Consulting Engineers of Alberta

2018 Partnering With Industry Symposium
CIVIL ENGINEERS

What my friends think I do.

What my mom thinks I do.

What society thinks I do.

What my boss thinks I do.

What construction contractors think I do.

What I think I do.

What I really do.
Integrated Infrastructure Services

Mark Hall
Development Manager
Blatchford Redevelopment

Adam Laughlin
Deputy City Manager
Integrated Infrastructure Services

D. Philip Alex
Branch Manager
Business Planning & Support

Brian Latte
Branch Manager
Infrastructure Delivery

Jason Meliefste
Branch Manager
Infrastructure Planning & Design

Craig Walbaum
Branch Manager
Building Great Neighbourhoods

Guy Boston
Branch Manager
LRT Delivery

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A NEW WAY OF THINKING

Vision
We inspire trust among citizens and Council in our commitment and ability to deliver quality infrastructure.

Mission
We are in the business of ... Bringing ideas to reality excellence
Building legacy infrastructure Helping citizens have a better life in Edmonton
Building a great city

Values
Safe, respected and empowered staff
Results achieved through teamwork
Innovation and excellence
Assembling expertise
Strong relationships
Principle of the Business Model

Clearly defined project scope and concepts consistent with policy and business partner requirements

Infrastructure is delivered efficiently to meet City, stakeholder and citizen needs. Reporting is done in a regular and transparent manner.
Project Development and Delivery Overview

Develop

Strategic

Concept

Design

Build

Operate

Council Decision Points:
- Confirm Infrastructure Priorities
- Approve Capital Budgets

Administrative Checkpoints:
- Project Initiation
- Authorization for Design Expenditure
- Capital Budget Approval
- Authorization for Construction Expenditure
- Handover
Value Chain

Strategy

Decision Context
Decision Framework
Decision Assembly
Decision Efficacy

Concept
Design
Build

Develop
Deliver

CITY PLANNING

INTEGRATED INFRASTRUCTURE SERVICES
Overarching Outputs
Strategic Leadership - The Way Ahead Renewal

2050 CITY VISION  30 YEARS

10-YEAR STRATEGIC GOALS  10 YEARS

CORPORATE BUSINESS PLAN  4 YEARS
LONG RANGE CAPITAL AND OPERATING INVESTMENT OUTLOOK  10 YEARS

DEPARTMENT BUSINESS PLANS & BRANCH ACTION PLANS  4 YEARS

OPERATING BUDGET  4 YEARS
CAPITAL BUDGET  4 YEARS
PUBLIC INVOLVEMENT PLAN (2019-2028)

- **Design Workshops**
  - Budget
  - Collateral
  - Confirm Stakeholders
  - June-September 2017

- **Guided Conversations**
  - with Community and Business Leaders and their Networks
  - Nov - March 2018

- **Workshops with other Stakeholders**
  - Jan - March 2018

- **Public Input**
  - March 2018

- **Detailed "What We Heard" Report**
  - April 2018
# City Planning Branch - Structure & Responsibilities

## CITY PLANNING BRANCH

<table>
<thead>
<tr>
<th>URBAN ANALYSIS</th>
<th>POLICY DEVELOPMENT</th>
<th>PLANNING COORDINATION</th>
<th>SUBDIVISION &amp; DEVELOPMENT COORDINATION</th>
<th>NETWORK INTEGRATION</th>
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<tbody>
<tr>
<td><strong>Teams</strong></td>
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<tr>
<td>Monitoring &amp; Geospatial Services</td>
<td>Citywide Policy</td>
<td>Industrial &amp; Commercial Areas</td>
<td>Systems Planning</td>
<td>Subdivision Planning</td>
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<td>Systems Analytics</td>
<td>Urban Places</td>
<td>Core &amp; Mature Communities</td>
<td>Growth Coordination</td>
<td>Development Servicing Agreements</td>
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<td>Research &amp; Analysis</td>
<td>Urban Design</td>
<td>Established &amp; Developing Communities</td>
<td>Urban Initiatives</td>
<td>Development Engineering and Drawing Review</td>
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<td>Transit Planning</td>
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<td>Development Inspections</td>
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</table>
Accomplishments - Highlights

BREATH - EDMONTON’S GREEN NETWORK STRATEGY

- Approved by Council August, 2017
- Transformative strategy that ensures neighbourhoods are supported by a network of green space
- Strategy based on a multifunctional network approach that supports the connection and integration of open spaces at site, neighbourhood, city and regional scales

RIVER VALLEY ACTIVATION PROJECT (MECHANIZED ACCESS)

- Opened December 9, 2017
- Part of the River Valley Activation Project, which is a project aimed at developing an integrated and coordinated plan to connect and provide for urban amenities in the North Saskatchewan River Valley system
EDMONTON’S TRANSIT STRATEGY

- Approved by Council June, 2017
- Provides a comprehensive and integrated perspective on Edmonton’s transit system
- Strategy will inform an updated transit system focused on customer service that is safe, fast, convenient and reliable and will result in a transit system that supports mobility, connectivity, integration and sustainability

DOWNTOWN MINIMUM GRID CYCLING NETWORK

- Opened Summer 2017
- 7.1 km of separated bike lanes in Edmonton’s downtown core
City Planning - Priorities

- MDP/TMP refresh
- Ribbon of Green
- Breathe - Green Network Strategy
- Bicycle Transportation Plan
- Bike Network Planning
- River Valley Activation Project
- Complete Streets Design Update
- New Mobility
- Nodes and Corridors
- Imagine Jasper Avenue
- Integrated Parking Framework

- Regional Goods Movement
- Regional Transportation/Land Use Model
- Smart Roads Strategy
- Transit Strategy
- City Wide Planning Framework
- Growth Coordination
- Evolving Infill 2.0
- Urban Design Framework
- Process & Service Improvements, including MR Funding Strategy
- Design & Construction Standards Update
Infrastructure Planning and Design

- **Plan** well designed infrastructure systems that optimize the balance between asset lifespan, asset usability, total cost of ownership (sustainability) and other Partner/ Council/ Citizen expectations.

- **Develop** comprehensive plans for infrastructure projects that support “turn key” delivery in the Infrastructure Delivery branch.
  
  (“turn key”: scope, budget and schedule confirmed to a level of confidence where the project can be executed with an acceptable level of risk)
Infrastructure Planning and Design

- Public Engagement is integrated into all Planning & Design processes and informs the outcomes and deliverables
- Support and development of a robust four-year capital program through the creation of a “pipeline” of programs and projects
- Deliver rigorous project management of planning and early stage design projects: high level business cases, concept plans and preliminary design (up to 30% engineering)
- Integration of Growth and Renewal planning into the project development based on the outcomes of our Asset Management and City building objectives.
Infrastructure Planning and Design

- **Project Management** functions relate to the leadership and stewardship of the work;
  - Integration with other stakeholders
  - Public Engagement
  - Budget/Cost Control
  - etc.
- **Internal Design** functions are also embedded within the Branch;
  - Focus is on providing Technical support as well delivering on internal resources design deliverables
  - Staff includes all (non-PM) architects, design engineers and technologists positions.
Review and Look Ahead...

2017 Accomplishments
● Yellowhead Freeway Funding Approved
● Initiation of various “fast-tracked” PTIF projects
● Project Development/Delivery Model Policy
● Sustainable Building Policy
● “Experience” Jasper Avenue Pilot Demonstration
● Implementation of the Downtown Bike Grid

2018 Priorities
● 2019-28 10-year Capital Investment Outlook
● 2019-22 4-year Capital Budget Development
● many more projects to come....
2018 Upcoming Projects

Facilities
- Northwest Eco Station
- Edmonton Police Services Firearms Facility
- many Building Retrofit projects

Transportation
- Yellowhead Freeway
- Ellerslie Road Widening
- 215 Street Widening - Green Roads Approach

Open Space
- Touch the Water
- Edmonton Waste Management Centre Landfill Capping
- various Base Level Park Development projects
BGN - Program Overview

Mandate Statement:
The Building Great Neighbourhoods (BGN) Branch leads the process of integrating and leveraging a scope of work that maximizes the full potential for strong and sustainable neighbourhoods.

The BGN Branch is at the heart of aligning and advancing multifaceted neighbourhood renewal efforts.
BGN - 2017 Highlights

- **2017 Neighbourhood Reconstruction**
  - Seven Neighbourhoods completed in 2017
  - Five Neighbourhoods started in 2017 and continuing in future years

- **2017 Neighbourhood Rehabilitation (various locations)**
  - Two Active Modes contracts
  - Two Overlay contracts
  - Two Neighbourhood collector reconstruction contracts
  - Two North East Road Projects (NERP) contracts (Year 3 of 4)
  - 83rd Avenue Bike Route (Year 1 of 2)
BGN - 2018 Ongoing Projects

- Projects continuing in 2018:
  - Montrose
  - Strathern
  - Kilkenny
  - Belgravia
  - McKernan
  - Two North East Road Projects (NERP) contracts (Year 4 of 4)
  - 83rd Avenue Bike Route (Year 2 of 2)
BGN - Upcoming Planning and Design Projects

- **2018 Awarded Neighbourhood Renewal Projects:**
  - Alberta Avenue, Central McDougall, Highlands, Inglewood, Royal Gardens, Strathcona

- **2018 Upcoming Design Neighbourhood Renewal Projects (Initial Phase is Design Analysis):**
  - Eastwood/Elmwood Park, Grandview Heights, Lorelei
  - Malmo Plains, Calder, Baturyn, Garneau
BGN - Future Projects

- **Unassigned Future Projects**
  - Anticipating consulting assignments on 8 neighbourhood reconstruction projects to be released in 2018
  - Estimated consulting value for 2018 assignments is $7M
  - 17 neighbourhood reconstruction projects planned between 2019-2022
● Alley Renewal Program
  ○ City of Edmonton has ~1100 alleys, averaging 5 km per neighbourhood
  ○ 68% of alleys currently have D and F condition grades
  ○ Alley reconstruction to begin in 2019, ramping up production towards 2022 and onwards
  ○ Anticipated reconstruction rate of 30-50 km per year supported by an annual budget of $20M
Infrastructure Delivery

Branch Manager
Brian Latte

Director, Transportation Infrastructure Delivery
Sam El Mohtar
- Supervisor, Project Management
  Nathan Stelmach
- Supervisor, Project Management
  Caroline Schettler

Director, Open Space Infrastructure Delivery
Martina Gardiner
- Supervisor, Project Management
  Andrew Kwan

Director, Facilities Infrastructure Delivery
Jesse Banford
- Supervisor, Project Management
  Jack Ashton

Manager, Renewable Energy Systems
Christian Felske
- Supervisor, Project Management
  Trish Kuffler

Strategic Coordinator - Jennifer Florax
Administrative Assistant - April Neale
Project Development and Delivery Overview

Develop

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Council Decision Points:

1. Project Initiation
2. Confirm Infrastructure Priorities
3. Approve Capital Budgets
4. Authorization for Construction Expenditure
5. Handover

Administrative Checkpoints:

1. Project Initiation
2. Authorization for Design Expenditure
3. Capital Budget Approval
4. Authorization for Construction Expenditure
5. Handover
Infrastructure Delivery

- We are in the business of successfully **Delivering** infrastructure projects that inspire the trust and confidence of Council and Citizens and the intent of the strategy, concept and design.

- We are in the business of bringing ideas to reality
Infrastructure Delivery

- We assemble expertise in Project Management that demonstrates excellence in safety, cost, schedule, quality and contract management.

- Implement projects in an integrated way through the develop/deliver approach.

We are in the Business of Building a Great City
2017 Transportation Infrastructure Delivery

Transportation Infrastructure Delivery completed 87 projects in 2017. Projects included:

- Roadways Renewal
- Bridge Reconstruction
- Busway Renewals

Over $105M in Transportation Infrastructure was Delivered in 2017.

Walterdale Bridge

170th Street Over CNR
2017 Open Space Infrastructure Delivery

Open Space Infrastructure Delivery completed **81** projects in 2017.

Alex Decoteau Park

River Valley Alliance East Trails

Terwillegar Park

Over **$32.5M** in Open Space Infrastructure was Delivered in 2017.
2017 Facility Infrastructure Delivery

Facility Infrastructure Delivery completed **54** projects in 2017. Projects included:
- 6 in Growth Projects
- 48 in Renewal & Rehabilitation Projects

$135M was Delivered and are now in Service,
$620M are currently in Design, and
$520M are under Construction.
2018 Transportation Delivery Plan

89 build locations with a total project value of over $100M (~22 tenders)

- **Arterial Renewal Program:**
  - $62 M; 75 Locations

- **Bridge Renewal Program:**
  - $30 M; 5 Locations

- **Arterial Growth and Network Improvements:**
  - $10M; 9 Locations

Groat Road Bridge Rehabilitation
2018 Open Space Infrastructure Delivery Plan

131 projects in design or build with a total project value over $100M

Keillor Point

Saskatchewan Drive Lookouts
2018 Facility Delivery Plan

39 upcoming projects to be released with a total project value over $300M

Lewis Farms Community Centre (CCGC)
Capital profile valued at over $200 Million

Co-Located Dispatch & Emergency Operations Centre
Capital profile valued at over $50 Million
LRT Network Plan
LRT and the Urban Form

Urban LRT focuses on integrating and identifying with the communities it is built within and maximizes use of public land by designing in compact form.

Urban LRT stops are:

- Smaller scale, Easily accessible
- Integrated with the surrounding community
- Designed to look attractive and unobtrusive
- Provide more direct transit, pedestrian, and cyclist connections

Urban LRT operates with reduced speeds in congested areas, allowing LRT to fit and operate safely in pedestrian-oriented communities with reduced right-of-way and fewer barriers.
Public Transit Infrastructure Fund (PTIF)

- In 2016, the Government of Canada introduced PTIF.
- 46 City of Edmonton PTIF projects with a total approved budget of $297.3 million.
- Two LRT PTIF projects are advancing to construction procurement readiness in anticipation of a second round of PTIF funding for construction:
  - Valley Line West
  - Metro Northwest (NAIT to Blatchford)
- The work and coordination required for the coincidental completion of PTIF projects is substantial, is occurring at a fast pace, and is constantly changing.
## LRT Program - Ongoing and Upcoming Work

<table>
<thead>
<tr>
<th>Project</th>
<th>Corridor Selection</th>
<th>Concept Planning</th>
<th>Design &amp; Procurement Ready</th>
<th>Build</th>
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<tbody>
<tr>
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<td>2018 - 2019</td>
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<td>Capital Line South 41 Avenue SW to International Airport</td>
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Thank you!