

PROPOSED	DESCRIPTION	EXISTING
	ALBERTA SURVEY CONTROL MONUMENT	● ASCM No.
	CONTROL POINT	● CP No.
	IRON PIN	○ IP
---	CONSTRUCTION EASEMENT	
	PROPERTY LINE	---
	UTILITY RIGHT OF WAY EASEMENT	---
	ABBREVIATION ELEVATION	⊕ DESC ELEV
⊙	BOLLARD/DELINEATOR POST	⊙
○	SIGN	○
⊕	BOREHOLE	⊕
☁	BUSH	☁
🌳	TREE	🌳
—▲—▲—▲—▲—	ASPHALT SWALE	—▲—▲—▲—▲—
≡≡≡≡≡≡≡≡	CONCRETE SWALE	≡≡≡≡≡≡≡≡
←←←←←←←←	DRAINAGE DITCH	←←←←←←←←
←←←←←←←←	DRAINAGE SWALE	←←←←←←←←
←←←←←←←←	<b>DRAINAGE SWALE BACKFILLED</b>	←←←←←←←←
.....	GRADE BREAK	.....
---	CENTRELINE	---
---	EDGE OF GRAVEL	---
---	EDGE OF PAVEMENT	---
≡≡≡≡≡≡≡≡	CURB AND GUTTER	≡≡≡≡≡≡≡≡
≡≡≡≡≡≡≡≡	MONOLITHIC SIDEWALK	≡≡≡≡≡≡≡≡
≡≡≡≡≡≡≡≡	SEPARATE SIDEWALK	≡≡≡≡≡≡≡≡
—x—x—x—x—x—	FENCE BARBED WIRE	—x—x—x—x—x—
—○—○—○—○—○—	FENCE CHAIN LINK	—○—○—○—○—○—
—□—□—□—□—□—	FENCE SILT	—□—□—□—□—□—
—x—x—x—x—x—	FENCE TO BE REMOVED	—x—x—x—x—x—
	RAILWAY	

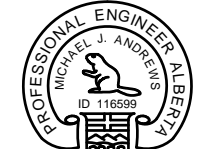
PROPOSED	DESCRIPTION	EXISTING
△ ET	ELECTRICAL TRANSFORMER	▲ ET
◆ GW	GUY WIRE	◆ GW
⌘ LS	LIGHT STANDARD	⌘ LS
△ PED	PEDESTAL	▲ PED
○ PP	POWER POLE	● PP
○ TS	TRAFFIC SIGNAL	⊙ TS
—C—	CABLE	—C—
—FO—	FIBRE OPTIC	—FO—
—G—	GAS LINE (NON-AER)	—G—
—G—	GAS ABANDONED	/G/
—OH—	OVERHEAD POWER	—OH—
—T—	TELECOMMUNICATION	—T—
—UG—	UNDERGROUND POWER	—UG—
⌘	BUTTERFLY VALVE	⌘
⌘	GATE VALVE	⌘
⊕	HYDRANT	⊕
X	CURB STOP	X
—W 150—	WATER MAIN	—W 150—
/ /	WATER MAIN ABANDONED	/ /
⊕	CLEANOUT	⊕
△	LANDSCAPE CATCH BASIN	▲
○	MANHOLE	●
⌘	PLUG VALVE	⌘
⊕	VAULT	⊕
⊕	CATCH BASIN	⊕
—	CULVERT	—
—	INLET STRUCTURE	—
—	OUTFALL STRUCTURE	—
—S 200—	SANITARY	—S 200—
/S 200/	SANITARY ABANDONED	/S 200/
—ST 200—	STORM	—ST 200—
/ST 200/	STORM ABANDONED	/ST 200/
—TD 100—	TILE DRAIN	—TD 100—

PROPOSED	DESCRIPTION	EXISTING
⊕	AIR RELEASE	⊕
	BELLxBELL ADAPTER	
⌘	BELLxFLANGE ADAPTER	⌘
⊕	COUPLER	⊕
⊕	CROSS	⊕
⊕	ELBOW 90°	⊕
⊕	ELBOW 45°	⊕
⊕	FLUSH POINT	⊕
⊕	HOT TAP	⊕
x	LOT SERVICE	x
⊕	PLUG	⊕
⊕	REDUCER	⊕
⊕	TEE	⊕
⊕	REDUCER TEE	⊕

NOTES:  
1. ALL ELEVATIONS AND STATIONS IN METRES. PIPE LENGTHS, PIPE SIZES AND DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE.

THE EXISTENCE, LOCATION AND ELEVATION OF ALL UTILITIES AS SHOWN ON ANY PLANS MAY BE BASED ON INFORMATION RECEIVED FROM THE RESPECTIVE AUTHORITIES AND ARE NOT GUARANTEED BY THE ENGINEER. NO RESPONSIBILITY IS IMPLIED OR ASSUMED BY THE ENGINEER AS TO THE LOCATION AND ELEVATION OR ANY OMISSIONS. THE CONTRACTOR OR ANY THIRD-PARTY IS RESPONSIBLE FOR DETERMINING THE EXISTENCE, LOCATION AND ELEVATION OF ALL SUCH UTILITIES AND MUST CONTACT THE VARIOUS UTILITY COMPANIES FOR ON SITE INFORMATION PRIOR TO COMMENCEMENT OF ANY OPERATIONS.

1	24-05-15	FOR QUOTATION
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PERMIT TO PRACTICE MPE, a division of Englobe Corp. Signature: _____ APEGA ID: 77905 Date: MAY 15, 2024 PERMIT NUMBER: P 7841 The Association of Professional Engineers and Geoscientists of Alberta (APEGA)	 MAY 15, 2024
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TOWN OF WESTLOCK

SPIRIT CENTRE PARKING LOT  
CIVIL  
LEGEND

DESIGNED	R.R., M.A	JOB	5454-035-00
DRAWN	A.B.E	SCALE	
DATE	MAY 2024	DRAWING	C0.1

ABANDONED	AB
ACRE	AC
AIR RELEASE MANHOLE	AR
AIR RELEASE VALVE	ARV
ALBERTA SURVEY CONTROL MONUMENT	ASCM
ASBESTOS CEMENT	AC
ASPHALTIC CONCRETE PAVEMENT	ACP
AT	@
AVENUE	AVE
BACK OF WALK	BOW
BEDDING	BED
BEGINNING OF CURVE	BC
BEGINNING OF VERTICAL CURVE	BVC
BELLxBELLxBELL	BxBxB
BELLxFLANGE	BxFL
BELLxSPIGOT	BxSP
BENCH MARK	BM
BLOCK	BLK
BOREHOLE	BH
BOTTOM	BTM
BOTTOM OF PIPE	BOP
BOUNDARY	BDY
BOULEVARD	BLVD
BUILDING	BLDG
CABLE	C
CANADIAN NATIONAL RAILWAY	CNR
CANADIAN PACIFIC RAILWAY	CPR
CANADIAN STANDARDS ASSOCIATION	CSA
CAPACITY	CAP
CAST IRON	CI
CATCH BASIN	CB
CATHODIC PROTECTION	CP
CENTRE LINE	CL
CERTIFICATE OF TITLE	C OF T
CHAIN LINK FENCE	CLF
CHECK DROP	CD
CHECK VALVE IN MANHOLE	CVM
CLASS	CL
CLEAN OUT	CO
COMMUNITY RESERVE	COMM RES
COMPLETE WITH	C/W
CONCRETE	CONC
CONDUIT	COND
CORRUGATED	C
CORRUGATED METAL PIPE	CMP
CORRUGATED STEEL PIPE	CSP
COUPLING	CPLG
CREEK	CRK
CRESCENT	CRES
CROSSFALL	X-FALL
CROSS DRAIN	C-D
CROSS SECTION	X-SEC
CUBIC METRE PER SECOND	m <sup>3</sup> /s
CULVERT	CULV
CURB AND GUTTER	C&G
CURB STOP	CS
CURED IN PLACE PIPE	CIPP
CURVE TO SPIRAL	CS

PVC AND HDPE PIPE HAZEN WILLIAMS ROUGHNESS COEFFICIENT

1000 - 4500	C=140
5000 - 15000	C=145

OVERLAND STORM WATER FLOW FORMULA ABBREVIATIONS

DEPTH OF FLOW IN 1 IN 5 YEAR STORM EVENT	D <sub>1:5</sub>
DEPTH OF FLOW IN 1 IN 100 YEAR STORM EVENT	D <sub>1:100</sub>

DEGREE	°
DELTA	
DIAMETER	Ø
DIMENSION RATIO	DR
DOMESTIC TURNOUT	DTO
DRAINOUT	DO
DRAIN INLET	DI
DRAWING	DWG
DRIVEWAY	DWY
DUCTILE IRON	DI
DWELLING	DWLG
EAST	E
EDGE OF GRAVEL	EOG
EDGE OF PAVEMENT	EOP
EDGE OF ROAD	EOR
ELECTRICAL TRANSFORMER	ET
ELEVATION	ELEV
ENCASEMENT	ENC
END OF CURVE	EC
END OF VERTICAL CURVE	EVC
ENGINEER	ENG
ENVIRONMENTAL CONSTRUCTION OPERATIONS	ECO
ENVIRONMENTAL RESERVE	ER
EXTERIOR DROP	EXT DROP
EXISTING GROUND	EG
FACE OF CURB	FOC
FACE OF WALK	FOW
FARM CROSSING	FC
FARM TURNOUT	FTO
FIBRE OPTIC	FO
FINISHED GRADE	FG
FINISHED LANDSCAPE GRADE	FLG
FLANGE	FLG
FLAPPER GATE	FP
FLOOD PLAIN	FLD PLN
FLOOD WAY	FLD WY
FLOOR	FLR
FLOW RATE	Q
FOOTING	FTG
FORCE MAIN	FM
FRAME & COVER	F&C
GALVANIZED	GALV
GALVANIZED IRON	GI
GAS	G
GUY WIRE	GW
HECTARE	ha
HEIGHT	H
HIGH DENSITY POLYETHYLENE	HDPE
HIGH POINT	HP
HIGHWAY	HWY
HORIZONTAL	HOR OR H
HORIZONTAL DIRECTIONAL DRILL	HDD
HOSPITAL	HOSP
HYDRANT	HYD
HYDRAULIC GRADE LINE	HGL
INLET CHAMBER	IC
INLET CONTROL DEVICE	ICD
INLET/OUTLET STRUCTURE (DRY POND)	I/O
INSIDE DIAMETER	ID
INTERSECTION	INT
INVERT	INV
IRON PIN	IP

FLOW RATE FOR A 1 IN 5 YEAR STORM EVENT	Q <sub>1:5</sub>
FLOW RATE FOR A 1 IN 100 YEAR STORM EVENT	Q <sub>1:100</sub>

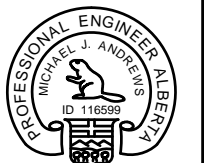
KILOGRAM	kg
KILOMETRES	km
KILOMETRES PER HOUR	km/h
RATE OF CURVATURE	K
LANDSCAPE CATCH BASIN	LSCB
LATERAL TURNOUT	LTO
LENGTH	L
LENGTH OF CURVE	LC
LENGTH OF VERTICAL CURVE	LVC
LIFT STATION	LS
LIGHT STANDARD	LS
LIP OF GUTTER	LG
LIP OF GUTTER RADIUS	LGR
LONG RADIUS	LR
LONG TANGENT	LT
LOW POINT	LP
LOW PROFILE CURB AND GUTTER	LPC&G
MANHOLE	MH
MANHOLE CATCH BASIN	MHCB
MAXIMUM	MAX
MEDIAN	MED
METRE	m
METRES PER SECOND	m/s
METER CHAMBER	MC
MIDDLE ORDINATE DISTANCE (VERTICAL SEPARATION FROM PI)	M
MILLIMETRE	mm
MINIMUM	MIN
MINUTES	'
MONITORING WELL	MW
MONOLITHIC SIDEWALK	MONO
MUNICIPAL RESERVE	MR
NORTH	N
NORTH EAST	NE
NORTH WEST	NW
NOT TO SCALE	NTS
NUMBER	No.
ON CENTRE	OC
OPTIMUM MOISTURE	OM
OUTLET CHAMBER	OC
OUTSIDE DIAMETER	OD
OVERHEAD POWER	OH
PEDESTAL	PED
PER	/
PERCENT	%
PIEZOMETER	PZ
PIPELINE TURNOUT	TO
POINT OF INTERSECTION	PI
POLYETHYLENE	PE
POLYVINYL CHLORIDE	PVC
POWER POLE	PP
POUNDS PER SQUARE INCH	PSI
PRESSURE REDUCING MANHOLE	PRVM
PROPERTY LINE	PL
PULL BOX	PB
PUMPOUT	PO
PUMP STATION	PS

VELOCITY FOR A 1 IN 5 YEAR STORM EVENT	V <sub>1:5</sub>
VELOCITY FOR A 1 IN 100 YEAR STORM EVENT	V <sub>1:100</sub>

RADIUS	R
RANGE	RGE
RAW WATER	RW
REDUCER	RED
REGISTERED PLAN	REG'D PL
REINFORCED	RE
REINFORCED CONCRETE	RC
RELOCATION	RELO
REMOVE	R
RESERVOIR	RES
RIGHT OF WAY	ROW
ROAD	RD
ROAD CROSSING	RC
ROLLED CURB AND GUTTER	RCG
RUBBER GASKET	RG
SANITARY	S
SECOND	"
SHOULDER	SHLD
SLOPE	S
SOUTH	S
SOUTH EAST	SE
SOUTH WEST	SW
SPIRAL TO CURVE	SC
SPIRAL TO TANGENT	ST
SQUARED	SQ
STANDARD	STD
STANDARD PROCTOR DENSITY	SPD
STAINLESS STEEL	SST
STATION	STA
STEEL	ST
STREET	ST
STORM	ST
TANGENT	TAN
TANGENT TO SPIRAL	TS
TAPPING VALVE	TV
TELECOMMUNICATION	T
THRUST BLOCK	TB
TILE DRAIN	TD
TOP OF ASPHALT	TOA
TOP OF CURB	TOC
TOP OF DAM	TOD
TOP OF PIPE	TOP
TOP OF RAIL	TOR
TOWNSHIP	TWP
TRAFFIC SIGNAL	TS
TYPICAL	TYP
UNDERGROUND POWER	UG
UTILITY RIGHT OF WAY	URW
VALVE	V
VALVE CHAMBER	VC
VELOCITY	VEL
VERTICAL	VER OR V
VERTICAL BEND DOWN	VBD
VERTICAL BEND UP	VBU
VERTICAL CURVE	VC
VERTICAL POINT OF INTERSECTION	VPI
VITRIFIED CLAY TILE	VCT
WATER	W
WATER VALVE	WV
WEST	W
WEeping TILE DRAIN	WTD
WHEEL CHAIR RAMP	WCR
WIDTH	W

1	24-05-15	FOR QUOTATION
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Signature: \_\_\_\_\_  
APEGA ID: 77905  
Date: MAY 15, 2024  
PERMIT NUMBER: P 7841  
The Association of Professional Engineers and Geoscientists of Alberta (APEGA)

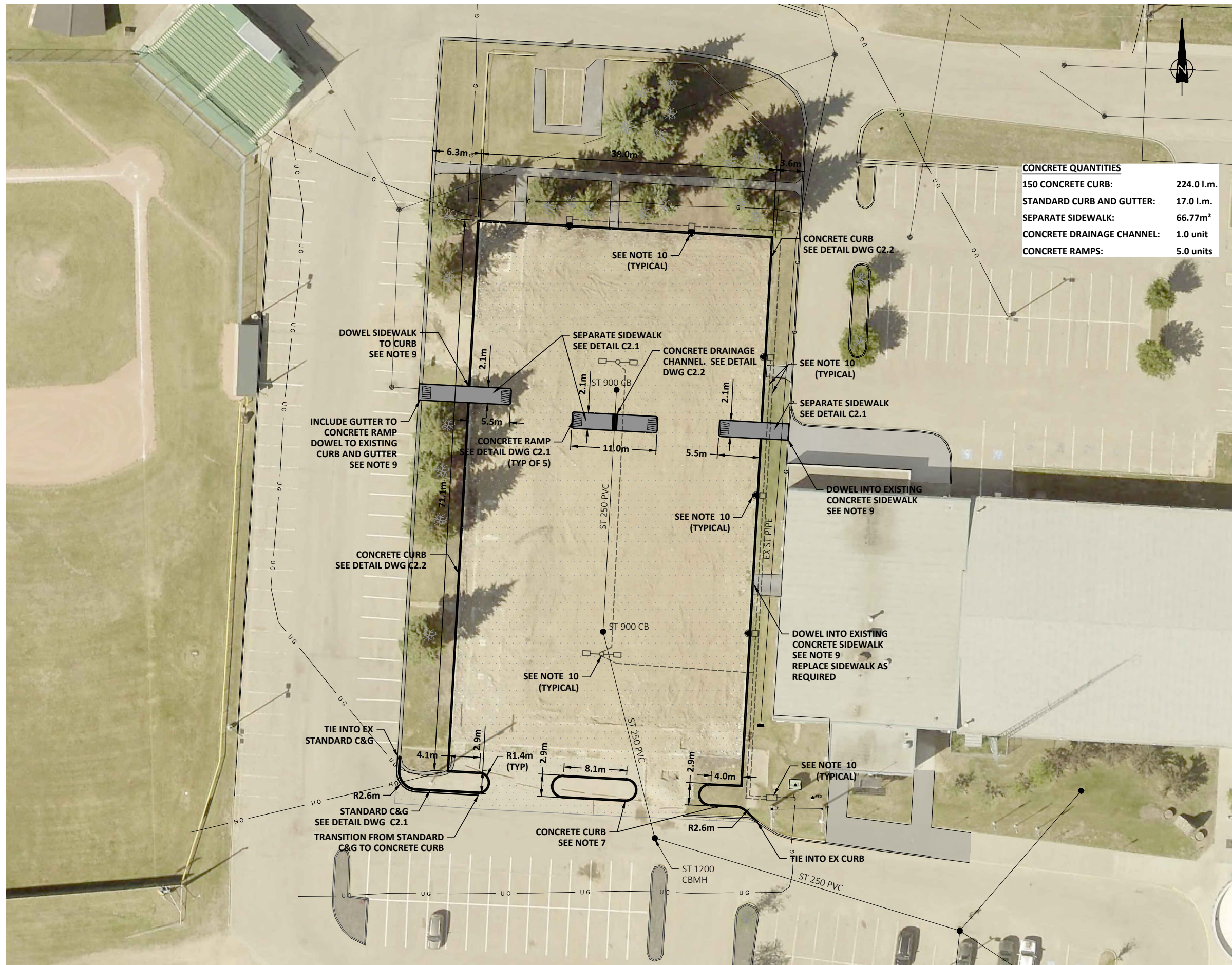


a division of Englobe

TOWN OF WESTLOCK

SPIRIT CENTRE PARKING LOT  
CIVIL  
ABBREVIATIONS

DESIGNED	R.R., M.A	JOB	5454-035-00
DRAWN	A.B.E	SCALE	
DATE	MAY 2024	DRAWING	C0.2



CONCRETE QUANTITIES	
150 CONCRETE CURB:	224.0 l.m.
STANDARD CURB AND GUTTER:	17.0 l.m.
SEPARATE SIDEWALK:	66.77m <sup>2</sup>
CONCRETE DRAINAGE CHANNEL:	1.0 unit
CONCRETE RAMPS:	5.0 units

- NOTES:
- FOR INFORMATION REGARDING GENERAL NOTES, UTILITIES, SYMBOLS AND ABBREVIATIONS REFER TO THE LEGEND AND ABBREVIATIONS DRAWINGS.
  - ALL BOLD ITEMS INDICATE WORK TO BE DONE AND ALL LIGHT ITEMS INDICATE EXISTING CONDITIONS.
  - LOCATION OF EXISTING CONDITIONS ARE APPROXIMATE ONLY AND SHALL BE FIELD CONFIRMED PRIOR TO CONSTRUCTION.
  - THE CONTRACTOR SHALL CALL ALBERTA ONE-CALL AT 1-800-242-3447 AT LEAST THREE (3) WORKING DAYS PRIOR TO BEGINNING ANY EXCAVATION OR REMOVALS.
  - THE CONTRACTOR IS RESPONSIBLE COORDINATING UTILITY LINE CROSSINGS WITH UTILITY COMPANIES.
  - THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ADEQUATE BARRICADES, CONSTRUCTION SIGNAGE, TRAFFIC CONTROL, AND FLAG PERSONS.
  - PERIMETER OF ISLAND TO BE CONSTRUCTED USING CONCRETE CURB AS PER DETAIL ON DWG C2.1. ISLAND INFILL TO BE LANDSCAPED BY OTHERS.
  - COORDINATE REMOVALS AND BASE WORK WITH REMOVALS AND GRADING CONTRACTORS, AS WELL AS WITH THE TOWN.
  - PROVIDE 300mm LONG 10M REBAR DOWELS AT 300mm ON-CENTRE TO TIE-IN TO EXISTING CONCRETE STRUCTURES POURS. DRILL 12mm DIAMETER BY 150mm DEEP HOLES IN CONCRETE STRUCTURES, SET DOWELS INTO HOLES WITH HAMMER AFTER INJECTING HIT-HY ADHESIVE INSIDE HOLE.
  - ELECTRICAL WORKS TO BE COMPLETED BY OTHERS.

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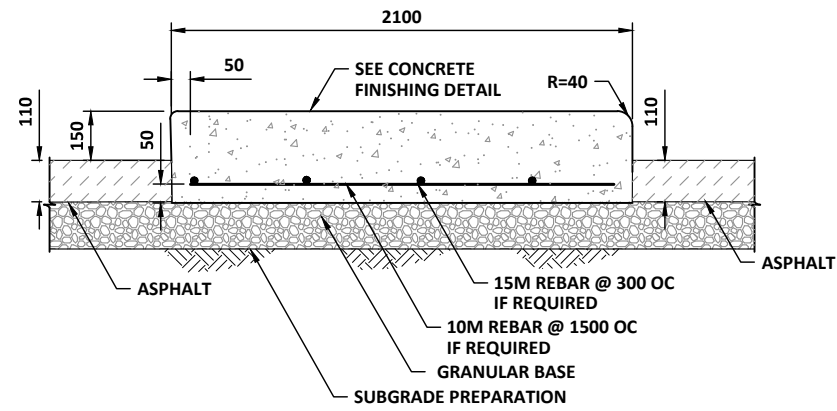
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APEGA ID 77905  
Date MAY 15, 2024  
PERMIT NUMBER: P 7841  
The Association of Professional Engineers and Geoscientists of Alberta (APEGA)



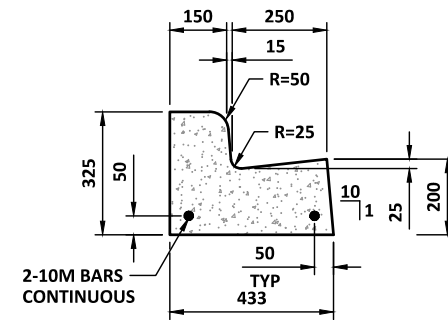
**TOWN OF WESTLOCK**

**SPIRIT CENTRE PARKING LOT  
CIVIL  
CONCRETE SITE WORKS**

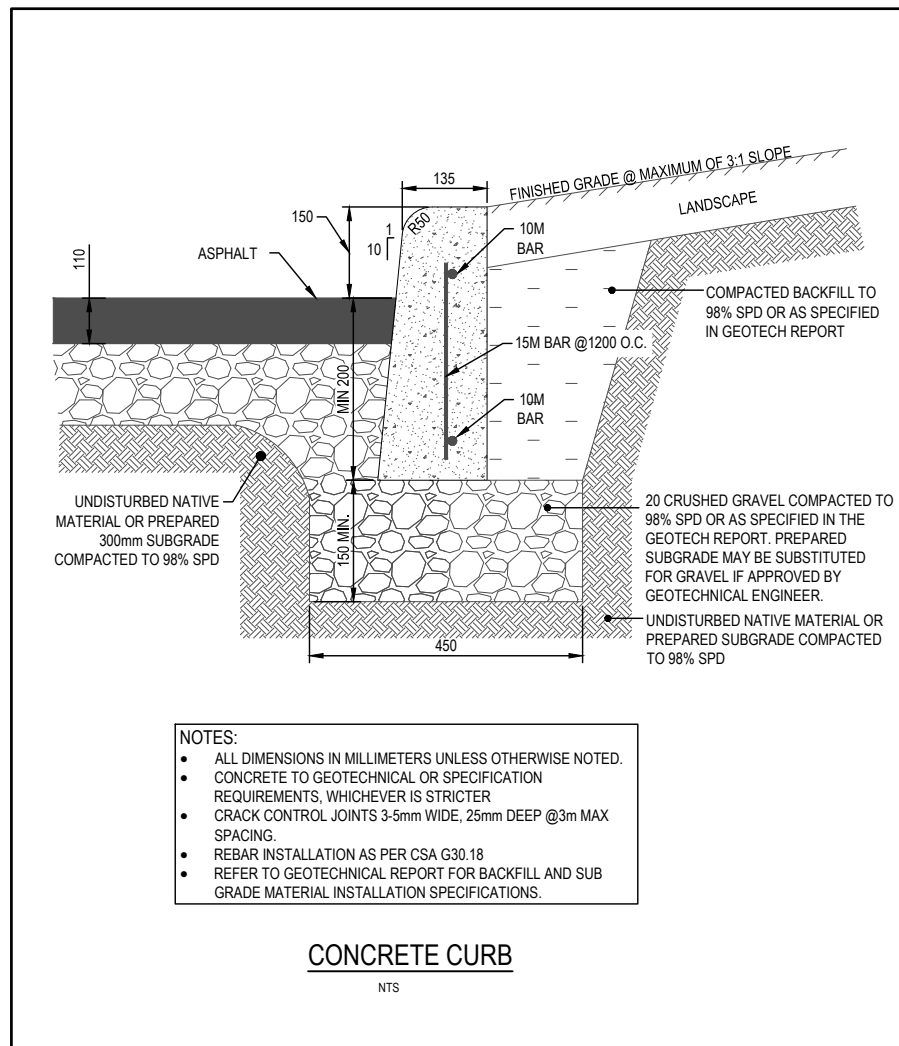
DESIGNED	R.R., M.A	JOB	5454-035-00
DRAWN	A.B.E	SCALE	1:500
DATE	MAY 2024	DRAWING	C1.1



**SEPARATE SIDEWALK**



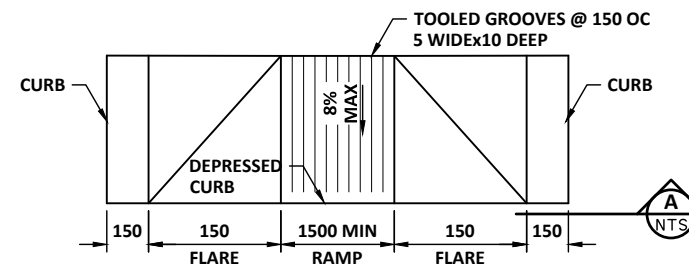
**STANDARD CURB AND GUTTER**



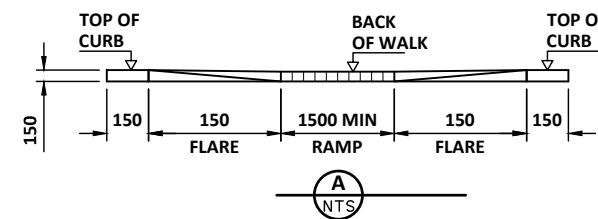
**CONCRETE CURB**

NTS

- NOTES:
- ALL DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE NOTED.
  - CONCRETE TO GEOTECHNICAL OR SPECIFICATION REQUIREMENTS, WHICHEVER IS STRICTER
  - CRACK CONTROL JOINTS 3-5mm WIDE, 25mm DEEP @3m MAX SPACING.
  - REBAR INSTALLATION AS PER CSA G30.18
  - REFER TO GEOTECHNICAL REPORT FOR BACKFILL AND SUB GRADE MATERIAL INSTALLATION SPECIFICATIONS.



**PLAN**

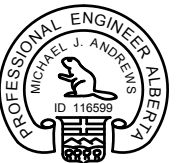


**CONCRETE SIDEWALK RAMP FOR BARRIER FREE ACCESS**

- NOTES:
1. ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE.

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MAY 15, 2024

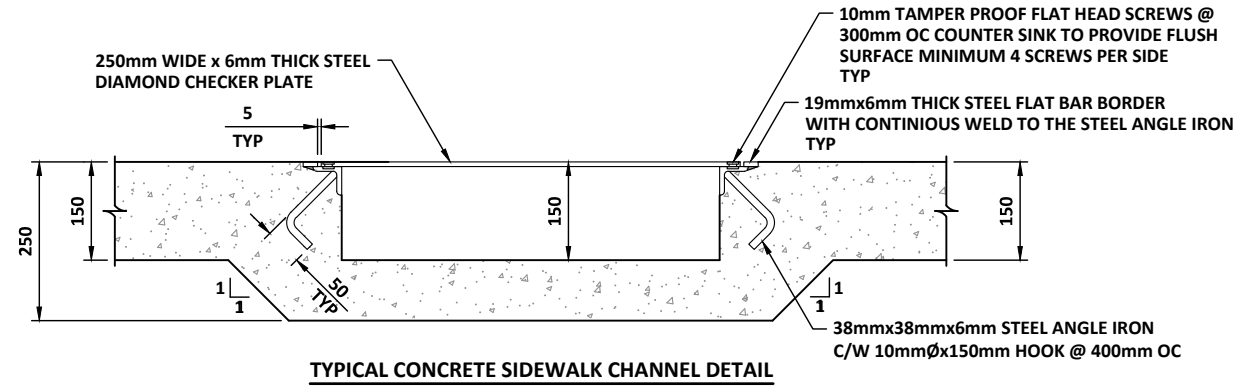
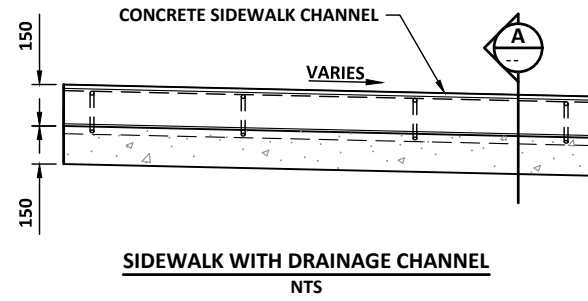


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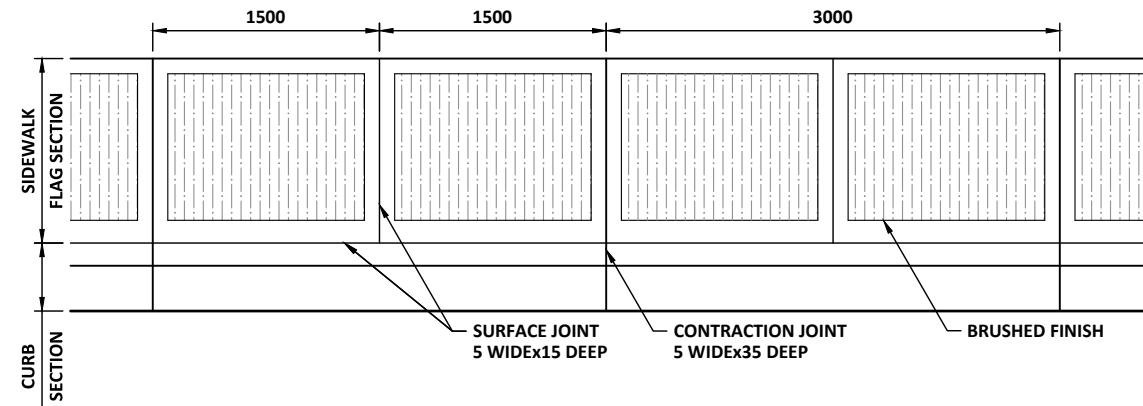
**TOWN OF WESTLOCK**

**SPIRIT CENTRE PARKING LOT  
CIVIL  
CONCRETE DETAIL 1**

DESIGNED	R.R., M.A	JOB	5454-035-00
DRAWN	A.B.E	SCALE	NTS
DATE	MAY 2024	DRAWING	C2.1



- NOTES:
- GRATE - 20X25.5 AS SUPPLIED BY SCHMIDT LASERWORKS OR APPROVAL EQUAL.
  - MATERIAL TO BE 1/4" MILD STEEL PAINTED BLACK (NON SLIP)

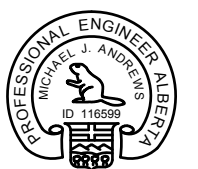


CONCRETE FINISHING DETAIL

- NOTES:
1. ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE.

1	24-05-15	FOR QUOTATION
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MAY 15, 2024



TOWN OF WESTLOCK

SPIRIT CENTRE PARKING LOT  
CIVIL  
CONCRETE DETAILS 2

DESIGNED	R.R., M.A	JOB	5454-035-00
DRAWN	A.B.E	SCALE	NTS
DATE	MAY 2024	DRAWING	C2.2