



Niagara Regional Police Headquarters

A 10-Year Journey



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Course Description

Niagara Regional Police Headquarters A Long Journey

This session will tell the story of how one of the most important recent police projects in Canada overcame many challenges and roadblocks – from service delivery and community issues, through political and funding challenges, location questions, budget constraints, design and construction.

This story will illustrate that design is only a small part of the challenges a project often faces, and will provide lessons learned for any agency contemplating a similar facility renewal program.

Learning Objectives

1. Navigating the political landscape and balancing multiple and diverse stakeholder interests
2. The benefits and value of preparing defensible and evidence-based arguments for facility renewal programs
3. The benefits of collaborative efforts amongst facility funding entities, owners, users and consultant teams
4. Balancing limited construction budgets against space and facility priorities

Niagara Regional Police Headquarters

A 10-Year Journey



Presenters



John E. Pepper, OAA, SAA, MRAIC, AIA Int'l Assoc. LEED AP
Rebanks Pepper Littlewood Architects
Toronto, Ontario
35 years in police, high-security & public safety facilities



Dean Roberts, AIA, NCARB, OAA
McClaren Wilson & Lawrie Architects, Inc.
Illinois, Arizona, Virginia
40 years experience in police & justice facilities

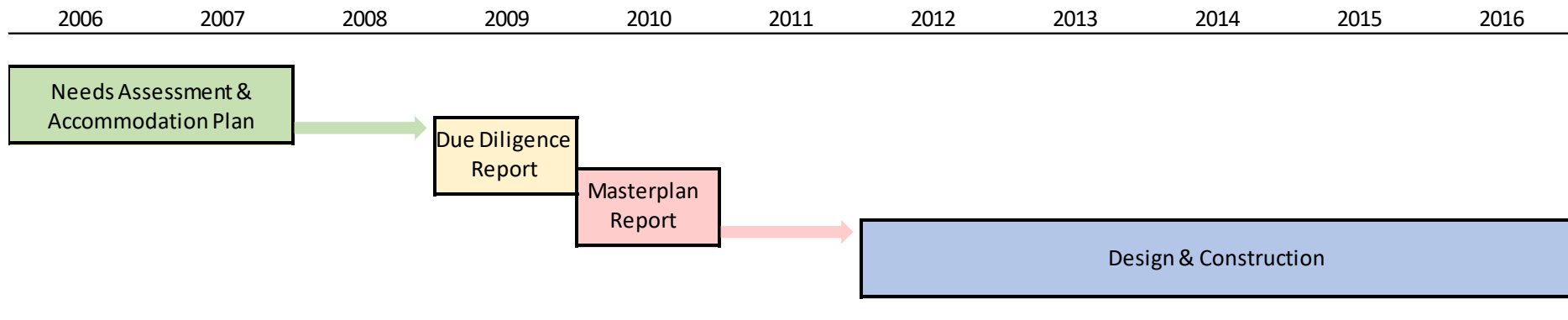


Richard Frayne, Superintendent
Niagara Regional Police Service, Ontario
Police Headquarters Project Liaison Officer

0.1-The Project Story

Four distinct project assignments 2006-2016:

1. Needs Assessment & Accommodation Plan (RPL)
2. Due Diligence/Peer Review (MWL)
3. Masterplan (MWL/RPL)
4. Design & Construction (RPL/MWL)



What did it take to become a reality?

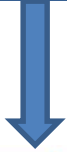


- 1. Planning the Journey** – Needs assessment & accommodation plan
- 2. Challenges** – Due diligence, peer review, stakeholder dispute
- 3. The End in Sight** – Project master plan
- 4. Moving Forward Again** – Project approval & design
- 5. Reaching the Destination** – Construction



1-Starting Out

Needs Assessment & Service Delivery (2006-2008)



2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016

We Need to do Something – But What?

- Policing services in Niagara Region
- Recognizing a need for new facilities
- Service delivery, organization and planning options
- Benefits of centralization
- Balancing operational efficiencies and community expectations

1.1-Police Service Delivery

The Regional Municipality of Niagara



1.2-Police Service Delivery

Background & History

- Regional Policing in Niagara and its communities
- History and legacy*
- Implications of current facility arrangement
- Regional precedents*
- Board and Regional government roles & responsibilities



1.3-Needs Assessment & Functional Programming

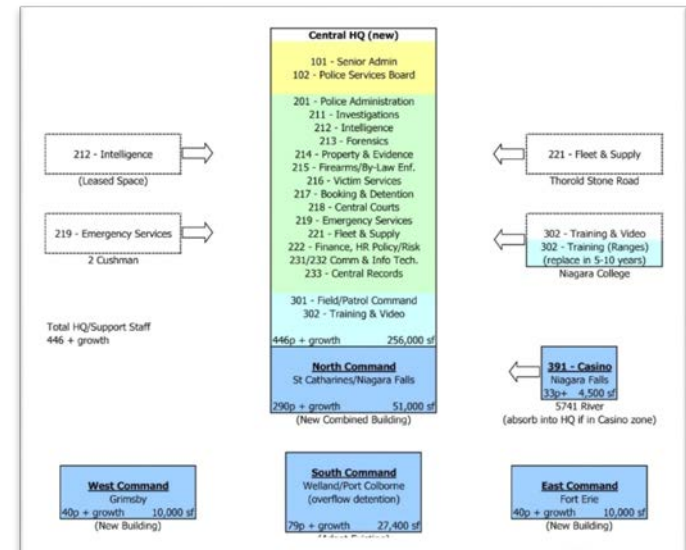
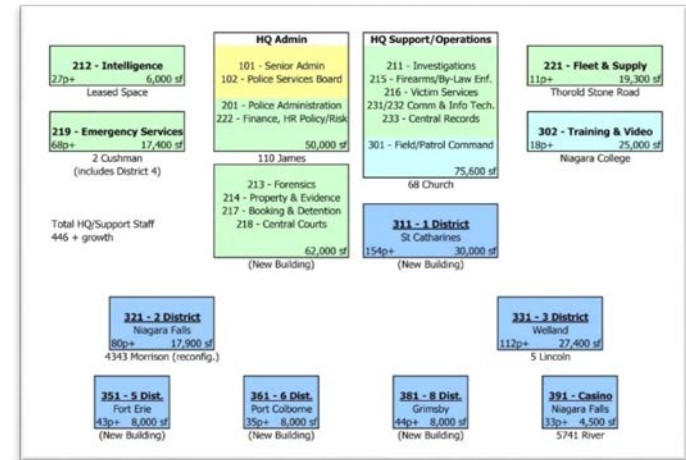
Building a Facility Model – Quantification

- Population growth & demographics – 7-10% increase over 15 yrs
- Police service demand
- Police-to-population ratios
- Future police resource projections - 16% increase
- Space & facility needs – 335,000 sq.ft to 2021 (15 yrs)
- Accommodating growth & change

1.4-Facility Distribution Models

Police Delivery Across the Region

- Efficiencies through centralization
- Community needs & expectations
- Police presence & deployment
- Optimization – what's best for Niagara Region?
- The HQ/District model
- Options



1.5-Benefits of Centralization

Efficiencies & Improvements

- Cost savings & efficiencies
- Improved communication & cooperation
- Better use of resources (people, space, equipment, vehicles)
- Ability to adopt new practices & policies (central booking, property & evidence)

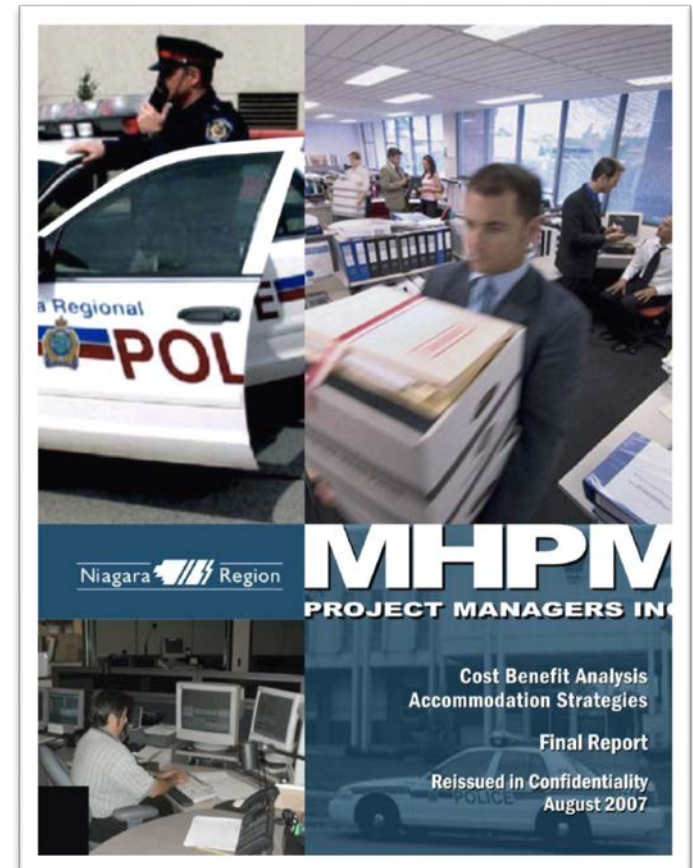


Model B2 – Five Corners

1.6-Cost Benefit Analysis

Recommendations

1. Model B represents best value for money while meeting expectations of different communities
2. Achievable operational savings through efficiencies
3. Improvement in communications, span of control & quality



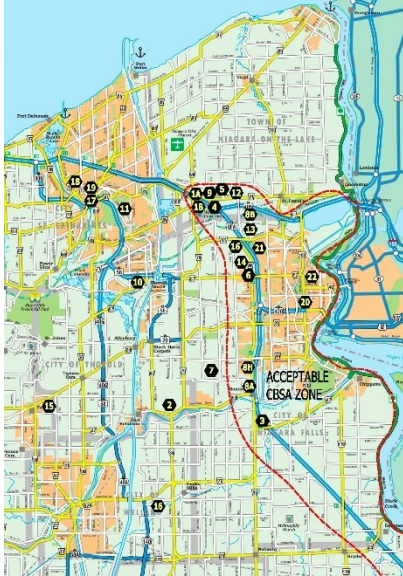
1.7-Site Selection

A Suitable Headquarters Location

- Police Services Act requirements
- Regional access & operational (convenience)
- Locating suitable sites
- Site selection criteria & evaluation
- Recommendations



1.8-Site Selection

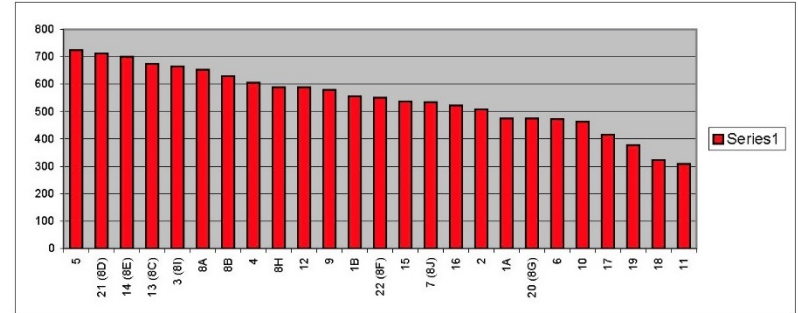


NRPS HQ – Preliminary Site Evaluation - May 21, 2008

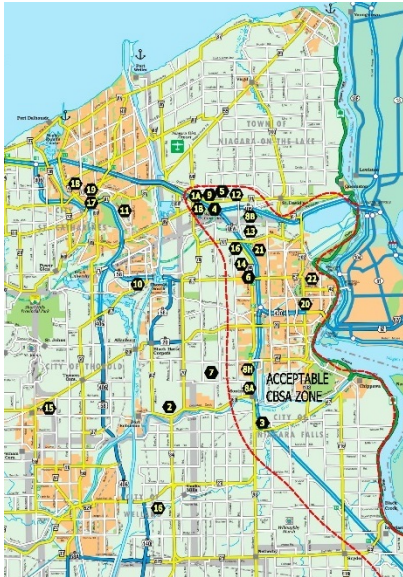
Ref.	Site Name	Municipality	Area	Score	Zoning	PPS	Existing Structure	Serviced	Transit	Risks	Flood	CBSA	Other
5	York Road/Concession 7	NOTL	33 ac	723	PI	Yes	No	W S St G H B	No	No	TBC	Yes	
21 (8D)	7736 Mountain Road	Niagara Falls	23 ac	712	TC-H	Yes	No	W S St G H B	No	No		Yes	
14 (8E)	Niagara Sports Centre	Niagara Falls	56 ac	700	A Conser		No	W G H	Yes 4	No	Creek	Yes	Future S
13 (8C)	Mountain Road/Mewburn	Niagara Falls	29.9 ac	673	A NEC	Neg	No	W S	No	No	Welland R.	Yes	SWM
3 (8I)	Lyons Creek/Montrose	Niagara Falls	42 ac	663	TC-H PI-H	Yes	No	W S G H B	No	No		Yes	EPA
8A	Montrose Business Park	Niagara Falls	54.59 ac	652	PI EPA	Yes	No	W S St G H B	Yes 4	No		Yes	SWM
8B	Mewburn Road	Niagara Falls	92.36 ac	629	A NEC	Neg	No	W G H B	No	No		Yes	
4	509 Glendale Ave E	NOTL	33 ac	605	PI		Yes	W S St G H B Ca	No	No		Yes	
8H	7893-8003 Montrose Rd	Niagara Falls	15.09 ac	589	TC		No	W S St G H B	Yes 4	No		Yes*	
12	East Glendale	NOTL	49.91 ac	588	A Conser	Yes	No		No	No	Creek	Yes (3)	Rezoning
9	353 Townline Road	NOTL	28.15 ac	579	LI		Yes	W S G H	No	No		Yes	
1B	York Road/Townline	NOTL	13.1 ac	556	PI		No		No	No		Yes*	
22 (8F)	4001 Fourth Avenue	Niagara Falls	100 ac	550	HI I PI			W S St G H	Yes 5	No		Yes	Extend G
15	Rice Road/Hwy 20	Pelham	12.12 ac	536	A-H	Yes	No	W S St G H Ca	No	No	Creek	No	Rezoning
7 (8J)	Beechwood/McLeod	Niagara Falls	20 ac	534	LI	Yes	No	No	No	No		No (3)	
16	Buchnor Road/Hwy 140	Welland	40 ac	521	A	Yes	No	W S G H B	No	No		Yes	SPA only
2	Chippewa Creek Rd	Thorold	100 ac	507	HI	Yes	No	W S St G H	No	No		No	
1A	York Road (West & East)	NOTL	7.0 + 6.0 ac	474	PI E	Yes	No		No	No		Yes (3)*	Non contig
20 (8G)	Stamford St/Hwy 420	Niagara Falls	12.25 ac	474	LI		Yes	W S St G H B	Yes 4	Power Lines	Crk+Pond	Yes*	
6	Regency Motel Site	Niagara Falls	9.8-10.69	472	A		Yes	W H	Yes 3	No		Yes*	Zoning Am
10	Hwy 58/Collier	Thorold	10.91 ac	462	LI-13	Yes	No		Yes	No		No	
17	Hair Cloth Site	St. Catharines	8.7 ac	414	BC		Yes	W S St	Yes 5	Railway	Yes	No	Rezoning
19	71 Carlisle Street	St. Catharines	1.11 ac +	376	BC		Yes	W S St	Yes 17	No		No	
18	68 Church Redevelopment	St. Catharines	2.45 ac	323	BC		Yes	W S St	Yes 4	No		No	
11	427 Merritt Street	St. Catharines	11.8 ac	309	R5-H CR		Yes	W G H	Yes 1	No		No	Rezoning

A	Agricultural -difficult	H	Holding
BC	Business Commercial	E	Enterprise
CR	Commercial Residential	SWM	Storm Water Management
Conser	Conservation Area	PPS	Provincial Policy Statement
HI	Heavy Industrial	EPA	Environmental Protection Area
I	Institutional		
LI	Light Industrial		
NEC	Niagara Escarpment Commission		
NPA	Niagara Protection Area		
PI	Prestige Industrial (M-5)		
R	Residential		
TC	Tourist Commercial		
W	Water		
S	Sanitary		
St	Storm		
G	Gas		
H	Hydro		
B	Bell		
Ca	Cable		

CBSA* Location Suitable but site area less than recommended



1.8-Site Selection

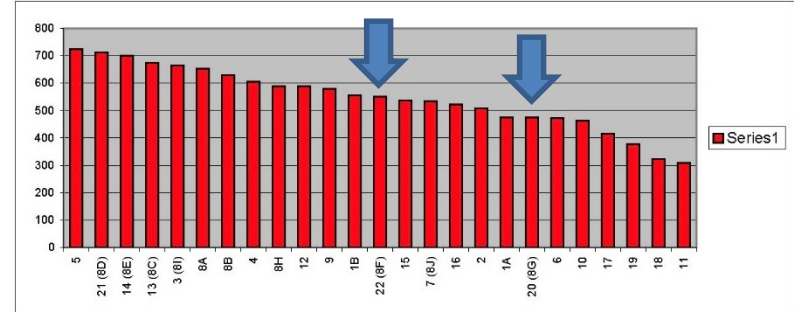


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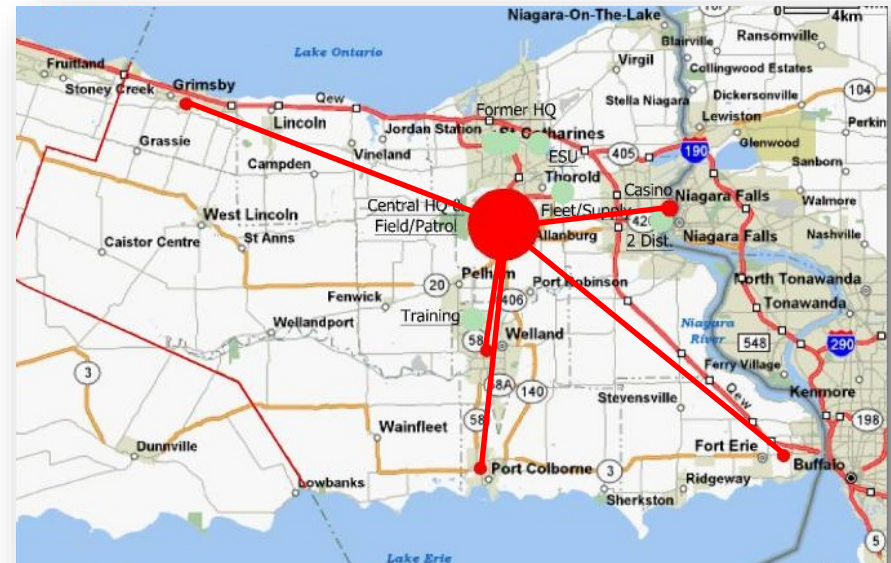
CBSA* Location Suitable but site area less than recommended



1.9-A Path Forward?

We have a Plan....

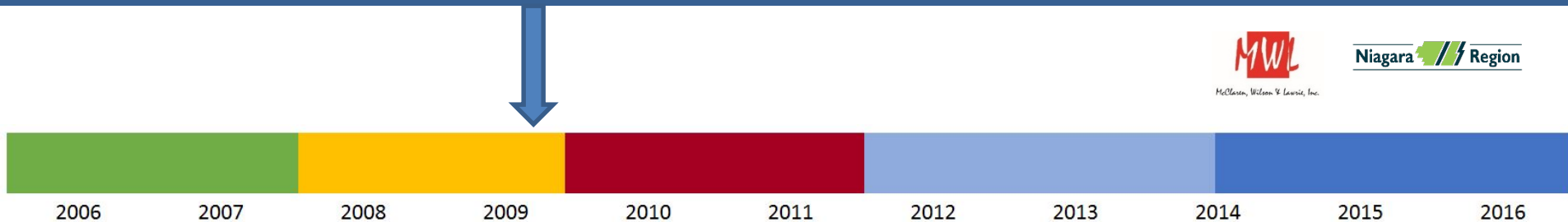
- Decision made on model to be adopted – Model B2 (four corners, became five corners)
- Space and facility requirements determined – 335,000 sq.ft (incl. new District stations)
- Request for funding – Construction budget \$80M in 2006 (equiv. \$89M in 2009, \$100M in 2014)





2-Challenges

Peer Review, Due Diligence, Disputes (2008-2009)



Due Diligence Report (August 2009)

- Peer review by subject matter experts:
 - *Review assumptions*
 - *Assess strategic alignment with Region's guiding principles*
- Prevailing questions
- Core assumptions
- Alternative approach
- Recommendations

2.1-Methodology & Measuring Success

Methodology

- Understanding the priorities of the NRPS & Region
- Core assumptions & evidence-based analysis
- Alignment with guiding principles
- Critical success factors

Measuring Success

- Affordable within taxpayer limits
- Improve quality and support mandated police services
- Increase organizational efficiency & productivity
- Create a logical implementation plan
- Integrated, collaborative & transparent process

2.2-Prevailing Questions

Roles & Responsibilities

- Niagara Regional Police Service & Board?
 - *Business plan for service delivery*
 - *Provide a clear and compelling case for new facilities*
- Regional Municipality of Niagara?
 - *Funding for police operations*
 - *Funding for facilities*
- Standard of performance for the delivery of police services?
 - *Police Services Act & Adequacy Standards**
 - *Commission on Accreditation for Law Enforcement Agencies (CALEA)*

2.3-Key Findings & Core Assumptions

Key Findings:

- Impact of 2001 amendments to the Police Services Act
- Performance Standards
- Shared responsibilities for facility compliance

Core Assumptions:

1. Centralization is appropriate (model evaluation process)
2. Staff growth & accommodation needs, address shortfalls
3. Use of existing building stock (where suitable)*

2.4-Alternative Approach

A Phased Accommodation Plan

- Prioritize renewal
- Critical facilities first
- Align scope with agreed budget

NRPS Master Plan - Facility Phasing per Minutes

Phase 1
2010 - 2012

Central HQ

- Central Records
- Communications & IT
- Property & Evidence
- Forensics
- Executive Command
- Investigations
- Central Booking
- Intelligence
- Potential Partners

Frees up 68 Church St.

(currently in leased space)

1 District Station
St. Catharines

Specialty Vehicle
Location TBD

(part of HQ?)

Upgrade 2 District
Niagara Falls

Phase 2
2016

Special Enforcem.
to Central HQ

Frees up Cushman Rd

Phase 3
2020

Admin/Business
to Central HQ

Frees up 110 James

Excluded from Scope

Fleet & Supply (remain at Thorold)
Training & Video (remain at Niagara College)

Welland Station remains

Currently Approved

Grimsby Station replacement under way
Fort Erie Station replacement approved

2.5-Aligning Priorities & Recommendations

Aligning Priorities & Guiding Principles:

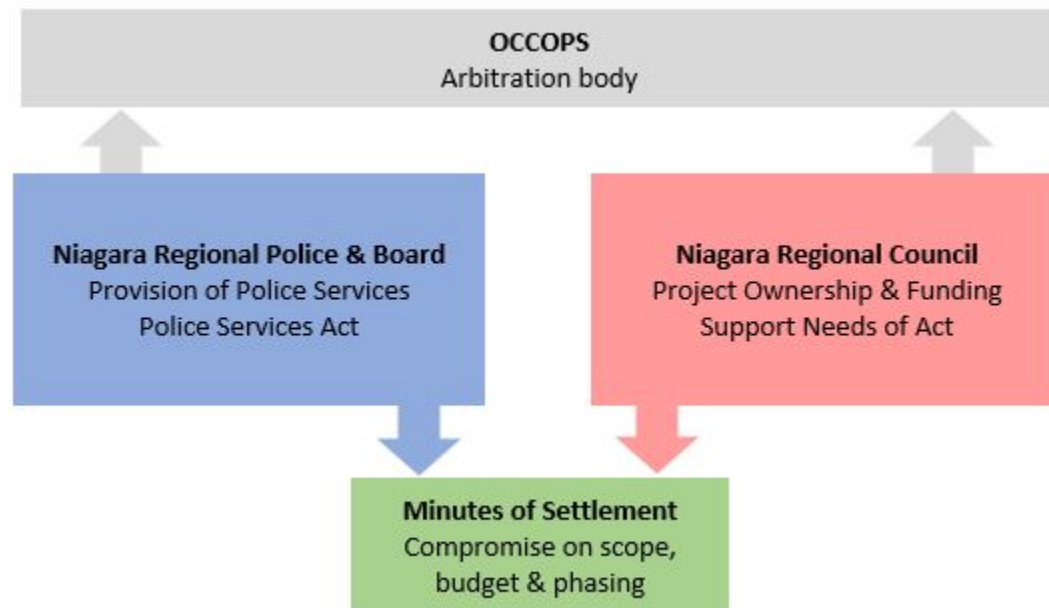
- Accommodate mission-critical operations
- Meet needs of line staff
- Realize full value of existing buildings
- Optimize value and costs*
- Consider alternate approach

Recommendations:

- Validate/update space needs assessment (based on staff growth)
- Develop a Master Plan – establish scope, costs, location
- Develop an Implementation Plan – schedule, phasing

2.6-NRPS/Region Dispute & Settlement

The Minutes of Settlement (September 2009)



2.7-NRPS/Region Dispute & Settlement

The Minutes of Settlement (September 2009)

- NRPS/Region Dispute & OCCOPS
- Avoiding 3rd-party arbitration – a compromise
- Included:
 - Centralized headquarters
 - New District stations in Niagara Falls & St Catharines
- Excluded:
 - Previously-approved District stations in Grimsby & Fort Erie
 - Fleet
 - Training

2.8-NRPS/Region Dispute & Settlement

The Minutes of Settlement:

- Established budget ceiling (no escalation) - \$83,076,100
- Jointly staffed Project Steering Committee
- Established project scope, phasing & timelines*
- Look for partnership opportunities (CBSA, IO)
- Required a Master Plan

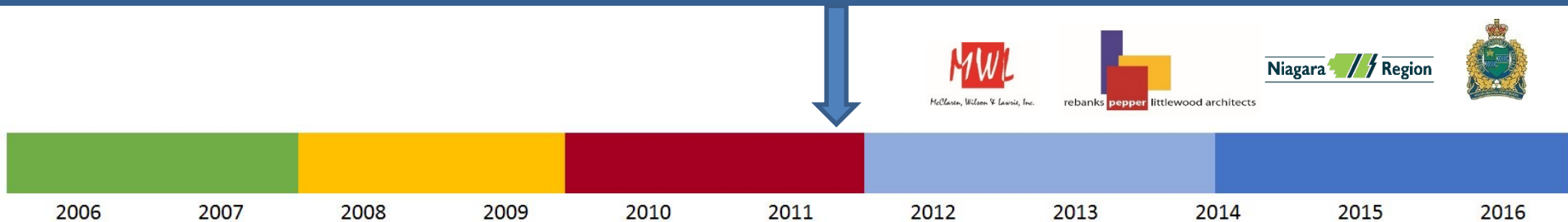
Implications:

- Limited & insufficient funding, no escalation allowance (recommended budget = \$80M in 2006, \$100M in 2014)
- Only partly addressed needs, some functions dropped
- Restricted ability to accommodate growth



3-Let's Get it Right

A Project Masterplan (2010)



- Why a Master Plan?
- Aligning Stakeholder Interests
- Approach
- Prevailing Questions
- Measuring Success
- Process
- Scope
- Site Selection
- Budget
- Partnership Opportunities
- Project Delivery Options
- Phasing, Schedule & Timelines

3.0-Navigation & Planning

Planning the Journey:

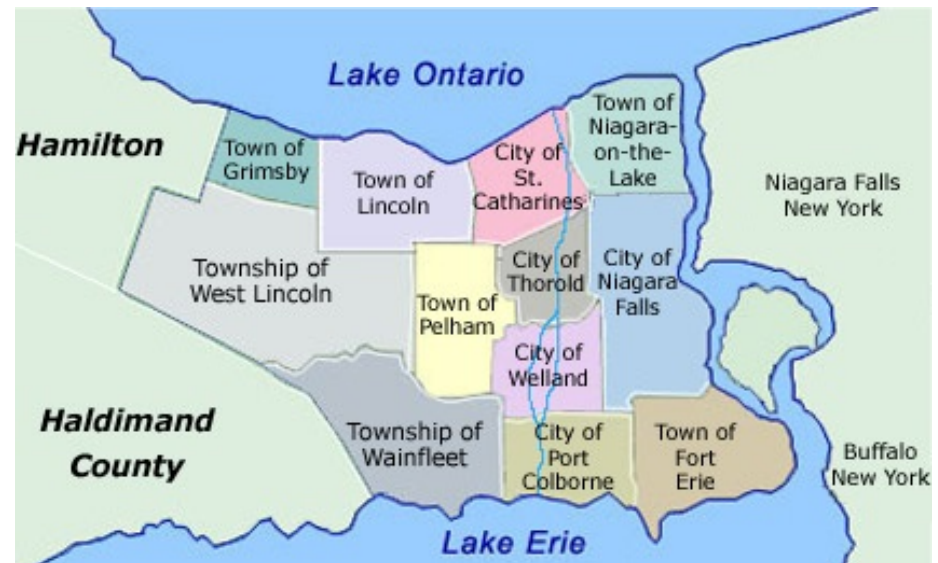
- Where are we now?
- Where do we need or want to be?
- What lies between here and there?
What roadblocks do we need to overcome? Can we see the roadblocks?
- What other risks are there?
- What's our strategy to get over (or around) the roadblocks?
- What tools do we need?



3.1-Why a Master Plan?

A Comprehensive Look at Facilities:

- Facilitate/support effective police operations
- Accommodate current & future staff & functions efficiently*
- Evaluate feasibility of using existing buildings
- Work within public policy framework
- Confirm a suitable location
- Address community concerns
- Establish an appropriate budget
- Work within Minutes



3.2-Aligning Stakeholder Interests

Bring Unity to Diverse Perspectives & Interests:

- Police operations & PSA 'Adequacy Standards'
- Public policy framework
- Meet needs & expectations of the communities
- Regional facility management
- Public stewardship
- Civic expression

Niagara Regional Police Service

- D/C Joe Matthews
- Guillermo Fuentes
- Supt. Brent Symonds

Regional Municipality of Niagara

- John Bergsma
- Patrick Robson
- Mike Weir

Consultants

- Dean Roberts
- John Pepper

3.3-Approach

Prevailing Questions Reflecting Constituent Concerns:

- Quantity issues – political constituents
- Quality issues – facility users

Enable Evidence-Based Decision-making:

- Data-informed recommendations
- Clear & rational vision

Have Questions Been Adequately Answered?

- Critical success factors

3.4-Prevailing Masterplan Questions

Prevailing Questions:

1. How big a facility is needed?
2. Where should it be located?
3. How much will the plan cost?
4. When will it be implemented?
5. Is the plan supported by all Steering Committee members?
6. Have potential partnership opportunities been explored?
7. What is the recommended disposition for existing properties?
8. What is the most appropriate project delivery method?

3.5-Measuring Success

Critical Success Factors

- Best value for money, including life-cycle costs
- Potential partnership & cost-sharing opportunities
- Function, function, function – supporting & enhancing operations
- Effective zoning, adjacencies & flow
- Safety & security
- Civic presence, community engagement, intuitive approachability
- Sustainable & expandable
- Project delivery method to optimize cost & risk

3.6-Masterplan Process

Considerations:

- Geography, area & population*
- Police service workload & HQ/District deployment model (B2)
- Staff requirements & operational units
- Space requirements, functional needs, codes & standards*
- Sites, testing, concepts
- Cost



3.7-Budget & Scope

Budget & Scope Implications

- Original program area (validated by peer review)
- Recommended budget (and escalation to time of tender)
- Approved budget & impact on program
- Effect of construction cost escalation

3.8-Site Selection

Site Selection Criteria

- Fresh look at available properties
- Support functional needs
- Consensus on criteria & weighting
- Shortlist & test-fit

City of St Catharines unhappy to lose HQ and employees

2. Where should the facility be located?

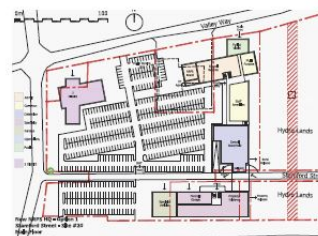
The committee completed an interim site evaluation report in March, 2010 as a part of this Master Plan study. That report evaluated 25 sites that were submitted by property owners in response to the Expression of Interest. At the conclusion of the interim report, Region Council directed the Committee



Site 22 - Fourth Avenue



Site 20 - Mountain Road



Site 20 - Stamford & 420 (#1)



Site 20 - Stamford & 420 (#2)

3.9-Site Selection

Final Site Selection

- Two sites selected for more detailed evaluation, test-fit & costing
- Both were physically suitable
- Both suitable zoned
- Stamford/420 site purchased



Stamford Road Site, Niagara Falls

3.10-Partnership Opportunities

Canadian Border Services Agency

- Space for each organization
- Common & shared areas
- Facility governance

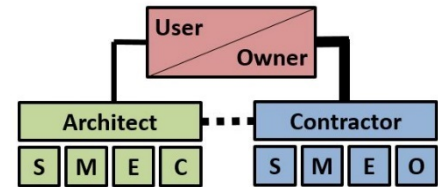
NRPS/CBSA Combined Facility				Configuration Options	
RPL Architects/MWL Architects				Rev. January 3, 2011	
NRPS		Common		CBSA	
Level 3	N101-Senior Admin 7,600 N102-PSB (part) 1,400 N201-Police Admin 1,600 N231-Communications 8,100 18,700	N102-PSB (Board Rm) 900 N302-Multipurpose (2) 2,200 N401-Dining/Break 2,600 N401-Other 800 C311-Dining/Break 900 C311-Meeting 1,200 8,600		C110-Regional Director 3,100 C120-District Director 1,400 C140-Info Technology 1,900 C150-Fin/Admin (part) 5,200 C160-HR 4,300 15,900	
Level 2	N211-Investigations 14,700 N212-Intelligence/SI 7,600 N213-Forensic Ident 7,800 N215-By-Law Enf. 1,200 N218-Courts Admin 1,200 N220-Traffic 1,500 N222-Finance/HR 3,500 N232-Info Systems 9,300 46,800	N401-Lockers/Fitness 9,400 C282-PPT Lockers 800 10,200		C210-Compliance Ver. 2,300 C230-Intel/Contraband 6,700 C240-POE/Etc. 500 C250-Investigations 1,200 C260-Support 1,400 C270-Special (excl. det.) 2,100 14,200	
Level 1	N214-Property/Evidence 15,900 N217-Central Booking 13,600 N233-Central Records 10,900 N402-Public Access 4,200 NRPS 2 District 14,400 59,000	N302-Community/MP 2,000 C282-PPT Classrooms 5,100 C311-Meeting 600 7,700		C130-CPC Processing 8,600 C153-Special (part) 2,700 C220-Queens W'house 2,900 C281-PPT Offices 1,000 15,200	
Level 0	N213-Forensic Garage 5,900 409-Police Garage 9,800 15,700				
Option 1 - Vertical circulation via Secure Zone for each organization					
Total UA - NRPS Block 140,200		Total UA - Common 26,500		Total UA - CBSA Block 45,300	
		NRPS 17,900			
		CBSA 8,600			
Total UA - All NRPS 158,100				Total UA - All CBSA 53,900	
				C270-Detention comp. 800	
				54,700	

Space savings achieved through co-location not included above - except part of C270 deducted (NRPS central booking used).

3.11-Project Delivery Options

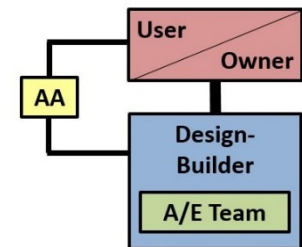
Design-Bid-Build

- Client retains architect, iterative design process
- Completed documents issued for Contractor bids



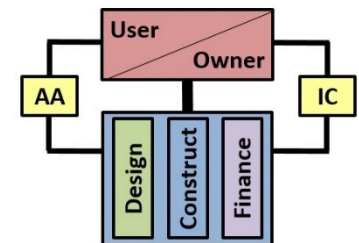
Design-Build

- Advocate Architect prepares Owner's Requirements (OSR)
- Design specifications for RFP to D-B teams
- Design-build teams present competitive proposals



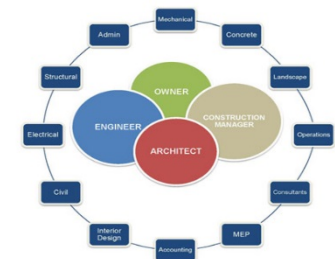
Design-Build-Finance (DBF) or Design-Build-Finance-Maintain (DBFM)

- Design Build team incentivized to factor in maintenance & operating costs to improve performance over time



Integrated Project Delivery

- Stakeholders work together in multi-party contract (owner, architect, engineers, constructor, subtrades)
- Shared risk & reward



3.12-Project Scheduling & Timelines

Phased implementation

- Central HQ seen as critical, no alternatives
- 1 District station St Catharines
- 2 District ultimately included in HQ project
- More logical to include administration with HQ

NRPS Master Plan - Facility Phasing per Minutes

Phase 1
2010 - 2012

Central HQ

- Central Records
- Communications & IT
- Property & Evidence
- Forensics
- Executive Command
- Investigations
- Central Booking
- Intelligence
- Potential Partners

Frees up 68 Church St.

(currently in leased space)

1 District Station
St. Catharines

Specialty Vehicle
Location TBD

(part of HQ?)

Upgrade 2 District
Niagara Falls

Phase 2
2016

Special Enforcem.
to Central HQ

Frees up Cushman Rd

Phase 3
2020

Admin/Business
to Central HQ

Frees up 110 James

Excluded from Scope

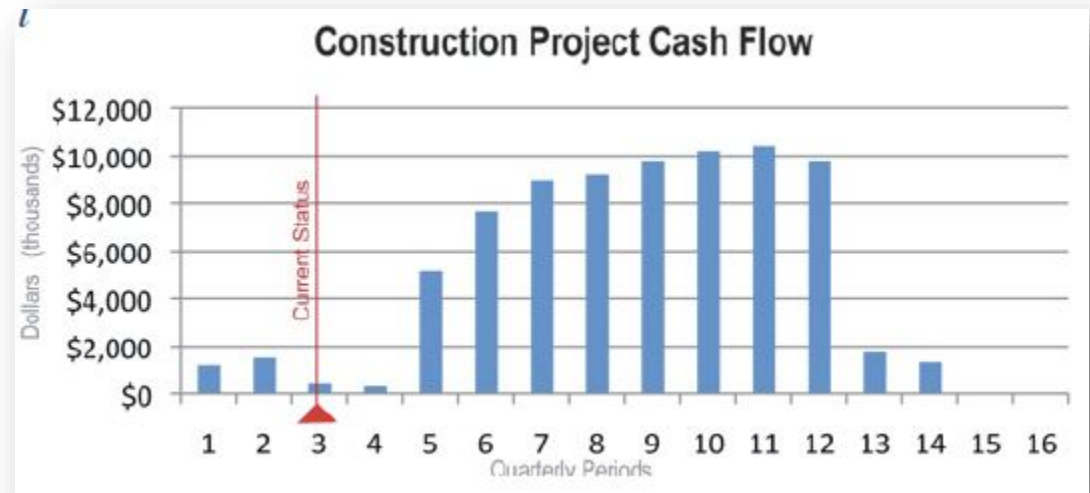
Fleet & Supply (remain at Thorold)
Training & Video (remain at Niagara College)

Welland Station remains

Currently Approved

Grimsby Station replacement under way
Fort Erie Station replacement approved

3.13-Project Scheduling & Timelines



3.14-Project Parameters & Risks

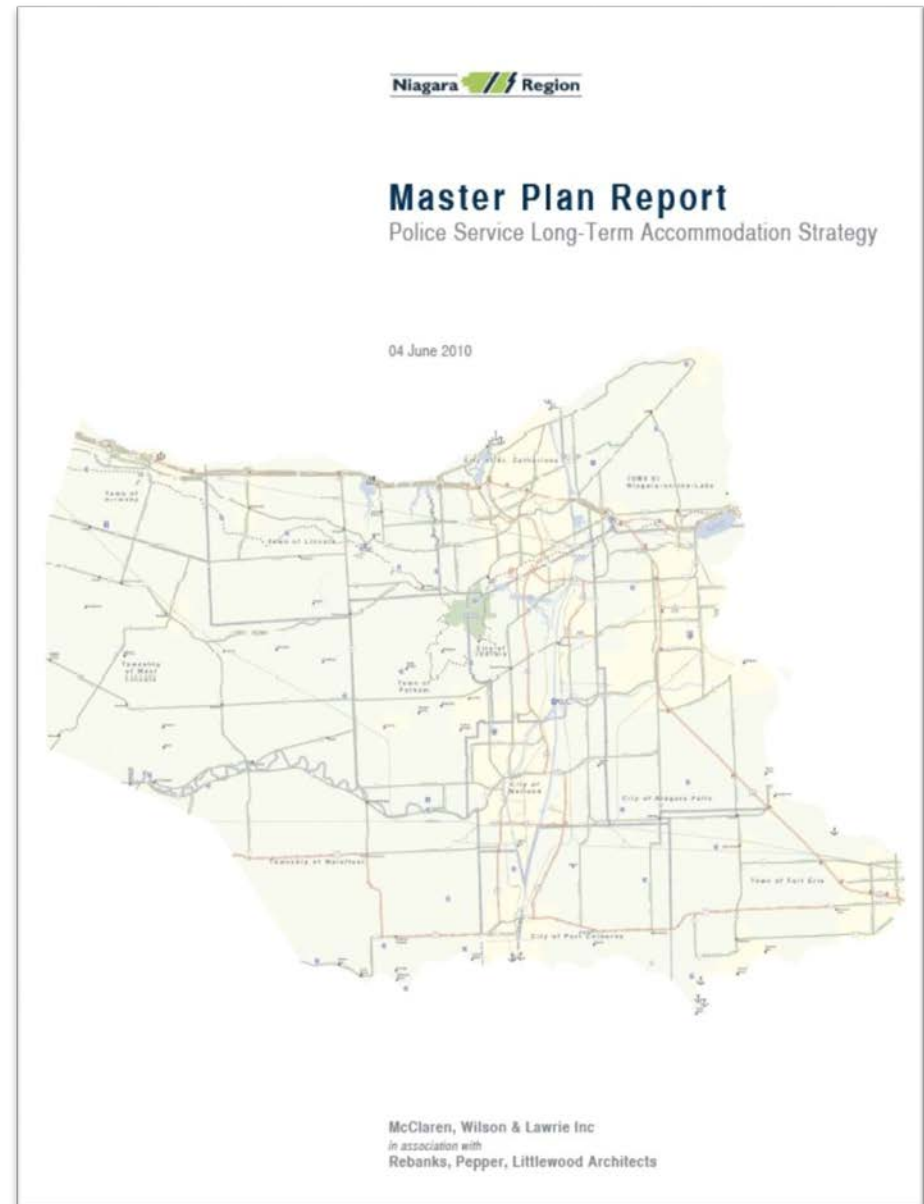
Project Budget

- Area reduced to 75%
- Construction budget reduced to 88%
- No escalation allowed, further reduction in buying power

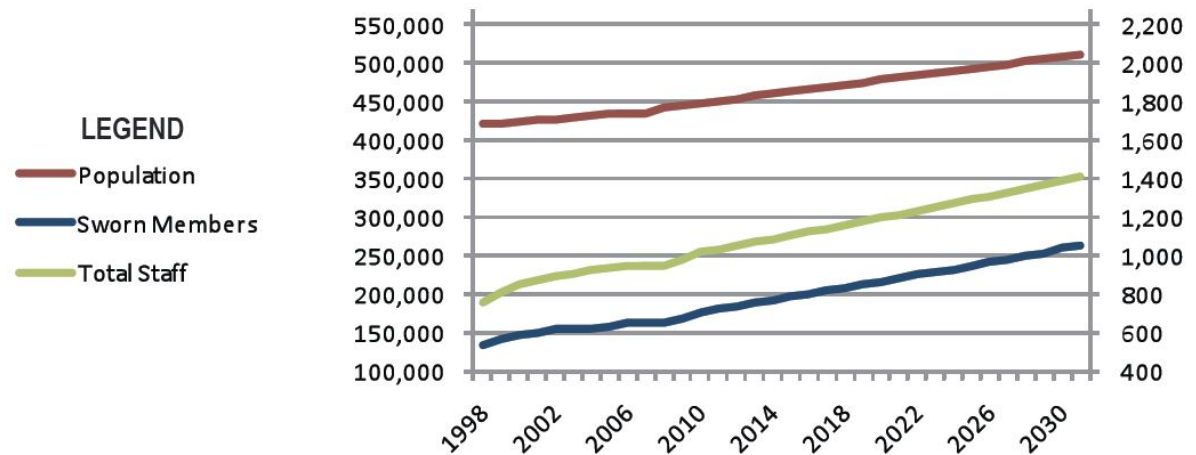
Budget / Scope Comparison				
Component	NRPS Estimate 13-Feb-2009	Minutes of Settlement September-09	Master Plan 3-Jun-2010	Master Plan 1-Mar-2011 1 Phase Senario
Building Area (point of beginning)	291,000 SF	291,000 SF		
Fleet		17,250 -		
Training		19,875 -		
Field & Patrol Services Command		2,750 -		
1 District		23,000 +		
Building Area / Budget Basis	291,000 SF	274,125 SF	258,000 SF	220,000 SF
Phase 1 - Construction Cost	\$72,800,000		\$55,404,445	\$63,970,000
Building Construction				\$59,960,000
Site Construction				\$4,010,000
Soft Cost	\$16,000,000		\$13,851,111	\$13,706,100
Phase 1 Cost	\$88,800,000	\$67,637,100	\$69,255,556	\$77,676,100
Phase 2 - Construction Cost			\$7,467,660	
Building Construction				
Site Construction				
Soft Cost			\$1,866,915	
Phase 2 Cost		\$4,006,400	\$9,334,575	
Phase 3 - Construction Cost			\$6,870,725	
Soft Cost			\$1,717,681	
Phase 3 Cost		\$8,332,600	\$8,588,406	
Building & Site Construction Cost	\$88,800,000	\$79,976,100	\$87,178,537	
Site Acquisition	\$3,100,000	\$3,100,000	\$2,150,000	
Site Acquisition, demolition, and cleanup				\$5,400,000
Master Plan Budget*	\$91,900,000	\$83,076,100	\$89,329,000	\$83,076,100

3.15-Masterplan Report 2010

- Executive Summary
- Planning for Growth (Staffing)
- Building & Parking Space
- Site Selection
- Concept Planning
- Costs
- Implementation Plan



3.16-Masterplan Report 2010



Projected Staff Growth vs. Projected Population Growth

	2021 (15 yrs)	2031 (25 yrs)
Region Population	484,000	511,000
Total NRPS Staff	1,215	1,418
HQ/District Space (est. in 2006)	291,000	340,000
Adjusted HQ/District Space (2010)	274,000	320,000
Recommended from Masterplan	258,000	276,000
Provided in Minutes of Settlement	220,000	n/a

3.17-Project Parameters & Risks

Project Parameters, Risks and Impact

- Budget Inadequacy & Funding Cap
 - *Impact on building program*
 - *Prioritization & choices, impact on future growth*
 - *Risk of project failure*
 - *Pressure on project team*





4-Moving Forward Again

Approval (maybe) and Design Team Selection

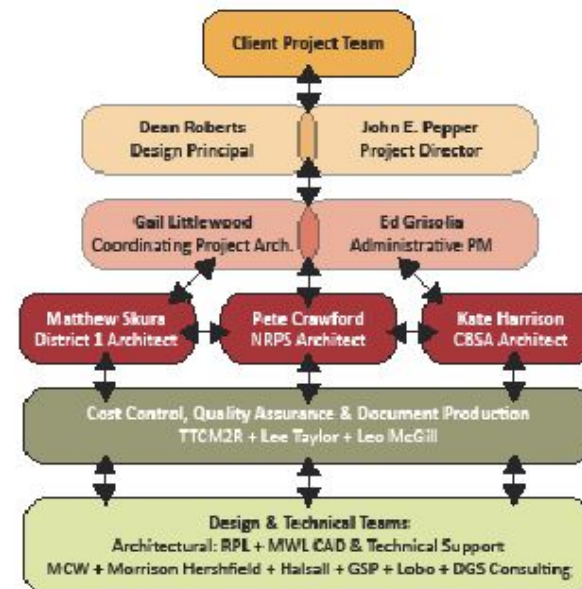
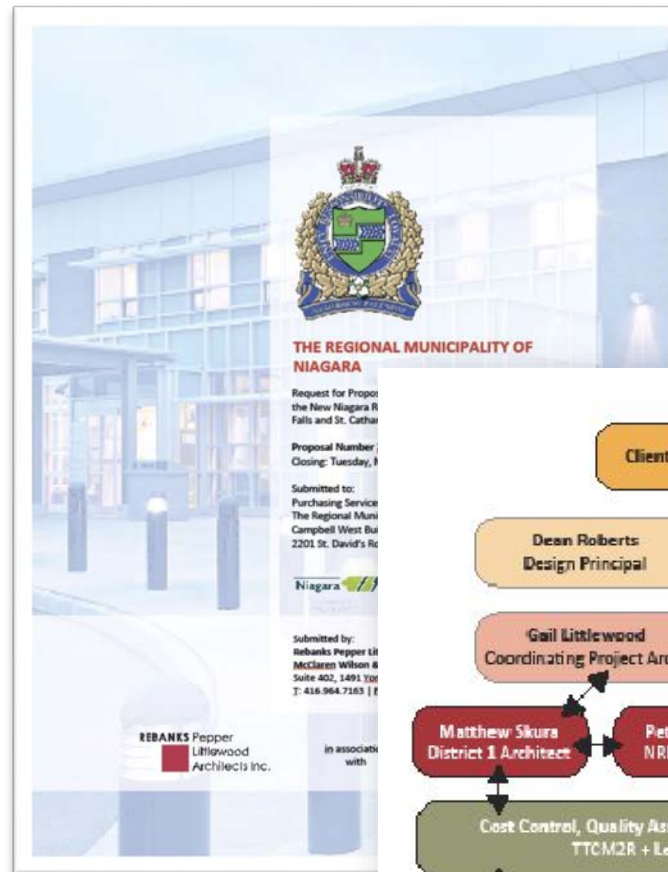


- Design Team Selection
- Precedents & Best Practices
- Design Objectives, Principles, Concepts
- Detailed Design
- Cost Control
- Tendering (Bidding)
- Regional Council Approval (budget cap)

4.1-Design Team Selection

A Logical Team

- Intimate project knowledge
- Unparalleled experience
- Approach & methodology
- CBSA potential partner
- Site had been purchased



1.5 – Team Organization

A project of this magnitude requires a robust and well-organized team structure. Clear lines of communication and defined responsibilities are essential, but the ability for individual team members to back up or fill in for other key team members is also important. Our team will be set up to facilitate effective creative input and involvement of key participants, both at internal design meetings and during user and stakeholder workshops and design reviews.

Rather than being seen as a duplication of effort, under the proper team structure members will participate actively in the process and will be familiar with both major and minor design decisions and project priorities.

4.2-Precedents & Best Practices

Precedents & Best Practice

- Processes & policies
- Technical
- Human factors
- Architectural expression & context



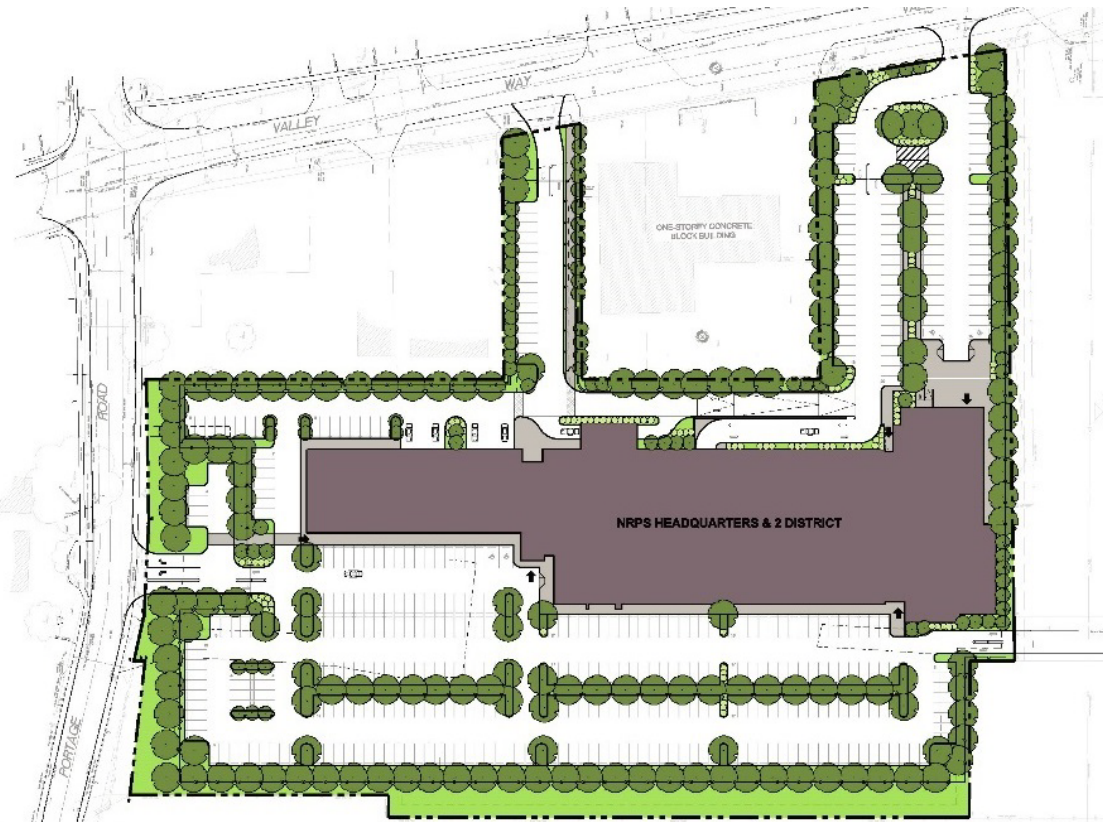
4.3-Design Collaboration



4.3-Design Objectives, Principles & Concepts

Primary Design Objectives & Challenges

- Positioning building on site
- Blocking & stacking in response to topography
- Main street corridor
- Three blocks (admin, support/operations & technical)
- Co-locating previously separate functions
- Integrating 2 District
- Cost-conscious solutions



Functional Planning- Parking

- Effective Site Zoning
- Effective and Efficient Site Area Utilization

The diagram illustrates a site layout with the following components:

- Valley Way** (top boundary)
- Portage Rd.** (left boundary)
- Stanley Avenue** (right boundary)
- Highway #420** (bottom boundary)
- Hydro Land** (adjacent area to the right)
- Stamford St.** (horizontal road below the main site)
- Overflow Staff Vehicles**: 120 Parking Spaces (top left)
- Centralized Functions**: 15 Spaces (top center)
- 2 District Access**: 53 Spaces (top right)
- Public Access**: 40 Spaces (top right)
- Accident Reporting** (top right)
- SCHEDULED PUBLIC ACCESS**: 5 SPACES (left side)
- PROVIDED GARAGE** (left side)
- SALLY PORT** (center left)
- FORENSIC GARAGE** (center left)
- CENTRALIZED FUNCTIONS** (center left)
- POLICE SPECIALTY FUNCTIONS** (center right)
- POLICE OPERATIONS** (center right)
- POLICE GARAGE** (center right)
- POLICE ADMINISTRATION** (center right)
- Staff Vehicles**: 239 Parking Spaces (bottom left)
- Police Fleet Vehicles**: 80 Parking Spaces, 40 Garage Spaces (bottom right)

- **Effective Site Zoning**
- **Effective and Efficient Site Area Utilization**

- Hydro Land

Stamford St.

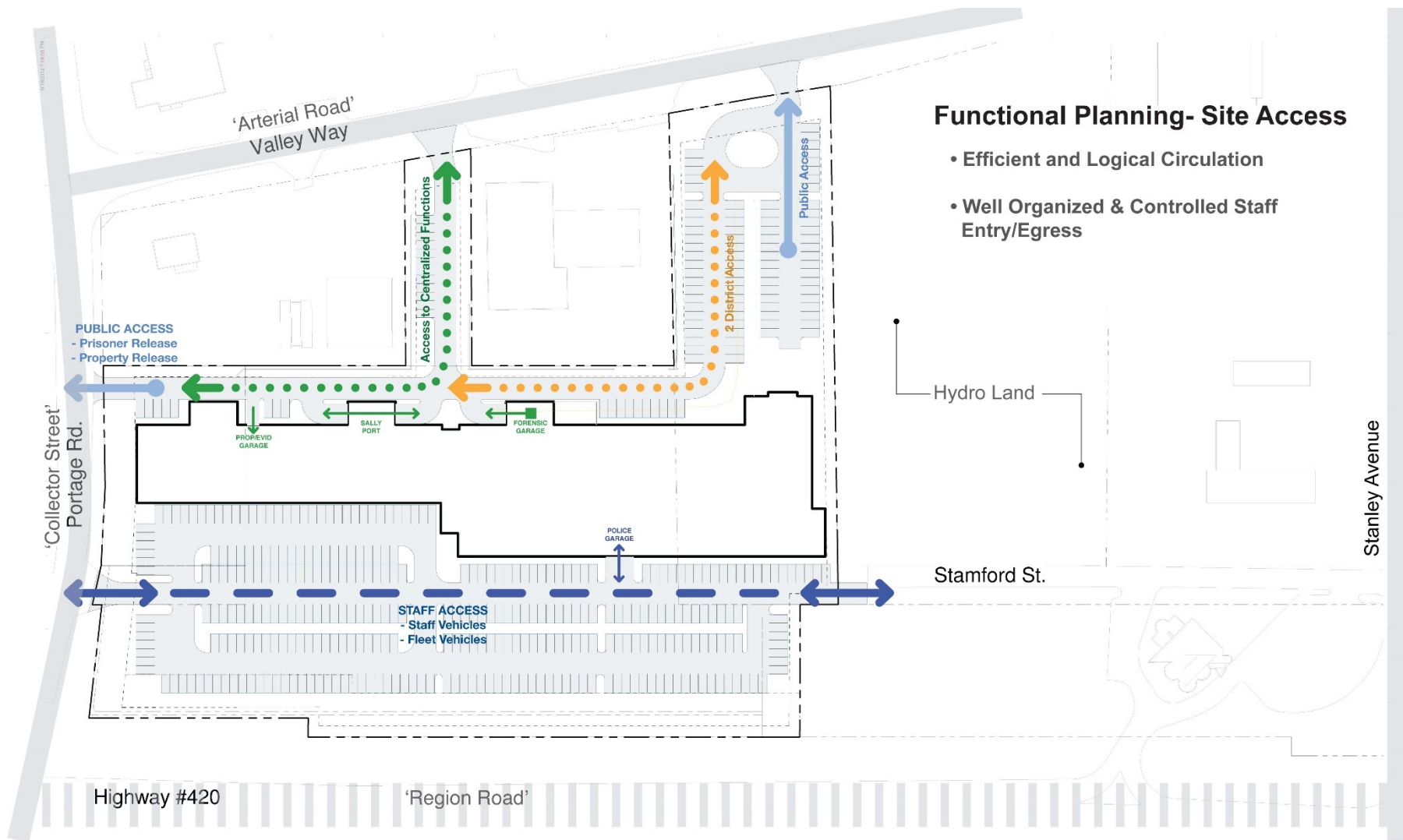
Stanley Avenue

Highway #420

Design Option A4.2

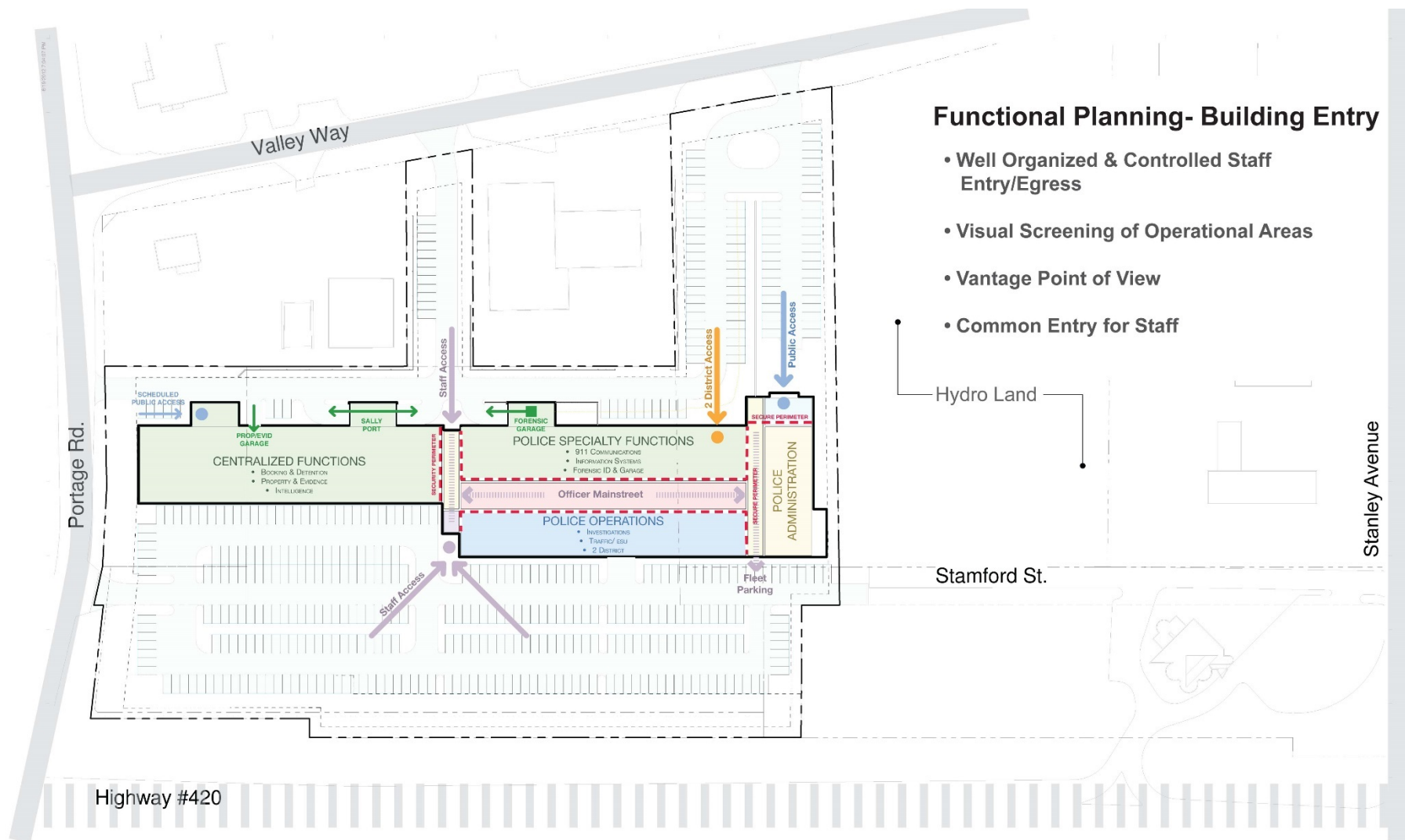
Niagara Regional Police Service Facilities
in Niagara Falls and St. Catharines, Ontario
Regional Municipality of Niagara

Operational Flow



Design Option A4.2

Functional Adjacencies



Functional Planning- Building Entry

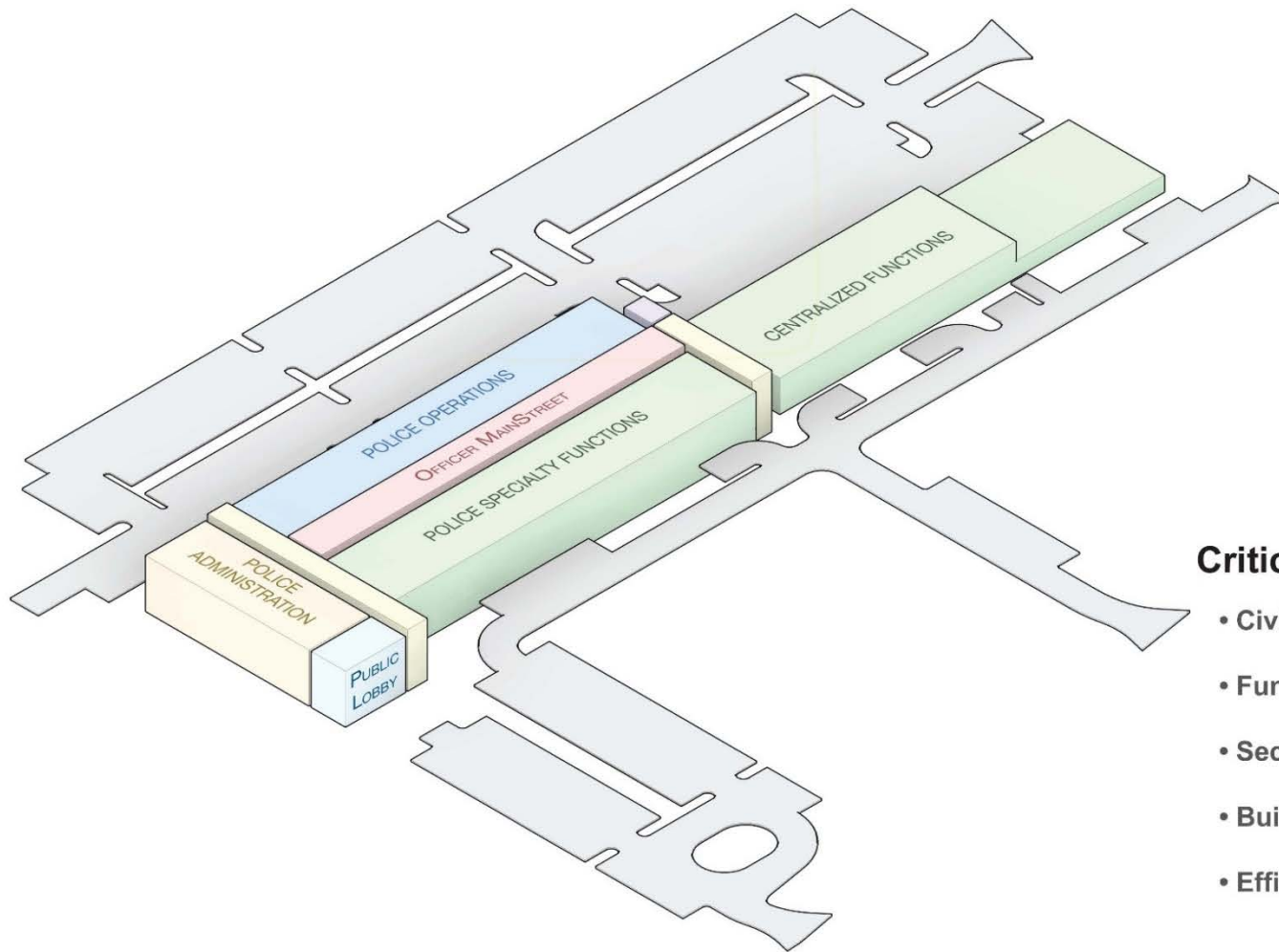
- Well Organized & Controlled Staff Entry/Egress
- Visual Screening of Operational Areas
- Vantage Point of View
- Common Entry for Staff



Design Option A4.2

Niagara Regional Police Service Facilities
in Niagara Falls and St. Catharines, Ontario
Regional Municipality of Niagara

Function and Site Inform Massing



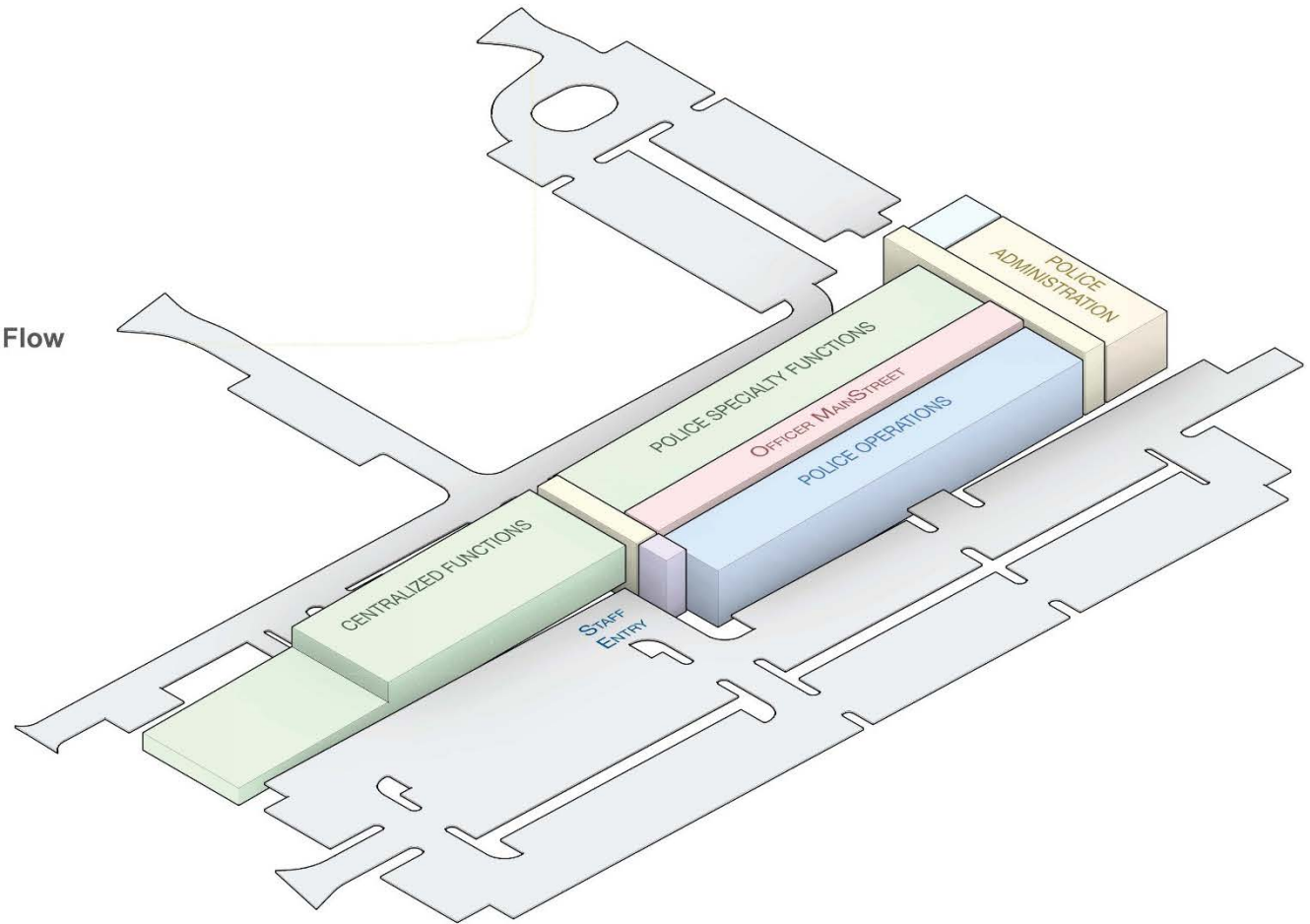
Critical Success Factors

- Civic Presence
- Functional Site Planning
- Security Planning
- Building Zoning
- Efficient Building Adjacencies & Flow

Site and Building Relationship

Critical Success Factors

- Civic Presence
- Functional Site Planning
- Security Planning
- Building Zoning
- Efficient Building Adjacencies & Flow



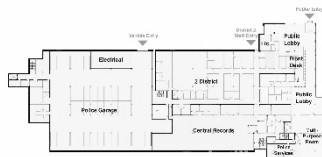
Effective Operational Flow



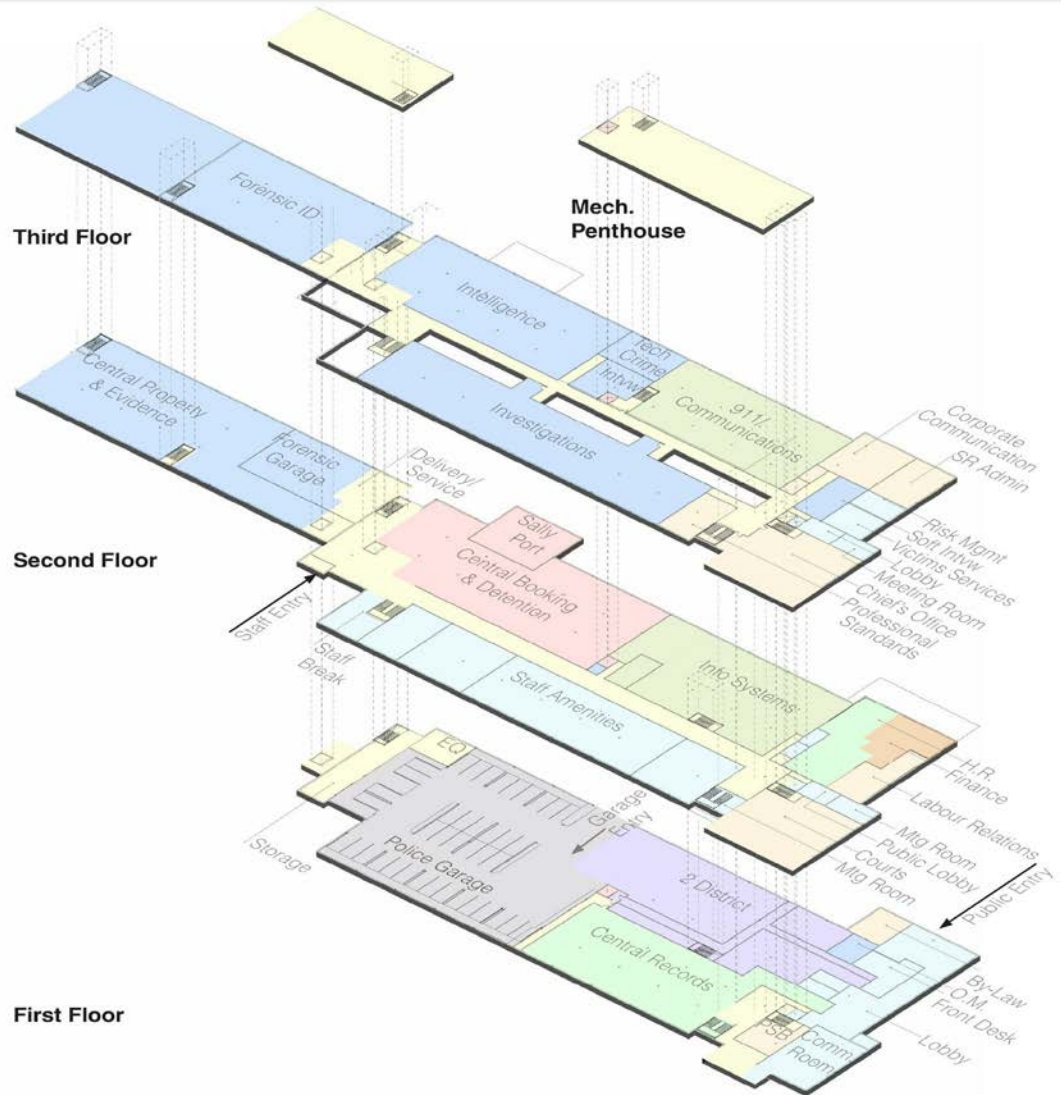
Third Floor



Second Floor



First Floor



Civic Values

Stability:

- Grounded- enduring
- Mass- substantial & solid
- Durable- long lasting

Transparency:

- Degrees of transparency

Multi-faceted:

- Many components/ One facility
- Complex expressed simply

Scale & proportion:

- Context: city, neighborhood, site
- Public expression
- Human interaction

Intuitive:

- Security / Safety



View of NRPS Headquarters/ 2District Facility from Hwy 420

Civic Values

Stability:

- Grounded- enduring
- Mass- substantial & solid
- Durable- long lasting

Transparency:

- Degrees of transparency

Multi-faceted:

- Many components/ One facility
- Complex expressed simply

Scale & proportion:

- Context: city, neighborhood, site
- Public expression
- Human interaction

Intuitive:

- Security / Safety



View of NRPS Headquarters/ 2District Facility from Hwy 420



Welcoming





4.4-Detailed Design

- Front desk & public lobby
- Central Booking
- Investigations
- Interview suites
- FIS labs
- 911 Communications & RTCC
- Daylighting*
- Circulation & employee interaction

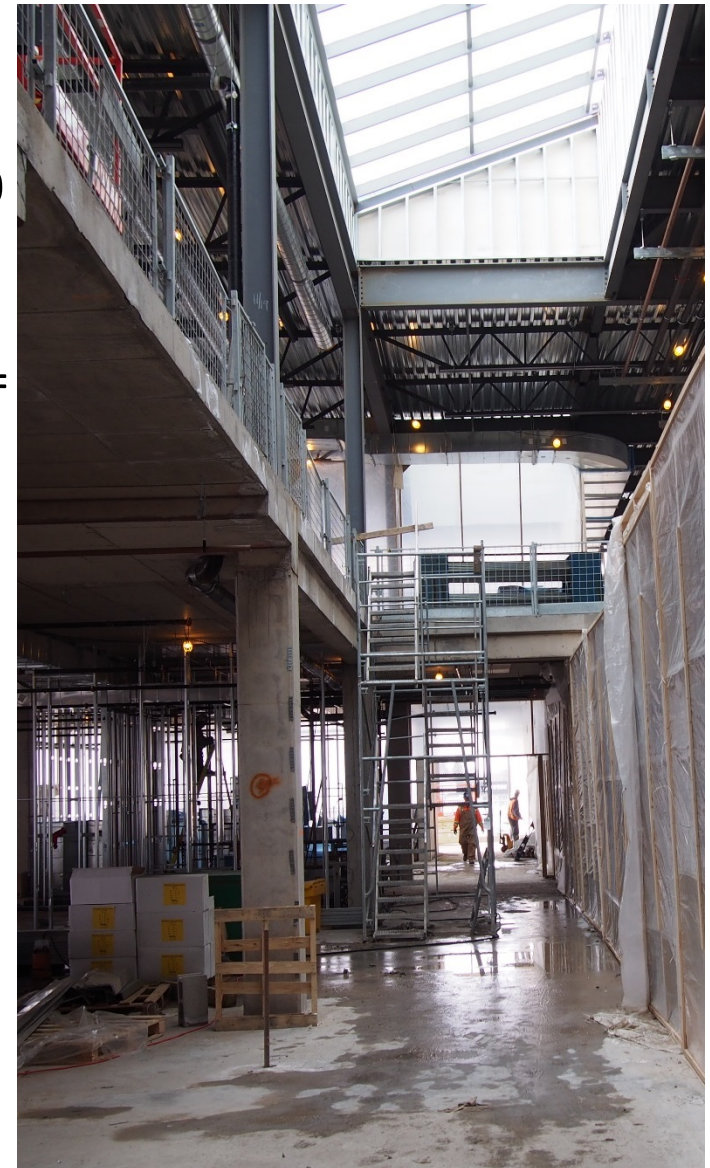


NORTH ELEVATION

4.5-Cost Control

Budget & Cost Control

- Project Budget for HQ/2D & 1D = \$83,076,100
- Project Budget for HQ/2D only = \$65,860,000
- Headquarters/2D Construction/FF&E Budget = \$54.5M
- Cost Estimate = \$57.1M (mid-point)
- Expected Low Bid = \$55-56M (10% spread)
- Risk of not getting Regional Council approval
- Aggressive cost control required throughout



4.6-1 District Station

The 1 District Problem

- Relocation from St. Catharines
- Site difficulties
- Put on hold
- Budget allocation

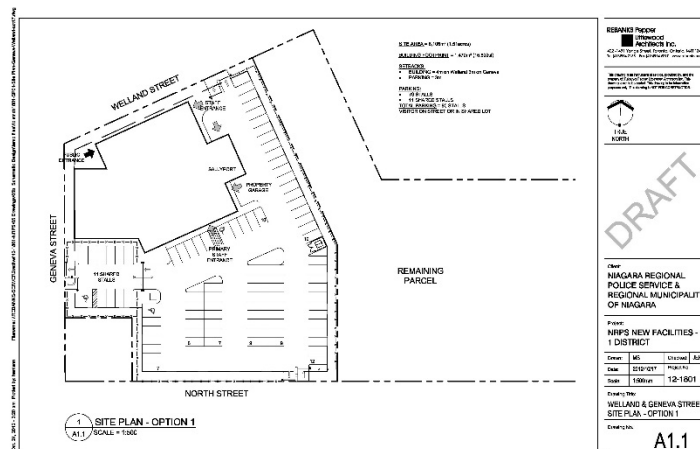
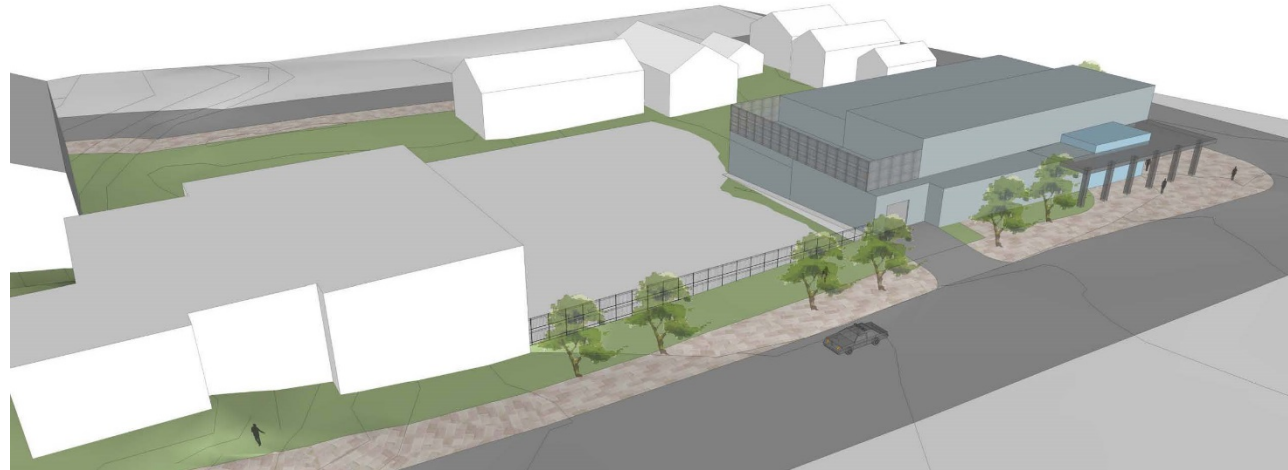
= political opposition



4.7-1 District Station

Location & Site Issues (2012)

- Difficulty accommodating program & parking
- Site issues, security, planning
- Alternate sites tested



4.8-Tendering (Bidding)

Tender Day

Anxiety

NRPS Bid Comparison

Sep 5, 2013

What we should expect:

2 above estimate

2 below estimate

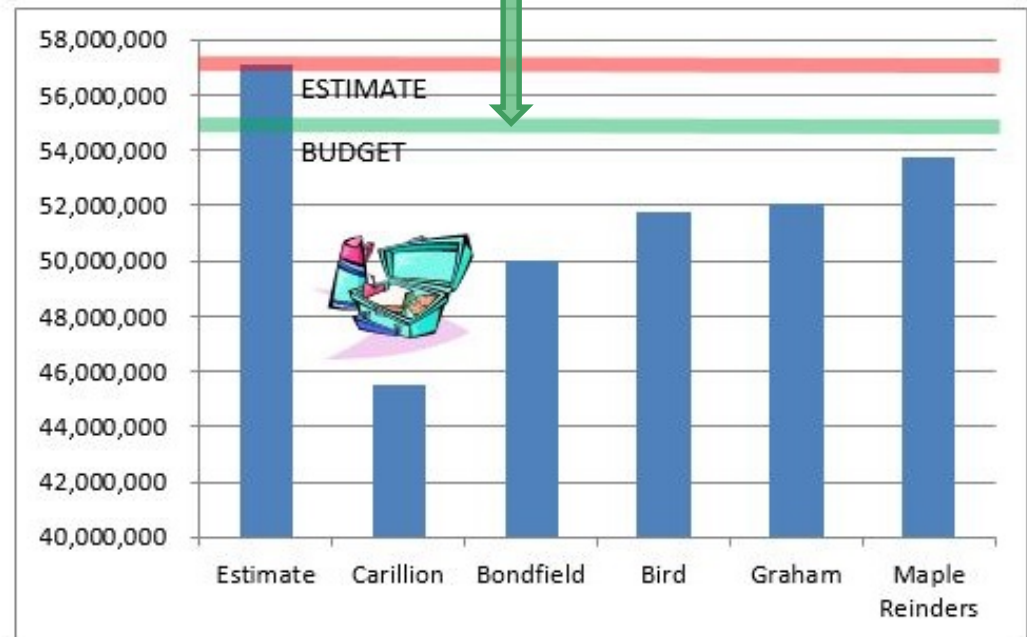
2 other high bids

Estimate	57,142,000	
Carillion	45,500,000	
Bondfield	50,026,000	4,526,000
Bird	51,750,000	6,250,000
Graham	52,080,000	6,580,000
Maple Reinders	53,775,000	8,275,000

18% spread

Fixed Project
\$83.0761M

HQ/2 District
Budget \$54.4M





5-Reaching the Destination

Finally – Under Construction!



2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016

Construction & Occupancy

- Construction starts
- Post-contract changes
- Challenges
- Data centre issues
- Construction delays
- Project close-out & commissioning
- Move-in



5.1-Mobilization & Construction Start



5.2-Post-Contract Changes

Add-back components & features

- Community room divider
- Fully-integrated cell security system
- Revisions to data centre HVAC system



5.3-Challenges

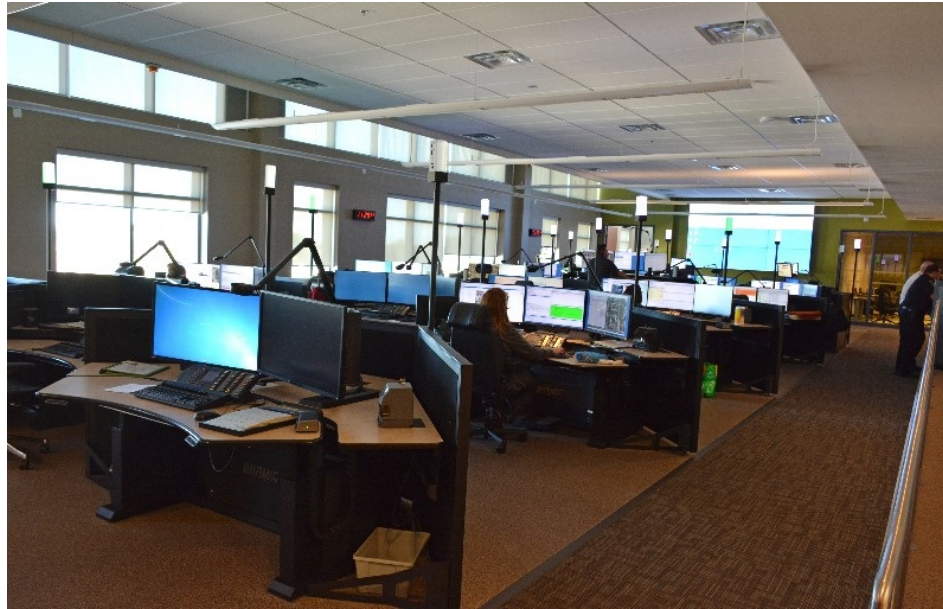
Impact of Contract Underpricing

- Aggressive Contractor shedding of obligations
- Subcontractor issues
- Difficult price control on extras
- Scheduling challenges



5.4-Furniture, Equipment & Move-in

**911 Comm
Centre
FIS Labs**



5.5-The Grand Opening

Move-In

- Tuesday,
September 20,
2016

Official Opening

- Wednesday,
November 16,
2016

NEWS LOCAL

\$65-million building replacing NRP's Niagara Falls detachment



By Ray Spiteri, Niagara Falls Review
Wednesday, September 14, 2016 6:48:30 EDT PM



Niagara Regional Police Deputy Chief Joe Matthews outside the new headquarters in Niagara Falls. The new building off Valley Way in Niagara Falls will officially open Tuesday. MIKE DiBATTISTA/Niagara Falls Review

5.6-Post-Occupancy

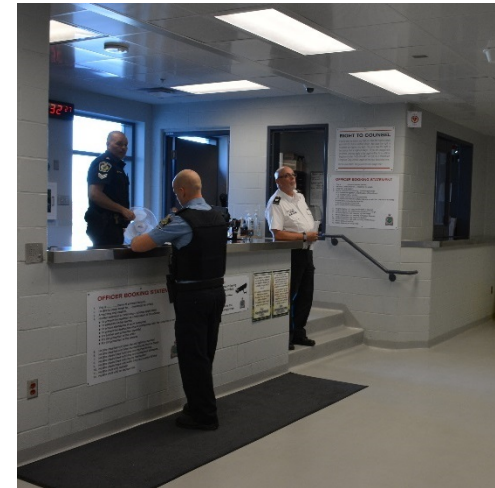




5.7-NRPS Now Setting Precedents

NRPS Precedents & Best Practice

- Central Booking & cell design
- FIS hub lab
- Property & evidence
- Exemplary daylighting solutions
- Furniture & workstation solutions







Wrap-Up

Questions & Answers

What we're hoping for....



Willing to accept

Knowledge, to be

Receptive, to what other

Projects have gone through

Here,

in Cincinnati



Wrap-Up

Questions & Answers

W

K

R

P

in Cincinnati



Wrap-Up

Questions & Answers

Questions?

- Consultant team
- Police/client perspective

