STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

SOUTH PORTLAND
CUMBERLAND COUNTY
BROADWAY AT EVANS STREET AND LINCOLN STREET
PROJECT NO. STP-2213(600)

TRAFFIC DATA
Current (2013) AADT .......... 24,240
Future (2027) AADT .......... 29,993

URBAN MINOR ARTERIAL

TRIMBLE SURESHOT H4 SUBM

FINISH 04/10/2018

REVISED

SHEET 5

TO ROUTE 77

TO ROUTE 1

TO ROUTE 1

SCALE IN FEET

0 0 0 0 0 0 0 0

PROJECT LOCATION: BROADWAY AT EVANS STREET AND LINCOLN STREET
PROGRAM AREA: MULTIMODAL
SCOPE OF WORK: TRAFFIC SIGNAL AND INTERSECTION IMPROVEMENTS

SOUTH PORTLAND BROADWAY
TITLE SHEET

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PLAN LEGEND

Legend for Plan Symbols

Town, County, State
Property Lines
R/W Lines-Existing
R/W Lines-Proposed
Culvert-Existing
Culvert-Proposed
Curb - Existing
Curbing - Proposed
Travelway-Existing
Travelway-Proposed
Railroad
Catch Basins
Manholes
Proposed Underdrain
Proposed Ditch
Existing Ditch
Utility Poles
Fire Hydrants
Existing Water Line
Existing Sewer
Existing Sewer Manhole
Gasmain-Existing
Gasmain-Proposed
Gasmain-Cable, Other

CENTRAL LEGEND:

Legend for Central Symbols

Centerline-Existing
Centerline-Proposed
Travelway-Existing
Travelway-Proposed
Railroad
Catch Basins
Manholes
Proposed Underdrain
Proposed Ditch
Existing Ditch
Utility Poles
Fire Hydrants
Existing Water Line
Existing Sewer
Existing Sewer Manhole
Gasmain-Existing
Gasmain-Proposed
Gasmain-Cable, Other

Legend for Central Symbols

Legend for Central Symbols

Legend for Central Symbols

Legend for Central Symbols

Legend for Central Symbols

Legend for Central Symbols
NOTES:

1) ALL WORK IS TO BE PERFORMED WITHIN THE EXISTING RIGHT-OF-WAY.
2) RIGHT-OF-WAY SHOWN ON THIS PLAN WAS TAKEN FROM FEDERAL AID PROJECT NO. 34-476 DATED FEBRUARY 1993, DOT FILE NO. 3-401.
3) DETECTABLE WARNING PANELS SHALL BE IN CONFORMANCE WITH MDOT STANDARD DETAIL 608(02).
4) HMA SIDEWALK SHALL BE 9.5 MM PLACED IN TWO 1" LIFTS.
5) SEE SHEET 8 FOR PROPOSED PAVEMENT MARKING INFORMATION.
6) EXISTING CURBING TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR.
7) HMA FOR ROADWAY PATCHES SHALL BE 12.5 MM PLACED IN A 2" LIFT OVER A 3" LIFT FOR A TOTAL OF 5".
8) HMA FOR PARKING LOT PATCHES SHALL BE 12.5 MM PLACED IN A 3" LIFT.

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HMA FOR PAVEMENT MARKING INFORMATION.

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HMA FOR ROADWAY PATCHES SHALL BE 12.5 MM PLACED IN A 2" LIFT OVER A 3" LIFT FOR A TOTAL OF 5".

HMA FOR PARKING LOT PATCHES SHALL BE 12.5 MM PLACED IN A 3" LIFT.
1. The installation of signal cabinets, controllers, and cabinets shall include cabinets, controllers, and cabinets. These cabinets shall be designed and manufactured to comply with the American National Standards Institute (ANSI) and the Federal Highway Administration (FHWA) standards. The cabinets shall be constructed of wood, metal, or a combination of materials, and shall be suitable for indoor or outdoor installation. The cabinets shall be provided with adequate ventilation, access for maintenance, and provisions for electrical connections. The cabinets shall be labeled with the manufacturer's name, model number, and date of manufacture.

2. The controllers shall be designed and installed to operate the traffic signals in accordance with the MUTCD. The controllers shall be capable of controlling multiple signals and shall be designed to minimize the potential for signal malfunction. The controllers shall be provided with a backup power supply to ensure continuous operation in the event of a power failure.

3. The traffic signals shall be installed at appropriate locations to control traffic flow, including pedestrian crossings and bus stops. The signals shall be equipped with lights and audible signals to provide sufficient visibility and auditory cues to drivers and pedestrians. The signals shall be installed to ensure clear visibility and unobstructed operation. The signals shall be equipped with appropriate markings, signs, and labels to ensure safe and efficient operation.

4. The control system shall be designed to provide reliable and efficient operation, including the ability to handle multiple signals and controllers. The system shall be programmed to provide coordinated phasing for major intersections and pedestrian crossing points. The system shall be designed to handle a variety of traffic conditions, including high-traffic periods, special events, and emergencies.

5. The system shall be designed to provide adequate safety features, including the ability to respond to emergency signals and to provide audible and visual warnings to pedestrians and drivers. The system shall be designed to operate in a secure manner, with provisions for secure communication and access to the control system. The system shall be designed to provide for the safe operation of the traffic signals and to ensure the safety of all users of the transportation system.

6. The system shall be designed to be environmentally friendly, with provisions for the use of renewable energy sources and the use of energy-efficient equipment. The system shall be designed to minimize energy consumption and to reduce the impact of the transportation system on the environment. The system shall be designed to comply with all applicable federal and state regulations and to be in accordance with all applicable standards and guidelines.

7. The system shall be designed to be user-friendly, with provisions for easy operation and maintenance. The system shall be designed to provide clear and concise instructions for operation and maintenance. The system shall be designed to provide for the safe and efficient operation of the traffic signals and to ensure the safety of all users of the transportation system.

8. The system shall be designed to provide for the safe and efficient operation of the traffic signals and to ensure the safety of all users of the transportation system. The system shall be designed to provide for the safe and efficient operation of the traffic signals and to ensure the safety of all users of the transportation system. The system shall be designed to provide for the safe and efficient operation of the traffic signals and to ensure the safety of all users of the transportation system.
INTERCONNECT NOTICES

1. INSTALL A 0.5 STRAND SINGLE WIRE FIBER INTERCONNECT CABLE FROM THE CABELS AT BROADWAY/LINCOLN AND BROADWAY/EVANS TO A DROP LOCATION AS SPECIFIED BY GWI.

2. FUSION SPUCES SHALL BE USED IN ALL LOCATIONS. MECHANICAL SPLICES SHALL BE ALLOWED. THE FUSION SPUCES SHALL HAVE AUTOMATIC CORE ALIGNMENT IN THE HORIZONTAL AND VERTICAL PLANES. IT SHALL BE CAPABLE OF SPUCING WITH A TYPICAL LOSS OF 0.02 DB FOR SINGLE-MODE FIBER AND IT SHALL BE CAPABLE OF ESTIMATING THE SPLICE LOSS.

3. FIBER OPTIC CABLE SHALL BE FULLY COMPATIBLE WITH THE EXISTING SERVICE PROVIDER'S (GWI) INFRASTRUCTURE.

4. FIBER OPTIC CABLE SHALL HAVE THE FOLLOWING FEATURES:
   - ALL DIELECTRIC NON-HALUMINIZED
   - DIELECTRIC CENTRAL AND OUTER STRENGTH MEMBERS
   - RESISTANCE FOR EASY STRIPPING
   - COLORED CORES AND BUFFER TUBES FOR EASY IDENTIFICATION
   - RATED FOR OUTDOOR USE
   - POLAR CABLE WITH WATER-BLOCKING DESIGN, SELF-FILLED CABLE SHALL NOT BE ALLOWED
   - STABILITY AND OPERATING TEMPERATURE OF -40 DEGREES C TO 70 DEGREES C (0 - 158 DEGREES F)
   - MAXIMUM ATTENUATION OF 0.3 DB PER KW FOR 1250NM, 0.35 DB PER KW FOR 1310NM, AND 0.5 DB PER KW FOR 1550NM
   - INITIAL GUARD ELECTRONIC DISTANCE OF 9000MM FOR 1250NM, 4000MM FOR 1310NM, AND 4000MM FOR 1550NM
   - SINGLE-MODE FIBERS SHALL COMPLY WITH EIA/TIA-492CA AND ITS RECOMMENDATION G.652
   - DIAMETER HOLLOW INTERCONNECT CABLE
   - ALL FIBERS RATED FOR OUTDOOR USE
   - COLOR-CODED FIBERS AND BUFFER TUBES FOR EASY IDENTIFICATION
   - RIPCORD FOR EASY STRIPPING
   - DIALECTRIC CENTRAL AND OUTER STRENGTH MEMBERS
   - ALL DIALECTRIC (NON-ARMORED)

5. WHERE GWI OWNS THE ATTACHMENT RIGHTS AND THE FIBER ITSELF, GWI SHALL PERFORM OVERLASHING THE NEW FIBER TO THE EXISTING FACILITIES AS WELL AS ANY SPECIFICATIONS TO COMPLETE THE CIRCUITS BACK TO THE SOUTH PORTLAND CENTRAL SERVER.

6. CONTRACTOR SHALL LEAVE 15' OF CABLE SLACK IN THE TRAFFIC CONTROL CABINETS.
PROP FIBER OPTIC SPICE TO EXISTING GWI NETWORK

PROP +/- 175' AERIAL FIBER OPTIC CABLE FROM POLE #39 TO POLE #40

PROP FIBER OPTIC CABLE FROM CONTROLLER CABINET TO UTILITY POLE #39

2. All pavement marking lines shall be paint and of size as specified except for:
   - Solid white stop lines - 24”
   - Solid single yellow chevron lines - 24”
   - Arrows and solid single white line shall be paint.

3. Painted pavement markings shall be furnished and installed in accordance with MaineDOT Standard Specification 807.

4. Existing pavement markings in conflict with proposed markings shall be removed.