

# ່ທ 2ND ST ST KHNSHS IASS. RIVER Ο ST. ST ST ST ST ST ST 11 KENTUCKY Q₽ LOUISI **/ERN** ō ENN AMP ဟ ⊋ ()NEW

### **GENERAL NOTES**

- (LATEST EDITION).
- AS NEEDED.
- PHASES COMMENCE.

### TRAFFIC CONTROL GENERAL NOTES

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- 3.

- 1.
- 2.
- 3.

- 2.

1. ALL TRAFFIC CONTROL DEVICES AND INSTALLATION OR USE THEREOF SHALL COMPLY WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS

2. MAINTAIN ENTRANCE ACCESS WITH TEMPORARY SURFACING

3. PHASE 1 SHALL BE CONSTRUCTED BEFORE ANY SUBSEQUENT

4. PHASES 2 THRU 4 MUST BE CONSTRUCTED ONE AT A TIME, BUT MAY BE CONSTRUCTED IN ANY ORDER.

5. PHASE 5 MAY BE CONSTRUCTED AT ANY TIME AND

CONCURRENT WITH ANY PHASE SOUTH OF 6TH STREET.

PHASE 1: ARKANSAS ST. FROM 7TH TO 9TH

THE INTERSECTION OF ARKANSAS ST. & 7TH ST. WILL BE CLOSED TO TRAFFIC. DETOUR ROUTE WILL BE ALONG MICHIGAN, MISSOURI, 6TH, & 8TH. NO PARKING WILL BE ALLOWED ALONG ARKANSAS. THE NORTHERN MOST LANE OF 9TH WILL BE CLOSED AT ARKANSAS WITH TRAFFIC SHIFTED TO ADJACENT LANE.

PHASE 2: MICHIGAN ST. FROM 2ND TO 4TH

NO PARKING WILL BE ALLOWED ALONG MICHIGAN. NORTHBOUND LANE ON MICHIGAN BETWEEN 3RD & 4TH WILL BE CLOSED. DETOUR ROUTE WILL BE ALONG 3RD, 4TH, & FLORIDA.

SOUTHBOUND TRAFFIC BETWEEN 3RD & 4TH WILL CONTINUE TO USE MICHIGAN AS A ONE-WAY ROADWAY.

PHASE 3: MICHIGAN ST. FROM 4TH TO 7TH

THE INTERSECTION OF MICHIGAN & 5TH WILL BE CLOSED TO TRAFFIC. DETOUR ROUTE WILL BE ALONG ARKANSAS, FLORIDA, 4TH, & 6TH. THE NORTH LEG OF THE INTERSECTION AT MICHIGAN & 6TH WILL BE CLOSED. DETOUR ROUTE WILL BE ALONG FLORIDA, 5TH, & 6TH. THE NORTHERN MOST THRU-LANE AND RIGHT TURN LANE ON 6TH WILL ALSO BE CLOSED WITH TRAFFIC SHIFTED TO THE ADJACENT LANE.

THE 5TH ST. & 6TH ST. CLOSURES ALONG MICHIGAN CANNOT TAKE PLACE CONCURRENTLY. ONE INTERSECTION MUST REMAIN OPEN AT ALL TIMES.

PHASE 4: 7TH ST, FROM MICHIGAN TO ARKANSAS 1. 7TH ST. WILL BE CLOSED FROM MICHIGAN TO MICHIGAN. DETOUR ROUTE WILL BE ALONG MICHIGAN, ARKANSAS, 6TH, & 8TH.

PHASE 5: FLORIDA ST. FROM 3RD TO 4TH

1. AS THE WORK IS NOT LOCATED WITHIN THE ROADWAY, THE CONTRACTOR SHALL USE ACCEPTABLE TRAFFIC CONTROL MEASURES, AS NEEDED, FOR THE MOBILIZATION AND STORAGE OF EQUIPMENT.

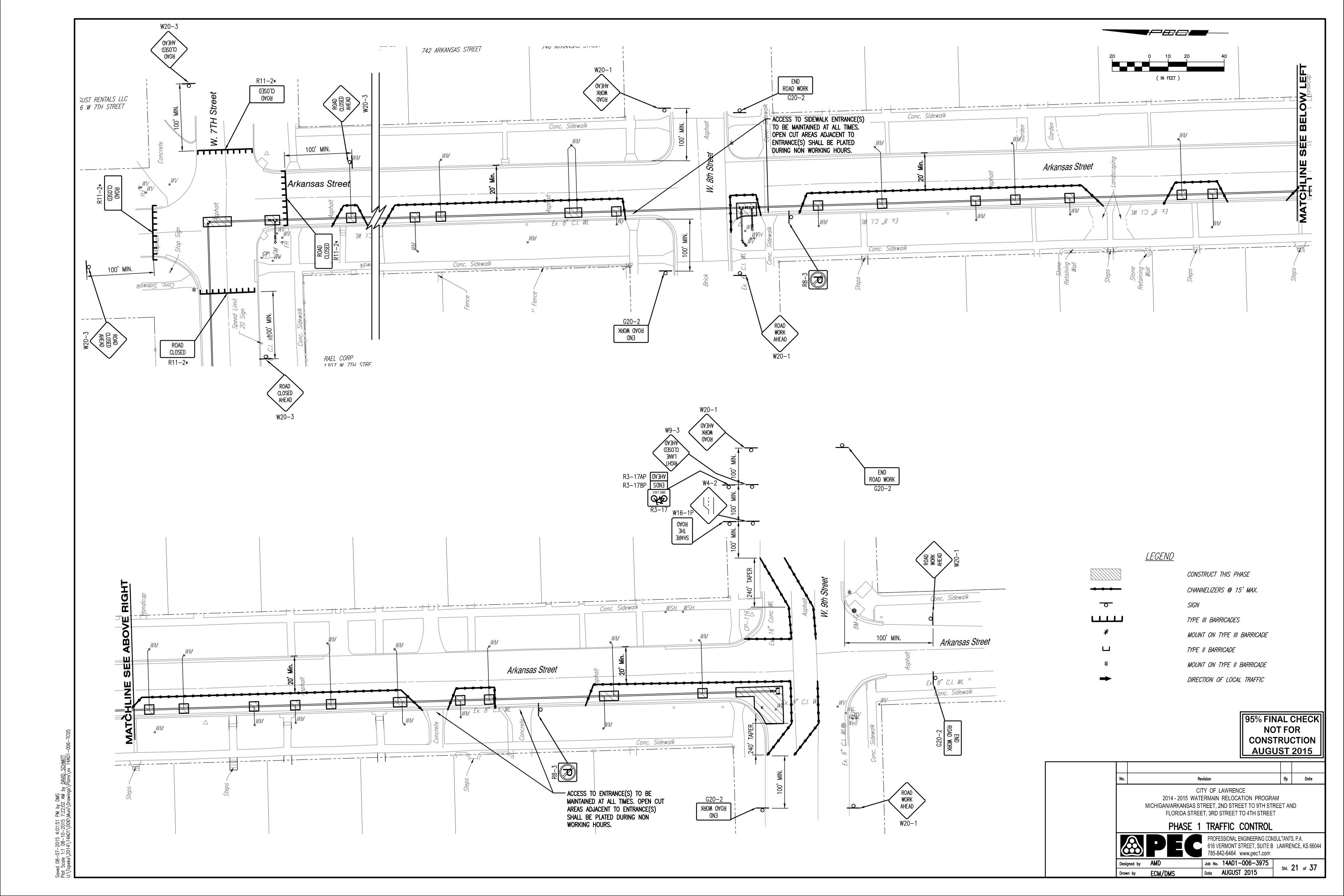
CONTRACTOR MAY CLOSE THE ROAD TO THRU TRAFFIC, LOCAL ACCESS ONLY, FOLLOWING APPROVAL FROM PROJECT ENGINEER.

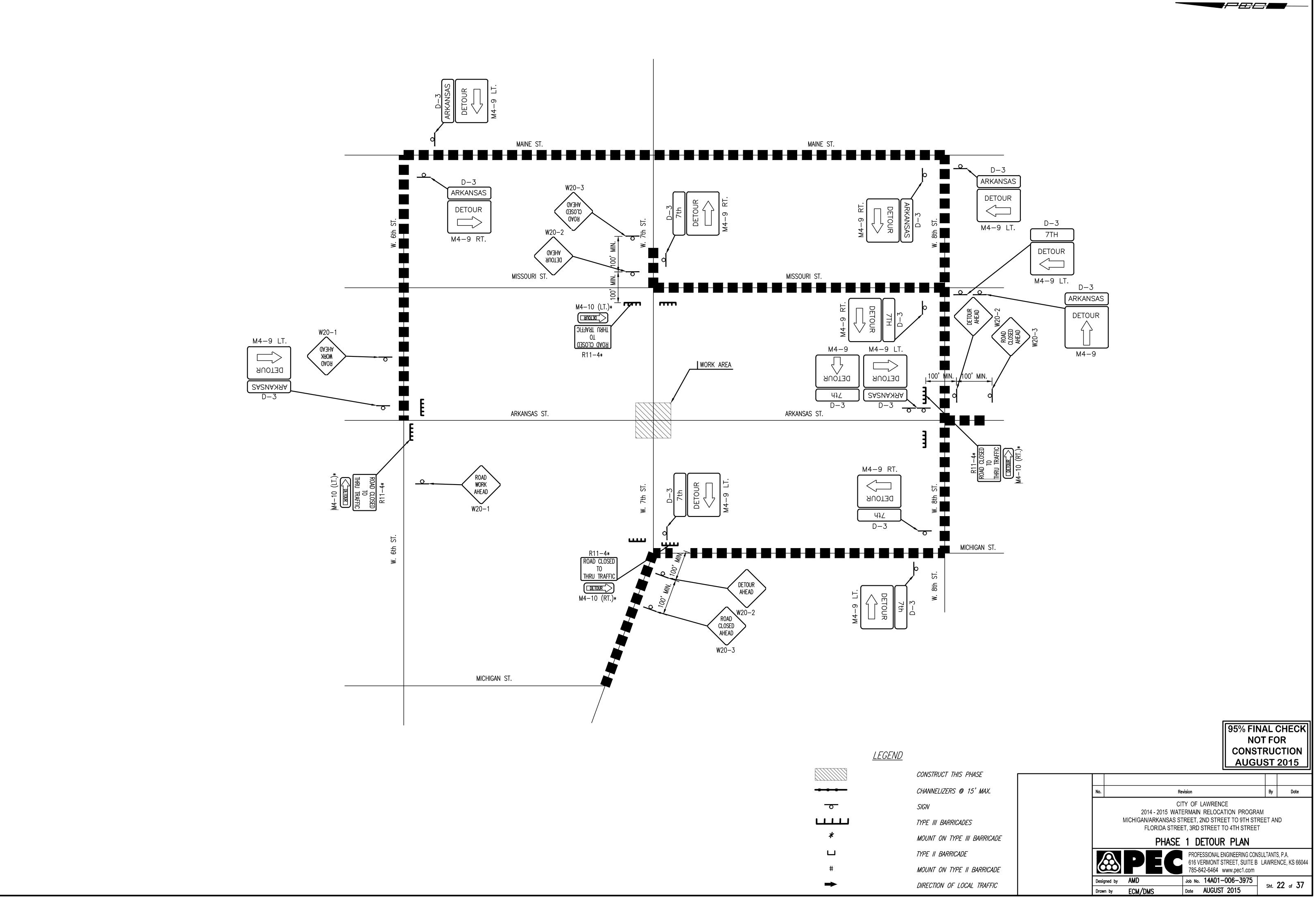
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No.			Rev	vision				Ву	Date	
CITY OF LAWRENCE 2014 - 2015 WATERMAIN RELOCATION PROGRAM MICHIGAN/ARKANSAS STREET, 2ND STREET TO 9TH STREET AND FLORIDA STREET, 3RD STREET TO 4TH STREET <b>TRAFFIC CONTROL CONSTRUCTION SEQUENCE</b>										
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Desig	ned by	AMD		Job No.			-3975	Sht	20 of 37	
Draw	n by	ECM/DMS		Date	JULY	2015		onu -		

95% FINAL CHECK

**NOT FOR** 

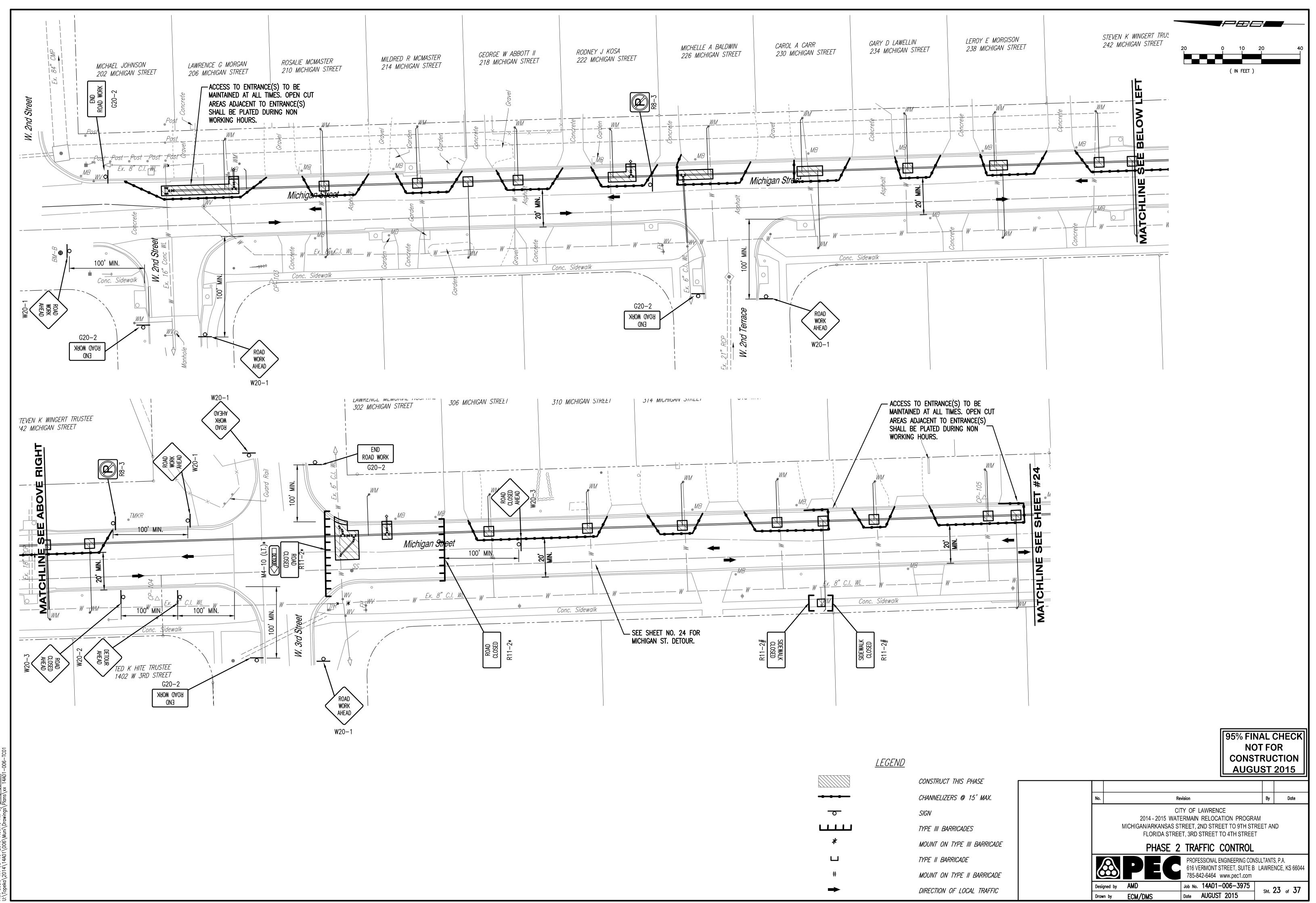
CONSTRUCTION



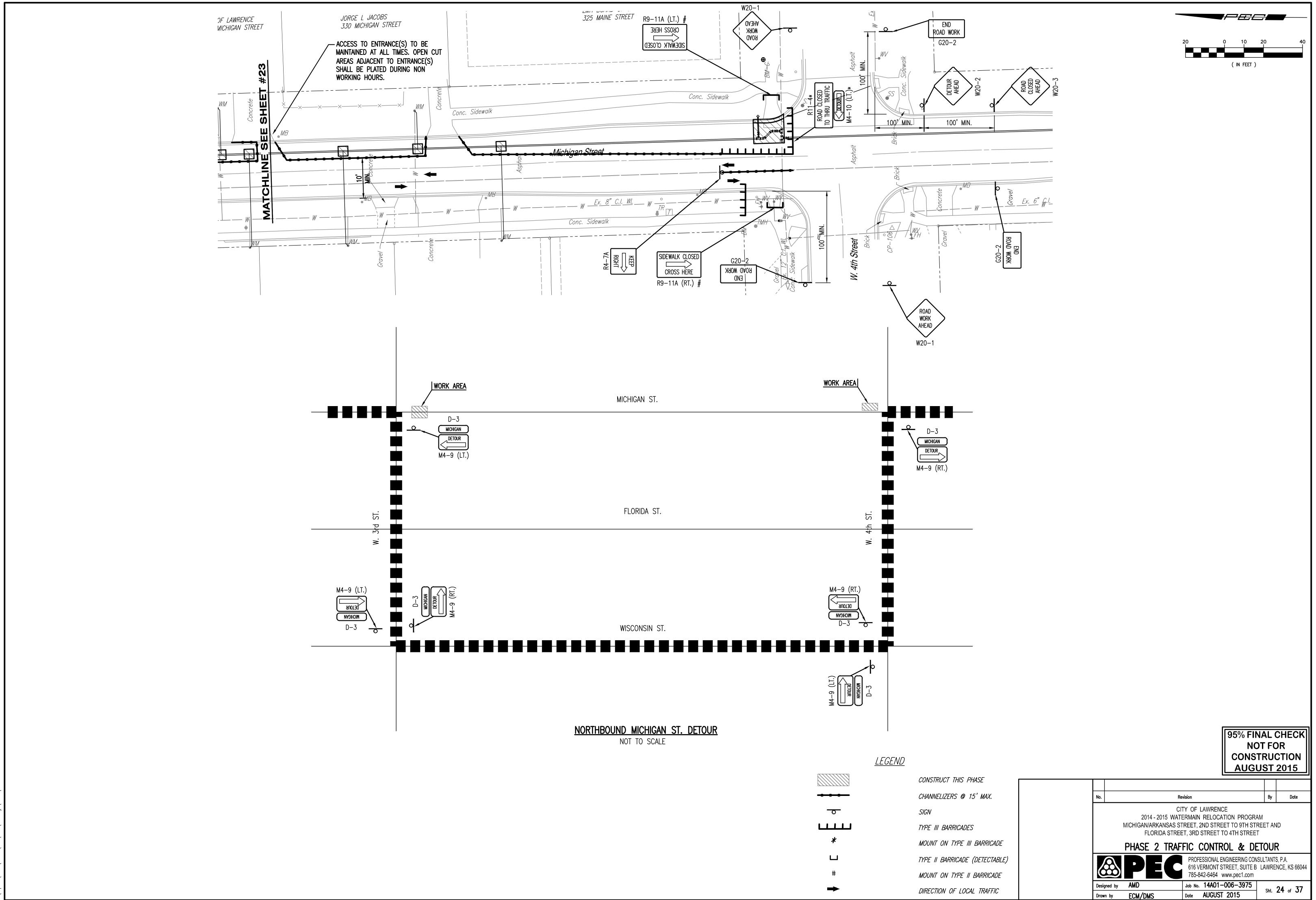


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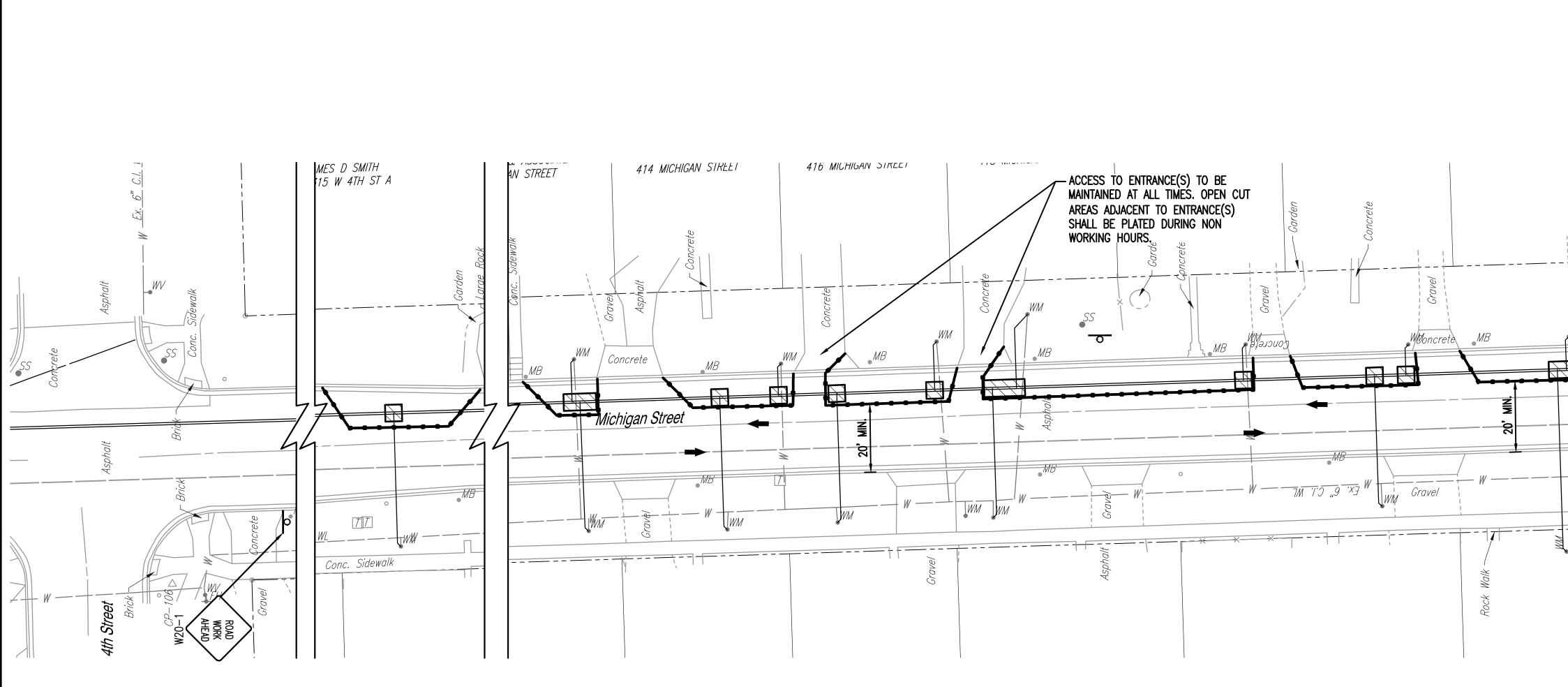
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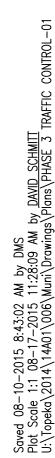


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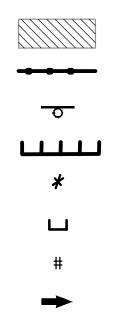


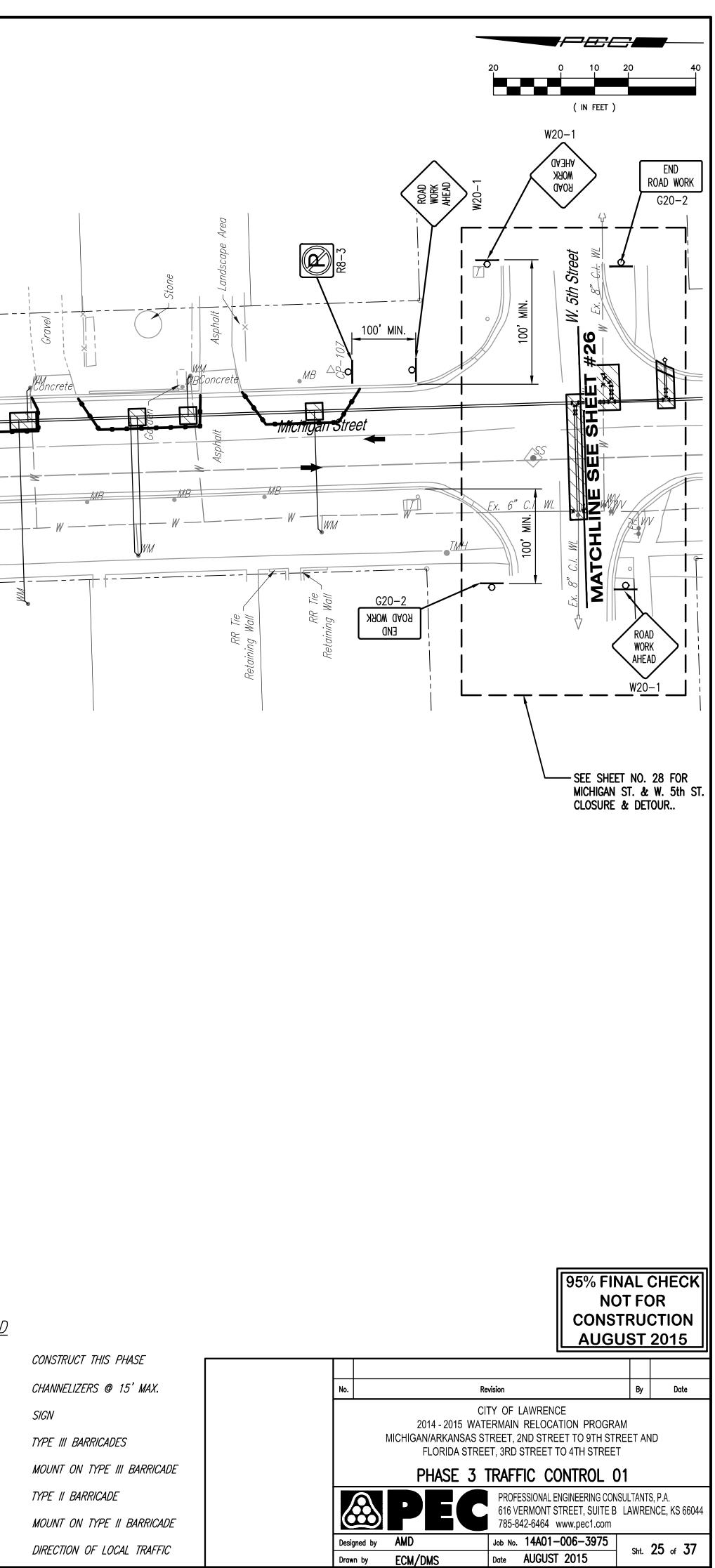
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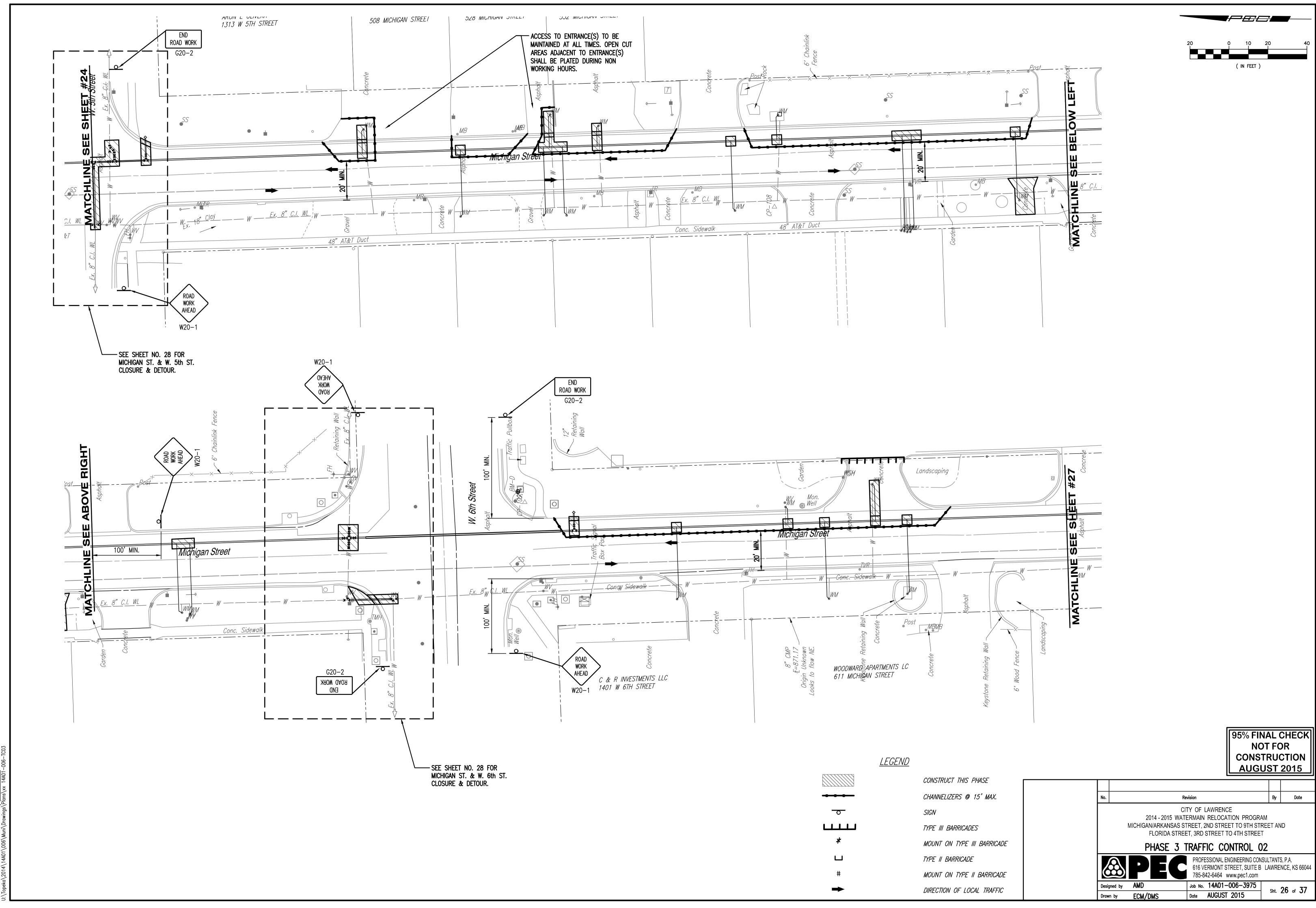




<u>LEGEND</u>

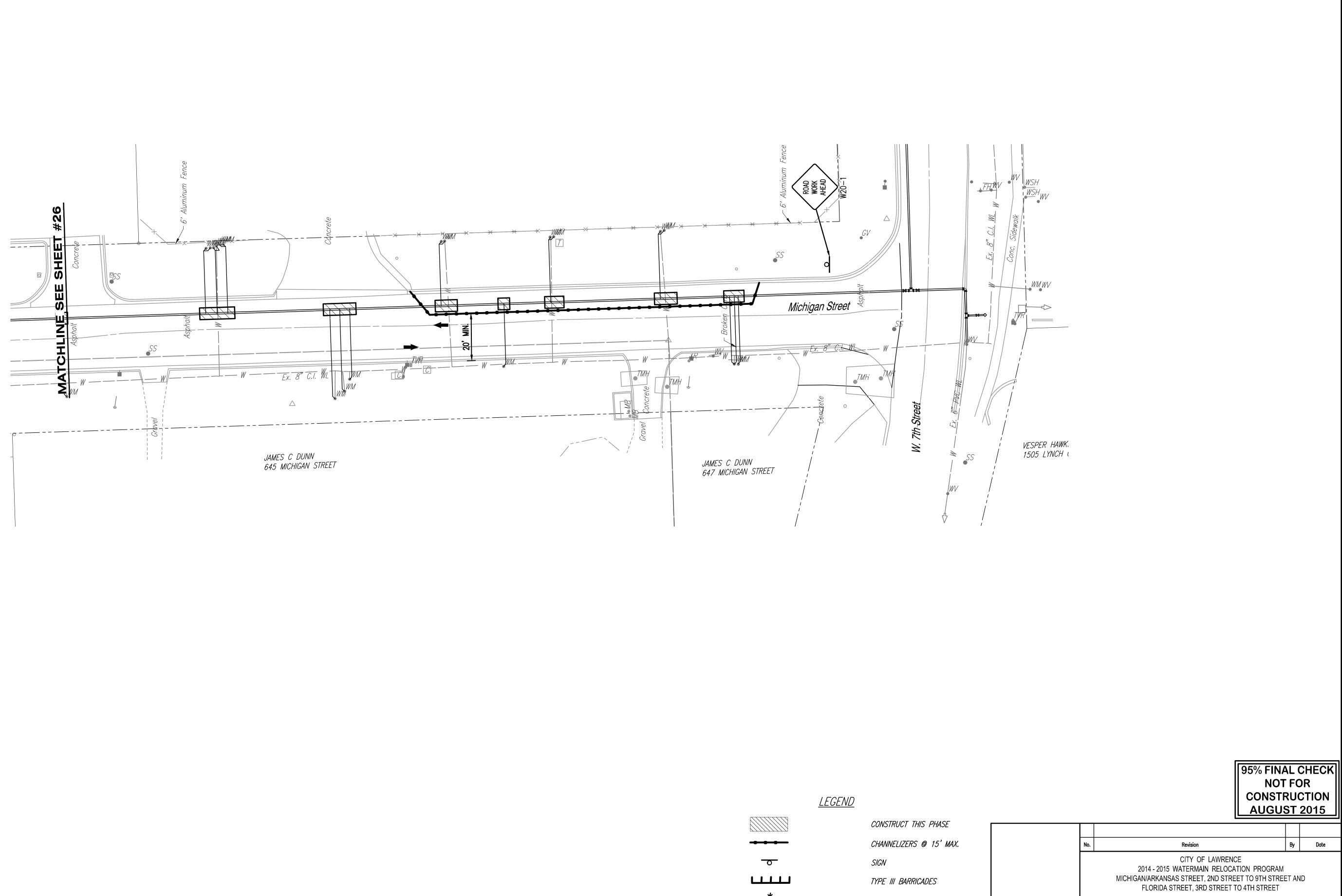


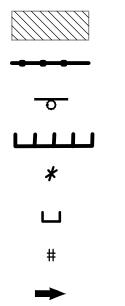




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MOUNT ON TYPE III BARRICADE TYPE II BARRICADE

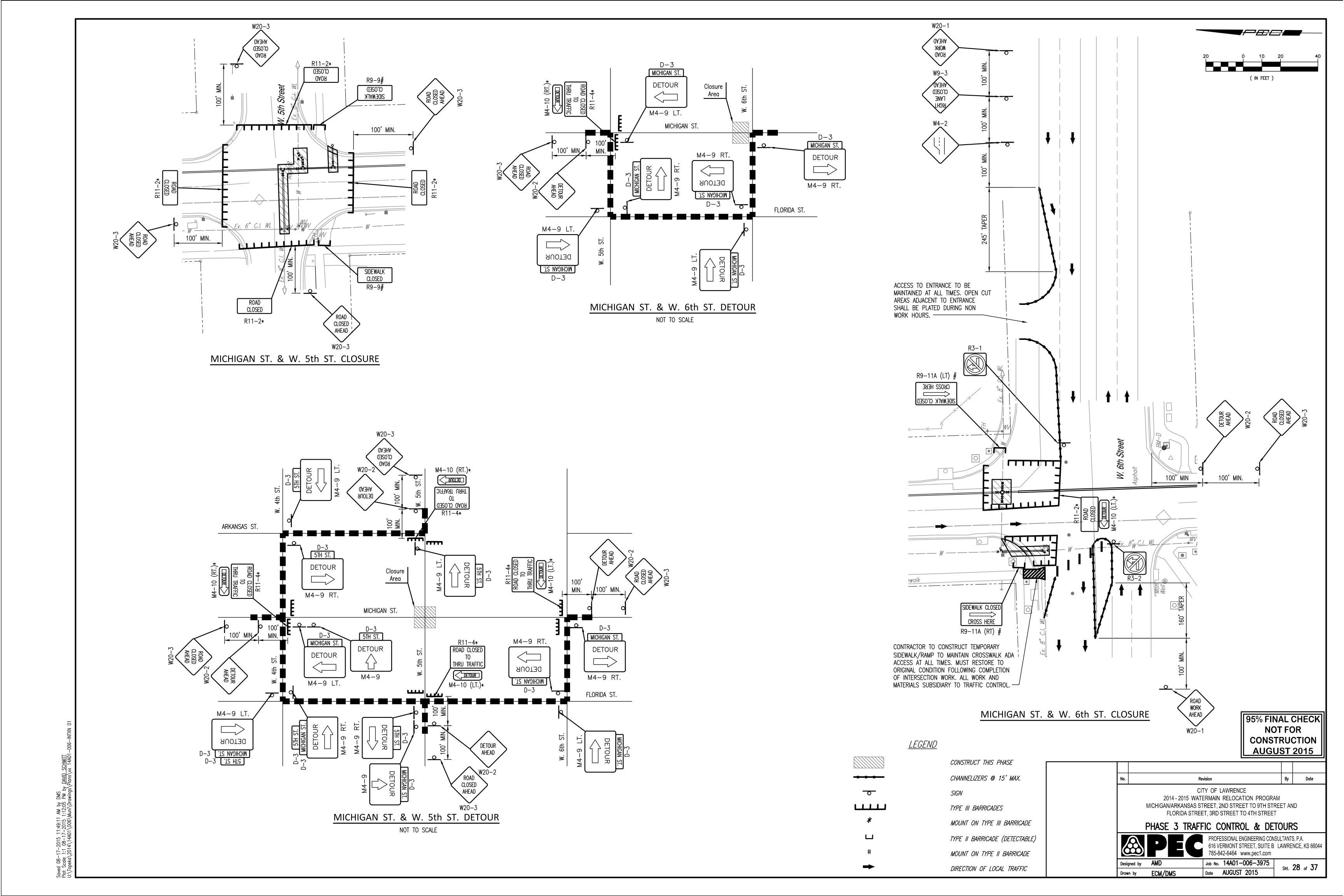
MOUNT ON TYPE II BARRICADE

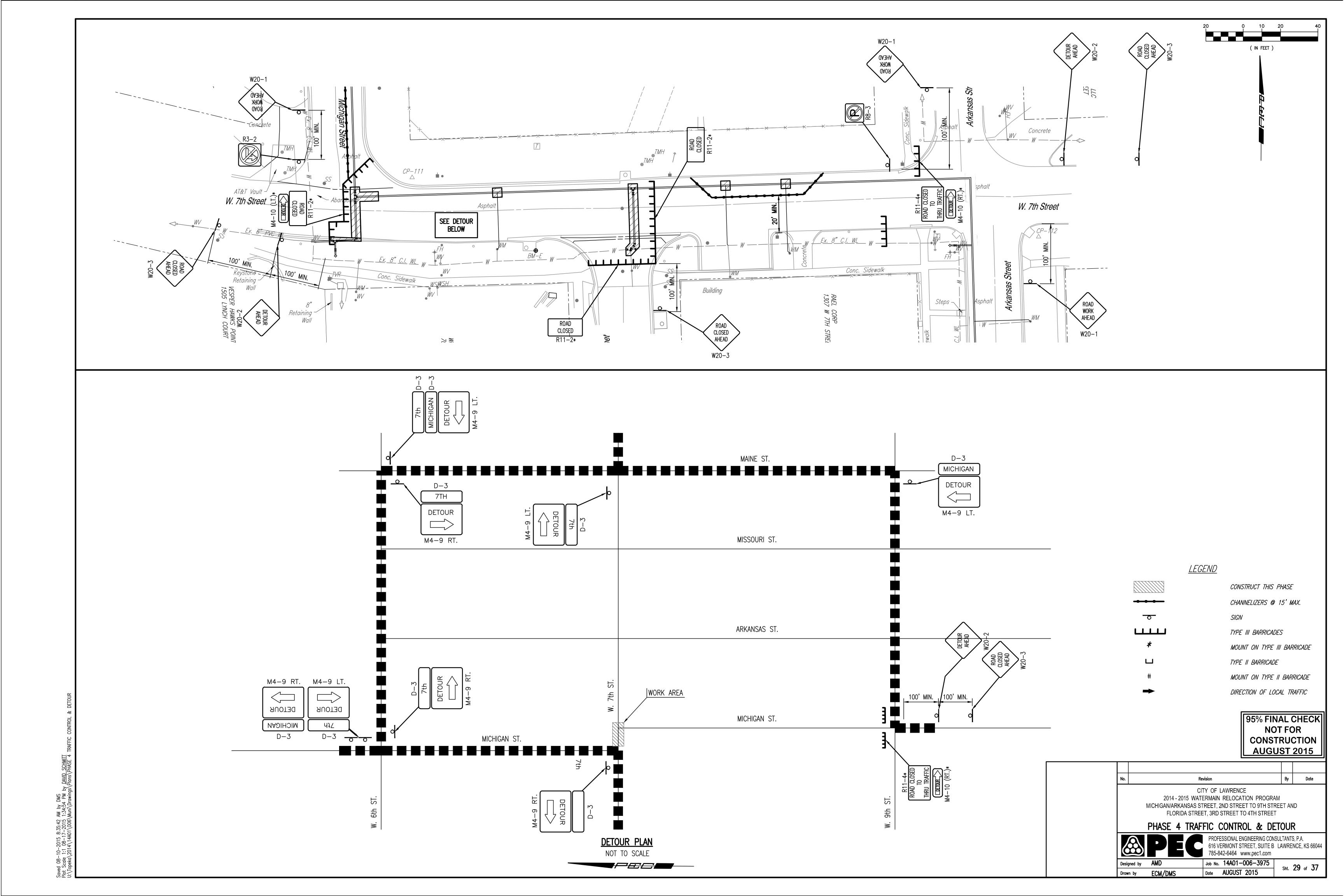
DIRECTION OF LOCAL TRAFFIC

PHASE 3 TRAFFIC CONTROL 03 PROFESSIONAL ENGINEERING CONSULTANTS, P.A. 616 VERMONT STREET, SUITE B LAWRENCE, KS 66044 785-842-6464 www.pec1.com Job No. 14A01-006-3975 Designed by AMD Sht. 27 of 37Date AUGUST 2015 Drawn by ECM/DMS

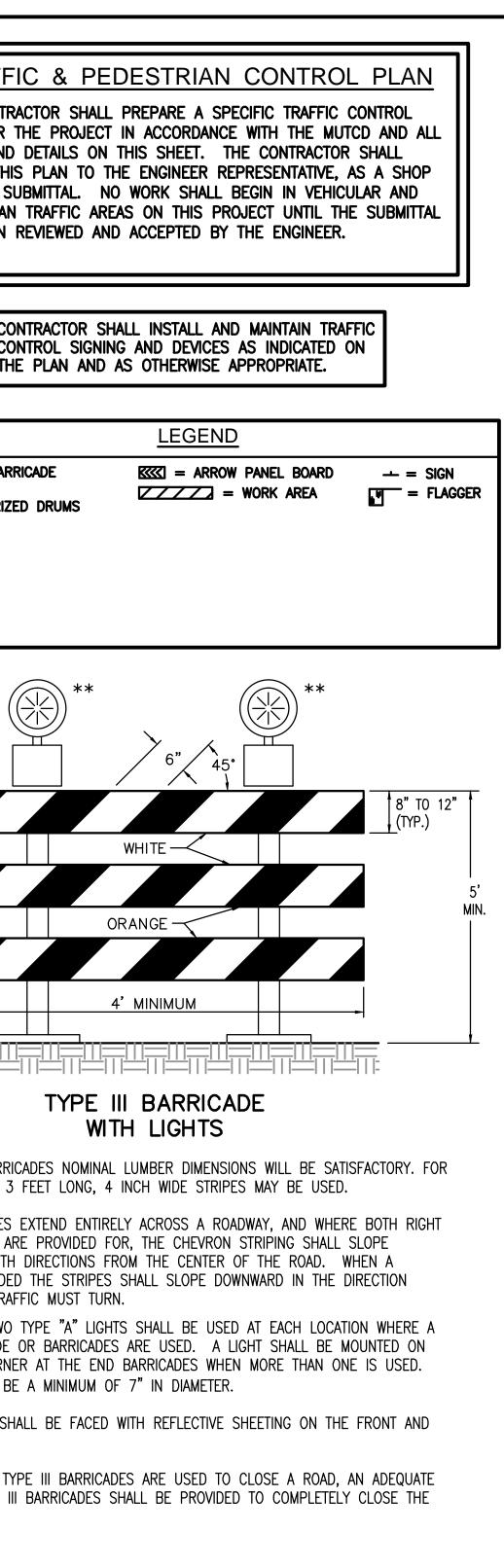
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( IN FEET )



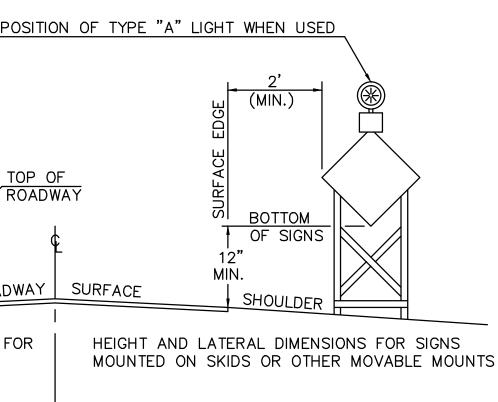


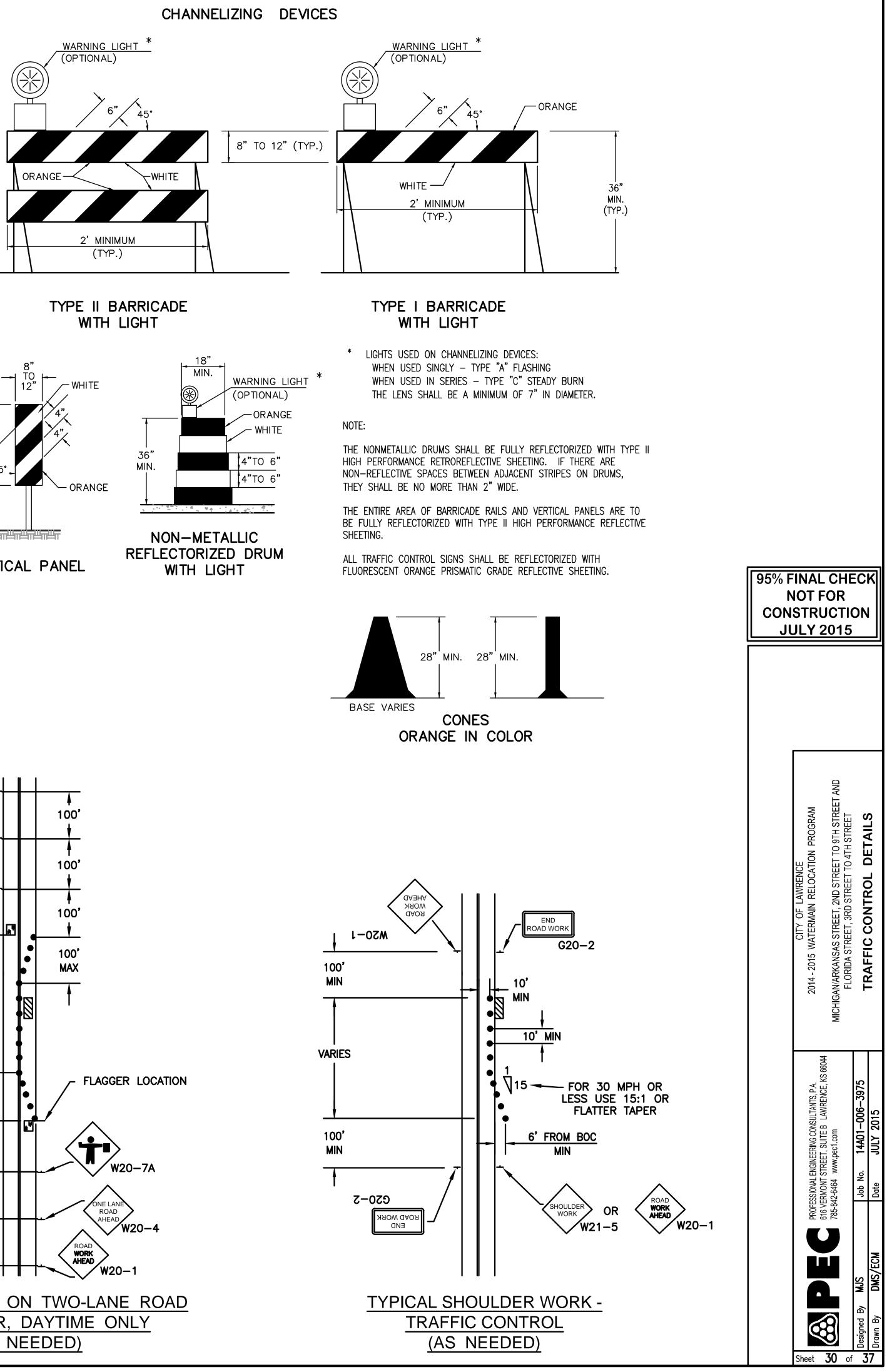
<b></b>		
1.	ALL TRAFFIC CONTROL DEVICES AND INSTALLATION OR USE THEREOF SHALL COMPLY WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (LATEST	TRAFF
2.	EDITION). ALL SIGNS SHALL BE POST MOUNTED IF NON PAVEMENT AREAS ARE AVAILABLE. POSTS SHALL BE 4"x4" WOOD OR OTHER BREAK AWAY MATERIAL AS APPROVED BY THE ENGINEER.	PLAN FOR NOTES AND SUBMIT THI DRAWING S
3.	SIGNS WITH A MINIMUM AREA OF 16 SQUARE FEET SHALL BE MOUNTED ON TWO POSTS. ALL TRAFFIC CONTROL DEVICES SHALL BE CRASHWORTHY. "CRASHWORTHY" DEVICES ARE THOSE THAT HAVE PASSED A CRASH TEST CONDUCTED UNDER THE GUIDELINES OF NCHRP REPORT 350.	PEDESTRIAN HAS BEEN
4.	ADJUSTMENT OF LONGITUDINAL DIMENSIONS FOR SIGN SPACING MAY BE REQUIRED BY THE ENGINEER TO ENSURE THAT EFFECTIVE AND SAFE CONDITIONS EXIST UNDER ACTUAL FIELD CONDITIONS. SIGN SPACING SHOULD BE AS UNIFORM AS POSSIBLE.	
5.	BARRICADES ARE TO BE SET AT LOCATIONS SHOWN ON THE TRAFFIC CONTROL PLAN SHEETS OR AS DIRECTED BY THE ENGINEER. SUFFICIENT BARRICADES SHALL BE ERECTED TO ADEQUATELY COVER THE ROADWAY OR LANE WIDTH. THE BARRICADES MAY BE MOUNTED ON	
6.	APPROVED SKIDS ANCHORED BY WIRE OR SANDBAGS. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL SIGNS AND DEVICES IN THEIR PROPER POSITION, CLEANING AND/OR REPLACING ANY DAMAGED OR ILLEGIBLE SIGN OR	• = REFLECTORIZ
7.	DEVICE AS DIRECTED BY THE ENGINEER WITHOUT UNDUE DELAY TO ENSURE EFFECTIVE AND SAFE TRAFFIC CONTROL. THE CONTRACTOR SHALL DESIGNATE AN EMPLOYEE, AND AN ALTERNATE, WHO WILL HAVE THE RESPONSIBILITY FOR SIGNING AND TRAFFIC CONTROL AS NOTED ON THE TRAFFIC CONTROL PLAN AND SHALL BE AVAILABLE 24 HOURS A DAY, 7 DAYS A WEEK, TO PERFORM THE ABOVE MAINTENANCE. THE ENGINEER WILL BE ADVISED OF THE NAME AND TELEPHONE NUMBER OF THE PERSON AND ALTERNATE GIVEN THIS RESPONSIBILITY.	
8.	<ul> <li>CHANNELIZATION DEVICES: DEVICES AS USED HEREIN INCLUDE BUT IS NOT LIMITED TO BARRICADES, BARRIERS, CONES, DRUMS AND VERTICAL PANELS.</li> <li>A. THE MAXIMUM SPACING BETWEEN CHANNELIZATION DEVICES IN A TAPER, MEASURED IN FEET, SHOULD BE APPROXIMATELY EQUAL TO THE EXISTING SPEED LIMIT PRIOR TO ANY WORK.</li> <li>B. DUE TO EXISTING CONDITIONS THE ENGINEER MAY REQUIRE A DECREASE IN THE SPACING STIPULATED ABOVE.</li> <li>C. TYPE I OR II BARRICADES SHOULD BE PLACED AT APPROXIMATELY RIGHT ANGLES TO THE CENTER OF THE ROADWAY OR SIDEWALK.</li> <li>D. DRUMS SHALL BE REFLECTORIZED FULL CIRCUMFERENCE AND MAY BE SUBSTITUTED FOR TYPE I OR II BARRICADES OR TRAFFIC CONES.</li> <li>E. FOR NIGHTTIME ALL DEVICES USED FOR CHANNELIZING TRAFFIC SHALL BE FULLY REFLECTORIZED AND, AS DIRECTED BY THE ENGINEER, DISPLAY THE APPROPRIATE WARNING LIGHT ON TOP OF THE DEVICE NEAREST THE TRAVELED WAY CENTERLINE.</li> <li>F. TRAFFIC CONES SHOULD BE UTILIZED AS CHANNELIZING DEVICES FOR DAYTIME TRAFFIC CONTROL OPERATIONS. IN AREAS DEEMED HAZARDOUS BY THE ENGINEER, SUCH AS OPEN TRENCHES, THEY SHOULD BE SUPPLEMENTED BY OTHER TRAFFIC CONTROL DEVICES AS DIRECTED BY THE ENGINEER. TRAFFIC CONES WILL NOT BE USED FOR NIGHTTIME OPERATIONS.</li> </ul>	
9.	AT ALL TIMES AND DURING ALL WEATHER CONDITIONS, ACCESS SHALL BE MAINTAINED FOR LOCAL TRAFFIC TO THE SATISFACTION OF THE ENGINEER.	
10.	ALL 'W' SIGNS HAVE A MINIMUM SURFACE AREA OF 9 SQ. FT. ALL OTHER SIGNS SHALL BE OF STANDARD SIZE AS DIRECTED IN THE MUTCD UNLESS SPECIFIED OTHERWISE ON THE TRAFFIC CONTROL PLAN.	FOR WOODEN BARRI RAILS LESS THAN 3
11.	THE CONTRACTOR SHALL GIVE THE CITY OF LAWRENCE, PUBLIC WORKS DEPARTMENT 48 HOURS NOTICE BEFORE ANY CHANGE TO TRAFFIC CONTROL AND TRAFFIC PATTERNS.	WHERE BARRICADES AND LEFT TURNS A
	ATTACH TWO FLUORESCENT RED-ORANGE FLAGS AND A RED KDOT SPECIFIED TYPE "B" HIGH INTENSITY WARNING LIGHT TO ANY STOP SIGN THAT CREATES A NEW STOP CONDITION OR MOVES THE STOP CONDITION TO A NEW LOCATION. LEAVE FLAGS AND LIGHTS IN PLACE FOR AT LEAST THE FIRST 30 DAYS. INSTALL W3-1 (SYMBOLIC STOP AHEAD) SIGN IN ADVANCE OF STOP SIGN IF STOP SIGN IS NOT VISIBLE FOR A MINIMUM DISTANCE OF 100 FEET (FOR 40 MPH OR LOWER) OR IF STOP CONDITION IS MOVED TO LESS THAN A DISTANCE OF 100 FEET (FOR 40 MPH OR LOWER) FROM AN EXISTING STOP AHEAD SIGN. DISTANCES FOR 45 MPH OR GREATER ARE AS DETERMINED BY THE ENGINEER.	DOWNWARD IN BOTH DETOUR IS PROVIDE TOWARD WHICH TRA ** A MINIMUM OF TWO TYPE III BARRICADE THE OUTSIDE CORNI THE LENS SHALL BI ALL BARRICADES SH BACK FACES. IN AREAS WHERE TY NUMBER OF TYPE II ROAD. <u>WARNING LIGHTS</u> WARNING LIGHTS SH SPECIFICATIONS FOR FLASHING WARNING VISIBLE FROM A MIN
		P P P P P P P P P P P P P P
	AVED SHOUL CURB CURB	7' MIN.
	HEIGHT AND	) LATERAL DIMENSIONS F NTED ON POSTS
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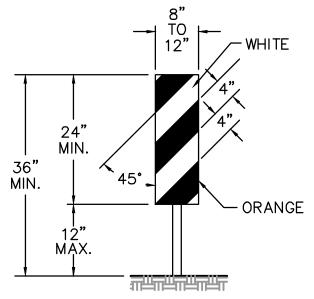


SHALL BE IN ACCORDANCE WITH THE CURRENT ITE PURCHASE R FLASHING AND STEADY BURN WARNING LIGHTS.

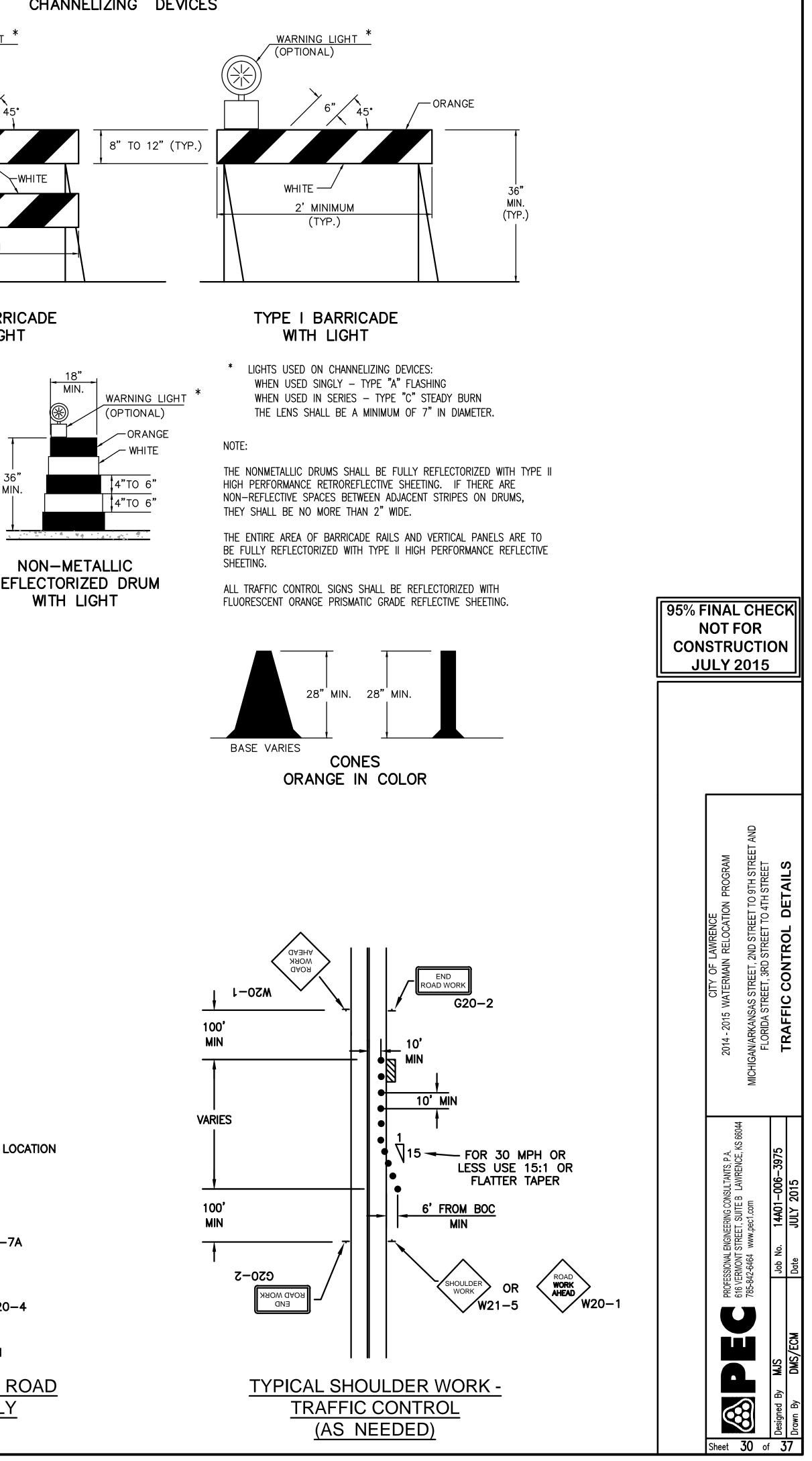
G LIGHTS SHALL BE MAINTAINED SO AS TO BE CAPABLE OF BEING INIMUM DISTANCE OF  $\frac{1}{2}$  MILE.

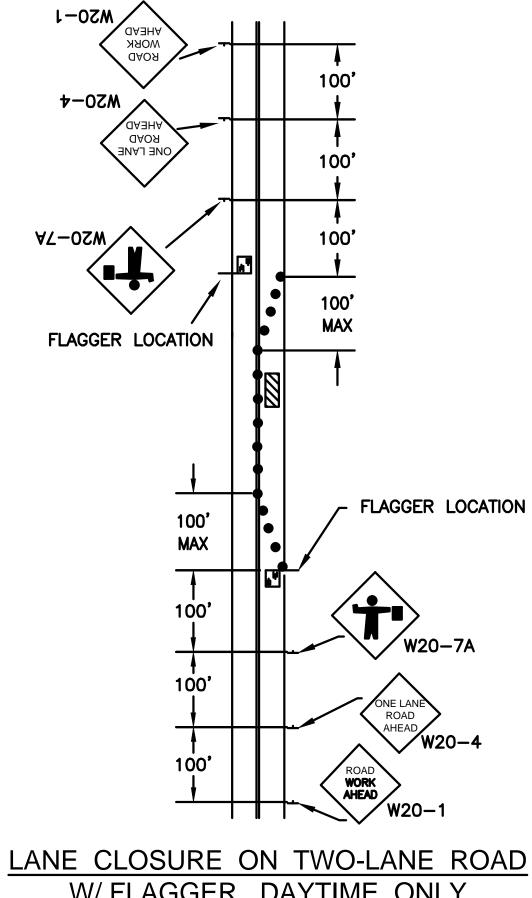






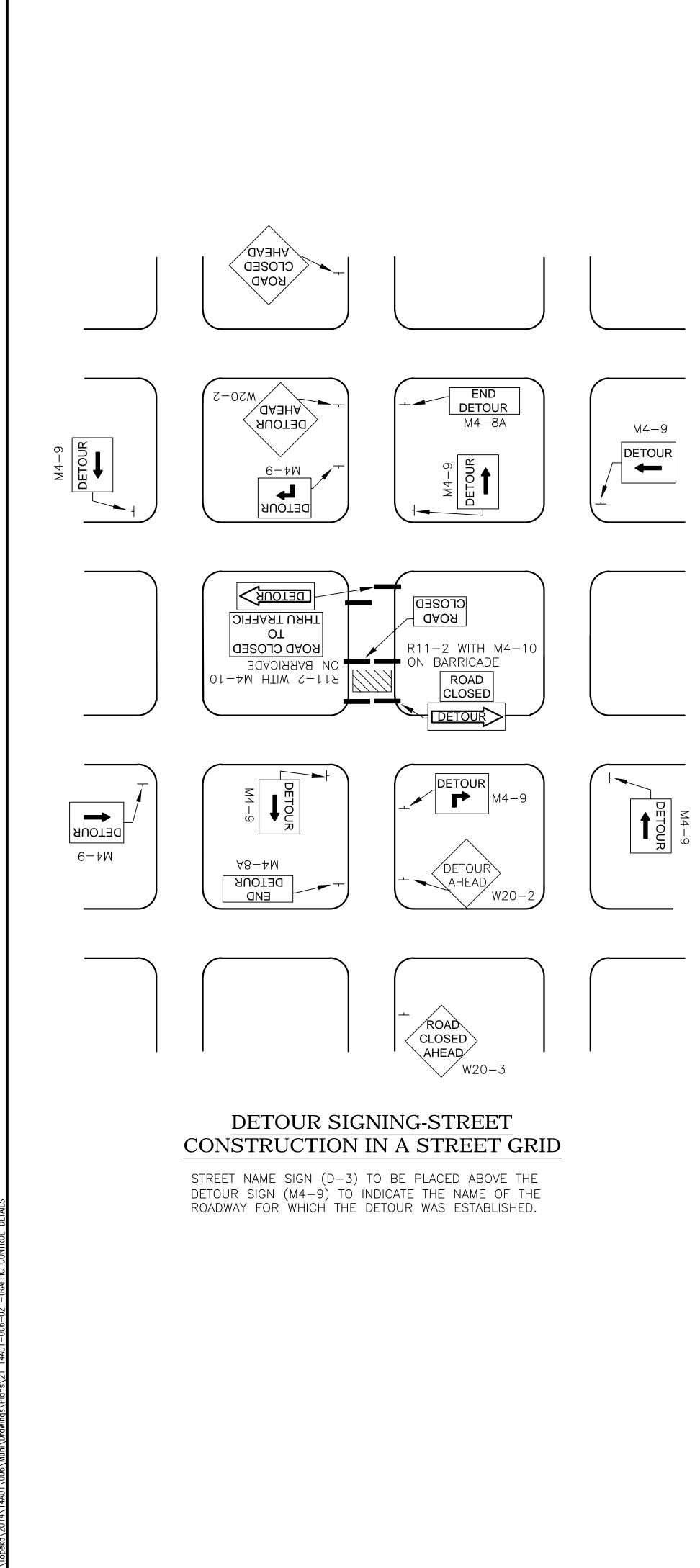
VERTICAL PANEL



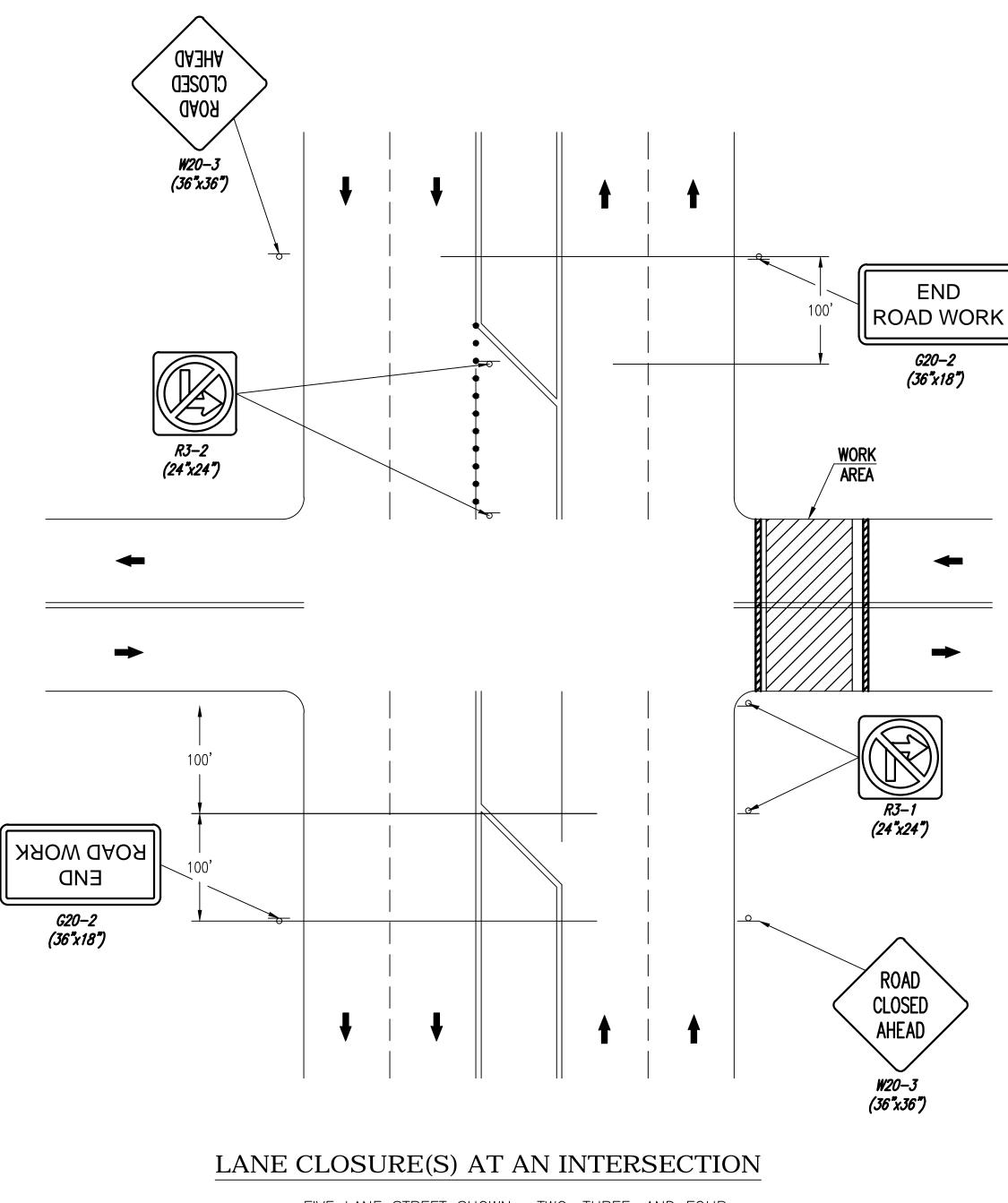


W/FLAGGER, DAYTIME ONLY (AS NEEDED)

UNTING LOCATIONS



-2015 2:29:03 PM by DMS | 07-24-2015 4:11:18 PM by <u>E</u> 14\14A01\006\Muni\Drawings\PI



FIVE LANE STREET SHOWN. TWO, THREE, AND FOUR LANE STREETS SIMILAR.

## FORMULAS FOR DETERMINING TAPER LENGTH

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

WHERE: L = TAPER LENGTH IN FEET

- W = WIDTH OF OFFSET IN FEET
- S = POSTED SPEED LIMIT PRIOR TO WORK STARTING

