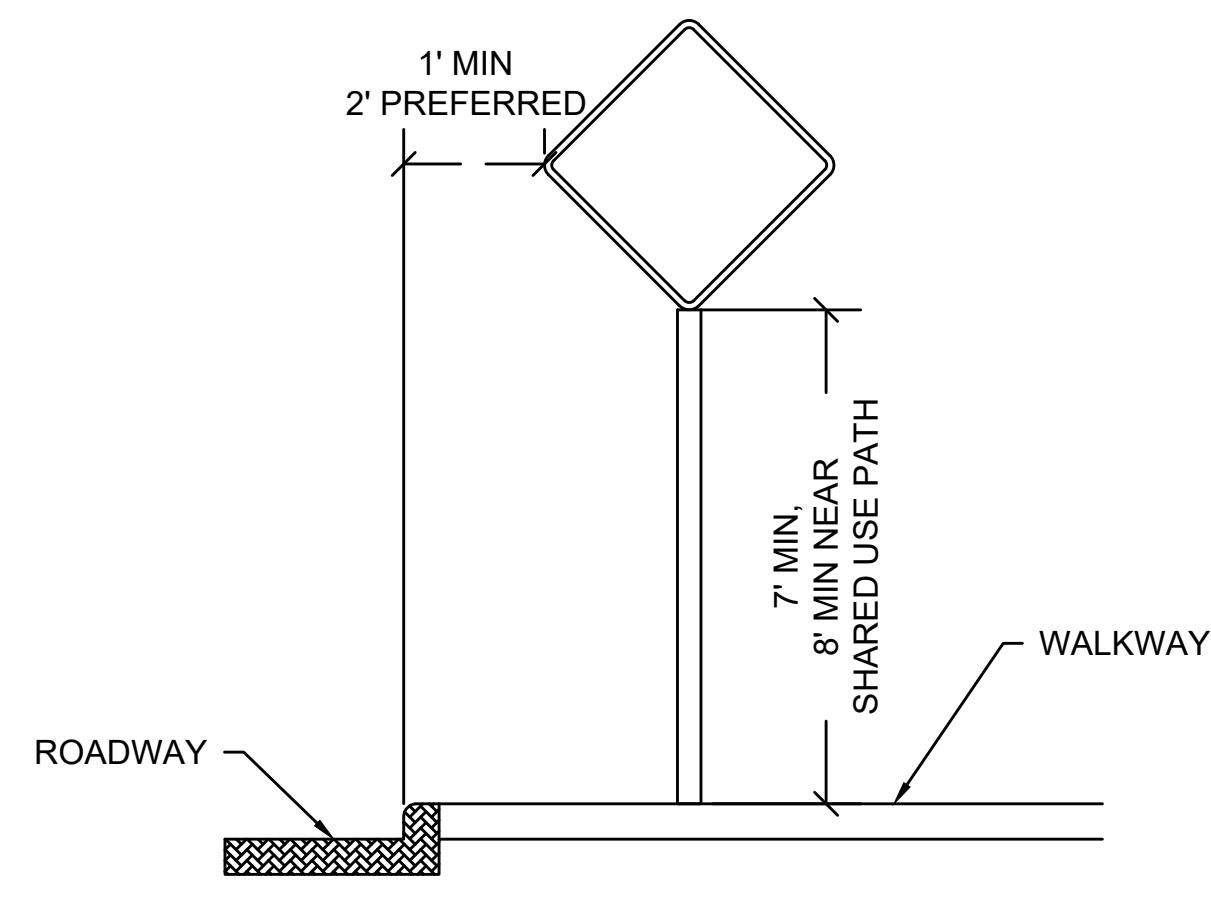
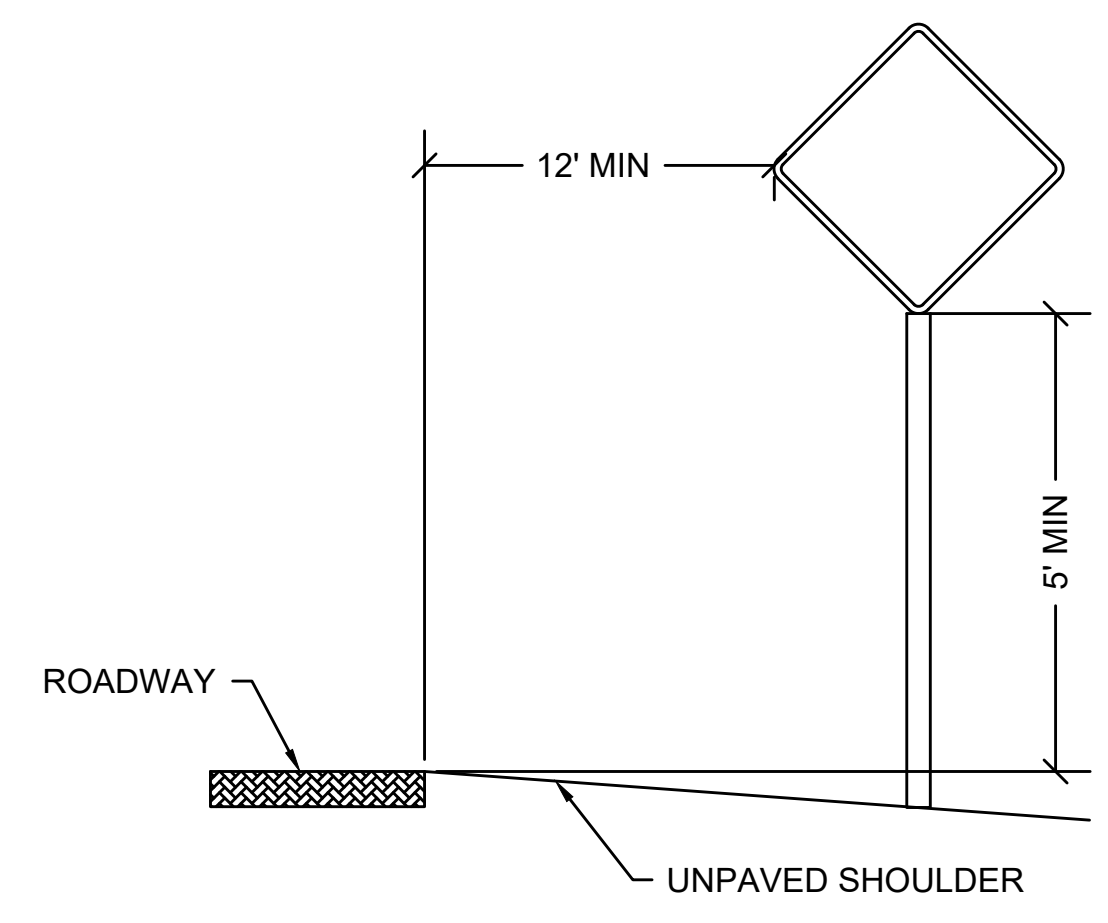
TURN LANE DESIGNATION MARKING DETAIL  
NOT TO SCALE



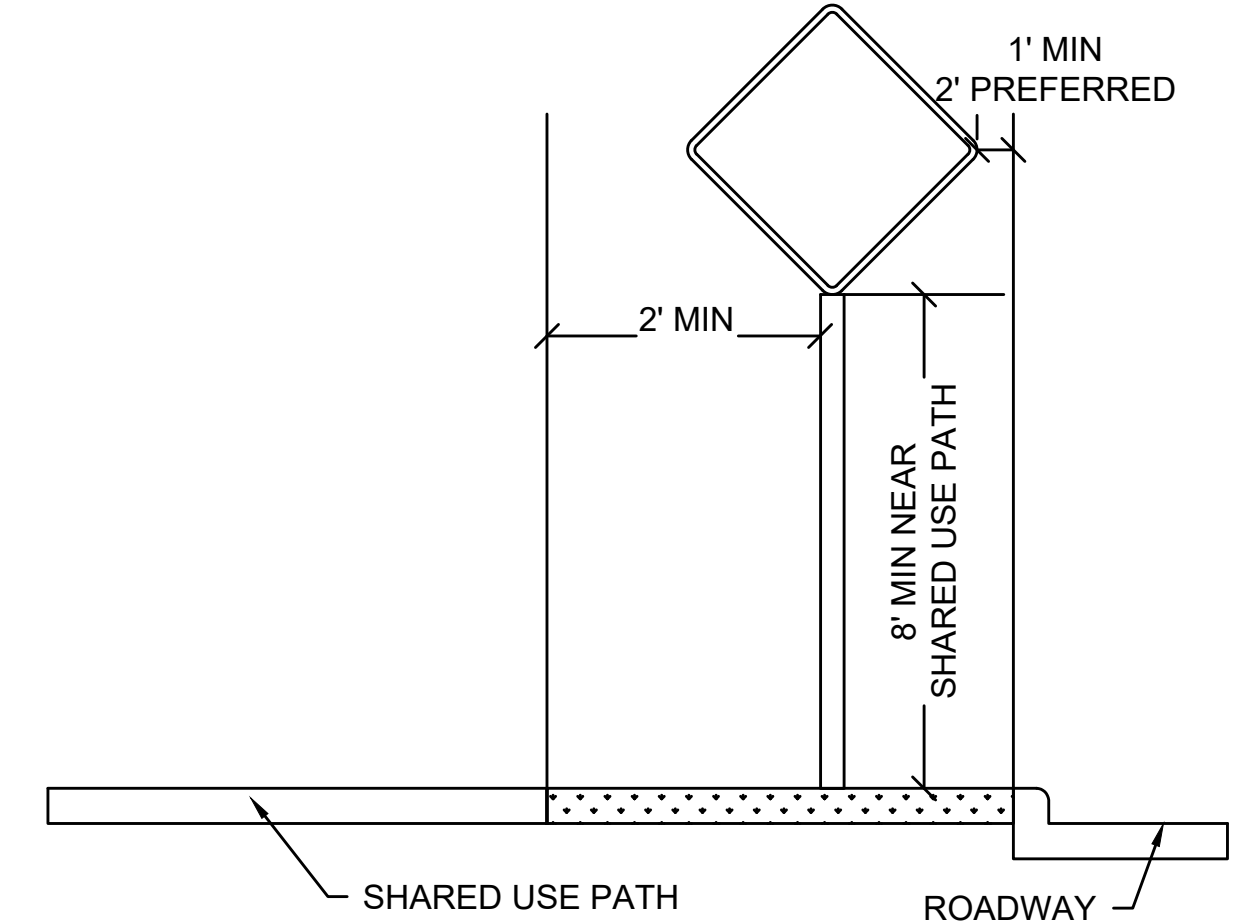
TURN LANE DESIGNATION MARKING DETAIL  
NOT TO SCALE



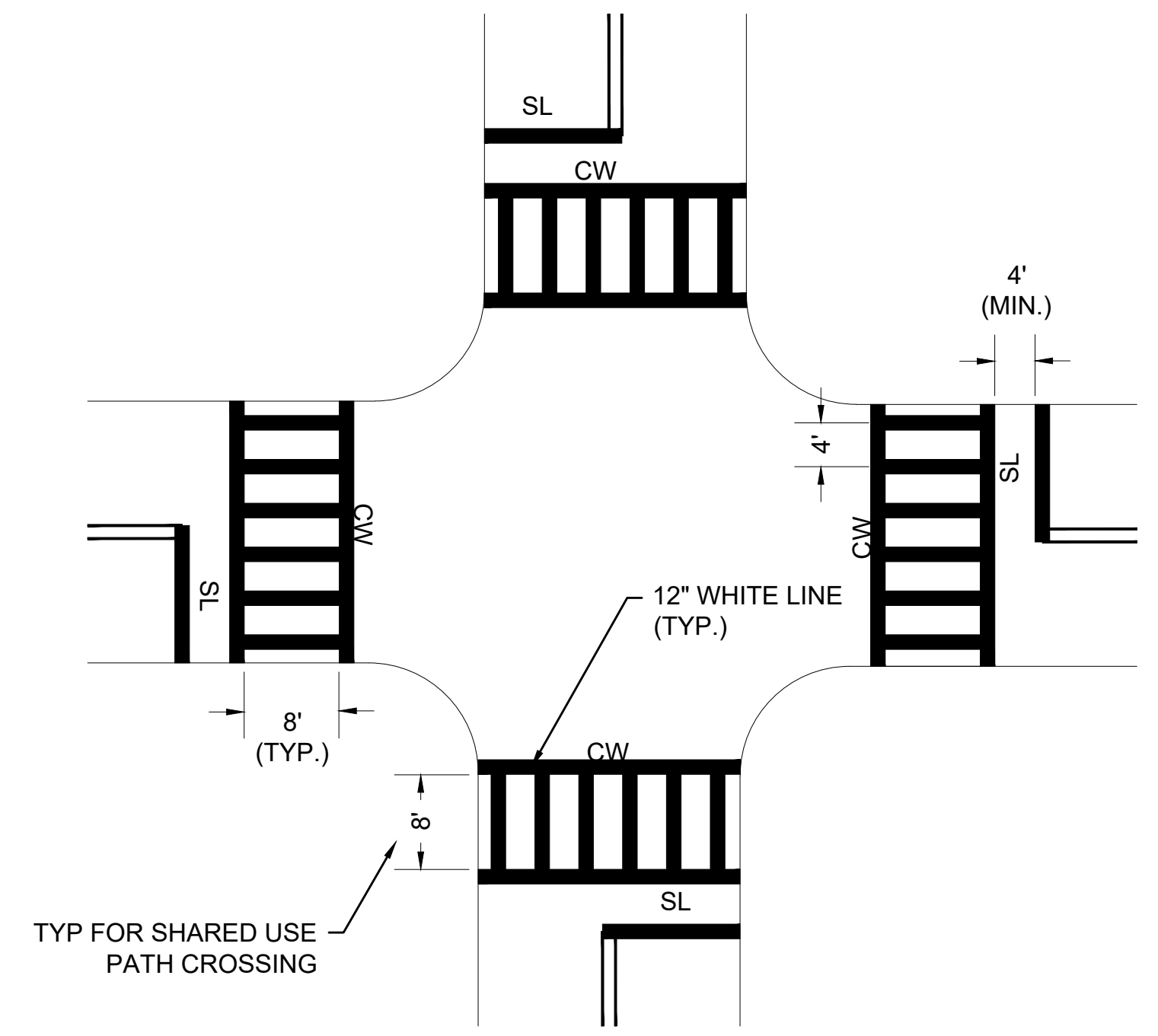
SIGN MOUNTING DETAIL - RURAL (NO CURB)  
NOT TO SCALE



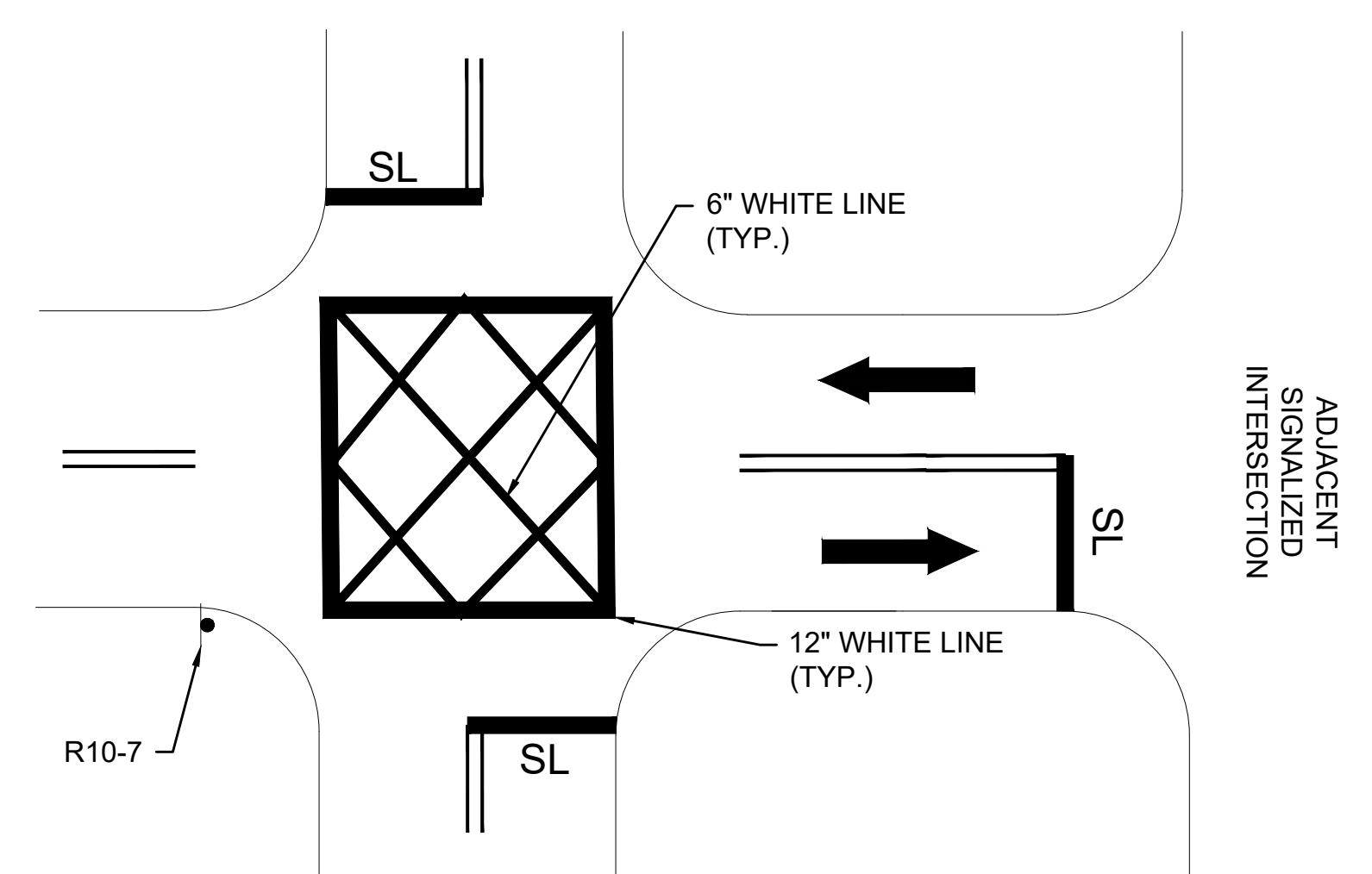
SIGN MOUNTING DETAIL - URBAN (WITH CURB)  
NOT TO SCALE



SIGN MOUNTING DETAIL - SHARED USE PATH  
NOT TO SCALE

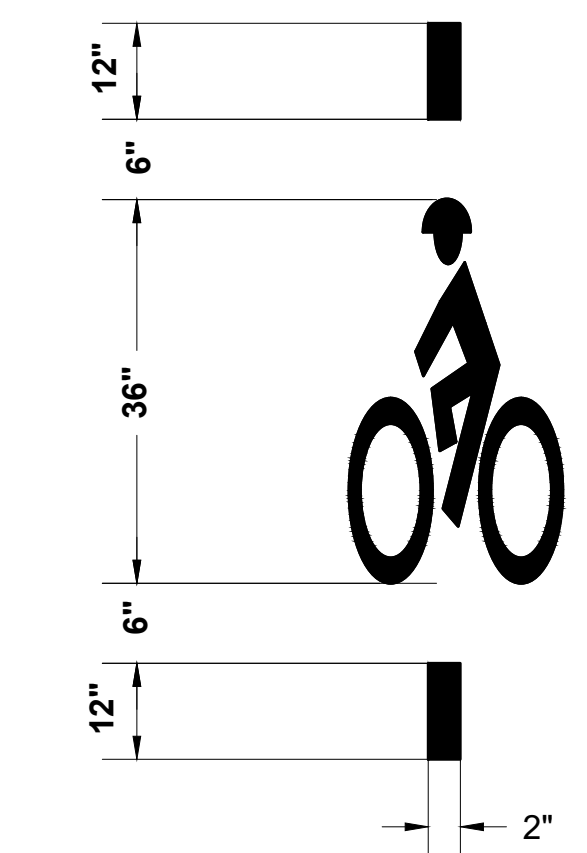


CROSSWALK AND STOP BAR MARKINGS  
NOT TO SCALE



- NOTE:
1. ALIGN EDGES OF THE BOX TO DEFINE THE SPECIFIC AREA THAT IS NOT TO BE BLOCKED.
  2. BOX DOES NOT HAVE TO BE RECTANGULAR IN SHAPE.

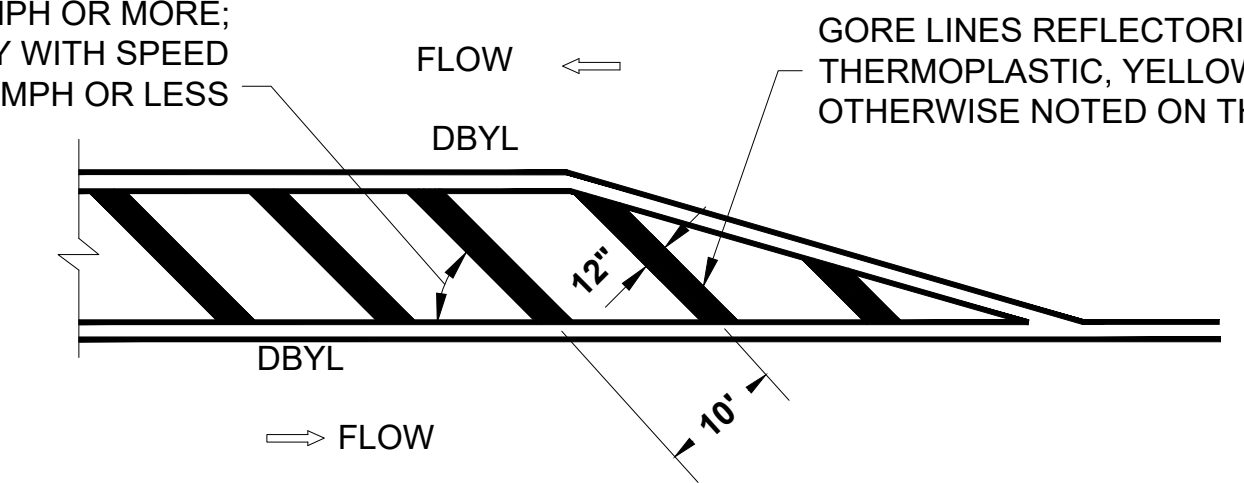
DO NOT BLOCK THE INTERSECTION MARKINGS  
NOT TO SCALE



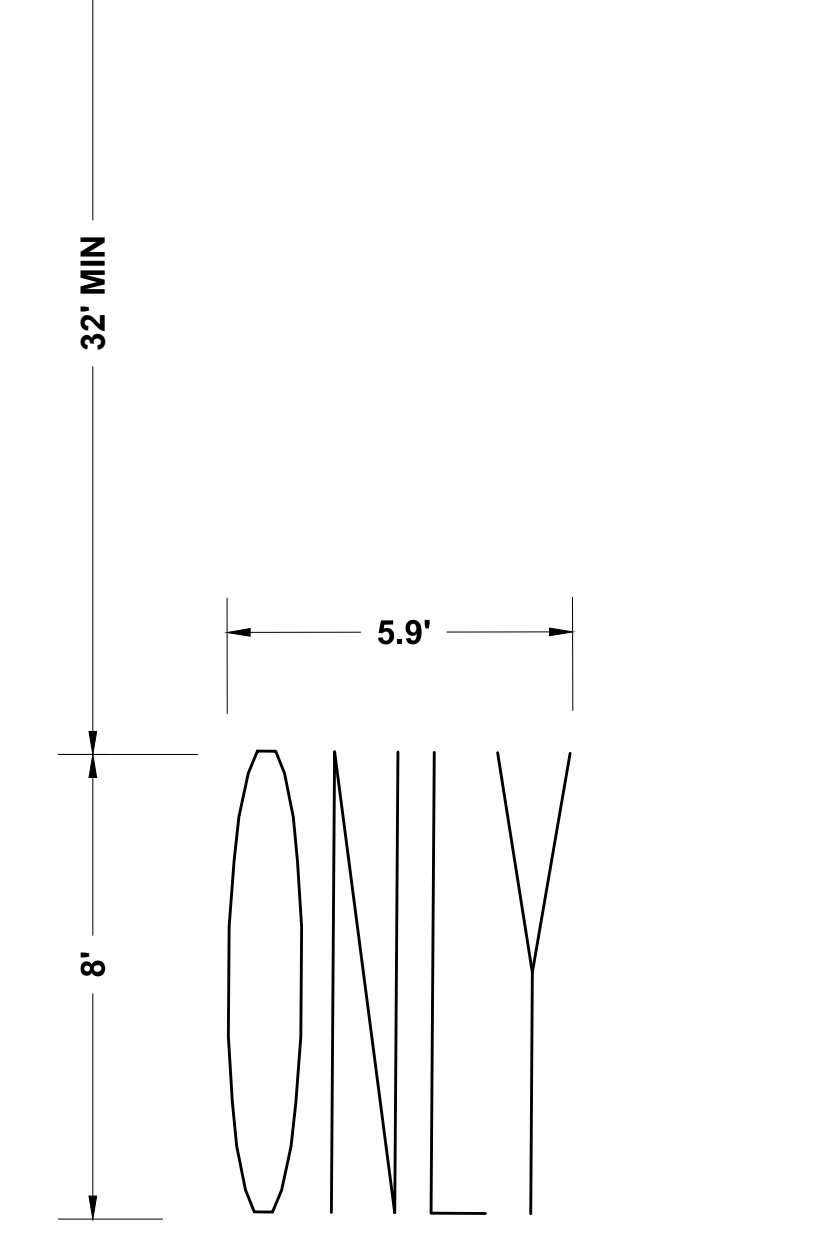
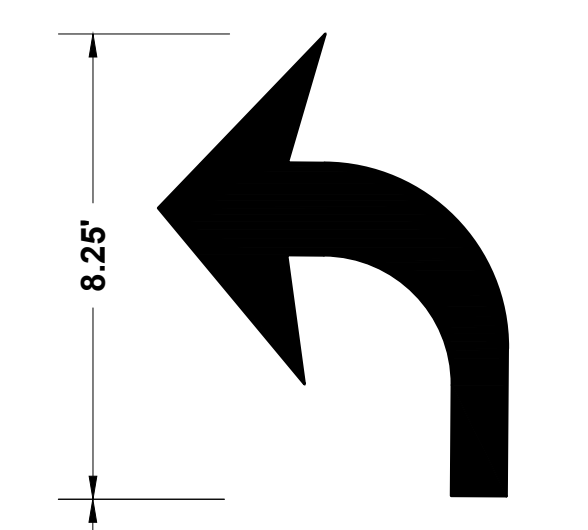
- NOTE:
1. BICYCLE DETECTOR PAVEMENT MARKINGS SHALL BE CENTERED IN THE BICYCLE DETECTOR. TRAFFIC SIGNAL PLANS SPECIFY BICYCLE DETECTOR LOCATION.

BICYCLE DETECTOR PAVEMENT MARKING DETAIL  
NOT TO SCALE

- 30° ON ROADWAY WITH SPEED LIMIT OF 45 MPH OR MORE;  
45° ON ROADWAY WITH SPEED LIMIT OF 40 MPH OR LESS



STANDARD CROSS-HATCHING  
NOT TO SCALE



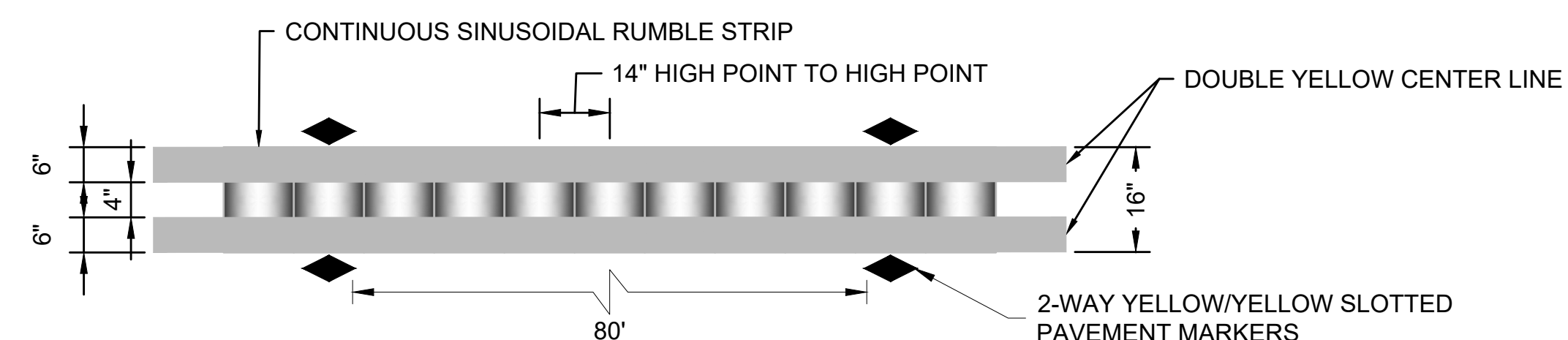
TURN LANE DESIGNATION MARKING DETAIL  
NOT TO SCALE



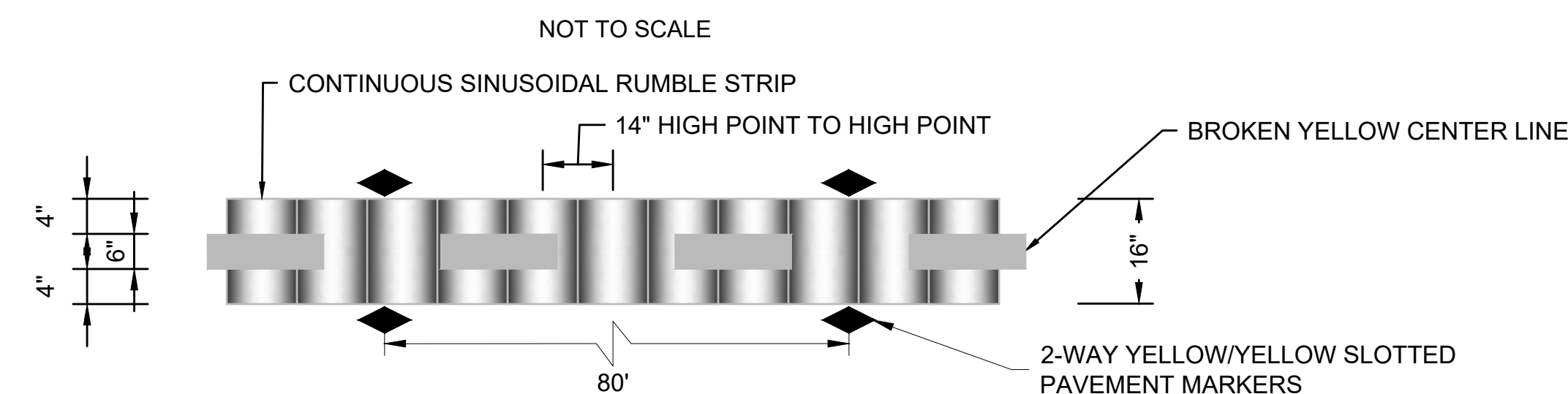
MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	103	116
PROJECT FILE NO.		608491	

TRAFFIC DETAILS  
SHEET 2 OF 2



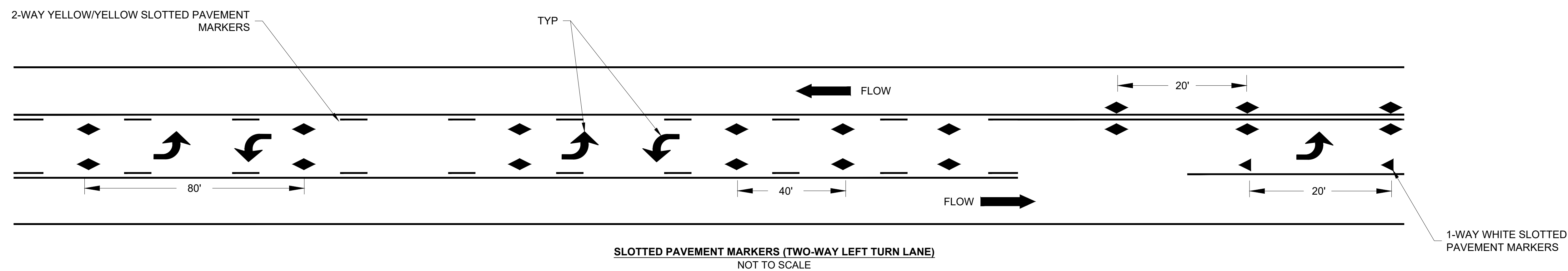
CONTINUOUS SINUSOIDAL CENTERLINE RUMBLE STRIP "TYPE C" DETAIL  
NOT TO SCALE



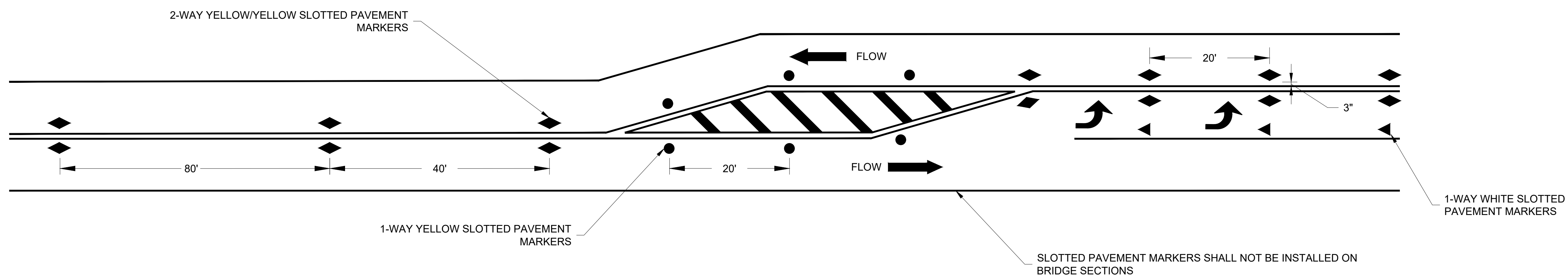
CONTINUOUS SINUSOIDAL CENTERLINE RUMBLE STRIP "TYPE C" DETAIL  
(PASSING ZONE)  
NOT TO SCALE

**CENTERLINE RUMBLE STRIP NOTES:**

1. CENTERLINE RUMBLE STRIPS SHALL BE INSTALLED ON ROUTE 16 CENTERLINE AS SHOWN ON THE PLANS.
2. RUMBLE STRIPS SHALL NOT BE INSTALLED ON BRIDGES OR WITHIN 20 FEET OF BRIDGE JOINTS.
3. HIGH POINT OF RUMBLE STRIPS SHALL BE  $\frac{1}{16}$  IN. BELOW PAVEMENT SURFACE.
4. LOW POINT OF RUMBLE STRIPS SHALL BE  $\frac{3}{8}$  IN BELOW PAVEMENT SURFACE.
5. REFER TO MASSDOT ENGINEERING DIRECTIVE E-20-007 FOR ADDITIONAL GUIDANCE REGARDING CONSTRUCTION OF RUMBLE STRIPS.



SLOTTED PAVEMENT MARKERS (TWO-WAY LEFT TURN LANE)  
NOT TO SCALE



SLOTTED PAVEMENT MARKERS (LEFT TURN LANE)  
NOT TO SCALE

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	104	116
PROJECT FILE NO.		608491	

**TTCP DETAILS  
SHEET 1 OF 6**

**TAPER LENGTH CRITERIA FOR TEMPORARY TRAFFIC CONTROL ZONES**

TYPE OF TAPER	TAPER LENGTH (L)
MERGING TAPER	AT LEAST L
SHIFTING TAPER	AT LEAST 1/2 L
SHOULDER TAPER	AT LEAST 1/4 L
ONE-LANE, TWO-WAY TRAFFIC TAPER	50 FT MIN. 100 FT MAX.
DOWNSTREAM TAPER	50 FT MIN. 100 FT MAX. PER LANE

Source: Table 6C-3 MUTCD LATEST EDITION

**FORMULAS FOR DETERMINING TAPER LENGTHS**

SPEED LIMIT (S)	TAPER LENGTH (L) FEET
40 MPH OR LESS	$L = \frac{WS^2}{60}$
45 MPH OR MORE	$L = WS$

WHERE: L = TAPER LENGTH IN FEET

W = WIDTH OF OFFSET IN FEET

S = POSTED SPEED LIMIT

Source: Table 6C-4 MUTCD LATEST EDITION

**SUGGESTED WORK ZONE WARNING SIGN SPACING**

ROAD TYPE	DISTANCE BETWEEN SIGNS **		
	A	B	C
LOCAL OR LOW VOLUME ROADWAYS	350	350	350
MOST OTHER ROADWAYS	500	500	500
FREEWAYS AND EXPRESSWAYS	1,000	1,500	2,640

\*\* DISTANCES ARE SHOWN IN FEET. THE COLUMN HEADINGS A, B, AND C ARE THE DIMENSIONS SHOWN IN THE DETAIL/TYPICAL SETUP FIGURES. THE A DIMENSION IS THE DISTANCE FROM THE TRANSITION OR POINT OF RESTRICTION TO THE FIRST SIGN. THE B DIMENSION IS THE DISTANCE BETWEEN THE FIRST AND SECOND SIGNS. THE C DIMENSION IS THE DISTANCE BETWEEN THE SECOND AND THIRD SIGNS. (THE "THIRD" SIGN IS THE FIRST ONE TYPICALLY ENCOUNTERED BY A DRIVER APPROACHING A TEMPORARY TRAFFIC CONTROL (TTC) ZONE.)

THE "THIRD" SIGN ABOVE IS TYPICALLY REFERRED TO AS AN "ADVANCE WARNING" SIGN ON THE TTCP SETUPS. THESE ADVANCE WARNING SIGNS ARE LOCATED PRIOR TO THE PROJECT LIMITS ON ALL APPROACHES (i.e. THE W20-1 SERIES (ROAD WORK XX FT) SIGNS), AND USUALLY REMAIN FOR THE DURATION OF THE PROJECT. ADDITIONAL SIGNS (i.e. "RIGHT LANE CLOSED 1 MILE" AND "LEFT LANE CLOSED 1 MILE") HAVE BEEN SHOWN IN SOME FIGURES AS EXAMPLES OF REINFORCEMENT SIGN PLACEMENT BUT ARE USED IN RARE OCCASIONS.

THE FIRST AND SECOND WARNING SIGNS ABOVE ARE REFERRED TO AS THE OPERATIONAL (DAY-TO-DAY) WORK ZONE SIGNS AND MAY BE MOVED DEPENDING ON WHERE THE SPECIFIC ROADWAY WORK FOR THAT DAY IS LOCATED.

MA-R2-10a SIGNS ARE TO BE PLACED BETWEEN THE SECOND AND THIRD SIGNS AS DESCRIBED ABOVE.

MA-R2-10a, MA-R2-10e, AND W20-1 SERIES SIGNS ARE TO BE INCLUDED ON ALL DETAILS/TYPICAL SETUPS.

Based on: Table 6C-1 MUTCD LATEST EDITION

**STOPPING SIGHT DISTANCE AS A FUNCTION OF SPEED**

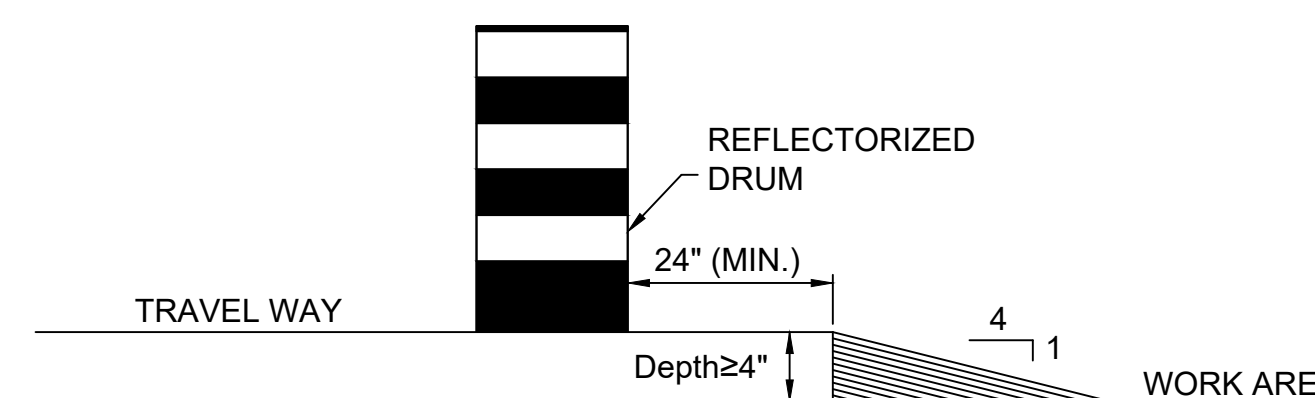
SPEED* (mph)	DISTANCE (ft)
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645
70	730
75	820

\*POSTED SPEED, OFF-PEAK 85TH-PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED

THESE VALUES MAY BE USED TO DETERMINE THE LENGTH OF LONGITUDINAL BUFFER SPACES.

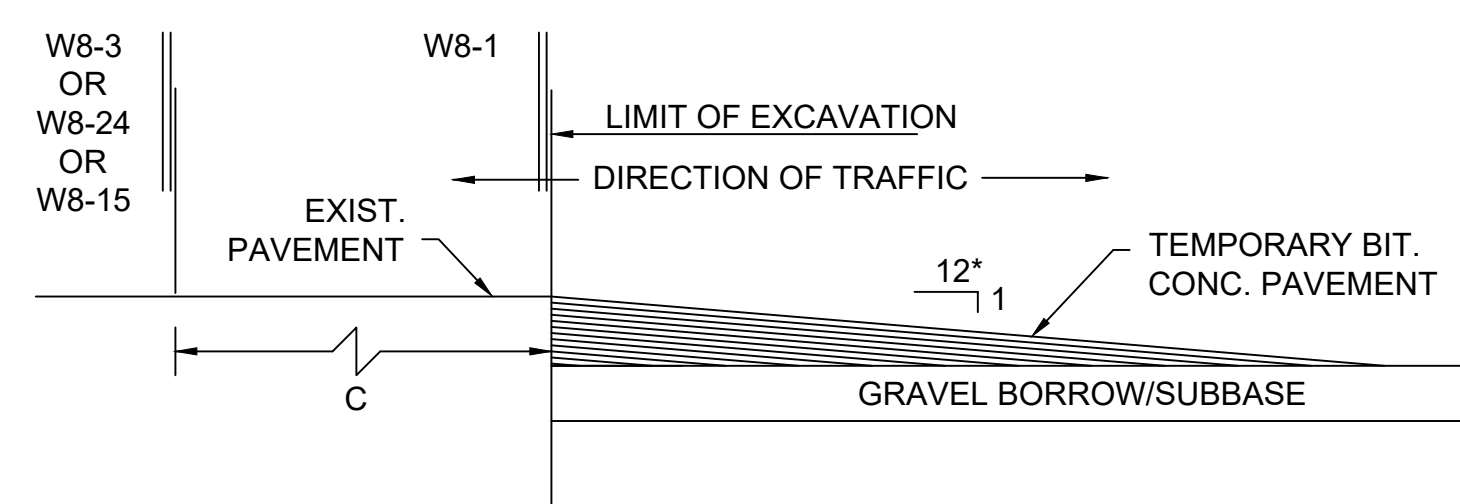
THE DISTANCES IN THE ABOVE CHART REPRESENT THE MINIMAL VALUES FOR BUFFER SPACING.

Source: Table 6C-2 MUTCD LATEST EDITION



**LATERAL DROP-OFF DETAIL**

NOT TO SCALE



**LONGITUDINAL DROP-OFF DETAIL**

NOT TO SCALE

\* - INCREASE SLOPE RATIO FOR HIGHER SPEEDS (50:1)

**TEMPORARY TRAFFIC CONTROL NOTES**

- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR TRAFFIC MANAGEMENT AND TO COMPLY WITH CONDITIONS OUTLINED WITHIN THE SPECIFICATIONS AND MASSDOT HIGHWAY DIVISION STANDARD DETAILS AND DRAWINGS FOR THE DEVELOPMENT OF TRAFFIC MANAGEMENT PLANS MANUAL.
- CONTRACTOR SHALL SUBMIT TO THE RESIDENT ENGINEER TRAFFIC MANAGEMENT PLANS FOR REVIEW AND APPROVAL BY MASSDOT HIGHWAY DIVISION. CONTRACTOR SHALL COORDINATE THE CONSTRUCTION EFFORT WITH OTHER PROJECTS IN THE VICINITY IN ORDER TO MINIMIZE POTENTIAL TRAFFIC IMPACTS.
- PLACEMENT OF CONSTRUCTION SIGNING, TRAFFIC CONTROL DEVICES, AND TEMPORARY PAVEMENT MARKINGS FOR EACH SET UP SHALL BE COMPLETED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- TYPICAL DAYTIME WORK HOURS ARE FROM 9:00 AM TO 3:30 PM ON WEEKDAYS, UNLESS OTHERWISE PERMITTED BY MASSDOT HIGHWAY DIVISION. ALL WORK SCHEDULES SHALL BE PRE-APPROVED BY THE DEPARTMENT PRIOR TO BEGINNING WORK.

**TEMPORARY TRAFFIC CONTROL NOTES - CHANNELIZATION**

- CHANNELIZATION SHALL BE ACCOMPLISHED THROUGH THE USE OF REFLECTORIZED PLASTIC DRUMS IN ACCORDANCE WITH THE CURRENT M.U.T.C.D. THE FIRST 10 DRUMS OF A TAPER SHALL BE MOUNTED WITH SEQUENTIAL FLASHING TYPE A LIGHTS.
- ALL DRUMS SHALL BE PLACED AND MOVED AS NECESSARY TO MAINTAIN ADEQUATE ABUTTER ACCESS AT ALL TIMES. WORK MAY REQUIRE ADDITIONAL SIGNS, DRUMS, AND OTHER TRAFFIC CONTROL DEVICES.
- THE SPACING BETWEEN CHANNELIZATION DEVICES (DRUMS OR CONES) SHALL NOT EXCEED 45 FEET. THE MINIMUM SPACING SHALL BE 20 FEET.

**TEMPORARY TRAFFIC CONTROL NOTES - GRADE DIFFERENCES**

- WHERE THERE IS A LONGITUDINAL DIFFERENCE IN ELEVATION BETWEEN EXISTING PAVEMENT AND MILLED OR NEW PAVEMENT, THE CONTRACTOR SHALL PATCH A TEMPORARY HMA WEDGE WITH A 12:1 (OR FLATTER) SLOPE FOR A SMOOTH TRANSITION.
- CROSS-SECTIONAL GRADE DIFFERENCE IN EXCESS OF 2" DURING NON-WORKING HOURS WILL REQUIRE DELINEATION BY USE OF REFLECTORIZED DRUMS OR CONES, AS DIRECTED BY MASSDOT HIGHWAY DIVISION.
- CROSS SECTIONAL GRADE DIFFERENCES IN EXCESS OF 4" DURING NON-WORKING HOURS SHALL BE PROTECTED BY BACKFILLING WITH A WEDGE OF EARTHWORK TO BE COMPACTED AT 4:1 SLOPE AND WILL ALSO REQUIRE DELINEATION OF DRUMS.

**GENERAL NOTES:**

- ALL TEMPORARY TRAFFIC CONTROL WORK SHALL CONFORM TO THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND ALL REVISIONS, UNLESS SUPERCEDED BY THESE PLANS.
- ALL SIGN LEGENDS, BORDERS, AND MOUNTING SHALL BE IN ACCORDANCE WITH THE MUTCD.
- TEMPORARY CONSTRUCTION SIGNING AND ALL OTHER TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF ANY WORK.
- TEMPORARY CONSTRUCTION SIGNING, BARRICADES, AND ALL OTHER NECESSARY WORK ZONE TRAFFIC CONTROL DEVICES SHALL BE REMOVED FROM THE HIGHWAY OR COVERED WHEN THEY ARE NOT REQUIRED FOR CONTROL OF TRAFFIC.
- SIGNS AND SIGN SUPPORTS LOCATED ON OR NEAR THE TRAVELED WAY, CHANNELIZING DEVICES, BARRIERS, AND CRASH ATTENUATORS MUST PASS THE CRITERIA SET FORTH IN NCHRP REPORT 350, "RECOMMENDED PROCEDURES FOR THE SAFETY PERFORMANCE EVALUATION OF HIGHWAY FEATURES". BARRIERS AND CRASH ATTENUATORS MUST ALSO MEET THE MINIMUM REQUIREMENTS OF THE AASHTO "MANUAL ON ASSESSING SAFETY HARDWARE" (MASH) AT TEST LEVEL (TL) 3 OR HIGHER.
- THE FIRST TEN PLASTIC DRUMS OF A TAPER SHALL BE MOUNTED WITH TYPE A SEQUENTIAL FLASHING LIGHTS.
- THE ADVISORY SPEED LIMIT, IF REQUIRED, SHALL BE DETERMINED BY THE ENGINEER.
- DISTANCES ARE A GUIDE AND MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.
- MAXIMUM SPACING OF TRAFFIC DEVICES IN A TAPER (DRUMS OR CONES) IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH.
- MINIMUM LANE WIDTH IS TO BE 11 FEET (3.3m) UNLESS OTHERWISE SHOWN. MINIMUM LANE WIDTH TO BE MEASURED FROM THE EDGE OF DRUMS OR BARRIER.
- ALL SIGNS SHALL BE MOUNTED ON THEIR OWN STANDARD SIGN SUPPORTS.

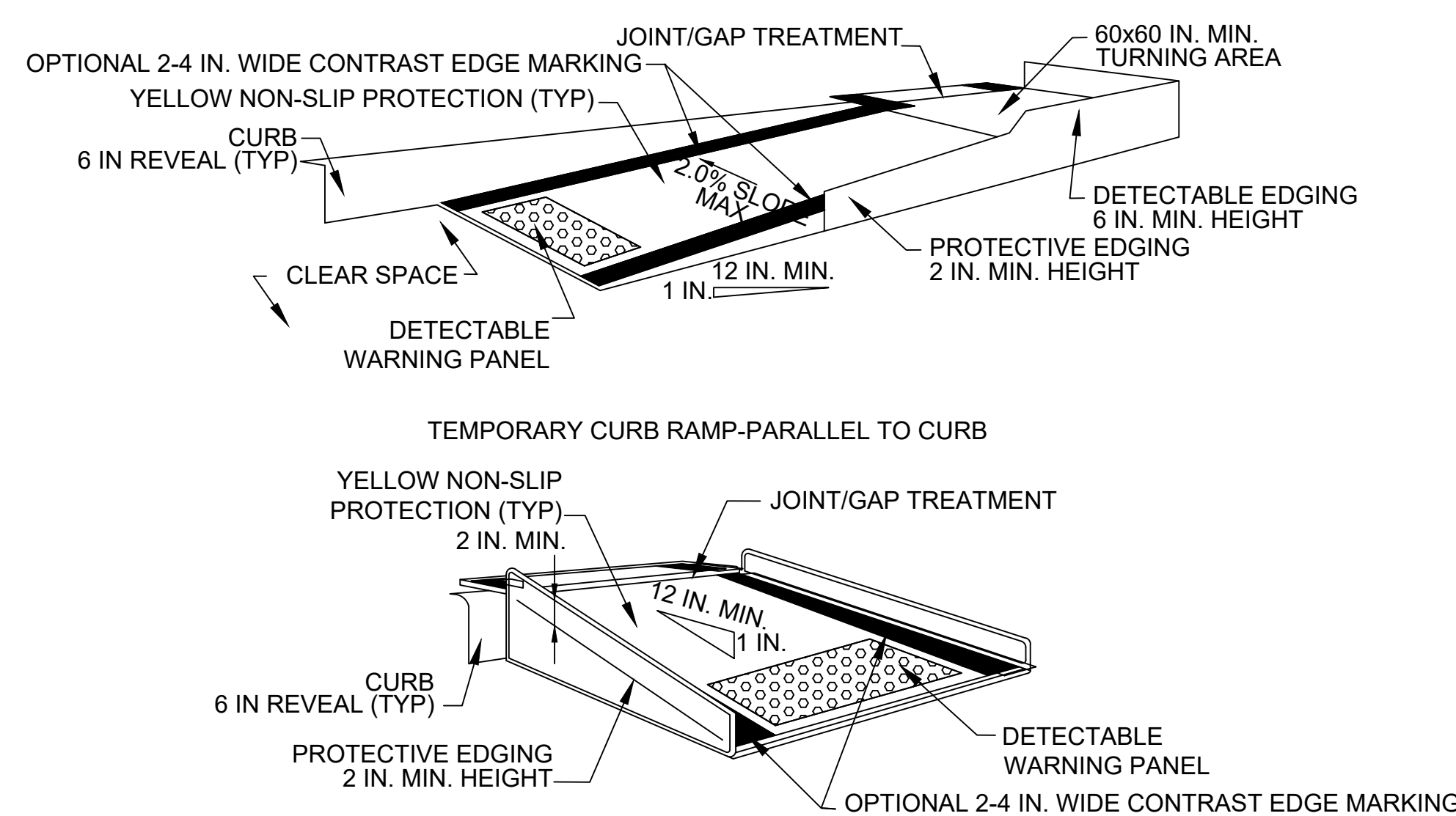
**LEGEND:**

- REFLECTORIZED PLASTIC DRUM OR 36" CONE
- P/F POLICE/FLAGGER DETAIL
- ▨ TYPE III BARRICADE
- CHANGEABLE MESSAGE SIGN
- ➡ ARROW BOARD
- ▨ WORK ZONE
- ➡ DIRECTION OF TRAFFIC
- ▨ IMPACT ATTENUATOR
- MEDIAN BARRIER
- ▨ MEDIAN BARRIER WITH WARNING LIGHTS
- ▨ WORK VEHICLE
- ▨ TRUCK MOUNTED ATTENUATOR
- ➡ TRAFFIC OR PEDESTRIAN SIGNAL
- SIGN



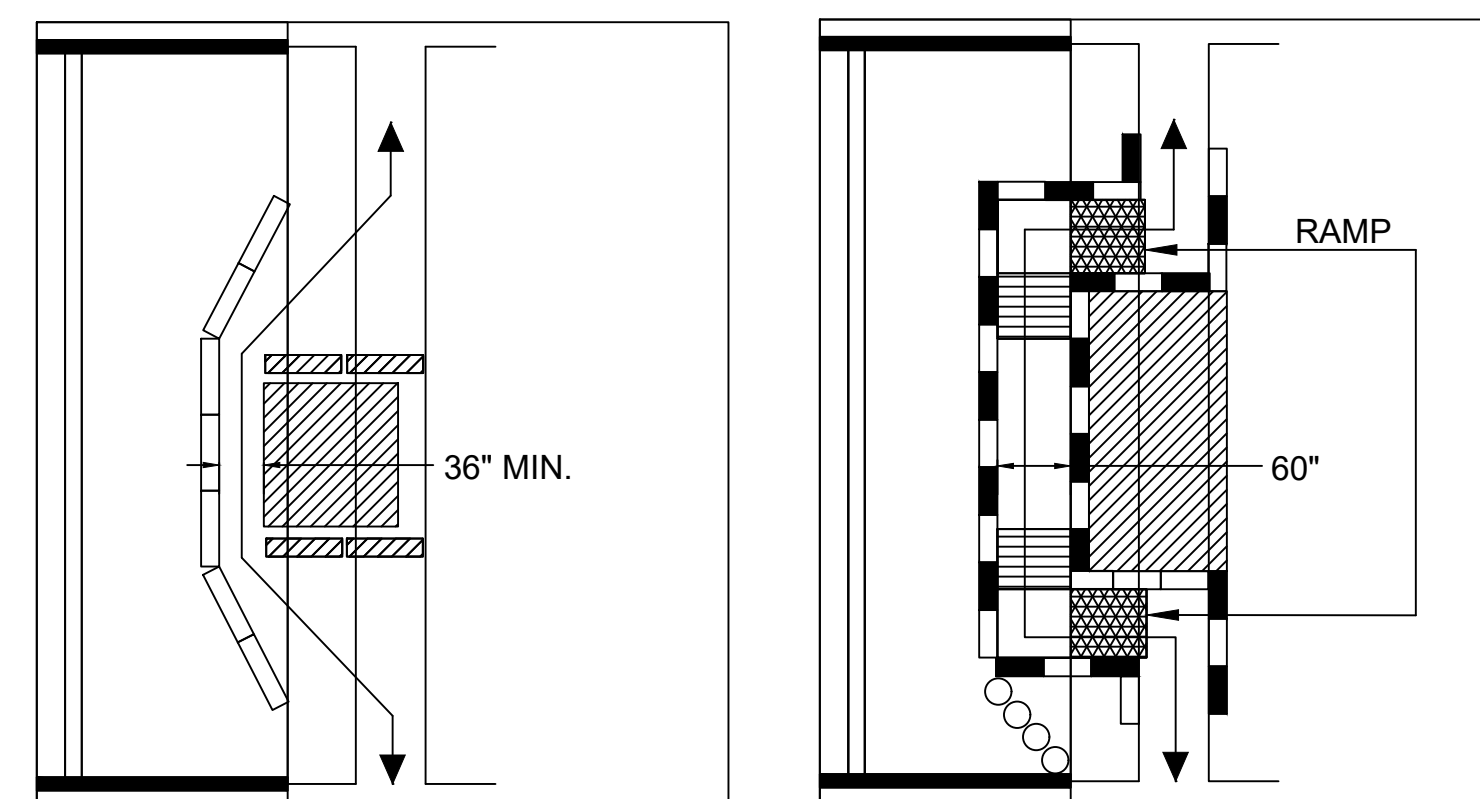
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	105	116
PROJECT FILE NO.		608491	

PEDESTRIAN DETAILS



NOTES:

- CURB RAMPS SHALL BE 60 IN. MINIMUM WIDTH WITH A FIRM, STABLE, AND NON-SLIP SURFACE.
- PROTECTIVE EDGING WITH A 2 IN. MINIMUM HEIGHT SHALL BE INSTALLED WHEN THE CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6 IN. OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN THE CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3 IN. OR MORE.
- PROTECTABLE EDGING WITH 6 IN. MINIMUM HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
- THE CURB RAMP WALKWAY AND LANDING AREA SURFACE SHALL BE OF A SOLID CONTINUOUS CONTRASTING COLOR ABUTTING UP TO THE EXISTING SIDEWALK.
- CURB RAMPS AND LANDINGS SHOULD HAVE A 1:50 (2%) MAX CROSS-SLOPE.
- CLEAR SPACE OF 48x48 IN. MINIMUM SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
- WATER FLOW IN THE GUTTER SYSTEM SHALL HAVE MINIMAL RESTRICTION.
- LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 0.5 IN. WIDTH.
- CHANGES BETWEEN SURFACE HEIGHTS SHOULD NOT EXCEED 0.5 IN. LATERAL EDGES SHOULD BE VERTICAL UP TO 0.25 IN. HIGH, AND BEVELED AT 1:2 BETWEEN 0.25 IN. AND 0.5 IN. HEIGHT.
- IF A TEMPORARY PEDESTRIAN RAMP LEADS TO A CROSSWALK, THEN A DETECTABLE WARNING PAD MUST BE ADHERED TO THE BASE OF THE RAMP. IF IT LEADS TO A PROTECTED PEDESTRIAN BYPASS THAT DOES NOT CONFLICT WITH VEHICULAR TRAFFIC, THEN A PAD SHALL NOT BE INSTALLED ON THE RAMP.

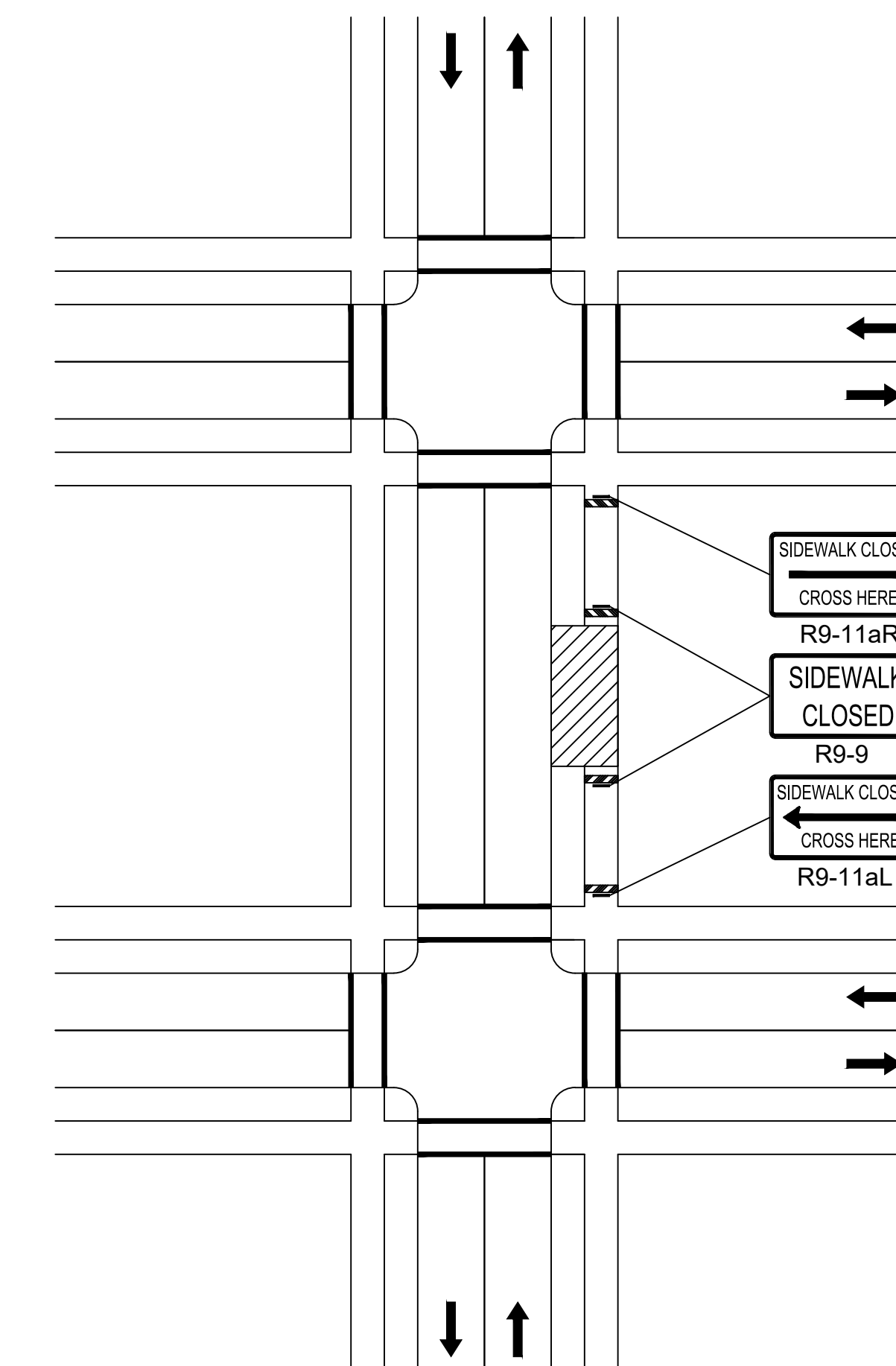


- WHEN EXISTING PEDESTRIAN FACILITIES ARE DISRUPTED, CLOSED, OR RELOCATED IN A TTC ZONE, TEMPORARY FACILITIES SHALL BE PROVIDED AND THEY SHALL BE DETECTABLE AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH THE FEATURES PRESENT IN THE EXISTING PEDESTRIAN FACILITY.
- A PEDESTRIAN CHANNELIZING DEVICE THAT IS DETECTABLE BY A PERSON WITH A VISUAL DISABILITY TRAVELING WITH THE AID OF A LONG CANE SHALL BE PLACED ACROSS THE FULL WIDTH OF THE CLOSED SIDEWALK.
- WHEN USED, TEMPORARY RAMPS SHALL COMPLY WITH AMERICANS WITH DISABILITIES ACT (SEE FIGURES PED-1 & PED-2)
- THE ALTERNATE PATHWAY SHOULD HAVE A SMOOTH CONTINUOUS HARD SURFACE FOR THE ENTIRE LENGTH OF THE TEMPORARY PEDESTRIAN FACILITY.
- THE PROTECTIVE REQUIREMENTS OF A TTC SITUATION HAVE PRIORITY IN DETERMINING THE NEED FOR TEMPORARY TRAFFIC BARRIERS AND THEIR USE IN THIS SITUATION SHOULD BE BASED ON ENGINEERING HAND-TRAILING EDGE
- AUDIBLE INFORMATION DEVICES SHOULD BE CONSIDERED WHERE MIDBLOCK CLOSINGS AND CHANGED CROSSWALK AREAS CAUSE INADEQUATE COMMUNICATION TO BE PROVIDED TO PEDESTRIANS WHO HAVE VISUAL DISABILITIES.

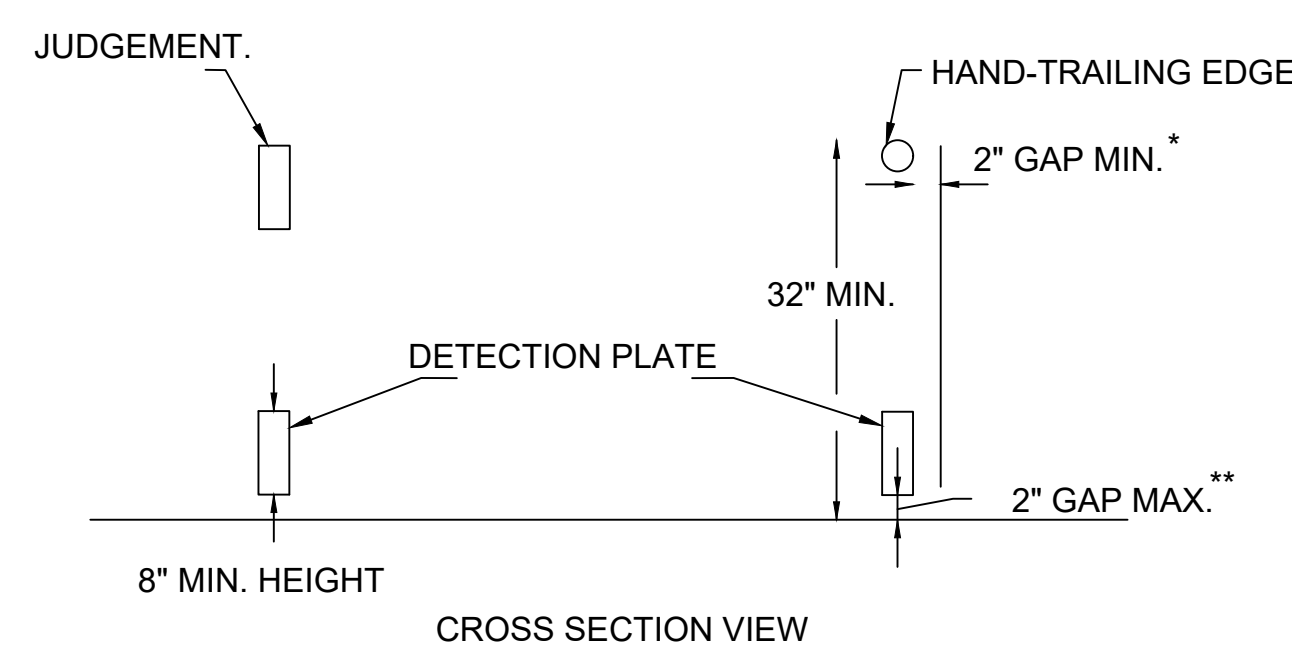
AUDIBLE DEVICES

FOR LONG TERM SIDEWALK CLOSURES (AT A MINIMUM OVERNIGHT) A FORM OF SPEECH MESSAGING FOR PEDESTRIANS WITH VISUAL DISABILITIES SHALL BE PROVIDED. AUDIBLE INFORMATION DEVICES SUCH AS DETECTABLE BARRIERS OR BARRICADES AND OTHER PASSIVE PEDESTRIAN ACTIVATION (MOTION ACTIVATED) DEVICES SHOULD BE CONSIDERED FOR THESE CASES. THESE AUDIBLE DEVICES CAN BE MOUNTABLE OR STAND ALONE.

NOTE: ADA COMPLIANT ACCESS SHALL BE MAINTAINED AT ALL TIMES, INCLUDING PEDESTRIAN GUIDANCE SYSTEMS AT WORK ZONES. ANY PEDESTRIAN DETOURS OR BYPASSES SHALL INCLUDE ADA COMPLIANT ROUTES WITH PROPER BARRICADES, RAILINGS, RAMPS, SIGNAGE, AND ANY OTHER EQUIPMENT NECESSARY FOR THE ROUTE.



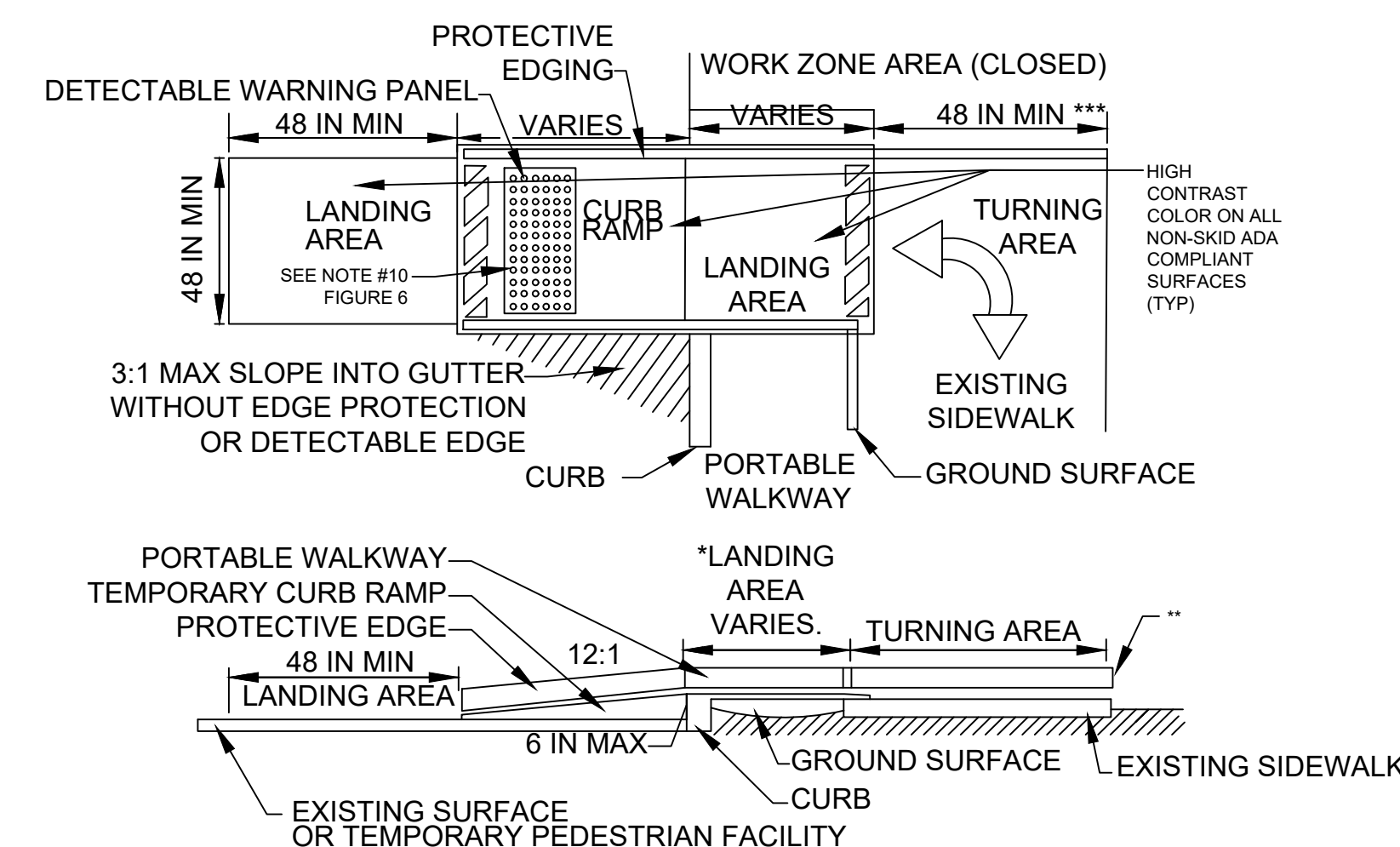
NOTE: IF A MINIMUM WIDTH OF 48" OF SOLID SMOOTH UNOBSTRUCTED SURFACE REMAINS ALONG THE WORK AREA THEN THE DETAIL CAN BE DISREGARDED. DELINEATION OF THE WORK AREA WILL STILL BE REQUIRED. ALL PEDESTRIAN DETOUR ROUTES SHALL BE ADA/MAAB COMPLIANT IN THEIR ENTIRETY.



PEDESTRIAN CHANNELIZING DEVICE

NOTES:

- \*THERE SHALL BE A 2 INCH GAP BETWEEN THE HAND-TRAILING EDGE AND ITS SUPPORT.
- \*\*A MAXIMUM 2 INCH GAP BETWEEN THE BOTTOM OF THE BOTTOM RAIL AND THE SURFACE MAY BE USED TO PROVIDE DRAINAGE.



TEMPORARY CURB RAMP

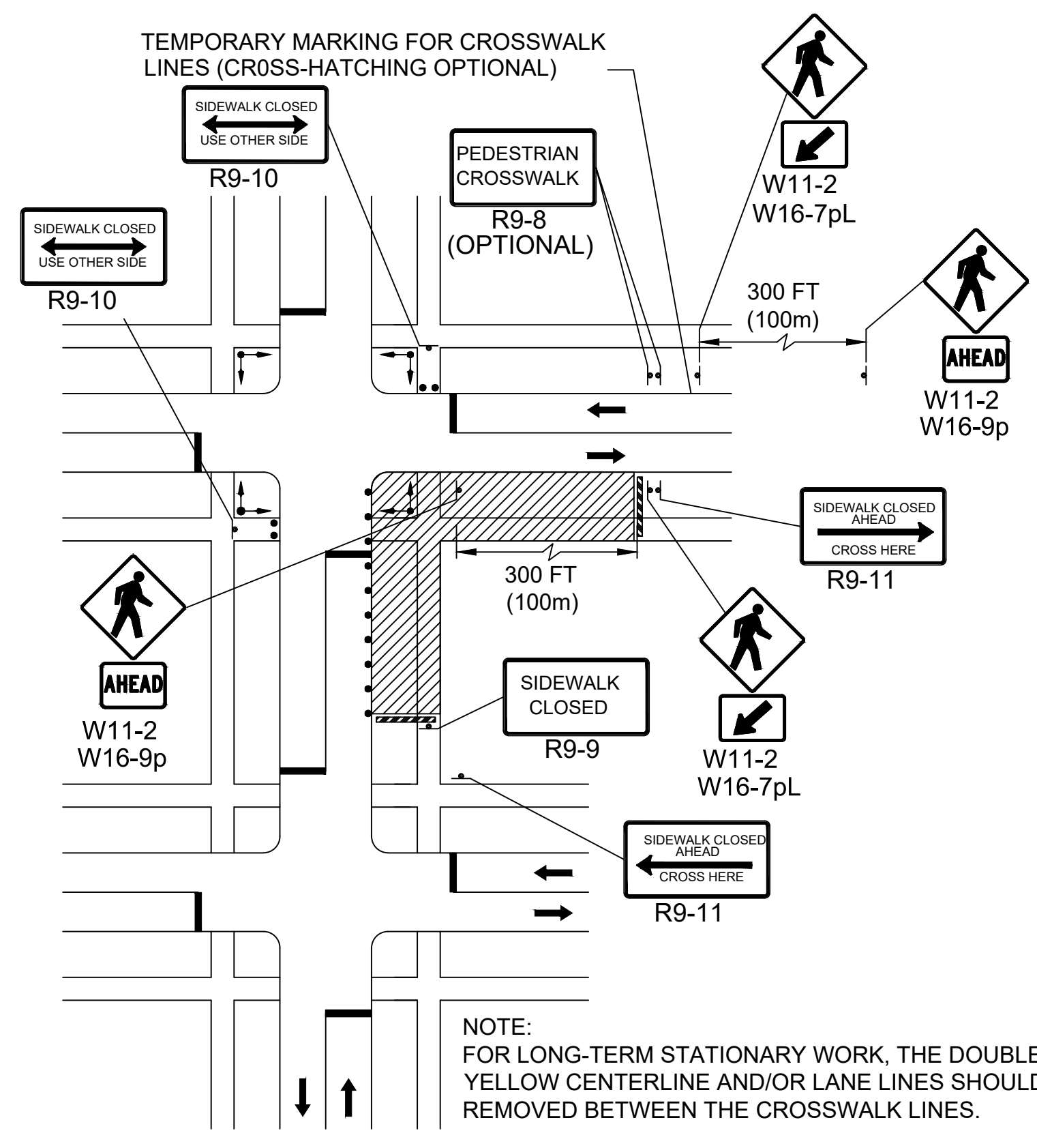
- \* LANDING AREA USED TO OVERLAP NON-ADA COMPLIANT SURFACES.
- \*\* DETECTABLE EDGE REMOVED IF A CONTINUOUS SIDEWALK.
- \*\*\* 60 IN. IF AN OBSTRUCTION IS AT BACK OF SIDEWALK.

**MENDON  
ROUTE 16**

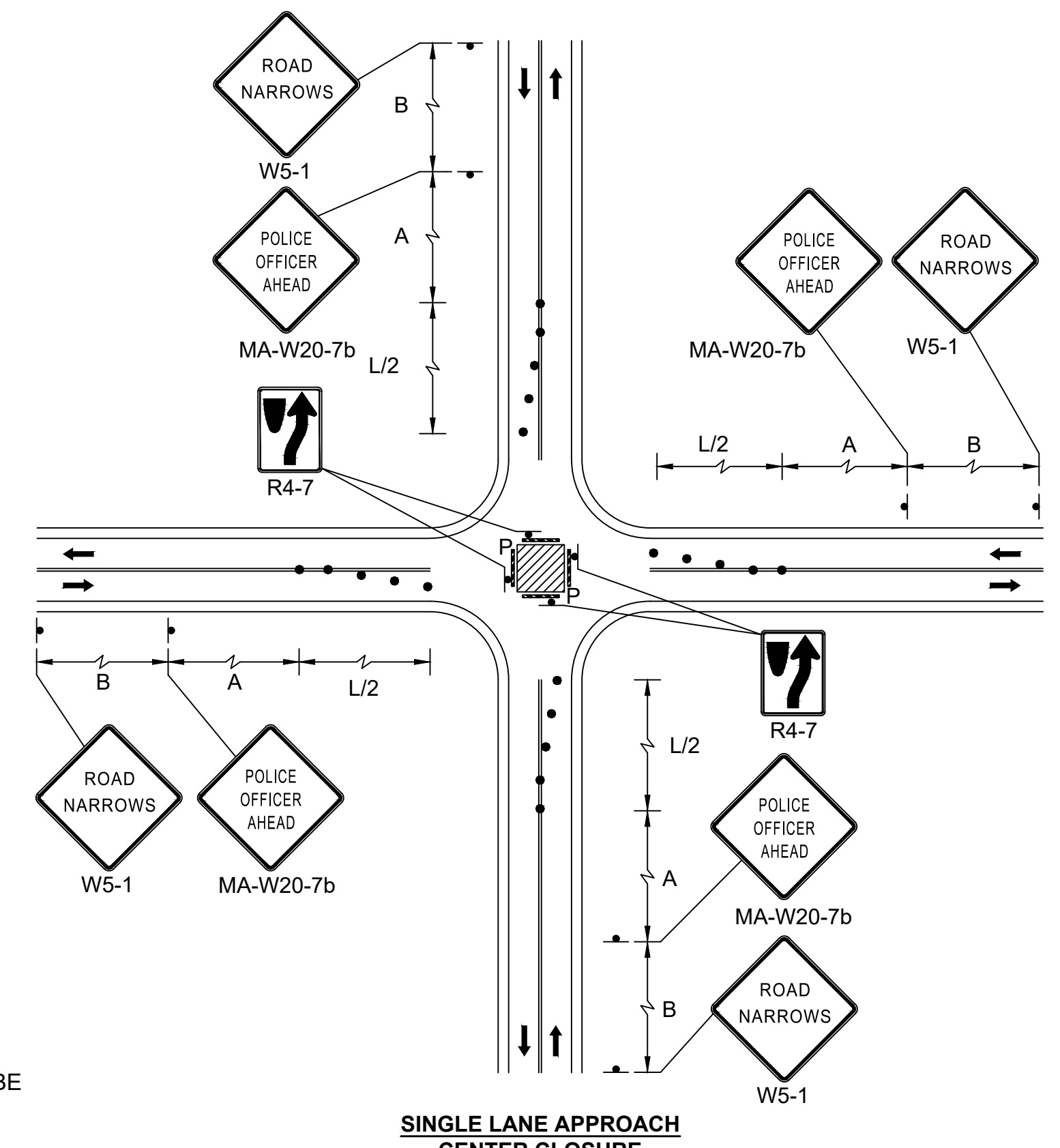
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	106	116
PROJECT FILE NO.		608491	

**TTCP DETAILS  
SHEET 3 OF 6**

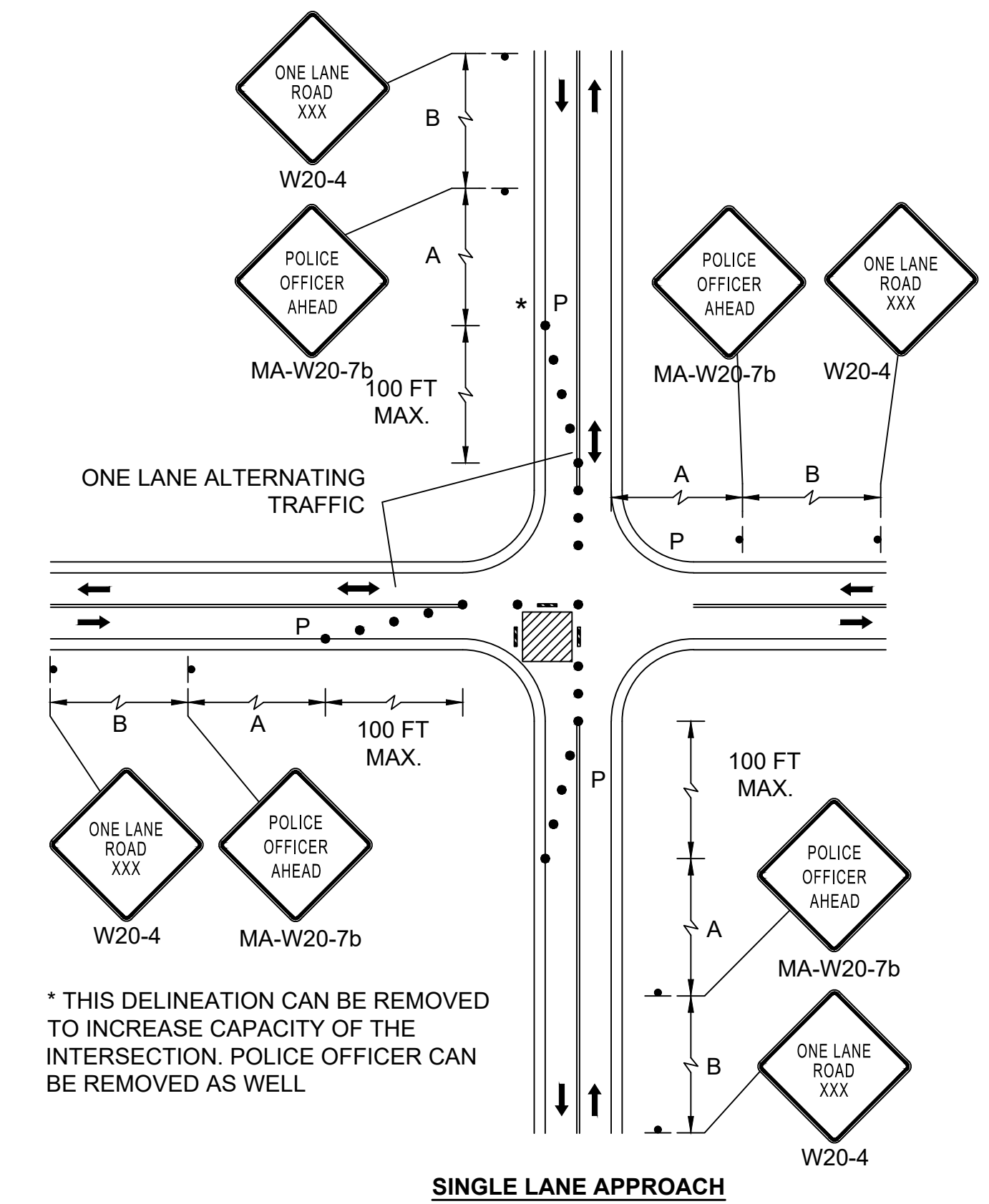
DETAIL IS TO BE USED IN CONJUNCTION WITH THE PROPOSED LANE CLOSURE DETAILS AND DURING CONSTRUCTION STAGING, AS DIRECTED BY THE ENGINEER. ADJUSTMENTS TO SIGNING AND DELINEATION MAY BE REQUIRED.



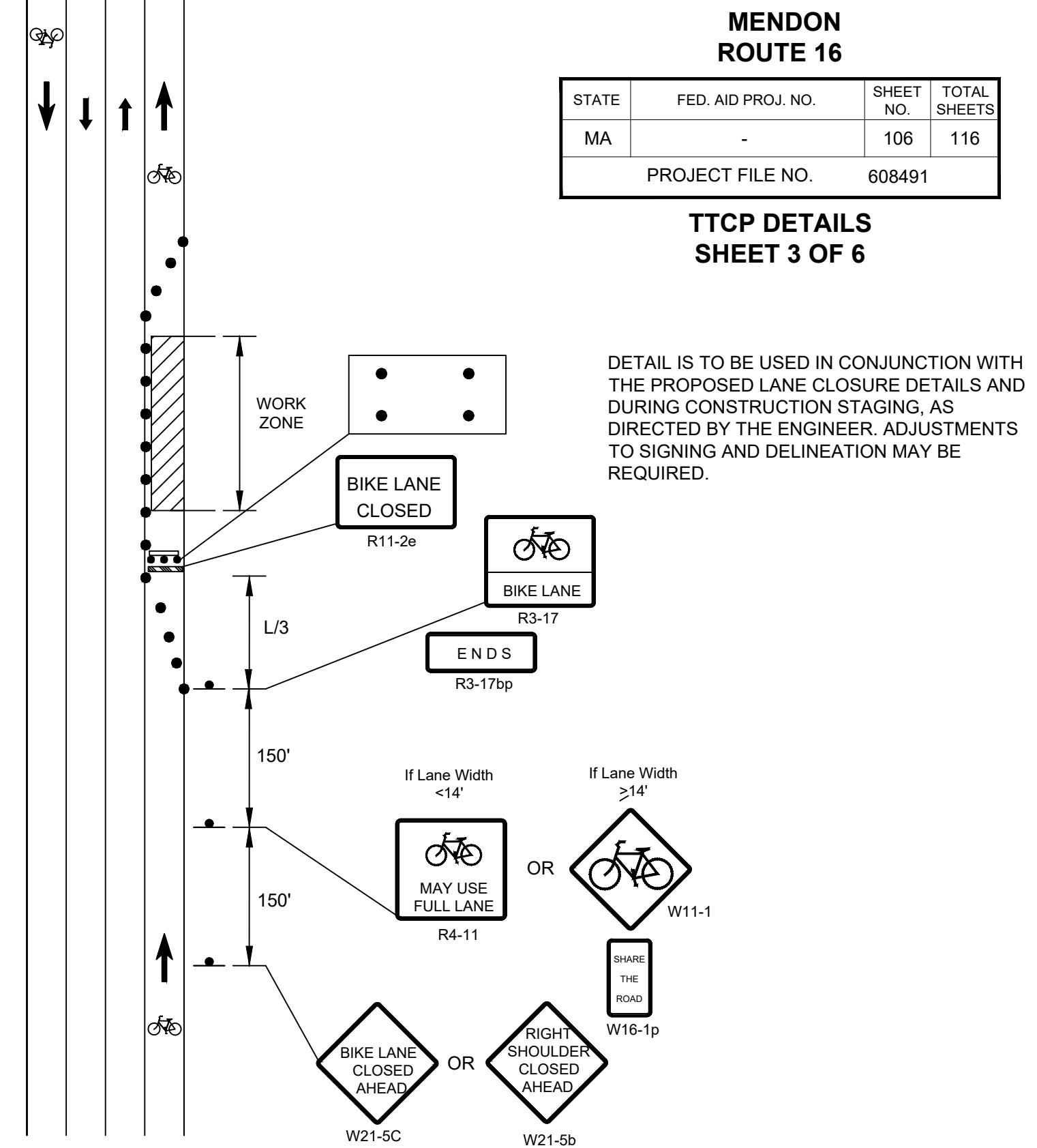
**PEDESTRIAN DETOUR  
NOT TO SCALE**



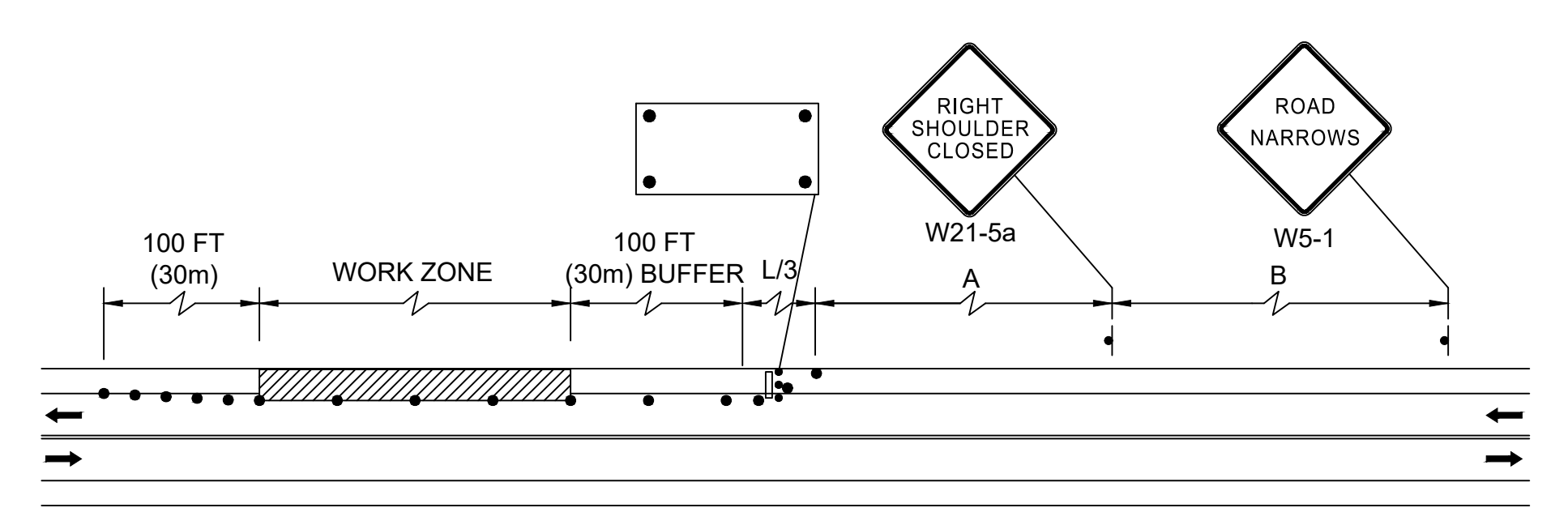
**SINGLE LANE APPROACH  
CENTER CLOSURE  
NOT TO SCALE**



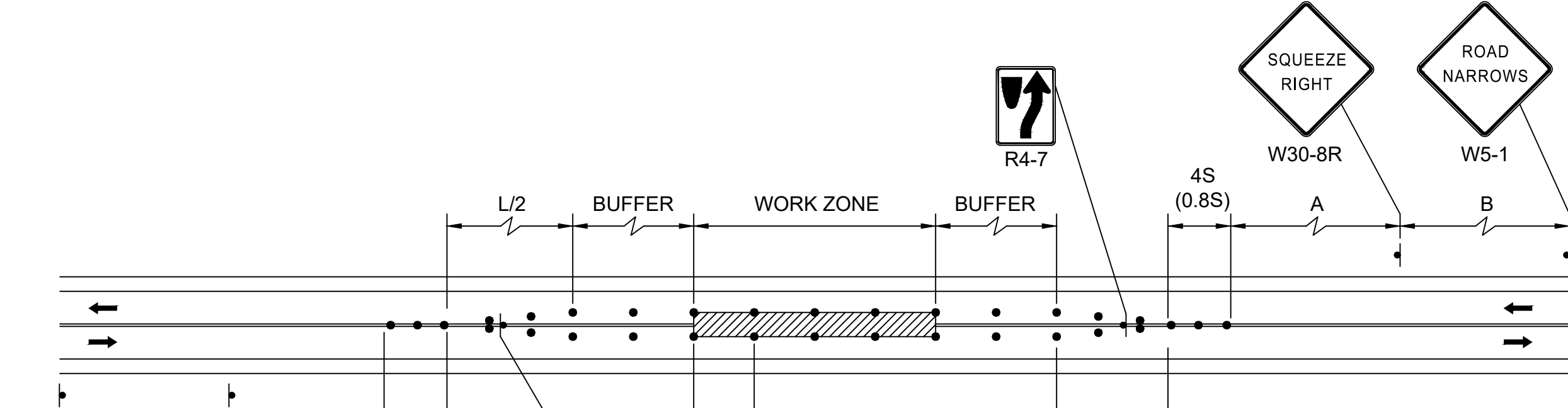
**SINGLE LANE APPROACH  
ONE QUADRANT CLOSURE  
NOT TO SCALE**



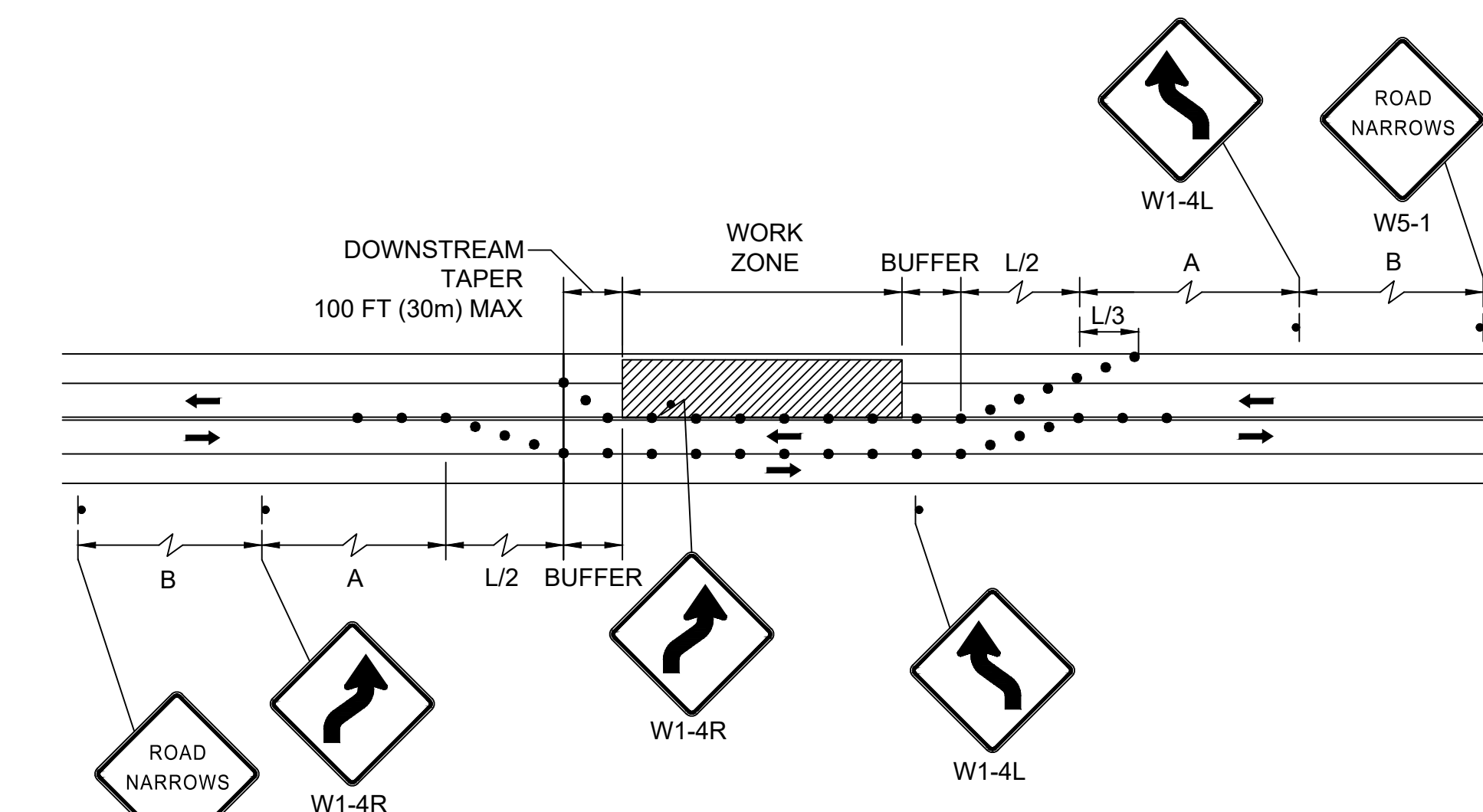
**BICYCLE LANE CLOSURE WITHOUT  
DETOUR  
NOT TO SCALE**



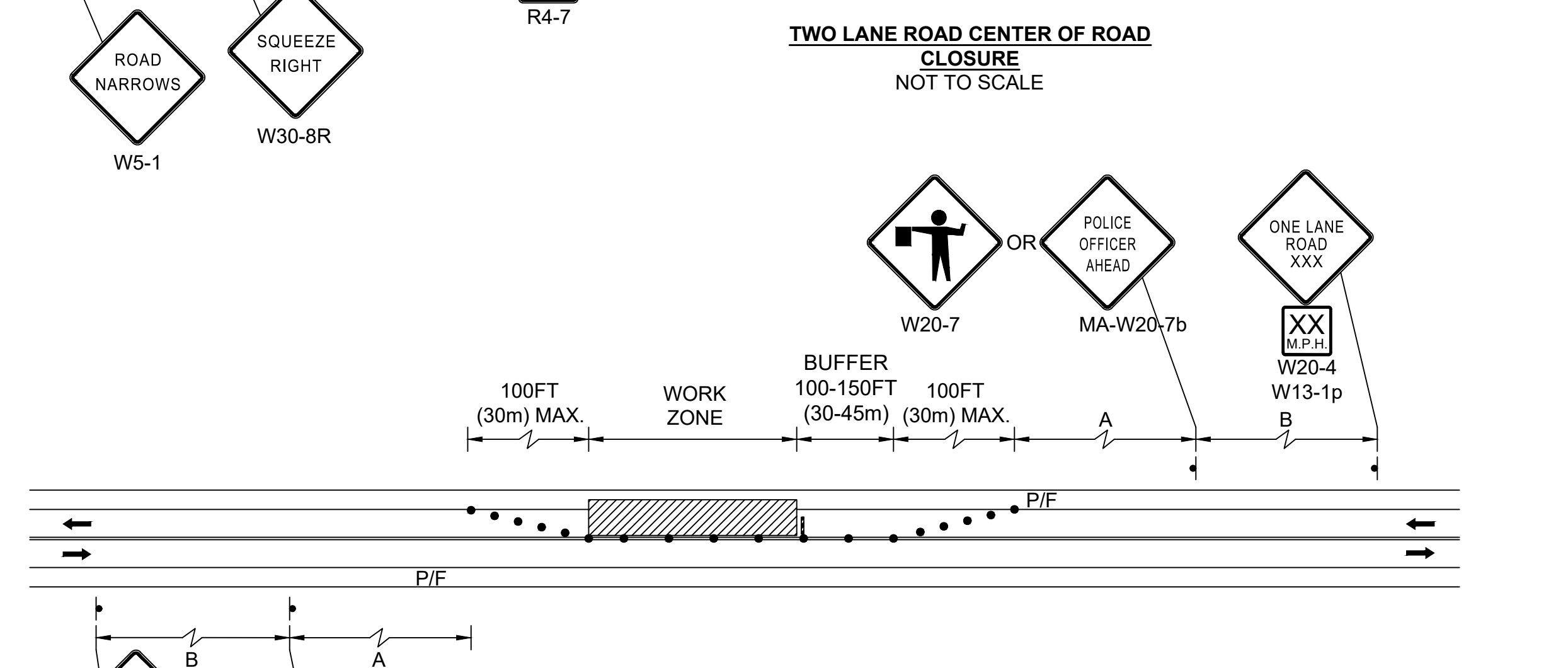
**TWO LANE ROAD SHOULDER CLOSED  
NOT TO SCALE**



**TWO LANE ROAD CENTER OF ROAD  
CLOSURE  
NOT TO SCALE**



**TWO LANE ROAD SHOULDER CLOSED  
AND TRAVEL LANE CLOSED  
NOT TO SCALE**



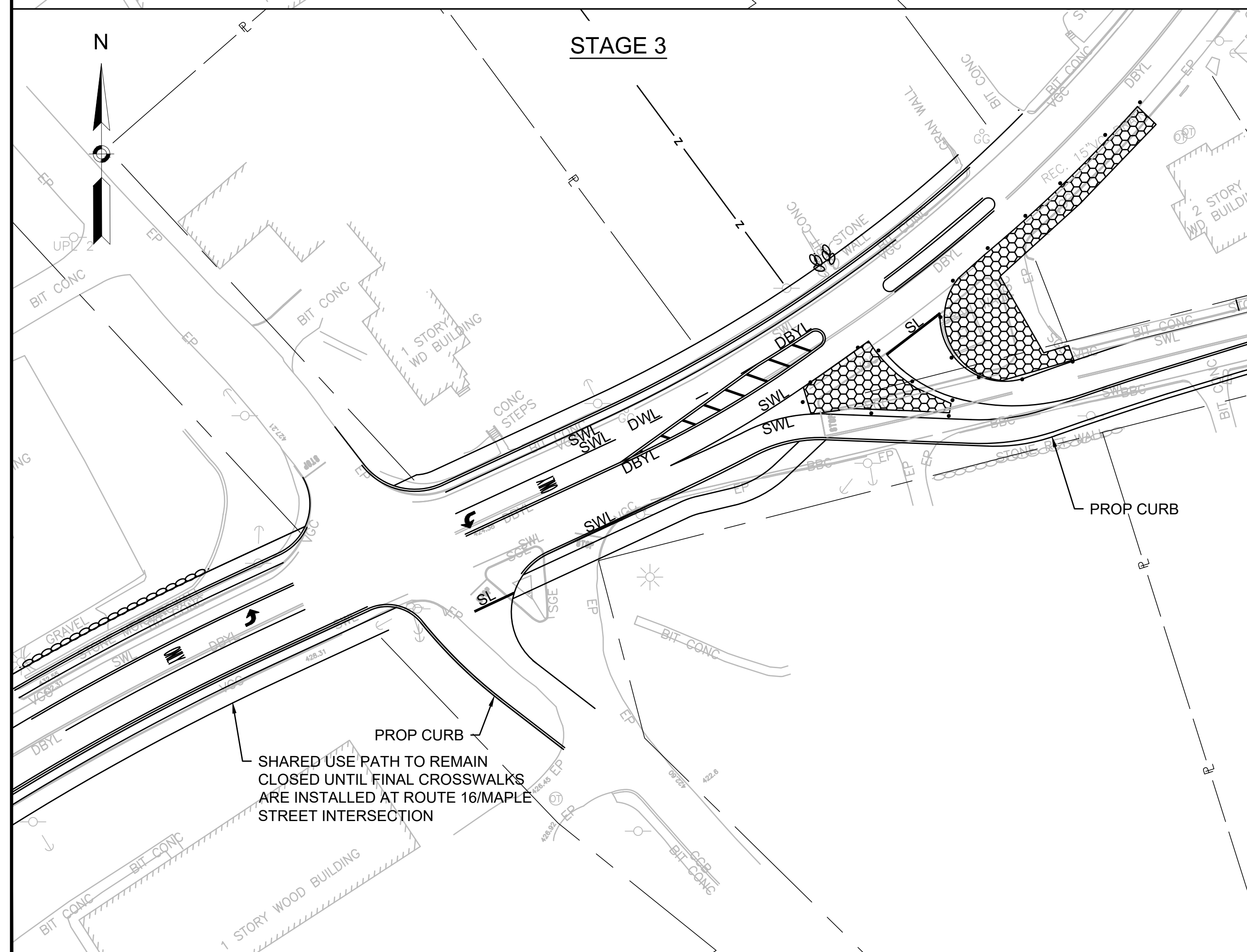
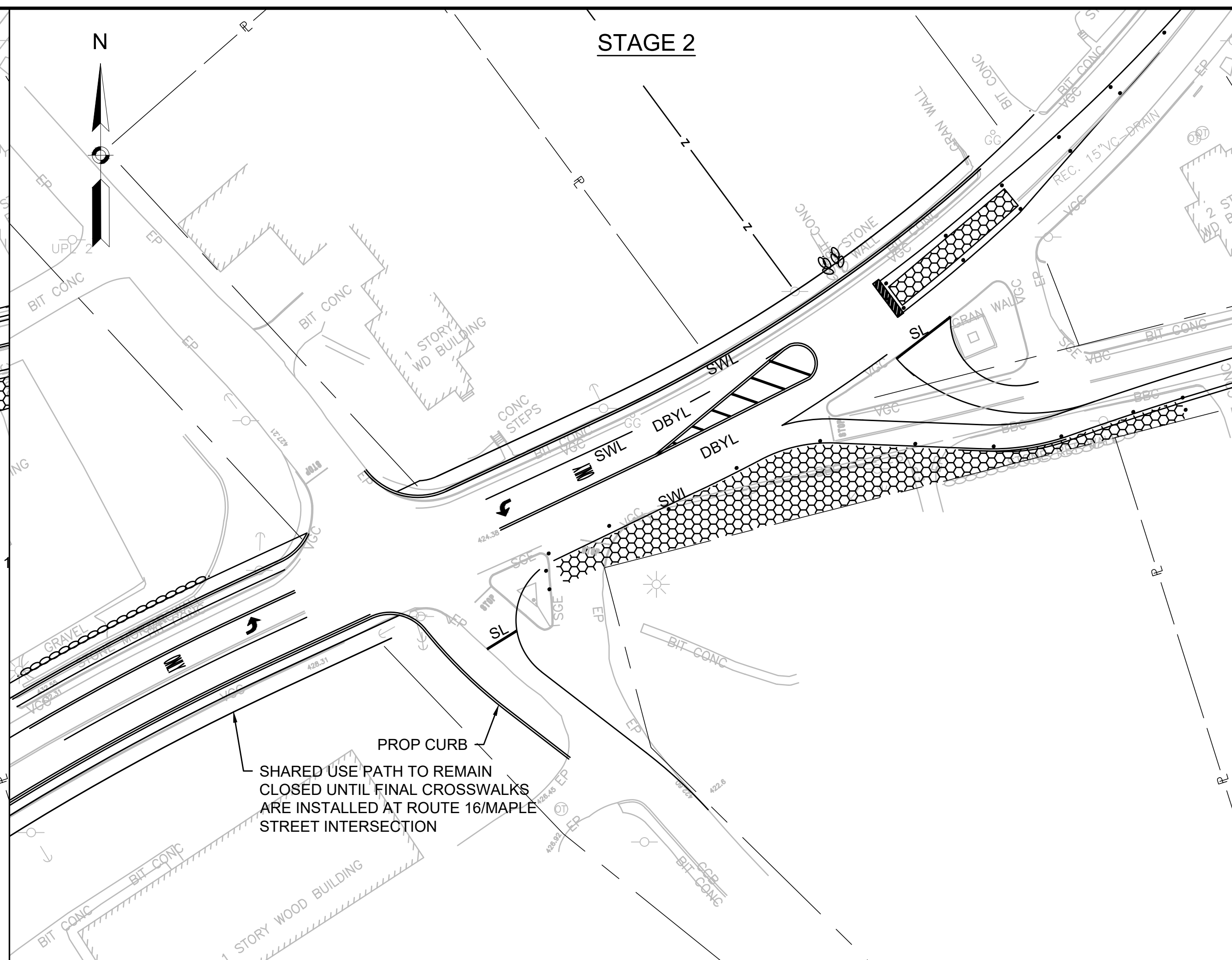
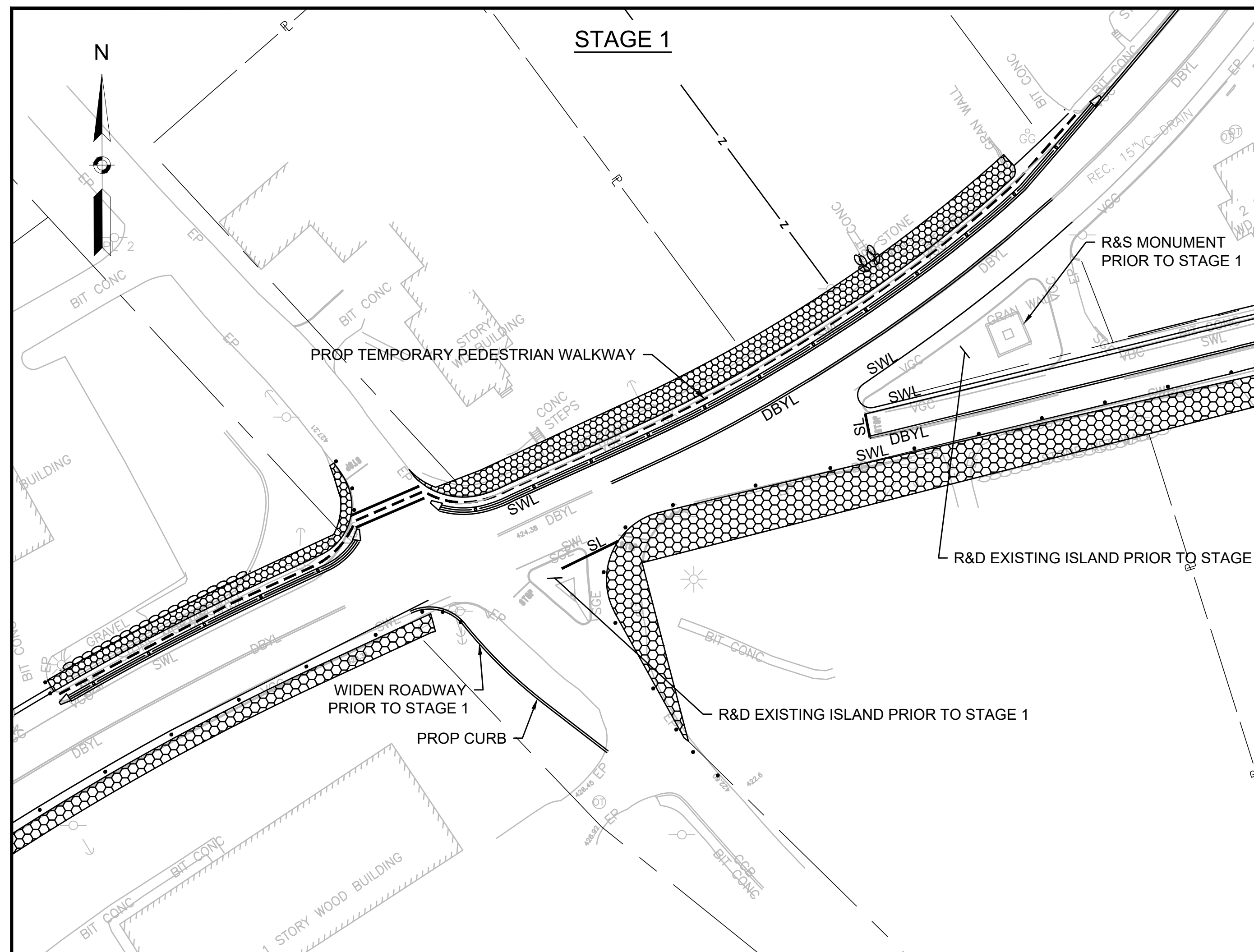
**TWO LANE ROAD ONE LANE  
ALTERNATING TRAFFIC  
NOT TO SCALE**




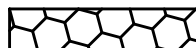
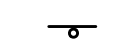
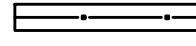
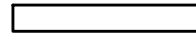

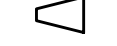


**MENDON  
ROUTE 16**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	107	116
PROJECT FILE NO.		608491	

**ROUTE 16 AT MAPLE  
STREET STAGING**

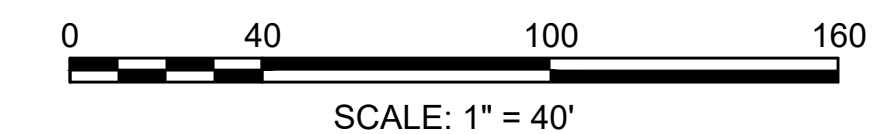


**TRAFFIC DEVICE LEGEND**

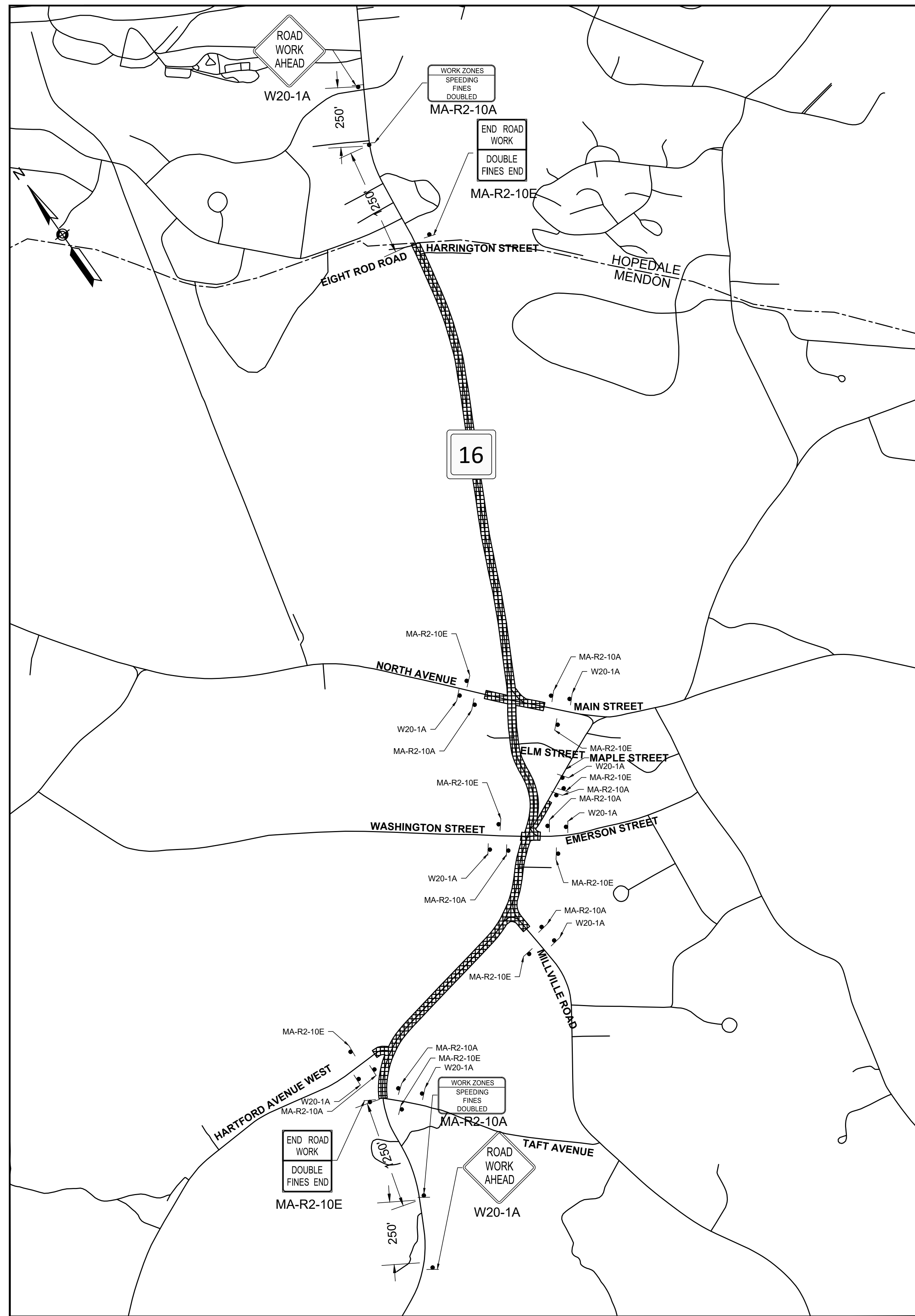
-  DIRECTION OF TRAVEL
-  WORK AREA
-  TEMPORARY STATIC SIGNAGE
-  LIMITED DEFLECTION BARRIER
-  TEMPORARY BARRIER
-  REFLECTORIZED DRUM OR CONE
-  IMPACT ATTENUATOR
-  TYPE III BARRICADE
-  TEMPORARY PEDESTRIAN WALKWAY

**NOTES**

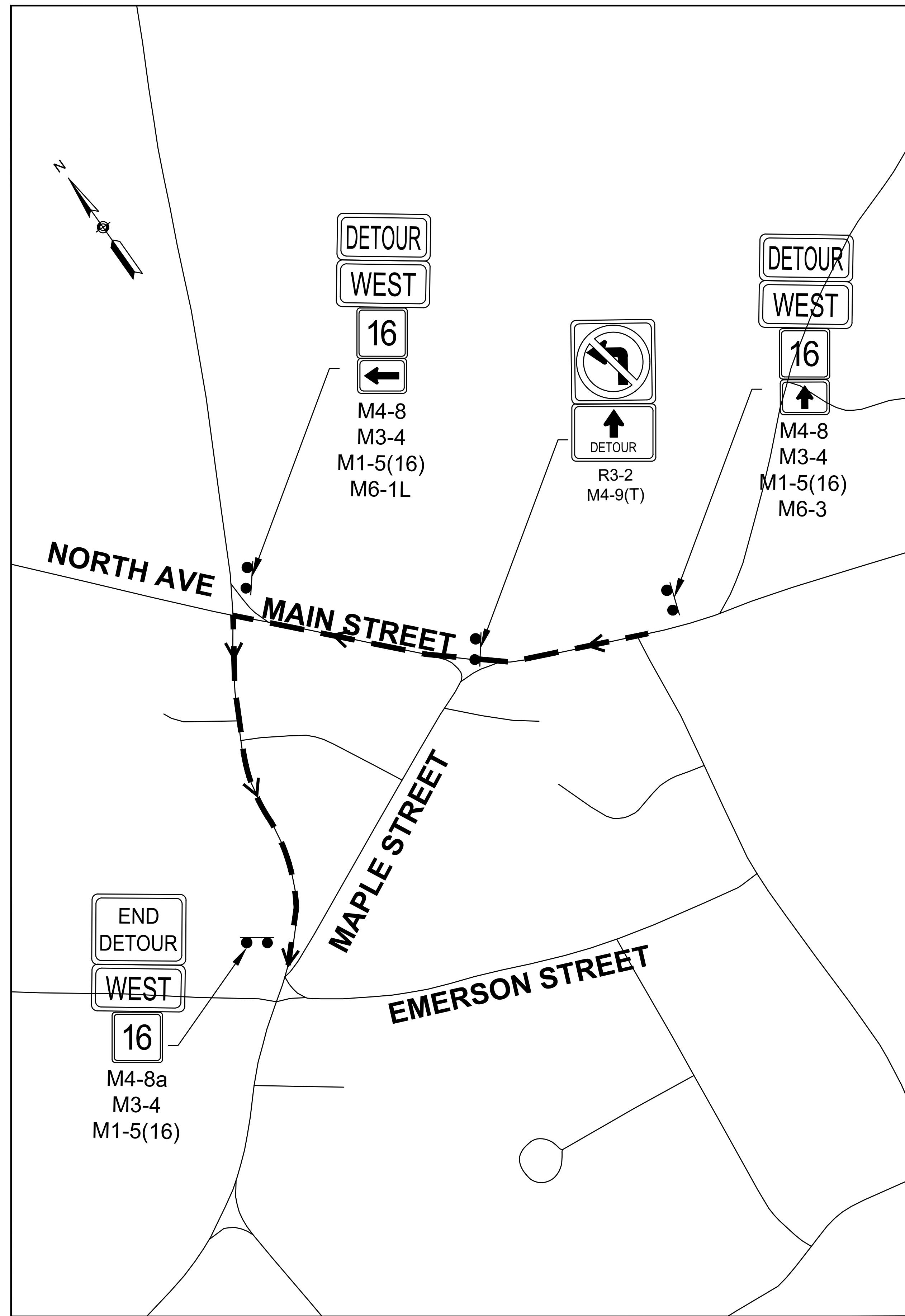
- CONTRACTOR SHALL MAINTAIN ACCESS TO EACH PROPERTY THROUGHOUT CONSTRUCTION. DRIVEWAY WIDTH FOR ACCESS SHALL BE A MINIMUM OF 20'. SPECIFIC PROPERTY ACCESS IS NOT SHOWN ON THESE PLANS.
- CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS ON THE NORTH SIDE OF ROUTE 16 WB AT ALL TIMES. WALKWAY WIDTH SHALL BE A MINIMUM OF 5'.
- STAGING PLANS ARE FOR ROUTE 16/MAPLE STREET INTERSECTION ONLY. ALL OTHER CONSTRUCTION ACTIVITIES INCLUDING, BUT NOT LIMITED TO MEDIAN, TRAFFIC SIGNALS, AND SIDEWALK/SHARED-USE PATH SHALL USE TYPICAL TEMPORARY TRAFFIC CONTROL SETUPS.
- CONTRACTOR SHALL MAINTAIN INTERSECTION OPERATIONS DURING THIS TIME.
- CONTRACTOR SHALL MAINTAIN 11' TRAVEL LANES ON ALL APPROACHES AND A 1' MINIMUM SHOULDER.



**ADVANCED WARNING SIGN LOCATIONS**  
NOT TO SCALE



**ROUTE 16 WB DETOUR AT MAPLE STREET**  
NOT TO SCALE



**MENDON**  
**ROUTE 16**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	108	116
PROJECT FILE NO.		608491	

**TTCP DETAILS**  
**SHEET 5 OF 6**

NOTES:  
1. ROUTE 16 WB DETOUR AT MAPLE STREET CAN BE USED AS AN ALTERNATE TO A TWO LANE ROAD ONE LANE ALTERNATING TEMPORARY TRAFFIC SETUP DURING STAGE 1 UNTIL PROPOSED WIDENING ON MAPLE STREET IS COMPLETE.



MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	109	116
PROJECT FILE NO.		608491	

TTCP DETAILS  
SHEET 6 OF 6

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			NUMBER OF SIGNS REQUIRED	COLOR			UNIT AREA (S.F.)	AREA IN SQUARE FEET
	WIDTH (IN)	HEIGHT (IN)		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACK-GROUND	LEGEND	BORDER		
MA-R2-10A	48	36		②	②	②	9	WHITE/FLUOR-ESCENT ORANGE	BLACK	BLACK	12.00	108.00
MA-R2-10E	36	48		②	②	②	9	WHITE/FLUOR-ESCENT ORANGE	BLACK	BLACK	12.00	108.00
R11-2E	48	30		①	①	①	1*	ORANGE	BLACK	BLACK	10.00	10.00
R3-17	30	24		①	①	①	1*	ORANGE	BLACK	BLACK	5.00	5.00
R3-17bp	30	12		①	①	①	1*	WHITE	BLACK	BLACK	2.50	2.50
R4-11	30	30		①	①	①	1*	ORANGE	BLACK	BLACK	6.25	6.25
R9-9	36	12		①	①	①	3*	ORANGE	BLACK	BLACK	3.00	9.00
R9-11aL	36	12		①	①	①	2*	ORANGE	BLACK	BLACK	3.00	6.00
R9-11aR	36	12		①	①	①	2*	ORANGE	BLACK	BLACK	3.00	6.00
R9-10	36	12		①	①	①	2*	ORANGE	BLACK	BLACK	3.00	6.00
W21-5aL	30	30		①	①	①	1*	ORANGE	BLACK	BLACK	6.25	6.25
W21-5aR	30	30		①	①	①	1*	ORANGE	BLACK	BLACK	6.25	6.25
W21-5bL	30	30		①	①	①	1*	ORANGE	BLACK	BLACK	6.25	6.25
W21-5bR	30	30		①	①	①	1*	ORANGE	BLACK	BLACK	6.25	6.25
W11-2	36	36		①	①	①	4*	ORANGE	BLACK	BLACK	6.25	25.00
W16-7PL	30	24		①	①	①	2*	ORANGE	BLACK	BLACK	5.00	10.00
W16-9P	24	12		①	①	①	2*	ORANGE	BLACK	BLACK	2.00	4.00

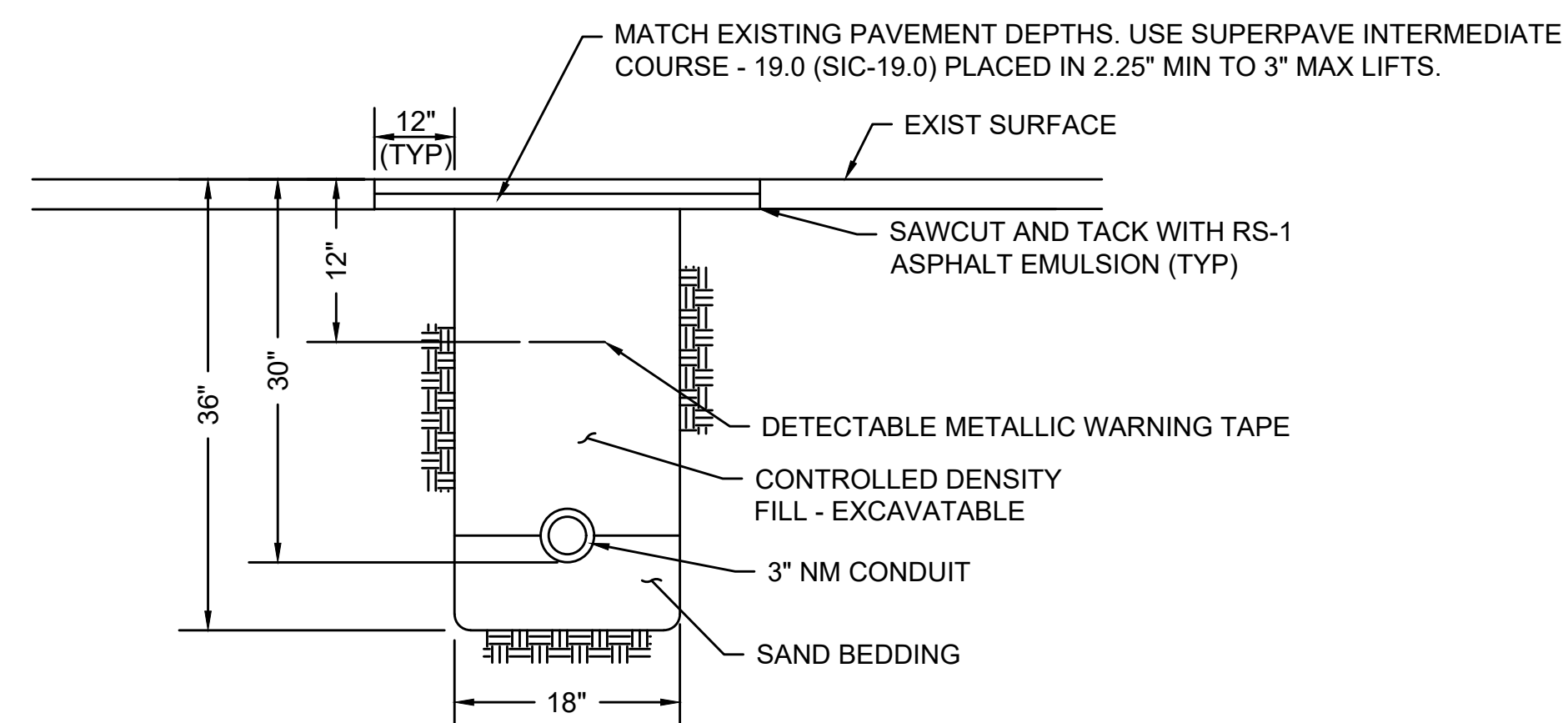
IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			NUMBER OF SIGNS REQUIRED	COLOR			UNIT AREA (S.F.)	AREA IN SQUARE FEET
	WIDTH (IN)	HEIGHT (IN)		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACK-GROUND	LEGEND	BORDER		
W20-1A	30	30		①	①	①	9	ORANGE	BLACK	BLACK	6.25	56.25
W20-4	30	30		①	①	①	6*	ORANGE	BLACK	BLACK	6.25	37.50
W1-4R	30	30		①	①	①	2*	ORANGE	BLACK	BLACK	6.25	12.50
W1-4L	30	30		①	①	①	2*	ORANGE	BLACK	BLACK	6.25	12.50
MA-W20-7b	30	30		②	②	②	10*	ORANGE	BLACK	BLACK	6.25	50.00
W30-8R	30	30		①	①	①	2*	ORANGE	BLACK	BLACK	6.25	12.50
W5-1	30	30		①	①	①	9*	ORANGE	BLACK	BLACK	6.25	31.25

① SEE MUTCD 2009 EDITION, 2004 STD. HWY. SIGNS (SHS), 2012 SHS SUPPLEMENT, AND SECTION M9.30.0 TYPE III OF THE MASSDOT STANDARD SPECIFICATION FOR TEXT DIMENSIONS.  
 ② SEE MASSDOT STANDARD SIGN BOOK, CURRENT EDITION, FOR TEXT DIMENSIONS.  
 \*NUMBER OF SIGNS REQUIRED ASSUMING ONE SET UP AT A TIME. SEE TYPICAL DETAILS ON SHEETS 104-### FOR TTCP SET UPS.

① SEE MUTCD 2009 EDITION, 2004 STD. HWY. SIGNS (SHS), 2012 SHS SUPPLEMENT, AND SECTION M9.30.0 TYPE III OF THE MASSDOT STANDARD SPECIFICATION FOR TEXT DIMENSIONS.  
 ② SEE MASSDOT STANDARD SIGN BOOK, CURRENT EDITION, FOR TEXT DIMENSIONS.  
 \*NUMBER OF SIGNS REQUIRED ASSUMING ONE SET UP AT A TIME. SEE TYPICAL DETAILS ON SHEETS 171-174 FOR TTCP SET UPS.

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	110	116
PROJECT FILE NO.		608491	

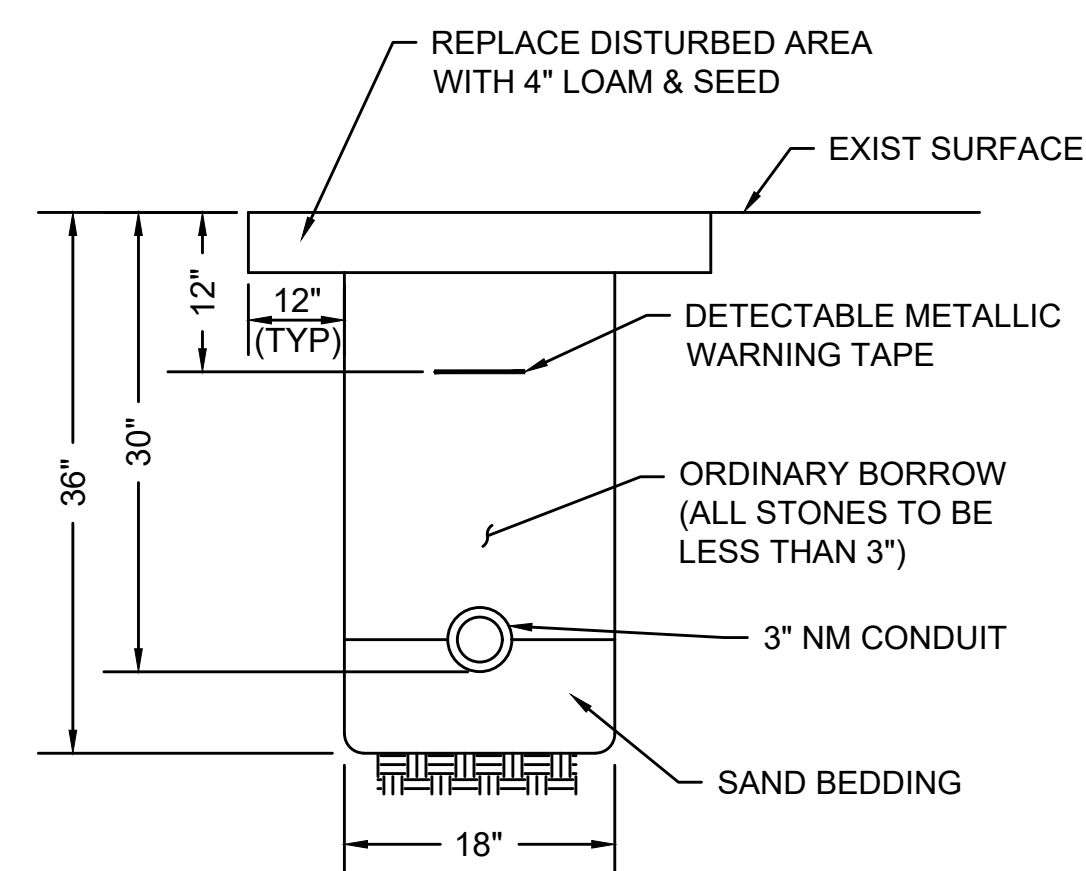
CONSTRUCTION DETAILS  
SHEET 1 OF 2



NOTES:

1. TEMPORARY PATCHING WITHIN MILL AND OVERLAY AREAS SHALL BE PAID FOR UNDER ITEM 451.
2. SCHEDULE 80 ELECTRICAL CONDUIT TYPE NM-PLASTIC (UL), WITH PULL ROPE, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
3. CONTROL DENSITY FILL SHALL MEET THE REQUIREMENTS OF MASSDOT MATERIAL SPECIFICATION M4.08.0.
4. WARNING TAPE SHALL BE IN CONFORMANCE WITH SPECIFICATIONS SECTION 02649.

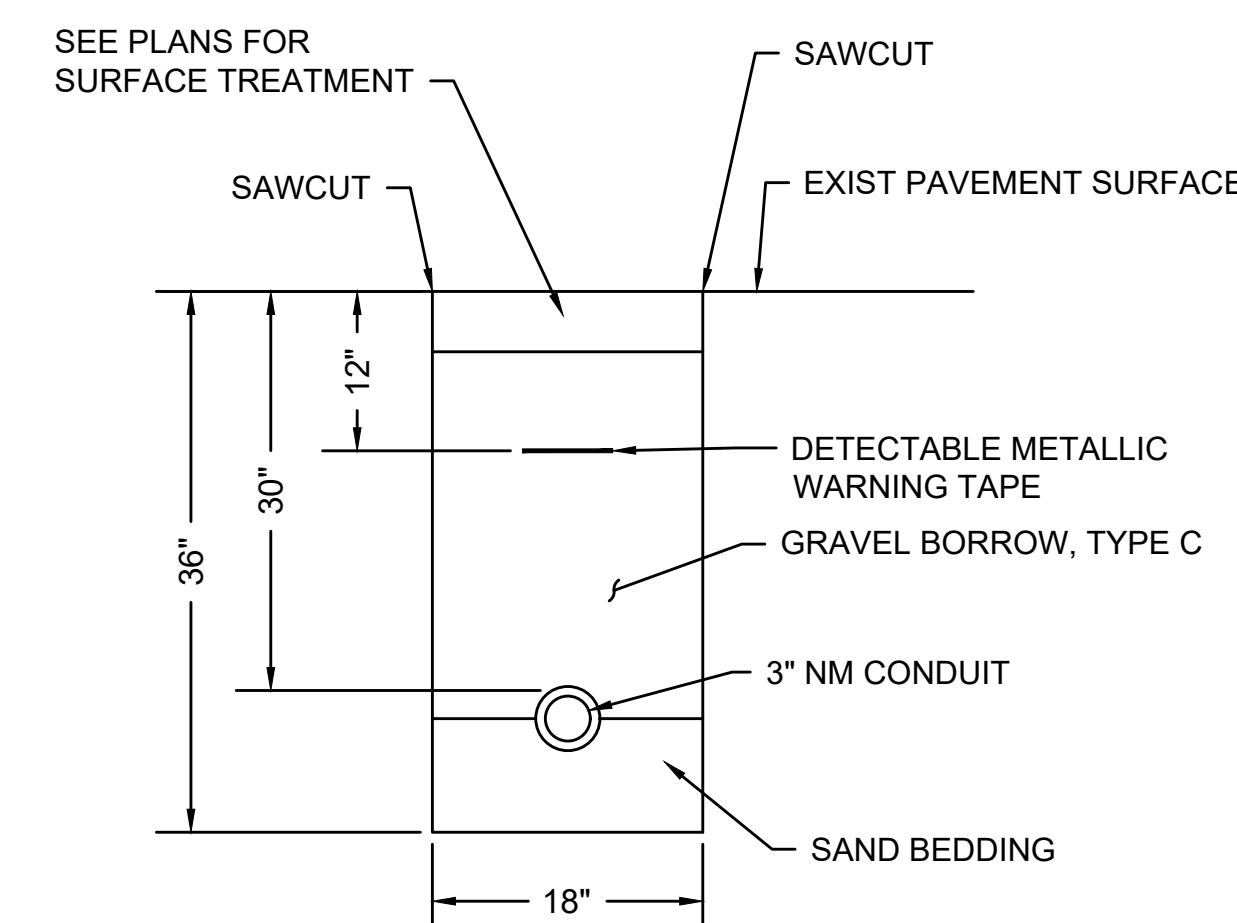
CONDUIT CROSSING ROADWAY  
NOT TO SCALE



NOTES:

1. SCHEDULE 80 ELECTRICAL CONDUIT TYPE NM-PLASTIC (UL), WITH PULL ROPE, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
2. WARNING TAPE SHALL BE IN CONFORMANCE WITH SPECIFICATIONS SECTION 02649.

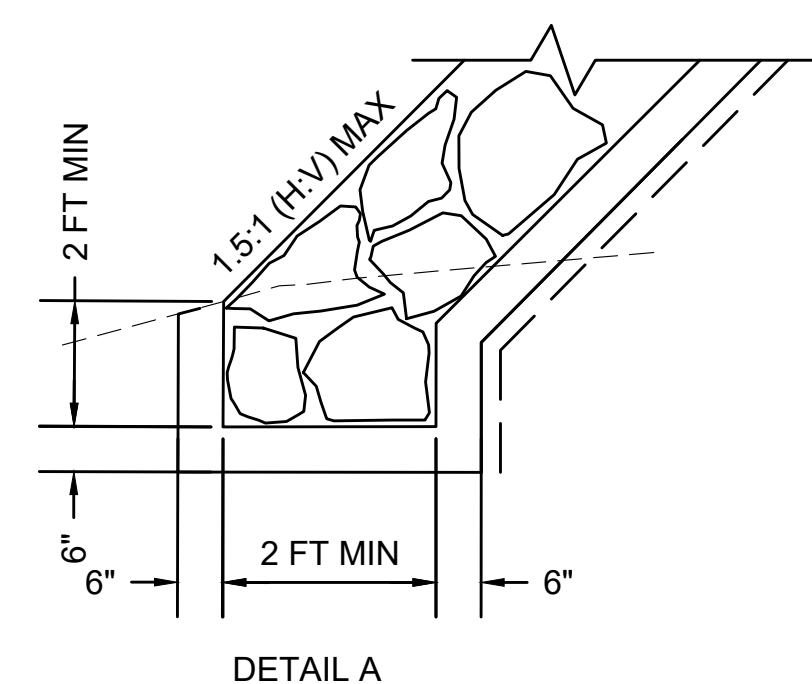
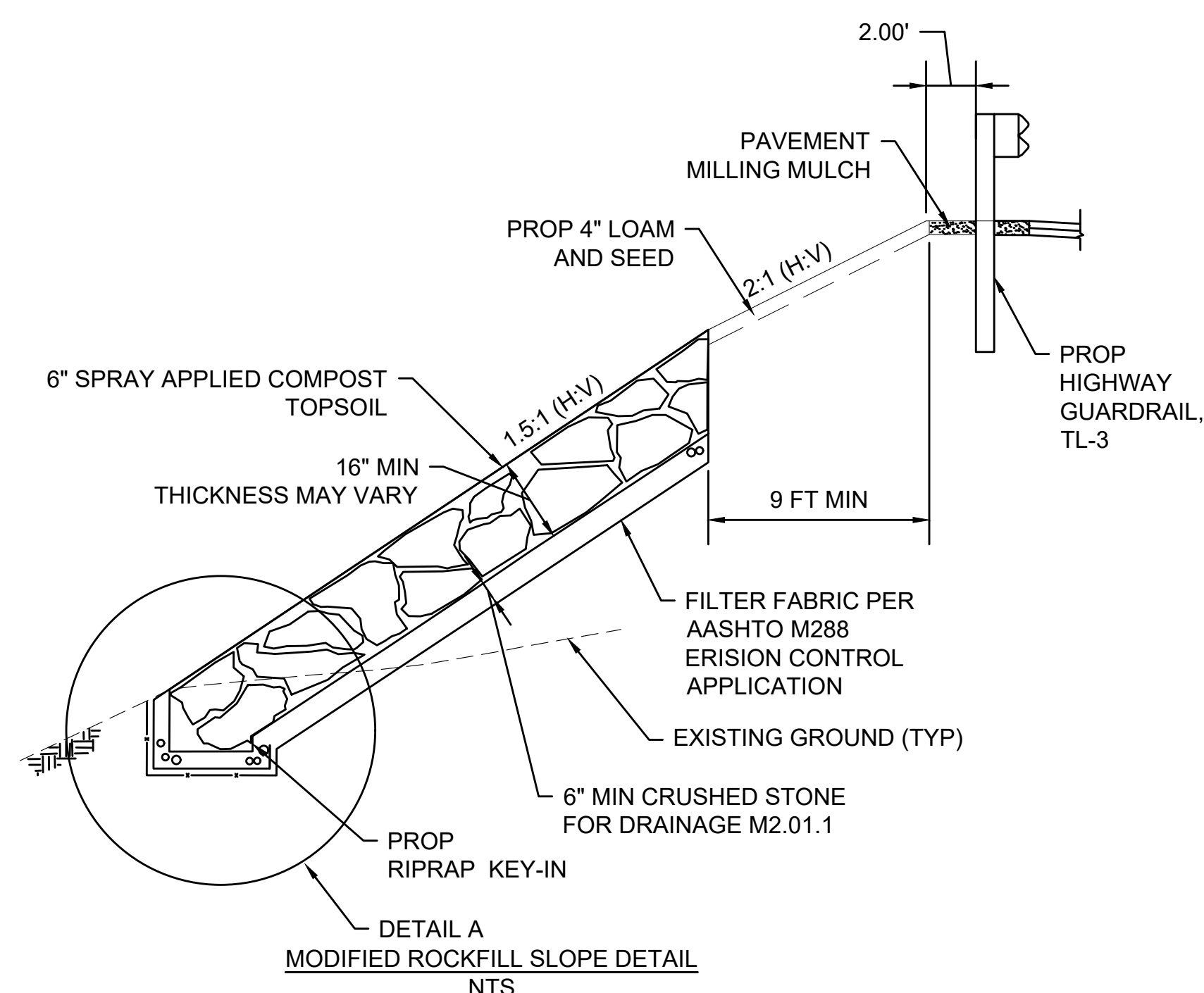
CONDUIT IN GRASS  
NOT TO SCALE



NOTES:

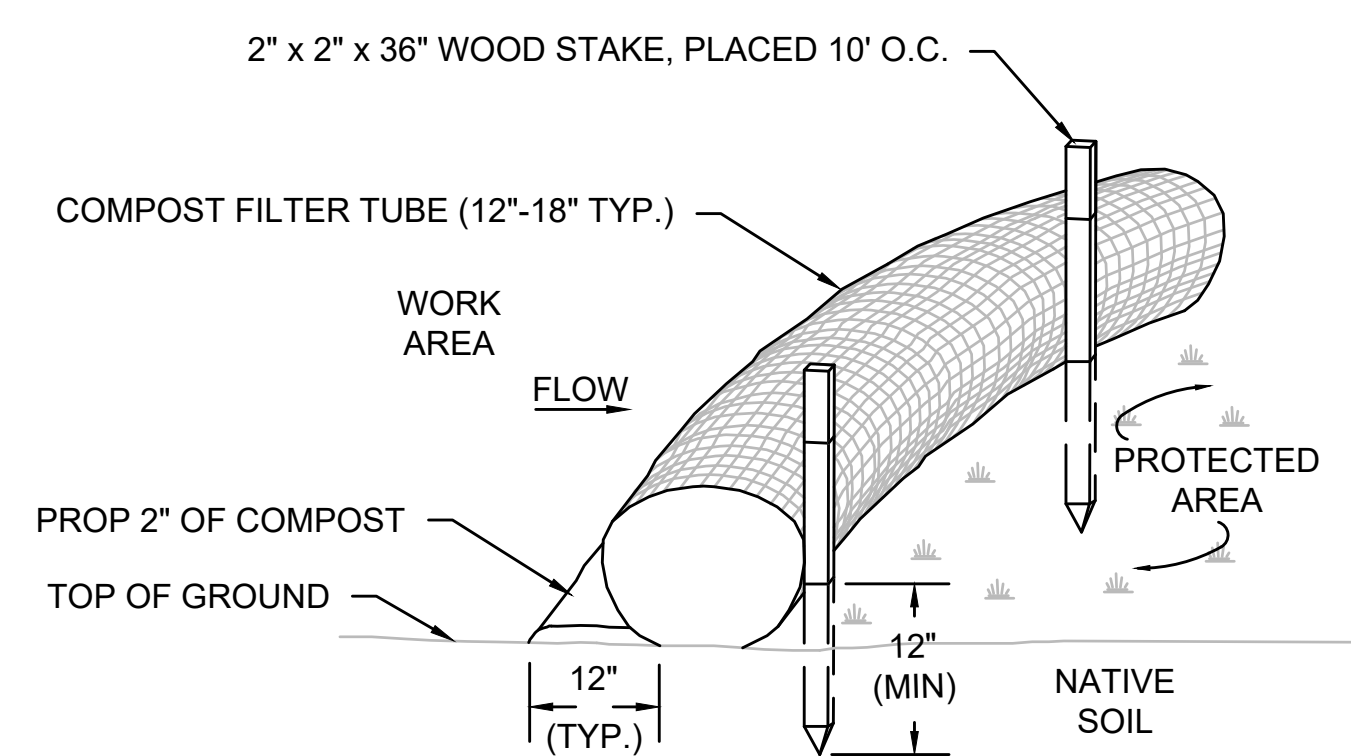
1. SCHEDULE 80 ELECTRICAL CONDUIT TYPE NM-PLASTIC (UL), WITH PULL ROPE, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
2. WARNING TAPE SHALL BE IN CONFORMANCE WITH SPECIFICATIONS SECTION 02649.

CONDUIT IN SIDEWALK  
NOT TO SCALE





STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	111	116
PROJECT FILE NO.		608491	

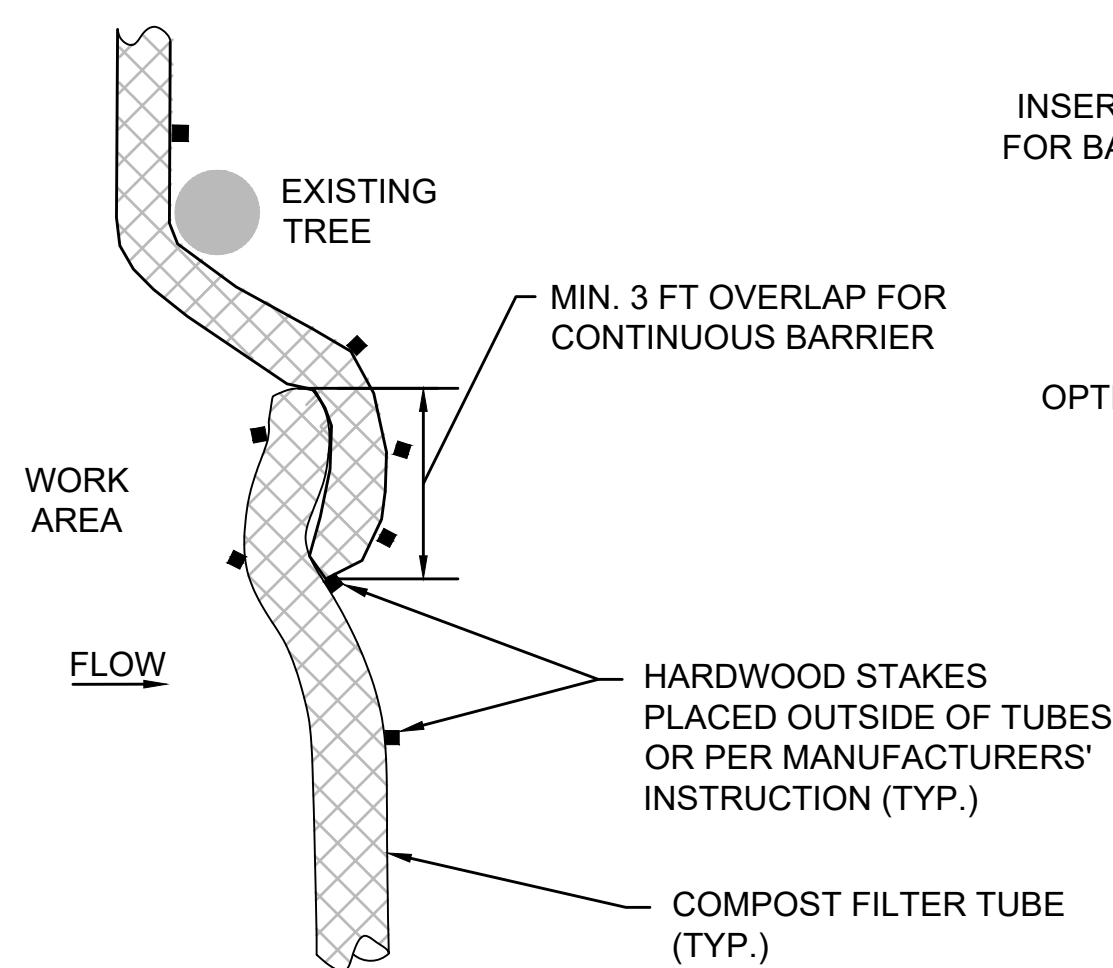


**NOTES:**

1. FILTER TUBE SHALL BE FILLED BY BLOWN IN ORGANIC COMPOST AND PLACED AS SHOWN ON THE PLANS.
2. COMPOST FILTER TUBES SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS, AND REPAIRED OR REPLACED AS NEEDED.
3. AT COMPLETION OF THE PROJECT, COMPOST FILTER TUBES SHALL BE CUT OPEN AND COMPOST MATERIAL SHALL BE DISPERSED ON SITE, AS DETERMINED BY THE ENGINEER.
4. THE EMPTY FILTER TUBE FABRIC SHALL BE REMOVED AND DISPOSED OF PROPERLY BY THE CONTRACTOR.

**COMPOST FILTER TUBE**

NOT TO SCALE

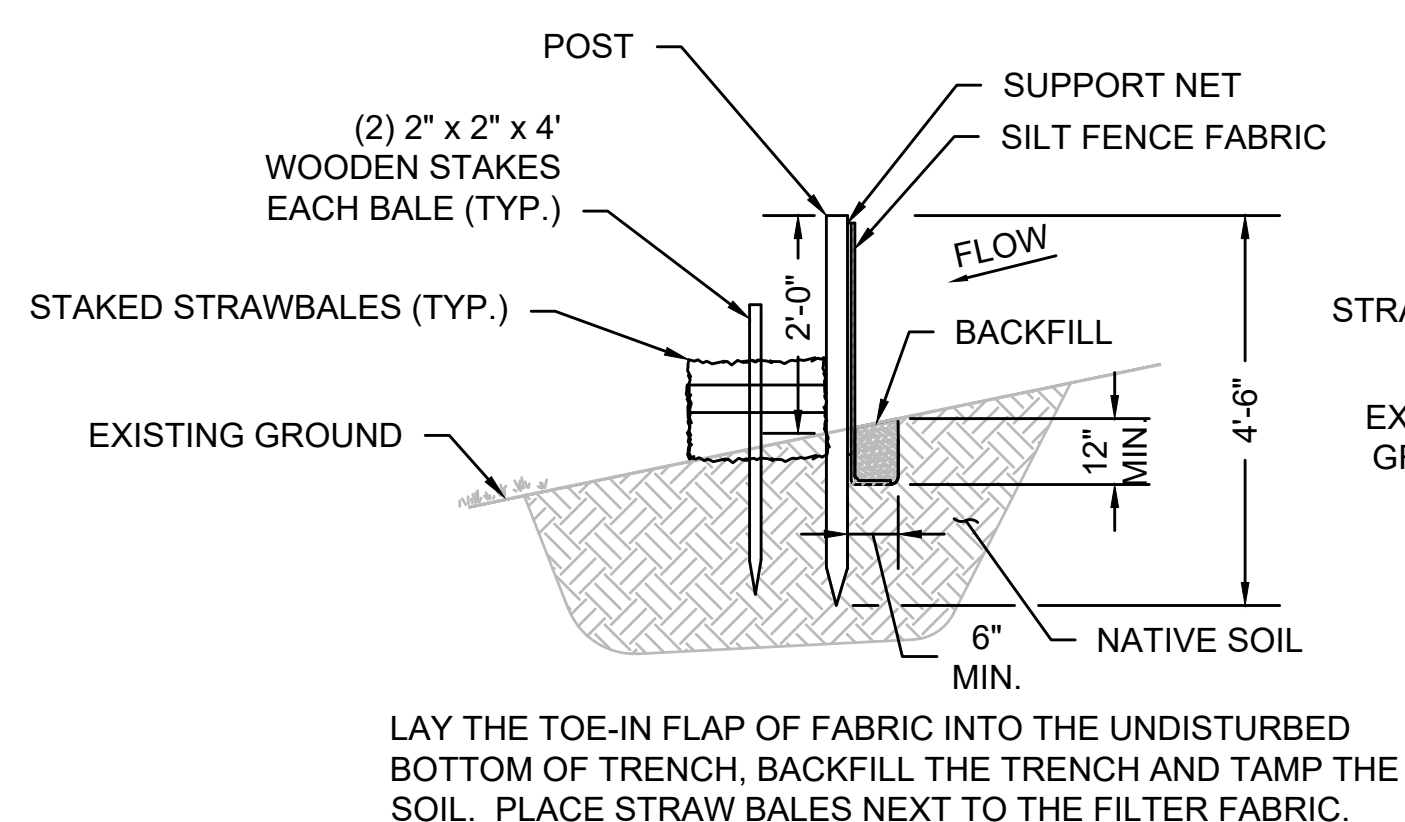


**NOTES:**

1. PROVIDE A MINIMUM TUBE DIAMETER OF 12 INCHES FOR SLOPES UP TO 50 FEET IN LENGTH WITH A SLOPE RATIO OF 3H:1V OR STEEPER. LONGER SLOPES OF 3H:1V MAY REQUIRE LARGER TUBE DIAMETER OR ADDITIONAL COURSING OF FILTER TUBES TO CREATE A FILTER BERM. REFER TO MANUFACTURER'S RECOMMENDATIONS FOR SITUATIONS WITH LONGER OR STEEPER SLOPES.
2. INSTALL TUBES ALONG CONTOURS AND PERPENDICULAR TO SHEET OR CONCENTRATED FLOW.
3. DO NOT INSTALL IN WATERWAYS.
4. CONFIGURE TUBES AROUND EXISTING SITE FEATURES TO MINIMIZE SITE DISTURBANCE AND MAXIMIZE CAPTURE AREA OF STORMWATER RUN-OFF.
5. PROVIDE A 3 FT. MINIMUM OVERLAP AT ENDS OF TUBES TO JOIN IN A CONTINUOUS BARRIER AND MINIMIZE UNIMPEDED FLOW. STAKE JOINING TUBES SNUGLY AGAINST EACH OTHER TO PREVENT UNFILTERED FLOW BETWEEN THEM.
6. SECURE ENDS OF TUBES WITH STAKES SPACED 18 APART. DO NOT PUNCTURE TUBES WITH STAKES.

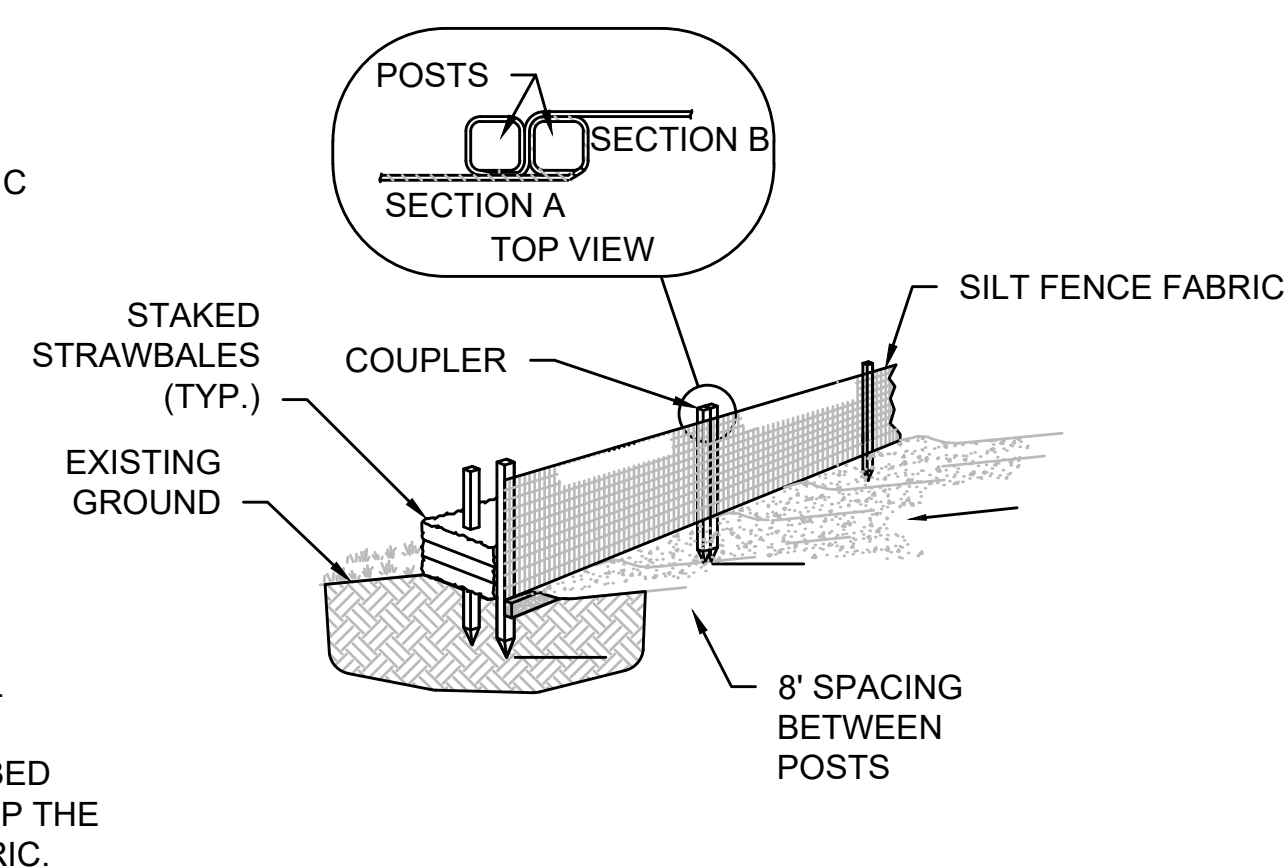
**COMPOST FILTER TUBE JOINT DETAIL**

NOT TO SCALE



LAY THE TOE-IN FLAP OF FABRIC INTO THE UNDISTURBED BOTTOM OF TRENCH, BACKFILL THE TRENCH AND TAMP THE SOIL. PLACE STRAW BALES NEXT TO THE FILTER FABRIC.

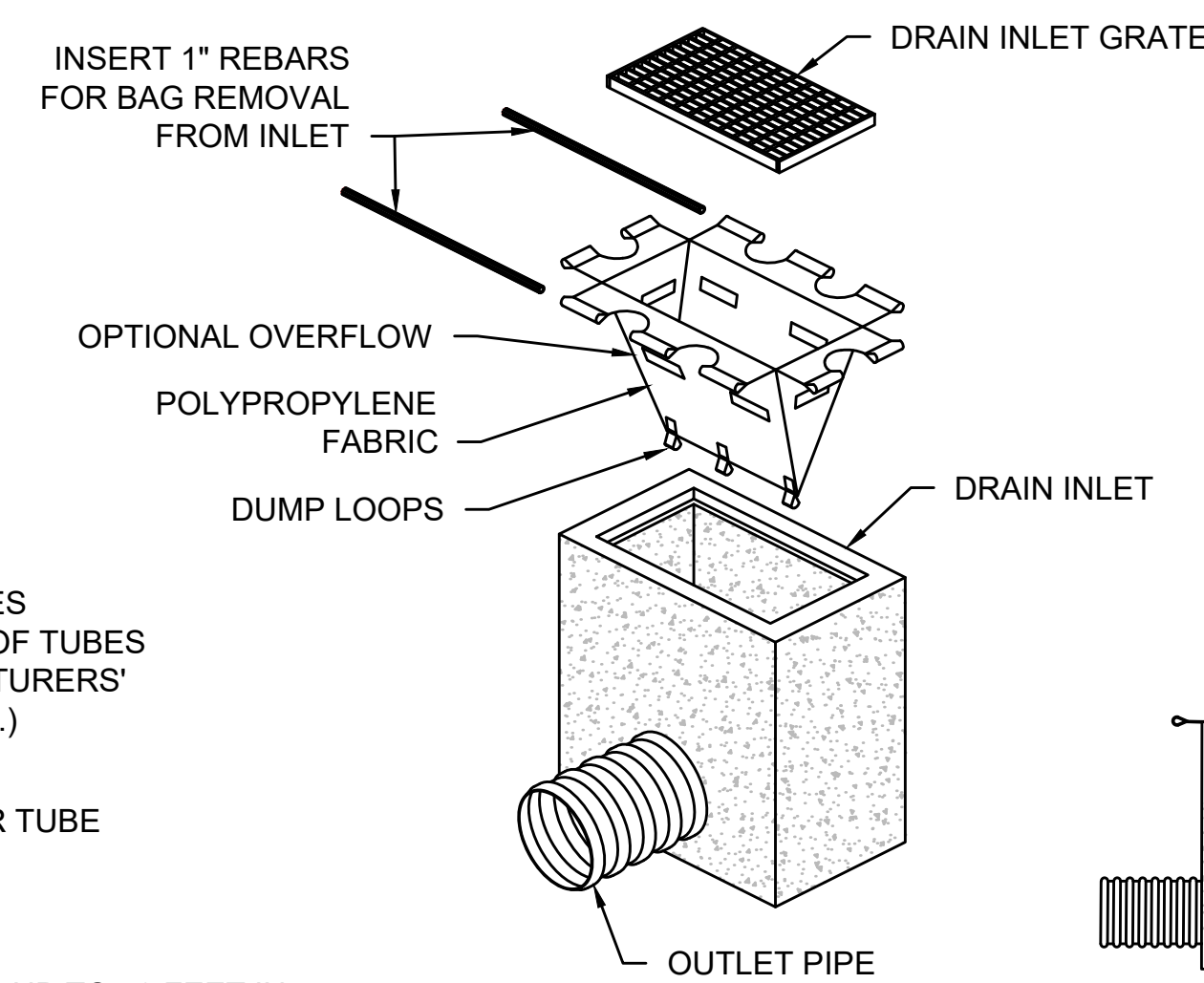
**SECTION (TOE-IN METHOD)**



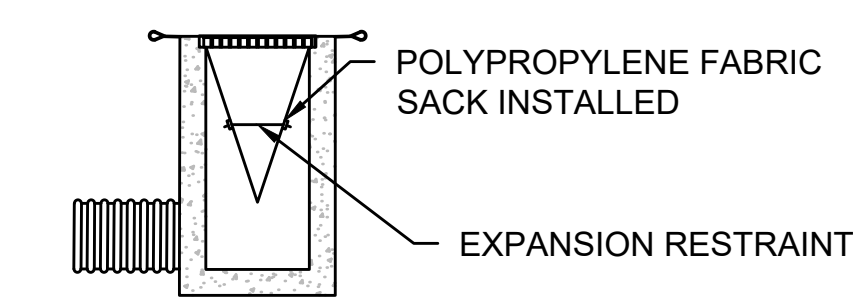
**ISOMETRIC**

**TYPICAL STRAW BALE & SILT FENCE EROSION CONTROL BARRIER**

NOT TO SCALE



**ISOMETRIC**



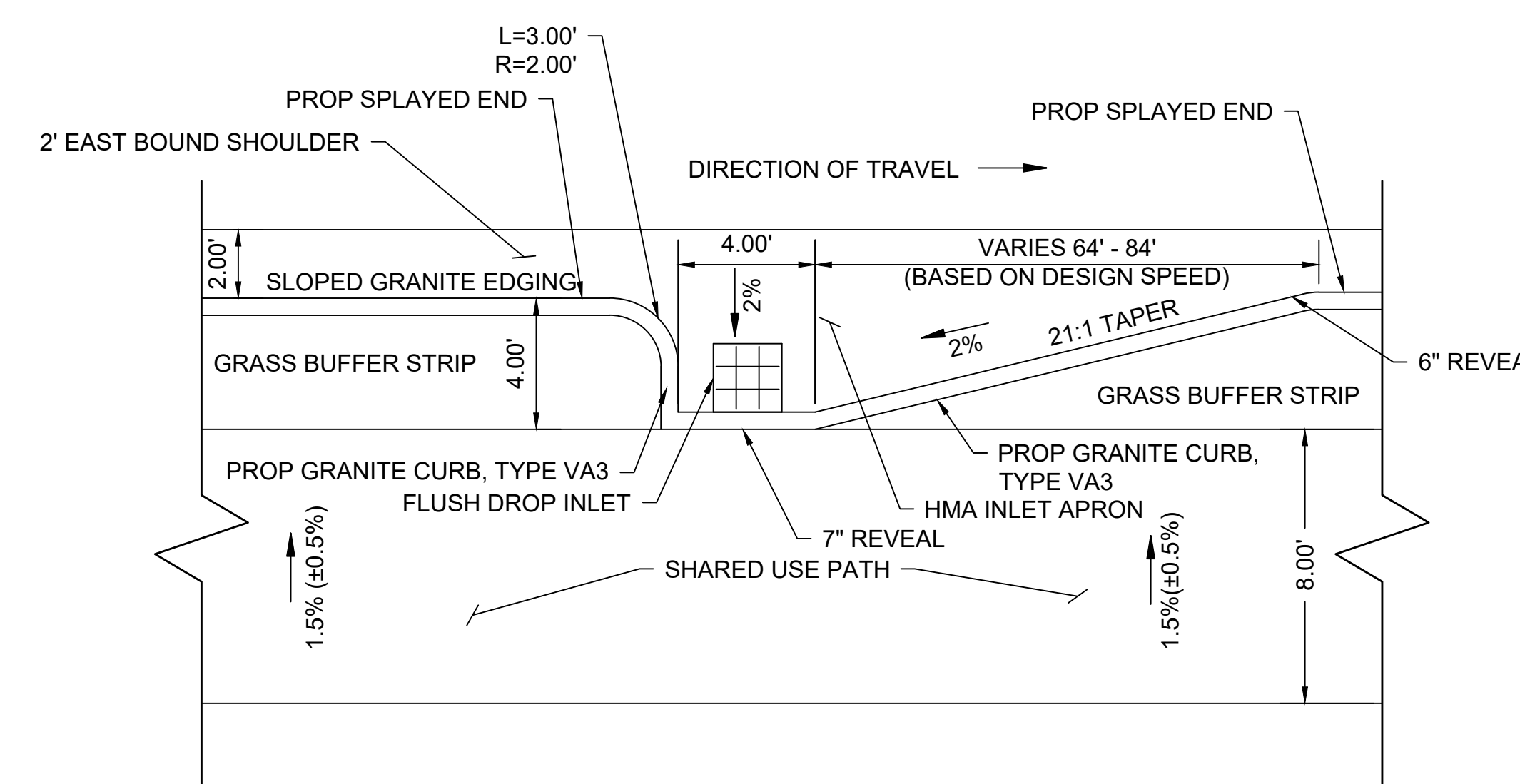
**SECTION**

**NOTES:**

1. INSTALL DRAIN INLET PROTECTION PER MANUFACTURER'S SPECIFICATIONS.
2. REMOVE DRAIN INLET GRATE AND INSTALL POLYPROPYLENE FABRIC OVER DRAIN INLET FRAME. REPLACE DRAIN INLET GRATE TO SECURE POLYPROPYLENE FABRIC IN PLACE.
3. LENGTH AND WIDTH SHALL BE MANUFACTURED TO FIT THE OPENING OF THE DRAIN INLET.
4. **MAINTENANCE:** REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM SURFACE AND VICINITY OF UNIT AFTER EACH STORM EVENT. REMOVE SEDIMENT THAT HAS ACCUMULATED WITHIN THE CONTAINMENT AREA OF THE DRAIN INLET PROTECTION SACK AS NEEDED.

**TYPICAL DRAIN INLET PROTECTION**

NOT TO SCALE



**DRAINAGE INLET IN GRASS BUFFER**

NOT TO SCALE







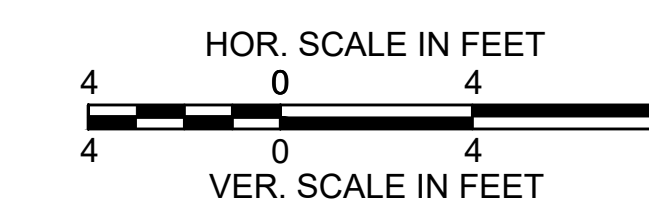
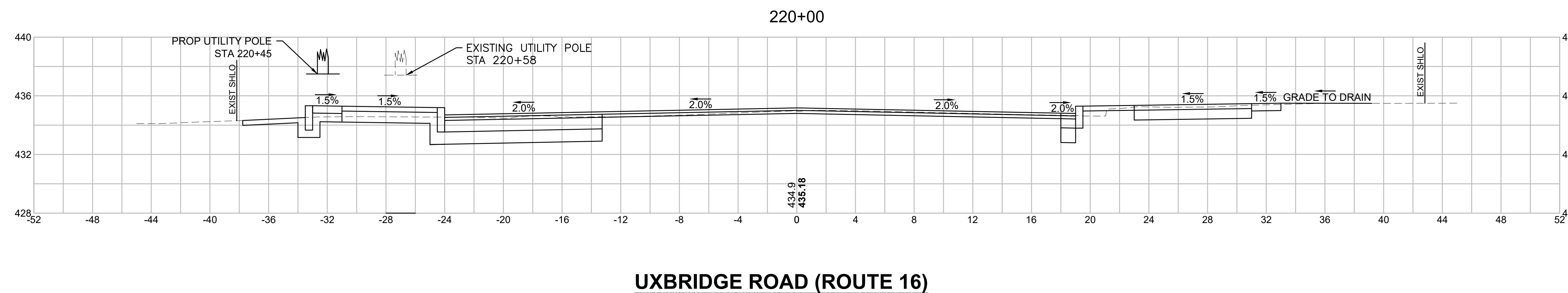
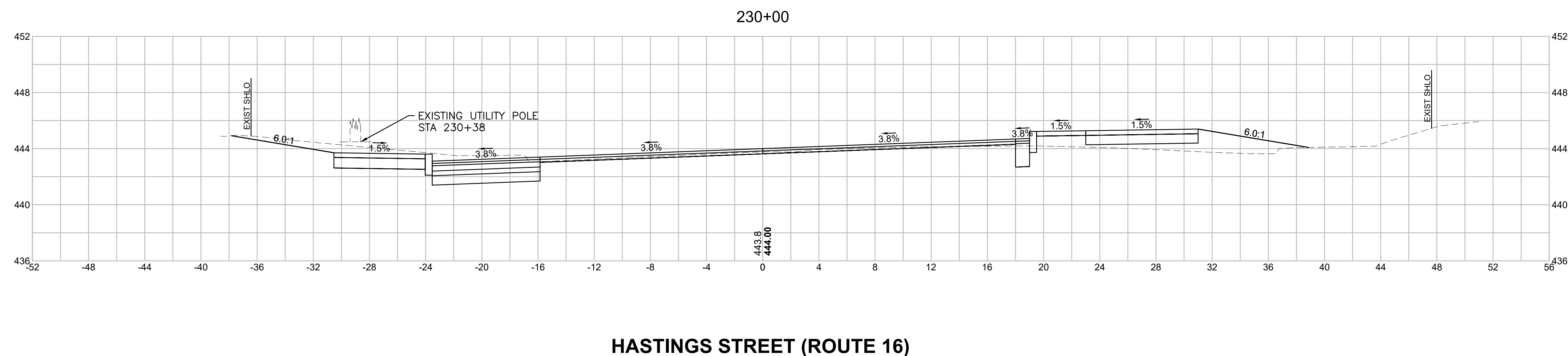
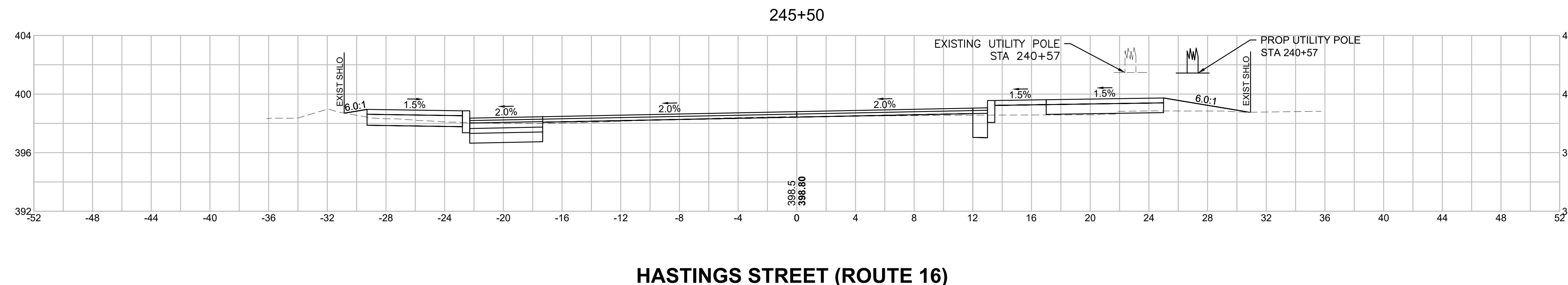




MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	115	116
PROJECT FILE NO.		608491	

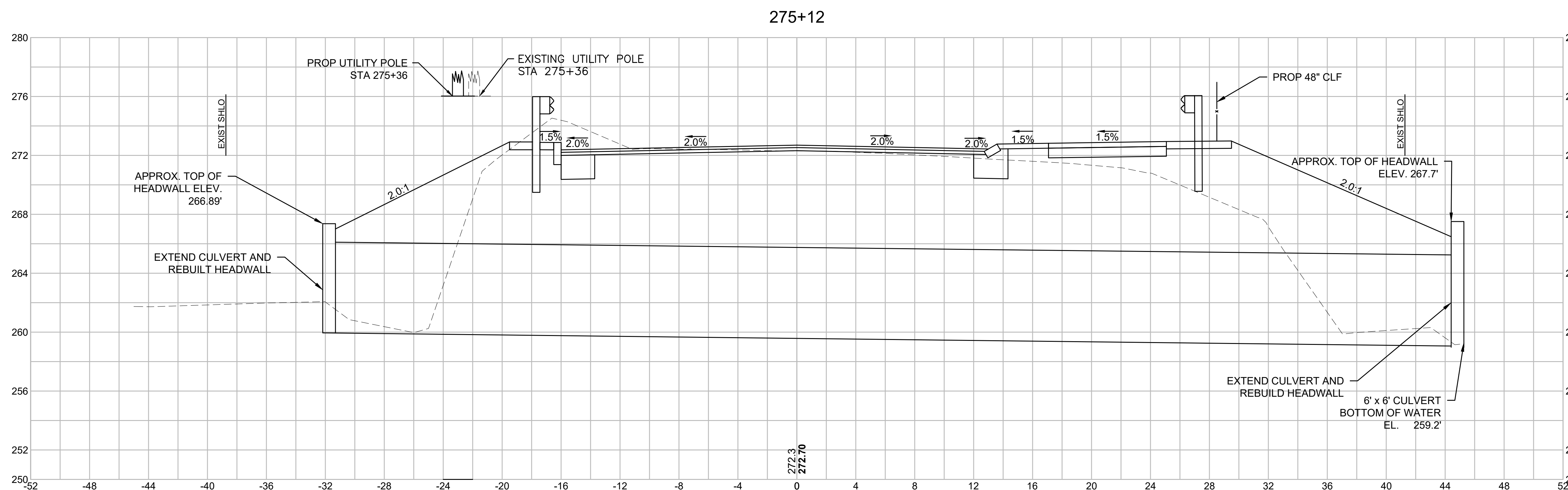
ROUTE 16 CRITICAL SECTIONS  
SHEET 1 OF 2



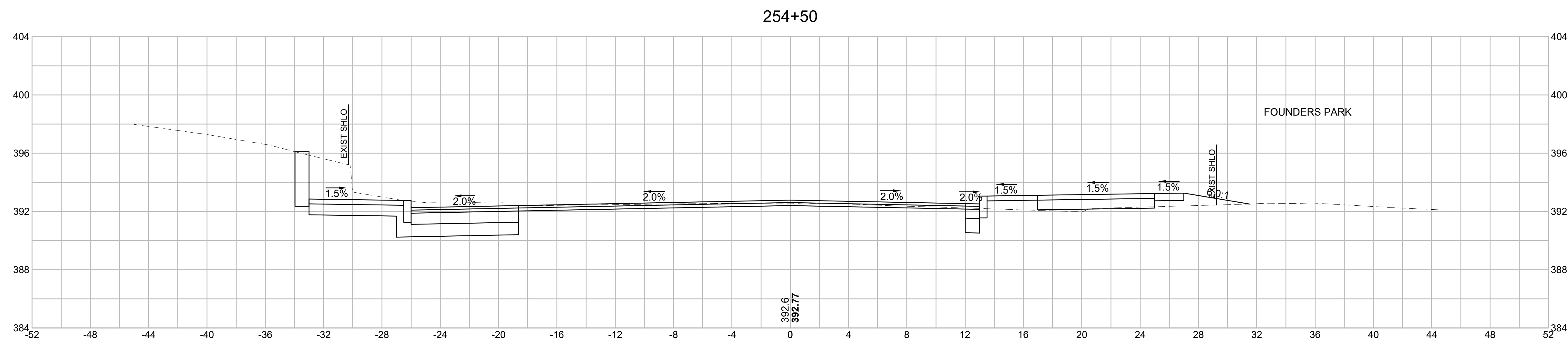
MENDON  
ROUTE 16

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	116	116
PROJECT FILE NO.		608491	

ROUTE 16 CRITICAL SECTIONS  
SHEET 2 OF 2



MILFORD STREET (ROUTE 16)



HASTINGS STREET (ROUTE 16)

