

**PUBLIC WORKS DEPARTMENT
MEMORANDUM #2014 – 29**

DATE: June 2, 2014
TO: Honorable Mayor Joyce Downing and City Council Members
FROM: John Pick, City Manager
Jim May, Chief of Police
David Willett, Director of Public Works
SUBJECT: Council Study Session
Police Facility – Spatial Needs Assessment

BACKGROUND

On February 10, 2014 the consultant team comprised of Architects Design Group (ADG), Inc and Short Elliot Hendrickson (SEH), Inc was awarded the Police Facility Needs Assessment project. Their scope of work (SOW) identified three focus categories:

1. Evaluation/analysis of existing space identifying both physical and operations issues of space quality, layout and detail.
2. Identify areas that do not meet current appropriate recommendations for law enforcement design or current life-safety codes.
3. Perform a special needs assessment/architectural program for the Police Department and Municipal Court that considers current and future needs/desires, and anticipated life cycle for both a one-story and two-story floor plan options.

Upon receiving “notice to proceed” ADG/SEH began their preliminary research and established dates to perform the building space assessment. During the week of February 24th ADG/SEH conducted personal interviews with many Police Department and Municipal Court staff members. The basis of the information shown in the Program/Spatial Needs Assessment (Executive Summary) was a result of this effort.

On April 29th ADG/SEH met with several Council Members individually to discuss preliminary results of the assessment. The discussions focused around the current operating space versus the optimum operating space for both the Police Department and the Municipal Court. In addition, concept level site planning was also discussed in context with potential building layout.

PROGRAM SUMMARY

The Program/Spatial Needs Assessment basically models staff and function versus work area, over time. The work functions are arranged to achieve systematic and efficient work flow. The product generates adjacency diagrams; the geneses of the building area floor plans.

The ADG/SEH team was first tasked to examine growth needs over a twenty year period. Space requirements were then assigned to three time intervals over the total study period as follows: 2014, 2029, and 2044. Respectively, the floor area yield needed to provide optimum service delivery at each interval was determined to be 43,163 sq. ft., 44,364 sq. ft., and 44,454 sq. ft. The first floor of City Hall houses the Police Department, Records, and Municipal Court. By contrast, the current area available to provide services equates to only about 18,000 square feet.

Because of the City’s landlocked situation, the Denver Regional Council of Governments (DRCOG) projects minimal population growth through the 20-year study period. Therefore, ADG/SEH proposes to use the space requirements identified in year-2044 as guidance with a small contingency for regulatory changes that may require an additional staff and/or the implementation of specialized equipment.

June 2, 2014

Council Study Session – Police Facility Needs Assessment Project

Upon determination of the building space requirement, staff was then able to provide ADG/SEH with three City-owned building sites that met or exceeded the lot size needed to accommodate the police and court operations. Of the three, two sites were selected as most suitable: 1) Tower Site, and 2) Civic Center Campus Site.

BUILDING SITES

cursory examinations were conducted on three potential building sites to include: acreage (area), visibility and centralized location, utility connections, and ingress/egress for police operations. The vacant city-owned site to the east of the Promenade project was eliminated because of the limited access – one way in and one-way out. The Tower and the Civic Center Campus sites were analyzed further with respect to potential building configuration and site positioning, and over site concept level master planning.

In order to maximize future development opportunity on the two sites, the ADG/SEH team was given guidance and instructed to prepare conceptual site master plans that would showcase the current building project within a conceptual planned unit development (potential PUD package).

By examining each site holistically, the development engineering/design economies of scale could be better understood as well as the potential for construction/building phasing opportunities.

POLICE/COURTS BUILDING AND SITE DEVELOPMENT COSTS

Option A – Civic Center Campus Master Plan

Building and Site Development (hard cost)	\$11,440,000
Professional Fees, FF&E, Specialized Technology (soft cost)	\$3,944,600
Contingency (10%)	\$1,538,460
Total Development and Project Cost	\$16,923,060

Option B – Tower Site Master Plan

Building and Site Development (hard cost)	\$11,220,000
Professional Fees, FF&E, Specialized Technology (soft cost)	\$3,768,600
Contingency (10%)	\$1,498,860
Total Development and Project Cost	\$16,487,460

See attachments for additional information.

PROJECT DESIGN SCHEDULE

Should Council decide to move forward with the procurement of an Architecture/Engineering (AE) firm to master plan either of the proposed sites, and to design the Police Department/Municipal Court building, the following schedule is provided as an approximate reference to what the overall process or timing might look like.

1. Solicitation/Request for Qualifications Process - A/E Consulting Team, qualification based selection: **(3 months)**.
Select Architecture/Engineering firm who specializes in this type of facility planning and design.
2. Contract Review/Fee Negotiation: **(2 months)**. Develop a detailed scope of services, negotiate fee, legal review.
3. Schematic Design Phase: **(2 months)**. This design phase will provide the basic layouts for all floor plans identifying the adjacencies and circulation patterns throughout the complex. Initial elevations will also be developed to provide insight into the complex’s appearance. The site design and Civil Engineering permit packages will begin to develop the necessary documents for the local regulatory agencies.
4. Solicitation/RFQ Process - Construction Manager at Risk (CMAR), qualification based selection: **(2 months)**. Schematic design included in procurement package.
5. Contract Review / Fee Negotiation: **(2 months)**. Scope of services to participate through design development and construction drawings, negotiate fee, legal review. Note – Final fee negotiated (possibly GMP) based on construction documents.

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6. Design Development Phase: **(3 months)**. During the beginning of this phase, the civil engineering for the site will be accomplished and the site development package will be submitted to the City to obtain site permitting.
7. Construction Documents Phase: **(6 months)**. A/E firm produces, with input from contractor, construction documents for the start of construction. Negotiate final fee, not to exceed, with CMAR.
8. Project Permitting: **(1 month)**. Submit the completed design documents to the Building Department.
9. Construction of the Facility: **(12 months)**. This period of time will be coordinated by the CM as there will be numerous subcontractors working on the complex. Coordination will be ongoing during this whole period between the CM's team, the design team, and the City.
10. Building Commissioning: **(1 month)**. This is the period of time it will take to get the complex's systems (data, telephone, security, furnishings, etc.) up and running, and for the issuance of the final Certificate of Occupancy.

TOTAL SCHEDULE – PLANNING THRU COMMISSIONING = 34 MONTHS

BUDGET/TIME IMPLICATIONS

Pending direction from Council, the first phase of the project would begin by contracting with an A&E firm to master plan the selected site and begin the design process for the police/court building and specialized equipment. The early costs are expected to be around \$1.4M to \$1.6M.

The project will require a significant amount of staff time.

STAFF REFERENCE

Jim May, Chief of Police

David H. Willett, MBA, PE, Director of Public Works

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dwillett@northglenn.org or 303.450.8783

ATTACHMENTS:

- o Total Development Cost Estimates – Option A Civic Center Campus Site, Option B Tower Site
- o ADG/SEH Power Point Presentation

POLICE AND MUNICIPAL COURT DEVELOPMENT COST ESTIMATE

Option "A" - Civic Center Campus Site

This option would construct the new facility on the City's existing site, with options for future expansion

<u>Project "Hard Costs"</u>	<u>\$/sq. ft.</u>	<u>Estimate</u>
Building Construction Cost @ 44,000 total SF (Building core & shell, MEP systems, and architectural finishes) <i>RSMMeans 2014 National Average = \$223, w/5% inflation for 2015 = 235</i>	\$235	\$10,340,000
Site Development Costs @ 10 acres (Earthwork, utilities, pavement, landscaping, and accessory structures)	\$25	\$1,100,000
Sub Total (hard cost)	\$260.00	\$11,440,000
<u>Project "Soft Costs"</u>	<u>\$/sq. ft.</u>	<u>Estimate</u>
PUD Development (site planning fees)	15% <i>of Site Development</i>	\$165,000
Professional Design Services (architect/engineering fees)	10% <i>of Bldg Construction</i>	\$1,034,000
Specialty Consultant (equip/tech fees)	4% <i>of Bldg Construction</i>	\$413,600
Testing & Inspection Fees	2% <i>combined</i>	\$228,800
Permitting Fees	3% <i>combined</i>	\$343,200
FF&E Allowance (Furnishings, fixtures, and equipment)	\$15	\$660,000
Specialized technology/equip. allowance	\$25	\$1,100,000
Sub Total (soft cost)	34.5%	\$3,944,600
Contingency	10%	\$1,538,460
Total Project Costs	\$385	\$16,923,060

POLICE AND MUNICIPAL COURT DEVELOPMENT COST ESTIMATE

Option "B" - Tower Site

This option would construct the new facility on the City's new site

<u>Project "Hard Costs"</u>	<u>\$/sq. ft.</u>	<u>Estimate</u>
Building Construction Cost @ 44,000 total SF (Building core & shell, MEP systems, and architectural finishes) <i>RSMMeans 2014 National Average = \$223, w/5% inflation for 2015 = 235</i>	\$235	\$10,340,000
Site Development Costs @ 6 acres (Earthwork, utilities, pavement, landscaping, and accessory structures)	\$20	\$880,000
Sub Total (hard cost)	\$255.00	\$11,220,000
<u>Project "Soft Costs"</u>	<u>\$/sq. ft.</u>	<u>Estimate</u>
PUD Development (site planning fees)	15% <i>of Site Development</i>	\$132,000
Professional Design Services (architect/engineering fees)	10% <i>of Bldg Construction</i>	\$1,034,000
Specialty Consultant (equip/tech fees)	4% <i>of Bldg Construction</i>	\$413,600
Testing & Inspection Fees	2% <i>combined</i>	\$224,400
Permitting Fees	3% <i>combined</i>	\$336,600
FF&E Allowance (Furnishings, fixtures, and equipment)	\$15	\$660,000
Specialized technology/equip. allowance	\$25	\$1,100,000
Sub Total (soft cost)	34.8%	\$3,900,600
Contingency	10%	\$1,512,060
Total Project Costs	\$378	\$16,632,660

Architects Design Group

in association with:

Short Elliott Hendrickson, Inc.

Denver, Colorado

2013-33

Request for Proposal

Police Facility Needs Assessment



Northglenn, Colorado

Northglenn Police and Municipal Courts Complex

Background & Program Summary



Circa 1976

Northglenn Police and Municipal Courts Complex

Potential Building Sites



Circa 1981

Northglenn Police and Municipal Courts Complex

Scope of Services – Project Approach

1. Spatial Needs Assessment
2. Existing Facility Evaluation
3. Existing Facility Operational Assessment
4. Site and Facility Security Considerations
5. Development Options
6. Discussion

Northglenn Police and Municipal Courts Complex

Year 2014

43,163 SF

Year 2029

44,364 SF

Year 2044

44,454 SF

Police = 32,085

Courts = 9,114

Shared Space = 3,255

+/- 72% of GSF

+/- 20% of GSF

+/- 8% of GSF

Existing = 13,000+

Existing = 5,000+

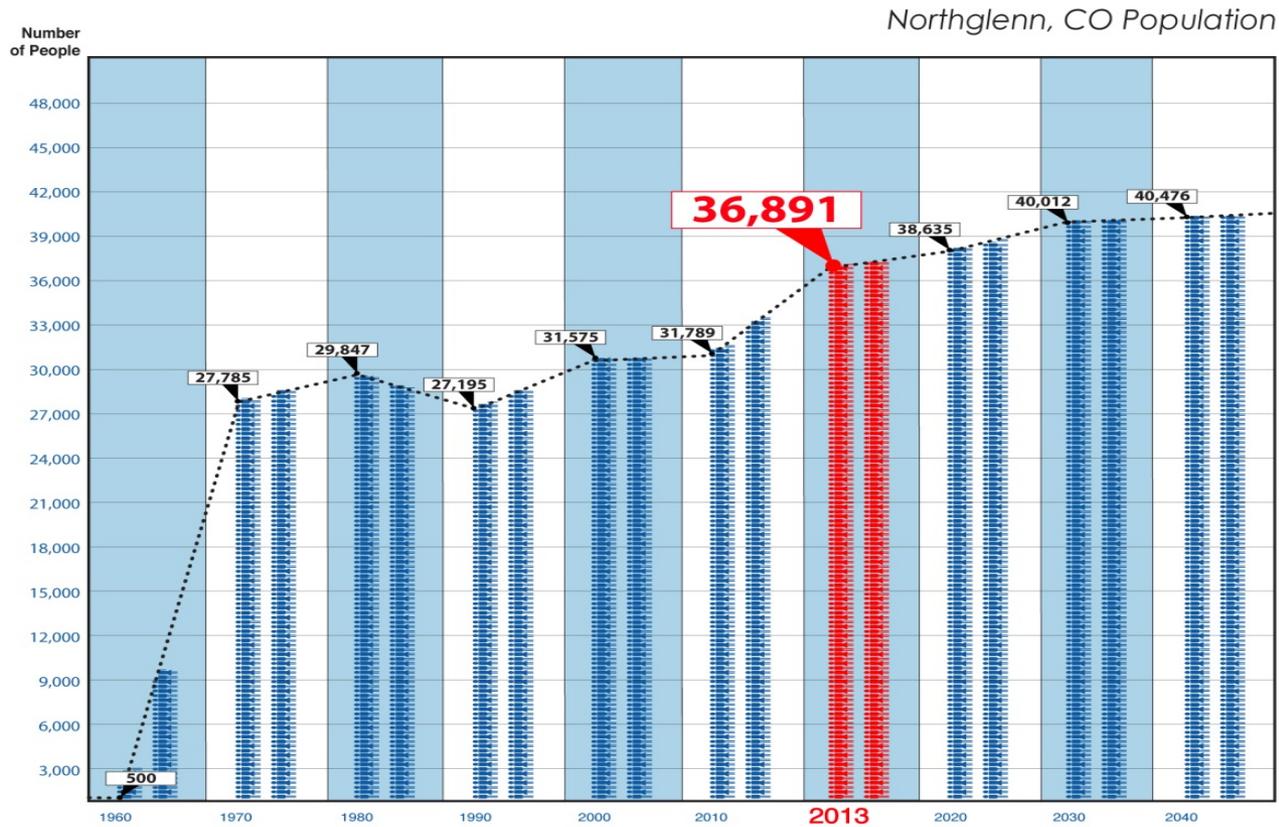
The difference is only 1,291 SF between Year 2014 and Year 2044.

Recommendation - Plan For The Future!

Approach to the Project

Planning for the Future

Population Growth – Northglenn



Source:
US Census Bureau

Northglenn Police and Municipal Courts Complex

Specialized Areas of a Law Enforcement Facility



***Ballistic-Rated
Records Counter***



***Evidence
Preparation***



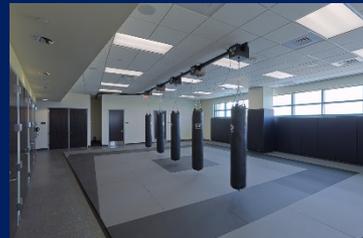
Evidence Lockers



***Evidence Chemical
Processing Labs***



***Physical Agility
Training Room***



***Defensive Tactics
Training Room***



***Weapons Storage
& Cleaning***



***Secured Vehicle
Sally Port***



***Interview Room with
Acoustical Recording***



***Interview
Observation Room***



***Tactical Vehicle
Storage***



***Booking & Intake
of Detainees***

Northglenn Police and Municipal Courts Complex

Existing Facility Code-Related Issues Include:



There are numerous locations of non-ADA Compliant conditions throughout the building including the hallways, restrooms, working areas, etc. The ADA, Americans with Disabilities Act, is a Federal Law, not a Building Code.

The Building Systems are failing and in need of replacement throughout the facility.

Northglenn Police and Municipal Courts Complex

Existing PD Facility-Related Operational Issues Include:



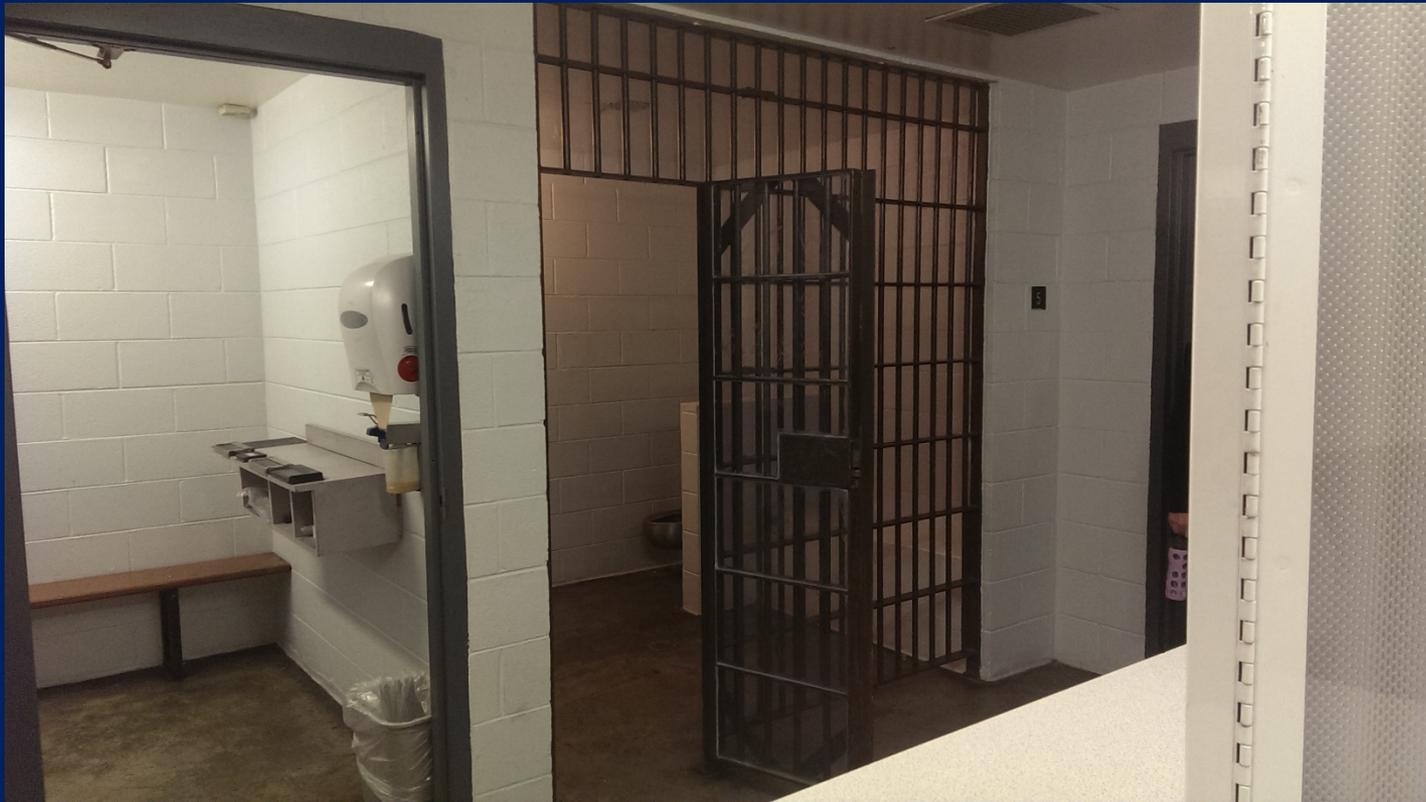
Evidence Processing Laboratory

This chemical processing laboratory is required to have specialized exhaust systems that protect the individuals working in this area from the potentially harmful airborne pathogens inherent with evidence, as well as the chemicals used in the process.

This area should also be 100% exhausted to ensure that none of the air from within these areas ever recirculates throughout the building's HVAC system. Current systems design does not allow for this.

Northglenn Police and Municipal Courts Complex

Existing PD Facility-Related Operational Issues Include:



Booking & Intake:

Department of Corrections, CALEA Accreditation Protocols:

The Booking and Intake Holding Facilities do not comply with the Department of Corrections requirement of Sight & Sound Separation of Adult Males, Females and Juveniles.

Northglenn Police and Municipal Courts Complex

Existing PD Facility-Related Operational Issues Include:



Vehicle Sally Port

Department of Corrections, CALEA Accreditation Protocols:

The Vehicle Sally Port, the primary entry point for bringing detainees into the facility should be clear of all objects that could be used as a weapon against the officers of NPD.

Northglenn Police and Municipal Courts Complex

Site Selection Considerations:

1. Appropriate Surrounding Land Use
2. Proximity to City and County Functions
3. Site Size/Ease of Expansion
4. Zoning Use
5. Site Development Considerations
6. Access: Vehicular / Pedestrian / Public Transportation
7. Impact on Redevelopment
8. Proximity to Potential Hazards
9. Ease of Acquisition
10. Adequacy of Infrastructure

Northglenn Police and Municipal Courts Complex

Recommended Sustainable Design Strategies:

- 1. Identify Design Solutions that can Reduce Long-Term Operational and Maintenance Costs.**
- 2. Evaluate Sustainable Design Opportunities that have Less Than a 7-Year Payback.**
- 3. Utilize a Benefit Cost Analysis (BCA) to Determine the Most Appropriate Concepts to Implement Using Confirmed Data.**
- 4. The Industry Standard is that the City will spend 10-15 Cents on the Dollar designing and building a new Facility, and 85-90 Cents on the Dollar Operating and Maintaining it over its lifespan.**

Northglenn Police and Municipal Courts Complex

Recommended Sustainable Design Considerations:

Inclusion of LED Lighting Fixtures in Parking and High- Use Areas

Low Impact Site Development Strategies

Bioswales & Regional Landscape Selection

Implement Daylight Harvesting

Solar Shading with Fixed Louvers

High-Efficiency HVAC Chiller Systems

High-Efficiency Light Fixtures with Occupancy/Light Sensors

High-Efficiency Reflective Roofing System

Regional Building Material Selections

Specification of High-Recycled Content Materials

Northglenn Police and Municipal Courts Complex

Site Candidate "A": Water Tower Site Aerial



NORTHGLENN POLICE AND MUNICIPAL COURTS COMPLEX - NORTHGLENN, COLORADO
ARCHITECTS DESIGN GROUP IN ASSOCIATION WITH SEH INC.

SITE OPTION A
SITE PLAN
JUNE 2, 2014

Northglenn Police and Municipal Courts Complex

Site Option "A": Water Tower Site – Phase I



PHASE 1

NORTHGLENN POLICE DEPARTMENT AND MUNICIPAL COURTS - NORTHGLENN, COLORADO
ARCHITECTS DESIGN GROUP IN ASSOCIATION WITH SEH INC.

SITE OPTION A

SITE PLAN
JUNE 2, 2014

Northglenn Police and Municipal Courts Complex

Site Option "A": Water Tower Site – Phase II



PHASE 2

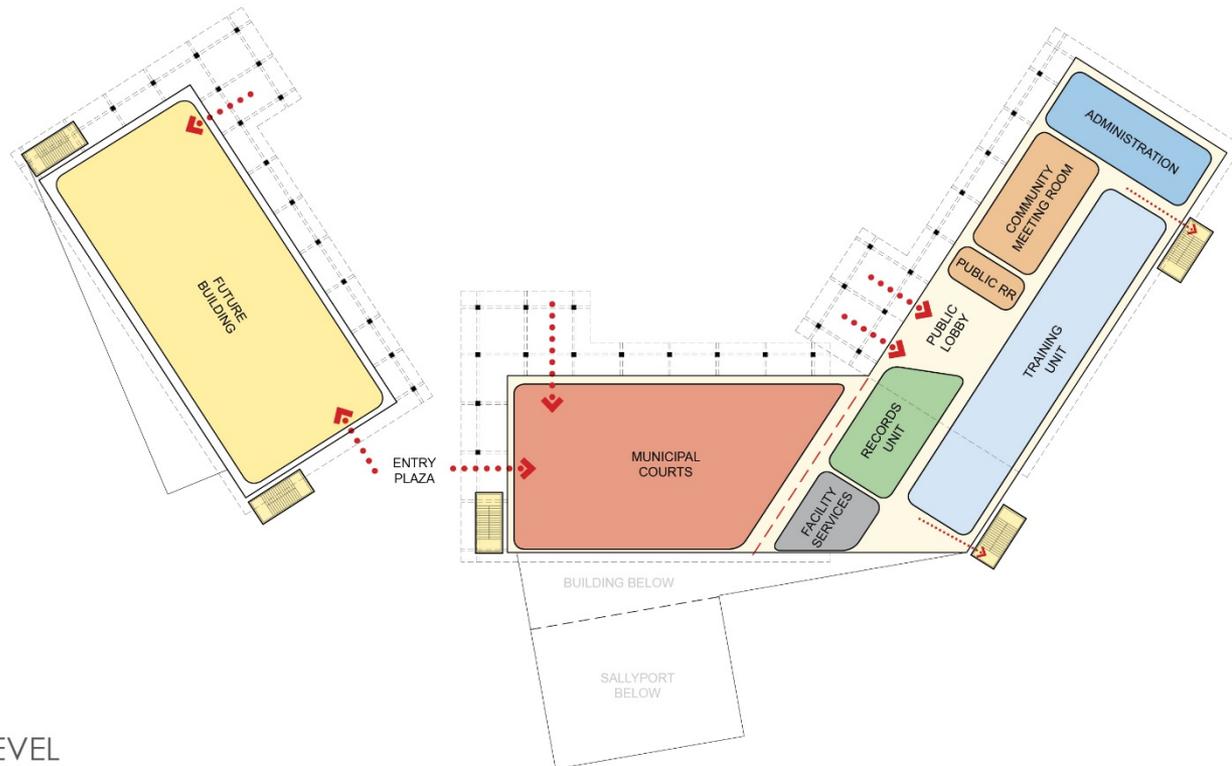
NORTHGLENN POLICE DEPARTMENT AND MUNICIPAL COURTS - NORTHGLENN, COLORADO
ARCHITECTS DESIGN GROUP IN ASSOCIATION WITH SEH INC.

SITE OPTION A

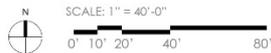
SITE PLAN
JUNE 2, 2014

Northglenn Police and Municipal Courts Complex

Site Option "A": Water Tower Site – Phase I



UPPER LEVEL



PHASE 2

NORTHGLENN POLICE DEPARTMENT AND MUNICIPAL COURTS - NORTHGLENN, COLORADO

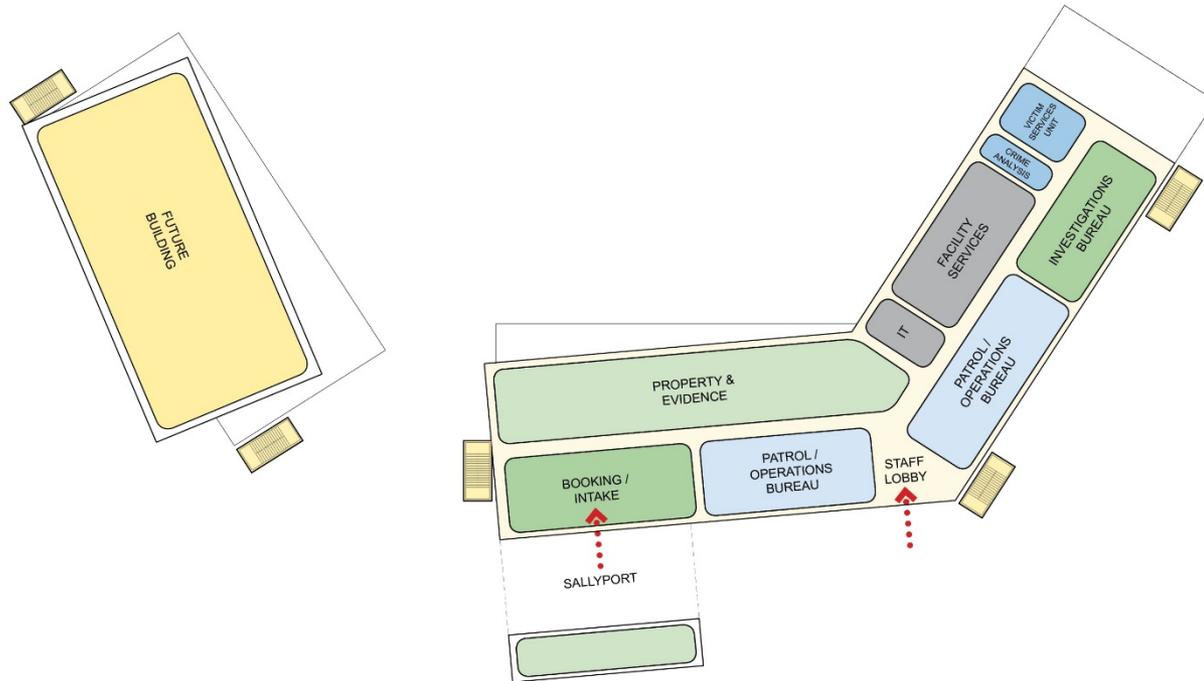
ARCHITECTS DESIGN GROUP IN ASSOCIATION WITH SEH INC.

SITE OPTION A
ADJACENCY DIAGRAM

JUNE 2, 2014

Northglenn Police and Municipal Courts Complex

Site Option "A": Water Tower Site – Phase I



LOWER LEVEL



SCALE: 1" = 40'-0"

0' 10' 20' 40' 80'

PHASE 2

NORTHGLENN POLICE DEPARTMENT AND MUNICIPAL COURTS - NORTHGLENN, COLORADO

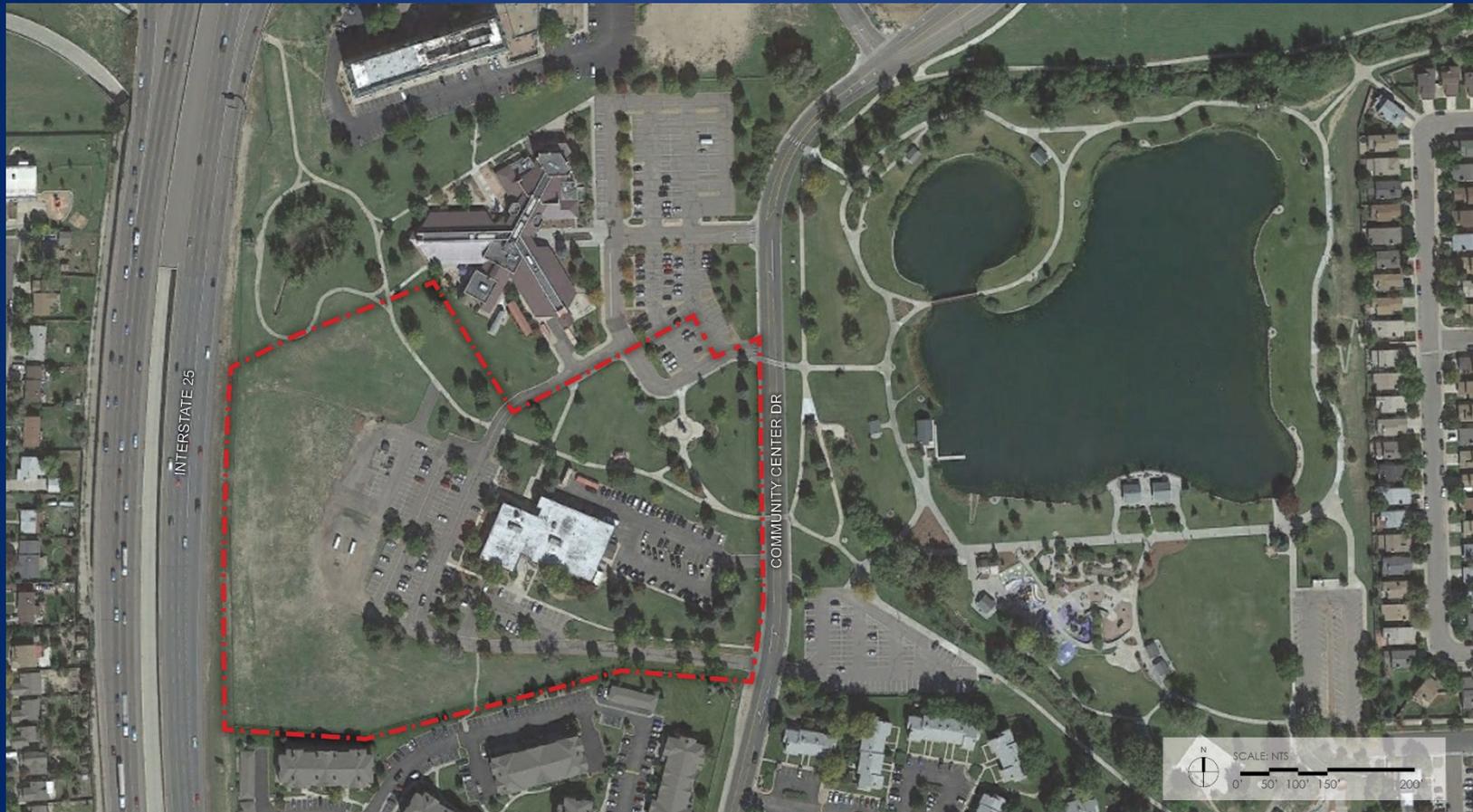
ARCHITECTS DESIGN GROUP IN ASSOCIATION WITH SEH INC.

SITE OPTION A
ADJACENCY DIAGRAM

JUNE 2, 2014

Northglenn Police and Municipal Courts Complex

Site Candidate "B": Municipal Campus Site Aerial



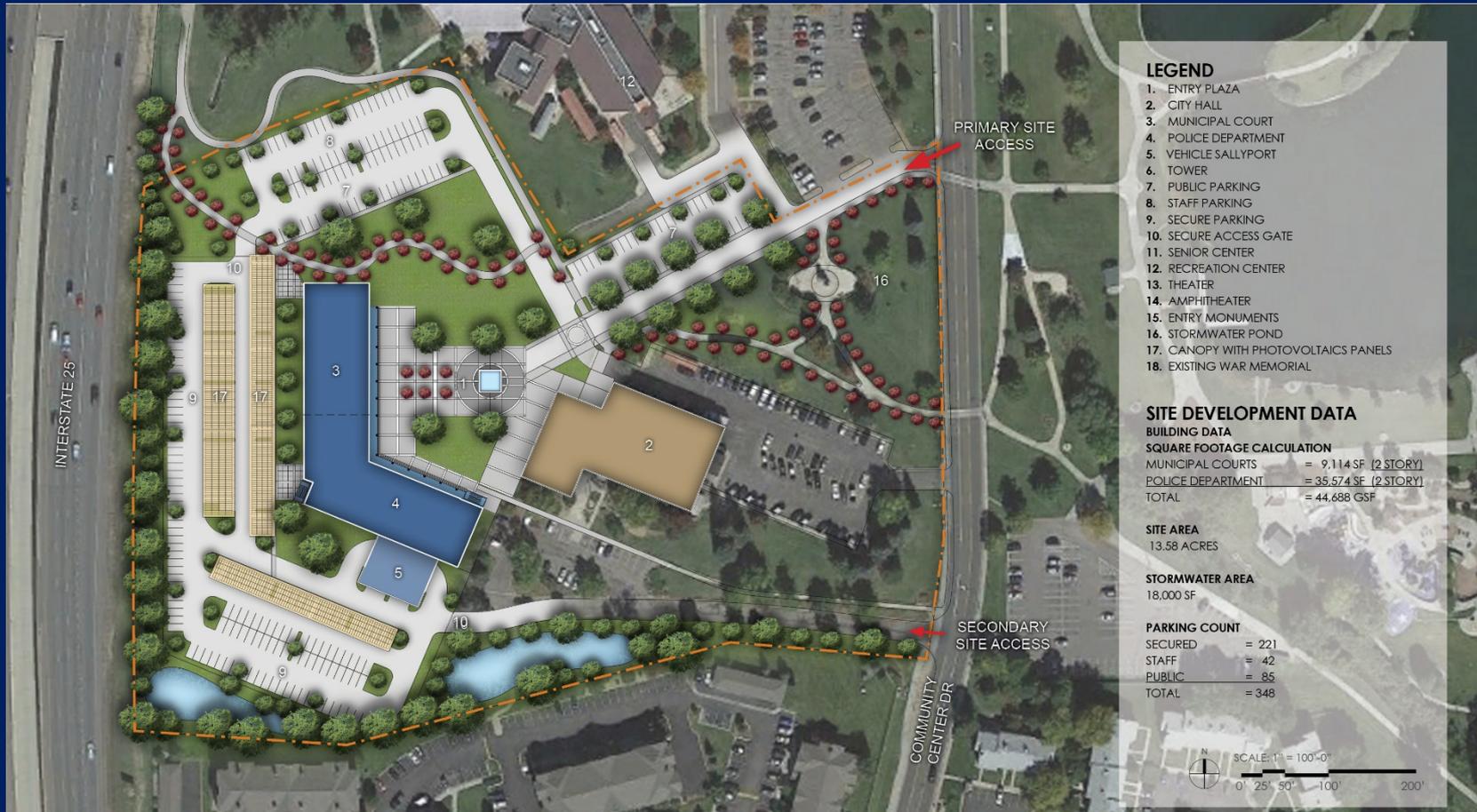
NORTHGLENN MUNICIPAL CAMPUS - NORTHGLENN, COLORADO
ARCHITECTS DESIGN GROUP IN ASSOCIATION WITH SEH INC.

SITE OPTION B

SITE PLAN
JUNE 2, 2014

Northglenn Police and Municipal Courts Complex

Site Candidate "B": Municipal Campus Site Phase I



PHASE 1

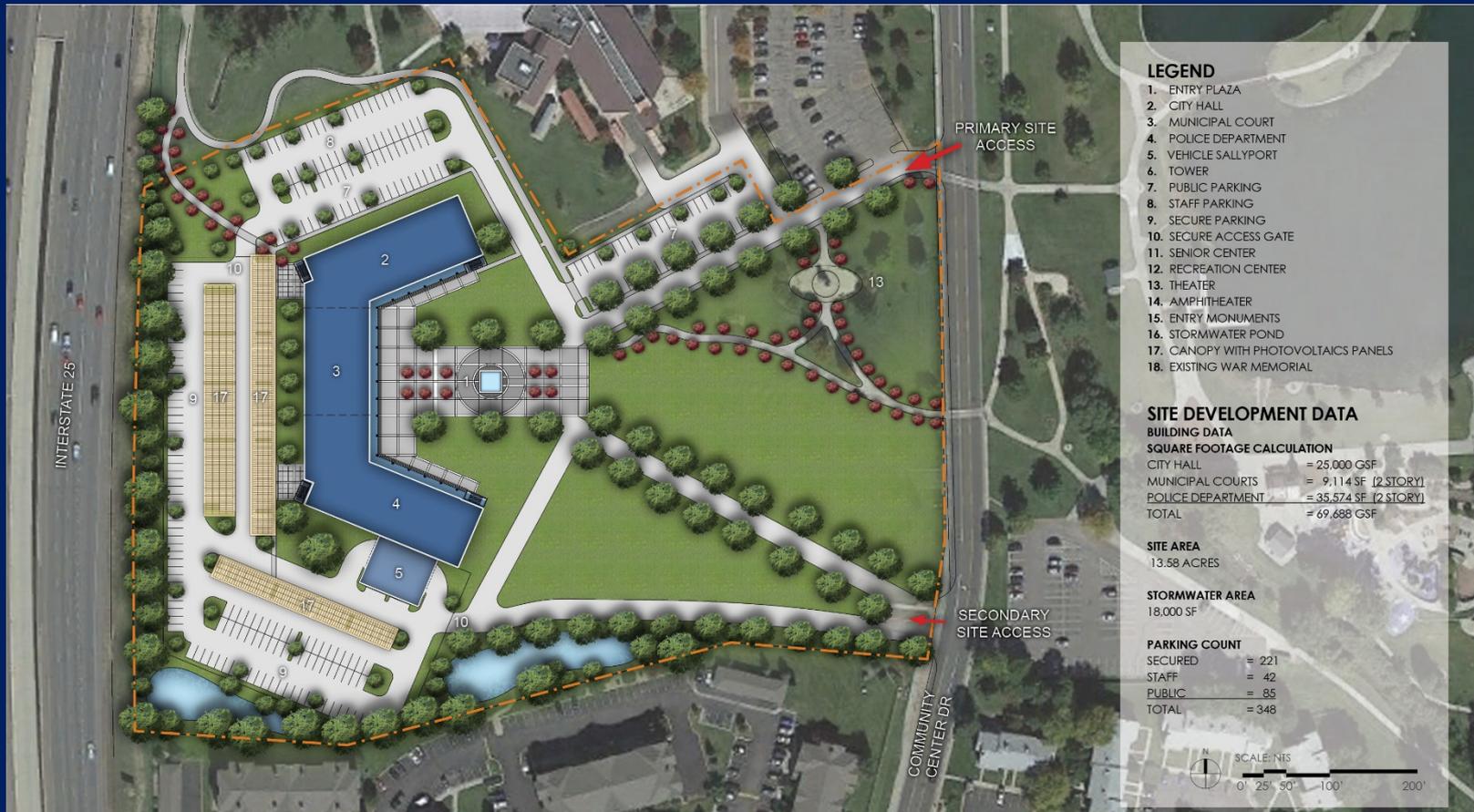
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SITE OPTION B

SITE PLAN
JUNE 2, 2014

Northglenn Police and Municipal Courts Complex

Site Candidate "B": Municipal Campus Site – Phase II



PHASE 2

NORTHGLENN MUNICIPAL CAMPUS - NORTHGLENN, COLORADO
ARCHITECTS DESIGN GROUP IN ASSOCIATION WITH SEH INC.

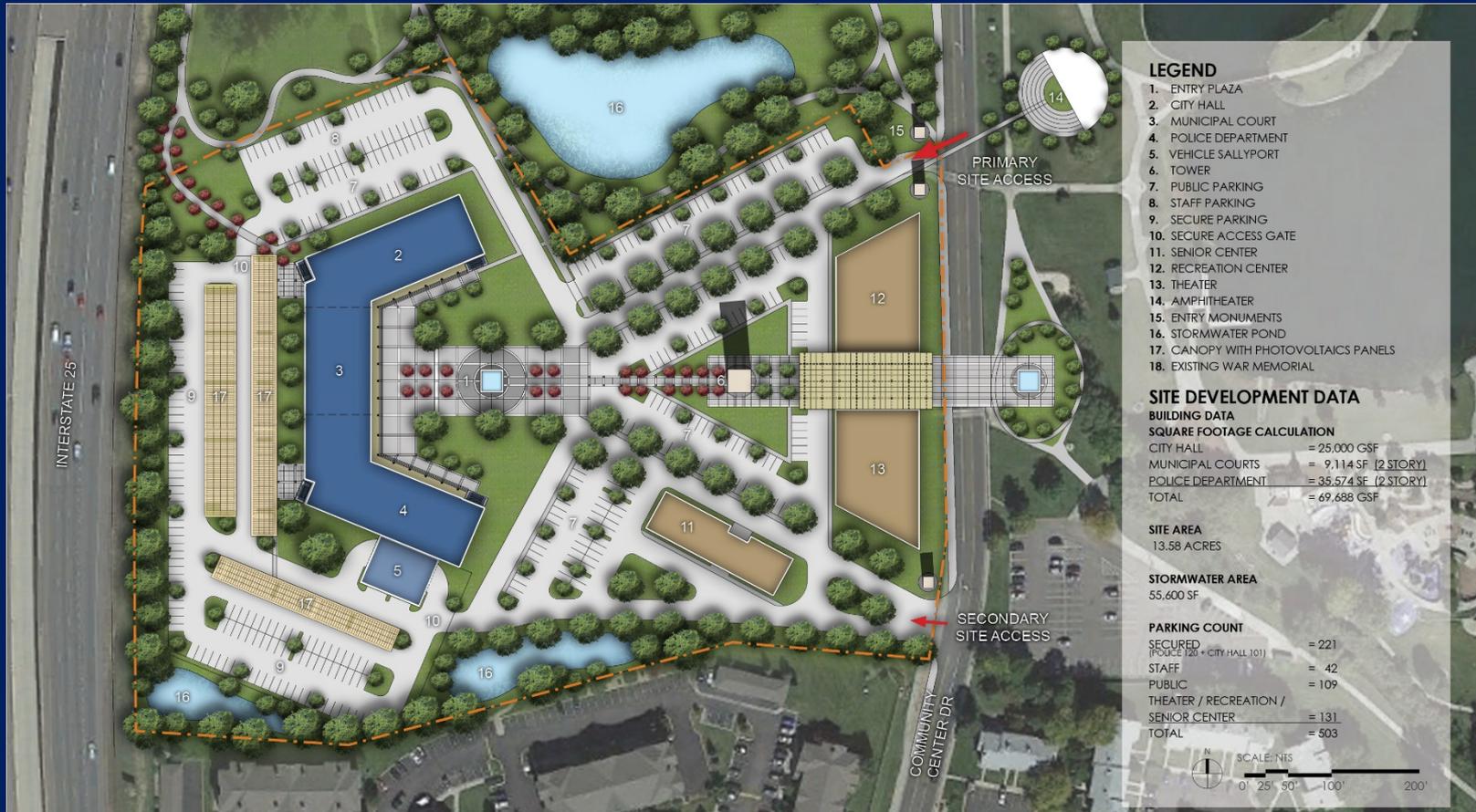
SITE OPTION B

SITE PLAN

JUNE 2, 2014

Northglenn Police and Municipal Courts Complex

Site Candidate "B": Existing Municipal Campus Site



PHASE 3

NORTHGLENN MUNICIPAL CAMPUS - NORTHGLENN, COLORADO
ARCHITECTS DESIGN GROUP IN ASSOCIATION WITH SEH INC.

SITE OPTION B

SITE PLAN
JUNE 2, 2014

Northglenn Police and Municipal Courts Complex

Site Candidate "B": Existing Municipal Campus Site



PHASE 3

NORTHGLENN MUNICIPAL CAMPUS - NORTHGLENN, COLORADO
ARCHITECTS DESIGN GROUP IN ASSOCIATION WITH SEH INC.

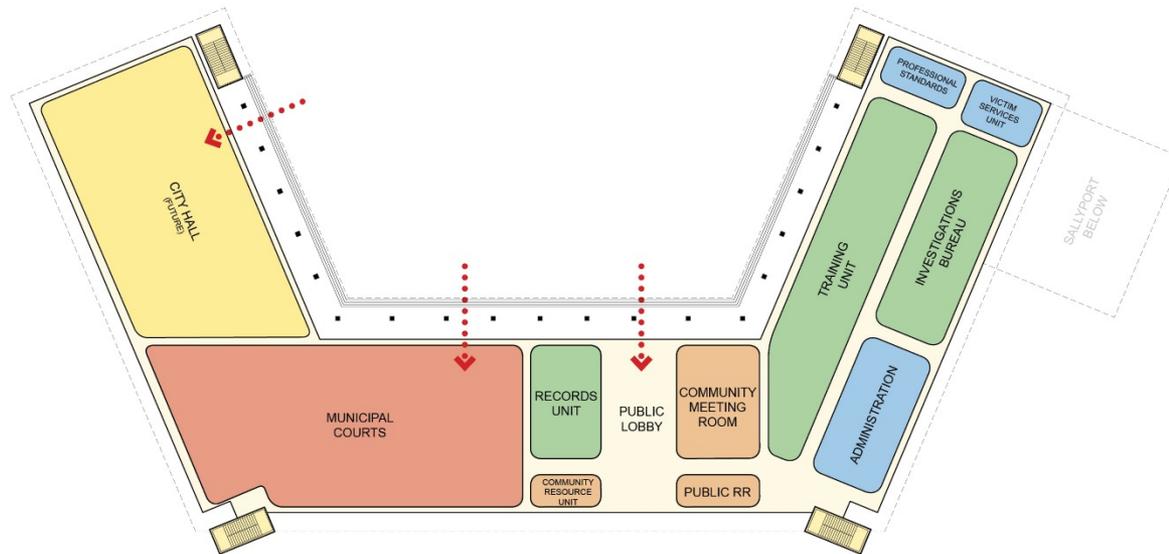
SITE OPTION B

SITE PLAN

JUNE 2, 2014

Northglenn Police and Municipal Courts Complex

Site Candidate "B": Existing Municipal Campus Site



UPPER LEVEL



SCALE: 1" = 40'-0"

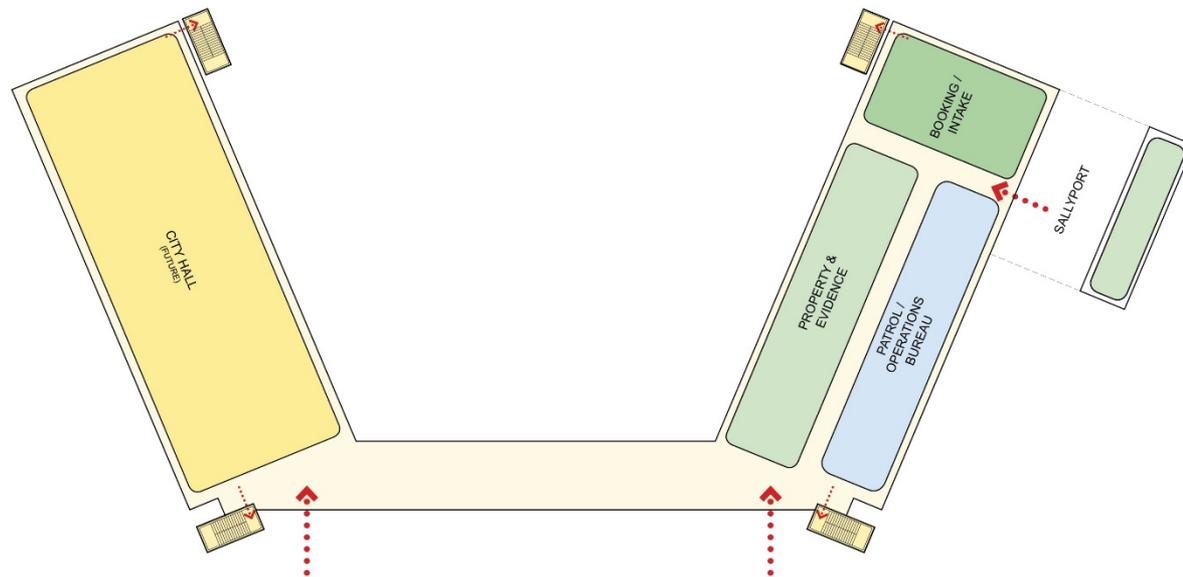


NORTHGLENN MUNICIPAL CAMPUS - NORTHGLENN, COLORADO
ARCHITECTS DESIGN GROUP IN ASSOCIATION WITH SEH INC.

SITE OPTION B
ADJACENCY DIAGRAM
JUNE 2, 2014

Northglenn Police and Municipal Courts Complex

Site Candidate "B": Existing Municipal Campus Site



LOWER LEVEL



SCALE: 1" = 40'-0"

0' 10' 20' 40' 80'

NORTHGLENN MUNICIPAL CAMPUS - NORTHGLENN, COLORADO
ARCHITECTS DESIGN GROUP IN ASSOCIATION WITH SEH INC.

SITE OPTION B
ADJACENCY DIAGRAM

JUNE 2, 2014

Northglenn Police and Municipal Courts Complex

Site Candidate “A”: Water Tower Site Opinion of Probable Development Costs

Project “Hard Costs”

Building Construction: 44,000 SF @ \$235/SF	= \$10,340,000
Site Development: 6 Acres	= \$ <u>880,000</u>
Sub Total “Hard Costs”:	= \$11,220,000

Project “Soft Costs”

PUD Site Planning Fees (Estimate):	= \$ 132,000
Professional A/E Fees @ 10% of \$11,220,000	= \$ 1,034,000
Specialty Consultant Fees @ 4% (Bldg. Cost)	= \$ 413,600
Testing & Inspection Fees Allowance @ 2%	= \$ 224,400
Permitting Fees Allowance @ 3%	= \$ 336,600
FF&E Allowance @ \$15/SF	= \$ 660,000
Spec. Equip./Tech. Allowance @ \$25/SF	= \$ <u>1,100,000</u>
Sub Total “Soft Costs”:	= \$ 3,900,600

Total Estimated Project Costs: = \$15,120,600

Northglenn Police and Municipal Courts Complex

Site Candidate “B”: Existing Municipal Campus Site Opinion of Probable Development Costs

Project “Hard Costs”

Building Construction: 44,000 SF @ \$235/SF	= \$10,340,000
Site Development: 6 Acres	= <u>\$ 1,100,000</u>
Sub Total “Hard Costs”:	= \$11,220,000

Project “Soft Costs”

PUD Site Planning Fees (Estimate):	= \$ 165,000
Professional A/E Fees @ 10% of \$11,220,000	= \$ 1,034,000
Specialty Consultant Fees @ 4% (Bldg. Cost)	= \$ 413,600
Testing & Inspection Fees Allowance @ 2%	= \$ 228,800
Permitting Fees Allowance @ 3%	= \$ 343,200
FF&E Allowance @ \$15/SF	= \$ 660,000
Spec. Equip./Tech. Allowance @ \$25/SF	= <u>\$ 1,100,000</u>
Sub Total “Soft Costs”:	= \$ 3,944,600

Total Estimated Project Costs: = \$15,164,600

Northglenn Police and Municipal Courts Complex

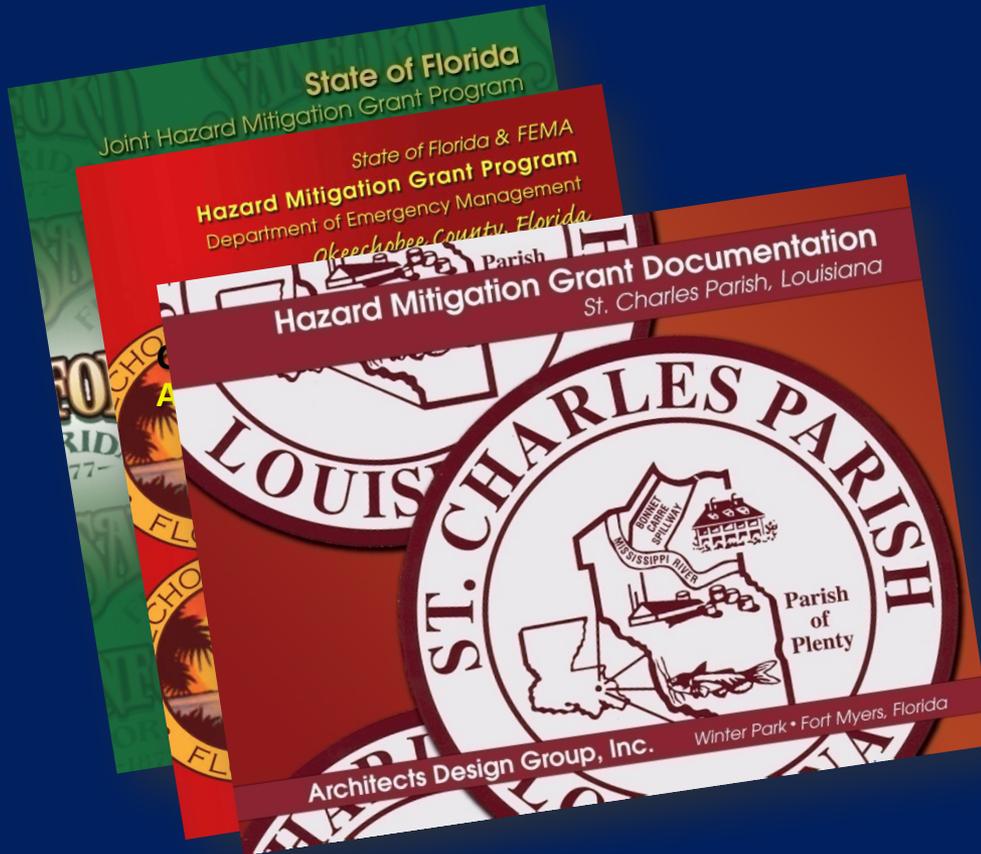
Getting the Community On Board



Northglenn Police and Municipal Courts Complex

Identification of Potential Funding Sources

FEMA Mitigation Grants



Okeechobee County, FL 911
Communications Center & EOC
Awarded: \$1,500,000

Monroe County, FL EOC
Awarded: \$819,000

Clay County, FL Emergency Services
Complex
Awarded: \$306,000

Hernando County, FL 911 Communications
Center & EOC
Awarded: \$1,200,000

Sanford, FL Public Safety Complex
Awarded: \$1,001,305

St. Charles Parish Louisiana EOC
Awarded: \$750,000

Jacksonville, AL Public Safety Facility
Awarded: \$612,000

Architects Design Group

in association with:

Short Elliott Hendrickson, Inc.

Denver, Colorado

2013-33

Request for Proposal

Police Facility Needs Assessment



Northglenn, Colorado