



# MASSACHUSETTS DEPARTMENT OF TRANSPORTATION HIGHWAY DIVISION

WATERTOWN/CAMBRIDGE  
WATERTOWN-CAMBRIDGE GREENWAY PHASE II

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	01	143
PROJECT FILE NO.		608806	

TITLE SHEET & INDEX

## PLAN AND PROFILE OF WATERTOWN-CAMBRIDGE GREENWAY PHASE II

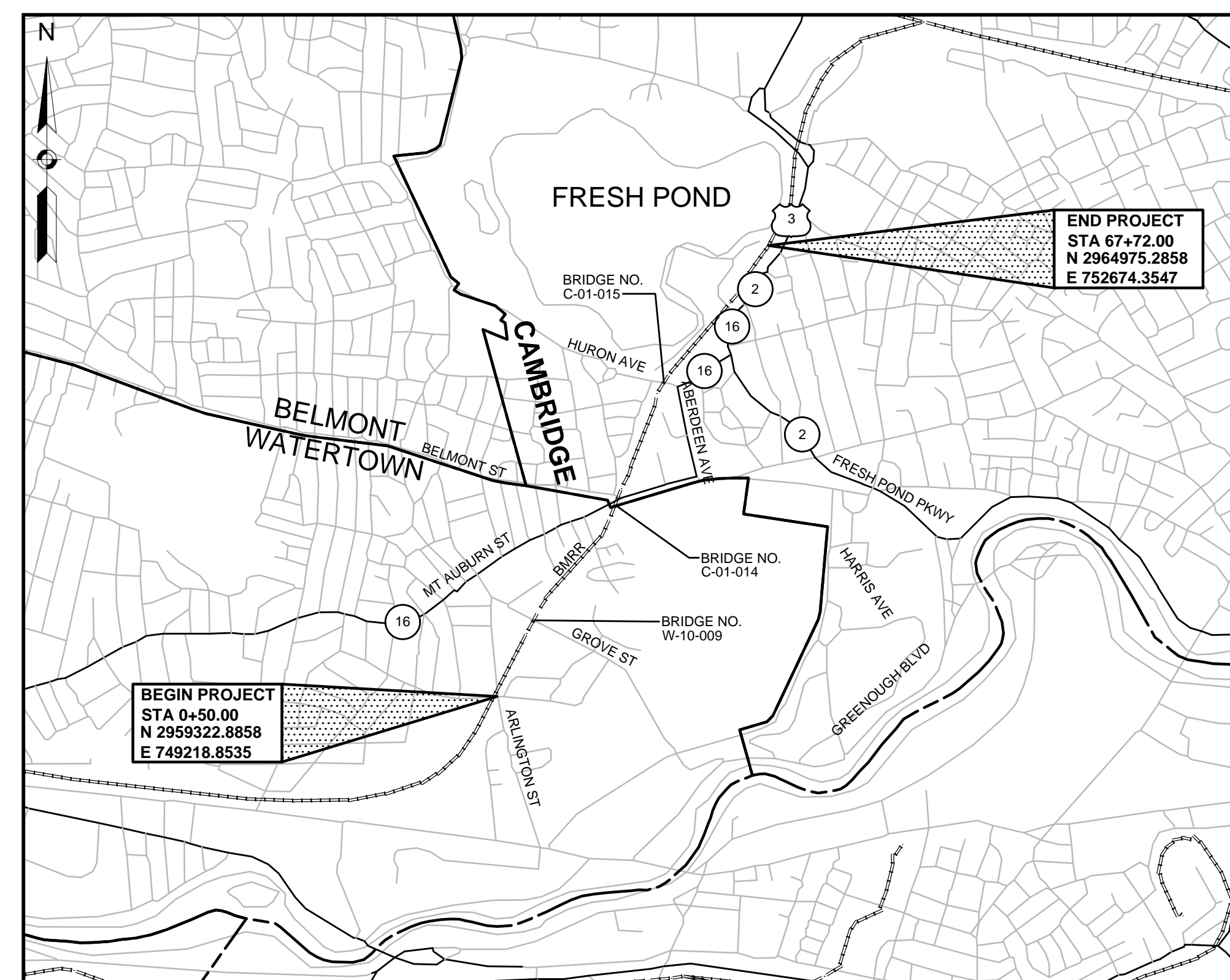
### IN THE TOWN / CITY OF WATERTOWN/CAMBRIDGE MIDDLESEX COUNTY

FEDERAL AID PROJECT NO. TBD

THE MASSACHUSETTS HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES DATED 1988, THE SUPPLEMENTAL SPECIFICATIONS DATED JULY 1, 2015, THE 2016 CONSTRUCTION STANDARD DETAILS, THE 1990 STANDARD DRAWINGS FOR SIGNS AND SUPPORTS, THE 2015 OVERHEAD SIGNAL STRUCTURE AND FOUNDATION STANDARD DRAWINGS, THE 1996 CONSTRUCTION AND TRAFFIC STANDARD DETAILS (AS RELATED TO TRAFFIC STANDARD DETAILS ONLY), THE LATEST MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR STREETS AND HIGHWAYS WITH MASSACHUSETTS AMENDMENTS, THE 1968 STANDARD DRAWINGS FOR TRAFFIC SIGNALS AND HIGHWAY LIGHTING, AND THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK, WILL GOVERN.

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#### INDEX



0 1500 3000 4500 6000  
SCALE: 1" = 1500'

LENGTH OF PROJECT = 6,722.00 FEET = 1.273 MILES

#### DESIGN DESIGNATION

GREENWAY

DESIGN SPEED

20 MPH

PS&E SUBMISSION  
AUGUST 4, 2017

DATE	DESCRIPTION



RECOMMENDED FOR APPROVAL

CHIEF ENGINEER DATE

APPROVED

HIGHWAY ADMINISTRATOR DATE

<p>ELECTRICAL ENGINEER BARD, RAO +ATHANAS CONSULTING ENGINEERS SHEET NOS. 54-62</p>	<p>LANDSCAPE ARCHITECT CAROL JOHNSON, ASSOCIATES, INC. SHEET NOS. 63-77</p>	<p>CIVIL ENGINEER VANASSE HANGEN BRUSTLIN, INC SHEET NOS. 1-53, 78-87 &amp; 93-143</p>	<p>STRUCTURAL ENGINEER VANASSE HANGEN BRUSTLIN, INC SHEET NOS. 88-92</p>
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DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
APPROVED:  
DIVISION ADMINISTRATOR DATE

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	02	143
PROJECT FILE NO.		608806	

LEGEND

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
		WOOD GUARD RAIL
		CHAIN LINK OR METAL FENCE
		WOOD FENCE
		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
		100 FT BANK BUFFER
		200 FT RIVERFRONT BUFFER
		STATE HIGHWAY LAYOUT/STATE OWNED LAND
		TOWN OR CITY LAYOUT
		COUNTY LAYOUT
		RAILROAD SIDELINE
		TOWN OR CITY BOUNDARY LINE
		PROPERTY LINE OR APPROXIMATE PROPERTY LINE
		EASEMENT
		COMPOST FILTER TUBE
		TRAVERSE OR TRIANGULATION STATION
		SPLIT RAIL FENCE
		CHECK DAM
		POROUS (FLEXIBLE) PVMT

PAVEMENT MARKINGS SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
		PAVEMENT ARROW - WHITE
		LEGEND "ONLY" - WHITE
		STOP LINE (12" LINE WIDTH)
		CROSSWALK (WIDTH AS NOTED)
		SOLID WHITE LINE (4" LINE WIDTH)
		SOLID YELLOW LINE (4" LINE WIDTH)
		BROKEN WHITE LINE (4" LINE WIDTH)
		BROKEN YELLOW LINE (4" LINE WIDTH)
		DOTTED WHITE LINE (4" LINE WIDTH)
		DOTTED YELLOW LINE (4" LINE WIDTH) (3' LINE W/ 9' GAPS)
		DOTTED WHITE LINE EXTENSION (4" LINE WIDTH)
		DOTTED YELLOW LINE EXTENSION (4" LINE WIDTH)
		DOUBLE WHITE LINE (4" LINE WIDTH)
		DOUBLE YELLOW LINE (4" LINE WIDTH)

TRAFFIC SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
		SIGN AND POST
		SIGN AND POST (2 POSTS)
		CONTROL CABINET, GROUND MOUNTED
		PULL BOX 12"x12" (OR AS NOTED)
		ELECTRIC HANDHOLE 12"x24" (OR AS NOTED)
		TRAFFIC SIGNAL CONDUIT

## ABBREVIATIONS

### GENERAL

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
CC	CEMENT CONCRETE
CCM	CEMENT CONCRETE MASONRY
CEM	CEMENT
CI	CURB INLET
CLF	CHAIN LINK FENCE
CL	CENTERLINE
CO.	COUNTY
CONC	CONCRETE
CONT	CONTINUOUS
CONST	CONSTRUCTION
CR GR	CROWN GRADE
DIA	DIAMETER
DWY	DRIVEWAY
ELEV (or EL.)	ELEVATION
EMB	EMBANKMENT
EOP	EDGE OF PAVEMENT
EQ	EQUAL
EXIST (or EX)	EXISTING
EXC	EXCAVATION
FDN.	FOUNDATION
FDP	FULL DEPTH PAVEMENT
FLDSTN	FIELDSTONE
GAR	GARAGE
GD	GROUND
G-FDP	GREENWAY FULL DEPTH PAVEMENT
GRAN	GRANITE
GRAV	GRAVEL
GRD	GUARD
HMA	HOT MIX ASPHALT
HOR	HORIZONTAL
HWY	HIGHWAY
JCT	JUNCTION
LO	LAYOUT
LOAM	LOAM BORROW
LSA	LANDSCAPED AREA
LT	LEFT
MAHWL	MEAN AVERAGE HIGH WATER LINE
MAX	MAXIMUM
MB	MAILBOX
MHB	MASSACHUSETTS HIGHWAY BOUND
MIN	MINIMUM
MOD	MODIFIED
MSE	MECHANICALLY STABILIZED EARTH
NERR	NEW ENGLAND RAILROAD
NIC	NOT IN CONTRACT
NO.	NUMBER
NTS	NOT TO SCALE
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
P&W	PROVIDENCE & WORCESTER
P.G.L.	PROFILE GRADE LINE
PREV	PREVIOUS/PREVIOUSLY
PROJ	PROJECT
PROP	PROPOSED
PSB	PLANTABLE SOIL BORROW
PVMT	PAVEMENT
R&D	REMOVE AND DISCARD
R&R	REMOVE AND RESET
R&S	REMOVE AND STACK
RD	ROAD
RDWY	ROADWAY
REB	REBUILD
REM	REMOVE
REMOD	REMODEL
RET	RETAIN
RET WALL	RETAINING WALL
ROW	RIGHT OF WAY
RR	RAILROAD
RT	RIGHT
SB	STONE BOUND
SHLD	SHOULDER
SHLO/S.H.L.O.	STATE HIGHWAY LAYOUT LINE

## ABBREVIATIONS

### GENERAL

SNETT	SOUTHERN NEW ENGLAND TRUNK TRAIL
ST	STREET
STA	STATION
STD	STANDARD
SW	SIDEWALK
TEMP	TEMPORARY
TC	TOP OF CURB
TOS	TOP OF SLOPE
TRANS	TRANSITION
TRM	TURF REINFORCING MAT
TYP	TYPICAL
VAR	VARIES
VERT	VERTICAL
WCR	WHEEL CHAIR RAMP
WP	WORKING POINT
X-SECT	CROSS SECTION

## ABBREVIATIONS

### UTILITIES

CB	CATCH BASIN
CBCI	CATCH BASIN WITH CURB INLET
CIP	CAST IRON PIPE
CIT	CHANGE IN TYPE
CMP	CORRUGATED METAL PIPE
CSP	CORRUGATED STEEL PIPE
DI	DROP INLET
DIP	DUCTILE IRON PIPE
FES	FLARED END SECTION
F&C	FRAME AND COVER
F&G	FRAME AND GRATE
GG	GAS GATE
GI	GUTTER INLET
GIP	GALVANIZED IRON PIPE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HDW	HEADWALL
HYD	HYDRANT
INV	INVERT
LB	LEACH BASIN
LP	LIGHT POLE
MH	MANHOLE
MW	MONITORING WELL
OHW	OVERHEAD WIRE
PVC	POLYVINYLCHLORIDE PIPE
PWW	PAVED WATER WAY
RCP	REINFORCED CONCRETE PIPE
SMH	SEWER MANHOLE
TSV&B	TAPPING SLEEVE VALVE & BOX
UP	UTILITY POLE
WG	WATER GATE
WIP	WROUGHT IRON PIPE
WM	WATER METER/WATER MAIN

## ABBREVIATIONS

### ALIGNMENT/GRADING

BS	BOTTOM STEP
CC	CENTER OF CURVE
HP	HIGH POINT
I.T.	INTERSECTION OF TANGENT
LP	LOW POINT
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PI	POINT OF INTERSECTION
PNT	POINT
POC	POINT ON CURVE
POT	POINT ON TANGENT
PRC	POINT OF REVERSE CURVATURE
PT	POINT OF TANGENCY
∠PT	ANGLE POINT
R	RADIUS OF CURVATURE
T	TANGENT DISTANCE OF CURVE
TAN	TANGENT
TS	TOP STEP
25.45 (TC)	SPOT ELEVATION
24.95 (BC)	

## ABBREVIATIONS

### PROFILES

AD	ALGEBRAIC DIFFERENCE IN RATES OF GRADE
HSD	HORIZONTAL SIGHT DISTANCE
K	RATE OF VERTICAL CURVATURE
L	LENGTH OF CURVE
PVC	POINT OF VERTICAL CURVATURE
PVCC	POINT OF VERTICAL COMPOUND CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PVRC	POINT OF VERTICAL REVERSE CURVATURE
PVT	POINT OF VERTICAL TANGENCY
SSD	STOPPING SIGHT DISTANCE
VC	VERTICAL CURVE

## GENERAL NOTES:

- EXISTING CONDITIONS SURVEY SHOWN ON THIS PLAN FROM ARLINGTON STREET TO HOLWORTHY PLACE AT APPROX RECORD BASELINE STATION 69+50± WAS PREPARED FROM AN ON-THE-GROUND INSTRUMENT SURVEY AND AERIAL PHOTOGRAPHY PERFORMED IN APRIL, 2000 AND DEPICTS BUILDING DETAILS AND PLANIMETRIC FEATURES ON THE STONEY BROOK CONDUIT AND ON ADJACENT PROPERTIES, TOGETHER WITH THE CITED RECORD INFORMATION. THIS WAS SUPPLEMENTED BY AN ON-THE-GROUND INSTRUMENT SURVEY PERFORMED BY VHB IN MAY, 2008. THE EXISTING CONDITIONS SURVEY SHOWN ON THIS PLAN FROM APPROX RECORD BASELINE STATION 69+50± TO THE CITY OF CAMBRIDGE WATER TREATMENT PLANT ENTRANCE DRIVE IS BASED ON AN ON-THE-GROUND INSTRUMENT SURVEY PERFORMED BY VHB BETWEEN MAY, 2015 AND AUGUST 2017.
- HORIZONTAL DATUM:  
WAS OBTAINED FROM PLANS BY SMC SURVEYING AND MAPPING CONSULTANT AND PROVIDED TO VHB. THE COORDINATES, IN U.S. SURVEY FEET, ARE ON THE MASSACHUSETTS STATE PLANE COORDINATE SYSTEM, MAINLAND ZONE, REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 (NAD83) AS DETERMINED BY SMC'S PROJECT NETWORK OF GPS OBSERVATIONS, BASED ON THE 1983 CITY OF CAMBRIDGE GIS CONTROL NETWORK.
- VERTICAL DATUM:  
WAS OBTAINED FROM PLANS BY SMC SURVEYING AND MAPPING CONSULTANT AND PROVIDED TO VHB. VHB HAS CONVERTED THE ORIGINAL DATUM OF NGVD(29) TO NAVD(83) BASED ON GPS OBSERVATION BY VHB USING (2011 - MAINLAND ZONE) EPOCH 2010.00, GEOID 12A US SURVEY FOOT.
- THE RIGHT-OF-WAY FROM ARLINGTON STREET TO GROVE STREET WAS TAKEN FROM THE PLANS BY SMC SURVEYING AND MAPPING CONSULTANTS AND PROVIDED TO VHB. THE RIGHT-OF-WAY FROM GROVE STREET TO HURON STREET ARE BASED ON RECORD PLAN #346 OF 2013. THE RIGHT-OF-WAY FROM HURON AVENUE TO THE CITY OF CAMBRIDGE WATER TREATMENT PLANT DRIVEWAY ENTRANCE ARE BASED ON RECORD PLAN #347 OF 2013. VHB LOCATED SUFFICIENT MONUMENTS REFERENCED ON SAID PLANS TO PLACE THE RIGHT-OF-WAY ACCORDINGLY.
- THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND GRADES IN THE FIELD BEFORE COMMENCING WORK AND PROMPTLY NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
- THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
- THE CONTRACTOR SHALL VERIFY BY TEST PIT, THE LOCATIONS OF EXISTING UTILITIES WHICH MAY CONFLICT WITH PROPOSED CONDUIT AND SIGNAL EQUIPMENT. ANY FIELD ADJUSTMENTS REQUIRED WILL BE MADE AS APPROVED OR DIRECTED BY THE ENGINEER.
- WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION OF THE CONFLICT.
- THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY COMPANIES.
- EXISTING UTILITY POLES WILL BE RELOCATED BY OTHERS IF REQUIRED.
- TREES AND SHRUBS WITHIN THE LIMITS OF GRADING SHALL BE REMOVED ONLY UPON APPROVAL OF THE ENGINEER.
- AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT NO EXPENSE TO THE OWNER.
- THE TERM "PROPOSED" (PROP) MEANS WORK TO BE CONSTRUCTED USING NEW MATERIALS OR, WHERE APPLICABLE, RE-USING EXISTING MATERIALS IDENTIFIED AS "REMOVE AND RESET" (R&R).
- ALL EXISTING SIGNS WITHIN THE PROJECT LIMITS SHALL BE RETAINED UNLESS INDICATED OTHERWISE ON THE DRAWINGS.
- ALL EXISTING STATE, COUNTY, CITY, AND TOWN LOCATION LINES AND PRIVATE PROPERTY LINES HAVE BEEN ESTABLISHED FROM AVAILABLE INFORMATION AND THEIR EXACT LOCATIONS ARE NOT GUARANTEED.
- ALL PROPOSED BOUNDS SHALL BE PLACED BY A LICENSED PROFESSIONAL SURVEYOR. THE CONTRACTOR SHALL EXERCISE DUE CARE WHEN WORKING AROUND ALL PROPERTY BOUNDS WHICH ARE TO REMAIN. SHOULD ANY DAMAGE TO A BOUND RESULT FROM THE ACTIONS OF THE CONTRACTOR, THE CONTRACTOR SHALL HAVE THE BOUND REPLACED AND/OR REALIGNED BY A LICENSED PROFESSIONAL SURVEYOR AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST.
- DISPOSAL OF ALL SURPLUS MATERIAL SHALL BE AS APPROVED BY THE ENGINEER AND OWNER.
- 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 TO THE ELEVATION OF THE NEAR EDGE OF THE TRAVEL WAY, SHALL BE 7 FEET ALONG (ROADWAYS) OR 4 FEET (SHARED-USE-PATHS) UNLESS OTHERWISE SPECIFIED ON THE PLANS. REFER TO PATH SIGN PLACEMENT DETAIL ON SHEET 84 FOR ADDITIONAL INFORMATION.
- CONTRACTOR SHALL COORDINATE WITH MBTA BUS OPERATIONS PRIOR TO AND DURING ANY CONSTRUCTION THAT AFFECTS ROADWAYS.

## WATERTOWN/CAMBRIDGE WATERTOWN-CAMBRIDGE GREENWAY PHASE II

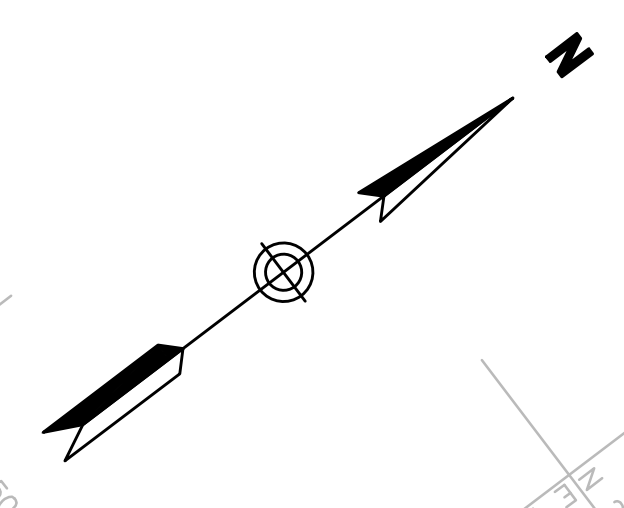
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	03	143
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## ABBREVIATIONS & GENERAL NOTES

**WATERTOWN/CAMBRIDGE  
WATERTOWN-CAMBRIDGE GREENWAY PHASE II**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	04	143
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**KEY PLAN**

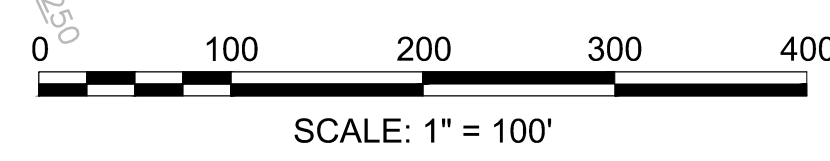


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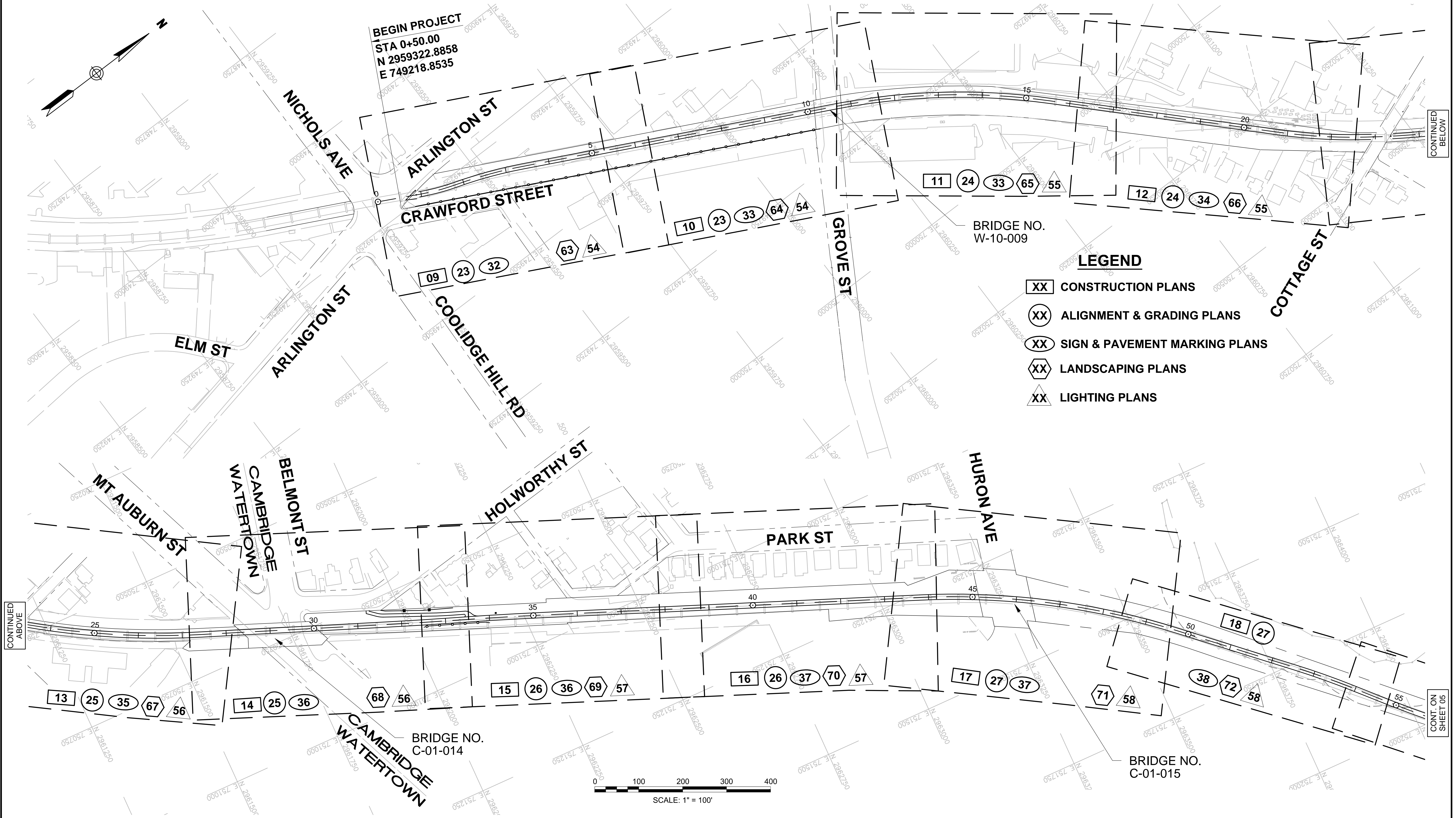
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BRIDGE NO.  
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BRIDGE NO.  
C-01-015



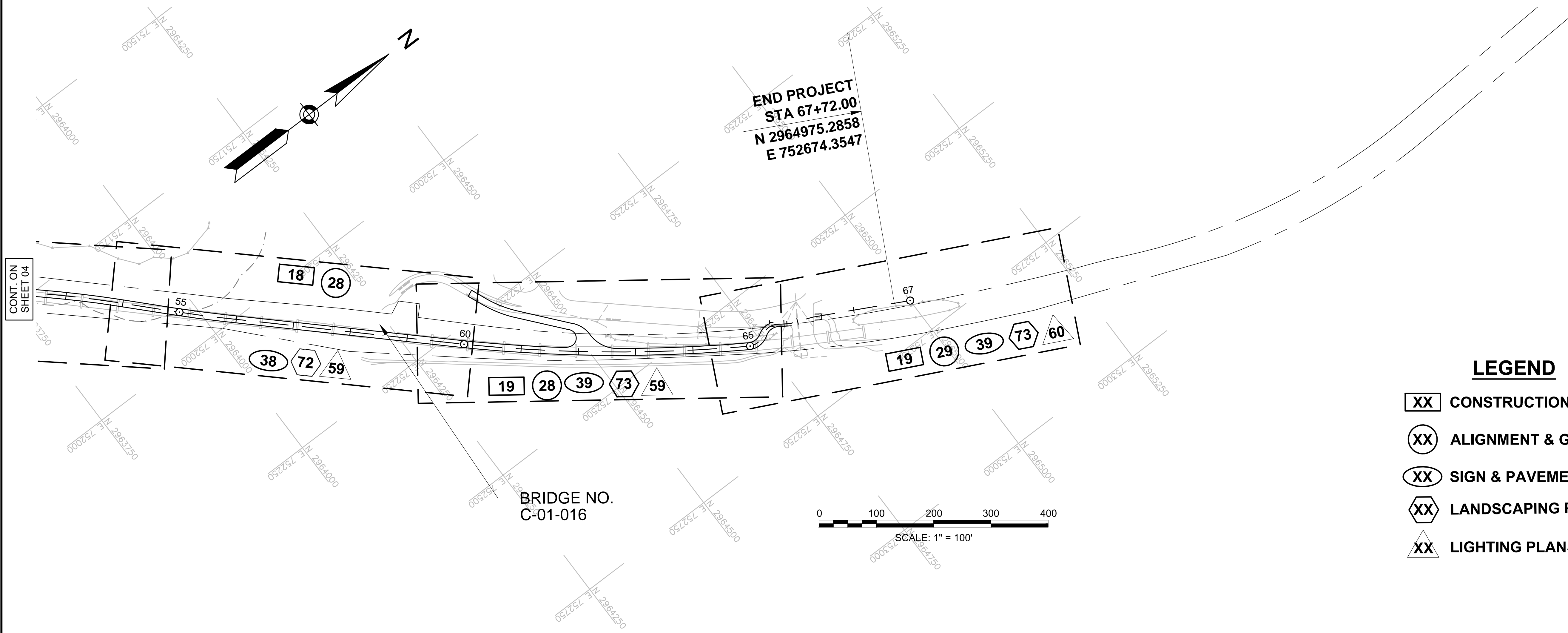
- LEGEND**
- XX CONSTRUCTION PLANS
  - XX ALIGNMENT & GRADING PLANS
  - XX SIGN & PAVEMENT MARKING PLANS
  - XX LANDSCAPING PLANS
  - XX LIGHTING PLANS



**WATERTOWN/CAMBRIDGE  
WATERTOWN-CAMBRIDGE GREENWAY PHASE II**

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**KEY PLAN**



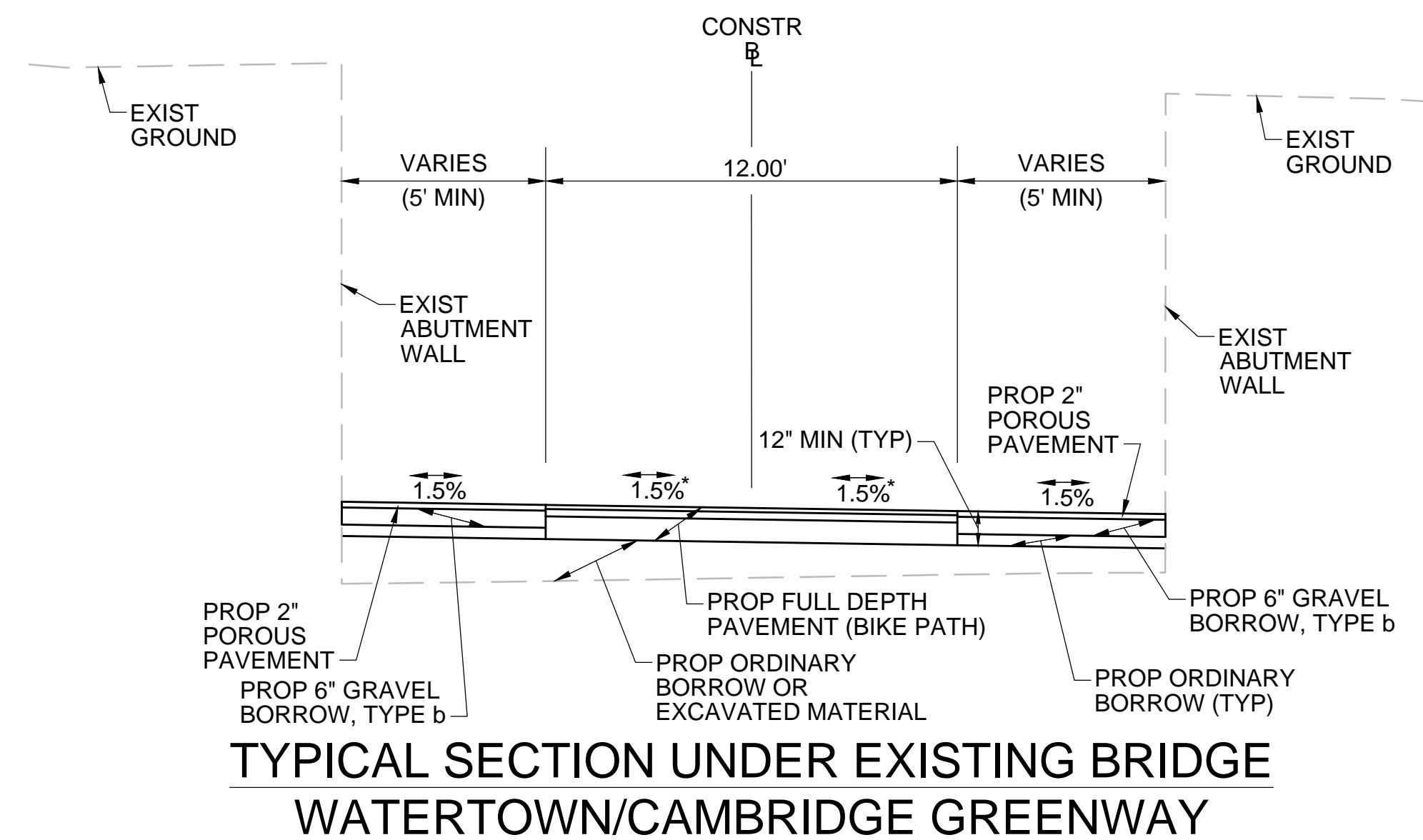
**LEGEND**

- XX** CONSTRUCTION PLANS
- XX** ALIGNMENT & GRADING PLANS
- XX** SIGN & PAVEMENT MARKING PLANS
- XX** LANDSCAPING PLANS
- XX** LIGHTING PLANS

CONT. ON  
SHEET 04

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	06	143
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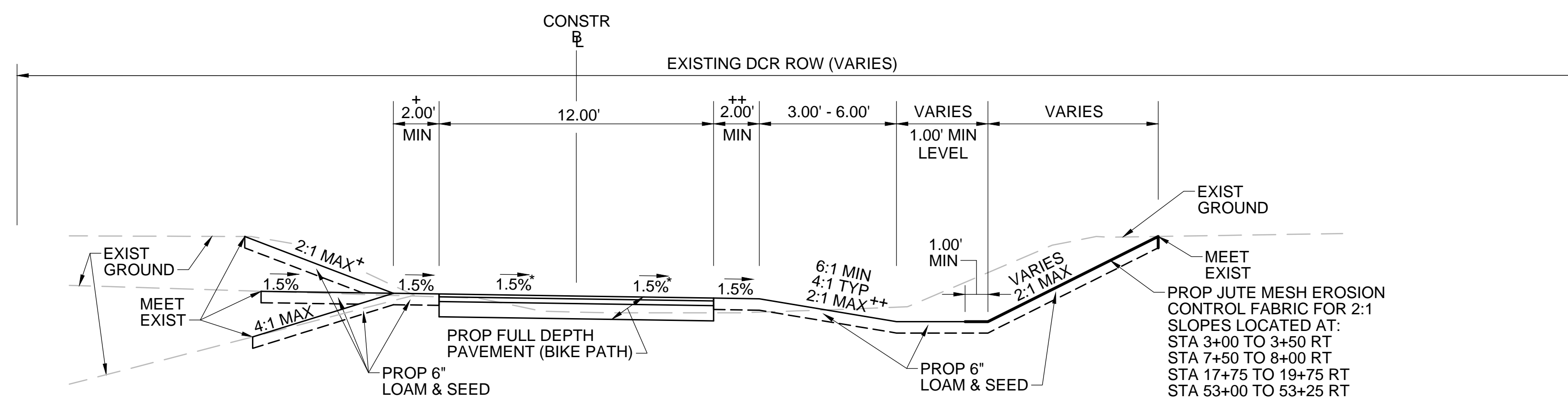
TYPICAL SECTIONS



TYPICAL SECTION UNDER EXISTING BRIDGE  
WATERTOWN/CAMBRIDGE GREENWAY

STA 10+25± TO STA 10+75± (GROVE ST) \*TOLERANCE FOR CONSTRUCTION ±0.5%  
 STA 28+50± TO STA 30+00± (MT AUBURN ST)  
 STA 45+40± TO STA 46+10± (HURON AVE)  
 STA 57+80± TO STA 58+50± (CAMBRIDGE WATER DEPARTMENT)

NTS

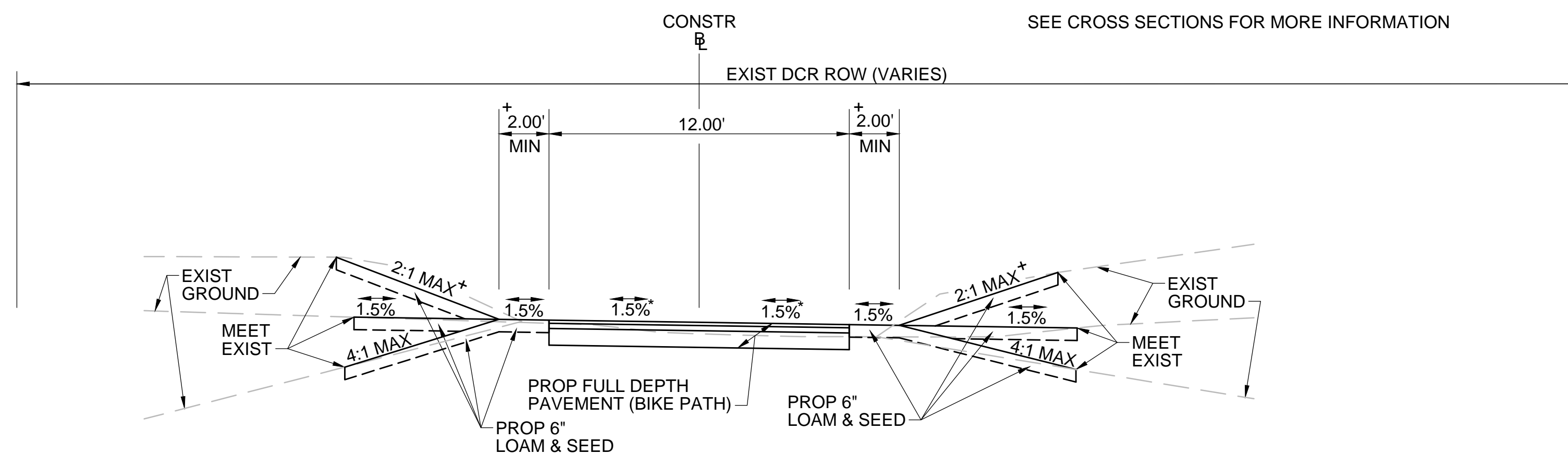


TYPICAL SECTION WITH DRAINAGE SWALE ON RIGHT  
WATERTOWN/CAMBRIDGE GREENWAY

STA 2+00± TO STA 4+75± STA 24+50± TO STA 27+00± \*TOLERANCE FOR CONSTRUCTION ±0.5%  
 STA 6+00± TO STA 8+90± STA 33+75± TO STA 43+30±  
 STA 11+00± TO STA 13+00± STA 47+30± TO STA 49+60±  
 STA 17+75± TO STA 20+75± STA 51+25± TO STA 53+25±

NTS

SEE CROSS SECTIONS FOR MORE INFORMATION



TYPICAL SECTION - SLOPE SCENARIOS  
WATERTOWN/CAMBRIDGE GREENWAY

STA 1+00± TO STA 2+00± STA 20+75± TO STA 24+50± \*TOLERANCE FOR CONSTRUCTION ±0.5%  
 STA 4+75± TO STA 6+00± STA 49+60± TO STA 51+25±  
 STA 8+90± TO STA 10+25± STA 56+50± TO STA 57+75±  
 STA 13+00± TO STA 13+65± STA 58+70± TO STA 60+00±  
 STA 14+15± TO STA 17+75±

NTS

SEE CROSS SECTIONS FOR MORE INFORMATION

PAVEMENT NOTES

PROPOSED FULL DEPTH PAVEMENT (PATH)

- SURFACE: 1.5" SUPERPAVE SURFACE COURSE - 9.5 (SSC - 9.5)
- INTERMEDIATE: 2.5" SUPERPAVE INTERMEDIATE COURSE - 19.0 (SIC - 19.0)
- SUBBASE: 4-8" GRAVEL BORROW, TYPE b LEVELING COURSE AS A BASE OVER EXIST BALLAST OR CONCRETE SLAB

\*NOTE:

EXIST GRAVEL/BALLAST SUBGROUND MATERIAL DETERMINED BY THE ENGINEER TO BE SUITABLE SHALL REMAIN. THE DEPTH OF THE GRAVEL BORROW WILL BE AS REQUIRED BASED ON THE PROPOSED SUB-BASE ELEVATIONS.

AFTER REMOVAL OF STEEL RAILS AND WOOD TIMBER, ROUGH GRADE AND COMPACT SUBGROUND AREA. THEN PLACE AND COMPACT GRAVEL BORROW SUB-BASE MATERIAL IN MULTIPLE LIFTS.

PROPOSED CEMENT CONCRETE WALK

- SURFACE: 4" CEMENT CONCRETE AIR ENTRAINED 4000 PSI, 3/4", 610
- SUBBASE: 8" GRAVEL BORROW, TYPE b

PROPOSED CEMENT CONCRETE WHEELCHAIR RAMP

- SURFACE: 6" CEMENT CONCRETE AIR ENTRAINED 4000 PSI, 3/4", 610 WITH 6"x6" WWM
- SUBBASE: 8" GRAVEL BORROW, TYPE b

PROPOSED HOT MIX ASPHALT WALK

- SURFACE: 1" SUPERPAVE SURFACE COURSE 9.5 (SSC - 9.5) OVER 1.5" SUPERPAVE INTERMEDIATE COURSE 12.5 (SIC - 12.5) OVER
- SUBBASE: 8" GRAVEL BORROW, TYPE b

PROPOSED HOT MIX ASPHALT DRIVEWAY

- SURFACE: 1" SUPERPAVE SURFACE COURSE 9.5 (SSC - 9.5) OVER 2.5" SUPERPAVE INTERMEDIATE COURSE 12.5 (SIC - 12.5) OVER
- SUBBASE: 8" GRAVEL BORROW, TYPE b

PROPOSED GATEWAY (PRECAST CONCRETE PAVER SIDEWALK)

- SURFACE: PRECAST CONCRETE PAVER
- BASE: 3" CEMENT CONCRETE AIR ENTRAINED 4000 PSI, 3/4", 610
- SUBBASE: 8" GRAVEL BORROW, TYPE b

PROPOSED FULL DEPTH PAVEMENT (COTTAGE ST & WATER DEPARTMENT DRIVEWAY)

- SURFACE: 1.75" SUPERPAVE SURFACE COURSE - 12.5 (SSC - 12.5)
- INTERMEDIATE: 3.5" SUPERPAVE INTERMEDIATE COURSE - 19.0 (SIC - 19.0)
- SUBBASE: 4" DENSE GRADED CRUSHED STONE FOR SUB-BASE OVER 8" GRAVEL BORROW, TYPE b

NOTES:

- ALL HOT MIX ASPHALT SHALL BE PRODUCED WITH A WARM-MIX ASPHALT ADDITIVE.
- ALL HOT MIX ASPHALT PAVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 450 QUALITY ASSURANCE FOR HMA AND SHALL BE PRODUCED IN ACCORDANCE WITH SECTION 455 SUPERPAVE HMA SPECIFICATIONS.
- ASPHALT EMULSION FOR TACK COAT (RS-1H) SHALL BE SPRAY APPLIED FOR DOUBLE OVERLAP COVERAGE AT 0.05 GALLONS PER SQUARE YARD OVER SMOOTH SURFACES.
- HMA JOINT SEALANT (ASPHALT RUBBER) SHALL BE APPLIED IN SURFACE COURSE AT ALL VERTICAL COLD JOINTS PRIOR TO PAVING.
- ALL HOT MIX ASPHALT WALKS SHALL BE MEASURED AND PAID FOR UNDER ITEM 702 OF STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES.
- ALL HOT MIX ASPHALT DRIVEWAYS SHALL BE MEASURED AND PAID FOR UNDER ITEM 703 OF STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES.

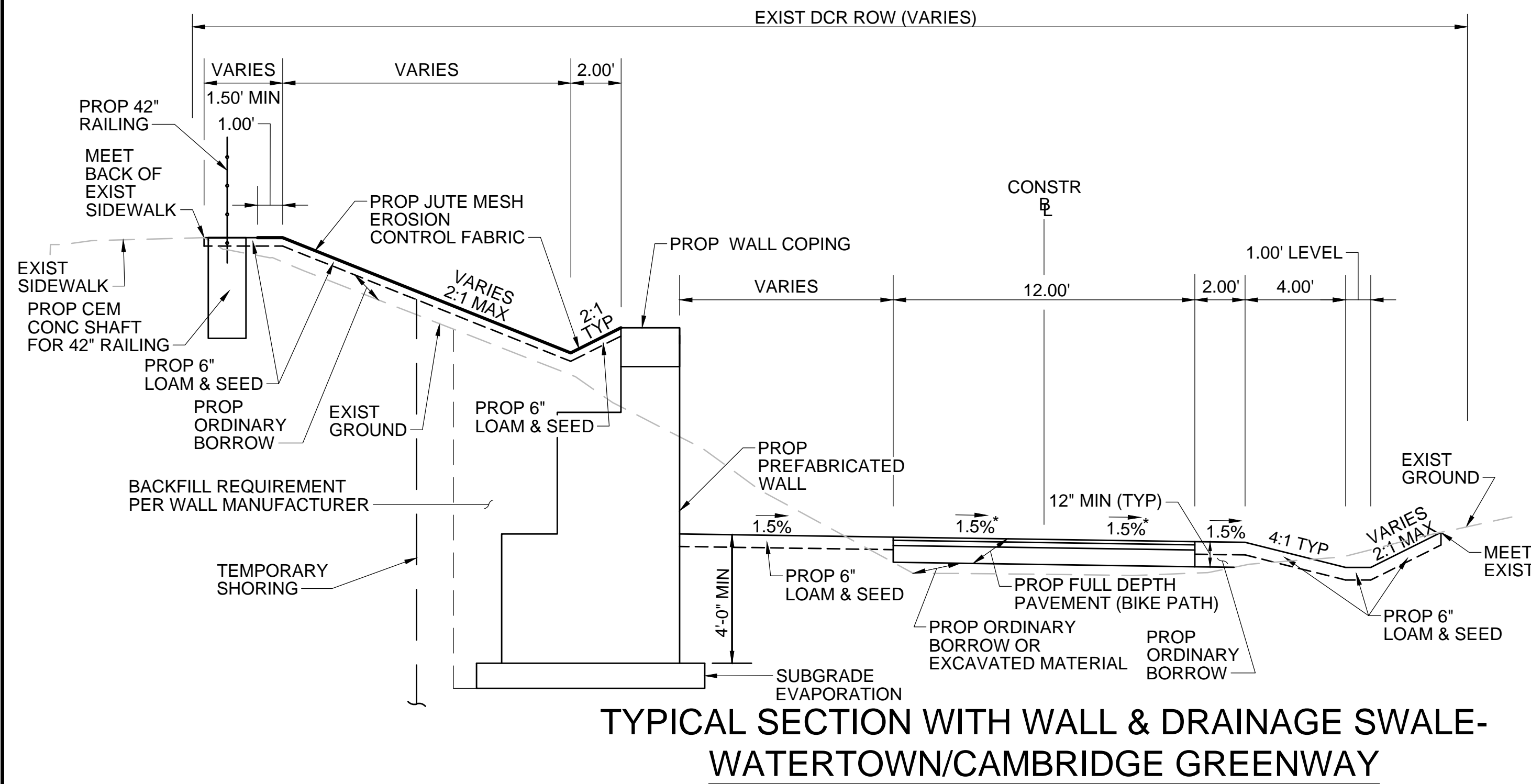
**PAVEMENT NOTES**

SEE SHEET 06

**WATERTOWN/CAMBRIDGE  
WATERTOWN-CAMBRIDGE GREENWAY PHASE II**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	07	143
PROJECT FILE NO.		608806	

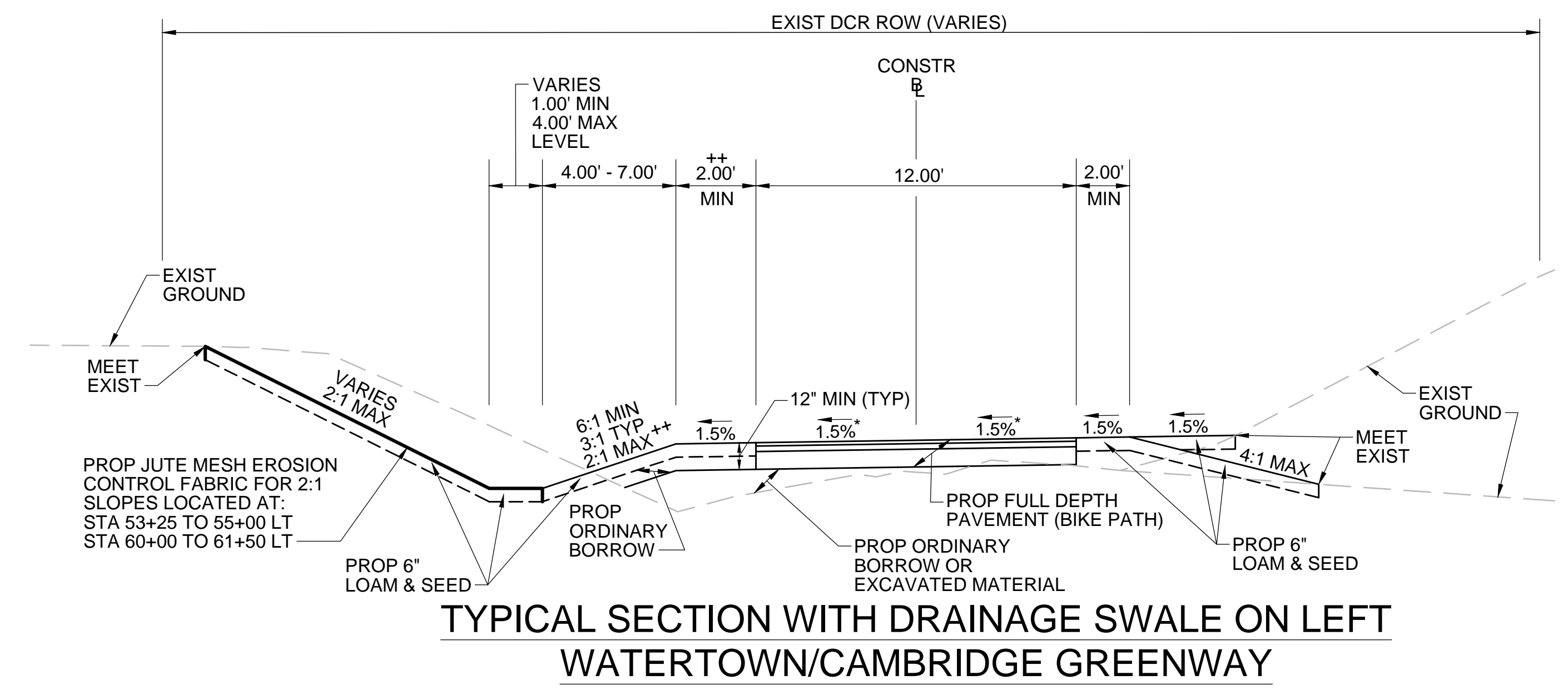
**TYPICAL SECTIONS**



**TYPICAL SECTION WITH WALL & DRAINAGE SWALE-  
WATERTOWN/CAMBRIDGE GREENWAY**

\*TOLERANCE FOR CONSTRUCTION ±0.5%

STA 29+90± TO STA 31+20±  
NTS



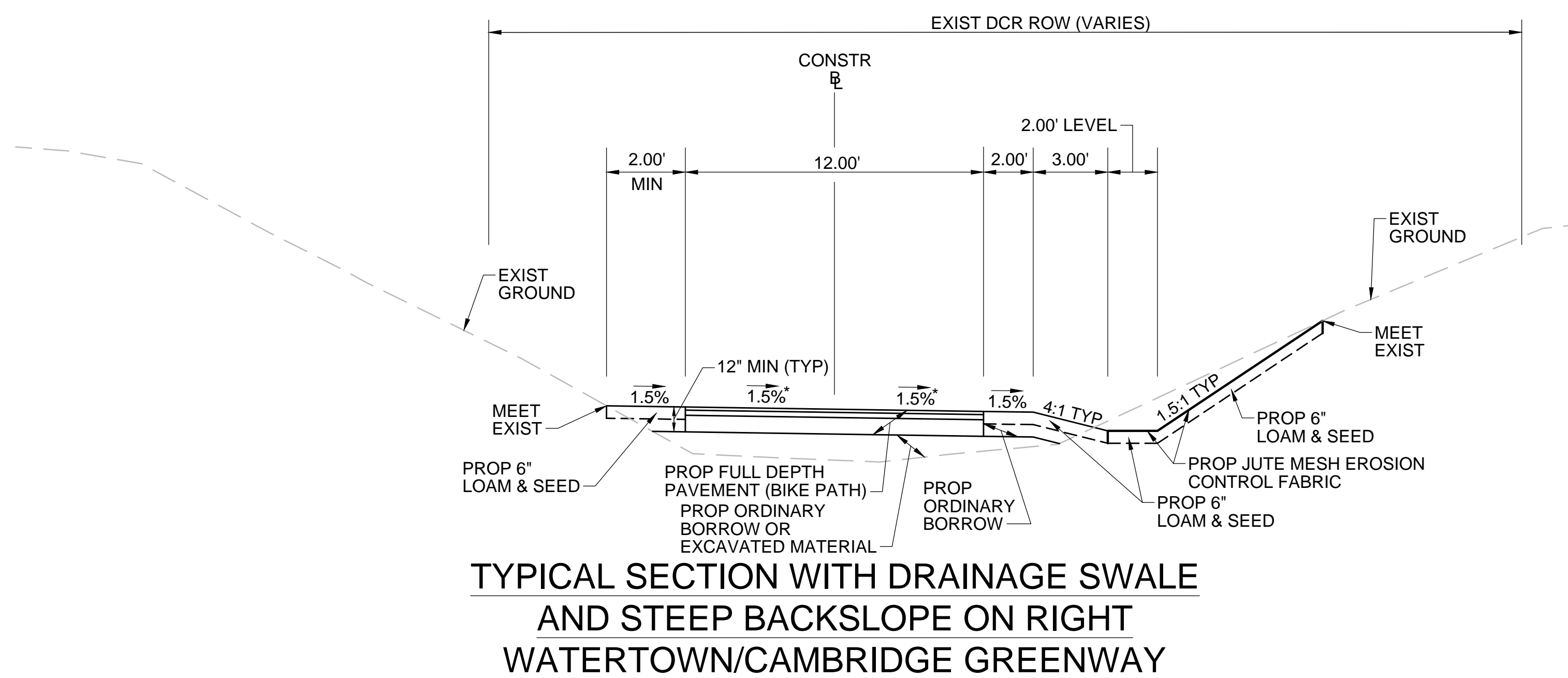
**TYPICAL SECTION WITH DRAINAGE SWALE ON LEFT  
WATERTOWN/CAMBRIDGE GREENWAY**

STA 52+50± TO STA 55+50±  
STA 60+00± TO STA 61+50±  
NTS

\*TOLERANCE FOR CONSTRUCTION ±0.5%

- + 3.00' SHLD FOR 2:1 BACKSLOPES
- ++ 2.00' SHLD FOR 6:1 TO 4:1 FORESLOPES
- 3.00' SHLD FOR 3:1 FORESLOPES
- 4.00' SHLD FOR 2:1 FORESLOPES

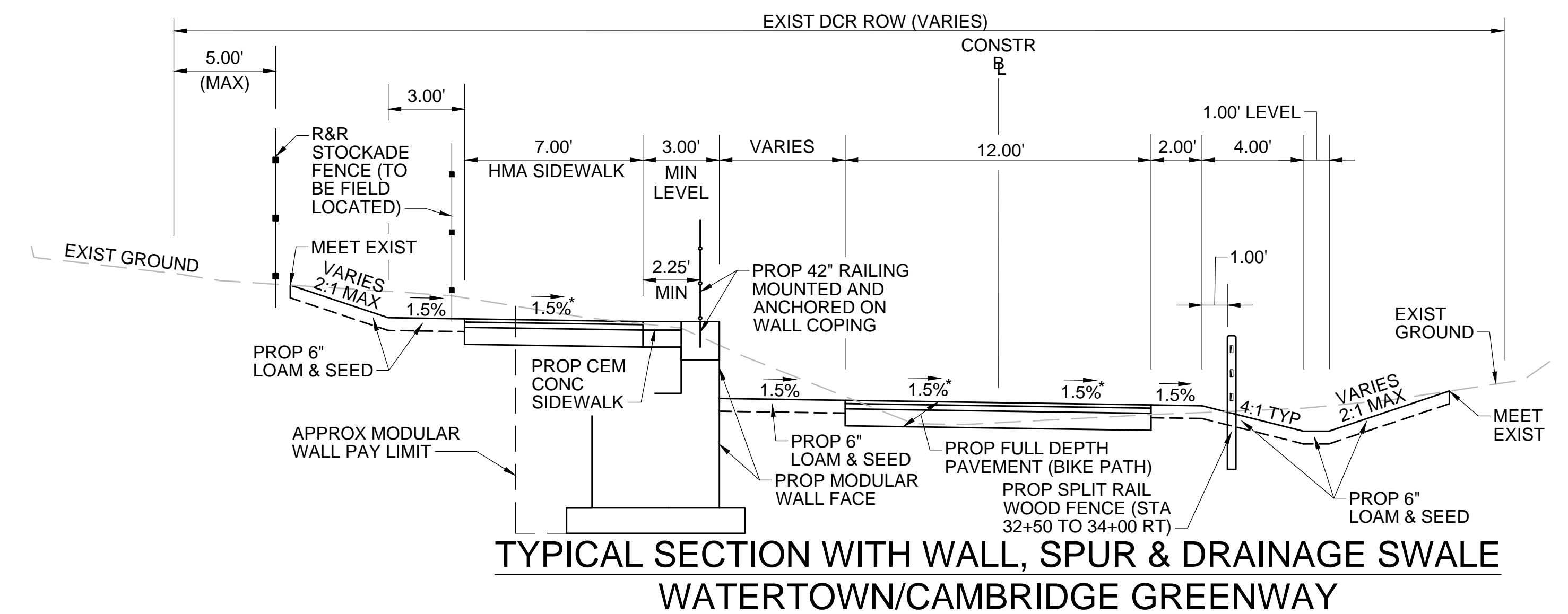
SEE CROSS SECTIONS FOR MORE INFORMATION



**TYPICAL SECTION WITH DRAINAGE SWALE  
AND STEEP BACKSLOPE ON RIGHT  
WATERTOWN/CAMBRIDGE GREENWAY**

STA 27+25± TO STA 28+25±  
NTS

\*TOLERANCE FOR CONSTRUCTION ±0.5%



**TYPICAL SECTION WITH WALL, SPUR & DRAINAGE SWALE  
WATERTOWN/CAMBRIDGE GREENWAY**

\*TOLERANCE FOR CONSTRUCTION ±0.5%

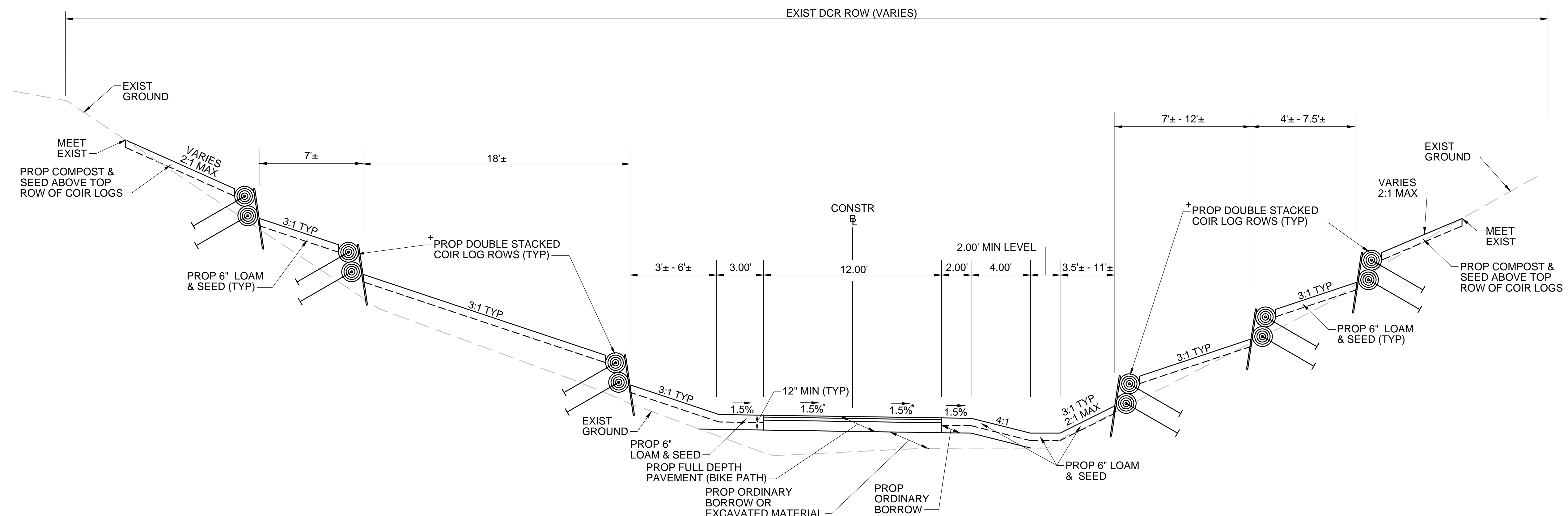
STA 31+20± TO STA 33+00±  
NTS

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	08	143
PROJECT FILE NO.		608806	

TYPICAL SECTIONS

PAVEMENT NOTES

SEE SHEET 06



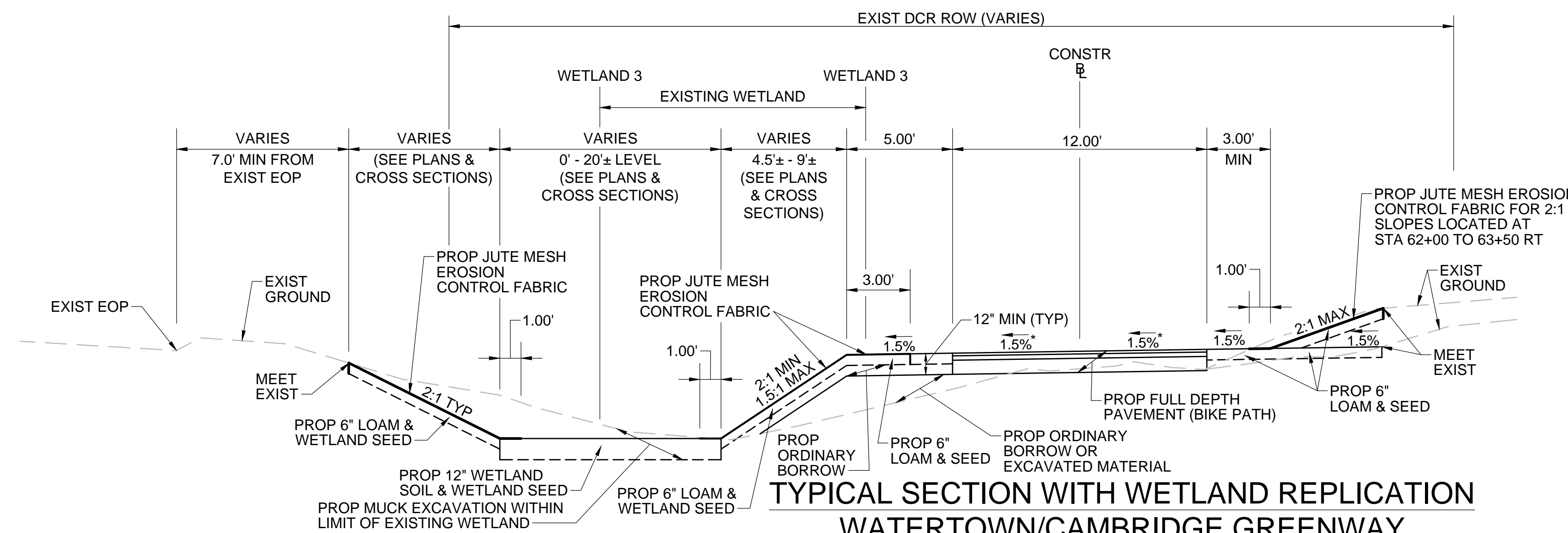
TYPICAL SECTION WITH COIR LOGS  
WATERTOWN/CAMBRIDGE GREENWAY

STA 28+30± TO STA 28+55± RT (SEE CROSS SECTIONS)  
STA 43+25± TO STA 45+40±  
STA 46+70± TO STA 47+25± RT (SEE CROSS SECTIONS)

NTS

\*TOLERANCE FOR CONSTRUCTION ±0.5%

+ SEE SHEET 57 FOR COIR LOG DETAILS. THE NUMBER OF ROWS OF COIR LOGS VARY - SEE PLANS & CROSS SECTIONS. FINAL PLACEMENT AND ELEVATION OF COIR LOG ROWS TO BE ADJUSTED IN THE FIELD AROUND EXISTING TREES TO REMAIN.



TYPICAL SECTION WITH WETLAND REPLICATION  
WATERTOWN/CAMBRIDGE GREENWAY

\*TOLERANCE FOR CONSTRUCTION ±0.5%  
SEE CROSS SECTIONS FOR MORE INFORMATION

STA 62+40± TO STA 65+10±  
NTS



**WATERTOWN/CAMBRIDGE  
WATERTOWN-CAMBRIDGE GREENWAY PHASE II**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	09	143
PROJECT FILE NO.		608806	

**CONSTRUCTION PLANS**

HIGHWAY GUARD DETAILS

NONE

WATER SUPPLY ALTERATIONS

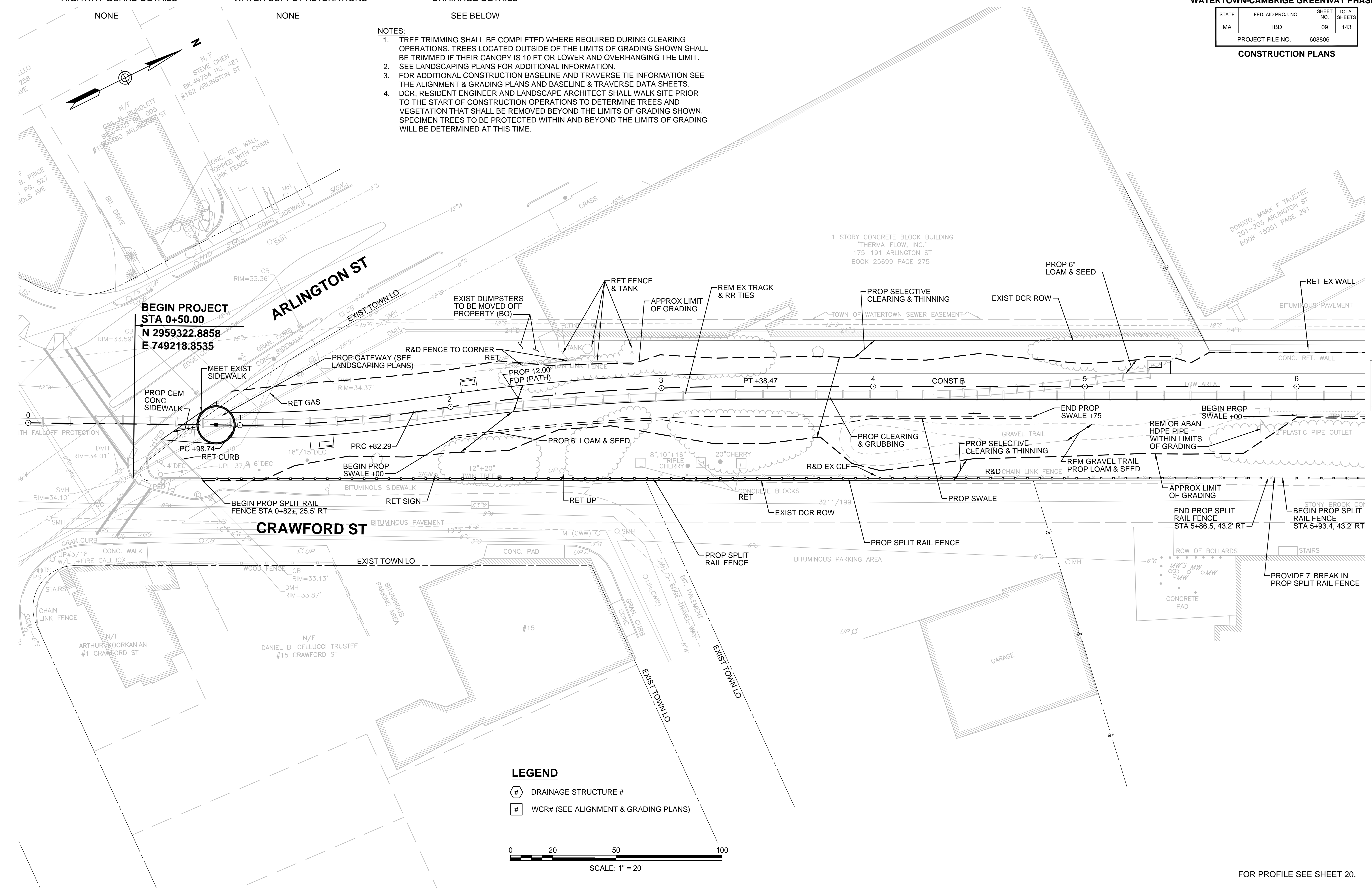
NONE

DRAINAGE DETAILS

SEE BELOW

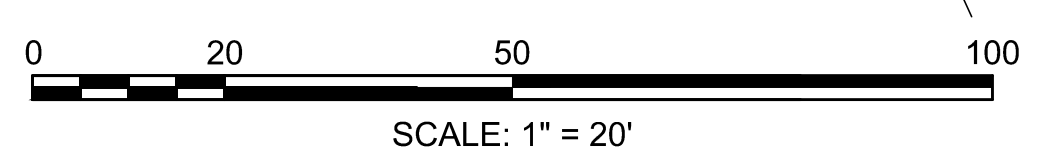
**NOTES:**

1. TREE TRIMMING SHALL BE COMPLETED WHERE REQUIRED DURING CLEARING OPERATIONS. TREES LOCATED OUTSIDE OF THE LIMITS OF GRADING SHOWN SHALL BE TRIMMED IF THEIR CANOPY IS 10 FT OR LOWER AND OVERHANGING THE LIMIT. SEE LANDSCAPING PLANS FOR ADDITIONAL INFORMATION.
2. FOR ADDITIONAL CONSTRUCTION BASELINE AND TRAVERSE TIE INFORMATION SEE THE ALIGNMENT & GRADING PLANS AND BASELINE & TRAVERSE DATA SHEETS.
3. DCR, RESIDENT ENGINEER AND LANDSCAPE ARCHITECT SHALL WALK SITE PRIOR TO THE START OF CONSTRUCTION OPERATIONS TO DETERMINE TREES AND VEGETATION THAT SHALL BE REMOVED BEYOND THE LIMITS OF GRADING SHOWN. SPECIMEN TREES TO BE PROTECTED WITHIN AND BEYOND THE LIMITS OF GRADING WILL BE DETERMINED AT THIS TIME.



**LEGEND**

- ⊕ DRAINAGE STRUCTURE #
- ⊠ WCR# (SEE ALIGNMENT & GRADING PLANS)



FOR PROFILE SEE SHEET 20.

CONTINUED ON SHEET NO. 10

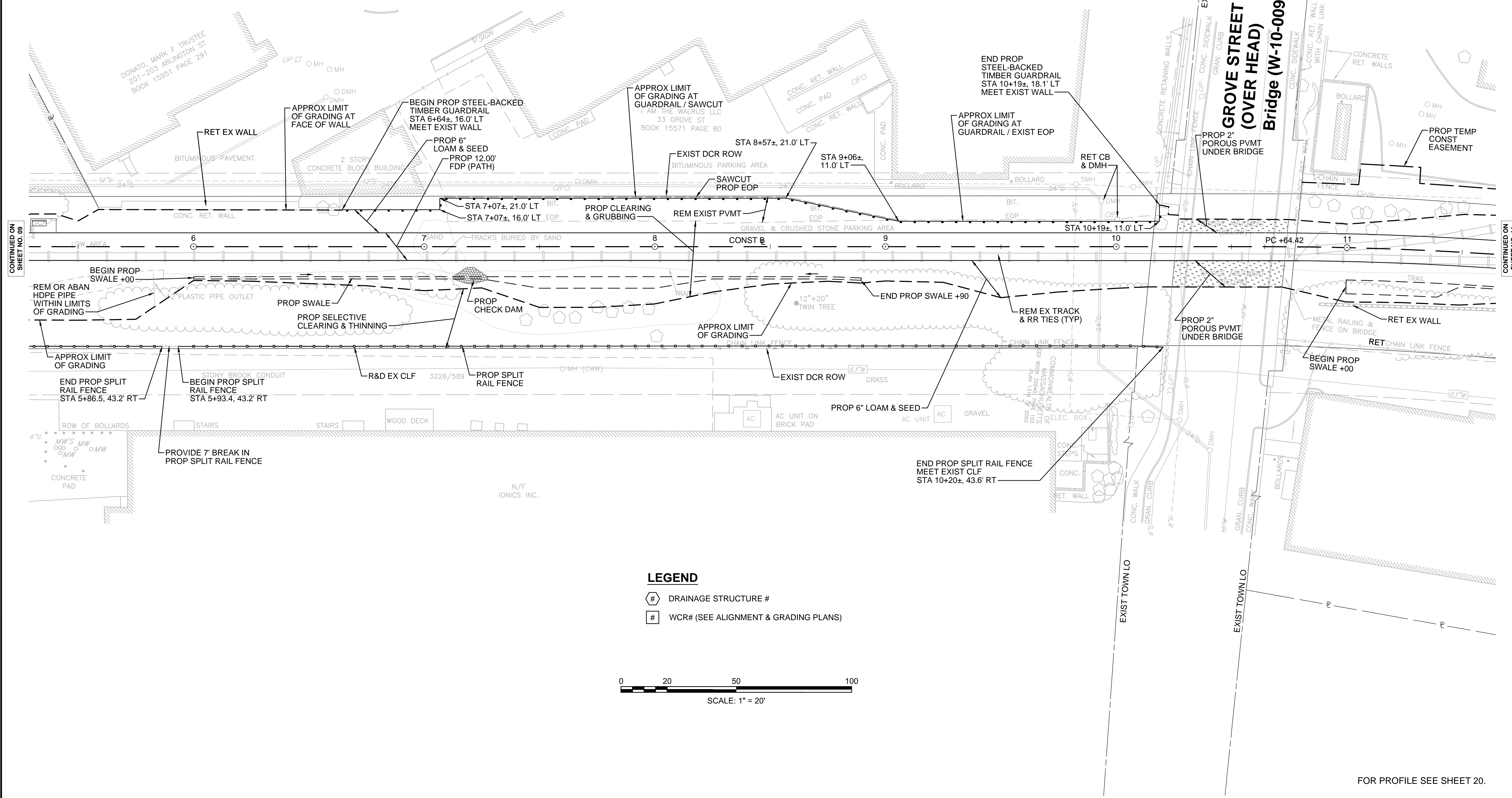
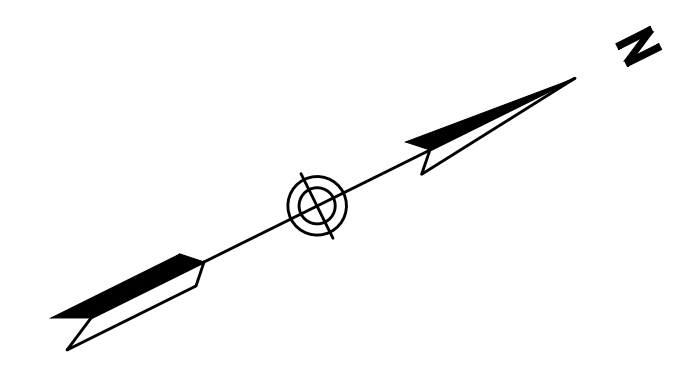
13061-GEN1.DWG Plotted on 4-Aug-2017 1:44 PM

HIGHWAY GUARD DETAILS  
STEEL BACKED TIMBER GUARDRAIL  
6+64± LT TO 10+19± LT

WATER SUPPLY ALTERATIONS  
NONE

DRAINAGE DETAILS  
SEE BELOW

- NOTES:**
- TREE TRIMMING SHALL BE COMPLETED WHERE REQUIRED DURING CLEARING OPERATIONS. TREES LOCATED OUTSIDE OF THE LIMITS OF GRADING SHOWN SHALL BE TRIMMED IF THEIR CANOPY IS 10 FT OR LOWER AND OVERHANGING THE LIMIT.
  - SEE LANDSCAPING PLANS FOR ADDITIONAL INFORMATION.
  - FOR ADDITIONAL CONSTRUCTION BASELINE AND TRAVERSE TIE INFORMATION SEE THE ALIGNMENT & GRADING PLANS AND BASELINE & TRAVERSE DATA SHEETS.
  - DCR, RESIDENT ENGINEER AND LANDSCAPE ARCHITECT SHALL WALK SITE PRIOR TO THE START OF CONSTRUCTION OPERATIONS TO DETERMINE TREES AND VEGETATION THAT SHALL BE REMOVED BEYOND THE LIMITS OF GRADING SHOWN. SPECIMEN TREES TO BE PROTECTED WITHIN AND BEYOND THE LIMITS OF GRADING WILL BE DETERMINED AT THIS TIME.



**LEGEND**

⊕ DRAINAGE STRUCTURE #

⊔ WCR# (SEE ALIGNMENT & GRADING PLANS)



FOR PROFILE SEE SHEET 20.

CONTINUED ON SHEET NO. 09

CONTINUED ON SHEET NO. 11

HIGHWAY GUARD DETAILS

NONE

WATER SUPPLY ALTERATIONS

NONE

DRAINAGE DETAILS

SEE BELOW

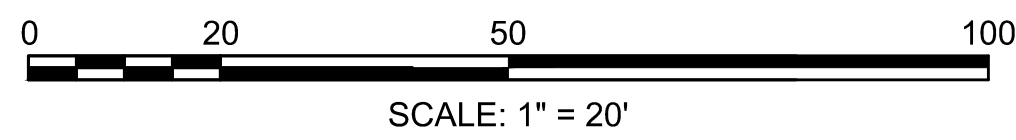
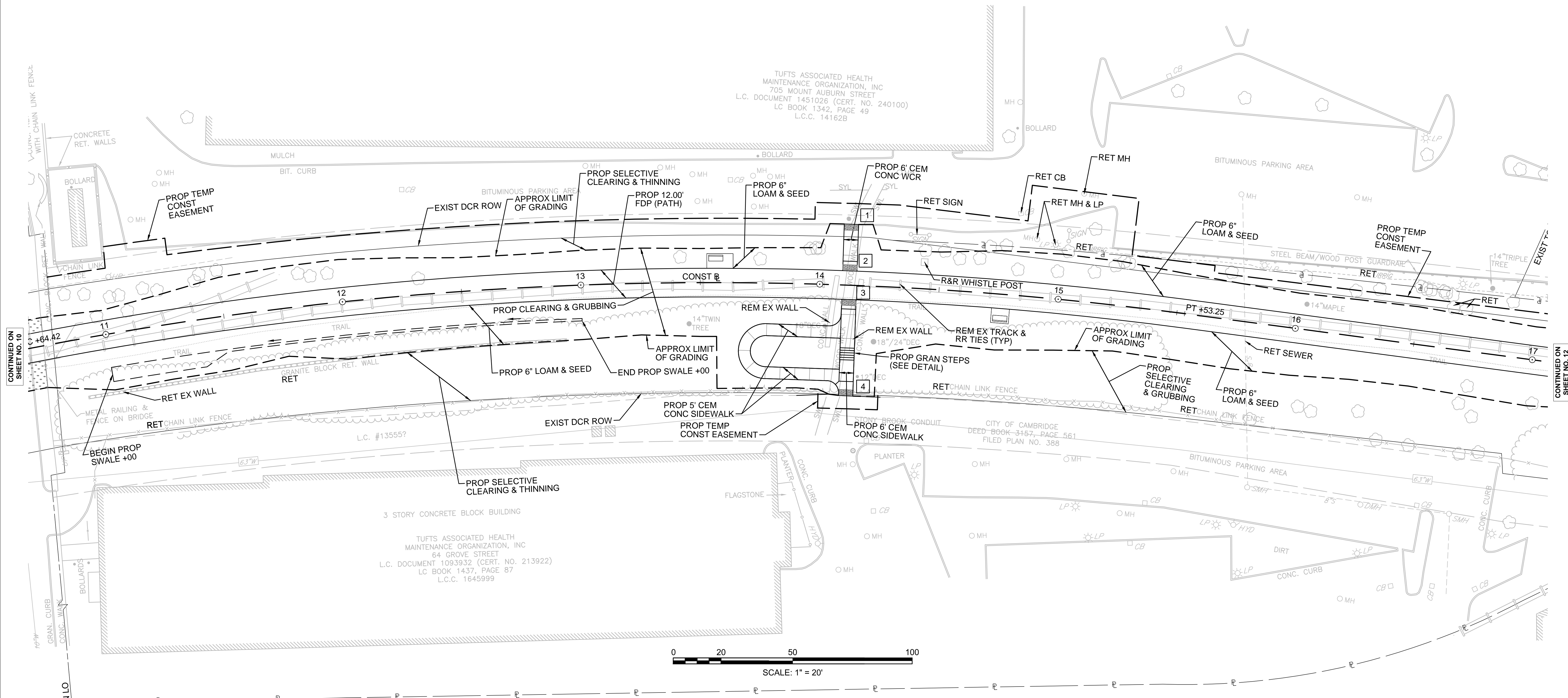
WATERTOWN/CAMBRIDGE  
WATERTOWN-CAMBRIDGE GREENWAY PHASE II

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	11	143
PROJECT FILE NO.		608806	

CONSTRUCTION PLANS

NOTES:

1. TREE TRIMMING SHALL BE COMPLETED WHERE REQUIRED DURING CLEARING OPERATIONS. TREES LOCATED OUTSIDE OF THE LIMITS OF GRADING SHOWN SHALL BE TRIMMED IF THEIR CANOPY IS 10 FT OR LOWER AND OVERHANGING THE LIMIT.
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3. FOR ADDITIONAL CONSTRUCTION BASELINE AND TRAVERSE TIE INFORMATION SEE THE ALIGNMENT & GRADING PLANS AND BASELINE & TRAVERSE DATA SHEETS.
4. DCR, RESIDENT ENGINEER AND LANDSCAPE ARCHITECT SHALL WALK SITE PRIOR TO THE START OF CONSTRUCTION OPERATIONS TO DETERMINE TREES AND VEGETATION THAT SHALL BE REMOVED BEYOND THE LIMITS OF GRADING SHOWN. SPECIMEN TREES TO BE PROTECTED WITHIN AND BEYOND THE LIMITS OF GRADING WILL BE DETERMINED AT THIS TIME.



LEGEND

- ⊕ DRAINAGE STRUCTURE #
- ▭ WCR# (SEE ALIGNMENT & GRADING PLANS)

FOR PROFILE SEE SHEET 20.

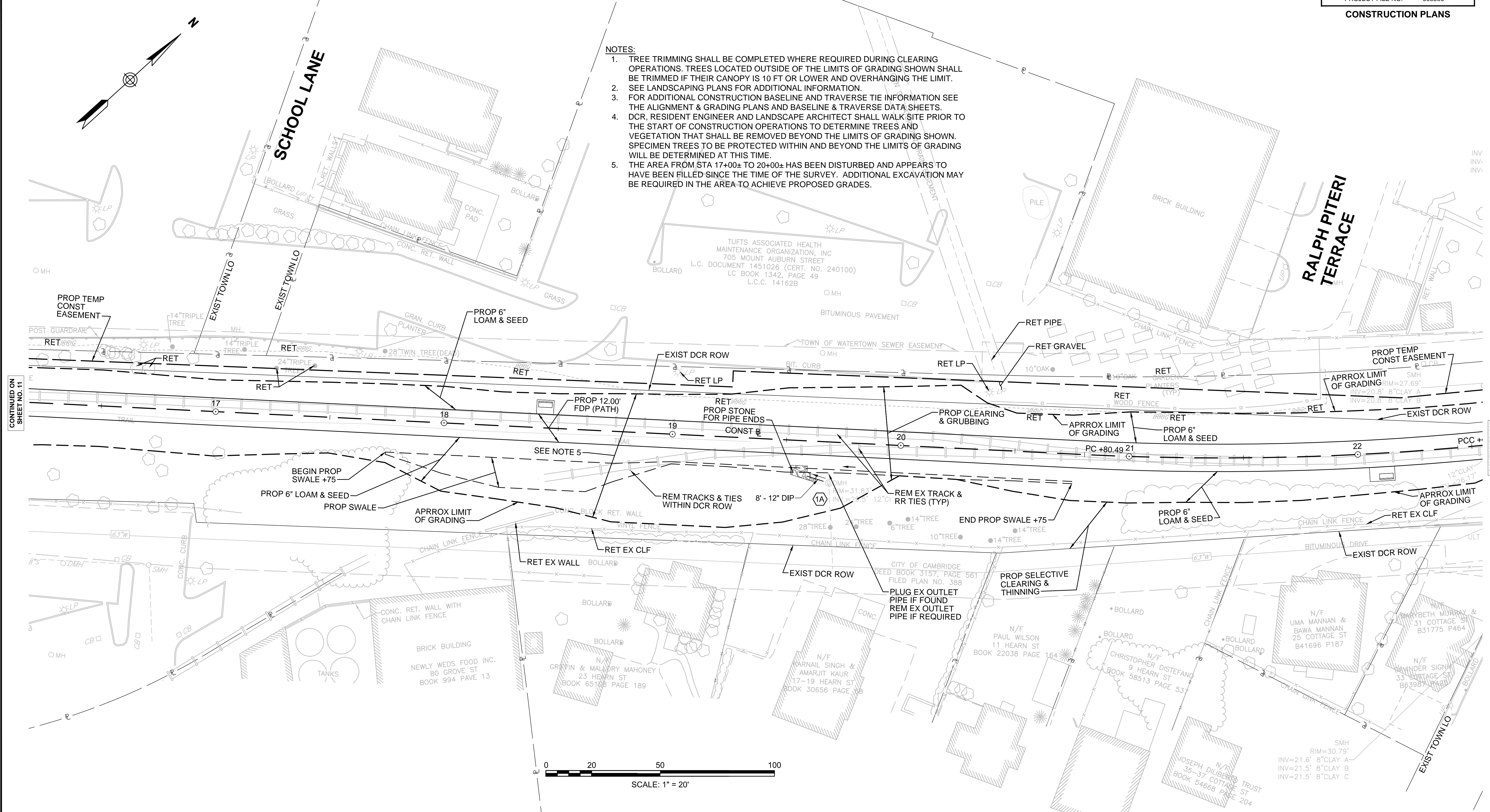
CONTINUED ON SHEET NO. 10

CONTINUED ON SHEET NO. 12

13061-GEN1.DWG Plotted on 4-Aug-2017 1:44 PM

HIGHWAY GUARD DETAILS NONE  
 WATER SUPPLY ALTERATIONS NONE  
 DRAINAGE DETAILS SEE BELOW

- NOTES:**
1. TREE TRIMMING SHALL BE COMPLETED WHERE REQUIRED DURING CLEARING OPERATIONS. TREES LOCATED OUTSIDE OF THE LIMITS OF GRADING SHOWN SHALL BE TRIMMED IF THEIR CANOPY IS 10 FT OR LOWER AND OVERHANGING THE LIMIT.
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  5. THE AREA FROM STA 17+00± TO 20+00± HAS BEEN DISTURBED AND APPEARS TO HAVE BEEN FILLED SINCE THE TIME OF THE SURVEY. ADDITIONAL EXCAVATION MAY BE REQUIRED IN THE AREA TO ACHIEVE PROPOSED GRADES.



- LEGEND**
- Ⓝ DRAINAGE STRUCTURE #
  - # WCR# (SEE ALIGNMENT & GRADING PLANS)

DCR GREENWAY DRAINAGE STRUCTURE DATA						
NO.	TYPE	STATION	RIM ELEV.	INV. IN	INV. OUT	REMARKS
1A	EX DMH	19+69.3 17.9 RT	31.83	(EX) 29.50	PROP 28.20 EX UNKNOWN	VERIFY BOTTOM OF STRUCTURE ELEVATION. ADJUST PROP OUTLET PIPE & OUTFALL AS REQUIRED.

FOR PROFILE SEE SHEET 20.

CONTINUED ON SHEET NO. 11

CONTINUED ON SHEET NO. 13

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	13	143
PROJECT FILE NO.		608806	

CONSTRUCTION PLANS

HIGHWAY GUARD DETAILS

STEEL BACKED TIMBER GUARDRAIL  
23+46± TO 25+52± LT

WATER SUPPLY ALTERATIONS

NONE

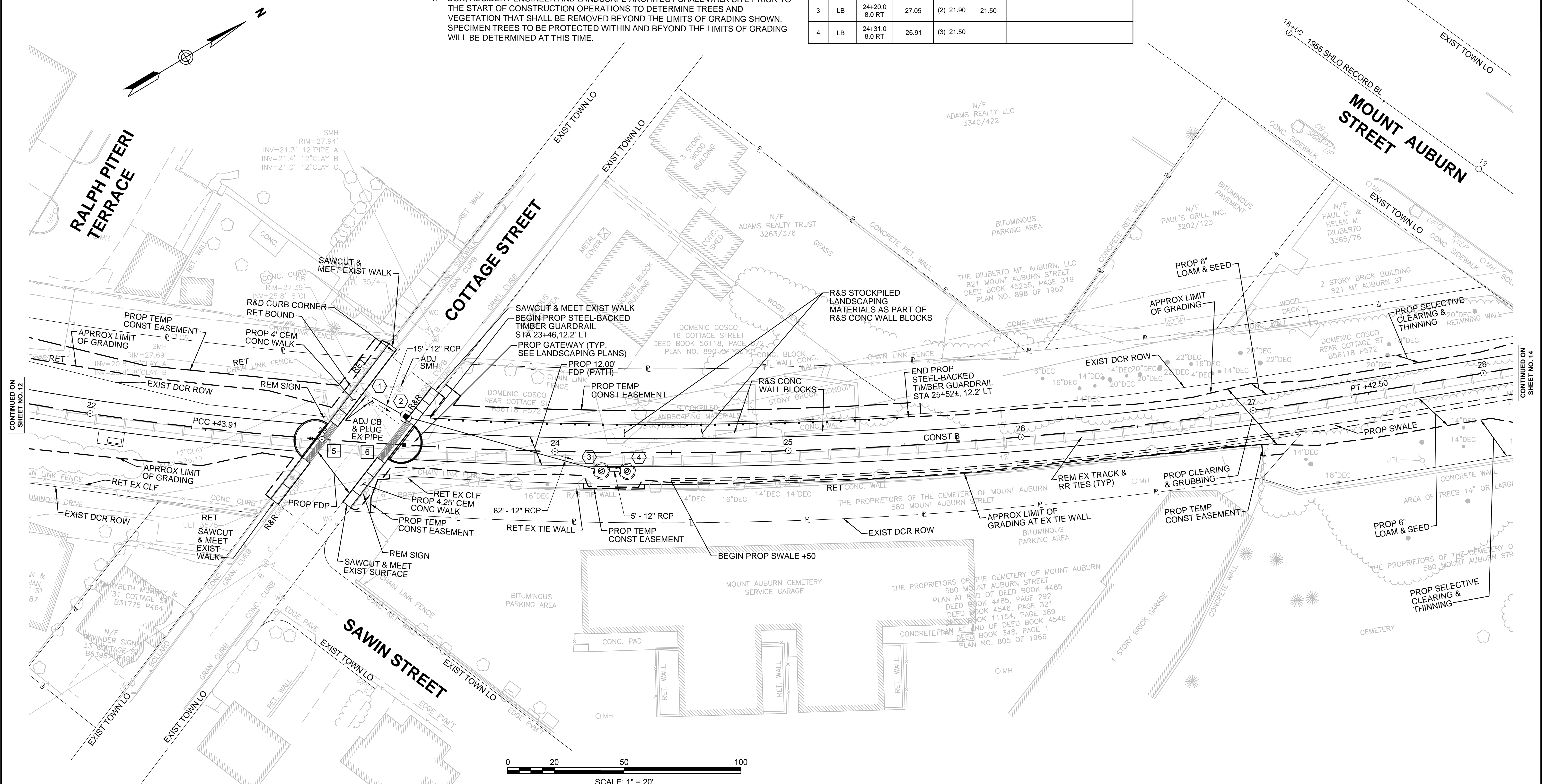
DRAINAGE DETAILS

SEE BELOW

DCR GREENWAY DRAINAGE STRUCTURE DATA						
NO.	TYPE	STATION	RIM ELEV.	INV. IN	INV. OUT	REMARKS
1	EX CB	23+18.0 20.6 LT	27.39		23.00	PLUG EXISTING PIPE
2	CB	23+35.3 12.2 LT	27.35	(1) 22.80	22.70	4 FT SUMP
3	LB	24+20.0 8.0 RT	27.05	(2) 21.90	21.50	
4	LB	24+31.0 8.0 RT	26.91	(3) 21.50		

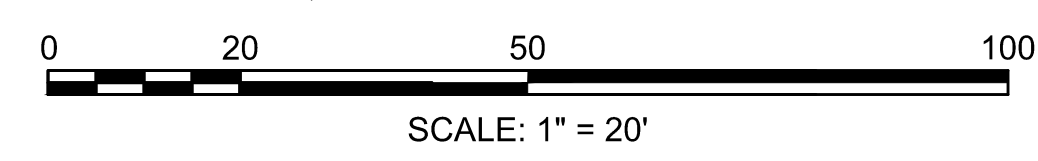
NOTES:

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CONTINUED ON SHEET NO. 12

CONTINUED ON SHEET NO. 14



LEGEND

- # DRAINAGE STRUCTURE #
- # WCR# (SEE ALIGNMENT & GRADING PLANS)

FOR PROFILE SEE SHEET 20-21.

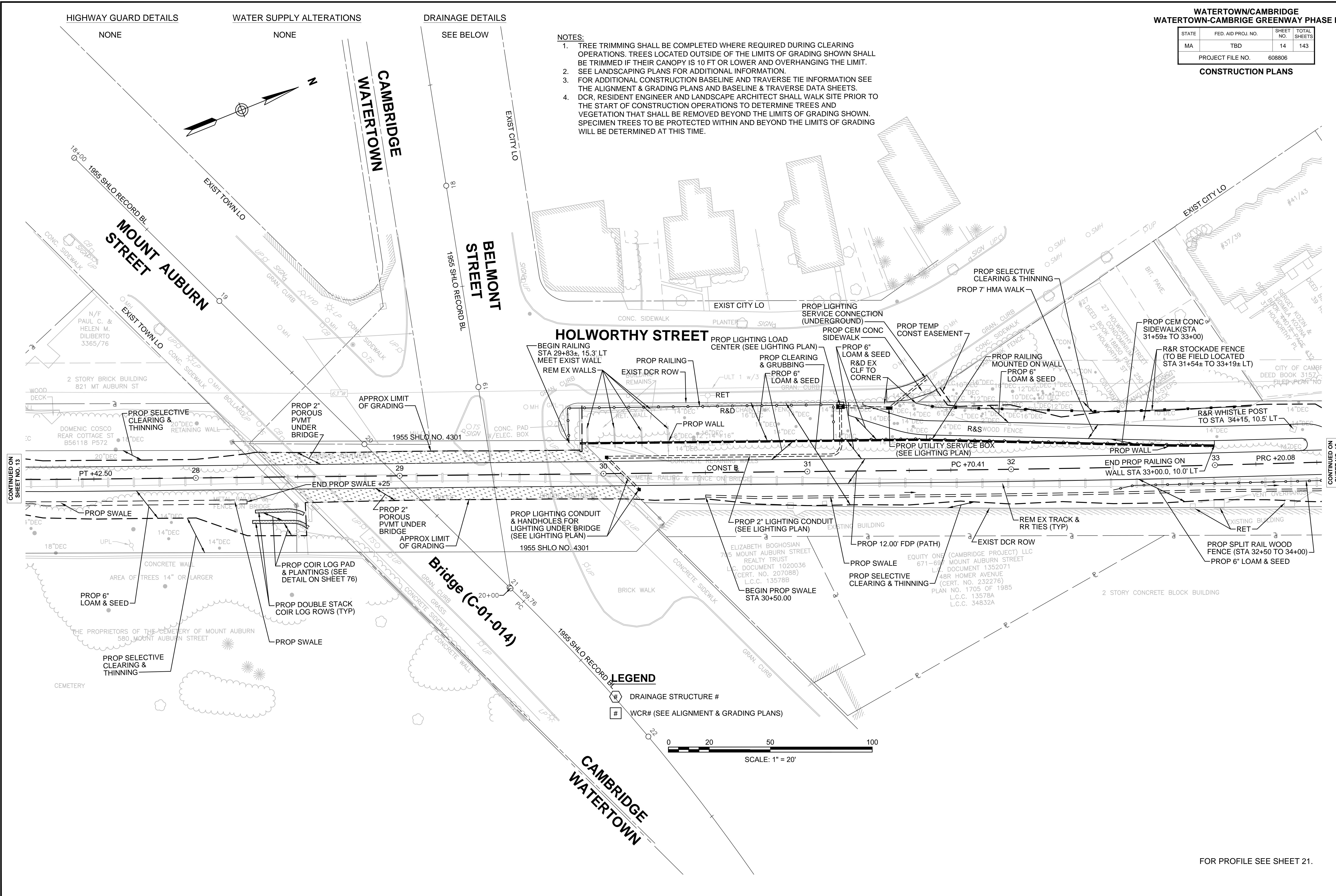
**WATERTOWN/CAMBRIDGE  
WATERTOWN-CAMBRIDGE GREENWAY PHASE II**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	14	143
PROJECT FILE NO.		608806	

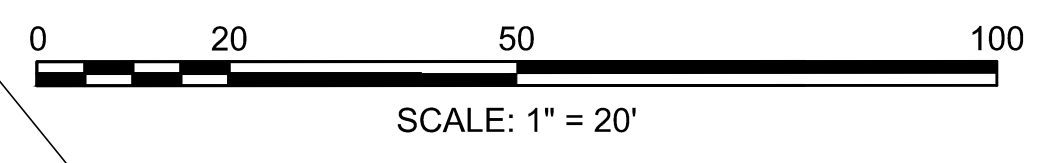
**CONSTRUCTION PLANS**

HIGHWAY GUARD DETAILS NONE  
WATER SUPPLY ALTERATIONS NONE  
DRAINAGE DETAILS SEE BELOW

- NOTES:**
- TREE TRIMMING SHALL BE COMPLETED WHERE REQUIRED DURING CLEARING OPERATIONS. TREES LOCATED OUTSIDE OF THE LIMITS OF GRADING SHOWN SHALL BE TRIMMED IF THEIR CANOPY IS 10 FT OR LOWER AND OVERHANGING THE LIMIT.
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- LEGEND**
- DRAINAGE STRUCTURE #
  - WCR# (SEE ALIGNMENT & GRADING PLANS)



CONTINUED ON SHEET NO. 13

CONTINUED ON SHEET NO. 15

FOR PROFILE SEE SHEET 21.

HIGHWAY GUARD DETAILS

STEEL BACKED TIMBER GUARDRAIL  
36+08± TO 37+39± LT

WATER SUPPLY ALTERATIONS

NONE

DRAINAGE DETAILS

SEE BELOW

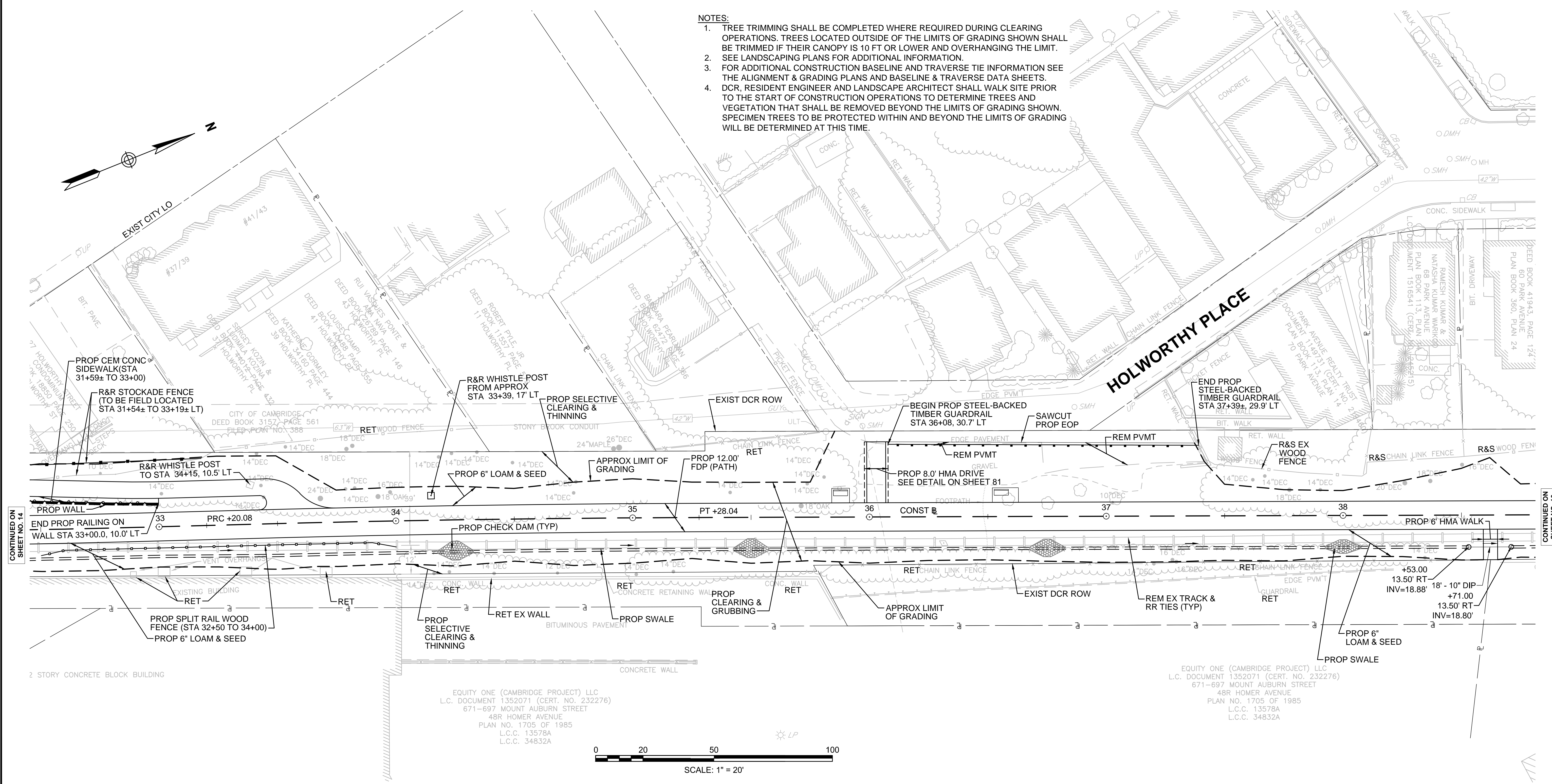
WATERTOWN/CAMBRIDGE  
WATERTOWN-CAMBRIDGE GREENWAY PHASE II

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	15	143
PROJECT FILE NO.		608806	

CONSTRUCTION PLANS

NOTES:

1. TREE TRIMMING SHALL BE COMPLETED WHERE REQUIRED DURING CLEARING OPERATIONS. TREES LOCATED OUTSIDE OF THE LIMITS OF GRADING SHOWN SHALL BE TRIMMED IF THEIR CANOPY IS 10 FT OR LOWER AND OVERHANGING THE LIMIT.
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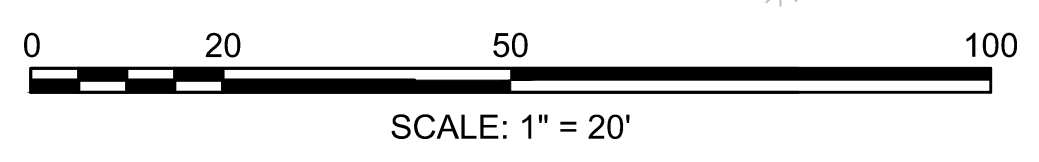


CONTINUED ON SHEET NO. 14

CONTINUED ON SHEET NO. 16

EQUITY ONE (CAMBRIDGE PROJECT) LLC  
L.C. DOCUMENT 1352071 (CERT. NO. 232276)  
671-697 MOUNT AUBURN STREET  
48R HOMER AVENUE  
PLAN NO. 1705 OF 1985  
L.C.C. 13578A  
L.C.C. 34832A

EQUITY ONE (CAMBRIDGE PROJECT) LLC  
L.C. DOCUMENT 1352071 (CERT. NO. 232276)  
671-697 MOUNT AUBURN STREET  
48R HOMER AVENUE  
PLAN NO. 1705 OF 1985  
L.C.C. 13578A  
L.C.C. 34832A



LEGEND

- # DRAINAGE STRUCTURE #
- # WCR# (SEE ALIGNMENT & GRADING PLANS)

FOR PROFILE SEE SHEET 21.

HIGHWAY GUARD DETAILS

NONE

WATER SUPPLY ALTERATIONS

NONE

DRAINAGE DETAILS

SEE BELOW

WATERTOWN/CAMBRIDGE  
WATERTOWN-CAMBRIDGE GREENWAY PHASE II

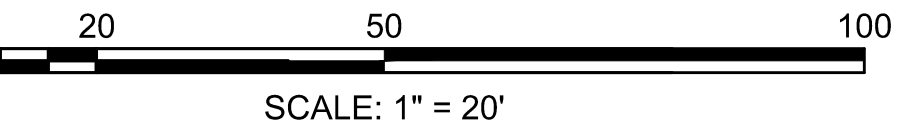
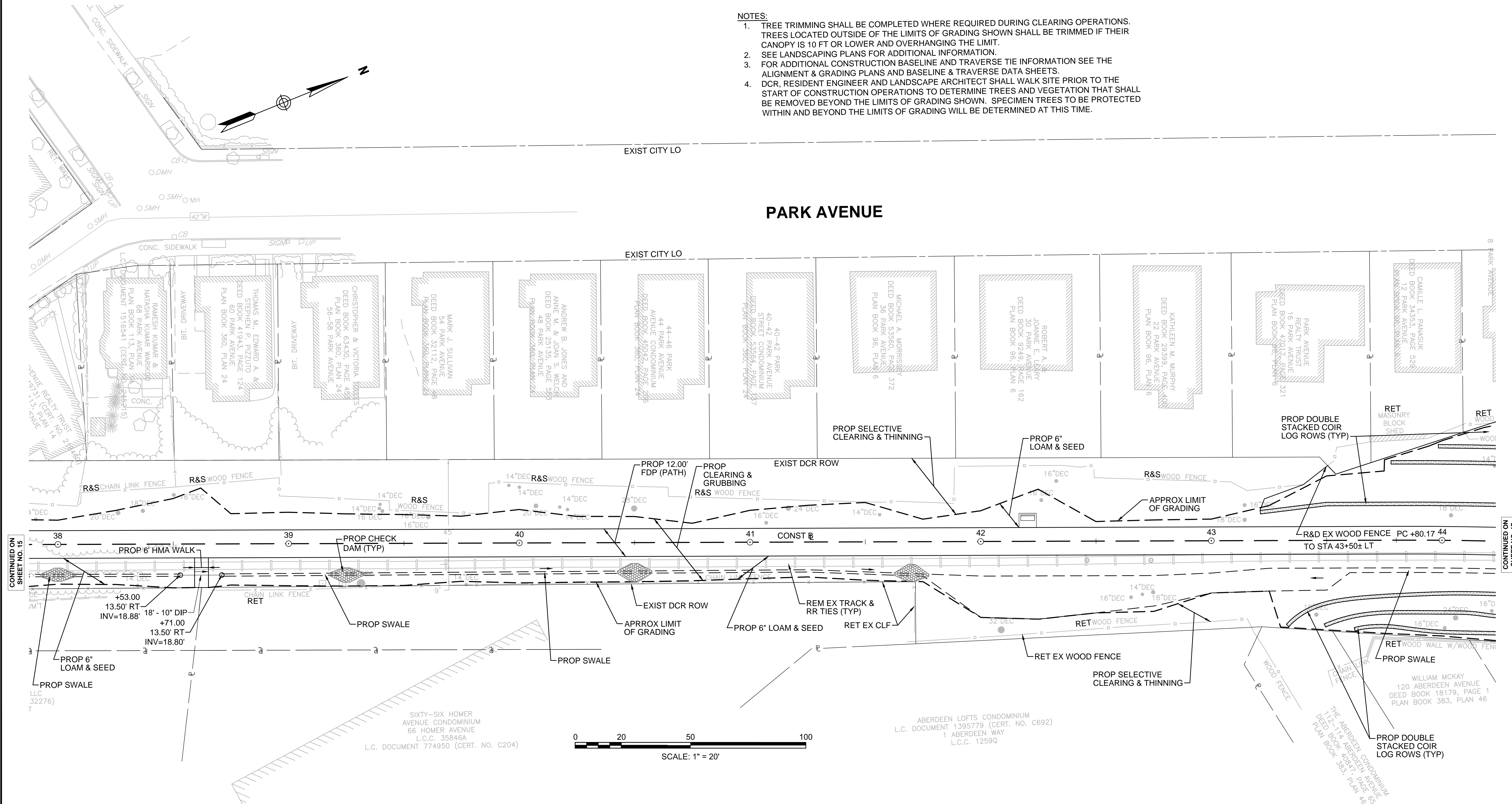
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	16	143
PROJECT FILE NO.		608806	

CONSTRUCTION PLANS

NOTES:

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PARK AVENUE



- LEGEND**
- # DRAINAGE STRUCTURE #
  - # WCR# (SEE ALIGNMENT & GRADING PLANS)

FOR PROFILE SEE SHEET 21.

CONTINUED ON SHEET NO. 15

CONTINUED ON SHEET NO. 17



HIGHWAY GUARD DETAILS

NONE

WATER SUPPLY ALTERATIONS

NONE

DRAINAGE DETAILS

SEE BELOW

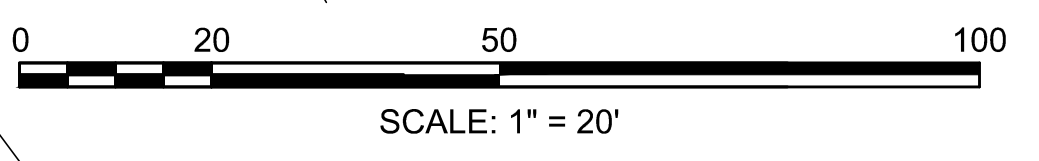
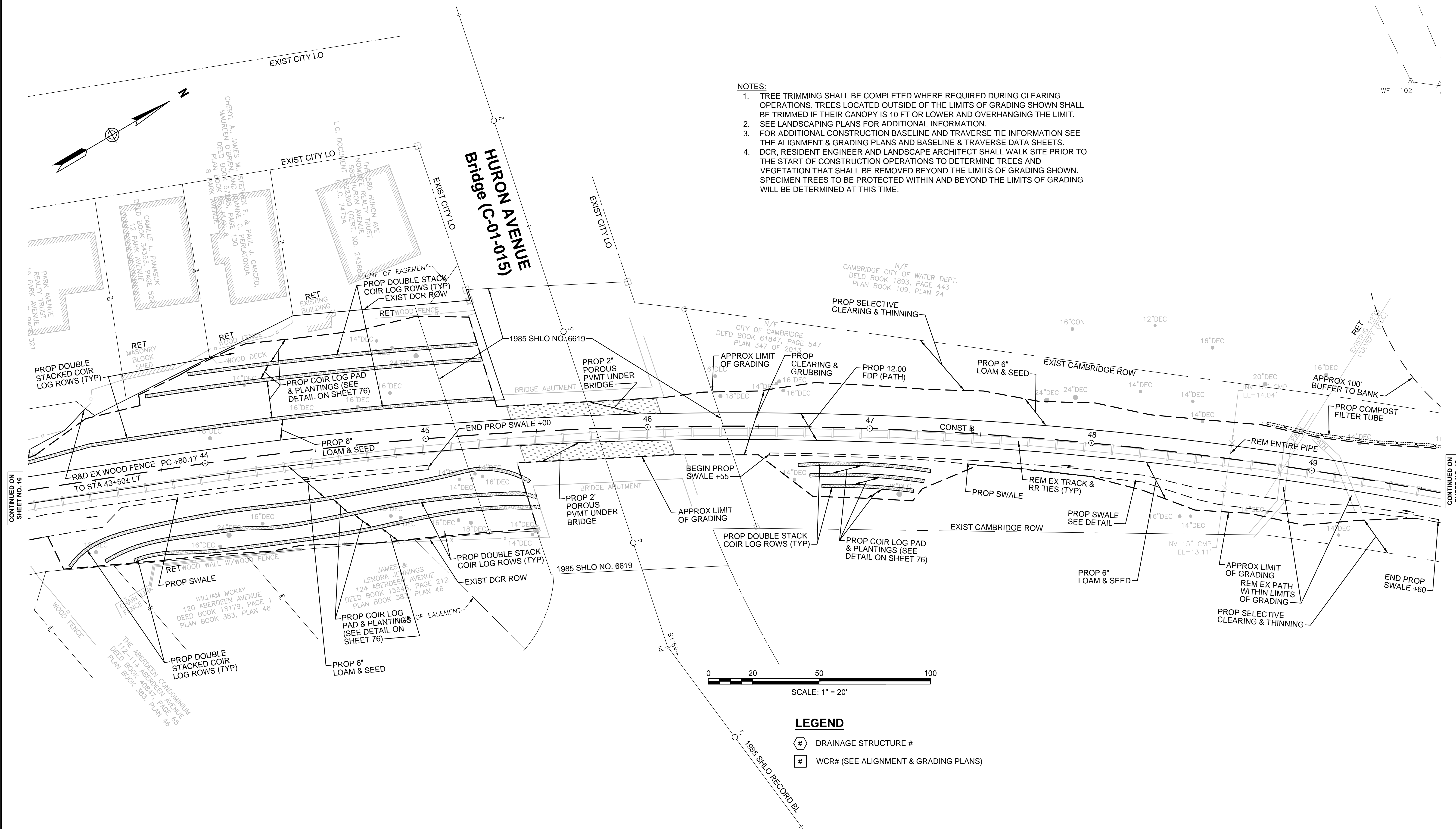
WATERTOWN/CAMBRIDGE  
WATERTOWN-CAMBRIDGE GREENWAY PHASE II

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	17	143
PROJECT FILE NO.		608806	

CONSTRUCTION PLANS

NOTES:

1. TREE TRIMMING SHALL BE COMPLETED WHERE REQUIRED DURING CLEARING OPERATIONS. TREES LOCATED OUTSIDE OF THE LIMITS OF GRADING SHOWN SHALL BE TRIMMED IF THEIR CANOPY IS 10 FT OR LOWER AND OVERHANGING THE LIMIT. SEE LANDSCAPING PLANS FOR ADDITIONAL INFORMATION.
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LEGEND

- # DRAINAGE STRUCTURE #
- # WCR# (SEE ALIGNMENT & GRADING PLANS)

FOR PROFILE SEE SHEET 21-22.

CONTINUED ON SHEET NO. 16

CONTINUED ON SHEET NO. 18

**WATERTOWN/CAMBRIDGE  
WATERTOWN-CAMBRIDGE GREENWAY PHASE II**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	18	143
PROJECT FILE NO.		608806	

**CONSTRUCTION PLANS**

HIGHWAY GUARD DETAILS

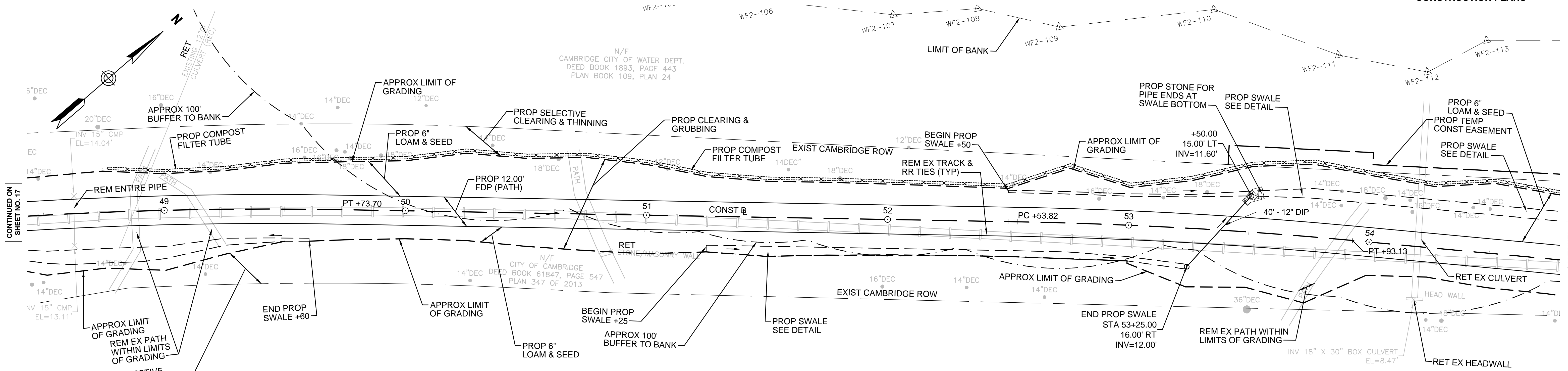
NONE

WATER SUPPLY ALTERATIONS

NONE

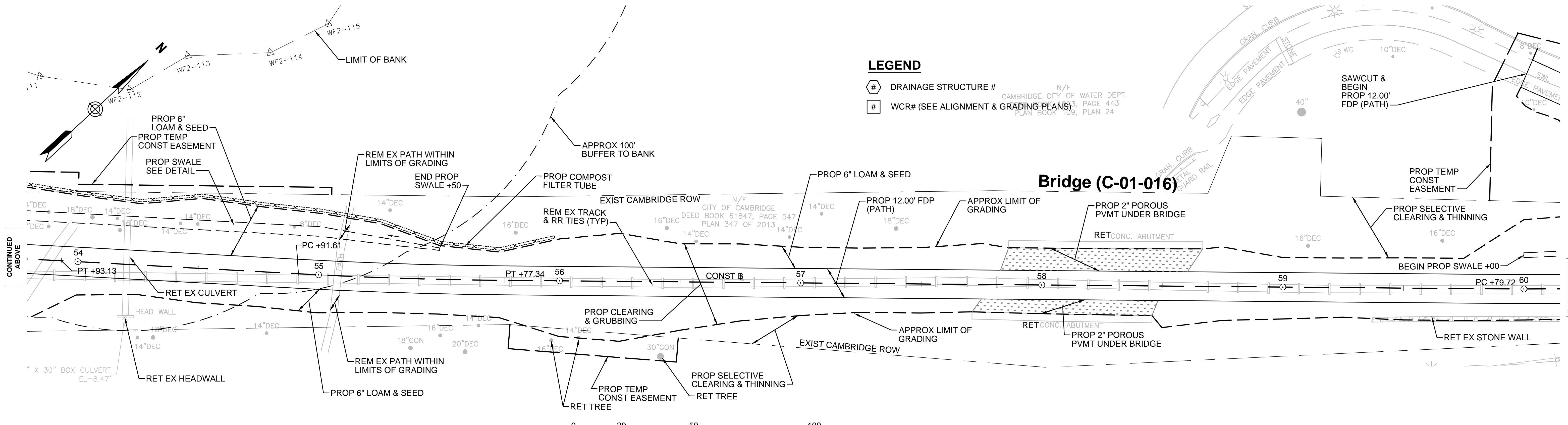
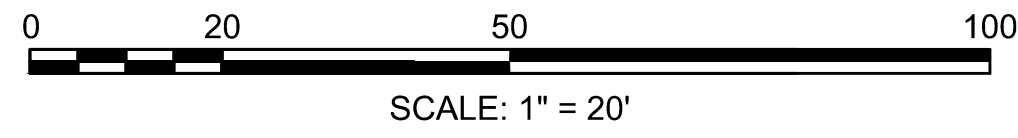
DRAINAGE DETAILS

SEE BELOW



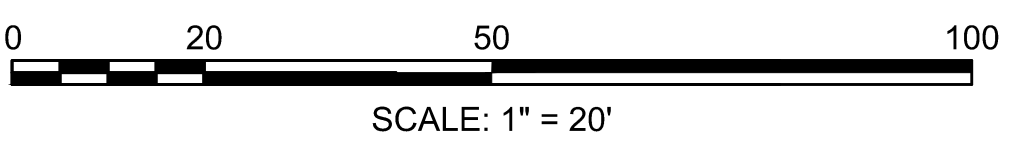
**NOTES:**

1. TREE TRIMMING SHALL BE COMPLETED WHERE REQUIRED DURING CLEARING OPERATIONS. TREES LOCATED OUTSIDE OF THE LIMITS OF GRADING SHOWN SHALL BE TRIMMED IF THEIR CANOPY IS 10 FT OR LOWER AND OVERHANGING THE LIMIT.
2. SEE LANDSCAPING PLANS FOR ADDITIONAL INFORMATION.
3. FOR ADDITIONAL CONSTRUCTION BASELINE AND TRAVERSE TIE INFORMATION SEE THE ALIGNMENT & GRADING PLANS AND BASELINE & TRAVERSE DATA SHEETS.
4. DCR, RESIDENT ENGINEER AND LANDSCAPE ARCHITECT SHALL WALK SITE PRIOR TO THE START OF CONSTRUCTION OPERATIONS TO DETERMINE TREES AND VEGETATION THAT SHALL BE REMOVED BEYOND THE LIMITS OF GRADING SHOWN. SPECIMEN TREES TO BE PROTECTED WITHIN AND BEYOND THE LIMITS OF GRADING WILL BE DETERMINED AT THIS TIME.



**LEGEND**

- # DRAINAGE STRUCTURE #
- # WCR# (SEE ALIGNMENT & GRADING PLANS)



FOR PROFILE SEE SHEET 22.

CONTINUED ON SHEET NO. 17

CONTINUED BELOW

CONTINUED ABOVE

CONTINUED ON SHEET NO. 19

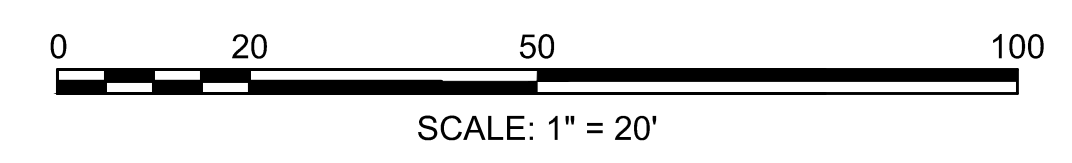
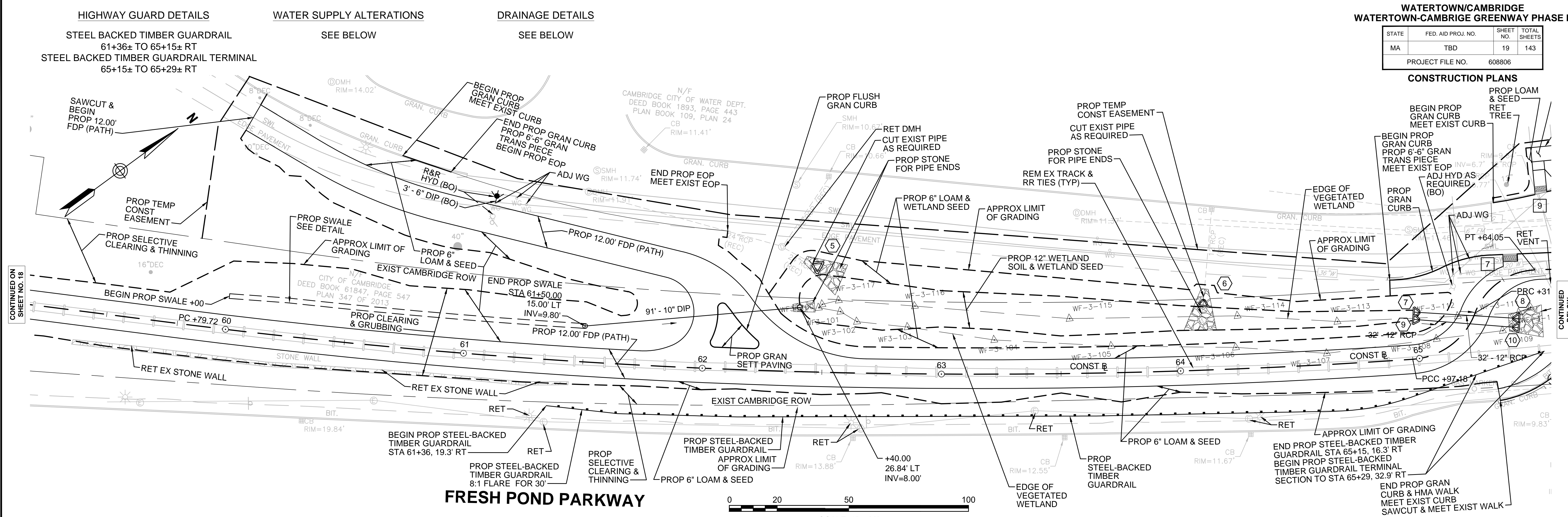
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CAMBRIDGE CITY OF WATER DEPT.  
DEED BOOK 1893, PAGE 443  
PLAN BOOK 109, PLAN 24

N/F  
CAMBRIDGE CITY OF WATER DEPT.  
DEED BOOK 61847, PAGE 547  
PLAN BOOK 109, PLAN 24

**WATERTOWN/CAMBRIDGE  
WATERTOWN-CAMBRIDGE GREENWAY PHASE II**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	19	143
PROJECT FILE NO.		608806	

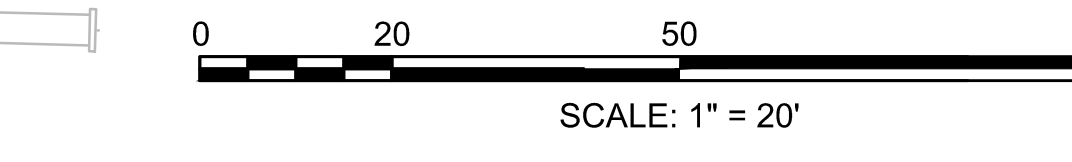
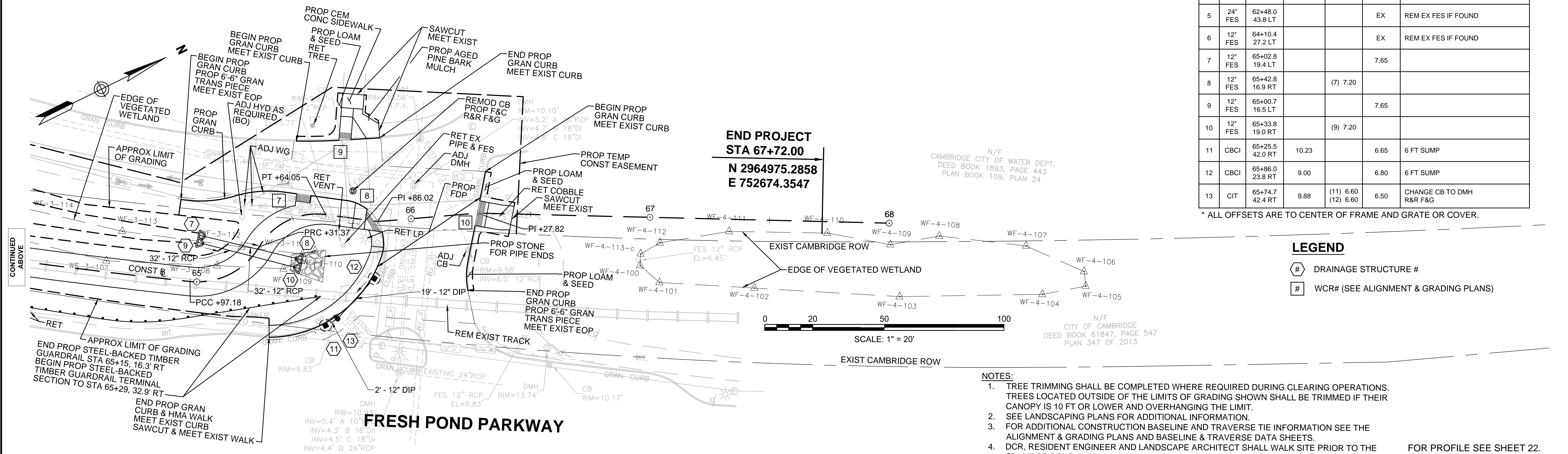
**CONSTRUCTION PLANS**



**DCR GREENWAY DRAINAGE STRUCTURE DATA**

NO.	TYPE	STATION	RIM ELEV.	INV. IN	INV. OUT	REMARKS
5	24" FES	62+48.0 43.8 LT			EX	REM EX FES IF FOUND
6	12" FES	64+10.4 27.2 LT			EX	REM EX FES IF FOUND
7	12" FES	65+02.8 19.4 LT			7.65	
8	12" FES	65+42.8 16.9 RT		(7) 7.20		
9	12" FES	65+00.7 16.5 LT			7.65	
10	12" FES	65+33.8 19.0 RT			(9) 7.20	
11	CBCI	65+25.5 42.0 RT	10.23		6.65	6 FT SUMP
12	CBCI	65+86.0 23.8 RT	9.00		6.80	6 FT SUMP
13	CIT	65+74.7 42.4 RT	9.88	(11) 6.60 (12) 6.60	6.50	CHANGE CB TO DMH R&R F&G

\* ALL OFFSETS ARE TO CENTER OF FRAME AND GRATE OR COVER.



**LEGEND**

- # DRAINAGE STRUCTURE #
- # WCR# (SEE ALIGNMENT & GRADING PLANS)

- NOTES:**
- TREE TRIMMING SHALL BE COMPLETED WHERE REQUIRED DURING CLEARING OPERATIONS. TREES LOCATED OUTSIDE OF THE LIMITS OF GRADING SHOWN SHALL BE TRIMMED IF THEIR CANOPY IS 10 FT OR LOWER AND OVERHANGING THE LIMIT.
  - SEE LANDSCAPING PLANS FOR ADDITIONAL INFORMATION.
  - FOR ADDITIONAL CONSTRUCTION BASELINE AND TRAVERSE TIE INFORMATION SEE THE ALIGNMENT & GRADING PLANS AND BASELINE & TRAVERSE DATA SHEETS.
  - DCR, RESIDENT ENGINEER AND LANDSCAPE ARCHITECT SHALL WALK SITE PRIOR TO THE START OF CONSTRUCTION OPERATIONS TO DETERMINE TREES AND VEGETATION THAT SHALL BE REMOVED BEYOND THE LIMITS OF GRADING SHOWN. SPECIMEN TREES TO BE PROTECTED WITHIN AND BEYOND THE LIMITS OF GRADING WILL BE DETERMINED AT THIS TIME.
- FOR PROFILE SEE SHEET 22.

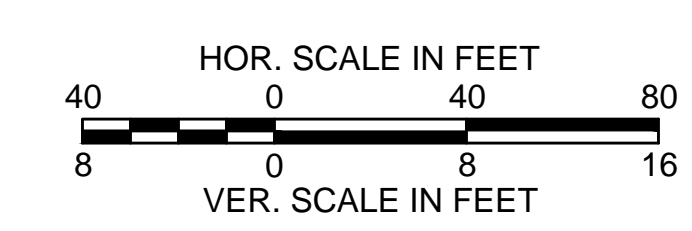
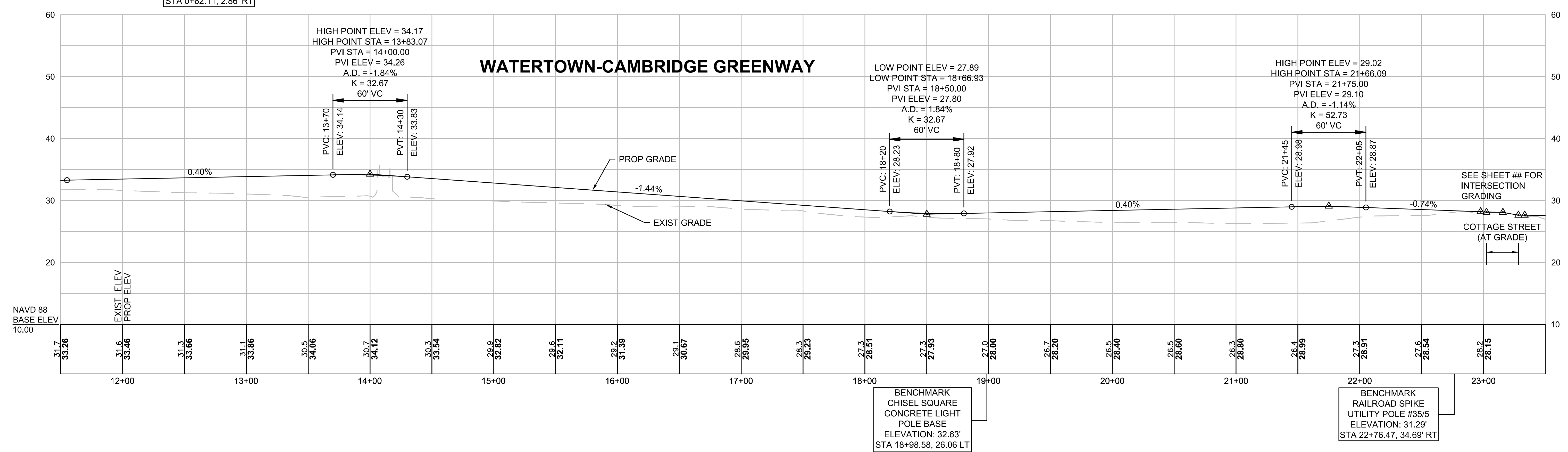
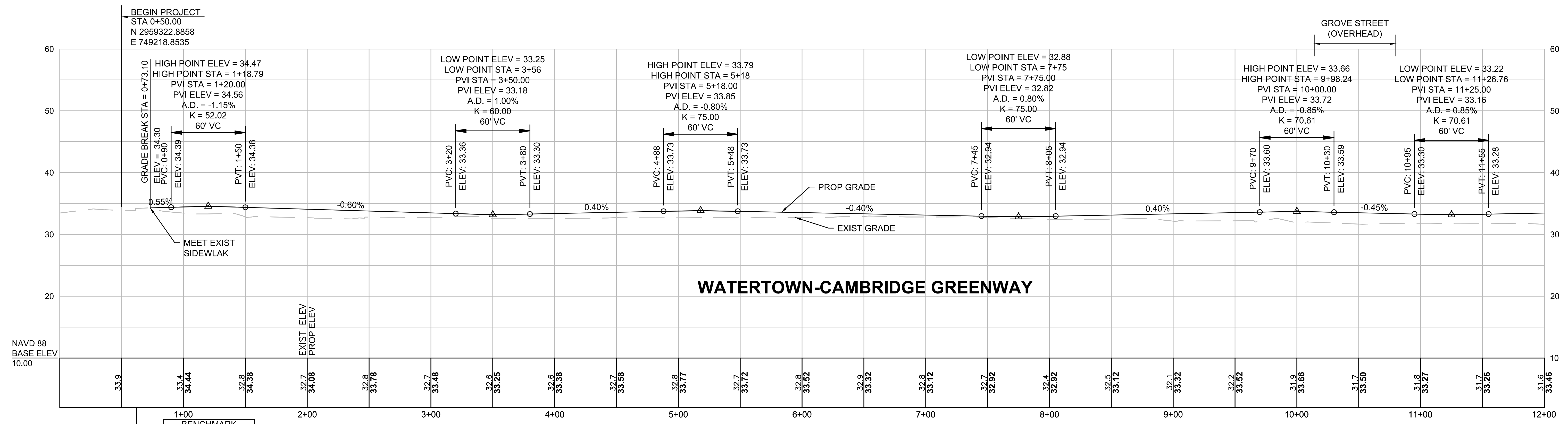
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**WATERTOWN/CAMBRIDGE  
WATERTOWN-CAMBRIDGE GREENWAY PHASE II**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	20	143
PROJECT FILE NO.		608806	

**PROFILES**



FOR PLAN SEE SHEET 09-13.

CONTINUED ABOVE

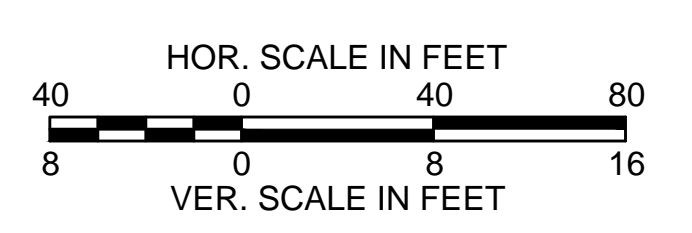
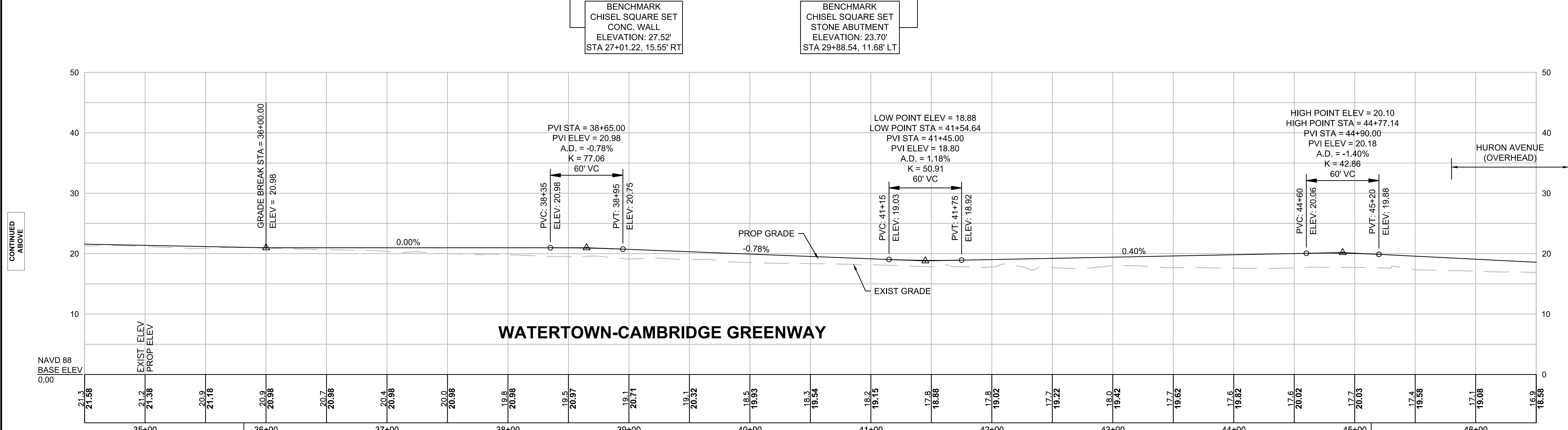
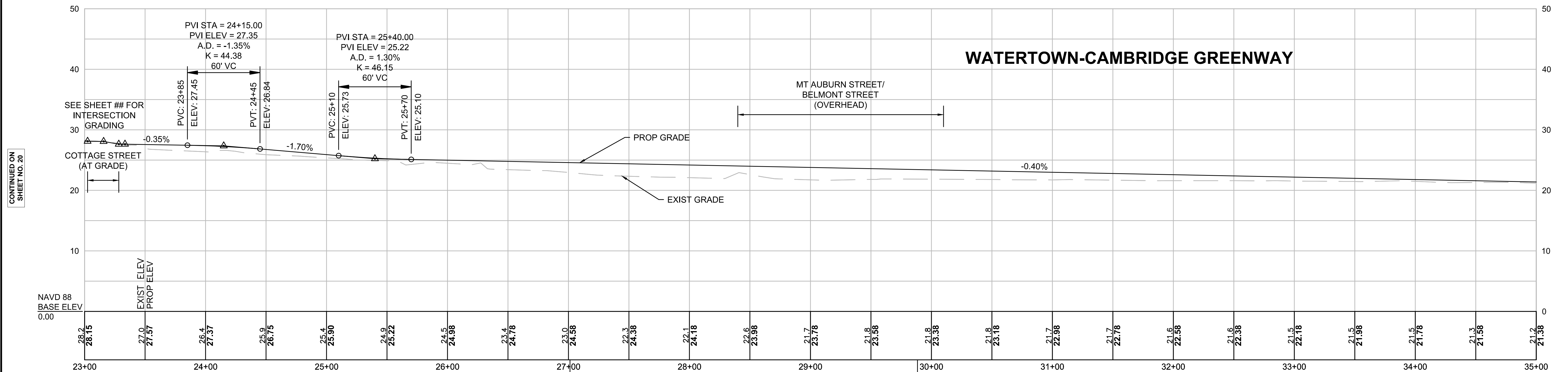
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13061-PROF.DWG Plotted on 4-Aug-2017 7:15 AM

**WATERTOWN/CAMBRIDGE  
WATERTOWN-CAMBRIDGE GREENWAY PHASE II**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	21	143
PROJECT FILE NO.		608806	

**PROFILES**



FOR PLAN SEE SHEET 13-17.

CONTINUED ON  
SHEET NO. 20

CONTINUED  
BELOW

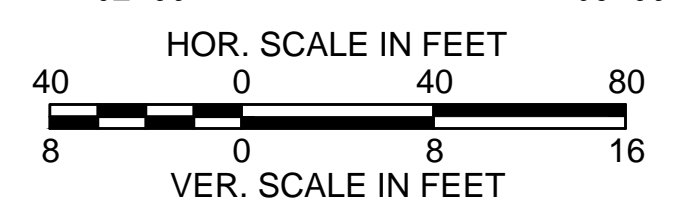
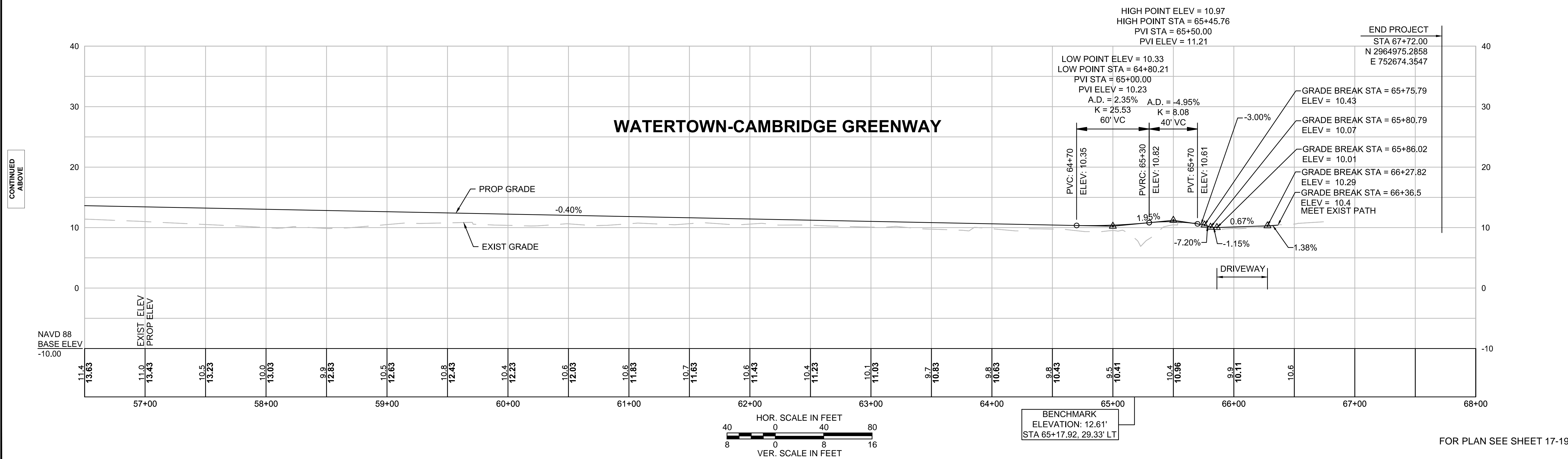
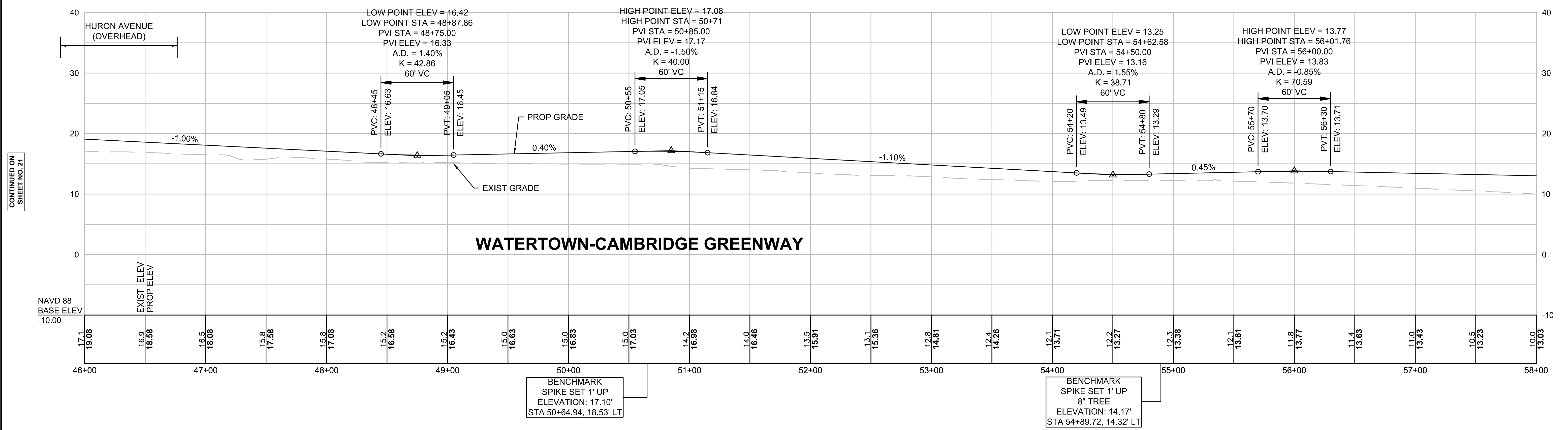
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SHEET NO. 22

**WATERTOWN/CAMBRIDGE  
WATERTOWN-CAMBRIDGE GREENWAY PHASE II**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	22	143
PROJECT FILE NO.		608806	

**PROFILES**



FOR PLAN SEE SHEET 17-19.

CONTINUED ON SHEET NO. 21

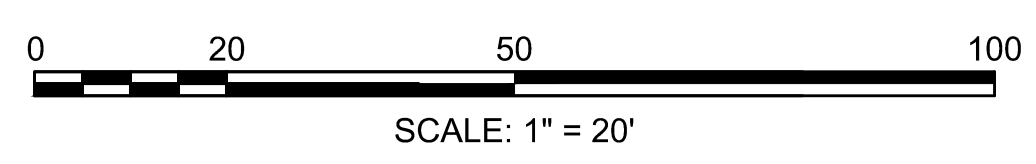
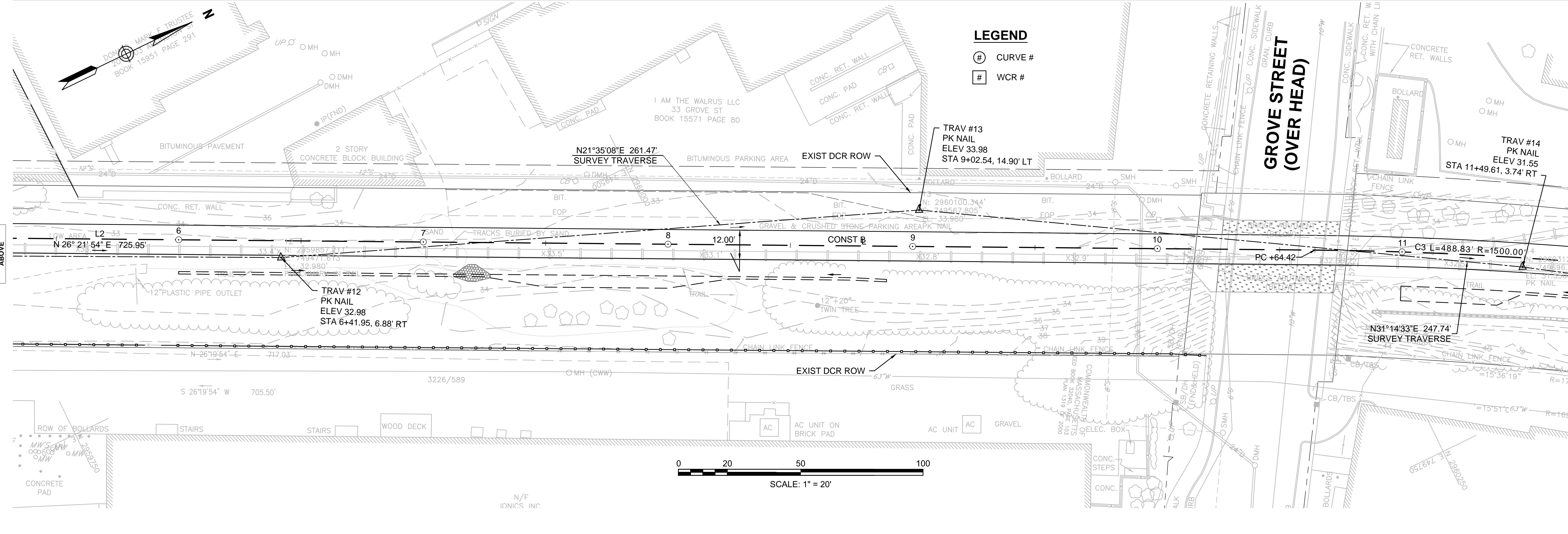
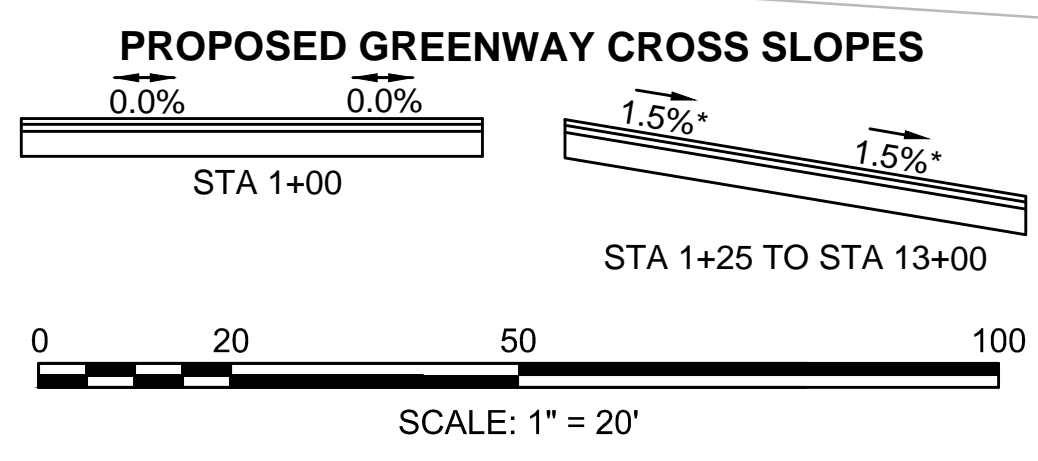
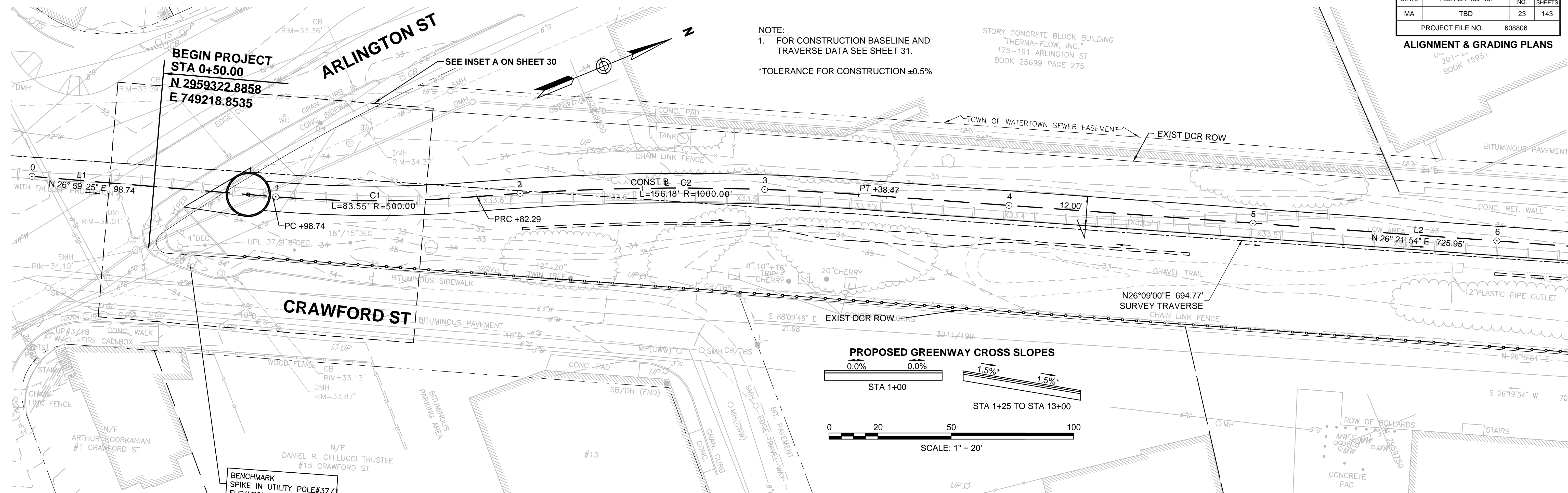
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WATERTOWN/CAMBRIDGE  
WATERTOWN-CAMBRIDGE GREENWAY PHASE II

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	23	143
PROJECT FILE NO.		608806	

ALIGNMENT & GRADING PLANS



CONTINUED BELOW

CONTINUED ABOVE

CONTINUED ON SHEET NO. 24

**WATERTOWN/CAMBRIDGE  
WATERTOWN-CAMBRIDGE GREENWAY PHASE II**

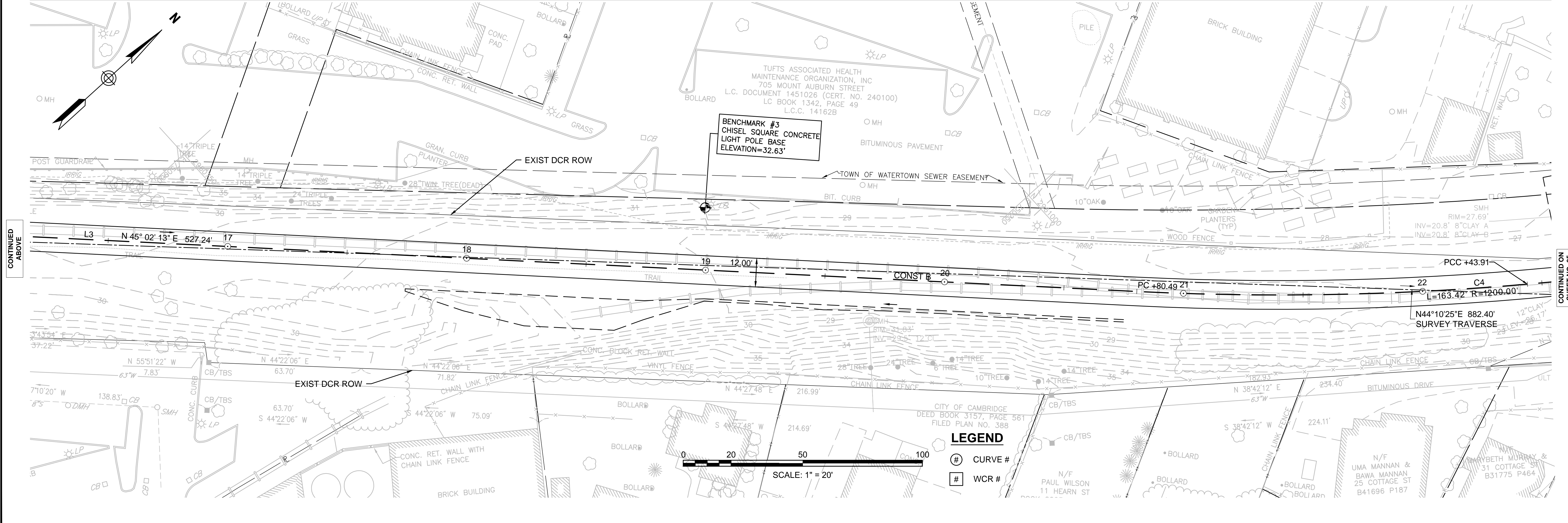
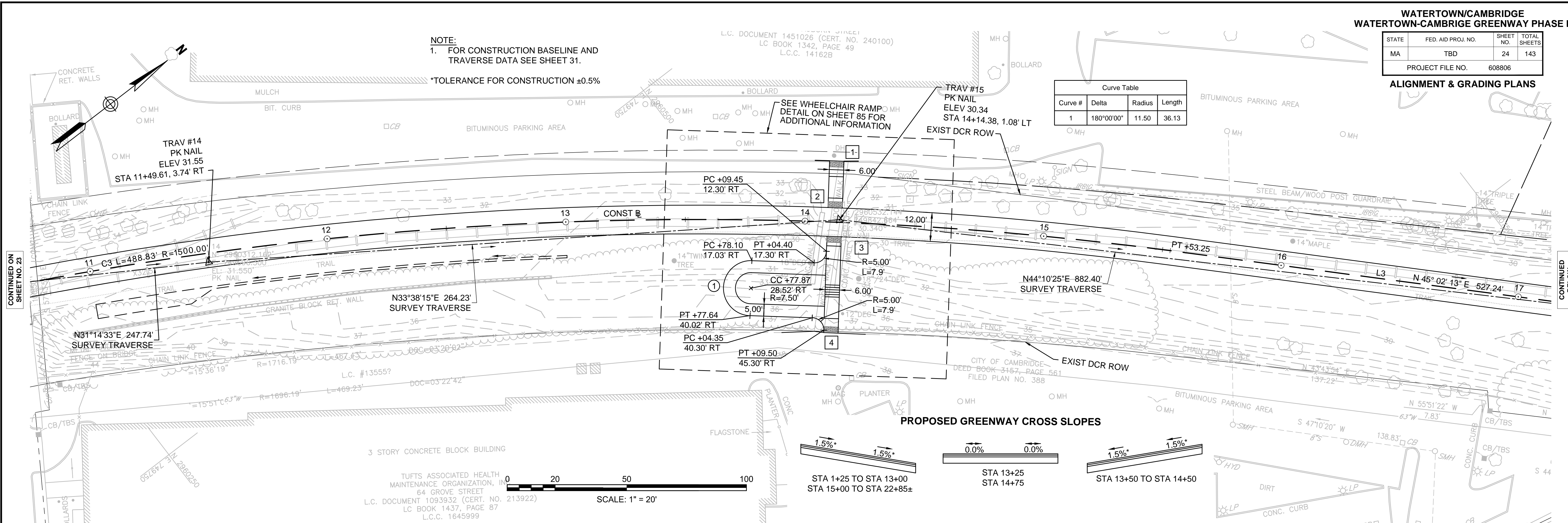
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	24	143
PROJECT FILE NO.		608806	

**ALIGNMENT & GRADING PLANS**

Curve Table			
Curve #	Delta	Radius	Length
1	180°00'00"	11.50	36.13

**NOTE:**  
1. FOR CONSTRUCTION BASELINE AND TRAVERSE DATA SEE SHEET 31.  
\*TOLERANCE FOR CONSTRUCTION ±0.5%

L.C. DOCUMENT 1451026 (CERT. NO. 240100)  
LC BOOK 1342, PAGE 49  
L.C.C. 14162B



CONTINUED ON SHEET NO. 23

CONTINUED BELOW

CONTINUED ABOVE

CONTINUED ON SHEET NO. 25

**LEGEND**

- ⊙ CURVE #
- ⊠ WCR #



**WATERTOWN/CAMBRIDGE  
WATERTOWN-CAMBRIDGE GREENWAY PHASE II**

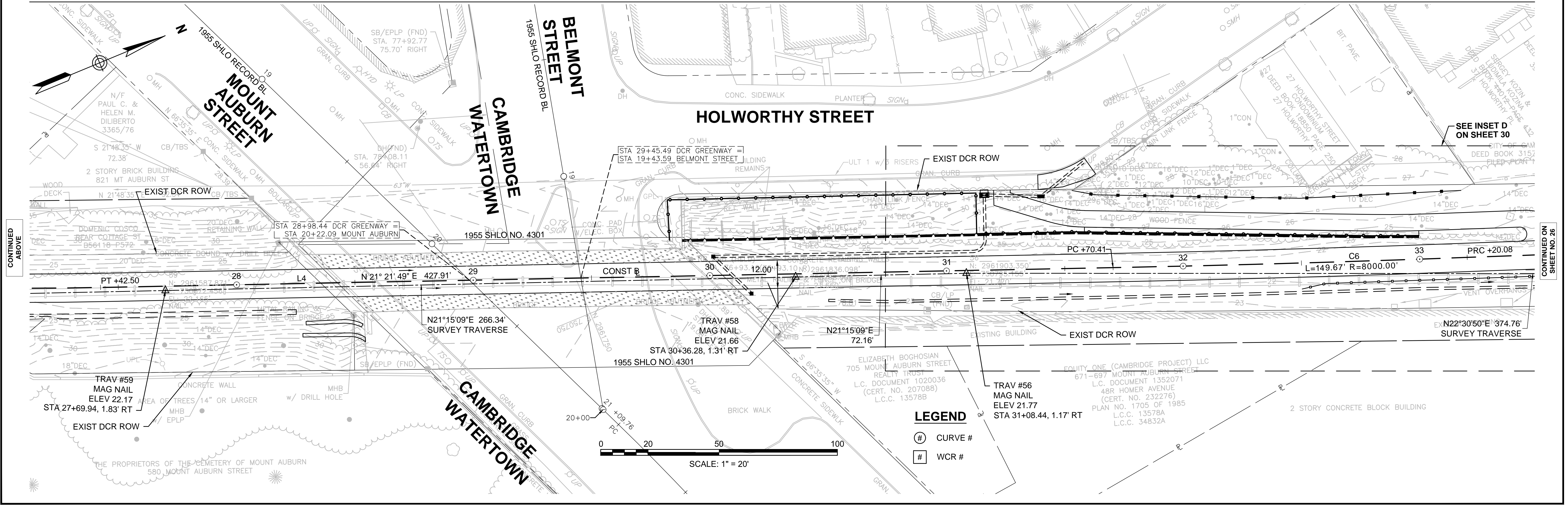
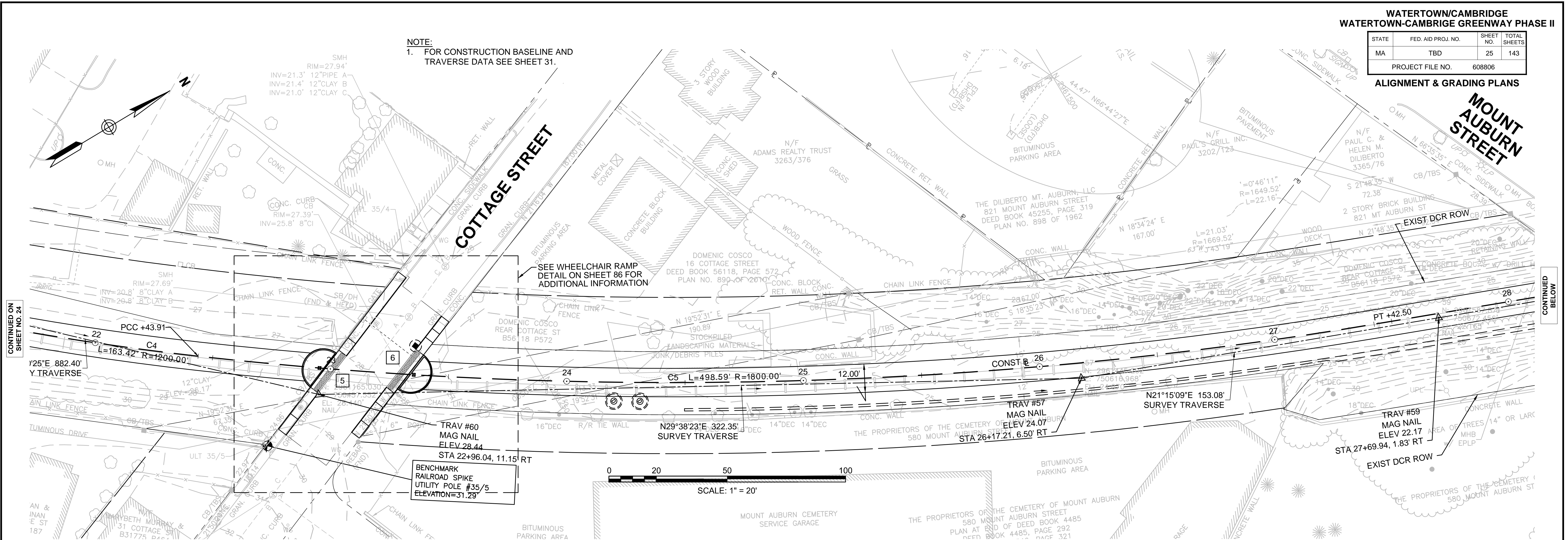
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	25	143
PROJECT FILE NO.		608806	

**ALIGNMENT & GRADING PLANS**

**NOTE:**  
1. FOR CONSTRUCTION BASELINE AND TRAVERSE DATA SEE SHEET 31.

CONTINUED ON  
SHEET NO. 24

CONTINUED  
BELOW

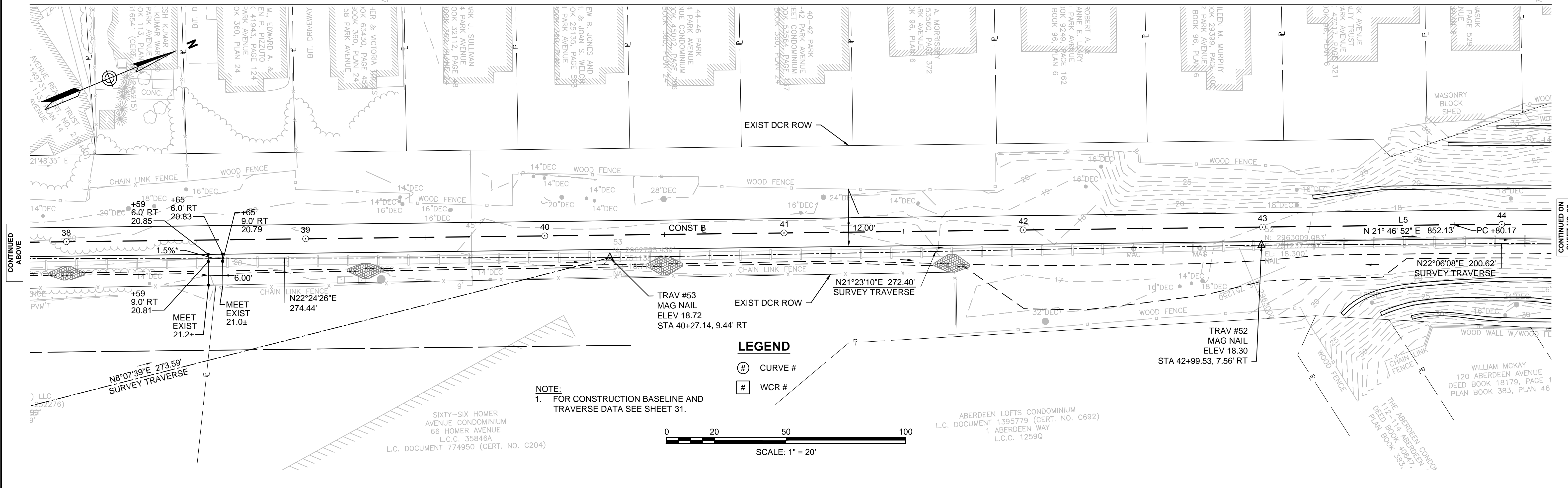
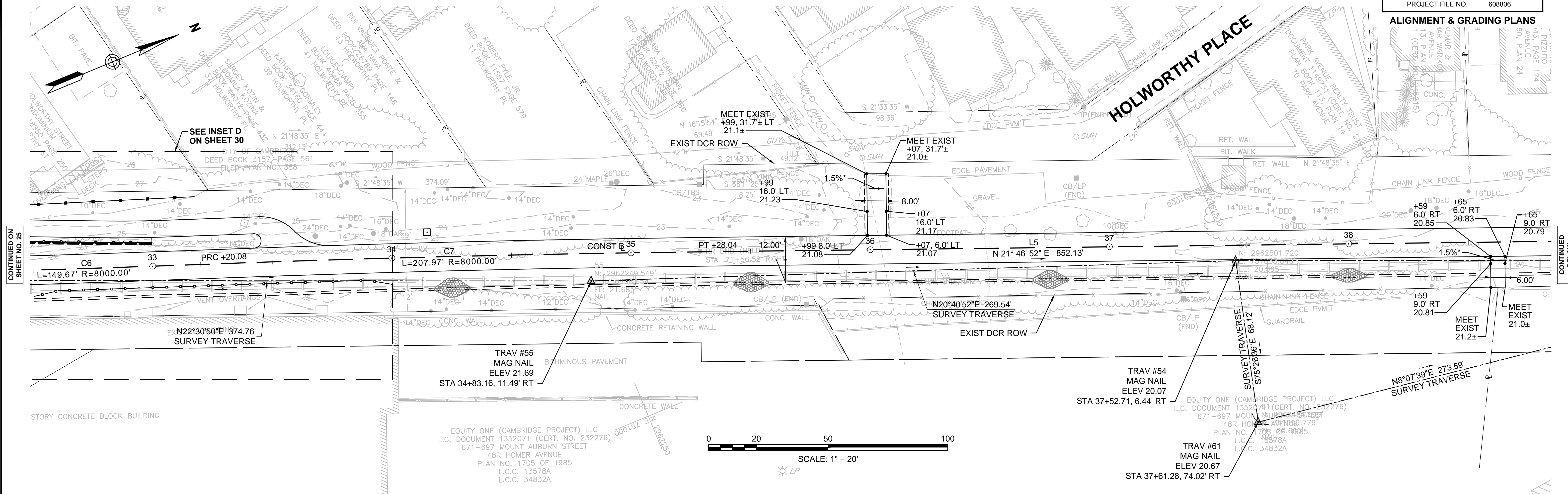


- LEGEND**
- ⊕ CURVE #
  - # WCR #

**WATERTOWN/CAMBRIDGE  
WATERTOWN-CAMBRIDGE GREENWAY PHASE II**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	26	143
PROJECT FILE NO.		608806	

**ALIGNMENT & GRADING PLANS**



CONTINUED ON SHEET NO. 25

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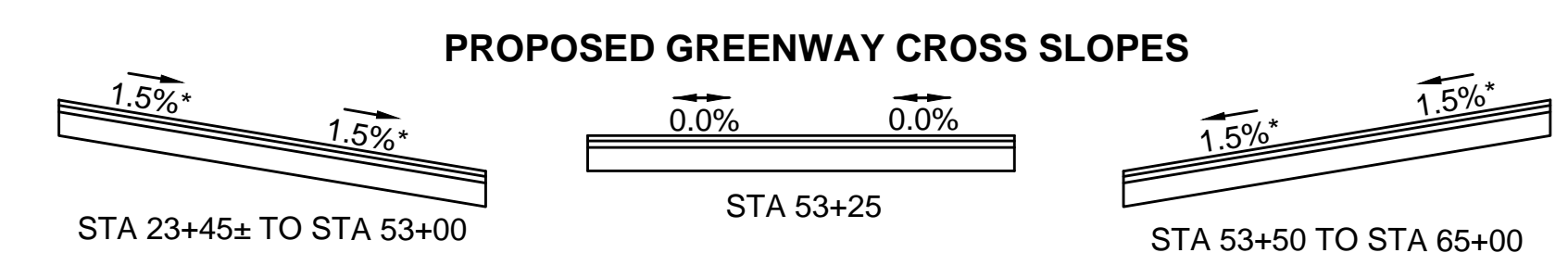
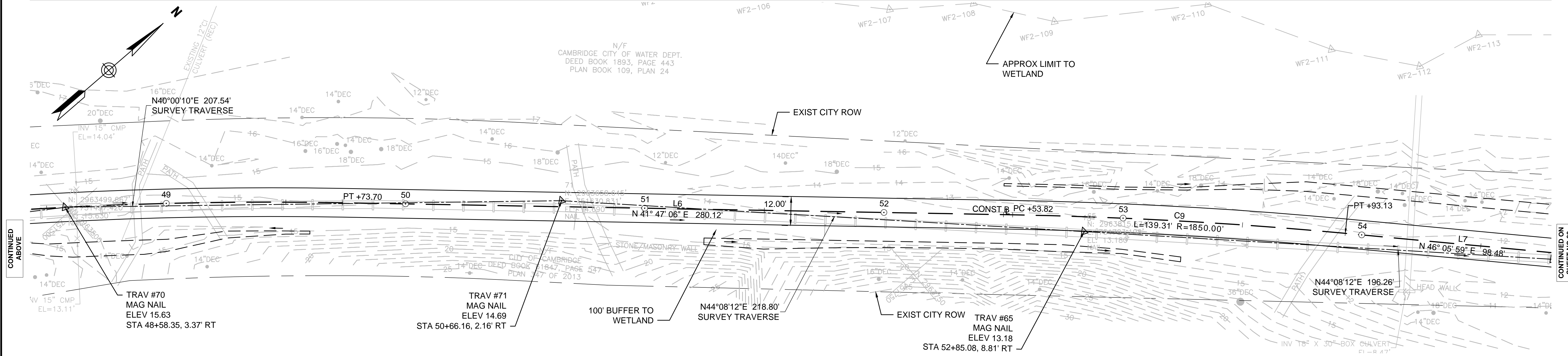
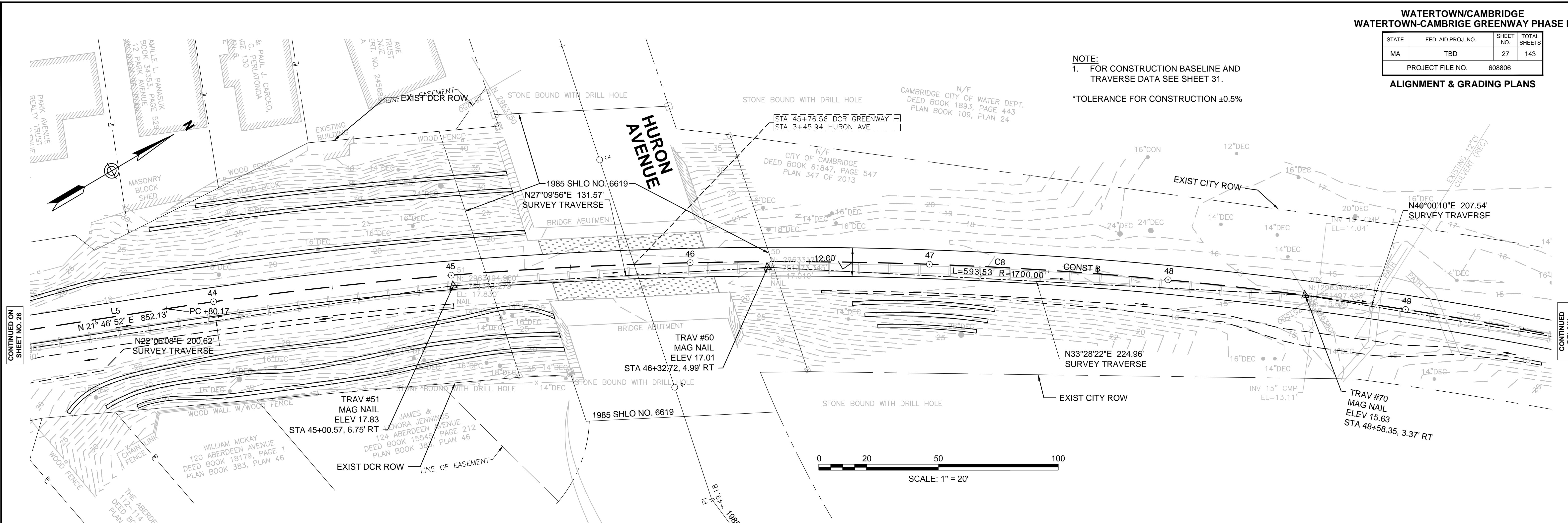
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**WATERTOWN/CAMBRIDGE  
WATERTOWN-CAMBRIDGE GREENWAY PHASE II**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	27	143
PROJECT FILE NO.		608806	

**ALIGNMENT & GRADING PLANS**

NOTE:  
1. FOR CONSTRUCTION BASELINE AND TRAVERSE DATA SEE SHEET 31.  
\*TOLERANCE FOR CONSTRUCTION ±0.5%



**LEGEND**

- ⊙ CURVE #
- # WCR #

CONTINUED ON SHEET NO. 26

CONTINUED BELOW

CONTINUED ABOVE

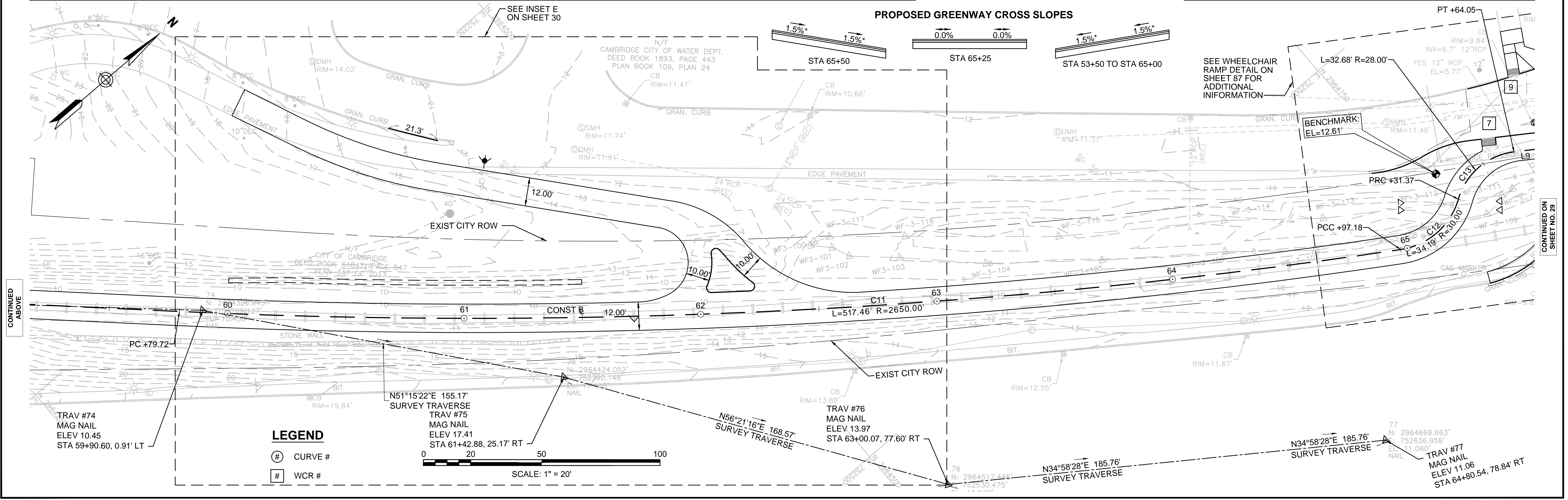
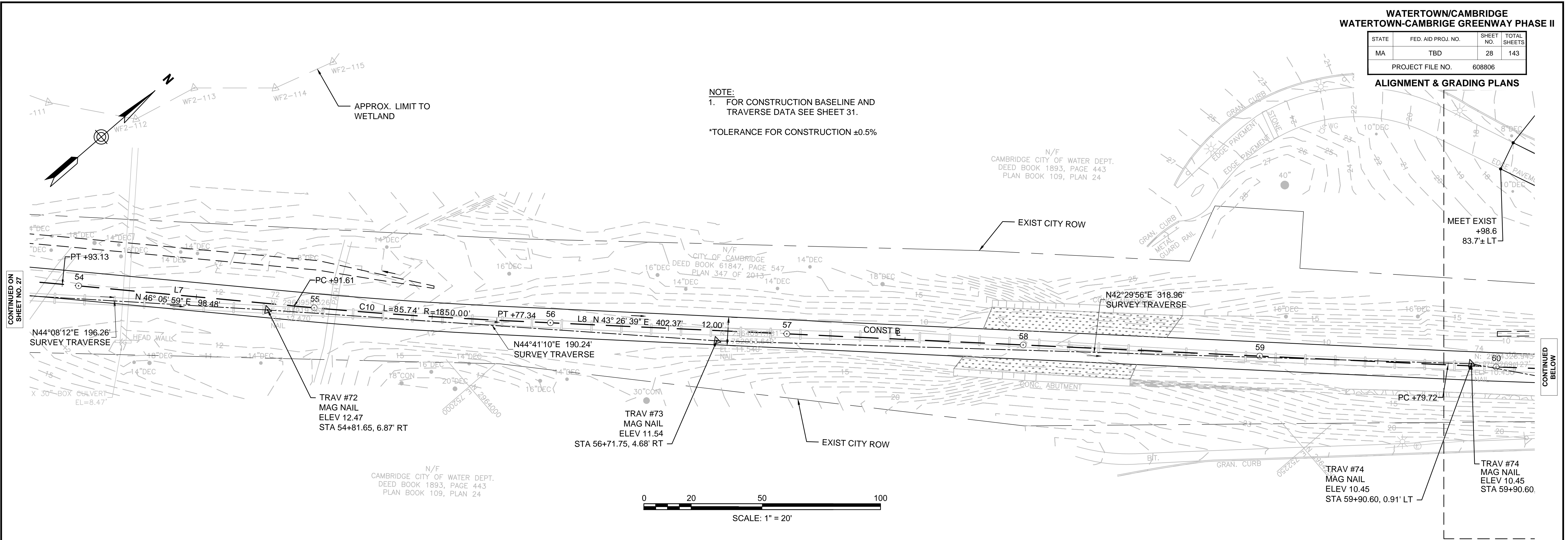
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**WATERTOWN/CAMBRIDGE  
WATERTOWN-CAMBRIDGE GREENWAY PHASE II**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	28	143
PROJECT FILE NO.		608806	

**ALIGNMENT & GRADING PLANS**

**NOTE:**  
1. FOR CONSTRUCTION BASELINE AND TRAVERSE DATA SEE SHEET 31.  
\*TOLERANCE FOR CONSTRUCTION ±0.5%



CONTINUED ON SHEET NO. 27

CONTINUED BELOW

CONTINUED ABOVE

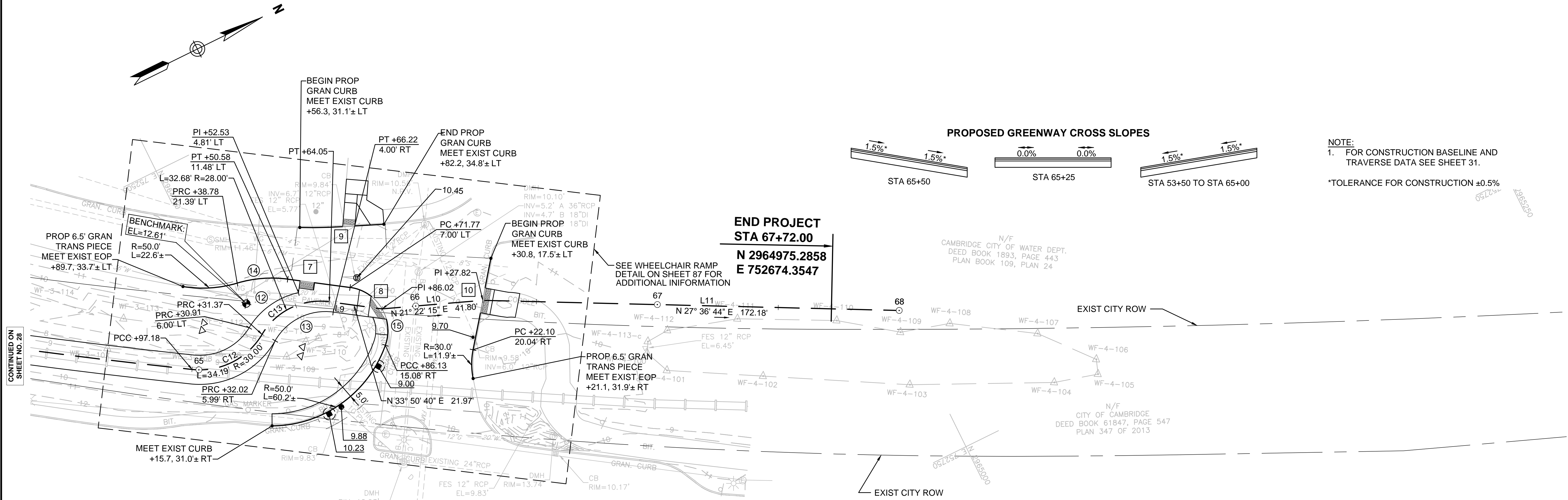
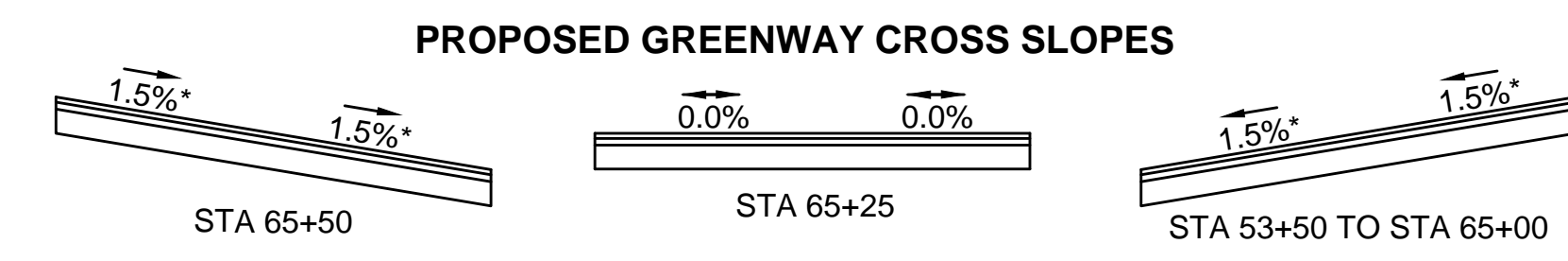
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**WATERTOWN/CAMBRIDGE  
WATERTOWN-CAMBRIDGE GREENWAY PHASE II**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	29	143
PROJECT FILE NO.		608806	

**ALIGNMENT & GRADING PLANS**

**NOTE:**  
1. FOR CONSTRUCTION BASELINE AND TRAVERSE DATA SEE SHEET 31.  
\*TOLERANCE FOR CONSTRUCTION ±0.5%

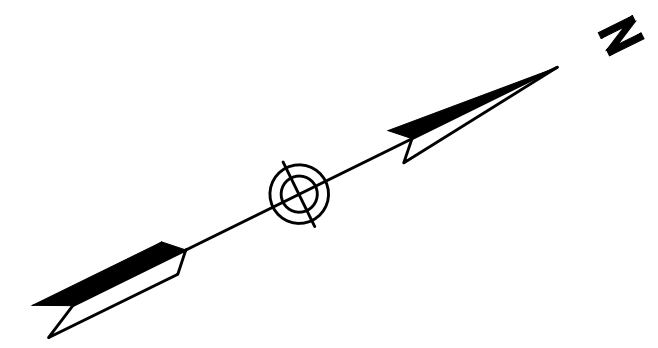


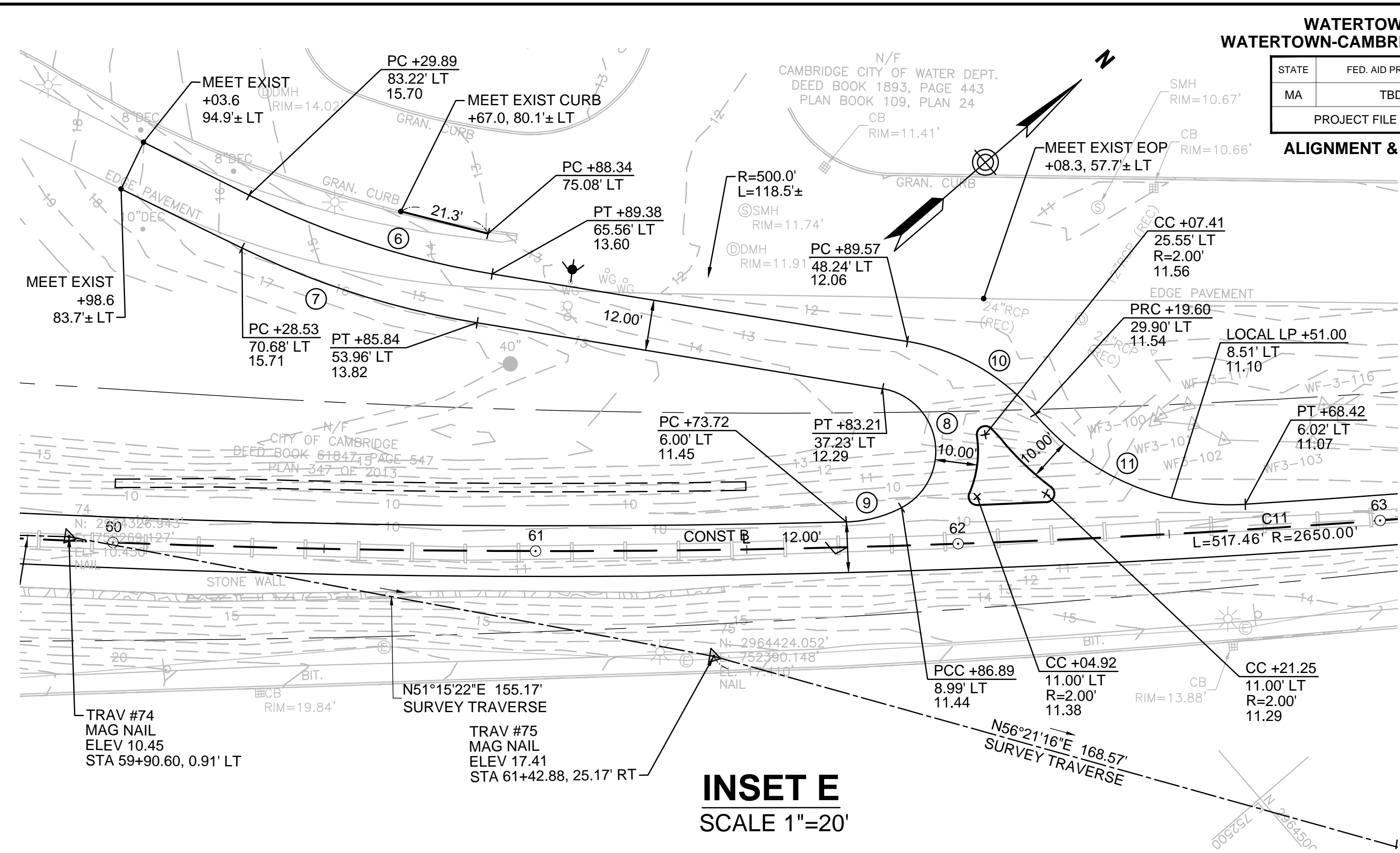
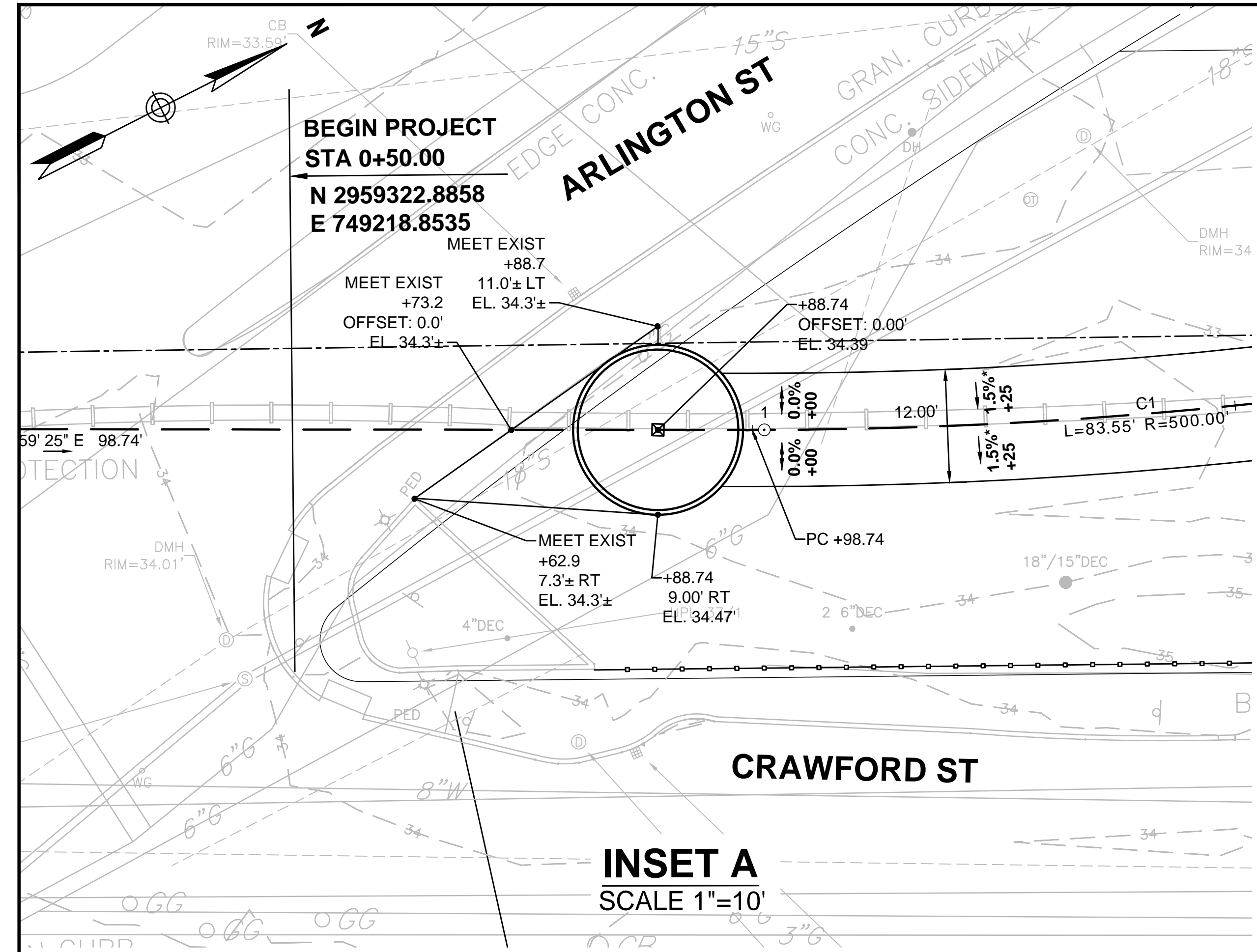
CONTINUED ON  
SHEET NO. 28

N34°58'28"E 185.76'  
SURVEY TRAVERSE

77  
N: 2964669.663'  
E: 752636.958'  
11.060'

TRAV #77  
MAG NAIL  
ELEV 11.06  
STA 64+80.54, 78.84' RT





1. FOR CONSTRUCTION BASELINE AND TRAVERSE DATA SEE SHEET 31

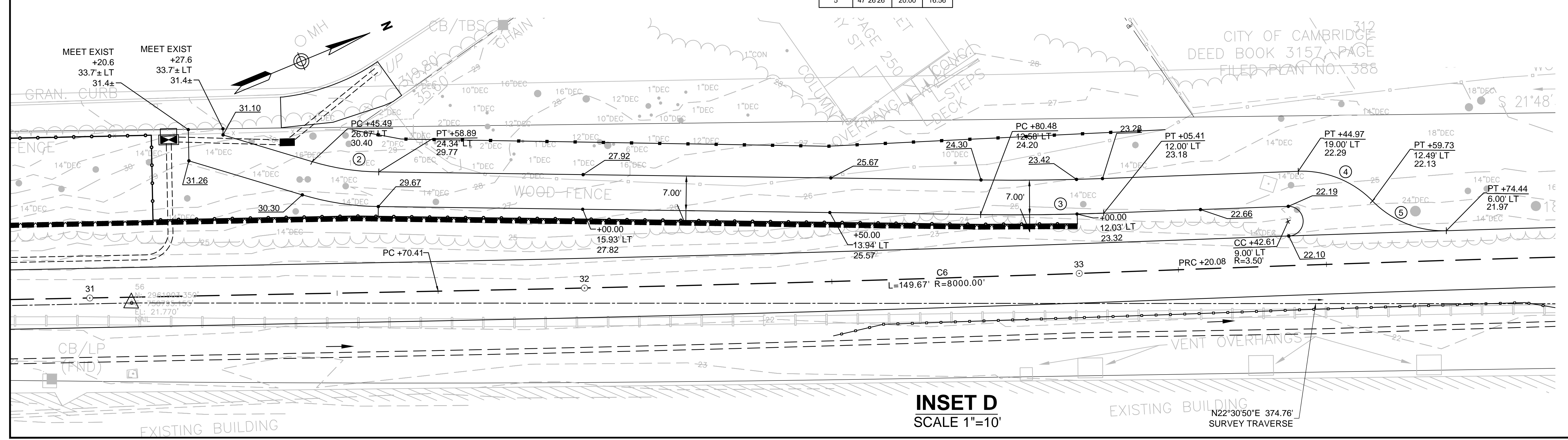
\*TOLERANCE FOR CONSTRUCTION ±0.5%

**LEGEND**

② CURVE #

Curve #	Delta	Radius	Length
2	15°57'14"	49.00	13.64
3	2°51'11"	500.00	24.90
4	47°39'05"	20.00	16.63
5	47°26'26"	20.00	16.56

Curve #	Delta	Radius	Length
6	17°23'07"	200.00	60.69
7	16°47'29"	200.00	58.61
8	143°17'23"	15.00	37.51
9	25°57'02"	30.00	13.59
10	40°44'03"	50.00	35.55
11	53°32'29"	60.00	56.07



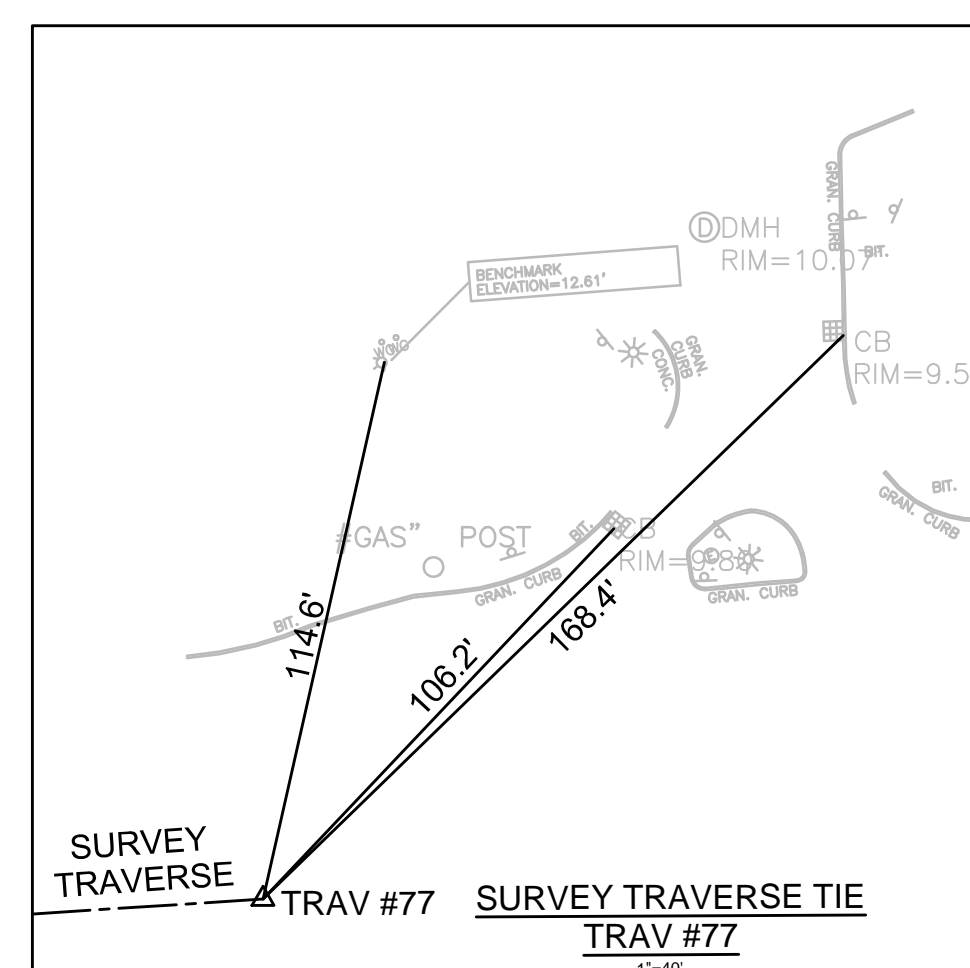
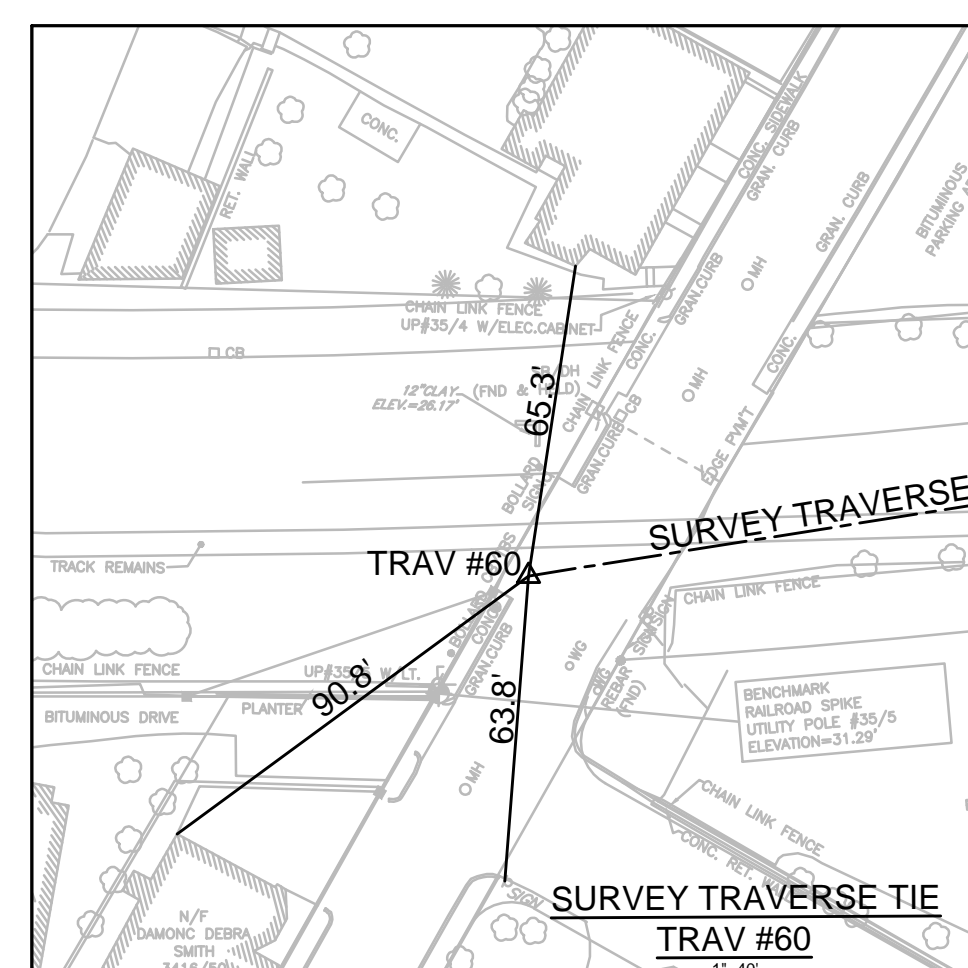
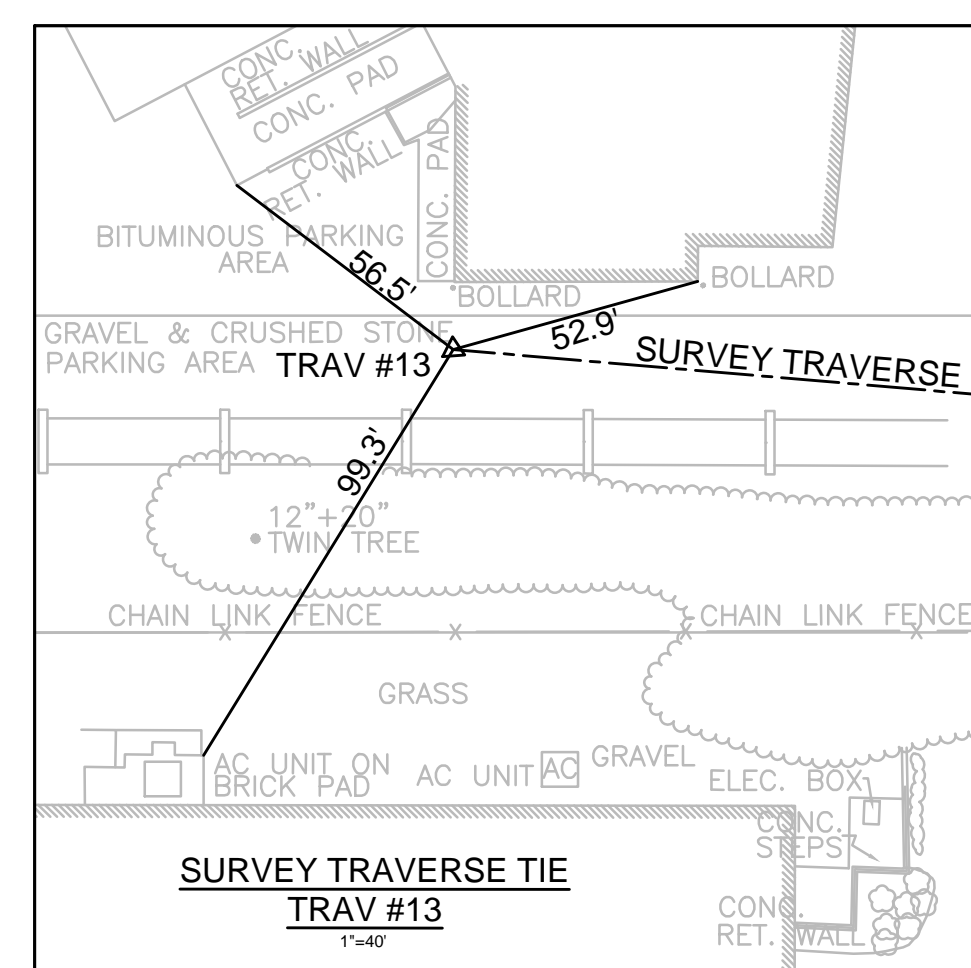
WATERTOWN/CAMBRIDGE  
WATERTOWN-CAMBRIDGE GREENWAY PHASE II

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	31	143
PROJECT FILE NO.		608806	

BASELINE & TRAVERSE DATA

TRAVERSE CHART						
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION	STATION	OFFSET
TRAV NO.12	2959857.2112	749471.6134	32.98	PUNCHMARK IN RAIL	6+41.95	6.88' RT
TRAV NO.13	2960100.3443	749567.8051	33.98	PK NAIL	9+02.54	14.90' LT
TRAV NO.14	2960312.1616	749696.3004	31.55	PK NAIL	11+49.61	3.74' RT
TRAV NO.15	2960532.1444	749842.6644	30.34	PK NAIL	14+14.38	3.74' RT
TRAV NO.20	2959233.5594	749165.4161	33.64	PK NAIL	N/A	N/A
TRAV NO.50	2963312.0166	751373.3451	17.01	MAG NAIL	46+32.72	1.08' LT
TRAV NO.51	2963194.9599	751313.2751	17.83	MAG NAIL	45+00.57	6.75' RT
TRAV NO.52	2963009.0827	751237.7898	18.30	MAG NAIL	42+99.53	7.56' RT
TRAV NO.53	2962755.4389	751138.4589	18.72	MAG NAIL	40+27.14	9.44' RT
TRAV NO.54	2962501.7197	751033.8460	20.06	MAG NAIL	37+52.71	6.44' RT
TRAV NO.55	2962249.5487	750938.6536	21.68	MAG NAIL	34+83.16	11.49' RT
TRAV NO.56	2961903.3504	750795.1553	21.77	MAG NAIL	31+08.44	1.17' RT
TRAV NO.57	2961445.2017	750616.9681	24.07	MAG NAIL	26+17.21	6.50' RT
TRAV NO.58	2961836.0978	750768.9988	21.66	MAG NAIL	30+36.28	1.31' RT
TRAV NO.59	2961587.8710	750672.4563	22.16	MAG NAIL	27+69.94	1.83' RT
TRAV NO.60	2961165.0304	750457.5517	28.44	MAG NAIL	22+96.04	11.15' RT
TRAV NO.61	2962484.5986	751099.7793	20.66	MAG NAIL	37+61.28	74.02' RT
TRAV NO.65	2963815.6735	751783.1976	13.18	MAG NAIL	52+85.08	8.81' RT
TRAV NO.70	2963499.6665	751497.4196	15.63	MAG NAIL	48+58.35	3.37' RT
TRAV NO.71	2963658.6449	751630.8314	14.69	MAG NAIL	50+66.16	2.16' RT
TRAV NO.72	2963956.5256	751919.8676	12.47	MAG NAIL	54+81.65	6.87' RT
TRAV NO.73	2964091.7806	752053.6486	11.54	MAG NAIL	56+71.75	4.68' RT
TRAV NO.74	2964326.9431	752269.1269	10.45	MAG NAIL	59+90.60	0.91' LT
TRAV NO.75	2964424.0516	752390.1480	17.41	MAG NAIL	61+42.88	21.57' RT
TRAV NO.76	2964517.4457	752530.4752	13.97	MAG NAIL	63+00.07	77.60' RT
TRAV NO.77	2964669.6630	752636.9577	11.06	MAG NAIL	64+80.54	78.84' RT

DCR GREENWAY CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L1	0+00.00	2959278.3316	749196.1616		N26°59'25"E 98.74'	0+98.74	2959366.3193	749240.9746
C1	0+98.74	2959366.3193	749240.9746	R= 500.00' L=83.55' = 9°34'25" T=41.87'		1+82.29	2959443.5797	749272.5093
C2	1+82.29	2959443.5797	749272.5093	R= 1000.00' L=156.18' = 8°56'55" T=78.25'		3+38.47	2959588.3517	749330.6804
L2	3+38.47	2959588.3517	749330.6804		N26°21'54"E 725.95'	10+64.42	2960238.7918	749653.0677
C3	10+64.42	2960238.7918	749653.0677	R= 1500.00' L=488.83' = 18°40'19" T=246.60'		15+53.25	2960634.0035	749937.0672
L3	15+53.25	2960634.0035	749937.0672		N45°02'13"E 527.24'	20+80.49	2961006.5747	750310.1204
C4	20+80.49	2961006.5747	750310.1204	R= 1200.00' L=163.42' = 7°48'10" T=81.84'		22+43.91	2961129.5599	750417.5421
C5	22+43.91	2961129.5599	750417.5421	R= 1800.00' L=498.59' = 15°52'15" T=250.90'		27+42.50	2961562.9844	750660.7580
L4	27+42.50	2961562.9844	750660.7580		N21°21'49"E 427.91'	31+70.41	2961961.4881	750816.6376
C6	31+70.41	2961961.4881	750816.6376	R= 8000.00' L=149.67' = 1°04'19" T=74.84'		33+20.08	2962101.3743	750869.8525
C7	33+20.08	2962101.3743	750869.8525	R= 8000.00' L=207.97' = 1°29'22" T=103.99'		35+28.04	2962295.4741	750944.5019
L5	35+28.04	2962295.4741	750944.5019		N21°46'52"E 852.13'	43+80.17	2963086.7683	751260.6940
C8	43+80.17	2963086.7683	751260.6940	R= 1700.00' L=593.53' = 20°00'14" T=299.82'		49+73.70	2963588.7390	751571.7238
L6	49+73.70	2963588.7390	751571.7238		N41°47'06"E 280.12'	52+53.82	2963797.6078	751758.3761
C9	52+53.82	2963797.6078	751758.3761	R= 1850.00' L=139.31' = 4°18'52" T=69.69'		53+93.13	2963897.8924	751855.0249
L7	53+93.13	2963897.8924	751855.0249		N46°05'59"E 98.48'	54+91.61	2963966.1807	751925.9859
C10	54+91.61	2963966.1807	751925.9859	R= 1850.00' L=85.74' = 2°39'19" T=42.88'		55+77.34	2964027.0410	751986.3636
L8	55+77.34	2964027.0410	751986.3636		N43°26'39"E 402.37'	59+79.72	2964319.1804	752263.0540
C11	59+79.72	2964319.1804	752263.0540	R= 2650.00' L=517.46' = 11°11'17" T=259.56'		64+97.18	2964727.1294	752580.0650
C12	64+97.18	2964727.1294	752580.0650	R= 30.00' L=34.19' = 65°17'36" T=19.22'		65+31.37	2964759.4961	752579.8444
C13	65+31.37	2964759.4961	752579.8444	R= 28.00' L=32.68' = 66°52'46" T=18.49'		65+64.05	2964790.3546	752580.0623
L9	65+64.05	2964790.3546	752580.0623		N33°50'40"E 21.97'	65+86.02	2964808.6012	752592.2978
L10	65+86.02	2964808.6012	752592.2978		N21°22'15"E 41.80'	66+27.82	2964847.5294	752607.5307
L11	66+27.82	2964847.5294	752607.5307		N27°36'44"E 172.18'	68+00.00	2965000.0989	752687.3334



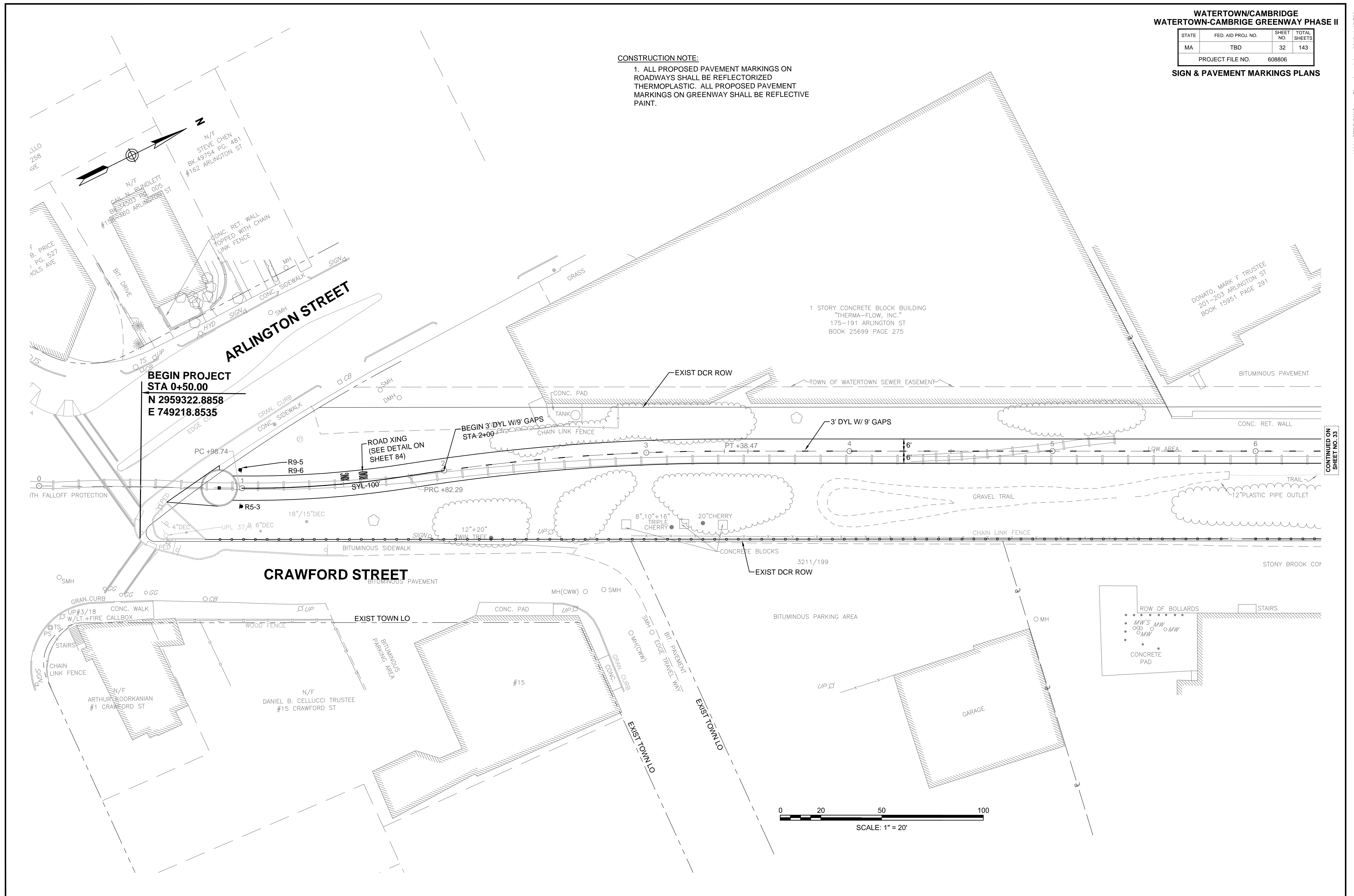
**WATERTOWN/CAMBRIDGE  
WATERTOWN-CAMBRIDGE GREENWAY PHASE II**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	32	143
PROJECT FILE NO.		608806	

**SIGN & PAVEMENT MARKINGS PLANS**

**CONSTRUCTION NOTE:**

1. ALL PROPOSED PAVEMENT MARKINGS ON ROADWAYS SHALL BE REFLECTORIZED THERMOPLASTIC. ALL PROPOSED PAVEMENT MARKINGS ON GREENWAY SHALL BE REFLECTIVE PAINT.



CONTINUED ON SHEET NO. 33

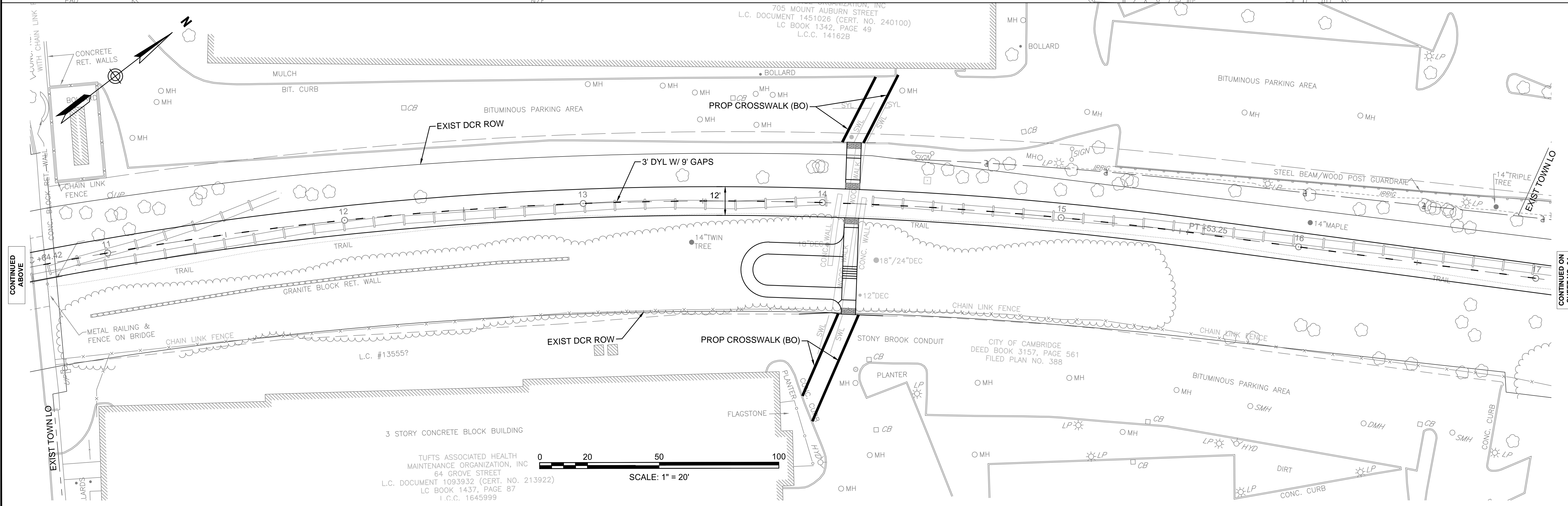
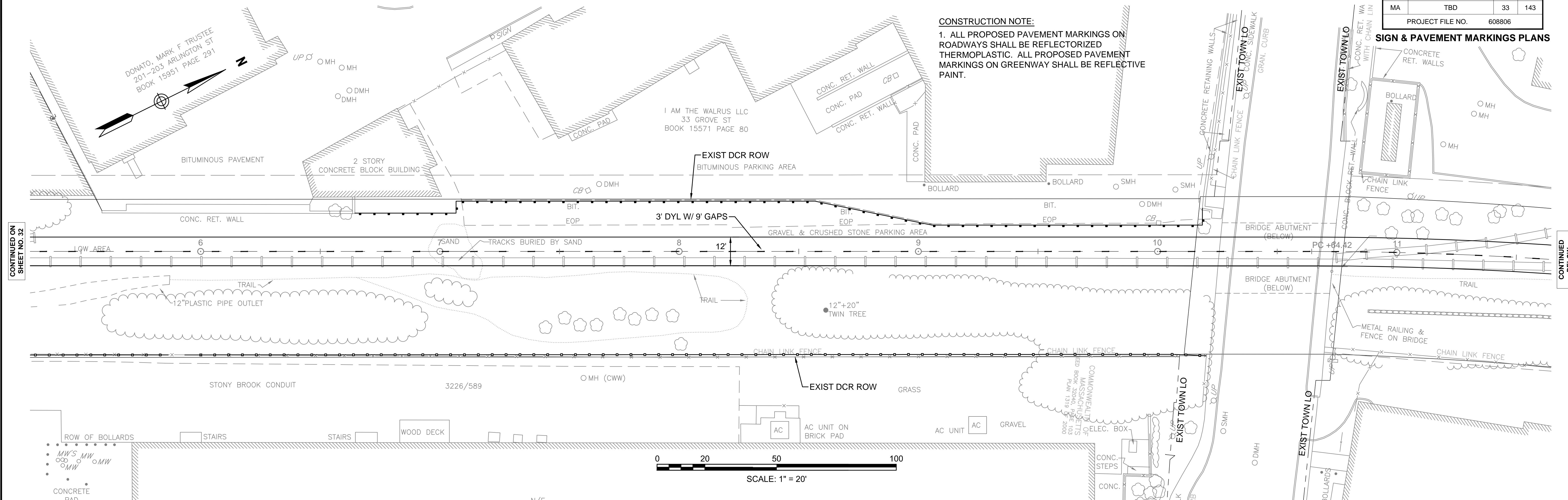


**WATERTOWN/CAMBRIDGE  
WATERTOWN-CAMBRIDGE GREENWAY PHASE II**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	33	143
PROJECT FILE NO.		608806	

**SIGN & PAVEMENT MARKINGS PLANS**

**CONSTRUCTION NOTE:**  
1. ALL PROPOSED PAVEMENT MARKINGS ON ROADWAYS SHALL BE REFLECTORIZED THERMOPLASTIC. ALL PROPOSED PAVEMENT MARKINGS ON GREENWAY SHALL BE REFLECTIVE PAINT.



CONTINUED ON SHEET NO. 32

CONTINUED BELOW

CONTINUED ABOVE

CONTINUED ON SHEET NO. 34

DONATO, MARK F TRUSTEE  
201-203 ARLINGTON ST  
BOOK 15951 PAGE 291

I AM THE WALRUS LLC  
33 GROVE ST  
BOOK 15571 PAGE 80

705 MOUNT AUBURN STREET  
L.C. DOCUMENT 1451026 (CERT. NO. 240100)  
LC BOOK 1342, PAGE 49  
L.C.C. 14162B

CITY OF CAMBRIDGE  
DEED BOOK 3157, PAGE 561  
FILED PLAN NO. 388

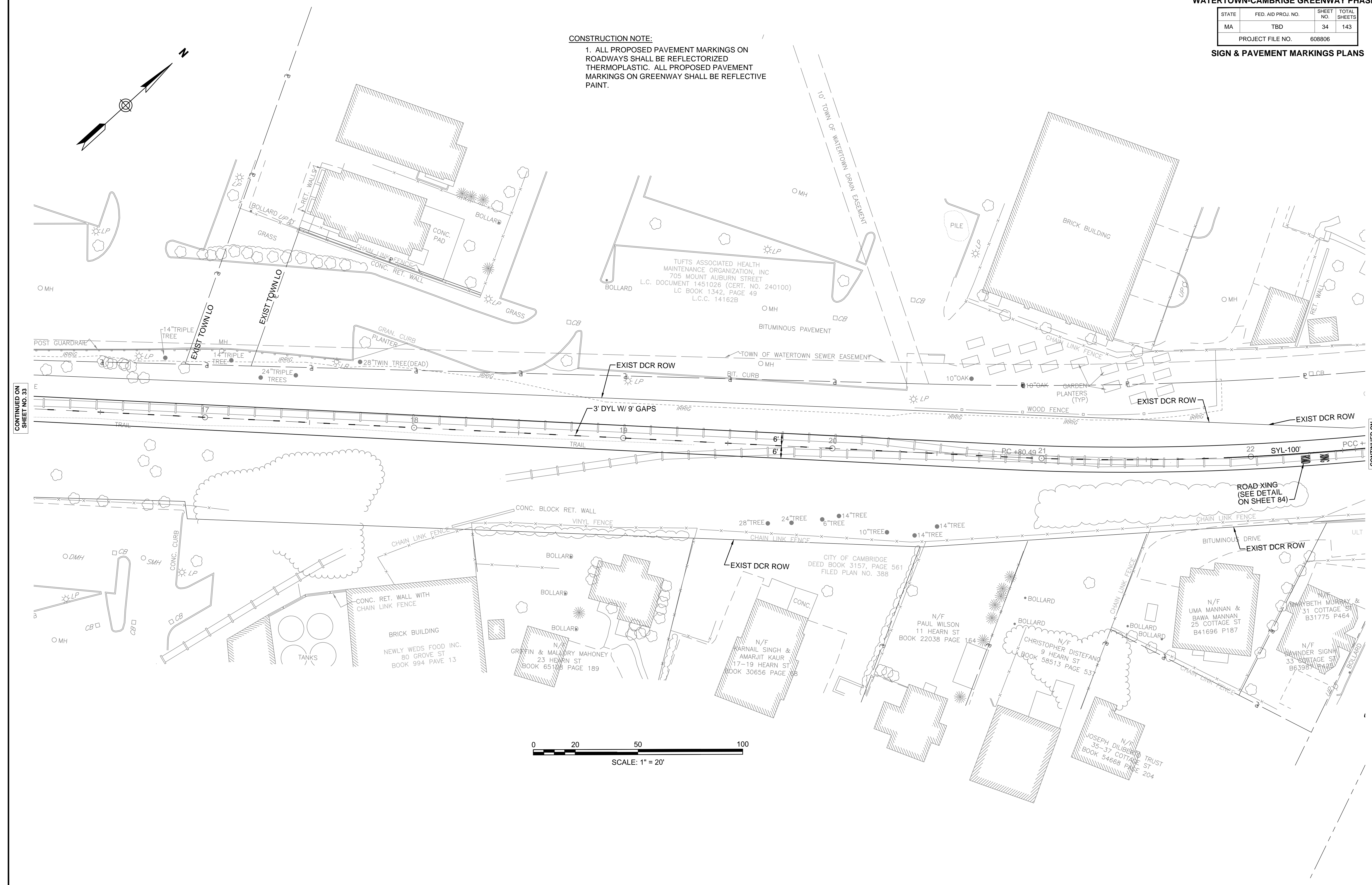
TUFTS ASSOCIATED HEALTH  
MAINTENANCE ORGANIZATION, INC  
64 GROVE STREET  
L.C. DOCUMENT 1093932 (CERT. NO. 213922)  
LC BOOK 1437, PAGE 87  
I.C.C. 1645999

**WATERTOWN/CAMBRIDGE  
WATERTOWN-CAMBRIDGE GREENWAY PHASE II**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	34	143
PROJECT FILE NO.		608806	

**SIGN & PAVEMENT MARKINGS PLANS**

**CONSTRUCTION NOTE:**  
1. ALL PROPOSED PAVEMENT MARKINGS ON ROADWAYS SHALL BE REFLECTORIZED THERMOPLASTIC. ALL PROPOSED PAVEMENT MARKINGS ON GREENWAY SHALL BE REFLECTIVE PAINT.



CONTINUED ON SHEET NO. 33

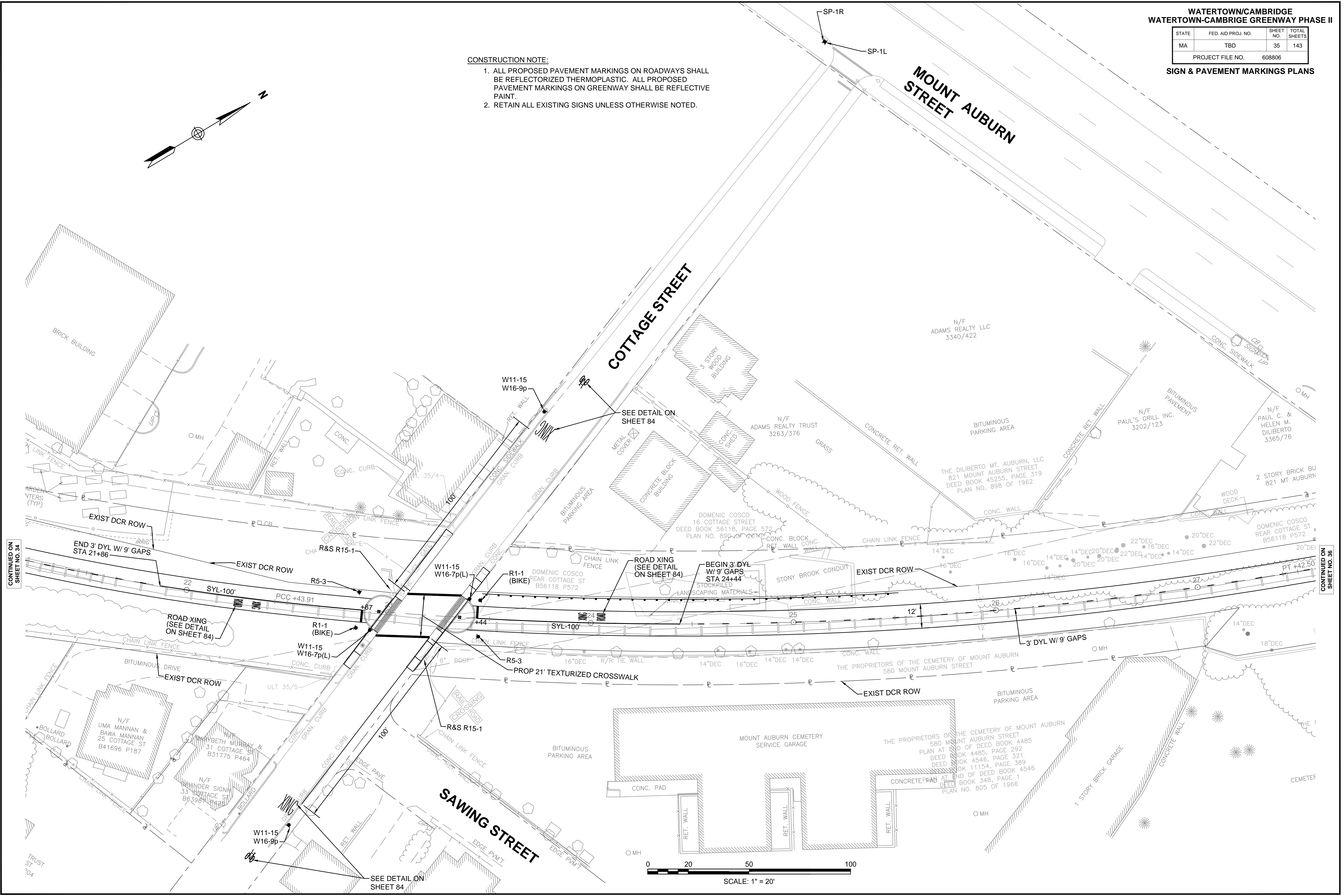
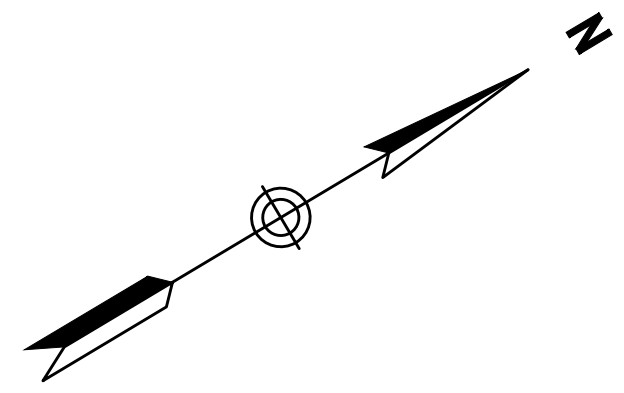
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**WATERTOWN/CAMBRIDGE  
WATERTOWN-CAMBRIDGE GREENWAY PHASE II**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	35	143
PROJECT FILE NO.		608806	

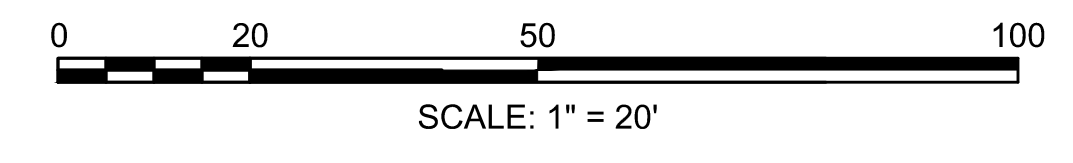
**SIGN & PAVEMENT MARKINGS PLANS**

- CONSTRUCTION NOTE:**
- ALL PROPOSED PAVEMENT MARKINGS ON ROADWAYS SHALL BE REFLECTORIZED THERMOPLASTIC. ALL PROPOSED PAVEMENT MARKINGS ON GREENWAY SHALL BE REFLECTIVE PAINT.
  - RETAIN ALL EXISTING SIGNS UNLESS OTHERWISE NOTED.



CONTINUED ON SHEET NO. 34

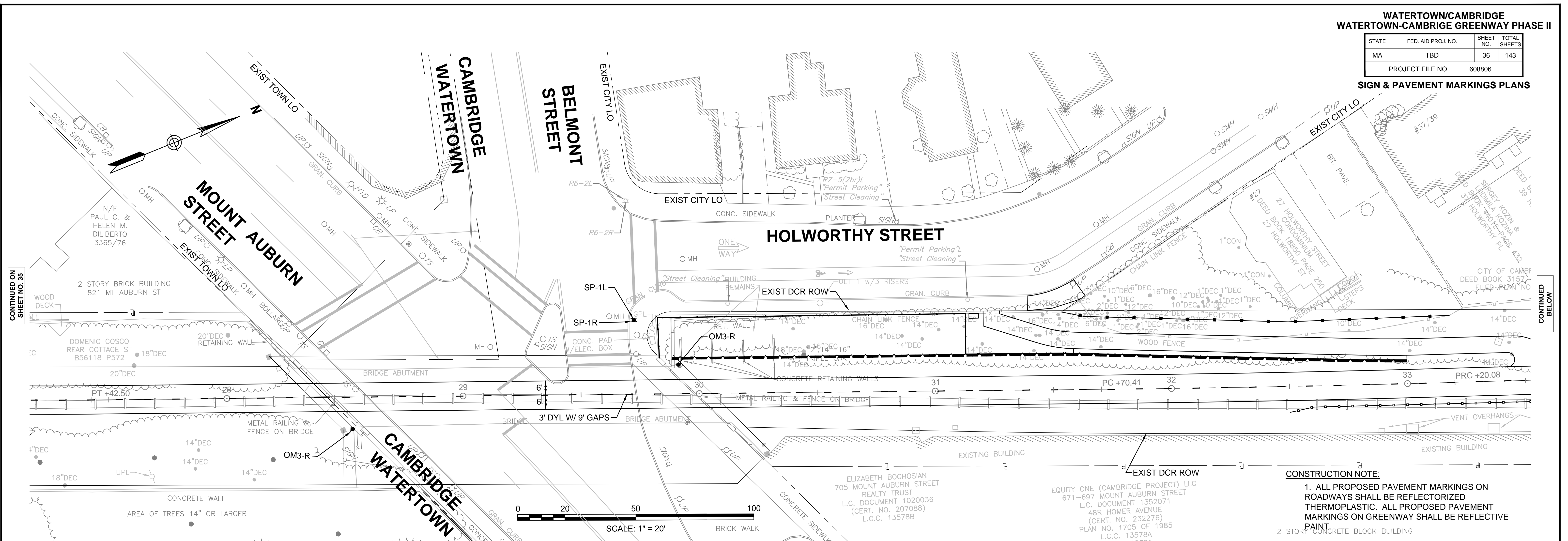
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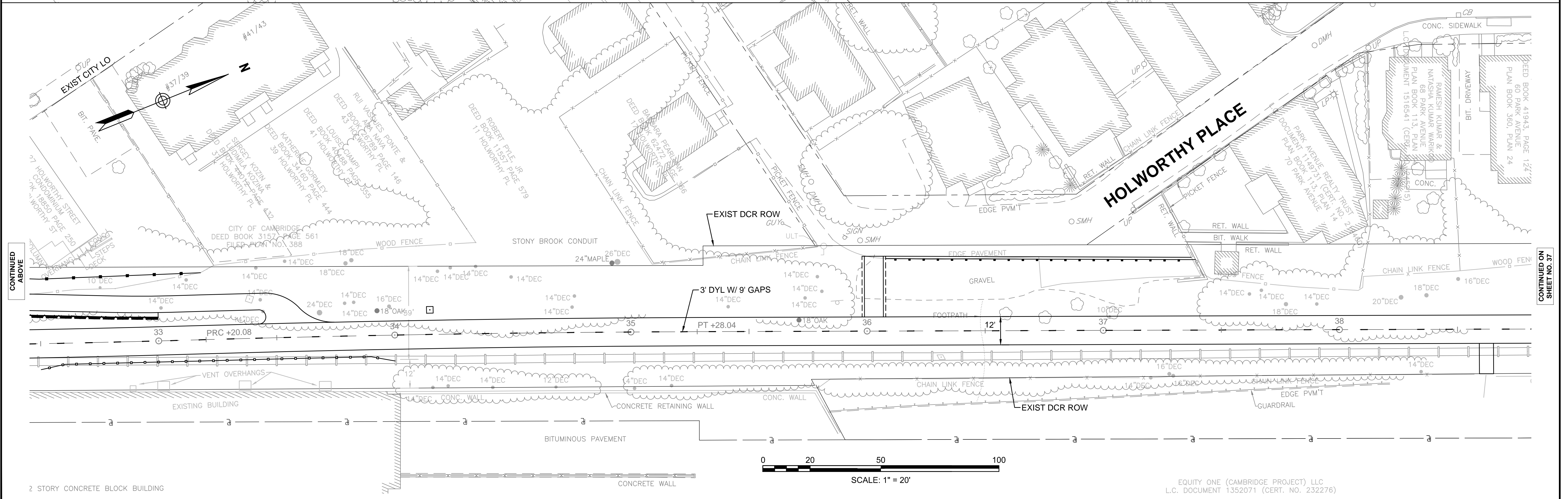
**WATERTOWN/CAMBRIDGE  
WATERTOWN-CAMBRIDGE GREENWAY PHASE II**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	36	143
PROJECT FILE NO.		608806	

**SIGN & PAVEMENT MARKINGS PLANS**



**CONSTRUCTION NOTE:**  
 1. ALL PROPOSED PAVEMENT MARKINGS ON ROADWAYS SHALL BE REFLECTORIZED THERMOPLASTIC. ALL PROPOSED PAVEMENT MARKINGS ON GREENWAY SHALL BE REFLECTIVE PAINT.  
 2. 2 STORY CONCRETE BLOCK BUILDING



EQUITY ONE (CAMBRIDGE PROJECT) LLC  
 L.C. DOCUMENT 1352071 (CERT. NO. 232276)

CONTINUED ON SHEET NO. 35

CONTINUED BELOW

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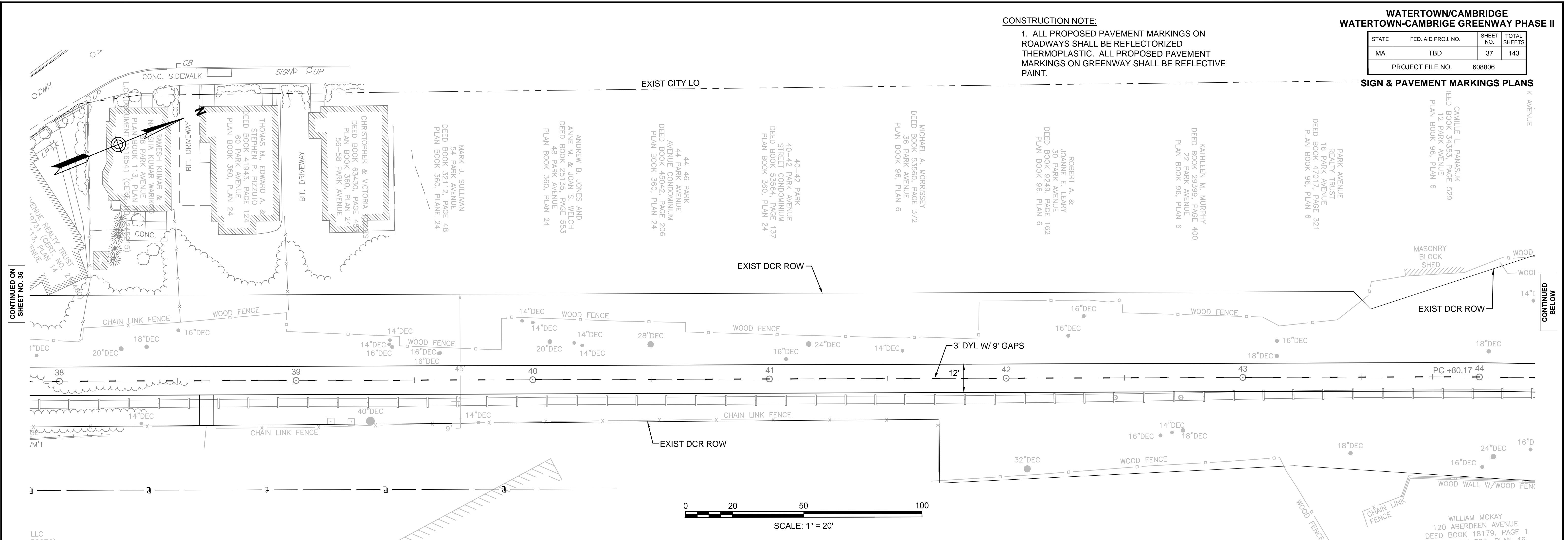
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**WATERTOWN/CAMBRIDGE  
WATERTOWN-CAMBRIDGE GREENWAY PHASE II**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	37	143
PROJECT FILE NO.		608806	

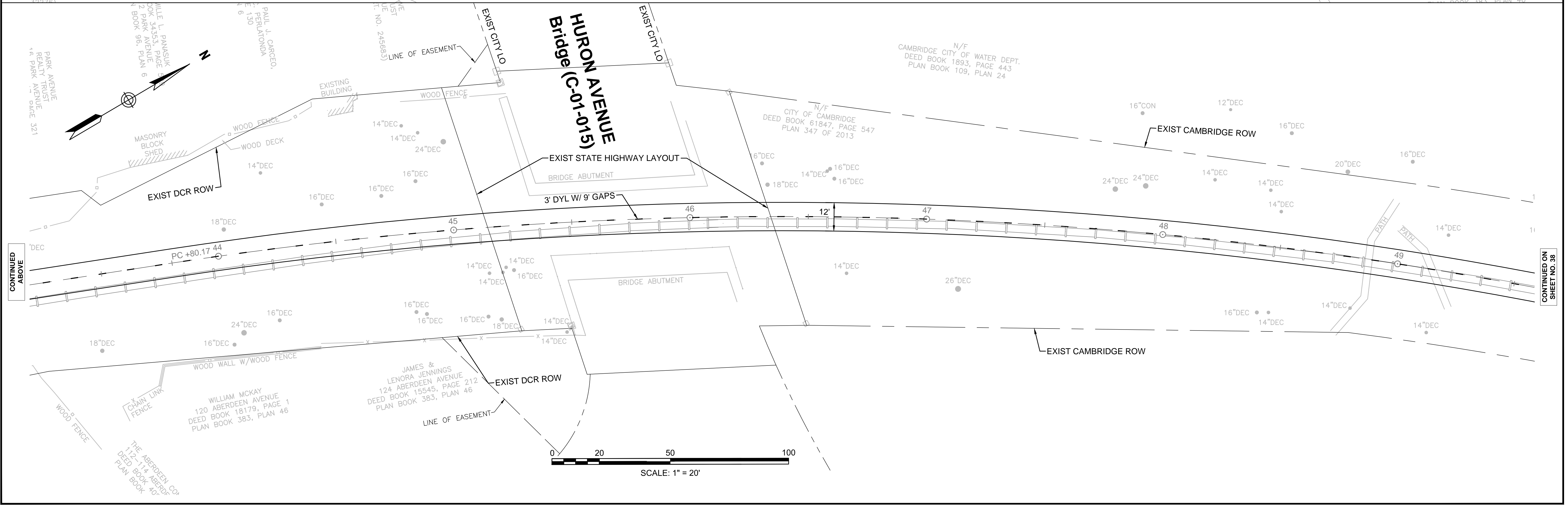
**CONSTRUCTION NOTE:**  
1. ALL PROPOSED PAVEMENT MARKINGS ON ROADWAYS SHALL BE REFLECTORIZED THERMOPLASTIC. ALL PROPOSED PAVEMENT MARKINGS ON GREENWAY SHALL BE REFLECTIVE PAINT.

**SIGN & PAVEMENT MARKINGS PLANS**



CONTINUED ON SHEET NO. 36

CONTINUED BELOW



CONTINUED ABOVE

CONTINUED ON SHEET NO. 38

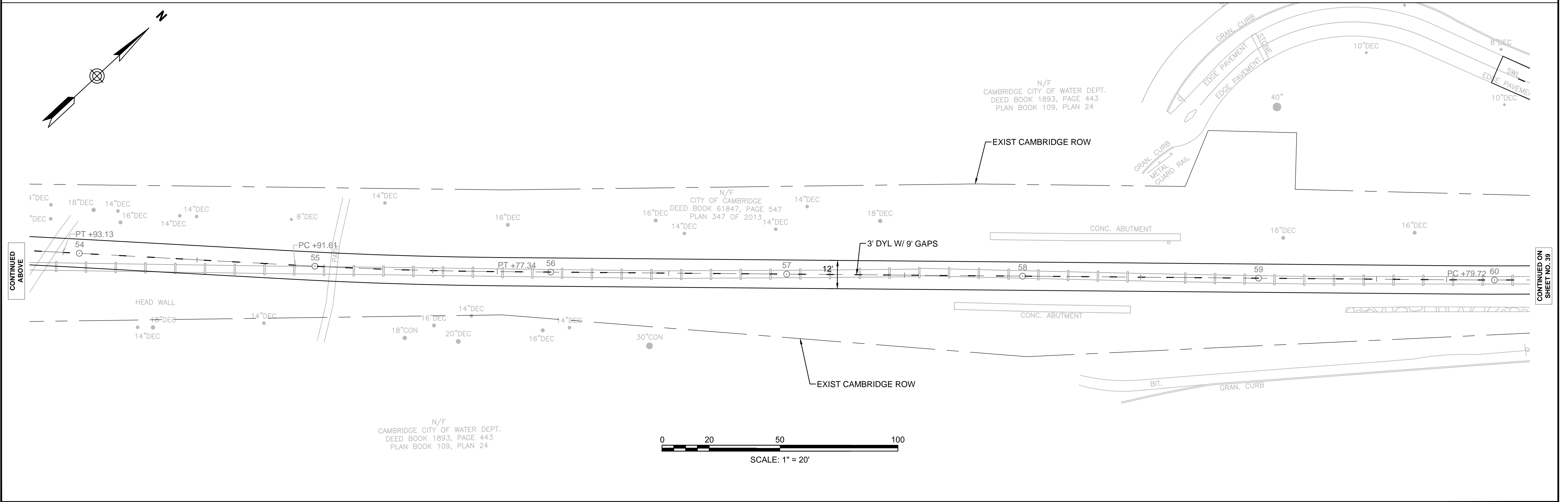
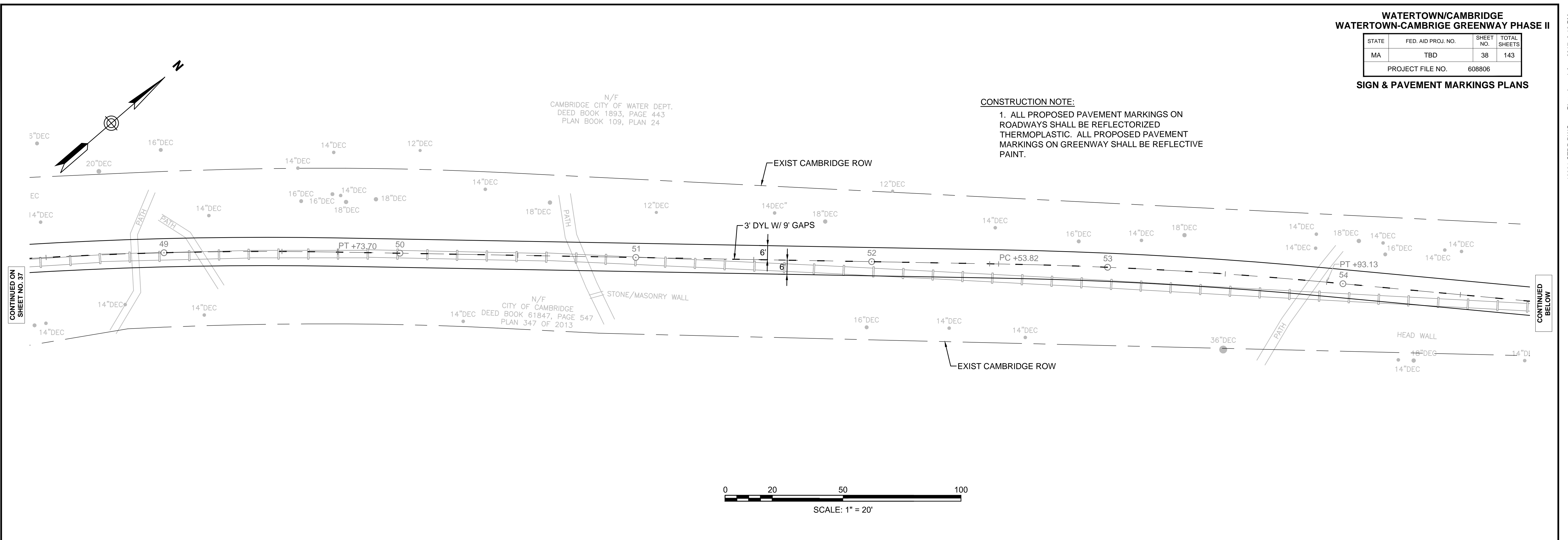
**WATERTOWN/CAMBRIDGE  
WATERTOWN-CAMBRIDGE GREENWAY PHASE II**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	38	143
PROJECT FILE NO.		608806	

**SIGN & PAVEMENT MARKINGS PLANS**

**CONSTRUCTION NOTE:**

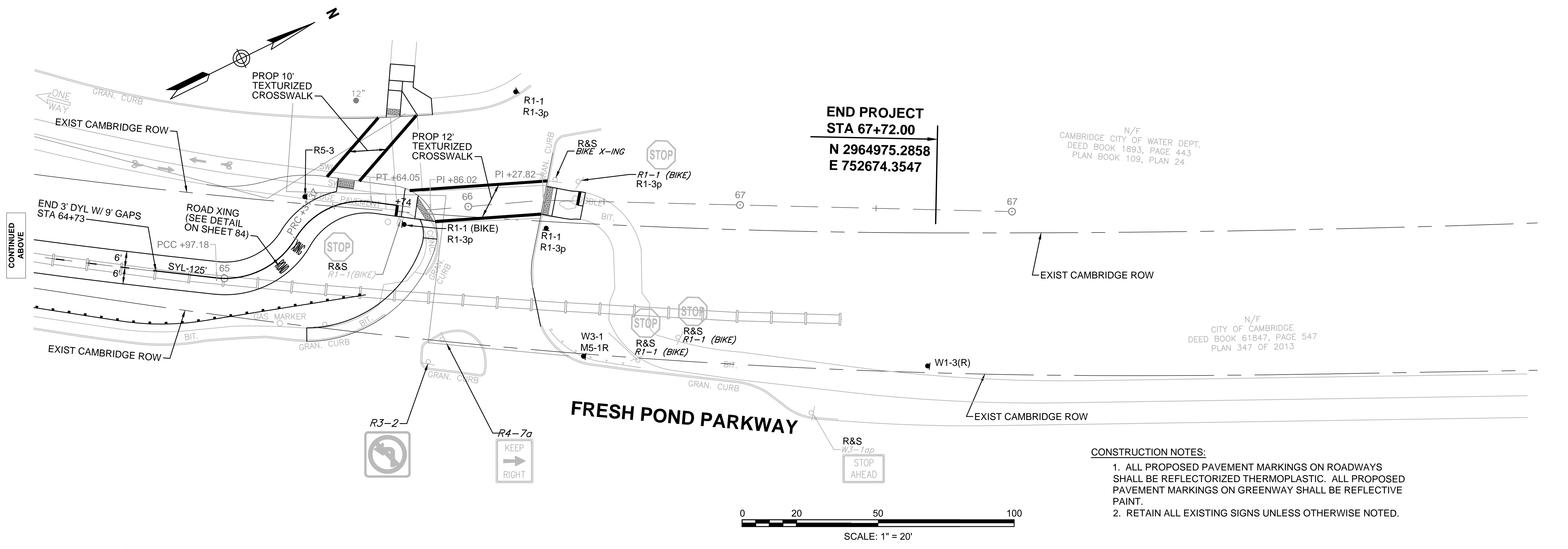
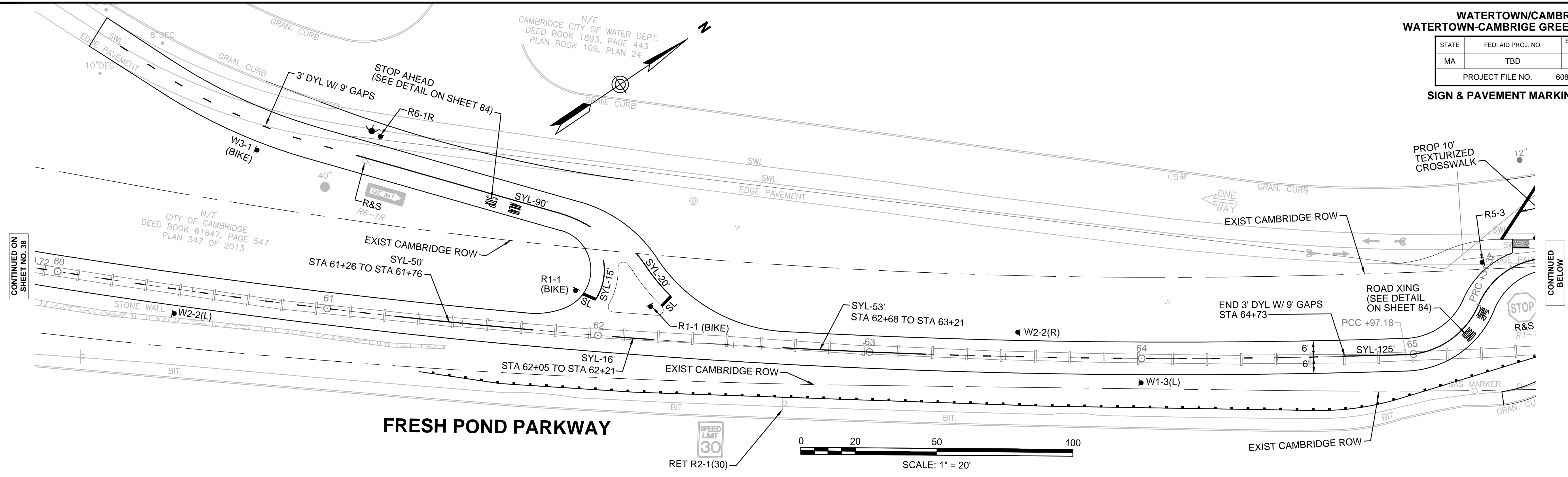
1. ALL PROPOSED PAVEMENT MARKINGS ON ROADWAYS SHALL BE REFLECTORIZED THERMOPLASTIC. ALL PROPOSED PAVEMENT MARKINGS ON GREENWAY SHALL BE REFLECTIVE PAINT.



**WATERTOWN/CAMBRIDGE  
WATERTOWN-CAMBRIDGE GREENWAY PHASE II**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	39	143
PROJECT FILE NO.		608806	

**SIGN & PAVEMENT MARKINGS PLANS**



**CONSTRUCTION NOTES:**  
 1. ALL PROPOSED PAVEMENT MARKINGS ON ROADWAYS SHALL BE REFLECTORIZED THERMOPLASTIC. ALL PROPOSED PAVEMENT MARKINGS ON GREENWAY SHALL BE REFLECTIVE PAINT.  
 2. RETAIN ALL EXISTING SIGNS UNLESS OTHERWISE NOTED.

CONTINUED ON SHEET NO. 38

CONTINUED BELOW

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	40	143
PROJECT FILE NO.		608806	

**SIGN SUMMARY**

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	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACK-GROUND	LEGEND	BORDER			
R1-1 (BIKE)	18"	18"		SEE FHWA "STANDARD HIGHWAY SIGNS", 2004 EDITION, AS AMENDED			5	RED	WHITE	WHITE	5-P5	1.86	9.30
R1-1	30"	30"					2				2-P5	5.18	10.36
R1-3p	18"	6"					3	RED	WHITE	WHITE	3 MTD W/ R1-1	0.75	2.25
R5-3	24"	24"					4	WHITE	BLACK	BLACK	4-P5	4.00	16.00
R6-1R	36"	12"					1	BLACK	BLACK	WHITE	1-P5	3.00	3.00
R9-5	12"	18"					1	WHITE	BLACK	BLACK	1-P5	1.50	1.50
R9-6	12"	18"					1	WHITE	BLACK	BLACK	1 MTD W/ R9-5	1.50	1.50
W1-3(L)	18"	18"					1	YELLOW	BLACK	BLACK	1-P5	2.25	2.25
W1-3(R)	18"	18"					1				1-P5	2.25	2.25
W2-2(L)	18"	18"					1	YELLOW	BLACK	BLACK	1-P5	2.25	2.25
W2-2(R)	18"	18"					1				1-P5	2.25	2.25
W3-1 (BIKE)	18"	18"					1	YELLOW	BLACK	BLACK	1-P5	2.25	2.25
W3-1	36"	36"					1				1-P5	9.00	9.00
W11-15	30"	30"					4	YELLOW	BLACK	BLACK	4-P5	6.25	25.00
W16-7p(L)	24"	12"					2	YELLOW	BLACK	BLACK	2 MTD WITH W11-15	2.00	4.00
W16-9p	24"	12"					2	YELLOW	BLACK	BLACK	2 MTD WITH W11-15	2.00	4.00
M5-1R	30"	21"					1	WHITE	BLACK	BLACK	1 MTD WITH W3-1	4.38	4.38
OM3-R	12"	36"					2	YELLOW	BLACK	BLACK	2-P5	3.00	6.00
SP-1L	24"	24"					2	PER DCR STANDARDS			2-P5	4.00	8.00
SP-1R	24"	24"					2	PER DCR STANDARDS			2 MTD WITH SP-1L	4.00	8.00

NOTE: HIGH INTENSITY REFLECTIVE SHEETING SHALL BE USED FOR ALL SIGNS. SEE 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.

EXISTING SIGN SUMMARY	
IDENTIFICATION NUMBER	TEXT
R1-1 (BIKE)	
R2-1(30)	
R3-2	
R4-7a	
R6-1R	
R15-1	
W3-1ap	



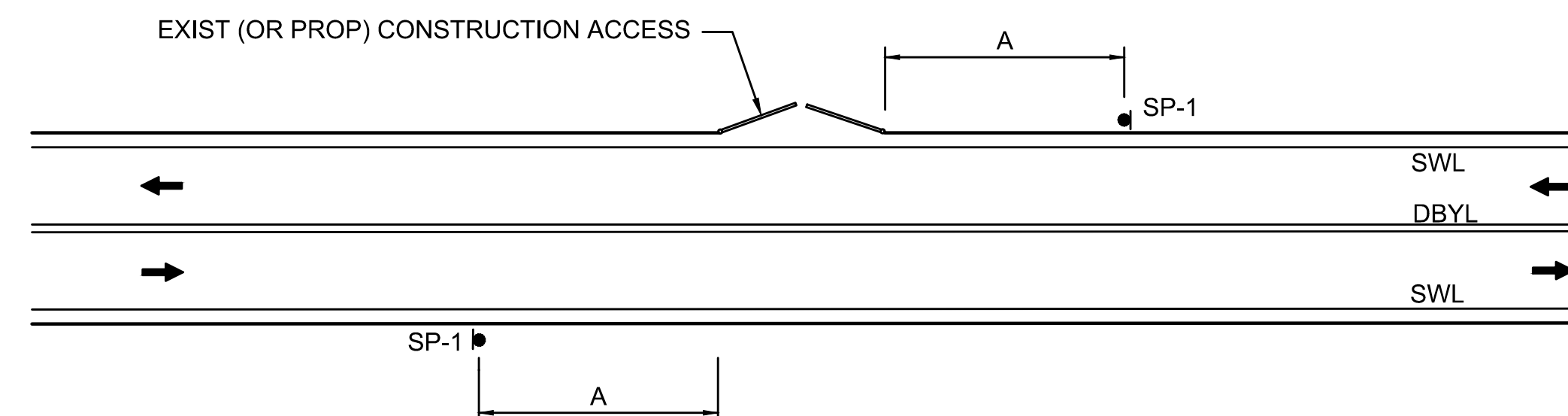
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	41	143
PROJECT FILE NO.		608806	

TEMPORARY TRAFFIC CONTROL PLANS

GENERAL NOTES

- ALL CONSTRUCTION SIGNING, TEMPORARY TRAFFIC CONTROL DEVICES, AND ROADSIDE ELEMENTS SHALL CONFORM WITH THE 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AS AMENDED, THE MASSDOT STANDARD DETAILS AND DRAWINGS FOR THE DEVELOPMENT OF TEMPORARY TRAFFIC CONTROL PLANS, THE LATEST REVISIONS OF THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, (AASHTO) ROADSIDE DESIGN GUIDE, AASHTO POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS, AND NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM (NCHRP) REPORT 350 OR THE AASHTO MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).
- ALL TEMPORARY PEDESTRIAN PATHWAYS SHALL COMPLY FULLY WITH ALL REQUIREMENTS OF THE MUTCD AND ALL APPLICABLE MASSACHUSETTS ARCHITECTURAL ACCESS BOARD (MAAB) AND AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG) REQUIREMENTS.
- WORK HOURS SHALL BE 7:00AM TO 3:00PM MONDAY THROUGH FRIDAY UNLESS OTHERWISE APPROVED BY THE ENGINEER. WORK SHALL NOT AFFECT TRAFFIC PATTERNS DURING PEAK TRAFFIC PERIODS. PEAK TRAFFIC PERIODS ARE DEFINED AS MONDAY THROUGH FRIDAY 7:00AM-9:00AM AND 3:00PM-6:00PM. THESE TIME RESTRICTIONS APPLY TO ALL WORK WITHIN THE PUBLIC WAY.
- NO WORK SHALL OCCUR WITHIN THE PUBLIC WAY ON STATE RECOGNIZED HOLIDAYS UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- ALL DRUMS OUTSIDE TAPERS SHALL BE SET AT 20' ON CENTER MAX. UNLESS OTHERWISE NOTED OR ADJUSTED BY THE ENGINEER.
- ALL DRUMS SHALL BE APPROXIMATELY PLACED AND MOVED AS NECESSARY TO MAINTAIN ADEQUATE ABUTTER ACCESS AT ALL TIMES. WORK MAY REQUIRE ADDITIONAL SIGNS, DRUMS AND OTHER TRAFFIC CONTROL DEVICES, GRADING AND TEMPORARY PAVEMENT FOR PASSAGE OF PEDESTRIAN, VEHICULAR AND EMERGENCY TRAFFIC THROUGH THE WORK AREAS, BOTH DURING AND AFTER WORKING HOURS, TO MAINTAIN SUCH ACCESS.
- CONTRACTOR SHALL NOTIFY EACH ABUTTER AT LEAST 24 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE THE TEMPORARY CLOSURE OR RESTRICTION OF ACCESS.
- FOR DROP-OFFS 4" OR LESS, CONDITION MAY BE MITIGATED WITH W8-9 (LOW SHOULDER) SIGN OR TEMPORARY CHANNELIZATION DEVICES. FOR DROP-OFFS GREATER THAN 4" BUT NO MORE THAN 12", DETERMINE WHETHER IT IS MORE COST EFFECTIVE TO INSTALL BOTH TEMPORARY CHANNELIZATION DEVICES AND A 1V:4H (MIN) TO 1V:6H (DESIRED) WEDGE OR TO SHIELD IT.
- CONTRACTOR SHALL STAGE WORK SUCH THAT A DROP-OFF OF NO MORE THAN 12" AT THE END OF EACH WORK DAY EXISTS WITHIN THE CLEAR ZONE AT ANY TIME.
- 11' MINIMUM LANE WIDTHS SHALL BE MAINTAINED UNLESS OTHERWISE NOTED.
- NON-ESSENTIAL TRAFFIC CONTROL DEVICES AND SIGNS SHALL BE COVERED OR REMOVED DURING NON-WORKING HOURS WHEN NOT IN USE.
- SIGNS INSTALLED ON PORTABLE STANDS REQUIRE 12 INCH MINIMUM MOUNTING HEIGHT FROM THE ROADWAY SURFACE TO THE BOTTOM OF THE SIGN.
- SIGNS INSTALLED ON PORTABLE STANDS PLACED AMONG CHANNELIZATION DEVICES REQUIRE A 36 INCH MINIMUM MOUNTING HEIGHT FROM THE ROADWAY SURFACE TO THE BOTTOM OF THE SIGN.
- SIGNS MOUNTED ON P5 POSTS REQUIRE A MINIMUM 84 INCH MOUNTING HEIGHT FROM THE ROADWAY OR SIDEWALK SURFACE TO THE BOTTOM OF THE SIGN.
- THE FIRST 10 REFLECTORIZED DRUMS IN THE TAPER SHALL BE MOUNTED WITH SEQUENTIAL FLASHING WARNING LIGHTS.
- REFLECTORIZED CONES SHALL BE A MINIMUM OF 36 INCHES IN HEIGHT.
- CONES MAY BE USED IN LIEU OF DRUMS OUTSIDE OF TAPER AREAS.
- MA-W20-7b SIGNS SHALL BE REPLACED BY W20-7 SIGNS WHEN FLAGGERS ARE USED IN LIEU OF POLICE OFFICER DETAILS.
- CONTRACTOR SHALL SECURE WORK AREAS TO PREVENT UNAUTHORIZED ACCESS AT ALL TIMES.
- CONSTRUCTION CLEAR ZONE SHALL BE IN ACCORDANCE WITH MASSDOT BOSTON TRAFFIC GUIDELINES AS FOLLOWS:  
4' IF POSTED SPEED IS LESS THAN 35 MPH  
8' IF POSTED SPEED IS 35 MPH  
15' IF POSTED SPEED IS 40 MPH
- TEMPORARY MARKINGS SHALL BE SURFACE-APPLIED REMOVEABLE TAPE.
- ALL TEMPORARY STOP LINES SHALL BE 12 INCHES WIDE.

SUGGESTED TEMPORARY TRAFFIC CONTROL SETUP APPLICATION		
LOCATION	TEMPORARY TRAFFIC CONTROL SETUPS	SHEET NUMBER
ARLINGTON ST	TYPICAL ONE WAY STREET LANE SHIFT PEDESTRIAN BYPASS TYPE I	42
COTTAGE ST	TYPICAL TWO-WAY STREET LANE CLOSURE ALTERNATING TRAFFIC	42
FRESH POND PARKWAY	TYPICAL ONE LANE CLOSURE - RIGHT PEDESTRIAN BYPASS TYPE I	42
CAMBRIDGE WATER DEPARTMENT INTERNAL ROADWAY	BIKE LANE CLOSURE - CAMBRIDGE WATER DEPARTMENT INTERNAL ROADWAY	43
PATH ON FRESH POND PARKWAY	PATH CLOSURE AND DETOUR - FRESH POND PARKWAY	45

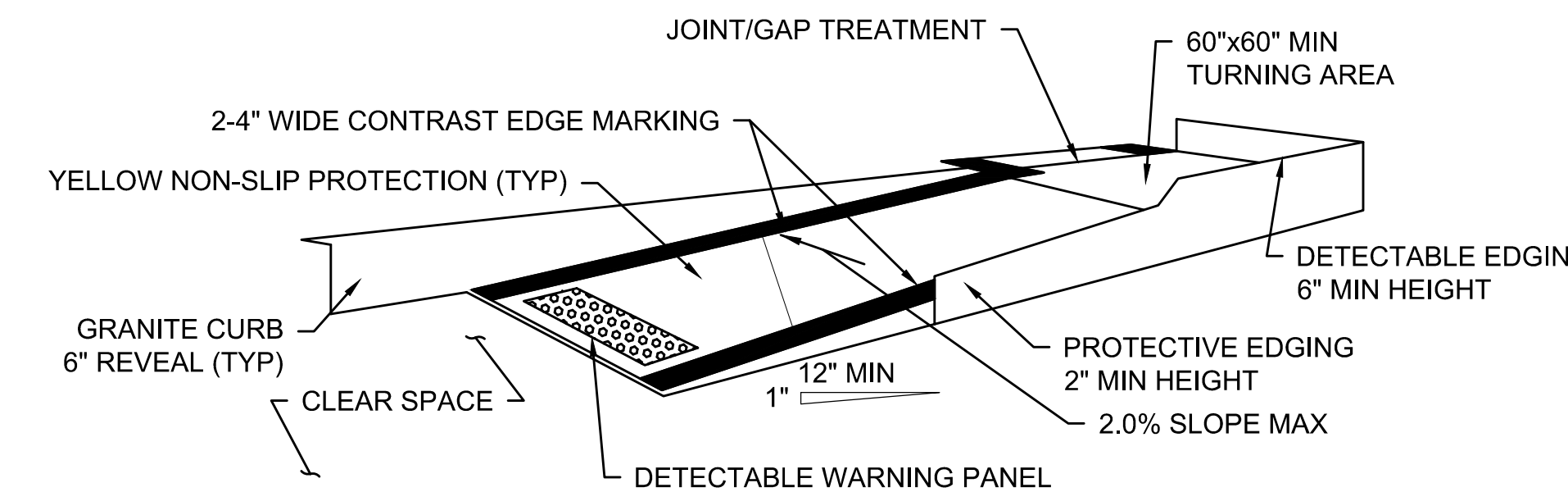


NOTE:  
1. SEE ADVANCE SIGN SPACING CHART ON THIS SHEET.

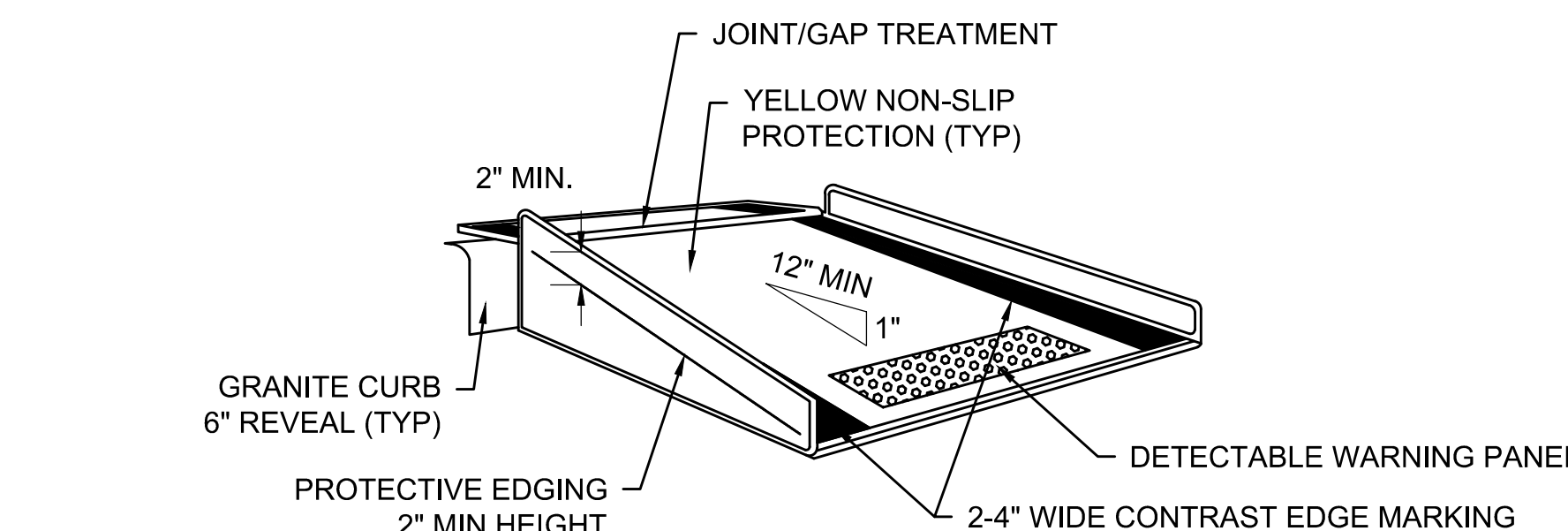
TYPICAL SETUP FOR CONSTRUCTION ACCESS

SCALE: NTS

BUFFER SPACING	
SPEED (MPH)	DISTANCE (FEET)
15	80
20	115
25	155
30	200
35	250
40	305



TEMPORARY CURB RAMP-PARALLEL TO CURB



TEMPORARY CURB RAMP-PERPENDICULAR TO CURB

TEMPORARY CURB RAMPS

SCALE: NTS

LEGEND

	FLAGGER
	POLICE OFFICER
	TRAFFIC SIGNAL
	REFLECTORIZED DRUM
	REFLECTORIZED DRUM WITH SEQUENTIAL FLASHING WARNING LIGHT (SEE NOTE 15)
	TEMPORARY CONSTRUCTION SIGN
	TRAFFIC CONE
	TYPE III BARRICADE
	ARROW BOARD (AB) (RIGHT OR LEFT)
	WORK AREA (PUBLIC ACCESS RESTRICTED)
	TRAFFIC FLOW
	PEDESTRIAN/BIKE ROUTE
	CONSTRUCTION FENCE
	PEDESTRIAN CHANNELIZATION DEVICE
NTS	NOT TO SCALE
	PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

LANE TAPER LENGTH FORMULAS

L=	TAPER LENGTH IN FEET
W=	WIDTH OF ROADWAY TO BE SHIFTED OR REDIRECTED IN FEET
S=	POSTED SPEED LIMIT IN MPH
	POSTED SPEED
	40 MPH OR LESS
	$L = \frac{WS^2}{60}$

ADVANCE SIGN SPACING

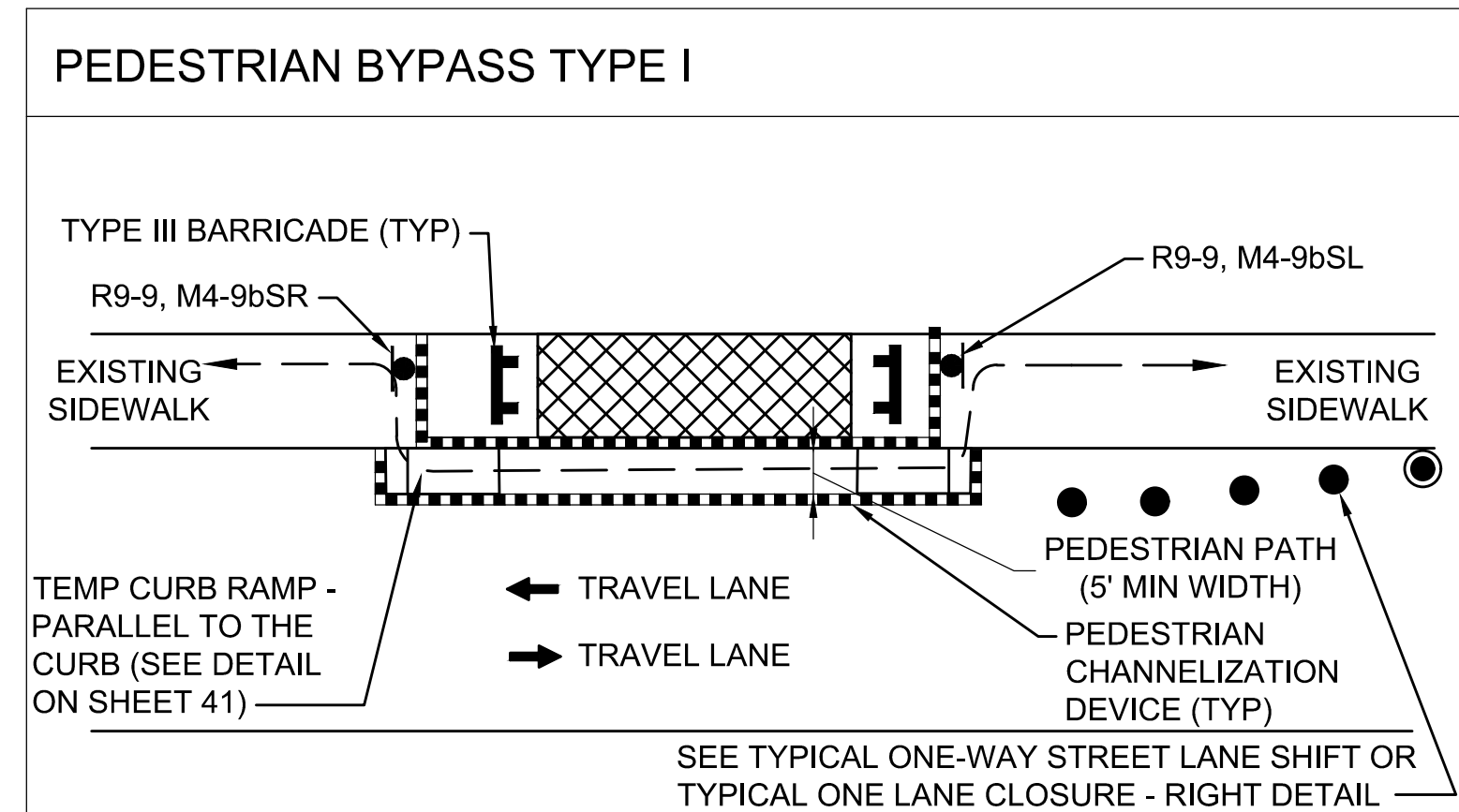
ROADWAYS	DISTANCE BETWEEN SIGNS (FEET)			
	A	B	C	D
FRESH POND PARKWAY	500	250	500	500
ARLINGTON ST, NICHOLS AVE, COOLIDGE HILL RD & CRAWFORD ST	350	150	350	350
ALL OTHER ROADWAYS	100	50	100	100

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	42	143
PROJECT FILE NO.		608806	

TEMPORARY TRAFFIC CONTROL PLANS

OPERATIONAL SIGNING

LANE CLOSURES SHOWN ARE FOR TEMPORARY CONSTRUCTION.  
ALL DRUMS AND SIGNS ARE SHOWN AS THEY SHOULD APPEAR  
DURING THE WORKING DAY, OR WHILE OPERATING IN THE WORK ZONE.  
REFER TO GENERAL NOTES FOR FURTHER DETAILS.

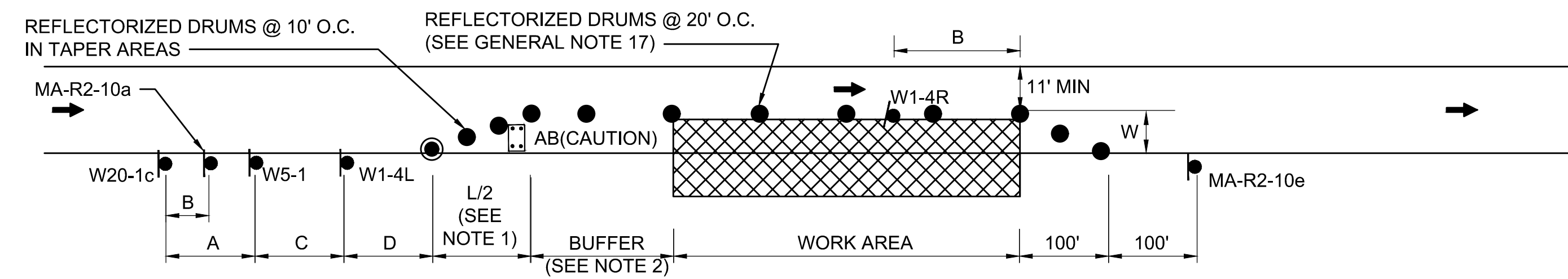


NOTES:

- ADDITIONAL ADVANCE WARNING SIGNS MAY BE NECESSARY AS DETERMINED BY THE ENGINEER
- CONTROLS FOR PEDESTRIAN TRAFFIC ONLY, ARE SHOWN. VEHICULAR TRAFFIC SHALL BE MAINTAINED AS SHOWN ELSEWHERE.
- STREET LIGHTING SHOULD BE CONSIDERED WHEN LOCATING CONTROL DEVICES.
- ← → INDICATES DIRECTION OF PEDESTRIAN TRAVEL.
- ALL TEMPORARY PEDESTRIAN PATHWAYS SHALL COMPLY FULLY WITH ALL REQUIREMENTS OF THE MUTCD AND ALL APPLICABLE MAAB AND ADAAG REQUIREMENTS. CONTRACTOR SHALL MAINTAIN ADA COMPLIANT PEDESTRIAN ACCESS AT ALL TIMES, SPECIFICALLY INCLUDING PEDESTRIAN GUIDANCE SYSTEMS (PEDESTRIAN CHANNELIZING DEVICES) AT WORKZONES. ACCESS SHALL BE MAINTAINED ALONG ALL SIDEWALKS AND CROSSWALKS TO ALL ABUTTERS. ANY PEDESTRIAN DETOURS SHALL INCLUDE AN ADA COMPLIANT PEDESTRIAN DETOUR ROUTE WITH PROPER BARRICADES, RAILINGS, RAMPS AND SIGNS.
- CONTRACTOR SHALL MAINTAIN AS WIDE OF A PEDESTRIAN ACCESS AS POSSIBLE AT ALL TIMES. EXCEPT WHERE NECESSARY, THE CONTRACTOR MAY TEMPORARILY REDUCE PEDESTRIAN PATHWAYS TO 4 FEET IN WIDTH (EXCLUDING CURB) FOR NO MORE THAN 200 LINEAR FEET AT A TIME IN ACCORDANCE WITH ALL STANDARDS.
- TEMPORARY WHEELCHAIR RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH MASSDOT, MAAB, AND ADAAG REQUIREMENTS. CONTRACTOR MAY UTILIZE EXISTING WCR'S AS POSSIBLE OR AS APPROVED BY THE ENGINEER.

PEDESTRIAN BYPASS DETAIL

SCALE: NTS

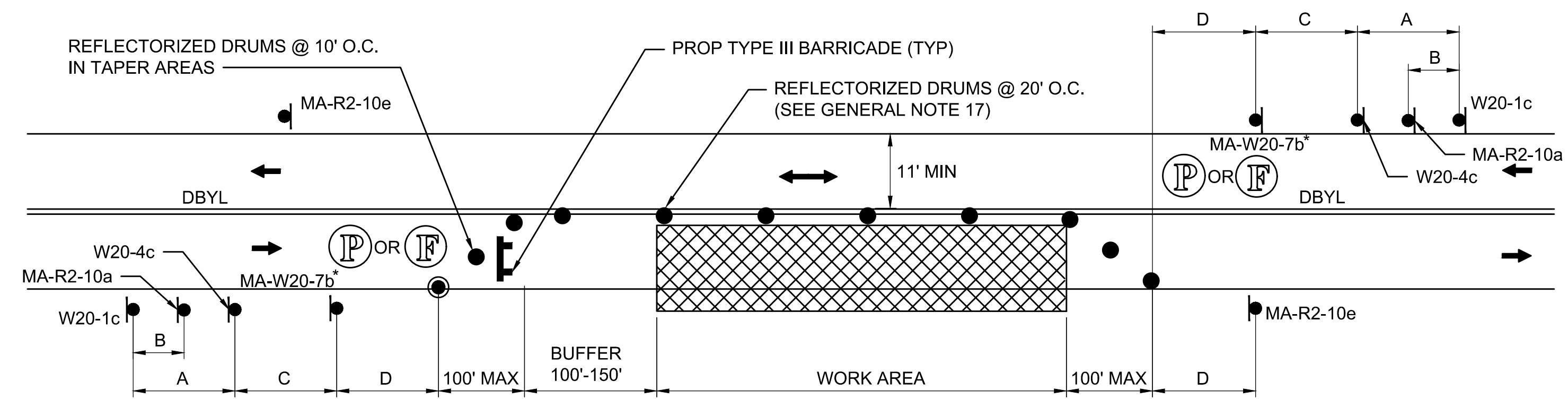


NOTES:

- SEE TAPER LENGTH FORMULA ON SHEET 41.
- SEE BUFFER SPACING CHART ON SHEET 41.
- SEE ADVANCE SIGN SPACING TABLE ON SHEET 41.

TYPICAL ONE WAY STREET LANE SHIFT

SCALE: NTS

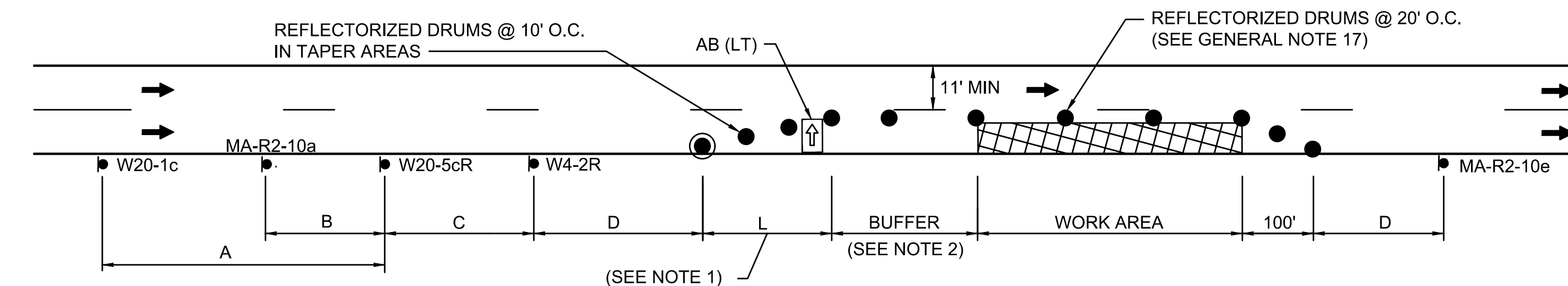


NOTES:

- REFER TO ADVANCE SIGN SPACING TABLE ON SHEET 41.
- \* SEE GENERAL NOTE 18 ON SHEET 41.

TYPICAL TWO-WAY STREET LANE CLOSURE ALTERNATING TRAFFIC

SCALE: NTS



NOTES:

- SEE TAPER LENGTH FORMULA ON SHEET 41.
- SEE BUFFER SPACING CHART ON SHEET 41.
- SEE ADVANCED SIGN SPACING CHART ON SHEET 41.

TYPICAL ONE LANE CLOSURE - RIGHT

SCALE: NTS

TEMPORARY TRAFFIC CONTROL SIGNS

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	COLOR			TEXT DIMENSIONS (INCHES)		
	WIDTH	HEIGHT		BACK-GROUND	LEGEND	BORDER	LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.
MA-R2-10a	48"	36"		FLUOR-ESCENT ORANGE WHITE	BLACK	BLACK	SEE MASSDOT STANDARDS		
MA-R2-10e	36"	48"		FLUOR-ESCENT ORANGE WHITE	BLACK	BLACK	SEE MASSDOT STANDARDS		
R3-7bp	24"	12"		WHITE	BLACK	BLACK	SEE FHWA INTERIM APPROVAL IA-18		
R7-1d	12"	18"		WHITE	RED	RED	SEE FHWA "STANDARD HIGHWAY SIGNS, 2004 EDITION"; AS AMENDED		
R7-1L	12"	18"		WHITE	RED	RED	SEE FHWA "STANDARD HIGHWAY SIGNS, 2004 EDITION"; AS AMENDED		
R7-1R	12"	18"		WHITE	RED	RED	SEE FHWA "STANDARD HIGHWAY SIGNS, 2004 EDITION"; AS AMENDED		
R9-9	30"	18"		WHITE	BLACK	BLACK	SEE MASSDOT STANDARDS		
R10-6L	24"	36"		WHITE	BLACK	BLACK	SEE MASSDOT STANDARDS		
R11-2e	48"	30"		WHITE	BLACK	BLACK	SEE MASSDOT STANDARDS		
R11-2f	48"	30"		WHITE	BLACK	BLACK	SEE MASSDOT STANDARDS		
OM1-1	24"	24"		YELLOW	YELLOW CLUSTER	---	SEE MASSDOT STANDARDS		
W1-4L	36"	36"		FLUOR-ESCENT ORANGE	BLACK	BLACK	SEE MASSDOT STANDARDS		
W1-4R	36"	36"		FLUOR-ESCENT ORANGE	BLACK	BLACK	SEE MASSDOT STANDARDS		
W4-2L	36"	36"		FLUOR-ESCENT ORANGE	BLACK	BLACK	SEE MASSDOT STANDARDS		
W4-2R	36"	36"		FLUOR-ESCENT ORANGE	BLACK	BLACK	SEE MASSDOT STANDARDS		
W5-1	36"	36"		FLUOR-ESCENT ORANGE	BLACK	BLACK	SEE MASSDOT STANDARDS		
W20-1b	36"	36"		FLUOR-ESCENT ORANGE	BLACK	BLACK	SEE MASSDOT STANDARDS		
W20-1c	36"	36"		FLUOR-ESCENT ORANGE	BLACK	BLACK	SEE MASSDOT STANDARDS		
W20-3b	36"	36"		FLUOR-ESCENT ORANGE	BLACK	BLACK	SEE MASSDOT STANDARDS		
W20-4c	36"	36"		FLUOR-ESCENT ORANGE	BLACK	BLACK	SEE MASSDOT STANDARDS		

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	COLOR			TEXT DIMENSIONS (INCHES)		
	WIDTH	HEIGHT		BACK-GROUND	LEGEND	BORDER	LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.
W20-5cL	36"	36"		FLUOR-ESCENT ORANGE	BLACK	BLACK	SEE FHWA "STANDARD HIGHWAY SIGNS, 2004 EDITION"; AS AMENDED		
W20-5cR	36"	36"		FLUOR-ESCENT ORANGE	BLACK	BLACK	SEE FHWA "STANDARD HIGHWAY SIGNS, 2004 EDITION"; AS AMENDED		
W20-7	36"	36"		FLUOR-ESCENT ORANGE	BLACK	BLACK	SEE FHWA "STANDARD HIGHWAY SIGNS, 2004 EDITION"; AS AMENDED		
MA-W20-7b	36"	36"		FLUOR-ESCENT ORANGE	BLACK	BLACK	SEE MASSDOT STANDARDS		
W21-5c	36"	36"		FLUOR-ESCENT ORANGE	BLACK	BLACK	SEE FHWA "STANDARD HIGHWAY SIGNS, 2004 EDITION"; AS AMENDED		
MA-W24-2	36"	36"		FLUOR-ESCENT ORANGE	BLACK	BLACK	SEE MASSDOT STANDARDS		
M4-8a	24"	18"		FLUOR-ESCENT ORANGE	BLACK	BLACK	SEE FHWA "STANDARD HIGHWAY SIGNS, 2004 EDITION"; AS AMENDED		
M4-9aL	30"	24"		FLUOR-ESCENT ORANGE	BLACK	BLACK	SEE MASSDOT STANDARDS		
M4-9aR	30"	24"		FLUOR-ESCENT ORANGE	BLACK	BLACK	SEE MASSDOT STANDARDS		
M4-9aV	30"	24"		FLUOR-ESCENT ORANGE	BLACK	BLACK	SEE MASSDOT STANDARDS		
M4-9aSR	30"	24"		FLUOR-ESCENT ORANGE	BLACK	BLACK	SEE MASSDOT STANDARDS		
M4-9bSL	30"	24"		FLUOR-ESCENT ORANGE	BLACK	BLACK	SEE MASSDOT STANDARDS		
M4-9bSR	30"	24"		FLUOR-ESCENT ORANGE	BLACK	BLACK	SEE MASSDOT STANDARDS		
M4-9cSL	30"	24"		FLUOR-ESCENT ORANGE	BLACK	BLACK	SEE MASSDOT STANDARDS		
M4-9cSR	30"	24"		FLUOR-ESCENT ORANGE	BLACK	BLACK	SEE MASSDOT STANDARDS		
SP-1	36"	36"		FLUOR-ESCENT ORANGE	BLACK	BLACK	5D 5D 5D 5D	4" 4" 4" 4"	NA
SP-2	30"	18"		WHITE	BLACK	BLACK	4D 4D	3.5" 3" 3.5"	NA
SP-3	36"	30"		WHITE	BLACK	BLACK	4B 4B	4.5" 5" 4.5"	NA

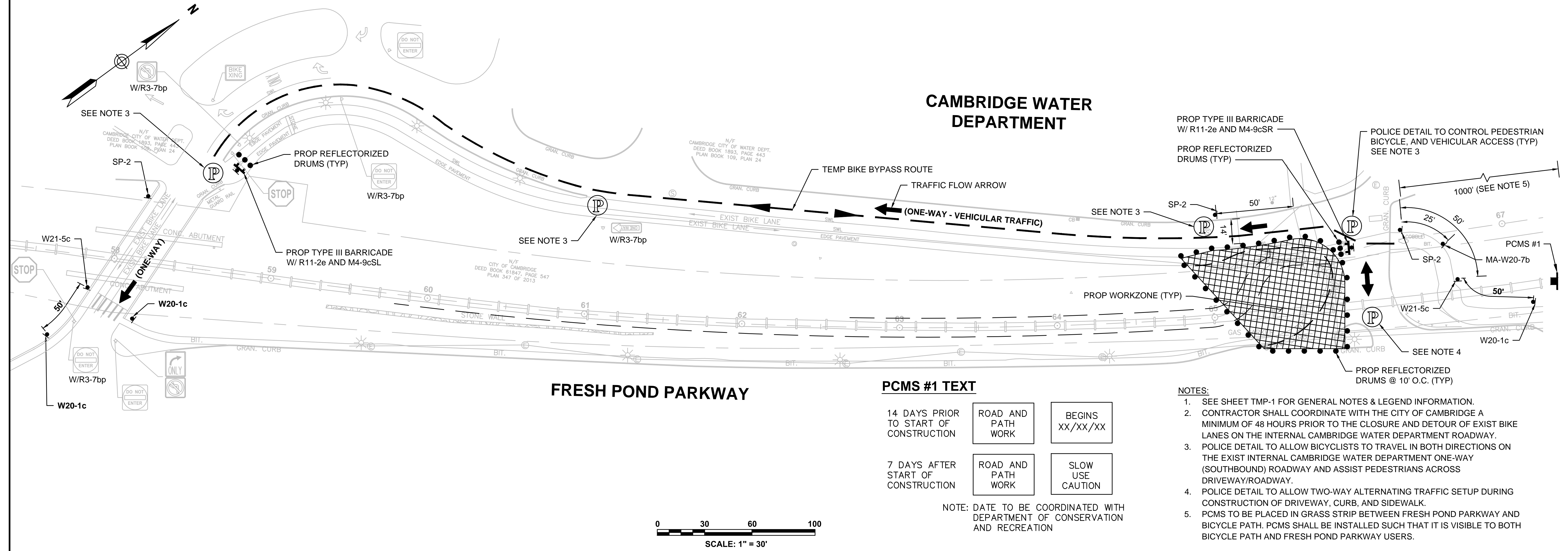
- NOTES:
- HIGH INTENSITY REFLECTIVE SHEETING SHALL BE USED FOR ALL SIGNS. SEE FHWA "STANDARD HIGHWAY SIGNS, 2004 EDITION" FOR TEXT DIMENSIONS, AS AMENDED; THE 1977 MASSHIGHWAY DEPARTMENT CONSTRUCTION AND TRAFFIC STANDARD DETAILS, AS AMENDED, FOR SIGNS AND SUPPORTS; THE MASSHIGHWAY DEPARTMENT SIGN LISTINGS 1993 EDITION, AS AMENDED; AND THE 2017 MASSDOT STANDARD SIGNS BOOK, AS AMENDED.
  - ALL SIGNS SHOWN GRAPHICALLY FOR INFORMATION ONLY. SIGN VENDOR SHALL FABRICATE ALL SIGNS IN ACCORDANCE WITH THE APPLICABLE STANDARDS.

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	43	143
PROJECT FILE NO.		608806	

TEMPORARY TRAFFIC CONTROL PLANS

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	44	143
PROJECT FILE NO.		608806	

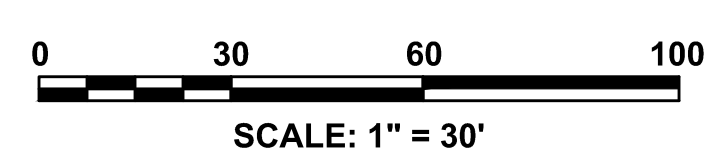
TEMPORARY TRAFFIC CONTROL PLANS



**PCMS #1 TEXT**

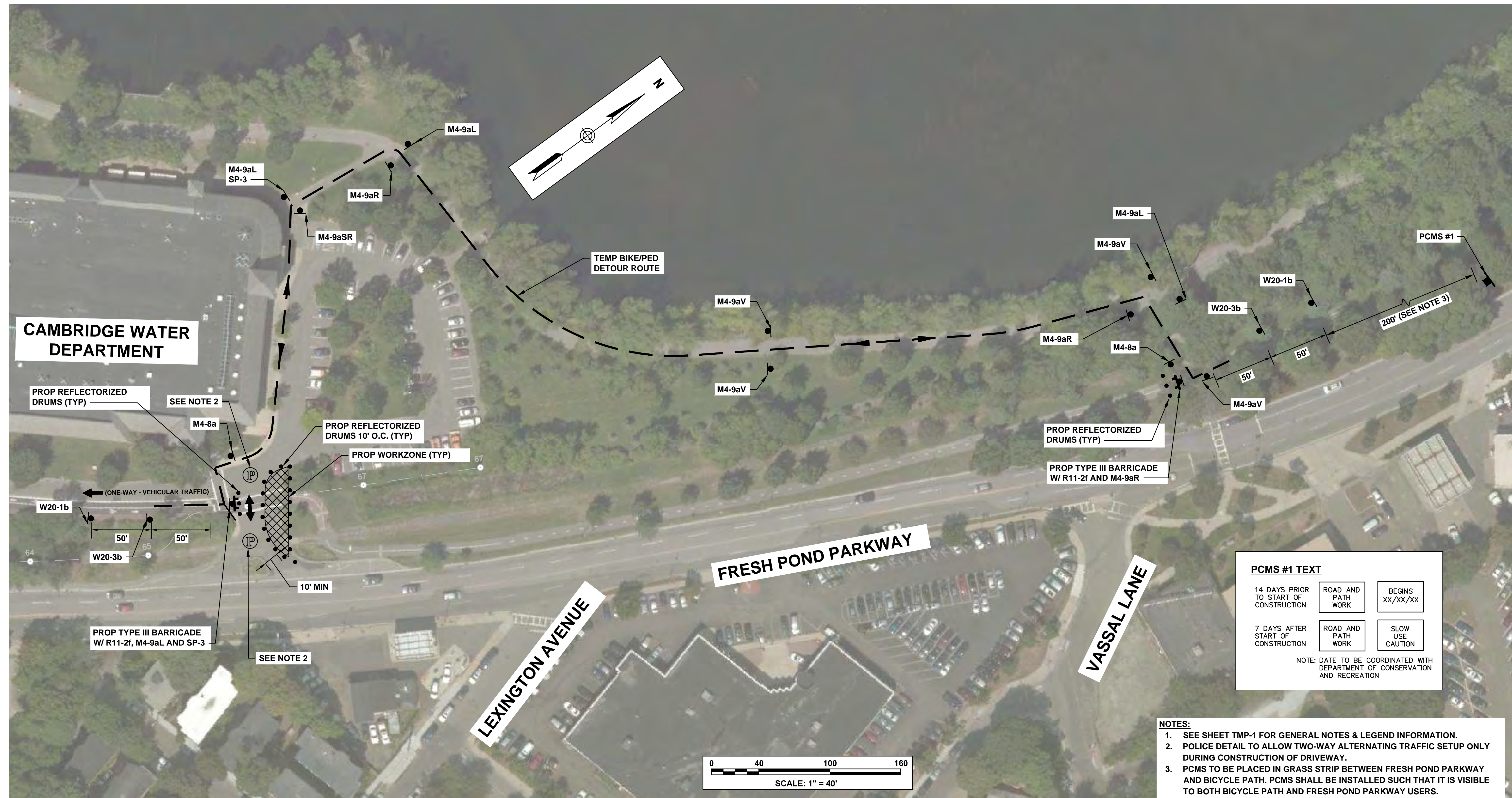
14 DAYS PRIOR TO START OF CONSTRUCTION	ROAD AND PATH WORK	BEGINS XX/XX/XX
7 DAYS AFTER START OF CONSTRUCTION	ROAD AND PATH WORK	SLOW USE CAUTION

- NOTES:**
- SEE SHEET TMP-1 FOR GENERAL NOTES & LEGEND INFORMATION.
  - CONTRACTOR SHALL COORDINATE WITH THE CITY OF CAMBRIDGE A MINIMUM OF 48 HOURS PRIOR TO THE CLOSURE AND DETOUR OF EXIST BIKE LANES ON THE INTERNAL CAMBRIDGE WATER DEPARTMENT ROADWAY.
  - POLICE DETAIL TO ALLOW BICYCLISTS TO TRAVEL IN BOTH DIRECTIONS ON THE EXIST INTERNAL CAMBRIDGE WATER DEPARTMENT ONE-WAY (SOUTHBOUND) ROADWAY AND ASSIST PEDESTRIANS ACROSS DRIVEWAY/ROADWAY.
  - POLICE DETAIL TO ALLOW TWO-WAY ALTERNATING TRAFFIC SETUP DURING CONSTRUCTION OF DRIVEWAY, CURB, AND SIDEWALK.
  - PCMS TO BE PLACED IN GRASS STRIP BETWEEN FRESH POND PARKWAY AND BICYCLE PATH. PCMS SHALL BE INSTALLED SUCH THAT IT IS VISIBLE TO BOTH BICYCLE PATH AND FRESH POND PARKWAY USERS.



**BIKE LANE CLOSURE - CAMBRIDGE WATER DEPARTMENT INTERNAL ROADWAY**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	45	143
PROJECT FILE NO.		608806	



**PCMS #1 TEXT**

14 DAYS PRIOR TO START OF CONSTRUCTION	ROAD AND PATH WORK	BEGINS XX/XX/XX
7 DAYS AFTER START OF CONSTRUCTION	ROAD AND PATH WORK	SLOW USE CAUTION

NOTE: DATE TO BE COORDINATED WITH DEPARTMENT OF CONSERVATION AND RECREATION

- NOTES:**
- SEE SHEET TMP-1 FOR GENERAL NOTES & LEGEND INFORMATION.
  - POLICE DETAIL TO ALLOW TWO-WAY ALTERNATING TRAFFIC SETUP ONLY DURING CONSTRUCTION OF DRIVEWAY.
  - PCMS TO BE PLACED IN GRASS STRIP BETWEEN FRESH POND PARKWAY AND BICYCLE PATH. PCMS SHALL BE INSTALLED SUCH THAT IT IS VISIBLE TO BOTH BICYCLE PATH AND FRESH POND PARKWAY USERS.

**PATH CLOSURE AND DETOUR - FRESH POND PARKWAY**

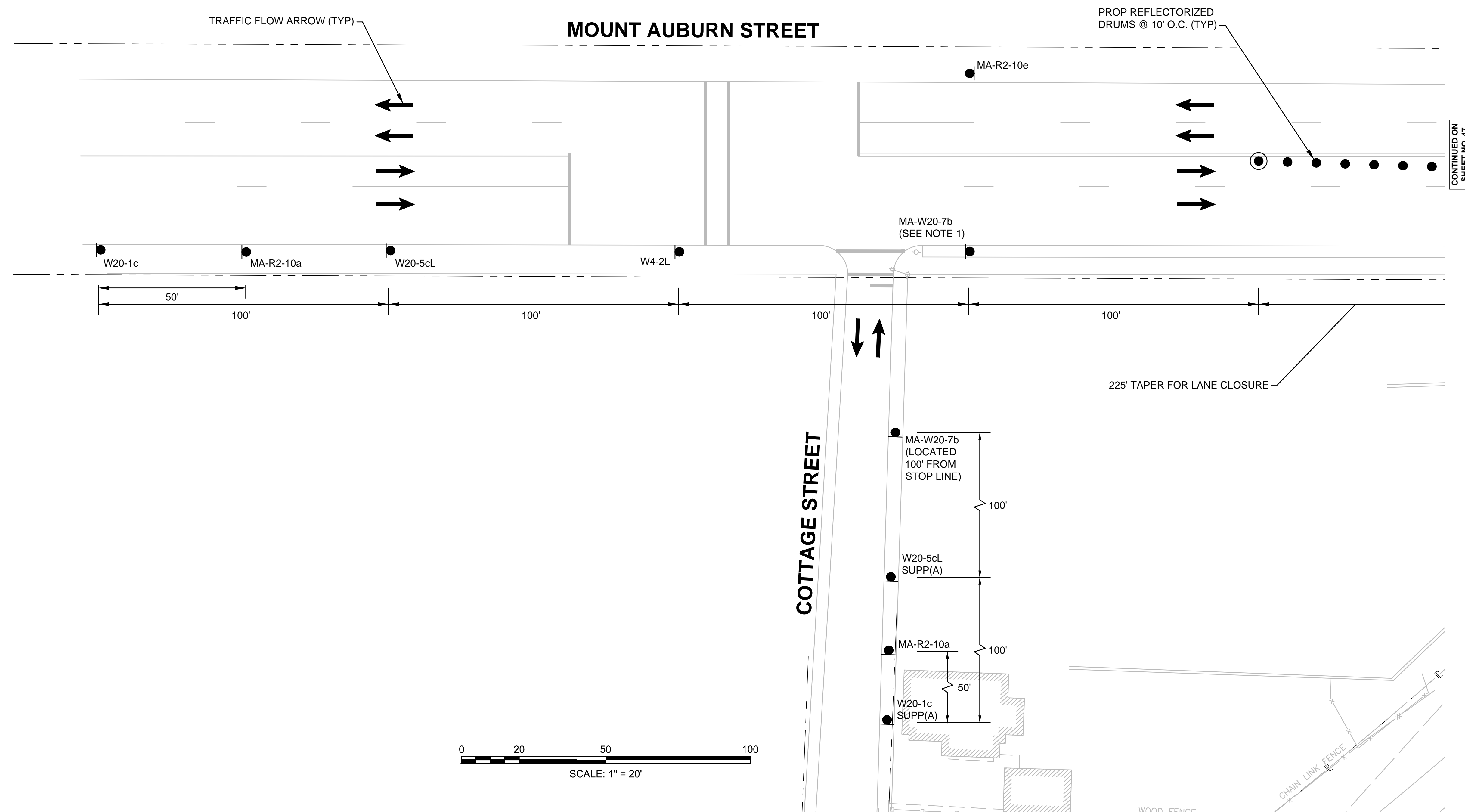
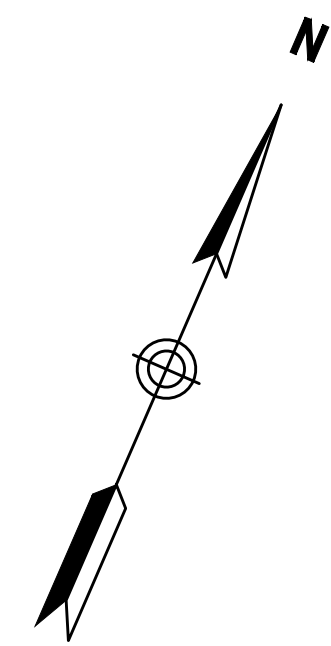
**WATERTOWN/CAMBRIDGE  
WATERTOWN-CAMBRIDGE GREENWAY PHASE II**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	46	143
PROJECT FILE NO.		608806	

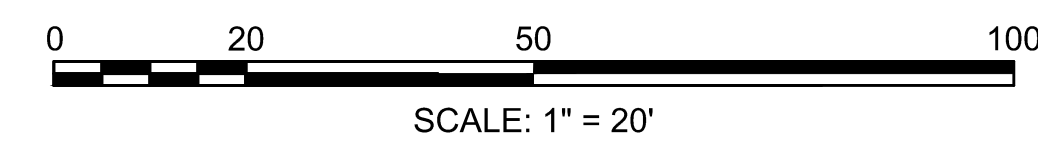
**STAGING PLANS  
WORKZONE 1**

**NOTE:**

1. MA-W20-7b SIGNS TO BE OMITTED IF POLICE DETAILS ARE NOT USED TO CONTROL TRAFFIC AT MT AUBURN ST AND BELMONT STREET INTERSECTION AND TRAFFIC SIGNAL REMAINS OPERATIONAL.



CONTINUED ON  
SHEET NO. 47



**STAGING PLANS  
WORKZONE 1**

**NOTE:**  
1. MA-W20-7b SIGNS TO BE OMITTED IF POLICE DETAILS ARE NOT USED TO CONTROL TRAFFIC AT MT AUBURN ST AND BELMONT STREET INTERSECTION AND TRAFFIC SIGNAL REMAINS OPERATIONAL.

**BELMONT ST EB  
TAPER CALCULATIONS**

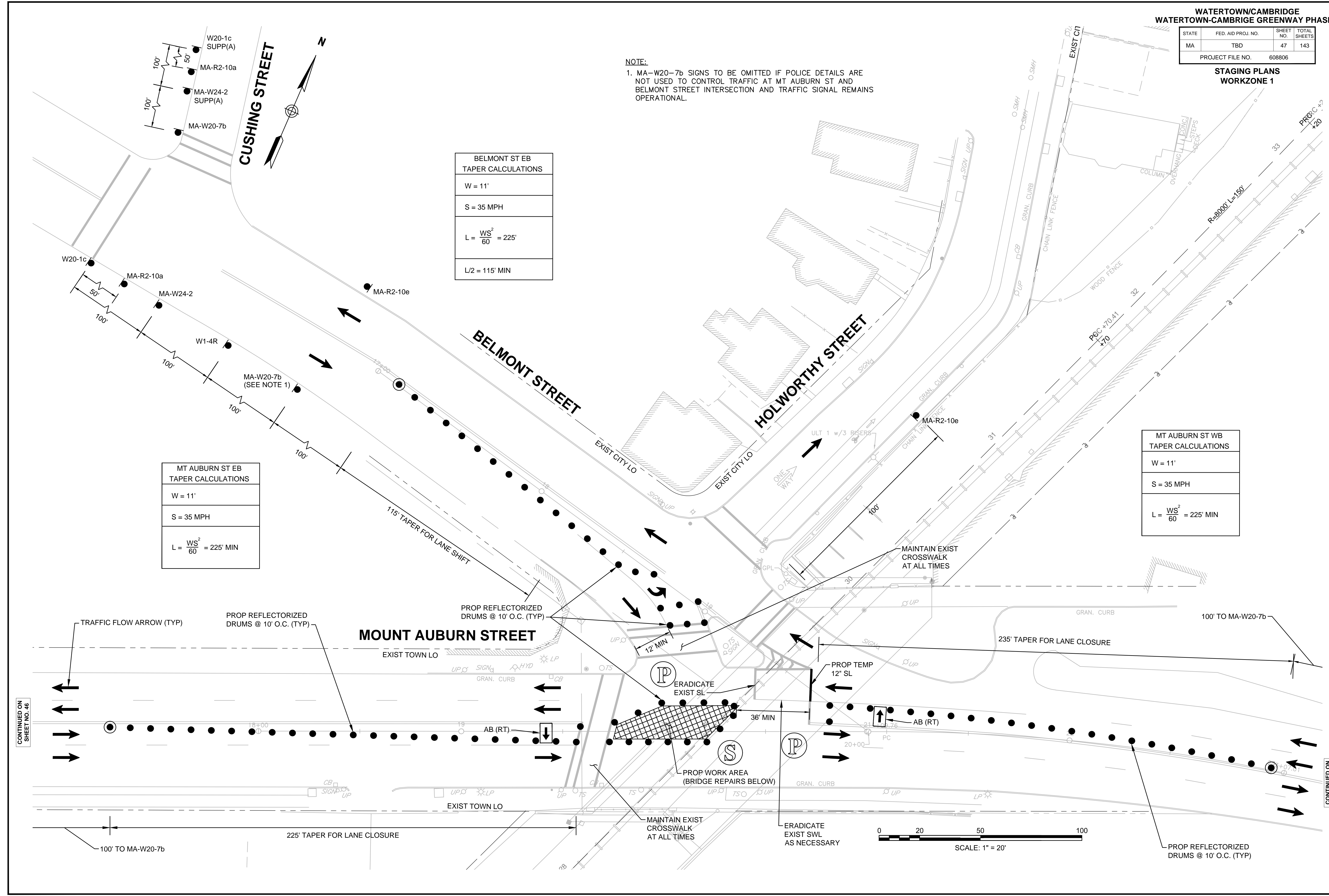
W = 11'
S = 35 MPH
$L = \frac{WS^2}{60} = 225'$
L/2 = 115' MIN

**MT AUBURN ST EB  
TAPER CALCULATIONS**

W = 11'
S = 35 MPH
$L = \frac{WS^2}{60} = 225'$ MIN

**MT AUBURN ST WB  
TAPER CALCULATIONS**

W = 11'
S = 35 MPH
$L = \frac{WS^2}{60} = 225'$ MIN



CONTINUED ON  
SHEET NO. 46

CONTINUED ON  
SHEET NO. 48

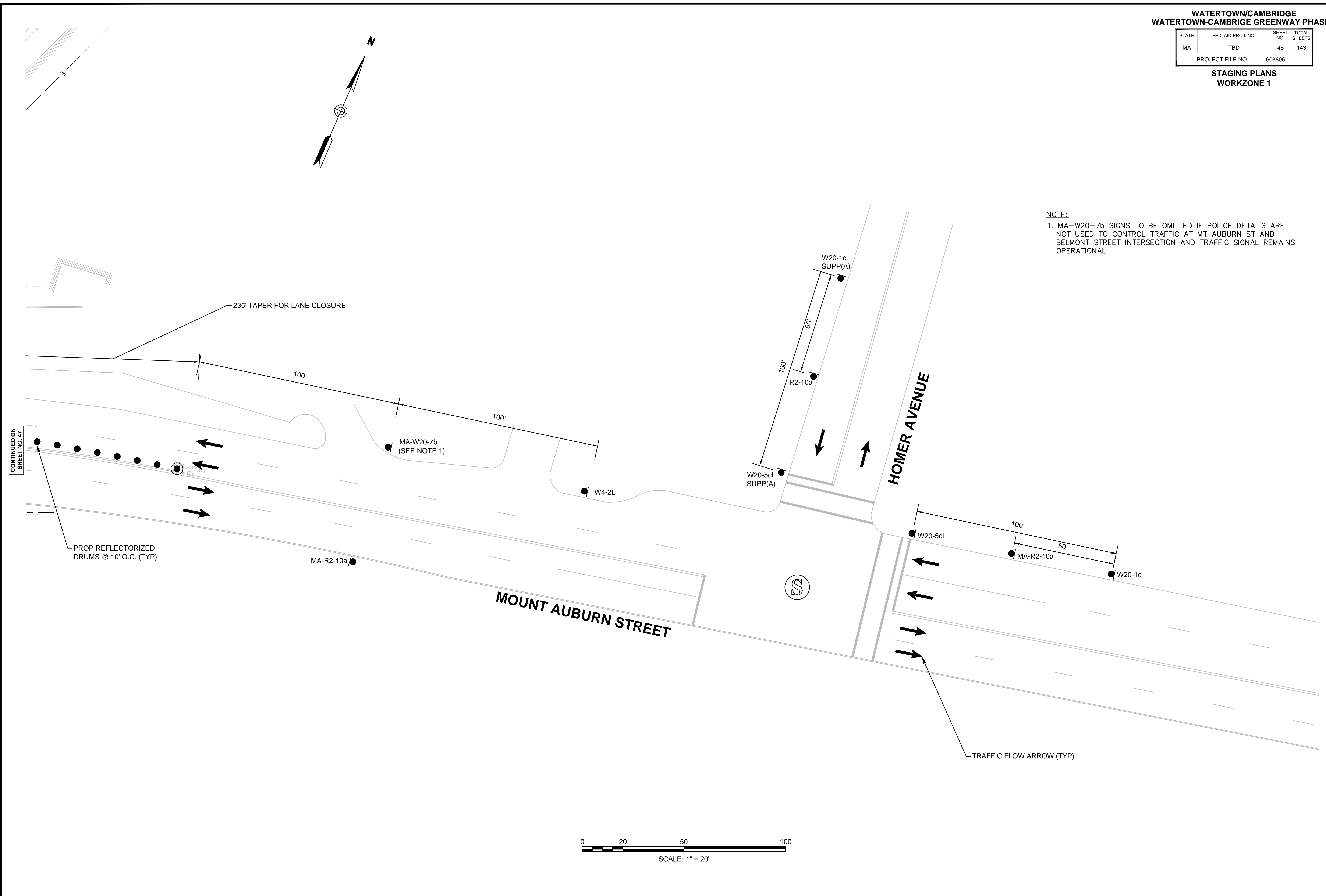
WATERTOWN/CAMBRIDGE  
WATERTOWN-CAMBRIDGE GREENWAY PHASE II

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	48	143
PROJECT FILE NO.		608806	

STAGING PLANS  
WORKZONE 1

NOTE:

1. MA-W20-7b SIGNS TO BE OMITTED IF POLICE DETAILS ARE NOT USED TO CONTROL TRAFFIC AT MT AUBURN ST AND BELMONT STREET INTERSECTION AND TRAFFIC SIGNAL REMAINS OPERATIONAL.

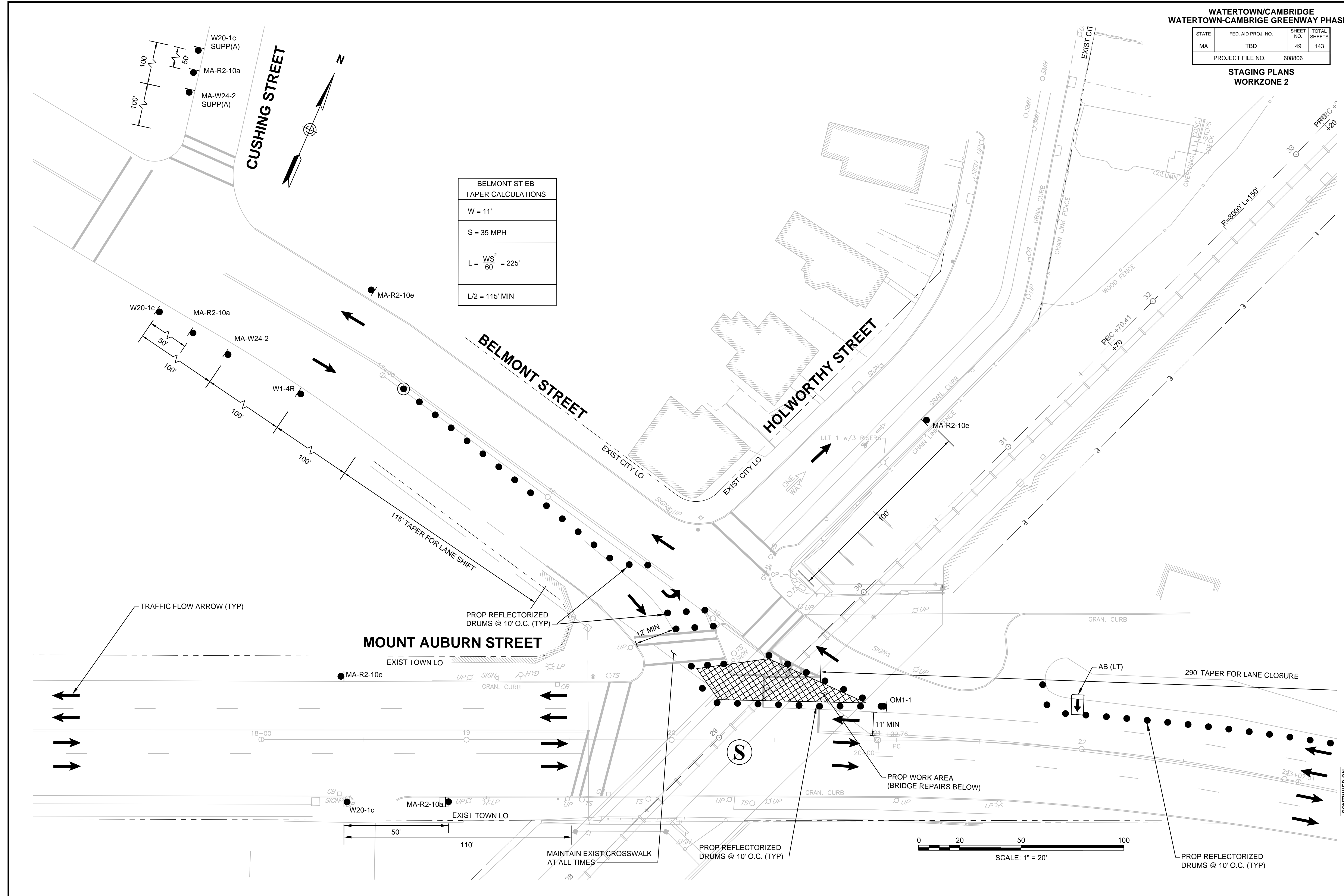




STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	49	143
PROJECT FILE NO.		608806	

STAGING PLANS  
WORKZONE 2

BELMONT ST EB TAPER CALCULATIONS	
W	= 11'
S	= 35 MPH
L	= $\frac{WS^2}{60} = 225'$
L/2	= 115' MIN



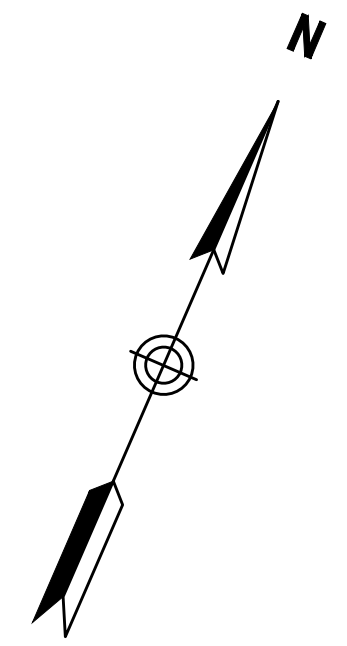
CONTINUED ON  
SHEET NO. 50

**WATERTOWN/CAMBRIDGE  
WATERTOWN-CAMBRIDGE GREENWAY PHASE II**

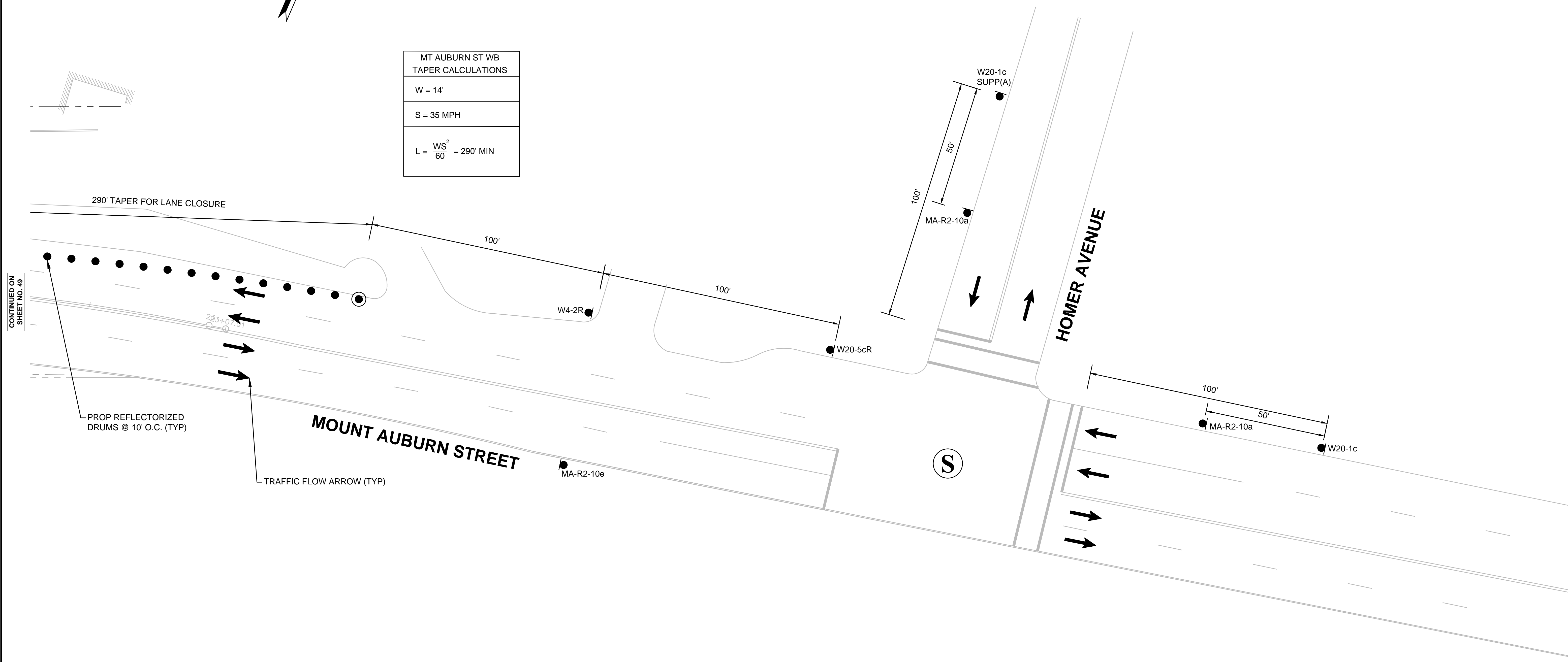
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	50	143
PROJECT FILE NO.		608806	

**STAGING PLANS  
WORKZONE 2**

EQUITY ONE (CAMBRIDGE PROJECT) LLC  
 871-897 MOUNT AUBURN STREET  
 4th FLOOR  
 (CITY NO. 232219)  
 PLAN NO. 1705 OF 1985  
 L.C.C. 13778A  
 L.C.C. 34832A



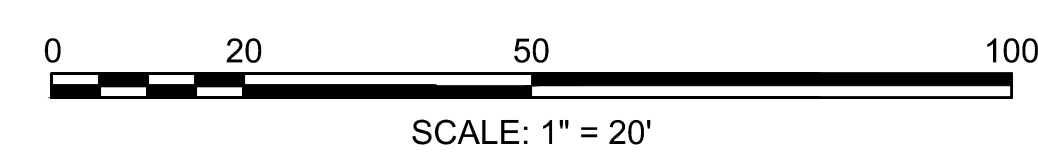
MT AUBURN ST WB TAPER CALCULATIONS	
W =	14'
S =	35 MPH
L = $\frac{WS^2}{60}$	= 290' MIN



CONTINUED ON  
SHEET NO. 49

PROP REFLECTORIZED  
DRUMS @ 10' O.C. (TYP)

TRAFFIC FLOW ARROW (TYP)

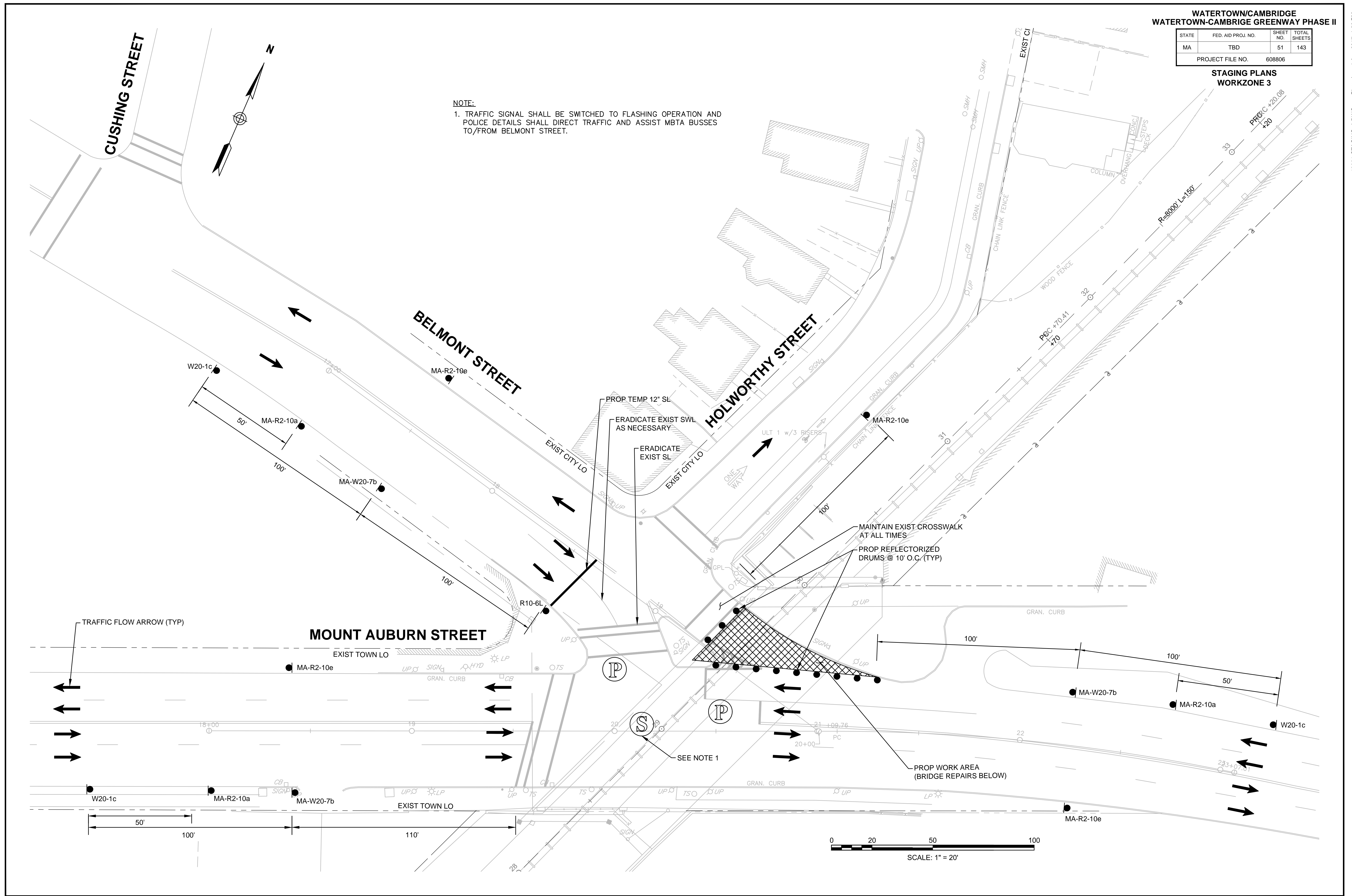


**WATERTOWN/CAMBRIDGE  
WATERTOWN-CAMBRIDGE GREENWAY PHASE II**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	51	143
PROJECT FILE NO.		608806	

**STAGING PLANS  
WORKZONE 3**

**NOTE:**  
1. TRAFFIC SIGNAL SHALL BE SWITCHED TO FLASHING OPERATION AND POLICE DETAILS SHALL DIRECT TRAFFIC AND ASSIST MBTA BUSES TO/FROM BELMONT STREET.



**WATERTOWN/CAMBRIDGE  
WATERTOWN-CAMBRIDGE GREENWAY PHASE II**

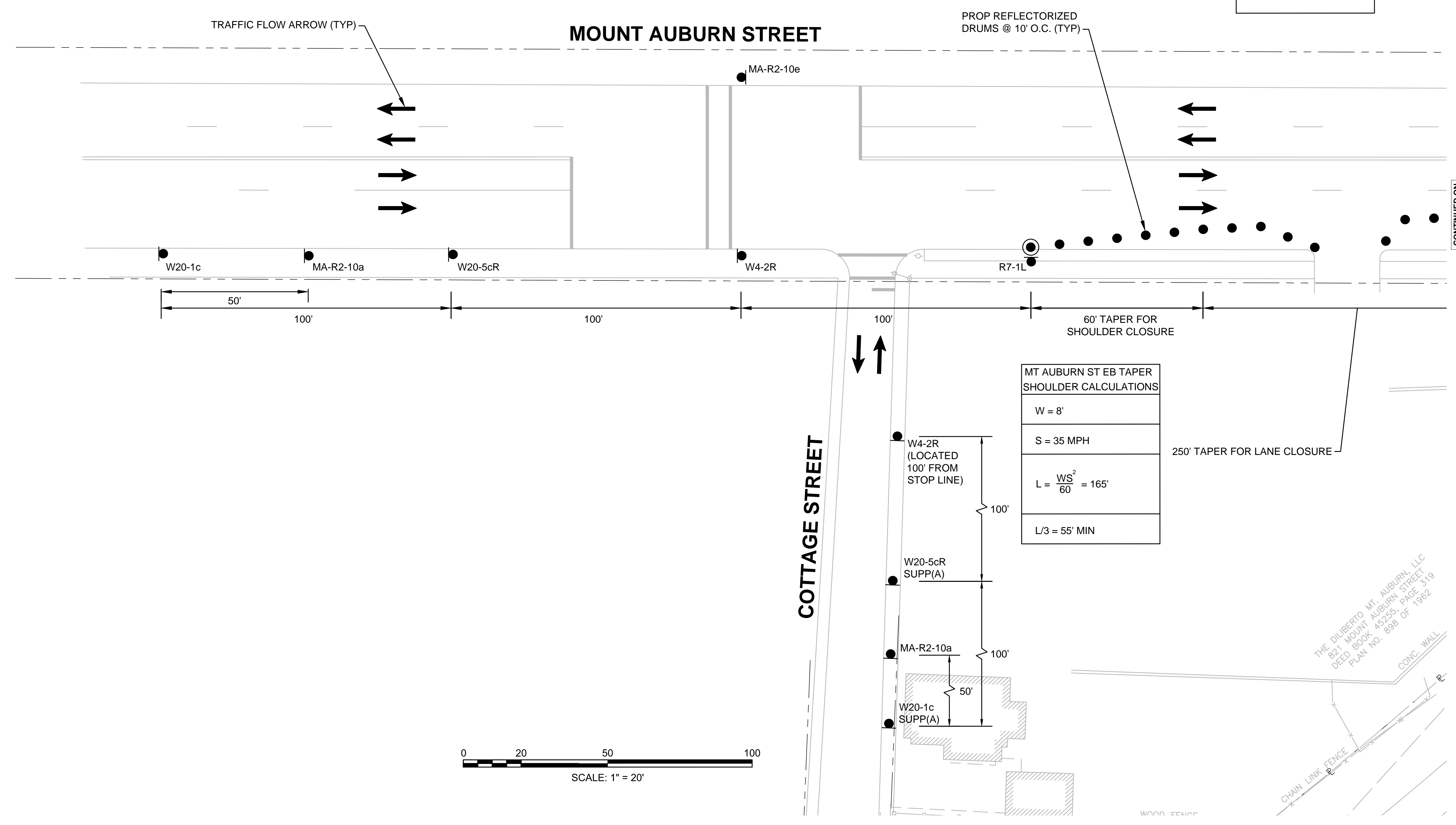
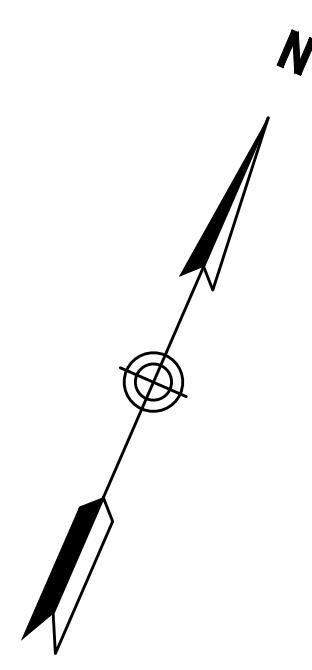
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	52	143
PROJECT FILE NO.		608806	

**STAGING PLANS  
WORKZONE 4**

MT AUBURN ST EB TAPER CALCULATIONS	
W = 12'	
S = 35 MPH	
$L = \frac{WS^2}{60} = 245'$ MIN	

CONTINUED ON  
SHEET NO. 53

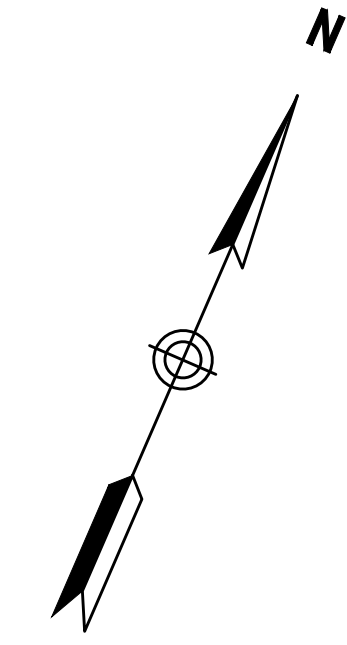
13061-STAGING\_4.DWG Plotted on 4-Aug-2017 1:50 PM



THE DILIBERTO MT AUBURN, LLC  
821 MOUNT AUBURN STREET  
DEED BOOK 45255 PAGE 319  
PLAN NO. 898 OF 1962

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	TBD	53	143
PROJECT FILE NO.		608806	

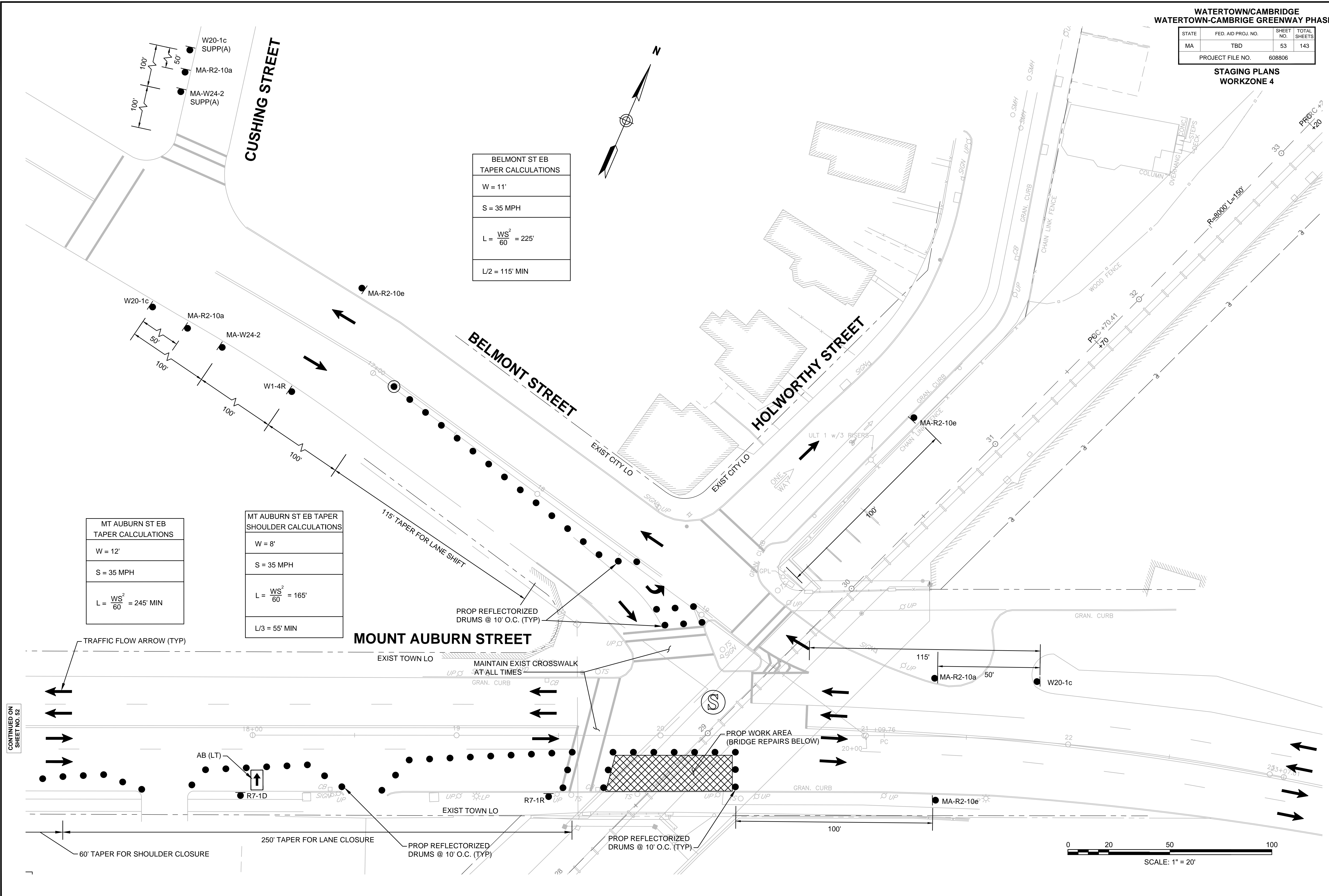
STAGING PLANS  
WORKZONE 4



BELMONT ST EB TAPER CALCULATIONS	
W = 11'	
S = 35 MPH	
$L = \frac{WS^2}{60} = 225'$	
L/2 = 115' MIN	

MT AUBURN ST EB TAPER CALCULATIONS	
W = 12'	
S = 35 MPH	
$L = \frac{WS^2}{60} = 245'$ MIN	

MT AUBURN ST EB TAPER SHOULDER CALCULATIONS	
W = 8'	
S = 35 MPH	
$L = \frac{WS^2}{60} = 165'$	
L/3 = 55' MIN	



CONTINUED ON  
SHEET NO. 52