

14-505-01



Rite in the Rain®
ALL-WEATHER
**CROSS SECTION
FIELD BOOK**

Nº 370-6F

**PARKS HWY GRADE SEPARATIONS
2014 SURVEY SERVICES
BOOK 1**

14-505-01 Parks Hwy Grade Separations 2014

Book 1



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Rite in the Rain®
ALL-WEATHER WRITING PAPER

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Project 14-S05-01 HSIP: PARKS HWY GRADE SEPARATIONS
2014 SURVEY SERVICES
BOOK 1

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SEPARATED RAILROAD CROSSING

SET CONTROL

- CP 78 SET 2" AL CAP ON 5/8" X 30" REBAR TYPICAL
- +/- 03' EAST OF THE EAST EDGE PARKS HWY 02' BELOW GRADE
 - +/- 272' SE OF MP 100 SIGN
 - +/- 330' ~~EAST~~ WEST OF RR CROSSING SIGN EAST SIDE PARKS HWY
 - +/- 68' EAST OF SOUTH SIDE DRIVEWAY WEST SIDE PARKS HWY
 - +/- 127' WEST OF POLE P 19 A
- CP 79 SET 2" AL CAP ON 5/8" X 30" REBAR TYPICAL
- +/- 01' NORTH OF NORTH EDGE PARKS HWY 03' BELOW GRADE
 - +/- 1600' WEST OF MP 100 SIGN
 - +/- 88' NORTH OF "TURNING TRAFFIC AHEAD" SIGN SOUTH SIDE PARKS
 - +/- 115' WEST OF POLE P 22 A
 - +/- 317' SE OF RR CROSSING SIGN NORTH SIDE PARKS HWY
 - +/- 100' NORTH OF WEST SIDE DRIVEWAY (JAN'S JUMPER JAVA) SOUTH SIDE PARKS HWY
- CP 80 SET 2" AL CAP ON 5/8" X 30" REBAR TYPICAL
- +/- 05' SOUTH OF SOUTH EDGE PARKS HWY 03' BELOW GRADE
 - +/- 160' SW OF POLE P 27
 - +/- 135' WEST OF "BICYCLES USE CAUTION" SIGN SOUTH SIDE PARKS HWY
 - +/- 525' EAST OF "RR CROSSING SIGN SOUTH SIDE PARKS HWY
- CP 81 SET 2" AL CAP ON 5/8" X 30" REBAR TYPICAL
- +/- 06' SOUTH OF SOUTH EDGE PARKS HWY 02' BELOW GRADE
 - +/- 1740' SOUTH OF MP 101 SIGN
 - +/- 640' NW OF RR CROSSING SIGN SOUTH SIDE PARKS HWY
 - +/- 125' SW OF POLE (NOT NUMBERED) W/ 3 GUY ANCHORS

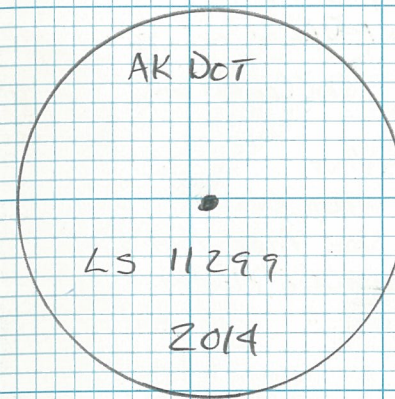
DAY CONT NEXT PAGE

9/11/2014
48°F
CLOUDY

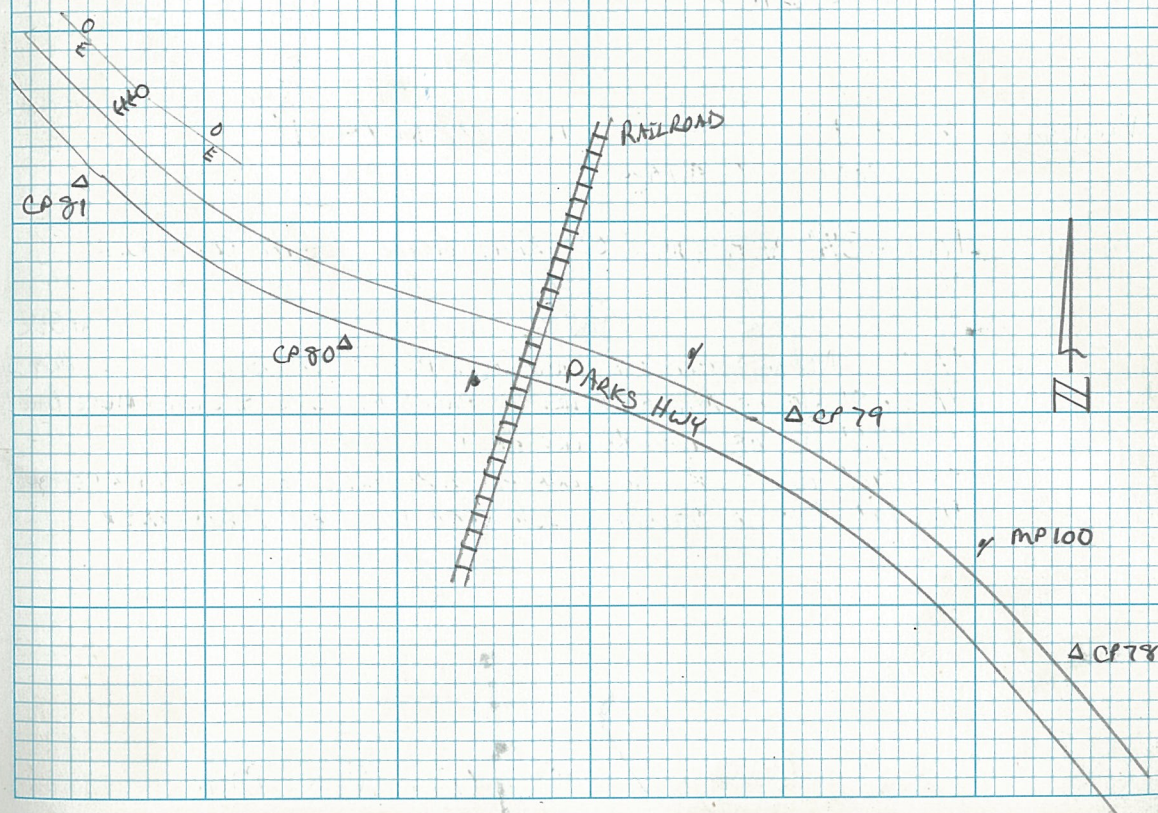
14-505-01

BOOK 1 PAGE 1

M. DANIEL
D. BURKE



SET TYPICAL
2" AL CAP
5/8" X 30" REBAR

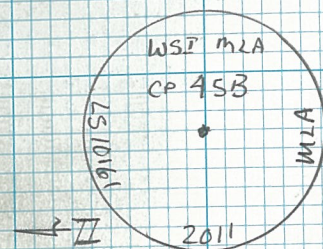


SEPARATED RAILROAD CROSSING

GPS CONTROL STATIC

BASE 1 @ CP ~~4~~ 3 1.224 m / 4.02'
 HA 1.202 m / 3.94'
 START 7:44 AM 8:12 AM END

- FOUND 3/4" AL POST MON 0' BELOW GRADE - GOOD CONDITION
- +/- 320' NORTH OF MP 117 SIGN
 - +/- 65' EAST OF EAST EDGE PARKS HWY
 - +/- 130' SOUTH OF TREE LINE AT NORTH END OF OLD MATERIALS SITE ON EAST SIDE PARKS HWY
 - +/- 21' NORTH OF 2" AL CAP W/ CARSONITE MARKER



VIVA BASE @ CP 1 HA 1.222 m / 4.01'
 START 8:47 AM END 3:47 PM

- FOUND 3/4" AL POST MON 0' BELOW GRADE - GOOD CONDITION
- +/- 45' EAST OF THE EAST EDGE PARKS HWY
 - +/- 263' SE OF "RIGHT LANE MUST TURN RIGHT" SIGN EAST SIDE PARKS AT SPUR
 - +/- 76' NE OF "RIGHT LANE MUST TURN RIGHT" SIGN EAST SIDE PARKS HWY
 - +/- 265' NE OF NORTH RETURN OF PAVED ENTRANCE TO "CUBBY'S MARKETPLACE"
 - +/- 275' SE OF SOUTH RETURN OF TALLEETNA SPUR RD
 - +/- 120' WEST OF NW CORNER PAVED PARKING LOT AT CUBBY'S MARKETPLACE
 - +/- 42' SW OF 3 TRUNK BIRCH TREE WEST OF NW CORNER PAVED PARKING LOT AT CUBBY'S MARKETPLACE

DAY CONT NEXT PAGE

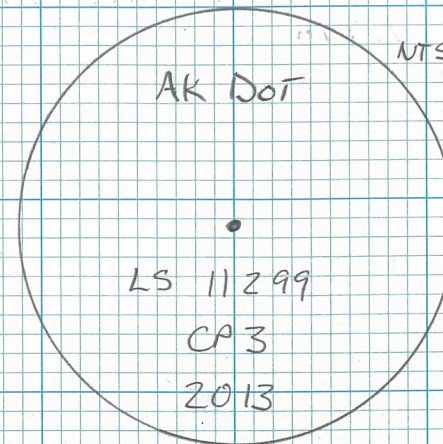
9/11/2014 CONT

14-505-01

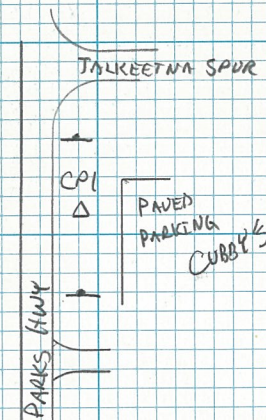
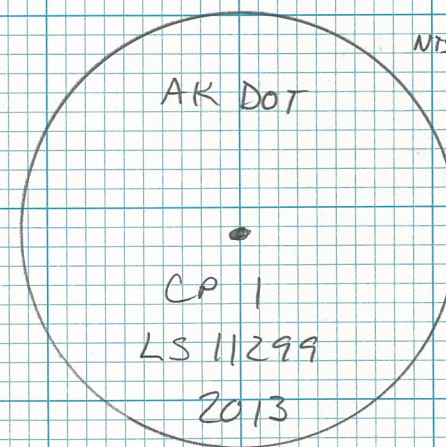
BOOK 1 PAGE 2

SAME CREW

CP 3



CP 1



SEPARATED RAILROAD CROSSING

GPS CONTROL STATIC

V2 @ CP 78 HA 1.323m / 4.34'
START 12:36pm END 3:17pm
* SEE PAGE 1 FOR DESCRIPTION

R4 @ CP 79 HA 1.332m / 4.37'
START 12:48pm END 3:25pm
* SEE PAGE 1 FOR DESCRIPTION

R1 @ CP 80 HA 1.299m / 4.26'
START 1:14pm END 3:31pm
* SEE PAGE 1 FOR DESCRIPTION

R3 @ CP 81 HA 5.22' / 1.591m
START 1:29pm END 3:39pm
* SEE PAGE 1 FOR DESCRIPTION
* ATX 1230 G.G. POLE PUCK / TRIBBACH - NO OFFSET

END DAY

9/11/2014 CONT

14-505-01

BOOK 1 PAGE 3

SAME CREW

EQUIP:	LEICA 1200 GPS SYSTEM (BASE 1)	SN 06370154
	LEICA VIVA GISIO BASE (VB)	SN 10081042
	LEICA VIVA GISX (V2)	SN 2811139
	LEICA 1200 ROVER (R4)	SN 182960
	LEICA 1200 ROVER (R1)	SN 181032
	LEICA 1200 ROVER (R3)	SN 199796

FILES	(BASE 1)	1450500S140911B1	(CP 3)
	(VB)	1450500S140911VB	(CP 1)
	(V2)	1450500S140911V2	(CP 78)
	(R4)	1450500S140911R4	(CP 75)
	(R1)	1450500S140911R1	(CP 80)
	(R3)	1450500S140911R3	(CP 81)

SEPARATED RAILROAD CROSSING

GPS CONTROL STATION

VIVA BASE @ CP 3 HA 1.248m / 4.09'

START 7:35 AM END 5:21 PM

* SEE PAGE 2 FOR DESCRIPTION

BASE 1 @ CP 1 HA 1.310m / 4.30'

START 8:07 AM END 3:53 PM

* SEE PAGE 2 FOR DESCRIPTION

R4 @ CP 78 HA 1.290m / 4.23'

START 8:24 AM END 11:35 AM

* SEE PAGE 1 FOR DESCRIPTION

R1 @ CP 79 HA 1.349m / 4.43'

START 8:32 AM END 11:38 AM

* SEE PAGE 1 FOR DESCRIPTION

V2 @ CP 80 HA 1.363m / 4.47'

START 8:42 AM END 11:40 AM

* SEE PAGE 1 FOR DESCRIPTION

R3 @ CP 81 HA 5.20'

START 9:48 AM END 11:43 AM

* SEE PAGE 1 FOR DESCRIPTION

* ATX 1230 GG POLE PUCK/TRIPBRAIN NO OFFSET

DAY CONT NEXT PAGE

9/12/2014

480P

CLOUDY / LI RAIN

14-505-01

BOOK PAGE 4

M. DANIEL

D. BURKE

EQUIP: LEICA VIVA GS10 BASE (VB) SN 10081092

LEICA 1200 GPS SYSTEM (B1) SN 06370184

LEICA 1200 POWER (R4) SN 182960

LEICA 1200 ROVER (R1) SN 181032

LEICA VIVA GS14 (V2) SN 2811139

LEICA 1200 ROVER (R3) SN 199796

FILES (VB) 1450500S140912VB (CP 3)

(B1) 1450500S140912B1 (CP 1)

(R4) 1450500S140912R4A (CP 78)

(R1) 1450500S140912R1A (CP 79)

(V2) 1450500S140912V2A (CP 80)

(R3) 1450500S140912R3A (CP 81)

ROUND 2

(R4) 1450500S140912R4B (CP 78)

(R1) 1450500S140912R1B (CP 79)

(V2) 1450500S140912V2B (CP 80)

(V3) 1450500S140912V3B (CP 81)

SEPARATED RAILROAD CROSSING

GAS CONTROL STATIC

R4 @ CP 78 HA 1.240m / 4.07'
 START 1:35 PM END 3:32 PM
 * SEE PAGE 1 FOR DESCRIPTION

R1 @ CP 79 HA 1.303m / 4.28'
 START 1:41 PM END 3:37 PM
 * SEE PAGE 1 FOR DESCRIPTION

V2 @ CP 80 HA 1.306m / 4.29'
 START 1:49 PM END 3:41 PM
 * SEE PAGE 1 FOR DESCRIPTION

R3 @ CP 81 HA 5.04' / 1.536m
 START 2:00 PM END 3:46 PM
 * SEE PAGE 1 FOR DESCRIPTION
 * ATX 1230 GQ POLE PUCK / TRAILBACK NO OFFSET

END DAY

9/12/2014

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BOOK 1 PAGE 5

SAME CREW

* FILES SEE PAGE 4

SEPARATED RAILROAD CROSSINGS

BASE @ CA 41
R4

TOPO MAP 91.5
HA = 1.227m / 4.02'
HA = 2m / 6.562'

PT	CODE	DESC
55001	9710	✓ CP6 (BIPOD)
55002	9710	✓ CPB (BIPOD)
55003	9710	✓ CPA (BIPOD)
55004 #2	1010	GROUND
55043	9710	✓ CP7 (BIPOD)
55044	9710	✓ CA 6 (BIPOD)
55045	9710	✓ CP 9 (BIPOD)

END DAY PT 55045

9/15/14
50°
SHOWERS

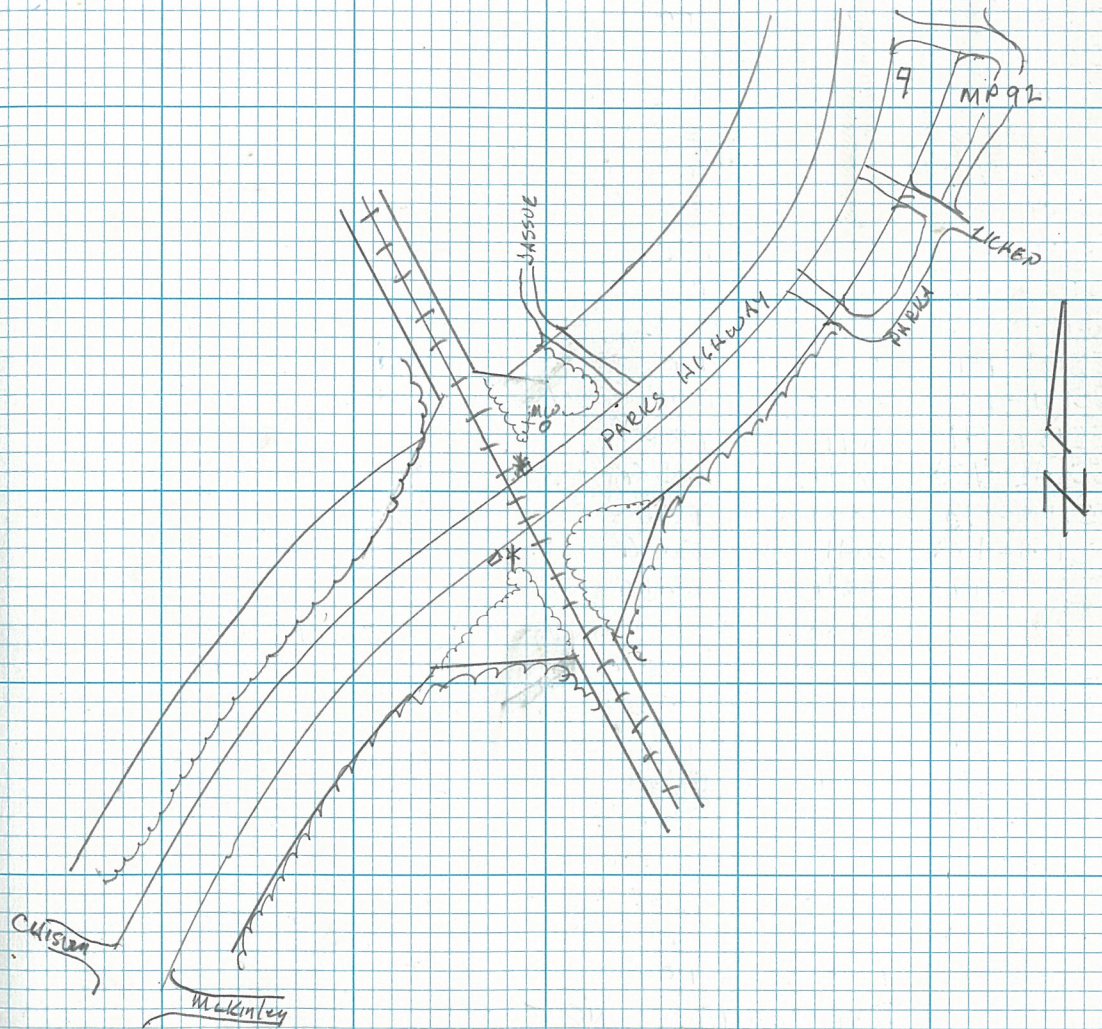
14-505-01

BOOK 1 PAGE 6
F SCHWADERER
T.TOK

EQUIP: LEICA GPS1200 SYSTEM w/ HDL RADIO (BASE1)
LEICA 1200 SMARTROVER (ROVER4)

1303202 BASE CA 41
FILES: 1450500 M140915B1 (BASE1)
1450500 M140915R4 (ROVER4)

CONTROL POINTS USED ARE FROM PARKS HWY MP 90-99
HDL PROJECT 13-032-02.



BASE @ CA 41
R4

SEPARATED RAILROAD CROSSINGS
TOPO MAP 91.5
HA = 1.183m / 3.88'
HA = 2m / 6.562'

PT	CODE	DESC
55050	9710	JOP 9 (BIPOD)
55051	9710	JOP 7 (BIPOD)
55052	9710	JOP 6 (BIPOD)
55053-061	2610	TOP OF RAILROAD RAIL
55062-070	2610	TOP OF RAILROAD RAIL
55071-079	1011	TOP
55080-088	1012	TOE
55089	6860	AK RAILROAD PROPERTY NO TRESSPASSING / 206.25
55090-092	1010	GROUND
55093	6860	2 / OVERHEAD POWER LINES
55094-100	1010	GROUND
55101-105	1012	TOE
55107-112	1011	TOP
55113-115	1011	TOP
55116-122	1012	TOE
55123-129	1011	TOP
55131-132	7020	FGP - w / 4' HIGH METAL GATES
55137-141	1011	TOP
55142-158	2041	EDDG
55159-173	2071	TOG
55174-178	2041	EDDG
55179-190	2041	EDDG
55191	6000	WUP - CONNECTS TO 16146
55192	6000	WUP - CONNECTS TO 16146
55194	6400	TPED AN 6828
55195-201	2071	TOG
55202-212	2081	EDGA
55213-215	2071	TOG
55221	1510	5" BIRCH
55222-224	1520	EDT - CLOSES
55227-229	1520	EDT - CLOSES
55230-240	1011	TOP

DAY CONTINUES NEXT PAGE

9/16/14
48°
RAIN

14-505-01

BOOK PAGE 7
F SCHWADERER
T TUK

EQUIP: LEICA GPS 1200 SYSTEM w/ PDL RADIO (CB1)
LEICA 1200 SMARTROVER (R4)

FILES: 1303202 BASE CA 41
14505 00M 140916 R4

SEE PAGES THIS BOOK FOR SKETCH

SEPARATED RAILROAD CROSSINGS
TOPD MP 91.5

PT	CODE	DESC
55241-252	1012	TOE
55260-272	1011	TOP
55273-278	1012	TOE
55282	9710	✓ CP 7 (BIP00)
55283	9710	✓ CP 6 (BIP00)
55284	9710	✓ CP 8 (BIP00)

END DAY AT 55284

9/16/14
CONT

14-505-01

BOOK1 PAGE 8
SAME CREW

SEPARATED GRADE CROSSINGS
LEVELS - PEG TEST
A X X B METHOD

STA 1

A1 5.947'
DIST 60.10'
B1 5.081'
DIST 120.01'

STA 2

B2 5.106'
DIST 60.00'
A2 5.970'
DIST 120.17'

COLL. ERR OLD 1.1"
COLL. ERR NEW -1.0"
DIFFERENCE -2.1"
RETICLE 5.972'

9/13/14
53°
RAIN

14-505-01

BOOK 1 PAGE 9
M. DANIEL
D. BORK

EQUIP: LEICA DNA10

RILE: 1450500

SEPARATED GRADE CROSSINGS SET TBM'S

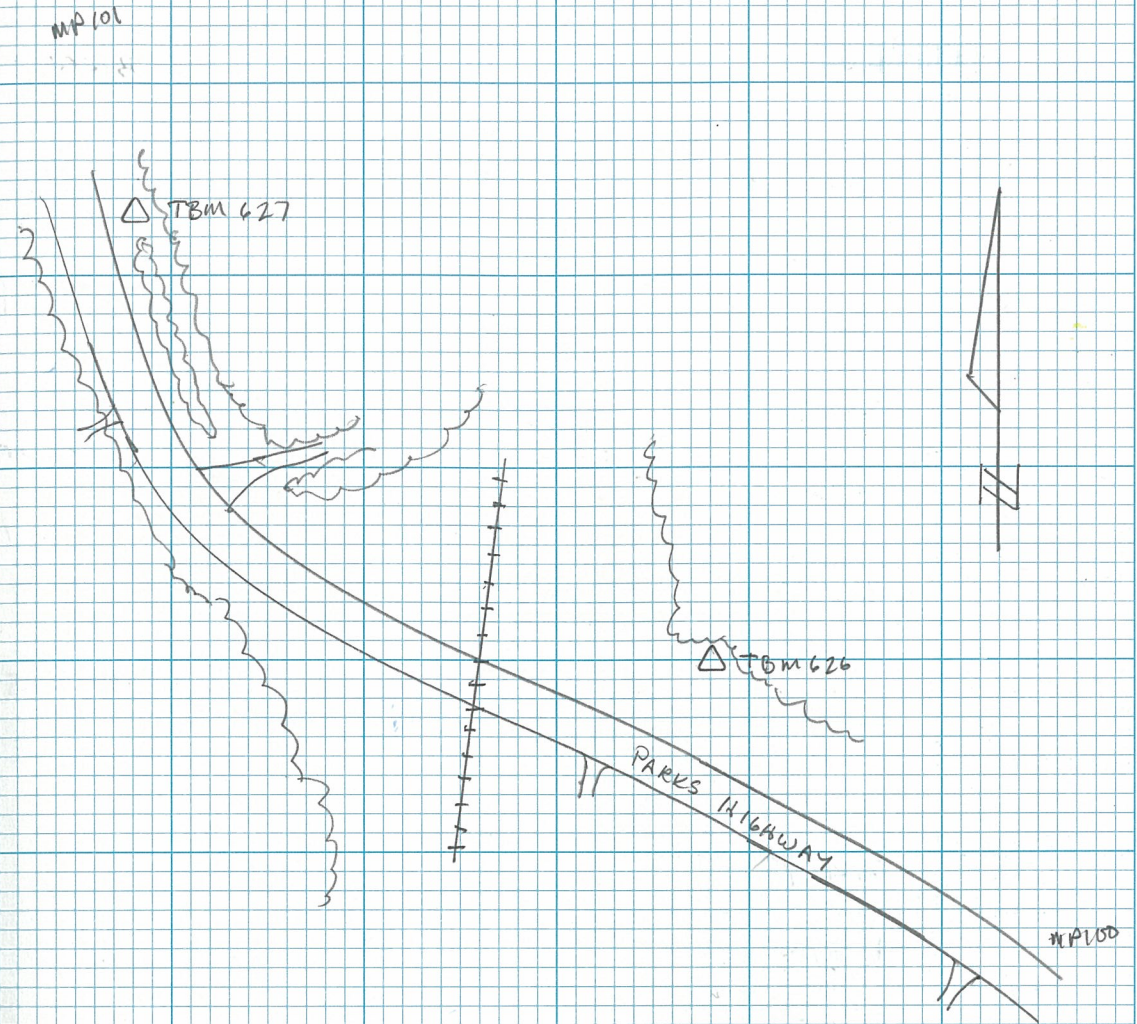
TBM 626 SET RAILROAD SPIKE IN SOUTH FACE OF 18" BIRCH
 +/- 18" ABOVE GRADE
 +/- 32' NORTH OF POLE P24
 +/- 117' NORTH OF NORTHEAST PARKS HWY
 +/- 594' SOUTHEAST OF RAILROAD CROSSING & PARKS HWY

TBM 627 SET RAILROAD SPIKE IN SOUTHWEST FACE OF 14" BIRCH
 +/- 1.0' ABOVE GRADE
 +/- 37' NORTH OF UNNUMBERED POLE
 +/- 108' NORTHEAST OF THE NORTHEAST EDGE PARKS HWY
 +/- 174' SOUTHEAST OF POLE P32A
 +/- 1000' SOUTHEAST OF RAILROAD CROSSING 1/2 MILE SW OF PARKS HWY

9/15/14
CONT.

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BOOK 1 PAGE 10
SAME CREW



SEPARATED GRADE CROSSINGS LEVELS - LINE 1

STA	+	-	ELEV	ADJ ELEV
CP9	4.888		362.560	362.556
		4.837		
TP1	5.542			
TP2		5.373		
	5.571			
TP3 CP7B		5.793	362.558	362.551
	5.786			
TP4		5.472		
	5.704			
TP5		4.878		
	5.195			
CP79		6.487	362.406	362.397
	4.948			
TP6		5.996		
	4.933			
TBM 626		7.175	359.116	359.103
	6.987			
TP7		4.741		
	6.041			
TP8		4.992		
	6.457			
TP9		5.163		
	4.878			
TP10		5.701		
	5.395			
TP11		5.707		
	5.761			
TP12		5.536		
	5.428			
TP13		5.559		
	4.967			
CP9		5.017	362.574	362.556

9/15/14
CONT

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BOOK 1 Pg 11
SAME CREW

FILE 14500 - LEVEL
LINE 0001
EXPORT FILE : 14505 LI.GSI

EOC 0.013

SEPARATED GRADE CROSSINGS LEVELS - LINE 2

STA	+	-	ELEV	ADJ ELEV
TBM 626			359.116	359.105
	5.982			
TP1		6.586		
	6.199			
CP80		4.626	360.085	360.072
	8.415			
TP2		1.879		
	5.485			
TP3		5.889		
	4.543			
CP81		6.275	364.485	364.470
	4.680			
TP4		7.238		
	4.527			
TBM 627		5.694	360.760	360.744
	4.937			
TP5		5.387		
	3.818			
CP50		8.183	355.945	355.927
	8.027			
TP6		3.663		
	5.224			
TP7		3.604		
	7.282			
TP8		4.725		
	6.228			
TP9		4.493		
	5.885			
TP10		5.481		
	1.878			
TP11		8.411		
	4.470			
TP12		6.045		
	6.475			
TBM 626		5.863	359.129	359.105

9/16/14
47°
RAIN

14-505-01

BOOK 1 PAGE 12
M DANIEL
D BURKE

RILE 14505
LINE 0002
EXPORT RILE 14505L2

ROC 0.014

SEPARATED GRADE CROSSINGS

TOPD MPA 91.5

HA = 1.167 m / 3.83'

BASE 1 @ CPA1

R4 HA = 2 m / 6.562'

PT	CODE	DESC
55290	9710	✓ CPA 9 (CBIPOD)
55291	9710	✓ CPA 7 (CBIPOD)
55292	9710	✓ CPA 6 (CBIPOD)
55293	6860	BICYCLES USE CAUTION
55294-95	7060	CRASH CUSHION
55296-299	2083	EDGE OF CONCRETE AREA
55300-303	1011	TOP
55304-307	1012	TOE
55308	1730	MONITOR WHEEL
55309-317	1011	TOP
55318-326	1013	GRADE BREAK
55327-335	1012	TOE
55338	6860	2 / OVERHEAD POWER LINES
55344-349	1012	TOE
55350-355	1011	TOP
55357-364	1011	TOP
55365-369	1012	TOE
55377-386	1012	TOE
55387-393	1011	TOP
55394-400	1012	TOE
55407-408	7060	CRASH CUSHION
55409-412	2083	EDGE OF CONCRETE AREA
55413	9710	✓ CPA 7 (CBIPOD)
55414	9710	✓ CPA 6 (CBIPOD)
55415	9710	✓ CPA 8 (CBIPOD)

END DAY AT 55415

9/17/14

46°

MOSTLY CLOUDY

14-505-01

BOOK 1 PAGE 13

F. SCHWADERER

T. TUK

EQUIP: LEICA GPS 1200 SYSTEM W/PDL RADIO (CBI)

LEICA 1200 SMART ROVER (CRA)

FILES: 1303202 BASE CPA1 (CBI)

1450501 M 140917 R4 (CRA)

SEE PAGE 6 THIS BOOK FOR SKETCH

SEPARATED GRADE CROSSINGS

TOPD MIP 91.5

HA = 1.141 m / 3.74'

B1 @ CP 4

R4 HA = 2m / 6.562'

PT	TOE	DESC
55420	9710	✓ CP 8 (BIPOD)
55421	9710	✓ CP 7 (BIPOD)
55422	9710	✓ CP 6 (BIPOD)
55423-435	2610	TOP OF RAILROAD RAIL
55436-445	2610	TOP OF RAILROAD RAIL
55446	6860	2 / OVERHEAD POWER LINES
55447	6860	BICYCLES USE CAUTION
55448-451	1011	TOP
55452-456	1012	TOE
55466-478	1011	TOP
55479-491	1011	TOP
55492-493	2700	VARIOUS DETECTORS
55494-497	2700	VARIOUS DETECTORS
55498-510	1012	TOE
55511-523	1012	TOE
55524-557	1010	GROUND
55558-568	1530	EOB
55569-597	1010	GROUND
55598	9710	✓ CP 6 (BIPOD)
55599	9710	✓ CP 7 (BIPOD)
55600	9710	✓ CP 8 (BIPOD)

END DAY PT 55600

9/18/14

46°

RAIN

14-505-01

BOOK PAGE 14

EQUIP: LEICA GPS 1200 SYSTEM W/ADL RADIO (B1)
LEICA 1200 SMART ROVER (CR)

FILES: 1303202 BASE CP41 (B1)
1450501M140918R4

SEE PAGE 6 THIS BOOK FOR SKETCH

SEPARATED GRADE CROSSINGS

MP 91.5 TOPD

HA = 1.189m / 3.09'

BI @ CP 41

R4 HA = 2m / 6.562'

PT	CODE	DESC
55605	9710	✓ CP 9 (BIPOD)
55606	9710	✓ CP 7 (BIPOD)
55607	9710	✓ CP 6 (BIPOD)
55610-619	1520	EOT
55615-617	2610	TOP OF RAILROAD RAIL
55618-619	1011	TOP
55620-621	1012	TUE
55622-640	2041	EODG
55641	4860	AK RR NO TRESPASSING /  / DD
55642-676	1530	EOB
55647-655	1530	EOB - CONNECTS TO 55642
55656-671	2062	EOTD
55671-688	2062	EOTD
55689-710	1530	EOB
55711-717	1520	EOT
55718-719	2041	EODG - TIE TO PREVIOUS SURVEY
55720-724	1530	EOB
55725	1513	11" COTTON WOOD
55726-770	1010	GROUND
55771	9710	✓ CP 9 (BIPOD)
55772	9710	✓ CP 6 (BIPOD)
55773	9710	✓ CP 9 (BIPOD)

END DAY AT 55773

9/19/14

48°

RAIN

14-505-01

BOOK PAGE 15

F SCHWADERER

T TUK

EQUIP: LEICA GPS 1200 SYSTEM W/PDL RADIO (BI)
LEICA 1200 SMARTROVER (R4)

FILES: 1303202 BASE CP41
1450501M140919R4

SEE PAGE 6 THIS BOOK FOR SKETCH

SEPARATED GRADE CROSSINGS

TOPD MP 91.5

BI @ CP 41 HA = 1.196 / 3.92'

R4 HA = 2m / 6.562'

PT	CODE	DESC
55780	9710	✓ CP 9 (B1POD)
55781	9710	✓ CP 8 (B1POD)
55782	9710	✓ CP 7 (B1POD)
55783-784	1010	GROUND
55785-794	1570	EOT
55795-808	1012	TOE
55809-812	2021	EDRG
55813-831	2071	TOG
55837-850	2021	EDRG
55851-853	1012	TOE
55854-856	1011	TOP
55857-859	2021	EDRG
55860-862	2071	TOG
55863-865	2021	EDRG
55866-872	1010	GROUND
55873	9710	✓ CP 8 (B1POD)
55874	9710	✓ CP 9 (B1POD)

END DAY PT 55874

9/20/14

46
CLOUDY

14-505-01

BOOK 1 PAGE 16

F SCHWADERER

T TOL

EQUIP: LEICA GPS 1200 SYSTEM W/POL RADIO (BI)
LEICA 1200 SMARTCOVER (R4)

FILES: BI = 1303202 BASE CP 41
1450501 M140920 R4

SEE PAGE 6 THIS BOOK FOR SKETCH

SEPARATED GRADE CROSSINGS

TOPD MP 100.5

B1 @ CP 80

HA = 1.336 m / 4.38'

R4 HA = 2 m / 6.562'

PT	CODE	DESC
55880	9710	✓ CP 9 (CBIPOD)
55881	9710	✓ CP 79 (CBIPOD)
55582	9710	✓ CP 50 (CBIPOD)
55883-929	2020	EORA
55925-961	2070	TOA
55965-988	2090	EORA
55989-996	2040	EODA
55997-777	2020	TOA
56000-018	2020	EORA
56019	6870	MP 100
56020-060	1011	TOP
56061-077	2020 / 2040	EORA / EODA / EORA
56078-086	1011	TOP - CLOSES ON 56078
56087-092	1012	TOE - CLOSES ON 56087
56093-108	1011	TOP - CLOSES ON 56093
56109-117	1012	TOE
56118-119	3090	18" CMP
56120-123	2083	EORA
56124-125	2060	CRASH CUSHION
56126-	9710	✓ CP 9 (CBIPOD)
56127	9710	✓ CP 79 (CBIPOD)
56128	9710	✓ CP 50 (CBIPOD)

END DAY PT 56128

9/22/14

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F SCHWADERER

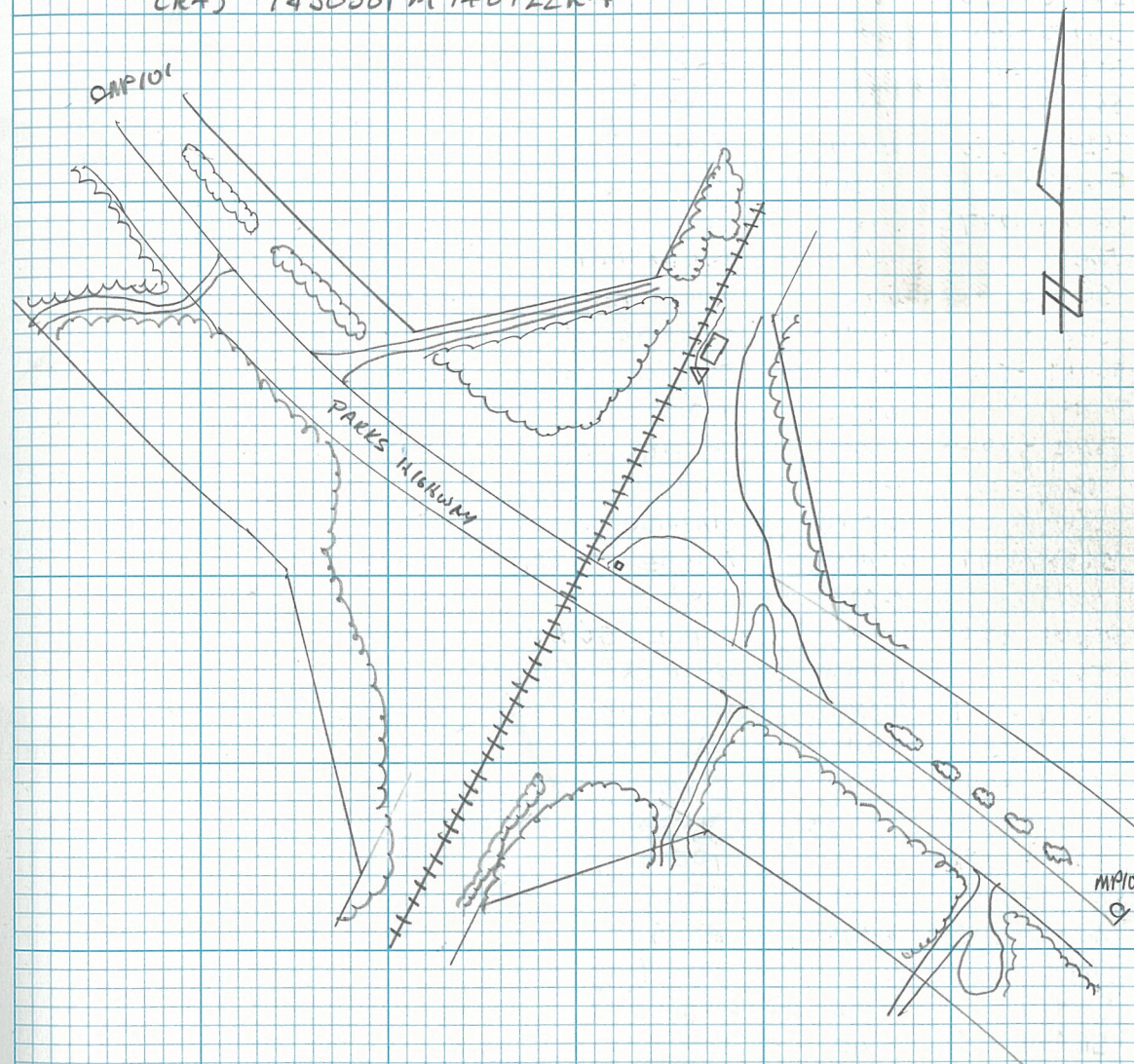
SUNNY

T TUK

LIGHT WIND

EQUIP: LEICA GPS 1200 SYSTEM W/POL RADIO (B1)
LEICA 1200 SMART ROVER (R4)

FILES: (B1) 1450501 BASE 80
(R4) 1450501 M 140922RA



SEPARATED GRADE CROSSINGS

TOPO MAP 100.5

B1 @ CP 80

HA = 1.336 m / 4.38'

R9 HA = 2 m / 6.562'

PT	CODE	DESC
56135	9710	✓ CP B1 (BIP00)
56136	9710	✓ CP 9 (BIP00)
56137	9710	✓ CP 78 (BIP00)
56138-179	1012	TOE
56180-181	3090	24" CMP
56182-210	1011	TOP
56211-229	1012	TOE
56230-245	1011	TOP
56246-256	1011	TOP
56257-266	1013	GRADE BREAK
56267-277	1013	GRADE BREAK
56278	6860	RR X-ING
56279	6860	TURNING TRAFFIC AHEAD / NEXT 2 mi / 45 MPH
56280	6041	RAP - GC1 RD
56281-290	6240	FOLUL 56280 TO 56291 (GC1)
56291	6220	FOV
56292-301	6240	FOLUL 56291 TO 56280 (GC1)
56302	6000	WUP (P25)
56304	6002	WUP RAP (P26)
56308-319	6240	FOLUL 56291 TO 56320 (GC1)
56320	6220	FOV
56321-332	6240	FOLUL 56320 TO 56291 (GC1)
56333	6002	WUP RAP (P27)
56337-351	6240	FOLUL 56320 TO 56352
56352	6041	RAP (GC1)
56353-367	6240	FOLUL 56352 TO 56320
56368	6000	WUP (P28)
56374-387	1012	TOE
56388-396	2041	EDDG
56397-405	2041	EDDG
56406	9710	✓ CP 9 (BIP00)
56407	9710	✓ CP 79 (BIP00)
56408	9710	✓ CP 50 (BIP00)

END DAY AT 56408

9/23/14

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CLOUDY

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F SCHWABER

T TUK

EQUIP: LEICA GPS 1200 SYSTEM W/ADL RADIO (B1)
LEICA 1200 SMART ROVER (R4)

FILES: (B1) 1450501 BASE 00
(R4) 1450501 M140923 R4

SEE PAGE 17 THIS BOOK FOR SKETCH

SEPARATED GRADE CROSSINGS

TOPO MAP 100.5

B1 @ CN 80

HA = 1.326m / 4.35'

R4 HA = 2m / 6.562'

AT	CODE	DESC
56415	9710	TOP 9 (B1POD)
56416	9710	TOP 50 (B1POD)
56417	9710	TOP 79 (B1POD)
56418	7060	CRASH CUSHION
56419-426	2041	EDGE (JANA'S JUMPIN JAVA)
56427-433	2041	EDGE "
56434-442	2041	EDGE "
56443-446	1520	FEOT
56447	6000	WUP (P20A)
56448-452	1520	FEOT - CLOSES
56453	6000	WUP (P21)
56454-459	1520	FEOT - CLOSES
56460	6000	WUP (P21A)
56461	6000	WUP (P22) ONE TO WUP 56468
56465	6400	TELE PED
56466	6002	WUPRAP - ONE TO WUP 56468
56468	6002	WUPRAP (P22A)
56470	6400	TELE PED
56471	6002	WUPRAP - ONE FROM 56468
56475-478	1520	FEOT - CLOSES
56479	6000	WUP (P22A)
56480-483	1520	FEOT - CLOSES
56484	1511	18" SPROCE
56485	6000	WUP (P23)
56486-489	1520	FEOT - CLOSES
56490	6000	WUP (P23A)
56491-495	1520	FEOT - CLOSES
56496	6000	WUP (P24)
626	9300	IBM 626
56499-566	1010	GROUND
56567-570	1011	TOP
56571-572	1012	TOE
56573-576	1011	TOP
56577-580	1012	TOE

CONT ON NEXT PAGE

9/21/14

34°

MOSTLY CLOUDY

14-505-01

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F SCHWADERER

T TUK

EQUIP: LEICA GPS 1200 SYSTEM W/ADL RADIO (B1)
LEICA 1200 SMART ROVER CR+

FILES: (B1) 1450501 BASE 80
(R4) 1450501 M140924R4

SEE PAGE 17 THIS BOOK FOR SKETCH

SEPARATED GRADE CROSSINGS
TOPD MAP 100.5

<u>PT</u>	<u>WDE</u>	<u>DESC</u>
56582-590	1520	EOT
56591-597	1520	EOT
56598-603	1520	EOT
56604-608	1520	EOT
56609	9710	✓ CA 9 (BIPAD)
56610	9710	✓ CA 50 (BIPAD)
56611	9710	✓ CA 81 (BIPAD)

END DAY PT 56611

8/24/14
CONT

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SAME CREW

SEPARATED GRADE CROSSINGS

B1 @ OABO
 R4 NA = 2m/6.562'

TOPD MAP 100.5

HA = 1.372m/4.50'

PT	CJDE	DESC
56615	9710	✓ CP 50 (CBIP00)
56616	9710	✓ CP B1 (CBIP00)
56617	9710	✓ CP 9 (CBIP00)
56618-679	2610	TOP OF RAIL
56630-651	2610	TOP OF RAIL
56652-661	2610	TOP OF RAIL
56662-669	2083	EOCA
56670-677	2083	EOCA
56678-685	2083	EOCA
56686-689	2700	WOOD RAIL GUARD
56690-693	2700	WOOD RAIL GUARD
56694-697	2700	WOOD RAIL GUARD
56698-701	2083	EOCA - CANTILEVER SIGNAL BASE
56702	2650	CANTILEVER ARM RAILROAD CROSSING SIGNAL
56703	2700	CROSSING ARM
56704	2700	CROSSING ARM
56705	2650	CANTILEVER ARM RAILROAD CROSSING SIGNAL
56706-709	2083	EOCA - CANTILEVER SIGNAL BASE
56710-713	2083	EOCA
56714-715	7060	CRASH CUSHION
56716	6630	TJB
56717	6630	TJB
56718	6630	TJB
56719	6062	WUPRAP - ONE FROM 56304
56720	5580	EM
56721	6002	WUPRAP - ONE FROM 56304
56722	5580	EM
56723	6050	GUY ANCHOR TO 56721
56724-727	7500	METAL SIGNAL BUILDING ARRR
56728	6400	TELE PED
56729	6290	MISC FIBER OPTIC - SEE PHOTOS 1855-1858
56730	7140	ANTENNA
56731-733	6050	GUY ANCHORS FOR 56730
56734-738	7500	PORTABLE ON SKIDS

DAY CONTINUES ON NEXT PAGE

9/25/14
 30°
 SUNNY

14-505-01

BOOK PAGE 21
 F SCHWADERER
 T TUX

EQUIP: LEICA GPS 1200 SYSTEM W/PDL RADIO (B1)
 LEICA 1200 SMARTROVER (C4)

FILES: (B1) 1450501 BASE 00
 (C4) 1450501M140925R4

SEE PAGE 17 THIS BOOK FOR SKETCH

SEPARATED GRADE CROSSINGS
TOPD MP 100.5

PT	CODE	DESC
56739	3090 8"	PERFORATED CMP @ 45° TO TRACK
56740	3090	8" PERFORATED CMP @ 45° TO TRACK
56741-751	1011	TOP
56752-762	1011	TOP
56763-775	1011	TOP
56776-787	1011	TOP
56788	6860	AK RR PROPERTY NO TRESSPASSING 1214.3/LUTH/
56789	6860	OVERHEAD POWER LINES
56790	6860	OVERHEAD POWER LINES
56791	6860	NO TRESSPASSING ETC./ALWAYS EXPECT A TRAIN ETC
56792-802	1012	TOE
56803-814	1012	TOE
56815-824	1012	TOE
56825-837	1012	TOE
56838-840	2070	TOA
56841	6400	TELEPED
56842	6860	AK RR PROPERTY NO TRESSPASSING / ALWAYS EXPECT A TRAIN ETC
56843	6860	LUTH M/LN 214.4
56844	9710	✓ CP 9 (B1POD)
56845	9710	✓ CP 79 (B1POD)
56846	9710	✓ CP 81 (B1POD)

END DAY PT 56846

9/25/14 Cont
CONT

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BOOK 1 PAGE 22
SAME CREW

SEPARATED GRADE CROSSINGS

TORO MP 100.5

B1 @ CP 80

HA 1.375M = 4.58'

ROVER V2 HA = 2.000M = 6.562'

BEG PT# 56851

<u>PT#</u>	<u>CODE</u>	<u>DESC</u>
56851	9710	CK SHOT CP 78
56852	9710	CK SHOT PCP 79
56853	9710	CK SHOT CP 50
56945	9710	CK SHOT CP 78
56946	9710	CK SHOT CP 79 84
56947	9710	CK SHOT

END OF DAY V2 - DAY CONT NEXT PAGE

9/26/2014

290R

MOSTLY CLEAR

14-505-01

BOOK 1

PAGE 23

M. DANZEL
D. BURKE
T. TUIK

EQUIP: LEICA 1200 GPS SYSTEM W/POCRA20 (B1)

FILES

(B1) 1450501 BASE 80

V2 1450501M140926 V2

R3 1450501M140926 R3

V4 1450501M140926 V4

SEE PAGE 17 THIS BOOK FOR SKETCH

SEPARATED GRADE CROSSING

MTA LOCATES / BOREHOLE LOCATIONS
MP 91.5

K @ CP 412
BSE CP 7

HI 549' AD = 0.04' HR 5 1/2"
HT 583' AZ = -253.03'

BEGIN PT 60,001

PT	CODE	DESC
60,001	9710	CP 8 (BEPD)
60,002	1720	BH: TH 1/6 TH 14-06
60,003	9710	CP 90 (BEPD) (HANDHELD)
60,004	1720	BH: TH 2/6 TH 14-05
60,005	1720	BH: TH 4/6 TH 14-03
60,006	1720	BH: TH 6/6 TH 14-01
60,007	1720	BH: TH 5/6 TH 14-02
60,008	1720	BH: TH 3/6 TH 14-04 * HR = 0.0'
60,009-17	6470	MTA LOCATES (TIC TO EXISTING LINE) TO PED 55194
60,018-20	6470	PROM PED 55194 TO →
60,021	9710	CP 7 HT 583'
60,022	9710	CP 89 HR 5 1/2" (HANDHELD)

END DAY TCR 803 - DAY CONT NEXT PAGE

9/26/2014 CONT

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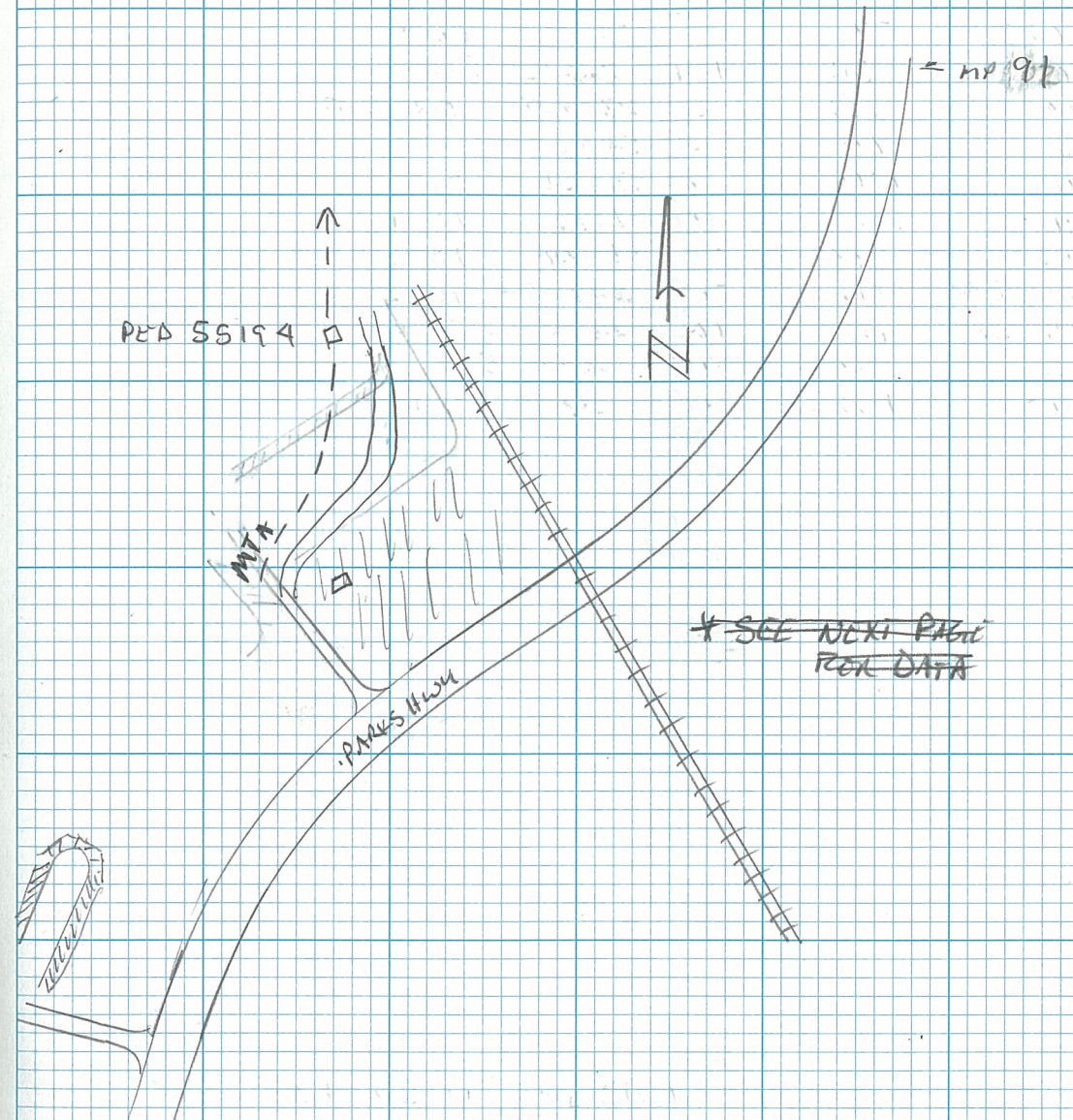
BOOK 1

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M. DANDEL
D. BURKE

EQUIP: LEICA TCR 803 SN 844464

FILE: 1450501M190926T



SEPARATED GRADE CROSSING

TOPO MP 100.5

BL @ CP 80 * SEE PAGE 23 FOR BASE INFO
VA HR = 6.5621/2m

BEGIN PT 60,0023

PT	CODE	DESC
60,023	9710	CP 78 (BE POD)
60,024	9710	CP 79 (BE POD)
60,025	9710	CP 50 (BE POD)
60,026-42	1011	TOP LINE
60,043-58	1012	TOE LINE
60,059-74	1011	TOP LINE
60,104-10	1011	TOP LINE
60,111-13	1012	TOE LINE
60,120-24	1012	TOE LINE
60,125-28	1011	TOP LINE
60,129-32	1012	TOE LINE
60,133-39	1011	TOP LINE
60,140-47	1012	TOE LINE
60,155-64	1011	TOP LINE
60,165-77	1012	TOE LINE
60,176	9710	CP 78 (BE POD)
60,177	9710	CP 84 (BE POD)

END DAY AT 60,177

9/26/2019

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BOOK 1

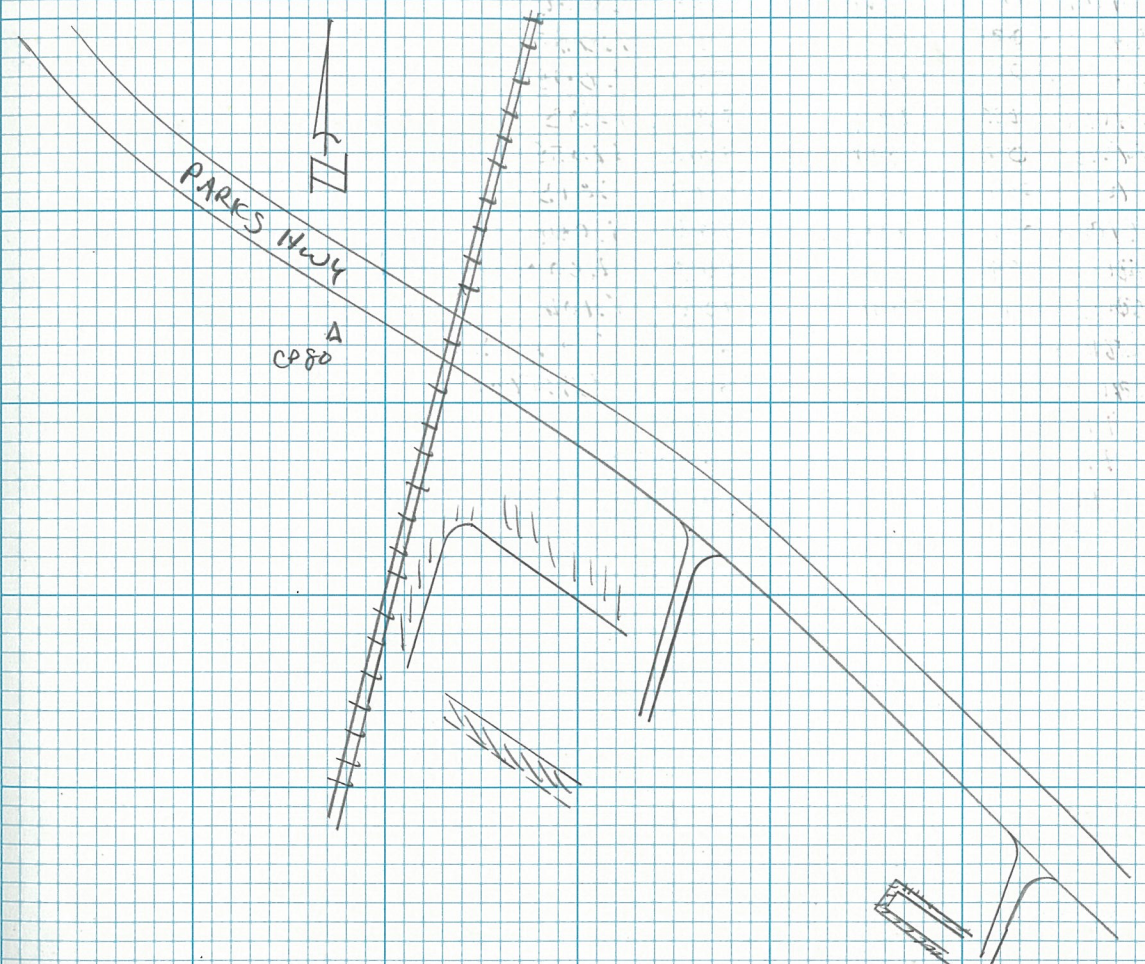
PAGE 25

M. DANIEL
D. BURKE
T. TUR

EQUVA: LEICA GS14 VEA (VA) SW 2804108

RILE 1450501M 190926VA

MP 101



SEPARATED GRADE CROSSINGS

TOPD MP 100.5

B1 @ CP 80 NA = 1.357m / 4.45'

RA NA = 2m / 6.562'

PT	CODE	DESC
56850	9710	✓ CP 50 (B1POD) ADD 100 TO ALL POINT NUMBERS THIS PAGE
56851	9710	✓ CA B1 (B1POD)
56852	9710	✓ CA 9 (B1POD)
56853-866	1520	EDT 56953-56966
56867-874	1012	TOE 56967-56974
56875-884	1011	TOP 56975-56984
56885-891	1011	TOP 56985-56991
56892-897	1012	TOE 56992-56997
56898-900	1012	TOE 56998-57000
56901-908	2080	EOAA 57001-57008
56909-914	1012	TOE 57009-57014
56915-920	1011	TOP 57015-57020
56921-923	1011	TOP 57021-57023
56924-928	2081	EOGA 57024-57028
56929-934	2081	EOGA 57029-57034
56935-938	2081	EOGA 57035-57038
56939-944	2081	EOGA 57039-57044
56945-948	2081	EOGA 57045-57048
56949-954	2081	EOGA 57049-57054
56955-958	2081	EOGA 57055-57058
56959-964	2081	EOGA 57059-57064
56965-968	2081	EOGA 57065-57068
56969-974	2081	EOGA 57069-57074
56975-978	2081	EOGA 57075-57078
56979-984	2081	EOGA 57079-57084
56985-988	2081	EOGA 57085-57088
56989-994	2081	EOGA 57089-57094
56995-998	2081	EOGA 57095-57098
56999-004	2081	EOGA 57099-57104
57005-011	2071	TOG 57105-57111
57013-016	1011	TOP 57113-57116
57017-053	1010	GROUND 57117-57153
57054	9710	✓ CP 50 (B1POD) 57154
57055	9710	✓ CA 9 (B1POD) 57155
57056	9710	✓ CP 79 (B1POD) 57156

END DAY PT 57156

9/27/14

34°

CLOUDY

14-505-01

BOOK PAGE 26

F SCHWADERER

M DANIEL

D BURKE

T TUK

EQUIP: LEICA GPS 1200 SYSTEM W/ADL RADIO (B1)

LEICA 1200 SMARTROVER (R3)

LEICA 1200 SMARTROVER (R4)

LEICA GS14 (V2)

LEICA GS14 (V4)

FILES: (B1) 1450501 BASE 80

(R4) 1450501M1409R4

(R3) 1450501M1409R3

(V2) 1450501M14092V2

(V4) 1450501M14092V4

SEE PAGE 17 THIS BOOK FOR SKETCH

SEPARATED GRADE CROSSINGS
 TOPO MAP 100.5

V4 HA = 2m/6.562'

PT	CODE	DESC
60200	9710	CA 7B (CBIPOD)
60201	9710	CA 50 (CBIPOD)
60202-60245	1010	GROUND - COFFEE SHACK AREA
60246-255	1010	GROUND - WEST OF PARKS, SOUTH OF CA 50
60256-279	1011	TOP
60280-304	1012	TOE
60305-311	1010	GROUND
60312-319	1011	TOP
60320-	9710	CA 86 (CBIPOD)
60321	9710	CA 81 (CBIPOD)
60322	9710	CA 7B (CBIPOD)

END DAY 60322

V2 HA = 2m/6.562'

PT	CODE	DESC
65000	9710	CA 7B (CBIPOD)
65001	9710	CA 50 (CBIPOD)
65023-028	7500	BUILDING CORNER
65107-114	2041	EODG
65115-122	2041	EODG
65123-129	1520	EOT
65130-132	1520	EOT
65133-138	1012	TOE
65139-144	1011	TOP
65148-157	1012	TOE
65158-167	1011	TOP
65168	9710	CA 81 (CBIPOD)
65169	9710	CA 86 (CBIPOD)
65170	9710	CA 7B (CBIPOD)

END DAY PT 65170

9/27/14
 CONT.

14-SOS-01

BOOK 1 PAGE 27
 SAME CREW

SEPARATED GRADE CROSSINGS

TOPO MAP NO. 5

B/C @ CP 80 HA = 1,342 m / 4,401'

V/A HA = 2 m / 6,562'

PT	CODK	DESC
57160	9710	CP 9 (BIPOD)
57161	9710	CP 79 (BIPOD)
57162	9710	CP 50 BIPOD
627	9300	TBM 627
57163-169	1010	GROUND
57170	6065	GOUL + 22.1'
57171	6065	GOUL + 28.0'
57172	6065	GOUL + 30.1'
57173-195	6470	UG TELE PED 56470 TO
57195-196	6470	UGT PED 56470 TO RISEK @ 56468
57197-209	6470	UGT PED 56470 TO END
57205-225	6470	UGT PED 56470 TO END
57226-249	6470	UGT PED 56470 TO PED 56465
57250-253	6470	UGT PED 56465 TO WRAP 56466
57254-288	6470	UGT PED 56465 TO PED 56728
57289-292	6470	UGT PED 56728 TO MRSC 56729
		PED 56728 ALSO CONNECTS TO RISEK @ 56304
		RISEK @ 56333 CONNECTS TO PED 56841
57293-311	6470	UGT FROM PED 56841 TO PED 50861
57312-333	6470	UGT FROM PED 50861 TO END
57334	1720	BH 6/6 AK DOT
57335	1720	BH 5/6 AK DOT
57336	1720	BH 3/6 AK DOT
57337	1720	BH 2/6 AK DOT
57338	1720	BH 1/6 AK DOT
57339	6065	GOUL + 26.1'
57340	6065	GOUL + 25.0' (OAT & OH F/O)
57341	6065	GOUL + 31.1' (OH F/O)
57342-350	1010	GROUND
57351	9710	CP 50 (BIPOD)
57352	9710	CP 9 (BIPOD)
57353	9710	CP 79 (BIPOD)

END DAY AT 57353

9/29/14

30°

PARTLY CLOUDY

SHOWERS

14-505-01

BOOK 1 PAGE 28

R SCHWADERER

T TUK

EQUIP: LEICA GPS 1200 SYSTEM W/PDL RADIO (BI)

LEICA GS 14 VIVA (V2)

LEICA GS 14 VIVA (V4)

FILES: (BI) 1450501 BASE 80

(V4) 1450501M140929V4

(V2) 1450501M140929V2

SEE PAGE 17 THIS BOOK FOR SKETCH

SEPARATED GRADE CROSSINGS
GPS CONTROL STATION

R3 @ CP3 HA 4.92' / 1.500m
START 8:05am END 4:23pm
* NO OFFSET (POCK/TREBRICH)
* SEE BOOK 1 PAGE 2 FOR DESCRIPTION

VB @ CP1 HA 1.233m / 4.06'
START 9:40am END 1:56pm
* SEE BOOK 1 PAGE 2 FOR DESCRIPTION

R1 @ CP86 HA 1.218m / 4.00'
START 10:00am END 1:48pm
* SEE BOOK 3 PAGE 1 FOR DESCRIPTION

END DAY

10/3/2014
26°F
CLOUDY

14-505-01

BOOK 1

PAGE 29

M. DANIEL

EQUIP: LEICA 1200 SMART ROVER (R3) SN 194796
 LEICA GS10 (VB) SN 10081092
 LEICA 1200 SMART ROVER (R1) SN 181032

FILES: (R3) 14505015 141003 R3
 (VB) 14505015 141003 VB
 (R1) 14505015 141003 R1

* RE-BURN OF CA 86 W/ CP1-CP3 BASE LINE