

STATE OF MINNESOTA
DEPARTMENT OF HIGHWAYS
CONSTRUCTION PLAN FOR TRAFFIC CONTROL SIGNAL SYSTEM
TRUNK HIGHWAY NO. 49 = 126

INTER. OF T.H. 49 (HODGSON ROAD) & T.H. 96

CONVENTIONAL SIGNS

STATE LINE	TIMBER	
COUNTY LINE	BRUSH	
TOWNSHIP OR RANGE LINE	ORCHARD	
SECTION LINE	ROCK LEDGE	
QUARTER LINE	SAND	
SIXTEENTH LINE	EDGE OF CUT	
RIGHT OF WAY LINE	TOE OF EMBANKMENT	
PROPERTY LINE (EXCEPT LAND LINES)	CATCH BASIN	
VACATED PLATTED PROPERTY	MANHOLE	
CORPORATE OR CITY LIMITS	FIRE HYDRANT	
TRUNK HIGHWAY CENTER LINE	ARC LAMP	
RETAINING WALL	OTHER LAMPS (State Kind)	
STEAM RAILROAD	RAILROAD CROSSING SIGN	
ELECTRIC RAILROAD	RAILROAD CROSSING BELL	
RAILROAD RIGHT OF WAY LINE	ELECTRIC WARNING SIGN	
CREEK	CROSSING GATE	
RAPIDS OR WATERFALL	CATTLE GUARD	
DRY RUN	OVERHEAD (Highway Over)	
DRAINAGE DITCH	UNDERPASS (Highway Under)	
HIGH TENSION LINE	ABUTMENT, WALL & PIER	
POWER POLE LINE	BRIDGE	
TELEPHONE OR TELEGRAPH LINE	BUILDING (One Story Frame)	
CULVERT	F-FRAME C-CONCRETE	
DROP INLET	S-STONE T-TILE	
GLASS RAIL	B-BRICK ST-STUCCO	
WIRE FENCE	IRON PIPE	
REGISTERED SNOW FENCE	STONE MONUMENT	
BRUSH OR HIGHWAY SNOW FENCE	WOOD STAKE OR HUB	
STONE WALL OF FENCE	WEANDER CORNER	
HEDGE		
WATER PIPE		
SEWER PIPE		
CHIMNEY TILE		
MANHOLE PIT		
SAND PIT		
CEMENT PIT		
ROCK QUARRY		
SPRINGS		
WATERSHED		
TRUNK HIGHWAY R.W.		
REGISTERED R.W.		
PRESENT ROAD R.W.		
LIMITED ACCESS		



NOTE: SECTION NUMBERS READ FROM THE SOUTH

PIT DATA

PIT NO.	Located in
	Dead Haul
PIT NO.	Located in
	Dead Haul
PIT NO.	Located in
	Dead Haul
PIT NO.	Located in
	Dead Haul

MINNESOTA PROJECT

GROSS LENGTH	FEET	MILES
BRIDGES-LENGTH	FEET	MILES
EXCEPTIONS-LENGTH	FEET	MILES
NET LENGTH	FEET	MILES

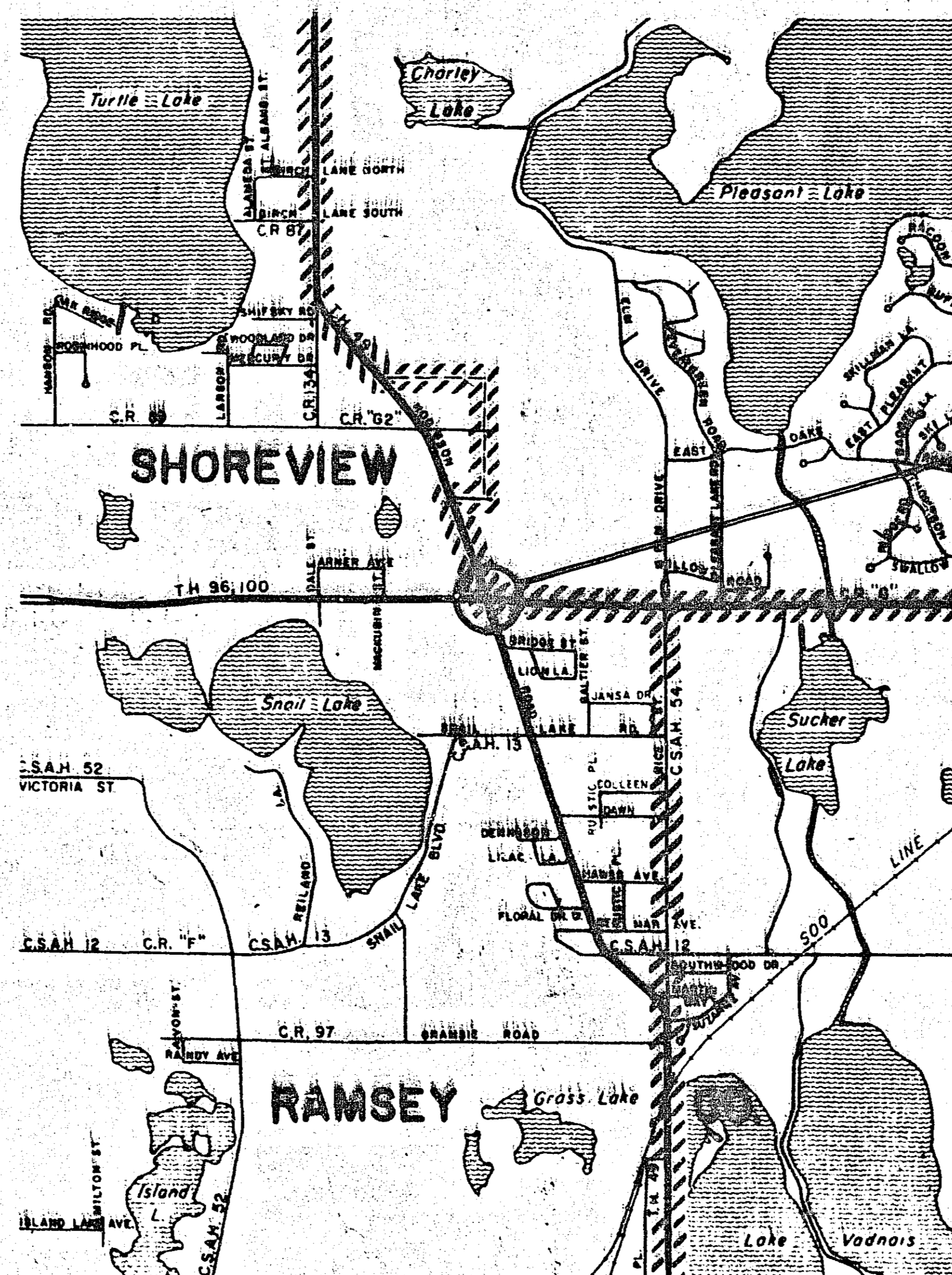
STATE PROJECT NO. 6214-11

GROSS LENGTH	FEET	MILES
BRIDGES-LENGTH	FEET	MILES
EXCEPTIONS-LENGTH	FEET	MILES
NET LENGTH	FEET	MILES

SCALES | PLAN: 1 inch = 100 feet
PROFILE: Horiz. 1 inch = 100 feet, Vert. 1 inch = 10 feet

LAYOUT
Scale 1 inch = 100 feet

SPECIFICATIONS



S.P. 6214-11 (49=126)

MICRO-FILMED
DATE 3-11-74
ROLL NUMBER 432
ROLL JOB NUMBER 23

Recommended for Approval _____ MUNICIPALITY _____ TITLE _____ 19____

Recommended for Approval J.P. Russell 9-21-63
TRAFFIC ENGINEER

Recommended for Approval C. S. Anderson 4-11-63
ROAD PLANS ENGINEER

Recommended for Approval R.P.M. Anderson 3/20/63
Deputy DISTRICT ENGINEER

Approved 4-15-63 J.P. Russell
DEPUTY CHIEF ENGINEER

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
O. W. Russell
DATE 3-20-63 REG. NO. 6284

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED: _____

DATE _____

FINAL CORRECTIONS	
DATE	JAN 2, 1964
RES. ENGR.	<u>W. H. Anderson</u>

DESIGN SQUAD _____

STANDARD DETAIL PLATES	
PLATE NO.	TITLE
8110	SIGNAL ASSEMBLY
8111	CONTROLLER ASSEMBLY
8112	CONCRETE FOUNDATION
8113	VEHICLE DETECTOR INSTALLATION
8116	METAL PIPE GUARD POSTS
8117	PRECAST CONCRETE HANDHOLE

- NOTES:**
1. ALL VEHICULAR SIGNAL INDICATIONS SHALL BE 12 INCH.
 2. PROVIDE BACKGROUND SHIELDS FOR T.H. 96 PEDESTAL MOUNTED SIGNAL INDICATIONS ONLY.
 3. PROVIDE LOUVERS FOR THE POLE AND PEDESTAL MOUNTED SIGNAL INDICATIONS (12 TOTAL).
 4. ALL SHADED AREAS IN PLAN INDICATES BITUMINOUS WIDENING TO BE DONE BY OTHER.

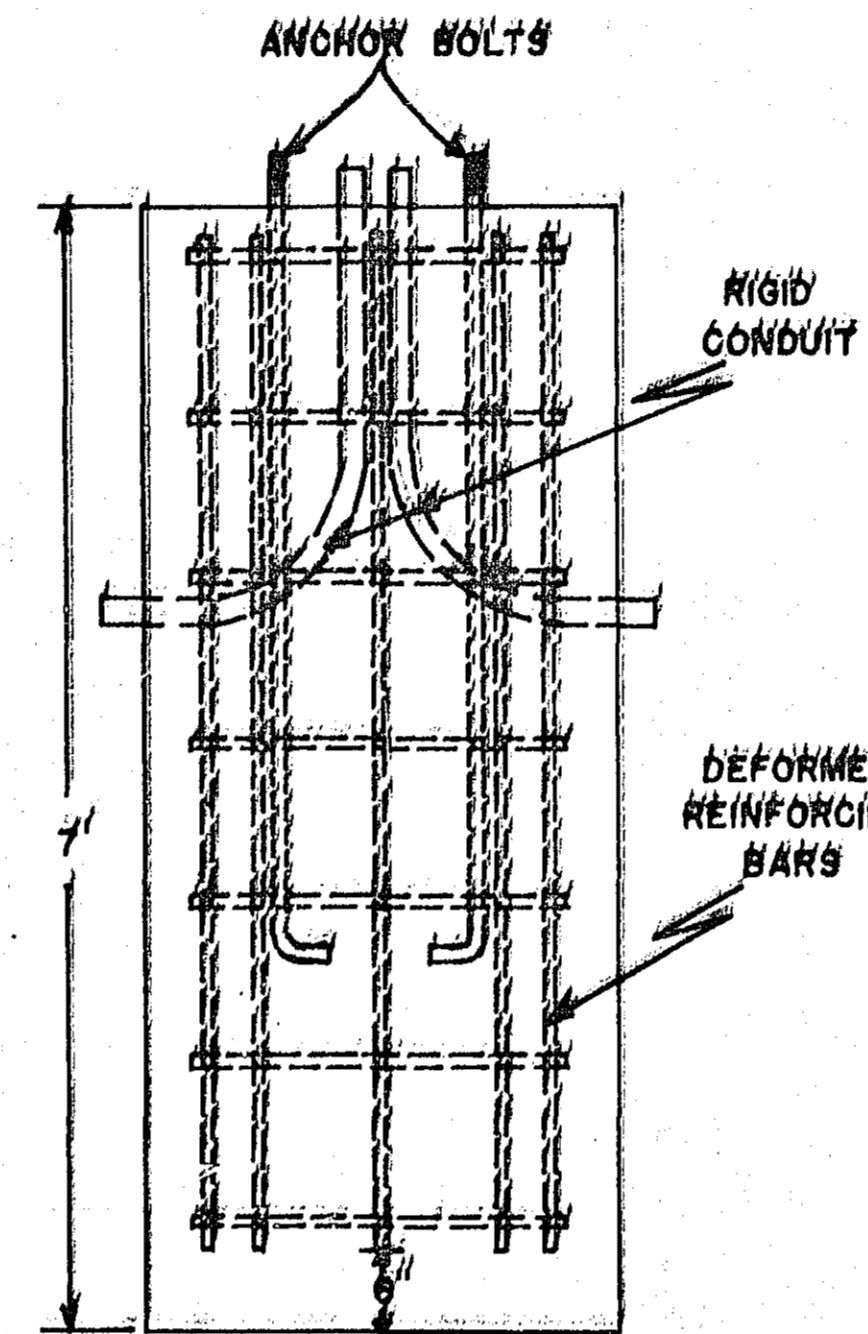
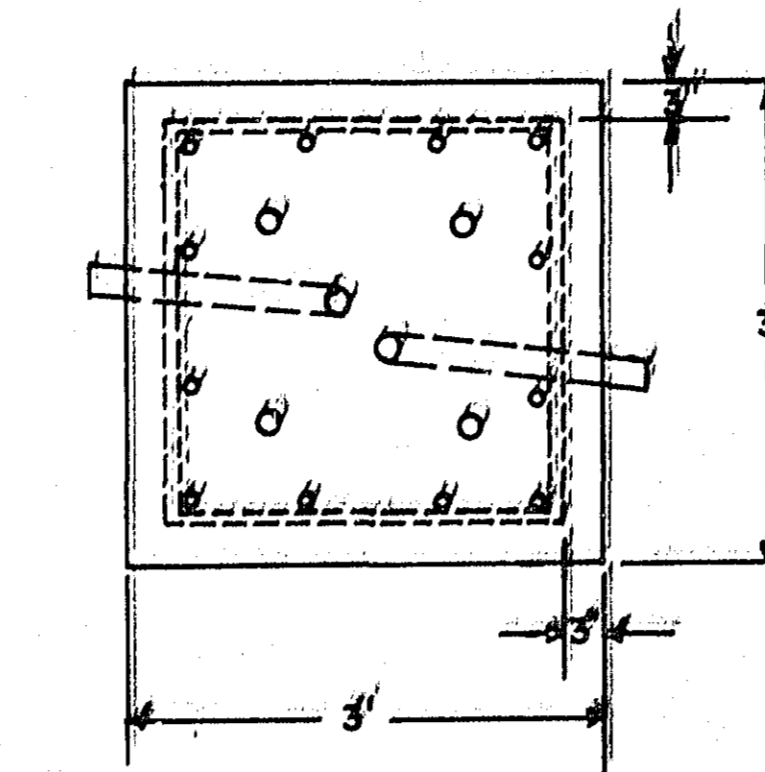
LEGEND OF SIGNAL SYSTEM	
□	CONTROLLER
■	HANDHOLE
=====	RIGID CONDUIT
□→	PEDESTAL MOUNTED SIGNALS
←→	4 WAY SPAN WIRE MOUNTED SIGNALS
→	ONE WAY POLE MOUNTED SIGNALS
--- ---	MAGNETIC VEHICLE DETECTORS
→	PEDESTRIAN SIGNAL
○	WOOD GUARD POSTS - INPLACE
●	WOOD GUARD POSTS - INSTALLED BY OTHERS
✕	CONCRETE GUARD POSTS - INPLACE

SIGNAL PHASING AND FLASHING OPERATION

T.H. 49 (HODGSON ROAD) AND T.H. 96

PHASE "A" = T.H. 96 - FLASHING YELLOW.

PHASE "B" = T.H. 49 (HODGSON ROAD) - FLASHING RED.



CONCRETE FOUNDATION FOR STEEL POLE

STEEL POLE INSTALLATION DETAIL

DETAIL
SCALE NONE

STEEL REINFORCEMENT

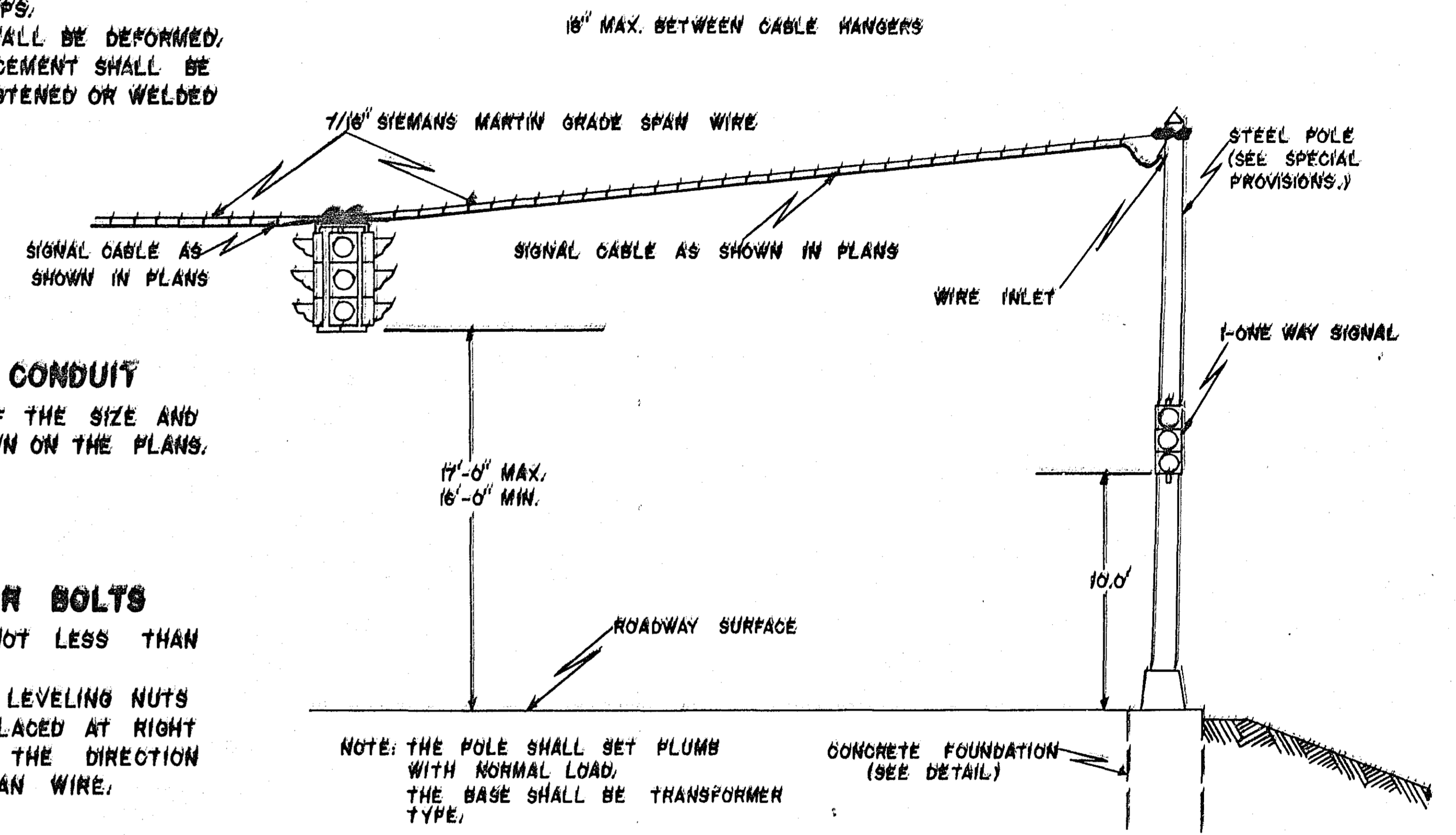
12-STRAIGHT BARS 1/2" Ø X 6'-3"
28-HORIZONTAL BARS, 1/2" Ø X 30"
OR 7 STIRRUPS.
ALL BARS SHALL BE DEFORMED.
THE REINFORCEMENT SHALL BE SECURELY FASTENED OR WELDED TOGETHER.

RIGID CONDUIT

SHALL BE OF THE SIZE AND NUMBER SHOWN ON THE PLANS.

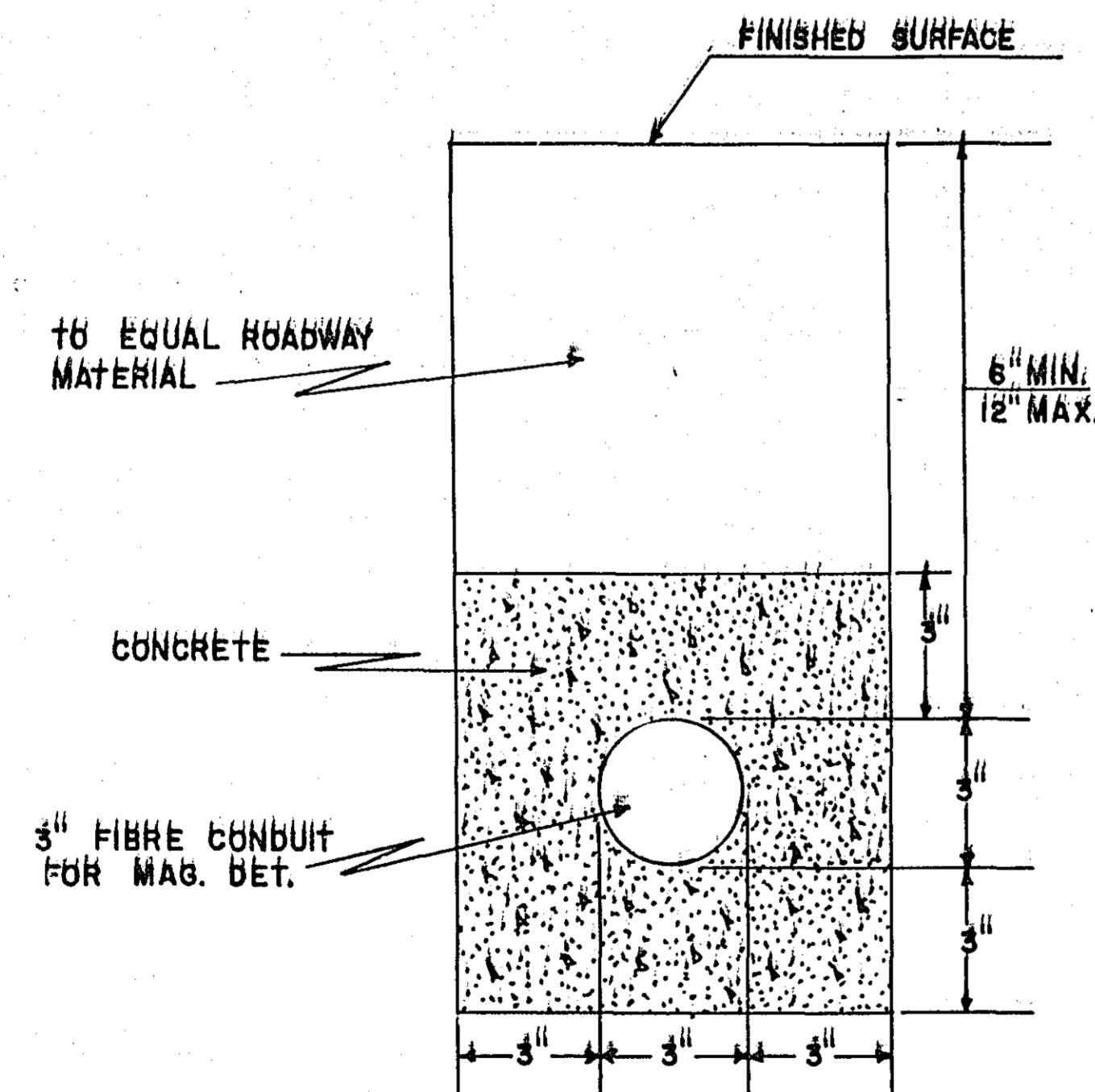
ANCHOR BOLTS

SHALL BE NOT LESS THAN 1 1/2" X 60".
BOLTS WITH LEVELING NUTS SHALL BE PLACED AT RIGHT ANGLES TO THE DIRECTION OF THE SPAN WIRE.



NOTE: THE POLE SHALL SET PLUMB WITH NORMAL LOAD. THE BASE SHALL BE TRANSFORMER TYPE.

DETAIL SHOWING MINIMUM CONCRETE ENCASEMENT OF FIBRE CONDUIT

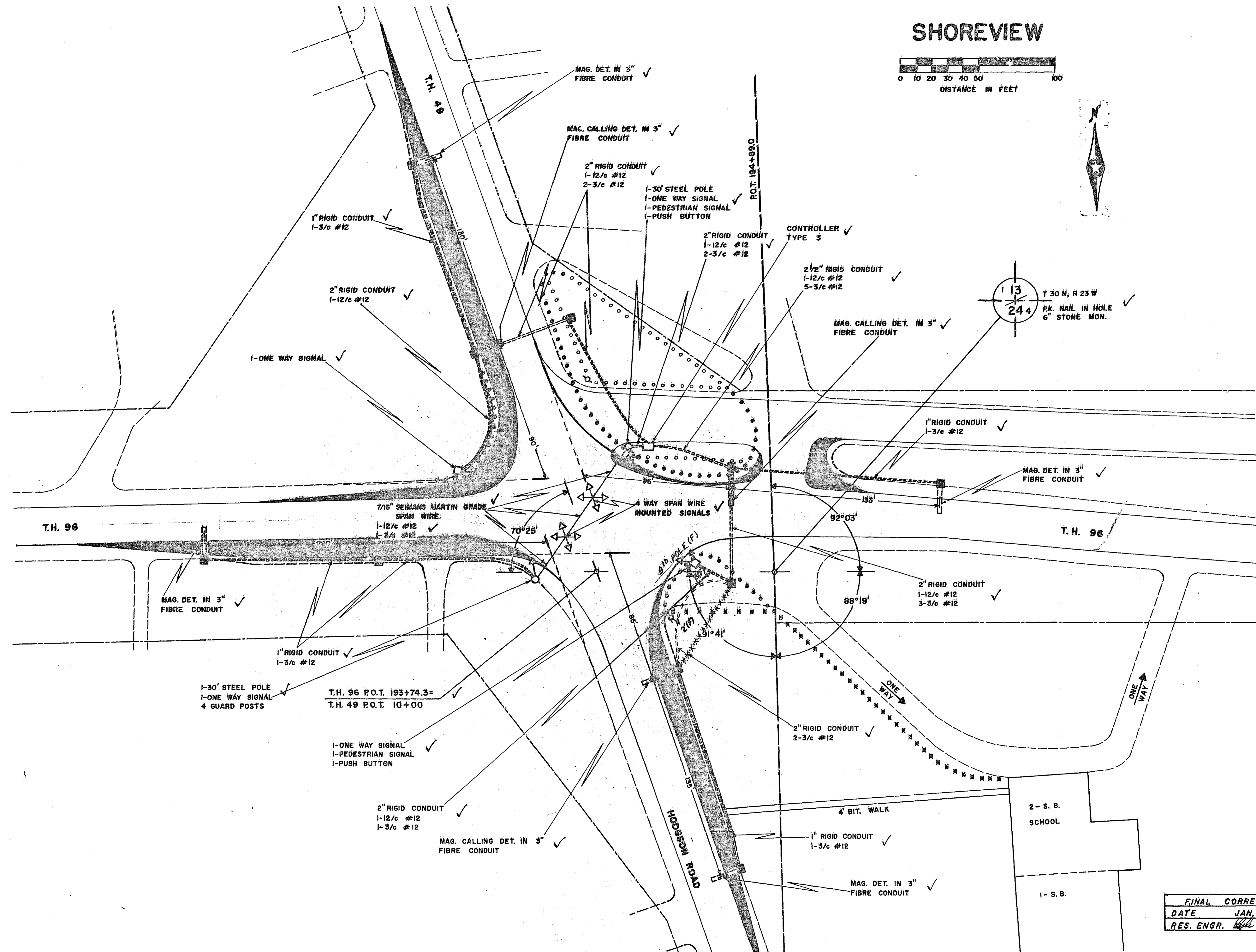
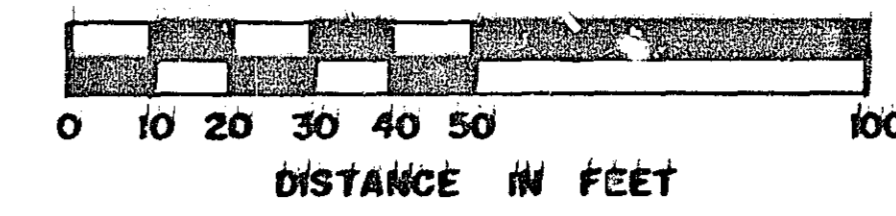


ESTIMATED QUANTITIES

PROJECT NO.	ITEM NO.	ITEM	UNIT	TOTAL ESTIMATED QUANTITIES
6214-11	2568.501	FULL TRAFFIC ACTUATED TRAFFIC CONTROL SIGNAL SYSTEM	SIGNAL SYSTEM	1 ✓

FINAL CORRECTIONS
DATE JAN. 2, 1964
RES. ENGR. *[Signature]*

SHOREVIEW



FINAL CORRECTIONS	
DATE	JAN. 2, 1964
RES. ENGR.	<i>Bill C. Vander</i>