WORK SESSION STAFF REPORT Work Session Item No. 3

Date:	February 4, 2019
То:	City Council
From:	Rick DeGardner, Public Services Director
Re:	Review Public Works Facility Concept Plans - Oertel Architects

Background

The City Council and staff have been discussing the need for the eventual replacement of our Public Works Facility (built in 1971) since a space needs analysis was conducted in 2011.

More recently, a Public Works Site Analysis and Space Needs Study was completed by CNH Architects in April, 2017 (Addendum to Public Works Facility Study was submitted October, 2017). The Public Works Facility was also discussed during the February, 2018 and May, 2018 work sessions.

The City Council expressed concerns with the scope and costs of a new public works facility outlined in the CNH Study. Oertel Architects was retained to reevaluate our needs and prepare options that are more cost effective.

Mr. Jeff Oertel from Oertel Architects will be present at Monday's work session to present some concept plans, projected costs, and answer questions.

Requested Council Direction

For informational purposes.

Attachments

- Oertel Architects Lino Lakes Public Works Concepts (4)
- Public Works Facility Follow-up Staff Report May 7, 2018 Work Session
- Public Works Facility Renovation & Expansion Staff Report February 5, 2018 Work Session
- CNH Architects Addendum October 30, 2017
- CNH Architects Public Works Site Analysis and Space Needs Study April 2017





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WORK SESSION STAFF REPORT Work Session Item No. 14

Date:	May 7, 2018
To:	City Council
From:	Rick DeGardner, Public Services Director
Re:	Public Works Facility Follow-up

Background

This item was discussed at the February work session and was also included on the March 5th work session agenda, but was tabled.

During the February work session, the City Council directed staff to provide the following information, which is attached:

- Cost breakdown of Hugo Public Works facility
- Plans and specifications for the Hugo Public Works Facility
- An estimate of how large a building is needed to store the city's vehicles and equipment

Requested Council Direction

This information is provided for further discussion.

Attachments

- A. City of Hugo Public Works Facility Fund Breakdown, (2004-2005)
- B. Plans and Specifications for the Hugo Public Works Facility Title Sheet (T1) and Site Layout (C1), February 2, 2004
- C. Inside Storage Analysis for the City's vehicles and equipment

CITY OF HUGO PUBLIC WORKS FACILITY FUND

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417-000.000-120.200	Accounts Payable	\$	(326,000.96)	\$	-	\$	326,000.96	\$	-
417-000.000-120.600	Contracts Payable	\$	(98,035.60)	\$	-	\$	98,035.60	\$	-
417-000.000-253.000	Fund Balance	\$	117,799.49	\$	-	\$	(117,799.49)	\$	<u></u>
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417-431.000-403.372	Community Room Revisions	\$	6,146.62	\$	6,146.62	\$		\$	7 600 00
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417-431.000-413.504	Change Locks	\$		\$	939.00	\$	(939.00)	\$	939.00
417-431.000-413.504	Rice Lake Park Centre Signage	\$		\$	4,977.15	\$	(4,977.15)	\$	4,977.15
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CONTACTS

OWNER CITY OF HUGO 14669 Fitzgerald Ave. N. Hugo, MN 55038 Fhone: (651) 162-6316 Fax: (651) 162-6314

ARCHITECT ELNESS SUENSCH GRAHAM ARCHITECTS 500 Washington Av. 5. Suite 1080 Mineapolis, MN 5545 Fhons: (612) 333-5500 Fax: (612) 333-5500

CIVIL ENGINEER OTEVENG ENGINEERS 1656 Livingstone Rd Hudson, WI 54016 Phone: (715) 386-5819 Fax: (715) 386-5819

STRUCTURAL, MECHANICAL & ELECTRICAL ENGINEER NELGON RUDIE 4 A660CIATE6, NC. 2635 University Ave. U. Suite I80 5t. Paul, MN 55114 Frone: (651) 644-2400 Fax: (651) 647-4120



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2.1	Electrical Lighting
2.2	Electrical Mezzani

A. APPLICABLE CODES & REGULATIONS 2002 MN State Building Code (Includes 2000 Int'l Building Code) Minnesota Accessibility Code Chapter 1341 MEZZANINE 30'-0 B. OCCUPANCY CLASSIFICATION A3 - Assembly (Community Hall) 3,200 SF S1 - Moderate Hazard Storage 19,000 SF 3 200 SF **1**31 occ. -3-HR FLOOR 19,000 SF 3,200 SF S2 - Light Hazard Storage C. CONSTRUCTION TYPE II-B 2" HIGH Non-Combustible Not Fire Rated D. ALLOWABLE SQUARE FOOTAGE A3 9500 SF Allowable 7130 SF Frontage Increase 16630 Total Allowable > 3200 SF 61 - 3200 SF MEZZANINE S1 17500 SF Allowable 7130 SF Frontage Increase 16630 Total Allowable (Per Floor) HASE BID, ALTERNATE A32 OCC. > 15,800 SF - Ground Level GARAGE > 3200 SF - Mezzanine Level S2 26000 SF Allowable 19500 SF Frontage Increase 45500 Total Allowable > 3200 SF ROOM TT -I-HR MET STUD E. OCCUPANCY LOAD A3 213 (2 Exits) S1 95 S2 16 鹿 िन्छन्द् HALL "NOT AN EXIT" ÷ F. ROOFING Type C or Better COMMUNITY ROOM PRECAST CONCRE WALL 3-HR PRECAST G. INTERIOR FINISHES SHOP WORKROOM Interior Rooms - Class C OFFICE Roof 1/48 Minimum Slope (1/8 Actual) ECCOPOD 0 1 Hour Firewall м 132 OCC. 3 Hour Firewall He occ. HOT OCC. 30'-0' 90'-0" 40'-0" 40'-0

61 - 19,000 SF (INCLUDES MEZZANINE) 95 OCCUPANTS

210'-0"

1 CODE PLAN



INSIDE STORAGE ANALYSIS FOR CITY'S VEHICLES AND EQUIPMENT

28-Feb-18

EXISTING VEHICLES AND EQUIPMENT (EXCLUDING TRAILERS)

Space Name	Quantity	Size	Area (SF)	Total (SF)
Large Spaces	9	18 x 36	648	5,832
Medium Spaces	37	12 x 24	288	10,656
General Equipment Storage	1		3,000	3,000
Circulation	1		8,500-10,800	8,500-10,800
TOTAL				28,000-30,300

EXISTING INSIDE STORAGE

Streets Shed	1	18 x 36	648	648
Parks Shed	1	22 x 76	1,672	1,672
TOTAL				2,320

ADDITIONAL STORAGE NEEDED

25,680-27,980*

*Does not include vehicle wash bay

WORK SESSION STAFF REPORT Work Session Item No. 10

Date:	February 5, 2018
To:	City Council
From:	Jeff Karlson, City Administrator
Re:	Public Works Facility Renovation & Expansion

Background

The Council had much discussion in 2017 about remodeling and expanding the existing public works facility. There was little support for building a new facility. There was no consensus as to what direction the Council wanted to go.

During the Council's last discussion in November, it was suggested that the conversation continue after the election.

Amongst the information included in this packet are the Site Analysis and Space Needs Study prepared by CNH Architects and an Addendum which further explains the deficiencies and scope of noncompliant code issues in the public works building. In the Addendum, Quinn Hutson specifically references pages 28 and 33 of the study.

Requested Council Direction

Staff is looking for further direction from the Council.

Attachments

Addendum to Public Works Facility Study 10-30-17 2017 Staff Reports and Minutes Public Works Facility Study 4-11-17 Original Proposal from CNH

Addendum

City of Lino Lakes Public Works Site Analysis and Space Needs Study Addendum

October 30, 2017

The following information is intended to expand on information provided in the original study dated April 11, 2017, to provide a more in-depth discussion of Layout Option A1, the remodeling and expansion of the existing City of Lino Lakes Public Works facility. The information in this Addendum does not change the space needs data, schematic layout design, estimated costs or other information in the original study; but instead provides a more comprehensive view of the background on which the data, design and cost estimates were based. The Addendum also reviews broad cost potentials for future expansion labeled Phase II in the study.

Existing Public Works Remodeling Scope

The remodeling of the existing Public Works facility is shown in the study to be a relatively complete interior gutting and rebuilding along with exterior envelope upgrades. To expand on this it is necessary to consider how the building code evaluates maintenance versus remodeling.

First of all, ongoing maintenance of an existing building does not trigger code updates. However, maintenance of an existing building only allows minor ongoing operational items such as changing light bulbs (not fixtures), painting, recarpeting, patching an existing roof or repairing existing mechanical units. Replacement of roofing systems, new mechanical units, replacement of light fixtures, and similar upgrades however are specifically excluded from the maintenance definition and are instead considered remodeling.

In comparison, the Minnesota State Building Code and referenced International Building Code require all remodeled portions of a building to fully comply with current building code requirements. Further, if the scope of a remodeling is such that the majority of the existing facility is remodeled, then the entire facility is required to be brought into compliance with the current building code standards. Under these provisions, the proposed remodeling and expansion of the existing Public Works facility as represented in Layout Option A1 would trigger a complete code compliant end result.

Finally, any items that are not in compliance with ADA accessibility standards, MPCA regulations, OSHA safety standards or other similar safety, environmental, and civil rights requirements are not "grandfathered" or allowed to remain noncompliant until a future remodeling date, but instead are to be addressed when identified.

When reviewing the existing Public Works facility, see pages 28 through 33 for a general summary, it was determined that the scope of code noncompliant spaces is such that no interior room was reasonably reusable in its current basic existing condition due to configuration, construction or operational deficiencies. This level of noncompliance was more extensive than was anticipated prior to

the start of the study however as the documentation of existing conditions completed, the evidence was extensive. The noncompliant items include the following partial list: corridors to narrow to meet accessibility standards, restrooms and countertops of improper size or without accessible heights, combustible construction in a non-combustible defined building including wood paneling and some wood wall construction, mechanical units that did not provide minimum air quality requirements, storage in areas without proper headroom, floor drains in vehicle accessed areas that flow into a septic system, among many other items. The deficiencies identified in the existing Public Works facility are not maintenance items as defined in the earlier paragraph, but can only be addressed in an extensive remodeling of the entire existing building which is what led to the findings represented in the original study.

While providing for more upgrade costs than originally would have been anticipated, the extent of the needed remodeling upgrades identified in the study is valuable knowledge for use by the City of Lino Lakes in effectively planning for the current and future needs of the Public Works Department in a manner to ensure that upgrades budgeted address the short-term and long-term goals developed for the facility.

Future Expansion (Phase II) Timing and Cost

The future expansion labeled as Phase II in the study represents possible future growth needs for the Public Works department looking out at least 15 to 20 years. This data is based on typical anticipated additional departmental needs to serve the increase in the population of the City of Lino Lakes as projected by the Metropolitan Council by the year 2040. This population projection is more than two decades in the future and only time will indicate if this growth level materializes. Further, the additional square footage of vehicle storage needed to serve this larger population is estimated based on staff input and comparison to other cities of similar population to the Metropolitan Council's future population estimate and also may not fully materialize. The intent of the study is to identify the maximum potential departmental facility needs within the requested timeframe reviewed such that, if needed, the site and building masterplan layout can accommodate this future facility growth without relocation or other inefficiencies.

The study is not intended to indicate that the Phase II storage building expansion will be required, only that if the projections both for growth of population and equipment needs achieves the maximum envisioned levels, the site and building masterplans developed remain viable. The City of Lino Lakes would need to revisit actual needs based on updated data over the coming decades.

Due to the unknown size and timing of the potential future expansion (Phase II) a cost estimate for this building addition was not included in the study results. However, to provide some concept of potential future expansion costs, the following table has been added to this Addendum.

	Building	Low Cost	High Cost		
Future Expansion Size	Area (sf)	/SF*	/SF*	Low Range	High Range
Minor Addition	15,000	\$110	\$150	\$1,650,000	\$2,250,000
Maximum Addition	30,000	\$110	\$150	\$3,300,000	\$4,500,000

*Costs in 2017 dollars and does not include inflation

As the table indicates, the low end cost for a small addition of a scope that still allows for efficient construction costs represents a construction cost of \$1.65 million for a low-temperature heated open plan storage addition. Conversely, if the population and equipment growth projections hit their most aggressive levels represented in this study, the maximum addition cost would range from \$3.3 million to a high end of \$4.5 million. As noted, these construction estimates are based on recent construction costs for Public Works facilities of similar types and are listed in 2017 dollars.

Thank you for the opportunity to provide this additional data to better explain the study methodology and the intended limitations of the future expansion cost ranges.

Best Regards

Quinn Hutson, AIA, LEED AP Principal CNH Architects, Inc.

CITY COUNCIL AGENDA ITEM 5B

STAFF ORIGINATOR:	Rick DeGardner, Public Services Director
MEETING DATE:	December 12, 2016
TOPIC:	Consider Resolution No. 16-172, Approving Public Works Space Needs Analysis and Existing Facility Audit Proposal
VOTE REQUIRED:	3/5

INTRODUCTION

The Lino Lakes Public Services Department is requesting City Council approval to retain CNH Architects, Inc. to conduct a Public Works Space Needs Analysis and Existing Facility Audit.

BACKGROUND

The Public Works Building (located at 1189 Main Street) was built in 1971 and consists primarily of a mechanical area (for fleet and equipment repairs), break room, and office space. A 40' x 80'shed (also built in 1971) provides some storage for vehicles, equipment, and supplies. In 2000, a 60' x 80' shed was built to provide additional indoor storage. A salt storage shed was built in 2013.

CNH Architects, Inc. will consider three approaches:

- 1. Renovate existing building and expand to meet future needs
- 2. Build a new facility at the existing site
- 3. Build a facility at the city property at Centerville Road and Birch Street

Topics including existing facility conditions, current and future space needs, growth potential for each option, accessibility compliance, energy usage and potential for savings, long-term costs of operation, and capital costs for remodeling/construction will be examined.

Mr. Quinn Hutson, Principal Architect with CNH Architects, Inc. will lead and coordinate all members of the design team and be the primary contact throughout the project. He brings extensive experience with city projects, numerous reviews of client and facility needs, and familiarity with the City and staff from past projects with the City of Lino Lakes.

RECOMMENDATION

Staff recommends the Council accept the CNH Architects, Inc. proposal to conduct a Public Works Space Needs Analysis and Existing Facility Audit for a fixed fee of \$11,900 plus reimbursable expenses for printing and mileage.

ATTACHMENTS

Resolution No. 16-172

Public Works Space Needs Analysis and Existing Facility Audit (Dated Sep. 23, 2016).

CITY OF LINO LAKES RESOLUTION NO. 16-172

RESOLUTION APPROVING PUBLIC WORKS SPACE NEEDS ANALYSIS AND EXISTING FACILITY AUDIT PROPOSAL

WHEREAS, The Lino Lakes Public Services Department is requesting City Council approval to retain CNH Architects, Inc. to conduct a Public Works Space Needs Analysis and Existing Facility Audit; and

WHEREAS, The Public Works Building (located at 1189 Main Street) was built in 1971 and consists primarily of a mechanical area (for fleet and equipment repairs), break room, and office space. Two sheds (built in 1971 and 2000) provide some storage for vehicles, equipment, and supplies. A salt storage shed was built in 2013; and

WHEREAS, CNH Architects, Inc. will consider three approaches:

- 1. Renovate existing building and expand to meet future needs
- 2. Build a new facility at the existing site
- 3. Build a facility at the city property at Centerville Road and Birch Street

Topics including existing facility conditions, current and future space needs, growth potential for each option, accessibility compliance, energy usage and potential for savings, long-term costs of operation, and capital costs for remodeling/construction will be examined; and

WHEREAS, Funding is available from the Building Facilities Fund.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Lino Lakes that the Council accept the CNH Architects, Inc. proposal to conduct a Public Works Space Needs Analysis and Existing Facility Audit for a fixed fee of \$11,900 plus reimbursable expenses for printing and mileage.

Adopted by the Lino Lakes City Council this 12th day of December 2016.

The motion for the adoption of the foregoing resolution was introduced by Council Member <u>Rafferty</u> and was duly seconded by Council Member <u>Maher</u> and upon vote being taken thereon, the following voted in favor thereof:

Rafferty, Maher, Manthey, Kusterman, Reinert

The following voted against same: none

Jeff Reinert, May

ATTEST:

Julianne Bartell, City

CITY COUNCIL SPECIAL WORK SESSION APPROVED

46 47	and staff intends that there will be more information and discussion in the future with resident involvement included.	
48	The council expressed their support for strong neighborhood involvement. The residents	
49 50	would be directly affected by additional traffic control (or no additional traffic control)	
50	and should have their voices heard. City Engineer Hankee explained that staff is still	
51	looking at the validity of the stop sign request from an engineering perspective. Staff	
52	could provide notice to the area residents at any time with council direction Council	
55	Member Kusterman pondered the council's authority if it comes to overruling a staff	
55	recommendation. Ms. Hankee explained that safety is the number one priority and so a	
56	recommendation. Wist Hankee explained that safety is the humber one priority and so a recommendation would be based first on that consideration. If the addition of a ston sign	
57	isn't the right action there could be other traffic calming recommendations	
58		
59	Council Member Rafferty asked if a traffic study and the work occurring on this situation	
60	is a standard response to a resident's request and staff confirmed that they review several	
61	requests each year as part of their normal work load.	
62		
63	3. Public Works Site Analysis and Space Needs Study – Public Services Director	
64	DeGardner introduced Quinn Hutson (Principal Architect) and Jessica Johnson	
65	(Architectural Designer) representing CNH Architects, to present their report.	
66		
67	Mayor Reinert noted that he believes the council requested an option of fixing the current	
68	facility but that doesn't seem to be included in the analysis. Mr. Hutson said that Option	
69	One includes renovating the current facility with a building expansion.	
70		
71	Jessica Johnson and Quinn Hutson, reviewed a PowerPoint presentation that included	
72	information on:	
73	- Overview of analysis they have completed;	
74	- Public Works site options map (site options are the existing site as Option A, or	
75	site adjacent to fire station #2 as Option B);	
76	- Space needs for the city's public works program: office, venicle storage, venicle	
77	maintenance, and departmental snops;	
78	- Growin consideration for the next 20 years,	
/9	- A comparison with other public works facilities in cities in the area and with	
8U 91	I avout options (two at site one and one at site two):	
01 87	- Sanitary and water service addition would be required at current site: there would	
02 83	be some disruption of services at current facilities (Council Members expressed	
84	concern about losing the baseball field and suggested that should not be	
85	necessary):	
86	- Site Option B advantages were noted (sewer and water hookup;, etc); the site is	
87	sufficient to meet the needs of both Phase 1 and 2;	
88	- An architectural review of the current facilities; accessibility and code review	
89	(several issues noted); mechanical systems review;	

CITY COUNCIL SPECIAL WORK SESSION APPROVED

Cost estimate: Phase 1, all three options priced, both low cost options to higher
 cost (Mayor Reinert remarked that a remodel without a space expansion hasn't
 been priced and Mr. Hutson said that is because that option wouldn't address
 future space needs). Mayor Reinert suggested that there is an even lower cost
 option that would basically add an unheated pole barn, although Director
 Grochala suggested there could be some space/utility services issues.

96

Mayor Reinert noted his concern about costs and prudence in spending the taxpayer's 97 funds. He is more supportive of exploring improvements at the Fire Station No. 2 land 98 for community use, such as a park, and improving the current public works facilities to 99 get equipment protected (i.e. unheated pole barn). Council Member Kusterman 100 remarked that perhaps a more detailed, lower level explanation of costs would be helpful 101 in a careful consideration of spending. Mayor Reinert remarked that the city just dug out 102 of a recession and he'd like to keep the city's budget small. He supports forward and 103 innovate thinking but this requires a lot of thought and there may be more urgent needs 104 right now. 105

106

107 In addition to more information on costs (at a more micro level),

a comparison of proposed square footages to current space would be helpful. Council

109 Member Rafferty remarked that city hall is a good example of a decision based on future 110 needs and the rocky road and changes that can occur as the future comes upon you.

111

Council Member Rafferty noted that one option would move facilities to the south side of the city and he wonders if that is best location for service provision. Director DeGardner suggested that the closer to the core of the city, the better as far as saving trips and driving economy. Mayor Reinert noted that the future could mean population changes however. Mr. Hutson added that with the south site, it is anticipated that the current site facilities would continue to some extent.

118

The mayor asked Administrator Karlson, if the roof were leaking here at city hall, what 119 procedure and funding is available to address the problem. Mr. Karlson noted the 120 facilities fund that is available for building expenses at city hall; for the work itself, a 121 bidding process would be appropriate. The mayor asked, would that facilities fund be 122 the same source to fund repairs to the public works facilities. Director DeGardner 123 explained that staff makes judgements about how to move on repair situations. Mavor 124 Reinert suggested that repairs should be done as needed along the way and he feels the 125 funds were available for repairs. 126

127

The council concurred that they will receive additional information as they have requested. Council Member Manthey asked about the move of city hall from the old building to the current. Director Grochala noted a study that involved creating a town

- 131 center as well as the space needs that developed.
- 132

133 Council Member Rafferty requested that the Hugo, Shoreview, etc. public works

134 locations be shared with the council.

WS – Item 4

WORK SESSION STAFF REPORT Work Session Item No. 4

Date:	July 5, 2017
То:	City Council
From:	Rick DeGardner, Public Services Director
Re:	Public Works Facility Audit Payment and Proposal for Additional Architectural Services

Background

December 12, 2016 - City Council approved Resolution 16-172 (Attachment 1), retaining CNH Architects to conduct a Public Works Space Needs Analysis and Existing Facility Audit (Attachment 2). Three approaches were identified:

- 1. Renovate existing building and expand to meet future needs
- 2. Build a new facility at the existing site
- 3. Build a facility at the city property at Centerville Road and Birch Street

<u>April 14, 2017</u> - Public Works Site Analysis and Space Needs Study delivered to all City Councilmembers (Attachment 3).

<u>May 1, 2017</u> - Mr. Quinn Hutson, Principal Architect and Ms. Jessica Johnson, Architectural Designer, present the study to the City Council. The City Council wanted additional information including an option of fixing the current facility, a more detailed explanation of costs, and a comparison of proposed square footages to current space.

<u>June 12, 2017</u> - City Council removed the payment of \$764.30 to CNH Architects from the consent agenda and directed staff to place this item on the July work session agenda.

A proposal for <u>Additional Architectural Services</u> from CNH Architects is included for consideration (Attachment 4). This would expand the scope of the original Public Works Facility Space Needs Study to breakout individual costs for remodeling the existing public works facility.

Requested Council Direction

Authorize staff to forward payment to CNH Architect for services rendered. Determine whether to proceed with proposal for Additional Architectural Services with CNH Architects.

Attachments

Attachment 1 - Staff Report and Resolution 16-172 Attachment 2 - Public Works Space Needs Analysis & Existing Facility Audit Proposal Attachment 3 - Completed Public Works Site Analysis and Space Needs Study Attachment 4 - Proposal for Additional Architectural Services





PROPOSAL FOR ADDITIONAL ARCHITECTURAL SERVICES

PROJECT:	Lino Lakes Public Works Space Needs Study
CNH No.:	16088
CLIENT:	City of Lino Lakes

May 24, 2017

Mr. Rick DeGardner Public Works Director – City of Lino Lakes 600 Town Center Pkwy. Lino Lakes, MN 55014

DESCRIPTION

The additional services under this proposal is to expand the original Public Works Facility Space Needs Study to breakout individual costs for Option A1 – the remodeling of the existing public works facility to evaluate the costs of individual portions of the remodeling and prioritize these items to consider a multi-phased approach.

GENERAL

We propose to perform the following additional services:

ADDITIONAL ARCHITECTURAL SERVICES

Our services for this part of the work consist of expanding the scope of the Space Needs Analysis Study with the following items

SERVICES PROVIDED

- Meetings with Staff as required
- Review structural element capacity and implications related to remodeling existing building
- Breakout elements of upgrade and remodeling of existing facility
- Prioritize maintenance and upgrade options
- Develop approximate budgets for each partial phase maintenance and upgrade option
- Update Study document printed and pdf copies
- Presentation at City Council Workshop

SERVICES NOT PROVIDED

- Mechanical/Electrical design
- Civil design

FEE

We propose the services indicated above for a fixed fee of \$4,800, plus reimbursable expenses as indicated below. This proposal fee is valid for 90 days from the date of this document.

AGREEMENT

This proposal updates the original Space Needs Proposal as indicated in this document, all other items remain as originally indicated.

The fee is due within 30 days of monthly invoices. A finance charge of 1.5% per month will be charge to unpaid bills after 30 days.

REIMBURSABLE EXPENSES

Reimbursable expenses include the following items and will be billed as they occur:

- Miscellaneous B&W and color printing at cost
- Miscellaneous postage, shipping and messenger service at cost
- Mileage, at IRS designated rate

SCHEDULE

The work indicated above will be completed for presentation at the early August City Council Workshop.

We appreciate the opportunity to expand the study to cover these additional elements.

Sincerely,

Quinn S. Hutson, AIA, LEED AP Principal CNH Architects, Inc

ACCEPTED BY:

Signature:	Rich	b	fend	
Name:	Rick	Dal	iondr	مر م
Title:	Direc	tr		
Date	: MA	30,	2017	

APPROVED

Council Member Rafferty recalled the department's early recommendation on the 134 purchase from Woodbury and asked if those trucks were intended for training from the 135 onset? Director Swenson recalled the development of the need for training. Mayor 136 Reinert said he's comfortable with the fact that the equipment has served a purpose and 137 may provide revenue to the city. 138 139 Director Swenson said he would proceed with working with the Brinlee Mountain 140 Company on the marketing of the equipment. Mayor Reinert directed staff to try and 141 make as much off the trucks as possible. Council Member Manthey asked if there is 142 time to work the market and Director Swenson said it's tied to the timing of the 143 requirement for recertification. 144 145 Director Swenson also received council concurrence on donating some hard suction host 146 147 that is no longer useful to the city. It was agreed that the equipment would be donated to the Centennial Fire District. He will bring the matter to the council for official 148 149 authorization. 4) Public Works Facility Audit Payment and Proposal for Additional Architectural 150 Services - Public Services Director DeGardner reviewed his written staff report, 151 including the history of this project to date. 152 153 Mayor Reinert remarked that the council wants to receive the information that they paid 154 for. The work received didn't include what was specifically requested. Now the 155 council is receiving this (representing the work originally requested) with a request to be 156 paid for the "additional" work. He suggests that the council work session recording of 157 previous council consideration will tell the tale. He clarified that he has stated in a 158 previous meeting that he isn't interested in new buildings. He sees the goal as getting the 159 city's equipment out of the weather. He didn't see anything representing that option 160 brought back. 161 162 Council Member Manthey said he recalls the three options brought forward and actually 163 that was what he expected. He would like to see additional information but he doesn't 164 necessarily recall that request. He recalls discussion about what the city will need 165 looking ahead to the future. 166 167 Mayor Reinert suggested that providing only three \$12 million options isn't what he 168 wanted and isn't appropriate. This is the difference between a want and a need – the 169 need being to get equipment out of the weather and repair the public works building. 170 171 Council Member Kusterman suggested that he got what he expected, not to say that he's 172 interested in spending that much money. 173 174 Mayor Reinert said he recalls specifically his request and he feels it was ignored. He 175 doesn't think that the bill should be paid until the job is finished. 176 177

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APPROVED

Council Member Maher suggested that the council voted and approved a resolution that

authorizes what came forward. Mayor Reinert suggested then that, to be clear, the 179 council will have to have every element of their discussion included in what they vote on 180 in the future. 181 182 Council Member Kusterman noted that the council's discussion included a request for an 183 itemization so they could look at what is really needed. 184 185 Director DeGardner remarked that he believes Mr. Hutson of CNH Architects thinks he 186 provided what he was asked to. Mr. DeGardner added that by keeping a shell and 187 attempting to retrofit the existing facility was probably not a level of improvement that 188 was considered. Mr. DeGardner said he can inform Mr. Hutson that the city doesn't 189 want to pay the remainder of the bill based on this discussion. Mayor Reinert added that 190 the job wasn't done as requested. He should finish the job with what he was paid or the 191 city can get someone else. 192 193 Council Member Maher said she hasn't listened to the tape to confirm what was said. 194 195 Council Member Kusterman suggested that the mayor seems to want the council to listen 196 to the tape to confirm the direction. 197 198 Council Member Rafferty recalled that he wasn't interested in spending a huge sum of 199 money at this point although he knows eventually facilities have to be upgraded. He does 200 see that Mr. Hutson tried to basically break things down in his report; perhaps Mr. Hutson 201 may have seen that it didn't make sense in his mind to not move to a new facility. 202 Council Member Rafferty said he doesn't see the need to withhold payment of the bill. 203 204 Mayor Reinert said he'd be willing to let go of the issue of payment of the bill but he 205 won't be willing to work with that company again. He'd like to see three contractors 206 brought in to view the current facility and hear what they could do to update that facility. 207 208 Council Member Manthey suggested that the process of discussion now is a good thing; 209 he always anticipated that there would be more council discussion to decide on the best 210 option for this city. He feels the council has to be very clear on the information they 211 want to receive. He thinks part of the discussion are things like bringing in water and 212 sewer and thinking ahead to needs in the future. 213 214 Council Member Rafferty suggested that even a contractor has to understand what is 215 being asked and that type of information isn't prepared. 216 217 Mayor Reinert asked, for the \$12,000 that this company will be paid, will there be value 218 to the city in the future. Council Member Rafferty said he believes so. 219 220 The council concurred that the payment will be added to the next council agenda for their 221 consideration (as an item separate from the expenditure list). Staff was directed to look at 222

APPROVED

alternative options to get information from contractors or architects who specialist inremodeling.

4.5) New Facility Rental Charges Impacting Recreation Department – Rick 225 DeGardner and Brian Hronski were present. Director DeGardner reviewed his written 226 report outlining charges for facility use that have been instituted by Centennial School 227 District (CSD). He reviewed the fall 2016 programs offered by the city and how the 228 revenue for those programs will not cover the costs of facility rental and result in a 229 significant deficit situation for the department. He reported that staff has attempted to 230 work this out with CSD but they are firm in their determination to charge the fees. The 231 department has worked hard to move what programs they can to city facilities or other 232 non-charge sites: some programs may have to be discontinued. He identifies two 233 scenarios within the staff report to deal with the situation - either challenge the 234 Recreation Supervisors to come up with solutions, or let certain programs go and hope 235 that the school district picks up on those activities and with that a loss of a recreation staff 236 237 position. 238 Mayor Reinert suggested that there's been a deterioration in the relationship between the 239 city and the school district in areas such as this and he fears it is mostly on their side. He 240 recalled ways that the city has worked with the district to assist. He suggested that there 241 are ways to charges back city costs to the district. He'd like to see if CSD would 242 reconsider. 243 244 Council Member Manthey asked if the school board members are aware and supportive 245 of this action. Mayor Reinert said he would write a letter to the superintendent and copy 246 the school board members; he'd rather unwind this before having to look at charging 247 back. 248 249 Director DeGardner remarked that the youth sports organizations have been given a 250 higher priority and as a result an exemption from the use fees. This would be a big 251 impact to the department and he can state that they have tried to work this out with his 252 contemporaries but that hasn't worked. He is really faced with a "what do we do for this 253 fall" and he is recommending the direction to staff to work on solutions. 254 255 Mayor Reinert asked that staff help him with a letter to the Superintendent, copied to the 256 school board members and perhaps a visit to the next school board meeting. 257 258 Council Member Kusterman said he is frustrated especially because he would like to see 259 more budgetary consideration to providing even more recreation opportunities. He 260 agrees with going to the school hierarchy to attempt to work this out. 261 262 The council directed staff to proceed with their recommended option one, including the 263

change to the \$10,000 contribution.

WS – Item 10

WORK SESSION STAFF REPORT Work Session Item No. 10

Date: August 7, 2017

To: City Council

From: Jeff Karlson

Re: Public Works Facility

Background

During the July 5th work session, the Council directed staff to seek alternative options for upgrading the public works facility. Since that meeting I have talked to several of you, including staff, about what direction we need to take. None of us seem to be on the same page. Therefore, it is unclear to staff what direction the Council wants to go.

Is it the Council's intent at this point to only address deficiencies with the building before moving forward with a plan for additional storage?

Requested Council Direction

Staff is requesting further direction.

APPROVED

10. Public Works Facility – Mayor Reinert explained that he has met with
 staff and has received much more information on this subject and will be receiving more.
 Perhaps that information will includes what he felt was lacking earlier. He feels it could
 be beneficial for city officials to look at other facilities.

Council Member Manthey asked about the goal of touring other facilities. Administrator
Karlson can work with other city staff to arrange visits. Council Member Kusterman said
he'd be happy to share some documents that he has from the City of Shoreview and their
process of phasing improvements.

312

The council agreed on the date of Tuesday, August 22, 5:30 p.m.

314 7. Council Updates on Boards/Commissions, City Council

315 8. Monthly Progress Report – Administrator Karlson reviewed the progress report.
 316 This item included an update on the Laserfiche project by the City Clerk.

317 9. Review Regular Agenda – The agenda for the August 14, 2017 council meeting
318 was reviewed and there were no changes.

319

321

The meeting was adjourned at 10:00 p.m.

These minutes were considered, corrected and approved at the regular Council meeting held on August 28, 2017.

324

325

326 327

328 Julianne Bartell, City Clerk 329

Jeff Reinert, Mayor

WORK SESSION STAFF REPORT Work Session Item No. 8

Date:	November 6, 2017	

To: City Council

From: Jeff Karlson, City Administrator

Re: Public Works Facility

Background

During the Council Work Session on May 1, 2017, Quinn Hutson, Principal Architect for CNH Architects, presented a Public Works Site Analysis and Space Needs Study. Mr. Hutson identified three options in the study along with the cost estimates for each option.

Mayor Reinert was of the opinion that CNH did not provide an option to remodel the existing facility. There has been much discussion and debate the last several months about what the City Council should do.

Public Services Director Rick DeGardner requested that Mr. Hutson provide a more indepth explanation of his evaluation regarding Option Al, which was to remodel and expand the existing public works building.

Attached is an Addendum that Mr. Hutson prepared last week. The Public Works Site Analysis and Space Needs Study are also attached. Hutson specifically references pages 28 through 33, which illustrates the deficiencies and scope of noncompliant code issues in the public works building.

Requested Council Direction

Staff is looking for further direction from the Council.

Attachments

October 30, 2017 Addendum to Public Works Facility Study April 11, 2017 Public Works Site Analysis and Space Needs Study

APPROVED

Mr. Hillesheim reported on the current status of the city's equipment and the benefits of replacing units. On the question of funding, staff is recommending use of 2017 budget surplus for the units and funding of controls from the building maintenance fund. The NAC representative spoke to replacement/down time if the units were to fail. The council discussed replacement brand proposed as well as energy savings as a result of replacement.

231

8. Public Works Facility – Administrator Karlson explained that, as a result of
questions that came up during a previous presentation by Quinn Hutson of CNH
Architects, an addendum is being presented further outlining the option of remodeling
and expanding the existing public works facility. He is asking if the council has further
direction on the matter.

237

Mayor Reinert feels opinions on this project are subjective. To address that, he thinks that more information and different perspective is needed. Perhaps an opinion from someone who doesn't specialize in government projects would be appropriate.

241

Council Member Manthey suggested that the council should give more detail on what is
wanted in order to get additional information. He suggested he'd prefer more discussion
for the whole council of possibilities and stages.

245

Mayor Reinert noted a Hugo facility that cost \$2 million. His concern is that there's no better level of services offered to the constituents with a more expensive building. He wants to get the best for the residents' money.

249

Council Member Manthey warned against oversimplifying. It isn't just putting trucks in
a garage. He recommends the council review the whole situation and decide of what
should be spent, including what the facility can provide in the future. Mayor Reinert said
he is oversimplifying to make a point.

254

Council Member Rafferty remarked that the conversation should be held with the
upcoming council. Council Member Maher added that she isn't certain all the
information has gotten to the architect that needs to and that can be solved by more
discussion and direction.

259

9. 2018 West Shadow Lake Drive and LaMotte Drive – City Engineer Hankee
explained that staff is continuing to work on the project design. They are still planning on
holding a neighborhood meeting at the end of November. Communication is underway
with the webside and phone calls being taken. Drainage, a critical component, is being
worked on. Ms. Hankee was informed that residents have contacted the mayor with
questions about lake level and she explained that she is working to address those
questions with the DNR and watershed district.

267

CITY OF LINO LAKES Public Works Site Analysis and Space Needs Study



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04/11/17

16088

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I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA

PRINT NAME: QUINN HUTSON

SIGNATURE:

DATE: 4/11/17

LICENSE NO: 21234

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EXECUTIVE SUMMARY

Site A



Introduction

The main facility of the current Lino Lakes Public Works Facility was built in 1971 with several additional cold storage sheds, salt and brine shed, and a mobile office out-building added to the site, since that time. The current site is on the northwest portion of Lino Lakes, off Main Street. While the facility has functioned in the past 45 years, the City Council and staff determined that it would be appropriate to analyze the condition of the current buildings along with the operational needs of the Public Works Department to best serve the community for the next 20 years. The long-term growth anticipated for the Public Works facility was also selected to be analyzed with two possible sites to be considered - the current location labeled Site A in this study and the site adjacent to Fire Station #2 on Centerville Road and Birch Street referred to as Site B.

With this goal in mind, the City of Lino Lakes contracted CNH Architects to perform an analysis of three approaches for the Public Works Facility, now and into the future. The goal of this study is to provide evidence based recommendations to address the needs of each department and analyze site conditions for each site. This study evaluates each of the sites identified, rating them for a broad series of attributes. The information provided in this study includes site data, gathered and analyzed by CNH Architects and valuable input from Lino Lakes city staff. The report includes this Executive Summary followed by supporting data and diagrams.

Site B



Process

Over the past few months, CNH Architects and our consulting team performed a detailed study and analysis. The study process evaluated the following four major steps:

Step 1: Assess conditions of the current facility, including taking photos of the existing site. This step includes reviewing current code and accessibility compliance, deferred maintenance, and short-term anticipated maintenance requirements.

Step 2: Develop a Space Needs Program of current space needs, as well as evaluating impacts on the space needs based on the projected growth of the City of Lino Lakes by 2040. This step started by gathering data from Lino Lakes city staff regarding current and projected space and site needs. Other public works facilities in similar, neighboring communities were reviewed as comparative case studies to create proper metrics for gauging the appropriate scope of work.

Step 3: Develop an analysis of relevant site attributes for the two sites being considered. This analysis includes availability of public utilities, buildable area after easement and wetlands were located, efficiency of potential space use, and adjacent land uses.

Step 4: Develop a total of three preliminary site and building layouts on the two proposed sites and obtain cost estimates for each option. The three options that have been identified for evaluation for the Public Works Facility are shown on the Public Works Facility Site Option Map and consist of the following:

Option A1: Remodel & Building Expansion on Existing Public Works Site (Site A) Option A2: New Facility on Existing Public Works Site (Site A)

Option B1: New Facility at Birch Street & Centerville Road adjacent to Fire Station #2 (Site B)

EXECUTIVE SUMMARY





Conclusions

The study determined that the existing facility, while having served the city well for 45 years, has fallen well behind current standards both for codes, safety, facility maintenance and appropriate size for a Public Works Department serving a city, the size of Lino Lakes. The building's code deficiencies include total lack of accessibility standards, multiple building code noncompliance items, OSHA workplace concerns, inappropriate sanitary waste conditions, and significant HVAC air quality issues. Similarly, the existing building has deferred maintenance issues such as leaking roof and windows as well as future near-term maintenance items that will require attention in the next 1 to 5 years. These items can all be addressed by remodeling or replacement, but need to be factored into the cost of relevant options being evaluated.

The review of the Space Needs for the Public Works Department, evaluated current space use, shortfalls in needed space, and the future growth in staff and equipment projected within the study timeframe of looking forward to 2040 needs. The approach included storage of all vehicles, equipment and equipment accessories within a weather-protected semi-heated facility as is typical within current public works facilities. This approach will provide long term value to the city in significantly longer lifespan of the equipment and reduced upkeep. The results of the Space Needs Program indicate a need for a total building area around 80,000 square feet by the end of the 2040 timeframe. The study indicates that all categories are short of space, currently with the largest shortage being in the Vehicle Storage category. Based on this review, we recommend a two-step construction with Phase 1 addressing current and near-term shortfalls and Phase 2 adding additional Vehicle Storage space later in the masterplan. With this phased approach, the Space Needs Program indicated a Phase 1 size of approximately 55,000 square feet with Phase 2 adding the remaining 30,000 square feet of Vehicle Storage.

These Space Needs were then compared to facilities at Hugo, Shoreview, Otsego and Hopkins. The areas of each category of space were translated in square feet per population to equalize the comparisons. The results indicate that Phase 1 Space Needs area goals are very conservative being at or under the areas represented by all the cities in comparison. The Phase 2 Space Needs area goals for the Vehicle Storage category rise into the middle of the comparison data still remaining conservative as this phase for Lino Lakes looks out to 2040 and beyond.

The next step of the study analyzed site characteristics of the two potential sites being considered for the future Public Works Facility, Site A, the current Public Works site and Site B, adjacent to Fire Station #2. Site A scored moderately positive on buildable area and site visibility and moderately negative on six other statistics. It scored negative on the infrastructure due to the current lack of municipal water and sanitary sewer serving the site, which would be required to remodel or replace the facility on this site. In review of Site B, this location rated infrastructure as a positive since all utilities are already stubbed to the site from the fire station work. This site rated moderately positive for four statistics, neutral for buildable area and flood plain, and moderately negative for two remaining items. However, understanding not all statistics are of equal weight, Site A scored an average of 2.22 out of 5 total points and Site B scored an average of 3.44 out of 5 total points. While Site B has features that result in a better analysis, both sites are workable and can be considered for the future of the Public Works Department, assuming of course that municipal water and sanitary sewer is extended to Site A.

Finally, the study developed three public work facility masterplan site layout options representing both a remodel / expansion approach as well as all new facilities. All three options result in facilities that function and meet the minimum goals of the Space Needs Program. The following are highlights of each option with more detailed information to be found in the main body of the study report. As shown in the cost analysis, there is approximately a 5% range in initial costs between the options however there are other factors for the City of Lino Lakes to consider in the selection such as long-term location within the city, life-cycle maintenance and utility costs, operation of public works staff during construction, and best uses of city property.

Option A1



Option A2



Option A1: Remodel & Building Expansion on Existing Public Works Site (Site A)

Remodeling and expansion of the existing public works building is the first option reviewed and provides the main advantages of reuse of the existing building structure. There is also the advantage of a somewhat larger overall site. However due to the extensive code, accessibility and safety issues, the building's interior would need to be mostly rebuilt to address these minimum requirements. There would also need to be exterior upgrades of the existing structure such as reroofing the building to replace the currently failing roof. For either option on Site A, the project also includes the requirement to bring municipal water and sanitary service to the site to provide mandatory fire suppression and treatment of vehicle floor drain sanitary flows. This option also impacts the public works department's operations, related to working around the remodeling and addition process. Based on the detailed preliminary cost estimates done by the cost consultant, this option's cost falls in the middle of the three options reviewed. However, when the increased maintenance costs of the remodeled portion of the building is factored in; this option is likely the costliest over the next decades.

Option A2: New Facility on Existing Public Works Site (Site A)

The approach on this option is the demolition of the existing public works facility and construction of an all-new facility on Site A on Main Street. This option has several advantages including the flexibility to place the new facility on the site to maximize the use, providing a more compact building and better screening of the outdoor storage and salt building area. This option also allows the continued use of the newer, of the two existing cold storage garages for the next 10 to 20 years until its life-expectancy is reached and Phase 2 is completed. The other main benefit of a new facility is the elimination of the increased maintenance and replacement requirements inherent in remodeling the existing building under Option A1. Similar to the first option however, this option would require the extension of municipal water and sanitary service to the site to provide mandatory fire suppression and treatment of vehicle floor drain sanitary flows. Operations of the Public Works Department would also be significantly impacted between the demolition and new construction of the facility, although the construction timeline would be reduced by not working around ongoing operations. Finally, this option has the highest initial cost of all the options considered, but would be less than Option A1 over the next few decades when increased maintenance costs of the remodeled building is factored in.

Option B1



Option B1: New Facility at Birch Street & Centerville Road adjacent to Fire Station #2 (Site B)

This option represents a new facility at the south Site B location where preparations for future city facilities were provided in the Fire Station #2 project. The advantages of this site include existing municipal utilities stubbed into the site, a location closer to the future population density projections, and the smallest most efficient building footprint of the three options. Other benefits of building on this site is the ability to not impact the operations of the Public Works Department during the construction process as they will be able to work from the existing facility until the new building opens. Also, by not building on Site A, there is not the loss of the one ballfield and hockey rink, maintaining more park and recreation usage within the city. Replacement costs for these recreational areas were not included in the study. Under this option, the existing salt storage building, material storage bins, as well as the existing cold storage buildings would remain on the north Site A location, at least through Phase 2 construction, providing the benefit of more available storage space in the short term. However, there will be a mixed impact of having public works elements on two sites. Option B1 has the lowest initial cost as well as the lowest life-cycle cost of the three options analyzed.

PUBLIC WORKS FACILITY SITE OPTION MAP



Option A1:Existing Site: Expand to meet future needsOption A2:Existing Site: New FacilityOption B1:Birch St. & Centerville Rd.: New Facility

Public Works Facility Option Location Map

The map above shows the two sites that were identified by city staff for consideration as potential properties for the proposed Public Works Facility. Options A1 and A2 are located at the current Public Works Facility. Option B1 is located adjacent to Fire Station #2.
Project Needs Assessment

CNH interviewed appropriate City Staff to understand both their current needs as well as future operational changes and anticipated growth areas. We compared these areas to similar nearby cities, providing not only relational size comparisons but interjecting potential issues that may not have been considered. To create accountability and clarity in our investigation, we made it a priority to gather initial information with rigor such that assumptions are minimal, collaborating closely with our engineers to pinpoint existing and potential issues that may or may not already be identified.

Option Analysis

After gathering all the information on space needs, CNH evaluated the existing public works campus, and developed future needs based on expected growth; CNH reviewed three approaches for the City of Lino Lakes to meet their Public Works needs. These include:

Option A1 – Renovate the existing building and expand to meet future needs.

Option A2 – Build an all new facility at the existing site to provide long-term value.

Option B1 – Build an all new facility at the city property at Birch Street and Centerville Road leaving some appropriate elements at the existing site.

The study has reviewed each of the above options, analyzing and listing comparative data on each option in order to provide the City of Lino Lakes with the tools to make an informed decision on the future of the Public Works department facilities. Among others, the review of each option will include the following topics:

- Space needs current and future
- · Growth potential for each option
- Existing facility conditions
 - Deferred and short-term maintenance
 - Building code / OSHA compliance
- · Accessibility compliance
- Capital costs for construction / remodeling proposed
- · Site location relative to population and infrastructure

Site A:

Site A consists of the existing site for the current Senior Citizen Center and Public Works Facility. The property's current zoning designation is for Public and Semi-Public District (PSP). It has a gross area of 27.46 acres of which 17.6 acres are suitable for building. The city owns the property of this existing facility. The site is surrounded by residential neighborhoods to the east and south, baseball fields to the west and agricultural land to the north.



Photograph:

View of the existing Vehicle Maintenance portion of the Public Works Facility









Infrastructure



This city owned property is served by electricity and natural gas utilities, but does not have municipal sanitary or water service. The current facility uses well water and has a private moundstyle septic system limiting the ability to install fire suppression and requiring storage tanks for future vehicle wash and floor drain sanitary flows. Extension of municipal sanitary is highly recommended. Municipal water and sanitary are located approximately 1 mile to the west.





Wetlands

There are designated wetlands running through the middle of the property which reduces the buildable area and mostly separating the northwest storage area from the main buildable area. The wetlands represent approximately 40% of the overall site. Floodplain

There is a large floodplain running through the middle of the property mostly duplicating the wetland areas.



Site Statistics Public Works Analysis







Easements

There is one gas easement running on the southwest corner of the site. This easement defines the southwest edge of the main buildable area.

Buildable Area

This site is approximately 27.4 acres, of which 12 acres is buildable area. This buildable area is separated into three distinct blocks with only the southeast block of 7.7 acres large enough to be considered for this project.

City Owned Property

Site B:

Site B is located on the southeast intersection of Birch Street and Centerville Road. The property's current zoning designation is for Public and Semi-Public District (PSP). It has a gross area of 17.6 acres of which 3 acres are suitable for building. It is adjacent to Fire Station #2 to the north and agricultural land on the east and west sides. To the south the property extends toward 46 acres of land owned by the City. There is one private residence on agricultural land to the southwest.

Photograph:

View of the site from the east







Infrastructure

This city owned property is served by all public utilities including electrical, natural gas, municipal water, and municipal sanitary services. The water and sanitary pipes were stubbed into the site as part of the recent Fire Station #2 project. The site is also served by the new city street with completed connections to both Centerville Road (County 21) and Birch Street (County 34).



Wetlands

The designated wetlands run along the North, East and West sections of the property and decreases the buildable area within this parcel.



Floodplain

The floodplain runs through the East part of the property, but since the construction of the fire station the FEMA map should be updated to reflect the correct contours of the site. The diagram above represents the approximate corrected floodplain zone. It is our understanding that the floodplain update is in process.



Site Analysis Site Statistics Public Works Analysis _ _ _ Adjacent Land Uses







Easements

There are no easements on the south buildable area being considered for this project other than standard drainage and utility setbacks along the property lines and roads.

Buildable Area

This site is approximately 17.6 acres not including the over 46 acres to the south. After deducting the fire stations' built area, there is 3 acres of remaining buildable area for this potential project.

Space Needs Program

ARCHITECTURAL CONSIDERATIONS - SPACE NEEDS PROGRAM

Overview

The current Lino Lakes Public Works Facility was built in 1971. While the facility has functioned in the past 45 years, the City Council and staff determined that a space needs program be developed to assess the existing, current and future needs. The Space Needs Program captures the conclusions made from the assessment exercise over the last months to express the scale and scope of modifications needed to the facility for both short and long term operational demands.

A comparison matrix at the end of this section reflects other Public Works facilities as they relate to the scale of this project. Public works facilities in the Twin Cites metro of Hugo, Shoreview, Otsego, and Hopkins were used as references. While each city's needs and approaches are different, the comparisons can provide additional insight when considering the best fit for the City of Lino Lakes.

Space Needs Analysis Approach

The space needs reviewed are based on the following assumptions to address the long-term needs of the Public Works Department for the City of Lino Lakes. While other approaches may be pursued, the assumptions indicated in this study represent the facility designs commonly taken by other similar municipalities within the greater region.

A. Departments Included within the Facility: This space needs program for the overall Public Works Department includes the streets, utilities, vehicle maintenance and park & recreation operations. This combination of operations creates efficiencies in operations and facilities as many functions overlap and require similar facilities.

B. Protection of Equipment: This space needs program provides space for all vehicles and equipment to be stored within the protection of the proposed building. This would include fully heated operational areas as well as partially heated storage areas, depending on the needs of the individual spaces. Much of the current equipment and many vehicles are currently stored outside within the current Public Works site significantly reducing its life-expectancy and increasing maintenance requirements. The space needs program assumes that all equipment and vehicles would be stored within the facility providing reduced life-cycle costs for the equipment and vehicles within the public works department.

C. Growth Projections: The space needs program allows room for the anticipated growth needs within the following 20 years at a minimum as is typical for a public facility built to operate for a period approaching 50 years. The City of Lino Lakes is projected by the Metropolitan Council's study to expand in population to 31,100 by 2040, or a growth of 49% from current. The growth built into the space needs program represents only the added staff and equipment that was determined to be needed with the increase in population and associated streets, parks, and utilities. Consequently the building space needs growth is only 14% above the current needs, significantly less than projected population growth.

SPACE NEEDS PROGRAM

Office Area

Space Name	Quantity	Size	Area	Total
Public Works Superintendent	1 	12'x14'	168	168
Open Office Area		15'x20'	300	300
Reception	1	16'x10'	160	160
Private Offices	9	12'x10'	120	1,080
Shop Supervisor Office	1	12'x10'	120	120
Copy Room	1	9'x10'	90	90
IT/Server Room	1	9'x10'	90	90
Multi-Purpose Room	1	40'x45'	1,800	1,800
Lunch Room		30'x40'	1,200	1,200
Men's Restroom & Locker Room	1	30'x40'	1,200	1,200
Women's Restroom & Locker Room	1	15'x25'	375	375
Storage	1	10'x25'	250	250
Janitor's Closet	1	10'x12'	120	120
Mechanical/Electrical Room	1	20'x30'	600	600
Public Restrooms	2	9'x10'	90	180
Subtotals				7,773
Circulation	15%			1,160
Total				8,893 j

Quantity	Size	Area	Total
16	18'x36'	835	13,360
49	12'x24'	288	14,112
20	8'x12'	96	1,920
+ 1	30'x40'	1,200	1,200
	20'x100'	2,000	2,000
⊥ 1 ∣	35'x50'	1,750	1,750
	30'x6600'	19,789	19,789
			54,131
	Quantity 	Quantity Size 16 18'x36' 49 12'x24' 20 8'x12' 1 30'x40' 1 20'x100' 1 35'x50' 1 30'x6600'	Quantity Size Area 16 18'x36' 835 49 12'x24' 288 20 8'x12' 96 1 30'x40' 1,200 1 20'x100' 2,000 1 35'x50' 1,750 1 30'x6600' 19,789

Space Needs Program

Vehicle	Space Name	Quantity	Size	Area	Total
Maintenance	Large Maintenance Bay	2	24'x48'	1,152	2,304
	Small Maintenance Bay	2	20'x40'	800	1,600
	Welding Bay / Fabrication	<u>-</u> - 1	28'x40'	1,120	1,120
	Small Engine Repair Bay		20'x40'	800	 800
	Tire & Brake Shop	<u>-</u> 1	20'x28'	560	560
	Tire Storage (Mezzanine)		30'x10'	300	300
	Lube Room	<u>-</u> 1 ⁻ -	12'x16'	192	192
	Parts Storage & Tools Room	+ - 1	20'x50'	1,000	1,000
	Subtotals				7,876
	Circulation	15%			1,181
	Total				9,057

Departmental	Space Name	Quantity	Size	Area	Total
Shops	Sign Storage	1	30'x40'	1,200	1,200
	Woodworking Shop	1	20'x30'	600	600
	Parks Storage	 1	30'x40'	1,200	1,200
	Water Meter Shop / Storage		15'x30'	450	450
	Subtotals				3,450 1
	Circulation	15%			518
	Total				3,968

Total Area	Subtotals		 76,049 I
	Exterior Wall and Building Services	10%	7,605
	Total		83,654

Summary

As this Space Needs Program indicates, the Public Works Department will need a total building area approaching approximately 84,000 square feet by the end of the study target of 2040. While the population of the City of Lino Lakes is projected to grow 50% by 2040, the projected total Space Needs Program is only 15% more than the current space needs because of operational efficiencies of a larger city. Due to this future growth and also the potential use of some existing cold storage space over the next 10 to 15 years, the Space Needs Program can be met in a two phase approach with Phase 2 encompassing approximately 25,000 square feet of future Vehicle Storage needs.

COMPARISON MATRIX

Comparative Square Footage Calculation

The Comparison matrix reflects size of areas in comparative Public Works Facilities. The following formula was used to create comparison factors.



The comparative factors are not a definitive means for determining the appropriate size and scale of Lino Lakes' expansion needs, particularly considering many other factors can influence how and why departmental allocations are established. However, this information can be helpful in guiding the space needs program with a larger perspective that acknowledges the external factor of city population and growth and how that impacts the operational capacity of the Public Works facility.

From the chart below, we can see that Hopkins' has a somewhat smaller population. Hopkins' total square footage for their Vehicle Storage space (shown to the right) is 37,800 square feet which is 85.5% larger than Lino Lakes' actual area of 5,512 square feet. Lino Lakes has a much smaller Vehicle Storage area. It is not surprising that Lino Lakes' Public Works facility is smaller than comparison facilities given Lino Lakes' growth in population and service needs since the current facility was built approximately 45 years ago.

City Population (2013 Census)

Lino Lakes	Hugo	Shoreview	Otsego	Hopkins
20,862	14,082	25,931	14,524	18,025/

Projected Population (2040)



COMPARISON MATRIX

Exis	sting	Square Feet / Population
Pha		
Pha	ise 2 O	
I	Lino Lakes (Existing) (5.512 sf / 20.862)	
 age	Lino Lakes (Proposed) (24,359 sf (54,131 sf) / 31,100)	00000000000000000000000000000000000000
Stor	Hugo (15,000 sf / 14,082)	
nicle \$	Shoreview (38,410 sf / 25,931)	
Vel	Otsego (18,300 sf / 14,524)	
	Hopkins (37,800 sf / 18,025)	
1	Lino Lakes (Existing) (3.545 sf / 20.862)	
 	Lino Lakes (Proposed) (8,893 sf / 31,100)	
ice –	Hugo (6,400 sf / 14,082)	
Off	Shoreview (15,620 sf / 25,931)	
	Otsego (4,300 sf / 14,524)	
	Hopkins (13,596 sf / 18,025)	
' 'ళ	Lino Lakes (Existing) (5,742 sf / 20,862)	
ance	Lino Lakes (Proposed) (13,025 sf / 31,100)	$\otimes \otimes \otimes ($
nten:	Hugo (6,400 sf / 14,082)	
e Mai Sho	Shoreview (13,990 sf / 25,931)	
ehicle	Otsego (5,850 sf / 14,524)	
	Hopkins (10,917 sf / 18,025)	



Description

Option A1 is located at the current Public Works and Senior Center Facility site. This option includes extensive remodeling of the existing Public Works and Senior Center Facility into Public Works' office space and vehicle maintenance area. The expansion includes additional office, additional vehicle maintenance, departmental shops and vehicle storage. The existing salt building and material storage bins will be reused. Due to the limitations of the buildable area and the location of the existing cell tower, a portion of the vehicle storage is rotated at a 120 degree angle.

This option would involve a total gutting of the existing building as needed to address deficiencies in the current building related to accessibility, energy code, fire suppression and mechanical systems. Option A1 and the following option by using the existing public works site will also require an extension of the municipal water service and municipal sanitary service to the site.

Due to the site layout limitations working around the existing office and maintenance building, the existing cold storage buildings will not be able to remain. This will reduce the total available storage for the Public Works department until Phase 2 is built, and may also result in the need to build Phase 2 sooner than the other option in order to meet the city's growth.

	Re-use of existing Public Works building structure Use of existing Salt Building Use of existing Material Storage Bins Use of existing miscellaneous site storage Re-use of existing site Large buildable area
`	
Cons	
1	1
	Potential long construction period of existing building disrupting operations Cost of bringing new Water main to site due to fire suppression requirements Loss of use of existing ice rink and cost to remove Loss of use of existing baseball field and cost to remove Cost of remodel based on code and handicapped accessibility deficiencies Non-efficient floor plan of vehicle storage to fit site and keep existing building Cost of bringing municipal sanitary sewer to site (or impacts of large storage tank and regular pumping for floor drains and wash bay sanitary) Reduced facility life expectancy and increased maintenance for the remodeled portion of the building compared to an all new facility
Total Sq	uare Footage
	Remodel 12 752 s f
· ·	New 67,582 s.f.
	Total 80,334 s.f.
l	





Description

Option A2 is located at the current Public Works and Senior Center Facility site. This option provides for an all-new Public Works Facility which includes office, vehicle maintenance, departmental shops and vehicle storage. The existing salt building, cold storage garage and material storage bins will be reused.

Since this option removes the existing 45 year old building, it provides the flexibility to place the building on the site in a more advantageous layout. This results in a more compact building footprint, better screening of the building to the east neighborhood, and the option for drive-through parking for large equipment within the storage garage. This site option also allows for the continued use of the newer of the two existing cold storage garages which will provide more available space for the Public Works department, especially until Phase 2 is added. Option A2, using the existing public works site, requires an extension of the municipal water service and municipal sanitary service to the site.

Pros		I.
 	 Use of existing salt building Use of existing material stop Use of existing miscellaned Use of existing cold storag Longer life-expectancy and Large buildable area Drive through stalls for larg Flexibility in building placer 	y prage Bins bus site storage e garage d reduced maintenance for an all new facility ne vehicle storage parking nent to best fit uses and site
Cons	 Cost of demolishing existin Disruption of operations du Cost of bringing new water Loss of use of existing ice Loss of use of existing bas Cost of bringing municipal tank and regular pumping f 	g facility I g facility I g facility I main to site for fire suppression requirements I main to site for fire suppression requirements I fink and cost to remove I genul field and cost to remove I sanitary sewer to site (or impacts of large storage I for floor drains and wash bay sanitary)
Total S	Square Footage	1
 - 	 Remodel New Total Existing Cold Storage 	None 1 79,503 s.f. 1 79,503 s.f. 1 4,835 s.f. 1





Description

Option B1 is located adjacent to Fire Station #2. This option includes a new Public Works Facility which includes office, vehicle maintenance, departmental shops and vehicle storage. The existing salt building and material storage bins will be reused at the existing Public Works site.

This option would allow for the use of the existing public works storage buildings throughout the construction period reducing operational disruption and cost during construction. Option B1 would also allow for the continued use of the north site facilities after construction until they reach there anticipated life-expectancy allowing for more flexibility and space for the Public Works department, especially until Phase 2 is added to the building.

/	
I Pros	
· · · · · · · · · · · · · · · · · · ·	 Existing municipal sanitary sewer connection located on site Existing municipal water main connection located on site Use of existing ice rink on Site A Use of existing baseball fields on Site A Efficient floor plan of vehicle storage No disruption at the current Public Works facility during construction Located adjacent to Fire Station #2 Closer to future population density as Lino Lakes grows Existing storage buildings at north site can continue to be used
Cons	
	 Smaller buildable area creates minimal clearances for site functions Existing salt building is located on Site A Existing material storage bins are located on Site A High visibility from future road
Total	Square Footage
I	1
I	Kemodel None None
	• INEW /0,U1/S.I.
	Ex. Public Works Storage 14,799 s.f.





ARCHITECTURAL REVIEW

Introduction

The current Lino Lakes Public Works Facility was built in 1971 and does not have access to municipal water or municipal sanitary sewer. Due to fire code requirements that limit the square footage of the facility the existing Public Works building cannot be expanded unless municipal water is brought to the site. The additions to this facility include 4 separate buildings. The majority of the vehicles are stored outdoors, which inherently reduces their life span. Equipment is currently stored in 3 buildings and is not conducive to an efficient work flow. The building has water damage and leaking in several locations.







Equipment Storage

Public Works is currently storing most of their equipment outside where they are covered in snow and have a greater chance of being rusted, therefore reducing their life span.

Vehicle Storage

Public Works is currently storing vehicles outside, where they are covered in snow and have a greater chance of being rusted, therefore reducing their life span.

Vehicle Maintenance

The current Vehicle Maintenance area and tool storage area does not provide adequate space to service the city's fleet of vehicles.

ARCHITECTURAL REVIEW

Exterior Brick

Exterior brick on the building has severe water damage in multiple places and is in need of repair.

Roof leakage

The existing standing seam roof needs to be replaced as there are multiple locations where leaking has occurred.

Gutters

There are several locations around the building where gutters are failing or not in place, snow is melting off of the roof and causing water damage and icy conditions, which are hazardous for the public and employees.

Offices and Storage

Current offices and storage areas are intermingled and do not provide an efficient use of space.









ARCHITECTURAL REVIEW









Break Room/Office

One of the additional buildings on-site houses one office and a break room due to limited space in the main facility.

Locker room

The current locker room does not have adequate lockers to accommodate employees and is used as a circulation space which doesn't have privacy for employees.

Lunch Room

The current lunch room does not have adequate appliances and chairs to accommodate Public Works employees.

Server / Telephone Storage

The current server is located in the main hallway, isn't easily accessible and is an eyesore. The data and telephone phone board is currently in the storage room.

ACCESSIBILITY & CODE REVIEW

Introduction

The current Public Works facility was built in 1971 and has major deficiencies related to accessibility, energy code, fire suppression and mechanical systems. Our accessibility review identifies conditions in the existing building that require immediate attention including; restroom clearances (water closet, lavatory and shower), non-accessible door hardware, accessible door clearances and accessible counter heights.

The existing building does not meeting current energy code requirements, fire suppression requirements, exiting requirements and mechanical system requirements as discussed on the following page. We did not complete a full OSHA safety assessment as a part of this study, but there are several items in the building that should be assessed further, including proper headroom clearances under the Vehicle Maintenance mezzanine.

As a result of the extent and variety of code, accessibility, and safety deficiencies in the current building, it is our opinion that the most economical approach if remodeling is considered would be to remove all existing interior rooms and reconstruct the interior build-out of the vast majority of the existing space. This also results in the best design fit with the long-term needs of the Public Works department.



The existing Women's Restroom does not have proper clearances for accessibility, with any amount of remodeling the restrooms would need to comply with the latest Minnesota State accessibility code.



The existing Men's Restroom does not have proper clearances for accessibility, with any amount of remodeling the restrooms would need to comply with the latest Minnesota State accessibility code.

MECHANICAL SYSTEMS REVIEW - VEHICLE MAINTENANCE









Ventilation System

Current ventilation system is inadequate. Current codes require .75 cfm per square foot of ventilation interlocked with an outdoor air intake. The current system operates manually with independent control switch for both the fan and intake damper. The exhaust fans appear dated and most likely have exceeded their expected service life.

Exhaust System

Vehicle Maintenance requires carbon monoxide sensors (gasoline engine fumes) and nitrogen dioxide sensors (diesel engine fumes) to enable the exhaust system in the event that the concentrations exceeds code minimum set point. These sensors are not installed.

Heating

General heating is accomplished with gas fired infrared heaters. These units are dated and most likely have exceeded their expected service life.

Sanitary Waste

The sanitary waste from the trench drains and floor drains are routed directly to the septic system. This is a code violation. For buildings served with a septic system, the flammable waste from trench drains must be routed to a storage tank separate from the septic system. Tanks are emptied periodically and trucked to a proper waste facility.

MECHANICAL SYSTEMS REVIEW - OFFICES/SENIOR CENTER

Furnace Room - Offices

The office space is served by three furnaces and associated split system air conditioning units. The units were installed in 2010 and are in good condition. The ductwork connected to these units would need to be replaced based upon the condition of the current ductwork and the change in zoning due to renovation schemes. In addition, current requirements for ventilation air will require an air-to-air energy recovery unit to temper the outdoor air before it is introduced into the furnaces.

Furnace Room - Senior Center

The community space is also served by three furnaces and associated split system air handlers. They were installed in 2010 as well and are in good condition. The comments for item 1 above applies to these systems as well.

- One of the units has a capacity of 5 tons. The Mn Energy Code requires a system of this capacity to be equipped with an economizer. The economizer introduces outdoor air into the space when outdoor air temperatures are favorable and cooling is required by utilizing outdoor air for cooling as opposed to operating compressors.





COST ESTIMATE

COST ESTIMATE

Option A1	Low Cost		High Cost	
Remodel & Expansion Phase 1	Public Works Facility Sanitary Sewer and Water Total (2017 Dollars)	\$ 9,707,342 <u>\$ 360,000</u> \$ 10,067,342	Public Works Facility Sanitary Sewer and Water Total (2017 Dollars)	\$ 12,195,113 <u>\$ 360,000</u> \$ 12,555,113 I I
	└	count in this estima	 ate 	
Option A2	Low Cost		High Cost	
New Facility at Existing Site Phase 1	Public Works Facility Sanitary Sewer and Water Total (2017 Dollars)	\$ 10,040,359 \$ 360,000 \$ 10,400,359	Public Works Facility Sanitary Sewer and Water Total (2017 Dollars)	\$ 12,458,171 <u>\$ 360,000</u> 12,818,171 I
	└	count in this estima	ate	
Option B1	Low Cost	-		、
New Facility at Fire Station Site Phase 1	Public Works Facility Total (2017 Dollars)	\$ 9,922,715 \$ 9,922,715	Public Works Facility Total (2017 Dollars)	\$ 12,380,093 \$ 12,380,093
	*Inflation not taken into acc	count in this estima		י لــــــــــــــــــــــــــــــــــــ

Cost Estimate Summary

The cost estimates shown above represent our teams professional opinion of probable construction cost based on the uses proposed, and typical construction costs for similar facilities within the greater metropolitan area. The low cost to high cost range represents the preliminary level of the designs done within this study, as well as the range in quality, life-cycle, and aesthetic choices that would be reviewed and selected by the city during the design process. The costs, as indicated are current construction costs and an inflation factor would need to be applied when a specific time line is developed.

The prices shown represent the estimated hard costs of the site and building construction shown in each option layout and vary only about \$500,000 when comparing the Low Cost for each option or 5% of the total cost. However, there are other cost factors not indicated that should also be taken into consideration when comparing options that would create a greater final cost differential between options. A partial list of these items include:

- · Operational cost to move Public Works functions off-site during construction for Site A options
- · Loss of use of ball field and hockey rink at Site A if expansion occurs there
- Additional maintenance costs for reused portions of the existing structure under Option A1, compared to an all-new facility in the other options
- Ability to continue to use one existing cold storage building under Option A2 and two existing cold storage buildings under Option B1, thus postponing the date when Phase 2 of the Public Works storage shown in each option layout would be needed



PROPOSAL

CITY OF LINO LAKES PUBLIC WORKS SPACE NEEDS ANALYSIS AND EXISTING FACILITY AUDIT

QUINN S. HUTSON, AIA PRINCIPAL ARCHITECT

CNH ARCHITECTS

7300 WEST 147TH STREET SUITE 504 APPLE VALLEY, MN 55124 PHONE 952-431-4433 www.cnharch.com

SEPTEMBER 23, 2016

16088



September 23, 2016

City of Lino Lakes 600 Town Center Pkwy. Lino Lakes, MN 55014

Re: Public Works Space Needs Analysis and Existing Facility Audit

On behalf of CNH Architects, our consulting engineers and estimator, thank you for considering our Proposal to provide Facility Space Needs Analysis services for the City of Lino Lakes.

The project team presented in this proposal has worked together for many years on City, County, and State projects in the State of Minnesota. Our architectural/engineering team has a common goal to provide quality design services and to be at the forefront of utilizing sustainable building methodologies. We understand the need for an organized process from the first meeting through completion of this study, with clear and detailed documentation along the way.

CNH Architects has worked with the City of Lino Lakes as well as numerous municipalities throughout the Twin Cities metropolitan area to provide assessment services, reviewing current conditions of many existing governmental facilities and identifying immediate as well as future growth needs. We communicate closely with our engineers and cost estimator so that our observations are shared and comprehensive, while keeping a holistic approach on the entire project so that the overall building performance and client vision is considered when individual components and systems are under analysis. Details can impact both short and long term effects on cost, maintenance and occupant use, and as a design team we are attentive to these implications at every scale.

We look forward to serving the City of Lino Lakes and together evaluate the facility needs of the Public Works Department now and into the future.

Respectfully submitted,

Quinn S. Huston, AIA, LEED AP Principal CNH Architects, Inc.



PROJECT TEAM



Our Team for your project consists of Architects, Mechanical / Electrical Engineers and Cost Estimator. It is our intention to maintain a consistent team of the principal architect and engineers presented in this proposal from the first meeting through completion of the study. By doing this, we will provide continuity of information, communications and understanding of the city's goals as the study progresses. This team will be supported by staff architects, designers and engineers as needed for the workflow and timeline developed in coordination with City staff.

Principal Architect, Quinn Hutson, will lead and coordinate all members of the design team and be the primary contact throughout the project. He brings extensive experience with city projects, numerous reviews of client and facility needs, and familiarity with the City and staff from past projects with the City of Lino Lakes.





Architect of Record **CNH Architects, Inc.** 7300 W. 147th Street, Suite 504 Apple Valley, MN 55124-7580 952-431-4433 Project Architect: Quinn S. Hutson, AIA, LEED AP

Mechanical/Electrical Engineers Engineering Design Initiative, Ltd. (edi) 1112 Fifth Street North Minneapolis, MN 55411 612-343-5965 Mechanical Engineer: Larry Svitak, PE Electrical Engineer: Jay S. Hruby, PE

Cost Estimator **Professional Project Management (PPM)** 1858 East Shore Drive Maplewood, MN 55109 651-776-5590 Cost Estimator: Doug Holmberg









PROJECT NEEDS ASSESSMENT

In order to put together a comprehensive assessment that addresses issues thoroughly and makes sound recommendations going forward, CNH Architects will collect information about the existing facilities as exhaustively as possible. Our team will interview appropriate City Staff to understand both their current needs as well as future operational changes and anticipated growth areas. We will compare these areas to other similar cities, providing not only relational size comparisons but interjecting potential issues that may not have been considered. To create accountability and clarity in our investigation, we make it a priority to gather initial information with rigor such that assumptions are minimal, collaborating closely with our engineers to pinpoint existing and potential issues that may or may not already be identified. In this process, owner and facility management involvement is critical, particularly in revealing and weighing components that contribute towards small and large scale building performance and longevity.

ACCESSIBILITY AND CODE COMPLIANCE

Many existing buildings are not up to code with building codes and accessibility requirements. We have extensive experience working with code and ADA guidelines, including recent projects completed with the State of Minnesota in upgrading all restrooms in their 4-story, 78,000 sf administrative building on the Capitol grounds, plus the unique security and accessibility issues of the Dakota County LEC 8100 Cell Block remodeling. These aspects of a project can easily become a costly component, and our familiarity with many issues related to accessibility upgrades can lead to efficient and proactive solutions.

MAINTENANCE & LONGEVITY

Durable materials, equipment and finishes are considered for longevity when providing recommendations in the assessment report, and consideration will be taken to balance initial construction cost versus cost over the life of the product and its implications on the rest of the structure if any. We would present a list of options, innovative ways to keep cost at a minimum, and review the pros and cons of each option to best achieve identified project goals.

Buildings inevitably deteriorate and require periodic maintenance. While keeping safety and durability of paramount importance, the Project Team is prepared to recommend options that help reduce maintenance costs and create an environment where building upkeep is simple and straightforward.



PROJECT APPROACH



SUSTAINABILITY

The Project Team will provide recommendations for sustainable opportunities in the existing city public works campus as well as any future facilities or sites. CNH has many years of green building experience, with several awarded projects listed in our firm portfolio. We just recently assisted the City of Roseville in utilizing the excess heat generated by the Ice Arena on their city campus to fully heat the new Fire Station we designed for them, providing significant energy cost savings. Creative approaches such as this will be evaluated for Lino Lakes, including initial cost and payback analysis to assist you in making informed choices that best fit the goals and values of the City.

OPTION ANALYSIS

After gathering all the information on space needs, evaluated the existing public works campus, and developed future needs based on expected growth; CNH will review three approaches for the City of Lino Lakes to meet their Public Works needs. These will include:

Option 1 – Renovate the existing building and expand to meet future needs.

Option 2 – Build an all new facility at the existing west site to provide long-term value.

Option 3 – Build an all new facility at the city property at Birch Street and Centerville Road leaving some appropriate elements at the existing west site.

The study will review each of the above options, analyzing and listing comparative data on each option in order to provide the City of Lino Lakes with the tools to make an informed decision on the future of the Public Works department facilities. Among others, the review of each option will include the following topics:

- · Space needs current and future
- · Growth potential for each option
- · Existing facility conditions
 - Deferred and short-term maintenance
 - Building code / OSHA compliance
- · Accessibility compliance
- · Energy usage and potential for savings
- · Long-term costs of operation
- · Capital costs for construction / remodeling proposed
- · Site location relative to population and infrastructure



FIRM BACKGROUND

EXECUTIVE SUMMARY

CNH Architects is a full-service architectural firm providing architectural design, engineering, interior planning and landscape architecture for corporate, commercial, manufacturing, and recreational facility owners as well as government agencies. The Principals, Wayne Hilbert and Quinn Hutson, are directly responsible for all design work.

CNH Architects has a staff with advanced training and certification in several areas including Certified Interior Designers, Certified Construction Specifier, LEED Accredited Professionals, NCARB certification, Construction Document Technologist, and Green Globe Professional.

With an efficient project team and over 50 years of experience, CNH Architects has a strong reputation for well thought-out design plans and personal attention to client requirements. CNH stresses strong design, quality contract documents, close communications with clients, and an intense field review and follow-up program. We are organized to assume full, single source responsibility for a thoroughly integrated and cost effective service. From a project's beginning, program, budget, and schedule are established, and a team of experts is assembled under the principal and project manager to assure that elements are addressed, questions answered, and the design and construction process is fully coordinated. A growing list of satisfied and repeat clients is testimony to the discipline and persistence of an organization that will not settle for partial success.

Over the last several years, CNH Architects has worked on construction projects which total between 20 - 30 million dollars annually. Our projects have varied including city, county, and state work, along with church and private sector clients.

COMPOSITION OF FIRM	
Licensed Architects	5
Designers	5
Administrative Support	2

Sustainable design is an integral part of our practice. A majority of our professional staff has LEED Accreditation and our office designed the first Green Globe projects in Minnesota. This is a third party national verification system as administered by the Green Building Initiative.





EAGAN CITY HALL AND POLICE DEPARTMENT ADDITION AND REMODEL EAGAN, MN

After over 25 years of use without significant remodeling, the City of Eagan found that the growth of the staff both in administration and the police department was stretching their facility past its ability to meet the current needs. CNH Architects did a comprehensive review of all staffing departments and operations and, along with city staff, developed a space needs analysis identifying both under-utilized space as well as significant shortfalls in operational space standards. In addition, the building condition was reviewed to determine elements that were either failing or reaching their expected usable life.

From this space needs study, CNH developed multiple options for addressing the needs identified in both City Hall and Police Department portions of the building. With staff input, these options were then modified to best meet operational flows, space needs, efficiency, and budget. A detailed construction cost was then determined and the project budget was set.

The city is completing the financial planning for this addition and remodeling project which will then move into the construction document and actual construction phases in the near future.

Dave Osberg, City Administrator, 651-675-5000

Quinn Hutson, CNH Architects





CITY HALL RENOW
CITY HALL ADDITI

POLICE SPACE SUMMARY			
First Floor	Addition	Remodel	
Enclosed Vehicle Garage	14,300 SF		
-35 squad stalls			
Front Lobby / Sally Port - Increase Security		210 SF	
Renovate Evidence Intake Lab and Evidence Storage		360 SF	
Renovate Men's and Women's Locker Rooms		2,200 SF	
Relocate Tactical Team Room / Renovate Garage #7		335 SF	
Enlarge Computer Forensics Office Area		80 SF	
Reduce Number of Holding Cells to Increase Storage		400 SF	
Sub-Total First Floor	14,300 SF	3,585 SF	
Second Floor	Addition	Remodel	
Police Office Expansion	3,485 SF		
Add Investigations Meeting Room		380 SF	
Renovate Records Storage Area		170 SF	
Enlarge Existing Conference Room		1,000 SF	
Add 2 Administrative Offices at existing Break Room		400 SF	
Sub-Total Second Floor	3,485 SF	1,950 SF	
		1	
Total Proposed Police Space	17,785 SF	5,535 SF	

Project Architect

Reference

\$2.581.0 \$27,00 \$312,00 \$205,00 \$112,00 Ice Parking Lot Expansion \$109.0 \$535,00 or City Hall Renovation tems Furniture at 2nd Floor \$150,00 ity Hall Expan \$11.000 Sub-tot \$1,352,000 ed Cost (Re \$8,063, Cost Reduction from O




BUILDING ASSESSMENTS (CNH Architects) CITY OF BLOOMINGTON, MN

CNH Architects is hired by the City of Bloomington to provide ongoing architectural consulting on design and maintenance projects. These projects have involved studies, design options, maintenance recommendations, and aesthetic opinions. Along with our consulting engineers and designers, our services to date have included:

- · Improving locker room drainage at a pool facility.
- · Developing new site design options for street turning lanes and municipal center complex.
- Studying material upgrades for a Senior Center.
- · Finish replacement options for public lobby at City Hall.
- Acoustical study and design for private offices, conference room, and performance studio at public works and performing arts areas.
- · Pistol range storage options study.

Office area remodeling to accommodate additional staff.



BISHOP HENRY WHIPPLE FEDERAL BUILDING (EDI) FORT SNELLING, MN

Engineering Design Initiative completed a comprehensive feasibility study for the Bishop Henry Whipple Federal Building located in Fort Snelling, MN. Facility sustainability and energy efficiency were the primary focus of the study. The existing mechanical, electrical and plumbing (MEP) systems serving the building are very inefficient, have greatly exceeded their normal operating lifetimes and have become increasingly problematic. Asbestos containing materials (ACM) are also a major concern.

EDI identified four facility alternatives ranging from refurbishing and replacing selected MEP equipment to complete ACM abatement and facility renovation. The study included conceptual design, construction cost estimating, tenant relocation planning, sustainability concepts and life cycle cost analysis. Based on the study results, the US General Services Administration has implemented a program to completely renovate the building so that it can continue to serve the regional offices of the Federal Government well into the future.



CITY OF EAGAN FIRE STATION #4 - FACILITY STUDY (CNH Architects) EAGAN, MN

CNH Architects provided a complete facility assessment of existing Fire Station #4 for the City of Eagan. This study evaluated the existing condition of fire station exterior envelope and all interior elements to determine their life expectancy and repair costs. The facility was also reviewed for ADA accessibility, identifying deficiencies and recommended upgrades. In addition, the facility was evaluated for function, current staff and equipment needs, and finally fire fighter safety. From this review, CNH developed a list of recommended remodeling elements and an expansion to better fit the current apparatus and to expand gear locker clearance to meet NFPA safety standards.

After identifying the facility's maintenance, accessibility, function and safety deficiencies, CNH Architects provided preliminary design of measures to address the existing concerns. Once these project goals were determined, an itemized cost estimate was developed for the maintenance, remodeling and expansion project. Finally, CNH worked along with the city staff to develop a written report and digital presentation to present this information to the City Council.



RESUMES



Quinn S. Hutson, AIA, LEED AP Principal Architect CNH Architects

As principal in the firm, Quinn's responsibilities cover all facets of architectural design, design development and construction document preparation. Individual project tasks include: client need assessment, alternative concept development, design/construction document preparation, building material and finish selection, cost estimating, code compliance verification and approval assurance. In addition to over 30 years with CNH Architects, Quinn's background includes many years of construction experience and annual continuing education to bring current construction knowledge to all of his projects.

Years of Experience: 30

Education: Bachelor of Architecture, University of Minnesota

- Registration: Professional Architect, Minnesota; Minnesota State Architecture Registration No. 21234; Certified Interior Designer, Minnesota; LEED Accredited Professional
- Affiliations: Rotary International, past President Eagan Rotary; Eagan Rotary Foundation, past Chair; American Institute of Architects; Firm Membership in the US Green Building Council

Facility Assessments

City of Eagan City Hall / Police Department - Facility Assessment and Needs Analysis Masterplan City of Eagan Fire Station #4 - Facility Assessment and Upgrade Study City of Rosemount Steeple Center (Former St. Joseph's Church) - Facility & Accessibility Study 360 Communities - Facility Assessment & Maintenance Budget Report Dakota County - Rooftop Fall Protection Study (32 buildings) Dakota County LEC - 8100 Cell Block Renovation

Other Relevant Projects

ABLE Fire Training Center - Burnsville, MN B. Robert Lewis House Renovation - Eagan, MN City of Apple Valley, MN Apple Valley Liquor Store #1 & #2 Police Facility City of Eagan, MN City Hall Community Room Fire Station #2 Remodel Fire Station #3 Remodel City of Rosemount, MN Community Center Arena Wall Community Center Banquet Upgrades Steeple Center Renovations City of Roseville Fire Station - Roseville, MN Dakota County. MN Community Development Agency - Eagan Courtroom Build-Out - Hastings Judicial Center - Hastings Judicial Center Addition & Remodel Law Enforcement Center - Hastings Independent School District 192 - Farmington, MN ECSE Program Farmington High School MMI Renovation Special Education Superintendant Office

Independent School District 196 - Rosemount/ Apple Valley/Eagan, MN Apple Valley High School Baseball Field Eastview High School Mechanical Catwalk ISD 196 Pathways, Apple Valley Commons II ISD 196 Transition Plus, Apple Valley Commons II Rosemount High School Theater Light Access Transportation Building Metropolitan Council Regional Maintenance Facility Addition/Remodel - Eagan, MN Metropolitan Mosquito Control District Division Headquarters - Scott, Carver, Anoka, & Dakota Counties Minnesota Department of Transportation (MnDOT)

District Facility - Detroit Lakes, MN Straight River Wayside Rest - Owatonna, MN





RESUMES



Timothy M. Nielsen, LEED AP BD+C Architect CNH Architects

Mr. Nielsen has participated in numerous projects requiring the assessment of existing building components and systems. Examples of this experience include renovation and repair projects for municipal/government facilities as well as historic preservation projects that have required a full assessment and analysis of all building components and systems to determine their appropriateness and cost effectiveness for reuse.

Years of Experience: 20

- Education: Master of Architecture, University of Kansas; Bachelor of Science in Architectural Studies, University of Nebraska
- Registration: Professional Architect, Minnesota; NCARB Certificate; Certified Building Official (CBO), State of Minnesota; LEED AP BD+C
- Affiliations: Competent Toastmaster (CTM), Toastmasters Int'l; Member, National Trust for Historic Preservation

Facility Assessments

City of Eagan City Hall / Police Department - Facility Assessment and Needs Analysis Masterplan Dakota County LEC - 8100 Cell Block Renovation Hennepin County*- multiple facilities Minnesota Air National Guard* Reroofing and exterior renovation projects Hotel Kaddatz - Fergus Falls, MN* Historic building renovation / repairs for adaptive reuse North Branch Library - Minneapolis, MN* Historic building renovation / repairs for adaptive reuse Flour Exchange Building - Minneapolis, MN* Historic building exterior repairs

Other Relevant Projects

Department of Administration, State of Minnesota

Water Intrusion Repairs - Judicial Center

Exterior Paver Replacement - Judicial Center

Buerkle Acura - White Bear Lake, MN

Dakota County Western Service Center Public Health Remodel - Apple Valley, MN Metropolitan Mosquito Control District - Plymouth, MN

* denotes projects completed with other firms





PROJECT TEAM



Larry Svitak, PE

Principal, Engineering Design Initiative, Ltd.

Mechanical Engineer

Larry has been involved in the design, construction administration, and project management of a variety of HVAC systems for over 12 years. Throughout that time Larry has earned the respect of his colleagues and clients through his hard work, attention to detail, and his great skills in communicating the complexities of HVAC systems to his customers. These skills stem not only from his technical grasp of HVAC systems, but from the practical experiences he gained in his first career as an Owner of an HVAC sheet metal firm.

Years of Experience: 30

Registration: Registered Professional Engineer in Minnesota, South Dakota and Wisconsin. Minnesota Registration No. 25091

- Affiliations: American Society of Heating, Refrigeration, and Air Conditioning Engineers; American Society of Plumbing Engineers; Firm Membership in the Consulting Engineering Council; Firm Membership in the U.S. Green Building Council
- Select Projects: Aitkin County Public Works Building - Aitkin, MN Anoka County Public Safety Campus Facility Analysis - Andover, MN (Minnesota B3) City of Eagan Fire Station #1 Fire Station #4 City of Minneapolis, MN Building Automation System Installation in 13 Fire Stations Paving Lab Study, Hiawatha Site Water Works Fridley Maintenance Facility (B3) - Fridley, MN Crow Wing County Highway Department, Brainerd Complex - Brainerd, MN Dakota County LEC 8100 Block - Hastings, MN Lino Lakes Fire Station - Lino Lakes, MN Lower St. Croix Valley Fire Station - Lakeland, MN LSS Data System Assessment - Minnetonka, MN MCF Rush City Property Space Renovation - Rush City, MN Metro Transit Overhaul Office Remodel - St. Paul, MN MnDOT District Facility - Detroit Lakes, MN Storage Facility - Maplewood, MN Safety Rest Area Energy Upgrades - New Market, Heath Creek, Albert Lea, and Straight River, MN Mora Police Facility Study & Schematic Design - Mora, MN Morrison County - Little Falls, MN Jail Expansion Public Works, Landfill Site Public Works, River Site Nobles County Public Works Building - Worthington, MN Roseville Fire Station - Roseville, MN Sherburne County - Zimmerman, MN Maintenance Facility Public Safety Building Staples City Garage - Staples, MN



PROJECT TEAM



Jay S. Hruby, PE

Principal, Engineering Design Initiative, Ltd.

Electrical Engineer

Jay has committed a large percentage of his electrical engineering career to the promotion of energy conservation and sustainability within his designs of commercial, industrial, educational and correctional buildings. Nearly all of Jay's recent projects have incorporated technologies that allow the buildings to exceed current energy code. Jay has teamed with utilities, environmental groups and energy conservation organizations to provide owners with sustainable buildings that meet the owner's performance goals. Jay has been involved in forensic engineering and commissioning of an array of electrical and communication systems.

Years of Experience: 19

Registration: Registered Professional Engineer in Minnesota, Iowa, Wisconsin, North Dakota and Illinois

Minnesota Registration No. 40290

Affiliations: Institute of Electric and Electronics Engineers; Consulting Engineering Council of Minnesota; Firm Membership in the U.S. Green Building Council

Select Projects: Beltrami County Highway Department Study - Bemidji, MN City of Eagan Fire Station #1 Fire Station #4 City of Minneapolis, MN 2710 Pacific Ave. Maintenance Facility Remodel 60th & Harriet Maintenance Facility Remodel Hiawatha Maintenance Facility (LEED Project) Paving Lab Study, Hiawatha Site Royalston Maintenance Facility Fire Alarm Commissioning Water Works Maintenance Facility, Fridley (MN - B3) City of Staples Maintenance Facility - Staples, MN Crow Wing County - Brainerd, MN Highway Department, Brainerd Complex Maintenance Facility Dakota County Empire Transportation Facility Remodel - Apple Valley, MN Heartland Express Transportation Maintenance Facility - Luverne, MN Lino Lakes Fire Station - Lino Lakes, MN Metro Transit Mall of America Transit Station Remodel - Bloomington, MN Mall of America Transit Shelter - Bloomington, MN 725 Building Addition & Remodel - Minneapolis, MN Reuter Facility Remodel & Addition - Brooklyn Center, MN Transit Overhaul Office Remodel - St. Paul, MN Metropolitan Mosquito Control District Maintenance Facility (MN - B3) - Anoka, MN Minneapolis Schools Transportation Remodel - Minneapolis, MN MnDOT Equipment Storage Building Renovation - Maplewood, MN Safety Rest Areas Remodel & Energy Upgrades Mora Police Facility Study & Schematic Design - Mora, MN Morrison County - Little Falls, MN Maintenance Facility Public Works, Landfill Site Public Works, River Site Northstar Corridor LRT Terminal Target Field Station - Minneapolis, MN Pine County Public Works - Sandstone, MN Roseville Fire Station - Roseville, MN Staples City Garage - Staples, MN



PROJECT TEAM

Doug Holmberg, PE

President, Professional Project Management (PPM) Cost Estimator Years of Experience: 37

Registration: Registered Professional Civil Engineer

Select Projects: 88th RRC Tenant Build-Out - Arden Hills, MN Apple Valley City Hall - Apple Valley, MN Apple Valley Fire Station #2 - Apple Valley, MN Apple Valley Fire Station #3 - Apple Valley, MN Army National Guard Training and Community Center - Hutchinson, MN Brainerd RTC Mechanical and Electrical Upgrades (3 Buildings) - Brainerd, MN Bureau of Criminal Apprehension Office Build Out - St. Paul, MN Capitol Complex Power House Electrical Upgrade - St. Paul, MN Cedar Street National Guard Armory Renovation - St. Paul, MN CENTRO Latin Community Center - Minneapolis, MN Chisago County Health and Human Services Building - North Branch, MN City of Sterling Colliseum Remodel (City Hall & Police) - Sterling, IL Command Operations Facility - Camp Pendleton, CA Dakota Communications Center - Empire, MN Delano Fire Station - Delano, MN Department of Labor: Job Corps Center Building 1 & 2 Renovation - Dayton, OH Fergus Falls City Hall Improvements - Fergus Falls, MN Fern Hill Park Picnic Shelter - St. Louis Park, MN Hennepin County Domestic Abuse Service Center - Minneapolis, MN Hennepin County Probate Court Floor C-4 Remodel - Minneapolis, MN Hennepin Parks Admin Headquarters Addition & Renovation - Plymouth, MN Improve Old Shoot Range House, Range 130 - Camp Pendleton, CA LaCrosse Transit Center - LaCrosse, WI Lesueur County Front Entry Remodel - Lesueur County, MN Metro Transit Canopy @ 7th Street (Typical Bay) - Minneapolis, MN Metro Transit Expansion 24th Street Facility - Minneapolis, MN Metro Transit Rail Support Facility - Minneapolis, MN Metro Transit South Garage Landscape Improvements - St. Paul, MN Metropolitan Council Regional Maintenance Facility Addition - Minneapolis, MN Minneapolis City Hall / MBC MPOP Upgrades - Minneapolis, MN Minnesota Valley Transit Authority (MVTA) Bus Garage Expansion - Eagan, MN Minnesota Valley Transit Authority Office Consolidation - Burnsville, MN MN National Guard Camp Ripley Remodel - Little Falls, MN MN National Guard Flight Simulator Re-Roof - Minneapolis MN MN National Guard Military Vehicle Storage Building - Olivia, MN MN National Guard Roof Replacement - Northfield, MN MN National Guard Roof Replacement - Olivia, MN MnDOT District Headquarters - Detroit Lakes, MN MnDOT Maplewood Bridge Crew Building - St. Paul, MN MnDOT Truck Station - Maple Grove, MN Neighborhood House / El Rio Vista Recreation Center - St. Paul, MN Oakdale City Hall Remodel - Oakdale, MN Olmsted County Human Services Center 2116 Building - Rochester, MN Ramsey City Hall Meeting Room / Kitchenette Remodel - St. Paul, MN Ramsey County License Bureau Remodel - St. Paul, MN Rochester Bus Shelters - Rochester, MN Sherburne County / City of Becker Public Works Facility - Becker, MN Shoreview Community Center Addition & Renovation - Shoreview, MN Shoreview Community Center Remodel - Shoreview, MN Union Depot - St. Paul. MN Wabasha Hi-Rise Exterior Modifications - St. Paul, MN Wright County Remodel - Buffalo, MN



DESIGN INNOVATION

CNH Architects address issues of concern and opportunity for our clients with creative and innovative design solutions. Some of these design solutions are exemplified by the following examples:



Minnesota Zoo Black Bear Exhibit



Valleywood Clubhouse



Apple Valley Liquor Store No. 3



ABLE Burn Building

CUSTOMER EXPERIENCE

When designing the Minnesota Zoo's new Black Bear Exhibit there were numerous challenges: the sloping site, exhibit safety, meeting the needs of the bears, fitting into the existing zoo's MN Trail, and creating a great visitor experience. This last challenge, to create a great customer experience, is a common issue with public facilities. For this exhibit, our design involved minimizing public view to caging and other institutional looking animal security features, while emphasizing the natural looking materials. A rock wall is positioned to hide the bear doors leading into the cage dens and creates a barrier to maintain the bears within their exhibit space. Landscaping is used to hide security fencing while giving the exhibit a natural feel. A cave for the bears also allows for an intimate viewing of sleeping bears, especially by the children that visit the exhibit. Large windows in the viewing gallery, with heated rocks just in front, help to attract the bears to a more visible viewing location. These and many other features increase the chances for visitors to see the bears while not being distracted by functional aspects of the exhibit.

FLEXIBILITY

Designing flexibility into a project is more than just creating a large featureless space. In the case of Valleywood Clubhouse, the facility was designed to accommodate a steady flow of golfers during the golf season, full course tournament events, and special occasion events in both the golf and non-golf seasons. To achieve this mix of activities and maintain the building footprint within the client's budget, a strategy of flexible rooms was developed. The main event room overlooks the 18th hole for a beautiful view of the course and the natural setting. It is sized to appeal to both golfers and special event users. This room is also equipped with audio/visual capabilities and has connections with an outdoor patio, bar serving window, commercial kitchen and a casual bar seating area. The casual bar seating area can serve as an overflow event space or accommodate a steady stream of golfers while another event is booked. The main entrance lobby with fireplace is ideal for setting a casual tone for golfers and allows enough space for a reception table for special events. All these rooms are nicely detailed and are equipped with features that can be used by either golfers and/or special event guests.

ENERGY

Reducing energy costs to a third of similar retail operations gives a building owner a competitive advantage. To achieve these savings, a comprehensive and innovative approach to building design was required. One strategy for the free standing Apple Valley Liquor Store No. 3 was to tie waste heat from the beverage coolers to a geothermal heat pump loop system that is used to heat and cool the building. Along with this system, a well-insulated building also limits the need for temperature adjustments. To further reduce energy consumption, efficient lighting and building systems were used. By incorporating natural daylight, the need for artificial lighting during daytime hours was reduced, and consequently the heat created by light fixtures. LED lighting and other high efficiency light sources were used. Pay back on the energy systems was calculated and verified by the owner at 6 to 7 years. This project is a Green Globe certified project and achieved Energy Star certification after a full year of operation.

FIRST COSTS

This fire training tower combines both a training tower and a fire burn facility. With 14 training rooms and participation from four communities, this facility reduces the need for multiple facilities and expands the training capabilities for the local fire departments. Within the facility sacrificial walls were used to allow protection of the permanent structural elements. Fires can do tremendous damage to a facility and these sacrificial block walls will need to be replaced every 5 years or more, but the overall structure should last for generations. This sacrificial system was selected in place of very expensive fire tile construction, saving the communities over \$200,000 or more than 10 percent of the construction budget.



SUSTAINABLE DESIGN



Valleywood Clubhouse - Three Green Globes





Apple Valley Liquor Store #3 - Two Green Globes



Apple Valley City Hall

DESIGN OF SUSTAINABLE BUILDINGS

A majority of CNH Architects' architectural and intern staff are LEED Accredited Professionals and designed the first two projects in Minnesota to be awarded a Green Globe certification. Wayne Hilbert is a principal with CNH Architects and one of the first architects LEED accredited and the first architect to receive certification as a Green Globe Professional in Minnesota.

CNH Architects, along with our design team, evaluate and develop sustainable strategies with our clients. We are familiar with a variety of rating systems and have incorporated multiple sustainable and high-performance strategies in our projects.

These projects not only highlight our energy strategies, but also include multiple approaches to: Performance Management

Site and Water

Energy and Atmosphere

Indoor Environment Quality

Materials and Waste

ROSEVILLE FIRE STATION

With an existing Ice Arena on the city campus, the new Roseville Fire Station took advantage of the economies and included the development of a campus geothermal loop system. The piping loop harvests excess heat created in the process of freezing the ice sheet and distributes this heat through the city campus to the new fire station building. This first phase of the campus geothermal loop provides sufficient energy to fully heat the entire fire station building for only the cost of circulating the fluid in the loop piping, with capacity to spare for other city buildings on the campus.

APPLE VALLEY LIQUOR STORE #3

Completed in 2008, this project was the first project in Minnesota to receive a Green Globe certification. The Green Building Initiative recognized this project with a "Two Globe" rating, and the building is also Energy Star certified. Using a highly efficient geothermal heat pump system and ventilation exchange allows this building to greatly reduce energy usage. The beer coolers are also integrated into the geothermal system.

APPLE VALLEY CITY HALL

Using both Minnesota Sustainable Design Guide and LEED as outlines for design, this project incorporates multiple sustainable strategies. It is listed on the Minnesota Office of Environmental Assistance website as an example of green architecture. It has also been published in American City and County Magazine and The National League of Cities for its sustainable strategies.

APPLE VALLEY SENIOR CENTER - APPLE VALLEY, MN

Completed in 2009, this project was awarded Two Globes under the Green Globe rating system. This facility uses a combination of daylight harvesting, heat pumps, ventilation air exchange and in-floor radiant heating to provide comfort and reduce energy consumption.

VALLEYWOOD CLUBHOUSE - APPLE VALLEY, MN

First facility in Minnesota to earn Three Green Globes for new construction. Overlooking the 18th hole, this building combines energy efficiency with a contemporary design to create a very successful event venue.



FEE PROPOSAL

The services for this study will result in a report document that will include the following study elements and recommendations:

- Space needs
 - Current and future growth
 - Comparisons to similar cities
- Growth potential for each option
- · Existing facility conditions
 - Deferred and short-term maintenance
 - Building code / OSHA compliance
 - Accessibility compliance
- · Site location relative to population and infrastructure
- · Energy usage and potential for savings
- · Long-term costs of operation
- · Capital costs for construction / remodeling proposed

In addition to preparing the above study results, CNH Architects and our consultant team will meet with staff as needed to gather the study information and review study drafts as well as present study results to the City Council.

We propose the services indicated above for a fixed fee of \$11,900, plus reimbursable expenses for printing and mileage.

Thank you for the opportunity to provide this proposal and we look forward to working with the City of Lino Lakes.

Accepted by:

Quinn S. Hutson, AIA, LEED AP Principal CNH Architects, Inc.

Name

Title

Owner (Firm name)



Addendum

City of Lino Lakes Public Works Site Analysis and Space Needs Study Addendum

October 30, 2017

The following information is intended to expand on information provided in the original study dated April 11, 2017, to provide a more in-depth discussion of Layout Option A1, the remodeling and expansion of the existing City of Lino Lakes Public Works facility. The information in this Addendum does not change the space needs data, schematic layout design, estimated costs or other information in the original study; but instead provides a more comprehensive view of the background on which the data, design and cost estimates were based. The Addendum also reviews broad cost potentials for future expansion labeled Phase II in the study.

Existing Public Works Remodeling Scope

The remodeling of the existing Public Works facility is shown in the study to be a relatively complete interior gutting and rebuilding along with exterior envelope upgrades. To expand on this it is necessary to consider how the building code evaluates maintenance versus remodeling.

First of all, ongoing maintenance of an existing building does not trigger code updates. However, maintenance of an existing building only allows minor ongoing operational items such as changing light bulbs (not fixtures), painting, recarpeting, patching an existing roof or repairing existing mechanical units. Replacement of roofing systems, new mechanical units, replacement of light fixtures, and similar upgrades however are specifically excluded from the maintenance definition and are instead considered remodeling.

In comparison, the Minnesota State Building Code and referenced International Building Code require all remodeled portions of a building to fully comply with current building code requirements. Further, if the scope of a remodeling is such that the majority of the existing facility is remodeled, then the entire facility is required to be brought into compliance with the current building code standards. Under these provisions, the proposed remodeling and expansion of the existing Public Works facility as represented in Layout Option A1 would trigger a complete code compliant end result.

Finally, any items that are not in compliance with ADA accessibility standards, MPCA regulations, OSHA safety standards or other similar safety, environmental, and civil rights requirements are not "grandfathered" or allowed to remain noncompliant until a future remodeling date, but instead are to be addressed when identified.

When reviewing the existing Public Works facility, see pages 28 through 33 for a general summary, it was determined that the scope of code noncompliant spaces is such that no interior room was reasonably reusable in its current basic existing condition due to configuration, construction or operational deficiencies. This level of noncompliance was more extensive than was anticipated prior to

the start of the study however as the documentation of existing conditions completed, the evidence was extensive. The noncompliant items include the following partial list: corridors to narrow to meet accessibility standards, restrooms and countertops of improper size or without accessible heights, combustible construction in a non-combustible defined building including wood paneling and some wood wall construction, mechanical units that did not provide minimum air quality requirements, storage in areas without proper headroom, floor drains in vehicle accessed areas that flow into a septic system, among many other items. The deficiencies identified in the existing Public Works facility are not maintenance items as defined in the earlier paragraph, but can only be addressed in an extensive remodeling of the entire existing building which is what led to the findings represented in the original study.

While providing for more upgrade costs than originally would have been anticipated, the extent of the needed remodeling upgrades identified in the study is valuable knowledge for use by the City of Lino Lakes in effectively planning for the current and future needs of the Public Works Department in a manner to ensure that upgrades budgeted address the short-term and long-term goals developed for the facility.

Future Expansion (Phase II) Timing and Cost

The future expansion labeled as Phase II in the study represents possible future growth needs for the Public Works department looking out at least 15 to 20 years. This data is based on typical anticipated additional departmental needs to serve the increase in the population of the City of Lino Lakes as projected by the Metropolitan Council by the year 2040. This population projection is more than two decades in the future and only time will indicate if this growth level materializes. Further, the additional square footage of vehicle storage needed to serve this larger population is estimated based on staff input and comparison to other cities of similar population to the Metropolitan Council's future population estimate and also may not fully materialize. The intent of the study is to identify the maximum potential departmental facility needs within the requested timeframe reviewed such that, if needed, the site and building masterplan layout can accommodate this future facility growth without relocation or other inefficiencies.

The study is not intended to indicate that the Phase II storage building expansion will be required, only that if the projections both for growth of population and equipment needs achieves the maximum envisioned levels, the site and building masterplans developed remain viable. The City of Lino Lakes would need to revisit actual needs based on updated data over the coming decades.

Due to the unknown size and timing of the potential future expansion (Phase II) a cost estimate for this building addition was not included in the study results. However, to provide some concept of potential future expansion costs, the following table has been added to this Addendum.

	Building	Low Cost	High Cost		
Future Expansion Size	Area (sf)	/SF*	/SF*	Low Range	High Range
Minor Addition	15,000	\$110	\$150	\$1,650,000	\$2,250,000
Maximum Addition	30,000	\$110	\$150	\$3,300,000	\$4,500,000

*Costs in 2017 dollars and does not include inflation

As the table indicates, the low end cost for a small addition of a scope that still allows for efficient construction costs represents a construction cost of \$1.65 million for a low-temperature heated open plan storage addition. Conversely, if the population and equipment growth projections hit their most aggressive levels represented in this study, the maximum addition cost would range from \$3.3 million to a high end of \$4.5 million. As noted, these construction estimates are based on recent construction costs for Public Works facilities of similar types and are listed in 2017 dollars.

Thank you for the opportunity to provide this additional data to better explain the study methodology and the intended limitations of the future expansion cost ranges.

Best Regards

Quinn Hutson, AIA, LEED AP Principal CNH Architects, Inc.

CITY OF LINO LAKES Public Works Site Analysis and Space Needs Study



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I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA

PRINT NAME: QUINN HUTSON

SIGNATURE:

DATE: 4/11/17

LICENSE NO: 21234

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EXECUTIVE SUMMARY

Site A



Introduction

The main facility of the current Lino Lakes Public Works Facility was built in 1971 with several additional cold storage sheds, salt and brine shed, and a mobile office out-building added to the site, since that time. The current site is on the northwest portion of Lino Lakes, off Main Street. While the facility has functioned in the past 45 years, the City Council and staff determined that it would be appropriate to analyze the condition of the current buildings along with the operational needs of the Public Works Department to best serve the community for the next 20 years. The long-term growth anticipated for the Public Works facility was also selected to be analyzed with two possible sites to be considered - the current location labeled Site A in this study and the site adjacent to Fire Station #2 on Centerville Road and Birch Street referred to as Site B.

With this goal in mind, the City of Lino Lakes contracted CNH Architects to perform an analysis of three approaches for the Public Works Facility, now and into the future. The goal of this study is to provide evidence based recommendations to address the needs of each department and analyze site conditions for each site. This study evaluates each of the sites identified, rating them for a broad series of attributes. The information provided in this study includes site data, gathered and analyzed by CNH Architects and valuable input from Lino Lakes city staff. The report includes this Executive Summary followed by supporting data and diagrams.

Site B



Process

Over the past few months, CNH Architects and our consulting team performed a detailed study and analysis. The study process evaluated the following four major steps:

Step 1: Assess conditions of the current facility, including taking photos of the existing site. This step includes reviewing current code and accessibility compliance, deferred maintenance, and short-term anticipated maintenance requirements.

Step 2: Develop a Space Needs Program of current space needs, as well as evaluating impacts on the space needs based on the projected growth of the City of Lino Lakes by 2040. This step started by gathering data from Lino Lakes city staff regarding current and projected space and site needs. Other public works facilities in similar, neighboring communities were reviewed as comparative case studies to create proper metrics for gauging the appropriate scope of work.

Step 3: Develop an analysis of relevant site attributes for the two sites being considered. This analysis includes availability of public utilities, buildable area after easement and wetlands were located, efficiency of potential space use, and adjacent land uses.

Step 4: Develop a total of three preliminary site and building layouts on the two proposed sites and obtain cost estimates for each option. The three options that have been identified for evaluation for the Public Works Facility are shown on the Public Works Facility Site Option Map and consist of the following:

Option A1: Remodel & Building Expansion on Existing Public Works Site (Site A) Option A2: New Facility on Existing Public Works Site (Site A)

Option B1: New Facility at Birch Street & Centerville Road adjacent to Fire Station #2 (Site B)

EXECUTIVE SUMMARY





Conclusions

The study determined that the existing facility, while having served the city well for 45 years, has fallen well behind current standards both for codes, safety, facility maintenance and appropriate size for a Public Works Department serving a city, the size of Lino Lakes. The building's code deficiencies include total lack of accessibility standards, multiple building code noncompliance items, OSHA workplace concerns, inappropriate sanitary waste conditions, and significant HVAC air quality issues. Similarly, the existing building has deferred maintenance issues such as leaking roof and windows as well as future near-term maintenance items that will require attention in the next 1 to 5 years. These items can all be addressed by remodeling or replacement, but need to be factored into the cost of relevant options being evaluated.

The review of the Space Needs for the Public Works Department, evaluated current space use, shortfalls in needed space, and the future growth in staff and equipment projected within the study timeframe of looking forward to 2040 needs. The approach included storage of all vehicles, equipment and equipment accessories within a weather-protected semi-heated facility as is typical within current public works facilities. This approach will provide long term value to the city in significantly longer lifespan of the equipment and reduced upkeep. The results of the Space Needs Program indicate a need for a total building area around 80,000 square feet by the end of the 2040 timeframe. The study indicates that all categories are short of space, currently with the largest shortage being in the Vehicle Storage category. Based on this review, we recommend a two-step construction with Phase 1 addressing current and near-term shortfalls and Phase 2 adding additional Vehicle Storage space later in the masterplan. With this phased approach, the Space Needs Program indicated a Phase 1 size of approximately 55,000 square feet with Phase 2 adding the remaining 30,000 square feet of Vehicle Storage.

These Space Needs were then compared to facilities at Hugo, Shoreview, Otsego and Hopkins. The areas of each category of space were translated in square feet per population to equalize the comparisons. The results indicate that Phase 1 Space Needs area goals are very conservative being at or under the areas represented by all the cities in comparison. The Phase 2 Space Needs area goals for the Vehicle Storage category rise into the middle of the comparison data still remaining conservative as this phase for Lino Lakes looks out to 2040 and beyond.

The next step of the study analyzed site characteristics of the two potential sites being considered for the future Public Works Facility, Site A, the current Public Works site and Site B, adjacent to Fire Station #2. Site A scored moderately positive on buildable area and site visibility and moderately negative on six other statistics. It scored negative on the infrastructure due to the current lack of municipal water and sanitary sewer serving the site, which would be required to remodel or replace the facility on this site. In review of Site B, this location rated infrastructure as a positive since all utilities are already stubbed to the site from the fire station work. This site rated moderately positive for four statistics, neutral for buildable area and flood plain, and moderately negative for two remaining items. However, understanding not all statistics are of equal weight, Site A scored an average of 2.22 out of 5 total points and Site B scored an average of 3.44 out of 5 total points. While Site B has features that result in a better analysis, both sites are workable and can be considered for the future of the Public Works Department, assuming of course that municipal water and sanitary sewer is extended to Site A.

Finally, the study developed three public work facility masterplan site layout options representing both a remodel / expansion approach as well as all new facilities. All three options result in facilities that function and meet the minimum goals of the Space Needs Program. The following are highlights of each option with more detailed information to be found in the main body of the study report. As shown in the cost analysis, there is approximately a 5% range in initial costs between the options however there are other factors for the City of Lino Lakes to consider in the selection such as long-term location within the city, life-cycle maintenance and utility costs, operation of public works staff during construction, and best uses of city property.

Option A1



Option A2



Option A1: Remodel & Building Expansion on Existing Public Works Site (Site A)

Remodeling and expansion of the existing public works building is the first option reviewed and provides the main advantages of reuse of the existing building structure. There is also the advantage of a somewhat larger overall site. However due to the extensive code, accessibility and safety issues, the building's interior would need to be mostly rebuilt to address these minimum requirements. There would also need to be exterior upgrades of the existing structure such as reroofing the building to replace the currently failing roof. For either option on Site A, the project also includes the requirement to bring municipal water and sanitary service to the site to provide mandatory fire suppression and treatment of vehicle floor drain sanitary flows. This option also impacts the public works department's operations, related to working around the remodeling and addition process. Based on the detailed preliminary cost estimates done by the cost consultant, this option's cost falls in the middle of the three options reviewed. However, when the increased maintenance costs of the remodeled portion of the building is factored in; this option is likely the costliest over the next decades.

Option A2: New Facility on Existing Public Works Site (Site A)

The approach on this option is the demolition of the existing public works facility and construction of an all-new facility on Site A on Main Street. This option has several advantages including the flexibility to place the new facility on the site to maximize the use, providing a more compact building and better screening of the outdoor storage and salt building area. This option also allows the continued use of the newer, of the two existing cold storage garages for the next 10 to 20 years until its life-expectancy is reached and Phase 2 is completed. The other main benefit of a new facility is the elimination of the increased maintenance and replacement requirements inherent in remodeling the existing building under Option A1. Similar to the first option however, this option would require the extension of municipal water and sanitary service to the site to provide mandatory fire suppression and treatment of vehicle floor drain sanitary flows. Operations of the Public Works Department would also be significantly impacted between the demolition and new construction of the facility, although the construction timeline would be reduced by not working around ongoing operations. Finally, this option has the highest initial cost of all the options considered, but would be less than Option A1 over the next few decades when increased maintenance costs of the remodeled building is factored in.

Option B1



Option B1: New Facility at Birch Street & Centerville Road adjacent to Fire Station #2 (Site B)

This option represents a new facility at the south Site B location where preparations for future city facilities were provided in the Fire Station #2 project. The advantages of this site include existing municipal utilities stubbed into the site, a location closer to the future population density projections, and the smallest most efficient building footprint of the three options. Other benefits of building on this site is the ability to not impact the operations of the Public Works Department during the construction process as they will be able to work from the existing facility until the new building opens. Also, by not building on Site A, there is not the loss of the one ballfield and hockey rink, maintaining more park and recreation usage within the city. Replacement costs for these recreational areas were not included in the study. Under this option, the existing salt storage building, material storage bins, as well as the existing cold storage buildings would remain on the north Site A location, at least through Phase 2 construction, providing the benefit of more available storage space in the short term. However, there will be a mixed impact of having public works elements on two sites. Option B1 has the lowest initial cost as well as the lowest life-cycle cost of the three options analyzed.

PUBLIC WORKS FACILITY SITE OPTION MAP



Option A1:Existing Site: Expand to meet future needsOption A2:Existing Site: New FacilityOption B1:Birch St. & Centerville Rd.: New Facility

Public Works Facility Option Location Map

The map above shows the two sites that were identified by city staff for consideration as potential properties for the proposed Public Works Facility. Options A1 and A2 are located at the current Public Works Facility. Option B1 is located adjacent to Fire Station #2.

Project Needs Assessment

CNH interviewed appropriate City Staff to understand both their current needs as well as future operational changes and anticipated growth areas. We compared these areas to similar nearby cities, providing not only relational size comparisons but interjecting potential issues that may not have been considered. To create accountability and clarity in our investigation, we made it a priority to gather initial information with rigor such that assumptions are minimal, collaborating closely with our engineers to pinpoint existing and potential issues that may or may not already be identified.

Option Analysis

After gathering all the information on space needs, CNH evaluated the existing public works campus, and developed future needs based on expected growth; CNH reviewed three approaches for the City of Lino Lakes to meet their Public Works needs. These include:

Option A1 – Renovate the existing building and expand to meet future needs.

Option A2 – Build an all new facility at the existing site to provide long-term value.

Option B1 – Build an all new facility at the city property at Birch Street and Centerville Road leaving some appropriate elements at the existing site.

The study has reviewed each of the above options, analyzing and listing comparative data on each option in order to provide the City of Lino Lakes with the tools to make an informed decision on the future of the Public Works department facilities. Among others, the review of each option will include the following topics:

- Space needs current and future
- · Growth potential for each option
- Existing facility conditions
 - Deferred and short-term maintenance
 - Building code / OSHA compliance
- · Accessibility compliance
- Capital costs for construction / remodeling proposed
- · Site location relative to population and infrastructure

Site A:

Site A consists of the existing site for the current Senior Citizen Center and Public Works Facility. The property's current zoning designation is for Public and Semi-Public District (PSP). It has a gross area of 27.46 acres of which 17.6 acres are suitable for building. The city owns the property of this existing facility. The site is surrounded by residential neighborhoods to the east and south, baseball fields to the west and agricultural land to the north.



Photograph:

View of the existing Vehicle Maintenance portion of the Public Works Facility









Infrastructure



This city owned property is served by electricity and natural gas utilities, but does not have municipal sanitary or water service. The current facility uses well water and has a private moundstyle septic system limiting the ability to install fire suppression and requiring storage tanks for future vehicle wash and floor drain sanitary flows. Extension of municipal sanitary is highly recommended. Municipal water and sanitary are located approximately 1 mile to the west.





Wetlands

There are designated wetlands running through the middle of the property which reduces the buildable area and mostly separating the northwest storage area from the main buildable area. The wetlands represent approximately 40% of the overall site. Floodplain

There is a large floodplain running through the middle of the property mostly duplicating the wetland areas.



Site Statistics Public Works Analysis







Easements

There is one gas easement running on the southwest corner of the site. This easement defines the southwest edge of the main buildable area.

Buildable Area

This site is approximately 27.4 acres, of which 12 acres is buildable area. This buildable area is separated into three distinct blocks with only the southeast block of 7.7 acres large enough to be considered for this project.

City Owned Property

Site B:

Site B is located on the southeast intersection of Birch Street and Centerville Road. The property's current zoning designation is for Public and Semi-Public District (PSP). It has a gross area of 17.6 acres of which 3 acres are suitable for building. It is adjacent to Fire Station #2 to the north and agricultural land on the east and west sides. To the south the property extends toward 46 acres of land owned by the City. There is one private residence on agricultural land to the southwest.

Photograph:

View of the site from the east







Infrastructure

This city owned property is served by all public utilities including electrical, natural gas, municipal water, and municipal sanitary services. The water and sanitary pipes were stubbed into the site as part of the recent Fire Station #2 project. The site is also served by the new city street with completed connections to both Centerville Road (County 21) and Birch Street (County 34).



Wetlands

The designated wetlands run along the North, East and West sections of the property and decreases the buildable area within this parcel.



Floodplain

The floodplain runs through the East part of the property, but since the construction of the fire station the FEMA map should be updated to reflect the correct contours of the site. The diagram above represents the approximate corrected floodplain zone. It is our understanding that the floodplain update is in process.



Site Analysis Site Statistics Public Works Analysis _ _ _ Adjacent Land Uses







Easements

There are no easements on the south buildable area being considered for this project other than standard drainage and utility setbacks along the property lines and roads.

Buildable Area

This site is approximately 17.6 acres not including the over 46 acres to the south. After deducting the fire stations' built area, there is 3 acres of remaining buildable area for this potential project.

Space Needs Program

ARCHITECTURAL CONSIDERATIONS - SPACE NEEDS PROGRAM

Overview

The current Lino Lakes Public Works Facility was built in 1971. While the facility has functioned in the past 45 years, the City Council and staff determined that a space needs program be developed to assess the existing, current and future needs. The Space Needs Program captures the conclusions made from the assessment exercise over the last months to express the scale and scope of modifications needed to the facility for both short and long term operational demands.

A comparison matrix at the end of this section reflects other Public Works facilities as they relate to the scale of this project. Public works facilities in the Twin Cites metro of Hugo, Shoreview, Otsego, and Hopkins were used as references. While each city's needs and approaches are different, the comparisons can provide additional insight when considering the best fit for the City of Lino Lakes.

Space Needs Analysis Approach

The space needs reviewed are based on the following assumptions to address the long-term needs of the Public Works Department for the City of Lino Lakes. While other approaches may be pursued, the assumptions indicated in this study represent the facility designs commonly taken by other similar municipalities within the greater region.

A. Departments Included within the Facility: This space needs program for the overall Public Works Department includes the streets, utilities, vehicle maintenance and park & recreation operations. This combination of operations creates efficiencies in operations and facilities as many functions overlap and require similar facilities.

B. Protection of Equipment: This space needs program provides space for all vehicles and equipment to be stored within the protection of the proposed building. This would include fully heated operational areas as well as partially heated storage areas, depending on the needs of the individual spaces. Much of the current equipment and many vehicles are currently stored outside within the current Public Works site significantly reducing its life-expectancy and increasing maintenance requirements. The space needs program assumes that all equipment and vehicles would be stored within the facility providing reduced life-cycle costs for the equipment and vehicles within the public works department.

C. Growth Projections: The space needs program allows room for the anticipated growth needs within the following 20 years at a minimum as is typical for a public facility built to operate for a period approaching 50 years. The City of Lino Lakes is projected by the Metropolitan Council's study to expand in population to 31,100 by 2040, or a growth of 49% from current. The growth built into the space needs program represents only the added staff and equipment that was determined to be needed with the increase in population and associated streets, parks, and utilities. Consequently the building space needs growth is only 14% above the current needs, significantly less than projected population growth.

SPACE NEEDS PROGRAM

Office Area

Space Name	Quantity	Size	Area	Total
Public Works Superintendent	1 	12'x14'	168	168
Open Office Area		15'x20'	300	300
Reception	1	16'x10'	160	160
Private Offices	9	12'x10'	120	1,080
Shop Supervisor Office	1	12'x10'	120	120
Copy Room	1	9'x10'	90	90
IT/Server Room	1	9'x10'	90	90
Multi-Purpose Room	1	40'x45'	1,800	1,800
Lunch Room		30'x40'	1,200	1,200
Men's Restroom & Locker Room	1	30'x40'	1,200	1,200
Women's Restroom & Locker Room	1	15'x25'	375	375
Storage	1	10'x25'	250	250
Janitor's Closet	1	10'x12'	120	120
Mechanical/Electrical Room	1	20'x30'	600	600
Public Restrooms	2	9'x10'	90	180
Subtotals				7,773
Circulation	15%			1,160
Total				8,893 j

Space Name	Quantity	Size	Area	Total
Large Spaces (Angled 60°)	16	18'x36'	835	13,360
Medium Spaces	49	12'x24'	288	14,112
Small Spaces	20	8'x12'	96	1,920
Mezzanine Storage		30'x40'	1,200	1,200
General Storage		20'x100'	2,000	2,000
Vehicle Wash Bay	⊥ 1 ∣	35'x50'	1,750	1,750
Circulation		30'x6600'	19,789	19,789
Total				54,131

Space Needs Program

Vehicle	Space Name	Quantity	Size	Area	Total
Maintenance	Large Maintenance Bay	2	24'x48'	1,152	2,304
	Small Maintenance Bay	2	20'x40'	800	1,600
	Welding Bay / Fabrication		28'x40'	1,120 ⊥	1,120
	Small Engine Repair Bay	₋ ₊ - 1 ,	20'x40'	800	800
	Tire & Brake Shop	<u>-</u> 1	20'x28'	560	560
	Tire Storage (Mezzanine)		30'x10'	300	300
	Lube Room	<u>-</u> 1 ⁻ -	12'x16'	192	192
	Parts Storage & Tools Room	+ - 1	20'x50'	1,000	1,000
	Subtotals				7,876
	Circulation	15%			1,181
	Total				9,057

Departmental	Space Name	Quantity	Size	Area	Total
Shops	Sign Storage	1	30'x40'	1,200	1,200
	Woodworking Shop	1	20'x30'	600	600
	Parks Storage	 1	30'x40'	1,200	
	Water Meter Shop / Storage		15'x30'	450	450
	Subtotals				3,450 1
	Circulation	15%			518
	Total				3,968

Total Area	Subtotals		 76,049 I
	Exterior Wall and Building Services	10%	7,605
	Total		83,654

Summary

As this Space Needs Program indicates, the Public Works Department will need a total building area approaching approximately 84,000 square feet by the end of the study target of 2040. While the population of the City of Lino Lakes is projected to grow 50% by 2040, the projected total Space Needs Program is only 15% more than the current space needs because of operational efficiencies of a larger city. Due to this future growth and also the potential use of some existing cold storage space over the next 10 to 15 years, the Space Needs Program can be met in a two phase approach with Phase 2 encompassing approximately 25,000 square feet of future Vehicle Storage needs.

COMPARISON MATRIX

Comparative Square Footage Calculation

The Comparison matrix reflects size of areas in comparative Public Works Facilities. The following formula was used to create comparison factors.



The comparative factors are not a definitive means for determining the appropriate size and scale of Lino Lakes' expansion needs, particularly considering many other factors can influence how and why departmental allocations are established. However, this information can be helpful in guiding the space needs program with a larger perspective that acknowledges the external factor of city population and growth and how that impacts the operational capacity of the Public Works facility.

From the chart below, we can see that Hopkins' has a somewhat smaller population. Hopkins' total square footage for their Vehicle Storage space (shown to the right) is 37,800 square feet which is 85.5% larger than Lino Lakes' actual area of 5,512 square feet. Lino Lakes has a much smaller Vehicle Storage area. It is not surprising that Lino Lakes' Public Works facility is smaller than comparison facilities given Lino Lakes' growth in population and service needs since the current facility was built approximately 45 years ago.

City Population (2013 Census)

Lino Lakes	Hugo	Shoreview	Otsego	Hopkins
20,862	14,082	25,931	14,524	18,025/

Projected Population (2040)



COMPARISON MATRIX

Exis	sting	Square Feet / Population
Pha		
Pha	ise 2 O	
I	Lino Lakes (Existing) (5.512 sf / 20.862)	
 age	Lino Lakes (Proposed) (24,359 sf (54,131 sf) / 31,100)	00000000000000000000000000000000000000
Stor	Hugo (15,000 sf / 14,082)	
nicle \$	Shoreview (38,410 sf / 25,931)	
Vel	Otsego (18,300 sf / 14,524)	
	Hopkins (37,800 sf / 18,025)	
	Lino Lakes (Existing) (3,545 sf / 20,862)	
	Lino Lakes (Proposed) (8,893 sf / 31,100)	$\bigcirc \bigcirc \bigcirc \bigcirc$
ice –	Hugo (6,400 sf / 14,082)	
- Off	Shoreview (15,620 sf / 25,931)	
 	Otsego (4,300 sf / 14,524)	
 	Hopkins (13,596 sf / 18,025)	
' రం	Lino Lakes (Existing) (5,742 sf / 20,862)	
ance	Lino Lakes (Proposed) (13,025 sf / 31,100)	$\otimes \otimes \otimes ($
nten:	Hugo (6,400 sf / 14,082)	
e Mai Sho	Shoreview (13,990 sf / 25,931)	
ehicle	Otsego (5,850 sf / 14,524)	
Ň	Hopkins (10,917 sf / 18,025)	



Description

Option A1 is located at the current Public Works and Senior Center Facility site. This option includes extensive remodeling of the existing Public Works and Senior Center Facility into Public Works' office space and vehicle maintenance area. The expansion includes additional office, additional vehicle maintenance, departmental shops and vehicle storage. The existing salt building and material storage bins will be reused. Due to the limitations of the buildable area and the location of the existing cell tower, a portion of the vehicle storage is rotated at a 120 degree angle.

This option would involve a total gutting of the existing building as needed to address deficiencies in the current building related to accessibility, energy code, fire suppression and mechanical systems. Option A1 and the following option by using the existing public works site will also require an extension of the municipal water service and municipal sanitary service to the site.

Due to the site layout limitations working around the existing office and maintenance building, the existing cold storage buildings will not be able to remain. This will reduce the total available storage for the Public Works department until Phase 2 is built, and may also result in the need to build Phase 2 sooner than the other option in order to meet the city's growth.

	\mathbb{N}
 Re-use of existing Public Works building structure Use of existing Salt Building Use of existing Material Storage Bins Use of existing miscellaneous site storage Re-use of existing site Large buildable area 	
Cons	
Detection construction activate to the building disputtion executions	1
 Cost of bringing new Water main to site due to fire suppression requirements Loss of use of existing ice rink and cost to remove 	I I
 Loss of use of existing baseball field and cost to remove 	I
 Cost of remodel based on code and handicapped accessibility deficiencies Non-efficient floor plan of vehicle storage to fit site and keep existing building 	
 Cost of bringing municipal sanitary sewer to site (or impacts of large storage tank and regular pumping for floor drains and wash bay sanitary) 	
 Reduced facility life expectancy and increased maintenance for the remodeled portion of the building compared to an all new facility 	l k I
`	_ /
Total Square Footage	- ``ı
• Remodel 12,752 s.f.	
• New 67,582 s.f.	1
• Total 80,334 s.f.	I.




Description

Option A2 is located at the current Public Works and Senior Center Facility site. This option provides for an all-new Public Works Facility which includes office, vehicle maintenance, departmental shops and vehicle storage. The existing salt building, cold storage garage and material storage bins will be reused.

Since this option removes the existing 45 year old building, it provides the flexibility to place the building on the site in a more advantageous layout. This results in a more compact building footprint, better screening of the building to the east neighborhood, and the option for drive-through parking for large equipment within the storage garage. This site option also allows for the continued use of the newer of the two existing cold storage garages which will provide more available space for the Public Works department, especially until Phase 2 is added. Option A2, using the existing public works site, requires an extension of the municipal water service and municipal sanitary service to the site.

Pros		I				
 	 Use of existing salt building Use of existing material stop Use of existing miscellaneo Use of existing cold storag Longer life-expectancy and Large buildable area Drive through stalls for larg Flexibility in building placer 	y prage Bins bus site storage e garage d reduced maintenance for an all new facility ne vehicle storage parking nent to best fit uses and site				
Cons	Cons Cost of demolishing existing facility Disruption of operations during construction period Cost of bringing new water main to site for fire suppression requirements Loss of use of existing ice rink and cost to remove Loss of use of existing baseball field and cost to remove Cost of bringing municipal sanitary sewer to site (or impacts of large storage tank and regular pumping for floor drains and wash bay sanitary) 					
Total S	Square Footage	1				
 - 	 Remodel New Total Existing Cold Storage 	None 1 79,503 s.f. 1 79,503 s.f. 1 4,835 s.f. 1				





Description

Option B1 is located adjacent to Fire Station #2. This option includes a new Public Works Facility which includes office, vehicle maintenance, departmental shops and vehicle storage. The existing salt building and material storage bins will be reused at the existing Public Works site.

This option would allow for the use of the existing public works storage buildings throughout the construction period reducing operational disruption and cost during construction. Option B1 would also allow for the continued use of the north site facilities after construction until they reach there anticipated life-expectancy allowing for more flexibility and space for the Public Works department, especially until Phase 2 is added to the building.

/						
I Pros						
· · · · · · · · · · · · · · · · · · ·	 Existing municipal sanitary sewer connection located on site Existing municipal water main connection located on site Use of existing ice rink on Site A Use of existing baseball fields on Site A Efficient floor plan of vehicle storage No disruption at the current Public Works facility during construction Located adjacent to Fire Station #2 Closer to future population density as Lino Lakes grows Existing storage buildings at north site can continue to be used 					
Cons						
	 Smaller buildable area creates minimal clearances for site functions Existing salt building is located on Site A Existing material storage bins are located on Site A High visibility from future road 					
Total Square Footage						
I	1					
I	Kemodel None None					
	• INEW /0,U1/S.I.					
	Ex. Public Works Storage 14,799 s.f.					





ARCHITECTURAL REVIEW

Introduction

The current Lino Lakes Public Works Facility was built in 1971 and does not have access to municipal water or municipal sanitary sewer. Due to fire code requirements that limit the square footage of the facility the existing Public Works building cannot be expanded unless municipal water is brought to the site. The additions to this facility include 4 separate buildings. The majority of the vehicles are stored outdoors, which inherently reduces their life span. Equipment is currently stored in 3 buildings and is not conducive to an efficient work flow. The building has water damage and leaking in several locations.







Equipment Storage

Public Works is currently storing most of their equipment outside where they are covered in snow and have a greater chance of being rusted, therefore reducing their life span.

Vehicle Storage

Public Works is currently storing vehicles outside, where they are covered in snow and have a greater chance of being rusted, therefore reducing their life span.

Vehicle Maintenance

The current Vehicle Maintenance area and tool storage area does not provide adequate space to service the city's fleet of vehicles.

ARCHITECTURAL REVIEW

Exterior Brick

Exterior brick on the building has severe water damage in multiple places and is in need of repair.

Roof leakage

The existing standing seam roof needs to be replaced as there are multiple locations where leaking has occurred.

Gutters

There are several locations around the building where gutters are failing or not in place, snow is melting off of the roof and causing water damage and icy conditions, which are hazardous for the public and employees.

Offices and Storage

Current offices and storage areas are intermingled and do not provide an efficient use of space.









ARCHITECTURAL REVIEW









Break Room/Office

One of the additional buildings on-site houses one office and a break room due to limited space in the main facility.

Locker room

The current locker room does not have adequate lockers to accommodate employees and is used as a circulation space which doesn't have privacy for employees.

Lunch Room

The current lunch room does not have adequate appliances and chairs to accommodate Public Works employees.

Server / Telephone Storage

The current server is located in the main hallway, isn't easily accessible and is an eyesore. The data and telephone phone board is currently in the storage room.

ACCESSIBILITY & CODE REVIEW

Introduction

The current Public Works facility was built in 1971 and has major deficiencies related to accessibility, energy code, fire suppression and mechanical systems. Our accessibility review identifies conditions in the existing building that require immediate attention including; restroom clearances (water closet, lavatory and shower), non-accessible door hardware, accessible door clearances and accessible counter heights.

The existing building does not meeting current energy code requirements, fire suppression requirements, exiting requirements and mechanical system requirements as discussed on the following page. We did not complete a full OSHA safety assessment as a part of this study, but there are several items in the building that should be assessed further, including proper headroom clearances under the Vehicle Maintenance mezzanine.

As a result of the extent and variety of code, accessibility, and safety deficiencies in the current building, it is our opinion that the most economical approach if remodeling is considered would be to remove all existing interior rooms and reconstruct the interior build-out of the vast majority of the existing space. This also results in the best design fit with the long-term needs of the Public Works department.



The existing Women's Restroom does not have proper clearances for accessibility, with any amount of remodeling the restrooms would need to comply with the latest Minnesota State accessibility code.



The existing Men's Restroom does not have proper clearances for accessibility, with any amount of remodeling the restrooms would need to comply with the latest Minnesota State accessibility code.

MECHANICAL SYSTEMS REVIEW - VEHICLE MAINTENANCE









Ventilation System

Current ventilation system is inadequate. Current codes require .75 cfm per square foot of ventilation interlocked with an outdoor air intake. The current system operates manually with independent control switch for both the fan and intake damper. The exhaust fans appear dated and most likely have exceeded their expected service life.

Exhaust System

Vehicle Maintenance requires carbon monoxide sensors (gasoline engine fumes) and nitrogen dioxide sensors (diesel engine fumes) to enable the exhaust system in the event that the concentrations exceeds code minimum set point. These sensors are not installed.

Heating

General heating is accomplished with gas fired infrared heaters. These units are dated and most likely have exceeded their expected service life.

Sanitary Waste

The sanitary waste from the trench drains and floor drains are routed directly to the septic system. This is a code violation. For buildings served with a septic system, the flammable waste from trench drains must be routed to a storage tank separate from the septic system. Tanks are emptied periodically and trucked to a proper waste facility.

MECHANICAL SYSTEMS REVIEW - OFFICES/SENIOR CENTER

Furnace Room - Offices

The office space is served by three furnaces and associated split system air conditioning units. The units were installed in 2010 and are in good condition. The ductwork connected to these units would need to be replaced based upon the condition of the current ductwork and the change in zoning due to renovation schemes. In addition, current requirements for ventilation air will require an air-to-air energy recovery unit to temper the outdoor air before it is introduced into the furnaces.

Furnace Room - Senior Center

The community space is also served by three furnaces and associated split system air handlers. They were installed in 2010 as well and are in good condition. The comments for item 1 above applies to these systems as well.

- One of the units has a capacity of 5 tons. The Mn Energy Code requires a system of this capacity to be equipped with an economizer. The economizer introduces outdoor air into the space when outdoor air temperatures are favorable and cooling is required by utilizing outdoor air for cooling as opposed to operating compressors.





COST ESTIMATE

COST ESTIMATE

Option A1	Low Cost		High Cost			
Remodel & Expansion Phase 1	Public Works Facility Sanitary Sewer and Water Total (2017 Dollars)	\$ 9,707,342 <u>\$ 360,000</u> \$ 10,067,342	Public Works Facility Sanitary Sewer and Water Total (2017 Dollars)	\$ 12,195,113 <u>\$ 360,000</u> \$ 12,555,113 I I		
Option A2	on A2		High Cost			
New Facility at Existing Site Phase 1	Public Works Facility Sanitary Sewer and Water Total (2017 Dollars)	\$ 10,040,359 \$ 360,000 \$ 10,400,359	Public Works Facility Sanitary Sewer and Water Total (2017 Dollars)	\$ 12,458,171 <u>\$ 360,000</u> 12,818,171 I		
Option B1	Low Cost		High Cost			
New Facility at Fire Station Site Phase 1	Public Works Facility Total (2017 Dollars)	\$ 9,922,715 \$ 9,922,715	Public Works Facility Total (2017 Dollars)	\$ 12,380,093 \$ 12,380,093		
I						

Cost Estimate Summary

The cost estimates shown above represent our teams professional opinion of probable construction cost based on the uses proposed, and typical construction costs for similar facilities within the greater metropolitan area. The low cost to high cost range represents the preliminary level of the designs done within this study, as well as the range in quality, life-cycle, and aesthetic choices that would be reviewed and selected by the city during the design process. The costs, as indicated are current construction costs and an inflation factor would need to be applied when a specific time line is developed.

The prices shown represent the estimated hard costs of the site and building construction shown in each option layout and vary only about \$500,000 when comparing the Low Cost for each option or 5% of the total cost. However, there are other cost factors not indicated that should also be taken into consideration when comparing options that would create a greater final cost differential between options. A partial list of these items include:

- · Operational cost to move Public Works functions off-site during construction for Site A options
- · Loss of use of ball field and hockey rink at Site A if expansion occurs there
- Additional maintenance costs for reused portions of the existing structure under Option A1, compared to an all-new facility in the other options
- Ability to continue to use one existing cold storage building under Option A2 and two existing cold storage buildings under Option B1, thus postponing the date when Phase 2 of the Public Works storage shown in each option layout would be needed