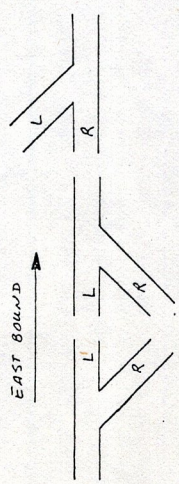


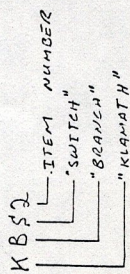
REV	INITIAL	DESCRIPTION	DATE	APPROVED
A		INITIAL DRAWING	9-16-8	MSX

NOTES:



1. THROUGH NOMENCLATURE (ABOVE)

2. GENERAL NOMENCLATURE



2L - LEFT

2C - COMMON

2R - RIGHT

POSITION WHEN CONNECTED CONTACT SET NUMBER

3. GAPS IN TRACK CORRESPOND TO GAPS IN DIAGRAM

4. ABBREVIATIONS:

N = MILES

Q = QUARRY

S = SWITCH

L = LEFT

R = RIGHT, RELAY

U = UP

D = DOWN

C = COMMON

F = FROG

T = TRACK (POWER RAIL), TUOLUMNE

X = CROSSING

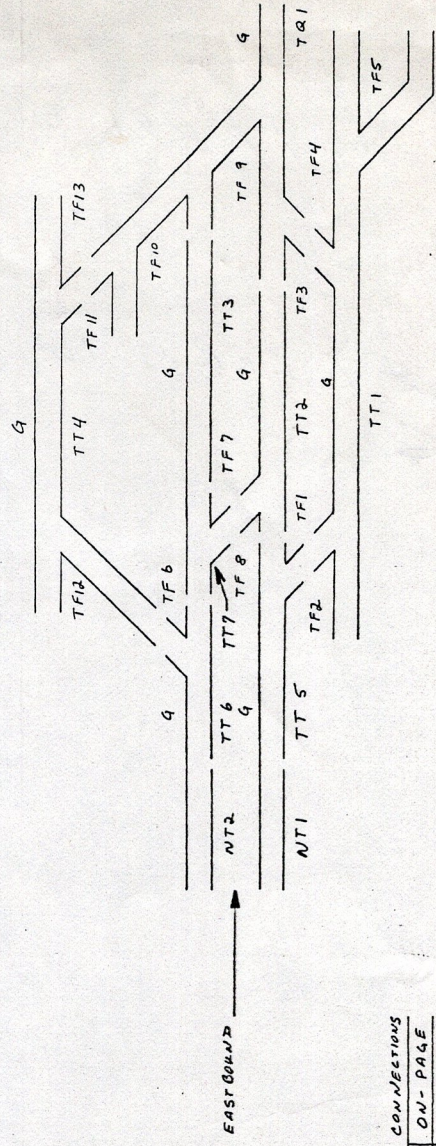
G = GROUND (TRACK POWER)

SW = PANEL SWITCH

NC = NO CONNECTION

Y = YARD (THROTTLE POWER SELECTOR)

TSW13	TSW12	TSW6	TSW7	TSW8	TSW11	TSW10	TSW9
1L TT4	1L TT4	1L TT6	1L TT7	1L TT2	1L TF10	1L TF9	1L TQ1
1C TF13	1C TF12	1C TFB	1C TF7	1C TFB	1C TF11	1C TF10	1C TF9
1R G	1R G	1R G	1R G	1R G	1R G	1R G	1R G
2L NC	2L NC	2L TSW12-2C	2L TF3	2L NC	2L NC	2L NC	2L NC
2C NC	2C TSW6-2L	2C TT6	2C TT7	2C TSW1-2L	2C NC	2C NC	2C NC
2R NC	2R TT4	2R TT7	2R TF8	2R TT2	2R NC	2R NC	2R NC



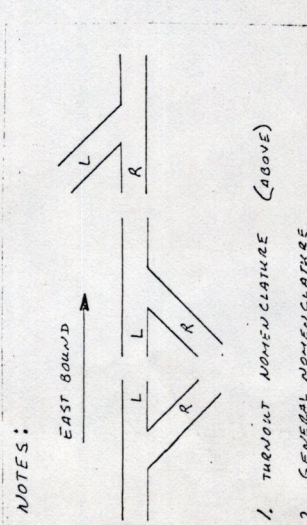
EXTERNAL CONNECTIONS

OFF-PAGE	ON-PAGE
TR1-1C	TT 1
TR2-1C	TT 2
TR3-1C	TT 3
TR4-1C	TT 4
TQ1-1C	TQ 1
NP-1	NT 1
NP-2	NT 2

TSW1	TSW2	TSW3	TSW4	TSW5
1L TTS	1L TT1	1L TQ1	1L TT1	1L TT1
1C TFI	1C TFA	1C TF3	1C TF4	1C TFS
1R G	1R G	1R TF9	1R G	1R TF4
2L TSW8-2C	2L NC	2L NC	2L NC	2L NC
2C TTS	2C NC	2C NC	2C NC	2C NC
2R TF2	2R NC	2R NC	2R NC	2R NC

SIZE	DRAWING NO.	REV
B	TUOLUMNE MAIN LINE TRACK WIRING	A
SCALE	NONE	SHEET 1 OF 1

REV	INITIAL	REVISIONS DESCRIPTION	DATE	APPROVED
A		INITIAL DRAWING	9-16-87	MSX



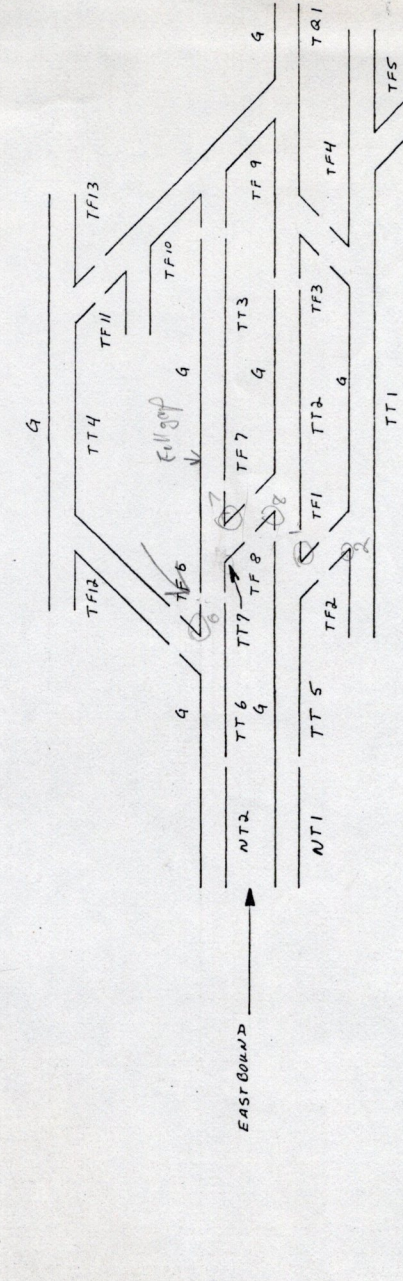
- NOTES:
- THRUOUT NOMENCLATURE (ABOVE)
 - GENERAL NOMENCLATURE
 - GAPS IN TRACK CORRESPOND TO GAPS IN DIAGRAM
 - ABBREVIATIONS:

EXTERNAL CONNECTIONS

OFF-PAGE	ON-PAGE
TR1-1C	TT 1
TR2-1C	TT 2
TR3-1C	TT 3
TR4-1C	TT 4
TQR1-1C	TQ 1
NP-1	NT 1
NP-2	NT 2

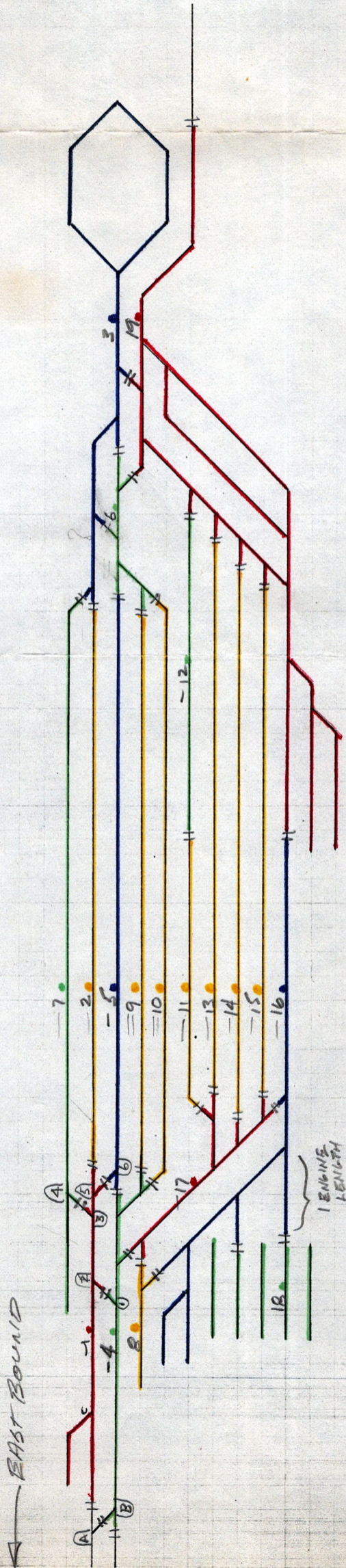
N = MILES
 Q = QUARRY
 S = SWITCH
 L = LEFT
 R = RIGHT, RELAY
 W = WP
 D = DOWN
 C = COMMON
 F = FROG
 T = TRACK (POWER RAIL), TROUMLINE
 X = CROSSING
 G = GROUND (TRACK POWER)
 SW = PANEL SWITCH
 NC = NO CONNECTION
 Y = YARD (THROTTLE POWER SELECTOR)

TSW13	TSW12	TSW6	TSW7	TSW8	TSW10	TSW9
1L TT4	F 1L TT4	G 1L TT6	P 1L TT7	B 1L TT24	1L TF9	1L TQ1
1C TF13	1C TF12	1C TF6	1C TF7	C 1C TF8	1C TF10	1C TF9
1R G	1R G	1R G	1R G	1R G 6	1R G	1R G
2L NC	2L NC	E 2L TSW12-2C	TT3	2L NC	2L NC	2L NC
2C NC	E 2C TSW6-2L	G 2C TT6	TT7	A 2C TSW1-2L	2C NC	2C NC
2R NC	P 2R TT4	D 2R TT7	TT8	B 2R TT2	2R NC	2R NC



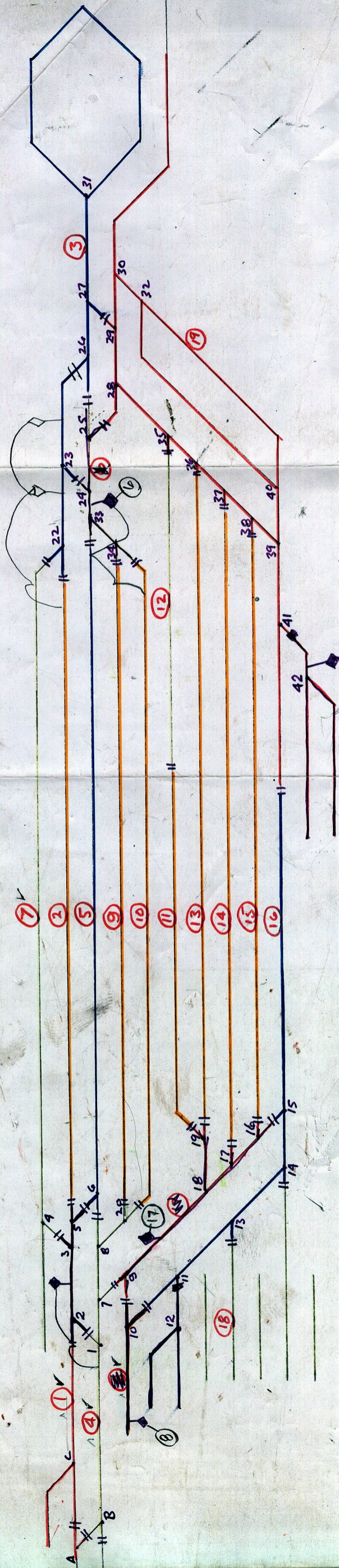
TSW1	TSW2	TSW3	TSW4	TSW5
H 1L TTS	1L TTI 6	1L TQ1	1L TTI	1L TTI
1C TFI	1C TF2	1C TF3	1C TF4	1C TFS
1R G	1R G 4	1R TF9	1R G	1R TF4
A 2L TSW8-2C	2L NC	2L NC	2L NC	2L NC
H 2C TTS	2C NC	2C NC	2C NC	2C NC
J 2R TF2	2R NC	2R NC	2R NC	2R NC

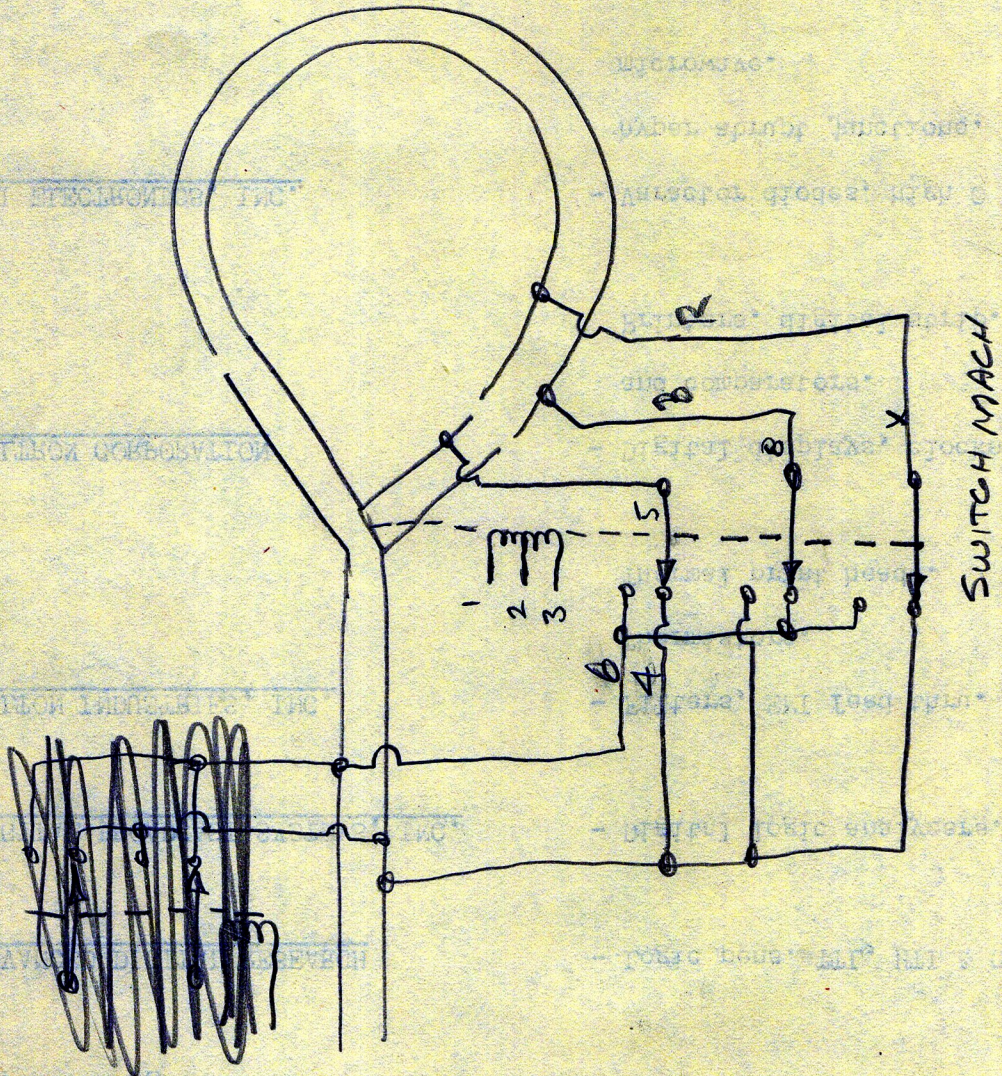
- NOTE:
- 1 - All blocks except roundhouse accessed by both throttles I & II.
 - 2 - 18 is direct to yard I only. (Also roundhouse)
 - 3 - Road cabs access all except 8, 16 & 18.
 - 4 - Left hand rail eastbound is common.
 - 5 - Reverse loop polarity is automatic.
 - 6 - Route selection by Pushbutton/relay. (Power automatic)
 - 7 - No cab just for round house duty.
 - 8 - Not all gaps are shown, merely those that separate blocks.
 - 9 - 16/17-19 not a thoroughfare. (IS ENGINE RUN AROUND)
 - 10 - Siding split at 11 - 12 maybe 13, 14 & 15 later.
 - 11 - Six possible operations simultaneously. Two to four most likely.
 - 12 - Remote access track 1, 4, 5, 2, 3, 19



86. Prod from 3rd 5, 9 or 10
 SIDING 8 REL. POWER THRU POINTS FROM 16 OR 17

◆ — POWER THRU SWITCH

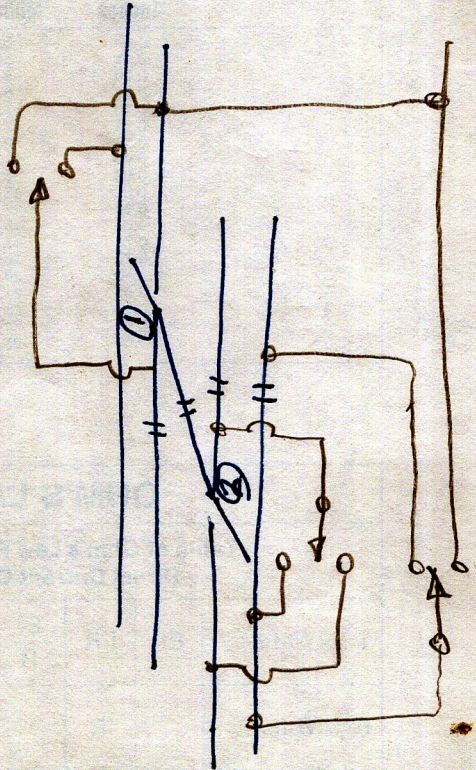
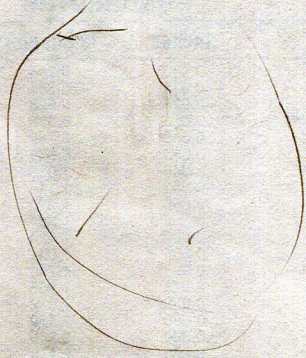




Reverse loop

W

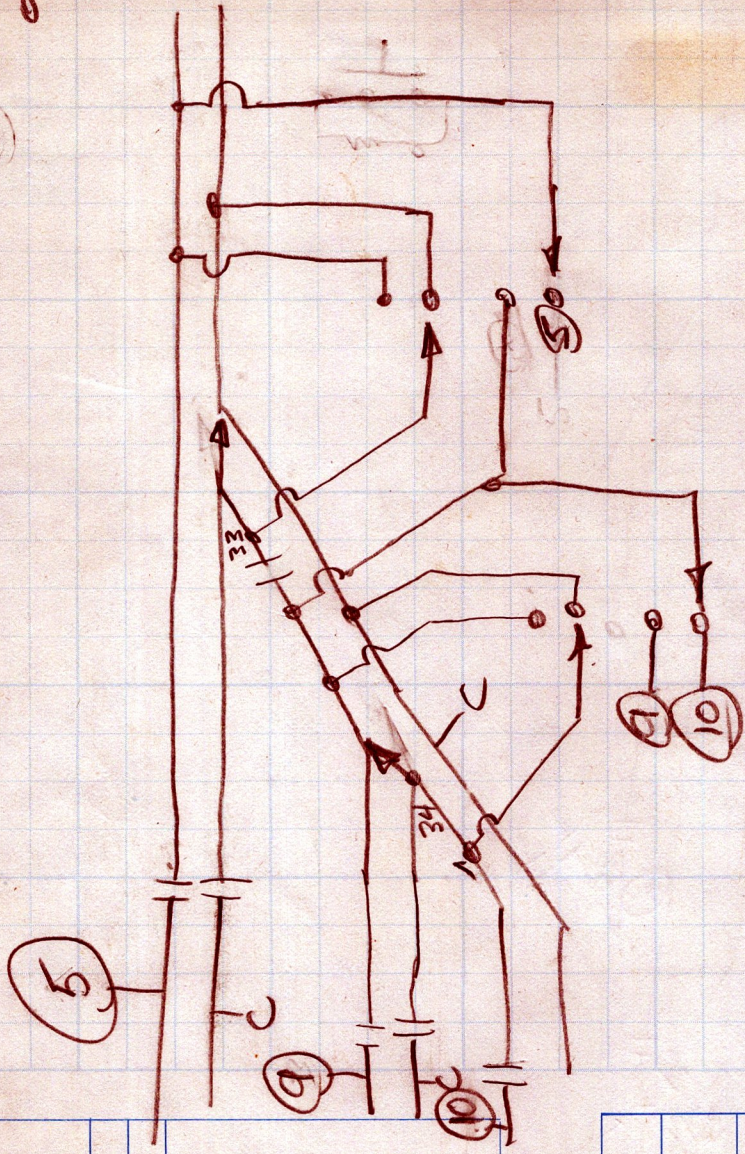




0.050
1.270
0.055
1.397
0.060
1.524
0.065
1.651
0.070
1.778
0.075
1.905
0.080
2.032
0.085
2.159
0.090
2.286
0.095
2.413
0.100
2.540

TENTHS

Inches	Millimeters
0.10	2.54
0.15	3.81
0.20	5.08
0.25	6.35
0.30	7.62
0.35	8.89
0.40	10.16
0.45	11.43
0.50	12.70
0.55	13.97
0.60	15.24
0.65	16.51
0.70	17.78
0.75	19.05
0.80	20.32
0.85	21.59
0.90	22.86
0.95	24.13
1.00	25.40



OHM'S LAW

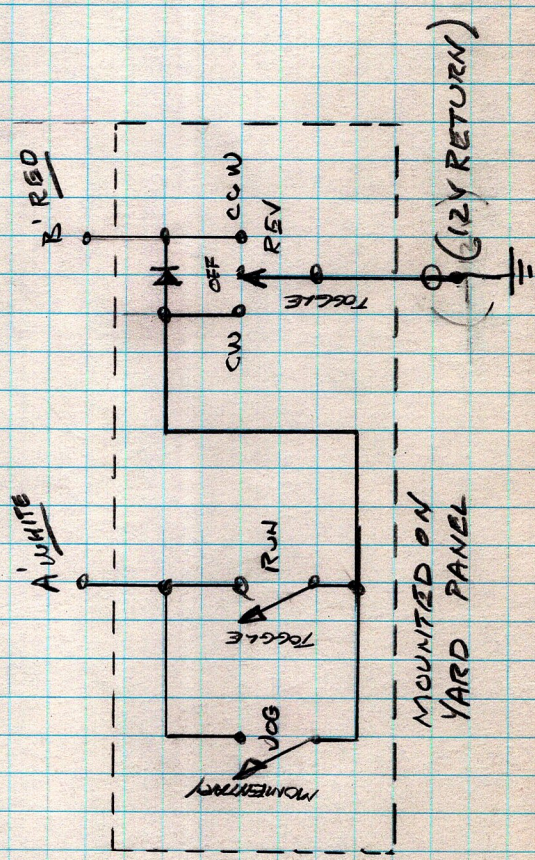
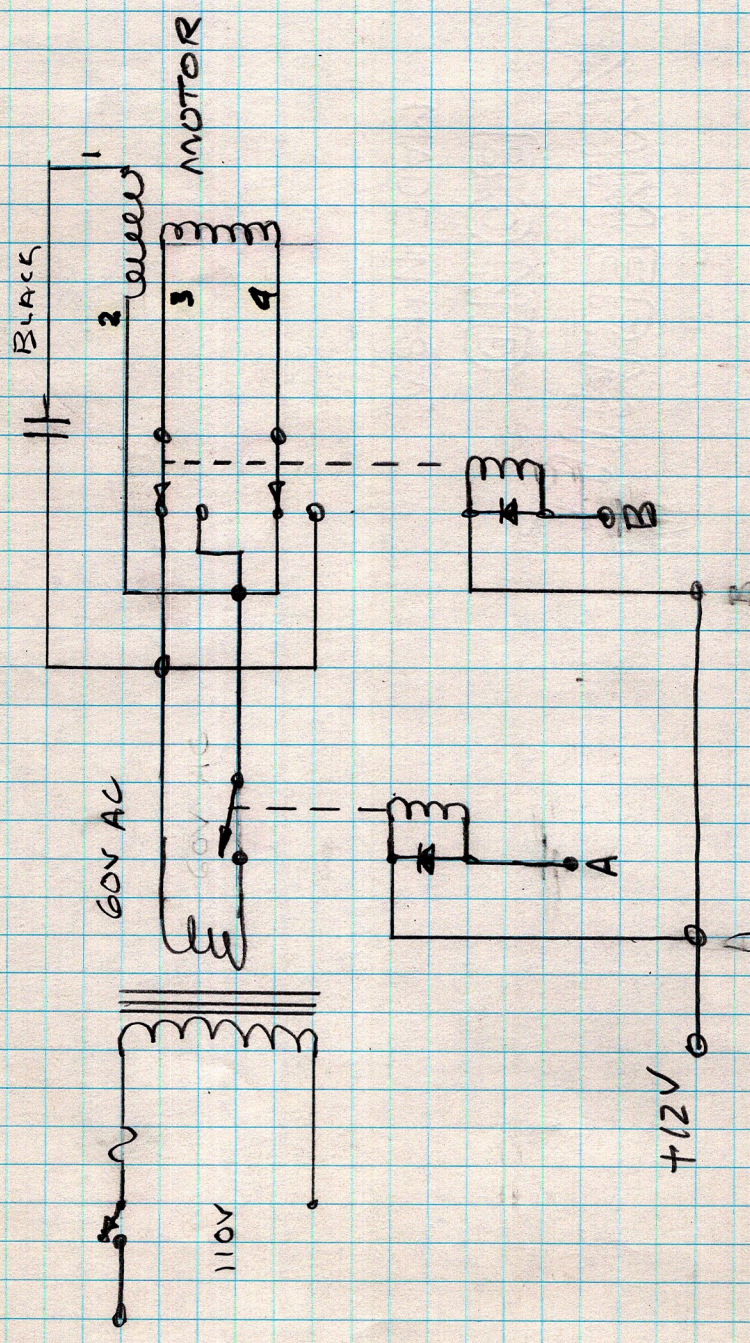
Table of Ohm's Law Formulae for Direct Current Circuits

P = Watts	EI	I^2R	$\frac{E^2}{R}$	$\frac{P}{I}$
E = Volts		IR	\sqrt{PR}	
I = Amperes			$\sqrt{\frac{P}{R}}$	$\frac{P}{E}$
R = Ohms	$\frac{E}{I}$			$\frac{E^2}{P}$

BEPICO

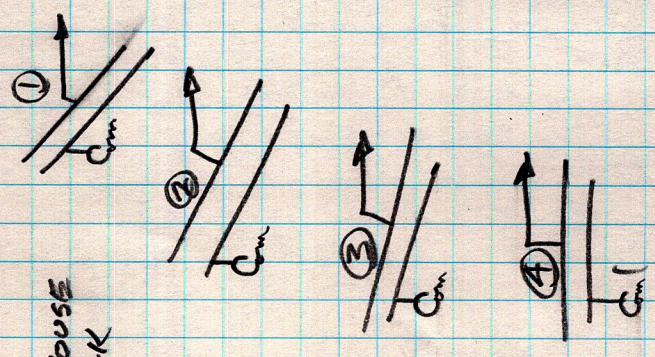
28151 HIGHWAY 74 • ROMOLAND,

INDUSTRIAL/COMMERCIAL • TELECOMMUNICATIONS • PULSE • DELAY LINES • UL RECOG



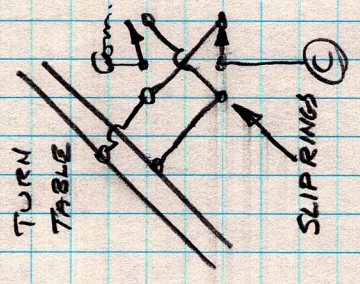
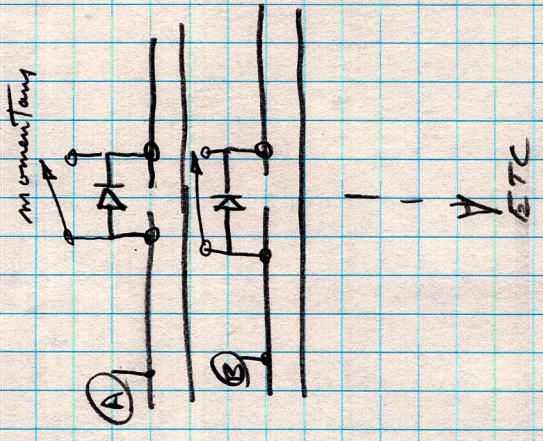
TURNABLE POWER
& PANEL CONTROL

ROUND HOUSE TRACK

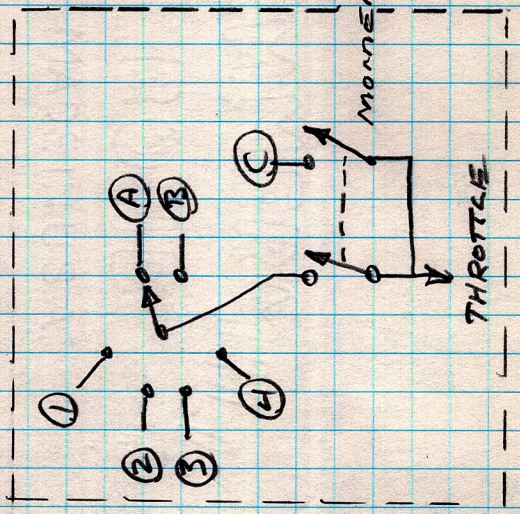


A
ETC.

YARD LEADS



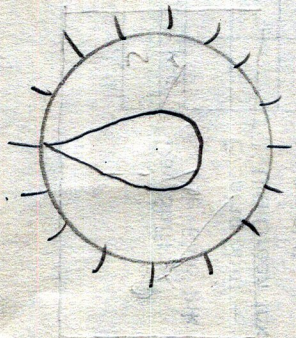
YARD PANEL



ROUND HOUSE TRACK
WIRING

CC 8-1-80 KIK

TABLE



CCW OFF CW



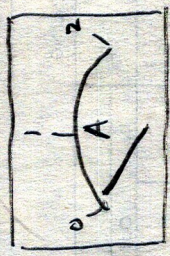
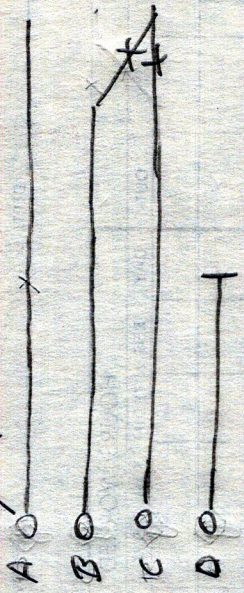
START



TRACK POWER



THIS IS THE TRACK OFF POINT

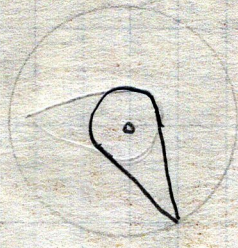


W

E



DIRECTION



THROTTLE

TRACK POWER HOLD POINT

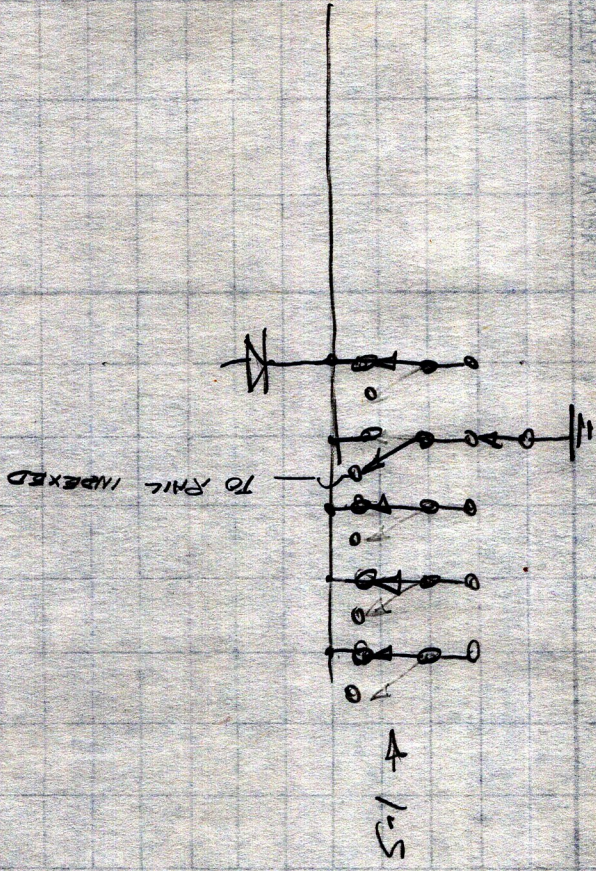


(CIRCUIT'S UNIT 1 & 2) (CIRCUIT'S UNIT 1 & 2)

ROUND HOUSE CONTROL PANEL

7-7-76

TOTAL HOURS WORKED



DATE: _____

TIME: _____

NAME: _____

NO. OF HOURS: _____

NO. OF MINUTES: _____

NO. OF SECONDS: _____

NO. OF PAGES: _____

NO. OF LINES: _____

NO. OF WORDS: _____

NO. OF CHARACTERS: _____

NO. OF SYLLABLES: _____

NO. OF LETTERS: _____

NO. OF DIGITS: _____

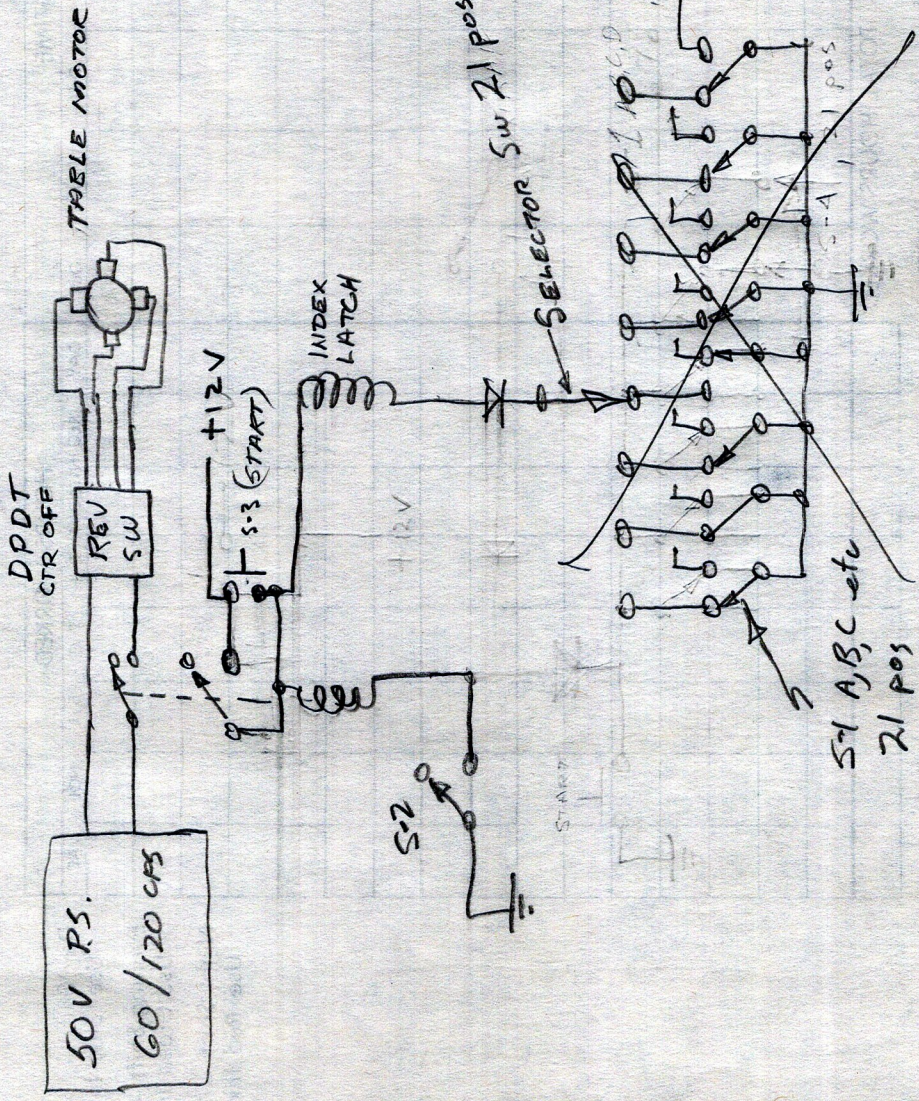
NO. OF SPACES: _____

NO. OF PUNCTUATION: _____

NO. OF OTHER CHARACTERS: _____

Use Red Ink
Use Green Ink
Use Blue Ink

LIVE SHEET

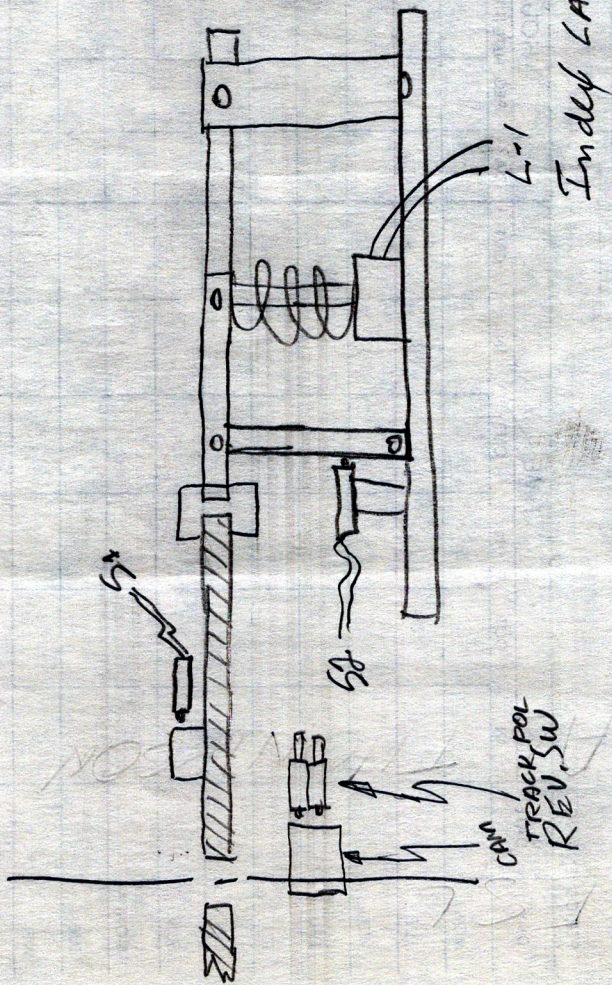


START

TO COMMON RAIL OF ROUND HOUSE LEADS AND STALLS

S-1 A, B, C etc 2/1 pos

Roundhouse 17 stalls
" " 4 leads



50V
P.S.
60/120W



TABLE MOTOR

