70MPH

142.6-143.0-40
143.0-176.0-49
176.0-180.5-40
180.5-204.3-60
234.2-236.0-40

PTC —
52.8 – 143.0
204.3 – 237.8

N

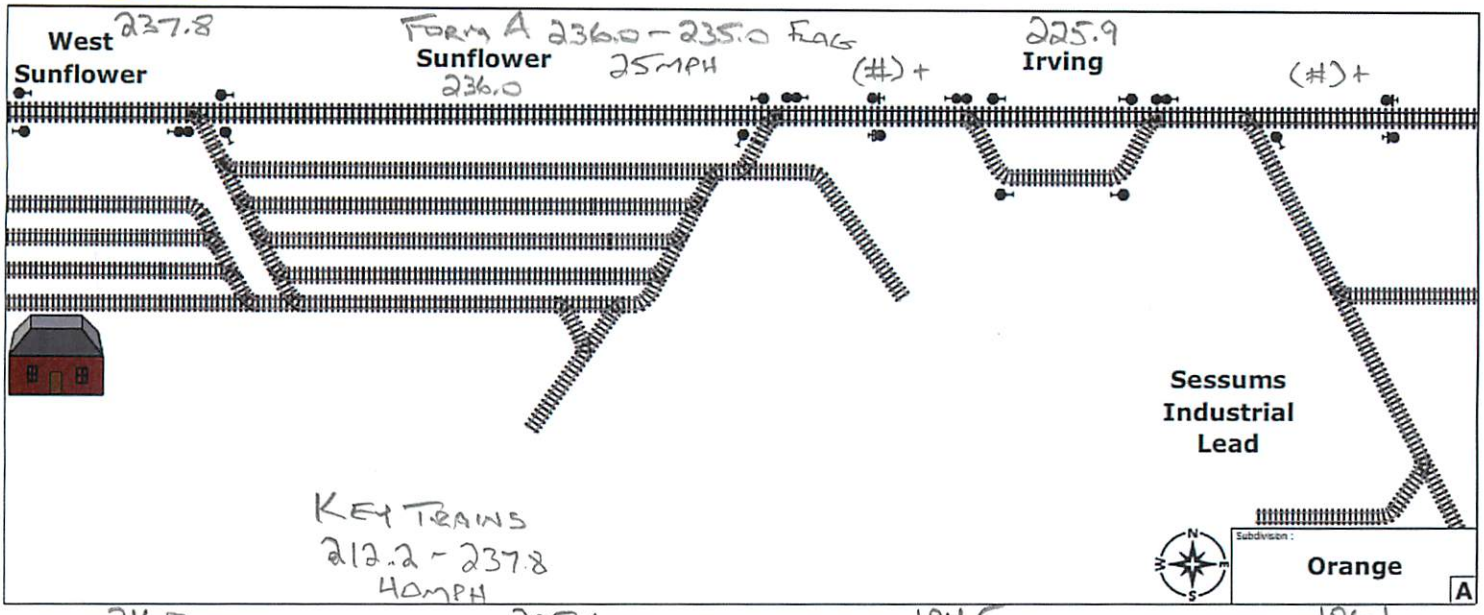
2020
TE&Y Training Maps

To be used with Training Area Timetable
#5 Effective December 01, 2019

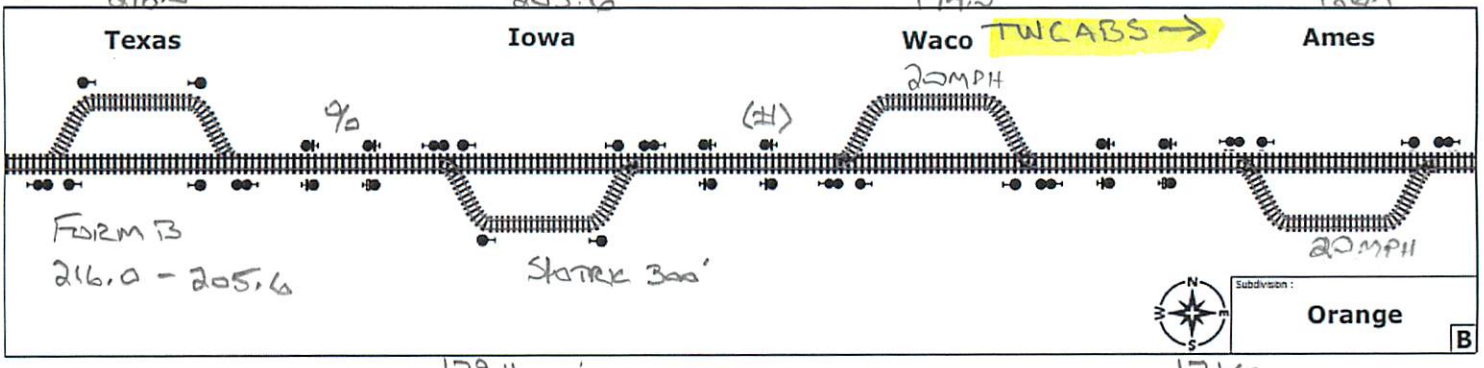
*Timetable area is west of North Platte, Denver and El Paso

BUILDING AMERICA®

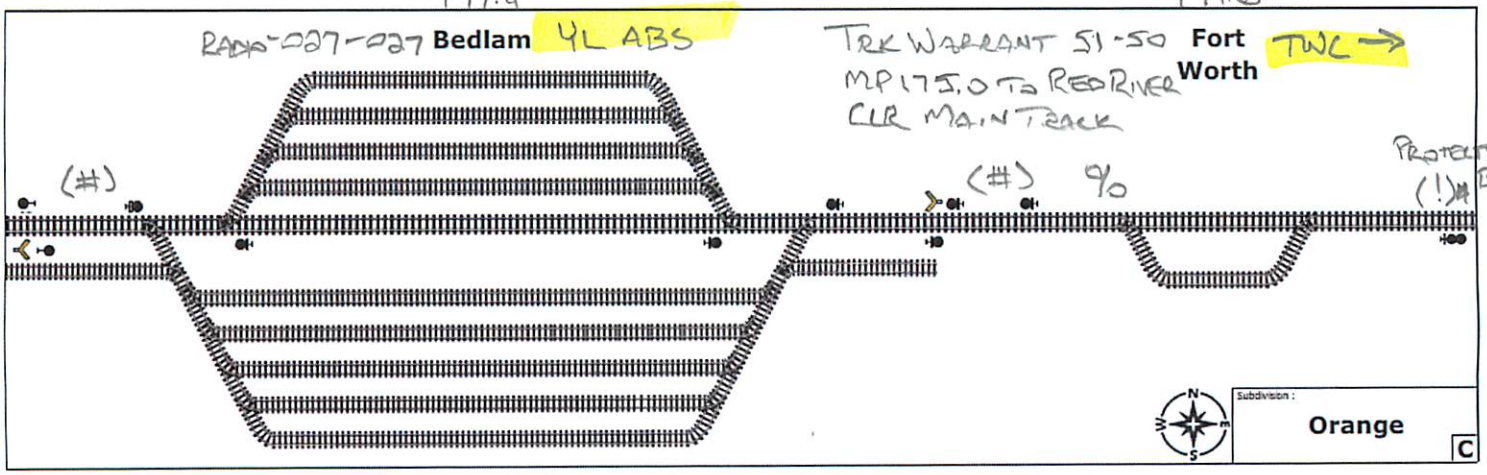
CTC



216.0 205.6 194.5 186.1



179.4 171.6



05/07/20

Contact YM For Zones
Emp. Announced Trk Breach

Every 5 Miles
Cond. Record Not at RS

ILXMD 15

BEFORE P/U

1HL OE 5474T 6502'C 6744'TOTAL

UP 7430	C45ACCTE	12.1	9.8	36.3	29.4
↓ 6493	C44AC	↓	↓		
6064	C44ACCTE				

73 TPOB

318 AXLES

TRAIN LIMITS: ROSE

IA431 – IRR143

326 TPA

SSC - 10910

HSC - 14878

OTHER THAN HOLL

IRR143 - CT321 FIELDS

210 TPA

SSC 6874

HSC 9374

L

AFTER P/U

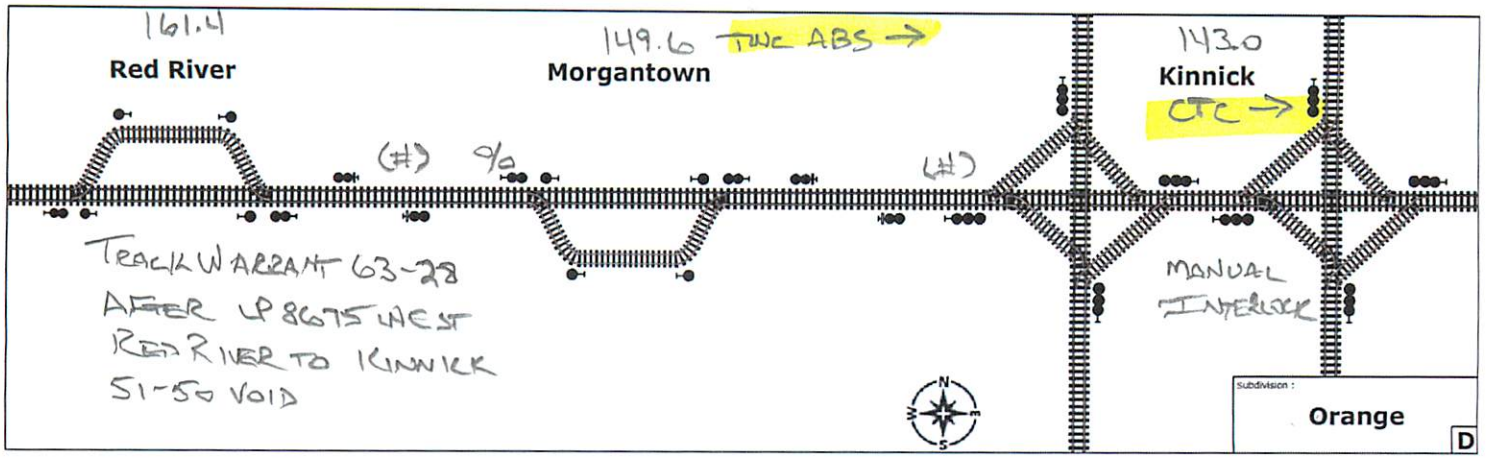
237 L OE 12283T 13847'C 14294'TOTAL

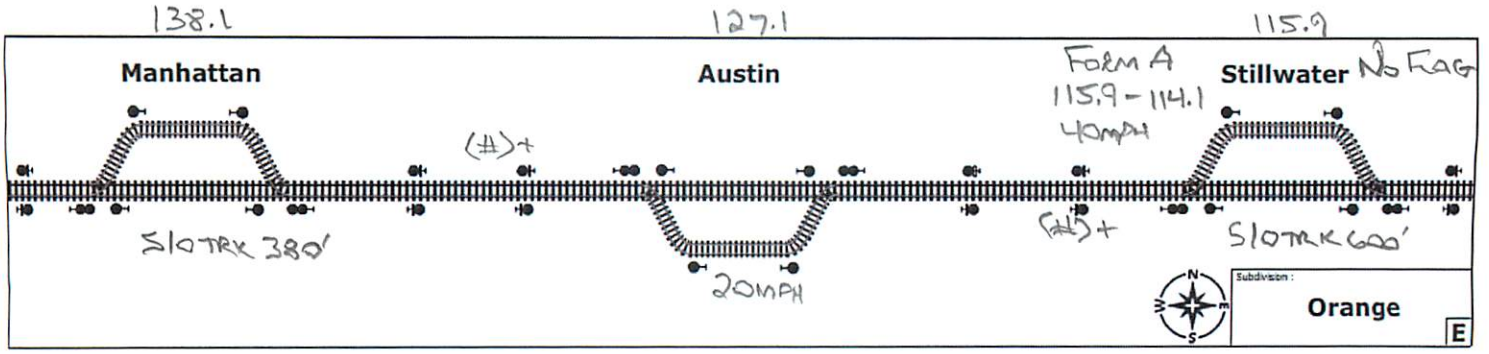
HE - SEE ABOVE

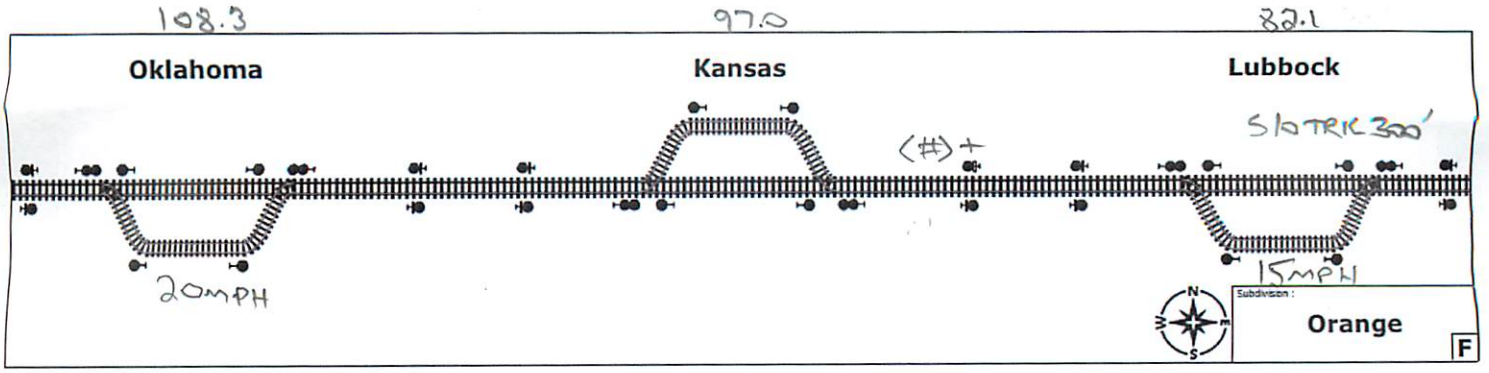
MID - UP 7229	C44AC	12.1	9.8		
↓ 8694	SD70ACE	12.0	10.5	72.5	59.5
REAR - UP 6914	C44ACCA	12.1	9.8		

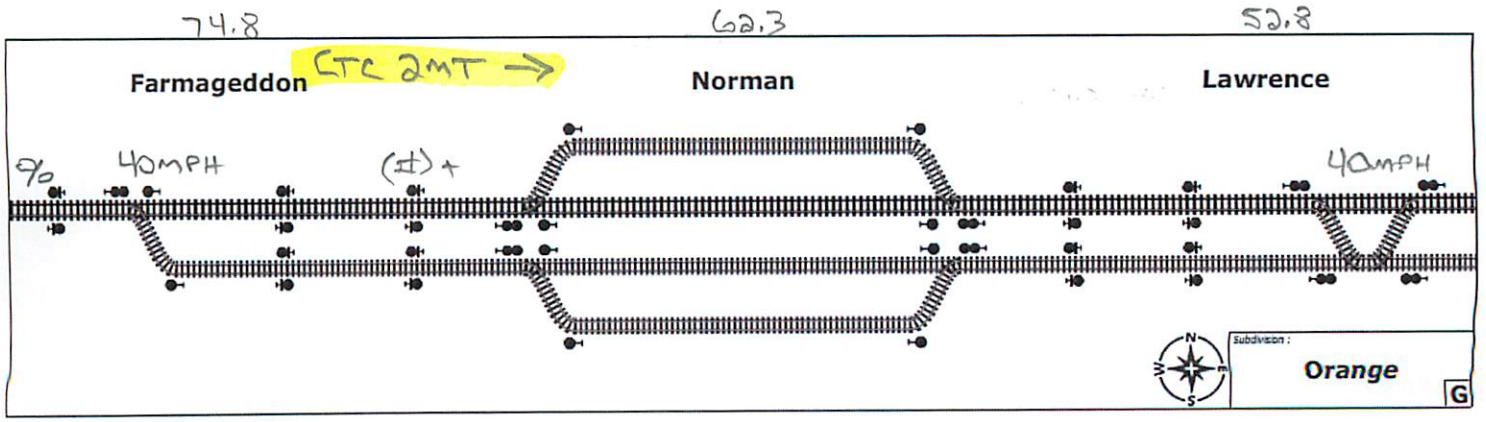
79 TPOB

664 AXLES









KINNICK -
TURNOUT & WYE
20MPH

EXPLANATION OF CHARACTERS

Symbol Represents	
123.45	MILE POST FOR SUB LIMITS ARE IN BOLD AND ITALICIZED
ABS	AUTOMATIC BLOCK SIGNAL
ACS	AUTOMATED CAB SIGNAL
ATC	AUTOMATIC TRAIN CONTROL
ATS	AUTOMATIC TRAIN STOP
CTC	CENTRALIZED TRAFFIC CONTOL
RL	RESTRICTED LIMITS
TWC	TRACK WARRANT CONTROL
DT	DOUBLE TRACK
#MT	MULTIPLE MAIN TRACK - # (number MT's)
!	SIDING WITH ENTERING SIGNAL ALLOWING ASPECT MORE FAVORABLE THAN LUNAR
(A)	AUTOMATIC INTERLOCKING
B	BASE RADIO STATION
D	DRAW BRIDGE
(G)	GATE-NORMAL POSITION AGAINST CONFLICTING ROUTE
G	GATE-NORMAL POSITION AGAINST THIS SUBDIVISION
(M)	MANUAL INTERLOCKING
(S)	STOP SIGN
T	TURNING FACILITY
(X)	RAILROAD CROSSING AT GRADE
X	CROSSOVER BETWEEN MAIN TRACKS WITH DUAL CONTROL SWITCHES
Y	YARD LIMITS
(Z)	MANUAL INTERLOCKING WITH A RELEASE BOX AND A M/W KEY RELEASE, IF EQUIPPED
(11-2)	SPECIAL INSTRUCTIONS APPLY ITEM 11 - 2 SWITCH MACHINES
(11-3)	SPECIAL INSTRUCTIONS APPLY ITEM 11 - 3 SWITCH MACHINES
N	NORTHWARD
S	SOUTHWARD
E	EASTWARD
W	WESTWARD
C	CENTER

(!) HOT WHEEL

Symbol Represents	
+	HEAD - END RESTRICTION ONLY | TALK ON DEFECT ONLY
(R)	REDUCE / RESUME SPEED SIGNS AT OTHER THAN PRESCRIBED LOCATION
(#)	HOT BOX AND DRAGGING EQUIPMENT DETECTOR STATION EQUIPPED WITH RADIO TRANSMITTED VERBAL INDICATOR
#	HOT BOX DETECTOR STATION EQUIPPED WITH RADIO TRANSMITTED VERBAL INDICATOR
@	HOT BOX AND DRAGGING EQUIPMENT DETECTOR STATION EQUIPPED WITH RADIO TRANSMITTED VERBAL INDICATOR - TALK ON DEFECT ONLY WITH HOLD OR STOP SIGNALS
$	HOT BOX DETECTOR STATION EQUIPPED WITH RADIO TRANSMITTED VERBAL INDICATOR - TALK ON DEFECT ONLY
%	DRAGGING EQUIPMENT DETECTOR WITH RADIO TRANSMITTED VERBAL INDICATOR - TALK ON DEFECT ONLY
&	HIGH WIDE SHIFTED LOAD AND DRAGGING EQUIPMENT DETECTOR EQUIPPED WITH RADIO TRANSMITTED VERBAL INDICATOR
(@)	WHEEL IMPACT DETECTOR EQUIPPED WITH RADIO TRAMSMITTED VERBAL DEFECT INDICATORS - TALK ON DEFECT ONLY
(&)	HIGH WIDE SHIFTED LOAD AND DRAGGING EQUIPMENT DETECTOR - TALK ON DEFECT ONLY
(*)	WHEEL DOWN INDICATOR - TALK ON DEFECT ONLY

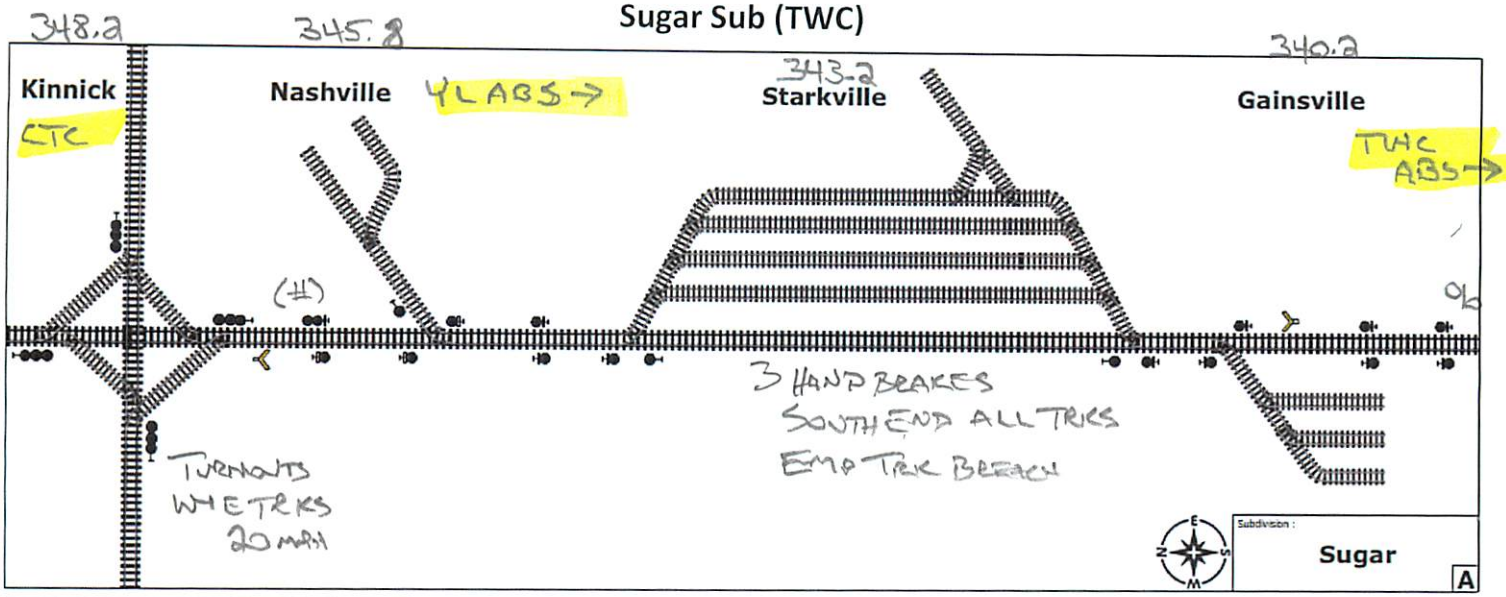
Track Diagram Color Codes

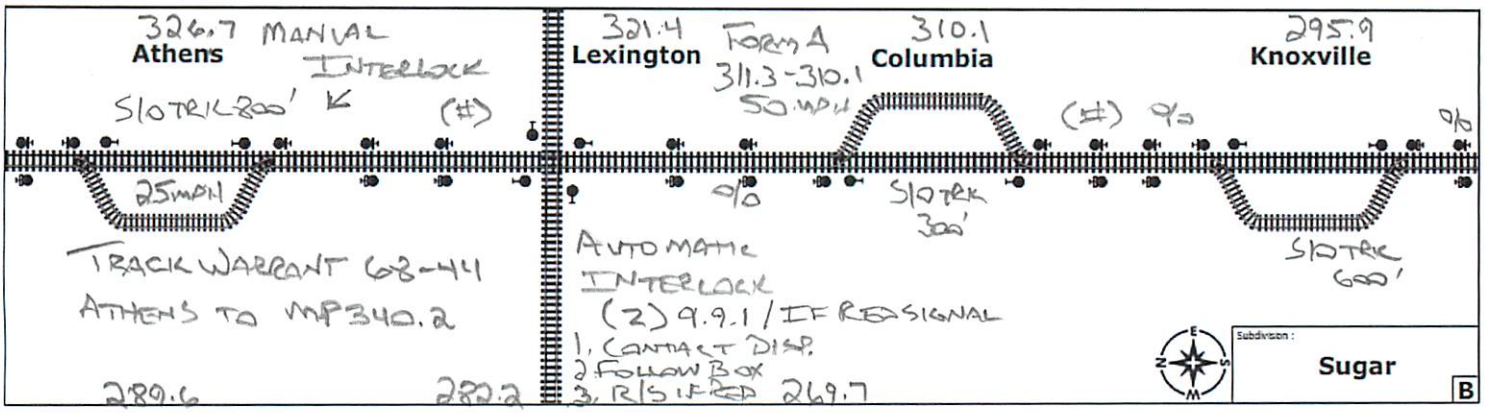
CTC	ABS	TWC
ATC	ACS	ATS
9.14 / 9.15	9.14.2	
YL / RL / NON-SIGNALED		

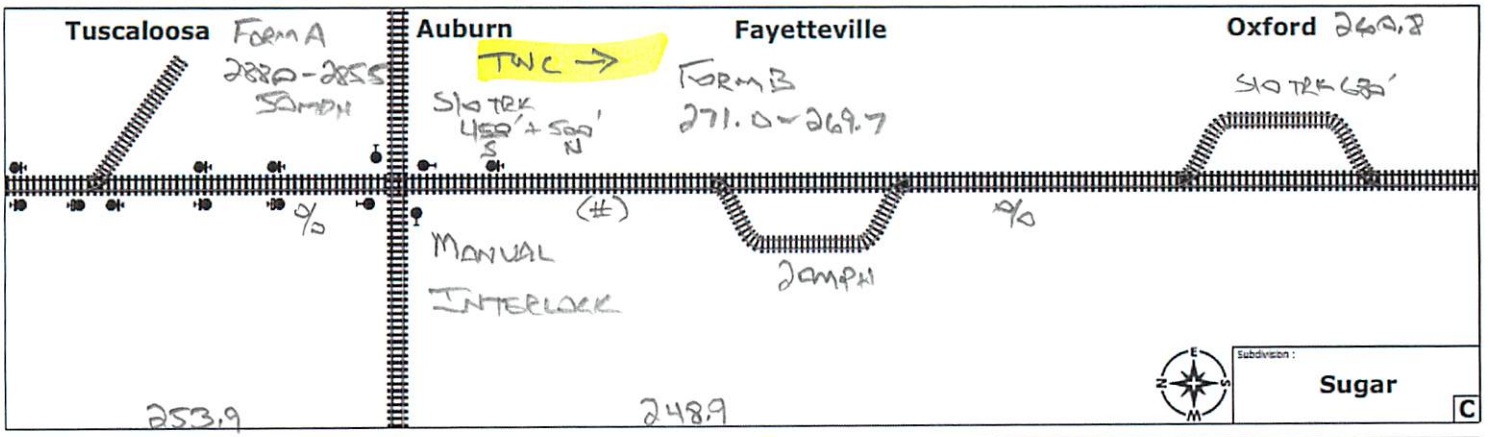
TABLE OF TRAIN SPEEDS

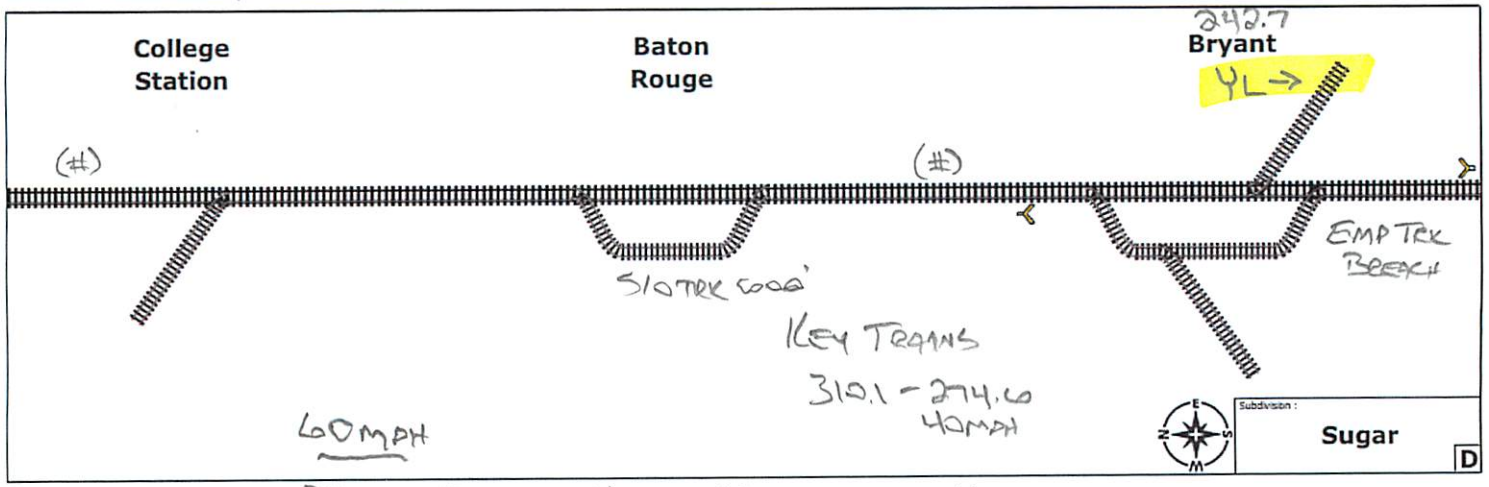
Min Per Mi.	Sec. Per Mi.	Miles Per Hour	Min. Per Mi.	Sec Per Mi.	Miles Per Hour	Min Per Mi.	Sec. Per Mi.	Miles Per Hour	Min. Per Mi.	Sec Per Mi.	Miles Per Hour
			1	6	54.5	1	21	44.4	1	35	37.9
0	45	80.0	1	7	53.7	1	22	43.9	1	40	36.0
0	48	75.0	1	8	52.9	1	23	43.4	1	45	34.3
0	50	72.0	1	10	51.4	1	24	42.9	1	50	32.7
0	52	69.2	1	11	50.7	1	25	42.4	1	55	31.3
0	54	66.6	1	12	50.0	1	26	41.9	2	0	30.0
0	56	64.2	1	13	49.3	1	27	41.4	2	5	28.8
0	58	62.0	1	14	48.6	1	28	40.9	2	10	27.7
1	0	60.0	1	15	48.0	1	29	40.4	2	15	26.7
1	1	59.0	1	16	47.4	1	30	40.0	2	20	25.7
1	2	58.0	1	17	46.7	1	31	39.6	2	25	24.8
1	3	57.1	1	18	46.1	1	32	39.1	3	0	20.0
1	4	56.2	1	19	45.6	1	33	38.7	4	0	15.0
1	5	55.3	1	20	45.0	1	34	38.2	6	0	10.0

Sugar Sub (TWC)









05/07/20

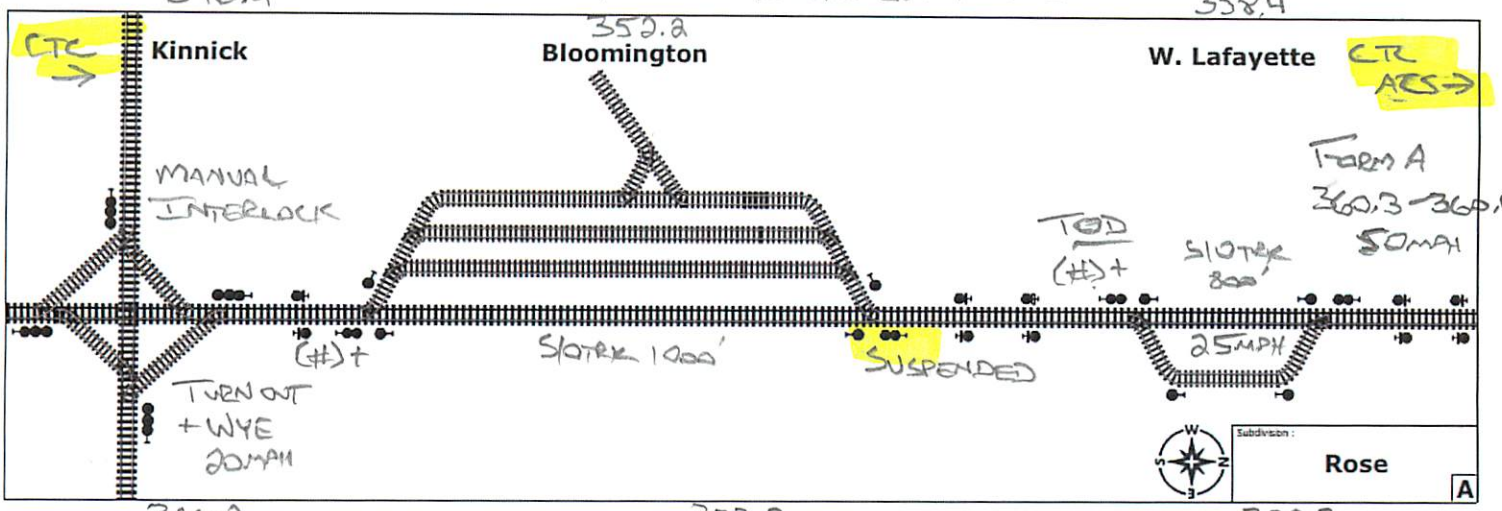
344.2 - 340.2 - 40
321.4 (X) - 25
301.4 - 300.1 - 50

282.2 - 246.1 - 49
246.1 - 242.7 - 20

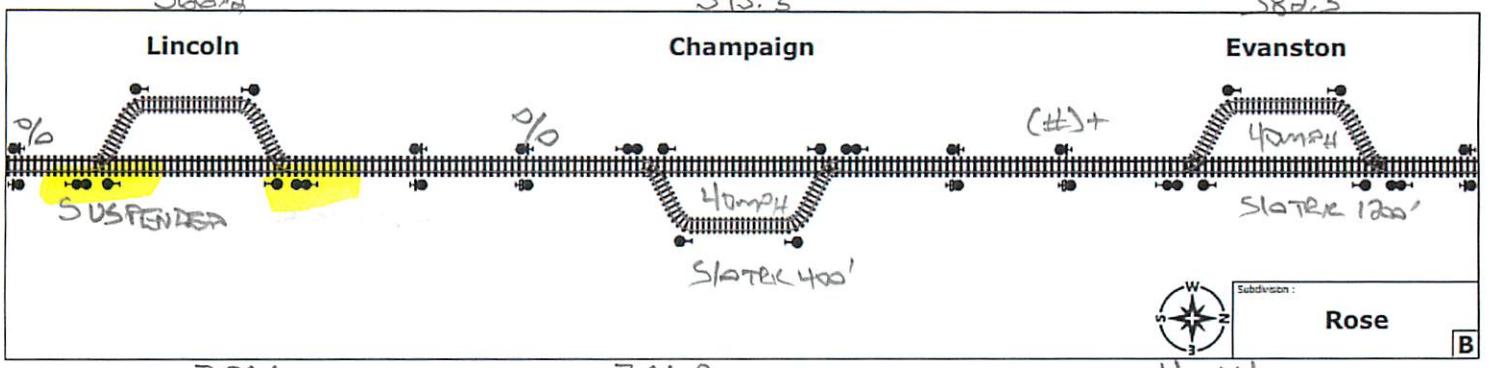
SIGNAL SUSPENSION - 366.2 - 354.4
PTR SOFT C/O AT 1ST SIGNAL

Rose Subdivision (ACS)

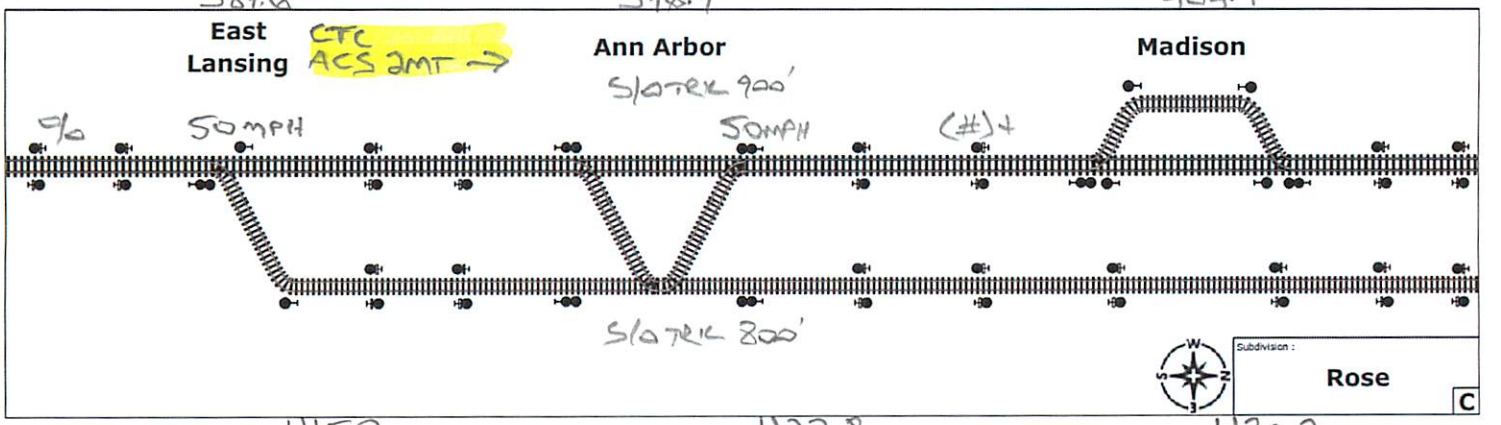
15MPH AT FIRST SIGNAL CUT IN PTC



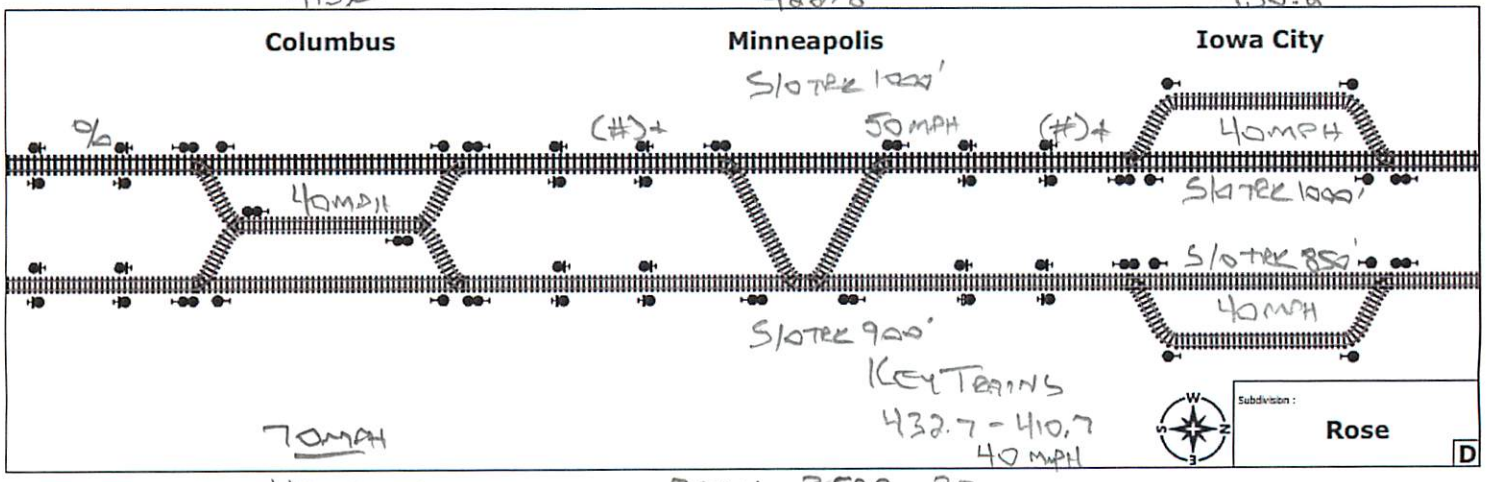
366.2 373.3 382.3



389.6 396.9 404.4



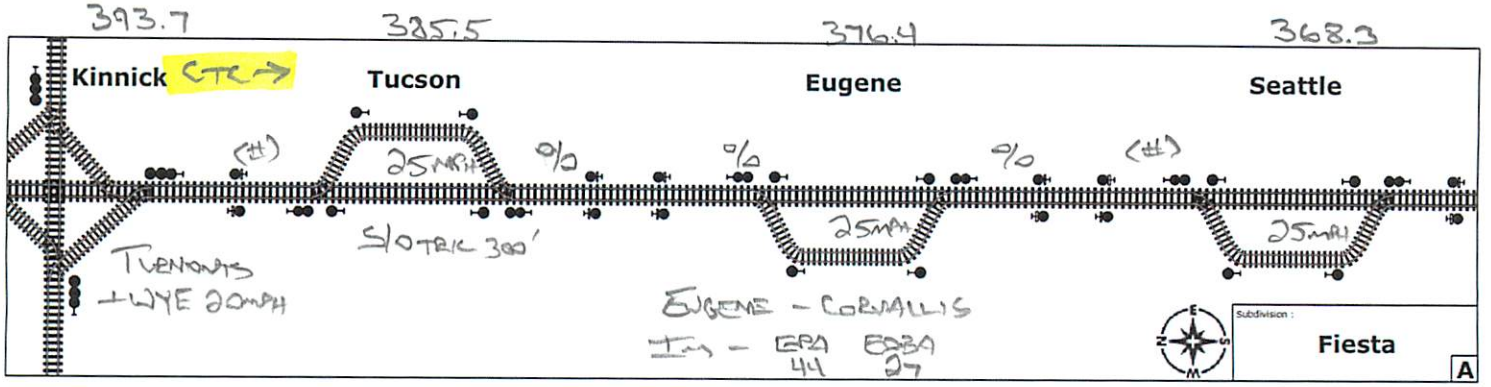
415.0 422.8 430.2

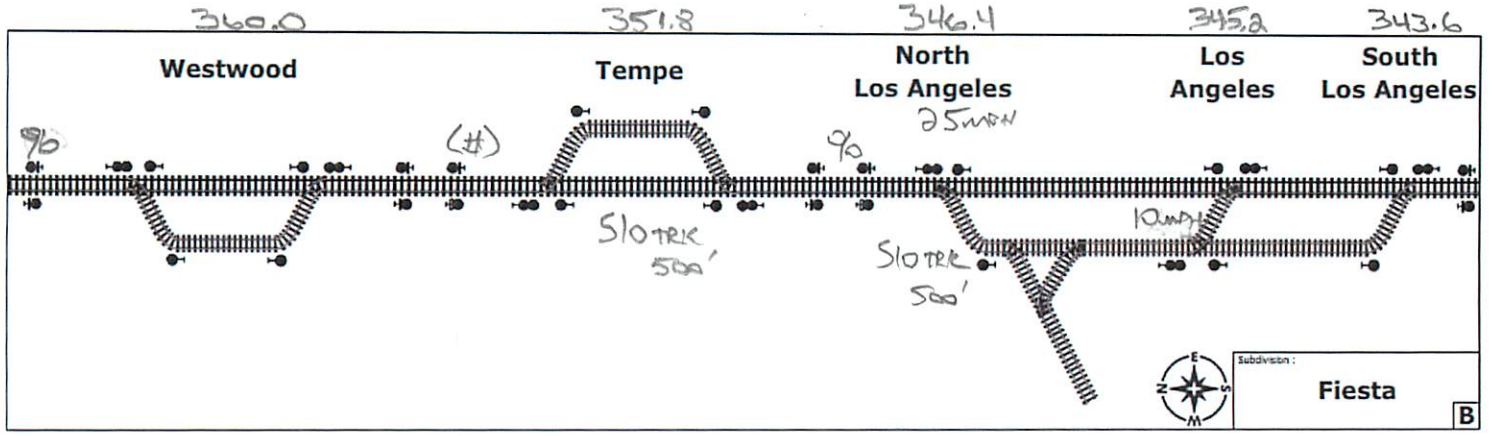


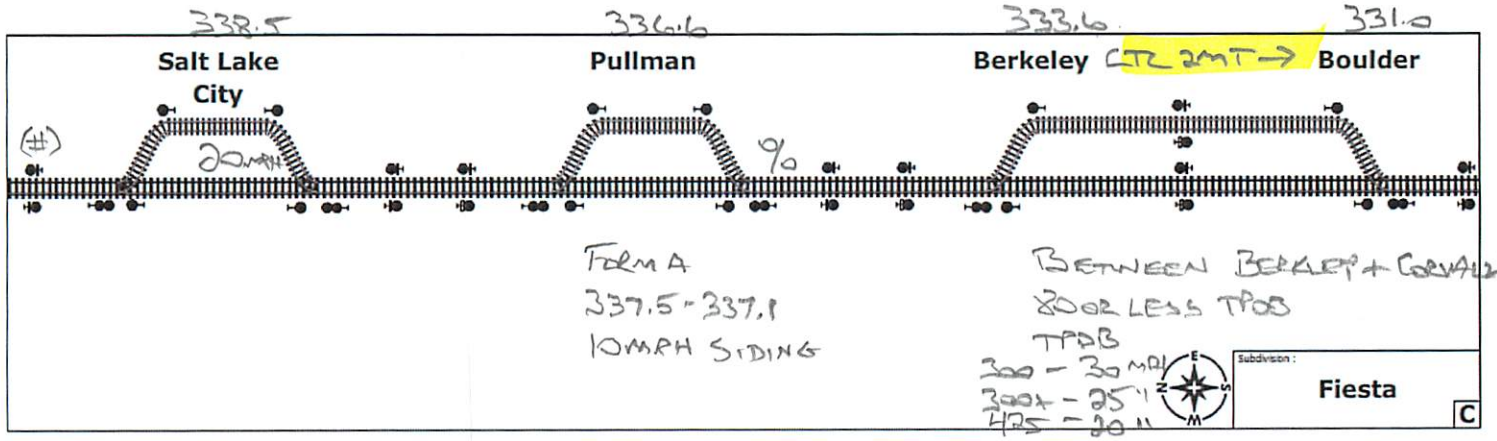
420.7 - 418.6 - 55
354.4 - 352.2 - 30
328.9 - 328.4 - 40
370.1 - 369.7 - 50
368.4 - 368.0 - 60

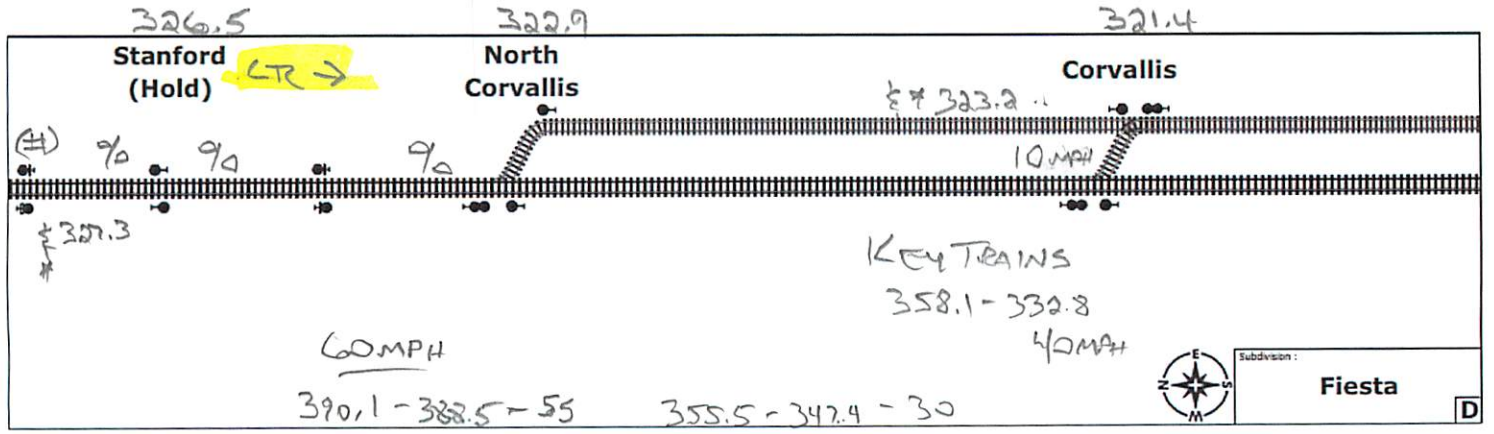
05/07/20

FIESTA SUBDIVISION (GRADE)









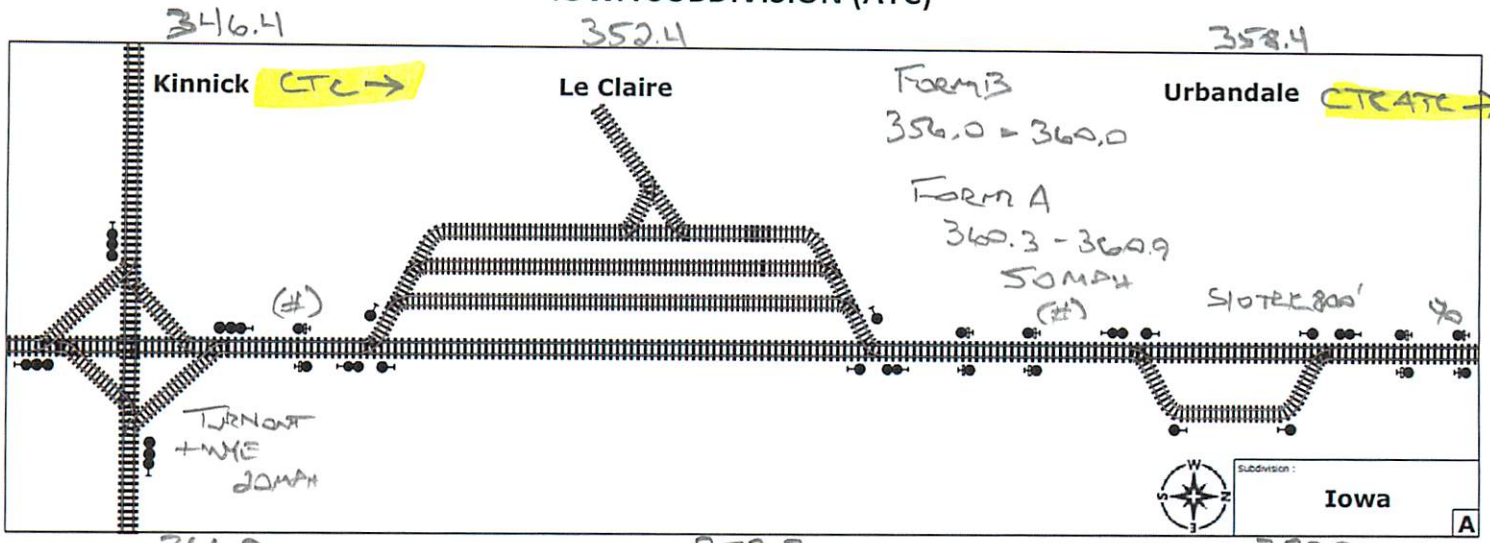
60MPH

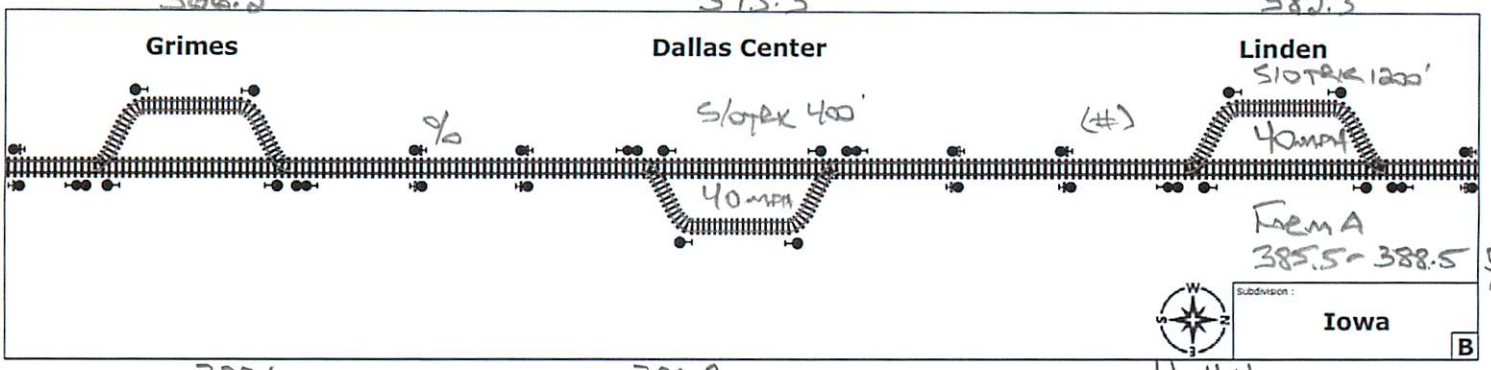
390.1 - 388.5 - 55
388.5 - 387.9 - 50
387.9 - 379.1 - 40
373.8 - 363.7 - 40
363.7 - 355.5 - 35

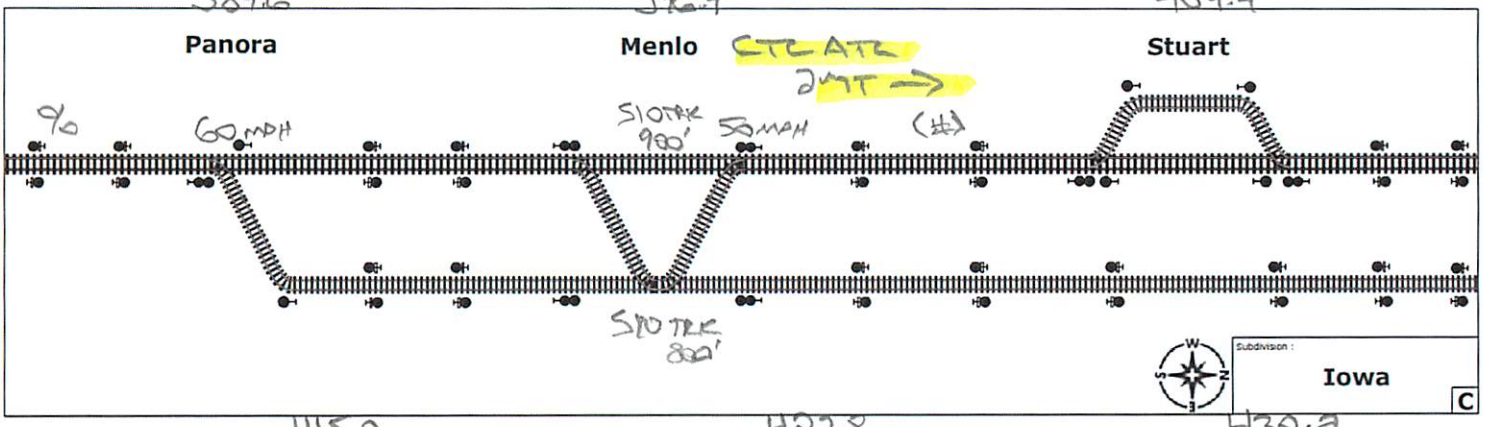
355.5 - 347.4 - 30
347.4 - 346.0 - 35
346.0 - 337.9 - 40
337.9 - 333.5 - 35
333.5 - 321.4 - 30

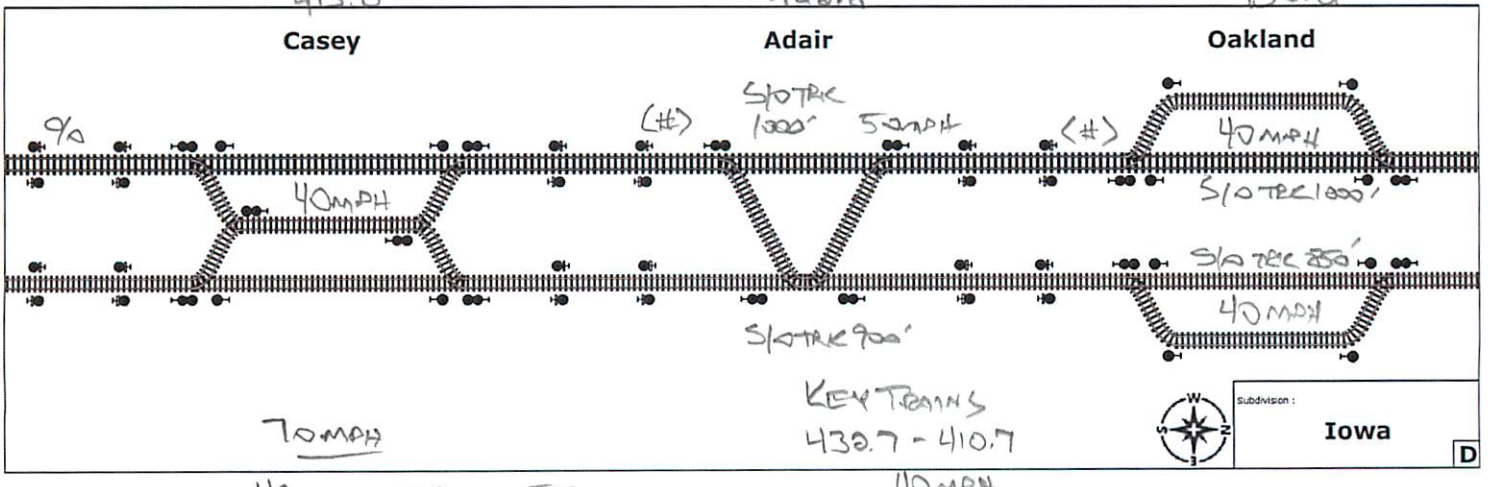
05/07/20

IOWA SUBDIVISION (ATC)









420.7 - 418.6 - 55
380.9 - 382.4 - 40
372.1 - 369.7 - 50
368.4 - 368.0 - 60

05/07/20

31.8.7: Locomotive Fuel Conservation and TPA Compliance

Step 1. Determine the minimum total EPA needed for route using the following formula:
Train Tonnage ÷ TPA Limit (as indicated on train list) = Total EPA needed.

Step 2. Determine the minimum number of **locomotive(s)** which are needed to handle train tonnage without exceeding the train TPA limit.

Step 3. Verify correct EPA is online for route by recalculating TPA:
Total Train Tonnage (including Isolated/shutdown locomotives) ÷ Total EPA = TPA

Step 4. Confirm **TRAIN TPA** does not exceed **ROUTE TPA.**

Step 5. Start or shutdown / isolate locomotives as required.

Formulas

TPA = Tons / EPA (include Isolated / shutdown locomotives for TONS)

EPA = Tons / TPA (weight of cars only for TONS)

TONS = TPA X EPA
1) **Tons that can be handled by all online locomotives without exceeding ROUTE TPA (Use Route TPA)**
2) **Tonnage pulled by a lead or cut-in helper. ½ of this number is tonnage pulled behind cut-in helper (Use Train TPA) This number must be less than coupler limit for the territory.**

TPDBA = Tons / EDBA (include Isolated / shutdown locomotives for TONS)