FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEET
UTAH	UTAH	HHS-000S(2)	1974	1	1

DATE	RIGHT OF WAY INSTRUMENTS				
9-25-74	ORIGINAL SUBMISSION FOR R/W AUTH.				
	REVISIONS				
	R/W DES. REV. BY:	MAPS CORR. BY:	PARCELS AFFECTED	REQUEST BY:	REMARKS:
4-22-75	M.K.L.	W.E.L.	2:E	DIST. I	ADD PARCEL 2:E

T. 5 N. R. 1 W.
S. L. B. & M.
JIM WHETTON, BUICK
MATCH EXISTING LIP OF GUTTER
TO BE REMOVED BY OTHERS
OGDEN CITY ALLEY
STA. 28+08.45 ℄ 20' STREET REQ'D.
STA. 28+10 35' RT. ADJUST EXIST. C.O.B. USE EXIST. SOLID COVER
STA. 27+68 35' RT. ADJUST EXIST. C.B., SOLID COVER & FRAME REQ'D. SALVAGE EXIST. GRATE
STA. 27+68 41' RT. CATCH BASIN V-1329 LINE 2 REQ'D. USE SALVAGED GRATE. 12" X 6' PIPE CULVERT CONNECTION TO EXIST. C. B. REQ'D.
STA. 26+93 ℄ 18' DRIVEWAY REQ'D.
STA. 26+24 ℄ 30' DRIVEWAY REQ'D.
STA. 25+62 ℄ 16' DRIVEWAY REQ'D.
STA. 24+54 35' RT. ADJUST EXIST. C.B. SOLID COVER & FRAME REQ'D. SALVAGE EXIST. GRATE
STA. 10+60 28' LT. CATCH BASIN V-1329 LINE 2 REQ'D. USE SALVAGED GRATE. 12" X 22' PIPE CULVERT CONNECTION TO EXIST. C.B. REQ'D.
STA. 10+90 19' LT. REMOVE EXIST. C.B., PLUG & ABANDON EXIST. PIPE
MATCH EXISTING LIP OF GUTTER
CAFE
DRY CLEANER
CAR WASH
MASTER MUFFLER GARAGE
STA. 11+37 ℄ 34' DRIVEWAY REQ'D.
STA. 10+82 ℄ 44' DRIVEWAY REQ'D.
25+00
SE 1/4 NW 1/4 SECTION 5
REMOVE AUX. T.L.P. & PAD
CURB & GUTTER REQ'D.
TO BE RELOCATED
Exist. R/W Line
CURB & GUTTER REQ'D
30" R.C.P. STORM SEWER
21" SANITARY SEWER
EXISTING CURB & GUTTER
S.P. 1596, SR-204
36TH STREET
OGDEN CITY LIMITS
SOUTH OGDEN CITY LIMITS
10" I.H.P. GAS LINE
30" R.C.P. STORM SEWER
12" SANITARY SEWER
REMOVE EXISTING CURB & GUTTER
S. 89°02'E.
24"R.C.P.
23+98.40 (COVERED)
23+92.4
MATCH EXISTING LIP OF GUTTER
12+00
STA. 11+78 ℄ 34' DRIVEWAY REQ'D.
TO BE RELOCATED BY SOUTH OGDEN
CURB & GUTTER REQ'D.
STA. 10+66 20' RT. ADJUST EXIST. C.B., SOLID COVER & FRAME REQ'D. SALVAGE EXIST. GRATE
STA. 10+63 27' RT. CATCH BASIN V-1329 LINE 2 REQ'D. USE SALVAGED GRATE. 12" X 6' PIPE CULVERT CONNECTION TO EXIST. C.B. REQ'D.
STA. 23+79 37' RT. ADJUST EXIST C.B., SOLID COVER & FRAME REQ'D. SALVAGE EXIST. GRATE
STA. 23+82 41' RT. CATCH BASIN V-1329 LINE 2 REQ'D. USE SALVAGED GRATE. 12" X 4' PIPE CULVERT CONNECTION TO EXIST. C.B. REQ'D.
NE 1/4 SW 1/4 SECTION 5
STA. 10+88 ℄ 34' DRIVEWAY REQ'D.
1:E
TELEPHONE
15" R.C.P.
S.0°58'W.
WALL AVENUE
SOUTH OGDEN CITY LIMITS
OGDEN CITY LIMITS
EXISTING CURB & GUTTER
12" C.M.P.
10" I.H.P. GAS LINE
GUTTER INLET
Sta. 24+70±
Sta. 24+64±
S.89°46'20"E. LINE
2:E
PLANTER AREA
FIRE ALARM BOX TO BE RELOCATED BY OTHERS
10" C.I. WATER LINE
24+22.85
EXISTING ROADWAY PER FIELD SURVEY
1/4 SECTION
9+00
SCALE: 1"=20'

NOTE: EXISTING STREET LIGHT POLES WILL BE REMOVED BY OTHERS, COORDINATE WITH OWNER AND U.P. & L. CO. FOR REMOVAL SCHEDULE.

PARCEL NO	OWNER	NET. AC.	SQ. FT.	EXIST. R/W AC. INDEED	OWNERSHIP AC.	REMAINING AC. LEFT	SQ. FT.	RIGHT	SQ. FT.
000S:1:E	LEASED STATIONS, INC	0.001±	36						
2:E	MERRILL BEAN CHEVROLET, INC.	0.001±	18						

UTILITIES

GAS MAIN	MT. FUEL SUPPLY
SANITARY SEWER MAIN	OGDEN CITY
UND. TEL. CABLES	MT. BELL TELEPHONE
STORM SEWER	OGDEN CITY

UTAH STATE DEPARTMENT OF HIGHWAYS
DIST. ONE - OGDEN, UTAH
ROADWAY DESIGN

36TH STREET & WALL AVE.
OGDEN, UTAH
R/W PLAN SHEET

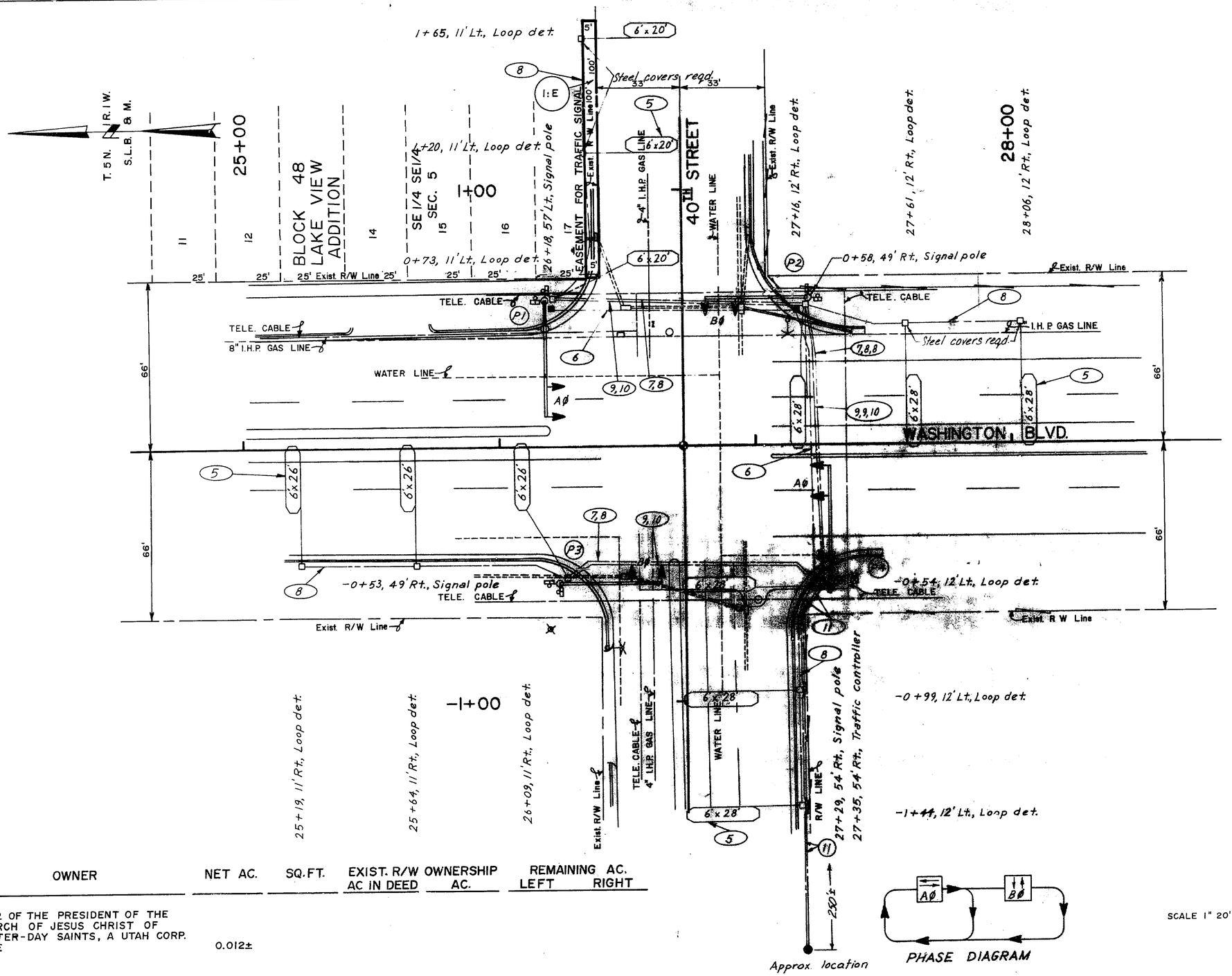
DESIGN M.K.L. 9/74	CHECK R.W.L. 9/74	REVIEW	
DRAWN R.W.L. 9/74	CHECK M.K.L. 9/74	DESIGN	
QUANT.	CHECK	R/W [signature] 9-74	
APPROVAL RECOMM. 9/23/74 [signature] PROJ. DESIGN ENGINEER			
APPROVED 9/23/74 [signature] DIST. PRECONSTRUCTION ENGR.		WEBER COUNTY	
PROJECT NUMBER HHS-000S(2) 2nd CONTRACT		SHEET NO. 1	

FED. ROAD DIST. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
	UTAH	HHS-000S(2)	1	

DATE	RIGHT OF WAY INSTRUMENTS
11-19-74	ORIGINAL SUBMISSION FOR R/W AUTH.

REVISIONS

	R/W DES REV. BY:	MAPS CORR. BY:	PARCELS AFFECTED	REQUEST BY:	REMARKS:



PARCEL NO	OWNER	NET AC.	SQ. FT.	EXIST. R/W AC IN DEED	OWNERSHIP AC.	REMAINING AC. LEFT	REMAINING AC. RIGHT
000S:1:E	CORP. OF THE PRESIDENT OF THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS, A UTAH CORP. SALE	0.012±					

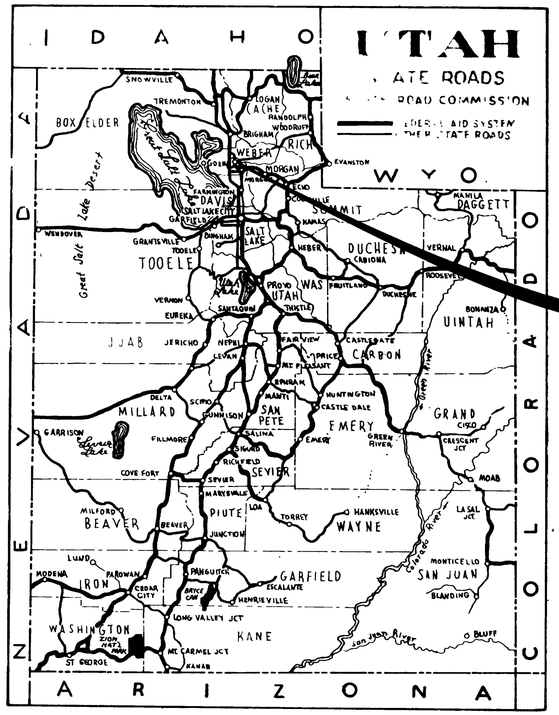
UTAH STATE DEPARTMENT OF HIGHWAYS
DIST. ONE - OGDEN, UT.
ROADWAY DESIGN

40TH ST. & WASHINGTON BLVD.
OGDEN, UTAH.
R/W PLANS

DESIGN B.H.S. 11-74	CHECK L.M.B. 11-74	REVIEW
DRAWN F.S. 11-74	CHECK B.H.S. 11-74	DESIGN
QUANT.	CHECK	R/W 11-74
APPROVAL RECOMM. 11-74 DATE	PROJ. DESIGN ENGINEER	
APPROVED 11-74 DATE	DIST. PRECONSTRUCTION ENGR	WEBER COUNTY
PROJECT NUMBER HHS-000S(2)		SHEET NO. 1

FED ROAD DIST NO	STATE	PROJ NO		SHEET NO
UTAH	UTAH	HHS-0005(2)		1

△ 12/3/74 - SHEET ADDED - K.F.H.



STATE OF UTAH
STATE ROAD COMMISSION

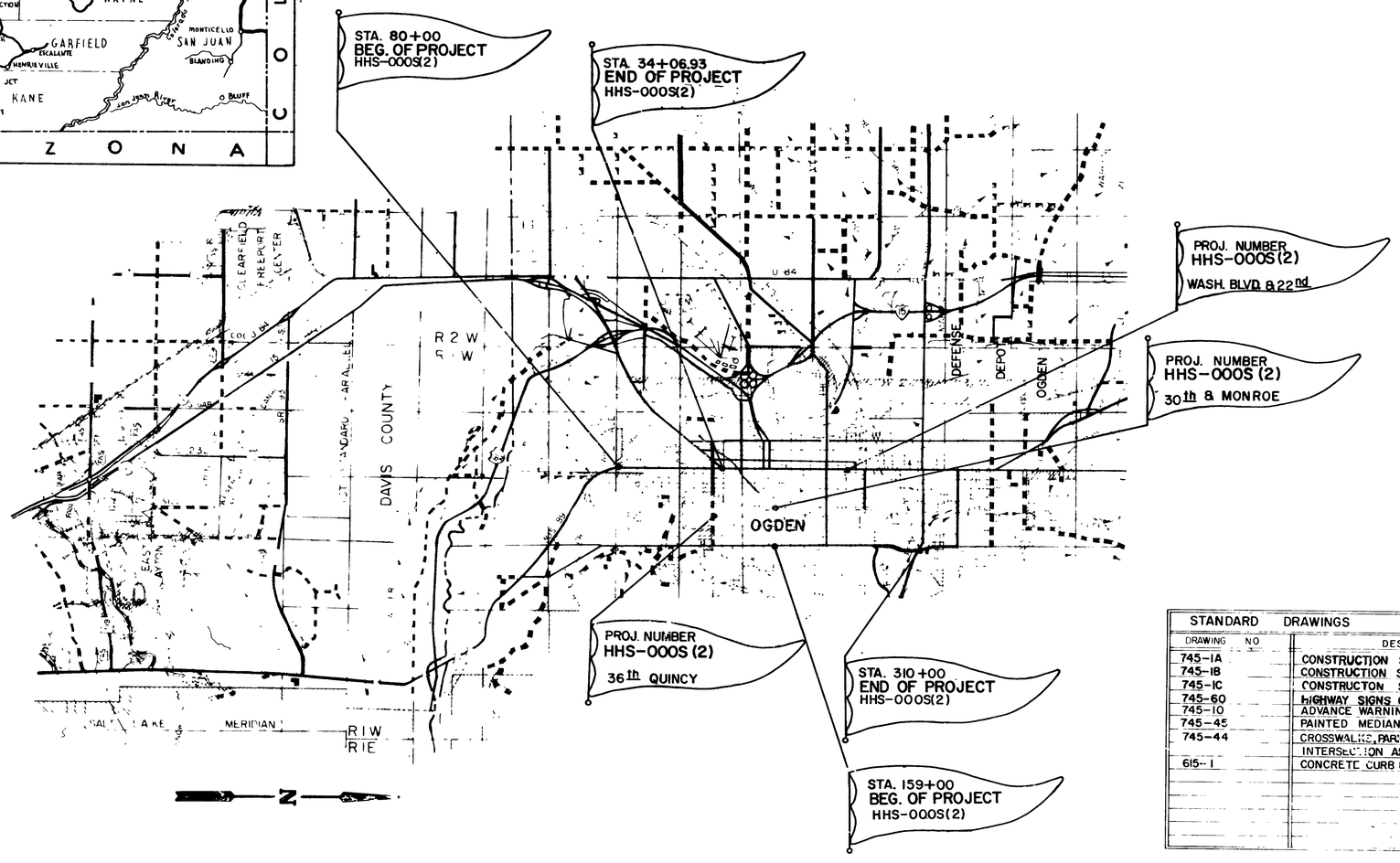
PLANS OF PROPOSED STATE ROAD

FEDERAL AID PROJECT

HHS-0005(2)

WASHINGTON BLVD. & 22nd STREET—OGDEN
WASHINGTON BLVD.— 43rd SOUTH TO RIVERDALE RD—OGDEN
HARRISON BLVD. — 30th STREET TO 12th STREET — OGDEN
MONROE BLVD. & 30th STREET — OGDEN
QUINCY AVE. & 36th STREET-OGDEN
TRAFFIC SIGNALS — CHANNELIZATION — DRAINAGE — SAFETY MODIFICATIONS

AS CONSTRUCTED



INDEX TO SHEETS

ROADWAY DRAWINGS

△	HAAING NO	SHEET NO	DESCRIPTION
		1	TITLE SHEET
		2	TYPICAL CROSS SECTION SHEET
		3 & 3A	SUMMARY SHEETS
		4-8	PLAN SHEET- 22nd STREET & WASHINGTON BLVD.
		5	PLAN SHEET- 36th STREET & WASHINGTON BLVD.
		6	PLAN SHEET- 40th STREET & WASHINGTON BLVD.
		7	PLAN SHEET—43rd STREET & WASHINGTON BLVD.
		8	PLAN SHEET- 36th STREET & QUINCY
		9-10	CHANNELIZATION SHEETS 40th TO 43rd STREET
			TRAFFIC SIGNALS
	S-61	1	SUMMARY & SCHEDULE SHEET
		2-8	SITUATION PLAN
		9-10	SUMMARY & SCHEDULE SHEET
		11-19	SITUATION PLAN
		20	MAST ARM SIGNAL POLE
		21	LIGHT POLE EXTENSION DETAIL
		22	SIGNAL HEAD DETAILS
		23	PEDESTRIAN SIGNAL ASSEMBLY DETAIL
		24	DETECTOR DETAIL
		25	JUNCTION BOX DETAIL
		26	CONTROLLER BASE JUNCTION BOX
		27	TYPE "M" CONTROL CABINET
		28	F- CONTROLLER CABINET BASE DETAIL
		29	MISC. DETAILS
		30	POWER SOURCE DETAILS
△	S-61	31	POST MOUNTED SIGNAL POLE

STRUCTURE DRAWINGS

DWG NO	NO OF SHTS	DESCRIPTION
V-988	1	STANDARD SOLID COVER & GRATING
V-1329	1	STANDARD CATCH BASIN

STANDARD DRAWINGS

DRAWING NO	DESCRIPTION	DATE
745-1A	CONSTRUCTION SIGNING	6-13-72
745-1B	CONSTRUCTION SIGNING	6-15-73
745-1C	CONSTRUCTON SIGNING	4-13-73
745-60	HIGHWAY SIGNS OTHER THAN FREEWAYS	6-1-71
745-10	ADVANCE WARNING DEVICES	10-5-71
745-45	PAINTED MEDIAN DETAILS	6-6-74
745-44	CROSSWALKS, PARKING AND INTERSECTION APPROACHES	6-6-74
615-1	CONCRETE CURB & GUTTER	10-15-70

UTAH STATE DEPARTMENT OF HIGHWAYS

RECOMMENDED FOR APPROVAL Nov 1974

Melvin W. McGuire

CHIEF, ROADWAY DESIGN DIVISION

APPROVED Nov. 1974

[illegible] Reeves

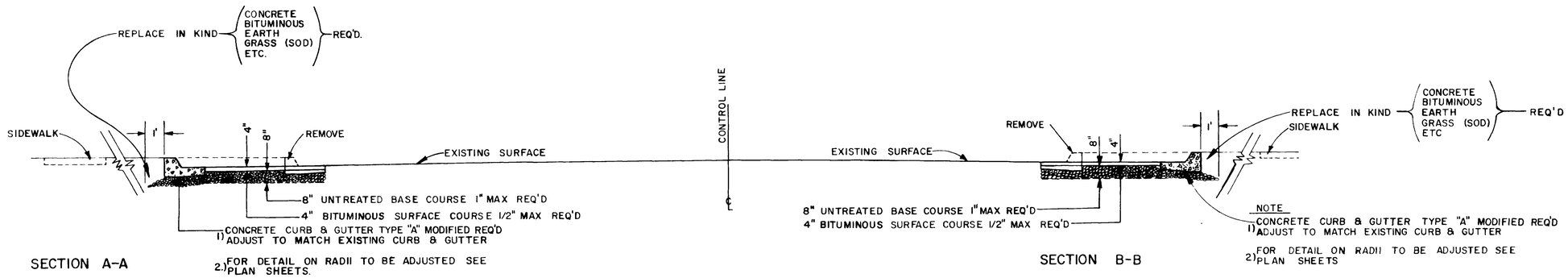
STATE HIGHWAY ENGINEER

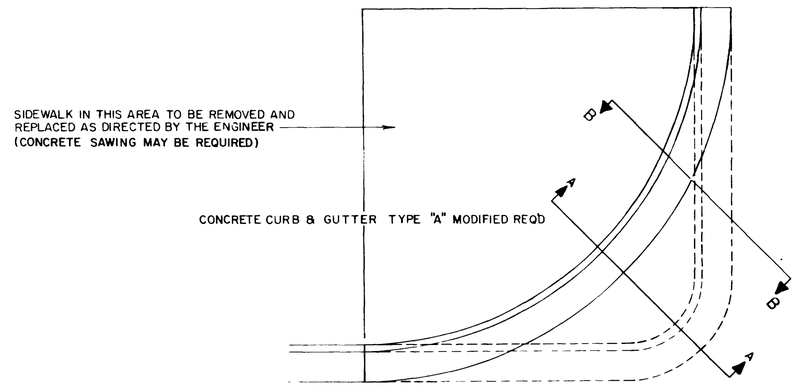
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED

DIVISION ENGINEER DATE

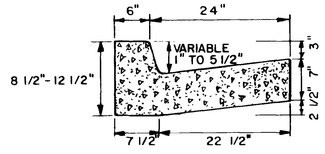
TYPICAL CROSS SECTION





TYPICAL FOR ALL CORNERS

NOTE- BACK OF CURB & GUTTER VARIES FROM 8 1/2" TO 12 1/2" AS NEEDED OR AS DIRECTED BY THE PROJ ENGINEER



CONCRETE CURB & GUTTER TYPE "A" MODIFIED

NO	BY	DATE	TYPE	REMARKS
				REVISIONS

UTAH STATE DEPARTMENT OF HIGHWAYS
DIST. ONE - OGDEN, UTAH
ROADWAY DESIGN

VARIOUS INTERSECTIONS in OGDEN
TYPICAL SECTIONS

DESIGN B.H.S. 11/73	CHECK B.P.W. 11/73	REVIEW		
DRAWN B.P.W. 11/73	CHECK B.H.S. 11/73	DESIGN		
QUANT.	CHECK	R/W		
APPROVAL RECOMM. 1-8-74 DATE	Bernard H. Hoole PROJ. DESIGN ENGINEER			
APPROVED 1-8-74 DATE	DIST. PRECONSTRUCTION ENGR.	WEBER COUNTY		
PROJECT NUMBER HHS-0005(2)		SHEET NO. 2		

SUMMARY SHEET

SURFACING

INTERSECTION	GRAVEL MATERIAL: BITUMINOUS SURFACE COURSE 1/2" MAX 140 LBS PER CU.FT. AREA	DEPTH	TON	UNTREATED BASE COURSE 1" MAX. 135 LBS PER CU.FT. AREA	DEPTH	TON	BITUMINOUS MATERIAL: AC-10 VISCOSITY GRADED ASPHALT .067 TONS OF B.S.C. PERCENT	TON	MC-70 OR MC-250 PRIME COAT 0.3 GAL. PER SQ. YD. TON	SS-1 EMULSION TACK COAT 0.1 GAL. / SQ. YD. TON	CONSTRUCTION SOURCE REFERENCE BOOK	PAGE
WASHINGTON BLVD 36th STREET			~~92~~			~~246~~	6	~~54~~	01	0.01	WEIGH	VARIOUS
39th STREET												
40th STREET			~~367~~			~~705~~	6	~~2.2~~	02	0.03		
43rd STREET			~~212.4~~			~~2420.8~~	6	~~12.80~~	1.28	0.28		
22nd STREET S.E COR.			~~3.1~~			~~8.2~~	6	~~0.19~~	0.02	0.01		
SW COR			~~31~~			~~82~~	6	~~0.19~~	0.02	0.01		
NW COR			~~31~~			~~8.2~~	6	~~0.19~~	0.02	0.01		
QUINCY AVE & 36 TH STREET S.W COR			~~30~~			~~12.6~~	6	~~0.2~~	0.02	0.01		
TOTAL			593.94 ~~270.6~~			1025.50 ~~255.1~~		37.029 ~~16.26~~	* 1.66	* 0.36	WEIGH	VARIOUS
USE			~~280~~ ② [4]			~~2560~~ ② [4]		~~17~~ ② [4]	[3] [4]	[3]		

*NOTE: FOR INFORMATION ONLY, PAYMENT FOR THESE ITEMS INCLUDED IN OTHER ITEMS OF WORK

EARTHWORK QUANTITIES

INTERSECTION	ROADWAY EXC. CU YD.		CONSTRUCTION SOURCE REFERENCE BOOK	PAGE
40th STREET	~~160~~			
STA. 27+01 - 29+50	976		CROSS SECTION ROLL# 1	
45th STREET				
STA. 40+00 - 51+00	331.6		CROSS SECTION ROLL# 2	
TOTAL	429.2 ~~160~~			
USE	~~160~~ ②			

* MATERIAL TO BE USED FOR BACKFILL AT 43rd SOUTH & EXCESS MATERIAL TO BE DISPOSED OF BY THE CONTRACTOR.

SUMMARY OF ITEMS

NAME		UNIT	QUANTITY
MOBILIZATION	Book D1 Pg. 149	LUMP	100% •
FLAGGING	Book M1 Pg. 1 TO 65	HOUR	263 ~~1050~~
ADVANCE WARNING DEVICE TYPE "A" STATIONARY	Book M1 Pg. 1 TO 61	HOUR	3475 ~~400~~
18" X 11' CORRUGATED STEEL PIPE ARCH	Book FS1 Pg 65	LIN FT	8 ~~4~~
15" REINFORCED CONCRETE PIPE DELETED		LIN FT	~~8~~
12" PIPE CULVERT (SPECIFY R.C.P, C.S.P. or C.A.P.)	Book FS1 Pg 46 TO 48	LIN FT	44
12" REINFORCED CONCRETE PIPE	Book FS1 Pg. 37 TO 42	LIN FT	40
18" CORRUGATED STEEL PIPE	Book FS1 Pg 63, 65-67	LIN FT	44 ~~20~~
MOVING & RESETTING FENCE	Book FS1 Pg 37	LIN FT	14.5 ~~20~~
REMOVAL OF CONCRETE CURB & GUTTER	Book FS1 Pg. 36 TO 37	LIN FT	419.7 ~~382~~
REMOVAL OF CONCRETE SIDEWALK	Book FS1 Pg. 36 TO 70	SQ. YD	108.96 ~~87~~
CONCRETE SAWING	Book FS1 Pg 59 TO 70	LIN FT	492 ~~180~~
CONCRETE CURB & GUTTER TYPE "A" (MODIFIED)	Book FS1 Pg. 36 TO 76	LIN. FT	510.3 ~~423~~
CONCRETE CURB TYPE "G"	Book FS1 Pg. 78	LIN FT	1505 ~~1500~~ [4]
CONCRETE SIDEWALK - 4" THICK	Book FS1 Pg. 40 TO 76	SQ. YD.	87.33 ~~51~~
CONCRETE SMALL STRUCTURES CLASS A (AE)	Book FS1 Pg. 41 TO 72	CU YD	9.741 ~~8~~
REINFORCING STEEL	Book FS1 Pg. 41 TO 72	LBS	1349.6 ~~980~~
CLEAN OUT BOX SOLID COVER & FRAME V-988	Book FS1 Pg. 52 TO 53	EACH	1
CATCH BASIN GRATE & FRAME V-988	Book FS1 Pg. 41 TO 72	EACH	11
CONCRETE MEDIAN FILLER	Book FS2 Pg. 2 TO 3	SQ YD	38.46 ~~40~~
UNTREATED BASE COURSE 1" MAX	Book - WEIGH Pg. VARIOUS	TON	1025.50 ~~2560~~ [4]
OBLITERATION OF LANE MARKINGS	Book FS1 Pg. 79 TO 80 Book - FS1 Pg. 8 TO 10	LIN.FT.	5769.9 ~~5400~~
BITUMINOUS MATERIAL GRADE AC-10 VISCOSITY GRADED ASPHALT	Book WEIGH Pg. VARIOUS	TON	37.029 ~~17~~ [4]
BITUMINOUS SURFACE COURSE 1/2" MAX	Book WEIGH Pg. VARIOUS	TON	593.94 ~~280~~ [4]
18" PIPE CULVERT (SPECIFY RCP, ~~C.S.P.~~ or ~~C.A.P.~~)	Book FS1 Pg. 46 TO 53	LIN. FT.	338 ~~330~~
PAINTED PAVEMENT MESSAGE	Book FS2 Pg. 8, 9, 10	EACH	32 ~~38~~
CONTINGENT SUM PAY ITEM		LUMP	•
HIGHWAY TRAFFIC PAINT	Book D1 Pg. 166 TO 167	GAL.	31 ~~8~~
ROADWAY EXCAVATION	CROSS SECTION ROLL #1, #2	CU YD.	429.2 ~~160~~
REMOVAL OF CONCRETE PAVEMENT DELETED		SQ YD	~~20~~
12" CORRUGATED STEEL PIPE DELETED	Book FS1 Pg. 35, 37, 72	LIN. FT	~~20~~
RECONSTRUCTING CLEANOUT, MANHOLES & MONUMENT BOXES		EACH	2
MOVING STREET SIGNS	Book D1 Pg 230	EACH	4 ~~20~~

CONCRETE WORK

INTERSECTION	CONC SIDEWALK 4" THICK SQ YD	REMOVAL OF CONC SIDEWALK SQ YD	CONC SAWING LIN FT	CONC MEDIAN FILLER SQ YD	CONSTRUCTION SOURCE REFERENCE BOOK	PAGE
WASHINGTON BLVD 36th STREET N.W COR	6.94 ~~5.6~~	~~10~~	~~30~~		FS1	62 - 63
N.E COR	5.14 ~~6.8~~	~~13.2~~	~~30~~		FS1	62-63
S.E COR	11.95 ~~7.4~~	~~5.4~~	~~30~~		FS1	64 - 65
40th STREET S.E COR		1.81			FS1	36 - 37
N.E. COR.		9.09			FS1	59
43rd STREET N.W COR	7.22 ~~0.25~~	9.27 ~~3.0~~			FS1	55 - 56
47+28 TO 48+45				34.86 ~~4.0~~	FS1	2 - 3
22nd STREET S.E COR	8.69 ~~3.40~~	~~15.6~~	~~30~~		FS1	71 - 72
S.W COR	11.95 ~~3.30~~	~~10.8~~	~~30~~		FS1	73 - 74
N.W COR	26.34 ~~2.30~~	~~16.6~~	~~30~~		FS1	75 - 76
QUINCY AVE & 36 TH STREET S.W COR	4.10 ~~0.70~~	5.39 ~~5.4~~			FS1	40 - 42
WASHINGTON BLVD. 36TH STREET N.W.COR.		9.71			FS1	61
S.E. COR.		12.50	5.0		FS1	60
N.E.COR.			6.0		FS1	59
22 ND STREET S.W.COR.		22.87	14.1		FS1	69
N.W.COR.		22.70	15.6		FS1	70
S.E. COR.		15.62	8.5		FS1	68
	87.33 ~~50.75~~	108.96 ~~[illegible]~~	49.2 ~~[illegible]~~	34.86 ~~4.0~~		
	~~51~~	~~[illegible]~~	~~[illegible]~~	~~4.0~~		

CONCRETE CURB, CURB & GUTTER

INTERSECTION	EXC FOR STR CU. YD.	TO BE REMOVED LIN. FT	TYPE "A" (MODIFIED) LIN. FT	CONC. CURB TYPE "G" LIN. FT	CONSTRUCTION SOURCE REFERENCE BOOK	PAGE
WASHINGTON BLVD 36th STREET N.W	9.08	34 ~~38~~	~~32~~		FSI	61
N.E	9.08	52 ~~54~~	~~32~~		FSI	59
S.E	9.08	51.7 ~~46~~	~~32~~		FSI	60
40th STREET S.E	19.5	27.5 ~~37~~	48.0 ~~64~~		FSI	36 - 37
43rd STREET S.W	12.7	23.0 ~~12~~	~~40~~		FSI	56
43rd STREET N.W	12.7	60 ~~50~~	~~40~~	1500	FSI	56
22nd STREET S.E	9.0	52.6 ~~47~~	~~31.42~~		FSI	68
S.W	9.0	53.0 ~~37~~	~~31.42~~		FSI	69
N.W	9.0	53.4 ~~51~~	~~31.42~~		FSI	70
QUINCY AVE & 36 TH STREET S.W	16.08	12.5 ~~10~~	83.3 ~~98~~		FSI	40 - 42
45rd STREET WASH. BLVD STA. 44+22 - 50+22 S			135 3		FSI	57
WASHINGTON BLVD. 36TH STREET NE. COR.			40.7		FSI	62 - 63
SE. COR.			41.2		FSI	64 - 65
NW. COR.			30.5		FSI	66 - 67
22ND STREET S.E. COR.			45.4		FSI	71 - 72
S.W. COR.			37.6		FSI	73 - 74
N.W. COR.			50.3		FSI	75 - 76
STA 41+00 - 48+45				1505.0	FSI	78
**	419.7 ~~382~~	510.3 ~~422.26~~	1505.0 ~~1500~~			
	~~38~~	~~423~~	~~1500~~			
	[2]	[2]	[4]			

** NOTE: EXCAVATION FOR STRUCTURES NOT A CONTRACT PAY ITEM, THESE FIGURES FOR INFORMATION ONLY

MISCELLANEOUS

NAME	UNIT	QUANTITY
MOBILIZATION	LUMP	100% •
FLAGGING	HOURS	263 ~~1050~~ (1)
ADVANCED WARNING DEVICE TYPE "A" STATIONARY	HOURS	347.5 ~~400~~ (1)
MOVING & RESETTING FENCE	LIN FT	14.5 ~~20~~
PAINTED PAVEMENT MESSAGE	EACH	32 ~~38~~ (2)
CONTINGENT SUM PAY ITEM	LUMP	100% •
HIGHWAY TRAFFIC PAINT	GAL	31 ~~8~~
RECONSTRUCTING CLEANOUT, MANHOLES & MONUMENT BOXES	EACH	2
REMOVAL OF CONCRETE PAVEMENT DELETED	SQ YD	~~20~~
MOVING STREET SIGNS	EACH	4 ~~20~~
OBLITERTION OF LANE MARKINGS	LIN FT	5769.9 ~~5400~~

I HEREBY CERTIFY THE ABOVE QUANTITIES OF WORK DONE ARE CORRECT _____ DATE _____
PROJECT ENGINEER

[4]	BHS	7/75	Changed Surfacing & Conc. Curb. Quantities	
			Changed Surfacing & Conc. Curb Quantities	
[2]	BHS	2/74	Changed Surfacing & Conc. Curb Quantities	
			Changed Flagging Quantities	
			REMARKS	

UTAH STATE DEPARTMENT OF HIGHWAYS
DIST. ONE - OGDEN, UTAH
ROADWAY DESIGN

VARIOUS INTERSECTIONS

SUMMARY SHEET

DESIGN	BHS 11/73	CHECK	BPW 11/73	REVIEW
DRAWN	BPW 11/73	CHECK	BHS 11/73	DESIGN
QUANT.	LMB 11/73	CHECK	BHS 11/73	R/W
APPROVAL RECOM'D	DATE	PROJ. ENGINEER		
APPROVED	DATE	DIST. PRECONSTRUCTION ENGR.		WEBER COUNTY
PROJECT NUMBER	HHS-000 S(2)			SHEET NO. 3

SUMMARY SHEET

DRAINAGE

INTERSECTION	X-ING ANGLE	PIPE CULVERT 18"	PIPE CULVERT 12"	CORR STEEL PIPE ARCH 18" x 11"	CORRUGATED STEEL PIPE 18"	CORRUGATED STEEL PIPE 12"	R C P 12"	R C P 15"	GUTTER INLET	EXC. FOR STR	GRAN. BACKFILL BORROW	CONC. SMALL STRUCT CI A (AE)	REINF. STEEL	STR. STEEL	C.O.D. SOLID COVER & FRAME V-988	C.B GRATE & FRAME V-988	LINE NO.	DWG. NO.	CONSTRUCTION SOURCE REFERENCE FIELD BOOK	CONSTRUCTION SOURCE REFERENCE PAGE	REMARK
		LN.FT.					LIN FT.		EACH	CU YD	TON	CU. YD	LB.	LB.	EACH	EACH					
WASHINGTON BLVD.																					
40th STREET																					
~~STA 26+97~~ 27+26 — ~~27+41~~ 27+30			~~44~~				32			* 10									FSI	35-37	RECONSTRUCT TOP OF CATCH BASIN IN PLACE
STA. 26+95															+				FSI	35-37	
STA. ~~27+42~~ 27+26 — 27+30										* 2.5		0.7159 ~~0.622~~	105 ~~85~~			1	3/2	V-1329	FSI	37	CATCH BASIN REQUIRED
43rd STREET																					
STA. ~~46+40~~ 44+22 — ~~47+48~~ 47+52		330	~~330~~							*24									FSI	43-46	
STA. ~~48+72~~ 48+69 — 48+74 S.E. CORNER										*2.5		0.8359 ~~0.622~~	111.3 ~~85~~			1	4/2	V-1329	FSI	49-50	CATCH BASIN 49' RT.
NORTHWEST CORNER 47+56			40				~~36~~			*11.6									FSI	48	REMOVE or ABANDON EXISTING PIPE
STA. 47+~~59~~ 51 — 47+56			4				~~4~~			* 1.0									FSI	45-46	EXTEND EXISTING
STA 47+~~52~~ 51 — 47+56										*4.8		0.8773 ~~+102~~	131.6 ~~130~~			1	5/6	V-1329	FSI	45-46	CATCH BASIN BOX 48' RT
STA. 47+83 (22~~5~~ RT. 47+55.5)										* 2.5		0.5959 ~~0.622~~	84.7 ~~88~~			1	2	V-1329	FSI	47-48	GUTTER INLET IN PLACE ~~72~~ CATCH BASIN REQUIRED ~~75~~ RT
36th STREET																					
STA. 24+71—N.E. CORNER					5					* 1.9		0.5405 ~~502~~	84.7 ~~78~~			1	2/1	V-1329	FSI	63	CATCH BASIN 41' RT.
~~STA. 24+71—N.E. CORNER~~				~~4~~						~~0.4~~											DELETED
~~STA. 0+75—S.E. CORNER~~								~~8~~		~~0.8~~											DELETED
STA. 0+75- S.E. CORNER										* 2.5		0.8228 ~~.622~~	111.3 ~~85~~			1	4/2	V-1329	FSI	65	CATCH BASIN 41' LT.
22nd STREET & WASHINGTON BLVD																					
~~STA. 130+18 LT. — S.W. CORNER~~						~~20~~				~~4.5~~											DELETED
STA. 130+03 RT. — S.E. CORNER					25 ~~20~~					* 6.5		~~0.300~~				1			FSI	72	RECONSTRUCT TOP OF CATCH BASIN IN PLACE 54' RT.
STA. 130+29 RT. — S.E CORNER										* 3.1		0.8293 ~~0.742~~	111.3 ~~105~~			1	4/3	V-1329	FSI	72	80' RT.
QUINCY & 36th STREET																					
SOUTHWEST CORNER							8			* 4.8		0.7159 ~~1.102~~	105 ~~130~~				3/6	V-1329	FSI	41-42	CATCH BASIN REQUIRED
SOUTHWEST CORNER																1					
WASHINGTON BLVD. & 36th STREET																					
STA. 0+11 N E COR.				8						* 2.5		0.5959 ~~.622~~	84.7 ~~85~~			1	2	V-1329	FSI	63	69' LT.
STA. 0+51 S E. COR.					14					*2.5		0.5959 ~~.622~~	84.7 ~~85~~			1	2	V-1329	FSI	65	66' LT.
45rd STREET STA 44+17 - 44+22												1.3631	170.8					V-1329	FS-1	46	CATCH BASIN REQUIRED H=5.6
STA 50+10 - 50+15		8										12626	164.5					V-1329	FS-1	52-53	CATCH BASIN REQUIRED H=5.0
** STA 50+10 - 50+15																1			FS-1	52-53	
TRANSFERED FROM SHEET # 3		1																			
TOTAL		338 ~~330~~	44	8 ~~4~~	44 ~~20~~	~~20~~	40	~~8~~				9.7410 ~~7.480~~	1,349.6 ~~972~~			1	11				
USE		~~330~~	~~44~~	~~4~~	~~20~~	~~20~~	~~40~~	~~8~~				~~8~~	~~980~~			1	11				
												①	①			①					

* NOTE: EXCAVATION for structures not a contract pay item, these figures for information only

** NOTE: Catch Basin adjusted to meet existing surface. Payment for items, with exception of solid COVER & Frame V-988 is on a Lump Sum basis.

FIRE HYDRANTS

INTERSECTION	6" GATE VALVES & BOX EACH	BENDS EACH	SALVAGE & RESET * EACH	NEW HYDRANTS REQ'D. EACH	SALVAGE & RETURN CITY EACH	CONSTRUCTION SOURCE REFERENCE FIELD BOOK	CONSTRUCTION SOURCE REFERENCE PAGE
WASHINGTON BLVD.							
36th STREET							
NORTHEAST CORNER			1			D1	62
40th STREET S.E. COR			1				

SUMMARY OF ITEMS (CON'T)

NAME	UNIT	QUANTITY	BK	Pg
SA #1 REPAIR AND RELOCATE DAMAGED UTILITY LINES	FORCE ACCOUNT	$ 359.58	D-1	59
SA#2 ITEM NO. 1 IMPORTED BORROW	TON	416.65	WEIGH #1	VARIOUS
ITEM NO 2 CONCRETE CURB & GUTTER, TYPE A	LIN FT.	414.50	FS-1	57-58
ITEM NO. 3 MODIFY CATCH BASIN, STATION 50+06	LUMP SUM	100%	FS-1	52-55
ITEM No. 4 MODIFY CATCH BASIN, STATION 44+18	LUMP SUM	100%	FS-1	46
ITEM NO. 5 METAL COVERS FOR TYPE IV JUNCTION BOXES	EACH	6	FS-1	46
SA#3 EXTRA WORK NECESSARY DUE TO CLOUD BURST	FORCE ACCOUNT	$ 411.64	D-1	221
SA#4 INSTALLATION OF TWO ADDITIONAL LUMINAIRES	LUMP SUM	100%	D-1	158
SA#5 INSTALLATION OF PEDESTRIAN POLE	LUMP SUM	100%	D-1	174
SA#6 RAISE AND REALIGN GATE AND INSTALLATION OF 8" CSP	LUMP SUM	100%	D-1	180
SA#7 (REFER TO CONTRACT BID ITEM #53, MINUS $636.00) ELIMINATION OF 3 DETECTOR LOOPS	LUMP SUM	100%	D-1	171
SA#8 CLEAN OUT BOX SOLID COVER AND FRAME	LUMP SUM	100%	D-1	198

I HEREBY CERTIFY THE ABOVE QUANTITIES OF WORK DONE ARE CORRECT _____ PROJECT ENGINEER DATE _____

NO	BY	DATE	TYPE	REMARKS
①	B.H.S.	12/11/74		Added Catch Basin

REVISIONS

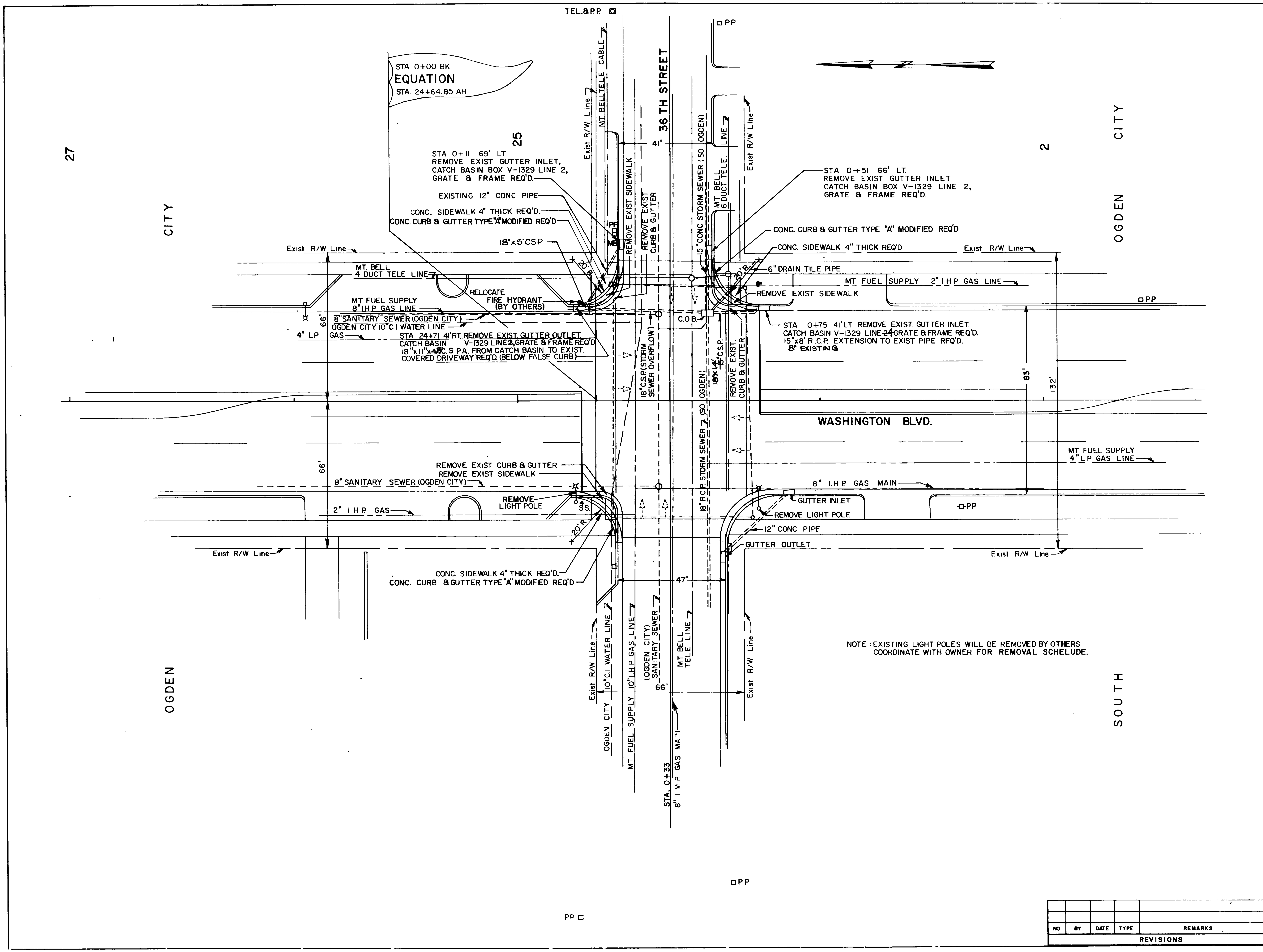
UTAH STATE DEPARTMENT OF HIGHWAYS
DIST ONE - OGDEN UTAH
ROADWAY DESIGN

VARIOUS INTERSECTIONS

SUMMARY SHEET

DESIGN	B.H.S. 11/73	CHECK	B.P.W. 11/73	REVIEW
DRAWN	B.P.W. 11/73	CHECK	B.H.S. 11/73	DESIGN
QUANT	L.M.B 11/73	CHECK	B.H.S. 11/73	R/W
APPROVAL RECOMM	1-8-74 DATE	FROM DESIGN ENGINEER		
APPROVED	1-8-74 DATE	CONST. ENGR. CONSTRUCTION ENGR.		WEBER COUNTY
PROJECT NUMBER	HHS-000 S (2)			SHEET NO 3A

22ND STREET
WASHINGTON BLVD.
Exist. R/W Line
99'
66'
132'
133
132
131
130
129
MT. FUEL SUPPLY 8"
SEE DETAIL #2
U.P.&L. CONDUIT
10" SANITARY SEWER (OGDEN CITY)
15" CONC. PIPE RETAIN
MAIL BOX
C.B.
C.O.B.
PP
SLP
MT FUEL SUPPLY 4" L.P. GAS LINE
12" OGDEN CITY WATER LINE
PARALLEL PARKING
MT BELL 9 DUCT TELEPHONE LINE
REMOVE EXISTING SIDEWALK
TELE.
24" R.C.P. RETAIN
TELE. LINE
N.0°58'E.
SURVEY LINE
MONUMENT LINE
OGDEN CITY 12" SANITARY SEWER
MT. FUEL SUPPLY 6" L.P. GAS LINE
MT BELL 6 DUCT TELEPHONE LINE
18" x 25' C.S.P
STA. 130+29 80' RT.
CATCH BASIN V-1329, LINE 4
GRATE & FRAME REQ'D. SLOPE TOP OF C.B. AS SHOWN IN DETAIL NO. 1
REMOVE
CONCRETE CURB & GUTTER TYPE "A" MODIFIED REQ'D.
CONCRETE SIDEWALK 4" THICK REQ'D.
STA. 130+03 54' RT
RECONSTRUCT TOP OF EXIST. CATCH BASIN
DWG. V-988 GRATE & FRAME REQ'D.
FH & VALVE
18" C.S.P
12" x 20' C.S. PIPE REQ'D. DELETED
MT. BELL 9 DUCT TELEPHONE LINE
REMOVE EXIST CURB & GUTTER
6" L P GAS MAIN
8" SANITARY SEWER (OGDEN CITY)
REMOVE EXIST. CURB & GUTTER
U.P.&L. BOX
12" x 20' C.S. PIPE REQ'D. DELETED
MT BELL 18 DUCT TELEPHONE LINE
MT. FUEL SUPPLY 6" GAS LINE
20' R.
REMOVE EXIST SIDEWALK
REMOVE EXISTING CURB & GUTTER
CONCRETE CURB & GUTTER TYPE "A" MODIFIED REQ'D
CONCRETE SIDEWALK 4" THICK REQ'D.
CONC. PAVEMENT REQ'D.
REMOVE CONC. PAVEMENT DELETED
TELEPHONE CABLE
OGDEN CITY 6" STEEL WATER LINE
OGDEN CITY 8" SANITARY SEWER
CONCRETE CURB & GUTTER TYPE "A" MODIFIED REQ'D.
CONCRETE SIDEWALK 4" THICK REQ'D.
10' ±
TOP CURB & GUTTER
℄ CURB & GUTTER
2'
DETAIL NO. 1
N
NOTE EXIST. STREET LIGHT POLES WILL BE REMOVED BY OTHERS
COORDINATE WITH OWNER FOR REMOVAL SCHEDULE
NO. BY DATE TYPE REMARKS
REVISIONS
UTAH STATE DEPARTMENT OF HIGHWAYS
ROADWAY DESIGN
WASHINGTON BLVD & 22 ND. STREET
OGDEN, UTAH
PLAN SHEET
EHS 8/73 JWT 9/73
FS & LB 8/73 EHS 9/73
LMB 11/73 BPW 11/73
HHS-0005(2)
4



UTAH STATE DEPARTMENT OF HIGHWAYS
DIST. ONE - OGDEN, UTAH
ROADWAY DESIGN

36 TH ST. & WASHINGTON BLVD.
OGDEN, UTAH
PLAN SHEET

DESIGN B.H.S 11/73	CHECK L.M.B. 11/73	REVIEW
DRAWN L.M.B 11/73	CHECK B.H.S. 11/73	DESIGN
QUANT. L.M.B 12/73	CHECK B.P.W. 12/73	R/W

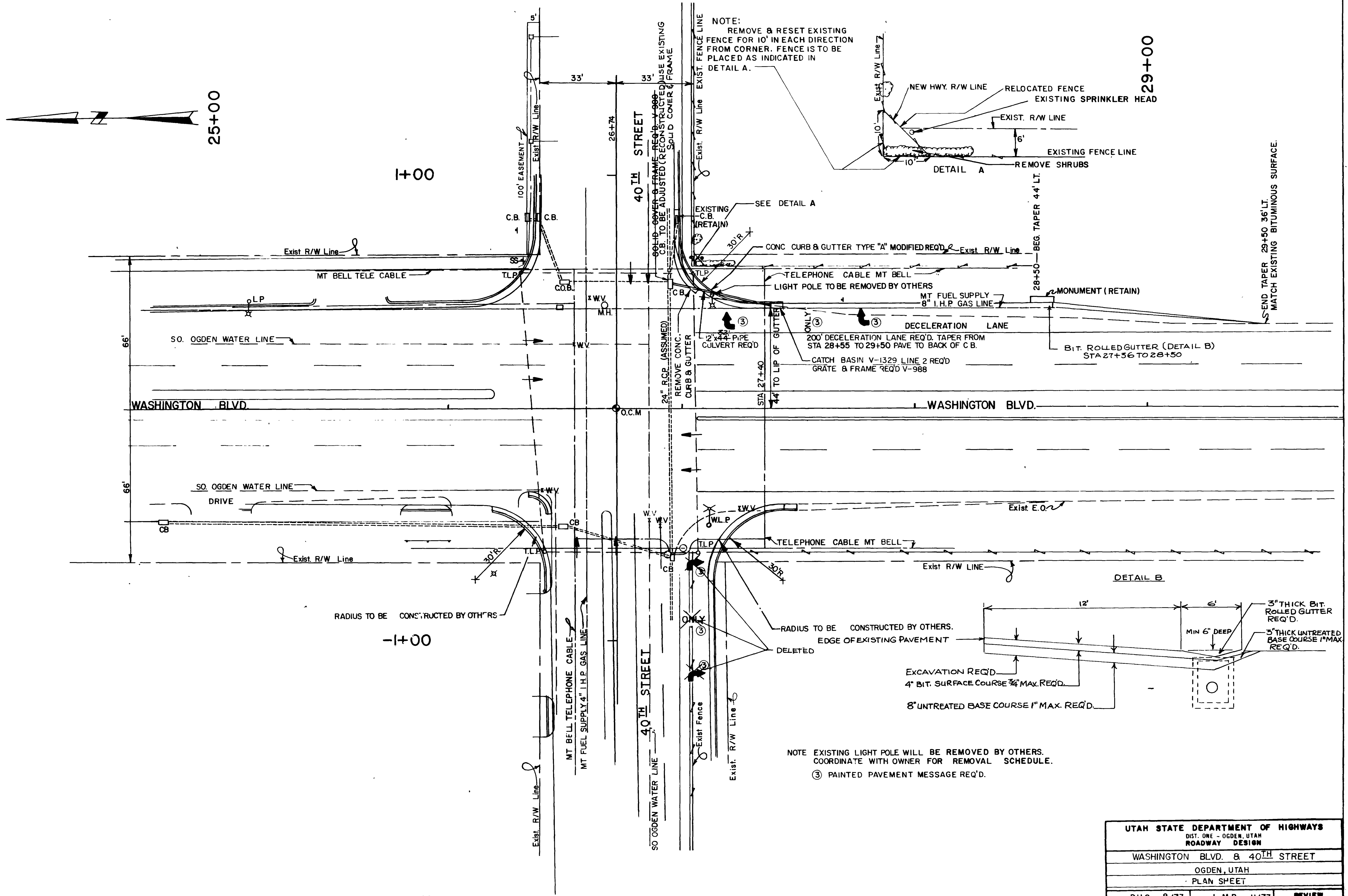
APPROVAL RECOMM. 1-8-74 DATE — PROJ. DESIGN ENGINEER

APPROVED 1-8-74 DATE — DIST. PRECONSTRUCTION ENGR.

WEBER COUNTY

PROJECT NUMBER HHS-000S(2)

SHEET NO. 5



25+00
29+00
1+00
-1+00
NOTE:
REMOVE & RESET EXISTING FENCE FOR 10' IN EACH DIRECTION FROM CORNER. FENCE IS TO BE PLACED AS INDICATED IN DETAIL A.
NEW HWY. R/W LINE
RELOCATED FENCE
EXISTING SPRINKLER HEAD
EXIST. R/W LINE
EXISTING FENCE LINE
REMOVE SHRUBS
DETAIL A
SEE DETAIL A
EXISTING C.B. (RETAIN)
CONC CURB & GUTTER TYPE "A" MODIFIED REQ'D
TELEPHONE CABLE MT BELL
LIGHT POLE TO BE REMOVED BY OTHERS
MT FUEL SUPPLY 8" I.H.P GAS LINE
MONUMENT (RETAIN)
28+50 — BEG. TAPER 44' LT.
END TAPER 29+50 36' LT. MATCH EXISTING BITUMINOUS SURFACE.
DECELERATION LANE
12"x44" PIPE CULVERT REQ'D
200' DECELERATION LANE REQ'D. TAPER FROM STA 28+55 TO 29+50 PAVE TO BACK OF C.B.
CATCH BASIN V-1329 LINE 2 REQ'D GRATE & FRAME REQ'D V-988
BIT. ROLLED GUTTER (DETAIL B) STA 27+36 TO 28+50
STA 27+40
44' TO LIP OF GUTTER
REMOVE CONC. CURB & GUTTER
24" R.C.P. (ASSUMED)
SOLID COVER & FRAME REQ'D V-988 C.B. TO BE ADJUSTED (RECONSTRUCTED) USE EXISTING SOLID COVER & FRAME
40TH STREET
26+74
33'
33'
5'
100' EASEMENT
Exist R/W Line
EXIST. FENCE LINE
MT BELL TELE CABLE
SO. OGDEN WATER LINE
WASHINGTON BLVD.
O.C.M
66'
66'
DRIVE
Exist. E.O.
TELEPHONE CABLE MT BELL
RADIUS TO BE CONSTRUCTED BY OTHERS
RADIUS TO BE CONSTRUCTED BY OTHERS.
EDGE OF EXISTING PAVEMENT
DELETED
MT BELL TELEPHONE CABLE
MT FUEL SUPPLY 4" I.H.P GAS LINE
SO OGDEN WATER LINE
Exist. Fence
Exist. R/W Line
DETAIL B
12'
6'
MIN 6" DEEP
3" THICK BIT. ROLLED GUTTER REQ'D.
3" THICK UNTREATED BASE COURSE 1" MAX REQ'D.
EXCAVATION REQ'D.
4" BIT. SURFACE COURSE 3/4" MAX. REQ'D.
8" UNTREATED BASE COURSE 1" MAX. REQ'D.
NOTE EXISTING LIGHT POLE WILL BE REMOVED BY OTHERS. COORDINATE WITH OWNER FOR REMOVAL SCHEDULE.
③ PAINTED PAVEMENT MESSAGE REQ'D.

PP □

NO	BY	DATE	TYPE	REMARKS
1	RDE	12-74		Changed Radius on S.E. Corner

REVISIONS

UTAH STATE DEPARTMENT OF HIGHWAYS
DIST. ONE - OGDEN, UTAH
ROADWAY DESIGN

WASHINGTON BLVD. & 40TH STREET
OGDEN, UTAH
PLAN SHEET

DESIGN B.H.S. 8/73	CHECK L.M.B. 11/73	REVIEW	
DRAWN FS & LB 8/73	CHECK R.H.S. 11/73	DESIGN 11-11-74	
QUANT. L.M.B. 12/73	CHECK B.P.W. 12/73	R/W	
APPROVAL RECOMM. 1-8-74 DATE	PROJ. DESIGN ENGINEER		
APPROVED 1-11-74 DATE	DIST. PRECONSTRUCTION ENGR.	WEBER COUNTY	
PROJECT NUMBER HHS-000S(2)		SHEET NO. 6	


EDGE OF BITUMINOUS ROAD
STA 41+00 END OF CURB AND GUTTER TYPE G
TO BE PAINTED
CONC. CURB TYPE "G" REQ'D.
DECELERATION LANE REQ'D
E.O.
40+00 END OF TAPER
41+00 BEG. OF TAPER
MATCH LINE
EXISTING C.S. PIPES
BITUMINOUS LINED DIKE REQ'D.
Curb & Gutter type "A"
STA. 44+18 48' RT. ADJUST EXISTING CATCH BASIN, PLUGGED AND ABANDONED SALVAGE EXISTING GRATE, PLACE ON C.B. V-1329
* NOTE: 3" THICK BIT. ROLLED GUTTER FROM STA 44+17 TO 50+09 DELETED REPLACED WITH CONCRETE CURB & GUTTER TYPE "A" & TYPE "A" MODIFIED
EDGE OF EXISTING PAVEMENT
N
12'
6'
-2%
MIN. 6" DEEP
3" THICK BIT. ROLLED GUTTER REQ'D.
3" THICK UNTREATED BASE COURSE 1" MAX. REQ'D.
EXISTING C.S.P.
EXCAVATION REQ'D.
4" BITUMINOUS SURFACE COURSE 3/4" MAX. REQ'D.
8" UNTREATED BASE COURSE 1" MAX. REQ'D.
18" PIPE CULVERT REQ'D. STA. 44+20 TO STA. 47+50
EXISTING C.B STA. 44+18
ROLLED GUTTER 3" ABOVE CATCH BASIN REQ'D.
UNDGR CABLE MK
PP
EDGE OF OIL
18" C.M.P.
12" C.M.P.
Exist R/W Line
ASPHALT DITCH
ACCELERATION LANE
CONC CURB TYPE "G" REQ'D
CONC CURB TYPE "G" REQ'D.
CONC MEDIAN FILLER REQ'D
TO BE PAINTED
PAINTED MEDIAN
EXISTING
2-4" YELLOW LINES
WASHINGTON BLVD.
6' RAD 2' RT.
CONC CURB TYPE "G" REQ'D.
STA 47+52 48' RT CATCH BASIN V-1329 LINE 5, GRATE AND FRAME REQ'D.
REMOVE CONC. SIDEWALK
PAINTED ISLAND REQ'D
STA 47+83 64' RT. REMOVE EXIST. GUTTER INLET
EXIST. 12" R.C.P.
ACCELERATION LANE REQ'D.
SOLID COVER & FRAME V-988
18" x 8' R.C.P.
BIT. ROLLED GUTTER REQ'D (SEE DETAIL)
* SEE NOTE
BACKFILL WITH EXCESS MATERIAL FROM THIS PROJECT AS APPROVED BY THE ENGR
STA 48+72 48' RT CATCH BASIN V-1329 LINE 2, 4 GRATE AND FRAME REQ'D
MT BELL UNDER GROUND TELE CABLE
STA 50+22 TO 51+15 Bituminous Rolled Gutter
Curb & Gutter Type "A" Modified
OGDEN WATER LINE
22" x 13" x 60' C.M.P.A TO BE REMOVED
SIGN
UNDGR. CABLE MK.
STA 44+20 TO STA 47+50 18" X 330' PIPE CULVERT REQ'D
12" x 4' R.C.P EXTENSION TO EXISTING PIPE REQ'D.
REMOVE EXISTING PIPE
CONC CURB & GUTTER TYPE "A" MODIFIED REQ'D
REMOVE CONC. CURB
12" x 40' R C P REQ'D
Curb & Gutter Type "A"
Curb & Gutter Type "A" Modified (30' DRIVEWAY)
STA. 47+83 72' RT. CATCH BASIN V-1329 LINE 2, GRATE & FRAME REQ'D SLOPE TOP OF C.B. AS SHOWN IN DETAIL NO. 1 ON SHEET NO. 4.
JCT H BOX
M H
10+00
CONC CURB & GUTTER TYPE "A" MODIFIED REQ'D
Curb & Gutter Type "A"
49+70 BEGIN OF TAPER
STA 50+02 CATCH BASIN V-1329
ONLY
EXISTING RAISED IS. AND RETAIN
REMOVE CONC CURB & GUTTER
REMOVE STOP SIGN
UNDGR CABLE MKR
SIDEWALK
C. B. G
EXISTING
4300 SOUTH
BASE LINE "B"
SO OGDEN WATER LINE
PLANTER
NOTE: ① PAINTED STOP BAR REQ'D.
② PAINTED CROSSWALK REQ'D
③ PAINTED PAVEMENT MESSAGE REQ'D.
STD. DWG NO 745-44
PAINT LEGEND
Ⓦ = WHITE
Ⓨ = YELLOW

CURB & GUTTER TYPE "A" MODIFIED
CURB & GUTTER TYPE "A"

	CURB & GUTTER TYPE "A" MODIFIED LIN FT	CURB & GUTTER TYPE "A" LIN FT
50+22.5 - 50+14.6 C.B V1329	7.9	
50+09.9 - 48+74.2 C.B. V1329		135.7
48+69.5 - 48+50 RT. RADIUS	51.2	
47+81 - 22.5 RT. RADIUS	40.0	
CONNECTION TO EXIST. CURB & GUTTER 47+55.5 C.B. V-1329	6.2	
47+50.8 - 46+41.7 DRIVEWAY	50.0	109.1
45+91.7 - 44+22 C.B. V-1329		169.7
TOTAL	155.3'	414.5'

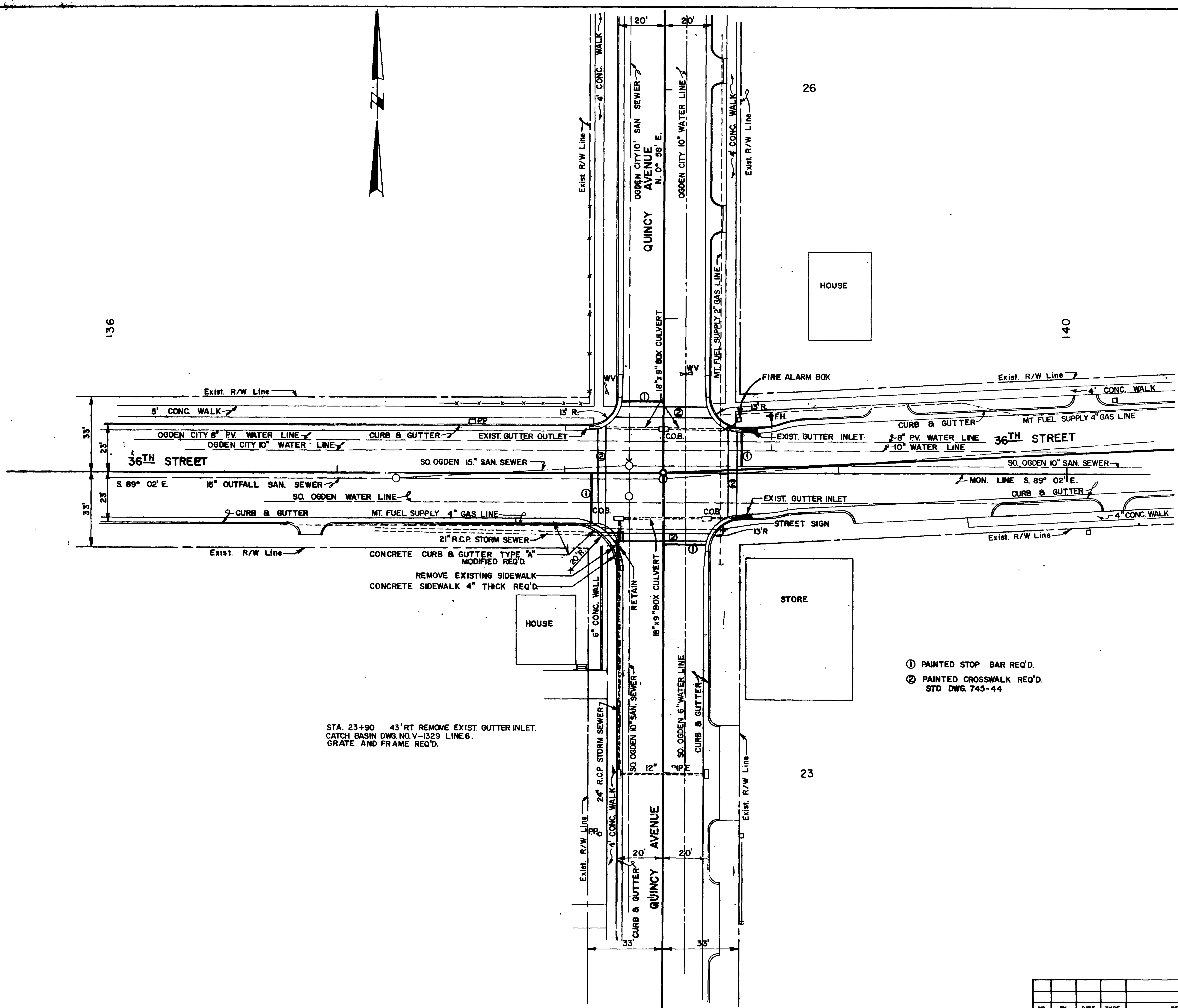
NO	BY	DATE	TYPE	REMARKS
1	BHS	12-11-74		CHANGED SOUTH WEST CORNER

REVISIONS

UTAH STATE DEPARTMENT OF HIGHWAYS
DIST ONE - OGDEN, UTAH
ROADWAY DESIGN

OGDEN
43rd SOUTH & WASHINGTON BLVD.
SITUATION PLAN

DESIGN XX XX CHECK XX XX
DRAWN F.B. 11/72 CHECK E.H.S 11/73
QUANT L M B 11/73 CHECK B.P.W 11/73
REVIEW DESIGN 1-11-74
R/W
APPROVAL RECOMM. 1-8-74 Bernard H. [illegible] DATE PROJ. DESIGN ENGINEER
APPROVED 1-8-74 [illegible] DATE DIST. PRECONSTRUCTION ENGR.
WEBER COUNTY
PROJECT NUMBER HHS-000S(2)
SHEET NO 7


26
136
140
23
HOUSE
HOUSE
STORE
QUINCY AVENUE N. 0° 58' E.
QUINCY AVENUE
36TH STREET
S. 89° 02' E.
20'
20'
33'
23'
Exist. R/W Line
4' CONC. WALK
OGDEN CITY 10" SAN SEWER
OGDEN CITY 10" WATER LINE
MT. FUEL SUPPLY 2" GAS LINE
18"x9" BOX CULVERT
WV
FIRE ALARM BOX
13' R.
F.H.
CURB & GUTTER
MT FUEL SUPPLY 4" GAS LINE
EXIST. GUTTER INLET
2-8" P.V. WATER LINE
2-10" WATER LINE
SO. OGDEN 10" SAN. SEWER
MON. LINE S. 89° 02' E.
4" CONC. WALK
STREET SIGN
5' CONC. WALK
OGDEN CITY 8" P.V. WATER LINE
OGDEN CITY 10" WATER LINE
EXIST. GUTTER OUTLET
C.O.B.
SO. OGDEN 15" SAN. SEWER
15" OUTFALL SAN. SEWER
SO. OGDEN WATER LINE
MT. FUEL SUPPLY 4" GAS LINE
21" R.C.P. STORM SEWER
CONCRETE CURB & GUTTER TYPE "A" MODIFIED REQ'D.
REMOVE EXISTING SIDEWALK
CONCRETE SIDEWALK 4" THICK REQ'D.
30' R.
6" CONC. WALL
RETAIN
SO. OGDEN 10" SAN. SEWER
SO. OGDEN 6" WATER LINE
24" R.C.P. STORM SEWER
12" PIPE
PP
STA. 23+90 43' RT REMOVE EXIST. GUTTER INLET.
CATCH BASIN DWG. NO. V-1329 LINE 6.
GRATE AND FRAME REQ'D.
① PAINTED STOP BAR REQ'D.
② PAINTED CROSSWALK REQ'D.
STD DWG. 745-44

NO.	BY	DATE	TYPE	REMARKS

REVISIONS

UTAH STATE DEPARTMENT OF HIGHWAYS
DIST. ONE – OGDEN, UTAH
ROADWAY DESIGN

36TH & QUINCY

OGDEN, UTAH

PLAN SHEET

DESIGN	O.C. 8/73	CHECK	D.S. 8/73	REVIEW	
DRAWN	B.P.W. 8/73	CHECK	B.H.S. 8/73	DESIGN	[signature] 11-11-74
QUANT.	L.M.B. 11/73	CHECK	B.P.W. 11/73	R/W	

APPROVAL RECOMM. 1-8-74 (DATE) [signature] (PROJ. DESIGN ENGINEER)

APPROVED 1-8-74 (DATE) [signature] (DIST. PRECONSTRUCTION ENGR.)

WEBER COUNTY

PROJECT NUMBER HHS-000S(2)

SHEET NO. 8

N

25

40 TH. STREET

30

35

40

Exist Hwy R/W Line

WASHINGTON BLVD.

Exist Hwy R/W Line

Exist. Hwy R/W Line

Exist Hwy R/W Line

FOR DETAILS ON INTERSECTION SEE SHEET 6

REVISIONS			
NO.	BY	DATE	TYPE	REMARKS

UTAH STATE DEPARTMENT OF HIGHWAYS

ROADWAY DESIGN

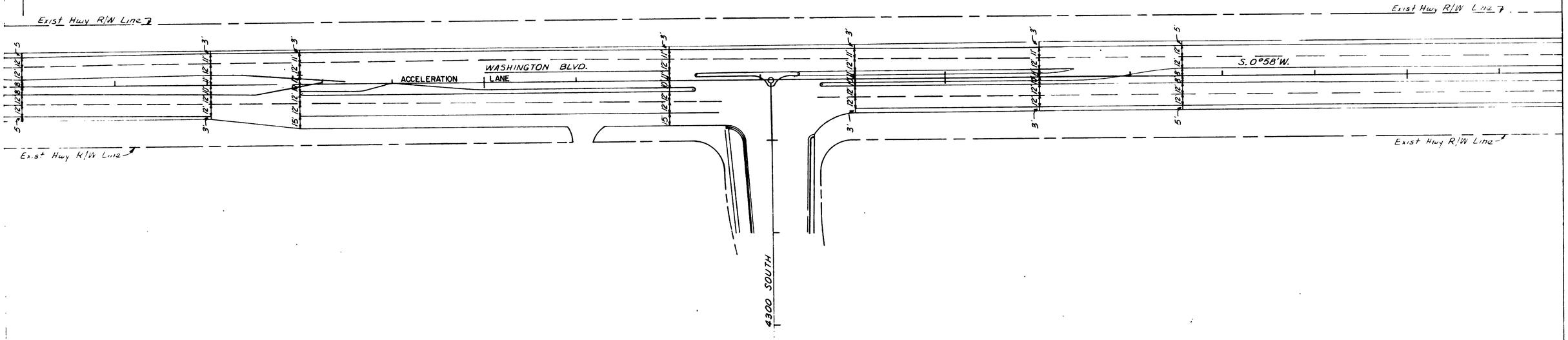
VARIOUS INTERSECTIONS
WASHINGTON BLVD., OGDEN
PLAN SHEET

DESIGNED	XX	CHECKED	XX	XX	REVIEW
DRAWN	L.M.B. 11/74	CHECKED	B.H.S. 11/74	DESIGN ENGR.	DATE 11/11/74
CHECKED	L.M.B. 11/74	CHECKED	B.H.S. 11/74	R.E.	
APPROVED FOR FHWA	11/74 DATE	Bernard H. Sloots FROM DESIGN ENGINEER			
APPROVED	DATE	FOR DIRECTOR, UDOT		WEBER COUNTY	

PROJECT NO. HHS-0005(2) SHEET NO. 9

40 45 50 55

FOR DETAILS ON INTERSECTION SEE SHEET 7



NO.	BY	DATE	TYPE	REMARKS
REVISIONS				

UTAH STATE DEPARTMENT OF HIGHWAYS
ROADWAY DESIGN

VARIOUS INTERSECTIONS
WASHINGTON BLVD.
PLAN SHEET

DESIGN XX	XX	CHECK XX	XX	REVIEW
DRAWN L.M.B. 11-74		CHECK B.H.S. 11-74		DESIGN 11/14/74
QUANT L.M.B. 11-74		CHECK B.H.S. 11-74		R/W
APPROVAL RECOMM 11/74 DATE		Bernard H. Poole PROJ. DESIGN ENGINEER		
APPROVED DATE		DIST. PRECONSTRUCTION ENGR.		WEBER COUNTY
PROJECT NUMBER HHS-0005(2)				SHEET NO 10

LOCATION	SIGNAL CONTROLLER (STATE FURNISHED)								
OGDEN SIGNALS	CABINET		CONTROLLER				JUNCTION BOX		AMP
AND	TYPE F (35")	TYPE M	2 PHASE ELECTRO-MECHANICAL	2 PHASE SOLID STATE	3 PHASE SOLID STATE	4 PHASE SOLID STATE	*Flasher inside fire station*	*Type V Junction Box*	LOOP DETECTOR
30th & Monroe Blvd.		1		1				1	4
36th & Quincy Ave.		1		1				1	4
22nd & Washington	1								
36th & Washington	1								
39th & Washington							1		
40th & Washington		1		1				1	4
43rd & Washington		1			1			1	2
UNITS	EA	EA	EA	EA	EA.	EA	EA.	EA	EA.
TOTAL	2	4		3	1		1	4	14

LOCATION	SIGNAL STRUCTURAL SUPPORT SYSTEM					
OGDEN SIGNALS	STRUCTURAL STEEL					FOUND
AND	*5/16" Guy Wire (Galvanized)*	MAST ARM SIGNAL POLE (STATE FURNISHED)	MAST ARM SIGNAL POLE WITH LIGHT POLE EXTENSION (STATE FURNISHED)	HIGH STRENGTH SIGNAL POLE *(State-Furnished)*	POLE MOUNT FOR SIGNAL HEADS	CLASS A CONCRETE (AE) INCLUDES CONTROLLER FOUND
30th & Monroe Blvd.		3	1			11
36th & Quincy Ave.		3	1			11
22nd & Washington		2	2			11
36th & Washington		2	2			11
39th & Washington	375			4		8
40th & Washington		2	2			11
43rd & Washington			1		1	4½
UNITS	FT.	EA.	EA	EA	EA	CU. YD.
TOTAL	375	12	9	4	1	67½

LOCATION	VEHICULAR and PEDESTRIAN SIGNAL HEADS																		
OGDEN SIGNALS	SIGNAL HEADS				PED. SIG.	STREET LIGHTS		CABLES						CONDUIT				JUNCTION BOX	
								IMSA SPECS. 19-1 OR 20-1											
AND	12", 1 WAY, 3 SECTION OPTICALLY PROGRAMED (125-150W) LAMPS	12", 1 WAY, 3 SECTION WITH 3 (125V - 150W) LAMPS	12", 1 WAY, 3 SECTION WITH LEFT OR RIGHT TURN ARROW	*12", 1 Way, 2 Section with 2 (125V-150W) Lamps*	"WALK-DONT WALK", MOD. OR STATE APPROVED GRID TYPE INDICATIONS	400 W. 240 V. TYPE III LUMNR AH FRONT SOCKET POSITION, HIGH PRESSURE SODIUM	400 W. 240 V. TYPE III LUMNR AH REAR/1 SOCKET POSITION MERCURY VAPOR	4 CDR. NO. 14 PVC SIGNAL CIRCUIT	7 CDR. NO. 14 PVC SIGNAL CIRCUIT (PED)	*5* CDR. NO. 14 PVC *with 1/4" messenger* SIGNAL CIRCUIT	*1* CDR. NO. *12* PVC INTERLOCK CIRCUIT	4 CDR. NO. 14 PVC MAST ARM SIGNAL POLE	*1* CDR. NO. *6* PVC STREET LIGHTING	1" RIGID STEEL CONDUIT (GALV.) INTERLOCK CIRCUITS	1" RIGID STEEL CONDUIT (GALV.) FIRE ALARM CIRCUIT	1" RIGID STEEL CONDUIT (GALV.) STREET LIGHTING CIRCUIT	2" RIGID STEEL CONDUIT (GALV.) SIGNAL CIRCUITS	TYPE III JUNCTION BOX	TYPE IV JUNCTION BOX
30th & Monroe Blvd.		8			8		1	330	350			300	120				250	1	10
36th & Quincy Ave.		8			8		1	325	300			275	250			65	200	2	11
22nd & Washington		8			8		2	425	385		330	300	610	310	480	200	300	3	7
36th & Washington		8			8	2		375	350		190	310	610	160		255	255	3	5
39th & Washington				8			2 **			450 w / 1150									
40th & Washington		8			8		2	450	465			330	690			220	325	3	11
43rd & Washington	2	4					1	200				110	125				100	1	1
UNITS	EA.	EA.	EA	EA	EA.	EA.	EA	FT.	FT.	FT.	FT	FT	FT.	FT	FT	FT	FT	EA	EA
TOTAL	2	44		8	40	2	9	2105	1850	450 w / 1150	520	1625	2405	470	480	740	1430	13	45

LOCATION	SIGNAL DETECTION DEVICE										
OGDEN SIGNALS	SENSING UNITS				CABLES				CONDUIT		
					IMSA SPECS. 19-1 OR 20-1						
AND	1 CDR. NO. 14 LOOP DETECTOR *	MAGNETIC DETECTOR MULTI-LANE	PUSH BUTTONS AND SIGNS	*Push Button inside fire station (State-Furnished)*	2 CDR. NO. 14 SHIELDED DETECTOR CIRCUIT *	3 CDR NO 14 PVC PUSH BUTTON CIR.	CDR NO. PVC	CDR NO. PVC	1" RIGID STEEL CONDUIT (GALV.) DETECTOR CIRCUITS	1 1/2" RIGID STEEL CONDUIT (GALV.) DETECTOR CIRCUITS	*1½" PVC Conduit*
30th & Monroe Blvd.	2060		8		715	325			480	80	150
36th & Quincy Ave.	1575		8		700	310			500	80	120
22nd & Washington											
36th & Washington											
39th & Washington				1							
40th & Washington	2100		8		825	385			720		75
43rd & Washington	1250				100				90		85
UNITS	FT	EA	EA.	EA.	FT.	FT	FT	FT	FT	FT	FT
TOTAL	6985		24	1	2340	1020			1790	160	430

LOCATION	SIGNAL POWER SOURCE			
OGDEN SIGNALS	SIGNALS		STREET LIGHTS	
AND	1 CDR. NO. 8 PVC SIGNAL CIRCUIT	1" RIGID STEEL CONDUIT (GALV.) SIGNAL CIRCUIT	1 CDR. NO. 6 PVC LIGHTING CIRCUIT	1" RIGID STEEL CONDUIT (GALV.) LIGHTING CIRCUIT
30th & Monroe Blvd.	250	120	250	120
36th & Quincy Ave.	160	80	160	80
22nd & Washington	130	60	130	60
36th & Washington	120	55	120	55
39th & Washington	*INSIDE FIRE STATION*			
40th & Washington	90	40	90	40
43rd & Washington	100	45	100	45
UNITS	FT	FT.	FT.	FT.
TOTAL	850	400	850	400

PAY QUANTITIES

30th & Monroe Blvd.	*For Information Only*	*Lump*	*Lump*	*Lump*	*Lump*
36th & Quincy Ave.	*For Information Only*	*Lump*	*Lump*	*Lump*	*Lump*
22nd & Washington	*For Information Only*	*Lump*	*Lump*	*Lump*	*Lump*
36th & Washington	*For Information Only*	*Lump*	*Lump*	*Lump*	*Lump*
39th & Washington	*For Information Only*	*Lump*	*Lump*	*Lump*	*Lump*
40th & Washington	*For Information Only*	*Lump*	*Lump*	*Lump*	*Lump*
43rd & Washington	*For Information Only*	*Lump*	*Lump*	*Lump*	*Lump*

NOTES:

STATE FURNISHED CONTROLLER EQUIPMENT SHALL BE DELIVERED TO THE JOB SITE BY STATE FORCES FOR DELIVERY CALL 328-5204 (SIGNAL LAB.) 5 WORKING DAYS PRIOR TO DESIRED DELIVERY DATE

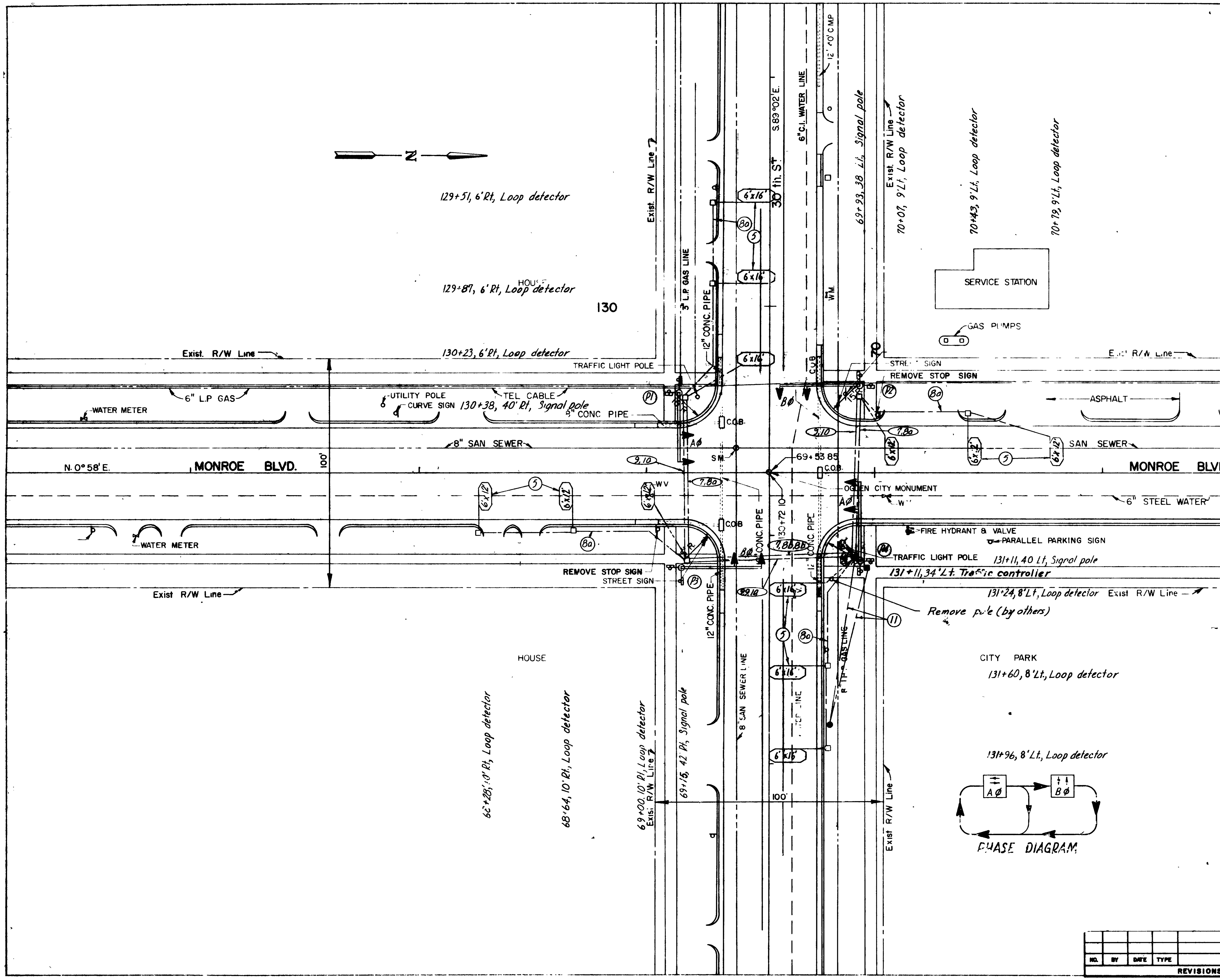
SIGNAL POWER SOURCE:
SIGNALS – FROM POWER SOURCE TO CONTROLLER CABINET.
STREET LIGHTS – FROM POWER SOURCE TO LIGHTING JUNCTION BOX.

* STRANDED POLYETHYLENE INSULATED CABLE.

** 8' BRACKET ARMS REQUIRED FOR STREET LIGHTING. LUMINAIRES REQUIRED TO HAVE PHOTO CELLS.

UTAH STATE DEPARTMENT OF HIGHWAYS
SALT LAKE CITY, UTAH
TRAFFIC DESIGN
TRAFFIC SIGNALS
OGDEN SIGNALS – Cont # 1
SUMMARY & SCHEDULE SHEET

K F Herzog	CHECK *PH 10 74*	REVIEW
K F Herzog	CHECK *PH 10 74*	DESIGN
ANT *K F Herzog*	CHECK *PH 10 74*	R W
10-74 *Keith* GROUP LEADER		
10 74 *Pete Holtan* TRAFFIC DESIGN ENGINEER		*WEBER* COUNTY
PROJECT NUMBER *HHS-0005(2)*	*S-61* DWG. NO.	*1* OF



Notes:

1. Power Co. shall locate meter on power pole 7' above ground.
2. All circuits shall be placed in same trench where possible but in separate conduit.
3. All pedestrian head assemblies shall be type VI as shown on "Pedestrian Signal Assembly Detail" sheet.
4. All signal head assemblies shall be type I as shown on "Signal Mounting Detail" sheet.
5. Detector loops – use 1 conductor No. 14 cable. 6'X12' loops use 3 turns, all others use 2 turns.
6. Multiple street lighting circuits – use single conductor No. 6 wire in 1" galvanized rigid steel conduit.
7. Push button circuit – use 3 conductor No. 14 cable in same conduit as detector circuit.
8. Detector circuit – use 2 conductor No. 14 shielded cable in a 1" b. 1½" galvanized rigid steel conduit. When more than one circuit is called for install circuits in same conduit.
9. Signal circuit – use 4 conductor No 14 cable in 2" galvanized rigid steel conduit. When more than 1 circuit is called for install circuits in same conduit.
10. Pedestrian circuit – use 7 conductor No 14 cable in same conduit as signal circuit.
11. Power sources – use single conductor No. 6 & 8 wire in 1" galvanized rigid steel conduit. See Summary & Schedule sheet.

Legend:

- (P1) Pole identification
- Mast arm signal pole
- Mast arm signal pole with light pole extension
- 12" – 1 way – 3 section signal head
- Traffic signal control cabinet
- ■ Type III junction box
- □ Type IV junction box
- Pedestrian signal with push button
- ● Power source
- — · — Conduit run
- Type V junction box
- ⬡ - - - PVC Loop lead-in

Pole Schedule

Ident.	Arm length
P1	30
P2	35
P3	35
P4	35

NO.	BY	DATE	TYPE	REMARKS

REVISIONS

UTAH STATE DEPARTMENT OF HIGHWAYS
DIST. ONE – OGDEN, UTAH
ROADWAY DESIGN

Traffic Signals
30th St & Monroe Blvd
Situation Plan

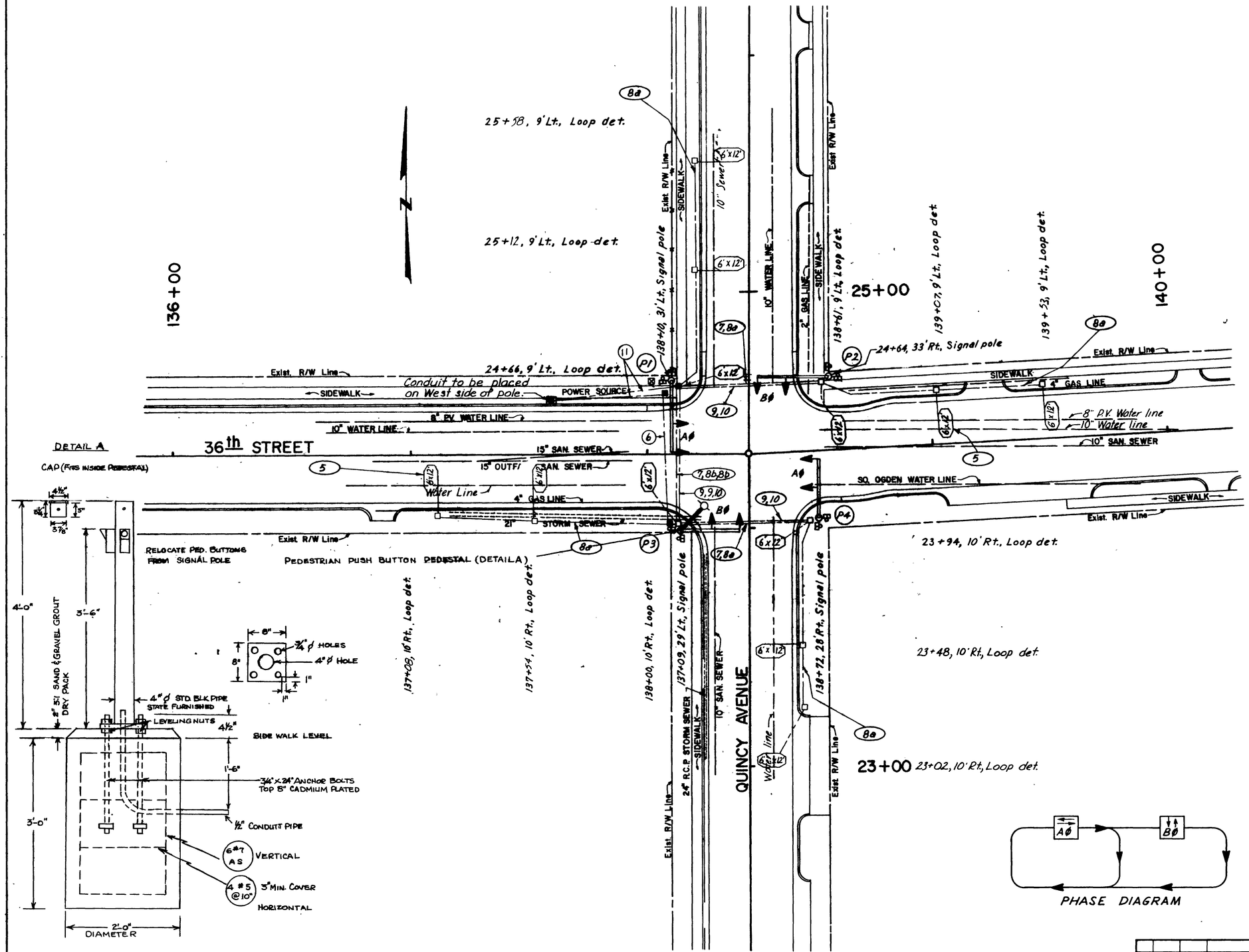
DESIGN K.E. Herzog — CHECK PH 10 74
DRAWN K.E. Herzog — CHECK PH 10-74
QUANT. K.E. Herzog — CHECK PH 10 74

REVIEW
DESIGN DL 11-20 74
R/W

APPROVAL RECOMM. 10-74 (DATE) [signature] DESIGN ENGINEER
APPROVED 11-74 (DATE) [signature] ENGR.

WEBER COUNTY

PROJECT NUMBER HHS-0005(2)
S-61 DWG NO
SHEET NO 2



NOTES:

1. Power Co. meter shall be located on power pole 7' above ground.
2. All circuits shall be placed in same trench where possible, but in separate conduit.
3. All pedestrian head assemblies shall be type II as shown on "Pedestrian Signal Assembly Detail" sheet.
4. All signal head assemblies shall be type I as shown on "Signal Mounting Detail" sheet unless otherwise noted.
5. Detector loops – use 1 conductor No. 14 cable, 6'x12' loops use 2 turns.
6. Multiple street lighting circuit – use single conductor No. 6 in 1" galvanized rigid steel conduit.
7. Push button circuit – use 3 conductor No. 14 cable in same conduit as the detector circuit.
8. Detector circuits – use 2 conductor No. 14 shielded cable in a 1", b 1½" galvanized rigid steel conduit. When more than 1 circuit is called for install circuits in same conduit.
9. Signal circuit – use 4 conductor No. 14 cable in 2" galvanized rigid steel conduit. When more than 1 circuit is called for install circuits in same conduit.
10. Pedestrian circuit – use 7 conductor No. 14 cable in same conduit as signal circuit. When signal circuit conduit is not available use 2" galvanized rigid steel conduit.
11. Power sources – use single conductor No. 6 & 8 wire in 1" galvanized rigid steel conduit. See Summary & Schedule

LEGEND:

- (P1) Pole identification
- Mast arm signal pole
- Mast arm signal pole W/light pole extension & insulator
- 12"–1 Way–3 Section signal head
- Traffic signal control cabinet
- Type III Junction box
- Type IV Junction box
- Pedestrian signal with push button
- Power souce
- Conduit run
- Type V junction box
- PVC loop lead-in

Pole Schedule

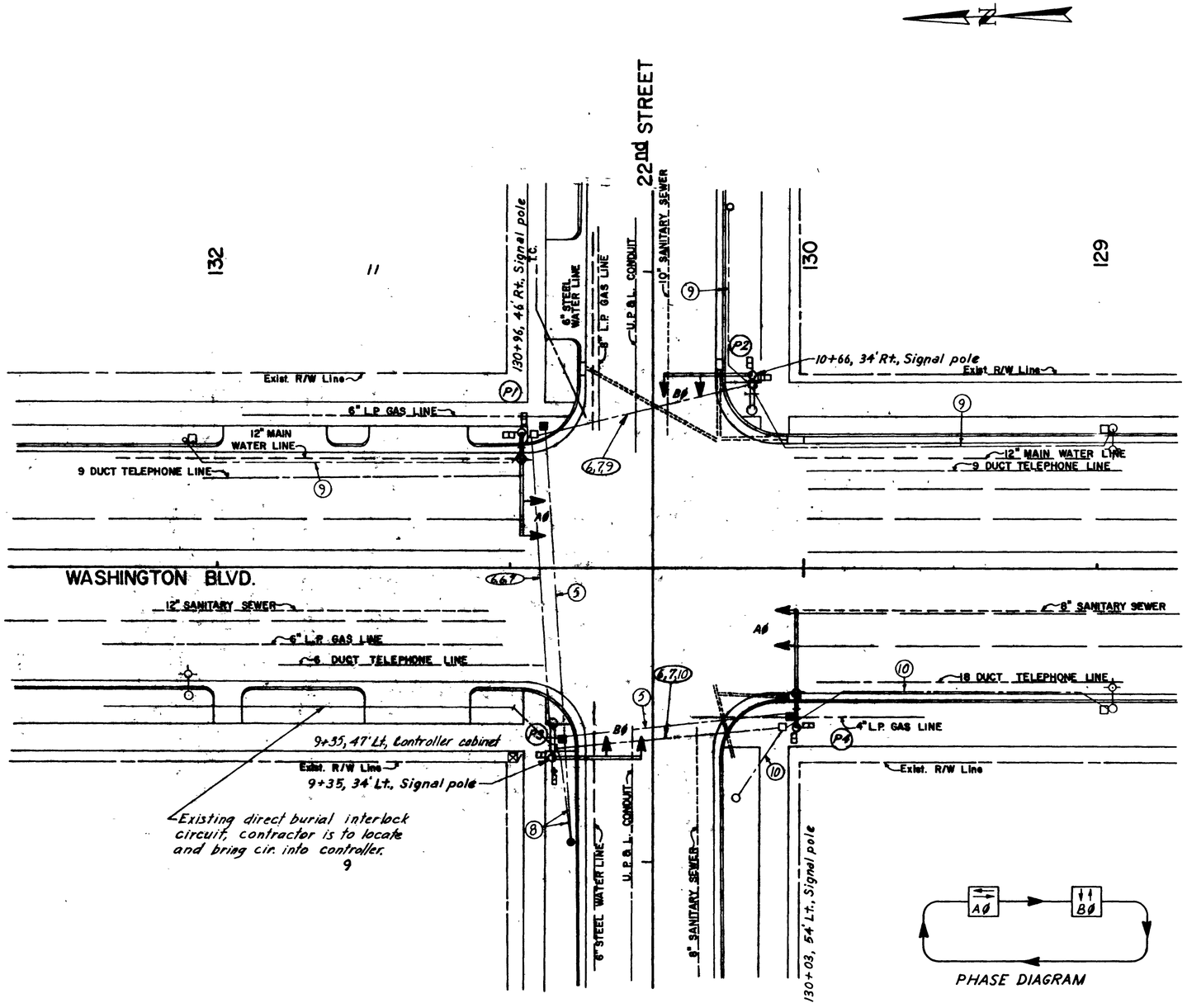
Pole Ident.	Mastarm Length
P1	30'
P2	30'
P3	25'
P4	25'

NO.	BY	DATE	REMARKS
			REVISIONS

UTAH STATE DEPARTMENT OF HIGHWAYS
SALT LAKE CITY, UTAH
TRAFFIC DESIGN

TRAFFIC SIGNALS
36TH STREET AND QUINCY AVE.
SITUATION PLAN

DESIGNED K.F. Herring	CHECK PH 10-74	REVIEW	
DRAWN M. Zupko	CHECK PH 10-74	DESIGN	12-20-74
QUANT. K.F. Herring	CHECK PH 10-74	R/W	
APPROVAL RECOMM 10-74 DATE	GROUP LEADER		
APPROVED 10-74 DATE	TRAFFIC DESIGN ENGINEER	Weber COUNTY	
PROJECT NUMBER HES-0005(2)	S-61 DWG. NO.	3 OF	



NOTES:

1. Power Co. meter shall be located on power pole 7' above ground.
2. All circuits shall be placed in same trench where possible, but in separate conduit.
3. All pedestrian head assemblies shall be type VI as shown on "Pedestrian Signal Assembly Detail" sheet.
4. All signal head assemblies shall be type I as shown on "Signal Mounting Detail" sheet unless otherwise noted.
5. Multiple street lighting circuit – use single conductor No. 6 in 1" galvanized rigid steel conduit.
6. Signal circuit – use 4 conductor No. 14 cable in 2" galvanized rigid steel conduit. When more than 1 circuit is called for install circuits in same conduit.
7. Pedestrian circuit – use 7 conductor No. 14 cable in same conduit as signal circuit. When signal circuit conduit is not available use 2" galvanized rigid steel conduit.
8. Power sources – use single conductor No. 6 & 8 wire in 1" galv. rigid steel conduit. See Summary & Schedule sheet.
9. Fire alarm circuit – use 1" galvanized rigid steel conduit. Use signal circuit conduit when available.
10. Interlock circuit – use 1 conductor No. 12 cable in 1" galvanized rigid steel conduit. Use signal circuit when available.
11. NEW LUMINAIRES MOUNTED ON P2 AND P3

LEGEND:

- (P1) Pole identification
- Mast arm signal pole
- Mast arm signal pole W/light pole extension & insulator
- 12"-1 Way-3 section signal head
- Traffic signal control cabinet
- Type III Junction box
- Type IV Junction box
- Pedestrian signal
- Power source
- Conduit run
- Type V junction box
- PVC. Loop Lead-in

Pole Schedule

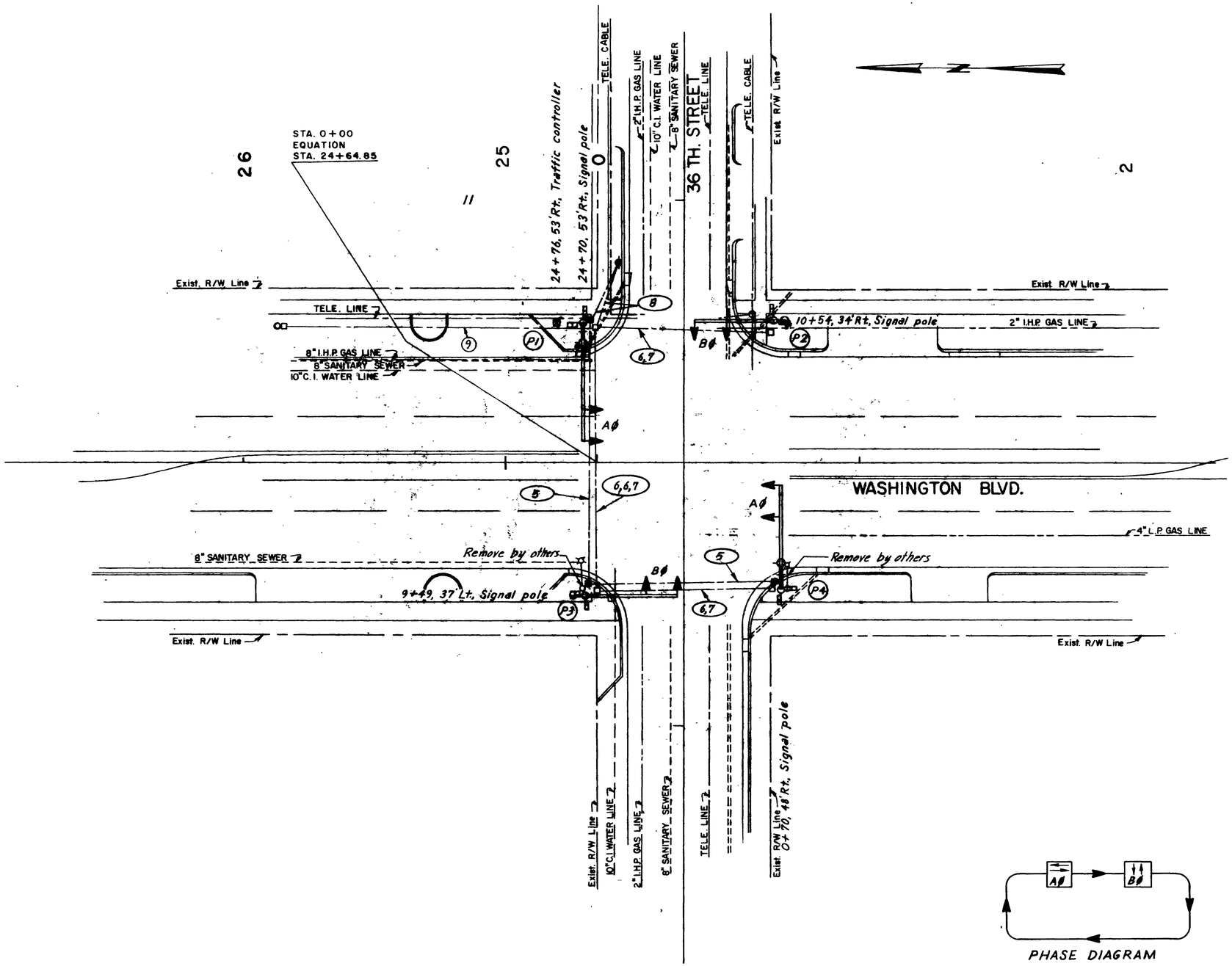
Pole Ident.	Mastarm Length
P1	35'
P2	30'
P3	30'
P4	40'

UTAH STATE DEPARTMENT OF HIGHWAYS
SALT LAKE CITY UTAH
TRAFFIC DESIGN

TRAFFIC SIGNALS
WASHINGTON BLVD. & 22ND STREET
SITUATION PLAN

DESIGNED K.F. Herzog	CHECK PH 10-74	REVIEW	
DRAWN M. Zupko	CHECK PH 10-74	DESIGN	11-20-74
QUANT. K.F. Herzog	CHECK PH 10-74	R/W	
APPROVAL RECOMM 10-74 DATE	GROUP SUPV.		
APPROVED 10-74 DATE	TRAFFIC DESIGN ENGINEER	WEBER COUNTY	
PROJECT NUMBER HES-0005(2)	S-61 DWG. NO.	4 OF	

NO	BY	DATE	REMARKS
			REVISIONS



PHASE DIAGRAM

NOTES:

1. Power Co. meter shall be located on power pole 7' above ground.
2. All circuits shall be placed in same trench where possible, but in separate conduit.
3. All pedestrian head assemblies shall be type VI as shown on "Pedestrian Signal Assembly Detail" sheet.
4. All signal head assemblies shall be type I as shown on "Signal Mounting Detail" sheet unless otherwise noted.
5. Multiple street lighting circuit – Use single conductor No. 6 in 1" galvanized rigid steel conduit.
6. Signal circuit – use 4 conductor No. 14 cable in 2" galvanized rigid steel conduit. When more than 1 circuit is called for install circuits in same conduit.
7. Pedestrian circuit – use 7 conductor No. 14 cable in same conduit as signal circuit. When signal circuit conduit is not available use 2" galvanized rigid steel conduit.
8. Power sources – use single conductor No. 6 & No. 8 wire in 1" galvanized rigid steel conduit. See Summary & Schedule sheet.
9. Interlock circuit - use 1 conductor No. 12 cable in 1" galvanized rigid steel conduit.

LEGEND:

- (P1) Pole identification
- Mast arm signal pole
- Mast arm signal pole W/ light pole extension & insulator
- 12"-1 Way-3 section signal head
- Traffic signal control cabinet
- Type III Junction box
- Type IV Junction box
- Pedestrian signal
- Power source
- ---- Conduit run

Pole Schedule

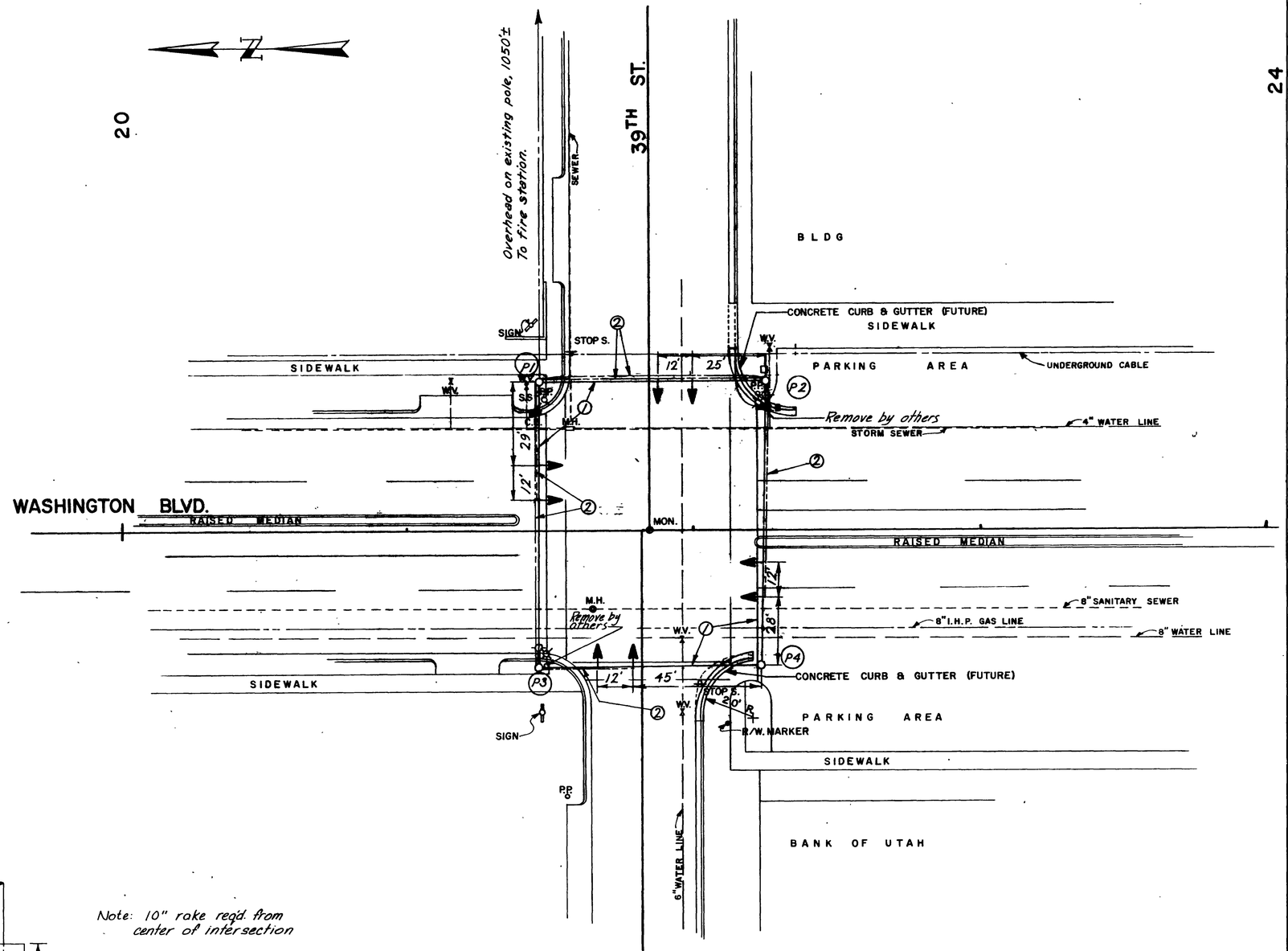
Pole Ident.	Mast arm Length
P1	45'
P2	~~30'~~ 35'
P3	~~35'~~ 40'
P4	40'

NO	BY	DATE	REMARKS
			REVISIONS

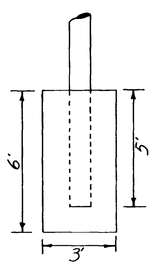
UTAH STATE DEPARTMENT OF HIGHWAYS
SALT LAKE CITY UTAH
TRAFFIC DESIGN

TRAFFIC SIGNALS
36TH St. AND WASHINGTON BLVD.
SITUATION PLAN

DESIGNED V.E. Herzog	CHECK PH 10-76	REVIEW	
DRAWN M. Zupko	CHECK PH 10-76	DESIGN	11-20-76
QUANT. V.E. Herzog	CHECK PH 10-76	R/W	
APPROVAL RECOMM 10-76 DATE	GROUP LEADER		
APPROVED 10-76 DATE	TRAFFIC DESIGN ENGINEER	WEBER COUNTY	
PROJECT NUMBER HES-0005(2)	S-61 DWG NO	5 OF	



Note: 10" rake req'd. from center of intersection



Signal Pole Base Detail

NOTES:

1. Guy wire – use 5/16" cable.
2. Signal circuit – use 5 conductor No. 14 cable overhead.
3. Power source and push button actuation to be located in fire station.
4. New luminaire and bracket shall be installed on traffic signal poles.

LEGEND:

- (P1) Pole identification
- ○ Steel traffic signal pole
- ➔ 12"-1 way-2 section signal head
- □ Type IV Junction box
- ---- Conduit run
- ---- Overhead circuit
- Steel traffic signal pole with luminaire

Pole Schedule	
Ident	length
P1	——
P2	——
P3	——
P4	——

NO	BY	DATE	TYPE	REMARKS

REVISIONS

UTAH STATE DEPARTMENT OF HIGHWAYS
DIST. ONE – OGDEN, UTAH
ROADWAY DESIGN

WASHINGTON BLVD. & 39th ST.
OGDEN
PLAN SHEET

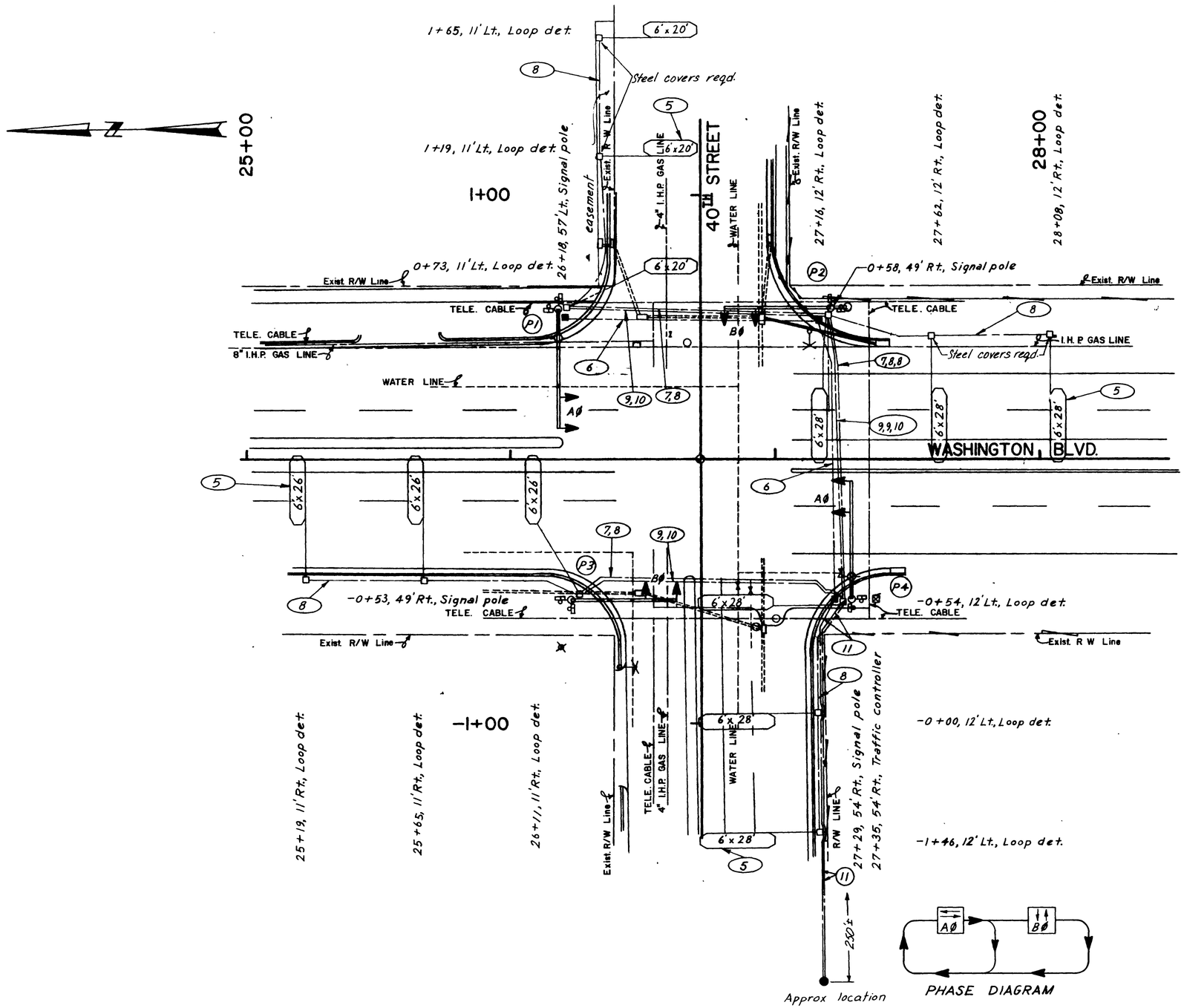
DESIGN K.E. Herrod CHECK 10-74 PH
DRAWN K.E. Herrod CHECK 10-74 PH
QUANT. K.E. Herrod CHECK 10-74 PH
APPROVAL RECOMM. 10-74 DATE — DESIGN ENGINEER
APPROVED 10-74 DATE — ENGR.

REVIEW
DESIGN 10/22/2074
R/W

WEBER COUNTY

PROJECT NUMBER HES-0005(2) S-61

SHEET NO. 6



NOTES:

1. Power Co. meter shall be located on power pole 7' above ground.
2. All circuits shall be placed in same trench where possible, but in separate conduit.
3. All pedestrian head assemblies shall be type VI as shown on "Pedestrian Signal Assembly Detail" sheet.
4. All signal head assemblies shall be type I as shown on "Signal Mounting Detail" sheet unless otherwise noted.
5. Detector loops – use 1 conductor No. 14 cable, 2 turns.
6. Multiple street lighting circuit – use single conductor No. 6 in 1" galvanized rigid steel conduit.
7. Push button circuit – use 3 conductor No. 14 cable in same conduit as the detector circuit.
8. Detector circuits – use 2 conductor No. 14 shielded cable in 1" galvanized rigid steel conduit. When more than 1 circuit is called for install circuits in same conduit.
9. Signal circuit – use 4 conductor No. 14 cable in 2" galvanized rigid steel conduit. When more than 1 circuit is called for install circuits in same conduit.
10. Pedestrian circuit – use 7 conductor No. 14 cable in same conduit as signal circuit. When signal circuit conduit is not available use 2" galvanized rigid steel conduit.
11. Power sources – use single conductor No. 6 & 8 wire in 1" galvanized rigid steel conduit. See Summary & Schedule sheet.

LEGEND:

- (P1) Pole identification
- Mast arm signal pole
- Mast arm signal pole W/light pole extension & insulator
- 12"-1 Way-3 section signal head
- Traffic signal control cabinet
- Type III Junction box
- Type IV Junction box
- Pedestrian signal with push button
- Power source
- ---- Conduit run
- Type V junction box
- PVC Loop Lead-in

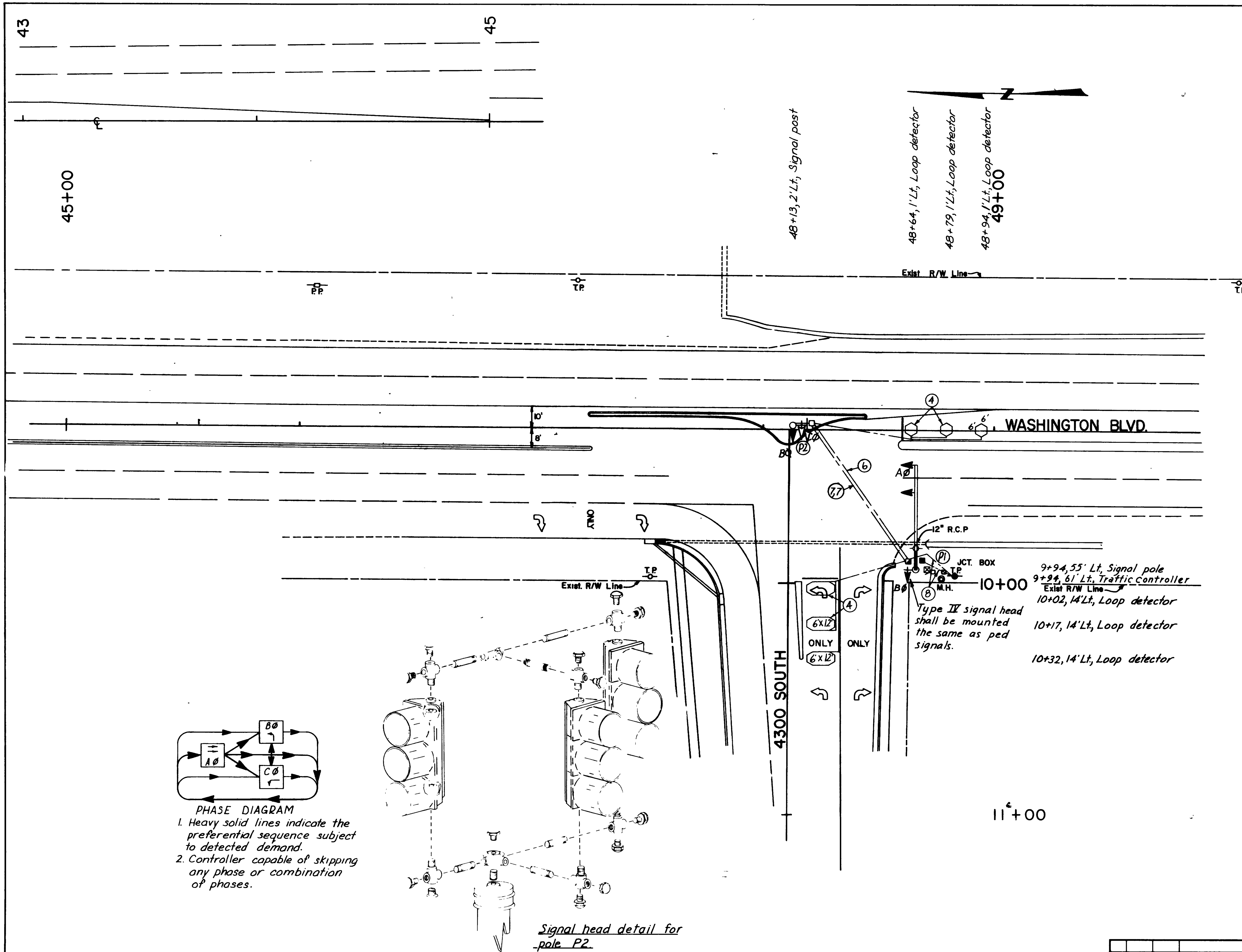
Pole Schedule	
Ident.	Arm length
P1	45'
P2	~~40'~~ 45'
P3	40'
P4	45'

UTAH STATE DEPARTMENT OF HIGHWAYS
SALT LAKE CITY, UTAH
TRAFFIC DESIGN

TRAFFIC SIGNALS
40TH ST. AND WASHINGTON BLVD.
SITUATION PLAN

DESIGNED K.E.Herzog	CHECK P.H. 10-74	REVIEW	
DRAWN M. Zupko	CHECK P.H. 10-74	DESIGN	11-20-74
QUANT. K.E.Herzog	CHECK P.H. 10-74	R/W	
APPROVAL RECOMM 10-74 DATE	GROUP LEADER		
APPROVED 10-74 DATE	TRAFFIC DESIGN ENGINEER		
PROJECT NUMBER HES-0005(2)	S-61 DWG NO.	WEBER COUNTY	
		7 OF	

NO	BY	DATE	REMARKS
			REVISIONS



Notes:

1. Power Co. shall locate meter on power pole 7' above ground.
2. All circuits shall be placed in same trench where possible but in separate conduit.
3. All signal head assemblies shall be type I as shown on "Signal Mounting Detail" sheet, unless otherwise noted.
4. Detector loops – use 1 conductor No. 14 cable. 6'x6' & 6'x12' loops use 3 turns
5. Multiple street lighting circuit – use single conductor No. 6 wire in 1" galv. rigid steel conduit.
6. Detector circuit – use 2 conductor No. 14 shielded cable in 1" galvanized rigid steel conduit.
7. Signal circuit – use 4 conductor No. 14 cable in 2" galv. rigid steel conduit. When more than 1 circuit is called for install circuits in same conduit.
8. Power source – use single conductor No. 6 & No 8 wire in 1" galv. rigid steel conduit. See summary and schedule sheet.
9. PROGRAMED HEAD ON WEST ARM PEDESTAL REMOVED (DIRECTED BY F.H.W.A.)

Legend:

- (P1) Pole schedule
- Mast arm signal pole
- Post mounted signal pole
- Mast arm signal pole with light pole extension
- 12" – 1 way – 3 section signal head
- 12" – 1 way – 3 section signal head with left turn arrow. (Optically Programed)
- Traffic control signal cabinet
- Type III junction box
- Type IV junction box
- Type V junction box
- Pedestrian signal with push button
- Power source
- Conduit run
- P.V.C. Loop Lead-in

Pole Schedule	
Ident	Arm length
P1	45'
P2	—

NO	BY	DATE	REMARKS
			REVISIONS

UTAH STATE DEPARTMENT OF HIGHWAYS
SALT LAKE CITY UTAH
TRAFFIC DESIGN

Traffic Signals
4300 South – Washington Blvd.
Situation Plan

DESIGNED K.S. Herzog	CHECK PH 10-74	REVIEW	
DRAWN K.S. Herzog	CHECK PH 10-74	DESIGN [signature] 10-20-74	
QUANT. K.S. Herzog	CHECK PH 10-74	R/W	
APPROVAL RECOMM 10-74	[signature] GROUP LEADER		
APPROVED 10-74	[signature] TRAFFIC DESIGN ENGINEER	Weber COUNTY	
PROJECT NUMBER HHS-0005(2)	S-61 DWG NO.	8 OF	

STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
UTAH				

LOCATION	SIGNAL CONTROLLER (STATE FURNISHED)									SIGNAL STRUCTURAL SUPPORT SYSTEM				VEHICULAR and PEDESTRIAN SIGNAL HEADS																						SIGNAL DETECTION DEVICE									SIGNAL POWER SOURCE			
	CABINET	CONTROLLER						AMPLIFIER UNIT		STRUCTURAL STEEL			FOUND.	SIGNAL HEADS		PED. SIGNALS		STREET LIGHTS	CABLES							CONDUIT				JUNCTION BOX		SENSING UNITS			CABLES			CONDUIT		SIGNALS		STREET LIGHTS	
																			IMSA SPECS. 19-1 OR 20-1													IMSA SPECS. 19-1 OR 20-1												
HARRISON BOULEVARD AND	TYPE F-33"	TYPE M	2 PHASE ELECTRO-MECHANICAL	2 PHASE SOLID STATE	3 PHASE SOLID STATE	MINORS WITH OVERLAPS		Type X Junction Box	LOOP DETECTOR	MAGNETIC DETECTOR	MAST ARM SIGNAL POLE (STATE FURNISHED)	MAST ARM SIGNAL POLE W/ LIGHT POLE EXTENSION (STATE FURNISHED)	HIGH STRENGTH SIGNAL POLE	8' BRACKET ARMS FOR STREET LIGHTING	CLASS A CONCRETE (AE) INCLUDES CONTROLLER FOUNDATION	12", 1 WAY, 3 SECTION WITH 3 (12SV - 150W) LAMPS	LOUVERS	"WALK - DON'T WALK" GRID TYPE INDICATIONS FRAMEWORK	400 W. 240 V. TYPE III LUMNR AH FRONT SOCKET POSITION, HIGH PRESSURE SODIUM	400 W. 240 V. TYPE III LUMNR AH REAR/I SOCKET POSITION MERCURY VAPOR	4 CDR. NO. 14 PVC SIGNAL CIRCUIT	7 CDR. NO. 14 PVC PEDESTRIAN CIRCUIT	7 CDR. NO. 14 PVC INTERLOCK CIRCUIT	CDR. NO. PVC SIGNAL CIRCUIT	4 CDR. NO. 14 PVC MAST ARM SIGNAL POLE	1 CDR. NO. 6 PVC STREET LIGHTING	1½ RIGID STEEL CONDUIT (GALV.) INTERLOCK CIRCUITS	2" RIGID STEEL CONDUIT (GALV) SIGNAL CIRCUITS	1" RIGID STEEL CONDUIT (GALV) STREET LIGHTING CIRCUIT	TYPE III JUNCTION BOX	TYPE IV JUNCTION BOX	1 CDR. NO. 14 LOOP DETECTOR *	MAGNETIC DETECTOR MULTI-LANE	PUSH BUTTONS AND SIGNS	2 CDR. NO. 14 SHIELDED DETECTOR CIRCUIT *	3 CDR. NO. 14 PVC PUSH BUTTON CIR.	CDR. NO PVC	CDR NO. PVC	1" RIGID STEEL CONDUIT (GALV) DETECTOR CIRCUITS	2" RIGID STEEL CONDUIT (GALV) DETECTOR CIRCUITS	1-1/2" PVC CONDUIT LOOP LEAD-INS	1 CDR. NO. 8 PVC SIGNAL CIRCUIT	1" RIGID STEEL CONDUIT (GALV) SIGNAL CIRCUIT	1 CDR. NO. 6 PVC LIGHTING CIRCUIT	1" RIGID STEEL CONDUIT(GALV) LIGHTING CIRCUIT
12th STREET	1					2					2																					675			300				120					
20th STREET											2																																		
21st STREET											1																																		
22nd STREET	1		1					1	2	3	1			11		8		8		1	400	410	115		325	510		300	220		3	7	900		4	425	380		400	90	100	50	100	50
24th STREET	1		1					1	2	3	1			11		8		8		1	400	400	115		315	300		300	200		3	7	910		4	385	375		365	100	310	155	310	155
26th STREET	1		1					1	2	3	1			11		8		8		1	380	390	100		325	490		285	200		3	7	850		4	380	365		360	50	500	250	500	250
28th STREET	1		1					1	2	3	1			11		8		8		1	375	375	115		315	320		280	95		2	7	890		4	400	350		385	100	500	250	500	250
UNITS	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	FT.	EA.	EA.	CU.YD.		EA.	EA.	EA.	EA.	FT.	FT.	FT.	FT.	FT.	FT.	FT.	FT.	FT.	FT.	FT.	EA.	EA.	FT.	EA.	EA.	EA.	FT.	FT.	FT.	FT.	FT.	FT.	FT.	FT.	FT.	FT.
TOTAL																																												

PAY QUANTITIES

NOTES:

STATE FURNISHED CONTROLLER EQUIPMENT SHALL BE DELIVERED TO THE JOB SITE BY STATE FORCES FOR DELIVERY CALL 328-5204 (SIGNAL LAB.) 5 WORKING DAYS PRIOR TO DESIRED DELIVERY DATE

SIGNAL POWER SOURCE:
SIGNALS - FROM POWER SOURCE TO CONTROLLER CABINET.
STREET LIGHTS - FROM POWER SOURCE TO LIGHTING JUNCTION BOX.

* STRANDED POLYETHYLENE INSULATED CABLE.

UTAH STATE DEPARTMENT OF HIGHWAYS
TRAFFIC DESIGN
TRAFFIC SIGNALS
Harrison Blvd. - 3450 So. to 12th St.
SUMMARY & SCHEDULE SHEET

DESIGNED	K.E. Herzog	PROJECT NO.	HHS-0005(2)
DRAWN	K.E. Herzog	CITY	Ogden
CHECKED	K.E. Herzog	COUNTY	Weber
DATE	10-72		Keith E. Herzog
	12-72		Pete Dalton

S-61 9

STATE	PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
UTAH				

LOCATION	SIGNAL CONTROLLER (STATE FURNISHED)										SIGNAL STRUCTURAL SUPPORT SYSTEM				VEHICULAR and PEDESTRIAN SIGNAL HEADS																				SIGNAL DETECTION DEVICE										SIGNAL POWER SOURCE					
	CABINET		CONTROLLER						AMPLIFIER UNIT		STRUCTURAL STEEL			FOUND.	SIGNAL HEADS		PED. SIGNALS	STREET LIGHTS	CABLES						CONDUIT				JUNCTION BOX		SENSING UNITS			CABLES				CONDUIT			SIGNALS		STREET LIGHTS	
																			IMSA SPECS. 19-1 OR 20-1														IMSA SPECS. 19-1 OR 20-1													
	TYPE F-35"	TYPE M	2 PHASE ELECTRO-MECHANICAL	2 PHASE SOLID STATE	3 PHASE SOLID STATE	MINORS WITH OVERLAPS		Type II Junction Box	LOOP DETECTOR	MAGNETIC DETECTOR	MAST ARM SIGNAL POLE (STATE FURNISHED)	"MAST ARM SIGNAL POLE W/ LIGHT POLE EXTENSION (STATE FURNISHED)	HIGH STRENGTH SIGNAL POLE	8' BRACKET ARMS FOR STREET LIGHTS	CLASS A CONCRETE (AE) INCLUDES CONTROLLER FOUNDATION	12"-1 WAY, 3 SECTION WITH 3 (12"-150W) LAMPS	LOUVERS	"WALK - DON'T WALK" GRID TYPE INDICATIONS FRAMEWORK	400 W. 240 V. TYPE III LUMNR AH FRONT SOCKET POSITION, HIGH PRESSURE SODIUM.	400 W. 240 V. TYPE III LUMNR AH REAR/1 SOCKET POSITION MERCURY VAPOR	4 CDR. NO. 14 PVC SIGNAL CIRCUIT	7 CDR. NO. 14 PVC PEDESTRIAN CIRCUIT	7 CDR. NO. 14 PVC INTERLOCK CIRCUIT	CDR. NO. PVC SIGNAL CIRCUIT	4 CDR. NO. 14 PVC MAST ARM SIGNAL POLE	1 CDR. NO. 6 PVC STREET LIGHTING	1" RIGID STEEL CONDUIT (GALV.) INTERLOCK CIRCUITS	2" RIGID STEEL CONDUIT (GALV.) SIGNAL CIRCUITS	1" RIGID STEEL CONDUIT (GALV.) STREET LIGHTING CIRCUIT	TYPE III JUNCTION BOX	TYPE IV JUNCTION BOX	1 CDR. NO. 14 LOOP DETECTOR *	MAGNETIC DETECTOR MULTI-LANE	PUSH BUTTONS AND SIGNS	2 CDR. NO. 14 SHIELDED DETECTOR CIRCUIT *	3 CDR. NO. 14 PVC PUSH BUTTON CIR.	CDR. NO. PVC	CDR NO. PVC	1" RIGID STEEL CONDUIT (GALV.) DETECTOR CIRCUITS	2" RIGID STEEL CONDUIT (GALV.) DETECTOR CIRCUITS	1-1/2" PVC CONDUIT LOOP LEAD-INS	/ CDR. NO. 8 PVC SIGNAL CIRCUIT	1" RIGID STEEL CONDUIT (GALV.) SIGNAL CIRCUIT	/ CDR. NO. 6 PVC LIGHTING CIRCUIT	1" RIGID STEEL CONDUIT (GALV.) LIGHTING CIRCUIT
HARRISON BOULEVARD AND 30th STREET	1	1	1	5		2		1	2		3	1		11	8	8		1	375	375	100		310	300	275	100	3	7	625	4		375	350		350		80	120	60	120	60
Interlock System																					8000				7800			27												
UNITS	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	FT.	EA.	EA.	CU.YD.	EA.	EA.	EA.	EA.	EA.	EA.	FT.	FT.	FT.	FT.	FT.	FT.	EA.	EA.	FT.	EA.	EA.	EA.	FT.	FT.	FT.	FT.	FT.	FT.	FT.	FT.	FT.	FT.	FT.	FT.
TOTAL	1	5		5		2		5	10		15	5		5	55	40		40			5	1930	1950	8545		1590	1920	7800	1440	815		14	62	4850		20		2265	1820			1860		540	1530	765	1530	765

NOTES:

STATE FURNISHED CONTROLLER EQUIPMENT SHALL BE DELIVERED TO THE JOB SITE BY STATE FORCES. FOR DELIVERY CALL 328-5204 (SIGNAL LAB.) 5 WORKING DAYS PRIOR TO DESIRED DELIVERY DATE

SIGNAL POWER SOURCE:
SIGNALS - FROM POWER SOURCE TO CONTROLLER CABINET.
STREET LIGHTS - FROM POWER SOURCE TO LIGHTING JUNCTION BOX.

* STRANDED POLYETHYLENE INSULATED CABLE.

PAY QUANTITIES

12th Street	For information only	1 Lump			
20th Street		1 Lump			
21st Street		1 Lump			
22nd Street	For information only	1 Lump	1 Lump	Lump	Lump
24th Street	" " "	1 Lump	1 Lump	"	"
26th Street	" " "	1 Lump	1 Lump	"	"
28th Street	" " "	1 Lump	1 Lump	"	"
30th Street	" " "	1 Lump	1 Lump	"	"
Interlock System			Lump		

NO	BY	DAT	REMARKS
			REVISIONS

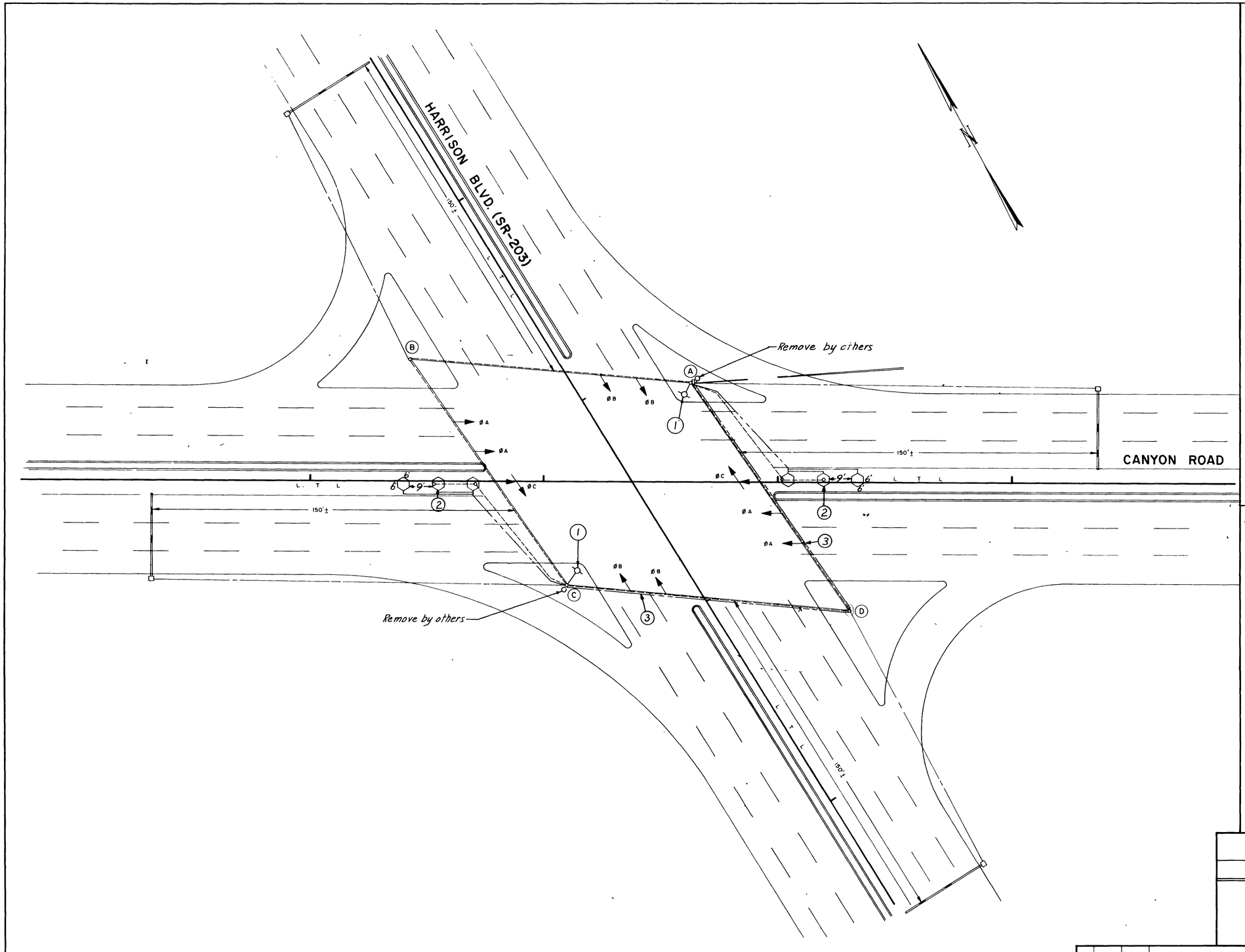
UTAH STATE DEPARTMENT OF HIGHWAYS
SALT LAKE CITY, UTAH
TRAFFIC DESIGN

TRAFFIC SIGNALS

Harrison Blvd. - 3450 So. to 12th St.

SUMMARY & SCHEDULE SHEET

DESIGNED K.F.Herzog	PROJ NO HHS-0005(2)
DRAWN K.F.Herzog	CITY Ogden
CHECKED K.F.Herzog	COUNTY Weber
APPROVAL RECOMM 10-72 DATE	Keith F. Herzog
APPROVED 10-72 DATE	Lee Nielsen TRAFFIC ENGINEER
DWG NO S-61	SHEET 10 OF 15



Notes.

1. New 8' brackets required for street lights
2. Detector loops - use 1 conductor No 14 cable 6'x6' loops use 3 turns.
3. Detector circuit - use 2 conductor No 14 shielded cable overhead.

Legend:

Loop detector with PVC conduit lead-in.

Overhead detector circuit

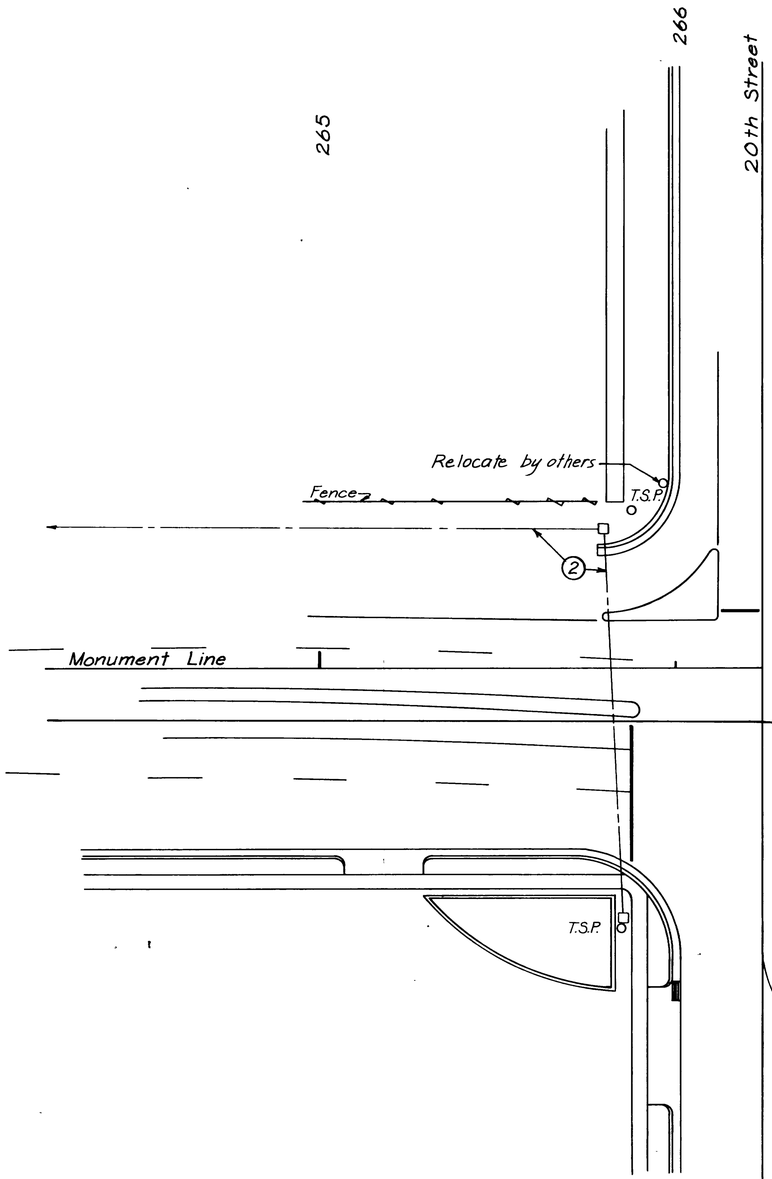
REVISIONS

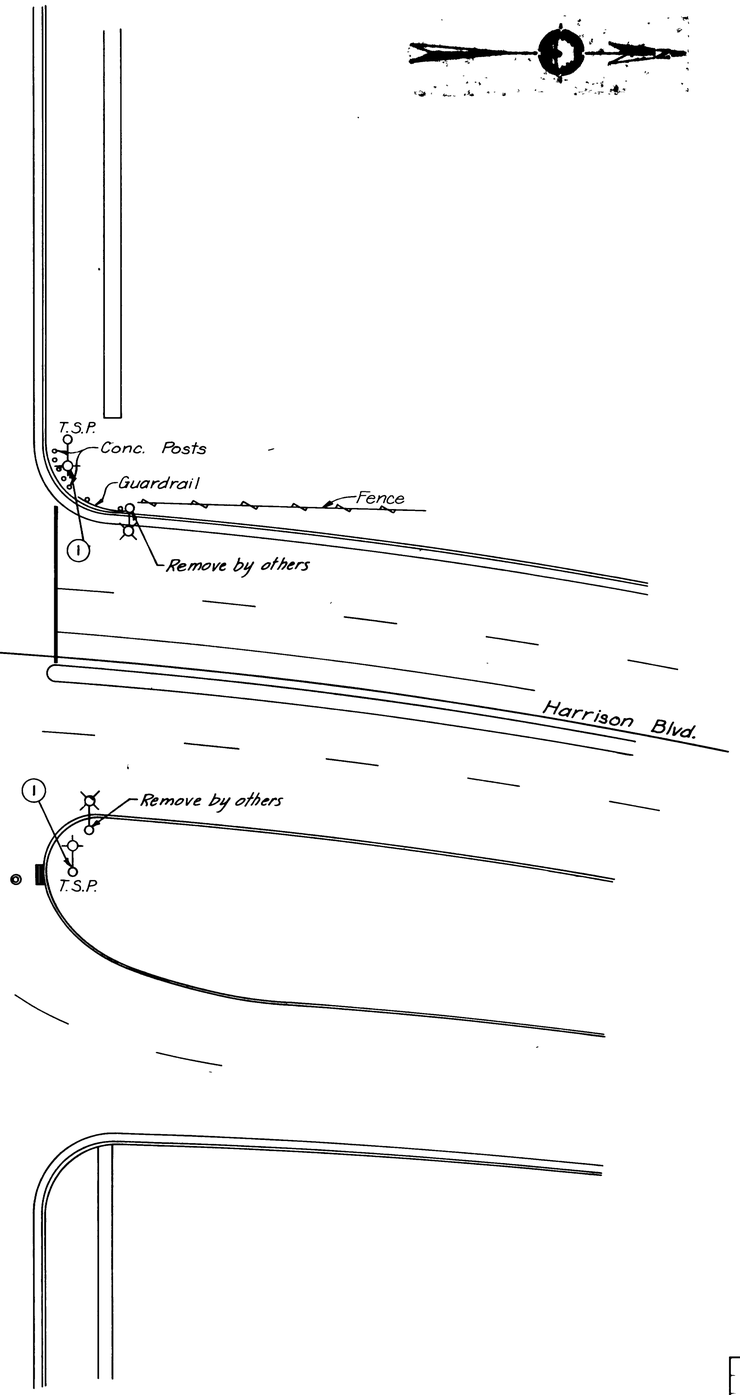
NO.	BY	DATE	REMARKS

UTAH STATE DEPARTMENT OF HIGHWAYS
SALT LAKE CITY, UTAH
TRAFFIC DESIGN

TRAFFIC SIGNALS
HARRISON BLVD. & 12th STREET
SITUATION PLAN

DESIGNED K.F.Herzog	PROJ NO HHS-0005(2)
DRAWN K.F.Herzog	CITY Ogden
CHECKED K.F.Herzog	COUNTY Weber
APPROVAL RECOMM 12-22 DATE	Keith F. Herzog
APPROVED 10 22 DATE	TRAFFIC ENGINEER
DWG NO S-61	SHEET 11 OF





Notes

1. 8' bracket required for street light.

2. Interlock circuit – use 7 conductor No. 14 cable in 1½" galvanized rigid steel conduit. Quantities for this item are found under interlock system.

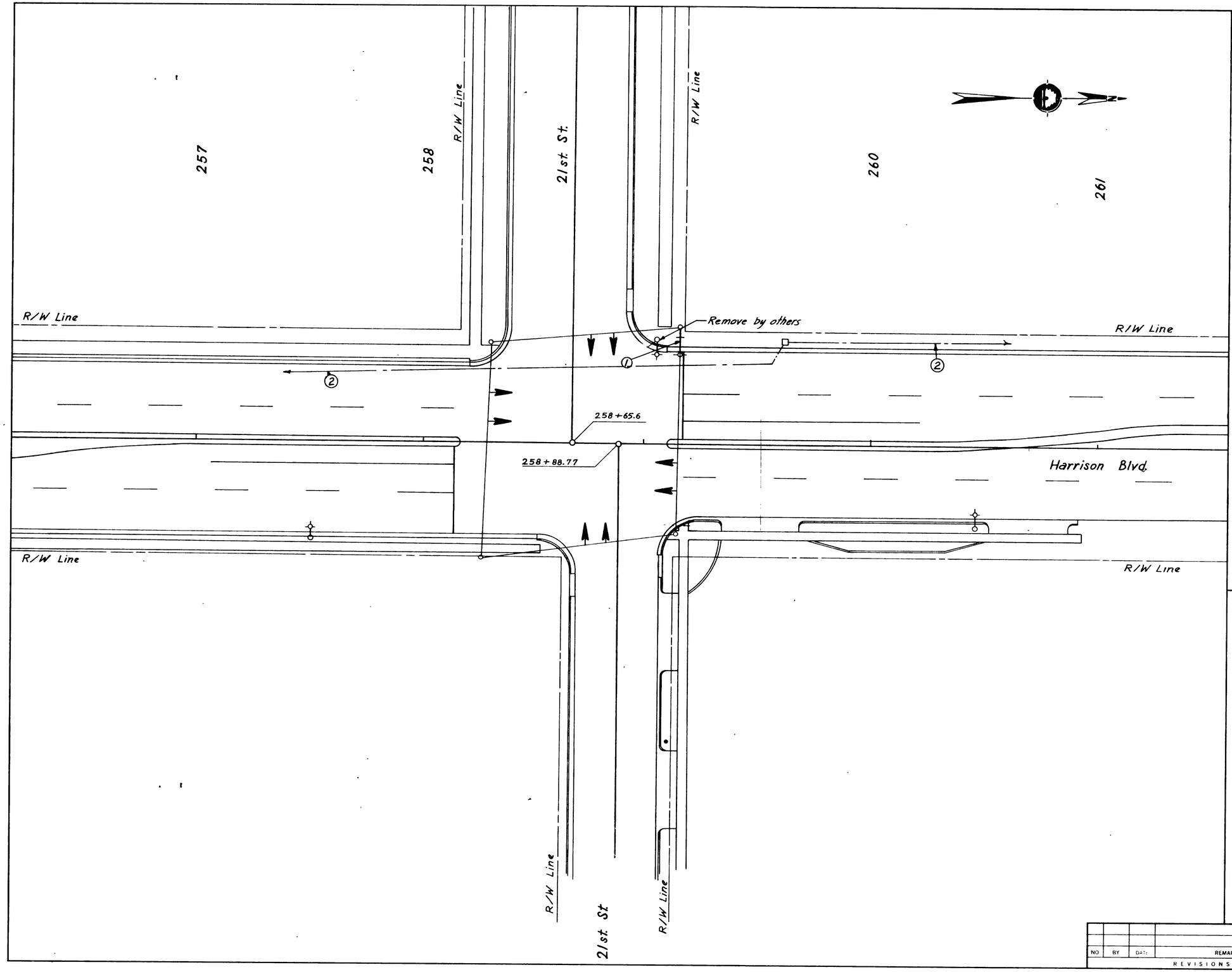
Symbols:

□ Type IV Junction box.

—·— Conduit run

TRAFFIC SIGNALS
Harrison Blvd. & 20th St.
SITUATION PLAN

K.F. Herzog	HHS-0005(2)
R.B. Curtis	Ogden
K.F. Herzog	Weber
10-72	
10 72	
S-61	12



Notes:

1. 8' bracket required for street lighting

2. Interlock circuit - use 7 conductor No. 14 cable in 1½" galvanized rigid steel conduit Quantities for this item are found under interlock system.

Symbols:

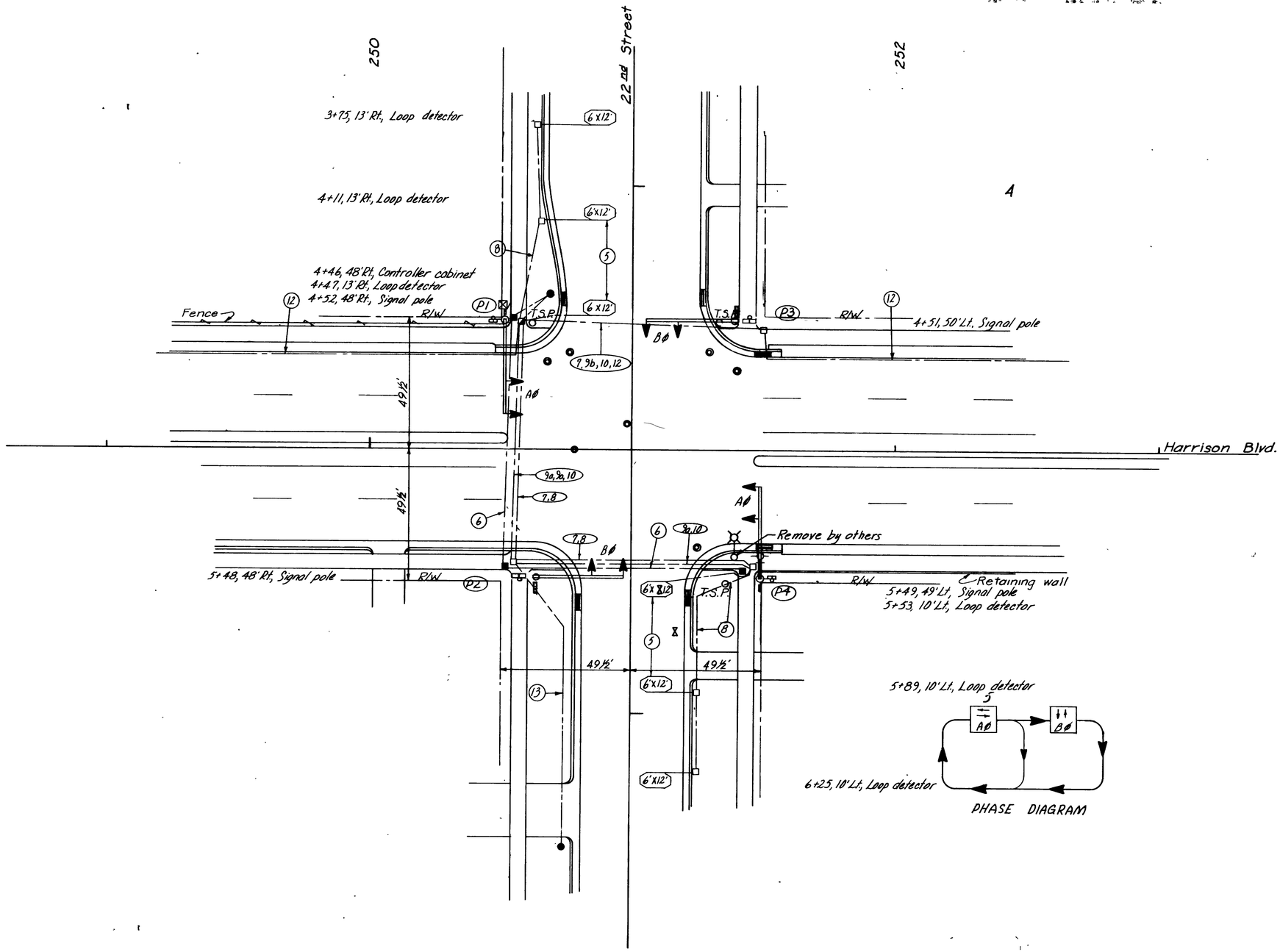
- ○ Steel traffic signal pole.
- ○—⊕— Steel traffic signal pole (existing) with light pole bracket and insulator.
- □ Type IV Junction box.
- —— — —— Conduit run

NO	BY	DATE	REMARKS
			REVISIONS

UTAH STATE DEPARTMENT OF HIGHWAYS
SALT LAKE CITY UTAH
TRAFFIC DESIGN

Traffic Signals
Harrison Blvd. & 21st. Street
Situation Plan

DESIGNED K.E.Herzog	CHECK K.E.Herzog	REVIEW
DRAWN [illegible]	CHECK K.E.Herzog	DESIGN HHS-5972
QUANT. K.E.Herzog	CHECK K.E.Herzog	R/W
APPROVAL RECOMM 10-72 DATE	Keith E. Herzog SIGNAL ENGINEER	
APPROVED 10-72 DATE	Vito Tholen TRAFFIC DESIGN ENGINEER	Weber COUNTY
PROJECT NUMBER HHS-0005(2)	5-61 DWG	13 OF



Notes:

1. Power Co shall locate meter on power pole 7' above ground
2. All circuits shall be placed in same trench where possible but in separate conduit
3. All pedestrian head assemblies shall be type VI as shown on "Pedestrian Signal Assembly Detail" sheet
4. All signal head assemblies shall be type I as shown on "Signal Mounting Detail" sheet.
5. Detector loops – use 1 conductor No. 14 cable. 6'x12' loops use 3 turns.
6. Multiple street lighting circuit – use single conductor No. 6 wire in 1" galvanized rigid steel conduit
7. Push button circuit – use 3 conductor No. 14 cable in same conduit as signal circuit.
8. Detector circuit – use 2 conductor No. 14 shielded cable in 1" galvanized rigid steel conduit.
9. Signal circuit – use 4 conductor No. 14 cable in a 2" b. 2½ galvanized rigid steel conduit. When more than one circuit is called for install circuits in same conduit.
10. Pedestrian circuit – use 7 conductor No. 14 cable in same conduit as signal circuit
11. Power source – use single conductor No. 6 & 8 wire in 1" galvanized rigid steel conduit. See Summary & Schedule sheet.
12. Interlock circuit – use 7 conductor No 14 cable in 1½" galvanized rigid steel conduit. Use signal circuit conduit when available.
13. Fire alarm circuit – use 1" galvanized rigid steel conduit.

Symbols:

- (P1) Pole identification
- Mast arm signal pole
- Mast arm signal pole with light pole extension and insulator.
- 12"– 1 way – 3 section signal head
- Traffic signal control cabinet
- Type III junction box
- Type IV junction box
- Pedestrian Signal head with push button
- Power source
- Conduit run
- Type V Junction box
- P.V.C. Loop lead-in

Pole Schedule	
Ident	Arm Length
P1	35'
P2	~~45'~~ 35'
P3	~~45'~~ 35'
P4	35'

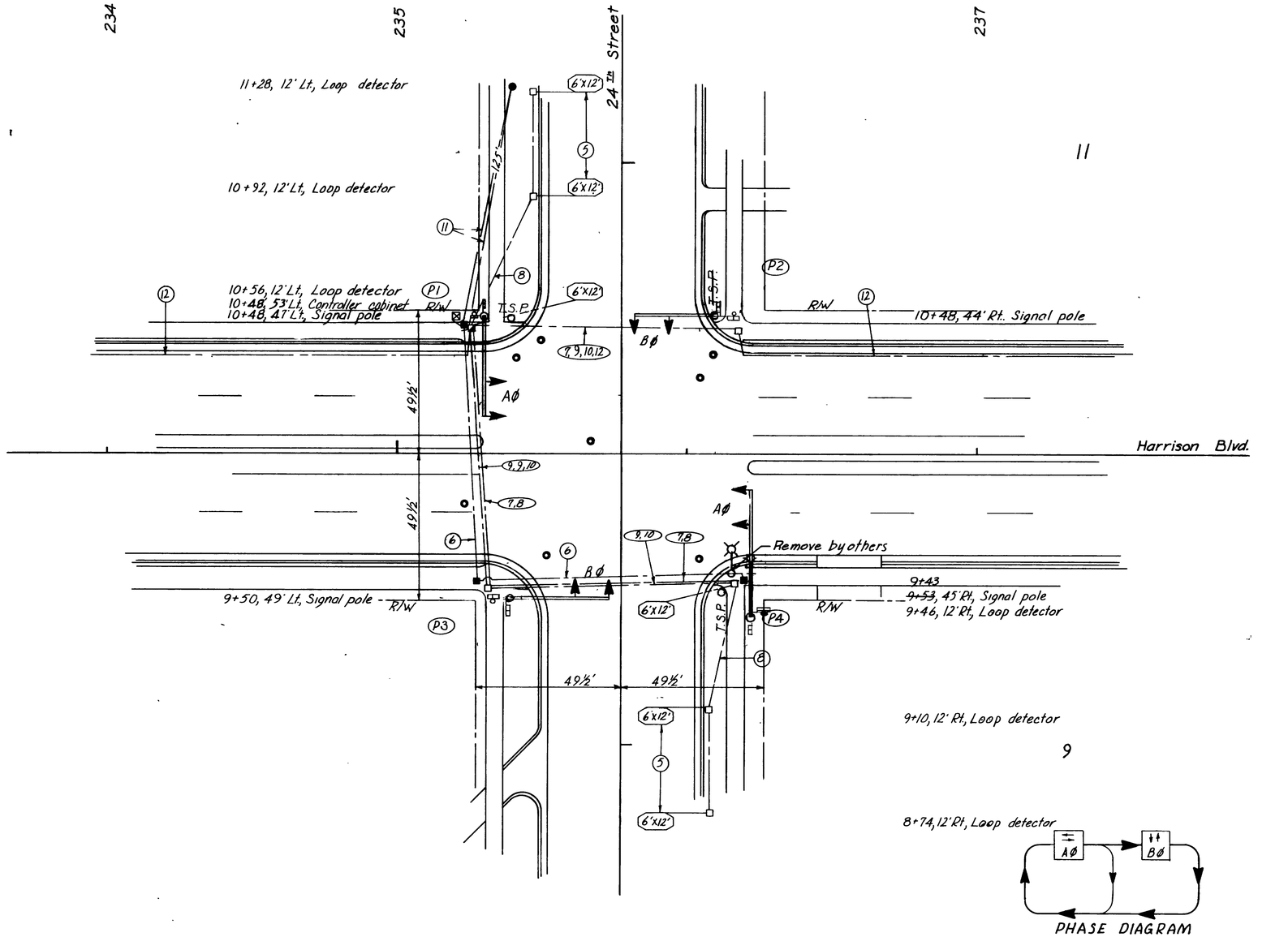
UTAH DEPARTMENT OF HIGHWAYS
TRAFFIC DESIGN

TRAFFIC SIGNALS
Harrison Blvd & 22nd St.
SITUATION PLAN

K.F. Herzog	HES-0005(2)
R.B. Curtis	Ogden
K.F. Herzog	Weber
10-72	Keith Herzog
10-72	Pete Iboltson
S-61	14

ENGINEER

△ K.F.H. 12/31/74 R/W



PHASE DIAGRAM

Notes

1. Power Co meter shall be located on power pole 7' above ground.
2. All circuits shall be placed in the same trench where possible but in separate conduit.
3. All pedestrian head assemblies shall be type VI as shown on "Pedestrian Signal Assembly Detail" sheet.
4. All signal head assemblies shall be type I as shown on "Signal Mounting Detail" sheet.
5. Detector loops-use 1 conductor No. 14 cable. 6'X12' loops use 3 turns
6. Multiple street lighting circuit-use single conductor No. 6 wire in 1" galvanized rigid steel conduit.
7. Push button circuit-use 3 conductor No. 14 cable in same conduit as detector circuit. When detector conduit not available use signal circuit conduit
8. Detector circuits-use 2 conductor No. 14 shielded cable in 1" galvanized rigid steel conduit.
9. Signal circuit-use 4 conductor No. 14 cable in 2" galvanized rigid steel conduit. When more than 1 circuit is called for install circuits in same conduit.
10. Pedestrian circuit-use 7 conductor No. 14 cable in same conduit as signal circuit
11. Power source-use single conductor No. 6 & No. 8 wire in 1" galvanized rigid steel conduit. See Summary & Schedule sheet.
12. Interlock circuit-use 7 conductor No 14 cable in 1½" galvanized rigid steel conduit. Use signal circuit conduit when available.
13. Fire alarm circuit-use 1" galvanized rigid steel conduit.

Legend:

- (P1) Pole identification
- Mast arm signal pole
- Mast arm signal pole with light pole extension & insulator.
- 12"-1way-3 section signal head
- Traffic signal control cabinet
- ■ Type III junction box
- □ Type IV junction box
- Pedestrian signal head with push button
- ● Power source
- —·— Conduit run
- ◪ Type V junction box
- ⬡---PVC Loop lead-in

Pole Schedule

Ident	Arm Length
P1	35'
P2	~~40~~ 30'
P3	~~45~~ 35'
P4	~~35~~ 40'

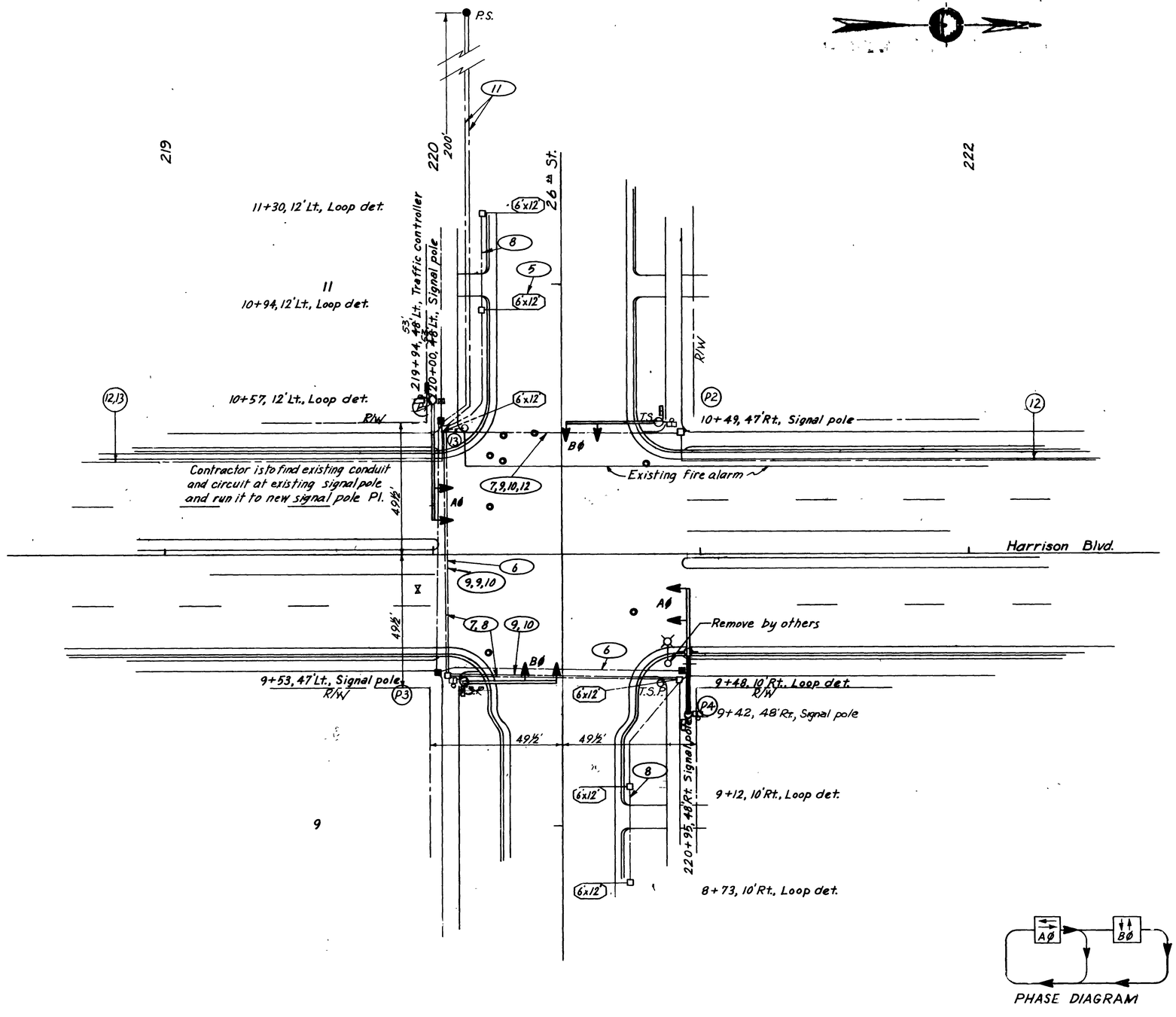
⚠ K.F.H. 12/3/14 - R/W

DEPARTMENT OF HIGHWAYS
TRAFFIC ENGINEERING

TRAFFIC SIGNALS
Harrison Blvd. & 24 St.
SITUATION PLAN

K.F. Herzog	HES-0005(2)
R.B. Curtis	Ogden
K.F. Herzog	Weber
10-72	Keith Herzog
10-72	Pete Holtan

S-61 15



Notes

1. Power Co. meter shall be located on power pole 7' above ground.
2. All circuits shall be placed in same trench where possible, but in separate conduit.
3. All pedestrian head assemblies shall be type VI as shown on "Pedestrian Signal Assembly Detail" sheet.
4. All signal head assemblies shall be type I as shown on "Signal Mounting Detail" sheet unless otherwise noted.
5. Detector loops – use 1 conductor No. 14 cable, 6'x12' loops use 3 turns, all other loops use 2 turns.
6. Multiple street lighting circuit – use single conductor No. 6 in 1" galvanized rigid steel conduit.
7. Push button circuit – use 3 conductor No. 14 cable in same conduit as the detector circuit.
8. Detector circuits – use 2 conductor No. 14 shielded cable in 1" galv. rigid steel conduit. When more than 1 circuit is called for install circuits in same conduit.
9. Signal circuit – use 4 conductor No. 14 cable in 2" galvanized rigid steel conduit. When more than 1 circuit is called for install circuits in same conduit.
10. Pedestrian circuit – use 7 conductor No. 14 cable in same conduit as signal circuits. When signal circuit conduit is not available use 2" galvanized rigid steel conduit.
11. Power sources – use single conductor No. 6 & No. 8 wire in 1" galv. rigid steel conduit. See Summary & Schedule sheet.
12. Interlock circuit – use 7 conductor No. 14 cable in 1-1/2" galvanized rigid steel conduit, use signal circuit conduit when available.
13. Fire alarm circuit – use interlock conduit.

LEGEND:

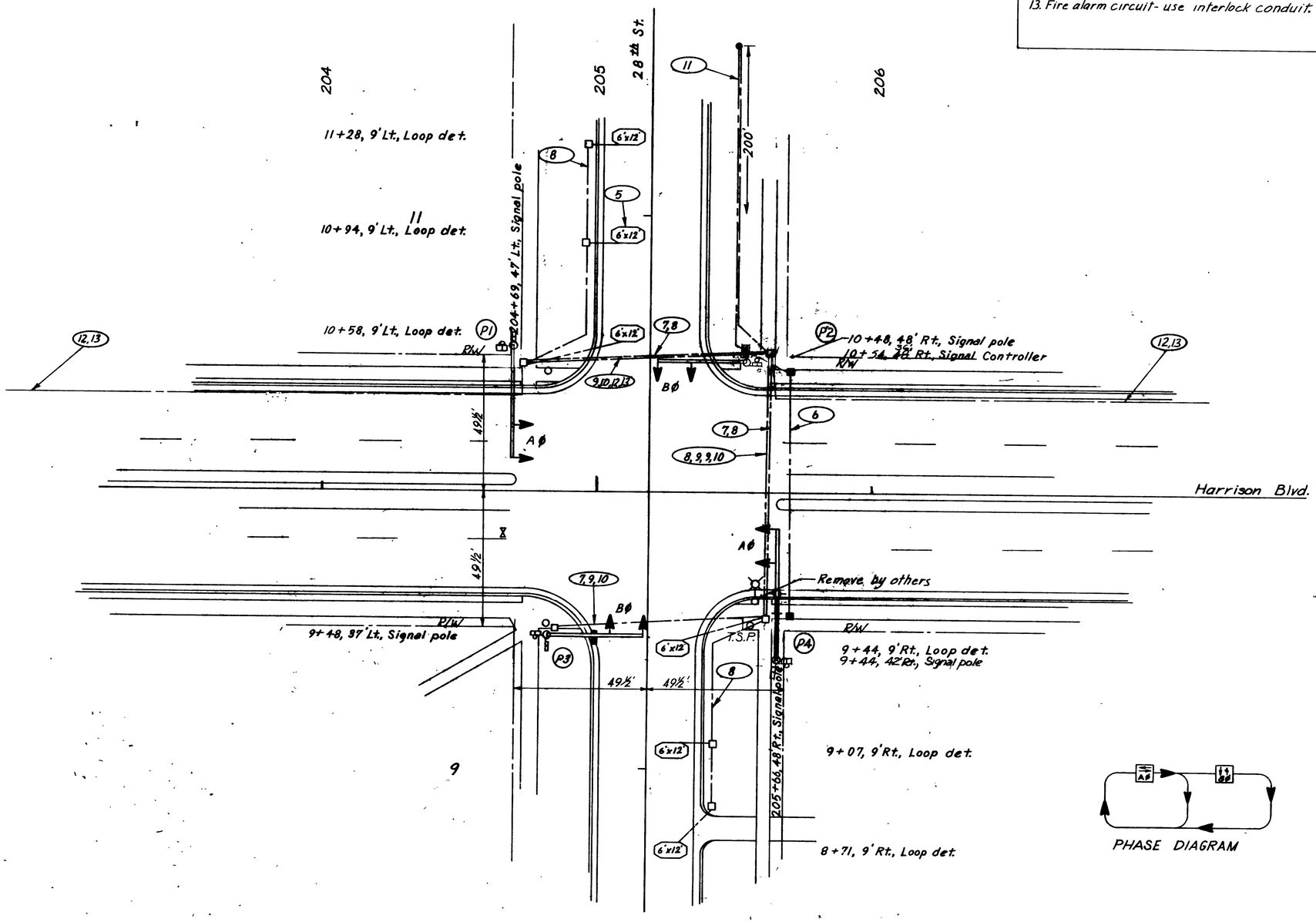
- (P1) Pole identification
- Mast arm signal pole
- Mast arm signal pole W/ light pole extension & insulator
- 12"-1 Way-3 Section signal head
- Traffic signal control cabinet
- Type III Junction box
- Type IV Junction box
- Type V Junction box
- Pedestrian signal with push button
- Power Source
- Conduit run
- P.V.C Loop Lead-in

Pole Schedule

Pole Ident.	Mast arm Length
P1	~~35'~~ 40'
P2	~~45'~~ 35'
P3	~~45'~~ 35'
P4	~~35'~~ 40'

TRAFFIC SIGNALS	
Harrison Blvd. & 26 th St.	
SITUATION PLAN	
K.E. Herzog	HHS-0005(2)
R.B. Curtis	Ogden
K.E. Herzog	Weber
10-72	Keith E. Herzog
10 72	Pete Hatten ENGINEER
5-61	16

1 K.E.H. 12/13/74 R/W
NO.



PHASE DIAGRAM

Notes: (cont.)

13. Fire alarm circuit- use interlock conduit.

1. Power Co. meter shall be located on power pole 7' above ground.
2. All circuits shall be placed in same trench where possible, but in separate conduit.
3. All pedestrian head assemblies shall be type VI as shown on "Pedestrian Signal Assembly Detail" sheet.
4. All signal head assemblies shall be type I as shown on "Signal Mounting Detail" sheet unless otherwise noted.
5. Detector loops – use 1 conductor No. 14 cable 6'x6' loops use 3 turns, all other loops use 2 turns.
6. Multiple street lighting circuit – use single conductor No. 6 in 1" galvanized rigid steel conduit.
7. Push button circuit – use 3 conductor No. 14 cable in same conduit as the detector circuit.
8. Detector circuits – use 2 conductor No. 14 Shielded cable in 1" galvanized rigid steel conduit. When more than 1 circuit is called for install circuits in same conduit.
9. Signal circuit – use 4 conductor No. 14 cable in 2" galvanized rigid steel conduit. When more than 1 circuit is called for install circuits in same conduit.
10. Pedestrian circuit – use 7 conductor No. 14 cable in same conduit as signal circuit. When signal circuit conduit is not available use 2" galvanized rigid steel conduit.
11. Power sources – use single conductor No. 6 & No. 8 wire in 1" galvanized rigid steel conduit.
12. Interlock circuit – use 7 conductor No. 14 cable in 1½" galvanized rigid steel conduit. Use signal circuit conduit when available.

LEGEND:

- (P1) Pole identification
- Mast arm signal pole
- Mast arm signal pole W/ light pole extension and insulator
- 12"-1 Way - 3 Section signal head
- Traffic signal control cabinet
- Type III Junction box
- Type IV Junction box
- Pedestrian signal with push button
- Power source
- ---- Conduit run
- Type V Junction box
- ----P.V.C Loop Lead-in

Pole Schedule

Pole Ident.	Mast arm Length
P1	~~35'~~ 40'
P2	~~45'~~ 35'
P3	35'
P4	~~35'~~ 40'

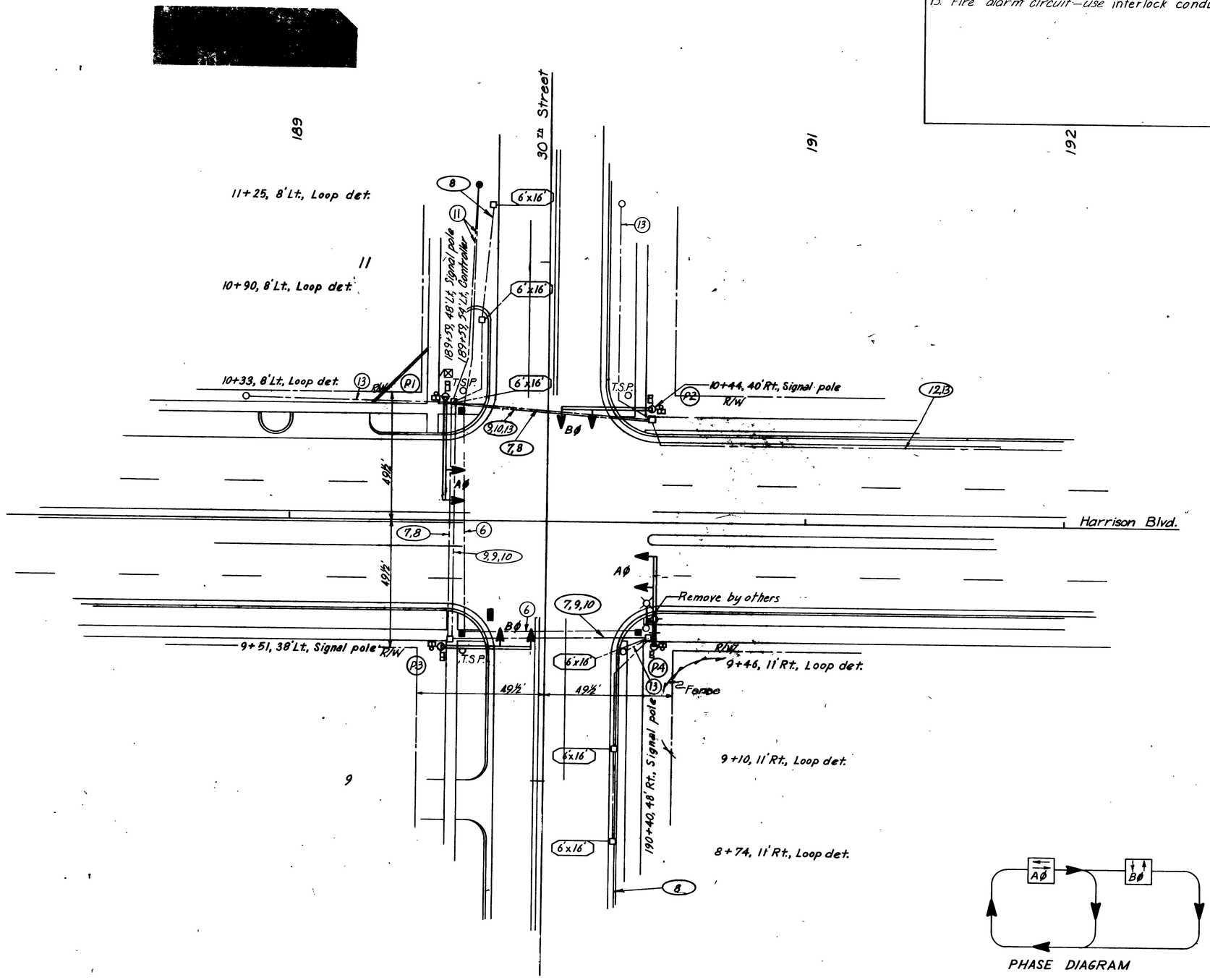
△ K.F.H. 12/5/74. R/W

STATE DEPARTMENT OF HIGHWAYS
TRAFFIC PLAN

TRAFFIC SIGNALS
Harrison Blvd. & 28th St.
SITUATION PLAN

K.F. Herzog R.B. Curtis	HES-0005(2) Ogden Weber
K.F. Herzog 10-72	
10-72	

DWG. NO. S-61 SHEET 17



Notes: (cont.)

13. Fire alarm circuit—use interlock conduit

Notes:

1. Power Co. meter shall be located on power pole 7' above ground.
2. All circuits shall be placed in same trench where possible, but in separate conduit.
3. All pedestrian head assemblies shall be type VI as shown on "Pedestrian Signal Assembly Detail" sheet.
4. All signal head assemblies shall be type I as shown on "Signal Mounting Detail" sheet unless otherwise noted.
5. Detector loops—use 1 conductor No. 14 cable, 6'x6' loops use 3 turns, all other loops use 2 turns.
6. Multiple street lighting circuit—use single conductor No. 6 in 1" galvanized rigid steel conduit.
7. Push button circuit—use 3 conductor No. 14 cable in same conduit as the detector circuit.
8. Detector circuits—use 2 conductor No. 14 shielded cable in 1" galvanized rigid steel conduit. When more than 1 circuit is called for install circuits in the same conduit.
9. Signal circuit—use 4 conductor No. 14 cable in 2" galvanized rigid steel conduit. When more than 1 circuit is called for install circuits in same conduit.
10. Pedestrian circuit—use 7 conductor No. 14 cable in same conduit as signal circuit. When signal circuit conduit is not available use 2" galvanized rigid steel conduit.
11. Power sources—use single conductor No. 6 & No. 8 wire in 1" gal'N. rigid steel conduit. See Summary & Schedule sheet
12. Interlock circuit—use 7 conductor No. 14 cable in 1-1/2" galvanized rigid steel conduit. Use signal circuit conduit when available.

LEGEND:

- (P1) Pole identification
- Mast arm signal pole
- Mast arm signal pole W/light pole extension and insulator
- 12"-1 Way-3 section signal head
- Traffic signal control cabinet
- Type III Junction box
- Type IV Junction box
- Pedestrian signal with push button
- Power source
- Conduit run
- Type V Junction box
- P.V.C. Loop Lead-in

PHASE DIAGRAM

Pole Schedule

Pole Ident.	Mast arm length
P1	40'
P2	35'
P3	35'
P4	35'

TRAFFIC SIGNALS
Harrison Blvd & 30th St.
SITUATION PLAN

K.F. Herzog — R.B. Curtis — HHS-0005(2) — Ogden — Weber
K.F. Herzog 10-72 — Keith F. Herzog
10-72 — Pete Dorton

△ K.F.H. 12/3/74. R/W

S-61

18

NO	BY	DATE	TYPE	REMARKS

REVISIONS

UTAH STATE DEPARTMENT OF HIGHWAYS
DIST. ONE - OGDEN, UTAH
ROADWAY DESIGN

Traffic Signals
Interlock System
Situation Plan

DESIGN B.H.S. 8/73	CHECK 10-74 PH	REVIEW
DRAWN M.D.H. 8/73	CHECK 10-74 PH	DESIGN 11-20-74
QUANT. KFZ 10-74	CHECK 10-74	R/W
APPROVAL RECOMM. 10-74 DATE		WEBER COUNTY
APPROVED 10-74 DATE	ENGR.	
PROJECT NUMBER HHS-0005(2)	S-61	SHEET NO. 19

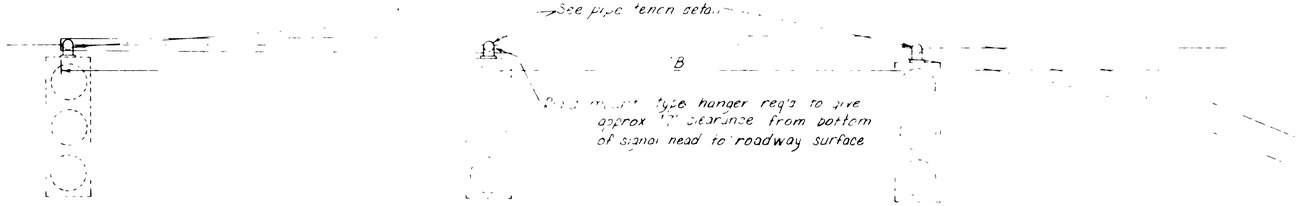
POLE			SIGNAL ARM				
Top O.D.	Bottom O.D.	Min Wall Thickness	B	End O.D.	Base O.D.	Min Wall Thickness	E
4 23/32	12 1/8	250	25'-0	3 7/8	7 5/16	125	1 1/2 IP
			30'-0"	3 7/8	8"	188	
			35'-0	3 7/8	8 1/16	250	
			40'-0"	3 7/8	8 3/8	250	
9 23/32	12 1/8	250	45'-0"	3 7/8	10 1/16	250	1 1/2 IP

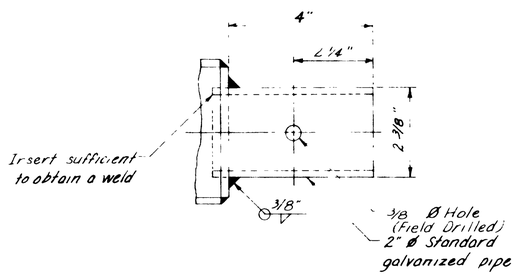
General Notes

1 FOUNDATION — All foundations shall be cast in place against undisturbed earth Welding of reinforcing steel prohibited

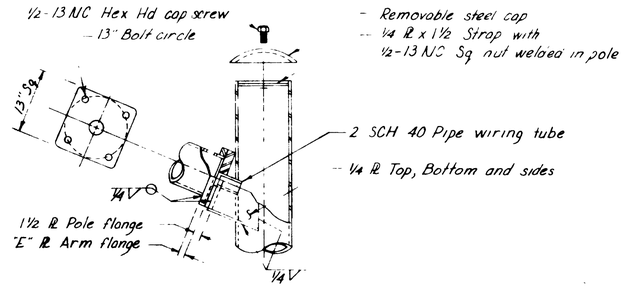
2 ANCHOR Bolts — Anchor bolt shall be 1 3/4" Ø x 5'-0" minimum with top 6" threaded and shall conform to the requirements of ASTM A 307 with regular square head or regular square nut tack welded and heavy hex nuts. Exposed portions of anchor bolts shall be cadmium plated in accordance with ASTM A165 Type NS.
Anchor bolts shall not be welded to reinforcing steel.

3 SHOP DRAWINGS — Shop drawings are required in accordance with section 510 04 of the State of Utah "Standard Specifications for Road and Bridge Construction", 1970

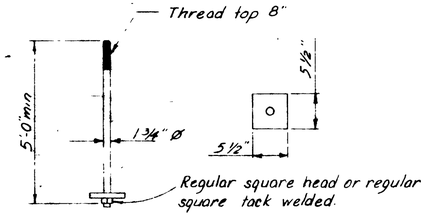




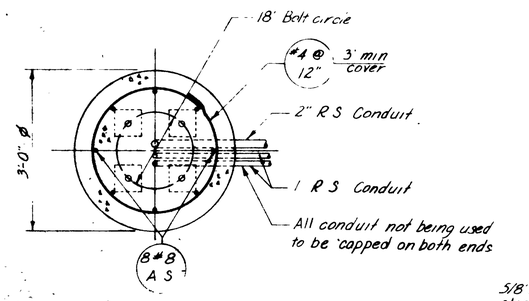
Pipe Tenon Detail



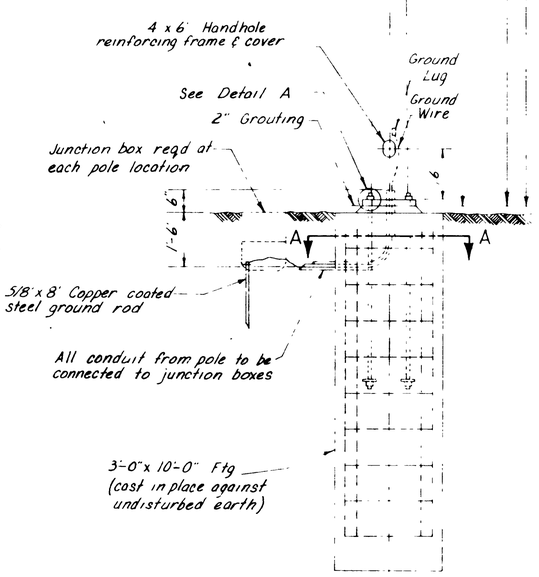
Signal Arm Connection

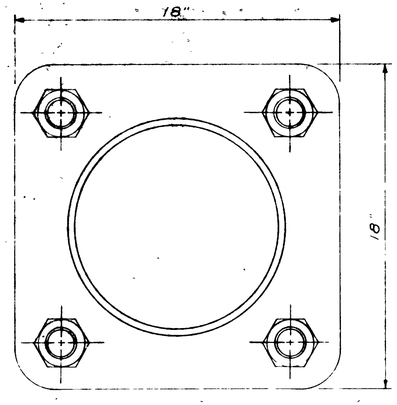


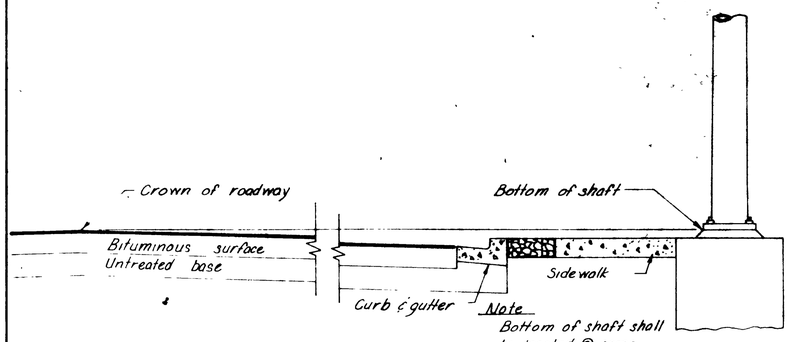
Anchor Bolt Detail

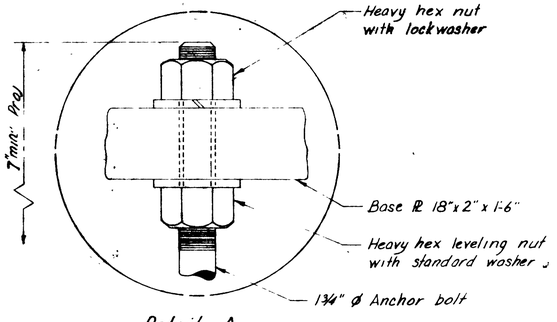


Section A-A









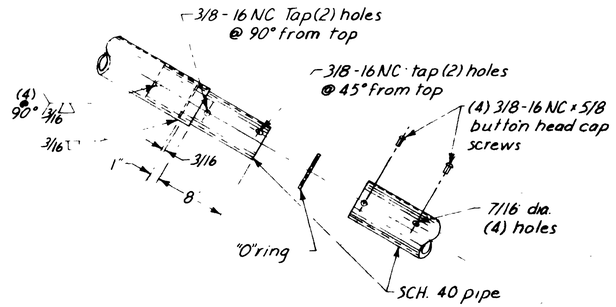
Detail A

NO	BY	DATE	REMARKS
			REVISIONS

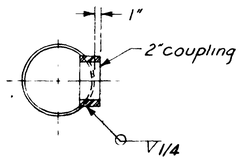
UTAH STATE DEPARTMENT OF HIGHWAYS
SALT LAKE CITY UTAH
TRAFFIC DESIGN

TRAFFIC SIGNALS
OGDEN
MAST ARM SIGNAL POLE

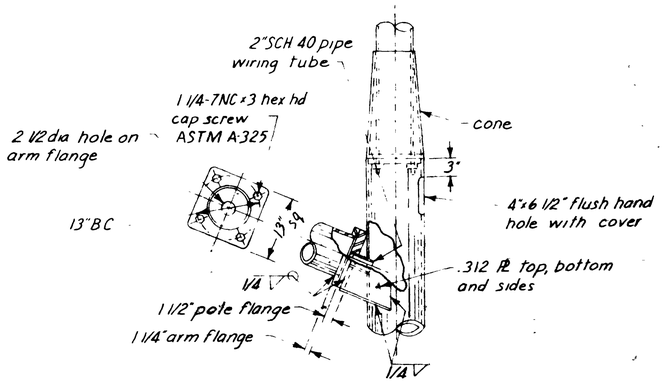
DESIGNED K F Herzog	CHECK 10-74 PH	REVIEW	
DRAWN K F Herzog	CHECK 10-74 PH	DESIGN	11-20-74
QUANT K F Herzog	CHECK 10-74 PH	R/S	
APPROVAL RECOMM 10-74 DATE	GROUP LEADER		
APPROVED 10-74 DATE	TRAFFIC DESIGN ENGINEER	Weber COUNTY	
PROJECT NUMBER HHS-0005(2)	S-61 DWG NO	20 OF	



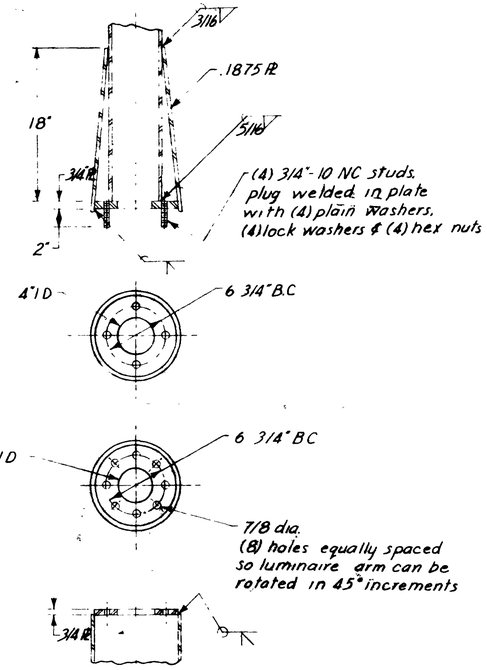
LUMINAIRE ARM CONNECTION



COUPLING DETAIL

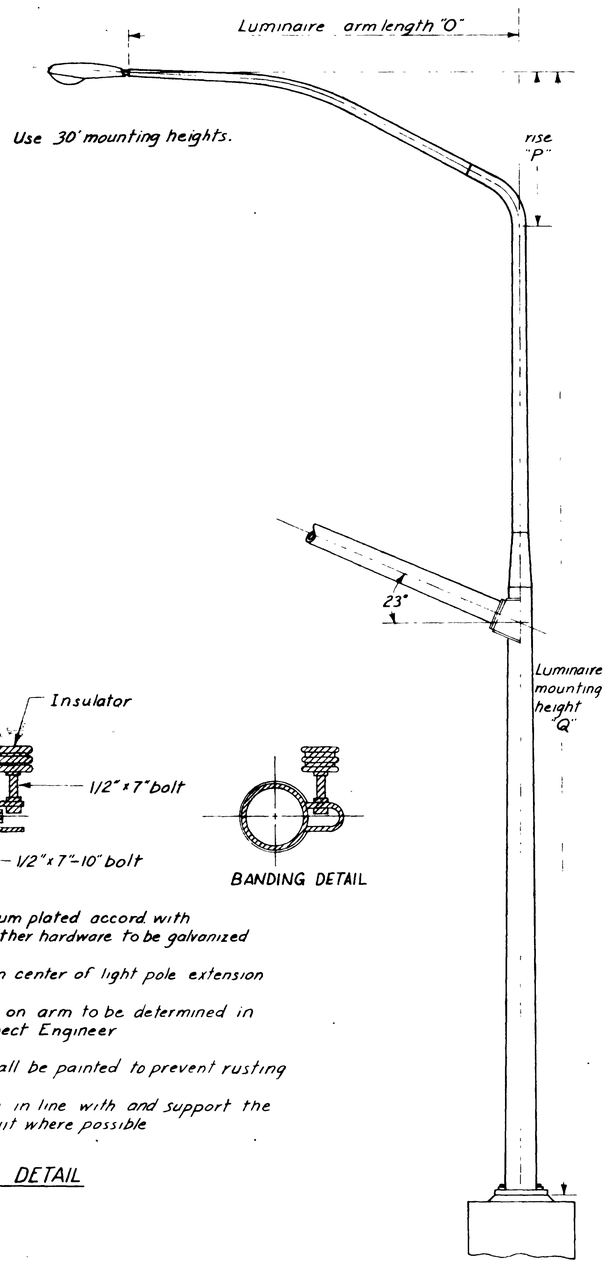


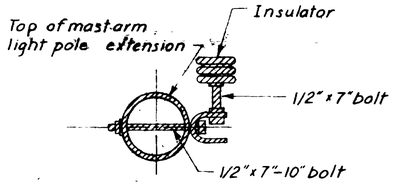
SIGNAL ARM CONNECTION



CONE DETAIL

LUMINAIRE ARM DATA						
"O"	Top OD x Base OD x Thickness	"P"	"Q"			
			30'-0" Nominal	35'-0" Nominal	40'-0" Nominal	45'-0" Nominal
6'-0"	2 3/8 x 4 x .125	3'-0"	28'-0"	33'-0"	38'-0"	43'-0"
8'-0"	2 3/8 x 4 x .125	3'-6"	28'-6"	33'-6"	38'-6"	43'-6"
10'-0"	2 3/8 x 4 x .125	4'-0"	29'-0"	34'-0"	39'-0"	44'-0"





BANDING DETAIL

Notes:
1. All bolts to be cadmium plated accord with ASTM A165 NS, all other hardware to be galvanized
2. Bolt shall be located in center of light pole extension
3. Location of insulator on arm to be determined in the field by the Project Engineer
4. Insulator bolt hole shall be painted to prevent rusting
5. Insulator shall remain in line with and support the existing lighting circuit where possible

INSULATOR DETAIL

NOTES:

Pole Specifications.

Material

Base plate and flanges
ASTM A-283 GR D steel

Shaft
.250 ASTM A-283 GR D steel
.125 & .1875 ASTM A-570 GR D steel

Pipe
ASTM A-53

Welds
All butt welds to be ground flush with base metal

Longitudinal
Butt weld by the submerged arc process

Circumferential
Butt weld with permanent back-up ring

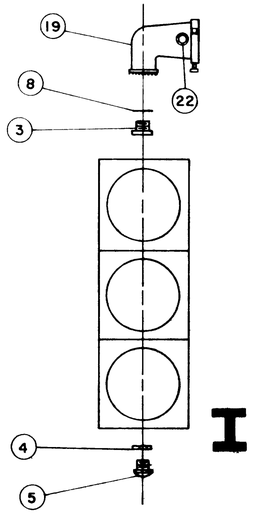
Finish
Hot dip galvanized per ASTM A-123

NO	BY	REMARKS

UTAH STATE DEPARTMENT OF HIGHWAYS
SALT LAKE CITY, UTAH
TRAFFIC DESIGN

TRAFFIC SIGNALS
OGDEN
LIGHT POLE EXTENSION DETAIL

DESIGNED K F Herzog	CHECK 10-74 PH	REVIEW
DRAWN K F Herzog	CHECK 10-74 PH	DESIGN ENGR 10-20-74
QUANT K F Herzog	CHECK 10-74 PH	R/W
APPROVAL RECOMM 10-74	GROUP LEADER	
APPROVED 10-74	TRAFFIC DESIGN ENGINEER	Weber COUNTY
PROJECT NUMBER HES 0005(2)	S-61 DWG NO.	21 OF



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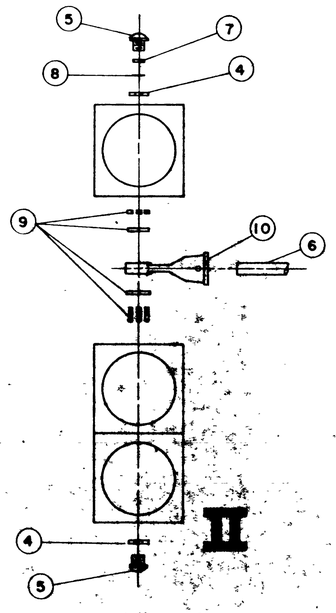

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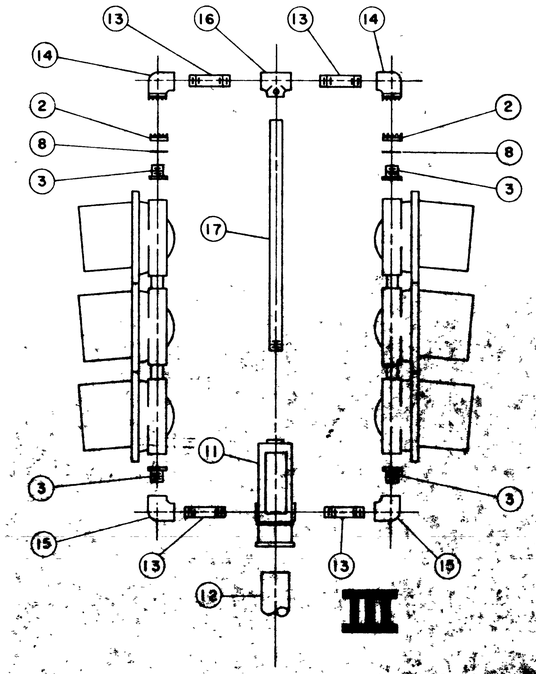

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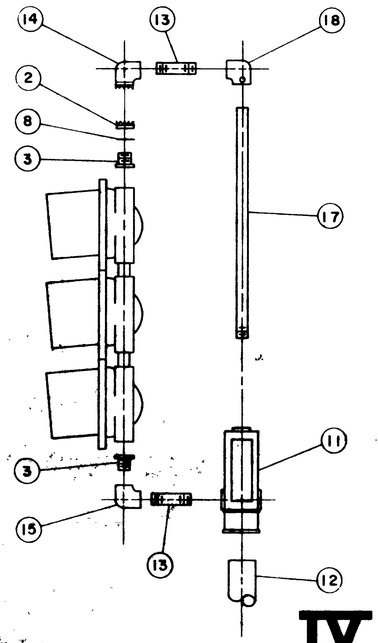

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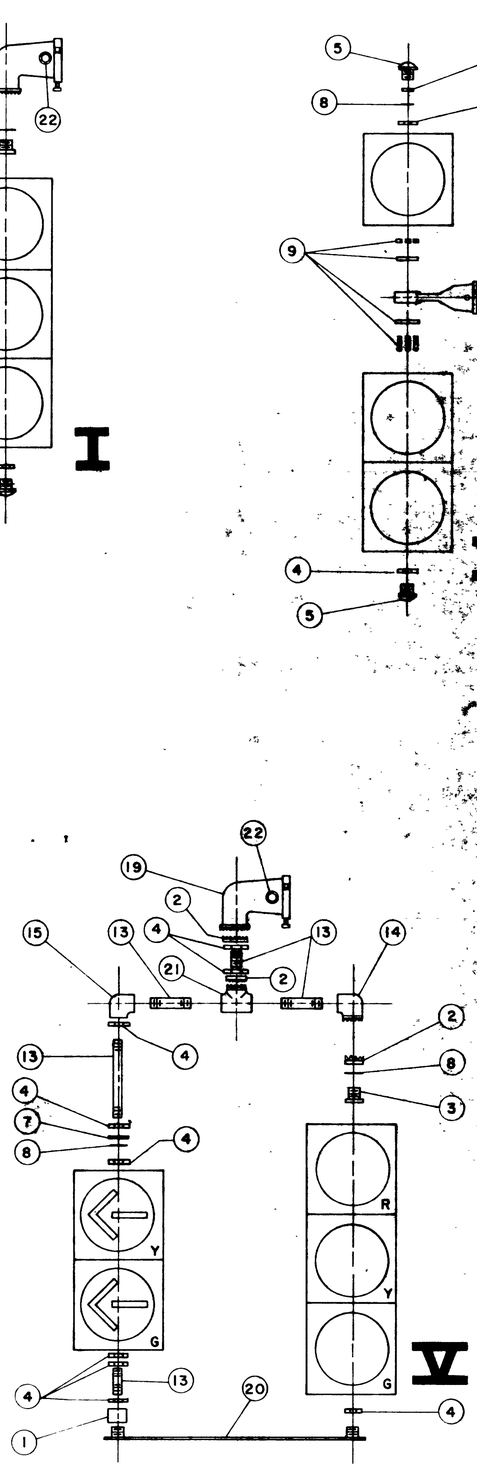

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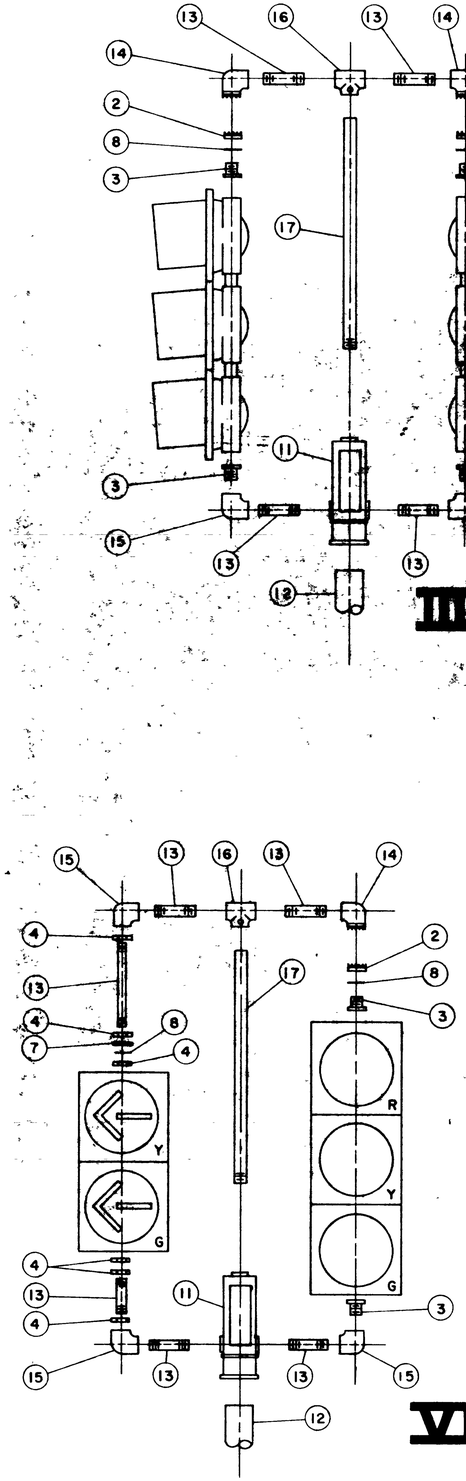

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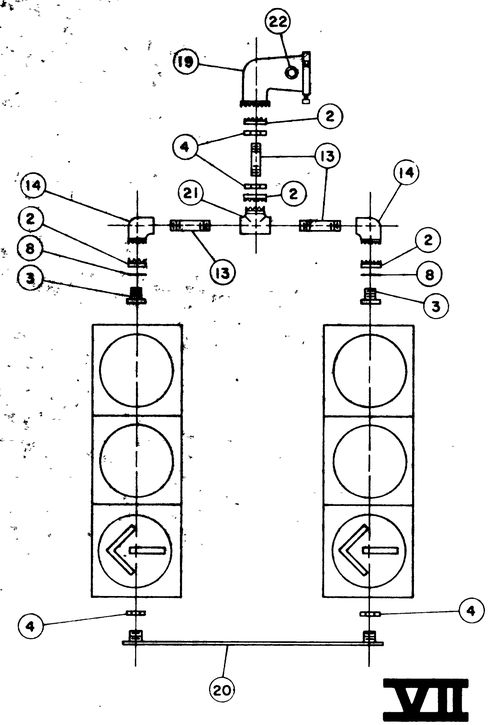


VII

LEGEND:

1. 1-1/2" SLEEVE.
2. LOCK RING.
3. 1-1/2" x 1-3/4" LOCK NIPPLE.
4. CONDUIT LOCK NUT.
5. ORNAMENTAL CAP.
6. PIPE TENON.
7. FLAT WASHER.
8. NEOPRENE WASHER.
9. ATTACHING WASHERS WITH 3-1/4" 20 UNC x 3-1/2" CARRIAGE BOLT WITH NUT.
10. BRONZE ELEVATOR PLUMBIZER.
11. POLE TOP MOUNTED TERMINAL COMPARTMENT.
12. PIPE SHAFT.
13. 1-1/2" PIPE, THRD. BOTH ENDS.
14. 90° ELBOW WITH LOCKING DEVICE.
15. 90° ELBOW.
16. TEE, DRILL & TAP FOR SET SCREW.
17. 1-1/2" PIPE, THRD. ONE END ONLY.
18. 90° ELBOW, DRILL & TAP FOR SET SCREW.
19. RIGID MAST ARM HANGER WITH 1-1/2" I.D. THREADED AND 2-1/8" I.D. FOR MAST ARM TENDON.
20. TIE BRACE - 2 WAY.
21. 1-1/2" SERRATED TEE.
22. 5/16" STAINLESS STEEL OR CADMIUM PLATED BOLT WITH DOUBLE HEX NUTS.

NOTES:

TERMINAL BLOCK TO BE LOCATED IN TOP SECTION.

VISORS FOR TRAFFIC SIGNALS SHALL BE THE TUNNEL TYPE, 12"x 12" AND GREEN IN COLOR. REFLECTOR FOR TRAFFIC SIGNALS SHALL BE MADE OF ALZAK.

SHOP DRAWINGS ARE REQUIRED IN ACCORDANCE WITH SECTION 510.04 OF THE STATE OF UTAH "SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" 1970 EDITION.

OTHER HARDWARE ACCEPTABLE SUBJECT TO APPROVAL OF STATE ENGINEER.

NO.	BY	REMARKS
		REVISIONS

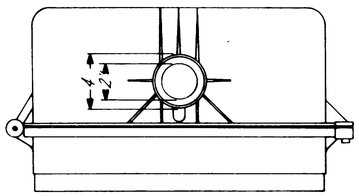
UTAH STATE DEPARTMENT OF HIGHWAYS
SALT LAKE CITY UTAH
TRAFFIC DESIGN

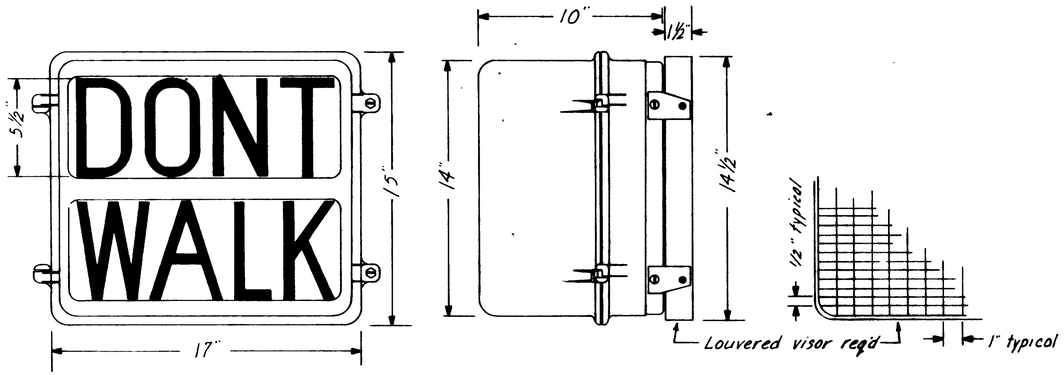
TRAFFIC SIGNALS

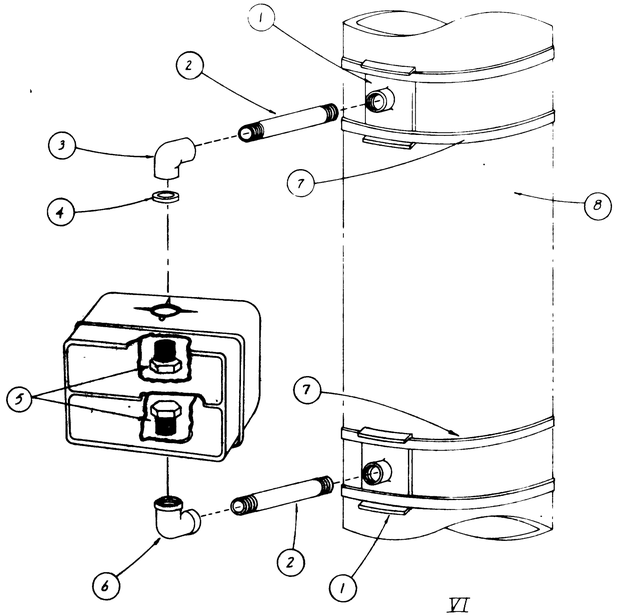
OGDEN

SIGNAL HEAD DETAILS

DESIGNED K F Herzog	CHECK 10-74 PH	REVIEW
DRAWN K F Herzog	CHECK 10-74 PH	DESIGN 11-20-74
QUANT K F Herzog	CHECK 10-74 PH	R/W
APPROVAL RECOMM 10-74 DATE	Keith F Herzog TRAFFIC DESIGN ENGINEER	
APPROVED 10-74 DATE	Lite Halter TRAFFIC DESIGN ENGINEER	Weber COUNTY
PROJECT NUMBER HHS-0005(2)	5-61 DWG NO	22 OF ___







Notes:

1. SHAFT (8'-0)
   The shaft shall be fabricated from standard black steel pipe ASTM A53 grade B
   Base plate shall conform to ASTM A36
   The shaft assembly shall be hot-dip galvanized after fabrication in accordance with ASTM A123

2. ANCHOR BOLTS
   Anchor bolts shall be 1" Ø x 2'5" minimum with top 6" threaded and shall meet ASTM A307 with regular square head or regular square nut tack welded and heavy hex nuts Exposed portions of anchor bolts shall be cadmium plated in accordance with ASTM A165 type NS Anchor bolts shall not be welded to reinforcing steel

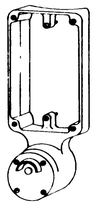
3. FOUNDATION
   Foundation shall be class A concrete (AE) cast in place in augered hole
   Pedestrian signal assembly type VI shall be mounted a minimum of 8' and maximum of 10' from ground surface

4. COLOR
   Color of pedestrian signals shall be Lunar White and Portland orange.
5. SHOP DRAWINGS
   Shop drawings are required in accordance with section 510.04 of the State of Utah "Standard Specifications for Road and Bridge Construction", 1970 Edition.

6. POLE PLATE
   Pole plates shall be ordered to fit round mast arm signal pole and shall be strapped to pole, not bolted
7. TYPE Pedestrian signal heads shall be modular or grid type which shall be approved by the State Highway Eng.

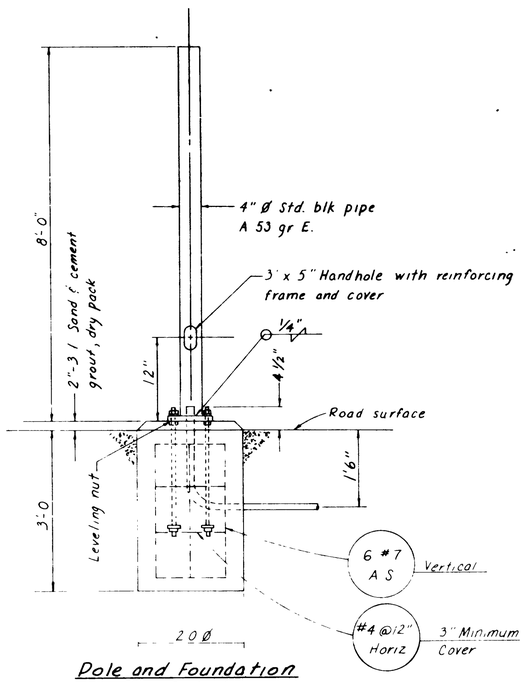
LEGEND:

1. Round pole plate.
2. 1½" x 12" pipe, thd both ends
3. 1½ plain elbow
4. 1½" Neoprene washer
5. 1½" Lock nipple
6. 1½" 90° Elbow with locking device
7. ¾" stainless steel band, 2 wraps
8. Pole shaft (Mast arm)
9. 1½" tee with set screw
10. 1½" pipe, thd on one end only
11. 4½" inside diameter pole top mounted terminal comp
12. 4½" inside diameter adapter
13. Pipe shaft (8'-0)
14. 1½" ornamental cap
15. 1½" lock nut
16. 1½" pipe, thd both ends, cut to size

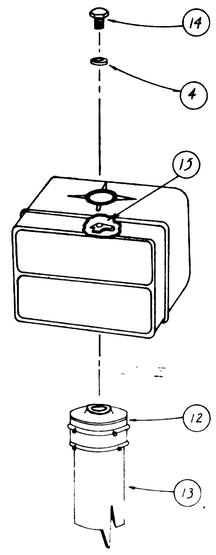


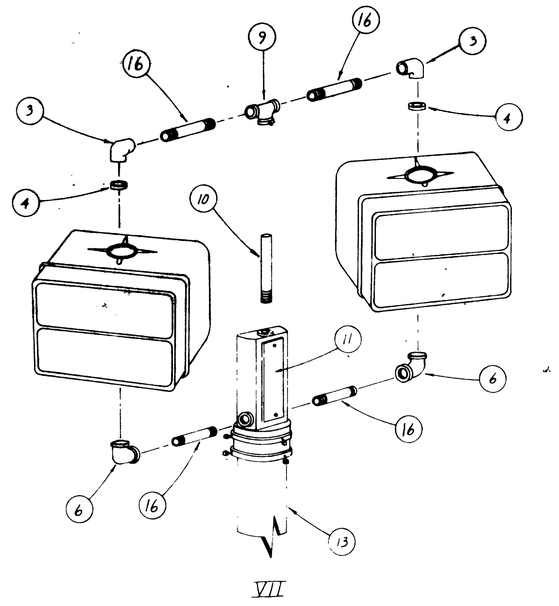
5"X 7"

Push Button Assembly Detail



Pole and Foundation Detail



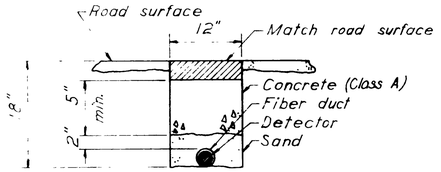


NO	BY	DATE	REMARKS
			REVISIONS

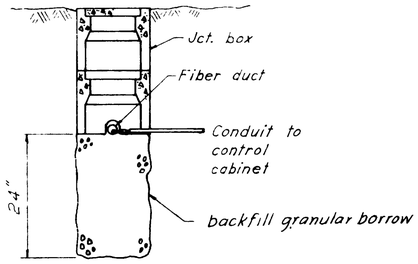
UTAH STATE DEPARTMENT OF HIGHWAYS
SALT LAKE CITY, UTAH
TRAFFIC DESIGN

Traffic Signals
OGDEN
Pedestrian Signal Assembly Detail

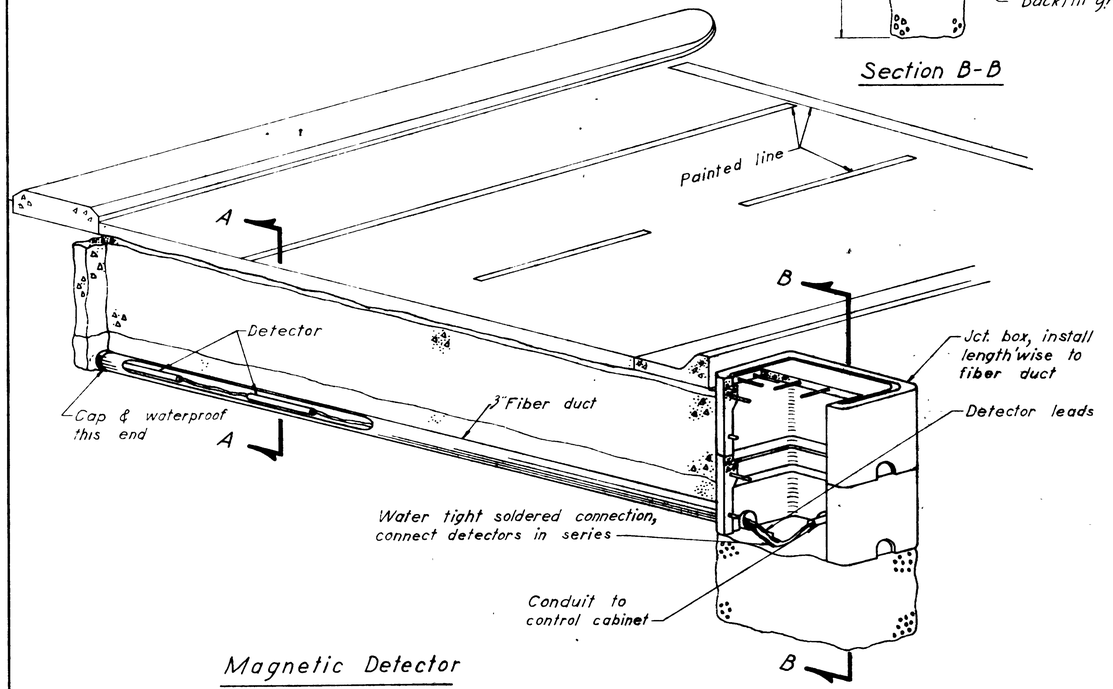
DESIGNED K F Herzog	CHECK 10-74 PH	REVIEW
DRAWN K F Herzog	CHECK 10-74 PH	DESIGN 11-20-74
QUANT K F Herzog	CHECK 10-74 PH	R/W
APPROVAL RECOMM 10-74 DATE	Kurt Zaugg GROUP LEADER	
APPROVED 10-74 DATE	Pete Nielsen TRAFFIC DESIGN ENGINEER	Weber COUNTY
PROJECT NUMBER HHS-0005(2)	S-61 DWG NO	23 OF



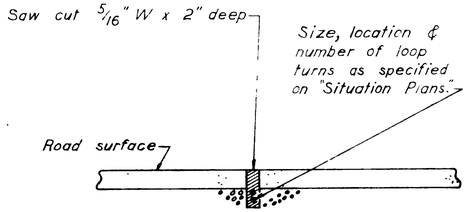
Section A-A



Section B-B



Magnetic Detector



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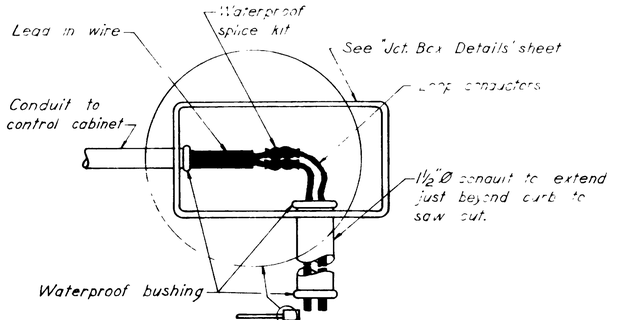
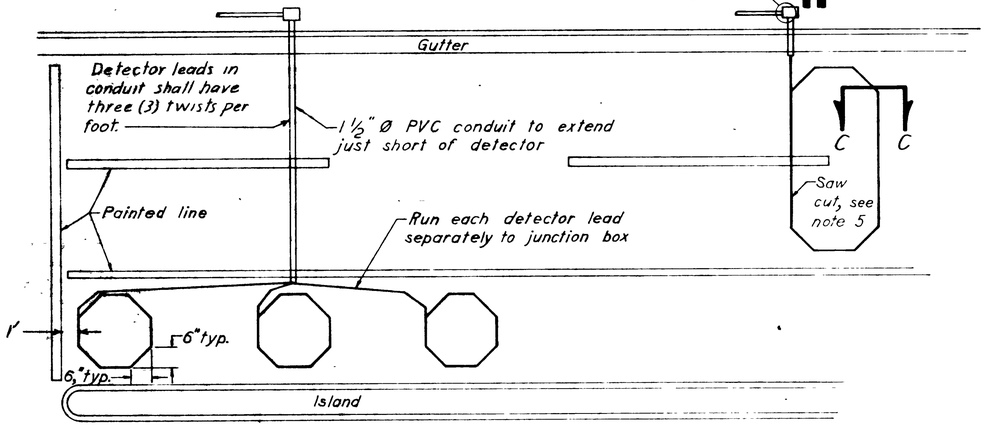




Loop Detector

Notes:

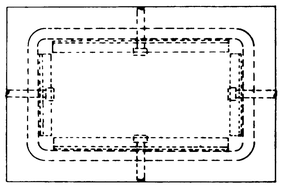
1. Traffic shall not be blocked during peak hours of 7:00 A.M. to 9:00 A.M. & 4:00 P.M. to 6:00 P.M.
2. Material removed to place detector must be replaced by specified material within 8 hours.
3. Contractor must provide traffic erosion protection for new surface until hardened.
4. All lanes must be reopened as soon as practical.
5. Place all conductors & conduit in saw cut. Cable or wire must be placed at bottom of dry slot. Epoxy seal not containing acetate solvent shall be used to close saw cut.

NO	BY	REMARKS
		REVISIONS

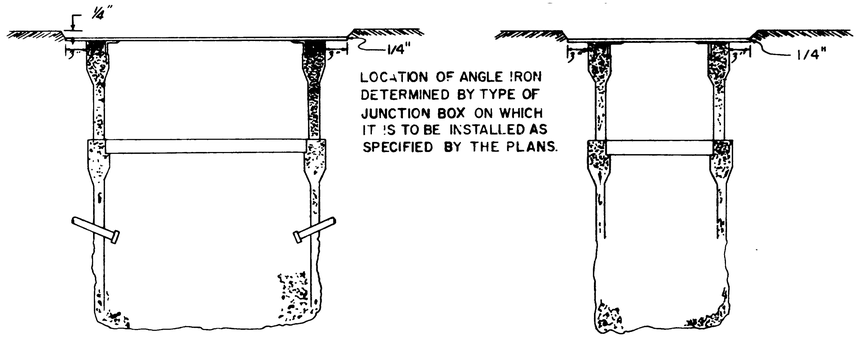
UTAH STATE DEPARTMENT OF HIGHWAYS
TRAFFIC DESIGN

TRAFFIC SIGNALS
OGDEN
DETECTOR DETAIL

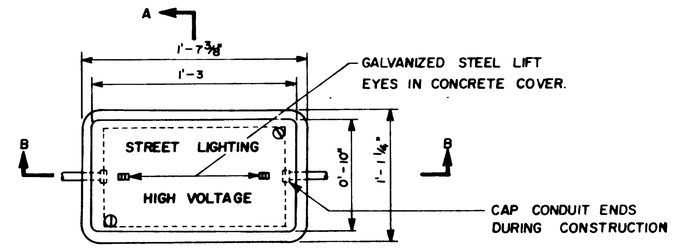
DESIGNED K F Herzog	CHECK 10-74 PH	REVIEW	
DRAWN K F Herzog	CHECK PH 10-74	DESIGN ENGINEER	DATE 10/1/2074
QUANT. K F Herzog	CHECK 10-74 PH		
APPROVED	10-74		
DATE	10-74	TRAFFIC & SAFETY ENGINEER	Weber COUNTY
PROJECT NUMBER	HHS-0005(2)	S-61	24 OF

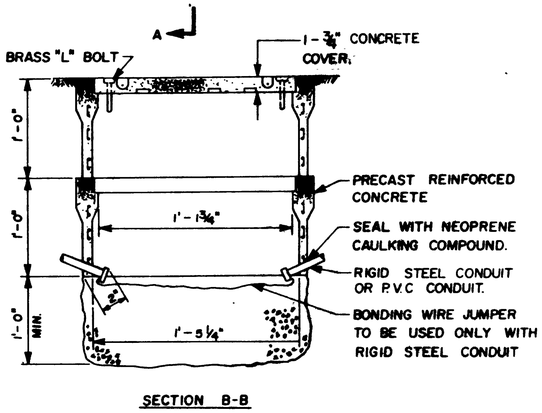


NOTE:
ANGLE IRON SHALL BE 1 1/2"x 1 1/2"x 1/4". WELDED TO THE STEEL COVER.

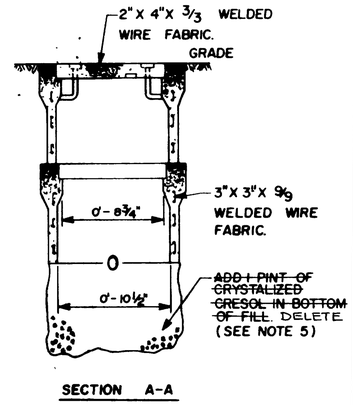


STEEL COVER DETAIL



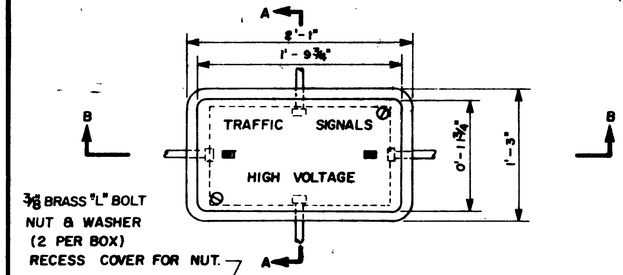


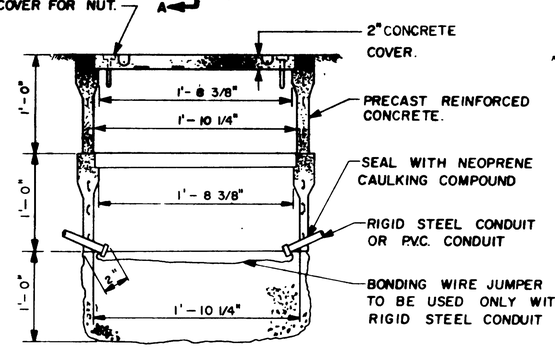
SECTION B-B



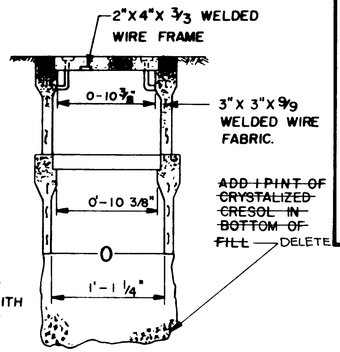
SECTION A-A

TYPE III





SECTION B-I



SECTION A-A

TYPE IV

GENERAL NOTE:

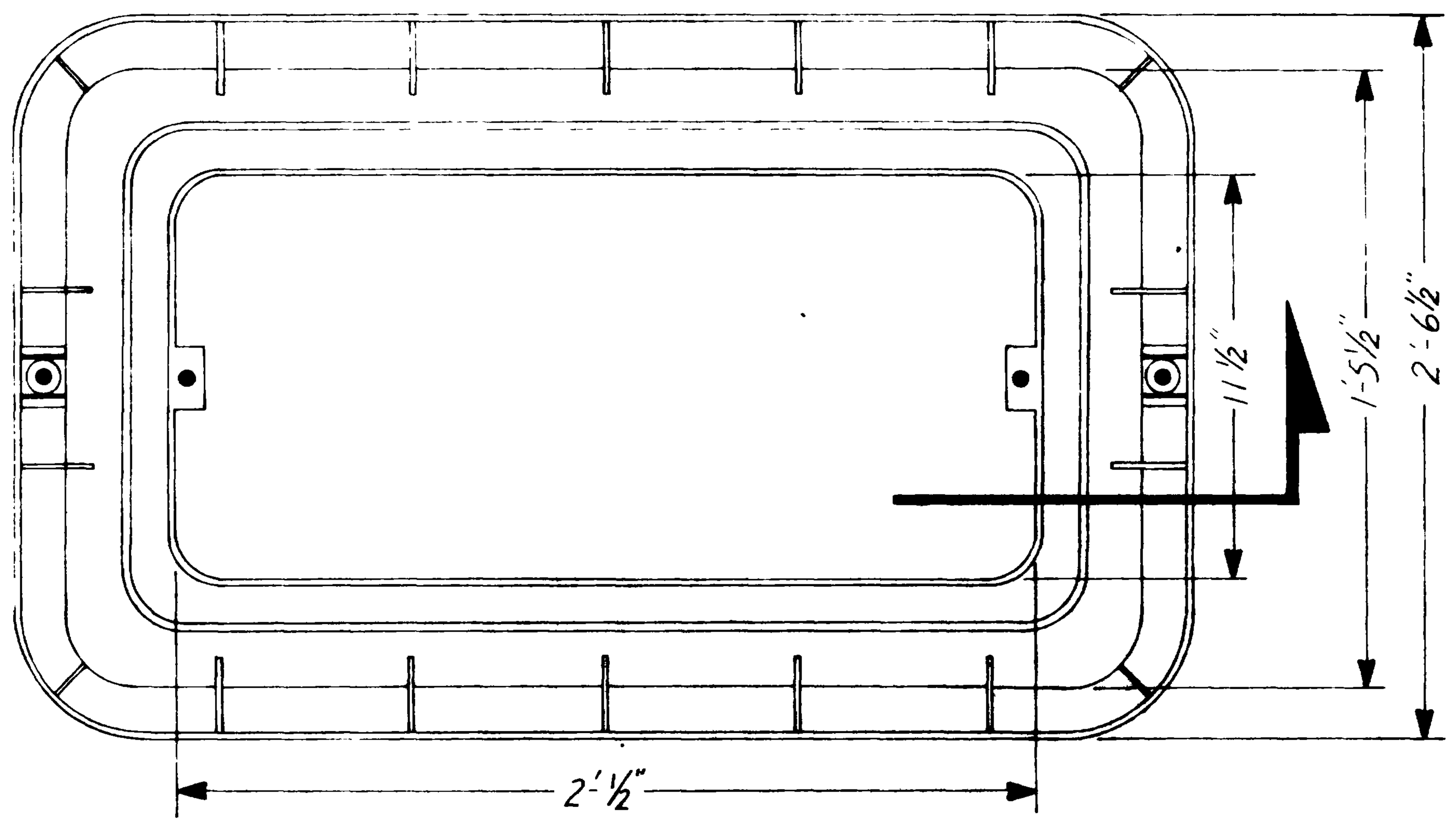
1. USE STEEL COVER AS SHOWN WHEN BOX IS TO BE INSTALLED WHERE SUBJECT TO TRAFFIC LOADS STEEL COVER SHALL HAVE EMBOSSED NON-SKID PATTERN WHEN BOX IS PLACED IN PAVED OR SIDEWALK AREA.
2. CONDUIT HOLES IN JUNCTION BOX SHALL BE CAST AT TIME OF PRECASTING OR DRILLED AT TIME OF PLACEMENT WITH NO STRUCTURAL DAMAGE TO BOX
3. TOP OF JUNCTION BOXES SHALL BE FLUSH WITH SURROUNDING GRADE OR TOP OF TOPOGRAPHY & SHALL BE PLACED FOR PROTECTION AS DIRECTED BY ENGINEER.
4. BONDING JUMPER REQUIRED WITH RIGID STEEL CONDUIT.
5. USE GRANULAR BACKFILL BORROW FOR JUNCTION BASE.
6. PROVIDE SEALING COMPOUND ON HIGH END OF EACH CONDUIT RUN

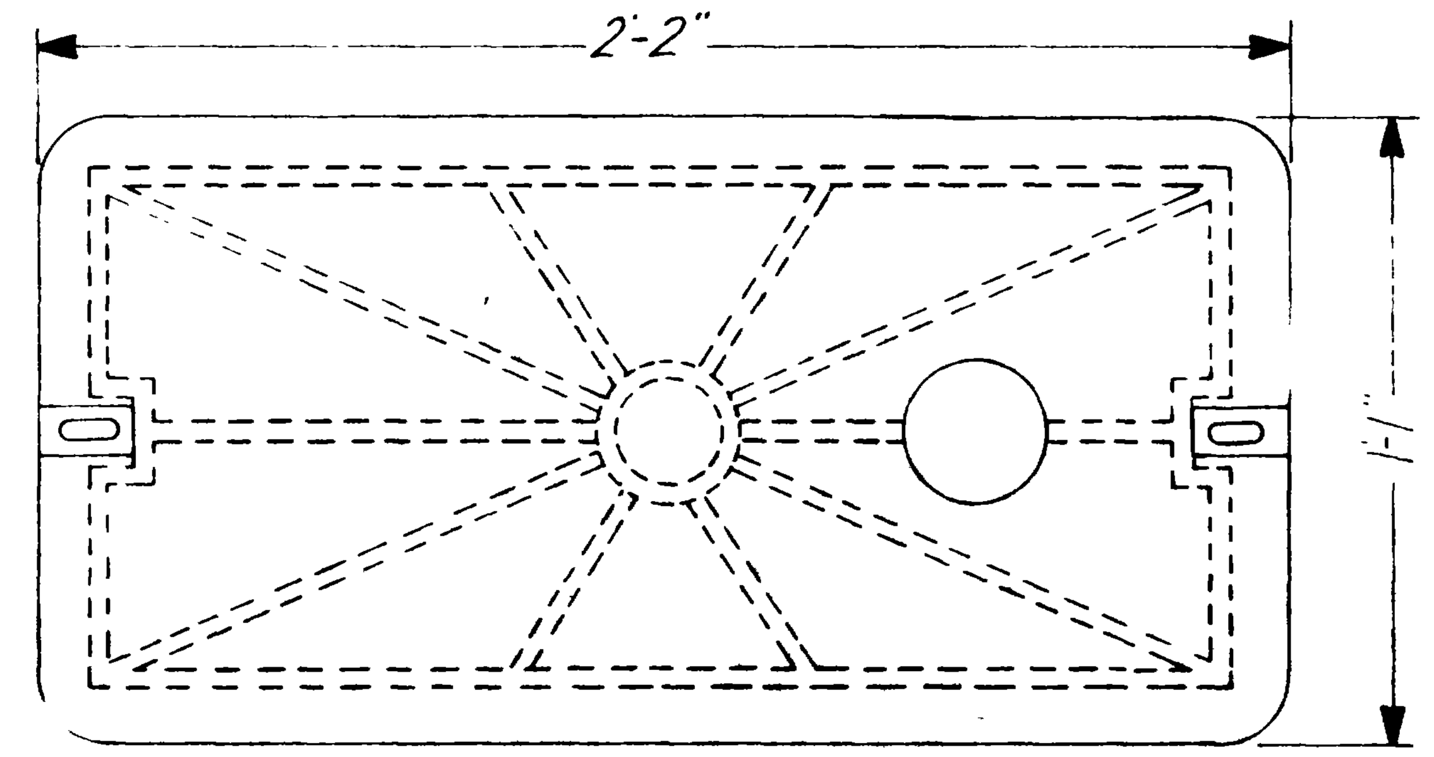
NO	BY	DATE	REMARKS
			REVISIONS

UTAH STATE DEPARTMENT OF HIGHWAYS
SALT LAKE CITY UTAH
TRAFFIC DESIGN

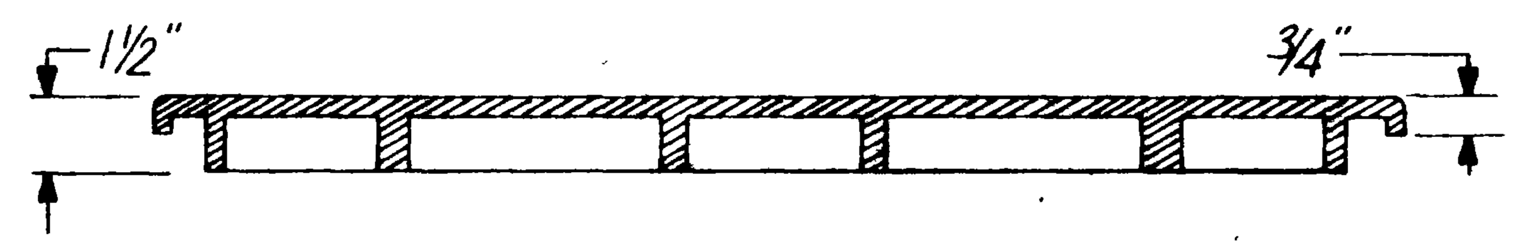
TRAFFIC SIGNALS
OGDEN
JUNCTION BOX DETAIL

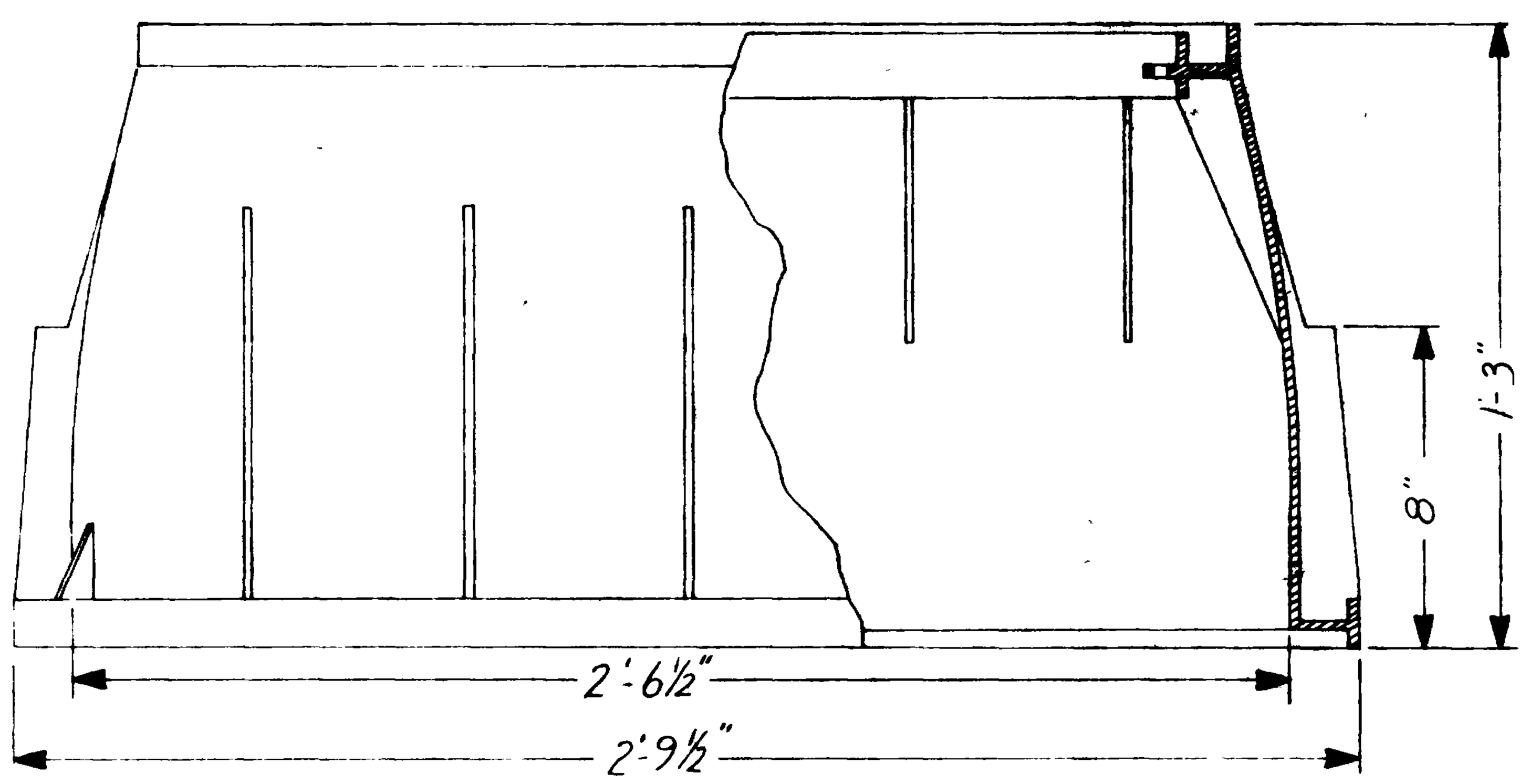
DESIGNED K.F. Herzog	CHECK 10-74 PH	REVIEW
DRAWN K.F. Herzog	CHECK 10-74 PH	DESIGN ENGR. 10/21/74
QUANT K.F. Herzog	CHECK 10-74 PH	R.E.
APPROVAL RECOMM 10-74 Keith F. Herzog TRAFF. DESIGN ENGR.		
APPROVED 10-74 Lile Dalton TRAFF. DESIGN ENGINEER		Weber COUNTY
PROJECT NUMBER HHS-0005(2)	S-61 SHEET NO.	25 TOTAL SHEETS



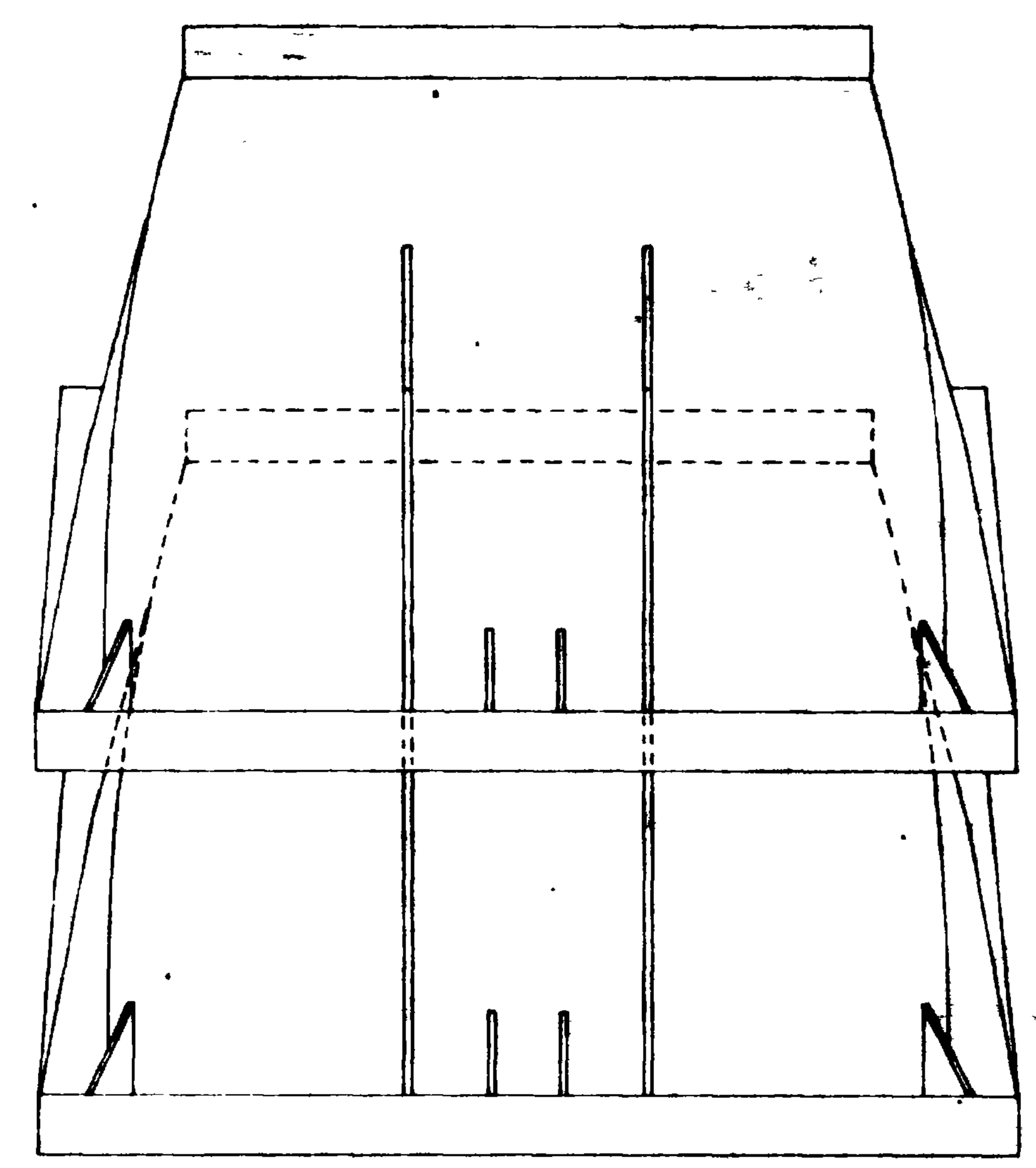


COVER



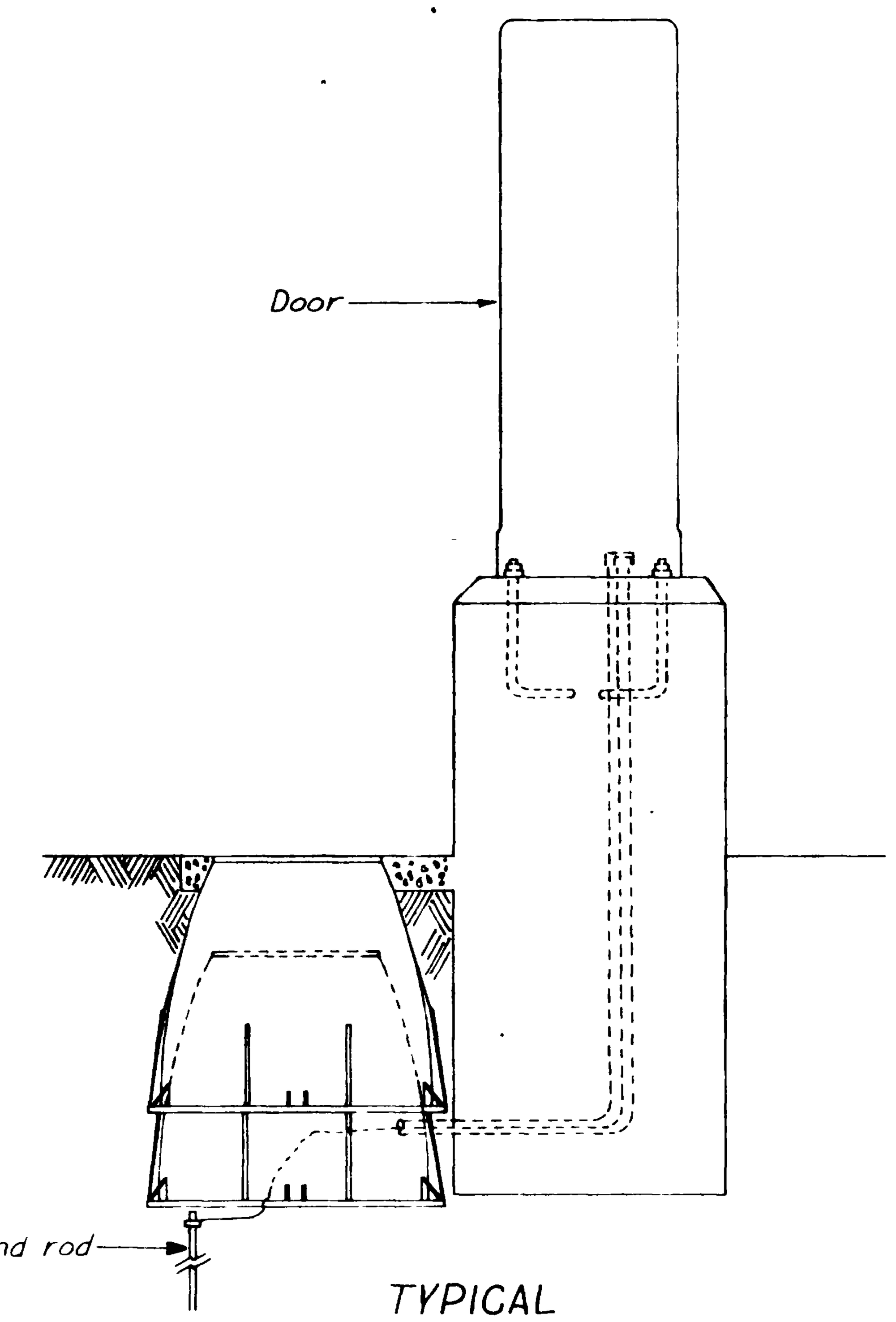


BODY



DOUBLE JUNCTION BOX

TYPE V



TYPICAL

NOTES:

1. This junction box shall be used at all controller locations.
2. Conduit holes in junction box shall be drilled at time of placement with no structural damage to box.
3. Top of junction box shall be flush with surrounding grade or top of topography and shall be placed for protection as directed by engineer.
4. Bonding jumper required with rigid steel conduit.
5. Use granular backfill barrow for junction box base.
6. Provide sealing compound on high end of each conduit run.
7. Copper coated steel ground rod required for grounding controller cabinet.
8. Shop drawings required in accordance with section 510.04 of the state of Utah Standard Specifications for Road and Bridge Construction', 1970.

SPECIFICATIONS:

COVER:

Made from high density polyethylene with ultra violet inhibitors.

ABS—maximum toughness with high modulus-impact 90 ft lbs.

Non-skid surface

Vandal-resistant bolts, recessed.

Will support 300 lb/ft.^{2} with ¼" maximum deflection

BODY:

Made from high density polyethylene with ultra violet inhibitors

Minimum wall thickness .250".

No.	BY		REMARKS

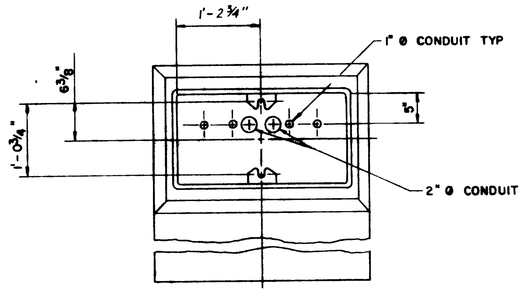
REVISION

UTAH STATE DEPARTMENT OF HIGHWAYS
SALT LAKE CITY UTAH
TRAFFIC DESIGN

TRAFFIC SIGNALS
OGDEN
CONTROLLER BASE JUNCTION BOX

DESIGNED KF Herzog	CHECK 10·74 PH	REVIEW
DRAWN KF Herzog	CHECK 10·74 PH	DESIGN [signature] 11-20-74
QUANT KF Herzog	CHECK 10·74 PH	R/W
APPROVAL RECOMM 10-74 DATE	[signature] GROUP LEADER	
APPROVED 10-74 DATE	[signature] TRAFFIC DESIGN ENGINEER	Weber COUNTY
PROJECT NUMBER HHS-0005-(2)	S-61 DWG. NO.	26 OF

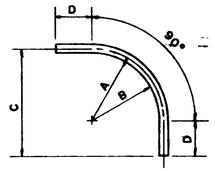
End anchor bolts have been deleted.

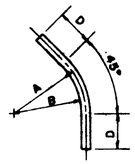


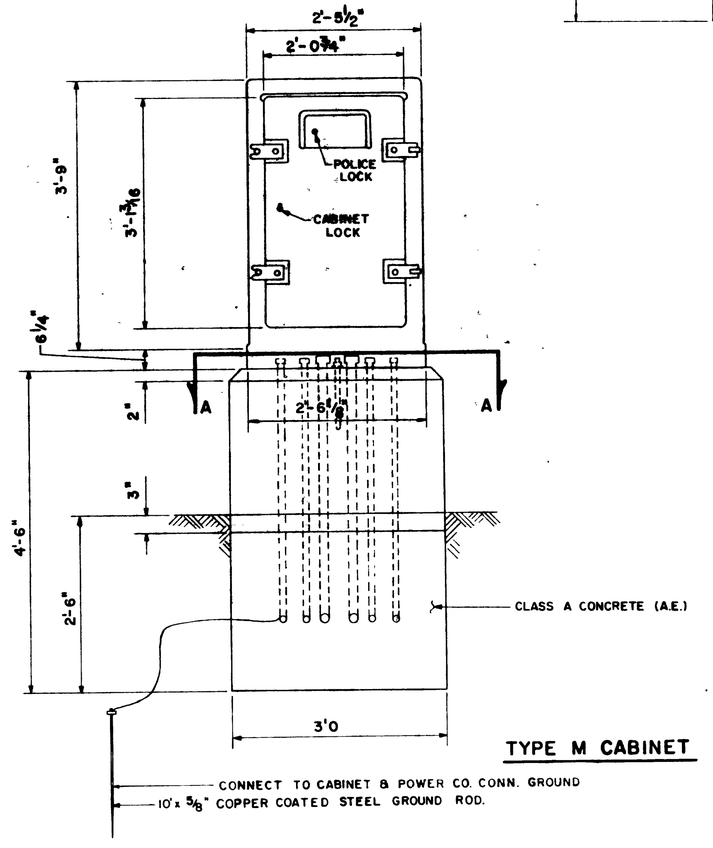
SECTION A-A

NOM. SIZE	A	B	C	D
½"	4"	3 9/16"	6¾"	2¾"
¾"	4½"	4"	7½"	3"
1"	5 3/16"	5 1/16"	8¾"	3"
1¼"	7⅛"	6 7/16"	10 ¼"	3"
1½"	8¼"	7 5/16"	1'0	3¾"
2"	9½"	8 5/16"	1'-2½"	5"
2½"	10½"	9 1/16"	1'-3½"	5"
3"	1'-1"	11 ¼"	1'-7¾"	6¾"
3½"	1'-3"	1'-1"	1'-10"	7"
4"	1'-4"	1'-1¾"	1'-11"	7"

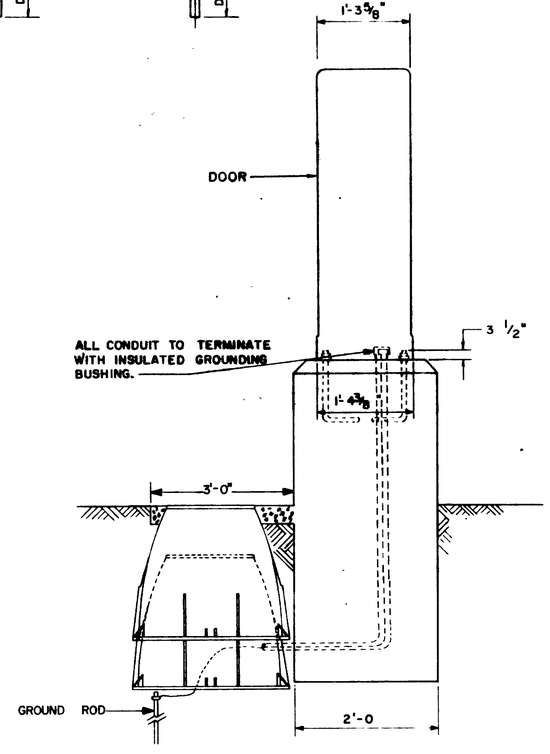
MINIMUM CONDUIT BENDS







TYPE M CABINET



M CABINET

NOTES:

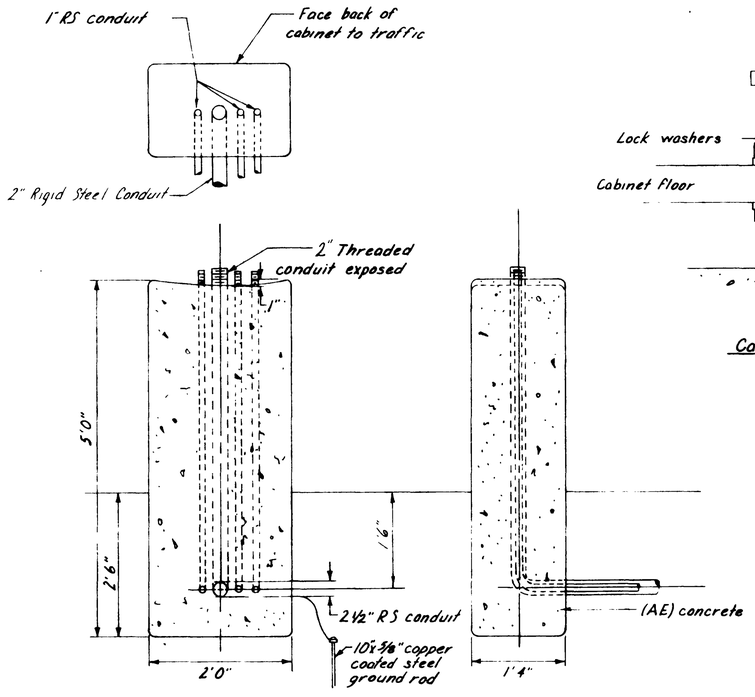
1. THE CABINET SHALL BE FABRICATED OF CAST ALUMINUM OR 14 GAUGE STEEL AND SHALL CONTAIN STRONG SUPPORTS FOR HOLDING THE CONTROLLER UNIT.
2. THE CABINET SHALL BE EITHER BURNISHED ALUMINUM OR GALVANIZED STEEL IN ACCORD WITH ASTM A-123
3. THE GROUNDED SIDE OF THE POWER SUPPLY SHALL BE GROUNDED TO THE CONTROL CABINET IN AN APPROVED MANNER.
4. THE CABINET SHALL HAVE A PANEL BEHIND THE AUXILIARY DOOR CONTAINING THE FOLLOWING SWITCHES:
   - A. MAIN POWER SWITCH DISPATCHER, SIGNAL LIGHTS & CONTROLLER SHALL BE DE-ENERGIZED WHEN MAIN POWER SWITCH IS OFF.
   - B. AUTOMATIC TO FLASHING SWITCH (AND VICE VERSA) SIGNAL LIGHTS OFF WITH CONTROLLER RUNNING.
5. THE CABINET SHALL BE EQUIPPED WITH A THERMOSTATICALLY CONTROLLED VENTILATION FAN.
6. ALL WIRING SHALL BE NEAT AND FIRM AND THE CABINET SHALL MOUNT THE FOLLOWING:
   - A. TERMINAL WITH 30 AMP CIRCUIT BREAKER FOR POWER SUPPLY LINE. TERMINAL UNFUSED, FOR NEUTRAL SIDE OF POWER SUPPLY LINE.
   - B. TERMINALS FOR CONDUCTORS OF SIGNAL CABLES, ONE FOR EACH SIGNAL CIRCUIT AND TWO OR MORE TERMINALS FOR THE COMMON CONDUCTORS.
   - C. TERMINALS FOR DETECTORS AND PEDESTRIAN PUSH BUTTON CABLES.
   - D. RADIO LINE FILTER FOR FILTERING AC+ LIGHTS POWER FOR SOLID STATE LIGHT CONTROL.
   - E. FAILSAFE CONTROL.
   - F. THYRECTOR FOR FILTERING LIGHTNING OR HIGH VOLTAGE SURGES TO GROUND FOR PROTECTION OF THE COMPONENTS.
   - G. MOUNTING BASES FOR SIGNAL RELAYS OR SIGNAL CONTROL UNITS.
7. THE CONTROLLER EQUIPMENT AND TERMINALS SHALL BE SO ARRANGED WITHIN THE CABINET THAT THEY WILL NOT UPSET THE ENTRANCE, TRAINING OR CONNECTION OF INCOMING CONDUCTORS.
8. ALL FIELD TERMINALS SHALL BE SUITABLY IDENTIFIED.
9. ALL OUTGOING TRAFFIC CONTROL SIGNAL CIRCUITS SHALL BE OF THE SAME POLARITY AS THE LINE SIDE OF THE POWER SUPPLY. THE COMMON RETURN OF THE SAME POLARITY AS THE GROUND SIDE OF THE POWER SUPPLY.

NO	BY	DATE	REMARKS
			REVISIONS

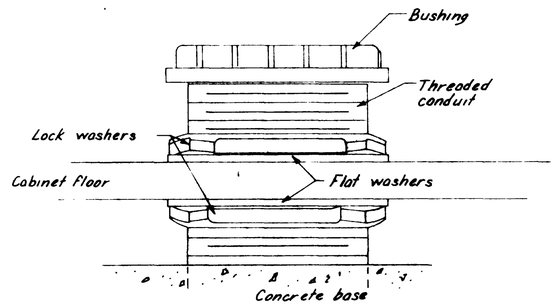
UTAH STATE DEPARTMENT OF HIGHWAYS
SALT LAKE CITY, UTAH
TRAFFIC DIVISION

TRAFFIC SIGNALS
OGDEN
TYPE "M" CONTROL CABINET

DESIGNED K.F. Herzog	CHECK 10-74 PH	REVIEW	
DRAWN K.F. Herzog	CHECK 10-74 PH	DESIGN	11-20-74
QUANT K.F. Herzog	CHECK 10-74 PH	R/W	
APPROVAL RECOMM 10-74 DATE			
APPROVED 10-74 DATE	TRAFFIC DESIGN ENGINEER	Weber COUNTY	
PROJECT NUMBER HHS-0005(2)	S-61 DWG. NO	27	



F Controller Cabinet Base Detail



Cabinet Connection Detail

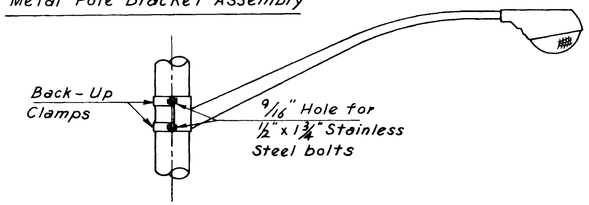
No.	By	REMARKS
		REVISIONS

UTAH STATE DEPARTMENT OF HIGHWAYS
SALT LAKE CITY, UTAH
TRAFFIC DESIGN

TRAFFIC SIGNALS
OGDEN
F- Controller Cabinet Base Detail

DESIGNED K F Herzog	CHECK 10-74 PH	REVIEW
DRAWN K F Herzog	CHECK 10-74 PH	DESIGN ENGR. 10-20-74
QUANT K F Herzog	CHECK 10-74 PH	R/W
APPROVAL REC'MM 10-74	GROUP LEADER	
APPROVED 10-74	TRAFFIC DESIGN ENGINEER	Weber COUNTY
PROJECT NUMBER HHS-0005(2)	S-61 SHEET NO.	28 OF

Metal Pole Bracket Assembly

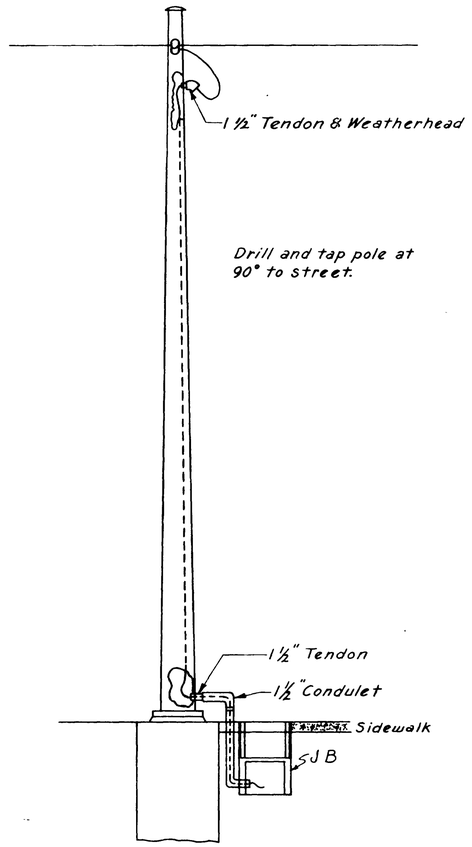


1. Arm member fabricated from 1¼" and/or 1½" standard aluminum pipe of 6063-T4 wrought aluminum alloy.

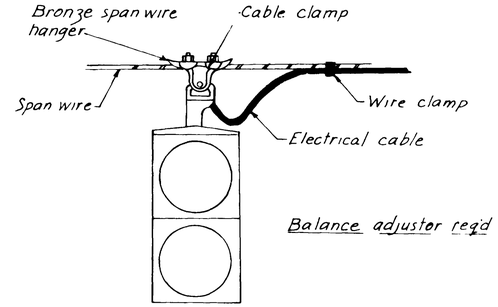
2. Stamped and/or formed from 6061-T4 wrought aluminum alloy mounting plate; dimensions to be ¼" x 7" x 8¾", depending upon Ø of existing steel pole, plate to be rectangular in shape and provided with 1¾" Ø deburred wire entrance hole; four 9/16" Ø holes provided for bolting purposes; two back-up clamps provided, each to be stamped from 6061-T4 or 6063-T5 wrought aluminum alloy, dimensions ¼" x 1¼" x 8¾"; two 9/16" holes provided in each back-up clamp; four stainless steel ½"-13NC-2 x 1¾" long, hex head bolts, nuts and lockwashers required.

3. Brackets shall have a guaranteed minimum yield of 25,000 psi. They shall be capable of sustaining a horizontal load of 50 lbs. and a vertical load of 100 lbs. They shall sustain a vertical load of 250 lbs. applied at the end of the arm without collapse or rupture of any portion of the structure.

4. Other bracket materials may be used subject to prior approval of the engineer.



Detail for bringing overhead circuits down pole



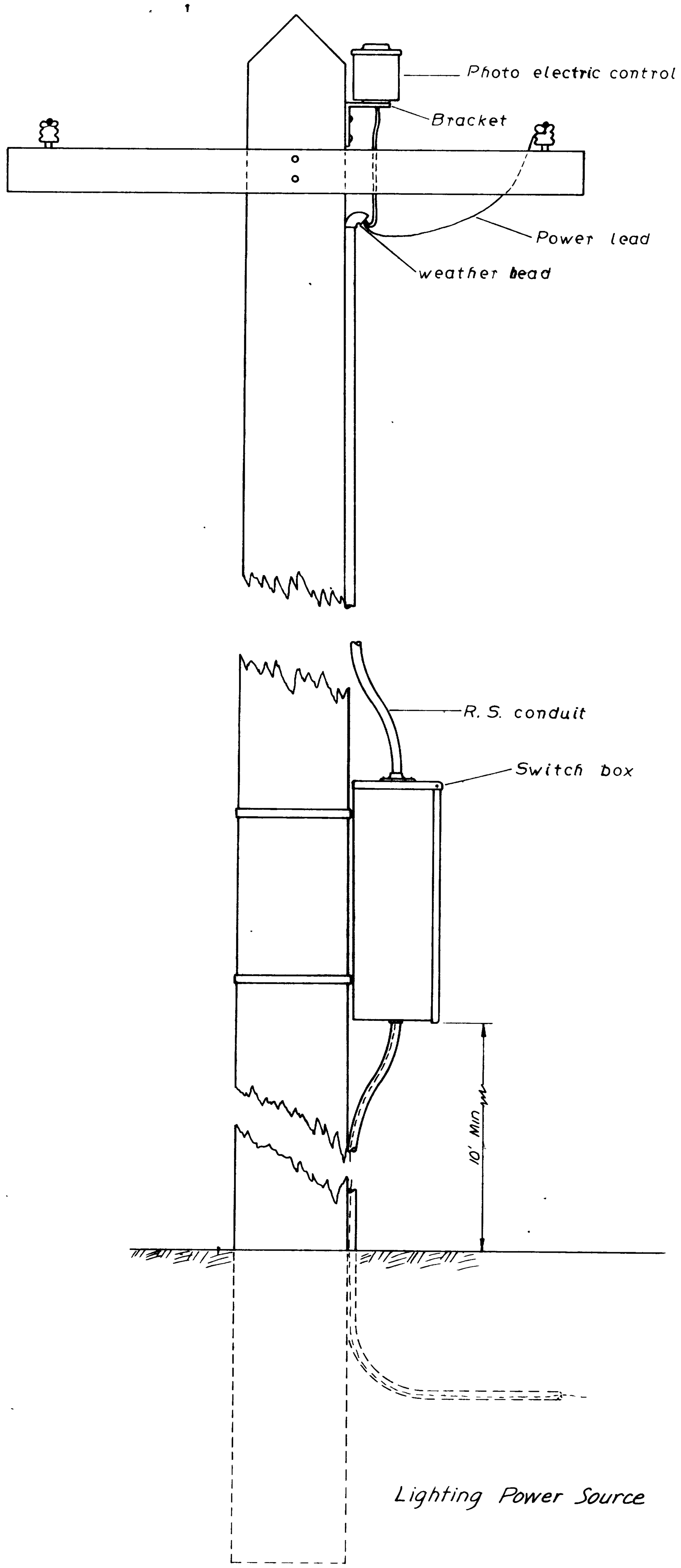
Signal mounting detail for 39th & Washington

UTAH STATE DEPARTMENT OF HIGHWAYS
SALT LAKE CITY UTAH
TRAFFIC DESIGN

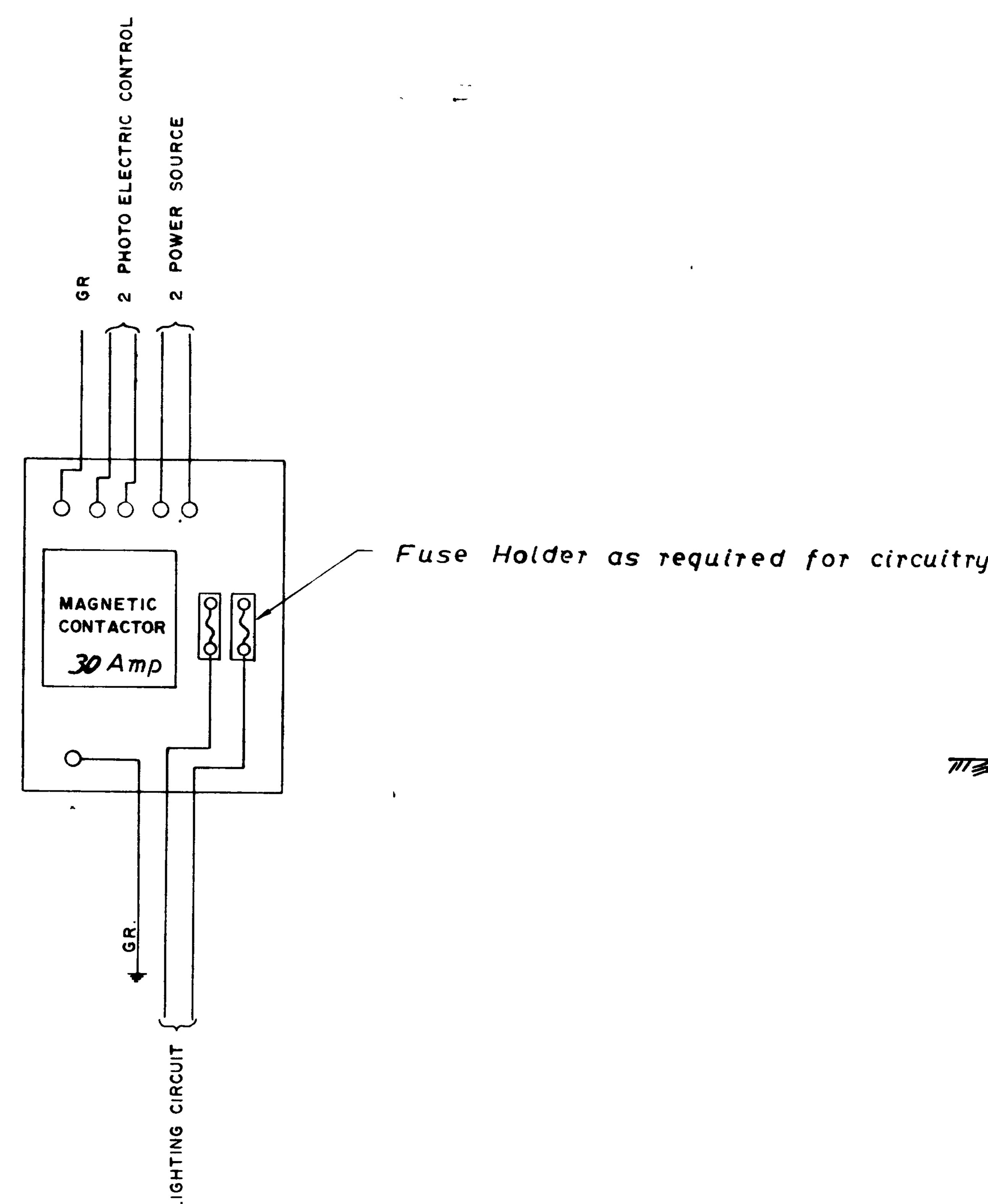
TRAFFIC SIGNALS
OGDEN
MISC. DETAILS

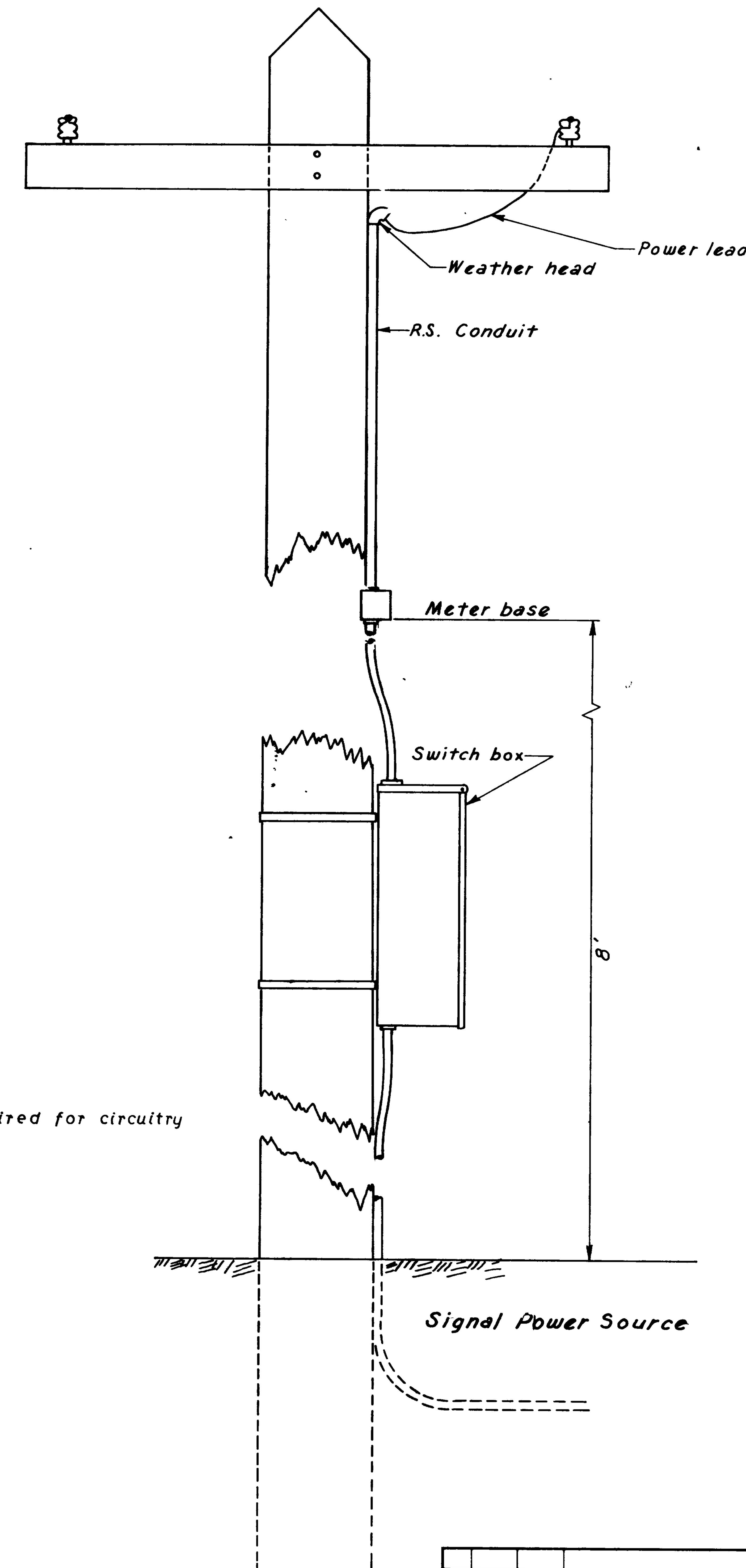
DESIGNED K.F. Herzog	CHECK PH 11-74	REVIEW
DRAWN M.Z.	CHECK PH 11-74	DESIGN
QUANT K.F. Herzog	CHECK PH 11-74	R/W
APPROVAL RECOMM 11-74 DATE	GROUP LEADER	
APPROVED 1-75 DATE	TRAFFIC DESIGN ENGINEER	WEBER COUNTY
PROJECT NUMBER HYS-0005 (2)	S-61 DWG NO	29 OF

NO.	BY	REMARKS

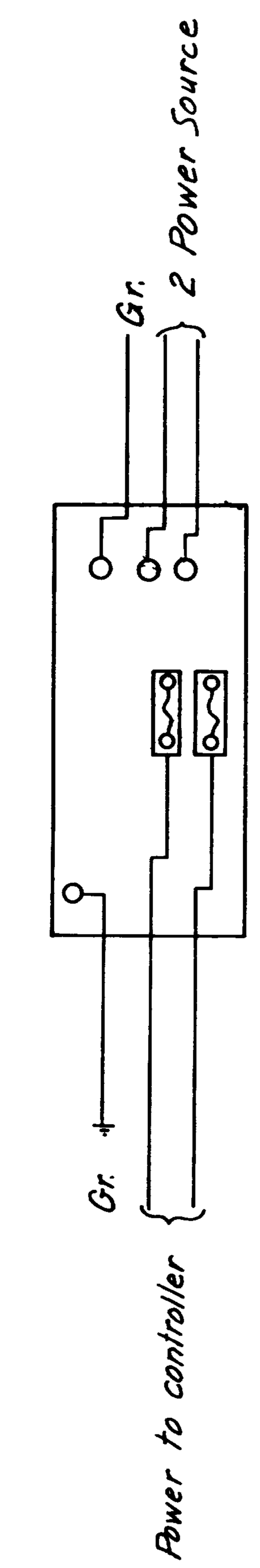


Lighting Power Source





Signal Power Source



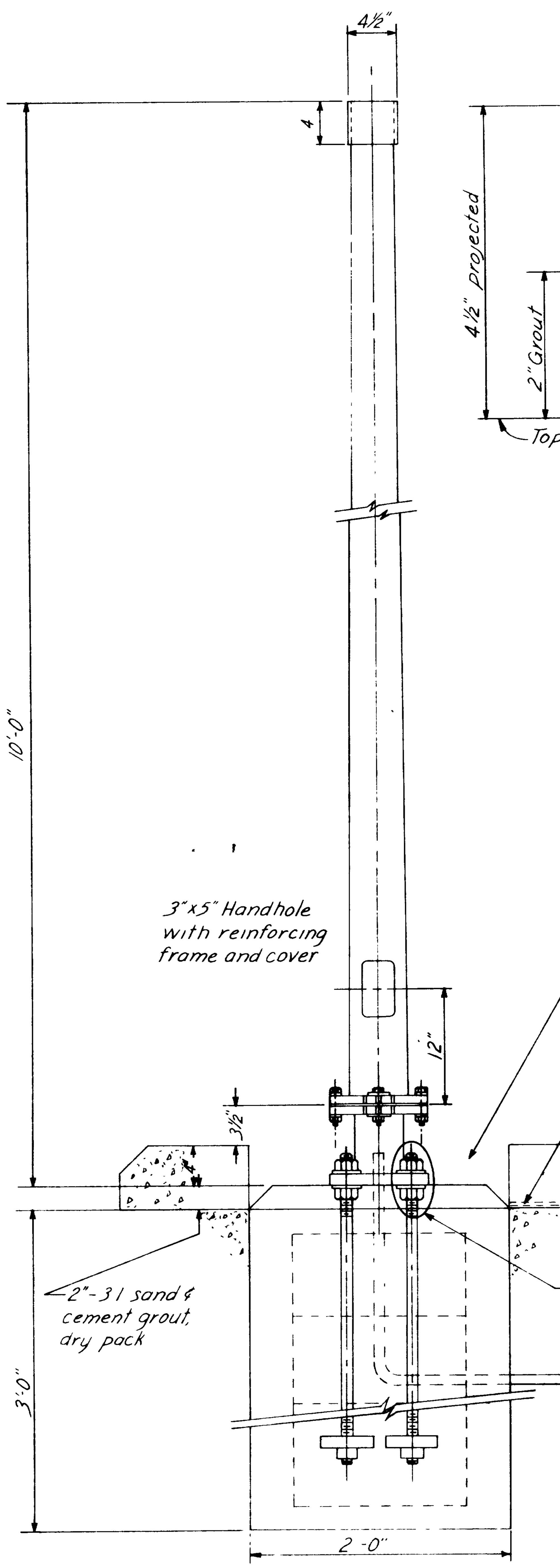
NO	BY	DATE	REMARKS

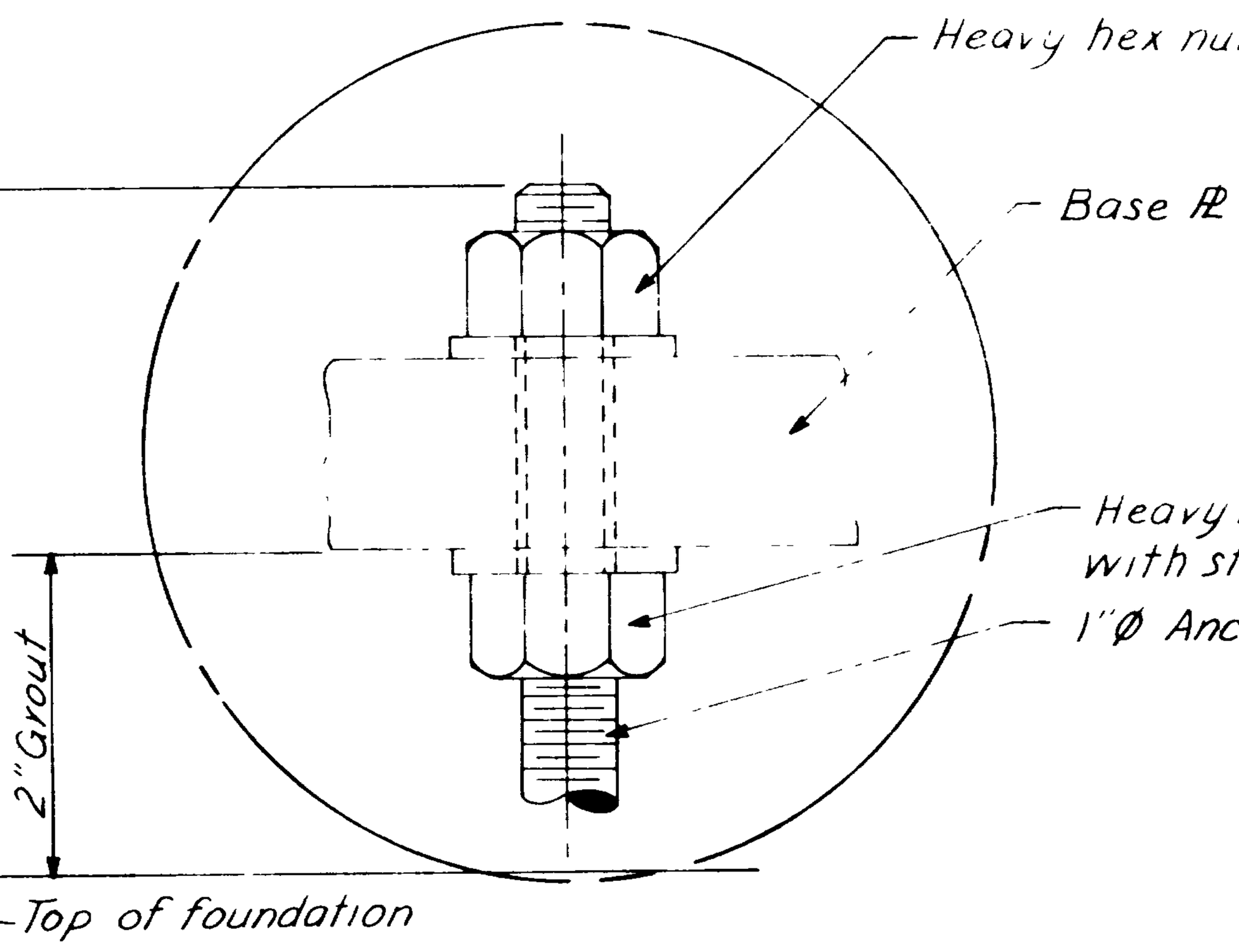
REVISIONS

UTAH STATE DEPARTMENT OF HIGHWAYS
SALT LAKE CITY, UTAH
TRAFFIC DESIGN

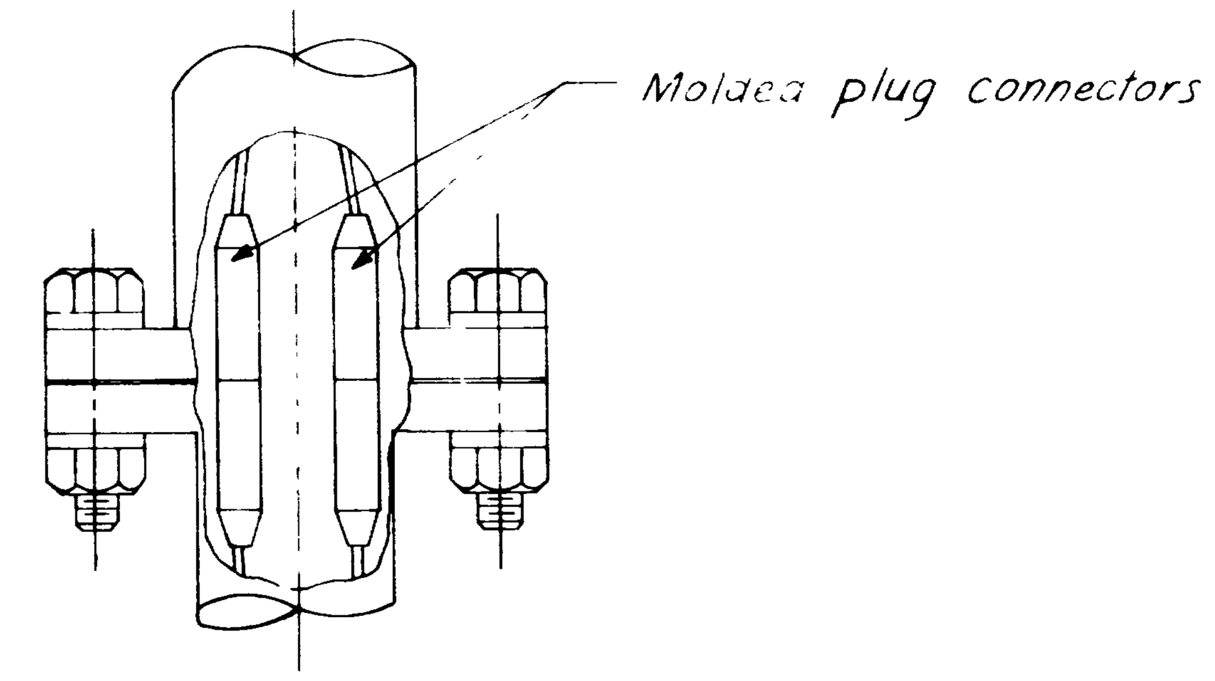
TRAFFIC SIGNALS
OGDEN SIGNALS
POWER SOURCE DETAILS

DESIGNED K.F. Herzog	CHECK 11-74 PH	REVIEW
DRAWN K.F. Herzog	CHECK 11-74 PH	DESIGN
CHECKED K.F. Herzog	CHECK 11-74 PH	R/W
APPROVAL RECOMM 11/74	GROUP LEADER	
APPROVE 11/74	ENGINEER	Weber COUNTY
PROJECT NUMBER HHS-005-(2)	DWG NO	3C OF

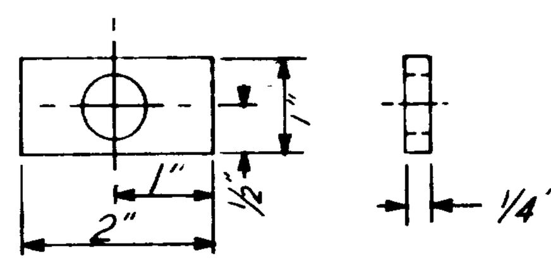




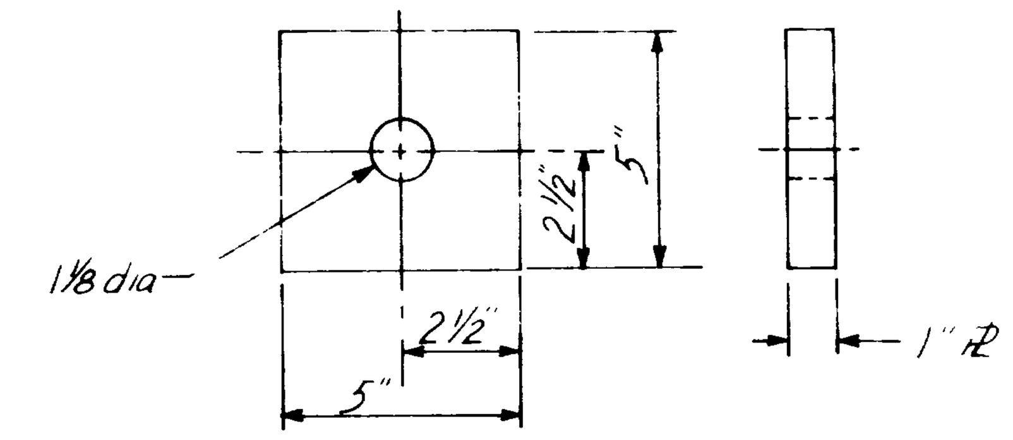
DETAIL A



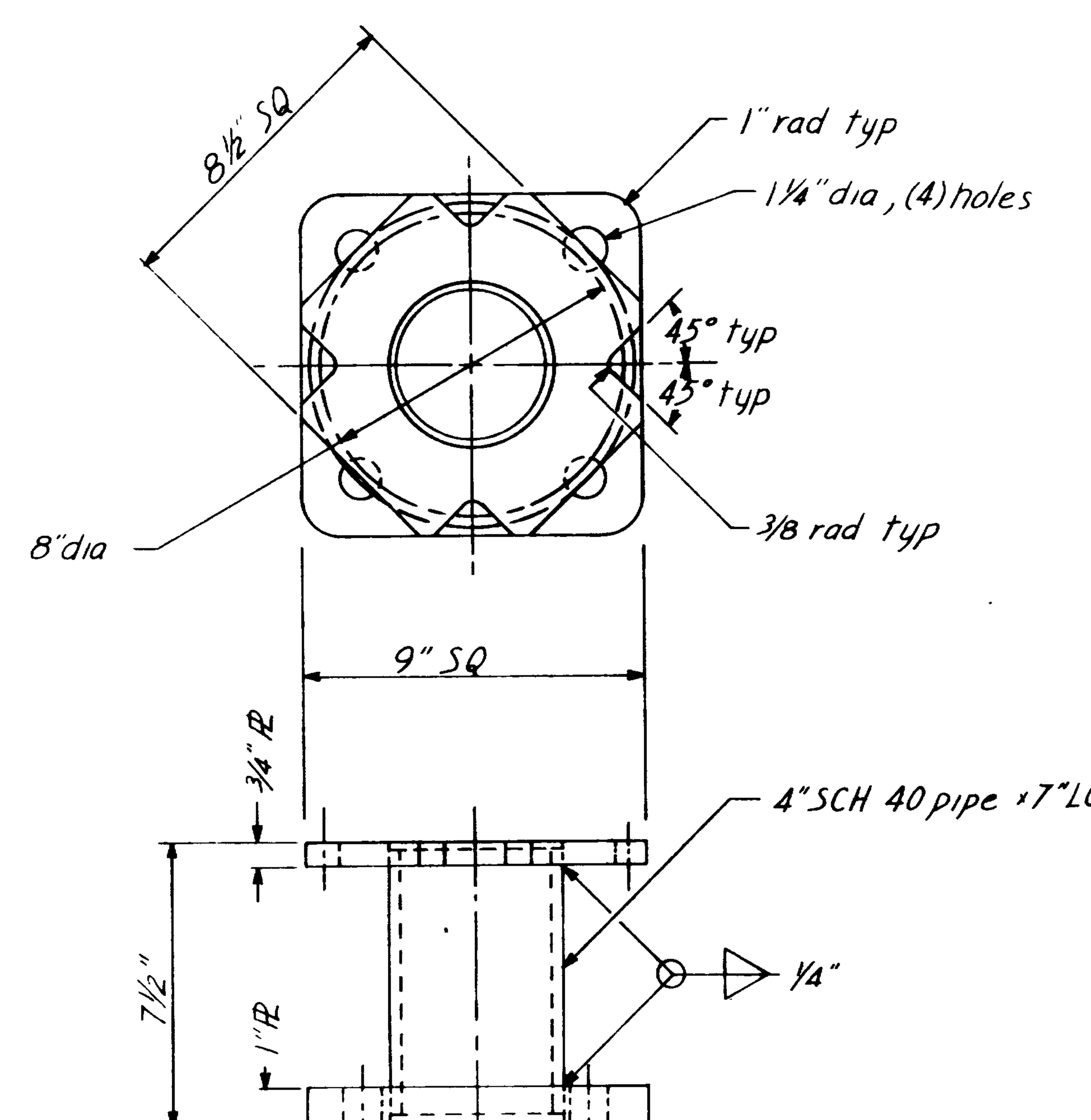
PLUG CONNECTOR DETAIL



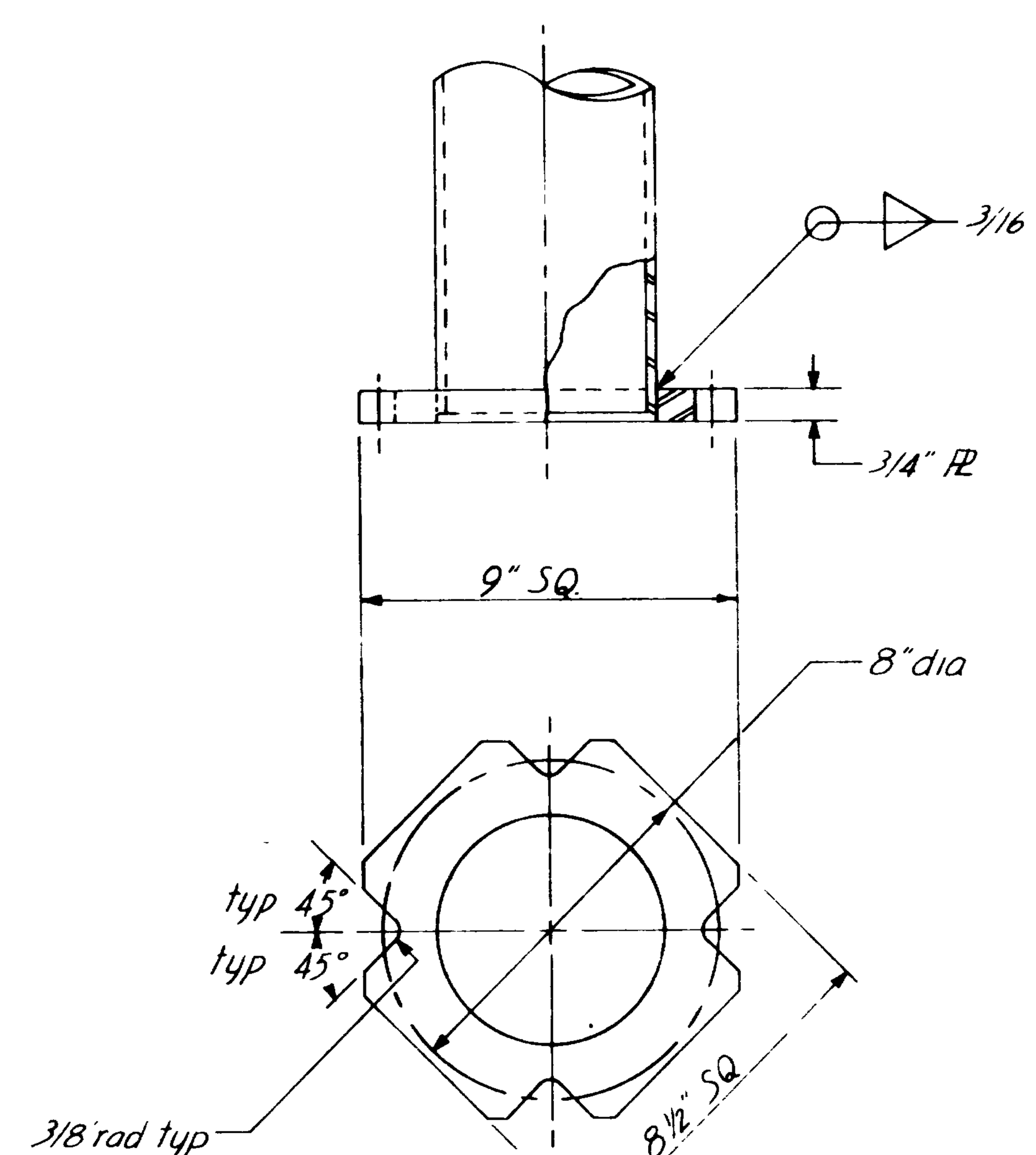
WASHER



WASHER



GROUND BASE



POLE BASE

GENERAL NOTES

1 POLE

The pole design contemplates the use of tapered metal poles of steel (ASTM A570 Grade C Galvanized ASTM A123) Other pole materials may be acceptable subject to the approval of designs and drawings prior to the opening of bids by the Chief Structural Engineer. Shop drawings are required

Poles shall meet the requirements of AASHO 'Specifications for the Design and Construction of Structural Supports for Highway Luminaires' 1970, for an 80 mph wind with 100 mph gusts

Allowable Stresses
ASTM A570 Grade C – F_b = 21.78 Ksi (.66Fy)
F_v = 10.89 Ksi (.33Fy)
(Increase 40% for Group I Loading)

2 ANCHOR BOLTS

All anchor bolts shall be 1Ø x 2'6" min with top 5" threaded and shall meet ASTM A325 with regular square head or regular square nut tack welded and heavy hexagon nuts. Exposed portions of anchor bolts shall be cadmium plated in accordance with ASTM A165 NS.
Anchor bolts shall not be welded to reinforcing steel

3 FOUNDATION

Foundation shall be cast-in place in augered hole
Foundation shall be class A concrete (AE)
2'Ø opening required in island to facilitate access to pole base

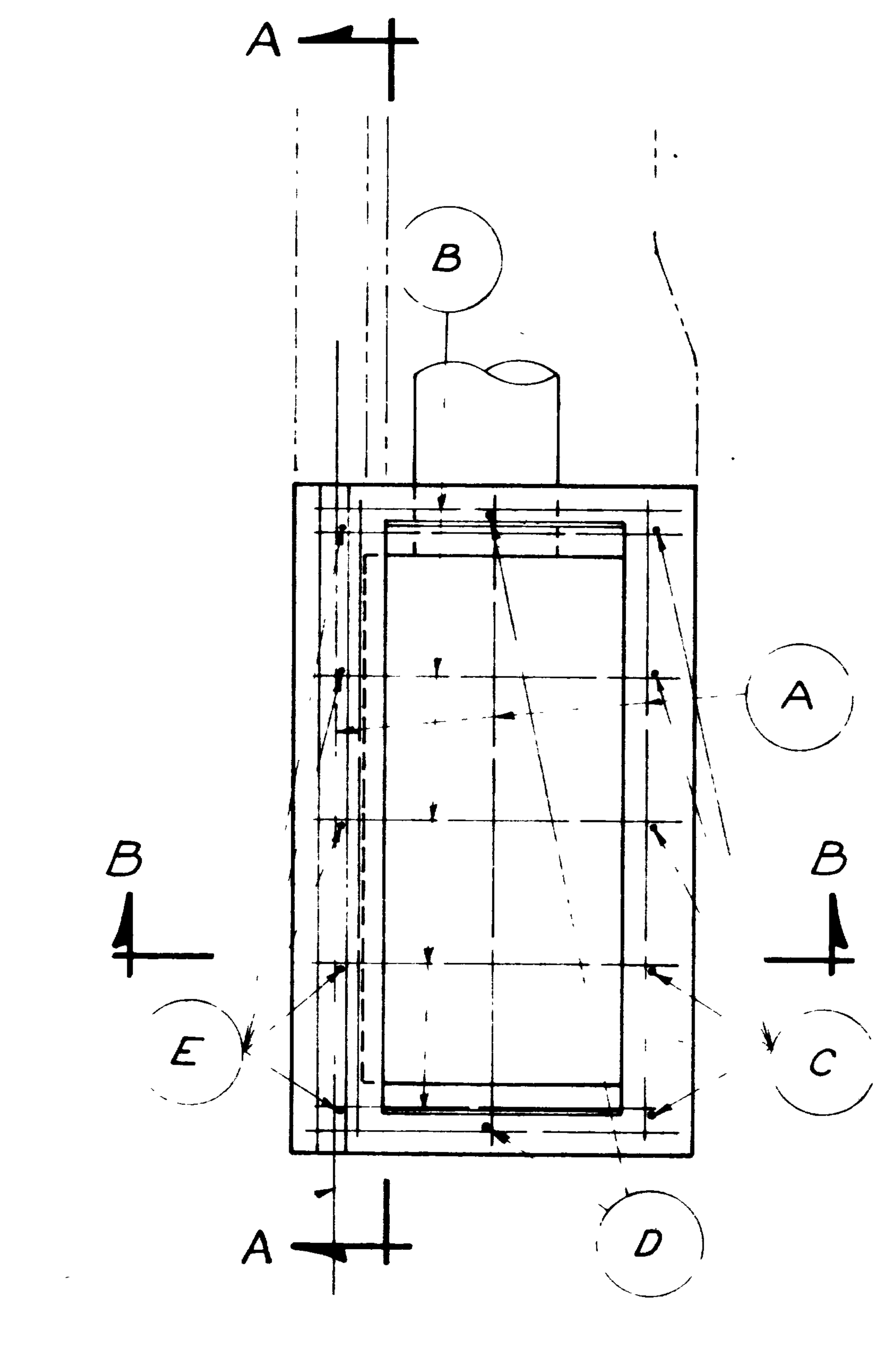
△1 K.F.H. 12/3/74. New Sheet

UTAH STATE DEPARTMENT OF HIGHWAYS
SALT LAKE CITY, UTAH
TRAFFIC DESIGN

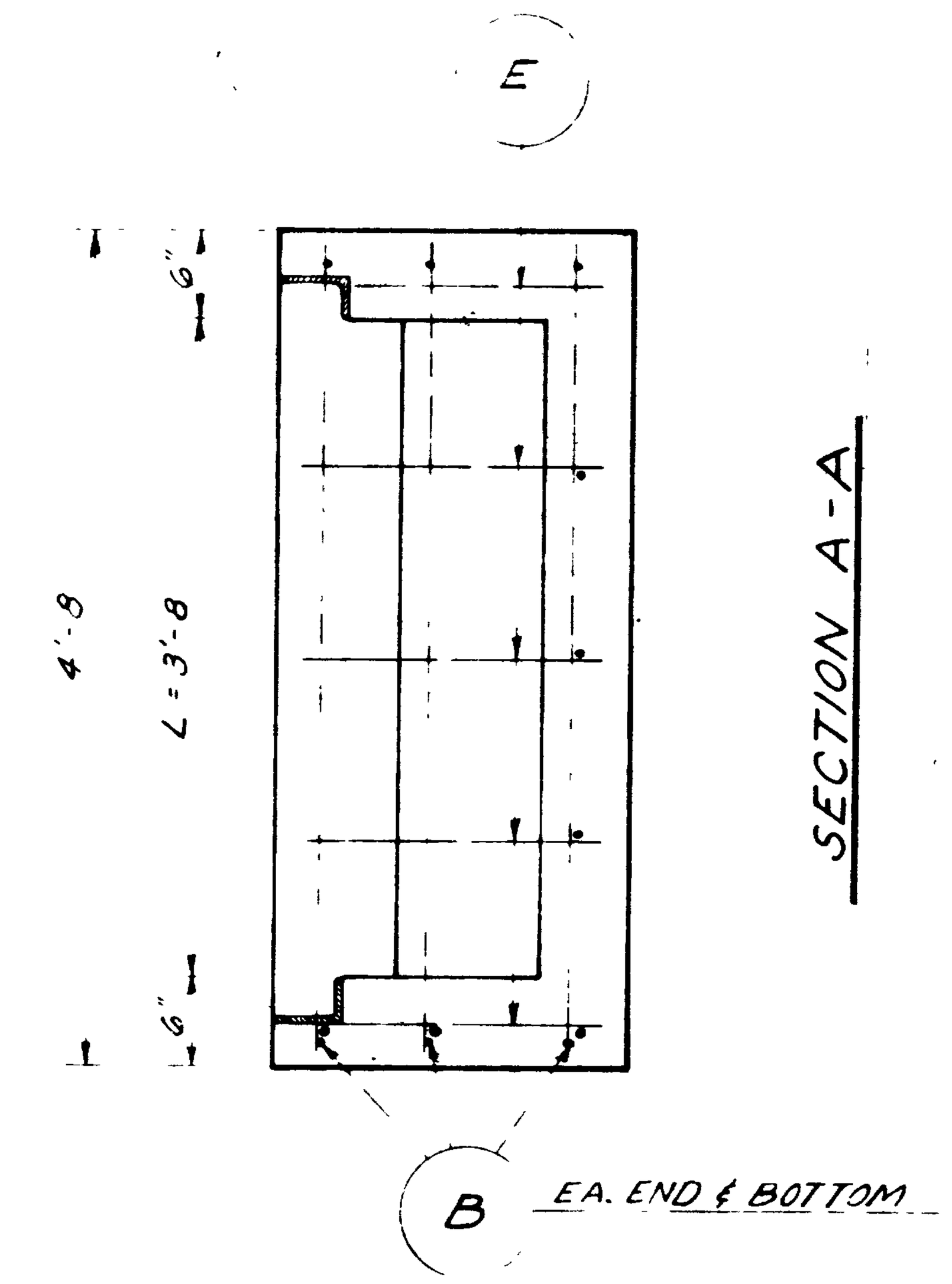
TRAFFIC SIGNALS
OGDEN SIGNALS
POST MOUNTED SIGNAL POLE

DESIGNED K.F. Herzog	CHECK PH 12 74	REVIEW
DRAWN K.F. Herzog	CHECK 12 74 PH	
TRACED K.F. Herzog	PH 12 74	
12-74	Keith [illegible]	
12 74	[illegible]	Weber

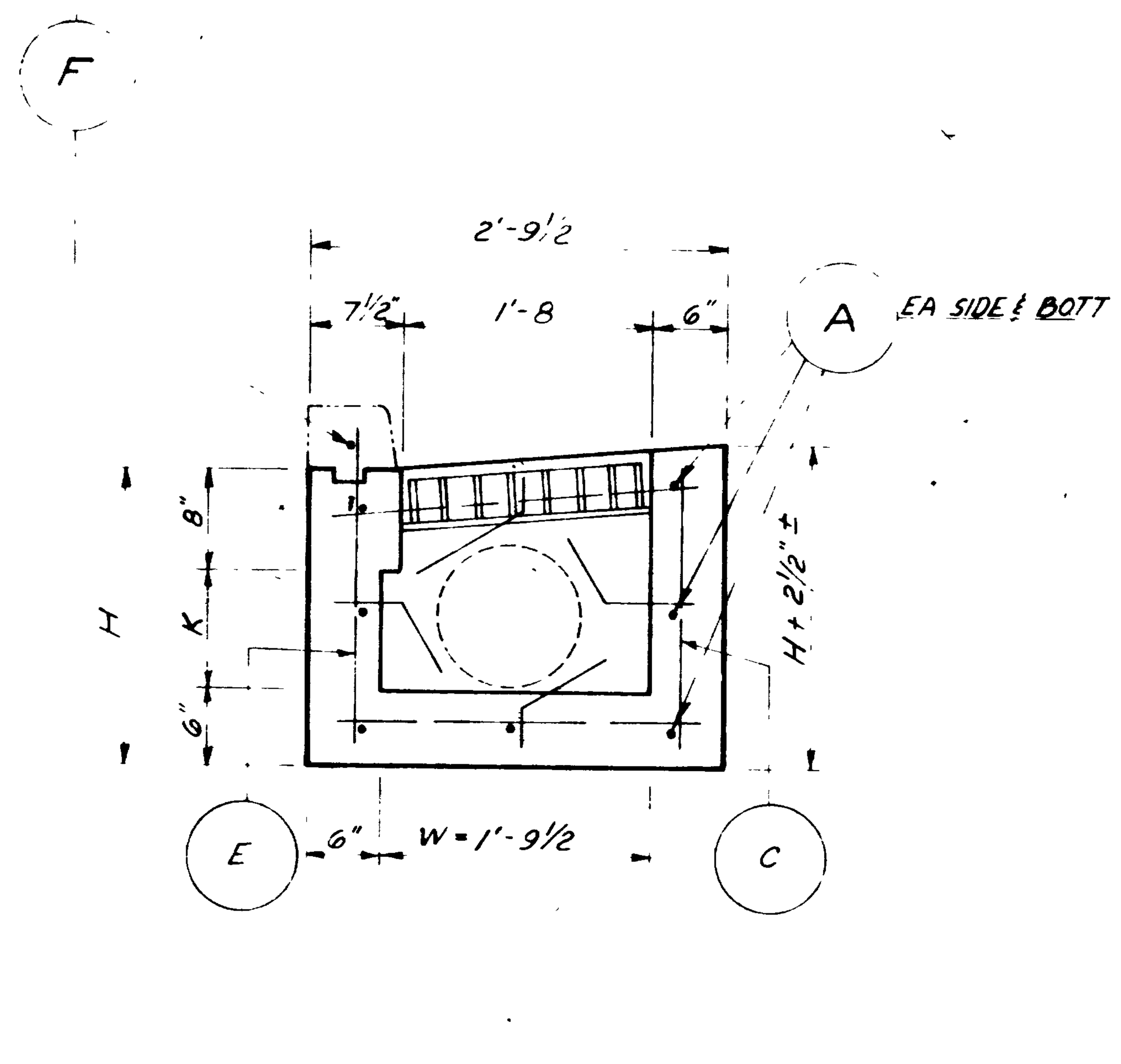
H45 [illegible]



PLAN



SECTION A-A



SECTION B-B

NOTE:
FOR GRATING & BEARING ANGLE DETAILS
SEE STD. DWG. V-988

GENERAL NOTES

MATERIALS [illegible] CONSTRUCTION [illegible] SHALL BE [illegible] ACCORDANCE WITH THE STATE OF UTAH STANDARD SPECIFICATIONS FOR [illegible] BRIDGE CONSTRUCTION, EDITION OF 1970 AND SUPPLEMENTS THERETO WHICH ARE IN EFFECT ON THE DATE [illegible]
ALL REINFORCING STEEL SHALL BE DEFORMED BILLET-STEEL BARS CONFORMING TO ASTM DESIGNATION A 615-68, GRADE 60
STRUCTURAL STEEL FOR GRATING SHALL BE STRUCTURAL CARBON STEEL CONFORMING TO A A S H O DESIGNATION M-183 (A S T M A-36).
GRATING AND BEARING ANGLES SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH A A S H O DESIGNATION M-1[illegible] A S T M [illegible]

A UNIT CATCH BASIN SHALL INCLUDE GRATING BEARING ANGLES AND BOX COMPLETE CLASS AA CONCRETE (AE) TYPE II CEMENT [illegible] REQUIRED

DESIGN DATA

THE DESIGN IS IN ACCORDANCE WITH THE [illegible] AND INTERIM SPECIFICATION
LOADING: HS 20-44
f_c = [illegible]
f_s = 24 [illegible] (REINF. STEEL) [illegible] (STRUCT STEEL)
n = 8

QUANTITIES

SEE TABLE BELOW

ALL REINFORCING BARS TO BE #5
@ 12" ± O C

SCHEDULE

LINE NO.	DIMENSIONS				REINFORCING STEEL												QUANTITIES			
					A		B		C		D		E		F		REINF. STEEL	CONC.	EXCAV	STRUC STEEL
	H	W	L	K	NO	L'GTH.	NO	L'GTH.	NO	L'GTH.	NO	L'GTH	NO	L'GTH.	NO	L'GTH	LB.	CU YD	CU YD	LB
1	1'-6	-9½	3'-8	0-4	7	4'-4	9	2'-5	5	1'-3	2	1'-2	5	1'-6	1	7'-0	78.4	.502	1.9	293.0
2	2'-0			0-10	7		9			1'-9		1'-8		2'-0			84.7	.622	2.5	
3	2'-6			1'-4	9		11			2'-3		2'-2		2'-6			105.0	.742	3.1	
4	3'-0			1'-10	9		11			2'-9		2'-8		3'-0			111.3	.862	3.6	
5	3'-6			2'-4	11		13			3'-3		3'-2		3'-6			131.6	.982	4.2	
6	4'-0	1'-9½	3'-8	2'-10	11	4'-4	13	2'-5	5	3'-9	2	3'-8	5	4'-0	1	7'-0	137.9	1.102	4.8	293.0

NOTE: CONCRETE DISPLACED BY PIPE SHALL BE DEDUCTED FROM THOSE CONCRETE QUANTITIES GIVEN IN SCHEDULE.

NOTE:
CONCRETE, REINFORCING STEEL AND STRUCTURAL STEEL QUANTITIES ARE CERTIFIED CORRECT FOR THE DIMENSIONS SHOWN

P.E.

STANDARD
CATCH BASIN

HGE
HEM 7-25-73 SMP VARIES
HGE SMP

1-21-74 [signature]

V-132[illegible]