



NEEDS ASSESSMENT

HUBBARD, OREGON: CITY HALL, POLICE DEPT, & PUBLIC WORKS



OUR HISTORY. OUR FUTURE. OUR PROMISE.

The values of our founder, Tom Mackenzie, remain the hallmarks of our firm. Upon this foundation we have, steadily and intentionally, built a team of experts focused on delivering the highest level of design excellence in service to our clients. This mark is our signature and our bond.

@2015 Mackenzie Engineering Inc. Unless noted, all text, video recordings, photos, drawings, computer generated images and/or statements are owned by Mackenzie and protected by copyright and/or other intellectual property laws. No part of these pages, either text or image may be reproduced, modified, stored in a retrieval system or retransmitted, in any form or by any means, electronic, mechanical, or otherwise without prior written permission. Mackenzie®, and M.™ and all corresponding logos and designs are service marks and/or registered service marks of Mackenzie Engineering Inc. All rights reserved.

The information in this document has been obtained from sources believed reliable. Our findings have been based on limited information and on-site observation. Because of the limited scope of our initial review, these preliminary findings should not be used as a principal basis for any decision relating to the site and/or building, and confirmation of the information contained within this document with the applicable government body may be necessary.

CONTENTS

1	INTRODUCTION	
	Project Team	
	Project Introduction	01-01
	Executive Summary	01-02
	Next Steps	01-06
2	EXISTING FACILITY ASSESSMENT	
	Map of Hubbard	02-03
	Evaluation of Deficiencies	02-04
	Existing Facility Map	02-05
	Existing Facility Floor Plan	02-07
	Existing Facility Photos	02-08
3	PROGRAMMING	
	Programming Summary	03-03
	Program	03-05
	Space Standards	03-12
	Concept Adjacencies	03-18
	Selected Adjacency	03-25
4	POTENTIAL SITES EVALUATION	
	Map of Potential Sites	04-03
	Land Use Matrix	04-04
	Site Scoring Criteria	04-06
	Importance Factor Matrix	04-08
	Evaluation of Selected Sites	04-11
5	CONCEPT DESIGN	
	Context of Design	05-03
	Conceptual Block Diagram Floor Plan	05-07
	Conceptual Site Design Options	05-09
6	PROJECT COST SUMMARY	
	Cost Summary	06-03
	Cost Estimate Report	06-05

INTRODUCTION

Hubbard Police Department

David Dryden - Police Chief

Christie Huston - Assistant to the Police Chief



Hubbard City Hall

Vickie Nogle - Director of Administration /
City Recorder

Lucy Astorga - Admin. Assistant / Court Clerk

Kari Kurtz - Senior Accounting Specialist



Hubbard Public Works

Jaime Estrada - Superintendant

Melinda Olinger - Assistant to the PW Superintendant

Mackenzie

Jeff Humphreys - Project Principal

Scott Moore - Project Manager

Rachel Peterson - Architectural Designer

Gabriela Frask, Crystal Torres - Land Use Planning

Brent Ahrend - Traffic Planning



JLD

John Drentlaw - Cost Estimator



Project Team

PROJECT INTRODUCTION

The Hubbard Police Department, City Hall, and Public Works are seeking to replace their existing facilities and combine their departments into one consolidated building. As detailed throughout this report, the replacement facility has been designed in an effort to better meet Hubbard's needs and goals; provide a more efficient operational model and layout; better align with the current space demand for the Departments; and allow for future staff and facility growth.

The City of Hubbard selected Mackenzie to assist with an evaluation of the existing conditions of the current facilities; work with staff to determine an anticipated building space-needs program for a replacement facility; and provide a conceptual plan and cost estimate for the building.

Mackenzie, which was established in 1960 and is based in Portland, Oregon, provides an integrated design approach to projects, including architecture, structural engineering, landscape architecture, civil engineering, land use planning, transportation planning and interior design services. Mackenzie's Public Projects team specializes in municipal and emergency response facility design, space needs evaluations, and bond campaign assistance. In the past decade, Mackenzie has worked on publicly funded projects in Oregon and Washington for more than 50 counties and municipalities, providing design and engineering services for more than 40 fire facilities, 18 police facilities and six municipal office buildings.

The project has been conceived as a build-out to meet the 20-year needs of the Departments. The new facility is envisioned to be between 14,890 and 15,790 square feet. After the initial collaborative programming process, Mackenzie developed conceptual building and site designs for the facility, with input received from Police Department, City Hall, and Public Works staff. An estimate of anticipated project costs, inclusive of construction, consultant, and owner costs required to fund the project has been provided based on the selected scheme.

The information contained within this report provides a detailed overview of Mackenzie's work with the City of Hubbard. All steps involved in this process have been documented and organized based on the associated task, and are contained within the pages of this report for the City of Hubbard's consideration. Recommendations for next steps have been outlined at the end of the Executive Summary.

EXECUTIVE SUMMARY

Public facility design is unique in that the building and all its functions are tools required to most effectively and efficiently enhance agency operations and safety. The design focuses on functionality and meeting the stringent requirements associated with protection and security of the building, its staff, and the communities they serve. Jurisdictional, state, and federal criteria for safety, security and operational procedures drive these requirements and invariably impact design considerations. These criteria ensure that this facility not only is able to improve operational efficiency on a day-to-day basis, but is capable of evolving over the life of the building, resisting and responding to emergency events, providing critical services for the citizens of Hubbard, enhancing the built environment of the surrounding area with a strong civic presence, and encouraging investment in the community.

The following report encompasses the primary tasks requested by the City of Hubbard to determine the feasibility of a replacement multi-use municipal facility in meeting the criteria stated above including:

- 1) space needs evaluation and documentation
- 2) conceptual design for the preferred site
- 3) preliminary cost analysis of the conceptual design.

Process and Methodology

Mackenzie employed programming, communication, consensus-building, and goal-setting techniques to ensure that the final report meets the expectations of the stakeholders involved in the process. Using a multidisciplinary approach, extensive public project experience, and lessons learned on previous police and public building projects, the team provided architectural, structural, space planning, site planning and land use planning services to meet the project objectives and deliverables.

Mackenzie worked with the City, Public Works, and Police Department staff to confirm the key stakeholders who needed to be involved throughout the design process and to support and strengthen dialogue between the Design Team and City, Public Works, and Police staff.

Existing Facility Assessment

Mackenzie toured the existing facility at 3720 Second Street to examine and document the current space deficiencies, operations, and structural integrity of the existing facility as it pertains to seismic design requirements for an essential facility. This evaluation sets the stage for future programming dialogue around operational requirements, court and department culture, and required adjacencies—both those indicative of justice facilities as well as those unique to the Hubbard Police Department and Hubbard City Hall.

The preliminary focus of this task was to concentrate on examination and documentation of existing infrastructure, access and current circulation, secure and public parking, ADA compliance, life safety compliance and additional land use regulatory requirements.

Executive Summary

Primary concerns noted through evaluation of the existing facilities include:

- Based on the age and condition of the current police station and city hall, the building does not meet current seismic criteria requirements for essential facilities.
- A majority of the building does not meet current ADA requirements
- There are numerous deferred maintenance items that need to be addressed
- The energy performance of the existing building systems and building envelope are limited due to the age of the facility
- The ability to expand the existing facility is limited due to the condition of the structures and availability of land on which to expand.
- Due to site constraints, there is a lack of adequate on-site parking for staff and public vehicles, as well as a complete lack of secure parking for Police Department staff.
- There is a shortage of available space to effectively and efficiently operate within the confines of the existing facility.

Staff Interviews, Space Programming and Adjacency Diagrams

In conjunction with examination of present conditions, Mackenzie worked closely with the Hubbard Police Department, City Hall, and Public Works staff to better understand the current space needs and projected those needs out based on a 20-year forecast. Through staff interviews, Mackenzie guided each Department through the process of space needs identification and required space allocations. From that, the Design Team developed a program matrix that identified the required spaces, their approximate size and amenities to be provided within them. Upon development of this document and prior to gaining City staff approval, Mackenzie reviewed the findings with the project team to clarify any questions or comments brought up over the course of creating the matrix.

Evaluation of the space needs program determined that a facility of approximately 14,890 square feet would be necessary by the end of the 20-year forecast window. Through this process, Mackenzie determined that the approximately 1,750 square feet of space that the Hubbard Police Department currently operates out of is more than five times too small compared to the required space needed at the time of this report. In conjunction with facility projections, it was determined that secure parking requirements for staff and operational vehicles is non-existent, and public parking is greatly undersized. Projections indicate a 20-year demand of 30 parking stalls for the public, 20 secure spaces for personal city staff vehicles, 2 secure spaces for official City vehicles, and 10 spaces of covered secure police parking.

Mackenzie further validated these identified growth projections and space needs through the use of comparable jurisdictions and newly constructed facilities in the region (see page 01-07 for trending spreadsheet). At about 300 square feet per staff member, the existing Hubbard Police Department is well below comparable jurisdictions, when compared to newly completed facilities, which average approximately 500 square feet per staff member at time of building completion (calculated using staffing counts at time of move-in).

In conjunction with identification of facility needs, Mackenzie prepared a series of adjacency blocking diagrams to illustrate spatial adjacencies and relationships specific to this facility's requirements and those particular to the City of Hubbard.

Executive Summary

These concepts were developed to graphically illustrate programming functions and their relationships to each other while also taking into consideration department culture, division work philosophies and general circulation. Each concept additionally takes into account specific security requirements of a police facility and their relationships to one another and the public functions of a facility.

Relationships with other City functions are also important to consider. Currently, the Department interacts most frequently with the City Administration, Municipal Court, and Public Works (for fleet and facility management). The prospect of master planning a site for all functions necessitates the examination of all parts and shared functions between them to facilitate operational and department efficiencies at all levels.

Site Examination

Based on the evaluation criteria identified during the previous tasks, the Design Team analyzed the existing city hall and police department site for suitability for the Hubbard City Hall, Public Works, and Police Department. It was determined - due to existing building size, seismic requirements, and site restrictions - that the existing site is not suitable for the future needs of the Departments.

Utilizing programming data, adjacency requirements and operational necessities to facilitate examination and development of site criteria, Mackenzie evaluated the feasibility of relocating the facility to the Schmidt Lane site. Evaluation included zoning impacts, geographic considerations, site access, public presence and compatibility with neighborhood, location, proximity to other City/ government functions, site development costs, property availability, expansion opportunities and ability to meet program requirements.

Concept Design

The Design Team met with stakeholders to discuss the layout and siting of the project through a series of floor and site plan block diagrams. The design team developed a concept design layout that further defined site access, public and secure parking, the building footprint and primary site characteristics.

Executive Summary

Project Cost Development

Based on the selected conceptual design, JLD developed an opinion of probable construction cost for the new municipal facility and associated site development improvements for the project. These cost projections were comprised of the opinion of costs related to the anticipated raw construction costs and anticipated general contractor margins based on a publicly funded project requiring prevailing wage rates for construction.

In conjunction with the development of the construction costs, Mackenzie prepared cost forecasts for consultant costs, including architectural/engineering fees, construction management fees, special inspections, geotechnical inspections, etc. Additionally, Mackenzie worked with the Hubbard Police Department, City Hall, and Public Works to evaluate and compile potential owner costs, including fixtures, furnishings and equipment, lockers and shelving, fitness equipment, moving costs, and applicable permit fees. A final cost matrix was prepared that provides a comprehensive look at all anticipated costs associated with the project broken out to reflect the construction cost, consultant costs and owner costs.

At the time of this report, the cost of the preferred property was unavailable, and as such, was not included in the project cost development. The site costs should be determined prior to finalizing the project budget.

HUBBARD MUNICIPAL FACILITY	General Construction Cost	\$3,132,995
	1-year Escalation	\$93,990
	General Conditions	\$177,484
	Bonds & Insurance	\$42,556
	CM Fee	\$241,292
	Construction Contingency	\$553,247
	Total Construction Costs	\$4,241,564
Total Consultant Costs	\$771,842	
Total Owner Costs	\$562,155	
Total Project Cost		\$5,575,561

Executive Summary

SUMMARY OF RECOMMENDATIONS

- Based on the current size, age and seismic limitations of the existing facility, coupled with site constraints, the existing facility is severely challenged to meet current needs or future growth requirements of the department and court. Relocation to a site suitable for the development of a facility and required parking is recommended.
- Examination of the Schmidt Lane site found the lot to be ideally sized for the immediate development requirements of the new Hubbard Public Safety Facility; both for the facility itself as well as the required site infrastructure. Furthermore, the site appears to be ideal for development opportunities to collocate other City functions and allow for master development as a civic center.

NEXT STEPS

- **Determine Availability and Cost of the Property**
At the time of this report, the cost of the preferred site was unavailable, and therefore not included in the project cost estimate. Before the project budget is finalized, the availability and cost of the preferred site should be determined.
- **Establish a Desired Time Line and Budget for the Project**
Based on the findings of Mackenzie's analysis, it is determined that the overall projected costs of the project as described in this report (with the exception of land costs) are estimated to be approximately \$5,575,560. It is encouraged that the Department agree on an expectation of project costs and schedule for development to provide clear direction of expectations to those that represent the Department and their consultants.
- **Determine Funding Mechanism**
Confirm the funding mechanism(s) the Department expects to pursue to complete the project. Once determined, the Department should assess the financial impact, if any, to the local community in comparison to previous voter approvals.
- **Conduct a Survey of the Property to Ensure Preferred Concept Design Is Achievable**
Due to the nature of the preferred Concept Design, it is recommended that the Department conduct a site survey to clearly describe the boundaries, topography and any encumbrances on the site to confirm that the preferred Concept Design is achievable.
- **Begin the Public Outreach/Campaign Process**
Begin process of presenting the message of the need for the project to local community. This effort should entail community outreach meetings to allow attendees to observe the condition of the existing station, as well as presenting the findings of the Needs Assessment process. A process for outreach to local community organizations and private business with an interest in the project should be developed and executed. Provide consistent updates and feedback to the community to ensure that your message reaches as many people as possible. Identify advocates for your project and solicit their participation in the assembly of a Public Advisory Committee (PAC). This committee should be comprised of local community members either active in, or supportive of the needs of the City of Hubbard.

Summary of Recommendations

DEPARTMENT COMPARISONS TABLE

Police Department	Population Size (2011)	City Area (Sq Mi)	Construction Cost per Sq Ft	Police Dept (Sq Ft)	Total Staff	Sworn Officers	Sq Ft per Staff	Sq Ft per Officer
Hubbard ^B (Existing)	3,207	0.72 mi ²	--	2,215 sf ^B	7	6	316 sf	370 sf
Hubbard (2015)	--	--	--	14,890 sf ^B	7	6	802 sf	935 sf

Algona ^A (2012)	3,061	1.29 mi ²	--	10,700 sf ^A	9	8	1188 sf	1337 sf
Monmouth ^C (2014)	9,635	2.24 mi ²	\$261 /sf	10,235 sf ^C	16	13	639 sf	787 sf
Sandy (2011)	9,672	3.14 mi ²	\$231 /sf	8,180 sf	17	14	481 sf	584 sf
Canby (2012)	15,998	3.79 mi ²	\$ 229 /sf	25,000 sf	30	25	833 sf	1000 sf
Roseburg (2009)	20,169	9 mi ²	\$232 /sf	26,886 sf	42	37	640 sf	727 sf
Woodburn (2006)	24,358	5 mi ²	\$ 176 /sf	27,204 sf	39	31	697 sf	877 sf
Tualatin (1999)	26,558	8 mi ²	\$ 192 /sf	21,107 sf	46.5	38	454 sf	555 sf
McMinnville (2008)	32,451	10 mi ²	\$ 244 /sf	34,900 sf	40	34	873 sf	1026 sf
Grants Pass ^B (2010)	32,871	8 mi ²	\$ 211 /sf	24,000 sf ^B	74	46	324 sf	522 sf
Keizer (2009)	36,191	7 mi ²	\$219 /sf	28,685 sf	48	40	598 sf	717 sf

^A Based on Needs Assessment Space-Planning
^B Facility is a justice center or shared civic facility;
 Square footage includes shared facilities/spaces
^C Facility is a remodel and/or expansion.

* Population and staff figures based on 'Uniform Crimes Report - 2011';
 compiled by the FBI. <<http://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2011/crime-in-the-u.s.-2011/tables/table-78-1/view>>

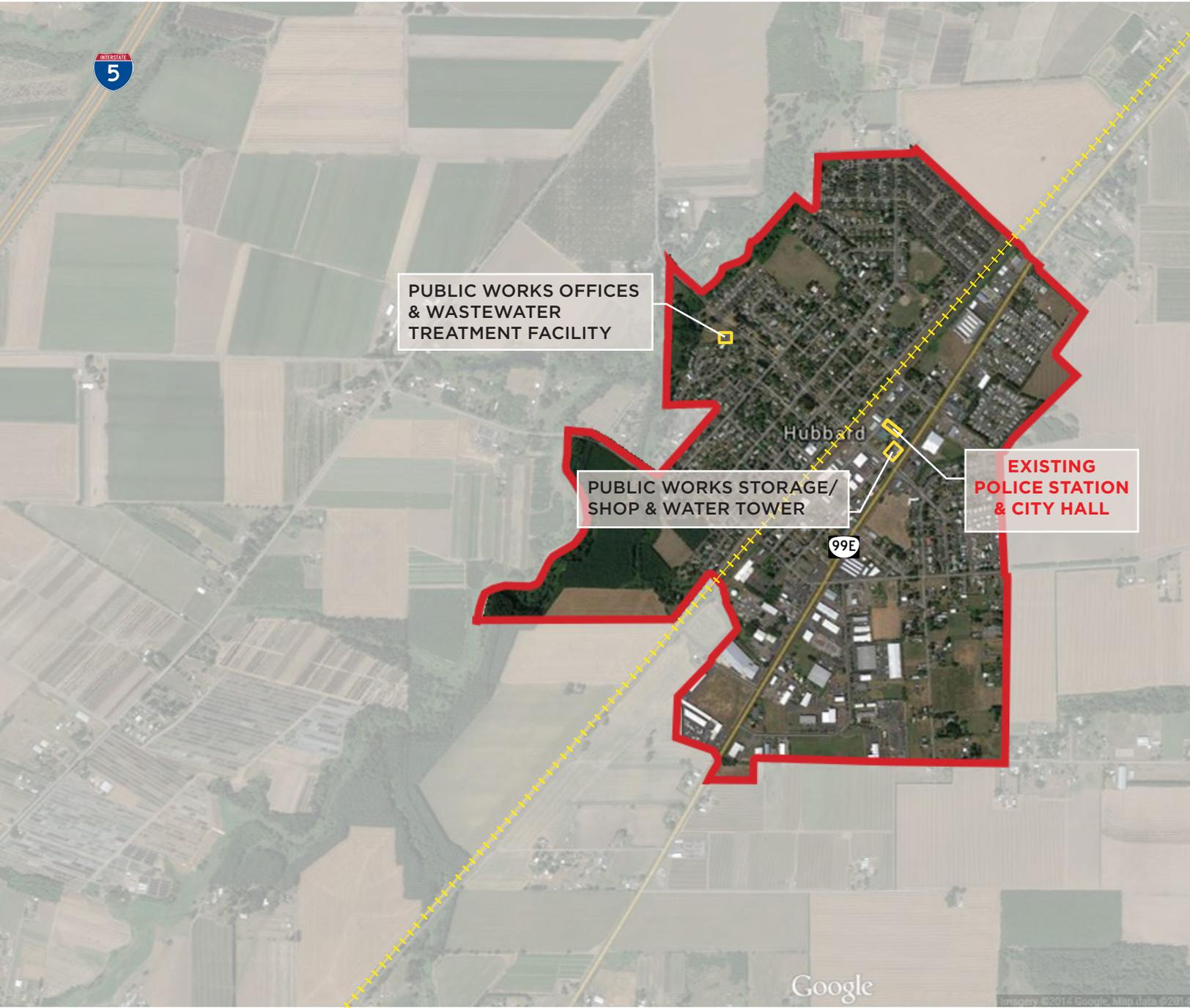
** City land area based on the 2010 US Census.

Police Department Comparisons Table



EXISTING FACILITY ASSESSMENT

2



HUBBARD, OREGON

- Established : 1891
- Population: 3,173
- Size: .71 square miles
- County: Marion



City of Hubbard: Context Map

Municipal Facility **M.**
 2130243.00

FACILITY ASSESSMENT

The existing facility occupies approximately 3,500 square feet at 3720 Second Street in Hubbard, Oregon. The current facility has been repurposed from a historic schoolhouse building and includes the Hubbard City Hall, Court and City Council Chambers, and Police Department.

Mackenzie performed an architectural and structural observation of the existing building, including review of its current use, operational deficiencies and structural condition. Mackenzie's primary observations have been summarized with photo identification noted on the following floor plan (1, 2, etc.) and subsequent pages of this section.

Overall, from our observation, the current condition of the building is not suitable to meet the current needs of the City of Hubbard. Of primary concern is the lack of structural capacity required for Immediate Occupancy classification of Essential Facilities, the degradation of interior and exterior building materials as well as safety concerns for both staff and the general public resulting from the inadequacy of the condition of the Police Department. Beyond those aspects, the building suffers from a lack of public presence, has no appropriate means of access, spaces that are grossly undersized and over-utilized to meet the City's current needs, and is non-compliant towards ADA (The Americans with Disabilities Act) and Oregon Energy Code standards.

The main public entrance is shared between the Police Department and the City Hall, providing direct access to the "lobby" corridor with little to no ability to reasonably accommodate multiple visitors at one time and is served by one non-ADA compliant toilet room for the public. This area includes a secure service counter for Police directly adjacent to a non-secure service counter for City Hall creating a security issue at this location and also serves as the primary circulation route between the two departments and the existing City Council Chambers. Due to the nature of this space, there is a significant lack of privacy between the public and private areas with no dedicated meeting space outside of the Council Chambers. As the space currently exists, officers are required to hold private conversations with the public in the Council Chambers or escort them into the secure portion of the facility to the interview room.

The Police Department itself lacks a clear hierarchy of security based on areas required to be more public and areas requiring more privacy. The area allocated for processing detainees is situated in an unsecure manner, creating potential for individuals to attempt to flee through other areas of the facility. Additionally, the areas serving the purpose of processing detainees are not hardened and as a result are susceptible to damage and increased maintenance/repairs. Police operations are spread throughout the facility (from the use of the Council Chambers as a Training Room and Evidence Storage to the main Police space on the opposite end of the building). A lack of space is evident throughout. The hallways themselves are also undersized, making it awkward for uniformed officers and staff to pass one another with their duty belts on.

The Department currently stores much of the evidence in a room directly off of the Council Chambers, which is only accessible from an unsecured door directly at the front of the room. This area is particularly undersized with no dedicated temperature and humidity control or additional ventilation as would typically be provided in a modern police facility. The evidence processing space is undersized and shared with the secured entry space used to process detainees and is located at the opposite end of the building from evidence storage, creating the potential for Chain of Custody issues.

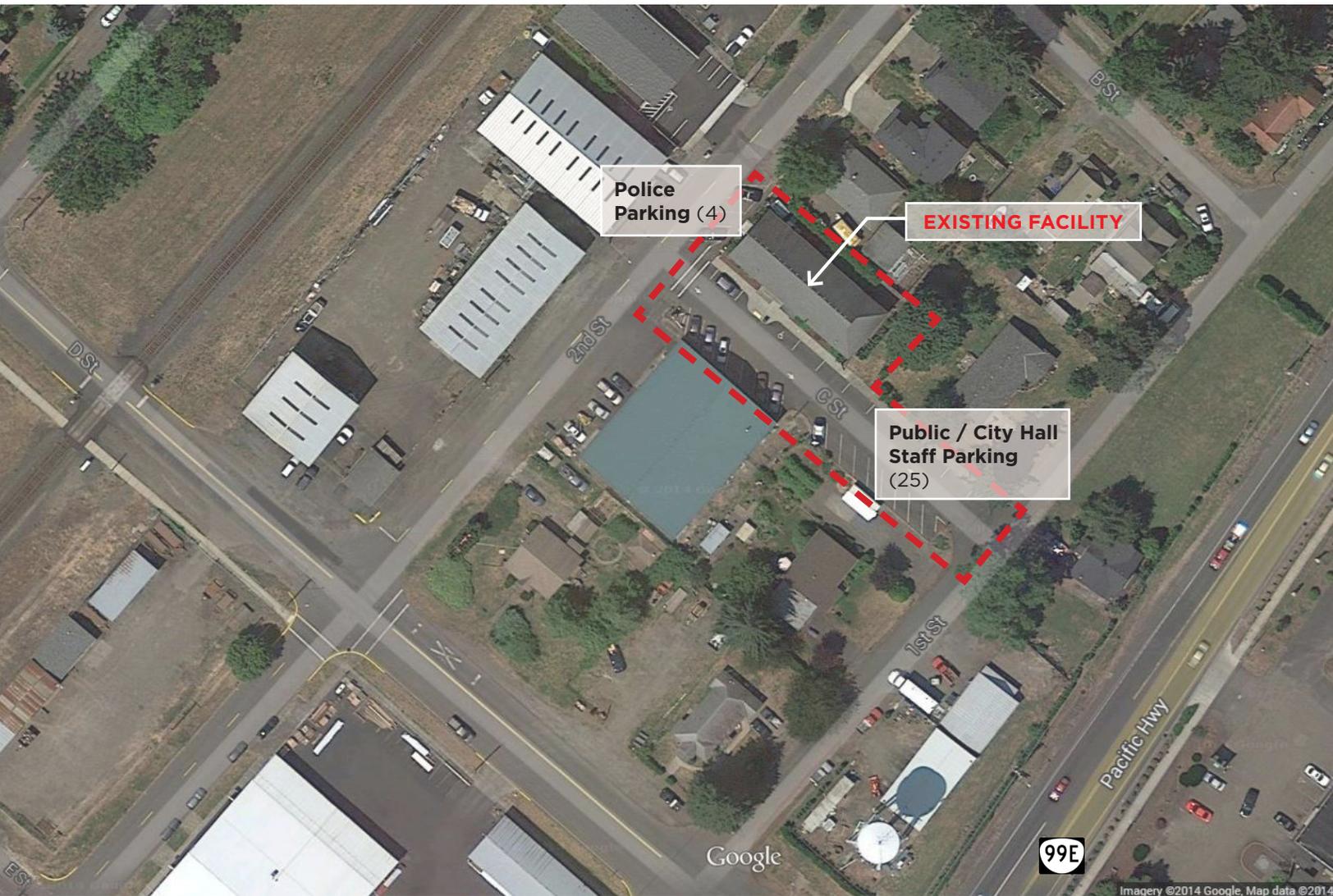
There is one locker room on the property for both male and female officers. The space suffers from a lack of ventilation and storage space, creating clutter around the lockers and circulation space.

Throughout the facility, Mackenzie staff observed a number of mechanical and ventilation concerns. Such concerns generally surrounded a lack of comfort within the spaces where the mechanical zoning results in rooms that are either too cold or too hot for their intended purpose. Primary ventilation concerns were observed within the evidence and locker rooms. General plumbing fixtures appeared to be operational; however, many fixtures throughout the restrooms do not meet current accessibility requirements. The building is equipped with an emergency generator that is undersized.

Facility Assessment Text

City of Hubbard

June 2015



EXISTING CITY HALL AND POLICE STATION

LOCATION

- 3720 Second Street
Hubbard, Oregon 97032

YEAR BUILT/REMODELED

- 1893/major remodel 1996

SITE SIZE

- 4622 sq. ft (does not include on-street parking)

BUILDING SIZE

- Approximately 3,500 sf

PARKING ON-SITE

- 25 Public Spaces
- 4 Non-Secure Staff Spaces

FLOORS

- 1 story with attic

ZONING

- Public Use (PU)

FIRE SPRINKLERS

- No

CONSTRUCTION TYPE

- V-B

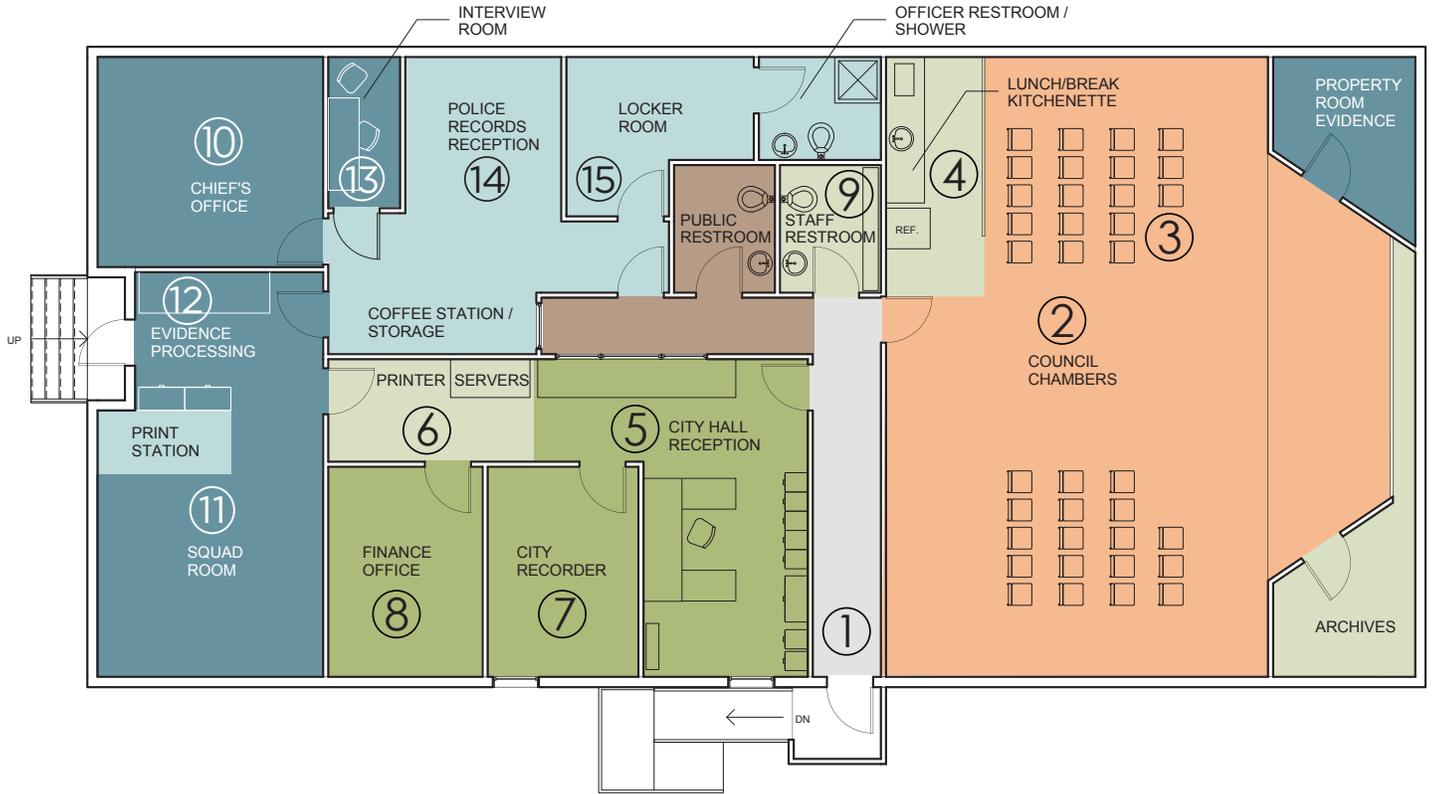
STAFFING

- 6 Sworn Officers
- 1 Unsworn Civilian Staff
- 3 Administrative City Hall Staff



Existing Facility Site: City Hall & Police Department

EXISTING FACILITY FLOOR PLAN



LEGEND

- CIRCULATION
- PUBLIC AREAS
- COUNCIL CHAMBERS
- CITY HALL / RECORDS / ADMINISTRATION
- CITY HALL ANCILLARY / STAFF SUPPORT / IT
- POLICE OPERATIONS
- POLICE ANCILLARY / STAFF SUPPORT / IT



Existing Facility Plan: City Hall & Police Department



1. PUBLIC ENTRY

- Cramped, narrow space
- Poor lighting
- Lack of seating for visitors
- Unclear circulation



2. COUNCIL CHAMBERS

- Undersized for the necessary functions it is currently used for
- Lack of table and chair storage.
- Shared with break room area



3. COUNCIL CHAMBERS SEATING

- Shared with break room area
- Undersized space for seating (and for potential growth)



4. STAFF LUNCH AREA AND KITCHEN

- Tucked in the corner of the council chambers
- No separation from council chambers' functions and this social space
- Undersized with no dedicated seating

5. CITY HALL RECEPTION

- Very limited amount of floor space
- Overflowing with records and storage (file cabinets, boxes, and full shelves)
- Inadequate and precarious location for city safe
- Lacks a well-secured cash drawer



6. SERVER / PRINTER AREA

- Currently located in a corridor-width space
- Lack of proper temperature control and ventilation.
- Unsecure



7. CITY RECORDER'S OFFICE

- Lack of space for storage
- Lack of table / desk space for laying out large-format plans
- No space for guest seating / small private conference



8. FINANCE OFFICE

- No natural light
- Limited ventilation
- Overflowing with storage materials / boxes / file cabinets

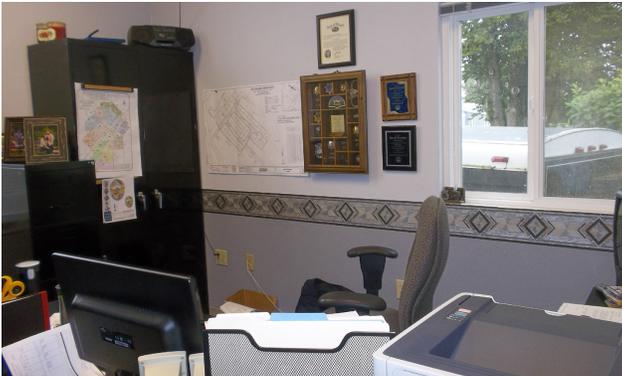


Existing Facility Interior



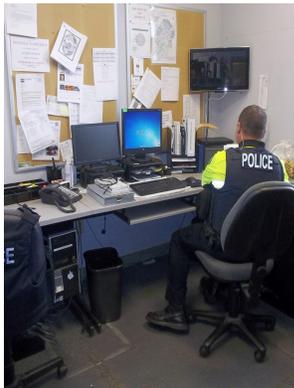
9. CITY HALL STAFF RESTROOM

- Overflowing with storage, which limits its functionality
- Not very maneuverable
- Not ADA compliant



10. POLICE CHIEF'S OFFICE

- Office spaces within the facility are limited and undersized. There is a lack of available space for file cabinets and guest seating for private conference. This limitation is worsened by the further lack of conference space within the facility for confidential or sensitive discussions.



11. SQUAD ROOM

- Lack of storage space
- No room for growth
- Lacks privacy from adjoining police station entry and suspect/evidence processing



12. OFFICER EVIDENCE PROCESSING

- Officer processing is limited in space for the necessary clearances to efficiently utilize the equipment. Proper ventilation is critical of evidence processing.

13. INTERVIEW ROOM

- Material and furniture lacks durability
- Not equipped with audio or video recording capabilities



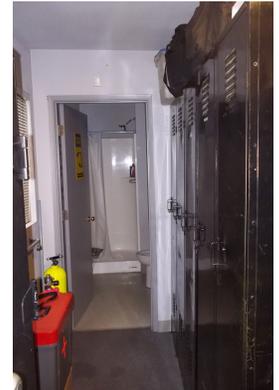
14. POLICE RECORDS RECEPTION

- Lack of storage space
- Lack of guest seating



15. POLICE STAFF LOCKER ROOM

- Cramped space limits its functionality
- No separate changing for men / women officers
- Lacks proper ventilation



16. EVIDENCE OVERFLOW STORAGE

- Located in the officer restroom over the sink
- Potential water damage to evidence due to its location in a restroom with a shower and water-heater
- Inadequate amount of space - both as overflow and in general property room evidence storage



Existing Facility Interior



17. POLICE STATION ENTRY / SQUAD CAR PARKING

- Squad car parking is not secure and not covered
- Nondescript and lacks a civic nature



18. GENERATOR AND AIR HANDLING UNIT

- Insufficiently sized generator to address emergency needs



19. WINDOW CONDITIONS

- Do not meet current energy code standards and require replacement
- Single glazed system increases the energy consumption of the building.
- Many are roughly covered with painted plywood, some are inoperable



20. PUBLIC ENTRANCE

- Unidentifiable
- Poor access from the street
- Lack of way finding

21. FOUNDATION CONDITION

- Existing brick foundation susceptible to failure in a seismic event
- Poor moisture control



22. BUILDING SIDING

- In disrepair with severely chipping paint and deteriorating resistance to moisture intake



23. STORMWATER MANAGEMENT

- Direct discharge creates potential for water migration back (in)to the building and site erosion concerns



Existing Facility Exterior



EXISTING PUBLIC WORKS STORAGE / SHOP & WATER TOWER

LOCATION

- 3652 First Street
Hubbard, Oregon 97032

SITE SIZE

- 16210 sf (.37 Acres)

BUILDING SIZE

- Approximately 3,000 sf

PARKING ON-SITE

- 6 Non-Secure Staff Spaces
and On-Street Parking

FLOORS

- 1 story warehouse

ZONING

- Public Use (PU)

FIRE SPRINKLERS

- No

CONSTRUCTION TYPE

- V-B



Existing Facility Site: Public Works Storage / Shop & Water Tower



1. VIEW OF WATER TOWER ON SITE

- Storage of most Public Works vehicles located on this site
- The warehouse and shop building is used for vehicle, equipment, and supply storage. The police department also uses this space for vehicle storage and to store auction surplus items.
- Public Works has outgrown this site, and it is not adequate for what it is intended for. Some equipment/vehicles must be parked outside, etc.



2. SHIPPING CONTAINER STORAGE

- Additional storage located in container on unpaved surface



3. VIEW OF GARAGE DOORS ON SHEDS

- Unmarked facility

Existing Facility Exterior

City of Hubbard

June 2015

4. WATER PIPES

- Connects to city water tower



5. LARGE EQUIPMENT STORAGE

- Interior of south warehouse with large equipment storage and corner staff restroom

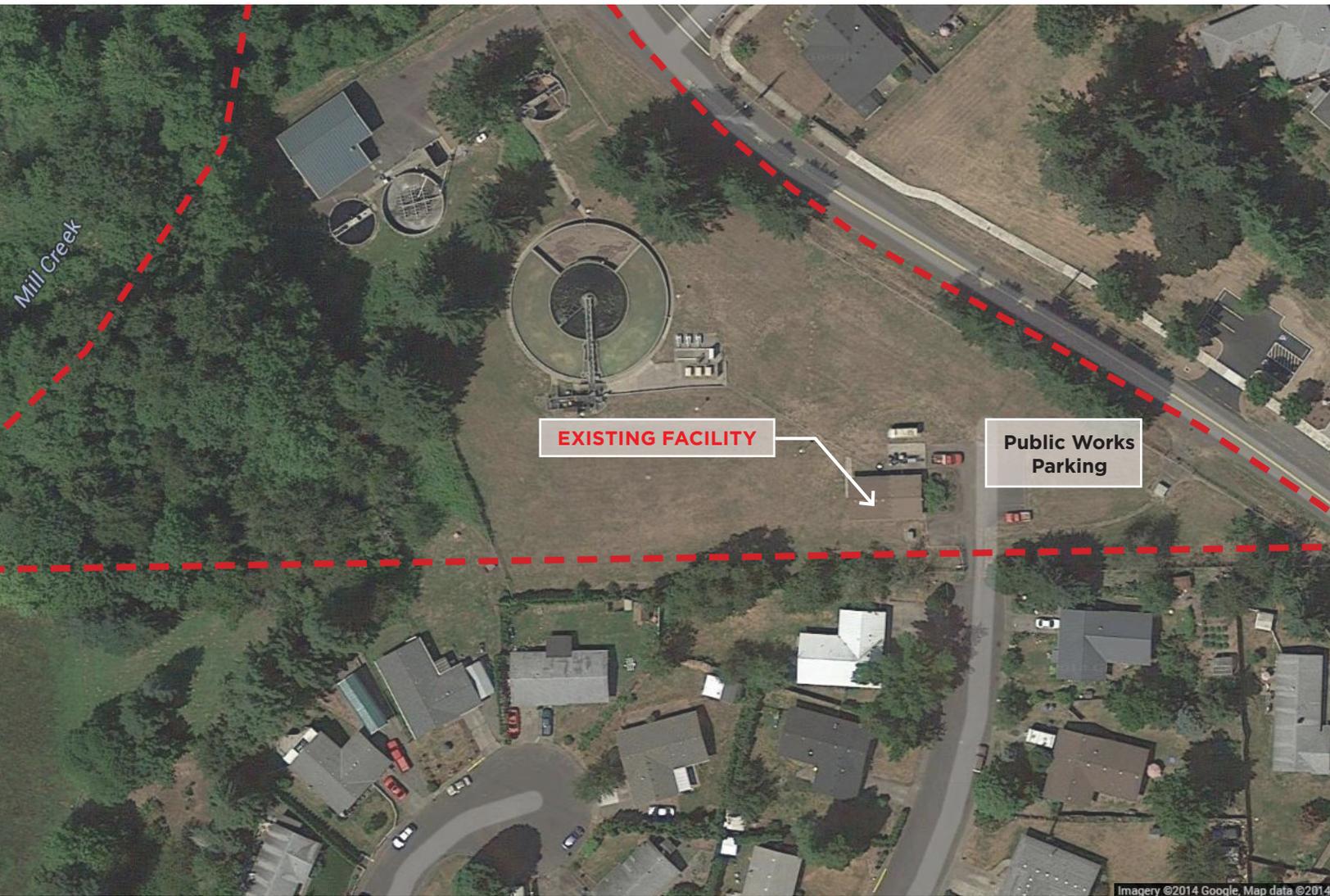


6. SMALL EQUIPMENT STORAGE & SHOP

- Police vehicles also stored in the north shed with small equipment and tools for Public Works



Existing Facility Interior



EXISTING PUBLIC WORKS HEADQUARTERS (& WASTEWATER TREATMENT)

LOCATION

- 3607 Sunset Dr.
Hubbard, OR 97032

SITE SIZE

- 227,726 sf (5.25 acres)

BUILDING SIZE

- 882 sf

PARKING ON-SITE

- 6 Semi-Secure Staff Spaces

FLOORS

- 1 story

ZONING

- Public Use (PU)

FIRE SPRINKLERS

- No

CONSTRUCTION TYPE

- V-B

STAFFING

- 2 Full-Time Administrative Staff



Existing Facility Site: Public Works Headquarters & Wastewater Treatment



1. PUBLIC WORKS SUPERINTENDENT'S OFFICE

- Current space is somewhat adequate in both offices, with the exception of the map cabinet in the Superintendent's office which is bulky and should be stored in a central area to free up space in the Superintendent's office. Larger office space for both would be good if the offices are moved to a new facility.



2. SUPERINTENDENT'S ASSISTANT'S OFFICE

- There is a lack of available table space for reviewing large-scale maps
- Inadequate space for guest seating (for private conference)



3. "MEETING" / PRINTING SPACE

- Lack of storage space
- No room for growth
- Backroom/meeting area consists of a general-use computer for Utility Workers; work table; copier; plotter; TV/VCR for viewing underground utility videos, etc.; charging station; and files needing to be accessible to all staff at all times (i.e. safety manual, etc.) The backroom is inadequate for all its intended uses.



4. MEETING TABLE SPACE

- Lacks sufficient space for laying out plans
- No seating
- Not enough table space for holding meetings

Existing Facility Interior

City of Hubbard

June 2015

5. PUBLIC WORKS OFFICE HEADQUARTERS

- Located on the other side of town from the City Hall (inconvenient for shared work with staff at that facility)
- Separated from much of Public Works' equipment which is stored near City Hall
- Lacks civic nature and public presence



6. OFFICE ADJACENCY: WASTEWATER TREATMENT

- Adjacency to wastewater treatment creates a less than ideal office setting - especially for public planning meetings



7. BUILDING FACADE CONDITION

- Deteriorating condition of paint on exterior walls



8. GENERATOR

- Public Works emergency generator



Existing Facility Exterior

PROGRAM

PROGRAMMING SUMMARY

Beyond the building program requirements, there are important site elements and considerations that must be taken into account for police operations and public functions. These program elements include public parking; secure parking for staff, patrol vehicles, and equipment; emergency power; building threat protection; and access to and from the site. The most challenging consideration, for any site, stems from public and secure parking requirements. These are governed by jurisdictional

requirements as well as Department growth projections and space requirements for vehicles and equipment.

The following pages outline the specific square footages for each space identified by the project team during the programming effort. Specific space needs have also been identified in the comments section, as appropriate (i.e. equipment, furniture layouts, etc.).

SPACE USE	SQUARE FEET		
	EXISTING	MOVE-IN	2035
PUBLIC AREA: LOBBY ENTRY		1,184 SF	1,184 SF
SHARED FACILITIES & SUPPORT	230 SF	3,522 SF	3,522 SF
CITY HALL	735 SF	1,142 SF	1,219 SF
PUBLIC WORKS	882 SF	950 SF	950 SF
MULTI-PURPOSE ROOM*	1,180 SF	2,400 SF	2400 SF
POLICE ADMINISTRATION & OPERATIONS	725 SF	1,292 SF	1,292 SF
POLICE SUPPORT FUNCTIONS	160 SF	1,608 SF	2,242 SF
POLICE BOOKING / PROCESSING	155 SF	352 SF	352 SF
POLICE PROPERTY / EVIDENCE	85 SF	792 SF	792 SF
TOTAL (INCLUDES 20% CIRCULATION)	4,152 SF	14,052 SF	14,890 SF

*Council Chambers, Municipal Court Room, Planning Commission, Police Training Room(s), Community Meeting Room, Primary EOC (Emergency) Incident Command

PARKING			
PUBLIC PARKING		5,400 SF (30 STALLS)	5,400 SF (30 STALLS)
STAFF PARKING		2,340 SF (13 STALLS)	3,600 SF (20 STALLS)
OFFICIAL CITY VEHICLES		360 SF (2 STALLS)	360 SF (2 STALLS)
POLICE - SECURE / COVERED		1,260 SF (7 STALLS)	1,800 SF (10 STALLS)

Space / Rm Use	Staffing Requirements			Space Requirements			Space Size			Total Required Square Footage			Comments
	Exist	2015	2035	Exist	2015	2035	W	L	Area	Exist	2015	2035	
Hubbard Space Requirements Summary													
City Departments										4,152	14,052	14,890	Assumes a single-story building
Exterior Requirements											22,083	25,600	
TOTAL SITE:											36,135	40,490	Approximately 1 +/- acres at full build-out.
Hubbard Space Requirements Summary *													
Shared Facilities & Support	N/A	N/A	N/A							1,410	7,106	7,106	* This facility will be the emergency services EOC as Incident Command. Community Shelter and Kitchen will be off-site at Fire Department
Police Department	7	7	10							1,125	4,853	5,614	
Municipal Court	2	2	2										
City Hall	3	3	6							735	1,142	1,219	
Public Works	5	5	10							882	950	950	
TOTAL BUILDING SQUARE FOOTAGE										4,152	14,052	14,890	
TOTAL EXTERIOR REQUIREMENTS											22,083	25,600	
TOTAL SITE REQUIREMENTS											36,135	40,490	Approximately 1 +/- acres at full build-out.

Space / Rm Use	Staffing Requirements			Space Requirements			Space Size			Total Required Square Footage			Comments
	Exist	2015	2035	Exist	2015	2035	W	L	Area	Exist	2015	2035	
Shared Facilities & Support													
PUBLIC LOBBY													
Vestibule				1	1		8	8	64		64	64	
Main Lobby				1	1		20	30	600		600	600	Includes waiting area seating; lobby display info (could include forms, pamphlets, electronic kiosk?)
Men's Public Restroom				1	1		10	26	260		260	260	Sized for maximum Court capacity
Women's Public Restroom				1	1		10	26	260		260	260	Sized for maximum Court capacity
Group Total		0	0	0							1,184	1,184	
MULTI-PURPOSE ROOM													
Large Multi-Purpose Room				1	1		40	60	2400		2,400	2,400	Functions as Council Chambers, Municipal Courtroom, Planning Commission, Police Training Room(s), Community Meeting Room, Primary EOC (Emergency) Incident Command; dividable space for shared uses; 100 person capacity
Chairs / Tables Storage				1	1		10	10	100		100	100	Also used to store police training mats
Audio / Video Media Storage				1	1		8	10	80		80	80	Secure; Temperature controlled; Projector, microphone equipment, recording system
Coffee Area / Prep				1	1		0	0	0		0	0	Counter w/ sink included within Community Room
Group Total		0	0	0							2,580	2,580	
FACILITY SUPPORT													
Conference/Meeting Room				1	1		12	18	216		216	216	Shared Conference Room / Table for 10 / Video Projection
Small Conference Room				1	1		10	12	120		120	120	Shared by Police, City Hall, Courts, Public Works 4-6 person capacity; data/tele port; Could be taken over by police in the case of a major investigation
Break / Lunch Room				1	1		20	20	400		400	400	Shared / Full Kitchen (stove, fridge, sink)
City Archives / Records Storage				1	1		10	20	200		200	200	Fire and water resistant, secure records strg area temperature controlled; compact shelving
Central Server Room				1	1		10	15	150		150	150	Secure; temperature controlled; electronics storage; Computer Hub
Supply Storage				1	1		6	8	48		48	48	Office supplies, documents
Physical Training				1	1		20	30	600		600	600	Shared fitness/training room
Janitorial Room				1	1		10	12	120		120	120	cleaning materials; include locking cabinets for some secure utility storage
Electrical Room				1	1		12	20	240		240	240	
Sprinkler Riser Room				1	1		8	8	64		64	64	
Group Total		0	0	0							2,158	2,158	
SUBTOTAL											5,922	5,922	
GENERAL CIRCULATION (20%)											1,184	1,184	
TOTAL SQUARE FOOTAGE (Shared Facilities & Support)											7,106	7,106	
EXTERIOR REQUIREMENTS													
Trash/ Recycle				1	1		10	20	200		200	200	
Generator				1	1		10	16	160		160	160	
Public Parking				30	30		10	18	180		5,400	5,400	Combined number from all Depts.
Personal Staff Vehicles				13	20		10	18	180		2,340	3,600	Combined number from all Depts; semi-secure
Official City Vehicles				2	2		10	18	180		360	360	For City Hall: judge/prosecuting attorney; secure
Patrol Vehicles				7	10		10	18	180		1,260	1,800	For Police (marked & unmarked); covered & secure Include bicycle racks for x4 patrol bicycles
Outdoor Community Space				0	1	1	20	40	800		800	800	Size to be confirmed.
Shared Staff Patio				0	1	1	20	20	400		400	400	Size to be confirmed; adjacent to lunch/break room
Group Total											10,920	12,720	
SUBTOTAL											10,920	12,720	
GENERAL CIRCULATION (100%)											10,920	12,720	
TOTAL SQUARE FOOTAGE (Exterior Requirements)											22,083	25,600	

Program: SHARED FACILITIES & SUPPORT

City of Hubbard

June 2015

Space / Rm Use	Staffing Requirements			Space Requirements			Space Size			Total Required Square Footage			Comments	
	Exist	2015	2035	Exist	2015	2035	W	L	Area	Exist	2015	2035		
Police Department														
SHARED SPACES														
Public Restrooms				2	2	0	0	0			0	0	0	SF included within Shared Facilities & Support
Conference Room				1	1	0	0	0			0	0	0	SF included within Shared Facilities & Support
Break / Lunch Room				1	1	0	0	0			0	0	0	SF included within Shared Facilities & Support Shared / Full Kitchen (stove, fridge, sink)
Supply Storage				1	1	0	0	0			0	0	0	SF included within Shared Facilities & Support
Training / Classroom/ Community Room				1	1	0	0	0			0	0	0	SF Included within Shared Facilities; Support Seating for 30 at tables /Video Projection/Ability to Mat Room for Hands on Training/ Partitioned into two rooms when needed
<i>Group Total</i>											0	0	0	
ADMINISTRATION & OPERATIONS														
Chief of Police				1	1	14	22	308			308	308	308	Private office; desk; 1 file cabinet; space for small meeting (4 chairs)
Sergeant				1	1	12	18	216			216	216	216	Shared private office: 2 desks/2 files 4-person conference table
Detectives				1	1	16	16	256			256	256	256	Shared private office: 2 desks/4 files Desk and chairs
Squad Room / Report Writing				1	1	16	16	256			256	256	256	Bullpen suite with 4 work stations Direct line of sight to processing area
Coffee Area / Prep				1	1	0	0	0			0	0	0	Counter w/ sink included within Squad Room
Reception Area (Service Counter)				1	1	12	16	192			192	192	192	Secure w/ bullet proof glazing & ADA counter 2 workstations/desk w/ counter/4 file cabinets/copier/ Shred box Evidence release, drug drop box; adjacent to main lobby and office supply strg
Soft Interview Room				1	1	8	8	64			64	64	64	Citizen contact/soft interviews/room for 3 people; Covert camera & microphone
<i>Group Total</i>											1,292	1,292	1,292	
PROPERTY / EVIDENCE														
Evidence Processing - Officers				1	1	12	16	192			192	192	192	Cardkey access, evidence lockers, work area, drying area/cabinets (8' long) Includes Drying, Temp., & Refridg. evidence lockers; 2x work stations with computers
Evidence Processing - Technicians				1	1	0	0	0			0	0	0	Evidence Tech Processing area 2x work stations with computers; SF included within Main Evidence Warehouse
Evidence Storage - Main warehouse				1	1	1	20	30	600		600	600	600	Compact shelving to be used; fuming tanks; drying tables
Refrigeration Storage				1	1	0	0	0			0	0	0	1x refrigerators; 1x future; SF included within Main Evidence Warehouse
Drug Storage				1	1	0	0	0			0	0	0	SF included within Main Evidence Warehouse
Weapons Storage				1	1	0	0	0			0	0	0	SF included within Main Evidence Warehouse
Oversized Item Storage				1	1	0	0	0			0	0	0	Open shelving within Main Evidence Warehouse
Bicycle Storage - Impound				1	1	0	0	0			0	0	0	5 wall-mounted bike racks for evidence storage;SF included within Main Evidence Warehouse
Evidence Release				1	1	0	0	0			0	0	0	Managed in soft interview room
<i>Group Total</i>											792	792	792	

Program: POLICE DEPARTMENT

Space / Rm Use	Staffing Requirements			Space Requirements			Space Size			Total Required Square Footage			Comments
	Exist	2015	2035	Exist	2015	2035	W	L	Area	Exist	2015	2035	
BOOKING / PROCESSING													
Detainee Processing					1	1	10	16	160		160	160	Fixed bench; floor drains; finger printing; photo processor
Hard Interview Rooms					2	2	8	8	64		128	128	Secure; table w/ 2 chairs; cuff ring Hardwired camera; intoxilyzer
Unisex Toilet for Detainees					1	1	8	8	64		64	64	Include cuff bar
Group Total											352	352	
POLICE SUPPORT FUNCTIONS													
Mudroom				0	1	1	12	15	180		64	180	Floor drains/slotted rubber floor mats/hose bib; used for secure access vestibule Shared with Public Works
Men's Restroom				1	1	1	10	26	260		150	260	
Men's Shower Room				0	1	1	12	16	192		192	192	3 Individual Showers
Men's Locker Room				1	15	25	2	7	14		210	350	15 Lockers / 25 Future Lockers (2035)
Women's Restroom				1	1	1	10	20	200		150	200	
Women's Shower Room				0	1	1	10	10	100		100	100	1 Individual Shower
Women's Locker Room				1	5	10	2	7	14		70	140	5 Lockers / 10 Future Lockers (2035)
1st Aid Station				0	2	2	0	0	0		0	0	Within locker room
Boot Polish Station				0	2	2	0	0	0		0	0	Within locker room
Quiet Room				0	1	1	10	12	120		120	120	Adjacent to locker rooms, 1x unisex
Patrol Supply Room					1	1	10	12	120		120	120	Secure; Flash lights, portable radios, tasers, etc.
Armory					1	1	12	15	180		180	180	Secure with countertop for weapons cleaning station; Weapons & ammunition strg/gun safe; sub-divided room
Patrol Equipment Room					1	1	12	15	180		32	180	Secure; Vehicle parts; Adjacent to Squad Room; 2'x2' Wall cubbies for Officer Duty Bags/Radar-Lidars; Thermal Imagers/Flashlight charging Banks
Records Storage					1	1	10	16	160		160	160	Secure; files & reports; compact shelving
Police Office Supply/IT Storage					1	1	6	10	60		60	60	Phones/LEDS/NCIC Computer Hub/Records Supply Storage/ Copier/Shred Box
Group Total											1,608	2,242	
SUBTOTAL		7	7	10								4,044	4,678
GENERAL CIRCULATION (20%)												809	936
TOTAL SQUARE FOOTAGE (Police Department)											4,860	4,853	5,614
POLICE EXTERIOR REQUIREMENTS													
Public Vehicles											0	0	SF Included in Shared Facilities & Support
Personal Vehicles				10	10	10					0	0	SF Included in Shared Facilities & Support Uncovered, Secured
Patrol Vehicles				7	7						0	0	SF Included in Shared Facilities & Support Covered if possible, secured, video surveillance
Impound Lot				5	5						0	0	SF Included in Shared Facilities & Support Uncovered, Secured, video surveillance
Storage Shed											0	0	SF Included in Shared Facilities & Support
Generator											0	0	SF included within Shared Facilities & Support Enclosed with sound dampening enclosure.
Trash/ Recycling											0	0	SF included within Shared Facilities & Support
K9 Kennel				0	1	1	4	8	32		32	32	Chain Link Enclosure located under covered secure parking area
Found Dog Kennels				0	4	4	4	8	32		128	128	Found dog kennels for holding/covered away from PD
Group Total											160	160	

Program: POLICE DEPARTMENT [continued]

Space / Rm Use	Staffing Requirements			Space Requirements			Space Size			Total Required Square Footage			Comments
	Exist	2015	2035	Exist	2015	2035	W	L	Area	Exist	2015	2035	
Municipal Court													
SHARED SPACES													
Lobby				1	1		0	0	0		0	0	SF included within Shared Facilities & Support
Public Restrooms				2	2		0	0	0		0	0	SF included within Shared Facilities & Support
Courtroom/ Multipurpose Room				1	1		0	0	0		0	0	SF included within Shared Facilities & Support; 100 Court occupants; Shared space w/ EOC, Police, City Hall, & Public Works; adjacent Security Room w/ security glass flush in wall for Court Clerk to take court payments prior to defendant leaving room (doors into main room and out of small room) & phone access; (Dedicated entrance for detainees)
Tables and Chairs Storage				1	1		0	0	0		0	0	SF included within Shared Facilities & Support
Conference Room				1	1		0	0	0		0	0	For Public Defender; SF included within Shared Facilities & Support
<i>Group Total</i>											0	0	
SUBTOTAL										0	0	0	
GENERAL CIRCULATION (20%)										0	0	0	
TOTAL SQUARE FOOTAGE (Municipal Court)										0	0	0	
COURT EXTERIOR REQUIREMENTS													
Public Vehicles											0	0	SF included in Shared Facilities & Support
Official Vehicles				2	2	2	10	18	180		0	0	SF included in Shared Facilities & Support Secure, covered if possible
<i>Group Total</i>											0	0	

Program: MUNICIPAL COURT

Space / Rm Use	Staffing Requirements			Space Requirements			Space Size			Total Required Square Footage			Comments
	Exist	2015	2035	Exist	2015	2035	W	L	Area	Exist	2015	2035	
City Hall													ADMINISTRATION FOR: FINANCE, MUNICIPAL COURT, PLANNING, UTILITY BILLING, CITY COUNCIL, STAFF BUDGET COMMITTEE, PLANNING COMMISSION, ETC.
SHARED SPACES													
Lobby					1	1	0	0	0		0	0	SF included within Shared Facilities & Support; Confidentiality for customers; separation between waiting and payment area; Payment drop box; Shared with Court and Building Dept.
Public Restrooms					2	2	0	0	0		0	0	SF included within Shared Facilities & Support
Conference Room					1	1	0	0	0		0	0	SF included within Shared Facilities & Support
Supply Storage					1	1	0	0	0		0	0	SF included within Shared Facilities & Support
Kitchen / Breakroom					1	1	0	0	0		0	0	SF included within Shared Facilities & Support Tables, chairs, refrigerator, microwave, coffee
Council Chambers					1	1	0	0	0		0	0	SF included within Shared Facilities & Support as MPR
<i>Group Total</i>											0	0	
ADMINISTRATION & FACILITIES													
Director of Administration / Recorder	1	1	1		1	1	12	18	216		216	216	Secured locking private office; Front Glass Wall w/ floor to ceiling shade covering; table area to review land use maps and compile packet material
Senior Accounting Specialist	1	1	1		1	1	12	15	180		180	180	Secured locking private office; Front Glass Wall w/ floor to ceiling shade covering
Administrative Assistant / Court Clerk	1	1	2		1	2	8	8	64		64	128	Open workstation; long table top for stuffing Utility Bills and Newsletters; Easy access to front counter but some privacy
Reception / Front Counter			2		1	1	12	20	240		240	240	Open workstation; counter for computer and printer for cash receipting, miscellaneous office equipment & cash draw; emergency buzzers to Public Works & Police Department; "on the phone" light next to the customer buzzer on the window; Filing space for accounts payable paid invoices
Payment Windows					3	3	4	5	20		60	60	Payment windows/stations for receiving customer payments in person; adjacent to MPR for court payments? (would need acoustic dampening)
Secure Storage					1	1	0	0	0		0	0	City Safe; contained within front counter area
<i>Group Total</i>	3	3	6								760	824	
SUPPORT FUNCTIONS													
Unisex Restroom					1	1	8	12	96		96	96	Serving City staff; include shower; adjacent to physical fitness room
Copy / Work Room					1	1	8	12	96		96	96	Copy machine, fax machine, mailing machine,
<i>Group Total</i>											192	192	
SUBTOTAL											952	1,016	
GENERAL CIRCULATION (20%)											190	203	
TOTAL SQUARE FOOTAGE (City Hall)											1,142	1,219	
CITY HALL EXTERIOR REQUIREMENTS													
Public Vehicles											0	0	Included in Shared Facilities & Support
Personal Vehicles					3	3	6	10	180		0	0	SF included in Shared Facilities & Support Uncovered, secured
<i>Group Total</i>											0	0	

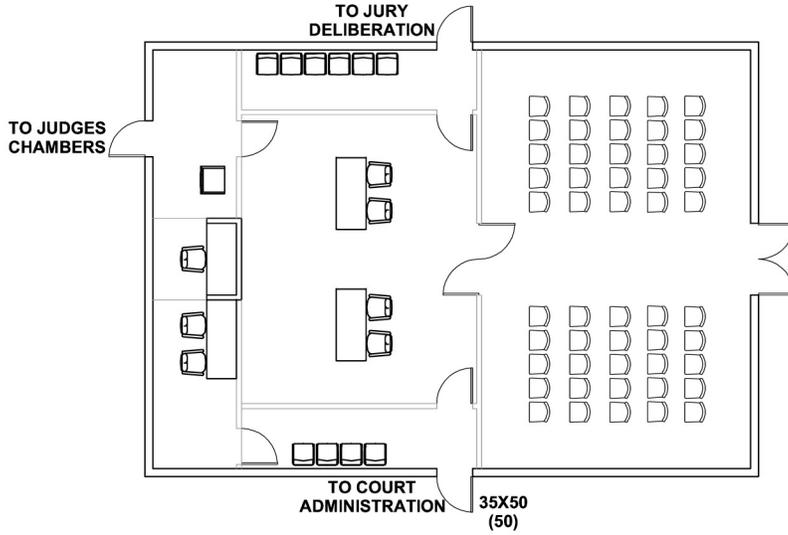
Program: CITY HALL

City of Hubbard

June 2015

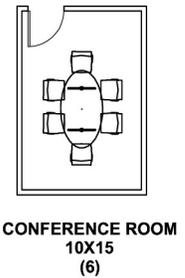
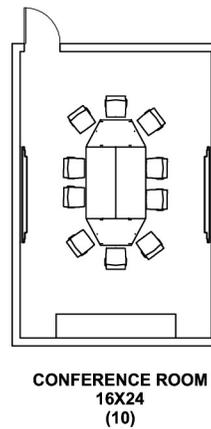
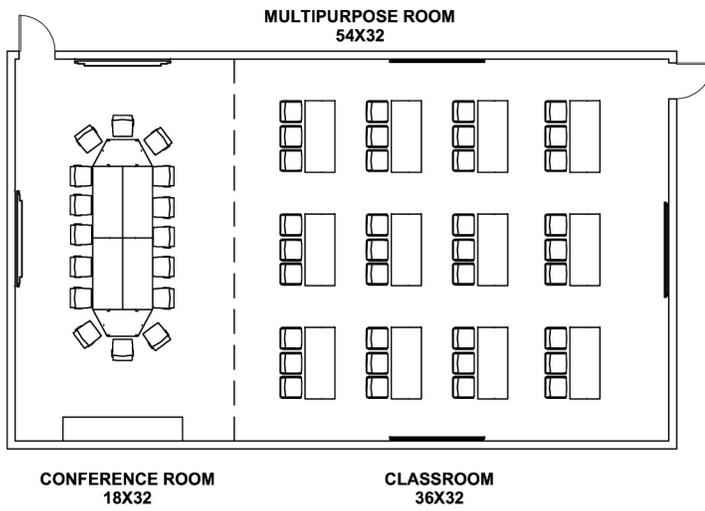
Space / Rm Use	Staffing Requirements			Space Requirements			Space Size			Total Required Square Footage			Comments	
	Exist	2015	2035	Exist	2015	2035	W	L	Area	Exist	2015	2035		
Public Works														
SHARED SPACES														
Lobby				1	1	0	0	0		0	0	0	SF included within Shared Facilities & Support	
Public Restrooms				2	2	0	0	0		0	0	0	SF included within Shared Facilities & Support	
Conference Room				1	1	0	0	0		0	0	0	SF included within Shared Facilities & Support	
Copy Room				1	1	0	0	0		0	0	0	SF included within Shared Facilities & Support Printer, copy machine, work space; shared w/ City Hall	
Supply Storage				1	1	0	0	0		0	0	0	SF included within Shared Facilities & Support Office supplies, documents, cleaning materials	
Kitchen/ Breakroom				1	1	0	0	0		0	0	0	SF included within Shared Facilities & Support Shared with Police & City Hall staff	
<i>Group Total</i>										0	0	0		
ADMINISTRATION & FACILITIES														
Superintendent				1	1	12	16	192		192	192	192	Private Office Desk; meeting table; credenza/computer station; 2 guest chairs; 2 file cabinets; would need access to a copy machine	
Assistant to the Superintendent				1	1	10	12	120		120	120	120	Private Office Plotter; desk; credenza/computer station; bookshelf; 2 file cabinets; 2 guest chairs; small table for viewing large maps. Would need access to a copy machine	
Office Assistant I				1	1	8	8	64		64	64	64	Open workstation; Work Station w/computer and connection to general printer; 2-4 file drawers; would need access to a copy machine	
Open Meeting / Work Area				7	7	8	8	64		448	448	448	Work Station w/computer connected to general printer; 2-4 file drawers; for current and future utility workers and temporary summer helper positions	
<i>Group Total</i>										824	824	824		
SUPPORT FUNCTIONS														
Copy / Work Room				1	1	8	12	96		96	96	96	Copy machine, fax machine, mailing machine,	
Archive Storage				1	1	0	0	0		0	0	0	Archived files, shared with other Departments SF included within Shared Facilities/Support	
Mudroom				1	1	0	0	0		0	0	0	SF included within Police	
Exercise Room				1	1	0	0	0		0	0	0	SF included within Police	
<i>Group Total</i>										96	96	96		
SUBTOTAL	5	5	10							0	920	920		
GENERAL CIRCULATION (20%)										0	184	184		
TOTAL SQUARE FOOTAGE (Public Works)										0	1,104	1,104		
PUBLIC WORKS EXTERIOR REQUIREMENTS														
Public Vehicles / Equipment				7	7	8	10	18	180		0	0	0	SF off-site; covered
Personal Vehicles				5	5	10	10	18	180		0	0	0	SF Included in Shared Facilities & Support Uncovered, secured.
Official Vehicles				5	5	9	10	20	200		0	0	0	SF off-site; Covered & enclosed/secure
<i>Group Total</i>										0	0	0	0	

Program: PUBLIC WORKS



MUNICIPAL COURT LAYOUT

Scale 1/16" = 1'-0"



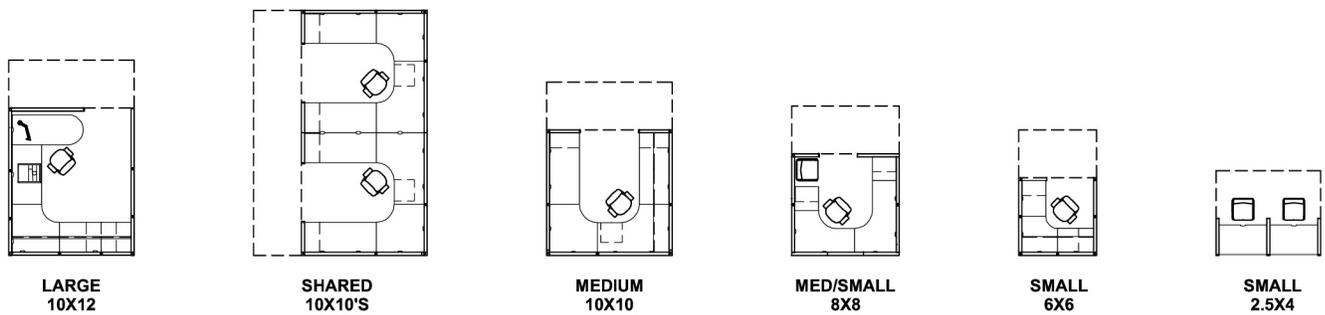
TYPICAL CONFERENCE LAYOUTS

Scale 1/16" = 1'-0"

SPACE STANDARDS

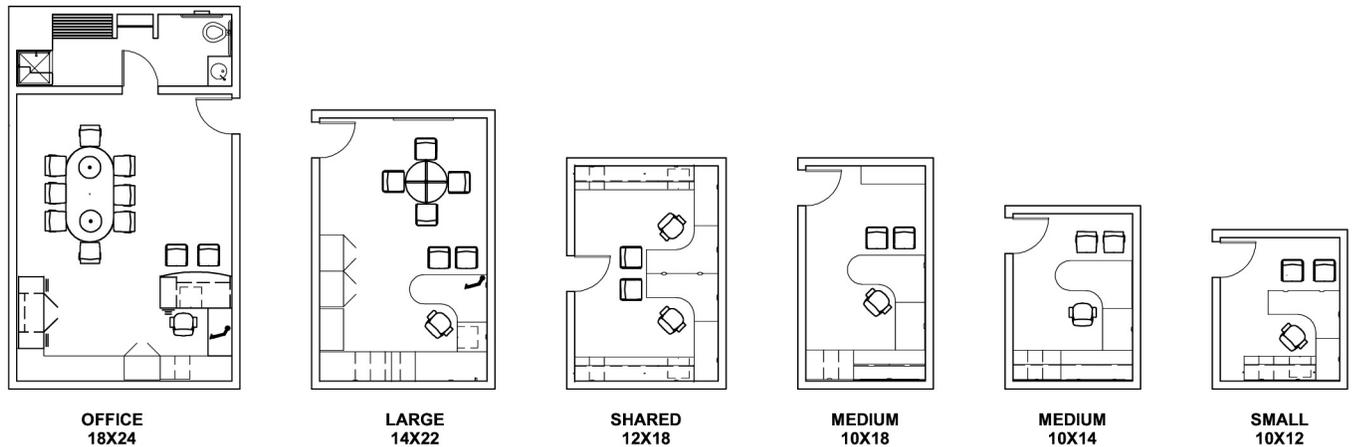
Based on existing emergency response facilities, past experience and general architectural standards, space standards have been developed and depicted to aid in efficiently comparing sizes for offices, support spaces, and primary functions unique to this particular type of facility. These space standards have been utilized in the development and validation of identified program elements.

The following layouts are provided for reference, and to indicate baseline dimensions and room layouts for discussion during the programming process. Actual room dimensions often adjust during the plan development task to account for spacial adjacencies and other design parameters.



TYPICAL CUBICLE LAYOUTS

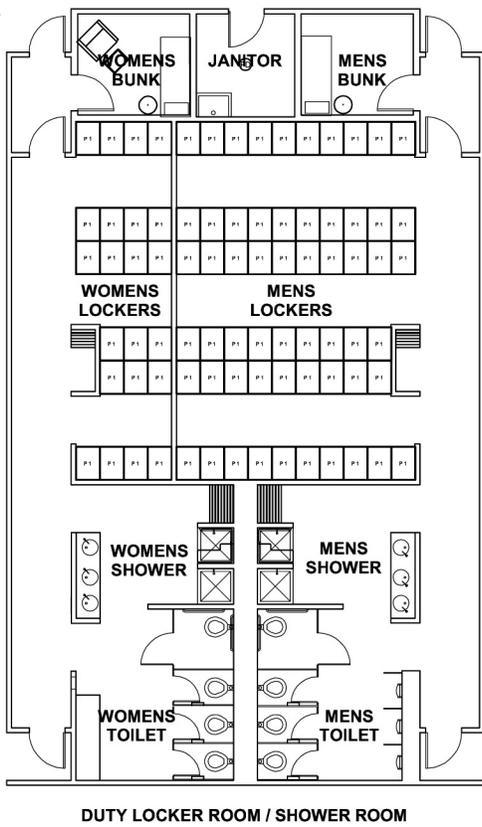
Scale 1/16" = 1'-0"



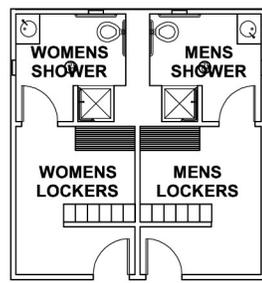
TYPICAL OFFICE LAYOUTS

Scale 1/16" = 1'-0"

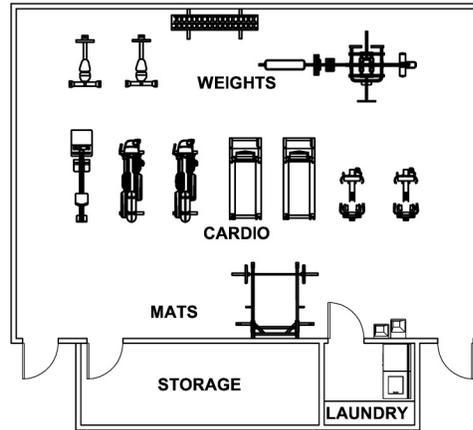
Space Standards



DUTY LOCKER ROOM / SHOWER ROOM



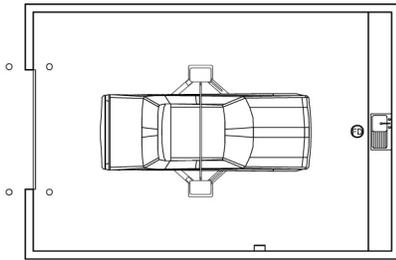
LOCKER ROOM / SHOWER ROOM



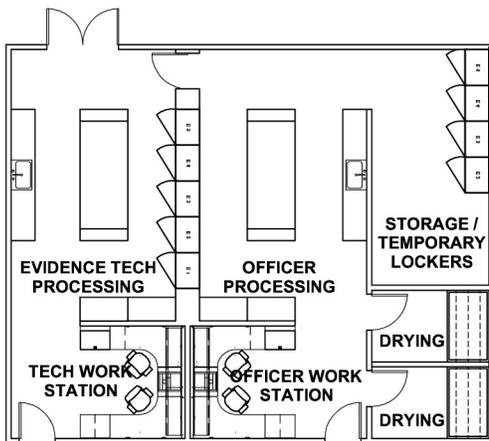
FITNESS

LOCKER / FITNESS LAYOUTS

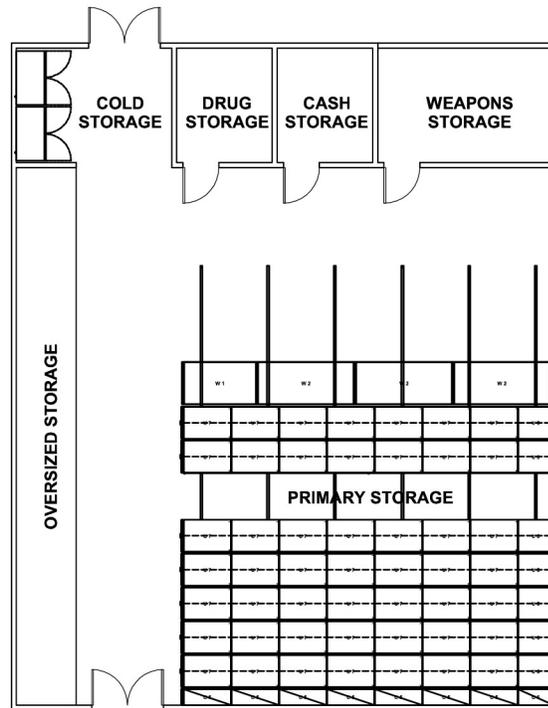
Scale 1/16" = 1'-0"



EVIDENCE VEHICLE GARAGE
20X30



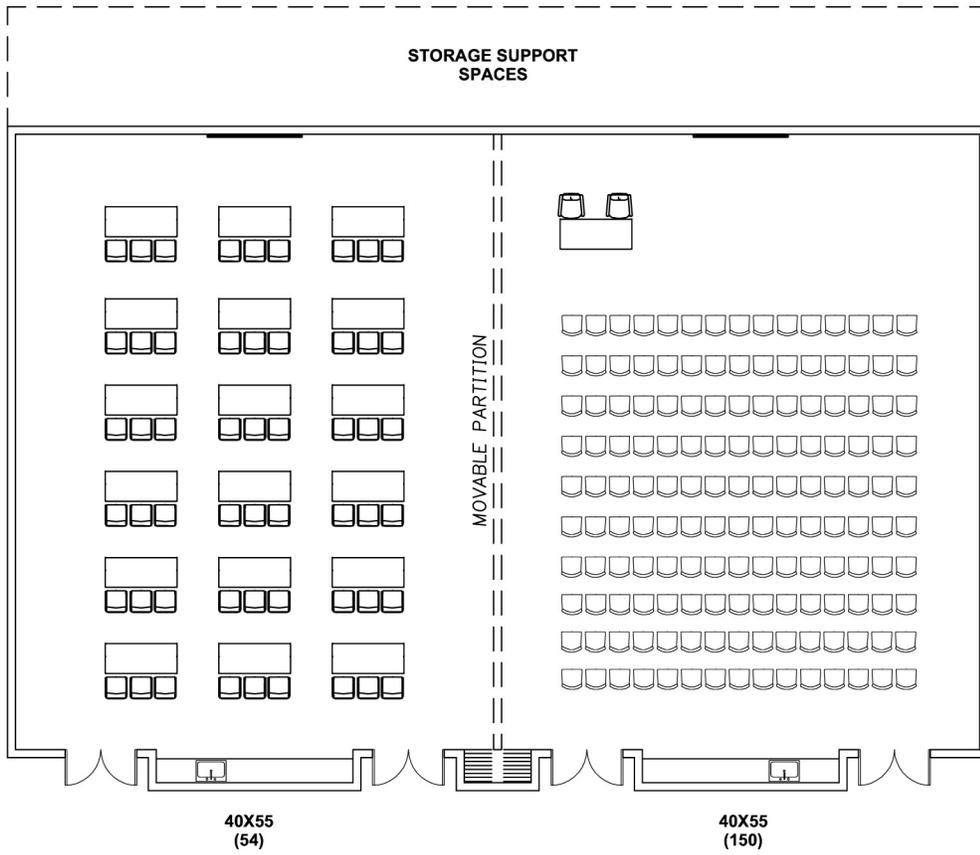
EVIDENCE PROCESSING



EVIDENCE STORAGE
45X75

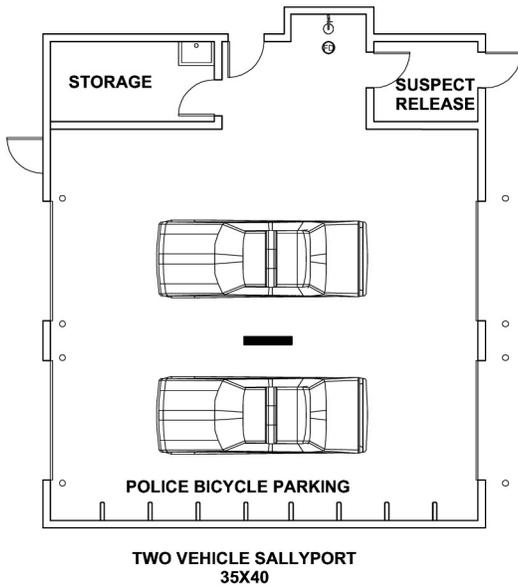
PROPERTY / EVIDENCE SPACE LAYOUTS

Scale 1/16" = 1'-0"

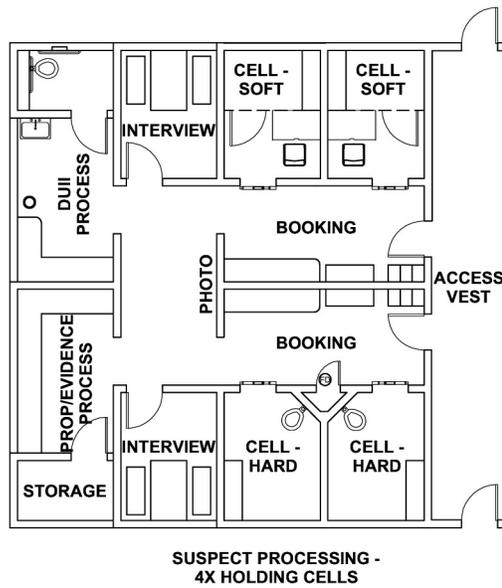


TRAINING CLASSROOM LAYOUTS

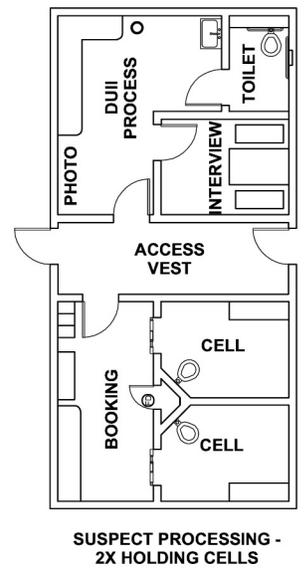
Scale 1/16" = 1'-0"



TWO VEHICLE SALLYPORT
35X40



SUSPECT PROCESSING -
4X HOLDING CELLS



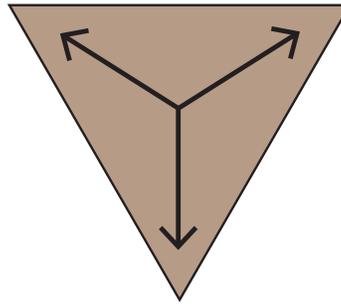
SUSPECT PROCESSING -
2X HOLDING CELLS

SUSPECT PROCESSING LAYOUTS

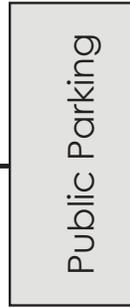
Scale 1/16" = 1'-0"
Space Standards

PUBLIC

Multi-Purpose Room



Lobby

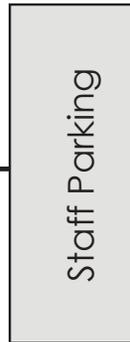


MEDIUM SECURITY

City Hall / Public Works Administration

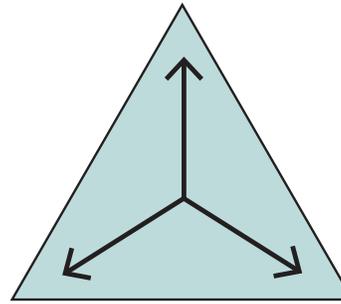


Lockers/Fitness



HIGH SECURITY

Evidence/
Detectives



Patrol/
Booking



Levels of Security Diagram

ADJACENCY DIAGRAMS

Public safety facilities are unique in that the relationships of all elements are closely linked to the ability of the police department to efficiently and effectively serve the community. Having an understanding of the relative sizes, proximity, and relationships between spaces is key. In conjunction with developing the future space-needs program for the Hubbard Police Department, City Hall, and Public Works - Mackenzie created three spatial adjacency diagrams: all single-story schemes. These graphics do not represent an actual building, but simply the relationships of spaces and sizes. Their required adjacencies to one another also informed how the schemes were developed.

All three schemes focus on the hierarchy of security between the public, City staff, and Police; flow of services; and development of a common hub for the City of Hubbard. Unlike the existing facility, in these diagrams there are clear public and private faces to establish a secure entrance for Department Staff and provide clear public functions including parking, community plaza, entry lobby, information support, and a large community (multi-purpose) room.

A centralized lunchroom is utilized to help create a common hub for the Police Department and the other City departments that will be housed in the building. The lunchroom is contained within the overall program of shared facilities - which are accessible by all three departments and within the medium security portion of the building.

The high-security area encompasses investigation services, evidence, patrol and booking. These are considered the most sensitive functions and would be located at the farthest reach from the public with secure access from police parking.

The shared functions are:

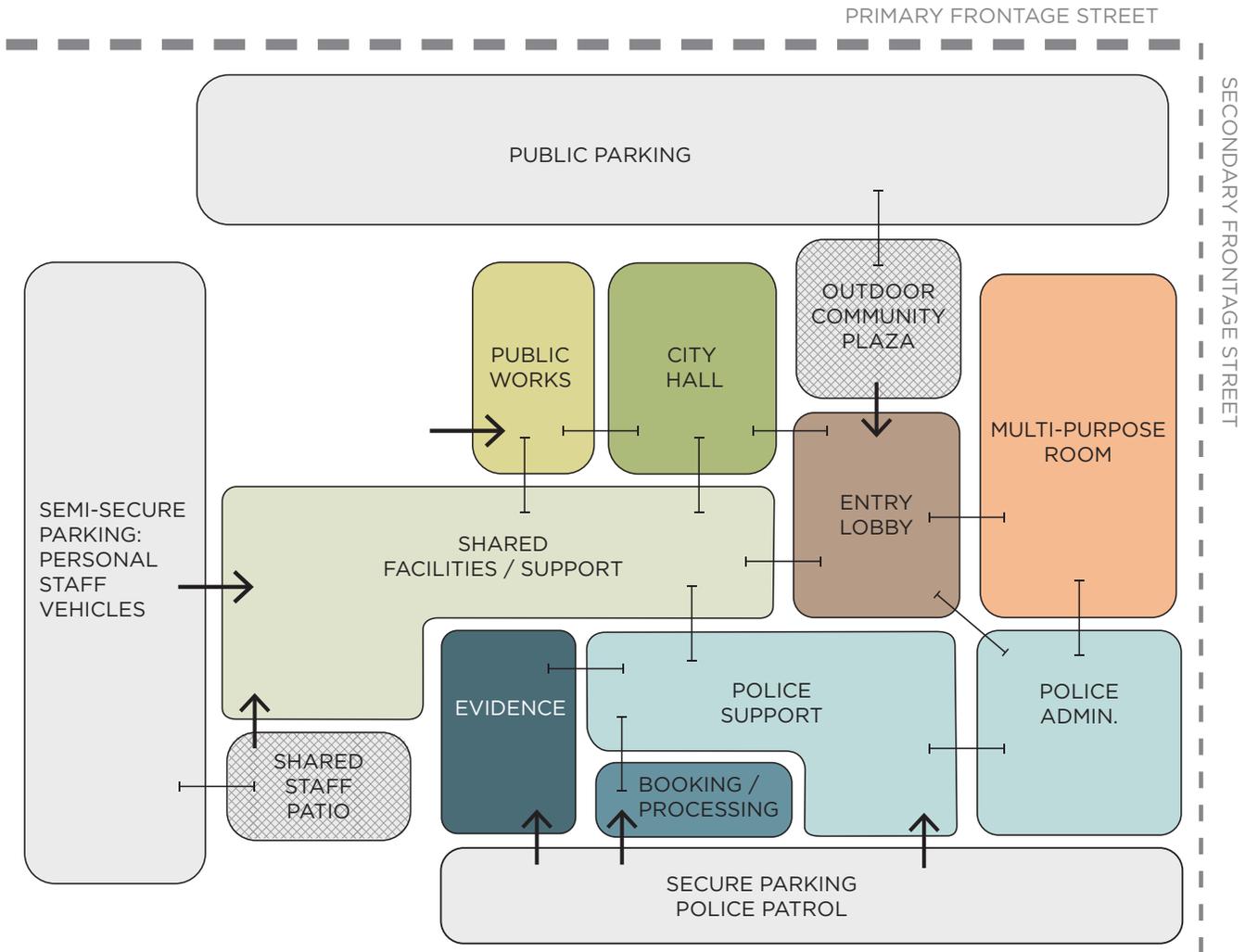
- Multi-Purpose Room
- Various-sized Conference Rooms
- Lunchroom
- City Archives / Records
- Central Server / Information Technology
- Physical Training / Fitness Room
- Public Restrooms
- Lobby
- Staff and Public Parking

The City Departments the Police most often interact with are:

- City Hall Administration
- Municipal Courts
- Public Works for fleet and facility management

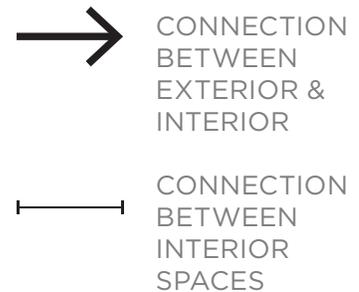
While shared functions will change with a new facility, it is important to consider the necessary and potential connections between the departments - for both design and economic efficiencies.

OPTION 1



ADVANTAGES

- All three city departments have direct access to shared facilities (lunch/break, conference rooms, central server, archives, physical fitness, supply storage, etc.)
- Police is buffered from the primary frontage street (the building's public face). This allows for a higher level of security for officers while still providing a connection between Police Administration/Reception and the entry lobby.
- Multi-Purpose Room (MPR) could be opened up to public plaza for community events/gatherings (indoor/outdoor connective space for the people of Hubbard)
- Police secure parking is separated from semi-secure staff vehicle parking. It is best to avoid comingling these parking typologies for security.

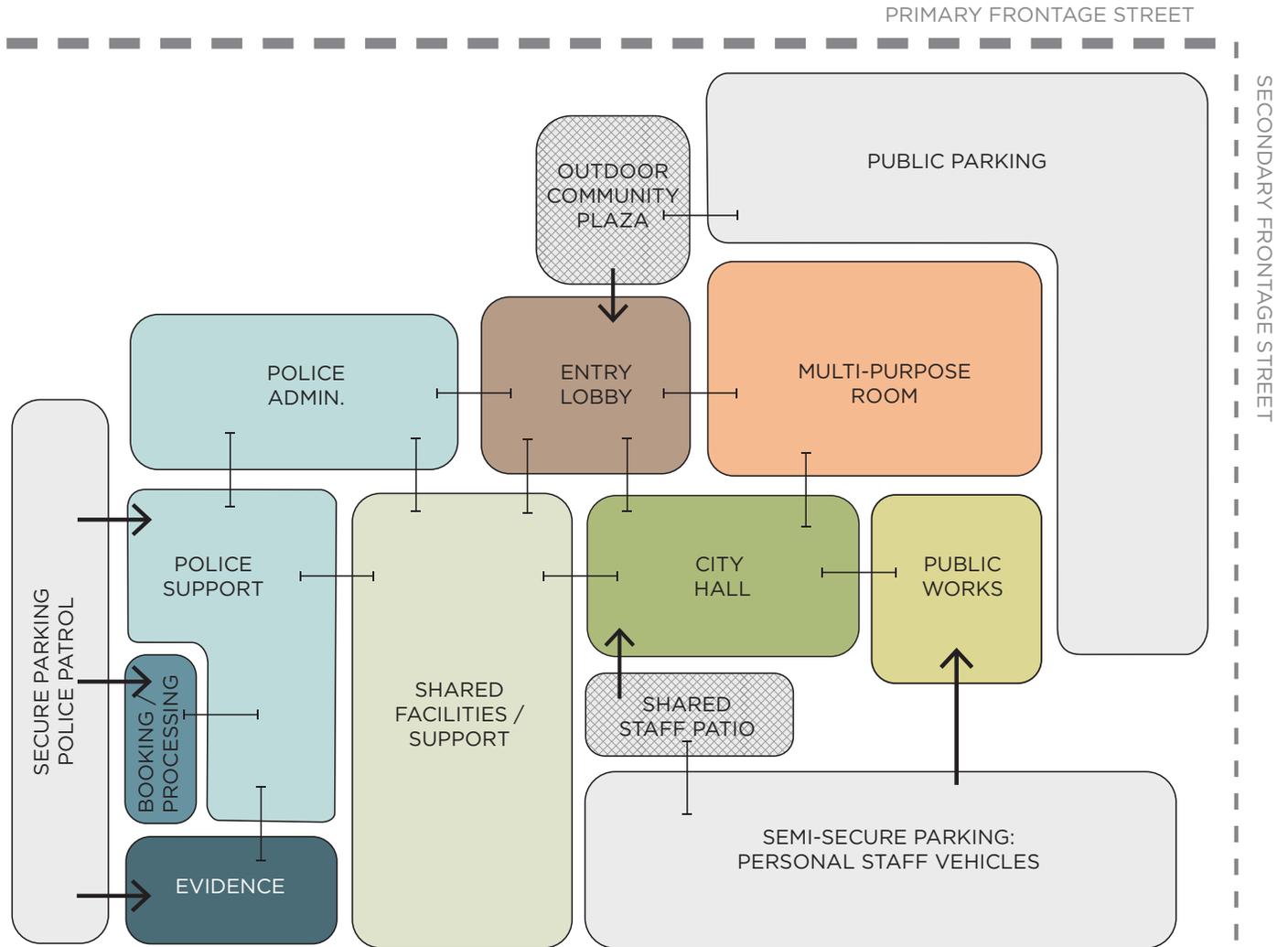


DISADVANTAGES

- Entry lobby is tucked away from immediate view by MPR and City Hall
- City Hall does not have direct adjacency to MPR

Adjacency Diagram: OPTION 1

OPTION 2



ADVANTAGES

- Entrance and public lobby have a prominent presence on the primary frontage street (which could be a welcoming component of the facility)
- Shared facilities are centralized in the layout to allow for optimum functionality among the city departments
- City Hall and Police Administration/Reception have direct access to entry lobby (for connecting to public realm)
- City Hall has direct access to Multi-Purpose Room for court payments

➔ CONNECTION BETWEEN EXTERIOR & INTERIOR

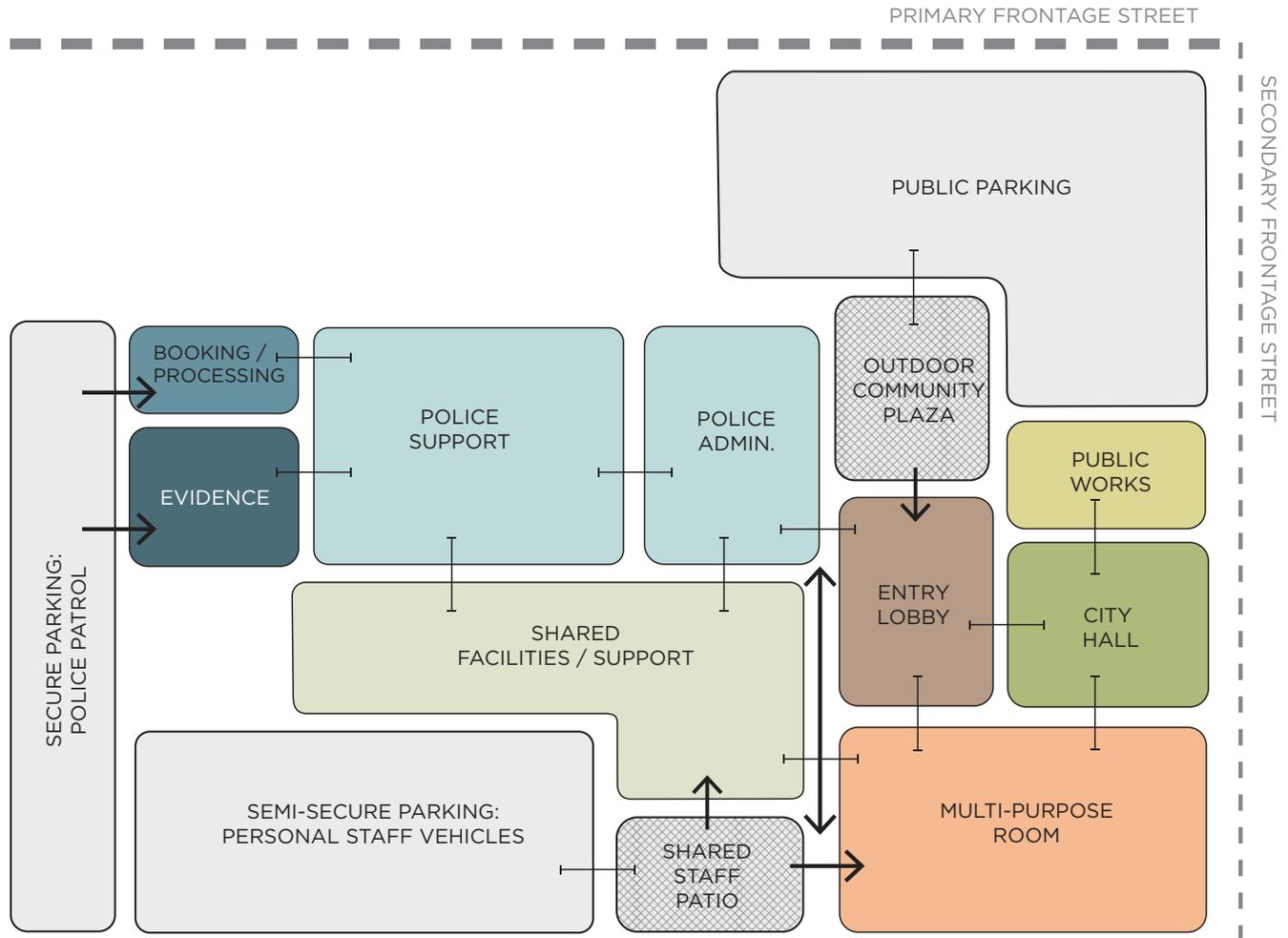
┆ CONNECTION BETWEEN INTERIOR SPACES

DISADVANTAGES

- Police Department is partly exposed to primary frontage street and the public realm.
- Public Works does not have direct adjacency to shared facilities

Adjacency Diagram : OPTION 2

OPTION 3



ADVANTAGES

- City Hall and Police Administration/Reception have direct access to entry lobby (for connecting to public realm)
- City Hall has direct access to Multi-Purpose Room for court payments



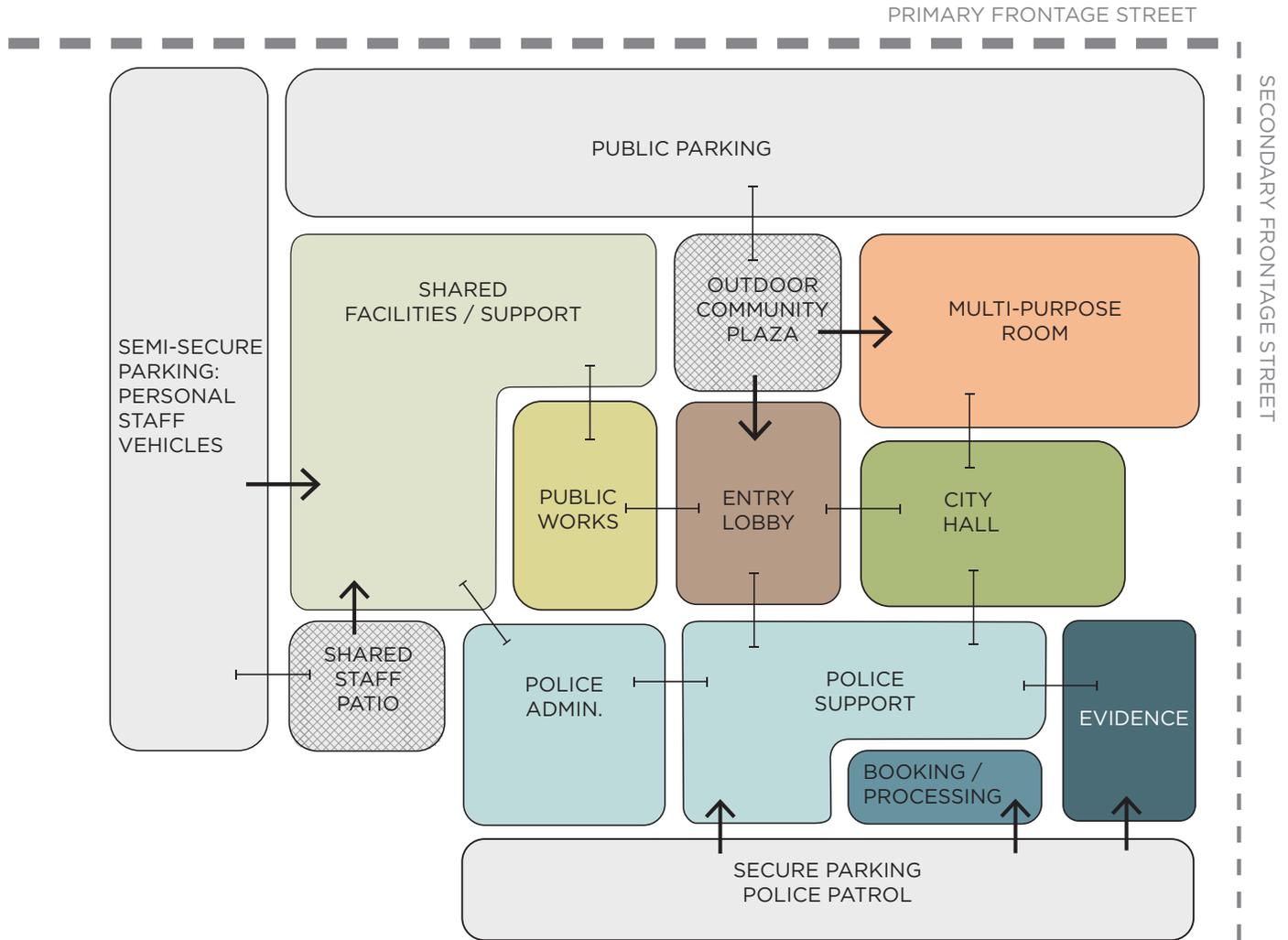
DISADVANTAGES

- Police department is fully fronting the primary frontage street, which could be a security issue
- City Hall and Public Works do not have direct adjacency to shared facilities (not convenient - especially for supply storage and archives access)
- Police secure parking is directly adjacent to staff parking, which is not ideal for security
- Multi-Purpose Room is located far from public plaza and parking which limits its functionality as a community break-out space



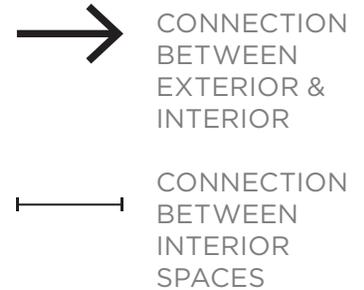
Adjacency Diagram: OPTION 3

OPTION 4



ADVANTAGES

- Police is buffered from the primary frontage street (the building's public face).
- Multi-Purpose Room (MPR) could be opened up to public plaza for community events/gatherings (indoor/outdoor connective space for the people of Hubbard)
- City Hall and Public Works are separated from Public Parking for security purposes
- Police secure parking is separated from semi-secure staff vehicle parking. It is best to avoid comingling these parking typologies for security.

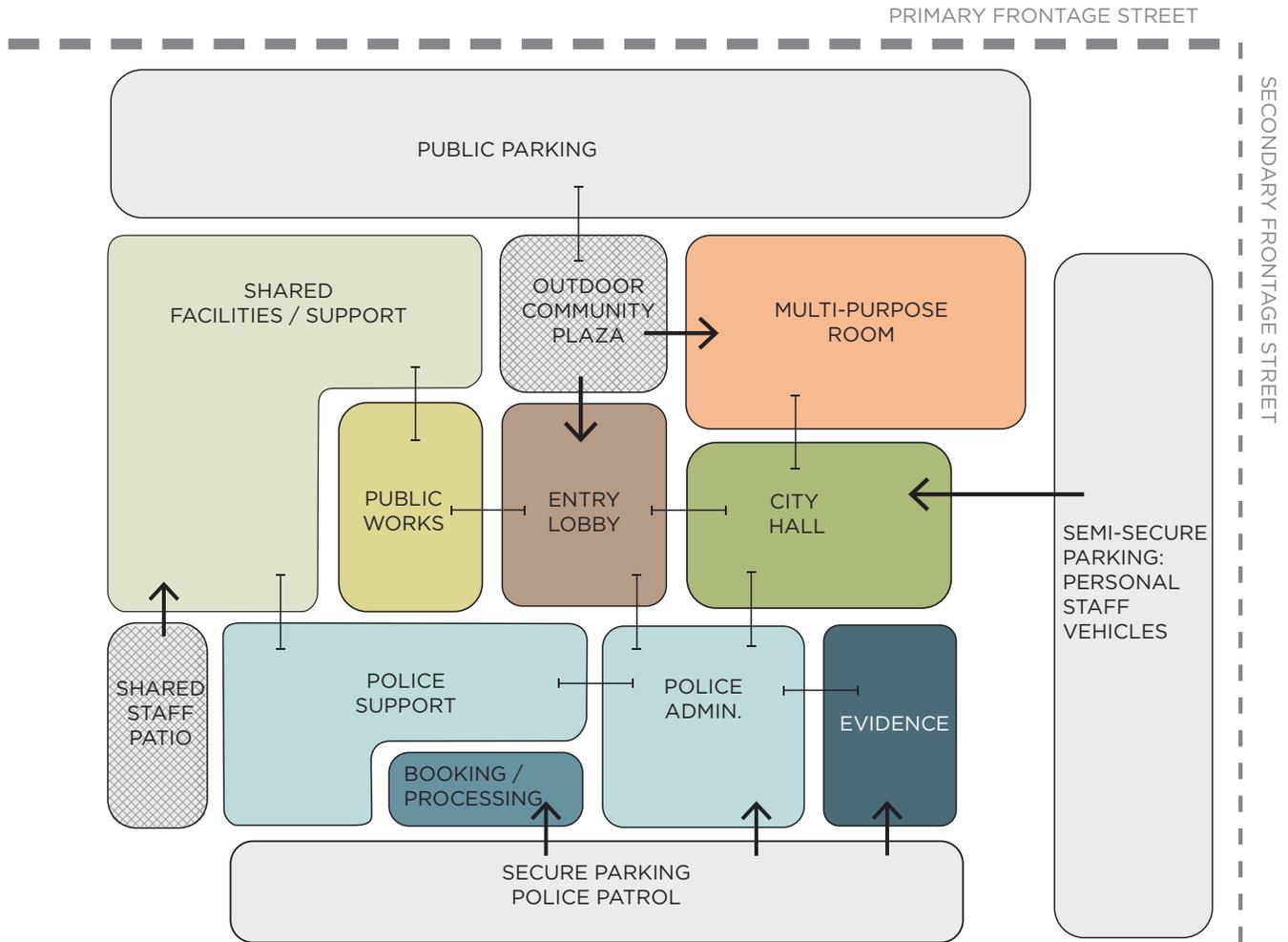


DISADVANTAGES

- Police Administration (and Reception) doesn't have direct adjacency to Entry Lobby
- Entry lobby is tucked away from immediate view by MPR and Shared Facilities/Support
- City Hall does not have direct adjacency to Shared Facilities/Support

Adjacency Diagram : OPTION 4

OPTION 5



ADVANTAGES

- All three City departments have direct access to Entry Lobby
- Police is buffered from the primary frontage street (the building's public face).
- Multi-Purpose Room (MPR) could be opened up to public plaza for community events/gatherings (indoor/outdoor connective space for the people of Hubbard)
- City Hall and Public Works are separated from Public Parking for security purposes

➔ CONNECTION BETWEEN EXTERIOR & INTERIOR

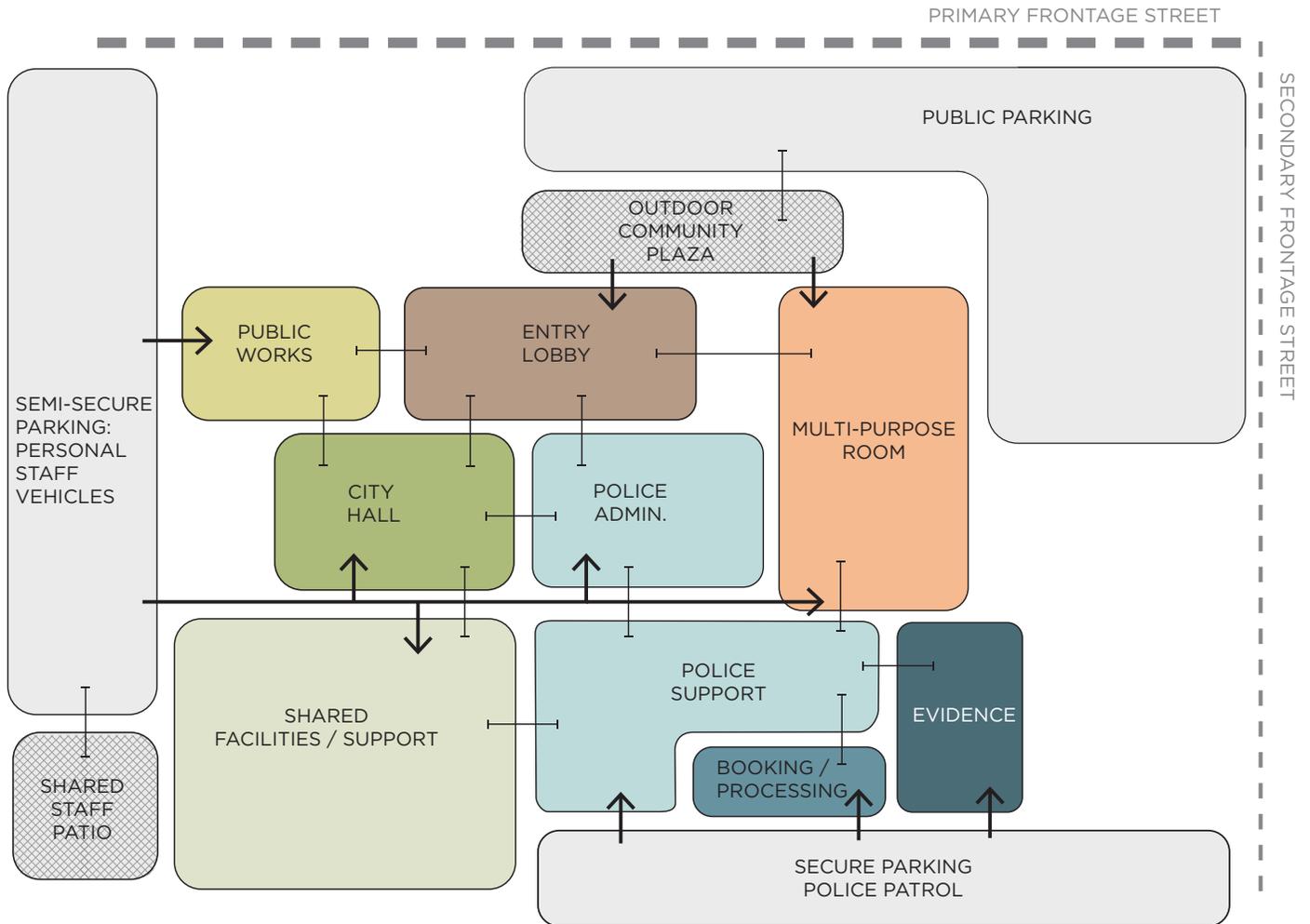
┆┆┆ CONNECTION BETWEEN INTERIOR SPACES

DISADVANTAGES

- Entry lobby is tucked away from immediate view by MPR and Shared Facilities/Support
- City Hall does not have direct adjacency to Shared Facilities/Support; shared spaces are not central in the building, which limits functionality
- Police secure parking is not separate from semi-secure staff vehicle parking. It's best to avoid comingling these parking types for security.

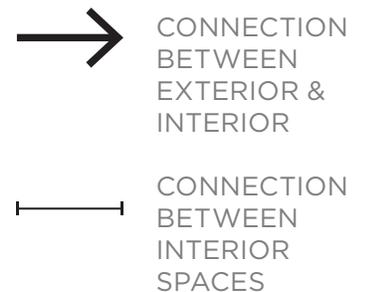
Adjacency Diagram: OPTION 5

OPTION 6



ADVANTAGES

- All three City departments have direct access to Entry Lobby
- Police is buffered from the primary frontage street (the building's public face).
- Multi-Purpose Room (MPR) could be opened up to public plaza for community events/gatherings (indoor/outdoor connective space for the people of Hubbard)
- City Hall and Public Works are separated from Public Parking for security purposes
- Police secure parking is separated from semi-secure staff vehicle parking. It is best to avoid comingling these parking typologies for security.
- Prominent Entry Lobby

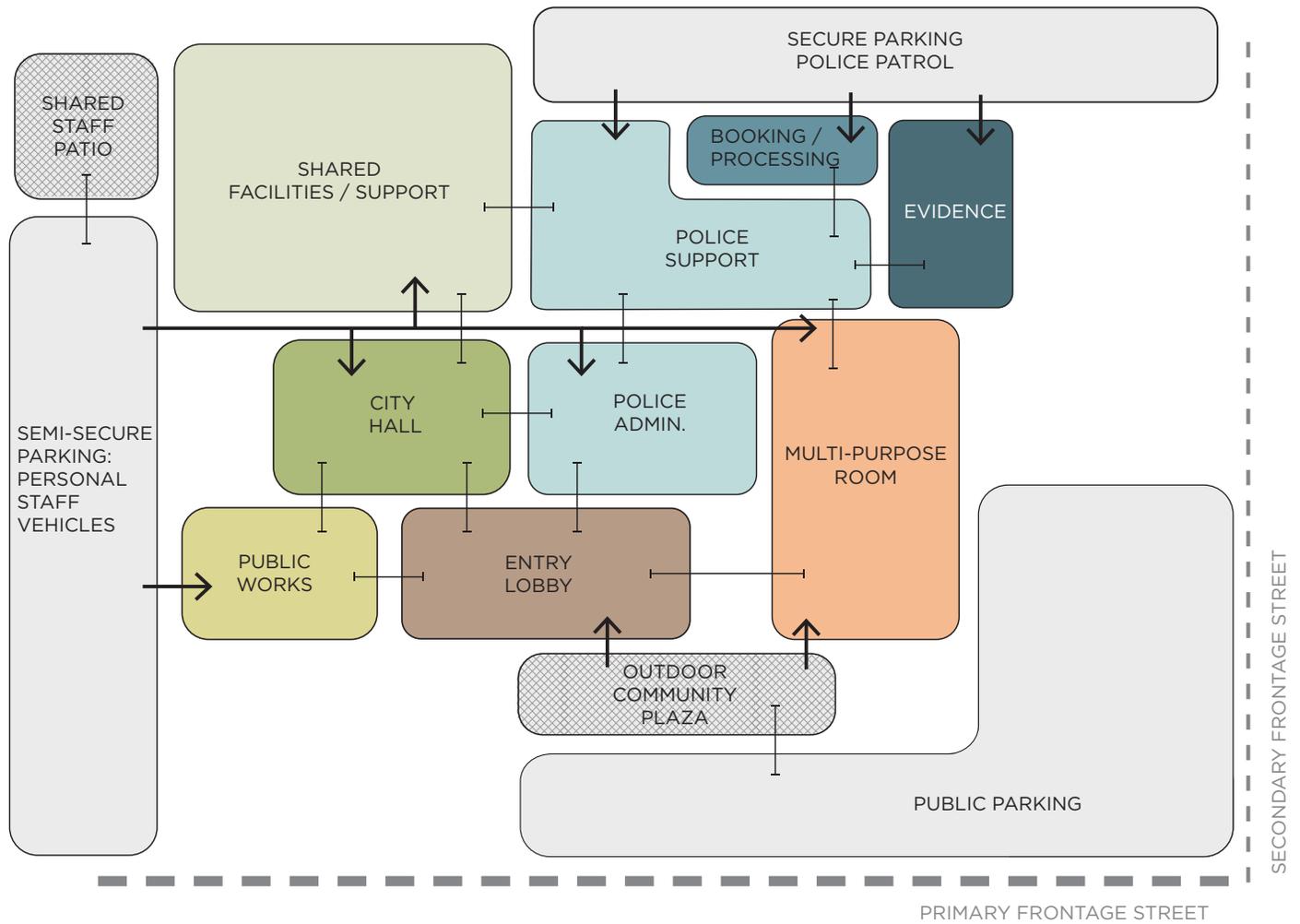


DISADVANTAGES

- Public Works does not have direct adjacency to Shared Facilities/Support
- City Hall does not have direct access to MPR

Adjacency Diagram : OPTION 6

SELECTED OPTION



The adjacency diagram shown above has been developed based on comments received from the City of Hubbard during review of the initial adjacency options. The approved adjacency diagram is intended to reflect the ideal relationships between each of the city departments as well as the location of shared and public spaces.

The final adjacency scheme reflects critical relationships often seen in departments, including administration’s interaction with the public

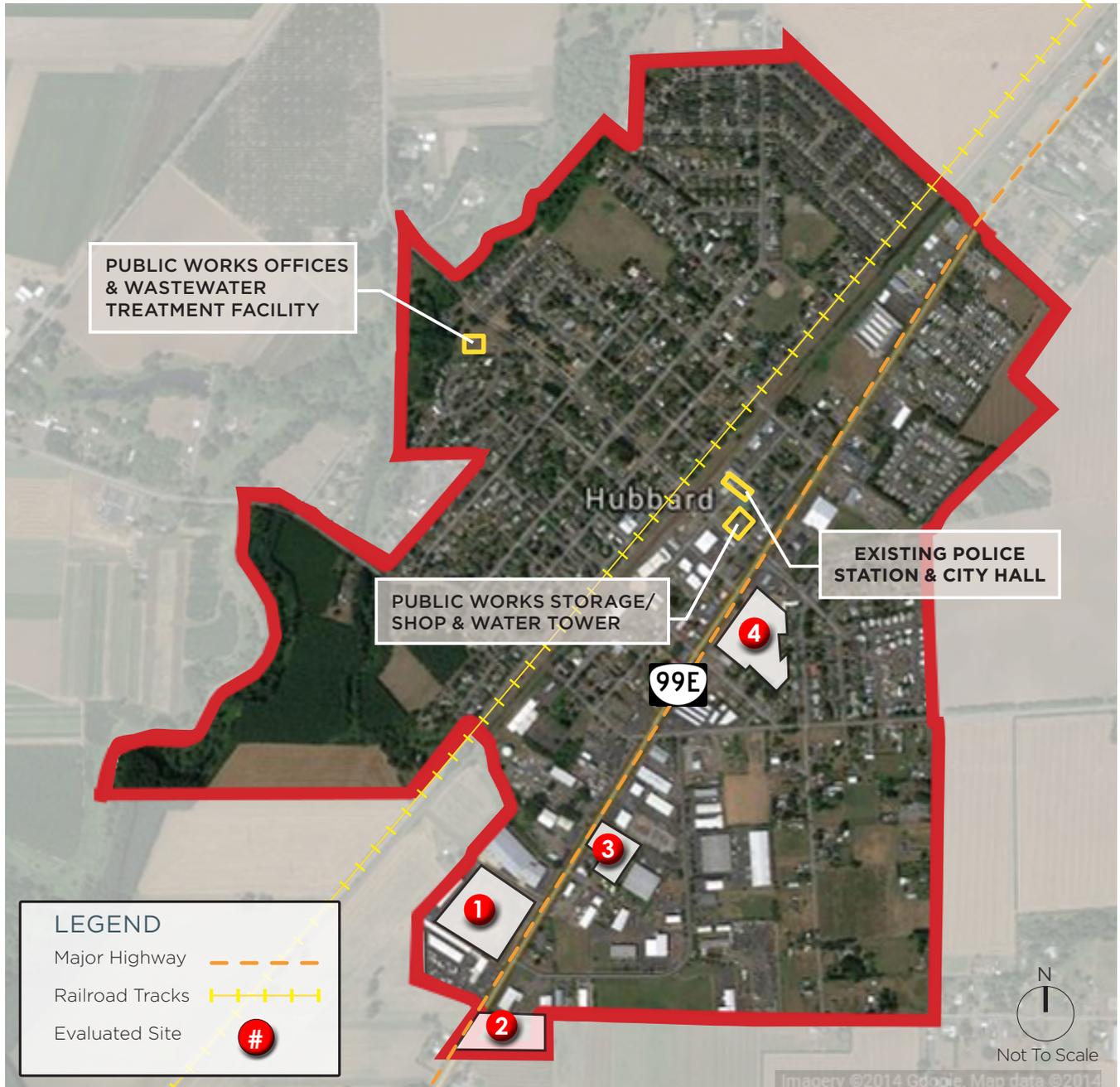
and visibility to the lobby and entry vestibule; proximity of Patrol and Report Writing to the Booking and Processing; central circulation with clear access from staff parking to all departments; and the procedural relationships between officer and evidence processing, and evidence storage.

The final adjacency diagram was leveraged to develop floor and site “block plan” options seen on the following pages.

Adjacency Diagram : SELECTED OPTION

POTENTIAL SITES EVALUATION

MAP OF POTENTIAL SITES



The current site conditions and development criteria for the four sites selected by the City of Hubbard are outlined in the following Land Use Matrix (page 04-04 and 04-05). The zoning for each of the sites allows for construction of a multi-use building permitted outright.

The selected sites are all located along the main artery (99E) through the City of Hubbard. Shown above is a map showing the city limits (including the urban growth boundary) and the selected sites.

- SITE 1: 2994 Schmidt Lane
- SITE 2: Tom Satere's Property
- SITE 3: Jaman Enterprises, LLC
- SITE 4: Alprop Co/Alpenrose Dairy, Inc.

Potential Sites

	SITE 1: SCHMIDT LN.	SITE 2: TOM SETERE
PROPERTY ADDRESS	2994 Schmidt Ln	17514-17568 Pacific Hwy 99E
SITE AREA	310820 sq ft tax lot / 230,752 sq ft (~5.3 acres) usable	129362 sq ft tax lot / 129,362 sq ft (~3 acres) usable
TAX LOT(S)	041W33DC00900	051W0400200
OWNER	PBSL, LLC	2012 BROTHER SETERE
ZONE & JURISDICTION	I-C (Industrial-Commercial) City of Hubbard	I-C (Industrial-Commercial) City of Hubbard
ALLOWED USE	<p>Unless otherwise subject to Conditional Use provisions or requirements of this Ordinance, the following uses are permitted in the Industrial-Commercial District: A. all uses permitted in the Industrial (I) District; B. building material, hardware and garden supply sales; C. retail sales accessory to a permitted industrial use; D. other retail uses which are permitted in the Commercial District; and E. wholesale commercial sales.</p> <p>CONDITIONAL USES: Conditional Uses as identified in Industrial Zoning F. Public and private utility buildings and structures such as electric substations, telephone exchanges, and communications towers and/or antennas.</p>	<p>Unless otherwise subject to Conditional Use provisions or requirements of this Ordinance, the following uses are permitted in the Industrial-Commercial District: A. all uses permitted in the Industrial (I) District; B. building material, hardware and garden supply sales; C. retail sales accessory to a permitted industrial use; D. other retail uses which are permitted in the Commercial District; and E. wholesale commercial sales.</p> <p>CONDITIONAL USES: Conditional Uses as identified in Industrial Zoning F. Public and private utility buildings and structures such as electric substations, telephone exchanges, and communications towers and/or antennas.</p>
FLOOR AREA RATIO	N/A	N/A
MIN. LANDSCAPE REQUIREMENTS	10%	10%
MAX. LOT COVERAGE	90%	90%
MIN. PARKING RATIO	1 SPACE PER 400 SQ. FT	1 SPACE PER 400 SQ. FT
MAX. BUILDING HEIGHT	80 FT	80 FT
BUILDING SETBACKS	<ol style="list-style-type: none"> 1. Front yard: 20 feet 2. Side yard: Abutting a residential or commercial district 25 feet; Abutting an industrial district 10 feet 3. Rear Yard: Abutting a residential or commercial district 25 feet; Abutting an industrial district 10 feet 	<ol style="list-style-type: none"> 1. Front yard: 20 feet 2. Side yard: Abutting a residential or commercial district 25 feet; Abutting an industrial district 10 feet 3. Rear Yard: Abutting a residential or commercial district 25 feet; Abutting an industrial district 10 feet
PARKING SETBACKS	When adjacent to residential zoning designation buffering and screening will be required as identified in 2.207.05 of the City of Hubbard Development Code. Screening and Buffering types include: 15 foot planted buffer; 10 foot berm plus planting area; 5 foot wall plus planted area	When adjacent to residential zoning designation buffering and screening will be required as identified in 2.207.05 of the City of Hubbard Development Code. Screening and Buffering types include: 15 foot planted buffer; 10 foot berm plus planting area; 5 foot wall plus planted area

SITE 3: JAMAN ENTERPRISE	SITE 4: ALPENROSE
2674-2714 Pacific Hwy 99E	3425 Pacific Hwy 99E
104350 sq ft tax lot / 85,862 sq ft (~2 acres) usable	240323 sq ft tax lots / 203,119 sq ft (~4.7 acres) usable
041W33DD02000	041W34CB03100; 041W33DA00100
JAMAN ENTERPRISES, LLC	ALPROP CO; ALPENROSE DAIRY, INC.
I-C (Industrial-Commercial) City of Hubbard	C (Commercial) City of Hubbard
<p>Unless otherwise subject to Conditional Use provisions or requirements of this Ordinance, the following uses are permitted in the Industrial-Commercial District: A. all uses permitted in the Industrial (I) District; B. building material, hardware and garden supply sales; C. retail sales accessory to a permitted industrial use; D. other retail uses which are permitted in the Commercial District; and E. wholesale commercial sales.</p> <p>CONDITIONAL USES: Conditional Uses as identified in Industrial Zoning F. Public and private utility buildings and structures such as electric substations, telephone exchanges, and communications towers and/or antennas.</p>	<p>Unless otherwise subject to Conditional Use provisions or requirements of this Ordinance, the following uses are permitted in the C District:</p> <p>A. Retail trade establishments engaged in selling goods or merchandise to the general public for personal or household consumption such as retail groceries, hardware stores, department stores, gas stations and sporting goods stores; B. Retail service establishments offering services and entertainment to the general public for personal or household consumption such as eating and drinking establishments, motels, hotels, banks, real estate and financial services; C. Business service establishments engaged in rendering services to other businesses on a fee or contract basis such as building maintenance, employment services and consulting services; D. Offices and clinics such as doctor and dentist offices, veterinary clinics and law offices; E. Dwelling units accessory to a permitted use or above a permitted use; F. Group day care homes and centers; G. Residential care home / facility; H. Amusement and recreational services; I. Public and private utility buildings and structures such as electric substations, telephone exchanges, and communications antennas or towers (approved in accordance with Section 3.103); J. Churches; K. Automobile sales, both new and used, recreational vehicles, recreational unit, and light trailer sales.</p>
N/A	N/A
10%	10%
90%	90%
1 SPACE PER 400 SQ. FT	1 SPACE PER 400 SQ. FT
80 FT	45 FT
<p>1. Front yard: 20 feet 2. Side yard: Abutting a residential or commercial district 25 feet; Abutting an industrial district 10 feet 3. Rear Yard: Abutting a residential or commercial district 25 feet; Abutting an industrial district 10 feet</p>	<p>B. Minimum yard setbacks: 1. Front Yard None* * - Abutting Highway 99E 20 feet 2. Rear Yard: Abutting a non-residential district None; Abutting a residential district 15 feet 3. Side Yard: Abutting a non-residential district None; Abutting a residential district 15 feet</p>
<p>When adjacent to residential zoning designation buffering and screening will be required as identified in 2.207.05 of the City of Hubbard Development Code. Screening and Buffering types include: 15 foot planted buffer; 10 foot berm plus planting area; 5 foot wall plus planting area</p>	<p>When adjacent to residential zoning designation buffering and screening will be required as identified in 2.207.05 of the City of Hubbard Development Code. Screening and Buffering types include: 15 foot planted buffer; 10 foot berm plus planting area; 5 foot wall plus planting area</p>

Land Use Matrix

IMPORTANCE FACTOR SCORING CRITERIA

Each site was independently evaluated and scored on 18 parameters outlined within the International Chief of Police (IACP) Facility Planning Guidelines. While there are many factors that must be taken into consideration when selecting a site, the following criteria serve as essential components when conducting a site evaluation.

- 1. COST OF LAND:**
Ranking evaluates the availability of property for purchase and assessed purchase price of each property.
- 2. COST OF SITE DEVELOPMENT:**
Ranking evaluates anticipated development costs of the property, including but not limited to existing infrastructure, hazardous material remediation, demolition of existing structures and topographical challenges.
- 3. SIZE OF SITE:**
Ranking evaluates the usable site acreage available for development within the property boundaries.
- 4. SHAPE OF SITE:**
Ranking evaluates the shape of the site, with particular emphasis on irregularities that present challenges to parking and building layout, access, visibility and general efficiencies.
- 5. POTENTIAL FOR MULTI-USE:**
Ranking evaluates multiple use opportunities for expansion of the police facility, co-location of other city functions within the confines of the site, supported access, parking and general placement of a new Police facility.
- 6. PUBLIC ACCESS TO SITE - VEHICLE:**
Ranking evaluates vehicular access to and from the site for both the public, police department and municipal court. Vehicular access evaluations took into consideration proximity to major arterial streets and highways, visibility and way-finding and ease of circulation once on site.
- 7. PUBLIC ACCESS TO SITE - TRANSIT:**
Ranking evaluates proximity to public transit infrastructure including light rail stations and bus stops, as well as frequency of routes.
- 8. PUBLIC ACCESS TO SITE - PEDESTRIAN / BICYCLE:**
Ranking evaluates the ease of access for pedestrians and bicycles to and from the site.
- 9. VISIBILITY AND PROMINENCE:**
Ranking evaluates the visibility and prominence the site offers for placement and development of a new civic structure for the City of Hubbard. Visibility and prominence can be impacted by alternative parameters such as size and shape of site, natural constraints such as terrain and floodplains and available positioning within the site for the building and parking.

10. PROXIMITY TO GOVERNMENT FUNCTIONS:

Ranking evaluates the proximity of the site to other civic structures, functions and property owned by the City of Hubbard.

11. NEIGHBORHOOD CONTEXT:

Ranking evaluates the context of the site and surrounding property. Evaluations took into account the nature of a police department and the scale of the facility as it relates to adjacent commercial, industrial or residential properties.

12. POSITIONING FACILITY ON SITE:

Ranking evaluates the flexibility of positioning the facility on the site to maximize visibility and prominence, security and potential for multi-use.

13. SECURITY:

Ranking evaluates the ability to appropriately locate the facility, public parking, secure parking and access to and from the site in a manner that supports the safety and security parameters associated with a police facility.

14. TRAFFIC CONGESTION:

Ranking evaluates street infrastructure, signals, one-way and two-way streets and potential traffic impacts associated with development of a new police facility.

15. EXPANSION TO ADJACENT SITES:

Ranking evaluated on the prospective site's direct adjacency to potential future property that could be acquired for either future expansion or development of alternative City functions.

16. PROXIMITY TO GEOGRAPHIC CENTER:

Ranking evaluates the property's proximity to Hubbard's city center. As a central headquarters, centralizing the facility within the service area is essential while coupling placement with close proximity to major vehicular streets, arterials and highways.

17. CURRENT OWNERSHIP:

Ranking evaluates the current ownership of the property, required purchase for multiple parcels and difficulties associated with land acquisition of property.

18. LAND USE:

Ranking evaluates the current use allowance (permitted outright or through a conditional use) and other general zoning regulations.

Importance Factor: Scoring Criteria

IMPORTANCE FACTOR MATRIX

RANKED: 1 - 4    

(1: LEAST SUITED; 4: MOST SUITED)

1. COST OF LAND
2. COST OF SITE DEVELOPMENT
3. SIZE OF SITE
4. SHAPE OF SITE
5. POTENTIAL FOR MULTI-USE
6. PUBLIC ACCESS TO SITE - VEHICLE
7. PUBLIC ACCESS TO SITE - TRANSIT
8. PUBLIC ACCESS TO SITE - PEDESTRIAN / BICYCLE
9. VISIBILITY AND PROMINENCE
10. PROXIMITY TO GOVERNMENT FUNCTIONS
11. NEIGHBORHOOD CONTEXT
12. POSITIONING FACILITY ON SITE
13. SECURITY
14. TRAFFIC CONGESTION
15. EXPANSION TO ADJACENT SITES
16. PROXIMITY TO GEOGRAPHIC CENTER
17. CURRENT OWNERSHIP
18. LAND USE

ASSESSMENT SCORE

CUMULATIVE RANK (BASED ON AVERAGE SCORE)

	SITE 1: SCHMIDT LN.	SITE 2: TOM SETERE	SITE 3: JAMAN ENTERPRISE	SITE 4: ALPENROSE
1.	3.8	2.6	2.8	2.4
2.	4	3.75	3.75	3.75
3.	4	3.33	3.17	4
4.	4	2.83	3.17	4
5.	4	3.33	3.17	3.83
6.	3.83	3.5	3.67	3
7.	3.67	3.17	3.33	3
8.	3.17	2.5	3.17	3.67
9.	4	3.33	3.5	3.83
10.	3.67	3.33	3.67	4
11.	3	2.5	3	3.67
12.	4	2.83	3.5	3.5
13.	4	3.67	3.83	3.67
14.	4	3.33	3.5	2.17
15.	3	2.83	2.67	2.83
16.	2.67	2.17	3	3.83
17.	3.2	3.2	3.6	2.8
18.	4	3.6	4	3.6
	66.01	55.80	60.50	61.55
	1	4	3	2

EVALUATION OF SELECTED SITES

Upon confirmation of the program size, it was determined that a facility of approximately 14,890 square feet and a parking demand of 10 secure covered spaces for Police, 20 City staff vehicle spaces, and 30 Public spaces were required to meet the 20-year needs of the City. These projections were utilized to appropriately assess and determine the capacity of each of the site options selected by the City of Hubbard and documented in the previous pages.

Initially, this effort focused on four potential sites noted on the map on page 04-03. Each site was first evaluated to determine if any critical flaws were present - such as whether or not the site was available for purchase or lease, appropriate site area, availability of public utilities needed to serve the development, required need for public improvements beyond the area of the site, and access limitations, etc. Each parameter was

considered by Mackenzie and the City of Hubbard in determining a site(s) that best met the criteria established. Through this initial investigation two sites; Schmidt Lane (Site 1) and Alpenrose (Site 4) were determined to best address the initial evaluation criteria completed by City staff.

Upon selection of the two sites, Mackenzie developed preliminary site diagrams for each site based on the programmed size of each department and the required site improvements to describe how each site might specifically accommodate the proposed project as well as projecting rough construction costs based on unit pricing for each option. This effort entailed developing a more refined block diagram from the selected adjacency diagram and testing its orientation on the chosen sites.

Selected Sites Evaluation

SELECTED SITE: OPTION A



SCHMIDT LANE SITE

LOCATION

- 2994 Schmidt Lane
Hubbard, OR
- Tax Lot: 041W33DC00900

SIZE

- 230,752 sq ft (5.3 Acres)

ZONING

- I-C (Industrial-Commercial)

TRANSPORTATION ACCESS

- Pacific Hwy E (Highway 99E)

SITE INFORMATION

- Building Setbacks (Zone I-C):
 - Front: 20 ft
 - Rear: 25 ft abutting residential or commercial; 10 ft abutting industrial
 - Side: 25 ft abutting residential or commercial; 10 ft abutting industrial
- Maximum Building Coverage: 90%
- Max. Building Height: 80 ft
- Minimum Parking Ratio: 1 SPACE / 400 SQ. FT

- Subject Site
- 2ft contours
- Taxlots

SELECTED SITE: OPTION B



ALPROP CO. / ALPENROSE SITE

- Subject Site
- 2ft contours
- Taxlots

LOCATION

- 3425 Pacific Hwy 99E
Hubbard, OR
- Tax Lot: Multiple Tax Lots

SIZE

- 203,119 sq ft (4.7 Acres)

ZONING

- C (Commercial)

TRANSPORTATION ACCESS

- Pacific Hwy E (Highway 99E)

SITE INFORMATION

- Building Setbacks (Zone C):
 - Front: 20 ft
 - Rear: 0 ft abutting non-residential
15 ft abutting residential
 - Side: 0 ft abutting non-residential
15 ft abutting residential
- Maximum Building Coverage: 90%
- Max. Building Height: 45 ft
- Minimum Parking Ratio: 1 SPACE / 400 SQ. FT

Selected Sites Evaluation

CONCEPT DESIGN

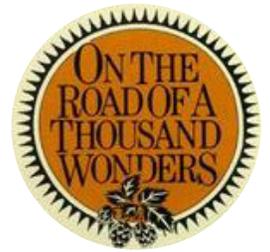
5

HISTORICAL CONTEXT

The Hubbard community you see from 99E is a bustling little commercial corridor. The historic city, now a quiet neighborhood of less than a square mile in size with about 3,200 residents, began with a log cabin located about a mile west of the highway. In the 1870s it flourished along the rail line (several blocks away from the present highway).

In 1848, the Hubbard family completed a long trip overland and settled in Oregon City. Charles Hubbard acquired the land now known as the City of Hubbard. His son, Charles Hubbard Jr. apparently had visions of growth for this newly settled hamlet. When plans for development of the Oregon-California Railroad were being made, he offered the right of way and every other block to railroad officials. The offer was accepted, the town site of "Hubbard" platted, track laid. In 1871, the first train stopped in Hubbard. On that day, the little town became a part of the larger world, serving as a grain shipping point and providing transportation for residents. Many Oregon towns, Hubbard included, owe their existence to the route of the railroad.

A solid understanding of the City, its community, its history, and the City government that stands as its foundation are key aspects of any design process, especially those which involve public buildings.



Historical Context

HUBBARD HOP FESTIVAL



Hubbard Fire Department’s Hop Festival (the third Saturday in July each year) is a special time to see the community in an especially celebratory mood.

The festival recognized its 40th anniversary in 2013 and is reflective of Hubbard’s agricultural history and present economy. It’s a day-long event that includes a parade, carnival in Rivenes Park with games for children, a fun run, horseshoe tournament, craft booths, food vendors, kids play area, raffle, live music, and a beer garden.

Money raised at the festival helps pay for materials and equipment used at the fire stations. The Volunteer Fire Fighters also use the money generated for various charities, scholarships, and community programs.



Hubbard Hop Festival

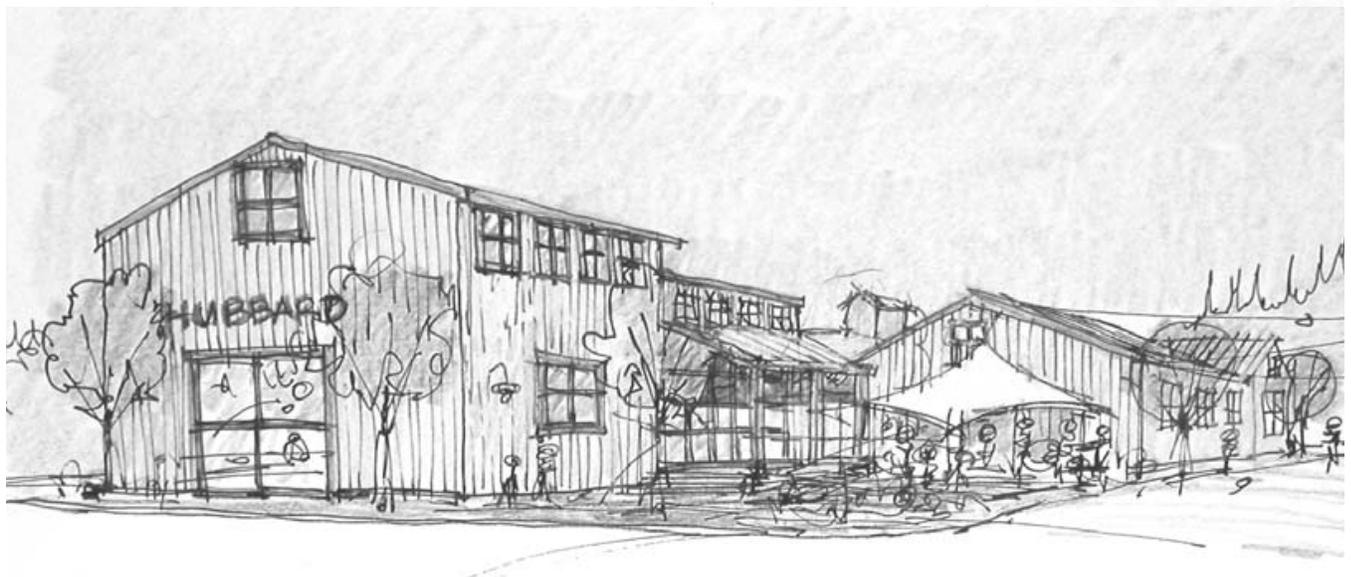
DOWNTOWN REVITALIZATION REPORT

"The recommendations contained in this report are broad brush and conceptual in nature. The aim of this project is to bring the community together to discuss a shared vision of downtown's future, then articulate those ideas into conceptual drawings and supporting text. The ideas contained in this report are not written in stone; they should be used as a springboard for further discussion as to which projects should be implemented and to assist in project prioritization and phasing."

PROJECT GOALS:

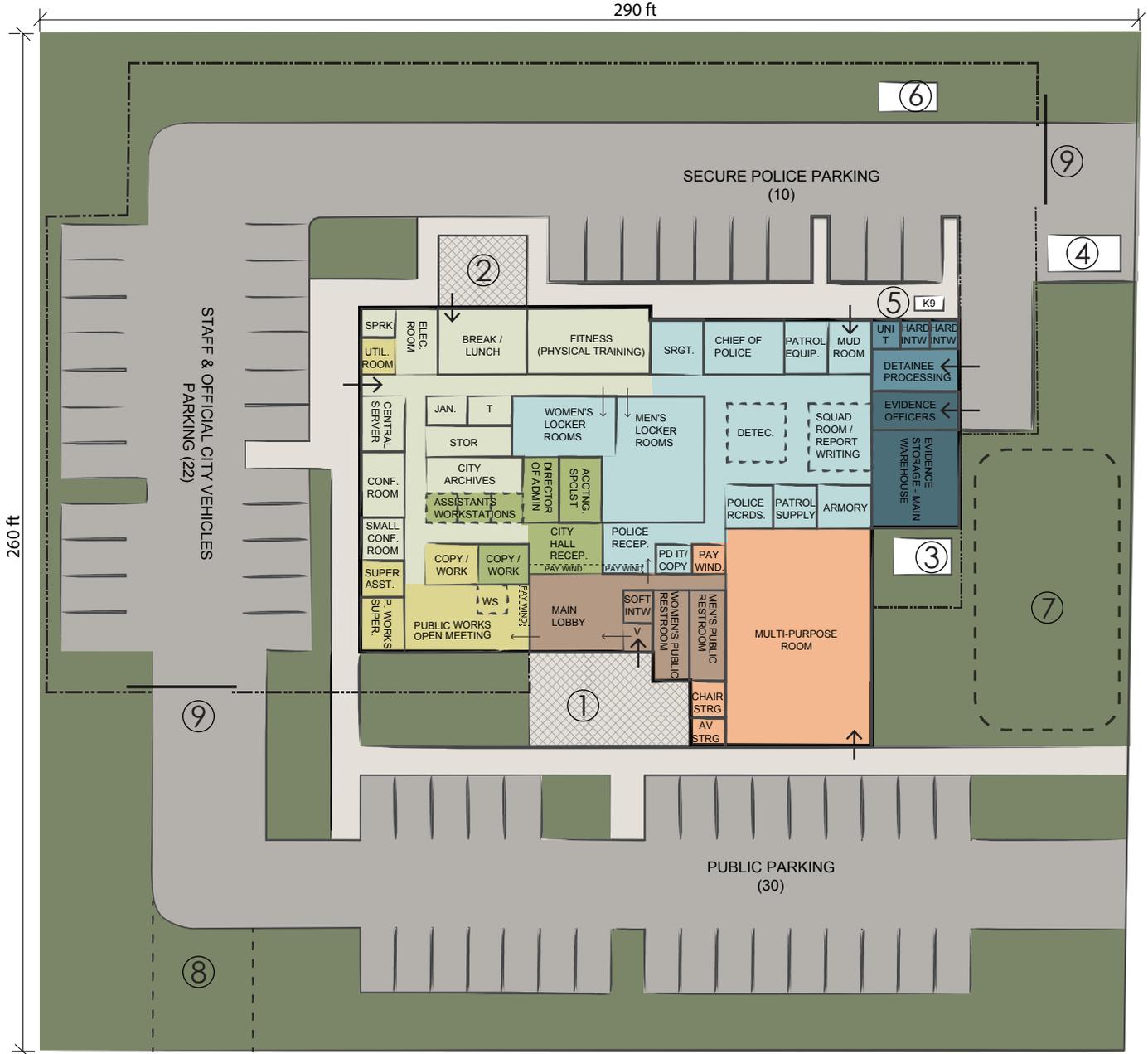
In 2003, the members of the Hubbard Resource Team approached this project with five overarching goals that served as the framework for their recommendations. The goals included:

1. Improve the community *for* the community
2. Celebrate the community's unique assets
3. Make the whole commercial district more inviting, walkable, connected and economically vibrant
4. Offer more reasons for visitors and residents to shop in Hubbard
5. Offer the community a downtown plan that can be implemented in phases



2003 ODDA Hubbard Downtown Revitalization Report

CONCEPT BLOCK DIAGRAM



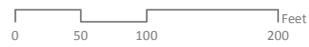
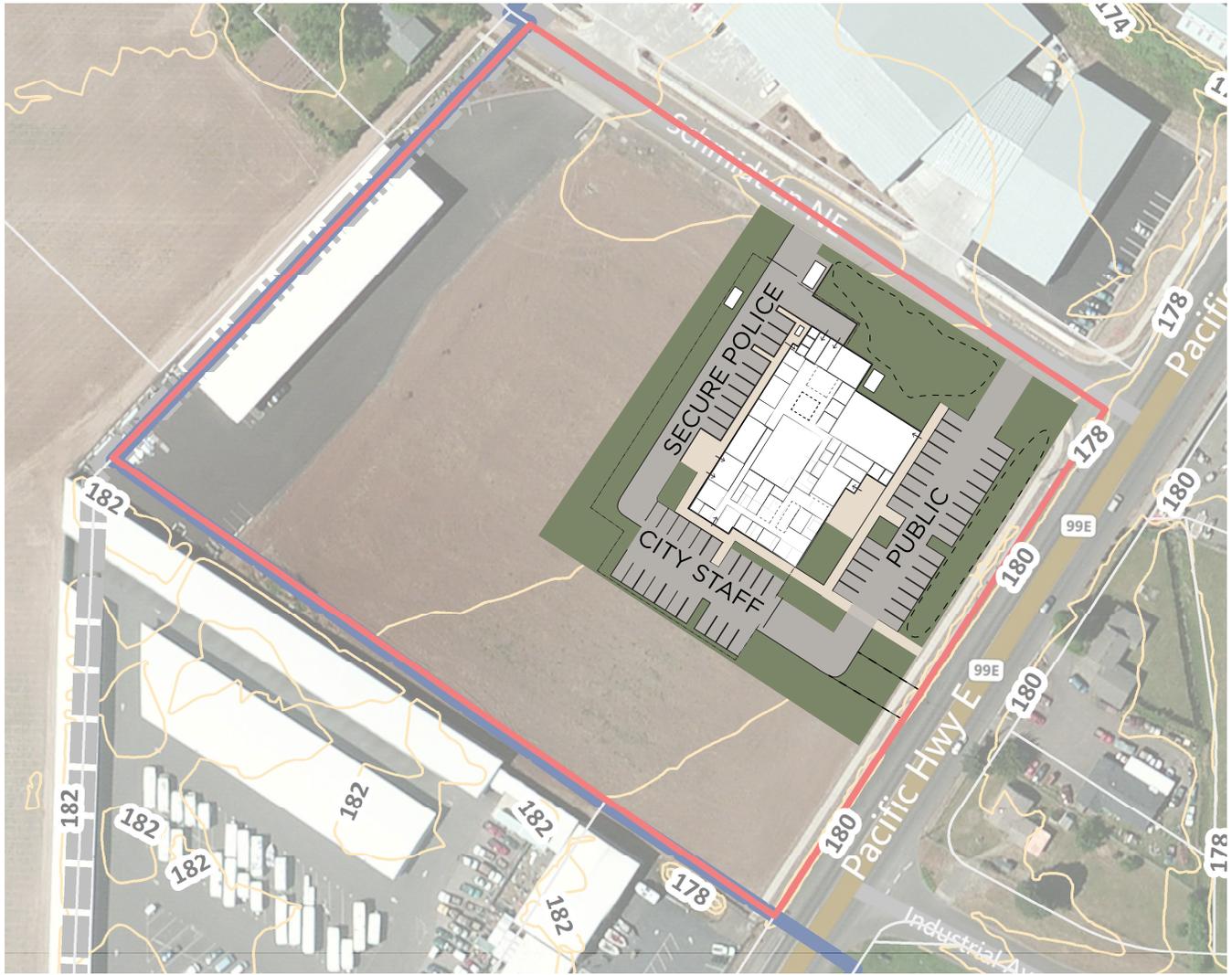
KEY SITE ELEMENTS

- 1 Community Plaza
- 2 Staff Patio
- 3 Emergency Generator
- 4 Trash/Recycling Enclosure
- 5 K9 Kennel
- 6 Found Dogs Kennels
- 7 Water Quality Swale
- 8 Potential Additional Access
- 9 Motorized Gate

SITE SUMMARY

Secure Parking	10 Spaces
Staff / City Vehicles Parking	22 Spaces
Public Parking	30 Spaces
Site Area	75,000 SF (~1.7 acres)
Building Area	15,790 SF

Conceptual Site and Floor Plan



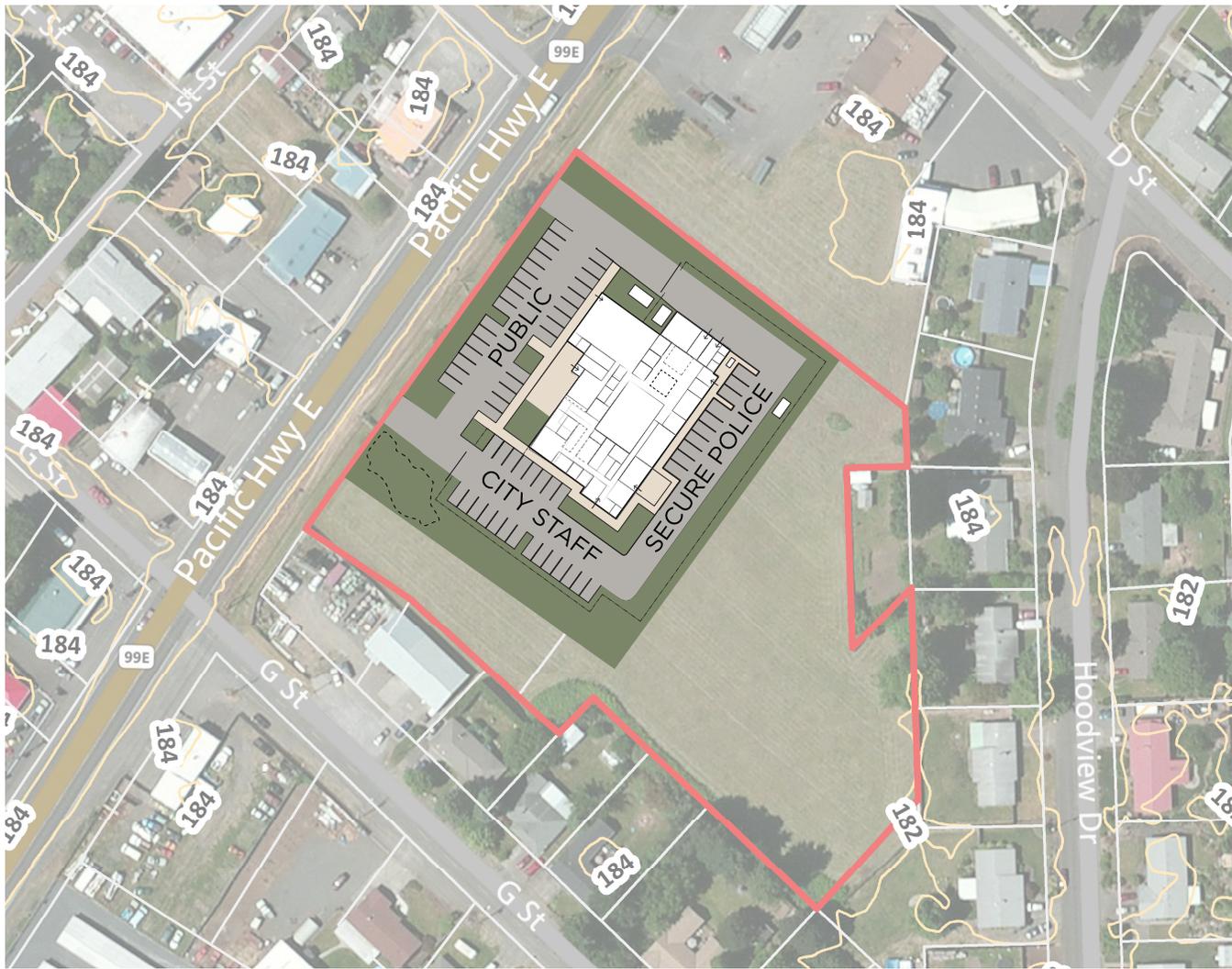
- Subject Site
- 2ft contours
- Taxlots

SCHMIDT LANE SITE

After the process of developing a block diagram of the floor plan and site plan of the Hubbard Municipal Facility (seen on the previous page), the concept was tested on the two selected sites. Both sites are undeveloped with limited existing topography and also are well oversized for the purposes of the City. In all three of the test-fits, the building and site are tucked into one corner of the site in order to minimize unused space and allow for the City to potentially only purchase a portion of the site.

The Schmidt Lane Site has the advantage of being located on Hwy 99E with a secondary access road (which is Schmidt Ln). It would be preferable to ODOT to have access to the site be located only on Schmidt, but there is a deviation process where a driveway could be located on the highway's frontage, if need be. In this configuration, the public parking and the entry sequence is prominent at the front the site, and it is feasible to reconfigure the existing stormwater swale to incorporate both the new facility and the current adjacent building.

Site Concept Study: Option 01



- Subject Site
- 2ft contours
- Taxlots

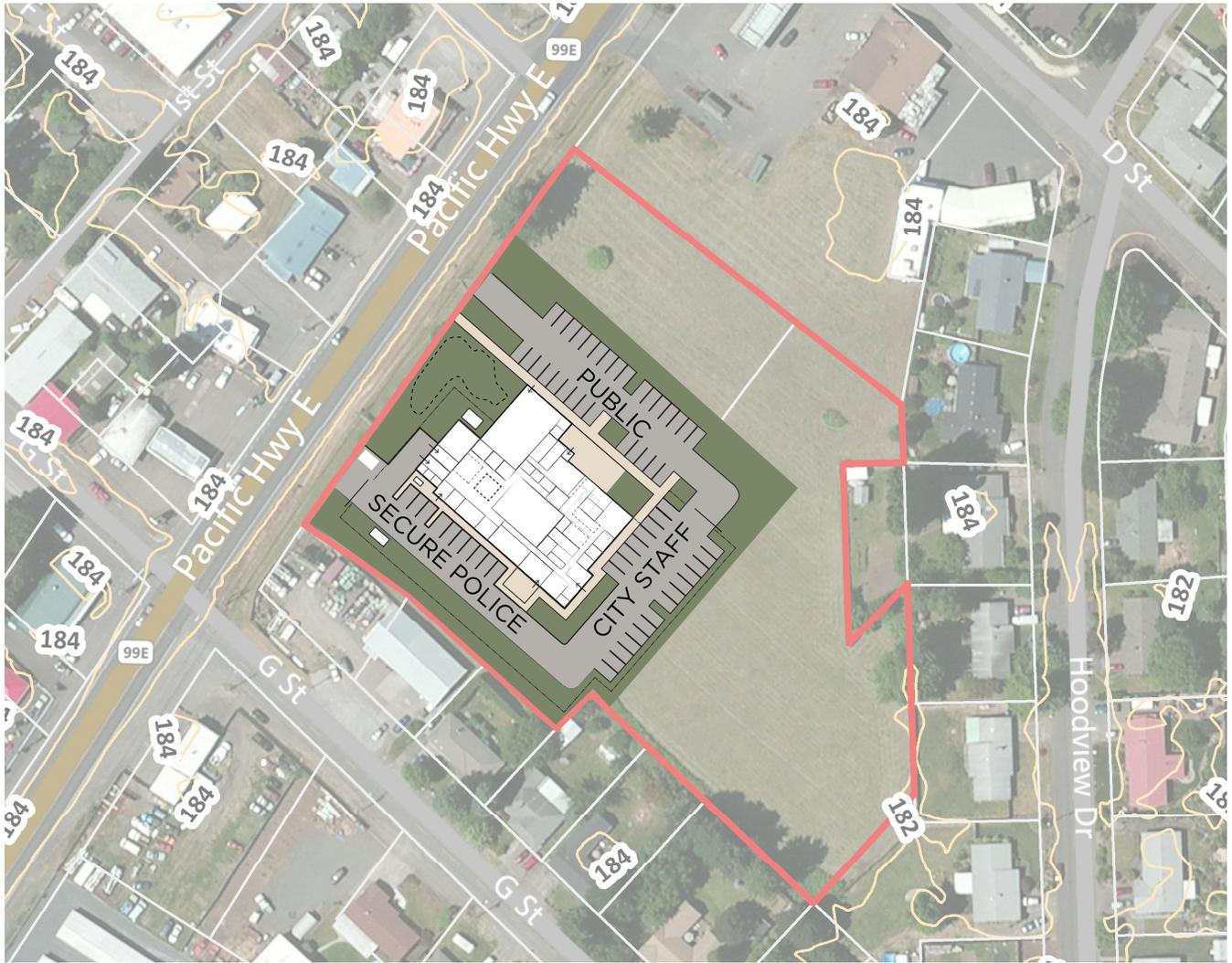
ALPROP CO. / ALPENROSE SITE: OPTION A

The Alpenrose Site has the advantage of being located on Hwy 99E in the center of Hubbard’s city limits. A disadvantage to this site is that its only frontage is on 99E. Since this is the only available access, ODOT would be required to allow driveway(s) - assuming no access easements exist. Ideally, one access would be located opposite E St (and possibly shared with the nearby gas station driveway) and one

towards the south end of the site. Spacing and conflicts with driveways on the west side of the highway may potentially be of a concern.

Similar to the Schmidt Lane Site, this configuration has the public parking and the entry sequence as a prominent feature at the front the site with two access points on either end of the site’s 99E frontage.

Site Concept Study: Option 02



- Subject
- 2ft contours
- Taxlots

ALPROP CO. / ALPENROSE SITE: OPTION B

The Alpenrose Site has the advantage of being located on Hwy 99E in the center of Hubbard’s city limits. A disadvantage to this site is that its only frontage is on 99E. Since this is the only available access, ODOT would be required to allow driveway(s) - assuming no access easements exist. Ideally, one access would be located opposite E St (and possibly shared with the nearby gas station driveway) and one towards the south end of the site. Spacing and conflicts with driveways on the west side of the highway may potentially be of a concern.

Unlike the previous test-fits, this configuration is rotated in relationship to the frontage of 99E. This has the disadvantage of situating the public parking and the entry sequence partially hidden by the building when someone is approaching from the south. However, the solar orientation of the building footprint is more ideal than the other schemes for both daylighting and solar heat gain in the winter.

Site Concept Study: Option 03

PROJECT COST SUMMARY



COST ESTIMATE SUMMARY

Following completion of the space needs program and conceptual design, Mackenzie evaluated cost impacts of the project proposal. The following cost summary projects a total development cost, including estimated construction costs, design costs and owner costs.

Development costs of a project are not limited to construction costs alone and require consideration of other variables. These variables differ between new construction and renovation or expansion, and invariably change from one project to the next depending on site conditions, existing building conditions, building codes, seismic zones and the environment of the construction industry. Differences arise depending on the design approach taken, the construction costs, design and engineering costs; however, owner costs for furniture, fixtures and equipment are constant. New construction can often differ substantially due to the single variable of land acquisition. This cost, coupled with higher construction costs, often leads to this being a more expensive option.

Construction costs reflect the raw costs incurred by a general contractor for overhead and profit, bonding and insurance, securing of materials and general construction of the site and building. In addition to the identified construction costs, a design contingency is recommended to ensure dollars are carried through construction for owner changes, design omissions, unforeseen conditions or jurisdictional requirements, among others.

HUBBARD MUNICIPAL FACILITY	General Construction Cost	\$3,132,995
	1-year Escalation	\$93,990
	General Conditions	\$177,484
	Bonds & Insurance	\$42,556
	CM Fee	\$241,292
	Construction Contingency	\$553,247
	Total Construction Costs	\$4,241,564
Total Consultant Costs	\$771,842	
Total Owner Costs	\$562,155	
Total Project Cost		\$5,575,561

Consultant costs reflect the costs incurred for project management and design of the project from conceptual design through

construction administration. Though design fees can vary, these costs are generally factored using a fee based on the construction costs for the project. In addition to architectural and engineering services, costs include marketing materials and required services such as topographical surveys and special inspections. A contingency is provided for this category for any unforeseen or additionally requested design services throughout the project.

Owner costs reflect the costs generally incurred directly by the owner throughout the project. This includes all items the owner may wish to contract separately from the general construction of the project. Additional owner-related costs include relocation into the new facility, legal documentation and counsel for project documents and issuances, and jurisdictional fees associated with design review, building permits, SDCs, TIF fees and BOLI fees. A contingency is provided in this category for any unforeseen or undefined costs not currently represented.

The Jurisdictional Fee Summary reflects a preliminary estimate of the fees which will be assessed by the governing jurisdiction. This information is based on the information available at the date of the report, and the actual fees may vary at the time of permit application or issuance. For the purposes of this estimate, any fees that are expected to be credited back once the permit is issued have been removed from the summary.

The following project development cost estimate examines the construction values of the programmed design concept. The design concept has been estimated for a high range and a low range, with details of scope and assumptions detailed in the statement of probable cost.

Project Cost Summary

PROJECT COST ESTIMATE

The Project Cost Estimate below details the construction, consultant, and owner costs that have been applied to the anticipated project cost. Hardcosts for the building and sitework are based on the Statement of Probable Costs, found in the following pages. A conservative 15% contingency factor has been applied to the estimate. As the design moves forward and assumptions made in the original estimate are addressed or eliminated, the contingency factor can be reduced to reflect a greater certainty in the hard cost estimate.

Hubbard Municipal Facility - Needs Assessment Cost Estimate

		Comments	
Construction Cost of Facility			
General Construction Cost	\$3,132,995.00	\$198.42	per SF
1-yr Escalation	\$93,989.85	3.0%	of above GC Costs combined
General Conditions	\$177,484.17	7.0%	of above GC Costs combined
Bonds & Insurance	\$42,555.86	1.3%	of above GC Costs combined
CM Fee	\$241,291.74	1.0%	of above GC Costs combined
Construction Contingency	\$553,247.49	15.0%	of above GC Costs combined
Total Construction Costs	\$4,241,564.11	\$268.62	per SF
Consultants Costs			
A/E Design and Construction Services - Base	\$508,987.69	12%	of Total Construction Cost
A/E LEED Design and Documentation	\$0.00		N/A - City has elected not to pursue certification
Reimbursables	\$38,174.08	8%	of A/E Design and Construction Services - Base
Owner's Project Manager	\$84,831.28	2.0%	of Construction Cost
Marketing Materials	\$0.00	Excluded	
Topo and Boundary Survey	\$6,000.00	Allowance	
Special Inspections	\$25,000.00	Allowance	
Geotechnical Services	\$15,000.00	Site specific investigation, geotechnical specifications and CA site observation	
Environmental Services	\$0.00	N/A	
Hazardous Material Survey/Testing/Mitigation Specs	\$0.00	N/A	
Commissioning	\$40,000.00	Recommended, not required	
Arborist	\$0.00	Not required	
Subtotal - Consultants	\$717,993.05		
Consultants Contingency	\$53,849.48	7.5% of Consultant Costs	
Total Consultants Costs	\$771,842.53	\$48.88	per SF
Owner Costs			
Land Acquisition	\$0.00	TBD	
Fixtures, Furniture & Equipment (FF&E)	\$157,900.00	\$10.00	per SF (Allowance)
Lockers/Shelving	\$120,000.00	Allowance	(Lockers, evidence and records shelving)
Fitness Equipment	\$50,000.00	Allowance	
Telephone/Data/AV/Security Equipment	\$31,580.00	\$2.00	per SF (Allowance)
LEED Registration	\$0.00	N/A - City has elected not to pursue certification	
Moving Allowance	\$15,000.00	Moving into new facility	
Temporary Facilities	\$0.00	N/A	
Permit Fees	\$84,831.28	2%	Building Permits and SDC fees
1.5% For Green Technology	\$63,623.46	1.5%	of Construction Value
Subtotal - Owner Costs	\$522,934.74		
Owner Contingency	\$39,220.11	7.50%	of Owner Costs
Total Owner Costs	\$562,154.85	\$35.60	per SF

Total Project Cost \$5,575,561.50

Building Size: 15,790 SF

Project Cost Summary



City of Hubbard
City Hall, Police & Public Works
Hubbard, Oregon

ESTIMATE OF NEEDS ASSESSMENT
prepared for: MACKENZIE

Estimate Date: June 5th, 2015 - Rev0



Table of Contents

Basis of Estimate	3
Construction Specification Institute Division Summary	4
Uniformat Category Summary	6
Construction Estimate Detail	10
Abbreviations & Definitions	25



Introduction, Basis of Estimate

2015 Unit Rates

Summary section facility category unit rates are based on 15,790 SF as outlined in the concept block diagram.

Projected 2035 and associated escalation is excluded.

Assumptions

100% of the building finishes and structure are assumed and not based on identified design and specifications.

Wall heights are assumed to be 20ft with 2ft parapet at exterior and 10ft tall finished wall on interior. Lobby assumed to be 12ft high ceiling

Demolition of existing buildings is excluded.

Relocation of existing facility and new Furniture Fixtures and Equipment (FF&E) are excluded.

Site is assumed to be flat with no cut and fill required.

One foot of clearing top soil included in estimate.

Assumed natural gas company will supply and install gas line to meter at building

Assumed the communications company will install the communications cable to the building in conduits installed by contractor.

All utilities are assumed to be in the adjacent streets.

General Comments

Estimate is based the needs basis study prepared by Mackenzie for City of Hubbard. Within this document the Programing summary and room identifications Concept Block Diagram were used to form this estimate

Unit prices are based on historical cost data, JLD Construction Consulting internal cost data base, RS Means, MCA, NECA, ENR, market vendor and contractor quotes

Labor rates are based on Portland, Oregon - Zone one) metropolitan area union labor rates with composite crews in accordance with union labor agreements. City of Hubbard is within the 50 mile limit of zone one.

Standard 40 hour week. Overtime excluded

Labor rates meet Oregon prevailing wage requirements.

Design fees excluded.

Owner furnished - Furniture Fixtures & Equipment Excluded.

Escalation excluded from unit prices.

Workers compensation at standard rate experience modification factor remains unchanged

Contingency is set at 15% for cost planning



Construction Specification Institute Division Summary



City of Hubbard
 City Hall, Police & Public Works
 June 5th, 2015 - Rev 0

2015 Facility Floor Area 15,790

Construction Specification Institute Division Summary

CSI Division	Description	Division Totals	\$ / SF	%
01000	General Requirements	\$ -	\$ -	0.00%
02000	Existing Conditions	\$ -	\$ -	0.00%
03000	Concrete	\$ 191,548	\$ 12.13	4.52%
04000	Masonry	\$ 133,152	\$ 8.43	3.14%
05000	Metal	\$ 321,066	\$ 20.33	7.57%
06000	Wood, Plastics, and Composites	\$ -	\$ -	0.00%
07000	Thermal and Moisture Protection	\$ 117,344	\$ 7.43	2.77%
08000	Openings	\$ 206,693	\$ 13.09	4.87%
09000	Finishes	\$ 309,944	\$ 19.63	7.31%
10000	Specialties	\$ 97,658	\$ 6.18	2.30%
11000	Equipment	\$ 61,321	\$ 3.88	1.45%
12000	Furnishings	\$ 65,550	\$ 4.15	1.55%
13000	Special Construction	\$ 26,158	\$ 1.66	0.62%
14000	Conveying Equipment	\$ -	\$ -	0.00%
21000	Fire Suppression	\$ 67,308	\$ 4.26	1.59%
22000	Plumbing	\$ 296,892	\$ 18.80	7.00%
23000	Heating and Air Conditioning	\$ 298,722	\$ 18.92	7.04%
24000	Integrated Automation	\$ -	\$ -	0.00%
26000	Electrical	\$ 357,737	\$ 22.66	8.43%
27000	Communications	\$ 44,500	\$ 2.82	1.05%
28000	Electronic Safety and Security	\$ 85,903	\$ 5.44	2.03%
31000	Earthwork	\$ 23,328	\$ 1.48	0.55%
32000	Exterior Improvements	\$ 356,441	\$ 22.57	8.40%
33000	Utilities	\$ 71,730	\$ 4.54	1.69%
Direct Trade Cost Subtotal		\$ 3,132,995	\$ 198	74%
3.00%	1yr Escalation - other years excluded	\$ 93,990	\$ 5.95	2.22%
0.00%	Permits Excluded	\$ -	\$ -	0.00%
5.50%	General Conditions	\$ 177,484	\$ 11.24	4.18%
1.25%	Bonds & Insurance	\$ 42,556	\$ 2.70	1.00%
7.00%	CM Fee	\$ 241,292	\$ 15.28	5.69%
15.00%	Construction Contingency	\$ 553,247	\$ 35.04	13.04%
Margins & Allowance Cost Subtotal		\$ 1,108,569	\$ 70	26%
Total Project Cost		\$ 4,241,564	\$ 269	100%



Uniformat Category Summary



City of Hubbard
 City Hall, Police & Public Works
 June 5th, 2015 - Rev 0

2015 Facility Floor Area 15,790

Uniformat Category Summary

Uniformat Category	Category Totals	\$ / SF	%
A1010 Standard Foundations	\$ 53,169.07	\$ 3.37	1.25%
A1020 Special Foundations	\$ -	\$ -	
A1030 Slab on Grade	\$ 163,493.28	\$ 10.35	3.85%
A2010 Basement Excavation	\$ -	\$ -	
A2020 Basement Walls	\$ -	\$ -	
B1010 Floor Construction	\$ 2,652.83	\$ 0.17	0.06%
B1020 Roof Construction	\$ 314,858.92	\$ 19.94	7.42%
B2010 Exterior Walls	\$ 114,397.06	\$ 7.24	2.70%
B2020 Exterior Windows	\$ 47,822.97	\$ 3.03	1.13%
B2030 Exterior Doors	\$ 60,540.13	\$ 3.83	1.43%
B3010 Roof Coverings	\$ 74,483.21	\$ 4.72	1.76%
B3020 Roof Openings	\$ 8,665.90	\$ 0.55	0.20%
C1010 Partitions	\$ 163,734.64	\$ 10.37	3.86%
C1020 Interior Doors	\$ 59,484.63	\$ 3.77	1.40%
C1030 Fittings	\$ 85,071.91	\$ 5.39	2.01%
C2010 Stair Construction	\$ 465.45	\$ 0.03	0.01%
C2020 Stair Finishes	\$ -	\$ -	
C3010 Wall Finishes	\$ 41,317.35	\$ 2.62	0.97%
C3020 Floor Finishes	\$ 145,381.11	\$ 9.21	3.43%
C3030 Ceiling Finishes	\$ 61,722.70	\$ 3.91	1.46%
D1010 Elevators & Lifts	\$ -	\$ -	
D1020 Escalators & Moving Walks	\$ -	\$ -	
D1090 Other Conveying Systems	\$ -	\$ -	
D2010 Plumbing Fixtures	\$ 65,674.67	\$ 4.16	1.55%
D2020 Domestic Water Distribution	\$ 127,433.44	\$ 8.07	3.00%
D2030 Sanitary Waste	\$ 46,892.97	\$ 2.97	1.11%
D2040 Rain Water Drainage	\$ 56,890.58	\$ 3.60	1.34%
D2090 Other Plumbing Systems	\$ -	\$ -	
D3010 Energy Supply	\$ 12,000.00	\$ 0.76	0.28%
D3020 Heat Generating Systems	\$ -	\$ -	
D3030 Cooling Generating Systems	\$ -	\$ -	
D3040 Distribution Systems	\$ 159,373.70	\$ 10.09	3.76%
D3050 Terminal & Package Units	\$ 52,686.19	\$ 3.34	1.24%
D3060 Controls & Instrumentation	\$ 45,000.00	\$ 2.85	1.06%
D3070 Systems Testing & Balancing	\$ 18,000.00	\$ 1.14	0.42%
D3090 Other HVAC Systems & Equipment	\$ 5,161.81	\$ 0.33	0.12%
D4010 Sprinklers	\$ 65,118.51	\$ 4.12	1.54%
D4020 Standpipes	\$ 529.64	\$ 0.03	0.01%



City of Hubbard
 City Hall, Police & Public Works
 June 5th, 2015 - Rev 0

2015 Facility Floor Area 15,790

Uniformat Category Summary

Uniformat Category	Category Totals	\$ / SF	%
D4030 Fire Protection Specialties	\$ 2,445.13	\$ 0.15	0.06%
D4090 Other Fire Protection Systems	\$ -	\$ -	
D5010 Electrical Service & Distribution	\$ 121,476.50	\$ 7.69	2.86%
D5020 Lighting and Branch Wiring	\$ 72,178.93	\$ 4.57	1.70%
D5030 Communications & Security	\$ 130,403.29	\$ 8.26	3.07%
D5090 Other Electrical Systems	\$ 106,109.14	\$ 6.72	2.50%
E1010 Commercial Equipment	\$ -	\$ -	
E1020 Institutional Equipment	\$ 32,443.52	\$ 2.05	0.76%
E1030 Vehicular Equipment	\$ 20,000.00	\$ 1.27	0.47%
E1090 Other Equipment	\$ 17,954.88	\$ 1.14	0.42%
E2010 Fixed Furnishings	\$ 58,414.41	\$ 3.70	1.38%
E2020 Movable Furnishings	\$ -	\$ -	
F1010 Special Structures	\$ -	\$ -	
F1020 Integrated Construction	\$ -	\$ -	
F1030 Special Construction Systems	\$ -	\$ -	
F1040 Special Facilities	\$ 17,080.44	\$ 1.08	0.40%
F1050 Special Controls and Instrumentation	\$ -	\$ -	
F2010 Building Elements Demolition	\$ -	\$ -	
F2020 Hazardous Components Abatement	\$ -	\$ -	
G1010 Site Clearing	\$ 11,681.74	\$ 0.74	0.28%
G1020 Site Demolition and Relocations	\$ -	\$ -	
G1030 Site Earthwork	\$ 11,646.70	\$ 0.74	0.27%
G1040 Hazardous Waste Remediation	\$ -	\$ -	
G2010 Roadways	\$ 46,955.72	\$ 2.97	1.11%
G2020 Parking Lots	\$ 141,825.20	\$ 8.98	3.34%
G2030 Pedestrian Paving	\$ 36,268.20	\$ 2.30	0.86%
G2040 Site Development	\$ 67,266.85	\$ 4.26	1.59%
G2050 Landscaping	\$ 39,205.61	\$ 2.48	0.92%
G3010 Water Supply	\$ 18,544.69	\$ 1.17	0.44%
G3020 Sanitary Sewer	\$ 5,055.45	\$ 0.32	0.12%
G3030 Storm Sewer	\$ 41,858.33	\$ 2.65	0.99%
G3040 Heating Distribution	\$ -	\$ -	
G3050 Cooling Distribution	\$ -	\$ -	
G3060 Fuel Distribution	\$ 231.78	\$ 0.01	0.01%
G3090 Other Site Mechanical Utilities	\$ -	\$ -	
G4010 Electrical Distribution	\$ 7,699.33	\$ 0.49	0.18%
G4020 Site Lighting	\$ 74,226.17	\$ 4.70	1.75%
G4030 Site Communications & Safety	\$ -	\$ -	



City of Hubbard
 City Hall, Police & Public Works
 June 5th, 2015 - Rev 0

2015 Facility Floor Area 15,790

Uniformat Category Summary

Uniformat Category	Category Totals	\$ / SF	%
G4090 Other Site Electrical Utilities	\$ -	\$ -	
G9010 Service and Pedestrian Tunnels	\$ -	\$ -	
G9090 Other Site Systems	\$ -	\$ -	
Direct Trade Cost Subtotal	\$3,132,995	\$198	74%
3.00% 1yr Escalation - other years excluded	\$93,990	\$ 5.95	2.22%
0.00% Permits excluded	\$0	\$ -	0.00%
5.50% General Conditions	\$177,484	\$ 11.24	4.18%
1.25% Bonds & Insurance	\$42,556	\$ 2.70	1.00%
7.00% CM Fee	\$241,292	\$ 15.28	5.69%
15.00% Construction Contingency	\$553,247	\$ 35.04	13.04%
Margins & Allowance Cost Subtotal	\$1,108,569	\$70	26%
Total Project Cost	\$4,241,564	\$269	100%



Construction Detail

**CSI Division
with subdivision in**

**ASTM E1557-97 - UNIFORMAT II
Level 3 Classifications**



City of Hubbard
 City Hall, Police & Public Works
 June 5th, 2015 - Rev 0

Phase I - Construction Breakdown

CSI	Description	Qty	Unit	Unit Rate	Total
02000	<u>Existing Conditions</u>				
	F2010 Building Elements Demolition				
	Facility Demolition		Excluded		
	F2020 Hazardous Components Abatement				
	Remove Hazardous Site Conditions		Excluded		
	G1020 Site Demolition and Relocations				
	Building & Site Improvements Demolition		Excluded		
	Subtotal		Existing Conditions		
03000	<u>Concrete</u>				
	A1010 Standard Foundations				
	Spread Footing 4-0x4-0x1-6 Concrete 4K	21	CY	214.85	\$4,492
	Spread footing formwork	504	SF	0.45	\$227
	Spread Footing 4-0x4-0x1-6 #5 8"o/c EA T&B	0.44	TN	1862.01	\$828
	8" Concrete foundation wall 3-0	45	CY	214.85	\$9,648
	foundation wall reinforcing steel	3.1	TN	1862.01	\$5,787
	foundation wall formwork	1212	SF	0.45	\$547
	Perimeter Strip Footing formwork	1818	SF	0.45	\$820
	Perimeter Strip Footing - #5 8"O/C EW T&B	5	TN	1862.01	\$9,119
	Perimeter Strip Footing - 36" x 18" concrete	101	CY	214.85	\$21,702
	A1030 Slab on Grade				
	8" Slab on Grade concrete	390	CY	214.85	\$83,807
	Slab on Grade rebar #4 1-6 o/c EW T&B	21.0	TN	1862.01	\$39,046
	Slab on Grade Formwork	1144	LF	4.29	\$4,902
	Utility Pad 1-0" SOG concrete	19	CY	214.85	\$4,146
	Utility Pad SOG rebar #4 1-6 o/c EW T&B	0.7	TN	1862.01	\$1,359
	Utility Pad SOG Formwork	575	SF	4.29	\$2,465
	B1010 Floor Construction				
	Locker room housekeeping pads	2	CY	266.46	\$400
	Housekeeping pad formwork	50	SF	45.06	\$2,253
	Subtotal		Concrete		\$191,548



City of Hubbard
 City Hall, Police & Public Works
 June 5th, 2015 - Rev 0

Phase I - Construction Breakdown

CSI	Description	Qty	Unit	Unit Rate	Total
04000	<u>Masonry</u>				
	B2010 Exterior Walls				
	Exterior Wall - 8" Split face CMU	9884	SF	10.26	\$101,434
	Exterior Wall - Split face CMU - Reinforcing steel	5.09	TN	1862.01	\$9,482
	C1010 Partitions				
	Interior CMU	1180	SF	14.60	\$17,230
	Interior CMU reinforcing steel	0.60	TN	1862.01	\$1,121
	G2040 Site Development				
	Brick wall at trash/recycle	379	SQ FT	10.26	\$3,885
	Subtotal		Masonry		\$133,152
05000	<u>Metal</u>				
	B1020 Roof Construction				
	OWJ 6-0 o/c 17 lb./LF	2539	LF	18.40	\$46,716
	Wide Flange Beam w12x87	1127	LF	150.36	\$169,472
	1 1/2 Metal Deck 20 ga 6-0 span	15790	SF	2.21	\$34,924
	6x6 TS Column	484	LF	57.97	\$28,060
	Miscellaneous Steel	2	TN	2682.00	\$5,364
	Roof Ladder	1	EA	465.45	\$465
	C1010 Partitions				
	Metal Studs 3 5/8 " 18ga 10high - no added bracing	1086	LF	33.21	\$36,065
	Subtotal		Metal		\$321,066
06000	<u>Wood, Plastics, and Composites</u>				
	Subtotal		Wood, Plastics, and Composites		



City of Hubbard
 City Hall, Police & Public Works
 June 5th, 2015 - Rev 0

Phase I - Construction Breakdown

CSI	Description	Qty	Unit	Unit Rate	Total
-----	-------------	-----	------	-----------	-------

07000 Thermal and Moisture Protection

A1030 Slab on Grade

Vapor Barrier 10mil	158	SQ	10.76	\$1,699
---------------------	-----	----	-------	---------

B1020 Roof Construction

Fireproofing 1" thick	16060	SF	1.89	\$30,323
-----------------------	-------	----	------	----------

B2010 Exterior Walls

Joint Sealant (allowance)	1000	LF	3.13	\$3,135
---------------------------	------	----	------	---------

B3010 Roof Coverings

Scupper	6	EA	200.95	\$1,206
Downspout	3	EA	136.96	\$411
Splash block	3	EA	41.99	\$126
3" rigid insulation R15	16240	SF	2.69	\$43,747
60mil loose laid EPDM	17440	SF	1.19	\$20,814
Parapet Flashing	556	LF	4.93	\$2,741
Horizontal to vertical flashing	606	LF	6.21	\$3,766
Pipe Penetration	20	EA	83.62	\$1,672

B3020 Roof Openings

Roof Hatch	1	EA	2165.90	\$2,166
------------	---	----	---------	---------

C1010 Partitions

R-19 wall Insulation	6839	SF	0.66	\$4,523
Wall vapor barrier 6mil	61	SQ	16.62	\$1,015

Subtotal	Thermal and Moisture Protection			\$117,344
-----------------	--	--	--	------------------

08000 Openings

B2020 Exterior Windows

Exterior fixed windows	615	SF	29.95	\$18,418
Storefront Window Wall	262	SQ FT	112.37	\$29,405

B2030 Exterior Doors

Exterior Secure Door, Frame, Hardware	5	EA	11165.94	\$55,830
Exterior Storefront Door	2	EA	2355.22	\$4,710



City of Hubbard
 City Hall, Police & Public Works
 June 5th, 2015 - Rev 0

Phase I - Construction Breakdown

CSI	Description	Qty	Unit	Unit Rate	Total
C1010 Partitions					
	Bullet Proof Glass Pay Window & Frame	144	SF	243.91	\$35,123
C1020 Interior Doors					
	Detention Doors	4	EA	6230.84	\$24,923
	Wood Doors	27	EA	315.22	\$8,511
	Wood Door Hardware	27	EA	370.11	\$9,993
	Secure Wood Doors	10	EA	325.15	\$3,251
	Wood Ballistic Door, frame, hardware	1	EA	3044.19	\$3,044
	Secure Wood Door hardware	10	EA	595.11	\$5,951
	1-0 x 3-0 relite in doors	37	EA	102.99	\$3,811
C1030 Fittings					
	Training Wall Mirrors	129	SF	17.21	\$2,223
G2040 Site Development					
	Trash/recycle Doors/Gate	1	LS	1500.00	\$1,500
Subtotal		Openings		\$206,693	
09000	<u>Finishes</u>				
C1010 Partitions					
	Gypsum Wall Board	35446	SF	0.78	\$27,579
	Gypsum Wall Board Level 5 finish	35446	SF	0.75	\$26,606
	Moisture resistant wall board	2660	SF	0.90	\$2,389
	Cement Wall Board	420	SF	1.28	\$538
	Sound Batts	7667	SF	1.12	\$8,609
C3010 Wall Finishes					
	Latex Paint	29340	SF	0.14	\$4,187
	Epoxy Paint Detention area	1180	SF	2.68	\$3,165
	Shower tile	420	SF	6.31	\$2,651
	Bathroom/Locker - Tile Wall	2795	SF	5.72	\$15,994



City of Hubbard
 City Hall, Police & Public Works
 June 5th, 2015 - Rev 0

Phase I - Construction Breakdown

CSI	Description	Qty	Unit	Unit Rate	Total
C3020 Floor Finishes					
	Admin - Carpet	277	SY	37.82	\$10,494
	Booking - Epoxy Floor Covering	457	SF	10.06	\$4,596
	City Hall - Carpet	97	SY	37.82	\$3,675
	Evidence - Linoleum	926	SF	19.37	\$17,933
	Multi Purpose - Carpet	236	SY	37.82	\$8,909
	Physical Therapy - Rubber Mat	566	SF	25.36	\$14,360
	Public - Stone Flooring	699	SF	27.14	\$18,975
	Public - Tile Floor	442	SF	16.49	\$7,281
	Public Works - Carpet	114	SY	37.82	\$4,321
	Shared - Carpet	190	SY	37.82	\$7,180
	Shared - Linoleum	475	SF	19.37	\$9,201
	Shared - Sealed Concrete Floor	375	SF	1.06	\$398
	Shared - Static Dissipative Tile	171	SF	9.02	\$1,543
	Support - Linoleum	830	SF	19.37	\$16,072
	Support - Tile Floor	1486	SF	8.96	\$13,310
	Tile base	514	LF	16.31	\$8,383
	6" Rubber Base	2125	LF	3.26	\$6,936
C3030 Ceiling Finishes					
	Hard Ceiling	3914	SF	0.78	\$3,045
	Gypsum Wall Board Level 5 finish	3913	SF	0.75	\$2,937
	Ceiling Suspension System 2x2 grid	11159	SF	1.54	\$17,217
	Ceiling Suspension System Seismic Brace	2641	EA	6.77	\$17,886
	Acoustical Tiles	11159	SF	1.90	\$21,173
	Detention Ceiling	451	SF	2.68	\$1,211
	Moisture resistant wall board	1327	SF	0.90	\$1,192
Subtotal			Finishes		\$309,944



City of Hubbard
 City Hall, Police & Public Works
 June 5th, 2015 - Rev 0

Phase I - Construction Breakdown

CSI	Description	Qty	Unit	Unit Rate	Total
10000	<u>Specialties</u>				
	C1030 Fittings				
	Interior Signage	45	EA	108.14	\$4,866
	Building Directional Signage	1	AL	6521.77	\$6,522
	15 lockers men / 5 lockers women	19	EA	290.23	\$5,514
	Locker room benches	6	EA	276.28	\$1,658
	HCDP Grab Bars	10	EA	107.94	\$1,079
	Seat Protectors	16	EA	192.81	\$3,085
	Sanitary Disposal	8	EA	583.24	\$4,666
	Toilet Paper Dispenser	16	EA	50.47	\$808
	Soap Dispenser	10	EA	200.18	\$2,002
	Paper Towel Dispenser	6	EA	295.25	\$1,772
	Electric Hand Dryers	6	EA	1094.76	\$6,569
	Fabricated toilet partitions	16	EA	1688.81	\$27,021
	Shower Doors	4	EA	590.31	\$2,361
	Dry Erase Boards	3	EA	243.53	\$731
	Tack Boards	6	EA	465.70	\$2,794
	Cubical workstations	0	Excluded		
	Wall Protection	1	AL	11402.18	\$11,402
	D4030 Fire Protection Specialties				
	Fire Extinguishers	8	EA	125.53	\$1,004
	Fire Extinguisher Cabinets	5	EA	288.18	\$1,441
	G2040 Site Development				
	Flag Pole 50ft	3	EA	4121.40	\$12,364
	Subtotal		Specialties		\$97,658
11000	<u>Equipment</u>				
	E1010 Commercial Equipment				
	E1020 Institutional Equipment				
	Overhead Projector	1	EA	3966.30	\$3,966
	Recessed Ceiling Operable Screen	1	EA	2426.44	\$2,426
	Detention Equipment	1	EA	4168.29	\$4,168
	Pass Through Drawer	3	EA	3294.17	\$9,882
	Gun Lockers	1	AL	12000.00	\$12,000



City of Hubbard
 City Hall, Police & Public Works
 June 5th, 2015 - Rev 0

Phase I - Construction Breakdown

CSI	Description	Qty	Unit	Unit Rate	Total
E1030 Vehicular Equipment					
	Parking Lot Security Gates (Allowance)	1	AL	20000.00	\$20,000
E1090 Other Equipment					
	Refrigerator	1	EA	3256.91	\$3,257
	Microwave	1	EA	506.91	\$507
	Stove	1	EA	3556.91	\$3,557
	Range Hood	1	EA	1556.91	\$1,557
Subtotal			Equipment	\$61,321	
12000	<u>Furnishings</u>				
C3020 Floor Finishes					
	Public - Walk off Mat	152	SF	46.94	\$7,135
E2010 Fixed Furnishings					
	Detention Seating	2	EA	1016.02	\$2,032
	Blinds and Window Treatment		excluded		
	Reception Built-In Desk/Counter	66	LF	379.04	\$25,021
	Break room & Copy Cabinets	112	LF	279.04	\$31,362
E2020 Movable Furnishings					
	Excluded				
Subtotal			Furnishings	\$65,550	
13000	<u>Special Construction</u>				
F1040 Special Facilities					
	K-9 Kennel	1	AL	12290.22	\$12,290
	Found Dog Kennels	1	EA	4790.22	\$4,790
E1090 Other Equipment					
	Evidence built-in cooler	1	AL	9077.26	\$9,077
Subtotal			Special Construction	\$26,158	
14000	<u>Conveying Equipment</u>				
Subtotal			Conveying Equip		



City of Hubbard
 City Hall, Police & Public Works
 June 5th, 2015 - Rev 0

Phase I - Construction Breakdown

CSI	Description	Qty	Unit	Unit Rate	Total
21000	<u>Fire Suppression</u>				
	D4010 Sprinklers				
	Wet-Pipe Sprinkler System	15790	SF	3.94	\$62,152
	Detention Fire Sprinkler heads	6	EA	223.63	\$1,342
	4" Dbl Check Valve	1	EA	1625.07	\$1,625
	D4020 Standpipes				
	2 1/2" Standpipe	15	LF	35.31	\$530
	D4090 Other Fire Protection Systems				
	G3010 Water Supply				
	Facility Fire Hydrant	1	EA	1417.17	\$1,417
	FDC Building Connection	1	EA	242.26	\$242
	Subtotal		Fire Suppression		\$67,308
22000	<u>Plumbing</u>				
	D2010 Plumbing Fixtures				
	Water Closet	14	EA	1525.87	\$21,362
	Urinal	4	EA	945.84	\$3,783
	Lavatory	12	EA	615.54	\$7,386
	Lavatory Wall Hung	1	EA	659.44	\$659
	Break room Sink	1	EA	537.86	\$538
	Shower valves	5	EA	2955.02	\$14,775
	Drinking Fountain	1	EA	1722.48	\$1,722
	Detention Water Closet & Sink	2	EA	6731.78	\$13,464
	Hose Bib and lock box	5	EA	123.63	\$618
	D2020 Domestic Water Distribution				
	Cold water distribution 1"	700	LF	27.28	\$19,096
	Cold water distribution 2"	392	LF	55.53	\$21,766
	Hot water distribution 1"	700	LF	27.28	\$19,096
	Hot water distribution 2"	392	LF	55.53	\$21,766
	Plumbing pipe insulation 1"	1400	LF	6.58	\$9,212
	Plumbing pipe insulation 2"	784	LF	7.36	\$5,771
	Valve & Fitting allowance	1	LS	20000.00	\$20,000
	Gas Water Heater 250MBH	1	EA	10290.72	\$10,291
	Water Heater Flue	15	VLF	29.00	\$435



City of Hubbard
 City Hall, Police & Public Works
 June 5th, 2015 - Rev 0

Phase I - Construction Breakdown

CSI	Description	Qty	Unit	Unit Rate	Total
D2030 Sanitary Waste					
	4" Sanitary waste	150	LF	40.49	\$6,074
	6" sanitary waste	340	LF	55.52	\$18,876
	4" vent piping	350	LF	40.49	\$14,172
	Floor Drain	12	EA	647.55	\$7,771
D2040 Rain Water Drainage					
	Roof Drain	3	EA	227.70	\$683
	Overflow Drain	3	EA	227.70	\$683
	Rainwater leaders	60	LF	162.26	\$9,736
	6" storm water pipe	260	LF	55.52	\$14,435
	8" storm water overflow pipe	260	LF	87.51	\$22,754
	Facility storm water insulation 6"	260	LF	17.10	\$4,446
	Facility storm water insulation 8"	260	LF	21.23	\$5,520
D2090 Other Plumbing Systems					
Subtotal			Plumbing	\$296,892	
23000	<u>Heating and Air Conditioning</u>				
B3020 Roof Openings					
	Mechanical roof curb allowance	1	AL	6500.00	\$6,500
D3010 Energy Supply					
	Natural Gas Pipe - Allowance	1	AL	12000.00	\$12,000
D3040 Distribution Systems					
	Ductwork 34x18 22ga	8311	Lb.	5.95	\$49,453
	Duct Liner 34x18 1" 3lb	5911	SF	7.21	\$42,604
	Flexible Duct 8" dia	759	LF	9.36	\$7,107
	Insulation Plenum rated	5911	SF	5.74	\$33,923
	VAV boxes	1	AL	10543.01	\$10,543
	Fire Dampers	10	EA	113.92	\$1,139
	Ceiling Diffusers 24 x24	50	EA	292.08	\$14,604
D3050 Terminal & Package Units					
	55 ton cooling / 300 MBH	1	AL	37672.06	\$37,672
	Rooftop MAU	1	AL	15014.13	\$15,014



City of Hubbard
 City Hall, Police & Public Works
 June 5th, 2015 - Rev 0

Phase I - Construction Breakdown

CSI	Description	Qty	Unit	Unit Rate	Total
D3060 Controls & Instrumentation					
	HVAC system controls	1	AL	45000.00	\$45,000
D3070 Systems Testing & Balancing					
	Testing balance HVAC	1	AL	18000.00	\$18,000
D3090 Other HVAC Systems & Equipment					
	Exhaust Fan 300CFM	10	EA	516.18	\$5,162
Subtotal		Heating and Air Conditioning			\$298,722
26000	<u>Electrical</u>				
D5010 Electrical Service & Distribution					
	Normal Power Main Switchboard 120/208V	1	EA	13397.40	\$13,397
	Normal Power Panel 120/208V	2	EA	3854.96	\$7,710
	Normal Power Transformer 277/480V	1	EA	28821.29	\$28,821
	Normal Power Main Switchboard 277/408V	1	EA	16409.45	\$16,409
	Normal Power Panel 277/480V	2	EA	7069.21	\$14,138
	Grounding to foundation mat	1	LS	5000.00	\$5,000
	Conduit and wiring	1	AL	36000.00	\$36,000
D5020 Lighting and Branch Wiring					
	Suspended Ceiling Fixtures	70	EA	182.60	\$12,782
	Shower light fixtures	6	EA	261.51	\$1,569
	Lobby Light fixtures	6	EA	388.68	\$2,332
	Normal Power Distribution 277/480V	1	AL	54000.00	\$54,000
	Detention Lighting	3	EA	498.68	\$1,496
D5090 Other Electrical Systems					
	Emergency Power Generator	1	AL	50546.86	\$50,547
	AIS Switch	1	AL	4243.39	\$4,243
	Emergency Power Lighting		Included.		
	Emergency Power conduit and wire		Included.		
	Emergency Power Panels	2	EA	16409.45	\$32,819
	Uninterruptible Power Supply	1	AL	18500.00	\$18,500



City of Hubbard
 City Hall, Police & Public Works
 June 5th, 2015 - Rev 0

Phase I - Construction Breakdown

CSI	Description	Qty	Unit	Unit Rate	Total
G4020 Site Lighting					
	Parking Lot Lighting	11	EA	2136.64	\$23,503
	Parking Lot Light Poles 30ft	11	EA	2437.34	\$26,811
	Landscape Lighting	1	AL	4743.39	\$4,743
	Exterior building wall packs	10	EA	291.51	\$2,915
Subtotal		Electrical		\$357,737	
27000	<u>Communications</u>				
D5030 Communications & Security					
	Public Address	1	AL	3000.00	\$3,000
	Telephone System	1	AL	10000.00	\$10,000
	Television System	1	AL	6500.00	\$6,500
	Data Communications System	1	AL	25000.00	\$25,000
Subtotal		Communications		\$44,500	
28000	<u>Electronic Safety and Security</u>				
	Exit Sign	7	EA	336.81	\$2,358
	Video Surveillance	1	AL	16486.77	\$16,487
	Security Alarm	1	AL	42433.86	\$42,434
	Fire Alarm	1	AL	18125.00	\$18,125
	Gas Detection	1	AL	6500.00	\$6,500
Subtotal		Electronic Safety and Security		\$85,903	
31000	<u>Earthwork</u>				
G1010 Site Clearing					
	Site clearing	2	AC	5019.26	\$10,039
	Top soil strip/Haul	2	AC	821.61	\$1,643
	Developed Site Area	1.75	AC		
G1030 Site Earthwork					
	Rough Grading	1	LS	8296.19	\$8,296
	Erosion Control	1100	LF	1.67	\$1,842
	Fine Grading	1	LS	1508.55	\$1,509
Subtotal		Earthwork		\$23,328	



City of Hubbard
 City Hall, Police & Public Works
 June 5th, 2015 - Rev 0

Phase I - Construction Breakdown

CSI	Description	Qty	Unit	Unit Rate	Total
32000 Exterior Improvements					
A1030 Slab on Grade					
	6" SOG Subgrade	14320	SF	1.08	\$15,532
	2" Sand under slab on grade	14322	SF	0.74	\$10,537
G2010 Roadways					
	Driveway/Garbage/entrance Concrete	404	SY	46.54	\$18,782
	Opt - Concrete Driveway	89	SY	46.54	\$4,119
	Full Lot Perimeter to Roadway Curb & Gutter	549	LF	26.27	\$14,418
	Site Bases & sub bases	4429	SF	2.18	\$9,637
G2020 Parking Lots					
	Site Bases & sub bases	25006	SF	0.91	\$22,790
	A/C Pavement	25007	SF	3.78	\$94,641
	18in Standard Curb	1727	FT	13.49	\$23,283
	HCDP - Signs & site markings	3	EA	42.26	\$127
	Site signs allowance	1	AL	500.00	\$500
	Painted Lines - Thermoplastic 4" wide	853	LF	0.57	\$484
G2030 Pedestrian Paving					
	Sidewalk Base	4442	SF	0.35	\$1,546
	Sidewalk forming	4442	SF	0.82	\$3,650
	Sidewalk Concrete Placement	4442	SF	4.50	\$19,990
	Staff Patio Brick pavers	423	SF	12.71	\$5,373
	Public Plaza	860	SF	6.64	\$5,710
G2040 Site Development					
	Chain Link Fence	726	LF	39.32	\$28,535
	Chain Link Vehicle Gate	2	AL	6500.00	\$13,000
	Patio Screen wall	59	LF	5.85	\$346
	Flag Pole Foundation	3	EA	2660.87	\$7,983
G2050 Landscaping					
	Seeding & Planting	18853	SF	0.84	\$15,832
	Irrigation System	18853	SF	1.24	\$23,373



City of Hubbard
 City Hall, Police & Public Works
 June 5th, 2015 - Rev 0

Phase I - Construction Breakdown

CSI	Description	Qty	Unit	Unit Rate	Total
G4020 Site Lighting					
	Parking Lot Light bases	11	EA	1477.62	\$16,254
	Covered Parking	3359	SQ FT		
Subtotal		Exterior Improvements		\$356,441	
33000 Utilities					
G3010 Water Supply					
	Potable Water Distribution	200	LF	24.44	\$4,888
	Potable Water excavation & backfill	405	CY	5.58	\$2,263
	Water Vault	1	EA	650.00	\$650
	Double check valve	1	EA	4534.53	\$4,535
	Fire protection valve by pass	1	EA	150.83	\$151
	Fire protection site water lines	180	LF	24.44	\$4,399
G3020 Sanitary Sewer					
	Sanitary pipe	150	LF	18.22	\$2,733
	Sanitary pipe excavation & backfill	284	CY	6.41	\$1,824
	Sanitary clean out	2	EA	249.36	\$499
G3030 Storm Sewer					
	Storm Sewer Pipe	910	LF	39.36	\$35,821
	Storm Sewer excavation & backfill	1941	CY	5.58	\$10,840
	Retention Pond Savings	-1	AL	8500.00	-\$8,500
	Catch basin	3	EA	360.06	\$1,080
	Utility area drains	3	EA	236.91	\$711
	Utility oil and grease separator	1	EA	1906.91	\$1,907
G3060 Fuel Distribution					
	Site Gas Pipe by Vendor		Excluded		
	Gas Meter Connection	1	EA	231.78	\$232



City of Hubbard
City Hall, Police & Public Works
June 5th, 2015 - Rev 0

Phase I - Construction Breakdown

CSI	Description	Qty	Unit	Unit Rate	Total
G4010 Electrical Distribution					
	Underground site conduit	200	LF	20.70	\$4,140
	Concrete conduit cover	200	LF	11.72	\$2,343
	Excavation & Backfill	190	CY	6.41	\$1,216
	Site Transformer - 277/480 by vendor		Excluded		
G4030 Site Communications & Safety					
	Site Telephone - Vendor		Excluded		
	Site cable television - by vendor		Excluded		
	Site Data/Fiber - by vendor		Excluded		
	Subtotal		Utilities		\$71,730

End of Estimate



Abbreviations & Definitions

<u>Item</u>	<u>Definitions</u>	<u>Item</u>	<u>Definitions</u>
ADA	American Disabilities Act	RI	Rough In
AG	Above Grade	SF	Square Feet
Agg	Aggregate	Sgl	Single
AL	Allowance	SOG	Slab on Grade
Alum	Aluminum	SQ	100 Square Feet
BG	Below Grade	SQ FT	Square Feet
CDX	Exterior grade plywood	USF	Useable Square Feet
CFCI	Contractor Furnished & Installed	w/	with
CL	Class	W/C	Water Closet
Clg	Ceiling	WD	Wood
Conc	Concrete	Wdo	Window
Dbl	Double	YD	Yard
Demo	Demolition	RRI	Remove, Refinish, Reinstall
DI	Ductile Iron	R&R	Remove and Reinstall
Dia	Diameter	AFU	risk-Allowance For Unknown
EA	Each	AFC	risk-Allowance For Change
Ext	Exterior		
FD	Floor Drain		
FDC	Fire Department Connection		
Flr	Floor		
ga	Gauge		
GWB	Gypsum Wall Board		
H/C	Hot/Cold		
HM	Hollow Metal		
HVAC	Heating Ventilation & Air Conditioning		
INT	Interior		
IT	Information Technology		
JT	Joint		
LB	Load Bearing		
LT	Light		
LVL	Level		
Mech	Mechanical		
Misc.	Miscellaneous		
Mtl	Metal		
NIC	Not In Contract		
NLD	Non-Loaded		
NR	Not Rated		
O/C	On Center		
OWJ	Open Web Joist		
Oz	Ounce		
P-Lam	Plastic Laminate		

