STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BANGOR-BREWER
PENOBSCOT COUNTY
JOSHUA CHAMBERLAIN BRIDGE
OVER
PENOBSCOT RIVER
US 1A & ROUTE 9
FEDERAL AID PROJECT NO. BH-1832(000)X
PROJECT LENGTH 0.000 mi.
BRIDGE NO. 5312

WIN 18320.00

BH-1832(000)X

LOADING

Live Load ..... HS 20 (from existing plans)

TRAFFIC DATA

Current (2012) AADT 14,690

MATERIALS

Structural Steel:
All Material (except as noted)..... ASTM A 709, Grade 50W (unpainted)
High Strength Bolts ..... ASTM A 325, Type 3

UTILITIES

Bangor Water District
Maine Central Railroad
Bangor Hydro - Electric Company
City of Bangor (Sewer & Lights)
Maine Fiber Company (Future)

Time Warner Cable
City of Brewer (Lights)
Oxford Networks
Fairpoint Communications

MAINTENANCE OF TRAFFIC

Maintain one 12'-0" wide lane of one - way traffic.

LIST OF DRAWINGS

PROJECT LOCATION:	Towns of Bangor & Brewer which carries US 1A and Rte 9 over the Penobscot River. Lat. 44°47'46.70"/ Long. -68°46'05.4"
PROGRAM AREA:	Bridge Program
OUTLINE OF WORK:	Painting and repair of Joshua Chamberlain bridge #5312 in Bangor which carries US 1A and Rte 9 over the Penobscot River.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

APPROVED
COMMISSIONER: DATE 11/7/12
CHIEF ENGINEER: DATE 11/14/2012

STATE OF MAINE · Michael Henry Wight · 8089 · REGISTERED PROFESSIONAL ENGINEER

Michael Wight
SIGNATURE 8089
P.E. NUMBER 11/14/2012
DATE

PROJECT INFORMATION

PROGRAM	BRIDGE PROGRAM
PROJECT MANAGER	MHW
DESIGNER	
CONSULTANT	
PROJECT RESIDENT	
CONTRACTOR	
PROJECT COMPLETION DATE	

BANGOR-BREWER
JOSHUA CHAMBERLAIN BRIDGE

TITLE SHEET

SHEET NUMBER
1
OF 18

ITEM NO.	ESTIMATED QUANTITIES DESCRIPTION	QUANTITY	UNIT
201.23	REMOVING SINGLE TREE TOP ONLY	2	EA
202.14	REMOVING EXISTING RAILINGS (PROPERTY OF CONTRACTOR)	340	LF
504.81	REMOVAL OF RIVETS & REPLACEMENT W/HIGH-STRENGTH BOLTS	170	EA
504.811	STRUCTURAL STEEL REPAIR	2090	LB
504.842	NEW HIGH STRENGTH BOLT	152	EA
506.144	FIELD PAINTING NEW AND EXISTING STRUCTURAL STEEL	1	LS
506.17	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL	1	LS
506.18	CONTAINMENT AND POLLUTION CONTROL	1	LS
506.191	DISPOSAL OF SPECIAL WASTE OR HAZARDOUS WASTE MATERIAL	1	LS
507.084	STEEL PIPE HAND RAILING	340	LF
510.10	SP. DET. 14 FT. ROADWAY WIDTH VEH. & PED. TRAFFIC NOT SEP.	1	LS
526.301	TEMPORARY CONCRETE BARRIER - TYPE I (500 LF)	1	LS
527.34	WORK ZONE CRASH CUSHIONS	4	UN
607.503	INSPECTION ACCESS GATE (Bangor Abutment)	1	EA
607.503	INSPECTION ACCESS GATE (Brewer Abutment)	1	EA
627.511	TEMPORARY PAVEMENT LINE TAPE, YELLOW OR WHITE	410	SF
627.512	REMOVABLE BLACK LINE MASKING TAPE	895	SF
627.513	TEMPORARY PAVEMENT MARKING TAPE, YELLOW OR WHITE	615	SF
627.733	4 INCH WHITE OR YELLOW PAINTED PAVE MRK LINE	450	LF
627.75	WHITE OR YELLOW PAVEMENT AND CURB MARKING	410	SF
627.77	REMOVING PAVEMENT MARKINGS	50	SF
627.811	TEMPORARY BI-DIRECTIONAL YELLOW DELINEATORS	50	EA
627.812	TEMPORARY BI-DIRECTIONAL WHITE DELINEATORS	50	EA
639.18	FIELD OFFICE TYPE A	1	EA
643.711	TRAFFIC SIGNAL MODIFICATION (TEMPORARY)	1	LS
652.31	TYPE I BARRICADE	10	EA
652.311	TYPE II BARRICADE	8	EA
652.312	TYPE III BARRICADE	8	EA
652.33	DRUM	100	EA
652.34	CONE	25	EA
652.35	CONSTRUCTION SIGNS	1000	SF
652.361	MAINTENANCE OF TRAFFIC CONTROL DEVICES	1	LS
652.38	FLAGGER	200	HR
652.381	TRAFFIC OFFICERS	80	HR
652.41	PORTABLE CHANGEABLE MESSAGE SIGN	4	EA
659.10	MOBILIZATION	1	LS
660.21	ON-THE-JOB TRAINING (BID)	1000	HR

GENERAL CONSTRUCTION NOTES

1) The steel portions of the existing bridge are coated with a lead-based paint system. The Contractor is responsible for the containment, proper management and disposal of all lead-contaminated hazardous waste generated by the process of removal of the bridge rail. The Contractor is responsible for implementing appropriate OSHA mandated personal protection standards related to this process. Once the existing bridge rail is removed at designated locations, the Contractor is solely responsible for the care, custody and control of the components of the existing bridge and any hazardous waste generated as a result of the storage, recycling or disposal of the bridge components, including lead-coated steel. The Contractor shall recycle or reuse the steel in accordance with the Maine Department of Environmental Protection's "Maine Hazardous Waste management Regulation," Chapter 850. A copy of this regulation is available at MaineDOT's offices on Child Street in Augusta. Payment for all labor, materials, equipment and other costs required to remove and dispose of lead based paint coated steel components will be considered incident to related contract items.

2) Prior to re-coating any bridge bearings, bearing seat areas shall be removed of all debris. This work shall be considered incidental to the related 506 Contract items.

3) The bridge drain downspouts consist of galvanized steel and shall not be painted.

4) Existing plans are available at the Maine DOT web address: http://www.maine.gov/mdot/contractors/*projecttbl

5) The Contractor shall field weld the toe and/or kick plates attached to the rail posts at locations where the existing welds are broken as directed by the Resident. The weld shall be a $\frac{5}{16}$ inch fillet weld between the top of the kick plate and the rail posts. Most of the toe/kick plates are hot dip galvanized. This work shall be done in accordance with Maine Department of Transportation Standard Specifications section 504-Structural Steel. This work shall not be paid for directly, but considered incidental to related contract items.

6) The following trees shall be removed and paid for under item 201.23 Removing Single Tree Top Only:

Station 25+00, 30'+/- left
Station 40+80, 32'+/- left

7) The Contractor shall replace missing or damaged bolts that attach the existing bridge and/or approach rail to the rail posts as directed by the Resident. The anticipated number of bolts to be replaced is approximately twenty. This work shall be done in accordance with Special Provision 507 Railing - Steel Pedestrian Railing. This work will not be paid for directly, but shall be considered incidental to related contract items.

8) The approximate total weight of structural steel is 1,140 tons.

Filename: ...\BRIDGE\MSTA\002_Estimate.dgn Division: BRIDGE Username: David.Shaw Date:11/20/2012

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BH-1832(000)X

WIN 18320.00

BRIDGE NO. 5312

BRIDGE PLANS

PROJ. MANAGER	S. BRIDGE	BY	DATE
DESIGN-DETAILED	M. WIGHT	D. SHAW	
CHECKED-REVIEWED	-----	-----	----- SIGNATURE
DESIGN2-DETAILED2	-----	-----	-----
DESIGN3-DETAILED3	-----	-----	----- P.E. NUMBER
REVISIONS 1	-----	-----	-----
REVISIONS 2	-----	-----	----- DATE
REVISIONS 3	-----	-----	-----
REVISIONS 4	-----	-----	-----
FIELD CHANGES	-----	-----	-----

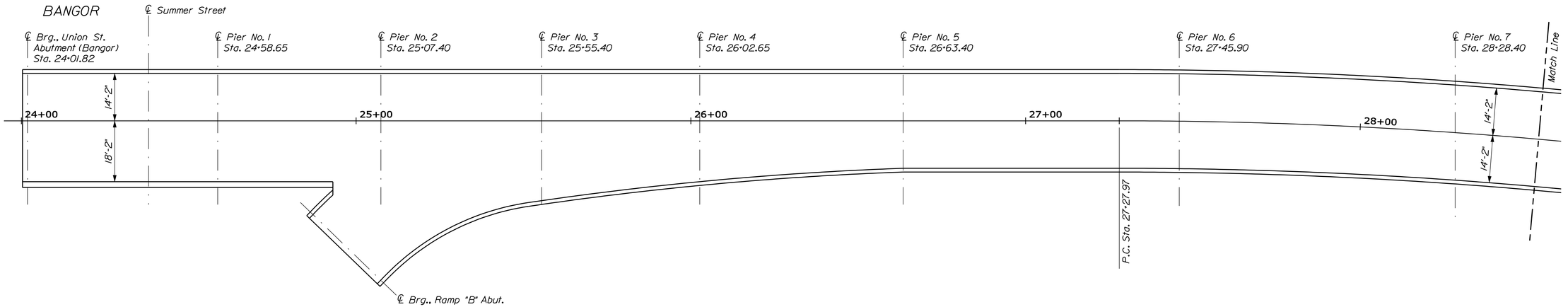
JOSHUA CHAMBERLAIN BRIDGE
PENOBSCOT RIVER
BANGOR-BREWER PENOBSCOT COUNTY

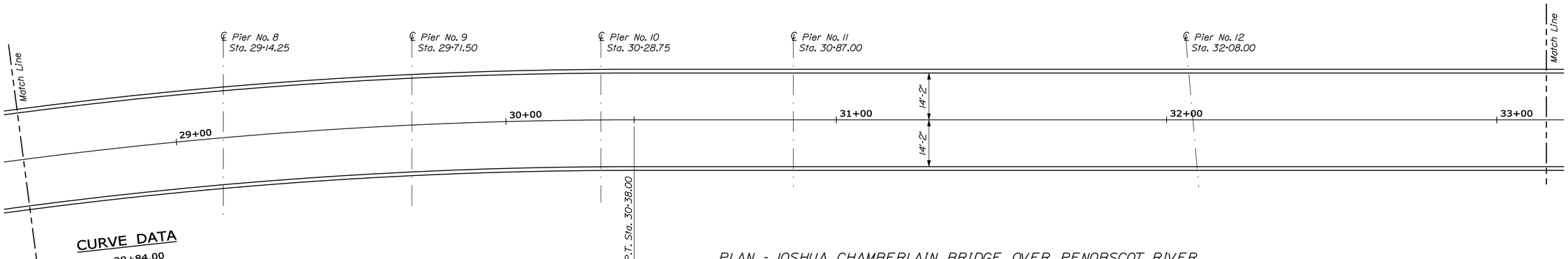
ESTIMATED QUANTITIES AND GENERAL CONSTRUCTION NOTES

SHEET NUMBER

2

OF 18

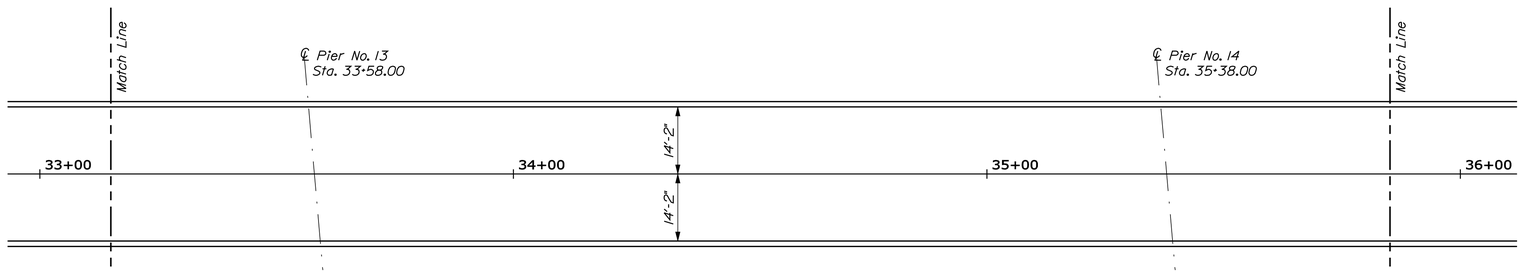


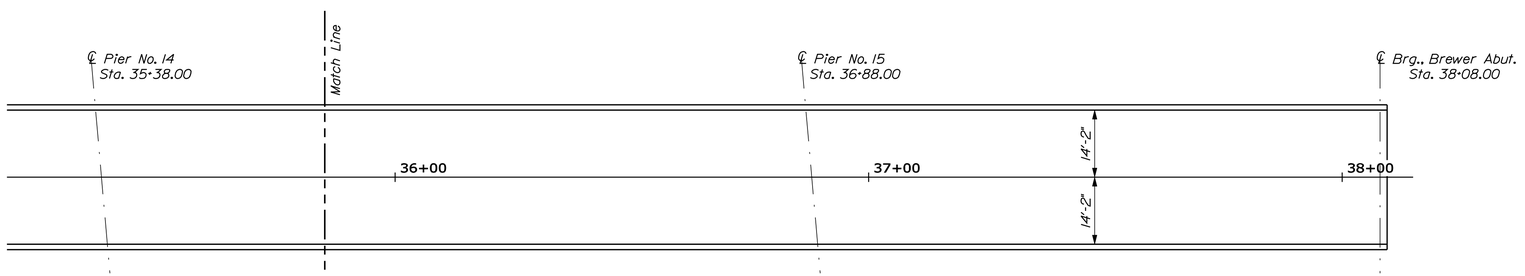


CURVE DATA

PI = 28+84.00
D = 4° - 00'
Δ = 12° - 26' Rt.
R = 1432.39'
T = 156.03'
L = 310.83'

PLAN - JOSHUA CHAMBERLAIN BRIDGE OVER PENOBSCOT RIVER





BREWER

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BH-1832(000)X

PIN 18320.00

BRIDGE NO. 5312

BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	S. BODGE	
DESIGN-DETAILED	M. WIGHT	
CHECKED-REVIEWED	D. SHAW	-----
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

JOSHUA CHAMBERLAIN BRIDGE
PENOBSCOT RIVER
BANGOR-BREWER PENOBSCOT COUNTY

GENERAL PLAN

SHEET NUMBER

3

OF 18

Filename: ...\MSTA\003_General_Plan.dgn Division: BRIDGE Username: David.Shaw Date:11/20/2012

GRAPHIC SCALE

400 0 200 400 800 1600

(IN FEET)

1 inch = 400 ft.

TRAFFIC SIGNAL NOTES:

1. ALL WORK PERFORMED UNDER THIS CONTRACT TO BE GOVERNED BY AND IN CONFORMITY WITH THE MAINE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS (DECEMBER 2002), STANDARD DETAILS HIGHWAYS AND BRIDGES (DECEMBER 2002) AND SUPPLEMENTAL THERETO EXCEPT AS MODIFIED ON THE PLANS AND IN THE SPECIAL PROVISIONS.
2. ALL PAVEMENT MARKINGS SHALL BE IN ACCORDANCE TO MEDOT STANDARD SPECIFICATION & STANDARD DETAILS SECTION 627 & THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, 2009 EDITION.
3. ALL SIGNAL MODIFICATIONS SHALL BE IN ACCORDANCE TO MEDOT STANDARD SPECIFICATION & STANDARD DETAILS SECTION 643 & THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, 2009 EDITION.
4. THE CONTRACTOR SHALL INSTALL THE LOCAL CONTROLLER SIGNAL TIMING VALUES SHOWN ON THE PLANS. THE SIGNAL CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A 72 HOUR NOTICE OF WHEN THEY WILL BE INSTALLING TIMING PLANS.
5. ENGINEER WILL MONITOR TRAFFIC OPERATIONS ONCE EVENT TIMING PLANS HAVE BEEN INSTALLED. SIGNAL CONTRACTOR SHALL BE AVAILABLE FOR A TWO WEEK PERIOD FOLLOWING EACH TIMING INSTALLATION TO ADJUST TIMINGS BASED ON ENGINEER'S RECOMMENDATION OF ACTUAL FIELD CONDITIONS.

LEGEND OF TRAFFIC SIGNALS
REQUIRING TIMING MODIFICATIONS

- TRAFFIC SIGNAL INCLUDED IN DOWNTOWN COORDINATED SYSTEM
- TRAFFIC SIGNAL INCLUDED IN PENOBSCOT COORDINATED SYSTEM
- ISOLATED INTERSECTION

MAIN & WATER STREETS
SEE SHEET 6

MAIN & UNION STREETS
SEE SHEET 5

MAIN & CEDAR STREETS
SEE SHEET 5

WASHINGTON & BROAD STREETS
SEE SHEET 10

WASHINGTON & EXCHANGE STREETS
SEE SHEET 10

LOCATION OF BRIDGE
PAINTING PROJECT

WILSON & MAIN STREETS
SEE SHEET 12

ONE LANE,
ONE DIRECTION
TRAFFIC ONLY

MAIN & BETTON STREETS
SEE SHEET 12

STATE & NORTH MAIN STREETS
SEE SHEET 11

STATE & PENOBSCOT STREETS
SEE SHEET 11

HANCOCK & OAK STREETS
SEE SHEET 9

OAK & WASHINGTON STREETS
SEE SHEET 9
PENOBSCOT CORRIDOR SYSTEM MASTER

STATE STREET &
BROADWAY
SEE SHEET 8

HARLOW &
CENTRAL STREETS
SEE SHEET 7

STATE & HARLOW STREETS
SEE SHEET 8

MAIN & HAMMOND STREETS
SEE SHEET 6

N

I-395 BRIDGE
PENOBSCOT RIVER
MAIN STREET
CEDAR STREET
UNION STREET
HAMMOND STREET
SUMMER STREET
S. MAIN STREET
AUGUSTA CHAPLAIN BRIDGE
PENOBSCOT PLAZA
OAK STREET
BROADWAY
HANCOCK STREET
STATE STREET
PENOBSCOT BRIDGE
PARKER STREET
WILSON STREET
N. MAIN STREET
PARKWAY SOUTH
EASTERN AVENUE
PENOBSCOT RIVER

Rev. #	Drwg. by	Description	Date
-	-	-	-

Designed By: JLT
Drawn By: GLC
Date: 11/16/2012
Scale: 1" = 400'
Checked: BCH
Approved: JLT

MAINE DEPARTMENT OF TRANSPORTATION
AUGUSTA, MAINE
Project Location: BANGOR & BREWER, MAINE
Drawing Description: **TRAFFIC SIGNALS LOCATION PLAN**

Seal: STATE OF MAINE — JOHN M. THEYKEN — No. 9687 — REGISTERED PROFESSIONAL ENGINEER — 11/16/12

Project No.: 83308E
MDOT WIN 18320.00
Engineer

SEWALL
AN INTEGRATED TEAM OF GEOSPATIAL ENGINEERING, SURVEYING AND NATURAL RESOURCE CONSULTANTS
JAMES W. SEWALL COMPANY *Since 1880*
SEWALL.COM 800.848.7352

Phase: CONSTRUCT

Sheet No.: 4

SIGNAL DATA
MAIN & CEDAR STREETS

EXISTING CONTROLLER PROGRAMMING

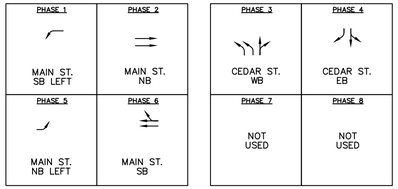
INTERVAL	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6
PHASE	MAIN ST. SB LEFT	MAIN ST. NB	CEDAR ST. WB	CEDAR ST. EB	MAIN ST. NB LEFT	MAIN ST. SB
TIMING IN SECONDS						
INITIAL INTERVAL	6	16	15	5	6	16
VEHICLE EXTENSION	3	3	3	3	3	3
MAX. GREEN 1	6	25	24	11	6	25
MAX. GREEN 2	–	–	–	–	–	–
YELLOW	4.0	4.0	4.0	4.0	4.0	4.0
ALL RED	2.0	2.0	2.0	2.0	2.0	2.0
PEDESTRIAN WALK		8	8	8		8
PEDESTRIAN DON'T WALK		20	15	18		15
RECALL		SOFT				SOFT

PROPOSED TIME OF DAY PLANS:

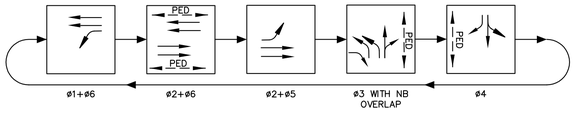
	PHASE 1 AM PEAK PLAN 1	PHASE 1 PM PEAK PLAN 2	PHASE 2 AM PEAK PLAN 3	PHASE 2 PM PEAK PLAN 4
CYCLE LENGTH (SEC.)	95	95	90	95
OFFSET (SEC.)	–	–	–	–
REFERENCE PHASE	–	–	–	–
SPLIT TIME PHASE 1	13	12	15	17
SPLIT TIME PHASE 2	31	29	26	26
SPLIT TIME PHASE 3	24	26	23	25
SPLIT TIME PHASE 4	27	28	26	27
SPLIT TIME PHASE 5	13	14	15	15
SPLIT TIME PHASE 6	31	27	26	28

PHASE TIME INCLUDES CLEARANCE INTERVALS.

8 PHASE NEMA CONTROLLER

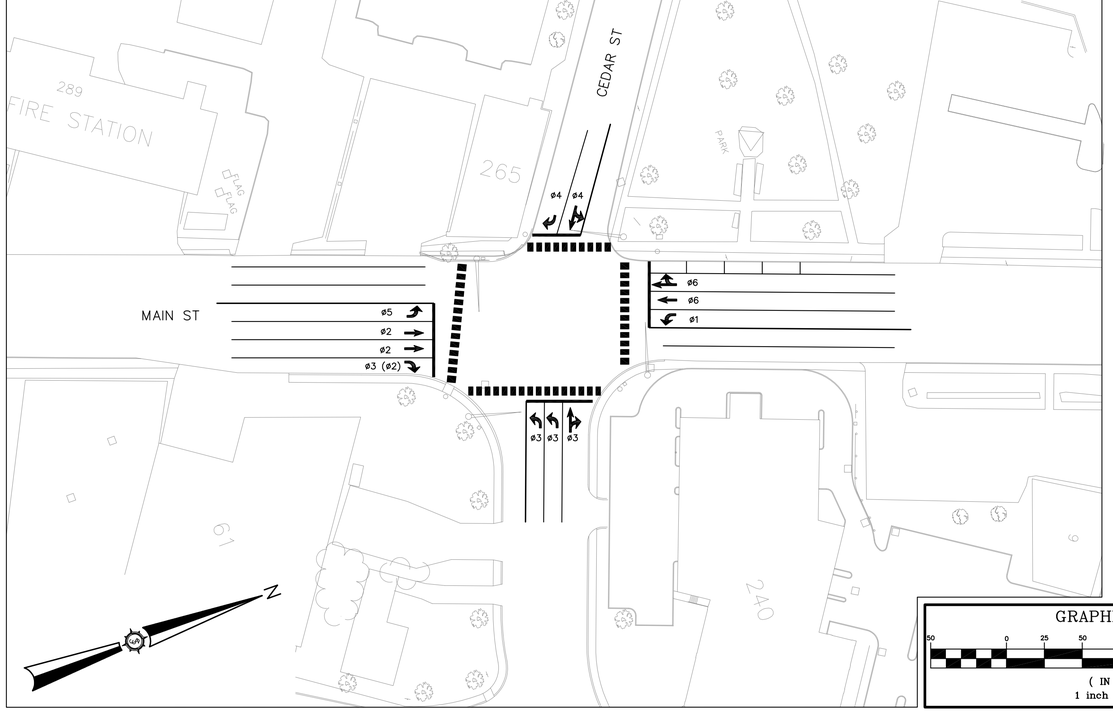


PROPOSED SEQUENCE



DAILY SCHEDULE MAIN & CEDAR STREETS

DAY 1 SATURDAY	CONST. PHASE 1	CONST. PHASE 2
0:00 – 6:00	FLASH	FLASH
6:00 – 8:00	FREE	FREE
8:00 – 10:00	PLAN 1	PLAN 3
10:00 – 16:00	PLAN 2	PLAN 4
16:00 – 19:00	PLAN 1	PLAN 3
19:00 – 23:59	FREE	FREE
DAY 2–6 MON. – FRI.		
0:00 – 6:00	FLASH	FLASH
6:00 – 10:00	PLAN 1	PLAN 3
10:00 – 18:00	PLAN 2	PLAN 4
18:00 – 23:59	FREE	FREE
DAY 7 SUNDAY		
0:00 – 6:00	FLASH	FLASH
6:00 – 10:00	FREE	FREE
10:00 – 16:00	PLAN 1	PLAN 3
16:00 – 23:59	FREE	FREE



GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)

1 inch = 50 ft.

SIGNAL DATA
MAIN & UNION STREETS

EXISTING CONTROLLER PROGRAMMING

INTERVAL	PHASE 1	PHASE 2	PHASE 4	PHASE 5	PHASE 6	PHASE 8
PHASE	MAIN ST. NB LEFT	MAIN ST. SB	UNION ST. WB	MAIN ST. SB LEFT	MAIN ST. NB	UNION ST. EB
TIMING IN SECONDS						
INITIAL INTERVAL	5	5	5	5	5	5
VEHICLE EXTENSION	5	5	5	5	5	5
MAX. GREEN 1	15	40	35	15	40	35
MAX. GREEN 2	–	–	–	–	–	–
YELLOW	4.0	4.0	4.0	4.0	4.0	4.0
ALL RED	2.0	2.0	2.0	2.0	2.0	2
PEDESTRIAN WALK		8	7		8	
PEDESTRIAN DON'T WALK		10	8		10	
RECALL	MAX	MAX	MAX	MAX	MAX	MAX

PROPOSED COORDINATION PLANS:

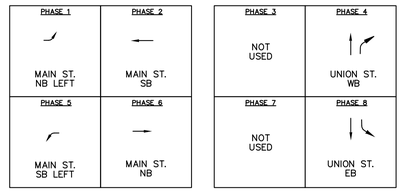
	PHASE 1 AM PEAK PLAN 1	PHASE 1 PM PEAK PLAN 2	PHASE 2 AM PEAK PLAN 3	PHASE 2 PM PEAK PLAN 4
CYCLE LENGTH (SEC.)	95	95	90	95
OFFSET (SEC.)	73	86	40	90
REFERENCE PHASE	2–SBTL	2–SBTL	2–SBTL	2–SBTL
SPLIT TIME PHASE 1	15	13	13	14
SPLIT TIME PHASE 2	30	28	25	29
SPLIT TIME PHASE 4	28	31	30	30
SPLIT TIME PHASE 5	12	12	12	12
SPLIT TIME PHASE 6	33	29	26	31
SPLIT TIME PHASE 8	22	23	22	22

PHASE TIME INCLUDES CLEARANCE INTERVALS.
REFERENCE PHASE IS TO START OF GREEN TIME.

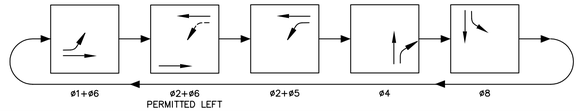
THE FOLLOWING INTERSECTIONS ARE PART OF THE DOWNTOWN COORDINATED SIGNAL SYSTEM:
MAIN & UNION STREETS
MAIN & HAMMOND & CENTRAL STREETS
HARLOW & CENTRAL STREETS
MAIN & WATER STREETS
STATE & HARLOW STREETS

ALL CONTROLLERS ARE EAGLE CONTROLLERS EPAC 300 MODELS.

8 PHASE NEMA CONTROLLER

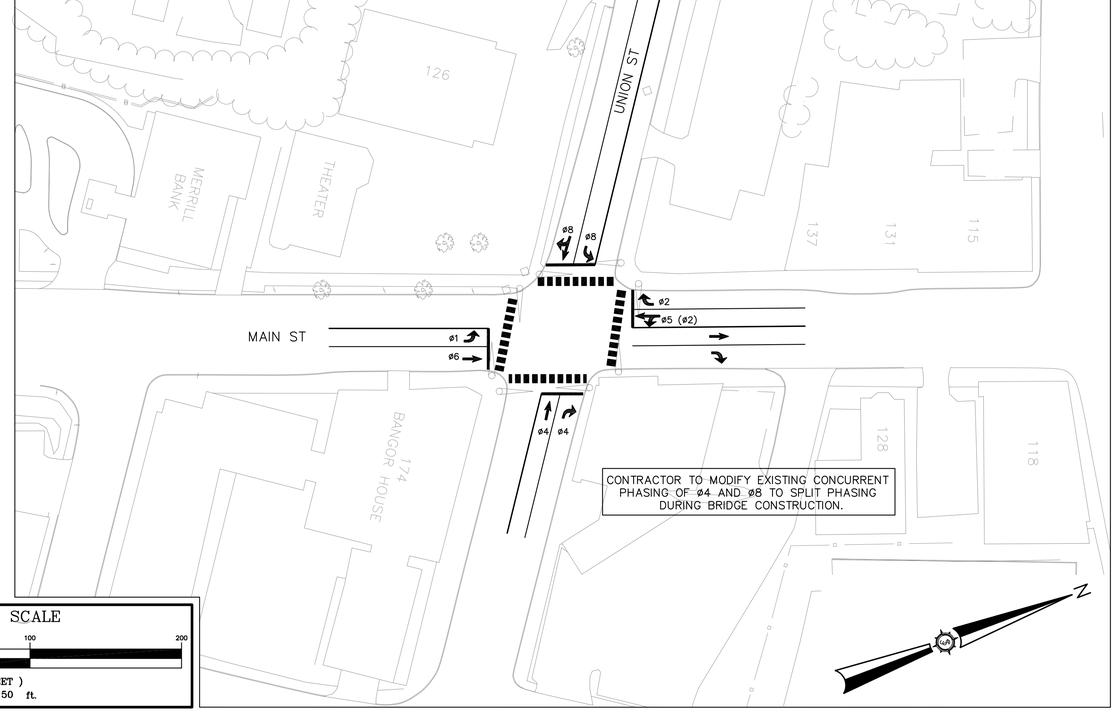


PROPOSED SEQUENCE



DAILY SCHEDULE DOWNTOWN SYSTEM

DAY 1 SATURDAY	CONST. PHASE 1	CONST. PHASE 2
0:00 – 5:00	FLASH	FLASH
5:00 – 10:00	PLAN 1	PLAN 3
10:00 – 16:00	PLAN 2	PLAN 4
16:00 – 23:59	PLAN 1	PLAN 3
DAY 2–6 MON. – FRI.		
0:00 – 5:00	FLASH	FLASH
5:00 – 10:00	PLAN 1	PLAN 3
10:00 – 18:30	PLAN 2	PLAN 4
18:30 – 23:59	PLAN 1	PLAN 3
DAY 7 SUNDAY		
0:00 – 5:00	FLASH	FLASH
5:00 – 10:00	PLAN 1	PLAN 3
10:00 – 16:00	PLAN 2	PLAN 4
16:00 – 23:59	PLAN 1	PLAN 3



Rev. #	Done by	Description	Date
1			
2			
3			

Designed By JMT
Drawn By JC
Checked BCH
Approved JMT
Date 11/16/2012
Scale 1" = 50'

MAINE DEPARTMENT OF TRANSPORTATION
AUGUSTA, MAINE

Project Location BANGOR & BREWER, MAINE

Drawing Description
MAIN & CEDAR STREETS
MAIN & UNION STREETS

Seal
STATE OF MAINE JOHN M. PRETZLOW No. 9687 LICENSED PROFESSIONAL ENGINEER
11/16/12

Project No. 83308E MDOT WIN 18320.00

Engineer
SEWALL
JAMES W. SEWALL COMPANY Since 1889
SURVEYING AND NATURAL RESOURCE CONSULTANTS
AN INTEGRATED TEAM OF GEOSPATIAL ENGINEERING, 800.451.1822

Phase CONSTRUCT

Sheet No. 5

SIGNAL DATA
MAIN & WATER STREETS

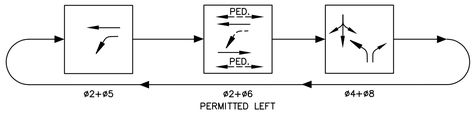
EXISTING CONTROLLER PROGRAMMING

INTERVAL / PHASE	PHASE 2 MAIN ST. SB	PHASE 4 WATER ST. WB	PHASE 5 MAIN ST. SB LEFT	PHASE 6 MAIN ST. NB	PHASE 8 MIDDLE ST. EB
TIMING IN SECONDS					
INITIAL INTERVAL	5	5	5	5	5
VEHICLE EXTENSION	5	5	5	5	5
MAX. GREEN 1	45	20	17	45	20
MAX. GREEN 2	–	–	–	–	–
YELLOW	4.0	4.0	4.0	4.0	4.0
ALL RED	2.0	2.0	1.0	2.0	2.0
PEDESTRIAN WALK	7			7	
PEDESTRIAN DON'T WALK	8			8	
RECALL	MAX	MAX	MAX	MAX	MAX

8 PHASE NEMA CONTROLLER

PHASE 1: NOT USED	PHASE 2: MAIN ST. SB	PHASE 3: NOT USED	PHASE 4: WATER ST. WB
PHASE 5: MAIN ST. SB LEFT	PHASE 6: MAIN ST. NB	PHASE 7: NOT USED	PHASE 8: MIDDLE ST. EB

PROPOSED SEQUENCE



PROPOSED COORDINATION PLANS:

	PHASE 1 AM PEAK PLAN 1	PHASE 1 PM PEAK PLAN 2	PHASE 2 AM PEAK PLAN 3	PHASE 2 PM PEAK PLAN 4
CYCLE LENGTH (SEC.)	95	95	90	95
OFFSET (SEC.)	53	65	18	70
REFERENCE PHASE	2+6	2+6	2+6	2+6
SPLIT TIME PHASE 2	68	69	62	67
SPLIT TIME PHASES 4 & 8	27	26	28	28
SPLIT TIME PHASE 5	15	15	15	20
SPLIT TIME PHASE 6	53	54	47	47

PHASE TIME INCLUDES CLEARANCE INTERVALS.
REFERENCE PHASE IS TO START OF GREEN TIME.

THE FOLLOWING INTERSECTIONS ARE PART OF THE DOWNTOWN COORDINATED SIGNAL SYSTEM:
MAIN & UNION STREETS
MAIN & WATER STREETS
MAIN & HAMMOND & CENTRAL STREETS
STATE & HARLOW STREETS
HARLOW & CENTRAL STREETS
ALL CONTROLLERS ARE EAGLE CONTROLLERS, EPAC 300 MODELS.

DAILY SCHEDULE DOWNTOWN SYSTEM

DAY 1 SATURDAY	CONST. PHASE 1	CONST. PHASE 2
0:00 – 5:00	FLASH	FLASH
5:00 – 10:00	PLAN 1	PLAN 3
10:00 – 16:00	PLAN 2	PLAN 4
16:00 – 23:59	PLAN 1	PLAN 3
DAY 2–6 MON. – FRI.		
0:00 – 5:00	FLASH	FLASH
5:00 – 10:00	PLAN 1	PLAN 3
10:00 – 18:30	PLAN 2	PLAN 4
18:30 – 23:59	PLAN 1	PLAN 3
DAY 7 SUNDAY		
0:00 – 5:00	FLASH	FLASH
5:00 – 10:00	PLAN 1	PLAN 3
10:00 – 16:00	PLAN 2	PLAN 4
16:00 – 23:59	PLAN 1	PLAN 3

SIGNAL DATA
MAIN & HAMMOND STREETS

EXISTING CONTROLLER PROGRAMMING

INTERVAL / PHASE	PHASE 1 CENTRAL ST. SB	PHASE 2 MAIN ST. NB RIGHT	PHASE 4 HAMMOND EB
TIMING IN SECONDS			
INITIAL INTERVAL	5	5	5
VEHICLE EXTENSION	5	5	5
MAX. GREEN 1	18	40	35
MAX. GREEN 2	–	–	–
YELLOW	3.0	4.0	4.0
ALL RED	1.0	2.0	2.0
PEDESTRIAN WALK	8		10
PEDESTRIAN DON'T WALK	10		16
RECALL	MAX	MAX	MAX

PROPOSED COORDINATION PLANS:

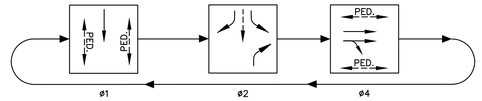
	PHASE 1 AM PEAK PLAN 1	PHASE 1 PM PEAK PLAN 2	PHASE 2 AM PEAK PLAN 3	PHASE 2 PM PEAK PLAN 4
CYCLE LENGTH (SEC.)	95	95	90	95
OFFSET (SEC.)	77	75	35	76
REFERENCE PHASE	2–SBTL	2–SBTL	2–SBTL	2–SBTL
SPLIT TIME PHASE 1	23	21	21	21
SPLIT TIME PHASE 2	43	48	42	47
SPLIT TIME PHASE 4	29	26	27	27

PHASE TIME INCLUDES CLEARANCE INTERVALS.
REFERENCE PHASE IS TO START OF GREEN TIME.

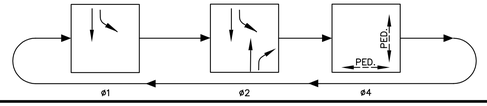
8 PHASE NEMA CONTROLLER

PHASE 1: CENTRAL ST. SB	PHASE 2: MAIN ST. NB RIGHT	PHASE 3: NOT USED	PHASE 4: HAMMOND ST. EB
PHASE 5: NOT USED	PHASE 6: NOT USED	PHASE 7: NOT USED	PHASE 8: NOT USED

PROPOSED SEQUENCE HAMMOND & MAIN

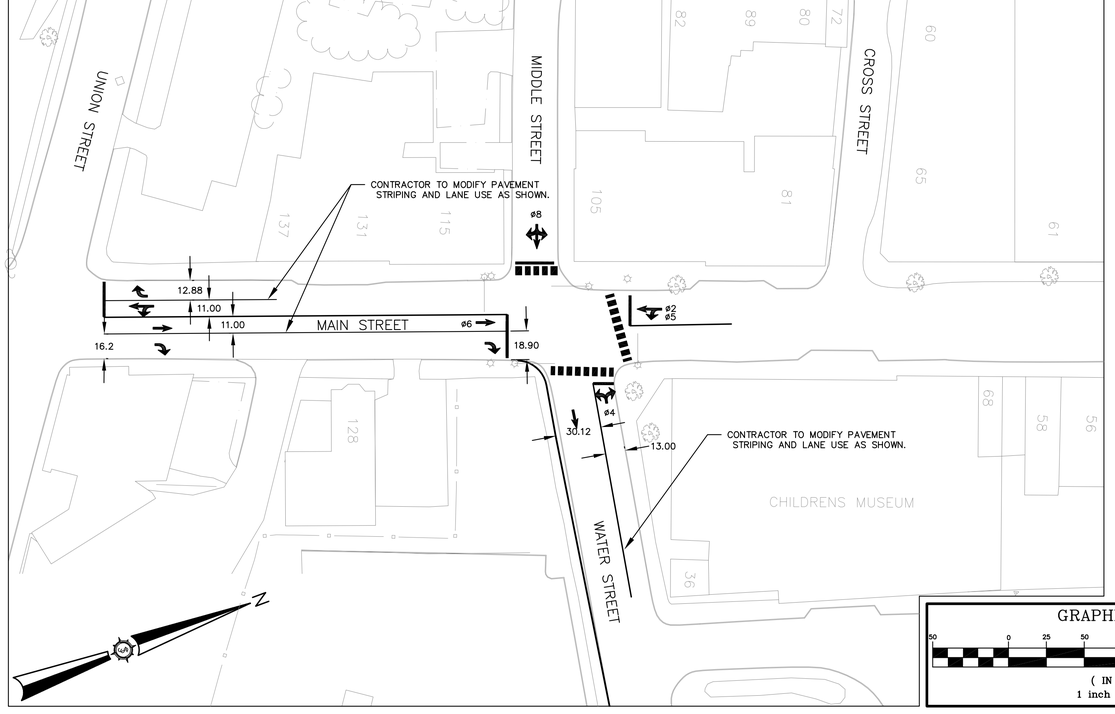


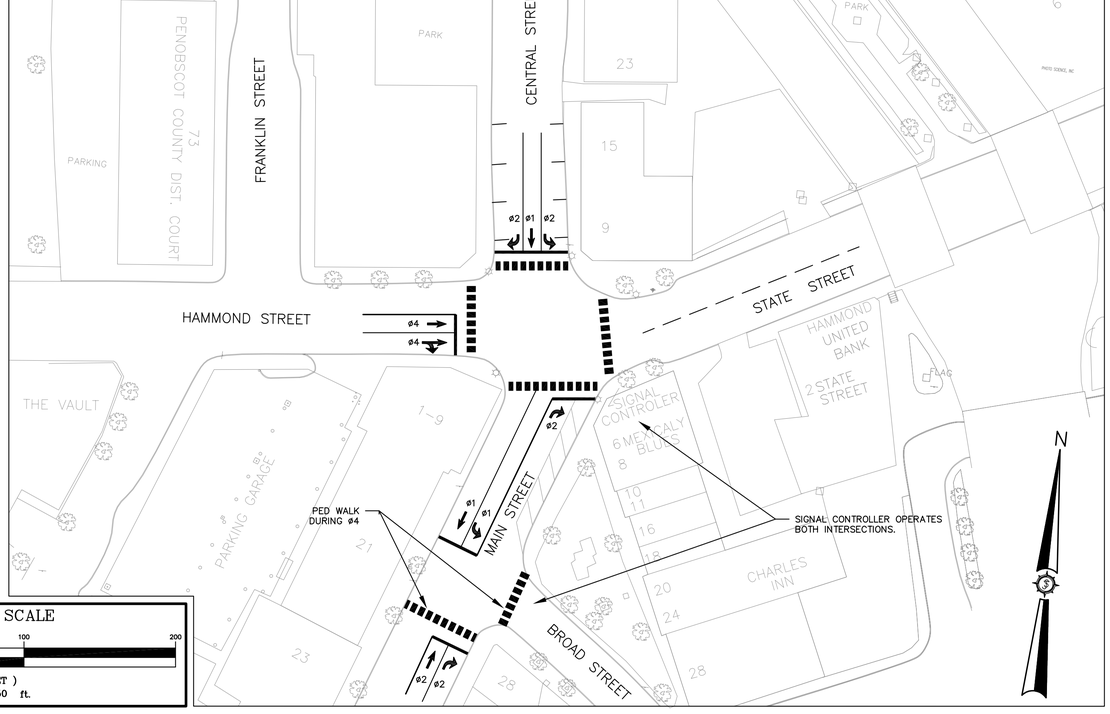
PROPOSED SEQUENCE MAIN & BROAD



DAILY SCHEDULE DOWNTOWN SYSTEM

DAY 1 SATURDAY	CONST. PHASE 1	CONST. PHASE 2
0:00 – 5:00	FLASH	FLASH
5:00 – 10:00	PLAN 1	PLAN 3
10:00 – 16:00	PLAN 2	PLAN 4
16:00 – 23:59	PLAN 1	PLAN 3
DAY 2–6 MON. – FRI.		
0:00 – 5:00	FLASH	FLASH
5:00 – 10:00	PLAN 1	PLAN 3
10:00 – 18:30	PLAN 2	PLAN 4
18:30 – 23:59	PLAN 1	PLAN 3
DAY 7 SUNDAY		
0:00 – 5:00	FLASH	FLASH
5:00 – 10:00	PLAN 1	PLAN 3
10:00 – 16:00	PLAN 2	PLAN 4
16:00 – 23:59	PLAN 1	PLAN 3





GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.

Rev. #	Drwg. by	Description	Date
1			
2			
3			

Designed By JMT
Drawn By JC
Date 11/16/2012
Scale 1" = 50'
Checked BCH
Approved JMT

MAINE DEPARTMENT OF TRANSPORTATION
AUGUSTA, MAINE
Project Location BANGOR & BREWER, MAINE
Drawing Description
MAIN & WATER STREETS
MAIN & HAMMOND STREETS

Seal: STATE OF MAINE JOHN M. CHRISTIAN No. 9687 PROFESSIONAL ENGINEER 11/16/12

Project No. 83308E
Engineer MDOT WIN 18320.00

SEWALL
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JAMES W. SEWALL COMPANY Since 1889
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Phase CONSTRUCT

Sheet No. 6

SIGNAL DATA
HARLOW & CENTRAL STREETS

EXISTING CONTROLLER PROGRAMMING

INTERVAL	PHASE 2	PHASE 4	PHASE 6		
PHASE	HARLOW ST. SB	PED. PED. PED.	HARLOW ST. NB		
TIMING IN SECONDS					
INITIAL INTERVAL	22		25		
VEHICLE EXTENSION	5		5		
MAX. GREEN 1	45		45		
MAX. GREEN 2	–		–		
YELLOW	4.0		4.0		
ALL RED	1.0		1.0		
PEDESTRIAN WALK		7			
PEDESTRIAN DON'T WALK		8			
RECALL	MIN				

8 PHASE NEMA CONTROLLER

PHASE 1	PHASE 2	PHASE 3	PHASE 4
NOT USED	HARLOW ST. SB	NOT USED	PED. PED. PED.
PHASE 5	**PHASE 6**	**PHASE 7**	**PHASE 8**
NOT USED	HARLOW ST. NB	NOT USED	NOT USED

PROPOSED PHASE SEQUENCE

PEDESTRIAN PHASE ONLY WHEN ACTUATED BY PEDESTRIAN PUSH BUTTON

PROPOSED COORDINATION PLANS:

	PHASE 1 AM PEAK PLAN 1	PHASE 1 PM PEAK PLAN 2	PHASE 2 AM PEAK PLAN 3	PHASE 2 PM PEAK PLAN 4
CYCLE LENGTH (SEC.)	95	95	90	95
OFFSET (SEC.)	0	0	0	0
REFERENCE PHASE	2–NWTL	2–NWTL	2–NWTL	2–NWTL
SPLIT TIME PHASE 2	39	41	36	41
SPLIT TIME PHASE 4	16	16	16	16
SPLIT TIME PHASE 6	40	38	38	38

PHASE TIME INCLUDES CLEARANCE INTERVALS.
REFERENCE PHASE IS TO START OF GREEN TIME.

DAILY SCHEDULE DOWNTOWN SYSTEM

		CONST. PHASE 1	CONST. PHASE 2
DAY 1 SATURDAY			
	0:00 – 5:00	FLASH	FLASH
	5:00 – 10:00	PLAN 1	PLAN 3
	10:00 – 16:00	PLAN 2	PLAN 4
	16:00 – 23:59	PLAN 1	PLAN 3
DAY 2–6 MON. – FRI.			
	0:00 – 5:00	FLASH	FLASH
	5:00 – 10:00	PLAN 1	PLAN 3
	10:00 – 18:30	PLAN 2	PLAN 4
	18:30 – 23:59	PLAN 1	PLAN 3
DAY 7 SUNDAY			
	0:00 – 5:00	FLASH	FLASH
	5:00 – 10:00	PLAN 1	PLAN 3
	10:00 – 16:00	PLAN 2	PLAN 4
	16:00 – 23:59	PLAN 1	PLAN 3

GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.

Rev.	Dwg. by	Description	Date
1			
2			
3			

Designed By JMT
Drawn By JC
Date 5/16/2012
Scale 1" = 50'
Checked BCH
Approved JMT

MAINE DEPARTMENT OF TRANSPORTATION
AUGUSTA, MAINE

Project Location BANGOR & BREWER, MAINE

Drawing Description **HARLOW & CENTRAL STREETS**

Seal

STATE OF MAINE JOHN M. PUTNAM No. 9687 LICENSED PROFESSIONAL ENGINEER 11/4/12

Project No. **83308E** MDOT WIN 18320.00

Engineer

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AN INTEGRATED TEAM OF GEOSPATIAL ENGINEERING, SURVEYING AND NATURAL RESOURCE CONSULTANTS
JAMES W. SEWALL COMPANY *Since 1880*
SEWALL.COM 800.448.3312

Phase CONSTRUCT

Sheet No. **7**

SIGNAL DATA
STATE & HARLOW STREETS

EXISTING CONTROLLER PROGRAMMING

INTERVAL	PHASE 2	PHASE 3	PHASE 4	PHASE 6
PHASE	STATE ST. EB	PED PED PED	EXCHANGE NB	STATE ST. WB
TIMING IN SECONDS				
INITIAL INTERVAL	7		7	7
VEHICLE EXTENSION	5		5	5
MAX. GREEN 1	55		30	65
MAX. GREEN 2	–		–	–
YELLOW	4.0		4.0	4.0
ALL RED	2.0		2.0	2.0
PEDESTRIAN WALK		7		
PEDESTRIAN DON'T WALK		10		
RECALL	MAX		MAX	MAX

PROPOSED COORDINATION PLANS:

	PHASE 1 AM PEAK PLAN 1	PHASE 1 PM PEAK PLAN 2	PHASE 2 AM PEAK PLAN 3	PHASE 2 PM PEAK PLAN 4
CYCLE LENGTH (SEC.)	95	95	90	95
OFFSET (SEC.)	14	16	77	16
REFERENCE PHASE	2–EBTL	2–EBTL	2–EBTL	2–EBTL
SPLIT TIME PHASES 2 & 6	47	48	41	47
SPLIT TIME PHASE 3	17	17	17	17
SPLIT TIME PHASE 4	31	30	32	31

PHASE TIME INCLUDES CLEARANCE INTERVALS.

THE FOLLOWNG INTERSECTIONS ARE PART OF THE DOWNTOWN COORDINATED SIGNAL SYSTEM:
MAIN & UNION STREETS
MAIN & HAMMOND & CENTRAL STREETS
HARLOW & CENTRAL STREETS
MAIN & WATER STREETS
STATE & HARLOW STREETS

ALL CONTROLLERS ARE EAGLE CONTROLLERS, EPAC 300 MODELS.

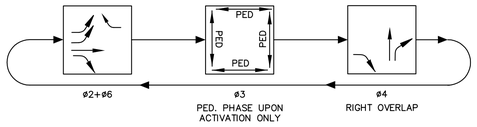
8 PHASE NEMA CONTROLLER

PHASE 1	PHASE 2	PHASE 3	PHASE 4
NOT USED	STATE ST. EB	PED PED PED	EXCHANGE ST. NB
PHASE 5	**PHASE 6**	**PHASE 7**	**PHASE 8**
NOT USED	STATE ST. WB	NOT USED	NOT USED

DAILY SCHEDULE DOWNTOWN SYSTEM

DAY 1 SATURDAY	CONST. PHASE 1	CONST. PHASE 2
0:00 – 5:00	FLASH	FLASH
5:00 – 10:00	PLAN 1	PLAN 3
10:00 – 16:00	PLAN 2	PLAN 4
16:00 – 23:59	PLAN 1	PLAN 3
DAY 2–6 MON. – FRI.		
0:00 – 5:00	FLASH	FLASH
5:00 – 10:00	PLAN 1	PLAN 3
10:00 – 18:30	PLAN 2	PLAN 4
18:30 – 23:59	PLAN 1	PLAN 3
DAY 7 SUNDAY		
0:00 – 5:00	FLASH	FLASH
5:00 – 10:00	PLAN 1	PLAN 3
10:00 – 16:00	PLAN 2	PLAN 4
16:00 – 23:59	PLAN 1	PLAN 3

PROPOSED SEQUENCE



SIGNAL DATA
STATE STREET & BROADWAY

EXISTING CONTROLLER PROGRAMMING

INTERVAL	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8
PHASE	STATE ST. WB LEFT	STATE ST. EB	BROADWAY SB LEFT	OAK ST. NB	STATE ST. EB LEFT	STATE ST. WB	OAK ST. NB LEFT	BROADWAY SB
TIMING IN SECONDS								
INITIAL INTERVAL	5	5	5	10	5	5	5	10
VEHICLE EXTENSION	3	3	3	3	3	3	3	3
MAX. GREEN 1	10	30	21	29	15	35	21	29
MAX. GREEN 2	–	–	–	–	–	–	–	–
YELLOW	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
ALL RED	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.6
PEDESTRIAN WALK		7		7		7		7
PEDESTRIAN DON'T WALK		12		14		12		12
RECALL				SOFT				SOFT

PROPOSED COORDINATION PLANS:

	PHASE 1 AM PEAK PLAN 1	PHASE 1 PM PEAK PLAN 2	PHASE 2 AM PEAK PLAN 3	PHASE 2 PM PEAK PLAN 4
CYCLE LENGTH (SEC.)	95	100	90	95
OFFSET (SEC.)	–	–	–	–
REFERENCE PHASE	–	–	–	–
SPLIT TIME PHASE 1	20	21	17	23
SPLIT TIME PHASE 2	24	26	24	22
SPLIT TIME PHASE 3	21	21	21	21
SPLIT TIME PHASE 4	30	32	28	29
SPLIT TIME PHASE 5	12	12	15	15
SPLIT TIME PHASE 6	32	35	26	30
SPLIT TIME PHASE 7	12	12	15	15
SPLIT TIME PHASE 8	39	41	34	35

PHASE TIME INCLUDES CLEARANCE INTERVALS.

8 PHASE NEMA CONTROLLER

PHASE 1	PHASE 2	PHASE 3	PHASE 4
STATE ST. WB LEFT	STATE ST. EB	BROADWAY SB LEFT	OAK ST. NB
PHASE 5	**PHASE 6**	**PHASE 7**	**PHASE 8**
STATE ST. EB LEFT	STATE ST. WB	OAK ST. NB LEFT	BROADWAY SB

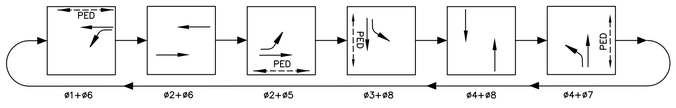
THE FOLLOWING INTERSECTIONS ARE PART OF THE PENOBSCOT CORRIDOR COORDINATED SIGNAL SYSTEM:
OAK & HANCOCK STREETS
WASHINGTON & EXCHANGE STREETS
STATE & NORTH MAIN STREETS
OAK & WASHINGTON STREETS
STATE & PENOBSCOT STREETS
NORTH MAIN & BETTON (PARKER) STREETS

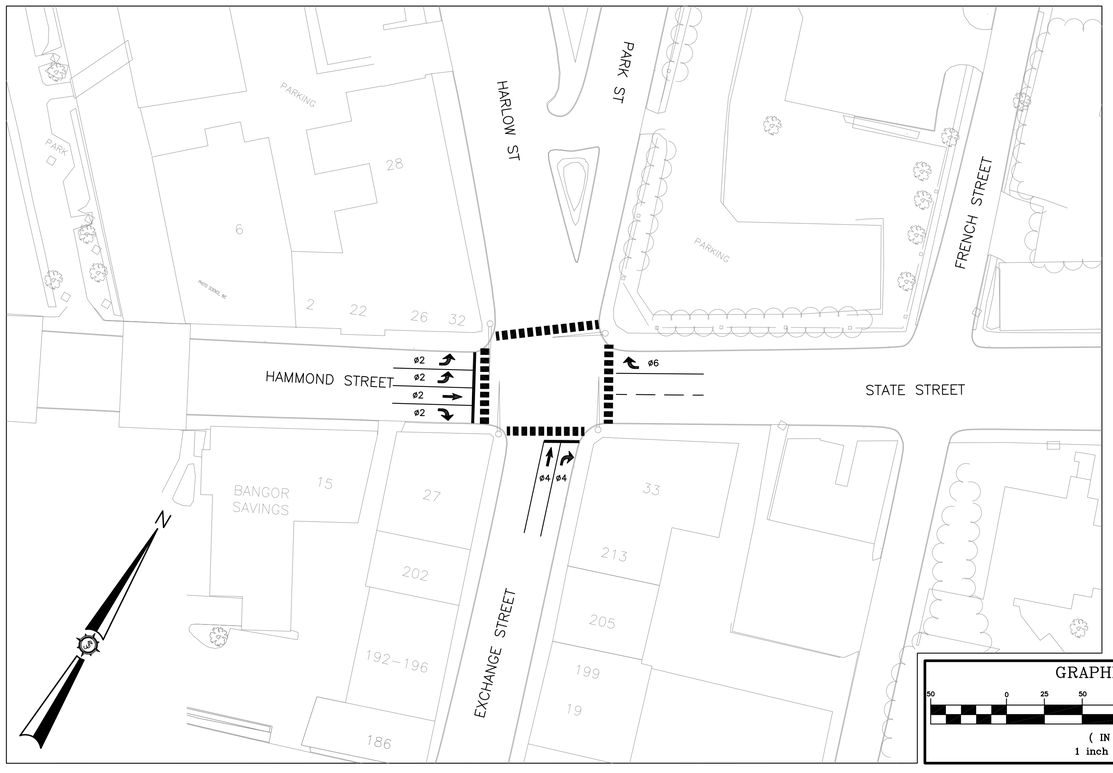
STATE STREET & BROADWAY (OAK STREET) IS PART OF SYSTEM BUT OPERATES INDEPENDENTLY.

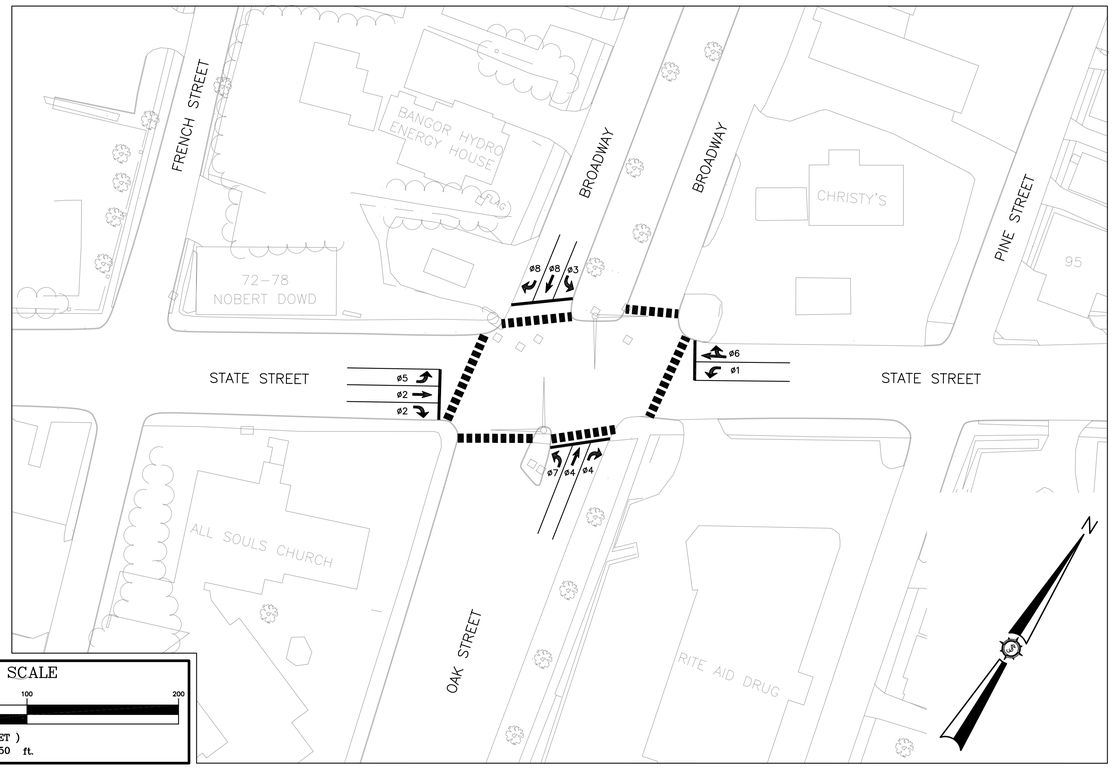
DAILY SCHEDULE PENOBSCOT CORRIDOR

DAY 1 SATURDAY	CONST. PHASE 1	CONST. PHASE 2
0:00 – 5:00	FLASH	FLASH
5:00 – 8:00	FREE	FREE
8:00 – 10:00	PLAN 1	PLAN 3
10:00 – 16:00	PLAN 2	PLAN 4
16:00 – 19:00	PLAN 1	PLAN 3
19:00 – 23:59	FREE	FREE
DAY 2–6 MON. – FRI.		
0:00 – 4:30	FLASH	FLASH
4:30 – 6:30	FREE	FREE
6:30 – 10:00	PLAN 1	PLAN 3
10:00 – 18:30	PLAN 2	PLAN 4
18:30 – 20:00	PLAN 1	PLAN 3
20:00 – 23:59	FREE	FREE
DAY 7 SUNDAY		
0:00 – 5:00	FLASH	FLASH
5:00 – 10:00	FREE	FREE
10:00 – 18:00	PLAN 1	PLAN 3
18:00 – 23:59	FREE	FREE

PROPOSED SEQUENCE







GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.

Rev. #	Drwg. by	Description	Date
1			
2			
3			

Designed By JMT
Drawn By JC
Checked BCH
Approved JMT
Date 11/16/2012
Scale 1" = 50'

MAINE DEPARTMENT OF TRANSPORTATION
AUGUSTA, MAINE
Project Location BANGOR & BREWER, MAINE
Drawing Description
STATE & HARLOW STREETS
STATE STREET & BROADWAY

Seal: STATE OF MAINE JAMES M. SEWALL No. 8687 PROFESSIONAL ENGINEER — 11/16/12

Project No. 83308E
MDOT WIN 18320.00
Engineer
SEWALL
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Phase CONSTRUCT

Sheet No. 8

SIGNAL DATA
HANCOCK & OAK STREETS

EXISTING CONTROLLER PROGRAMMING

INTERVAL	PHASE 1	PHASE 2			
PHASE	RED OAK ST NB & SB RED	PED HANCOCK WB			
TIMING IN SECONDS					
INITIAL INTERVAL	10	5			
VEHICLE EXTENSION	3	3			
MAX. GREEN 1	25	25			
MAX. GREEN 2	–	–			
YELLOW	3.0	3.0			
ALL RED	2.0	2.0			
PEDESTRIAN WALK	7	7			
PEDESTRIAN DON'T WALK	13	13			
RECALL	SOFT				

PROPOSED COORDINATION PLANS:

	PHASE 1 AM PEAK PLAN 1	PHASE 1 PM PEAK PLAN 2	PHASE 2 AM PEAK PLAN 3	PHASE 2 PM PEAK PLAN 4
CYCLE LENGTH (SEC.)	95	95	90	95
OFFSET (SEC.)	23	13	20	15
REFERENCE PHASE	1–NBSB	1–NBSB	1–NBSB	1–NBSB
SPLIT TIME PHASES 1	60	56	58	56
SPLIT TIME PHASES 2	35	39	32	39

PHASE TIME INCLUDES CLEARANCE INTERVALS.
REFERENCE PHASE IS TO START OF GREEN TIME.

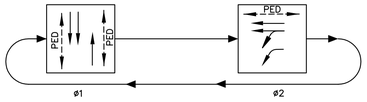
THE FOLLOWING INTERSECTIONS ARE PART OF THE PENOBSCOT CORRIDOR COORDINATED SIGNAL SYSTEM:
OAK & HANCOCK STREETS
WASHINGTON & EXCHANGE STREETS
STATE & NORTH MAIN STREETS
OAK & WASHINGTON STREETS
STATE & PENOBSCOT STREETS
NORTH MAIN & BETTON (PARKER) STREETS

THE SYSTEM MASTER IS LOCATED AT THE INTERSECTION OF WASHINGTON AND OAK STREETS.

8 PHASE NEMA CONTROLLER

PHASE 1	PHASE 2	PHASE 3	PHASE 4
OAK ST NB & SB	HANCOCK ST. WB	NOT USED	NOT USED
PHASE 5	**PHASE 6**	**PHASE 7**	**PHASE 8**
NOT USED	NOT USED	NOT USED	NOT USED

PROPOSED SEQUENCE



DAILY SCHEDULE PENOBSCOT CORRIDOR

DAY 1 SATURDAY	CONST. PHASE 1	CONST. PHASE 2
0:00 – 5:00	FLASH	FLASH
5:00 – 8:00	FREE	FREE
8:00 – 10:00	PLAN 1	PLAN 3
10:00 – 16:00	PLAN 2	PLAN 4
16:00 – 19:00	PLAN 1	PLAN 3
19:00 – 23:59	FREE	FREE
DAY 2–6 MON. – FRI.		
0:00 – 4:30	FLASH	FLASH
4:30 – 6:30	FREE	FREE
6:30 – 10:00	PLAN 1	PLAN 3
10:00 – 18:30	PLAN 2	PLAN 4
18:30 – 20:00	PLAN 1	PLAN 3
20:00 – 23.59	FREE	FREE
DAY 7 SUNDAY		
0:00 – 5:00	FLASH	FLASH
5:00 – 10:00	FREE	FREE
10:00 – 18:00	PLAN 1	PLAN 3
18:00 – 23:59	FREE	FREE

SIGNAL DATA
OAK & WASHINGTON STREETS

EXISTING CONTROLLER PROGRAMMING

INTERVAL	PHASE 2	PHASE 4	PHASE 6
PHASE	OAK ST. NB	WASHINGTON EB	OAK ST. SB
TIMING IN SECONDS			
INITIAL INTERVAL	10	5	10
VEHICLE EXTENSION	3	3	3
MAX. GREEN 1	20	20	20
MAX. GREEN 2	–	–	–
YELLOW	3.0	3.0	3.0
ALL RED	2.0	2.0	2.0
PEDESTRIAN WALK		5	5
PEDESTRIAN DON'T WALK		9	8
RECALL	SOFT		SOFT

PROPOSED COORDINATION PLANS:

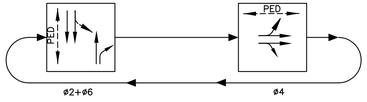
	PHASE 1 AM PEAK PLAN 1	PHASE 1 PM PEAK PLAN 2	PHASE 2 AM PEAK PLAN 3	PHASE 2 PM PEAK PLAN 4
CYCLE LENGTH (SEC.)	95	95	90	95
OFFSET (SEC.)	0	0	0	0
REFERENCE PHASE	2+6	2+6	2+6	2+6
SPLIT TIME PHASES 2 & 6	63	57	59	52
SPLIT TIME PHASES 4	32	38	31	43

PHASE TIME INCLUDES CLEARANCE INTERVALS.
REFERENCE PHASE IS TO START OF GREEN TIME.

8 PHASE NEMA CONTROLLER

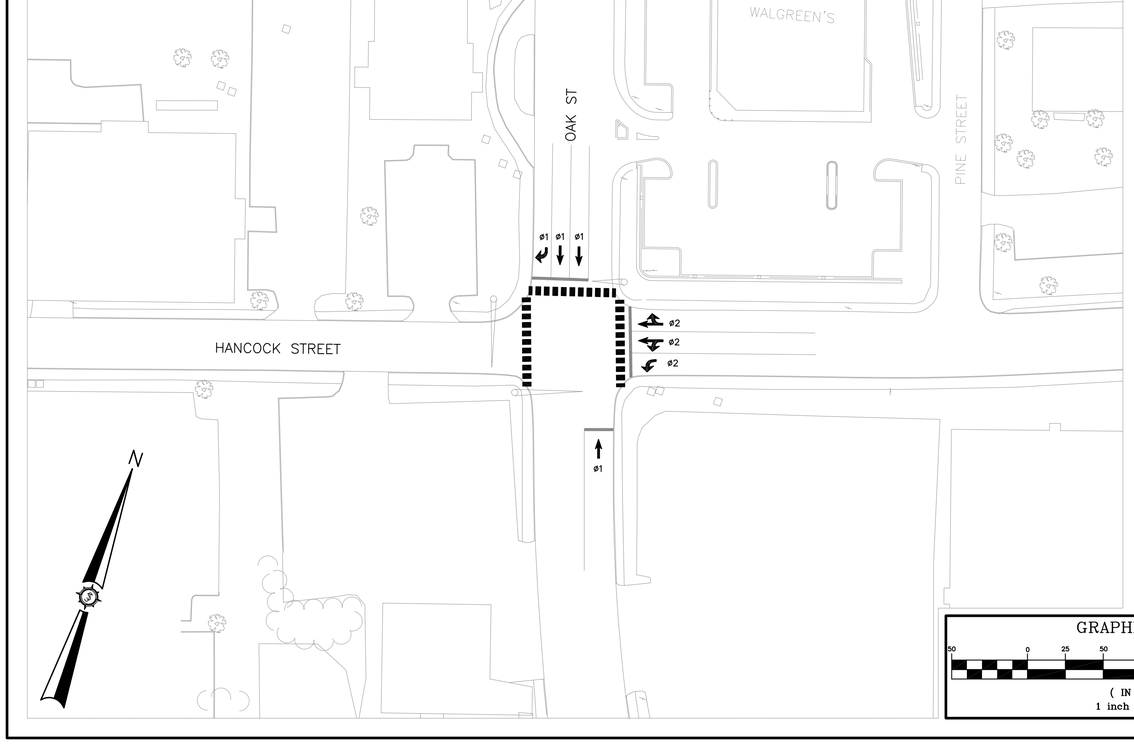
PHASE 1	PHASE 2	PHASE 3	PHASE 4
NOT USED	OAK ST NB	NOT USED	PED WASHINGTON ST EB
PHASE 5	**PHASE 6**	**PHASE 7**	**PHASE 8**
NOT USED	PED OAK ST SB	NOT USED	NOT USED

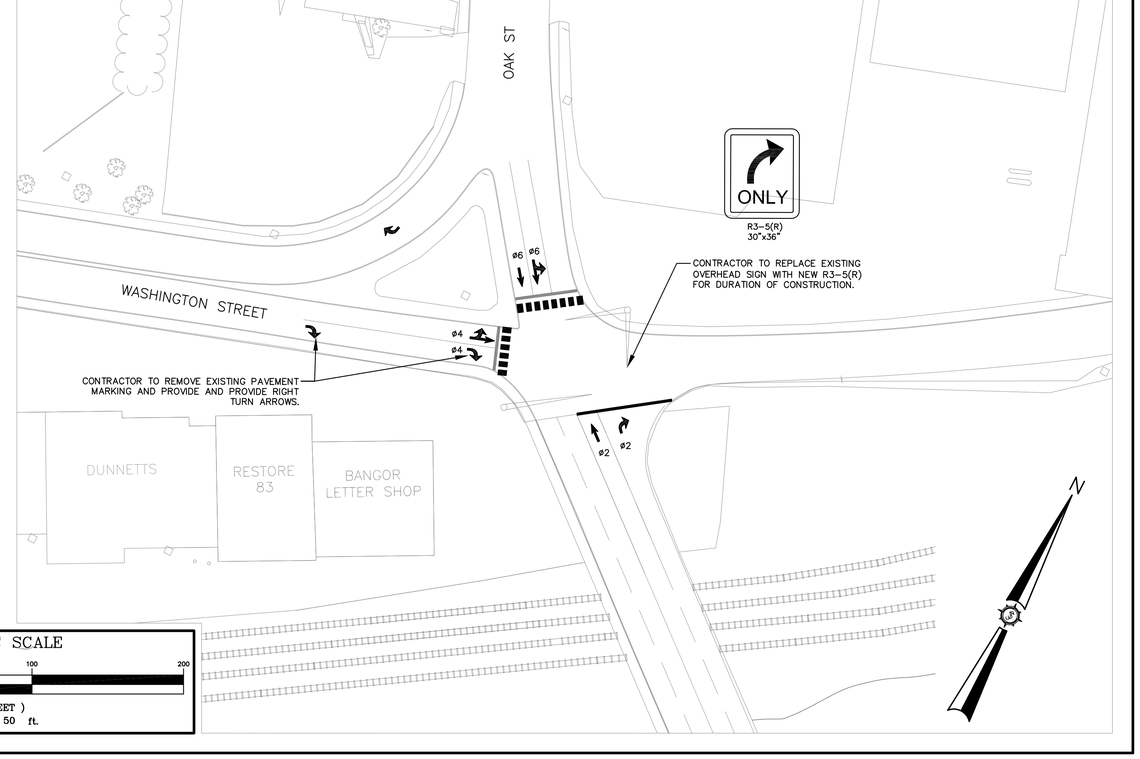
PROPOSED SEQUENCE



DAILY SCHEDULE PENOBSCOT CORRIDOR

DAY 1 SATURDAY	CONST. PHASE 1	CONST. PHASE 2
0:00 – 5:00	FLASH	FLASH
5:00 – 8:00	FREE	FREE
8:00 – 10:00	PLAN 1	PLAN 3
10:00 – 16:00	PLAN 2	PLAN 4
16:00 – 19:00	PLAN 1	PLAN 3
19:00 – 23:59	FREE	FREE
DAY 2–6 MON. – FRI.		
0:00 – 4:30	FLASH	FLASH
4:30 – 6:30	FREE	FREE
6:30 – 10:00	PLAN 1	PLAN 3
10:00 – 18:30	PLAN 2	PLAN 4
18:30 – 20:00	PLAN 1	PLAN 3
20:00 – 23.59	FREE	FREE
DAY 7 SUNDAY		
0:00 – 5:00	FLASH	FLASH
5:00 – 10:00	FREE	FREE
10:00 – 18:00	PLAN 1	PLAN 3
18:00 – 23:59	FREE	FREE





GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.

No.	Description	Date
1		
2		
3		
4		

Designed by JMT
Drawn by JC
Checked BCH
Approved JMT
Date 11/16/2012
Scale 1" = 50'

MAINE DEPARTMENT OF TRANSPORTATION
AUGUSTA, MAINE

Project Location
BANGOR & BREWER, MAINE

Drawing Description
HANCOCK & OAK STREETS
OAK & WASHINGTON STREETS

Seal
STATE OF MAINE JOHN N. FREEMAN No. 9887 REGISTERED PROFESSIONAL ENGINEER
11/16/12

Project No.
83308E
MDOT WIN 18320.00

Engineer
SEWALL
AN INTEGRATED TEAM OF GEOSPATIAL ENGINEERING, SURVEYING AND NATURAL RESOURCE CONSULTANTS
JAMES W. SEWALL COMPANY *Since 1880*
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Phase
CONSTRUCT

Sheet No.
9

SIGNAL DATA
WASHINGTON & BROAD STREETS

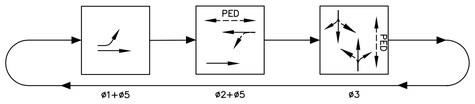
EXISTING CONTROLLER PROGRAMMING

INTERVAL / PHASE	PHASE 1 INDEPENDENT EB LEFT	PHASE 2 WASHINGTON WB	PHASE 3 BROAD SB FRONT NB	PHASE 5 INDEPENDENT EB
TIMING IN SECONDS				
INITIAL INTERVAL	10	15	10	10
VEHICLE EXTENSION	5	5	5	5
MAX. GREEN 1	15	35	20	25
MAX. GREEN 2	–	–	–	–
YELLOW	4.0	4.0	4.0	4.0
ALL RED	2.0	2.0	2.0	2.0
PEDESTRIAN WALK		7.0	7.0	
PEDESTRIAN DON'T WALK		8.0	8.0	
RECALL		MAX	MAX	MAX

8 PHASE NEMA CONTROLLER

PHASE 1: INDEPENDENT ST. EB LEFT	PHASE 2: WASHINGTON ST. WB	PHASE 3: BROAD ST. SB FRONT ST. NB	PHASE 4: NOT USED
PHASE 5: INDEPENDENT ST. EB	PHASE 6: NOT USED	PHASE 7: NOT USED	PHASE 8: NOT USED

PROPOSED SEQUENCE



PROPOSED TIME OF DAY PLANS:

	PHASE 1 AM PEAK PLAN 1	PHASE 1 PM PEAK PLAN 2	PHASE 2 AM PEAK PLAN 3	PHASE 2 PM PEAK PLAN 4
CYCLE LENGTH (SEC.)	95	95	90	95
OFFSET (SEC.)	–	–	–	–
REFERENCE PHASE	–	–	–	–
SPLIT TIME PHASE 1	12	12	13	12
SPLIT TIME PHASE 2	26	34	46	43
SPLIT TIME PHASE 3	57	49	31	40
SPLIT TIME PHASE 5	38	46	59	55

PHASE TIME INCLUDES CLEARANCE INTERVALS.
REFERENCE PHASE IS TO START OF GREEN TIME.

THE INTERSECTION OF WASHINGTON AND BROAD STREETS FUNCTIONS A PRETIMED AND ISOLATED INTERSECTION.

DAILY SCHEDULE WASHINGTON & BROAD

DAY 1 SATURDAY	CONST. PHASE 1	CONST. PHASE 2
0:00 – 5:00	FLASH	FLASH
5:00 – 10:00	PLAN 1	PLAN 3
10:00 – 16:00	PLAN 2	PLAN 4
16:00 – 23:59	PLAN 1	PLAN 3
DAY 2–6 MON. – FRI.		
0:00 – 5:00	FLASH	FLASH
5:00 – 10:00	PLAN 1	PLAN 3
10:00 – 18:30	PLAN 2	PLAN 4
18:30 – 23:59	PLAN 1	PLAN 3
DAY 7 SUNDAY		
0:00 – 5:00	FLASH	FLASH
5:00 – 10:00	PLAN 1	PLAN 3
10:00 – 16:00	PLAN 2	PLAN 4
16:00 – 23:59	PLAN 1	PLAN 3

SIGNAL DATA
WASHINGTON & EXCHANGE STREETS

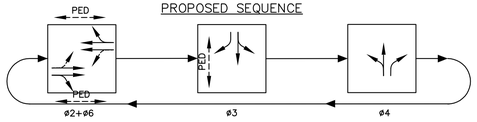
EXISTING CONTROLLER PROGRAMMING

INTERVAL / PHASE	PHASE 2 WASHINGTON EB	PHASE 3 EXCHANGE SB	PHASE 4 PLAZA NB	PHASE 6 WASHINGTON WB
TIMING IN SECONDS				
INITIAL INTERVAL	10	5	5	10
VEHICLE EXTENSION	3	3	3	3
MAX. GREEN 1	31	20	24	31
MAX. GREEN 2	–	–	–	–
YELLOW	3.0	3.0	3.0	3.0
ALL RED	2.0	2.0	2.0	2.0
PEDESTRIAN WALK	7		7	7
PEDESTRIAN DON'T WALK	17		12	17
RECALL	SOFT			SOFT

8 PHASE NEMA CONTROLLER

PHASE 1: NOT USED	PHASE 2: WASHINGTON EB	PHASE 3: EXCHANGE SB	PHASE 4: PLAZA NB
PHASE 5: NOT USED	PHASE 6: WASHINGTON WB	PHASE 7: NOT USED	PHASE 8: NOT USED

PROPOSED SEQUENCE



PROPOSED COORDINATION PLANS:

	PHASE 1 AM PEAK PLAN 1	PHASE 1 PM PEAK PLAN 2	PHASE 2 AM PEAK PLAN 3	PHASE 2 PM PEAK PLAN 4
CYCLE LENGTH (SEC.)	95	95	90	95
OFFSET (SEC.)	49	48	41	48
REFERENCE PHASE	2–EBTL	2–EBTL	2–EBTL	2–EBTL
SPLIT TIME PHASES 2 & 6	48	49	46	52
SPLIT TIME PHASES 3	25	26	23	23
SPLIT TIME PHASES 4	22	20	21	20

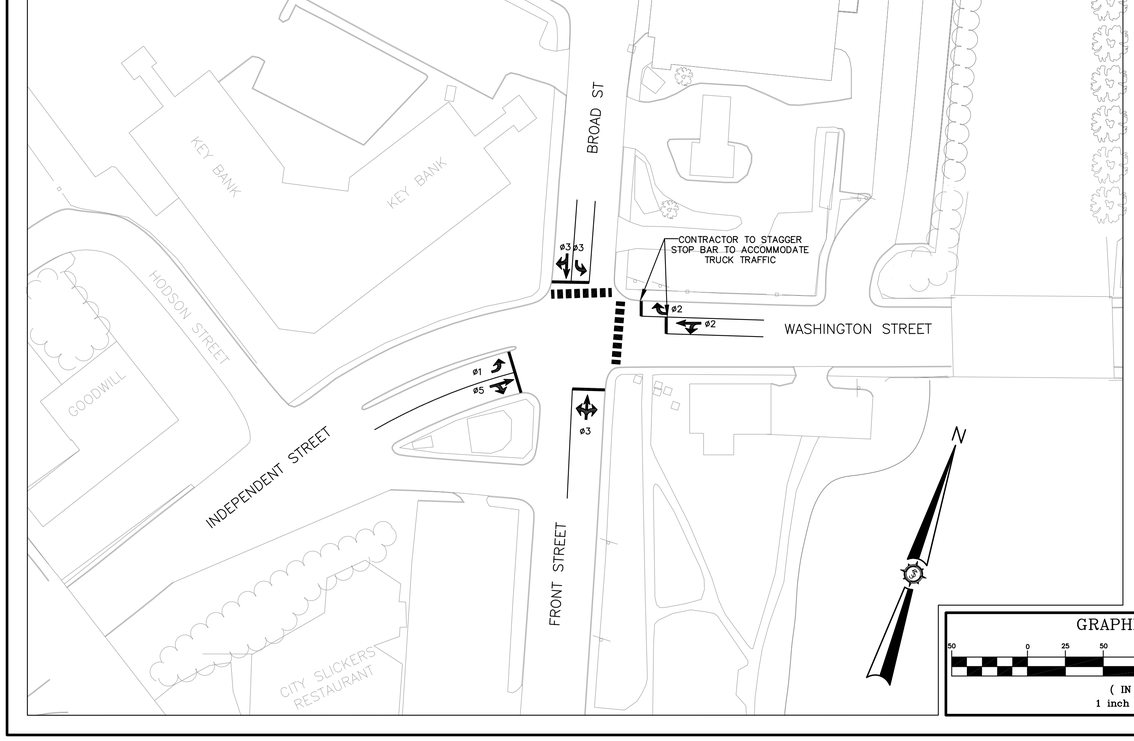
PHASE TIME INCLUDES CLEARANCE INTERVALS.
REFERENCE PHASE IS TO START OF GREEN TIME.

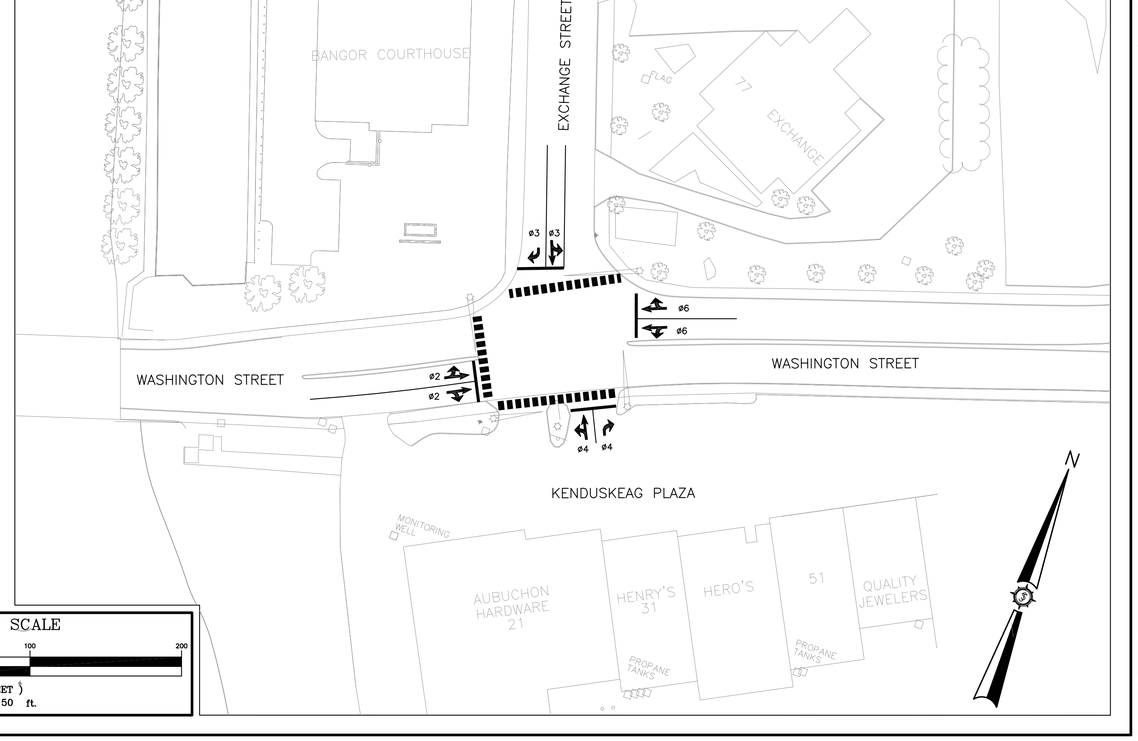
THE FOLLOWING INTERSECTIONS ARE PART OF THE PENOBSCOT CORRIDOR COORDINATED SIGNAL SYSTEM:
OAK & HANCOCK STREETS
WASHINGTON & EXCHANGE STREETS
STATE & NORTH MAIN STREETS
OAK & WASHINGTON STREETS
STATE & PENOBSCOT STREETS
NORTH MAIN & BETTON (PARKER) STREETS

ALL INTERSECTION CONTROLLERS ARE EAGLE CONTROLLERS, EPAC 300 MODEL.

DAILY SCHEDULE PENOBSCOT CORRIDOR

DAY 1 SATURDAY	CONST. PHASE 1	CONST. PHASE 2
0:00 – 5:00	FLASH	FLASH
5:00 – 8:00	FREE	FREE
8:00 – 10:00	PLAN 1	PLAN 3
10:00 – 16:00	PLAN 2	PLAN 4
16:00 – 19:00	PLAN 1	PLAN 3
19:00 – 23:59	FREE	FREE
DAY 2–6 MON. – FRI.		
0:00 – 4:30	FLASH	FLASH
4:30 – 6:30	FREE	FREE
6:30 – 10:00	PLAN 1	PLAN 3
10:00 – 18:30	PLAN 2	PLAN 4
18:30 – 20:00	PLAN 1	PLAN 3
20:00 – 23.59	FREE	FREE
DAY 7 SUNDAY		
0:00 – 5:00	FLASH	FLASH
5:00 – 10:00	FREE	FREE
10:00 – 18:00	PLAN 1	PLAN 3
18:00 – 23:59	FREE	FREE





Rev. #	Drwg. by	Description	Date
1			
2			
3			
4			

Designed by JMT | Drawn by JC | Checked BCH
Date 11/16/2012 | Scale 1" = 50' | Approved JMT

MAINE DEPARTMENT OF TRANSPORTATION
AUGUSTA, MAINE

Project Location: BANGOR & BREWER, MAINE

Drawing Description: WASHINGTON & BROAD STREETS
WASHINTON & EXCHANGE STREETS

Seal: STATE OF MAINE JOHN N. PETERSON No. 8687 LICENSED PROFESSIONAL ENGINEER 11/16/12

Project No. 83308E | MDOT WIN 18320.00

Engineer: SEWALL
AN INTEGRATED TEAM OF GEOSPATIAL ENGINEERING, SURVEYING AND NATURAL RESOURCE CONSULTANTS
JAMES W. SEWALL COMPANY Since 1880
SEWALL.COM 800.848.3202

Phase: CONSTRUCT

Sheet No. 10

SIGNAL DATA
STATE & PENOBSCOT STREETS

EXISTING CONTROLLER PROGRAMMING

INTERVAL	PHASE 1	PHASE 2			
PHASE	PED STATE NB+SB	PED PENOBSCOT EB			
TIMING IN SECONDS					
INITIAL INTERVAL	10	5			
VEHICLE EXTENSION	3	3			
MAX. GREEN 1	29	21			
MAX. GREEN 2	–	–			
YELLOW	3.0	3.0			
ALL RED	2.0	2.0			
PEDESTRIAN WALK	5	4			
PEDESTRIAN DON'T WALK	16	9			
RECALL	SOFT				

8 PHASE NEMA CONTROLLER

PHASE 1	PHASE 2	PHASE 3	PHASE 4
PED STATE NB+SB	PED PENOBSCOT EB	NOT USED	NOT USED
PHASE 5	**PHASE 6**	**PHASE 7**	**PHASE 8**
NOT USED	NOT USED	NOT USED	NOT USED

PROPOSED COORDINATION PLANS:

COORDINATION PLANS: PROPOSED

	PHASE 1 AM PEAK PLAN 1	PHASE 1 PM PEAK PLAN 2	PHASE 2 AM PEAK PLAN 3	PHASE 2 PM PEAK PLAN 4
CYCLE LENGTH (SEC.)	95	95	90	95
OFFSET (SEC.)	21	7	18	4
REFERENCE PHASE	1–NWSE	1–NWSE	1–NWSE	1–NWSE
SPLIT TIME PHASE 1	65	70	61	70
SPLIT TIME PHASE 2	30	25	29	25

PHASE TIME INCLUDES CLEARANCE INTERVALS.
REFERENCE PHASE IS TO START OF GREEN TIME.

THE FOLLOWING INTERSECTIONS ARE PART OF THE PENOBSCOT CORRIDOR COORDINATED SIGNAL SYSTEM:
OAK & HANCOCK STREETS
WASHINGTON & EXCHANGE STREETS
STATE & NORTH MAIN STREETS
OAK & WASHINGTON STREETS
STATE & PENOBSCOT STREETS
NORTH MAIN & BETTON (PARKER) STREETS

DAILY SCHEDULE PENOBSCOT CORRIDOR

DAY 1 SATURDAY	CONST. PHASE 1	CONST. PHASE 2
0:00 – 5:00	FLASH	FLASH
5:00 – 8:00	FREE	FREE
8:00 – 10:00	PLAN 1	PLAN 3
10:00 – 16:00	PLAN 2	PLAN 4
16:00 – 19:00	PLAN 1	PLAN 3
19:00 – 23:59	FREE	FREE
DAY 2–6 MON. – FRI.		
0:00 – 4:30	FLASH	FLASH
4:30 – 6:30	FREE	FREE
6:30 – 10:00	PLAN 1	PLAN 3
10:00 – 18:30	PLAN 2	PLAN 4
18:30 – 20:00	PLAN 1	PLAN 3
20:00 – 23:59	FREE	FREE
DAY 7 SUNDAY		
0:00 – 5:00	FLASH	FLASH
5:00 – 10:00	FREE	FREE
10:00 – 18:00	PLAN 1	PLAN 3
18:00 – 23:59	FREE	FREE

SIGNAL DATA
STATE & NORTH MAIN STREETS

CONTROLLER PROGRAMMINGEXISTING

INTERVAL	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 6	PHASE 8
PHASE	STATE SB LEFT	STATE NB	N. MAIN WB LEFT	N. MAIN EB	STATE SB	N. MAIN WB
TIMING IN SECONDS						
INITIAL INTERVAL	5	10	5	5	10	5
VEHICLE EXTENSION	3	3	3	3	3	3
MAX. GREEN 1	20	15	10	30	35	40
MAX. GREEN 2	–	–	–	–	–	10
YELLOW	3.0	3.0	3.0	3.0	3.0	3.0
ALL RED	2.0	2.0	2.0	2.0	2.0	2.0
PEDESTRIAN WALK				5	4	
PEDESTRIAN DON'T WALK				20	19	
RECALL		SOFT			SOFT	

8 PHASE NEMA CONTROLLER

PHASE 1	PHASE 2	PHASE 3	PHASE 4
STATE SBLT	STATE NB	N. MAIN WBLT	N. MAIN EB
PHASE 5	**PHASE 6**	**PHASE 7**	**PHASE 8**
NOT USED	STATE SB	NOT USED	N. MAIN WB

PROPOSED COORDINATION PLANS:

PROPOSED COORDINATION PLANS:

	PHASE 1 AM PEAK PLAN 1	PHASE 1 PM PEAK PLAN 2	PHASE 2 AM PEAK PLAN 3	PHASE 2 PM PEAK PLAN 4
CYCLE LENGTH (SEC.)	95	95	90	95
OFFSET (SEC.)	37	24	30	20
REFERENCE PHASE	6–SET	6–SET	6–SET	6–SET
SPLIT TIME PHASE 1	20	26	20	26
SPLIT TIME PHASE 2	38	36	33	36
SPLIT TIME PHASE 3	14	12	14	12
SPLIT TIME PHASE 4	23	21	23	21
SPLIT TIME PHASE 6	58	62	53	62
SPLIT TIME PHASE 8	37	33	37	33

PHASE TIME INCLUDES CLEARANCE INTERVALS.
REFERENCE PHASE IS TO START OF GREEN TIME.

DAILY SCHEDULE PENOBSCOT CORRIDOR

DAY 1 SATURDAY	CONST. PHASE 1	CONST. PHASE 2
0:00 – 5:00	FLASH	FLASH
5:00 – 8:00	FREE	FREE
8:00 – 10:00	PLAN 1	PLAN 3
10:00 – 16:00	PLAN 2	PLAN 4
16:00 – 19:00	PLAN 1	PLAN 3
19:00 – 23:59	FREE	FREE
DAY 2–6 MON. – FRI.		
0:00 – 4:30	FLASH	FLASH
4:30 – 6:30	FREE	FREE
6:30 – 10:00	PLAN 1	PLAN 3
10:00 – 18:30	PLAN 2	PLAN 4
18:30 – 20:00	PLAN 1	PLAN 3
20:00 – 23:59	FREE	FREE
DAY 7 SUNDAY		
0:00 – 5:00	FLASH	FLASH
5:00 – 10:00	FREE	FREE
10:00 – 18:00	PLAN 1	PLAN 3
18:00 – 23:59	FREE	FREE

GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.

Rev. #	Done by	Description	Date
1			
1			
1			

Designed by JMT
Drawn by JC
Date 11/16/2012
Scale 1" = 50'
Checked BCH
Approved JMT

MAINE DEPARTMENT OF TRANSPORTATION
AUGUSTA, MAINE
Project Location BANGOR & BREWER, MAINE
Drawing Description
STATE & PENOBSCOT STREETS
STATE & NORTH MAIN STREETS

Seal
STATE OF MAINE — JOHN M. PRETTYMAN — No. 9587 — REGISTERED PROFESSIONAL ENGINEER — 11/16/12

Project No. 83308E
MDOT WIN 18320.00

Engineer
SEWALL
AN INTEGRATED TEAM OF GEOSPATIAL ENGINEERING, SURVEYING AND NATURAL RESOURCE CONSULTANTS
JAMES W. SEWALL COMPANY Since 1880
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Phase CONSTRUCT

Sheet No. 11

SIGNAL DATA
NORTH MAIN & WILSON STREETS

CONTROLLER PROGRAMMING

INTERVAL	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8
PHASE	WILSON ST. NB LEFT	BRIDGE SB	S. MAIN ST. EB LEFT	MAIN ST. WB	BRIDGE SB LEFT	WILSON ST. NB	MAIN ST. WB LEFT	S. MAIN ST. EB
TIMING IN SECONDS								
INITIAL INTERVAL	5	8	5	5	5	8	5	5
VEHICLE EXTENSION	3	3	3	3	3	3	3	3
MAX. GREEN 1	10	36	10	24	10	36	10	29
MAX. GREEN 2	–	–	–	–	–	–	–	–
YELLOW	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
ALL RED	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
PEDESTRIAN WALK		7		7		7		7
PEDESTRIAN DON'T WALK		22		17		22		17
RECALL		SOFT				SOFT		

PROPOSED TIME OF DAY PLANS:

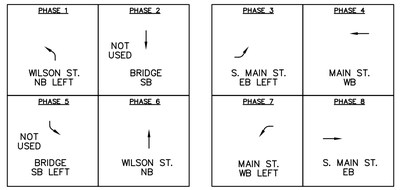
	PHASE 1 AM PEAK PLAN 1	PHASE 1 PM PEAK PLAN 2	PHASE 2 AM PEAK PLAN 3	PHASE 2 PM PEAK PLAN 4
CYCLE LENGTH (SEC.)	95	90	90	95
OFFSET (SEC.)	–	–	–	–
REFERENCE PHASE	–	–	–	–
SPLIT TIME PHASE 1	13	12	12	12
SPLIT TIME PHASE 3	16	12	13	13
SPLIT TIME PHASE 4	31	31	30	35
SPLIT TIME PHASES 6	48	47	47	47
SPLIT TIME PHASE 7	13	12	13	13
SPLIT TIME PHASE 8	34	31	30	35

PHASE TIME INCLUDES CLEARANCE INTERVALS.

THE INTERSECTION OF NORTH MAIN & WILSON STREETS IS NOT PART OF A COORDINATED SYSTEM.

CONCURRENT PEDESTRIAN PHASE ON ACTUATION ONLY.

8 PHASE NEMA CONTROLLER



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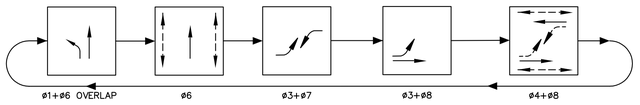
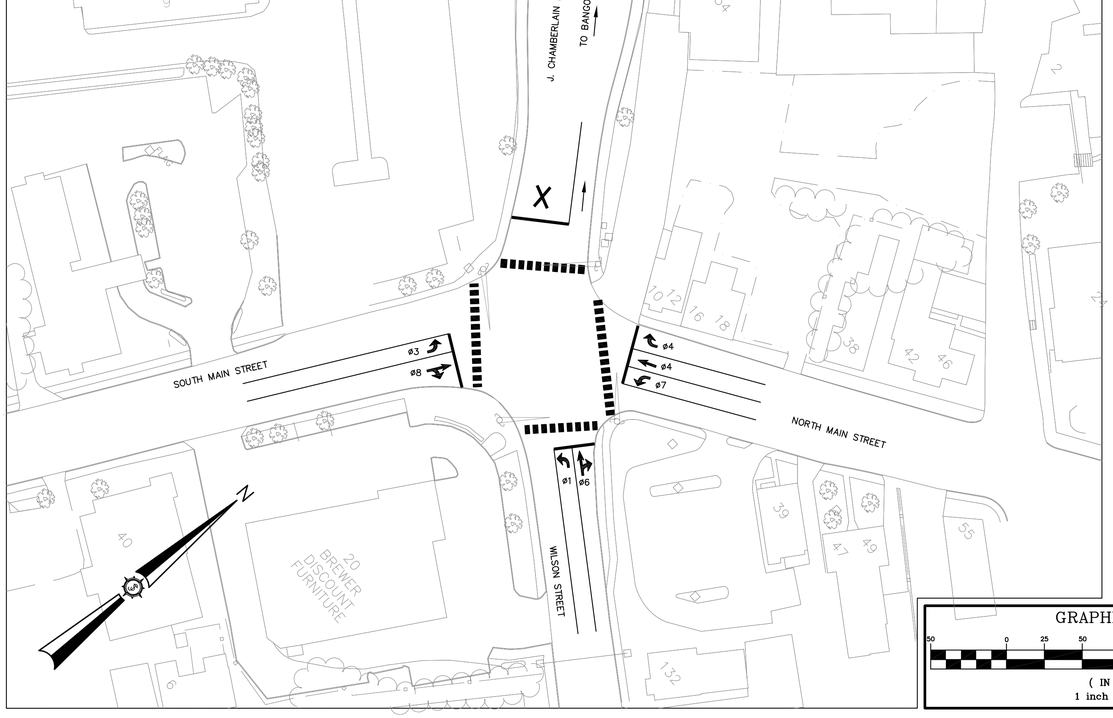


DAILY SCHEDULE WILSON & MAIN STREETS

DAY 1 SATURDAY	CONST. PHASE 1	CONST. PHASE 2
0:00 – 5:00	FLASH	FLASH
5:00 – 10:00	PLAN 1	PLAN 3
10:00 – 16:00	PLAN 2	PLAN 4
16:00 – 23:59	PLAN 1	PLAN 3
DAY 2–6 MON. – FRI.		
0:00 – 5:00	FLASH	FLASH
5:00 – 10:00	PLAN 1	PLAN 3
10:00 – 18:30	PLAN 2	PLAN 4
18:30 – 23:59	PLAN 1	PLAN 3
DAY 7 SUNDAY		
0:00 – 5:00	FLASH	FLASH
5:00 – 10:00	PLAN 1	PLAN 3
10:00 – 16:00	PLAN 2	PLAN 4
16:00 – 23:59	PLAN 1	PLAN 3



GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)

1 inch = 50 ft.

SIGNAL DATA
NORTH MAIN & BETTON STREETS

EXISTING CONTROLLER PROGRAMMING

INTERVAL	PHASE 2	PHASE 4	PHASE 6	PHASE 8
PHASE	N. MAIN WB	PARKER NB	N. MAIN EB	BETTON SB
TIMING IN SECONDS				
INITIAL INTERVAL	5	10	5	10
VEHICLE EXTENSION	3	3	3	3
MAX. GREEN 1	22	23	22	23
MAX. GREEN 2	–	–	–	–
YELLOW	3.0	3.0	3.0	3.0
ALL RED	2.0	2.0	2.0	2.0
PEDESTRIAN WALK	4	4	4	
PEDESTRIAN DON'T WALK	12	9	13	
RECALL	SOFT		SOFT	

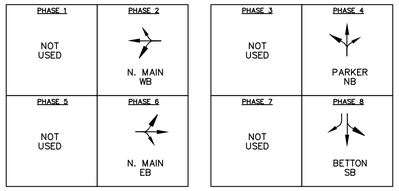
PROPOSED COORDINATION PLANS:

	PHASE 1 AM PEAK PLAN 1	PHASE 1 PM PEAK PLAN 2	PHASE 2 AM PEAK PLAN 3	PHASE 2 PM PEAK PLAN 4
CYCLE LENGTH (SEC.)	95	95	90	95
OFFSET (SEC.)	69	58	64	52
REFERENCE PHASE	6–EBTL	6–EBTL	6–EBTL	6–EBTL
SPLIT TIME PHASES 2 & 6	69	57	64	57
SPLIT TIME PHASES 4 & 8	26	38	26	38

PHASE TIME INCLUDES CLEARANCE INTERVALS.
REFERENCE PHASE IS TO START OF GREEN TIME.

THE FOLLOWING INTERSECTIONS ARE PART OF THE PENOBSCOT CORRIDOR COORDINATED SIGNAL SYSTEM:
OAK & HANCOCK STREETS
WASHINGTON & EXCHANGE STREETS
STATE & NORTH MAIN STREETS
OAK & WASHINGTON STREETS
STATE & PENOBSCOT STREETS
NORTH MAIN & BETTON (PARKER) STREETS

8 PHASE NEMA CONTROLLER



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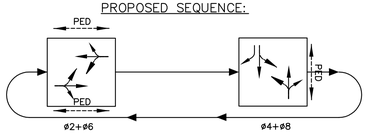
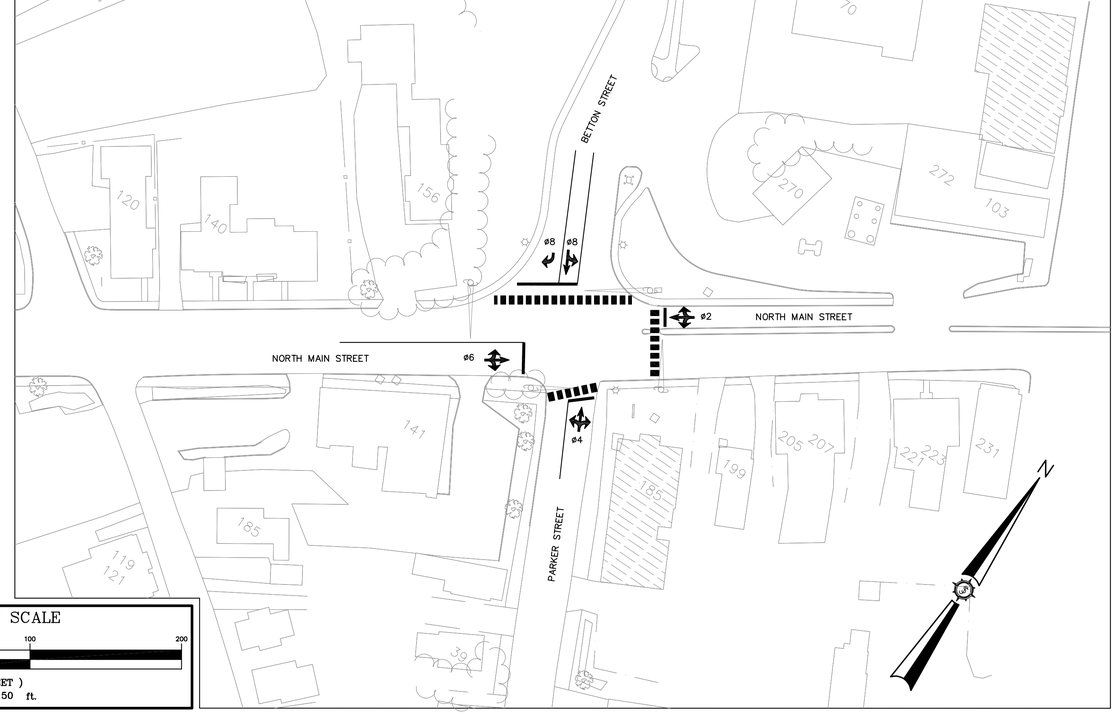


DAILY SCHEDULE PENOBSCOT CORRIDOR

DAY 1 SATURDAY	CONST. PHASE 1	CONST. PHASE 2
0:00 – 5:00	FLASH	FLASH
5:00 – 8:00	FREE	FREE
8:00 – 10:00	PLAN 1	PLAN 3
10:00 – 16:00	PLAN 2	PLAN 4
16:00 – 19:00	PLAN 1	PLAN 3
19:00 – 23:59	FREE	FREE
DAY 2–6 MON. – FRI.		
0:00 – 4:30	FLASH	FLASH
4:30 – 6:30	FREE	FREE
6:30 – 10:00	PLAN 1	PLAN 3
10:00 – 18:30	PLAN 2	PLAN 4
18:30 – 20:00	PLAN 1	PLAN 3
20:00 – 23.59	FREE	FREE
DAY 7 SUNDAY		
0:00 – 5:00	FLASH	FLASH
5:00 – 10:00	FREE	FREE
10:00 – 18:00	PLAN 1	PLAN 3
18:00 – 23:59	FREE	FREE



Rev. #	Rev. by	Description	Date
1			
2			
3			
4			

Designed By JMT
Drawn By JC
Checked BCH
Approved JMT
Date 11/16/2012
Scale 1" = 50'

MAINE DEPARTMENT OF TRANSPORTATION
AUGUSTA, MAINE

Project Location BANGOR & BREWER, MAINE

Drawing Description
NORTH MAIN & WILSON STREETS
NORTH MAIN & BETTON STREETS

Seal
STATE OF MAINE JOHN M. CHAPMAN No. 9687 REGISTERED PROFESSIONAL ENGINEER
11/16/12

Project No. 83308E

Engineer
SEWALL
AN INTEGRATED TEAM OF GEOSPATIAL ENGINEERING, SURVEYING AND NATURAL RESOURCE CONSULTANTS
JAMES W. SEWALL COMPANY Since 1859
SOLUTIONS 800.448.2352

MDOT WIN 18320.00

Phase CONSTRUCT

Sheet No. 12

GENERAL NOTES – DETOUR PHASE 1

1. ALL WORK PERFORMED UNDER THIS CONTRACT TO BE GOVERNED BY AND IN CONFORMITY WITH THE MAINE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS (DECEMBER 2002), STANDARD DETAILS HIGHWAYS AND BRIDGES (DECEMBER 2002) AND SUPPLEMENTAL THERETO EXCEPT AS MODIFIED ON THE PLANS AND IN THE SPECIAL PROVISIONS.

2. ALL TEMPORARY PAVEMENT MARKINGS SHALL BE IN ACCORDANCE TO MEDOT STANDARD SPECIFICATION & STANDARD DETAILS SECTION 627 & THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, 2009 EDITION.

3. ALL CONSTRUCTION SIGNS & BARRIERS SHALL BE IN ACCORDANCE TO MEDOT STANDARD SPECIFICATIONS & STANDARD DETAILS & THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, 2009 EDITION.

4. ON-STREET PARKING ON SOUTH SIDE OF WATER STREET IS TO BE ELIMINATED FROM MAIN STREET TO THE FIRST KEY BANK ENTRANCE.

5. WATER STREET SHALL BE RE-STRIPED AT THE INTERSECTION WITH MAIN STREET FOR ONE WESTBOUND LANE. SEE SIGNAL PLAN 6.

6. ALL EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH THE TEMPORARY PAVEMENT MARKINGS SHALL BE REMOVED BY GRINDING. PAVEMENT MARKING REMOVAL TO BE PAID UNDER ITEM 627.77. AT PROJECT COMPLETION, THE ORIGINAL PAVEMENT MARKINGS ARE TO BE RESTORED AND THE TEMPORARY PAVEMENT MARKINGS REMOVED.

7. EXACT LOCATION OF SIGNS TO BE FIELD DETERMINED AND APPROVED BY RESIDENT.

LEGEND

- SIGN LOCATION
- (D) SIGN DESCRIPTION
- TRAVEL DIRECTION
- LANE CLOSED
- TYPE 3 BARRICADE
- TEMPORARY CONCRETE BARRIER AND/OR DRUMS

SIGN DIMENSIONS

SIGN	DIM. (IN.) (WXH.)
G20-2	36X18
M1-4	24X24
M1-5	24X24
M3-1	24X12
M3-2	24X12
M4-8	24X12
M4-8a	24X12
M5-1	21X15
M6-1	21X15
M6-3	21X15
R3-1	24X24
R3-5fP	30X12
R5-1	30X30
R9-10	24X12
R9-11	24X12
R11-4	60X30
R11-4b	60X30
R11-5	24X24
W20-1b	36X36
W20-2	36X36

SIGN	DIM. (IN.) (WXH.)
CS-1	60X30
CS-2	36X12
CS-3	36X12
CS-4	36X12
CS-5	30X30
CS-6	48X24
CS-7	36X36
CS-8	48X24
CS-9	60X30

(1) DETOUR NORTH 1A EAST 9
M4-8, M3-1, M3-2, M1-4 (1A), M1-5 (9), M6-3

(2) DETOUR NORTH 1A EAST 9
M4-8, M3-1, M3-2, M1-4 (1A), M1-5 (9), M5-1 (LT)

(3) DETOUR NORTH 1A EAST 9
M4-8, M3-1, M3-2, M1-4 (1A), M1-5 (9), M5-1 (RT)

(3a) DETOUR NORTH 1A EAST 9 RIGHT LANE
M4-8, M3-1, M3-2, M1-4 (1A), M1-5 (9), M5-1 (RT), R3-5fP

(3b) DETOUR NORTH 1A EAST 9 RIGHT LANE
M4-8, M3-1, M3-2, M1-4 (1A), M1-5 (9), M6-1 (RT), R3-5fP

(4) DETOUR EAST 9 NORTH 1A
M4-8, M3-2, M3-1, M1-5 (9), M1-4 (1A), M5-1 (LT), M6-3

(5) END DETOUR EAST 9
M4-8a, M3-2, M1-5 (9)

(6) DETOUR NORTH 1A
M4-8, M3-1, M1-4 (1A), M6-3

(7) DETOUR NORTH 1A
M4-8, M3-1, M1-4 (1A), M5-1 (LT)

(8) END DETOUR NORTH 1A
M4-8a, M3-1, M1-4 (1A)

(9) DETOUR NORTH 1A EAST 9
M4-8, M3-1, M3-2, M1-4 (1A), M1-5 (9), M6-1 (LT)

(A) CHANGEABLE MESSAGE BOARD "CHAMBERLAIN BRIDGE CLOSED USE HAMMOND ST TO BREWER"

(Aa) CHANGEABLE MESSAGE BOARD "CHAMBERLAIN BRIDGE CLOSED USE I-395 TO BREWER"

(B) CHAMBERLAIN BRIDGE CLOSED
CS-1

(C) DETOUR AHEAD
W20-2

(D) BRIDGE CLOSED TO THRU TRAFFIC (DO NOT ENTER)
R11-4b, R5-1

(Dg) BRIDGE CLOSED TO THRU TRAFFIC (LOCAL TRAFFIC ONLY)
R11-4b, R11-5

(E) ROAD CLOSED TO THRU TRAFFIC (LOCAL TRAFFIC ONLY)
R11-4, R11-5

(F) SIDEWALK CLOSED USE OTHER SIDE
R9-10 (ON TYPE II BARRICADE)

(G) ROAD CLOSED TO THRU TRAFFIC
R11-4, R3-1

(J) END ROAD WORK
G20-2

(K) BRIDGE WORK 1000 FT
W20-1b

(L) BRIDGE WORK 500 FT
W20-1b (500 FT)

(Lg) BRIDGE WORK 500 FT ON LEFT
W20-1b (500 FT), CS-2

(Lb) BRIDGE WORK 500 FT ON RIGHT
W20-1b (500 FT), CS-3

(M) DETOUR TO BREWER
M4-8, CS-4, M5-1 (LT)

(N) DETOUR TO BREWER
M4-8, CS-4, M6-3

(O) DETOUR TO BREWER
M4-8, CS-4, M5-1 (RT)

(P) SIDEWALK CLOSED AHEAD CROSS HERE
R9-11 (ON TYPE II BARRICADE)

(R) SUMMER ST DETOUR
CS-5 LT/RT

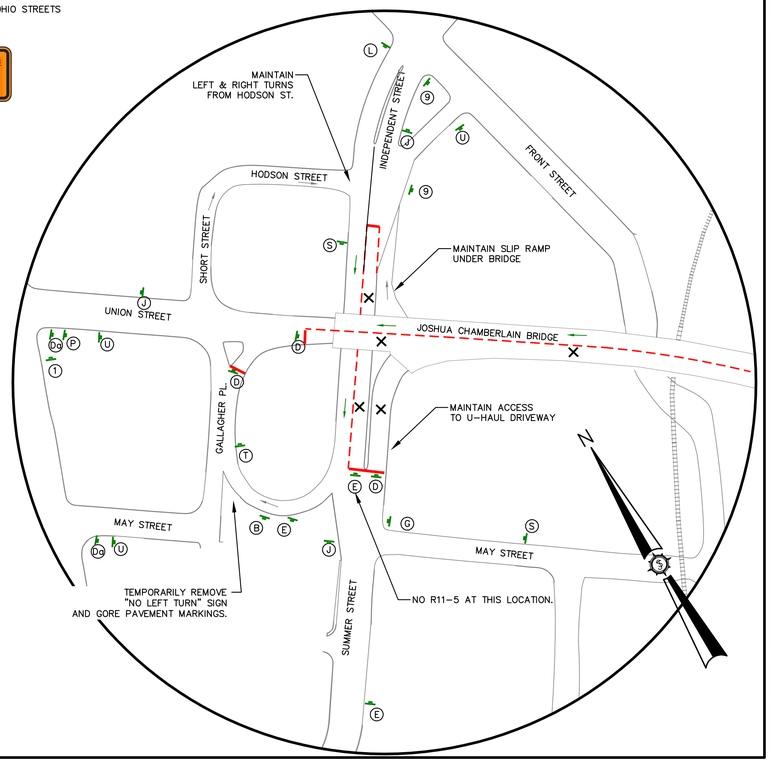
(S) BRIDGE CLOSED ON RIGHT
CS-6

(T) TRAFFIC TO PARKING GARAGE ONLY
CS-7

(U) ALL BUSINESSES OPEN
CS-8

SIGNS FOR UNION & OHIO STREETS NORTHWEST OF I-95:

CHAMBERLAIN BRIDGE CLOSED USE I-395 TO BREWER
CS-9



Rev. #	Dwg. By	Description	Date
-	-	-	-

Designed By: GLC
Drawn By: JC
Date: 11/16/2012
Scale: 1" = 1,000'
Checked: -
Approved: -

MAINE DEPARTMENT OF TRANSPORTATION
AUGUSTA, MAINE
Project Location: BANGOR & BREWER, MAINE
Drawing Description: **DETOUR PLAN PHASE 1**

STATE OF MAINE — GLENN L. CORDELL — No. 7260 — REGISTERED PROFESSIONAL ENGINEER
Seal

Project No.: **83308E**
MDOT WIN 18320.00

Engineer: SEWALL
AN INTEGRATED TEAM OF GEOSPATIAL ENGINEERING, SURVEYING AND NATURAL RESOURCE CONSULTANTS
JAMES W. SEWALL COMPANY *Since 1880*
207.848.5702
SEWALL.COM

Phase: CONSTRUCT

Sheet No.: **13**

GENERAL NOTES – DETOUR PHASE 2

1. ALL WORK PERFORMED UNDER THIS CONTRACT TO BE GOVERNED BY AND IN CONFORMITY WITH THE MAINE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS (DECEMBER 2002), STANDARD DETAILS HIGHWAYS AND BRIDGES (DECEMBER 2002) AND SUPPLEMENTAL THERETO EXCEPT AS MODIFIED ON THE PLANS AND IN THE SPECIAL PROVISIONS.

2. ALL TEMPORARY PAVEMENT MARKINGS SHALL BE IN ACCORDANCE TO MEDOT STANDARD SPECIFICATION & STANDARD DETAILS SECTION 627 & THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, 2009 EDITION.

3. ALL CONSTRUCTION SIGNS & BARRIERS SHALL BE IN ACCORDANCE TO MEDOT STANDARD SPECIFICATIONS & STANDARD DETAILS & THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, 2009 EDITION.

4. WATER STREET SHALL BE RE-STRIPED AT THE INTERSECTION WITH MAIN STREET FOR ONE WESTBOUND LANE. SEE SIGNAL PLAN 6.

5. ALL EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH THE TEMPORARY PAVEMENT MARKINGS SHALL BE REMOVED BY GRINDING. PAVEMENT MARKING REMOVAL TO BE PAID UNDER ITEM 627.77. AT PROJECT COMPLETION, THE ORIGINAL PAVEMENT MARKINGS ARE TO BE RESTORED AND THE TEMPORARY PAVEMENT MARKINGS REMOVED.

LEGEND

- SIGN LOCATION
- (D) SIGN DESCRIPTION
- TRAVEL DIRECTION
- LANE CLOSED
- TYPE 3 BARRICADE
- TEMPORARY CONCRETE BARRIER AND/OR DRUMS

SIGN DIMENSIONS

SIGN	DIM. (IN.) (WXH.)	SIGN	DIM. (IN.) (WXH.)
G20-2	36X18	CS-1	60X30
M1-4	24X24	CS-2	36X12
M1-5	24X24	CS-3	36X12
M3-1	24X12	CS-4	36X12
M3-2	24X12	CS-5	30X30
M4-8	24X12	CS-6	48X24
M4-8a	24X12	CS-7	36X36
M5-1	21X15	CS-8	48X24
M6-1	21X15	CS-9	60X30
M6-3	21X15		
R3-5fP	30X12		
R5-1	30X30		
R9-10	24X12		
R9-11	24X12		
R11-4	60X30		
R11-4b	60X30		
R11-5	24X24		
W20-1b	36X36		
W20-2	36X36		

(1) DETOUR NORTH 1A EAST 9
M4-8, M3-1, M3-2, M1-4 (1A), M1-5 (9), M6-3

(2) DETOUR NORTH 1A EAST 9
M4-8, M3-1, M3-2, M1-4 (1A), M1-5 (9), M5-1 (LT)

(3) DETOUR NORTH 1A EAST 9
M4-8, M3-1, M3-2, M1-4 (1A), M1-5 (9), M5-1 (RT)

(3a) DETOUR NORTH 1A EAST 9 RIGHT LANE
M4-8, M3-1, M3-2, M1-4 (1A), M1-5 (9), M5-1 (RT), R3-5fP

(3b) DETOUR NORTH 1A EAST 9 RIGHT LANE
M4-8, M3-1, M3-2, M1-4 (1A), M1-5 (9), M6-1 (RT), R3-5fP

(4) DETOUR EAST 9 NORTH 1A
M4-8, M3-2, M3-1, M1-5 (9), M1-4 (1A), M5-1 (LT), M6-3

(5) END DETOUR EAST 9
M4-8a, M3-2, M1-5 (9)

(6) DETOUR NORTH 1A
M4-8, M3-1, M1-4 (1A), M6-3

(7) DETOUR NORTH 1A
M4-8, M3-1, M1-4 (1A), M5-1 (LT)

(8) END DETOUR NORTH 1A
M4-8a, M3-1, M1-4 (1A)

(9) DETOUR NORTH 1A EAST 9
M4-8, M3-1, M3-2, M1-4 (1A), M1-5 (9), M6-1 (LT)

(A) CHANGEABLE MESSAGE BOARD "CHAMBERLAIN BRIDGE CLOSED USE HAMMOND ST TO BREWER"

(Ag) CHANGEABLE MESSAGE BOARD "CHAMBERLAIN BRIDGE CLOSED USE I-395T TO BREWER"

(B) CHAMBERLAIN BRIDGE CLOSED
CS-1

(C) DETOUR AHEAD
W20-2

(D) BRIDGE CLOSED TO THRU TRAFFIC — DO NOT ENTER
R11-4b, R5-1

(Dg) BRIDGE CLOSED TO THRU TRAFFIC — LOCAL TRAFFIC ONLY
R11-4b, R11-5

(E) ROAD CLOSED TO THRU TRAFFIC — LOCAL TRAFFIC ONLY
R11-4, R11-5

(F) SIDEWALK CLOSED USE OTHER SIDE
R9-10 (ON TYPE II BARRICADE)

(G) BRIDGE CLOSED TO THRU TRAFFIC
R11-4b

(J) END ROAD WORK
G20-2

(K) BRIDGE WORK 1000 FT
W20-1b

(L) BRIDGE WORK 500 FT
W20-1b (500 FT)

(Lg) BRIDGE WORK 500 FT ON LEFT
W20-1b (500 FT), CS-2

(Lb) BRIDGE WORK 500 FT ON RIGHT
W20-1b (500 FT), CS-3

(M) DETOUR TO BREWER
M4-8, CS-4, M5-1 (LT)

(N) DETOUR TO BREWER
M4-8, CS-4, M6-3

(O) DETOUR TO BREWER
M4-8, CS-4, M5-1 (RT)

(P) SIDEWALK CLOSED AHEAD CROSS HERE
R9-11 (ON TYPE II BARRICADE)

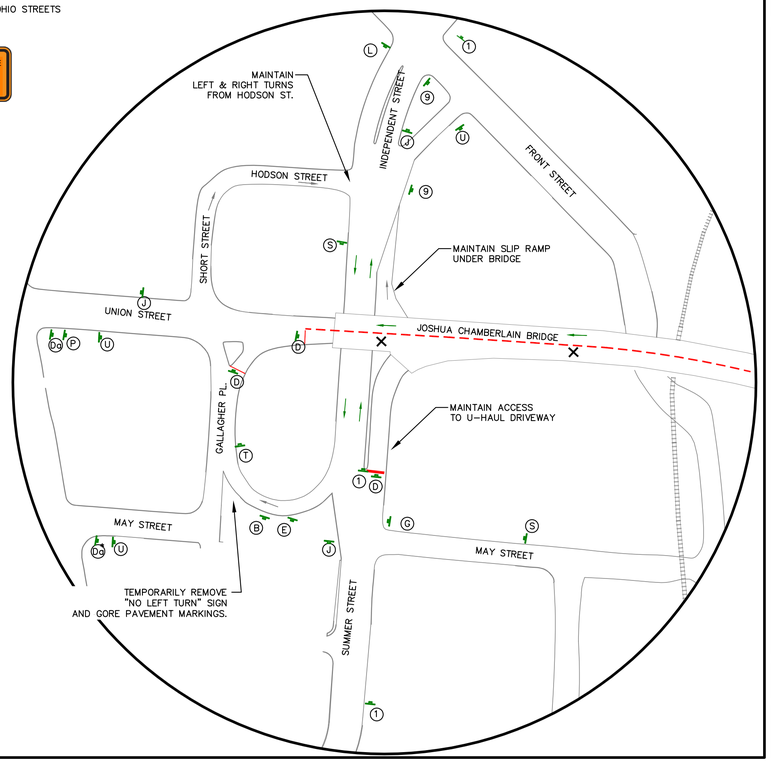
(S) BRIDGE CLOSED ON RIGHT
CS-6

(T) TRAFFIC TO PARKING GARAGE ONLY
CS-7

(U) ALL BUSINESSES OPEN
CS-8

SIGNS FOR UNION & OHIO STREETS NORTHWEST OF I-95:

CHAMBERLAIN BRIDGE CLOSED USE I-395 TO BREWER
CS-9



Rev. #	Dwg. By	Description	Date
-	-	-	-

Designed By: GLC
Drawn By: JC
Date: 11/16/2012
Scale: 1" = 1,000'
Checked: -
Approved: -

MAINE DEPARTMENT OF TRANSPORTATION
AUGUSTA, MAINE
Project Location: BANGOR & BREWER, MAINE
Drawing Description: DETOUR PLAN PHASE 2

STATE OF MAINE — GLENN L. CORSELLI — No. 7260 — REGISTERED PROFESSIONAL ENGINEER — Seal

MDOT WIN 18320.00
83308E
Project No.
Engineer

SEWALL
AN INTEGRATED TEAM OF GEOSPATIAL ENGINEERING, SURVEYING AND NATURAL RESOURCE CONSULTANTS
JAMES W. SEWALL COMPANY Since 1880
SEWALL.COM 800.848.3202

Phase: CONSTRUCT

Sheet No.: 14

Filename: ...\MSTA\015_Detour_Spans234.dgn Division: BRIDGE Username: David.Shaw Date:11/20/2012

Note: Signs shall be attached to the existing pier columns.
The method of attachment shall be approved by the Resident.

POR # 3
MAP 42, LOT 164
HAYMARKET ASSOCIATES
D/B/A KEY BANK

WATERFRONT ASSOCIATES, LLC

INDEPENDENCE STREET

BANGOR DIMENSION LLC
ITEM NO. (2)
TEMP. ROAD RIGHTS = 1884± S.F. (1)
TOTAL AREA = 1.13± AC. (CALC.)

Existing Light to Remain in Place

8'± TEMP. ROAD LIMITS

Remove Tree
1884± S.F.

Temporary Concrete Barrier (Typ.)

Remove existing granite curbing and install temporary pavement

Remove existing pavement around tree, level area and install temporary pavement

Drums

Work Zone Crash Cushions (Typ.)

Install sign on column
BRIDGE WORK AHEAD

Install sign on column
EXIT RAMP

BROAD STREET

CITY OF BANGOR

U.S. ROUTE 1A

SUMMER STREET

Ramp

22+00 23+00 24+00 25+00 26+00 27+00 28+00 29+00

To Brewer

PC = STA. 27+27.97

BALTIMORE WATERFRONT ASSOCIATES

CURVE DATA #1
PI = 28+84.00
D = 4°00'00.0"
Δ = 12°26'00.0" Rt.
R = 1432.39'
L = 310.83'
T = 156.03'
E = 8.47'

RJL ASSOCIATES, INC.

ALBERT G. DRAVIDZIUS
PEGGY DRAVIDZIUS

CITY OF BANGOR
ITEM NO. (1)
TEMP. CONST. RIGHTS = 0.59± AC. (1)
TOTAL AREA = 0.99± AC. (CALC.)

AREC 6, LLC
ITEM NO. (3)
TEMP. CONST. RIGHTS = 1575± S.F.(1)
TOTAL AREA = 1.08± AC. (CALC.)

PLAN

25 0 25 50
Scale in Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

BH-1832(000)X

WIN 18320.00 BRIDGE PLANS

BRIDGE NO. 5312

	BY	DATE
PROJ. MANAGER	S. BRIDGE	
DESIGN-DETAILED	M. WIGHT	D. SHAW
CHECKED-REVIEWED	-----	-----
DESIGN2-DETAILED2	-----	-----
DESIGN3-DETAILED3	-----	-----
REVISIONS 1	-----	-----
REVISIONS 2	-----	-----
REVISIONS 3	-----	-----
REVISIONS 4	-----	-----
FIELD CHANGES	-----	-----

SIGNATURE

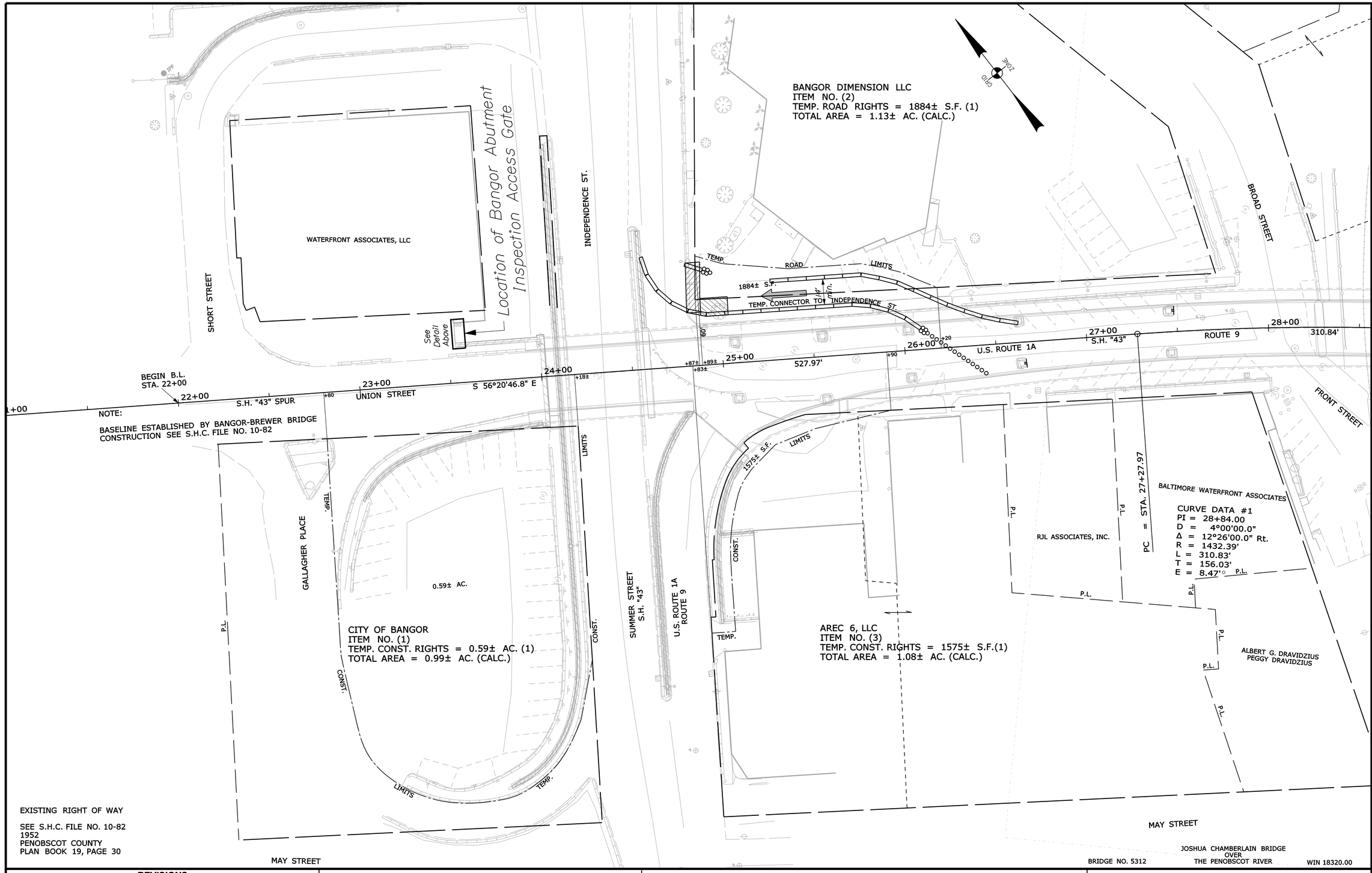
P.E. NUMBER

DATE

JOSHUA CHAMBERLAIN BRIDGE
PENOBSCOT RIVER
BANGOR-BREWER PENOBSCOT COUNTY

DETOUR FOR WORK ON SPANS 2, 3 AND 4

SHEET NUMBER
15
OF 18



SYMBOLS

- IP or ●PF (IRON PIPE or PIN FOUND)
- ST. (SEPTIC TANK)
- (ROW MONUMENT)
- (TRAVERSE POINT)
- WELL
- GRADING LIMIT LINE
- CONSTRUCTION LIMIT LINE
- PROPERTY LINE
- LIMITS OF "RIGHT" PORTION (LOW P.)
- EXISTING RIGHT OF WAY
- NEW RIGHT OF WAY
- NEW ROW WITHIN EXIST. ROW
- CONTROL OF ACCESS
- WATER LINE
- GAS LINE
- ELECTRIC LINE
- TELEPHONE LINE
- SEWER LINE

ITEM	TECH	CHECKED
BASE MAP		
EXIST. R/W	BDM	
PROP. LINES	BDM	
AREAS	BDM	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016

BANGOR
RIGHT OF WAY MAP

REVISIONS

NO.	DATE	DESCRIPTION	BY

PLAN NO.	FILED IN PLAN BOOK GRANTOR	PAGE INSTRUMENT	COUNTY RECORD DATE	BOOK	PAGE

DAVID BERNHARDT
COMMISSIONER
KENNETH L. SWEENEY
CHIEF ENGINEER
DATE

STATE HIGHWAY "43"
U.S. ROUTE 1A\ROUTE 9 UNION STREET
BANGOR PENOBSCOT COUNTY
FEDERAL AID PROJECT NO. BH-1832(000)X

OCTOBER 2012 | RIGHT-OF-WAY MAP | D.O.T. FILE NO. 10-479
SCALE 1"= 25' | SHEET 1 OF 3

SHEET NUMBER
16
OF 18

CITY OF BANGOR

CITY OF BANGOR
FORMER LOCATION OF FERRYWAY
SEE S.H.C. 10-82,
SHEET 2 OF 2, 1952

BROAD STREET

UNION STREET

U.S. ROUTE 1A

ROUTE 9

27+00
S.H. "43"

28+00

310.84'

29+00

30+00

1061.20'

31+00

32+00

S 43°54'46.8" E

33+00

34+00

S.H.C. FILE NO. 10-82

35'

FRONT STREET

MARITIME ACTIVITIES, INC.

PENOBSCOT RIVER

BANGOR
BREWER

CURVE DATA #1
PI = 28+84.00
D = 4°00'00.0"
Δ = 12°26'00.0" Rt.
R = 1432.39'
L = 310.83'
T = 156.03'
E = 8.47'

PC = STA. 27+27.97

PT = STA. 30+38.80

BALTIMORE WATERFRONT ASSOCIATES

RJL ASSOCIATES, INC.

P.L.

ALBERT G. DRAVIDZIUS
PEGGY DRAVIDZIUS

MAY STREET

NOTE:

QUIT-CLAIM DEED DATED APRIL 6, 1955
STATE OF MAINE TO MERCANTILE WAREHOUSE CO.,
SUCCESSORS AND ASSIGNS, RIGHT TO MAINTAIN
BUILDING ON LAND WHICH EXTENDS INTO S.H. "43"
RIGHT OF WAY AND RIGHT TO PASS AND REPASS
UNDER BRIDGE.

EXISTING RIGHT OF WAY

SEE S.H.C. FILE NO. 10-82
1952
PENOBSCOT COUNTY
PLAN BOOK 19, PAGE 30

BRIDGE NO. 5312

JOSHUA CHAMBERLAIN BRIDGE
OVER
THE PENOBSCOT RIVER

WIN 18320.00

GRID ZONE

SYMBOLS

- ● IP or ● #PF (IRON PIPE or PIN FOUND)
- S.T. (SEPTIC TANK)
- (ROW MONUMENT)
- ⌀BM (TRAVERSE POINT)
- ○WELL (WELL)
- - - GRADING LIMIT LINE
- CONSTRUCTION LIMIT LINE
- PROPERTY LINE P.L.
- LIMITS OF "RIGHT" PORTION (LOW P.)
- EXISTING RIGHT OF WAY
- NEW RIGHT OF WAY
- NEW ROW WITHIN EXIST. ROW
- CONTROL OF ACCESS
- W WATER LINE
- G GAS LINE
- E ELECTRIC LINE
- T TELEPHONE LINE
- SEWER LINE

ITEM	TECH	CHECKED
BASE MAP		
EXIST. R/W	BDM	
PROP. LINES	BDM	
AREAS	BDM	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016
BANGOR
RIGHT OF WAY MAP

REVISIONS			
NO.	DATE	DESCRIPTION	BY

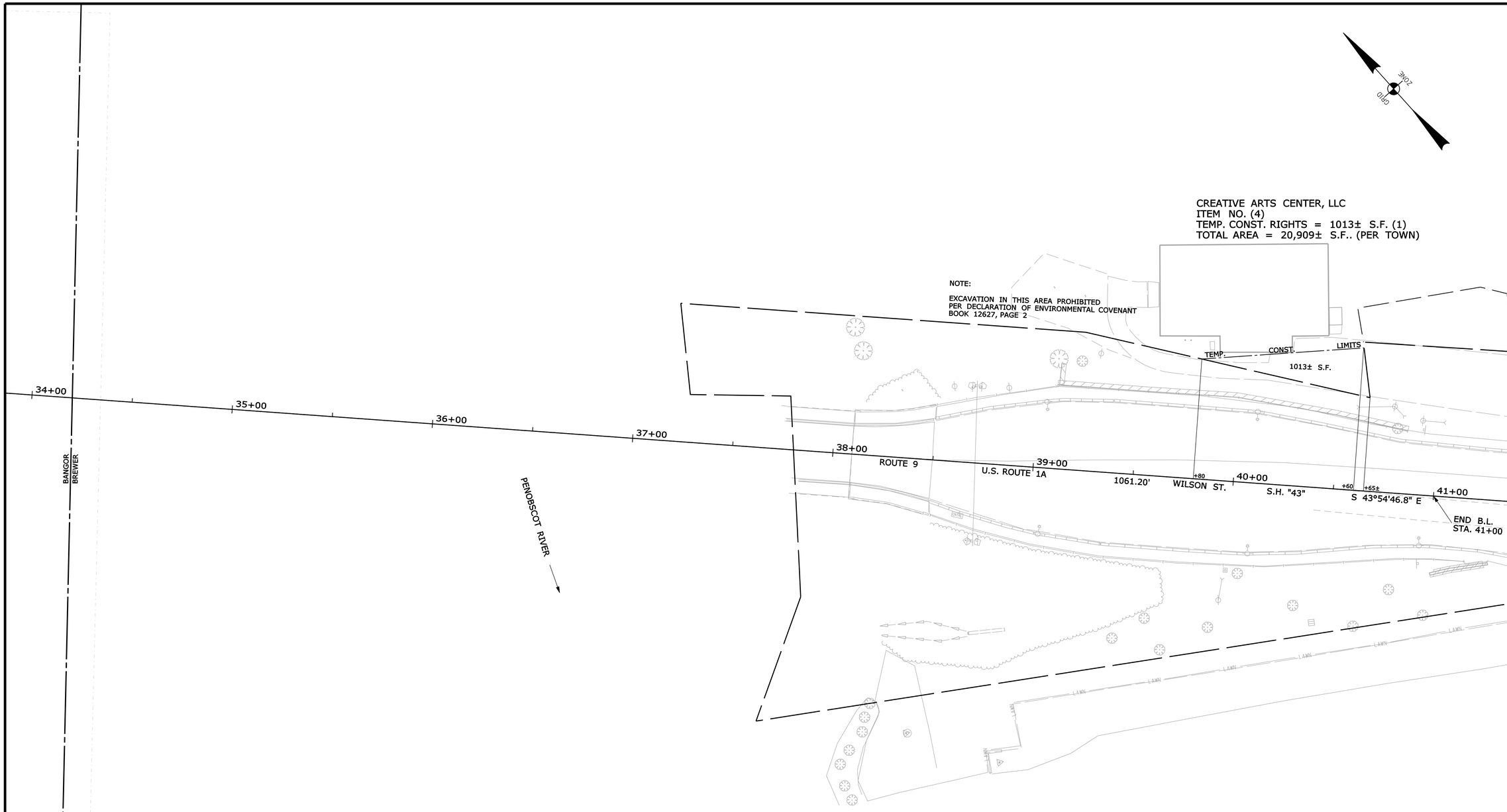
PLAN FILED IN PLAN BOOK			PAGE	COUNTY RECORD			
NO.	GRANTOR		INSTRUMENT	DATE	BOOK	PAGE	

DAVID BERNHARDT
COMMISSIONER
KENNETH L. SWEENEY
CHIEF ENGINEER
DATE

STATE HIGHWAY "43"
U.S. ROUTE 1A/ROUTE 9 UNION STREET
BANGOR-BREWER PENOBSCOT COUNTY
FEDERAL AID PROJECT NO. BH-1832(000)X

OCTOBER 2012	RIGHT-OF-WAY MAP	D.O.T. FILE NO. 10-479
SCALE 1" = 25'	SHEET 2 OF 3	

SHEET NUMBER
17
OF 18



SYMBOLS

- ● IP or ● PIP (IRON PIPE or PIN FOUND)
- ST. (SEPTIC TANK)
- (ROW MONUMENT)
- ⊿BM (TRAVERSE POINT)
- ○WELL (WELL)
- GRADING LIMIT LINE
- CONSTRUCTION LIMIT LINE
- PROPERTY LINE PL
- LIMITS OF "MRG" RIGHT-OF-WAY (LOW P.)
- EXISTING RIGHT OF WAY
- NEW RIGHT OF WAY
- NEW ROW WITHIN EXIST. ROW
- CONTROL OF ACCESS
- W WATER LINE
- G GAS LINE
- E ELECTRIC LINE
- T TELEPHONE LINE
- SEWER LINE

ITEM	TECH	CHECKED
BASE MAP		
EXIST. R/W	BDM	
PROP. LINES	BDM	
AREAS	BDM	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016

BANGOR
RIGHT OF WAY MAP

JOSHUA CHAMBERLAIN BRIDGE
OVER
BRIDGE NO. 5312 THE PENOBSCOT RIVER WIN 18320.00

REVISIONS			
NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK PAGE		COUNTY RECORD			
NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE

DAVID BERNHARDT
COMMISSIONER
KENNETH L. SWEENEY
CHIEF ENGINEER
DATE

STATE HIGHWAY "43"
U.S. ROUTE 1A\ROUTE 9 WILSON STREET
BANGOR-BREWER PENOBSCOT COUNTY
FEDERAL AID PROJECT NO. BH-1832(000)X

OCTOBER 2012	RIGHT-OF-WAY MAP	D.O.T. FILE NO. 10-479
SCALE 1" = 25'	SHEET 3 OF 3	

SHEET NUMBER
18
OF 18