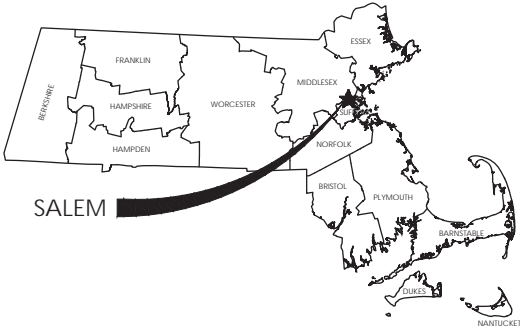


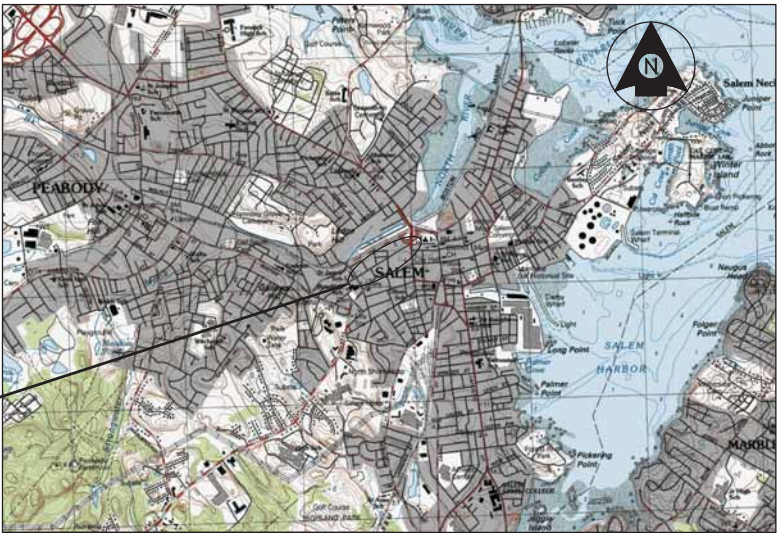


SALEM, MA

# BRIDGE STREET RECONSTRUCTION PROJECT



LOCATION MAP



PROJECT  
LOCATION

VICINITY MAP  
1" = 2500'

SHEET NO.	DESCRIPTION
1	TITLE SHEET AND INDEX
2	KEY PLAN
3	LEGEND, ABBREVIATIONS AND GENERAL NOTES
4 - 8	EXISTING CONDITIONS PLANS
9 - 12	TYPICAL SECTIONS
13 - 17	CONSTRUCTION PLANS
18 - 22	PROFILES
23 - 27	SIGN AND PAVEMENT MARKING PLANS
28	TRAFFIC SIGN SUMMARY
29 - 30	TRAFFIC SIGNAL PLAN
31 - 32	TEMPORARY TRAFFIC CONTROL PLANS
33	CRITICAL CROSS-SECTIONS

JUNE 2017

PROJECT NUMBER: 179410455

PRELIMINARY DESIGN SUBMISSION

THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION HIGHWAY DIVISION STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES DATED 1988, AS AMENDED, THE ENGLISH SUPPLEMENTAL SPECIFICATIONS DATED JULY 1, 2015, THE 2014 CONSTRUCTION STANDARD DETAILS, THE 1996 CONSTRUCTION AND TRAFFIC STANDARD DETAILS (AS RELATES TO TRAFFIC STANDARD DETAILS ONLY), THE 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS WITH MASSACHUSETTS AMENDMENTS, THE 1990 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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Consultants

Legend

Notes

Revision By Appd. YY.MM.DD

Issued By Appd. YY.MM.DD

File Name: Dwn. Chkd. Dgn. YY.MM.DD

Permit-Seal

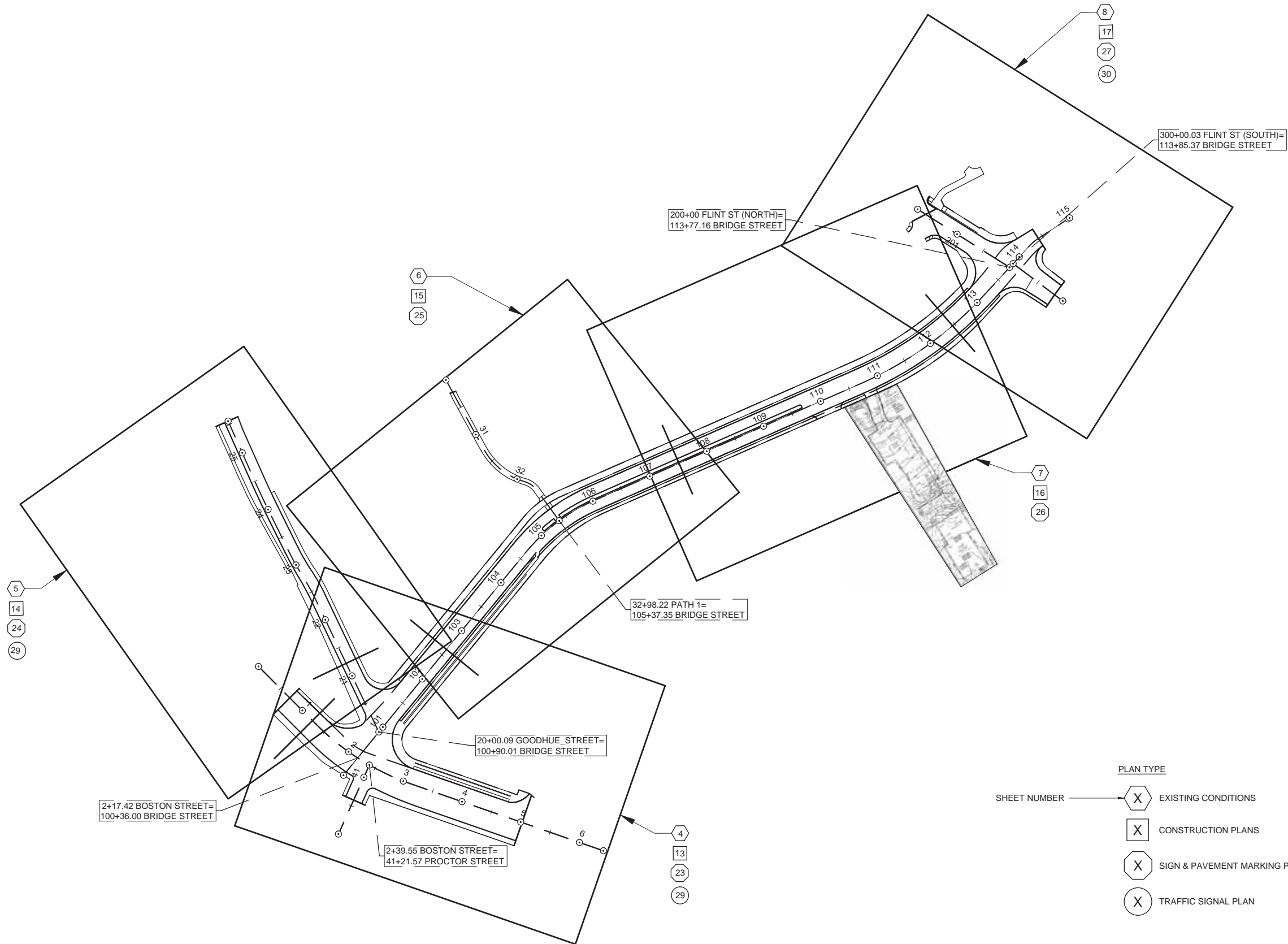


Client/Project  
CITY OF SALEM

BRIDGE STREET MASSWORKS PROJECT  
"COMPLETE STREETS" ENHANCMENTS  
SALEM, MA

Title  
KEY PLAN

Project No. 179410455	Scale 1" = 80'	Revision
Drawing No.	Sheet	



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2017/06/14 4:40 PM by: Simpson, Alex

ORIGINAL SHEET - ARCHD

## LEGEND AND ABBREVIATIONS

### EXISTING:

—B—	TWO FOOT CONTOUR
—10—	TEN FOOT CONTOUR
—+B.6—	SPOT ELEVATION
—	BITUMINOUS BERM
—	GRANITE CURB
—	CONCRETE CURB
—	VEGETATION LINE
—	GUARDRAIL
—X—X—	METAL FENCE
—X—X—	WOOD FENCE
—	WALL
—	CRUSHED STONE
—	CONCRETE
—	EXPOSED LEDGE
—	SIGN
—	MAILBOX
—	HANDICAP RAMP
—	BOLLARD
—	STUMP
—	DECIDUOUS TREE
—	CONIFEROUS TREE
—TEC—	COMPILED COMMUNICATIONS LINE
—	TELEPHONE MANHOLE
—G—	COMPILED GAS LINE
—	VENT
—	GAS DRIP
—	GAS GATE
—OHW—	OVERHEAD WIRES
—E—	COMPILED ELECTRIC LINE
—	TRAFFIC LIGHT
—	STREET LIGHT
—	ELECTRIC MANHOLE
—	FIRE ALARM BOX
—	UTILITY POLE
—	UTILITY POLE WITH LIGHT
—	GUY WIRE
—D—	OBSERVED DRAIN LINE
—D—	COMPILED DRAIN LINE
—	DRAIN MANHOLE
—	CATCH BASIN
—	MONITORING WELL
—S—	OBSERVED SEWER LINE
—S—	COMPILED SEWER LINE
—	SEWER MANHOLE
—W—	COMPILED WATER LINE
—	WATER GATE
—	HYDRANT
—	WATER SERVICE
—	IRRIGATION CONTROL VALVE
—	WATER MANHOLE
—	HANDHOLE
—	TERMINUS UNKNOWN
—	ABOVE GROUND
—A.G.	BITUMINOUS BERM
—BB	BITUMINOUS
—BIT.	CONCRETE CURB
—CC	CAST IRON
—CI	CHAINLINK FENCE
—CLF	CORRUGATED METAL PIPE
—CMP	CONCRETE
—CONC.	EDGE OF PAVEMENT
—EOP	FIRE ALARM BOX
—FAB	GRANITE CURB
—GC	HIGH DENSITY POLYETHYLENE
—HDPE	MASS HIGHWAY
—MAHW	NO PIPES VISIBLE
—N.P.V.	PLASTIC
—PL	POLYVINYL CHLORIDE
—PVC	

### PROPOSED:

—	BASELINE
—	CURB
—	CITY APPROX. LAYOUT LINE
—	SAWCUT
—	CATCH BASIN
—	DRAIN MANHOLE
—	CHANGE IN TYPE (CB TO DMH)
—	HYDRANT
—	RAISED INTERSECTION PAVERS
—	FLUSH GRANITE CURB
—	ASPHALT PAVEMENT BREAKLINE
—	DETECTABLE WARNING PANEL
—	SIGN POST
—	ABAN
—	ADJBO
—	AP
—	APPROX.
—	BIT.
—	BL
—	CEM.
—	CL
—	CONC.
—	CONST
—	CW
—	DIA
—	EXIST
—	GALV
—	HMA
—	HYD
—	LP
—	LT
—	MAX.
—	MIN.
—	NTS
—	PC
—	PCC
—	PI
—	PRC
—	PROP
—	PSI
—	PT
—	R&R
—	R&RBO
—	R&S
—	RT
—	SL
—	STA
—	TYP
—	WCR
—	WTL
—	ABANDON
—	ADJUST BY OTHERS
—	ANGLE POINT
—	APPROXIMATE
—	BITUMINOUS
—	BASELINE
—	CEMENT
—	CENTERLINE
—	CONCRETE
—	CONSTRUCTION
—	CROSSWALK
—	DIAMETER
—	EXISTING
—	GALVANIZED
—	HOT MIX ASPHALT
—	HYDRANT
—	LIGHT POLE
—	LEFT
—	MAXIMUM
—	MINIMUM
—	NOT TO SCALE
—	POINT OF CURVATURE
—	POINT OF COMPOUND CURVATURE
—	POINT OF INTERSECTION
—	POINT OF REVERSE CURVATURE
—	PROPOSED
—	POUNDS PER SQUARE INCH
—	POINT OF TANGENCY
—	REMOVE AND RESET
—	REMOVE AND RESET BY OTHERS
—	REMOVE AND STACK
—	RIGHT
—	STOP LINE - 12" WIDTH
—	STATION
—	TYPICAL
—	WHEELCHAIR RAMP
—	WHITE TRANSVERSE LINE -
—	4' SPACE, 3:1 SLOPE - 4" WIDTH

## GENERAL NOTES:

- PLANS PREPARED ARE BASED ON SURVEY PROVIDED BY SURVEYING AND MAPPING CONSULTANTS. THE LOCATION AND SIZE OF EXISTING PIPES, DUCTS, CONDUITS AND OTHER UNDERGROUND STRUCTURES SHOWN ON THE DRAWINGS ARE NOT WARRANTED TO BE EXACT NOR IS IT WARRANTED THAT ALL UNDERGROUND STRUCTURES, UTILITIES AND SERVICE CONNECTIONS ARE SHOWN. CONTRACTOR SHALL NOTIFY UTILITY COMPANIES IN WRITING AND BY CALLING DIG SAFE (1-888-344-7233) BEFORE EXCAVATION. CONTRACTOR SHALL BEAR FULL RESPONSIBILITY FOR LOCATING ALL EXISTING UTILITIES PRIOR TO EXCAVATION THROUGHOUT THE ENTIRE CONSTRUCTION DURATION.
- PROPERTY LINE INFORMATION IS COMPILED FROM FIELD OBSERVATIONS, CITY LAYOUT PLANS, CITY ASSESSORS PLANS, AND PLANS RECORDED AT THE MIDDLESEX COUNTY REGISTRY OF DEEDS.
- THE BEARING SYSTEM FOR THIS PLAN IS BASED UPON MASSACHUSETTS STATE PLANE GRID.
- VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)
- SALEM CITY BASE DATUM
- HORIZONTAL DATUM: NORTH AMERICAN DATUM OF 1983 (NAD83)
- ALL BASELINE TIES FOR CORNERS AND RADII OF CURB OR EDGING ARE TO THE P.C.'S OR P.T.'S, UNLESS OTHERWISE NOTED.
- ALL EXISTING SIGNS SHALL BE REMOVED AND REPLACED IN KIND WITH NEW SIGNS AND CHANNEL POSTS UNLESS OTHERWISE NOTED. MAILBOXES SHALL BE REMOVED AND RESET UNLESS OTHERWISE NOTED.
- ALL TRAFFIC SIGNAL HARDWARE (INCLUDING MAST ARMS, PULL BOXES, PEDESTALS & CONTROLLER BOXES), PARKING METERS, LIGHT/UTILITY POLES, FENCES, STONE BOUNDS, GRANITE BOUNDS, AND OTHER PROPERTY MARKERS ARE TO BE RETAINED AND PROTECTED UNLESS OTHERWISE NOTED ON PLANS. PULLBOXES ARE TO BE RETAINED AND ADJUSTED TO GRADE.
- THE CONTRACTOR SHALL SAWCUT TO THE FULL PAVEMENT DEPTH AT LOCATIONS WHERE NEW FULL DEPTH PAVEMENT OR NEW SIDEWALK MEETS EXISTING PAVEMENT OR SIDEWALK, AT THE LOCATIONS SHOWN ON THE PLANS AND AS REQUIRED BY THE ENGINEER. PROPOSED WORK SHALL MATCH EXISTING LINE AND GRADE AT LIMITS OF WORK.
- ALL AREAS OUTSIDE OF THE LIMIT OF WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- EXISTING TREES WITHIN THE LIMIT OF WORK SHALL BE RETAINED AND PROTECTED UNLESS OTHERWISE NOTED OR REQUIRED BY ENGINEER. IN THE EVENT THAT A PROPOSED CATCH BASIN IS WITHIN 6' OF AN EXISTING TREE, THE INFORMATION SHALL BE FURNISHED TO THE ENGINEER FOR RESOLUTION PRIOR TO INSTALLATION OF THE CATCH BASIN.
- MATCH GRADE AT WALKS, BACK OF WALKS AND DRIVES UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR AS INDICATED ON THE PLANS. IF GRADE AT BACK OF WALK CANNOT BE MET, CONTRACTOR SHALL UTILIZE APPROPRIATE TREATMENT SUCH AS CURB AT BACK OF WALK, FEATHERING OF LOAM, ETC. TO BEST MATCH GRADE AT BACK OF WALK TO THE SATISFACTION OF THE ENGINEER.
- ALL GRANITE CURB, EDGING, AND CURB CORNERS THAT ARE TO BE REMOVED SHALL BE REMOVED AND STACKED OR DISCARDED AS DIRECTED BY THE ENGINEER. GRANITE CURB OR EDGING TO BE RESET SHALL NOT BE RANDOMLY MIXED WITH NEW CURB, BUT SHALL BE RESET SO AS TO GIVE A UNIFORM APPEARANCE.
- ALL PROPOSED GRANITE CURB SHALL BE TYPE VA 4, UNLESS OTHERWISE NOTED.
- ALL FLUSH CURB ENCOUNTERED AT DRIVEWAYS SHALL BE REMOVED AND RE-USED ELSEWHERE, DISPOSED, OR AS DIRECTED BY ENGINEER, UNLESS OTHERWISE NOTED.
- ALL PROPOSED WHEELCHAIR RAMPS ARE TO CONFORM TO LATEST AAB AND ADA WHEELCHAIR RAMP STANDARDS.
- A MINIMUM 36" PATH OF TRAVEL (EXCLUDING CURB) SHALL BE MAINTAINED PAST ALL OBSTRUCTIONS (EXISTING, RELOCATED, AND PROPOSED) ON THE SIDEWALK INCLUDING, BUT NOT LIMITED TO, UTILITY POLES, HYDRANTS, SIGNS, SIGNALS, LIGHT POLES, TREES AND MAILBOXES. IF THERE IS A CONFLICT, THE INFORMATION SHALL BE FURNISHED TO THE ENGINEER FOR RESOLUTION PRIOR TO SIDEWALK RECONSTRUCTION.
- ALL EXISTING CURB STOPS, VALVE BOXES, CASTINGS AND HYDRANTS, IN AREAS TO BE REPAVED SHALL BE PROTECTED AND ADJUSTED TO LINE AND GRADE BY THE CONTRACTOR, UNLESS OTHERWISE DIRECTED BY ENGINEER.
- THE CONTRACTOR SHALL VERIFY ALL OUTLET GRADES OF DRAINAGE STRUCTURES PRIOR TO CONSTRUCTING ANY DRAINAGE MODIFICATIONS. CONTRACTOR TO CONFIRM LOCATION OF EXISTING UTILITIES WITH TEST PITS.
- 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 ADJUST ALL UTILITY FRAMES AND COVERS AS REQUIRED. CONTRACTOR TO ARRANGE FOR INSPECTION OF ALL WORK ON UTILITIES WITH THE APPROPRIATE UTILITY COMPANY. IN THE EVENT ANY UTILITY COMPANY DOES NOT ALLOW THE CONTRACTOR TO MAKE THE ADJUSTMENTS, THE CONTRACTOR SHALL COORDINATE HIS WORK TO ALLOW FOR THE ADJUSTMENTS TO BE MADE BY THE UTILITY OR ITS DESIGNEE. THE EXPECTED UTILITIES INCLUDE BUT ARE NOT LIMITED TO: WATER, GAS & ELECTRIC, TELEPHONE & CATV AND FIRE.
- CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND APPROVALS REQUIRED TO PERFORM THE WORK, INCLUDING ALL PERMITS REQUIRED BY THE CITY OF CAMBRIDGE DEPARTMENT OF PUBLIC WORKS AND/OR WATER DEPARTMENT.
- PRIOR TO THE START OF CONSTRUCTION, CONTRACTOR SHALL COORDINATE ANY UTILITY RELOCATIONS WITH THE CITY OF CAMBRIDGE DEPARTMENT OF PUBLIC WORKS AND ALL RESPECTIVE UTILITY AGENCIES. LOCATIONS FOR RELOCATED UTILITIES ARE TO BE DETERMINED BY THE RESPECTIVE UTILITY AGENCY IN CONSULTATION WITH THE CAMBRIDGE DEPARTMENT OF PUBLIC WORKS.
- CONTRACTOR SHALL FOLLOW CITY OF SALEM DEPARTMENT OF PUBLIC WORKS STANDARD DETAILS WHERE APPLICABLE. ALL WORK DONE UNDER THIS CONTRACT SHALL BE COMPLETED IN CONFORMANCE TO MASSDOT "STANDARD SPECIFICATIONS FOR HIGHWAYS & BRIDGES" AND ANY UPDATES OR SUPPLEMENTAL SPECIFICATIONS PERTAINING THERETO, AND SPECIFICATIONS INCLUDED IN THIS CONTRACT.
- WORK SHALL NOT EXTEND BEYOND EXISTING ROW UNLESS OTHERWISE NOTED ON PLANS OR AS REQUIRED BY ENGINEER.
- INLETS AND OUTLETS FROM DRAINAGE STRUCTURES REMOVED SHALL BE PLUGGED WITH BRICK MASONRY NOT LESS THAN 8" IN THICKNESS, CONSISTENT WITH MASSDOT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES SECTION 201. PIPES LARGER THAN 24" SHALL BE BACKFILLED WITH FLOWABLE FILL TO THE SATISFACTION OF THE CITY OF CAMBRIDGE.
- CONTRACTOR SHALL REMOVE AND DISCARD ALL EXISTING CATCH BASINS WITH BRADLEY HEAD COVERS WITHIN PROJECT LIMITS AND REPLACE WITH TYPE 1-SINGLE GRATE CATCH BASIN, CAMBRIDGE DPW STANDARD 2604.2, AS NOTED ON PLANS OR AS APPROVED BY ENGINEER.
- NO WORK SHALL TAKE PLACE ON PRIVATE PROPERTY WITHOUT A SIGNED RIGHT OF ENTRY AGREEMENT BETWEEN THE PROPERTY OWNER AND THE CITY.
- IN TREE LOCATIONS WHERE TREE ROOTS ARE DAMAGING EXISTING CURB, THE CONTRACTOR MUST COORDINATE THE CURB REMOVAL WITH THE CITY ARBORIST PRIOR TO REMOVING CURB.
- WHEN FITTING GRANITE CURB OVER EXISTING UTILITIES AND OTHER OBSTRUCTIONS, NOTCHING AND CUTTING OF CURB SHALL TAKE PLACE WITH NO ADDITIONAL COST TO CITY.
- CONTRACTOR SHALL PROVIDE A STAKED LAYOUT FOR THE ENGINEER TO REVIEW PRIOR TO COMMENCING SIDEWALK WORK. THE CONTRACTOR SHALL PROVIDE ALL CUT AND FILL AMOUNTS AT ALL BACK OF SIDEWALK, STEPS, WALLS, DRIVEWAYS, WALKWAYS, BUILDING ENTRANCES, UTILITY STRUCTURES, ETC. ALL DISCREPANCIES THAT WILL CAUSE THE SIDEWALK NOT TO BE COMPLIANT WILL BE BROUGHT TO THE ENGINEER'S ATTENTION.
- FOR ALL PAY REQUESTS, CONTRACTOR SHALL PROVIDE BACK UP STATING DATES INSTALLED, QUANTITY INSTALLED, CALCULATION ON QUANTITY, AND A MARKED UP DRAWING SHOWING LOCATION INSTALLED.
- ALL EXISTING "D" GRATES FOR CATCH BASINS SHALL BE REPLACED WITH CITY STANDARD FRAME AND GRATE.
- ALL PAVEMENT MARKING SYMBOLS (BIKE LANE SYMBOLS, ETC) SHALL BE PAVEMENT MARKING TAPE. ALL OTHER MARKINGS SHALL BE THERMOPLASTIC.



5 BURLINGTON WOODS DRIVE SUITE 210  
BURLINGTON, MA 01803-4542  
Tel. (781) 221-1000  
www.stantec.com

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### Consultants

### Legend

### Notes


Revision	By	Appd.	YY.MM.DD

Issued	By	Appd.	YY.MM.DD

File Name:	Dwn.	Chkd.	Dgn.	YY.MM.DD



Client/Project  
CITY OF SALEM

BRIDGE STREET MASSWORKS PROJECT  
"COMPLETE STREETS" ENHANCMENTS  
SALEM, MA

Title

## LEGEND, ABBREVIATIONS & GENERAL NOTES

Project No.	Scale
179410455	NOT TO SCALE
Drawing No.	Sheet
	Revision



# TEMPORARY BENCHMARK CHART

T.B.M.#	DESCRIPTION	ELEVATION
B050A	BRASS RIVET IN TOP OF CONCRETE CHANNEL WALL	9.58
B050B	BRASS RIVET IN A STONE BOUND, FLUSH	10.40

(SEE NOTE 8)

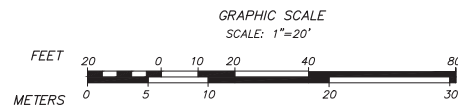
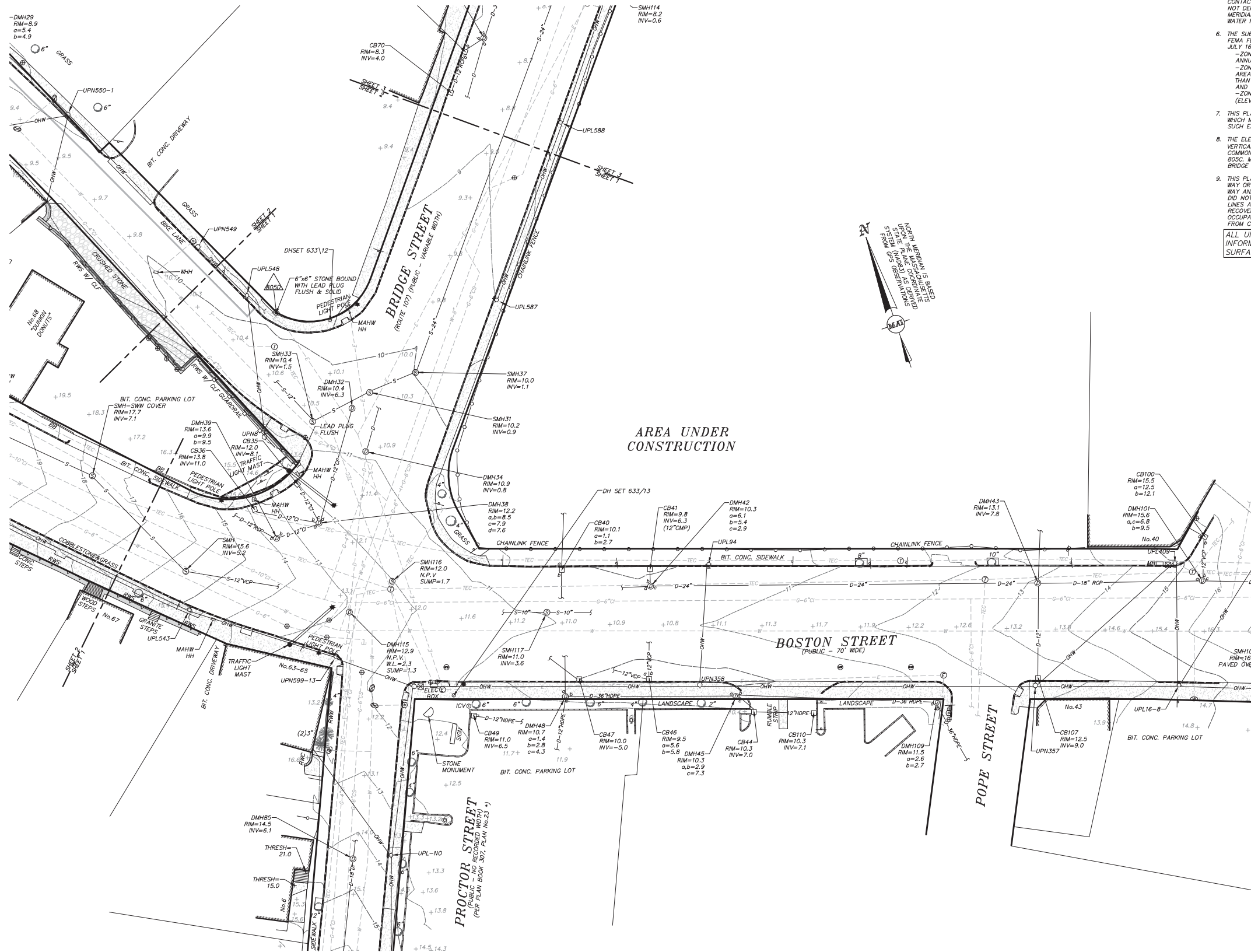
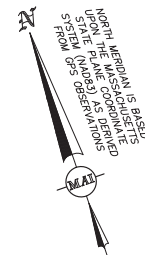
## NOTES:

- THE TOPOGRAPHY, SITE DETAIL & SURFACE IMPROVEMENTS DEPICTED HEREON WERE OBTAINED FROM AN INSTRUMENT SURVEY CONDUCTED ON THE GROUND BY MERIDIAN ASSOCIATES, INC. BETWEEN DECEMBER 30, 2016 & JANUARY 25, 2017.
- THE LOCATION OF ALL UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE AND ARE BASED UPON A PARTIAL FIELD SURVEY AND COMPILED OF AVAILABLE PLANS OF RECORD. MERIDIAN ASSOCIATES, INC. DOES NOT WARRANT NOR GUARANTEE THE LOCATION OF ALL UTILITIES DEPICTED OR NOT DEPICTED. THE CONTRACTOR, PRIOR TO COMMENCEMENT OF CONSTRUCTION, SHALL VERIFY THE LOCATION OF ALL UTILITIES AND CONTACT BIG SAFE AT 1-888-344-7233. TRAFFIC ELECTRIC CONDUIT IS NOT DEPICTED HEREON. AT THE TIME OF FINAL RELEASE OF THIS DRAWING MERIDIAN HAD NOT RECEIVED CONDUIT RECORDS OF SEWER, DRAIN OR WATER FROM THE CITY OF SALEM.
- THE SUBJECT PREMISES IS LOCATED IN THE FOLLOWING FLOOD ZONES PER FEMA FLOOD INSURANCE RATE MAPS 25090C04180 & 25090C04190 DATED JULY 16, 2014:
  - ZONE X (UNSHADED), AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN;
  - ZONE X (SHADED), AREAS OF 0.2% ANNUAL CHANCE FLOODPLAIN;
  - AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE;
  - AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD;
  - ZONE AE, AREAS DETERMINED TO HAVE A BASE FLOOD ELEVATION (ELEV=10 NAVD 88)
- THIS PLAN DOES NOT SHOW ANY UNRECORDED OR UNWRITTEN EASEMENTS WHICH MAY EXIST. THIS DOES NOT CONSTITUTE A GUARANTEE THAT NO SUCH EASEMENTS EXIST.
- THE ELEVATIONS DEPICTED HEREON WERE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). STARTING BENCHMARK: COMMONWEALTH OF MASSACHUSETTS HIGHWAY DEPARTMENT BENCHMARK B050. MARK IS A BRASS RIVET SET IN A CONCRETE CHANNEL WALL ON BRIDGE STREET AT FLINT STREET. ELEVATION=9.58 FEET.
- THIS PLAN IS NOT TO BE USED FOR THE RECONSTRUCTION OF RIGHT OF WAY OR EASEMENT LINES OR FOR TITLE INSURANCE PURPOSES. RIGHT OF WAY AND EASEMENT LINES DEPICTED HEREON ARE APPROXIMATE ONLY. MAI DID NOT PERFORM A BOUNDARY RETRACEMENT SURVEY. RIGHT OF WAY LINES ARE PROVIDED BASED UPON LIMITED LAYOUT RECORDS, LAND PLANS RECOVERED AT SOUTH ESSEX REGISTRY OF DEEDS AND APPARENT OCCUPATION. PROPERTY LINES ARE APPROXIMATE ONLY AND COMPILED FROM CITY OF SALEM OS.

ALL UNDERGROUND UTILITY DATA REPRESENTS RECORD INFORMATION RECOVERED THROUGH RESEARCH WITHOUT SURFACE DEMARCATION NOR SUBSURFACE VERIFICATION.

## LEGEND:

8	TWO FOOT CONTOUR
10	TEN FOOT CONTOUR
+8.6	SPOT ELEVATION
---	BITUMINOUS BERM
---	GRANITE CURB
---	CONCRETE CURB
---	VEGETATION LINE
---	GUARDRAIL
---	METAL FENCE
---	WOOD FENCE
---	WALL
---	CRUSHED STONE
---	CONCRETE
---	EXPOSED LEDGE
---	SIGN
---	MAILBOX
---	HANDICAP RAMP
---	BOLLARD
---	STUMP
---	DECIDUOUS TREE
---	CONIFEROUS TREE
---	COMPILED COMMUNICATIONS LINE
---	TELEPHONE MANHOLE
---	COMPILED GAS LINE
---	VENT
---	GAS DRIP
---	GAS GATE
---	OVERHEAD WIRES
---	COMPILED ELECTRIC LINE
---	TRAFFIC LIGHT
---	ELECTRIC MANHOLE
---	FIRE ALARM BOX
---	UTILITY POLE
---	UTILITY POLE WITH LIGHT
---	OUT WIRE
---	OBSERVED DRAIN LINE
---	COMPILED DRAIN LINE
---	DRAIN MANHOLE
---	CATCH BASIN
---	MONITORING WELL
---	OBSERVED SEWER LINE
---	COMPILED SEWER LINE
---	SEWER MANHOLE
---	COMPILED WATER LINE
---	WATER GATE
---	HYDRANT
---	WATER SERVICE
---	IRRIGATION CONTROL VALVE
---	WATER MANHOLE
---	MANHOLE
---	HANDHOLE
---	TERMINUS UNKNOWN
---	ABOVE GROUND
---	BITUMINOUS BERM
---	BITUMINOUS
---	CONCRETE CURB
---	CAST IRON
---	CHAINLINK FENCE
---	CORRUGATED METAL PIPE
---	CONCRETE
---	EDGE OF PAVEMENT
---	FIRE ALARM BOX
---	GRANITE CURB
---	HIGH DENSITY POLYETHYLENE
---	MASS HIGHWAY
---	NO PIPES VISIBLE
---	PLASTIC
---	POLYVINYL CHLORIDE
---	REINFORCED CONCRETE PIPE
---	CONCRETE RETAINING WALL
---	CONCRETE BLOCK RETAINING WALL
---	STONE RETAINING WALL
---	WOOD RETAINING WALL
---	THRESHOLD
---	WTRIFIED CLAY PIPE



## REVISIONS

NO.	DATE	DESCRIPTION	BY	CHK'D
1	02/15/2017	ISSUED FOR PERMIT	JM	JK

## BRIDGE STREET MASSWORKS

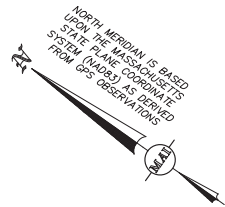
RECORD CONDITIONS PLAN OF LAND  
LOCATED IN  
**SALEM, MASSACHUSETTS**  
(ESSEX COUNTY)

PREPARED FOR  
**STANTEC CONSULTING SERVICES, INC.**  
SCALE: 1"= 20' DATE: FEBRUARY 15, 2017

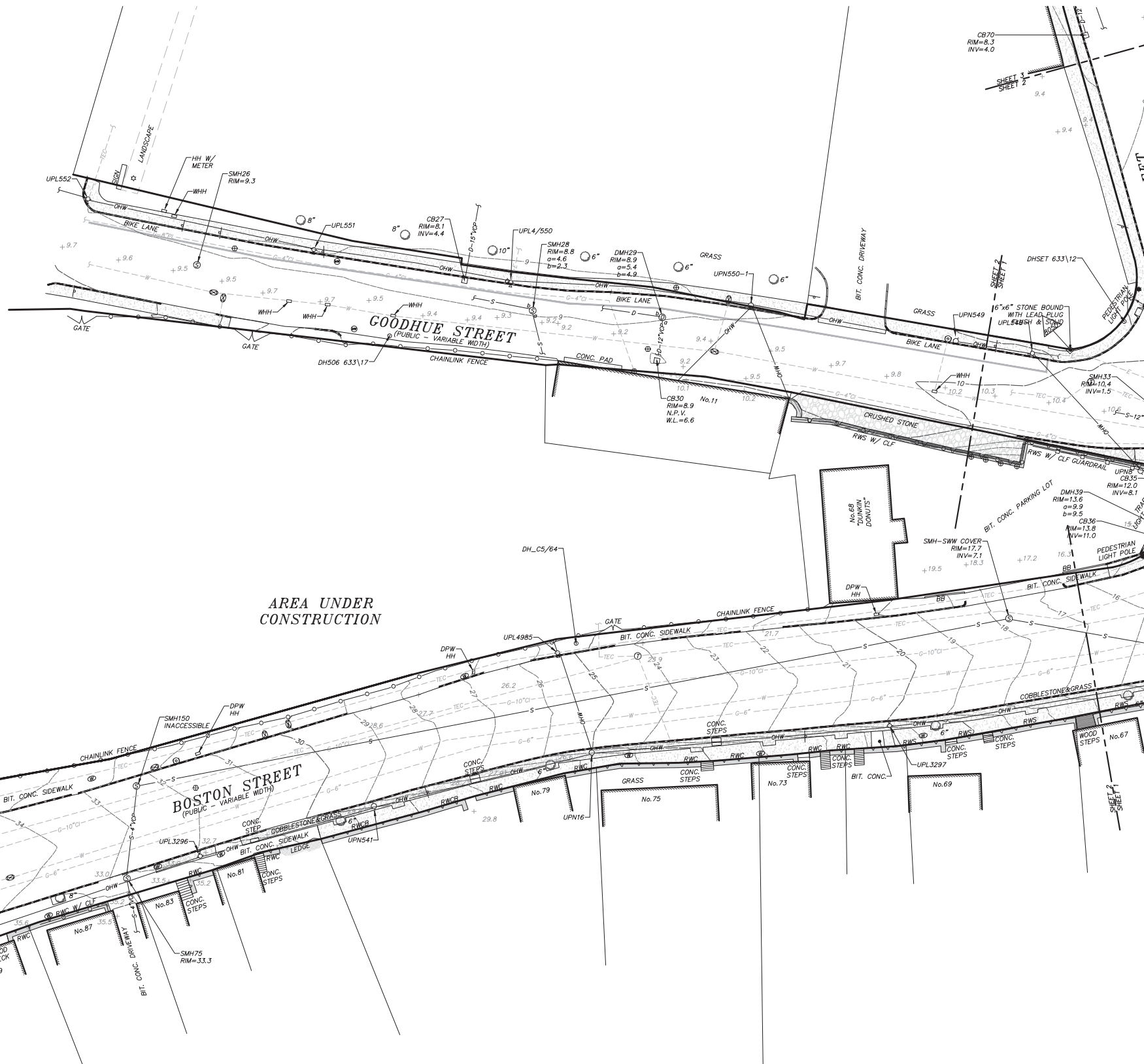
**MERIDIAN ASSOCIATES**  
500 CUMMINGS CENTER, SUITE 500 WESTBOROUGH, MASSACHUSETTS 01581  
TELEPHONE: (978) 299-0447  
WWW.MERIDIANASSOC.COM

SHEET No. 4 OF 33 PROJECT No. 5948





NORTH MERIDIAN IS BASED  
UPON THE MASSACHUSETTS  
STATE PLANE COORDINATE  
SYSTEM (MASS) AS DERIVED  
FROM GPS OBSERVATIONS



LEGEND:	
	8' TWO FOOT CONTOUR
	10' TEN FOOT CONTOUR
	SPOT ELEVATION
	BITUMINOUS BERM
	GRANITE CURB
	CONCRETE CURB
	VEGETATION LINE
	GUARDRAIL
	METAL FENCE
	WOOD FENCE
	CRUSHED STONE
	CONCRETE
	EXPOSED LEDGE
	SIGN
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	VENT
	GAS DRIP
	GAS GATE
	OVERHEAD WIRES
	COMPILED ELECTRIC LINE
	TRAFFIC LIGHT
	STREET LIGHT
	ELECTRIC MANHOLE
	FIRE ALARM BOX
	UTILITY POLE
	UTILITY POLE WITH LIGHT
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	CATCH BASIN
	MONITORING WELL
	OBSERVED SEWER LINE
	SEWER MANHOLE
	COMPILED WATER LINE
	WATER GATE
	HYDRANT
	WATER SERVICE
	IRRIGATION CONTROL VALVE
	WATER MANHOLE
	MANHOLE
	HANDHOLE
	TERMINATING UNKNOWN
	ABOVE GROUND
	BITUMINOUS BERM
	BITUMINOUS
	CONCRETE CURB
	CAST IRON
	CHAINLINK FENCE
	CORRUGATED METAL PIPE
	CONCRETE
	EDGE OF PAVEMENT
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	HIGH DENSITY POLYETHYLENE
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	CONCRETE RETAINING WALL
	CONCRETE BLOCK RETAINING WALL
	STONE RETAINING WALL
	WOOD RETAINING WALL
	THRESHOLD
	VITRIFIED CLAY PIPE

#### TEMPORARY BENCHMARK CHART:

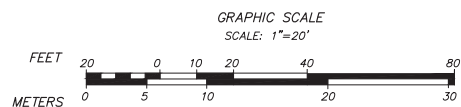
T.B.M.#	DESCRIPTION	ELEVATION
8050	BRASS RIVET IN TOP OF CONCRETE CHANNEL WALL	9.58
8052	BRASS RIVET IN A STONE BOUND, FLUSH	10.40

(SEE NOTE 8)

#### NOTES:

- THE TOPOGRAPHY, SITE DETAIL & SURFACE IMPROVEMENTS DEPICTED HEREON WERE OBTAINED FROM AN INSTRUMENT SURVEY CONDUCTED ON THE GROUND BY MERIDIAN ASSOCIATES, INC. BETWEEN DECEMBER 30, 2016 & JANUARY 25, 2017.
- THE LOCATION OF ALL UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE AND ARE BASED UPON A PARTIAL FIELD SURVEY AND COMPILATION OF AVAILABLE PLANS OF RECORD. MERIDIAN ASSOCIATES, INC. DOES NOT WARRANT NOR GUARANTEE THE LOCATION OF ALL UTILITIES DEPICTED OR NOT DEPICTED. THE CONTRACTOR, PRIOR TO COMMENCEMENT OF CONSTRUCTION, SHALL VERIFY THE LOCATION OF ALL UTILITIES AND CONTACT DIG SAFE AT 1-888-344-7233. TRAFFIC ELECTRIC CONDUIT IS NOT DEPICTED HEREON. AT THE TIME OF FINAL RELEASE OF THIS DRAWING MERIDIAN HAD NOT RECEIVED CONDUIT RECORDS OF SEWER, DRAIN OR WATER FROM THE CITY OF SALEM.
- THE SUBJECT PREMISES IS LOCATED IN THE FOLLOWING FLOOD ZONES PER FEMA FLOOD INSURANCE RATE MAPS 25009C0418G & 25009C0419G DATED JULY 16, 2014:
  - ZONE X (UNSHADED), AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN;
  - ZONE Y (SHADED), AREAS OF 0.2% ANNUAL CHANCE FLOODPLAIN; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD;
  - ZONE AE, AREAS DETERMINED TO HAVE A BASE FLOOD ELEVATION (ELEV=10 NAVD 88)
- THIS PLAN DOES NOT SHOW ANY UNRECORDED OR UNWRITTEN EASEMENTS WHICH MAY EXIST. THIS DOES NOT CONSTITUTE A GUARANTEE THAT NO SUCH EASEMENTS EXIST.
- THE ELEVATIONS DEPICTED HEREON WERE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). STARTING BENCHMARK: COMMONWEALTH OF MASSACHUSETTS HIGHWAY DEPARTMENT BENCHMARK 8050, MARK IS A BRASS RIVET SET IN A CONCRETE CHANNEL WALL ON BRIDGE STREET AT FLINT STREET. ELEVATION=9.58 FEET.
- THIS PLAN IS NOT TO BE USED FOR THE RECONSTRUCTION OF RIGHT OF WAY OR EASEMENT LINES OR FOR TITLE INSURANCE PURPOSES. RIGHT OF WAY AND EASEMENT LINES DEPICTED HEREON ARE APPROXIMATE ONLY. MAI DID NOT PERFORM A BOUNDARY RETRACEMENT SURVEY. RIGHT OF WAY LINES ARE PROVIDED BASED UPON LIMITED LAYOUT RECORDS, LAND PLANS RECOVERED AT SOUTH ESSEX REGISTRY OF DEEDS AND APPARENT OCCUPATION. PROPERTY LINES ARE APPROXIMATE ONLY AND COMPILED FROM CITY OF SALEM GIS.

ALL UNDERGROUND UTILITY DATA REPRESENTS RECORD INFORMATION RECOVERED THROUGH RESEARCH WITHOUT SURFACE DEMARCATION NOR SUBSURFACE VERIFICATION.



#### BRIDGE STREET MASSWORKS

RECORD CONDITIONS PLAN OF LAND  
LOCATED IN  
**SALEM, MASSACHUSETTS**  
(ESSEX COUNTY)

PREPARED FOR  
**STANTEC CONSULTING SERVICES, INC.**  
SCALE: 1"= 20' DATE: FEBRUARY 15, 2017

**MERIDIAN ASSOCIATES**

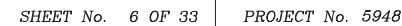
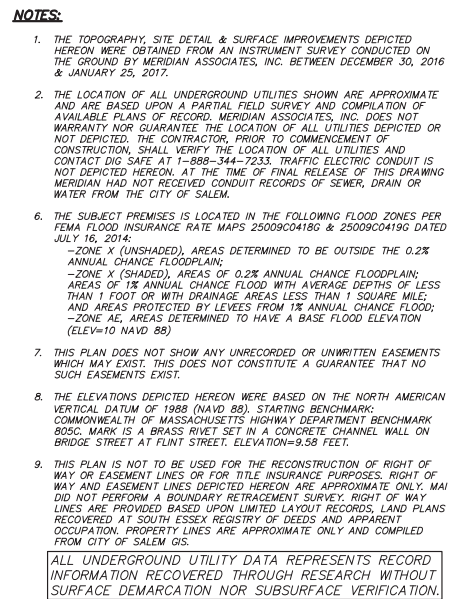
500 CUMMINGS CENTER, SUITE 3050  
BEVERLY, MASSACHUSETTS 01915  
TELEPHONE: (978) 299-0447  
WWW.MERIDIANASSOC.COM

SHEET No. 5 OF 33 PROJECT No. 5948

#### REVISIONS

NO.	DATE	DESCRIPTION	BY	CHK'D

DWG. No. 5948\_REC  
BK. #633, PG. #11  
BK. #635, PG. #64

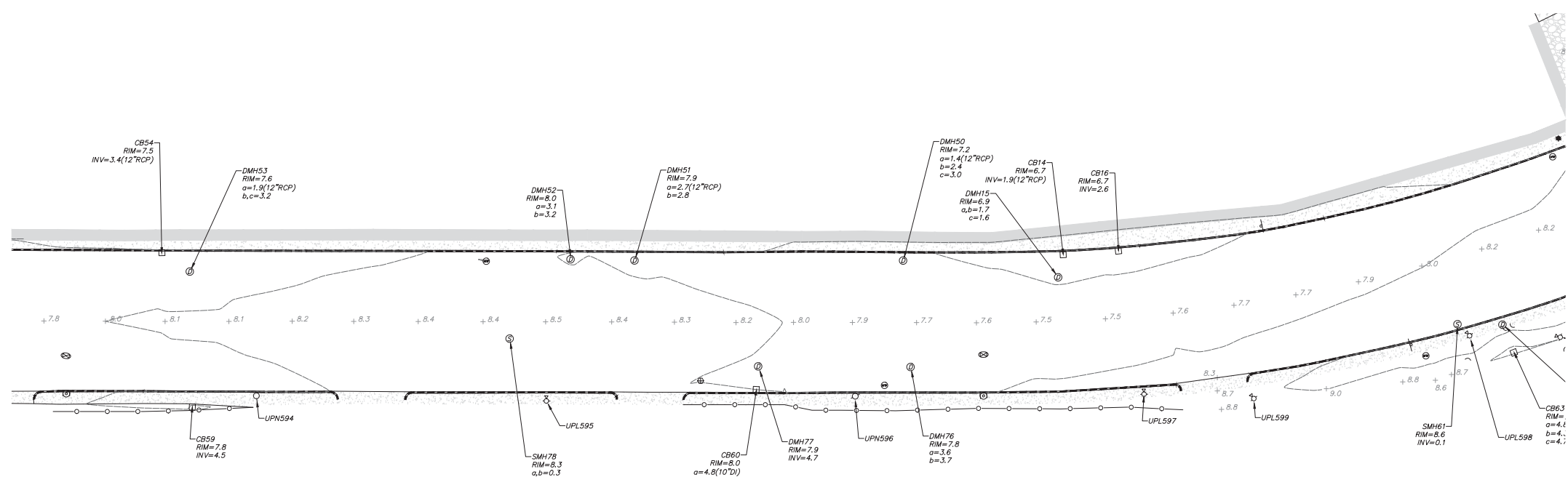
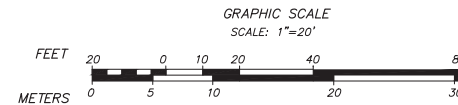


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- LEGEND:**
- 8 TWO FOOT CONTOUR
  - 10 TEN FOOT CONTOUR
  - +6.6 SPOT ELEVATION
  - BITUMINOUS BERM
  - GRANITE CURB
  - CONCRETE CURB
  - VEGETATION LINE
  - GUARDRAIL
  - METAL FENCE
  - WOOD FENCE
  - WALL
  - CRUSHED STONE
  - CONCRETE
  - EXPOSED LEDGE
  - SIGN
  - MB MAILBOX
  - MB HANDICAP RAMP
  - BOLLARD
  - STUMP
  - DECIDUOUS TREE
  - CONIFEROUS TREE
  - COMPILED COMMUNICATIONS LINE
  - TELEPHONE MANHOLE
  - COMPILED GAS LINE
  - VENT
  - GAS DRIP
  - GAS GATE
  - OHW OVERHEAD WIRES
  - COMPILED ELECTRIC LINE
  - TRAFFIC LIGHT
  - STREET LIGHT
  - ELECTRIC MANHOLE
  - FIRE ALARM BOX
  - UTILITY POLE
  - UTILITY POLE WITH LIGHT
  - GUY WIRE
  - D OBSERVED DRAIN LINE
  - COMPILED DRAIN LINE
  - DRAIN MANHOLE
  - CATCH BASIN
  - MONITORING WELL
  - S OBSERVED SEWER LINE
  - COMPILED SEWER LINE
  - SEWER MANHOLE
  - COMPILED WATER LINE
  - WATER GATE
  - HYDRANT
  - WATER SERVICE
  - IRRIGATION CONTROL VALVE
  - WATER MANHOLE
  - MANHOLE
  - HH HANDHOLE
  - TERMINUS UNKNOWN
  - A.G ABOVE GROUND
  - BB BITUMINOUS BERM
  - BIT. BITUMINOUS
  - CC CONCRETE CURB
  - CI CAST IRON
  - CLF CHAINLINK FENCE
  - CMP CORRUGATED METAL PIPE
  - CONC. CONCRETE
  - EOP EDGE OF PAVEMENT
  - FAB FIRE ALARM BOX
  - GC GRANITE CURB
  - HDPE HIGH DENSITY POLYETHYLENE
  - MAHW MASS HIGHWAY
  - N.P.V. NO PIPES VISIBLE
  - PL PLASTIC
  - PVC POLYVINYL CHLORIDE
  - RCP REINFORCED CONCRETE PIPE
  - RWC CONCRETE RETAINING WALL
  - RWCW CONCRETE BLOCK RETAINING WALL
  - RWS STONE RETAINING WALL
  - RWW WOOD RETAINING WALL
  - THRESH THRESHOLD
  - VCP VITRIFIED CLAY PIPE

- NOTES:**
1. THE TOPOGRAPHY, SITE DETAIL & SURFACE IMPROVEMENTS DEPICTED HEREON WERE OBTAINED FROM AN INSTRUMENT SURVEY CONDUCTED ON THE GROUND BY MERIDIAN ASSOCIATES, INC. BETWEEN DECEMBER 30, 2016 & JANUARY 25, 2017.
  2. THE LOCATION OF ALL UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE AND ARE BASED UPON A PARTIAL FIELD SURVEY AND COMPILED OF AVAILABLE PLANS OF RECORD. MERIDIAN ASSOCIATES, INC. DOES NOT WARRANT NOR GUARANTEE THE LOCATION OF ALL UTILITIES DEPICTED OR NOT DEPICTED. THE CONTRACTOR, PRIOR TO COMMENCEMENT OF CONSTRUCTION, SHALL VERIFY THE LOCATION OF ALL UTILITIES AND CONTACT DIG SAFE AT 1-888-344-7233. TRAFFIC ELECTRIC CONDUIT IS NOT DEPICTED HEREON. AT THE TIME OF FINAL RELEASE OF THIS DRAWING MERIDIAN HAD NOT RECEIVED CONDUIT RECORDS OF SEWER, DRAIN OR WATER FROM THE CITY OF SALEM.
  3. THE SUBJECT PREMISES IS LOCATED IN THE FOLLOWING FLOOD ZONES PER FEMA FLOOD INSURANCE RATE MAPS 25009C0418G & 25009C0419G DATED JULY 16, 2014:
    - ZONE X (UNSHADED), AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN;
    - ZONE X (SHADED), AREAS OF 0.2% ANNUAL CHANCE FLOODPLAIN;
    - AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE;
    - AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD;
    - ZONE AE, AREAS DETERMINED TO HAVE A BASE FLOOD ELEVATION (ELEV=10 NAVD 88)
  4. THIS PLAN DOES NOT SHOW ANY UNRECORDED OR UNWRITTEN EASEMENTS WHICH MAY EXIST. THIS DOES NOT CONSTITUTE A GUARANTEE THAT NO SUCH EASEMENTS EXIST.
  5. THE ELEVATIONS DEPICTED HEREON WERE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). STARTING BENCHMARK: COMMONWEALTH OF MASSACHUSETTS HIGHWAY DEPARTMENT BENCHMARK 805C. MARK IS A BRASS RIVET SET IN A CONCRETE CHANNEL WALL ON BRIDGE STREET AT FLINT STREET. ELEVATION=9.58 FEET.
  6. THIS PLAN IS NOT TO BE USED FOR THE RECONSTRUCTION OF RIGHT OF WAY OR EASEMENT LINES OR FOR TITLE INSURANCE PURPOSES. RIGHT OF WAY AND EASEMENT LINES DEPICTED HEREON ARE APPROXIMATE ONLY. MAI DID NOT PERFORM A BOUNDARY RETRACEMENT SURVEY. RIGHT OF WAY LINES ARE PROVIDED BASED UPON LIMITED LAYOUT RECORDS, LAND PLANS RECOVERED AT SOUTH ESSEX REGISTRY OF DEEDS AND APPARENT OCCUPATION. PROPERTY LINES ARE APPROXIMATE ONLY AND COMPILED FROM CITY OF SALEM GIS.
- ALL UNDERGROUND UTILITY DATA REPRESENTS RECORD INFORMATION RECOVERED THROUGH RESEARCH WITHOUT SURFACE DEMARCATION NOR SUBSURFACE VERIFICATION.



**TEMPORARY BENCHMARK CHART:**

T.B.M.#	DESCRIPTION	ELEVATION
805C	BRASS RIVET IN TOP OF CONCRETE CHANNEL WALL	9.58
805D	BRASS RIVET IN A STONE BOUND, FLUSH	10.40

(SEE NOTE 8)

**REVISIONS**

NO.	DATE	DESCRIPTION	BY	CHK'D

DWG. No. 5948\_REC  
BK. #633, PG. #11  
BK. #635, PG. #64

**BRIDGE STREET MASSWORKS**

**RECORD CONDITIONS PLAN OF LAND**  
LOCATED IN  
**SALEM, MASSACHUSETTS**  
(ESSEX COUNTY)

PREPARED FOR  
**STANTEC CONSULTING SERVICES, INC.**  
SCALE: 1"= 20' DATE: FEBRUARY 15, 2017

**MERIDIAN ASSOCIATES**  
500 CUMMINGS CENTER, SUITE 500  
BEVERLY, MASSACHUSETTS 01915  
TELEPHONE: (978) 299-0447  
WWW.MERIDIANASSOC.COM

500 MILK STREET, SUITE 302  
WESTBOROUGH, MASSACHUSETTS 01581  
TELEPHONE: (508) 871-7030  
WWW.MERIDIANASSOC.COM

**SHEET No. 7 OF 33 PROJECT No. 5948**

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TEMPORARY BENCHMARK CHART:

T.B.M.#	DESCRIPTION	ELEVATION
B050A	BRASS RIVET IN TOP OF CONCRETE CHANNEL WALL	9.58
B050A	BRASS RIVET IN A STONE BOUND, FLUSH	10.40

(SEE NOTE 8)

LEGEND:

8	TWO FOOT CONTOUR
10	TEN FOOT CONTOUR
+8.0	SPOT ELEVATION
---	BITUMINOUS BERM
---	GRANITE CURB
---	CONCRETE CURB
---	VEGETATION LINE
---	GUARDRAIL
---	METAL FENCE
---	WOOD FENCE
---	WALL
---	CRUSHED STONE
---	CONCRETE
---	EXPOSED LEDGE
+	DMB
+	MAILBOX
+	HANDICAP RAMP
+	BOLLARD
+	STUMP
+	DECIDUOUS TREE
+	CONIFEROUS TREE
---	COMPILED COMMUNICATIONS LINE
---	TELEPHONE MANHOLE
---	COMPILED GAS LINE
---	VENT
---	GAS DRIP
---	GAS GATE
---	OVERHEAD WIRES
---	COMPILED ELECTRIC LINE
---	TRAFFIC LIGHT
---	STREET LIGHT
---	ELECTRIC MANHOLE
---	FIRE ALARM BOX
---	UTILITY POLE
---	UTILITY POLE WITH LIGHT
---	GUY WIRE
---	OBSERVED DRAIN LINE
---	COMPILED DRAIN LINE
---	DRAIN MANHOLE
---	CATCH BASIN
---	MONITORING WELL
---	OBSERVED SEWER LINE
---	COMPILED SEWER LINE
---	SEWER MANHOLE
---	COMPILED WATER LINE
---	WATER GATE
---	HYDRANT
---	WATER SERVICE
---	IRRIGATION CONTROL VALVE
---	WATER MANHOLE
---	MANHOLE
---	HANDHOLE
---	TERMINUS UNKNOWN
A.G.	ABOVE GROUND
BB	BITUMINOUS BERM
BIT	BITUMINOUS
CC	CONCRETE CURB
CI	CAST IRON
CLF	CHAINLINK FENCE
CMP	CORRUGATED METAL PIPE
CONC.	CONCRETE
EOP	EDGE OF PAVEMENT
FAB	FIRE ALARM BOX
GC	GRANITE CURB
HDPE	HIGH DENSITY POLYETHYLENE
MAHWW	MASS HIGHWAY
N.P.V.	NO PIPES VISIBLE
PL	PLASTIC
PVC	POLYVINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
RWC	CONCRETE RETAINING WALL
RWCW	CONCRETE BLOCK RETAINING WALL
RWS	STONE RETAINING WALL
RWW	WOOD RETAINING WALL
THRESH	THRESHOLD
VCP	WITRIFIED CLAY PIPE

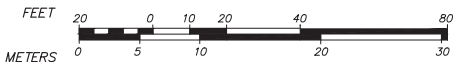
NOTES:

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ALL UNDERGROUND UTILITY DATA REPRESENTS RECORD INFORMATION RECOVERED THROUGH RESEARCH WITHOUT SURFACE DEMARCATON NOR SUBSURFACE VERIFICATION.

GRAPHIC SCALE

SCALE: 1"=20'



BRIDGE STREET MASSWORKS

RECORD CONDITIONS PLAN OF LAND  
LOCATED IN  
**SALEM, MASSACHUSETTS**  
(ESSEX COUNTY)

PREPARED FOR  
**STANTEC CONSULTING SERVICES, INC.**  
SCALE: 1"= 20' DATE: FEBRUARY 15, 2017

**MERIDIAN ASSOCIATES**

500 CUMMINGS CENTER, SUITE 900  
BEVERLY, MASSACHUSETTS 01915  
TELEPHONE: (978) 299-0447  
WWW.MERIDIANASSOC.COM

SHEET No. 8 OF 33 PROJECT No. 5948

REVISIONS

NO.	DATE	DESCRIPTION	BY	CHK'D

DWG. No. 5948\_REC  
BK. #633, PG. #11  
BK. #C5, PG. #64



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Consultants

Legend

Notes

Revision	By	Appd.	YY.MM.DD
Issued	By	Appd.	YY.MM.DD
File Name:			
	Dwn.	Chkd.	Dgn.
Permit-Seal			YY.MM.DD

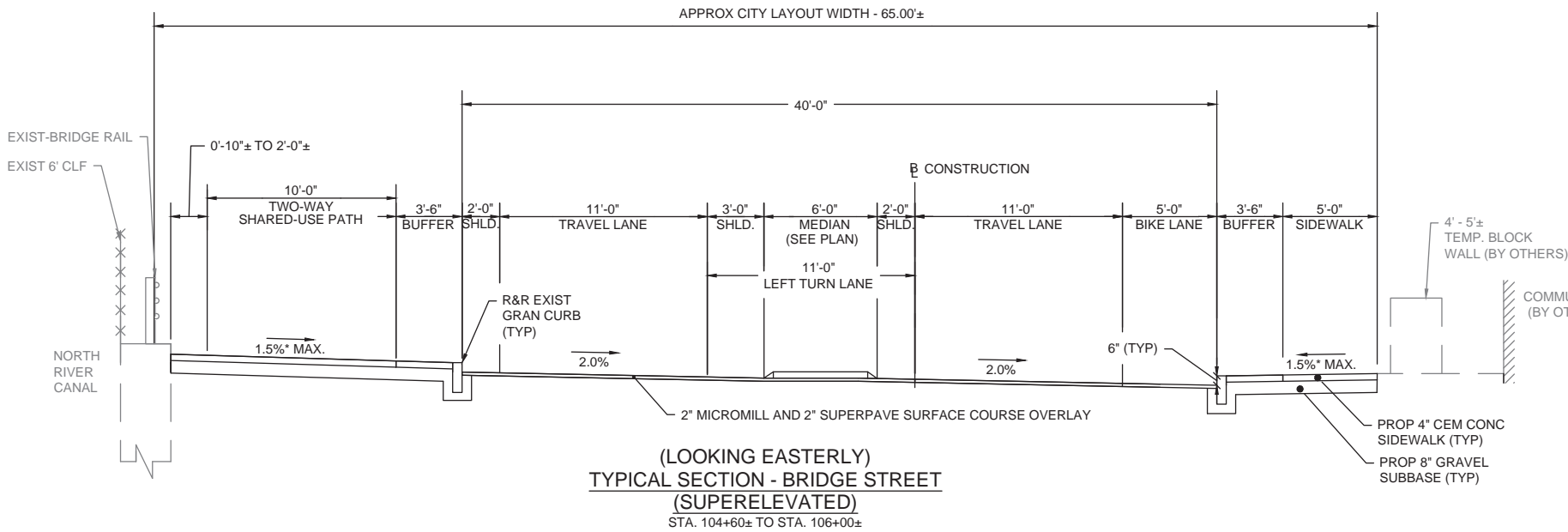


Client/Project  
CITY OF SALEM

BRIDGE STREET MASSWORKS PROJECT  
"COMPLETE STREETS" ENHANCMENTS  
SALEM, MA

Title  
TYPICAL SECTIONS  
PART 1 OF 4

	SCALE: 1" = 4'	
Project No. 179410455	Scale	
Drawing No.	Sheet	Revision



PAVEMENT NOTES:

PAVEMENT RECLAMATION (GOODHUE STREET):

SURFACE: 2" HOT MIX ASPHALT TOP COURSE 12.5 (SSC-12.5) OVER  
3" HOT MIX ASPHALT DENSE INTERMEDIATE COURSE 19.0 (SIC-19.0) OVER

SUBBASE: 5" MIN.\* RECLAIMED BASE COURSE MATERIAL  
(SUPPLEMENT WITH DENSE GRADED CRUSHED STONE IF NECESSARY)  
\* REQUIRES OVER EXCAVATION OF SUB-BASE MATERIAL TO MEET MINIMUM DEPTH. SEE GRADING PLANS FOR LOCATION AND DETAILS.

RECLAIM: 12" DEPTH

PAVEMENT MILL AND HMA OVERLAY (BRIDGE STREET):

SURFACE: 2" HOT MIX ASPHALT TOP COURSE 12.5 (SSC-12.5) OVER

MILLING: 2" MICROMILL

PAVEMENT MILL AND HMA OVERLAY (FLINT STREET):

SURFACE: 1.75" HOT MIX ASPHALT TOP COURSE 12.5 (SSC-12.5) OVER

MILLING: 1.75" MICROMILL

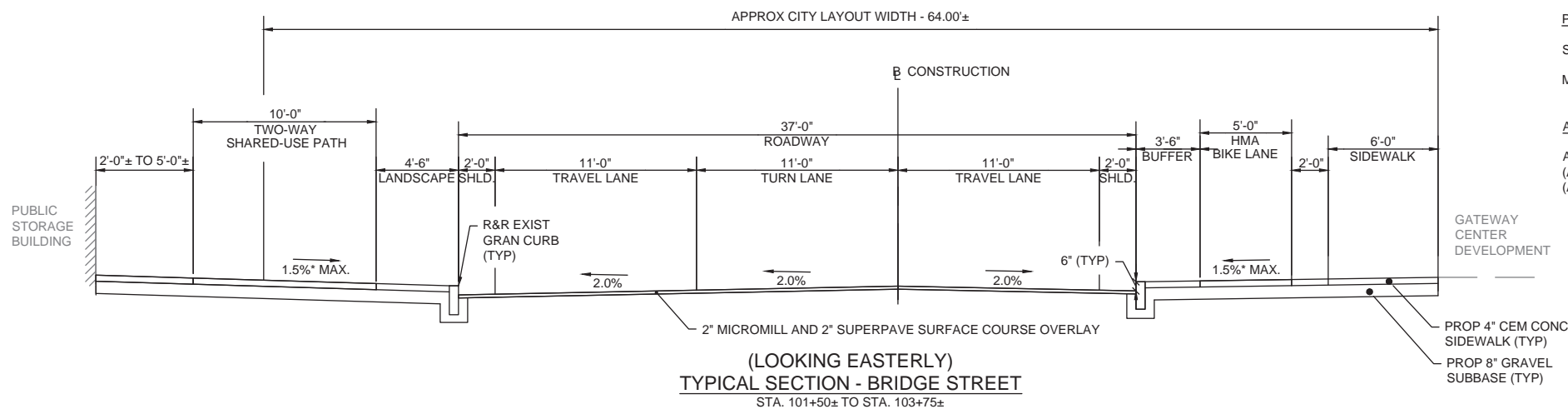
PAVEMENT MILL AND HMA OVERLAY (BOSTON STREET):

SURFACE: 1.75" HOT MIX ASPHALT TOP COURSE 12.5 (SSC-12.5) OVER

MILLING: 1.75" MICROMILL

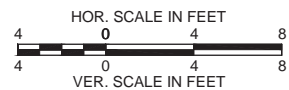
ASPHALT EMULSION FOR TACK COAT:

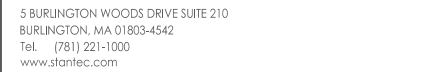
ASPHALT EMULSION FOR TACK COAT SHALL BE PLACED ON ALL MILLED SURFACES (APPLICATION RATE = 0.07 GAL/SY) AND BETWEEN ALL NEW PAVEMENT LAYERS (APPLICATION RATE = 0.05 GAL/SY).



NOTES:

- MEET EXISTING ELEVATIONS AT BACK OF SIDEWALK WHERE POSSIBLE WHILE MAINTAINING ADA COMPLIANCE. EXISTING AND PROPOSED ELEVATIONS ARE SHOWN ON THE GRADING PLANS WHERE BACK OF SIDEWALK ELEVATIONS ARE NOT MET.





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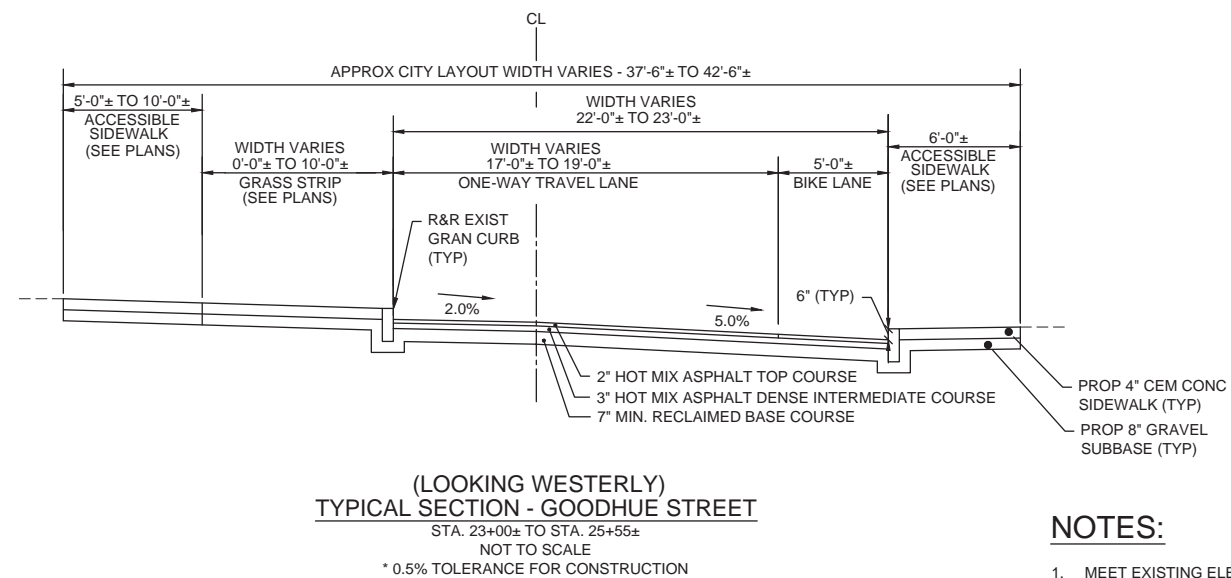
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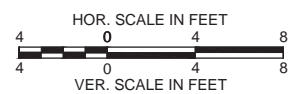
Client/Project  
CITY OF SALEM  
  
BRIDGE STREET MASSWORKS PROJECT  
"COMPLETE STREETS" ENHANCEMENTS  
  
SALEM, MA

Title  
TYPICAL SECTIONS  
PART 4 OF 4

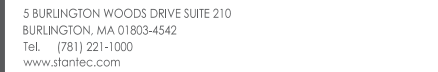
	SCALE: 1" = 4'	
Project No. 179410455	Scale	
Drawing No.	Sheet	Revision



1. MEET EXISTING ELEVATIONS AT BACK OF SIDEWALK WHERE POSSIBLE WHILE MAINTAINING ADA COMPLIANCE. EXISTING AND PROPOSED ELEVATIONS ARE SHOWN ON THE GRADING PLANS WHERE BACK OF SIDEWALK ELEVATIONS ARE NOT MET.
2. OVER EXCAVATION WILL BE REQUIRED AT THE FOLLOWING STATION RANGES TO MEET THE MINIMUM RECLAIMED BASE COURSE MATERIAL DEPTHS (SEE GRADING PLANS FOR LOCATIONS AND DETAILS)  
STA. 23+00± TO STA. 25+55±







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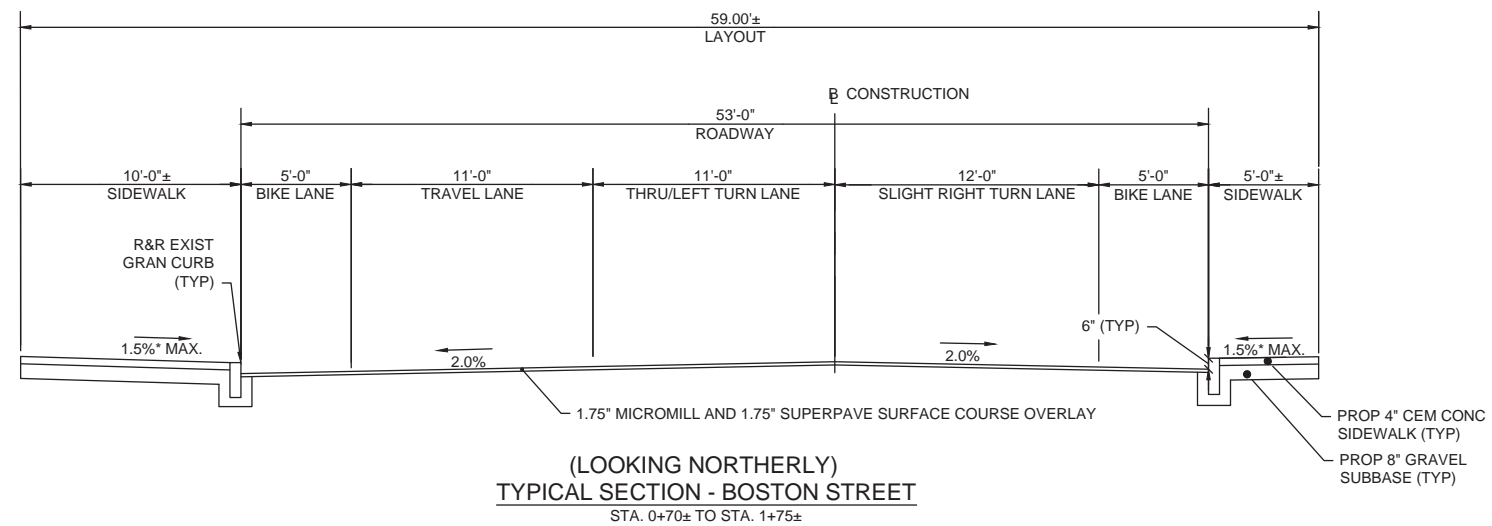
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Legend

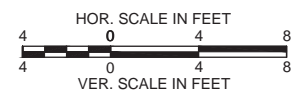
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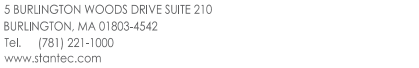
BRIDGE STREET MASSWORKS PROJECT  
"COMPLETE STREETS" ENHANCEMENTS  
SALEM, MA

Project No.	SCALE: 1" = 4'	
179410455	Scale	
Drawing No.	Sheet	Revision



1. MEET EXISTING ELEVATIONS AT BACK OF SIDEWALK WHERE POSSIBLE WHILE MAINTAINING ADA COMPLIANCE. EXISTING AND PROPOSED ELEVATIONS ARE SHOWN ON THE GRADING PLANS WHERE BACK OF SIDEWALK ELEVATIONS ARE NOT MET.





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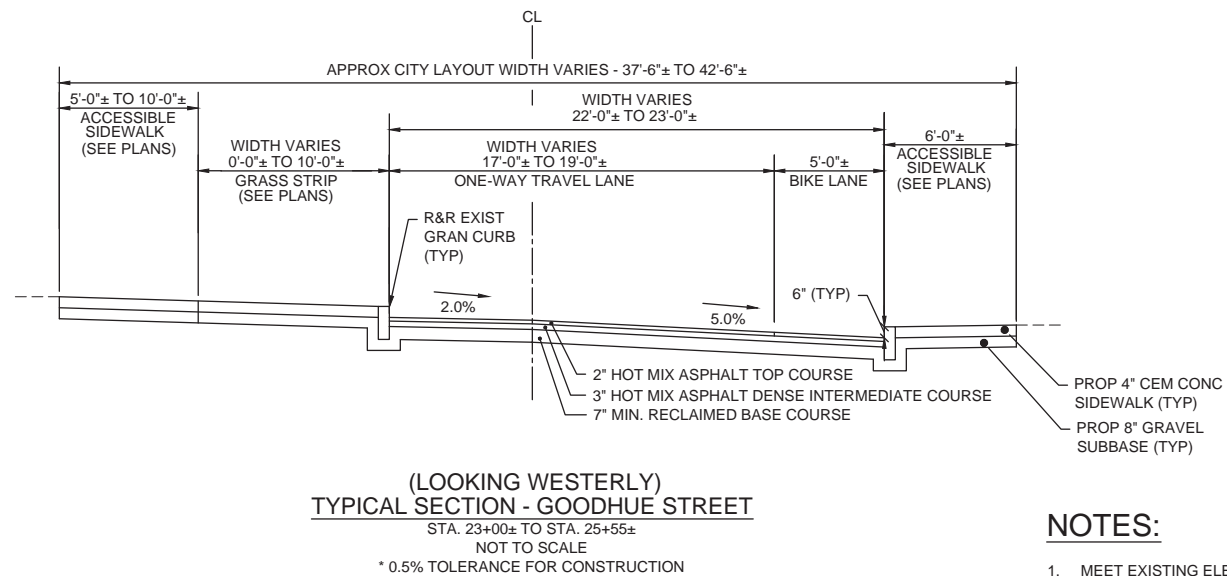
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Legend

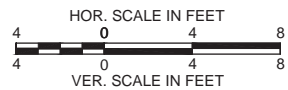
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BRIDGE STREET MASSWORKS PROJECT  
"COMPLETE STREETS" ENHANCMENTS  
SALEM, MA

SCALE: 1" = 4'	
Project No. 179410455	Scale
Drawing No.	Sheet      Revision



1. MEET EXISTING ELEVATIONS AT BACK OF SIDEWALK WHERE POSSIBLE WHILE MAINTAINING ADA COMPLIANCE. EXISTING AND PROPOSED ELEVATIONS ARE SHOWN ON THE GRADING PLANS WHERE BACK OF SIDEWALK ELEVATIONS ARE NOT MET.
2. OVER EXCAVATION WILL BE REQUIRED AT THE FOLLOWING STATION RANGES TO MEET THE MINIMUM RECLAIMED BASE COURSE MATERIAL DEPTHS (SEE GRADING PLANS FOR LOCATIONS AND DETAILS)  
STA. 23+00± TO STA. 25+55±







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## Notes

Revision	By	Appd.	YY-MM-DD

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File Name: \_\_\_\_\_

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Client/Project  
CITY OF SALEM

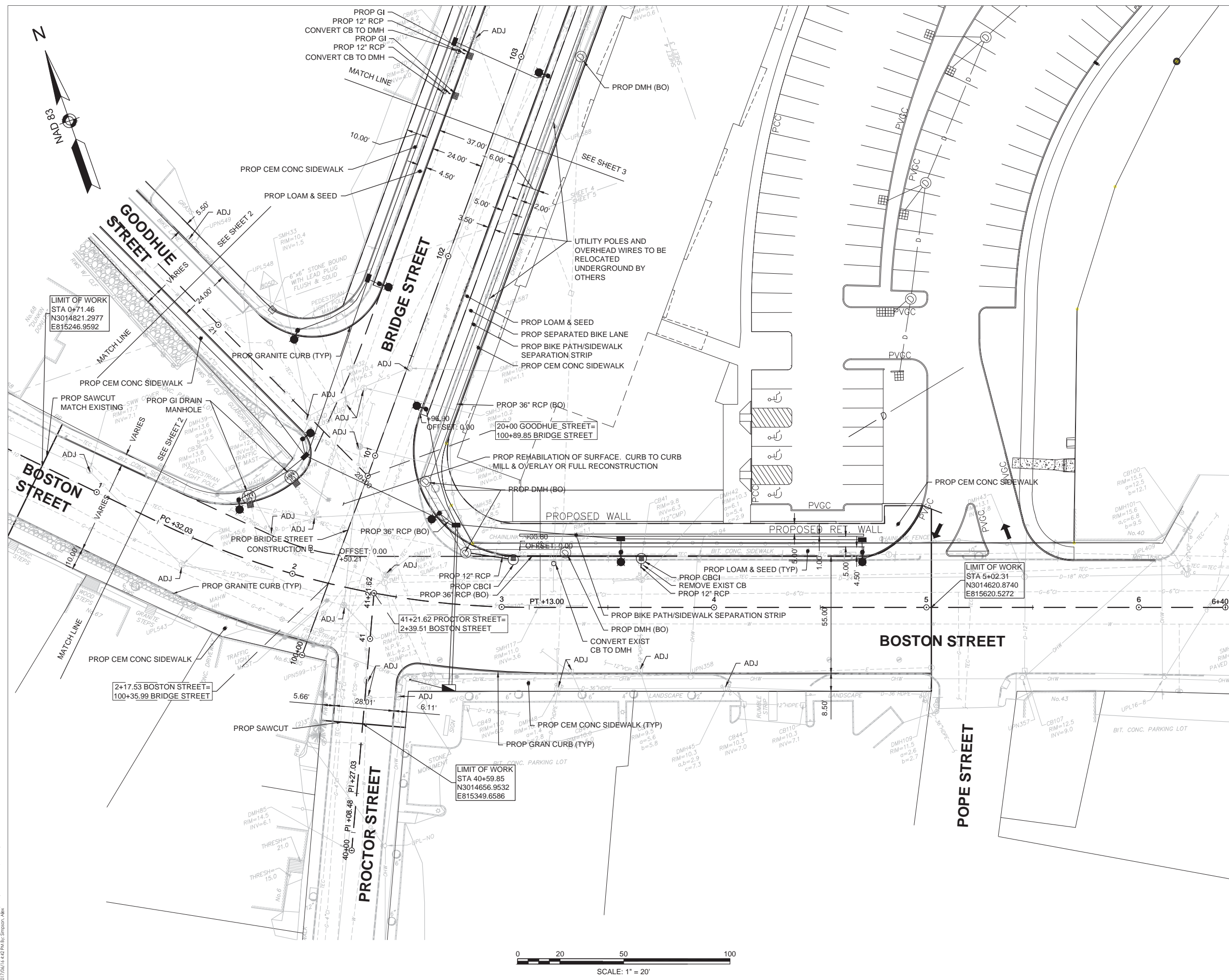
BRIDGE STREET MASSWORKS PROJECT  
"COMPLETE STREETS" ENHANCMENTS

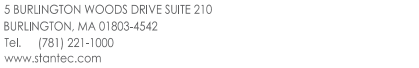
SALEM, MA

Title

CONSTRUCTION PLAN SHEET 1

Project No.	Scale	
179410455	<b>1" = 20'</b>	
Drawing No.	Sheet	Revision





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## Notes

[illegible]

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CITY OF SALEM

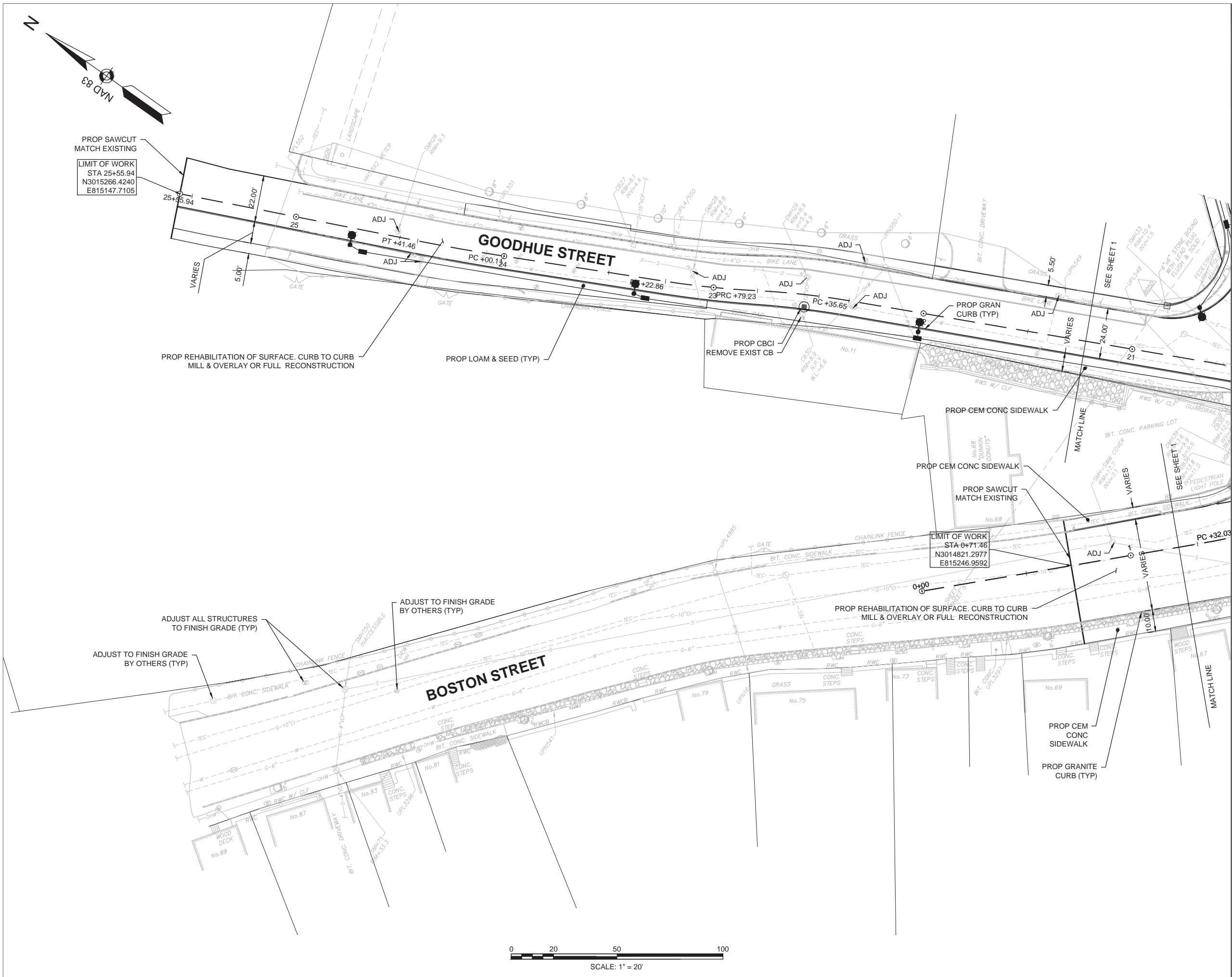
BRIDGE STREET MASSWORKS PROJECT  
"COMPLETE STREETS" ENHANCEMENTS

SALEM, MA

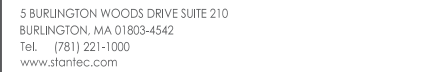
Title

CONSTRUCTION PLAN SHEET 2

Project No.	Scale	
179410455	<b>1" = 20'</b>	
Drawing No.	Sheet	Revision







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Notes

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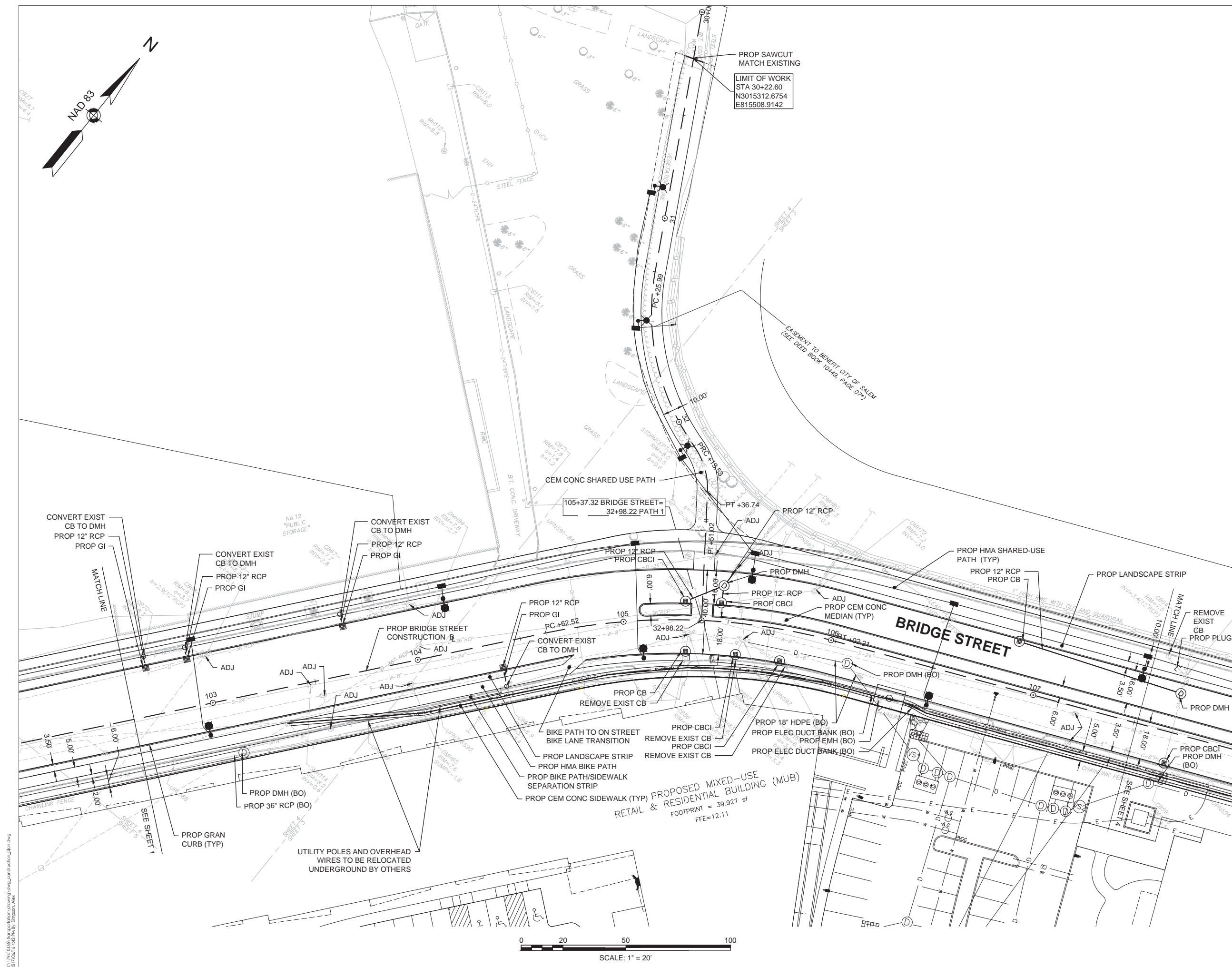
Client/Project  
CITY OF SALEM

BRIDGE STREET MASSWORKS PROJECT  
"COMPLETE STREETS" ENHANCEMENTS  
SALEM, MA

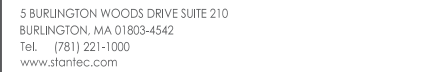
Title

CONSTRUCTION PLAN SHEET 3

Project No.	Scale
179410455	<b>1" = 20'</b>
Drawing No.	Sheet
	Revision







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## Notes

[illegible]

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CITY OF SALEM

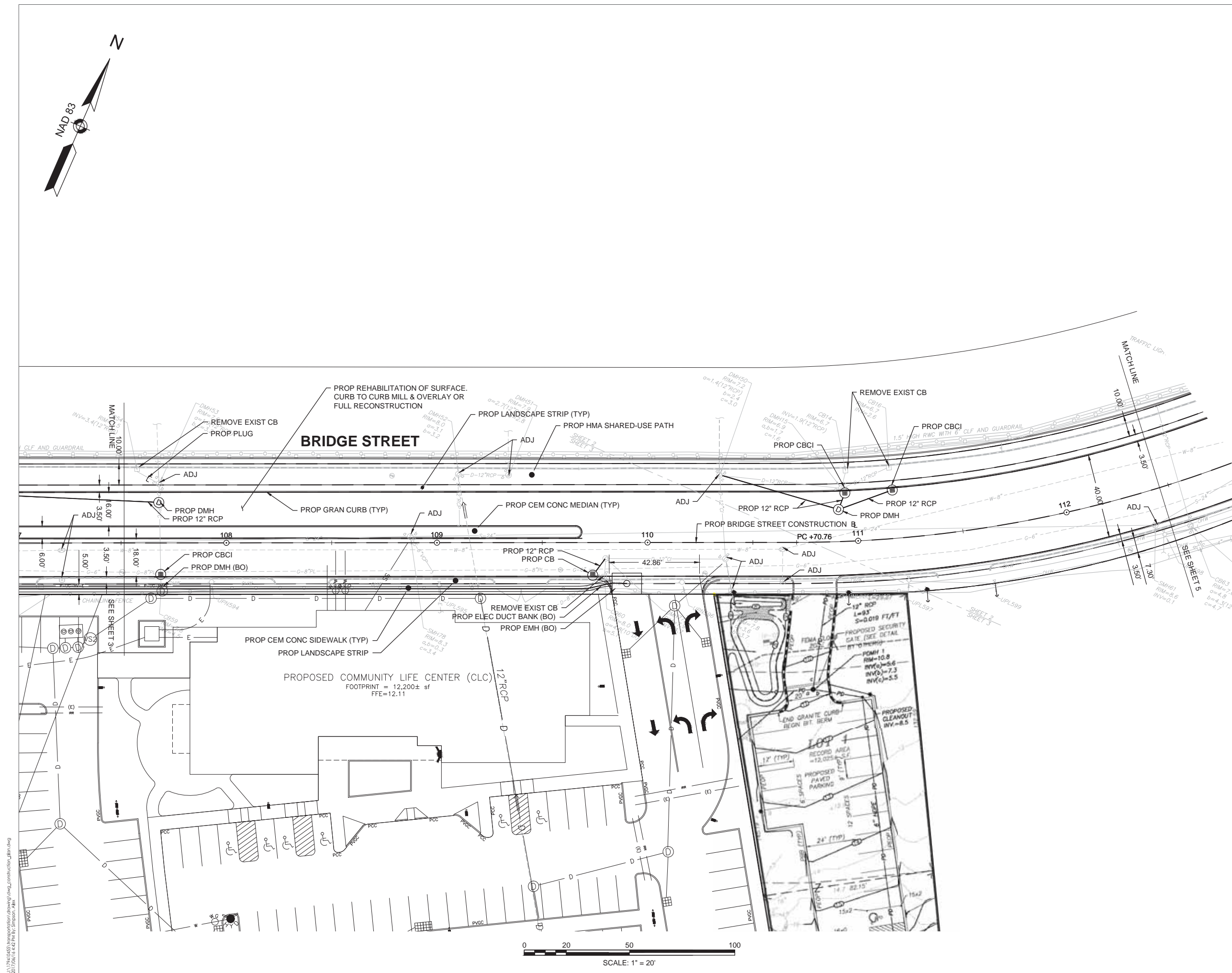
BRIDGE STREET MASSWORKS PROJECT  
"COMPLETE STREETS" ENHANCEMENTS  
SALEM, MA

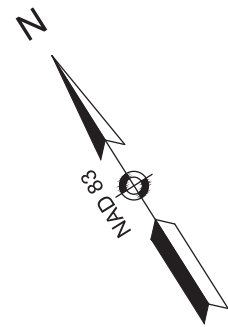
Title

CONSTRUCTION PLAN SHEET 4

Project No.	Scale	
179410455	<b>1" = 20'</b>	
Drawing No.	Sheet	Revision

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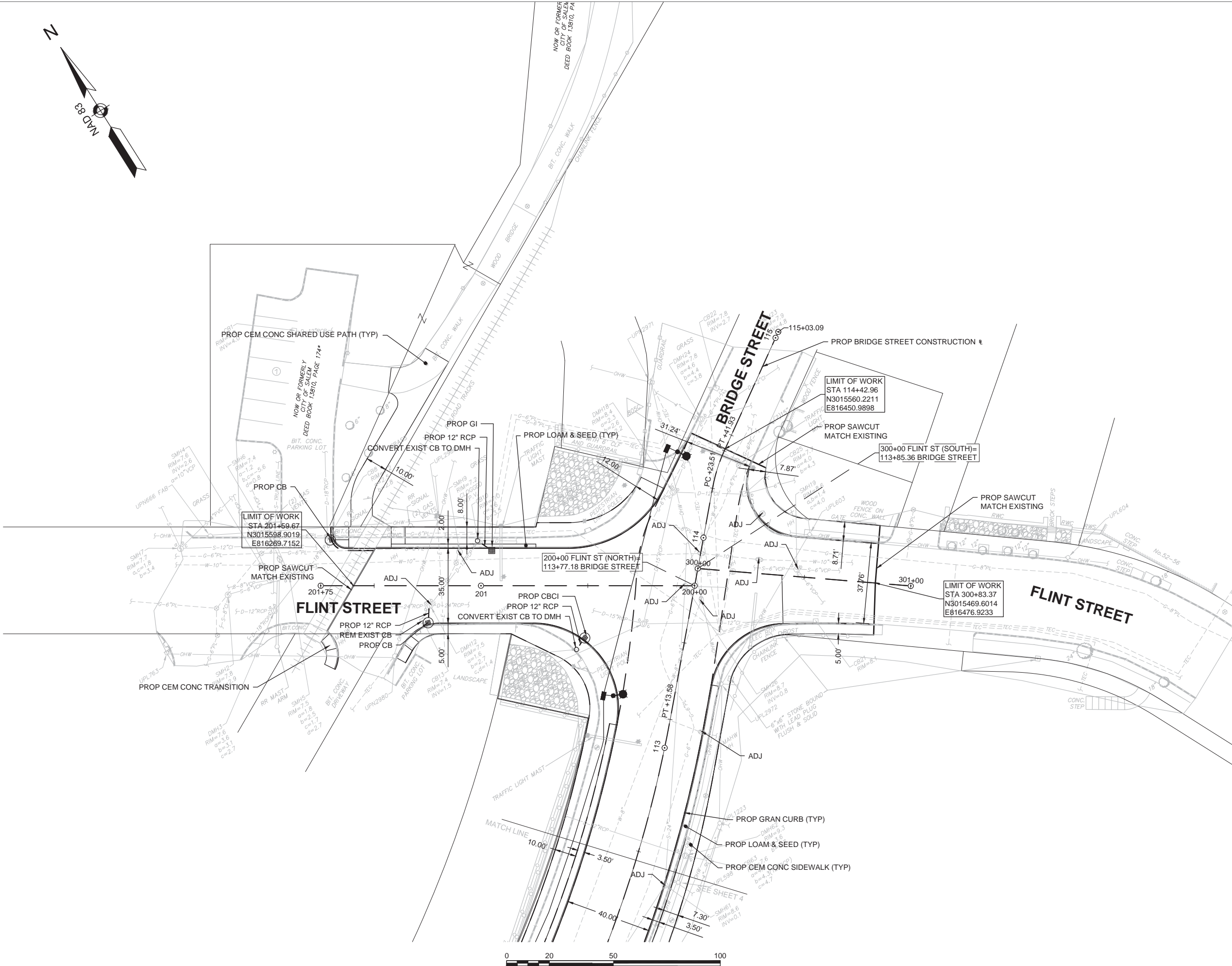
Client/Project  
CITY OF SALEM

BRIDGE STREET MASSWORKS PROJECT  
"COMPLETE STREETS" ENHANCEMENTS  
SALEM, MA

Title

CONSTRUCTION PLAN SHEET 5

Project No.	Scale	
179410455	1" = 20'	
Drawing No.	Sheet	Revision



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CITY OF SALEM

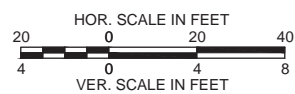
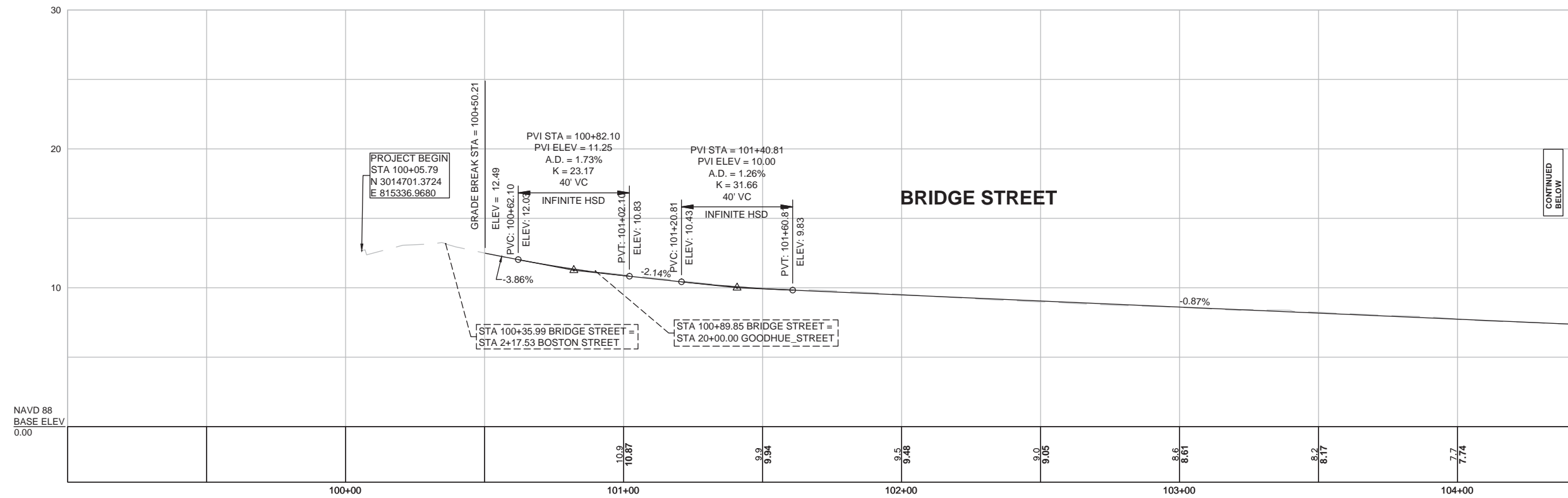
BRIDGE STREET MASSWORKS PROJECT  
"COMPLETE STREETS" ENHANCMENTS

SALEM, MA

Title

BRIDGE STREET PROFILES PART 1

Project No.	Scale
179410455	H:1"=20' V:1"=4'
Drawing No.	Sheet
	Revision



NOTES:  
1. FOR CONSTRUCTION PLAN SEE SHEET 13, 15, 16, AND 17.





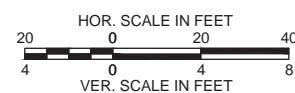
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Notes



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CITY OF SALEM  
BRIDGE STREET MASSWORKS PROJECT  
"COMPLETE STREETS" ENHANCEMENTS  
SALEM, MA

Project No.	Scale	
179410455	H:1"=20' V:1"=4'	
Drawing No.	Sheet	Revision



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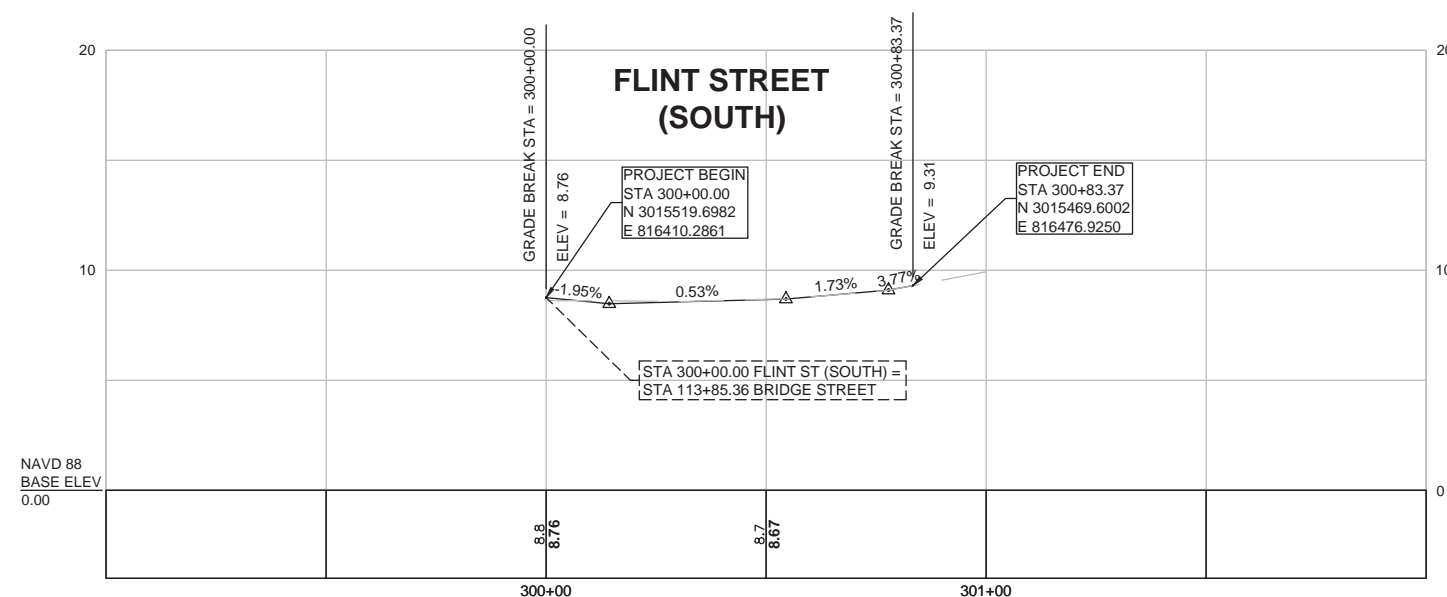
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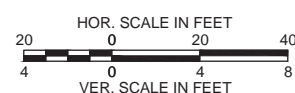


Client/Project  
CITY OF SALEM

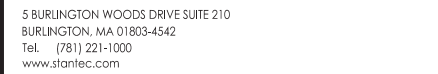
BRIDGE STREET MASSWORKS PROJECT  
"COMPLETE STREETS" ENHANCEMENTS  
SALEM, MA

Title  
FLINT STREET PROFILES

Project No.	Scale	
179410455	H:1"=20' V:1"=4'	
Drawing No.	Sheet	Revision



NOTES:  
1. FOR CONSTRUCTION PLAN SEE SHEET 17.



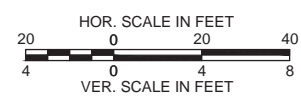
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Notes



NOTES:  
1. FOR CONSTRUCTION PLAN SEE SHEET 14.

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Issued	By	Appd.	YY.MM.DD
File Name:			
	Dwn.	Chkd.	Dsgn.
			YY.MM.DD



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BRIDGE STREET MASSWORKS PROJECT  
"COMPLETE STREETS" ENHANCEMENTS  
SALEM, MA

Title  
GOODHUE STREET PROFILES

Project No.	Scale	
179410455	H:1"=20' V:1"=4'	
Drawing No.	Sheet	Revision



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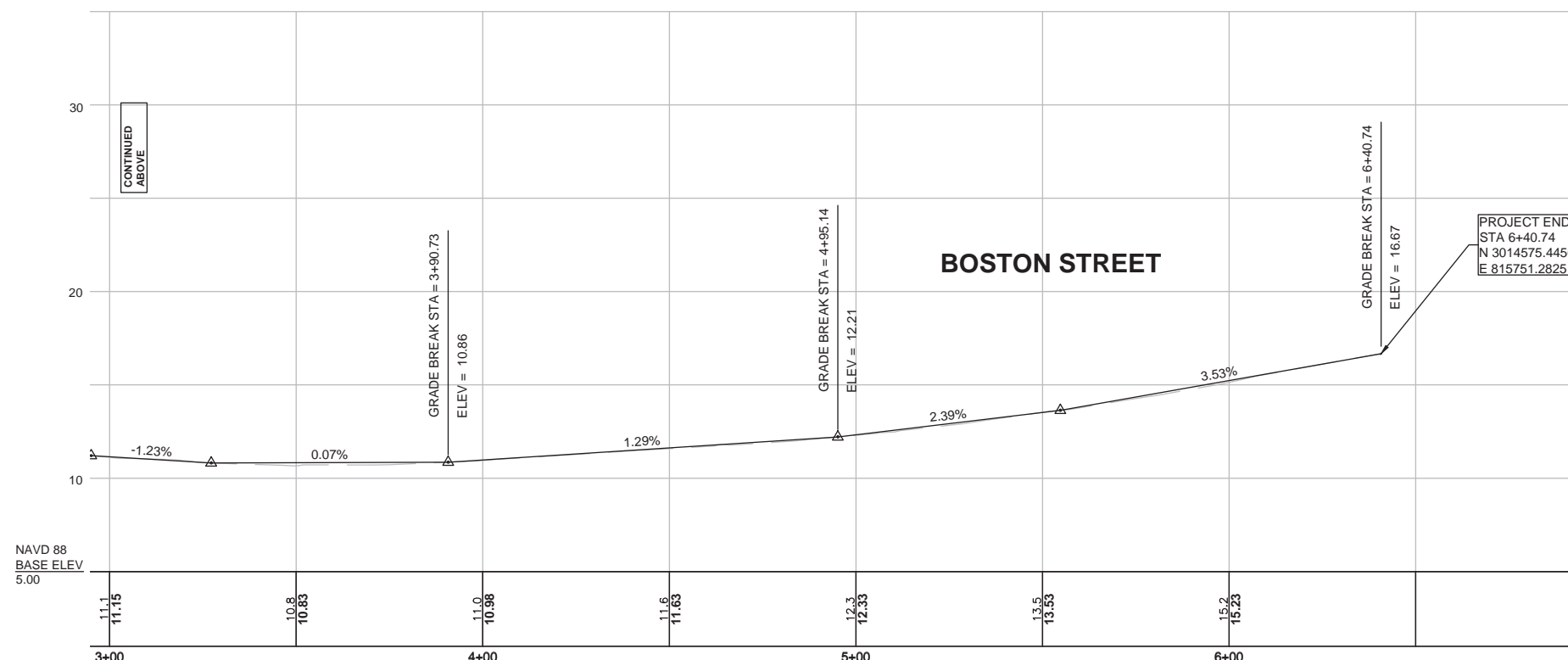
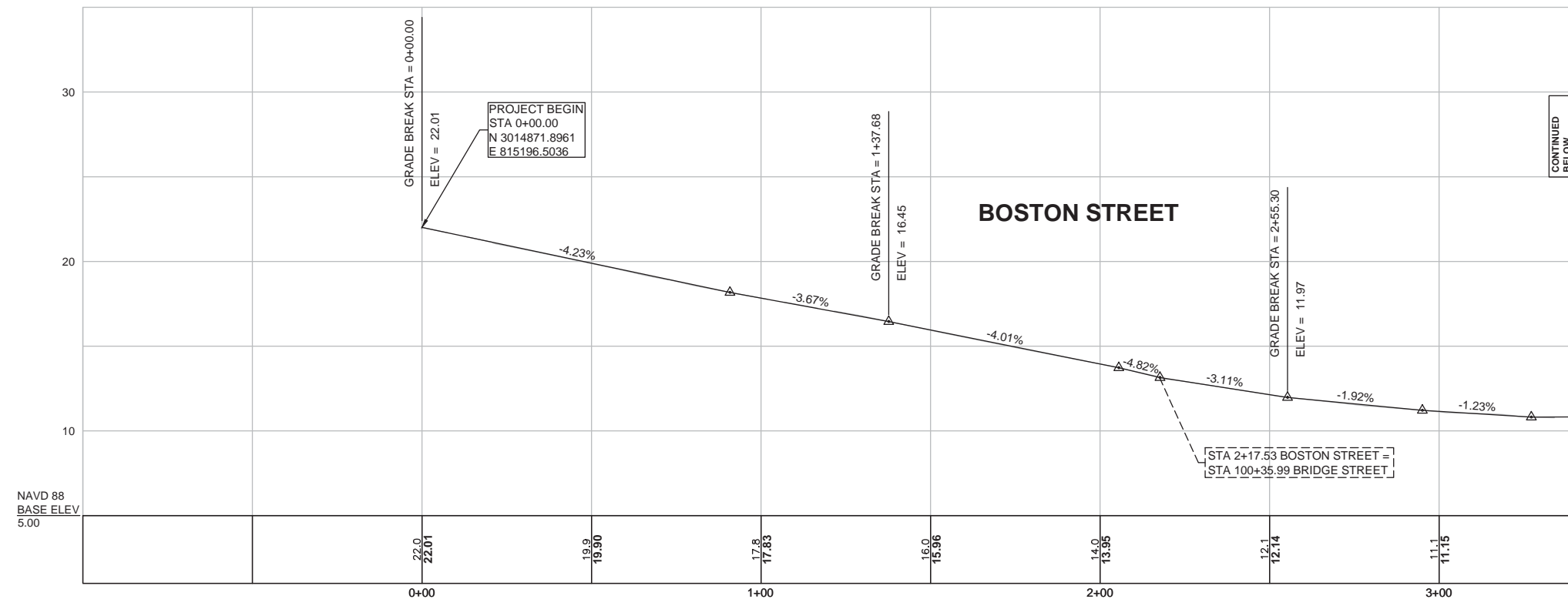
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Notes



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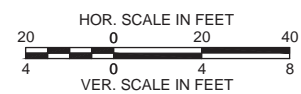
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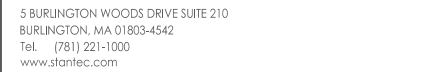
Client/Project  
CITY OF SALEM  
  
BRIDGE STREET MASSWORKS PROJECT  
"COMPLETE STREETS" ENHANCEMENTS  
  
SALEM, MA

Title  
BOSTON STREET PROFILES

Project No.	Scale	
179410455	H:1"=20' V:1"=4'	
Drawing No.	Sheet	Revision



NOTES:  
1. FOR CONSTRUCTION PLAN SEE SHEET 13.



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			YY.MM.DD



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BRIDGE STREET MASSWORKS PROJECT  
"COMPLETE STREETS" ENHANCEMENTS  
SALEM, MA

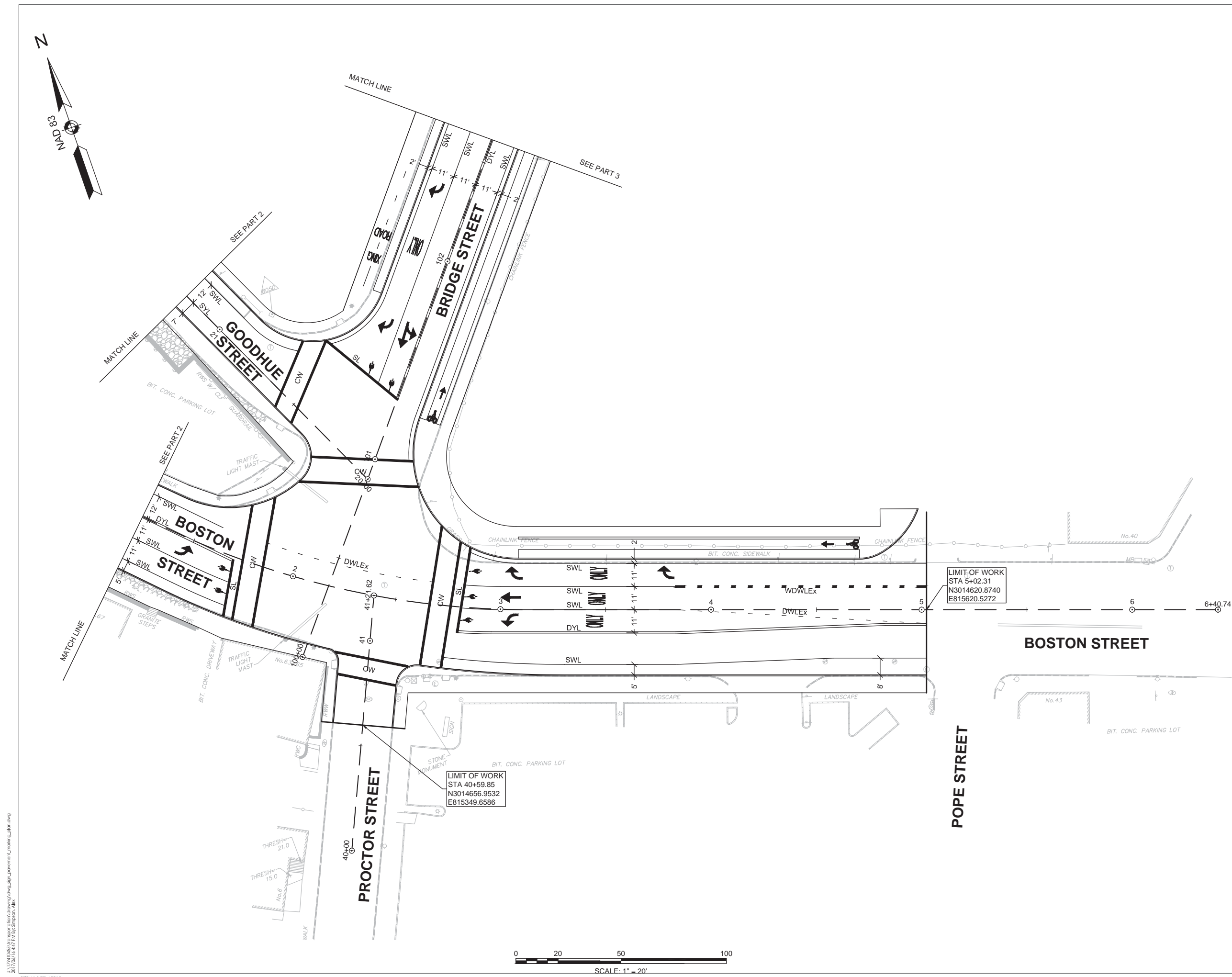
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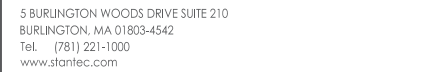
Title

SIGN & PAVEMENT MARKING PLAN  
PART 1 OF 5

Project No.	Scale	
179410455	1" = 20'	
Drawing No.	Sheet	Revision

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## Notes

[illegible]

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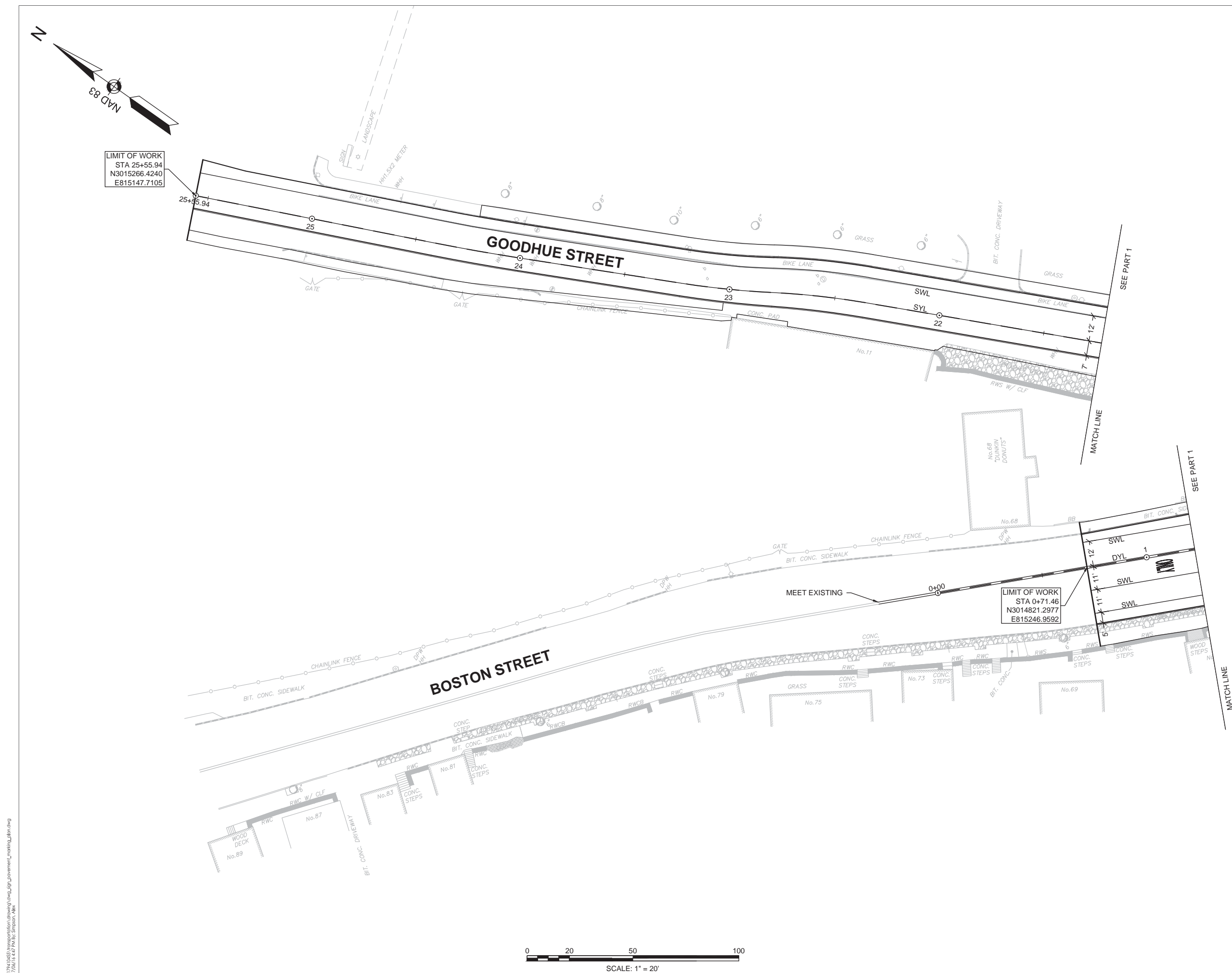
BRIDGE STREET MASSWORKS PROJECT  
"COMPLETE STREETS" ENHANCEMENTS  
SALEM, MA

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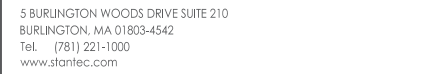
Title

SIGN & PAVEMENT MARKING PLAN  
PART 2 OF 5

Project No.	Scale	
179410455	1" = 20'	
Drawing No.	Sheet	Revision







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			YY.MM.DD



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CITY OF SALEM

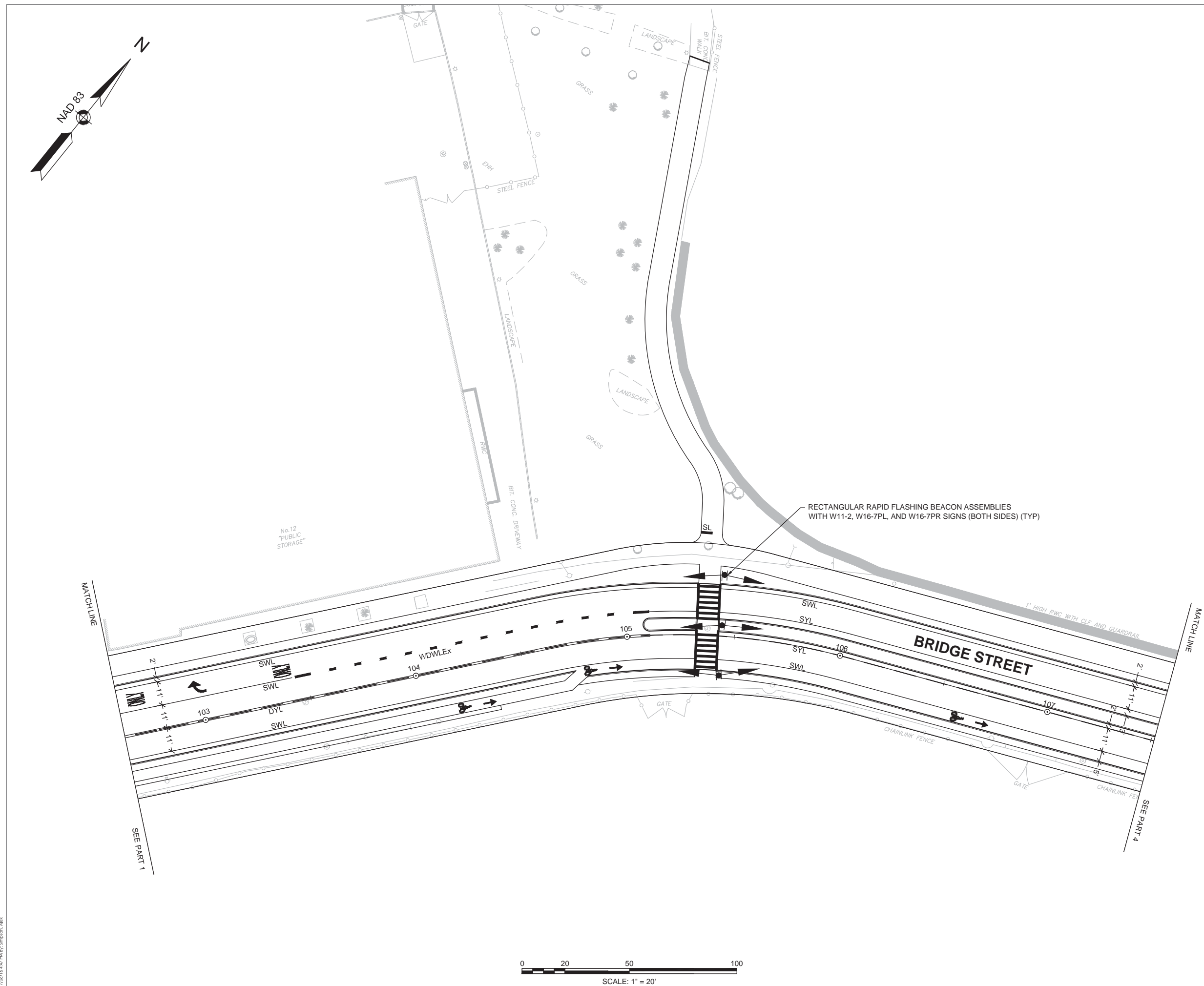
BRIDGE STREET MASSWORKS PROJECT  
"COMPLETE STREETS" ENHANCEMENTS  
SALEM, MA

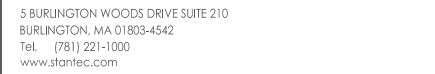
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Title

SIGN & PAVEMENT MARKING PLAN  
PART 3 OF 5

Project No.	Scale	
179410455	1" = 20'	
Drawing No.	Sheet	Revision



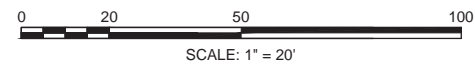
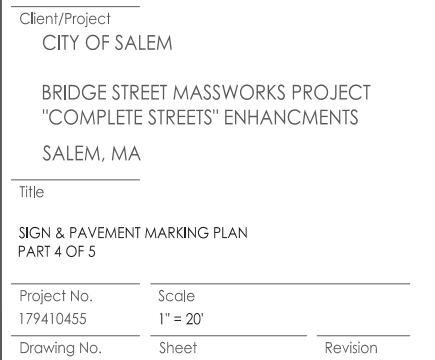


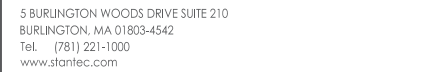
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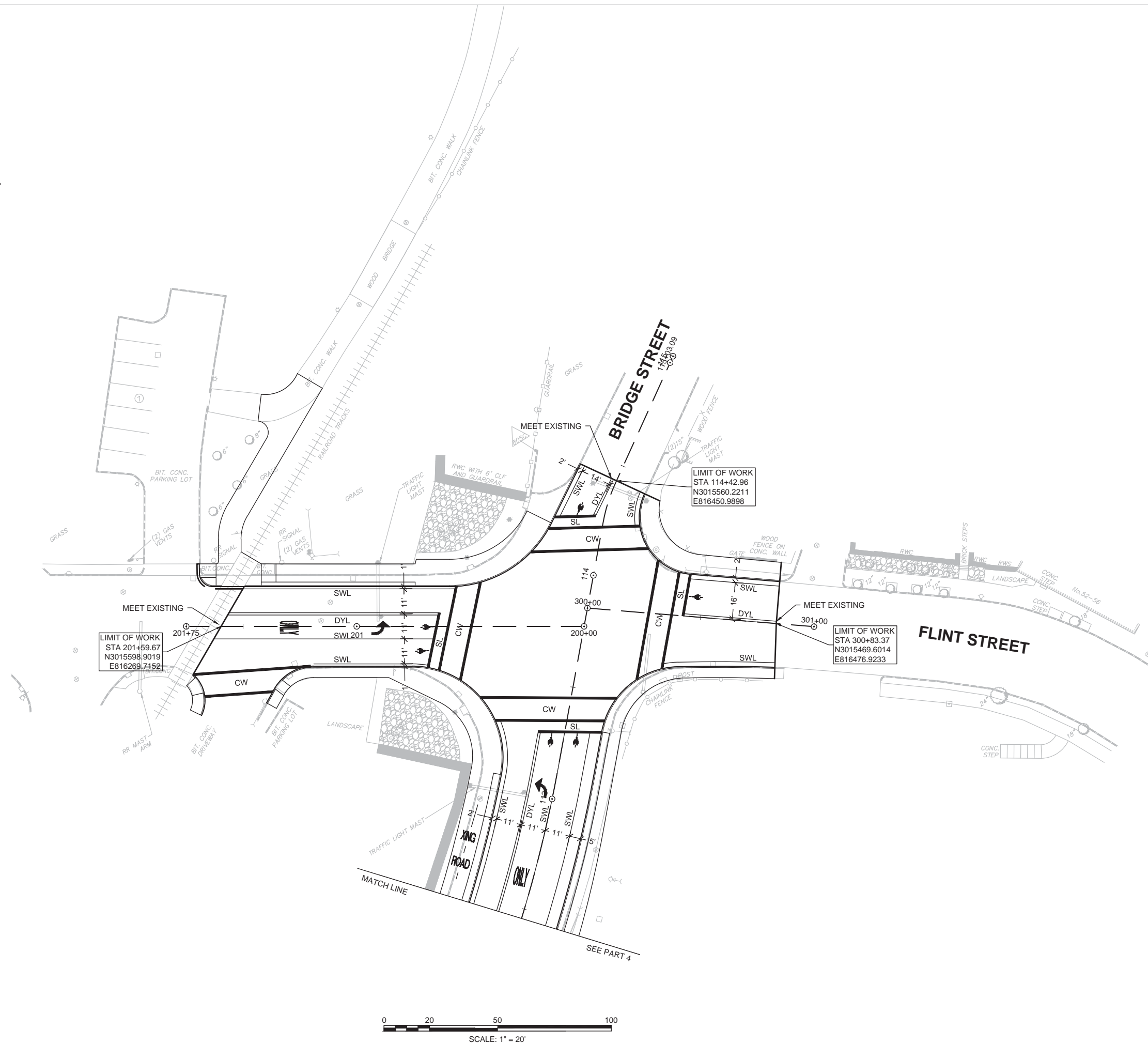
BRIDGE STREET MASSWORKS PROJECT  
"COMPLETE STREETS" ENHANCEMENTS  
SALEM, MA

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Title

SIGN & PAVEMENT MARKING PLAN  
PART 5 OF 5

Project No.	Scale	
179410455	1" = 20'	
Drawing No.	Sheet	Revision



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BRIDGE STREET MASSWORKS PROJECT  
"COMPLETE STREETS" ENHANCMENTS  
SALEM, MA

Title

SIGN & PAVEMENT MARKING PLAN  
SIGN SUMMARY

Project No. 179410455	Scale NOT TO SCALE
Drawing No.	Sheet Revision

IDENTIFI- CATION NUMBER	SIZE OF SIGN		SIGN	LEGEND DIMENSIONS			NUMBER OF SIGNS REQUIRED	COLOR			SUPPORT AND NUMBER REQUIRED	AREA IN SQUARE FEET
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW		BACK- GROUND	LEGEND	BORDER		
R1-1 (BIKE)	18"	18"		SEE MUTCD	SEE MUTCD	SEE MUTCD	2	SEE MUTCD	SEE MUTCD	SEE MUTCD	1-P5 2	10.50
R3-7L	30"	30"					6				1-P5 6	37.50
R3-7R	30"	30"					2				1-P5 2	12.50
R3-8b	48"	30"					2				2-P5 2	20.00
R4-7	24"	30"					2				1-P5 2	10.00
R10-11b	24"	24"		↓	↓	↓	4	↓	↓	↓	MOUNT 1 WITH R7-5R (2-HOUR)	16.00
MA-R10-12a	30"	36"		SEE MASSDOT STDS.	SEE MASSDOT STDS.	SEE MASSDOT STDS.	4	SEE MASSDOT STDS.	SEE MASSDOT STDS.	SEE MASSDOT STDS.	MOUNT 4 ON MAST ARM	30.00
R10-22	12"	18"		SEE MUTCD	SEE MUTCD	SEE MUTCD	7	SEE MUTCD	SEE MUTCD	SEE MUTCD	MOUNT 5 WITH OTHERS 1-P5 2	10.50
W11-2	30"	30"		SEE MUTCD	SEE MUTCD	SEE MUTCD	6	SEE MUTCD	SEE MUTCD	SEE MUTCD	MOUNT 6 ON RRFB	37.50
W16-7pL	24"	12"		↓	↓	↓	2	↓	↓	↓	MOUNT 2 WITH W11-2	4.00
W16-7pR	24"	12"		↓	↓	↓	2	↓	↓	↓	MOUNT 2 WITH W11-2	4.00



Revision	By	Appd.	YY.MM.DD

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File Name:	Dwn.	Chkd.	Orgn.	YY.MM.DD
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Client/Project  
CITY OF SALEM

BRIDGE STREET MASSWORKS PROJECT  
"COMPLETE STREETS" ENHANCEMENTS

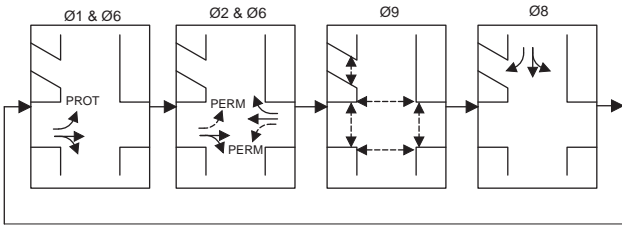
SALEM, MA

Title

TRAFFIC SIGNAL PLAN  
LOCATION 1 - BRIDGE STREET AT BOSTON STREET

Project No. 179410455	Scale 1" = 20'
Drawing No.	Sheet
	Revision

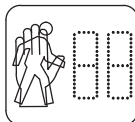
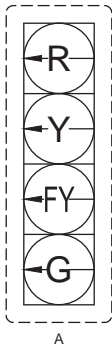
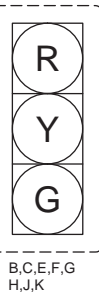
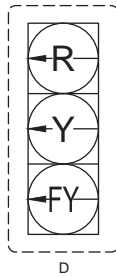
PREFERENTIAL PHASING SEQUENCE



→ VEHICLE MOVEMENT  
→ PEDESTRIAN MOVEMENT - UPON PEDESTRIAN ACTUATION

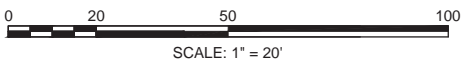
MAJOR ITEM LIST	
QTY.	DESCRIPTION
1	TRAFFIC SIGNAL CONTROLLER (TS-2, TYPE 1) TYPE 8DW W/ 8DW CABINET, & CEM CONC FOUNDATION
1	MALFUNCTION MANAGEMENT UNIT (CAPABLE OF FLASHING YELLOW ARROW)
1	30 FT MAST ARM (STEEL) WITH R10-12a SIGN, INCLUDE BASE AND CEM CONCRETE FOUNDATION
1	35 FT MAST ARM (STEEL) INCLUDE BASE AND CEM CONCRETE FOUNDATION
1	40 FT MAST ARM (STEEL) INCLUDE BASE AND CEM CONCRETE FOUNDATION
4	8 FT TRAFFIC SIGNAL POST, ORNAMENTAL BASE & CEM CONC FOUNDATION
2	10 FT TRAFFIC SIGNAL POST, ORNAMENTAL BASE & CEM CONC FOUNDATION
9	1-WAY, 3 SECTION SIGNAL HEAD, 12" L.E.D. LENS (W/ VISORS)
1	1-WAY, 4 SECTION SIGNAL HEAD, 12" L.E.D. LENS (W/ VISORS)
10	5" NON-LOUVERED BACKPLATES WITH 3" RETROREFLECTIVE (YELLOW) BORDER
10	PEDESTRIAN SIGNAL HEAD (L.E.D.), WITH COUNTDOWN DISPLAY
10	ACCESSIBLE PEDESTRIAN SIGNAL PUSH BUTTON ASSEMBLY (INCL. SIGN & SADDLE)
1	PRE-EMPTION PHASE SELECTOR
1	EMERGENCY PRE-EMPTION CONFIRMATION STROBE
3	EMERGENCY PRE-EMPTION RECEIVERS
1	SERVICE CONNECTION (UNDERGROUND - ELECTRIC)

SIGNAL FACES

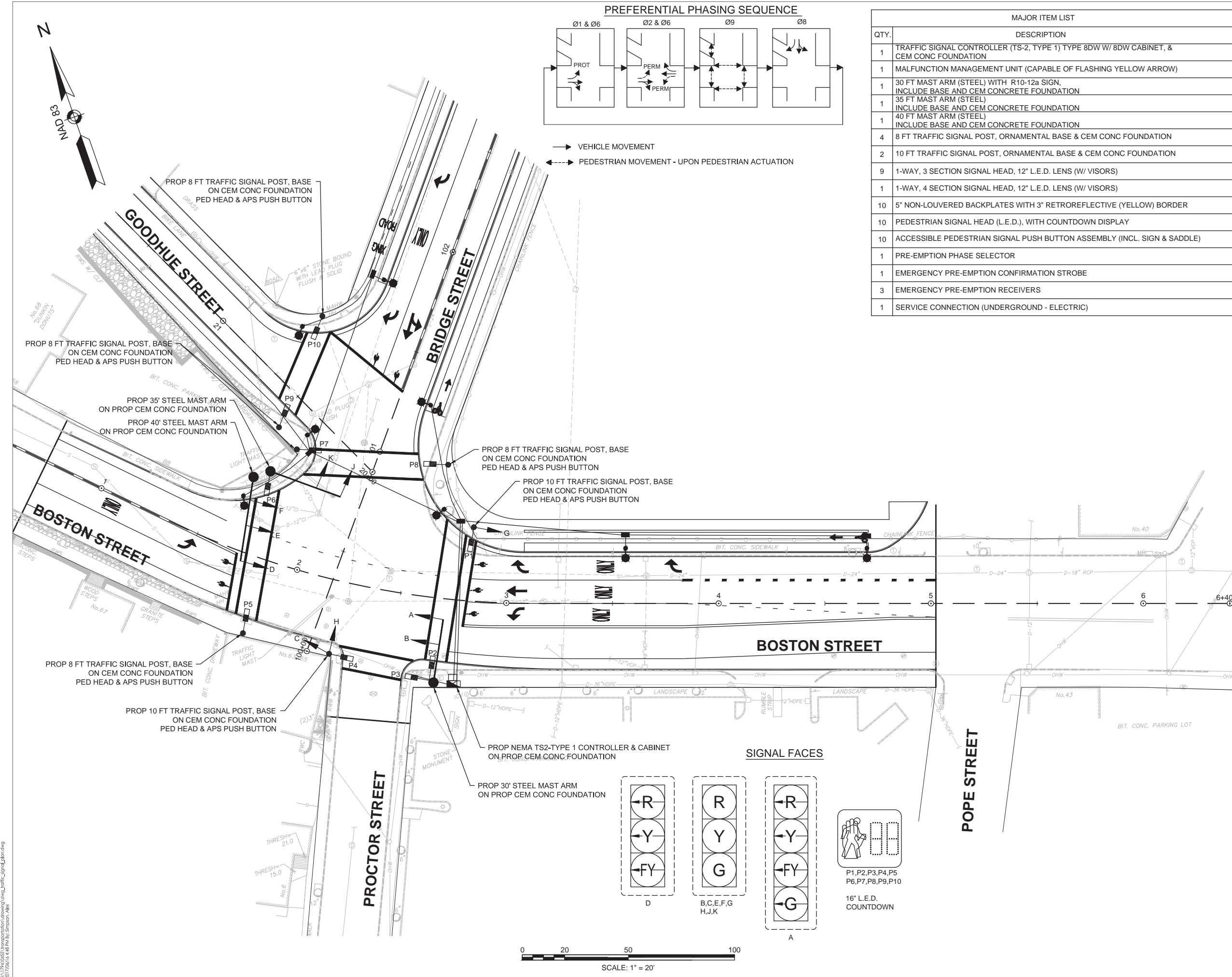


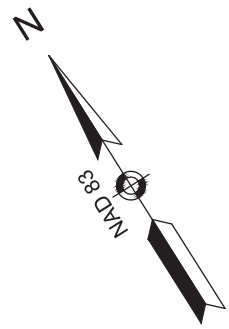
P1, P2, P3, P4, P5  
P6, P7, P8, P9, P10

16" L.E.D.  
COUNTDOWN



SCALE: 1" = 20'





MAJOR ITEM LIST	
QTY.	DESCRIPTION
1	TRAFFIC SIGNAL CONTROLLER (TS-2, TYPE 1) TYPE 8DW W/ 8DW CABINET, & CEM CONC FOUNDATION
1	MALFUNCTION MANAGEMENT UNIT (CAPABLE OF FLASHING YELLOW ARROW)
2	20 FT MAST ARM (STEEL) INCLUDE BASE AND CEM CONCRETE FOUNDATION
1	25 FT MAST ARM (STEEL) WITH R10-12a SIGN, INCLUDE BASE AND CEM CONCRETE FOUNDATION
1	35 FT MAST ARM (STEEL) INCLUDE BASE AND CEM CONCRETE FOUNDATION
5	8 FT TRAFFIC SIGNAL POST, ORNAMENTAL BASE & CEM CONC FOUNDATION
2	10 FT TRAFFIC SIGNAL POST, ORNAMENTAL BASE & CEM CONC FOUNDATION
11	1-WAY, 3 SECTION SIGNAL HEAD, 12" L.E.D. LENS (W/ VISORS)
1	1-WAY, 4 SECTION SIGNAL HEAD, 12" L.E.D. LENS (W/ VISORS)
12	5" NON-LOUVERED BACKPLATES WITH 3" RETROREFLECTIVE (YELLOW) BORDER
8	PEDESTRIAN SIGNAL HEAD (L.E.D.), WITH COUNTDOWN DISPLAY
8	ACCESSIBLE PEDESTRIAN SIGNAL PUSH BUTTON ASSEMBLY (INCL. SIGN & SADDLE)
1	PRE-EMPTION PHASE SELECTOR
1	EMERGENCY PRE-EMPTION CONFIRMATION STROBE
4	EMERGENCY PRE-EMPTION RECEIVERS
1	SERVICE CONNECTION (UNDERGROUND - ELECTRIC)



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Notes

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File Name:	Dwn.	Chkd.	Orgn.	YY.MM.DD

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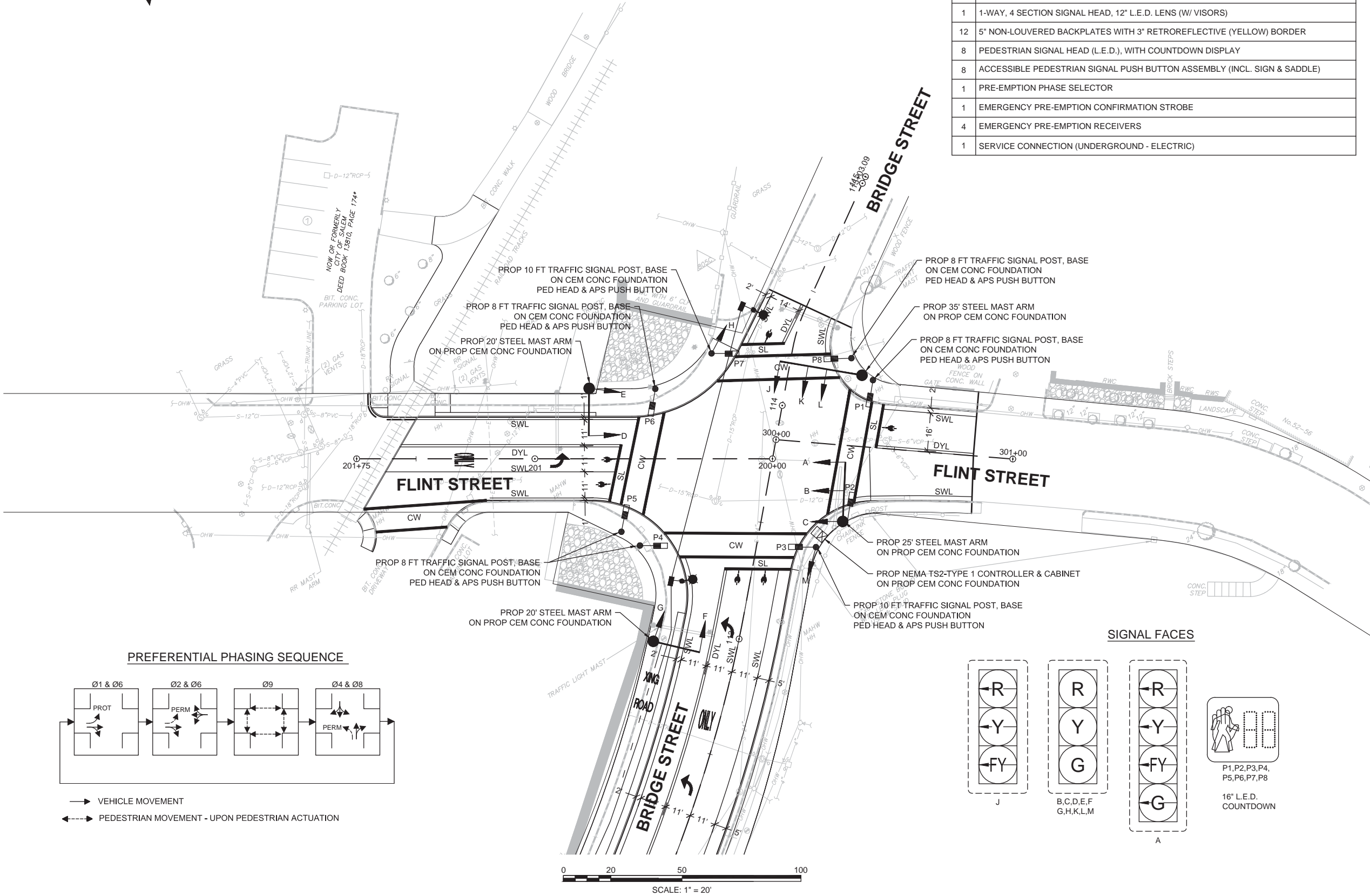
BRIDGE STREET MASSWORKS PROJECT  
"COMPLETE STREETS" ENHANCEMENTS

SALEM, MA

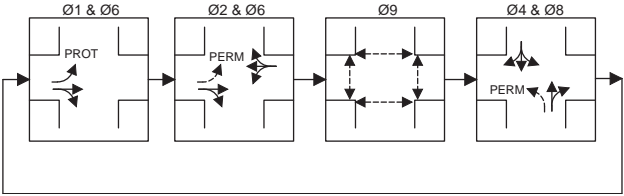
Title

TRAFFIC SIGNAL PLAN  
LOCATION 2 - BRIDGE STREET AT FLINT STREET

Project No. 179410455	Scale 1" = 20'	Revision
Drawing No.	Sheet	

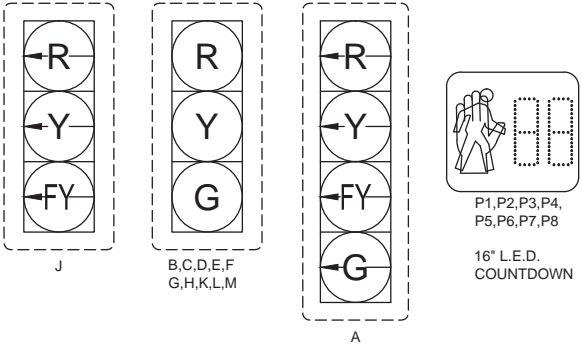


PREFERENTIAL PHASING SEQUENCE



→ VEHICLE MOVEMENT  
--- PEDESTRIAN MOVEMENT - UPON PEDESTRIAN ACTUATION

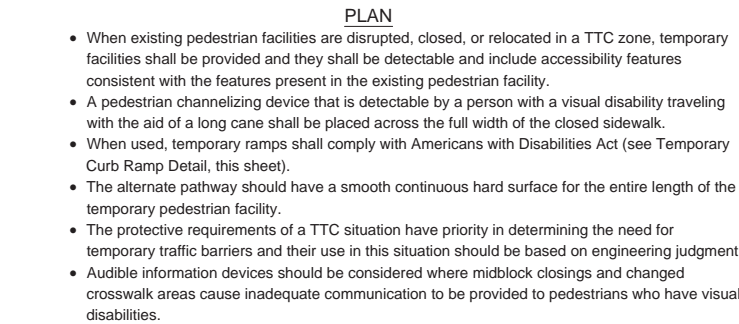
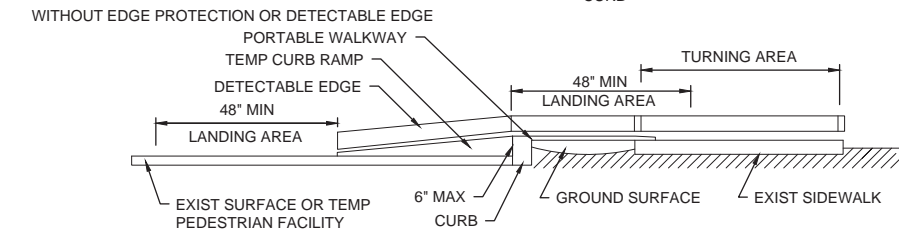
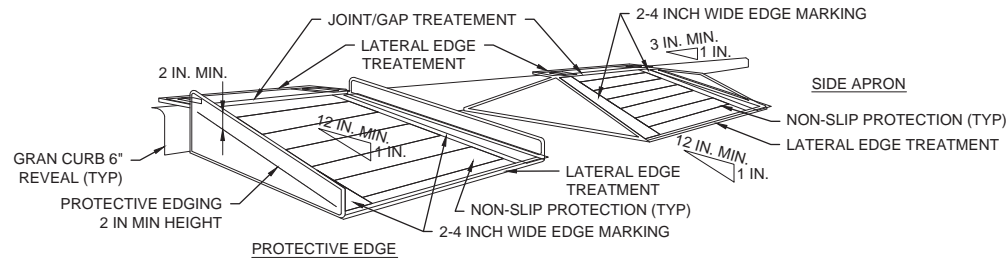
SIGNAL FACES



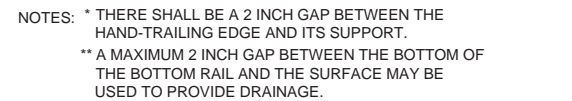
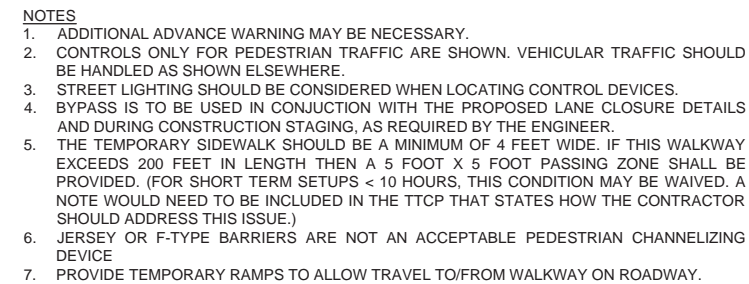


1. CURB RAMPS SHALL BE 60 IN. MINIMUM WIDTH WITH A FIRM, STABLE AND NON-SLIP SURFACE.
2. PROTECTIVE EDGING WITH A 2 IN. MINIMUM HEIGHT SHALL BE INSTALLED WHEN THE CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6 IN. OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN THE CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3 IN. OR MORE.
3. DETECTABLE EDGING WITH 6 IN. MINIMUM HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
4. CURB RAMPS AND LANDINGS SHOULD HAVE A 1:50 (2%)

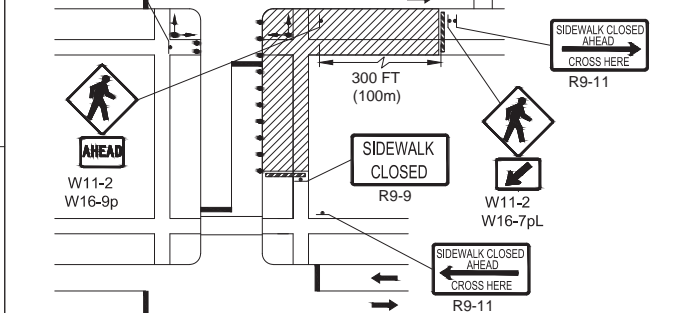
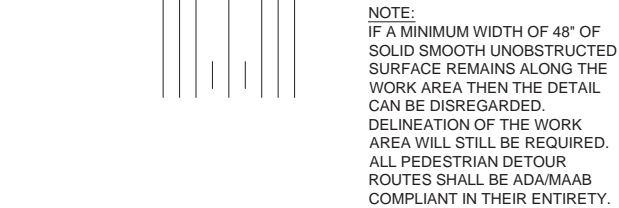
- MAX CROSS-SLOPE.
5. CLEAR SPACE OF 48x48 IN. MINIMUM SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
6. THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A CONTRASTING COLOR 2 TO 4 IN. WIDE MARKING. THE MARKING IS OPTIONAL WHERE COLOR CONTRASTING EDGING IS USED.
7. WATER FLOW IN THE GUTTER SYSTEM SHALL HAVE MINIMAL RESTRICTION.
8. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 0.5 IN. WIDTH.
9. 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.



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.



PEDESTRIAN CHANNELIZING DEVICE  
NOT TO SCALE



**NOTE:**  
FOR LONG-TERM STATIONARY WORK, THE DOUBLE  
YELLOW CENTERLINE AND/OR LANE LINES SHOULD BE  
REMOVED BETWEEN THE CROSSWALK LINES.

PEDESTRIAN DETOUR PLAN  
NOT TO SCALE

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[illegible]

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BRIDGE STREET MASSWORKS PROJECT  
"COMPLETE STREETS" ENHANCEMENTS

SALEM, MA

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Title

TEMPORARY TRAFFIC CONTROL PLAN  
TYPICAL DETAILS PART 1 OF 2

Project No.	Scale
179410455	NOT TO SCALE
Drawing No.	Sheet
	Revision



NOTES:

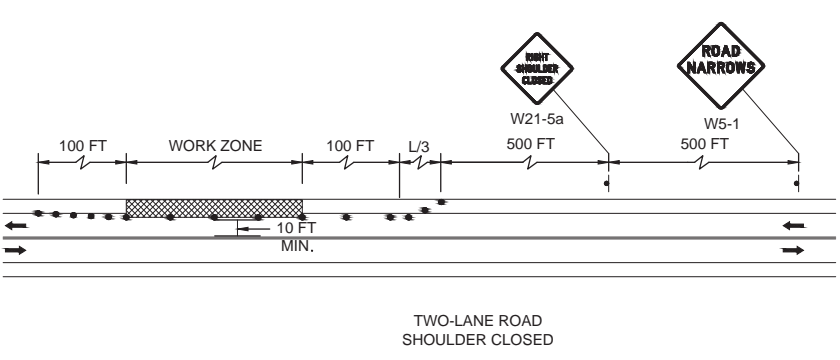
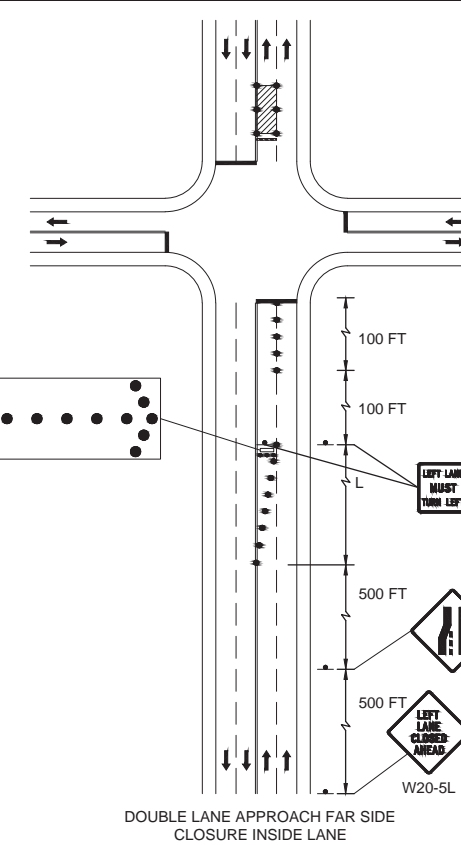
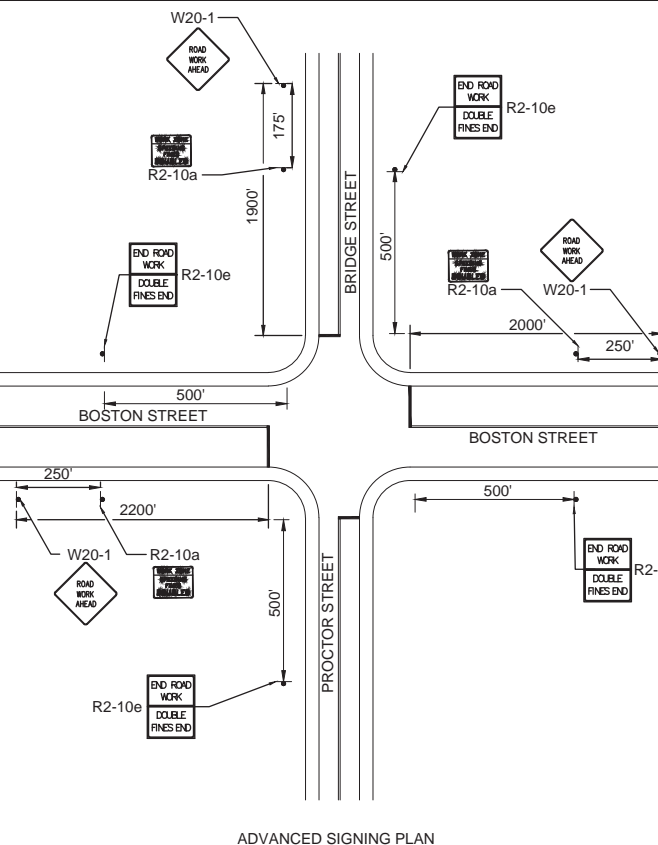
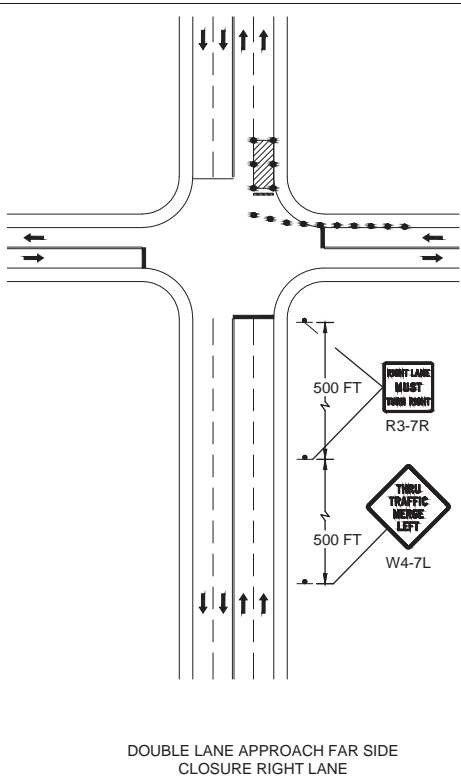
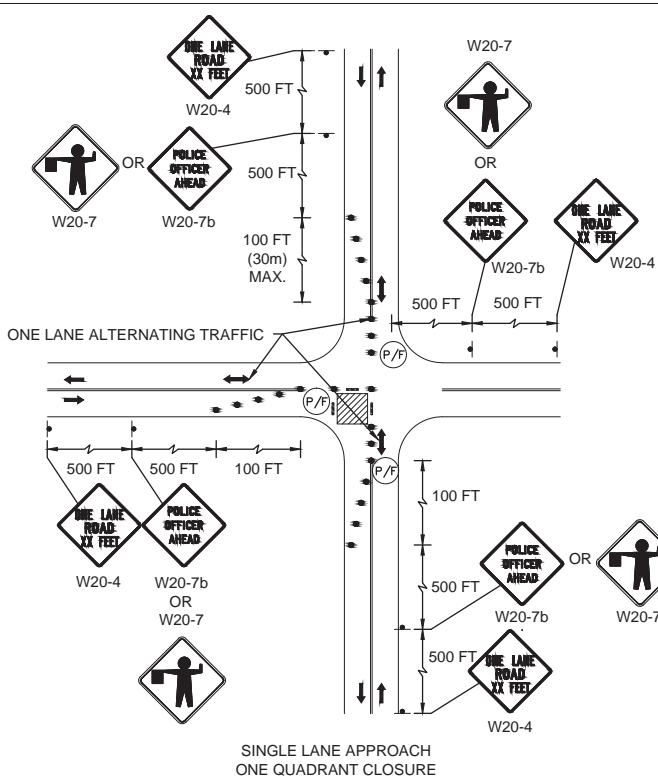
- ALL TEMPORARY TRAFFIC CONTROL WORK SHALL CONFORM TO THE 2009 "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND ALL REVISIONS, THE MASSACHUSETTS AMENDMENTS TO THE 2009 MUTCD, AND MASSDOT STANDARDS.
- ALL SIGN LEGENDS, BORDERS AND MOUNTING SHALL BE IN ACCORDANCE WITH THE 2009 MUTCD, THE MASSACHUSETTS AMENDMENTS TO THE 2009 MUTCD, AND MASSDOT STANDARDS.
- 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 ROADWAY OR COVERED WHEN THEY ARE NOT REQUIRED FOR CONTROL OF TRAFFIC.
- SIGNS AND SIGN SUPPORTS LOCATED ON OR NEAR THE TRAVELED WAY, AND REFLECTORIZED PLASTIC DRUMS WITH LIGHTING DEVICES MOUNTED ON THEM, MUST PASS THE CRITERIA SET FORTH IN NCHRP REPORT 350, "RECOMMENDED PROCEDURES FOR THE SAFETY PERFORMANCE EVALUATION OF HIGHWAY FEATURES."
- CONTRACTORS SHALL NOTIFY EACH ABUTTER AT LEAST 24 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE THE TEMPORARY CLOSURE OF ACCESS, SUCH AS CONDUIT INSTALLATION, EXISTING PAVEMENT EXCAVATION, TEMPORARY DRIVEWAY PAVEMENT PLACEMENT AND SIMILAR OPERATIONS.
- THE FIRST FIVE PLASTIC DRUMS OF A TAPER SHALL BE MOUNTED WITH TYPE A LIGHTS.
- 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 10 FEET UNLESS OTHERWISE SHOWN. MINIMUM LANE WIDTH TO BE MEASURED FROM THE EDGE OF DRUMS OR MEDIAN BARRIER.
- ALL SIGNS SHALL BE MOUNTED ON THEIR OWN STANDARD SIGN SUPPORTS.
- ALL TEMPORARY WALKWAYS SHALL MEET ADA/AAB GUIDELINES.
- DETAILS SHOWN ON THIS PLAN ARE NOT TO SCALE.
- ADA COMPLIANT PEDESTRIAN ACCESS SHALL BE MAINTAINED AT ALL TIMES, INCLUDING PEDESTRIAN GUIDANCE SYSTEMS AT WORK ZONES.
- SIGN DISTANCES A AND B SHOULD BE 500 FT ALONG NEEDHAM STREET AND 350 FT ALONG OAK STREET AND CHRISTINA STREET.

TAPER LENGTH CRITERIA FOR TEMPORARY TRAFFIC CONTROL ZONES

TYPE OF TAPER	TAPER LENGTH (L)
MERGING TAPER	AT LEAST L
SHIFTING TAPER	AT LEAST 0.5L
SHOULDER TAPER	AT LEAST 0.33L
ONE-LANE, TWO-WAY TRAFFIC TAPER	100 FT MAXIMUM
DOWNSTREAM TAPER	100 FT PER LANE

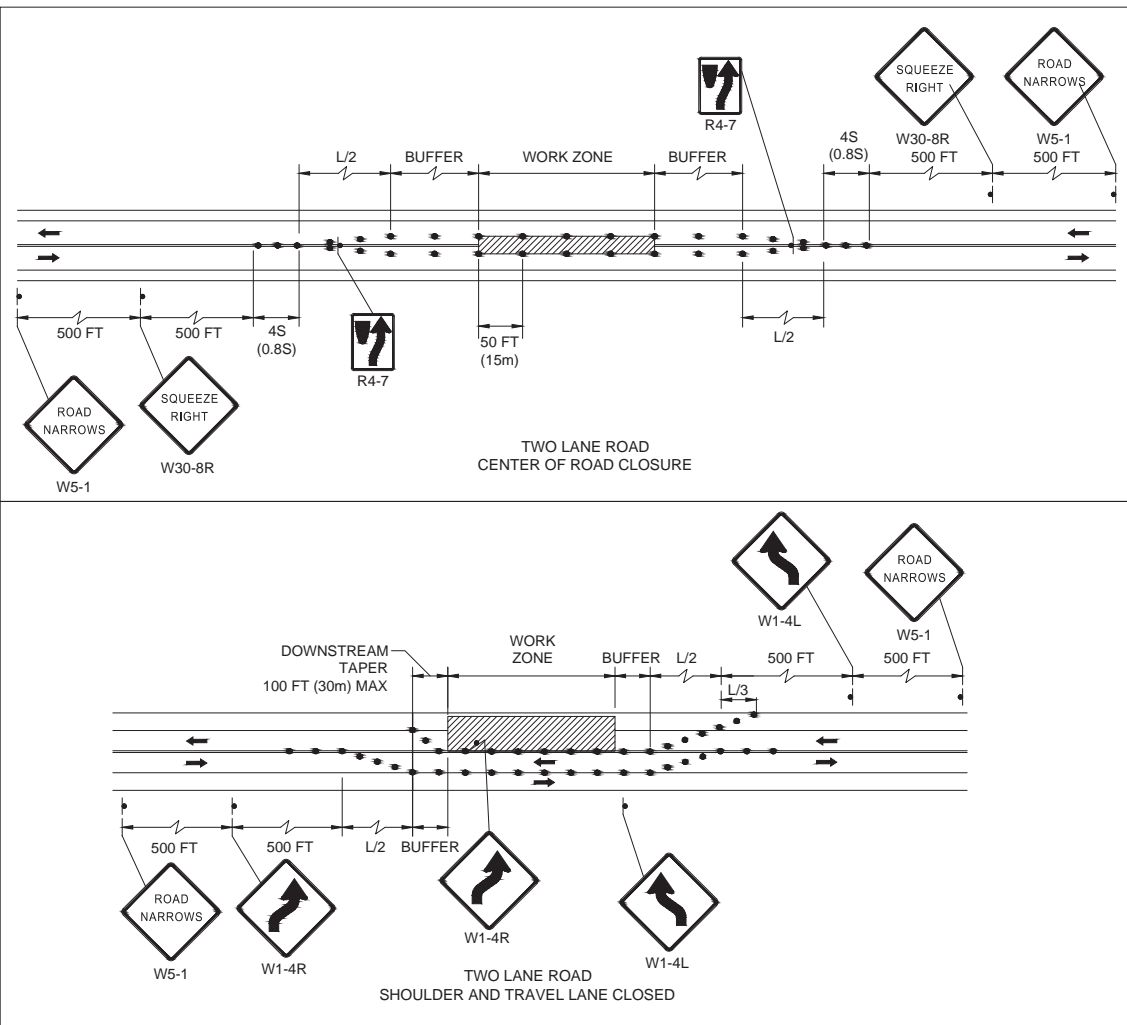
FORMULAS FOR DETERMINING TAPER LENGTHS

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



LEGEND

- REFLECTORIZED DRUM
- DIRECTION OF TRAFFIC FLOW
- WORK ZONE
- POLICE OFFICER OR FLAGGER
- CONSTRUCTION SIGN
- FLASHING ARROW BOARD



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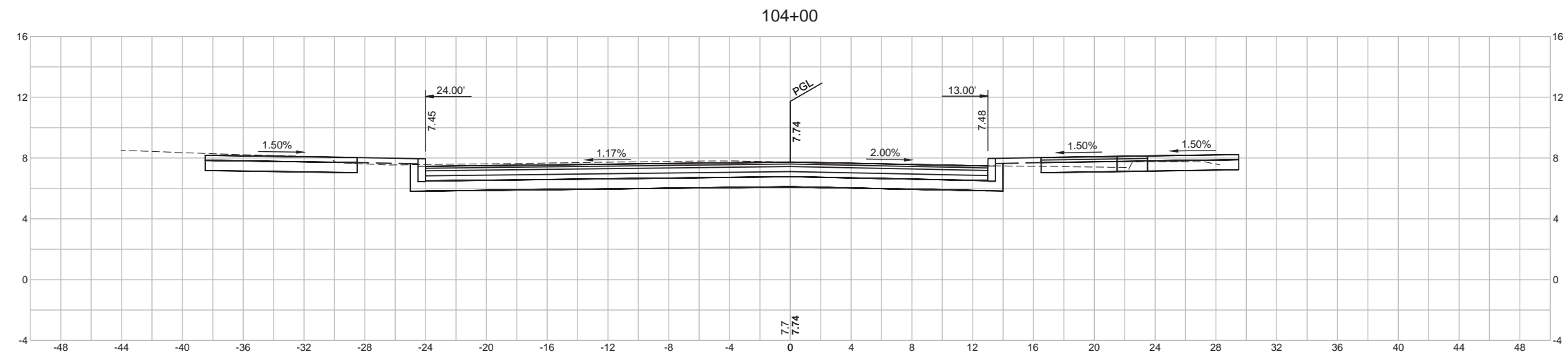


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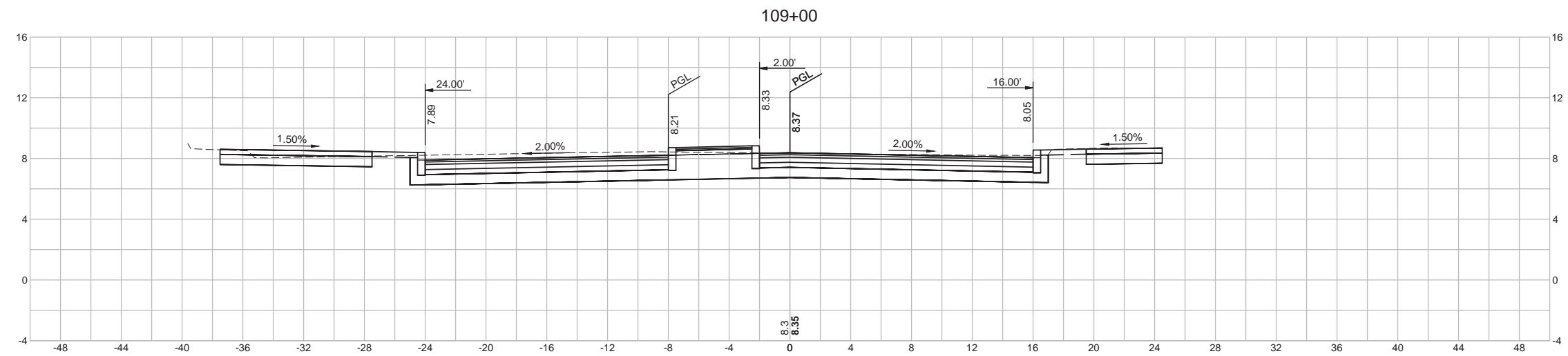
BRIDGE STREET MASSWORKS PROJECT  
"COMPLETE STREETS" ENHANCMENTS  
SALEM, MA

Title  
CROSS SECTIONS  
PART 1 OF 1

Project No. 179410455	Scale H: 1"=4' V: 1"=4'	Revision
Drawing No.	Sheet	



SECTION A-A - BRIDGE STREET  
STA. 104+00±



SECTION B-B - BRIDGE STREET  
STA. 109+00±

