

CALC. BY JMA
 DATE 2/89
 CHK'D BY [Signature]
 DATE 2/89

SUM-8-223

OHIO
 FHWA REGION 5

131
 208

LIGHTING KEY

- "X" EXISTING LIGHT POLE WITH 700 WATT MERCURY VAPOR LUMINAIRE.
- "X" REPLACE EXISTING LUMINAIRE WITH NEW 50,000 LUMEN, 400 WATT H.P.S. EXISTING FOUNDATION, POLE AND WIRING TO REMAIN.
- "X" RELOCATE EXISTING POLE 8.5' FEET BEHIND EDGE OF PROPOSED SHOULDER. PLACE NEW FOUNDATION, NEW LUMINAIRE (50,000 LUMEN, 400 WATT H.P.S.) NEW UNDERGROUND CIRCUIT AND NEW POLE WIRING.
- "X" EXISTING LIGHT POLE WITH 400 WATT MERCURY VAPOR LUMINAIRE.
- "X" REPLACE EXISTING LUMINAIRE WITH NEW 22,000 LUMEN, 200 WATT H.P.S. EXISTING FOUNDATION, POLE AND WIRING TO REMAIN.
- "X" RELOCATE EXISTING POLE 8.5' FEET BEHIND EDGE OF PROPOSED SHOULDER. PLACE NEW FOUNDATION, NEW LUMINAIRE (22,000 LUMEN, 200 WATT H.P.S.) NEW UNDERGROUND CIRCUIT AND NEW POLE WIRING.
- EXISTING LUMINAIRES MOUNTED ON TRAFFIC SIGNAL MAST ARMS.
- MOUNT NEW LUMINAIRES ON NEW TRAFFIC SIGNAL MAST ARMS.
- NEW LIGHT POLE AND LUMINAIRE MOUNTED ON A STRUCTURE.
- EXISTING PULL BOX
- PROPOSED PULL BOX, 18"
- EXISTING 1 1/2" DUCT CABLE
- PROPOSED 1 1/2" DUCT CABLE
- EXISTING CONDUIT
- EXISTING CONDUIT, CONCRETE ENCASED
- PROPOSED CONDUIT, 3", CONCRETE ENCASED
- EXISTING POWER POLE
- EXISTING LIGHTING CONTROL CENTER
- EXISTING CIRCUIT NUMBER

PROPOSED ILLUMINATED OVERHEAD SIGNS

- CANTILEVER
- CENTER MOUNT
- SPAN
- SPAN WIRE

EXISTING ILLUMINATED OVERHEAD SIGNS

- CANTILEVER
- CENTER MOUNT
- SPAN
- SPAN WIRE

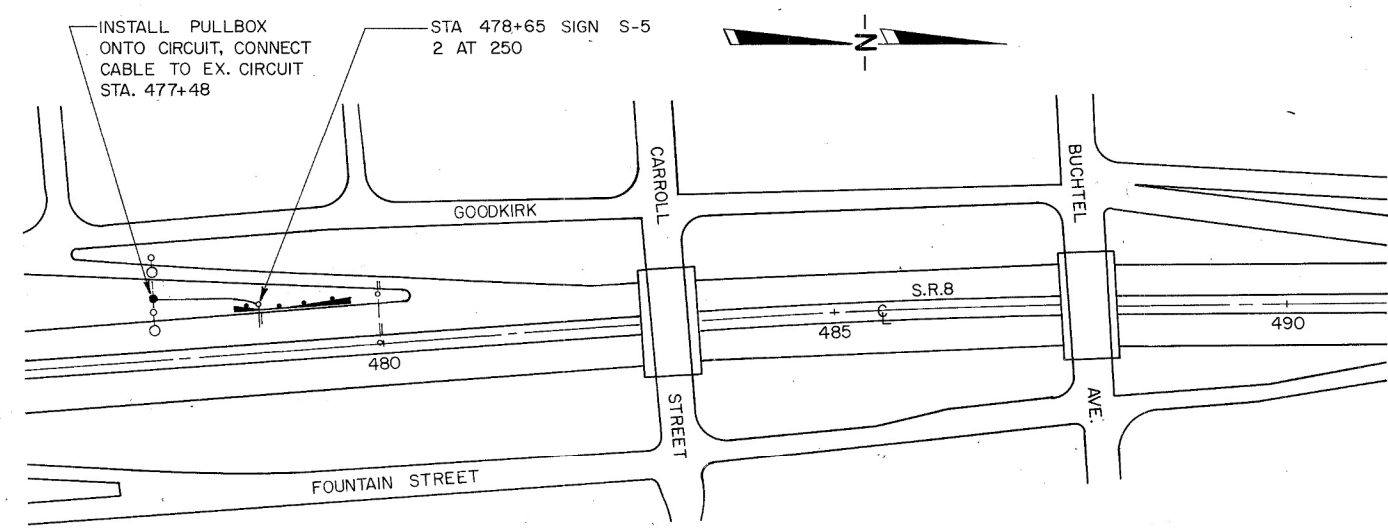
"X" REPRESENTS THE POLE DESIGN DESIGNATION. SEE POLE DATA CHART FOR POLE DESIGNS & DESIGNATION LETTERS.

POLE DATA CHART

DESCRIPTION	DESIGN NUMBER	DESIGN DESIGNATION
MAINLINE	AT 25B 41.7	A
MAINLINE	AT 20B 41.7	B
MAINLINE	AT 18 B 41.7	C
RAMPS	AT 10 B 34.2	D
GLENWOOD	A 12 B 30	E

DESIGN CRITERIA

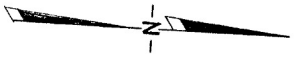
- TYPE OF LIGHTING ----- ONE SIDE
- ILLUMINATION ----- 1.2 fc AVERAGE INITIAL
- LAMPS ----- 200 WATT H.P.S.
400 WATT H.P.S.
250 WATT H.P.S.
- UNIFORMITY ----- 4:1 MAX. CONVENTIONAL
- DISTRIBUTION ----- 200 WATT H.P.S. ANSI-IES TYPE II
400 WATT H.P.S. ANSI-IES TYPE III
- SYSTEM VOLTAGES ----- 480 V - 2 WIRE - ONE SIDE GROUNDED
120 V - 2 WIRE - ONE SIDE



LIGHTING PLAN

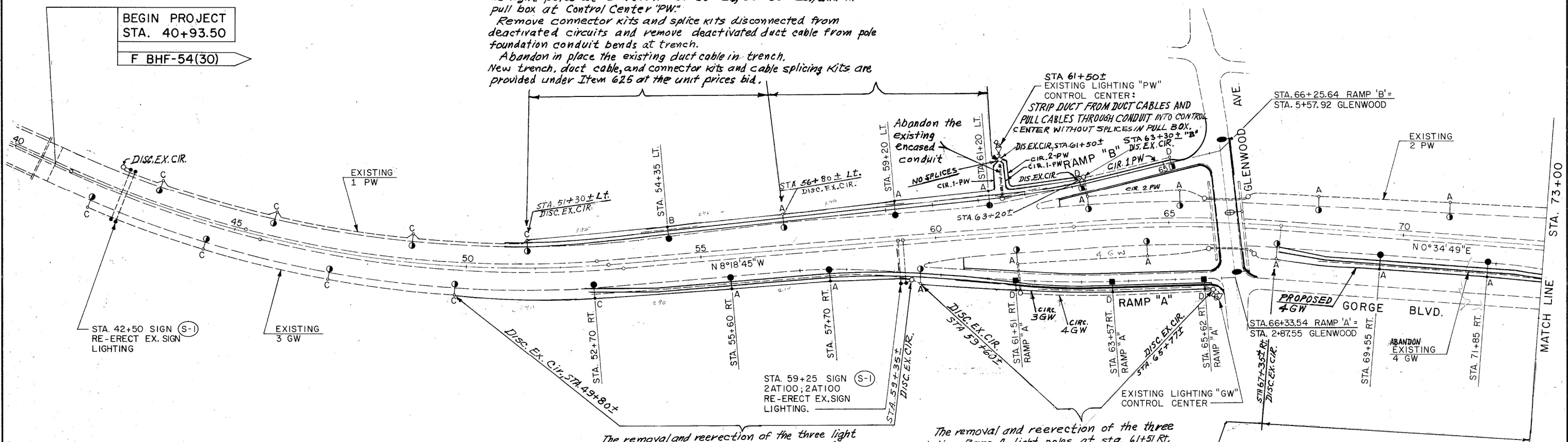
FOR OVERHEAD SIGN SUPPORT AT STA. 478+65

LIGHTING PLAN
 STA. 477+48 TO STA. 40+93.50
 LIGHTING DESIGN CRITERIA



The removal and reerection of mainline light poles at stations 54+35 Lt and 59+20 Lt requires disconnections in circuit 1 PW at light poles at stations 51+30± Lt, 56+80± Lt, and in pull box at Control Center "PW".
 Remove connector kits and splice kits disconnected from deactivated circuits and remove deactivated duct cable from pole foundation conduit bends at trench.
 Abandon in place the existing duct cable in trench.
 New trench, duct cable, and connector kits and cable splicing kits are provided under Item 625 at the unit prices bid.

BEGIN PROJECT
 STA. 40+93.50
 F BHF-54(30)



STA. 42+50 SIGN
 RE-ERECT EX. SIGN
 LIGHTING

EXISTING
 3 GW

Disc. Ex. Cir. STA. 49+80±
 STA. 52+70 RT.
 STA. 55+60 RT.
 STA. 57+70 RT.
 STA. 59+25 SIGN
 2AT100; 2AT100
 RE-ERECT EX. SIGN
 LIGHTING.

STA. 59+25 SIGN
 2AT100; 2AT100
 RE-ERECT EX. SIGN
 LIGHTING.

The removal and reerection of the three light poles at mainline stations 52+70 Rt, 55+60 Rt, and 57+70 Rt requires disconnections in circuit 3GW at the light pole at sta. 49+80± and in the pull box at sta. 59+35± Rt.
 Remove connector kits and cable splicing kits, and deactivated duct cable from pole foundation conduit bend. Abandon in place the existing duct cable in trench.

The removal and reerection of the three existing Ramp A light poles at sta. 61+51 Rt, sta. 63+57 Rt, and sta. 65+62 Rt requires disconnections in circuit 3GW at fixed light pole at sta. 59+60± and in existing pull box at Sta. 65+71± Rt.
 Remove Connector kits, splicing kits, and duct cable of deactivated circuits and abandon in place deactivated duct cable in trench.

The removal and reerection of light poles at mainline stations 69+55 Rt. and 71+85 Rt. on circuit 4GW, this sheet, and at 73+50 Rt on sheet 133, requires disconnections at the fixed light pole at sta. 67+35± and at the pull box at sta. 74+20±, sheet no. 133.
 Remove connector kits, splice kits, and deactivated duct cable from pole foundation conduit bend. Abandon in place existing duct cable in trench.

STA. 61+50±
 EXISTING LIGHTING "PW"
 CONTROL CENTER:
 STRIP DUCT FROM DUCT CABLES AND
 PULL CABLES THROUGH CONDUIT INTO CONTROL
 CENTER WITHOUT SPLICES IN PULL BOX.
 DIS. EX. CIR. STA. 61+50±
 STA. 63+30± "B"
 STA. 63+30± "B"
 DIS. EX. CIR.
 CIR. 2-PW
 CIR. 1-PW RAMP "B"
 DIS. EX. CIR.
 CIR. 2 PW
 CIR. 1 PW

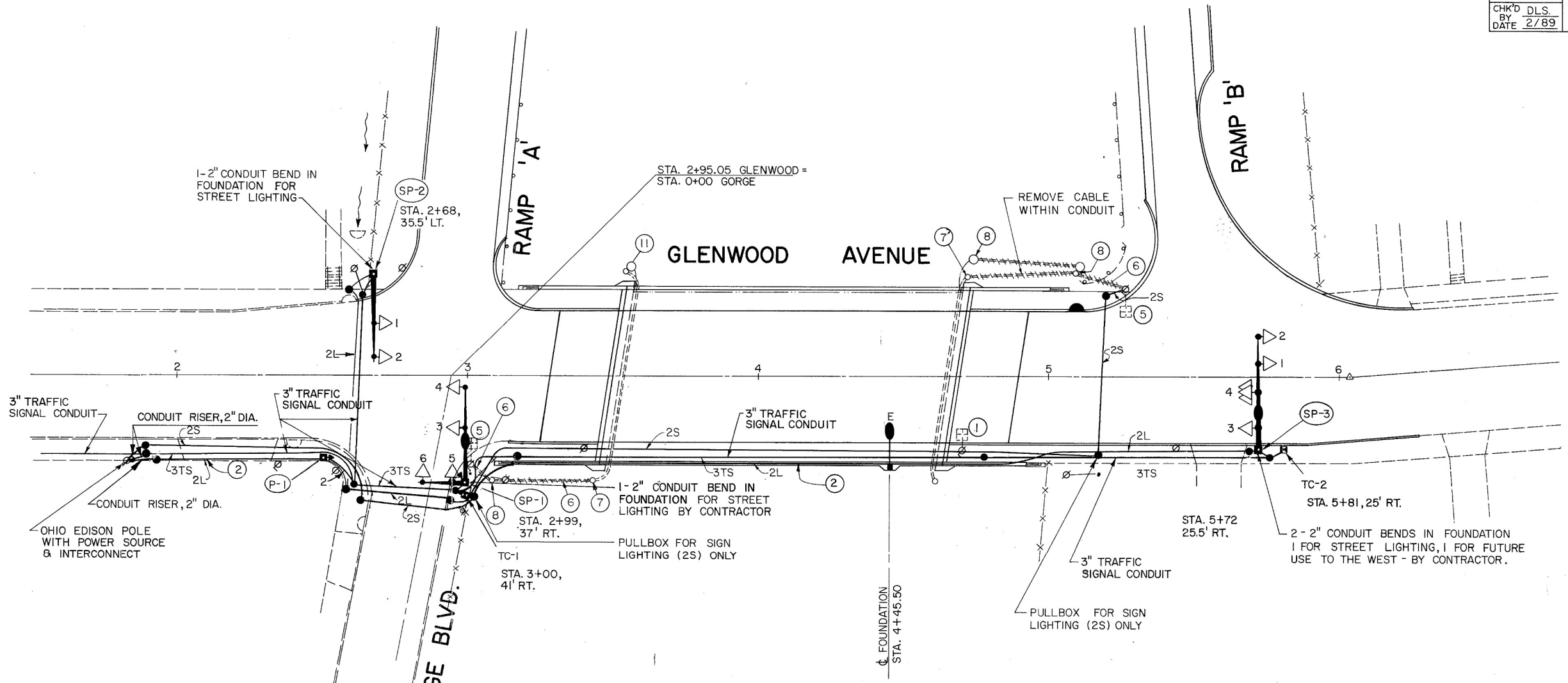
STA. 66+25.64 RAMP "B"
 STA. 5+57.92 GLENWOOD

PROPOSED
 4 GW
 STA. 66+33.54 RAMP "A"
 STA. 2+87.55 GLENWOOD

FOR DETAILS OF LIGHTING ON GLENWOOD AVE.
 BRIDGE SEE SHEET 136
 FOR QUANTITIES SEE SHEET 128
 FOR LEGEND SEE SHEET 131
 FOR OVERHEAD SIGN DETAILS SEE TRAFFIC CONTROL PLANS.

CIRCUIT RECONNECTION IS INCLUDED IN THE UNIT PRICE BID FOR ITEM 625 CONNECTOR KITS AND CABLE SPLICING KITS.

LIGHTING PLAN
 STA. 40+93.50 TO STA. 73+00



LEGEND

- SIGNAL POLE & MAST ARM
- 18" PULLBOX
- TRAFFIC CONTROLLER (TC-)
- VEHICULAR SIGNAL
- PEDESTRIAN SIGNAL
- LUMINAIRE
- EXISTING LUMINAIRE
- NEW POLE & LUMINAIRE MOUNTED ON STRUCTURE.
- 3" TRAFFIC SIGNAL CONDUIT
- 2" STREET LIGHTING CONDUIT
- 2" SIGN LIGHTING CONDUIT
- EXISTING CONDUIT TO BE REMOVED
- EXISTING CONDUIT, CONCRETE ENCASED

NOTES:

- ① EXISTING POLE AND/OR LUMINAIRE TO BE REMOVED BY OHIO EDISON. LUMINAIRES TO BECOME PROPERTY OF THE CITY OF AKRON.
- ② THE POLE FOUNDATION ON THE BRIDGE, ALL OF THE 2" CONDUIT AND THE POLE RISER, ALL WORK TO BE PERFORMED BY THE CONTRACTOR.
- ③ FOR TRAFFIC SIGNAL INFORMATION AND DETAILS NOT SHOWN SEE TRAFFIC CONTROL PLANS.
- ④ ANCHOR BOLTS FOR LIGHT POLE ON STRUCTURE TO BE SUPPLIED BY CONTRACTOR TO BE PAID FOR UNDER ITEM 625 - LIGHT POLE ANCHOR U-BOLTS, AS PER PLAN CIRCLE SIZE TO BE 1 1/2" AS PER OHIO EDISON. SEE BRIDGE PLANS FOR DETAILS OF LIGHT POLE PILASTER.
- ⑤ EXISTING SIGN & STREET LIGHT COMBINATION POLE. LUMINAIRE AND MOUNTING ARM TO BE REMOVED. LUMINAIRE TO BECOME PROPERTY OF THE CITY OF AKRON.
- ⑥ ABANDON CONCRETE ENCASED CONDUIT. CABLES TO BE REMOVED FROM CONDUIT ARE PROPERTY OF CONTRACTOR FOR DISPOSAL.
- ⑦ DISCONNECT EXISTING SIGN LIGHTING CABLE FROM EXISTING SPLICE AND RESPLICE EXISTING CABLES LEFT INSIDE PULLBOX.
- ⑧ REMOVE PULLBOX AS PER ITEM 202 -