

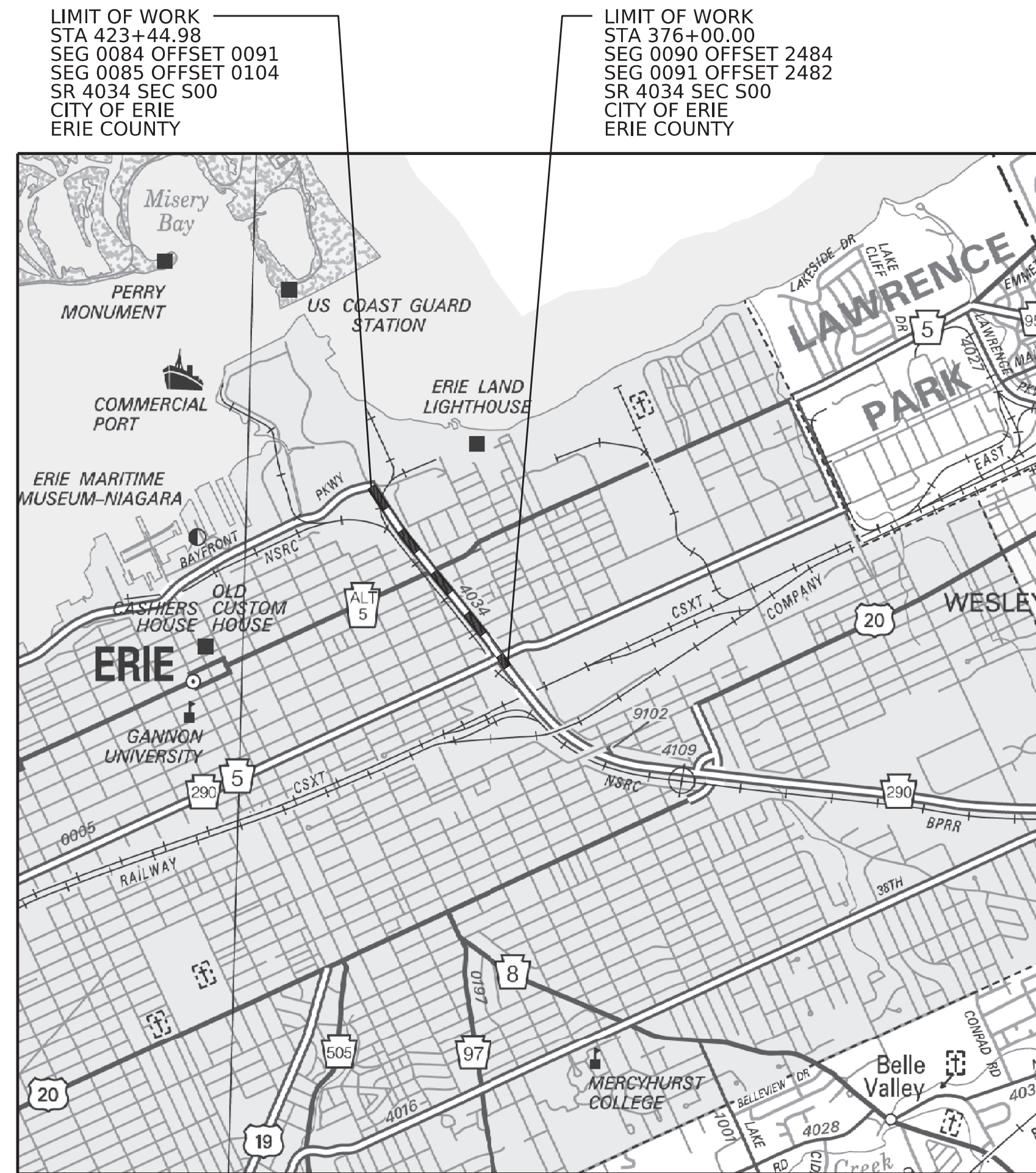
GENERAL NOTES

1. THIS WORK CONSISTS OF MAINTENANCE OF TRAFFIC AND THE PROTECTION OF THE TRAVELING PUBLIC APPROACHING THE CONSTRUCTION AREA AND WITHIN THE LIMITS OF CONSTRUCTION AND ON APPROVED DETOURS.
2. FURNISH, ERECT, PLACE AND MAINTAIN TRAFFIC CONTROL SIGNS AND DEVICES AND MAINTAIN TRAFFIC DURING HOURS OF CONSTRUCTION AND AT ALL OTHER TIMES IN ACCORDANCE WITH THE METHODS INDICATED ON THESE DRAWINGS AND THE FOLLOWING:
 - A. SPECIAL PROVISIONS OF THE CONTRACT.
 - B. PENNDOT PUBLICATION 213, "TEMPORARY TRAFFIC CONTROL GUIDELINES", APRIL 2022 EDITION.
 - C. PENNDOT PUBLICATION 212, "OFFICIAL TRAFFIC CONTROL DEVICES", MARCH 2006.
 - D. PENNDOT PUBLICATION NO. 35, APPROVED CONSTRUCTION MATERIALS (BULLETIN 15), (LATEST).
 - E. PENNDOT PUBLICATION 46, TRAFFIC ENGINEERING MANUAL
 - F. PENNDOT PUBLICATION NO. 408, SPECIFICATIONS AND CURRENT REVISIONS.
 - G. PENNDOT PUBLICATION NO. 236, "HANDBOOK OF APPROVED SIGNS", (NOVEMBER 2013).
 - H. PENNDOT PUBLICATION NO. 111, "TRAFFIC CONTROL - PAVEMENT MARKING AND SIGNING STANDARDS" TC-8600 AND TC-8700 SERIES, AUGUST 2021).
 - I. MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (MUTCD), 2009 EDITION INCLUDING ALL REVISIONS AND SUPPLEMENTS.
 - J. PENNDOT PUBLICATION 148, TC-8800 SERIES, "TRAFFIC STANDARDS - SIGNALS", DECEMBER 2011 EDITION AND CURRENT REVISIONS.
 - K. PENNDOT PUBLICATION 149, "TRAFFIC SIGNAL DESIGN HANDBOOK", OCTOBER 14, 2010 (MAY 2013 UPDATE).
3. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE PENNSYLVANIA ONE CALL SYSTEM, INC. AT 1-800-242-1776 AT LEAST THREE (3) FULL WORKING DAYS BEFORE DIGGING. PA ONE-CALL SHOULD BE CONTACTED BEFORE ANY SIGN POST ANCHOR IS DRIVEN INTO THE GROUND FOR ANY TEMPORARY AND/OR PERMANENT SIGNING.
4. ALL SIGNS AND DEVICES ON THIS PROJECT MUST COMPLY WITH CURRENT N.C.H.R.P. 350 OR MASH CRITERIA.
5. MAINTAIN CONSTANT SURVEILLANCE OF TRAFFIC CONTROL OPERATIONS AND SATISFACTORILY REPLACE OR CORRECT ALL MISSING, DAMAGED, INEFFECTIVE, OR MISALIGNED EQUIPMENT TO THE SATISFACTION OF THE INSPECTOR-IN-CHARGE.
6. INSPECTOR-IN-CHARGE SHALL REPORT ALL TRAFFIC INCIDENTS TO THE DISTRICT TRAFFIC ENGINEER BY COPY OF THE TRAFFIC ACCIDENT REPORT FROM THE PENNSYLVANIA STATE POLICE.
7. ALL SIGNS AND DEVICES ARE TO BE NEW AT THE BEGINNING OF THE PROJECT AND ARE TO BE MAINTAINED TO PENNDOT'S SATISFACTION THROUGHOUT THE PROJECT DURATION.
8. ERADICATE ALL CONFLICTING PAVEMENT MARKINGS. REPLACE ALL PAVEMENT MARKINGS UPON PROJECT COMPLETION IN ACCORDANCE WITH PAVEMENT MARKING PLANS.
9. THIS TRAFFIC CONTROL PLAN DOES NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITIES AS SPECIFIED IN SECTION 901.3 OF PUBLICATION NO. 408.
10. THE TRAFFIC CONTROL DEVICES SHOWN DO NOT NECESSARILY DEPICT THE ACTUAL NUMBER OF DEVICES REQUIRED. PLACE ANY ADDITIONAL DEVICES AS DIRECTED BY THE INSPECTOR-IN-CHARGE.
11. ANY SPECIAL SIGNS ARE TO BE FABRICATED IN ACCORDANCE WITH THE MOST CURRENT TC-8700 STANDARDS.
12. PROVIDE NEW REFLECTIVE SHEETING FOR ALL SIGNS AND DEVICES, I.E. SUPPORTS, SIGN BLANKS, DRUMS, VERTICAL PANELS, ETC. SHALL BE CLEAN AND FREE FROM ALL DEFECTS.
13. PROVIDE ADEQUATE NUMBER OF TYPE III BARRICADES AT ROAD CLOSURE LOCATIONS TO COMPLETELY CLOSE THE ROADWAY.
14. CONTRACTOR SHALL DOCUMENT NOTIFICATION TO LOCAL EMERGENCY AUTHORITIES (E.G. POLICE, FIRE, MEDICAL), AFFECTED POST OFFICE(S), BUSINESSES, SCHOOL DISTRICT(S), AUTOMATED PERMIT ROUTING/ANALYSIS SYSTEM (APRAS) COORDINATOR AT LEAST FOURTEEN DAYS PRIOR TO ANY SIGNIFICANT TRAFFIC IMPACTS (E.G. LATERAL WIDTH RESTRICTIONS LESS THAN 12 FEET, DETOURS).
15. ALL SHORT-TERM OPERATIONS LEAD-IN SIGNS SHOULD BE MOUNTED ON PORTABLE SIGN STANDS ONLY AS STATED IN BULLETIN 15.
16. ALL CHANGES TO THIS TRAFFIC CONTROL PLAN MUST BE APPROVED AND SIGNED BY THE DISTRICT TRAFFIC UNIT.
17. CONTRACTOR SHALL ENSURE PROPER TEMPORARY BARRIER DEFLECTION DISTANCES TO DROPOFFS AND OBSTRUCTIONS ARE MAINTAINED IN ACCORDANCE WITH PENNDOT PUBLICATION 408 SECTION 901.

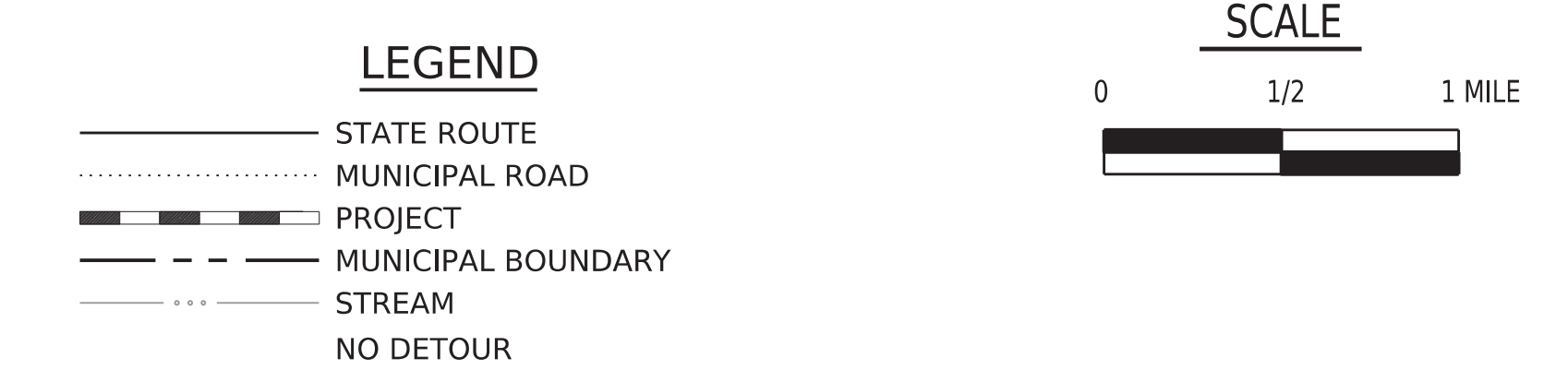
GENERAL NOTES (CONTINUED)

18. NOTE THAT THIS APPROVAL DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR THE PROTECTION OF THE PUBLIC AND THE CONSTRUCTION PERSONNEL. THE STANDARDS PRESCRIBED ARE MINIMUM AND ADDITIONAL PROTECTION MAY BE NECESSARY IF PROBLEMS ARE ENCOUNTERED DURING THE TERM OF THE CONTRACT. CONSTANTLY REVIEW THIS PLAN FOR ADEQUACY AND RECOMMEND CHANGES FOR THE DEPARTMENT APPROVAL WHEN INADEQUACIES ARE DISCOVERED.
19. THE CONTRACTOR HAS THE OPTION TO SUBMIT ALTERNATE TRAFFIC CONTROL PLANS FOR CONSIDERATION. THESE PLANS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE COMMONWEALTH OF PENNSYLVANIA, AND SHALL BE CONSISTENT WITH STANDARD DESIGN PRACTICES. THE DEPARTMENT WILL ALLOW NO CONSTRUCTION ACTIVITY UNTIL THE CONTRACTOR'S ALTERNATE PLANS ARE APPROVED IN WRITING BY THE DISTRICT TRAFFIC ENGINEER. MODIFICATIONS TO THE APPROVED MPT PLAN SHALL BE APPROVED BY THE DISTRICT TRAFFIC ENGINEER OR AUTHORIZED REPRESENTATIVE.
20. THE CONTRACTOR SHALL HAVE A SUFFICIENT AMOUNT OF THE FOLLOWING SIGNS AVAILABLE IN CASE THEIR USE BECOMES NECESSARY: W3-4 "BE PREPARED TO STOP" AND W20-7 "FLAGGER SYMBOL". THESE SIGNS ARE NOT INTENDED TO BE PART OF THE REQUIRED NORMAL TRAFFIC CONTROL OR A SUPPLEMENT THERETO.
21. MAINTAIN ACCESS TO ALL PROPERTIES AT ALL TIMES UTILIZING EXISTING DRIVEWAYS OR TEMPORARY ACCESS MEASURES AS NECESSARY. PROVIDE WIDTH ADEQUATE TO ACCOMMODATE COMMERCIAL OR TWO-WAY TRAFFIC WHERE APPLICABLE. INSTALL DRUM-MOUNTED "ENTER HERE" SIGNS AT BUSINESS DRIVES WHEN DIRECTED BY THE INSPECTOR-IN-CHARGE.
22. THE CONTRACTOR SHALL PROVIDE INGRESS AND EGRESS ABILITIES TO LOCAL ROADS AND DRIVEWAYS SITUATED ADJACENT TO CONSTRUCTION AREAS AT ALL TIMES UNLESS OTHERWISE NOTED.
23. PROVIDE TWO (2) WEEKS NOTICE TO THE INSPECTOR-IN-CHARGE PRIOR TO ERECTING ANY TRAFFIC CONTROL DEVICES AND BETWEEN SETUP OF THE TRAFFIC CONTROL PHASES.
24. THE INSPECTOR-IN-CHARGE WILL INSPECT ALL TRAFFIC CONTROL DEVICES PRIOR TO THE START OF WORK.
25. THE TRAFFIC CONTROL DEVICES SHOWN DO NOT NECESSARILY DEPICT THE ACTUAL NUMBER OF DEVICES REQUIRED.
26. PROVIDE 24 HOURS A DAY, 7 DAYS A WEEK ON CALL PERSONNEL TO RESET ANY DAMAGED OR OVERTURNED WORK ZONE TRAFFIC CONTROL DEVICES OR SIGNS.
27. ALL CHANNELIZING DEVICES MUST BE LONG TERM DEVICES. SEQUENTIAL FLASHING WARNING LIGHTS ARE REQUIRED ON CHANNELIZING DEVICES USED TO FORM MERGING TAPERS.

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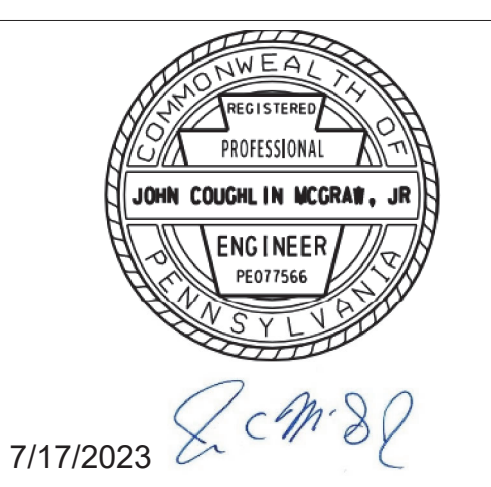


LOCATION MAP



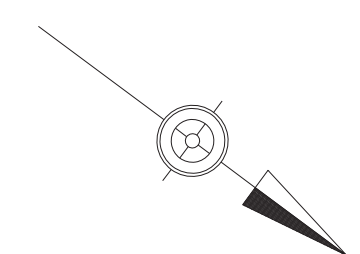
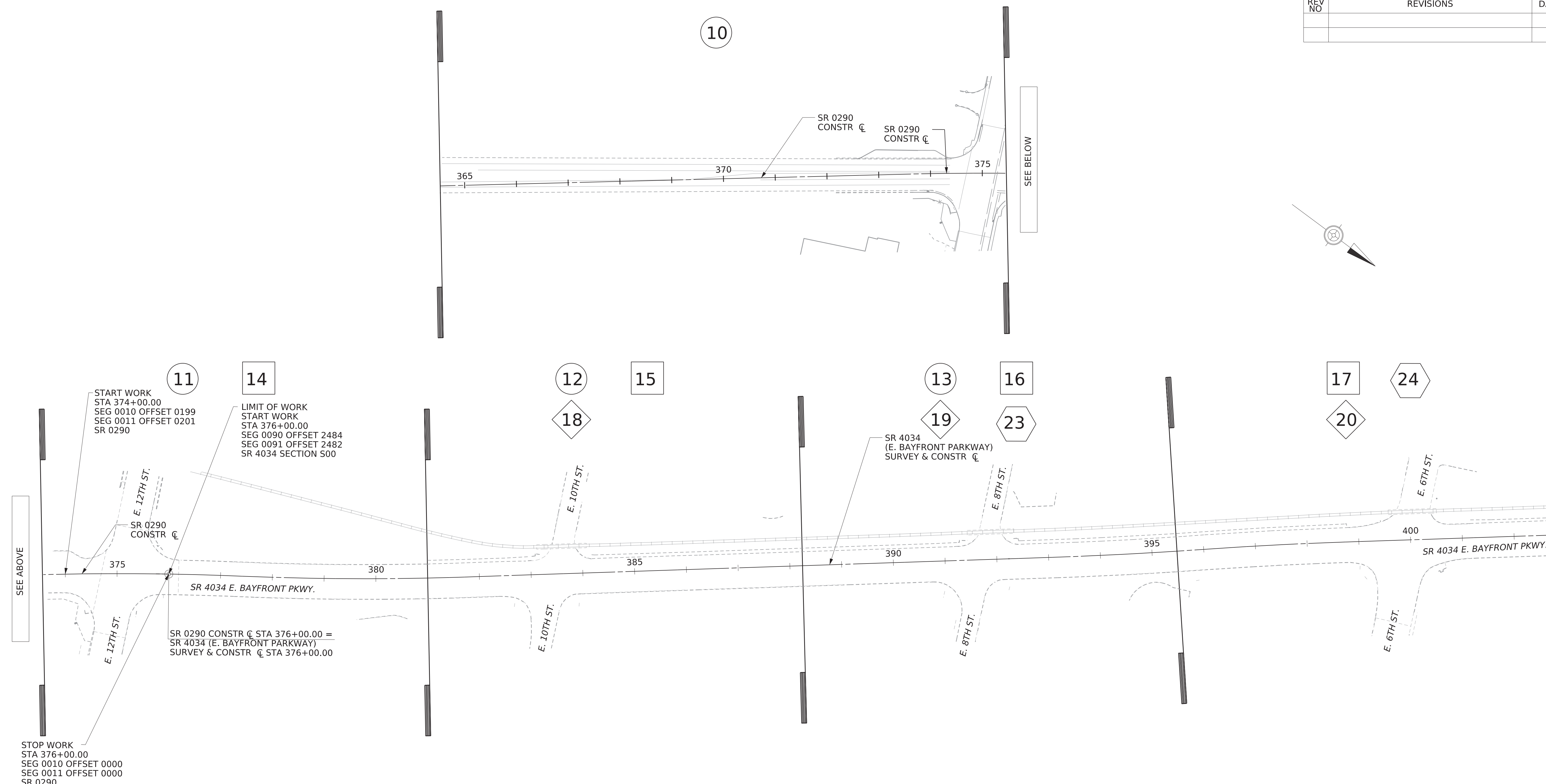
TRAFFIC CONTROL PLAN GENERAL NOTES AND LOCATION MAP

RECOMMENDED:
Brian M. Smith, P.E. Digitally signed by Brian M. Smith, P.E.
 Date: 2023.07.25 11:51:06 -04'00'
 DISTRICT TRAFFIC ENGINEER DATE


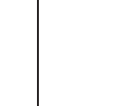

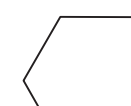
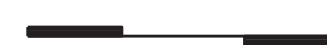


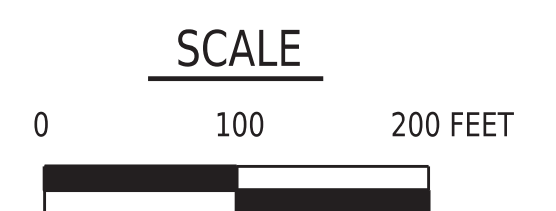
7/17/2023 *JCM*

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| DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
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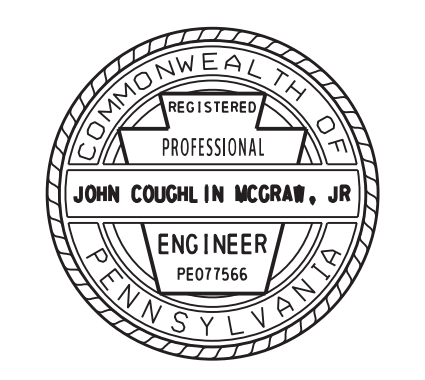


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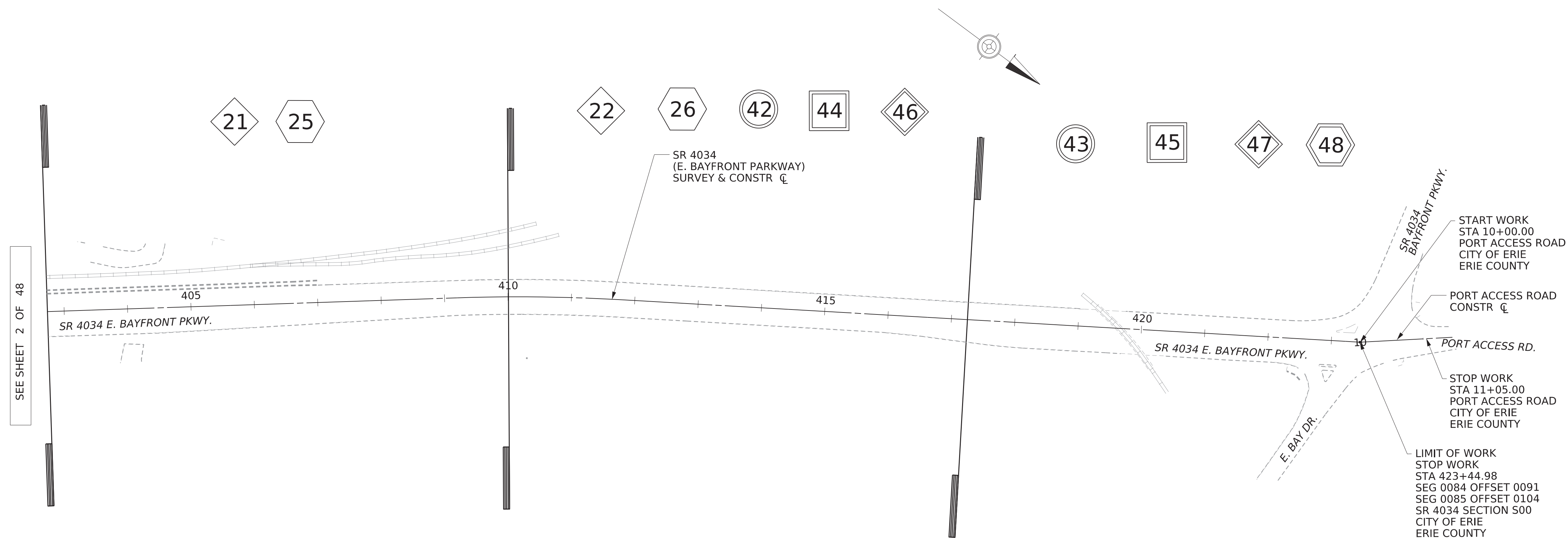
-  PHASE 1
-  PHASE 2
-  PHASE 3
-  PHASE 4
-  SHEET LIMITS



TRAFFIC CONTROL PLAN



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| CITY OF ERIE | | | | |
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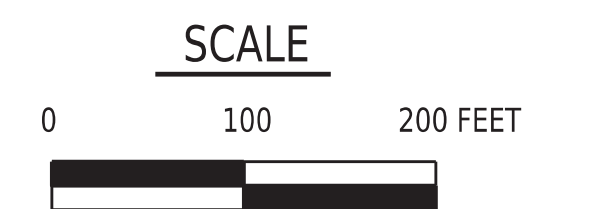


SEE SHEET 2 OF 48

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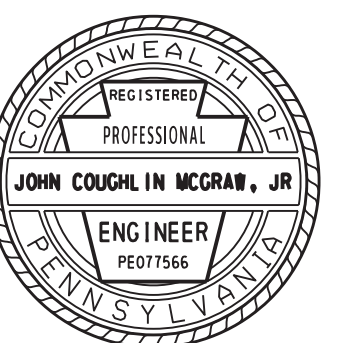
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| | PHASE 1 | | RAILROAD REMOVAL PHASE A |
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SHEET LIMITS



TRAFFIC CONTROL PLAN

INDEX MAP



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| CITY OF ERIE | | | | | | |
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CONSTRUCTION SEQUENCE

PHASE 1

PLACE LONG-TERM SIGNING SHOWN IN PHASE 1 OF THE TRAFFIC CONTROL PLAN.

REVISE EXISTING TRAFFIC SIGNAL TIMINGS AT THE FOUR INTERSECTIONS ALONG SR 4034 AS DIRECTED IN THE TEMPORARY SIGNAL COORDINATION PLAN AND CONTRACT DOCUMENTS.

ADJUST SIGNAL HEAD LOCATIONS AND INSTALL TEMPORARY OVERHEAD DETECTION IN ACCORDANCE WITH PHASE 1 TEMPORARY TRAFFIC SIGNAL PLAN.

UTILIZE SHORT-TERM OPERATIONS PER PUBLICATION 213 TO INSTALL LANE CLOSURES, TEMPORARY PAVEMENT MARKINGS, CHANNELIZING DEVICES AND SIGN OVERLAYS/COVERS.

MAINTAIN ONE LANE OF TRAFFIC IN EACH DIRECTION AND TURN LANES AS SHOWN IN PHASE 1 OF THE TRAFFIC CONTROL PLAN.

CONSTRUCT THE RAISED MEDIAN AND DRAINAGE FEATURES AS SHOWN ON THE ROADWAY PLANS. BACKFILL AND RESTORE OR PLATE ALL OPEN EXCAVATIONS FOR DRAINAGE FEATURES AT THE END OF EACH WORK DAY.

ONCE COMPLETED WITH PHASE 1, UTILIZE SHORT-TERM OPERATIONS PER PUBLICATION 213 TO RETURN RELOCATED SIGNAL HEADS NOT USED IN PHASE 2 TO PRIOR LOCATIONS.

PHASE 2

UTILIZE SHORT TERM OPERATIONS PER PUBLICATION 213 TO INSTALL INTERIM PAVEMENT MARKINGS, WITH THE EXCEPTION OF THE W/4" EDGELINE AND CROSSWALKS, ON SOUTHBOUND SR 4034 BETWEEN EAST 12TH STREET AND EAST 10TH STREET CONSISTENT WITH THE MARKINGS SHOWN ON THE PERMANENT PAVEMENT MARKING PLAN.

PLACE LONG-TERM SIGNING SHOWN IN PHASE 2 OF THE TRAFFIC CONTROL PLAN.

ADJUST SIGNAL HEAD LOCATIONS AND INSTALL/ RESET TEMPORARY OVERHEAD DETECTION IN ACCORDANCE WITH PHASE 2 TEMPORARY TRAFFIC SIGNAL PLAN.

UTILIZE SHORT-TERM OPERATIONS PER PUBLICATION 213 TO INSTALL LANE CLOSURES, TEMPORARY PAVEMENT MARKINGS, CHANNELIZING DEVICES, AND SIGN OVERLAYS/COVERS.

MAINTAIN ONE LANE OF TRAFFIC IN EACH DIRECTION AND TURN LANES AS SHOWN IN PHASE 2 OF THE TRAFFIC CONTROL PLAN.

CONSTRUCT THE RAISED MEDIAN AND DRAINAGE FEATURES AS SHOWN ON THE ROADWAY PLANS. BACKFILL AND RESTORE OR PLATE ALL OPEN EXCAVATIONS FOR DRAINAGE FEATURES AT THE END OF EACH WORK DAY.

ONCE COMPLETED WITH PHASE 2, UTILIZE SHORT-TERM OPERATIONS PER PUBLICATION 213 TO RETURN RELOCATED SIGNAL HEADS NOT USED IN PHASE 3 TO PRIOR LOCATIONS.

PHASE 3

UTILIZE SHORT TERM OPERATIONS PER PUBLICATION 213 TO INSTALL INTERIM PAVEMENT MARKINGS, WITH THE EXCEPTION OF THE W/4" EDGELINE AND CROSSWALKS, ON SOUTHBOUND SR 4034 BETWEEN EAST 10TH STREET AND EAST 8TH STREET AND NORTHBOUND SR 4034 BETWEEN EAST 12TH STREET AND EAST 10TH STREET CONSISTENT WITH THE MARKINGS SHOWN ON THE PERMANENT PAVEMENT MARKING PLAN.

PLACE LONG-TERM SIGNING SHOWN IN PHASE 3 OF THE TRAFFIC CONTROL PLAN.

ADJUST SIGNAL HEAD LOCATIONS AND RESET TEMPORARY VIDEO DETECTION IN ACCORDANCE WITH PHASE 3 TEMPORARY TRAFFIC SIGNAL PLAN.

UTILIZE SHORT TERM OPERATIONS PER PUBLICATION 213 TO INSTALL LANE CLOSURES, TEMPORARY PAVEMENT MARKINGS, CHANNELIZING DEVICES, AND SIGN OVERLAYS/COVERS.

MAINTAIN ONE LANE OF TRAFFIC IN EACH DIRECTION AND TURN LANES AS SHOWN IN PHASE 3 OF THE TRAFFIC CONTROL PLAN.

CONSTRUCT THE RAISED MEDIAN AND DRAINAGE FEATURES AS SHOWN ON THE ROADWAY PLANS. BACKFILL AND RESTORE OR PLATE ALL OPEN EXCAVATIONS FOR DRAINAGE FEATURES AT THE END OF EACH WORK DAY.

ONCE COMPLETED WITH PHASE 3, UTILIZE SHORT-TERM OPERATIONS PER PUBLICATION 213 TO RETURN RELOCATED SIGNAL HEADS NOT USED IN PHASE 4 TO PRIOR LOCATIONS.

CONSTRUCTION SEQUENCE (CONTINUED)

PHASE 4

UTILIZE SHORT-TERM OPERATIONS PER PUBLICATION 213 TO INSTALL TEMPORARY PAVEMENT MARKINGS, WITH THE EXCEPTION OF THE W/4" EDGELINE AND CROSSWALKS, ON SOUTHBOUND SR 4034 BETWEEN EAST 8TH STREET AND EAST 6TH STREET AND ON NORTHBOUND SR 4034 BETWEEN EAST 10TH STREET AND EAST 8TH STREET CONSISTENT WITH THE MARKING SHOWN ON THE PERMANENT PAVEMENT MARKING PLAN.

UTILIZE SHORT-TERM OPERATIONS PER PUBLICATION 213 TO INSTALL LANE CLOSURES, TEMPORARY PAVEMENT MARKINGS, CHANNELIZING DEVICES, AND SIGN OVERLAYS/COVERS.

PLACE LONG-TERM SIGNING SHOWN IN PHASE 4 OF THE TRAFFIC CONTROL PLAN.

SIGNAL HEAD LOCATIONS AND TEMPORARY OVERHEAD DETECTORS TO REMAIN IN PLACE FROM PHASE 3 IN ACCORDANCE WITH PHASE 4 TEMPORARY TRAFFIC SIGNAL PLAN.

DO NOT PLACE ANY TRAFFIC CONTROL DEVICES ON EXISTING RAILROAD TRACKS. DO NOT REMOVE EXISTING STOP BARS FOR RAILROAD CROSSING.

MAINTAIN ONE LANE OF TRAFFIC IN EACH DIRECTION AND TURN LANES AS SHOWN IN PHASE 4 OF THE TRAFFIC CONTROL PLAN.

CONSTRUCT THE RAISED MEDIAN AND DRAINAGE FEATURES AS SHOWN ON THE ROADWAY PLANS. BACKFILL AND RESTORE OR PLATE ALL OPEN EXCAVATIONS FOR DRAINAGE FEATURES AT THE END OF EACH WORK DAY.

WHEN WORK IS COMPLETE AND ALL TRAFFIC CONTROL IS REMOVED, UTILIZE SHORT TERM OPERATIONS PER PUBLICATION 213 TO INSTALL INTERIM PAVEMENT MARKINGS, WITH THE EXCEPTION OF THE W/4" EDGELINE AND CROSSWALKS, ON SR 4034 NORTHBOUND BETWEEN EAST 8TH STREET AND EAST 6TH STREET AND SR 4034 NORTHBOUND AND SOUTHBOUND BETWEEN EAST 6TH STREET AND THE LIMITS OF THE TRAFFIC CONTROL CONSISTENT WITH THE MARKINGS SHOWN ON THE PERMANENT PAVEMENT MARKING PLAN. EXTEND YELLOW EDGELINE ADJACENT TO RAISED MEDIAN TO MATCH EXISTING DOUBLE YELLOW AT STA 409+69, MATCH ALL OTHER MARKINGS TO EXISTING MARKINGS AT THE END OF THE TRAFFIC CONTROL LIMITS.

ONCE COMPLETED WITH PHASE 4, UTILIZE SHORT-TERM OPERATIONS PER PUBLICATION 213 TO RETURN RELOCATED SIGNAL HEADS TO PRIOR LOCATIONS AND RESTORE EXISTING TIMINGS TO ALL INTERSECTIONS.

PHASE 5

UTILIZE SHORT-TERM OPERATIONS PER PUBLICATION 213 TO COMPLETE THE CURB RAMP REPLACEMENT, DRAINAGE FEATURES ALONG EAST 12TH STREET, EAST 10TH STREET, EAST 8TH STREET, AND EAST 6TH STREET, PAVEMENT PATCHING, MILLING, AND PAVEMENT OVERLAY OF SR 0290 AND SR 4034, AS SHOWN IN THE ROADWAY PLANS. INSTALL FINAL SIGNING AND PAVEMENT MARKINGS.

MAINTAIN AT LEAST ONE LANE OF TRAFFIC IN EACH DIRECTION AT ALL TIMES.

PHASE 6

UTILIZE SHORT-TERM OPERATIONS PER PUBLICATION 213 TO COMPLETE THE SIGNAL UPGRADES OF EACH INTERSECTION ALONG THE PROJECT LIMITS AS SHOWN IN THE SIGNAL PLANS.

MAINTAIN AT LEAST ONE LANE OF TRAFFIC IN EACH DIRECTION AT ALL TIMES.

RAILROAD CROSSING REMOVAL PHASE A

PHASE A CANNOT OCCUR CONCURRENTLY WITH PHASE 3 OR PHASE 4.

PLACE LONG-TERM SIGNING SHOWN IN RAILROAD REMOVAL PHASE A OF THE TRAFFIC CONTROL PLAN.

UTILIZE SHORT-TERM OPERATIONS PER PUBLICATION 213 TO INSTALL LANE CLOSURES, TEMPORARY BARRIER, CHANNELIZING DEVICES AND SIGN OVERLAYS/COVERS.

MAINTAIN ONE LANE OF TRAFFIC IN THE NORTHBOUND DIRECTION AS SHOWN IN RAILROAD REMOVAL PHASE A OF THE TRAFFIC CONTROL PLAN.

MAINTAIN BAYFRONT BIKEWAY AS SHOWN IN THE TRAFFIC CONTROL PLAN.

REMOVE RAILROAD TRACKS, CONCRETE PAVEMENT, AND ALL ASSOCIATED HARDWARE AS SHOWN IN THE TRAFFIC CONTROL PLANS AND CONSTRUCTION PLANS.

ONCE TRACKS ARE FULLY REMOVED, PLACE CONCRETE AND CURE. RESTORE BAYFRONT BIKEWAY TRAIL AS SHOWN IN CONSTRUCTION PLANS.

ONCE COMPLETED WITH PHASE A, UTILIZE SHORT-TERM OPERATIONS PER PUBLICATION 213 TO REMOVE ALL LONG-TERM TRAFFIC CONTROL DEVICES AND REOPEN BAYFRONT BIKEWAY TO UNRESTRICTED PEDESTRIAN TRAFFIC.

RAILROAD CROSSING REMOVAL PHASE B

PHASE B CANNOT OCCUR CONCURRENTLY WITH PHASE 3 OR PHASE 4.

PLACE LONG-TERM SIGNING SHOWN IN RAILROAD REMOVAL PHASE A OF THE TRAFFIC CONTROL PLAN.

UTILIZE SHORT-TERM OPERATIONS PER PUBLICATION 213 TO INSTALL LANE CLOSURES, TEMPORARY BARRIER, CHANNELIZING DEVICES AND SIGN OVERLAYS/COVERS.

MAINTAIN ONE LANE OF TRAFFIC IN EACH DIRECTION AS SHOWN IN RAILROAD REMOVAL PHASE B OF THE TRAFFIC CONTROL PLAN.

REMOVE RAILROAD TRACKS, CONCRETE PAVEMENT, AND ALL ASSOCIATED HARDWARE AS SHOWN IN THE TRAFFIC CONTROL PLANS AND CONSTRUCTION PLANS.

ONCE TRACKS ARE FULLY REMOVED, PLACE CONCRETE AND CURE.

ONCE COMPLETED WITH PHASE B, UTILIZE SHORT-TERM OPERATIONS PER PUBLICATION 213 TO REMOVE ALL LONG-TERM TRAFFIC CONTROL DEVICES.

RAILROAD CROSSING REMOVAL PHASE C

PHASE C CANNOT OCCUR CONCURRENTLY WITH PHASE 3 OR PHASE 4.

PLACE LONG-TERM SIGNING SHOWN IN RAILROAD REMOVAL PHASE C OF THE TRAFFIC CONTROL PLAN.

UTILIZE SHORT-TERM OPERATIONS PER PUBLICATION 213 TO INSTALL LANE CLOSURES, TEMPORARY BARRIER, CHANNELIZING DEVICES AND SIGN OVERLAYS/COVERS.

MAINTAIN ONE LANE OF TRAFFIC IN THE SOUTHBOUND DIRECTION ON THE NORTHBOUND ROADWAY AS SHOWN IN RAILROAD REMOVAL PHASE C OF THE TRAFFIC CONTROL PLAN. MAINTAIN LANES ON THE NORTHBOUND ROADWAY AS SHOWN IN PHASE C OF THE TRAFFIC CONTROL PLAN.

REMOVE RAILROAD TRACKS, CONCRETE PAVEMENT, AND ALL ASSOCIATED HARDWARE AS SHOWN IN THE TRAFFIC CONTROL PLANS AND CONSTRUCTION PLANS.

ONCE TRACKS ARE FULLY REMOVED, PLACE CONCRETE AND CURE.

ONCE COMPLETED WITH PHASE C, UTILIZE SHORT-TERM OPERATIONS PER PUBLICATION 213 TO REMOVE ALL LONG-TERM TRAFFIC CONTROL DEVICES.

CONSTRUCTION SEQUENCE (CONTINUED)

RAILROAD CROSSING REMOVAL PHASE D

PLACE LONG-TERM SIGNING SHOWN IN RAILROAD REMOVAL PHASE D OF THE TRAFFIC CONTROL PLAN.

UTILIZE SHORT-TERM OPERATIONS PER PUBLICATION 213 TO INSTALL TEMPORARY BARRIER.

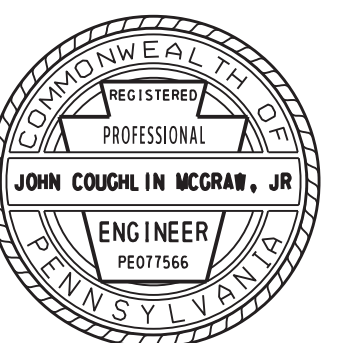
MAINTAIN BAYFRONT BIKEWAY AS SHOWN IN THE TRAFFIC CONTROL PLANS.

REMOVE RAILROAD TRACKS, CONCRETE PAVEMENT, AND ALL ASSOCIATED HARDWARE AS SHOWN IN THE TRAFFIC CONTROL PLANS AND CONSTRUCTION PLANS.

ONCE TRACKS ARE FULLY REMOVED, PLACE ASPHALT PER CONSTRUCTION PLANS.

ONCE COMPLETED WITH PHASE D, UTILIZE SHORT-TERM OPERATIONS PER PUBLICATION 213 TO REMOVE ALL LONG-TERM TRAFFIC CONTROL DEVICES AND REOPEN BAYFRONT BIKEWAY TO UNRESTRICTED PEDESTRIAN TRAFFIC.

TRAFFIC CONTROL PLAN CONSTRUCTION SEQUENCE

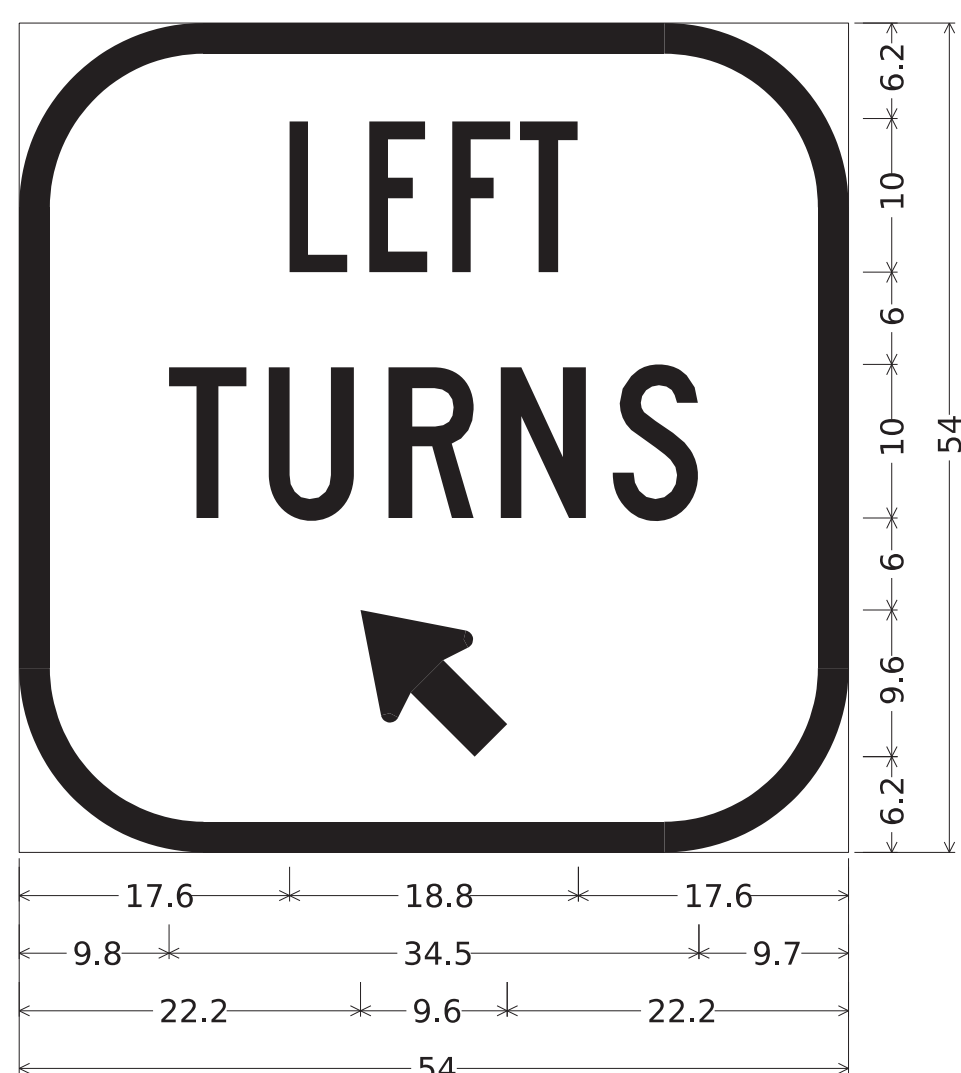


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TABULATION OF TRAFFIC CONTROL DEVICES

INCLUDED IN THE LUMP SUM ITEM 0901-0001
(FOR INFORMATION ONLY)

| TRAFFIC CONTROL DEVICE | SIGN SIZE | DESCRIPTION | PHASE 1 | PHASE 2 | PHASE 3 | PHASE 4 | RAILROAD REMOVAL PHASE A | RAILROAD REMOVAL PHASE B | RAILROAD REMOVAL PHASE C | RAILROAD REMOVAL PHASE D |
|------------------------|-----------|---|---------|---------|---------|---------|--------------------------|--------------------------|--------------------------|--------------------------|
| G20-2 | 60" X 24" | END ROAD WORK | 2 | 2 | 2 | 2 | 4 | 3 | 4 | |
| R1-1 | | STOP | | | | | | | 2 | |
| R3-5L | 30" X 36" | LEFT TURN | 3 | 4 | 4 | 2 | | | | |
| R9-3BL | 18" X 12" | USE CROSSWALK LEFT | 2 | 2 | 2 | 1 | | | | |
| R9-3BR | 18" X 12" | USE CROSSWALK RIGHT | 2 | 2 | 2 | 1 | | | | |
| R9-11A | 24" X 12" | SIDEWALK CLOSED CROSS HERE | 4 | 4 | 4 | 2 | | | | |
| R11-2 (MOD) | 48" X 30" | LANE CLOSED | 5 | 5 | 6 | 4 | | | | |
| R22-1 | 48" X 36" | WORK ZONE-TURN ON HEADLIGHTS | 2 | 2 | 2 | 2 | 1 | 1 | 1 | |
| W1-4L | 48" X 38" | LEFT REVERSE CURVE | | | | | | | 1 | |
| W1-4R | 48" X 48" | RIGHT REVERSE CURVE | | | | | | | 1 | |
| W3-1 | 48" X 48" | STOP SIGN AHEAD | | | | | | | 1 | |
| W4-2L | 48" X 48" | PAVEMENT WIDTH TRANSITION - LEFT LANE ENDS | 2 | 2 | 2 | 2 | | 2 | 1 | |
| W4-2R | 48" X 48" | PAVEMENT WIDTH TRANSITION - RIGHT LANE ENDS | | | | | 1 | | 1 | |
| W4-5 | 48" x 48" | ENTERING ROADWAY MERGE SIGN | | | | | | 1 | | |
| W20-1 | 48" X 48" | ROAD WORK | 14 | 18 | 14 | 10 | 7 | 5 | 5 | |
| W20-5L | 48" X 48" | LEFT LANE CLOSED | 2 | 2 | 2 | 2 | | 3 | 1 | |
| W20-5R | 48" X 48" | RIGHT LANE CLOSED | | | | | 1 | | 2 | |
| W21-19 | 48" X 48" | ACTIVE WORK ZONE WHEN FLASHING | 2 | 2 | 2 | 2 | 1 | 2 | 2 | |
| W21-20 | 48" X 48" | END ACTIVE WORK ZONE | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| W30-1-6 | 30" X 10" | DISTANCE (AHEAD) | 16 | 20 | 16 | 12 | 8 | 8 | 8 | |
| SP-1 | 54" X 54" | LEFT TURNS | 1 | | | | | | | |
| SP-2 | 42" X 30" | TRAIL WORK AHEAD | | | | | 2 | | | 2 |



Sign # : SS-1;
12.0" Radius, 2.0" Border, Black on, Orange;
"LEFT", B 2K; "TURNS", C 2K;
Arrow K - 12.0" 135';

Table of distances between letter and object lefts

| | | | | |
|------|-----|-----|-----|------|
| L | E | F | T | |
| 17.6 | 5.2 | 5.4 | 4.4 | 3.8 |
| 17.6 | | | | 17.6 |

| | | | | |
|-----|-----|-----|-----|-----|
| T | U | R | N | S |
| 9.8 | 6.4 | 7.9 | 7.2 | 7.4 |
| 9.8 | | | | 9.7 |

| | | | | |
|------|-----|------|--|--|
| | | | | |
| 22.2 | 9.6 | 22.2 | | |

SP-1



Sign # : SS-2;
1.5" Radius, 0.8" Border, 0.6" Indent, Black on, Orange;
"TRAIL", D 2K;
"WORK", D 2K;
"AHEAD", D 2K;

Table of distances between letter and object lefts

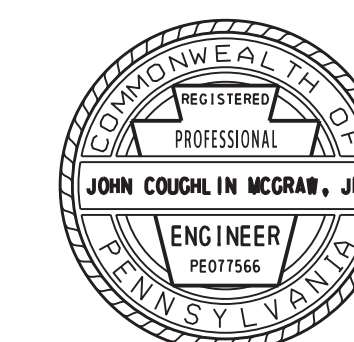
| | | | | |
|-----|-----|-----|-----|-----|
| T | R | A | I | L |
| 6.1 | 3.9 | 3.8 | 5.0 | 2.0 |
| 6.1 | | | | 6.1 |

| | | | |
|-----|-----|-----|-----|
| W | O | R | K |
| 6.3 | 5.0 | 4.7 | 4.3 |
| 6.3 | | | 6.2 |

| | | | | |
|-----|-----|-----|-----|-----|
| A | H | E | A | D |
| 4.3 | 4.9 | 4.7 | 3.5 | 4.9 |
| 4.3 | | | | 4.2 |

SP-2

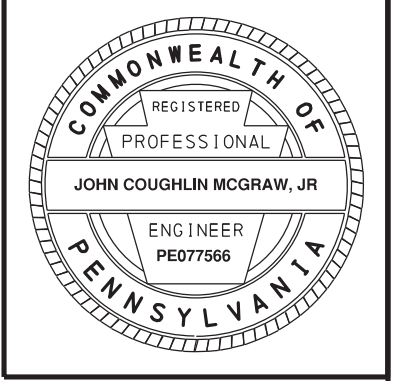
TRAFFIC CONTROL PLAN TABULATIONS



TABULATION OF QUANTITIES

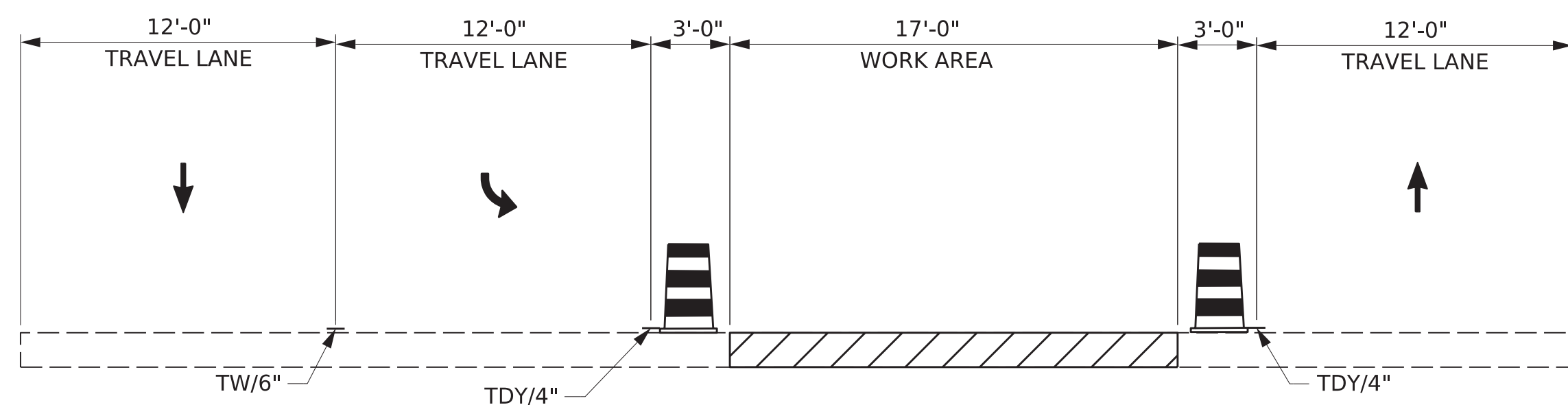
TRAFFIC CONTROL PLAN

| | | | | | | | | |
|--------------|-----------|------|----|----------|--------|-------|---------|---------|
| REVISION NO | REVISIONS | DATE | BY | DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
| | | | | 01 | ERIE | 4034 | S00 | 7 OF 48 |
| CITY OF ERIE | | | | | | | | |



| ITEM NUMBER | UNIT | REMARKS | SIDE | STATIONS |
|--------------------------|-------|---|---------|------------------------|
| 0627 | LF | TEMPORARY BARRIER, TEST LEVEL 3, BARRIER DEFLECTION DISTANCE < /±1' | | |
| 0628 | LF | RESET TEMPORARY BARRIER, TEST LEVEL 3, BARRIER DEFLECTION DISTANCE < /±1' | | |
| 0696 | EACH | TEMPORARY IMPACT ATTENUATING DEVICE, TYPE V (STANDARD), TEST LEVEL 3 | | |
| 0697 | EACH | RESET TEMPORARY IMPACT ATTENUATING DEVICE, TYPE V (STANDARD), TEST LEVEL 3 | | |
| 0901 | LS | MAINTENANCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION | | |
| 0901 | EACH | ARROW PANEL | | |
| 0901 | DAY | ADDITIONAL WARNING LIGHTS, TYPE B | | |
| 0901 | SF | ADDITIONAL TRAFFIC CONTROL SIGNS | | |
| 0901 | EACH | SEQUENTIAL WARNING LIGHTS | | |
| 0901 | LF | 4" STANDARD PAVEMENT MARKINGS, PAINT & BEADS, YELLOW | | |
| 0901 | LF | 6" STANDARD PAVEMENT MARKINGS, PAINT & BEADS, YELLOW | | |
| 0901 | LF | 6" STANDARD PAVEMENT MARKINGS, PAINT & BEADS, WHITE | | |
| 0901 | LF | 24" STANDARD PAVEMENT MARKINGS, PAINT & BEADS, WHITE | | |
| 0901 | EACH | 3-LINE CHANGEABLE MESSAGE SIGN WITH TELECOMMUNICATIONS | | |
| 4954 | LF | SIGNAL CABLE, 14 AWG, 5 CONDUCTOR, TEMPORARY | | |
| 4954 | LF | SIGNAL CABLE, 14 AWG, 7 CONDUCTOR, TEMPORARY | | |
| 0958 | EACH | TEMPORARY MODIFICATIONS TO EXISTING PERMANENT TRAFFIC SIGNAL (2 APPROACHES) | | |
| 0958 | EACH | TEMPORARY MODIFICATIONS TO EXISTING PERMANENT TRAFFIC SIGNAL (2 APPROACHES) | | |
| 0958 | EACH | TEMPORARY MODIFICATIONS TO EXISTING PERMANENT TRAFFIC SIGNAL (2 APPROACHES) | | |
| 0958 | EACH | TEMPORARY MODIFICATIONS TO EXISTING PERMANENT TRAFFIC SIGNAL (2 APPROACHES) | | |
| 0962 | EACH | WHITE WATERBORNE PAVEMENT LEGEND, "LEFT ARROW", 12'-0" X 3'-0" | | |
| 0963 | SF | PAVEMENT MARKING REMOVAL | | |
| 9000 | SF | TEMPORARY SIGN COVER | | |
| 9000 | SF | CLOTH OVERLAY SIGN, REFLECTORIZED | | |
| RAILROAD REMOVAL PHASE D | | | | |
| 80 | | | LT / RT | 419+65.00 to 420+35.00 |
| 620 | 780 | 3 | 3 | -- |
| 4 | 20 | 100 | 45 | 26058 |
| 620 | 5444 | 611 | 3 | 60 |
| 80 | 1 | 1 | 1 | 1 |
| 12 | 10929 | 60 | 52.5 | |
| TOTALS | | | | |

| | | | | | | |
|--------------|-----------|-------|---------|---------|----|------|
| DISTRICT | COUNTY | ROUTE | SECTION | SHEET | | |
| 1-0 | ERIE | 4034 | 500 | 8 OF 48 | | |
| CITY OF ERIE | | | | | | |
| REV NO | REVISIONS | | | DATE | BY | APPD |
| | | | | | | |

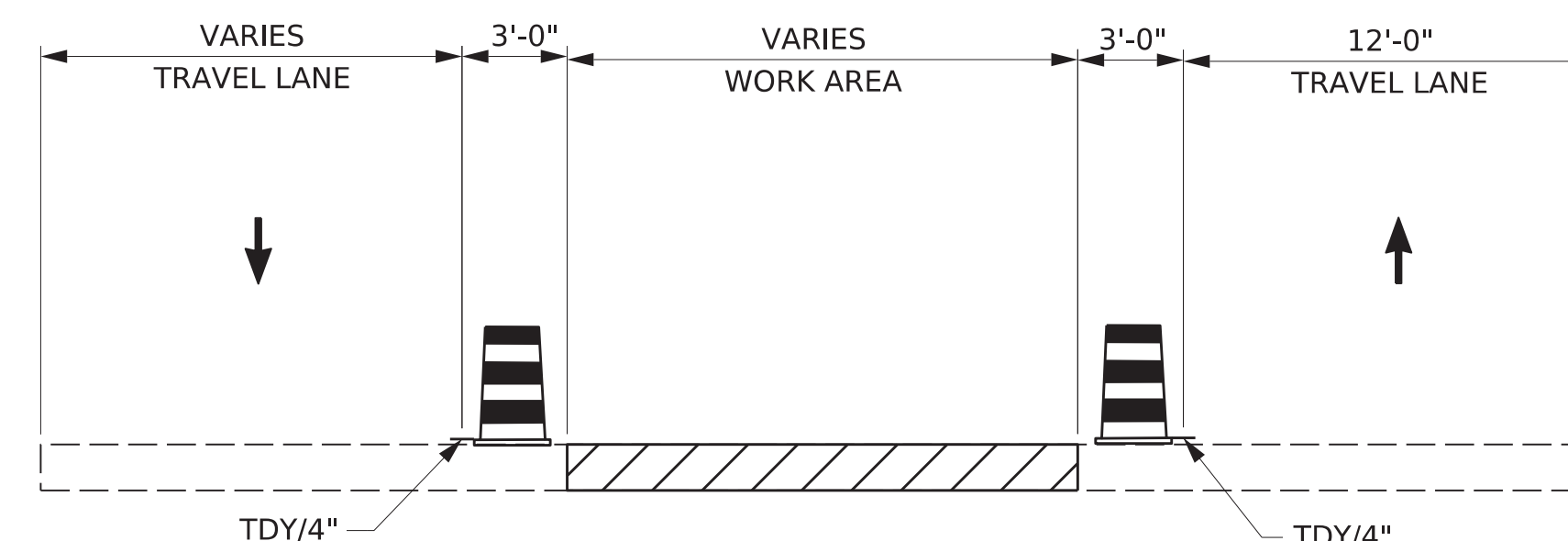


PHASE 1
PHASE 1 - SR 4034 SURVEY & CONSTR ☐ 375+50 TO 377+28

PHASE 2
PHASE 2 - SR 4034 SURVEY & CONSTR ☐ 383+75 TO 385+26

PHASE 3
PHASE 3 - SR 4034 SURVEY & CONSTR ☐ 392+05 - 393+57

PHASE 4
PHASE 4 - SR 4034 SURVEY & CONSTR ☐ 400+48 - 403+13

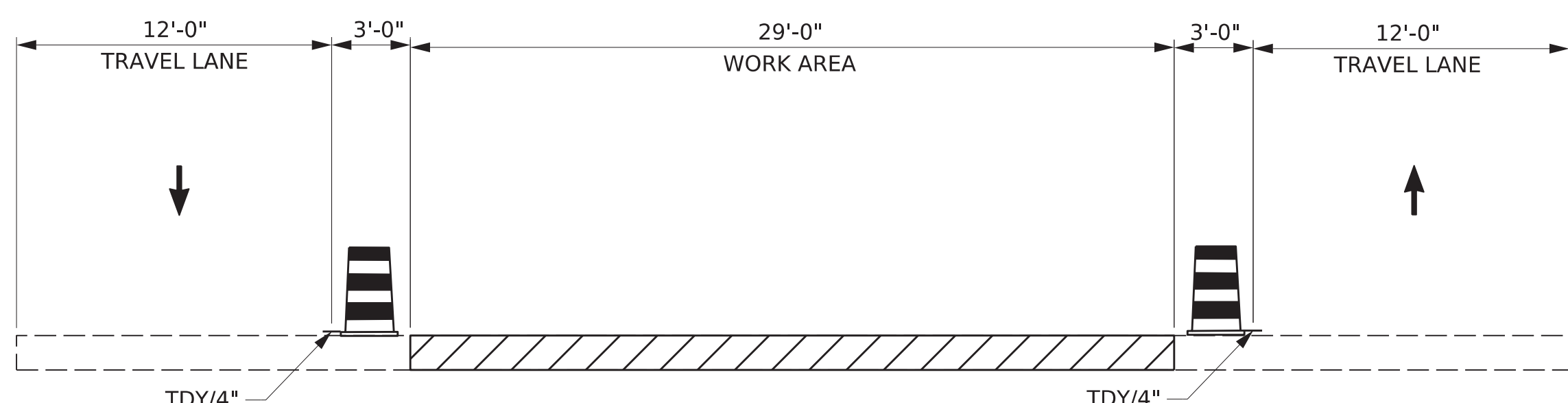


PHASE 1
PHASE 1 - SR 4034 SURVEY & CONSTR ☐ 377+28 - 378+77

PHASE 2
PHASE 2 - SR 4034 SURVEY & CONSTR ☐ 385+26 - 386+68

PHASE 3
PHASE 3 - SR 4034 SURVEY & CONSTR ☐ 393+57 - 394+38

PHASE 4
PHASE 4 - SR 4034 SURVEY & CONSTR ☐ 403+13 - 403+88

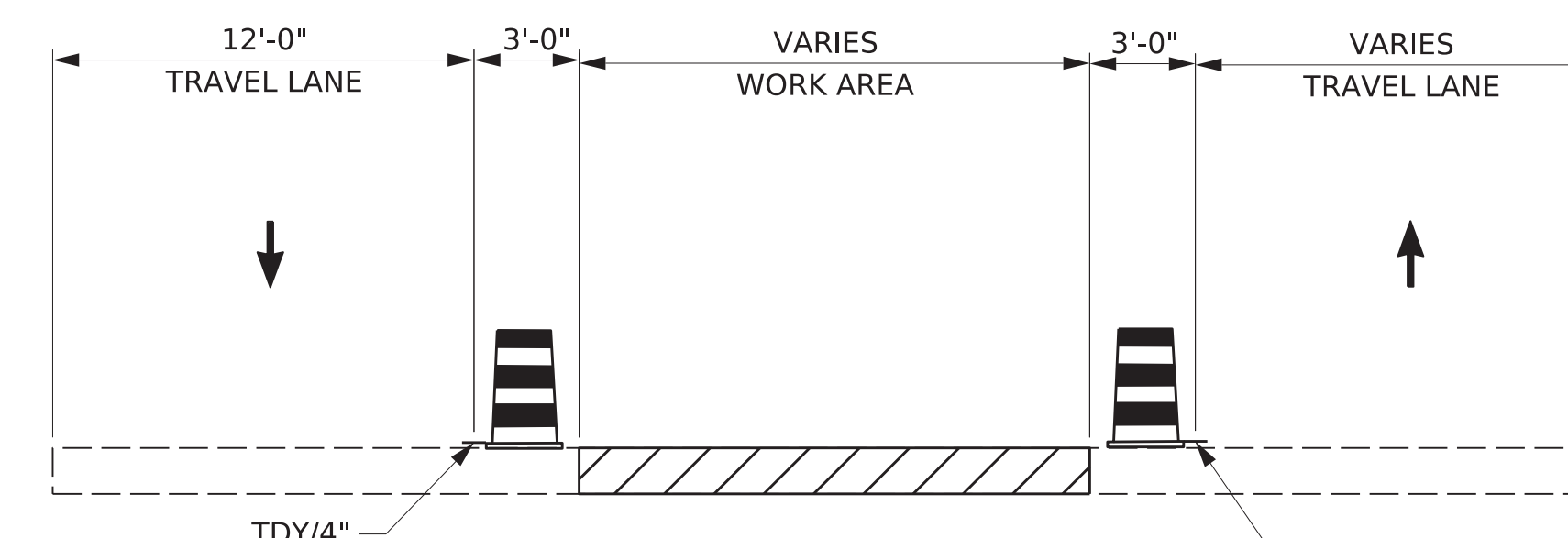


PHASE 1
PHASE 1 - SR 4034 SURVEY & CONSTR ☐ 378+77 - 380+78

PHASE 2
PHASE 2 - SR 4034 SURVEY & CONSTR ☐ 386+68 - 389+08

PHASE 3
PHASE 3 - SR 4034 SURVEY & CONSTR ☐ 394+38 - 396+89

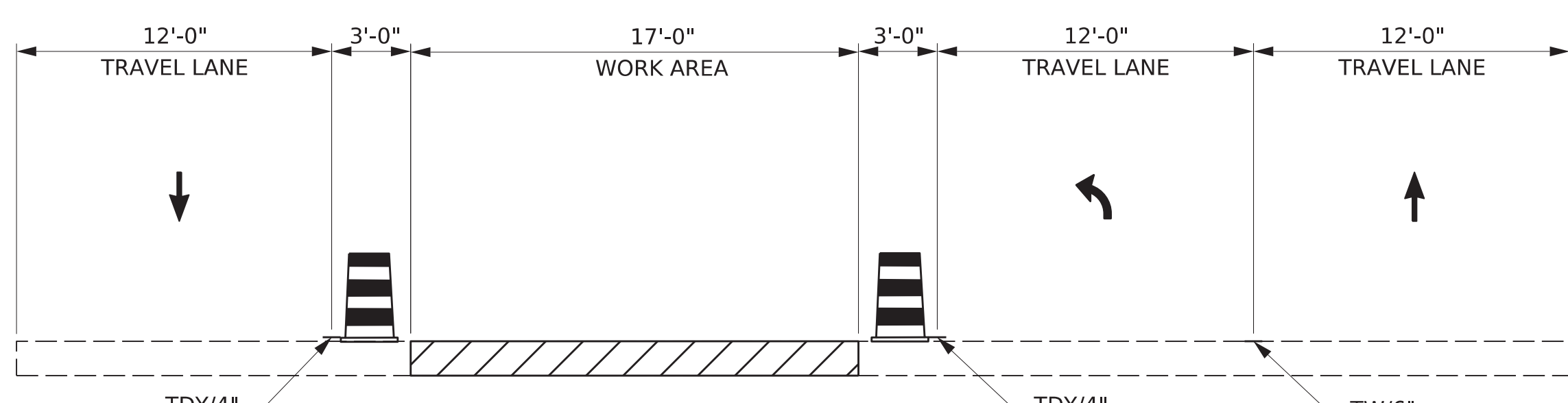
PHASE 4
PHASE 4 - SR 4034 SURVEY & CONSTR ☐ 403+88 - 405+00



PHASE 1
PHASE 1 - SR 4034 SURVEY & CONSTR ☐ 380+78 - 381+78

PHASE 2
PHASE 2 - SR 4034 SURVEY & CONSTR ☐ 389+08 - 390+08

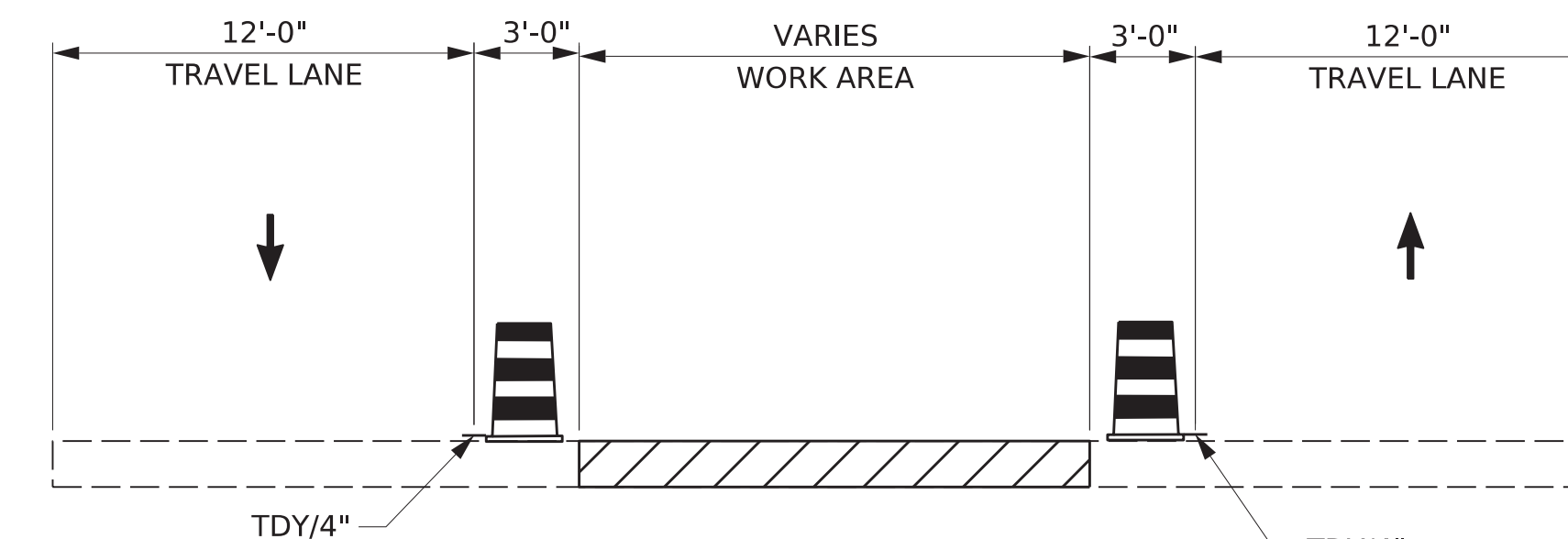
PHASE 3
PHASE 3 - SR 4034 SURVEY & CONSTR ☐ 396+89 - 397+70



PHASE 1
PHASE 1 - SR 4034 SURVEY & CONSTR ☐ 381+78 - 382+98

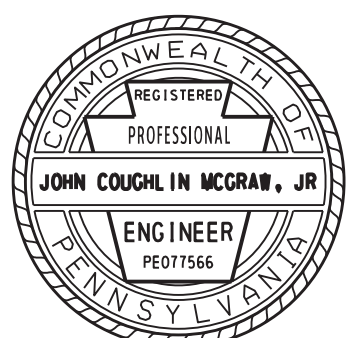
PHASE 2
PHASE 2 - SR 4034 SURVEY & CONSTR ☐ 390+08 - 391+40

PHASE 3
PHASE 3 - SR 4034 SURVEY & CONSTR ☐ 397+70 - 399+48

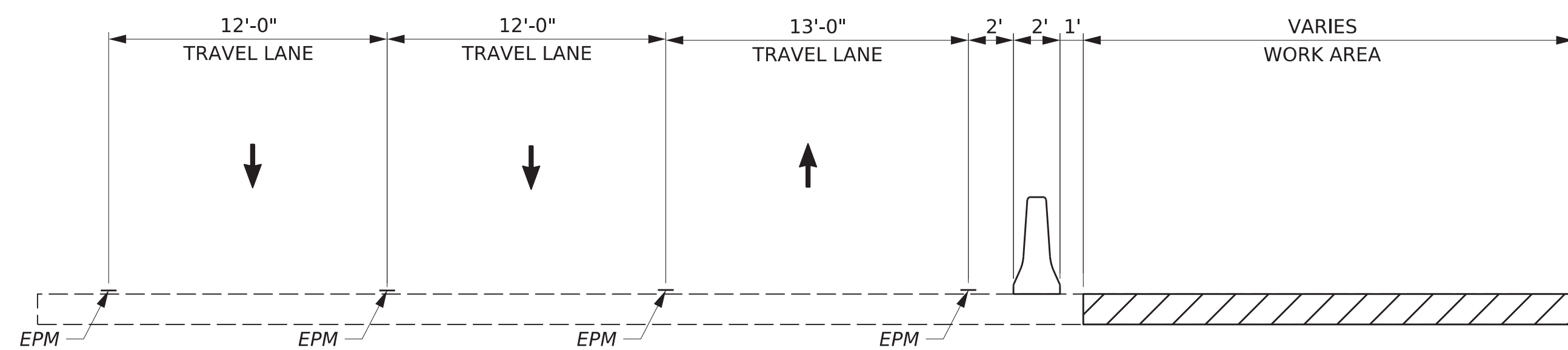


PHASE 4
PHASE 4 - SR 4034 SURVEY & CONSTR ☐ 405+00 - 409+20

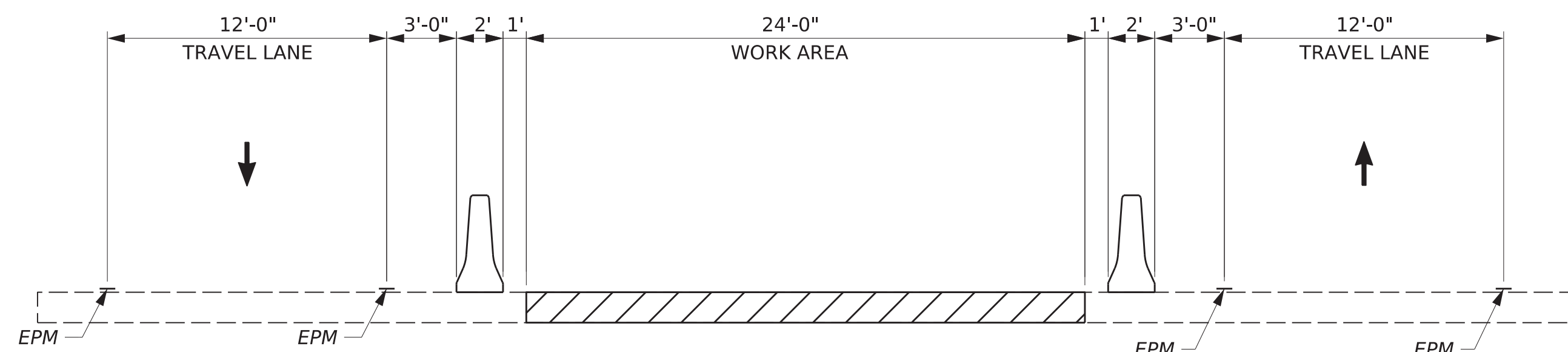
TRAFFIC CONTROL PLAN
TYPICAL SECTIONS



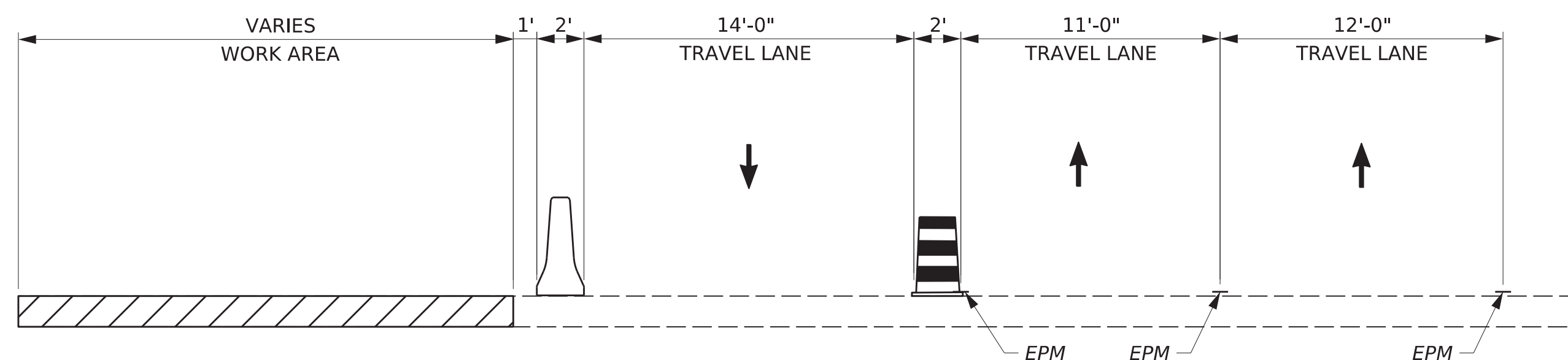
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|--------------|-----------|-------|---------|---------|----|------|
| DISTRICT | COUNTY | ROUTE | SECTION | SHEET | | |
| 1-0 | ERIE | 4034 | 500 | 9 OF 48 | | |
| CITY OF ERIE | | | | | | |
| REV NO | REVISIONS | | | DATE | BY | APPD |
| | | | | | | |



PHASE A
 PHASE A - SR 4034
 SURVEY & CONSTR C
 419+60 TO 420+21

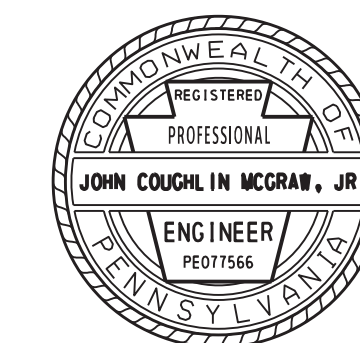


PHASE B
 PHASE B - SR 4034
 SURVEY & CONSTR C
 419+35 TO 420+00

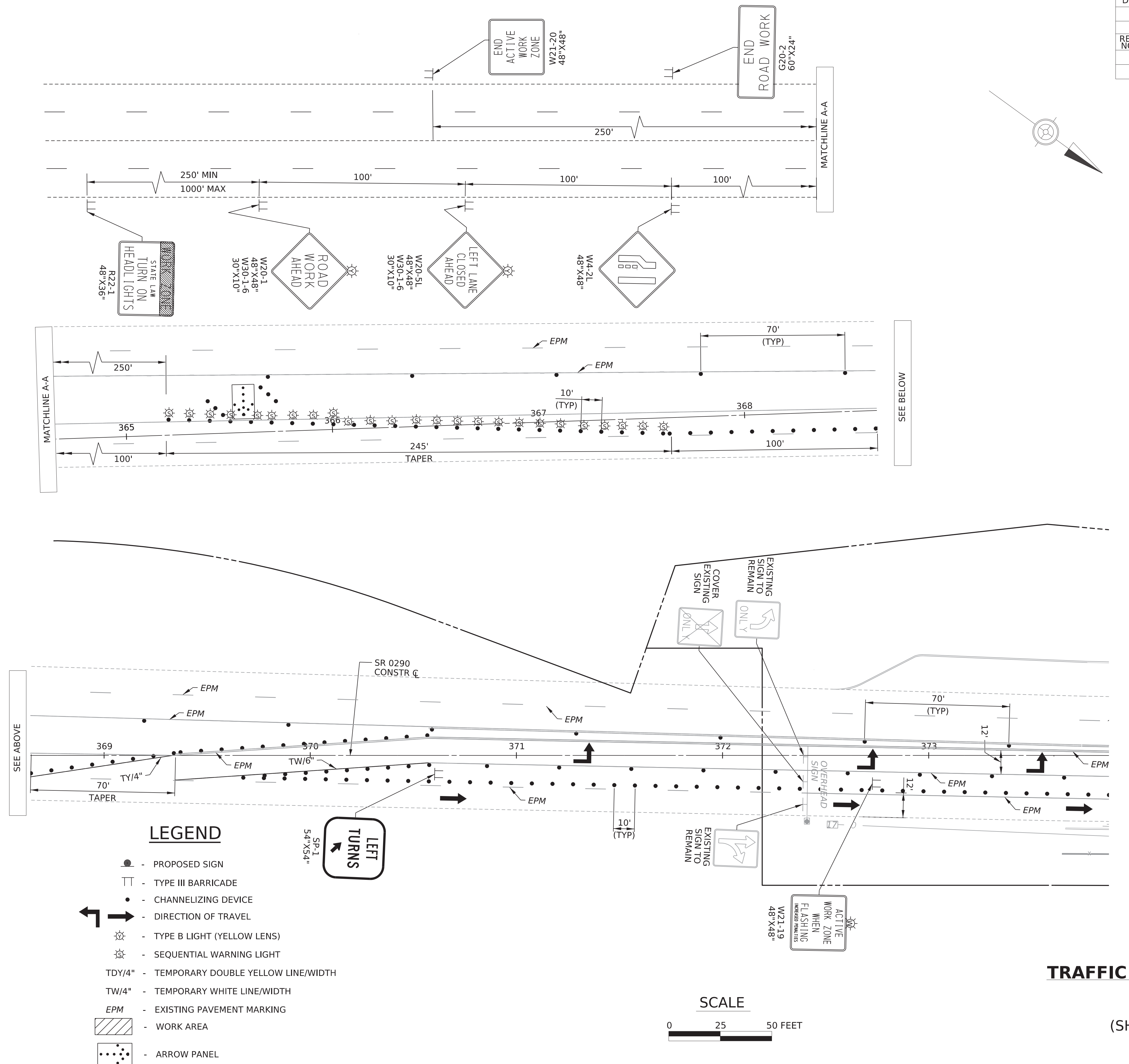


PHASE C
 PHASE C - SR 4034
 SURVEY & CONSTR C
 419+16 TO 419+74

TRAFFIC CONTROL PLAN
 TYPICAL SECTIONS

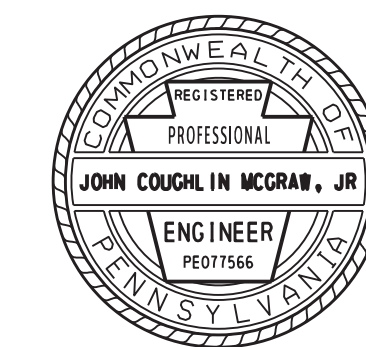


| | | | | |
|--------------|-----------|-------|---------|----------|
| DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
| 1-0 | ERIE | 4034 | 500 | 10 OF 48 |
| CITY OF ERIE | | | | |
| REV NO | REVISIONS | DATE | BY | APPD |
| | | | | |



TRAFFIC CONTROL PLAN

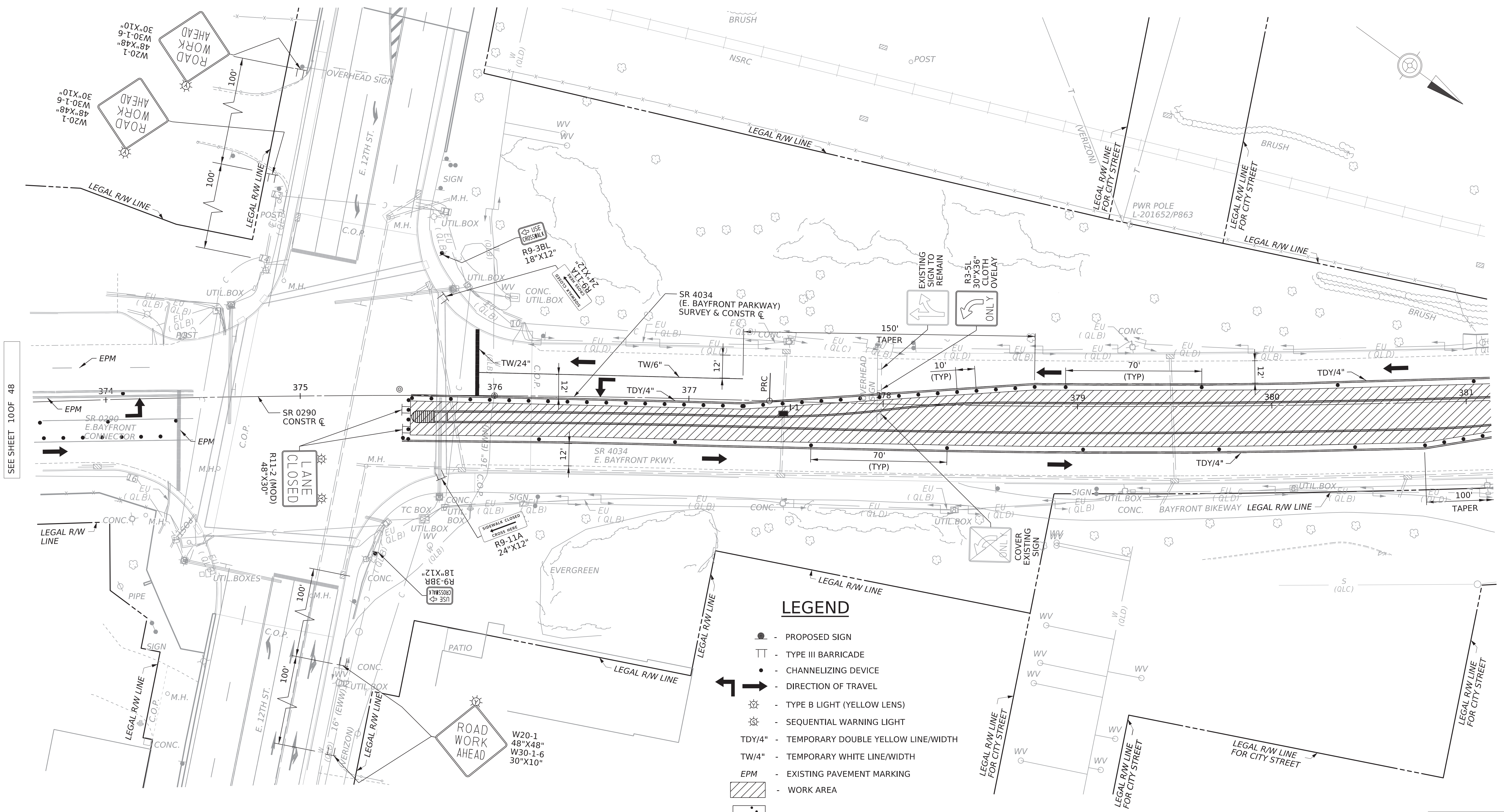
PHASE 1
(SHEET 1 OF 4)



SEE SHEET 11 OF 48

| | | | | |
|--------------|-----------|-------|---------|----------|
| DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
| 1-0 | ERIE | 4034 | 500 | 11 OF 48 |
| CITY OF ERIE | | | | |
| REV NO | REVISIONS | DATE | BY | APPD |
| | | | | |

NOTES:
 1. SEE SHEET 28 - 29 FOR TEMPORARY SIGNAL PLAN.
 2. UTILIZE FLAGGING PER PENNDOT PUB. 213 WHILE ENTERING/EXISTING ACTIVE WORK AREA.



SEE SHEET 10 OF 48

SEE SHEET 12 OF 48

LEGEND

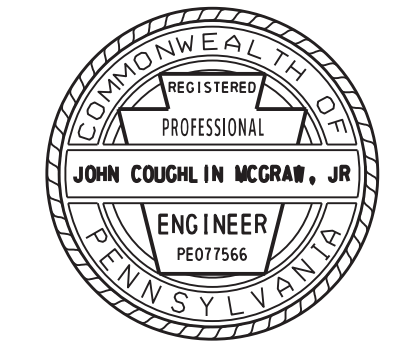
- - PROPOSED SIGN
- TT - TYPE III BARRICADE
- - CHANNELIZING DEVICE
- - DIRECTION OF TRAVEL
- ⊙ - TYPE B LIGHT (YELLOW LENS)
- ⊙ - SEQUENTIAL WARNING LIGHT
- TDY/4" - TEMPORARY DOUBLE YELLOW LINE/WIDTH
- TW/4" - TEMPORARY WHITE LINE/WIDTH
- EPM - EXISTING PAVEMENT MARKING
- ▨ - WORK AREA
- - ARROW PANEL

SCALE



TRAFFIC CONTROL PLAN

PHASE 1
(SHEET 2 OF 4)

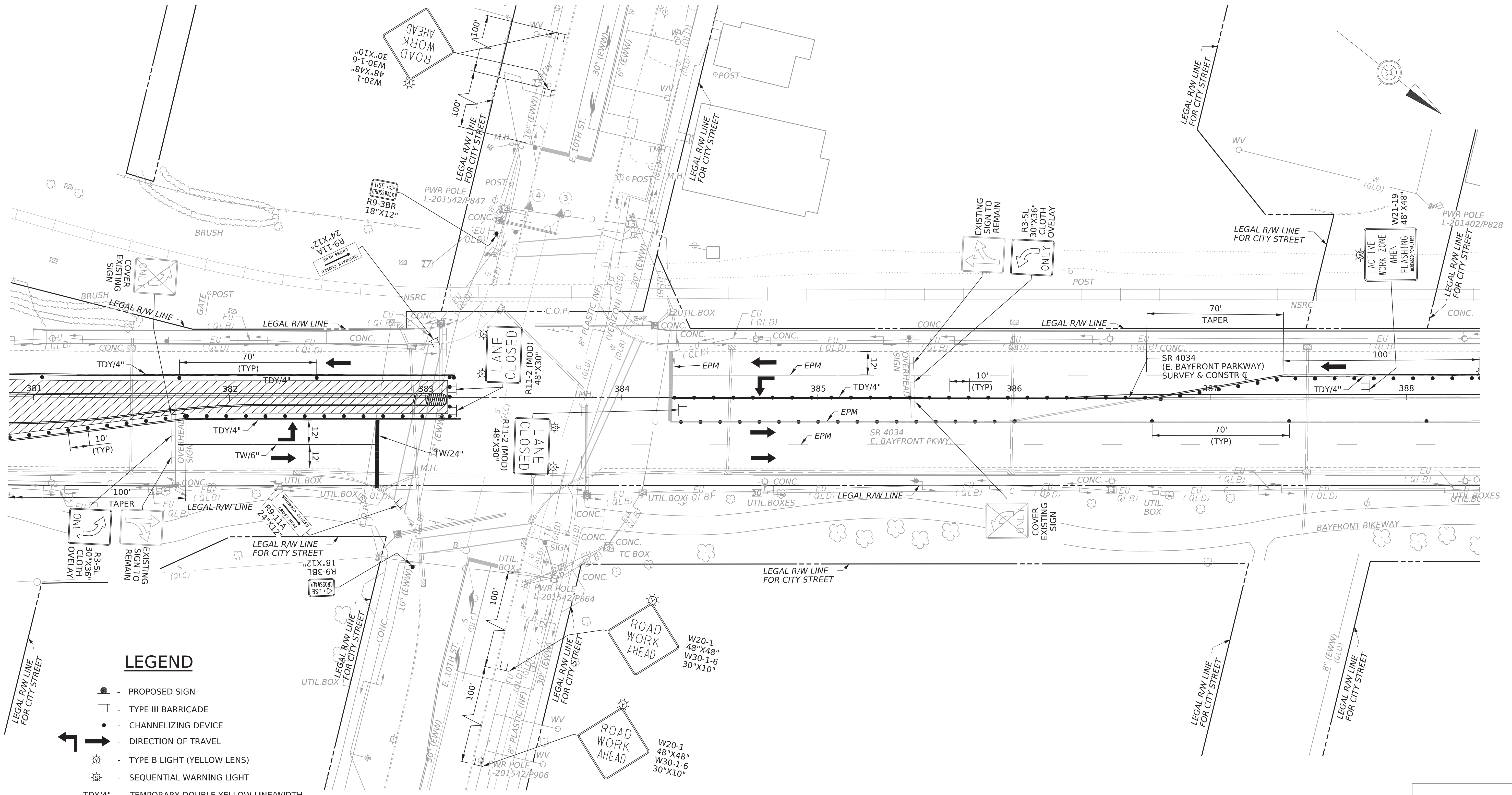


NOTES:
1. SEE SHEET 30 - 31 FOR TEMPORARY SIGNAL PLAN.
2. UTILIZE FLAGGING PER PENNDOT PUB. 213 WHILE ENTERING/EXISTING ACTIVE WORK AREA.

| | | | | | | |
|--------------|-----------|-------|---------|----------|----|------|
| DISTRICT | COUNTY | ROUTE | SECTION | SHEET | | |
| 1-0 | ERIE | 4034 | 500 | 12 OF 48 | | |
| CITY OF ERIE | | | | | | |
| REV NO | REVISIONS | | | DATE | BY | APPD |
| | | | | | | |

SEE SHEET 11 OF 48

SEE SHEET 13 OF 48



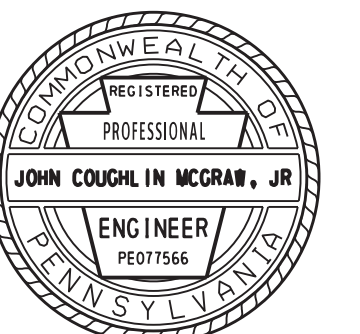
LEGEND

- PROPOSED SIGN
- TYPE III BARRICADE
- CHANNELIZING DEVICE
- DIRECTION OF TRAVEL
- TYPE B LIGHT (YELLOW LENS)
- SEQUENTIAL WARNING LIGHT
- TDY/4" - TEMPORARY DOUBLE YELLOW LINE/WIDTH
- TW/4" - TEMPORARY WHITE LINE/WIDTH
- EPM - EXISTING PAVEMENT MARKING
- WORK AREA
- ARROW PANEL

SCALE

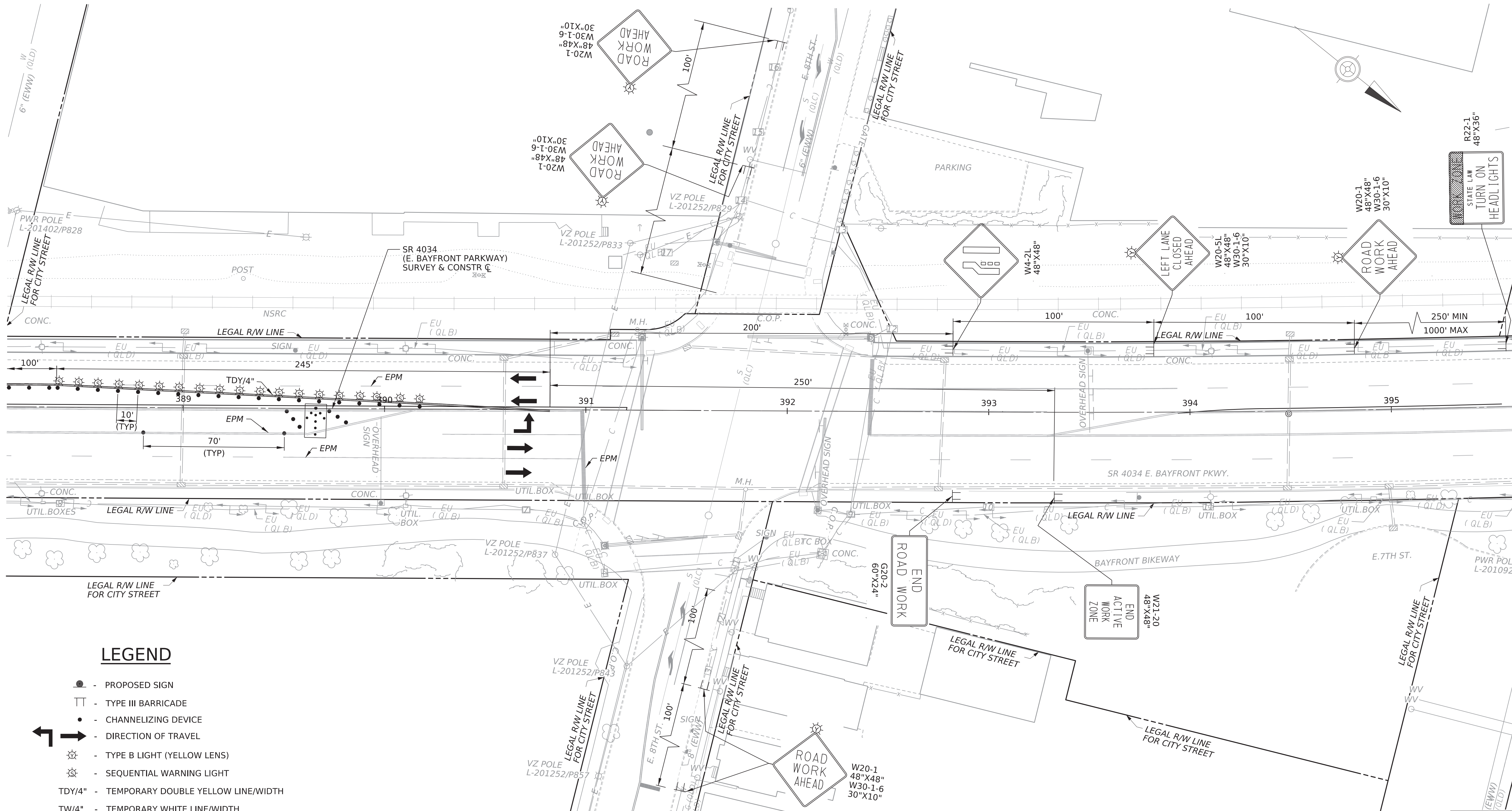


TRAFFIC CONTROL PLAN
 PHASE 1
 (SHEET 3 OF 4)



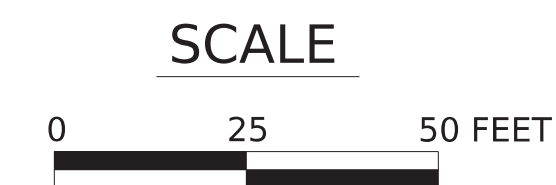
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|--------------|-----------|-------|---------|----------|
| DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
| 1-0 | ERIE | 4034 | 500 | 13 OF 48 |
| CITY OF ERIE | | | | |
| REV NO | REVISIONS | | DATE | BY APPD |
| | | | | |

SEE SHEET 12 OF 48



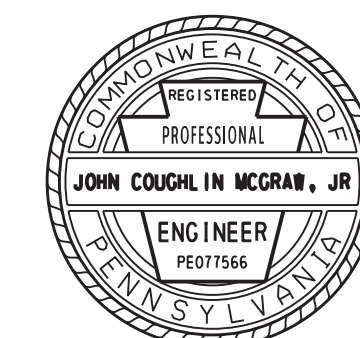
LEGEND

- PROPOSED SIGN
- TYPE III BARRICADE
- CHANNELIZING DEVICE
- DIRECTION OF TRAVEL
- TYPE B LIGHT (YELLOW LENS)
- SEQUENTIAL WARNING LIGHT
-
-
- EXISTING PAVEMENT MARKING
- WORK AREA
- ARROW PANEL



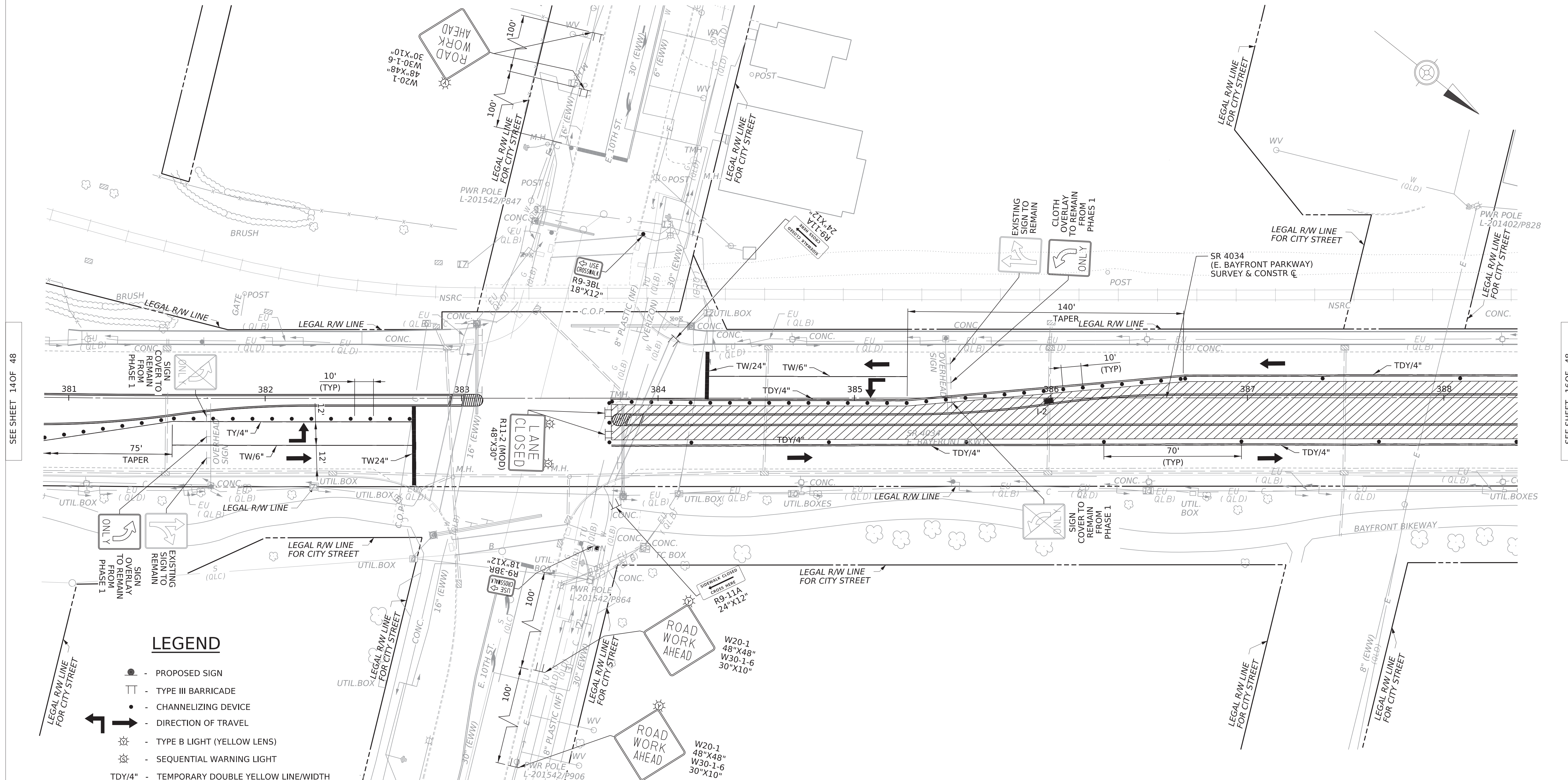
TRAFFIC CONTROL PLAN

PHASE 1
(SHEET 4 OF 4)



| | | | | |
|--------------|-----------|-------|---------|----------|
| DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
| 1-0 | ERIE | 4034 | 500 | 15 OF 48 |
| CITY OF ERIE | | | | |
| REV NO | REVISIONS | DATE | BY | APPD |
| | | | | |

NOTES:
 1. SEE SHEET 32 - 33 FOR TEMPORARY SIGNAL PLAN.
 2. UTILIZE FLAGGING PER PENNDOT PUB. 213 WHILE ENTERING/EXISTING ACTIVE WORK AREA.



SEE SHEET 14 OF 48

SEE SHEET 16 OF 48

LEGEND

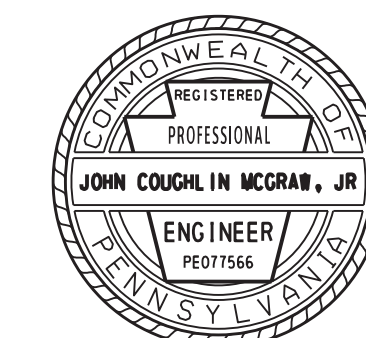
- PROPOSED SIGN
- TYPE III BARRICADE
- CHANNELIZING DEVICE
- DIRECTION OF TRAVEL
- TYPE B LIGHT (YELLOW LENS)
- SEQUENTIAL WARNING LIGHT
- TDY/4" - TEMPORARY DOUBLE YELLOW LINE/WIDTH
- TW/4" - TEMPORARY WHITE LINE/WIDTH
- EPM - EXISTING PAVEMENT MARKING
- WORK AREA
- ARROW PANEL

SCALE



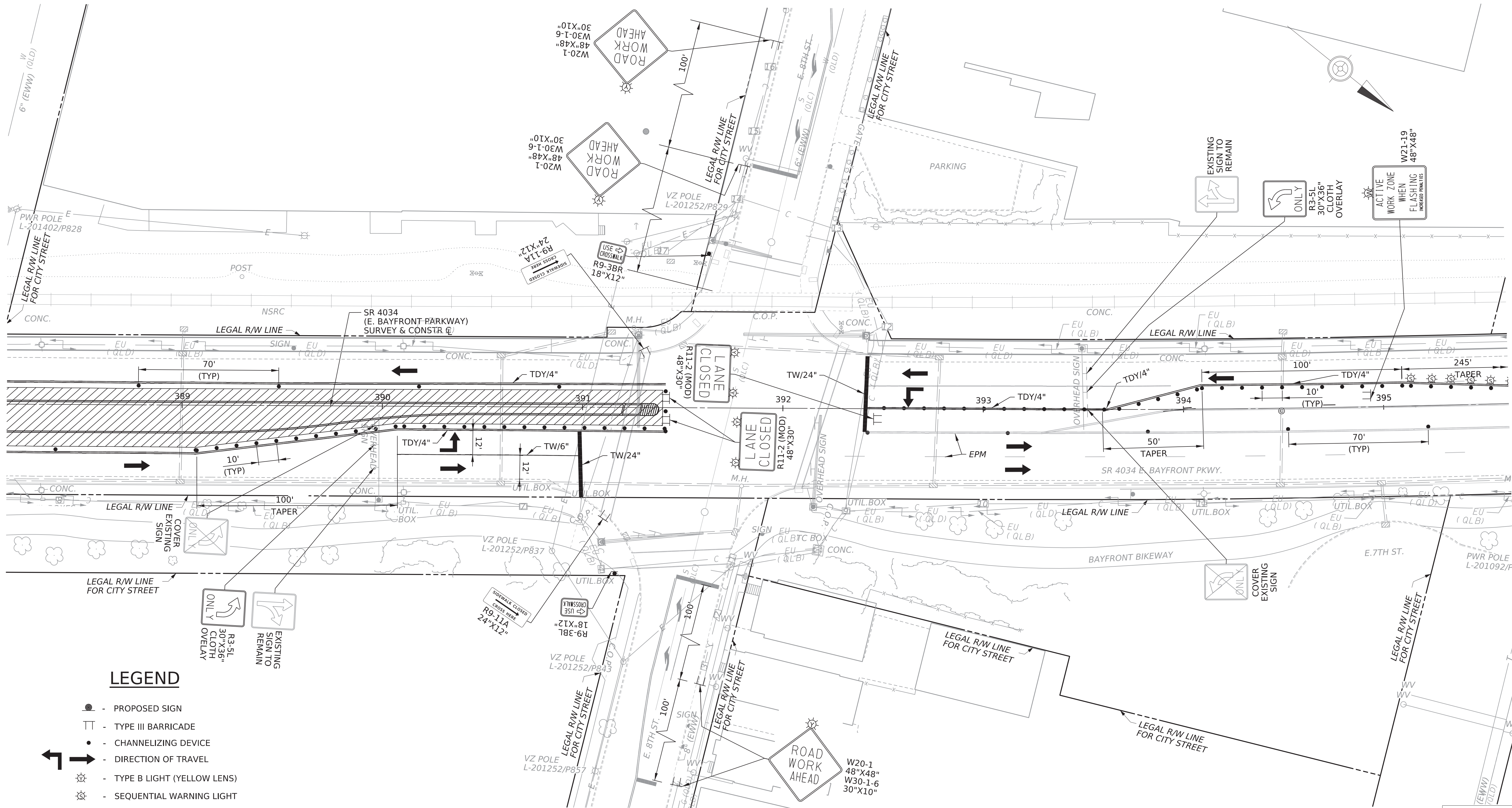
TRAFFIC CONTROL PLAN

PHASE 2
(SHEET 2 OF 4)



| | | | | | | |
|--------------|-----------|-------|---------|----------|----|------|
| DISTRICT | COUNTY | ROUTE | SECTION | SHEET | | |
| 1-0 | ERIE | 4034 | 500 | 16 OF 48 | | |
| CITY OF ERIE | | | | | | |
| REV NO | REVISIONS | | | DATE | BY | APPD |
| | | | | | | |

- NOTES:
- SEE SHEET 34 - 35 FOR TEMPORARY SIGNAL PLAN.
 - UTILIZE FLAGGING PER PENNDOT PUB. 213 WHILE ENTERING/EXISTING ACTIVE WORK AREA.

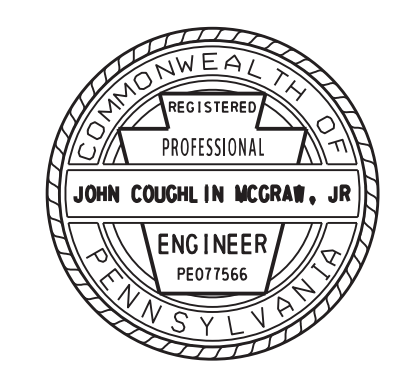


LEGEND

- PROPOSED SIGN
- TYPE III BARRICADE
- CHANNELIZING DEVICE
- DIRECTION OF TRAVEL
- TYPE B LIGHT (YELLOW LENS)
- SEQUENTIAL WARNING LIGHT
- TDY/4" - TEMPORARY DOUBLE YELLOW LINE/WIDTH
- TW/4" - TEMPORARY WHITE LINE/WIDTH
- EPM - EXISTING PAVEMENT MARKING
- WORK AREA
- ARROW PANEL

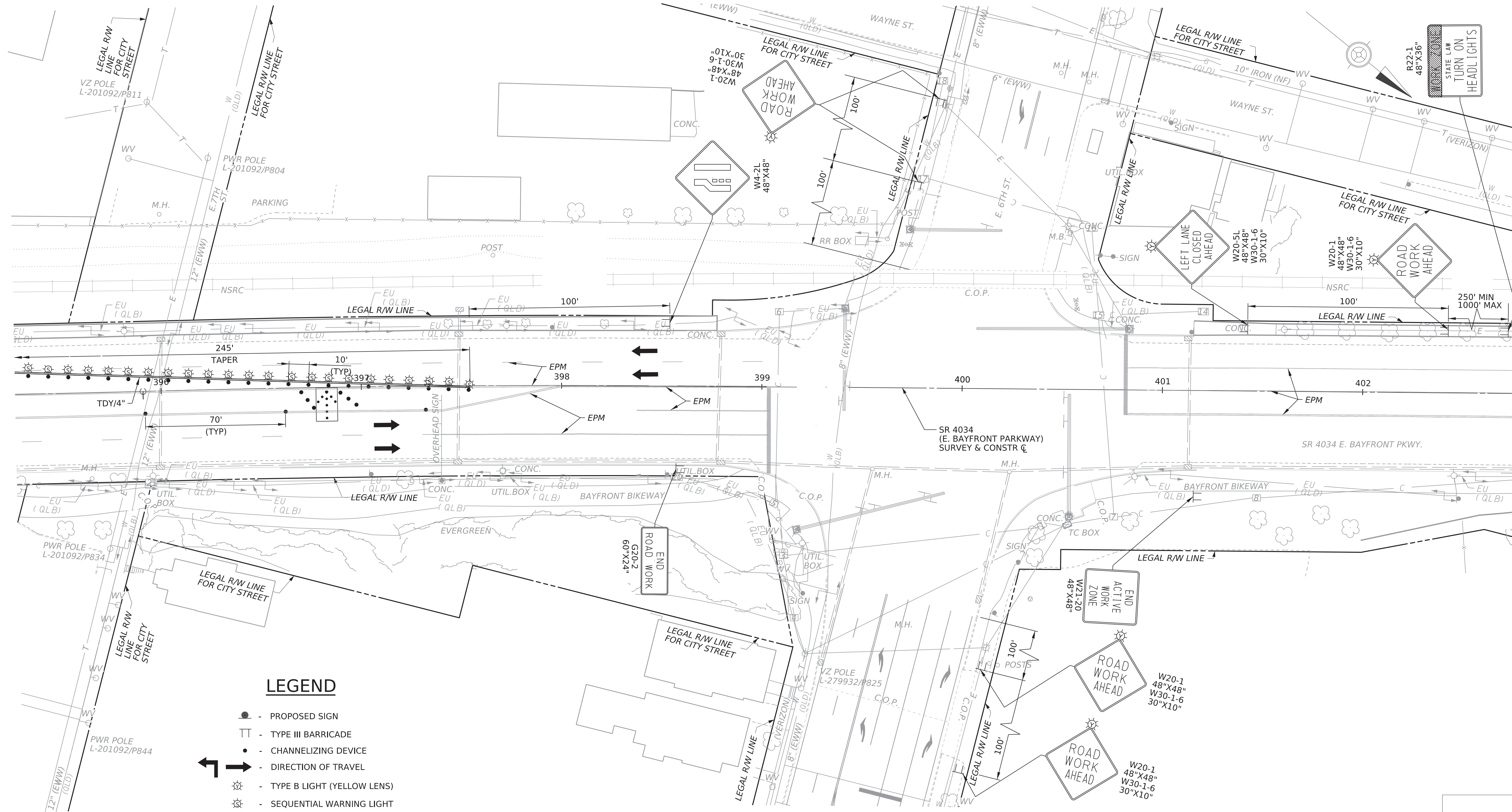


TRAFFIC CONTROL PLAN
 PHASE 2
 (SHEET 3 OF 4)



| DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
|--------------|-----------|-------|---------|----------|
| 1-0 | ERIE | 4034 | 500 | 17 OF 48 |
| CITY OF ERIE | | | | |
| REV NO | REVISIONS | DATE | BY | APPD |
| | | | | |

SEE SHEET 16 OF 48

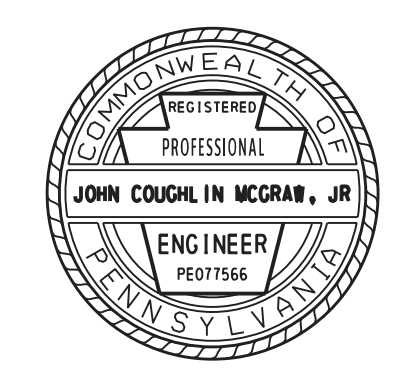


LEGEND

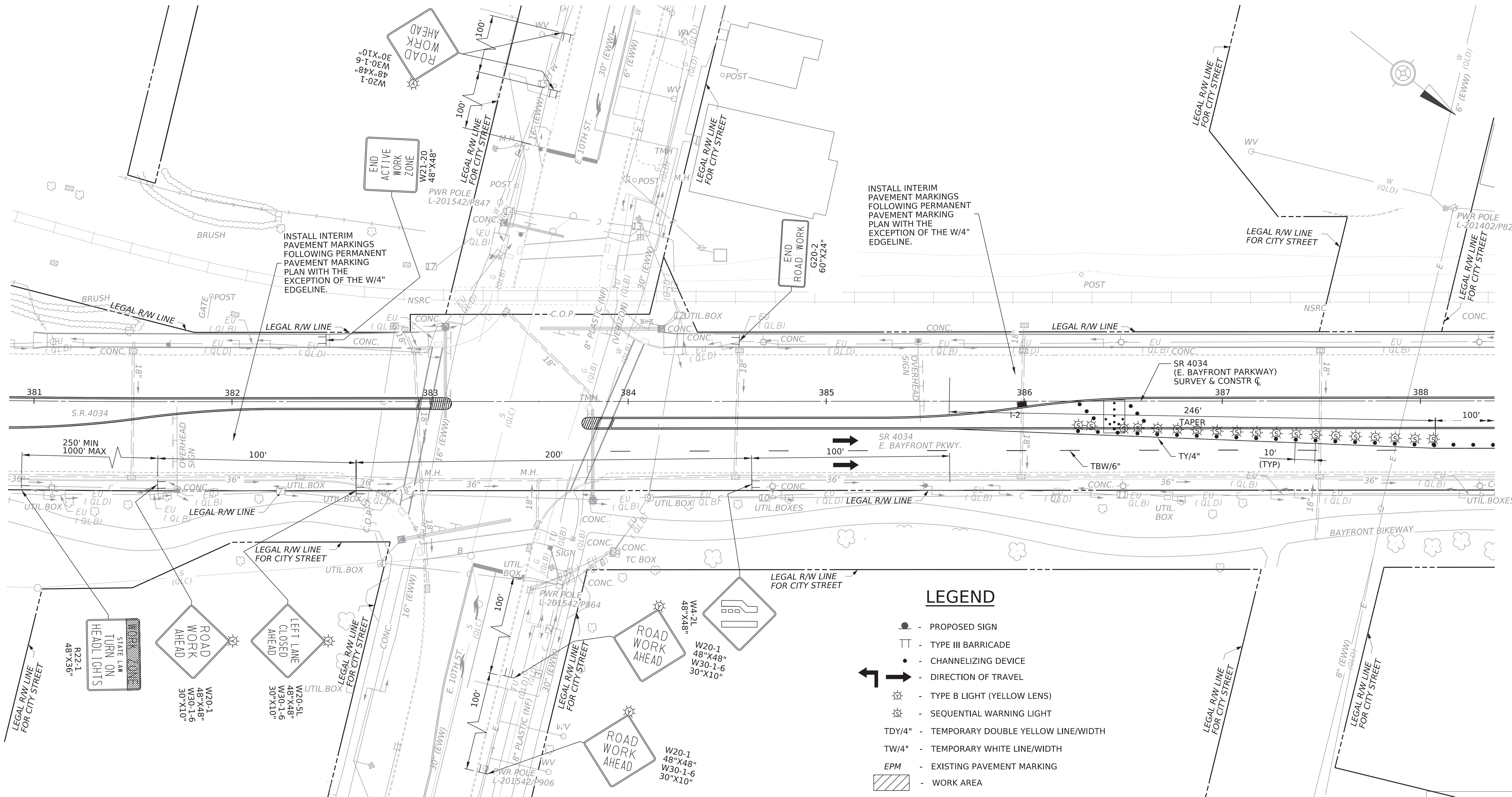
- PROPOSED SIGN
- TYPE III BARRICADE
- CHANNELIZING DEVICE
- DIRECTION OF TRAVEL
- TYPE B LIGHT (YELLOW LENS)
- SEQUENTIAL WARNING LIGHT
- TDY/4" - TEMPORARY DOUBLE YELLOW LINE/WIDTH
- TW/4" - TEMPORARY WHITE LINE/WIDTH
- EPM - EXISTING PAVEMENT MARKING
- WORK AREA
- ARROW PANEL



TRAFFIC CONTROL PLAN PHASE 2 (SHEET 4 OF 4)



| | | | | |
|--------------|-----------|-------|---------|----------|
| DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
| 1-0 | ERIE | 4034 | 500 | 18 OF 48 |
| CITY OF ERIE | | | | |
| REV NO | REVISIONS | | DATE | BY APPD |
| | | | | |



INSTALL INTERIM PAVEMENT MARKINGS FOLLOWING PERMANENT PAVEMENT MARKING PLAN WITH THE EXCEPTION OF THE W/4" EDGELINE.

INSTALL INTERIM PAVEMENT MARKINGS FOLLOWING PERMANENT PAVEMENT MARKING PLAN WITH THE EXCEPTION OF THE W/4" EDGELINE.

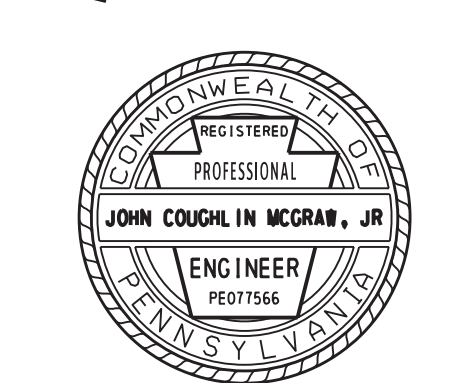
LEGEND

- - PROPOSED SIGN
- TT - TYPE III BARRICADE
- - CHANNELIZING DEVICE
- - DIRECTION OF TRAVEL
- ☼ - TYPE B LIGHT (YELLOW LENS)
- ☼ - SEQUENTIAL WARNING LIGHT
- TDY/4" - TEMPORARY DOUBLE YELLOW LINE/WIDTH
- TW/4" - TEMPORARY WHITE LINE/WIDTH
- EPM - EXISTING PAVEMENT MARKING
- ▨ - WORK AREA
- - ARROW PANEL

SCALE

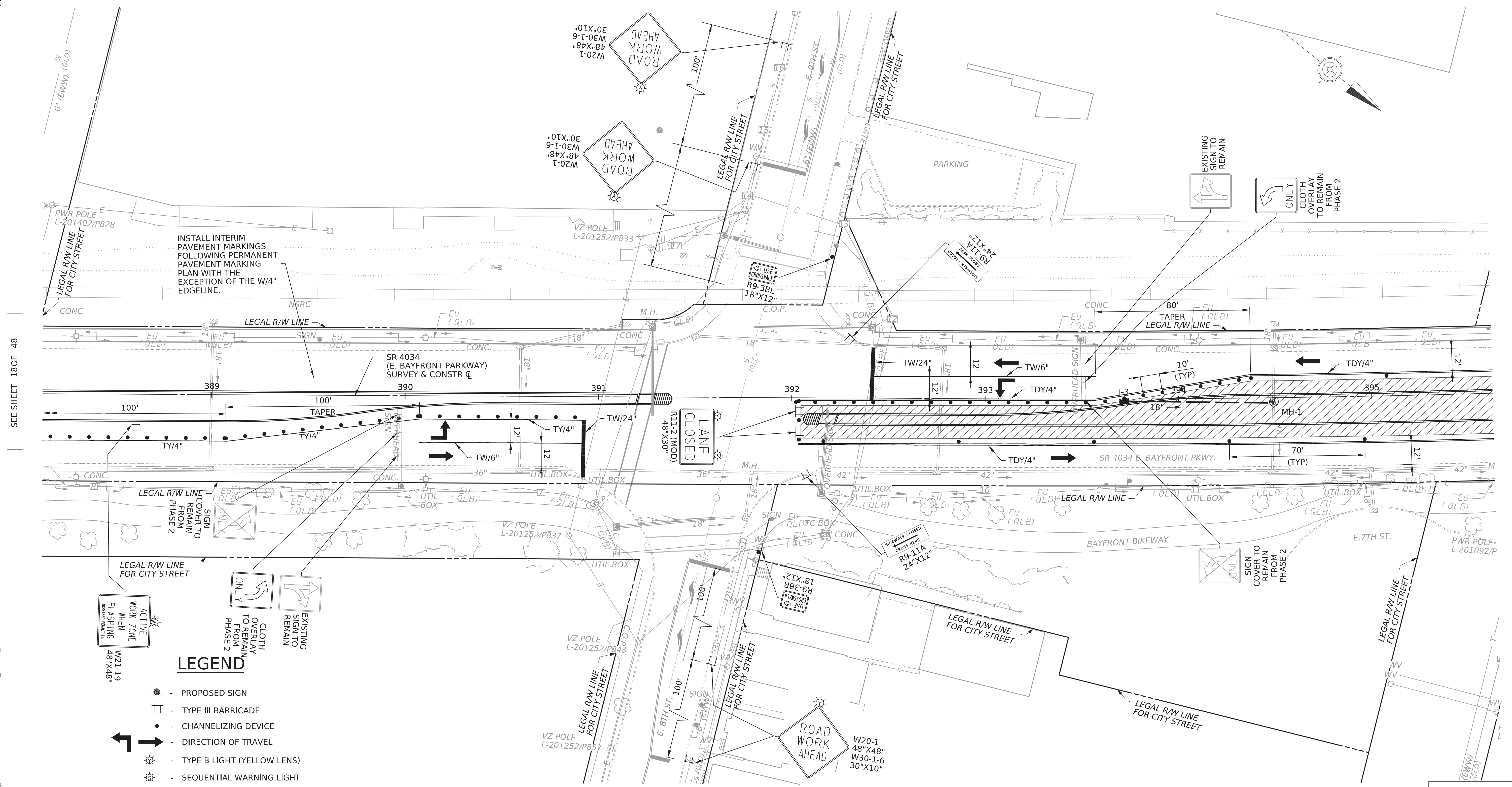


TRAFFIC CONTROL PLAN
PHASE 3
(SHEET 1 OF 5)



| | | | | |
|--------------|-----------|-------|---------|----------|
| DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
| 1-0 | ERIE | 4034 | 500 | 19 OF 48 |
| CITY OF ERIE | | | | |
| REV NO | REVISIONS | DATE | BY | APPD |
| | | | | |

NOTES:
 1. SEE SHEET 36 - 37 FOR TEMPORARY SIGNAL PLAN.
 2. UTILIZE FLAGGING PER PENNDOT PUB. 213 WHILE ENTERING/EXISTING ACTIVE WORK AREA.



SEE SHEET 18 OF 48

SEE SHEET 20 OF 48

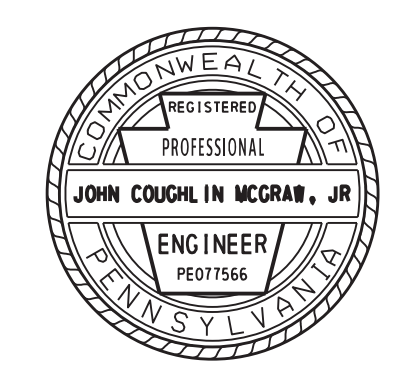
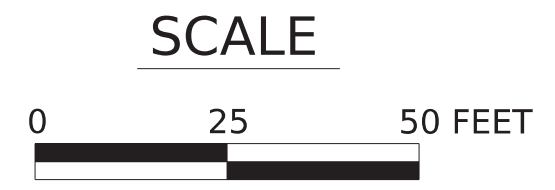


LEGEND

- - PROPOSED SIGN
- TT - TYPE III BARRICADE
- - CHANNELIZING DEVICE
- ← → - DIRECTION OF TRAVEL
- ⚡ - TYPE B LIGHT (YELLOW LENS)
- ⚡ - SEQUENTIAL WARNING LIGHT
- TDY/4" - TEMPORARY DOUBLE YELLOW LINE/WIDTH
- TW/4" - TEMPORARY WHITE LINE/WIDTH
- EPM - EXISTING PAVEMENT MARKING
- ▨ - WORK AREA
- - ARROW PANEL

TRAFFIC CONTROL PLAN

PHASE 3
(SHEET 2 OF 5)

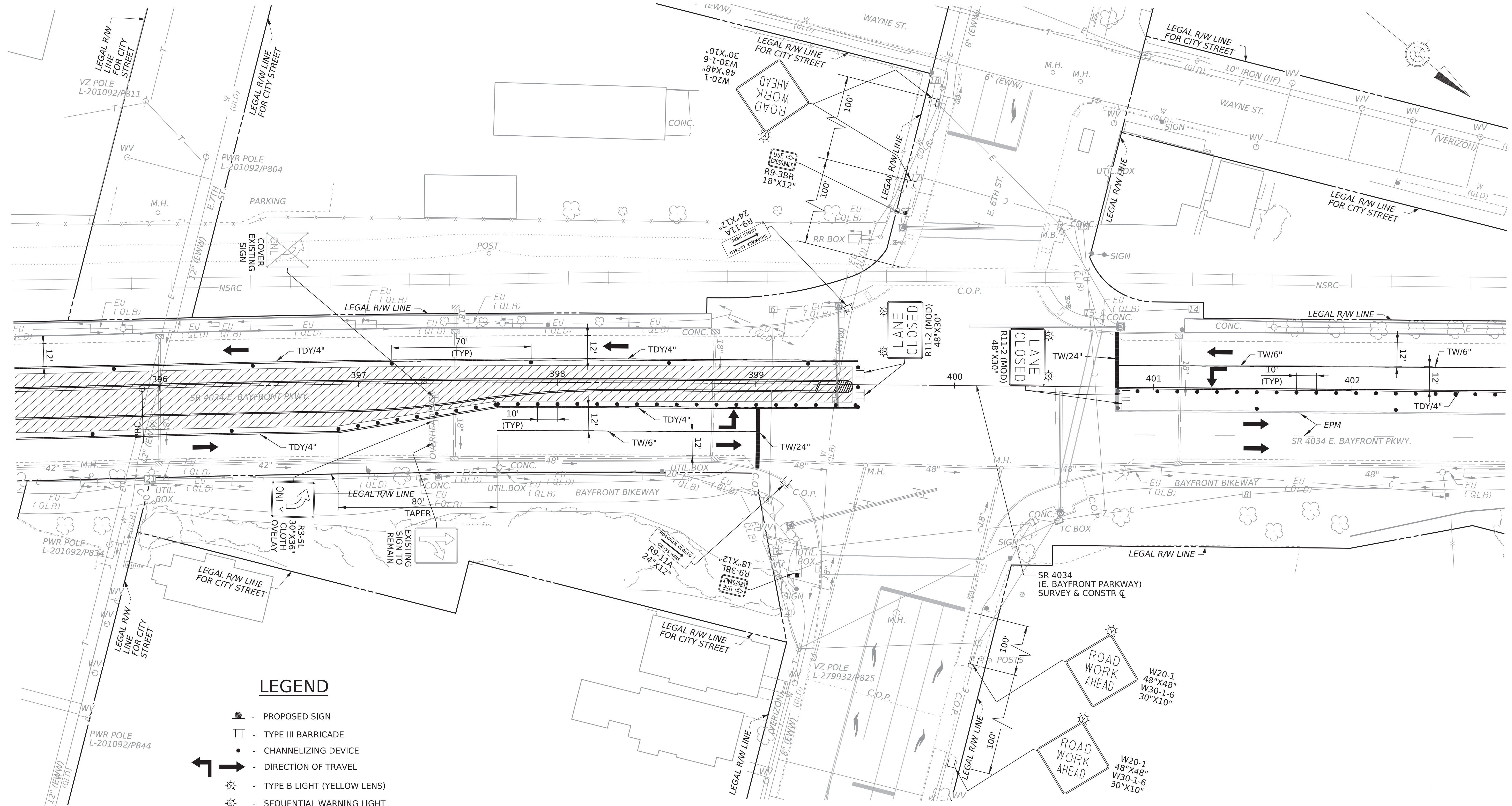


| | | | | |
|--------------|-----------|-------|---------|----------|
| DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
| 1-0 | ERIE | 4034 | 500 | 20 OF 48 |
| CITY OF ERIE | | | | |
| REV NO | REVISIONS | | DATE | BY APPD |
| | | | | |

- NOTES:
- SEE SHEET 38 - 39 FOR TEMPORARY SIGNAL PLAN.
 - UTILIZE FLAGGING PER PENNDOT PUB. 213 WHILE ENTERING/EXISTING ACTIVE WORK AREA.

SEE SHEET 20 OF 48

SEE SHEET 21 OF 48

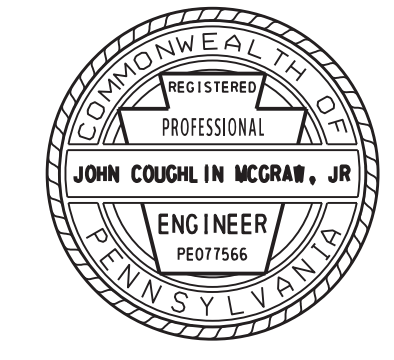


LEGEND

- PROPOSED SIGN
- TYPE III BARRICADE
- CHANNELIZING DEVICE
- DIRECTION OF TRAVEL
- TYPE B LIGHT (YELLOW LENS)
- SEQUENTIAL WARNING LIGHT
- TDY/4" - TEMPORARY DOUBLE YELLOW LINE/WIDTH
- TW/4" - TEMPORARY WHITE LINE/WIDTH
- EPM - EXISTING PAVEMENT MARKING
- WORK AREA
- ARROW PANEL



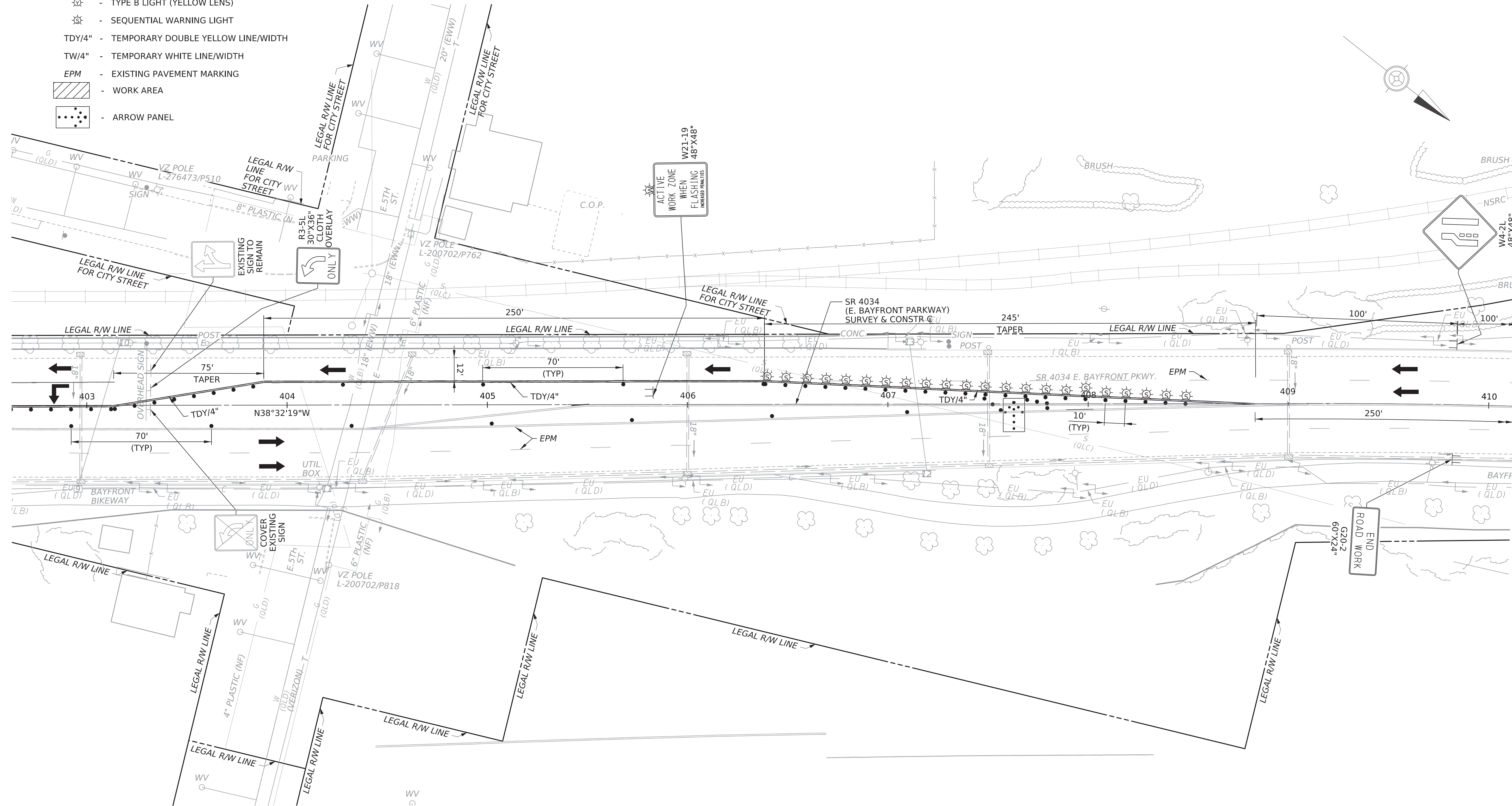
TRAFFIC CONTROL PLAN
 PHASE 3
 (SHEET 3 OF 5)



| | | | | |
|--------------|-----------|-------|---------|----------|
| DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
| 1-0 | ERIE | 4034 | 500 | 21 OF 48 |
| CITY OF ERIE | | | | |
| REV NO | REVISIONS | | DATE | BY APPD |
| | | | | |

LEGEND

- PROPOSED SIGN
- TYPE III BARRICADE
- CHANNELIZING DEVICE
- DIRECTION OF TRAVEL
- TYPE B LIGHT (YELLOW LENS)
- SEQUENTIAL WARNING LIGHT
- TDY/4" - TEMPORARY DOUBLE YELLOW LINE/WIDTH
- TW/4" - TEMPORARY WHITE LINE/WIDTH
- EPM - EXISTING PAVEMENT MARKING
- WORK AREA
- ARROW PANEL



SEE SHEET 20 OF 48

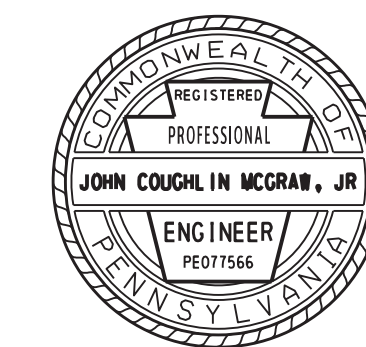
SEE SHEET 22 OF 48

SCALE



TRAFFIC CONTROL PLAN

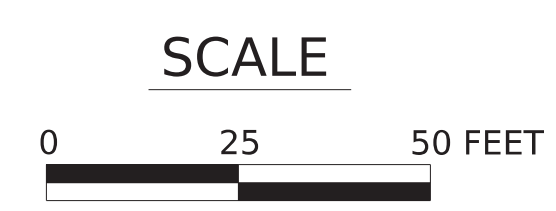
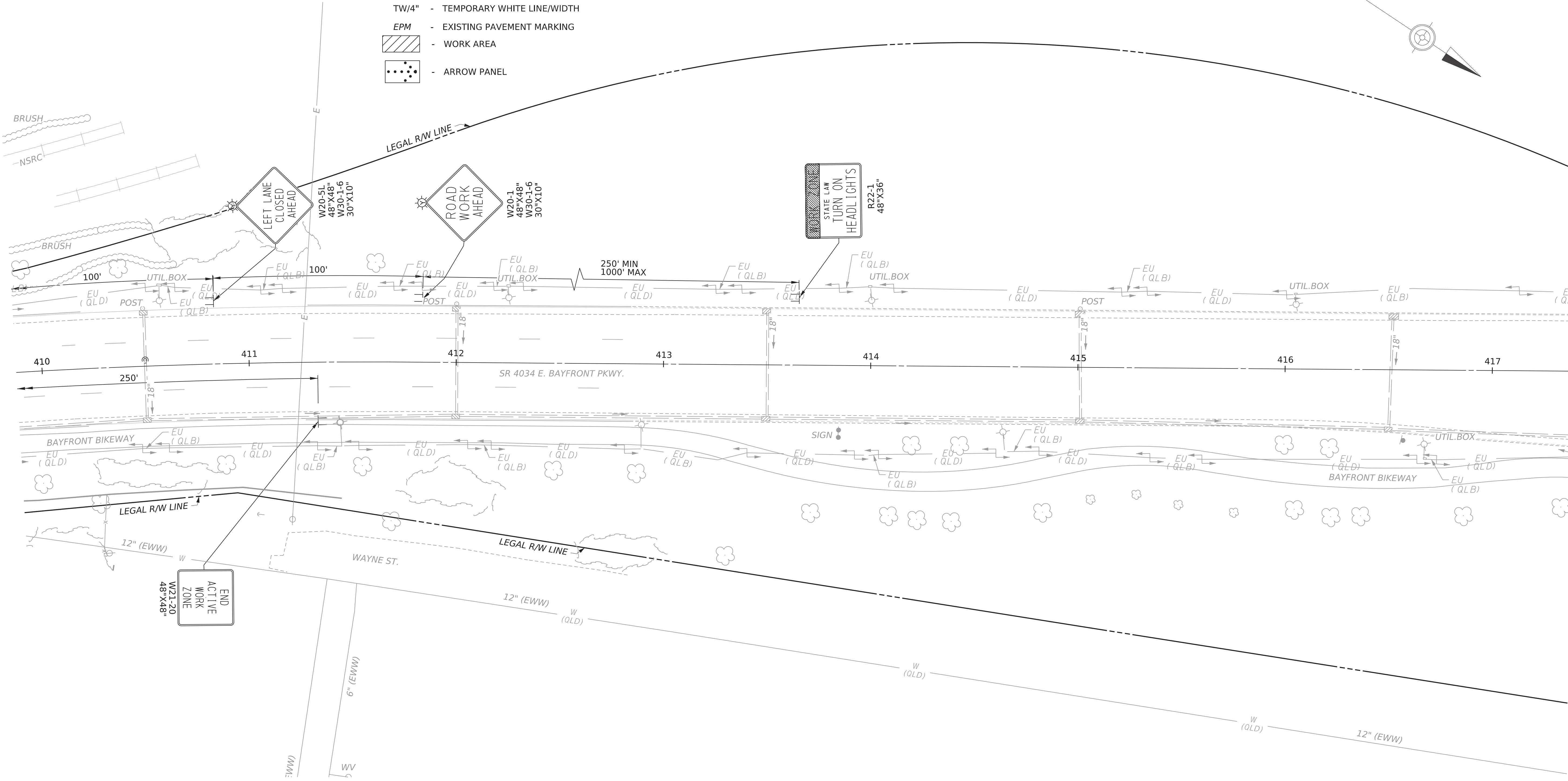
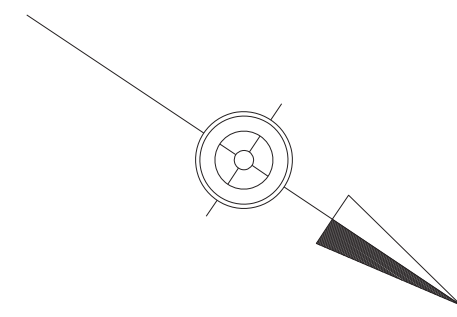
PHASE 3 (SHEET 4 OF 5)



| | | | | |
|--------------|-----------|-------|---------|----------|
| DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
| 1-0 | ERIE | 4034 | 500 | 22 OF 48 |
| CITY OF ERIE | | | | |
| REV NO | REVISIONS | DATE | BY | APPD |
| | | | | |

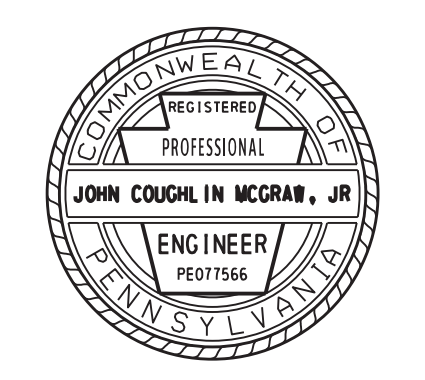
LEGEND

- PROPOSED SIGN
- TYPE III BARRICADE
- CHANNELIZING DEVICE
- DIRECTION OF TRAVEL
- TYPE B LIGHT (YELLOW LENS)
- SEQUENTIAL WARNING LIGHT
- TDY/4"
- TW/4"
- EPM
- WORK AREA
- ARROW PANEL

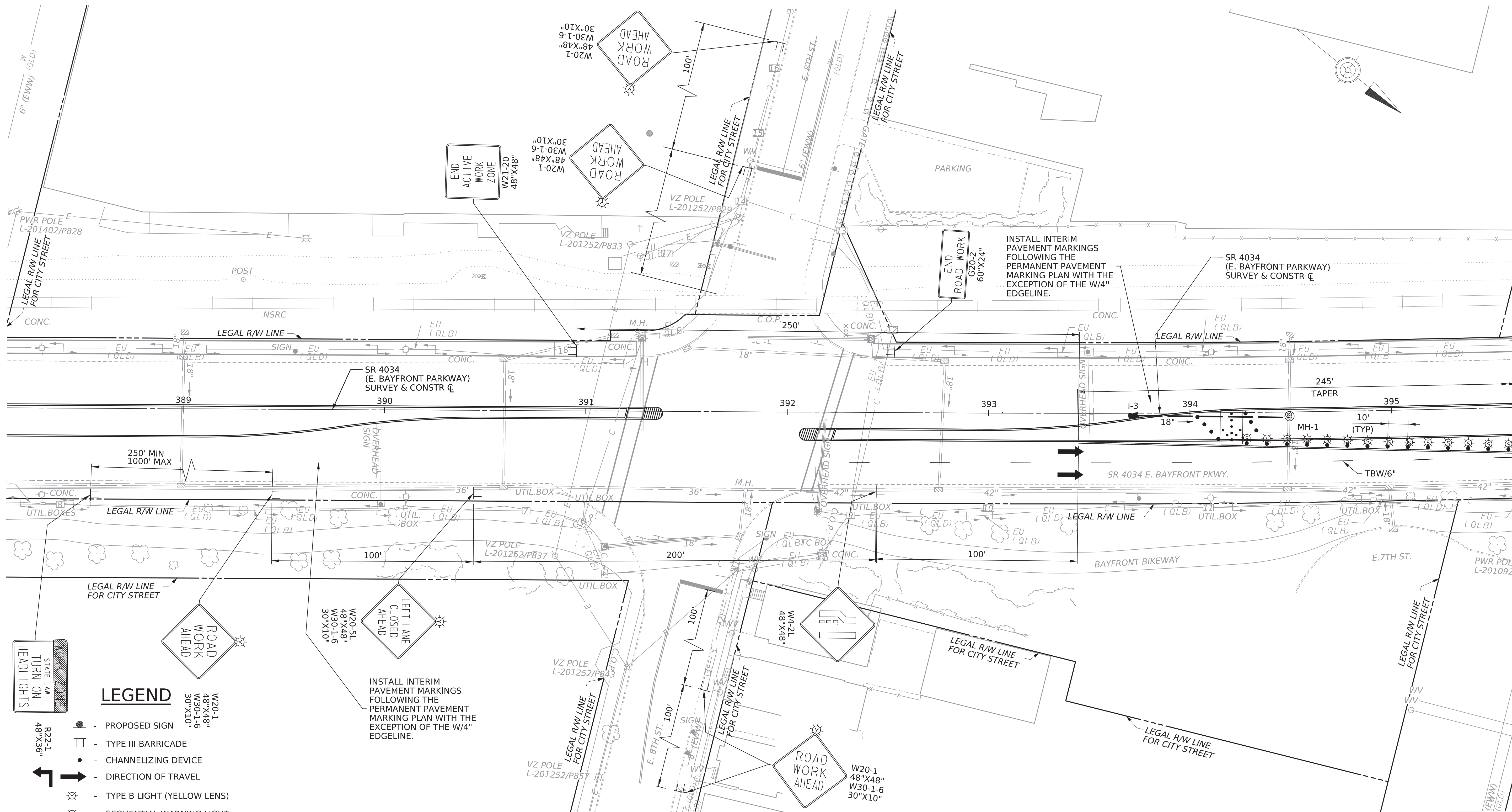


TRAFFIC CONTROL PLAN

PHASE 3
(SHEET 5 OF 5)



| | | | | | | |
|--------------|-----------|-------|---------|----------|----|------|
| DISTRICT | COUNTY | ROUTE | SECTION | SHEET | | |
| 1-0 | ERIE | 4034 | 500 | 23 OF 48 | | |
| CITY OF ERIE | | | | | | |
| REV NO | REVISIONS | | | DATE | BY | APPD |
| | | | | | | |



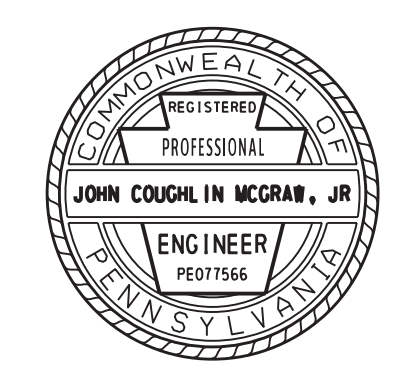
LEGEND

- - PROPOSED SIGN
- TT - TYPE III BARRICADE
- - CHANNELIZING DEVICE
- - DIRECTION OF TRAVEL
- ⊛ - TYPE B LIGHT (YELLOW LENS)
- ⊛ - SEQUENTIAL WARNING LIGHT
- TDY/4" - TEMPORARY DOUBLE YELLOW LINE/WIDTH
- TW/4" - TEMPORARY WHITE LINE/WIDTH
- EPM - EXISTING PAVEMENT MARKING
- ▨ - WORK AREA
- - ARROW PANEL

INSTALL INTERIM PAVEMENT MARKINGS FOLLOWING THE PERMANENT PAVEMENT MARKING PLAN WITH THE EXCEPTION OF THE W/4" EDGELINE.

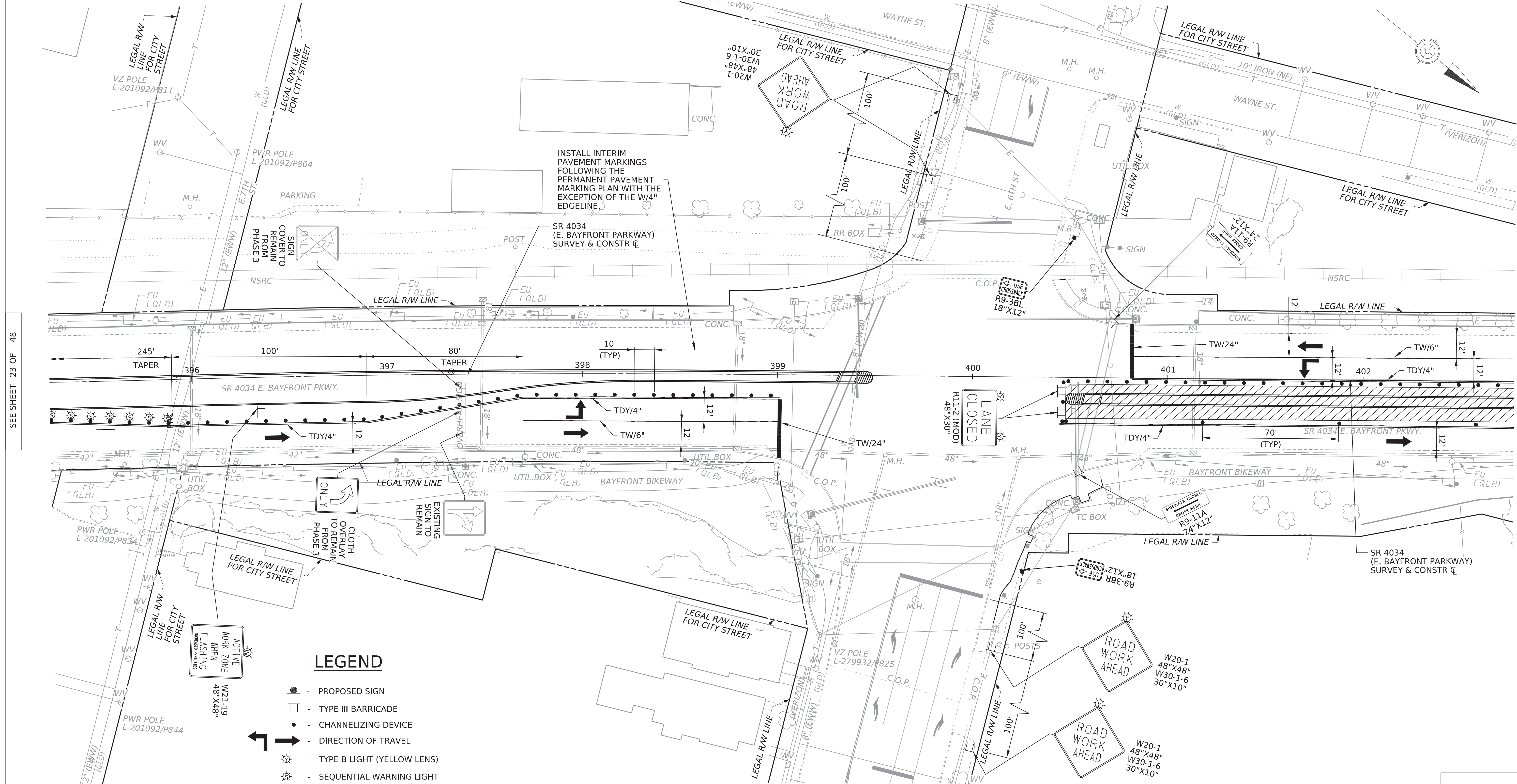


TRAFFIC CONTROL PLAN
 PHASE 4
 (SHEET 1 OF 4)



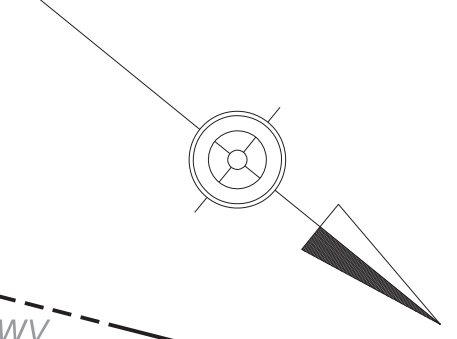
| DISTRICT | COUNTY | ROUTE | SECTION | SHEET | |
|--------------|-----------|-------|---------|----------|------|
| 1-0 | ERIE | 4034 | 500 | 24 OF 48 | |
| CITY OF ERIE | | | | | |
| REV NO | REVISIONS | | DATE | BY | APPD |
| | | | | | |

NOTES:
 1. SEE SHEET 40 - 41 FOR TEMPORARY SIGNAL PLAN.
 2. UTILIZE FLAGGING PER PENNDOT PUB. 213 WHILE ENTERING/EXISTING ACTIVE WORK AREA.



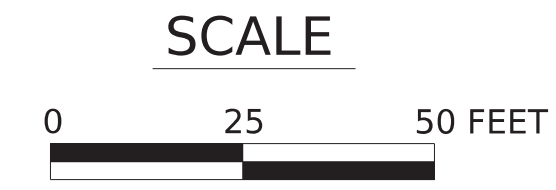
INSTALL INTERIM PAVEMENT MARKINGS FOLLOWING THE PERMANENT PAVEMENT MARKING PLAN WITH THE EXCEPTION OF THE W/4" EDGELINE.

SR 4034 (E. BAYFRONT PARKWAY) SURVEY & CONSTR C

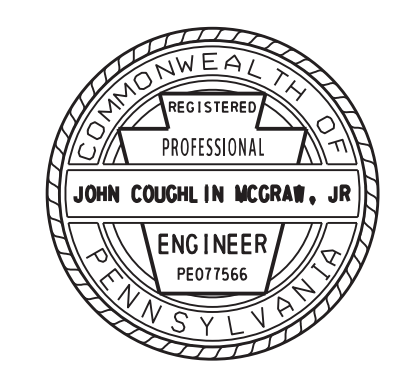


LEGEND

- - PROPOSED SIGN
- TT - TYPE III BARRICADE
- - CHANNELIZING DEVICE
- - DIRECTION OF TRAVEL
- ⚡ - TYPE B LIGHT (YELLOW LENS)
- ⚡ - SEQUENTIAL WARNING LIGHT
- TDY/4" - TEMPORARY DOUBLE YELLOW LINE/WIDTH
- TW/4" - TEMPORARY WHITE LINE/WIDTH
- EPM - EXISTING PAVEMENT MARKING
- ▨ - WORK AREA
- - ARROW PANEL



TRAFFIC CONTROL PLAN
 PHASE 4
 (SHEET 2 OF 4)



SEE SHEET 23 OF 48

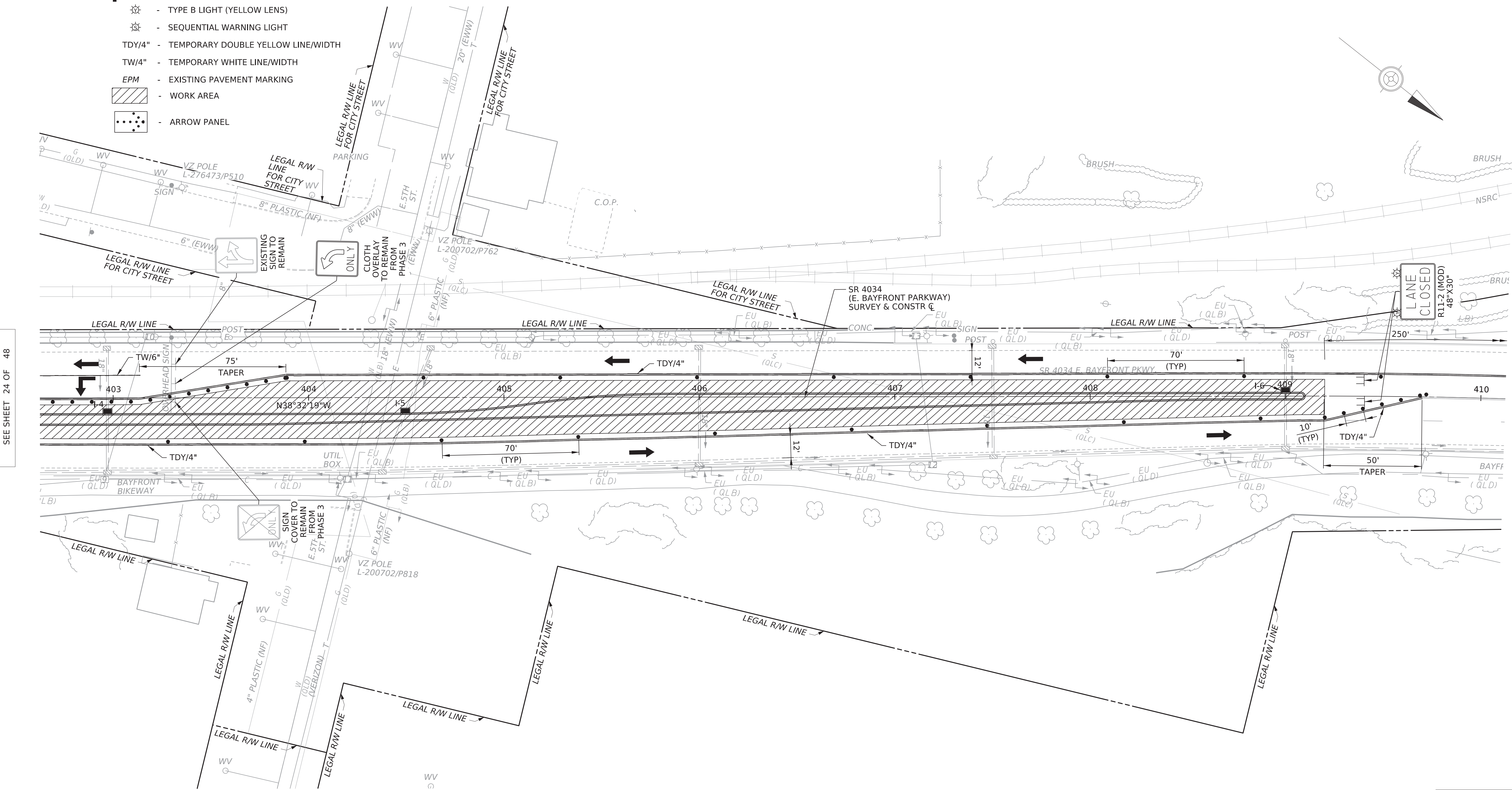
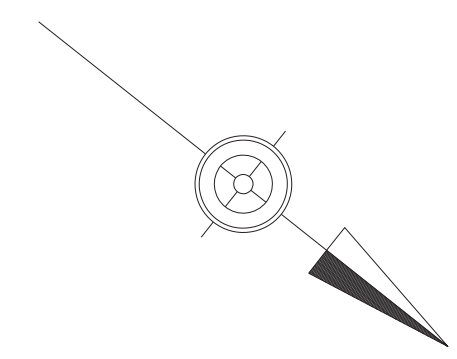
SEE SHEET 25 OF 48

| | | | | |
|--------------|-----------|-------|---------|----------|
| DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
| 1-0 | ERIE | 4034 | 500 | 25 OF 48 |
| CITY OF ERIE | | | | |
| REV NO | REVISIONS | | DATE | BY APPD |
| | | | | |

LEGEND

- - PROPOSED SIGN
- TT - TYPE III BARRICADE
- - CHANNELIZING DEVICE
- ↔ - DIRECTION OF TRAVEL
- ⊙ - TYPE B LIGHT (YELLOW LENS)
- ⊙ - SEQUENTIAL WARNING LIGHT
- TDY/4" - TEMPORARY DOUBLE YELLOW LINE/WIDTH
- TW/4" - TEMPORARY WHITE LINE/WIDTH
- EPM - EXISTING PAVEMENT MARKING
- ▨ - WORK AREA
- - ARROW PANEL

NOTE:
1. UTILIZE FLAGGING PER PENNDOT PUB. 213 WHILE ENTERING/EXISTING ACTIVE WORK AREA.



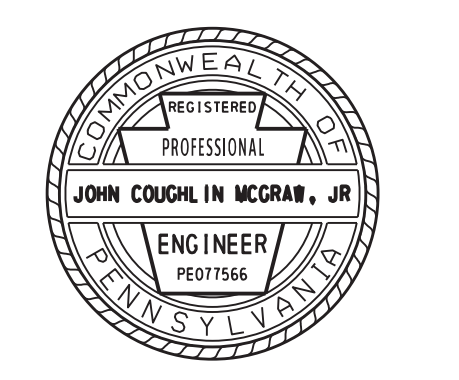
SEE SHEET 24 OF 48

SEE SHEET 26 OF 48



TRAFFIC CONTROL PLAN

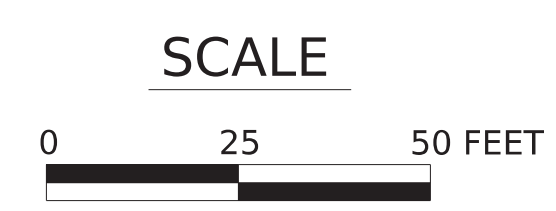
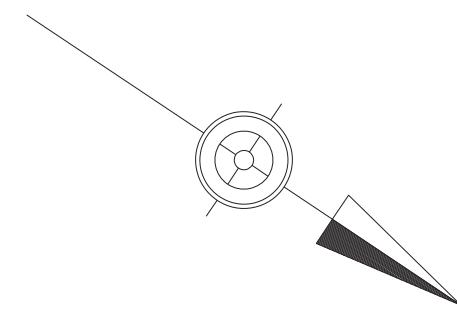
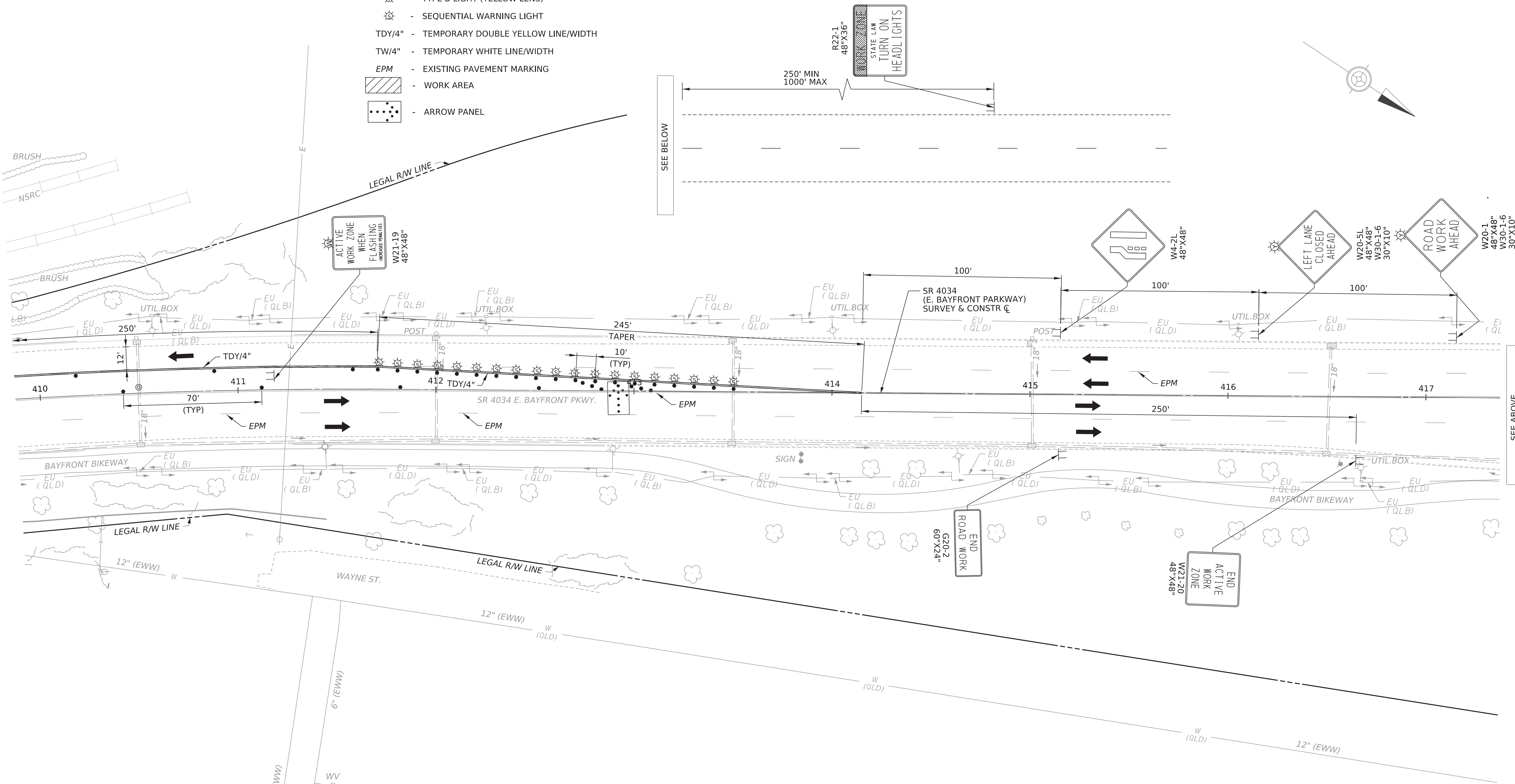
PHASE 4
(SHEET 3 OF 4)



| | | | | | | |
|--------------|-----------|-------|---------|----------|----|------|
| DISTRICT | COUNTY | ROUTE | SECTION | SHEET | | |
| 1-0 | ERIE | 4034 | 500 | 26 OF 48 | | |
| CITY OF ERIE | | | | | | |
| REV NO | REVISIONS | | | DATE | BY | APPD |
| | | | | | | |

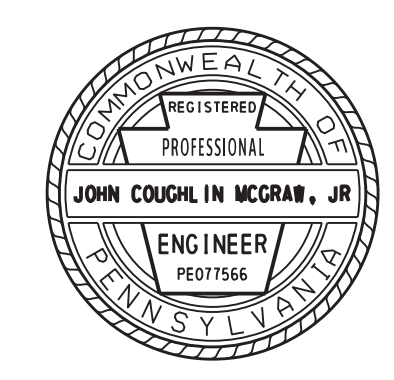
LEGEND

- PROPOSED SIGN
- TYPE III BARRICADE
- CHANNELIZING DEVICE
- DIRECTION OF TRAVEL
- TYPE B LIGHT (YELLOW LENS)
- SEQUENTIAL WARNING LIGHT
- TDY/4" - TEMPORARY DOUBLE YELLOW LINE/WIDTH
- TW/4" - TEMPORARY WHITE LINE/WIDTH
- EPM - EXISTING PAVEMENT MARKING
- WORK AREA
- ARROW PANEL



TRAFFIC CONTROL PLAN

PHASE 4
(SHEET 4 OF 4)



| | | | | | | |
|--------------|-----------|-------|---------|----------|----|------|
| DISTRICT | COUNTY | ROUTE | SECTION | SHEET | | |
| 1-0 | ERIE | 4034 | 500 | 27 OF 48 | | |
| CITY OF ERIE | | | | | | |
| REV NO | REVISIONS | | | DATE | BY | APPD |
| | | | | | | |

**SR 0290/SR 4034 (BAYFRONT CONNECTOR)
AND SR 0005 (EAST 12TH STREET)**

COORDINATION PLAN

| PLAN | DAY OF WEEK | | | | | | | TIME | CYCLE LENGTH | OFFSET | SPLITS | | | | | | | |
|------|-------------|---|---|---|---|---|---|----------------------|--------------|--------|--------|----|----|----|----|----|----|----|
| | S | M | T | W | T | F | S | | | | Ø1 | Ø2 | Ø3 | Ø4 | Ø5 | Ø6 | Ø7 | Ø8 |
| 3 | X | X | X | X | X | X | | 12:00 AM TO 6:30 AM | 70 | 0 | 14 | 19 | 13 | 24 | 14 | 19 | 13 | 24 |
| 1 | X | X | X | X | X | X | | 6:30 AM TO 9:30 AM | 110 | 0 | 14 | 31 | 26 | 39 | 14 | 31 | 13 | 52 |
| 3 | X | X | X | X | X | X | | 9:30 AM TO 3:00 PM | 70 | 0 | 14 | 19 | 13 | 24 | 14 | 19 | 13 | 24 |
| 2 | X | X | X | X | X | X | | 3:00 PM TO 6:00 PM | 110 | 0 | 14 | 32 | 13 | 51 | 14 | 32 | 13 | 51 |
| 3 | X | X | X | X | X | X | | 6:00 PM TO 12:00 AM | 70 | 0 | 14 | 19 | 13 | 24 | 14 | 19 | 13 | 24 |
| 3 | X | | | | | | X | 12:00 AM TO 12:00 PM | 70 | 0 | 14 | 19 | 13 | 24 | 14 | 19 | 13 | 24 |

SR 4034 (BAYFRONT PARKWAY) AND EAST EIGHTH STREET

COORDINATION PLAN

| PLAN | DAY OF WEEK | | | | | | | TIME | CYCLE LENGTH | OFFSET | SPLITS | | | |
|------|-------------|---|---|---|---|---|---|----------------------|--------------|--------|--------|----|----|----|
| | S | M | T | W | T | F | S | | | | Ø2 | Ø4 | Ø6 | Ø8 |
| 3 | X | X | X | X | X | X | | 12:00 AM TO 6:30 AM | 70 | 22 | 18 | 52 | 18 | 52 |
| 1 | X | X | X | X | X | X | | 6:30 AM TO 9:30 AM | 110 | 100 | 18 | 92 | 18 | 92 |
| 3 | X | X | X | X | X | X | | 9:30 AM TO 3:00 PM | 70 | 22 | 18 | 52 | 18 | 52 |
| 2 | X | X | X | X | X | X | | 3:00 PM TO 6:00 PM | 110 | 68 | 36 | 74 | 36 | 74 |
| 3 | X | X | X | X | X | X | | 6:00 PM TO 12:00 AM | 70 | 22 | 18 | 52 | 18 | 52 |
| 3 | X | | | | | | X | 12:00 AM TO 12:00 PM | 70 | 22 | 18 | 52 | 18 | 52 |

SR 4034 (BAYFRONT PARKWAY) AND EAST TENTH STREET

COORDINATION PLAN

| PLAN | DAY OF WEEK | | | | | | | TIME | CYCLE LENGTH | OFFSET | SPLITS | | | | |
|------|-------------|---|---|---|---|---|---|----------------------|--------------|--------|--------|------|------|----|------|
| | S | M | T | W | T | F | S | | | | Ø2 | Ø4 | Ø6 | Ø7 | Ø8 |
| 3 | X | X | X | X | X | X | | 12:00 AM TO 6:30 AM | 70 | 16 | 35.5 | 34.5 | 35.5 | 13 | 21.5 |
| 1 | X | X | X | X | X | X | | 6:30 AM TO 9:30 AM | 110 | 26 | 36 | 74 | 36 | 13 | 61 |
| 3 | X | X | X | X | X | X | | 9:30 AM TO 3:00 PM | 70 | 16 | 35.5 | 34.5 | 35.5 | 13 | 21.5 |
| 2 | X | X | X | X | X | X | | 3:00 PM TO 6:00 PM | 110 | 16 | 41 | 69 | 41 | 13 | 56 |
| 3 | X | X | X | X | X | X | | 6:00 PM TO 12:00 AM | 70 | 16 | 35.5 | 34.5 | 35.5 | 13 | 21.5 |
| 3 | X | | | | | | X | 12:00 AM TO 12:00 PM | 70 | 16 | 35.5 | 34.5 | 35.5 | 13 | 21.5 |

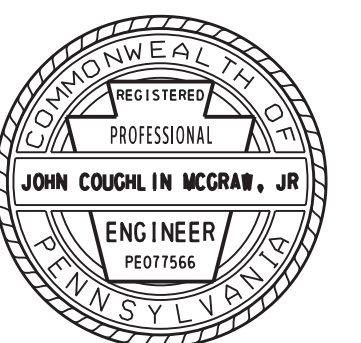
SR 4034 (BAYFRONT PARKWAY) AND EAST SIXTH STREET

COORDINATION PLAN

| PLAN | DAY OF WEEK | | | | | | | TIME | CYCLE LENGTH | OFFSET | SPLITS | | | | | | | |
|------|-------------|---|---|---|---|---|---|----------------------|--------------|--------|--------|----|----|----|----|----|----|----|
| | S | M | T | W | T | F | S | | | | Ø1 | Ø2 | Ø3 | Ø4 | Ø5 | Ø6 | Ø7 | Ø8 |
| 3 | X | X | X | X | X | X | | 12:00 AM TO 6:30 AM | 70 | 62 | 12 | 17 | 11 | 30 | 12 | 17 | 15 | 26 |
| 1 | X | X | X | X | X | X | | 6:30 AM TO 9:30 AM | 110 | 58 | 12 | 23 | 15 | 60 | 12 | 23 | 22 | 53 |
| 3 | X | X | X | X | X | X | | 9:30 AM TO 3:00 PM | 70 | 62 | 12 | 17 | 11 | 30 | 12 | 17 | 15 | 26 |
| 2 | X | X | X | X | X | X | | 3:00 PM TO 6:00 PM | 110 | 26 | 15 | 30 | 11 | 54 | 12 | 33 | 30 | 35 |
| 3 | X | X | X | X | X | X | | 6:00 PM TO 12:00 AM | 70 | 62 | 12 | 17 | 11 | 30 | 12 | 17 | 15 | 26 |
| 3 | X | | | | | | X | 12:00 AM TO 12:00 PM | 70 | 62 | 12 | 17 | 11 | 30 | 12 | 17 | 15 | 26 |

TRAFFIC CONTROL PLAN

TEMPORARY SIGNAL
COORDINATION PLAN



| | | | | |
|-----------------|---------------|-------|---------|----------|
| DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
| 1-0 | ERIE | 4034 | S00 | 28 OF 48 |
| CITY OF ERIE | | | | |
| REVISION NUMBER | REVISIONS | | | DATE BY |
| | | | | |
| PERMIT NO: | SHEET: 2 OF 3 | | | |
| DATE ISSUED: | DATE REVISED: | | | |

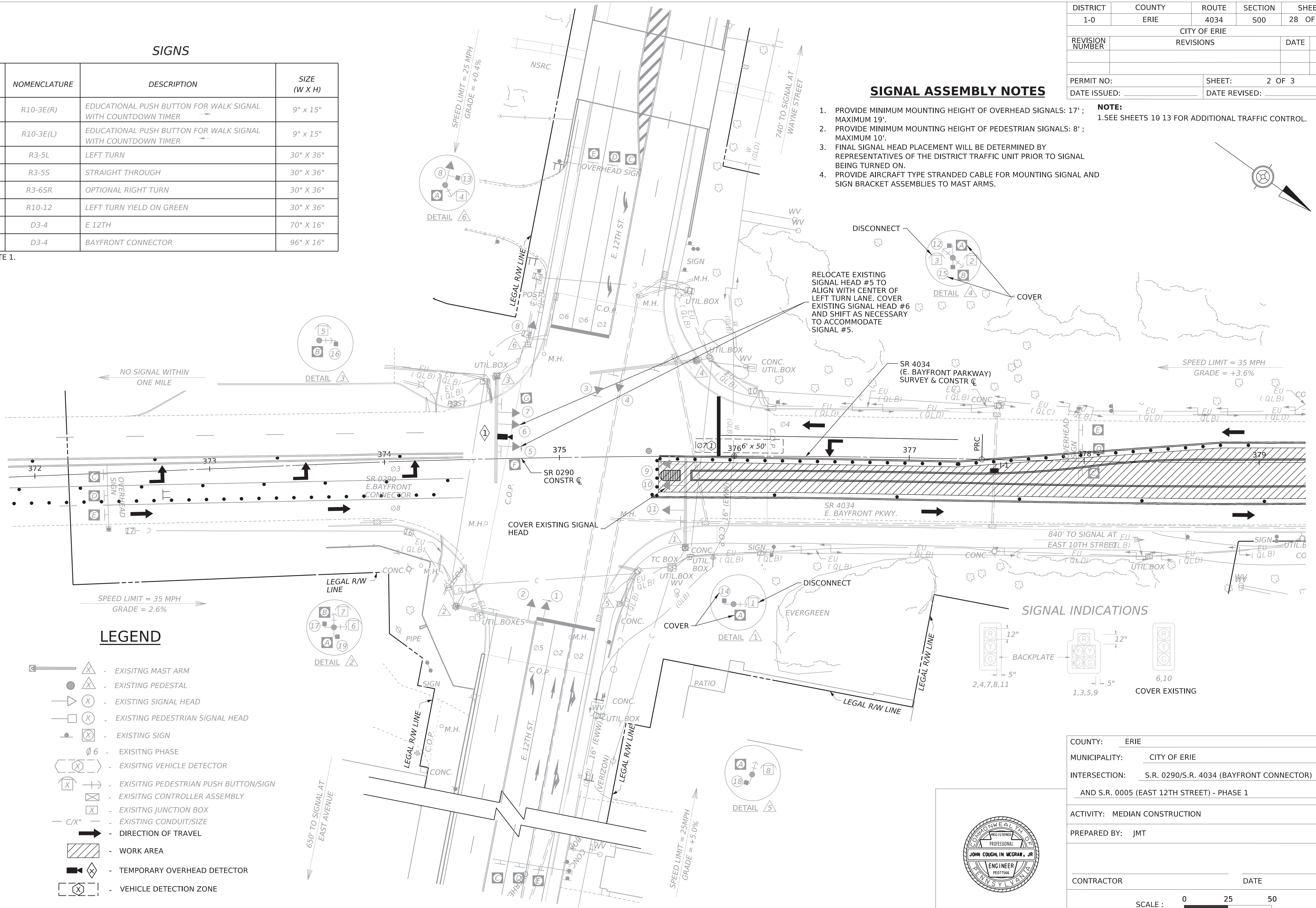
SIGNS

| PLAN SYMBOL | NOMENCLATURE | DESCRIPTION | SIZE (W X H) |
|-------------|--------------|--|--------------|
| | R10-3E(R) | EDUCATIONAL PUSH BUTTON FOR WALK SIGNAL WITH COUNTDOWN TIMER | 9" x 15" |
| | R10-3E(L) | EDUCATIONAL PUSH BUTTON FOR WALK SIGNAL WITH COUNTDOWN TIMER | 9" x 15" |
| | R3-5L | LEFT TURN | 30" x 36" |
| | R3-5S | STRAIGHT THROUGH | 30" x 36" |
| | R3-6SR | OPTIONAL RIGHT TURN | 30" x 36" |
| | R10-12 | LEFT TURN YIELD ON GREEN | 30" x 36" |
| | D3-4 | E 12TH | 70" x 16" |
| | D3-4 | BAYFRONT CONNECTOR | 96" x 16" |

● SEE NOTE 1.

SIGNAL ASSEMBLY NOTES

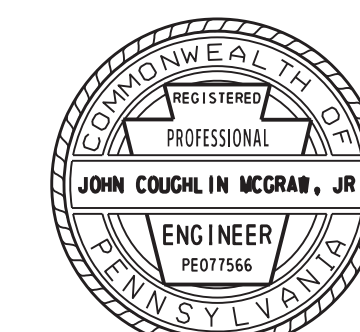
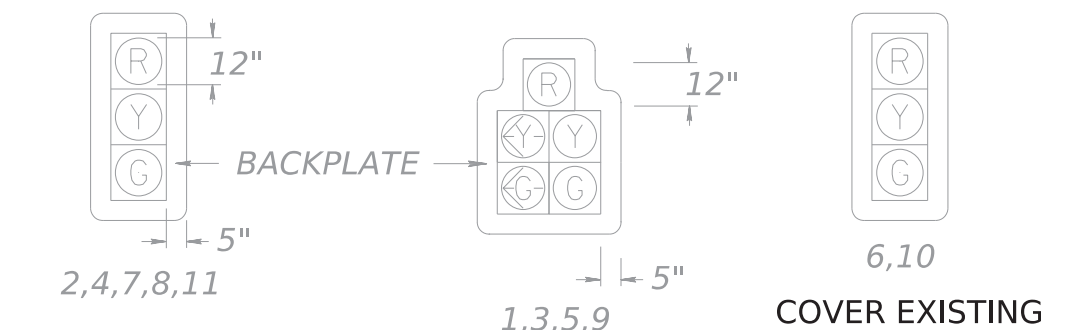
1. PROVIDE MINIMUM MOUNTING HEIGHT OF OVERHEAD SIGNALS: 17'; MAXIMUM 19'.
 2. PROVIDE MINIMUM MOUNTING HEIGHT OF PEDESTRIAN SIGNALS: 8'; MAXIMUM 10'.
 3. FINAL SIGNAL HEAD PLACEMENT WILL BE DETERMINED BY REPRESENTATIVES OF THE DISTRICT TRAFFIC UNIT PRIOR TO SIGNAL BEING TURNED ON.
 4. PROVIDE AIRCRAFT TYPE STRANDED CABLE FOR MOUNTING SIGNAL AND SIGN BRACKET ASSEMBLIES TO MAST ARMS.
- NOTE:**
1. SEE SHEETS 10 13 FOR ADDITIONAL TRAFFIC CONTROL.



LEGEND

- EXISTING MAST ARM
- EXISTING PEDESTAL
- EXISTING SIGNAL HEAD
- EXISTING PEDESTRIAN SIGNAL HEAD
- EXISTING SIGN
- EXISTING PHASE
- EXISTING VEHICLE DETECTOR
- EXISTING PEDESTRIAN PUSH BUTTON/SIGN
- EXISTING CONTROLLER ASSEMBLY
- EXISTING JUNCTION BOX
- EXISTING CONDUIT/SIZE
- DIRECTION OF TRAVEL
- WORK AREA
- TEMPORARY OVERHEAD DETECTOR
- VEHICLE DETECTION ZONE

SIGNAL INDICATIONS



COUNTY: ERIE
 MUNICIPALITY: CITY OF ERIE
 INTERSECTION: S.R. 0290/S.R. 4034 (BAYFRONT CONNECTOR)
 AND S.R. 0005 (EAST 12TH STREET) - PHASE 1

ACTIVITY: MEDIAN CONSTRUCTION
 PREPARED BY: JMT

CONTRACTOR: _____ DATE: _____



MOVEMENT, PHASING, AND SEQUENCE CHART

| SIGNAL | PHASE 1+5 | | | | PHASE 1+6 | | | | PHASE 2+5 | | | | PHASE 2+6 | | | | PHASE 3+7 | | | | PHASE 3+8 | | | | PHASE 4+7 | | | | PHASE 4+8 | | | | EMERGENCY FLASHING |
|-------------------|--|----|----|--|-----------|----|----|----|-----------|----|----|----|-----------|----|----|----|-----------|-----|-----|----|-----------|-----|-----|----|-----------|-----|-----|----|-----------|-----|-----|----|--------------------|
| | 1 | 2 | 3 | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | |
| 1 | R | R | R | | G | G | Y | R | R | R | R | R | G | G | Y | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R |
| 2,8 | R | R | R | | G | G | Y | R | R | R | R | R | G | G | Y | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R |
| 3 | R | R | R | | R | R | R | R | G | G | Y | R | G | G | Y | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R |
| 4 | R | R | R | | R | R | R | R | G | G | Y | R | G | G | Y | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R |
| 5 | R | R | R | | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | G | G | Y | R | Y |
| 7 | R | R | R | | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | G | G | Y | R | Y |
| 9 | R | R | R | | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | G | G | Y | R | Y |
| 11 | R | R | R | | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R | G | G | Y | R | Y |
| 12,13 | DW | DW | DW | | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | W | FD | DW | DW | W | FD | DW | DW | OFF |
| 14,15 | COVER EXISTING PEDESTRIAN SIGNAL HEADS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16,17 | DW | DW | DW | | W | FD | DW | DW | DW | DW | DW | DW | W | FD | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | OFF |
| 18,19 | DW | DW | DW | | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | W | FD | DW | DW | DW | DW | DW | DW | W | FD | DW | DW | OFF |
| FIXED | | 4 | 3 | | | 4 | 3 | | | 4 | 3 | | | 4 | 3 | | | 3.5 | 2.5 | | | 3.5 | 2.5 | | | 3.5 | 2.5 | | | 3.5 | 2.5 | | |
| MINIMUM | 7 | | | | 7 | | | | 7 | | | | 10 | | | | 7 | | | | 7 | | | | 7 | | | | 7 | | | | |
| ADDED INITIAL | | | | | | | | | | | | | 21 | | | | | | | | | | | | | | | | | | | | |
| MAX. INITIAL | | | | | | | | | | | | | 17 | | | | | | | | | | | | | | | | | | | | |
| PASSAGE TO REDUCE | 3 | | | | 3 | | | | 3 | | | | 7 | | | | 3 | | | | 3 | | | | 3 | | | | 4 | | | | |
| BEFORE RED | | | | | | | | | | | | | 25 | | | | | | | | | | | | | | | | | | | | |
| MIN. GAP | | | | | | | | | | | | | 3 | | | | | | | | | | | | | | | | | | | | |
| MAX I* | 12 | | | | 12 | | | | 12 | | | | 46 | | | | 12 | | | | 12 | | | | 12 | | | | 32 | | | | |
| MAX II* | 12 | | | | 12 | | | | 12 | | | | 46 | | | | 12 | | | | 12 | | | | 12 | | | | 32 | | | | |
| *** PEDESTRIAN | | | | | ⑩ | | | | ⑩ | | | | 19 | 25 | | | | | | | ⑨ | | | | ⑨ | | | | 14 | 18 | | | |
| MEMORY | NL | | | | NL | | | | NL | | | | MN | | | | NL | | | | NL | | | | NL | | | | NL | | | | |

*** UPON PEDESTRIAN ACTIVATION, OTHERWISE DON'T WALK AT ALL TIMES.

MN - MINIMUM RECALL
MX - MAXIMUM RECALL
L - LOCKING
NL - NON-LOCKING

- ① R/G- IF FOLLOWED BY | 1+6
- ② R/G- IF FOLLOWED BY | 2+5
- ③ G/Y- IF FOLLOWED BY | 2+6
- ④ G IF FOLLOWED BY | 2+6
- ⑤ G/Y- IF FOLLOWED BY | 4+8
- ⑥ R/G- IF FOLLOWED BY | 4+7
- ⑦ R/G- IF FOLLOWED BY | 3+8
- ⑧ G IF FOLLOWED BY | 4+8

- ⑨ TIMING WILL BE AS SHOWN IN PHASE 4+8. INTERVALS 1 & 2 MAY TIME OUT IN THIS PHASE OR MAY BE COMPLETED IN PHASE 4+8.
- ⑩ TIMING WILL BE AS SHOWN IN PHASE 2+6. INTERVALS 1 & 2 MAY TIME OUT IN THIS PHASE OR MAY BE COMPLETED IN PHASE 2+6.

MAX I* : 10PM TO 10AM **
MAX II** : 10AM TO 10PM **
** IN CASE OF COORDINATION FAILURE

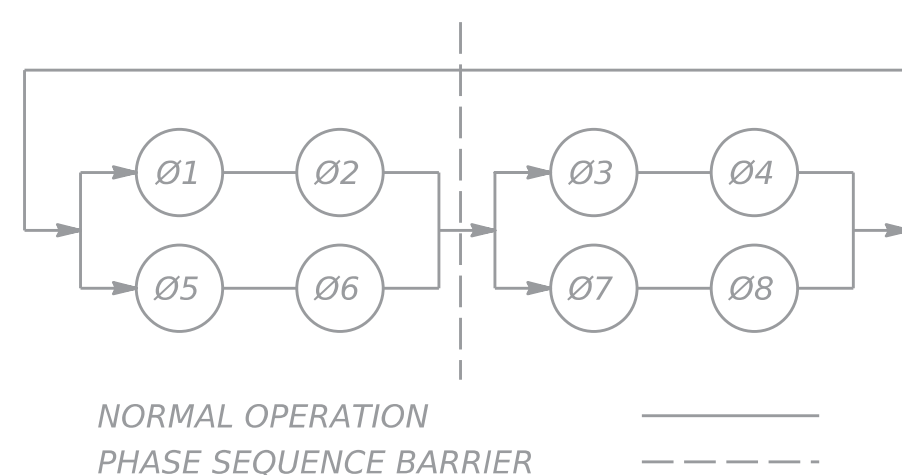
| ITEM NUMBER | DESCRIPTION | QTY | LOCATION | REMARKS |
|--------------|--|-----|----------|------------------------|
| 4954 0203 LF | SIGNAL CABLE, 14 AWG, 7 CONDUCTOR, TEMPORARY | 20 | 374+65 | EXISTING SIGNAL HEAD 5 |

ITEM 0958-0321 (FOR INFORMATION ONLY)

| DESCRIPTION | QTY | LOCATION | REMARKS |
|-------------------------------------|-----|----------|---------|
| TEMPORARY OVERHEAD DETECTION SYSTEM | 1 | ① | |

- NOTES:
1. SIGNAL HEADS 6 AND 10 COVERED DURING THIS PHASE.
2. MAINTAIN ALL EXISTING PREEMPTION.

PHASING DIAGRAM



| DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
|-----------------|-----------|---------------|---------|----------|
| 1-0 | ERIE | 4034 | 500 | 29 OF 48 |
| CITY OF ERIE | | | | |
| REVISION NUMBER | REVISIONS | DATE | BY | |
| | | | | |
| PERMIT NO: | | SHEET: 3 OF 3 | | |
| DATE ISSUED: | | DATE REVISED: | | |

NOTES

- INSTALLATION, OPERATION, AND MAINTENANCE OF THESE SIGNALS SHALL BE IN ACCORDANCE WITH PENNSYLVANIA DEPARTMENT OF TRANSPORTATION REGULATIONS GOVERNING THE DESIGN, LOCATION, AND OPERATION OF SIGNS, SIGNALS, AND PAVEMENT MARKINGS.
- NO MODIFICATIONS OF THIS INSTALLATION ARE PERMITTED UNLESS PRIOR APPROVAL IS GRANTED, IN WRITING, BY THE SECRETARY OF TRANSPORTATION OR HIS REPRESENTATIVE.
- MAINTENANCE WORK ON ALL APPROACHES TO THE SIGNALIZED INTERSECTION NECESSARY FOR PROPER VISIBILITY OF THE SIGNS AND SIGNALS, INCLUDING TRIMMING OF TREES, IS THE RESPONSIBILITY OF THE PERMITTEE.
- UNLESS OTHERWISE NOTED, THE PERMITTEE SHALL MAINTAIN CURBING AND OTHER DRAINAGE FACILITIES IN ACCORDANCE WITH DEPARTMENT STANDARDS AND CRITERIA, EXCEPT FOR INLET GRATES THAT WILL BE MAINTAINED BY THE DEPARTMENT AS A PART OF THE ROADWAY SURFACE.
- ALL SIGNS, CURBS, CURB RAMPS, SIDEWALKS, AND PAVEMENT MARKINGS INDICATED ON THIS DRAWING ARE CONSIDERED PART OF THE PERMIT AND SHALL BE INSTALLED AND MAINTAINED BY THE PERMITTEE IN ACCORDANCE WITH PENNSYLVANIA DEPARTMENT OF TRANSPORTATION PUBLICATION 68, OFFICAL TRAFFIC CONTROL DEVICES. EXCEPTIONS ARE LONGITUDINAL PAVEMENT MARKINGS IN STATE HIGHWAYS, WHICH ARE MAINTAINED BY THE DEPARTMENT.
- SUPPORT POLES FOR OVERHEAD SIGNALS AND SIGNS SHALL HAVE A MINIMUM CLEARANCE OF 2 FEET BEHIND THE FACE OF THE CURB OR 12 FEET FROM THE EDGE OF THE TRAVELED ROADWAY TO EDGE OF SUPPORT POLE.
- VEHICULAR SIGNALS OR SIGNS ERECTED OVER THE ROADWAY SHALL HAVE A CLEARANCE OF 17 FEET ABOVE THE ROADWAY. UNLESS OTHERWISE NOTED, POST MOUNTED VEHICULAR SIGNALS SHALL HAVE A CLEARANCE OF NOT LESS THAN 8 FEET NOR MORE THAN 15 FEET ABOVE THE SIDEWALK LEVEL OR PAVEMENT GRADE AT THE CENTER OF THE HIGHWAY IF NO SIDEWALK EXISTS. UNLESS OTHERWISE NOTED, PEDESTRIAN SIGNALS SHALL HAVE A CLEARANCE OF 8 FEET ABOVE THE SIDEWALK LEVEL. UNLESS OTHERWISE NOTED, POST MOUNTED SIGNS SHALL HAVE A CLEARANCE OF 7 FEET ABOVE THE SIDEWALK LEVEL OR ABOVE THE EDGE OF ROADWAY GRADE, IF NO SIDEWALK EXISTS. UNLESS OTHERWISE NOTED, THE TOP OF THE POST MOUNTED SIGNS SHALL BE A MINIMUM 9 FEET ABOVE GROUND LINE.
- THE MINIMUM HORIZONTAL DISTANCE BETWEEN SIGNAL, MEASURED AT RIGHT ANGLES TO THE APPROACH, SHALL BE 8 FEET.
- THIS DRAWING CANNOT BE USED AS A CONSTRUCTION DRAWING UNLESS THE PERMITTEE COMPLIES WITH THE PROVISIONS OF THE LATEST ACT PREVENTING DAMAGE TO UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. CONSULT WITH UTILITY COMPANIES TO RESOLVE ANY PROBLEMS THAT MAY BE CREATED DUE TO THE LOCATION OF UTILITIES.

COORDINATION NOTES

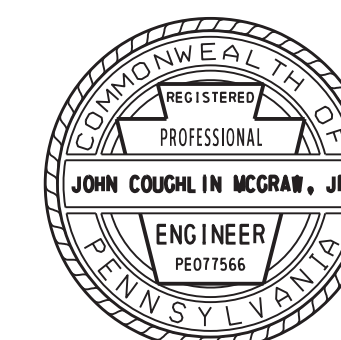
CONTROLLER TO BE COORDINATED WITH ADJACENT CONTROLLERS THROUGH THE USE OF THE INTERCONNECT BABLE TO PROVIDE A PROGRESSIVE MOVEMENT OF TRAFFIC ALONG THE BAYFRONT CONNECTOR/PARKWAY (S.R. 4034/S.R. 0290), EAST 6TH STREET (S.R. 4018), EAST LAKE ROAD (S.R. 4018), EAST 10TH STREET, AND EAST 12TH STREET (S.R. 0005).

MASTER COMPUTER IS LOCATED AT THE CITY OF ERIE ENGINEERING OFFICES.

MASTER CONTROLLER IS LOCATED AT THE INTERSECTION OF EAST 6TH STREET (S.R. 4018) BAYFRONT CONNECTOR (S.R. 4034).

MASTER LOCATION FOR REFERENCING OFFSETS IS AT THE INTERSECTION OF EAST 12TH STREET (S.R. 0005) AT BAYFRONT CONNECTOR/PARKWAY (S.R. 4034/S.R. 0290). OFFSETS ARE REFERENCED TO THE END OF GREEN OF PHASE 4+8.

| | |
|---------------|--|
| COUNTY: | ERIE |
| MUNICIPALITY: | CITY OF ERIE |
| INTERSECTION: | S.R. 0290/S.R. 4034 (BAYFRONT CONNECTOR) AND S.R. 0005 (EAST 12TH STREET) - PHASE 1 |
| ACTIVITY: | MEDIAN CONSTRUCTION |
| PREPARED BY: | JMT |
| CONTRACTOR | DATE |



SCALE : 0 25 50
(IN FEET)

SIGNS

| PLAN SYMBOL | NOMEN-CLATURE | DESCRIPTION | SIZE (W X H) |
|-------------|---------------|--|--------------|
| A | D3-4 | E 10TH ST | 70" X 16" |
| B | D3-4 | BAYFRONT PARKWAY | 96" X 16" |
| C | R3-5L | LEFT TURN | 30" X 36" |
| D | R3-5S | STRAIGHT-THROUGH | 30" X 36" |
| E | R3-6SR | OPTIONAL RIGHT TURN | 30" X 36" |
| F | R3-7L | LEFT LANE MUST TURN LEFT | 30" X 30" |
| G | R10-11 | NO TURN ON RED | 30" X 36" |
| H | R10-12 | LEFT TURN YIELD ON GREEN | 30" X 36" |
| I | R10-4L | PUSH BUTTON FOR WALK SIGNAL | 9" X 12" |
| J | R10-4R | PUSH BUTTON FOR WALK SIGNAL | 9" X 12" |
| K | R10-6L | STOP HERE ON RED | 24" X 30" |
| L | R3-1 | NO RIGHT TURN (INTERNALLY ILLUMINATED) | 36" X 36" |
| M | R3-2 | NO LEFT TURN (INTERNALLY ILLUMINATED) | 36" X 36" |
| N | R5-1 | DO NOT ENTER (INTERNALLY ILLUMINATED) | 36" X 36" |
| O | R8-8 | DO NOT STOP ON TRACKS | 24" X 30" |
| P | R10-20 | OPPOSING TRAFFIC HAS EXTENDED GREEN | 30" X 36" |
| Q | R7-7A | NO PARKING ANYTIME | 12" X 18" |
| R | SPECIAL | NO TURN ON RED WHEN OVERHEAD SIGN IS LIT | 36" X 36" |

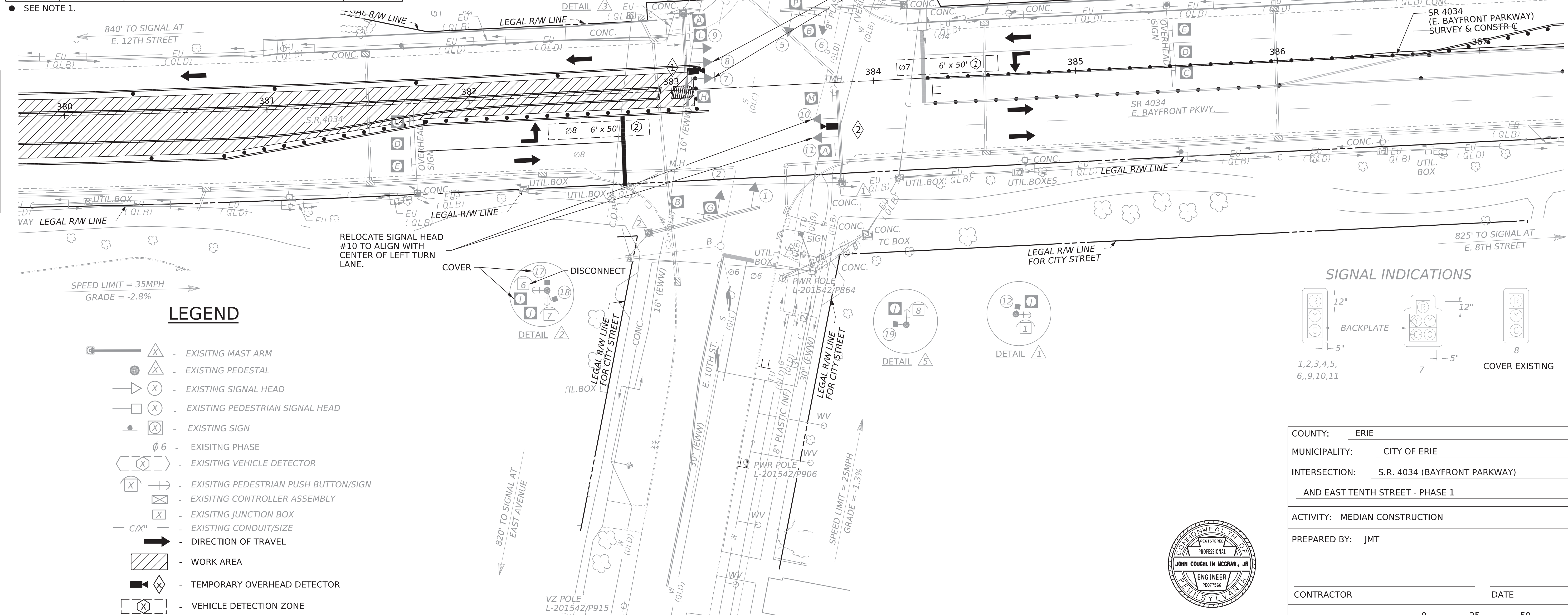
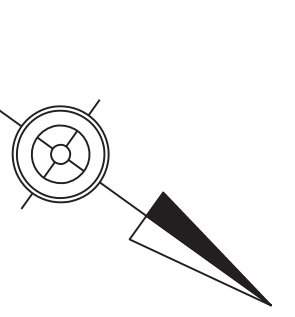
SEE NOTE 1.

| DISTRICT | COUNTY | ROUTE | SECTION | SHEET | |
|-----------------|-----------|---------------|---------|----------|----|
| 1-0 | ERIE | 4034 | 500 | 30 OF 48 | |
| CITY OF ERIE | | | | | |
| REVISION NUMBER | REVISIONS | | | DATE | BY |
| | | | | | |
| PERMIT NO: | | SHEET: 2 OF 3 | | | |
| DATE ISSUED: | | DATE REVISED: | | | |

NOTE:
1. SEE SHEETS 10-13 FOR ADDITIONAL TRAFFIC CONTROL.

SIGNAL ASSEMBLY NOTES

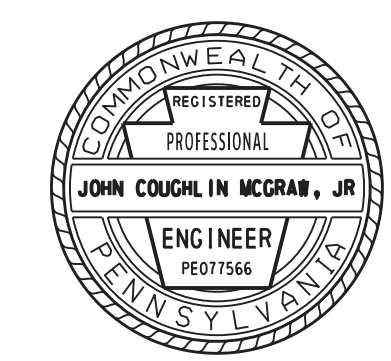
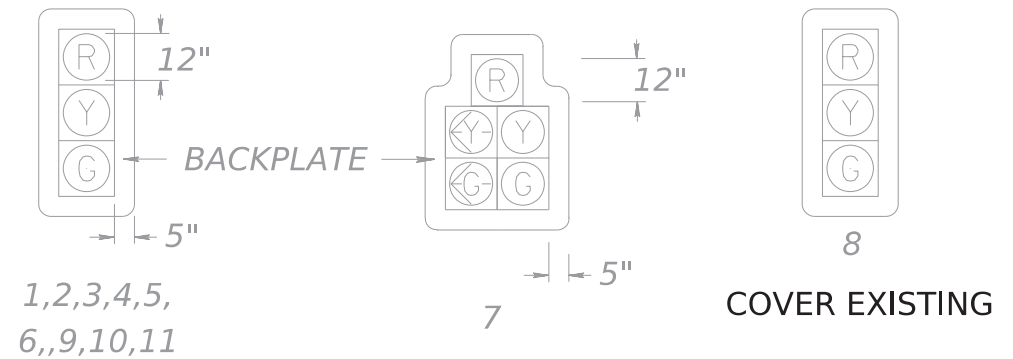
1. PROVIDE MINIMUM MOUNTING HEIGHT OF OVERHEAD SIGNALS: 17' ; MAXIMUM 19'.
2. PROVIDE MINIMUM MOUNTING HEIGHT OF PEDESTRIAN SIGNALS: 8' ; MAXIMUM 10'.
3. FINAL SIGNAL HEAD PLACEMENT WILL BE DETERMINED BY REPRESENTATIVES OF THE DISTRICT TRAFFIC UNIT PRIOR TO SIGNAL BEING TURNED ON.
4. PROVIDE AIRCRAFT TYPE STRANDED CABLE FOR MOUNTING SIGNAL AND SIGN BRACKET ASSEMBLIES TO MAST ARMS.



LEGEND

- EXISTING MAST ARM
- EXISTING PEDESTAL
- EXISTING SIGNAL HEAD
- EXISTING PEDESTRIAN SIGNAL HEAD
- EXISTING SIGN
- EXISTING PHASE
- EXISTING VEHICLE DETECTOR
- EXISTING PEDESTRIAN PUSH BUTTON/SIGN
- EXISTING CONTROLLER ASSEMBLY
- EXISTING JUNCTION BOX
- EXISTING CONDUIT/SIZE
- DIRECTION OF TRAVEL
- WORK AREA
- TEMPORARY OVERHEAD DETECTOR
- VEHICLE DETECTION ZONE

SIGNAL INDICATIONS



| | |
|---------------|---|
| COUNTY: | ERIE |
| MUNICIPALITY: | CITY OF ERIE |
| INTERSECTION: | S.R. 4034 (BAYFRONT PARKWAY) AND EAST TENTH STREET - PHASE 1 |
| ACTIVITY: | MEDIAN CONSTRUCTION |
| PREPARED BY: | JMT |
| CONTRACTOR: | DATE |



MOVEMENT, PHASING, AND SEQUENCE CHART

| SIGNAL | PHASE 2+6 | | | | PHASE 4+7 | | | | PHASE 4+8 | | | | RAILROAD PREEMPTION P1 | | | RAILROAD PREEMPTION P2 | | | EMERGENCY FLASHING | |
|---|--|------|-----|-----|-----------|------------------------|------------------------|-----|-------------------|-------------------|-----|-----|------------------------|-----|-----|------------------------|---|-------------------|--------------------|-----|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 1 | 2 | 3 | | 4 |
| 1,2 | G | G | G | Y | R | R | R | R | | | | | R | R | R | | | | | R |
| 3,4 | G | G | Y | R | R | R | R | R | | | | | R | R | R | | | | | R |
| 5,6 | G | G | Y | R | R | R | R | R | | | | | R | R | R | | | | | R |
| 7 | R | R | R | R | R | $\frac{G}{\epsilon G}$ | $\frac{G}{\epsilon G}$ | Y | $\textcircled{2}$ | $\textcircled{3}$ | | | G | G | Y | R | | | | R |
| 9 | R | R | R | R | R | G | G | Y | $\textcircled{1}$ | $\textcircled{4}$ | | | G | G | Y | R | | | | R |
| 10,11 | R | R | R | R | R | R | R | R | | | | | G | G | Y | R | | | | R |
| *12,13 | W | FD | DW | DW | DW | DW | DW | DW | | | | | DW | DW | DW | DW | | | | OFF |
| *16,17 | COVER EXISTING PEDESTRIAN SIGNAL HEADS | | | | | | | | | | | | | | | | | | | |
| *14,15 | DW | DW | DW | DW | DW | W | FD | DW | DW | | | | W | FD | DW | DW | | | | OFF |
| *18,19 | DW | DW | DW | DW | DW | DW | DW | DW | | | | | W | FD | DW | DW | | | | OFF |
| SIGNS \textcircled{L} \textcircled{M} \textcircled{N} | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | ON | ON | ON | ON | | | | |
| FIXED | \times | 3.0 | 3.0 | 2.0 | \times | 3.0 | 3.0 | | \times | 3.0 | 3.0 | | 6.0 | 3.0 | 3.0 | | | | | |
| MINIMUM | 7 | | | | 7 | | | | 12 | | | | | | | | | | | |
| SEC./ACT. | | | | | | | | | 2.1 | | | | | | | | | | | |
| MAX. INITIAL | | | | | | | | | 25 | | | | | | | | | | | |
| PASSAGE | 4 | | | | 4 | | | | 6 | | | | | | | | | | | |
| TIME TO REDUCE | | | | | | | | | 3 | | | | | | | | | | | |
| BEFORE REDUCTION | | | | | | | | | 27 | | | | | | | | | | | |
| MIN. GAP | | | | | | | | | 3 | | | | | | | | | | | |
| MAX I | 40 | | | | 7 | | | | 23 | | | | 6 | | | | | $\textcircled{5}$ | | |
| MAX II | 45 | | | | 7 | | | | 18 | | | | 6 | | | | | $\textcircled{5}$ | | |
| * PEDESTRIAN | 13.0 | 17.5 | | | | $\textcircled{4}$ | | | 10.0 | 13.0 | | | | | | | | $\textcircled{6}$ | | |
| MEMORY | MN | | | | NL | | | | MN | | | | | | | | | | | |

RAILROAD PREEMPTION NOTES

NORMAL OPERATION WILL BE PREEMPTED BY THE TRAIN APPROACH SIGNALS WHEN ACTIVATED BY A TRAIN ENTERING THE RAILROAD CIRCUIT. IF TRAIN PREEMPTION OCCURS IN:

- PHASE 4+8-INTERVAL 1, IT TERMINATES IMMEDIATELY FOLLOWED BY PHASE 4+8-INTERVALS 2,3&4 IF PEDESTRIAN TIMINGS ARE ACTUATED, OR INTERVALS 3&4 IF PEDESTRIAN TIMINGS ARE NOT ACTUATED, AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 4+8-INTERVAL 2, IT TIMES OUT FOLLOWED BY PHASE 4+8-INTERVALS 3&4 AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 4+8-INTERVAL 3, IT TIMES OUT FOLLOWED BY PHASE 4+8-INTERVAL 4 AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 4+8-INTERVAL 4, IT TIMES OUT FOLLOWED BY TRAIN PHASE P1-INTERVAL 1.
- PHASE 4+7-INTERVAL 1, IT TERMINATES IMMEDIATELY FOLLOWED BY PHASE 4+7-INTERVALS 2,3&4 IF PEDESTRIAN TIMINGS ARE ACTUATED, OR INTERVALS 3&4 IF PEDESTRIAN TIMINGS ARE NOT ACTUATED, AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 4+7-INTERVAL 2, IT TIMES OUT FOLLOWED BY PHASE 4+7-INTERVALS 3&4 AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 4+7-INTERVAL 3, IT TIMES OUT FOLLOWED BY PHASE 4+7-INTERVALS 4 AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 4+7-INTERVAL 4, IT TIMES OUT FOLLOWED BY TRAIN PHASE P1-INTERVAL 1.
- PHASE 2+6-INTERVAL 1, IT TERMINATES IMMEDIATELY FOLLOWED BY PHASE 2+6-INTERVALS 2,3,4&5 IF PEDESTRIAN TIMINGS ARE ACTUATED, OR INTERVALS 3,4&5 IF PEDESTRIAN TIMINGS ARE NOT ACTUATED, AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 2+6-INTERVAL 2, IT TIMES OUT FOLLOWED BY PHASE 2+6-INTERVALS 3,4&5 AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 2+6-INTERVAL 3, IT TIMES OUT FOLLOWED BY PHASE 2+6-INTERVALS 4&5 AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 2+6-INTERVAL 4, IT TIMES OUT FOLLOWED BY PHASE 2+6-INTERVAL 5 AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 2+6-INTERVAL 5, IT TIMES OUT FOLLOWED BY TRAIN PHASE P1-INTERVAL 1.

IN RETURNING FROM TRAIN OPERATION TO NORMAL OPERATION, IF TRAIN PREEMPTION TERMINATES IN:

- TRAIN PHASE P2-INTERVAL 1, A TIMING DEVICE WILL BE ACTIVATED WHICH WILL HOLD THIS INTERVAL FOR TEN SECONDS FOLLOWED BY THE TRAIN PHASE P2-INTERVALS 2,3&4 BEFORE RETURNING TO PHASE 2+6-INTERVAL 1 AND NORMAL OPERATION.
- TRAIN PHASE P2-INTERVAL 2, IT TIMES OUT FOLLOWED BY TRAIN PHASE P-INTERVALS 3&4 BEFORE RETURNING TO PHASE 2+6-INTERVAL 1 AND NORMAL OPERATION.
- TRAIN PHASE P2-INTERVAL 3, IT TIMES OUT FOLLOWED BY TRAIN PHASE P-INTERVALS 4 BEFORE RETURNING TO PHASE 2+6-INTERVAL 1 AND NORMAL OPERATION.
- TRAIN PHASE P2-INTERVAL 4, IT TIMES OUT FOLLOWED BY PHASE 2+6-INTERVAL 1 AND NORMAL OPERATION.

OPERATION OF LOOP DETECTORS ON EASTBOUND APPROACH E. 10TH ST. AS AFFECTED BY THE RAILROAD PREEMPTION IS AS FOLLOWS:
ANY CALL ON THIS DETECTOR EXISTING AT THE TIME OF PREEMPTION OR OCCURING DURING PREEMPTION SHALL BE HELD BY THE PREEMPTION EQUIPMENT TO BE PLACED IN THE CONTROLLER MEMORY UPON RETURN TO NORMAL OPERATION.

RAILROAD PREEMPTION TAKES PRECEDENCE OVER EMERGENCY PREEMPTION.

| ITEM NUMBER | DESCRIPTION | QTY | LOCATION | REMARKS |
|-------------|--|-----|----------|-------------------------|
| 4954 0202 | SIGNAL CABLE, 14 AWG, 5 CONDUCTOR, TEMPORARY | 20 | 383+75 | EXISTING SIGNAL HEAD 10 |
| 4954 0203 | SIGNAL CABLE, 14 AWG, 7 CONDUCTOR, TEMPORARY | 20 | 383+08 | EXISTING SIGNAL HEAD 7 |

ITEM 0958-0322 (FOR INFORMATION ONLY)

| DESCRIPTION | QTY | LOCATION | REMARKS |
|-------------------------------------|-----|-------------------------------------|---------|
| TEMPORARY OVERHEAD DETECTION SYSTEM | 1 | $\textcircled{1}$ $\textcircled{2}$ | |

NOTES:
1. SIGNAL HEAD 8 COVERED DURING THIS PHASE
2. MAINTAIN ALL EXISTING PREEMPTION.

| DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
|-----------------|---------------|-------|---------|----------|
| 1-0 | ERIE | 4034 | 500 | 31 OF 48 |
| CITY OF ERIE | | | | |
| REVISION NUMBER | REVISIONS | DATE | BY | |
| | | | | |
| PERMIT NO: | SHEET: 3 OF 3 | | | |
| DATE ISSUED: | DATE REVISED: | | | |

NOTES

- INSTALLATION, OPERATION, AND MAINTENANCE OF THESE SIGNALS SHALL BE IN ACCORDANCE WITH PENNSYLVANIA DEPARTMENT OF TRANSPORTATION REGULATIONS GOVERNING THE DESIGN, LOCATION, AND OPERATION OF SIGNS, SIGNALS, AND PAVEMENT MARKINGS.
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- THE MINIMUM HORIZONTAL DISTANCE BETWEEN SIGNAL, MEASURED AT RIGHT ANGLES TO THE APPROACH, SHALL BE 8 FEET.
- THIS DRAWING CANNOT BE USED AS A CONSTRUCTION DRAWING UNLESS THE PERMITTEE COMPLIES WITH THE PROVISIONS OF THE LATEST ACT PREVENTING DAMAGE TO UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. CONSULT WITH UTILITY COMPANIES TO RESOLVE ANY PROBLEMS THAT MAY BE CREATED DUE TO THE LOCATION OF UTILITIES.

COORDINATION NOTES

CONTROLLER TO BE COORDINATED WITH ADJACENT CONTROLLERS THROUGH THE USE OF THE INTERCONNECT CABLE TO PROVIDE A PROGRESSIVE MOVEMENT OF TRAFFIC ALONG THE BAYFRONT CONNECTOR/PARKWAY (S.R. 4034/S.R. 0290), EAST 6TH STREET (S.R. 4018), EAST LAKE ROAD (S.R. 4018), EAST 10TH STREET, AND EAST 12TH STREET (S.R. 0005).

MASTER COMPUTER IS LOCATED AT THE CITY OF ERIE ENGINEERING OFFICES.

MASTER CONTROLLER IS LOCATED AT THE INTERSECTION OF EAST 12TH STREET (S.R. 0005) AT BAYFRONT CONNECTOR/PARKWAY (S.R. 4034/S.R. 0290).

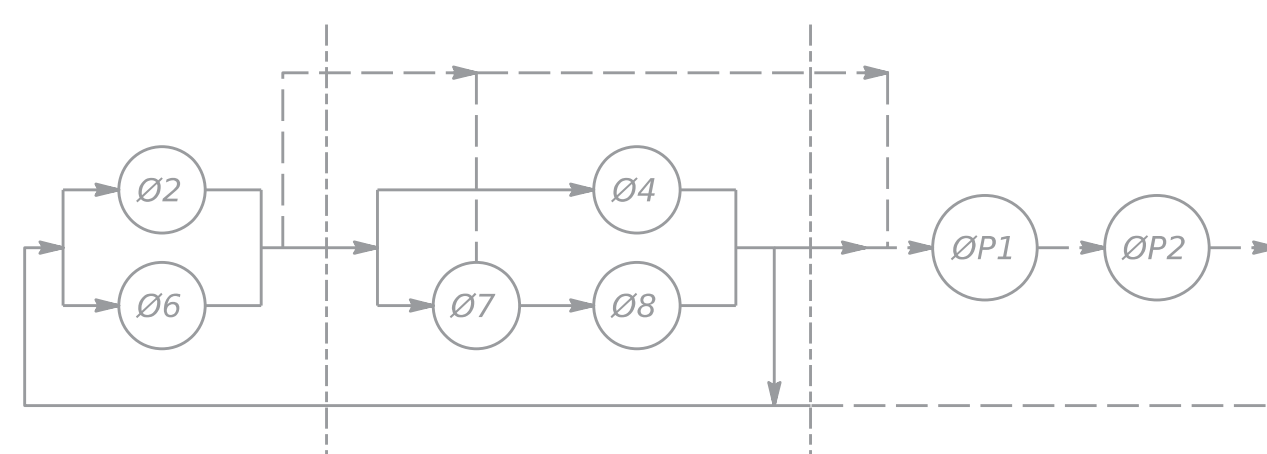
MASTER LOCATION FOR REFERENCING OFFSETS IS AT THE INTERSECTION OF EAST 12TH STREET (S.R. 0005) AT BAYFRONT CONNECTOR/PARKWAY (S.R. 4034/S.R. 0290). OFFSETS ARE REFERENCED TO THE END OF GREEN OF PHASE 4+8.

* UPON PEDESTRIAN ACTIVATION, OTHERWISE DON'T WALK AT ALL TIMES.

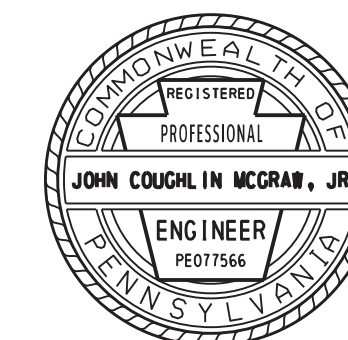
MN - MINIMUM RECALL
MX - MAXIMUM RECALL
L - LOCKING
NL - NON-LOCKING

- $\textcircled{1}$ G IF FOLLOWED BY PHASE 4+8
- $\textcircled{2}$ $\frac{G}{\epsilon Y}$ IF FOLLOWED BY PHASE 4+8
- $\textcircled{3}$ G IF FOLLOWED BY PHASE 4+8
- $\textcircled{4}$ TIMING WILL BE AS SHOWN IN PHASE 4+8. INTERVALS 1 & 2 MAY TIME OUT IN THIS PHASE OR MAY BE COMPLETED IN PHASE 4+8.
- $\textcircled{5}$ DWELL UNTIL PREEMPTION TERMINATES.
- $\textcircled{6}$ RETURN TO DW UNTIL PEDESTRIAN ACTUATION IS CALLED.

PHASING DIAGRAM



NORMAL OPERATION ———
RAILROAD PREEMPTION - - - - -
PHASE SEQUENCE BARRIER - · - · -



| | |
|---------------|---|
| COUNTY: | ERIE |
| MUNICIPALITY: | CITY OF ERIE |
| INTERSECTION: | S.R. 4034 (BAYFRONT PARKWAY) AND EAST TENTH STREET - PHASE 1 |
| ACTIVITY: | MEDIAN CONSTRUCTION |
| PREPARED BY: | JMT |
| CONTRACTOR: | DATE |

SCALE : 0 25 50
(IN FEET)

SIGNS

| PLAN SYMBOL | NOMEN-CLATURE | DESCRIPTION | SIZE (W X H) |
|-------------|---------------|--|--------------|
| A | D3-4 | E 10TH ST | 70" X 16" |
| B | D3-4 | BAYFRONT PARKWAY | 96" X 16" |
| C | R3-5L | LEFT TURN | 30" X 36" |
| D | R3-5S | STRAIGHT-THROUGH | 30" X 36" |
| E | R3-6SR | OPTIONAL RIGHT TURN | 30" X 36" |
| F | R3-7L | LEFT LANE MUST TURN LEFT | 30" X 30" |
| G | R10-11 | NO TURN ON RED | 30" X 36" |
| H | R10-12 | LEFT TURN YIELD ON GREEN | 30" X 36" |
| I | R10-4L | PUSH BUTTON FOR WALK SIGNAL | 9" X 12" |
| J | R10-4R | PUSH BUTTON FOR WALK SIGNAL | 9" X 12" |
| K | R10-6L | STOP HERE ON RED | 24" X 30" |
| L | R3-1 | NO RIGHT TURN (INTERNALLY ILLUMINATED) | 36" X 36" |
| M | R3-2 | NO LEFT TURN (INTERNALLY ILLUMINATED) | 36" X 36" |
| N | R5-1 | DO NOT ENTER (INTERNALLY ILLUMINATED) | 36" X 36" |
| O | R8-8 | DO NOT STOP ON TRACKS | 24" X 30" |
| P | R10-20 | OPPOSING TRAFFIC HAS EXTENDED GREEN | 30" X 36" |
| Q | R7-7A | NO PARKING ANYTIME | 12" X 18" |
| R | SPECIAL | NO TURN ON RED WHEN OVERHEAD SIGN IS LIT | 36" X 36" |

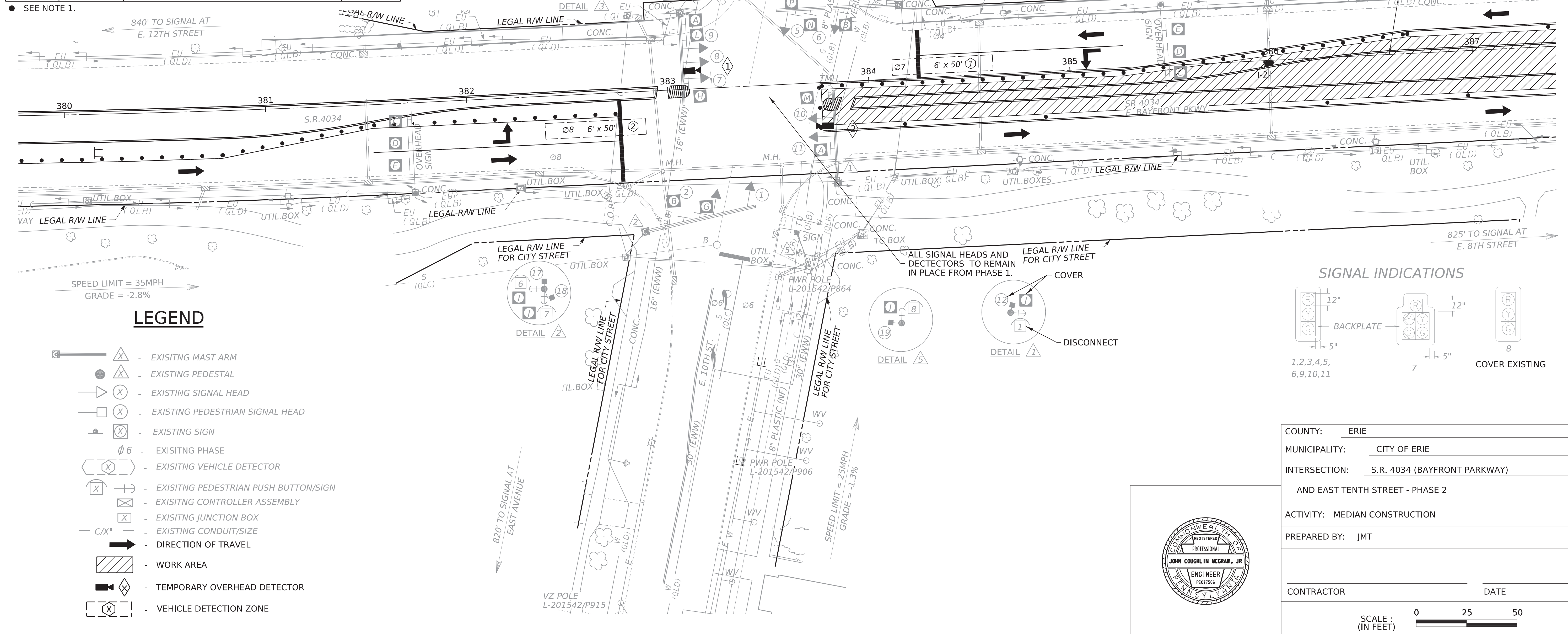
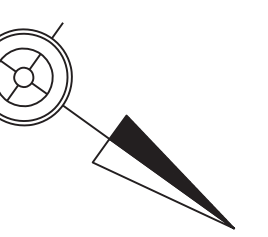
● SEE NOTE 1.

| DISTRICT | COUNTY | ROUTE | SECTION | SHEET | |
|-----------------|-----------|---------------|---------|----------|----|
| 1-0 | ERIE | 4034 | 500 | 32 OF 48 | |
| CITY OF ERIE | | | | | |
| REVISION NUMBER | REVISIONS | | | DATE | BY |
| | | | | | |
| PERMIT NO: | | SHEET: | | 2 OF 3 | |
| DATE ISSUED: | | DATE REVISED: | | | |

NOTE:
1. SEE SHEETS 14 - 17 FOR ADDITIONAL TRAFFIC CONTROL.

SIGNAL ASSEMBLY NOTES

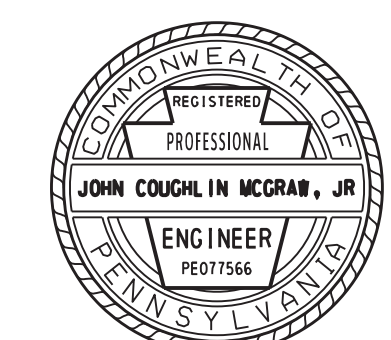
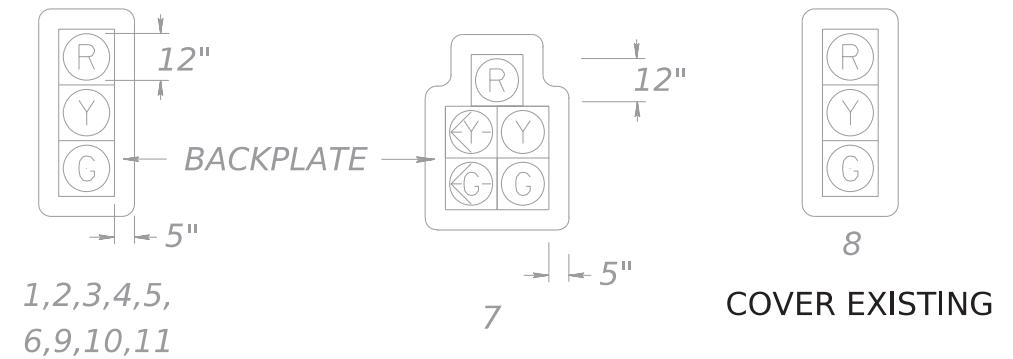
1. PROVIDE MINIMUM MOUNTING HEIGHT OF OVERHEAD SIGNALS: 17'; MAXIMUM 19'.
2. PROVIDE MINIMUM MOUNTING HEIGHT OF PEDESTRIAN SIGNALS: 8'; MAXIMUM 10'.
3. FINAL SIGNAL HEAD PLACEMENT WILL BE DETERMINED BY REPRESENTATIVES OF THE DISTRICT TRAFFIC UNIT PRIOR TO SIGNAL BEING TURNED ON.
4. PROVIDE AIRCRAFT TYPE STRANDED CABLE FOR MOUNTING SIGNAL AND SIGN BRACKET ASSEMBLIES TO MAST ARMS.



LEGEND

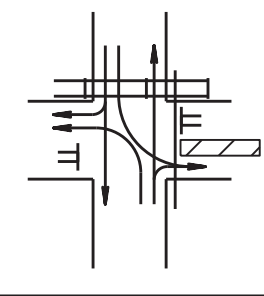
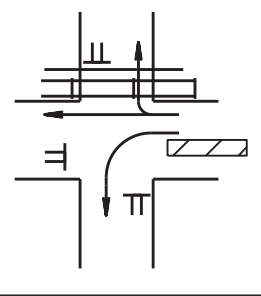
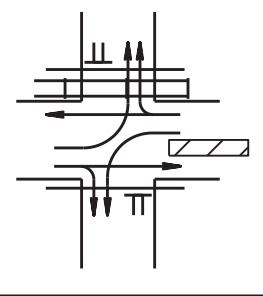
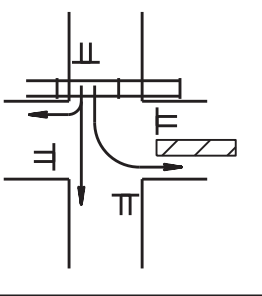
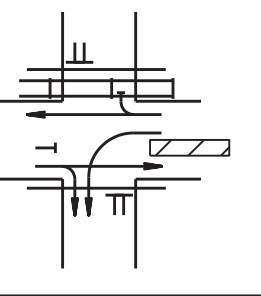





- EXISTING MAST ARM
- EXISTING PEDESTAL
- EXISTING SIGNAL HEAD
- EXISTING PEDESTRIAN SIGNAL HEAD
- EXISTING SIGN
- EXISTING PHASE
- EXISTING VEHICLE DETECTOR
- EXISTING PEDESTRIAN PUSH BUTTON/SIGN
- EXISTING CONTROLLER ASSEMBLY
- EXISTING JUNCTION BOX
- EXISTING CONDUIT/SIZE
- DIRECTION OF TRAVEL
- WORK AREA
- TEMPORARY OVERHEAD DETECTOR
- VEHICLE DETECTION ZONE

SIGNAL INDICATIONS



| | |
|------------------|---|
| COUNTY: | ERIE |
| MUNICIPALITY: | CITY OF ERIE |
| INTERSECTION: | S.R. 4034 (BAYFRONT PARKWAY) AND EAST TENTH STREET - PHASE 2 |
| ACTIVITY: | MEDIAN CONSTRUCTION |
| PREPARED BY: | JMT |
| CONTRACTOR: | |
| DATE: | |
| SCALE: (IN FEET) | 0 25 50 |

MOVEMENT, PHASING, AND SEQUENCE CHART

| SIGNAL | PHASE 2+6 | | | | PHASE 4+7 | | | | PHASE 4+8 | | | | RAILROAD PREEMPTION P1 | | | RAILROAD PREEMPTION P2 | | | EMERGENCY FLASHING | | | | | | | |
|---|---|------|-----|-----|---|------------------------|------------------------|-----|---|------------------------|-----|-----|--|---|--|---|------|------|--------------------|----|--|---|---|-----|-----|-----|
| |  | | | |  | | | |  | | | |  | | |  | | | | | | | | | | |
| | INTERVAL | | | | INTERVAL | | | | INTERVAL | | | | INTERVAL | | | INTERVAL | | | | | | | | | | |
| 1,2 | G | G | G | Y | R | R | R | R | R | R | R | R | | | | | G | Y | R | | | R | R | R | R | R |
| 3,4 | G | G | Y | R | R | R | R | R | R | R | R | R | | | | | R | R | R | | | R | R | R | R | R |
| 5,6 | G | G | Y | R | R | R | R | R | R | R | R | R | | | | | R | R | R | | | R | R | R | R | R |
| 7 | R | R | R | R | R | $\frac{G}{\epsilon G}$ | $\frac{G}{\epsilon G}$ | Y | $\frac{G}{\epsilon G}$ | $\frac{G}{\epsilon G}$ | Y | R | ② | ③ | | | G | G | Y | R | | | R | R | Y | Y |
| 9 | R | R | R | R | R | G | G | Y | ① | ① | | | | | | | G | G | Y | R | | | R | R | Y | Y |
| 10,11 | R | R | R | R | R | R | R | R | R | R | R | R | | | | | G | G | Y | R | | | R | R | Y | Y |
| *12,13 | COVER EXISTING PEDESTRIAN SIGNAL HEADS | | | | | | | | | | | | | | | | | | | | | | | | | |
| *16,17 | W | FD | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | | | | | DW | DW | DW | DW | | | DW | DW | DW | OFF |
| *14,15 | DW | DW | DW | DW | DW | W | FD | DW | DW | DW | DW | DW | | | | | W | FD | DW | DW | | | DW | DW | DW | OFF |
| *18,19 | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | | | | | W | FD | DW | DW | | | DW | DW | DW | OFF |
| SIGNS  | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | | | | | ON | ON | ON | ON | | | ON | ON | ON | |
| FIXED |  | 3.0 | 3.0 | 2.0 |  | 3.0 | 3.0 | |  | 3.0 | 3.0 | | | | | | 6.0 | 3.0 | 3.0 | | | |  | 3.0 | 3.0 | |
| MINIMUM | 7 | | | | | | | | | | | | | | | | | | | | | | | | | |
| SEC./ACT. | | | | | | | | | | | | | | | | | 2.1 | | | | | | | | | |
| MAX. INITIAL | | | | | | | | | | | | | | | | | 25 | | | | | | | | | |
| PASSAGE | 4 | | | | | | | | | | | | | | | | 6 | | | | | | | | | |
| TIME TO REDUCE | | | | | | | | | | | | | | | | | 3 | | | | | | | | | |
| BEFORE REDUCTION | | | | | | | | | | | | | | | | | 27 | | | | | | | | | |
| MIN. GAP | | | | | | | | | | | | | | | | | 3 | | | | | | | | | |
| MAX I | 40 | | | | | | | | | | | | | | | | 23 | | | | | | | ⑤ | | |
| MAX II | 45 | | | | | | | | | | | | | | | | 18 | | | | | | | ⑤ | | |
| * PEDESTRIAN | 13.0 | 17.5 | | | | | | | ④ | | | | | | | | 10.0 | 13.0 | | | | | | | | ⑥ |
| MEMORY | MN | | | | NL | | | | MN | | | | | | | | | | | | | | | | | |

RAILROAD PREEMPTION NOTES

NORMAL OPERATION WILL BE PREEMPTED BY THE TRAIN APPROACH SIGNALS WHEN ACTIVATED BY A TRAIN ENTERING THE RAILROAD CIRCUIT. IF TRAIN PREEMPTION OCCURS IN:

- PHASE 4+8-INTERVAL 1, IT TERMINATES IMMEDIATELY FOLLOWED BY PHASE 4+8-INTERVALS 2,3&4 IF PEDESTRIAN TIMINGS ARE ACTUATED, OR INTERVALS 3&4 IF PEDESTRIAN TIMINGS ARE NOT ACTUATED, AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 4+8-INTERVAL 2, IT TIMES OUT FOLLOWED BY PHASE 4+8-INTERVALS 3&4 AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 4+8-INTERVAL 3, IT TIMES OUT FOLLOWED BY PHASE 4+8-INTERVAL 4 AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 4+8-INTERVAL 4, IT TIMES OUT FOLLOWED BY TRAIN PHASE P1-INTERVAL 1.
- PHASE 4+7-INTERVAL 1, IT TERMINATES IMMEDIATELY FOLLOWED BY PHASE 4+7-INTERVALS 2,3&4 IF PEDESTRIAN TIMINGS ARE ACTUATED, OR INTERVALS 3&4 IF PEDESTRIAN TIMINGS ARE NOT ACTUATED, AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 4+7-INTERVAL 2, IT TIMES OUT FOLLOWED BY PHASE 4+7-INTERVALS 3&4 AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 4+7-INTERVAL 3, IT TIMES OUT FOLLOWED BY PHASE 4+7-INTERVALS 4 AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 4+7-INTERVAL 4, IT TIMES OUT FOLLOWED BY TRAIN PHASE P1-INTERVAL 1.
- PHASE 2+6-INTERVAL 1, IT TERMINATES IMMEDIATELY FOLLOWED BY PHASE 2+6-INTERVALS 2,3,4&5 IF PEDESTRIAN TIMINGS ARE ACTUATED, OR INTERVALS 3,4&5 IF PEDESTRIAN TIMINGS ARE NOT ACTUATED, AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 2+6-INTERVAL 2, IT TIMES OUT FOLLOWED BY PHASE 2+6-INTERVALS 3,4&5 AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 2+6-INTERVAL 3, IT TIMES OUT FOLLOWED BY PHASE 2+6-INTERVALS 4&5 AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 2+6-INTERVAL 4, IT TIMES OUT FOLLOWED BY PHASE 2+6-INTERVALS 5 AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 2+6-INTERVAL 5, IT TIMES OUT FOLLOWED BY TRAIN PHASE P1-INTERVAL 1.

IN RETURNING FROM TRAIN OPERATION TO NORMAL OPERATION, IF TRAIN PREEMPTION TERMINATES IN:

- TRAIN PHASE P2-INTERVAL 1, A TIMING DEVICE WILL BE ACTIVATED WHICH WILL HOLD THIS INTERVAL FOR TEN SECONDS FOLLOWED BY THE TRAIN PHASE P2-INTERVALS 2,3&4 BEFORE RETURNING TO PHASE 2+6-INTERVAL 1 AND NORMAL OPERATION.
- TRAIN PHASE P2-INTERVAL 2, IT TIMES OUT FOLLOWED BY TRAIN PHASE P-INTERVALS 3&4 BEFORE RETURNING TO PHASE 2+6-INTERVAL 1 AND NORMAL OPERATION.
- TRAIN PHASE P2-INTERVAL 3, IT TIMES OUT FOLLOWED BY TRAIN PHASE P-INTERVALS 4 BEFORE RETURNING TO PHASE 2+6-INTERVAL 1 AND NORMAL OPERATION.
- TRAIN PHASE P2-INTERVAL 4, IT TIMES OUT FOLLOWED BY PHASE 2+6-INTERVAL 1 AND NORMAL OPERATION.

OPERATION OF LOOP DETECTORS ON EASTBOUND APPROACH E. 10TH ST. AS AFFECTED BY THE RAILROAD PREEMPTION IS AS FOLLOWS:

ANY CALL ON THIS DETECTOR EXISTING AT THE TIME OF PREEMPTION OR OCCURING DURING PREEMPTION SHALL BE HELD BY THE PREEMPTION EQUIPMENT TO BE PLACED IN THE CONTROLLER MEMORY UPON RETURN TO NORMAL OPERATION.

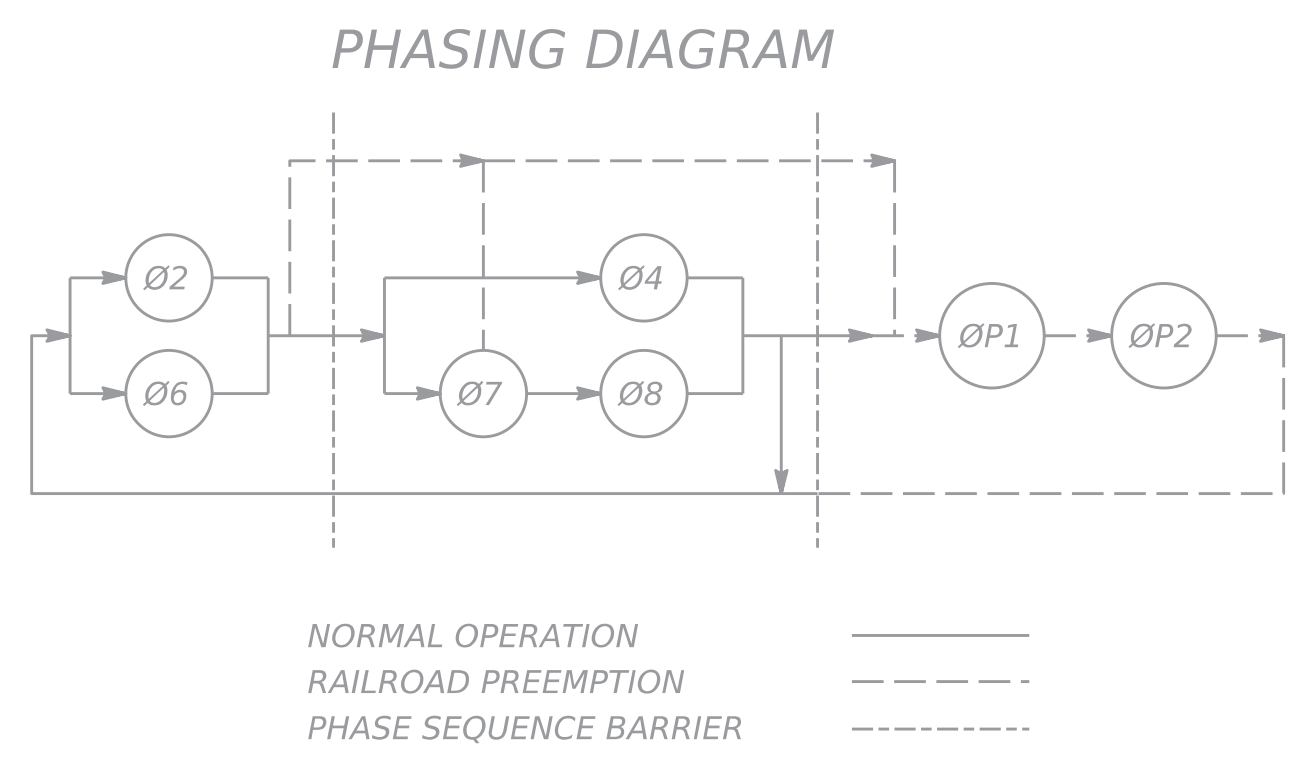
RAILROAD PREEMPTION TAKES PRECEDENCE OVER EMERGENCY PREEMPTION.

- NOTES:**
1. SIGNAL HEAD 8 COVERED DURING THIS PHASE
 2. MAINTAIN ALL EXISTING PREEMPTION.

* UPON PEDESTRIAN ACTIVATION, OTHERWISE DON'T WALK AT ALL TIMES.

MN - MINIMUM RECALL
 MX - MAXIMUM RECALL
 L - LOCKING
 NL - NON-LOCKING

① G IF FOLLOWED BY PHASE 4+8 ⑤ DWELL UNTIL PREEMPTION TERMINATES.
 ② $\frac{G}{\epsilon Y}$ IF FOLLOWED BY PHASE 4+8 ⑥ RETURN TO DW UNTIL PEDESTRIAN ACTUATION IS CALLED.
 ③ G IF FOLLOWED BY PHASE 4+8
 ④ TIMING WILL BE AS SHOWN IN PHASE 4+8. INTERVALS 1 & 2 MAY TIME OUT IN THIS PHASE OR MAY BE COMPLETED IN PHASE 4+8.



| | | | | | |
|-----------------|---------------|-------|---------|----------|----|
| DISTRICT | COUNTY | ROUTE | SECTION | SHEET | |
| 1-0 | ERIE | 4034 | 500 | 33 OF 48 | |
| CITY OF ERIE | | | | | |
| REVISION NUMBER | REVISIONS | | | DATE | BY |
| | | | | | |
| PERMIT NO: | SHEET: 3 OF 3 | | | | |
| DATE ISSUED: | DATE REVISED: | | | | |

NOTES

1. INSTALLATION, OPERATION, AND MAINTENANCE OF THESE SIGNALS SHALL BE IN ACCORDANCE WITH PENNSYLVANIA DEPARTMENT OF TRANSPORTATION REGULATIONS GOVERNING THE DESIGN, LOCATION, AND OPERATION OF SIGNS, SIGNALS, AND PAVEMENT MARKINGS.
2. NO MODIFICATIONS OF THIS INSTALLATION ARE PERMITTED UNLESS PRIOR APPROVAL IS GRANTED, IN WRITING, BY THE SECRETARY OF TRANSPORTATION OR HIS REPRESENTATIVE.
3. MAINTENANCE WORK ON ALL APPROACHES TO THE SIGNALIZED INTERSECTION NECESSARY FOR PROPER VISIBILITY OF THE SIGNS AND SIGNALS, INCLUDING TRIMMING OF TREES, IS THE RESPONSIBILITY OF THE PERMITTEE.
4. UNLESS OTHERWISE NOTED, THE PERMITTEE SHALL MAINTAIN CURBING AND OTHER DRAINAGE FACILITIES IN ACCORDANCE WITH DEPARTMENT STANDARDS AND CRITERIA, EXCEPT FOR INLET GRATES THAT WILL BE MAINTAINED BY THE DEPARTMENT AS A PART OF THE ROADWAY SURFACE.
5. ALL SIGNS, CURBS, CURB RAMPS, SIDEWALKS, AND PAVEMENT MARKINGS INDICATED ON THIS DRAWING ARE CONSIDERED PART OF THE PERMIT AND SHALL BE INSTALLED AND MAINTAINED BY THE PERMITTEE IN ACCORDANCE WITH PENNSYLVANIA DEPARTMENT OF TRANSPORTATION PUBLICATION 68, OFFICAL TRAFFIC CONTROL DEVICES. EXCEPTIONS ARE LONGITUDINAL PAVEMENT MARKINGS IN STATE HIGHWAYS, WHICH ARE MAINTAINED BY THE DEPARTMENT.
6. SUPPORT POLES FOR OVERHEAD SIGNALS AND SIGNS SHALL HAVE A MINIMUM CLEARANCE OF 2 FEET BEHIND THE FACE OF THE CURB OR 12 FEET FROM THE EDGE OF THE TRAVELED ROADWAY TO EDGE OF SUPPORT POLE.
7. VEHICULAR SIGNALS OR SIGNS ERRECTED OVER THE ROADWAY SHALL HAVE A CLEARANCE OF 17 FEET ABOVE THE ROADWAY. UNLESS OTHERWISE NOTED, POST MOUNTED VEHICULAR SIGNALS SHALL HAVE A CLEARANCE OF NOT LESS THAN 8 FEET NOR MORE THAN 15 FEET ABOVE THE SIDEWALK LEVEL OR PAVEMENT GRADE AT THE CENTER OF THE HIGHWAY IF NO SIDEWALK EXISTS. UNLESS OTHERWISE NOTED, PEDESTRIAN SIGNALS SHALL HAVE A CLEARANCE OF 8 FEET ABOVE THE SIDEWALK LEVEL. UNLESS OTHERWISE NOTED, POST MOUNTED SIGNS SHALL HAVE A CLEARANCE OF 7 FEET ABOVE THE SIDEWALK LEVEL OR ABOVE THE EDGE OF ROADWAY GRADE, IF NO SIDEWALK EXISTS. UNLESS OTHERWISE NOTED, THE TOP OF THE POST MOUNTED SIGNS SHALL BE A MINIMUM 9 FEET ABOVE GROUND LINE.
8. THE MINIMUM HORIZONTAL DISTANCE BETWEEN SIGNAL, MEASURED AT RIGHT ANGLES TO THE APPROACH, SHALL BE 8 FEET.
9. THIS DRAWING CANNOT BE USED AS A CONSTRUCTION DRAWING UNLESS THE PERMITTEE COMPLIES WITH THE PROVISIONS OF THE LATEST ACT PREVENTING DAMAGE TO UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. CONSULT WITH UTILITY COMPANIES TO RESOLVE ANY PROBLEMS THAT MAY BE CREATED DUE TO THE LOCATION OF UTILITIES.

COORDINATION NOTES

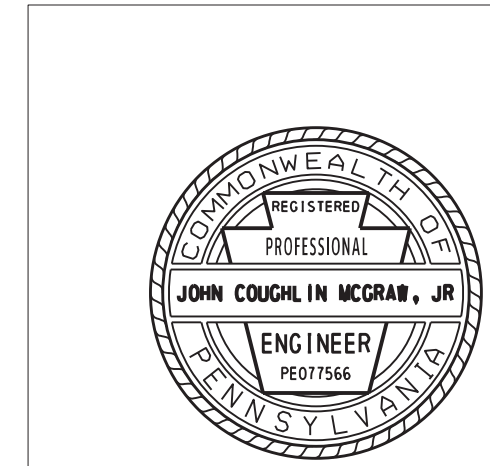
CONTROLLER TO BE COORDINATED WITH ADJACENT CONTROLLERS THROUGH THE USE OF THE INTERCONNECT CABLE TO PROVIDE A PROGRESSIVE MOVEMENT OF TRAFFIC ALONG THE BAYFRONT CONNECTOR/PARKWAY (S.R. 4034/S.R. 0290), EAST 6TH STREET (S.R. 4018), EAST LAKE ROAD (S.R. 4018), EAST 10TH STREET, AND EAST 12TH STREET (S.R. 0005).

MASTER COMPUTER IS LOCATED AT THE CITY OF ERIE ENGINEERING OFFICES.

MASTER CONTROLLER IS LOCATED AT THE INTERSECTION OF EAST 12TH STREET (S.R. 0005) AT BAYFRONT CONNECTOR/PARKWAY (S.R. 4034/S.R. 0290).

MASTER LOCATION FOR REFERENCING OFFSETS IS AT THE INTERSECTION OF EAST 12TH STREET (S.R. 0005) AT BAYFRONT CONNECTOR/PARKWAY (S.R. 4034/S.R. 0290). OFFSETS ARE REFERENCED TO THE END OF GREEN OF PHASE 4+8.

| | |
|---------------|---|
| COUNTY: | ERIE |
| MUNICIPALITY: | CITY OF ERIE |
| INTERSECTION: | S.R. 4034 (BAYFRONT PARKWAY) AND EAST TENTH STREET - PHASE 2 |
| ACTIVITY: | MEDIAN CONSTRUCTION |
| PREPARED BY: | JMT |
| CONTRACTOR | DATE |



SIGNS

| PLAN SYMBOL | NOMENCLATURE | DESCRIPTION | SIZE (W X H) |
|-------------|--------------|--|--------------|
| A | D3-4 | E 8TH ST | 60" X 16" |
| B | D3-4 | BAYFRONT PARKWAY | 96" X 16" |
| C | R3-5L | LEFT TURN | 30" X 36" |
| D | R3-5S | STRAIGHT-THROUGH | 30" X 36" |
| E | R3-6SR | OPTIONAL RIGHT TURN | 30" X 36" |
| F | R3-7L | LEFT LANE MUST TURN LEFT | 30" X 30" |
| G | R10-11 | NO TURN ON RED | 30" X 36" |
| H | R10-4L | PUSH BUTTON FOR WALK SIGNAL | 9" X 12" |
| I | R10-4R | PUSH BUTTON FOR WALK SIGNAL | 9" X 12" |
| J | R10-6L | STOP HERE ON RED | 24" X 30" |
| K | R3-1 | NO RIGHT TURN (INTERNALLY ILLUMINATED) | 36" X 36" |
| L | R3-2 | NO LEFT TURN (INTERNALLY ILLUMINATED) | 36" X 36" |
| M | R5-1 | DO NOT ENTER (INTERNALLY ILLUMINATED) | 36" X 36" |
| N | R8-8 | DO NOT STOP ON TRACKS | 24" X 30" |
| O | R10-20 | OPPOSING TRAFFIC HAS EXTENDED GREEN | 30" X 36" |
| P | R7-7A | NO PARKING ANYTIME | 12" X 18" |
| Q | SPECIAL | NO TURN ON RED WHEN OVERHEAD SIGN IS LIT | 36" X 36" |

● SEE NOTE 1.

| DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
|----------|--------|-------|---------|----------|
| 1-0 | ERIE | 4034 | 500 | 34 OF 48 |

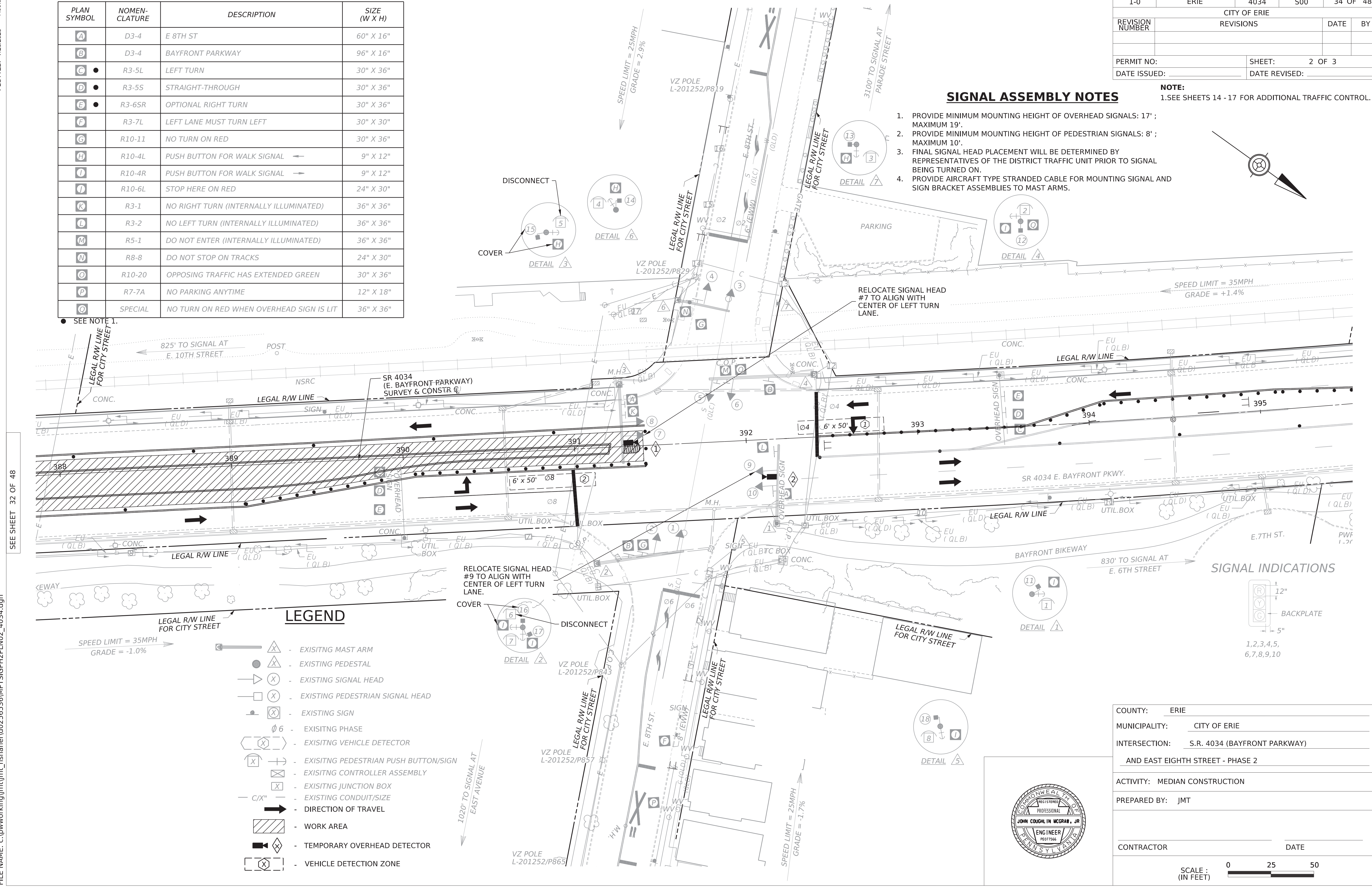
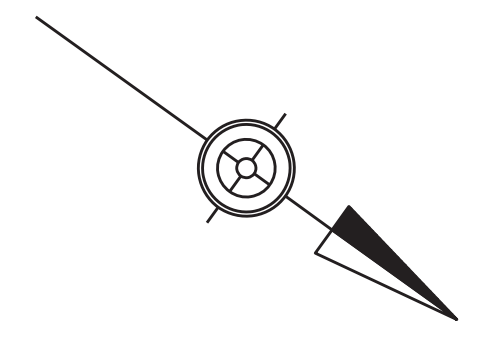
| CITY OF ERIE | | | | |
|-----------------|-----------|------|----|--|
| REVISION NUMBER | REVISIONS | DATE | BY | |
| | | | | |

| | |
|--------------|---------------|
| PERMIT NO: | SHEET: 2 OF 3 |
| DATE ISSUED: | DATE REVISED: |

SIGNAL ASSEMBLY NOTES

1. PROVIDE MINIMUM MOUNTING HEIGHT OF OVERHEAD SIGNALS: 17' ; MAXIMUM 19'.
2. PROVIDE MINIMUM MOUNTING HEIGHT OF PEDESTRIAN SIGNALS: 8' ; MAXIMUM 10'.
3. FINAL SIGNAL HEAD PLACEMENT WILL BE DETERMINED BY REPRESENTATIVES OF THE DISTRICT TRAFFIC UNIT PRIOR TO SIGNAL BEING TURNED ON.
4. PROVIDE AIRCRAFT TYPE STRANDED CABLE FOR MOUNTING SIGNAL AND SIGN BRACKET ASSEMBLIES TO MAST ARMS.

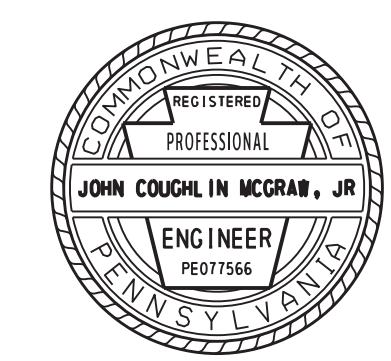
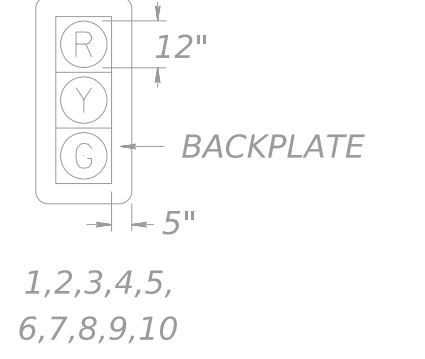
NOTE:
1.SEE SHEETS 14 - 17 FOR ADDITIONAL TRAFFIC CONTROL.



LEGEND

- EXISTING MAST ARM
- EXISTING PEDESTAL
- EXISTING SIGNAL HEAD
- EXISTING PEDESTRIAN SIGNAL HEAD
- EXISTING SIGN
- EXISTING PHASE
- EXISTING VEHICLE DETECTOR
- EXISTING PEDESTRIAN PUSH BUTTON/SIGN
- EXISTING CONTROLLER ASSEMBLY
- EXISTING JUNCTION BOX
- EXISTING CONDUIT/SIZE
- DIRECTION OF TRAVEL
- WORK AREA
- TEMPORARY OVERHEAD DETECTOR
- VEHICLE DETECTION ZONE

SIGNAL INDICATIONS



| | |
|---------------|--|
| COUNTY: | ERIE |
| MUNICIPALITY: | CITY OF ERIE |
| INTERSECTION: | S.R. 4034 (BAYFRONT PARKWAY) AND EAST EIGHTH STREET - PHASE 2 |
| ACTIVITY: | MEDIAN CONSTRUCTION |
| PREPARED BY: | JMT |
| CONTRACTOR: | DATE |
| SCALE: | 0 25 50 (IN FEET) |

SEE SHEET 32 OF 48

FILE NAME: c:\pwworking\jmt\jmt_nshane\d0256536\MPTSIGPH2PL\NO2_4034.dgn

MOVEMENT, PHASING, AND SEQUENCE CHART

| SIGNAL | PHASE 2+6 | | | | | PHASE 4+8 | | | | | RAILROAD PREEMPTION P1 | | | | | RAILROAD PREEMPTION P2 | | | | | EMERGENCY FLASHING | | | | | |
|------------------|--|----|-----|-----|-----|-----------|-----|-----|-----|-----|------------------------|-----|-----|-----|-----|------------------------|-----|-----|----|--|--------------------|-----------------|----|----|--|-----|
| | INTERVAL | | | | | INTERVAL | | | | | INTERVAL | | | | | INTERVAL | | | | | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | | 1 | 2 | 3 | | | 1 | 2 | 3 | 4 | | | | | | | |
| 1,2 | G | G | G | Y | R | R | R | R | R | R | | | | | | G | Y | R | | | R | R | R | R | | R |
| 3,4 | G | G | Y | R | R | R | R | R | R | R | | | | | | R | R | R | | | R | R | R | R | | R |
| 5,6 | G | G | Y | R | R | R | R | R | R | R | | | | | | R | R | R | | | R | R | R | R | | R |
| 7,8 | R | R | R | R | R | G | G | Y | R | | | | | | | R | R | R | | | G | G | Y | R | | Y |
| 9,10 | R | R | R | R | R | G | G | Y | R | | | | | | | R | R | R | | | G | G | Y | R | | Y |
| *11,12 | W | FD | DW | DW | DW | DW | DW | DW | DW | | | | | | | DW | DW | DW | | | DW | DW | DW | DW | | OFF |
| *15,16 | COVER EXISTING PEDESTRIAN SIGNAL HEADS | | | | | | | | | | | | | | | | | | | | | | | | | |
| *13,14 | DW | DW | DW | DW | DW | W | FD | DW | DW | | | | | | | W | FD | DW | DW | | | | | | | OFF |
| *17,18 | DW | DW | DW | DW | DW | W | FD | DW | DW | | | | | | | W | FD | DW | DW | | | | | | | OFF |
| SIGNS | | | | | | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | ON | ON | ON | | | ON | ON | ON | ON | | OFF |
| FIXED | | | 3.0 | 3.0 | 2.0 | | 3.0 | 3.0 | | | | 3.0 | 2.0 | | | | 3.0 | 3.0 | | | | | | | | |
| MINIMUM | 7 | | | | | | | | | | | | | | | 7 | | | | | | | | | | |
| SEC. JACT. | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MAX. INITIAL | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PASSAGE | 4 | | | | | | | | | | | | | | | | | | | | | | | | | |
| TIME TO REDUCE | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BEFORE REDUCTION | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MIN. GAP | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MAX I | 21 | | | | | | | | | | | | | | | 7 | | | | | ^① | | | | | |
| MAX II | 29 | | | | | | | | | | | | | | | 7 | | | | | ^① | | | | | |
| *PEDESTRIAN | 13.0 | 18 | | | | | | | | | 9.0 | 12 | | | | | | | | | 9.0 | ^② 12 | | | | |
| MEMORY | | | | | | NL | | | | | MN | | | | | MN | | | | | | | | | | |

MEMORY: * UPON PEDESTRIAN ACTIVATION, OTHERWISE DON'T WALK AT ALL TIMES.

MN - MINIMUM RECALL
 MX - MAXIMUM RECALL
 L - LOCKING
 NL - NON-LOCKING

^① DWELL UNTIL PREEMPTION TERMINATES.

^② RETURN TO DW UNTIL PEDESTRIAN ACTUATION IS CALLED.

RAILROAD PREEMPTION NOTES

NORMAL OPERATION WILL BE PREEMPTED BY THE TRAIN APPROACH SIGNALS WHEN ACTIVATED BY A TRAIN ENTERING THE RAILROAD CIRCUIT. IF TRAIN PREEMPTION OCCURS IN:
 -PHASE 4+8-INTERVAL 1, IT TERMINATES IMMEDIATELY FOLLOWED BY PHASE 4+8-INTERVALS 2,3&4 IF PEDESTRIAN TIMINGS ARE ACTUATED, OR INTERVALS 3&4 IF PEDESTRIAN TIMINGS ARE NOT ACTUATED, AND TRAIN PHASE P1-INTERVAL 1.
 -PHASE 4+8-INTERVAL 2, IT TIMES OUT FOLLOWED BY PHASE 4+8-INTERVALS 3&4 AND TRAIN PHASE P1-INTERVAL 1.
 -PHASE 4+8-INTERVAL 3, IT TIMES OUT FOLLOWED BY PHASE 4+8-INTERVAL 4 AND TRAIN PHASE P1-INTERVAL 1.
 -PHASE 4+8-INTERVAL 4, IT TIMES OUT FOLLOWED BY TRAIN PHASE P1-INTERVAL 1.
 -PHASE 2+6-INTERVAL 1, IT TERMINATES IMMEDIATELY FOLLOWED BY PHASE 2+6-INTERVALS 2,3,4&5 IF PEDESTRIAN TIMINGS ARE ACTUATED, OR INTERVALS 3,4&5 IF PEDESTRIAN TIMINGS ARE NOT ACTUATED, AND TRAIN PHASE P1-INTERVAL 1.
 -PHASE 2+6-INTERVAL 2, IT TIMES OUT FOLLOWED BY PHASE 2+6-INTERVALS 3,4&5 AND TRAIN PHASE P1-INTERVAL 1.
 -PHASE 2+6-INTERVAL 3, IT TIMES OUT FOLLOWED BY PHASE 2+6-INTERVALS 4&5 AND TRAIN PHASE P1-INTERVAL 1.
 -PHASE 2+6-INTERVAL 4, IT TIMES OUT FOLLOWED BY PHASE 2+6-INTERVALS 5 AND TRAIN PHASE P1-INTERVAL 1.
 -PHASE 2+6-INTERVAL 5, IT TIMES OUT FOLLOWED BY TRAIN PHASE P1-INTERVAL 1.

IN RETURNING FROM TRAIN OPERATION TO NORMAL OPERATION, IF TRAIN PREEMPTION TERMINATES IN:
 -TRAIN PHASE P2-INTERVAL 1, A TIMING DEVICE WILL BE ACTIVATED WHICH WILL HOLD THIS INTERVAL FOR TEN SECONDS FOLLOWED BY THE TRAIN PHASE P2-INTERVALS 2,3&4 BEFORE RETURNING TO PHASE 2+6-INTERVAL 1 AND NORMAL OPERATION.
 -TRAIN PHASE P2-INTERVAL 3, IT TIMES OUT FOLLOWED BY TRAIN PHASE P-INTERVALS 4 BEFORE RETURNING TO PHASE 2+6-INTERVAL 1 AND NORMAL OPERATION.
 -TRAIN PHASE P2-INTERVAL 4, IT TIMES OUT FOLLOWED BY PHASE 2+6-INTERVAL 1 AND NORMAL OPERATION.

OPERATION OF LOOP DETECTORS ON EASTBOUND APPROACH E. 8TH ST. AS AFFECTED BY THE RAILROAD PREEMPTION IS AS FOLLOWS:
 ANY CALL ON THIS DETECTOR EXISTING AT THE TIME OF PREEMPTION OR OCCURRING DURING PREEMPTION SHALL BE HELD BY THE PREEMPTION EQUIPMENT TO BE PLACED IN THE CONTROLLER MEMORY UPON RETURN TO NORMAL OPERATION.

RAILROAD PREEMPTION TAKES PRECEDENCE OVER EMERGENCY PREEMPTION.

| ITEM NUMBER | MISCELLANEOUS | | | |
|--------------|--|-----|----------|------------------------|
| UNIT | DESCRIPTION | QTY | LOCATION | REMARKS |
| 4954 0202 LF | SIGNAL CABLE, 14 AWG, 5 CONDUCTOR, TEMPORARY | 20 | 391+28 | EXISTING SIGNAL HEAD 7 |
| 4954 0202 LF | SIGNAL CABLE, 14 AWG, 5 CONDUCTOR, TEMPORARY | 20 | 392+16 | EXISTING SIGNAL HEAD 9 |

ITEM 0958-0323 (FOR INFORMATION ONLY)

| DESCRIPTION | QTY | LOCATION | REMARKS |
|-------------------------------------|-----|----------|---------|
| TEMPORARY OVERHEAD DETECTION SYSTEM | 1 | | |

NOTES:
 1. MAINTAIN ALL EXISTING PREEMPTION.

| DISTRICT | COUNTY | ROUTE | SECTION | SHEET | |
|-----------------|-----------|---------------|---------|----------|----|
| 1-0 | ERIE | 4034 | S00 | 35 OF 48 | |
| CITY OF ERIE | | | | | |
| REVISION NUMBER | REVISIONS | | | DATE | BY |
| | | | | | |
| PERMIT NO: | | SHEET: 3 OF 3 | | | |
| DATE ISSUED: | | DATE REVISED: | | | |

NOTES

- INSTALLATION, OPERATION, AND MAINTENANCE OF THESE SIGNALS SHALL BE IN ACCORDANCE WITH PENNSYLVANIA DEPARTMENT OF TRANSPORTATION REGULATIONS GOVERNING THE DESIGN, LOCATION, AND OPERATION OF SIGNS, SIGNALS, AND PAVEMENT MARKINGS.
- NO MODIFICATIONS OF THIS INSTALLATION ARE PERMITTED UNLESS PRIOR APPROVAL IS GRANTED, IN WRITING, BY THE SECRETARY OF TRANSPORTATION OR HIS REPRESENTATIVE.
- MAINTENANCE WORK ON ALL APPROACHES TO THE SIGNALIZED INTERSECTION NECESSARY FOR PROPER VISIBILITY OF THE SIGNS AND SIGNALS, INCLUDING TRIMMING OF TREES, IS THE RESPONSIBILITY OF THE PERMITTEE.
- UNLESS OTHERWISE NOTED, THE PERMITTEE SHALL MAINTAIN CURBING AND OTHER DRAINAGE FACILITIES IN ACCORDANCE WITH DEPARTMENT STANDARDS AND CRITERIA, EXCEPT FOR INLET GRATES THAT WILL BE MAINTAINED BY THE DEPARTMENT AS A PART OF THE ROADWAY SURFACE.
- ALL SIGNS, CURBS, CURB RAMPS, SIDEWALKS, AND PAVEMENT MARKINGS INDICATED ON THIS DRAWING ARE CONSIDERED PART OF THE PERMIT AND SHALL BE INSTALLED AND MAINTAINED BY THE PERMITTEE IN ACCORDANCE WITH PENNSYLVANIA DEPARTMENT OF TRANSPORTATION PUBLICATION 68, OFFICAL TRAFFIC CONTROL DEVICES. EXCEPTIONS ARE LONGITUDINAL PAVEMENT MARKINGS IN STATE HIGHWAYS, WHICH ARE MAINTAINED BY THE DEPARTMENT.
- SUPPORT POLES FOR OVERHEAD SIGNALS AND SIGNS SHALL HAVE A MINIMUM CLEARANCE OF 2 FEET BEHIND THE FACE OF THE CURB OR 12 FEET FROM THE EDGE OF THE TRAVELED ROADWAY TO EDGE OF SUPPORT POLE.
- VEHICULAR SIGNALS OR SIGNS ERECTED OVER THE ROADWAY SHALL HAVE A CLEARANCE OF 17 FEET ABOVE THE ROADWAY. UNLESS OTHERWISE NOTED, POST MOUNTED VEHICULAR SIGNALS SHALL HAVE A CLEARANCE OF NOT LESS THAN 8 FEET NOR MORE THAN 15 FEET ABOVE THE SIDEWALK LEVEL OR PAVEMENT GRADE AT THE CENTER OF THE HIGHWAY IF NO SIDEWALK EXISTS. UNLESS OTHERWISE NOTED, PEDESTRIAN SIGNALS SHALL HAVE A CLEARANCE OF 8 FEET ABOVE THE SIDEWALK LEVEL. UNLESS OTHERWISE NOTED, POST MOUNTED SIGNS SHALL HAVE A CLEARANCE OF 7 FEET ABOVE THE SIDEWALK LEVEL OR ABOVE THE EDGE OF ROADWAY GRADE, IF NO SIDEWALK EXISTS. UNLESS OTHERWISE NOTED, THE TOP OF THE POST MOUNTED SIGNS SHALL BE A MINIMUM 9 FEET ABOVE GROUND LINE.
- THE MINIMUM HORIZONTAL DISTANCE BETWEEN SIGNAL, MEASURED AT RIGHT ANGLES TO THE APPROACH, SHALL BE 8 FEET.
- THIS DRAWING CANNOT BE USED AS A CONSTRUCTION DRAWING UNLESS THE PERMITTEE COMPLIES WITH THE PROVISIONS OF THE LATEST ACT PREVENTING DAMAGE TO UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. CONSULT WITH UTILITY COMPANIES TO RESOLVE ANY PROBLEMS THAT MAY BE CREATED DUE TO THE LOCATION OF UTILITIES.

COORDINATION NOTES

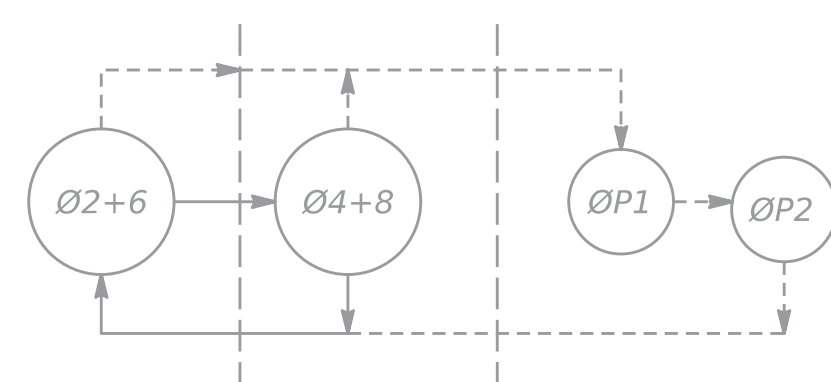
CONTROLLER TO BE COORDINATED WITH ADJACENT CONTROLLERS THROUGH THE USE OF THE INTERCONNECT CABLE TO PROVIDE A PROGRESSIVE MOVEMENT OF TRAFFIC ALONG THE BAYFRONT CONNECTOR/PARKWAY (S.R. 4034/S.R. 0290), EAST 6TH STREET (S.R. 4018), EAST LAKE ROAD (S.R. 4018), EAST 10TH STREET, AND EAST 12TH STREET (S.R. 0005).

MASTER COMPUTER IS LOCATED AT THE CITY OF ERIE ENGINEERING OFFICES.

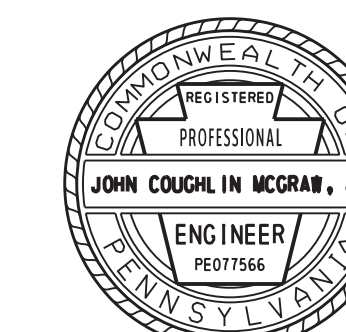
MASTER CONTROLLER IS LOCATED AT THE INTERSECTION OF EAST 12TH STREET (S.R. 0005) AT BAYFRONT CONNECTOR/PARKWAY (S.R. 4034/S.R. 0290).

MASTER LOCATION FOR REFERENCING OFFSETS IS AT THE INTERSECTION OF EAST 12TH STREET (S.R. 0005) AT BAYFRONT CONNECTOR/PARKWAY (S.R. 4034/S.R. 0290). OFFSETS ARE REFERENCED TO THE END OF GREEN OF PHASE 4+8.

PHASING DIAGRAMS



NORMAL OPERATION ———
 RAILROAD PREEMPTION - - - - -
 PHASE SEQUENCE BARRIER - - - - -



| | |
|---------------|--|
| COUNTY: | ERIE |
| MUNICIPALITY: | CITY OF ERIE |
| INTERSECTION: | S.R. 4034 (BAYFRONT PARKWAY) AND EAST EIGHTH STREET - PHASE 2 |
| ACTIVITY: | MEDIAN CONSTRUCTION |
| PREPARED BY: | JMT |
| CONTRACTOR | DATE |

SCALE: 0 25 50
 (IN FEET)

SIGNS

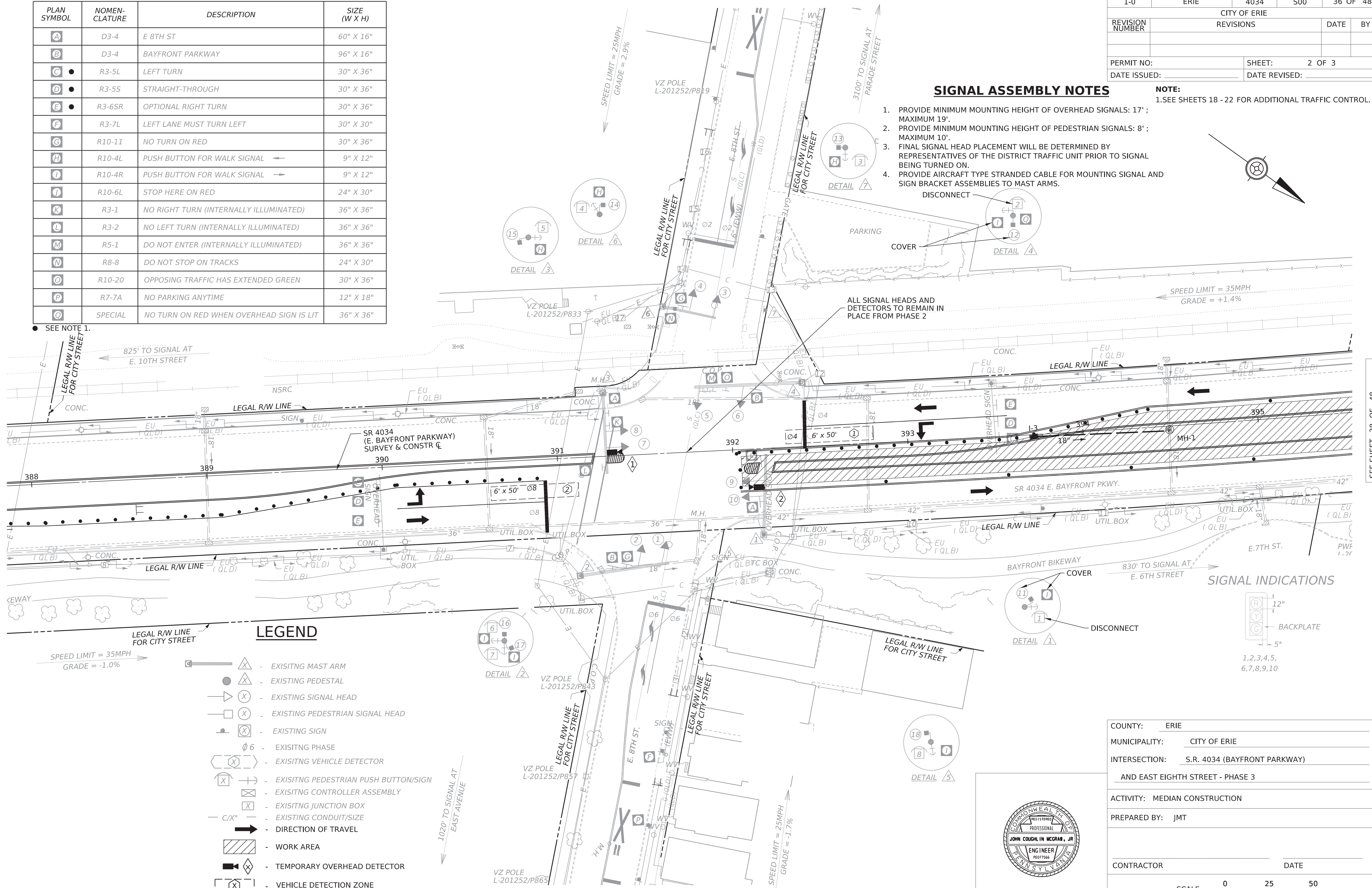
| PLAN SYMBOL | NOMEN-CLATURE | DESCRIPTION | SIZE (W X H) |
|-------------|---------------|--|--------------|
| A | D3-4 | E 8TH ST | 60" X 16" |
| B | D3-4 | BAYFRONT PARKWAY | 96" X 16" |
| C | R3-5L | LEFT TURN | 30" X 36" |
| D | R3-5S | STRAIGHT-THROUGH | 30" X 36" |
| E | R3-6SR | OPTIONAL RIGHT TURN | 30" X 36" |
| F | R3-7L | LEFT LANE MUST TURN LEFT | 30" X 30" |
| G | R10-11 | NO TURN ON RED | 30" X 36" |
| H | R10-4L | PUSH BUTTON FOR WALK SIGNAL | 9" X 12" |
| I | R10-4R | PUSH BUTTON FOR WALK SIGNAL | 9" X 12" |
| J | R10-6L | STOP HERE ON RED | 24" X 30" |
| K | R3-1 | NO RIGHT TURN (INTERNALLY ILLUMINATED) | 36" X 36" |
| L | R3-2 | NO LEFT TURN (INTERNALLY ILLUMINATED) | 36" X 36" |
| M | R5-1 | DO NOT ENTER (INTERNALLY ILLUMINATED) | 36" X 36" |
| N | R8-8 | DO NOT STOP ON TRACKS | 24" X 30" |
| O | R10-20 | OPPOSING TRAFFIC HAS EXTENDED GREEN | 30" X 36" |
| P | R7-7A | NO PARKING ANYTIME | 12" X 18" |
| Q | SPECIAL | NO TURN ON RED WHEN OVERHEAD SIGN IS LIT | 36" X 36" |

● SEE NOTE 1.

SIGNAL ASSEMBLY NOTES

1. PROVIDE MINIMUM MOUNTING HEIGHT OF OVERHEAD SIGNALS: 17' ; MAXIMUM 19'.
2. PROVIDE MINIMUM MOUNTING HEIGHT OF PEDESTRIAN SIGNALS: 8' ; MAXIMUM 10'.
3. FINAL SIGNAL HEAD PLACEMENT WILL BE DETERMINED BY REPRESENTATIVES OF THE DISTRICT TRAFFIC UNIT PRIOR TO SIGNAL BEING TURNED ON.
4. PROVIDE AIRCRAFT TYPE STRANDED CABLE FOR MOUNTING SIGNAL AND SIGN BRACKET ASSEMBLIES TO MAST ARMS.

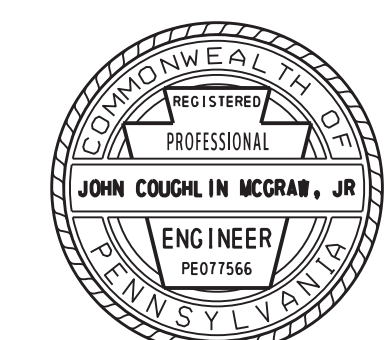
NOTE:
1. SEE SHEETS 18 - 22 FOR ADDITIONAL TRAFFIC CONTROL.



LEGEND

- EXISTING MAST ARM
- EXISTING PEDESTAL
- EXISTING SIGNAL HEAD
- EXISTING PEDESTRIAN SIGNAL HEAD
- EXISTING SIGN
- EXISTING PHASE
- EXISTING VEHICLE DETECTOR
- EXISTING PEDESTRIAN PUSH BUTTON/SIGN
- EXISTING CONTROLLER ASSEMBLY
- EXISTING JUNCTION BOX
- EXISTING CONDUIT/SIZE
- DIRECTION OF TRAVEL
- WORK AREA
- TEMPORARY OVERHEAD DETECTOR
- VEHICLE DETECTION ZONE

SIGNAL INDICATIONS



| | |
|---------------|---|
| COUNTY: | ERIE |
| MUNICIPALITY: | CITY OF ERIE |
| INTERSECTION: | S.R. 4034 (BAYFRONT PARKWAY) AND EAST EIGHTH STREET - PHASE 3 |
| ACTIVITY: | MEDIAN CONSTRUCTION |
| PREPARED BY: | JMT |
| CONTRACTOR: | DATE |
| SCALE: | 0 25 50 (IN FEET) |

MOVEMENT, PHASING, AND SEQUENCE CHART

| SIGNAL | PHASE 2+6 | | | | | PHASE 4+8 | | | | RAILROAD PREEMPTION P1 | | | RAILROAD PREEMPTION P2 | | | | EMERGENCY FLASHING | | | | |
|------------------|--|-----|-----|-----|-----|-----------|-----|-----|-----|------------------------|-----|-----|------------------------|--|--|-----|--------------------|-----|----|--|-----|
| | | | | | | | | | | | | | | | | | | | | | |
| | INTERVAL | | | | | INTERVAL | | | | INTERVAL | | | INTERVAL | | | | | | | | |
| 1,2 | G | G | G | Y | R | R | R | R | R | | G | Y | R | | | R | R | R | R | | R |
| 3,4 | G | G | Y | R | R | R | R | R | R | | R | R | R | | | R | R | R | R | | R |
| 5,6 | G | G | Y | R | R | R | R | R | R | | R | R | R | | | R | R | R | R | | R |
| 7,8 | R | R | R | R | R | G | G | Y | R | | R | R | R | | | G | G | Y | R | | Y |
| 9,10 | R | R | R | R | R | G | G | Y | R | | R | R | R | | | G | G | Y | R | | Y |
| *11,12 | COVER EXISTING PEDESTRIAN SIGNAL HEADS | | | | | | | | | | | | | | | | | | | | |
| *15,16 | W | FD | DW | DW | DW | DW | DW | DW | DW | | DW | DW | DW | | | DW | DW | DW | DW | | OFF |
| *13,14 | DW | DW | DW | DW | DW | W | FD | DW | DW | | DW | DW | DW | | | W | FD | DW | DW | | OFF |
| *17,18 | DW | DW | DW | DW | DW | W | FD | DW | DW | | DW | DW | DW | | | W | FD | DW | DW | | OFF |
| SIGNS | | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | | ON | ON | ON | | | ON | ON | ON | ON | | OFF |
| FIXED | | 3.0 | 3.0 | 2.0 | | 3.0 | 3.0 | | | | 3.0 | 2.0 | | | | | 3.0 | 3.0 | | | |
| MINIMUM | 7 | | | | | 12 | | | | | 7 | | | | | | | | | | |
| SEC. JACT. | | | | | | 2.5 | | | | | | | | | | | | | | | |
| MAX. INITIAL | | | | | | 25 | | | | | | | | | | | | | | | |
| PASSAGE | 4 | | | | | 6 | | | | | | | | | | | | | | | |
| TIME TO REDUCE | | | | | | 3 | | | | | | | | | | | | | | | |
| BEFORE REDUCTION | | | | | | 27 | | | | | | | | | | | | | | | |
| MIN. GAP | | | | | | 3 | | | | | | | | | | | | | | | |
| MAX I | 21 | | | | | 55 | | | | | 7 | | | | | ① | | | | | |
| MAX II | 29 | | | | | 47 | | | | | 7 | | | | | ① | | | | | |
| * PEDESTRIAN | 13.0 | 18 | | | | 9.0 | 12 | | | | | | | | | 9.0 | 12 | ② | | | |
| MEMORY | NL | | | | | MN | | | | MN | | | | | | | | | | | |

MEMORY: * UPON PEDESTRIAN ACTIVATION, OTHERWISE DON'T WALK AT ALL TIMES.

MN - MINIMUM RECALL
 MX - MAXIMUM RECALL
 L - LOCKING
 NL - NON-LOCKING

① DWELL UNTIL PREEMPTION TERMINATES.

② RETURN TO DW UNTIL PEDESTRIAN ACTUATION IS CALLED.

RAILROAD PREEMPTION NOTES

NORMAL OPERATION WILL BE PREEMPTED BY THE TRAIN APPROACH SIGNALS WHEN ACTIVATED BY A TRAIN ENTERING THE RAILROAD CIRCUIT. IF TRAIN PREEMPTION OCCURS IN:
 -PHASE 4+8-INTERVAL 1, IT TERMINATES IMMEDIATELY FOLLOWED BY PHASE 4+8-INTERVALS 2,3&4 IF PEDESTRIAN TIMINGS ARE ACTUATED, OR INTERVALS 3&4 IF PEDESTRIAN TIMINGS ARE NOT ACTUATED, AND TRAIN PHASE P1-INTERVAL 1.
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 -PHASE 4+8-INTERVAL 3, IT TIMES OUT FOLLOWED BY PHASE 4+8-INTERVAL 4 AND TRAIN PHASE P1-INTERVAL 1.
 -PHASE 4+8-INTERVAL 4, IT TIMES OUT FOLLOWED BY TRAIN PHASE P1-INTERVAL 1.
 -PHASE 2+6-INTERVAL 1, IT TERMINATES IMMEDIATELY FOLLOWED BY PHASE 2+6-INTERVALS 2,3,4&5 IF PEDESTRIAN TIMINGS ARE ACTUATED, OR INTERVALS 3,4&5 IF PEDESTRIAN TIMINGS ARE NOT ACTUATED, AND TRAIN PHASE P1-INTERVAL 1.
 -PHASE 2+6-INTERVAL 2, IT TIMES OUT FOLLOWED BY PHASE 2+6-INTERVALS 3,4&5 AND TRAIN PHASE P1-INTERVAL 1.
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 -PHASE 2+6-INTERVAL 5, IT TIMES OUT FOLLOWED BY TRAIN PHASE P1-INTERVAL 1.

IN RETURNING FROM TRAIN OPERATION TO NORMAL OPERATION, IF TRAIN PREEMPTION TERMINATES IN:
 -TRAIN PHASE P2-INTERVAL 1, A TIMING DEVICE WILL BE ACTIVATED WHICH WILL HOLD THIS INTERVAL FOR TEN SECONDS FOLLOWED BY THE TRAIN PHASE P2-INTERVALS 2,3&4 BEFORE RETURNING TO PHASE 2+6-INTERVAL 1 AND NORMAL OPERATION.
 -TRAIN PHASE P2-INTERVAL 3, IT TIMES OUT FOLLOWED BY TRAIN PHASE P-INTERVALS 4 BEFORE RETURNING TO PHASE 2+6-INTERVAL 1 AND NORMAL OPERATION.
 -TRAIN PHASE P2-INTERVAL 4, IT TIMES OUT FOLLOWED BY PHASE 2+6-INTERVAL 1 AND NORMAL OPERATION.

OPERATION OF LOOP DETECTORS ON EASTBOUND APPROACH E. 8TH ST. AS AFFECTED BY THE RAILROAD PREEMPTION IS AS FOLLOWS:
 ANY CALL ON THIS DETECTOR EXISTING AT THE TIME OF PREEMPTION OR OCCURING DURING PREEMPTION SHALL BE HELD BY THE PREEMPTION EQUIPMENT TO BE PLACED IN THE CONTROLLER MEMORY UPON RETURN TO NORMAL OPERATION.

RAILROAD PREEMPTION TAKES PRECEDENCE OVER EMERGENCY PREEMPTION.

NOTES:

1. MAINTAIN ALL EXISTING PREEMPTION.

| DISTRICT | COUNTY | ROUTE | SECTION | SHEET | |
|-----------------|-----------|---------------|---------|----------|----|
| 1-0 | ERIE | 4034 | 500 | 37 OF 48 | |
| CITY OF ERIE | | | | | |
| REVISION NUMBER | REVISIONS | | | DATE | BY |
| | | | | | |
| PERMIT NO: | | SHEET: 3 OF 3 | | | |
| DATE ISSUED: | | DATE REVISED: | | | |

NOTES

1. INSTALLATION, OPERATION, AND MAINTENANCE OF THESE SIGNALS SHALL BE IN ACCORDANCE WITH PENNSYLVANIA DEPARTMENT OF TRANSPORTATION REGULATIONS GOVERNING THE DESIGN, LOCATION, AND OPERATION OF SIGNS, SIGNALS, AND PAVEMENT MARKINGS.
2. NO MODIFICATIONS OF THIS INSTALLATION ARE PERMITTED UNLESS PRIOR APPROVAL IS GRANTED, IN WRITING, BY THE SECRETARY OF TRANSPORTATION OR HIS REPRESENTATIVE.
3. MAINTENANCE WORK ON ALL APPROACHES TO THE SIGNALIZED INTERSECTION NECESSARY FOR PROPER VISIBILITY OF THE SIGNS AND SIGNALS, INCLUDING TRIMMING OF TREES, IS THE RESPONSIBILITY OF THE PERMITTEE.
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5. ALL SIGNS, CURBS, CURB RAMPS, SIDEWALKS, AND PAVEMENT MARKINGS INDICATED ON THIS DRAWING ARE CONSIDERED PART OF THE PERMIT AND SHALL BE INSTALLED AND MAINTAINED BY THE PERMITTEE IN ACCORDANCE WITH PENNSYLVANIA DEPARTMENT OF TRANSPORTATION PUBLICATION 68, OFFICAL TRAFFIC CONTROL DEVICES. EXCEPTIONS ARE LONGITUDINAL PAVEMENT MARKINGS IN STATE HIGHWAYS, WHICH ARE MAINTAINED BY THE DEPARTMENT.
6. SUPPORT POLES FOR OVERHEAD SIGNALS AND SIGNS SHALL HAVE A MINIMUM CLEARANCE OF 2 FEET BEHIND THE FACE OF THE CURB OR 12 FEET FROM THE EDGE OF THE TRAVELED ROADWAY TO EDGE OF SUPPORT POLE.
7. VEHICULAR SIGNALS OR SIGNS ERECTED OVER THE ROADWAY SHALL HAVE A CLEARANCE OF 17 FEET ABOVE THE ROADWAY. UNLESS OTHERWISE NOTED, POST MOUNTED VEHICULAR SIGNALS SHALL HAVE A CLEARANCE OF NOT LESS THAN 8 FEET NOR MORE THAN 15 FEET ABOVE THE SIDEWALK LEVEL OR PAVEMENT GRADE AT THE CENTER OF THE HIGHWAY IF NO SIDEWALK EXISTS. UNLESS OTHERWISE NOTED, PEDESTRIAN SIGNALS SHALL HAVE A CLEARANCE OF 8 FEET ABOVE THE SIDEWALK LEVEL. UNLESS OTHERWISE NOTED, POST MOUNTED SIGNS SHALL HAVE A CLEARANCE OF 7 FEET ABOVE THE SIDEWALK LEVEL OR ABOVE THE EDGE OF ROADWAY GRADE, IF NO SIDEWALK EXISTS. UNLESS OTHERWISE NOTED, THE TOP OF THE POST MOUNTED SIGNS SHALL BE A MINIMUM 9 FEET ABOVE GROUND LINE.
8. THE MINIMUM HORIZONTAL DISTANCE BETWEEN SIGNAL, MEASURED AT RIGHT ANGLES TO THE APPROACH, SHALL BE 8 FEET.
9. THIS DRAWING CANNOT BE USED AS A CONSTRUCTION DRAWING UNLESS THE PERMITTEE COMPLIES WITH THE PROVISIONS OF THE LATEST ACT PREVENTING DAMAGE TO UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. CONSULT WITH UTILITY COMPANIES TO RESOLVE ANY PROBLEMS THAT MAY BE CREATED DUE TO THE LOCATION OF UTILITIES.

COORDINATION NOTES

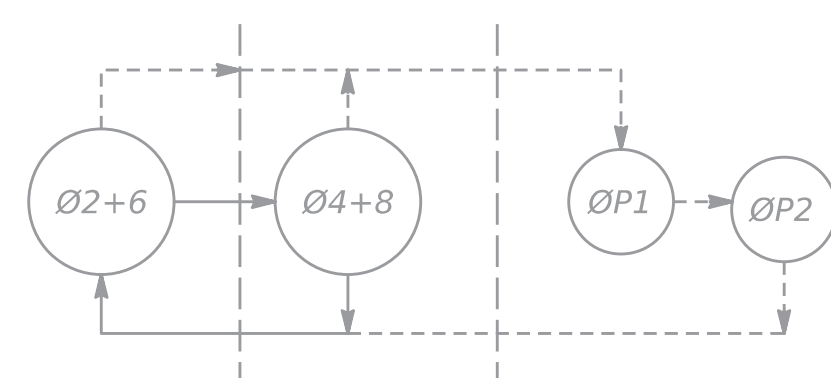
CONTROLLER TO BE COORDINATED WITH ADJACENT CONTROLLERS THROUGH THE USE OF THE INTERCONNECT CABLE TO PROVIDE A PROGRESSIVE MOVEMENT OF TRAFFIC ALONG THE BAYFRONT CONNECTOR/PARKWAY (S.R. 4034/S.R. 0290), EAST 6TH STREET (S.R. 4018), EAST LAKE ROAD (S.R. 4018), EAST 10TH STREET, AND EAST 12TH STREET (S.R. 0005).

MASTER COMPUTER IS LOCATED AT THE CITY OF ERIE ENGINEERING OFFICES.

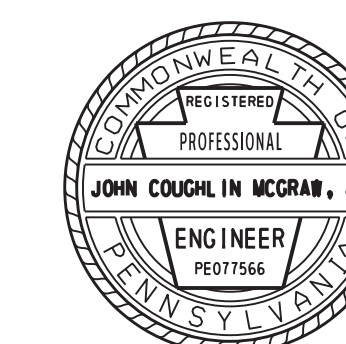
MASTER CONTROLLER IS LOCATED AT THE INTERSECTION OF EAST 12TH STREET (S.R. 0005) AT BAYFRONT CONNECTOR/PARKWAY (S.R. 4034/S.R. 0290).

MASTER LOCATION FOR REFERENCING OFFSETS IS AT THE INTERSECTION OF EAST 12TH STREET (S.R. 0005) AT BAYFRONT CONNECTOR/PARKWAY (S.R. 4034/S.R. 0290). OFFSETS ARE REFERENCED TO THE END OF GREEN OF PHASE 4+8.

PHASING DIAGRAMS



NORMAL OPERATION ———
 RAILROAD PREEMPTION - - - - -
 PHASE SEQUENCE BARRIER - - - - -



| | |
|---------------|--|
| COUNTY: | ERIE |
| MUNICIPALITY: | CITY OF ERIE |
| INTERSECTION: | S.R. 4034 (BAYFRONT PARKWAY) AND EAST EIGHTH STREET - PHASE 3 |
| ACTIVITY: | MEDIAN CONSTRUCTION |
| PREPARED BY: | JMT |
| CONTRACTOR: | DATE |

SCALE : 0 25 50
 (IN FEET)

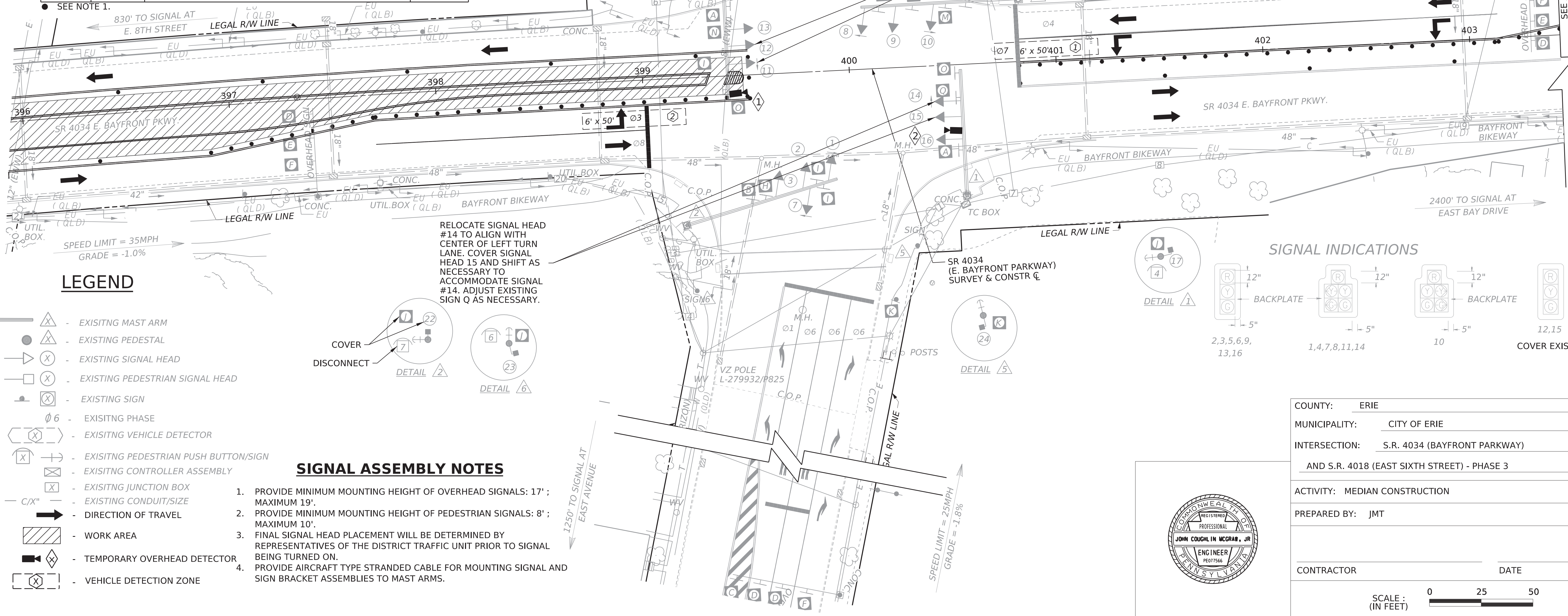
SIGNS

| PLAN SYMBOL | NOMENCLATURE | DESCRIPTION | SIZE (W X H) |
|-------------|--------------|---|--------------|
| A | D3-4 | E 6TH ST | 60" X 16" |
| B | D3-5 | ← BAYFRONT PARKWAY → | 96" X 16" |
| C | D3-5 | ← BAYFRONT PARKWAY → | 96" X 16" |
| D | R3-5L | LEFT TURN | 30" X 36" |
| E | R3-5S | STRAIGHT-THROUGH | 30" X 36" |
| F | R3-6SR | OPTIONAL RIGHT TURN | 30" X 36" |
| G | R3-5R | RIGHT TURN | 30" X 36" |
| H | R10-11 | NO TURN ON RED | 30" X 36" |
| I | R10-12 | LEFT TURN YIELD ON GREEN | 30" X 36" |
| J | R10-4L | PUSH BUTTON FOR WALK SIGNAL ← | 9" X 12" |
| K | R10-4R | PUSH BUTTON FOR WALK SIGNAL → | 9" X 12" |
| L | R10-6L | STOP HERE ON RED | 24" X 30" |
| M | R10-10R | RIGHT TURN SIGNAL | 30" X 36" |
| N | R3-1 | NO RIGHT TURN (INTERNALLY ILLUMINATED) | 36" X 36" |
| O | R3-2 | NO LEFT TURN (INTERNALLY ILLUMINATED) | 36" X 36" |
| P | R5-1 | DO NOT ENTER (INTERNALLY ILLUMINATED) | 30" X 36" |
| Q | R10-12 | LEFT TURN YIELD ON GREEN (INTERNALLY ILLUMINATED) | 36" X 36" |
| R | W11-2A | PEDESTRIAN CROSSING | 30" X 30" |
| S | R7-7A | YIELD TO PEDS IN CROSSWALKS | 24" X 18" |
| T | SPECIAL | NO TURN ON RED WHEN OVERHEAD SIGN IS LIT | 36" X 36" |

● SEE NOTE 1.

| DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
|-----------------|-----------|-------|---------------|----------|
| 1-0 | ERIE | 4034 | 500 | 38 OF 48 |
| CITY OF ERIE | | | | |
| REVISION NUMBER | REVISIONS | DATE | BY | |
| | | | | |
| PERMIT NO: | | | SHEET: | 2 OF 3 |
| DATE ISSUED: | | | DATE REVISED: | |

NOTE:
1. SEE SHEETS 18 - 22 FOR ADDITIONAL TRAFFIC CONTROL.

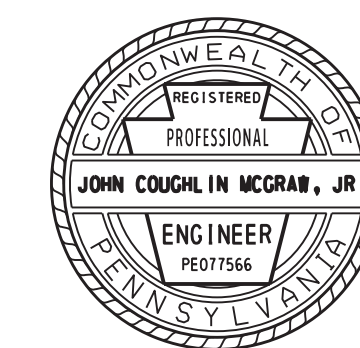


LEGEND

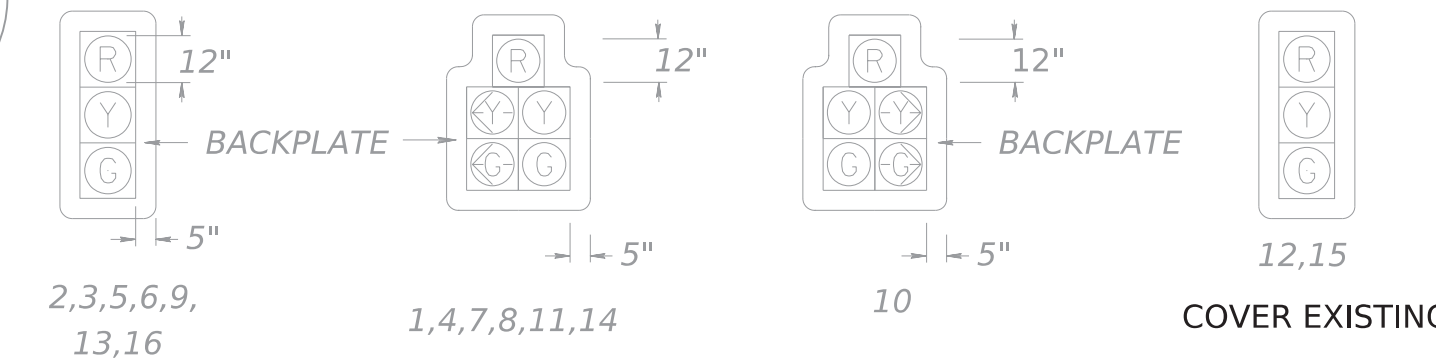
- EXISTING MAST ARM
- EXISTING PEDESTAL
- EXISTING SIGNAL HEAD
- EXISTING PEDESTRIAN SIGNAL HEAD
- EXISTING SIGN
- EXISTING PHASE
- EXISTING VEHICLE DETECTOR
- EXISTING PEDESTRIAN PUSH BUTTON/SIGN
- EXISTING CONTROLLER ASSEMBLY
- EXISTING JUNCTION BOX
- EXISTING CONDUIT/SIZE
- DIRECTION OF TRAVEL
- WORK AREA
- TEMPORARY OVERHEAD DETECTOR
- VEHICLE DETECTION ZONE

SIGNAL ASSEMBLY NOTES

- PROVIDE MINIMUM MOUNTING HEIGHT OF OVERHEAD SIGNALS: 17' ; MAXIMUM 19'.
- PROVIDE MINIMUM MOUNTING HEIGHT OF PEDESTRIAN SIGNALS: 8' ; MAXIMUM 10'.
- FINAL SIGNAL HEAD PLACEMENT WILL BE DETERMINED BY REPRESENTATIVES OF THE DISTRICT TRAFFIC UNIT PRIOR TO SIGNAL BEING TURNED ON.
- PROVIDE AIRCRAFT TYPE STRANDED CABLE FOR MOUNTING SIGNAL AND SIGN BRACKET ASSEMBLIES TO MAST ARMS.



SIGNAL INDICATIONS



| | |
|---------------|---|
| COUNTY: | ERIE |
| MUNICIPALITY: | CITY OF ERIE |
| INTERSECTION: | S.R. 4034 (BAYFRONT PARKWAY) AND S.R. 4018 (EAST SIXTH STREET) - PHASE 3 |
| ACTIVITY: | MEDIAN CONSTRUCTION |
| PREPARED BY: | JMT |
| CONTRACTOR: | DATE |



MOVEMENT, PHASING, AND SEQUENCE CHART

| SIGNAL | PHASE 1+5 | | | | PHASE 2+6 | | | | | PHASE 3+7 | | | | PHASE 4+8 | | | | RAILROAD PREEMPTION P1 | | | | RAILROAD PREEMPTION P2 | | | | EMERGENCY FLASHING | | | | | | |
|------------------|--|-----|-----|-----|-----------|-----|-----|-----|-----|-----------|-----|-----|--|-----------|-----|-----|-----|------------------------|-----|-----|-----|------------------------|---|---|---|--------------------|------|-----|-----|-----|--|-----|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | | 4 | | | | | |
| 1 | R | R | R | R | G | G | G | Y | R | R | R | R | | R | R | R | R | | G | G | G | Y | | | | | R | R | R | R | | R |
| 2,3 | R | R | R | R | G | G | G | Y | R | R | R | R | | R | R | R | R | | G | G | G | Y | | | | | R | R | R | R | | R |
| 4 | R | R | R | R | G | G | Y | R | R | R | R | R | | R | R | R | R | | R | R | R | R | | | | | R | R | R | R | | R |
| 5,6 | R | R | R | R | G | G | Y | R | R | R | R | R | | R | R | R | R | | G | G | Y | R | | | | | R | R | R | R | | R |
| 7,8 | R | R | R | R | G | G | Y | R | R | R | R | R | | R | R | R | R | | R | R | R | R | | | | | R | R | R | R | | R |
| 9 | R | R | R | R | G | G | Y | R | R | R | R | R | | R | R | R | R | | R | R | R | R | | | | | R | R | R | R | | R |
| 10 | R | R | R | R | G | G | Y | R | R | R | R | R | | R | R | R | R | | R | R | R | R | | | | | R | R | R | R | | R |
| 11 | R | R | R | R | R | R | R | R | R | R | R | R | | G | G | Y | R | | R | R | R | R | | | | | G | G | Y | R | | R |
| 13 | R | R | R | R | R | R | R | R | R | R | R | R | | G | G | Y | R | | R | R | R | R | | | | | G | G | Y | R | | R |
| 14 | R | R | R | R | R | R | R | R | R | R | R | R | | G | G | Y | R | | R | R | R | R | | | | | R | R | R | R | | R |
| 16 | R | R | R | R | R | R | R | R | R | R | R | R | | G | G | Y | R | | R | R | R | R | | | | | G | G | Y | R | | R |
| *17,18 | DW | DW | DW | DW | W | FD | DW | DW | DW | DW | DW | DW | | DW | DW | DW | DW | | DW | DW | DW | DW | | | | | DW | DW | DW | DW | | OFF |
| *21,22 | COVER EXISTING PEDESTRIAN SIGNAL HEADS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| *19,20 | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | | W | FD | DW | DW | | DW | DW | DW | DW | | | | | W | FD | DW | DW | | OFF |
| *23,24 | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | | W | FD | DW | DW | | DW | DW | DW | DW | | | | | W | FD | DW | DW | | OFF |
| SIGN | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | | OFF | OFF | OFF | OFF | | ON | ON | ON | ON | | | | | ON | ON | ON | ON | | OFF |
| SIGN | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | | ON | ON | ON | ON | | OFF | OFF | OFF | OFF | | | | | OFF | OFF | OFF | OFF | | OFF |
| FIXED | 3.0 | 3.0 | 2.0 | | 3.0 | 3.0 | 2.0 | | | 3.0 | 2.0 | | | 3.0 | 3.0 | | | | 3.0 | 3.0 | | | | | | | 3.0 | 3.0 | | | | |
| MINIMUM | 7 | | | | 10 | | | | | | | | | 12 | | | | | | | | | | | | | | | | | | |
| SEC./ACT. | | | | | 2.1 | | | | | | | | | 2.1 | | | | | | | | | | | | | | | | | | |
| MAX. INITIAL | | | | | 19 | | | | | | | | | 22 | | | | | | | | | | | | | | | | | | |
| PASSAGE | 2 | | | | 5 | | | | | | | | | 7 | | | | | | | | | | | | | | | | | | |
| TIME TO REDUCE | | | | | | | | | | | | | | 4 | | | | | | | | | | | | | | | | | | |
| BEFORE REDUCTION | | | | | | | | | | | | | | 22 | | | | | | | | | | | | | | | | | | |
| MIN. GAP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MAX I | 10 | | | | 16 | | | | | 10 | | | | 26 | | | | | | | | | | | | | | | | | | ① |
| MAX II | 10 | | | | 26 | | | | | 7 | | | | 19 | | | | | | | | | | | | | | | | | | ① |
| *PEDESTRIAN | | | | | 14 | 20 | | | | | | | | 13.0 | 19 | | | | | | | | | | | | 13.0 | 19 | | | | ② |
| MEMORY | NL | | | | MN | | | | | NL | | | | MN | | | | | | | | | | | | | | | | | | |

RAILROAD PREEMPTION NOTES

NORMAL OPERATION WILL BE PREEMPTED BY THE TRAIN APPROACH SIGNALS WHEN ACTIVATED BY A TRAIN ENTERING THE RAILROAD CIRCUIT. IF TRAIN PREEMPTION OCCURS IN:

- PHASE 3+7-INTERVAL 1, IT TERMINATES IMMEDIATELY FOLLOWED BY PHASE 3+7-INTERVALS 2&3 AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 3+7-INTERVAL 2, IT TIMES OUT FOLLOWED BY PHASE 3+7-INTERVAL 3 AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 3+7-INTERVAL 3, IT TIMES OUT FOLLOWED BY TRAIN PHASE P1-INTERVAL 1.
- PHASE 4+8-INTERVAL 1, IT TERMINATES IMMEDIATELY FOLLOWED BY PHASE 4+8-INTERVALS 2,3&4 IF PEDESTRIAN TIMINGS ARE ACTUATED, OR INTERVALS 3&4 IF PEDESTRIAN TIMINGS ARE NOT ACTUATED, AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 4+8-INTERVAL 2, IT TIMES OUT FOLLOWED BY PHASE 4+8-INTERVALS 3&4 AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 4+8-INTERVAL 3, IT TIMES OUT FOLLOWED BY PHASE 4+8-INTERVAL 4 AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 4+8-INTERVAL 4, IT TIMES OUT FOLLOWED BY TRAIN PHASE P1-INTERVAL 1.
- PHASE 1+5-INTERVAL 1, IT TERMINATES IMMEDIATELY FOLLOWED BY PHASE 1+5-INTERVALS 2,3&4 AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 1+5-INTERVAL 2, IT TIMES OUT FOLLOWED BY PHASE 1+5-INTERVALS 3&4 AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 1+5-INTERVAL 3, IT TIMES OUT FOLLOWED BY PHASE 1+5-INTERVALS 4 AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 1+5-INTERVAL 4, IT TIMES OUT FOLLOWED BY TRAIN PHASE P1-INTERVAL 1.
- PHASE 2+6-INTERVAL 1, IT TERMINATES IMMEDIATELY FOLLOWED BY PHASE 2+6-INTERVALS 2,3,4&5 IF PEDESTRIAN TIMINGS ARE ACTUATED, OR INTERVALS 3,4&5 IF PEDESTRIAN TIMINGS ARE NOT ACTUATED, AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 2+6-INTERVAL 2, IT TIMES OUT FOLLOWED BY PHASE 2+6-INTERVALS 3,4&5 AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 2+6-INTERVAL 3, IT TIMES OUT FOLLOWED BY PHASE 2+6-INTERVALS 4&5 AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 2+6-INTERVAL 4, IT TIMES OUT FOLLOWED BY PHASE 2+6-INTERVALS 5 AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 2+6-INTERVAL 5, IT TIMES OUT FOLLOWED BY TRAIN PHASE P1-INTERVAL 1.

IN RETURNING FROM TRAIN OPERATION TO NORMAL OPERATION, IF TRAIN PREEMPTION TERMINATES IN:

- TRAIN PHASE P2-INTERVAL 1, A TIMING DEVICE WILL BE ACTIVATED WHICH WILL HOLD THIS INTERVAL FOR TEN SECONDS FOLLOWED BY THE TRAIN PHASE P2-INTERVALS 2,3&4 BEFORE RETURNING TO PHASE 2+6-INTERVAL 1 AND NORMAL OPERATION.
- TRAIN PHASE P2-INTERVAL 2, IT TIMES OUT FOLLOWED BY TRAIN PHASE P-INTERVALS 3&4 BEFORE RETURNING TO PHASE 2+6-INTERVAL 1 AND NORMAL OPERATION.
- TRAIN PHASE P2-INTERVAL 3, IT TIMES OUT FOLLOWED BY TRAIN PHASE P-INTERVALS 4 BEFORE RETURNING TO PHASE 2+6-INTERVAL 1 AND NORMAL OPERATION.
- TRAIN PHASE P2-INTERVAL 4, IT TIMES OUT FOLLOWED BY PHASE 2+6-INTERVAL 1 AND NORMAL OPERATION.

OPERATION OF LOOP DETECTORS ON EASTBOUND APPROACH E. 6TH ST. AS AFFECTED BY THE RAILROAD PREEMPTION IS AS FOLLOWS:

ANY CALL ON THIS DETECTOR EXISTING AT THE TIME OF PREEMPTION OR OCCURING DURING PREEMPTION SHALL BE HELD BY THE PREEMPTION EQUIPMENT TO BE PLACED IN THE CONTROLLER MEMORY UPON RETURN TO NORMAL OPERATION.

RAILROAD PREEMPTION TAKES PRECEDENCE OVER EMERGENCY PREEMPTION.

EMERGENCY PREEMPTION NOTES

EMERGENCY PREEMPTION EQUIPMENT IS LOCATED IN THE CONTROLLER CABINET. UPON PREEMPTION, THE CONTROLLER'S INTERNAL PREEMPTION PROGRAM PROVIDES THE FOLLOWING SEQUENCE IF THE CONFLICTING PHASE IS IN GREEN:

- A. A FLASHING "DON'T WALK" REPLACES ANY "WALK" INDICATION.
- B. THE FLASHING "DON'T WALK" INTERVAL IS COMPLETED.
- C. A YELLOW CLEARANCE INTERVAL REPLACES ALL CONFLICTING GREEN INDICATIONS.
- D. UPON COMPLETION OF THE YELLOW CLEARANCE INTERVAL, THE ALL RED INTERVAL IS COMPLETED FOLLOWED BY THE GREEN INDICATIONS FOR THE SELECTED STREET.

UPON PREEMPTION, THE CONTROLLER'S INTERNAL PREEMPTION PROGRAM PROVIDES THE FOLLOWING SEQUENCE IF THE SELECTED STREET IS IN GREEN:

- A. A FLASHING "DON'T WALK" REPLACES ANY "WALK" INDICATION.
- B. THE FLASHING "DON'T WALK" INTERVAL IS COMPLETED.
- C. THE GREEN INDICATION REMAINS ON THE SELECTED STREET.

UTILIZE CONTROLLER TIMINGS FOR INTERVAL BEING CLEARED.

FOR THE DURING OF THE PREEMPTION, A GREEN INDICATION REMAINS ON THE SELECTED STREET WITH A RED INDICATION GIVEN TO ALL OTHER STREETS AND A STEADY "DON'T WALK" INDICATION ON ALL PEDESTRIAN SIGNALS.

UPON TERMINATION OF THE PREEMPTION, THE SIGNAL RETURNS TO NORMAL OPERATION.

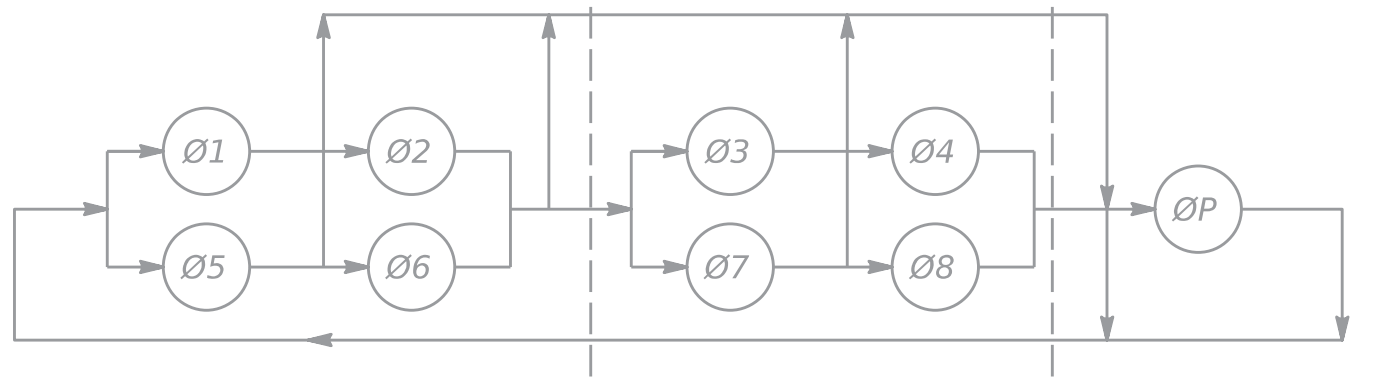
MEMORY: MN - MINIMUM RECALL
MX - MAXIMUM RECALL
L - LOCKING
NL - NON-LOCKING

* UPON PEDESTRIAN ACTIVATION, OTHERWISE DON'T WALK AT ALL TIMES.

① DWELL UNTIL PREEMPTION TERMINATES.

② RETURN TO DW UNTIL PEDESTRIAN ACTUATION IS CALLED.

PHASING DIAGRAM



NORMAL OPERATION
RAILROAD PREEMPTION
PHASE SEQUENCE BARRIER

| ITEM NUMBER | DESCRIPTION | QTY | LOCATION | REMARKS |
|----------------|--|-----|----------|-------------------------|
| 4954 0203 EACH | SIGNAL CABLE, 14 AWG, 7 CONDUCTOR, TEMPORARY | 20 | 399+42 | EXISTING SIGNAL HEAD 11 |
| 4954 0203 EACH | SIGNAL CABLE, 14 AWG, 7 CONDUCTOR, TEMPORARY | 20 | 400+53 | EXISTING SIGNAL HEAD 14 |

ITEM 0958-0324 (FOR INFORMATION ONLY)

| DESCRIPTION | QTY | LOCATION | REMARKS |
|-------------------------------------|-----|----------|---------|
| TEMPORARY OVERHEAD DETECTION SYSTEM | 1 | ① ② | |

- NOTES:
- SIGNAL HEADS 12 AND 15 COVERED DURING THIS PHASE.
 - MAINTAIN ALL EXISTING PREEMPTION.

| DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
|-----------------|---------------|--------|---------|----------|
| 1-0 | ERIE | 4034 | 500 | 39 OF 48 |
| CITY OF ERIE | | | | |
| REVISION NUMBER | REVISIONS | DATE | BY | |
| | | | | |
| PERMIT NO: | SHEET: | 3 OF 3 | | |
| DATE ISSUED: | DATE REVISED: | | | |

NOTES

- INSTALLATION, OPERATION, AND MAINTENANCE OF THESE SIGNALS SHALL BE IN ACCORDANCE WITH PENNSYLVANIA DEPARTMENT OF TRANSPORTATION REGULATIONS GOVERNING THE DESIGN, LOCATION, AND OPERATION OF SIGNS, SIGNALS, AND PAVEMENT MARKINGS.
- NO MODIFICATIONS OF THIS INSTALLATION ARE PERMITTED UNLESS PRIOR APPROVAL IS GRANTED, IN WRITING, BY THE SECRETARY OF TRANSPORTATION OR HIS REPRESENTATIVE.
- MAINTENANCE WORK ON ALL APPROACHES TO THE SIGNALIZED INTERSECTION NECESSARY FOR PROPER VISIBILITY OF THE SIGNS AND SIGNALS, INCLUDING TRIMMING OF TREES, IS THE RESPONSIBILITY OF THE PERMITTEE.
- UNLESS OTHERWISE NOTED, THE PERMITTEE SHALL MAINTAIN CURBING AND OTHER DRAINAGE FACILITIES IN ACCORDANCE WITH DEPARTMENT STANDARDS AND CRITERIA, EXCEPT FOR INLET GRATES THAT WILL BE MAINTAINED BY THE DEPARTMENT AS A PART OF THE ROADWAY SURFACE.
- ALL SIGNS, CURBS, CURB RAMPS, SIDEWALKS, AND PAVEMENT MARKINGS INDICATED ON THIS DRAWING ARE CONSIDERED PART OF THE PERMIT AND SHALL BE INSTALLED AND MAINTAINED BY THE PERMITTEE IN ACCORDANCE WITH PENNSYLVANIA DEPARTMENT OF TRANSPORTATION PUBLICATION 68, OFFICIAL TRAFFIC CONTROL DEVICES. EXCEPTIONS ARE LONGITUDINAL PAVEMENT MARKINGS IN STATE HIGHWAYS, WHICH ARE MAINTAINED BY THE DEPARTMENT.
- SUPPORT POLES FOR OVERHEAD SIGNALS AND SIGNS SHALL HAVE A MINIMUM CLEARANCE OF 2 FEET BEHIND THE FACE OF THE CURB OR 12 FEET FROM THE EDGE OF THE TRAVELED ROADWAY TO EDGE OF SUPPORT POLE.
- VEHICULAR SIGNALS OR SIGNS ERRECTED OVER THE ROADWAY SHALL HAVE A CLEARANCE OF 17 FEET ABOVE THE ROADWAY. UNLESS OTHERWISE NOTED, POST MOUNTED VEHICULAR SIGNALS SHALL HAVE A CLEARANCE OF NOT LESS THAN 8 FEET NOR MORE THAN 15 FEET ABOVE THE SIDEWALK LEVEL OR PAVEMENT GRADE AT THE CENTER OF THE HIGHWAY IF NO SIDEWALK EXISTS. UNLESS OTHERWISE NOTED, PEDESTRIAN SIGNALS SHALL HAVE A CLEARANCE OF 8 FEET ABOVE THE SIDEWALK LEVEL. UNLESS OTHERWISE NOTED, POST MOUNTED SIGNS SHALL HAVE A CLEARANCE OF 7 FEET ABOVE THE SIDEWALK LEVEL OR ABOVE THE EDGE OF ROADWAY GRADE, IF NO SIDEWALK EXISTS. UNLESS OTHERWISE NOTED, THE TOP OF THE POST MOUNTED SIGNS SHALL BE A MINIMUM 9 FEET ABOVE GROUND LINE.
- THE MINIMUM HORIZONTAL DISTANCE BETWEEN SIGNAL, MEASURED AT RIGHT ANGLES TO THE APPROACH, SHALL BE 8 FEET.
- THIS DRAWING CANNOT BE USED AS A CONSTRUCTION DRAWING UNLESS THE PERMITTEE COMPLIES WITH THE PROVISIONS OF THE LATEST ACT PREVENTING DAMAGE TO UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. CONSULT WITH UTILITY COMPANIES TO RESOLVE ANY PROBLEMS THAT MAY BE CREATED DUE TO THE LOCATION OF UTILITIES.

COORDINATION NOTES

CONTROLLER TO BE COORDINATED WITH ADJACENT CONTROLLERS THROUGH THE USE OF THE INTERCONNECT BABLE TO PROVIDE A PROGRESSIVE MOVEMENT OF TRAFFIC ALONG THE BAYFRONT CONNECTOR (S.R. 4034), BAYFRONT PARKWAY (S.R. 4034), AND EAST 6TH STREET (S.R. 4018).

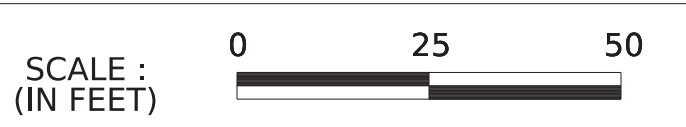
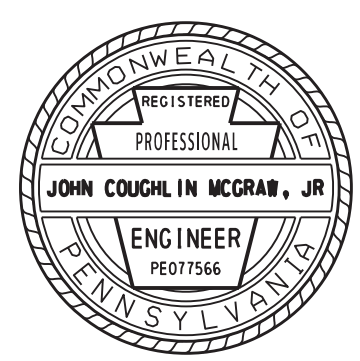
MASTER COMPUTER IS LOCATED AT THE CITY OF ERIE ENGINEERING OFFICES.

MASTER CONTROLLER IS LOCATED AT THIS INTERSECTION.

MASTER LOCATION FOR REFERENCING OFFSETS IS AT THIS INTERSECTION. OFFSETS ARE REFERENCED TO THE END OF GREEN OF PHASE 4+8.

CONTROLLER TO OPERATE IN FREE MODE (INDEPENDENTLY) IN THE EVENT OF FAILURE OF THE COORDINATION SYSTEM.

| | |
|---------------|---|
| COUNTY: | ERIE |
| MUNICIPALITY: | CITY OF ERIE |
| INTERSECTION: | S.R. 4034 (BAYFRONT PARKWAY) AND S.R. 4018 (EAST SIXTH STREET) - PHASE 3 |
| ACTIVITY: | MEDIAN CONSTRUCTION |
| PREPARED BY: | JMT |
| CONTRACTOR: | DATE |



SIGNS

| PLAN SYMBOL | NOMENCLATURE | DESCRIPTION | SIZE (W X H) |
|-------------|--------------|---|--------------|
| A | D3-4 | E 6TH ST | 60" X 16" |
| B | D3-5 | ← BAYFRONT PARKWAY → | 96" X 16" |
| C | D3-5 | ← BAYFRONT PARKWAY → | 96" X 16" |
| D | R3-5L | LEFT TURN | 30" X 36" |
| E | R3-5S | STRAIGHT-THROUGH | 30" X 36" |
| F | R3-6SR | OPTIONAL RIGHT TURN | 30" X 36" |
| G | R3-5R | RIGHT TURN | 30" X 36" |
| H | R10-11 | NO TURN ON RED | 30" X 36" |
| I | R10-12 | LEFT TURN YIELD ON GREEN | 30" X 36" |
| J | R10-4L | PUSH BUTTON FOR WALK SIGNAL ← | 9" X 12" |
| K | R10-4R | PUSH BUTTON FOR WALK SIGNAL → | 9" X 12" |
| L | R10-6L | STOP HERE ON RED | 24" X 30" |
| M | R10-10R | RIGHT TURN SIGNAL | 30" X 36" |
| N | R3-1 | NO RIGHT TURN (INTERNALLY ILLUMINATED) | 36" X 36" |
| O | R3-2 | NO LEFT TURN (INTERNALLY ILLUMINATED) | 36" X 36" |
| P | R5-1 | DO NOT ENTER (INTERNALLY ILLUMINATED) | 30" X 36" |
| Q | R10-12 | LEFT TURN YIELD ON GREEN (INTERNALLY ILLUMINATED) | 36" X 36" |
| R | W11-2A | PEDESTRIAN CROSSING | 30" X 30" |
| S | R7-7A | YIELD TO PEDS IN CROSSWALKS | 24" X 18" |
| T | SPECIAL | NO TURN ON RED WHEN OVERHEAD SIGN IS LIT | 36" X 36" |

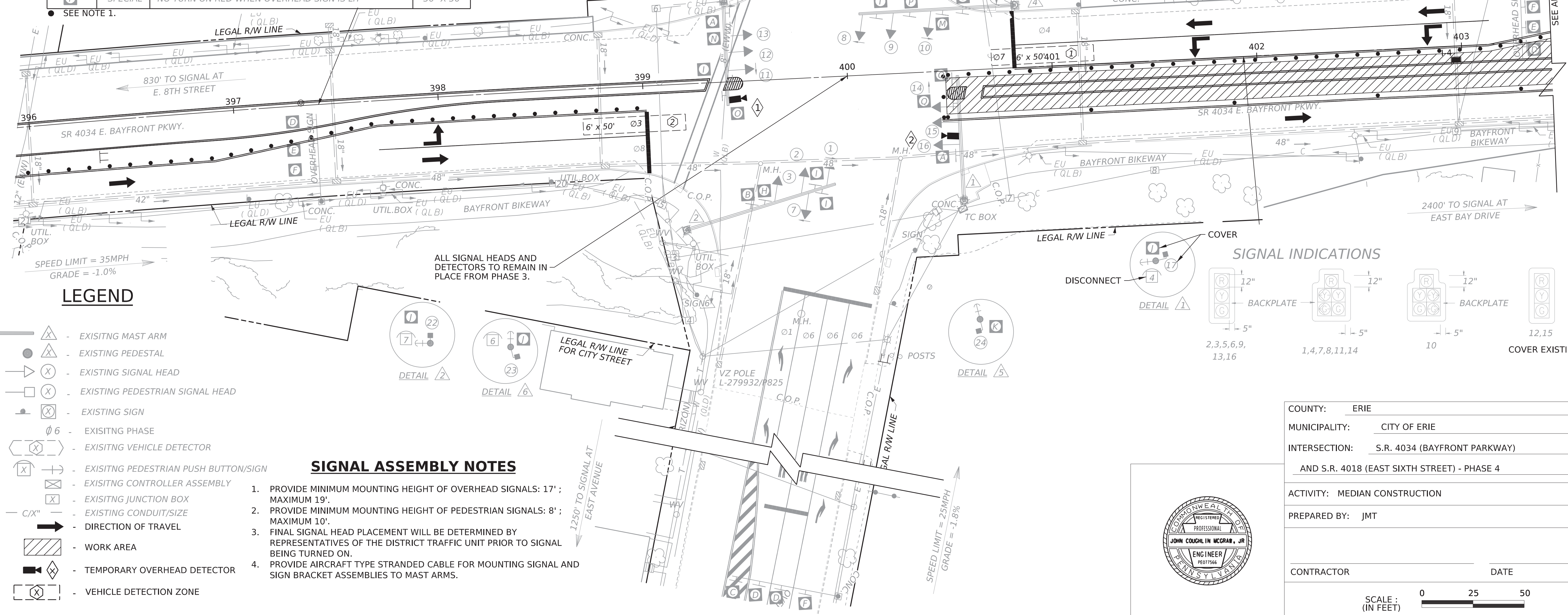
● SEE NOTE 1.

| DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
|----------|--------|-------|---------|----------|
| 1-0 | ERIE | 4034 | 500 | 40 OF 48 |

| CITY OF ERIE | | | |
|-----------------|-----------|------|----|
| REVISION NUMBER | REVISIONS | DATE | BY |
| | | | |

| | |
|--------------|---------------|
| PERMIT NO: | SHEET: 2 OF 3 |
| DATE ISSUED: | DATE REVISED: |

NOTE:
1. SEE SHEETS 23 - 26 FOR ADDITIONAL TRAFFIC CONTROL.

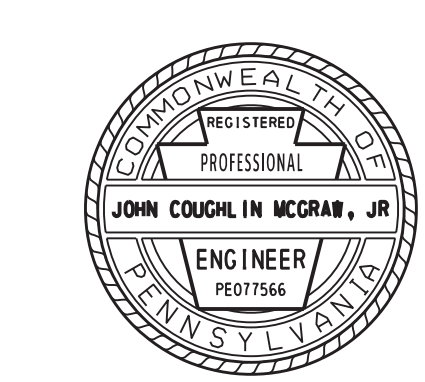


LEGEND

- EXISTING MAST ARM
- EXISTING PEDESTAL
- EXISTING SIGNAL HEAD
- EXISTING PEDESTRIAN SIGNAL HEAD
- EXISTING SIGN
- EXISTING PHASE
- EXISTING VEHICLE DETECTOR
- EXISTING PEDESTRIAN PUSH BUTTON/SIGN
- EXISTING CONTROLLER ASSEMBLY
- EXISTING JUNCTION BOX
- EXISTING CONDUIT/SIZE
- DIRECTION OF TRAVEL
- WORK AREA
- TEMPORARY OVERHEAD DETECTOR
- VEHICLE DETECTION ZONE

SIGNAL ASSEMBLY NOTES

1. PROVIDE MINIMUM MOUNTING HEIGHT OF OVERHEAD SIGNALS: 17' ; MAXIMUM 19'.
2. PROVIDE MINIMUM MOUNTING HEIGHT OF PEDESTRIAN SIGNALS: 8' ; MAXIMUM 10'.
3. FINAL SIGNAL HEAD PLACEMENT WILL BE DETERMINED BY REPRESENTATIVES OF THE DISTRICT TRAFFIC UNIT PRIOR TO SIGNAL BEING TURNED ON.
4. PROVIDE AIRCRAFT TYPE STRANDED CABLE FOR MOUNTING SIGNAL AND SIGN BRACKET ASSEMBLIES TO MAST ARMS.



| | |
|---------------|---|
| COUNTY: | ERIE |
| MUNICIPALITY: | CITY OF ERIE |
| INTERSECTION: | S.R. 4034 (BAYFRONT PARKWAY) AND S.R. 4018 (EAST SIXTH STREET) - PHASE 4 |
| ACTIVITY: | MEDIAN CONSTRUCTION |
| PREPARED BY: | JMT |
| CONTRACTOR: | DATE |



MOVEMENT, PHASING, AND SEQUENCE CHART

| SIGNAL | PHASE 1+5 | | | | PHASE 2+6 | | | | | PHASE 3+7 | | | | PHASE 4+8 | | | | RAILROAD PREEMPTION P1 | | | | RAILROAD PREEMPTION P2 | | | | EMERGENCY FLASHING | | | |
|------------------|--|----------|----------|-----|-----------|-----|-----|-----|-----|-----------|-----|-----|--|-----------|---|---|------|------------------------|-----|-----|-----|------------------------|-----|-----|------|--------------------|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | | 4 | | |
| 1 | R ←G- | R ←Y- | R ←G- | R | G | G | G | Y | R | R | R | R | | R | R | R | R | G | G | G | Y | R | R | R | R | | R | | |
| 2,3 | R | R | R | R | G | G | G | Y | R | R | R | R | | R | R | R | R | G | G | G | Y | R | R | R | R | | R | | |
| 4 | R ←G- | R ←Y- | R | R | G | G | Y | R | R | R | R | R | | R | R | R | R | R | R | R | R | R | R | R | R | | R | | |
| 5,6 | R | R | R | R | G | G | Y | R | R | R | R | R | | R | R | R | R | G | G | Y | R | R | R | R | R | | R | | |
| 7,8 | R ←G- | R ←Y- | R | R | G | G | Y | R | R | R | R | R | | R | R | R | R | R | R | R | R | R | R | R | R | | R | | |
| 9 | R | R | R | R | G | G | Y | R | R | R | R | R | | R | R | R | R | R | R | R | R | R | R | R | R | | R | | |
| 10 | R | R | R | R | G | G | Y | R | R | R | R | R | | R | R | R | R | R | R | R | R | R | R | R | R | | R | | |
| 11 | R | R | R | R | R | R | R | R | R | R | R | R | | G | G | Y | R | R | R | R | R | G | G | Y | R | | R | | |
| 13 | R | R | R | R | R | R | R | R | R | R | R | R | | G | G | Y | R | R | R | R | R | G | G | Y | R | | R | | |
| 14 | R | R | R | R | R | R | R | R | R | R | R | R | | G | G | Y | R | R | R | R | R | R | R | R | R | | R | | |
| 16 | R | R | R | R | R | R | R | R | R | R | R | R | | G | G | Y | R | R | R | R | R | G | G | Y | R | | R | | |
| *17,18 | COVER EXISTING PEDESTRIAN SIGNAL HEADS | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| *21,22 | DW | DW | DW | DW | W | FD | DW | DW | DW | DW | DW | DW | | | | | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | OFF |
| *19,20 | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | | | | | W | FD | DW | DW | DW | DW | DW | DW | W | FD | DW | DW | OFF |
| *23,24 | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | DW | | | | | W | FD | DW | DW | DW | DW | DW | DW | W | FD | DW | DW | OFF |
| SIGN | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | | | | | OFF | OFF | OFF | OFF | ON | ON | ON | ON | ON | ON | ON | ON | OFF |
| SIGN | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | ON | | | | | ON | ON | ON | ON | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF |
| FIXED | ⊗ | 3.0 | 3.0 | 2.0 | ⊗ | 3.0 | 3.0 | 2.0 | ⊗ | 3.0 | 2.0 | | | | | | ⊗ | 3.0 | 3.0 | ⊗ | 3.0 | 3.0 | ⊗ | 3.0 | 3.0 | | | | |
| MINIMUM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SEC./ACT. | | | | | 2.1 | | | | | | | | | | | | 2.1 | | | | | | | | | | | | |
| MAX. INITIAL | | | | | 19 | | | | | | | | | | | | 22 | | | | | | | | | | | | |
| PASSAGE | 2 | | | | 5 | | | | | | | | | | | | 7 | | | | | | | | | | | | |
| TIME TO REDUCE | | | | | | | | | | | | | | | | | 4 | | | | | | | | | | | | |
| BEFORE REDUCTION | | | | | | | | | | | | | | | | | 22 | | | | | | | | | | | | |
| MIN. GAP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MAX I | 10 | | | | 16 | | | | | | | | | | | | 10 | | | | 26 | | | | | | | | ① |
| MAX II | 10 | | | | 26 | | | | | | | | | | | | 7 | | | | 19 | | | | | | | | ① |
| * PEDESTRIAN | | | | | 14 | 20 | | | | | | | | | | | 13.0 | 19 | | | | | | | 13.0 | ② | 19 | | |
| MEMORY | NL | | | | MN | | | | | | | | | | | | NL | | | | MN | | | | | | | | |

RAILROAD PREEMPTION NOTES

NORMAL OPERATION WILL BE PREEMPTED BY THE TRAIN APPROACH SIGNALS WHEN ACTIVATED BY A TRAIN ENTERING THE RAILROAD CIRCUIT. IF TRAIN PREEMPTION OCCURS IN:

- PHASE 3+7-INTERVAL 1, IT TERMINATES IMMEDIATELY FOLLOWED BY PHASE 3+7-INTERVALS 2&3 AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 3+7-INTERVAL 2, IT TIMES OUT FOLLOWED BY PHASE 3+7-INTERVAL 3 AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 3+7-INTERVAL 3, IT TIMES OUT FOLLOWED BY TRAIN PHASE P1-INTERVAL 1.
- PHASE 4+8-INTERVAL 1, IT TERMINATES IMMEDIATELY FOLLOWED BY PHASE 4+8-INTERVALS 2,3&4 IF PEDESTRIAN TIMINGS ARE ACTUATED, OR INTERVALS 3&4 IF PEDESTRIAN TIMINGS ARE NOT ACTUATED, AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 4+8-INTERVAL 2, IT TIMES OUT FOLLOWED BY PHASE 4+8-INTERVALS 3&4 AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 4+8-INTERVAL 3, IT TIMES OUT FOLLOWED BY PHASE 4+8-INTERVAL 4 AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 4+8-INTERVAL 4, IT TIMES OUT FOLLOWED BY TRAIN PHASE P1-INTERVAL 1.
- PHASE 1+5-INTERVAL 1, IT TERMINATES IMMEDIATELY FOLLOWED BY PHASE 1+5-INTERVALS 2,3&4 AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 1+5-INTERVAL 2, IT TIMES OUT FOLLOWED BY PHASE 1+5-INTERVALS 3&4 AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 1+5-INTERVAL 3, IT TIMES OUT FOLLOWED BY PHASE 1+5-INTERVALS 4 AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 1+5-INTERVAL 4, IT TIMES OUT FOLLOWED BY TRAIN PHASE P1-INTERVAL 1.
- PHASE 2+6-INTERVAL 1, IT TERMINATES IMMEDIATELY FOLLOWED BY PHASE 2+6-INTERVALS 2,3,4&5 IF PEDESTRIAN TIMINGS ARE ACTUATED, OR INTERVALS 3,4&5 IF PEDESTRIAN TIMINGS ARE NOT ACTUATED, AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 2+6-INTERVAL 2, IT TIMES OUT FOLLOWED BY PHASE 2+6-INTERVALS 3,4&5 AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 2+6-INTERVAL 3, IT TIMES OUT FOLLOWED BY PHASE 2+6-INTERVALS 4&5 AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 2+6-INTERVAL 4, IT TIMES OUT FOLLOWED BY PHASE 2+6-INTERVALS 5 AND TRAIN PHASE P1-INTERVAL 1.
- PHASE 2+6-INTERVAL 5, IT TIMES OUT FOLLOWED BY TRAIN PHASE P1-INTERVAL 1.

IN RETURNING FROM TRAIN OPERATION TO NORMAL OPERATION, IF TRAIN PREEMPTION TERMINATES IN:

- TRAIN PHASE P2-INTERVAL 1, A TIMING DEVICE WILL BE ACTIVATED WHICH WILL HOLD THIS INTERVAL FOR TEN SECONDS FOLLOWED BY THE TRAIN PHASE P2-INTERVALS 2,3&4 BEFORE RETURNING TO PHASE 2+6-INTERVAL 1 AND NORMAL OPERATION.
- TRAIN PHASE P2-INTERVAL 2, IT TIMES OUT FOLLOWED BY TRAIN PHASE P-INTERVALS 3&4 BEFORE RETURNING TO PHASE 2+6-INTERVAL 1 AND NORMAL OPERATION.
- TRAIN PHASE P2-INTERVAL 3, IT TIMES OUT FOLLOWED BY TRAIN PHASE P-INTERVALS 4 BEFORE RETURNING TO PHASE 2+6-INTERVAL 1 AND NORMAL OPERATION.
- TRAIN PHASE P2-INTERVAL 4, IT TIMES OUT FOLLOWED BY PHASE 2+6-INTERVAL 1 AND NORMAL OPERATION.

OPERATION OF LOOP DETECTORS ON EASTBOUND APPROACH E. 6TH ST. AS AFFECTED BY THE RAILROAD PREEMPTION IS AS FOLLOWS:

ANY CALL ON THIS DETECTOR EXISTING AT THE TIME OF PREEMPTION OR OCCURING DURING PREEMPTION SHALL BE HELD BY THE PREEMPTION EQUIPMENT TO BE PLACED IN THE CONTROLLER MEMORY UPON RETURN TO NORMAL OPERATION.

RAILROAD PREEMPTION TAKES PRECEDENCE OVER EMERGENCY PREEMPTION.

EMERGENCY PREEMPTION NOTES

EMERGENCY PREEMPTION EQUIPMENT IS LOCATED IN THE CONTROLLER CABINET. UPON PREEMPTION, THE CONTROLLER'S INTERNAL PREEMPTION PROGRAM PROVIDES THE FOLLOWING SEQUENCE IF THE CONFLICTING PHASE IS IN GREEN:

- A FLASHING "DON'T WALK" REPLACES ANY "WALK" INDICATION.
- THE FLASHING "DON'T WALK" INTERVAL IS COMPLETED.
- A YELLOW CLEARANCE INTERVAL REPLACES ALL CONFLICTING GREEN INDICATIONS.
- UPON COMPLETION OF THE YELLOW CLEARANCE INTERVAL, THE ALL RED INTERVAL IS COMPLETED FOLLOWED BY THE GREEN INDICATIONS FOR THE SELECTED STREET.

UPON PREEMPTION, THE CONTROLLER'S INTERNAL PREEMPTION PROGRAM PROVIDES THE FOLLOWING SEQUENCE IF THE SELECTED STREET IS IN GREEN:

- A FLASHING "DON'T WALK" REPLACES ANY "WALK" INDICATION.
- THE FLASHING "DON'T WALK" INTERVAL IS COMPLETED.
- THE GREEN INDICATION REMAINS ON THE SELECTED STREET.

UTILIZE CONTROLLER TIMINGS FOR INTERVAL BEING CLEARED.

FOR THE DURING OF THE PREEMPTION, A GREEN INDICATION REMAINS ON THE SELECTED STREET WITH A RED INDICATION GIVEN TO ALL OTHER STREETS AND A STEADY "DON'T WALK" INDICATION ON ALL PEDESTRIAN SIGNALS.

UPON TERMINATION OF THE PREEMPTION, THE SIGNAL RETURNS TO NORMAL OPERATION.

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| | | | | |
| PERMIT NO: | SHEET: 3 OF 3 | | | |
| DATE ISSUED: | DATE REVISED: | | | |

NOTES

- INSTALLATION, OPERATION, AND MAINTENANCE OF THESE SIGNALS SHALL BE IN ACCORDANCE WITH PENNSYLVANIA DEPARTMENT OF TRANSPORTATION REGULATIONS GOVERNING THE DESIGN, LOCATION, AND OPERATION OF SIGNS, SIGNALS, AND PAVEMENT MARKINGS.
- NO MODIFICATIONS OF THIS INSTALLATION ARE PERMITTED UNLESS PRIOR APPROVAL IS GRANTED, IN WRITING, BY THE SECRETARY OF TRANSPORTATION OR HIS REPRESENTATIVE.
- MAINTENANCE WORK ON ALL APPROACHES TO THE SIGNALIZED INTERSECTION NECESSARY FOR PROPER VISIBILITY OF THE SIGNS AND SIGNALS, INCLUDING TRIMMING OF TREES, IS THE RESPONSIBILITY OF THE PERMITTEE.
- UNLESS OTHERWISE NOTED, THE PERMITTEE SHALL MAINTAIN CURBING AND OTHER DRAINAGE FACILITIES IN ACCORDANCE WITH DEPARTMENT STANDARDS AND CRITERIA, EXCEPT FOR INLET GRATES THAT WILL BE MAINTAINED BY THE DEPARTMENT AS A PART OF THE ROADWAY SURFACE.
- ALL SIGNS, CURBS, CURB RAMPS, SIDEWALKS, AND PAVEMENT MARKINGS INDICATED ON THIS DRAWING ARE CONSIDERED PART OF THE PERMIT AND SHALL BE INSTALLED AND MAINTAINED BY THE PERMITTEE IN ACCORDANCE WITH PENNSYLVANIA DEPARTMENT OF TRANSPORTATION PUBLICATION 68, OFFICIAL TRAFFIC CONTROL DEVICES. EXCEPTIONS ARE LONGITUDINAL PAVEMENT MARKINGS IN STATE HIGHWAYS, WHICH ARE MAINTAINED BY THE DEPARTMENT.
- SUPPORT POLES FOR OVERHEAD SIGNALS AND SIGNS SHALL HAVE A MINIMUM CLEARANCE OF 2 FEET BEHIND THE FACE OF THE CURB OR 12 FEET FROM THE EDGE OF THE TRAVELED ROADWAY TO EDGE OF SUPPORT POLE.
- VEHICULAR SIGNALS OR SIGNS ERECTED OVER THE ROADWAY SHALL HAVE A CLEARANCE OF 17 FEET ABOVE THE ROADWAY. UNLESS OTHERWISE NOTED, POST MOUNTED VEHICULAR SIGNALS SHALL HAVE A CLEARANCE OF NOT LESS THAN 8 FEET NOR MORE THAN 15 FEET ABOVE THE SIDEWALK LEVEL OR PAVEMENT GRADE AT THE CENTER OF THE HIGHWAY IF NO SIDEWALK EXISTS. UNLESS OTHERWISE NOTED, PEDESTRIAN SIGNALS SHALL HAVE A CLEARANCE OF 8 FEET ABOVE THE SIDEWALK LEVEL. UNLESS OTHERWISE NOTED, POST MOUNTED SIGNS SHALL HAVE A CLEARANCE OF 7 FEET ABOVE THE SIDEWALK LEVEL OR ABOVE THE EDGE OF ROADWAY GRADE, IF NO SIDEWALK EXISTS. UNLESS OTHERWISE NOTED, THE TOP OF THE POST MOUNTED SIGNS SHALL BE A MINIMUM 9 FEET ABOVE GROUND LINE.
- THE MINIMUM HORIZONTAL DISTANCE BETWEEN SIGNAL, MEASURED AT RIGHT ANGLES TO THE APPROACH, SHALL BE 8 FEET.
- THIS DRAWING CANNOT BE USED AS A CONSTRUCTION DRAWING UNLESS THE PERMITTEE COMPLIES WITH THE PROVISIONS OF THE LATEST ACT PREVENTING DAMAGE TO UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. CONSULT WITH UTILITY COMPANIES TO RESOLVE ANY PROBLEMS THAT MAY BE CREATED DUE TO THE LOCATION OF UTILITIES.

COORDINATION NOTES

CONTROLLER TO BE COORDINATED WITH ADJACENT CONTROLLERS THROUGH THE USE OF THE INTERCONNECT BABLE TO PROVIDE A PROGRESSIVE MOVEMENT OF TRAFFIC ALONG THE BAYFRONT CONNECTOR (S.R. 4034), BAYFRONT PARKWAY (S.R. 4034), AND EAST 6TH STREET (S.R. 4018).

MASTER COMPUTER IS LOCATED AT THE CITY OF ERIE ENGINEERING OFFICES.

MASTER CONTROLLER IS LOCATED AT THIS INTERSECTION.

MASTER LOCATION FOR REFERENCING OFFSETS IS AT THIS INTERSECTION. OFFSETS ARE REFERENCED TO THE END OF GREEN OF PHASE 4+8.

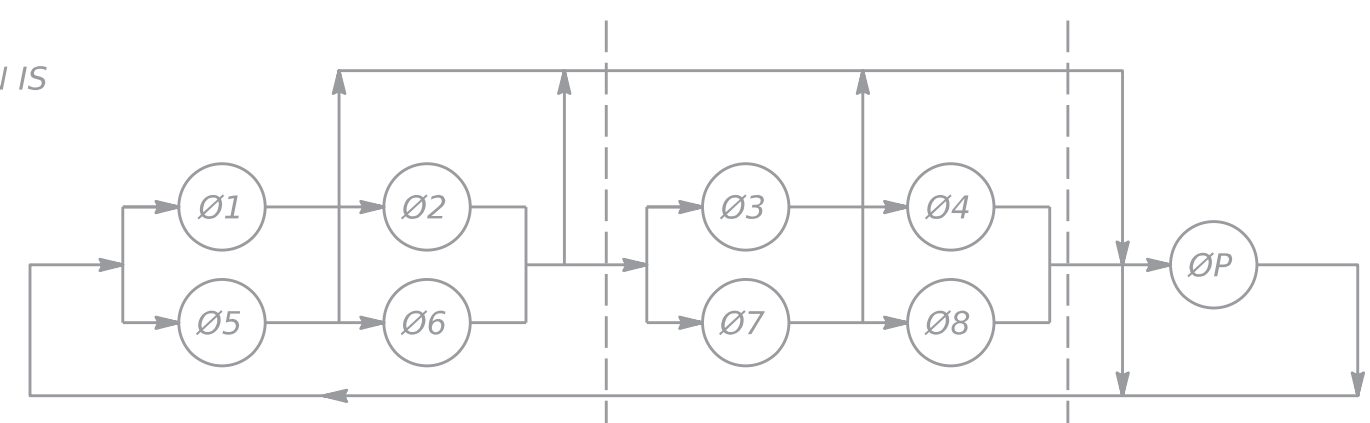
CONTROLLER TO OPERATE IN FREE MODE (INDEPENDENTLY) IN THE EVENT OF FAILURE OF THE COORDINATION SYSTEM.

MEMORY: * UPON PEDESTRIAN ACTIVATION, OTHERWISE DON'T WALK AT ALL TIMES.

- MN - MINIMUM RECALL
- MX - MAXIMUM RECALL
- L - LOCKING
- NL - NON-LOCKING

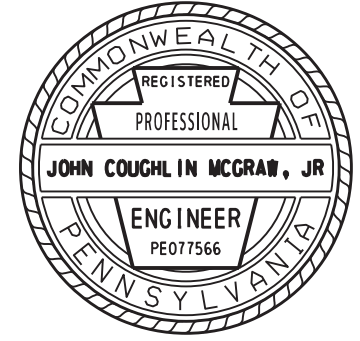
- DWELL UNTIL PREEMPTION TERMINATES.
- RETURN TO DW UNTIL PEDESTRIAN ACTUATION IS CALLED.

PHASING DIAGRAM



NORMAL OPERATION
RAILROAD PREEMPTION
PHASE SEQUENCE BARRIER

- NOTES:
- SIGNAL HEADS 12 AND 15 COVERED IN THIS PHASE.
 - MAINTAIN ALL EXISTING PREEMPTION.



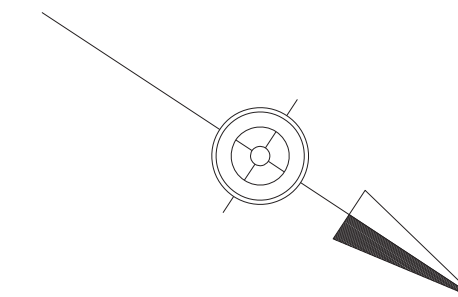
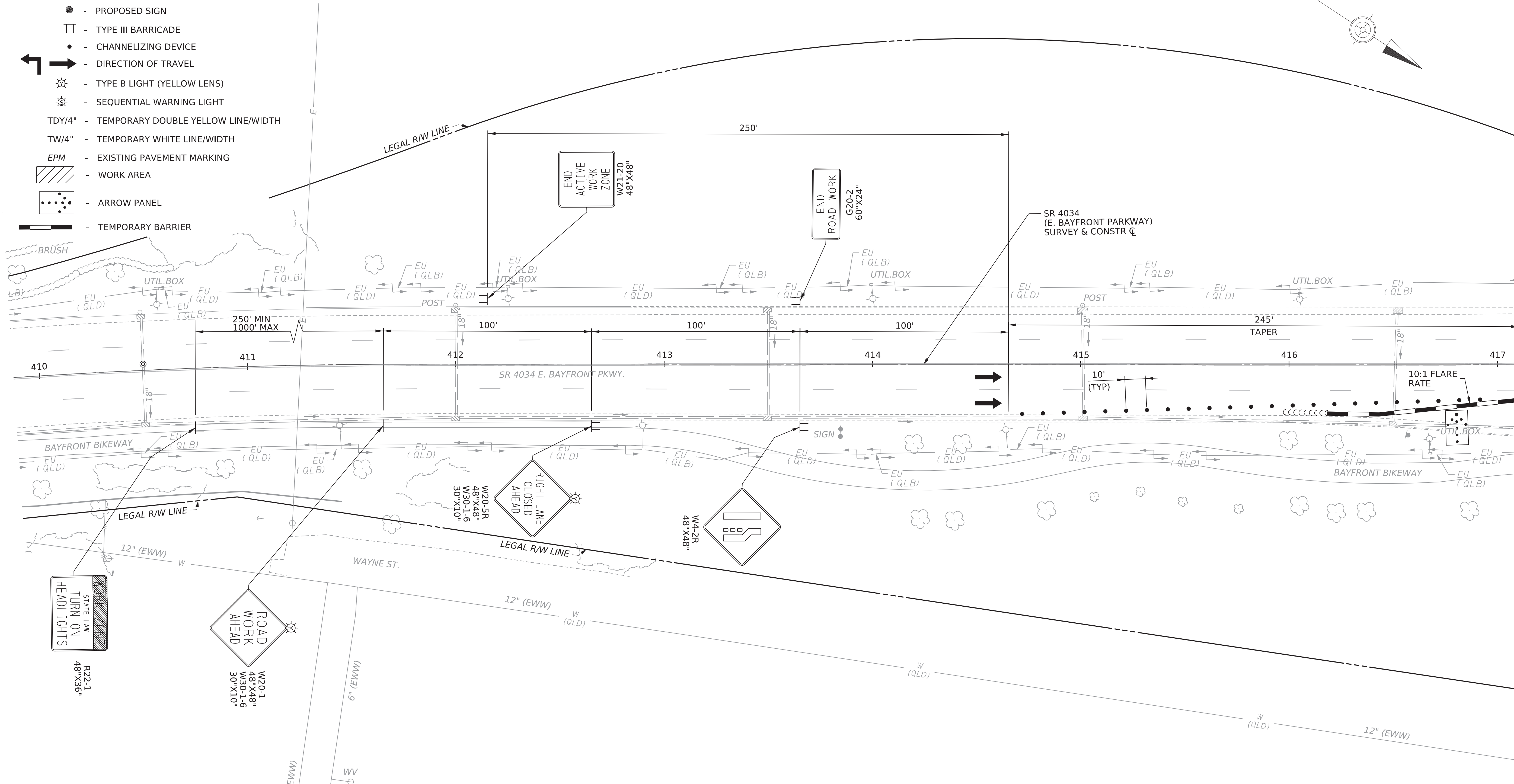
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| COUNTY: | ERIE |
| MUNICIPALITY: | CITY OF ERIE |
| INTERSECTION: | S.R. 4034 (BAYFRONT PARKWAY) AND S.R. 4018 (EAST SIXTH STREET) - PHASE 4 |
| ACTIVITY: | MEDIAN CONSTRUCTION |
| PREPARED BY: | JMT |
| CONTRACTOR | DATE |



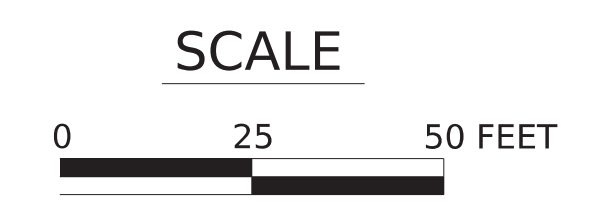
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LEGEND

- PROPOSED SIGN
- TYPE III BARRICADE
- CHANNELIZING DEVICE
- DIRECTION OF TRAVEL
- TYPE B LIGHT (YELLOW LENS)
- SEQUENTIAL WARNING LIGHT
- TDY/4" - TEMPORARY DOUBLE YELLOW LINE/WIDTH
- TW/4" - TEMPORARY WHITE LINE/WIDTH
- EPM - EXISTING PAVEMENT MARKING
- WORK AREA
- ARROW PANEL
- TEMPORARY BARRIER



SEE SHEET 43 OF 48

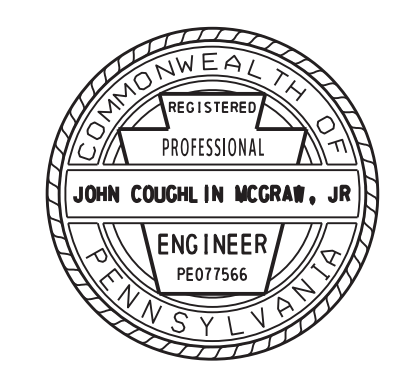


TRAFFIC CONTROL PLAN

RAILROAD CROSSING REMOVAL

PHASE A

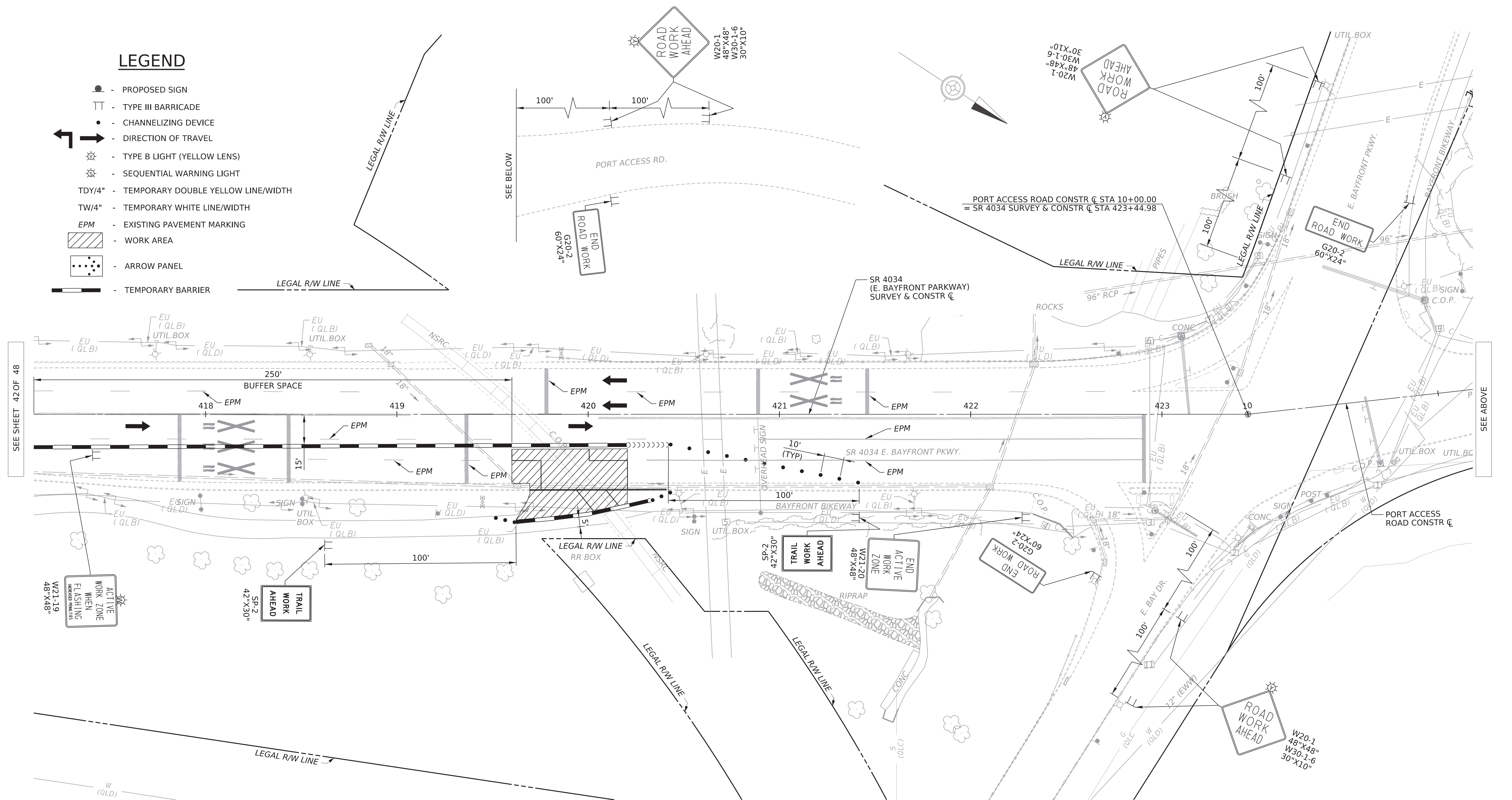
(SHEET 1 OF 2)



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| 1-0 | ERIE | 4034 | 500 | 43 OF 48 |
| CITY OF ERIE | | | | |
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LEGEND

- PROPOSED SIGN
- TYPE III BARRICADE
- CHANNELIZING DEVICE
- DIRECTION OF TRAVEL
- TYPE B LIGHT (YELLOW LENS)
- SEQUENTIAL WARNING LIGHT
- TEMPORARY DOUBLE YELLOW LINE/WIDTH
- TEMPORARY WHITE LINE/WIDTH
- EXISTING PAVEMENT MARKING
- WORK AREA
- ARROW PANEL
- TEMPORARY BARRIER

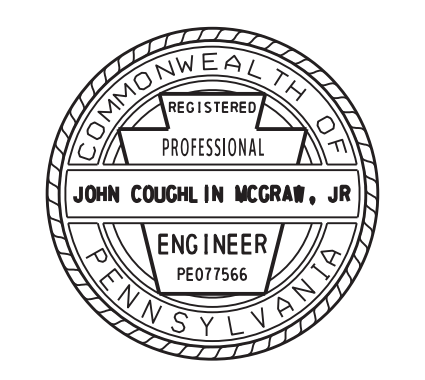


TRAFFIC CONTROL PLAN

RAILROAD CROSSING REMOVAL

PHASE A

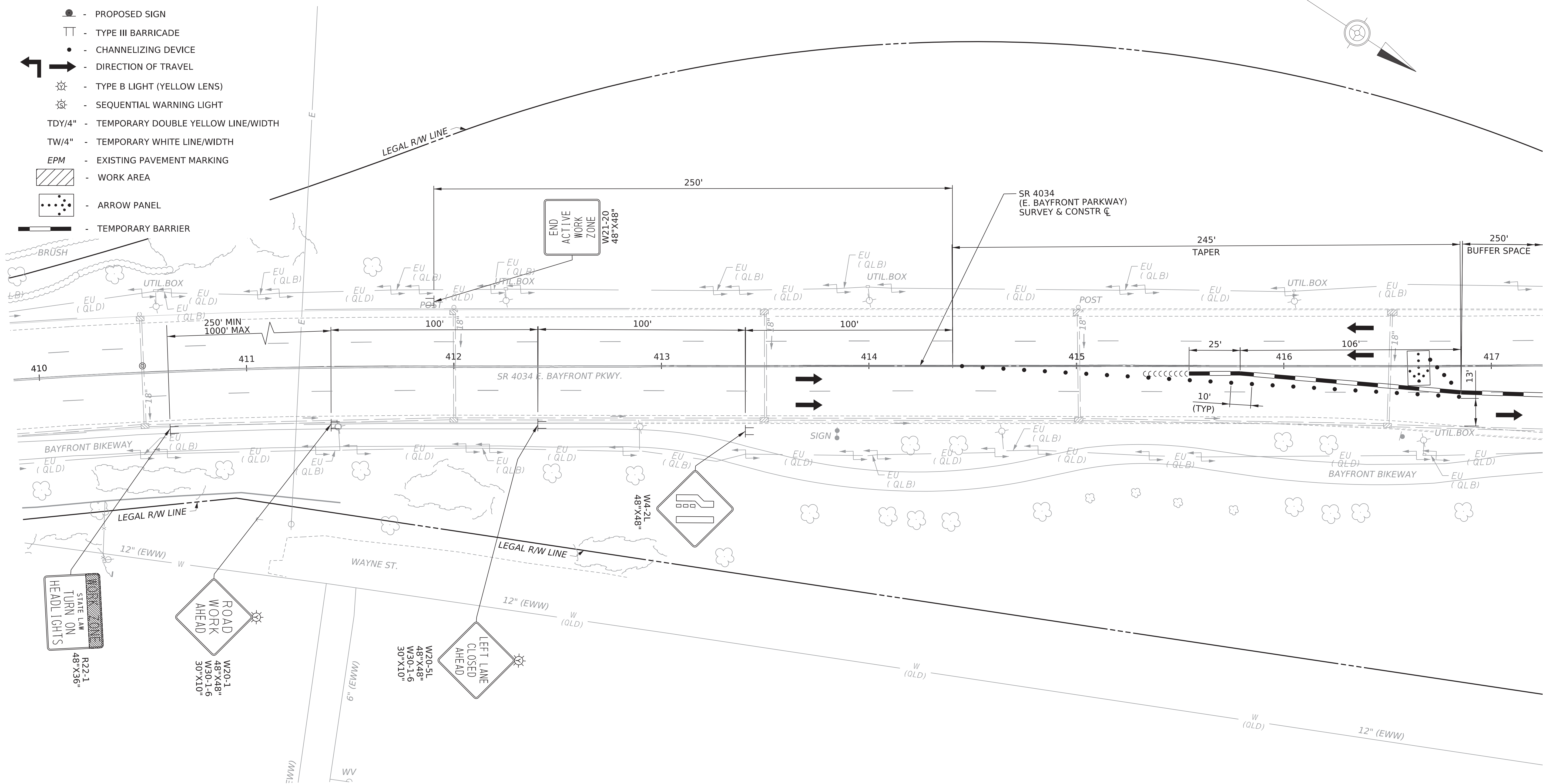
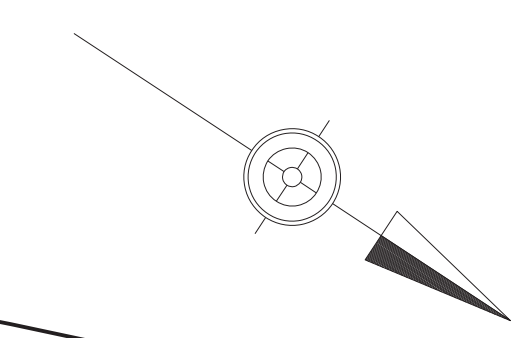
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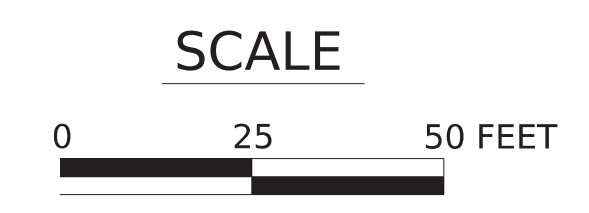
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LEGEND

- PROPOSED SIGN
- TYPE III BARRICADE
- CHANNELIZING DEVICE
- DIRECTION OF TRAVEL
- TYPE B LIGHT (YELLOW LENS)
- SEQUENTIAL WARNING LIGHT
- TEMPORARY DOUBLE YELLOW LINE/WIDTH
- TEMPORARY WHITE LINE/WIDTH
- EXISTING PAVEMENT MARKING
- WORK AREA
- ARROW PANEL
- TEMPORARY BARRIER



SEE SHEET 45 OF 48

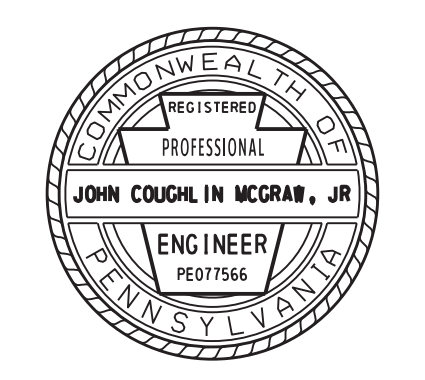


TRAFFIC CONTROL PLAN

RAILROAD CROSSING REMOVAL

PHASE B

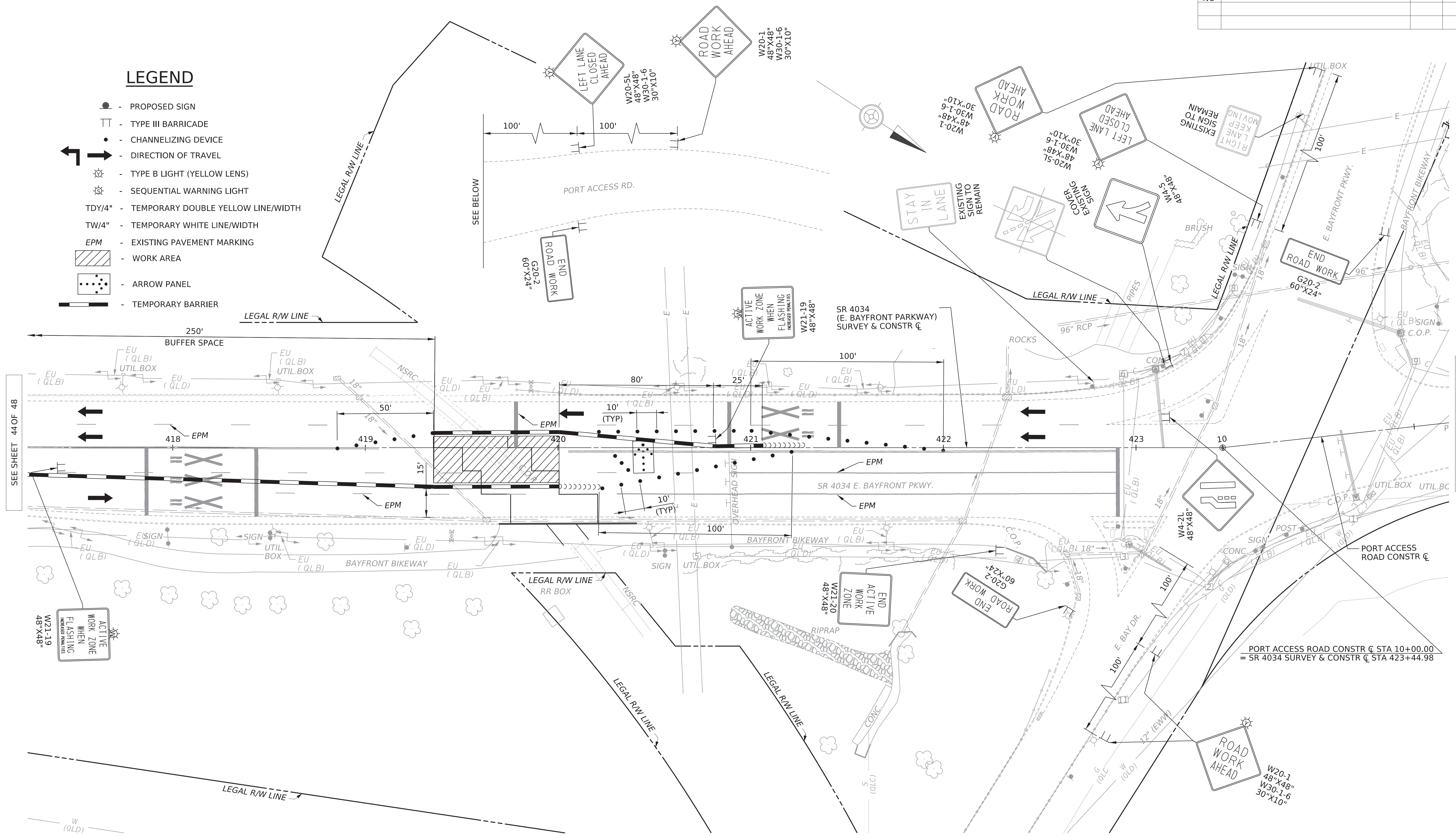
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| | | | | |

LEGEND

- PROPOSED SIGN
- TYPE III BARRICADE
- CHANNELIZING DEVICE
- DIRECTION OF TRAVEL
- TYPE B LIGHT (YELLOW LENS)
- SEQUENTIAL WARNING LIGHT
- TEMPORARY DOUBLE YELLOW LINE/WIDTH
- TEMPORARY WHITE LINE/WIDTH
- EXISTING PAVEMENT MARKING
- WORK AREA
- ARROW PANEL
- TEMPORARY BARRIER



SEE SHEET 44 OF 48

SEE ABOVE

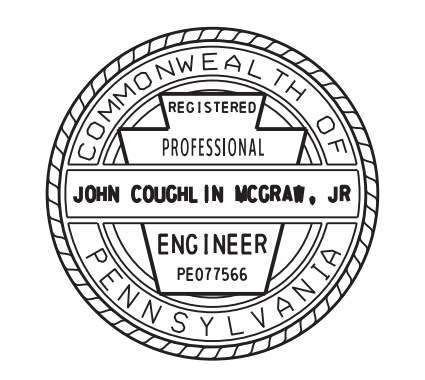


TRAFFIC CONTROL PLAN

RAILROAD CROSSING REMOVAL

PHASE B

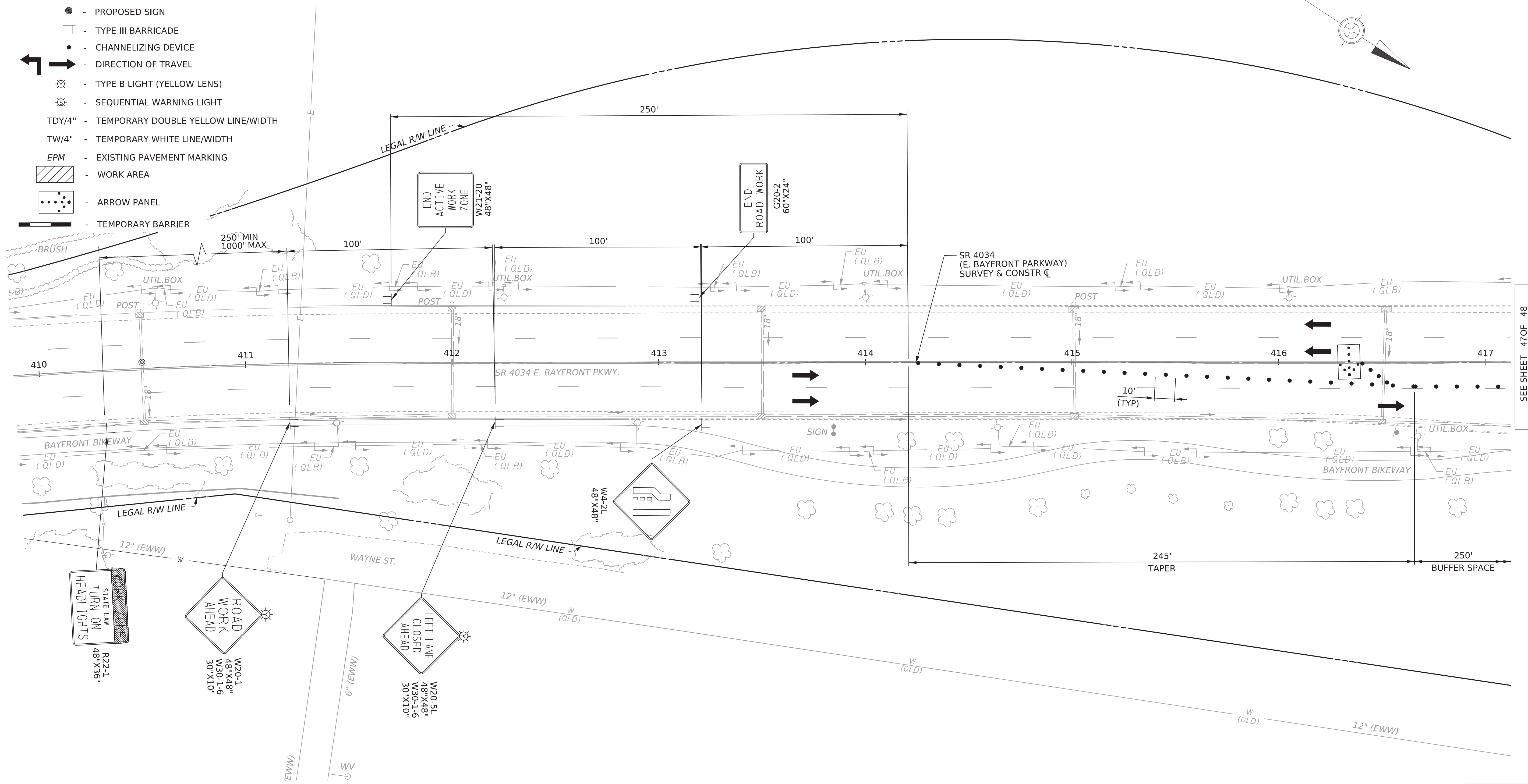
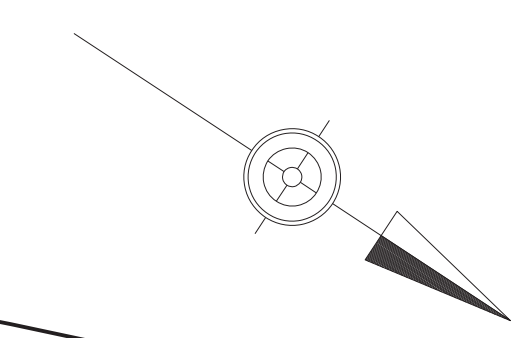
(SHEET 2 OF 2)



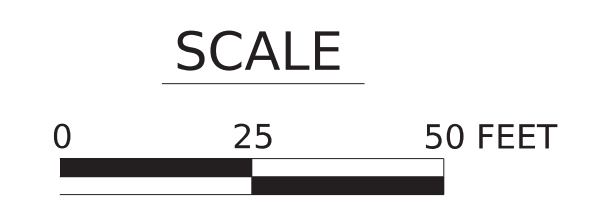
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|--------------|-----------|-------|---------|----------|----|------|
| DISTRICT | COUNTY | ROUTE | SECTION | SHEET | | |
| 1-0 | ERIE | 4034 | 500 | 46 OF 48 | | |
| CITY OF ERIE | | | | | | |
| REV NO | REVISIONS | | | DATE | BY | APPD |
| | | | | | | |

LEGEND

- PROPOSED SIGN
- TYPE III BARRICADE
- CHANNELIZING DEVICE
- DIRECTION OF TRAVEL
- TYPE B LIGHT (YELLOW LENS)
- SEQUENTIAL WARNING LIGHT
- TDY/4" - TEMPORARY DOUBLE YELLOW LINE/WIDTH
- TW/4" - TEMPORARY WHITE LINE/WIDTH
- EPM - EXISTING PAVEMENT MARKING
- WORK AREA
- ARROW PANEL
- TEMPORARY BARRIER



SEE SHEET 47 OF 48

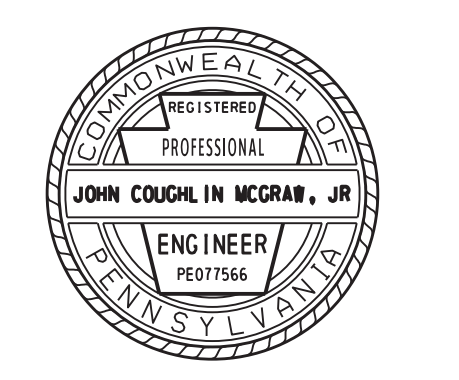


TRAFFIC CONTROL PLAN

RAILROAD CROSSING REMOVAL

PHASE C

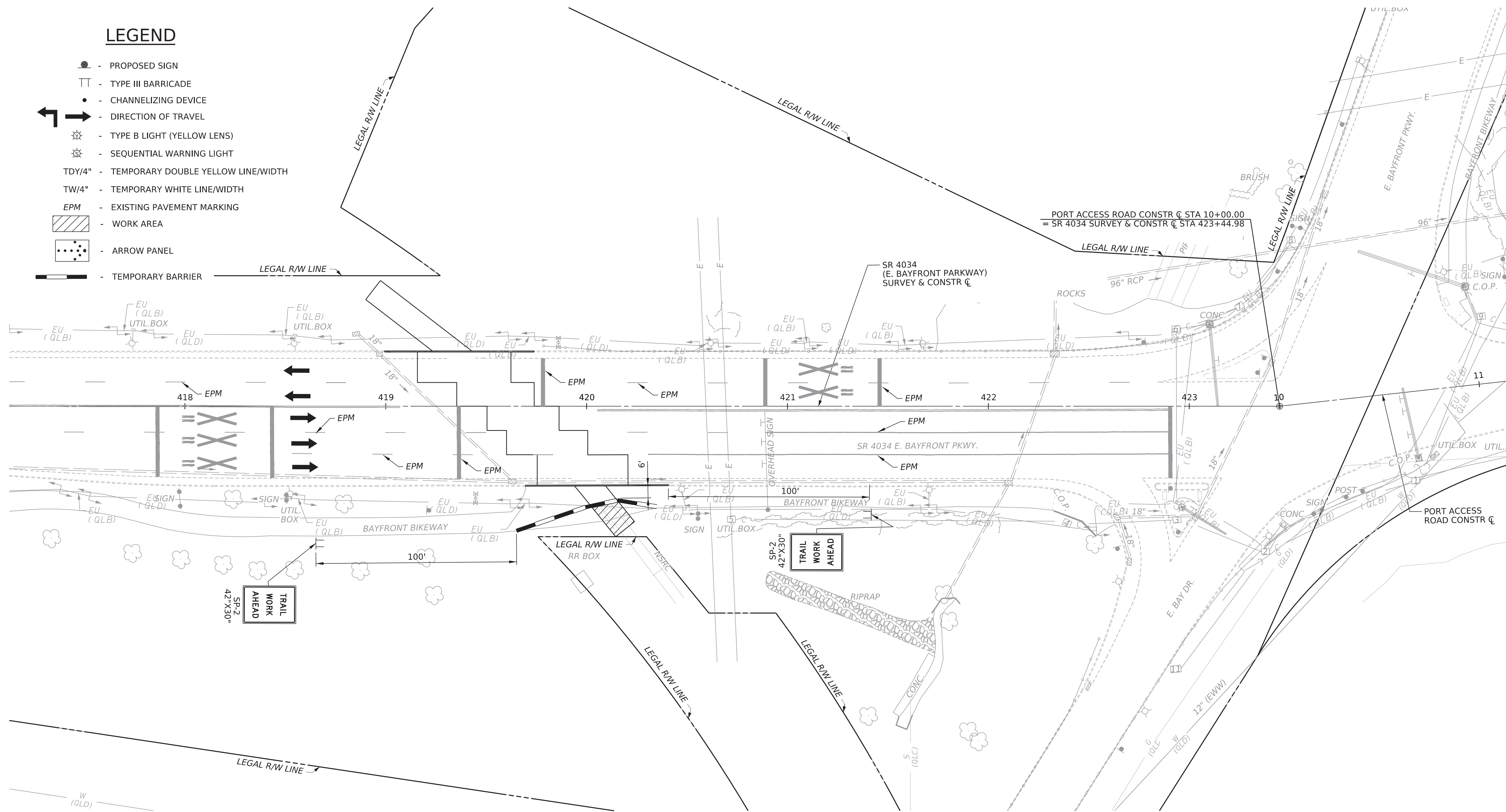
(SHEET 1 OF 2)



| | | | | |
|--------------|-----------|-------|---------|----------|
| DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
| 1-0 | ERIE | 4034 | 500 | 48 OF 48 |
| CITY OF ERIE | | | | |
| REV NO | REVISIONS | | DATE | BY APPD |
| | | | | |

LEGEND

- PROPOSED SIGN
- TYPE III BARRICADE
- CHANNELIZING DEVICE
- DIRECTION OF TRAVEL
- TYPE B LIGHT (YELLOW LENS)
- SEQUENTIAL WARNING LIGHT
- TDY/4"
- TW/4"
- EPM
- WORK AREA
- ARROW PANEL
- TEMPORARY BARRIER



TRAFFIC CONTROL PLAN

RAILROAD CROSSING REMOVAL
PHASE D
(SHEET 1 OF 1)

