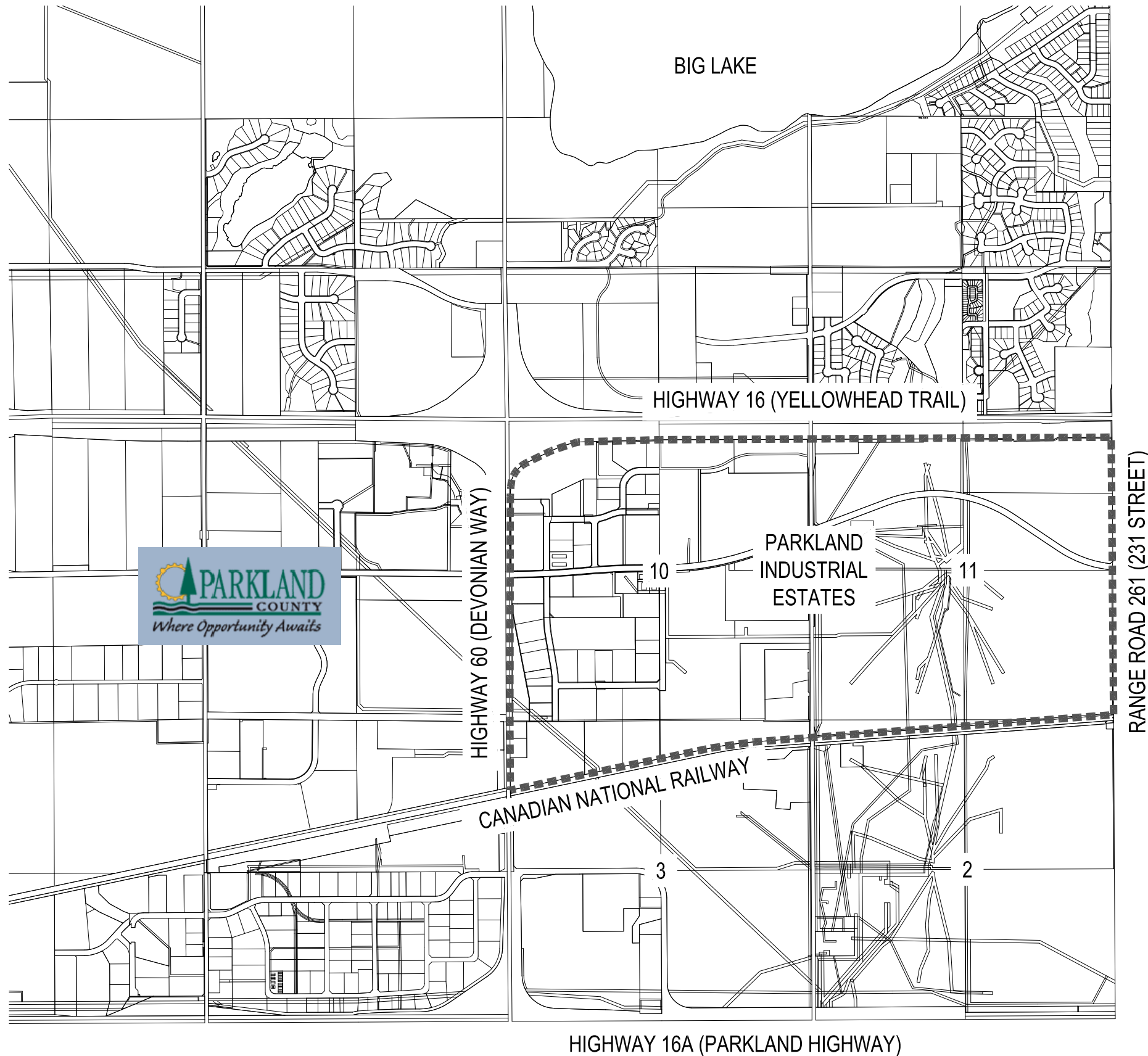
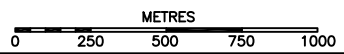


LEGEND

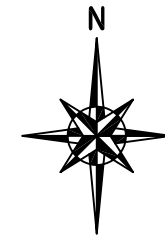
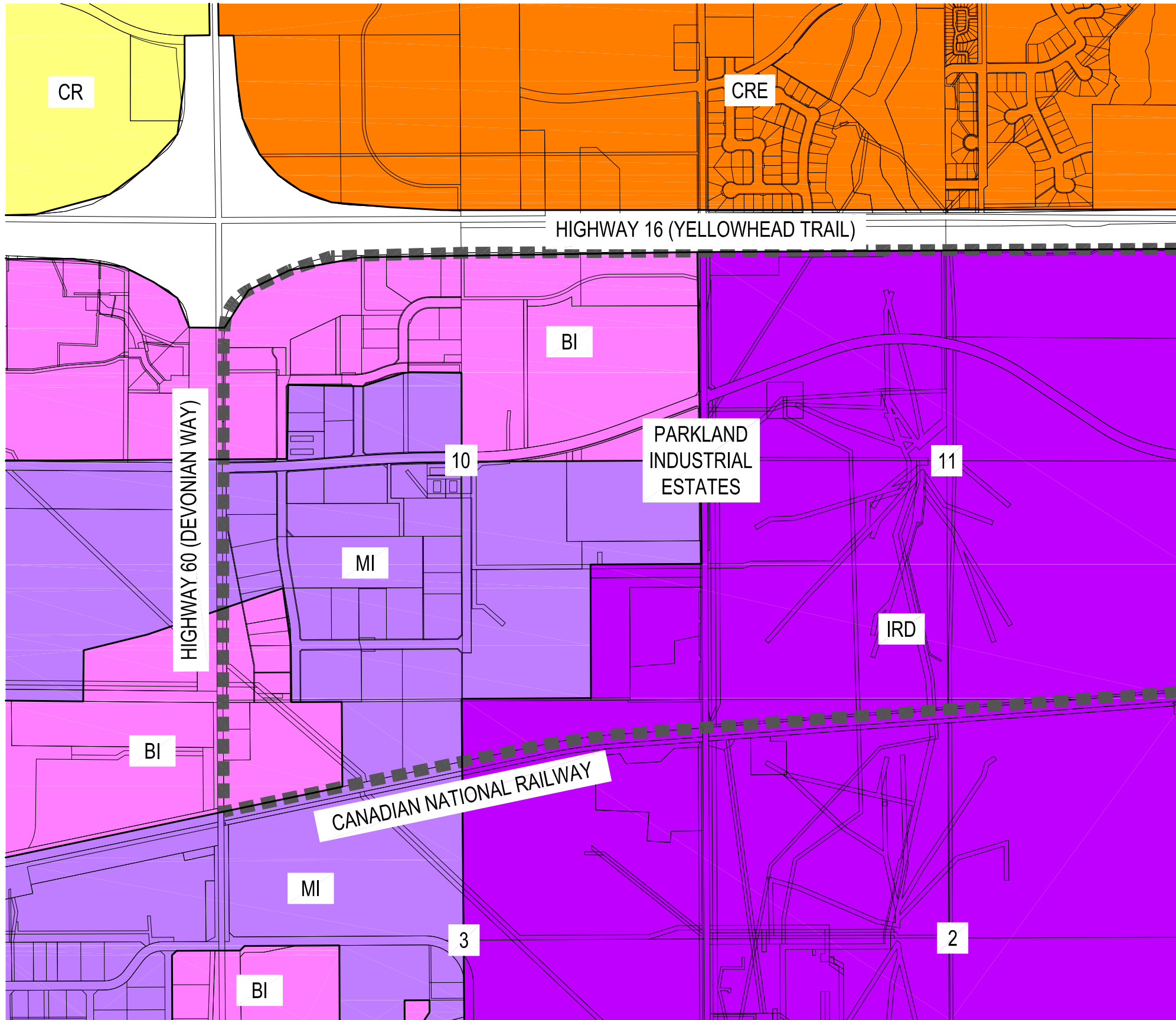
■ ■ ■ ■ ■ OUTLINE PLAN BOUNDARY



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DRAWING SUBMISSIONS				DESIGN ELEMENTS, ALIGNMENTS & CONFIGURATIONS ARE SHOWN IN A CONCEPTUAL MANNER ONLY, FOR OUTLINE PLAN PURPOSES, AND ARE SUBJECT TO CHANGE AT THE DETAILED DESIGN STAGE	PRELIMINARY DRAWING ONLY	 PARKLAND COUNTY Where Opportunity Awaits	 TRANS AMERICA GROUP	 PRISM ENGINEERING INC PHONE: (780) 469-4219 www.prism-eng.ca	PROJECT PARKLAND INDUSTRIAL ESTATES OUTLINE PLAN UPDATES SECTIONS 10 & 11-53-26-W4M PARKLAND COUNTY, ALBERTA	SCALE:	1 : 25,000	DRAWING:
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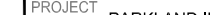
LEGEND

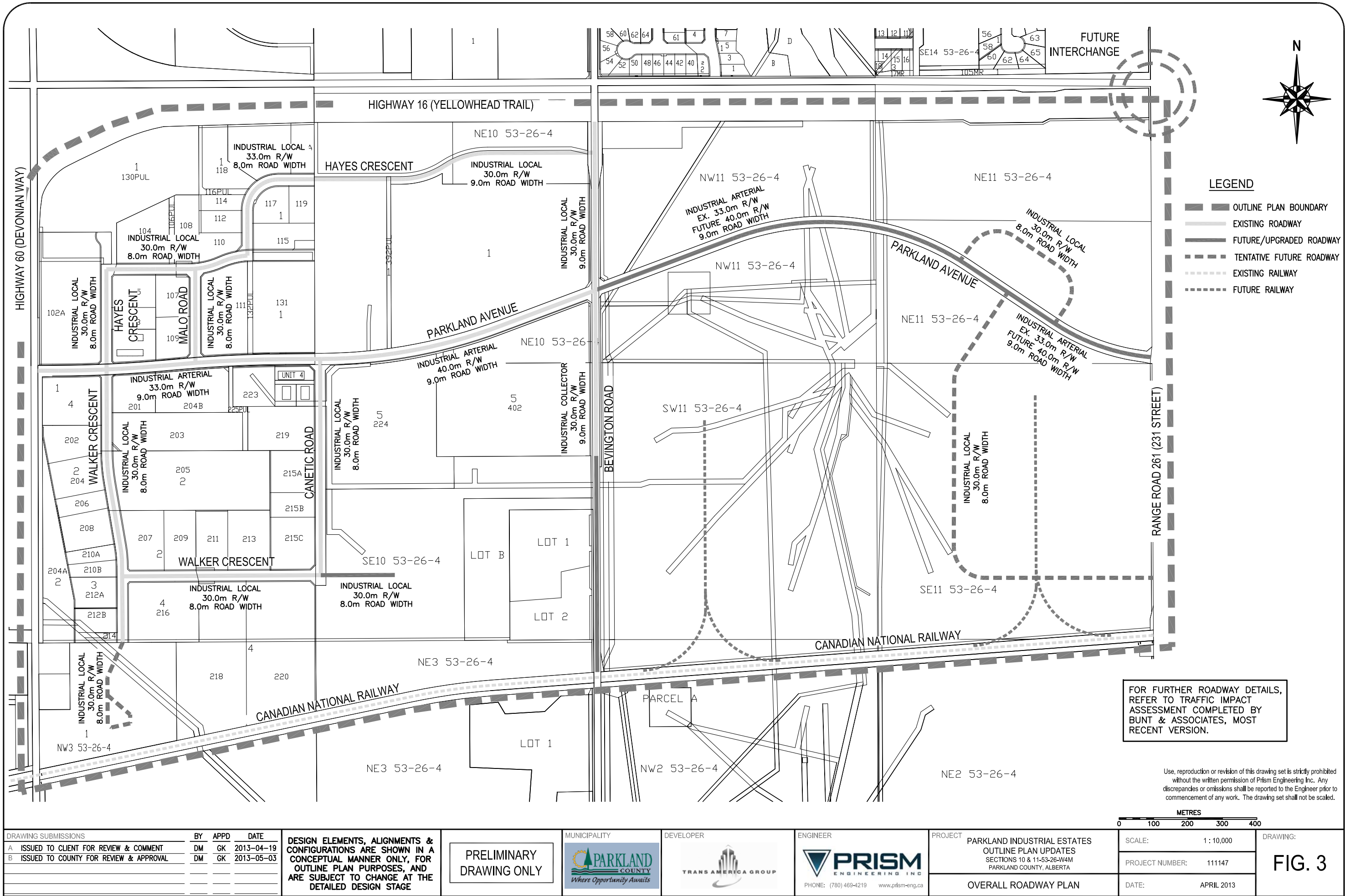
- OUTLINE PLAN BOUNDARY
- BI - BUSINESS INDUSTRIAL DISTRICT
- MI - MEDIUM INDUSTRIAL DISTRICT
- IRD - INDUSTRIAL RESERVE DISTRICT
- CRE - COUNTRY RESIDENTIAL ESTATE DISTRICT
- CR - COUNTRY RESIDENTIAL DISTRICT

RANGE ROAD 261 (231 STREET)

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DRAWING SUBMISSIONS				DESIGN ELEMENTS, ALIGNMENTS & CONFIGURATIONS ARE SHOWN IN A CONCEPTUAL MANNER ONLY, FOR OUTLINE PLAN PURPOSES, AND ARE SUBJECT TO CHANGE AT THE DETAILED DESIGN STAGE	PRELIMINARY DRAWING ONLY				PROJECT PARKLAND INDUSTRIAL ESTATES OUTLINE PLAN UPDATES SECTIONS 10 & 11-53-26-W4M PARKLAND COUNTY, ALBERTA LAND USE PLAN	DRAWING:			
A	ISSUED TO CLIENT FOR REVIEW & COMMENT	DM	GK							2013-04-19	SCALE:	1 : 15,000	FIG. 2
B	ISSUED TO COUNTY FOR REVIEW & APPROVAL	DM	GK							2013-05-03	PROJECT NUMBER:	111147	
											DATE:	APRIL 2013	



DRAWING SUBMISSIONS		BY	APPD	DATE
A	ISSUED TO CLIENT FOR REVIEW & COMMENT	DM	GK	2013-04-19
B	ISSUED TO COUNTY FOR REVIEW & APPROVAL	DM	GK	2013-05-03

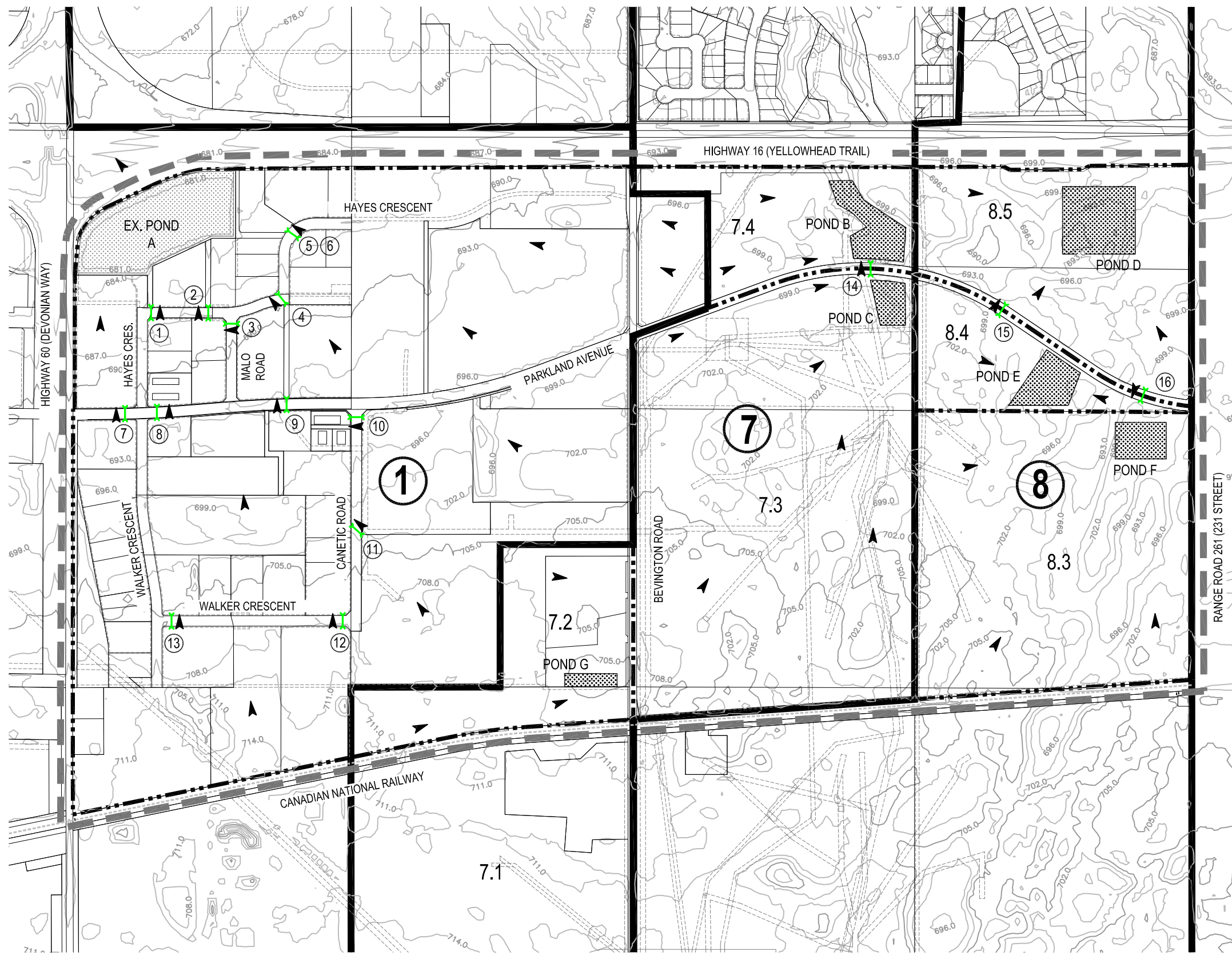
DESIGN ELEMENTS, ALIGNMENTS & CONFIGURATIONS ARE SHOWN IN A CONCEPTUAL MANNER ONLY, FOR OUTLINE PLAN PURPOSES, AND ARE SUBJECT TO CHANGE AT THE DETAILED DESIGN STAGE

PRELIMINARY
DRAWING ONLY



PROJECT: PARKLAND INDUSTRIAL ESTATES OUTLINE PLAN UPDATES SECTIONS 10 & 11-53-26-W4M PARKLAND COUNTY, ALBERTA

OVERALL ROADWAY PLAN



LEGEND

- OUTLINE PLAN BOUNDARY
- STORM BASIN BOUNDARY
- 1 STORM BASIN NUMBER
- STORM SUB BASIN BOUNDARY
- 8.5 STORM SUB BASIN NUMBER
- EXISTING DRAINAGE DIRECTION
- 1 CULVERT LABEL
- EXISTING CULVERT LOCATION

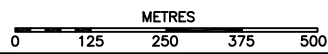
STORM BASIN AREAS (WITHIN OLP BOUNDARY)

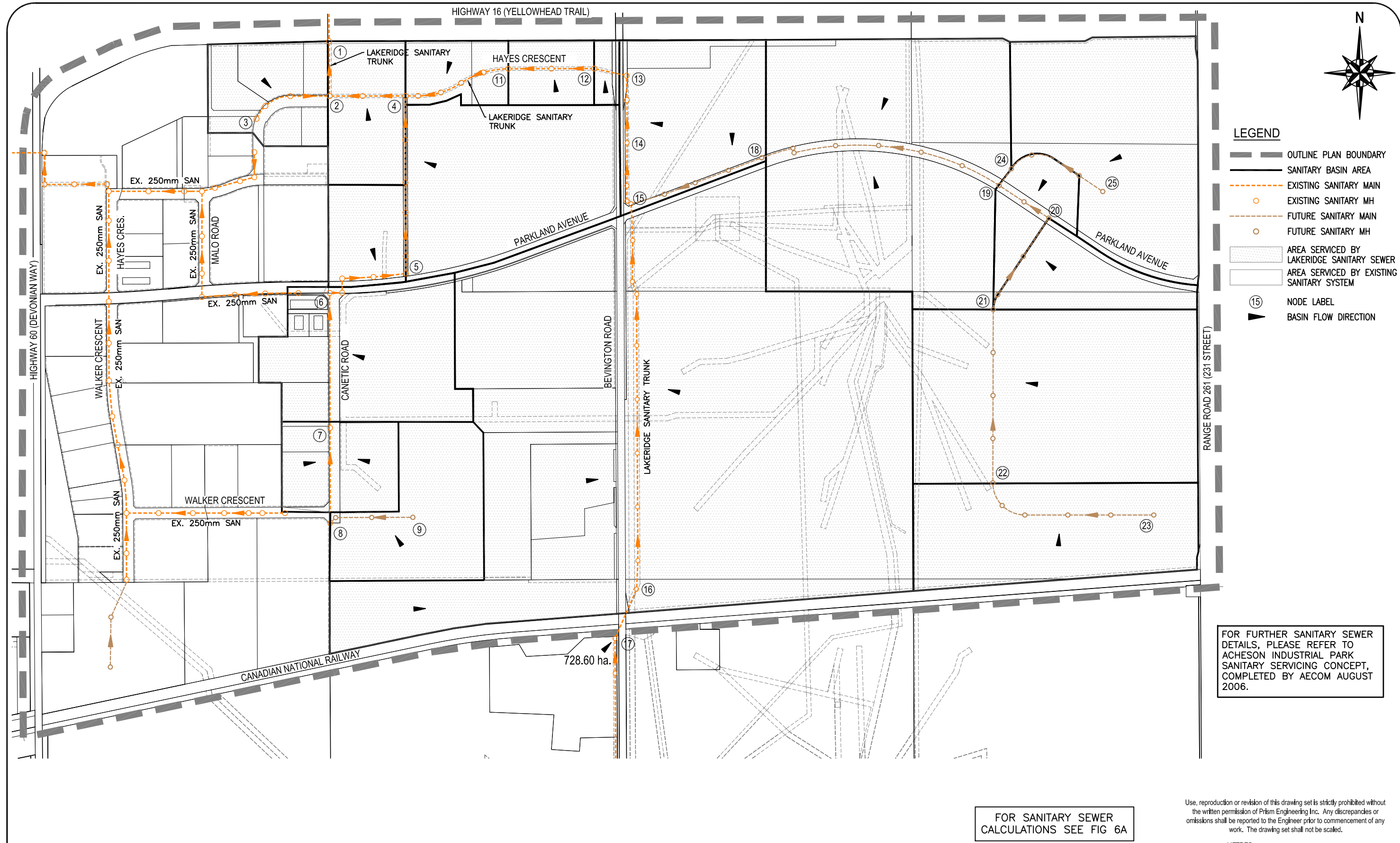
BASIN 1		
INDUSTRIAL/COMMERCIAL	221.4Ha	547.1Ac
SWMF EX. POND A	9.6Ha	23.7Ac
ROAD	24.1Ha	59.6Ac
TOTAL	255.1Ha	630.4Ac
BASIN 7-2		
INDUSTRIAL/COMMERCIAL	24.2Ha	59.8Ac
ROAD	2.7Ha	6.7Ac
TOTAL	26.9Ha	66.5Ac
BASIN 7-3		
INDUSTRIAL/COMMERCIAL	95.1Ha	235.0Ac
ROAD	3.4Ha	8.4Ac
TOTAL	98.5Ha	243.4Ac
BASIN 7-4		
INDUSTRIAL/COMMERCIAL	20.4Ha	50.4Ac
ROAD	0.9Ha	2.2Ac
TOTAL	21.3Ha	52.6Ac
BASIN 8-3		
INDUSTRIAL/COMMERCIAL	60.9Ha	150.5Ac
ROAD	3.5Ha	8.6Ac
TOTAL	64.4Ha	159.1Ac
BASIN 8-4		
INDUSTRIAL/COMMERCIAL	13.7Ha	33.9Ac
ROAD	2.2Ha	5.4Ac
TOTAL	15.9Ha	39.3Ac
BASIN 8-5		
INDUSTRIAL/COMMERCIAL	37.6Ha	92.9Ac
ROAD	3.0Ha	7.4Ac
TOTAL	40.6Ha	100.3Ac

CULVERT	SIZE
1	2x1200mm
2	2x1200mm
3	2x1200mm
4	1x1200mm
5	2x1200mm
6	2x1500mm
7	2x1200mm
8	1x1200mm
9	3x1200mm
10	2x1200mm
11	2x1000mm
12	1x600mm
13	2x900mm
14	1x800mm
15	1x800mm
16	1x800mm

FOR FURTHER DETAILS ON STORM WATER MANAGEMENT, PLEASE REFER TO ACHESON/BIG LAKE AREA MASTER DRAINAGE PLAN, COMPLETED BY AECOM AUGUST 2011.

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DRAWING SUBMISSIONS		BY	APPD	DATE
A	ISSUED TO CLIENT FOR REVIEW & COMMENT	DM	GK	2013-04-19
B	ISSUED TO COUNTY FOR REVIEW & APPROVAL	DM	GK	2013-05-03

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PRELIMINARY
DRAWING ONLY



PROJECT
PARKLAND INDUSTRIAL ESTATES
OUTLINE PLAN UPDATES
SECTIONS 10 & 11-53-26-W4M
PARKLAND COUNTY, ALBERTA
OVERALL SANITARY SEWER PLAN

SCALE: 1 : 10,000
PROJECT NUMBER: 111147
DATE: APRIL 2013

DRAWING:
FIG. 6

FOR SANITARY SEWER
CALCULATIONS SEE FIG 6A

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SANITARY SEWER DESIGN CALCULATIONS

PROJECT : PARKLAND INDUSTRIAL ESTATES
JOB # : 111147
DATE : Sept 1, 2011

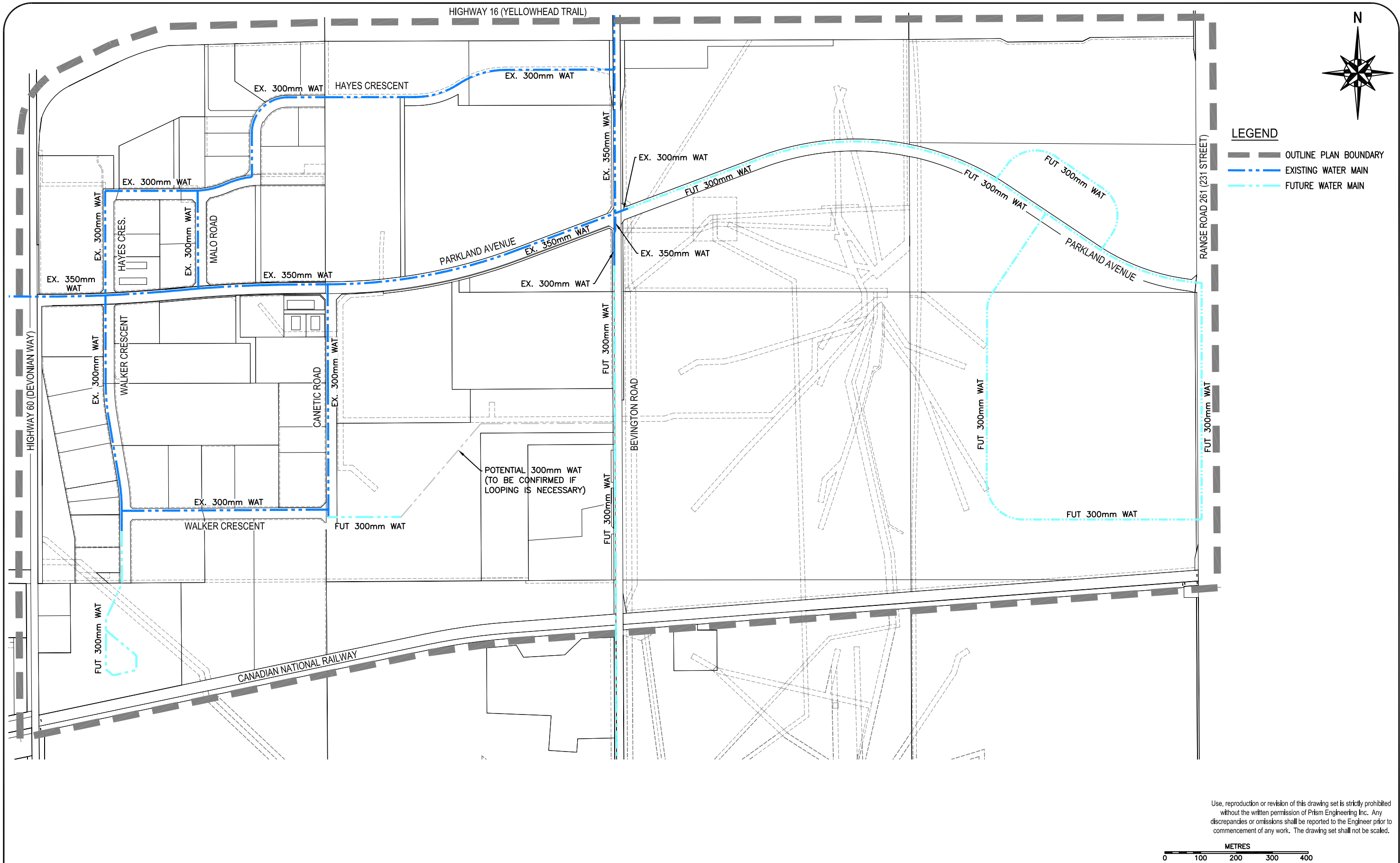
Commercial/Industrial Flow = 6,170 L/ha/d 0.07141 L/s/ha
Inflow / Infiltration Allowance = 0.28 L/s/ha
Pipe Roughness n = 0.013 PVC

From Node	To Node	INDUSTRIAL					I/I Allow (L/s)	PWW Flow (L/s)	Req. Flow (L/s)	PIPE						
		Added Area (ha)	Total Area (ha)	Avg. Flow (L/s)	Peak Factor	Peak DWF (L/s)				Size (mm)	Slope (%)	Length (m)	Cap. (L/s)	Cap. Used (%)	Full Flow Vel. (m/s)	Partial Flow Vel. (m/s)
23	22	21.5	21.5	1.5354	3.00	4.61	6.02	10.63	12.36	250	0.50	500	42.05	29%	0.86	0.74
22	21	38.6	60.1	4.2919	3.00	12.88	16.83	29.70	34.54	250	0.50	484	42.05	82%	0.86	0.96
21	20	7.9	68.0	4.8560	3.00	14.57	19.04	33.61	39.08	250	0.50	301	42.05	93%	0.86	0.97
20	19	5.5	73.5	5.2488	3.00	15.75	20.58	36.33	42.24	300	0.50	166	68.38	62%	0.97	1.02
25	24	27.8	27.8	1.9853	3.00	5.96	7.78	13.74	15.98	250	0.50	299	42.05	38%	0.86	0.80
24	19	0	27.8	1.9853	3.00	5.96	7.78	13.74	15.98	250	0.50	58	42.05	38%	0.86	0.80
19	18	47.8	149.1	10.6475	3.00	31.94	41.75	73.69	85.69	375	0.50	687	123.98	69%	1.12	1.21
18	15	0	149.1	10.6475	3.00	31.94	41.75	73.69	85.69	375	0.50	393	123.98	69%	1.12	1.21
17	16	728.6	728.6	52.0308	3.00	156.09	204.01	360.10	418.72	600	0.34	150	358.03	117%	1.27	1.43
16	15	132.6	861.2	61.5000	3.00	184.50	241.14	425.64	494.93	600	0.82	1072	556.01	89%	1.97	2.22
15	14	0	1010.3	72.1476	3.00	216.44	282.88	499.33	580.61	600	1.10	200	643.98	90%	2.28	2.58
14	13	16.9	1027.2	73.3544	3.00	220.06	287.62	507.68	590.32	675	1.30	187	958.42	62%	2.68	2.82
13	12	1.3	1028.5	73.4473	3.00	220.34	287.98	508.32	591.07	675	0.69	93	698.24	85%	1.95	2.19
12	11	4.3	1032.8	73.7544	3.00	221.26	289.18	510.45	593.54	600	1.00	240	614.01	97%	2.17	2.47
11	4	5	1037.8	74.1114	3.00	222.33	290.58	512.92	596.42	675	0.68	302	693.17	86%	1.94	2.18
9	8	14.1	14.1	1.0069	3.00	3.02	3.95	6.97	8.10	250	0.50	478	42.05	19%	0.86	0.66
8	7	8.2	22.3	1.5925	3.00	4.78	6.24	11.02	12.82	250	2.30	235	90.19	14%	1.84	1.30
7	6	19.7	42.0	2.9993	3.00	9.00	11.76	20.76	24.14	250	2.00	376	84.10	29%	1.71	1.48
6	5	6	48.0	3.4278	3.00	10.28	13.44	23.72	27.59	250	0.40	253	37.61	73%	0.77	0.84
5	4	24.9	72.9	4.5231	3.00	13.57	20.41	33.98	39.51	250	0.55	495	44.10	90%	0.90	1.02
4	2	8.7	1119.4	79.9386	3.00	239.82	313.43	553.25	643.31	675	0.98	212	832.14	77%	2.33	2.57
3	2	9.1	9.1	0.6498	3.00	1.95	2.55	4.50	5.23	250	0.46	225	40.33	13%	0.82	0.57
2	1	0	1128.5	80.5885	3.00	241.77	315.98	557.75	648.54	675	1.19	154	916.97	71%	2.56	2.78

NOTE: VALUES SHOWN IN BLUE PROVIDED BY PARKLAND COUNTY APRIL 11, 2011, INCLUDING DESIGN FLOWS PER HECTARE, INFLOW / INFILTRATION ALLOWANCE RATE, AND MINIMUM PEAK FACTOR.
AVERAGE FLOW SHOWN IN RED REFLECTS SYSCO SERVICE SEWAGE GENERATION RATE (94,635 L/d), PROVIDED WITHIN ACHESON INDUSTRIAL PARK
SANITARY SERVICING CONCEPT REPORT, COMPLETED BY AECOM AUGUST 2006.

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A	ISSUED TO CLIENT FOR REVIEW & COMMENT	DM	GK	2013-04-19							PROJECT NUMBER:	111147		
B	ISSUED TO COUNTY FOR REVIEW & APPROVAL	DM	GK	2013-05-03							DATE:	APRIL 2013		
SANITARY SEWER DESIGN CALCULATIONS														



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A	ISSUED TO CLIENT FOR REVIEW & COMMENT	DM	GK	2013-04-19						SCALE:	1 : 10,000	
B	ISSUED TO COUNTY FOR REVIEW & APPROVAL	DM	GK	2013-05-03						PROJECT NUMBER:	111147	
										DATE:	APRIL 2013	