



Town of Picture Butte Trails Design and Concept Plan

February 2018



Contents

Trail Network	1
Trail Network Vision & Description	2
Trail Network Phases	4
Trail Network Sections	5
Recommended Crossing Improvements	7
CPR Trail Section	8
CPR Trail Description	9
Preliminary Pathway Design Drawings	10
Landscaping Recommendations	18
Opinion of Probable Cost	24
Appendices	
Appendix 1: Classification & Rating Systems	
Alberta Recreation Corridor & Trails Classification System; IMBA Trail Rating System	
Appendix 2: Construction Specifications	
City of Lethbridge Construction Specifications; City of Lethbridge Parks & Open Space Standards 2013 (Section 4.0 Trails & Walkways); IMBA Trail Design Standards	
Appendix 3: Site Furnishings Specifications	
Dumorf Specifications; Polygon Specifications	



Trail Network

TRAIL NETWORK VISION & DESCRIPTION

The Town of Picture Butte completed its Parks, Culture and Recreation Regional Master Plan in 2016. The recommendations within the Master Plan that were directly related to trails included:

- Development of a network of multi-use trails around the Town;
- Creation of a 'Community Hub' with linkages to a multi-purpose trail along the abandoned CPR rail line; and
- Targeting of the Walk On the Wildside (WOW) Trails for upgrades and maintenance.

The Town has since acquired land that was previously a CPR railway and intends to develop a multi-use trail and parkway along a portion of this property. It would also be beneficial to take the opportunity to connect existing trails and established sidewalks in order to create a comprehensive and connected network within and around the Town.

The following report outlines opportunities and details towards:

- Creating an overall map of the envisioned trail system.
- Recommending trail surfaces for sections of the network according to a standard trail classification system (International Mountain Bicycling Association (IMBA) Standards).
- Developing design specifications, engineered drawings and cross sections for the CPR section of the Trail.
- Planning the trail by identifying the location of the CPR section of the trail, removal of existing surface, grading, and landscaping requirements and recommendations.

With the successful implementation of the Picture Butte Trails Network, the Town will move closer towards its vision of "a welcoming and engaged community that sustains quality parks, cultural and recreational experiences which meets the needs of the residents and surrounding area."

Recommended Trail Network Phasing & Sections

A visioning session was held with members of the Walk On the Wildside (WOW) Trails committee to identify key routes, opportunities, and constraints for trail network development. Building on this discussion, a recommended network was created (**Figure 1.1 - Overall Trail Network in Phases**), incorporating five phases. With each phase, priority was placed on extending a well-connected, looping network rather than sections in isolation. The Town's existing and future sidewalk network is a key component of the system. Additionally, sections of trail that rely on future (possibly long-term) town development were included in later phases so as not to limit opportunities for a connected network over a shorter term. See **Figure 1.2 - Trail Network Sections** and **Table 1.2 - Trail Network Section Descriptions** for details.

Trail Classification & Rating

The Alberta Recreation Corridor & Trails (ARCT) Classification System, developed by Alberta Tourism, Parks and Recreation, designates trails for single or multiple types of use and then provide three classifications of user experience. For the Picture Butte Trails Network, multi-use trails are assumed to be for use by pedestrians, cyclists, and small wheeled users (inline skates, roller skis, skateboards, wheelchairs, scooters). To design trails that are appropriate for all of these user groups, the user group with the highest requirements (for example, widest trail or most gentle gradients) determines the design characteristics for the trail section.

The table below outlines the recommended characteristics for each user experience classification:

Table 1.1 Recommended Trail Classifications & Characteristics

ARCT Classification	Trail Surface	Gradient	Trail Width	Clearing Width (on each side of trail)	Clearing Height	Specification Reference
Developed	Paved	Gentle (0-5%), up to 10%	2.5 m +	1 m	3 m	City of Lethbridge Construction Specifications
Semi-Developed	Granular	up to 15%	1 - 2 m	1 m	3 m	City of Lethbridge Parks & Open Space Standards 2013 (Section 4.0 Trails & Walkways)
Primitive	Natural / unsurfaced	up to 30%	0.3 - 1 m	0.5 m	2.5 m	IMBA Trail Design Standards



Developed Trail

Source: <http://www.winnipegtrails.ca/wp-content/uploads/bishop-300x225.jpg>



Semi-Developed Trail

Source: <https://threebestrated.ca/images/TerwillegarParkTrail-Edmonton-AB.jpeg>



Primitive Trail

Source: <https://tamilandvedas.files.wordpress.com/2012/06/running-in-the-mountain.jpg>

Primitive trails, sometimes referred to as single-track, are typically not universally accessible due to surfacing and terrain. Their narrow, natural surfaces have fewer impacts on the environment and our sensitive ecosystems. Primitive trails may include sections of very rough terrain. These trails are often built - at least initially - by knowledgeable trail user groups. The IMBA has developed some standards and guidelines to support trail building. Refer to **Appendix 1 - Classification & Rating Systems** for additional information regarding the Alberta Recreation Corridor & Trails Classification System. Refer to **Appendix 2 - Construction Specifications** for the City of Lethbridge Construction Specifications, the City of Lethbridge Parks & Open Space Standards 2013 (Section 4.0 Trails & Walkways), and the IMBA Trail Design Standards.

In addition to the three classifications above, Town of Picture Butte sidewalks will also an integral role in the comprehensive Trails Network.

For each section of the Picture Butte Trails Network, **Table 1.2 - Trail Network Section Descriptions** includes recommendations for short, medium, and long term surfacing or development according to the ARCT Classification System. The final classification for each section is then matched to the corresponding category of the trail difficulty rating system adopted by the IMBA.

While most sections of the trail will fall into the same IMBA category (White Circle - Easiest), identifying these categories provides users with consistent information and could be used to develop further tourism opportunities should a more extensive network of trails be developed in the region. Refer to **Appendix 1 - Classification & Rating Systems** for detail regarding the IMBA Trail Rating System.

Recommended Crossing Improvements

As trail sections are developed, particular attention needs to be paid to safety in crossing busier streets and highways. **Figure 1.3 - Recommended Crossing Improvements** identifies locations along the proposed trail network where additional safety measures may be required to ensure the safety of trail users.



▲
N not to scale

- Phase 1
- Phase 2
- Phase 3
- Phase 4
- Phase 5

Figure 1.1
Overall Trail Network in Phases



▲
N not to scale

- Phase 1
- Phase 2
- Phase 3
- Phase 4
- Phase 5

Figure 1.2
Trail Network Sections

Table 1.2
Trail Network Section Descriptions

Phase	Trail section	Section length (m)	Current ARCT Classification	Future ARCT Classification (short term)	Future ARCT Classification (long term)	IMBA Standard (long term)
1	1	272	semi-developed	developed	developed	White Circle (Easiest)
	2	760	sidewalk	sidewalk	sidewalk	sidewalk
	3	746	future trail	developed	developed	White Circle (Easiest)
	4	1070	sidewalk	sidewalk	sidewalk	sidewalk
	5	502	sidewalk	sidewalk	sidewalk	sidewalk
2	6	517	sidewalk	sidewalk	sidewalk	sidewalk
	7	125	future trail	sidewalk	sidewalk	sidewalk
	8	902	future trail	semi-developed	developed	White Circle (Easiest)
	9	356	future trail	developed	developed	White Circle (Easiest)
3	10a	278	future trail	primitive	primitive or semi-developed	Blue Square (Challenging)
	10b	240	future trail	primitive	developed	White Circle (Easiest)
	11a	788	future trail	primitive	primitive or semi-developed	Blue Square (Challenging)
	11b	565	future trail	primitive	developed	White Circle (Easiest)
	12	754	future trail	future trail	developed	White Circle (Easiest)
4	13	343	semi-developed	developed	developed	White Circle (Easiest)
	14	272	future trail	future trail	sidewalk	sidewalk
5	15	1310	semi-developed	semi-developed	developed	White Circle (Easiest)
	16	1017	future trail	future trail	sidewalk	sidewalk
	17	596	future trail	future trail	sidewalk/developed	White Circle (Easiest)
	18	368	future trail	future trail	sidewalk	sidewalk
	19	661	future trail	future trail	developed	White Circle (Easiest)



▲
N not to scale

○ Recommended Crossing Improvement

Figure 1.3
Recommended Crossing Improvements



CPR Trail Section

CPR TRAIL SECTION DESCRIPTION

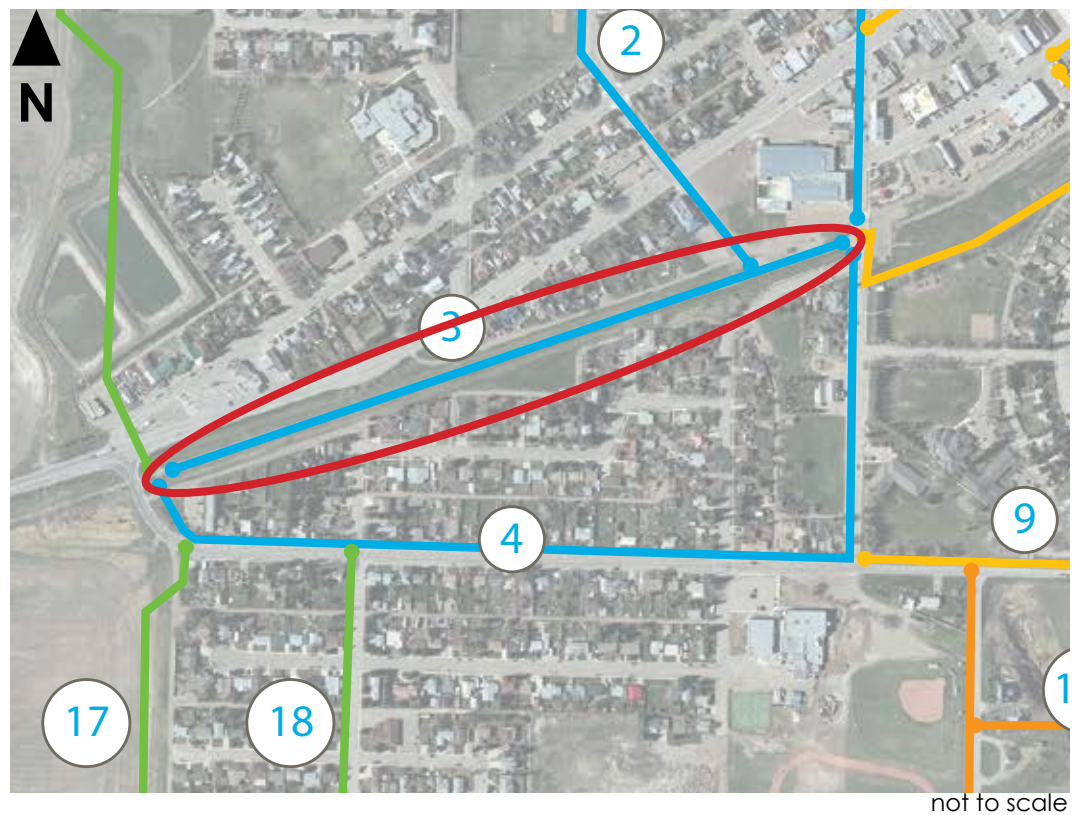
The following section describes the CPR Trail section (Trail section 3 on **Figure 1.2 - Trail Network Section Descriptions**) of the Picture Butte Trails Network in greater detail.

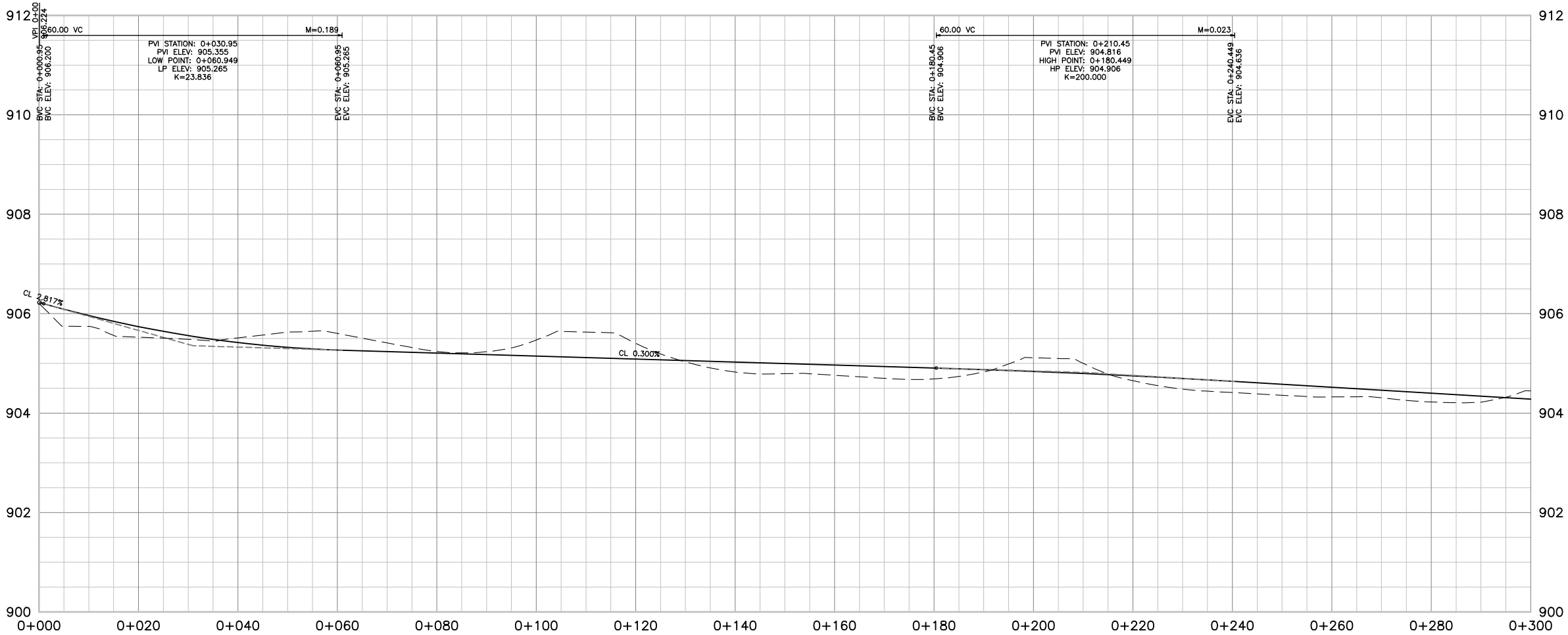
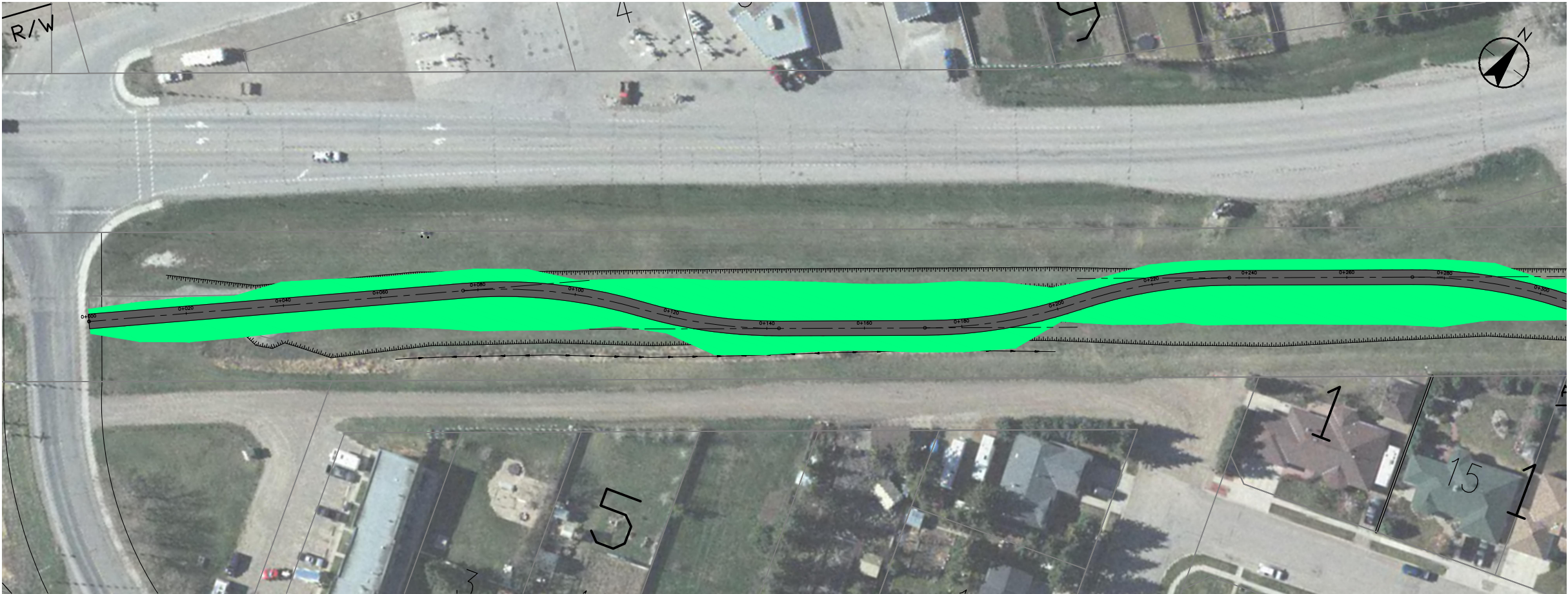
The Preliminary Pathway Design Drawings on the following 3 pages describe grading changes required to create a pathway that meanders along the previous CPR right-of-way. This asphalt path is designed to be 3.0m in width in order to accommodate pedestrians, cyclists, and small wheeled users (inline skates, roller skis, skateboards, wheelchairs, scooters). The pathway gradient is kept within an acceptable range for users of varying abilities and skill levels.

Beginning with **Figure 2.2 - Landscaping Recommendations Overview Plan**, high-level landscaping recommendations are provided for areas along this section of the trail. A recommended plant palette is provided, along with recommendations for a variety of possible site furnishings.

Finally a high-level opinion of probable cost is provided for the CPR Trail section.

Figure 2.1
CPR Trail Location





Stantec Consulting Ltd.
290 - 220 4th Street S
Lethbridge AB
Tel. 403.329.3344
www.stantec.com

Copyright Reserved
The Contractor shall verify and be responsible for all dimensions, DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.
The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Legend

Notes

Revision	By	Appd.	YY.MM.DD
Issued	By	Appd.	YY.MM.DD
File Name:	Dwn.	Chkd.	Dgn.
Permit-Seal			

Client/Project
TOWN OF PICTURE BUTTE

TRAILS DESIGN AND CONCEPT PLAN

Picture Butte, Alberta, Canada

Title
PRELIMINARY PATHWAY DESIGN(S)
CPR TRAIL

Project No.
112948135

Drawing No.
C201

Scale
1:1000H
1:100V
Sheet
of
Revision
0



Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.

The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Notes



Client/Project
TOWN OF PICTURE BUTTE
TRAILS DESIGN AND CONCEPT PLAN
Picture Butte, Alberta, Canada
Title
PRELIMINARY PATHWAY DESIGN(S)
CPR TRAIL

Scale
1:1000H
1:100V

3
Revision

Q

C



The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.
The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Notes

Client/Project

TOWN OF PICTURE BUTTE

TRAILS DESIGN AND CONCEPT PLAN

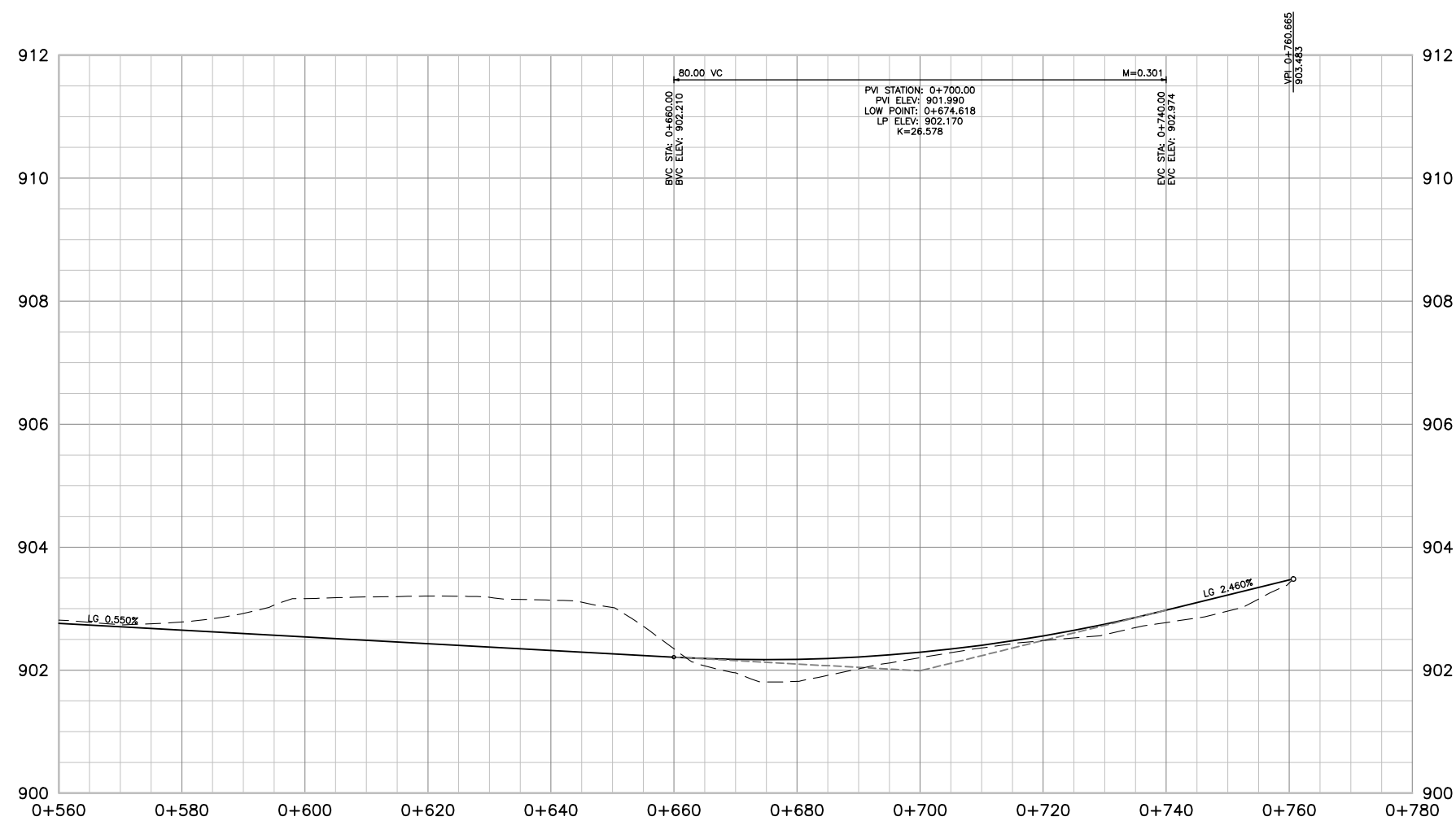
Picture Butte, Alberta, Canada

Title

PRELIMINARY PATHWAY DESIGN(S)
CPR TRAIL

Scale
1:1000H
1:100V
0 10 30 50m
0 1 3 5.0m
Sheet Revision

of 0





The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.

The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Notes

Revision _____
By _____
Appd. _____
YY.MM.DD _____

Issued _____
By _____
Appd. _____
YY.MM.DD _____

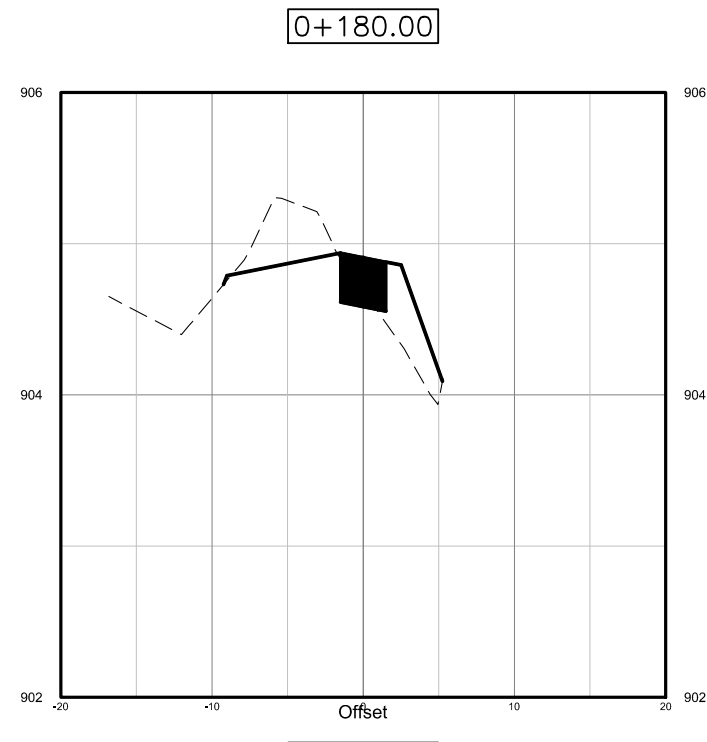
File Name: _____

Permit-Seal _____
Dwn. _____
Chkd. _____
Sgn. _____
YY.MM.DD _____

TRAILS DESIGN AND CONCEPT PLAN

Title
PRELIMINARY PATHWAY DESIGN(S)
CPR TRAIL
20m CROSS SECTIONS

Project No. 112948135	Scale	
Drawing No. C301	Sheet of	Revision 0





The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.

The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Revision	By	Appd.	YY.MM.DD

Issued	By	Appd.	YY.MM.DD

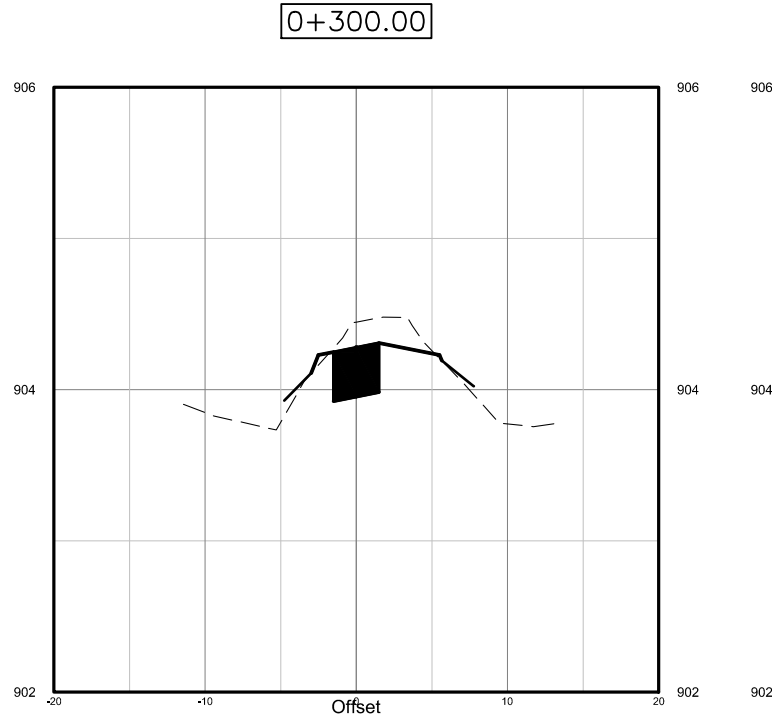
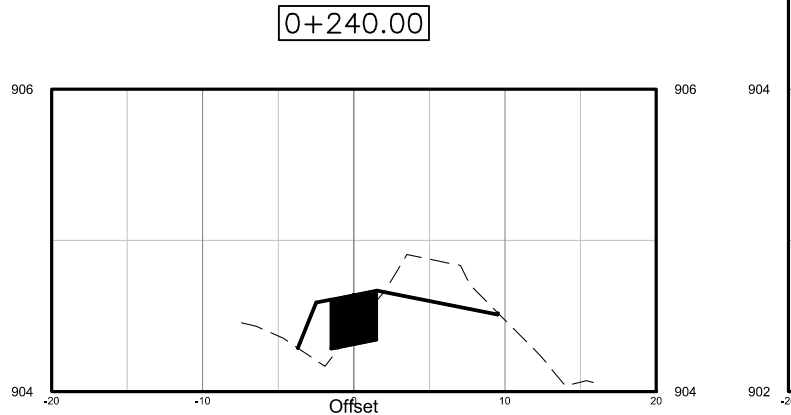
File Name:	Dwn.	Chkd.	Sgn.	YY.MM.DD
------------	------	-------	------	----------

TRAILS DESIGN AND CONCEPT PLAN

Title
PRELIMINARY PATHWAY DESIGN(S)
CPR TRAIL
20m CROSS SECTIONS

Drawing No.	Sheet	Revision
-------------	-------	----------

C302 of 0



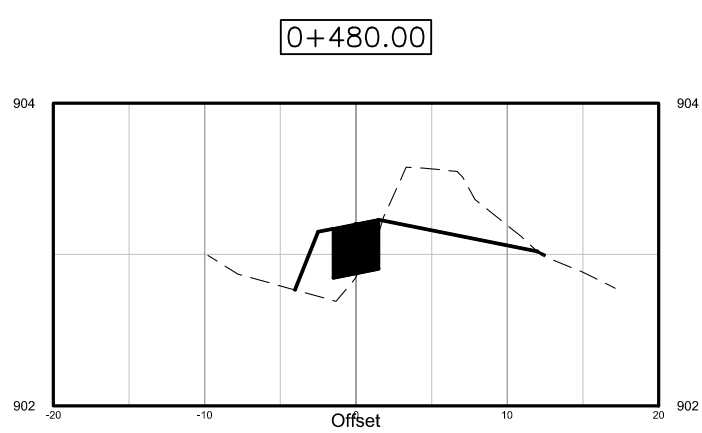


The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.

The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Notes

Client/Project TOWN OF PICTURE BUTTE		
TRAILS DESIGN AND CONCEPT PLAN		
Picture Butte, Alberta, Canada		
Title PRELIMINARY PATHWAY DESIGN(S) CPR TRAIL 20m CROSS SECTIONS		
Project No. 112948135	Scale	
Drawing No. C303	Sheet of	Revision 0





The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.

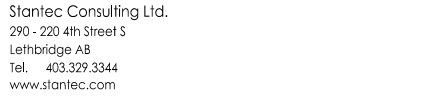
The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Permit-Seal

TRAILS DESIGN AND CONCEPT PLAN

Title
PRELIMINARY PATHWAY DESIGN(S)
CPR TRAIL
20m CROSS SECTIONS

Drawing No.	Sheet	Revision
-------------	-------	----------



The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.

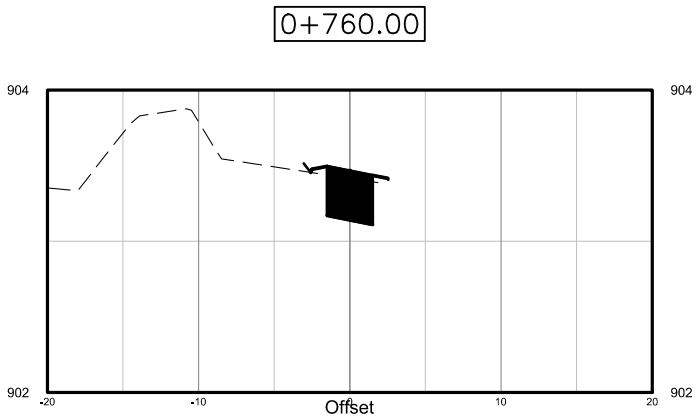
The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

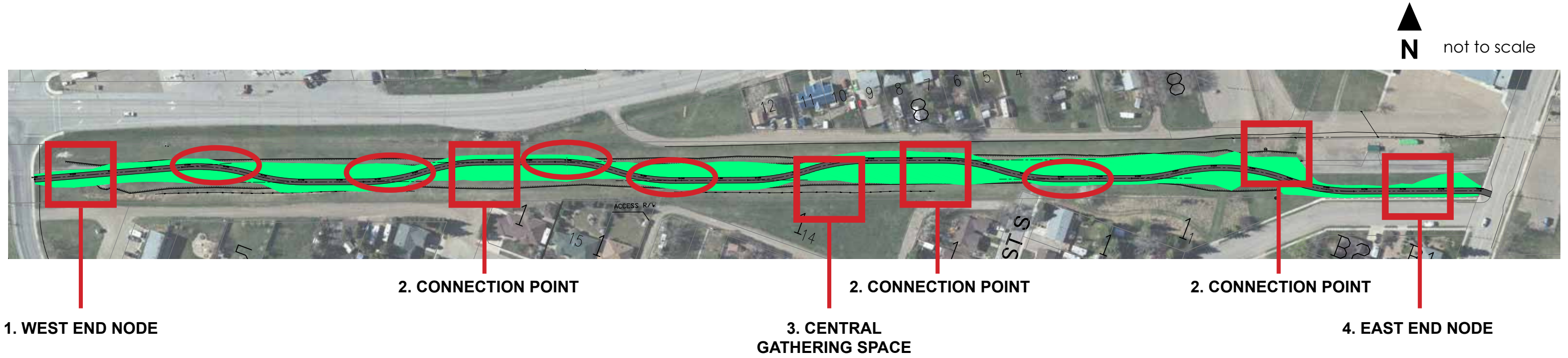
Notes

Revision	By	Appd.	YY.MM.DD
Issued	By	Appd.	YY.MM.DD
File Name:			
	Dwn.	Chkd.	Dsgn.
Permit-Seal			YY.MM.DD

Title
PRELIMINARY PATHWAY DESIGN(S)
CPR TRAIL
20m CROSS SECTIONS

Project No. 112948135	Scale	
Drawing No. C305	Sheet of	Revision 0







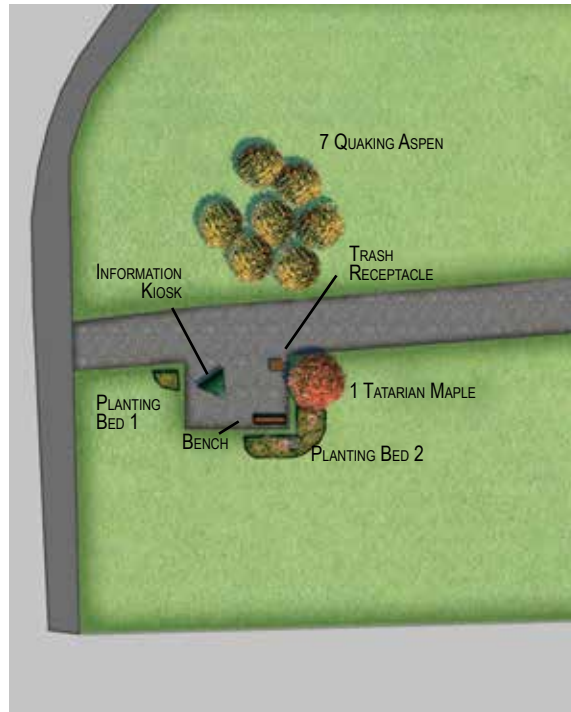
-  SEE LANDSCAPING RECOMMENDATIONS DETAILS ON FOLLOWING PAGES
-  ADDITIONAL WIND BREAKS (SPECIFIC LOCATIONS TBD ON SITE)
 - 1 GROUPING OF 7 ASPEN
 - 2 GROUPINGS OF 3 SPRUCE & 3 ASH
 - 2 GROUPINGS OF 3 PINE & 3 LINDEN

FIGURE 2.2
LANDSCAPING RECOMMENDATIONS OVERVIEW PLAN
 PICTURE BUTTE

LANDSCAPING RECOMMENDATIONS

1. WEST END NODE



PLANTING LIST

PLANTING BED 1:

- 5 BLUE LYME GRASS
- 3 RUBY CAROUSEL BARBERRY

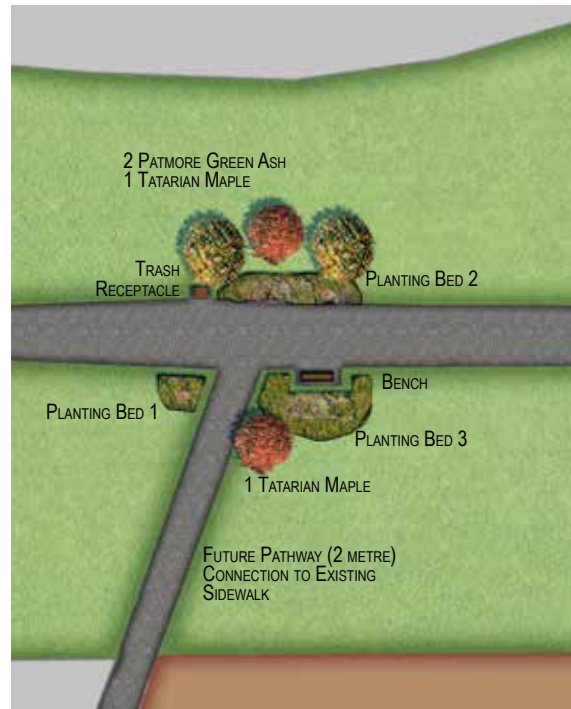
PLANTING BED 2:

- 3 RUBY CAROUSEL BARBERRY
- 6 BLUE CHIP JUNIPER
- 3 GARLAND SPIREA

SITE FURNITURE LIST

- 1 TRASH RECEPTACLE (HAUL-ALL HB-1N)
- 1 BENCH (DUMORE MODEL #270)
- 1 INFORMATION KIOSK (POLIGON KSK-3-8)

2. CONNECTION POINTS (3 LOCATIONS)



PLANTING LIST

PLANTING BED 1:

- 3 BUD'S YELLOW DOGWOOD
- 5 BLUE LYME GRASS
- 3 RUBY CAROUSEL BARBERRY

PLANTING BED 2:

- 3 BUD'S YELLOW DOGWOOD
- 3 RUBY CAROUSEL BARBERRY
- 6 BLUE CHIP JUNIPER

PLANTING BED 3:

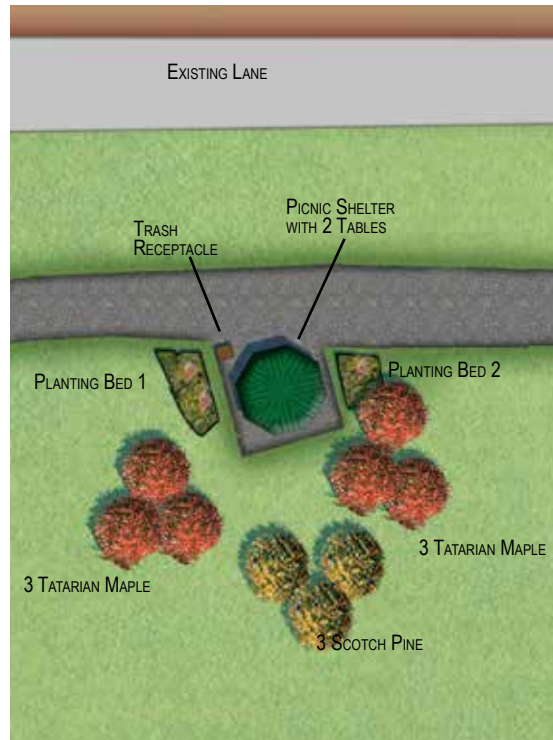
- 6 BUD'S YELLOW DOGWOOD
- 10 BLUE LYME GRASS
- 3 RUBY CAROUSEL BARBERRY
- 3 BLUE CHIP JUNIPER

SITE FURNITURE LIST

- 1 TRASH RECEPTACLE (HAUL-ALL HB-1N)
- 1 BENCH (DUMORE MODEL #270)

LANDSCAPING RECOMMENDATIONS

3. CENTRAL GATHERING SPACE



PLANTING LIST

PLANTING BED 1:

- 3 BUD'S YELLOW DOGWOOD
- 5 BLUE LYME GRASS
- 3 RUBY CAROUSEL BARBERRY
- 3 BLUE CHIP JUNIPER

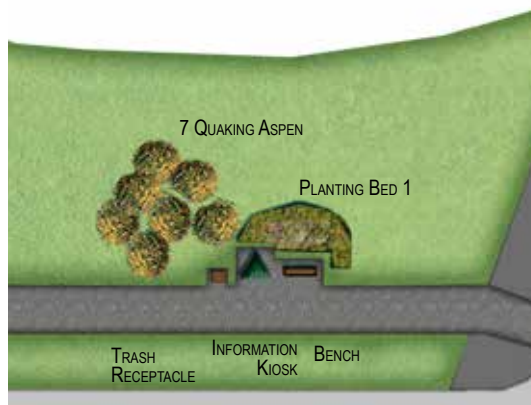
PLANTING BED 2:

- 3 BUD'S YELLOW DOGWOOD
- 5 BLUE LYME GRASS
- 3 RUBY CAROUSEL BARBERRY

SITE FURNITURE LIST

- 1 TRASH RECEPTACLE (HAUL-ALL HB-1N)
- 1 PICNIC SHELTER (POLIGON OTC-16)
- 1 ACCESSIBLE PICNIC TABLE (DUMOR #75)
- 1 STANDARD PICNIC TABLE (DUMOR #75)

4. EAST END NODE



PLANTING LIST

PLANTING BED 1:

- 6 BUD'S YELLOW DOGWOOD
- 10 BLUE LYME GRASS
- 3 RUBY CAROUSEL BARBERRY
- 3 BLUE CHIP JUNIPER

- 7 QUAKING ASPEN

SITE FURNITURE LIST

- 1 TRASH RECEPTACLE (HAUL-ALL HB-1N)
- 1 BENCH (DUMORE MODEL #270)
- 1 INFORMATION KIOSK (POLIGON KSK-3-8)

LANDSCAPING RECOMMENDATIONS

CROSS SECTION AT CONNECTION POINT



CROSS SECTION AT WEST END



PLANT PALETTE

The plant palette incorporates a variety of trees, shrubs, and grasses identified for xeriscaping purposes in the City of Lethbridge Design Standards. These Standards have been developed to recommend plantings that will thrive in local southern Alberta conditions. While minimizing watering requirements, these plantings were also selected for their bright colours and the varying textures and heights of the plant material. Selecting plants with visual interest throughout the year was important in the design to maintain an interesting landscape year-round.

SPRING/SUMMER

PATMORE GREEN ASH



TATARIAN MAPLE 'HOT WINGS'



HARVEST GOLD LINDEN



QUAKING ASPEN



SCOTCH PINE



BLACK HILLS WHITE SPRUCE



BUD'S YELLOW DOGWOOD



RUBY CAROUSEL BARBERRY



GARLAND SPIREA



BLUE CHIP JUNIPER



BLUE LYME GRASS



FALL

PATMORE GREEN ASH



TATARIAN MAPLE 'HOT WINGS'



HARVEST GOLD LINDEN



BUD'S YELLOW DOGWOOD



SITE FURNISHINGS

Site furnishings were chosen to provide comfortable amenities at key locations along the trail.

1. SEATING

DUMOR MODEL #270



2. PICNIC TABLE

DUMOR MODEL #75
(STANDARD & ACCESSIBLE STYLES)



3. INFORMATION KIOSK

POLIGON KIOSK 3-8



4. PICNIC SHELTER

POLIGON OTC-16



Town of Picture Butte
CPR Trail Development
Opinion of Probable Cost: Design



January 11, 2018

Project Number: 112948135
File: Design

1. GENERAL REQUIREMENTS

DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL
1. General Requirements	1	LS	\$ 10,000.00	\$ 10,000.00
Subtotal				\$ 10,000.00
Contingency			15%	\$ 1,500.00
TOTAL				\$ 11,500.00

2. REMOVALS & SITE GRADING

DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL
1. Saw Cutting	120	lm	\$ 5.00	\$ 600.00
2. Remove and Dispose Concrete Surface	150	m2	\$ 10.00	\$ 1,500.00
3. Remove and Dispose Asphalt Surface	20	m2	\$ 20.00	\$ 400.00
4. Topsoil Stripping	800	m3	\$ 3.00	\$ 2,400.00
5. Common Excavation	1,600	m3	\$ 8.00	\$ 12,800.00
Subtotal				\$ 17,700.00
Contingency			15%	\$ 2,655.00
TOTAL				\$ 20,355.00

3. SURFACING

DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL
1. Curb and Gutter - Standard 300mm	35.0	lm	\$ 90.00	\$ 3,150.00
2. Concrete Surfacing (100mm) incl GBC	25.0	m2	\$ 100.00	\$ 2,500.00
3. Wheelchair Ramps - Type 1	3.0	ea	\$ 100.00	\$ 300.00
4. Asphalt Pathway incl Subgrade Prep and GBC (3.0m)	760.0	lm	\$ 110.00	\$ 83,600.00
Subtotal				\$ 89,550.00
Contingency			15%	\$ 13,432.50
TOTAL				\$ 102,982.50

4. LANDSCAPING

DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL
1. Topsoil Placement	7,500.0	m2	\$ 2.00	\$ 15,000.00
2. Seeding	7,500.0	m2	\$ 1.50	\$ 11,250.00
3. Shrub Bed Preparation	1,140.0	m2	\$ 15.00	\$ 17,100.00
4. Screened Wood Chip Mulch (Planting Beds)	1,140.0	m2	\$ 10.00	\$ 11,400.00
5. Concrete Pads - Site Furniture	100.0	m2	\$ 160.00	\$ 16,000.00
6. Planting				
Trees				
a) Quaking Aspen (60mm CAL)	21	ea	\$ 400.00	\$ 8,400.00
b) Scotch Pine (2.5m HT)	9	ea	\$ 550.00	\$ 4,950.00
c) Patmore Green Ash (60mm CAL)	12	ea	\$ 450.00	\$ 5,400.00
d) Black Hills White Spruce (2.5m HT)	6	ea	\$ 450.00	\$ 2,700.00
e) Harvest Golden Linden (65mm CAL)	6	ea	\$ 500.00	\$ 3,000.00
f) Tatarian Maple (60mm CAL)	13	ea	\$ 500.00	\$ 6,500.00
Shrubs				
g) Bud's Yellow Dogwood (2 GAL)	42	ea	\$ 45.00	\$ 1,890.00
h) Ruby Carousel Barberry (2 GAL)	39	ea	\$ 65.00	\$ 2,535.00
i) Blue Chip Juniper (2 GAL)	36	ea	\$ 60.00	\$ 2,160.00
j) Garland Spirea (2 GAL)	3	ea	\$ 65.00	\$ 195.00
Perennials				
k) Blue Lyme Grass (6" POT)	60	ea	\$ 25.00	\$ 1,500.00
7. Site Furnishings & Structures				
a) Benches (Dumor Model #270), with arms	5	ea	\$ 1,600.00	\$ 8,000.00
b) Trash Receptacle (Haul-All HB-1N)	5	ea	\$ 2,500.00	\$ 12,500.00
c) Picnic Tables (Dumor #75)	2	ea	\$ 1,700.00	\$ 3,400.00
d) Information Kiosk (Poligon KSK-3-8)	2	ea	\$ 15,580.00	\$ 31,160.00
e) Picnic Shelter (Poligon OTC-16)	1	ea	\$ 27,270.00	\$ 27,270.00
Subtotal				\$ 192,310.00
Contingency			15%	\$ 28,846.50
TOTAL				\$ 221,156.50

5. FUTURE OPTIONAL ASPHALT PATHWAY CONNECTIONS

DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL
1. Future Asphalt Pathway Connections (2.0m wide)	210.0	lm	\$ 125.00	\$ 26,250.00
* may require additional grading/fill work				
Subtotal				\$ 26,250.00
Contingency			15%	\$ 3,937.50
TOTAL				\$ 30,187.50

January 11, 2018

Project Number: 112948135
File: Design

A. CONSTRUCTION COSTS

1. GENERAL REQUIREMENTS	\$	12,000.00
2. REMOVALS & SITE GRADING	\$	21,000.00
3. SURFACING	\$	103,000.00
4. LANDSCAPING	\$	222,000.00
5. FUTURE OPTIONAL ASPHALT	\$	31,000.00
6. IRRIGATION		not evaluated
7. MAINTENANCE		not evaluated

CONSTRUCTION SUBTOTAL	\$	389,000.00
Contingencies Included	\$	46,434.00