

[illegible]

## POST SIZE SUMMARY

|               |                         |  |    |       |
|---------------|-------------------------|--|----|-------|
| PLANS         | PROJECT DESIGN ENGINEER |  | BY | DATE  |
|               | DESIGN-DETAILED         |  | RL | 11-89 |
|               | CHECKED                 |  |    |       |
|               | REVISIONS               |  |    |       |
| FIELD CHANGES |                         |  |    |       |

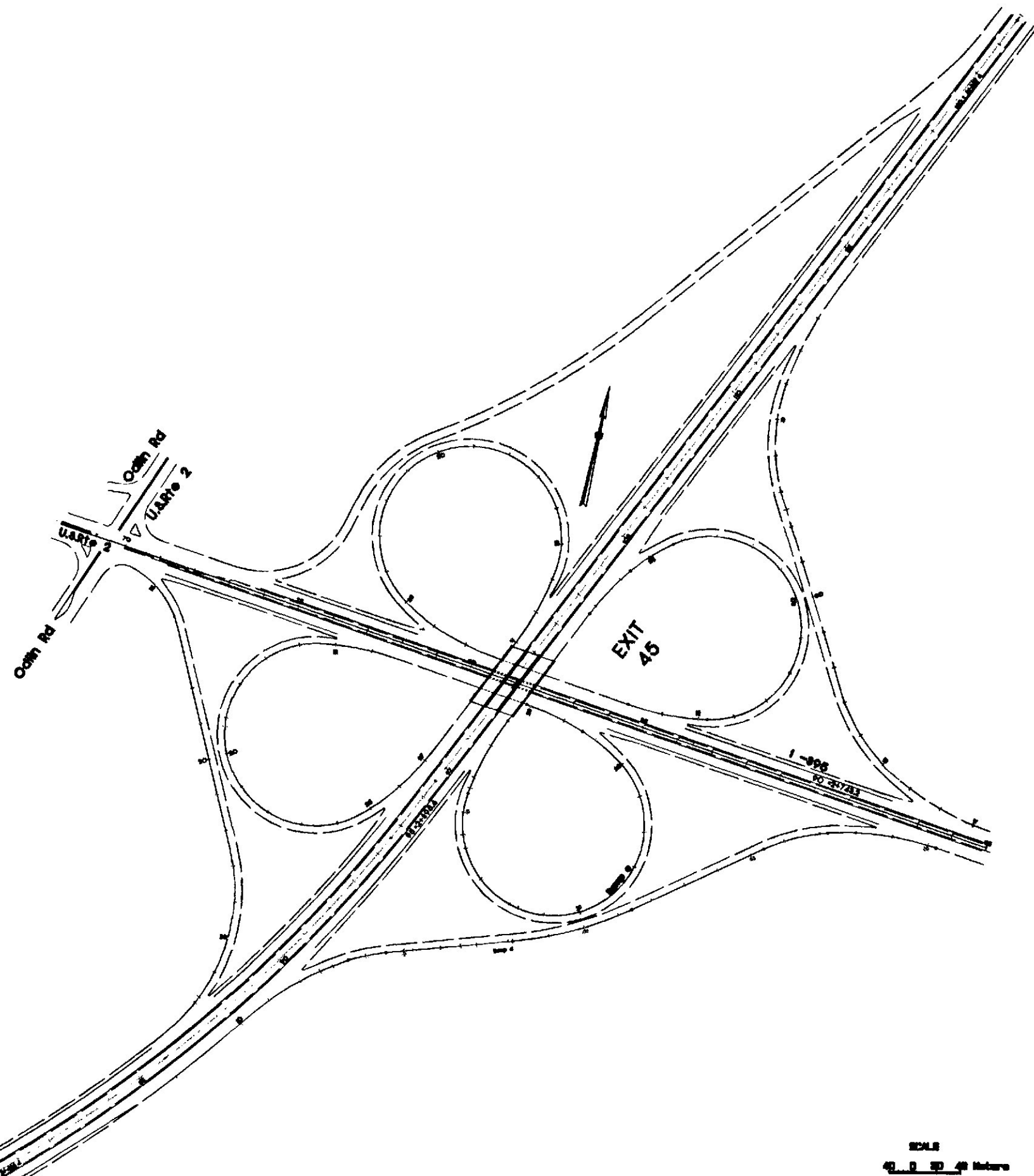
Diagram illustrating the proposed sign locations and actions for Highway 30:

- Location 30:** Install new sign, 2- 600mm Foundations, Multi-post Breakaway Device at Mile 174.1. The sign reads: **Bangor NEXT 6 EXITS** (G-12).
- Location 31:** Remove existing sign. Install new sign on existing H-Beam posts. The sign reads: **To Bangor Mail Blvd EXIT 48A or 49** (G-3).
- Location 32:** Remove existing sign. The sign reads: **Bangor Mail Boulevard EXIT 49** (Remove).

1. Locations of signs shown are approximate. Final locations shall be determined by the Construction Manager.
2. The final locations of the overhead guide sign structures will be determined by the Construction Manager. The existing cross sections shown are for estimating purposes only. The Contractor will be responsible for establishing the elevations of the proposed foundations and its relationship of the sign structure to the roadway before fabrication of the structures. The existing cross sections shown, and the posts lengths on the pole summary sheet, are for estimating purposes only. The Contractor will be responsible for establishing the exact length of post at exact locations determined by the Construction Manager before fabrication.
3. Signing materials removed, and not reinstalled
  - shall remain the property of MDOT. All aluminum extrusions, zee bar tube posts, steel H-beam posts, breakaway devices and sign hangers shall be carefully removed and stockpiled. Aluminum extruded panel signs shall be disassembled. All materials shall be delivered to MDOT Motor Transport Garage in Augusta. Before each delivery the contractor shall contact Dean Springer, Interstate Signing Supervisor at 207-287-2847.
  - No separate payment will be made for removal, dismantling, stockpiling delivery or disposal of above mentioned material.
4. All TYPE I signs shall be fabricated with high intensity reflective sheeting, background and legend.
5. All work done shall be in conformance with "THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", FHWA, 1988, and "STANDARD HIGHWAY SIGNS", FHWA, 1979.
  - All sign supports shall be in conformance with the latest revision of ASHTO's, GUIDE FOR STRUCTURAL SUPPORTS FOR TRAFFIC SIGNAL, SIGNING AND LIGHTING POLES.
6. Payment for removal of wood posts and aluminum tube posts without concrete foundations, with TYPE I signs attached, shall be incidental to removal the signs, Items No. 645.103 or 645.106.
7. Payment for removal of Exit Panels attached to Guide Signs shall be considered incidental to the removal of the Guide Sign.
  - Payment for removal of a M-I and the cardinal direction shall be considered as removal of one sign.
8. MDOT will supply a stick on escutcheon to be applied to each new sign. They shall be pressed on and rolled to the lower left corner.
9. If structural rock is encountered during installation of foundations
  - payment for excavation shall be incidental to foundation items.
10. Signs damaged during removal, manufacture, transportation, stockpiling or installation will not be accepted for payment. Damaged signs shall be replaced, as deemed necessary by the Engineer.
11. All signs shall be new except as noted on the plans.

1. All dimensions are in millimeters unless otherwise noted.
2. All elevations and stations are in meters.

| F.H.V.A.<br>REG. NO. | STATE | PROJECT NUMBER       | SHEET<br>NO. | TOTAL<br>SHEETS |
|----------------------|-------|----------------------|--------------|-----------------|
| 1                    | MAINE | IR-I-IM-HP-95-B(155) | 128          | 140             |



PLAN  
Highway Signing  
Stillwater Avenue  
BANGOR

SHEET 1 OF 2      AUGUSTA, MAINE      PIN 4926.00



MULTIPLOT File Generated 10 APR 00 08:39:10 for: TRIGGER,  
P:\NLDISK\2\1\PIN TRAFFIC TRIGGER\BANGOR 4926\STILL\INTER\_CHANGE.FGB;1  
MOD\_DISK\MODT.GDS MASTER\METRIC\BORDERS.FGB;1  
Windows PLANTA SHT1

|                         |       |
|-------------------------|-------|
| PROJECT DESIGN ENGINEER | DATE  |
| DESIGN-DETAILED         | 11-99 |
| CHECKED                 |       |
| REVISIONS               |       |
| FIELD CHANGES           |       |

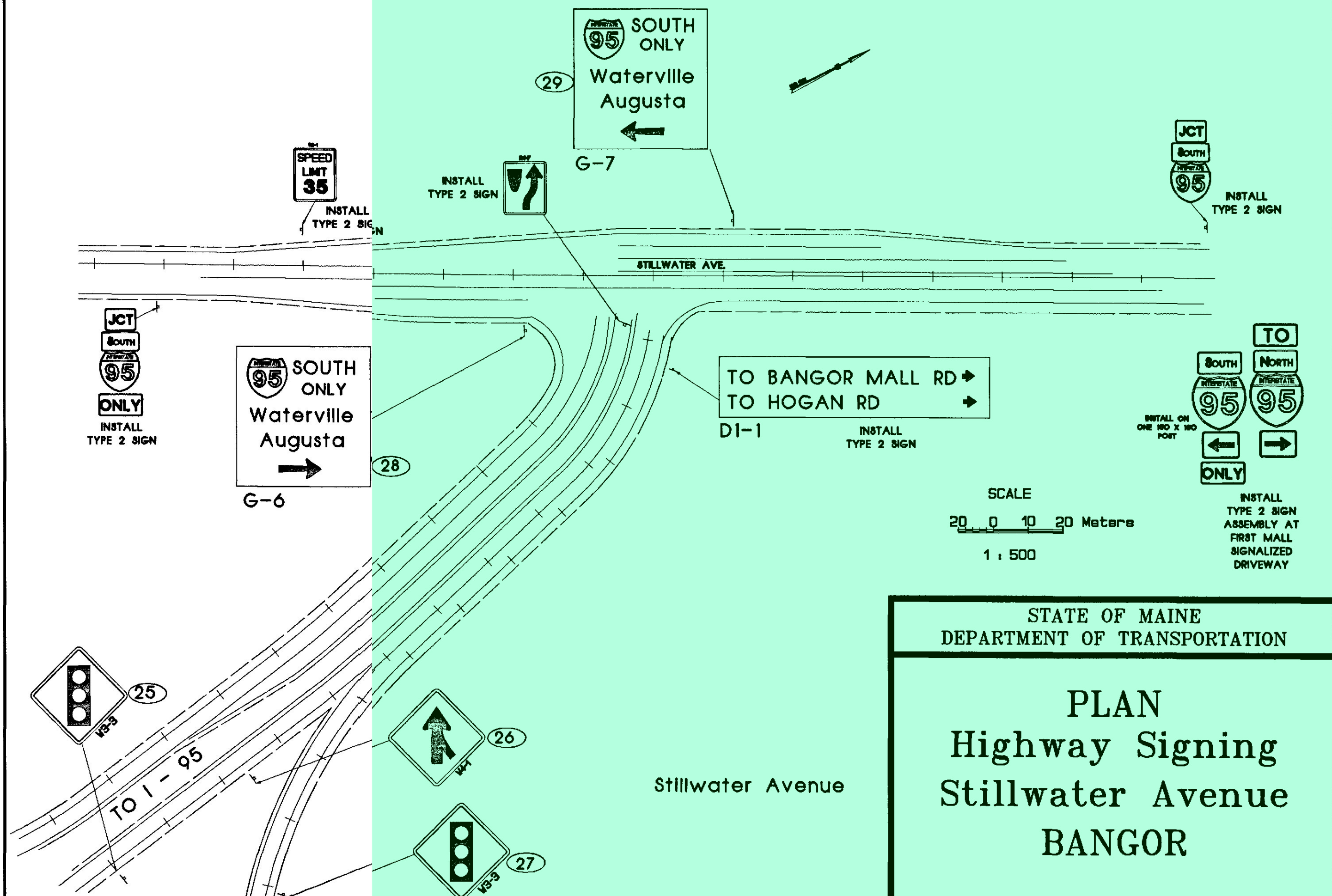
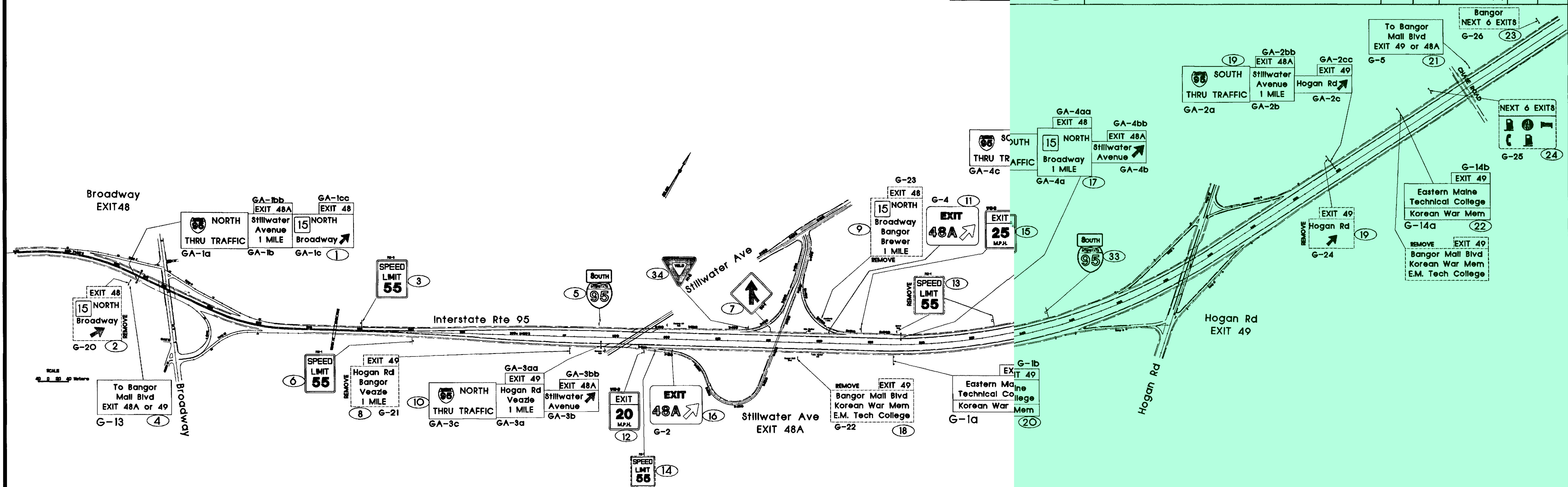
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- LOCATION NOTES - TYPE 1 SIGNS
- GA-1. Install new overhead guide sign structure, signs and foundations.
  - G-20. Remove existing sign and 2 posts. See note 4.
  - R2-1. Install new sign, H-beam post, breakaway device and 600mm foundation.
  - G-13. Install new sign and 2 H-beam posts on existing foundations.  
The Contractor shall fabricate base plates to fit existing foundations.
  - M1-1, M3-3. Install new signs, H-beam post and 450mm foundation behind existing guardrail.
  - R2-1. Install new sign, post, breakaway device and 600mm foundation.
  - W4-1. Install new sign, H-beam post, breakaway device and 600mm foundation.
  - G-21. Remove existing sign, 2 posts and foundations.
  - G-23. Remove existing sign, 2 posts and foundations.
  - GA-3. Install new overhead guide sign structure, signs and foundations.
  - G-4. Install new sign, H-beam post, breakaway device and 600mm foundation.
  - W13-2. Install sign, H-beam post, breakaway device and 600mm foundation.
  - R2-1. Remove post, sign and foundation. Install new sign, H-beam post, breakaway device and 600mm foundation northerly of existing sign.
  - R2-1. Remove existing sign, post and foundation.
  - W13-2. Install new sign, H-beam post, breakaway device and 600mm foundation.
  - G-2. Install new sign, H-beam post, breakaway device and 600mm foundation.
  - GA-4. Install new overhead guide sign structure, signs and foundations.  
Viden shoulders and install guardrail.
  - G-22. Remove sign, 2 posts and 2 foundations.
  - GA-2. Install new overhead guide sign structure, signs and foundations.  
Viden paved shoulders and install guardrail. Remove 'Hogan Rd' sign, 2 posts and 2 foundations.
  - G-1. Install sign, 2 posts, multi-post breakaway devices and 2- 600mm foundations.
  - G-5. Install new sign, 2 H-beam posts, multi-post breakaway device and 600mm foundations.
  - G-14. Remove existing sign. Install new sign on existing posts.
  - G-26. Change existing 'NEXT 5 EXITS' to 'NEXT 6 EXITS' by overlaying the '5' with a '6' on 0.08 aluminum.
  - G-25. Remove existing sign. Install new sign on existing posts.
  - W3-3. Install new sign, H-beam post, breakaway device and 600mm foundation.
  - W4-1. Install new sign, H-beam post, breakaway device and 600mm foundation.
  - W3-3. Install new sign, H-beam post, breakaway device and 600mm foundation.
  - G-6. Install new sign, H-beam post, breakaway device and 600mm foundation.
  - G-7. Install new sign, H-beam post, breakaway device and 600mm foundation.
  - G-12. Install new sign, H-beam posts, multi post breakaway device and 2 - 600mm foundations at Mile 174.1.
  - G-3. Remove existing sign, Maine Mall Blvd, EXIT 49. Install new sign on existing posts.
  - G-27. Remove existing sign. Install new sign on existing posts.
  - M1-1, M3-3. Remove existing sign, post and foundation. Install new sign, post, breakaway device and 600mm foundation northerly of existing.
  - R1-2. Install new sign, H-beam post, breakaway device and 600mm foundation.

METRIC

- All dimensions are in millimeters unless otherwise noted.
- All elevations and stations are in meters.

| F.H.W.A. REG. NO. | STATE | PROJECT NUMBER       | SHEET NO. | TOTAL SHEETS |
|-------------------|-------|----------------------|-----------|--------------|
| 1                 | MAINE | IR-1-IM-EP-95-R(100) | 127       | 140          |













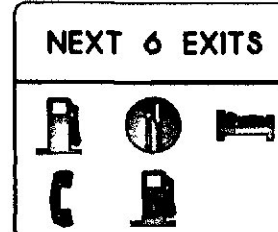




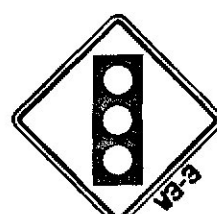











STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

PLAN  
Highway Signing  
Stillwater Avenue  
BANGOR



**METRIC**

| ITEM NO. | I. D. NO.                            | SIGN SIZE        |                  | SIGN TEXT   | TEXT DIMENSIONS        |                        |                            |             |                       |   | SIGN AREA IN SQUARE METERS | NO. OF SIGNS REQD. | POST                     | COLOR           |             |               |
|----------|--------------------------------------|------------------|------------------|---|------------------------|------------------------|----------------------------|-------------|-----------------------|---|----------------------------|--------------------|--------------------------|-----------------|-------------|---------------|
|          |                                      | HEIGHT           | WIDTH            |   | LETTER HEIGHT          |                        |                            |             | RTE. MARKER OR SHIELD | ARROW   |                            |                    |                          | LOCATION NUMBER | BACK GROUND | LEGEND BORDER |
|          |                                      |                  |                  |   | U.C.                   | L.C.                   | C.L.                       | N.          |                       |   |                            |                    |                          |                 |             |               |
| 645.12   | GA-1b<br>GA-2b                       | 2743<br>(9'-0")  | 3962<br>(13'-0") | Stillwater Avenue<br>1 MILE   | 406<br>(16)            | 305<br>(12)            | 254<br>(10)                | 381<br>(15) |                       |   | 21.749                     | 2                  | Overhead Sign Structures | 1<br>19         | Green       | White         |
| 645.12   | GA-1c                                | 2438<br>(8'-0")  | 4877<br>(16'-0") | <div>15</div> NORTH<br><br>Broadway    | 406<br>(16)            | 305<br>(12)            |                            |             | 915                   | Standard "UP" at 45 DEGREES                     | 11.891                     | 1                  |                          | 1               |             |               |
| 645.12   | GA-2a<br>GA-4c                       | 1981<br>(6'-6")  | 4115<br>(13'-6") |  SOUTH<br>THRU TRAFFIC   |                        |                        | (12)<br>305E               |             | 914                   |   | 16.304                     | 2                  |                          | 17<br>19        |             |               |
| 645.12   | GA-1a<br>GA-3c                       | 1981<br>(6'-6")  | 4115<br>(13'-6") |  NORTH<br>THRU TRAFFIC   |                        |                        | 305E<br>(12)               |             | 914                   |   | 16.304                     | 2                  |                          | 1,<br>10        |             |               |
| 645.12   | GA-2c                                | 1524<br>(5'-0")  | 4572<br>(15'-0") | Hogan Rd   | 406<br>(16)            | 305<br>(12)            |                            |             |                       | Standard "UP" at 45 DEGREES                     | 6.968                      | 1                  |                          | 19              |             |               |
| 645.12   | GA-3b<br>GA-4b                       | 1981<br>(6'-6")  | 4724<br>(15'-6") | Stillwater Avenue    | 406<br>(16)            | 305<br>(12)            |                            |             |                       | Standard "UP" at 45 DEGREES                     | 18.719                     | 2                  |                          | 10<br>17        |             |               |
| 645.12   | GA-3a                                | 2743<br>(9'-0")  | 3810<br>(12'-6") | Hogan Rd<br>Veezle<br>1 MILE  | 406<br>(16)            | 305<br>(12)            | 254<br>(10)                | 381<br>(15) |                       |   | 10.451                     | 1                  |                          | 10              |             |               |
| 645.12   | GA-1bb<br>GA-2bb<br>GA-3bb<br>GA-4bb | 762<br>(2'-6")   | 2743<br>(9'-0")  | EXIT 48A  |                        |                        | See Standard Highway Signs |             |                       |   | 8.361                      | 4                  |                          | 1, 10<br>11, 19 |             |               |
| 645.12   | GA-4a                                | 3048<br>(10'-0") | 3962<br>(13'-0") | <div>15</div> NORTH<br><br>Broadway<br>1 MILE   | 406<br>(16)            | 305<br>(12)            | 305<br>(12)                | 381<br>(15) |                       | 914   | 12.077                     | 1                  |                          | 17              |             |               |
| 645.12   | GA1cc<br>GA4aa                       | 762<br>(2'-6")   | 2438<br>(8'-0")  | EXIT 48   |                        |                        | See Standard Highway Signs |             |                       |   | 3.716                      | 2                  |                          | 1, 17           |             |               |
| 645.12   | GA-2cc<br>GA-3aa<br>G-1b<br>G-14b    | 762<br>(2'-6")   | 2438<br>(8'-0")  | EXIT 49   |                        |                        | See Standard Highway Signs |             |                       |   | 3.716                      | 2                  | 10, 19<br>20, 22         |                 |             |               |
| 645.251  |                                      |                  |                  |   |                        |                        |                            |             |                       |   | 3.716                      | 2                  |                          |                 |             |               |
| 645.251  | G-1a<br>G-14a                        | 2286<br>(7'-6")  | 4420<br>(14'-6") | Eastern Maine<br>Technical College<br><br>Korean War Mem  | 271<br>(10.67)         | 203<br>(8)             |                            |             |                       |   | 20.206                     | 2                  | H-Beam Posts             | 20<br>22        |             |               |
| 645.251  | G-2<br>G-4                           | 1524<br>(5'-0")  | 2286<br>(7'-6")  | <div>EXIT<br/>48A</div>    |                        |                        | See Standard Highway Signs |             |                       |   | 6.968                      | 2                  |                          | 11<br>16        |             |               |
| 645.251  | G-5                                  | 2286<br>(7'-6")  | 4267<br>(14'-0") | To Bangor<br>Mall Blvd<br>EXIT 49 or 48A  | 338<br>(13.3)          | 254<br>(10)            | 254<br>(10)                | 381<br>(15) |                       |   | 9.754                      | 1                  |                          | 21              |             |               |
| 645.251  | G-6                                  | 1980<br>(6'-6")  | 1980<br>(6'-6")  |  SOUTH<br>ONLY<br>Waterville<br>Augusta<br> | 203<br>(8)<br>SERIES C | 152<br>(6)<br>SERIES C | 152<br>(6)<br>SERIES C     |             | 610                   | 300x600<br>Standard "UP" at 90 DEGREES<br>Right | 3.920                      | 1                  |                          | 28              |             |               |
| 645.251  | G-7                                  | 1980<br>(6'-6")  | 1980<br>(6'-6")  |  SOUTH<br>ONLY<br>Waterville<br>Augusta<br> | 203<br>(8)<br>SERIES C | 152<br>(6)<br>SERIES C | 152<br>(6)<br>SERIES C     |             | 610                   | 300x600<br>Standard "UP" at 90 DEGREES<br>Left  | 3.920                      | 1                  |                          | 29              |             |               |
| 645.251  | G-3                                  | 2286<br>(7'-6")  | 4267<br>(14'-0") | To Bangor<br>Mall Blvd<br>EXIT 48A or 49  | 338<br>(13.3)          | 254<br>(10)            | 254<br>(10)                | 381<br>(15) |                       |   | 9.754                      | 1                  |                          | 31              |             |               |
| 645.251  | G-13                                 | 2286<br>(7'-6")  | 3810<br>(12'-6") | To Bangor<br>Mall Blvd<br>EXIT 48A or 49  | 338<br>(13.3)          | 254<br>(10)            | 254<br>(10)                | 381<br>(15) |                       |   | 8.709                      | 1                  |                          | 4               | Green       | White         |

| ITEM NO. | I. D. NO.    | SIGN SIZE          |                  | SIGN TEXT   | TEXT DIMENSIONS |             |             |             |                                       |       | SIGN AREA IN SQUARE METERS | NO. OF SIGNS REQD. | POST                            |                            | COLOR                     |  |
|----------|--------------|--------------------|------------------|---|-----------------|-------------|-------------|-------------|---------------------------------------|-------|----------------------------|--------------------|---------------------------------|----------------------------|---------------------------|--|
|          |              | HEIGHT             | WIDTH            |   | LETTER HEIGHT   |             |             |             | RTE. MARKER OR SHIELD                 | ARROW |                            |                    | LOCATION NUMBER                 | BACK GROUND                | LEGEND BORDER             |  |
|          |              |                    |                  |   | U.C.            | L.C.        | C.L.        | N.          |                                       |       |                            |                    |                                 |                            |                           |  |
| 645.251  | G-25<br>G-27 | 1828<br>(6'-0")    | 2438<br>(8'-0")  |    |                 |             | 203<br>(8)  | 305<br>(12) | D9-11<br>D9-8<br>D9-9<br>D9-1<br>D9-7 |       | 8.918                      | 2                  | EXISTING<br>H-BEAMS<br>24<br>32 | Blue                       | White                     |  |
| 645.251  | G-12         | 1524<br>(5'-0")    | 3353<br>(11'-0") | Bangor<br>NEXT 6 EXITS  | 338<br>(13.33)  | 254<br>(10) | 254<br>(10) | 381<br>(15) |                                       |       | 5.110                      | 1                  | 30                              | Green                      | White                     |  |
| 645.251  | G-26         | 381<br>(15")       | 381<br>(15")     | 6   | On              | 0.08        | Aluminum    | Overlay     | Sheeting                              |       | 0.142                      | 1                  | 23                              | Engineer<br>Grade<br>Green | Hi-<br>Intensity<br>White |  |
| 645.271  | M1-1         | 914<br>(3'-0")     | 914<br>(3'-0")   |    |                 |             |             |             |                                       |       | 1.672                      | 2                  | 5, 33                           |                            |                           |  |
|          | M3-3         | 381                | 762              |    |                 |             |             |             |                                       |       | 0.581                      | 2                  | 6, 33                           | Blue                       | White                     |  |
|          | R1-2         | 1524 on<br>(5'-0") | Sides            |    |                 |             |             |             |                                       |       | 1.065                      | 1                  | 34                              | Red                        | White                     |  |
|          | R2-1         | 1524<br>(5'-0")    | 1219<br>(4'-0")  |    |                 |             |             |             |                                       |       | 5.574                      | 3                  | 3, 6, 13                        | White                      | Black                     |  |
|          | W3-3         | 914 on<br>(3'-0")  | Sides            |    |                 |             |             |             |                                       |       | 1.672                      | 2                  | 25<br>27                        | Yellow                     | Black                     |  |
|          | W4-1         | 1219 on<br>(4'-0") | Sides            |    |                 |             |             |             |                                       |       | 2.972                      | 2                  | 7<br>26                         | Yellow                     | Black                     |  |
|          |              |                    |                  |   |                 |             |             |             |                                       |       |                            |                    |                                 |                            |                           |  |
|          | W13-2        | 1524               | 1219             |  |                 |             |             |             |                                       |       | 1.858                      | 1                  | 12                              | Yellow                     | Black                     |  |
| 645.271  | W13-2        | 1524               | 1219             |  |                 |             |             |             |                                       |       | 1.858                      | 1                  | 15                              | Yellow                     | Black                     |  |
| 645.291  | D1-1         | 762                | 2134             | TO MAINE MALL RD →<br>TO HOGAN RD →   |                 |             | 152C        |             |                                       |       | 1.626                      | 1                  |                                 | Green                      | White                     |  |
| 645.292  | M1-1         | 610                | 610              |  |                 |             |             |             |                                       |       | 1.488                      | 4                  |                                 | Blue<br>Red                | White                     |  |
| 645.292  | M3-3         | 305                | 610              |  |                 |             |             |             |                                       |       | 0.557                      | 3                  |                                 | Blue                       | White                     |  |
| 645.292  | M2-1         | 381                | 533              |  |                 |             |             |             |                                       |       | 0.406                      | 2                  |                                 | Blue                       | White                     |  |
| 645.292  | M3-1         | 305                | 610              |  |                 |             |             |             |                                       |       | 0.186                      | 1                  |                                 | Blue                       | White                     |  |
| 645.292  | M4-5         | 305                | 610              |  |                 |             |             |             |                                       |       | 0.372                      | 1                  |                                 | Blue                       | White                     |  |
| 645.292  | M4-ONLY      | 305                | 610              |  |                 |             |             |             |                                       |       | 0.372                      | 2                  |                                 | Yellow                     | Black                     |  |
| 645.292  | M6-1         | 381                | 533              |  |                 |             |             |             |                                       |       | 0.406                      | 2                  |                                 | Blue                       | White                     |  |
| 645.292  | R4-7         | 1219               | 915              |  |                 |             |             |             |                                       |       | 1.115                      | 1                  |                                 | White                      | Black                     |  |

LEGEND  
U.C. = UPPER CASE LETTERS  
L.C. = LOWER CASE LETTERS  
C.L. = CAPITAL LETTERS  
N. = NUMERALS

Lettering Styles Shown Are Not Meant To  
Be Representative Of Standard Highway Signs  
or MUTCD

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

SIGN SUMMARY  
Highway Signing  
Stillwater Avenue  
BANGOR

SHEET 1 OF 1      AUGUSTA, MAINE      PIN 4926.00

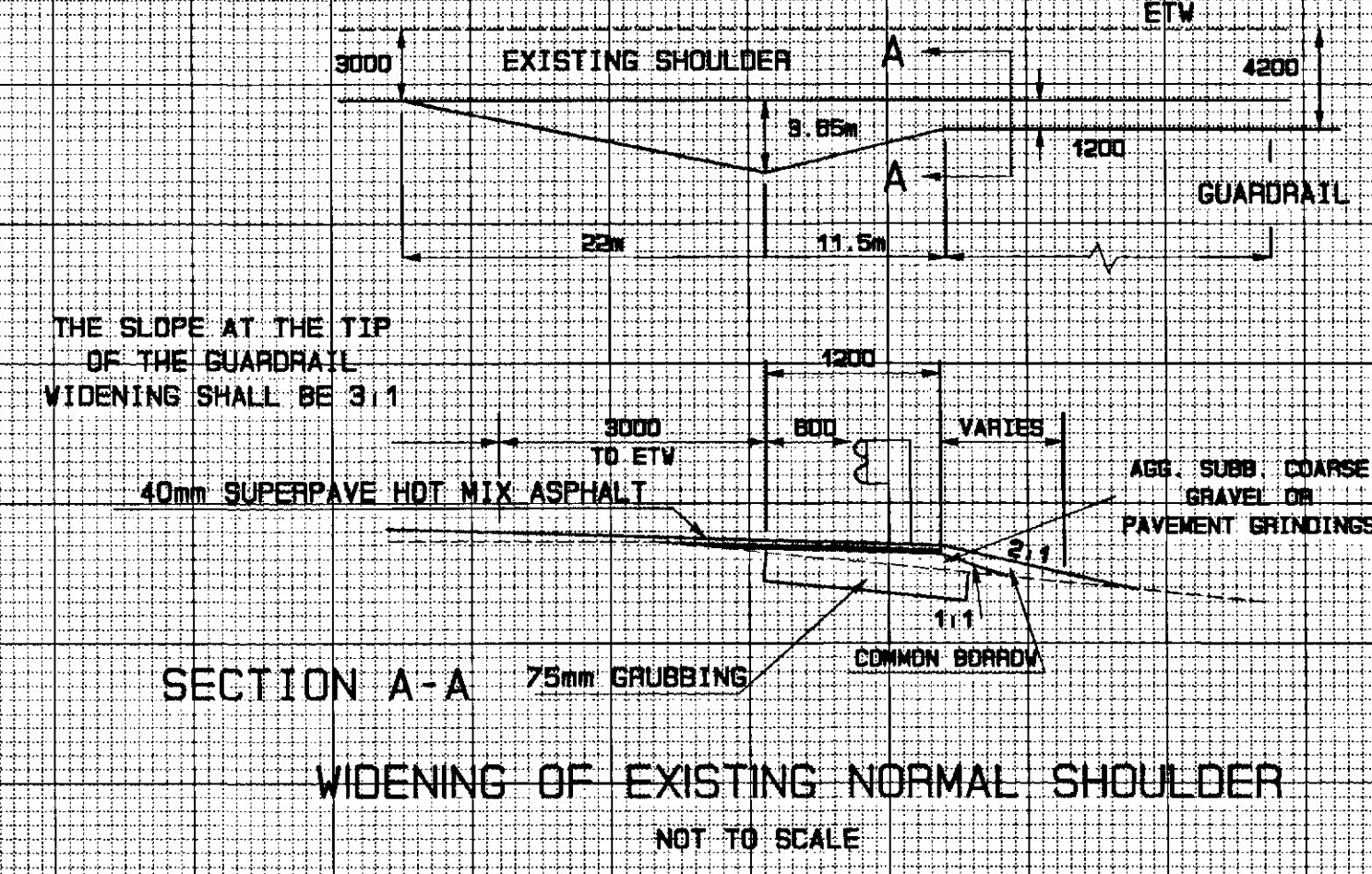
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|-------------------------|----|-------|
| PROJECT DESIGN ENGINEER | BY | DATE  |
| DESIGN-DETAILED         | RL | 11-69 |
| CHECKED                 |    |       |
| REVISIONS               |    |       |
| ETD. CHANCE             |    |       |

# PLANS

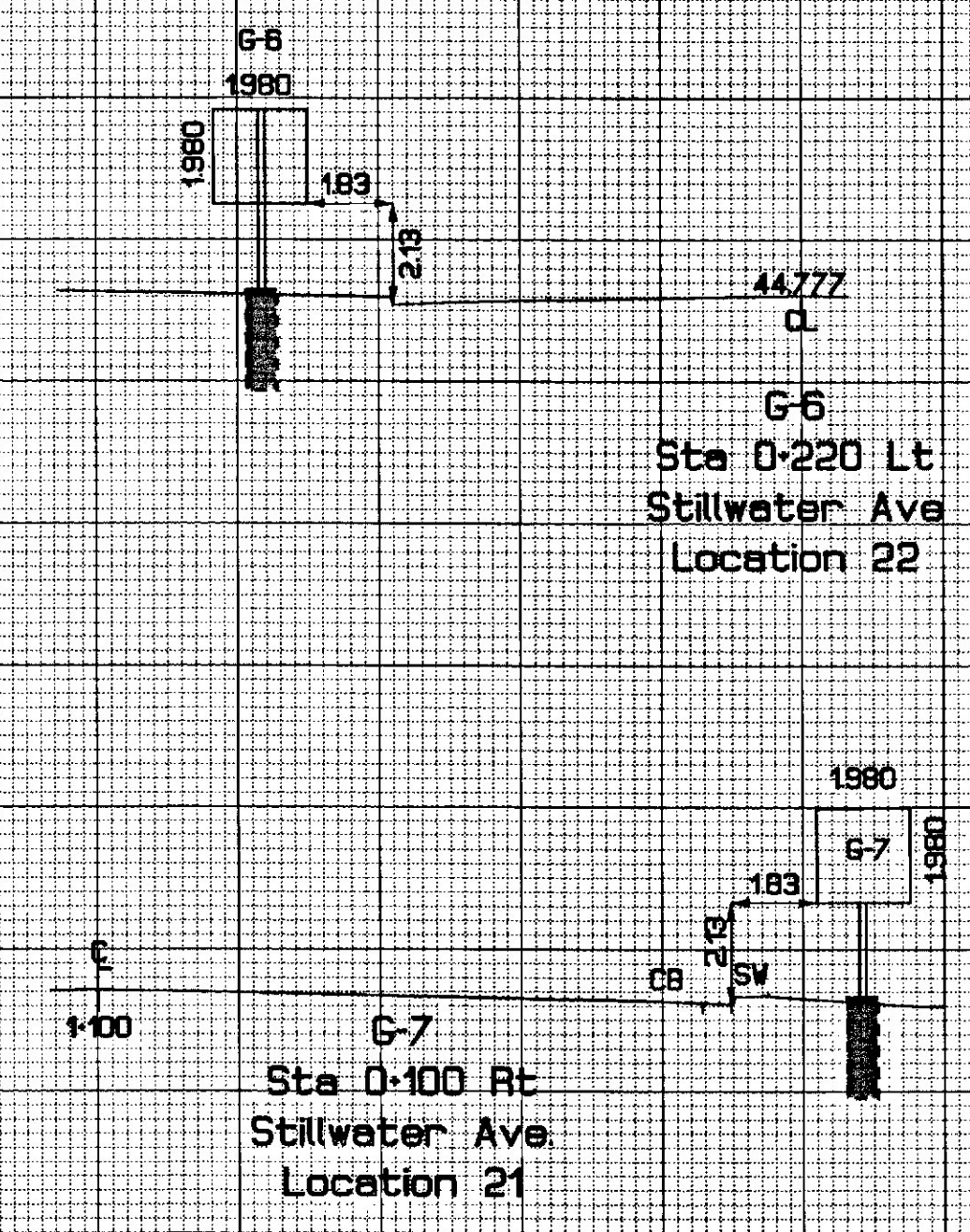
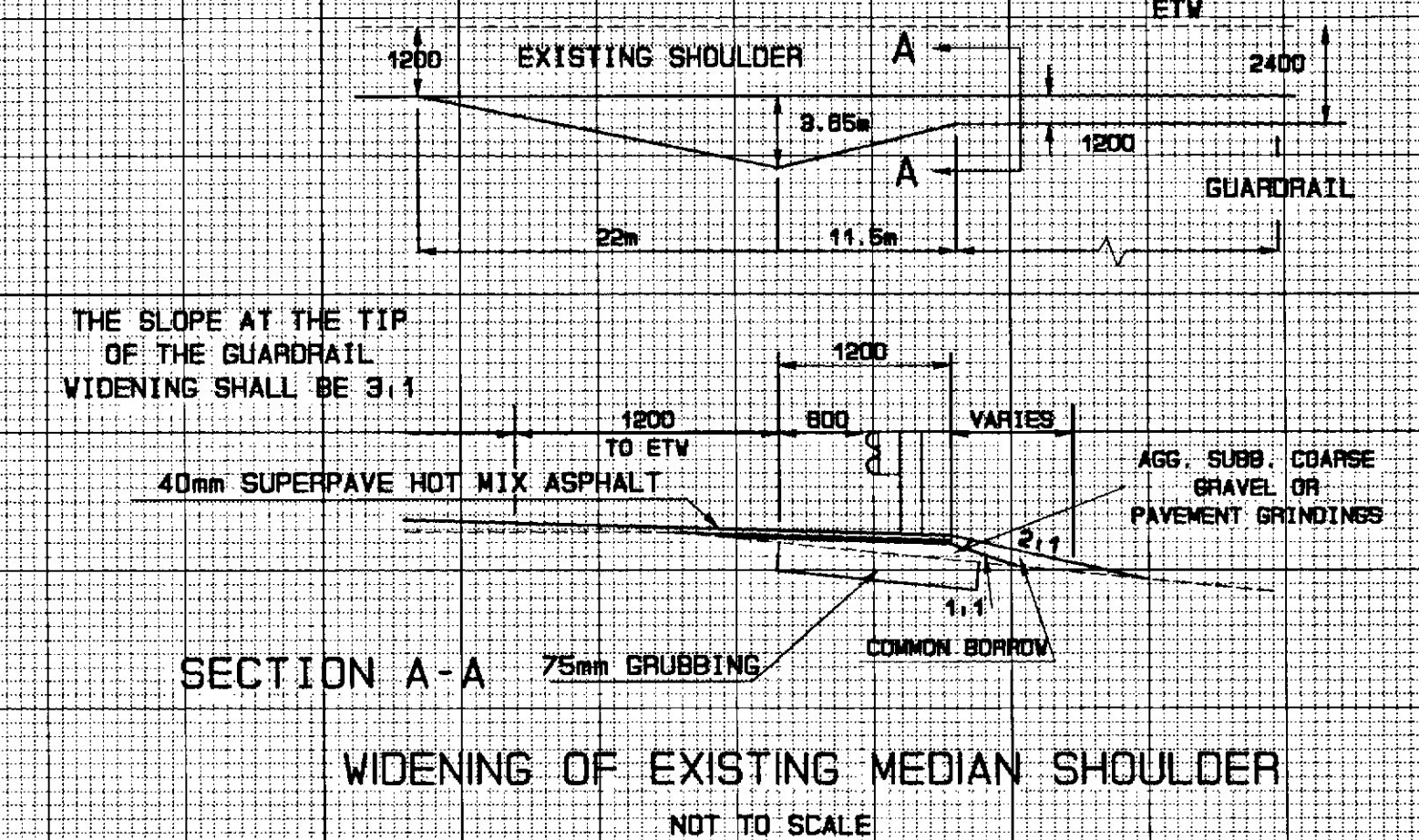
01MAR00-01.00.10



ITEM NO. 205.51, WIDENING OF EXISTING SHOULDER



ITEM NO. 205.51, WIDENING OF EXISTING SHOULDER



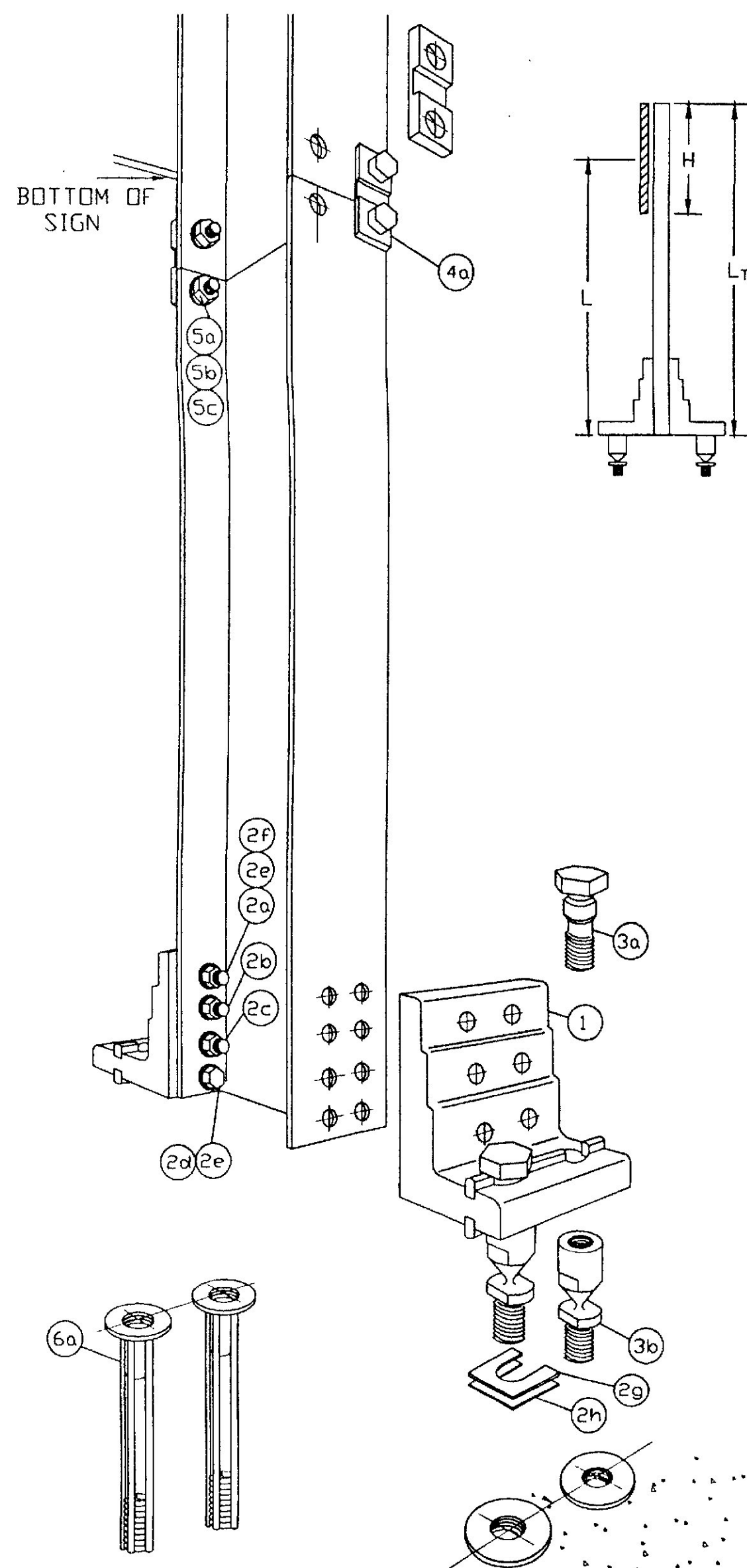


# BILL OF MATERIALS

| ITEM | DESCRIPTION   | QTY | PART               |
|------|---|-----|--------------------|
| POST |   |     | NO.                |
| 1    | Bracket 6061-T6 Aluminum (see Bracket Selection Table)                              | 2   | SBBK650-1A,-2A,-3A |
| 2    | Bracket Hardware Assembly, B650-LP  | 1   | SB-B650LPH         |
| 2a   | Bolt 15.88mm(5/8")-11UNCx69.85mm(2-3/4"), Hex Head, ASTM A325, Galv. ASTM A153      | 4   | S325BG6275         |
| 2b   | Bolt 15.88mm(5/8")-11UNCx76.2mm(3"), Hex Head, ASTM A325, Galv. ASTM A153           | 4   | S325BG6300         |
| 2c   | Bolt 15.88mm(5/8")-11UNCx82.55mm(3-1/4"), Hex Head, ASTM A325, Galv. ASTM A153      | 4   | S325BG6325         |
| 2d   | Cap Screw 15.88mm(5/8")-13UNCx31.75mm(1-1/4"), Hex Head, ASTM A307, Galv. ASTM A153 | 4   | S307SG5125         |
| 2e   | LockWasher 15.88mm(5/8"), ANSI B18-21-1, Galv. ASTM A153                            | 16  | S100WGSL60         |
| 2f   | Nut 15.88mm(5/8")-11UNC, Heavy Hex, ASTM A563 Gr. DH, Galv. ASTM A1531              | 2   | S563NGH60D         |
| 2g   | Shim 24.51mm(1") Horseshoe, 18 Gauge, Galv. Steel Sheet                             | 2   | S100WGS18          |
| 2h   | Shim 24.51mm(1") Horseshoe, 14 Gauge, Galv. Steel Sheet                             | 2   | S100WGS14          |
| 3    | Coupling & Bolt Assembly, LP, Type B  | 1   | SB-CBLP            |
| 3a   | Special Bolt 24.51mm(1")-8UNC, ASTM A449, Galv. ASTM A153/B695                      | 4   | SBCSBB             |
| 3b   | Coupling 24.51mm(1")-8UNC, LP., AMS 6378D*, Galv. ASTM A153, Polyester Coat**       | 4   | SBCB1B             |
| 4    | Hinge Assembly, Type B650   | 1   | SB-HB2             |
| 4a   | Hinge Plate Type B550, AISI 4130 Steel, Galv. ASTM A123                             | 4   | SBHB2B             |
| 5    | Hinge Hardware Assembly, Type B   | 1   | SB-HHB             |
| 5a   | Bolt 19.05mm(3/4")-10UNCx57.15mm(2-1/4"), Hex Head, ASTM A325, Galv. ASTM A153      | 8   | S325BG7225         |
| 5b   | LockWasher 19.05mm(3/4"), ANSI B18-21-1, Galv. ASTM A153                            | 8   | S100WGSL70         |
| 5c   | Nut 19.05mm(3/4")-10UNC, Heavy Hex, ASTM A563 Gr. DH, Galv. ASTM A153               | 8   | S563NGH70D         |
| 6    | Anchor Assembly, Type B   | 1   | SBABPK             |
| 6a   | Anchor 24.51mm(1")-8UNC, 304 S.S Ferrule, AISI 1008 Coil                            | 4   | SBABP              |

\* With exception to decarburization and macrostructure clauses.

\*\* 2-4 Mil. Thick Morton Powder Coatings' 20-7037 polyester powder coat.



Select correct bracket number from bracket selection table using the proper "L" value as shown in the attached figure.

$$L = L_T - H/2$$

| POST WIDTH | BRACKET SELECTION TABLE |           |            |           |            |           |
|------------|-------------------------|-----------|------------|-----------|------------|-----------|
|            | BRACKET #1              |           | BRACKET #2 |           | BRACKET #3 |           |
|            | MIN. 'L'                | MAX. 'L'  | MIN. 'L'   | MAX. 'L'  | MIN. 'L'   | MAX. 'L'  |
| 254MM(10") | 4.9M(16')               | 8.8m(29') | 3.3m(11')  | 4.9m(16') | -          | 3.3m(11') |
| 305MM(12") | 5.5M(18')               | 8.8m(29') | 4.0m(13')  | 5.5m(18') | -          | 4.0m(13') |
| 356MM(14") | 5.8M(19')               | 8.8m(29') | 4.3m(14')  | 5.8m(19') | -          | 4.3m(14') |
| 406MM(16") | 6.4M(21')               | 8.8m(29') | 4.6m(16')  | 6.4m(21') | -          | 4.6m(15') |
| 457MM(18") | 7.0M(23')               | 8.8m(29') | 4.9m(16')  | 7.0m(23') | -          | 4.9m(16') |
| 533MM(21") | 7.6M(25')               | 8.8m(29') | 5.5m(18')  | 7.6m(25') | -          | 5.5m(18') |

## GENERAL NOTES:

- Meets all requirements of "AASHTO standard specifications for structural supports for highway signs, luminaires and traffic signals".
- All hardware (American Standard) supplied is hot dip galvanized per ASTM A153 or mechanically galvanized per ASTM B695.
- Fasteners, except for special bolt and coupling, are installed with lockwashers or locknuts and do not have specific torque requirements. Fasteners should be made as tight as possible with conventional wrenches unless noted otherwise.
- Square and level individual components to minimize need for shimming.
- Structural steel to be hot dip galvanized per ASTM A123 after fabrication
- No more than two shims underneath any one coupling and no more than three shims underneath any two couplings.
- Select proper post size by referring to post selection tables for medium and large signs
- Refer to reverse for complete installation instructions.

## METRIC

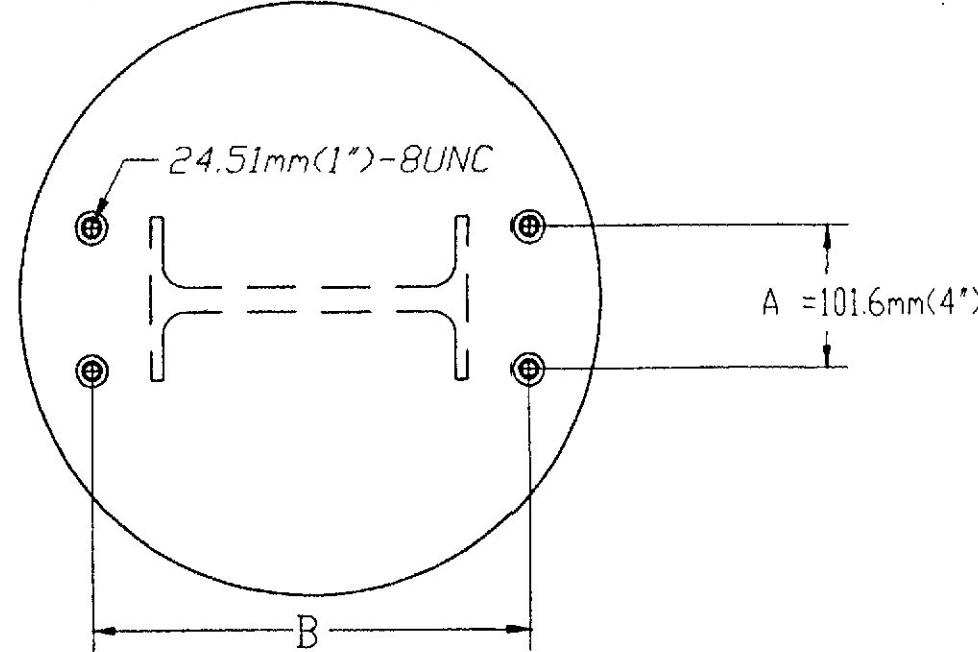
- All dimensions are in millimeters unless otherwise noted.
- All elevations and stations are in meters.

| F.V.W.A. REG. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|-------------------|-------|----------------|-----------|--------------|
| 1                 | MAINE |                | 130       | 140          |

## INSTALLATION NOTES

Wrench sizes required: 9/16", 7/8", 1", 1-1/16", 1-1/4", 1-7/16", 1-5/8"

### PLAN VIEW OF FOOTING



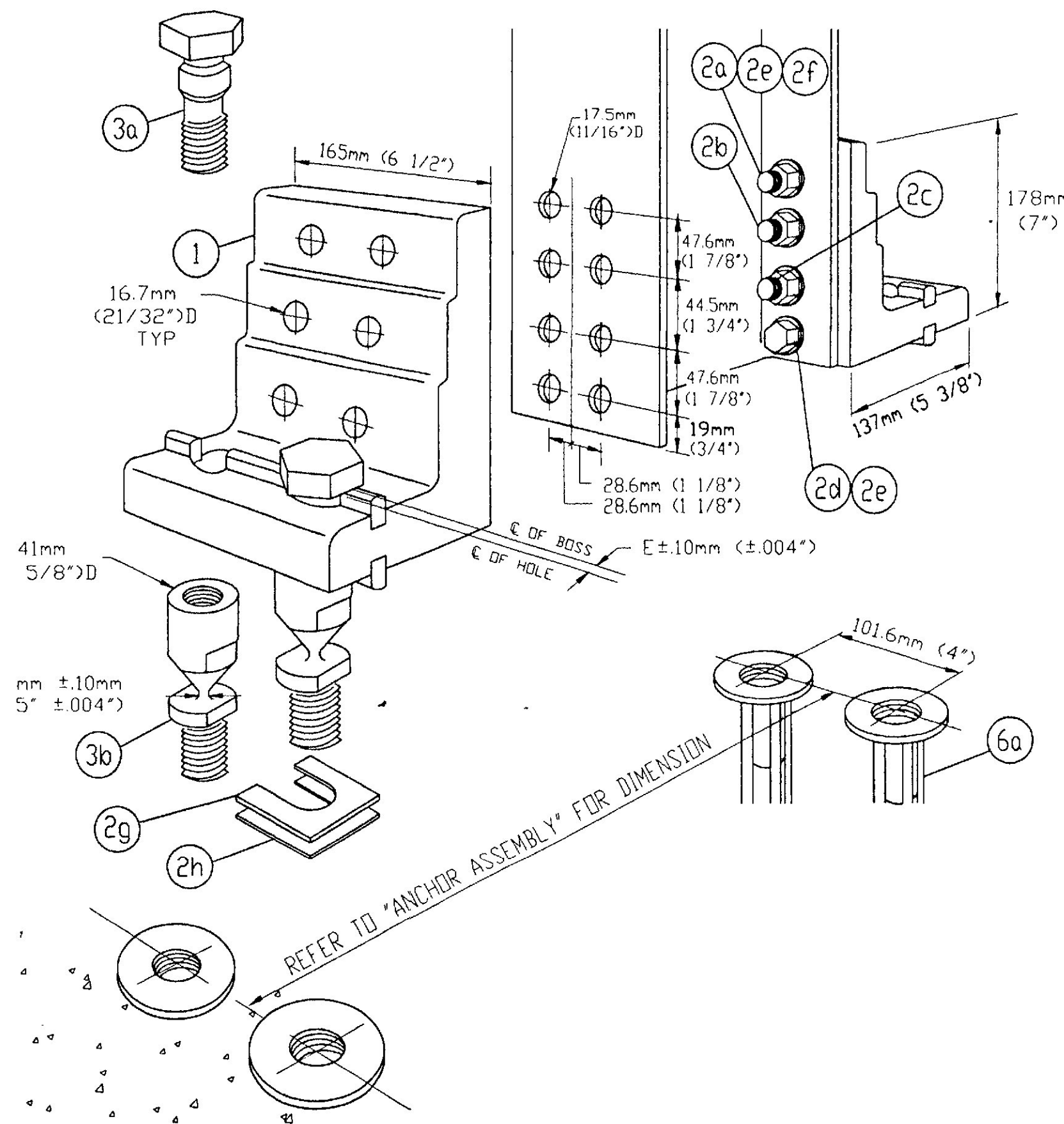
- B = Depth of post plus 201.6mm(7-15/16") --- Bracket #1
- B = Depth of post plus 204.8mm(8-1/16") --- Bracket #2
- B = Depth of post plus 206.4mm(8-1/8") --- Bracket #3

## HINGE ASSEMBLY:

- Butt upper and lower posts together on flat surface.
- Place hinge plates 4a on outer flanges and secure with bolts 5a 5b and 5c-snug but do not tighten.
- Make sure upper and lower posts are in alignment; then tighten all nuts 5c to proof load -- 1/2 a turn beyond snug

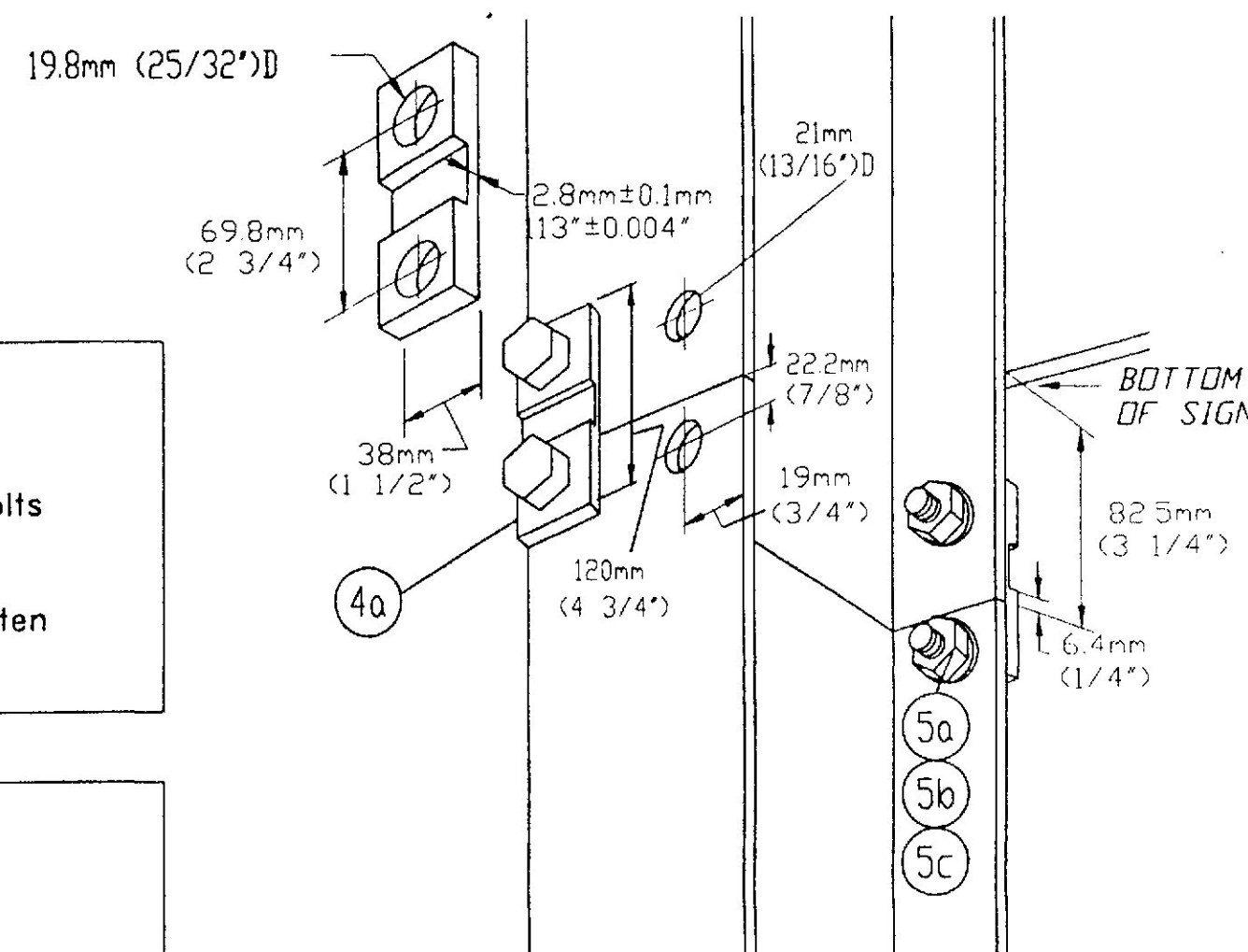
## BRACKET ASSEMBLY:

- Assemble bracket to post with bolts provided.
- Square and tighten. (Item 1 2a 2b 2c 2d 2e & 2f)



## ANCHOR ASSEMBLY:

- Assemble coupling anchors 6a to installation template (not shown). Rigid steel template is recommended
- Lower entire anchor assembly into fresh concrete and vibrate into position so that the tops of the individual anchors 6a are flush with the finished top surface of the footings.



## COUPLING ASSEMBLY:

- Suspend post over footing and insert special bolts 3a through bracket 1.
  - Below bracket, thread couplings 3b into anchors 6a but leave loose.
  - Lower post with special bolts 3a onto loose couplings 3b and thread bolts into couplings.
  - Thread couplings all the way in to anchors 6a.
  - Tighten special bolts 3a.
- NOTE! do not place torque across necked down wrench flats are provided on either side for proper tightening.
- If post is not plumb, insert shims 2g and 2h between couplings 3b and anchor 6a.

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

STANDARD DETAILS  
Highway Signing  
Sign Post  
Breakaway Device

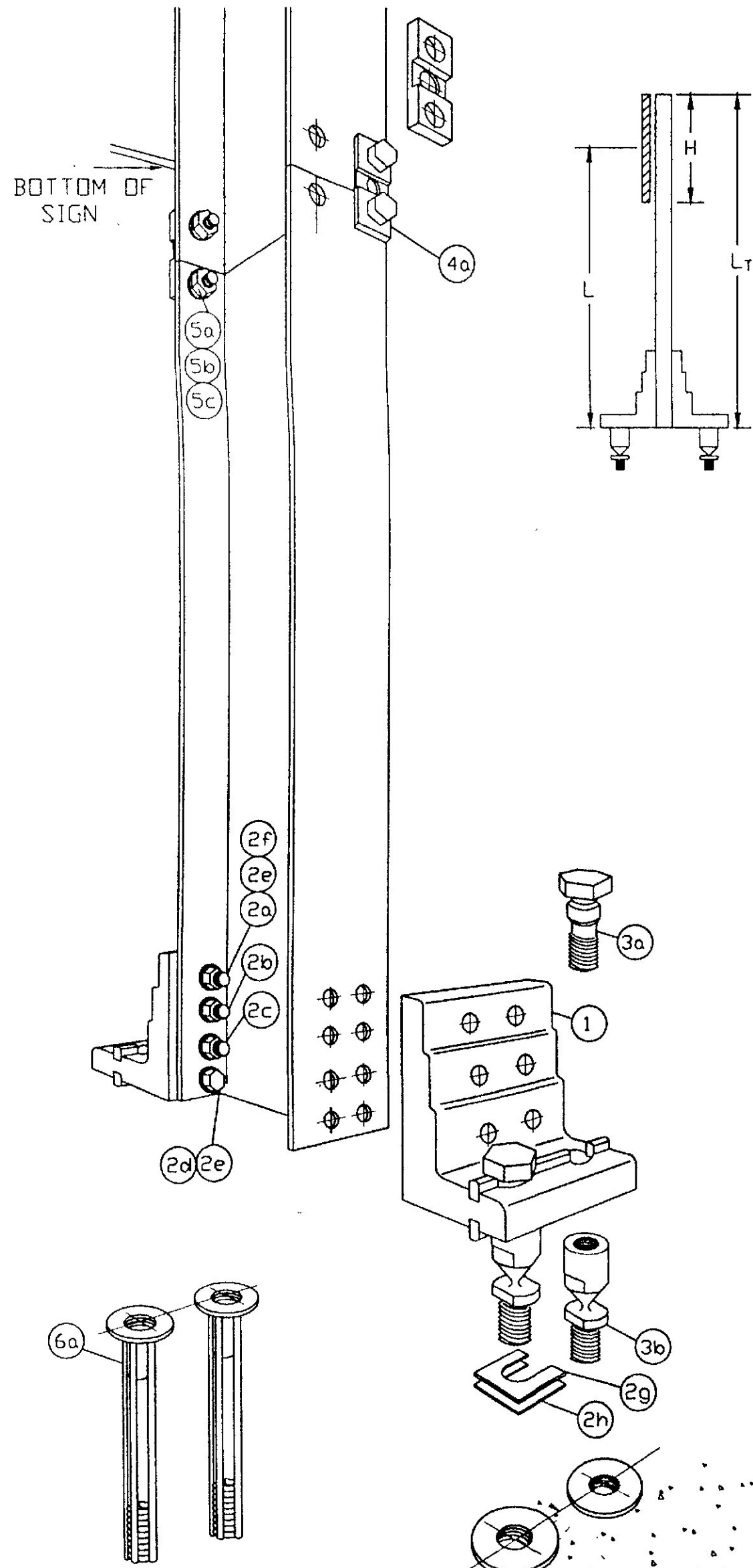


BILL OF MATERIALS

| ITEM | DESCRIPTION                           | QTY   | PART                 |
|------|---------------------------------------|---|----------------------|
|      |                                       | POST  | NO.                  |
| 1    | Bracket                               | 6061-T6 Aluminum (see Bracket Selection Table)                            | 2 SBBK525-1A,-2A,-3A |
| 2    | Bracket Hardware Assembly, B525-LP    | 1   | SB-B525LPH           |
| 2a   | Bolt                                  | 12.7mm(1/2")-13UNCx63.5mm(2-1/2"), Hex Head, ASTM A325, Galv. ASTM A153   | 4 S325BG5250         |
| 2b   | Bolt                                  | 12.7mm(1/2")-13UNCx69.85mm(2-3/4"), Hex Head, ASTM A325, Galv. ASTM A153  | 4 S325BG5275         |
| 2c   | Bolt                                  | 12.7mm(1/2")-13UNCx76.2mm(3"), Hex Head, ASTM A325, Galv. ASTM A153       | 4 S325BG5300         |
| 2d   | Cap Screw                             | 12.7mm(1/2")-13UNCx31.75mm(1-1/4"), Hex Head, ASTM A307, Galv. ASTM A153  | 4 S307SG5125         |
| 2e   | LockWasher                            | 12.7mm(1/2"), ANSI B18-21-1, Galv. ASTM A153                              | 16 S100WGS50         |
| 2f   | Nut                                   | 12.7mm(1/2")-13UNC, Heavy Hex, ASTM A563 Gr. DH, Galv. ASTM A153          | 12 S563NGH500        |
| 2g   | Shim                                  | 24.51mm(1") Horseshoe, 18 Gauge, Galv. Steel Sheet                        | 2 S100WGS18          |
| 2h   | Shim                                  | 24.51mm(1") Horseshoe, 14 Gauge, Galv. Steel Sheet                        | 2 S100WGS14          |
| 3    | Coupling & Bolt Assembly, LP., Type B | 1   | SB-CBLP              |
| 3a   | Special Bolt                          | 24.51mm(1")-8UNC, ASTM A449, Galv. ASTM A153/B695                         | 4 SBSCBB             |
| 3b   | Coupling                              | 24.51mm(1")-8UNC, LP., AMS 6378D*, Galv. ASTM A153, Polyester Coat**      | 4 SBCEB1B            |
| 4    | Hinge Assembly, Type B525             | 1   | SB-HB1               |
| 4a   | Hinge Plate                           | Type B525, AISI 4130 Steel, Galv. ASTM A123                               | 4 SBHB1B             |
| 5    | Hinge Hardware Assembly, Type B       | 1   | SB-HHB               |
| 5a   | Bolt                                  | 19.05mm(3/4")-10UNCx57.15mm(2-1/4"), Hex Head, ASTM A325, Galv. ASTM A153 | 8 S325BG7225         |
| 5b   | LockWasher                            | 19.05mm(3/4"), ANSI B18-21-1, Galv. ASTM A153                             | 8 S100WGS170         |
| 5c   | Nut                                   | 19.05mm(3/4")-10UNC, Heavy Hex, ASTM A563 Gr. DH, Galv. ASTM A153         | 8 S563NGH700         |
| 6    | Anchor Assembly, Type B               | 1   | SBABPK               |
| 6a   | Anchor                                | 24.51mm(1")-8UNC, 304 S.S.Ferrule, AISI 1038 Rod, AISI 1008 Coil          | 4 SBABP              |

\* With exception to decarburization and macrostructure clauses.

\*\* 2-4 Mil. Thick Morton Powder Coatings' 20-7037 polyester powder coat.



Select correct bracket number from bracket selection table using the proper "L" value as shown in the attached figure.

$$L = L_T - H/2$$

| POST WIDTH | BRACKET SELECTION TABLE |           |            |           |            |           |
|------------|-------------------------|-----------|------------|-----------|------------|-----------|
|            | BRACKET #1              |           | BRACKET #2 |           | BRACKET #3 |           |
|            | MIN. 'L'                | MAX. 'L'  | MIN. 'L'   | MAX. 'L'  | MIN. 'L'   | MAX. 'L'  |
| 152MM(6")  | 3.6M(12')               | 8.8m(29') | 2.7m(9')   | 3.6m(12') | -          | 2.7m(9')  |
| 203MM(8")  | 4.3M(14')               | 8.8m(29') | 3.0m(10')  | 4.3m(14') | -          | 3.0m(10') |

GENERAL NOTES:

- Meets all requirements of "AASHTO standard specifications for structural supports for highway signs, luminaires and traffic signals".
- All hardware (American Standard) supplied is hot dip galvanized per ASTM A153 or mechanically galvanized per ASTM B695.
- Fasteners, except for special bolt and coupling, are installed with lockwashers or locknuts and do not have specific torque requirements. Fasteners should be made as tight as possible with conventional wrenches unless noted otherwise.
- Square and level individual components to minimize need for shimming.
- Structural steel to be hot dip galvanized per ASTM A123 after fabrication.
- No more than two shims underneath any one coupling and no more than three shims underneath any two couplings.
- Select proper post size by referring to post selection tables for medium and large signs.
- Refer to reverse for complete installation instructions.

METRIC

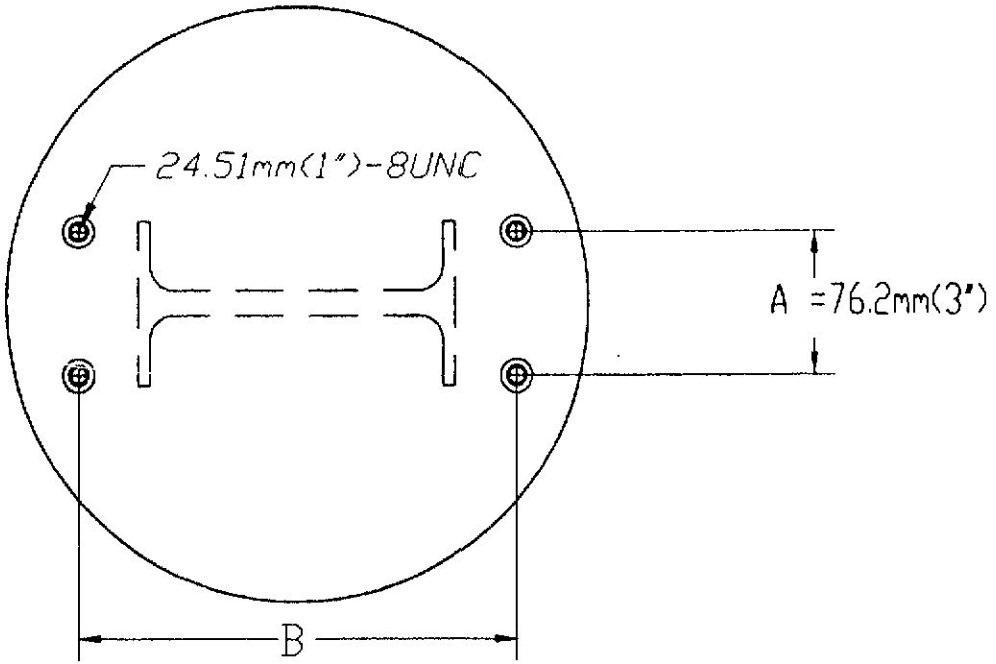
- All dimensions are in millimeters unless otherwise noted.
- All elevations and stations are in meters.

| F.H.W.A. RES. NO. | STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|-------------------|-------|----------------|-----------|--------------|
| 1                 | MAINE |                | 131       | 140          |

INSTALLATION NOTES

Wrench sizes required: 9/16", 7/8", 1-1/16", 1-1/4", 1-7/16", 1-5/8"

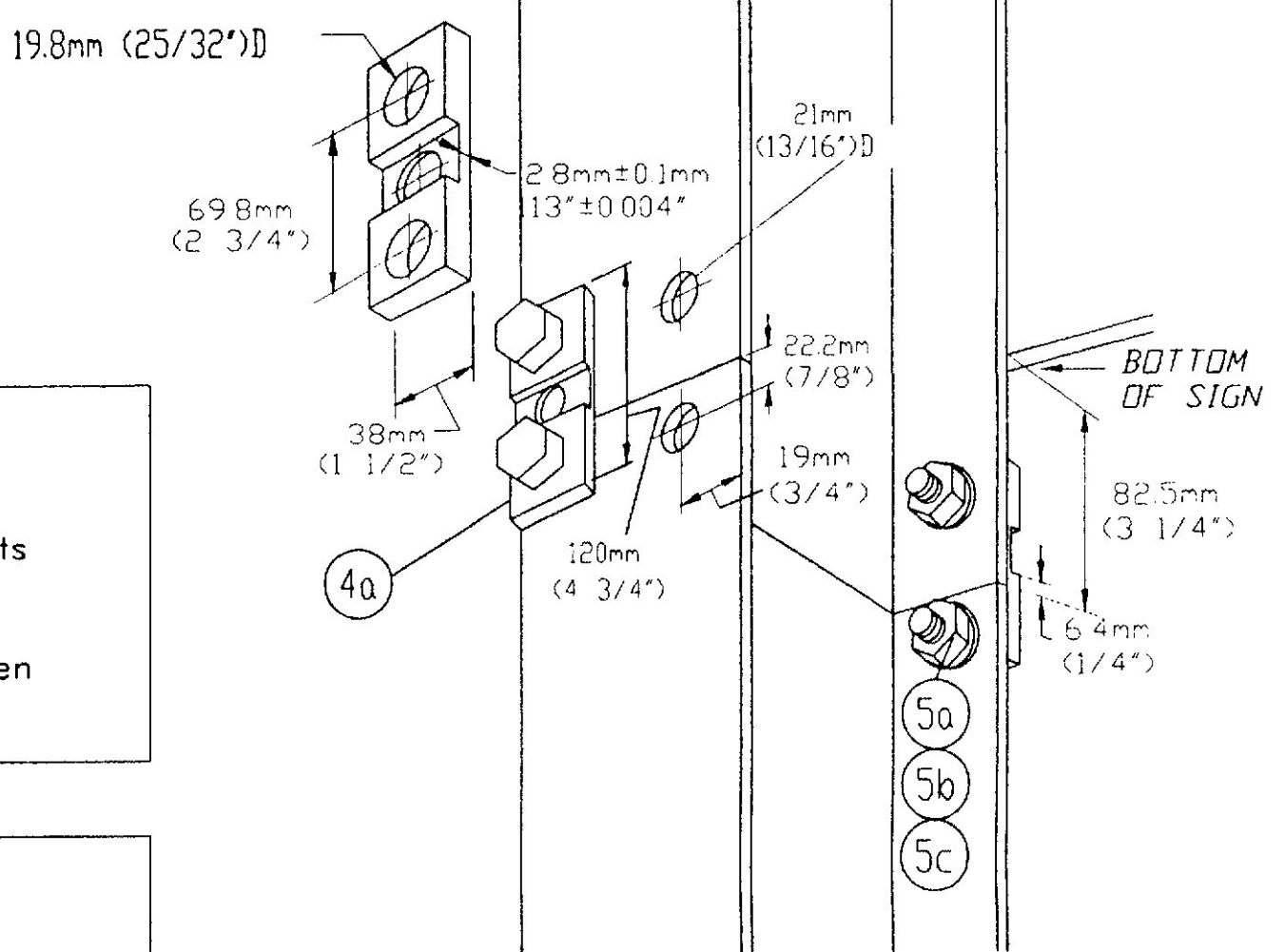
PLAN VIEW OF FOOTING



- B = Depth of post plus 201.6mm(7-15/16") --- Bracket #1
- B = Depth of post plus 204.8mm(8-1/16") --- Bracket #2
- B = Depth of post plus 206.8mm(8-1/8") --- Bracket #3

ANCHOR ASSEMBLY:

- Assemble coupling anchors 6a to installation template (not shown). Rigid steel template is recommended.
- Lower entire anchor assembly into fresh concrete and vibrate into position so that the tops of the individual anchors 6a are flush with the finished top surface of the footings.

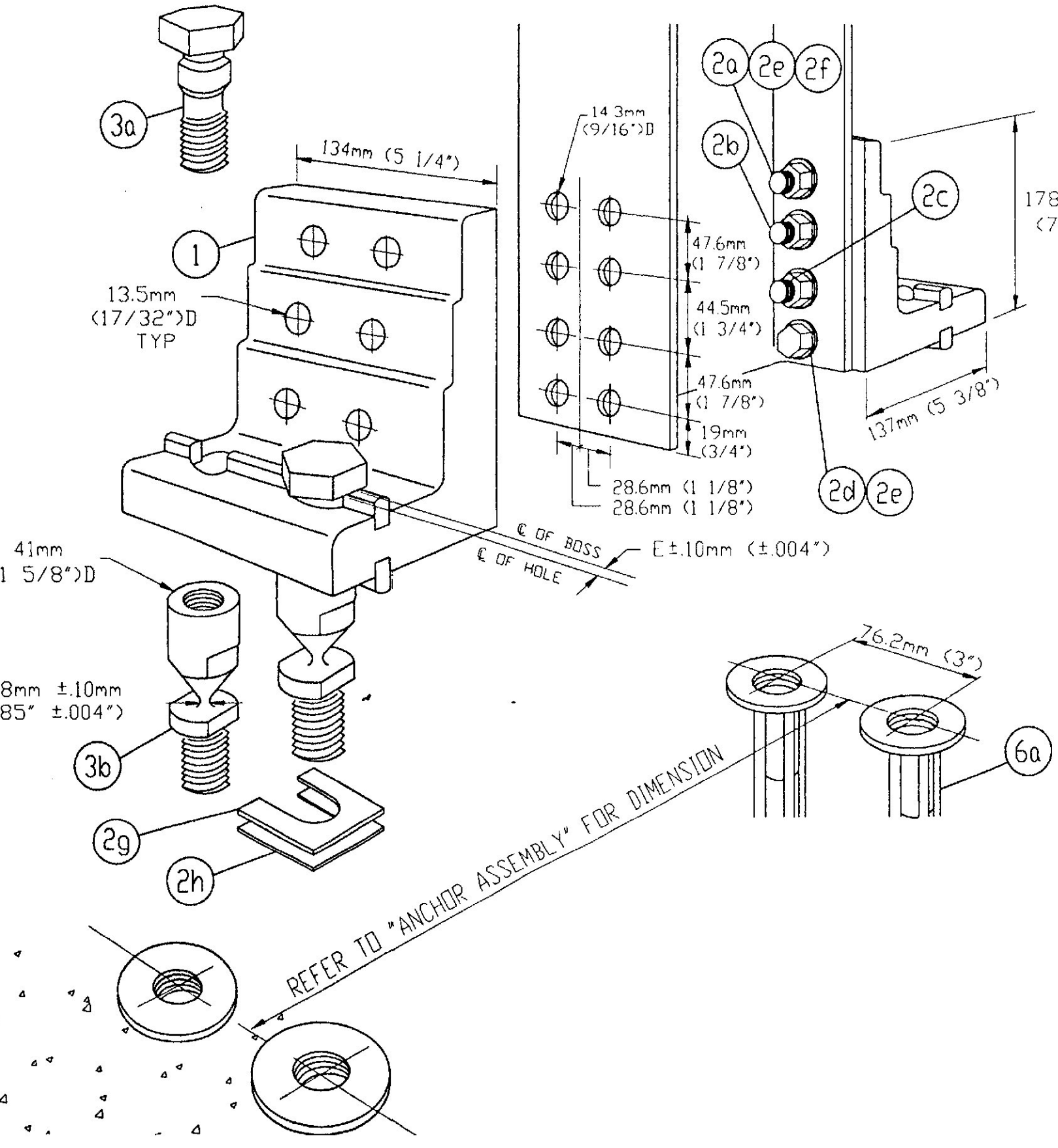


HINGE ASSEMBLY:

- Bolt upper and lower posts together on flat surface.
- Place hinge plates 4a on outer flanges and secure with bolts 5a 5b and 5c--snug but do not tighten.
- Make sure upper and lower posts are in alignment; then tighten all nuts 5c to proof load -- 1/2 a turn beyond snug

BRACKET ASSEMBLY:

- Assemble bracket to post with bolts provided.
- Square and tighten. (Item 1 2a 2b 2c 2d 2e & 2f)



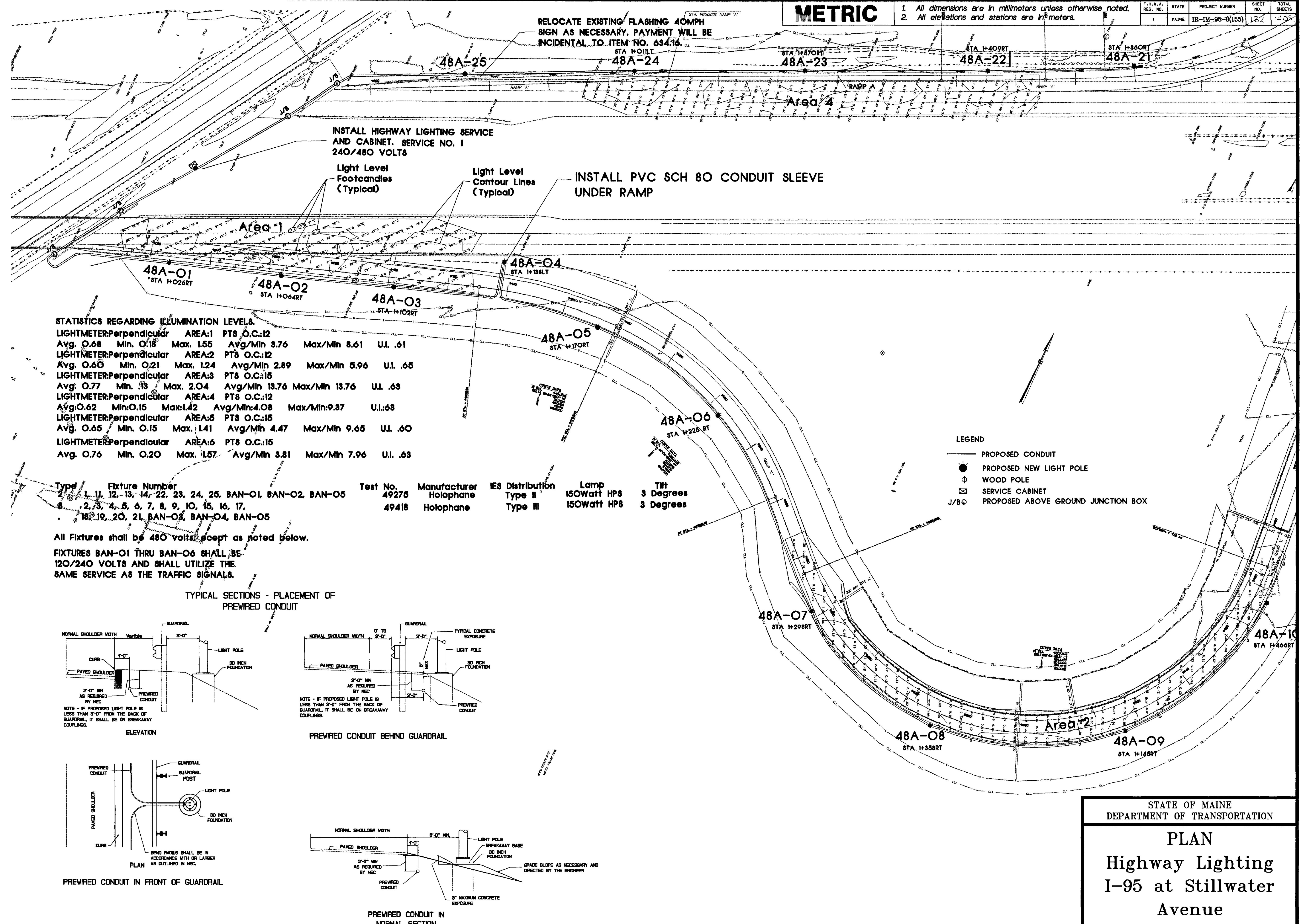
COUPLING ASSEMBLY:

- Suspend post over footing and insert special bolts 3a through bracket 1.
- Below bracket, thread couplings 3b into anchors 6a but leave loose.
- Lower post with special bolts 3a onto loose couplings 3b and thread bolts into couplings.
- Thread couplings all the way in to anchors 6a.
- Tighten special bolts 3a. NOTE! do not place torque across necked down portion of coupling--wrench flats are provided on either side for proper tightening.
- If post is not plumb, insert shims 2g and 2h between couplings 3b and anchor 6a.

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

STANDARD DETAILS  
Highway Signing  
Sign Post  
Breakaway Device





| PROJECT DESIGN ENGINEER | BY  | DATE  |
|-------------------------|-----|-------|
| DESIGN-DETAILED         | RL  | 11-00 |
| CHECKED                 | DEE | 2-00  |
| REVISED                 | DEE | 2-00  |
| FIELD CHANGES           |     |       |

**PLANS**

01MAR00-01.00.10

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

PLAN  
Highway Lighting  
I-95 at Stillwater  
Avenue  
BANGOR

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SHT1

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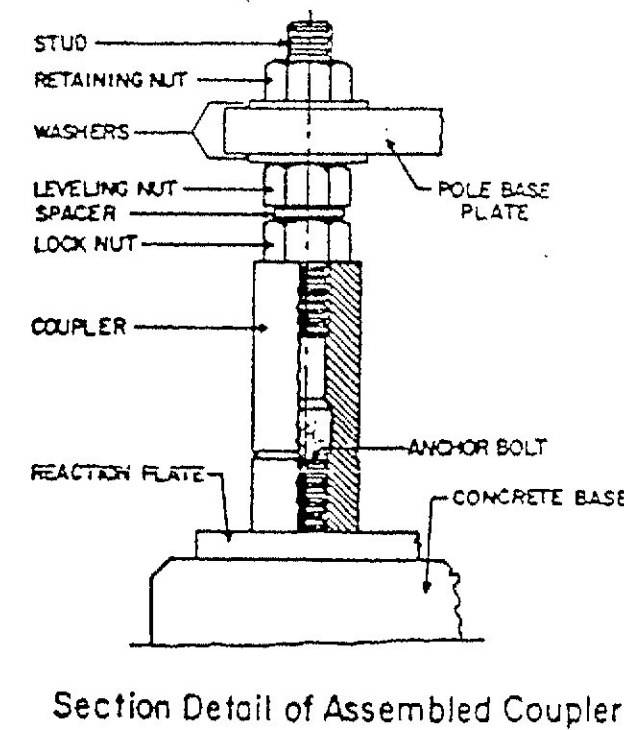
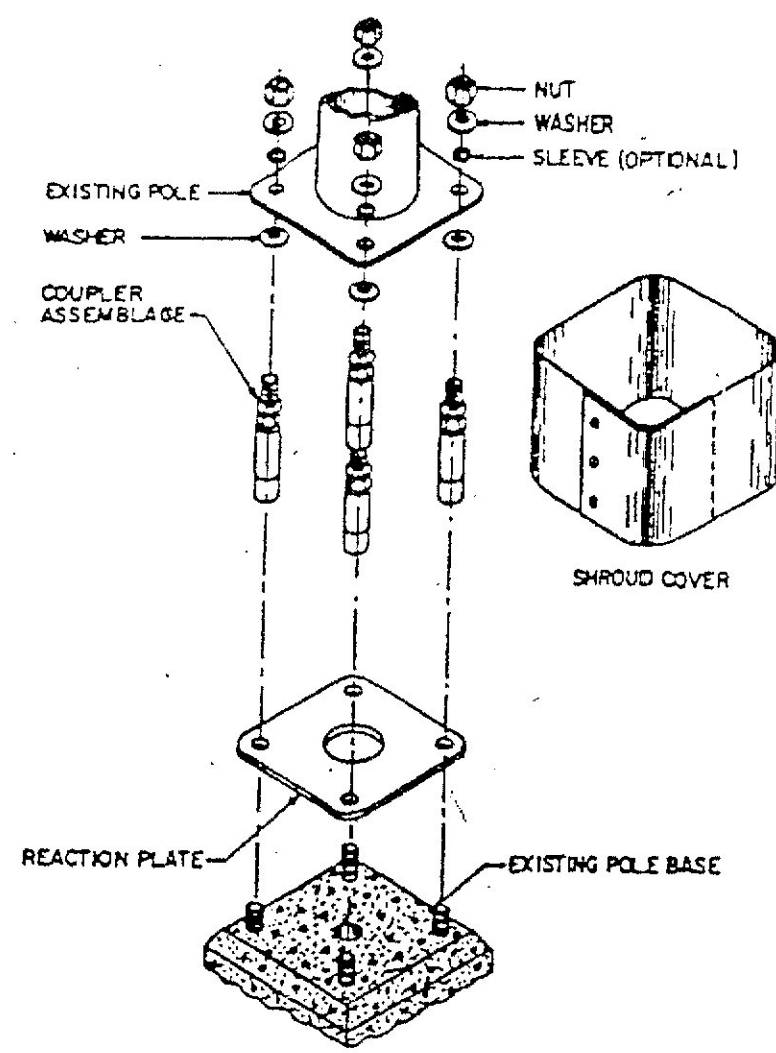
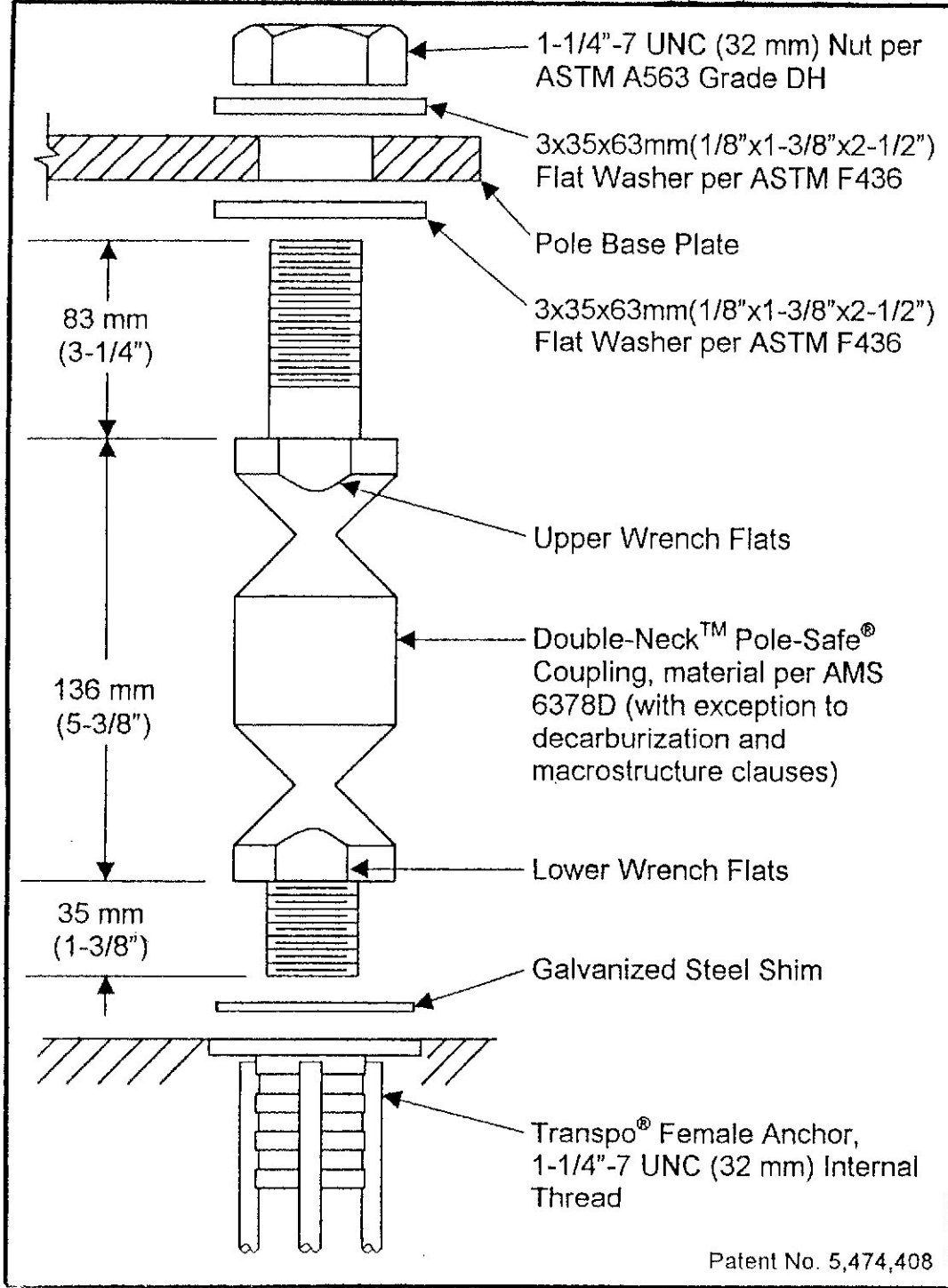
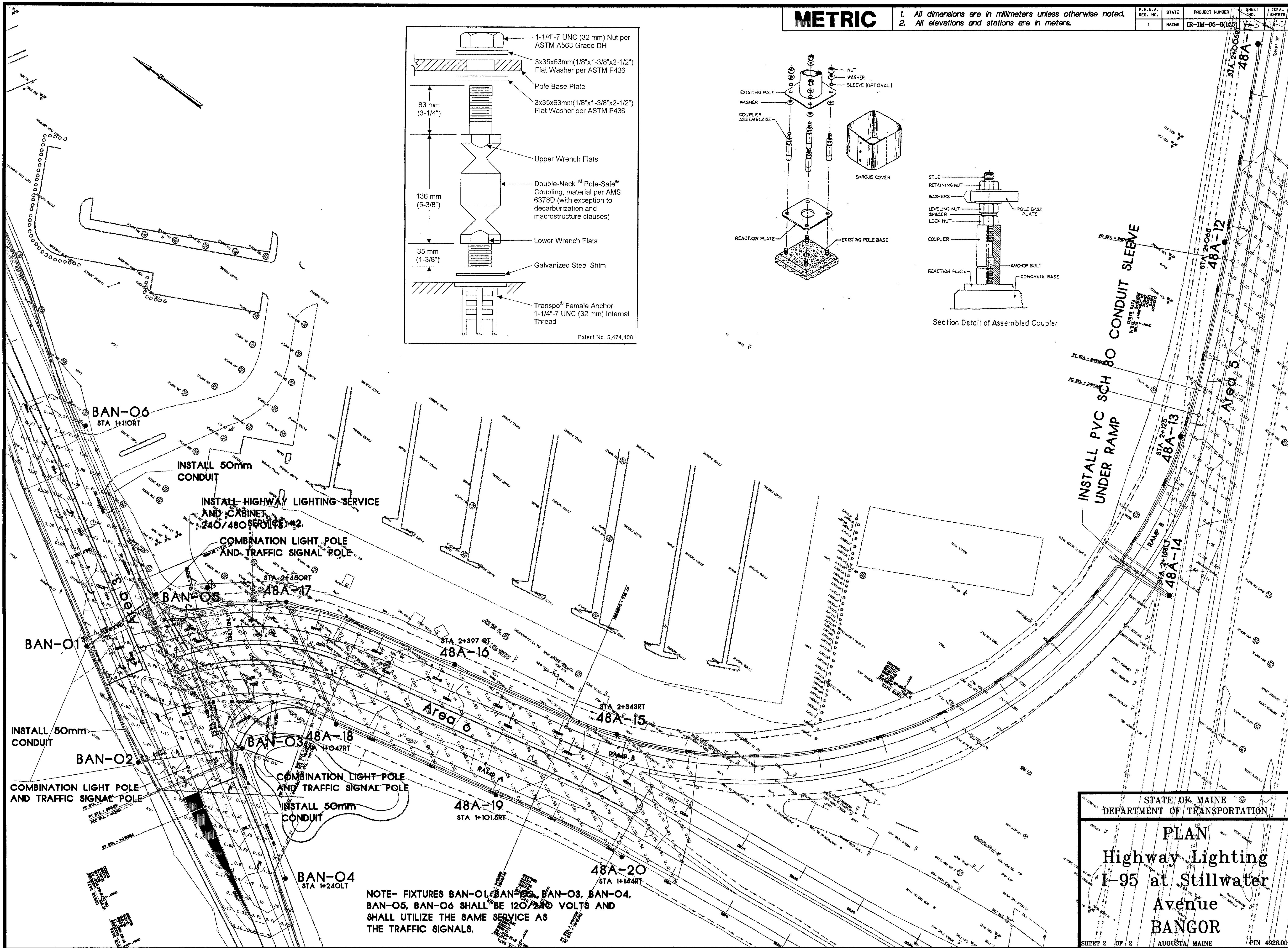
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| PROJECT DESIGN ENGINEER | DATE  |
|-------------------------|-------|
| DESIGN-DETAILED         | 11-98 |
| CHECKED                 | 2-00  |
| REVISIONS               | 2-00  |
| FIELD CHANGES           |       |

| BY  | RL  | DATE |
|-----|-----|------|
| DLB | DLB | 2-00 |
| DLB | DLB | 2-00 |

| PLANS |
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| 99    |
| 100   |

01WARD-0100.10



**METRIC**

1. All dimensions are in millimeters unless otherwise noted.
2. All elevations and stations are in meters.

| F.N.V.A. REG. NO. | STATE | PROJECT NUMBER  | SHEET NO. | TOTAL SHEETS |
|-------------------|-------|-----------------|-----------|--------------|
| 1                 | MAINE | IR-1M-95-B(155) | 1         | 1            |

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

**PLAN**  
Highway Lighting  
I-95 at Stillwater  
Avenue  
BANGOR

SHEET 2 OF 2  
AUGUSTA, MAINE  
PIN 4928.00



| SUMMARY OF CONDUIT    |             |            |   |    |    |    |    |     |    |     |  |   |     |
|-----------------------|-------------|------------|---|----|----|----|----|-----|----|-----|--|---|-----|
| Station               | Pole Number | Break-Away | Meters Prewired Conduit - Wire Size<br>3 - Wire Stranded Copper, Single Phase |    |    |    |    |     |    |     | METALLIC<br>CONDUIT<br>BRIDGE<br>X-ING | Remarks                                 |     |
|                       |             |            | #1  | #2 | #3 | #4 | #6 | #8  | #8 | #12 |  |   | #14 |
| Service #1 Circuit 1  |             |            |   |    |    |    |    |     |    |     |  |   |     |
| Ramp c, Area 1 & 2    |             |            |   |    |    |    |    |     |    |     |  |   |     |
| 240/480 VOLTS         |             |            |   |    |    |    |    |     |    |     |  |   |     |
| Service               |             |            |   |    |    |    |    |     |    |     |  |   |     |
| Junction Box          |             |            |   |    |    |    |    | 30  |    |     |  |   |     |
| Junction Box          |             |            |   |    |    |    |    |     |    |     | 20                                     | Steel Conduit on Bridge Abutment        |     |
| 1+026RT 48A-O1        | YES         |            |   |    |    |    |    | 43  |    |     |  |   |     |
| 1+064RT 48A-O2        | YES         |            |   |    |    |    |    | 38  |    |     |  |   |     |
| 1+102RT 48A-O3        | YES         |            |   |    |    |    |    | 38  |    |     |  |   |     |
| 1+138LT 48A-O4        | YES         |            |   |    |    |    |    | 48  |    |     |  | Install Rigid Conduit Sleeve Under Ramp |     |
| 1+170RT 48A-O5        | YES         |            |   |    |    |    |    | 45  |    |     |  |   |     |
| 1+225RT 48A-O6        | YES         |            |   |    |    |    |    | 55  |    |     |  |   |     |
| 1+298RT 48A-O7        | YES         |            |   |    |    |    |    | 75  |    |     |  |   |     |
| 1+358RT 48A-O8        | NO          |            |   |    |    |    |    | 60  |    |     |  |   |     |
| 1+415RT 48A-O9        | NO          |            |   |    |    |    |    | 65  |    |     |  |   |     |
| 1+466RT 48A-10        | NO          |            |   |    |    |    |    | 64  |    |     |  |   |     |
|                       |             |            |   |    |    |    |    |     |    |     |  |   |     |
|                       |             |            |   |    |    |    |    |     |    |     |  |   |     |
| Service #1, Circuit 2 |             |            |   |    |    |    |    |     |    |     |  |   |     |
| Ramp A, Area 4        |             |            |   |    |    |    |    |     |    |     |  |   |     |
|                       |             |            |   |    |    |    |    |     |    |     |  |   |     |
| Service               |             |            |   |    |    |    |    |     |    |     |  |   |     |
| Junction Box          |             |            |   |    |    |    |    |     | 35 |     |  |   |     |
| Junction Box          |             |            |   |    |    |    |    |     |    |     | 20                                     | Steel Conduit on Bridge Abutment        |     |
| 1+085LT 48A-25        | NO          |            |   |    |    |    |    | 30  |    |     |  |   |     |
| 1+011LT 48A-24        | NO          |            |   |    |    |    |    | 60  |    |     |  |   |     |
| 1+470RT 48A-23        | NO          |            |   |    |    |    |    | 60  |    |     |  |   |     |
| 1+409RT 48A-22        | YES         |            |   |    |    |    |    | 60  |    |     |  |   |     |
| 1+360RT 48A-21        | YES         |            |   |    |    |    |    | 50  |    |     |  |   |     |
|                       |             |            |   |    |    |    |    |     |    |     |  |   |     |
| Service #2 Circuit 3  |             |            |   |    |    |    |    |     |    |     |  |   |     |
| Ramp B, Area 5 & 6    |             |            |   |    |    |    |    |     |    |     |  |   |     |
| 240/480 VOLTS         |             |            |   |    |    |    |    |     |    |     |  |   |     |
| Service #2            |             |            |   |    |    |    |    |     |    |     |  |   |     |
| 2+450RT ** 48A-17     | YES         |            |   |    |    |    |    | 45  |    |     |  |   |     |
| 2+397RT 48A-16        | YES         |            |   |    |    |    |    | 53  |    |     |  |   |     |
| 2+343RT 48A-15        | YES         |            |   |    |    |    |    | 52  |    |     |  |   |     |
| 2+168LT 48A-14        | YES         |            |   |    |    |    |    | 187 |    |     |  | Install Rigid Conduit Sleeve Under Ramp |     |
| 2+125RT 48A-13        | YES         |            |   |    |    |    |    | 58  |    |     |  |   |     |
| 2+065RT 48A-12        | YES         |            |   |    |    |    |    | 60  |    |     |  |   |     |
| 2+005RT 48A-11        | YES         |            |   |    |    |    |    | 60  |    |     |  |   |     |
|                       |             |            |   |    |    |    |    |     |    |     |  |   |     |
|                       |             |            |   |    |    |    |    |     |    |     |  |   |     |
| **2+450RT 48A-17      | YES         |            |   |    |    |    |    |     |    |     |  |   |     |
| 1+047RT 48A-18        | YES         |            |   |    |    |    |    | 40  |    |     |  | Install Rigid Conduit Sleeve Under Ramp |     |
| 1+101RT 48A-19        | YES         |            |   |    |    |    |    | 53  |    |     |  |   |     |
| 1+144RT 48A-20        | YES         |            |   |    |    |    |    | 43  |    |     |  |   |     |

[illegible]

## General Notes

1. There shall be no junction boxes or splices between light poles. The prewired conduit shall be continuous between each light pole. The only exception to this is at bridge abutments where the prewired conduit needs to transition to metallic conduit.
2. Existing conduit that goes through the bridge abutment will have a junction box attached to the face of it in accordance with the NEC. Conduit that does not currently go through the bridge abutment will have an above ground junction box mounted to back wall. The junction box center shall be no higher than 4.5 feet above ground. All above ground junction boxes shall be made of stainless steel or aluminum with a continuous hinge and a NEMA Type 4x rating.
3. All materials and workmanship shall conform to latest version of the NEC, the local electrical utility and all local ordinances which may apply.
4. All new luminaries shall be IES cutoff with tempered flat glass, and shall use 150 Watt HPS lamps .
5. All fixtures shall be top- mounted ( no bracket arm) on aluminum poles at a mounting height of 40 feet except those mounted on duel poles. Poles shall be located as shown on the plans.
6. All fixtures shall be gasketed and shall include a protected starter, double fuse kit, a terminal block and a NEMA decal. All fixtures shall be gray.
7. The plans were designed with a Holophane Mongoose Catalog Number MC-15AHP-48-NF-G-P-B-D-GA and MC-15AHP-48-WF-G-P-B-D-GA. If different fixtures are used they shall be IES Type 11 and Type 111 distributions respectively. The bidder must demonstrate that the fixtures will meet or exceed the light levels shown on the plans and provide an average maintained illumination of 0.6 and produce an average / minimum ratios that are generally 4:1 or better (i.e. comparable to the average / minimum ratios shown on the plans.).
8. On the summary of fixtures table, Type 2 refers to IES Type 11 cutoff, narrow roadway. Type 3 refers to IES Type 111 cutoff, wide roadway.
9. The size of the prewired conduit indicated on the plans is the minimum size to be used.
11. Non- metallic conduit for new ramp crossings shall be used as a sleeve for the prewired conduit. It shall be paid under item 626.22 nonmetallic conduit.
12. The length of the prewired conduit is for estimating purposes, it shall be field measured before installation.
13. Light poles shall be identified (as indicated on the plans) by four inch numbers mounted vertically on the poles with reflective sheeting. Payment is incidental to item 634.21.
14. The breakaway supports for the light fixture shall conform to the latest version of AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES, AND TRAFFIC SIGNALS and NCHRP Report 350. The breakaway device shall be designed so that the anchor bolts don't bend (if applicable) when pole is struck by an errant vehicle. A flangible coupling such as the TRANSP0 Pole Safe 5000 series (with a Female Anchor), the Manitoba Safety Base with a reaction plate, or an approved equal. Payment for the breakaway supports where called for on the plans shall be considered incidental to item no. 634.16 highway lighting.
15. All lighting bases shall have a ground rod that is bonded to the grounding conductor and is located immediately adjacent to foundation, payment for ground rods are incidental to item no. 634.16 highway lighting.

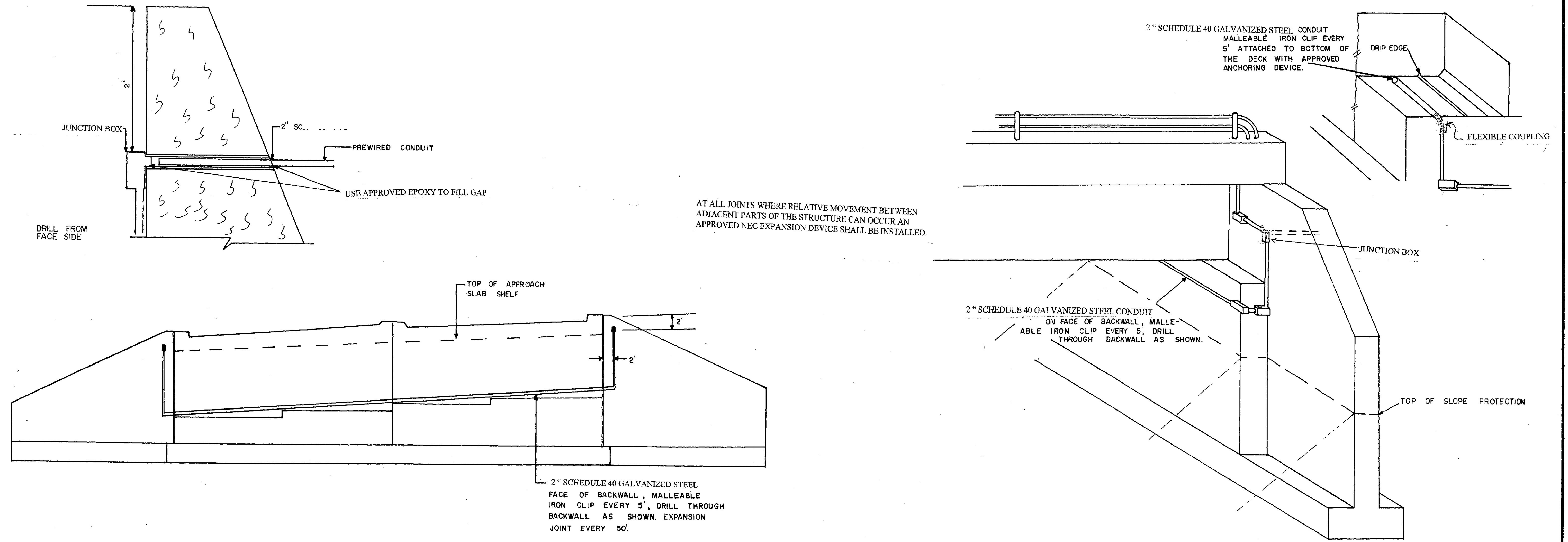
STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

CONDUIT SUMMARY  
Highway Lighting  
I-95 at Stillwater  
Avenue  
BANGOR

SHEET 1 OF 1 AUGUSTA, MAINE PIN 4928.00



| F.H.W.A.<br>REG. NO. | STATE | PROJECT NUMBER | SHEET<br>NO. | TOTAL<br>SHEETS |
|----------------------|-------|----------------|--------------|-----------------|
| 1                    | MAINE |                | 135          | 140             |



AT ALL JOINTS WHERE RELATIVE MOVEMENT BETWEEN  
ADJACENT PARTS OF THE STRUCTURE CAN OCCUR AN  
APPROVED NEC EXPANSION DEVICE SHALL BE INSTALLED.

TYPICAL CONDUIT INSTALLATION ON BRIDGE

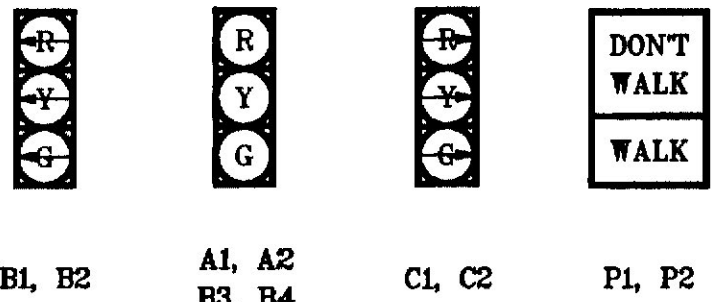
|                         |    |      |
|-------------------------|----|------|
| PROJECT DESIGN ENGINEER | BY | DATE |
| DESIGN - DETAILED       |    |      |
| CHECKED                 |    |      |
| REVISIONS               |    |      |
| FIELD CHANGES           |    |      |
| <b>PLANS</b>            |    |      |

|  |
|--|
| STATE OF MAINE<br>DEPARTMENT OF TRANSPORTATION |
| <b>STANDARD DETAILS</b>                        |
| LIGHTING SYSTEM                                |
| SHEET OF AUGUSTA, MAINE                        |

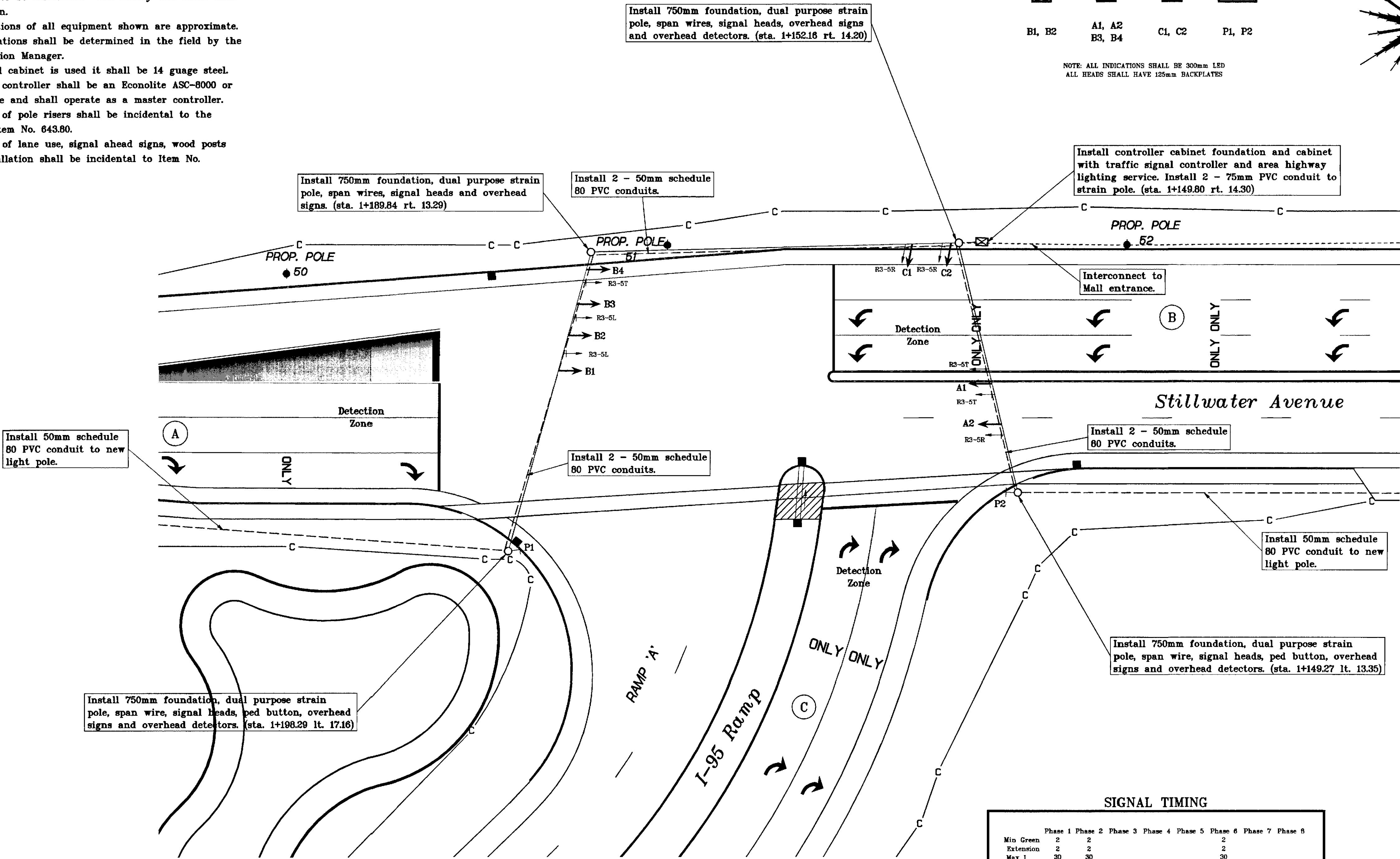


- GENERAL NOTES:
- The Contractor shall meet all requirements of the utility companies when installing equipment on their poles. The Contractor shall be responsible for contacting the utility companies to determine their requirements.
  - The Electrical Contractor shall make the necessary connections for a #6 AWG bonding wire to an existing utility's vertical ground wire. If this vertical ground wire does not exist the contractor shall leave enough bonding wire to reach the system neutral. The local utility should be notified when the bonding wire is ready to be connected. The utility will make that connection.
  - The locations of all equipment shown are approximate. Final locations shall be determined in the field by the Construction Manager.
  - If a steel cabinet is used it shall be 14 guage steel.
  - The new controller shall be an Econolite ASC-8000 or compatible and shall operate as a master controller.
  - The cost of pole risers shall be incidental to the cost of Item No. 643.80.
  - The cost of lane use, signal ahead signs, wood posts and installation shall be incidental to Item No. 643.80.

INDICATIONS



NOTE: ALL INDICATIONS SHALL BE 300mm L&D  
ALL HEADS SHALL HAVE 125mm BACKPLATES



LEGEND

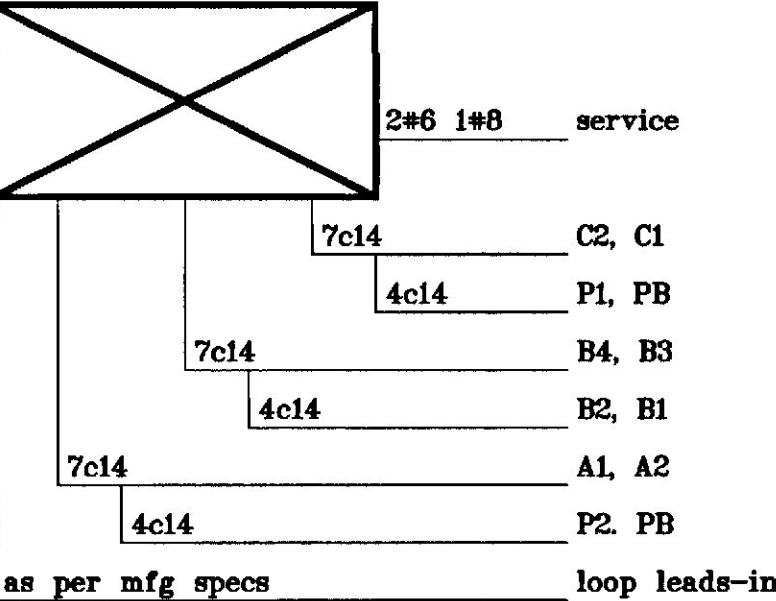
- controller with cabinet
- steel pole on foundation
- overhead lane use sign
- vehicular head
- ped head
- conduit

SIGNAL TIMING

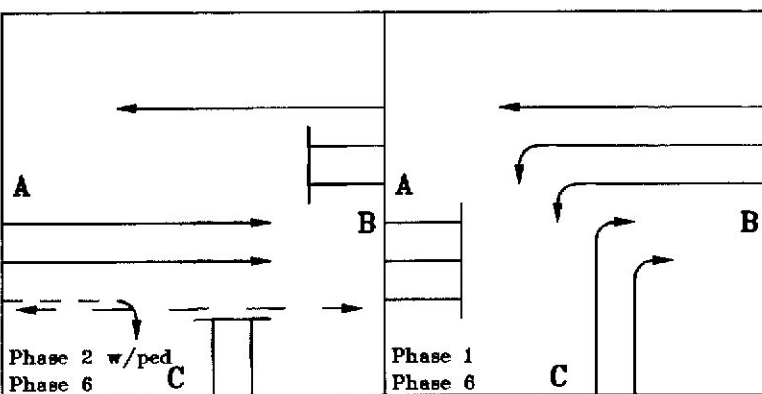
|           | Phase 1 | Phase 2 | Phase 3 | Phase 4 | Phase 5 | Phase 6 | Phase 7 | Phase 8 |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|
| Min Green | 2       | 2       | 2       | 2       | 2       | 2       | 2       | 2       |
| Extension | 2       | 2       | 2       | 2       | 2       | 2       | 2       | 2       |
| Max 1     | 30      | 30      | 30      | 30      | 30      | 30      | 30      | 30      |
| Max 11    | -       | -       | -       | -       | -       | -       | -       | -       |
| Veh Clear | 3       | 3       | 3       | 3       | 3       | 3       | 3       | 3       |
| Red Clear | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1       |
| Walk      | -       | -       | -       | -       | -       | -       | -       | -       |
| Ped Clear | -       | -       | -       | -       | -       | -       | -       | -       |
| Recall    | off     | off     | off     | off     | off     | off     | off     | off     |

Note: During flash operation phases 2 and 6 shall flash yellow and all other phases shall flash red.

WIRING DIAGRAM



PHASE DIAGRAM



Scale

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
*Bangor*  
*Traffic Signal*  
*at*  
*Stillwater Avenue*  
*and*  
*I-95 Ramp*  
*IR-IM-95-8(155)180*

|                 |          |      |
|-----------------|----------|------|
| PROJECT DESIGN  | ENGINEER | DATE |
| DESIGN-DETAILED | BY       | 5/99 |
| CHECKED         | MJD      |      |
| REVISIONS       | MJD      |      |
| FIELD CHANGES   |          |      |
| PLANS           |          |      |

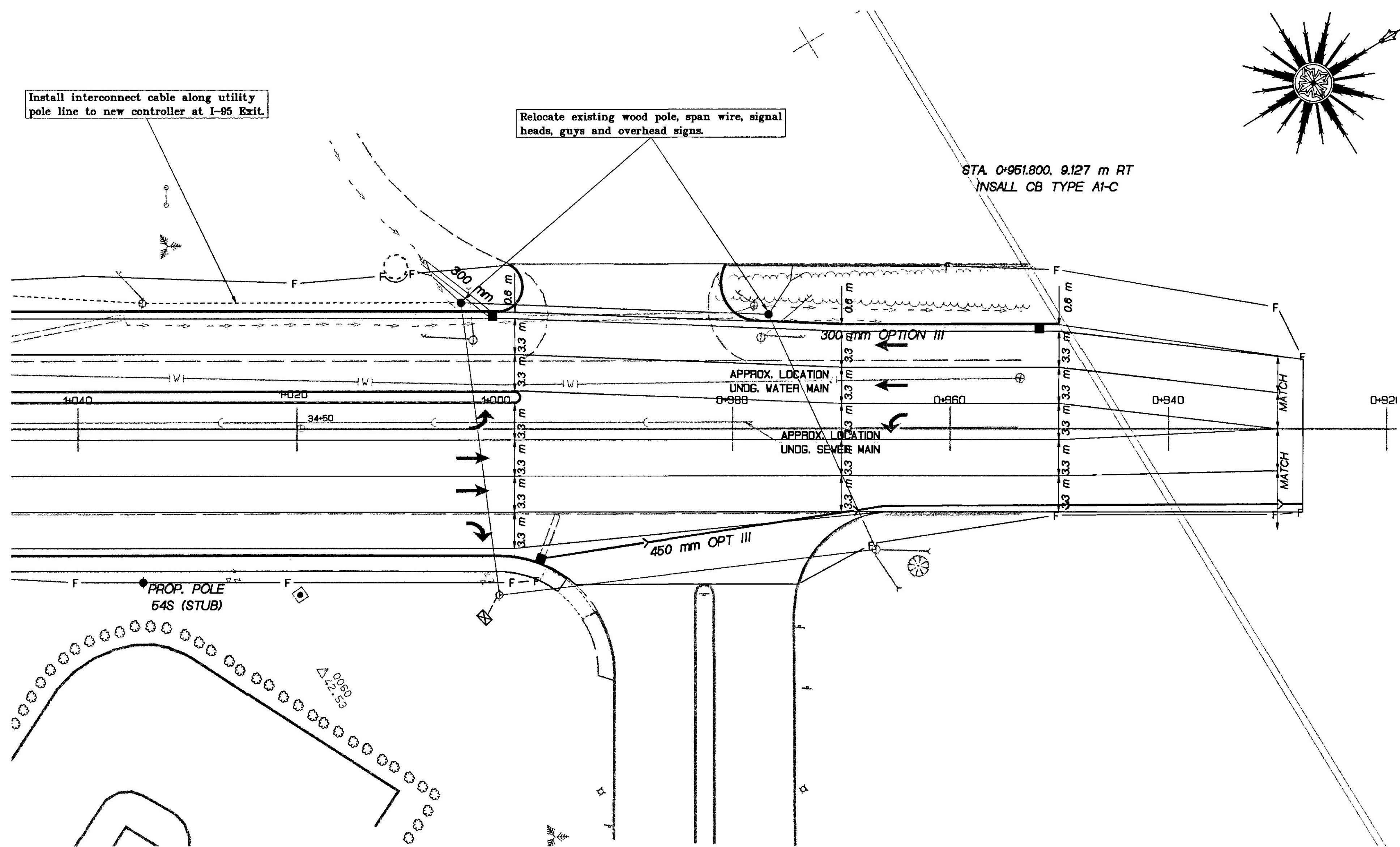
01MAR00-0100.10



METRIC

1. All dimensions are in millimeters unless otherwise noted.  
2. All elevations and stations are in meters.

| F.H.W.A.<br>RES. NO. | STATE | PROJECT NUMBER | SHEET<br>NO. | TOTAL<br>SHEETS |
|----------------------|-------|----------------|--------------|-----------------|
| 1                    | MAINE | 95-8(155)180   | 137          | 140             |



|                         |     |      |
|-------------------------|-----|------|
| PROJECT DESIGN ENGINEER | BY  | DATE |
| DESIGN-DETAILED         | MJD | 3/00 |
| CHECKED                 |     |      |
| REVISIONS               |     |      |
| FIELD CHANGES           |     |      |

01MAR00-0100.40

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
*Bangor*  
*Traffic Signal Modification*  
*at*  
*Stillwater Avenue*  
*and*  
*Bangor Mall Entrance*  
*IR-IM-95-8(155)180*

SHEET OF AUGUSTA, MAINE P.L.N. 004926.00



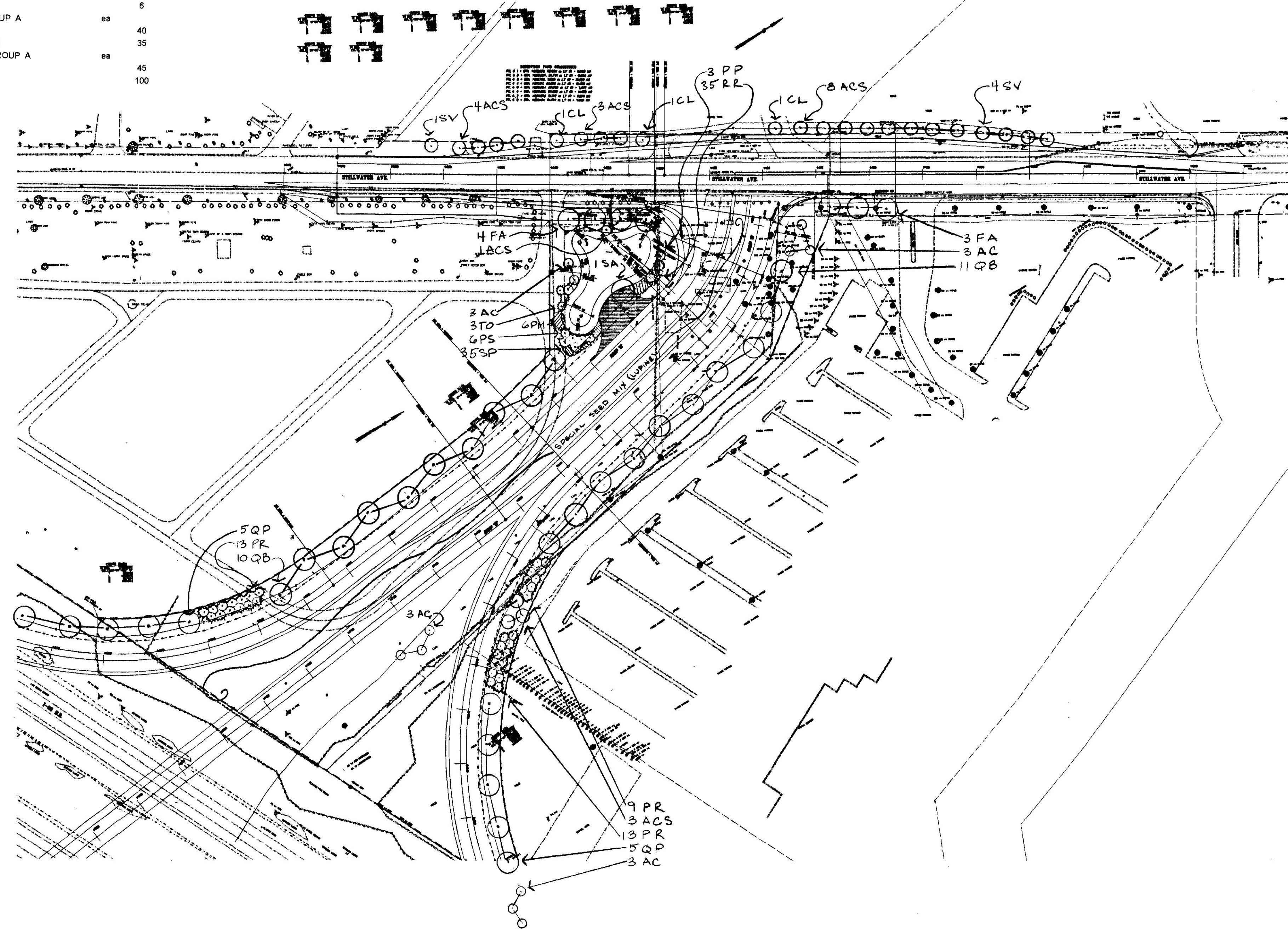
METRIC

1. All dimensions are in millimeters unless otherwise noted.  
2. All elevations and stations are in meters.

| F.H.V.A.<br>RES. NO. | STATE | PROJECT NUMBER     | SHEET<br>NO. | TOTAL<br>SHEETS |
|----------------------|-------|--------------------|--------------|-----------------|
| 1                    | MAINE | IR-14-95-8(153)180 | 157          | 140             |

PLANT MATERIAL LIST

| ITEM NO. | Symbol | Description  | Unit | Species |
|----------|--------|--|------|---------|
| 621.0100 |        | EVERGREEN TREES (200 MM - 300 MM) (8"-12") Seedlings           | ea   |         |
|          | PRS    | Pinus resinosa (Red Pine)                                      | 200  |         |
| 621.0310 |        | EVERGREEN TREES (1200 MM - 1500 MM) (4'-5') GROUP A            | ea   |         |
|          | PR     | Pinus resinosa (Red Pine)                                      | 95   |         |
|          | TO     | Thuja occidentalis 'Techny' (Techny Arborvitae)                | 3    |         |
| 621.0370 |        | EVERGREEN TREES (1500 MM - 1800 MM) (5'-6') GROUP A            | ea   |         |
|          | PS     | Pinus strobus (White Pine)                                     | 6    |         |
|          | PP     | Picea pungens (Colorado Green Spruce)                          | 3    |         |
| 621.195  |        | MEDIUM DECIDUOUS TREES (45 MM - 60 MM) (13/4"-2") GROUP A      | ea   |         |
|          | ACS    | Acer campestre (Hedge Maple) **Single Stem Tree**              | 19   |         |
|          | SR     | Syringa reticulata (Japanese Tree Lilac) **Single Stem Tree**  | 5    |         |
|          | CL     | Crataegus laevigata var. oxyacantha 'Toba' (Toba Hawthorn)     | 3    |         |
| 621.2730 |        | LARGE DECIDUOUS TREES (50 MM - 65 MM) (2'-2 1/2" cal.) GROUP A | ea   |         |
|          | SA     | Salix alba 'Tristis' (Golden Weeping Willow)                   | 1    |         |
|          | QP     | Quercus palustris (Pin Oak)                                    | 15   |         |
|          | QB     | Quercus bicolor (White Oak)                                    | 24   |         |
|          | FA     | Fraxinus americana 'Autumn Purple' (Autumn Purple White Ash)   | 14   |         |
| 621.4010 |        | DWARF EVERGREENS (600 MM - 750 MM) (2'-2.5') GROUP A           | ea   |         |
|          | PM     | Pinus mugo 'Pumilo' (Swiss Mountain Pine)                      | 6    |         |
| 621.546  |        | DECIDUOUS SHRUBS (600 MM - 900 MM) (2'-3') GROUP A             | ea   |         |
|          | RR     | Rosa Rugosa (Rugosa Rose)                                      | 40   |         |
|          | SP     | Spiraea prunifolia plena (Double Flowering Bridal Wreath)      | 35   |         |
| 621.558  |        | DECIDUOUS SHRUBS (1200 MM - 1500 MM) (4'-5') GROUP A           | ea   |         |
|          | AC     | Amelanchier canadensis (Shadblow)                              | 45   |         |
|          | RF     | Rhamnus frangula columnaris (Tallhedge Buckthorn)              | 100  |         |



|                         |       |
|-------------------------|-------|
| PROJECT DESIGN ENGINEER | DATE  |
| DESIGN-DETAILED         | 07/99 |
| CHECKED                 |       |
| REVISIONS               |       |
| FIELD CHANGES           |       |

PLANS

14.LLY95-0100.20

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

LANDSCAPE PLANS

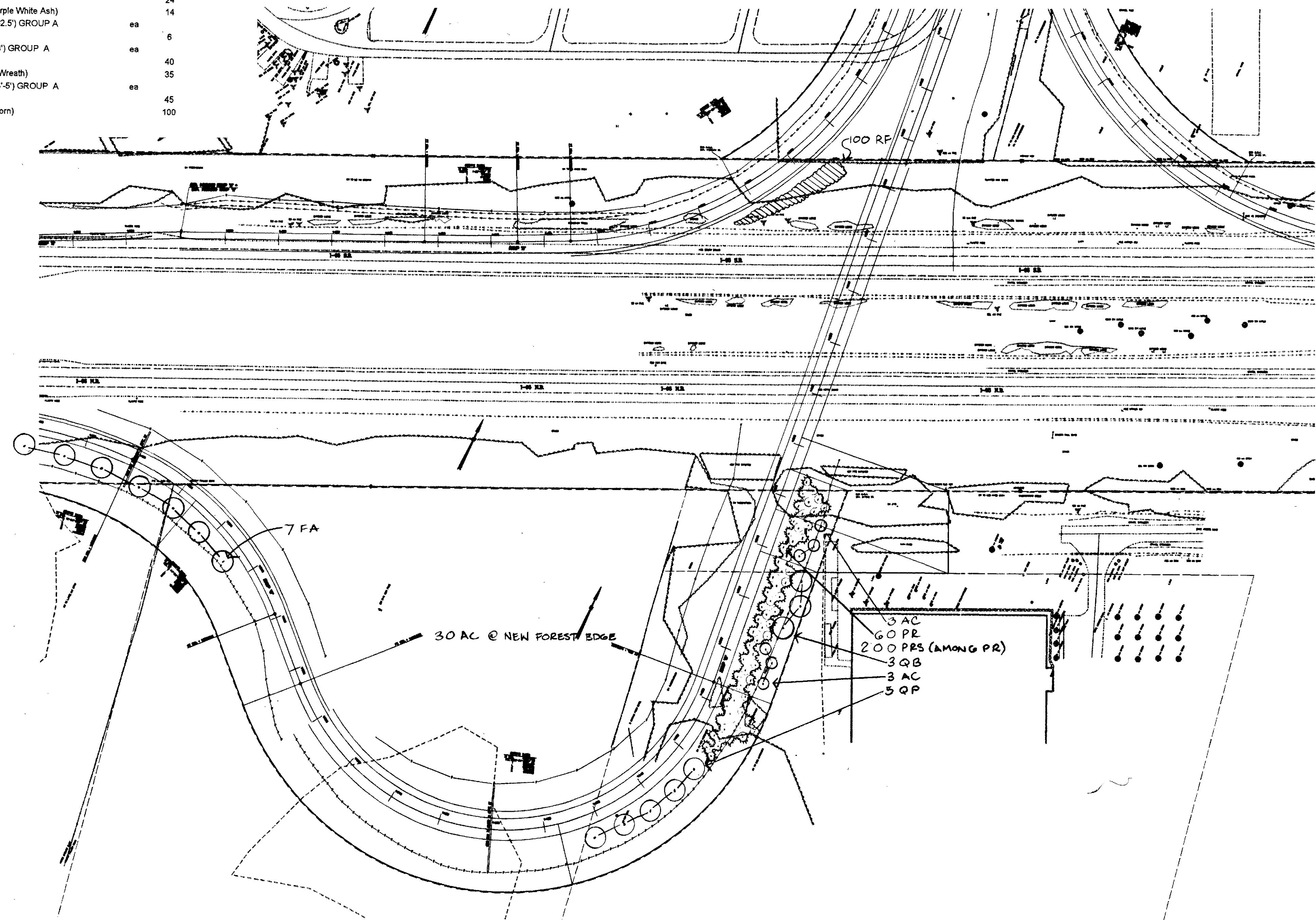
BANGOR

STILLWATER AVE. & I-95

20 0 20 40



| PLANT MATERIAL LIST |        |  |      |         |
|---------------------|--------|--|------|---------|
| ITEM NO.            | Symbol | Description  | Unit | Species |
| 621.0100            |        | EVERGREEN TREES (200 MM - 300 MM) (8"-12") Seedlings           | ea   |         |
|                     | PRS    | Pinus resinosa (Red Pine)                                      | 200  |         |
| 621.0310            |        | EVERGREEN TREES (1200 MM - 1500 MM) (4'-5') GROUP A            | ea   |         |
|                     | PR     | Pinus resinosa (Red Pine)                                      | 95   |         |
|                     | TO     | Thuja occidentalis 'Techny' (Techny Arborvitae)                | 3    |         |
| 621.0370            |        | EVERGREEN TREES (1500 MM - 1800 MM) (5'-6') GROUP A            | ea   |         |
|                     | PS     | Pinus strobus (White Pine)                                     | 6    |         |
|                     | PP     | Picea pungens (Colorado Green Spruce)                          | 3    |         |
| 621.195             |        | MEDIUM DECIDUOUS TREES ( 45 MM - 60 MM) (13/4"-2") GROUP A     | ea   |         |
|                     | ACS    | Acer campestre (Hedge Maple) ** Single Stem Tree**             | 19   |         |
|                     | SR     | Syringa reticulata (Japanese Tree Lilac) **Single Stem Tree**  | 5    |         |
|                     | CL     | Crataegus laevigata var. oxyacantha 'Toba' (Toba Hawthorn)     | 3    |         |
| 621.2730            |        | LARGE DECIDUOUS TREES (50 MM - 65 MM) (2"-2 1/2" cal.) GROUP A | ea   |         |
|                     | SA     | Salix alba 'Tristis' (Golden Weeping Willow)                   | 1    |         |
|                     | QP     | Quercus palustris (Pin Oak)                                    | 15   |         |
|                     | QB     | Quercus bicolor (White Oak)                                    | 24   |         |
|                     | FA     | Fraxinus americana 'Autumn Purple' (Autumn Purple White Ash)   | 14   |         |
| 621.4010            |        | DWARF EVERGREENS (600 MM - 750 MM) (2'-2.5') GROUP A           | ea   |         |
|                     | PM     | Pinus mugo 'Pumilo' (Swiss Mountain Pine)                      | 6    |         |
| 621.546             |        | DECIDUOUS SHRUBS (600 MM - 900 MM) (2'-3') GROUP A             | ea   |         |
|                     | RR     | Rosa Rugosa (Rugosa Rose)                                      | 40   |         |
|                     | SP     | Spiraea prunifolia plena (Double Flowering Bridal Wreath)      | 35   |         |
| 621.558             |        | DECIDUOUS SHRUBS (1200 MM - 1500 MM) (4'-5') GROUP A           | ea   |         |
|                     | AC     | Amelanchier canadensis (Shadblow)                              | 45   |         |
|                     | RF     | Rhamnus frangula columnaris (Tallhedge Buckthorn)              | 100  |         |



|                         |       |
|-------------------------|-------|
| PROJECT DESIGN ENGINEER | DATE  |
| DESIGN-DETAILED         | 07/99 |
| CHECKED                 |       |
| REVISIONS               |       |
| FIELD CHANGES           |       |
| PLANS                   |       |

14 JUL 1999 01:00:20