

TOWN OF PENHOLD  
BYLAW NO. 721/15

OFF-SITE LEVY BYLAW

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Being a Bylaw of the Town of Penhold in the Province of Alberta for the purpose of imposing an off-site levy on newly annexed undeveloped lands within the Town boundaries

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**WHEREAS;** pursuant to the *Municipal Government Act*, R.S.A. 2000, c M-26, (the Act) Council deems it expedient to impose, upon annexed lands that are to be developed or subdivided, off-site levies for the purposes of paying for all or part of new or expanded water, sanitary waste water, storm sewer and drainage facilities; as well as, expanded roads.;

**WHEREAS;** notice of Council's intention to consider passage of this bylaw at the April 27<sup>th</sup>, 2015 regular meeting was given pursuant to Section 606 of the *Municipal Government Act*.;

**NOW THEREFORE** the Municipal Council of the Town of Penhold, in the Province of Alberta in Council duly assembled, enacts as follows:

**SECTION 1 ~ PURPOSE AND INTENT:**

- 1.1. This Bylaw is intended to:
- a. impose and provide for the payment of a levy to be known as an offsite levy in respect to lands that is to be subdivided or developed in the Town of Penhold; and
  - b. authorize agreements to be entered into in respect of payment of a levy; and
  - c. specify the object of each levy; and
  - d. indicate how the amount of the levy was determined.

**SECTION 2 ~ ADMINISTRATION AND ENFORCMENT:**

- 2.1. Council hereby delegates to the Chief Administrative Officer the duty and authority to enforce and administer this Bylaw.

**SECTION 3 ~ ENACTMENT:**

- 3.1. "An offsite levy" as provided for in the Act, is hereby imposed on all undeveloped land within the municipal boundaries that is to be developed or subdivided for residential, commercial, industrial, institutional or other uses or purposes, at terms and rates specified in this Bylaw;
- 3.2. The owner of lands to be developed or subdivided shall, as a condition of development or subdivision approval, enter into an Agreement to pay the town the offsite levies authorized to be imposed under this Bylaw.
- 3.3. In addition to the collection of levies imposed by this bylaw, the Council of the Town of Penhold is hereby authorized to enter into agreements with owners or purchasers of that land for the provision of additional municipal services to the land and for the payment of a

levy imposed on the land by agreement to reimburse the municipality as a condition of subdivision approval;

- 3.4. The Town of Penhold or its agent shall provide to the owner or purchaser a notice of the offsite levy prior to the entering into of any agreement;
- 3.5. All offsite levies imposed by this bylaw are due and payable at the time specified in the agreement for provision of municipal services, either prior to the registration of the plan of subdivision or at the time of issuance of a development permit on any development within the subdivision area, if the agreement so specifies.

**SECTION 4 ~ PENALTIES:**

- 4.1. Where the owner or purchaser fails, neglects or refuses to pay the offsite levy imposed on his/her land, the Town of Penhold:
  - a. May cause the levy to be added to the tax roll as a charge against the lands of the owner or purchaser concerned as taxes and with the same priority as to lien and to payment thereof as is in the case of ordinary municipal taxes; or
  - b. May refuse to register a subdivision until the owner or purchaser has entered into the agreement to pay, or has paid the levy.

**SECTION 5 ~ IMPOSITION OF LEVY:**

- 5.1. The offsite levies are imposed in accordance with Schedule 'D' to this bylaw, the unit of measurement being a parcel or lot, or as described in the schedule. Environmental reserve, municipal and/or school reserves and public utility lots are not subject to imposition of a levy or levies.

**SECTION 6 ~ FUTURE CAPITAL EXPENDITURES:**

- 6.1. This does not include future capital expenditures for upgrading services.

**SECTION 7 ~ AMENDING SCHEDULES:**

7.1. The Council of the Town of Penhold herewith authorizes 2015 Offsite Levies, Benefiting Areas and Schedules 'A – D' to this Bylaw to be amended from time to time by resolution of Council.

**Read a first time this 27<sup>th</sup>, day of April, 2015.**

**Read a second time this 28<sup>th</sup> day of September, 2015.**

**Read for a third time this 13th day of October, 2015.**




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**Mayor**




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**Chief Administrative Officer**

# TOWN OF PENHOLD 2015 Offsite Levies

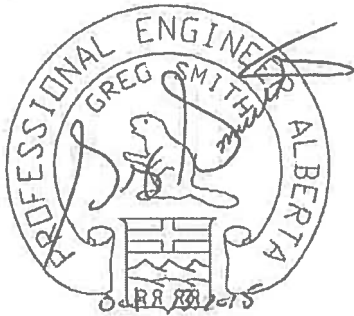
October 13, 2015  
Job # TPN18  
Final Version




**Revisions:**

<b>Date</b>	<b>Description</b>
Dec 2014	Draft Version 1 Issued for Review
Apr 2015	Draft Version 2 Issued for Review
Apr 2015	Final Version Issued for Review
June 2015	Revisions made from Public Process. Final Version Issued for Review.
June 2015	Revisions made to project costs. Final Version Issued for Review.
Oct 2015	Revisions made to New Oxford Landing Water Reservoir Cost

**Corporate Authorization:**



Prepared by Greg Smith, P. Eng.

PERMIT TO PRACTICE TAGISH ENGINEERING LTD.
Signature 
Date <u>Oct. 13, 2015</u>
PERMIT NUMBER: P 3686 The Association of Professional Engineers, Geologists and Geophysicists of Alberta

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## 1.0 INTRODUCTION

### 1.1 Purpose

Tagish Engineering Ltd. was commissioned by the Town of Penhold to update and restructure the existing offsite levies for the Town area. The previous levies were completed in 2012 and this newer version applies updated costs and benefit analysis.

The overall purpose of this offsite levies report is to provide the Town of Penhold with an assessment of the existing and future costs that they have allocated for municipal infrastructure upgrades. Through the use of offsite levies, the Town of Penhold can recapture some of the costs from developers for their proportionate share of Town constructed municipal infrastructure which benefit the applicable development areas.

### 1.2 Conditions for Offsite Levies

Under the Municipal Government Act, the Town of Penhold is allowed to implement offsite levies against development in order to cover the costs in the following scenarios:

- New or expanded facilities for the storage, transmission, treatment or supply of water
- New or expanded facilities for the treatment, movement or disposal of sanitary sewage
- New or expanded storm sewer drainage facilities
- New or expanded roads required for, or impacted by a subdivision or development
- Lands required for or in connection with any facilities described in the points above

The infrastructure projects included in this offsite levy report have been analyzed for residual benefit to ensure both the existing Town areas and new developments are both considered. There has been a cost benefit analysis included for each project and can be found in the corresponding appendices of this report.

## 2.0 CONTRIBUTING AREAS

### 2.1 General Overview

In this section, the contributing areas will be broken down as follows:

- Benefitting Areas
- Non Benefitting Areas

### 2.2 Benefitting Areas

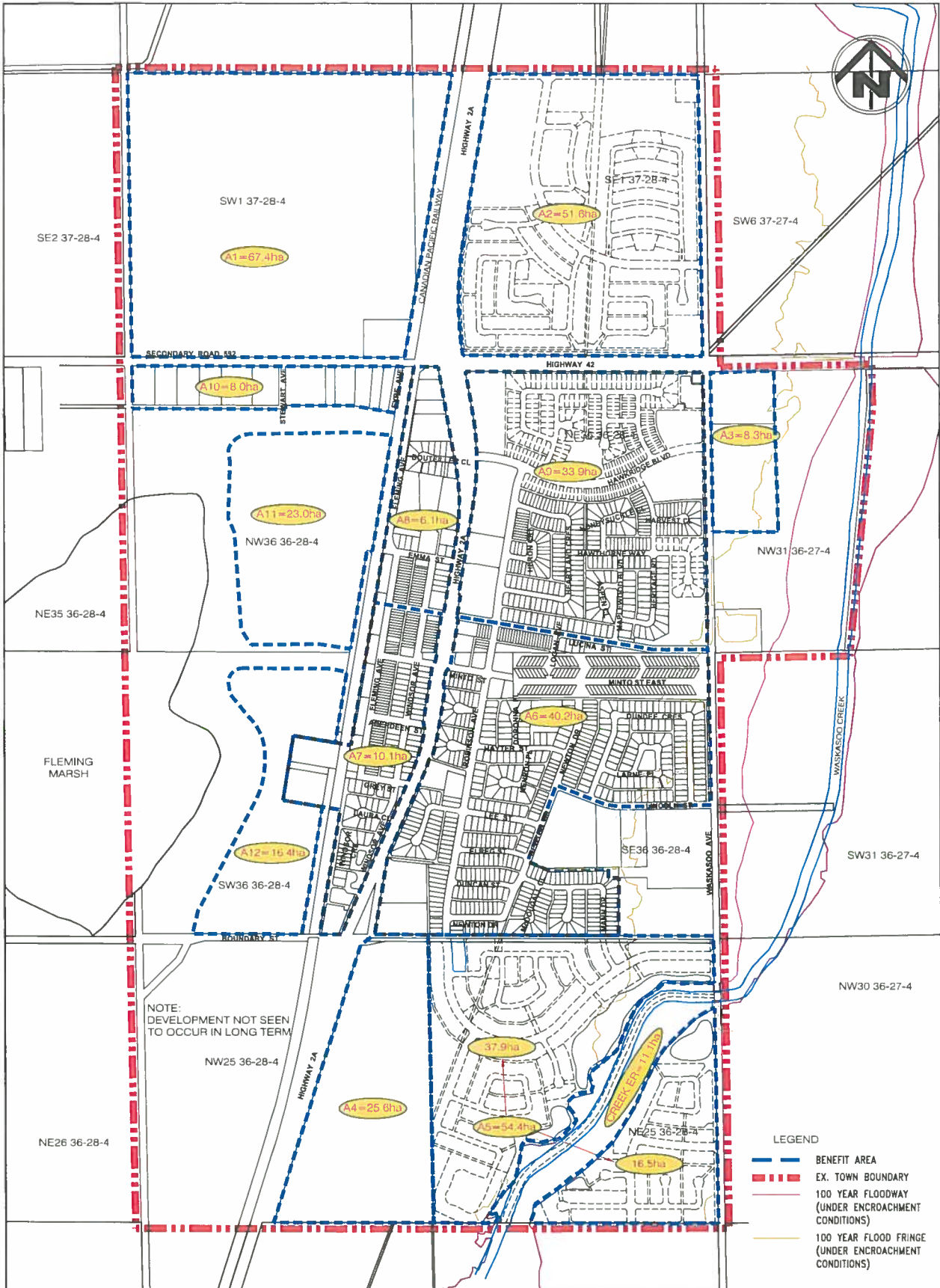
Figure A which follows Page 4, shows the benefitting areas for the development area for the Town of Penhold and the area for each zone. The overall benefitting area within the Town boundary is 345 ha. All areas included in this report are taken from the Town base mapping. The following table shows the area in hectares attributed to each development area.

<b>BENEFITING AREAS</b>		
<b>DEVELOPMENT AREAS</b>		
	<b>LOCATION</b>	<b>AREA (ha)</b>
<b>A1</b>	SW1 - MUNTEAN	67.4
<b>A2</b>	SE1 - OXFORD LANDING	51.6
<b>A3</b>	NW31 - MULTIPLEX / SCHOOL	8.3
<b>A4</b>	NW25 - FUTURE NEWTON	25.6
<b>A5</b>	NE25 - PALISADES	54.4
<b>TOTAL</b>		<b>207.3</b>
<b>EXISTING TOWN SITE AREAS</b>		
<b>A6</b>	SE36 - OLD NEWTON, PARK PLACE, LAEBON (LUCINA ST SOUTH AND TRAILER PARK, HWY 2A ON WEST)	40.2
<b>A7</b>	SW36 - OLD TOWN SITE, SOUTH LUCINA BETWEEN CP RAIL & HWY 2A	10.1
<b>A8</b>	NW36 - OLD TOWN SITE, NORTH LUCINA BETWEEN CP RAIL & HWY 2A	6.1
<b>A9</b>	NE36 - HAWKRIDGE	33.9
<b>A10</b>	NW36 - ACREAGE ALONG SR 592	8.0
<b>A11</b>	NW36 - INDUSTRIAL	23.0
<b>A12</b>	SW36 - INDUSTRIAL	16.4
<b>TOTAL</b>		<b>137.7</b>
<b>TOTAL</b>		<b>345.0</b>

### 2.3 Non Benefitting Areas

Figure B shows the land use concept plan for the Town of Penhold, which follows Page 4. The land use concept plan was used to determine the non-benefitting areas for the Town area. These non-benefitting areas include environmental reserves for Waskasoo Creek and Fleming Marsh environmental areas.





**TAGISH ENGINEERING LTD.**  
Consulting Engineers

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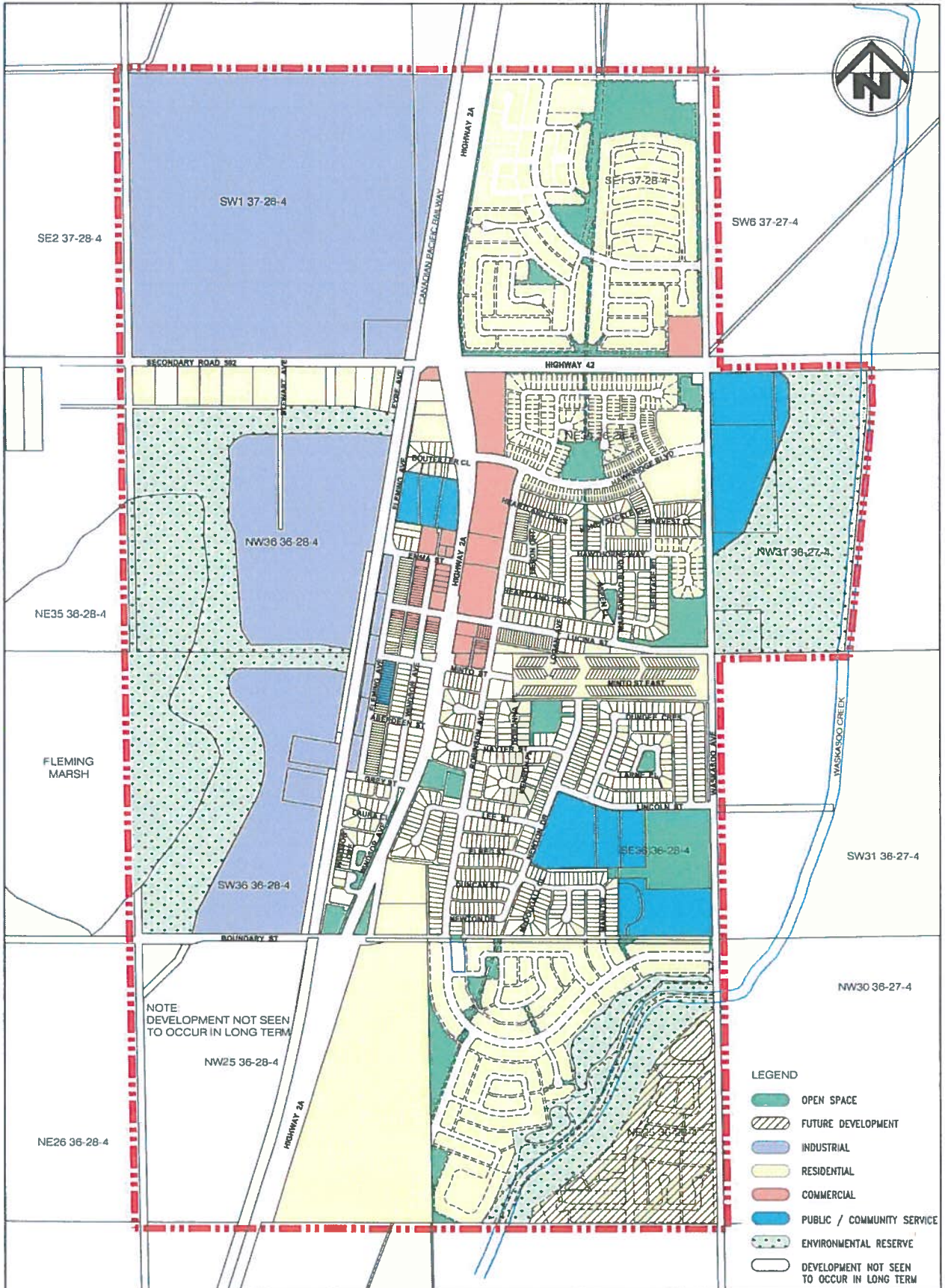
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Client  
**TOWN OF PENHOLD**

Project  
**2015 OFFSITE LEVIES COST BENEFITS**

Drawing  
**BENEFITING AREAS**

Drawn: AW	Scale: 1:10,000	Drawing No. <b>FIG. A</b>
Designed: WWW	Date: JUNE 2015	
Checked: WWW	File No.: TPN18_AREA.dwg	
Approved: WWW	Project No.: TPN18	



<p><b>TAGISH ENGINEERING</b> LTD Consulting Engineers</p>	<p>G4, 5550 - 45 St, RED DEER, AB T4N 1L1</p> <p>Ph: (403) 346-7710 Fax: (403) 341-8009 E-mail: admin@tagish-engineering.com</p>	<p>Client <b>TOWN OF PENHOLD</b></p> <p>Project <b>2015 OFFSITE LEVIES COST BENEFITS</b></p>	
	<p>Drawing</p> <p><b>LAND USE CONCEPT</b></p>	<p>Drawn: AW</p> <p>Designed: WWW</p> <p>Checked: WWW</p> <p>Approved: WWW</p>	<p>Scale: 1:10,000</p> <p>Date: DEC 2014</p> <p>File No.: TPN18_AREA.dwg</p> <p>Project No.: TPN18</p>

### **3.0 SUMMARY OF LEVIES**

#### **3.1 Results**

A summary of the levies are shown in Schedules A, B, C and D, which follows Page 5. These levies are derived from the detailed information found in Appendices A and B. Appendix A provides cost estimates and benefit analysis for Water and Sanitary related Infrastructure. Appendix B provides cost estimates and benefit analysis for Transportation related Infrastructure. Infrastructure projects for water, sanitary and transportation are based on the 2011 Infrastructure Study which was completed by Tagish Engineering. Please refer to the 2011 Infrastructure Study for additional information and figures.

**TOWN OF PENHOLD - 2015 OFFSITE LEVIES UPDATE**

**SCHEDULE "A" - WATER AND SEWER OFFSITE LEVIES**

TPN18 - October 13, 2015

ITEM	INFRASTRUCTURE	COST	BENEFITTING DEVELOPMENT AREA #	DEVELOPMENT AREA (Ha)	2015 LEVY PER HECTARE (\$)	LEVY NOTES
<b>Water Treatment &amp; Storage</b>						
1	Upgrade Existing Pumping Station	\$538,316	1,2,3,4,5,6,7,8,9,10,11,12	345.0	\$1,560.34	Upgrade Pumping Station on Robinson. Larger Generator/Pumps/ Piping
2	New Water Storage Reservoir and Pumping Station - Oxford Landing	\$1,200,000	1,2,3,4,5,6,7,8,9,10,11,12	345.0	\$3,478.26	New Reservoir in Oxford Landing includes SCF grant
3	Waskasoo Waterline from Lucina to HawkrIDGE Blvd.	\$230,000	2,3,9	93.8	\$2,452.03	Waterline from Lucina to HawkrIDGE Blvd
<b>Total Cost - Water Treatment &amp; Storage</b>		<b>\$1,968,316</b>				
<b>Water Supply</b>						
4	Well 2	\$105,525	1,2,3,4,5,6,7,8,10,11,12	311.1	\$339.20	Existing water well #2 connected in 2002 for \$175,525 of which \$70,000 was from previously funded charges.
5	Regional Water Line	\$2,210,000	1,2,3,4,5,6,7,8,9,10,11,12	345.0	\$6,405.80	It is estimated that the Town of Penhold will be responsible for a future \$2,210,000 for a regional water line.
<b>Total Cost - Water Supply</b>		<b>\$2,315,525</b>				
<b>Water Distribution</b>						
6	Robinson Avenue 300mm Trunk Main	\$165,000	4,5,6	120.2	\$1,372.71	Two portions of 300mm line will be installed to improve fire flows in this area. The remainder of the 300mm water line will be the developers responsibility when multi family is developed.
<b>Total Cost - Water Distribution</b>		<b>\$165,000</b>				
<b>Studies and Reports</b>						
7	2011 Infrastructure Study and Offsite Levies Report	\$137,053	1,2,3,4,5,6,7,8,9,10,11,12	345.0	\$397.26	Report provided Assessment of Infrastructure Improvements needed to meet Development growth and establish offsite levies.
<b>Total Cost - Studies and Reports</b>		<b>\$137,053</b>				
<b>Total Cost - Water and Sanitary Infrastructure</b>		<b>\$4,585,894</b>				

**TOWN OF PENHOLD - 2015 OFFSITE LEVIES UPDATE**

**SCHEDULE "B" - APPLIED WATER & SANITARY SEWER LEVIES**

Date: October 13, 2015

Item Name	Existing Town of Penhold Developed Areas										Benefit Area Totals	Project Cost		
	Development Area #	Muntean SW1	Oxford Landing SE1	Newton NW25	Pallisades NE25	NW36	SW36	Multiplex Sch Site	Park Place Newton	Hwy 2A South West Town			Hwy 2A Stewart Fas Gas	Hawkridge
		1	2	4	5	11	12	3	6	7	8	9	10	
	Area (ha)	67.4	51.6	25.6	54.4	23.0	16.4	8.3	40.2	10.1	6.1	33.9	8.0	
	Levy per Ha													
1. Upgrade Existing Pumping station		\$1,560.34	\$1,560.34	\$1,560.34	\$1,560.34	\$1,560.34	\$1,560.34	\$1,560.34	\$1,560.34	\$1,560.34	\$1,560.34	\$1,560.34	\$1,560.34	\$536,316.00
2. New Water Storage Reservoir and Pumping Station - Oxford Landing		\$3,478.26	\$3,478.26	\$3,478.26	\$3,478.26	\$3,478.26	\$3,478.26	\$3,478.26	\$3,478.26	\$3,478.26	\$3,478.26	\$3,478.26	\$3,478.26	\$1,200,000.00
3. Waskasoo Waterline from Lucina to Hawkridge Blvd.		\$2,452.03	\$2,452.03					\$2,452.03				\$2,452.03		\$230,000.00
4. Well 2		\$339.20	\$339.20	\$339.20	\$339.20	\$339.20	\$339.20	\$339.20	\$339.20	\$339.20	\$339.20	\$339.20	\$339.20	\$105,525.00
5. Regional Water Line		\$6,405.80	\$6,405.80	\$6,405.80	\$6,405.80	\$6,405.80	\$6,405.80	\$6,405.80	\$6,405.80	\$6,405.80	\$6,405.80	\$6,405.80	\$6,405.80	\$2,210,000.00
6. Robinson Avenue 300mm Trunk Main		\$1,372.71		\$1,372.71	\$1,372.71				\$1,372.71					\$165,000.00
7. 2011 Infrastructure Study and Offsite Levies Report		\$397.26	\$397.26	\$397.26	\$397.26	\$397.26	\$397.26	\$397.26	\$397.26	\$397.26	\$397.26	\$397.26	\$397.26	\$137,053.00
<b>Totals per Ha</b>		<b>\$12,181</b>	<b>\$14,633</b>	<b>\$13,554</b>	<b>\$13,554</b>	<b>\$12,181</b>	<b>\$12,181</b>	<b>\$14,633</b>	<b>\$13,554</b>	<b>\$12,181</b>	<b>\$12,181</b>	<b>\$14,294</b>	<b>\$12,181</b>	<b>\$4,585,894</b>

TOWN OF PENHOLD - 2015 OFFSITE LEVIES UPDATE

SCHEDULE "C" - TRANSPORTATION LEVIES

TPN18- October 13, 2015

Item #	Development Area Contributing Area (Hr.)	Estimated Project Cost	A11-NW26 Industrial										Reference Exhibit	
			A2-Oxford Landing	A9-Hawkridge Estates	A3-High School + MultiPlex	A5-Palisades	A4-Newton	A6-Town of Penhold	A1-SW1 - Murtleen	A11-NW26 Industrial	Percentages	Project Area		
			51.6	33.9	8.3	54.4	25.6	40.2	67.4	23.0	304.4			
1	Waskasoo Avenue - North of Highway 42 to Oxford Landing South Entrance	\$673,920.00	\$648,648.00	\$3,369.60	\$1,684.80	\$5,054.40	\$0.00	\$15,163.20					Oxford Palisades Newton Hawkridge High School Background	Exhibit 14
2	Waskasoo Avenue and Highway 42 Intersection (Type V Intersection c/w Full Signalization)	\$1,084,500.00	\$233,167.50	\$195,210.00	\$178,942.50	\$10,845.00	\$271,125.00						Background Oxford Landing Palisades Newton High School, Multiplex Hawkridge	Exhibit 15A
3	Waskasoo Avenue - Highway 42 to South of Intersection at Hawkridge Boulevard	\$941,158.86	\$122,350.65	\$244,701.30	\$215,243.03	\$16,470.28	\$164,702.80						Background Oxford Landing Palisades Newton Hawkridge Estates High School	
4	Waskasoo Avenue - South of Roundabout to Lucina Street	\$857,914.18		\$94,370.56	\$512,603.72	\$42,895.71	\$208,044.19						Palisades Newton High School Background	Exhibit 14
5	Waskasoo Avenue - Lucina Street to Lincoln Street	\$287,174.02		\$19,384.25	\$201,739.75	\$16,512.51	\$49,537.52						Palisades High School Newton Background	
6	Waskasoo Avenue - Lincoln Street to The Bridge	\$350,990.46		\$5,264.86	\$308,871.60	\$25,446.81	\$11,407.19						Palisades High School Newton Background	
7	Veterans Way - Highway 2A to Robinson Avenue	\$483,000.00		\$1,207.50	\$302,454.60	\$169,050.00	\$10,287.90						Palisades Newton High School Background	Exhibit 16
8	Highway 2A and Future Newton Drive Intersection - Type II	\$450,000.00			\$148,500.00	\$301,500.00							Palisades Newton Background Newton	Exhibit 13
9	Traffic Impact Study	\$30,225.00	\$5,123.55	\$824.14	\$5,401.58	\$2,541.92	\$3,991.61	\$6,692.39	\$2,283.75				Spit Evenly based on Area	
	Total Levies	\$5,156,882.52	\$1,009,289.71	\$446,646.96	\$1,878,811.18	\$585,262.22	\$734,259.40	\$6,692.39	\$2,283.75					
	Levy per Ha		\$19,559.86	\$13,175.43	\$59,715.29	\$22,861.81	\$18,265.16	\$99.29	\$99.29					

**SCHEDULE "D" Distribution of Capital Costs (2015 Offsite Levies) Applied to Areas that Benefits Oct 13, 2015**

Area #	Description	Area (ha)	Schedule B	Schedule C	Total Levy (\$/ha)
A1	SW 1' Industrial - West of CPR - North of SH 592	67.4	\$12,181	\$99	\$12,280
A2	Oxford Landing	51.6	\$14,633	\$19,560	\$34,193
A3	High School	8.3	\$14,633	\$59,715	\$74,348
A4	Future Newton	25.6	\$13,554	\$22,862	\$36,415
A5	Palisades	54.4	\$13,554	\$34,537	\$48,091
A6	Town of Penhold(Park Place,Newton, Trailer P., MultiP.)	40.2	\$13,554	\$18,265	\$31,819
A7	Town of Penhold (Hwy 2A South West Town)	10.1	\$12,181	\$0	\$12,181
A8	Town of Penhold (Hwy 2A Stewart Fas Gas)	6.1	\$12,181	\$0	\$12,181
A9	Hawkridge	33.9	\$14,294	\$13,175	\$27,469
A10	South of SR 592 acreages	8.0	\$12,181	\$0	\$12,181
A11	NW 36 Industrial - West of CPR	23.0	\$12,181	\$99	\$12,280
A12	SW 36 Industrial - West of CPR	16.4	\$12,181	\$0	\$12,181
	<b>Total Transportation Costs</b>				<b>\$5,158,883</b>
	<b>Total Water and Sewer</b>				<b>\$4,585,894</b>
	<b>Total Water, Sanitary, Transportation</b>				<b>\$9,744,777</b>

## 4.0 CONCLUSION

The purpose of this report is to update and restructure the offsite levies for the Town of Penhold. When the newly calculated offsite levies are compared to the neighbouring communities such as the City of Red Deer, they are found to be substantially lower. These levies reflect the development area size, and complexity of the municipal infrastructure required for the Town of Penhold. The levies seem to be in line with development in the area, and exercises the philosophy that the developer pays a fair share to develop within the Town of Penhold. Tagish Engineering recommends the new offsite levies be considered through bylaw and are used by the Town. Furthermore, Tagish Engineering recommends that the offsite levies are reviewed on a regular basis to re-assess estimated costs, projects, and market inflation. If further information is required, please contact our office.

Respectively Submitted by,

Tagish Engineering Ltd.



**Appendix A**  
**Water and Sanitary**  
**Cost Estimates and Benefit Analysis**

## 2015 OFFSITE LEVY REPORT

# Water and Sanitary Cost Estimates and Benefit Analysis

Revised : October 13, 2015

The following is an itemized breakdown of infrastructure list in Schedule "A" – Water and Sewer Offsite Levies.

### **Water Treatment and Storage**

#### **Item # 1**

#### **Upgrade Existing Pump Station**

##### **Scope of Work**

- Decommission old pressure tank
- New pumps with variable speed drives
- New electrical panels and install VFD drivers
- Emergency generator system
- New chlorination system with chlorine analyzers
- New stainless steel header system and outside pipe connections
- Security fencing Around Facility to comply with AE Guidelines

##### **Grant Support**

The Town of Penhold secured a Grant from the Alberta Municipal Water Wastewater Partnership program to help construct the works. \$494,410 was available for the project and has been included below.

##### **Estimated Cost**

The existing pump station is in the process of being constructed. An estimated total construction cost is approximately \$1,032,726 based on progress payments to date.

Total Cost of Construction	\$1,032,726.00
Less Grant from AMWWP	\$494,410.00
Town of Penhold Share	<b>\$538,316.00</b>

##### **Benefiting Area**

This project is for the overall water system and therefore the benefit was allocated to all benefiting areas. (Areas 1 -12)

## 2015 OFFSITE LEVY REPORT

### Cost Benefit

The Infrastructure Report showed deficiencies in the water system in delivering adequate fire flows south of Lucina St. and to the Palisades and Future Newton development areas. In order to meet the necessary flow capabilities the existing Reservoir and Pumping Station has to be upgraded. All areas would benefit from the upgrades. Included are future development areas west of the CP Rail line in the Stewart property, and to future developments in the north and west areas of the Town of Penhold.

**2015 OFFSITE LEVY REPORT**

**Water Treatment and Storage**

**Item #2**

**New Water Storage Reservoir, and Pumping Station – Oxford Landing**

**Scope of Work**

- 2000 m<sup>3</sup> Reservoir
- Pump station complete with variable speed pumps, etc.

**Estimated Cost**

1. Reservoir, site work, general expenses, landscaping	\$1,692,000.00
2. Pumping station building, heat, ventilation	\$219,600.00
3. Mechanical including piping, pumps, connections, commission & testing	\$411,600.00
4. Standby generator	\$180,000.00
5. Electrical including service connection	\$132,000.00
6. Instrumentation, SCADA	\$217,200.00
7. Contingency	\$285,600.00
8. Engineering	\$462,000.00
Small Communities Fund Grant	-\$2,400,000.00
<b>Total</b>	<b>\$1,200,000.00</b>

**Benefitting Area**

This project is for the overall water system and therefore the benefit was allocated to all benefiting areas. (Areas 1 -12)

**Cost Benefit**

A second reservoir and pumping station will provide water distribution to the north areas and distribution service to the south areas. All new development and existing Town will benefit from the increased storage and fire fighting capacity that is added to the water system.

## **2015 OFFSITE LEVY REPORT**

### **Water Treatment and Storage**

#### **Item #3**

#### **Waskasoo Waterline from Lucina to Hawkridge Blvd.**

##### **Scope of Work**

- Water line installed from Lucina to Hawkridge Boulevard
- Provide looping from Lucina to Hawkridge Blvd. Area for Hawkridge, High School, Multiplex, and Oxford development areas

##### **Estimated Cost**

- Costs reported from the Town was **\$230,000.00**. This item was a carry forward from the previous levy bylaw

##### **Benefitting Area**

Area 2 – Oxford Landing, Area 3 – Multiplex/High School, Area 9 - Hawkridge

##### **Cost Benefit**

The water line provides an initial distribution line to the north east areas of Town. In the future this water line provides looping to the north east areas identified above.

## 2015 OFFSITE LEVY REPORT

Water Supply  
Item #4  
Well 2

### Scope of Work

- Costs from Water Supply #2 constructed in 2002 included in estimate

### Estimated Cost

<b>Water Supply Well #2 – 2002 construction</b>	
2006 levy cost	\$175,525.00
- \$70,000 previously funded charges	-\$70,000.00
Total Water Supply	<b>\$105,525.00</b>

### Benefitting Area

This project is for the overall water system and therefore the benefit was allocated to all benefitting areas. (Areas 1 -12), with the exception of A9 as they have paid development charges previously agreed through development agreement.

### Cost Benefit

Existing Well 2 which was constructed in 2002 provides the Town of Penhold with water supply. Area 9 (Hawkridge Estates) is excluded from the cost benefit because they have paid for the benefit through development charges previously.

## 2015 OFFSITE LEVY REPORT

### Water Supply

#### Item #5

#### Regional Water Line

#### Scope of Work

- 350mm pipe to Penhold
- Regional line is approximately 21km long from supply line from Anthony Henday to Penhold
- Total Capital Cost of \$22.1 million
- It is estimated that the Town of Penhold would be responsible for 10% of Capital Cost

#### Estimated Cost

<b>Regional Water Line</b>	
21 km long regional water line	\$22,100,000.00
(10% Town of Penhold cost share)	\$2,210,000.00
Total Water Supply	<b>\$2,210,000.00</b>

#### Benefitting Area

This project is for the overall water system and therefore the benefit was allocated to all benefiting areas. (Areas 1 -12)

#### Cost Benefit

To meet future development needs Penhold is anticipating joining the Regional Water Supply Line from the Anthony Henday. The existing well system meets current demands but future growth will need more supply. The regional water line will provide a better sustainable water source for the Town of Penhold for the existing portions of Town as well as future development.

## 2015 OFFSITE LEVY REPORT

### Water Distribution

#### Item# 6

#### Robinson Avenue 300 mm Trunk Main

#### Scope of Work

- Install 220m of 300 mm trunk main needed to provide fire flow pressure to south areas
- Make 4 connections to existing distribution mains, miscellaneous fittings, etc
- Road restoration – directional drill with bell hole repairs and connections

#### Estimated Cost

1. 220 m – 300 mm water line	\$80,000.00
2. 4 connections to existing mains, fittings, unsuitable material, etc.	\$30,000.00
3. Road restoration work	\$10,000.00
4. Bonding, contingency, miscellaneous	\$30,000.00
5. Engineering	\$15,000.00
<b>Total</b>	<b>\$165,000.00</b>

#### Benefitting Area

Area 4 – NW 25 Future Newton, Area 5 – Palisades, Area 6 – Old Newton/Park Place/Laebon

#### Cost Benefit

Two portions of 300mm line will be installed to improve fire flows in this area. The water main will be upgraded between Henderson Street and Lee Street as well as between Boundary Street and Newton Drive. The remainder of the 300mm water line will be the developer's responsibility when multi family is developed.



## 2015 OFFSITE LEVY REPORT

### Studies and Reports

#### Item #7

#### 2011 Infrastructure Study and Offsite Levies Report

#### Scope of Work

- To assess water, sanitary, stormwater, and transportation system throughout the Town of Penhold
- Prepare an offsite levies report

#### Estimated Cost

- \$137,053 of cost incurred to date

#### Benefitting Area

This report is for the overall systems and therefore the benefit was allocated to all benefiting areas. (Areas 1 -12)

#### Cost Benefit

The cost benefit was completed on a percentage of overall area basis, meaning each area was divided by the total benefiting area to derive the percentage allocation of the report costs.

**Appendix B**  
**Transportation**  
**Cost Estimates and Benefit Analysis**

## 2015 OFFSITE LEVY REPORT

### Transportation Cost Estimates and Benefit Analysis

Revised : June 23, 2015

The following is an itemized breakdown of infrastructure list in Schedule "C" – Transportation Offsite Levies.

#### Item # 1-6 Waskasoo Avenue

##### Scope of Work

Develop Waskasoo Avenue - Collector Road Standard

- 9.5 Width - Curb and gutter, separate sidewalk
- Asphalt (100mm), Base course (150mm), Base (300mm) Pit run
- Necessary Underground Storm collection system
- Street lighting & Landscaping
- Highway 42 - Type V Intersection c/w full signalization
- Highway 42 South to Waskasoo Creek Bridge - 1750 m
- Intersection for: Multiplex, High School, Hawkridge

#### Estimate Cost Summary For Waskasoo Avenue Segments

See following plan that present Segment locations

1.	North of Hwy 42 to Oxford Landing South Entrance	\$ 673,920.00
2.	Highway Intersection Type V, Upgrades to Lanes, Signalize less [139,500] in grant funding	\$1,084,500.00
3.	Hwy 42 to second entrance to intersection of Hawkridge	\$ 941,158.86
4.	South of Hawkridge to Lucina	\$ 857,914.18
5.	Lucina to Lincoln (Grant funded – Streetlights only)	\$ 287,174.02
6.	Lincoln to Waskasoo Creek Bridge (Grant funded – Streetlights only)	\$ 350,990.46

Note: ACRP project was \$3,946,840.07 of which \$3,362,788.05 was funded from the Alberta Government. The first 3.0 million is a 90/10 funding breakdown, the remaining costs are 70/30. The multiplex land balancing is; Grant = \$992,859.82, Town = \$110,317.76. Waskasoo Avenue is; Grant = \$2,369,928.23, Town = \$473,734.26.

Fortis street lighting estimate was \$167.79 per m.

**Total Estimated Construction Costs** **\$ 4,195,657.52**

#### Cost Benefit

A Traffic Impact Assessment (TIA) was completed to assess the benefit to each development and existing Town of Penhold. The TIA determined the percent of benefit for each development

## 2015 OFFSITE LEVY REPORT

area including existing developed Town site areas, such as Old Newton, Park Place, Trailer Park, and Hawkrige. The percentages were then assigned to each applicable Waskasoo Ave cost.

The percent benefit for Palisades (NE 25) and future Newton development (NW 25 ) areas were assigned a percentage for the combined development area. The apportioned benefit for each was dispersed based on the percentage each has of developable land. Palisades has 68% or 54.4 ha and Newton has 32% or 25.6 ha of the 80 ha of total developable land. If Palisades is assigned 100% use for a segment, the costs would be apportioned 68% to Palisades and 32% Newton.

Schedule "C" apportions the percentage of cost to each development

## 2015 OFFSITE LEVY REPORT

### Item # 7

#### Veterans Way – Hwy 2A to Robinson Ave

#### Scope of Work

Intersection of Hwy 2A to West Boundary quarter line of Palisades Development (West of Robinson Ave), Roadway complete with Storm Sewer

- Upgrade to Urban Undivided
- 9.5m Width - 200m length
- Mono Sidewalk north side
- Rolled Curb and Gutter south side
- Storm Sewer in south ditch line Hwy 2A to Robinson
- Widen existing to south 2 m. Necessary embankment and pavement widening

#### Estimated Cost Summary

1.	Removals and Disposals	\$29,000
2.	Storm Sewer - 260m - 300mm - 2 Culvert Inlets to Hwy 2A - 3 Catch basins - 3 Manholes	\$203,100
3.	Surface Works - 260m Sidewalk - 260m Curb and Gutter - Widen roadway 2.0 m - Pave south side between existing and Curb Line	<u>\$250,900</u>
	<b>TOTAL</b>	<b>\$483,000</b>

#### Benefiting Area

Area 4 – Future Newton, Area 5 – Palisades, Area 6 – Old Newton, Park Place, Penhold Trailer Park

#### Cost Benefit

The percentage of use was taken from Exhibit 16 in the TIA and based on the average "With the Development of the Newton Quarter".

## 2015 OFFSITE LEVY REPORT

### Item # 8

#### Highway 2A and Future Newton Drive Intersection – Type II

##### Scope of Work

- Tee Intersection improvements Type II to Hwy 2A
- East side only
- Only needed when Future Newton Development takes place in East side Hwy 2A

##### Estimate of Cost Summary

1.	Intersection Improvements	\$350,000
2.	Lighting	\$ 60,000
3.	Engineering, Testing and Approvals	<u>\$ 40,000</u>
	<b>TOTAL</b>	<b>\$450,000</b>

##### Benefit Area

Area 4 – Future Newton, Area 5 – Palisades

##### Cost Benefit

The TIA identifies that the use will be shared between the two Developments. Exhibit 13 shows the estimated traffic volumes leaving and entering the Newton and Palisades subdivision on the east leg of the intersection, and these were the volumes used as it is this traffic that necessitates the new intersection. The volumes were averaged between am and pm. The Intersection Totals do not apply because of all the background traffic that passes directly through on Hwy 2A.

## 2015 OFFSITE LEVY REPORT

### Item #9

#### Traffic Impact Assessment Study

##### Scope of Work

- To assess traffic flow and generation through major roadways and intersection throughout the Town.
- The report defines traffic loading from each area within Town and makes recommendations for improvements related to growth.

##### Estimated Cost

- \$30,225 of cost incurred to date

##### Benefitting Area

This report is for definition of all required transportation projects and therefore each area that is benefitting from any or all projects has been included. This is area 1,2,3,4,5,6,9,11.

##### Cost Benefit

The cost were assigned to each area that is identified in the TIA. The cost benefit was completed on a percentage of overall benefitting area basis, meaning each area was divided by the total transportation benefitting area to derive the percentage allocation of the report costs.