### Monday, June 22, 2020 7:00 p.m.

### Brooklyn Park Council Chambers 5200 85<sup>th</sup> Avenue North

### **REGULAR COUNCIL MEETING – AGENDA #25**

If you need these materials in an alternative format or need reasonable accommodations for a City Council meeting, please provide the City with 72-hours' notice by calling 763-424-8000 or emailing Josie Shardlow at <u>josie.shardlow@brooklynpark.org</u>. Para asistencia, 763-424-8000; Yog xav tau kev pab, 763-424-8000.

Members of the public who desire to give input or testimony during the meeting may do so by texting Mayor Lunde at 763-242-1555 or emailing him at jeffrey.lunde@brooklynpark.org (Subject line: "Council Testimony").

Our Vision: Brooklyn Park, a thriving community inspiring pride where opportunities exist for all.

### Our Brooklyn Park 2025 Goals:

• A united and welcoming community, strengthened by our diversity • Beautiful spaces and quality infrastructure make Brooklyn Park a unique destination • A balanced economic environment that empowers businesses and people to thrive • People of all ages have what they need to feel healthy and safe • Partnerships that increase racial and economic equity empower residents and neighborhoods to prosper • Effective and engaging government recognized as a leader

#### I. ORGANIZATIONAL BUSINESS

#### 1. CALL TO ORDER/ROLL CALL/PLEDGE OF ALLEGIANCE

2. PUBLIC COMMENT AND RESPONSE 7:00 p.m. Provides an opportunity for the public to address the Council on items which are not on the agenda. Public Comment will be limited to 15 minutes (*if no one is in attendance for Public Comment, the regular meeting may begin*), and it may not be used to make personal attacks, to air personality grievances, to make political endorsements or for political campaign purposes. Individuals should limit their comments to three minutes. Council Members will not enter into a dialogue with citizens. Questions from the Council will be for clarification only. Public Comment will not be used as a time for problem solving or reacting to the comments made, but rather for hearing the citizen for informational purposes only.

### 2A. RESPONSE TO PRIOR PUBLIC COMMENT

### 2B. PUBLIC COMMENT

**3A. APPROVAL OF AGENDA** (Items specifically identified may be removed from Consent or added elsewhere on the agenda by request of any Council Member.)

### 3B. PUBLIC PRESENTATIONS/PROCLAMATIONS/RECEIPT OF GENERAL COMMUNICATIONS

- **3B.1** Community Long-range Improvement Commission Annual Report and Work Plan
  - A. 2020 ANNUAL REPORT TO COUNCIL
  - B. 2020 CLIC WORK PLAN
- **3B.2** Planning Commission 2020 Work Plan
- A. 2020 WORK PLAN
- **3B.3** Receive the 2019 Audited Comprehensive Annual Financial Report and Auditor's Reports A. 2019 CAFR *LIMITED DISTRIBUTION* (available Monday)

### II. STATUTORY BUSINESS AND/OR POLICY IMPLEMENTATION

4. CONSENT (All items listed under Consent, unless removed from Consent in agenda item 3A, shall be approved by one council motion.) Consent Agenda consists of items delegated to city management or a commission but requires council action by State law, City Charter or city code. These items must conform to a council approved policy, plan, capital improvement project, ordinance or contract. In addition, meeting minutes shall be included.

- 4.1 2019 Annual Report on Deer Hunt and Authorize 2020 Deer Management Program
  - A. RESOLUTION
  - **B.** 2019 DEER HUNT STATS

- C. 2011-2019 DEER HUNT RESULTS
- D. 2020 AERIAL DEER COUNTS
- E. 2018-2019 DEER/VEHICLE INCIDENT REPORT
- F. DEER HUNT ZONES
- 4.2 Letters of Credit/Bond Releases, Escrow/Cash Bond Releases
- **4.3** Approve a Tobacco Sales License for Mega Co-op dba Murphy Oil, USA, Located at 8050 Lakeland Avenue North, Brooklyn Park, MN 55445
- **4.4** Approve a 3.2 Malt Liquor Off-Sale License for Mega Co-op dba Murphy Oil, USA, Located at 8050 Lakeland Avenue North, Brooklyn Park, MN 55445
- 4.5 Time APC Towers III, LLC Time Extension for Conditional Use Permit #19-113 to Allow a 125-Foot Bell Tower to Support up to Three Wireless Service Providers Including T-Mobile at 5840 69<sup>th</sup> Avenue North
  - A. RESOLUTION
  - B. LOCATION MAP
  - C. LETTER FROM THE APPLICANT
  - D. PLANNING COMMISSION MINUTES
- **4.6** Homeward Bound, USA, Inc (Peter Hagen) Waiver of Platting #19-109 to Subdivide the Existing Lot into Two Single-Family Residential Lots at 6409 Edgemont Blvd. N.
  - A. RESOLUTION
  - B. LOCATION MAP
  - C. PLANNING COMMISSION MINUTES

The following items relate to the City Council's long-range policy-making responsibilities and are handled individually for appropriate debate and deliberation. (Those persons wishing to speak to any of the items listed in this section should fill out a speaker's form and give it to the City Clerk. Staff will present each item, following in which audience input is invited. Discussion will then be closed to the public and directed to the council table for action.)

5. PUBLIC HEARINGS

None

- 6. LAND USE ACTIONS
  - 6.1 Graybar (PlanForce, Inc.) Conditional Use Permit #20-112 to Expand Outdoor Storage Area at 7601 Setzler Parkway North
    - A. RESOLUTION
    - B. LOCATION MAP
    - C. PLANNING AND ZONING INFORMATION
    - D. PLANNING COMMISSION MINUTES
    - E. LETTER FROM APPLICANT
    - **F.** RESOLUTION #2015-123
    - G. RESOLUTION #2017-118
    - H. PLANS
  - 6.2 "Haymaker Heights" (Abdou Jaiteh of Value Foods, Inc.) Preliminary Plat #20-113 to Adjust the Property Lines at Zanebrook Shopping Center at 7616-7638 Brooklyn Boulevard and 7609-7635 Welcome Avenue North
    - A. RESOLUTION
    - B. LOCATION MAP
    - C. PLANNING AND ZONING INFORMATION
    - D. PLANNING COMMISSION MINUTES
    - E. LETTER FROM THE APPLICANT
    - F. PLANS
  - 6.3 The Lodge (Valerian LLC) Conditional Use Permit #20-111 and Variances for a Residential Care Facility at 7711-7715 Humboldt Avenue North
    - A. RESOLUTION
    - B. LOCATION MAP
    - C. PLANNING AND ZONING INFORMATION
    - D. PHOTOS
    - E. PLANNING COMMISSION MINUTES
    - F. LETTER FROM THE APPLICANT
    - G. PLANS

### 7. GENERAL ACTION ITEMS

- 7.1 Approve MNDOT Agreement No. 1035496 for Local Road Improvement Program Funding for the Trunk Highway 169/101<sup>st</sup> Avenue North Interchange Project (SAP 110-129-006, SAP 110-129-007 and SAP 110-129-008), City CIP 4042-19
  - A. RESOLUTION
  - B. LOCATION MAP
  - C. DRAFT AGREEMENT NO. 1035496
- **7.2** Approve Amendments to Agreements With Consultants for the Trunk Highway 169 / 101<sup>st</sup> Avenue Interchange; CIP 4042
  - A. RESOLUTION SRF DESIGN SERVICES
  - B. RESOLUTION WSB RIGHT OF WAY SERVICES
  - C. SRF AMENDMENT LETTER AND TABLE
  - D. WSB AMENDMENT TABLE
  - E. LOCATION MAP
- 7.3 Approve Change Order No. 2 for TH 169 / 101<sup>st</sup> Avenue N Interchange; CIP 4042-19
  - A. RESOLUTION
  - B. LOCATION MAP
  - C. CHANGE ORDER NO. 2
- 7.4 Approve the Purchase of Fire Trucks
  - A. RESOLUTION
  - **B.** CAPITAL EQUIPMENT PLAN
  - C. PAYMENT SCHEDULE
  - D. SPECIFICATIONS
  - E. MOTOR VEHICLE PURCHASE CONTRACT
  - F. COMMUNITY LEASING PARTNERS
- **7.5** SECOND READING of an Ordinance Amending Chapter 93A of the Brooklyn Park City Code and Adopting the Minnesota State Fire Code
  - A. ORDINANCE
- 7.6 Brooklyn Park Firefighters' Relief Association Dissolution
  - A. RESOLUTIÓN
  - **B.** MINNESOTA 2020 SESSION LAWS, CHAPTER 108, ARTICLE 13

# III. DISCUSSION – These items will be discussion items but the City Council may act upon them during the course of the meeting.

8. DISCUSSION ITEMS None

### IV. VERBAL REPORTS AND ANNOUNCEMENTS

- 9A. COUNCIL MEMBER REPORTS AND ANNOUNCEMENTS
- 9B. CITY MANAGER REPORTS AND ANNOUNCEMENTS

### V. ADJOURNMENT

Since we do not have time to discuss every point presented, it may seem that decisions are preconceived. However, background information is provided for the City Council on each agenda item in advance from city staff and appointed commissions, and decisions are based on this information and past experiences. If you are aware of information that has not been discussed, please raise your hand to be recognized. Please speak from the podium. Comments that are pertinent are appreciated. Items requiring excessive time may be continued to another meeting.

Request for e								
Agenda Item:	3B.1	Meeting Date:	June 22, 2020					
	Public Presentations/ Proclamations/Receipt of	Originating						
Agenda Section:	General Communications	Department:	Administration					
Resolution:	N/A	-						
Ordinance:	N/A	Prepared By:	Jesse Struve, City Engineer					
Attachments:	2	Presented By:	Kathy Fraser, CLIC Chair					
Item:	Community Long-range Improvement Commission Annual Report and Work Plan							

### City Manager's Proposed Action:

MOTION \_\_\_\_\_, SECOND \_\_\_\_\_, TO ACCEPT THE COMMUNITY LONG-RANGE IMPROVEMENT COMMISSION 2020 WORK PLAN.

### **Overview:**

Chair Kathy Fraser will give a verbal report on the activities of the Community Long-range Improvement Commission (CLIC) for the last 12 months and CLIC's 2020 workplan.

### Primary Issues/Alternatives to Consider: N/A

Budgetary/Fiscal Issues: N/A

### Attachments:

3B.1A 2020 ANNUAL REPORT TO COUNCIL 3B.1B 2020 CLIC WORK PLAN

3B.1A 2020 ANNUAL REPORT TO COUNCIL Page 2

# ANNUAL REPORT TO COUNCIL

# 2019-2020

Presented by Kathy Fraser, Chair and Kaade Wallace, Vice Chair

# CLIC 2019-2020 ANNUAL REPORT TO COUNCIL

### CLIC 2019-2020 OVERVIEW

- 1. Reporting period: March 2019 February 2020
- 2. Fifteen Commissioners, 1 Council Member, 1 Staff Liaison, 0 Youth Members
- 3. 10/10 monthly meetings 10 quorums average attendance = 9

### CLIC 2019-2020 AREAS OF FOCUS

- 1. Age Friendly City
  - a. Reviewed Age Friendly report and provided feedback
  - b. Presented verbal report on Age Friendly recommendations to Council
  - c. Monitored progress of recommendations
- 2. Communications
  - a. Reviewed and discussed progress of Communication Plan
  - b. Reviewed and commented on new website re-design
  - c. Ongoing Review/discussions on Internal/external communication
- 3. Housing Continuum Outlook
  - a. Update from HRC on housing
  - b. Reviewed housing policy and affordability data
- 4. Redevelopment/Development Ongoing Updates/Review/Comment
  - a. Reviewed and commented on Wayfinding and Temporary Plaza Project
  - b. METRO Blue Line Extension Community Advisory Committee appointment
  - c. Received an update from Economic Development Authority (EDA)
- 5. Future Planning
  - a. Reviewed/Commented on CIP/CEP
  - b. Reviewed 2040 Comprehensive Plan
  - c. Reviewed and commented on Park System Plan

### CLIC 2019-2020 ACTIONABLE ITEMS

- 1. CLIC Charter changes approved.
- 2. 2020- 2024 CIP-CEP Recommendation Approvals.
- 3. 2020- 2021 Work Plan completed.
- 4. 2020 Elections: Kathy Fraser (Chair), Erik Meyers (Vice Chair), Amy Meuers (Secretary).

# CLIC 2019-2020 ANNUAL REPORT TO COUNCIL

### CLIC 2020-2021 WORK PLAN (SEE ATTACHMENT)

- Age Friendly City Review/Comment/Recommend/Act
  - Keep in front of council and continue to monitor progress of recommendations.
  - Research AARP Designation and designate Brooklyn Park an Age Friendly City.
  - Monitor progress of Senior Center and Park System Plan projects.
  - Monitor what's taking place at the state level.
- Communications/Branding Ongoing Review/Comment/Recommend/Act
  - Monitor progress and effectiveness of implemented recommendations.
  - Stay informed of new branding initiatives.
  - Review outcomes and provide recommendation for improvement.
- Housing Continuum Outlook Ongoing Review/Comment/Recommend
  - Monitor City's housing policy.
  - Collaborate and Support Human Rights Commission (HRC)in their housing efforts.
  - Continue to explore long term housing for life transitions.
- Redevelopment/Development- Ongoing Updates/Review/Comment/Recommend
  - Look at long term effects of LRT and connection to the system (east-west mobility).
  - Monitor 252 reconstruction.
  - Village Creek area redevelopment.
  - Review Development impacts on gentrification, rent levels, & housing policy.
  - Evaluate and encourage sustainable / equitable redevelopment / investment throughout the community.
- Future Planning Ongoing Review/Comment/Recommend
  - Review Greenstep Cities Program and explore becoming a Greenstep city.
  - Review/Comment Capital Improvement Plan (CIP)/ Capital Equipment Plan (CEP).
  - Keep update with progress of Brooklyn Park 2025.
  - Facility Naming and Memorial Donation Policy (as required).
  - Monitor Census communication and outcome.

# CLIC 2019-2020 ANNUAL REPORT TO COUNCIL

### COMMISSION INFORMATION

COMMUNITY LONG-RANGE IMPROVEMENT COMMISSION (CLIC) City of Brooklyn Park 5200 85th Avenue North Brooklyn Park, MN 55443

763-424-8000

http://www.brooklynpark.org/commissions/citizen-long-range-improvement/

Community Long-range Improvement Commission (CLIC) members study long-term trends and makes recommendations to the City Council on improvements to Brooklyn Park's future. CLIC is the only commission specifically mentioned in the City Charter (9.04).

Issues range from promoting business development, making transit connections, using of social media and mobile technology and partnering with groups in the community. The Community Long-range Improvement Commission also reviews the City's infrastructure planning (streets, sewers, and public buildings) where public funds will be involved.

The Community Long-range Improvement Commission studies city departments, initiatives and processes to see if anything can be improved. This committee works with all the departments. • Make recommendations to the City Council if there are improvements that should be made to better meet the needs of the community

• When improvements are brought to the table, help the City Council determine which improvements are done first.

KATHY FRASER	ERIC MEYERS	JESSE STRUVE
CHAIR	VICE CHAIR	STAFF LIAISON
<b>Tel</b> 763-566-4279	<b>Tel</b>	<b>Tel</b> 763-493-8114
katfraser@gmail.com	erik.meyers@gmail.com	jesse.struve@brooklynpark.org

Time frame	Project or Task(s)	BP2	025	Purpose (see next page for info)	Outcome (fill in after completed)
Late 2020	Age Friendly City	⊠1 ⊠3 ⊠5	⊠2 ⊠4 ⊠6	Report/Comment      Recommend      Act Initiated by:     ⊠Commission □Council □City Manager	<ul> <li>Keep this in front of the Council</li> <li>Research AARP Designation and Designate Brooklyn Park as an Age Friendly City</li> <li>Monitor Progress of Senior Center and Park System Plan Projects</li> <li>Monitor Progress of Recommendations associated with Linda Morkin Final Report</li> <li>Monitor What is Taking Place at the State</li> </ul>
Late-2020	Communication / Branding	⊠1 ⊠3 ⊠5	⊠2 ⊠4 ⊠6	Report/Comment      Recommend      Act     Initiated by:         ⊠Commission □Council □City Manager	<ul> <li>Get a progress report about how implementing the recommendations have improved or reached new people in the community</li> <li>Keep informed about any new branding initiatives</li> <li>Review initiatives and outcomes and provide recommendations for improvement</li> </ul>
Late-2020	Housing Continuum Outlook	⊠1 ⊠3 ⊠5	⊠2 ⊠4 ⊠6	☑ Report/Comment ☑ Recommend ☑ Act Initiated by: ☑ Commission □ Council □ City Manager	<ul> <li>Monitor City's policy on housing.</li> <li>Collaborate and Support the HRC in their Housing efforts.</li> <li>Continue to explore long term housing for life transitions.</li> </ul>
ongoing	Redevelopment / Development	⊠1 ⊠3 ⊠5	⊠2 ⊠4 ⊠6	<ul> <li>☑ Report/Comment ☑ Recommend ☑ Act</li> <li>Initiated by:</li> <li>☑ Commission □ Council □ City Manager</li> </ul>	<ul> <li>Monitor 252 Reconstruction</li> <li>Monitor long term effects of LRT.</li> <li>Village Creek and redevelopment of the area</li> <li>East-West Mobility (Transit, trails, &amp; sidewalks).</li> <li>Review Development impacts on gentrification, rent levels, &amp; housing policy.</li> <li>Evaluate and encourage sustainable / equitable redevelopment / investment throughout the community.</li> </ul>
2019-2020	Future Planning	⊠1 ⊠3 ⊠5	⊠2 ⊠4 ⊠6	<ul> <li>☑ Report/Comment ☑ Recommend □ Act</li> <li>Initiated by:</li> <li>☑ Commission □ Council □ City Manager</li> </ul>	<ul> <li>Review Greenstep Cities Program</li> <li>Review and comment on CIP / CEP</li> <li>Keep updated with progress of BP 2025.</li> <li>Facility Naming and Memorial Donation Policy.</li> <li>2020 CLIC work plan.</li> <li>5yr Review of Resilient Communities Project (2022).</li> <li>Monitor Census Communication and Outcome</li> </ul>

1. United Community

2<sup>.</sup> Beautiful Places

3 Thriving Economy 4 Healthy & Safe People

fe Peonle 5 Increased Equity

6. Effective & Engaging Gov't

# Workplan Projects: What's the purpose?

Commissions can either initiate a project themselves OR be asked by the Council or City Manager to do one of the following:

### **Report/Comment**

- Commission studies a specific issue or topic and reports its findings or comments to the Council, either in writing or in a Council meeting.
- Commission does not vote.
- No direct action is taken.

Example: Charter Commissioner provided a memo on the topic of Council Members being employed by the City part-time, at the Council's request.

### Recommend

- Commission reviews a specific policy issue and makes a formal recommendation to City Council on what action to take.
- A recommendation requires a majority of the Commissioners' support.
- Individual member comments are not included.

Examples: Planning Commission recommends approval on land use actions; RPAC made a recommendation on amplified sound policy. Example: HRC partnered with a community organization on an event; City Manager requests that HRC coordinate the "All Are Welcome" sign contest.

### Act

• Commission initiates or takes on a project, approved by Council through their workplan.

# Brooklyn Park 2025 **Community Goals** Working together to make Brooklyn Park a thriving community inspiring pride where opportunities exist for all.

We asked and you answered! Our community wants to accomplish these goals by the year 2025:

### United Community A united and welcoming community, strengthened by our diversity.

- We have connected neighbors who understand and celebrate our unique cultures.
- Brooklyn Park is unified with a strong positive identity and image.
- Our community's activities, events and services are inclusive, multi-cultural, and accessible.
- We have places and spaces for diverse communities to gather.
- Residents of every age contribute to our community.

### Healthy and Safe People People of all ages have what they need to feel healthy and safe.

- Neighborhoods are empowered and supported by strengthened positive relationships with police.
- Youth are engaged in positive and guality experiences.
- Aging adults have services and amenities to thrive and age in place.
- Everyone has access to quality healthy food options.
- People have access to quality medical and emergency care.

### Beautiful Places **Beautiful spaces and quality** infrastructure make Brooklyn Park a unique destination.

- Modern transportation options (drive, ride, walk, bike) connect people to education, jobs, and recreation.
- Quality recreation and park amenities inspire activity for all ages and interests.
- Our rich diversity is showcased through our vibrant music, art, food, entertainment, and cultural scene.
- Attractive key corridors, corners, and city centers create destinations that meet community needs.
- Neighborhoods are well-maintained with • quality housing for all ages and incomes integrated throughout the community.

### Increased Equity Partnerships that increase racial and Effective and engaging government economic equity empower residents and neighborhoods to prosper.

- Each resident has access to the training and support needed to get and keep a living wage job.
- Each student graduates high school with a pathway to college or career.
- Aging neighborhoods and commercial centers are revitalized through continuous investment.
- The community provides necessary supports and services for community members to overcome life challenges such as hunger, mental illness, and homelessness.

### Thriving Economy A balanced economic environment that empowers businesses and people to thrive.

- People of all ages and backgrounds enjoy • financial stability.
- Residents and visitors support an abundance of retail stores, restaurants, and entertainment venues.
- Our business environment inspires private • investment and job growth.
- Business and organizations of all types, sizes and specialties start, stay and grow here.
- We are a leader in environmental sustainability, benefiting our economy and community.

### Effective, Engaging Government recognized as a leader.

- The City provides quality services at a reasonable cost.
- Elected officials, commissions, and City staff reflect the diversity of the community and are culturally competent.
- City information is clear, accessible, and delivered in ways that meet the community's needs.
- City laws are understandable, equitably • enforced, and relevant to the community.
- The City is well-managed and recognized as a great place to work.



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Agenda Item:	3B.2	Meeting Date:	June 22, 2020
Agenda Section:	Public Presentations/ Proclamations/Receipt of General Communications	Originating Department:	Community Development
Resolution:	N/A		
Ordinance:	N/A	Prepared By:	Cindy Sherman, Planning Director
Attachments:	1	Presented By:	Cindy Sherman
Item:	Planning Commission 2020	Work Plan	

### City Manager's Proposed Action:

MOTION \_\_\_\_\_, SECOND \_\_\_\_\_, TO ACCEPT THE PLANNING COMMISSION 2020 WORK PLAN.

### Overview:

The Planning Commission has adopted a 2020 work plan that anticipates focusing work on processing applications and updating the city zoning regulations. Also included is a legal review provided by the city attorney which is helpful to the commission's work.

### Primary Issues/Alternatives to Consider: N/A

Budgetary/Fiscal Issues: N/A

### Attachments:

3B.2A 2020 WORK PLAN

# Workplan | Planning Commission

Time frame	Project or Task(s)	BP2	025	Purpose (see next page for info)	Outcome (fill in after completed)
On-going	Process Land Use applications and provide recommendations to the City Council	⊠1 ⊠3 ⊡5	⊠2 ⊠4 ⊠6	□ Report/Comment ⊠ Recommend □ Act Initiated by: ⊠ Commission □ Council □ City Manager	
On-going	Zoning code update and creation of a unified code	□1 □3 ⊠5	□2 ⊠4 ⊠6	□ Report/Comment ⊠ Recommend ⊠ Act Initiated by: ⊠ Commission □ Council □ City Manager	
Third quar.	Legal update and review	□1 □3 □5	□2 □4 ⊠6	Report/Comment  Recommend  Act  Initiated by:  Commission  Council  City Manager	
		□1 □3 □5	□2 □4 □6	Report/Comment Recommend Act Initiated by: Commission Council City Manager	
		□1 □3 □5	□2 □4 □6	Report/Comment  Recommend  Act  Initiated by:  Commission  Council  City Manager	
		□1 □3 □5	□2 □4 □6	Report/Comment  Recommend  Act  Initiated by:  Commission  Council  City Manager	

 1: United Community
 2: Beautiful Places
 3. Thriving Economy
 4. Healthy & Safe People
 5. Increased Equity
 6. Effective & Engaging Gov't



2020

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Brooklyn Park M Unique, Unifed, Undiscovered,

3B.2A 2020 WORK PLAN Page 4

**Community Goals** Working together to make Brooklyn Park a thriving community inspiring pride where opportunities exist for all.

Brooklyn Park 2025

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Brooklyn Park M Unique. Unifed. Undiscovered.

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- Youth are engaged in positive and quality experiences.
- Aging adults have services and amenities to thrive and age in place.
- Everyone has access to guality healthy food options.
- People have access to quality medical and emergency care.

Goals adopted by City Council February 27, 2017

1.09400010			
Agenda Item:	3B.3	Meeting Date:	June 22, 2020
	Public Presentations/ Proclamations/Receipt of	Originating	
Agenda Section:	General Communications	Department:	Finance Department
Resolution:	N/A		
Ordinance:	N/A	Prepared By:	Jeanette Boit-Kania, Asst. Finance Director
Attachments:	1	Presented By:	Chris Knopik, CliftonLarsonAllen, LLP
			inancial Report and Auditor's
Item:	Reports		

### City Manager's Proposed Action:

MOTION \_\_\_\_\_, SECOND \_\_\_\_\_, TO RECEIVE THE COMPREHENSIVE ANNUAL FINANCIAL REPORT (CAFR) FOR THE YEAR ENDED DECEMBER 31, 2019.

The effect of this action will be to accept the 2019 CAFR as well as the management letter, and legal compliance reports prepared by CliftonLarsonAllen, LLP.

### **Overview:**

Federal and State law, as well as the City Charter, require an independent audit of the financial records of the City each year. The firm of CliftonLarsonAllen, LLP has been engaged to perform the City's audit for the year 2019. A draft of the 2019 CAFR is now complete and is being presented to the City Council. The auditors, as part of their engagement, are also presenting their management letter, and legal compliance reports. In 2019, the City did not meet the threshold requirements of grant expenditure to have a single audit. Representatives of the firm will be discussing the results of their audit and the assessment of the adequacy of internal accounting controls and the quality of the financial reporting.

### **Budgetary/Fiscal Issues:**

This is the final audited report of the City's financial condition and results of operations for the year ended December 31, 2019. We believe this report continues to conform to the requirements for the Certificate of Achievement for Excellence in Financial Reporting of the Government Finance Officers Association of the United States and Canada and will be submitting it for their review.

### Attachments:

3B.3A 2019 CAFR – LIMITED DISTRIBUTION (available Monday)

Agenda Item:	4.1	Meeting Date:	June 22, 2020					
Agenda Section:	Consent	Originating Department:	Recreation and Parks					
Resolution:	x							
Ordinance:	N/A	Prepared By:	Jody Yungers, Director Recreation and Parks					
Attachments:	6	Presented By: Jody Yungers						
Item:	2019 Annual Report on Deer Hunt and Authorize 2020 Deer Management Program							

### City Manager's Proposed Action:

MOTION \_\_\_\_\_, SECOND \_\_\_\_\_, TO WAIVE THE READING AND ADOPT RESOLUTION #2020-\_\_\_\_\_ TO ACCEPT THE 2019 DEER HUNT RESULTS, AUTHORIZE THE CONTINUATION OF THE 2020 DEER MANAGEMENT PROGRAM, AND AUTHORIZE THE DIRECTOR OF RECREATION AND PARKS TO ENTER INTO AN AGREEMENT WITH THE METRO BOWHUNTERS RESOURCE BASE TO CONDUCT THE 2020 HUNT.

### **Overview:**

The City Council approved a Deer Management Plan in 2011. The Deer Management Plan identifies the numbers of deer within a range that the natural habitat can support effectively in the Brooklyn Park community. The plan recommends 15 to 20 deer per square mile, which translates to 45 to 60 deer in the northern portion of the city, 15 to 20 deer along the Mississippi River south of Highway 610, and 15 to 20 in the Palmer Lake Nature Area. Over the last eight years, the City Council, in support of this plan, has approved a Deer Management Program consisting of a controlled archery deer hunt.

The Recreation and Parks Department works in partnership with Three Rivers Park District and a consortium of seven suburban communities to conduct an annual aerial survey. This survey provides a snapshot of the deer population within the Brooklyn Park community. Please see the attached February 2020 Aerial Survey Results; this survey is used to identify the number of targeted deer to be removed for a sustainable population in the City's urban landscape.

In the winter of 2020, the aerial survey found that the herd in Brooklyn Park / Brooklyn Center has increased slightly from 171 deer in 2019 to 172 deer in 2020. These numbers are substantially higher than the 2018 aerial survey, which identified 118 deer.

The City contracts with the Metro Bowhunters Resource Base (MBRB) to conduct the controlled deer hunt. The MBRB coordinates and manages the hunter's application process, which includes a criminal background check. The controlled deer hunt occurs in the fall of each year. Attached is a copy of the nine-year summary that notes the number of deer culled from the herd: 70 were culled in 2011, 61 in 2012, 48 in 2013, 32 in 2014, 28 in 2015, 32 in 2016, 18 in 2017, 20 in 2018, and 23 in 2019.

### Summary of 2020 Deer Hunt:

Most areas hunted had nine days of scheduled hunt time, except the Coon Rapids Dam, which only had six days. The success of the hunt is dependent on deer movement, as hunters must hunt from stands that are stationary for safety reasons. We had a total of 23 deer harvested in 2019.

There can be multiple conditions that contribute to the success of a hunt: 1) antlerless deer in previous years that were removed from the herd; and 2) the cold temperatures and heavy rain days that effects deer movement.

Weather was a definite factor in the success in each of the three-day hunt periods. High water on the Mississippi River and flooding on Banfill Island affected this zone. Greenhaven Park area swamps were full of water and later ice causing the deer to move to the Highway 169 and Vocational College areas on higher ground.

Suggested changes for 2020 Hunt: staff is recommending that we follow a similar schedule as was done in 2019, which reduced the number of hunt dates, and eliminate the mid-October hunt week and continue to hunt within the following locations and dates:

Hunt locations to include:

Zone #1 – Northwoods Park Zone #2 – Rush Creek Regional Trail and Regent Zone #3 – Environmental Nature Area Zone #4 – Coon Rapids Dam Regional Park (CRDRP) Zone #5 – Palmer Lake Zone #8 – Bayfill Island (Ike Walton League) Zone #11 – Brookdale Park Open Space

Hunt Dates: September 28, 29 and 30 – all locations October 26, 27 and 28 – all locations November 9, 10 and 11 – all locations

We anticipate that the Izaak Walton League, Breckenridge Chapter, will again allow the hunt to use the island they own on the Mississippi River. The other four areas are along the Rush Creek Regional Trail, Northwoods Park, Environmental Nature Area, Mississippi Gateway Regional Park, Brookdale and Palmer Lake Nature Area. These five areas are property owned by either the City or Three Rivers Park District.

One public safety benefit to controlling the deer population in an urban/suburban area is the reduction of deer related car accidents. Attached is a chart graphing the deer vehicle accidents in Brooklyn Park since implementation of the controlled deer hunts in 2011. In 2019, there was a significant reduction of deer related incidents to 34. This is in comparison to 2018 with 48, 2017 with 63, 2016 with 60, and 70 accidents in 2015. As noted on the attached chart, there has been a gradual decline in deer related accidents since implementation of the deer management program, which was at an all-time high in 2011 with 105 deer related accidents.

### Primary Issues/Alternatives to Consider:

On Wednesday, June 17, the Recreation and Parks Advisory Commission (RPAC) reviewed the annual hunt report and has recommended that City Council move forward with staff recommendations for the 2020 Fall Deer Hunt, and to authorize the Director of Recreation and Parks to move forward with a contract with the Metro Bowhunters Resource Base (MBRB) to conduct the 2020 hunt as the city has done in the previous nine years. Staff is also recommending that the city continue to work in partnership with Three Rivers Park District to conduct the 2021 aerial survey to determine herd count and the need for future hunts.

### Budgetary/Fiscal Issues:

The only cost incurred is for the shared cost for the annual fly over (\$650) and the warning signs that mark the hunt areas for the general public. The contractor, MBRB, does not charge for their services. There is a charge for certificates of insurance that the City provides to MBRB in the event they obtain access to private property.

### Attachments:

- 4.1A RESOLUTION
- 4.1B 2019 DEER HUNT STATS
- 4.1C 2011-2019 DEER HUNT RESULTS
- 4.1D 2020 AERIAL DEER COUNTS
- 4.1E 2018-2019 DEER/VEHICLE INCIDENT REPORT
- 4.1F DEER HUNT ZONES

### **RESOLUTION #2020-**

### RESOLUTION TO ACCEPT THE 2019 DEER HUNT RESULTS, AUTHORIZE THE CONTINUATION OF THE 2020 DEER MANAGEMENT PROGRAM, AND AUTHORIZE THE DIRECTOR OF RECREATION AND PARKS TO ENTER INTO AN AGREEMENT WITH THE METRO BOWHUNTERS RESOURCE BASE TO CONDUCT THE 2020 HUNT

WHEREAS, the City Council approved a Deer Management Plan in 2011, which identifies the number of deer within a range that the natural habitat can support effectively in the Brooklyn Park community; and

WHEREAS, the Recreation and Parks Department works in partnership with Three Rivers Park District and a consortium of seven suburban communities to conduct an annual aerial survey to determine the approximate deer population within the Brooklyn Park community; and

WHEREAS, the Deer Management Plan recommends 15 to 20 deer per square mile, which translates to 45 to 60 deer in the northern portion of the city, 15 to 20 deer along the Mississippi River south of Highway 610, and 15 to 20 in the Palmer Lake Nature Area; and

WHEREAS, in February 2020, the aerial survey found that the herd in Brooklyn Park had increased with a total of 172 total deer, which is slightly more than in the winter of 2019 with a count of 171; and

WHEREAS, the 2019 hunt resulted in a total of 23 deer, due to poor hunting conditions; and

WHEREAS, one public safety benefit to controlling the deer population in an urban/suburban area is the reduction of deer related car accidents; and

WHEREAS, in 2019, the number of deer related incidents decreased to 34 from the reported 48 incidents in 2018, and there has been a gradual decline in deer related accidents since implementation of the deer management program in 2011 with 105 deer related accidents; and

WHEREAS, the Metro Bowhunters Resource Base (MBRB) does not charge for their services to conduct the hunt.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Brooklyn Park to accept the 2019 Deer Hunt Results, authorize the continuation of the 2020 Deer Management Program, and authorize the Director of Recreation and Parks to enter into an agreement with the Metro Bowhunters Resource Base to conduct the 2020 Deer Hunt.

### 2019 BROOKLYN PARK DEER REMOVAL HUNT RESULTS

ZONES	PERIOD 1 S	EP 30 - OCT 2	PERIOD 2	OCT 28 - 30	PERIOD	3 NOV 11-13	TOTAL ALL	TOTAL DEER	
	ANTERLESS	ADULT BUCKS	ANTERLESS	ADULT BUCKS	ANTERLESS	ADULT BUCKS	ANTERLESS	ADULT BUCKS	
ZONE 1	0	0	1	0	0	1	1	1	2
ZONE 2	0	0	1	0	0	0	1	0	1
ZONE 3	1	0	2	1	1	2	4	3	7
ZONE 4	1	0	3	1	NO HUNT		4	1	5
ZONE 5	0	1	0	0	0	0	0	1	1
ZONE 8	0	0	0	0	2	0	2	0	2
ZONE 10	0	0	0	1	0	0	0	1	1
ZONE 11	1	0	1	1	0	1	2	2	4
TOTAL DEER		4		12		7	14	9	23

- ZONE 1 NORTHWOODS PARK
- ZONE 2 RUSH CREEK TRAIL 102ND AND REGENT
- ZONE 3 ENVIRONMENTAL PARK
- ZONE 4 COON RAPIDS DAM
- ZONE 5 PALMER LAKE PARK
- ZONE 8 BANFILL ISLAND
- ZONE 10 GREENHAVEN PARK
- ZONE 11 BROOKDALE PARK

### 2011 - 2019 Brooklyn Park Deer Removal Hunt Results

ZONES	20	11	201	2	201	13	201	4	201	5	201	6	201	7	201	8	201	9	2011 - 20 <sup>2</sup> Resu		TOTAL DEER
	ANTERLESS	ADULT BUCKS	ANTERLESS	ADULT BUCKS																	
ZONE 1	1	1	0	0	1	0	1	1	1	0	1	1	1	0	0	0	1	1	6	3	9
ZONE 2	2	2	0	0	1	3	1	1	0	1	0	2	1	0	2	1	1	0	8	10	18
ZONE 3	24	5	8	6	6	0	2	0	5	2	9	2	5	2	5	2	4	3	68	22	90
ZONE 4	15	0	15	6	11	1	2	1	2	2	8	1	1	2	1	0	4	1	59	14	73
ZONE 5	14	6	6	4	14	1	11	3	5	2	6	2	3	1	2	1	0	1	61	21	82
ZONE 6			4	2					0	0									4	2	6
ZONE 7			0	2	1	0	1	1	0	0									2	3	5
ZONE 8			5	3	3	1	3	1	6	1			2	0	1	0	2	0	27	6	33
ZONE 9					3	2	2	1	0	1							0	1	5	5	10
ZONE 10															3	2	2	2	5	4	9
TOTAL DEER	7	0	61		48	3	32	2	28		32		18	5	20		23	3	245	90	335

ZONE 1 NORTHWOODS PARK

ZONE 2 RUSH CREEK TRAIL 102ND and REGENT

ZONE 3 ENVIRONMENTAL PARK

ZONE 4 COON RAPIDS DAM

ZONE 5 PALMER LAKE PARK

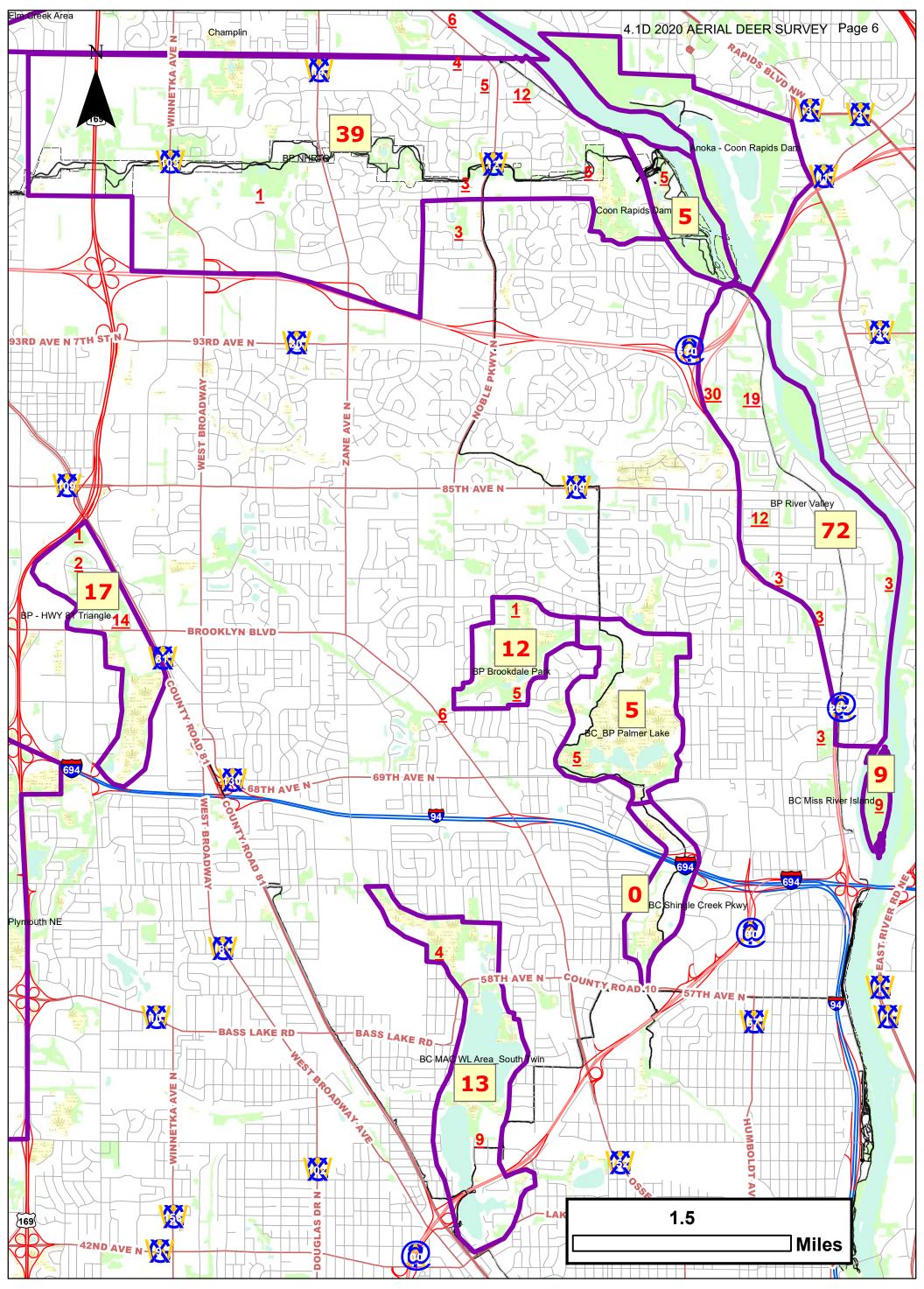
ZONE 6 WOODS AT 103RD AND WINNETKA (NOW DEVELOPED)

ZONE 7 RUSH CREEK TRAIL 101ST AND 169

ZONE 8 BANFILL ISLAND

ZONE 9 JEWELL PARK

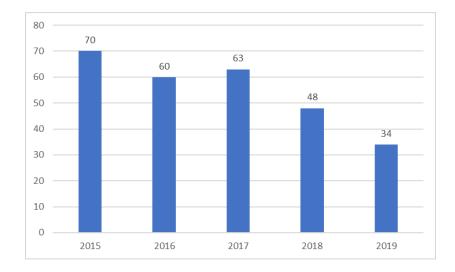
ZONE 10 GREENHAVEN PARK



Department of: NRM Created by: Steven Hogg Map Created: 1/23/2018

# Brooklyn Park Brooklyn Center 2/12/2020 - Aerial Deer Survey Total Deer Counted - 172

This map is a compilation of data from various sources and is provided "as is" without warranty of any representation of accuracy, timeliness, or completeness. The user acknowledges and accepts the limitations of the Data, including the fact that the Data is dynamic and in a constant state of maintenance, correction, and update.



2 2 2

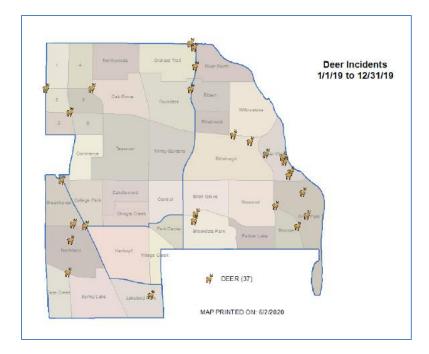
### Deer/Vehicle Incidents by Year 2019

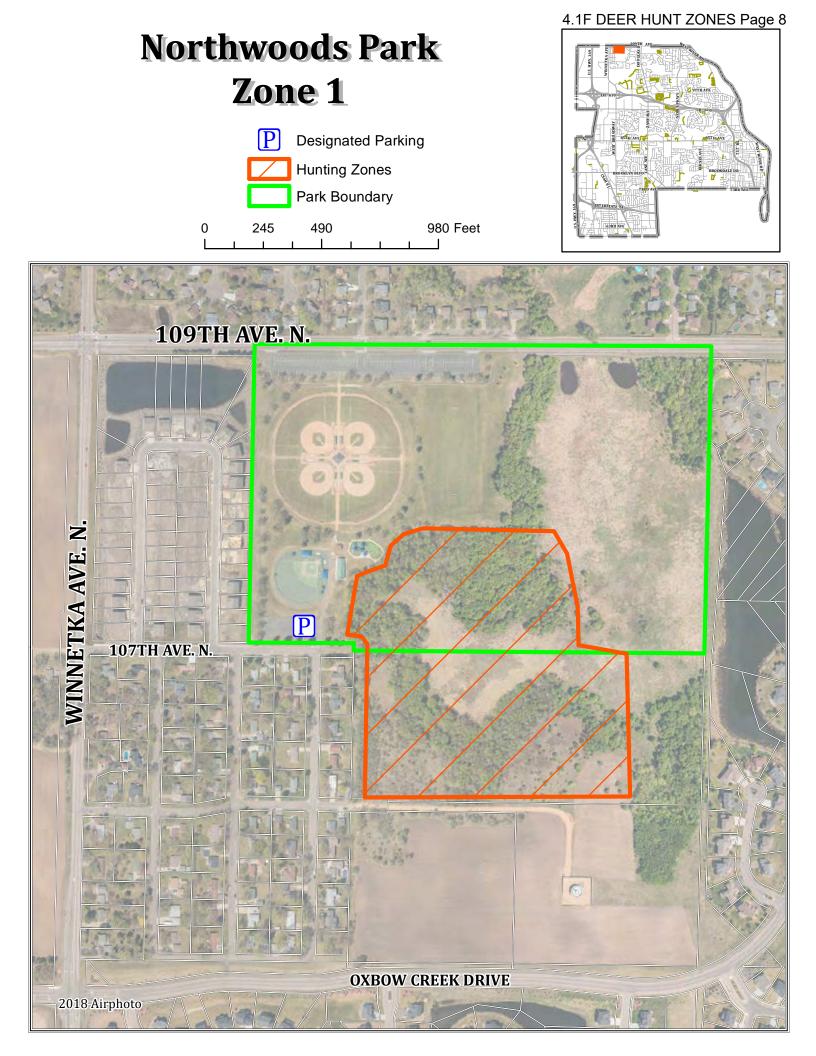
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610/Noble Ave N	
610/West Broadway	
83 <sup>rd</sup> /County Rd 81	

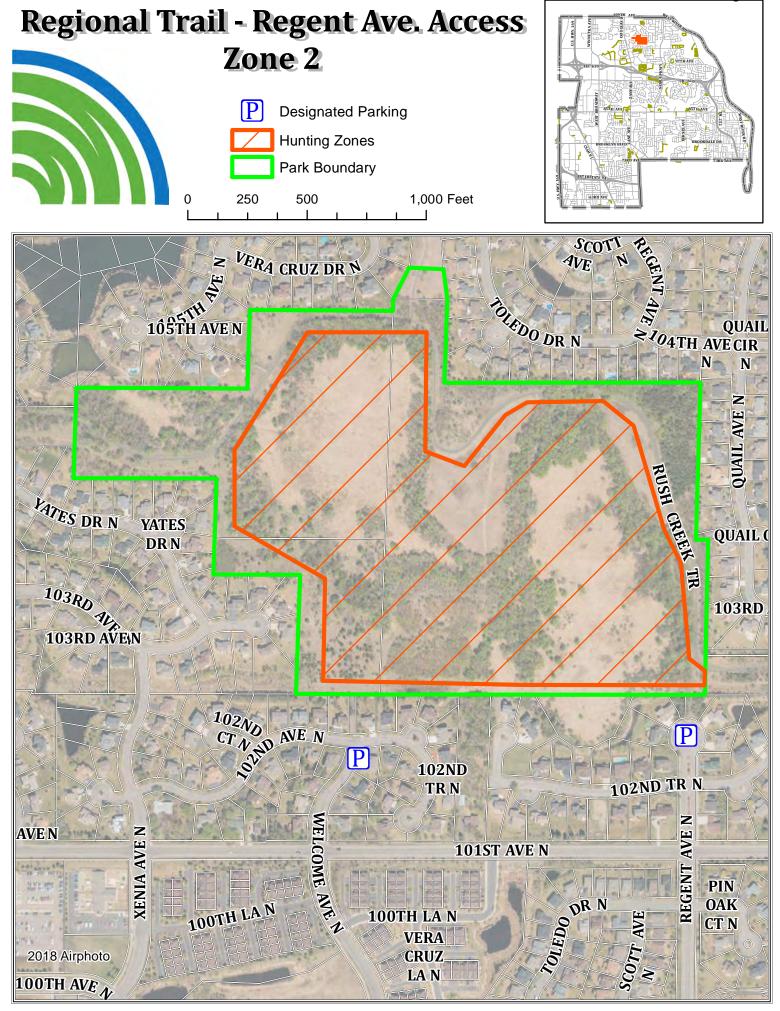
<b>Top Locations</b>	for	2019
169/610		3

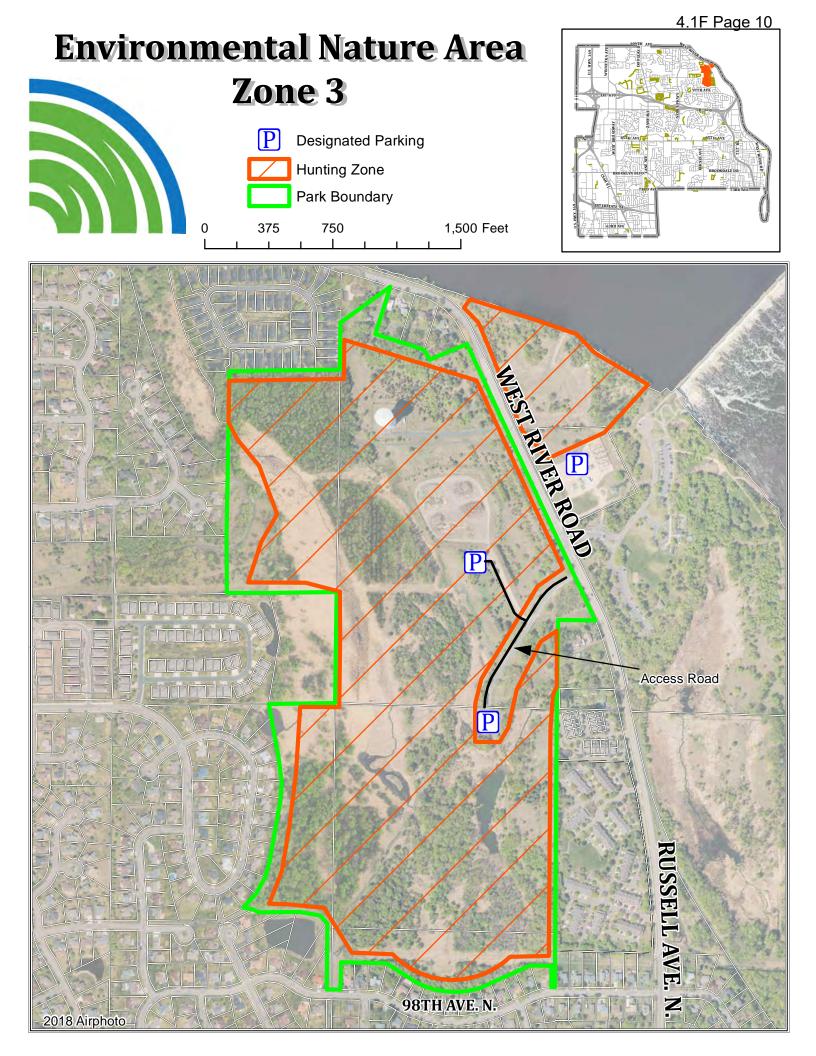
2
2
2



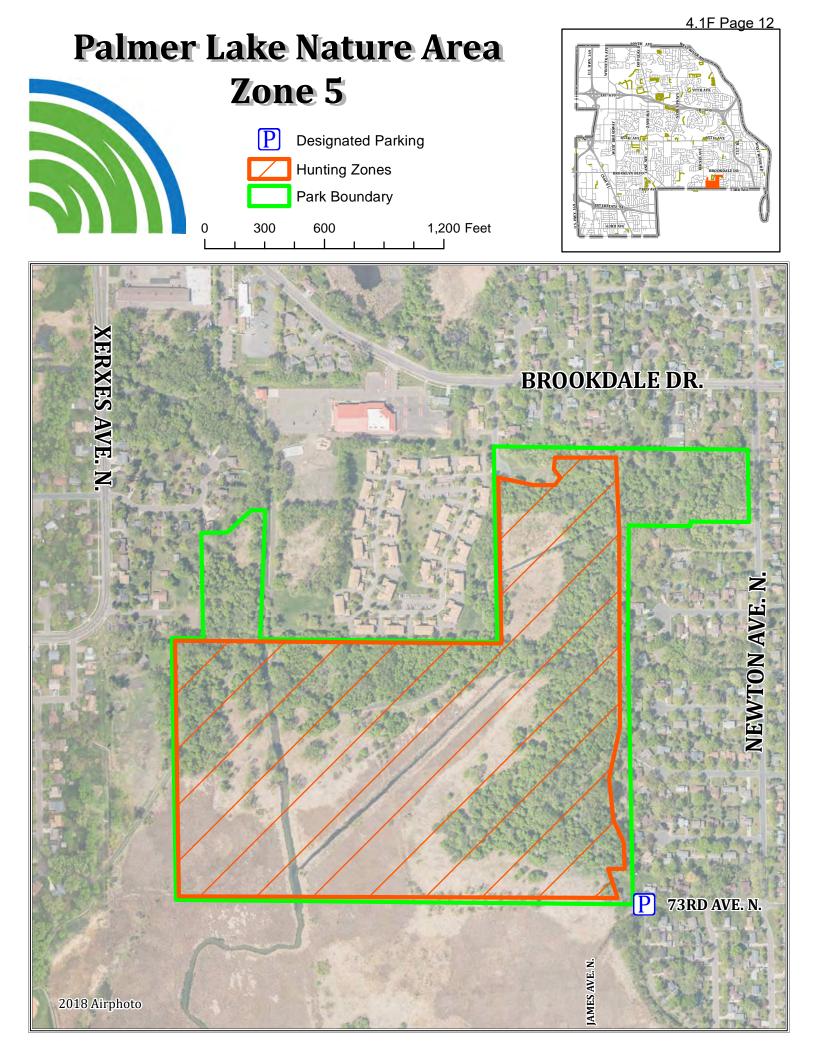


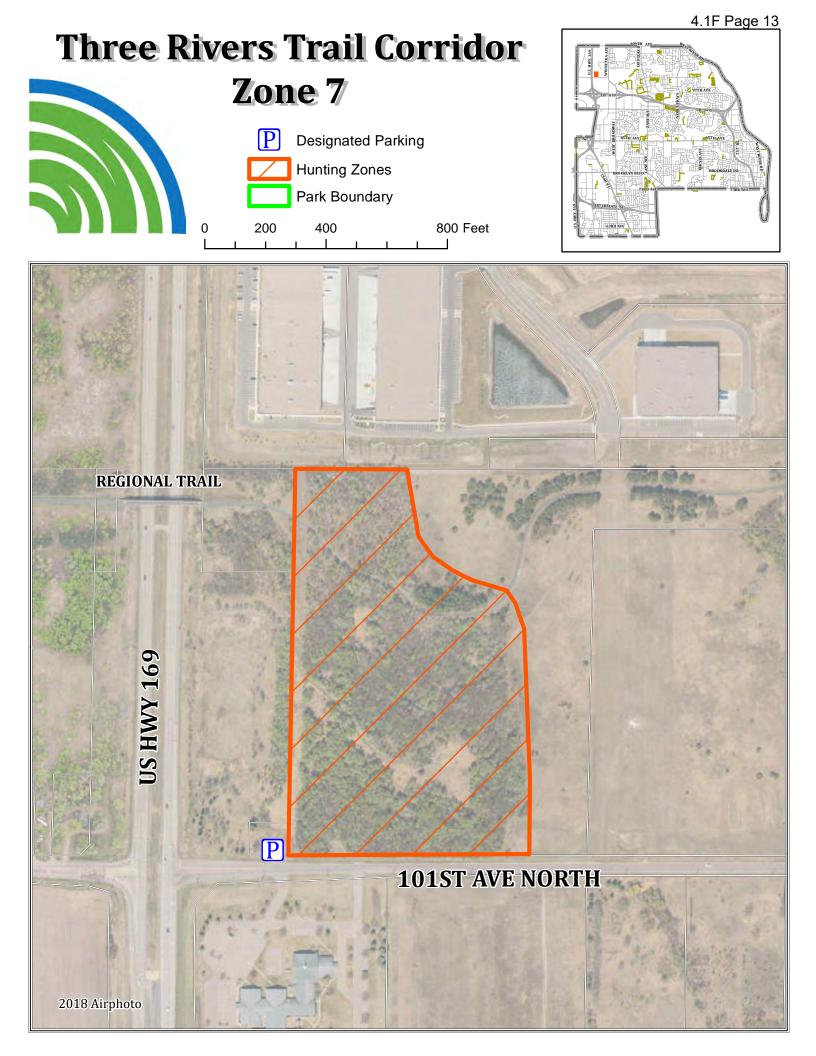
4.1F Page 9





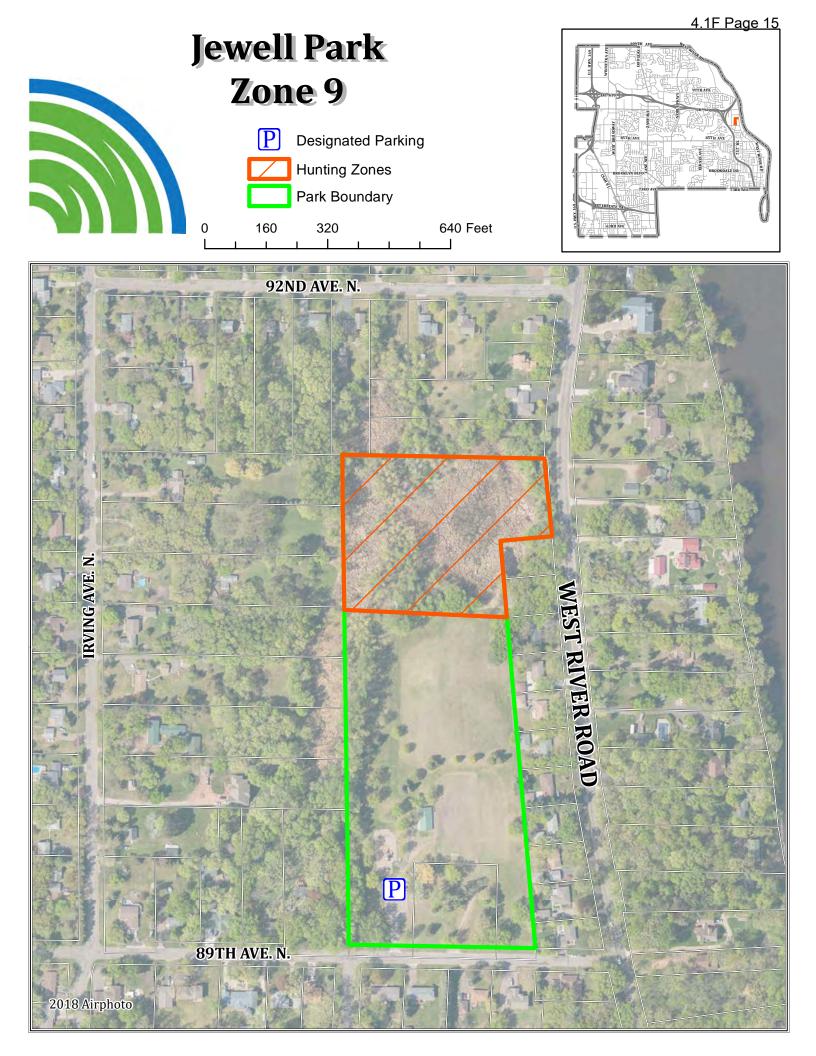


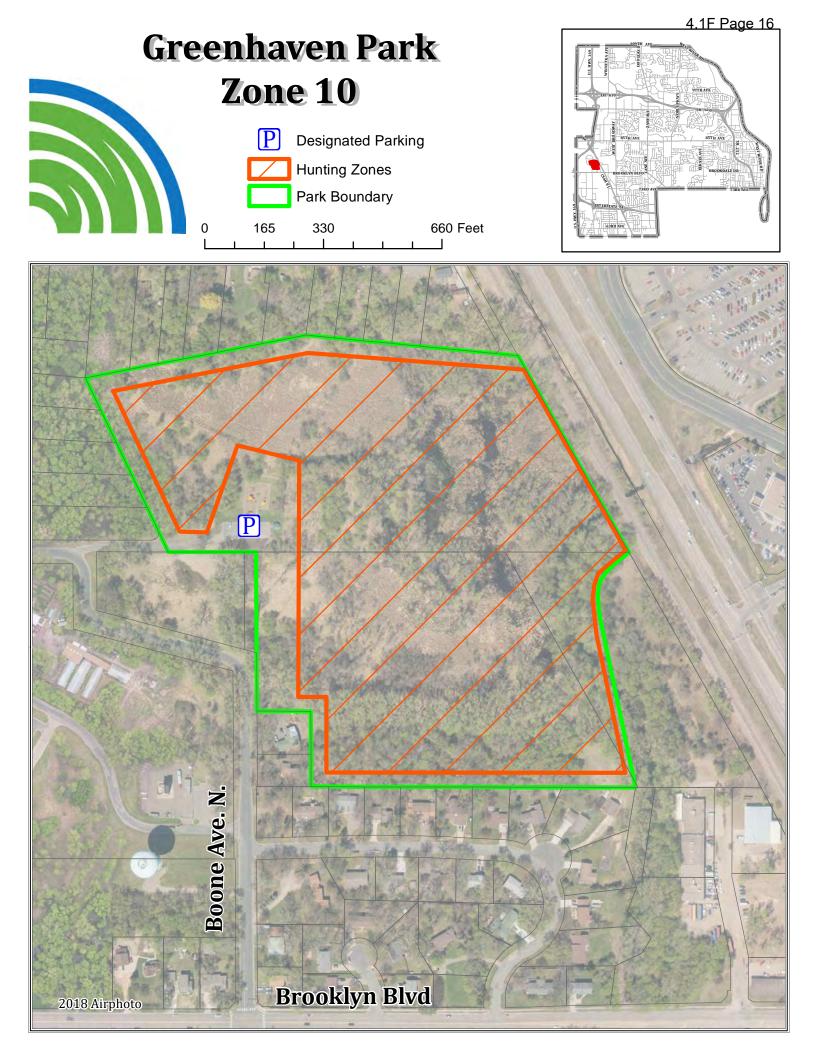


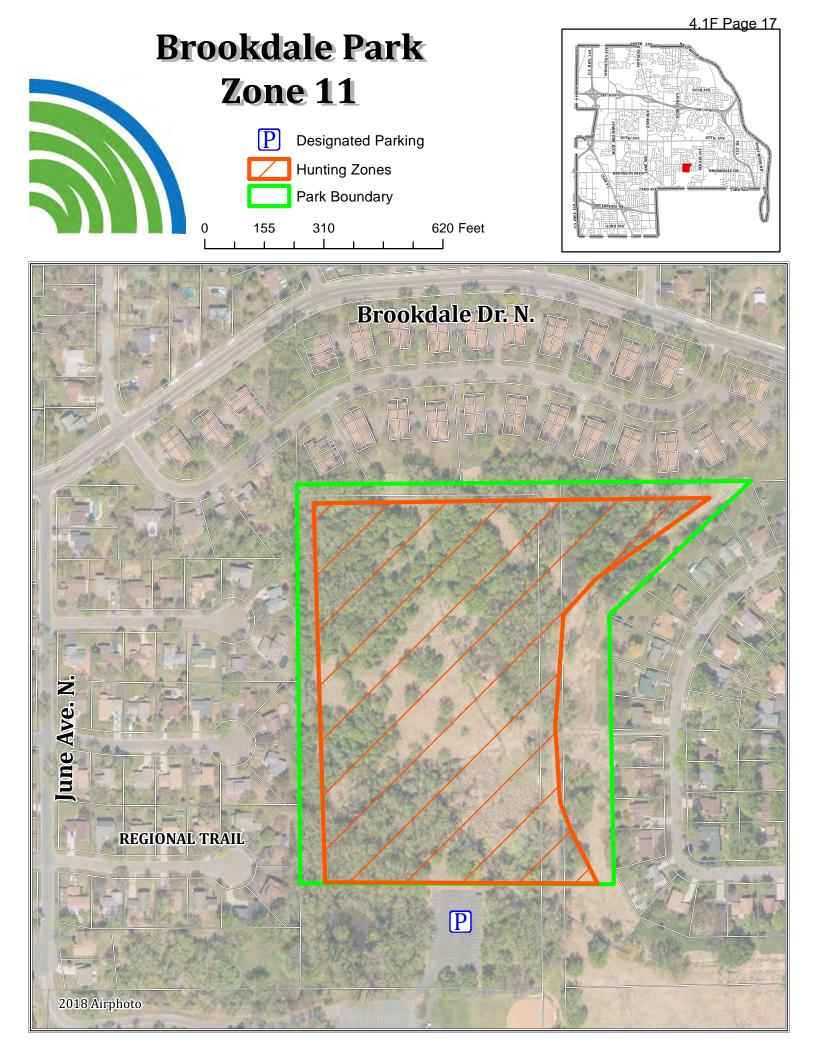


4.1F Page 14









Agenda Item:	4.2	Meeting Date:	June 22, 2020		
Agenda Section:	Consent	Originating Department:	Community Development		
Resolution:	N/A				
Ordinance:	N/A	Prepared By:	JoAnn Millette, Development Specialist		
Attachments:	N/A	Presented By:	Cindy Sherman, Planning Director		
Item:	Letters of Credit/Bo	nd Releases, Escrow/Cash Bo	nd Releases		

### City Manager's Proposed Action:

MOTION \_\_\_\_\_, SECOND \_\_\_\_, TO RELEASE THE CASH BOND (\$5,000) AND THE ENGINEERING ESCROW (\$1,586.79) FOR SATISFACTORY COMPLETION OF THE "610 COMMERCE CENTER 4<sup>TH</sup>/CSM BUILDING #2" PROJECT #17-103 LOCATED AT 9350 WEST BROADWAY FOR CSM CORPORATION.

MOTION \_\_\_\_\_, SECOND \_\_\_\_\_, TO REDUCE THE ON AND OFF-SITE BONDING FROM \$37,400 TO \$19,500, FOR SATISFACTORY PROGRESS OF THE "SAMARA CIRCLE" PROJECT #18-104 LOCATED AT 7630 AND 7646 RIVERDALE DR N FOR AJ CONSTRUCTION /JOSH AND JOHN AHLQUIST.

The City will release Village Bank LOC #40002257/510 and the applicant will deposit an additional \$19,500 into the cash bond account. We will continue to hold a cash bond in the amount of \$27,100 and an engineering escrow in the amount of approximately \$5,300 until the engineering punch list is completed and landscape turf is established.

MOTION \_\_\_\_\_\_, SECOND \_\_\_\_\_\_, TO RELEASE THE ON AND OFF-SITE IMPROVEMENT BOND #107102904 (\$520,300) BY TRAVELERS CASUALTY, REDUCE THE CASH BOND BY \$27,300 AND REDUCE THE ENGINEERING ESCROW BY \$12,000 FOR PROGRESS OF THE "IBEW" PROJECT #19-111 LOCATED AT 6700 WEST BROADWAY FOR RYAN COMPANIES US, INC.

The City will continue to hold a cash bond in the amount of \$10,000 and an engineering escrow in the amount of approximately \$5,000 until landscaping is completed, silt fences are removed, "no parking" signs are installed and engineering punch list is completed and approved.

### Primary Issues/Alternatives to Consider: N/A

Budgetary/Fiscal Issues: N/A

Attachments: N/A

Agenda Item:	4.3	Meeting Date:	June 22, 2020		
Agenda item.	4.5		June 22, 2020		
		Originating			
Agenda Section:	Consent	Department:	Community Development		
Resolution:	N/A				
			Megan Bookey, Program Assistant		
Ordinance:	N/A	Prepared By:			
			Keith Jullie, Rental and Business		
Attachments:	N/A	Presented By:	Licensing Manager		
	Approve a Tobacco Sales License for Mega Co-op dba Murphy Oil, USA, Located at				
Item:	8050 Lakeland Avenue North, Brooklyn Park, MN 55445				

### City Manager's Proposed Action:

MOTION \_\_\_\_\_, SECOND \_\_\_\_, TO APPROVE A TOBACCO SALES LICENSE FOR MEGA CO-OP DBA MURPHY OIL, USA, LOCATED AT 8050 LAKELAND AVENUE NORTH, BROOKLYN PARK, MN 55445.

### Overview:

This is a change of ownership, which requires a new Tobacco Sales license for Murphy Oil, USA, located at 8050 Lakeland Avenue North in Brooklyn Park, MN.

The Police Department has completed their investigation of the owners. The Community Development Department approved the application on June 16, 2020. There are currently no known code violations at this address. The Police and Community Development Departments find no reason that would preclude the issuance of the Tobacco Sales license. Their reports are on file in the Licensing Division and are available upon request.

### Primary Issues/Alternatives to Consider: N/A

Budgetary/Fiscal Issues: N/A

Attachments: N/A

Agenda Item:	4.4	Meeting Date:	June 22, 2020		
Agenda Section:	Consent	Originating Department:	Community Development		
Resolution:	N/A				
Ordinance:	N/A	Prepared By:	Megan Bookey, Program Assistant		
Attachments:	N/A	Presented By:	Keith Jullie, Rental and Business Licensing Manager		
literes	Approve a 3.2 Malt Liquor Off-Sale License for Mega Co-op dba Murphy Oil, USA,				
Item:	Located at 8050 Lakeland Avenue North, Brooklyn Park, MN 55445				

### City Manager's Proposed Action:

MOTION \_\_\_\_\_\_, SECOND \_\_\_\_\_, TO APPROVE A 3.2 MALT LIQUOR OFF-SALE LICENSE FOR MEGA CO-OP DBA MURPHY OIL, USA, LOCATED AT 8050 LAKELAND AVENUE NORTH, BROOKLYN PARK, MN 55445.

### Overview:

This is a change of ownership, which requires a new 3.2 malt liquor off-sale license for Murphy Oil, USA, located at 8050 Lakeland Avenue North in Brooklyn Park, MN.

The Police Department has completed their investigation of the owners. The Community Development Department approved the application on June 16, 2020. There are currently no known code violations at this address. The Police and Community Development Departments find no reason that would preclude the issuance of the 3.2 malt liquor off-sale license. Their reports are on file in the Licensing Division and are available upon request.

### Primary Issues/Alternatives to Consider: N/A

Budgetary/Fiscal Issues: N/A

Attachments: N/A

# City of Brooklyn Park Request for Council Action

Agenda Item:	4.5	Meeting Date:	June 22, 2020
Agenda Section:	Consent	Originating Department:	Community Development
Resolution:	x		
Ordinance:	N/A	Prepared By:	Todd A. Larson, Senior Planner
Attachments:	4	Presented By:	Cindy Sherman, Planning Director
	APC Towers III, LLC – Time Extension for Conditional Use Permit #19-113 to Allow a 125-		
Item:	Foot Bell Tower to Support up to Three Wireless Service Providers Including T-Mobile at 5840 69 <sup>th</sup> Avenue North		

#### City Manager's Proposed Action:

MOTION \_\_\_\_\_, SECOND \_\_\_\_\_, TO WAIVE THE READING AND ADOPT RESOLUTION #2020-\_\_\_\_ APPROVING A TIME EXTENSION FOR A CONDITIONAL USE PERMIT FOR A COMMUNICATIONS TOWER AT 5840 69<sup>TH</sup> AVENUE NORTH.

#### Planning Commission Recommendation:

At its meeting on June 10, 2020, the Planning Commission unanimously (7-0) recommended approval of the time extension.

#### **Overview:**

In July 2019, APC Towers III, LLC received approval to construct and operate a 125-foot communications tower on a portion of the Brooklyn Evangelical Lutheran Church property at 5840 69<sup>th</sup> Avenue N. The tower site is off the northeast corner of the parking lot. The tower is being designed to resemble a bell tower, similar to the tower at Discover Church (1400 81<sup>st</sup> Avenue N.), and to accommodate three carriers. The tower requires a conditional use permit (CUP) to be constructed and operate. The approved CUP expires on July 22, 2020. The applicant is delayed in submitting for a building permit and is requesting a one-time one-year extension.

#### Budgetary/Fiscal Issues: N/A

#### Alternatives to consider:

- 1. Approve the time extension as recommended by the Planning Commission.
- 2. Approve the time extension with modifications.
- 3. Deny the time extension based on certain findings.

#### Attachments:

- 4.5A RESOLUTION
- 4.5B LOCATION MAP
- 4.5C LETTER FROM THE APPLICANT
- 4.5D PLANNING COMMISSION MINUTES

#### **RESOLUTION #2020-**

#### RESOLUTION APPROVING A TIME EXTENSION FOR A CONDITIONAL USE PERMIT FOR A COMMUNICATIONS TOWER AT 5840 69<sup>TH</sup> AVENUE NORTH

#### Planning Commission File #19-113

WHEREAS, Mr. Ryan Streff of Powder River Development, on behalf of APC Towers III, LLC, has made application for a Conditional Use Permit under the provisions of Chapter 152 of the City Code at Brooklyn Evangelical Lutheran Church at 5840 69<sup>th</sup> Avenue North and legally described as:

*The west 465 feet of the South 633 feet of the Southeast quarter of the Southwest quarter, Section 28, Township 119, Range 21, Hennepin County, Minnesota, except roads.* 

If recorded after the property is replatted, then the legal description shall be:

Lot 1, Block 1, A1 Reliable Home Services, Hennepin County, Minnesota

WHEREAS, the matter has been referred to the Planning Commission who have given their advice and recommendation to the City Council; and

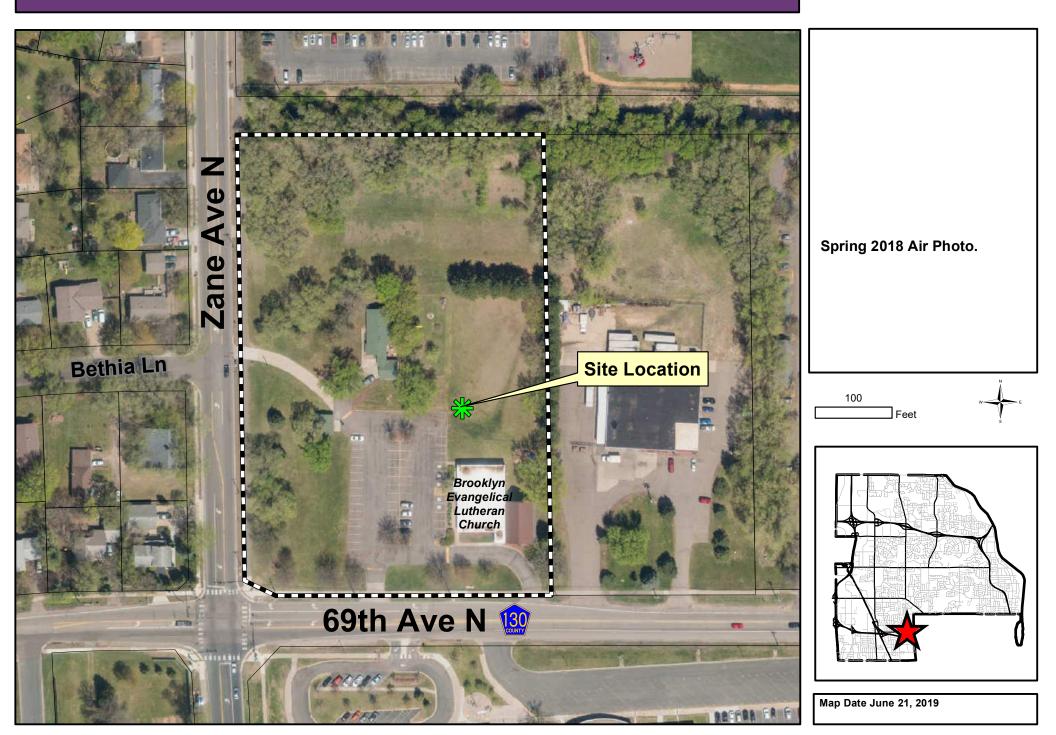
WHEREAS, the City Council approved Resolution #2019-124 on July 22, 2019 and is set to expire one year from the date of approval; and

WHEREAS, the applicant can request a one-time one-year extension.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Brooklyn Park that the Conditional Use Permit for the construction and operation of a 125-foot communications monopole is extended until July 22, 2021, at which time the tower must be operational or have an active building permit: otherwise, the Conditional Use Permit is expired.

Conditional Use Permit #19-113 APC Towers 5840 69th Ave. N.





From:Tami LewallenSent:Tuesday, June 2, 2020 1:37 PMTo:Todd LarsonCc:Mike GallagherSubject:RE: Resolution #2019-124 (CUP #19-113)

Good afternoon, Mr. Larson. Thank you for returning my call so quickly regarding the above referenced resolution.

Per our conversation, I would like to request for a one time one-year extension on this resolution to be considered on the next PC's agenda. APC Towers intends to move forward with this project, and unfortunately has been delayed at this time.

Please let me know if you require additional information.

Tami Lewallen, PMP Director of Development | APC Towers Cell: 919.389.1091 Desk: 919.670.5202 8601 Six Forks Road, Suite 250 Raleigh, NC 27615

#### UNAPPROVED MINUTES MINUTES OF THE BROOKLYN PARK PLANNING COMMISSION Regular Meeting – June 10, 2020

#### 1. CALL TO ORDER

The meeting was called to order at 7:00 PM.

#### 2. ROLL CALL/PLEDGE OF ALLEGIANCE

Those present were: Commissioners Aarestad, Herbers, Husain, Kiekow, Kisch, Muvundamina, and Vosberg; Planning Director Sherman; Senior Planner Larson.

Those not present were: Commissioners Mohamed and Morton-Spears; Council Liaison Russell.

#### 5. CONSENT AGENDA

- **A. Minutes –** May 13, 2020
- **B.** Time Extension for APC Towers III, LLC for Conditional Use Permit #19-113 to allow a 125-foot bell tower to support up to three wireless service providers including T-Mobile at 5840 69<sup>th</sup> Ave N.
- **C. Time Extension for Homeward Bound, USA, Inc. (Peter Hagen)** for Waiver of Platting #19-109 to subdivide the existing lot into two single-family residential lots at 6409 Edgemont Blvd N.

MOTION HUSAIN, SECOND HERBERS TO APPROVE THE JUNE 10, 2020 CONSENT AGENDA.

MOTION CARRIED UNANIMOUSLY.

# City of Brooklyn Park Request for Council Action

Request for obtaining Action				
Agenda Item:	4.6	Meeting Date:	June 22, 2020	
Agenda Section:	Consent	Originating Department:	Community Development	
Resolution:	x			
Ordinance:	N/A	Prepared By:	Todd A. Larson, Senior Planner	
Attachments:	3	Presented By:	Cindy Sherman, Planning Director	
Item:	Homeward Bound, USA, Inc (Peter Hagen) – Waiver of Platting #19-109 to Subdivide the Existing Lot into Two Single-Family Residential Lots at 6409 Edgemont Blvd. N.			

#### City Manager's Proposed Action:

MOTION \_\_\_\_\_, SECOND \_\_\_\_\_, TO WAIVE THE READING AND ADOPT RESOLUTION #2020-\_\_\_\_ APPROVING A TIME EXTENSION FOR A WAIVER OF PLATTING TO SUBDIVIDE 6409 EDGEMONT BOULEVARD NORTH INTO TWO SINGLE-FAMILY PARCELS.

#### Planning Commission Recommendation:

At its meeting on June 10, 2020, the Planning Commission unanimously (7-0) recommended approval of the time extension.

#### **Overview:**

On June 24, 2019, the City Council approved a waiver of platting to subdivide 6409 Edgemont Boulevard along the originally platted property lines. This property is actually two platted parcels that have been combined for tax purposes. City Code requires a public hearing for any subdivision, although a new plat is not necessary in this case. The process to subdivide land along the originally-platted lines in this manner is called a *waiver of platting*. The approval for the waiver of platting is set to expire on June 24, 2020, unless a one-time one-year extension is granted.

#### **Budgetary/Fiscal Issues: N/A**

#### Alternatives to consider:

- 1. Approve the time extension as recommended by the Planning Commission.
- 2. Approve the time extension with modifications.
- 3. Deny the time extension based on certain findings.

#### Attachments:

- 4.6A RESOLUTION
- 4.6B LOCATION MAP
- 4.6C PLANNING COMMISSION MINUTES

#### RESOLUTION #2020-

# RESOLUTION APPROVING A TIME EXTENSION FOR A WAIVER OF PLATTING TO SUBDIVIDE 6409 EDGEMONT BOULEVARD NORTH INTO TWO SINGLE-FAMILY PARCELS

Planning Commission File #19-109

WHEREAS, Homeward Bound USA Inc. owns the following property within the City of Brooklyn Park:

Lots 6 and 7, Edgemont Addition, Hennepin County, Minnesota

WHEREAS, the property is two platted lots that were combined for tax purposes; and

WHEREAS, the property owner would like to subdivide the parcel along the originally-platted lines to sell each lot individually; and

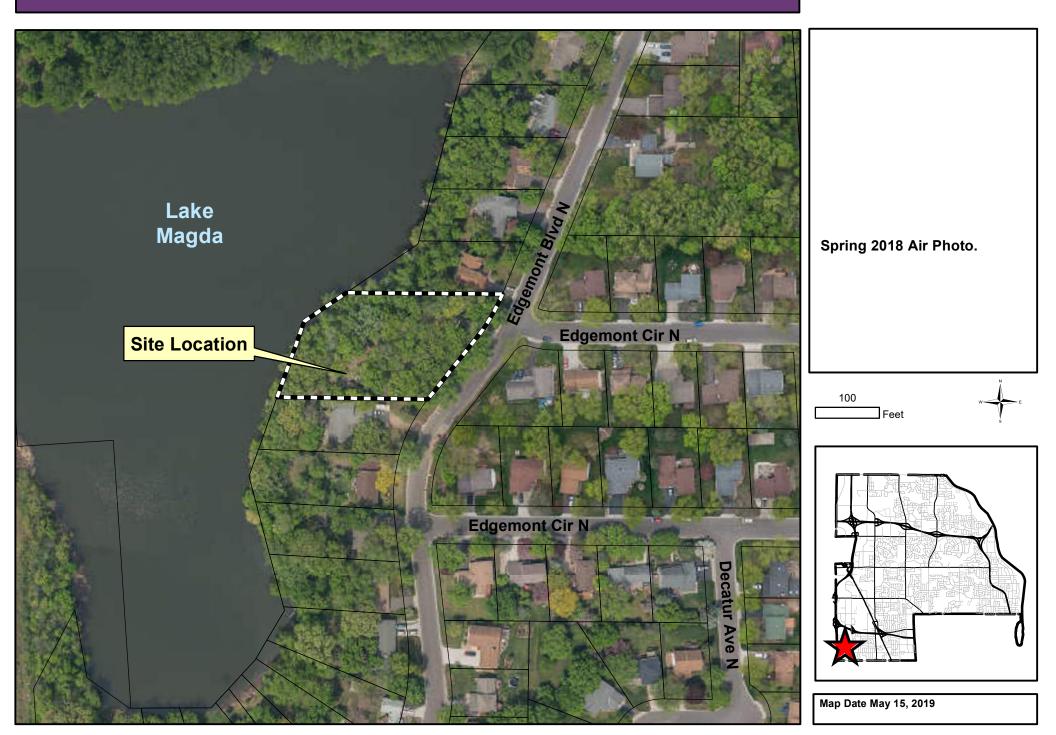
WHEREAS, the City Council approved Resolution #2019-101 on June 24, 2019, and is valid for one year from the date of approval; and

WHEREAS, the City Council may grant a one-time one-year extension.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Brooklyn Park that Resolution #2019-101 is extended through June 24, 2021, at which time all conditions within said resolution must be met or the approval expires.

## Waiver of Platting #19-109 6409 Edgemont Blvd. N.





#### UNAPPROVED MINUTES MINUTES OF THE BROOKLYN PARK PLANNING COMMISSION Regular Meeting – June 10, 2020

#### 1. CALL TO ORDER

The meeting was called to order at 7:00 PM.

#### 2. ROLL CALL/PLEDGE OF ALLEGIANCE

Those present were: Commissioners Aarestad, Herbers, Husain, Kiekow, Kisch, Muvundamina, and Vosberg; Planning Director Sherman; Senior Planner Larson.

Those not present were: Commissioners Mohamed and Morton-Spears; Council Liaison Russell.

#### 5. CONSENT AGENDA

- **A. Minutes –** May 13, 2020
- **B.** Time Extension for APC Towers III, LLC for Conditional Use Permit #19-113 to allow a 125-foot bell tower to support up to three wireless service providers including T-Mobile at 5840 69<sup>th</sup> Ave N.
- **C. Time Extension for Homeward Bound, USA, Inc. (Peter Hagen)** for Waiver of Platting #19-109 to subdivide the existing lot into two single-family residential lots at 6409 Edgemont Blvd N.

MOTION HUSAIN, SECOND HERBERS TO APPROVE THE JUNE 10, 2020 CONSENT AGENDA.

MOTION CARRIED UNANIMOUSLY.

# City of Brooklyn Park Request for Council Action

Agenda Item:	6.1	Meeting Date:	June 22, 2020	
Agenda Section:	Land Use Actions	Originating Department:	Community Development	
Resolution:	x			
Ordinance:	N/A	Prepared By:	Todd A. Larson, Senior Planner	
Attachments:	8	Presented By:	Cindy Sherman, Planning Director	
Item:	Graybar (PlanForce, Inc.) – Conditional Use Permit #20-112 to Expand Outdoor Storage Area at 7601 Setzler Parkway North			

#### City Manager's Proposed Action:

MOTION \_\_\_\_\_, SECOND \_\_\_\_\_, TO WAIVE THE READING AND ADOPT RESOLUTION #2020-\_\_\_\_ APPROVING SECOND AMENDMENT TO CONDITIONAL USE PERMIT FOR ADDITIONAL OUTDOOR STORAGE AT 7601 SETZLER PARKWAY NORTH.

#### Planning Commission Recommendation:

At its meeting on June 10, 2020, the Planning Commission unanimously (7-0) recommended approval of the conditional use permit with the conditions that are listed in the attached resolution.

#### Overview:

City Code allows outside storage in the Business Park (BP) zoning district with a conditional use permit (CUP) and subject to performance standards that include a limit on the total amount of outside storage permitted. The Code allows up to 15 percent of the area of the building footprint on certain sites in the BP districts.

Graybar, which occupies a building that is 324,000 sq. ft., has previously had two requests for outside storage areas approved and are now requesting an additional expansion. The following is an outline of the past requests:

- June 2015: CUP granted for 10,000 square feet of fenced-in outdoor storage along the south side of its property.
- 2017: approved expansion of an additional 15,000 square feet.
- 2020: request for an additional 3,937.50 square feet of outside storage. Total outside storage with new request is 28,937.50 sq. ft. or 8.9 percent of the building area. Fifteen percent is permitted, which totals 48,600 sq. ft.

The black chain link fence with a mesh screen will match what is there today for screening.

Currently, the property has a landscaped berm along West Broadway to help screen the truck court and the existing storage area. As part of the West Broadway reconstruction project, the berm will be reduced, and some landscaping will be removed to widen the roadway and relocate the transmission line thus potentially exposing the existing storage area. Instead of installing additional trees and shrubs now that could be damaged or removed during construction, it is recommended that trees and shrubs be installed after the West Broadway project is complete, if needed. This is a condition that is carried over from the 2017 approvals.

#### Budgetary/Fiscal Issues: N/A

#### Alternatives to consider:

- 1. Approve the CUP as recommended by the Planning Commission.
- 2. Approve the CUP with modifications.
- 3. Deny the CUP based on certain findings.

#### Attachments:

- 6.1A RESOLUTION
- 6.1B LOCATION MAP
- 6.1C PLANNING AND ZONING INFORMATION
- 6.1D PLANNING COMMISSION MINUTES
- 6.1E LETTER FROM APPLICANT
- 6.1F RESOLUTION #2015-123
- 6.1G RESOLUTION #2017-118
- 6.1H PLANS

#### RESOLUTION #2020-

#### RESOLUTION APPROVING SECOND AMENDMENT TO CONDITIONAL USE PERMIT FOR OUTDOOR STORAGE AT 7601 SETZLER PARKWAY NORTH

Planning Commission File #20-112

WHEREAS, Chad Berreau or PlanForce, Inc., on behalf of Graybar Electric and Duke Realty Corporation, has requested an amendment to a Conditional Use Permit for an additional 3,937.5 square foot fenced and screened outdoor storage facility located at 7601 Setzler Parkway North and legally described as:

#### Lot 1, Block 1, Crosstown North Business Center 12, Hennepin County, Minnesota.

WHEREAS, the City Council approved Conditional Use Permit #15-118 through Resolution #2015-123 and recorded as Document No. A10224470 for 10,000 square feet of outdoor fenced and screened storage area on June 22, 2015; and

WHEREAS, the City Council approved Conditional Use Permit #17-110 through Resolution #2017-118 (unrecorded) for an additional 15,000 square feet of outdoor fenced and screened storage area on June 26, 2017; and

WHEREAS, the matter has been referred to the Planning Commission who have given their advice and recommendation to the City Council; and

WHEREAS, the effect of the proposed use upon the health, safety and welfare of surrounding lands, existing and anticipated traffic conditions and its effect on property values in the neighborhood have been considered.

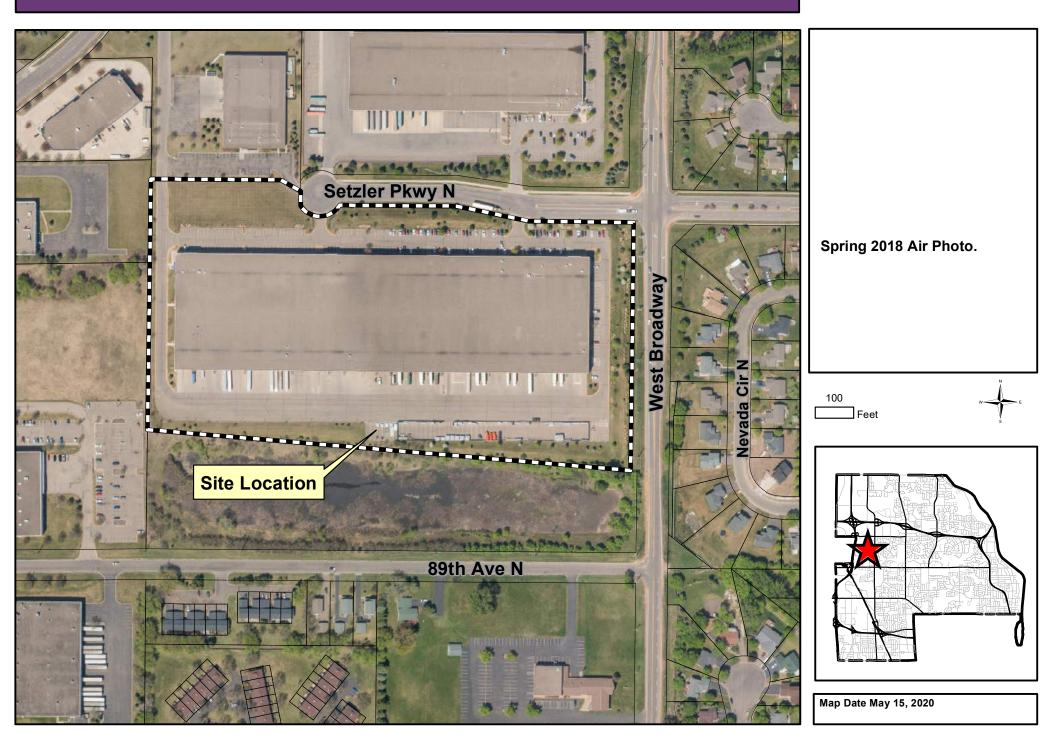
NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Brooklyn Park that the Conditional Use Permit for an additional 3,937.5 square feet of fenced and screened outdoor storage area at 7601 Setzler Parkway North shall be approved, subject to the following conditions:

- 1. The outdoor storage area must conform to the plans presented to the Planning Commission and City Council.
- 2. The area in which the storage is to be located must be enclosed by a black vinyl-coated chain link fence with privacy screening.
- 3. The area must not be used for the storage of junk vehicles, trash, debris, or other nuisance items as defined elsewhere in the City Code.
- 4. Height of materials, vehicles, or equipment in outdoor storage area shall not exceed the height of the fence.
- 5. A building permit must be obtained for the fence.
- 6. The storage area and fencing must not enclose the building's Fire Department connection or block any required emergency exits.
- 7. The berm along West Broadway is expected to be altered with road construction in the upcoming years. Within one year of completion of work adjacent to the site, the property owner must add trees and shrubs to replace the screening lost during construction.
- 8. All conditions listed in Resolutions #2015-123 and #2017-118 remain in effect, unless herein modified.

This Conditional Use Permit must be recorded with the Hennepin County Taxpayer Services Department (County Recorder). The use must be in compliance with the conditions listed above and City Code in order to be valid. This approval expires one year from the date of approval, unless all conditions are met.

# Conditional Use Permit #20-112 Graybar 7601 Setzler Pkwy. N.





Land Use Plan	Business Park
Current Zoning	Business Park (BP)
Surrounding Zoning	North and West – Business Park (BP) South – Conservancy District (CD) East – Detached Single-Family Residential District (R3A)
Neighborhood	Commerce
Lot Area Building Area	18.59 acres 324,000 ft²
Existing Storage Area Proposed Storage Area Total Storage Area	25,000 ft² (7.7% of building footprint) 3,937.5 ft² (1.2% of building footprint) 28,937.5 ft² (8.9% of building footprint)
Conforms to: Land Use Plan – Yes Zoning Code – Yes Variances Needed – Ne	one
Public Notification	100 Mailed Notices Sun Post Legal Notices – May 28, 2020 Neighborhood Update Email – Commerce and Tessman



Photo 1. The western end of the outdoor storage area that will be extended (June 2, 2020).

#### MINUTES OF THE BROOKLYN PARK PLANNING COMMISSION Regular Meeting – June 10, 2020

#### 1. CALL TO ORDER

The meeting was called to order at 7:00 PM.

#### 2. ROLL CALL/PLEDGE OF ALLEGIANCE

Those present were: Commissioners Aarestad, Herbers, Husain, Kiekow, Kisch, Muvundamina, and Vosberg; Planning Director Sherman; Senior Planner Larson.

Those not present were: Commissioners Mohamed and Morton-Spears; Council Liaison Russell.

#### 6. PUBLIC HEARING

**B.** Graybar (PlanForce, Inc.) – Conditional Use Permit #20-112 to expand outdoor storage area.

Senior Planner Larson introduced the application for Graybar. He explained the original conditional use permit for 10,000 square feet of outdoor storage area was approved in 2015, and this was later amended for additional storage two years later when Graybar expanded. Graybar now requests an additional expansion of outdoor storage by roughly 4,000 square feet. He explained a conditional use permit can allow outdoor storage of up to 15% of the building, and after this request the storage area will be at about 9% of the building. A current photo of the storage area shows that the stored material exceeds the height of the fence, which is not allowed but does show the need to expand the area for outdoor storage. He stated the property owner, applicant, and the company have all been notified of the infraction. Staff recommends approval.

Chad Berreau, a representative of PlanForce Group, introduced himself and Zach Lewis, the project manager with Metal Tech, to the Planning Commission. He stated the conditions are the same as they have been in the past, including a condition for pending landscape improvements as they relate to roadway improvements. He noted the property owner is responsible for fulfilling the work for this particular condition since the roadway has not yet been improved.

Commissioner Chair Kisch opened the public hearing.

Explaining no one pre-registered to speak on this item, Commissioner Kisch closed the public hearing while encouraging community members to send any comments to Planning Staff.

Commissioner Vosberg pointed to the condition that will require landscaping to provide screening when the berm on West Broadway is removed for road improvements. She asked if City Staff will monitor this requirement is fulfilled since it will be the responsibility of the property owner and not the applicant.

Chad Berreau explained that Duke was included in the email exchanges that included this documentation, and he will reach out to them tomorrow to remind them of the condition. He reiterated this was also a condition included in the previous conditions for the permit, so he doesn't think this will come as a surprise.

Planning Director Sherman explained the application runs with the land regardless of the applicant, so the landowner is responsible as well. She noted that planning applications require the contact information and consent of the property owners.

Commissioner Vosberg stated her concern that they are reviewing the conditions without the responsible party present. She asked if City Staff will follow up with the property owner to ensure they understand.

Planning Director Sherman explained both the applicant and property owner are notified of the conditions and expectations. She added there are anticipated impacts and takings of the property for future road improvements to West Broadway and the construction of the LRT, but the property owner will be compensated with the idea some of it will be used to replace landscaping that was removed. She expects the property owner is well aware of this reality.

MOTION <u>HERBERS</u>, SECOND <u>HUSAIN</u> TO RECOMMEND APPROVAL OF SECOND AMENDMENT TO CONDITIONAL USE PERMIT FOR ADDITIONAL OUTDOOR STORAGE AT 7601 SETZLER PARKWAY NORTH, SUBJECT TO CONDITIONS IN THE DRAFT RESOLUTION.

MOTION CARRIED UNANIMOUSLY.



April 27, 2020

Mr. Todd Larson, Senior Planner **City of Brooklyn Park Planning Department** 5200 85<sup>th</sup> Avenue North Brooklyn Park, MN 55443

Re: Letter of Request, CUP for Exterior Storage

- + Project 20081: Graybar
- + Site: 7601 Setzler Parkway N, Brooklyn Park, MN 55445
- Delivered to: City Hall

Property ID: 17 11921230011

Property Address: 7601 Setzler Parkway N, Brooklyn Park, MN 55445 Zoning District: BP – Business Park Property Owner: Duke Secured Fincg 2009-1Alz Development Name: Crosstown North, Building 12 Tenant: Graybar Electric

Graybar, Inc, a tenant at 7601 Setzler Parkway N, Brooklyn Park, MN, and is seeking to increase its outdoor storage area, by approximately 4,000 SF (78'-9" x 50'-0".), by expanding its 25,000 SF fenced enclosed outdoor storage area. See photo below and attached site plan.

Zoning regulations for a Business Park district (BP) allows a property to have outdoor storage areas of up to 15% of building footprint, when approved by the City with a CUP.

The property has a 324,100 square foot building and may be allowed up to up to 48,615 sf (15%) of outdoor storage.

4/27/2020 | Page 2

Graybar, the sole building tenant at this address, occupies the entire building and operates with a 25,000 square foot fence enclosed outdoor storage area, representing 7.7% allowable outdoor storage area.

The 4,000 sf expansion to this outdoor storage area will provide Graybar with about 29,000 square feet of outdoor storage, for a total of 8.9% allowable area.

The enclosure will be an extension of existing fencing, see photo below, the new enclosure will remain within existing paved lot bound with concrete curbs; no change or expansion in hard surface, drainage, parking nor impacts to traffic flow will be caused by this work. The expanded storage will reduce trailer staging by 6 trailer stalls; but no other changes in vehicle parking (247 provided out of 247 required) or loading dock access (53 provided out of 4 required) is caused by this work.



All the best,

Chad Berreau Designer PlanForce 952.512.9554



Doc No A10224470

Certified, filed and/or recorded on Aug 6, 2015 12:00 PM

Office of the County Recorder Hennepin County, Minnesota Martin McCormick, County Recorder Mark Chapin, County Auditor and Treasurer Pkg ID 1278323M

Deputy 30	Pkg ID 1278323M
Attested Copy or Duplicate Original	\$4.00
Document Recording Fee	\$46.00
Document Total	\$50.00

This cover sheet is now a permanent part of the recorded document.

3

13

#### **RESOLUTION #2015-123**

#### RESOLUTION APPROVING A CONDITIONAL USE PERMIT FOR A 10,000 SQUARE FOOT OUTDOOR STORAGE FACILITY LOCATED AT 7601 SETZLER PARKWAY NORTH

#### Planning Commission File #15-118

WHEREAS, Charlie Walker Construction, Inc., on behalf of Graybar Electric and Duke Realty Corporation, has filed application for Conditional Use Permit (CUP #15-118) for a 10,000 square foot fenced and screened outdoor storage facility located at 7601 Setzler Parkway North and legally described as:

#### Lot 001, Block 001, Crosstown North Business Center 12, Hennepin County, Minnesota.

WHEREAS, the matter has been referred to the Planning Commission who have given their advice and recommendation to the City Council; and

WHEREAS, the effect of the proposed use upon the health, safety and welfare of surrounding lands, existing and anticipated traffic conditions and its effect on property values in the neighborhood have been considered.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Brooklyn Park that the Conditional Use Permit for a 10,000 square foot fenced and screened outdoor storage area at 7601 Setzler Parkway North, subject to the following conditions:

- 1. The outdoor storage area must conform to the plans presented to the Planning Commission and City Council.
- 2. The area in which the storage is to be located must be enclosed by a black vinyl-coated chain link fence with privacy screening.
- 3. The area must not be used for the storage of junk vehicles, trash, debris, or other nuisance items as defined elsewhere in the City Code.
- 4. Height of materials, vehicles, or equipment in outdoor storage area shall not exceed the height of the principal structure.
- 5. A building permit must be obtained for the fence.
- 6. The storage area and fencing must not enclose the building's Fire Department connection or block any required emergency exits.

This Conditional Use Permit must be recorded with the Hennepin County Taxpayer Services Department (County Recorder). The use must be in compliance with the conditions listed above and City Code in order to be valid. This approval expires on December 31, 2015, unless all conditions are met. The foregoing resolution was introduced by Mayor Pro Tem Gates seconded by Council Member Jordan.

The following voted in favor of the resolution: Trepanier, Gates, Mata, Jordan and Crema. The following voted against: None.

The following was absent: Parks, Lunde.

Where upon the resolution was adopted.

ADOPTED: June 22, 2015

RICH GATES, MAYOR PRO TEM

#### CERTIFICATE

STATE OF MINNESOTA COUNTY OF HENNEPIN CITY OF BROOKLYN PARK

(SEAL)

I, the undersigned, being the duly qualified City Clerk of the City of Brooklyn Park, Minnesota, hereby certify that the above resolution is a true and correct copy of the resolution as adopted by the City Council of the City of Brooklyn Park on June 22, 2015.

WITNESS my hand officially as such Clerk and the corporate seal of the City this 23<sup>rd</sup> day of June 2015

DEVIN MONTERO, CITY CLERK

#### RESOLUTION #2017-118

#### RESOLUTION APPROVING AN AMENDMENT TO A CONDITIONAL USE PERMIT FOR ADDITIONAL OUTDOOR STORAGE AT 7601 SETZLER PARKWAY NORTH

Planning Commission File #17-110

WHEREAS, Chris Johnson Construction, Inc., on behalf of Graybar Electric and Duke Realty Corporation, has requested an amendment to a Conditional Use Permit for an additional 15,000 square foot fenced and screened outdoor storage facility located at 7601 Setzler Parkway North and legally described as:

Lot 1, Block 1, Crosstown North Business Center 12, Hennepin County, Minnesota.

WHEREAS, the City Council approved Conditional Use Permit #15-118 through Resolution #2015-123 and recorded as Document No. A10224470 for 10,000 square feet of outdoor fenced and screened storage area on June 22, 2015; and

WHEREAS, the matter has been referred to the Planning Commission who have given their advice and recommendation to the City Council; and

WHEREAS, the effect of the proposed use upon the health, safety and welfare of surrounding lands, existing and anticipated traffic conditions and its effect on property values in the neighborhood have been considered.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Brooklyn Park that the Conditional Use Permit for an additional 15,000 square feet of fenced and screened outdoor storage area at 7601 Setzler Parkway North, subject to the following conditions:

- 1. The outdoor storage area must conform to the plans presented to the Planning Commission and City Council.
- 2. The area in which the storage is to be located must be enclosed by a black vinylcoated chain link fence with privacy screening.
- 3. The area must not be used for the storage of junk vehicles, trash, debris, or other nuisance items as defined elsewhere in the City Code.
- 4. Height of materials, vehicles, or equipment in the outdoor storage area shall not exceed the height of the fence.
- 5. A building permit must be obtained for the fence.
- 6. The storage area and fencing must not enclose the building's Fire Department connection or block any required emergency exits.
- 7. The berm along West Broadway is expected to be altered with road construction in 2018-2020. Within one year of completion of work adjacent to the site, the property owner must add trees and shrubs to replace the screening lost during construction.

- 8. The light under the canopy at the southeast entrance must be replaced with a shielded fixture.
- 9. All conditions listed in Resolution #2015-123 remain in effect, unless herein modified.

This Conditional Use Permit must be recorded with the Hennepin County Taxpayer Services Department (County Recorder). The use must be in compliance with the conditions listed above and City Code in order to be valid. This approval expires one year from the date of approval, unless all conditions are met.

The foregoing resolution was introduced by Council Member M. Mata and duly seconded by Council Member Pha.

The following voted in favor of the resolution: B. Mata, Parks, Pha, Lunde, Gates, M. Mata and Jacobson.

The following voted against: None.

The following was absent: None.

Where upon the resolution was adopted.

ADOPTED: June 26, 2017

JEFFREY JONEAL LUNDE, MAYOR

CERTIFICATE

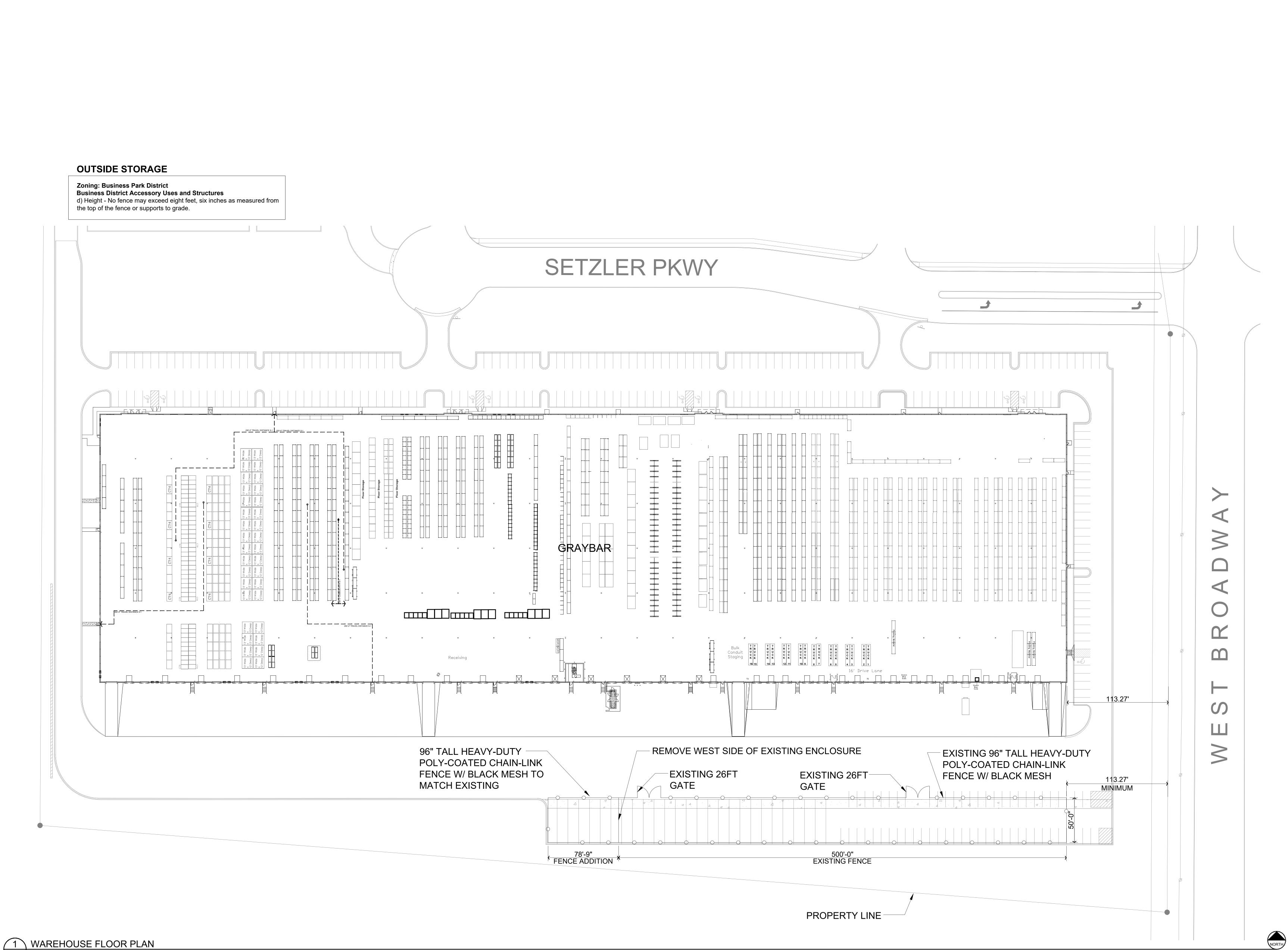
STATE OF MINNESOTA COUNTY OF HENNEPIN CITY OF BROOKLYN PARK

I, the undersigned, being the duly qualified City Clerk of the City of Brooklyn Park, Minnesota, hereby certify that the above resolution is a true and correct copy of the resolution as adopted by the City Council of the City of Brooklyn Park on June 26, 2017.

WITNESS my hand officially as such Clerk and the corporate seal of the City this 27th day of June 2017.

**DEVIN MONTERO, CITY CLERK** 

(SEAL)



1201

# SCALE: 1/32" = 1'-0"



# City of Brooklyn Park Request for Council Action

Request for obtaining Autom				
Aganda Itami	6.2	Meeting Deter	lune 22, 2020	
Agenda Item:	6.2	Meeting Date:	June 22, 2020	
Agenda Section:	Land Use Actions	Originating Department:	Community Development	
Resolution:	x			
Ordinance:	N/A	Prepared By:	Todd A. Larson, Senior Planner	
Attachments:	6	Presented By:	Cindy Sherman, Planning Director	
	"Haymaker Heights" (Abdou Jaiteh of Value Foods, Inc.) – Preliminary Plat #20-113 to			
	Adjust the Property Lines at Zanebrook Shopping Center at 7616-7638 Brooklyn			
Item:	Boulevard and 7609-7635 Welcome Avenue North			

#### City Manager's Proposed Action:

MOTION \_\_\_\_\_\_, SECOND \_\_\_\_\_, TO WAIVE THE READING AND ADOPT RESOLUTION #2020-\_\_\_\_ APPROVING PRELIMINARY AND FINAL PLAT OF "HAYMAKER HEIGHTS" SUBDIVIDING 5.83 ACRES INTO THREE BUSINESS LOTS AND ONE OUTLOT SOUTHWEST OF BROOKDALE DRIVE AND WELCOME AVENUE.

#### Planning Commission Recommendation:

At its meeting on June 10, 2020, the Planning Commission unanimously (7-0) recommended approval of the plat with the conditions that are outlined in the attached resolution.

#### **Overview:**

Zanebrook Shopping Center dates back to 1965 construction and is comprised of five buildings between Brooklyn Boulevard, Welcome Avenue, Brookdale Drive, and Zane Avenue under common private ownership. A sixth building, the Village Creek Police Station, is owned by the City. Two of Zanebrook's buildings are singleoccupant buildings: Value Foods and Angel's Learning Center. One of the tenants, Mr. Jaiteh of Value Foods, has approached the shopping center owner, Mr. Mark Haymaker, to purchase the building and property. In order to sell this building and the land underneath, the Zanebrook parcels need to be replatted so that the building is on its own lot.

The land under the buildings consists of six parcels. These lots do not conform to today's standards and cross through buildings. The proposed plat places Value Foods and Angel's Learning Center on their own lots and two multi-tenant buildings together on one lot. The new property lines are placed in accordance with the International Building Code (IBC) rules regarding separation of walls from property lines. The northwestern building straddles three lots and is not affected by this plat. The applicant is platting the minimum number of parcels necessary to create a lot to accomplish the sale of the affected buildings. With the change in ownership, a shared access and maintenance agreement is required to perpetuate the shared driveways and parking areas serving the shopping center.

The City currently owns a parking easement on a portion of the Zanebrook property for secure parking at the Village Creek Police Station. The buyer has indicated that he does not want any liability for that area, so an outlot is shown for the area currently used with the parking easement. This outlot will be conveyed to the City at no cost since the City paid for that easement at the time of acquisition.

The building containing Angel's Learning Center is served by utilities that run under the Value Foods building. This is a highly unusual private situation that is no longer allowed by today's Code. City Code now requires that all buildings be served directly with public utilities. It is recommended that a private utility easement is recorded to protect the utilities for the Angel's Learning Center building. Any redevelopment of the Angel's site may be required to change where the utilities are accessed.

#### Budgetary/Fiscal Issues:

Park dedication will be collected on the newly platted lots in accordance with City Code. The current rate is \$8,000 per acre for a total of \$43,520 on the three lots proposed.

#### Alternatives to consider:

- 1. Approve the plat as recommended by the Planning Commission.
- 2. Approve the plat with modifications.
- 3. Deny the plat based on certain findings.

#### Attachments:

- 6.2A RESOLUTION
- 6.2B LOCATION MAP
- 6.2C PLANNING AND ZONING INFORMATION
- 6.2D PLANNING COMMISSION MINUTES
- 6.2E LETTER FROM THE APPLICANT
- 6.2F PLANS

#### RESOLUTION #2020-

#### RESOLUTION APPROVING PRELIMINARY AND FINAL PLAT OF "HAYMAKER HEIGHTS" SUBDIVIDING 5.83 ACRES INTO THREE BUSINESS LOTS AND ONE OUTLOT SOUTHWEST OF BROOKDALE DRIVE AND WELCOME AVENUE

#### Planning Commission File #20-113

WHEREAS, the plat of "Haymaker Heights" has been submitted in the manner required for platting of land under the Brooklyn Park Codes and under Chapter 462 of the Minnesota Statutes and all proceedings have been duly had thereunder; and

WHEREAS, said plat is consistent with the Comprehensive Plan and the regulations and requirements of the laws of the State of Minnesota and codes of the City of Brooklyn Park, Chapters 151 and 152.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Brooklyn Park, Preliminary and Final Plat Request #20-113 "Haymaker Heights" shall be approved subject to the following conditions:

#### I. PRELIMINARY PLAT

#### **1.00 DRAWINGS**

1.01 Preliminary plans on file in the City Clerk's office dated 04-28-2020 for two lots upon compliance with the following requirements:

#### 2.00 BONDS, ESCROWS AND DIRECT PAYMENTS

- 2.01 A developer's escrow shall be required in the amount of **\$2,000.00** as required by Chapter 152. The developer's escrow must be posted with the City Treasurer to cover engineering, legal and administrative costs incurred by the City. If this account becomes deficient, it shall be the developer's responsibility to deposit additional funds. This must be done before final bonding obligations are complete.
- 2.02 Payment of any special assessments on the property.

#### 3.00 REQUIRED DOCUMENTS

- 3.01 Approval of Title by the City Attorney and all conditions therein.
- 3.02 Cross access and maintenance agreements must be reviewed by the City Attorney's office and recorded with the plat.
- 3.03 A private utility easement to service the building on Lot 2 from across Lot 3 must be reviewed by the City Attorney's office and recorded with the plat.

#### 4.00 GENERAL CONDITIONS

4.01 It shall be the developer's responsibility to keep active and up to date the developer's contract and financial surety (Letter of Credit, bonds, etc.). These documents must remain active until the developer has been released from any further obligation by City Council motion received in writing from the Engineering Department.

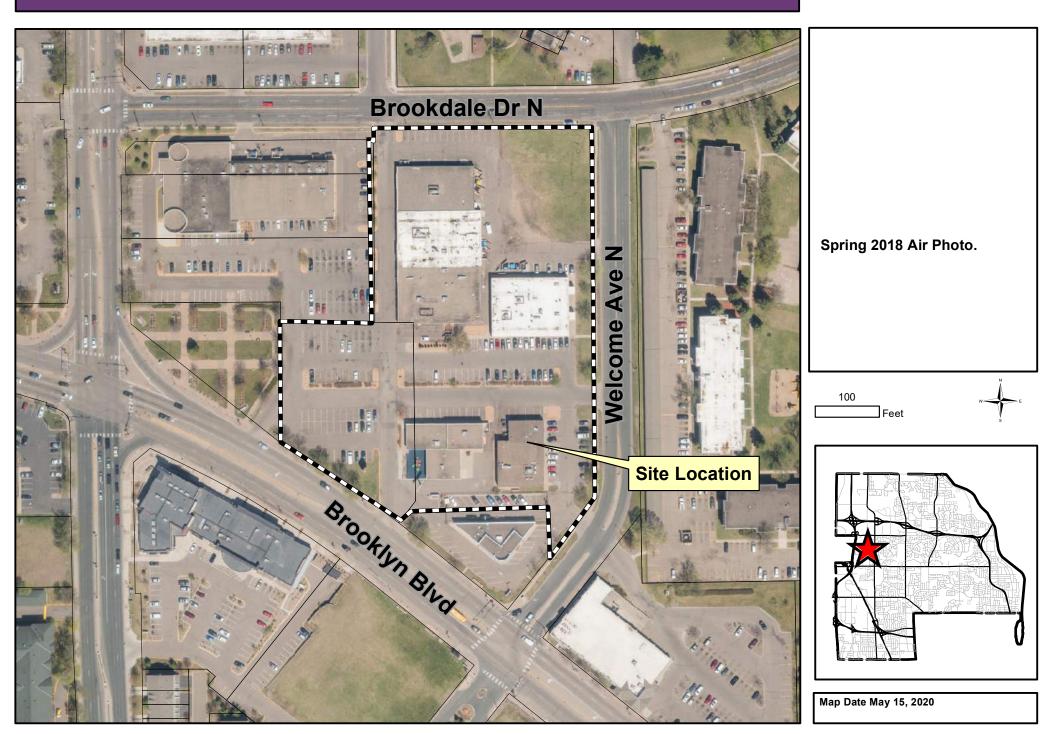
#### II. FINAL PLAT

- 5.01 NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Brooklyn Park, Final Plat Request #20-113 "Haymaker Heights" shall be approved subject to the following conditions:
  - A. Title review by the City Attorney and all conditions therein.
  - B. Easement review by the City Engineer and all conditions therein.
  - C. Per requirements set forth above or as subsequently amended by motion, approving the preliminary and final plat of "Haymaker Heights" which is part of this resolution by reference and is on file and can be examined in the City Clerk's office.
  - D. Submission of a letter from the land surveyor or engineer indicating the square footage contained in each lot on the plat, per Section 151.043, Subdivision J, of the City Code.
  - E. Submission of a CAD copy of the plat.
  - F. Park dedication is required on the amount of \$8,000 per acre for a total of \$43,520. No dedication is required on Outlot A until the time it is replatted. The amounts due are:

Lot 1 – 4.07 acres - \$32,560 Lot 2 – 0.65 acres - \$5,200 Lot 3 – 0.72 acres - \$5,760

BE IT FURTHER RESOLVED that such execution of the certificate upon said plat by the Mayor and City Manager shall be conclusive showing of proper compliance therewith by the sub divider and City officials and shall entitle such plat to be placed on record forthwith without further formality, all in compliance with M.S.A. 462 and the Ordinance of the City.





Land Use Plan	Neighborhood Mixed Use
Current Zoning	Village Redevelopment (VR)
Surrounding Zoning	North – Detached Single- and Attached Two-Family Residential District (R4) East – Multiple Family Residential District (R6) <i>Moonraker Apartments</i> South and West – Village Redevelopment (VR)
Neighborhood	Park Center
Site Area	5.83 acres
Conforms to: Land Use Plan – Yes Zoning Code – Yes Subdivision Code – Ye Variances Needed – N	
Public Notification	96 Mailed Notices SunPost Legal Notices – May 28, 2020 Neighborhood Email Update – Park Center, Village Creek, and Central

#### MINUTES OF THE BROOKLYN PARK PLANNING COMMISSION Regular Meeting – June 10, 2020

#### 1. CALL TO ORDER

The meeting was called to order at 7:00 PM.

#### 2. ROLL CALL/PLEDGE OF ALLEGIANCE

Those present were: Commissioners Aarestad, Herbers, Husain, Kiekow, Kisch, Muvundamina, and Vosberg; Planning Director Sherman; Senior Planner Larson.

Those not present were: Commissioners Mohamed and Morton-Spears; Council Liaison Russell.

#### 6. PUBLIC HEARING

**C.** Haymaker Heights (Abdou Jaiteh of Value Foods, Inc.) – Preliminary and Final Plat #20-113 to adjust the property lines of Zanebrook Shopping Center.

Senior Planner Larson introduced the application that looks to adjust the property lines for a portion of the Zanebrook Shopping Center. He explained the shopping center was constructed in the 1960s on several different parcels which would not be allowed today since there are property lines that run through the buildings in unusual spots while the building code requires a separation of the walls from the property lines. The operator of Value Foods would like to purchase the building and land at 7609 Welcome Ave N for his business which requires a new parcel to be created. However, to ensure the other buildings remain conforming, a total of three parcels are being replatted so the property lines match up with the buildings. He explained once this is completed there will be no visual change to the shopping center, this is just a change in property lines and landownership. Staff recommends approval.

Royce Durham, a representative for the applicant with KW Commercial at 7201 Walker Street in St. Louis Park, introduced himself to the Commission for any questions. He didn't have anything to add to the staff presentation.

Abdou Jaiteh, the applicant, also introduced himself to the Commission explaining he is the party interested in purchasing the building.

Royce Durham explained Brian Alton is the attorney representing Abdou Jaiteh but notified Royce he is muted on the call. Royce asked if someone could unmute Brain.

Brain Alton, 951 Grand Ave in St. Paul, introduced himself to the Commission as the attorney for Abdou Jaiteh and Value Foods.

Commissioner Chair Kisch opened the public hearing.

Explaining no one pre-registered to speak on this item, Commissioner Kisch closed the public hearing while encouraging community members to send any comments to Planning Staff.

Commissioner Kiekow asked what happens if there is a problem with the utility lines that are shared between properties.

Brian Alton explained there would be an easement agreement to allow for service, maintenance, repair, and replacement as necessary.

Commissioner Kiekow asked who the parties to the easement agreement would be.

Brian Alton stated in addition to Value Foods as a party, the agreement would also include the owner of Haymaker Heights and the rest of Zanebrook Shopping Center.

Commissioner Kiekow asked if there would be a provision that the easement agreement would transfer to the owner of the property if it is sold.

Brian Alton confirmed this was correct, he explained the easement agreement would run with the land for both properties. If there is a conveyance of that property, the new owner would get the benefit of it. Commissioner Kiekow asked if the outlot that will be conveyed to the City in a parking easement means the City will be responsible for maintaining the blacktop and general site conditions.

Brian Alton confirmed this was correct. He explained there are portions of the outlot on the east and west side that are part of Haymaker Heights, so there is an easement to travel across lots 2 and 3 to get to the outlot. The owner of the outlot only has to take care of the outlot property, not the ingress and egress to the east and west which will be the obligation of the respective property owners.

Commissioner Kiekow asked how this would impact snow removal.

Brian Alton explained snow removal is part of the expected maintenance for the site.

Commissioner Kiekow asked if the existing owners would take care of maintenance.

Brian Alton confirmed this was correct.

Commissioner Chair Kisch asked City Staff how the lot sizes and setbacks compare to new lots with new buildings relative to future development. He asked if there are any limitations created by the property lines on the plat as it currently exists.

Senior Planner Larson explained the site is zoned Village Redevelopment which doesn't have a minimum lot size, so there are no concerns about the area or frontage of the lot. He noted the site could certainly be redeveloped, and the buildings could potentially larger than the existing buildings. However, any sort of redevelopment would have to come back to the City for approval.

MOTION <u>HERBERS</u>, SECOND <u>VOSBERG</u> TO RECOMMEND APPROVAL OF PLAT #20-113 FOR "HAYMAKER HEIGHTS" SUBDIVIDING 5.83 ACRES INTO FOUR PARCELS SOUTHWEST OF BROOKDALE DRIVE AND WELCOME AVENUE, SUBJECT TO CONDITIONS IN THE DRAFT RESOLUTION.

MOTION CARRIED UNANIMOUSLY.

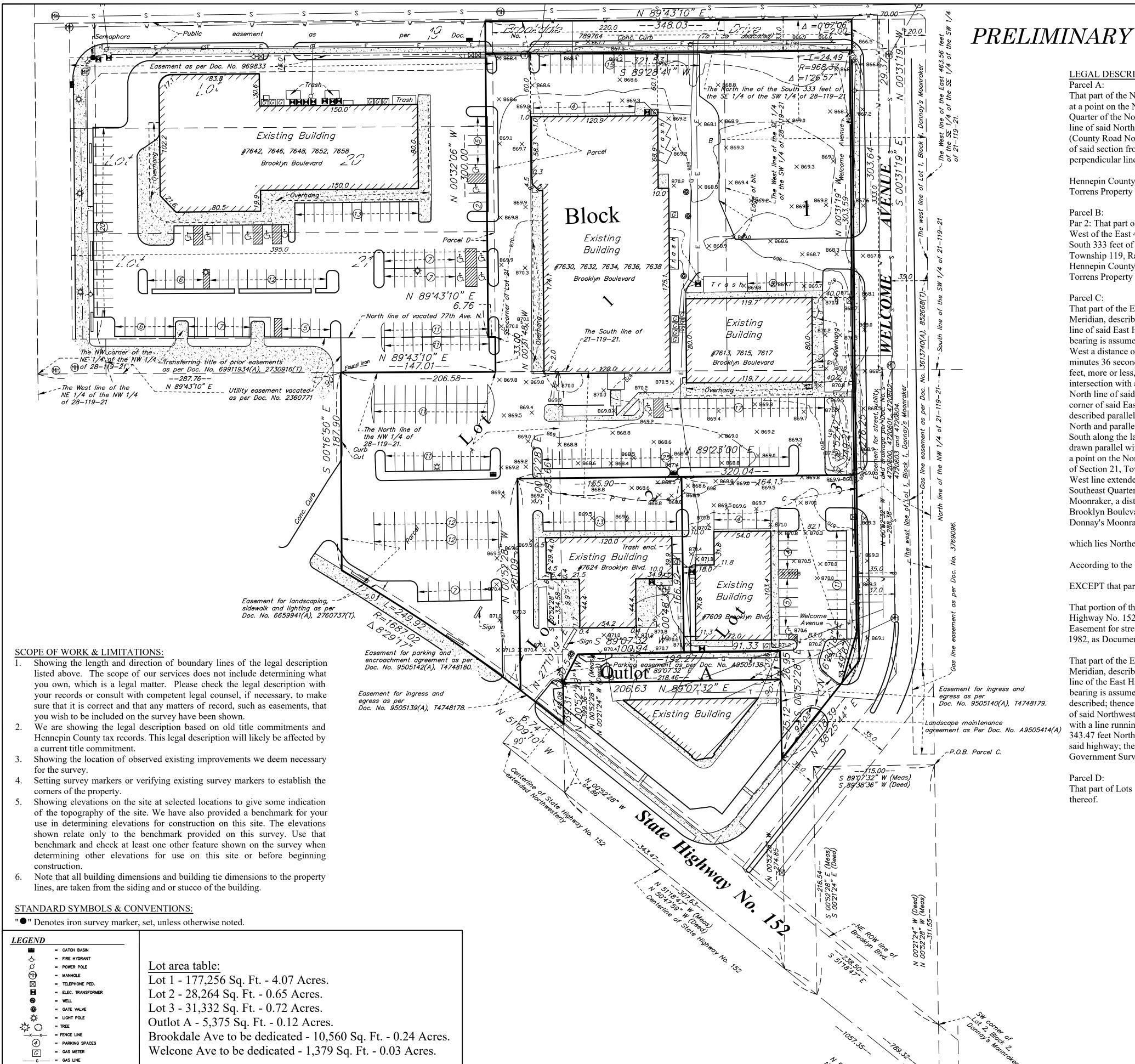
#### 6.2E LETTER FROM THE APPLICANT Page 9

#### Letter of Request

This letter of request is submitted on behalf of the Applicant, Abdou Jaiteh of Value Foods, Inc. The current Property Owner is Pea Soup Properties, LLC. The Applicant and current Property Owner have hired real estate professionals and a design team to assist with this project. The contact information of these professionals is listed on the following page.

**Project:** Applicant is the local owner of Value Foods African Market, a local grocery store dedicated to providing the community of Brooklyn Park the very-best authentic African foods and products. Value Foods African Market is currently a tenant of the 7609 Welcome Ave. Building, which is depicted in Exhibit A. Applicant desires to purchase the 7609 Welcome Ave Building from its current landlord, Pea Soup Properties, LLC. As shown in Exhibit A, the 7609 Building is currently located on a parcel with 3 other buildings. To accomplish this purchase, the property must be re-platted to create a separate parcel and legal description for the 7609 Building.

In addition, the Applicant and the existing Property Owner desire to create an outlot for the area highlighted in yellow in Exhibit A. This area represents an existing, permanent parking easement that benefits the City of Brooklyn Park on the south side of the property. The Applicant and the current Property Owner cannot use this easement area for their businesses, so they desire to create an outlot and convey it, at no charge, to the City of Brooklyn Park.

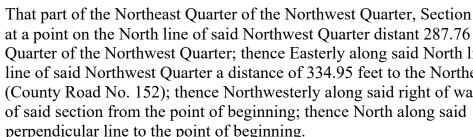


------ ST----- = STORM DRAIN LINE ------ E ------ = OVERHEAD UTILITY LINE

- CONCRETE SURFACE



### LEGAL DESCRIPTION:



Hennepin County, Minnesota

#### Parcel B:

Par 2: That part of the South 333 feet of the Southeast Quarter of the Southeast Quarter lying West of the East 463.56 feet of the said Southeast Quarter of the Southeast Quarter of the Southwest Quarter; also the South 333 feet of the East 220 feet of the West Half of the Southeast Quarter of the Southwest Quarter; Section 21, Township 119, Range 21. Hennepin County, Minnesota

Torrens Property

Parcel C:

That part of the East Half of the Northwest Quarter, Section 28, Township 119 North, Range 21 West of the 5th Principal Meridian, described as follows: Commencing at the intersection of the center line of State Highway No. 152 and the East line of said East Half of the Northwest Quarter of Section 28; thence North 50 degrees 47 minutes 59 seconds West (said bearing is assumed) along said center line for a distance of 601.25 feet; thence North 0 degrees 21 minutes 24 seconds West a distance of 311.55 feet to the actual point of beginning of the tract to be described; thence South 89 degrees 38 minutes 36 seconds West a distance of 115 feet; thence South 0 degrees 21 minutes 24 seconds East, a distance of 216.56 feet, more or less, to said center line; thence North 50 degrees 47 minutes 59 seconds West along said center line to its intersection with a line drawn parallel with the East line of said East Half of the Northwest Quarter from a point on the North line of said East Half of the Northwest Quarter, said point being 494.34 feet (29.96 rods) East of the Northwest corner of said East Half of the Northwest Quarter; thence North 0 degrees 21 minutes 24 seconds West along the last described parallel line to the last described point; thence East along said North line to its intersection with a line drawn North and parallel with the East line of said East Half of the Northwest Quarter from the actual point of beginning; thence South along the last described line to the actual point of beginning, except that part which lies Southeasterly of a line drawn parallel with and 35 feet Southeasterly of (measured at right angles to) the following described line: Commencing at a point on the North line of the South 333 feet of the Southeast Quarter of the Southwest Quarter of Section 21, Township 119, Range 21 distant 35 feet West of the West line of Lot 1, Block 1, Donnay's Moonraker (said West line extended North) thence South parallel to said West line of Donnay's Moonraker to the South line of the Southeast Quarter of the Southwest Quarter of Section 21; thence Southerly parallel to said West line of Donnay's Moonraker, a distance of 288.38 feet; thence in a Southwesterly direction to a point on the North right of way line of Brooklyn Boulevard said point being a distance of 238.50 feet Northwesterly of the Southwest corner of Lot 2, Block 1, Donnay's Moonraker, as measured along the Northeast right of way line of Brooklyn Boulevard and there terminating;

which lies Northeasterly of the Northeasterly right of way line of State Highway No. 152.

According to the United States Government Survey thereof and situate in Hennepin County, Minnesota.

EXCEPT that part of the foregoing described property that lies within the following property:

That portion of the following described property which lies Northeasterly of the Northeasterly right of way line of State Highway No. 152 and which lies Northwesterly of the Northwesterly boundary of Welcome Avenue as created pursuant to Easement for street, utility and drainage purposes granted to the City of Brooklyn Park dated May 17, 1982, filed June 7, 1982, as Document Nos. 4720600, 4720601, 4720603 and 4720604:

That part of the East Half of the Northwest Quarter, Section 28, Township 119 North, Range 21 West of the 5th Principal Meridian, described as follows: Commencing at the intersection of the center-line of State Highway No. 152 and the East line of the East Half of the Northwest Quarter of Section 28; thence North 50 degrees 47 minutes 59 seconds West (said bearing is assumed) along said center-line for a distance of 789.32 feet to the actual point of beginning of the tract to be described; thence North parallel with the East line of said East line of said East Half of said Northwest Quarter a distance of 274.85 feet; thence West at right angles a distance of 218.46 feet to its intersection with a line running Northeasterly at a right angle to the centerline of State Highway No. 152 from a point in said centerline 343.47 feet Northwest of the point of beginning; thence Southwesterly along said last described line to the centerline of said highway; thence Southeasterly along said centerline to the point of beginning, according to the United States Government Survey thereof and situate in Hennepin County, Minnesota.

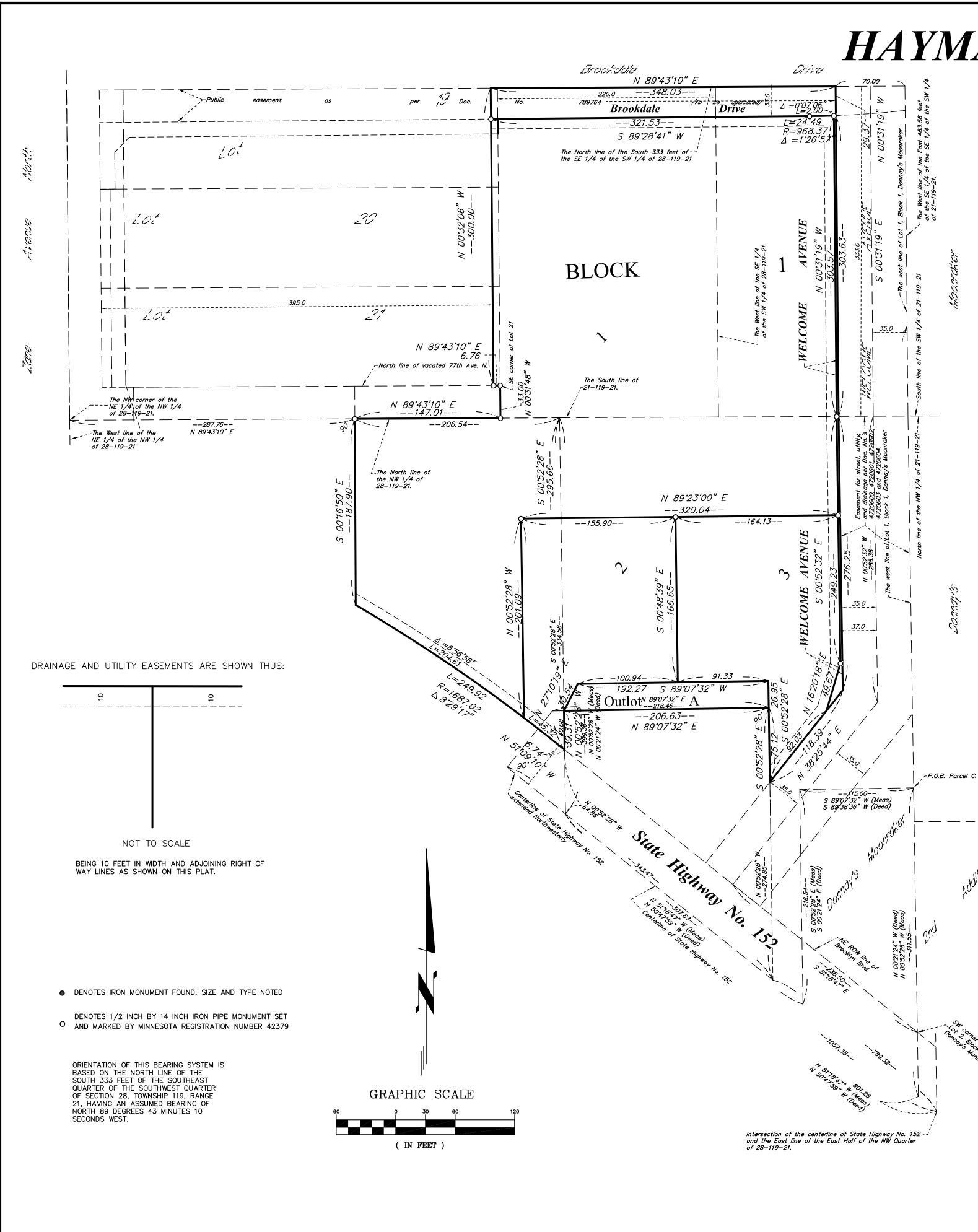
Parcel D:

That part of Lots 19 through 21, LOWELL'S ADDITION, Hennepin County, Minnesota, lying East of the West 395 feet thereof.

That part of the Northeast Quarter of the Northwest Quarter, Section 28, Township 119, Range 21 described as beginning at a point on the North line of said Northwest Quarter distant 287.76 feet East of the Northwest corner of said Northeast Quarter of the Northwest Quarter; thence Easterly along said North line 206.58 feet; thence Southerly parallel with the East line of said Northwest Quarter a distance of 334.95 feet to the Northeasterly right of way line of Brooklyn Boulevard (County Road No. 152); thence Northwesterly along said right of way line to a line drawn perpendicular to the North line

	dvance
Survey	/ing & Engineering, Co.
Mi	17917 Highway 7 nnetonka, Minnesota 55345 Phone (952) 474-7964 Web: www.advsur.com
REPORT WAS DIRECT SUPE REGISTERED	9
	28, 2020
DRAWING	ORIENTATION & SCALE
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DATE	REVISION DESCRIPTION
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SHEET 1 OF 1



# HAYMAKER HEIGHTS

KNOW ALL PERSONS BY THESE PRESENTS: That Pea Soup Propertiesm LLC, a Minnesota limited liability company following described property:

#### LEGAL DESCRIPTION: Parcel A:

That part of the Northeast Quarter of the Northwest Quarter, Section 28, Township 119, Range 21 described as beginning line of said Northwest Quarter distant 287.76 feet East of the Northwest corner of said Northeast Quarter of the Northwest along said North line 206.58 feet; thence Southerly parallel with the East line of said Northwest Quarter a distance of 334 Northeasterly right of way line of Brooklyn Boulevard (County Road No. 152); thence Northwesterly along said right of perpendicular to the North line of said section from the point of beginning; thence North along said perpendicular line to the point of beginning.

Hennepin County, Minnesota Torrens Property

Parcel B:

Par 2: That part of the South 333 feet of the Southeast Quarter of the Southeast Quarter of the Southwest Quarter lying W of the said Southeast Quarter of the Southeast Quarter of the Southwest Quarter; also the South 333 feet of the East 220 f Southeast Quarter of the Southwest Quarter; Section 21, Township 119, Range 21. Hennepin County, Minnesota

#### Parcel C:

Torrens Property

That part of the East Half of the Northwest Quarter, Section 28, Township 119 North, Range 21 West of the 5th Principal follows: Commencing at the intersection of the center line of State Highway No. 152 and the East line of said East Half of Section 28; thence North 50 degrees 47 minutes 59 seconds West (said bearing is assumed) along said center line for thence North 0 degrees 21 minutes 24 seconds West a distance of 311.55 feet to the actual point of beginning of the tract South 89 degrees 38 minutes 36 seconds West a distance of 115 feet; thence South 0 degrees 21 minutes 24 seconds East, more or less, to said center line; thence North 50 degrees 47 minutes 59 seconds West along said center line to its interse parallel with the East line of said East Half of the Northwest Quarter from a point on the North line of said East Half of the point being 494.34 feet (29.96 rods) East of the Northwest corner of said East Half of the Northwest Quarter; thence Nor seconds West along the last described parallel line to the last described point; thence East along said North line to its inte North and parallel with the East line of said East Half of the Northwest Quarter from the actual point of beginning; thenc described line to the actual point of beginning, except that part which lies Southeasterly of a line drawn parallel with and (measured at right angles to) the following described line: Commencing at a point on the North line of the South 333 feet of the Southwest Quarter of Section 21, Township 119, Range 21 distant 35 feet West of the West line of Lot 1, Block 1, (said West line extended North) thence South parallel to said West line of Donnay's Moonraker to the South line of the S Southwest Quarter of Section 21; thence Southerly parallel to said West line of Donnay's Moonraker, a distance of 288.3 Southwesterly direction to a point on the North right of way line of Brooklyn Boulevard said point being a distance of 23 of the Southwest corner of Lot 2, Block 1, Donnay's Moonraker, as measured along the Northeast right of way line of Bro there terminating;

which lies Northeasterly of the Northeasterly right of way line of State Highway No. 152.

According to the United States Government Survey thereof and situate in Hennepin County, Minnesota.

EXCEPT that part of the foregoing described property that lies within the following property:

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Parcel D: That part of Lots 19 through 21, LOWELL'S ADDITION, Hennepin County, Minnesota, lying East of the West 395 feet

Have caused the same to be surveyed and platted as HAYMAKER HEIGHTS and do hereby dedicate to the public for pu and the drainage and utility easements as created by this plat.

In witness whereof said Pea Soup Properties, LLC, a Minnesota limited liability company has caused these presents to be officer this \_\_\_day of \_\_\_\_\_, 20\_\_\_.

Pea Soup Properties, LLC

Mark Henley Haymaker, President

STATE OF MINNESOTA COUNTY OF

This instrument was acknowledged before me this day of \_\_\_\_, 20\_\_\_\_ by Mark Henley Haymaker, Pres Properties, LLC, a Minnesota limited liability company.

(Signature)

#### (Print)

Notary Public, County, Minnesota My Commission Expires

# R.T. DOC. NO. \_\_\_\_\_ C.R. DOC. NO. \_\_\_\_\_

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	Mayor	City Manager	
	STATE OF MINNESOTA		
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	The instrument was acknowledged before me this xxxxxxxx, City Manager, of the City of Brooklyn F	Park, a Minnesota municipal corporatio	n, on behalf of the corporation.
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on with a line drawn Northwest Quarter, said 0 degrees 21 minutes 24	Notary Public, County, Minn My Commission Expires	iesota	
ection with a line drawn South along the last 5 feet Southeasterly of	I, Thomas M. Bloom, do hereby certify that this plat Licensed Land Surveyor in the State of Minnesota; t		
the Southeast Quarter onnay's Moonraker theast Quarter of the	mathematical data and labels are correctly designate be correctly set within one year; that all water bound	d on this plat: that all monuments depid laries and wet lands, as defined in Mini	cted on this plat have been or winesota Statutes Section 505.01,
eet; thence in a 50 feet Northwesterly clyn Boulevard and	Subd. 3, as of the date of this certificate are shown as this plat.		ays are snown and ladeled on
Tyn Douevard and	Dated thisday of	20	
	Thomas M. Bloom, Licensed Land Surveyor Minnesota License Number 42379		
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	CITY COUNCIL, CITY OF BROOKLYN PARK, M	/INNESOTA	
igned by its proper	This plat of HAYMAKER HEIGHTS was approved, 20	by the City of Brooklyn Park, Minnes	ota, this day of
	Mayor	City Manager	
	RESIDENT AND REAL ESTATE SERVICES, Her I hereby certify that taxes payable in 201_ and prio		ed on this Plat, dated this
	day of, 20 Mark V. Chapin, Hennepin County Auditor	_	
ent of Pea Soup			, Deputy
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ent of Pea Soup	SURVEY DIVISION, Hennepin County, Minnesota		
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ent of Pea Soup	SURVEY DIVISION, Hennepin County, Minnesota Pursuant to MN. STAT. Sec. 383B.565 (1969), this 20 Chris F. Mavis, County Surveyor By	plat has been approved this	

# City of Brooklyn Park Request for Council Action

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Agenda Item:	6.3	Meeting Date:	June 22, 2020
		Originating	
Agenda Section:	Land Use Actions	Department:	Community Development
		•	
Resolution:	Х		
Ordinance:	N/A	Prepared By:	Todd A. Larson, Senior Planner
Attachments:	7	Presented By:	Cindy Sherman, Planning Director
	The Lodge (Valerian LLC) - Conditional Use Permit #20-111 and Variances for a		
Item:	Residential Care Facility at 7711-7715 Humboldt Avenue North		

#### City Manager's Proposed Action:

MOTION \_\_\_\_\_, SECOND \_\_\_\_\_, TO WAIVE THE READING AND ADOPT RESOLUTION #2020-\_\_\_\_ APPROVING CONDITIONAL USE PERMIT FOR A RESIDENTIAL CARE FACILITY WITH VARIANCES AT 7711-7715 HUMBOLDT AVENUE NORTH.

#### Planning Commission Recommendation:

At its meeting on June 10, 2020, the Planning Commission unanimously (7-0) recommended approval of the conditional use permit and variances with the conditions that are outlined in the attached resolution.

#### **Overview:**

Mr. Jonathan Sondergaard owns and operates two sets of twin-home style residential care facilities at 7719-23 and 7727-31 Humboldt Avenue (collectively called *The Lodges*) and recently purchased a small office building at 7711 Humboldt Avenue. The office building has been vacant for several years. The applicant is proposing to remove the office building and replace it with another twin-home style residential care facility to create a campus feel to their care facility buildings. This site is zoned Neighborhood Retail Business District (B2) where this use is allowed with a conditional use permit.

Additionally, the property does not conform to the lot area and width requirements of the B2 district. Though a legal lot of record, the applicant is requesting variances to protect their investment. Furthermore, the placement of new building on the lot will need setback variances.

#### Budgetary/Fiscal Issues: N/A

#### Alternatives to consider:

- 1. Approve the proposal as presented.
- 2. Approve the proposal with modifications.
- 3. Deny the proposal based on certain findings.

#### Attachments:

- 6.3A RESOLUTION
- 6.3B LOCATION MAP
- 6.3C PLANNING AND ZONING INFORMATION
- 6.3D PHOTOS
- 6.3E PLANNING COMMISSION MINUTES
- 6.3F LETTER FROM THE APPLICANT
- 6.3G PLANS

#### **RESOLUTION #2020-**

#### RESOLUTION APPROVING CONDITIONAL USE PERMIT FOR A RESIDENTIAL CARE FACILITY WITH VARIANCES AT 7711-7715 HUMBOLDT AVENUE NORTH

Planning Commission File #20-111

WHEREAS, an application has been made by Mr. Michael Margulies of Valerian LLC representing Jonathan Sondergaard for a Conditional Use Permit with variances under the provisions of the City Code on property legally described as:

The North 108.8 feet of the South 326.8 feet of the East 199.82 feet of the East half of the East half of the Southeast quarter of Section 23, Township 119, Rage 21, Hennepin County, Minnesota, except road

Being Registered land as is evidenced by Certificate of Title No. 1378034

WHEREAS, *Brooklyn Park 2025* goals include Beautiful Places with quality housing for all ages and incomes; and

WHEREAS, this project provides housing and care for vulnerable populations in the community; and

WHEREAS, the effect of the proposed use upon the health, safety, and welfare of surrounding lands, existing and anticipated traffic conditions, and its effect on the neighborhood have been considered; and

WHEREAS, the matter has been referred to the Planning Commission who held the public hearing on June 10, 2020.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Brooklyn Park:

The Conditional Use Permit for a 12-bed care center facility is hereby approved with the following conditions:

#### 1.00 DRAWINGS

- 1.01 Site, utility, landscaping, and grading plans on file in the City Clerk's office dated 04-24-2020 are approved, subject to conditions listed below.
- 1.02 Architectural plans dated 04-29-2020, are approved, subject to conditions listed below.

#### 2.00 BONDS, ESCROWS AND DIRECT PAYMENTS

2.01 A Development Contract and bonding shall be required as a development bond or letter of credit in the amount of **\$77,900.00**, a cash bond in the amount of **\$4,100.00**, and a developer's escrow in the amount of **\$2,400.00** as required by Chapter 152. The developer's escrow must be posted with the City to cover engineering, legal and administrative costs incurred by the City. If this account becomes deficient, it shall be the developer's responsibility to deposit additional funds. This must be done before final bonding obligations are complete.

#### 3.00 REQUIRED DOCUMENTS

- 3.01 All utility construction, drainage, grading and development plans must be approved by the City Engineer prior to receiving a building permit.
- 3.02 A comprehensive search shall be performed to identify any existing wells on the property. A licensed well driller shall properly abandon any unused wells in the plat. Such abandonment shall be reviewed and approved by the Minnesota Department of Health.
- 3.03 Storm water approval by the City Engineer per Shingle Creek Watershed Management Commission rules and all conditions therein, including a storm water management maintenance agreement.
- 3.04 A State of Minnesota Housing with Services license is required for the operation of the facility. All conditions of the licensing procedures shall apply.
- 3.05 A cross-access and maintenance agreement must be approved by the City Attorney's office and recorded against the property and the other two properties (Lot 1 and Lot 2, Community Home Addition) that share the driveway.

#### 4.00 GENERAL CONDITIONS

- 4.01 It shall be the developer's responsibility to keep active and up to date the developer's contract and financial surety (Letter of Credit, bonds, etc.). These documents must remain active until the developer has been released from any further obligation by City Council motion received in writing from the Engineering Department.
- 4.02 Before final bonding obligations are released, a certificate signed by a registered engineer must be provided. This certificate will state that all final lot and building grades are in conformance to drainage development plan(s) approved by the City Engineer.
- 4.03 No burying of construction debris shall be permitted on the site.
- 4.04 Dust control measures must be in place to prevent for dust and erosion including, but not limited to, daily watering, silt fences, and seeding. The City Engineer may impose measures to reduce dust.
- 4.05 Adequate dumpsters must be on site during construction of streets, utilities, and buildings. When full, they must be emptied immediately or replaced with an empty dumpster.
- 4.06 Snow must not be stored on any parking space. In the event landscaped areas or storm water basins are full, snow must be hauled off site.
- 4.07 The lap siding must be an upgraded product such as LP Smartside, Hardie, or steel instead of vinyl to meet the Class-I material requirements of the B2 zoning district.
- 4.08 All lighting must meet City Code requirements. The lighting plan must be submitted prior to building permit showing parking and pedestrian areas meet 1.0 foot-candle light levels. All lighting must be downcast and shielded and freestanding lighting is limited to a 15-foot mounting height.
- 4.09 The property owner is responsible for maintaining and irrigating the grass and landscaping in the adjacent boulevards.

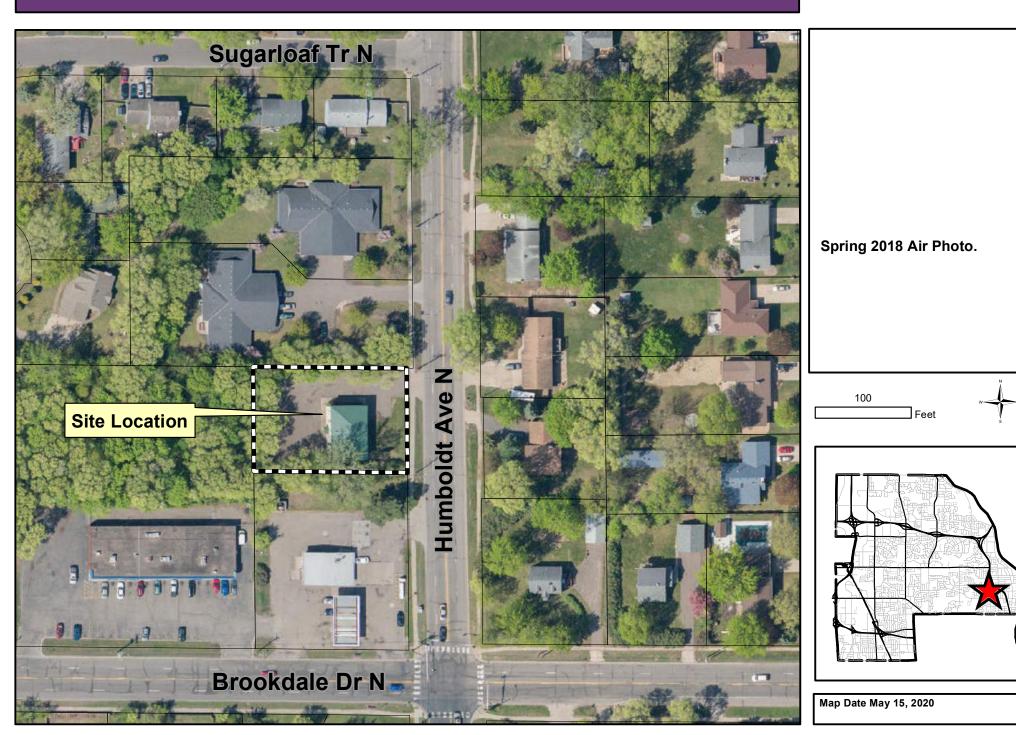
#### **5.00 VARIANCES**

BE IT FURTHER RESOLVED by the City Council of the City of Brooklyn Park that variances to lot area, width, and setbacks be approved as follows:

- 5.01 A lot area of 21,744 square feet is approved based on the lot being an existing lot of record that had a structure on it.
- 5.02 A lot width of 108 feet is approved based on the lot being an existing lot of record that had a structure on it.
- 5.03 A setback of 28 feet 9 inches from the edge of the Humboldt Avenue right-of-way as this setback is not out of character of other side-yard corner lot residential properties in the immediate area.
- 5.04 A setback of 10 feet from the west property line as this line acts as an internal side property line with the orientation of the structure.
- 5.05 All four variances together constitute a reasonable redevelopment of the property in relation to the associated two properties to the north.

### Conditional Use Permit #20-111 Valerian LLC The Lodge 7711 Humboldt Ave. N.





Land Use Plan	Neighborhood Mixed Use	
Current Zoning	Neighborhood Retail Business District (B2)	
Surrounding Zoning	North – Detached Single- and Attached Two-Family Residential District (R4) East – Detached Single-Family Residential District (R3) South and West – Neighborhood Retail Business District (B2)	
Neighborhood	Norwood	
Site Area	0.4 acres	
Building Area	6,000 ft²	
Number of Units	2 units with 6 beds each	
Conforms to: Land Use Plan – Yes Zoning Code – Yes Variances Needed – T	o front setback, rear setback, lot area, and lot width	
Public Notification	72 Mailed Notices SunPost Legal Notices – May 28, 2020 1 Proposed Development Sign Neighborhood Update Email – Norwood, Palmer Lake, and Monroe	

#### Proposed Use and Building Design

The applicant owns the two sets of residential care center buildings to the north at 7719-23 and 7727-31 Humboldt Avenue. The applicant is proposing to remove the existing vacant split entry office building and replacing it with a similar building as the existing care center buildings. The proposed use falls into the category called "Care centers, convalescent homes, hospitals, and assisted living facilities," a conditional use within the B2 zoning district.

The two existing buildings are laid out in an L-shaped configuration. The proposed third building would face north creating a U-shaped configuration in a campus setting.

The proposed building would be constructed as a side-by-side one-level twin home. Each half would have six bedrooms allowing residents to be grouped according to care needs. The eastern half would have a meeting space instead of a garage.

The façade materials would match the existing buildings with brick, lap siding, and shakes. On a commercial building, two Class-I materials are required. The brick wainscot would count as one material. If an upgraded material such as LP Smartside, Hardie, or steel were used instead of traditional vinyl siding, then the architectural requirements will be met.

#### Access and Parking

The office building has a driveway onto Humboldt Avenue toward the northern property line. This curb cut is proposed to be reused with a new driveway that will loop northward to meet the shared driveway of the existing twinhomes. This configuration will allow for better circulation for mobility vans or buses that currently need to turn around.

Two parking spaces are available in the proposed garage and four spaces outside of the proposed building. The other buildings combined have eight enclosed spaces and eight available in front of the garages. The applicant has indicated that the combined 22 parking spaces meets the shared staffing and visitor needs for the

facility. The residents of the facility do not drive. The requirement for the number of parking spaces for the combined site is six for the units and fourteen for staff for a total of twenty.

The existing shared driveway for the two twinhomes was designed under the R4 standards and does not have concrete curbing. Curbing is typically required for commercial properties. It is recommended that either a flat curb or surmountable curbing is added to the areas of new construction.

#### Landscaping and Screening

The applicant has submitted a landscape plan that meets City Code requirements. To the south of the property is the Amstar gas station. In May, the City Council approved plans to redevelop that site. Those plans included a privacy fence along the property line with the proposed care facility.

#### Variances

The applicant is requesting some variances with the project and has laid out justifications for each in his attached letter. The property is an existing lot of record that does not meet the area and width requirements of a B2 lot. Though the property can legally be used, the applicant is requesting the variance to safeguard legal status. City Code states that nonconforming lots may be combined with other parcels to make a conforming lot. In this case, the applicant owns the adjacent two oversized properties. Those properties, however, are in a different zoning district and have different financing, so combination is not easily possible. Since the parcel is being set up to interact with the adjacent parcels rather than stand alone, staff is comfortable recommending that the variances be granted.

The setback variances are due to the differences between the standards for a commercial property (50-foot front) and a residential property (30-foot front *or* 20-foot side adjacent to right-of-way). The way the structure is positioned on the lot has Humboldt Avenue acting as a side street instead of a front. Up Humboldt Avenue, other homes on corner lots at Sugarloaf Trail and at 78<sup>th</sup> Avenue have the reduced side yard setbacks, so the proposed 28.6-foor setback will not be out of character. The west property line is acting as an internal side (10 feet required) instead of a rear (30 feet required). Staff is recommending approval of the setbacks as proposed. The following table is a summary of the four variances:

	Required	Proposed
Lot Area	25,000 ft <sup>2</sup>	21,744 ft <sup>2</sup>
Lot Width	125 ft	108 ft
Front Setback (east)	50 ft	28.6 ft
Rear Setback (west)	30 ft	10 ft

#### Lighting

The applicant provided a lighting plan that is residential in character. Since this is a business district, the flood lights shown must be replaced with downcast and shielded light fixtures.

#### Utilities

Water and sanitary sewer services will be provided to the building from under Humboldt Avenue according to City requirements.



Photo 1. The existing building at 7711 Humboldt Ave. N. (06-02-2020). To be demolished.



Photo 2. The 7727-31 Humboldt Ave. building (06-02-2020).

#### MINUTES OF THE BROOKLYN PARK PLANNING COMMISSION Regular Meeting – June 10, 2020

#### 1. CALL TO ORDER

The meeting was called to order at 7:00 PM.

#### 2. ROLL CALL/PLEDGE OF ALLEGIANCE

Those present were: Commissioners Aarestad, Herbers, Husain, Kiekow, Kisch, Muvundamina, and Vosberg; Planning Director Sherman; Senior Planner Larson.

Those not present were: Commissioners Mohamed and Morton-Spears; Council Liaison Russell.

#### 6. PUBLIC HEARING

**A.** The Lodge (Valerian LLC) – Conditional Use Permit and Variance #20-111 for a residential care facility within a twin-home style building.

Senior Planner Larson introduced the application that will redevelop an office building on Humboldt Ave to construct an additional group home that will be similar to two existing pairs of twin-homes to the north, also group homes owned by Valerian LLC. He said the additional group home will complete a small campus of care facilities. The existing driveway would remain that will create a horseshoe loop for better access for larger vehicles that come to the site, such as emergency vehicles, garbage trucks, and transportation vans. Since the proposed lot is zoned B2, a residential care facility use is allowed with a conditional use permit. The other component of the request includes two variances. One variance will be used for the existing slightly smaller and narrower lot than what is typical for the B2 zoning district today. The second variance will allow for adjustments to required setbacks due to constraints of the property lines in relation to the lay-out of the proposed structure. He explained the setback from Humboldt Ave is not out of character with other buildings in the neighborhood as other residential properties have a setback of 20 feet, and the proposal requests a setback of 28 feet. He noted the landscaping plan is fairly robust while meeting all the zoning code requirements for B2.

Michael Marguiles, a representative of Valerian LLC, introduced himself to the Commission along with other representatives on the call: Dean Dovolis, an architect for Valerian LLC, and Jonathon Sondergaard, the property owner. He clarified that Valerian LLC is the project manager, but the property is owned by Mr. Sondergaard's company known as The Lodges. He added the applicant accepts all of the conditions specified in the staff report, particularly condition #4.07 which requires the siding is upgraded to a Class 1 material. He reiterated that the new building would complete a three-building campus for The Lodges. The new building will house 10-12 residents requiring acute medical assisted living. He explained the existing two buildings have operated for a significant period of time without any issues.

Commissioner Chair Kisch opened the public hearing explaining community members were asked to pre-register in order to participate in the public hearing since the meeting is being held via teleconference.

Stating that no one pre-registered to speak for this item, Commissioner Chair Kisch closed the public hearing. He reminded those listening to the meeting that they can still submit comments to Planning Staff in order to be included in the recommendation forwarded to City Council later in June.

Commissioner Kiekow explained he saw a group of people smoking cigarettes on the corner of the street when he drove by last week. He asked if there was a better place for people to smoke other than along the City street.

Dean Dovolis explained the new building will have additional space for staff to take breaks such as a patio in the back to prevent this from happening in the future.

Commissioner Kiekow added that one of the individuals was in a wheelchair, and that a patio for staff and residents will avoid an unsightly congregation area out on the street.

Dean Dovolis reiterated there will be patios in the rear of the property to provide an outdoor space.

Jonathan Sondergaard reiterated that will be a designated smoking area, and he will also be speaking with his staff in the meantime to make sure this isn't a concern going forward.

Commissioner Vosberg asked if the fence in the renderings will be constructed on the south and west sides of the property.

Dean Dovolis confirmed the fence will be against neighboring commercial properties.

Commissioner Vosberg asked for the planned height of the fence.

Dean Dovolis answered the fence will probably be 5 feet maximum. He added the fence will define the property for the residents while providing separation from commercial properties to the south and west.

Commissioner Vosberg asked City Staff to confirm that a recent proposal to a neighboring property also required a fence.

Senior Planner Larson confirmed the Conditional Use Permit in question included a condition for a 6-foot fence.

Commissioner Vosberg asked if there would be two fences between the two properties.

Dean Dovolis explained the fence would be coordinated between the property owners to share one fence.

Commissioner Vosberg asked if there are social areas for the residents of the three buildings to intermingle with each other.

Jonathan Sondergaard explained they do intend to use one the new conference spaces for indoor gatherings and activities for residents to socialize.

Commissioner Vosberg said she would like to see a designated area for residents to be able to congregate to avoid people lining the street.

Jonathan Sondergaard reiterated there will be designated areas for staff and residents to congregate so they stay safe and as far away from the street as possible.

Commissioner Chair Kisch pointed out that the site plan doesn't show a sidewalk connection from the building. He asked if the driveway is assumed to serve as sidewalk access.

Dean Dovolis confirmed the driveway will double as a sidewalk connection since it is anticipated the traffic level will be minimal due to the nature of the residents.

MOTION <u>HUSAIN</u>, SECOND <u>VOSBERG</u> TO RECOMMEND APPROVAL OF CONDITIONAL USE PERMIT FOR A RESIDENTIAL CARE FACILITY WITH VARIANCES AT 7711-7715 HUMBOLDT AVENUE NORTH, SUBJECT TO CONDITIONS IN THE DRAFT RESOLUTION.

#### MOTION CARRIED UNANIMOUSLY.

Planning Director Sherman stated all public hearing applications are scheduled to be reviewed at the City Council meeting on June 22, 2020.

#### Exhibit A

to

#### Application for Conditional Use Permit and Variance

#### **Conditional Use Permit**

Applicant seeks a Conditional Use Permit to develop and operate a residential assisted living facility serving residents with acute medical needs on the Property (the "Proposed Use"). The Property is currently zoned B2 and the Proposed Use is conditionally permitted under Section 152.342.01 of the Brooklyn Park Zoning Code (the "Code").

The proposed building will be immediately adjacent to two buildings substantially the same size and design as the proposed building, which buildings are currently being used for the same purposes as the Proposed Use. The proposed building size is approximately 6,030 square feet. It will provide bedrooms for a total of ten to 12 residents and staff. The building will have two full commercial kitchens, two dining rooms and two living rooms. The building will have facilities for staff to meet with professionals and family members, along with ample garage and driveway space. It will be fully sprinkled. The Property will be served by a one-way half-circular driveway shared with the adjoining properties to the north and utilizing the existing curb cuts. The shared driveway will be created by a recorded easement.

The proposed building and the Proposed Use satisfy the conditions of Section 152.035 of the City's Zoning Code. Specifically:

(A) Purpose. The Proposed Use of the requested Conditional Use Permit is compatible with uses in the district and public needs. The Proposed Use complies with the standards of Section 152 of the Code.

(B) Qualifications. The Proposed Use Only is specifically classified as conditional in the zoning district where the Property is located.

(C) *Procedures*. Applicant has complied with the procedures for applying for a Conditional Use Permit set forth in § <u>152.031</u> of the Code.

(D) *Review Standards.* The Proposed Use satisfies the Review Standards set forth in Section 152 of the Code. Specifically:

(1) Comprehensive Plan. The Proposed use complies with the Comprehensive Plan, all relevant public facilities and capital improvement plans, and all sections of the City Code.

(2) *Traffic*. The Proposed Use will not materially adversely impact neighborhood traffic volumes and raises no safety concerns associated with driveway location on adjacent roads, sidewalks and trail connections.

(3) Parking. The characteristics of the parking area of the Proposed Use, including the number and design of parking spaces, landscaping, traffic circulation, drainage, and lighting are consistent with the neighborhood and surrounding uses.

(4) *City services.* The Proposed Use will not materially impose on the ability of the City to provide adequate public facilities and services to the Property nor will the Proposed Use materially impose on the ability of the existing infrastructure to absorb the additional demand for City services.

(5) Screening and landscaping. The design of the proposed building provides appropriate screening and buffering ability to counter incompatible off-site impacts of the Proposed Use on adjacent property and the surrounding neighborhood.

(6) Architectural standards. The design of the proposed building meets or exceeds the architectural design and landscaping standards for the district in which it is located. The design is consistent with and complementary to the design of the buildings adjacent to the proposed building.

#### Variances

Applicant seeks four variances:

#### A. Front Yard Setback Variance.

Applicant requests a variance to reduce the minimum front yard setback on the East side of the Property from 50 feet to 28' 8". This request is appropriate because there are practical difficulties in complying with the setback requirements of the Section 152 of the Code. Referring to the Review Standards set forth in Section 152.034 of the Code:

(1) The property owner proposes to use the Property in a reasonable manner not permitted by the zoning ordinance. The property owner intends to use the Property in exactly the same manner as the two essentially identical building situated adjacent to the Property. The site plan for the proposed building retains a significant portion of the trees and berming buffering the Property and the proposed building from the street.

(2) The plight of the Property is due to circumstances unique to the property and not created by the landowner. The configuration and dimensions of the Property makes it practically impossible to construct a viable building without seeking a front yard setback variance. Moreover, the configuration of the building and the manner in which it is situated on property make the "front yard" more properly viewed as a "side yard". Side yard setbacks in this district are 10 feet and therefore the proposed setback is almost three times the required setback for a side yard.

(3) Granting of the variance will not alter the essential character of the area or neighborhood where the property is located. A significant number of the buildings along the West side of Humboldt Avenue North-particularly running North from the Property, do not respect the 50 foot setback. The first residential property adjacent and northly to the assisted living campus has only a 25 foot actual building setback from Humboldt Avenue North. None of the buildings for the next two blocks respect a 50 foot setback from Humboldt Avenue. The building setbacks for these properties range from 25 to 32 feet, making the proposed setback for the Property consistent with and complementary to the building line.

(4) Economic considerations alone do not constitute practical difficulties. The practical difficulties are not due to economic considerations alone. The configuration and dimensions of the Property makes it practically impossible to construct a viable building without seeking a front yard setback variance.

#### B. Rear Yard Setback Variance

Applicant requests a variance to reduce the minimum rear yard setback on the West side of the Property from 30 feet to ten feet. This request is appropriate because there are practical difficulties in complying with the setback requirements of Section 152 of the Code. Referring to the Review Standards set forth in Section 152.034 of the Code:

(1) The property owner proposes to use the Property in a reasonable manner not permitted by the zoning ordinance. The property owner intends to use the Property in exactly the same manner as the two essentially identical building situated adjacent to the Property.

(2) The plight of the Property is due to circumstances unique to the property and not created by the landowner. The configuration and dimensions of the Property makes it practically impossible to construct a viable building without seeking a rear yard setback variance. Moreover, the configuration of the building and the manner in which it is situated on property make the "rear yard" more properly viewed as a "side yard". Side yard setbacks in this district are 10 feet and therefore the proposed setback conforms to the required setback for a side yard.

(3) Granting of the variance will not alter the essential character of the area or neighborhood where the property is located. A ten foot setback will not impose a burden to any of the adjacent properties, and the landscape plan ensures adequate buffers between the Property and the properties adjacent to it.

(4) Economic considerations alone do not constitute practical difficulties. The practical difficulties are not due to economic considerations alone. The configuration and dimensions of the Property makes it practically impossible to construct a viable building without seeking a rear yard setback variance.

#### C. Non-Conforming Lot Size Variance

Applicant requests a variance to develop the proposed building on a lot that is legal nonconforming in size. The lot is a legally subdivided and separately taxed parcel of land. The total area of the lot is 21,744 square feet. The minimum lot size in the district is 25,000 square feet. The lot was subdivided into a legal parcel prior to the imposition of the 25,000 square foot minimum lot size requirement. This request is appropriate because there are practical difficulties in complying with the minimum lot size requirements of Section 152 of the Code. Referring to the Review Standards set forth in Section 152.034 of the Code:

(1) The property owner proposes to use the Property in a reasonable manner not permitted by the zoning ordinance. The property owner intends to use the Property in exactly the same manner as the two essentially identical building situated adjacent to the Property.

(2) The plight of the Property is due to circumstances unique to the property and not created by the landowner. The lot has been legally nonconforming for a significant period of time. The current owner acquired the lot in its current status as a legally non-conforming lot and did not create this situation

(3) Granting of the variance will not alter the essential character of the area or neighborhood where the property is located. The use of the property will match the use of the properties adjacent to

it. The property will participate with the other two assisted living properties in a mutual driveway easement so any impact of the non-conforming lot size will be further mitigated and reduced.

(4) Economic considerations alone do not constitute practical difficulties. The practical difficulties are not due to economic considerations alone. The current building is blighted and needs to be torn down and replaces. Any redevelopment of the property for any purpose would confront the issue of the non-conforming lot size.

Section 152.053 of the Code pertains to non-conforming lots of record. None of the factors set forth in Section 152.053 (A) or (B) are applicable to this Property or the proposed redevelopment. Applicant agrees to commence construction of the proposed building within one year of the demolition of the existing building pursuant to Section 152.053 (C).

#### D. Street Frontage Variance

Applicant requests a variance to develop the proposed building on a lot that is non-conforming with respect to required street frontage. The lot is a legally subdivided and separately taxed parcel of land. The total length of the street frontage along Humboldt Avenue North is 108 feet. The required street frontage in the district is 125 feet. Applicant seeks to reduce the minimum street frontage from 125 feet to 108 feet. The lot was subdivided into a legal parcel prior to the imposition of the 125 foot minimum street frontage requirement. This request is appropriate because there are practical difficulties in complying with the minimum street frontage requirements of Section 152 of the Code. Referring to the Review Standards set forth in Section 152.034 of the Code:

(1) The property owner proposes to use the Property in a reasonable manner not permitted by the zoning ordinance. The property owner intends to use the Property in exactly the same manner as the two essentially identical building situated adjacent to the Property.

(2) The plight of the Property is due to circumstances unique to the property and not created by the landowner. The lot has been legally nonconforming for a significant period of time. The current owner acquired the lot in its current status as a legally non-conforming lot and did not create this situation

(3) Granting of the variance will not alter the essential character of the area or neighborhood where the property is located. The use of the property will match the use of the properties adjacent to it. The property will participate with the other two assisted living properties in a mutual driveway easement so any impact of the non-conforming lot size will be further mitigated and reduced.

(4) **Economic considerations alone do not constitute practical difficulties.** The practical difficulties are not due to economic considerations alone. The current building is blighted and needs to be torn down and replaces. Any redevelopment of the property for any purpose would confront the issue of the non-conforming lot size.

#### Exhibit B to Application for Conditional Use Permit and Variance

Legal Description of the Property:

The North 108.8 feet of the South 326.8 feet of the East 199.82 feet of the East 1/2 of the East 1/2 of the Southeast Quarter of Section 23, Township 119, Range 21, Hennepin County, Minnesota.

Being Registered land as is evidenced by Certificate of Title No. 1378034







# THE LODGE OF BROOKLYN PARK





## **DRAWING INDEX**

G-101.00	COVER
G-102.00	LIFE SAFETY
G-103.00	<b>CAMPUS PLAN</b>
G-104.00	STREET PLAN
A 101 00	

LIGHTING SITE PLAN A-101.00 **FLOOR PLAN** A-102.00

**ELEVATIONS** A-301.00 **ELEVATIONS** A-302.00

## CONTEXT MAP



**G101**.00

**DESIGN DEVELOPMENT** 

SHEET

COVER

SHEET TITLE

PROJECT 7711 HUMBOLDT AVE **BROOKLYN PARK, MN** 

WRITTEN DIMENSIONS SHALL GOVERN.

SUBCONTRACTORS OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK, OR FOR THE DOCUMENTS. ALWAYS USE DIMENSIONS AS SHOWN. DRAWINGS ARE NOT TO BE SCALED. DRAWING SCALES ARE INDICATED FOR REFERENCE

ONLY AND ARE NOT INTENDED TO ACCURATELY DEPICT ACTUAL OR DESIGNED CONDITIONS.

THE ARCHITECT SHALL NOT HAVE CONTROL OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, DEVIATIONS, TECHNIQUES, SEQUENCES, OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT

612-205-0521 DATE SUBMISSION **CITY REVIEW** 2020.04.29

OWNER'S REPRESENTATIVE

MICHAEL MARGULIES

VALERIAN LLC

SURVEYOR **CIVIL SITE GROUP** PATRICK SARVER 651-615-0060

DESIGN EVAN HALL 612-205-2364

**ERASING ARCHITECTURE** 

952-222-3395

JONATHAN SONDERGAARD

Commercial | Retail | Mixed Use Residential | Restaurants 2924 W. St. Germain St. St. Cloud, MN 56301 320-237-7411: hlarchitects2000@gmail.com OWNER **THE LODGES** 

Architects







## LIFE SAFETY ANALYSIS

## **SUMMARY OF WORK**

THIS BUILDING IS A 5,500 SF ASSISTED LIVING FACILITY WITH A 550 SF TWO CAR ATTACHED GARAGE. THE TOTAL FOOTPRINT IS 6,050 SF. THE BUILDING IS CLASIFIED AS TYPE R-4 WITH CONDITION TO APPLIED, IS SPRINKLERED, AND IS BUILT OUT USING CONSTRUCTION TYPE VB.

## **REFERENCE DOCUMENTS**

2020 MINNESOTA BUILDING CODE 2020 MINNESOTA ENERGY CODE 2020 MINNESOTA ACCESSIBILITY CODE 2020 MINNESOTA STATE FIRE CODE 2020 MINNESOTA PLUBMING CODE 2020 MINNESOTA MECHANICAL AND FUELD GAS CODE MINNESOTA ELECTRIC CODE 2020 MINNESOTA HIGH PRESSURE PIPING CODE

## **PROJECT ADDRESS**

7711 HUBOLDT AVE, BROOKLYN PARK, MN

## **CHAPTER 3: OCCUPANCY CLASSIFICATION AND USE**

THIS FACILITY HAS 6 TO 16 PERSONS (12) RECEIVING CUSTODIAL CARE AND SHALL BE CLASSIFIED AS GROUP R-4. RESIDENTIAL GROUP R-4 SHALL INCLUDE BUILDINGS, STRUCTURES, OR PORTIONS THEREOF FOR MORE THAN 5 BUT NOT MORE THAN 16 PERSONS, EXLUDING STAFF, WHO RESIDE ON A 24-HOUR BASIS IN A SUPERVISED RESIDENTIAL ENVIRONMENT AND RECEIVE CUSTODIAL CARE. THIS GROUP SHALL INCLUDE:

ASSISTED LIVING FACILITIES

310.5.2 CONDITION 2 APPLIES WHICH READS: THIS OCCUPANCY CONDITION SHALL INCLUDE BUILDINGS IN WHICH THERE ARE ANY PERSONS RECEIVING CUSTODIAL CARE WHO REQUIRE LIMITED VERBAL OR PHYSICAL ASSISTANCE WHILE RESPONDING TO AN EMERGENCY SITUATION TO COMPLETE BUILDING EVACUATION.

## **CHAPTER 4: SPECIAL DETAILED REQUIREMENTS BASED ON OCCUPANCY AND USE**

420.2 SPARATION WALLS: WALLS SEPERATING DWELLING UNITS IN THE SAME BUILDING, WALLS SEPERATING SLEEPING UNITS IN THE SAME BUILDING, AND WALLS SEPARATING DWELLING OR SLEEPING UNITS FROM OTHER OCCUPANCIES CONTIGUOUS TO THEM IN THE SAME BUILDING SHALL BE CONSTRUCTED AS FIRE PARTITIONS IN ACCORDANCE WITH SECTION 708.

420.4 AUTOMATIC SPRINKLERS

420.5 FIRE ALARM SYSTEMS AND SMOKE ALARMS

FIRE ALARM SYSTEMS AND SMOKE ALARMS SHALL BE PROVIDED IN GROUP I-1, R-1 AND R-2 OCCUPANCIES IN ACCORDANCE WITH SECTIONS 907.2.6, 907.2.8 AND 907.2.9, RESPECTIVELY. SINGLE- OR MULTIPLE STATION SMOKE ALARMS SHALL BE PROVIDED IN GROUPS I-1, R-2, R-3 AND R-4 IN ACCORDANCE WITH SECTION 907.2.10.

## **CHAPYER 5: GENERAL BUILDING HEIGHTS AND AREAS** SECTION 506: BUILDING AREA

506.1 GENERAL: THE FLOOR AREA OF A BUILDING SHALL BE DETERMINED BASED ON THE TYPE OF CONSTRUCTION, OCCUPANCY CLASSIFICATION, WHETHER THERE IS AN AUTOMATIC SPRINKLER SYSTEM INSTALLED THROUGHOUT THE BUILDING AND THE AMOUNT OF BUILDING FRONTAGE ON PUBLIC WAY OR OPEN SPACE.

TABLE 506.2

## CONSTRUCTION TYPE V B // R-4 // (S1)

S1=BUILDINGSAMAXIMUMOFONESTORYABOVEGRADEPLANEEQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM INSTALLED IN ACCORDANCE WITH SECTION 903.3.1.1.

28,000 SF = ALLOWABLE AREA FACTOR IN SQUARE FEET

## **CHAPYER 6: TYPES OF CONSTRUCTION**

602.5 TYPE 5

TYPE 5 CONSTRUCTION IS THAT TYPE OF CONSTRUCTION IN WHICH THE STRUCTURAL ELEMENTS, EXTERIOR WALLS AND INTERIOR WALLS ARE OF ANY MATERIALS PERMITTED BY THIS CODE.

## **CHAPYER 9: FIRE PROTECTION AND LIFE SAFETY SYSTEMS**

[F] 903.3.1.1 NFPA 13 SPRINKLER SYSTEMS. WHERE THE PROVISIONS OF THIS CODE REQUIRE THAT A BUILDING OR

PORTION THEREOF BE EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH THIS SECTION, SPRINKLERS SHALL BE INSTALLED THROUGHOUT IN ACCORDANCE WITH NFPA 13 EXCEPT AS PROVIDED IN SECTIONS 903.3.1.1.1 AND 903.3.1.1.2.

[F] 903.2.8.3 GROUP R-4, CONDITION 2. AN AUTOMATIC SPRINKLER SYSTEM INSTALLED IN ACCORDANCE WITH SECTION 903.3.1.2 SHALL BE PERMITTED IN GROUP R-4, CONDITION 2 OCCUPANCIES.

## **CHAPYER 10: MEANS OF EGRESS**

TABLE 1004.5: MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT

FUNCTION OF SPACE: RESIDENTIAL

OCCUPANT LOAD FACTOR: 200 GROSS

TABLE 1020.2 MINIMUM CORRIDOR WIDTH: 44 INCHES

1020.4 DEAD ENDS.

WHERE MORE THAN ONE EXIT OR EXIT ACCESS DOORWAY IS REQUIRED, THE EXIT ACCESS SHALL BE ARRANGED SUCH THAT DEAD-END CORRIDORS DO NOT EXCEED 20 FEET IN LENGTH.



**DESIGN DEVELOPMENT** 

LIFE SAFETY

SHEET TITLE

PROJECT 7711 HUMBOLDT AVE **BROOKLYN PARK, MN** 

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**VALERIAN LLC** MICHAEL MARGULIES

DATE

2020.04.29

612-205-0521

SUBMISSION

**CITY REVIEW** 

PATRICK SARVER 651-615-0060 **OWNER'S REPRESENTATIVE** 

**CIVIL SITE GROUP** 

612-205-2364 SURVEYOR

EVAN HALL

952-222-3395 DESIGN

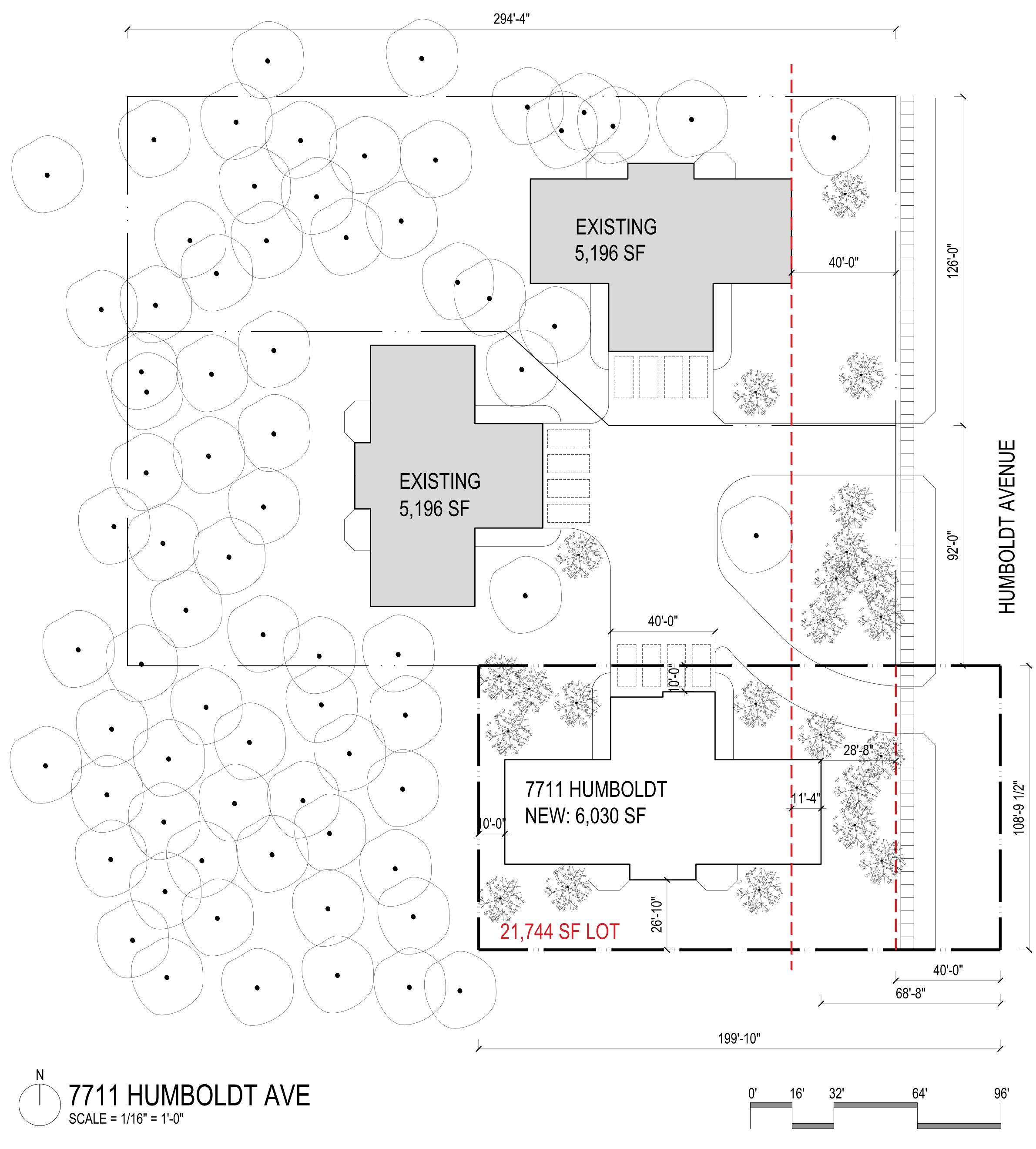
**ERASING ARCHITECTURE** 

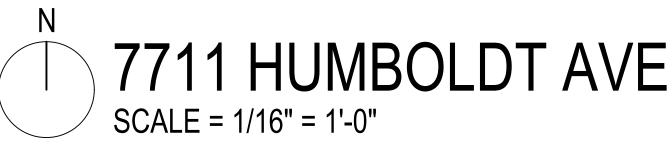
OWNER **THE LODGES** JONATHAN SONDERGAARD

2924 W. St. Germain St. St. Cloud, MN 56301 20-237-7411: hlarchitects2000@gmail.com

Commercial | Retail | Mixed Use Residential | Restaurant

Architects





## ZONING ANALYSIS

## 7711 HUMBOLDT AVENUE

## **SEE CIVIL DRAWINGS FOR UTILITIES AND ALL SITE DIMENSIONS**

## LINK:

http://library.amlegal.com/nxt/gateway.dll/Minnesota/brooklyn/ brooklynparkmncodeofordinances?f=templates\$fn=default. htm\$3.0\$vid=amlegal:brooklynpark\_mn

## **CHAPTER:** 152

LOT SIZE: 108(front)x200, 21,744 SF

**CITY, COUNTY:** BROOKLYN PARK, HENNIPEN COUNTY

**CITY ZONING CLASSIFICATION:** B2 – Neighborhood Retail Business District

## **MAXIMUM ALLOWABLE BUILDING FOOTPRINT:** 35%

## FRONT YARD SETBACK: 50

SIDE YARD SETBACK: 10

**REAR YARD SETBACK:** 30

**MINIMUM LOT SIZE:** 25,000

## MINIMUM LOT FRONTAGE: 125

**PARKING REQUIREMENTS:** For uses not specifically listed below (Assisted living not explicitly listed in Figure 152.142.01), off-street parking requirements may be established by the City Manager based upon the characteristics of the use.

**CONDITIONAL USE REQUIRED:** CARE CENTERS, CONVALESCENT HOMES, HOSPITALS, AND ASSISTED LIVING FACILITIES

## **OTHER NOTES:**

Unless otherwise approved through a site plan approval all nonresidential uses on parcels adjacent to residential uses in residential districts must be constructed at a height no greater than 35 feet or the height of any residential use, whichever is greater.

ENTITLEMENTS REQUESTED: The proposed front yard is less than the 50' setback. The proposed rear setback is less than the 30' setback. The lot size is 21,744, which is less than the minimum of 25,000. The lot frontage is 108', which is less than the 125 minimum.

G103.00

**DESIGN DEVELOPMENT** 

SHEET

## **CAMPUS PLAN**

SHEET TITLE

PROJECT 7711 HUMBOLDT AVE **BROOKLYN PARK, MN** 

WRITTEN DIMENSIONS SHALL GOVERN.

fechniques, sequences, or procedures, UBCONTRACTORS OR ANY OTHER PERSONS ERFORMING ANY OF THE WORK, OR FOR THE AILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT SHOWN. DRAWINGS ARE NOT TO BE SCALED. DRAWING SCALES ARE INDICATED FOR REFERENCE

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612-205-0521 SUBMISSION

**CITY REVIEW** 

VALERIAN LLC

DATE 2020.04.29

SURVEYOR **CIVIL SITE GROUP** PATRICK SARVER 651-615-0060

**OWNER'S REPRESENTATIVE** 

MICHAEL MARGULIES

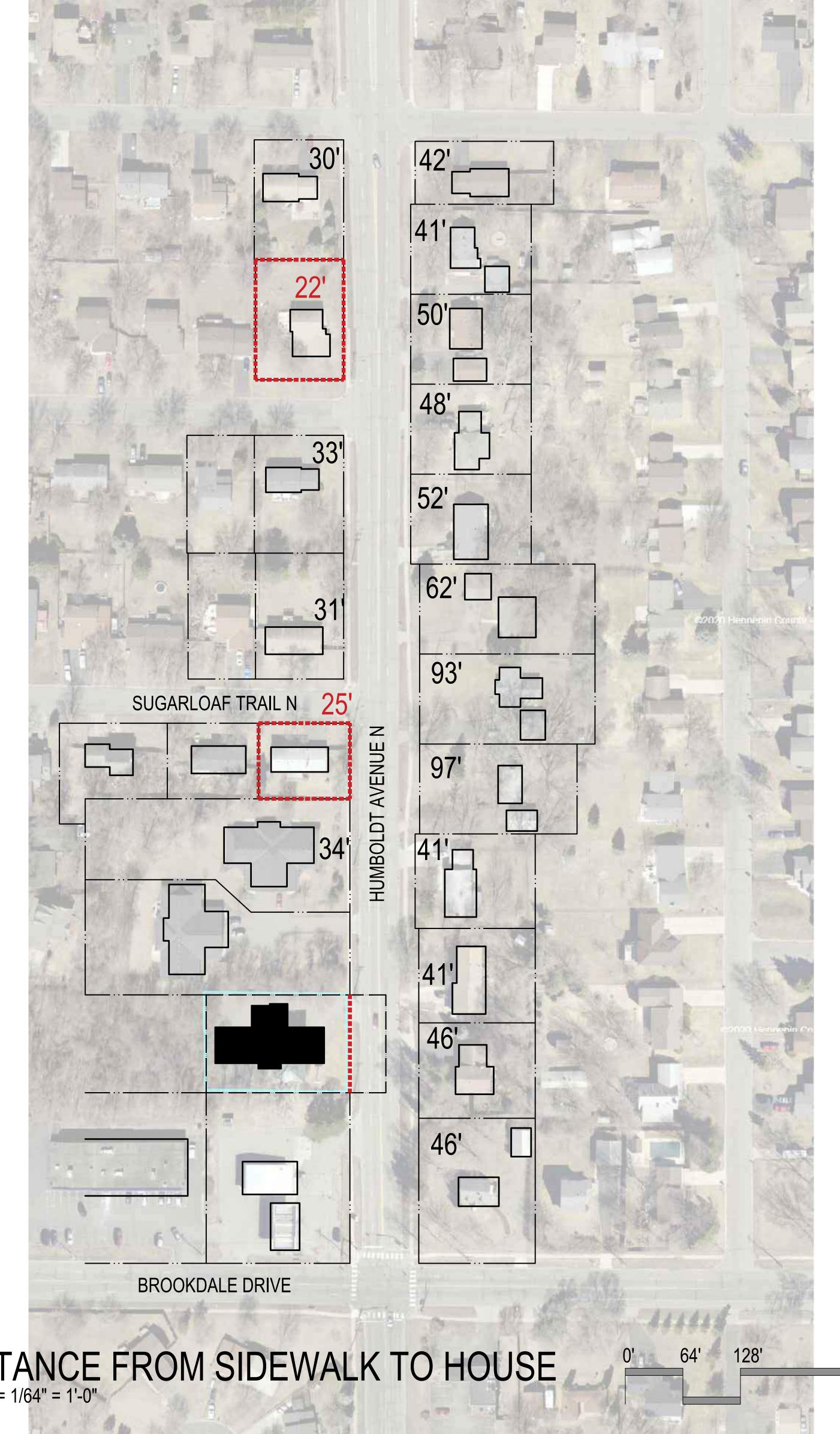
EVAN HALL 612-205-2364

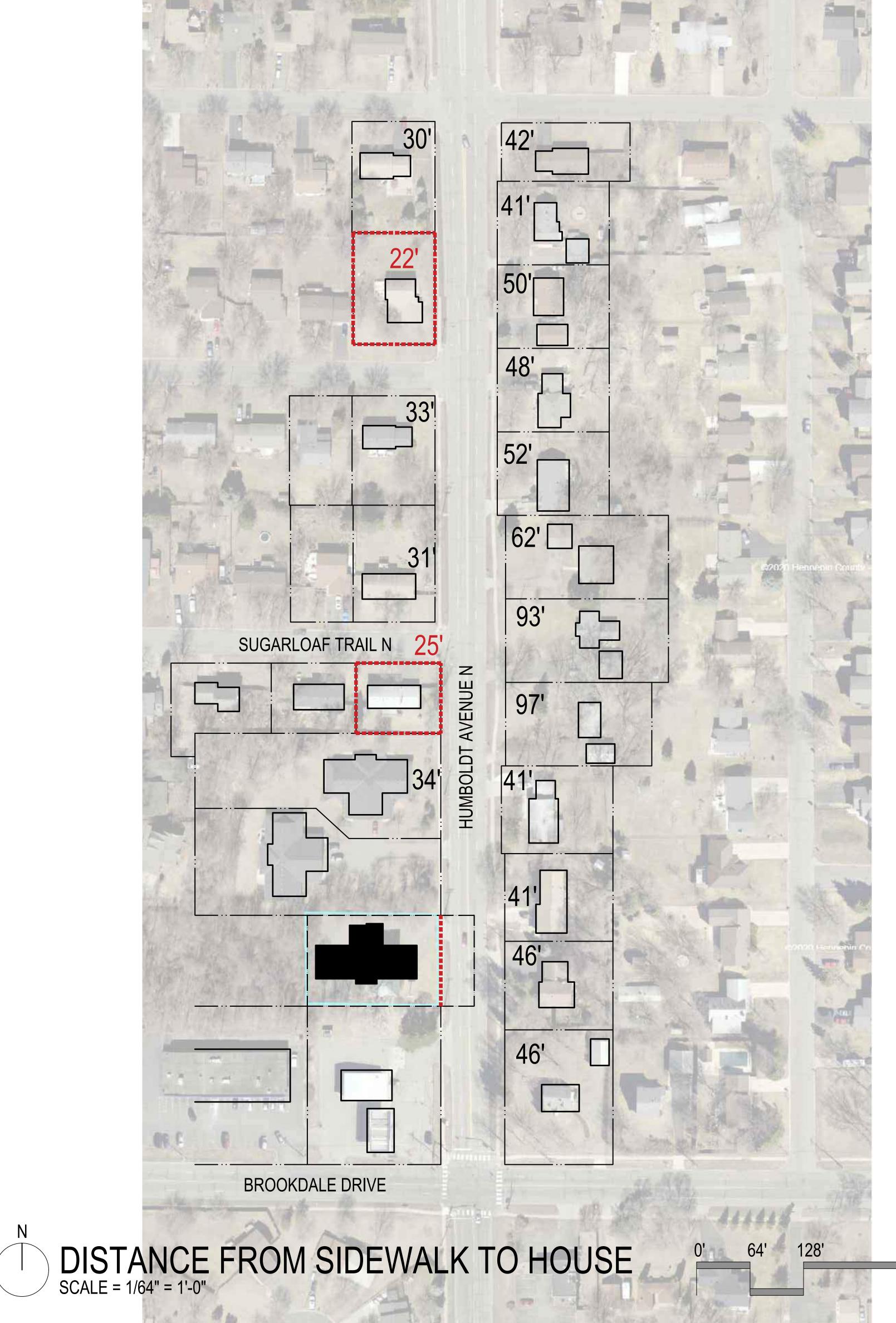
DESIGN **ERASING ARCHITECTURE** 

952-222-3395

OWNER **THE LODGES** JONATHAN SONDERGAARD

Architects Commercial | Retail | Mixed Use Residential | Restaurants 2924 W. St. Germain St. St. Cloud, MN 56301 320-237-7411: hlarchitects2000@gmail.com





256'



SHEET

**DESIGN DEVELOPMENT** 

PHASE

STREET PLAN

SHEET TITLE

PROJECT 7711 HUMBOLDT AVE **BROOKLYN PARK, MN** 

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SUBMISSION **CITY REVIEW** 

DATE 2020.04.29

SURVEYOR **CIVIL SITE GROUP** PATRICK SARVER 651-615-0060

OWNER'S REPRESENTATIVE

MICHAEL MARGULIES 612-205-0521

VALERIAN LLC

EVAN HALL **612-205-2364** 

DESIGN **ERASING ARCHITECTURE** 

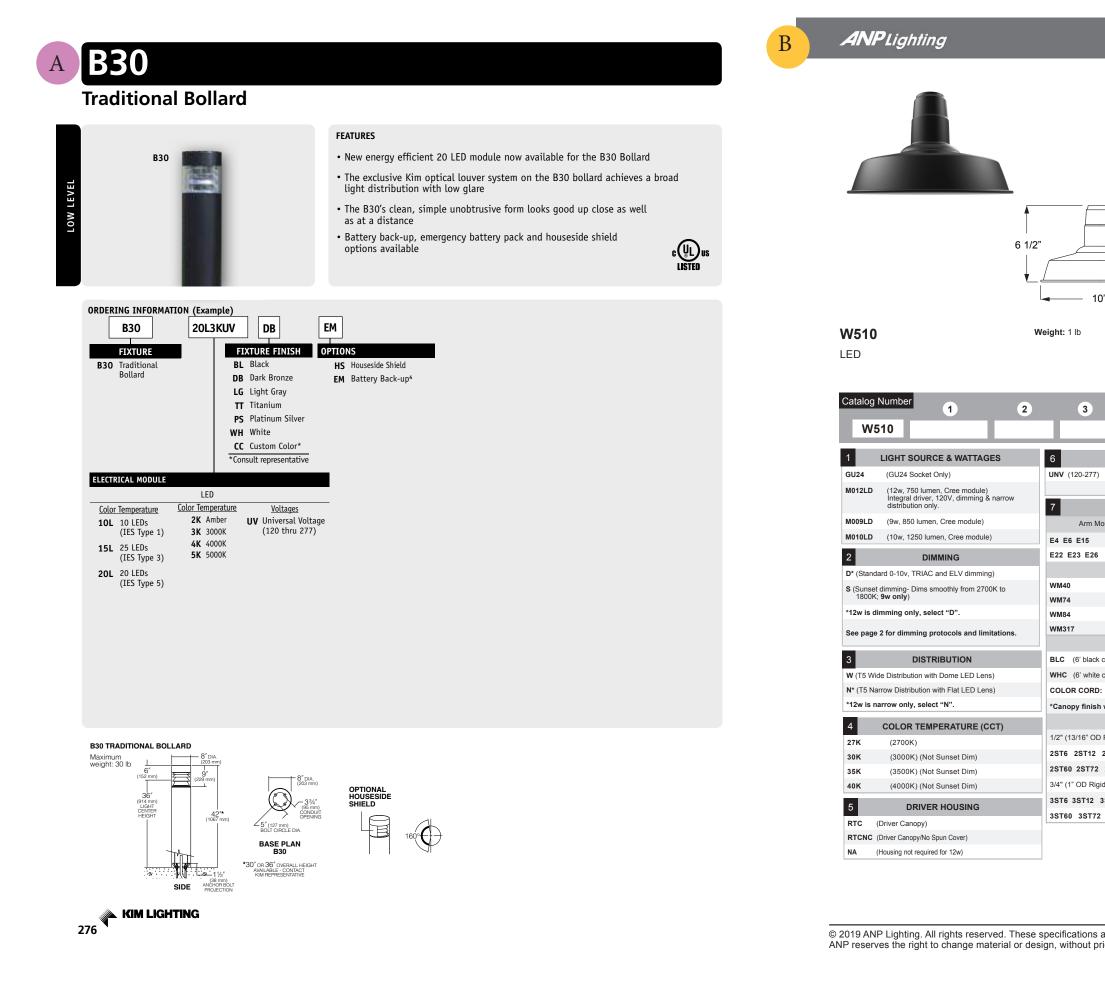
JONATHAN SONDERGAARD 952-222-3395

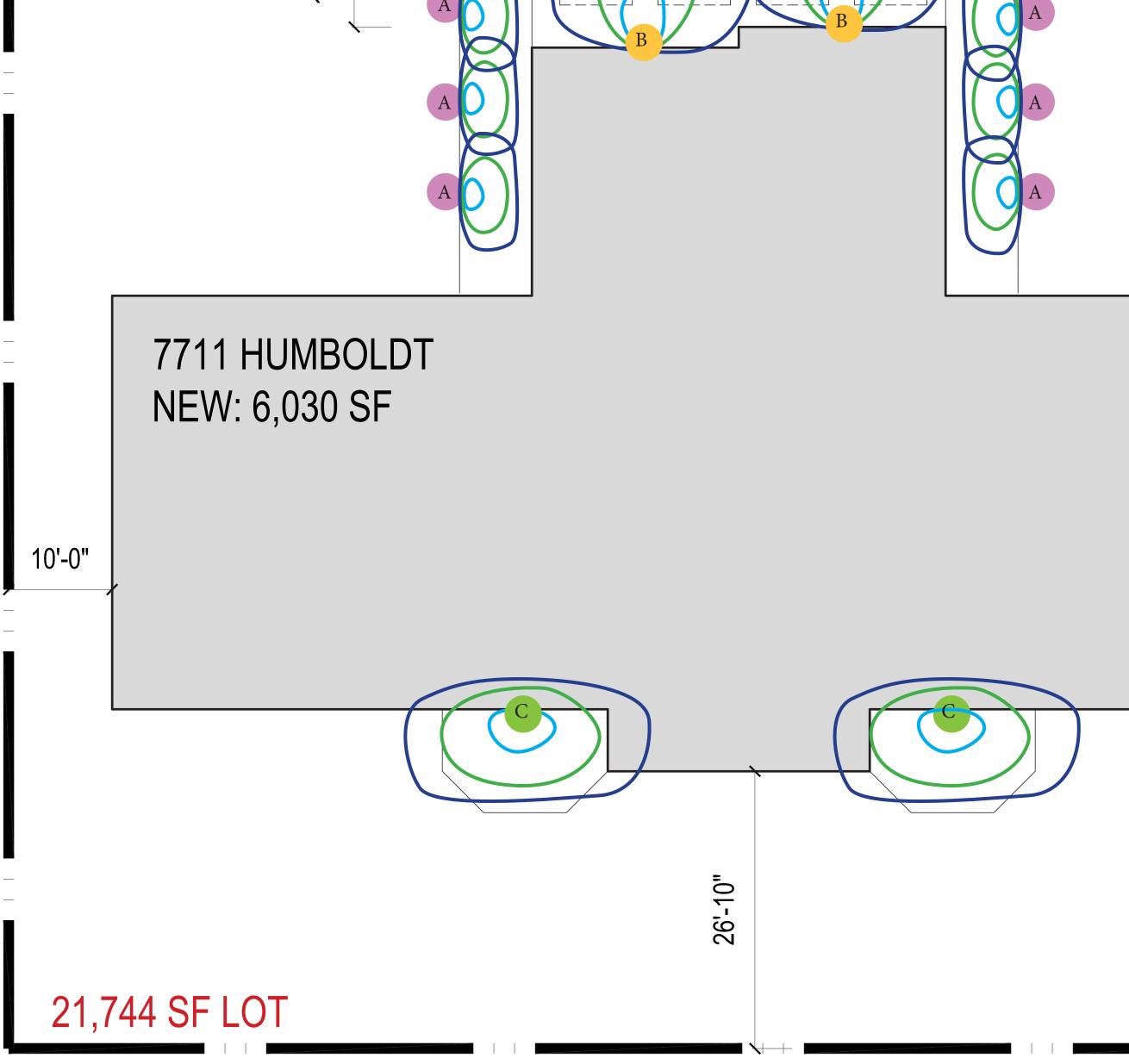
Commercial | Retail | Mixed Use Residential | Restaurants 2924 W. St. Germain St. St. Cloud, MN 56301 320-237-7411: hlarchitects2000@gmail.com OWNER

Architects

ARCHITECT

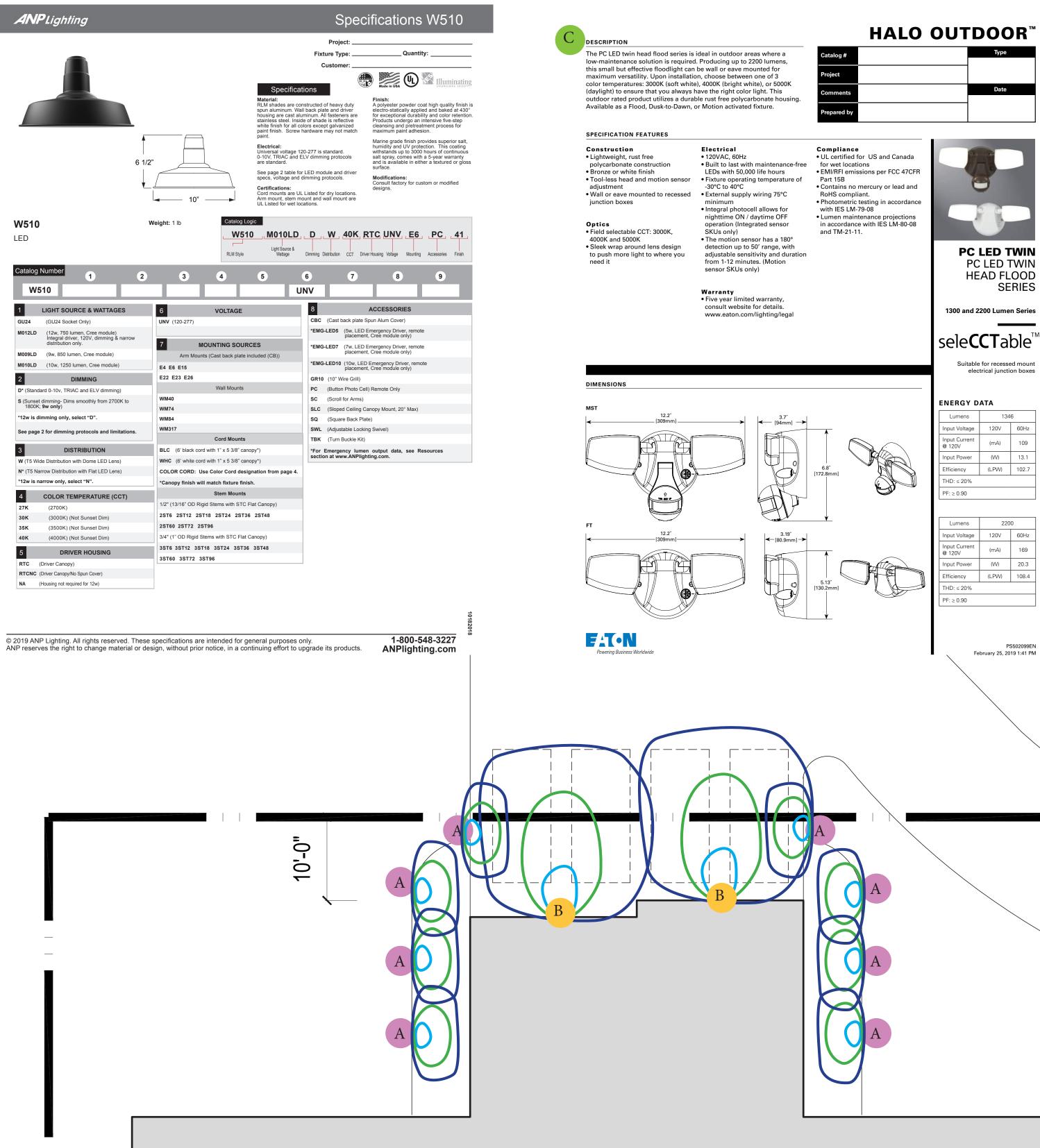
THE LODGES





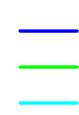


## SITE LIGHTING PLAN



16			
	60Hz		
	109		
	13.1		
	102.7		
)	0		
	60Hz		
	169		
Ī	20.3		

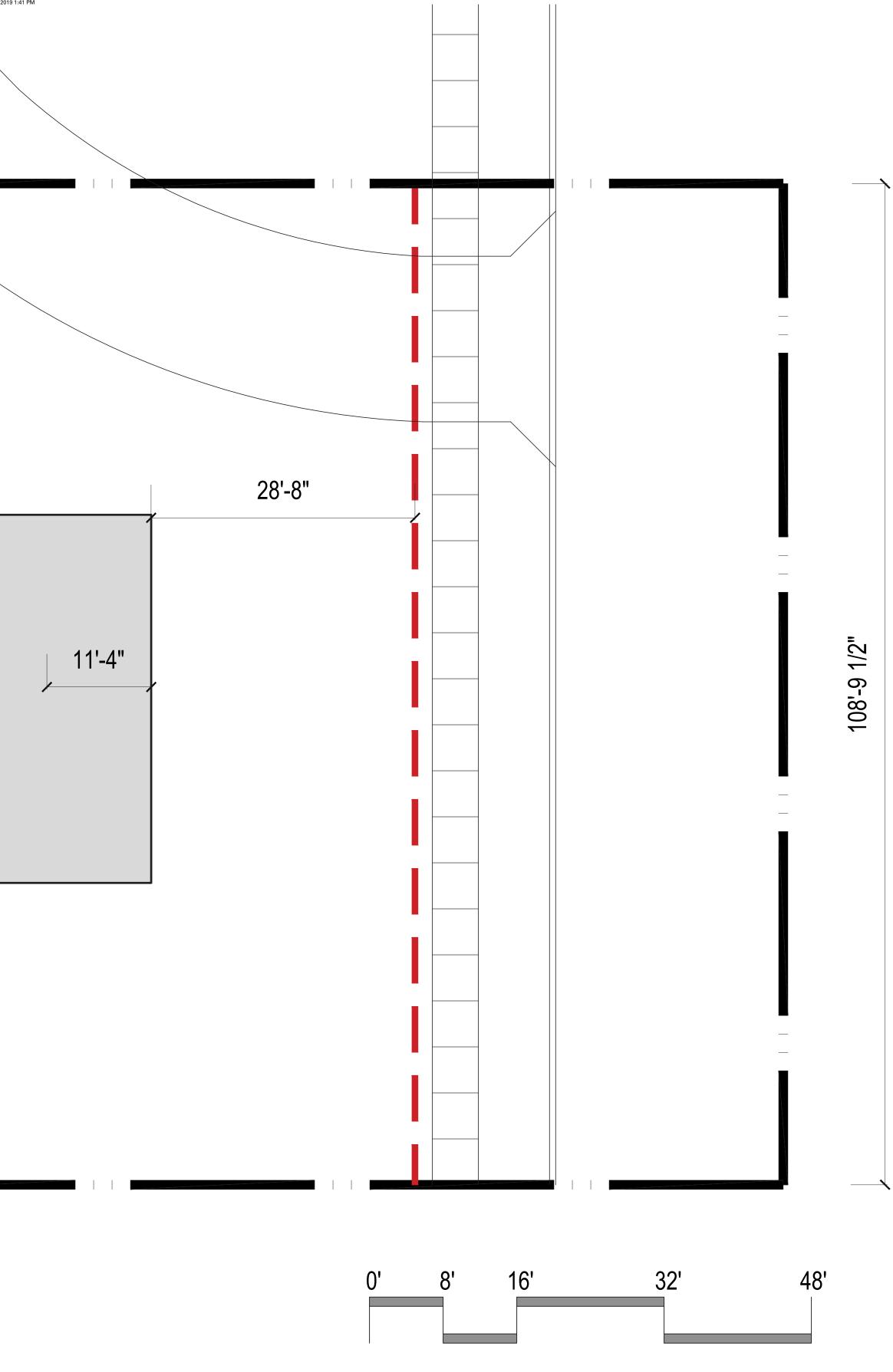
## ILLUMINANCE LEGEND



0.5 FOOT CANDLES 2.0 FOOT CANDLES 6 FOOT CANDLES

## LUMINAIRE SCHEDULE

LABEL	CATALOG #	NAME	DESCRIPTION	WATTS
Α	P5247-31	PROGRESS LIGHTING 24" 3W 1 LED BOLLARD	80 LUMEN BOLLARD BLACK FINISH WITH CLEAR GLASS	3W LED
В	MST18R17L	EATON ALL PRO LED TWIN ROUND SERIES	1600 LUMEN BRONZE TWIN LED WITH 180° MOTION SENSOR, 5000K	150W INCAN. EQUIVALENT
С	RS16LED1827MB-WG-2	TROY RLM CLASSICS STANDARD	1265 LUMEN ALUMINUM SHADE DOWNLIGHT, 2700K	18W LED



## A101.00

**DESIGN DEVELOPMENT** 

PHASE

SHEET

## SITE LIGHTING PLAN

SHEET TITLE

## PROJECT 7711 HUMBOLDT AVE **BROOKLYN PARK, MN**

WRITTEN DIMENSIONS SHALL GOVERN.

CONSTRUCTION MEANS, METHODS, DEVIATIONS, TECHNIQUES, SEQUENCES, OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. ALWAYS USE DIMENSIONS AS SHOWN. DRAWINGS ARE NOT TO BE SCALED. DRAWING SCALES ARE INDICATED FOR REFERENCE

ONLY AND ARE NOT INTENDED TO ACCURATELY DEPICT ACTUAL OR DESIGNED CONDITIONS.

THE ARCHITECT SHALL NOT HAVE CONTROL OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR

SUBMISSION **CITY REVIEW** 

DATE 2020.04.29

SURVEYOR **CIVIL SITE GROUP** PATRICK SARVER 651-615-0060

OWNER'S REPRESENTATIVE

MICHAEL MARGULIES

**VALERIAN LLC** 

612-205-0521

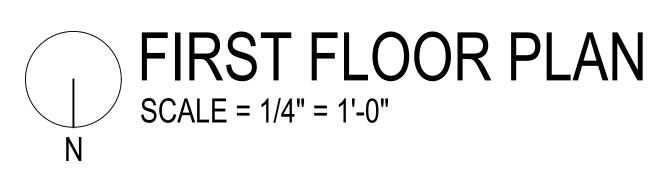
EVAN HALL 612-205-2364

DESIGN **ERASING ARCHITECTURE** 

OWNER **THE LODGES** JONATHAN SONDERGAARD 952-222-3395

Architects Commercial | Retail | Mixed Use Residential | Restaurants 2924 W. St. Germain St. St. Cloud, MN 56301 320-237-7411: hlarchitects2000@gmail.com







A102.00

PHASE **DESIGN DEVELOPMENT** 

**GROUND FLOOR PLAN** 

SHEET

SHEET TITLE

PROJECT 7711 HUMBOLDT AVE **BROOKLYN PARK, MN** 

WRITTEN DIMENSIONS SHALL GOVERN.

WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. ALWAYS USE DIMENSIONS AS SHOWN. DRAWINGS ARE NOT TO BE SCALED. DRAWINGSCALESAREINDICATEDFORREFERENCE

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SUBMISSION **CITY REVIEW** 

DATE 2020.04.29

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OWNER'S REPRESENTATIVE

MICHAEL MARGULIES

**VALERIAN LLC** 

612-205-0521

EVAN HALL 612-205-2364

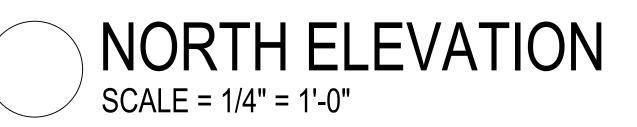
DESIGN **ERASING ARCHITECTURE** 

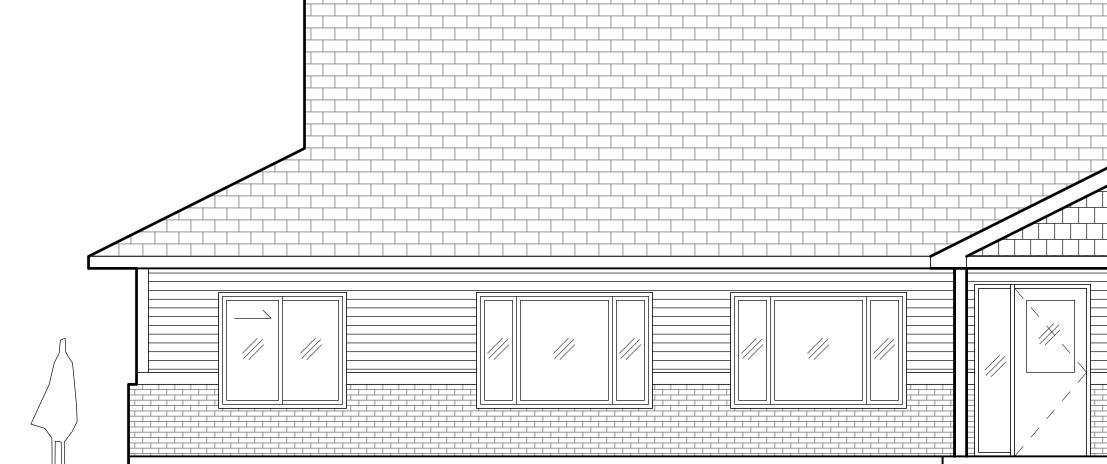
952-222-3395

2924 W. St. Germain St. St. Cloud, MN 56301 320-237-7411: hlarchitects2000@gmail.com OWNER **THE LODGES** JONATHAN SONDERGAARD

ARCHITECT Architects Commercial | Retail | Mixed Use Residential | Restaurants













PHASE **DESIGN DEVELOPMENT** 

**ELEVATIONS** 

SHEET TITLE

PROJECT 7711 HUMBOLDT AVE BROOKLYN PARK, MN

WRITTEN DIMENSIONS SHALL GOVERN.

DOCUMENTS. ALWAYS USE DIMENSIONS AS SHOWN. DRAWINGS ARE NOT TO BE SCALED. DRAWINGSCALESAREINDICATEDFORREFERENCE

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SUBMISSION **CITY REVIEW** 

DATE 2020.04.29

SURVEYOR **CIVIL SITE GROUP** PATRICK SARVER 651-615-0060

OWNER'S REPRESENTATIVE

MICHAEL MARGULIES 612-205-0521

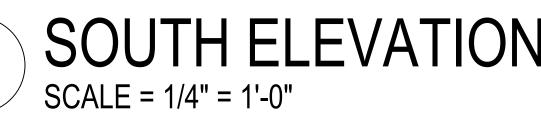
VALERIAN LLC

ERASING ARCHITECTURE Evan Hall 612-205-2364

952-222-3395 DESIGN

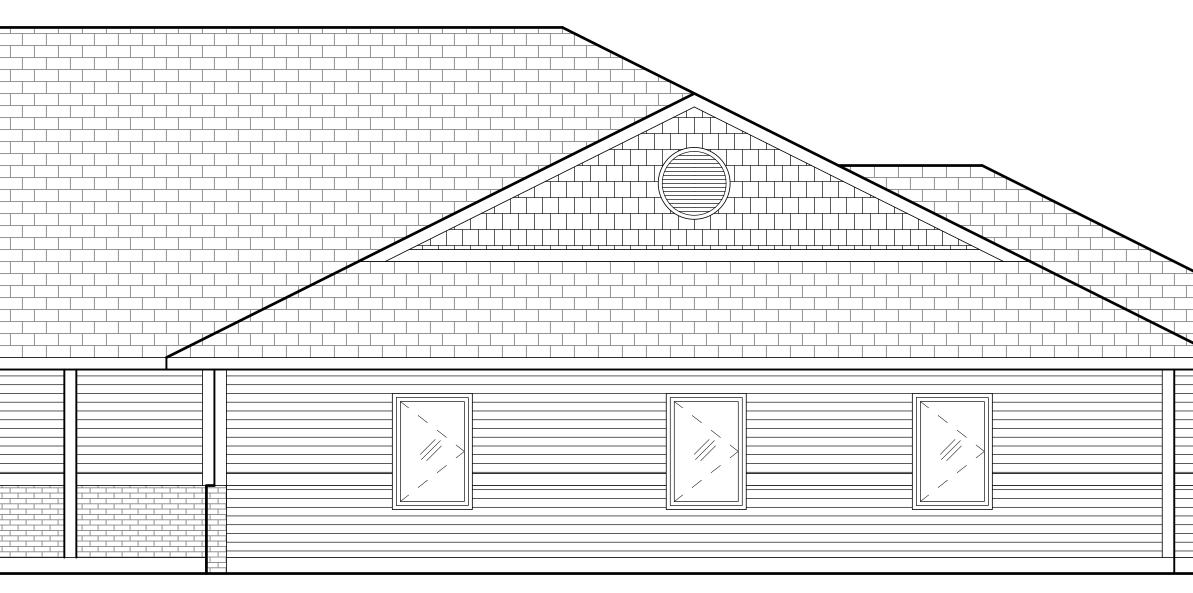
**THE LODGES** JONATHAN SONDERGAARD

Commercial | Retail | Mixed Use Residential | Restaurants 2924 W. St. Germain St. St. Cloud, MN 56301 320-237-7411: hlarchitects2000@gmail.com OWNER









122'-1" TO ROOF

\_\_\_\_\_



PHASE **DESIGN DEVELOPMENT** 

**ELEVATIONS** 

SHEET TITLE

SHEET

PROJECT 7711 HUMBOLDT AVE BROOKLYN PARK, MN

WRITTEN DIMENSIONS SHALL GOVERN.

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VALERIAN LLC MICHAEL MARGULIES 612-205-0521

SUBMISSION

**CITY REVIEW** 

DATE

2020.04.29

OWNER'S REPRESENTATIVE

**CIVIL SITE GROUP** PATRICK SARVER 651-615-0060

EVAN HALL **612-205-2364** SURVEYOR

DESIGN ERASING ARCHITECTURE

JONATHAN SONDERGAARD 952-222-3395

2924 W. St. Germain St. St. Cloud, MN 56301 320-237-7411: hlarchitects2000@gmail.com OWNER THE LODGES

ARCHITECT Architects Commercial | Retail | Mixed Use Residential | Restaurants



# 7711 HUMBOLDT

## BROOKLYN PARK, MINNESOTA ISSUED FOR: CITY RESUBMITTAL

## ARCHITECT:

HL ARCHITECTS 2924 W. ST. GERMAIN ST. ST. CLOUD, MN 56301 320-237-7411

## DEVELOPER / PROPERTY OWNER:

VALERIAN LLC 5009 RIDGE ROAD EDINA, MN 55436 612-205-0521

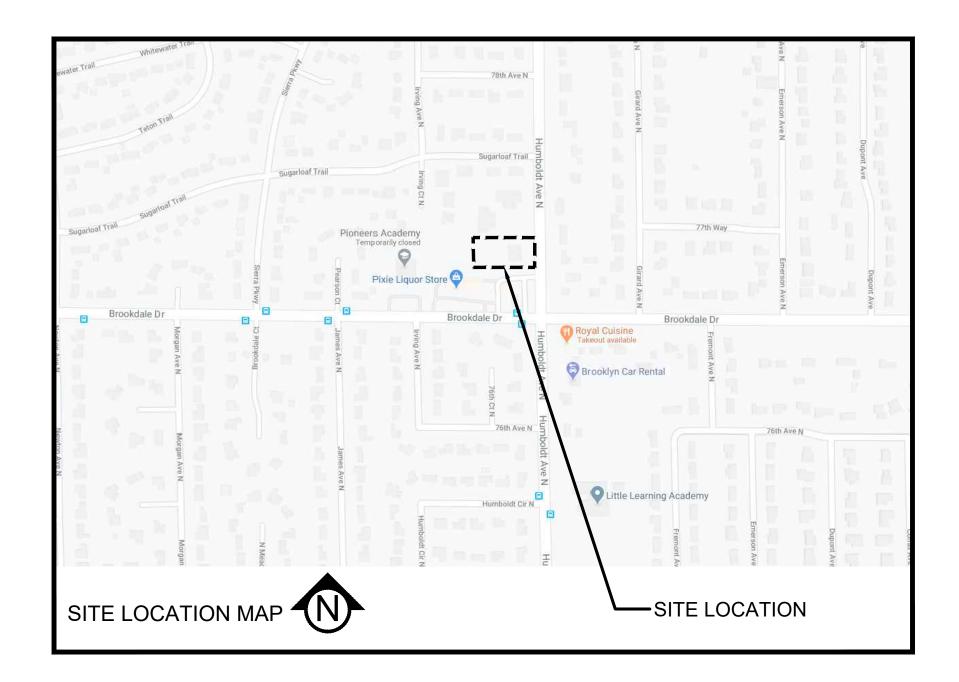
## ENGINEER / LANDSCAPE ARCHITECT:

CIVIL SITE GROUP 4931 W 35TH STREET SUITE 200 ST LOUIS PARK, MN 55416 CONTACT: MATT PAVEK 612-615-0060

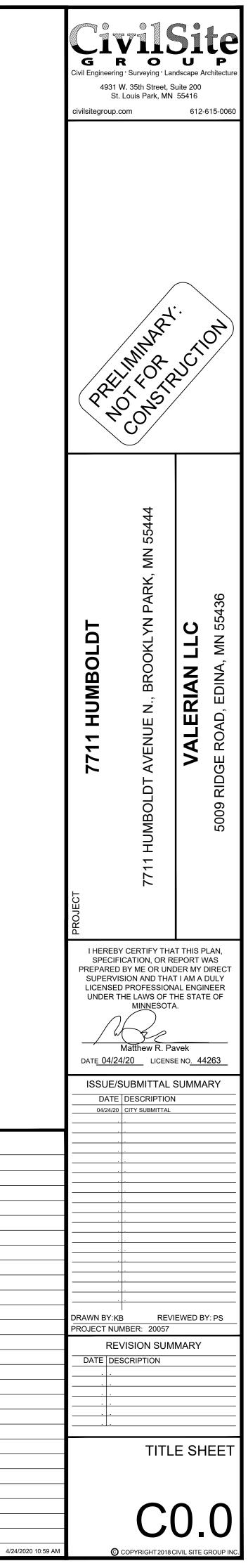
#### SURVEYOR: CIVIL SITE GROUP

4931 W 35TH STREET SUITE 200 ST LOUIS PARK, MN 55416 CONTACT: RORY SYNSTELIEN 612-615-0060

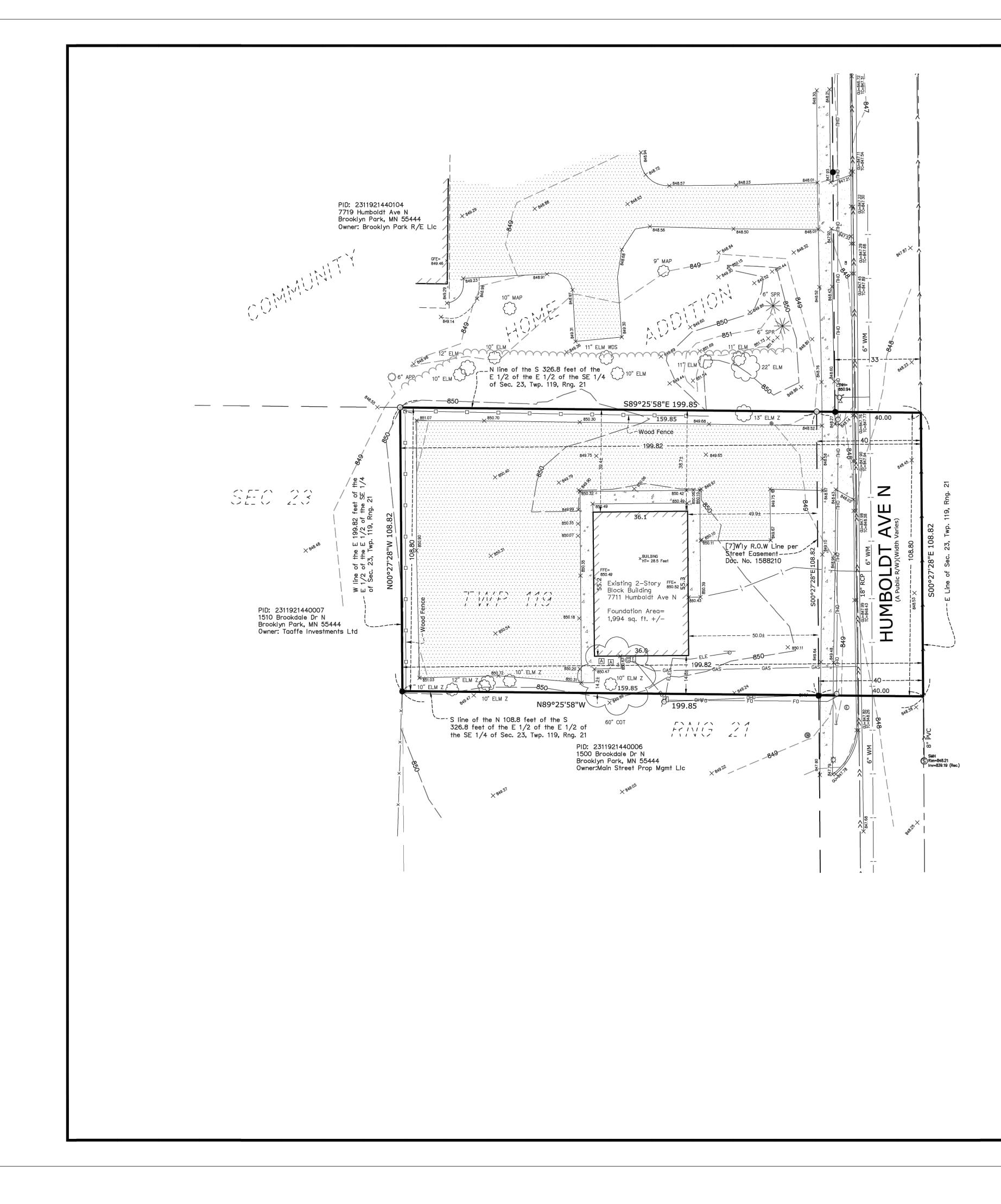
GEOTECHNICAL ENGINEER: TBD







		ISSUE/S
		DATE
		04/24/20
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	SHEET INDEX	· · · · ·
SHEET NUMBER	SHEET TITLE	·
C0.0	TITLE SHEET	·
V1.0	SITE SURVEY	·
C1.0	REMOVALS PLAN	·
C2.0	SITE PLAN	·
C3.0	GRADING PLAN	·
C4.0	UTILITY PLAN	·
C5.0	CIVIL DETAILS	·
C5.1	CIVIL DETAILS	·
C5.2	CIVIL DETAILS	·
L1.0	LANDSCAPE PLAN	DRAWN BY:KE
L1.1	LANDSCAPE PLAN NOTES & DETAILS	PROJECT NUM
SW1.0	SWPPP - EXISTING CONDITIONS	RE
SW1.1	SWPPP - PROPOSED CONDITIONS	DATE DES
SW1.2	SWPPP - DETAILS	
SW1.3	SWPPP - NARRATIVE	
		· · ·
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- 1. Bearings are based on the H
- 2. Site Address: 7711 Humbold
- 3. This property is contained in Community Panel No. 27053
- 4. The Gross land area is 21,7

5. Elevations are based on the property corner having an e

#### SURVEY REPORT

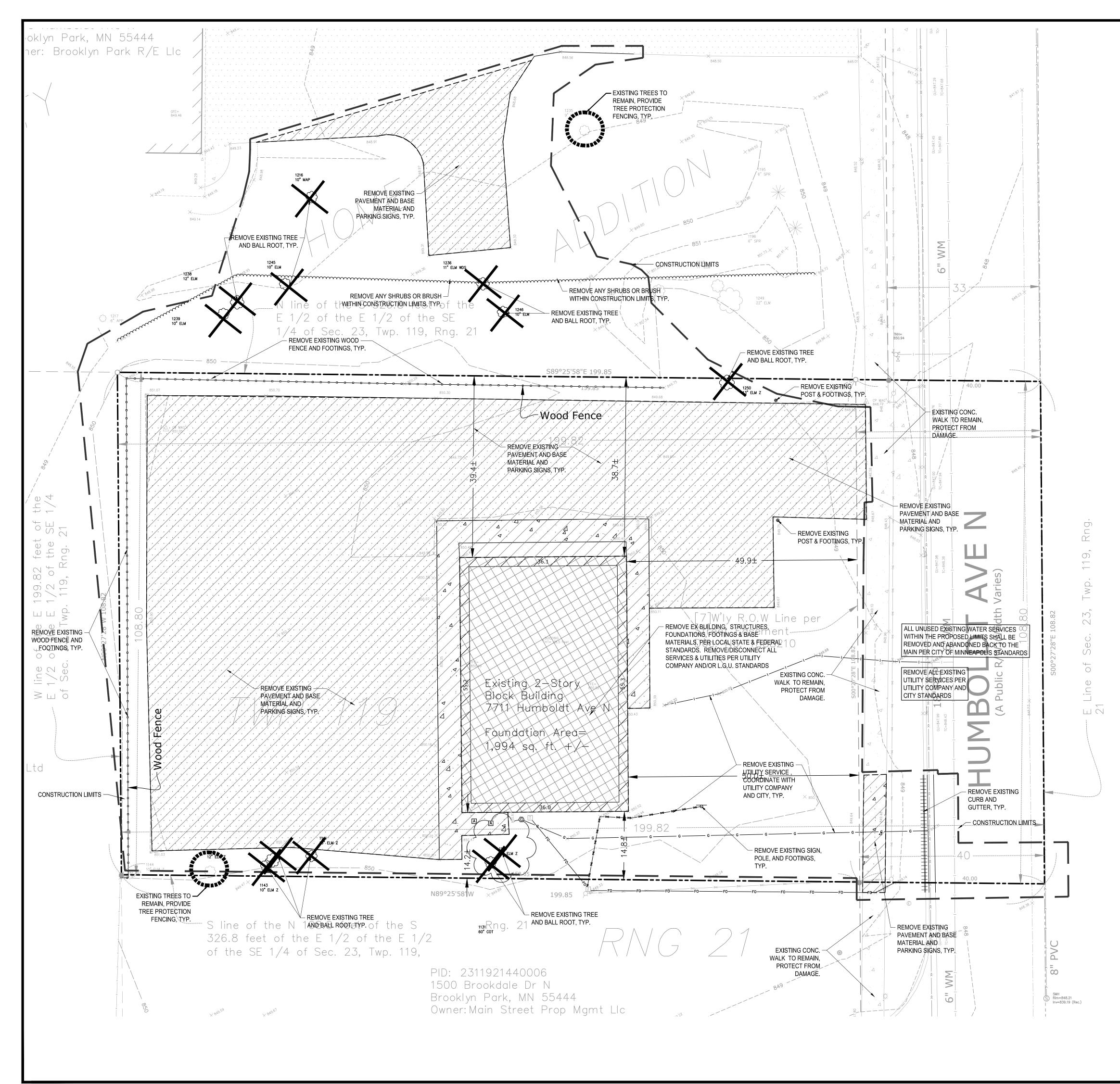
#### ALTA CERTIFICATION



#### ------ FO------ FIBE GAS GAS \_\_\_\_\_ WAT \_\_\_\_>\_\_\_\_ SAN ----- STOP OVER ------ ELE ------ ELEG \_\_\_\_\_ CTV \_\_\_\_\_ CAB ——×——— CHAI \_\_\_\_ woo \_\_\_\_\_0\_\_\_\_\_ GUAF CON . a d a PAV BIT GRAV SURI

						Ci	vil	Site
							<b>R O</b> ng • Surveying • L W. 35th Street.	UP andscape Architecture Suite 200
							it. Louis Park, M	
	<b>CRIPTION OF PROPERTY SURVEYED</b> North 108.8 feet of the South 326.8 feet of the Ea	ast 199.8	2 feet of the East 1/2 of the East	st 1/2 of th	ne Southeast Quarter of Section 23,			
	nship 119, Range 21, Hennepin County, Minnesot							
	g Registered land as is evidenced by Certificate of A/NSPS Land Title Survey Notes	Title No.	1378034.					
	bered per Table A)							
1.	Bearings are based on the Hennepin County Coo							
2. 3.	Site Address: 7711 Humboldt Ave N, Brooklyn P. This property is contained in Zone X (area deter			ance flood	plain) per Flood Insurance Rate Map,			
	Community Panel No. 27053C0206F, effective d	ate of No	vember 4, 2016.					
4. 5.	The Gross land area is 21,744 +/- square feet o Elevations are based on the NGVD 29 Datum. Si			ted aprox.	. 10 feet northeasterly of the northest			
6	property corner having an elevation of 850.94 fe	et.						
6.	The current Zoning for the subject property was Please note that the general restrictions for the	subject p	roperty may have been amende					
	such amendments if they are not in a recorded or Zoning Administrator for the current restrictions			id that a zo	oning letter be obtained from the			
9.	We did not observe any striped parking stalls on	subject	property.					416
11.	We have shown the location of utilities to the be sources: plans obtained from utility companies, We have used this information to develop a view of underground features cannot be accurately, c the client is advised that excavation may be nec all the utilities located on the subject property.	plans pro of the u ompletely	vided by client, markings by uti nderground utilities for this site / and reliably depicted. Where a	lity compa . However, idditional c	nies and other appropriate sources. , lacking excavation, the exact location or more detailed information is required,	Ave	554	<b>R/E LLC</b> Louis Park, MN 55-
13.	The names of the adjoining owners of the platte	d lands, a	as shown hereon, are based on	informatio	n obtained from Hennepin County GIS.	5	unty,	<b>R/E I</b> Louis P
SUF	VEY REPORT						in Co	<b>ਮ</b> ਨ
1.	This map and report was prepared with the bene agent for Old Republic Title Insurance Company, B of the herein referenced Title Commitment: a. Item no.'s 1-6 are not survey related.					Humboldt		<b>/n P</b> Ste 77
	b. The following are numbered per the referen [7]. Public street easement(s) over subje and 1588210. Doc. No. 1573697 crea easement over the east 40 feet of su 1573697. The 40 foot easement per	ct proper ates an e bject pro	ty in favor of City of Brooklyn P asement over the east 7 feet of perty. Doc. No. 1588210 was ci	subject pr	operty. Doc. No. 1588210 creates an	711 Hu	2	<b>Brooklyn</b> 5775 Wayzata Blvd, Ste
To: Broc Com This Req and	A CERTIFICATION Jnity Cooperative Council, LLC, a Minnesota limited klyn Park Real Estate LLC, a Minnesota limited lial mercial Title, Inc.: is to certify that this map or plat and the survey of irements for ALTA/NSPS Land Title Surveys, joint 13 of Table A thereof. The field work was complet d this 13th day of April, 2020.	oility com on which ly establi	ipany; Highland Bank; Old Repu it is based were made in accord shed and adopted by ALTA and	iblic Title I lance with	nsurance Company; and Guaranty the 2016 Minimum Standard Detail	PROJECT		CLIENT 577
	L. Synstelien Minnesota License No. @civilsitegroup.com	44565	N			I HERE SPEC PREPARE SUPER LICENSE LAWS C	VISION AND TH D LAND SURVE OF THE STATE O F THE STATE O ORY L. SYNS	AT THIS PLAN, REPORT WAS NDER MY DIRECT AT I AM A DULY YOR UNDER THE DF MINNESOTA.
	20 10	0	10 20 4	10		FIELD CR		
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		00,						
	Linetvne	e &	Symbol Lege	nd				/AP
	FO FO FIBER OPTIC	ۍ ۵	SIGN UTILITY MANHOLE	E <b>ITU</b>	AIR CONDITIONER BOLLARD	-Sugarloaf T		77th Way
	WATERMAIN     SANITARY SEWER	S S	SANITARY MANHOLE STORM MANHOLE	¢		Brookdale Dr	Humboldt Ave N Brookdal	e Dr
	STORM SEWER     OHU     OHU     OVERHEAD UTILITIES	R	CATCH BASIN ROOF DRAIN	~~	FLAG POLE FLARED END SECTION	nmes Ave N ookdale Ci	Z Z 76th Ave N	76th Ave N
	TEL TELEPHONE LINE     ELECTRIC LINE	Ξ	TELEPHONE BOX	) 8			lumboldt /	Emerson Fremont
	CABLE LINE	() R	TELEPHONE MANHOLE ELECTRIC TRANSFORMER	r S	HANDICAP SYMBOL HYDRANT			
	WOODEN FENCELINE	8	TRAFFIC SIGNAL	()) () ()	WATER MANHOLE WATER VALVE	DATE D	ESCRIPTION	
	O GUARDRAIL	C	CABLE TV BOX ELECTRICAL METER	A A	POWER POLE	A-22-20   A	dditional Topo	
	PAVER SURFACE	©	GAS METER	⊥ ₩	GUY WIRE CONIFEROUS TREE			
	BITUMINOUS SURFACE	0	FOUND IRON MONUMENT	*	DECIDUOUS TREE	PROJECT NO		
	GRAVEL/LANDSCAPE SURFACE	0	CAST IRON MONUMENT					SPS LAND E SURVEY
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## REMOVAL NOTES:

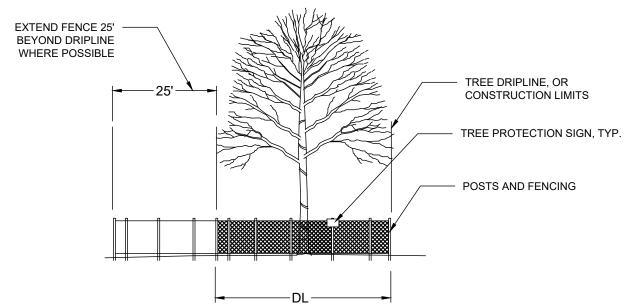
- 1. SEE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) PLAN FOR CONSTRUCTION STORM WATER MANAGEMENT PLAN.
- 2. REMOVAL OF MATERIALS NOTED ON THE DRAWINGS SHALL BE IN ACCORDANCE WITH MNDOT, STATE AND LOCAL REGULATIONS.
- REMOVAL OF PRIVATE UTILITIES SHALL BE COORDINATED WITH UTILITY OWNER PRIOR TO CONSTRUCTION ACTIVITIES.
   EXISTING PAVEMENTS SHALL BE SAWCUT IN LOCATIONS AS SHOWN ON THE DRAWINGS OR THE NEAREST JOINT FOR
- PROPOSED PAVEMENT CONNECTIONS.
  5. REMOVED MATERIALS SHALL BE DISPOSED OF TO A LEGAL OFF-SITE LOCATION AND IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS.
- 6. ABANDON, REMOVAL, CONNECTION, AND PROTECTION NOTES SHOWN ON THE DRAWINGS ARE APPROXIMATE. COORDINATE WITH PROPOSED PLANS.
- 7. EXISTING ON-SITE FEATURES NOT NOTED FOR REMOVAL SHALL BE PROTECTED THROUGHOUT THE DURATION OF THE CONTRACT.
- 8. PROPERTY LINES SHALL BE CONSIDERED GENERAL CONSTRUCTION LIMITS UNLESS OTHERWISE NOTED ON THE DRAWINGS. WORK WITHIN THE GENERAL CONSTRUCTION LIMITS SHALL INCLUDE STAGING, DEMOLITION AND CLEAN-UP OPERATIONS AS WELL AS CONSTRUCTION SHOWN ON THE DRAWINGS.
- 9. MINOR WORK OUTSIDE OF THE GENERAL CONSTRUCTION LIMITS SHALL BE ALLOWED AS SHOWN ON THE PLAN AND PER CITY REQUIREMENTS.
- 10. DAMAGE BEYOND THE PROPERTY LIMITS CAUSED BY CONSTRUCTION ACTIVITY SHALL BE REPAIRED IN A MANNER APPROVED BY THE ENGINEER/LANDSCAPE ARCHITECT OR IN ACCORDANCE WITH THE CITY.
- 11. PROPOSED WORK (BUILDING AND CIVIL) SHALL NOT DISTURB EXISTING UTILITIES UNLESS OTHERWISE SHOWN ON THE DRAWINGS AND APPROVED BY THE CITY PRIOR TO CONSTRUCTION.
- 12. SITE SECURITY MAY BE NECESSARY AND PROVIDED IN A MANNER TO PROHIBIT VANDALISM, AND THEFT, DURING AND AFTER NORMAL WORK HOURS, THROUGHOUT THE DURATION OF THE CONTRACT. SECURITY MATERIALS SHALL BE IN ACCORDANCE WITH THE CITY.
- 13. VEHICULAR ACCESS TO THE SITE SHALL BE MAINTAINED FOR DELIVERY AND INSPECTION ACCESS DURING NORMAL OPERATING HOURS. AT NO POINT THROUGHOUT THE DURATION OF THE CONTRACT SHALL CIRCULATION OF ADJACENT STREETS BE BLOCKED WITHOUT APPROVAL BY THE CITY PRIOR TO CONSTRUCTION ACTIVITIES.
- 14. ALL TRAFFIC CONTROLS SHALL BE PROVIDED AND ESTABLISHED PER THE REQUIREMENTS OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD) AND THE CITY. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO, SIGNAGE, BARRICADES, FLASHERS, AND FLAGGERS AS NEEDED. ALL PUBLIC STREETS SHALL REMAIN OPEN TO TRAFFIC AT ALL TIMES. NO ROAD CLOSURES SHALL BE PERMITTED WITHOUT APPROVAL BY THE CITY.
- 15. SHORING FOR BUILDING EXCAVATION MAY BE USED AT THE DISCRETION OF THE CONTRACTOR AND AS APPROVED BY THE OWNERS REPRESENTATIVE AND THE CITY PRIOR TO CONSTRUCTION ACTIVITIES.
- 16. STAGING, DEMOLITION, AND CLEAN-UP AREAS SHALL BE WITHIN THE PROPERTY LIMITS AS SHOWN ON THE DRAWINGS AND MAINTAINED IN A MANNER AS REQUIRED BY THE CITY.
- 17. ALL EXISTING SITE TRAFFIC/REGULATORY SIGNAGE TO BE INVENTORIED AND IF REMOVED FOR CONSTRUCTION SHALL BE RETURNED TO LGU.
- 18. ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "GOPHER STATE ONE CALL" (651-454-0002 OR 800-252-1166) FOR UTILITY LOCATIONS, 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

CITY OF BROOKLYN PARK REMOVAL NOTES:

1. RESERVED FOR CITY SPECIFIC REMOVAL NOTES.

## EROSION CONTROL NOTES:

SEE SWPPP ON SHEETS SW1.0 - SW1.3

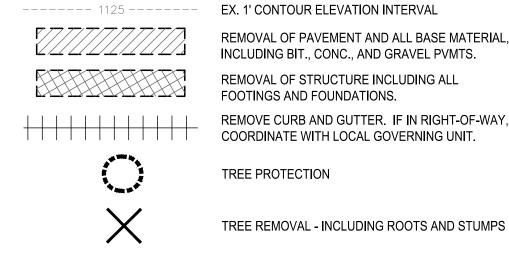


DRIPLINE WIDTH FURNISH A AND INSTALL TEMPORARY FENCE AT THE TREE'S DRIP LINE OR CONSTRUCTION LIMITS AS SHOWN ON PLAN, PRIOR TO ANY CONSTRUCTION. WHERE POSSIBLE PLACE FENCE 25' BEYOND DRIP LINE. PLACE TREE PROTECTION SIGN ON POSTS, ONE PER INDIVIDUAL TREE (FACING CONSTRUCTION

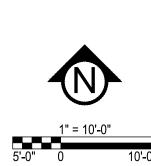
ACTIVITY), OR ONE EVERY 100' LF ALONG A GROVE OR MULTI-TREE PROTECTION AREA.

TREE PROTECTION

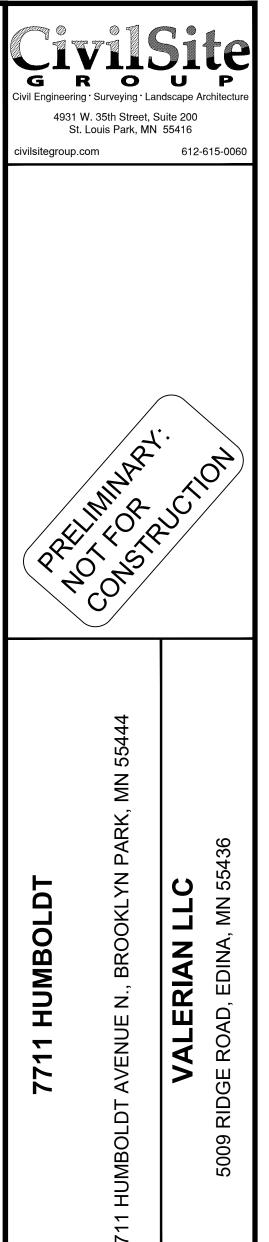
### REMOVALS LEGEND:

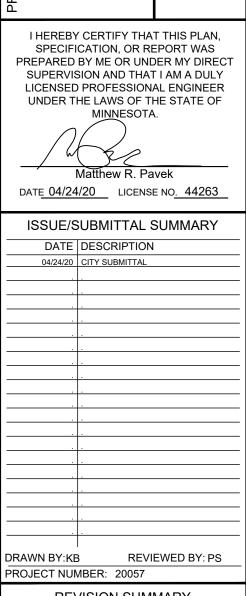






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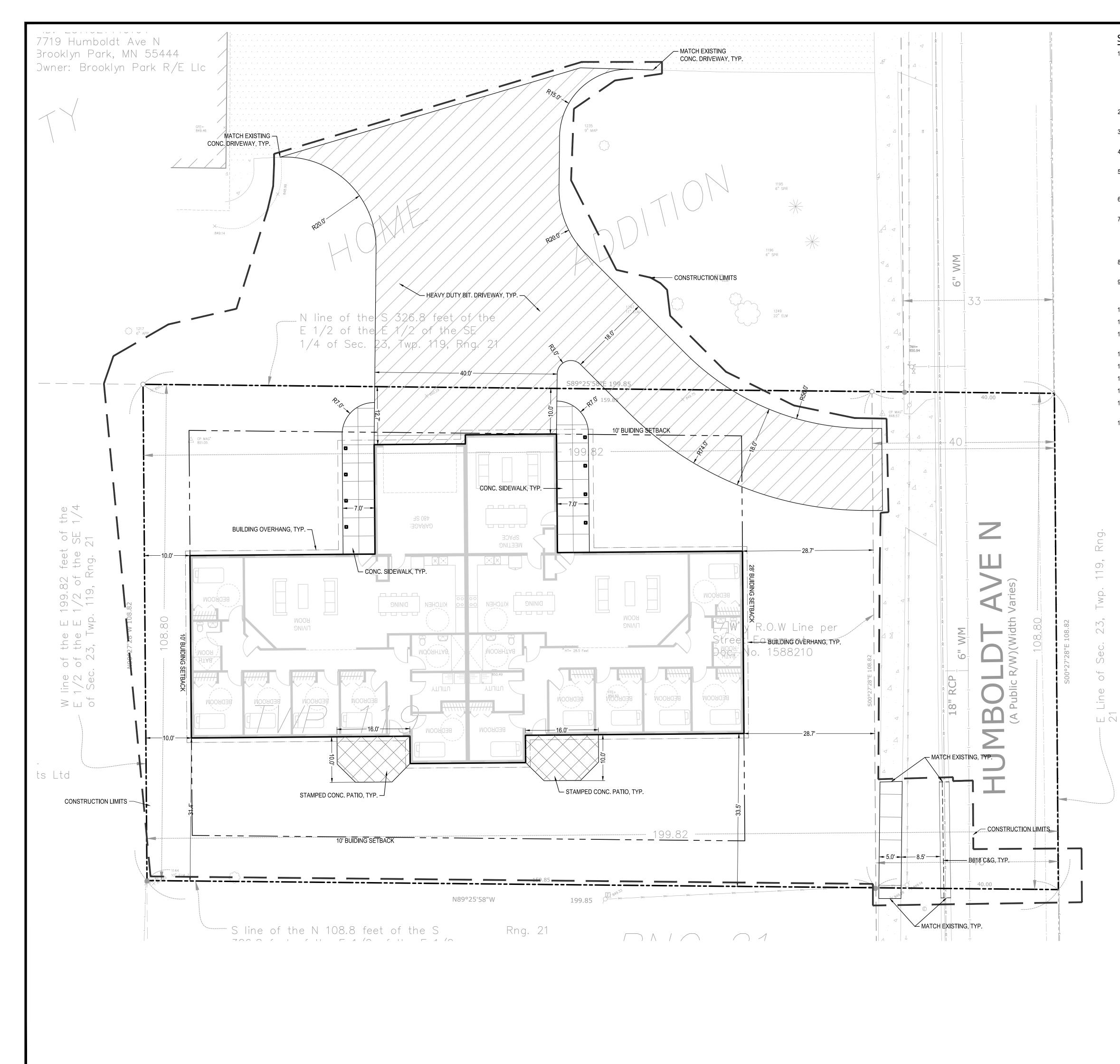






REMOVALS PLAN

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### SITE LAYOUT NOTES:

 CONTRACTOR SHALL VERIFY LOCATIONS AND LAYOUT OF ALL SITE ELEMENTS PRIOR TO BEGINNING CONSTRUCTION, INCLUDING BUT NOT LIMITED TO, LOCATIONS OF EXISTING AND PROPOSED PROPERTY LINES, EASEMENTS, SETBACKS, UTILITIES, BUILDINGS AND PAVEMENTS. CONTRACTOR IS RESPONSIBLE FOR FINAL LOCATIONS OF ALL ELEMENTS FOR THE SITE. ANY REVISIONS REQUIRED AFTER COMMENCEMENT OF CONSTRUCTION, DUE TO LOCATIONAL ADJUSTMENTS SHALL BE CORRECTED AT NO ADDITIONAL COST TO OWNER. ADJUSTMENTS TO THE LAYOUT SHALL BE APPROVED BY THE ENGINEER/LANDSCAPE ARCHITECT PRIOR TO INSTALLATION OF MATERIALS. STAKE LAYOUT FOR APPROVAL.

 THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION, INCLUDING A RIGHT-OF-WAY AND STREET OPENING PERMIT.

- 3. THE CONTRACTOR SHALL VERIFY RECOMMENDATIONS NOTED IN THE GEO TECHNICAL REPORT PRIOR TO INSTALLATION OF SITE IMPROVEMENT MATERIALS.
- 4. CONTRACTOR SHALL FIELD VERIFY COORDINATES AND LOCATION DIMENSIONS OF THE BUILDING AND STAKE FOR REVIEW AND APPROVAL BY THE OWNERS REPRESENTATIVE PRIOR TO INSTALLATION OF FOOTING MATERIALS.
- LOCATIONS OF STRUCTURES, ROADWAY PAVEMENTS, CURBS AND GUTTERS, BOLLARDS, AND WALKS ARE APPROXIMATE AND SHALL BE STAKED IN THE FIELD, PRIOR TO INSTALLATION, FOR REVIEW AND APPROVAL BY THE ENGINEER/LANDSCAPE ARCHITECT.
- 6. CURB DIMENSIONS SHOWN ARE TO FACE OF CURB. BUILDING DIMENSIONS ARE TO FACE OF CONCRETE FOUNDATION. LOCATION OF BUILDING IS TO BUILDING FOUNDATION AND SHALL BE AS SHOWN ON THE DRAWINGS.
- 7. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OR SAMPLES AS SPECIFIED FOR REVIEW AND APPROVAL BY THE ENGINEER/LANDSCAPE ARCHITECT PRIOR TO FABRICATION FOR ALL PREFABRICATED SITE IMPROVEMENT MATERIALS SUCH AS, BUT NOT LIMITED TO THE FOLLOWING, FURNISHINGS, PAVEMENTS, WALLS, RAILINGS, BENCHES, FLAGPOLES, LANDING PADS FOR CURB RAMPS, AND LIGHT AND POLES. THE OWNER RESERVES THE RIGHT TO REJECT INSTALLED MATERIALS NOT PREVIOUSLY APPROVED.
- 8. PEDESTRIAN CURB RAMPS SHALL BE CONSTRUCTED WITH TRUNCATED DOME LANDING AREAS IN ACCORDANCE WITH A.D.A. REQUIREMENTS-SEE DETAIL.
- 9. CROSSWALK STRIPING SHALL BE 24" WIDE WHITE PAINTED LINE, SPACED 48" ON CENTER PERPENDICULAR TO THE FLOW OF TRAFFIC. WIDTH OF CROSSWALK SHALL BE 5' WIDE. ALL OTHER PAVEMENT MARKINGS SHALL BE WHITE IN COLOR UNLESS OTHERWISE NOTED OR REQUIRED BY ADA OR LOCAL GOVERNING BODIES.
- 10. SEE SITE PLAN FOR CURB AND GUTTER TYPE. TAPER BETWEEN CURB TYPES-SEE DETAIL.
- 11. ALL CURB RADII ARE MINIMUM 3' UNLESS OTHERWISE NOTED.
- 12. CONTRACTOR SHALL REFER TO FINAL PLAT FOR LOT BOUNDARIES, NUMBERS, AREAS AND DIMENSIONS PRIOR TO SITE IMPROVEMENTS.
- 13. FIELD VERIFY ALL EXISTING SITE CONDITIONS, DIMENSIONS.
- 14. PARKING IS TO BE SET PARALLEL OR PERPENDICULAR TO EXISTING BUILDING UNLESS NOTED OTHERWISE.
- 15. ALL PARKING LOT PAINT STRIPPING TO BE WHITE, 4" WIDE TYP.
- BITUMINOUS PAVING TO BE "LIGHT DUTY" UNLESS OTHERWISE NOTED. SEE DETAIL SHEETS FOR PAVEMENT SECTIONS.
   ALL TREES THAT ARE TO REMAIN ARE TO BE PROTECTED FROM DAMAGE WITH A CONSTRUCTION FENCE AT THE DRIP LINE. SEE LANDSCAPE DOCUMENTS.
- 18. ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "GOPHER STATE ONE CALL" (651-454-0002 OR 800-252-1166) FOR UTILITY LOCATIONS, 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

### CITY OF BROOKLYN PARK SITE NOTES:

1. RESERVED FOR CITY SPECIFIC SITE NOTES.

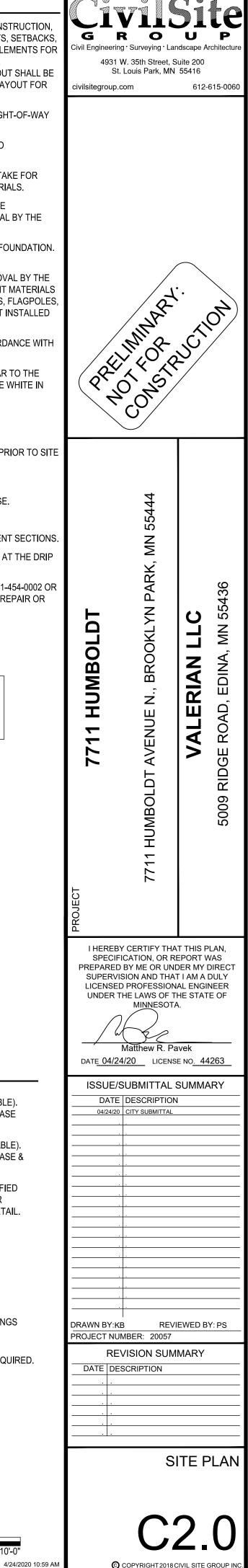
## SITE AREA TABLE:

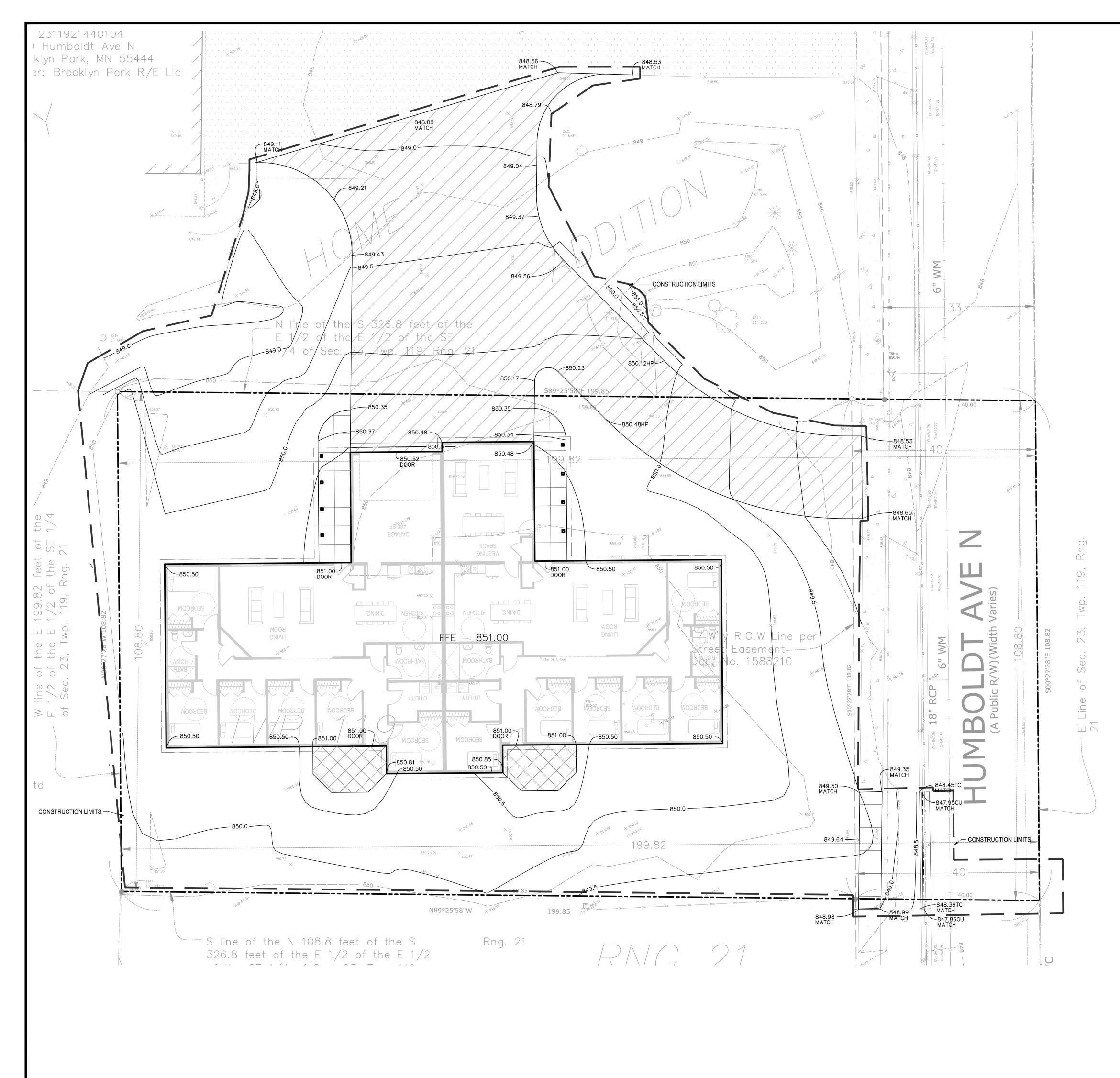
SITE AREA CALCULATIONS				
	EXISTING CO	NDITION	PROPOSED CO	NDITION
BUILDING COVERAGE	1,994 SF	9.2%	5,999 SF	27.6%
ALL PAVEMENTS	13,404 SF	61.6%	5,691 SF	26.2%
ALL NON-PAVEMENTS	6,346 SF	29.2%	10,054 SF	46.2%
TOTAL SITE AREA	2 <b>1,7</b> 44 SF	100.0%	21,744 SF	100.0%
IMPERVIOUS SURFACE				
EXISTING CONDITION	15,398 SF	70.8%		
PROPOSED CONDITION	11,690 SF	53.8%		
DIFFERENCE (EX. VS PROP.)	-3,708 SF	-17.1%		

### SITE PLAN LEGEND:

	LIGHT DUTY BITUMINOUS PAVEMENT (IF APPLICABLE).
	SEE GEOTECHNICAL REPORT FOR AGGREGATE BASE & WEAR COURSE DEPTH, SEE DEATIL.
	HEAVY DUTY BITUMINOUS PAVEMENT (IF APPLICABLE). SEE GEOTECHNICAL REPORT FOR AGGREGATE BASE & WEAR COURSE DEPTH, SEE DETAIL.
	CONCRETE PAVEMENT (IF APPLICABLE) AS SPECIFIED (PAD OR WALK) SEE GEOTECHNICAL REPORT FOR AGGREGATE BASE & CONCRETE DEPTHS, SEE DETAIL. PROPERTY LINE
	CONSTRUCTION LIMITS
TO	CURB AND GUTTER-SEE NOTES (T.O.) TIP OUT GUTTER WHERE APPLICABLE-SEE PLAN
<b>↑ ↑</b>	TRAFFIC DIRECTIONAL ARROW PAVEMENT MARKINGS
6	SIGN AND POST ASSEMBLY. SHOP DRAWINGS REQUIRED. HC = ACCESSIBLE SIGN NP = NO PARKING FIRE LANE ST = STOP CP = COMPACT CAR PARKING ONLY
	ACCESSIBILITY ARROW (IF APPLICABLE) DO NOT PAINT.

Know what's below. Call before you dig.





## GENERAL GRADING NOTES:

- 1. SEE SITE PLAN FOR HORIZONTAL LAYOUT & GENERAL GRADING NOTES.
- 2. THE CONTRACTOR SHALL COMPLETE THE SITE GRADING CONSTRUCTION (INCLUDING BUT NOT LIMITED TO SITE PREPARATION, SOIL CORRECTION, EXCAVATION, EMBANKMENT, ETC.) IN ACCORDANCE WITH THE REQUIREMENTS OF THE OWNER'S SOILS ENGINEER. ALL SOIL TESTING SHALL BE COMPLETED BY THE OWNER'S SOILS ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED SOIL TESTS AND INSPECTIONS WITH THE SOILS ENGINEER.
- 3. GRADING AND EXCAVATION ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT REQUIREMENTS & PERMIT REQUIREMENTS OF THE CITY.
- 4. ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "GOPHER STATE ONE CALL" (651-454-0002 OR 800-252-1166) FOR UTILITY LOCATIONS, 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.
- 5. PROPOSED SPOT GRADES ARE FLOW-LINE FINISHED GRADE ELEVATIONS, UNLESS OTHERWISE NOTED.
- 6. GRADES OF WALKS SHALL BE INSTALLED WITH 5% MAX. LONGITUDINAL SLOPE AND 1% MIN. AND 2% MAX. CROSS SLOPE, UNLESS OTHERWISE NOTED.
- 7. PROPOSED SLOPES SHALL NOT EXCEED 3:1 UNLESS INDICATED OTHERWISE ON THE DRAWINGS. MAXIMUM SLOPES IN MAINTAINED AREAS IS 4:1
- 8. PROPOSED RETAINING WALLS, FREESTANDING WALLS, OR COMBINATION OF WALL TYPES GREATER THAN 4' IN HEIGHT SHALL BE DESIGNED AND ENGINEERED BY A REGISTERED RETAINING WALL ENGINEER. DESIGN DRAWINGS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.
- 9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF GRADE STAKES THROUGHOUT THE DURATION OF CONSTRUCTION TO ESTABLISH PROPER GRADES. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR A FINAL FIELD CHECK OF FINISHED GRADES ACCEPTABLE TO THE ENGINEER/LANDSCAPE ARCHITECT PRIOR TO TOPSOIL AND SODDING ACTIVITIES.
- 10. IF EXCESS OR SHORTAGE OF SOIL MATERIAL EXISTS, THE CONTRACTOR SHALL TRANSPORT ALL EXCESS SOIL MATERIAL OFF THE SITE TO AN AREA SELECTED BY THE CONTRACTOR, OR IMPORT SUITABLE MATERIAL TO THE SITE.
- 11. EXCAVATE TOPSOIL FROM AREAS TO BE FURTHER EXCAVATED OR REGRADED AND STOCKPILE IN AREAS DESIGNATED ON THE SITE. THE CONTRACTOR SHALL SALVAGE ENOUGH TOPSOIL FOR RESPREADING ON THE SITE AS SPECIFIED. EXCESS TOPSOIL SHALL BE PLACED IN EMBANKMENT AREAS, OUTSIDE OF BUILDING PADS, ROADWAYS AND PARKING AREAS. THE CONTRACTOR SHALL SUBCUT CUT AREAS, WHERE TURF IS TO BE ESTABLISHED, TO A DEPTH OF 6 INCHES. RESPREAD TOPSOIL IN AREAS WHERE TURF IS TO BE ESTABLISHED TO A MINIMUM DEPTH OF 6 INCHES.
- 12. FINISHED GRADING SHALL BE COMPLETED. THE CONTRACTOR SHALL UNIFORMLY GRADE AREAS WITHIN LIMITS OF GRADING, INCLUDING ADJACENT TRANSITION AREAS. PROVIDE A SMOOTH FINISHED SURFACE WITHIN SPECIFIED TOLERANCES, WITH UNIFORM LEVELS OR SLOPES BETWEEN POINTS WHERE ELEVATIONS ARE SHOWN, OR BETWEEN SUCH POINTS AND EXISTING GRADES. AREAS THAT HAVE BEEN FINISH GRADED SHALL BE PROTECTED FROM SUBSEQUENT CONSTRUCTION OPERATIONS, TRAFFIC AND EROSION. REPAIR ALL AREAS THAT HAVE BECOME RUTTED BY TRAFFIC OR ERODED BY WATER OR HAS SETTLED BELOW THE CORRECT GRADE. ALL AREAS DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED TO EQUAL OR BETTER THAN ORIGINAL CONDITION OR TO THE REQUIREMENTS OF THE NEW WORK.
- 13. PRIOR TO PLACEMENT OF THE AGGREGATE BASE, A TEST ROLL WILL BE REQUIRED ON THE STREET AND/OR PARKING AREA SUBGRADE. THE CONTRACTOR SHALL PROVIDE A LOADED TANDEM AXLE TRUCK WITH A GROSS WEIGHT OF 25 TONS. THE TEST ROLLING SHALL BE AT THE DIRECTION OF THE SOILS ENGINEER AND SHALL BE COMPLETED IN AREAS AS DIRECTED BY THE SOILS ENGINEER. THE SOILS ENGINEER SHALL DETERMINE WHICH SECTIONS OF THE STREET OR PARKING AREA ARE UNSTABLE. CORRECTION OF THE SUBGRADE SOILS SHALL BE COMPLETED IN ACCORDANCE WITH THE REQUIREMENTS OF THE SOILS ENGINEER. NO TEST ROLL SHALL OCCUR WITHIN 10' OF ANY UNDERGROUND STORM RETENTION/DETENTION SYSTEMS.
- 14. TOLERANCES
- 14.1. THE BUILDING SUBGRADE FINISHED SURFACE ELEVATION SHALL NOT VARY BY MORE THAN 0.30 FOOT ABOVE, OR 0.30 FOOT BELOW, THE PRESCRIBED ELEVATION AT ANY POINT WHERE MEASUREMENT IS MADE.
- 14.2. THE STREET OR PARKING AREA SUBGRADE FINISHED SURFACE ELEVATION SHALL NOT VARY BY MORE THAN 0.05 FOOT ABOVE, OR 0.10 FOOT BELOW, THE PRESCRIBED ELEVATION OF ANY POINT WHERE MEASUREMENT IS MADE.
  14.3. AREAS WHICH ARE TO RECEIVE TOPSOIL SHALL BE GRADED TO WITHIN 0.30 FOOT ABOVE OR BELOW THE REQUIRE
- ELEVATION, UNLESS DIRECTED OTHERWISE BY THE ENGINEER. 14.4. TOPSOIL SHALL BE GRADED TO PLUS OR MINUS 1/2 INCH OF THE SPECIFIED THICKNESS.
- 15. MAINTENANCE
- 15.1. THE CONTRACTOR SHALL PROTECT NEWLY GRADED AREAS FROM TRAFFIC AND EROSION, AND KEEP AREA FREE OF TRASH AND DEBRIS.
- 15.2. CONTRACTOR SHALL REPAIR AND REESTABLISH GRADES IN SETTLED, ERODED AND RUTTED AREAS TO SPECIFIED TOLERANCES. DURING THE CONSTRUCTION, IF REQUIRED, AND DURING THE WARRANTY PERIOD, ERODED AREAS WHERE TURF IS TO BE ESTABLISHED SHALL BE RESEEDED AND MULCHED.
- 15.3. WHERE COMPLETED COMPACTED AREAS ARE DISTURBED BY SUBSEQUENT CONSTRUCTION OPERATIONS OR ADVERSE WEATHER, CONTRACTOR SHALL SCARIFY, SURFACE, RESHAPE, AND COMPACT TO REQUIRED DENSITY PRIOR TO FURTHER CONSTRUCTION.

Know what's below.

Call before you dig.

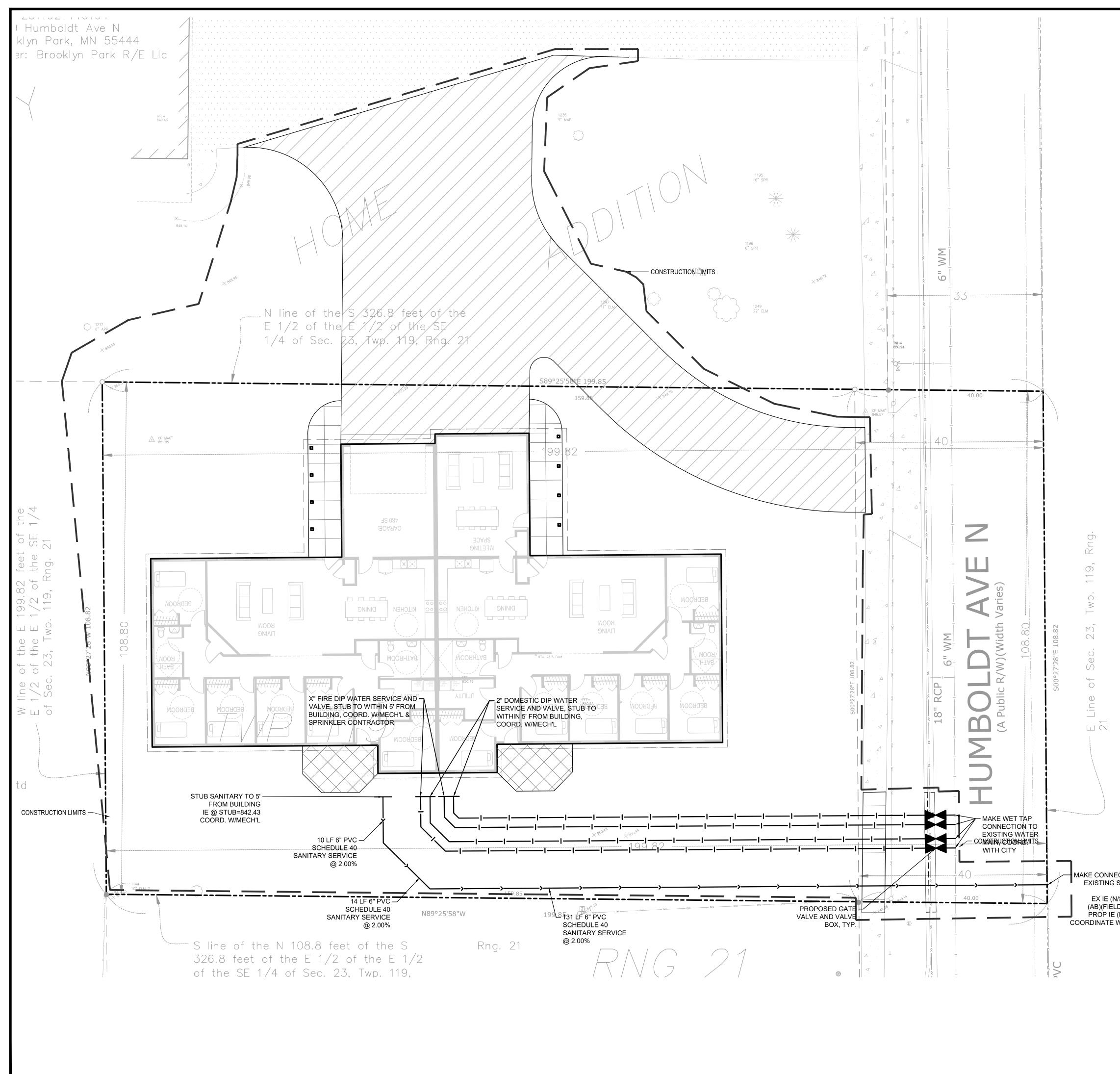
1. RESERVED FOR CITY SPECIFIC GRADING NOTES.

EROSION CONTROL NOTES:

SEE SWPPP ON SHEETS SW1.0 - SW1.3

1125	EX. 1' CONTOUR ELEVATION INTERVAL
1137	1.0' CONTOUR ELEVATION INTERVAL
41.26	SPOT GRADE ELEVATION (GUTTER/FLOW LINE UNLESS OTHERWISE NOTED)
891.00 G	SPOT GRADE ELEVATION GUTTER
891.00 TC	SPOT GRADE ELEVATION TOP OF CURB
891.00 BS/TS	SPOT GRADE ELEVATION BOTTOM OF STAIRS/TOP OF STAIRS
891.00 ME	SPOT GRADE ELEVATION MATCH EXISTING
GB	GRADE BREAK - HIGH POINTS
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### **GENERAL UTILITY NOTES:**

- 1. SEE SITE PLAN FOR HORIZONTAL DIMENSIONS AND LAYOUT.
- 2. CONTRACTOR SHALL FIELD VERIFY LOCATION AND ELEVATION OF EXISTING UTILITIES AND TOPOGRAPHIC FEATURES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF DISCREPANCIES OR VARIATIONS FROM THE PLANS.
- 3. ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "GOPHER STATE ONE CALL" (651-454-0002 OR 800-252-1166) FOR UTILITY LOCATIONS, 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.
- 4. UTILITY INSTALLATION SHALL CONFORM TO THE CURRENT EDITION OF "STANDARD SPECIFICATIONS FOR WATER MAIN AND SERVICE LINE INSTALLATION" AND "SANITARY SEWER AND STORM SEWER INSTALLATION" AS PREPARED BY THE CITY ENGINEERS ASSOCIATION OF MINNESOTA (CEAM), AND SHALL CONFORM WITH THE REQUIREMENTS OF THE CITY AND THE PROJECT SPECIFICATIONS.
- 5. CASTINGS SHALL BE SALVAGED FROM STRUCTURE REMOVALS AND RE-USED OR PLACED AT THE DIRECTION OF THE OWNER.
- 6. ALL WATER PIPE SHALL BE CLASS 52 DUCTILE IRON PIPE (DIP) AWWA C151, ASME B16.4, AWWA C110, AWWA C153 UNLESS OTHERWISE NOTED.
- ALL SANITARY SEWER SHALL BE SDR 26 POLYVINYL CHLORIDE (PVC) ASTM D3034 & F679, OR SCH 40 ASTM D1785, 2665, ASTM F794, 1866) UNLESS OTHERWISE NOTED.
- 8. ALL STORM SEWER PIPE SHALL BE HDPE ASTM F714 & F2306 WITH ASTM D3212 SPEC FITTINGS UNLESS OTHERWISE NOTED.
- 9. PIPE LENGTHS SHOWN ARE FROM CENTER TO CENTER OF STRUCTURE OR TO END OF FLARED END SECTION.
   10. UTILITIES ON THE PLAN ARE SHOWN TO WITHIN 5' OF THE BUILDING FOOTPRINT. THE CONTRACTOR IS ULTIMATELY
- RESPONSIBLE FOR THE FINAL CONNECTION TO BUILDING LINES. COORDINATE WITH ARCHITECTURAL AND MECHANICAL PLANS. 11. CATCH BASINS AND MANHOLES IN PAVED AREAS SHALL BE SUMPED 0.04 FEET. ALL CATCH BASINS IN GUTTERS SHALL
- BE SUMPED 0.15 FEET PER DETAILS. RIM ELEVATIONS SHOWN ON THIS PLAN DO NOT REFLECT SUMPED ELEVATIONS.12. ALL FIRE HYDRANTS SHALL BE LOCATED 5 FEET BEHIND BACK OF CURB UNLESS OTHERWISE NOTED.
- 13. HYDRANT TYPE, VALVE, AND CONNECTION SHALL BE IN ACCORDANCE WITH CITY REQUIREMENTS. HYDRANT EXTENSIONS ARE INCIDENTAL.
- 14. A MINIMUM OF 8 FEET OF COVER IS REQUIRED OVER ALL WATERMAIN, UNLESS OTHERWISE NOTED. EXTRA DEPTH MAY BE REQUIRED TO MAINTAIN A MINIMUM OF 18" VERTICAL SEPARATION TO SANITARY OR STORM SEWER LINES. EXTRA DEPTH WATERMAIN IS INCIDENTAL.
- 15. A MINIMUM OF 18 INCHES OF VERTICAL SEPARATION AND 10 FEET OF HORIZONTAL SEPARATION IS REQUIRED FOR ALL UTILITIES, UNLESS OTHERWISE NOTED.
- 16. ALL CONNECTIONS TO EXISTING UTILITIES SHALL BE IN ACCORDANCE WITH CITY STANDARDS AND COORDINATED WITH THE CITY PRIOR TO CONSTRUCTION.
- 17. CONNECTIONS TO EXISTING STRUCTURES SHALL BE CORE-DRILLED.
- 18. COORDINATE LOCATIONS AND SIZES OF SERVICE CONNECTIONS WITH THE MECHANICAL DRAWINGS.
- 19. COORDINATE INSTALLATION AND SCHEDULING OF THE INSTALLATION OF UTILITIES WITH ADJACENT CONTRACTORS AND CITY STAFF.
- 20. ALL STREET REPAIRS AND PATCHING SHALL BE PERFORMED PER THE REQUIREMENTS OF THE CITY. ALL PAVEMENT CONNECTIONS SHALL BE SAWCUT. ALL TRAFFIC CONTROLS SHALL BE PROVIDED BY THE CONTRACTOR AND SHALL BE ESTABLISHED PER THE REQUIREMENTS OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD) AND THE CITY. THIS SHALL INCLUDE BUT NOT BE LIMITED TO SIGNAGE, BARRICADES, FLASHERS, AND FLAGGERS AS NEEDED. ALL PUBLIC STREETS SHALL BE OPEN TO TRAFFIC AT ALL TIMES. NO ROAD CLOSURES SHALL BE PERMITTED WITHOUT APPROVAL BY THE CITY.
- 21. ALL STRUCTURES, PUBLIC AND PRIVATE, SHALL BE ADJUSTED TO PROPOSED GRADES WHERE REQUIRED. THE REQUIREMENTS OF ALL OWNERS MUST BE COMPLIED WITH. STRUCTURES BEING RESET TO PAVED AREAS MUST MEET OWNERS REQUIREMENTS FOR TRAFFIC LOADING.
- 22. CONTRACTOR SHALL COORDINATE ALL WORK WITH PRIVATE UTILITY COMPANIES.
- 23. CONTRACTOR SHALL COORDINATE CONNECTION OF IRRIGATION SERVICE TO UTILITIES. COORDINATE THE INSTALLATION OF IRRIGATION SLEEVES NECESSARY AS TO NOT IMPACT INSTALLATION OF UTILITIES.
- 24. CONTRACTOR SHALL MAINTAIN AS-BUILT PLANS THROUGHOUT CONSTRUCTION AND SUBMIT THESE PLANS TO ENGINEER UPON COMPLETION OF WORK.
- 25. ALL JOINTS AND CONNECTIONS IN STORM SEWER SYSTEM SHALL BE GASTIGHT OR WATERTIGHT. APPROVED RESILIENT RUBBER JOINTS MUST BE USED TO MAKE WATERTIGHT CONNECTIONS TO MANHOLES, CATCHBASINS, OR OTHER STRUCTURES.
- 26. ALL PORTIONS OF THE STORM SEWER SYSTEM LOCATED WITHIN 10 FEET OF THE BUILDING OR WATER SERVICE LINE MUST BE TESTED IN ACCORDANCE WITH MN RULES, CHAPTER 4714, SECTION 1109.0.

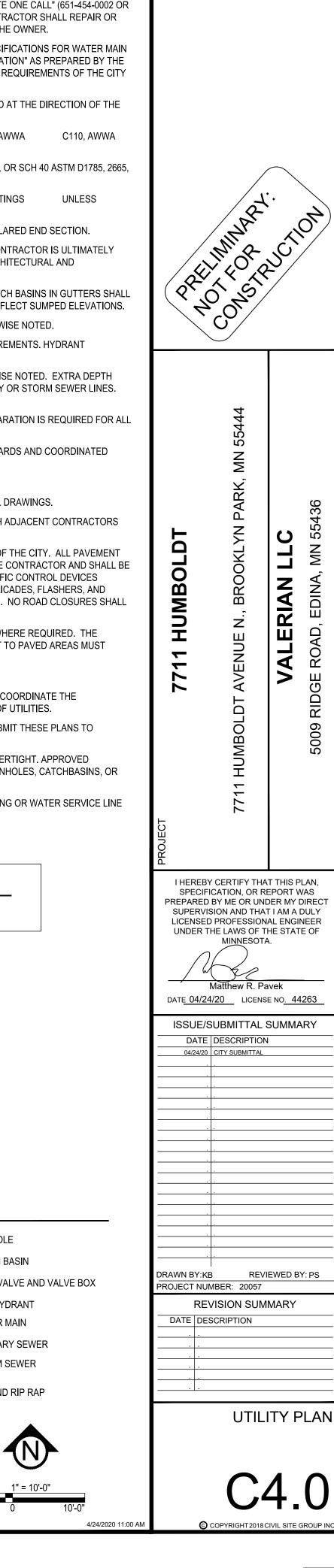
#### CITY OF BROOKLYN PARK UTILITY NOTES:

1. RESERVED FOR CITY SPECIFIC UTILITY NOTES.

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UTILITY LEGEND:	
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Know what's below. Call before you dig.



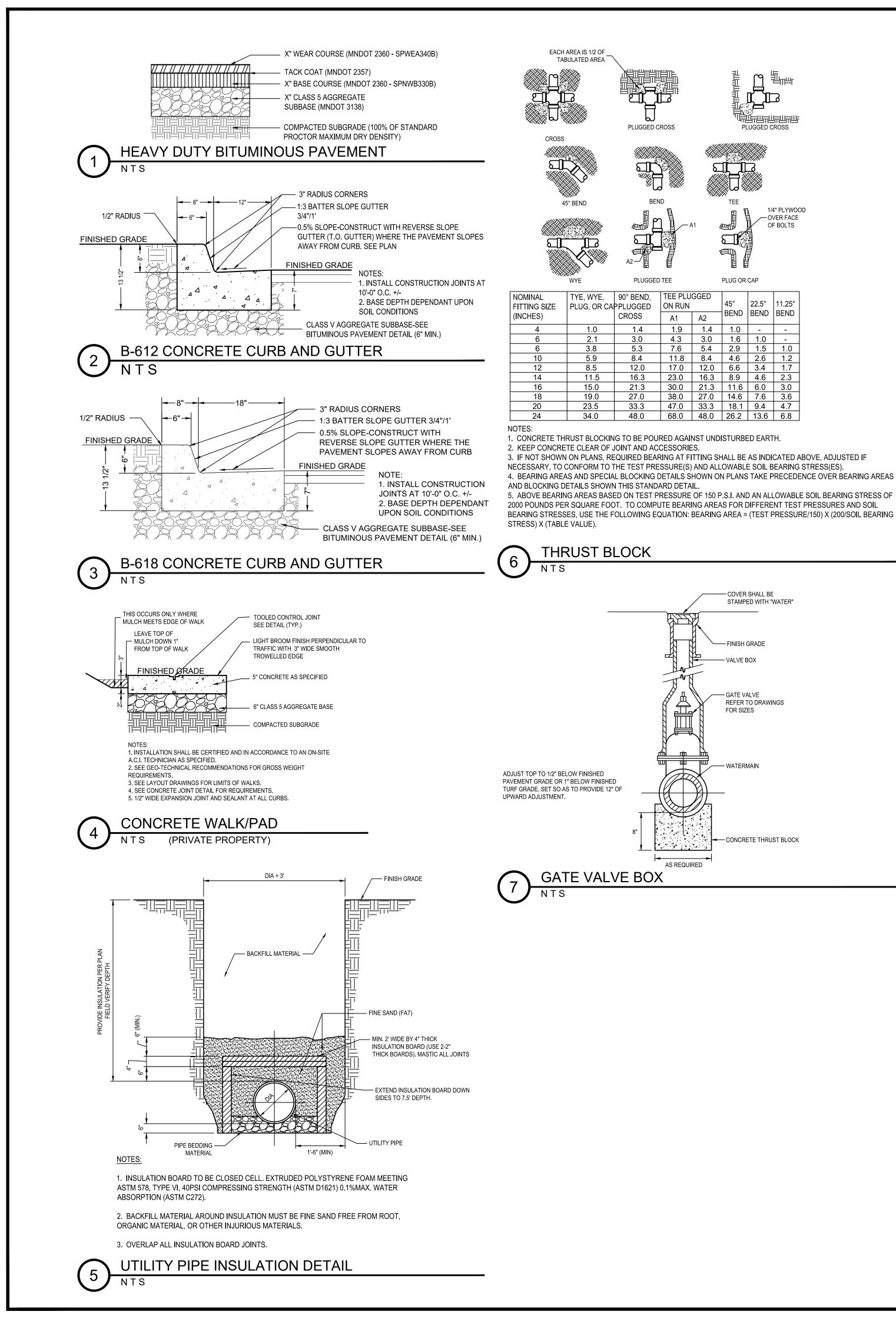
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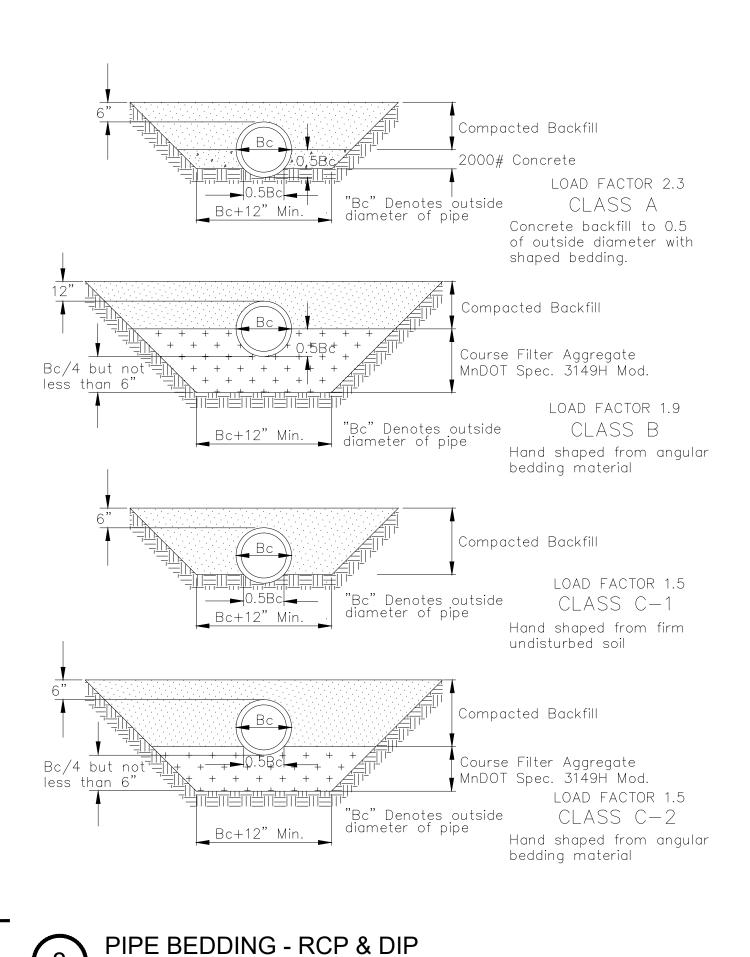
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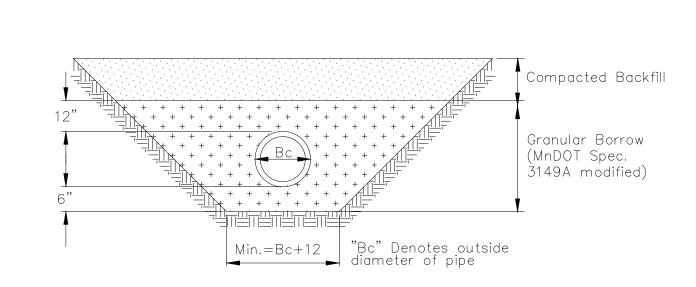
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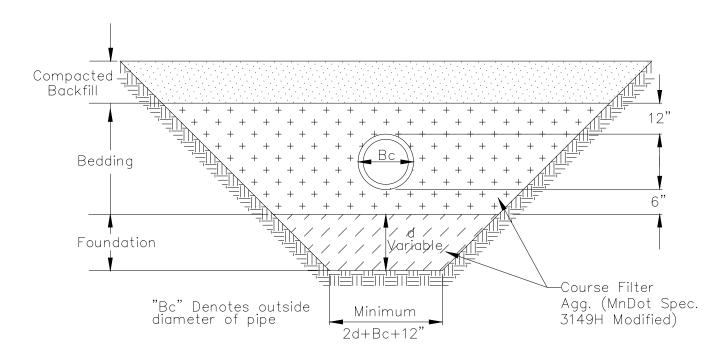
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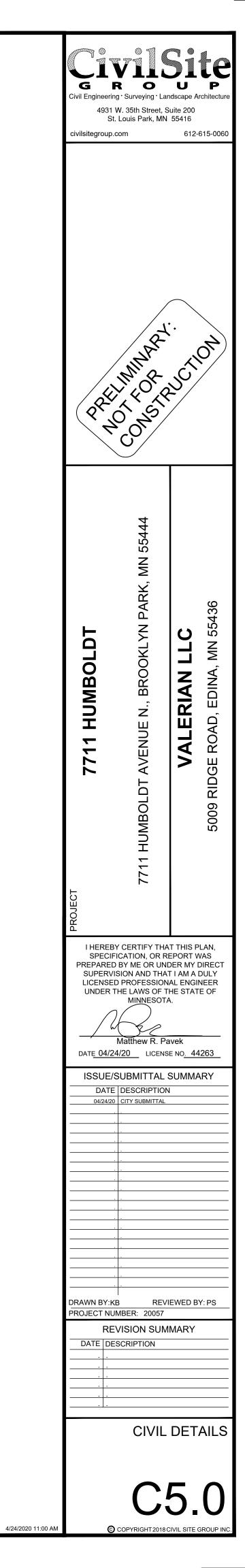


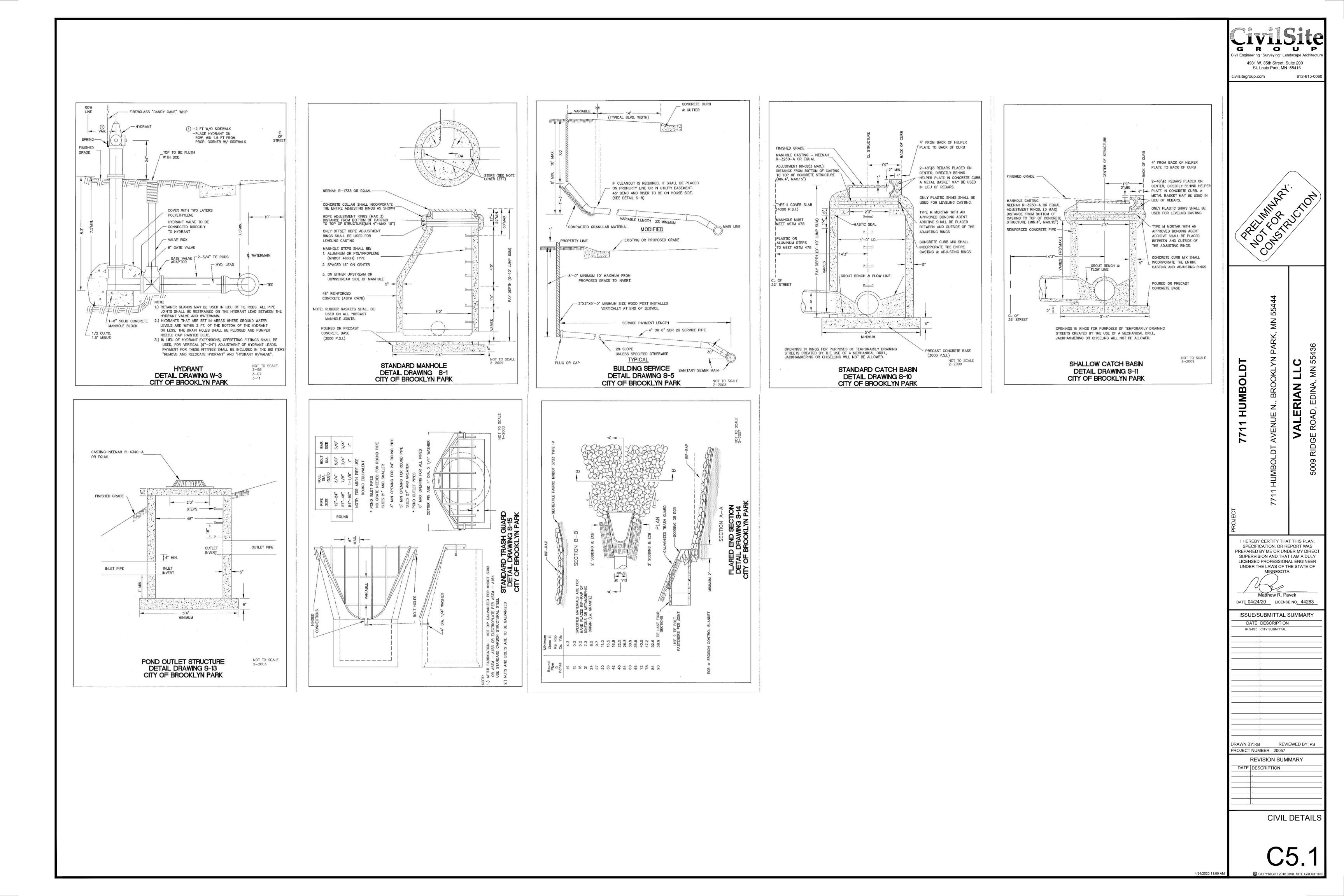


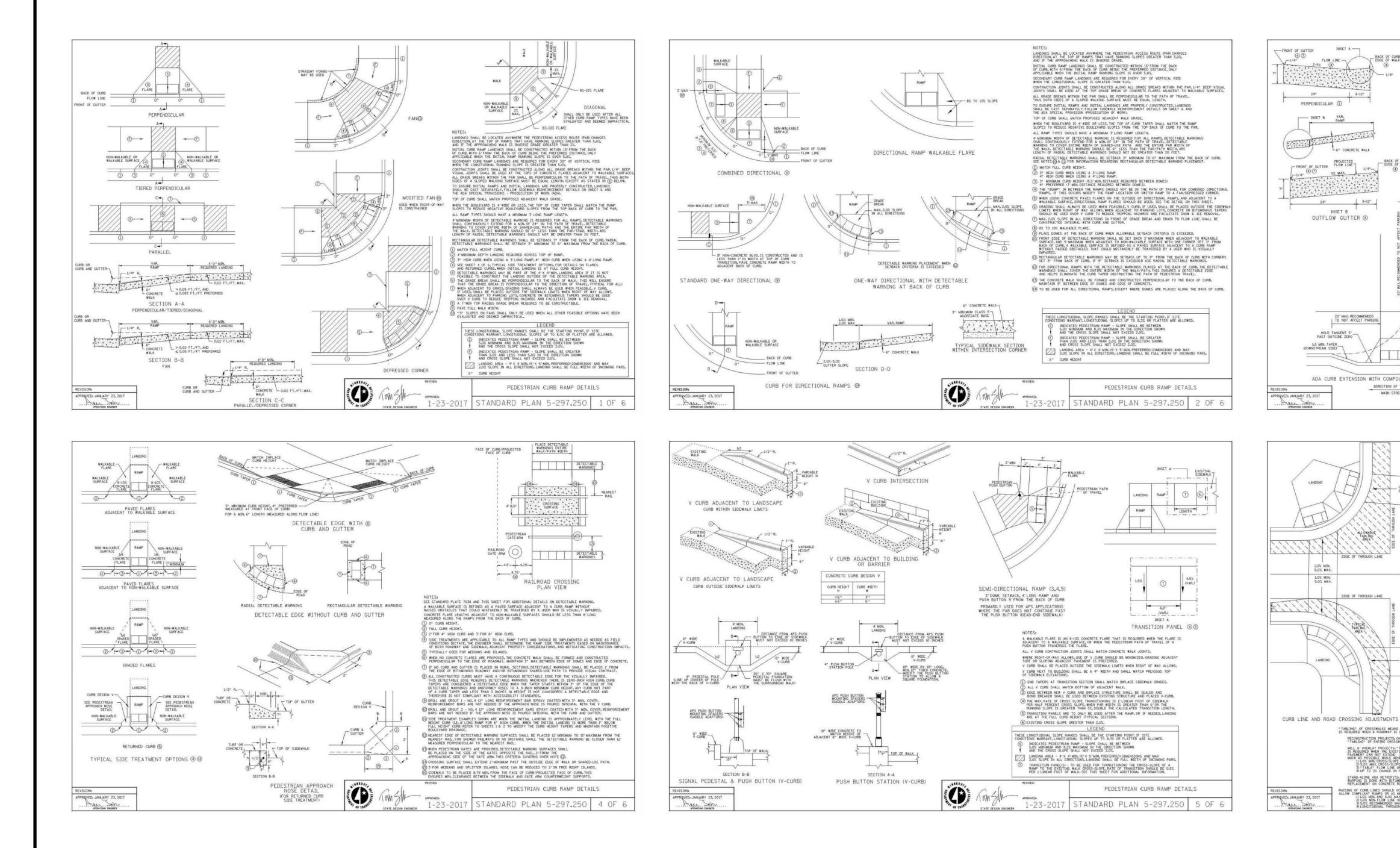


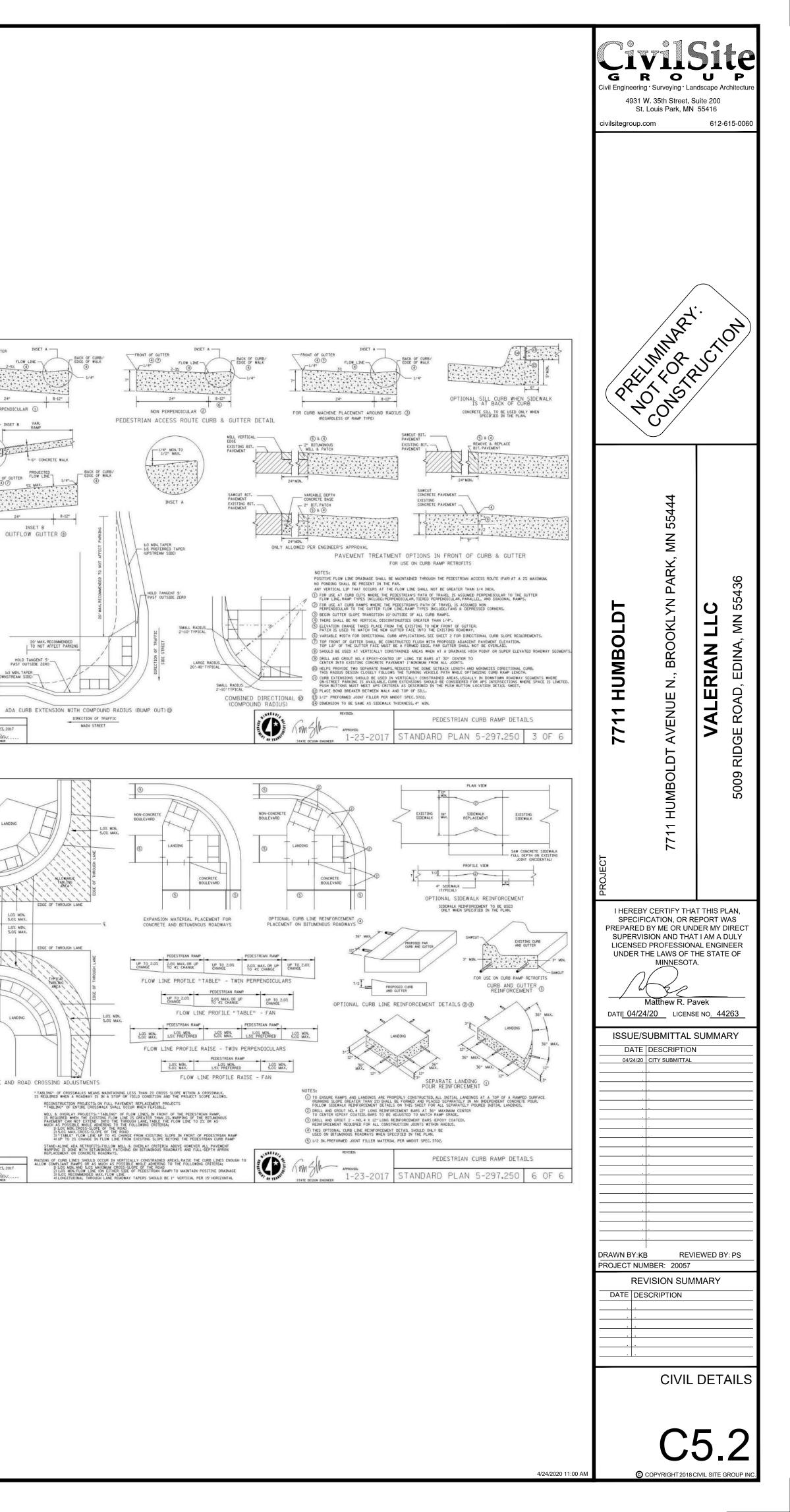
PIPE BEDDING - PVC

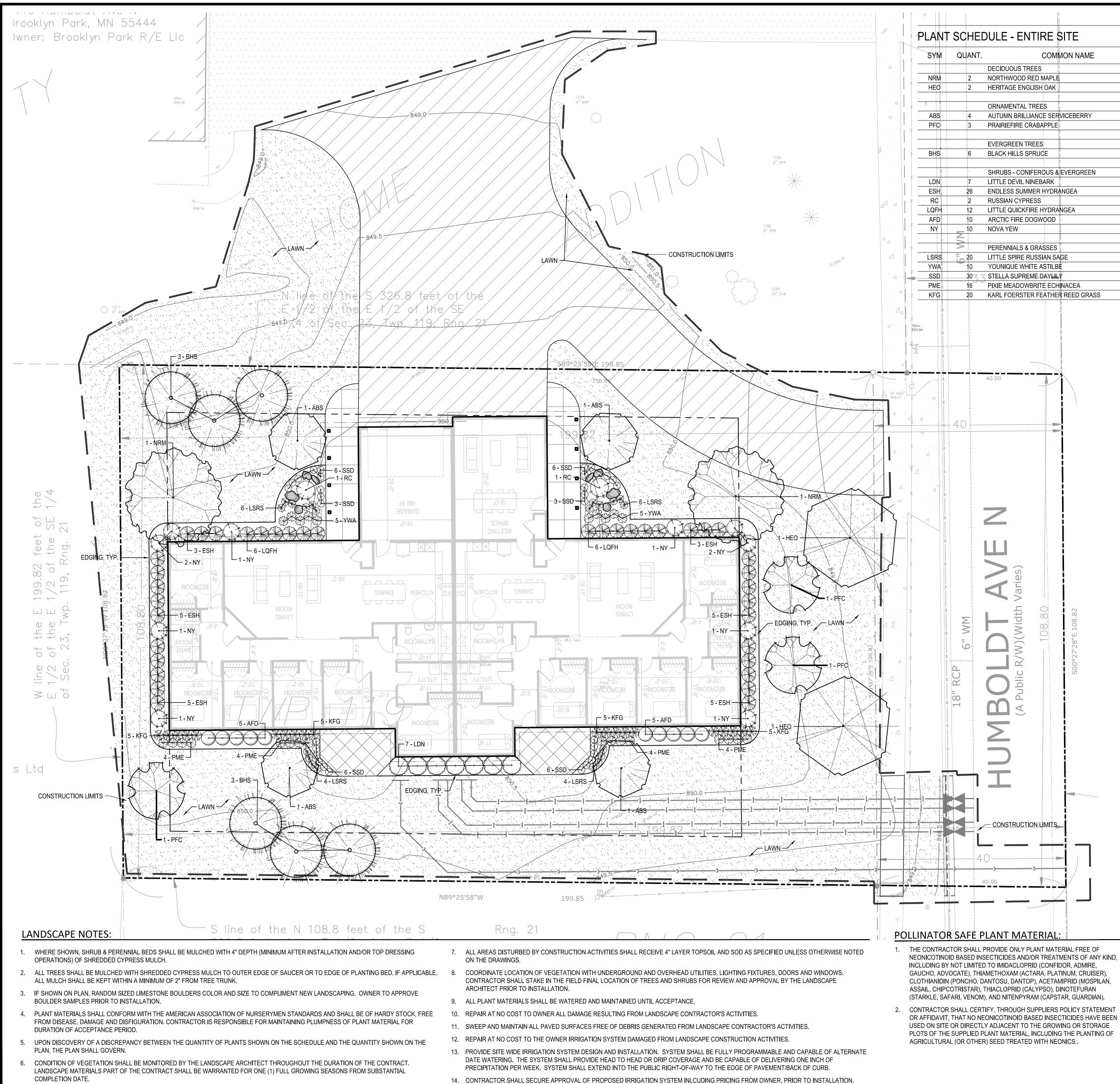
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BOTANICAL NAME	SIZE		COMMENTS
Acer rubrum 'Northwood'	2.5" CAL.	B&B	STRAIGHT LEADER. FULL FORM
Quercus x macdanielii 'Clemons'	2.5" CAL.	B&B	STRAIGHT LEADER. FULL FORM
Amelanchier x grandiflora 'Autumn Brilliance'	1.5" CAL.	B&B	STRAIGHT LEADER. FULL FORM
Malus 'Prairie Fire'	1.5" CAL.	B&B	STRAIGHT LEADER. FULL FORM
Diago playar (Danasta)			
Picea glauca 'Densata'	6' HT.	B&B	STRAIGHT LEADER. FULL FORM
Physocarpus opulifolius 'Donna May'	24" HT.	CONT.	
Hydrangea macrophylla 'Endless Summer'	24" HT.	CONT.	
Microbiota decussata	24" HT.	CONT.	
Hydrangea paniculata 'SMHPLQF'	24" HT.	CONT.	
Cornus sericea 'Farrow'	24" HT.	CONT.	
Taxus cuspidata 'Nova'	24" HT.	CONT.	
Perovskia atriplicifolia	#1	CONT.	
Astilbe 'Verswhite'	#1	CONT.	
Hemerocallis 'Stella Supreme'	#1	CONT.	
Echinacea 'Pixie Meadowbrite'	#1	CONT.	
Calamagrostis x acutiflora 'Karl Foerster'	#1	CONT.	

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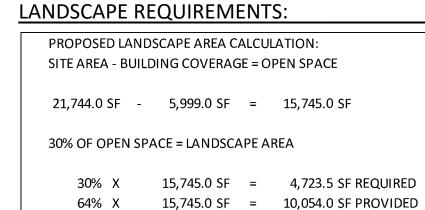
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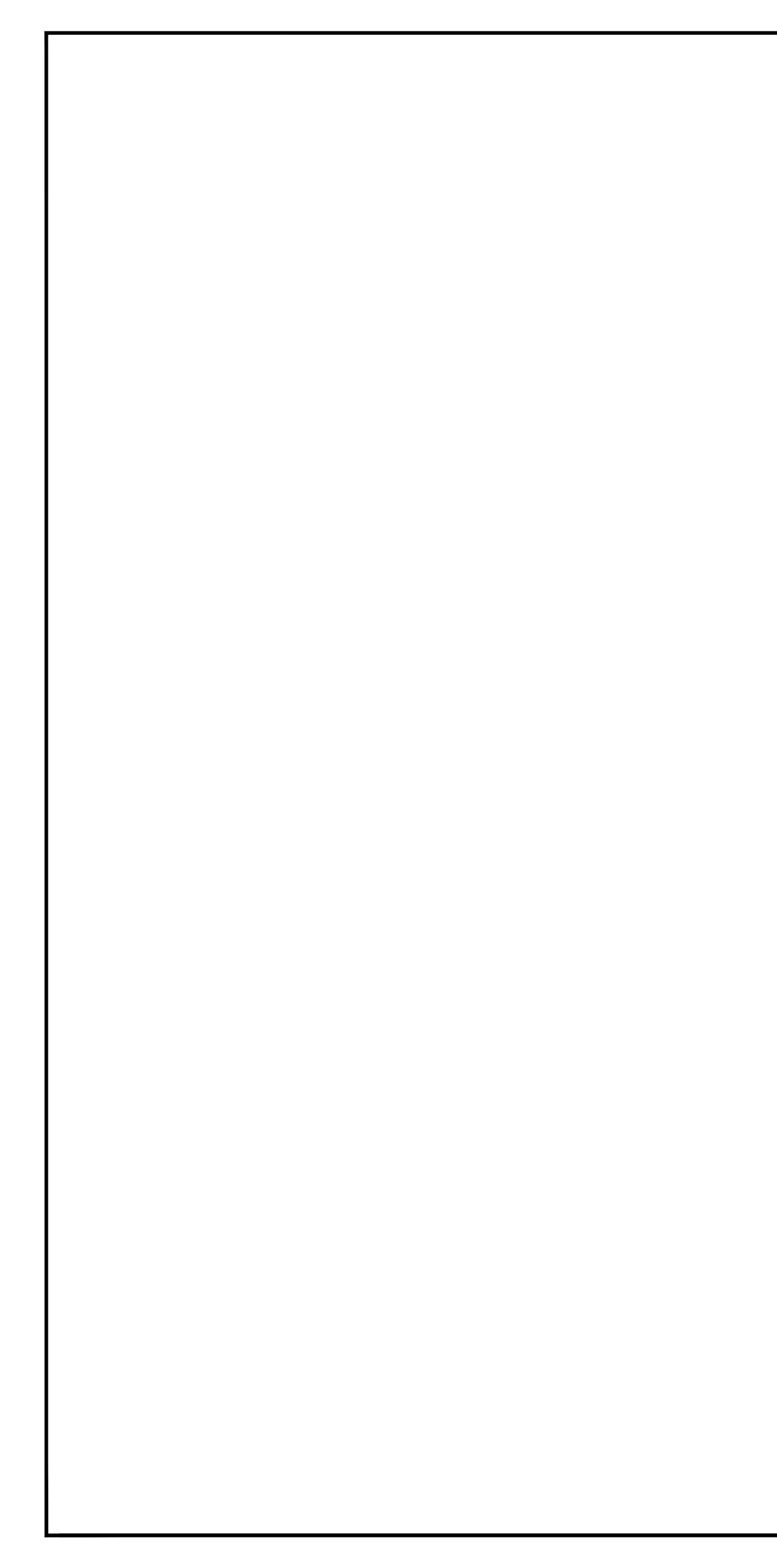


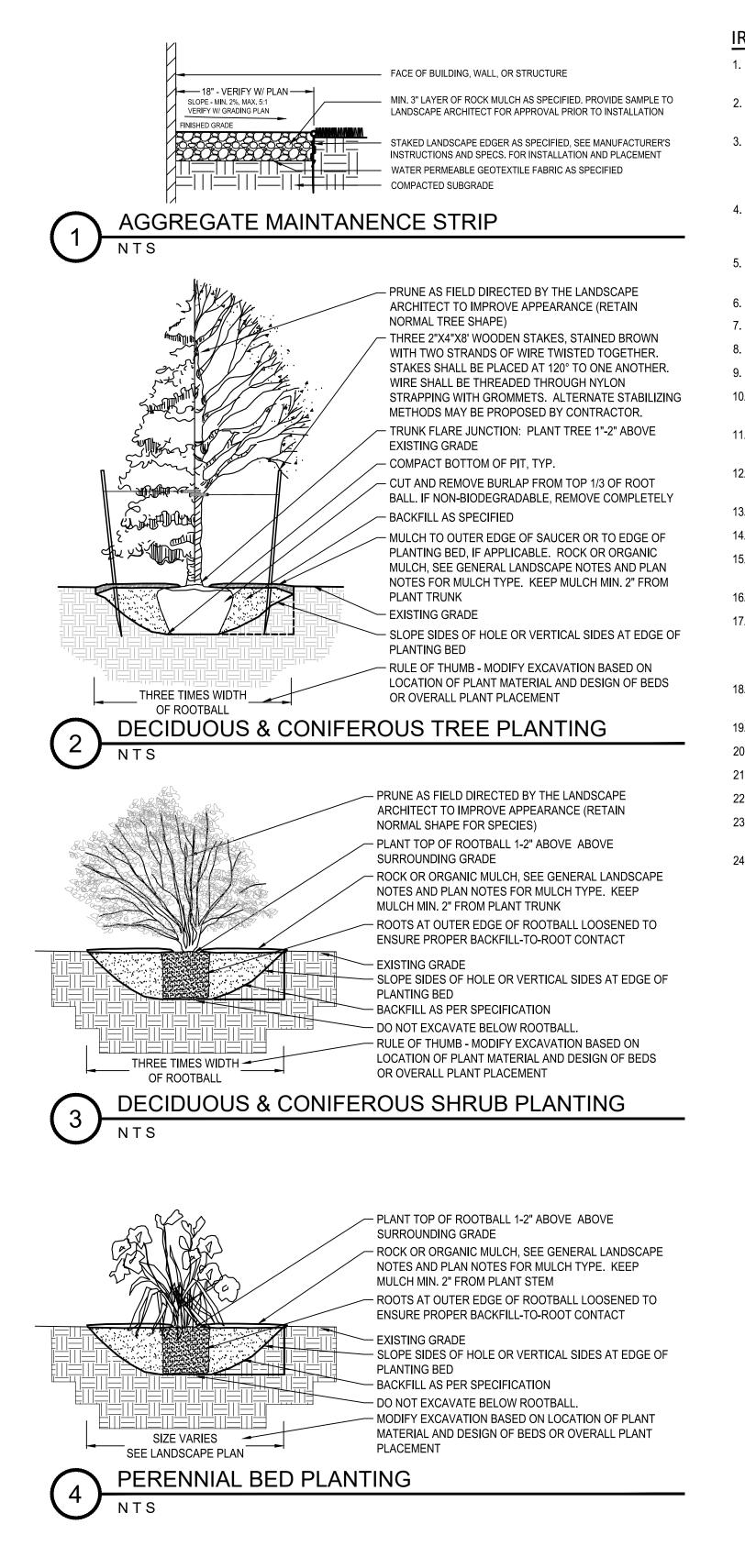
53.8% PROPOSED IMPERVIOUS RATIO PROPOSED LANDSCAPE: 1 OVERSTORY TREE/3,000 SF OF OPEN AREA 10,054.0 SF / 3000 = 3 TREES REQUIRED SEE PLANT SCHEDULE 1 ORNAMENTAL TREE/1500 SF OF OPEN AREA 10,054.0 SF / 1500 = 6.7 TREES REQUIRED SEE PLANT SCHEDULE 1 EVERGREEN TREE/3,000 SF OF OPEN AREA 10,054.0 SF / 3000 = 3 TREES REQUIRED SEE PLANT SCHEDULE

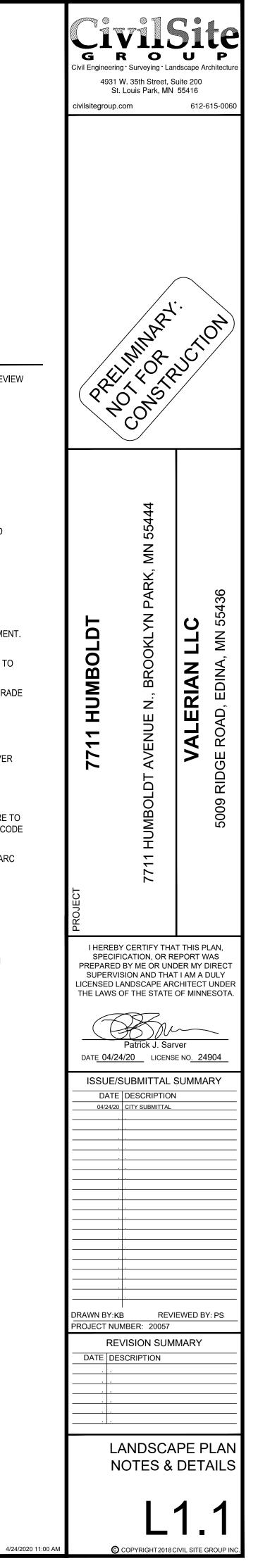
	1 SHRUB/100 SF OF OPEN AREA 10,054.0 SF / 100 = 101 SHRUBS REQUIRED SEE PLANT SCHEDULE	PROJECT
LEGI	END	L I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA. Patrick J. Sarver DATE 04/24/20 LICENSE NO. 24904
	SHREDDED CYPRESS MULCH, SAMPLES REQUIRED PROVIDE EDGING AS SHOWN ON PLAN	ISSUE/SUBMITTAL SUMMARY
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	PROPOSED CANOPY TREE SYMBOLS - SEE PLANT SCHEDULE AND PLAN FOR SPECIES AND PLANTING SIZES	
	PROPOSED EVERGREEN TREE SYMBOLS - SEE PLANT SCHEDULE AND PLAN FOR SPECIES AND PLANTING SIZES	
	PROPOSED ORNAMENTAL TREE SYMBOLS - SEE PLANT SCHEDULE AND PLAN FOR SPECIES AND PLANTING SIZES	DRAWN BY:KB REVIEWED BY: PS PROJECT NUMBER: 20057
	PROPOSED DECIDUOUS AND EVERGREEN SHRUB SYMBOLS - SI PLANT SCHEDULE AND PLAN FOR SPECIES AND PLANTING SIZE	
Ŕ	PROPOSED PERENNIAL PLANT SYMBOLS - SEE PLANT SCHEDULE AND PLAN FOR SPECIES AND PLANTING SIZES	· · · · · · · · · · · · · · · · · · ·
	EDGING	· · · · · · · · · · · · · · · · · · ·
	DECORATIVE BOULDERS (ROUNDED & BLOCK STYLE), 18"-30" DI	A
	Know what's below. Call before you dig. 1'' = 10'-0''	LANDSCAPE PLAN

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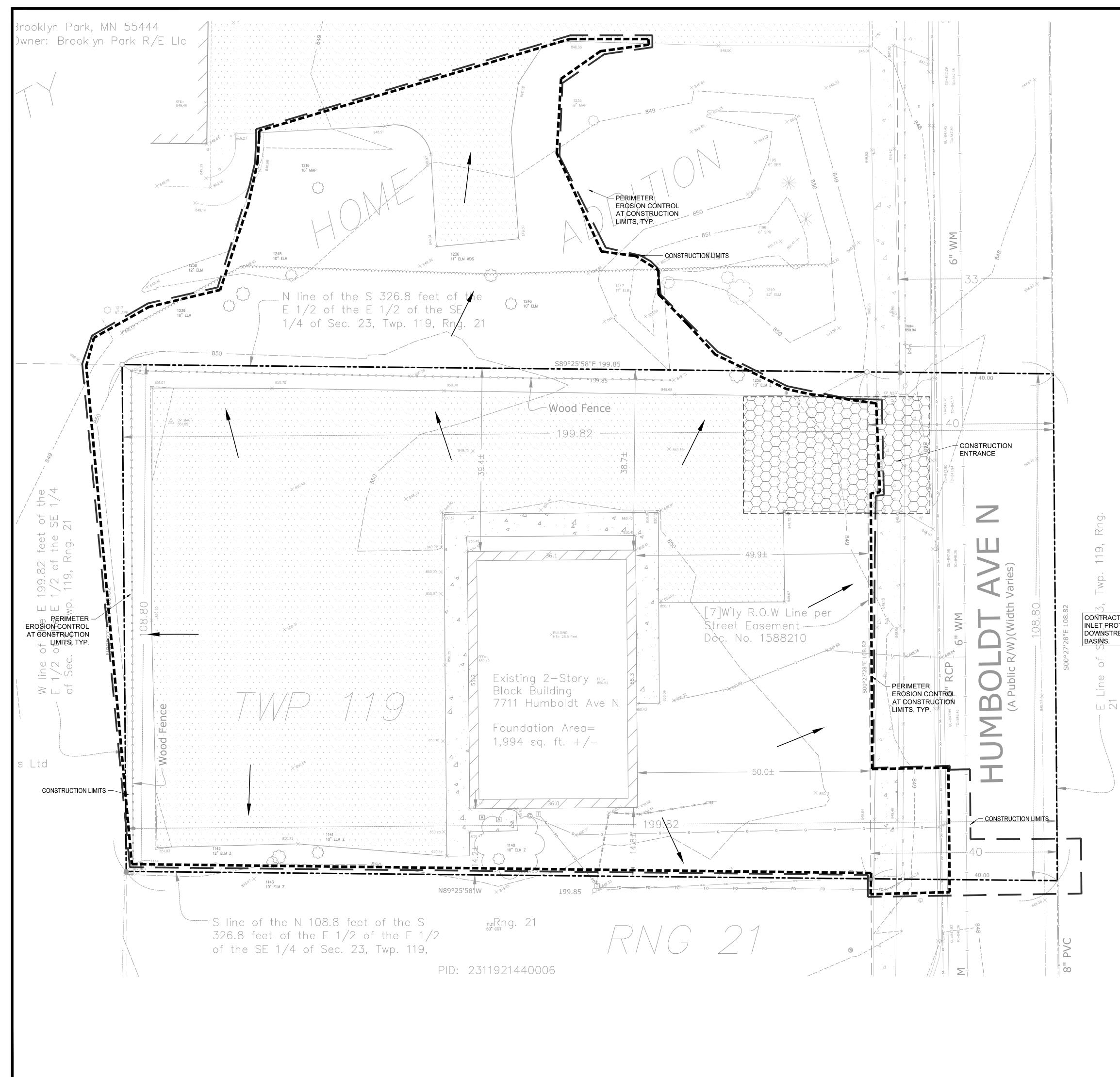


#### **IRRIGATION NOTES:**

- ENTIRE SITE SHALL BE FULLY IRRIGATED. THE CONTRACTOR SHALL SUBMIT IRRIGATION SHOP DRAWINGS FOR REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- SEE MECHANICAL AND ELECTRICAL PLANS AND SPECIFICATIONS FOR IRRIGATION WATER, METER, AND POWER CONNECTIONS.
- CONTRACTOR TO VERIFY LOCATION OF ALL UNDERGROUND/ABOVE GROUND FACILITIES PRIOR TO ANY EXCAVATION/INSTALLATION. ANY DAMAGE TO UNDERGROUND/ABOVE GROUND FACILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND COSTS ASSOCIATED WITH CORRECTING DAMAGES SHALL BE BORNE ENTIRELY BY THE CONTRACTOR.
- SERVICE EQUIPMENT AND INSTALLATION SHALL BE PER LOCAL UTILITY COMPANY STANDARDS AND SHALL BE PER NATIONAL AND LOCAL CODES. EXACT LOCATION OF SERVICE EQUIPMENT SHALL BE COORDINATED WITH THE LANDSCAPE ARCHITECT OR EQUIVALENT AT THE JOB SITE.
- CONTRACTOR SHALL COORDINATE WITH LOCAL UTILITY COMPANY FOR THE PROPOSED ELECTRICAL SERVICE AND METERING FACILITIES.
- IRRIGATION WATER LINE CONNECTION SIZE IS 1-<sup>1</sup>/<sub>2</sub>" AT BUILDING. VERIFY WITH MECHANICAL PLANS.COVAGE.
   ALL MAIN LINES SHALL BE 18" BELOW FINISHED GRADE.
- 8. ALL LATERAL LINES SHALL BE 12" BELLOW FINISHED GRADE.
- 9. ALL EXPOSED PVC RISERS, IF ANY, SHALL BE GRAY IN COLOR.
- 10. CONTRACTOR SHALL LAY ALL SLEEVES AND CONDUIT AT 2'-0" BELOW THE FINISHED GRADE OF THE TOP OF PAVEMENT. EXTEND SLEEVES TO 2'-0" BEYOND PAVEMENT.
- 11. CONTRACTOR SHALL MARK THE LOCATION OF ALL SLEEVES AND CONDUIT WITH THE SLEEVING MATERIAL "ELLED" TO 2'-0" ABOVE FINISHED GRADE AND CAPPED.
- 12. FABRICATE ALL PIPE TO MANUFACTURE'S SPECIFICATIONS WITH CLEAN AND SQUARE CUT JOINTS. USE QUALITY GRADE PRIMER AND SOLVENT CEMENT FORMULATED FOR INTENDED TYPE OF CONNECTION.
- 13. BACKFILL ALL TRENCHES WITH SOIL FREE OF SHARP OBJECTS AND DEBRIS.
- 14. ALL VALVE BOXES AND COVERS SHALL BE BLACK IN COLOR.
- 15. GROUP VALVE BOXES TOGETHER FOR EASE WHEN SERVICE IS REQUIRED. LOCATE IN PLANT BED AREAS WHENEVER POSSIBLE.
- 16. IRRIGATION CONTROLLER LOCATION SHALL BE VERIFIED ON-SITE WITH OWNER'S REPRESENTATIVE.
- 17. CONTROL WIRES: 14 GAUGE DIRECT BURIAL, SOLID COPPER IRRIGATION WIRE. RUN UNDER MAIN LINE. USE MOISTURE-PROOF SPLICES AND SPLICE ONLY AT VALVES OR PULL BOXES. RUN SEPARATE HOT AND COMMON WIRE TO EACH VALVE AND ONE (1) SPARE WIRE AND GROUND TO FURTHEST VALVE FROM CONTROLLER. LABEL OR COLOR CODE ALL WIRES.
- 18. AVOID OVER SPRAY ON BUILDINGS, PAVEMENT, WALLS AND ROADWAYS BY INDIVIDUALLY ADJUSTING RADIUS OR ARC ON SPRINKLER HEADS AND FLOW CONTROL ON AUTOMATIC VALVE.
- 19. ADJUST PRESSURE REGULATING VALVES FOR OPTIMUM PRESSURE ON SITE.
- 20. USE SCREENS ON ALL HEADS.
- 21. A SET OF AS-BUILT DRAWINGS SHALL BE MAINTAINED ON-SITE AT ALL TIMES IN AN UPDATED CONDITION.
- 22. ALL PIPE 3" AND OVER SHALL HAVE THRUST BLOCKING AT EACH TURN.
- 23. ALL AUTOMATIC REMOTE CONTROL VALVES WILL HAVE 3" MINIMUM DEPTH OF 3/4" WASHED GRAVEL UNDERNEATH VALVE AND VALVE BOX. GRAVEL SHALL EXTENT 3" BEYOND PERIMETER OF VALVE BOX.
- 24. THERE SHALL BE 3" MINIMUM SPACE BETWEEN BOTTOM OF VALVE BOX COVER AND TOP OF VALVE STRUCTURE.



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### SWPPP NOTES:

1. THIS PROJECT IS LESS THAN ONE ACRE AND WILL NOT REQUIRE AN MPCA NPDES PERMIT. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY EROSION CONTROL PERMITS REQUIRED BY THE CITY.

2. SEE SHEETS SW1.0 - SW1.3 FOR ALL EROSION CONTROL NOTES, DESCRIPTIONS, AND PRACTICES.

3. SEE GRADING PLAN FOR ADDITIONAL GRADING AND EROSION CONTROL NOTES.

4. CONTRACTOR IS RESPONSIBLE FOR SWPPP IMPLEMENTATION, INSPECTIONS, AND COMPLIANCE WITH NPDES PERMIT.

CITY OF BROOKLYN PARK EROSION CONTROL NOTES: 1. RESERVED FOR CITY SPECIFIC EROSION CONTROL NOTES.

ALL SPECIFIED EROSION AND SEDIMENT CONTROL PRACTICES, AND MEASURES CONTAINED IN THIS SWPPP ARE THE MINIMUM REQUIREMENTS. ADDITIONAL PRACTICES MAY BE REQUIRED DURING THE COURSE OF CONSTRUCTION.

CONTRACTOR TO PROVIDE INLET PROTECTION AT ALL DOWNSTREAM CATCH BASINS.



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 EX. 1' CONTOUR ELEVATION INTERVAL

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 DRAINAGE ARROW
 SILT FENCE / BIOROLL - GRADING LIMIT

 INLET PROTECTION
 INLET PROTECTION

 STABILIZED CONSTRUCTION ENTRANCE
 EROSION CONTROL BLANKET



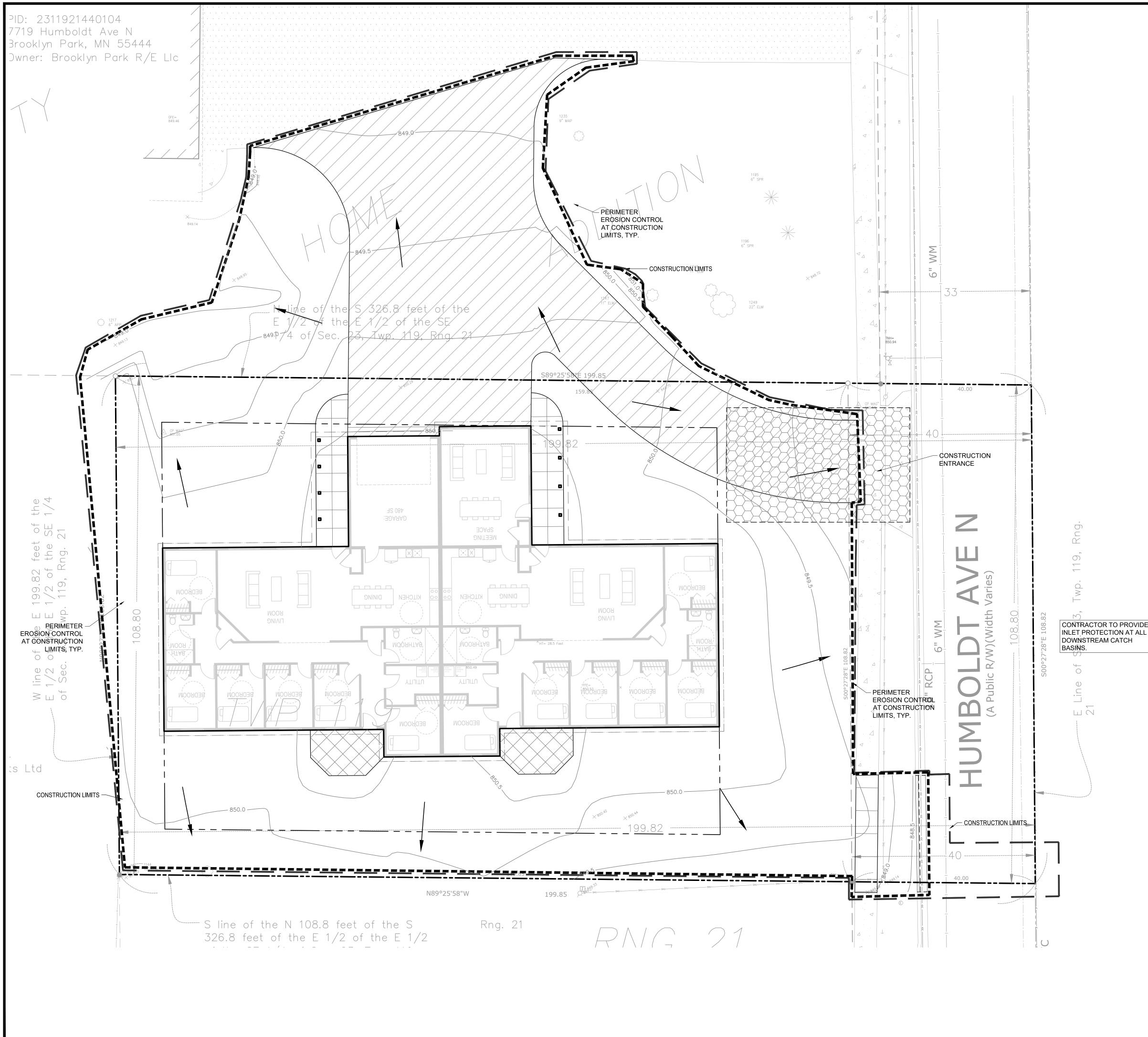


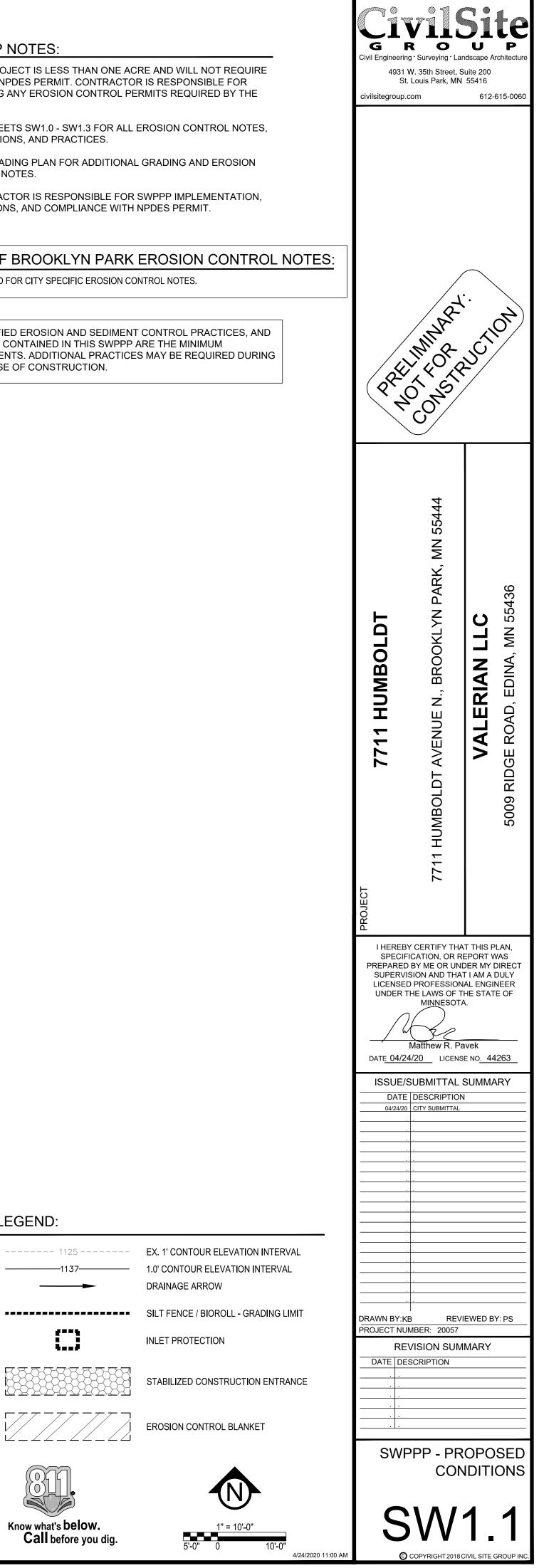
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SWPPP NOTES:

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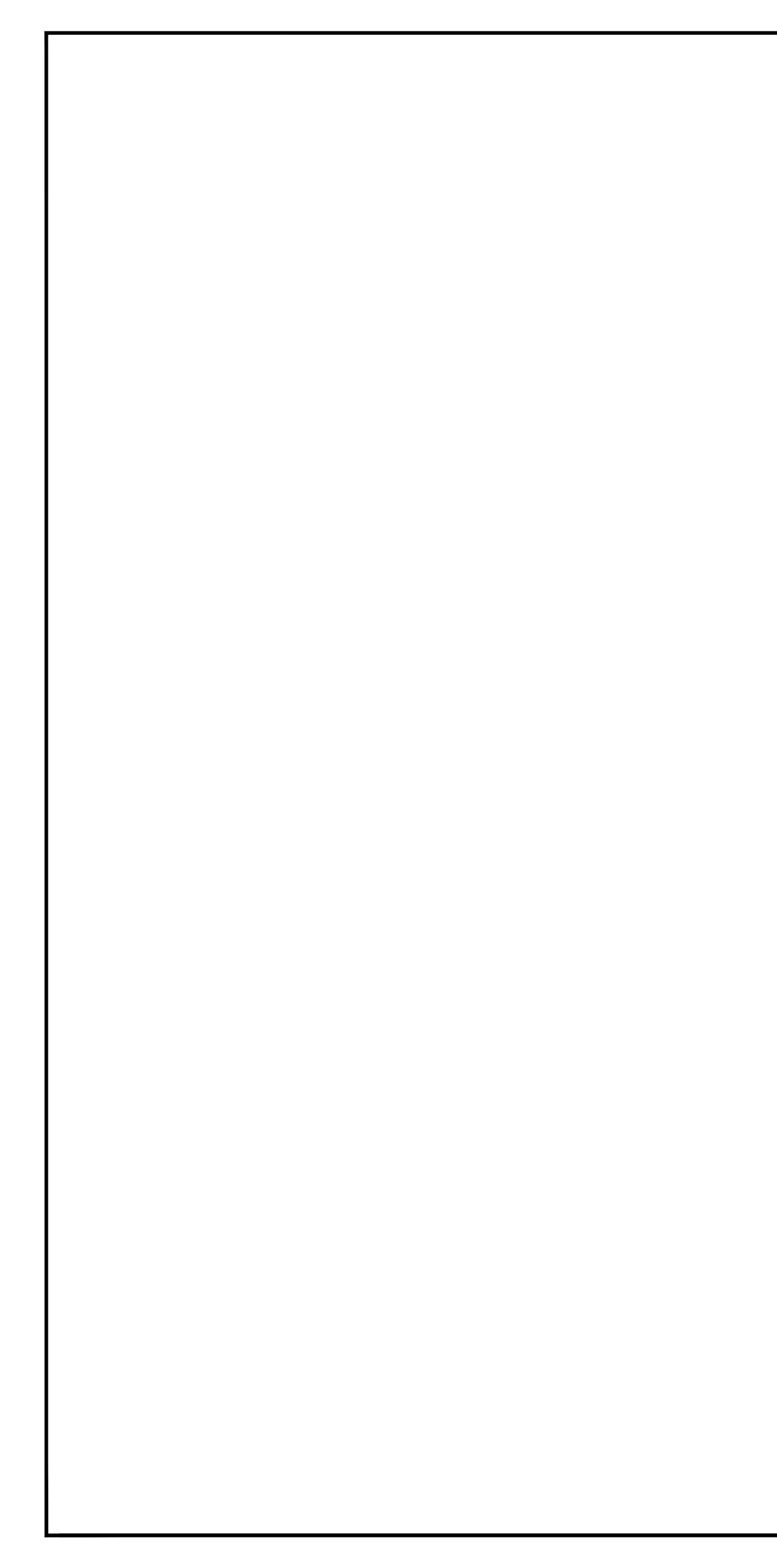
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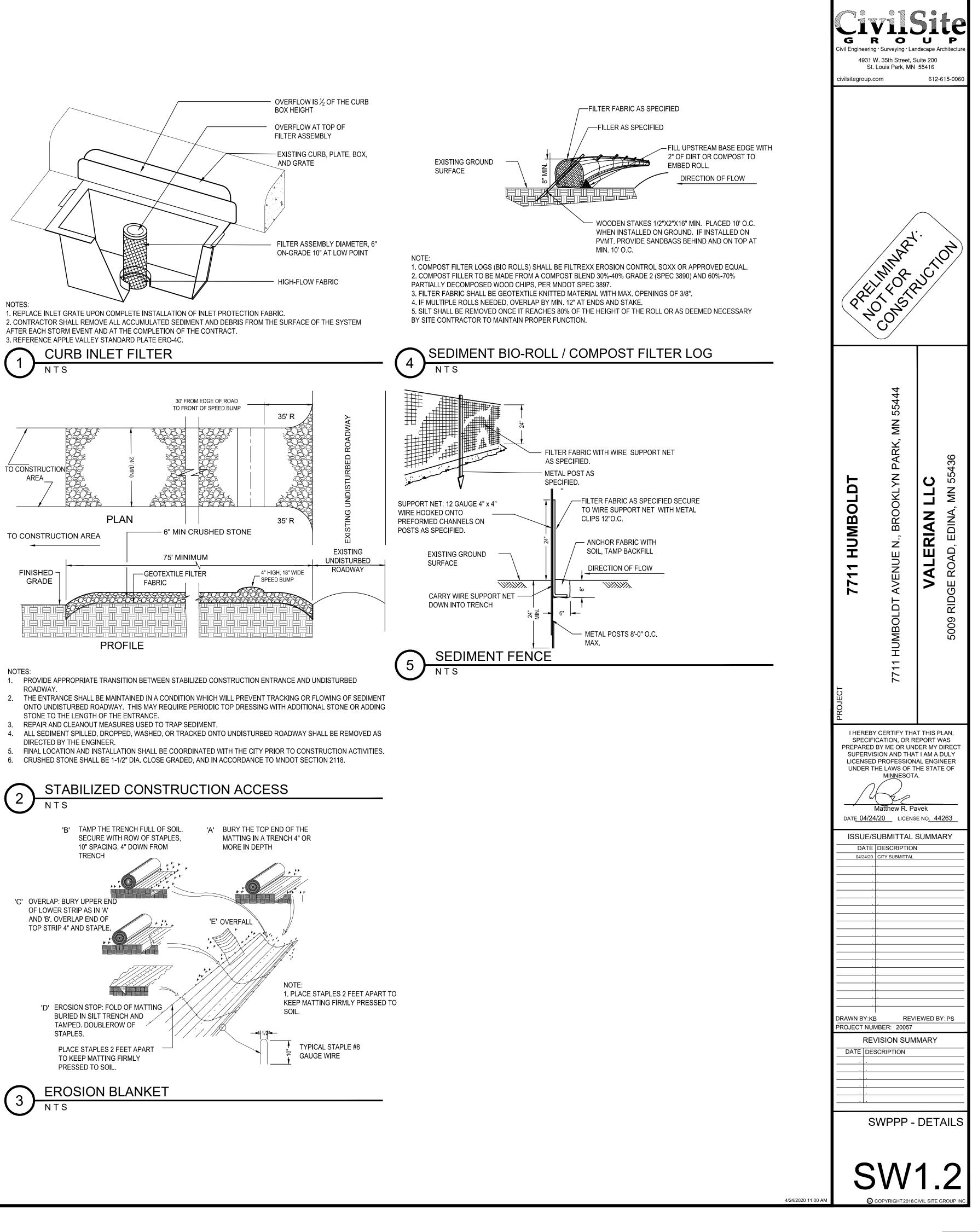


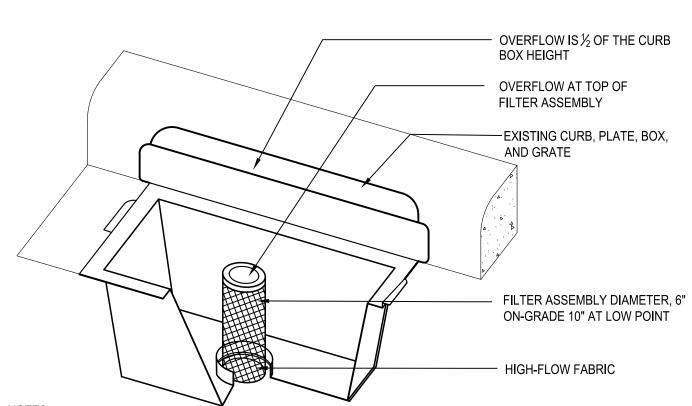












#### THE CONTRACTOR AND ALL SUBCONTRACTORS INVOLVED WITH A CONSTRUCTION ACTIVITY THAT DISTURBS SITE SOIL OR WHO IMPLEMENT A POLLUTANT CONTROL MEASURE IDENTIFIED IN THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) MUST COMPLY WITH THE REQUIREMENTS OF THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT (DATED AUGUST 1, 2018 # MNR100001) AND ANY LOCAL GOVERNING AGENCY HAVING JURISDICTION CONCERNING EROSION AND SEDIMENTATION CONTROL.

## STORMWATER DISCHARGE DESIGN REQUIREMENTS

## SWPPP

# THE NATURE OF THIS PROJECT WILL BE CONSISTENT WITH WHAT IS REPRESENTED IN THIS SET OF CONSTRUCTION PLANS AND

SPECIFICATIONS. SEE THE SWPPP PLAN SHEETS AND SWPPP NARRATIVE (ATTACHMENT A: CONSTRUCTION SWPPP TEMPLATE) FOR ADDITIONAL SITE SPECIFIC SWPPP INFORMATION. THE PLANS SHOW LOCATIONS AND TYPES OF ALL TEMPORARY AND PERMANENT EROSION PREVENTION AND SEDIMENT CONTROL BMP'S. STANDARD DETAILS ARE ATTACHED TO THIS SWPPP DOCUMENT.

- THE INTENDED SEQUENCING OF MAJOR CONSTRUCTION ACTIVITIES IS AS FOLLOWS: 1. INSTALL STABILIZED ROCK CONSTRUCTION ENTRANCE
- 2. INSTALLATION OF SILT FENCE AROUND SITE
- 3. INSTALL ORANGE CONSTRUCTION FENCING AROUND INFILTRATION AREAS. 4. CLEAR AND GRUB FOR TEMPORARY SEDIMENT BASIN / POND INSTALL
- 5. CONSTRUCT TEMPORARY SEDIMENT BASIN / POND (SECTION 14)
- 6. CLEAR AND GRUB REMAINDER OF SITE 7. STRIP AND STOCKPILE TOPSOIL
- 8. ROUGH GRADING OF SITE
- 9. STABILIZE DENUDED AREAS AND STOCKPILES 10. INSTALL SANITARY SEWER, WATER MAIN STORM SEWER AND SERVICES
- 11. INSTALL SILT FENCE / INLET PROTECTION AROUND CB'S
- 12. INSTALL STREET SECTION 13. INSTALL CURB AND GUTTER
- 14. BITUMINOUS ON STREETS
- 15. FINAL GRADE BOULEVARD, INSTALL SEED AND MULCH 16. REMOVE ACCUMULATED SEDIMENT FROM BASIN / POND
- 17. FINAL GRADE POND / INFILTRATION BASINS (DO NOT COMPACT SOILS IN INFILTRATION AREAS.)

18. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED BY EITHER SEED OR SOD/LANDSCAPING, REMOVE SILT FENCE AND RESEED ANY AREAS DISTURBED BY THE REMOVAL.

## RECORDS RETENTION:

THE SWPPP (ORIGINAL OR COPIES) INCLUDING, ALL CHANGES TO IT, AND INSPECTIONS AND MAINTENANCE RECORDS MUST BE KEPT AT THE SITE DURING CONSTRUCTION BY THE PERMITTEE WHO HAS OPERATIONAL CONTROL OF THAT PORTION OF THE SITE. THE SWPPP CAN BE KEPT IN EITHER THE FIELD OFFICE OR IN AN ON SITE VEHICLE DURING NORMAL WORKING HOURS.

ALL OWNER(S) MUST KEEP THE SWPPP, ALONG WITH THE FOLLOWING ADDITIONAL RECORDS, ON FILE FOR THREE (3) YEARS AFTER SUBMITTAL OF THE NOT AS OUTLINED IN SECTION 4. THIS DOES NOT INCLUDE ANY RECORDS AFTER SUBMITTAL OF THE NOT.

- 1. THE FINAL SWPPP;
- 2. ANY OTHER STORMWATER RELATED PERMITS REQUIRED FOR THE PROJECT;
- 3. RECORDS OF ALL INSPECTION AND MAINTENANCE CONDUCTED DURING CONSTRUCTION (SEE SECTION 11, INSPECTIONS AND MAINTENANCE):
- 4. ALL PERMANENT OPERATION AND MAINTENANCE AGREEMENTS THAT HAVE BEEN IMPLEMENTED, INCLUDING ALL RIGHT OF WAY,
- CONTRACTS, COVENANTS AND OTHER BINDING REQUIREMENTS REGARDING PERPETUAL MAINTENANCE; AND 5. ALL REQUIRED CALCULATIONS FOR DESIGN OF THE TEMPORARY AND PERMANENT STORMWATER MANAGEMENT SYSTEMS.

SWPPP IMPLEMENTATION RESPONSIBILITIES:

- 1. THE OWNER AND CONTRACTOR ARE PERMITTEE(S) AS IDENTIFIED BY THE NPDES PERMIT. 2. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ON-SITE IMPLEMENTATION OF THE SWPPP, INCLUDING THE ACTIVITIES OF ALL OF THE CONTRACTOR'S SUBCONTRACTORS
- 3. CONTRACTOR SHALL PROVIDE A PERSON(S) KNOWLEDGEABLE AND EXPERIENCED IN THE APPLICATION OF EROSION PREVENTION AND SEDIMENT CONTROL BMPS TO OVERSEE ALL INSTALLATION AND MAINTENANCE OF BMPS AND IMPLEMENTATION OF THE
- 4. CONTRACTOR SHALL PROVIDE PERSON(S) MEETING THE TRAINING REQUIREMENTS OF THE NPDES PERMIT TO CONDUCT INSPECTION AND MAINTENANCE OF ALL EROSION PREVENTION AND SEDIMENT CONTROL BMPS IN ACCORDANCE WITH THE REQUIREMENTS OF THE PERMIT. ONE OF THESE INDIVIDUAL(S) MUST BE AVAILABLE FOR AN ONSITE INSPECTION WITHIN 72 HOURS UPON REQUEST BY MPCA. CONTRACTOR SHALL PROVIDE TRAINING DOCUMENTATION FOR THESE INDIVIDUAL(S) AS REQUIRED BY THE NPDES PERMIT. THIS TRAINING DOCUMENTATION SHALL BE RECORDED IN OR WITH THE SWPPP BEFORE THE START OF CONSTRUCTION OR AS SOON AS THE PERSONNEL FOR THE PROJECT HAVE BEEN DETERMINED. DOCUMENTATION SHALL INCLUDE: 4.1. NAMES OF THE PERSONNEL ASSOCIATED WITH THE PROJECT THAT ARE REQUIRED TO BE TRAINED PER SECTION 21 OF THE PERMIT
- 4.2. DATES OF TRAINING AND NAME OF INSTRUCTOR AND ENTITY PROVIDING TRAINING.
- 4.3. CONTENT OF TRAINING COURSE OR WORKSHOP INCLUDING THE NUMBER OF HOURS OF TRAINING. 5. FOLLOWING FINAL STABILIZATION AND THE TERMINATION OF COVERAGE FOR THE NPDES PERMIT, THE OWNER IS EXPECTED TO FURNISH LONG TERM OPERATION AND MAINTENANCE (O & M) OF THE PERMANENT STORM WATER MANAGEMENT SYSTEM.

## CONSTRUCTION ACTIVITY REQUIREMENTS

SWPPP AMENDMENTS (SECTION 6)

- 1. ONE OF THE INDIVIDUALS DESCRIBED IN ITEM 21.2.A OR ITEM 21.2.B OR ANOTHER QUALIFIED INDIVIDUAL MUST COMPLETE ALL SWPPP CHANGES, CHANGES INVOLVING THE USE OF A LESS STRINGENT BMP MUST INCLUDE A JUSTIFICATION DESCRIBING HOW THE REPLACEMENT BMP IS EFFECTIVE FOR THE SITE CHARACTERISTICS.
- 2. PERMITTEES MUST AMEND THE SWPPP TO INCLUDE ADDITIONAL OR MODIFIED BMPS AS NECESSARY TO CORRECT PROBLEMS IDENTIFIED OR ADDRESS SITUATIONS WHENEVER THERE IS A CHANGE IN DESIGN. CONSTRUCTION. OPERATION. MAINTENANCE. WEATHER OR SEASONAL CONDITIONS HAVING A SIGNIFICANT EFFECT ON THE DISCHARGE OF POLLUTANTS TO SURFACE WATERS OR GROUNDWATER.
- 3. PERMITTEES MUST AMEND THE SWPPP TO INCLUDE ADDITIONAL OR MODIFIED BMPS AS NECESSARY TO CORRECT PROBLEMS IDENTIFIED OR ADDRESS SITUATIONS WHENEVER INSPECTIONS OR INVESTIGATIONS BY THE SITE OWNER OR OPERATOR, USEPA OR MPCA OFFICIALS INDICATE THE SWPPP IS NOT EFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING THE DISCHARGE OF POLLUTANTS TO SURFACE WATERS OR GROUNDWATER OR THE DISCHARGES ARE CAUSING WATER QUALITY STANDARD EXCEEDANCES (E.G., NUISANCE CONDITIONS AS DEFINED IN MINN, R, 7050.0210, SUBP, 2) OR THE SWPPP IS NOT CONSISTENT WITH THE OBJECTIVES OF A USEPA APPROVED TMDL.

## **BMP SELECTION AND INSTALLATION (SECTION 7):**

1. PERMITTEES MUST SELECT, INSTALL, AND MAINTAIN THE BMPS IDENTIFIED IN THE SWPPP AND IN THIS PERMIT IN AN APPROPRIATE AND FUNCTIONAL MANNER AND IN ACCORDANCE WITH RELEVANT MANUFACTURER SPECIFICATIONS AND ACCEPTED ENGINEERING PRACTICES.

## **EROSION PREVENTION (SECTION 8):**

- 1. BEFORE WORK BEGINS, PERMITTEES MUST DELINEATE THE LOCATION OF AREAS NOT TO BE DISTURBED. 2. PERMITTEES MUST MINIMIZE THE NEED FOR DISTURBANCE OF PORTIONS OF THE PROJECT WITH STEEP SLOPES. WHEN STEEP SLOPES MUST BE DISTURBED, PERMITTEES MUST USE TECHNIQUES SUCH AS PHASING AND STABILIZATION PRACTICES DESIGNED FOR STEEP SLOPES (E.G., SLOPE DRAINING AND TERRACING).
- 3. PERMITTEES MUST STABILIZE ALL EXPOSED SOIL AREAS, INCLUDING STOCKPILES. STABILIZATION MUST BE INITIATED IMMEDIATELY TO LIMIT SOIL EROSION WHEN CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE AND WILL NOT RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS. STABILIZATION MUST BE COMPLETED NO LATER THAN 14 CALENDAR DAYS AFTER THE CONSTRUCTION ACTIVITY HAS CEASED. STABILIZATION IS NOT REQUIRED ON CONSTRUCTED BASE COMPONENTS OF ROADS, PARKING LOTS AND SIMILAR SURFACES. STABILIZATION IS NOT REQUIRED ON TEMPORARY STOCKPILES WITHOUT SIGNIFICANT SILT, CLAY OR ORGANIC COMPONENTS (E.G., CLEAN AGGREGATE STOCKPILES, DEMOLITION CONCRETE
- STOCKPILES, SAND STOCKPILES) BUT PERMITTEES MUST PROVIDE SEDIMENT CONTROLS AT THE BASE OF THE STOCKPILE. 4. FOR PUBLIC WATERS THAT THE MINNESOTA DNR HAS PROMULGATED "WORK IN WATER RESTRICTIONS" DURING SPECIFIED FISH SPAWNING TIME FRAMES, PERMITTEES MUST COMPLETE STABILIZATION OF ALL EXPOSED SOIL AREAS WITHIN 200 FEET OF THE WATER'S EDGE, AND THAT DRAIN TO THESE WATERS, WITHIN 24 HOURS DURING THE RESTRICTION PERIOD.
- 5. PERMITTEES MUST STABILIZE THE NORMAL WETTED PERIMETER OF THE LAST 200 LINEAR FEET OF TEMPORARY OR PERMANENT DRAINAGE DITCHES OR SWALES THAT DRAIN WATER FROM THE SITE WITHIN 24 HOURS AFTER CONNECTING TO A SURFACE WATER OR PROPERTY EDGE. PERMITTEES MUST COMPLETE STABILIZATION OF REMAINING PORTIONS OF TEMPORARY OR PERMANENT DITCHES OR SWALES WITHIN 14 CALENDAR DAYS AFTER CONNECTING TO A SURFACE WATER OR PROPERTY EDGE AND CONSTRUCTION IN THAT PORTION OF THE DITCH TEMPORARILY OR PERMANENTLY CEASES.
- 6. TEMPORARY OR PERMANENT DITCHES OR SWALES BEING USED AS A SEDIMENT CONTAINMENT SYSTEM DURING CONSTRUCTION (WITH PROPERLY DESIGNED ROCK-DITCH CHECKS, BIO ROLLS, SILT DIKES, ETC.) DO NOT NEED TO BE STABILIZED. PERMITTEES MUST STABILIZE THESE AREAS WITHIN 24 HOURS AFTER THEIR USE AS A SEDIMENT CONTAINMENT SYSTEM CEASES 7. PERMITTEES MUST NOT USE MULCH, HYDROMULCH, TACKIFIER, POLYACRYLAMIDE OR SIMILAR EROSION PREVENTION PRACTICES WITHIN ANY PORTION OF THE NORMAL WETTED PERIMETER OF A TEMPORARY OR PERMANENT DRAINAGE DITCH OR SWALE
- SECTION WITH A CONTINUOUS SLOPE OF GREATER THAN 2 PERCENT. 8. PERMITTEES MUST PROVIDE TEMPORARY OR PERMANENT ENERGY DISSIPATION AT ALL PIPE OUTLETS WITHIN 24 HOURS AFTER CONNECTION TO A SURFACE WATER OR PERMANENT STORMWATER TREATMENT SYSTEM.
- 9. PERMITTEES MUST NOT DISTURB MORE LAND (I.E., PHASING) THAN CAN BE EFFECTIVELY INSPECTED AND MAINTAINED IN ACCORDANCE WITH SECTION 11.

## SEDIMENT CONTROL (SECTION 9):

- 1. PERMITTEES MUST ESTABLISH SEDIMENT CONTROL BMPS ON ALL DOWNGRADIENT PERIMETERS OF THE SITE AND DOWNGRADIENT AREAS OF THE SITE THAT DRAIN TO ANY SURFACE WATER, INCLUDING CURB AND GUTTER SYSTEMS. PERMITTEES MUST LOCATE SEDIMENT CONTROL PRACTICES UPGRADIENT OF ANY BUFFER ZONES. PERMITTEES MUST INSTALL SEDIMENT CONTROL PRACTICES BEFORE ANY UPGRADIENT LAND-DISTURBING ACTIVITIES BEGIN AND MUST KEEP THE SEDIMENT CONTROL PRACTICES IN PLACE UNTIL THEY ESTABLISH PERMANENT COVER.
- 2, IF DOWNGRADIENT SEDIMENT CONTROLS ARE OVERLOADED, BASED ON FREQUENT FAILURE OR EXCESSIVE MAINTENANCE REQUIREMENTS. PERMITTEES MUST INSTALL ADDITIONAL UPGRADIENT SEDIMENT CONTROL PRACTICES OR REDUNDANT BMPS TO ELIMINATE THE OVERLOADING AND AMEND THE SWPPP TO IDENTIFY THESE ADDITIONAL PRACTICES AS REQUIRED IN ITEM 6.3. 3. TEMPORARY OR PERMANENT DRAINAGE DITCHES AND SEDIMENT BASINS DESIGNED AS PART OF A SEDIMENT CONTAINMENT

- CONDITIONS.
- PERIMETER CONTROL PRACTICE IF EXPOSED SOILS STILL DRAIN TO A SURFACE WATER.
- THE SHORT-TERM ACTIVITY IS NOT COMPLETE.
- ESTABLISH PERMANENT COVER ON ALL AREAS WITH POTENTIAL FOR DISCHARGING TO THE INLET. FLOODING/FREEZING) IS IDENTIFIED BY THE PERMITTEES OR THE JURISDICTIONAL AUTHORITY (E.G.,
- FOR REMOVAL IN THE SWPPF DOWNGRADIENT PERIMETER.
- OR ONTO PAVED ROADS WITHIN THE SITE.
- ONTO THE STREET 12. PERMITTEES MUST INSTALL TEMPORARY SEDIMENT BASINS AS REQUIRED IN SECTION 14.
- EQUIPMENT USE TO MINIMIZE SOIL COMPACTION. 14. PERMITTEES MUST PRESERVE TOPSOIL ON THE SITE, UNLESS INFEASIBLE.
- 15. PERMITTEES MUST DIRECT DISCHARGES FROM BMPS TO VEGETATED AREAS UNLESS INFEASIBLE.
- CHEMICAL ADDITION AND MUST DIRECT TREATED STORMWATER TO A SEDIMENT CONTROL SYSTEM FOR FILTRATION OR SETTLEMENT OF THE FLOC PRIOR TO DISCHARGE.

## DEWATERING AND BASIN DRAINING (SECTION 10):

- SURFACE WATER OR DOWNSTREAM PROPERTIES.
- FILTRATION DEVICE (E.G., CARTRIDGE FILTERS, ABSORBENTS PADS) PRIOR TO DISCHARGE.
- CAUSE EROSION OR SCOUR IN THE IMMEDIATE VICINITY OF DISCHARGE POINTS OR INUNDATION OF WETLANDS IN THE IMMEDIATE
- VICINITY OF DISCHARGE POINTS THAT CAUSES SIGNIFICANT ADVERSE IMPACT TO THE WETLAND. SITE IN A MANNER THAT DOES NOT CAUSE EROSION.

## INSPECTIONS AND MAINTENANCE (SECTION 11):

- THAN 1/2 INCH IN 24 HOURS 2. PERMITTEES MUST INSPECT AND MAINTAIN ALL PERMANENT STORMWATER TREATMENT BMPS. 3. PERMITTEES MUST INSPECT ALL EROSION PREVENTION AND SEDIMENT CONTROL BMPS AND POLLUTION PREVENTION
- ACCESS TO THE AREA
- PERMITS, PRIOR TO CONDUCTING ANY WORK IN SURFACE WATERS.
- A SHORTER TIME TO AVOID A SAFETY HAZARD TO USERS OF PUBLIC STREETS. 6. PERMITTEES MUST REPAIR, REPLACE OR SUPPLEMENT ALL PERIMETER CONTROL DEVICES WHEN THEY BECOME NONFUNCTIONAL OR THE SEDIMENT REACHES 1/2 OF THE HEIGHT OF THE DEVICE.
- OF SEDIMENT COLLECTED IN THE BASIN REACHES 1/2 THE STORAGE VOLUME.
- 8. PERMITTEES MUST ENSURE THAT AT LEAST ONE INDIVIDUAL PRESENT ON THE SITE (OR AVAILABLE TO THE PROJECT SITE IN THREE (3) CALENDAR DAYS) IS TRAINED IN THE JOB DUTIES DESCRIBED IN ITEM 21.2.B.
- 9. PERMITTEES MAY ADJUST THE INSPECTION SCHEDULE DESCRIBED IN ITEM 11.2 AS FOLLOWS: a. INSPECTIONS OF AREAS WITH PERMANENT COVER CAN BE REDUCED TO ONCE PER MONTH, EVEN IF CONSTRUCTION ACTIVITY
- CONTINUES ON OTHER PORTIONS OF THE SITE; OR ON THE SITE, INSPECTIONS CAN BE REDUCED TO ONCE PER MONTH AND, AFTER 12 MONTHS, MAY BE SUSPENDED WARRANT: OR
- c. WHERE CONSTRUCTION ACTIVITY HAS BEEN SUSPENDED DUE TO FROZEN GROUND CONDITIONS, INSPECTIONS MAY BE WHICHEVER COMES FIRST.
- THESE RECORDS MUST BE RETAINED WITH THE SWPPP. THESE RECORDS MUST INCLUDE:
- a. DATE AND TIME OF INSPECTIONS; AND
- b. NAME OF PERSONS CONDUCTING INSPECTIONS; AND
- SITE SPECIFIC RAINFALL DATA FROM RADAR SUMMARIES: AND
- OBVIOUS INDICATORS OF POLLUTANTS); AND
- SECTION 6 WITHIN SEVEN (7) CALENDAR DAYS.
- POLLUTION PREVENTION MANAGEMENT (SECTION 12):
- STORMWATER OR ARE DESIGNED TO BE EXPOSED TO STORMWATER.
- 2. PERMITTEES MUST PLACE PESTICIDES, FERTILIZERS AND TREATMENT CHEMICALS UNDER COVER (E.G., PLASTIC SHEETING OR
- 4. PERMITTEES MUST PROPERLY STORE, COLLECT AND DISPOSE SOLID WASTE IN COMPLIANCE WITH MINN. R. CH. 7035.
- MUST PROPERLY DISPOSE SANITARY WASTE IN ACCORDANCE WITH MINN. R. CH. 7041. MEASURES WHERE POSSIBLE
- 7. PERMITTEES MUST LIMIT VEHICLE EXTERIOR WASHING AND EQUIPMENT TO A DEFINED AREA OF THE SITE. PERMITTEES MUST

SYSTEM (E.G., DITCHES WITH ROCK-CHECK DAMS) REQUIRE SEDIMENT CONTROL PRACTICES ONLY AS APPROPRIATE FOR SITE

4. A FLOATING SILT CURTAIN PLACED IN THE WATER IS NOT A SEDIMENT CONTROL BMP TO SATISFY ITEM 9.2 EXCEPT WHEN WORKING ON A SHORELINE OR BELOW THE WATERLINE. IMMEDIATELY AFTER THE SHORT TERM CONSTRUCTION ACTIVITY (E.G., INSTALLATION OF RIP RAP ALONG THE SHORELINE) IN THAT AREA IS COMPLETE, PERMITTEES MUST INSTALL AN UPLAND 5. PERMITTEES MUST RE-INSTALL ALL SEDIMENT CONTROL PRACTICES ADJUSTED OR REMOVED TO ACCOMMODATE SHORT-TERM ACTIVITIES SUCH AS CLEARING OR GRUBBING, OR PASSAGE OF VEHICLES, IMMEDIATELY AFTER THE SHORT-TERM ACTIVITY IS COMPLETED. PERMITTEES MUST RE-INSTALL SEDIMENT CONTROL PRACTICES BEFORE THE NEXT PRECIPITATION EVENT EVEN IF

6. PERMITTEES MUST PROTECT ALL STORM DRAIN INLETS USING APPROPRIATE BMPS DURING CONSTRUCTION UNTIL THEY 7. PERMITTEES MAY REMOVE INLET PROTECTION FOR A PARTICULAR INLET IF A SPECIFIC SAFETY CONCERN (E.G. STREET

CITY/COUNTY/TOWNSHIP/MINNESOTA DEPARTMENT OF TRANSPORTATION ENGINEER). PERMITTEES MUST DOCUMENT THE NEED 8. PERMITTEES MUST PROVIDE SILT FENCE OR OTHER EFFECTIVE SEDIMENT CONTROLS AT THE BASE OF STOCKPILES ON THE

9. PERMITTEES MUST LOCATE STOCKPILES OUTSIDE OF NATURAL BUFFERS OR SURFACE WATERS, INCLUDING STORMWATER CONVEYANCES SUCH AS CURB AND GUTTER SYSTEMS UNLESS THERE IS A BYPASS IN PLACE FOR THE STORMWATER. 10. PERMITTEES MUST INSTALL A VEHICLE TRACKING BMP TO MINIMIZE THE TRACK OUT OF SEDIMENT FROM THE CONSTRUCTION SITE

11. PERMITTEES MUST USE STREET SWEEPING IF VEHICLE TRACKING BMPS ARE NOT ADEQUATE TO PREVENT SEDIMENT TRACKING

13. IN ANY AREAS OF THE SITE WHERE FINAL VEGETATIVE STABILIZATION WILL OCCUR, PERMITTEES MUST RESTRICT VEHICLE AND

16 PERMITTEES MUST PRESERVE A 50 FOOT NATURAL BUFFER OR JE A BUFFER IS INFEASIBLE ON THE SITE PROVIDE REDUNDANT (DOUBLE) PERIMETER SEDIMENT CONTROLS WHEN A SURFACE WATER IS LOCATED WITHIN 50 FEET OF THE PROJECT'S EARTH DISTURBANCES AND STORMWATER FLOWS TO THE SURFACE WATER. PERMITTEES MUST INSTALL PERIMETER SEDIMENT CONTROLS AT LEAST 5 FEET APART UNLESS LIMITED BY LACK OF AVAILABLE SPACE. NATURAL BUFFERS ARE NOT REQUIRED ADJACENT TO ROAD DITCHES, JUDICIAL DITCHES, COUNTY DITCHES, STORMWATER CONVEYANCE CHANNELS, STORM DRAIN INLETS, AND SEDIMENT BASINS. IF PRESERVING THE BUFFER IS INFEASIBLE, PERMITTEES MUST DOCUMENT THE REASONS IN THE SWPPP. SHEET PILING IS A REDUNDANT PERIMETER CONTROL IF INSTALLED IN A MANNER THAT RETAINS ALL STORMWATER. 17. PERMITTEES MUST USE POLYMERS, FLOCCULANTS, OR OTHER SEDIMENTATION TREATMENT CHEMICALS IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICES, DOSING SPECIFICATIONS AND SEDIMENT REMOVAL DESIGN SPECIFICATIONS PROVIDED BY THE MANUFACTURER OR SUPPLIER. THE PERMITTEES MUST USE CONVENTIONAL EROSION AND SEDIMENT CONTROLS PRIOR TO

1. PERMITTEES MUST DISCHARGE TURBID OR SEDIMENT-LADEN WATERS RELATED TO DEWATERING OR BASIN DRAINING (E.G., PUMPED DISCHARGES, TRENCH/DITCH CUTS FOR DRAINAGE) TO A TEMPORARY OR PERMANENT SEDIMENT BASIN ON THE PROJECT SITE UNLESS INFEASIBLE. PERMITTEES MAY DEWATER TO SURFACE WATERS IF THEY VISUALLY CHECK TO ENSURE ADEQUATE TREATMENT HAS BEEN OBTAINED AND NUISANCE CONDITIONS (SEE MINN. R. 7050.0210, SUBP. 2) WILL NOT RESULT FROM THE DISCHARGE, IF PERMITTEES CANNOT DISCHARGE THE WATER TO A SEDIMENTATION BASIN PRIOR TO ENTERING A SURFACE WATER, PERMITTEES MUST TREAT IT WITH APPROPRIATE BMPS SUCH THAT THE DISCHARGE DOES NOT ADVERSELY AFFECT THE

2. IF PERMITTEES MUST DISCHARGE WATER CONTAINING OIL OR GREASE, THEY MUST USE AN OIL-WATER SEPARATOR OR SUITABLE 3. PERMITTEES MUST DISCHARGE ALL WATER FROM DEWATERING OR BASIN-DRAINING ACTIVITIES IN A MANNER THAT DOES NOT

4. IF PERMITTEES USE FILTERS WITH BACKWASH WATER, THEY MUST HAUL THE BACKWASH WATER AWAY FOR DISPOSAL, RETURN THE BACKWASH WATER TO THE BEGINNING OF THE TREATMENT PROCESS, OR INCORPORATE THE BACKWASH WATER INTO THE

1. PERMITTEES MUST ENSURE A TRAINED PERSON, AS IDENTIFIED IN ITEM 21.2.B, WILL INSPECT THE ENTIRE CONSTRUCTION SITE AT LEAST ONCE EVERY SEVEN (7) DAYS DURING ACTIVE CONSTRUCTION AND WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER

MANAGEMENT MEASURES TO ENSURE INTEGRITY AND EFFECTIVENESS. PERMITTEES MUST REPAIR, REPLACE OR SUPPLEMENT ALL NONFUNCTIONAL BMPS WITH FUNCTIONAL BMPS BY THE END OF THE NEXT BUSINESS DAY AFTER DISCOVERY UNLESS ANOTHER TIME FRAME IS SPECIFIED IN ITEM 11.5 OR 11.6. PERMITTEES MAY TAKE ADDITIONAL TIME IF FIELD CONDITIONS PREVENT

4. DURING EACH INSPECTION, PERMITTEES MUST INSPECT SURFACE WATERS, INCLUDING DRAINAGE DITCHES AND CONVEYANCE SYSTEMS BUT NOT CURB AND GUTTER SYSTEMS, FOR EVIDENCE OF EROSION AND SEDIMENT DEPOSITION. PERMITTEES MUST REMOVE ALL DELTAS AND SEDIMENT DEPOSITED IN SURFACE WATERS, INCLUDING DRAINAGE WAYS, CATCH BASINS, AND OTHER DRAINAGE SYSTEMS AND RESTABILIZE THE AREAS WHERE SEDIMENT REMOVAL RESULTS IN EXPOSED SOIL. PERMITTEES MUST OMPLETE REMOVAL AND STABILIZATION WITHIN SEVEN (7) CALENDAR DAYS OF DISCOVERY UNLESS PRECLUDED BY LEGA REGULATORY, OR PHYSICAL ACCESS CONSTRAINTS. PERMITTEES MUST USE ALL REASONABLE EFFORTS TO OBTAIN ACCESS. IF PRECLUDED, REMOVAL AND STABILIZATION MUST TAKE PLACE WITHIN SEVEN (7) DAYS OF OBTAINING ACCESS. PERMITTEES ARE RESPONSIBLE FOR CONTACTING ALL LOCAL, REGIONAL, STATE AND FEDERAL AUTHORITIES AND RECEIVING ANY APPLICABLE

5. PERMITTEES MUST INSPECT CONSTRUCTION SITE VEHICLE EXIT LOCATIONS, STREETS AND CURB AND GUTTER SYSTEMS WITHIN AND ADJACENT TO THE PROJECT FOR SEDIMENTATION FROM EROSION OR TRACKED SEDIMENT FROM VEHICLES. PERMITTEES MUST REMOVE SEDIMENT FROM ALL PAVED SURFACES WITHIN ONE (1) CALENDAR DAY OF DISCOVERY OR, IF APPLICABLE, WITHIN

7. PERMITTEES MUST DRAIN TEMPORARY AND PERMANENT SEDIMENTATION BASINS AND REMOVE THE SEDIMENT WHEN THE DEPTH

b. WHERE SITES HAVE PERMANENT COVER ON ALL EXPOSED SOIL AND NO CONSTRUCTION ACTIVITY IS OCCURRING ANYWHERE

COMPLETELY UNTIL CONSTRUCTION ACTIVITY RESUMES. THE MPCA MAY REQUIRE INSPECTIONS TO RESUME IF CONDITIONS

SUSPENDED. INSPECTIONS MUST RESUME WITHIN 24 HOURS OF RUNOFF OCCURRING, OR UPON RESUMING CONSTRUCTION,

10. PERMITTEES MUST RECORD ALL INSPECTIONS AND MAINTENANCE ACTIVITIES WITHIN 24 HOURS OF BEING CONDUCTED AND

c. ACCURATE FINDINGS OF INSPECTIONS, INCLUDING THE SPECIFIC LOCATION WHERE CORRECTIVE ACTIONS ARE NEEDED; AND d. CORRECTIVE ACTIONS TAKEN (INCLUDING DATES, TIMES, AND PARTY COMPLETING MAINTENANCE ACTIVITIES); AND e. DATE OF ALL RAINFALL EVENTS GREATER THAN 1/2 INCHES IN 24 HOURS, AND THE AMOUNT OF RAINFALL FOR EACH EVENT. PERMITTEES MUST OBTAIN RAINFALL AMOUNTS BY EITHER A PROPERLY MAINTAINED RAIN GAUGE INSTALLED ONSITE, A WEATHER STATION THAT IS WITHIN ONE (1) MILE OF YOUR LOCATION, OR A WEATHER REPORTING SYSTEM THAT PROVIDES

f. IF PERMITTEES OBSERVE A DISCHARGE DURING THE INSPECTION, THEY MUST RECORD AND SHOULD PHOTOGRAPH AND DESCRIBE THE LOCATION OF THE DISCHARGE (I.E., COLOR, ODOR, SETTLED OR SUSPENDED SOLIDS, OIL SHEEN, AND OTHER

g. ANY AMENDMENTS TO THE SWPPP PROPOSED AS A RESULT OF THE INSPECTION MUST BE DOCUMENTED AS REQUIRED IN

1. PERMITTEES MUST PLACE BUILDING PRODUCTS AND LANDSCAPE MATERIALS UNDER COVER (E.G., PLASTIC SHEETING OR TEMPORARY ROOFS) OR PROTECT THEM BY SIMILARLY EFFECTIVE MEANS DESIGNED TO MINIMIZE CONTACT WITH STORMWATER. PERMITTEES ARE NOT REQUIRED TO COVER OR PROTECT PRODUCTS WHICH ARE EITHER NOT A SOURCE OF CONTAMINATION TO

TEMPORARY ROOFS) OR PROTECT THEM BY SIMILARLY EFFECTIVE MEANS DESIGNED TO MINIMIZE CONTACT WITH STORMWATER. 3. PERMITTEES MUST STORE HAZARDOUS MATERIALS AND TOXIC WASTE, (INCLUDING OIL, DIESEL FUEL, GASOLINE, HYDRAULIC FLUIDS, PAINT SOLVENTS, PETROLEUM-BASED PRODUCTS, WOOD PRESERVATIVES, ADDITIVES, CURING COMPOUNDS, AND ACIDS) IN SEALED CONTAINERS TO PREVENT SPILLS, LEAKS OR OTHER DISCHARGE. STORAGE AND DISPOSAL OF HAZARDOUS WASTE MATERIALS MUST BE IN COMPLIANCE WITH MINN. R. CH. 7045 INCLUDING SECONDARY CONTAINMENT AS APPLICABLE.

5. PERMITTEES MUST POSITION PORTABLE TOILETS SO THEY ARE SECURE AND WILL NOT TIP OR BE KNOCKED OVER. PERMITTEES 6. PERMITTEES MUST TAKE REASONABLE STEPS TO PREVENT THE DISCHARGE OF SPILLED OR LEAKED CHEMICALS, INCLUDING FUEL,

FROM ANY AREA WHERE CHEMICALS OR FUEL WILL BE LOADED OR UNLOADED INCLUDING THE USE OF DRIP PANS OR ABSORBENTS UNLESS INFEASIBLE. PERMITTEES MUST ENSURE ADEQUATE SUPPLIES ARE AVAILABLE AT ALL TIMES TO CLEAN UP DISCHARGED MATERIALS AND THAT AN APPROPRIATE DISPOSAL METHOD IS AVAILABLE FOR RECOVERED SPILLED MATERIALS. PERMITTEES MUST REPORT AND CLEAN UP SPILLS IMMEDIATELY AS REQUIRED BY MINN. STAT. 115.061, USING DRY CLEAN UP

CONTAIN RUNOFF FROM THE WASHING AREA IN A SEDIMENT BASIN OR OTHER SIMILARLY EFFECTIVE CONTROLS AND MUST

DISPOSE WASTE FROM THE WASHING ACTIVITY PROPERLY. PERMITTEES MUST PROPERLY USE AND STORE SOAPS, DETERGENTS, OR SOLVENTS.

8. PERMITTEES MUST PROVIDE EFFECTIVE CONTAINMENT FOR ALL LIQUID AND SOLID WASTES GENERATED BY WASHOUT OPERATIONS (E.G., CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS) RELATED TO THE CONSTRUCTION ACTIVITY. PERMITTEES MUST PREVENT LIQUID AND SOLID WASHOUT WASTES FROM CONTACTING THE GROUND AND MUST DESIGN THE CONTAINMENT SO IT DOES NOT RESULT IN RUNOFF FROM THE WASHOUT OPERATIONS OR AREAS. PERMITTEES MUST PROPERLY DISPOSE LIQUID AND SOLID WASTES IN COMPLIANCE WITH MPCA RULES. PERMITTEES MUST INSTALL A SIGN INDICATING THE LOCATION OF THE WASHOUT FACILITY.

## PERMIT TERMINATION (SECTION 4 AND SECTION 13):

- 1. PERMITTEES MUST SUBMIT A NOT WITHIN 30 DAYS AFTER ALL TERMINATION CONDITIONS LISTED IN SECTION 13 ARE COMPLETE. 2. PERMITTEES MUST SUBMIT A NOT WITHIN 30 DAYS AFTER SELLING OR OTHERWISE LEGALLY TRANSFERRING THE ENTIRE SITE. INCLUDING PERMIT RESPONSIBILITY FOR ROADS (E.G., STREET SWEEPING) AND STORMWATER INFRASTRUCTURE FINAL CLEAN OUT, OR TRANSFERRING PORTIONS OF A SITE TO ANOTHER PARTY. THE PERMITTEES' COVERAGE UNDER THIS PERMIT TERMINATES AT MIDNIGHT ON THE SUBMISSION DATE OF THE NOT.
- 3. PERMITTEES MUST COMPLETE ALL CONSTRUCTION ACTIVITY AND MUST INSTALL PERMANENT COVER OVER ALL AREAS PRIOR TO SUBMITTING THE NOT. VEGETATIVE COVER MUST CONSIST OF A UNIFORM PERENNIAL VEGETATION WITH A DENSITY OF 70 PERCENT OF ITS EXPECTED FINAL GROWTH. VEGETATION IS NOT REQUIRED WHERE THE FUNCTION OF A SPECIFIC AREA DICTATES NO VEGETATION, SUCH AS IMPERVIOUS SURFACES OR THE BASE OF A SAND FILTER.
- 4. PERMITTEES MUST CLEAN THE PERMANENT STORMWATER TREATMENT SYSTEM OF ANY ACCUMULATED SEDIMENT AND MUST ENSURE THE SYSTEM MEETS ALL APPLICABLE REQUIREMENTS IN SECTION 15 THROUGH 19 AND IS OPERATING AS DESIGNED.
- 5. PERMITTEES MUST REMOVE ALL SEDIMENT FROM CONVEYANCE SYSTEMS PRIOR TO SUBMITTING THE NOT. 6. PERMITTEES MUST REMOVE ALL TEMPORARY SYNTHETIC EROSION PREVENTION AND SEDIMENT CONTROL BMPS PRIOR TO
- SUBMITTING THE NOT. PERMITTEES MAY LEAVE BMPS DESIGNED TO DECOMPOSE ON-SITE IN PLACE. 7, FOR RESIDENTIAL CONSTRUCTION ONLY. PERMIT COVERAGE TERMINATES ON INDIVIDUAL LOTS IF THE STRUCTURES ARE FINISHED
- AND TEMPORARY EROSION PREVENTION AND DOWNGRADIENT PERIMETER CONTROL IS COMPLETE, THE RESIDENCE SELLS TO THE HOMEOWNER, AND THE PERMITTEE DISTRIBUTES THE MPCA'S "HOMEOWNER FACT SHEET" TO THE HOMEOWNER. 8. FOR CONSTRUCTION PROJECTS ON AGRICULTURAL LAND (E.G., PIPELINES ACROSS CROPLAND), PERMITTEES MUST RETURN THE
- DISTURBED LAND TO ITS PRECONSTRUCTION AGRICULTURAL USE PRIOR TO SUBMITTING THE NOT.

## SEED NOTES:

ALL SEED MIXES AND APPLICATION SHALL BE IN ACCORDANCE WITH THE MNDOT SEEDING MANUAL.

## GENERAL RECOMMENDATIONS

THE CONTRACTOR IS RESPONSIBLE TO SALVAGE AND PRESERVE EXISTING TOPSOIL NECESSARY FOR FINAL STABILIZATION AND TO ALSO MINIMIZE COMPACTION IN ALL LANDSCAPE AREAS. IMMEDIATELY BEFORE SEEDING THE SOIL SHALL BE TILLED TO A MINIMUM DEPTH OF 3 INCHES.

TEMPORARY EROSION CONTROL SEEDING, MULCHING & BLANKET.

## SEED

• TEMPORARY SEED SHALL BE MNDOT SEED MIX 21-112 (WINTER WHEAT COVER CROP) FOR WINTER AND 21-111 (OATS COVER CROP) FOR SPRING/SUMMER APPLICATIONS. BOTH SEED MIXES SHALL BE APPLIED AT A SEEDING RATE OF 100 LBS/ACRE.

 IMMEDIATELY AFTER SEEDING, WITHIN 24 HOURS, MNDOT TYPE 1 MULCH SHOULD BE APPLIED TO PROTECT AND ENHANCE SEED GERMINATION. MULCH SHALL BE APPLIED AT 90% COVERAGE (2 TONS PER ACRE OF STRAW MULCH)

- 3:1 (HORIZ/VERT.) OR FLATTER MUCH SHALL BE COVERED WITH MULCH
- SLOPES STEEPER THAN 3:1 OR DITCH BOTTOMS SHALL BE COVERED WITH EROSION CONTROL BLANKET. SEE PLAN FOR MORE DETAILED DITCH AND STEEP SLOPE EROSION CONTROL TREATMENTS.

## AREAS AND QUANTITIES:

SITE AREA CAI BUILDING COV

LL PAVEMEN ALL NON-PA

TOTAL SITE A

IMPERVIOUS EXISTING CO PROPOSED C DIFFERENCE

EROSION CO DISTURBED A SILT FENCE/B EROSION COI INLET PROTEC

NOTE: QUANTITIES ARE FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR SHALL DETERMINE FOR THEMSELVES THE EXACT QUANTITIES FOR BIDDING AND CONSTRUCTION.

CONTRACTOR:

CONTRACTOR SHALL OBTAIN A COPY OF THE FOLLOWING SWPPP ATTACHMENTS WHICH ARE A PART OF THE OVERALL SWPPP PACKAGE: ATTACHMENT A. CONSTRUCTION SWPPP TEMPLATE - SITE SPECIFIC SWPPP DOCUMENT ATTACHMENT B. CONSTRUCTION STORMWATER INSPECTION CHECKLIST ATTACHMENT C. MAINTENANCE PLAN FOR PERMANENT STORM WATER TREATMENT SYSTEMS ATTACHMENT D: STORMWATER MANAGEMENT REPORT - ON FILE AT THE OFFICE OF PROJECT ENGINEER. AVAILABLE UPON REQUEST. ATTACHMENT E: GEOTECHNICAL EVALUATION REPORT - ON FILE AT THE OFFICE OF PROJECT ENGINEER. AVAILABLE UPON REQUEST.

THESE NOTES SUPERCEDE ANY GENERAL SWPPP NOTES.

THIS PROJECT IS GREATER THAN 1.0 ACRES SO AN NPDES PERMIT IS REQUIRED AND NEEDS TO BE SUBMITTED TO THE MPCA. THE CONTRACTOR IS REQUIRED TO FOLLOW THE GUIDELINES IN THE NPDES PERMIT THROUGHOUT CONSTRUCTION.

PROJECT NARRATIVE:

IMPROVEMENTS WILL OCCUR.

LOCATED ON SITE.

THIS SITE IS APPROPRIATE FOR INFILTRATION.

THESE ARE AS FOLLOWS:

CEASED

PERMANENT SEED MIX

 FOR THIS PROJECT ALL AREAS THAT ARE NOT TO BE SODDED OR LANDSCAPED SHALL RECEIVE A NATIVE PERMANENT SEED MIX. • AREAS IN BUFFERS AND ADJACENT TO OR IN WET AREAS MNDOT SEED MIX 33-261 (STORMWATER SOUTH AND WEST) AT 35 LBS PER ACRF •• DRY AREAS MNDOT SEED MIX 35-221 (DRY PRAIRIE GENERAL) AT 40 LBS PER ACRE. MAINTENANCE SHALL BE IN ACCORDANCE TO THE MNDOT SEEDING MANUAL.

## TRAINING SECTION 21

DESIGN ENGINEER: MATTHEW R. PAVEK P.E. TRAINING COURSE: DESIGN OF SWPPP TRAINING ENTITY: UNIVERSITY OF MINNESOTA INSTRUCTOR: JOHN CHAPMAN DATES OF TRAINING COURSE: 5/15/2011 - 5/16/2011 TOTAL TRAINING HOURS: 12 RE-CERTIFICATION: 3/16/2017 (8 HOURS), EXP. 5/31/2020

ALCULATIONS				
	EXISTING CONDITION		PROPOSED CONDITIC	
OVERAGE	1,994 SF	9.2%	5,999 SF	27.6%
NTS	13,404 SF	61.6%	5,691 SF	26.2%
VEMENTS	6,346 SF	29.2%	10,054 SF	46.2%
AREA	21,744 SF	100.0%	21,744 SF	100.0%
SURFACE				
NDITION	15,398 SF	70.8%		
CONDITION	11,690 SF	53.8%		
(EX. VS PROP.)	-3,708 SF	-17.1%		
NTROL QUANTITIES				
AREA	23,213 SF	0.53		
BIO-ROLL	±710 LF			
NTROL BLANKET	0 SF			
CTION DEVICES	±1 EA			

## SWPPP CONTACT PERSON

SWPPP INSPECTOR TRAINING: ALL SWPPP INSPECTIONS MUST BE PERFORMED BY A PERSON THAT MEETS THE TRAINING REQUIREMENTS OF THE NPDES CONSTRUCTION SITE PERMIT. TRAINING CREDENTIALS SHALL BE PROVIDED BY THE CONTRACTOR AND KEPT ON SITE WITH THE SWPPP

OWNER INFORMATION

OWNER:

CONTACT:

612-205-0521

VALERIAN LLC

5009 RIDGE ROAD

EDINA, MN 55436

MICHAEL MARGULIES

## PARTY RESPONSIBLE FOR LONG TERM OPERATION AND MAINTENANCE OF PERMANENT STORM WATER MANAGEMENT SYSTEM

PERMANENT STORMWATER MANAGEMENT IS NOT REQUIRED AS PART OF THIS PROJECT TO MEET NPDES PERMIT REQUIREMENTS. THE PROPERTY OWNER IS RESPONSIBLE FOR THE LONG TERM OPERATION AND MAINTENANCE OF THE PROPOSED STORMWATER SYSTEM. SWPPP ATTACHMENTS (ONLY APPLICABLE IF SITE IS 1 ACRE OR GREATER)

# SUPPLEMENTARY SITE SPECIFIC EROSION CONTROL NOTES:

PROJECT IS A REDEVELOPMENT OF AN EXISTING TWO STORY BUILDING INTO AN ASSISTED LIVING FACILITY . SITE AND LANDSCAPE

## NATIVE BUFFER NARRATIVE:

PRESERVING A 50' NATURAL BUFFER AROUND WATER BODIES IS NOT REQUIRED AS PART OF THIS PROJECT BECAUSE WATER BODIES ARE NOT

## INFILTRATION NARRATIVE

## SOIL CONTAMINATION NARRATIVE:

SOILS ONSITE HAVE NOT BEEN IDENTIFIED AS CONTAMINATED. AN MPCA SOILS ASSESSMENT WAS COMPLETED AND IT WAS DETERMINED THAT

SPECIAL TMDL BMP REQUIREMENTS SITE SPECIFIC (IF REQUIRED):

## 1. DURING CONSTRUCTION:

A. STABILIZATION OF ALL EXPOSED SOIL AREAS MUST BE INITIATED IMMEDIATELY TO LIMIT SOIL EROSION BUT IN NO CASE COMPLETED LATER THAN SEVEN (7) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY B. TEMPORARY SEDIMENT BASIN REQUIREMENTS DESCRIBED IN SECTION 14. MUST BE USED FOR COMMON DRAINAGE LOCATIONS THAT SERVE AN AREA WITH FIVE (5) OR MORE ACRES DISTURBED AT ONE TIME.

PERMANENT STABILIZATION NOTES SITE SPECIFIC:

	/. 35th Street, S Louis Park, MN	Suite 200 55416	ffe rchitecture 615-0060
OP IN	MINAR		<u>3</u>
PROJECT 7711 HUMBOLDT	7711 HUMBOLDT AVENUE N., BROOKLYN PARK, MN 55444	VALERIAN LLC	5009 RIDGE ROAD, EDINA, MN 55436
I HEREBY SPECIFIC PREPARED I SUPERVIS LICENSED UNDER TH	CERTIFY THA CATION, OR R BY ME OR UNI SION AND THA PROFESSION TE LAWS OF T MINNESOTA Matthew R. Pa	EPORT V DER MY I T I AM A I IAL ENGII HE STAT A.	VAS DIRECT DULY NEER E OF
DATE	UBMITTAL DESCRIPTION CITY SUBMITTAL		
DATE DES			

4/24/2020 11:00 AM

COPYRIGHT 2018 CIVIL SITE GROUP IN

## City of Brooklyn Park Request for Council Action

Agenda Item:	7.1	Meeting Date:	June 22, 2020
Agenda Section:	General Action Items	Originating Department:	Operations and Maintenance - Engineering Services Division
Resolution:	X	Draw and Day	Jeff Holstein, P.E., P.T.O.E.
Ordinance:	N/A	Prepared By:	City Transportation Engineer
Attachments:	3	Presented By:	Jesse Struve, City Engineer
Item:	Approve MNDOT Agreement No. 1035496 for Local Road Improvement Program Funding for the Trunk Highway 169/101 <sup>st</sup> Avenue North Interchange Project (SAP 110-129-006, SAP 110-129-007 and SAP 110-129-008), City CIP 4042-19		

## City Manager's Proposed Action:

MOTION \_\_\_\_\_\_, SECOND \_\_\_\_\_, TO WAIVE THE READING AND ADOPT RESOLUTION #2020-\_\_\_\_\_ APPROVING MNDOT AGREEMENT NO. 1035496 FOR LOCAL ROAD IMPROVEMENT PROGRAM FUNDING FOR THE TRUNK HIGHWAY 169 / 101<sup>ST</sup> AVENUE NORTH INTERCHANGE PROJECT (SAP 110-129-006, SAP 110-129-007 AND SAP 110-129-008), CITY CIP 4042-19.

## Overview:

The City applied for state funding for the interchange project and was awarded \$4,000,000 in general obligation bonds during the 2018 legislative session. The bond funding is administered by MnDOT and provided under the Local Road Improvement Program (LRIP). LRIP funds require the City to enter into a MnDOT grant agreement and pass a resolution before the grant can be authorized and state transportation funds can be disbursed.

MnDOT has prepared Agreement No. 1035496 for the LRIP funding. This document includes the current best estimate of eligible LRIP project costs and documents the terms and conditions of the funding. Since the awarded bid was well under our earlier estimate, the current estimate of LRIP funding is \$2,314,463.34. The agreement may be amended in the future up to the awarded \$4,000,000 if additional project costs eligible for LRIP funding are incurred. Staff reviewed the agreement and deemed it reasonable and acceptable. Staff recommends City Council approval of MNDOT Agreement No. 1035496 for Local Road Improvement Program Funding for the Trunk Highway 169/101<sup>st</sup> Avenue North Interchange Project (SAP 110-129-006, SAP 110-129-007 and SAP 110-129-008), City CIP 4042-19.

## Primary Issues/Alternatives to Consider: N/A

## Budgetary/Fiscal Issues:

Project No. 4042-19 is included in the City's 2020-2024 Capital Improvement Plan. Funding is planned to come from the City's EDA, special assessments, and grants (including LRIP monies).

## Attachments:

- 7.1A RESOLUTION
- 7.1B LOCATION MAP
- 7.1C DRAFT AGREEMENT NO. 1035496

## RESOLUTION #2020-

## RESOLUTION APPROVING MNDOT AGREEMENT NO. 1035496 FOR LOCAL ROADWAY IMPROVEMENT PROGRAM FUNDING FOR THE PROPOSED TRUNK HIGHWAY 169 / 101ST AVENUE NORTH INTERCHANGE PROJECT

## (SAP 110-129-006, SAP 110-129-007 AND SAP 110-129-008) CITY CIP 4042-19

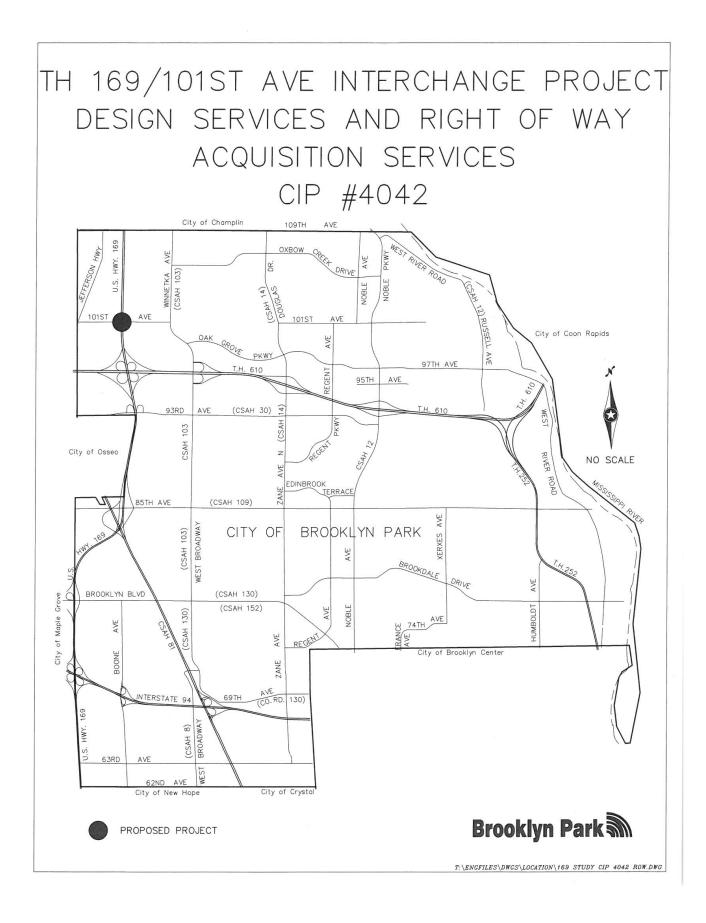
WHEREAS, the City of Brooklyn Park has applied to the Commissioner of Transportation for a grant from the Minnesota State Transportation Fund for Local Road Improvement; and

WHEREAS, the Commissioner of Transportation has given notice that funding for this project is available; and

WHEREAS, the amount of the grant has been determined to be \$2,314,463.34 by reason of the lowest responsible bid.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Brooklyn Park.

- To approve MnDOT Agreement NO. 1035496 for Local Roadway Improvement Program funding for the proposed Trunk Highway 169/101<sup>st</sup> Avenue North interchange project (SAP 110-129-006, SAP 110-129-007 and SAP 110-129-008). The Mayor and City Manager, or their successors in office, are hereby authorized to execute such agreements, and amendments thereto with the Commissioner of Transportation concerning the above-referenced grant.
- 2. Agrees to the terms and conditions of the grant consistent with Minnesota Statutes, Section 174.52 and will pay any additional amount by which the cost exceeds the estimate, and will return to the Minnesota State Transportation Fund any amount appropriated for the project but not required.
- 3. Agrees that if federal-aid funds are being used to participate in the cost of the project, the Minnesota State Transportation Fund grant shall be deposited directly into the federal-aid agency account and that the records of the City shall so state.



## LOCAL ROAD IMPROVEMENT PROGRAM (LRIP) GRANT AGREEMENT

**This Agreement** between the Minnesota Department of Transportation ("MnDOT") and the Grantee named below is made pursuant to Minnesota Statutes Section 174.52 and pursuant to Minn. Laws 2018, Chapter 214- H.F. 4425. The provisions in that section and the Exhibits attached hereto and incorporated by reference constitute this Agreement and the persons signing below agree to fully comply with all of the requirements of this Agreement. This Agreement will be effective on the date State obtains all required signatures under Minnesota Statutes §16C.05, subdivision 2.

1. Public Entity (Grantee) name, address and contact person:

City of Brooklyn Park 5200 85<sup>th</sup> Avenue North Brooklyn Park, MN 55443

Contact: Jeff Holstein, City Transportation Engineer

2. Project(s):

Name of Project & Project Number (See Exhibit C for location)	Amount of LRIP Funds	Amount of Required Matching Funds	Completion Date
TH 169 / 101 <sup>st</sup> Ave Interchange Project			
2792-50:110-129- 006 – Const.	\$2,093,672.24	\$11,045,761.66	Dec. 31, 2021
2792-5-50:110-129- 007 – Const. Eng.	\$85,000	\$0	Dec. 31, 2021

- 3. Total Amount of LRIP Grant for all projects under this Agreement: \$2,178,672.24
- 4. The following Exhibits for each project are attached and incorporated by reference as part of this Agreement:

Exhibit A-1	Completed Sources and Uses of Funds Schedule
Exhibit A-2	Completed Sources and Uses of Funds Schedule
Exhibit B	Project Completion Schedule
Exhibit C	Bond Financed Property Certification
Exhibit D	Grant Application
Exhibit E	Grantee Resolution Approving Grant Agreement
Exhibit F	General Terms and Conditions

- 5. Additional requirements, if any:
- 6. Any modification of this Agreement must be in writing and signed by both parties.

(The remaining portion of this page was intentionally left blank.)

## 7.1C DRAFT AGREEMENT NO. 1035496 Page 6

## PUBLIC ENTITY (GRANTEE)

litle:	
Date:	
By:	
Title:	
Date:	
Approval and	<b>T OF TRANSPORTATIO</b> Certifying Encumbrance
Title: State Aid P	rograms Engineer
Date:	
Ву:	cial Management, Grant Agency Grant Supervisor
	ONTRACT MANAGEM

## EXHIBIT A-1

## SOURCES AND USES OF FUNDS SCHEDULE

## SAP 110-129-006

## SOURCES OF FUNDS

## **USES OF FUNDS**

<b>Entity Supplying Funds</b>	Amount	Expenses	Amount
State Funds:		Items Paid for with LRIP	
LRIP Grant	\$2,093,672.24	Grant Funds:	
		Roadways	\$1,542,592.00
Other:		Curb and gutter	\$155,730.24
		Storm Sewer	\$395,350.00
Subtotal	\$2,093,672.24	Subtotal	\$2,093,672.24
Public Entity Funds:		Items paid for with Non-	
Matching Funds	\$	LRIP Grant Funds:	
		Construction	
Other:			
Federal (R.S.)	\$7,000,000	Roadway & embankment	\$2,792,930.00
City of Brooklyn Park Local Funds	\$379,183.32	bridge	\$3,074,171.66
City of Maple Grove MSAS Funds	\$31,073.11	Ramps	\$3,755,360.00
TED	\$3,635,505.23	Auxiliary lanes	\$1,423,300.00
Subtotal	\$11,045,761.66	Subtotal	\$11,045,761.66
TOTAL FUNDS	\$13,139,433.90	= TOTAL PROJECT COSTS	\$13,139,433.90

## EXHIBIT A-2

## SOURCES AND USES OF FUNDS SCHEDULE

## SAP 110-129-007

## SOURCES OF FUNDS

## **USES OF FUNDS**

Entity Supplying Funds	Amount	Expenses	Amount
State Funds:		Items Paid for with LRIP	
LRIP Grant	\$85,000.00	Grant Funds:	
		Curb and gutter, storm sewer, sanitary sewer, signal work, roadways	\$85,000.00
Other:			
Subtotal	\$85,000.00	Subtotal	\$85,000.00
Public Entity Funds:		Items paid for with Non-	
Matching Funds	\$	LRIP Grant Funds:	
Other:			\$
	\$		
			\$
Subtotal	\$0	Subtotal	\$0
TOTAL FUNDS	\$85,000.00 =	= TOTAL PROJECT COSTS	\$85,000.00

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## EXHIBIT B

PROJECT COMPLETION SCHEDULE (Provide for enough time to final the project through the MnDOT state aid pay request process.)

The Completion date for the projects SAP 110-129-006 tied to SAP 129-110-007:

December 31, 2021

## EXHIBIT C

## BOND FINANCED PROPERTY CERTIFICATION

## State of Minnesota General Obligation Bond Financed Property

The undersigned states that it has a fee simple, leasehold and/or easement interest in the real property located in the County(ies) of Hennepin, State of Minnesota that is generally described or illustrated graphically in **Attachment 1** attached hereto and all improvements thereon (the "Restricted Property") and acknowledges that the Restricted Property is or may become State bond-financed property. To the extent that the Restricted Property is or becomes State bond-financed property, the undersigned acknowledges that:

- A. The Restricted Property is State bond-financed property under Minn. Stat. Sec. 16A.695, is subject to the requirements imposed by that statute, and cannot be sold, mortgaged, encumbered or otherwise disposed of without the approval of the Commissioner of Minnesota Management and Budget; and
- B. The Restricted Property is subject to the provisions of the Local Road Improvement Program Grant Agreement between the Minnesota Department of Transportation and the undersigned dated \_\_\_\_\_\_, 20\_\_\_; and
- C. The Restricted Property shall continue to be deemed State bond-financed property for 37.5 years or until the Restricted Property is sold with the written approval of the Commissioner of Minnesota Management and Budget.

Date: \_\_\_\_\_, 20\_\_\_\_

City of Brooklyn Park , a political subdivision of the State of Minnesota

By:	
Name:	
Title:	

By:	
Name:	
Title:	

## 7.1C DRAFT AGREEMENT NO. 1035496 Page 11

## Attachment 1 to Exhibit C

## GENERAL DESCRIPTION OF RESTRICTED PROPERTY

(Insert a narrative or graphic description of the Restricted Property for the project. It need not be a legal description if a legal description is unavailable.)

## EXHIBIT D

## GRANT APPLICATION

Attach the grant application for the project

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## EXHIBIT E

## GRANTEE RESOLUTION APPROVING GRANT AGREEMENT

### EXHIBIT F

## GENERAL TERMS AND CONDITIONS FOR LOCAL ROAD IMPROVEMENT PROGRAM (LRIP) GRANTS

## Article I DEFINITIONS

Section 1.01 **Defined Terms.** The following terms shall have the meanings set out respectively after each such term (the meanings to be equally applicable to both the singular and plural forms of the terms defined) unless the context specifically indicates otherwise:

"Advance(s)" - means an advance made or to be made by MnDOT to the Public Entity and disbursed in accordance with the provisions contained in Article VI hereof.

"Agreement" - means the Local Road Improvement Program Grant Agreement between the Public Entity and the Minnesota Department of Transportation to which this Exhibit is attached.

"Certification" - means the certification, in the form attached as **Exhibit C**, in which the Public Entity acknowledges that its interest in the Real Property is bond financed property within the meaning of Minn. Stat. Sec. 16A.695 and is subject to certain restrictions imposed thereby.

"Code" - means the Internal Revenue Code of 1986, as amended, and all treasury regulations, revenue procedures and revenue rulings issued pursuant thereto.

"Commissioner" - means the Commissioner of Minnesota Management & Budget.

"Commissioner's Order" - means the "Fourth Order Amending Order of the Commissioner of Minnesota Management & Budget Relating to Use and Sale of State Bond Financed Property" dated July 30, 2012, as it may be amended or supplemented.

"Completion Date" - means the projected date for completion of the Project as indicated in the Agreement.

"Construction Contract Documents" - means the document or documents, in form and substance acceptable to MnDOT, including but not limited to any construction plans and specifications and any exhibits, amendments, change orders, modifications thereof or supplements thereto, which collectively form the contract between the Public Entity and the Contractor(s) for the completion of the Construction Items on or before the Completion Date for either a fixed price or a guaranteed maximum price.

"Construction Items" - means the work to be performed under the Construction Contract Documents.

"Contractor" - means any person engaged to work on or to furnish materials and supplies for the Construction Items including, if applicable, a general contractor.

"Draw Requisition" - means a draw requisition that the Public Entity, or its designee, submits to MnDOT when an Advance is requested, as referred to in Section 4.02.

"G.O. Bonds" - means the state general obligation bonds issued under the authority granted in Article XI, Sec. 5(a) of the Minnesota Constitution, the proceeds of which are used to fund the LRIP Grant, and any bonds issued to refund or replace such bonds.

"Grant Application" - means the grant application that the Public Entity submitted to MnDOT which is attached as **Exhibit D**.

"LRIP Grant" - means a grant from MnDOT to the Public Entity under the LRIP in the amount specified in the Agreement, as such amount may be modified under the provisions hereof.

"LRIP" - means the Local Road Improvement Program pursuant to Minn. Stat. Sec. 174.52 and rules relating thereto.

"MnDOT" - means the Minnesota Department of Transportation.

"Outstanding Balance of the LRIP Grant" - means the portion of the LRIP Grant that has been disbursed to the Public Entity minus any amounts returned to the Commissioner.

"Project" - means the Project identified in the Agreement to be totally or partially funded with a LRIP grant.

"Public Entity" - means the grantee of the LRIP Grant and identified as the Public Entity in the Agreement.

"Real Property" - means the real property identified in the Agreement on which the Project is located.

## Article II GRANT

Section 2.01 Grant of Monies. MnDOT shall make the LRIP Grant to the Public Entity, and disburse the proceeds in accordance with the terms and conditions herein.

Section 2.02 Public **Ownership**, The Public Entity acknowledges and agrees that the LRIP Grant is being funded with the proceeds of G.O. Bonds, and as a result all of the Real Property must be owned by one or more public entities. The Public Entity represents and warrants to MnDOT that it has one or more of the following ownership interests in the Real Property: (i) fee simple ownership, (ii) an easement that is for a term that extends beyond the date that is 37.5 years from the Agreement effective date, or such shorter term as authorized by statute, and which cannot be modified or terminated early without the prior written consent of MnDOT and the Commissioner; and/or (iii) a prescriptive easement for a term that extends beyond the date that is 37.5 years from the Agreement effective date.

Section 2.03 **Use of Grant Proceeds.** The Public Entity shall use the LRIP Grant solely to reimburse itself for expenditures it has already made, or will make, to pay the costs of one of the following applicable activities: (i) preliminary, final construction and engineering and administration (ii) constructing or reconstructing city streets, county highways, or town roads with statewide or regional significance that have not been fully funded through other state, federal, or local funding sources; or (iii) capital improvement projects on county state-aid highways that are intended primarily to reduce traffic crashes, deaths, injuries, and property damage. The Public Entity shall not use the LRIP Grant for any other purpose, including but not limited to, any work to be done on a state trunk highway or within a trunk highway easement.

Section 2.04 **Operation of the Real Property.** The Real Property must be used by the Public Entity in conjunction with or for the operation of a county highway, county state-aid highway, town road, or city street and for other uses customarily associated therewith, such as trails and utility corridors, and for no other purposes or uses. The Public Entity shall have no intention on the effective date of the Agreement to use the Real Property as a trunk highway or any part of a trunk highway. The Public Entity must annually determine that the Real Property is being used for the purposes specified in this Section and, upon written request by either MnDOT or the Commissioner, shall supply a notarized statement to that effect.

Section 2.05 Sale or Lease of Real Property. The Public Entity shall not (i) sell or transfer any part of its ownership interest in the Real Property, or (ii) lease out or enter into any contract that would allow another entity to use or operate the Real Property without the written consent of both MnDOT and the Commissioner. The sale or transfer of any part of the Public Entity's ownership interest in the Real Property, or any lease or contract that would allow another entity to use or operate the Real Property, must comply with the requirements imposed by Minn. Stat. Sec. 16A.695 and the Commissioner's Order regarding such sale or lease.

Section 2.06 Public **Entity's Representations and Warranties.** The Public Entity represents and warrants to MnDOT that:

- A. It has legal authority to execute, deliver and perform the Agreement and all documents referred to therein, and it has taken all actions necessary to its execution and delivery of such documents.
- B. It has the ability and a plan to fund the operation of the Real Property for the purposes specified in Section 2.04, and will include in its annual budget all funds necessary for the operation of the Real Property for such purposes.
- C. The Agreement and all other documents referred to therein are the legal, valid and binding obligations of the Public Entity enforceable against the Public Entity in accordance with their respective terms.
- D. It will comply with all of the provisions of Minn. Stat. Sec. 16A.695, the Commissioner's Order and the LRIP. It has legal authority to use the G.O. Grant for the purpose or purposes described in this Agreement.
- E. All of the information it has submitted or will submit to MnDOT or the Commissioner relating to the LRIP Grant or the disbursement of the LRIP Grant is and will be true and correct.
- F. It is not in violation of any provisions of its charter or of the laws of the State of Minnesota, and there are no actions or proceedings pending, or to its knowledge threatened, before any judicial body or governmental authority against or affecting it relating to the Real Property, or its ownership interest therein, and it is not in default with respect to any order, writ, injunction, decree, or demand of any court or any governmental authority which would impair its ability to enter into the Agreement or any document referred to herein, or to perform any of the acts required of it in such documents.
- G. Neither the execution and delivery of the Agreement or any document referred to herein nor compliance with any of the provisions or requirements of any of such documents is prevented by, is a breach of, or will result in a breach of, any provision of any agreement or document to which it is now a party or by which it is bound.

- H. The contemplated use of the Real Property will not violate any applicable zoning or use statute, ordinance, building code, rule or regulation, or any covenant or agreement of record relating thereto.
- I. The Project will be completed and the Real Property will be operated in full compliance with all applicable laws, rules, ordinances, and regulations of any federal, state, or local political subdivision having jurisdiction over the Project and the Real Property.
- J. All applicable licenses, permits and bonds required for the performance and completion of the Project and for the operation of the Real Property as specified in Section 2.04 have been, or will be, obtained.
- K. It reasonably expects to possess its ownership interest in the Real Property described in Section 2.02 for at least 37.5 years, and it does not expect to sell such ownership interest.
- L. It does not expect to lease out or enter into any contract that would allow another entity to use or operate the Real Property.
- M. It will supply whatever funds are needed in addition to the LRIP Grant to complete and fully pay for the Project.
- N. The Construction Items will be completed substantially in accordance with the Construction Contract Documents by the Completion Date and all such items will be situated entirely on the Real Property.
- O. It will require the Contractor or Contractors to comply with all rules, regulations, ordinances, and laws bearing on its performance under the Construction Contract Documents.
- P. It shall furnish such satisfactory evidence regarding the representations and warranties described herein as may be required and requested by either MnDOT or the Commissioner.
- Q. It has made no material false statement or misstatement of fact in connection with its receipt of the G.O. Grant, and all the information it has submitted or will submit to the State Entity or Commissioner of MMB relating to the G.O. Grant or the disbursement of any of the G.O. Grant is and will be true and correct.

Section 2.07 **Event(s) of Default.** The following events shall, unless waived in writing by MnDOT and the Commissioner, constitute an Event of Default under the Agreement upon either MnDOT or the Commissioner giving the Public Entity 30 days' written notice of such event and the Public Entity's failure to cure such event during such 30-day time period for those Events of Default that can be cured within 30 days or within whatever time period is needed to cure those Events of Default that cannot be cured within 30 days as long as the Public Entity is using its best efforts to cure and is making reasonable progress in curing such Events of Default; however, in no event shall the time period to cure any Event of Default exceed six (6) months unless otherwise consented to, in writing, by MnDOT and the Commissioner.

A. If any representation, covenant, or warranty made by the Public Entity herein or in any other document furnished pursuant to the Agreement, or to induce MnDOT to disburse the LRIP Grant, shall prove to have been untrue or incorrect in any material respect or materially misleading as of the time such representation, covenant, or warranty was made.

- B. If the Public Entity fails to fully comply with any provision, covenant, or warranty contained herein.
- C. If the Public Entity fails to fully comply with any provision, covenant or warranty contained in Minn. Stat. Sec. 16A.695, the Commissioner's Order, or Minn. Stat. Sec. 174.52 and all rules related thereto.
- D. If the Public Entity fails to use the proceeds of the LRIP Grant for the purposes set forth in Section 2.03, the Grant Application, and in accordance with the LRIP.
- E. If the Public Entity fails to operate the Real Property for the purposes specified in Section 2.04.
- F. If the Public Entity fails to complete the Project by the Completion Date.
- G. If the Public Entity sells or transfers any portion of its ownership interest in the Real Property without first obtaining the written consent of both MnDOT and the Commissioner.
- H. If the Public Entity fails to provide any additional funds needed to fully pay for the Project.
- I. If the Public Entity fails to supply the funds needed to operate the Real Property in the manner specified in Section 2.04.

Notwithstanding the foregoing, any of the above events that cannot be cured shall, unless waived in writing by MnDOT and the Commissioner, constitute an Event of Default under the Agreement immediately upon either MnDOT or the Commissioner giving the Public Entity written notice of such event.

Section 2.08 **Remedies.** Upon the occurrence of an Event of Default and at any time thereafter until such Event of Default is cured to the satisfaction of MnDOT, MnDOT or the Commissioner may enforce any or all of the following remedies.

- A. MnDOT may refrain from disbursing the LRIP Grant; provided, however, MnDOT may make such disbursements after the occurrence of an Event of Default without waiving its rights and remedies hereunder.
- B. If the Event of Default involves a sale of the Public Entity's interest in the Real Property in violation of Minn. Stat. Sec. 16A.695 or the Commissioner's Order, the Commissioner, as a third party beneficiary of the Agreement, may require that the Public Entity pay the amounts that would have been paid if there had been compliance with such provisions. For other Events of Default, the Commissioner may require that the Outstanding Balance of the LRIP Grant be returned to it.
- C. Either MnDOT or the Commissioner, as a third party beneficiary of the Agreement, may enforce any additional remedies it may have in law or equity.

The rights and remedies specified herein are cumulative and not exclusive of any rights or remedies that MnDOT or the Commissioner would otherwise possess.

If the Public Entity does not repay the amounts required to be paid under this Section or under any other provision contained herein within 30 days of demand by the Commissioner, or any amount ordered by a court of competent jurisdiction within 30 days of entry of judgment against the Public Entity and in favor

of MnDOT and/or the Commissioner, then such amount may, unless precluded by law, be offset against any aids or other monies that the Public Entity is entitled to receive from the State of Minnesota.

Section 2.09 Notification **of Event of Default.** The Public Entity shall furnish to MnDOT and the Commissioner, as soon as possible and in any event within seven (7) days after it has obtained knowledge of the occurrence of each Event of Default, a statement setting forth details of each Event of Default and the action which the Public Entity proposes to take with respect thereto.

Section 2.10 **Effect of Event of Default.** The Agreement shall survive Events of Default and remain in full force and effect, even upon full disbursement of the LRIP Grant, and shall only be terminated under the circumstances set forth in Section 2.11.

#### Section 2.11 Termination of Agreement and Modification of LRIP Grant.

A. If the Project is not started within five (5) years after the effective date of the Agreement or the LRIP Grant has not been disbursed within four (4) years after the date the Project was started, MnDOT's obligation to fund the LRIP Grant shall terminate. In such event, (i) if none of the LRIP Grant has been disbursed by such date, MnDOT shall have no obligation to fund the LRIP Grant and the Agreement will terminate, and (ii) if some but not all of the LRIP Grant has been disbursed by such date, MnDOT shall have no further obligation to provide any additional funding for the LRIP Grant and the Agreement shall remain in force but shall be modified to reflect the amount of the LRIP Grant that was actually disbursed and the Public Entity is still obligated to complete the Project by the Completion Date.

B. The Agreement shall terminate upon the Public Entity's sale of its interest in the Real Property and transmittal of the required portion of the proceeds of the sale to the Commissioner in compliance with Minn. Stat. Sec. 16A.695 and the Commissioner's Order, or upon the termination of the Public Entity's ownership interest in the Real Property if such ownership interest is an easement.

Section 2.12 Excess **Funds.** If the full amount of the G.O. Grant and any matching funds referred to in Section 5.13 are not needed to complete the Project, then, unless language in the G.O. Bonding Legislation indicates otherwise, the G.O. Grant shall be reduced by the amount not needed.

### Article III

## COMPLIANCE WITH MINNESOTA STATUTE, SEC. 16A.695 AND THE COMMISSIONER'S ORDER

Section 3.01 **State Bond Financed Property**. The Public Entity acknowledges that its interest in the Real Property is, or when acquired by it will be, "state bond financed property", as such term is used in Minn. Stat. Sec. 16A.695 and the Commissioner's Order and, therefore, the provisions contained in such statute and order apply, or will apply, to its interest in the Real Property, even if the LRIP Grant will only pay for a portion of the Project.

Section 3.02 **Preservation of Tax Exempt Status.** In order to preserve the tax-exempt status of the G.O. Bonds, the Public Entity agrees as follows:

A. It will not use the Real Property or use or invest the LRIP Grant or any other sums treated as "bond proceeds" under Section 148 of the Code (including "investment proceeds," "invested sinking funds" and "replacement proceeds") in such a manner as to cause the G.O. Bonds to be classified as "arbitrage bonds" under Code Section 148.

- B. It will deposit and hold the LRIP Grant in a segregated non-interest-bearing account until such funds are used for payments for the Project.
- C. It will, upon written request, provide the Commissioner all information required to satisfy the informational requirements set forth in the Code, including Sections 103 and 148, with respect to the G.O. Bonds.
- D. It will, upon the occurrence of any act or omission by the Public Entity that could cause the interest on the G.O. Bonds to no longer be tax exempt and upon direction from the Commissioner, take such actions and furnish such documents as the Commissioner determines to be necessary to ensure that the interest to be paid on the G.O. Bonds is exempt from federal taxation, which such action may include: (i) compliance with proceedings intended to classify the G.O. Bonds as a "qualified bond" within the meaning of Code Section 141(e), or (ii) changing the nature of the use of the Real Property so that none of the net proceeds of the G.O. Bonds will be deemed to be used, directly or indirectly, in an "unrelated trade or business" or for any "private business use" within the meaning of Code Sections 141(b) and 145(a).
- E. It will not otherwise use any of the LRIP Grant or take, permit or cause to be taken, or omit to take, any action that would adversely affect the exemption from federal income taxation of the interest on the G.O. Bonds, and if it should take, permit or cause to be taken, or omit to take, as appropriate, any such action, it shall take all lawful actions necessary to correct such actions or omissions promptly upon obtaining knowledge thereof.

Section 3.03 Changes to G.O. Compliance Legislation or the Commissioner's Order. If Minn. Stat. Sec. 16A.695 or the Commissioner's Order is amended in a manner that reduces any requirement imposed against the Public Entity, or if the Public Entity's interest in the Real Property becomes exempted from Minn. Stat. Sec. 16A.695 and the Commissioner's Order, then upon written request by the Public Entity, MnDOT shall execute an amendment to the Agreement to implement such amendment or exempt the Public Entity's interest in the Real Property from Minn. Stat. Sec. 16A.695 and the Commissioner's Order.

#### Article IV DISBURSEMENT OF GRANT PROCEEDS

Section 4.01 **The Advances.** MnDOT agrees, on the terms and subject to the conditions set forth herein, to make Advances of the LRIP Grant to the Public Entity from time to time in an aggregate total amount not to exceed the amount of the LRIP Grant. If the amount of LRIP Grant that MnDOT cumulatively disburses hereunder to the Public Entity is less than the amount of the LRIP Grant delineated in Section 1.01, then MnDOT and the Public Entity shall enter into and execute whatever documents MnDOT may request in order to amend or modify this Agreement to reduce the amount of the LRIP Grant to the amount actually disbursed. Provided, however, in accordance with the provisions contained in Section 2.11, MnDOT's obligation to make Advances shall terminate as of the dates specified in Section 2.11 even if the entire LRIP Grant has not been disbursed by such dates.

Advances shall only be for expenses that (i) are for those items of a capital nature delineated in Source and Use of Funds that is attached as **Exhibit A**, (ii) accrued no earlier than the effective date of the legislation that appropriated the funds that are used to fund the LRIP Grant, or (iii) have otherwise been consented to, in writing, by the Commissioner.

It is the intent of the parties hereto that the rate of disbursement of the Advances shall not exceed the rate of completion of the Project or the rate of disbursement of the matching funds required, if any, under Section

5.13. Therefore, the cumulative amount of all Advances disbursed by the State Entity at any point in time shall not exceed the portion of the Project that has been completed and the percentage of the matching funds required, if any, under Section 5.13 that have been disbursed as of such point in time. This requirement is expressed by way of the following two formulas:

Formula #1: Cumulative Advances  $\leq$  (Program Grant)  $\times$  (percentage of matching funds, if any, required under Section 5.13 that have been disbursed)

Formula #2:

Cumulative Advances  $\leq$  (Program Grant)  $\times$  (percentage of Project completed)

Section 4.02 **Draw Requisitions.** Whenever the Public Entity desires a disbursement of a portion of the LRIP Grant the Public Entity shall submit to MnDOT a Draw Requisition duly executed on behalf of the Public Entity or its designee. Each Draw Requisition with respect to construction items shall be limited to amounts equal to: (i) the total value of the classes of the work by percentage of completion as approved by the Public Entity and MnDOT, plus (ii) the value of materials and equipment not incorporated in the Project but delivered and suitably stored on or off the Real Property in a manner acceptable to MnDOT, less (iii) any applicable retainage, and less (iv) all prior Advances.

Notwithstanding anything herein to the contrary, no Advances for materials stored on or off the Real Property will be made by MnDOT unless the Public Entity shall advise MnDOT, in writing, of its intention to so store materials prior to their delivery and MnDOT has not objected thereto.

At the time of submission of each Draw Requisition, other than the final Draw Requisition, the Public Entity shall submit to MnDOT such supporting evidence as may be requested by MnDOT to substantiate all payments which are to be made out of the relevant Draw Requisition or to substantiate all payments then made with respect to the Project.

The final Draw Requisition shall not be submitted before completion of the Project, including any correction of material defects in workmanship or materials (other than the completion of punch list items). At the time of submission of the final Draw Requisition the Public Entity shall submit to MnDOT: (I) such supporting evidence as may be requested by MnDOT to substantiate all payments which are to be made out of the final Draw Requisition or to substantiate all payments then made with respect to the Project, and (ii) satisfactory evidence that all work requiring inspection by municipal or other governmental authorities having jurisdiction has been duly inspected and approved by such authorities and that all requisite certificates and other approvals have been issued.

If on the date an Advance is desired the Public Entity has complied with all requirements of this Agreement and MnDOT approves the relevant Draw Requisition, then MnDOT shall disburse the amount of the requested Advance to the Public Entity.

Section 4.03 Additional Funds. If MnDOT shall at any time in good faith determine that the sum of the undisbursed amount of the LRIP Grant plus the amount of all other funds committed to the Project is less than the amount required to pay all costs and expenses of any kind which reasonably may be anticipated in connection with the Project, then MnDOT may send written notice thereof to the Public Entity specifying the amount which must be supplied in order to provide sufficient funds to complete the Project. The Public Entity agrees that it will, within 10 calendar days of receipt of any such notice, supply or have some other entity supply the amount of funds specified in MnDOT's notice.

Section 4.04 **Condition Precedent to Any Advance.** The obligation of MnDOT to make any Advance hereunder (including the initial Advance) shall be subject to the following conditions precedent:

- A. MnDOT shall have received a Draw Requisition for such Advance specifying the amount of funds being requested, which such amount when added to all prior requests for an Advance shall not exceed the amount of the LRIP Grant set forth in Section 1.01.
- B. No Event of Default under this Agreement or event which would constitute an Event of Default but for the requirement that notice be given or that a period of grace or time elapse shall have occurred and be continuing.
- C. No determination shall have been made by MnDOT that the amount of funds committed to the Project is less than the amount required to pay all costs and expenses of any kind that may reasonably be anticipated in connection with the Project, or if such a determination has been made and notice thereof sent to the Public Entity under Section 4.03, then the Public Entity has supplied, or has caused some other entity to supply, the necessary funds in accordance with such section or has provided evidence acceptable to MnDOT that sufficient funds are available.
- D. The State Entity shall have received evidence, in form and substance acceptable to the State Entity, that the Public Entity has sufficient funds to fully and completely pay for the Project and all other expenses that may occur in conjunction therewith.
- E. The Public Entity has supplied to the State Entity all other items that the State Entity may reasonably require

Section 4.05 Processing and Disbursement of Advances. The Public Entity acknowledges and agrees as follows:

- A. Advances are not made prior to completion of work performed on the Project.
- B. All Advances are processed on a reimbursement basis.
- C. The Public Entity must first document expenditures to obtain an Advance.
- D. Reimbursement requests are made on a partial payment basis or when the Project is completed.
- E. All payments are made following the "Delegated Contract Process or State Aid Payment Request" as requested and approved by the appropriate district state aid engineer.

Section 4.06 **Construction Inspections.** The Public Entity shall be responsible for making its own inspections and observations regarding the completion of the Project, and shall determine to its own satisfaction that all work done or materials supplied have been properly done or supplied in accordance with all contracts that the Public Entity has entered into regarding the completion of the Project.

### Article V MISCELLANEOUS

Section 5.01 **Insurance.** If the Public Entity elects to maintain general comprehensive liability insurance regarding the Real Property, then the Public Entity shall have MnDOT named as an additional named insured therein.

Section 5.02 **Condemnation.** If, after the Public Entity has acquired the ownership interest set forth in Section 2.02, all or any portion of the Real Property is condemned to an extent that the Public Entity can no longer comply with Section 2.04, then the Public Entity shall, at its sole option, either: (i) use the condemnation proceeds to acquire an interest in additional real property needed for the Public Entity to continue to comply with Section 2.04 and to provide whatever additional funds that may be needed for such purposes, or (ii) submit a request to MnDOT and the Commissioner to allow it to sell the remaining portion of its interest in the Real Property. Any condemnation proceeds which are not used to acquire an interest in additional real property hall be applied in accordance with Minn. Stat. Sec. 16A.695 and the Commissioner's Order as if the Public Entity's interest in the Real Property that remains after the condemnation, such sale must occur within a reasonable time period after the date the condemnation occurred and the cumulative sum of the condemnation and sale proceeds applied in accordance with Minn. Stat. Sec. 16A.695 and the Commissioner's Order.

If MnDOT receives any condemnation proceeds referred to herein, MnDOT agrees to or pay over to the Public Entity all of such condemnation proceeds so that the Public Entity can comply with the requirements of this Section.

Section 5.03 **Use, Maintenance, Repair and Alterations.** The Public Entity shall not, without the written consent of MnDOT and the Commissioner, (i) permit or allow the use of any of the Real Property for any purpose other than the purposes specified in Section 2.04, (ii) substantially alter any of the Real Property except such alterations as may be required by laws, ordinances or regulations, or such other alterations as may improve the Real Property by increasing its value or which improve its ability to be used for the purposes set forth in Section 2.04, (iii) take any action which would unduly impair or depreciate the value of the Real Property, (iv) abandon the Real Property, or (v) commit or permit any act to be done in or on the Real Property in violation of any law, ordinance or regulation.

If the Public Entity fails to maintain the Real Property in accordance with this Section, MnDOT may perform whatever acts and expend whatever funds necessary to so maintain the Real Property, and the Public Entity irrevocably authorizes MnDOT to enter upon the Real Property to perform such acts as may be necessary to so maintain the Real Property. Any actions taken or funds expended by MnDOT shall be at its sole discretion, and nothing contained herein shall require MnDOT to take any action or incur any expense and MnDOT shall not be responsible, or liable to the Public Entity or any other entity, for any such acts that are performed in good faith and not in a negligent manner. Any funds expended by MnDOT pursuant to this Section shall be due and payable on demand by MnDOT and will bear interest from the date of payment by MnDOT at a rate equal to the lesser of the maximum interest rate allowed by law or 18% per year based upon a 365-day year.

Section 5.04 **Recordkeeping and Reporting.** The Public Entity shall maintain books and records pertaining to Project costs and expenses needed to comply with the requirements contained herein, Minn. Stat. Sec. 16A.695, the Commissioner's Order, and Minn. Stat. Sec. 174.52 and all rules related thereto, and upon request shall allow MnDOT, its auditors, the Legislative Auditor for the State of Minnesota, or the State Auditor for the State of Minnesota, to inspect, audit, copy, or abstract all of such items. The Public Entity shall use generally accepted accounting principles in the maintenance of such items, and shall retain all of such books and records for a period of six years after the date that the Project is fully completed and placed into operation.

Section 5.05 **Inspections by MnDOT.** The Public Entity shall allow MnDOT to inspect the Real Property upon reasonable request by MnDOT and without interfering with the normal use of the Real Property.

Section 5.06 Liability. The Public Entity and MnDOT agree that each will be responsible for its own acts and the results thereof to the extent authorized by law, and neither shall be responsible for the acts of the other party and the results thereof. The liability of MnDOT and the Commissioner is governed by the provisions of Minn. Stat. Sec. 3.736. If the Public Entity is a "municipality" as that term is used in Minn. Stat. Chapter 466, then the liability of the Public Entity is governed by the provisions of Chapter 466. The Public Entity's liability hereunder shall not be limited to the extent of insurance carried by or provided by the Public Entity, or subject to any exclusion from coverage in any insurance policy.

Section 5.07 **Relationship of the Parties.** Nothing contained in the Agreement is to be construed as establishing a relationship of co-partners or joint venture among the Public Entity, MnDOT, or the Commissioner, nor shall the Public Entity be considered to be an agent, representative, or employee of MnDOT, the Commissioner, or the State of Minnesota in the performance of the Agreement or the Project.

No employee of the Public Entity or other person engaging in the performance of the Agreement or the Project shall be deemed have any contractual relationship with MnDOT, the Commissioner, or the State of Minnesota and shall not be considered an employee of any of those entities. Any claims that may arise on behalf of said employees or other persons out of employment or alleged employment, including claims under the Workers' Compensation Act of the State of Minnesota, claims of discrimination against the Public Entity or its officers, agents, contractors, or employees shall in no way be the responsibility of MnDOT, the Commissioner, or the State of Minnesota. Such employees or other persons shall not require nor be entitled to any compensation, rights or benefits of any kind whatsoever from MnDOT, the Commissioner, or the State of Minnesota, including tenure rights, medical and hospital care, sick and vacation leave, disability benefits, severance pay and retirement benefits.

Section 5.08 **Notices.** In addition to any notice required under applicable law to be given in another manner, any notices required hereunder must be in writing and personally served or sent by prepaid, registered, or certified mail (return receipt requested), to the address of the party specified below or to such different address as may in the future be specified by a party by written notice to the others:

To the Public Entity: At the address indicated on the first page of the Agreement.

To MnDOT at:	Minnesota Department of Transportation Office of State Aid 395 John Ireland Blvd., MS 500 Saint Paul, MN 55155 Attention: Marc Briese, State Aid Programs Engineer
To the Commissioner at:	Minnesota Management & Budget 400 Centennial Office Bldg. 658 Cedar St. St. Paul, MN 55155 Attention: Commissioner

Section 5.09 Assignment or Modification. Neither the Public Entity nor MnDOT may assign any of its rights or obligations under the Agreement without the prior written consent of the other party.

Section 5.10 **Waiver.** Neither the failure by the Public Entity, MnDOT, or the Commissioner, as a third party beneficiary of the Agreement, in one or more instances to insist upon the complete observance or performance of any provision hereof, nor the failure of the Public Entity, MnDOT, or the Commissioner to exercise any right or remedy conferred hereunder or afforded by law shall be construed as waiving any

breach of such provision or the right to exercise such right or remedy thereafter. In addition, no delay by any of the Public Entity, MnDOT, or the Commissioner in exercising any right or remedy hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any right or remedy preclude other or further exercise thereof or the exercise of any other right or remedy.

Section 5.11 **Choice of Law and Venue.** All matters relating to the validity, interpretation, performance, or enforcement of the Agreement shall be determined in accordance with the laws of the State of Minnesota. All legal actions arising from any provision of the Agreement shall be initiated and venued in the State of Minnesota District Court located in St. Paul, Minnesota.

Section 5.12 **Severability.** If any provision of the Agreement is finally judged by any court to be invalid, then the remaining provisions shall remain in full force and effect and they shall be interpreted, performed, and enforced as if the invalid provision did not appear herein.

Section 5.13 **Matching Funds.** Any matching funds as shown on Page 1 of the Grant Agreement that are required to be obtained and supplied by the Public Entity must either be in the form of (i) cash monies, (ii) legally binding commitments for money, or (iii) equivalent funds or contributions, including equity, which have been or will be used to pay for the Project. The Public Entity shall supply to MnDOT whatever documentation MnDOT may request to substantiate the availability and source of any matching funds.

Section 5.14 **Sources and Uses of Funds.** The Public Entity represents to MnDOT and the Commissioner that the Sources and Uses of Funds Schedule attached as **Exhibit A** accurately shows the total cost of the Project and all of the funds that are available for the completion of the Project. The Public Entity will supply any other information and documentation that MnDOT or the Commissioner may request to support or explain any of the information contained in the Sources and Uses of Funds Schedule. If any of the funds shown in the Sources and Uses of Funds Schedule have conditions precedent to the release of such funds, the Public Entity must provide to MnDOT a detailed description of such conditions and what is being done to satisfy such conditions.

Section 5.15 **Project Completion Schedule.** The Public Entity represents to MnDOT and the Commissioner that the Project Completion Schedule attached as **Exhibit B** correctly and accurately sets forth the projected schedule for the completion of the Project.

Section 5.16 **Third-Party Beneficiary.** The Governmental Program will benefit the State of Minnesota and the provisions and requirements contained herein are for the benefit of both the State Entity and the State of Minnesota. Therefore, the State of Minnesota, by and through its Commissioner of MMB, is and shall be a third-party beneficiary of this Agreement.

Section 5.17 **Public Entity Tasks**. Any tasks that the Agreement imposes upon the Public Entity may be performed by such other entity as the Public Entity may select or designate, provided that the failure of such other entity to perform said tasks shall be deemed to be a failure to perform by the Public Entity.

Section 5.18 **Data Practices.** The Public Entity agrees with respect to any data that it possesses regarding the G.O. Grant or the Project to comply with all of the provisions and restrictions contained in the Minnesota Government Data Practices Act contained in Minnesota Statutes Chapter 13, as such may subsequently be amended or replaced from time to time.

Section 5.19 Non-Discrimination. The Public Entity agrees to not engage in discriminatory employment practices regarding the Project and it shall fully comply with all of the provisions contained in

Minnesota Statutes Chapters 363A and 181, as such may subsequently be amended or replaced from time to time.

Section 5.20 **Worker's Compensation.** The Public Entity agrees to comply with all of the provisions relating to worker's compensation contained in Minn. Stat. Secs. 176.181 subd. 2 and 176.182, as they may be amended or replaced from time to time with respect to the Project.

Section 5.21 **Antitrust Claims.** The Public Entity hereby assigns to MnDOT and the Commissioner of MMB all claims it may have for over charges as to goods or services provided with respect to the Project that arise under the antitrust laws of the State of Minnesota or of the United States of America.

Section 5.22 **Prevailing Wages.** The Public Entity agrees to comply with all of the applicable provisions contained in Minnesota Statutes Chapter 177, and specifically those provisions contained in Minn. Stat.§. 177.41 through 177.435 as they may be amended or replaced from time to time with respect to the Project. By agreeing to this provision, the Public Entity is not acknowledging or agreeing that the cited provisions apply to the Project.

Section 5.23 Entire Agreement. The Agreement and all of the exhibits attached thereto embody the entire agreement between the Public Entity and MnDOT, and there are no other agreements, either oral or written, between the Public Entity and MnDOT on the subject matter hereof.

Section 5.24 **E-Verification.** The Public Entity agrees and acknowledges that it is aware of Minn.Stat. § 16C.075 regarding e-verification of employment of all newly hired employees to confirm that such employees are legally entitled to work in the United States, and that it will, if and when applicable, fully comply with such order.

## EXHIBIT G

### MINNESOTA REPORT ON JOBS

- (a) Pursuant to Minn. Stat. Sec. 16A.633, subd. 4, State Entity is required to report the number of jobs created or retained by the Project. To enable State Entity to comply with Minn. Stat. Sec. 16A.633, subd. 4, the Public Entity is required to report the number of jobs created or retained by the Project to State Entity as set forth below.
- (b) The Public Entity shall require all of its contractors to report the information below to the Public Entity. The Public Entity shall then report to State Entity. Information can be recorded by State Entity in an Excel document that can be downloaded into the report by Minnesota Management and Budget. Each report must contain the following:
  - (1) The name of the Project.
  - (2) The State Entity's contract number, if applicable.
  - (3) Reporting period. The appropriate biennium is to be selected.
  - (4) The Agency Number. This will complete the next column with Agency Name.
  - (5) Legal Citation for the Authorization.
  - (6) Department ID responsible for the Project.
  - (7) The Appropriation for the Project.
  - (8) The Appropriation Amount.
- (9) Project Start Date.

(10) Project Completion Date.

- (11) The County where the Project is located or, if it is located in more than one county, where it is primarily located.
- (12) Funding Source for Project. The selection will be Trunk Highway Bonds, General Obligation Bonds or General Fund.
- (13) Job Type. Jobs should be classified as either (i) engineering/professional, (ii) construction, or (iii) other. Manager and supervisor jobs shall be classified as category (i), (ii) or (iii) based on the nature of the work those individuals spent the majority of their time overseeing.
- (14) Hourly Wages. Jobs should be classified according to the hourly pay ranges below. Overhead or indirect costs or the value of pensions or other benefits should not be included in wages.

(i)	less than \$10.00,
(ii)	\$10.01 to \$15.00,
(iii)	\$15.01 to \$20.00,
(iv)	\$20.01 to \$25.00,
(v)	\$25.01 to \$30.00,
(vi)	\$30.01 to \$35.00,
(vii)	\$35.01 to \$40.00, or
(viii)	more than \$40.00.

- (15) Jobs.
  - a. Jobs should be classified as either (i) jobs created or (ii) jobs retained; they will not be counted as both. A "job created" is a new position created and filled, or an existing unfilled position that is filled, because of the Project. A "job retained"

means a job at a specific wage level that existed prior to beginning the Project that would have been lost but for the Project. Only jobs in Minnesota should be counted.

- b. Jobs should be expressed in "full-time equivalents" (FTE). In calculating an FTE, the number of hours worked during the Reporting Period should be divided by 2,080 (the number of hours representing a full work schedule in a Reporting Period). Jobs should be reported regardless of when the Project or an individual's employment began or ended. Jobs are to be calculated based on hours worked in the current Reporting Period only, so that reporting is not cumulative.
- c. Jobs should not be separated into full-time, part-time, temporary, seasonal, etc. Instead, all hours should be totaled and converted into FTEs as indicated above.
- (c) Each contractor will report its workforce and the workforce of its subcontractor's active during the Reporting Period. This includes employees actively engaged in the Project who work on the jobsite, in the Project office, in the home office or telecommute from home or other alternative office location. This includes, but is not limited to, any engineering personnel, inspectors, sampling and testing technicians, and lab technicians performing work directly in support of the Project. This does not include material suppliers such as steel, culverts, guardrail and tool suppliers. Only hours that relate to time spent on the Project should be reported.
- (d) The Public Entity must incorporate these reporting requirements into its contracts with its contractors (in part so that contractors can add the requirements to their contracts with subcontractors and impose deadlines on reporting by subcontractors).
- (e) To distinguish the jobs reported by contractors that were funded by the Grant, the Public Entity must multiply the job numbers reported by each contractor in each category above by the percentage of total Project costs funded by the Grant (e.g., if the Grant was 40% of total Project costs, the Public Entity should multiply the jobs numbers given in each category by 40% to arrive at the number of jobs funded by the Grant) and it is those numbers that should be reported to State Entity.

## City of Brooklyn Park Request for Council Action

Agenda Item:	7.2	Meeting Date:	June 22, 2020
Agenda Section:	General Action Items	Originating Department:	Operations and Maintenance – Engineering Division
Resolution:	xx		
Ordinance:	N/A	Prepared By:	Jeff Holstein, City Transportation Engineer
Attachments:	5	Presented By:	Jesse Struve, City Engineer
Item:	Approve Amendments to Agreements With Consultants for the Trunk Highway 169 / 101 <sup>st</sup> Avenue Interchange; CIP 4042		

## City Manager's Proposed Actions:

- 1) MOTION \_\_\_\_\_\_, SECOND \_\_\_\_\_, TO WAIVE THE READING AND ADOPT RESOLUTION #2020-\_\_\_\_ TO APPROVE AMENDING THE SUPPLEMENTAL LETTER AGREEMENT WITH SRF CONSULTING GROUP, INC. TO PREPARE FINAL DESIGN PLANS AND SPECIFICATIONS FOR THE TRUNK HIGHWAY 169 / 101<sup>ST</sup> AVENUE INTERCHANGE; CIP 4042.
- 2) MOTION \_\_\_\_\_\_, SECOND \_\_\_\_\_, TO WAIVE THE READING AND ADOPT RESOLUTION #2020-\_\_\_\_\_ TO APPROVE AMENDING THE SUPPLEMENTAL LETTER AGREEMENT WITH WSB & ASSOCIATES, INC. TO PROVIDE RIGHT OF WAY ACQUISITION SERVICES FOR THE TRUNK HIGHWAY 169 / 101<sup>ST</sup> AVENUE INTERCHANGE; CIP 4042.

## Overview:

At the July 23, 2018 City Council meeting, the City Council approved retaining the SRF Consulting Group Inc. (Resolution #2018-103) and WSB & Associates, Inc. (Resolution #2018-104) to prepare final design plans and specifications and to provide right of way acquisition services, respectively, for the Highway 169 / 101<sup>st</sup> Avenue Interchange Project. Supplemental letters of agreement and attached work scopes were executed with each consultant for the project.

The scope of the project expanded to include several design and right of way acquisition items that were not anticipated in the earlier work scopes and executed agreements. Amendments were subsequently approved for these additional services on July 8, 2019. Another amendment was processed for the right of way services in the fall of 2019.

The project scope has further expanded to include additional out-of-scope items for both design and right of way services. These include the following:

## <u>Design</u>

- Additional utility coordination related to undergrounding the Xcel overhead lines.
- Additional plan submittals to address MnDOT comment changes.
- Additional traffic control plan changes for TH 169 / TH 610.
- Plan revision to add driveway to Goerisch Parcel.
- Preparation and processing of Right of Way Public Interest Finding (PIF) to attempt to bid earlier.
- Bidding assistance.
- Additional project management time.

### Right of Way Acquisition

- Additional relocation claim for the daughter of the former owner of Parcel 5.
- Additional legal descriptions and parcel sketches for Parcels 4, 10 and 13.
- Additional assistance for Parcels 5 and 9 regarding personal articles, auction activities and replacement housing payment appeal.

The original approved cost for the design services agreement with the SRF Consulting Group, Inc. was \$799,700. The earlier amendment increased this amount by \$195,565 to \$995,265. Amendment #2 would increase this amount by \$79,996.32 to \$1,075,261.32. The original approved cost for the right of way acquisition services agreement with WSB & Associates, Inc. was \$97,182. Amendments #1 and #2 added \$61,470 from out of scope items for a current total of \$158,652. Amendment #3 would add \$8,308 for a new total of \$166,960.

City staff has reviewed these items and costs and find them to be reasonable and necessary. Staff recommends the City Council approve amending the agreements with the SRF Consulting Group, Inc. to prepare final design plans and specifications and with WSB & Associates, Inc. for right of way acquisition services for the TH 169 / 101<sup>st</sup> Avenue Interchange.

## Primary Issues/Alternatives to Consider: N/A

## Budgetary/Fiscal Issues:

This project is included in the 2020-2024 CIP as CIP 4042 with expenditures for design and right of way acquisition services (\$2 million). The budgeted amount should accommodate the additional costs and these costs should be reimbursable through the grants the City has been awarded for this project.

### Attachments:

- 7.2A RESOLUTION SRF DESIGN SERVICES
- 7.2B RESOLUTION WSB RIGHT OF WAY SERVICES
- 7.2C SRF AMENDMENT LETTER AND TABLE
- 7.2D WSB AMENDMENT TABLE
- 7.2E LOCATION MAP

## RESOLUTION #2020-

### RESOLUTION TO APPROVE AMENDING THE SUPPLEMENTAL LETTER AGREEMENT WITH SRF CONSULTING GROUP, INC. TO PREPARE FINAL DESIGN PLANS AND SPECIFICATIONS FOR THE TRUNK HIGHWAY 169 / 101<sup>ST</sup> AVENUE INTERCHANGE; CIP 4042

WHEREAS, a Master Agreement (four-year duration) with SRF Consulting Group, Inc. was approved for Planning / Land Use and Engineering services by the City Council on June 12, 2017; and

WHEREAS, the Master Agreement provides for individual projects to be negotiated by supplemental letter agreements; and

WHEREAS, on July 23, 2018, the City Council approved Supplemental Letter Agreement #22 with the SRF Consulting Group, Inc. to prepare final design plans and specifications for the Trunk Highway 169 / 101<sup>st</sup> Avenue Interchange at a cost of \$799,700; and

WHEREAS, out of scope design service items were provided by SRF at a cost of \$195,565 and these items were approved by Council on July 8, 2019; and

WHEREAS, additional out of scope items have been provided by SRF to complete the design services at a cost of \$79,996.32 and these items have been reviewed by staff and determined to be complete and of reasonable cost.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Brooklyn Park to approve amending the Supplemental Letter Agreement with SRF Consulting Group, Inc. to include these additional items to prepare final design plans and specifications for the Trunk Highway 169 / 101<sup>st</sup> Avenue Interchange.

## **RESOLUTION #2020-**

### RESOLUTION TO APPROVE AMENDING THE SUPPLEMENTAL LETTER AGREEMENT WITH WSB & ASSOCIATES, INC. TO PROVIDE RIGHT OF WAY ACQUISITION SERVICES FOR THE TRUNK HIGHWAY 169 / 101<sup>ST</sup> AVENUE INTERCHANGE; CIP 4042

WHEREAS, a Master Agreement (four-year duration) with WSB & Associates, Inc. was approved for Planning / Land Use and Engineering services by the City Council on June 12, 2017; and

WHEREAS, the Master Agreement provides for individual projects to be negotiated by supplemental letter agreements; and

WHEREAS, on July 23, 2018, the City Council approved Supplemental Letter Agreement #1 with WSB & Associates, Inc. to provide right of way acquisition services for the Trunk Highway 169 / 101<sup>st</sup> Avenue Interchange at a cost of \$97,182; and

WHEREAS, the City Council subsequently approved amendments #1 and #2 to Supplemental Agreement #1 for out of scope items provided by WSB to complete additional right of way acquisition services; and

WHEREAS, more additional out of scope items have been provided or will be provided by WSB to complete the right of way acquisition services at a cost of \$8,308 and these items have been reviewed by staff and determined to be complete and of reasonable cost.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Brooklyn Park to approve amending the Supplemental Letter Agreement with WSB & Associates, Inc. to include these additional items to provide right of way acquisition services for the Trunk Highway 169 / 101<sup>st</sup> Avenue Interchange.



SRF No. 11431

June 3, 2020

Mr. Jeff Holstein Project Manager / City Transportation Engineer City of Brooklyn Park 5200 85<sup>th</sup> Avenue N. Brooklyn Park, MN 55443

Subject: 101<sup>st</sup> and TH 169 Interchange Request for Contract Amendment; Final Design

Dear Mr. Holstein:

This letter is a request for a contract amendment to cover costs for changed conditions that resulted in revisions to project scope. These revisions are as follows:

- Additional Utility Coordination related to bury of Xcel Aerial Lines On July 8, 2019, the Brooklyn Park City Council took action to convert the aerial utility lines residing on the existing power poles along 101<sup>\*\*</sup> Avenue to an underground system. The poles were owned by Xcel Energy, but also held some aerial lines for Century Link. Prior to that date, SRF was working with Xcel Energy to identify locations for pole relocation, and an establishment of a new permanent easement corridor for segments of the existing power poles. With this change, the Xcel Utility Manager changed from an aerial-designer to an underground designer, in which SRF need to coordinate with a new individual not familiar with the prior work. Additional review and coordination was required to get Xcel ready to submit their relocation permit to MnDOT.
- Additional Submittal Plans for final approval As of July 8, 2019 it was planned that the submittal on July 11, 2019 would address all comments received from the MnDOT Trunk Highway, Federal Aid and Cooperative Agreements, with a Metro Approval and submission to MnDOT Central Office for final approval. In fact, SRF was required to provide two more 100% submittals to address comments not originally identified in previous submittals. In addition to these comments, there were also plan standard revisions that occurred (for instance a number of Standard Plates and Standard Plans required were updated within the time frames) that need to be incorporated on various submittals. Additional time was required to address these new comments, along with the updates to plan standards, to the construction plans, specifications, and estimate.
- Additional Traffic Comments / Staging Revision for TH 169 / TH 610 Ramp Connection – On September 6, 2019, SRF submitted its plans for final approval of the

Mr. Jeff Holstein City of Brooklyn Park June 3, 2020 Page 2

construction plan set, which addressed plan comments received based on the August 14<sup>th</sup> Submittal. At the time of submittal it was assured from State Aid that comments received based on August 14 were indeed addressed and plan approval from Metro State Aid would be forthcoming. After September 6, 2019, Cooperative Agreements let us new that new comments were coming from MnDOT Traffic which impacted signing and staging previously addressed and were informed Metro approval would not be received until these comments were addressed. The type of comments received from SRF's perspective would normally be received much earlier in the project and as a result required additional effort to be addressed at this point in the project. These plan revisions would require revisions to 17 plan sheets submitted on October 14, 2019.

- Plan revision to incorporate driveway at Gorish Parcel On or about the time of September 26, 2019, the City had asked SRF to revisit the access at the Gorish Parcel. Prior to this, SRF was asked to develop the right of way so an access could be developed, mainly to help the City in its right-of-way negotiations. No access was depicted in the construction plans. Around the date in question, the City requested additional information necessary for the negotiation, which at the time was a figure depicting the cross section of the driveway. After this request, the City directed SRF to incorporate the driveway into the plans. However, at this point, SRF recently received approval of the current plan set from State Aid, and was under review from Central Office for review and approval. The inclusion of the driveway was an interruption in the normal approval process for State Aid and MnDOT, which required SRF to perform additional coordination with both entities along with the revision of 17 plan sheets which include plan details, tabulations, SEQ, and revised estimate to re-attain State Aid approval. These revised sheets were submitted on October 12, 2019, with the resubmit on October 14,2019 to include additional sheets related to revisions in Bullet 2 above.
- **Right of Way PIF** A right of way PIF was being developed with the assumption that plan approval would occur in the September 2019 timeline. At that point this would be ahead of the planned date of October 17<sup>th</sup>, 2019 Title and Possession Date. The PIF was created and approved, however as the project schedule dragged on, the authorization to advertise was obtained after the Title and Possession was obtained, thus negating the need for the PIF.
- **Bidding Assistance** The original contract did not include work necessary for the completion of advertising and bidding of the contract. This was not a substantial effort but additional work was realized by Staff. This work occurred between January and March of 2020.
- Additional project management time and coordination with City and State Agency for approval – At the time of the previous amendment being approved with July 8, 2020, it was anticipated the final plan submittal planned on date July 11, 2020, would be the final submittal necessary for Metro State Aid Approval, with an anticipated bidding date potentially ahead of October 17<sup>th</sup> 2019. The State Aid Office (both the Federal Aid and Cooperative Agreement Units) both required an additional two submittals of the plan in order to get plan approval. Once the State Aid approval was attained the Central Office Review went as planned. SRF did its best to manage costs during these additional reviews, as well as progressing the project to its

Mr. Jeff Holstein City of Brooklyn Park

June 3, 2020 Page 3

conclusion. As a result, the costs related to management of these tasks for internal and external coordination did increase.

We have attached a spreadsheet detailing the level of effort and costs incurred to respond to the out-of-scope items listed above. The requested amount is approximately \$80,000.

Thank you for the opportunity to provide these additional design services on this important project. We are available for a meeting at your convenience to discuss this amendment and to answer any questions related to this request.

Sincerely,

SRF CONSULTING GROUP, INC.

Forevich ustop

Christopher M. Trboyevich, PE (MN WI) Project Manager, Senior Associate

Kevin M. Jullie, PE (MN ND) Principal

CMT/KMJ/jal

Enclosure: Fee Estimate of Cost of Additional Services

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## 7.2C SRF AMENDMENT LETTER AND TABLE Page 8

	Principal	Senior Associate	Associate	Senior Engineer	Engineer	Technician			
Additional Work Items							Hours	Rate	Dollars
Utility Coordination							30		\$3,690.09
Tyler Smith				21			21	105.03	\$2,205.63
Chris Trboyevich	9						9	164.94	\$1,484.46
Additional Submittals for Final Approval							176		\$23,350.32
Tyler Smith				96			96		
Chris Trboyevich	72						72		\$11,875.68
Kevin Jullie	8						8		\$1,391.76
Traffic Comments Staging							124		\$12,180.18
Chris Trboyevich	2						2		\$329.88
Nathan Poole				38			38	103.32	\$3,926.16
Luke James				42			42		\$4,164.30
Kevin Olm						42	42	89.52	\$3,759.84
Gorish Access Revision							20		\$4,690.56
Chris Trboyevich	20						20		\$3,298.80
Kevin Jullie	8						8	173.97	\$1,391.76
Right of Way PIF							39		\$6,784.83
Kevin Jullie	39						39	173.97	\$6,784.83
Bidding Assistance							40		\$6,597.60
Chris Trboyevich	40						40	164.94	\$6,597.60
Additional PM Time							136		\$22,702.74
Chris Trboyevich	106						106		\$17,483.64
Kevin Jullie	30						30	173.97	\$5,219.10
SubTotal							573		\$79,996.3

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Original Contract Amount	\$799,655.60
Amendment 1	\$195,565.25
Additional work Items	\$79,996.32
Proposed new contract amount	\$1,075,217.17
Amendment 2 Request	\$79,996.32



SRF No. 11431

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Mr. Jeff Holstein City of Brooklyn Park June 3, 2020 Page 2

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- **Right of Way PIF** A right of way PIF was being developed with the assumption that plan approval would occur in the September 2019 timeline. At that point this would be ahead of the planned date of October 17<sup>th</sup>, 2019 Title and Possession Date. The PIF was created and approved, however as the project schedule dragged on, the authorization to advertise was obtained after the Title and Possession was obtained, thus negating the need for the PIF.
- **Bidding Assistance** The original contract did not include work necessary for the completion of advertising and bidding of the contract. This was not a substantial effort but additional work was realized by Staff. This work occurred between January and March of 2020.
- Additional project management time and coordination with City and State Agency for approval – At the time of the previous amendment being approved with July 8, 2020, it was anticipated the final plan submittal planned on date July 11, 2020, would be the final submittal necessary for Metro State Aid Approval, with an anticipated bidding date potentially ahead of October 17<sup>th</sup> 2019. The State Aid Office (both the Federal Aid and Cooperative Agreement Units) both required an additional two submittals of the plan in order to get plan approval. Once the State Aid approval was attained the Central Office Review went as planned. SRF did its best to manage costs during these additional reviews, as well as progressing the project to its

Mr. Jeff Holstein City of Brooklyn Park

June 3, 2020 Page 3

conclusion. As a result, the costs related to management of these tasks for internal and external coordination did increase.

We have attached a spreadsheet detailing the level of effort and costs incurred to respond to the out-of-scope items listed above. The requested amount is approximately \$80,000.

Thank you for the opportunity to provide these additional design services on this important project. We are available for a meeting at your convenience to discuss this amendment and to answer any questions related to this request.

Sincerely,

SRF CONSULTING GROUP, INC.

Forevich ustop

Christopher M. Trboyevich, PE (MN WI) Project Manager, Senior Associate

Kevin M. Jullie, PE (MN ND) Principal

CMT/KMJ/jal

Enclosure: Fee Estimate of Cost of Additional Services

n:\bms\srf-pm\ctrboyeesich\dms30389\11431\_Amendment\_Requess\_26200528.doix

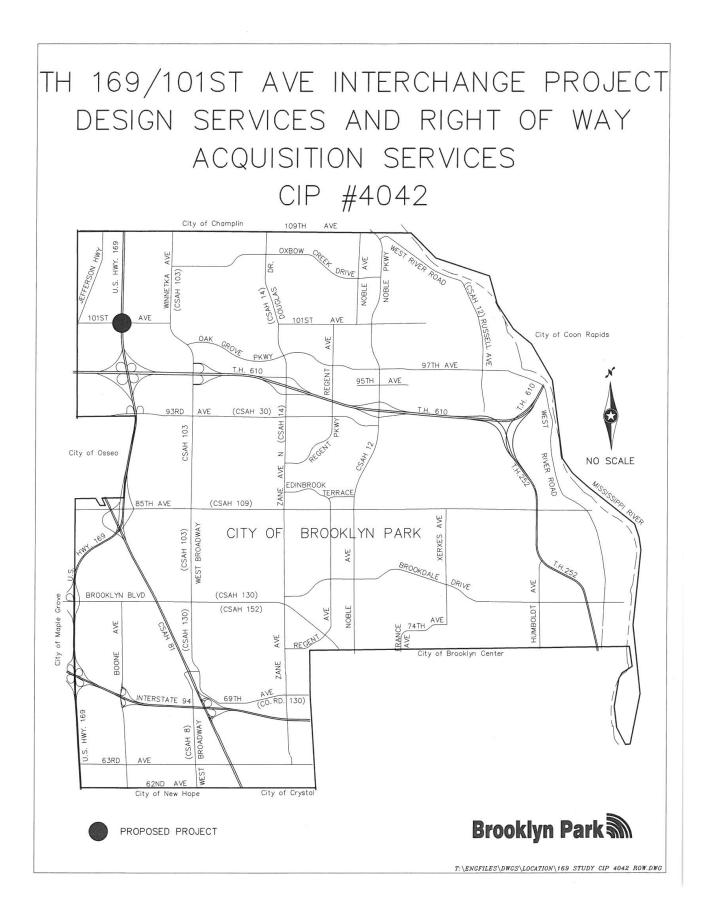
## 7.2C SRF AMENDMENT LETTER AND TABLE Page 8

	Principal	Senior Associate	Associate	Senior Engineer	Engineer	Technician			
Additional Work Items							Hours	Rate	Dollars
Utility Coordination							30		\$3,690.09
Tyler Smith				21			21	105.03	\$2,205.63
Chris Trboyevich	9						9	164.94	\$1,484.46
Additional Submittals for Final Approval							176		\$23,350.32
Tyler Smith				96			96		
Chris Trboyevich	72						72		\$11,875.68
Kevin Jullie	8						8		\$1,391.76
Traffic Comments Staging							124		\$12,180.18
Chris Trboyevich	2						2		\$329.88
Nathan Poole				38			38	103.32	\$3,926.16
Luke James				42			42		\$4,164.30
Kevin Olm						42	42	89.52	\$3,759.84
Gorish Access Revision							20		\$4,690.56
Chris Trboyevich	20						20		\$3,298.80
Kevin Jullie	8						8	173.97	\$1,391.76
Right of Way PIF							39		\$6,784.83
Kevin Jullie	39						39	173.97	\$6,784.83
Bidding Assistance							40		\$6,597.60
Chris Trboyevich	40						40	164.94	\$6,597.60
Additional PM Time							136		\$22,702.74
Chris Trboyevich	106						106		\$17,483.64
Kevin Jullie	30						30	173.97	\$5,219.10
SubTotal							573		\$79,996.3

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Original Contract Amount	\$799,655.60
Amendment 1	\$195,565.25
Additional work Items	\$79,996.32
Proposed new contract amount	\$1,075,217.17
Amendment 2 Request	\$79,996.32

	WSB & Associ Amendmer TH 169 / 101st Ave Interc City of Brookl 5/26/20	nt # 3 hange Fina yn Park	ıl Design				
		Project Manager	Right of Way Agent	Survey Technician	Survey Crew	Total Hours	Amendment # 3
Phase	TASKS						Total
2. Parce	el Sketch, Legal Descriptions						
	Revised easement areas required revised parcel sketches and legal descriptions for Parcels 4, 10 & 13			16		16	\$1,920
3. Reloc	ation						
	a. Relocation Services for Angela Friberg b. Additional claim preparation	4	32			36	\$4,500
4. Direc	t Purchase Activities						
4.2	Direct Purchase Activities a. Additional assistance for Parcel 5 & 9 regarding personal property and auction activities		16			16	\$1,888
	Total Hours	4	48	16	0	68	
	Hourly Rates		\$118.00	\$120.00	\$185.00		
	Total Salary Costs	\$724.00	\$5,664.00	\$1,920.00	\$0.00		
	Amendment # 3 Request						\$8,308.00
Current	Contract Amount						\$158,652.00
Total Co	ontract						\$166,960.00



# City of Brooklyn Park Request for Council Action

Request R			
Agenda Item:	7.3	Meeting Date:	June 22, 2020
Agenda Section:	General Action Items	Originating Department:	Operations and Maintenance, Engineering Services Division
Resolution:	X		
Ordinance:	N/A	Prepared By:	Craig Runnakko, Construction Engineer
Attachments:	3	Presented By:	Jesse Struve, City Engineer
Item:	Approve Change Order No	5. 2 for TH 169 / 101 <sup>st</sup> Av	venue N Interchange; CIP 4042-19

## City Manager's Proposed Action:

MOTION \_\_\_\_\_, SECOND \_\_\_\_, TO WAIVE THE READING AND ADOPT RESOLUTION #2020-\_\_\_\_\_ APPROVING CHANGE ORDER NO. 2 TO NEW LOOK CONTRACTING, INC. OF ROGERS, MN IN THE AMOUNT OF \$62,291.20 FOR A TOTAL CONTRACT AMOUNT OF \$13,446,949.70 FOR CONSTRUCTION OF THE TH 169 / 101<sup>ST</sup> AVENUE NORTH INTERCHANGE PROJECT; CIP 4042-19.

## **Overview:**

The City has been working on the TH 169 / 101<sup>st</sup> Avenue North Interchange Project for five years. The project is needed to provide reasonably suitable and convenient access to the developing portion of the city north of 93<sup>rd</sup> Avenue and west of Winnetka/West Broadway Avenues. The project will allow this area to reach its development potential, provide congestion relief to the TH 169 / 109<sup>th</sup> Avenue intersection and the TH 610 / West Broadway interchange and improve the safety along this portion of TH 169.

Extra work is desired by City of Brooklyn Park EDA to dispose of the asbestos, hazardous and regulated solid waste encountered beyond the construction limits at 8832 101st Avenue N so the parcel can be sold at some point in the future. The costs for this work could go down based on the fact that the previous owner asked for access to the parcel on Sunday, June 21, 2020, and may remove some of the items, and if anything is purchased in the auction set for June 26, 2020. Extra work is required to fix infiltration and the coating in Metropolitan Council Environmental Services (MCES) MH 16B; additional work on the manhole joints is being quoted as this time and will be included on the next change order. The extra work required at the sewer manholes is a result of the deep connections to these manholes and there may be additional work required on the other two connections based on the inspections of MCES. The city is already in discussions with MCES on a cost share to fix the leaking manholes and our costs for that work may be reduced. A separate mechanism will be put into place for reimbursement based on the final negotiations with them.

It was determined that Hygienist oversight was required during the work on the regulated and hazardous waste encountered for Change Order No. 1 so that is also included in this change order.

The total amount of the Change Order No. 2 is \$62,291.20. This change order in addition to Change Order No 1 increases the total cost of the project by 2.34%. A significant portion of this change order will be covered by existing grants and bonding already secured for the project.

It is not unusual for projects of this type to require additional items due to circumstances or conditions that were not expected at the time of plan preparation or during construction, and the hazardous waste was anticipated but couldn't be determined while the properties were occupied.

Staff recommends that the City Council approve Change Order No. 2.

#### Primary Issues/Alternatives to Consider: N/A

#### **Budgetary/Fiscal Issues:**

The TH 169 / 101<sup>st</sup> Avenue Interchange Project is included in the 2020-2024 Capital Improvement Plan as part of CIP 4042. The revised total estimated project cost is approximately \$24 million. The city is expecting to use the funding grants we have been awarded to fund the majority of the project costs. The remaining costs may be funded with special assessments, EDA funds and/or Special Assessment Construction Fund monies.

#### Attachments:

- 7.3A RESOLUTION
- 7.3B LOCATION MAP
- 7.3C CHANGE ORDER NO. 2

#### RESOLUTION #2020-

#### RESOLUTION APPROVING CHANGE ORDER NO. 2 TO NEW LOOK CONTRACTING, INC. OF ROGERS, MN IN THE AMOUNT OF \$62,291.20 FOR A TOTAL CONTRACT AMOUNT OF \$13,446,949.70 FOR CONSTRUCTION OF THE TH 169 / 101<sup>ST</sup> AVENUE NORTH INTERCHANGE PROJECT; CIP 4042-19

WHEREAS, the City of Brooklyn Park has an existing contract with New Look Contracting, Inc. dated February 24, 2020, said being let pursuant to statute and after advertising for bids; and

WHEREAS, said contract was awarded on a unit price basis; and

WHEREAS, in the proper performance of the contract unforeseen conditions were encountered requiring construction units exceeding the original bid; and

WHEREAS, it is now the desire of the Council to include additional units at the same unit price and units for which no item in the contract is provided to complete the following improvements:

#### CHANGE ORDER NO. 2

CIP PROJECT 4042-19 Total Additions: \$62,291.20

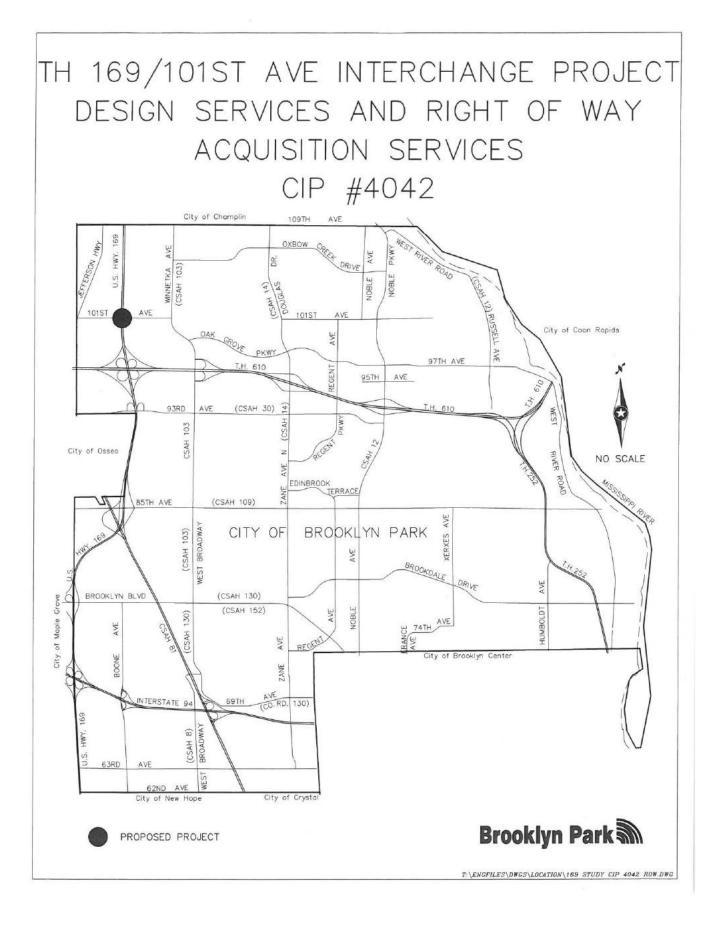
WHEREAS, the additional units do not exceed 25% of the original contract price; and

WHEREAS, the contractor, New Look Contracting, Inc. has agreed to add such additional units at the same unit price in accordance with the mutually agreed upon compensation in accordance with the General Conditions Section of the Contract Specifications Paragraphs GC 4.3, 4.4 and 7.4 and all in accordance with Chapter 429.041 Subd. 7 of the Minnesota Laws.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Brooklyn Park.

- 1. That the original contract dated February 24, 2020 for CIP 4042-19 be amended to include said additional units of work, at a cost of \$62,291.20, for a new contract value of \$13,446,949.70.
- 2. The Contractor shall file an increased bond to cover \$13,446,949.70, the full contractual amount, and the contractor's written agreement to add to the existing contract shall be placed on file with the Clerk and made a part of the original contract, all in accordance with Chapter 429.041, Subd. 7 of Minnesota Laws.

## 7.3B LOCATION MAP Page 4



**Total Coating Solutions** 

320-438-0454 jaymi@totalcoatingsolutions.com http://www.totalcoatingsolutions.com

# Estimate

ADDRESS

Golden Valley Manhole Rehab Golden Valley



ESTIMATE # 1146 DATE 05/07/2020

DATE	ACTIVITY	DESCRIPTION	QTY	RATE	AMOUNT	
	2 - Commercial	Install AV 275 to Eliminate water infiltration at joint between FRP and Concrete Base. Stabilize ground around joint.	55	313.6363636	17,250.00	
	2 - Commercial	Install Rapid Cure Vertical Patch after joint has been stabilized. Any material over and above original 55 gallons will be charged at material rate.	1	2,012.50	2,012.50	
	1- 21	Project subject to one week lead time due to material ordering.				
MAY	ED EL 1	2			******	

x / hal a Cykel Please sign TOTAL

\$19,262.50

Once Signed Estimate is received by Total Coating Solutions, job will be added to the schedule and a tentative start date will be applied. Work may be delayed due to circumstance beyond Total Coating Solutions control, such as weather

Acceptance of Estimate - The above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified .

Payment will be made as outlined above immediately upon

Please send payments to: Total Coating Solutions 1847 540th Street W Braham, MN 55006

## 7.3C CHANGE ORDER 1 Page 6

	ta Department Of Transport	auon	Report Printed Date: 5/28/20
Contract: 2	00501	Change Order No.: 0003	Net Change Order Amount: \$32,028.70
Prime Contra	ctor: NEW LOOK CONTRACTING, INC.,	0000342303	Spec Book Year: 18
CO Type: CC	PLevel2	Awarded Contract Amount: \$13,137,833.90	Funding Source: SA
State Proj. No	o.: 2750-92	Resident Engineer: Dan Penn	
Fed. Proj. No.	: 2750-92 / STPF 2720(012)	Admin Office: MC-Golden Valley North West	
District: M M	letro	County: C027 HENNEPIN	Route:
Reason: 1402	2.5 Extra Work		
Location: LO	CATED AT T.H. 169 AND 101ST AVE INTI	ERCHANGE.	
Description:	Additional Hazardous Waste Abatement &	Removals	
Explanation:			
Issue	Additional bazardous materials regulat	ed solid wastes and ashestos are present on the City of	Brooklyn Park project site (outside of the construction limits).
Resolution	the adjacent site (outside of the constru The Engineer directs the Prime Contract	ction limits) which is also owned by the City of Brooklyn tor to perform and or oversee the removal of all addition	removed as part of the project. The contaminated material continues on Park. The Engineer has determined that additional clean up is required. al on-site hazardous items. They will provide the following pieces of ised to load the waste material into dumpsters prior to their removal.
			and documentation for the removal of these items is done properly and OT approved asbestos abatement contractor, as per Special Provision S-
		act people to be revised in perendance with energification	1402.5 Extra Work.
Entitlement	The Engineer has determined the Contr	act needs to be revised in accordance with specification	
Impact	This document does not change Contra	يرين متحيير معروض وأنصره ويردن الي احدة علو مترد إذ كيته عمرة التام التي والمتحمات الميون المتحمات	ENERGY AND PERMIT AND AND A
Entitlement Impact Cost	This document does not change Contra Cost approved by Engineer	ct Time.	enermantes prenervatives s
Impact	This document does not change Contra Cost approved by Engineer	يرين متحيير معروض وأنصره ويردن الي احدة علو مترد إذ كيته عمرة التام التي والمتحمات الميون المتحمات	energen er en de la seconda en la second
Impact Cost	This document does not change Contra Cost approved by Engineer Payment for cost will be at the negotiate	ct Time.	energen er en de la seconda en la second

Contract: 200501

Page 1 of 3

Report	Printed	Date:	5/28/2020
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Item Descrip	otion	item ID	ltem Reason	Project Line	Cont. Line	Project	Category	Funding	Quantity	Unit	Unit Price	Dollar Amount
Hazardous Material Removal - CHANGI	s Abatement and E ORDER DOLLAR	1402621/00010	Neg	3980	1385	124766	0001 - SP 2750-92 / SP110-129-006	0001 - SP 2750- SP110-129-00		DOL	\$1.00	\$32,028.70
											Total:	\$32,028.70
Time Adjustme	ents											
and an elementation the second and independent endows the supervision of the second and the seco	NOT THE REPORT OF T				Construction of the Advancement	tariy ce dalarin amit sinte teng yaniiyi kelala	akan berhar menerakan berhar berhar berhar menerakan berhar berhar berhar berhar berhar berhar berhar berhar be					
Time ID T	ime Description				Ti	те Туре	Original	Cui	rrent A	djustment	t	New
					Ti	те Туре	Original	Cu	rrent A	djustment	t	New
Project/Catego		cription			Ti	те Туре	Original				t	New Dollar Amount
Time ID T Project/Catego Project 124766	Project Desc GRADING, CC UTILITIES, TM associated to	cription DNCRETE AND BI MS, AND BRIDGE the contract exce r Construction)	#27W46. Pa	yroll Wage	IGNALS,	LIGHTING, ns for all wor	Feder YES	al Category		otion	t	Dollar

Contract: 200501

Å	Signature & Date	
roject Engineer/Project Supervisor	Marty VanDenEykel Digitally sig	gned by Marty VanDenEykel .05.28 11:48:09 -05'00'
ontractor	all	6/1/20
ommissioner of Transportation ursuant to Delegation	Seth Yliniemi	Digitally signed by Seth Yliniemi Date: 2020.06.01 12:47:02 -05'00'
ommissioner of Administration ursuant to Delegation	James Cownie	Digitally signed by James Cownie Date: 2020.06.01 13:18:43 -05'00'
onsultant Contract Administrator ecommendation for Approval only)		5
ocal Agency (if funded wholly or a part by Local Agency)		

ATTACHMENTS: By signing this agreement, the Contractor acknowledges receipt of the specified attachments (if applicable)

Description	Specialty Cont	Specialty Contractor			New Look Contracting				Total Price
	Name	Price		Labor	Ε	quipment	Material		
Hazadrous Materials Removal	J&J Contracting	\$ 72,550.00	\$	2,982.00	\$	1,650.00		10%	\$ 84,900.20
MSW Removal	J&J Contracting	\$ 21,900.00	\$	5,638.00	\$	4,238.00		10%	\$ 34,953.60
Asbestos Abatement & Hygienist	Twell Environmental	\$ 53,223.00	\$	2,463.00	\$	750.00		10%	\$ 62,079.60
Well Abatement	E.H. Rennier	\$ 10,380.00	\$	1,869.00	\$	980.00		10%	\$ 14,551.90
Possible Addtions									
Fuel Tank Removal (EACH)	Dean's ⊤anks	\$ 2,500.00	\$	1,376.00	\$	845.00	\$ 275.00	10%	\$ 5,193.10
Removal of Septic System (EACH)	New Look Contracting		\$	3,850.00	\$	1,192.00	\$ 750.00	10%	\$ 5,546.20

#### Pre-Demolition Hazardous Building Materials Inspection Report Additional Work Items Summary

Total - \$207,224.40

Twell Environmental - Hygienist Oversight was not included in Change Order No. 1 (\$196,224.60 approved for this item), it is included in Change Order No. 2 in the amount of \$11,000.00 and that will finish the extra work within the buildings and construction limits due to hazardous materials within the properties and waste left behind by the previous owners.

Craig Runnakko, P.E. 6/17/20

# City of Brooklyn Park Request for Council Action

Request it			
Agenda Item:	7.4	Meeting Date:	June 22, 2020
Agenda Section:	General Action Items	Originating Department:	Fire
Resolution:	x		
Ordinance:	N/A	Prepared By:	T. John Cunningham, Fire Chief
Attachments:	6	Presented By:	T. John Cunningham
Item:	Approve the Purchase of Fir	e Trucks	

## City Manager's Proposed Action:

MOTION \_\_\_\_\_\_, SECOND \_\_\_\_\_, TO WAIVE THE READING AND ADOPT RESOLUTION #2020-\_\_\_\_\_ APPROVING PURCHASE OF TWO (2) FIRE ENGINES FOR THE FIRE DEPARTMENT IN THE AMOUNT OF \$1,286,575.30 AND APPROVING MASTER EQUIPMENT LEASE PURCHASE AREEMENT AND ESCROW AGREEMENT.

## **Overview:**

The Brooklyn Park Fire Department ("Department") maintains a fleet of five fire engines (pumpers), one ladder, two light-duty rescue trucks, and various support vehicles. The Department currently staffs three of its engines, 24 hours a day, 7 days a week with two firefighters each. Two of the engines are available for use in a reserve or call-back status.

In 2019, the Department created a working group to begin a comprehensive review of the existing engines in the Department's fleet and to create a standardized design moving forward. The review also included an in-depth analysis over modern-day firefighting tactics, hose-line deployment, and the best practices in cancer prevention and safety. While the Department had planned to replace an engine in 2019 (Engine 11, 1999 Sterling), the working group wanted to ensure it completed its due diligence on creating a model engine that would serve as a template for all purchases moving forward. In addition to evaluating the firefighting capability of the engine, the working group also consulted with the Operations and Maintenance staff for recommendations on items related to the mechanics of the truck.

## Truck Specifications

The working group, which included fire administration, full-time and part-time staff, hosted several meetings to review concepts and desired capabilities of the next generation of the Department engine fleet. The group also met with other departments and explored new model trucks at the Minnesota State Fire Chiefs Association annual conference. The group focused on designing a truck that:

- Meets the needs of the Department today and into the future;
- Is simple, functional, and is designed to handle the workload of the Department;
- Carries the essential equipment to handle the majority of the calls that the Department responds to;
- Is easy to decontaminate inside the cab to lessen the risks of cancer;
- Deploys all hoses off the rear (with the exception of a hose on the front bumper) and has a low hosebed.

## Engine 31 and Engine 41

During the course of the working group meeting to evaluate the capabilities and functionality of the new engine moving forward, Department staff were advised of a significant issue on both Engine 31 and Engine 41 (2004 Spartan/Gladiator), which were slated to be replaced at a later date. The frame rails on both trucks had begun to separate as a result of rust accumulating in that area (it should be noted that newer designs include protective

coatings to help prevent such an issue). A third-party was consulted and advised that while the trucks could remain in service, it is likely that the issue will continue to get worse and result in the trucks needing to be replaced. An adjustment was made to the 2020 Capital Equipment Plan (CEP) to replace Engine 41, the worse of the two trucks. This is in addition to Engine 11 that was slated to be replaced in 2019.

#### Light-Duty Rescue Trucks

As you may recall, the Department had previously utilized two (2) light-duty rescue trucks as a front-line first response vehicle. The trucks carried a minimal amount of equipment, including a small water tank and pump. Fire administration switched to a three-engine response model and the current rescues are being phased out. The planned replacement funds allocated for the rescue trucks have been reallocated to purchase a pumper.

#### Purchase Recommendation

After developing a comprehensive list of specifications, which included an analysis of possible vendors, the working group is recommending the purchase of two (2) engines from Custom Fire Apparatus, Inc. Custom Fire Apparatus, Inc. is based in Osceola, WI and has a reputable history with the Department. The purchase is being made on an existing contract through the Houston-Galveston Area Council (H-GACBuy) #FS19EC05.

City staff is also recommending that we pre-pay \$580,000 toward the purchase of the two trucks and finance the remaining balance through Community Leasing Partners (interest rate of 2.82%)

#### Primary Issues/Alternatives to Consider: N/A

#### **Budgetary/Fiscal Issues:**

The total contract purchase price is \$1,286,575.30.

Historically, the city had not been contributing an on-going replacement value of larger fire equipment purchases into the CEP. In the past, the city had utilized the Heritage Fund and other funding sources, including bonds, to purchase fire apparatus. This practice was recently changed, and the city is now charging back the planned future replacement value of fire apparatus. It will take some time for the CEP to have adequate funding to support large fire apparatus purchases.

An infusion of \$580,000 has been accrued to purchase new fire engines from the General Fund and the Garage Fund. It is recommended that \$580,000 be applied as a down-payment toward the purchase of the two new engines. The city will earn interest (4.2% per annum as per the HGAC contract), which will be applied to the overall purchase price.

Staff recommends contracting with Community Leasing Partners to lease/finance the remaining amount owed on the truck. The payments will be spread over 10 years (the anticipated life-span on the truck is 12 years) with an interest rate of 2.82%. The city can choose to pay off the amount due sooner and, if needed, can renegotiate the terms of the agreement with the company in the event the payments need to be extended longer. There is no balloon payment at the end; the city owns the trucks.

The purchase will be made utilizing the HGAC contract in accordance with applicable city policies and state laws.

#### Attachments:

- 7.4A RESOLUTION
- 7.4B CAPITAL EQUIPMENT PLAN
- 7.4C PAYMENT SCHEDULE
- 7.4D SPECIFICATIONS
- 7.4E MOTOR VEHICLE PURCHASE CONTRACT
- 7.4F COMMUNITY LEASING PARTNERS

#### RESOLUTION #2020-

#### RESOLUTION APPROVING PURCHASE OF TWO (2) FIRE ENGINES FOR THE FIRE DEPARTMENT IN THE AMOUNT OF \$1,286,575.30 AND APPROVING MASTER EQUIPMENT LEASE PURCHASE AGREEMENT AND ESCROW AGREEMENT

WHEREAS, fire engines serve as a valuable life-safety tool in protecting the Brooklyn Park community; and

WHEREAS, specifications were prepared for the purchase of two (2) new fire engines for the City of Brooklyn Park; and

WHEREAS, the purchase of the two (2) new fire engines can be made on the Houston-Galveston Area Council (H-GACBuy) contract, #FS19EC05; and

WHEREAS, the total purchase for the two (2) new fire engines from Custom Fire Apparatus, Inc. is \$1,286,575.30; and

WHEREAS, the City of Brooklyn Park will apply a down payment of \$580,000 from the Capital Equipment Plan (CEP) Fund toward the purchase of the two (2) new fire engines; and

WHEREAS, the City of Brooklyn Park will finance the remaining balance of approximately \$694,575.30 with Community Leasing Partners.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Brooklyn Park authorizes the purchase of two (2) new fire engines from Custom Fire Apparatus, Inc. in the amount of \$1,286,575.30 with \$580,000 from the Capital Equipment Plan Fund and the remaining balance of approximately \$694,575.30 financed through Community Leasing Partners.

BE IT FURTHER RESOLVED that the City Council approves and authorizes the execution and delivery of the Schedule of Equipment and authorizes the appropriate City officials to execute the Master Equipment Lease Purchase Agreement, the Escrow Agreement, and any other documents necessary to accomplish the purchasing and financing of the fire engines.

## 7.4B CAPITAL EQUIPMENT PLAN Page 4

Capital Equipment Plan City of Brooklyn Park, MN	Department Contact			
Project # 5405 Project Name Fire Pumper Trucks First Year: N/A Ranking Points: N/A	Useful Life	Vehicles/Equipment		
Description 2019 - Unit #2112 - 1999 Fire Pumper Truck (E-4	11)			
Justification These units are anticipated to be at end of reliable standards.	uscful life. These replacements will allow the ability	to provide serv	ices as per adopted	
Expenditurse	2010 2020 2021 2022	2023	Total	

	Total	560,000					560,000
E.REquipment Replac	ement	560,000					560,000
Funding Sources		2019	2020	2021	2022	2023	Total
	Total	560,000					560,000
Capital Equipment		569,000					560,000
Expenditures		2019	2020	2021	2022	2023	Total

Capital Equipment Plan	2020 thru 2024			
	Department	B - Fire		
City of Brooklyn Park, MN	Contact	John Cunningham/Todd Seitz		
Project # 5405	Туре	Equipment		
	Useful Life	20		
Project Name Fire Pumper Trucks	Category	Vehicles/Equipment		
	Priority	N/A		
	Status	Active		
Description				
Justification				
These units are anticipated to be at end of reliable useful life. These r	eplacements will allow the ability to provide serv	vices as per adopted		
standards.				

Expenditures	2020	2021	2022	2023	2024	Total
Capital Equipment	560,000				560,000	1,120,000
Tota	560,000				560,000	1,120,000
Free dine Services	2020	2021	2022	2022	2024	Tatal
Funding Sources	2020	2021	2022	2023	2024	Total
E.REquipment Replacement	560,000				560,000	1,120,000
Tota	560,000				560,000	1,120,000

CUSTOM FIRE APPARATUS, INC.

BROOKLYN PARK, MN PREPAYMENT SCHEDULE FIRE TRUCK										
			Down Payment			on	07/01/20	11 Months Funds till	Delivery	
<u>Date</u>	Transaction		Transactions		Balance		Interest Calc	0.35% Per Month		
06/22/20	Contract Net Price	\$	1,286,575.30							
07/01/20 01/01/21 01/01/21	Pre-Payment Interest Earned till Chassis Due Remaining Chassis Payment Due (To be paid upon Chassis Shipment)	\$ \$	(580,000.00) (12,180.00) (70,000.00)	\$ \$	706,575.30 (12,180.00) (70,000.00)	\$ X\$	6.00	) Interest Earning Funds Months <b>07/01/20</b> ) Interest Credit	То	01/01/21
5/22/2021 BALANCE DUE ON DELIVERY OF TRUCK \$ 624,395.30					S	Summary of C	harges and Credits:			
NOTE: Delivery of the chassis or the completed apparatus before or later than these designated dates will affect the quoted discounts.					Le	ontract Net Pric ess Interest Crec Potential Out	dit	\$ <b>\$</b>	1,286,575.30 (12,180.00) 1,274,395.30	



# **Custom Pumpers**

## As Per HGAC Proposal FS19EC05

# Brooklyn Park, Minnesota

The following Proposal Specifications are in accordance with your Advertised Specifications for the piece of apparatus as follows:

Fire Truck, triple pumper, 1500 gallon per minute, hose body, booster tank, and all other appurtenances in accordance with the following:

#### GENERAL REQUIREMENTS

It is the intent of these specifications to cover the furnishing and delivering to the purchaser, complete apparatus equipped as specified. Minor details of construction and materials where not otherwise specified are left to the discretion of Custom Fire Apparatus, Inc. (CustomFIRE) who shall be solely responsible for the design and construction of all features.

The apparatus being furnished under these specifications shall conform to the requirements specific to pumper fire apparatus NFPA Booklet 1901 version current at time of contract. Any test equipment required, or expense incurred for the Certification Tests shall be borne by CustomFIRE.

**RELIABILITY OF CONTRACTOR:** Please refer to the company literature and newsletters as evidence that we can design, engineer, and construct the apparatus specified. The location of the factory where the apparatus is to be manufactured and tested is in Osceola, Wisconsin.

**DESIGN:** The design of the equipment shall be in accordance with the best engineering practices. The equipment design and accessory installation shall permit accessibility for use, maintenance, and service. All components and assemblies shall be free of hazardous protrusions, sharp edges, cracks or other elements which might cause injury to personnel or equipment. NOTE: Where "nibbled" or non-continuous cutting methods are used to machine the body material, all edges shall be reworked/machine smoothed for injury prevention and appearance reasons.

All oil, hydraulic, and air tubing lines and electrical wiring shall be in protective positions, properly attached to the frame or body structure and shall have protective loom or grommets at each point where they pass through structural members.



## **Custom Pumpers**

## As Per HGAC Proposal FS19EC05

Parts and components shall be located or positioned for rapid and simple inspection and recognition of excessive wear or potential failure. Whenever functional layout of operating components determines that physical or visual interference between items cannot be avoided, the item predicted to require the most maintenance shall be located for the best accessibility.

Cover plates which must be removed for component adjustment or part removal will be equipped with disconnect fastenings or hinged panels.

Drains, filler plugs, grease fittings, hydraulic lines, bleeders and check points for all components will located so that they are readily accessible and do not require special tools for proper servicing. Design practices shall minimize the number of tools required for maintenance.

All components shall be designed and protected so that heavy rain or other adverse weather conditions will not interfere with normal servicing or operation.

All specified stainless steel shall be type 304, 2-B where used for exterior painted panels and #4-brushed where used for pump panel overlays and unpainted compartment and body panels. All specified smooth surface aluminum, where used for painted or machined swirl natural finish, shall be 5052-H32 alloy of the specified thickness. All 4-way aluminum treadplate shall be "polished" finish with NFPA approved pattern on walking and step surfaces, type 3003 of specified thickness. All specified bolted fasteners shall be coated stainless steel "low profile" button socket head cap screws. All nut fasteners to be Ny-Lok or approved equal, designed to prevent loosening, No substitute will be acceptable to stainless steel where specified.

NOTE: Lighter gauges of specified materials will not be substituted - all basic requirements will be complied with.

Aluminum will not be substituted for any specified stainless fabrications.

CustomFIRE is prepared, if so requested by the Purchaser, to present evidence of our design experience/capabilities and manufacturing ability to carry out the terms of the contract.

#### **APPARATUS SIZE - CAPACITY - SEATING**

Total overall length of apparatus is not to exceed 33 ft. 0 in., highest point of apparatus is not to exceed 132 inches, chassis wheelbase is not to not exceed TBD inches, and GVWR is to be at nomore than 49,000 pounds.



## **Custom Pumpers**

## As Per HGAC Proposal FS19EC05

The total overall width of apparatus is not to exceed 101 inches; this dimension is not to include the primary construction of the apparatus body and chassis cab. Any peripherals that are 'removable' are not to be incorporated into this measurement. Items that are considered 'removable' are: Rub Rails, Fenderettes, Mirrors, Lights, Handrails, Etc.

RESPONSIBILITY OF PURCHASER: It is the responsibility of the purchaser to specify the details of the apparatus, its required performance, the maximum number of fire fighters to ride on the apparatus, and any hose ground ladders, or equipment it will be required to carry which exceed the minimum requirements of this standard.

A total of four (3 with SCBA's) seating positions are to be provided, "Fully Enclosed", with approved seat belts. Two seating positions are to be located inside forward chassis cab and Two inside crew cab/area.

The GAWR, and GCWR or GVWR of the chassis is to be adequate to carry the fully equipped apparatus including full water and other tanks, the specified hose load, unequipped personnel weight (The unequipped personnel weight is to be calculated at 250 pound. per person times the maximum number of persons to ride the apparatus as specified.), ground ladders, and a miscellaneous equipment allowance of 2500 pounds. (2000 pounds. for apparatus with less than 250 cu. ft. of compartment space). It is the responsibility of the purchaser to provide the contractor with the weight of equipment to be carried if it is in excess of the allowance of 2500 pound.

#### PROPOSAL PRINT/DRAWING

Custom Fire Apparatus' proposal is being submitted with a complete detailed print of the apparatus as you may, or may not, have specified. The print is to a scale of 1 inch = 15 inches, and is of the exact apparatus being proposed, not a stock print of a unit resembling your design. All dimensions are subject to a +/- .125 inch (metal thickness) tolerance. The provided print has complete views of the driver side with chassis cab, passenger side with chassis cab, and the rear of body. The print also includes all of the following depicted items:

**CHASSIS:** exact replication of model of custom-built chassis cab with: roof line, interior seating arrangement, window arrangement, rear view mirrors, air conditioning condenser, non-emergency head/turn/marker lighting, front grille, air horns, bumper with extension, 120-volt shore power receptacle, air system keep-fill receptacle, emergency lighting fixtures, hand rails, and horizontal exhaust system with underbody outlet.



## **Custom Pumpers**

## As Per HGAC Proposal FS19EC05

**APPARATUS BODY:** the apparatus body sub-frame, underbody tow eyes, water tank profile with baffles and suction sump, underbody folding wheel chocks, <u>all</u> exterior 4-way treadplate pattern areas, body access steps, hand rails, interior compartment shelving, emergency and non-emergency lighting fixtures, ladders and pike poles and storage area(s), hard suction hose and storage area(s), side and rear compartmentation showing dimensions and D-ring door hardware, / roll-up door slats/bundles/bar type handle/latches, and hose bed arrangement with dividers and grating material. / dividers, grating material, and hose bed covers.

**PUMP ENCLOSURE and PUMP SYSTEM:** pump enclosure/compartment, fire pump profile, fire pump transmission profile, tank-to-pump piping, pre-connect hose beds with hose guides, side pump panel removable sections, pump access door(s), pump control and instrument panel layout with: gauges, instruments, pump controls, discharge outlets with closures, suction inlets with closures, and deluge discharge riser with monitor/device.

**ADDITIONAL OPTIONAL FEATURES:** other optional features, as specified, are also included on the proposal drawing, this includes; front bumper extension accessories/treadplate gravel shield/pre-connect hose bed, interior chassis cab EMS storage compartments, interior body compartment roll-out trays, drop-down ladder rack, rewind air/hydraulic/cord reels, SCBA bottle storage compartments/racks, cascade air storage bottles with fill station, generator installation, permanent quartz lighting, hand operated 120-Volt floodlighting, 120-volt exterior body receptacles, extendible light tower, and other detailed accessories and features so as to provide a "picture" of the proposed apparatus.

# **COMPLIANCE:** We trust, that the Quality and accuracy of our Proposal Drawing will be a major consideration, for your determining the most "responsible" proposal.

#### ACCEPTANCE TESTS AND REQUIREMENTS

Acceptance tests on behalf of the purchaser shall be prescribed and conducted prior to delivery or within 10 days after delivery, in the presence of such person or persons as the purchaser may designate in the requirements for delivery.

**ALTITUDE REQUIREMENTS**: The apparatus shall be designed to meet the specified rating at 2000 feet altitude above sea level.

**ROADABILTY**: The apparatus, when fully equipped and loaded per "Carrying Capacity", shall be capable of the following performance on dry/level/paved roads in good condition: From a standing start the vehicle shall attain a true speed of 35 MPH within 25 seconds. The vehicle shall attain a minimum top speed of 50 MPH. The apparatus shall be able to maintain a speed of at least 20 MPH on any grade up to and including 6%.



## **Custom Pumpers**

## As Per HGAC Proposal FS19EC05

**ROAD TESTS**: Specified acceleration tests shall consist of two runs in opposite directions over the same route. From a standing start, through the gears, the vehicle shall attain a true speed of 35 mph within 25 seconds in the case of pumpers, and a true speed of 55 mph within 60 seconds.

The service brakes shall bring the fully laden apparatus to a complete stop from an initial speed of 20 MPH in a distance not exceeding 35 ft., on a substantially hard level surface road free from loose material, oil, or grease.

Manufacturer's pump test and independent third party pump certification tests shall be conducted in accordance with requirements of NFPA #1901. A Certificate of Testing shall be furnished to the Purchaser, both for the CFA Preliminary Tests and the third party Certification Tests.

Responsibility for the apparatus and equipment shall remain with Custom Fire Apparatus, Inc. until acceptance by the purchaser.

At the time of delivery, a hard copy of each of the following will be provided:

- 1. Engine manufacturer's certified brake horsepower curve showing the maximum no-load governed speed.
- 2. Manufacturer's record of pumper construction details, per NFPA 1901.
- 3. Manufacturer's Run-In Certification with preliminary test results.
- 4. Pump Manufacturer's Certification of Hydrostatic Tests.

5. Pump Manufacturer's Certification of Pump Test Results.

6. The Certification of Inspection/Test of Fire Department Pumper by an Independent Third Party per NFPA 1901 standards.

7. Weight documents from certified scales showing actual loading on the sides of front axle, sides of rear axle(s), and overall (four total) vehicle (with the water tank full but without personnel, equipment, and hose) shall be supplied with the completed vehicle to determine compliance with NFPA section 10-1. Weights shall verify side-to-side loading, to be in compliance with NFPA section 4.12.2.3.3

8. At least two copies of the complete operation and maintenance manual covering the completed apparatus as delivered including the pump, emergency lighting and siren, generator, or other furnished accessories.



## **Custom Pumpers**

## As Per HGAC Proposal FS19EC05

9. Wiring diagrams of 12-volt electrical systems, installed by apparatus body manufacturer (prime contractor). Diagrams must be "vehicle specific", describing all 12-volt electrical functions as furnished on this **and only this** apparatus.

10. A finalized drawing of apparatus as completed.

11. A "Delivery Manual", consisting of a 3-ring notebook type binder with reference tabs for each section, shall be furnished to include the following items: invoice copy(ies), proof of insurance, Manufacturer's Statement of Origin, acceptance forms, certifications, specifications, individual component manufacturer instructions and parts manuals, warranty forms for body, warranty forms for all major components, warranty instructions and format to be used for compliance with warranty obligations, routine service forms/publications, technical publications or training guide for major components, and apparatus body print "as built".

- 12. Paint numbers of all color coatings.
- 13. Certifications of water tank capacity.
- 14. Written load analysis of 12-volt electrical system as installed by CustomFIRE.

A test data plate shall be provided at the pump operator's position which gives the rated discharges and pressures together with the speed of the engine as is determined by the manufacturer's test for this particular unit. Plate shall also include delivery date, pump serial number(s), original Customer, and the CFA serial number.

A permanent plate will be affixed in the driver's compartment specifying the quantity and type of fluids used in the vehicle:

All nameplates and instruction plates shall be metal or plastic with the information permanently engraved, stamped, or etched thereon. Metal nameplates to be installed with plated screws. All nameplates to be mounted in a conspicuous place.

**FAILURE TO MEET TESTS:** In the event that the apparatus fails to meet the test requirements on first trials, a second trial may be made at the option of CustomFIRE within 30 days of the date of the first trials. Such trials shall be final and conclusive and failure to comply with these requirements shall be cause for



## **Custom Pumpers**

## As Per HGAC Proposal FS19EC05

rejection. Failure to make such changes as the Chief of the Fire Department and/or the purchaser may consider necessary to conform to any clause of the specifications within thirty days after notice is given may also be cause for rejection of the apparatus.

## **DELIVERY CONSTRUCTION PERIOD**

The maximum period for construction of complete apparatus shall not exceed 365 Calendar Days and shall include the time required for delivery of the chassis to our factory. CustomFIRE will not be held liable for delay of delivery caused by accidents, strikes, floods, or other events not subject to our control. You may also refer to the Bid Proposal Form for the number of Calendar Days for completed delivery of the apparatus, from date of bid acceptance and any further information.

#### **DELIVERY TO FIRE DEPARTMENT - NO EXCEPTIONS**

The completed unit shall be delivered to the purchaser with full instructions provided to Fire Department personnel on operation, care, and maintenance of apparatus at the purchaser's fire station.

#### **DELIVERY ENGINEER:**

Delivery shall be performed by a CustomFIRE trained Delivery Engineer who shall remain in the community a reasonable time for training of Fire Department personnel and making normal adjustments.

Delivery shall be considered to include, but not be limited to:

A. Transportation of the Fire Apparatus.

B. Conducting day or evening classes for instruction of Fire Department personnel and Drivers for operation.

The Delivery Engineer shall be factory trained, fully capable of conducting informative classes on the complete operation of the vehicle. This means familiarity with engine, running gear, transmission, driving skill, as well as handling of pump equipment and all controls.

The Delivery Engineer shall set delivery and instruction schedule with the person appointed by Purchaser, recognizing the need for either daytime or evening classes. Advance notice of at least one (1) week will be given, advising the specific day on which the new apparatus will arrive.



## **Custom Pumpers**

## As Per HGAC Proposal FS19EC05

The Purchaser shall make all housing arrangements for the Delivery Engineer and provide him with transportation to and from lodging and nearest available airport or rental car agency (if it applies). The cost of all housing and other living expenses are to be paid for by the Delivery Engineer.

## **CONSTRUCTION METHODS, STAINLESS STEEL FABRICATIONS**

Since any reputable original equipment manufacturer (OEM) of Fire Fighting Apparatus possesses the means and capability to provide the specified press-brake fabricated construction and bolted assembly method, the purchaser will ONLY consider proposals of such manufacture. Proposals' specifying weld-together stainless steel structural's or weld-together stainless steel fabrications do not meet the intent of this requirement and will be rejected. Furthermore, proposals that include the practice of mating or engaging stainless steel materials into structural aluminum extrusions will not be considered.

All proposals must be compliant to the specified sheet and plate stainless steel construction materials, including type of alloy, thickness, and surface finish.

Bidders will be required to demonstrate, by example of their previously delivered apparatus; precision of metal cut profiles, accuracy of fastener spacing, fit-and-finish of assembled fabrications, absence of imperfections in metal finishing, and ease of which the assembled fabricated body components may be disassembled and removed for modifications, repairs or replacement.

The apparatus body assembly shall consist only of individual press-brake-formed structural fabrications, each of which is precisely machined from high quality 304 alloy stainless steel sheets, and assembled with integral 90-degree flanges at mating surfaces. All mating surfaces are to be assembled using the specified removable threaded fasteners. Bidders will be required to demonstrate: precision of metal cut profiles, fit-and-finish of assembled fabrications, and ease of which the assembled parts may be disassembled and removed for modifications, repairs or replacement.

Due to the requirement that the apparatus body be easily repairable, proposals that include the practice of stitch-welding, seam-welding, or plug-welding mating body fabrications shall not be submitted. Likewise, apparatus body designs that rely on metal fusion, adhesives, encapsulating welded extrusions, or non-removable fasteners, as a method of permanent assembly, or apparatus body designs and construction methods that have compartment modules welded to their understructures will not be not be considered.

# NOTE: THERE SHALL BE NO STRUCTURALS USED TO FORM THE SHAPE OF AND SUBSEQUENTLY WELDED TO THE APPARATUS BODY COMPARTMENTS, THUS ALLOWING FOR PARTIAL OR COMPLETE DISASSEMBLY FOR REPAIRS.



## **Custom Pumpers**

## As Per HGAC Proposal FS19EC05

## TYPE 304 STAINLESS STEEL CONSTRUCTION MATERIALS - NO EXCEPTIONS

Since all manufacturers of Fire Fighting Apparatus have the means and ability to purchase and fabricate their compartmented bodies of Type 304 Stainless Steel, it is the only grade of stainless steel that will be accepted.

Apparatus proposals that incorporate lesser grades, or combinations of Type 304 and lesser grades of stainless steel, will not be considered.

## AWARD OF CONTRACT

Custom Fire Apparatus, Inc. utilizes premium "concealed-all-bolted" construction methods allowing future removal and repair of damaged apparatus body components. This is "universally" considered to be a superior method of manufacturing, as compared to weld-together permanently assembled apparatus bodies.

Custom Fire Apparatus, Inc. is a USA Corporation that is 100% held, by its founder, a United States citizen who is "actively" operating the manufacturing business. Custom Fire Apparatus, Inc. is a Wisconsin Corporation, with Articles filed in December of 1978, and is still owned by the same "active" President, operating with the same Corporate Name.

Prior to the award an authorized representative of Custom Fire Apparatus, Inc. will be available meet with purchasing officials (at Purchaser's location) to personally discuss all facets of the Proposal specifications to insure a complete and satisfactory understanding of the bid proposal.

#### STAINLESS STEEL REQUIREMENT

More than 30 years ago, Custom Fire Apparatus "pioneered" the use of stainless steel, to construct fire apparatus bodies, and can demonstrate where these apparatuses are still in active service.

#### **SERVICEABILITY:**

To insure the Purchaser a source of service and parts over a 25 year anticipated life of the apparatus, the Bidder shall provide factory service, fabrication/manufacturing, and testing facilities within a \_\_\_\_ mile radius of the Fire Department. This same facility must stock a complete line of all fire fighting equipment and parts for this apparatus. Records as to the purchase source for all auxiliary components of the specified apparatus



# **Custom Pumpers**

## As Per HGAC Proposal FS19EC05

shall be available to Purchaser upon request. This purchase information shall include manufacturer name, model number, authorized distributor, current part number, and special installation instructions.

#### PRINTED PROPOSALS

All proposals shall be submitted in typed format. Casual, hand-written proposals shall be considered informal and immediately rejected and the bid will be returned in its entirety to manufacturer. The only handwriting acceptable on the proposal forms will be on the signature lines.

#### PROPOSAL SIGNATURES REQUIRED

All bids must be signed by the President of the manufacturer of the apparatus being proposed. Bids signed by a sales representative shall be declared informal and will be rejected. Each bid must give the full business address of the manufacturer. Bids by a Corporation must be authorized and signed by the President. Same signature is required on Bid Bond, if specified.

#### **BID WITHDRAWALS**

Bids may be withdrawn by certified mail or acknowledged facsimile request from Bidders prior to the time fixed for opening. Negligence on the part of the Bidder in preparing the Bid Proposal confers no right for the withdrawal of the Bid after it has been opened. No Bidder may withdraw their Bid after the time set for the opening thereof.

#### **DETAILED PROPOSAL SPECIFICATIONS**

All Bidders shall furnish complete "Proposal Specifications", printed on their own stationery, copies or reproduction of these "advertised specifications" can only be used as an attachment to the proposal specifications, for comparison/ compliance purposes.

All Bid Proposal Specifications must be in the same sequence as these Advertised Specifications for ease of comparison. Any bid not in this sequence will be disregarded and rejected.

#### LETTER OF EXCEPTIONS

It is the intent of the Fire Department to receive proposals on equipment/apparatus meeting the attached detailed specifications in their entirety. Any proposals being submitted, without "Full Compliance" with the advertised specifications shall so state on the Bid Proposal Page, followed by a detailed "Letter of Exceptions" listing the areas of non-compliance and equipment or designs being substituted.



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## DELIVERY AND OPENING OF PROPOSAL

Each proposal and all papers bound and attached thereto, together with the proposal guarantee, shall be placed in an envelope and securely sealed therein. The envelope shall be marked "Bid on Fire Equipment".

Proposals will be received at or prior to the time set for the opening of bids. Proposals received after the "Bid Opening" will be returned unopened.

The bids will be opened publicly and read aloud at the time and date stated on the advertisement for bids.

#### **CORPORATE OWNERSHIP OF MANUFACTURER**

The manufacturer of the apparatus must be fully owned and managed by a Parent Company, Corporation, or Individual(s) that is 100% held by United States of America based Company, Corporation, or United States citizens(s).

Proposals from any manufacturer that is fully or partially owned and/or operated by a foreign company, Corporation or Individual(s) under any type of ownership, partnership, or any similar type of agreement will be immediately rejected.

#### **INSURANCE REQUIREMENTS**

Each Bidder must submit with their bid proposal a Certificate of Insurance listing the proposed manufacturer's product liability insurance coverage. Liability insurance shall be a minimum amount of \$11,000,000 million dollars with coverage attained with a minimum of \$1,000,000.00 underlying insurance and \$10,000,000.00 umbrella coverage. Submitted Certificate shall name the apparatus manufacturer, insurance company, policy number, and effective dates of the insurance policy. Bids submitted without the required Certificate, or for Certificates listing less than One (1) million dollars of underlying coverage, plus the Ten (10) million dollar umbrella coverage, will be considered non responsive and automatically rejected. No exceptions are allowed to the minimum insurance coverage requirement.

The manufacturer shall maintain full coverage on the purchaser's cab and chassis from time of first possession by the manufacturer until the apparatus is delivered and accepted by the purchaser. No exceptions. Purchaser reserves the right to require proof of insurance from the manufacturer's insurance carrier prior to entering into a contract for the apparatus.



## **Custom Pumpers**

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## **INSPECTION TRIPS**

The Truck Committee members will be advised as to the date of the following phases of construction: Pre-Construction (prior to bending of metal), Pre-Paint (final design/equipment layout), and Pre-Delivery. All Truck Committee members are welcome to travel to the factory during these, and any other stages of construction, at the purchaser's expense.

All changes to original proposal specifications, as approved by the Truck Committee during any factory visit, will be noted on a "revised specification", provided by Custom Fire and distributed to the designated head of Truck Committee, within five working days after any Conference(s).

#### PROGRESS PAYMENT

In order to eliminate interest and handling charges for the chassis portion, a "Progress Payment" is due made upon shipment of chassis to the Osceola, Wisconsin factory. This amount shall be for an equivalent portion of the chassis portion of the contract.

#### BALANCE PAYMENT TERMS

Final payment terms for completed apparatus is due on the day of delivery. Apparatus shall not leave care, custody and control of Custom Fire Apparatus, Inc. or designated Sales Representative without full payment of the same.

Final delivery price shall not include any Local, State, or Federal taxes. Custom Fire Apparatus, Inc. shall not be liable for any State or Federally mandated tax or program after the sale of this apparatus.

#### GENERAL WARRANTY

The new fire apparatus manufactured per these specifications shall be warranted for a period of ONE (1) year from the date of delivery, except for chassis and other components noted herein.

Under this warranty, CustomFire agrees to furnish any parts to replace those that have failed due to defective material or workmanship where there is no indication of abuse, neglect, unusual or other than normal service providing that such parts are, at the option of CustomFire, made available for inspection upon request, returned to the Osceola, Wisconsin factory or other location designated by CustomFire with transportation prepaid within 30 days after the date of failure or within ONE (1) year from the date of delivery of the



## **Custom Pumpers**

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apparatus to the original purchaser, whichever occurs first, and inspection indicates the failure was attributed to defective material or workmanship. Accessories/components warranted by their original manufacturer may be subject to reinstallation charges under the terms of their respective warranties, especially if such warranties exceed the above 1-year warranty terms.

The warranty on the chassis and chassis supplied components, storage batteries, valves, generators, electrical lamps and other devices subject to deterioration is limited to the warranty of the manufacturer thereof and adjustments for the same are to be made directly with the chassis manufacturer by the purchaser.

This warranty will not apply to any fire apparatus which has been repaired or altered outside the Osceola, WI factory or designated (approved) facility in any way, which, in CustomFIRE's opinion might affect its stability or reliability. Each warranty claim needing repair or service at the designated facility must receive preauthorization by CustomFire prior to performance of any work.

This warranty will not apply to those items which are usually considered to be normal maintenance and upkeep services: including, but not limited to, normal lubrication or proper adjustment or minor auxiliary pumps or reels.

Refer to the "BOOSTER TANK" section for specific warranties on the provided Booster Tank.

This warranty is in lieu of all other warranties, expressed or implied, all other representations to the original purchaser, and all other obligations or liabilities, including liabilities for incidental or consequential damage on CustomFIRE's part. Without limiting the foregoing, any express or implied warranties of merchantability or fitness for a particular purpose or warranties arising by Customer usage or by operation of law with regard to any products delivered pursuant hereto are expressly disclaimed. CustomFire neither assumes nor authorizes any person to assume for CustomFire, any liability in connection with the sales of CustomFIRE's apparatus unless made in writing by CustomFire.

#### **20-YEAR WARRANTY ON STAINLESS STEEL BODY FABRICATIONS - TRANSFERABLE**

CUSTOM FIRE APPARATUS, INC. shall warrant to the original and second purchasers only that the stainless-steel body components as fabricated by and assembled by CUSTOM FIRE APPARATUS, INC., under normal use and with reasonable maintenance, are structurally sound and shall remain so, for a period of 20-YEARS. Furthermore, all stainless-steel fabrications shall remain free from corrosion perforation, for the same 20 YEARS.



## **Custom Pumpers**

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Body Warranty coverage is transferable to a second owner of the vehicle, if applicable. In the event that the body is "remounted" to another chassis that is different from the chassis of origination, this warranty shall be void.

This warranty does not apply to the following items which are covered by a separate warranty: paint finish, hardware, moldings, and other purchased or non-stainless steel accessories which are attached to this body.

Surface tarnishing or discoloration on any exposed body surface is not covered under this warranty. Body Damage that occurs when normal wear and tear to hinges, latches, or other fasteners results in damage to doors or body panels is not covered. It is the responsibility of the purchaser to maintain fit and alignment of doors and latches. This warranty terminates upon transfer of possession or ownership from the second purchaser.

**<u>NOTE</u>**: This 20-year warranty requires that the body be equipped with the purchased option of CustomFIRE's tubular stainless steel body sub-frame.

CUSTOM FIRE APPARATUS, INC. MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, WITH RESPECT TO THE STAINLESS-STEEL BODY AND ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED.

CUSTOM FIRE APPARATUS, INC. shall replace, without charge, repair at the factory, or make a fair allowance for any defect in material or workmanship demonstrated to the satisfaction to have existed at the time of delivery or not due to misuse, negligence, or accident. If CUSTOM FIRE APPARATUS, INC. elects to repair the body, the extent of such repair shall be determined solely by CustomFire, and shall be performed solely at the Osceola, Wisconsin factory, or at an OEM approved facility. The expense of any transportation to or from such repair facility shall be borne by the purchaser and is not an item covered under this warranty.

CUSTOM FIRE APPARATUS, INC. shall not be liable for consequential damages and under no circumstances shall its liability exceed the price for a replacement body. The remedies set forth herein are exclusive and in substitution for all other remedies to which the purchaser would otherwise be entitled.

CUSTOM FIRE APPARATUS, INC. shall be given a reasonable opportunity to investigate all claims. The purchaser must commence any action arising out of, based upon or relating to agreement or the breach thereof, within twelve months from the date the cause of the action occurred.

"Original Vehicle" requires that each of the following apparatus components match the As Delivered state of the vehicle and refers to the state of the apparatus at time of delivery including Original Apparatus Chassis,



# **Custom Pumpers**

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Original Apparatus Pump and Associated Plumbing, Original Apparatus Body Components and Enhancements, Original Apparatus Electrical Systems, and Original Water Tank.

### **CORROSION PERFORATION WARRANTY - 20 YEARS**

In addition to the Paint Warranty as specified, the Stainless Steel apparatus body is to be warranted against corrosion perforation for a period of twenty (20) years.

#### NOX-RUST NON-HARDENING UNDERCOATING

After final body reassembly, under body areas shall be spray coated with Nox-Rust or equal rustproofing undercoating material. Vehicle shall be Prep-Sol "solvent washed" after undercoating, to remove all overspray residues.

### 2-YEAR WARRANTY - ELECTRICAL SYSTEM - 12 VOLT DC

The Apparatus 12-volt. DC Electrical System (exclusive of chassis) shall be covered, by the apparatus manufacturer (bidder) under normal use with normal service and maintenance, for a period of two (2) years, of which one (1) year is for Parts and Labor, and year two is for Parts Only. This warranty shall cover: Power Distribution System (PDC), Looms and Harnesses, Multi-Pin Connectors, and Workmanship as provided by the apparatus manufacturer. Individual emergency and non-emergency electrical devices, light fixtures, audible equipment, intercoms, and motors shall be covered by the prevailing manufacturer's warranty.

### **10-YEAR APPARATUS PAINT WARRANTY**

The TEN (10) year paint performance guarantee will cover the areas of the vehicle as are originally finished by the apparatus body builder with the specified product for a period of TEN (10) years beginning the day the vehicle is delivered to the purchaser.

The areas as outlined on the Guarantee Certificate, will be covered for the following paint failures:

**GUARANTEE INCLUSIONS:** 

FULL APPARATUS BODY:



# **Custom Pumpers**

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- \* Peeling or delaminating of the topcoat and/or other layers of paint.
- \* Cracking or checking
- \* Loss of gloss caused by cracking, checking, or hazing.
- \* Any paint failure caused by defective finishes which are covered by this guarantee.

All guarantee exclusions, limitations, and methods of claims are covered in the full certificate provided to the original owner.

The warranty on the chassis paint is limited to the warranty of the chassis manufacturer thereof and adjustments for the same are to be made directly with the chassis manufacturer by the Purchaser. Where painted shutter style doors are provided, the warranty is limited to that which is provided by the manufacturer thereof. Graphics are excluded from refinishing under warranty.

### LIFETIME SUB-FRAME WARRANTY - STAINLESS STEEL

The specified tubular stainless steel apparatus body sub-frame is to be warranted for the vehicle's lifetime, against cracks, corrosion and rubber isolator deterioration.

### LIFETIME WARRANTY - WATER TANK

The water tank, and its installed accessories, shall be covered by a "Lifetime" Warranty, against cracks, corrosion, or other failures caused by the tanks design and normal use of the same. The warranty shall be between the tank manufacturer, and the customer.

### TANK CRADLE STRUCTURE WARRANTY

The tank cradle is to have a lifetime warranty, covering both structural and corrosion, as provided by body builder.

### LIFETIME WARRANTY - FOAM TANK(S)



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The foam reservoir(s)/tank(s), and installed accessories, shall be covered by a "Lifetime" Warranty, against cracks, corrosion, or other failures caused by the tanks design and normal use of the same. The warranty shall be between the foam tank manufacturer, and the customer.

#### WATER PUMP PLUMBING WARRANTY

The stainless steel "TIG-welded" plumbing components and ancillary brass fittings used in the construction of the waterway plumbing system (water pump suction and discharge piping) shall be warranted for a period of ten (10) years. This covers structural failures caused by defective design or workmanship, or perforation caused by internal or external corrosion, provided the apparatus pumping system is used in a normal and reasonable manner. This component warranty is extended only to the original purchaser for a period of ten (10) years from the date of delivery.

This warranty shall apply only to the piping for the discharges and intakes plumbed to the truck's main water pump and shall not include the pump, valves or any aspects of the product that are covered by specific Supplier warranties.

Labor to replace defective components and fittings will be covered for a period of One (1) year beyond the delivery date.

### **CHASSIS**

The chassis shall be a Sutphen Monarch, designed and built with strict standards of quality and service.

### **DOUBLE FRAME RAILS/SINGLE AXLE**

The chassis frame shall be of a ladder type design utilizing industry accepted engineering best practices. The frame shall be specifically designed for fire apparatus use.

Each frame rail shall be constructed of two .375" thick-formed channels. The outer channel shall be 10.188" x 3.50" x .375" and the inner channel (liner) shall be 9.31" x 3.13" x .375".

Over the entire length of the frame rail, the section modulus shall be 31.8 in.<sup>3</sup>. The resistance to bending moment (RBM) shall be 3,498,000 in./lbs.



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Each rail is media blasted to remove scale, oil, and contaminants. This blasting also ensures paint adhesion. Each rail will be primed with Cathacoat 302HB, a high performance, two component, reinforced inorganic zinc-rich primer with proven cathodic protection of steel structures, prior to assembly.

The cross-members shall be constructed of minimum .375" formed channels and have formed gusseted ends at the frame rail attachment. Single axle rear suspensions will utilize 3-piece bolt assembled cross-members at each suspension hanger

.625 inch, grade 8 flange, Huck bolt fasteners shall be used on all permanently attached brackets to the frame to eliminate the need for bolt re-tightening. Additional hardware will be Grade 8 Zinc coated flange head locking fasteners.

A lifetime warranty shall be provided, per manufacturer's written statement.

#### FRONT TOW EYES, BELOW BUMPER

There shall be two front tow eyes with 3" diameter holes attached directly to the chassis frame, accessible below the front bumper.

#### **TOW EYES, PAINTED FINISH**

The front tow eyes shall be painted to match the color of the chassis frame.

#### REAR TOW EYES

There shall be two tow eyes attached directly to the chassis frame rail and shall be chromate acid etched for superior corrosion resistance and painted to match the chassis.

#### **STEERING**

The steering system shall be a TRW wheel to wheel steering system that is tested and certified by TRW, consisting of a heavy duty TRW/Ross Model TAS-85 power steering gear, TRW PS36 steering pump, miter box, drag links, and a thermostatic controlled fan cooled system (set point 185 deg. F to 170 deg. F). The steering gear shall be bolted to the frame at the cross-member for steering linkage rigidity. Four (4) turns from lock to lock with an 18" diameter slip resistant rubber covered steering wheel. Steering column shall have six-position tilt and 2" telescopic adjustment. The cramp angle shall be 45 degrees with 315mm tires or 43 degrees with 425mm tires providing very tight turning ability.



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### DRIVE LINE

The driveline shall consist of Spicer 1810 series dual grease fitting universal joints with "half-round" end yokes. The drive shaft shall be built with a heavy-duty steel tube 4.095" outside diameter x .180 wall thickness. The shafts shall be dynamically balanced prior to installation into the chassis. A splined slip joint shall be provided in each shaft assembly. Universal joints shall be extended life. There shall be two (2) Zerk fittings in each universal joint assembly so the joint can be greased without turning the shaft.

#### **ENGINE**

The apparatus shall be powered by a Cummins Diesel X 12 500 HP @ 1800 R.P.M., 1695 ft. lb. torque @ 1000 R.P.M.

Displacement:11.8 liter displacement.Cylinders:6Bore:5.2" (132mm)Stroke:5.67" (144mm)

#### AIR COMPRESSOR

The air compressor shall be an 18.7 CFM engine driven Wabco.

#### **STARTER**

A 12-volt starter shall be provided, controlled by a switch on the left lower cab dash.

#### EXHAUST SYSTEM

The engine exhaust system shall include the following components:

- Diesel Particulate Filter (DPF)
- Diesel Oxidation Catalyst (DOC)
- Diesel Exhaust Fluid (DEF)
- Selective Catalytic Reduction Filter (SCR)

The SCR catalyst utilizes the DEF fluid, which consists of urea and purified water, to convert NOx into nitrogen and water. This shall meet or exceed 2017 EPA emissions requirements.

The engine exhaust system shall be horizontal design constructed from heavy-duty truck components. The exhaust tubing shall be stainless steel to the DPF through to the SCR, aluminized steel from the SCR to the



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exhaust tip. A heavy duty stainless steel bellows tube shall be used to isolate the exhaust system from the engine. The system shall be equipped with single canister consisting of a Diesel Oxidation Catalyst (DOC) and a Diesel Particulate Filter (DPF), and shall be mounted under the right side frame rail, meeting the specific engine manufacturer's specifications and current emission level requirements. The outlet shall be directed to the forward side of the rear wheels, exiting the right side with a heavy duty heat diffuser. The heat diffuser shall prevent the exhaust temperature from exceeding 851 deg. F during a regeneration cycle. A heatabsorbing sleeve shall be provided on the exhaust pipe in the engine compartment area to reduce the heat, protect the alternator, and also to protect personnel while servicing the engine compartment.

### AFTER TREATMENT SYSTEM

To meet EPA requirements of Particulate output, a DPF (Diesel Particulate Filter) is used. To meet EPA requirements of Nitrous Oxide output an SCR (Selective Catalytic Reduction) system utilizing DEF (Diesel Exhaust Fluid) is used.

#### **ON-BOARD DIAGNOSTIC (OBD) SYSTEM**

The engine shall be equipped with an on-board diagnostic (OBD) system which shall monitor emissions elated engine systems and components and alert the operator of any malfunctions. The OBD system is designed to further enhance the engine and operating system by providing early detection of emission related faults. The engine control unit (ECU) will manage smart sensors located throughout the engine and after-treatment system. The system shall monitor component verification and sensor operation. There shall be warning lights located in the dash instrument panel to alert the operator of a malfunction. A data port shall be provided under the driver's side dash for the purpose of code reading and troubleshooting. All communication shall be provided through the J1939 data link.

#### **ENGINE WARRANTY**

The engine shall have a five (5) year or 100,000 mile warranty and approval by Cummins Diesel for Full Engine Coverage Plan (RVF) – which is their most complete engine coverage plan, which includes EGR components installation in the chassis. There shall be no deductible for the first two years. A one hundred dollar deductible shall apply for service beginning the third year.

#### AIR CLEANER/INTAKE

The engine air intake and filter shall be designed in accordance with the engine manufacturer's recommendations. It shall be 99.9% effective in removing airborne contaminants when tested per the industry



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standard SAE J726 procedure and offer a dirt holding capacity of at least 3.0 gm/cfm of fine dust (tested per SAE J726) offering superior engine protection.

The air filter shall be located at the front of the apparatus and shall be at least 66" above the ground, to allow fording deep water in an emergency situation.

An ember separator shall be provided in the engine air intake meeting, the requirements of NFPA 1901.

An Air Restriction warning light shall be provided and located on the cab dash.

## PRIMARY FUEL FILTER/WATER SEPARATOR

A Cummins approved Fleetguard Fuel Pro FH230 fuel filter/water separator shall be remote mounted to the chassis frame rail.

### **12VDC HEATER**

A 12V DC heater shall be provided for the Fleetguard Fuel Pro FH230 fuel filter/water separator.

#### SECONDARY FUEL FILTER

A Cummins approved Fleetguard FF5776 fuel filter will be mounted on the driver's side of the engine.

#### TRANSMISSION

The chassis shall be equipped with a Generation 5 Allison EVS4000 six (6) speed automatic transmission. It shall be programmed five (5) speed, sixth gear locked out, for fire apparatus vocation, in concert with the specified engine.

The transmission is communicated on the J-1939 through the communication port. The fifth gear shall be an overdrive ratio, permitting the vehicle to reach its top speed at the engine's governed speed. The dipstick is dipped in a rubber coating for ease in checking oil level when hot.

The chassis to transmission wiring harness shall utilize Metri-Pack 280 connectors with triple lip silicone seals and clip-type positive seal connections to protect electrical connections from contamination without the use of coatings.



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Ratings: Max Input (HP) 600 Max Input (Torque) 1850 (lb ft) Max Turbine (Torque) 2600 (lb ft)

Mechanical Ratios: 1<sup>st</sup> - 3.51:1 2<sup>nd</sup> - 1.91:1 3<sup>rd</sup> - 1.43:1 4<sup>th</sup> - 1.00:1 5<sup>th</sup> - 0.74:1 Reverse - -5.00:1

#### TRANSMISSION FLUID

The transmission shall come filled with an Allison approved Synthetic Transmission Fluid that meets the Allison TES-295 specification.

### ENGINE BRAKE

The engine shall be equipped with a Jacobs compression engine brake. An "On/Off" switch and a control for "Low/High" shall be provided on the instrument panel within easy reach of the driver.

The engine brake shall interface with the Wabco ABS brake controller to prevent engine brake operations during adverse braking conditions.

A pump shift interlock circuit shall be provided to prevent the engine brake from activating during pumping operations.

The brake light shall activate when the engine brake is engaged.

### TRANSMISSION COOLER

The apparatus transmission shall be equipped with a Liquid-To-Liquid remote mounted cooler with aluminum internal components. The cooler shall be encased in an aluminum housing and mounted to the outside of the officer's side frame rail for accessibility and ease of service.



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## TRANSMISSION SHIFTER

An Allison "Touch Pad" shift selector shall be mounted to the right of the driver on the engine cover accessible to the driver. The shift position indicator shall be indirectly lit for nighttime operation.

### COOLING SYSTEM

The cooling system shall be designed to keep the engine properly cooled under all conditions of road and pumping operations. The cooling system shall be designed and tested to meet or exceed the engine and transmission manufacturer's requirements, and EPA regulations.

The complete cooling system shall be mounted in a manner to isolate the system from vibration and stress. The individual cores shall be mounted in a manner to allow expansion and contraction at various rates without inducing stress to the adjoining core(s).

The cooling system shall be comprised of a charge air cooler to radiator serial flow package that provides the maximum cooling capacity for the specified engine as well as serviceability. The main components shall include a surge tank, a charge air cooler, bolted to the top of the radiator to maximize cooling, recirculation shields, a shroud, a fan, and required tubing. All components shall consist of an individually sealed system.

### RADIATOR

The radiator shall be a cross-flow design constructed completely of aluminum with welded side tanks. The radiator shall be bolted to the bottom of the charge air cooler to allow a single depth core, thus allowing a more efficient and serviceable cooling system.

The radiator shall be equipped with a drain cock to drain the coolant for serviceability. The drain cock shall be located at the lowest point of the aluminum cooling system to maximize draining of the system.

### **CHARGE AIR COOLER**

The charge air cooler shall be of a cross-flow design and constructed completely of aluminum with extruded tanks. The charge air cooler shall be bolted to the top of the radiator to allow a single depth core.

### COOLANT

The cooling system shall be filled with a 50/50 mix. The coolant makeup shall contain ethylene glycol and deionized water to prevent the coolant from freezing to a temperature of -34 degrees F.



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### HOSES & CLAMPS

Silicone hoses shall be provided for all engine coolant lines.

All radiator hose clamps shall be spring loaded stainless steel constant torque hose clamps for all main hose connections to prevent leaks. Recirculation shields shall be installed where required to prevent heated air from reentering the cooling package and affecting performance.

### FAN

The engine cooling system shall incorporate a heavy-duty composite 11- blade Z-series fan. It shall provide the highest cooling efficiently while producing the lowest amount of noise. This robust yet light-weight fan results in less wear and stress on motors and bearings.

A shroud and recirculation shield system shall be used to ensure air that has passed through the radiator is not drawn through again.

The fan tip to radiator core clearance shall be kept at a minimal distance to increase the efficiency of the fan and reduce fan blast noise.

### FAN CLUTCH

A fan clutch shall be provided that shall allow the cooling fan to operate only when needed. The fan shall remain continuously activated when the truck is placed in pump gear.

#### SURGE TANK

The cooling system shall be equipped with an aluminum surge tank mounted to the officer's side of the cooling system core. The surge tank shall house a low coolant probe and sight glass to monitor the coolant level. Low coolant shall be alarmed with the check engine light. The surge tank shall be equipped with a dual seal cap that meets the engine manufacturer's pressure requirements, and system design requirements.

The tank shall allow for expansion and to remove entrained air from the system. There shall also be an extended fill neck to prevent system overfill and encroachment of expansion air space. Baffling shall be installed in the tank to prevent agitated coolant from being drawn into the engine cooling system.



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## FUEL TANK

The chassis shall be equipped with a 65-gallon stainless steel rectangular fuel tank. The fuel tank shall be certified to meet FMVSS 393.67 tests. It shall also maintain engine manufacturer's recommended expansion room of 5%.

The tank shall be removable by means of six (6) bolted connections and dropped. One (1) tank baffle shall be used.

Dual pick-up and return ports with a single 3/4" tank drawtube shall be provided for diesel generators if required.

The fuel lines shall be nylon braid reinforced fuel hose with brass fittings. The lines shall be carefully routed along the inside of the frame rails. All fuel lines are covered in high temperature rated split plastic loom. Single suction and return fuel lines shall be provided.

The fuel tank shall be mounted in a saddle with a barrier between the tank and the saddle. The bottom of the fuel tank shall contain a 1/2" drain plug.

### FUEL FILL

The fuel tank shall be equipped with a 2-1/4" filler neck assembly with a 3/4" vent located on the driver's side of the truck. A fuel fill cap attached with a lanyard shall be provided.

### FUEL COOLER

Installed on the apparatus fuel system shall be an Air-To-Liquid aluminum fuel cooler. The fuel cooler shall be located in the lowest module of the cooling system.

#### DIESEL EXHAUST FLUID TANK

The exhaust system shall include a molded cross linked polyethylene tank. The tank shall have a capacity of 5 usable gallons and shall be mounted on the left side of the chassis frame.

The DEF tank fill neck shall accept only a 19mm dispensing nozzle versus the standard 22mm diesel fuel dispensing nozzle to prevent cross contamination. The DEF tank cap shall be blue in color to further prevent cross contamination.

A placard shall accompany fill location noting DEF specifications.



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## EXHAUST SHIELD

There shall be a heat deflector over the exhaust where it passes under the right side compartment.

### ALTERNATOR

A 420 ampere Prestolite/Leece Neville alternator with serpentine belt shall be provided. The alternator shall generate 260 amperes at idle.

A low voltage alarm, audible and visual, shall be provided.

#### LOW VOLTAGE ALARM

A Floyd Bell TXB-V88-515-QF low voltage alarm, audible and visual, shall be provided.

### **BATTERIES**

The battery system shall be a single system consisting of four (4) negative ground, 12 volt Interstate Group 31 MHD batteries, cranking performance of 950 CCA each with total of 3800 amps, 185 minute reserve capacity with 25 ampere draw at 80 degrees Fahrenheit. Each battery shall have 114 plates. The batteries shall include a one-year warranty which shall be accepted nationwide.

The batteries shall be installed in a vented 304 stainless steel battery box with a removable aluminum cover to protect the batteries from road dirt and moisture. The battery cover shall be secured with four "T" handle rubber hold downs to provide easy access for maintenance and inspection. Stainless steel hardware will be used for installation. The batteries are to be placed on dri-deck and secured with a fiberglass hold down. The batteries shall be wired directly to starter motor and alternator.

The battery cables shall be 3/0 gauge. Battery cable terminals shall be soldering dipped, color-coded and labeled on heat shrink tubing with a color-coded rubber boot protecting the terminals from corrosion.

There shall be a 350-ampere fuse protecting the pump primer and a 250-ampere fuse protecting the electric cab tilt pump and other options as required.



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## MASTER BATTERY DISCONNECT SWITCH

A master battery disconnect switch shall be installed under the driver's seat. The switch shall be installed on the vertical face of the seat riser so it is visible when the cab door is opened.

### BATTERY JUMPER TERMINAL

There shall be one set (two studs) of battery jumper terminals located by the battery box under the cab. The terminals shall have plastic color-coded covers. Each terminal shall be tagged to indicate positive/negative.

### **120V SHORELINE INLET & AUTO EJECT**

The apparatus shall be equipped with a 120V shoreline inlet to provide power to the battery charger from an external source. The inlet shall include a Kussmaul 091-55-120 Super 20 Auto Eject featuring a 12 volt solenoid which shall eject the shoreline cord away from vehicle path upon sensing engine start. After ejection, a weatherproof cover shall snap into position over inlet.

A 20-amp connector shall be provided and shipped loose for connecting the external shoreline cord to the inlet.

### **120-VOLT OUTLET WIRED TO SHORELINE INLET**

A 120-volt outlet shall be provided and wired to the shoreline inlet. The location of the outlet shall be determined during the pre-construction conference.

#### **BATTERY CHARGER**

A Kussmaul Auto Charge LPC 40 model #091-200-12-IND low profile 40 amp battery charger shall be provided and installed in the cab. The unit shall include an auxiliary 15 amp output circuit with power source selector for operating accessory loads. The charger shall be wired to the 120V shoreline inlet.

The charger shall include a Model #091-200-IND remote bar graph display.

#### FRONT AXLE



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A Hendrickson STEERTEK NXT non-driving, front steer axle with a capacity of 20,000 pound shall be provided. The axle shall have a 3.74" drop and will have a fabricated boxed shaped cross section, a one piece knuckle, and serviceable king pin. Adjustable Ackerman settings shall be available, and determine based on wheelbase. The axle shall have 10 bolt hub piloted, and furnished with oil seals.

#### SUSPENSION (FRONT)

The front suspension shall be a parabolic taper-leaf spring design, 56" long and 4" wide. Long life, maintenance free, threaded pin bushings in spring shackles shall be utilized. All spring and suspension mounting shall be attached directly to frame with high strength Huck bolts and self-locking round collars. Progressive rate bump stop and custom tuned passive hydraulic damper shall be supplied. NO EXCEPTIONS.

#### STEER ASSIST

The steer assist provides driver assistance when turning the vehicle left or right while traveling.

### FRONT TIRES

Front tires shall be Michelin 385/65R22.5, load range J, XZY3 tread, single tubeless type with a GAWR of 20,000 pounds. Wheels shall be disc type, hub piloted, 22.5 x 12.25 10 stud 11.25 bolt circle.

### REAR AXLE

The rear axle shall be a Meritor<sup>™</sup> RS-26-185 Single reduction drive axle with a capacity of 27,000 lbs. The axles shall be hub piloted, 10 studs, furnished with oil seals.

#### TOP SPEED

The top speed shall be approximately 68 MPH.

#### **DIFFERENTIAL LOCK**

A driver controlled differential lock shall be provided with a toggle switch control in cab.

#### SUSPENSION (REAR) 27,000 LB AIR RIDE



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A Hendrickson FIREMAAX model FMX272 air ride rear suspension shall be provided. The suspension shall be a dual air spring design equipped with dual height control valves to maintain proper ride height. To reduce axle stress and maintain axle position and pinion angle the suspension design shall incorporate three torque rods. The ground rating of the suspension shall be 27,000 pounds.

#### **REAR TIRES**

Rear tires shall be Michelin 12R22.5, load range H, XDS Mud and Snow tread, dual tubeless type with a GAWR up to 27,000 pounds. Wheels shall be disc type, hub piloted, 22.5 x 8.25 10 stud with 11.25" bolt circle.

#### TIRE PRESSURE MONITOR

A Real Wheels LED tire pressure sensor shall be provided for each wheel. The pressure sensor shall indicate if a particular tire is not properly inflated. A total of six (6) indicators shall be provided.

#### **WHEELS**

The front and rear wheels shall be steel. The wheels shall be painted truck color.

The steel wheel shall be properly balanced.

#### HUB COVERS

Polished stainless steel hub covers shall be provided for the front and rear axle.

#### LUG NUT CAPS

Chrome plated lug nut caps shall be provided for the front and rear wheels.

#### FRONT MUD FLAPS

Hard rubber mud flaps shall be provided for front tires.

#### **REAR MUD FLAPS**

Hard rubber mud flaps shall be provided for rear tires.



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### **BRAKES, Front**

The front brakes shall be Arvin Meritor DiscPlus EX225 Air Disc Brakes. Each disc brake assembly shall include one (1) 17" vented rotor, one (1) lightweight hub, one (1) twin-piston caliper, and two (2) quick-change pads.

### **BRAKES, Rear**

The rear brakes shall be Meritor S-cam style. They shall be 16.5" x 8.625" with heavy duty return springs, and a double anchor pin design. They shall also have quick change shoes for fast easy brake relining.

#### EMERGENCY PARK BRAKE RELEASE

In the event of an air system failure an emergency spring parking brake release shall be provided. The emergency system shall include an additional 1559 cubic inch tank mounted on the chassis frame rail. The release shall be mounted on the driver's side cab dash next to the parking brake actuator clearly marked "Emergency Release".

#### AIR BRAKE SYSTEM

The vehicle shall be equipped with air-operated brakes. The system shall meet or exceed the design and performance requirements of current FMVSS-121 and test requirements of current NFPA 1901 standards.

Each wheel shall have a separate brake chamber. A dual treadle valve shall split the braking power between the front and rear systems.

All main brake lines shall be color-coded nylon type protected in high temperature rated split plastic loom. The brake hoses from frame to axle shall have spring guards on both ends to prevent wear and crimping as they move with the suspension. All fittings for brake system plumbing shall be brass.

A Meritor Wabco System Saver 1200 air dryer shall be provided.

The air system shall be provided with a rapid build-up feature, designed to meet current NFPA 1901 requirements. The system shall be designed so the vehicle can be moved within 60 seconds of startup. The quick build up system shall provide sufficient air pressure so that the apparatus has no brake drag and is able to stop under the intended operating conditions following the 60-second buildup time. The vehicle shall not be required to have a separate on-board electrical air compressor or shoreline hookup to meet this requirement.



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Four (4) supply tanks shall be provided. One air reservoir shall serve as a wet tank and a minimum of one tank shall be supplied for each the front and rear axles. A Schrader fill valve shall be mounted in the front of the driver's step well.

A spring actuated air release emergency/parking brake shall be provided on the rear axle. One (1) parking brake control shall be provided and located on the engine hood next to the transmission shifter within easy reach of the driver. The parking brake shall automatically apply at  $35 \pm 10$  PSI reservoir pressure. A Meritor WABCO IR-2 Inversion Relay Valve, supplied by both the Primary and Secondary air systems, shall be used to activate the parking brake and to provide parking brake modulation in the event of a primary air system failure.

Accessories plumbed from the air system shall go through a pressure protection valve and to a manifold so that if accessories fail they shall not interfere with the air brake system.

### AUTOMATIC HEATED MOISTURE EJECTORS

Each air tank in the chassis braking system shall consist of a heated automatic moisture ejector to assist in keeping the air tanks and air lines free of debris and moisture. A manual pull cable shall be incorporated.

#### AIR INLET

An air system inlet/fill connection shall be provided. The inlet shall be connected to the air brake to allow constant air feed. The location of the inlet shall be on the left hand side of the driver's step well.

#### AUTO-EJECT

A Kussmaul Model 091-28 auto-eject with female coupling shall be provided.

#### AIR BRAKING ABS SYSTEM

A Wabco ABS system shall be provided to improve vehicle stability and control by reducing wheel lock-up during braking. This braking system shall be fitted to axles and all electrical connections shall be environmentally sealed from water and weather and be vibration resistant.



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The system shall constantly monitor wheel behavior during braking. Sensors on each wheel transmit wheel speed data to an electronic processor, which shall sense approaching wheel lock and instantly modulate brake pressure up to 5 times per second to prevent wheel lock-up. Each wheel shall be individually controlled. To improve field performance, the system shall be equipped with a dual circuit design. The system circuits shall be configured in a diagonal pattern. Should a malfunction occur, that circuit shall revert to normal braking action. A warning light at the driver's instrument panel shall indicate malfunction to the operator.

The system shall consist of a sensor clip, sensor, electronic control unit and solenoid control valve. The sensor clip shall hold the sensor in close proximity to the tooth wheel. An inductive sensor consisting of a permanent magnet with a round pole pin and coil shall produce an alternating current with a frequency proportional to wheel speed. The unit shall be sealed, corrosion-resistant and protected from electromagnetic interference. The electronic control unit shall monitor the speed of each wheel sensor and a microcomputer shall evaluate wheel slip in milliseconds.

#### AUTOMATIC SLIP RESPONSE

The Rockwell/Wabco 4 Channel Anti-lock braking system shall be provided. The system shall be supplied with (ASR) Automatic slip response. The ASR controls slip under acceleration.

### COMPRESSION FITTINGS ON AIR SYSTEM

All air line fittings installed on the chassis shall be compression style fittings. The following locations shall utilize push-on fittings: • Pressure protection valve (accessory block)

- Double check valve (braking system, park brake)
- One way check valve (brake valve tank)
- Elbow Male Modified 1/4" tube x 1/4" MP (low air switch)
- Elbow Male 1/4" tube x 3/8"MP (brake pedal solenoid)
- · Connector 1/4" x 3/8"MPT (brake pedal solenoid)
- Switch stoplight (Wabco sealed switch/brake light and service brake switch)
- Low pressure switch (PTC) (Wabco sealed switch/low air switch)

### MISCELLANEOUS CHASSIS EQUIPMENT

- Fluid capacity plate affixed below driver's seat.
- Chassis filter part number plate affixed below driver's seat.
- Maximum rated tire speed plaque near driver.
- Tire pressure label near each wheel location.
- Cab occupancy capacity label affixed next to transmission shifter.



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Do not wear helmet while riding plaque for each seating position. NFPA compliant seat belt and standing warning plates provided.

### NFPA TILT TABLE TEST REPLACING THE ELECTRONIC STABILITY CONTROL FEATURE

Custom Fire Apparatus to build out the pump module and body and will provide the NFPA tilt table test replacing the electronic stability control mentioned earlier. <u>ALUMINUM CAB</u>

The cab shall be a full tilt 8-person 10" rearraised roof cab designed specifically for the fire service and manufactured by the chassis builder. Apparatus cabs that are not manufactured by the apparatus manufacturer shall not be acceptable.

#### CAB DESIGN

The apparatus chassis shall be of an engine forward, fully enclosed tilt cab design. There shall be four (4) side entry doors.

The cab shall be of a fully open design with no divider wall or window separating the front and rear cab sections. The cab shall be designed in a manner that allows for the optimum forward facing vision for crew. Cab designs that utilize roof mounted air conditioning units, are not desired.

The cab shall be constructed of high strength 5052H32 aluminum plate welded to 6061-T6 extruded aluminum framing.

The cab roof shall utilize 5" x 5" honeycomb re-enforced 6061 T6 aluminum extrusion, with fully radiused outer corner rails with integral drip channel and 6061 T6  $\frac{3}{4}$ " x 2" x  $\frac{3}{16}$ " aluminum box tubing type cross brace supports. Structures that do not include an integral drip channel will not be accepted. The box tubing type cross brace supports shall be installed in a curved fashion beginning from the midline of the apparatus cab and curving toward the exterior corner rails. This curvature will allow for increased strength in the event of a roll over while not allowing for rainwater buildup on the apparatus cab roof.

The cab sides shall be constructed from  $1 \frac{1}{2}$ " x 3" x 3/16" 6061 T6 extruded door pillars and posts that provide a finished door opening, extruded and formed wheel well openings supports, formed aluminum wheel well liners and box tubing type support braces.

The cab floor and rear cab wall shall utilize 1 <sup>3</sup>/<sub>4</sub>" x 4" x 3/16" 6061 T6 extruded box tubing type framing and support bracing.



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The framework shall be of a welded construction that fully unitizes the structural frame of the cab.

The structural extrusion framework shall be overlaid with interlocked aluminum alloy sheet metal panels to form the exterior skin of the cab. The cab sides shall be constructed of 3/16" thick 5052H32 aluminum plate that slides into an integral channel of the extrusion framework. The plate is then skip welded into that channel to allow for tolerable flex while the apparatus travels down the roadway. Cab designs that utilize 1/8" thick aluminum for the cab sides shall not be acceptable.

The structural extrusion framework shall support and distribute the forces and stresses imposed by the chassis and cab loads and shall not rely on the sheet metal skin for any structural integrity.

The cab face extrusion framework shall be overlaid with 1/8" thick 5052H32 aluminum plate to allow for an aesthetically pleasing radiused cab face.

#### CAB SUB-FRAME

The cab shall be mounted to a 4" x 4" x 3/8" steel box tube sub-frame, and shall be isolated from the chassis, through the use of no less than six (6) elastomeric bushings. This substructure shall be completely independent of the apparatus cab. The sub frame shall be painted to match the primary chassis color.

The sub-frame shall be mounted to the chassis through the use of lubricated Kaiser Bushings for the front pivot point, and two (2) hydraulically activated cab latches, to secure the rear.

Cab mounting that does not include a sub-frame shall not be considered. NO EXCEPTIONS.

#### CAB DIMENSIONS

The cab shall be designed to satisfy the following minimum width and length dimensions:

Cab Width (excluding mirrors) 98" Cab Length (from C/L of front axle) To front of cab (excluding bumper) 68" To rear of cab 73" Total Cab Length (excluding bumper) 141"

#### **ROOF DESIGN**



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The cab shall be of a one-half 10" raised roof design with side drip rails and shall satisfy the following minimum height dimensions:

Cab Dimensions Interior Front 59" Rear 65"

Cab Dimensions Exterior Front 65" Rear 75"

#### FENDER CROWNS

Polished stainless steel front axle fenderettes with full depth radiused wheel well liners shall be provided.

#### **CAB INSULATION**

The exterior walls, doors, and ceiling of the cab shall be insulated from the heat and cold, and to further reduce noise levels inside the cab. The cab interior sound levels shall not exceed 90 decibels at 45 mph in all cab seat positions. NO EXCEPTIONS

#### EXTERIOR GLASS

The cab windshield shall be of a two piece curved design utilizing tinted, laminated, automotive approved safety glass. The window shall be held in place by an extruded rubber molding. The cab shall be finished painted prior to the window installation.

#### SUN VISORS

The sun visors shall be made of dark smoke colored transparent polycarbonate. There shall be a visor located at both the driver and officer positions, recessed in a molded form for a flush finish.

#### CAB STRUCTURAL INTEGRITY

The cab of the apparatus shall be designed and so attached to the vehicle as to eliminate, to the greatest possible extent, the risk of injury to the occupants in the event of an accident.

The apparatus cab shall be tested to specific load and impact tests with regard to the protection of occupants of a commercial vehicle.



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A test shall be conducted to evaluate the frontal impact strength of the apparatus cab to conform to the test J2420 and the "United Nations Regulation 29, Annex 3, paragraph 4, (Test A). A second test shall be conducted to evaluate the roof strength of the apparatus cab to conform to the Society Of Automotive Engineers (SAE) SAE J2422/SAE J2420 and "United Nations Regulation 29, Annex 3, paragraph 5, (Test B) and SAE J2420. The evaluation shall consist of the requirements imposed by ECE Regulation 29, Paragraph 5.

The test shall be conducted by a certified independent third party testing institution.

A letter stating successful completion of the above test on the brand of cab being supplied shall be included in the bid. There shall be "no exception" to this requirement.

### SEAT BELT TESTING

The seat belt anchorage system shall be tested to meet FMVSS 207 Section 4.2a and FMVSS 210 section 4.2. Testing shall be conducted by an independent third party product evaluation company.

A copy of the certification letter shall be supplied with the bid documents.

### CAB LOCKDOWN LATCHES

Cab lockdown latches shall be provided with an interlock switch tied to a component as specified. A LED indicator light shall be located in the cab. Once the component's path is clear and the cab tilt switch is engaged, the cab latches will released to allow the cab to be tilted.

### CAB TILT SYSTEM

An electrically powered hydraulic cab tilt system shall be provided and shall lift the cab to an angle of 45 degrees, exposing the engine and accessories for fluid checks and service work. The system shall be interlocked to only operate when the parking brake is set.

The lift system shall be comprised of two (2) hydraulic lift cylinders, an electrically driven hydraulic pump, and a control switch. The hydraulic pump shall be located on the exterior of the frame rail on the driver's side of the chassis that can be easily accessible when the cab is tilted. A mechanical locking system consisting of an air operated actuator and a heavy radiused wall 3" x 3" aluminum extrusion will be provided to ensure the cab remains in the raised position in the event of a hydraulic failure. Additionally, each of the hydraulic lift cylinders shall incorporate a check valve, and velocity fuses that will activate should a sudden



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drop in pressure be detected. The cab tilt controls shall be interlocked to the parking brake to ensure the cab will not move, unless the parking brake is set. The cab tilt controls will consist of a momentary raise/lower switch and a two position cab safety lock switch.

The hydraulic lift cylinders will be connected to a steel cab sub-frame, and not directly to the cab. NO EXCEPTIONS

#### MANUAL CAB LIFT

There shall be a manually operated hydraulic pump for tilting the cab in case the main pump should fail. Access to the pump shall be located under the left corner of the front bumper.

#### CAB TILT ALARM

An audible alarm shall sound when cab is tilting.

#### BARRIER STYLE CAB DOORS

Barrier style cab doors shall be provided. The lower part of the door shall be removed to expose the cab entry step well.

The cab doorframes shall be constructed from 6061 T6 aluminum extrusions fitted with a 5052 H32 aluminum sheet metal skin and shall be equipped with dual weather seals. The outside cab door window opening shall be framed by a black anodized aluminum trim, to provide a clean appearance. The cab doors shall be equipped with heavy-duty door latching hardware, which complies with FMVSS 206. The door latch mechanism shall utilize control cable linkage for positive operation. A rubber coated nylon web doorstop shall be provided.

The doors shall be lap type with a 10 gauge full-length stainless steel flange and 3/8" diameter hinge pin and shall be fully adjustable.

All openings in the cab shall be grommeted or equipped with rubber boots to seal the cab from extraneous noise and moisture.

The cab doors shall be designed to satisfy the following minimum opening and step area dimensions: Door Opening:



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Front 36.5" x 73" Rear 36.5" x 73"

#### STEP WELLS

The lower cab step wells shall be sprayed with a black Raptor urethane blend. The back and side walls of the step well shall also be lined with 1/8" aluminum treadplate.

#### CAB STEPS

The lower cab steps shall be no more than 22" from the ground. Grip strut material shall be installed on the stepping surface.

An intermediate step shall be provided, mid way between the lower cab step, and the cab floor. The intermediate step shall be slightly inset to provide for safer ingress and egress. Diamondplate material shall be installed on the stepping surface.

All steps shall be covered with material that meets or exceeds the NFPA requirements for stepping surfaces.

### STEP LIGHTS

A white TecNiq E41 LED strip light shall illuminate each interior cab step. These lights shall illuminate whenever the battery switch is on and the cab door is opened.

#### POWER WINDOWS

All four cab entry doors shall have power windows. Each door shall be individually operated and the driver's position shall have master control over all windows. All four windows shall roll down completely.

#### SIDE WINDOWS

Fixed position side window shall be provided on each side of the cab between the forward cab area and the crew cab area. The widows shall be approximately 20.5" high x 16.50" wide to provide maximum visibility. The side windows shall be held in place by an extruded rubber molding with a chrome plated decorative locking bead.



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### WINDOW TINTING

The crew cab windows and doors, with the exception of the driver's and officer's doors, and the windshield, shall be tinted with deep "limo" tint. The tint shall be incorporated into the window glass with eight percent (8%) light transmittance. Film tinting shall not be acceptable.

### WINDSHIELD WIPERS

Two (2) black anodized finish two speed electric windshield wiper system. Dual motors with positive parking. System includes large dual arm wipers with built in washer system. One (1) master control works the wiper, washer and intermittent wipe features. Washer bottle is a remote fill with a 4 quart capacity. Washer fill is located just inside of officer cab door.

### **MIRRORS**

Two (2) Lang Mekra 300 Series smooth chrome plated Aero style main and convex mirrors shall be installed on each side of the vehicle. The main mirror shall be 4-way remote adjustable with heat, 7" x 16" 2nd surface chromed flat glass. The convex shall be 6" x 8" 2nd surface chromed 400 mm radius glass. Each mirror housing assembly shall be constructed of lightweight textured chrome ABS with on truck glass and housing back cover replacement. In the event the mirror breaks the glass shall be replaceable in (3) minutes or less. The glass shall include a safety adhesive backing to keep broken glass in place. The mirror assembly shall be supported by a "C" loop bracket constructed of polished stainless steel tube utilizing two point mounting reducing vibration of mirror glass during normal vehicle operation. The lower section of the holder shall include a spring loaded single detent position 20 degrees forward with easy return to operating position without refocusing.

### UPPER GRILLE

The front of the cab shall be equipped with a raised polished stainless steel grille that is laser cut to resemble an American flag with sufficient area cut out to allow proper airflow into the cooling system and engine compartment. Plastic chrome plated grilles shall not be acceptable.

### UPPER GRILLE LOGO

The upper grille shall have a laser cut flaming "S" logo in the upper portion of the grille. The cut out shall contain reflective material behind.



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## LOWER GRILLE

The front of the cab shall be equipped with a polished stainless steel lower grille with custom laser engraved design per customer specifications. The design shall allow proper airflow into the cooling system and engine compartment. Plastic chrome plated lower grille shall not be acceptable.

#### **BUMPER**

There shall be a 12" high double rib polished stainless steel wrap-around bumper provided at the front of the apparatus. Laser cut perforated grilles shall be incorporated into the bumper and located at the outboard section of the bumper for the air horns and at the center for the siren speaker. The bumper shall be mounted to a reinforcement plate constructed of 1/4" x 10" x 70" carbon steel. A gravel shield shall be provided, constructed of .188" aluminum diamond plate. The bumper extension shall be approximately 18".

#### **BUMPER SIDES**

The sides of the bumper shall be finished with diamond plate.

#### **STORAGE WELL COMPARTMENT**

There shall be a hose well compartment located in the center of the front bumper. The compartment shall run the full length of the bumper and measure approximately 75" long x 10" wide x 6" deep at the ends and 12" deep in the center. The compartment shall be constructed of .125" smooth aluminum plate.

### **BUMPER TROUGH LIP**

The bumper trough shall have a 1" lip around the top of the trough to assist in containing components in the trough as well as reducing allowance of moisture and debris into the trough.

### DIAMOND PLATE BUMPER LID

There shall be a 1/8" diamond plate cover with latches provided for the front bumper trough. The cover shall have a 2" rise to accommodate the storage well requirements.

The storage well cover lid shall be provided with a cut-out to accommodate the front discharge. Location to be determined at the preconstruction conference.



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### **BUMPER GUIDE RODS**

Two (2) stainless steel guide rods shall be attached, one each side to the front bumper. The guide rods shall be constructed from stainless steel and be attached to the apparatus with corrosion resistant hardware. An amber light shall be provided in each guide rod.

## AIR HORNS

Two (2) Grover 1510 round, 24" long chrome plated, air horns shall provided.

#### **AIR HORN BUMPER CUT-OUTS**

The air horns shall be installed thru the front bumper.

#### AIR HORNS WIRED TO STEERING WHEEL

The air horns shall be wired through the steering wheel button. A selector switch shall be provided on the instrument panel to switch between functions.

### **MOMENTARY SWITCH ON DASH**

A momentary switch for the air horns shall be provided on the officer's side dash.

### ELECTRONIC SIREN

One (1) Powercall UDX7 electronic siren shall be installed at the cab instrument panel complete with noise canceling microphone.

#### SIREN SPEAKERS

Two (2) Cast Products SA4201-5-A 100 watt weatherproof siren speakers shall be provided and wired to the electronic siren.

#### SPEAKER MOUNTING

The electronic siren speaker(s) shall be installed behind the main cab grille.



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### FEDERAL Q2B SIREN

There shall be a Federal Q2B-NN siren installed in the center of the cab grille. The siren shall be securely mounted and activated by means of a solenoid and shall include a brake.

#### SIREN WIRED TO STEERING WHEEL BUTTON

The mechanical siren shall be wired through the steering wheel button. A selector switch shall be provided on the instrument panel to switch between functions.

### MOMENTARY SWITCH ON DASH

A momentary switch for the mechanical siren shall be provided on the officer's side dash.

### CAB EXTERIOR LIGHTING

Exterior lighting and reflectors shall meet or exceed Federal Motor Vehicle Safety Standards and National Fire Protection Association requirements.

### **HEADLIGHTS**

The front low and high beam headlights shall be FIRETECH model FT-4X6 LED, rectangular shaped, quad style installed in custom rectangular shaped stainless steel housings on the front of the cab. Each housing shall accommodate a forward-facing turn signal in the outboard location and a side-facing warning light. An additional pair of rectangular shaped stainless steel housings shall be installed on the front of the cab above the headlight housings. Each housing shall accommodate two (2) forward-facing warning lights and a side-facing turn signal.

#### **HEADLIGHT FINISH**

The interior components of the headlights shall have a black finish.

### **ALTERNATING HEAD LAMP**

The headlights shall have an alternating flash feature for emergency response use.



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### FRONT TURN SIGNALS

There shall be four (4) Whelen 400 Series Model 40A00AAR LED rectangular amber turn signal lights mounted one (1) each side in the front of the headlight housings and one (1) mounted on the side of each warning light housing.

### EXTERIOR CAB HANDRAILS

There shall be four (4) 24" long, handrails provided and installed, one at each cab entrance. The handrails shall be constructed of type 304 stainless steel 1.25 inch diameter tubing with bright finish and knurled gripping surface. Mounting flanges shall be constructed from 7 gauge, .180 thick, stainless sheet. Each grab rail shall have 90 degree returns to flanges. The ends of grab rail shall pass through the flanges and be welded to form one structural unit. The handrails shall be mounted using 1.25" SS Hex bolts, with a barrier rubber gasket at each flange.

Sufficient space shall allow for a gloved hand to firmly grip the rail.

### COAT HOOKS FOR GRAB HANDLES

There shall be a coat hook installed on each exterior cab handrail, for hanging of coats, turnout gear, etc.

### HANDRAILS, FRONT OF CAB

There shall be a pair of knurled stainless steel handrails on the front face of the cab, below the windshields.

#### **INTERIOR CAB HANDRAILS**

There shall be two (2) rubber coated grab handles provided and mounted on the interior of the cab, one each side, on the windshield post for ingress assistance. The handrail on the driver's side shall be approximately 11" long and the handrail on the officer's side shall be approximately 18" long.

#### CAB DOOR HANDRAILS

There shall be two (2) 1.25" diameter knurled stainless steel handrails shall be provided and mounted, one on the inside of each rear crew door, just above the windowsill. The handrails shall be approximately 22" long.



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## DRIVER'S SIDE EXTERIOR CAB COMPARTMENT

There shall be a cabinet constructed of .125 aluminum plate recessed in the cab behind driver's side rear crew door. The compartment shall be approximately 38" high x 15" wide x 22.25" deep.

The compartment shall have a hinged door that is hinged at the front. The doors shall have an Austin Hardware slam catch single-point "D"-ring door closure and held open with gas struts.

The compartment shall be operated by an individual switch and illuminated with (1) LED light.

### **OFFICER'S SIDE CAB COMPARTMENT**

There shall be a cabinet constructed of .125 aluminum plate recessed in the cab behind officer's side rear crew door. The compartment shall be approximately 38" high x 15" wide x 20.25" deep (12.75" deep if front suction)

The compartment shall have a hinged door that is hinged at the front. The doors shall have an Austin Hardware slam catch single-point "D"-ring door closure and held open with gas struts.

The compartment shall be operated by an individual switch and illuminated with (1) LED light.

#### ADJUSTABLE SHELF

There shall be an adjustable shelf provided and installed in the compartment. The shelf shall be fabricated of .188 aluminum plate and have two 1.5" x 1.5" x .188" aluminum angles welded to the underside of the shelf for support.

#### DIAMOND PLATE, CAB ROOF

The rear exterior section roof of the cab shall have a diamond plate overlay. The overlay shall be constructed of .125" aluminum embossed diamond plate and measure 30" x 91".

### **CAB INTERIOR**



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The metal surfaces of the cab interior shall be coated and sealed with MultiSpec gray speckle, urethane modified, mar resistant paint. The textured coating shall provide paramount durability and wear resistance against foreign objects and normal wear and tear.

The front and rear headliners, as well as the rear cab wall, shall be finished in Gray-Black Durawear covered padded panels.

### **INTERIOR DOOR PANELS**

The interior of the cab entry doors shall have a 304 brushed stainless steel scuff plate, contoured to the door, from the door window sill down.

#### CAB FLOOR COVERING

The cab interior floor shall be covered with a 5/16" thick, black rubberized material to provide a rugged but cosmetically pleasing stepping surface throughout the cab. The floor covering shall provide superior durability and resistance against foreign objects as well as normal wear and tear.

#### **ENGINE ENCLOSURE**

An integral, formed aluminum and composite engine enclosure shall be provided. The engine enclosure shall be contoured and blended in an aesthetically pleasing manner with the interior dash and flooring of the cab. The enclosure shall be kept as low as possible, to maximize space and increase crew comfort.

The enclosure shall be constructed from 5052 H2 aluminum plate and GRP composite materials, providing high strength, low weight, and superior heat and sound deadening qualities.

Additionally, the underside of the engine enclosure shall be coated in with a ceramic spray on insulation and sound control. This coating is an environmentally-friendly coating that is applied seamlessly and rapidly while providing superior thermal insulation and protection against vibration and noise, and will prevent future corrosion from forming by sealing the substrate. NO EXCEPTIONS

### ENGINE ENCLOSURE COVERING

The top of the engine enclosure shall be covered with Scorpion heavy duty, black polyurethane blended coating. The textured coating shall provide paramount durability and wear resistance against foreign objects and normal wear and tear as well as sound deadening and insulation. The rubberized cab floor covering shall extend up the lower exterior sides of the engine enclosure to aid in sound deadening and heat resistance.



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## TOOL MOUNTING PLATE

There shall be a 3/16" smooth aluminum plate installed on the engine enclosure between the driver and the officer for use in mounting of equipment. The mounting plate shall feature beveled edges on the front and sides for a finished appearance. The plate shall be coated with the same finish as the engine enclosure and shall be secured to the engine cover with screws for easy replacement.

### ENGINE HOOD LIGHTS

An LED work light shall be installed in the engine enclosure with an individual switch located on the base of the light.

#### COMPUTER TRAY

There shall be a slide-out tray in front of the officer's seat for a laptop computer or other use.

#### **GLOVE BOX HOLDERS**

A pair of glove box holders shall be provided in the upper cab crew door area, constructed of 3/16" smooth aluminum. Each glove box holder shall be capable of holding (3) glove boxes.

#### CHASSIS WIRING

All chassis wiring shall have XL high temperature crosslink insulation. All wiring shall be color-coded, and the function and number stamped at 3" intervals on each wire. All wiring shall be covered with high temperature rated split loom for easy access to wires when trouble shooting. All electrical connectors and main connectors throughout the chassis shall be treated to prevent corrosion.

#### MASTER ELECTRICAL PANEL

The main chassis breaker panel shall be wired through the master disconnect solenoid and controlled by the three-position ignition rocker switch. The breaker panel shall be located in front of the officer on the interior firewall and shall be protected by a removable aluminum cover. The cover shall have an aluminum notebook holder on the exterior face accessible to the officer. The cover shall be painted with a durable finish to match the interior of the cab and shall be secured with two (2) thumb screws.



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The breaker panel shall include up to 22 ground switched relays with circuit breaker protection. An integrated electrical sub-panel shall be provided and interfaced to the body and chassis through an engineered wire harness system.

Twelve (12) 20-ampere relays and one (1) 70-ampere relay shall be provided for cab light bar and other electrical items. If the option for a mechanical siren has been selected two (2) additional relays shall be provided.

Up to two (2) additional relay boards with circuit breaker protection shall be provided for additional loads as required. Each board shall contain four (4) relays. The relay boards shall be configured to trip with input from switch of positive-negative or load manager by moving the connector on the board (no tools required).

All relay boards shall be equipped with a power-on indicator light (red), input indicator light (green) and power output indicator light (red).

Up to twenty-three (23) additional automatic reset circuit breakers for non-switched loads that are remotely switched (ie: heater fans, hood lights, etc.) shall be provided.

All relays and circuit breakers on the relay boards shall be pull-out/push-in replaceable.

All circuit breakers on the relay boards shall be 20 ampere automatic reset which can be doubled or tripled for 40 or 60-ampere capacity.

The system shall utilize Deutch DRC weather resistant connectors at the breaker panel, toe board and main dash connections.

All internal wire end terminals, including locking connectors, shall be mechanically affixed to the wire ends by matching terminal crimping presses to assure the highest quality terminations.

All internal splices shall be ultrasonically welded connections and all internal wiring shall be high temperature GXL type wire that is protected by wiring duct wherever possible.

All switches shall be ground controlled; no power going through any rocker switch.

Any switch controlling a relay in the breaker panel shall be capable of being set to function only when the parking brake is set. All relays shall be tagged with the function that the relay is controlling.

### INSTRUMENT PANEL



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The main dash shroud, which covers the area directly in front of the driver from the doorpost to the engine hood, shall be constructed of vacuum formed ABS material with scorpion texture. The dash shall be a onepiece hinged panel that tilts outward for easy access to service the internal components. The gauge panel shall be constructed with a .125" aluminum panel, covered with a scratch resistant reverse printed and laminated poly carbonite.

The gauges shall be AMETEK Vehicular Instrumentation Systems (VIS), Next Generation Instrumentation System (NGI) with built-in self-diagnostics and red warning lights to alert the driver of any problems. All gauges and controls shall be backlit for night vision and identified for function. All main gauges and warning lights shall be visible to the driver through the steering wheel.

### **MASTER BATTERY & IGNITION SWITCH**

The vehicle shall be equipped with a keyless ignition, with a three (3)-position Master Battery rocker switch, "Off/ACC/On" and a two (2)-position Engine Start rocker switch, "Off/Start".

### **DIESEL PARTICULATE FILTER CONTROLS**

There shall be two (2) controls for the diesel particulate filter. One control shall be for regeneration and one control shall be to inhibit engine regeneration. These shall be located below the steering wheel in the kick panel.

### **INSTRUMENTATION & CONTROLS**

Instrumentation on dash panel in front of the driver:

Tachometer/hourmeter with high exhaust system regeneration temperature, and instrument malfunction indicators

Speedometer/odometer with built in turn signal, high beam, and re-settable trip odometer Voltmeter Diesel fuel gauge

DEF (Diesel Exhaust Fluid) gauge

- Engine oil pressure
- Transmission temperature
- Engine temperature
- Primary air pressure
- Secondary air pressure

Indicators and warning lights in front of the driver: Parking brake engaged Low air with buzzer



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Antilock brake warning Check transmission Transmission temperature Upper power indicator Seat belt Engine temperature Low oil indicator Low voltage indicator Air filter restriction light Low coolant indicator High idle indicator Power on indicator Check engine Stop engine Check engine MIL lamp DPF indicator High exhaust temperature Wait to start Other indicator and warning lights (if applicable): Differential locked PTO (s) engaged Auto-slip response Retarder engaged Retarder temperature ESC indicator Controls located on main dash panel in front of the driver: Master power disconnect with ignition switch Engine start switch Headlight switch Windshield wiper/washer switch Differential lock switch (if applicable) Dimmer switch for backlighting

Controls included in steering column: Horn button Turn signal switch Hi-beam low-beam switch



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4-way flasher switch Tilt-telescopic steering wheel controls

### **CENTER CONTROL CONSOLE**

There shall be an ergonomically designed center control console. The console shall be constructed of 1/8" smooth aluminum and shall be mounted on the engine hood between the driver and officer. The console shall have a durable coating to match the color of the engine hood covering and shall feature surfaces on each side that are contoured to face the driver and the officer for easy viewing and accessibility. The switches and other customer specified electrical items shall be mounted in removable 1/8" smooth aluminum panels with a black wrinkle finish. The console shall have an aluminum lift-up lid with quick release latch. The lid shall be held in the open position with a gas strut to allow for easy access and serviceability.

Controls located in the console conveniently accessible to the driver:

Transmission shifter Pump shift control with OK TO PUMP and PUMP ENGAGED lights Remote mirror control Illuminated rocker switches to control high idle, Jacob's brake, siren/horn, siren brake, master emergency, and other customer specified components 12V power point (if applicable)

Controls located in the console conveniently accessible to the driver and the officer (center): Parking brake control with a guard to prevent accidental engagement

Controls located in the console conveniently accessible to the officer:

Illuminated rocker switches to control customer specified components that are easily reachable to the officer and do not allow for compromise of the driver's view, and eliminate the need for foot switches Surface to recess siren head, radio head, or other desired items as space permits 12V power point (if applicable)

Driving compartment warning labels shall include:

HEIGHT OF VEHICLE OCCUPANTS MUST BE SEATED AND BELTED WHEN APPARATUS IS IN MOTION DO NOT USE AUXILIARY BRAKING SYSTEMS ON WET OR SLIPPERY ROADS EXIT WARNINGS

Additional labels included: COMPUTER CODE SWITCH ABS CODE SWITCH



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FLUID DATA TAG CHASSIS DATA TAG

#### **OVERHEAD CONTROL CONSOLE**

An ergonomically designed overhead console shall be provided above the driver and officer, running the full width of the cab. The overhead console shall be constructed from 1/8" aluminum plate and shall be painted with a durable finish to match the inside of the cab. There shall be seven (7) removable 1/8" smooth aluminum plates with a black wrinkle finish to house switches and other electrical items.

Directly above the driver there shall be two (2) panels with no cutouts, unless otherwise specified by the customer.

There shall be a panel located to the right of the driver that shall be designated for defroster, heat, and air conditioning controls (if specified).

The center overhead panel shall be designated for up to seven (7) door ajar indicators. Upon releasing the apparatus parking brake, one or more of these lights shall automatically illuminate (flash) when any of the following conditions occur that may cause damage if the apparatus is moved: cab or compartment door is open; ladder or equipment rack is not stowed; stabilizer system deployed; any other device has not been properly stowed.

There shall be a panel to the left of the officer as well as two (2) directly above the officer. These panels shall have no cutouts, unless otherwise specified by the customer.

#### ENGINE WARNING SYSTEM

An engine warning system shall be provided to monitor engine conditions such as low oil pressure, high engine temperature and low coolant level. Warning indication shall include a STOP ENGINE (red) light with audible buzzer activation and a CHECK ENGINE (amber) light. Note: (Some engine configurations may also include a fluid warning light.)

There shall be a master information light bar with 24 lights located across the center of the dash panel that covers up to 24 functions. These are defined under Indicators and Warning Lights above.

#### PUMP SHIFT MODULE



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An electronic pump shift module with yellow knob toggle switch for shifting road mode/none/pump mode shall be within easy reach of the driver. The module shall be constructed of an aluminum composite panel and flush mount LED indicators with backlit verbiage. A gear lockup will be provided interlocked with park brake to hold the transmission in direct drive for pump operation.

#### CAB LOCKDOWN INDICATOR LIGHT

There shall be sensors in the cab lockdown latches. The sensors will send a signal to a marked light in the overhead light bar, inside the cab, to indicate when the cab in securely latched to the chassis, when the parking brake is released.

#### TRANSMISSION GAUGE

A transmission oil pressure gauge shall be provided on the cab dash.

#### DOOR AJAR LIGHT

An Ecco 6220 strobe light shall be installed in the cab near the driver. The light shall illuminate when the parking brake is released and any cab or body door is open or any other item on the apparatus is not properly stowed that may cause damage.

#### DOOR AJAR ALARM

A door ajar alarm shall be installed in the interior of the cab

#### MAPBOOK SLOT

A mapbook slot shall be installed on exterior of the breaker panel located on the officer's side of the cab.

#### PROGRAMMABLE LOAD MANAGER

Load manager shall have the ability to sequence loads on and off. The Super Node II has twenty-four (24) inputs and twenty-four (24) outputs. Eighteen (18) are positive polarity outputs and six (6) are ground polarity outputs. It shall also be able to establish a 8 priority levels to sheding loads when the vehicle is stationary, starting at 12.8 volts lowest priority load to be shed, then respectively at 12.7, 12.5, 12.3, 12.1, 11.9, 11.5 and never shed volts DC. An output is shed (turned OFF) when the system voltage drops below the



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designated priority level's shed voltage for thirty (30) seconds. If the voltage has dropped below multiple priority level shed voltages then each higher priority level will shed before the lower priority levels. An output is unshed (turned back ON) when the system voltage rises above the designated priority level's unshed voltage for ten (10) seconds. If the voltage has risen above multiple priority level unshed voltages then each lower priority level will unshed before the upper priority levels.

#### MASTER SWITCH

All outputs can be tied or not tied to the stage switch. In fire apparatus this switch is typically referred to as the master switch. The state of the stage switch is controlled by Utility Module output memory space 3. When this output is active the stage switch is active. Any output tied to the stage switch will be OFF if the stage switch is not active regardless of the output's multiplex equation. Set an output to be tied to the stage switch by checking the stage switch box in its "Output Port Load Settings" under the "Settings" tab. The name of the stage switch can be changed from the standard "stage" to anything desired by modifying the text in the "Output Port Load Settings" area.

#### **AUTOMATIC HIGH IDLE ACTIVATION**

The Utility Module's high idle request (input memory space 2) is activated when the system voltage drops below the high idle threshold (12.8 volts standard or 25.6 volts if 24 volt load management is enabled) for 8 seconds or longer AND load management has been enabled (Utility Module output memory space 1 is active). The high idle request will remain active as long as the voltage remains below the voltage threshold and for 3 minutes after the system voltage rises above the voltage threshold. High idle can be canceled by activating the Utility Module's high idle cancel (output memory space 0).

#### HIGH IDLE

The engine shall have a "high idle" switch on the dash that shall maintain an engine RPM of 1,000. The switch shall be installed at the cab instrument panel for activation/deactivation. The "high idle" mode shall become operational only when the parking brake is on and the truck transmission is in neutral.

#### AUXILIARY POWER POINTS

Two (2) 12-volt 20-ampere auxiliary lighter socket type plug-ins, shall be provided in the cab, one near the driver and one near the officer.



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#### USB POWER POINTS

Two (2) 12-volt dual port USB power points shall be provided in the cab.

#### CAB ACCESSORY FUSE PANEL

A fuse panel shall be located underneath the rear facing seat on the officer's side. The fuse panel shall consist of six (6) battery hot and six (6) ignition switch circuits. Each circuit shall be capable of 10-ampere 12volt power and total output of 50-amps. The fuse panel shall be capable of powering accessories such as hand held spotlights, radio chargers, hand lantern chargers and other miscellaneous 12-volt electrical components.

#### POWER & GROUND STUDS, OVERHEAD COMMAND CONSOLE

There shall be a set three of (3) threaded power studs provided in the cab's overhead Command Console for future installation of two-way radios.

The studs shall be wired as follows:

- One (1) 12-volt 60-amp, direct to the battery
- One (1) 12-volt 30-amp controlled by the ignition switch
- One (1) 12-volt 125-amp ground

#### POWER & GROUND STUDS, UNDER OFFICER'S SEAT

There shall be a minimum of four (4) threaded power studs provided under the officer's seat to accommodate the future installation of two-way radios.

The studs shall be wired as follows:

- One (1) 12-volt 40-amp controlled by the battery switch
- One (1) 12-volt 60-amp controlled by the ignition switch
- One (1) 12-volt 60-amp, direct to the battery
- One (1) 12-volt 100-amp ground

#### VEHICLE DATA RECORDER



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An Akron / Weldon vehicle data recorder as required by the 2009 edition of NFPA 1901 shall be installed. Vehicle data shall be sampled at the rate of 1 second per 48 hours, and 1 minute per 100 engine hours.

Free software is available to allow the fire department to collect the data as needed.

#### LIGHTING CAB INTERIOR

Interior lighting shall be provided inside the front of the cab for passenger safety. Two (2) Whelen 6" round ceiling mounted combination red/clear LED dome lights with a push button on/off switch in the light lens. One light shall be located over each the officer and driver's position. The lights shall also activate from the open door switch located in each cab doorjamb.

#### LIGHTING CREW CAB INTERIOR

Interior lighting shall be provided inside the crew cab for passenger safety. Two (2) Whelen 6" round ceiling mounted combination red/clear LED dome lights with a push button on/off switch in the light lens shall be provided. The lights shall also activate from the open door switch located in each cab doorjamb.

#### DOOR LIGHTS

One (1) Whelen 500 series TIR6 model 50\*03Z\*R LED light shall be installed in a chrome plated bezel inside each of the lower cab doors. The lights shall be wired to flash when the ignition is on and the cab door is open.

#### HEAVY DUTY HEATER/DEFROSTER/AIR CONDITIONER

There shall be a minimum 80,000 cool BTU and 65,000 heat BTU single unit, heater/air conditioner mounted over the engine cover. The unit shall be mounted in center of the cab on the engine hood/enclosure. Unit shall have a shutoff valve at the right side of the frame, next to the engine. Airflow of the heater/air conditioner shall be a minimum 1200 CFM. To achieve maximum cooling, a TM-31 Compressor (19.1 cu. in.) will be used.

The defroster/heater shall be a minimum of 35,000 BTU and shall be a separate unit mounted over the windshield. There shall be eight (8) louvers/diffusers to direct to windshield and door glass. Airflow of the defroster/heater shall be a minimum 350 CFM. The unit shall be painted Zolatone greystone to match the cab ceiling.



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The condenser shall be roof mounted and have 80,000 BTU rating. The unit shall include two fan motors. Airflow of the condenser shall be a minimum 2250 CFM. (This roof-mounted condenser shall work at full rated capacity at an idle with no engine heat problems.)

#### HEATER/DEFROSTER/AIR CONDITIONING CONTROLS

The heater/defroster/air conditioning shall be located in the overhead console in the center of the apparatus cab within reach of the driver and officer. The controls shall be illuminated for easy locating in dark conditions. The controls shall be located in such a way that the driver will not be forced to turn away from the road to make climate control adjustments. Control of all heater/defroster/air conditioning functions for the entire apparatus cab shall be achieved through these controls.

#### FLOORBOARD HEATING DUCT

There shall be ductwork to the floor of the cab, facing forward to provide heat for the front of cab floor area.

#### **DEFROSTER DIFFUSER**

A molded diffuser made of durable ABS plastic ductwork system shall be provided. It shall be form fitted and shall attach to the cab's overhead defroster unit to provide temperature controlled air to the windshields. Air flow of up to 280 cfm is balanced and directed across the entire windshield for optimum defrosting capability in all types of weather.

#### TOOL MOUNTING PLATE

There shall be a 3/16" smooth aluminum plate installed on top of the heat/ air conditioning unit for use in mounting of equipment. The plate shall measure approximately 25" wide x 19.5" long and shall be spaced up 1". The mounting plate shall feature beveled edges on the front and rear for a finished appearance. The plate shall be coated with the same finish as the heat/air conditioning unit and shall be secured with screws for easy replacement.

#### **STORAGE COMPARTMENT**

A storage unit constructed of .125" aluminum material shall be installed on the back of the heat/air conditioning, and shall have 3 slots to vertically slide EMS glove boxes into with acress to the rear crew area.



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#### AUXILIARY DEFROSTER FAN

There shall be a Red Dot model RD-5-5786-OP 12-volt fan mounted under the upper command console, inboard of console position 2, directed at the driver's side windshield. The fan shall be activated by a 3position toggle switch located at the base of the fan. The switch positions shall be High, Low and Off.

#### AUXILIARY DEFROSTER FAN

There shall be a Red Dot model RD-5-5786-OP 12-volt fan mounted under the upper command console, inboard of console position 5, directed at the officer's side windshield. The fan shall be activated by a 3position toggle switch located at the base of the fan. The switch positions shall be High, Low and Off.

#### DRIVER'S SEAT

A H.O. Bostrom Sierra high back ABTS seat with air suspension shall be provided for the driver. The seat shall be equipped with a red 3-point shoulder harness with lap belt. The seat shall have fore/aft adjustment and shall be upholstered with heavy duty Low Seam Durawear Plus material.

#### HELMET STORAGE

The helmet for the above seat shall be stored in a compartment. A placard shall be provided visible to the riding position warning that injury may occur if helmets are worn while seated.

#### OFFICER'S SEAT

An H.O. Bostrom Tanker 350 ABTS SCBA seat shall be provided for the officer. The seat back shall have a SCBA cavity and auto-pivot-and-return padded headrest. The seat shall be equipped with a red 3-point shoulder harness with lap belt and an automatic retractor built into the seat assembly. The seat shall be upholstered with heavy duty Low Seam Durawear Plus material.

#### **UNDER SEAT STORAGE COMPARTMENT**

There shall be an open storage area under the officer's seat, accessible from the front. The storage area shall be approximately 19.5" wide x 14.375" high x 21.75" deep. The lower rear portion of the compartment shall be tapered to accommodate the wheel well and wiring chase. The opening shall be approximately 15.5" wide x 10.5" high.



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#### HELMET STORAGE

The helmet for the above seat shall be stored in a compartment. A placard shall be provided visible to the riding position warning that injury may occur if helmets are worn while seated.

#### CREW SEAT - DRIVER'S SIDE, REAR FACING

One (1) H.O. Bostrom Tanker 450 ABTS SCBA fixed base seat shall be installed behind the driver. The seat back shall have a SCBA cavity and auto-pivot-and-return padded headrest. The seat shall be equipped with a red 3-point shoulder harness with lap belt and an automatic retractor built into the seat assembly. The seat shall be upholstered with heavy duty Low Seam Durawear Plus material.

#### HELMET STORAGE

The helmet for the above seat shall be stored in a compartment. A placard shall be provided visible to the riding position warning that injury may occur if helmets are worn while seated.

#### CREW SEAT - OFFICER'S SIDE, REAR FACING

One (1) H.O. Bostrom Tanker 450 ABTS SCBA fixed base seat shall be installed behind the officer. The seat back shall have a SCBA cavity and auto-pivot-and-return padded headrest. The seat shall be equipped with a red 3-point shoulder harness with lap belt and an automatic retractor built into the seat assembly. The seat shall be upholstered with heavy duty Low Seam Durawear Plus material.

#### HELMET STORAGE

The helmet for the above seat shall be stored in a compartment. A placard shall be provided visible to the riding position warning that injury may occur if helmets are worn while seated.

#### EMS CABINET, FORWARD FACING

There shall be a cabinet constructed of .125 aluminum plate and painted to match the interior of the cab. The cabinet dimensions shall be approximately 46" wide x 18" deep x 53" tall. The cabinet shall come complete with interior access. Strip lighting shall be provided in the cabinet. The cabinet shall be provided on the back wall of the cab, mounted on the crew seat riser, in place of the two forward facing crew seats.



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#### **INTERIOR COMPARTMENT OPENING**

The compartment shall come complete with a single interior access opening, and 1" nylon black webbing with black plastic buckles to cover the opening.

#### ADJUSTABLE SHELVES

There shall be two (2) adjustable shelves provided and installed in the compartment. The shelves shall be fabricated of .188 aluminum plate and have two 1.5" x 1.5" x 1.8" aluminum angles welded to the underside of the shelf for support.

#### SEAT UPHOLSTERY COLOR

The cab seat upholstery shall be black in color.

#### SCBA BRACKETS

Each SCBA seat in the cab shall feature an H.O. Bostrom SecureAll self contained breathing apparatus (SCBA) locking system. The seat back shall include a bracket which shall be capable of storing most U.S. and international SCBA brands and sizes while in transit or for storage. The bracket shall be easily adjustable for all SCBA brands and cylinder diameters; adjustment points shall utilize similar hardware and adjustments shall be made with one tool.

The bracket shall be adjustable to compensate for different cylinder lengths without the use of tools. The adjustment shall be made by raising a lever and moving the top clamp vertically.

The bracket system shall be free of straps and clamps that may interfere with auxiliary equipment on SCBA units. The center guide fork shall keep the tank in-place for a safe and comfortable fit in seat cavity. Fire fighters shall simply push the SCBA unit against the pivot arm to engage the patented auto-locking system. Once the lock is engaged, the top clamp shall surround the top of the SCBA tank for a secure fit in all directions.

The locking system shall include a release handle integrated into the seat cushion for quick and easy release and to eliminate the need for straps or pull cords which might interfere with other SCBA equipment.



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#### SEAT BELT WARNING SYSTEM

An Akron / Weldon seat belt warning system shall be provided and shall monitor each seating position. Each seat shall be supplied with a sensor that, in conjunction with the display module located on the dash, shall determine when the seat belt was fastened and if the seat is occupied. An icon shall represent that the seat is properly occupied. An audible and visual alarm shall be activated if the seat is occupied and/or the belt is not fastened in the proper sequence.

#### CREW SEAT COMPARTMENT

A compartment shall be provided under the forward facing crew seats on the back wall of the cab. The front of the compartment shall be open and enclosed with black nylon webbing. The webbing shall be secured with plastic buckles. Compartment dimensions are 91.5"L x 14"H x 19"W. IN-CAB OVERHEAD STORAGE AREA

An overhead storage area shall be provided at the front of the raised roof portion inside of the cab above the rear-facing crew seats. The full-width storage area shall be approximately 84" wide x 10.5" high x 17" deep and shall have a Zolatone gray/black rubberized, textured finish to match the cab interior. Removable nylon netting shall be provided to cover the storage area opening.

#### **VOYAGER, 2 CAMERA SYSTEM**

Provided and mounted on the apparatus shall be One (1) HD Voyager 7" Color Sealed,

Weatherproof/Dustproof LCD Monitor (AOM713WP); One (1) Rugged Color Camera, 130°; Viewing Angle,

LED Low light Assist (VCCS130); One (1) Right Color Side Body Camera, 110°; Viewing Angle w/ Housing (VCCSIDRCM); One (1) 50' Camera Cable to LCD Monitor (CEC50); One (1) 15' Camera Cable to LCD Monitor (CEC15); One (1) 6" Double Knuckle Monitor Mount (72706).

#### LED ICC/MARKER LIGHTS

LED type ICC/marker lights shall be provided to meet D.O.T. requirements.



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#### **GROUND LIGHTING**

The apparatus shall be equipped with lighting capable of illumination to meet NFPA requirements. Lighting shall be provided at areas under the driver and crew riding area exits and shall be automatically activated when the exit doors are opened. The ground lights shall be Truck-lite® LED model #44042C. Lighting required in other areas such as work areas, steps and walkways shall be activated when the parking brake is applied, provided the ICC lights are on.

#### **OPTICAL WARNING SYSTEM**

The optical warning system shall be capable of two separate signaling modes during emergency operations. One mode shall signal to drivers and pedestrians that the apparatus is responding to an emergency and is calling for the right-of-way and the other mode shall signal that the apparatus is stopped and is blocking the right-of-way.

A momentary rocker switch shall be provided near the driver and labeled Master Emergency to energize all of the optical warning devices provided. A secondary momentary rocker switch shall be provided near the officer. All lights shall operate at not less than the minimum flash rate per minute as specified by NFPA.

#### UPPER LEVEL WARNING DEVICES

The upper level shall be divided into zones A (front), B (officer's side), C (rear) and D (driver's side). Zone A shall be provided by the chassis manufacturer as follows:

#### LOWER LEVEL WARNING DEVICES

The lower level shall be divided into zones A (front), B (officer's side), C (rear) and D (driver's side). Zone A shall be provided by the chassis manufacturer as follows:

Zone A (front) shall have four (4) Whelen M6 series model M6\* Super LED warning lights.

The lights shall be installed two (2) each side on the front of the cab in the warning light housings.

#### WARNING LIGHT FLANGES



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There shall be six (6) Whelen M6FC600 flanges installed, one behind each Whelen M6 warning light mounted on the stainless steel headlight housing. Four (4) in Lower Warning Zone A (front), one (1) Lower Warning Zone B (officer's side), and one (1) Lower Warning Zone D (driver's side).

#### LOW POWER SWITCH

The emergency light shall have a low power switch that can will reduce power to all emergency lights when apparatus in a blocked mode.

Switch shall be interlocked to be available only when the parking brake is set.

#### ADDITIONAL WARNING LIGHTS

There shall be (2) additional Whelen M6 Series model M6\* Super LED warning lights installed on the apparatus.

Location of these lights to be above diver and officer side wheel wells.

#### BROW MOUNTED LED SCENE LIGHT

A Whelen Pioneer PFH2 brow mounted LED scene light shall be provided. The lamp head shall operate at 12 volts DC, draw 12.5 amps, and generate 16,000 lumens of light. The light shall be mounted at the front brow of the cab and shall be controlled from a switch in the cab.

#### TELESCOPIC LED SCENE LIGHT

A Whelen PFH2 telescopic LED scene light shall be provided. The lamp head shall operate at 12 volts DC, draw 13 amps, and generate 16,000 lumens of light. The light shall be installed at a fire department specified location with bottom mount cradle. The light shall have a switch on the lamp head and shall also be controlled from a switch in the cab.

#### SCENE LIGHTS

A pair of Whelen M9 LED scenelights shall be installed.

They shall be located above window between front and crew cab doors on each side of cab.

#### **ADDITIONAL 3-WAY SWITCH**

An additional 3-way switch shall be provided per the customer's location.



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#### **CORROSION REDUCTION POLICY**

The manufacturer shall have in place a formal corrosion reduction program and assembly procedures designed for reducing and eliminating the possibility of corrosion. It is understood that fire apparatus will operate in harsh environments. At the time of the bid the apparatus manufacturer shall show proof of a corrosion policy. Failure to submit this information could be grounds for rejection. If a formal policy is not in place explain in your bid how your firm will take the necessary steps for corrosion reduction. There will be no exception to this requirement.

In addition to a formal program the manufacture shall show proof of testing corrosion reduction processes to ASTMB117. A copy of recent test shall be included in the bid.

#### **Frame Rails**

The chassis frame rails shall be coated with a high performance, two component, reinforced inorganic zinc rich primer with a proven cathodic protection makeup preferably Cathacoat 302HB. The surface shall be clean and free of all salts, chalk and oils prior to application. Where the primer has been broken during the frame assembly process the area shall be touched up to reestablish the seal. Prior to finish paint a second primer Devran 201 shall be applied. Once the assembly of the frame is complete and the second primer is applied the entire assembly shall be covered with high quality top coat paint preferably Imron 5000 or equal. The manufacturer shall submit with the bid a copy of the product brochure and or description of the primer to be used.

#### **Electro Plating**

Steel and Iron brackets such as the pump module bracket shall be Zinc plated to protect against corrosion. Plating shall be in accordance with ASTM B663. The apparatus manufacturer shall list all components with plating.

#### Fasteners

In any area that a stainless steel screw or bolt head is to come in contact with aluminum or steel, painted or non-painted, the fastener shall have the underside if the head pre-coated with nylon. The nylon coating shall act as a barrier between the fastener head and the metal or painted surface.

Screw or bolt taped into the metal shall be pre-coated with a Threadlocker type material pre-applied on the threads.

When bolting together stainless steel the manufacturer shall use a pan-head bolt with nylon coating under the head, a stainless washer with a rubber backing, and a Stover flange nut to secure the bolt.



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When mounting aluminum components such as a step to the apparatus body. The manufacturer shall use stainless washers with rubber backing. All mounted components shall a barrier material between the two surfaces.

All rivet type fasteners shall be of the same material being secured.

Whenever possible, pre-drill and tap all holes for mounting components such as lights, steps and hand rails prior to the paint process to reduce the corrosion opportunity. If a hole must be drilled into a previously painted surface, re-establish the paint barrier around the hole and use a flange-type nutsert with a gasket under the flange.

Where possible, minimize the number of stainless trim screws in aluminum. Structural tape and or adhesive shall be used where possible for mounting trim to the body or cab.

If a pre-treated screw or bolt is not available, hand apply Dynatex Boltlocker or Theadlocker on the threads of the screw, bolt or nutsert. This will help seal threads from moisture and help prevent the fasteners from loosening.

If lubricant is used when tapping the hole, clean out the lubricant and the shavings before applying blue Threadlocker into the hole.

#### **Barrier Tape**

Barrier tape shall be used on the backsides of all lights, trim pieces, or other components when bolting them to the apparatus; also when attaching stainless steel over an aluminum surface or when attaching aluminum treadplate to the stainless steel. All instances of dis-similar metals contacting each other require the addition of barrier tape between the metals where contact is made.

Before applying the tape, be sure the metal surface is clean from oil or dirt by cleaning the surface with a 50/50 mix of alcohol and water pr similar solvent.

#### Gaskets

Gaskets shall be used under all snaps, loops and fasteners for such items as for hose bed covers. Reestablish paint seal around the mounting hole edges after drilling.

Mounting with Threadlocker coating shall be used.

Flat washers with rubber backing shall be used behind all lights that have stainless screws.



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#### **Rollup Doors**

1 3/4" X 1/16" barrier tape shall be used on the frame opening to act as barrier between the aluminum door rail and the painted door opening surface.

Use a paint stick around the holes after drilling and tapping. In mounting the rails, use screws with the nylon under the head and Threadlocker on the threads for mounting the doorframes.

Install barrier tape to the painted surface where the trim is located on top of the door opening.

#### **Hinged Doors**

Barrier tape shall be applied to the painted surface of the body and on the painted hinge side of the door.

On the hinge side, mount tape out toward the edge to space over the barrel of the **hinge**, being sure to not touch the door.

Make sure the hinge fits into the extrusion frame with no corner weld beads interfering with the door fit. Do not put the hinge in a bind or cause the stainless steel hinge to touch the aluminum. Install the doors using a truss head bolt with the nylon coating under the head and Threadlocker on the threads.

#### **Painting Steel**

The manufacturer shall wipe any oil residue dry, remove any rust and remove weld slag or smoke. Clean the surface with solvent before painting. Prime with one even coat of black Color primer, and then spray a topcoat over the primer for the finish coat. After bolts are tightened to the proper torque, touch up the bolt area and ends of the bolts with primer or cold galvanizing coating.

#### **Mounting Emergency Lights and Options**

All emergency lights, accessory mountings, Kussmaul covers, and 110 outlet boxes mounted to the body should be mounted with pre-coated Threadlocker and nylon under the head screws or bolts to minimize corrosion between dissimilar metals.

#### **Electrical Grounding**

Grounding straps shall be installed consisting of a minimum 2-gauge strap bolted to the chassis frame.

- A ground cable from the cab to the right side frame rail
- From the alternator to the right side frame rail
- From the pump module frame to the right side truck frame.
- Aerials: from the hydraulic and pump module framework.
- From the pump mount to the truck frame rail.
- From the body module to the right side truck frame.



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Proper grounding will help eliminate ground loop problems throughout the truck, reducing the possibility for electrolysis and corrosion to occur. Provide clean connection points on all ground connections, (remove paint where applicable), and spray or brush on electrical sealer as necessary.

When installing foam system pump wiring the power must come from a dedicated breaker to a power solenoid, and then to the power terminal provided by FoamLogix or FoamPro. Pay particular attention to the grounding detail for wire size and good grounding practice, including removing the paint at the point of ground attachment to the chassis. Keep the length of ground wire as short as practically possible.

#### SALT SPRAY TESTING

Salt spray test shall be used to confirm the relative resistance to corrosion of coated and uncoated metallic specimens, when exposed to a salt spray climate at an elevated temperature. Test specimens shall be placed in an enclosed chamber and exposed to a continuous indirect spray of neutral (pH 6.5 to 7.2) salt water solution, which falls-out on to the specimens at a rate of 1.0 to 2.0 ml/80cm<sup>2</sup>/hour, in a chamber temperature of +35C. This climate shall be maintained under constant steady state conditions.

#### Method

Salt fog testing shall be performed by placing samples in a test cabinet that has been designed in accordance with Paragraph 4 (Apparatus) of ASTM B117 and operated in accordance with Paragraph 10 (Conditions) of ASTM B117.

A 5% salt solution, prepared by dissolving sodium chloride into water that meets the requirements of ASTM D1193 Specification for Reagent Water, Type IV is supplied to the chamber. At the time the samples are placed into test, the cabinet should be pre-conditioned to the operating temperature of 35°C and fogging a 5% salt solution at the specified rate. The fog collection rate is determined by placing a minimum of two 80 sq. cm. funnels inserted into measuring cylinders graduated in ml. inside the chamber. One collection device shall be located nearest the nozzle and one in the farthest corner.

#### Orientation

Unless otherwise agreed upon, the samples are placed at a 15-30 degree angle from vertical or tested in the "installed" position. This orientation allows the condensation to run down the specimens and minimizes condensation pooling. Overcrowding of samples within the cabinet should be avoided. An important aspect of the test is the utilization of a free-falling mist, which uniformly settles on the test samples. Samples should be placed in the chamber so that condensation does not drip from one to another.

#### **Test durations**



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Test durations shall be 500 hours except for sample rotation and daily monitoring of collection rates, the cabinet should remain closed for the duration of the test.

#### PAINTING

All exposed metal surfaces not chrome plated, polished stainless steel or bright aluminum tread plate shall be thoroughly cleaned and prepared for painting. All irregularities in painted surfaces shall be rubbed down and all seams shall be caulked before the application of the finish coat.

All removable items such as brackets, door hinges, trim, etc. shall be removed and painted separately to insure finish paint behind all mounted items. Both aluminum and steel surfaces to be painted shall be primed with a two (2)-component primer which is compatible with the finish coat. The apparatus shall be finish painted with a polyurethane base/clear system. "No Exception"

A barrier gasket/washer of "High Density Closed Cell Urethane Foam" shall be used behind all lights, handrails, door hardware and any miscellaneous items such as stainless steel snaps, hooks, washers and acorn nuts. The gaskets/washers shall be coated with pressure sensitive acrylic adhesive. All screws used to penetrate painted surfaces shall be pre-treated/coated under the head with nylon and the threads shall have pre-coat #80. This procedure shall be strictly adhered to for corrosion prevention and damage to the finish painted surfaces.

The following paint process shall be utilized:

#### **Surface Preparation:**

- 1. Wash surface thoroughly with mild detergent.
- 2. Clean and de-grease with Prep-Sol 3812S.
- 3. Sand and feather edge using 400 grit or finer on a dual action sander.
- 4. Remove sanding dust with a cleaner compatible with polyurethane base coat/clear coat final finish.

#### Substrate treatment:

1. Use a Metal Conditioner followed with a Conversion Coating product.

#### **Priming:**

- 1. Use a priming 615S pretreatment.
- 2. Use a self etching primer applied to achieve a 1.5 mil dft minimum.
- 3. Use Prime N Seal sealer compatible with polyurethane base coat.

#### **Color Coat:**



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1. Apply polyurethane base coat 1-2 mil dft minimum.

#### Clear coat:

1. Apply polyurethane clear coat 2 mil dft minimum.

#### PAINT-TWO TONE CAB

The cab exterior surfaces shall be two (2) colors. The paint break line shall be at the bottom of the windshield.

#### PAINTED FRAME

The frame rails and body rear drop shall be painted glossy black.

#### AIR CONDITIONING CONDENSER

The air conditioning condenser shall be painted to match the cab roof.

#### MISCELLANEOUS EQUIPMENT FURNISHED

1 pt. touch-up paint A bag of stainless steel nuts and bolts, as used in the construction of the apparatus.

#### **OPERATION AND SERVICE MANUALS**

Complete "Operation and Service" manuals shall be supplied with the completed apparatus, one (1) printed copy and one (1) USB flash drive. Service manual instructions shall include service, maintenance and troubleshooting for major and minor components of the truck. The apparatus manufacturer shall supply part numbers for major components (i.e. Engine, Axles, Transmission, Pump, etc.). A table of contents, hydraulic, air brake and overall apparatus wiring schematics shall be included.

A video demonstration DVD on the operation of the truck shall be supplied with the manuals.



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#### DEALER PREP/INSPECTION

The apparatus dealer responsible for the sale of the Sutphen apparatus shall perform a pre-delivery inspection of the apparatus prior to the customer taking possession of the vehicle. This inspection allows for the dealer to record all applicable part and serial numbers for the apparatus so that service and parts can be easily facilitated during the service life of the vehicle. This inspection allows for a second quality control check, prior to the apparatus being placed in service.

#### WARRANTIES

The following warranties shall be supplied:

1. The apparatus shall be warranted to be free from mechanical defects in workmanship for a period of one (1) year.

2. The apparatus shall be covered for parts and labor costs associated with repairs for a period one (1) year.

- 3. Life-time warranty on the frame.
- 4. Seven (7) year warranty on paint.
- 5. Ten (10) year cab structural warranty
- 6. Manufacturers Warranties for all major components.

Detailed warranty documents shall be included for complete coverage on each of these warranties.

#### APPARATUS SIZE

Total overall length of apparatus is not to exceed:

Overall Width is not to exceed:

NOTE: Any peripherals that are 'removable' are not be incorporated into this Overall Width measurement. Items that are considered 'removable' are: Rub Rails, Fenderettes, Mirrors, Lights, Handrails, Etc.

Highest point of apparatus is not to exceed:

Chassis wheelbase is not to exceed:



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#### **ROLLOVER STABILITY - NFPA (CURRENT): TILT TABLE TESTING**

The apparatus shall meet the rollover stability criteria defined in current NFPA by passing a tilt table test. The apparatus shall remain stable to 26.5 degrees in both directions when tested on a tilt table in accordance with SAEJ2180.

#### TILT TESTING FACILITIES

Custom Fire Apparatus, Inc. has a 40', 100,000-pound capacity "Tilt Table Testing Facility", capable of lifting the proposed fully loaded apparatus. The customer is welcome to witness the Tilt-table Certification Test as it is being performed, at Custom Fire's facility in Osceola, Wisconsin.

#### FLUID DATA LABEL

A printed Fluid Data Field label is to be furnished, installed inside the chassis and visible from exterior ground level. Data Field is to provide the following information, **as is applicable** to the particular apparatus:

- 1. Engine Oil
- 2. Engine Coolant
- 3. Chassis Transmission Fluid
- 4. Pump Transmission Lubrication Fluid
- 5. Pump Primer Fluid
- 6. Drive Axle Lubrication Fluid
- 7. Air Conditioning Refrigerant
- 8. Air Conditioning lubrication oil
- 9. Power Steering Fluid
- 10. CAFS System Lubricant
- 11. Transfer Case Fluid
- 12. Front Tire Cold Pressure
- 13. Cab Tilt Mechanism Fluid
- 14. Transfer Case Fluid (chassis)
- 15. Equipment Rack Fluid
- 16. Generator System Lubricant
- 17. Chassis Manufacturer
- 18. OEM Production Number
- 19. Paint Number



### **Custom Pumpers**

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20. Year Built

21. Date Shipped

- 22. Vehicle Identification Number (VIN)
- 23. Rear Tire Cold Pressure

Fluid Data label is to be permanently encased in a chrome full surround bezel.

#### WARNING LABEL: VEHICLE WEIGHT, HEIGHT, LENGTH, AND SEATING CAPACITY

A single label, with printed data field, is to be installed in the cab, in direct view of the seated Driver, to denote the following:

#### VEHICLE WEIGHT

To indicate, in pounds and tons, the vehicle's total "as delivered" weight (with water and/or foam load, if so equipped), and the maximum for seated occupants (250 pounds allowance for each person).

#### **VEHICLE HEIGHT AND LENGTH**

In feet-and-inches; the overall height of the vehicle (to the highest permanent point-except antennas), and overall length of vehicle (bumper to tailboard).

#### SEATING/OCCUPANCY

The exact number of passengers to be carried in the chassis cab and/or crew cab.

**NOTE:** The dimensions and weight are to be "<u>as manufactured</u>", and the customer must revise the data plate, if they so change the height (by permanent loading and accessory equipment/device installations), and the weight by adding loose equipment, products, and supplies.

**WARNING** Label is to be permanently encased in a chrome full surround bezel.

#### SEAT BELT WARNING LABELS

One or more permanent labels to be installed in the cab visible to each seating position, to read: **WARNING: Occupants must be seated and belted while apparatus in in motion**. Labels are to be permanently encased in a chrome full surround bezel.

#### HELMET WARNING LABEL



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One or more permanent labels to be installed in the cab visible to each seating position, to read: **WARNING: Occupants MUST NOT wear helmets while seated**.

Labels are to be permanently encased in a chrome full surround bezel.

#### AIR SYSTEM PRESSURE PROTECTION VALVE

The chassis air system shall be furnished with a Pressure Protection Valve/Device. The Pressure Protection Valve shall prevent the passage of air pressure, to apparatus builders installed accessories, such as: Air Horns, PTO or Pump Shift, Air Actuators, and other air operated accessories, whenever system air pressure is below 80.

#### CUSTOM CHASSIS FRONT BUMPER EXTENSION

The specified front bumper is to be extended forward of the chassis cab, using chassis frame rail extension brackets, as are furnished by the custom chassis manufacturer (OEM).

#### LENGTH OF BUMPER EXTENSION, AHEAD OF GRILLE

The front bumper is to be extended 18-inches ahead of the front grille, with specified gravel shield extending from bumper flange to within 1" of the front grille.

#### HIGH IDLE

See CHASSIS segment of specifications, for description of: High Idle feature to be furnished.

#### AIR INTAKE EMBER SEPARATOR

See CHASSIS segment of specifications, for description of: Air Intake Ember Separator to be furnished.

#### UREA FILL, AS PROVIDED BY CHASSIS OEM

The chassis furnished Urea Fill Station, is not to be modified by body Builder.



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#### UREA RESERVOIR TO BE FILLED UPON DELIVERY

The chassis furnished Urea Reservoir is to be "topped-off" (filled) upon the vehicle's delivery to the purchaser.

#### FUEL AND UREA FILL DOOR, DRIVER SIDE

A Cast Products model FG2208 fuel/urea fill cover shall be installed. The cover shall be constructed of bead-blasted aluminum and shall be vertically hinged on the forward side. The fuel cover flange shall be constructed of aluminum. "LOW SULFUR DIESEL FUEL ONLY" green (color) nametag to be furnished, on the interior door.

A minimum 2" threaded brass vented fuel fill cap shall be furnished, located inside fuel fill door, piped to the underbody diesel fuel tank with: minimum 1.5" i.d. reinforced non-collapsible fuel fill hose and .75" tubing air vent extending from top of underbody fuel tank to top of fuel fill neck.

The tank shall exceed FHWA 393.67 requirements, including 96% fill capacity of tank's total volume.

#### SCUFF PROTECTION BELOW FUEL FILL DOOR

The area immediately below the fuel fill door shall be furnished with a mirror finish polished stainless steel scuff plate. Scuff plate shall be of a size and located to prevent paint damage caused by contact with the fueling nozzle. Scuff plate is to be installed with adhesive (no screws), perimeter edges seal caulked.

#### REMOVABLE PANEL ACCESS TO FUEL TANK

See APPARATUS BODY segment of specifications, for description and location of provided Fuel Tank Access Panel.

#### TIRE VALVE CORE EXTENSIONS



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Two (2) each "rigid" metal valve core threaded extensions shall be furnished, installed on the inside dual rear tires of the vehicle's rear axle. Inside dual wheels shall be positioned so that the valve core extensions protrude through the outside dual wheels, located directly across from the outside dual wheel's valve core.

#### CHASSIS WHEEL FINISH:

Please refer to chassis specifications for chassis front and rear wheel finish and/or wheel trim. All wheels are to remain on the vehicle, and in the original OEM "factory" finish.

#### TIRE PRESSURE WARNING DEVICE, LED CAPS FOR 6 TIRES

There shall be a VECSAFE LED, tire alert pressure management system furnished that shall monitor each tire's pressure. A chrome plated brass sensor shall be furnished on the valve stem of each tire for a total of six (6) tires. The sensor shall activate an integral battery-operated LED when the pressure of a tire drops 8 PSI, from the nominal pressure when the cap was installed. Removing the cap from the sensor shall indicate the functionality of the sensor and battery. If the sensor and battery are in working condition, the LED shall immediately start blinking.

#### **DRIVELINE JOINTS**

The optionally specified Custom Chassis will be furnished with a temporary "jack-shaft" assembly, located in the same position as the fire pump's split-shaft style transmission. Refer to chassis specifications for vehicle driveline specifications.

#### MUD FLAPS

Driver's side and passenger's side front fender and rear body wheel well mud flaps shall be furnished, made of fabric reinforced neoprene rubber, bolted to the front fender liner and rear wheel well bulkheads using stainless steel strap brackets and bolts. Mud flaps shall extend approximately 10" below running board level.

#### NFPA REQUIRED TESTING OF APPARATUS NOISE LEVELS



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The completed apparatus shall be "Noise Level Tested" to be in compliance with NFPA standards in effect on the day of purchase, Noise level testing shall be of the particular apparatus, not of a similar series or model, and shall be accomplished just prior to delivery to the customer.

#### MODIFICATIONS TO CHASSIS, TO BE PROVIDED BY BODY BUILDER:

The following special modifications are to be performed by the Fire Apparatus Body Builder/Manufacturer, on the specified fire apparatus Truck Cab and Chassis.

#### **GOVERNOR TEST, FRAME RAIL PROTECTION & ATTACHMENT STANDARDS:**

#### SPEED GOVERNOR TEST

Engine limiting speed governor is to be tested, upon arrival at the Body Builder's factory for compliance with the maximum no-load engine operating speed, as determined on appropriate engine power curve sheet.

#### SUSPENSION AND FRAME CORROSION PROTECTION

Rear axle suspension brackets left and right sides, front and rear, are to be caulked with silicone sealant preventing build-up of road salts and moisture that may cause future corrosion of bracket-to-frame-rail attachment points.

#### FRAME RAIL MOUNTING PROCEDURE

All chassis frame rail mounted brackets, supports, pump flanges, and apparatus body sub-frame components are to be bolted to the frame rail sides. No holes are to be drilled in the frame flanges, only the web may be drilled. No welding will be allowed to the chassis frame, web, or flanges, ahead of the rear most spring shackles. Frame flange sandwich clamping devices (such as U-bolts) are not to be used.

#### CHASSIS WEIGHTS AND MEASUREMENTS

The apparatus manufacturer is to perform the following described weight recordings and suspension deflection tests, on the bare chassis, and provide resulting information to the Purchaser:

**Load Distribution NFPA 1901, 4.13.3.3:** The fire apparatus, when loaded to its estimated in-service weigh, shall have a side-to-side tire load variation of no more than 7-percent of the total tire load for that axle. In order to provide baseline information for the completed apparatus' demonstration of compliance with this NFPA requirement, the following tests and measurements are to be performed:



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#### BARE CHASSIS SIDE-TO-SIDE WEIGHT RECORDINGS

Individual weights of the bare chassis, at 4-points, are to be taken as follows:

Driver side front tire only weight Passenger side front tire only weight, Driver side only rear tires weight Passenger side only rear tires weight.

These weights are to demonstrate the bare chassis side-to-side weight disparities, prior to installation of permanent apparatus components.

#### BARE AND VARYING LOAD CHASSIS SUSPENSION DEFLECTION TEST

Measurements are to be taken, from top of chassis frame rails-to-ground, above front axle and rear axle(s) driver side and passenger side (4-points), under the following conditions:

Bare chassis, prior to installation of permanent apparatus components. With 4,000 pounds of imposed weight, at projected apparatus load centerline. With 8,000 pounds of imposed weight, at projected apparatus load centerline. With 12,000 pounds of imposed weight, at projected apparatus load centerline.

These bare and weighted measurements are to demonstrate the actual amount of suspension deflection, front and rear/side-to-side, with simulated apparatus payloads.

# NOTE; THE ABOVE WEIGHTS AND DEFLECTION RESULTS, ARE TO BE NOTED WITHIN THE COMPLETED VEHICLE DELIVERY DOCUMENTS.

#### **NFPA RELATED STANDARDS:**

#### **GROUND CLEARANCE STANDARDS**

Axle housings are to clear the road surface by at least 8" and; an angle of departure of at least 8 degrees is to be maintained at rearmost protrusion (bumper/tailboard) of the vehicle when fully loaded.

#### VISIBLE WARNING DEVICE AND PLACARDS

The specified "Hazard" Indicator Light is to be mounted inside chassis cab so as to be prominently visible to the driver.



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#### CAB TILT CONTROLLED AT PASSENGER (OFFICER) SIDE

The hydraulic powered cab tilt device is to be operated from the passenger (Officer) side of vehicle, so as to allow full view of the chassis cab as it is being raised and lowered.

#### CHASSIS CAB PUSH-BUTTON TILT CONTROL CONSOLE AND CABLE

The push-button cab tilt control console with cable, as provided with the custom chassis, is to be "shipped loose" with the completed vehicle. The quick-disconnect bulkhead style coupler plug-in is to be accessible from the ground level, passenger side of the vehicle.

#### COMPLIANT DPF/DEF EXHAUST SYSTEM

The original equipment chassis engine DPF/DEF (diesel particulate filter/diesel exhaust fluid) exhaust system, upstream and downstream of the passenger side outlet, shall remain unaltered (not modified) to remain in compliance with exhaust emission standards in effect at time of contract. The apparatus body design and accessory installations may have to be compromised, in order to prevent interference with the exhaust system components. Fabricated stainless steel heat deflector plates are to be provided, where necessary, to protect body manufacturer installed components from excessive radiant heat. Exhaust outlet shall terminate below body compartment floor immediately ahead of rear wheels on passenger side of vehicle.

#### GATED COOLANT LINES: AUXILIARY HEATER(S)

Engine cooling system chassis cab heater return-to-engine line shall be separated and equipped with a .5" i.d. bronze NRS screw type gate valve and .625" i.d. neoprene rubber heater hose extending to specified auxiliary heater(s). An additional .5" bronze NRS gate valve is to be furnished on the auxiliary heater(s)-to-engine return line. Gate valves shall allow complete shut-off of the chassis cab and remote auxiliary heating system(s) that are downstream of the chassis cab heater. Gate valves shall prevent hot water circulation during warm weather periods and to allow shutdown should a hose or heater core leak develop.

#### COOLANT "BOOST" PUMP



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The specified pump compartment heater core is to be piped to the engine coolant system, installation to include: 12-volt in-line Groco "free-flow" centrifugal cast bronze bodied coolant "boost" pump, parallel run of high grade coolant hoses with stainless steel screw type hose clamps.

Installation of coolant pump is to provide increased rate of coolant flow to assure maximum available chassis cab and auxiliary heater core temperatures during extreme winter conditions.

Coolant Pump is to be activated and deactivated by the optionally specified "auxiliary" heater fan switch.

#### WHEEL CHOCKS (Required by NFPA)\_

Refer to Wheel Chocks in the NFPA Equipment Section of these specifications.

#### MOUNT CUSTOMER'S KNOX LOCKING KEY BOX

The customer's provided KNOX BOX brand locking key box is to be installed, so as to be accessible to the seated offficer position.

#### MANUALS, CERTIFICATIONS, AND DIAGRAMS, IN ENGLISH LANGUAGE

At the time of delivery, one (1) hard copy(ies) of: each of the following manuals will be provided.

- 1. Engine manufacturer's certified brake horsepower curve showing the maximum no-load governed speed.
- 2. Manufacturer's record of pumper construction details, per NFPA 1901.
- 3. Manufacturer's Run-In Certification with preliminary test results.
- 4. Pump Manufacturer's Certification of Hydrostatic Tests.
- 5. Pump Manufacturer's Certification of Pump Test Results.

6. The Certification of Inspection/Test of Fire Department Pumper by an Independent Third Party per NFPA 1901 standards.



## **Custom Pumpers**

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7. Weight documents shall be supplied with the completed vehicle to determine compliance with NFPA section 10-1. Weights shall be for each tire or dual set of tires, so as to verify side-to-side loading, to be in compliance with NFPA section 4.12.2.3.3.

8. The complete operation and maintenance manual covering the completed apparatus as delivered including the pump, emergency lighting and siren, generator, or other furnished accessories.

9. A finalized drawing of apparatus as completed.

10. A "Delivery Manual", consisting of a 3-ring notebook type binder with reference tabs for each section, shall be furnished to include the following items: invoice copy(ies), proof of insurance, Manufacturer's Statement of Origin, acceptance forms, certifications, specifications, individual component manufacturer instructions and parts manuals, warranty forms for body, warranty forms for all major components, warranty instructions and format to be used for compliance with warranty obligations, routine service forms/publications, technical publications or training guide for major components, and apparatus body print "as built".

- 11. Paint numbers of all color coatings.
- 12. Certifications of tank(s) capacity.
- 13. Written load analysis of 12-volt electrical system as installed by body builder.

A test data plate shall be provided at the pump operator's position which gives the rated discharges and pressures together with the speed of the engine as is determined by the manufacturer's test for this particular unit. Plate shall also include delivery date, pump serial number(s), original Customer, and the apparatus manufacturer's serial number.

#### ELECTRICAL WIRING DIAGRAMS, CD (COMPACT DISC)

Two (2) electrical wiring diagrams, prepared for the fire apparatus, shall be provided, in a CD format. CD shall allow for: Viewing separate diagram Printing of full diagram



### **Custom Pumpers**

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Wiring diagrams shall be of 12-volt electrical systems, as installed by apparatus body manufacturer (prime contractor). Diagrams to be "vehicle specific", describing all 12-volt electrical functions as furnished on this **and only this** apparatus.

CD drawings shall include: Title Block with Job Number and Chassis VIN and Model # Chassis wiring as installed by OEM/body builder Body wiring "as built"

#### FIRE PUMP SYSTEM

#### PUMP AND PUMP TRANSMISSION

#### **PUMP**

A 1500 gallon per minute, Waterous model CSUC20-1500, Class A, single-stage centrifugal iron body - rear drive fire truck pump is to be furnished, mounted "mid-ship" of the vehicle immediately ahead of the compartments and water tank. The pump transmission gear ratio must allow the pump to deliver the percentage of rated capacity at discharge pressures indicated below, while the drive engine is running in its peak performance range/RPM:

100 percent of rated capacity at 150 pounds net pressure 100 percent of rated capacity at 165 pounds net pressure 70 percent of rated capacity at 200 pounds net pressure 50 percent of rated capacity at 250 pounds net pressure

#### **PUMP TRANSMISSION**

Pump transmission to be Waterous C-20, "chain-drive" style to provide smooth quiet transmission of power. Transmission "drop" shall be of proper dimension to allow for optimum driveline angles.

Extra heavy duty 2.35" x 46" involute spline pump driveline to be furnished for high torque engine applications.

#### SEPARABLE IMPELLER SHAFT

A separable impeller shaft will be furnished to allow removal of the pump transmission, separate from the pump body, while the pump body remains undisturbed on the apparatus



### **Custom Pumpers**

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#### ADDITIONAL FEATURES

Additional pump features will include: dual-suction bronze replaceable impeller and impeller seal rings, stainless steel impeller shaft, grease lubricated front and oil lubricated rear roller bearings, and horizontally split main pump body, and all moving parts which come into contact with water are to be bronze or stainless steel.

#### IMPELLER HUBS

Flame plated impeller hubs shall be furnished along with labyrinth style seal rings.

#### MANUFACTURER HYDRO TEST

The pump is to be performance tested by Waterous, at the above pressures and capacities, and also 10 minutes hydrostatically at a pressure of 600 PSI. Certification by Waterous is to be provided in delivery manual.

#### **OEM PERFORMANCE TEST**

Apparatus Manufacturer's pump performance test is to be performed after construction. Factory certification to be provided in delivery manual.

#### PUMP TEST DATA PLATE, SINGLE-STAGE PUMPS

The pump operator's panel will be provided with a metal plate listing the rated flow performance demonstrated together with the RPM of the engine at said pressures and deliveries, and mounted in clear view of the pump operator's panel. Test plate shall also indicate pump serial number, engine governed speed, and pump to engine gear ratio.

#### PUMP INSTRUCTION MANUALS

Two (2), Waterous Operator's Manuals, both in digital CD format, are to be provided upon delivery of the apparatus. Manuals to be pump model and serial number specific, to include but not be limited to operation procedures, maintenance (lubrication), and illustrated parts break-downs.

#### PUMP WARRANTY

Please refer to the specification Warranty Section, for Waterous Fire Pump Warranty being furnished.

#### PUMP SEALS



### **Custom Pumpers**

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"Mechanical" pump seal assemblies to be furnished, with the specified full-body centrifugal pump, self-adjusting type, maintenance free.

#### PUMP DRAIN MANIFOLD

Waterous manifold drain valve, with bronze body and stainless plunger shall be furnished mounted on pump transmission and operated by a push-pull cable with chrome plated T-handle control on pump panel. Drain valve shall be piped with high pressure nylon tubing, to low points of pump suction and discharge cavities to allow simultaneous draining through a single drain valve.

#### FLAME PLATED IMPELLER HUBS

Flame plated impeller hubs shall be furnished, on specified midship style pump, along with labyrinth style seal rings.

#### PRIMER PERFORMANCE REQUIREMENTS

The pump shall be capable of taking suction and discharging water with a lift of 10' in not more than 30 seconds with the pump dry, through 20' of suction hose of appropriate size. It shall be capable of developing a vacuum of 22" at an altitude of up to 1000'.

#### WATEROUS VPOS PUMP PRIMER

A high capacity positive displacement self-lubricating priming system shall be furnished, consisting of: a Waterous VPO "oil-less" rotary vane priming pump with 12-volt electric motor drive, and a push-button priming valve actuator on pump operator's panel. Priming pump shall be mounted beneath fire pump.

#### WATEROUS VAP VACCUM ACTIVATED PRIMING VALVE

There shall be a Waterous model VAP vacuum activated priming valve supplied with the pump. The valve shall open automatically when the priming system is activated. The valve shall be installed on the pump or mounted remotely.

#### STAINLESS STEEL TUBULAR PUMP SUCTION INLET AUXILIARY PIPING



### **Custom Pumpers**

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Suction manifolds, where not part of and integral with the pump manufacturer's pump intake castings, shall be fabricated of "**tubular**" stainless steel ONLY, schedule 10 or schedule 40 wall thickness, type 304L.

NOTE: Due to the poor flow characteristics, a suction manifold fabricated of square or rectangular tubing with flat-mount weld spuds and/or riser pipes for auxiliary suction taps, is not an acceptable substitute to a tubular manifold.

All suction manifolds and fittings, and suction valves, tubing's, and hose line assemblies shall be pressure tested after installation.

#### PUMP FITTINGS AND "ROUND TUBULAR" 304L S/S DISCHARGE MANIFOLD

The above specified fire pump shall be furnished with high-tensile closed grain cast iron "bolt-on" left and/or right side discharge fittings (upstream of discharge valves only) and cast iron "bolt-on" left side, right side, and/or front/rear large diameter suction intake adapters, as furnished and flow/pressure tested by the fire pump manufacturer.

A type 304L stainless steel **"round tubular"** discharge manifold shall be furnished, flange bolted or Victaulic clamped to and easily removable from, the fire pump's large diameter discharge outlet taps.

NOTE: Due to the likelihood of high pressure deformation (regardless of wall thickness), manifolds fabricated of square or rectangular tubing's, are not acceptable

The tubular manifolds main waterway shall be commensurate in diameter to feed the quantity and size of auxiliary discharge line "branches". So as to provide unsurpassed flow characteristics, all auxiliary branch reducers shall be concentric bell reducers, and all couplings and risers shall be "coped" to conform to the radius of the larger size feed waterway. Flat-mount weld spuds and non-coped risers welded to rectangular fabrications and end plates are not acceptable.

All stainless steel welding shall be TIG, to assure proper penetration and conformity with original tubing and weld fitting outside diameters. All elbows shall be smooth sweep weld fittings.

See following specifications describing the number/size/locations of outlet gate valves to be furnished.

Heavy wall threaded pipe and pipe fittings shall be used, wherever possible, downstream of the specified side outlet and top deluge discharge valves.



### **Custom Pumpers**

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All flexible discharge lines and bleeder lines, downstream of respective valves, shall be reinforced high pressure hose assemblies with stainless steel or brass end fittings.

Pressure gauge tubing lines shall be clear polypropylene with brass fittings, manifold drain lines (that are not high pressure hose assemblies) shall be copper tubing.

All discharge manifolds and fittings, suction manifolds and fittings, discharge and suction valves, tubing's, and hose line assemblies shall be pressure tested before and after installation.

#### 3.5" WATEROUS SUCTION VALVE, HIGH-FLOW

A 3.5" full-flow Waterous tank-to-pump 1/4-turn valve to be furnished with chrome plated bronze ball, spring loaded seal assembly, and inlet hose connection. The gated suction line/piping from specified tank sump to the tank-to-pump valve shall be furnished with reusable screw-banded flexible "hump hose" connection and 4" i.d. stainless steel piping enclosed within the fire pump compartment. Tank-to-pump suction line design and size shall allow a flow rate of at least 700 GPM. (200 GPM in excess of NFPA minimum requirement).

NOTE: Plastic or PVC tubing is not an acceptable alternative to stainless steel piping.

#### TANK-TO-PUMP CHECK VALVE

Waterous bronze tank-to-pump suction check valve to be furnished, integral with fire pump main body casting, full-flow design to prevent obstruction of suction waterway (available on CS and CM pumps only). Check valve shall prevent high capacity "back-flow" of water from the pump-to-tank, if the tank suction valve is inadvertently left open.

#### WATER TANK-TO-PUMP CONTROL, "PULL TO OPEN"

Specified tank-to-pump suction valve is to be remote controlled with lever style valve actuator and a manual push-pull style T-handle twist-to-lock operator's panel control. Tank-to-pump suction valve control is to be "In-Closed" and "Out-Open".

#### TANK REFILL, 1" BALL VALVE



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One (1), gated 1" tank fill discharge line, extending from pressure side of fire pump to water tank is to be furnished, with: female TIPT tank fill spud located in upper portion of water tank, high pressure wire reinforced 1" hose with stainless steel grooved Victaulic end couplings, 1" Akron 8000 series bronze 1/4-turn self-locking ball style discharge valve configured for manual valve control located on the pump operator's control panel, and a nameplate to read: "TANK FILL".

#### WATER TANK REFILL CONTROL, "PULL TO OPEN", TOP-CONTROL PANEL

Specified water tank refill discharge valve is to be remote controlled with lever style valve actuator and a manual push-pull style operator's panel control, with trigger style locking (for throttling) control handle. Tank refill valve control is to be "Rearward (push)-Closed" and "Forward (pull)-Open".

#### TANK RECIRCULATING - PUMP COOLER

One (1), gated .375" pump recirculating/cooling line, from pressure side of fire pump to water tank top to be furnished with: .375" female TIPT spud located at top front of water tank, high pressure tubing, and .375" bronze body 1/4-turn ball style valve with chrome handle located on operator's control panel. Valve is to be identified as pump cooling line.

#### PUMP MOUNTING, FULL-BODY MID-SHIP PUMP WITH SPLIT-SHAFT

The specified full body mid-ship pump system, with its integral split-shaft pump transmission, shall be independently mounted on a "pump house" sub-frame which itself is to be bolted to and easily removable from the chassis frame rails. The sub-frame shall consist of a two (2) each .312" steel plate fabricated Z-irons which rest on the top flange of the chassis frame rails; and are sandwich bolted to the outboard chassis frame webs. This design shall provide for a "rigid" mount of the pump house, and perfect horizontal and vertical alignment with the apparatus body, running boards always remaining in alignment with apparatus body rub rails. The pump house is to be located no more than one (1) inch forward of apparatus body, and two (2) inches rearward of the chassis cab.

The fire pump shall be mounted to the pump house sub-frame with angular brackets that are solid mounted one side of pump, castering opposite side (as recommended by pump manufacturer), so as to prevent imposing of torque/twisting loads on the full body pump castings. Pump mount brackets are to be placed at the same relative angle as engine/transmission and the rear axle.



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Pump mounting brackets and pump house sub-frame shall be primer painted and urethane painted to match pump or chassis frame rails.

#### DRIVELINE, SPICER 1710/1760 SERIES

Spicer 1710 series driveline components to be furnished to facilitate pump installation, components shall include: slip stub shafts, slip yokes, and cross and bearings to be compatible with pump end yokes and chassis driveline. Modified drivelines shall be high speed balanced.

#### PNEUMATIC PUMP SHIFT

The pump shift is to be pneumatically operated using a standard automotive air valve to control a double action air shift cylinder, designed so that the pump shift remains in its latest position in the event of loss of air pressure. Shift engagement is to be provided by free-sliding shift collar with internal locking mechanism.

Pump transmission's pneumatic power shift mechanism and the Pump Shift Console are to be plumbed to the chassis air system, downstream of the vehicle Air Pressure Protection System, using high pressure nylon tubing and brass fittings.

#### SHIFT CONSOLE, COLLAR-LOCK LEVER STYLE

Pump Shift Engagement Control will include: air control lever with spring loaded locking collar to prevent it from accidentally being moved from the "ROAD" or "PUMP" position, "PUMP ENGAGED" light indicating mechanical shifting of the pump into the "ROAD" position has been accomplished, "O. K. TO PUMP" light to indicated chassis transmission is in the correct pumping gear, and a control plate describing operation of the pneumatic power shift assembly.

An additional indicator light to be furnished on pump control panel, adjacent to, or integral with, engine throttle, to indicate that the vehicle transmission is in the proper gear and driveline is rotating: "O. K. TO PUMP".

Pump transmission's pneumatic power shift mechanism and the Pump Shift Console are to be plumbed to the chassis air system, downstream of the Pressure Protection System, using high pressure nylon tubing and brass fittings.



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The OK to Pump indicator lights, inside the chassis cab and at the pump operator's control panel are to be furnished with circuit protection, wired to and activated by the vehicle transmission position and pump shift signals.

### TRANSMISSION LOCK-UP

The direct gear (1:1 ratio) vehicle transmission lock-up for the fire pump operation is to engage automatically when the pump shift control, in the cab, is activated.

### PUMP MANUAL SHIFT OVERRIDE

The pneumatic pump shift is to be furnished with a single mechanical MANUAL override control located on the driver's side of the vehicle. Pump pneumatic shift override control is to allow for manual shifting of the pneumatic air cylinder, allowing the pump to be shifted into "Pump" and "Road" positions manually.

### LOCATION FOR PUMP SHIFT CONSOLE

The specified remote Pump Shift Console is to be located: on the driver's side slanted panel, adjacent to automatic transmission shift console, above the engine tunnel facing outboard towards driver.

### PUMP TEST. PRELIMINARY AND FINAL CERTIFICATION TESTING

After a "preliminary" apparatus factory performance test, the above specified pump test/certification is to be performed by apparatus manufacturer and "witnessed" by an independent third party as per NFPA 1901 pumping standards, with proper serialized certification provided upon apparatus delivery.

### PRESSURE GOVERNOR AND MONITORING DISPLAY, FRC PUMPBOSS

Fire Research PumpBoss series PBA401-D00 pressure governor and monitoring display kit shall be installed. The kit shall include a control module, intake pressure sensor, discharge pressure sensor, and cables. The control module case shall be waterproof and have dimensions not to exceed 6 .75" high by 4 .625". The control knob shall be 2" in diameter with no mechanical stops, have a serrated grip, and a red idle push button in the center. It shall not extend more than 1 .75" from the front of the control module. Inputs for



### **Custom Pumpers**

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monitored engine information and outputs for engine control shall be on the J1939 databus. Inputs from the pump discharge and intake pressure sensors shall be electrical

#### The following continuous displays shall be provided:

Engine RPM; shown with four daylight bright LED digits more than .5" high Check engine and stop engine warning LEDs Engine oil pressure; shown on a dual color (green/red) LED bar graph display Engine coolant temperature; shown on a dual color (green/red) LED bar graph display Transmission Temperature: shown on a dual color (green/red) LED bar graph display Battery voltage; shown on a dual color (green/red) LED bar graph display Pressure and RPM operating mode LEDs Pressure / RPM setting; shown on a dot matrix message display Throttle ready LED.

The dot-matrix message display shall show diagnostic and warning messages as they occur. It shall show monitored apparatus information, stored data, and program options when selected by the operator. All LED intensity shall be automatically adjusted for day and night time operation.

The program shall store the accumulated operating hours for the pump and engine to be displayed with the push of a button. It shall monitor inputs and support audible and visual warning alarms for the following conditions:

High Battery Voltage Low Battery Voltage (Engine Off) Low Battery Voltage (Engine Running) High Transmission Temperature Low Engine Oil Pressure High Engine Coolant Temperature Out of Water (visual alarm only) No Engine Response (visual alarm only).

The program features shall be accessed via push buttons located on the front of the control module. There shall be a USB port located at the rear of the control module to upload future firmware enhancements.

The governor shall operate in two control modes, pressure and RPM. No discharge pressure or engine RPM variation shall occur when switching between modes. A throttle ready LED shall light when the interlock signal is recognized. The governor shall start in pressure mode and set the engine RPM to idle. In pressure mode the governor shall automatically regulate the discharge pressure at the level set by the operator. In RPM mode the governor shall maintain the engine RPM at the level set by the operator except in the event of a discharge pressure increase. The governor shall limit a discharge pressure increase in RPM mode to a



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maximum of 30 PSI. Other safety features shall include recognition of no water conditions with an automatic programmed response and a push button to return the engine to idle.

The pressure governor and display shall be programmed to interface with a Cummins engine.

#### ENGINE INSTRUMENTATION

The engine instrumentation is to be included in the specified fire pump pressure control system "engine governor". Instrumentation shall be integral with the Governor Control.

### PUMP OVERHEAT PROTECTION

One (1), Waterous Overheat Protection Manager (OPM) model #82516-1B, thermal relief style valve to be furnished, installed on the two .5" tapped holes located near the center discharge area of the pump. The OPM consists of a valve that automatically opens when the water in the pump reaches 140 degrees and a warning light located on the pump operator's panel that is triggered by a thermal switch when the water in the pump reaches 180 degrees. The warning light acts as an additional protection device if the temperature inside the pump keeps rising although the valve is open. The OPM valve and switch are both mounted on the two (2) .5" tapped holes located near the center discharge area of the pump. Discharge shall be "to ground".

The warning light and test button shall be mounted to a heavy polished casting that is mounted to the pump operator's panel.

#### **SELF BLEEDING SUCTION CAPS**

The specified "threaded" suction caps shall be the VLH Class-1, Trident or equivalent which incorporates a cross-machined thread design to automatically relief stored pressure in the line during un-capping.

### SELF-BLEEDING DISCHARGE OUTLET CAPS, AND ELBOWS

Where specified, the rocker lug discharge caps and outlet elbow extensions are to be VLH, Class-1, Trident, or equivalent which incorporates a cross-machined thread design to automatically relieve stored pressure in the line during uncapping/unthreading.



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### **BUMPER DISCHARGE**

### FRONT BUMPER 2.5" PRECONNECT DISCHARGE

One (1), front bumper 2.5" gated discharge to be furnished with: 2.5" NST male outlet x 2.5" inlet 90 degree discharge swivel, 3" x 2.5" reducer fitting, Auto-Drain hose line bleeder valve, 3" i.d. wire reinforced hose with 3" stainless end fittings, 2.5" Waterous 1/4-turn discharge valve with chrome plated ball and spring loaded self-adjusting seal assembly (located inside pump compartment), and push-pull chrome "twist-to-lock" discharge control handle with recessed color coded nameplate located on the pump operator's control panel.

### BUMPER TOP DISCHARGE OUTLET, HORIZONTAL DEPLOYMENT

The specified front bumper extension pre-connect discharge outlet is to be located on the top exterior surface of the bumper extension gravel shield, so as to allow horizontal swiveling deployment.

### SWIVEL STOPS

To avoid contact with chassis cab or bumper gravel shield topside accessories, the bumper gravel shield is to be equipped with polished stainless steel pin style posts, or gravel matching material fabrications, located so as to limit the range of pre-connect swiveling outlet fitting.

### **BUMPER DISCHARGE OUTLET LOCATION, DRIVER SIDE**

The above specified top swiveling discharge outlet is to be located on the Driver (Street) side of the bumper extension.

### AUTOMATIC DRAIN(S):

Front underside discharge plumbing shall be equipped with Class 1, model 34AD automatic drains. These drains shall open whenever the pressure in the discharge line drops below 5 PSI. The drains shall be located in areas that shall allow the entire line to drain effectively. More than one drain shall be used in lines that are uneven along their length.



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Where the drain valve is located above the frame rails of the chassis, the outlets shall be extended with hoses to below the chassis frame rails.

### FIRE PUMP MODULE, MIDSHIP OF APPARATUS, INDEPENDENT OF THE BODY

### PUMP ENCLOSURE, MID-SHIP S/S MODULAR - DRIVER SIDE CONTROLS

A pump compartment/module shall be furnished, located "mid-ship" of the vehicle, designed for driver side pump controls and instrumentation. The pump compartment shall be "fully enclosed", using fabricated sheet metal panels on top, sides, front, and rear. The modular style pump enclosure shall be located no more than 1" ahead of the apparatus body.

The entire pump compartment module shall be separate from the apparatus body, rigidly mounted to the chassis frame rails, and designed to allow independent twisting "no-contact" movements of the cab, pump module and apparatus body. The pump module shall remain rigid to the chassis frame rails, and fire pump itself shall have a flex-mount system as approved by the fire pump manufacturer. The rigid module mount system shall prevent unnecessary movement of the pump compartment, and the resulting miss-alignment of running boards and body rubrails.

### STAINLESS STEEL CONSTRUCTION

Pump compartment shall be of all-bolted construction, fully enclosed, constructed of type 304 brushed stainless steel. Due to the entire pump house module being constructed of scuff-resistant non-painted brushed stainless steel, neither polished stainless steel nor aluminum treadplate overlays are required for scuff protection.

### BLEEDER VALVE AND DRAIN VALVE CONTROL PANELS

The specified passenger side outlet and inlet bleeder valve controls shall be located immediately above the running board, installed on a brushed stainless steel horizontal full width bolt-on riser panel. The specified driver side outlet and inlet bleeder valve controls, and master pump drain control shall be located immediately above the running board, installed on a brushed stainless steel horizontal full width bolt-on riser panel.

### **REMOVABLE ACCESS PANEL**



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Passenger side of pump module shall incorporate brushed stainless steel removable mid-section panel, removal of which allows for pump inspection, service, and maintenance.

The removable side panel shall be located above, and interlocking with the passenger side bleeder control panel. The panel shall be held in place by a minimum of four (4) chrome plated quick release trigger latches, and removable side panel shall also be furnished with two (2) chrome plated grab handles to aid in removal and re-installation of the panel.

Passenger side removable panel opening shall be full width of the pump compartment/module by at least 30" tall.

#### **OVERHEAD PUMP ENCLOSURE**

The upper portion of the pump module shall be of adequate size to accommodate any optionally specified recessed dunnage area, or accessory equipment installations. This area shall be above the pump controls and plumbing, inboard of the instrument panel, ahead of the apparatus body and water tank.

#### **RUNNING BOARDS**

Driver's and passenger's side pump panel running boards to be furnished, extending from rear of specified lower chassis cab steps to front side body compartment corners.

Running boards shall be at least 10" deep, bolted to and easily removable from the lower pump compartment module. Running boards shall be fabricated of tailboard matching material, provided with non-slip grip-pattern top step surface.

Running boards shall be "in-line" with the specified lower cab steps and body side rubrails.

#### PASSENGER SIDE PUMP INSPECTION DOOR

One (1) lift-up style horizontally hinged pump compartment interior access/inspection door shall be furnished, located on passenger side pump panel, overhead the removable pump access panel. Inspection door shall be fabricated of brushed stainless steel, equipped with top mounted polished stainless piano hinge, two (2) bottom trigger latches, and two (2) underside telescoping air cylinder props to hold in the open position.



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### TRANSVERSE COMPARTMENT MODULE

A transverse compartment module shall be provided, attached directly to the front of the specified pump enclosure. The module shall protrude forward, forward of and be the same width as the pump module. The module shall be at least 20" front-to-rear by full height of pump module, furnished with a vertical transverse compartment cavity designed to accommodate the specified doors.

Compartments are to be 26" lower level depth and 78"+ upper/transverse interior depth, equipped with "sweep-out" floors and black vinyl sectional floor tiles. Compartment doors are to be at least 15" wide by 5" less than the total height of pump module. Doors are to be "flush" style double panel, same construction as specified for apparatus body doors, with: stainless steel piano hinge, D-ring stainless steel door handle with dual rotary slam latches, and spring style door prop.

### LED STRIP LIGHTING

The above specified interior cabinet lighting shall consist of 12-volt incandescent fixture, one (1) fixtures centered overhead of the two (2) door openings. Light fixtures(s) to be activated by opening of the respective door.

### SIDE CONTROL PANEL

### MIDSHIP PUMP DRIVER SIDE CONTROLS

The pump operator's control panel shall be located on driver's side "midship" of vehicle. So as to permit operation of the pump from one central location, all Manual style gated discharge valve controls, and Air or Manual style remote gated suction controls are to be mounted on this side facing pump operator's control panel.

All mechanical pump actuator rods, rotating and/or push-pull, are to be heavily cadmium or zinc plated solid cold roll steel, provided with adjustable threaded clevis joints or swivel ball joints and chrome plated brass handles or black phenolic control knobs. Where Air style suction valve controls are specified, they are to be of the mechanical toggle style with "open" indicator light.

The upper portion of the driver side pump control panel is to accommodate the specified "opening" instrument panel, the middle portion to accommodate the gate valve and major pump controls, and the bottom



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portion is to accommodate the inlet and outlet bleeder controls and (where specified) the gravity style master drain control.

### PRESSURE GAUGES/INSTRUMENTS ALIGNED WITH DISCHARGE CONTROLS

The specified pump panel mounted discharge controls are to be located adjacent to or immediately below and in line with corresponding individual discharge pressure gauge. The pump operator's control panel is to be configured in an organized manner, "user-friendly", side-to-side across the entire panel.

### SIDE MOUNT VALVE CONTROLS

One (1) Akron brand 9000 series CAN Networked Valve controller are to be located on the side-mount pump operator's panel.

### DISCHARGE CONTROL NAME PLATES

The specified individual discharge control color coded identification name plate's nomenclature is to, describe: the physical location of outlet, the size of hose to be attached, and the type of discharge. Where an outlet is Foam Capable, the name plate is to so describe.

### DISCHARGE OUTLET NAME PLATES

Individual Discharge Outlet name plates are to be provided adjacent to the outlet or hose bed. Outlet name plates are to be of the same color as the discharge valve control name plate, pressure instrument name plate, and the bleeder valve control name plate.

### SIDE MOUNT VALVE CONTROLS

Nine (9) Innovative Controls brand chrome plated, side mount push-pull controls, with ergonomically designed chrome plated T-handles, and encapsulated UV-resistant printed color-coded (ILO engraved) verbiage labels shall be furnished.

### DISCHARGE CONTROL NAME PLATES



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### As Per HGAC Proposal FS19EC05

The specified individual discharge control engraved color coded identification name plate's nomenclature shall, describe: the physical location of outlet, the size of hose to be attached, and the type of discharge. Where an outlet is Foam Capable, the name plate shall so describe.

### **DISCHARGE OUTLET NAME PLATES**

Individual Discharge Outlet name plates are to be provided adjacent to the outlet or hose bed. Outlet name plates are to be of the same color as the discharge valve control name plate, pressure instrument/gauge name plate, and the bleeder valve control name plate.

### THE SPECIFIED MANUAL PUSH-PULL CONTROL LEVERS ARE TO BE USED FOR:

- \_\_\_\_\_ each, Passenger Side Gated Suction
- \_\_\_\_\_ each, Rear Gated Suction
- \_\_\_\_\_ each, Driver Side Gated Suction
- \_\_\_\_\_ each, Tank-to-Pump Suction
- \_\_\_\_\_ each Tank Fill Discharge
- \_\_\_\_\_ each, Passenger Side Discharges
- \_\_\_\_\_ each, Rear Discharges
- \_\_\_\_\_ each, Hose Bed Discharges
- \_\_\_\_\_ each, Driver Side Discharges
- \_\_\_\_\_ each, Deluge Discharge
- \_\_\_\_\_ each, Hose Reel Discharges
- \_\_\_\_\_ each, Bumper Discharge
- \_\_\_\_\_ each, Pre-Connect Discharges: Speed-Lays / Cross-Lays



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\_\_\_\_\_ each, Rear Pre-Connect Discharges

### COLOR CODED DISCHARGE AND SUCTION NAME PLATES

The name plates, as provided for identification of the following devices, are to be permanently printed on a colored background with nomenclature as specified above, attached with permanent adhesive, NOTE: Name plates are not to be screwed or riveted in position.

Color matching name plates are to be provided for: Suction Inlet, Suction Control (when gated), Suction Bleeder, Discharge Outlet, Discharge Control, Discharge Pressure Instrument, and Discharge Bleeder Control.

### AKRON ELECTRIC VALVE CONTROL CONSOLES ARE TO BE USED FOR:

- \_\_\_\_\_ each, Passenger Side Gated Master Suction
- \_\_\_\_\_ each, Rear Gated Suction
- \_\_\_\_\_ each, Front Gated Suction
- \_\_\_\_\_ each, Driver Side Gated Master Suction
- \_\_\_\_\_ each, Tank-to-Pump Suction
- \_\_\_\_\_ each Tank Fill Discharge
- \_\_\_\_\_ each, Passenger Side Discharges
- \_\_\_\_\_ each, Rear Discharges
- \_\_\_\_\_ each, Hose Bed Discharges
- \_\_\_\_\_ each, Driver Side Discharges
- \_\_\_\_\_ each, Deluge Discharge
- \_\_\_\_\_ each, Bumper Discharge



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\_\_\_\_\_ each, Pre-Connect Discharges: Speed-Lays / Cross-Lays

\_\_\_\_\_ each, Rear Pre-Connect Discharges

### PASSENGER SIDE PUMP PANEL 12-VOLT LED LIGHTING

Weatherproof 12-volt LED light fixtures are to be furnished, located overhead the passenger's side pump suction inlets, discharge outlets, and bleeder controls. Lighting is to include, but not be limited to: two (2) each, 12-volt LED "shielded" pump panel light fixtures, located one (1) in each of the top outboard corners of side pump panel. Lighting is to be positioned to illuminate the inlets, outlets, and their respective bleeders and drains.

The pump panel lights are to be activated by a pump operator's panel mounted light switch.

### PUMP SYSTEM ELECTRICAL

All pump compartment wiring for specified 12-volt electrical equipment is to be suitably protected inside heat resistant vinyl, forming one or more wiring harness(es).

All 12-volt switches, relays, terminals, connectors, and wiring to have a direct current rating of 125% of maximum current for which the current is protected. All wiring terminals to be closed barrel style, mechanically crimped, and insulated

#### PUMP MODE TRANSMISSION LOCK-UP

Vehicle electronic automatic transmission to be "signaled" by shifting of the fire pump into pump gear, so as to activate transmission "Lock-Up" mode (direct drive). An automatic transmission shift selector position detent or transparent removable shield is to be provided to prevent unintentional movement of the shift selector during pumping operations.

### PUMP MODULE WIRING SCHEMATICS

Vehicle Specific wiring information is to be provided for this particular apparatus "as configured" upon completed delivery of the same. Information is to be in a drawing format, describing origination and termination connections and functions.

### DEACTIVATE ENGINE COMPRESSION BRAKE - WITH PUMP SHIFT



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### As Per HGAC Proposal FS19EC05

Specified engine compression brake shall be automatically deactivated with the shifting of the pump transmission into "Pump Gear".

### PUMP COMPARTMENT LIGHT, LED

One (1), clear lens 4" round grommet mount 12-volt LED interior pump compartment light to be furnished, mounted beneath the ceiling of interior pump module. Light to be activated by Parking Brake.

### SIDE MOUNT PUMP INSTRUMENT PANEL - TILT OUT STYLE

The specified pump pressure gauges, discharge pressure gauges, and engine monitors/ instruments shall be installed on a brushed stainless steel hinged gauge panel, located in top portion of driver's side exterior pump control panel. The gauge panel is to be equipped with a polished stainless steel piano hinge on the bottom and two adjustable-grip chrome plated lift-and-turn latches, located in upper corners. Gauge panel to be of the "tilt-out" style, to allow access to back of gauges and interior fire pump compartment. A full width fabricated overhead light shield is to be provided for underside mounting of the optionally specified 12-volt light fixture.

### PUMP INSTRUMENT PANEL/CONTROL PANEL LIGHTING

One (1) LED "light strip" is to be provided, with multiple 12-volt LED elements. Light strip is to be located: overhead the pump gauge/instrument panel (see gauge panel) illuminating the gauges, instruments, and controls. Lights to be activated by as specified below.

### FABRICATED STAINLESS STEEL LIGHT SHIELDS

A fabricated stainless steel light shield is to be provided, designed to illuminate downward and inward, prevent outboard glare, and protect the specified light strip. Light shield is to be full width of the specified instrument/gauge panel.

### PUMP GAUGE/INSTRUMENT and PUMP PANEL 12-VOLT LIGHTING, ACTIVATION

The specified pump instrument/gauge, control panel, and optionally specified pump panel lighting is to be activated, "ON" by a gauge/instrument panel mounted Light Switch.

### PASSENGER SIDE PUMP PANEL LIGHTING



### **Custom Pumpers**

### As Per HGAC Proposal FS19EC05

One (1) LED "light strip" is to be provided, with multiple 12-volt LED elements. Light strip is to be located: overhead the passenger side pump discharge outlets and suction inlets. Lights to be activated by as specified below.

### **DRIVER SIDE PUMP PANEL LIGHTING**

One (1) LED "light strip" is to be provided, with multiple 12-volt LED elements. Light strip is to be located: overhead the driver side pump discharge outlets and suction inlets. Lights to be activated by as specified below.

### FABRICATED STAINLESS STEEL LIGHT SHIELDS

Fabricated stainless steel light shields are to be provided, designed to illuminate downward and inward, prevent outboard glare, and protect the specified light strip. Light shields are to be full width of the side pump panels.

### PUMP PANEL RUNNINGBOARD RECESSED SUCTION HOSE TRAYS, STAINLESS STEEL

Two (2), one driver's side and one passenger side, LDH soft suction hose storage well cavities are to be furnished, recessed into the pump panel running boards. Wells are to be recessed down through and completely removable from the pump panel running boards. Bottom panel of suction wells to be crisscross fabricated with center drain hole, and provided with black vinyl sectional floor tiles. Length, width, and depth of hose well is to accommodate a minimum of 25 ft. of 5" LDH.

Inboard and outboard exterior surfaces are to be smooth brushed stainless steel, to prevent hose damage, and to match running board material.

### RUNNINGBOARD CAVITY HOSE RESTRAINTS, NYLON STRAPS/VELCRO FASTERNER

The above specified two (2) each running board hose cavity(s) to be equipped with two (2) nylon variable length strap restraints, with foot loops, nylon buckle and VelCro fastener.

### **RECESSED OPEN DUNNAGE CAVITY FOR MONITOR**



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A recessed dunnage (open well) cavity is to be furnished, top of pump compartment ahead of hosebody between pump compartment side panels. Dunnage cavity is to be of the appropriate size to accommodate and allow for retraction of the specified monitor device. Cavity to be equipped with removable fabricated floor, and floor drain tubes extending to beneath the pump module. Removal of floor section shall allow top access to pump and its piping.

### PUMP TEST DATA LABEL

The pump control panel is to be provided with a printed data field indicating the rated flow at 150, 165, 200 and 250 test pressures, together with the RPM of the engine at those pressures and deliveries. Test Label is to be mounted in clear view of the pump operator's position, as per NFPA 1901 compliance.

Test label is to also indicate the following information: Pump Make and Model Pump Capacity Apparatus Date of Manufacture Apparatus Model Designation Apparatus Serial Number Apparatus Production Number Engine Governed Speed Pump Transmission Gear Ratio (to Engine)

Data field is to be permanently encased in a chrome full surround bezel.

### GATED INLET WARNING LABEL(S)

# **WARNING:**

Death or serious injury might occur if proper operating procedures are not followed. The pump operator as well as individuals connecting supply or discharge hoses to the apparatus must be familiar with water hydraulics hazards and component limitations.

### ENGINE COOLER/HEAT EXCHANGER CONTROL VALVE



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Operation of the custom chassis supplied cooling system heat exchanger is to be controlled from the pump control panel and labeled to identify its operation. Discharge feed and suction return piping between the fire pump and heat exchanger are to be high pressure lines with copper fittings. The piping is to be installed so as to drain back (down) to the fire pump, without low points, when pump master drain is "open", in order to prevent freezing. Pressure line (from pump discharge) is to be gated, with the valve control located on the pump operator's control panel, with instructional nameplate.

### **INTAKE RELIEF VALVE, 2.5'' BRONZE**

An Elkhart bronze pump suction intake relief valve shall be furnished, installed inside pump compartment, flange bolted or threaded to suction cavity of the fire pump. Valve to be of the pre-set (to 125 PSI) adjustable bypass design, to dump below the vehicle excessive inlet water pressure. Relief valve to be accessible for future adjustment of bypass pressure.

### **INTAKE RELIEF VALVE, WITH DISCHARGE OUTLET FITTING**

The specified one (1) each fire pump suction manifold Intake Relief Valve's outlet(s) to terminate with a chrome plated brass 2.5" male NST threaded fitting, allowing for closure with a standard threaded discharge cap (in the event of relief valve leakage). Outlet is to be located at side of apparatus, away from the fire pump operator's location, and labeled: "**Pump Intake Pressure Relief Outlet: DO NOT CAP**".

### HEAT ENCLOSURE, ALUMINUM

A removable heater casing is to be furnished, completely enclosing the underside of the fire pump compartment module. Heater casing side and end panels are to be fabricated entirely of natural finish smooth sheet aluminum, bolted to and easily removable from the bottom perimeter of the pump module. So as to allow maximum ground clearance, the heater casing shall be the minimum depth required to enclose the pump transmission, horizontal engine exhaust system, and all pump accessories. Two (2) individual smooth aluminum slide-out bottom panels are to be furnished, criss-cross reinforced with drain holes and <sup>1</sup>/<sub>4</sub>-turn butterfly clamp latch, removal of which allows for inspection of and access to the fire pump and chassis components, NOTE: A center bottom slide-out panel brace shall be furnished, off-set to one side so as to not obstruct the pump transmission lubricating fluid drain.

### ANODE, PUMP SUCTION MANIFOLD - 2 EACH



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Two (2) sacrificial zinc anodes shall be furnished in the water pump inlet manifold, to protect the pump from corrosion.

### PUMP SUCTION INLETS

Following specified pump manifold inlets shall be equipped with zinc die cast screens so as to provide cathode protection for pump waterways.

All intakes shall be furnished with suitable closures capable of withstanding 500 PSI, threaded caps shall be chrome plated brass, rocker lug 3" and smaller, long handled larger than 3".

### SUCTION INLET VALVE STANDARDS (WHERE OPTIONALLY SPECIFIED)

Following optionally specified 3" or larger gated intakes (except the tank-to-pump intake) shall include a remote controlled valve mechanism that shall not permit changing the position of the flow regulating element of the valve from full close to full open, or vice versa, in less than 3 seconds. Where air type actuators are employed, they shall include dual (2-each) adjustable needle valve restrictors, bench set/tested, so as to facilitate the slow movement. Where manual gear or electric gear style actuators are employed, the crank or motor shall regulate movement speed.

### SHORT SUCTION TUBE

The specified side pump suction inlet(s) shall be of minimum length to allow for exterior stacking of adapters or pre-connected hose.

#### INLET BLEEDER VALVES

Where specified, each gated intake shall be equipped with a bleeder valve located inside pump compartment (inside rear compartment-for rear suctions), upstream gate valve, with remote bleeder control in close proximity to the intake. The gated inlet bleeders shall consist of: .75" high pressure flexible hose assemblies extending between suction valve and bleeder valve, .75" cast bronze or stainless steel bleeder valve, exterior bleeder valve control handle, and an engraved or printed identification label. Bleeder controls for side gated inlets are to be located below the inlet, in a single row immediately above the running board/floor level. Bleeder controls for optionally specified rear inlets are to be located below the inlet, above the tailboard level. The bleeder valves shall be Innovative Control, "lift-handle" style equipped with chrome plated lever control handles, which are in the down position when closed.



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### HOSE THREADS

Where specified, all screw-on/off threads shall be NST (National Standard Threads), all "sexless" couplings shall be Storz.

### PUMP DISCHARGE OUTLET CONTROLS AND ACTUATORS

All discharge valves shall have operating controls and actuators that allow the valve to be positioned incrementally from closed to full open, and locked in any selected position. Each valve control is to be adjacent to its respective pressure instrument.

Each of the specified 3" diameter or larger discharge valves are to have an operating mechanism which shall not permit changing the position of the flow regulating element of the valve from full close to full open, or vice versa, in less than 3 seconds.

### DISCHARGE OUTLET BLEEDERS

Each of the following specified gated discharges shall be equipped with a "discharge outlet bleeder". The outlet bleeders shall consist of: .75" high pressure flexible hose assemblies extending between discharge valve and bleeder valve, .75" cast bronze or stainless steel bleeder valve mounted interior of pump compartment (inside rear compartment-for rear discharges), exterior bleeder valve control handle, and color coded (to match corresponding discharge outlet) engraved or printed identification label. Bleeder controls for side discharges are to be located below the outlet, in a single row immediately above the running board/floor level. Bleeder controls for optionally specified rear discharges are to be located below the outlet, above the tailboard level. The bleeder valves shall be Innovative Control, "lift-handle" style equipped with chrome plated lever control handles, which are in the down position when closed.

### HOSE THREADS

Where specified, all screw-on/off threads shall be NST (National Standard Threads), all "sexless" couplings shall be Storz.

### **DISCHARGE VALVES - WATEROUS**



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All 2.5" and 3.5" discharges shall be equipped with Waterous brand, ball style, in-line valves. The valves shall be equipped with chromium-plated bronze ball and a "spring-loaded" seal assembly, no lubrication or regular maintenance shall be required on the Waterous valves.

### FULL-FLOW DISCHARGE LINE OUTLET VALVES - WATEROUS

All 2.5"discharge outlet valves, {qty} each, are to be equipped with "Full-Flow" chromium-plated bronze ball and a "spring-loaded" seal assembly, no lubrication or regular maintenance shall be required on the Waterous valves.

### PASSENGER SIDE SUCTION(S)

### 6" NON-GATED MASTER SUCTION, SHORT FITTING LENGTH, 6" NST

A passenger's side 6" pump suction intake is to be furnished with: 6" removable zinc strainer, 6" NST male cast iron threaded inlet adapter, and a "Short" cast iron interior pump compartment mounted intake fitting. The NST male threaded inlet is to be located inboard the vertical side pump panel, so as to allow for a swivel female threaded suction inlet appliance; without the inlet appliance and its closure cap extending beyond the apparatus overall width (to remain inboard of the running board/rub rail).

### RECESSED ACCESS TO INLET APPLIANCE COUPLING

To allow for access to and tightening of the optionally specified (or customer provided) screw-on suction inlet appliance's threaded coupling, the passenger side vertical outboard pump panel is to be furnished with a "recessed" shroud surrounding the suction inlet fitting. The shroud is to provide ample space surrounding the inlet fitting, to allow for use of a coupling spanner wrench and/or mallet. In combination with a "short" inlet fitting, the recessed shroud is to facilitate the installation of a suction inlet appliance without extending beyond the overall with of the apparatus body, running board, and/or rub rail.

### <u>6" PASSENGER SIDE GATED INLET APPLIANCE, 6" NSTx 5" STORZ 30-DEGREE INLET</u>

One (1) each, Task Force Tips AB3ST-NX-PS lightweight 5" Storz by 6" NST swivel female 30-degree master inlet ball intake valve(s), each with: TOP-MOUNT crank operator with position indicator, adjustable



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pressure intake relief valve and A1621-KIT Vent/drain is to be furnished and installed, on the passenger's side 6" NST male suction inlet. Each appliance is to be furnished with a TFT A01ST 5" Storz locking cap with cable retainer.

### DRIVER'S SIDE SUCTION(S)

### 6" NON-GATED MASTER SUCTION, SHORT FITTING LENGTH, 6" NST

A driver's side 6" pump suction intake is to be furnished with: 6" removable zinc strainer, 6" NST male cast iron threaded inlet adapter, and a "Short" cast iron interior pump compartment mounted intake fitting. The NST male threaded inlet is to be located inboard the vertical side pump panel, so as to allow for a swivel female threaded suction inlet appliance; without the inlet appliance and its closure cap extending beyond the apparatus overall width (to remain inboard of the running board/rub rail).

### RECESSED ACCESS TO INLET APPLIANCE COUPLING

To allow for access to and tightening of the optionally specified (or customer provided) screw-on suction inlet appliance's threaded coupling, the driver side vertical outboard pump panel is to be furnished with a "recessed" shroud surrounding the suction inlet fitting. The shroud is to provide ample space surrounding the inlet fitting, to allow for use of a coupling spanner wrench and/or mallet. In combination with a "short" inlet fitting, the recessed shroud is to facilitate the installation of a suction inlet appliance without extending beyond the overall with of the apparatus body, running board, and/or rub rail.

### <u>6" GATED INLET APPLIANCE, 6" NSTx 5" STORZ 30-DEGREE INLET</u>

One (1) each, Task Force Tips AX3ST-NX-PS, 5" swivel Storz by 6" NST swivel female ball intake valve (3.65" waterway), with: 30-degree swiveling inlet elbow, Parallel Shaft Handcrank operator with position indicator, adjustable pressure intake relief valve and drain is to be furnished and installed, on the 6" NST male pump suction inlet. The appliance is to be furnished with a TFT A01ST 5" Storz locking cap with cable retainer.

### 2.5" GATED SUCTION, 2.5" NST PLUGGED, CONTROL AT INLET



### **Custom Pumpers**

### As Per HGAC Proposal FS19EC05

A driver's side gated 2.5" pump suction intake is to be furnished, with: 2.5" NST male chrome plated rocker lug plug type cap with chain, 2.5" NST chrome plated rocker lug swivel female with internal strainer, bronze bleeder valve (inboard pump panel) with exterior control, 2.5" full flow Akron 8000 series 1/4-turn ball style self-locking bronze suction valve (located inboard pump panel) with through-the-panel model TS control arm, "OPEN" and "CLOSED" nameplates, and 2.5" i.d. stainless pipe or flanged casting between the valve and the pump intake manifold.

### **DISCHARGE PIPING ANODE, 1 EACH**

One (1) each, replaceable threaded or flange bolt-on zinc anode plug is to be furnished and installed in the discharge piping of the fire pump to assist in protecting the pump and piping from electrolysis.

### 3.5" WATEROUS GATED OUTLET, 5" STORZ x 2.5" NST CAPPED

One (1), passenger's side 4" gated discharge to be furnished with: 2.5" NST chrome plated brass rocker lug cap with chain, 2.5" NST male x 5" Storz lightweight adapter, 5" Storz x 4" NST female outlet adapter, 30-degree smooth sweep weld type discharge elbow/extension nipple (extending through pump panel), bronze bleeder valve located inboard pump panel with remote control knob adjacent to discharge outlet, 3.5" Waterous hand crank, "worm gear actuated" 1/4-turn discharge valve with chrome plated ball and spring loaded self-adjusting seal assembly (located inside pump compartment), operator's panel mounted Waterous hand crank controller, valve position indicator, and appropriate cast iron pump discharge fitting.

### **REAR DISCHARGE(S)**

### REAR PASSENGER SIDE 2.5" DISCHARGE

One (1), rear (passenger's side) 2.5" gated discharge to be provided with: 2.5" NST chrome plated brass rocker lug cap with chain, 2.5" NST male x 2.5" NST rocker lug swivel female 30-degree chrome plated brass elbow extension, 2.5" NST male chrome plated brass outlet adapter, .75" bleeder valve with exterior remote control, 2.5" i.d. stainless steel pipe or wire reinforced hose assembly with 2.5" stainless end fittings, 2.5" Waterous 1/4-turn discharge valve with chrome plated ball and spring loaded self-adjusting seal assembly (located inside pump compartment), and push-pull chrome "twist-to-lock" discharge control handle with recessed color coded nameplate located on the pump operator's control panel.



### **Custom Pumpers**

### As Per HGAC Proposal FS19EC05

### REAR PASSENGER SIDE INBOARD 2.5" DISCHARGE

One (1), rear (passenger's side inboard) 2.5" gated discharge to be furnished with: 2.5" NST chrome plated brass rocker lug cap with chain, 2.5" NST male x 2.5" NST rocker lug swivel female 30-degree chrome plated brass elbow extension, 2.5" NST male chrome plated brass outlet adapter, .75" bleeder valve with exterior remote control, 2.5" i.d. stainless steel pipe or wire reinforced hose assembly with 2.5" stainless end fittings, 2.5" Waterous 1/4-turn discharge valve with chrome plated ball and spring loaded self-adjusting seal assembly (located inside pump compartment), and push-pull chrome "twist-to-lock" discharge control handle with recessed color coded nameplate located on the pump operator's control panel.

### **REAR DRIVER SIDE 2.5'' DISCHARGE**

One (1), rear (driver's side) 2.5" gated discharge to be furnished with: 2.5" NST chrome plated brass rocker lug cap with chain, 2.5" NST male x 2.5" NST rocker lug swivel female 30-degree chrome plated brass elbow extension, 2.5" NST male chrome plated brass outlet adapter, .75" bleeder valve with exterior remote control, 2.5" i.d. stainless steel pipe or wire reinforced hose assembly with 2.5" stainless end fittings, 2.5" Waterous 1/4-turn discharge valve with chrome plated ball and spring loaded self-adjusting seal assembly (located inside pump compartment), and push-pull chrome "twist-to-lock" discharge control handle with recessed color coded nameplate located on the pump operator's control panel.

### **REAR DRIVER SIDE INBOARD 2.5'' DISCHARGE**

One (1), rear (driver's side inboard) 2.5" gated discharge to be furnished with: 2.5" NST chrome plated brass rocker lug cap with chain, 2.5" NST male x 2.5" NST rocker lug swivel female 30-degree chrome plated brass elbow extension, 2.5" NST male chrome plated brass outlet adapter, .75" bleeder valve with exterior remote control, 2.5" i.d. stainless steel pipe or wire reinforced hose assembly with 2.5" stainless end fittings, 2.5" Waterous 1/4-turn discharge valve with chrome plated ball and spring loaded self-adjusting seal assembly (located inside pump compartment), and push-pull chrome "twist-to-lock" discharge control handle with recessed color coded nameplate located on the pump operator's control panel.

### DRIVER'S SIDE DISCHARGE(S)

### DRIVER SIDE 2.5" DISCHARGE



### **Custom Pumpers**

### As Per HGAC Proposal FS19EC05

One (1), driver's side 2.5" gated discharge to be furnished with: 2.5" NST chrome plated brass rocker lug cap with chain, 2.5" NST male x 2.5" NST rocker lug swivel female 45 degree chrome plated brass elbow outlet extension, 2.5" NST male chrome plated brass outlet adapter, .75" bleeder valve and hose assembly, 2.5" i.d. stainless steel pipe nipple, 2.5" Waterous 1/4-turn discharge valve with chrome plated ball and spring loaded self-adjusting seal assembly (located inside pump enclosure), and push-pull chrome "locking-style" discharge control handle located on the pump operator's control panel.

### **DELUGE DISCHARGE**

### **DELUGE DISCHARGE LOCATION**

The specified Deluge Discharge outlet shall be located above the "midship" fire pump module.

#### MONITOR SUPPORT BRACKET

A stainless steel fabricated monitor support bracket is to be furnished, located beneath the top of pump module, designed to prevent movement of the monitor/deluge device throughout the range of movement and flow capacity. Support is to be bolted in position and removable so as to allow for disassembly of the deluge discharge. In addition to the monitor support, the underside of surrounding deck plating is to be reinforced with channel steel brackets to support the weight of two (2) firefighters.

### **TOP DELUGE DISCHARGE - HAND CRANK VALVE**

One (1), top (above pump) gated deluge discharge to be furnished with: 3" riser outlet thread/flange, 3" i.d. stainless steel stationary riser pipe, .75" bronze "auto-drain" valve located immediately downstream of gate valve, 3.5" Waterous hand crank worm gear actuated deluge discharge valve with chrome plated ball and spring loaded self-adjusting seal assembly (located inside pump enclosure), operator's panel mounted Waterous hand crank controller with valve position indicator and wheel handle.

NOTE: The exterior deluge riser piping (and flange where provided) shall be covered, fully enclosed, with polished 4-way aluminum treadplate cylindrical shroud.

### PORTABLE TFT DELUGE MONITOR TOP



# **Custom Pumpers**

### As Per HGAC Proposal FS19EC05

One (1), Task Force model XFT-NJ "CrossFire" manually operated 1250 GPM lift-off deck monitor is to be furnished, with XFF-MPL 3" direct flange mount, installed on the specified deluge discharge 4-bolt flanged outlet fitting (or optionally specified riser appliance). Monitor shall have manual free-swivel and wheel controlled elevation.

NOTE: The monitor shall be finished in standard TFT color.

### EXTEND-A-GUN - 12"

One (1), Task Force XG12-VoltL-PL "Extend-A-Gun" Manually telescoping deluge riser mount to be furnished, with 3" Victaulic inlet, 3" NPT outlet and XGB-33 clamp kit. Extend-A-gun to be installed on specified deluge piping, designed to vertically elevate deluge monitor 12" when in the extended position.

### TASK FORCE TIPS DISCHARGE PIPE, 2.5" EXTRUDED ALUMINUM

One (1), TFT model XF-SS5 extruded aluminum 5" long Discharge Pipe to be furnished, with internal vanes for stream shaping.

### TASK FORCE TIPS STACKED TIPS, LIGHTWEIGHT ALLOY

One (1) each, TFT model MST-4NJ, set of 4-Stacked Tips to be furnished.

### FOAM SYSTEM, DIRECT DISCHARGE

#### SINGLE AGENT FOAM SYSTEM

The following specified Direct Discharge Foam System shall be of the "single agent" type, with features and accessories as per the following:

### PLACARDS, SINGLE AGENT FOAM SYSTEM

A foam system piping schematic placard, for "single agent" system, shall be furnished, located adjacent to the system's control console. A foam system rating placard shall also be furnished, for the particular model and brand, also located adjacent to the control console. Placards shall be provided by foam system manufacturer, chrome plated cast metal.



### **Custom Pumpers**

### As Per HGAC Proposal FS19EC05

All foam capable discharge controls shall be identified, with colored engraved nameplates to read: FOAM

#### FOAMPRO 2002 SINGLE AGENT CLASS-A FOAM SYSTEM:

The apparatus shall be equipped with a "single agent" FoamPro 2002, electronic, fully automatic, variable speed, direct injection, discharge side foam proportioning system. The system shall be capable of handling Class A foam concentrates. The foam proportioning operation shall be based on direct measurement of water flows, and remain consistent within the specified flows and pressures. The system shall be equipped with a digital electronic control display, suitable for installation on the pump panel.

Incorporated within the control display shall be a micro-processor that receives the input from the flowmeter, while also monitoring foam concentrate pump output, comparing values to ensure that the operator preset proportional amount of foam concentrate is injected into the discharge side of the fire pump.

A paddle wheel type flowmeter shall be installed in the discharge line to the specified "foam capable" discharges.

The digital computer control display will enable the pump operator to perform the following control and operation functions for the foam proportioning system:

- 1. Provide push-button control for foam proportioning rates from 0.1% to 9.9% in 0.1% increments.
- 2. Show current gallon per minute water flow rate.
- 3. Show total gallons of water discharged, during and after foam operations are completed.
- 4. Show total gallons of foam concentrate consumed.
- 5. Simulate flow rates for manual operation.
- 6. Perform set-up and diagnostic functions for the computer control microprocessor.
- 7. Flash a "low concentrate" warning when the foam concentrate tank(s) run low.



### **Custom Pumpers**

### As Per HGAC Proposal FS19EC05

8. Flash a "no concentrate" warning and shut the foam concentrate off, preventing damage to the pump, should the foam tank go empty.

9. Foam Strainer, in suction line, removable

A 12-volt electric motor driven positive displacement foam concentrate pump, rated up to 5.0 GPM, with operating pressures up to 400 psi shall be installed in a suitable location near the apparatus pump hose.

The motor driven foam pump system shall be mounted to a fabricated stainless steel platform, strategically located within the fire pump module, such that the pump is below the level of the foam cell.

A pump motor electric driver (mounted to the base of the pump) shall receive signals from the computer control display, and power the .75 horsepower electric motor directly coupled to the concentrate pump in a variable speed duty cycle to ensure that the correct proportion of concentrate preset by the pump operator is injected into the fire stream.

### MASTER FOAM MANIFOLD

A flanged bolt-on or victaulic grooved stainless steel pump discharge foam manifold is to be furnished, for use with the specified direct discharge injection foam system. Discharge manifold is to include a 4" i.d. stainless steel dual plate spring loaded check valve, fitting tap for foam injection line, fitting tap for flow sensor, bottom fitting tap for the remote manifold drain valve, and multiple taps for use with discharge valves designated as foam lines. Discharge foam manifold is to be of adequate size/capacity to handle flows not exceeding 1100 gallons per minute.

NOTE: Purchaser must designate which of the above specified Discharge Outlet Connections are to be Foam Capable, not to exceed 1100 gallons per minute total flow. NFPA Discharge Flow Rates are designated in Table 16.7.1.

### FOAM MANIFOLD DRAIN

A .75" quarter-turn bronze drain valve, with chrome plated control handle and recessed name tag, is to be furnished, located on a side pump panel immediately above the running board/rubrail level. Manifold drain line is to extend from a bottom tap on the foam manifold, with positive "gravity-drain" to the panel mount drain valve, assuring complete drainage of the manifold downstream of its check valve and upstream of the foam capable discharge valves.



### **Custom Pumpers**

### As Per HGAC Proposal FS19EC05

### CLASS - "A" FOAM CAPABLE OUTLETS, 1100-GPM FOAM MANIFOLD CAPACITY

The following individual discharge outlets are to be Class A foam capable:

- \_\_\_\_\_ each, Passenger Side Discharge
- \_\_4\_\_ each, Rear Discharge
- \_\_\_\_\_ each, Rear Pre-Connect Discharge
- \_\_\_\_\_ each, Driver Side Discharge
- \_\_\_\_\_ each, Pre-Connect Discharge(s): Speed-Lays / Cross-Lays
- \_\_\_\_\_ each, Hose Reel Discharge
- \_\_1\_\_ each, Bumper Discharge

### FOAM LEVEL GAUGE/INDICATOR

### FOAM RESERVOIR, CLASS-A FOAM CONCENTRATE

Class-A foam cell to be furnished, located interior of specified non-metallic water tank, totally separate from baffled water cavities. Refer to Water Tank for full description and capacity of the Class-A foam cell.

#### FOAM LEVEL -TANKVISION, FOR CLASS-A FOAM

One (1), FRC, "Tankvision" foam tank level indicator to be furnished with: weatherproof encapsulated high intensity LED light indicator, 30-ft sensor cable extension for foam tank level indicator, tank level sensing probe, and protected wiring loom. Foam tank level indicator to be mounted on pump control panel. Tank level sensing probe to be located in front of specified foam tank.

### ON-BOARD 12-VOLT "POWERED" FOAMPRO REFILL SYSTEM



### **Custom Pumpers**

### As Per HGAC Proposal FS19EC05

To increase safety of firefighter personnel, the apparatus shall be equipped with an electronic, automatic, concentrate refill system. System shall operate independently of the foam proportioner allowing simultaneous use. Refill operation shall not require apparatus or fire pump to be running. The system shall be capable of handling Class A foam concentrates, emulsifiers, gels and decontamination concentrates. The apparatus shall be plumbed from the externally accessed intake/flush ports to the concentrate cell, located internal of the specified water tank. External fill and flush connections to be quick-connect, cam-lock type. Internal piping to incorporate check valves to prevent backflow. Concentrate tank inlet shall be positioned to minimize agitation. The refill operation shall be based on direct measurement of concentrate level in tank. System must be capable of automatically stopping when cell is full and include a manual override feature. The system shall be equipped with an electronic control suitable for installation on the pump panel. Incorporated within the control shall be a microprocessor that receives input from the system while controlling foam concentrate pump output. An all bronze three-way valve shall be included to allow the operator to flush system after use. Valve control, intake and flush ports shall be located within corresponding panel plate.

The system shall enable the operator to perform the following control/operation functions and status indicators for the refill operation:

- a) Provide push-button start/stop control of foam refill
- b) Solid green light advises operator concentrate cell is full
- c) Flashing green indicates system is running
- d) Green light off, system off
- e) Allow override of "full tank" condition
- f) Provide a means to flush the pump and intake piping

System shall include a 12-volt electric motor driven, positive displacement concentrate pump. Pump shall deliver minimum flow of 10 gpm (37.8 L/min) @ 20 psi, with all types and brands of concentrates currently utilized in fire apparatus. Pump body to be of all bronze construction and other wetted components and piping to be constructed of non-corrosive materials. The system will draw a maximum of 38 amps @ 12 VDC. A pump/motor solenoid (mounted to the base of the pump) shall receive signals from the computer control display and power the .5 hp (0.4 Kw) electric motor directly coupled to the concentrate pump. The system shall receive readings when the concentrate tank is full and stop operation to prevent overfill. Components of the complete refill system shall include:

- g) Operator control and display with Weather-Pac connectors
- h) Refill/flush quick-connect cam-lock fittings and cap
- i) Check valves
- j) Pump/motor assembly and solenoid
- k) Strainer



# **Custom Pumpers**

### As Per HGAC Proposal FS19EC05

- l) Tank level switch
- m) Three-way fill/flush valve
- n) Stainless steel pick-up wand and 6 feet of reinforced suction hose, 1 in diameter to allow maximum flow
- o) Panel placards

An installation and operation manual shall be provided, along with a one-year limited warranty by the manufacturer.

### FOAM CAPABLE DISCHARGES: IDENTIFICATION

All of the specified "Foam Capable" discharges shall have red graphical identification tags or their nametags and/or data plates marked: **FOAM**, in addition to the other discharge nomenclature.

#### PUMP GAUGE PANEL

### PUMP MODULE EXTERIOR LIGHTING

Any optionally specified light fixtures and/or strips shall be 12-volt LED and activated with park brake.

### PUMP OPERATOR'S INSTRUMENTS AND GAUGES

### AIR HORN SWITCH - PUMP GAUGE PANEL, RED MOMENTARY ROCKER STYLE

A weatherproof momentary rocker style RED switch is to be furnished on the pump gauge panel, with a nametag to read: "AIR HORN." Switch is to activate the optionally specified high capacity 12-volt air horn solenoid.

### HEATER, PUMP COMPARTMENT

#### HOT WATER TYPE HEATER, 20,000 BTU

A 20,000 BTU Badger R-290-0 or equivalent hot water type automotive heater to be furnished and installed inside pump compartment. Heater installation to include: gated engine coolant feed and return lines, 12-volt electric fan, and fan control located on pump control panel.



# **Custom Pumpers**

### As Per HGAC Proposal FS19EC05

### PUMP HEATER HOSES AND CLAMPS

The hot water heater core feed and return lines shall be minimum .75" i. d. rubber construction.

Hose clamps are to be screw-to-tighten style, constructed of non-corrosive material.

### COLOR CODED DISCHARGE NAMEPLATES: NOMENCLATURE

Discharge name plates and/or control diagrams are to be permanently engraved into colored media or encapsulated color coded printing, as specified below, Name plate colors are to match the designated color of the individual outlets and pressure instruments.

Suction name plates are to be of the same single color, contrasting to the discharge colors

The name plate's nomenclature is to identify: physical location, size of hose to be attached, and type of discharge. Example: REAR PASSENGER SIDE 2.5" PRECONNNECT DISCHARGE

Color matching name plates are to be provided for: Discharge Outlet (or Hose bed Pre-Connect), Discharge Control, Discharge Pressure Instrument, and the Discharge Bleeder Control.

Apparatus locations are to be identified as: FRONT (forward facing), PASSENGER SIDE (curb side facing), REAR (rearward facing), and DRIVER SIDE (street side facing).

On sides of apparatus, left-to-right locations are to be identified as FORWARD and REARWARD.

At rear of apparatus, locations are to be identified as INBOARD, OUTBOARD, OR CENTER.

NOTE: The terms LEFT and RIGHT are not to be utilized, unless specifically instructed to do so by customer.

### MASTER GAUGES, VACUUM and PRESSURE

#### **NO-SHOK LIQUID FILLED GAUGES**

Master pump intake and pump discharge pressure indicating devices shall be located within 8" of each other, edge to edge, with the intake (suction) pressure indicating device to the left of the pump discharge pressure indicating device.



### **Custom Pumpers**

### As Per HGAC Proposal FS19EC05

A 4" diameter NoShok compound style pressure gauge to be furnished, registering 0 x 600 psi, **"enhanced"** black numerals on white background. Gauge needle shall have a "bright orange" tip for improved visibility. Gauge to be piped to discharge volute of fire pump, equipped with a black permanently engraved identification nameplate installed below the gauge, to read: "DISCHARGE."

A 4" diameter NoShok compound style pressure gauge to be furnished, registering -30 x 400 psi,**"enhanced"** black numerals on white background. Gauge needle shall have a "bright orange" tip for improved visibility. Gauge to be piped to suction volute of fire pump, equipped with a black permanently engraved identification nameplate installed below the gauge, to read: "SUCTION."

### TEST GAUGE PANEL

A test plug assembly to be furnished, installed on specified gauge panel adjacent to respective pump suction and pump discharge gauge. Test plugs to be piped to pump suction cavity and discharge cavity using high pressure clear nylon tubing with brass fittings.

### **INDIVIDUAL DISCHARGE GAUGES, 2.5'' DIAMETER**

Nine (9), 2.5" diameter NoShok compound style discharge pressure gauges to be furnished, registering 0 x 400 psi, **"enhanced"** black numerals on white background. Gauge needle shall have a "bright orange" tip for improved visibility. Gauges to be located in a uniform manner no more than 6" from its respective discharge valve control.

Each gauge and respective discharge valve control to be equipped with color coded permanently engraved identification nameplate to describe numerical sequence, location, type and size of outlet.

All above specified pressure gauges to be analog style, liquid filled, vibration dampened, and capable of operations to -40 degrees F. Master gauges and individual discharge pressure gauges shall have a 7 year warranty.

The specified engine monitors, pump suction and discharge gauges, and individual gated discharge pressure gauges shall be installed on the specified gauge panel.

Pressure gauges to be piped to the individual discharge valves and pump suction and discharge volutes using high pressure clear nylon tubing with brass fittings.



### **Custom Pumpers**

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### CAST METAL PRESSURE GAUGE SURROUND BEZELS

The specified individual pump discharge, pump intake, and individual discharge pressure gauges shall be encased/surrounded by chrome or polished trim bezels. Color coded placards/name tags are to be recessed into the gauge trim bezels.

### THE INDIVIDUAL DISCHARGE PRESSURE GAUGES ARE TO BE ASSIGNED TO:

- \_\_\_\_\_ each, Passenger Side Discharges
- \_\_\_\_\_ each, Rear Discharges
- \_\_\_\_\_ each, Hose Bed Discharges
- \_\_\_\_\_ each, Driver Side Discharges
- \_\_\_\_\_ each, Deluge Discharge
- \_\_\_\_\_ each, Hose Reel Discharges
- \_\_\_\_\_ each, Bumper Discharge
- \_\_\_\_\_ each, Pre-Connect Discharges: Speed-Lays / Cross-Lays
- \_\_\_\_\_ each, Rear Pre-Connect Discharges

### TANK LEVEL INDICATOR(S)

#### WATER LEVEL - TANK VISION

One (1), FRC, "Tankvision" WLA300-A00 water tank level indicator to be furnished with: weatherproof encapsulated high intensity LED light indicator, tank level sending unit, and protected wiring loom. Water tank level indicator to be mounted on pump control panel. Tank level sensing unit to be located front of specified water tank to properly sense water capacity.

#### WHELEN PSTANK STRIP-LITE SYSTEM



### **Custom Pumpers**

### As Per HGAC Proposal FS19EC05

Two (2) Whelen Strip-Lite PSTANK, water tank level status lights shall be furnished, with green/blue/amber/red colors. Lights to be signaled by the specified tank level driver, with information provided by the specified primary level indicator. Red .25-level lights to flash, other colors to be steady illumination when activated. Strip-Lites to be furnished, one on each exterior side of apparatus, as specified.

### TANK INDICATOR REMOTE LIGHT DRIVER, FRC SYSTEM

Fire Research TankVision model WLA290-A00 remote light driver shall be furnished and installed. The driver shall provide four (4) separate signal outputs to the optionally specified remote tank level lights. The driver shall signal.25, .5, .75, and full tank liquid levels. When power is applied the driver shall run a test and cycle each remote light on and off. When the tank is less than .25 full the driver shall "blink" the .25 level light.

The remote light driver shall receive input information over a single wire from the specified Fire Research tank level primary indicator, which is mounted on the pump operator's panel.

### POLYPROPYLENE WATER TANK -- LIFETIME WARRANTED - 500 WATER/20 FOAM

The apparatus shall be equipped with a polypropylene thermoplastic water tank, with isolated foam cell. The water tank's capacity is to be 500 US gallons, and the foam cell's capacity is to be 20 US gallons.

The tank body and end bulkheads shall be constructed of .5" thick, polypropylene, nitrogen-welded and tested inside and out. Tank construction shall conform to NFPA standards.

The transverse and longitudinal .375" thick swash partitions shall be interlocked and welded to each other as well as to the walls of the tank. The partitions shall be designed and equipped with vent holes to permit air and liquid movement between compartments.

The .5" thick cover shall be recessed .375" from the top of the side walls. Hold down dowels shall extend through and be welded to both the covers and the transverse partitions, providing rigidity during fast fill operations. Drilled and tapped holes for lifting eyes shall be provided in the top area of the water tank.

The bottom of the tank shall be secured within the specified rubber lined "full perimeter cradle", design to be in accordance with the tank manufacturer's requirements.



# **Custom Pumpers**

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The water fill tower shall be designed, sized and located as required by the needs of the tank. The .5" thick polypropylene fill and overflow tower shall be equipped with a hinged lid and a removable polypropylene screen.

An overflow tube shall be installed within the fill tower and internally piped with large diameter schedule 40 PVC pipe through the tank, exiting behind the vehicle's rear axle.

The water tank sump shall be a minimum of  $10" \ge 10" \ge 3"$  deep and located on the bottom of the booster tank. There shall be a 4" i.d. schedule 40 polypropylene tank suction pipe from the entrance of the tank (adjacent to and inline with fire pump) to the tank sump. The tank drain and clean out shall be 3" NPT schedule 80 female flange with plug, located in the bottom of the tank sump.

### FOAM CELL

One (1), 20-gallon foam cell shall be furnished as a component of specified water tank. The foam cell shall include a vertical fill stack with lift-up cover and latch assembly. The foam cell pressure/vacuum vent installed. Threaded female ports shall be furnished in the lower and bottom wall of the foam reservoir/cell, for use with the foam concentrate liquid line and low level sensor.

### WARRANTY

The booster tank shall have a lifetime warranty as provided by the tank manufacturer.

### FOAM TANK DESIGN STANDARDS

The non-corrosive foam tank is to meet (or in the case of multiple tanks, Tanks are to meet) applicable sections of NFPA standards.

The foam concentrate tank is to be provided with sufficient wash partitions so that the maximum dimension perpendicular to the plane of any partition shall not exceed 36 inches. The swash partition(s) are to extend from wall to wall and cover at least 75 percent of the area of the plane of the partition.

The foam concentrate tank is to be provided with a fill tower or expansion compartment having a minimum area of 12 square inches and having a volume of not less than 2 percent of the total tank volume. The fill tower opening is to be protected by a completely sealed air-tight cover. The cover is to be attached to the fill tower by mechanical means. The fill opening is to be designed to incorporate a .25 inch removable screen



# **Custom Pumpers**

### As Per HGAC Proposal FS19EC05

and shall be located so that foam concentrate from a five (5) gallon container can be dumped directly to the bottom of the tank to minimize aeration without the use of funnels or other special devices.

The foam tank fill tower is to be equipped with a pressure/vacuum vent that enables the tank to compensate for changes in pressure or vacuum when filling or withdrawing foam concentrate from the tank. The pressure/vacuum vent must not allow atmospheric air to enter the foam tank except during operation or to compensate for thermal fluctuations. The vent is to be protected to prevent foam concentrate from escaping or directly contacting the vent at any time. The vent is to be of sufficient size to prevent tank damage during filling or foam withdrawal.

A color coded label or visible permanent marking that reads "FOAM TANK FILL" is to be placed at or near any foam concentrate tank fills opening.

An additional label is to be placed at or near any foam concentrate tank fill opening that specifies the type of foam concentrate the system is designed to use. Any restrictions on the types of foam concentrate that can be used with the system are also be stated, and a warning message that reads "WARNING: DO NOT MIX BRANDS AND TYPES OF FOAM."

The foam concentrate tank outlet connection is to be designed and located to prevent aeration of the foam concentrate and shall allow withdrawal of 80 percent of the foam concentrate tank storage capacity under all operating conditions with the vehicle level.

### FOAM RESERVOIR DRAIN

One (1) foam reservoir drain is to be furnished, each consisting of a 1/4-turn ball style bronze or stainless steel .75" i.d. valve, stainless steel piping, and threaded spud in reservoir. Reservoir drain is to be located in the pump module, and is to drain liquid concentrate to below the chassis frame.

### UPF POLY TANK III

The specified water tank shall be manufactured by United Plastics Fabrication (UPF), NO EXCEPTIONS.

The booster tank warranty is to be provided by United Plastics Fabricating, Inc., copy of the warranty must be included in the delivery documents.

### UPF POLY TANK DATA PLACARD



### **Custom Pumpers**

### As Per HGAC Proposal FS19EC05

The Apparatus is to be provided with a Data Placard, as furnished by the Water Tank Manufacturer. The Data Placard is to include the following fields of information:

MAXIMUM FILL PRESSURE: PSI MAXIMUM FILL RATE: GPM DATE OF MANUFACTURE TANK SERIAL NUMBER WATER CAPACITY: Gallons FOAM CAPACITY: Gallons-A FOAM CAPACITY: Gallons-B

### WATER TANK SUPPORT STRUCTURE

The specified water tank is to be nested into a full perimeter mounting "picture frame" style support structure consisting of 2" x 2" x .25" thick 304 grade stainless steel angle. The front of tank is to be equipped with a full width .25" thick front base plate. All stainless cradles are to be wire-feed welded to the specified stainless steel apparatus body sub frame transverse tubings.

Structure is to be tank-specific, and shall provide support in the areas and locations specified by the tank manufacturer.

# All mating areas between tank and structure are to be lined with 60 DURO rubber cushion material, .5" thick on horizontal and front surfaces and .25" thick on sides and back vertical surfaces.

Structure is to be mounted to chassis frame rail side walls by hardened carriage bolts. The use of threaded rod plates or U-bolts will not be considered adequate.

#### TANK CRADLE STRUCTURE WARRANTY

The tank cradle is to have a **lifetime warranty**, both structurally and corrosion-free, as provided by body builder.

### WATER TANK PASS-THROUGH(S) FOR REAR DISCHARGE PIPING

The water tank shall have four (4) 4" i.d. pass-through PVC sleeve(s) extending horizontally through the length of the water tank, to allow passage through the tank of discharge piping. Sleeve(s) shall be in line with the exit location of the rear discharge(s).

### VERTICAL L-SHAPE TANK: FOR EXTRA DEEP EASY ACCESS REAR HOSEBED



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The specified water tank is to be "Vertical" L-shaped, with forward portion of vessel higher than the rear bottom portion, so as to allow for the apparatus body hose bed (located above rear portion of water tank) to be of maximum depth and minimum height above tailboard. The forward water tank section is not to extend above the apparatus body sides, and is to be covered with the specified material.

The tank bottom is to be T-shape below forward vertical portion, to allow for maximum lower side compartment depth.

### TANK NOTCHED FOR RECESSED TANK-TO-FIRE PUMP SUCTION PLUMBING

The front bottom of tank is to be "notched" to accommodate recessing of the tank-to-fire pump suction piping. The notched area is to accommodate the specified hump hose coupling, and allow for a forward most location of the water tank within the apparatus body cavity.

#### WATER TANK "MAXIMUM PRESSURE" DATA LABEL

The one (1) optionally specified Water Tank Re-Fill Inlet(s) to be furnished with permanently printed or engraved Data Plate(s) to indicate the **MAXIMUM ALLOWED TANK FILL INLET PRESSURE**. Inlet pressure is to be determined by the piping/valve size (inside diameter) and Tank Manufacturer's Restrictions. Label(s) to be permanently encased in a chrome full surround bezel, located adjacent to the inlet fitting(s).

### DIRECT TANK FILL, 2.5" VALVE WITH 2.5" NST FEMALE INLET

#### LOCATION

There shall be one (1) 2.5" gated external tank fill furnished and properly labeled, installed on the driver's side of the apparatus.

Piping, for the fill, shall be routed to the tank and include an interior tank flow deflector to "break up" the stream of water entering the water tank.

#### VALVE

One (1) each 2.5" ball valve with manual control, 2.5" stainless steel piping, and 2.5" NST swivel female inlet, internal strainer, plug cap and chain shall be provided.

### **BLEEDER VALVE**



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A 1/4-turn drain/bleeder valve shall be furnished, with exterior rear body panel mounted chrome plated bleeder valve control handle, and recessed permanently engraved identification label.

### COMPARTMENTED BODY CONSTRUCTION MATERIALS and FABRICATION:

### FABRICATION MATERIALS

The apparatus body compartments shall be fabricated using a combination of 12-gauge thickness and 14-gauge thickness, type 304 smooth sheet ASTM A240 stainless steel, with #4-polish RA52 surface finish. All structural sheet metal fabrications shall be of 12-gauge material thickness, including, but not limited to: side and rear lower level compartment floors, wheelwell outer panels, rear body corners, and hose bed risers.

Other specified interior compartment shelving, trays, and shelving tracks shall be fabricated of smooth aluminum, of designated thickness, and shall have a machine sanded finish.

The specified 4-way treadplate apparatus body components shall be type 3003 "Brite" aluminum C-102 or equal pattern treadplate, NFPA approved no-slip diamond on step and walk surfaces.

### PRECISION MACHINING AND FABRICATION

All individual apparatus body fabricated components are to be: computer designed for repeatable tolerances, precision computer control machined for superior cut edge quality, and computer control machine fabricated for assembled parts accuracy

### **FASTENERS:**

All apparatus body screw type fasteners shall be stainless steel "low profile" button socket head cap screws with stainless steel hex "Ny-Lok" threaded nuts designed to prevent loosening. Size of fasteners, .25" minimum, and their spacing must provide for maximum structural integrity and no leakage in flanged areas between fasteners. Any necessary exterior exposed nut fasteners shall be polished stainless steel or chrome plated "acorn" covering fastener threads. **NOTE: Hex head, truss head, Phillips pan head, or other large profile style fasteners shall not be used for assembly of fabricated sheet metal components.** Additionally, there are to be NO .187" fasteners of any style used for structural applications.

### **CONSTRUCTION METHODS:**

All individual fabricated body components are to be assembled with removable fasteners for ease of modifications and repairs. Exterior compartment and hose body fabrications must be free of all projections which might injure personnel or fire hose. NOTE: Where "nibbled" or other non-continuous non-smooth cutting methods are used to machine the body material, all edges must be reworked/filed for injury prevention and improved appearance.



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The described construction methods are to ensure easy disassembly of the apparatus body in the event of damage or need for future modifications. Apparatus designs or construction methods which do not allow for disassembly and removal of major fabricated components are not to be considered "equal" to this construction method, NOTE: metal bar shapes, tubular structures and/or extrusions are not to be utilized in the construction of the apparatus body; metal fabrications with integral flanges are to provide the needed structural integrity.

Specified upper level side compartments shall have fabricated vertical door jambs located above wheel well enclosure, separating forward/upper level wheel well/rear compartment areas. Door jambs are to be bolted to sweep-out threshold portion of upper level compartment opening and to the underside of overhead compartment roof fabrication, easily removable so as to allow future modifications to door opening size.

For maximum cubic footage of compartments, the lower portion of the interior forward side compartments shall be recessed into within 4-inches of the chassis frame rail depth, both driver's side and passenger's side of the apparatus body. Recessed areas to be full width of interior compartment, at least 30" high, occupying entire underbody area beneath the outboard portion of the tank.

### **BODY CORNER STYLE:**

The front & rear driver side and passenger side body corners shall be as specified below.

The body corners shall have full height vertical front surfaces, and integral forward compartment door jambs.

### **SWEEP OUT COMPARTMENT FLOORS:**

Driver's side, passenger's side, and rear compartments shall be equipped with "sweep/wash-out" floors, which are raised at least 1" above the compartment door opening threshold and exterior rub rail. All running board/tailboard level side compartment door thresholds shall extend outboard, below the compartment doors, with a minimum 3" flange-down (flush with body sides) and 1" return-in, providing structure for mounting of the specified rub rail material. Door thresholds shall be bolted to and removable from the interior raised compartment floors.

Upper level compartment floors, located above rear wheel well housings, are to be "sweep/wash-out" design, fabricated of body material matching smooth sheet material. Upper level compartment door bottom threshold shall be integral with the rear wheel well outer panel, positioned at least 1" below the interior compartment floor surface, and lined with mirror finish stainless steel for doorway protection.



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### FRONT COMPARTMENT CORNERS, SQUARE SHAPE

The driver side and passenger side front body corners are to have a 90-degree "square" shape. Each corner is to be a single piece full height fabrication, with integral inboard body mating flange (allowing for removal), and outboard vertical door jamb.

### **REMOVABLE INTERIOR COMPARTMENT CORNER ALUMINUM WIRE COVERS**

The passenger's side and the driver's side front and rear interior compartment corners (4-each) are to include vertical full height/full depth wiring harness covers (bulkheads) which are bolted in position and easily removable. Interior compartment corner wire covers are to be constructed of machine swirled natural finish sheet aluminum, designed to provide a rigid mounting surface for optionally specified adjustable shelf tracks.

Front driver side interior corner wire cover is to be "cut-out" and equipped with a large removable panel door for unobstructed access to the specified 12-volt power distribution center. The removable panel door is to be matching smooth aluminum, and designed to allow quick removal without the need for hand tools. Where shelf tracks are provided on same wire cover, the panel door is to be located inboard of each track, so tracks may remain in place.

Where the apparatus is equipped with a Line Voltage System, the passenger side interior corner wire cover is to be cut-out, to expose the perimeter profile of the optionally specified line voltage circuit breaker panel.

### **CONSTRUCTION FEATURES:**

Wheel well trim shall be furnished as specified below, bolted in position and easily replaceable, surrounding driver's side and passenger's side rear body "radius" wheel well cut-outs.

### STAINLESS STEEL WHEEL WELL LINERS

A removable sheet stainless steel circular underside wheel well liner shall be furnished, driver and passenger side wheel well housings. Liners shall be bolted in position and easily removable to allow for underside access to the optional wheel well panel mounted accessories, such as: warning light fixtures, fuel fill piping, air bottle containers, etc: Removal of liners shall also provide convenient access to the rear axle suspension components. Where the outboard edge of circular liners meets the vertical outboard wheel well panel, a replaceable hollow-core rubber gasket shall be provided.

### ALUMINUM TREADPLATE ROOF OVERLAYS



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Driver's and passenger's side compartment roof tops shall be lined/plated with designated material, flanged down at least 1-inch on front, rear, and full length outboard side. Liners shall extend the full length and the full width of compartment roof tops. Flange mating corners of roof top liners shall have "TIG" welded closures. Where aluminum treadplate liners are specified, they shall be underside coated with a spray on rubberized "barrier" coating, prior to final bolt-on installation, NOTE: The treadplate liners are not to be considered a structural portion of the apparatus body, bottom sides of which are not to be visible from within the compartment's interior.

During assembly all areas where metal mates or abuts shall be properly caulked with G.E. or equal silicone body sealant to prevent moisture penetration.

Where compartment wall/bulkhead mounted vertical slotted adjustable shelf track assemblies are specified, the tracks are to be bolted in place or mechanically "engaged" to compartment wall/bulkhead, and easily removable. NOTE: Weld-on shelving tracks do not meet the intent of this requirement.

### REAR BODY FACE CONSTRUCTION MATERIAL

Exterior rear face of body, including: passenger's side rear door jamb, driver's side rear door jamb, and rear top header (below hose bed) shall be fabricated of type 304 smooth plate stainless steel, to allow for application of reflective graphics.

### FILTERED COMPARTMENT VENTING

Back walls of all apparatus body side compartments, including: six (6) lower level (below top of chassis frame rails) 2-ahead of and 1-behind the wheelwell housings and one (1) over-the-wheel, are to be equipped with vented pass-through openings to the body under side. Vented openings are to be covered with 3M water resistant mesh filter media and an interior compartment metal grille. Grille is to be attached to the interior compartment wall with reusable stainless steel screw fasteners with nylon threaded inserts, allowing for removal and cleaning of the filter media from inside of each vented compartment. Vent openings, mesh filter media, and removable grille must allow for dust and moisture free ventilation of the compartment interiors, without reduction of the interior compartment depth.

### BLACK BAR STOCK POLY RUBRAIL



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Bottom edge of side compartments, ahead of and behind rear wheel cut-out, are to be lined with rectangular shape extruded Black 1" deep x 3" high Poly (plastic) Bar Stock bumper material. Rub rails are to be located immediately below the sweep-out bottom door threshold, extending from front to rear of body, equipped tapered ends.

Rub rails shall be bolted in position, with .375" stainless steel fasteners on 12-inch centerlines, easily replaceable.

### BLACK BAR STOCK POLY, TAILBOARD REAR FLANGE

The rear full width flange of the tailboard is to be lined with rectangular shape extruded Black 1" deep x 3" high Poly (plastic) Bar Stock bumper material, forming a rub rail to match body rub rails. Bar stock rub rail shall be bolted in position, easily replaceable.

### **ROUTING OF POLY RUB RAILS, FOR DOT MARKER LIGHTS**

The flat bar stock poly rub rail is to be routered, directly in-line with each of the marker lights, so as to allow rear visibility of the illuminated marker light fixtures.

### **ROUTING OF POLY RUB RAILS, FOR RECESSED LIGHT FIXTURES**

**Four (4)** each, routed-out areas are to be provided for the following specified light fixtures. Routed areas are to be large enough (height and width) to expose the marker light fixture, and to allow for the fixture lens to be removed through the routed area. (refer to lighting fixtures for special recessed mounting).

### POLISHED STAINLESS-STEEL FENDER CROWNS

Polished stainless steel fender crowns (fenderettes) will be provided, encircling the radius panel cut-outs of the rear body wheel well housings. Fender crowns to be bolted to and removable from wheel well housings, with nylon spacers provided between mating flanges, to allow "wash-out" of mating areas. The bolt-on fasteners are to be stainless steel, concealed from exterior view.

NOTE: Use of fender crowns, on any manufacturer's 100" wide compartmented apparatus body, causes vehicle to exceed Federal D.O.T. vehicle standards (of 102") for over-all vehicle width, furthermore; fenderettes will extend beyond the purchaser specified rub rails.

### TUBULAR HANDRAILS, VERTICAL REAR INBOARD CORNERS



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Apparatus body tubular railings are to be furnished, consisting of: 1-.25" o.d. extruded aluminum tubing, chrome plated double bolt type 3" stand-off end type and center rail brackets, and neoprene rubber surface mounting gaskets furnished between rail bracket and painted body surface.

Tubular railings at step areas are to be provided with an aggressive machined "knurled" non-slip exterior surface. Two (2) tubular railings are to be located: 1-passenger's side and 1-driver's side at vertical rear inboard compartment corners.

Two (2) tubular railings are to be located: 1-passenger's side and 1-driver's side at vertical rear beavertails or inboard or outboard compartment corners, as is appropriate for rear body corner design. Handrails are to begin approximately 24" above tailboard, extending to the full height of inboard rear body corners/beavertails.

### DRIVER SIDE TOOL OR WHEEL CHOCK STORAGE, IN WHEEL WELL HOUSING

One (1) triangular shaped fully enclosed tool compartment(s) shall be furnished, located in upper outboard corner(s) of driver's side wheelwell housing. Interior of compartment(s) to be un-divided so as to accommodate the maximum number of miscellaneous tools/or wheel chocks. Interior space shall be a minimum of 2.65 cu. ft.

Compartment(s) shall be equipped with a single weatherstripped vertically hinged over-lapping "beveled-edge" door constructed of wheelwell matching material, equipped with: full height polished stainless steel piano hinge, chain door-stop and trigger style latch.

### WHEEL CHOCK COMPARTMENT, DRIVER SIDE WHEEL WELL

One (1) rectangular shaped fully enclosed folding wheel chock compartment shall be furnished, located in the lower rearward corner of driver's side wheelwell housing, immediately ahead of the rear side compartment doorway.

Two (2) horizontal sleeve segments shall be provided, inboard of and flange bolted to the body wheelwell panel. Sleeves are to be of proper width, height, and depth to accommodate two (2) each optionally specified folding style wheel chocks.

Compartment shall be equipped with a single weather-stripped vertically hinged over-lapping "beveled-edge" door constructed of stainless steel, with wheelwell matching finish, equipped with: full height polished



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stainless steel piano hinge, chain door-stop, and a single chrome plated push-button trigger-latch. For scuff protection, the interior of compartment access door is to be lined with insulated rubber mating.

Wheel chock compartment door shall be equipped with proximity switch to activate DO NOT MOVE VEHICLE LIGHT, and notify driver of an open door condition.

### FUEL FILL DOOR and VENTED FILL PIPE, DRIVER SIDE

A brushed Stainless Steel vertically hinged fuel fill door shall be furnished, bolted in position, located driver side apparatus body rear wheelwell. "DIESEL FILL ONLY" green (color) nametag to be furnished, on the interior door.

A minimum 2" threaded brass vented fuel fill cap shall be furnished, located inside fuel fill door, piped to the underbody diesel fuel tank with: minimum 1.5" i.d. reinforced non-collapsible fuel fill hose and .50" tubing air vent extending from top of underbody fuel tank to top of fuel fill neck.

The tank shall exceed FHWA 393.67 requirements, including 96% fill capacity of tank's total volume.

### SCUFF PROTECTION BELOW FUEL FILL DOOR

The area immediately below the fuel fill door shall be furnished with a mirror finish polished stainless steel scuff plate. Scuff plate shall be of a size and located to prevent paint damage caused by contact with the fueling nozzle. Scuff plate is to be installed with adhesive (no screws), perimeter edges seal caulked.

### PASSENGER SIDE SCBA STORAGE IN WHEEL WELL

Two (2) triangular shaped compartment(s) shall be furnished, located in upper corner(s) of wheel well to accommodate three (3) SCBA bottles.

### COMPARTMENT INTERIOR COATING

Sleeve segments shall be spray coated with a rubberized material for bottle protection and retention.

For additional protection the interior of specified access door is to be lined with insulated rubber mating.

### **COMPARTMENT DOOR**

Air bottle compartment shall be equipped with weather stripped over-lapping stainless steel door.



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Door shall be installed with polished stainless-steel piano hinge, laser-cut stainless steel door prop, and a single push-button trigger-latch.

### **DNMA SWITCH**

Bottle storage compartment door shall be equipped with proximity switch to activate DO NOT MOVE VEHICLE LIGHT and notify driver of an open door condition.

### PIKE POLE MOUNTING, WITH THE LADDER MOUNTINGS

The above specified two (2) pike pole(s) shall be mounted, in appropriate aluminum or PVC tubes, located inside the specified slide-in ladder storage area(s). End of tube(s) shall be "notched" for Pike Head, to prevent rotation.

### **COMPARTMENT INTERIOR ACCESSORIES**

Installed within the compartments shall be the following accessories. All compartments with an adjustable shelf or tray shall include four (4) side wall mounted slide tracks.

### DRIVER SIDE FORWARD COMPARTMENT

### TOOL BOARD, PULL-OUT

Furnished within the compartment shall be two (2). Each tool board shall be constructed of .188" smooth aluminum and shall have a load capacity of 300 pounds. The tool board shall be sized to fit the compartment interior dimensions.

Each tool board shall be a single piece fabrication with the front edge formed with a double bend flange to provide rigidity and a hand grasp for tool board operation. The tool board shall be fastened to slide assemblies on the top and bottom that are attached to angles fastened to shelf track. The shelf track shall allow the tool board to be side-to-side adjustable within the compartment. The tool board shall lock in both the stored and extended position.



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No Compartment Floor Vinyl Tiles

### DRIVER SIDE OVER WHEELS COMPARTMENT

### DRIVER SIDE OVER WHEELS SECOND COMPARTMENT

### DRIVER SIDE REAR COMPARTMENT

### **OFFICER SIDE FORWARD COMPARTMENT**

### **SHELVING**

Five (5) 3/16" smooth aluminum shelves with 2" tall side walls shall be furnished in the above compartment.

Each shelf shall be vertically adjustable and equipped with spring loaded positioning pins at all 4 attachment points.

No Compartment Floor Vinyl Tiles

### TRAY, SLIDE OUT, FLOOR MOUNT

Furnished within the compartment shall be a tray constructed of .188" smooth aluminum and shall have a load capacity of 600 pounds. The tray shall be sized to fit the compartment interior dimensions.

Each tray shall be a single piece fabrication with 2.50" perimeter flanges that are welded in the corners forming a pan and providing a recessed area. The front tray flange shall be formed with a double flange, out and down, to provide a pull handle. The tray shall be fastened to European style extruded precision slide assemblies on each side that are attached to angles bolted to the compartment floor. The tray shall be held in both the stored and extended position with the use of a gas strut that does not require any type of mechanical latch and allows 110% extension out of the compartment.



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### OFFICER SIDE OVER WHEELS COMPARTMENT

### OFFICER SIDE REAR COMPARTMENT

### REAR FACING COMPARTMENT

### UNDER BODY STAINLESS STEEL SUB-FRAME

An apparatus body sub frame is to be furnished, completely independent of the assembled apparatus body fabrications, bolted to and easily removable from the body module. The apparatus body sub frame, including a forward yoke assembly with torsional suspension, transverse under-tank-cradle supports, and a rigid cantilevered rear platform, are to be constructed of rectangular heavy wall type 304 stainless steel welded tubing. Overall sub frame design will provide a corrosion-free structural under body "platform" onto which the compartmented apparatus body is to be bolted to and easily removable from.

### FORWARD BODY SUB-FRAME

A forward sub frame "yoke" is to be furnished, with upper level horizontal transverse cross-members supporting the water tank cradle, and lower level outboard and rearward horizontal members providing under-compartment-floor support of all side and rear compartments. Sub frame vertical tubular structures are to be no more than 1" from chassis frame webs, so as to allow for maximum interior depth of all side compartments. Four (4) bolt-through rubber cushion "vibration and torsion isolators" are to be provided, two (2) per side. Isolators are to bolt to .312" longitudinal yoke structures, and chassis frame web .312" angle brackets, the assembly of which allows for unlimited twisting-moment of the chassis frame rails, independent of the body sub frame. Lower level horizontal under-floor supports are to allow for individual compartment floor load rating in excess of 800 pounds per compartment (as determined by body construction material), without deformation of the floor material.

### **REARWARD BODY SUB-FRAME**

A "cantilevered" rear under body and tailboard sub-frame platform will be furnished, with transverse and longitudinal tubular stainless structures welded to .75" x 8" glove plate frame drops which are bolted to the side web of rear most chassis frame rails. Glove plates are to be located immediately rearward of the chassis rear axle suspension, and are to include integral bottom 3" diameter closed tow eyes. A bolt-on tubular structure is to be provided, spanning between the glove/tow plates, with its removal allowing for the entire body sub frame (with compartmented body attached) to be lifted vertically from the chassis.



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### **BODY SUB-FRAME MOUNTING TO CHASSIS**

Apparatus body sub frame components are to be bolted to the chassis frame with hardened steel locking thread nut and bolt fasteners, bolt holes precision drilled through chassis frame side webs. Body sub frame is to be positioned parallel with and leveled to the chassis frame rails, designed to provide approximately 22" from the ground to top of apparatus body rub rails, running boards, and rear tailboard, when fully loaded.

NOTE: The apparatus body sub frame is not to be fastened to the chassis frame rails with U-bolts, sandwich clamps, or other temporary fastening methods, AND/OR the body sub frame is not to be permanently welded to the body fabrications or extrusions. Above all, the body sub frame is to provide the above specified under-compartment-floor support.

Top mating surface (body to sub frame) of underbody and tailboard tubular supports is to be fully lined with 3M vinyl barrier tape so as to properly isolate the sub frame from the compartment floors.

### APPARATUS BODY SIDE BODY CONFIGURATION:

A precision machined and fabricated fire apparatus compartmented body is to be furnished, designed to be located immediately rearward of the specified fire pump module, totally separate of the pump module. The compartmented body is to be mounted to, supported by, and removable from the specified under body structural sub-frame.

The body configuration is to include fully enclosed and weather sealed compartmentation on the driver side and the passenger's side of vehicle. In order to provide for maximum depth compartmentation, the wheelwell housings are to completely enclose the rear axle suspension components, allowing for the lower portions of the side compartments to extend inboard to the chassis frame depth. Additionally, the apparatus body overall side-to-side width (inboard of body rub rails and fender moldings) is to be 100".

Passenger's side of apparatus body are to be equipped with one (1) 3/4-height compartment ahead of, one (1) horizontal low profile compartment above, and one (1) 3/4-height compartment behind the rear wheelwell.

Driver's side of apparatus body are to be equipped with one (1) full-height compartment ahead of, one (1) half-height compartment upper level above and one (1) full-height compartment behind rear wheelwell housing.

### **COMPARTMENTATION, THREE (3) EACH: DRIVER SIDE**



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D1: The driver's front side compartment segment (ahead of wheelwell) shall be \_\_" interior width x \_\_" interior height x \_\_" interior depth lower level/\_\_" interior depth upper level. Compartment segment to be fully enclosed and weather sealed, equipped with vertically hinged compartment door(s), size of \_\_" wide x \_\_" high.

D2: The driver's side over-the-wheels upper level compartment segment shall be \_\_" interior width x \_\_" interior height x \_\_" interior depth. Compartment to be fully enclosed and weather sealed, equipped with one (1) lift-up horizontally hinged compartment door, size of \_\_" wide x \_\_" high.

D3: The driver's rear side compartment segment shall be \_\_" interior width x \_\_" interior height x \_\_" interior depth lower level/\_\_" interior depth upper level. Compartment segment to be fully enclosed and weather sealed, equipped with vertically hinged compartment door(s), size of \_\_" wide x \_\_" high.

### COMPARTMENTATION, THREE (3) EACH; PASSENGER SIDE:

P1: The passenger's front side compartment segment (ahead of rear wheels) shall be \_\_\_" interior width x \_\_\_" interior height x \_\_\_" interior depth lower x \_\_\_" interior depth upper. Compartment segment to be fully enclosed and weather sealed, equipped with one (1) vertically hinged compartment door, size of \_\_\_" wide x \_\_\_" high.

P2: The passenger's over-the-wheel horizontal compartment shall be \_\_\_ interior width x \_\_\_ interior height x \_\_\_ interior depth. Compartment segment to be fully enclosed and weather sealed, equipped with one (1) drop-down hinged compartment door, size of \_\_\_ wide x \_\_\_ high.

P3: The passenger's rear side compartment segment shall be \_\_" interior width x \_\_" interior height x \_\_" interior depth lower x \_\_" interior depth upper. Compartment to be fully enclosed and weather sealed, equipped with one (1) vertically hinged compartment door, size of \_\_" wide x \_\_" high.

### SIDE COMPARTMENT DOOR, HORIZONTALLY HINGED, DROP-DOWN

The following specified compartment door shall be "flush" with exterior body panels/door jambs, fabricated double panel design with interior compartment weather-stripping. Door shall be flush mounted to prevent lapping door panel gaskets from freezing to body exterior panels, NOTE: Compartment doors which do not custom-fit door openings, or lap over exterior body panels are not acceptable.

Specified compartment door jambs, integral with front and rear body corners, integral with compartment roofs, and removable above wheelwell housings, shall be double-broke with return flanges perimeter lined



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with hollow core clip-on/removable neoprene rubber weather-stripping. Weather-stripping shall seal against interior perimeter door flange, allowing "flush fit" of exterior door surface with exterior body sides. Weather-stripping shall be single continuous piece, with no splice joints in the vertical or top horizontal areas.

Striker pins, for use with specified compartment door rotary latches, shall be positioned on front and rear door jambs of horizontally hinged door. Striker pins to be of minimum length so as to not obstruct door opening. Striker pins shall be threaded stud type, cadmium plated, easily accessible and removable.

Compartment door shall be U-formed, with triple-broke 2" perimeter flange, fabricated of .125" 5052/H32 smooth aluminum. Removable full size inner door liner shall be fabricated of .100" polished 4-way aluminum treadplate, installed after finish painting of exterior door panel. Inner door liner shall be caulked with silicone sealant prior to assembly, held in place with "flush" stainless steel replaceable fasteners (not self-tapping screws or thread tapped flange screws). Inner door cavity, between exterior door pan and removable inner liner shall be packed with sound deadening automotive sheet foam material. Doors shall be of the "flush design" to custom fit the door opening, without overlapping exterior door perimeter body panels. D-ring Hansen 102L polished stainless steel slam type door handle that unlatches counter-clockwise shall be furnished. D-ring shall be bent outward for better grasp, with a latch integral mechanism spring-loaded to return to horizontal position. Door handle shall be located in the top center of bottom horizontally hinged door. Two (2) Eberhard #1-400 cadmium plated "rotary-slam" automatic door latches shall be furnished, mounted one front and one rear of horizontally hinged compartment doors. Neoprene rubber gasket shall be furnished, protecting painted surface between door skin and latch assembly. Exterior door panel shall be smooth with no welds or fasteners exposed.

Door stop cables shall be provided, at front and rear of opened door, designed to hold door perpendicular to opening.

Top horizontal and side vertical door jamb areas, surrounding drop-down style compartment door, shall be lined with polished stainless steel trim moldings to provide corner scuff protection.

Door hinge shall be full length piano style type 304 stainless steel with single piece stainless steel hinge pin. Exposed piano hinge knuckles shall be "machine buffed" to a chrome-like high lustrous finish. Hinge leaves shall be lined with 3M dielectric tape on mating surfaces to doors and door jambs. Piano hinge shall be bolted to door and corresponding door jamb using stainless steel button socket head cap screws and Ny-Lok stainless steel self-locking nuts.

### TRIPLE-BROKE-FLANGE 'SAFETY EDGE'' HOSEBED RISER



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Driver's side full length longitudinal hose bed riser is to be furnished, with triple-formed top horizontal flange, vertical rear triple-formed flange, and mitered top rear corner. A forward transverse hose bed riser is to be furnished, with triple-formed top flange, extending between and flush with driver's side hose bed riser and passenger's hose bed side panel. Front transverse hose bed riser is to be bolted to front body transverse cross panel, easily removable. Driver's side hose bed riser is to be bolted to and removable from the compartment roof top, "inboard" and flush with hose bed side wall. Transverse and longitudinal hose bed risers are to be designed to provide additional hose bed depth, matching the overall height of the passenger hose bed side wall.

The hose bed transverse and longitudinal risers are to be fabricated of type 304 stainless steel #4-brushed un-painted natural finish.

### LADDER BRACKETS, RECESSED INTO BODY SIDE

A recessed ladder mounting area shall be furnished, located above passenger's side compartments, running full length of compartmented apparatus body (extending along side the passenger's side midship pump panel, where nested ladder length dictates). The passenger's upper body side shall be equipped with multiple vertical channel reinforcements, two of which shall be furnished with adjustable U-shape ladder rail brackets. Ladder rail brackets shall be mounted one (1) ahead of and one (1) rear of the designated "clamped" ladder rungs, so as to prevent forward or rearward movement of the stacked and nested ladders. The ladders shall be firmly held in nested position using two (2) spring loaded chrome plated hand grip rotating ladder rung clamps. Clamps shall secure both the extension and roof ladders, tightly against the vertical ladder bracket channels.

### SIDE COMPARTMENT DOORS

The following specified compartment doors shall be "flush" with exterior body panels/door jambs, fabricated double panel design with interior compartment weatherstripping. Doors shall be flush mounted to prevent lapping door panel gaskets from freezing to body exterior panels, NOTE: Doors shall be flush mounted to prevent lapping door panel gaskets from freezing to body exterior panels.

Specified compartment door jambs, integral with front and rear body corners, integral with compartment roofs, and removable above wheelwell housings, shall be double-broke with return flanges perimeter lined with hollowcore clip-on/removable neoprene rubber weatherstripping. Weatherstripping shall seal against interior perimeter door flange, allowing "flush fit" of exterior door surface with exterior body sides. Weatherstripping shall be single continuous piece, with no splice joints in the vertical or top horizontal areas.



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Striker pins, for use with specified compartment door rotary latches, shall be positioned in top and bottom door jambs of vertically hinged doors and front and rear door jambs of horizontally hinged doors. Striker pins to be of minimum length so as to not obstruct door opening. Striker pins shall be threaded stud type, cadmium plated, easily accessible and removable.

Passenger's side and driver's side compartment doors shall be U-formed, with double-broke 2" perimeter flange, fabricated of .125" 5052/H32 smooth aluminum. Removable full size inner door liners shall be fabricated of .100" polished 4-way aluminum treadplate, installed after finish painting of exterior door panel. Inner door liners shall be caulked with silicone sealant prior to assembly, held in place with "flush" stainless steel replaceable fasteners (not self-tapping screws or thread tapped flange screws). Inner door cavity, between exterior door pan and removable inner liner shall be packed with sound deadening automotive sheet foam material. All doors shall be of the "flush design" to custom fit the door opening, without overlapping exterior door perimeter body panels. D-ring Hansen 102L polished stainless steel slam type door handles that unlatch counter-clockwise shall be furnished. D-rings shall be bent outward for better grasp, with a latch integral mechanism spring-loaded to return to horizontal position. Door handles shall be located in righthand door where double vertically hinged doors are furnished on passenger side (leading edge door) in lefthand door where double doors are furnished on driver side (leading edge door), or to trailing edge of single vertically hinged driver side or passenger side door. Door handles shall be located at centerline bottom of top horizontally hinged doors and centerline top of bottom horizontally hinged doors. Two (2) Eberhard #1-400 cadmium plated "rotary-slam" automatic door latches shall be furnished, mounted one top and one bottom of all vertically hinged driver side or passenger side doors and one front and one rear of horizontally hinged compartment doors. Neoprene rubber gaskets shall be furnished, protecting painted surface between door skin and latch assembly. Exterior door panels shall be smooth with no welds or fasteners exposed. Area where double doors meet shall be weatherstripped, mating door flange offset to allow flush fit of adjacent door. Back side of offset flange (non-latched doors) shall be equipped with rubber bumpers to prevent damage to exterior surface of adjacent door. Vertical offset door flanges shall be integral with exterior door skin, not part of the removable interior door liner.

Rod and spring type door holders/props shall be furnished, installed in top outboard interior corners of all vertically hinged compartment doors. Door holders shall be double bolted to doors and door jamb drop flange, easily removable. Interior compartment doors shall include corner reinforcements with crimp-nut fasteners to accommodate bolted door holder bracket. Door holders/props shall be designed to hold the doors in both "open" and "closed" positions, properly adjusted to prevent opening beyond 90 degrees. NOTE: Door holders/props which are welded to sheet metal screwed to door jambs and/or inner door liners are not acceptable.



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In addition to rod/spring door props, all vertically hinged doors shall be provided with multi-stranded steel cable door stops as added protection in event of failure of rod/spring prop. Cable door stops shall not obstruct door opening.

Horizontally hinged lift-up style compartment doors shall be equipped with front and rear (dual) air cylinder assists. Cylinder assists shall be mounted to double bolted fabricated stainless steel door and door jamb brackets. Bottom horizontal and side vertical door jamb areas, surrounding lift-up style compartment doors, shall be lined with polished stainless steel trim moldings to provide corner scuff protection.

All compartment door hinges shall be full length piano style type 304 stainless steel with single piece stainless steel hinge pin. Exposed piano hinge knuckles shall be "machine buffed" to a chrome-like high lustrous finish. Hinge leaves shall be lined with 3M dielectric tape on mating surfaces to doors and door jambs. Piano hinges shall be bolted to door and corresponding door jamb using stainless steel button socket head cap screws and Ny-Lok stainless steel self-locking nuts. So as to provide minimum clearance between door and door jamb (for improved weather sealing), all vertically mounted compartment door hinges shall be .060" material with .187" stainless pin and maximum knuckle length of .625". Horizontal top-of-door mounted hinges, where located under drip cap, may be of larger pin diameter.

### POLISHED EXTRUDED ALUMINUM DRIP PROTECTION

Machine-polished extruded aluminum drip cap extrusions shall be provided, installed overhead all of specified hinged compartment door, and/or roll-out tray-doors. Drip cap extrusions are to be installed with screw fasteners (not adhesive).

### ACCESS PANELS ON INSIDE DOOR LINERS, REMOVABLE

All of the specified "latched" compartment doors, both vertically hinged and horizontally hinged, are to have removable latch access panels, located on the the inner door liner panel, immediately in-line with the door latch handle. Panels are to be constructed of inner panel matching metal, positioned so as to not interfere with perimeter door jamb weatherstripping, held in place with removable stainless fasteners.

### ADJUSTABLE SHELF TRACKS, LOW PROFILE

Four (4) sets of Laser cut vertically slotted bolt-on "low profile" shelf tracks are to be furnished, mounted two (2) on forward and two (2) on rearward interior side walls of the designated apparatus body side compartments. Tracks are to be designed to accommodate spring-loaded threaded cleats allowing for infinite



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vertical adjustment of the optionally specified horizontal compartment shelves, NOTE: Cleats are to be provided, only with the optionally specified shelves, four (4) each per shelf.

Shelf tracks are to be fabricated of .125" smooth aluminum with a finish matching that of the shelves and trays, and their design must allow for the shelving width to match the compartment clear opening width.

### ROM VERTICAL STRIP INTERIOR DOORWAY COMPARTMENT LIGHTING

Six (6) pairs of ROM brand 12-volt multiple LED element, interior compartment vertical "strip" tubular lights, shall be furnished for compartments.

Lights to be inboard the specified door tacks or jambs, activated by "opening" of the respective compartment door, using a magnetic bar latch switch where roll-up doors are provided (mechanical plunger switch where hinged doors are provided).

Lighting shall have polycarbonate lens to resist breakage from impact and damage from light element heat.

### **OVERHEAD HOSE BODY: FORWARD DUNNAGE AND REARWARD HOSE BED**

The upper level centerline of hose body, above the water tank, is to include a forward dunnage area, and a rearward hose bed.

### **OPEN-TOP DUNNAGE AREA**

Open dunnage area is to be provided.

A forward hose body transverse divider panel is to be provided, fabricated with perimeter flanges, and bolted in position (so as to be removable) immediately to the rear of the water tank fill stack. Transverse divider panel is to form the forward wall of the main hose bed area, and provide a mounting surface for optionally specified adjustable hose bed divider tracks.

Location of the transverse divider panel is to provide for an "open-top" dunnage area, ahead of the main hose bed, overhead the water tank, rearward of the midship pump module.

Dunnage floor gratings or heavy gauge 4-way aluminum treadplate, notched to custom fit around the specified tank fill stack(s).

### HOSE BED: ALUMINUM GRATINGS



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The apparatus main hose bed area is to be located to the rear of the transverse hose body divider panel, between passenger's and driver's inboard apparatus body sides, overhead the water tank.

Multiple double-break flange reinforced tank retainer/hose load support beams are to be provided, spanning between and bolted to the inboard apparatus body sides. Beams are to be constructed of body matching material, profile is to be of minimum height to maximize hose bed depth, and the beams are to be positioned no more than twenty (20) inches apart.

Extruded aluminum slatted hose bed floor gratings are to be furnished, running longitudinally the full length of the hose bed. Longitudinal grating slats are to be fastened to underside perpendicular cross-slats which extend the full width of the hose bed cavity. The hose bed floor gratings are to be assembled with bolts (not welded), so as to allow for future modifications and repairs to the grating assembly. Longitudinal gratings are to be single piece full length extrusions, spaced at least .5" apart to allow for hose ventilation. Cross-slats are to be positioned to rest on the top surface of the specified overhead tank retainer/ hose load support beams.

### STAINLESS STEEL ADJUSTABLE HOSEBED DIVIDER TRACKS

Channel fabricated stainless steel hose bed divider horizontal slide tracks are to be furnished, transverse at the rear of hose bed, designed so as to retain the floor gratings and prevent snagging of hose or couplings during deployment and re-loading operations.

In addition to the rear transverse hose bed divider slide track, two (2) parallel transverse stainless steel horizontal channel tracks shall be furnished, bolted to/removable from the specified forward cross divider. Forward and rear horizontal channel tracks are to be provided with sliding friction clamps and threaded studs with acorn nuts, allowing infinite side-to-side adjustment of hose bed divider location.

### 2-ADJUSTABLE HOSE BED DIVIDERS, FABRICATED ALUMINUM

Two (2) each, additional full length hose bed dividers are to be furnished, infinitely adjustable left-to-right.

Dividers shall be fabricated of smooth 12-gauge type 304 stainless steel sheet with full length triple-break top flange, full height triple-break rear vertical flange, matching flange 45-degree mitered top rear corner, single full length reinforcing bottom flange, and full height single-break forward flange. Triple-break flanges shall provide for a safe-grab/hand-hold, the entire top length and vertical rear, as well as providing a mounting surface for optionally specified handrails and/or tarp fasteners.

### HOSE BED CAPACITY



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The main overhead hose bed areas, as described above, shall be designed to accommodate: two beds containing 300 ft. of 1-3/4" double jacket fire hose each, 200ft. of 2-1/2" double jacket fire hose in one bed and 400' of 2-1/2" in another bed, and 800ft. of 5" large diameter hose.

### VINYL HOSE BED COVER

A vinyl coated nylon hose bed cover/tarp to be furnished over main hose body area.

Hose bed cover material shall be black in color.

Front of hose bed shall be fastened to apparatus body by full width awning rail and beaded seam sewn into leading edge of hose bed cover.

Cover shall be removable by sliding front of hose bed cover laterally out of awning rail.

Sides of hose bed shall be restrained by stretch cord and cast metal hook fasteners.

Rear of hose bed shall be restrained by upper retaining pins, chain-weighted seam and stretch cords provided at the rear and on end flap.

### NO RIDE WARNING LABEL

One or more permanent labels to be installed at the rear step area, to read: **WARNING: Do Not Ride on Tailboard**. Label is to be permanently encased in a chrome full surround bezel.

### TAILBOARD, NON-SLIP PUNCTURE GRIP STAINLESS STEEL

A 101" wide rear step/tailboard shall be furnished, constructed of 12-gauge type 304 stainless steel, with #4 brushed/polished finish and the following specified non-slip top surface.

Tailboard shall be a single piece fabrication, with perimeter fabricated flanges, side and rear same width as the outboard rear corners "beveled" 45-degrees. The beveled corner flanges and the rear flange of tailboard shall be double-broke, and have a total of five (5) diamond shape cut-outs, exposing the under flange mounted rear corner marker lights and rear center marker light cluster. Tailboard shall be spaced .5" away from the rear face of body, for drainage, bolted in position and easily replaceable in the event of damage.

Per NFPA: Steps, platforms, or secure ladders shall be provided so that firefighters have access to all working and storage areas of the apparatus. The maximum stepping height from ground to first step shall not



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exceed 24". Additional steps cannot be more than 18" apart. All steps, platforms, or ladders shall sustain a minimum static load of 500 pounds. without permanent deformation and shall have skid resistant surfaces. Any step shall have a minimum area of 35 sq. in. Platform shall have a minimum depth of 8".

### LASER-CUT CUSTOM TEXT/SHAPE(S), TAILBOARD FLANGE

The rear vertical flange, of the apparatus rear tailboard shall have \_\_\_\_\_\_"laser-cut-out", (in lieu of diamond shape cut-outs) inline with the specified 12-volt red rear marker light fixtures, such that the letter / shape is illuminated.

### PUNCTURE-FABRICATED MACHINED NON-SLIP STEP SURFACES

The entire top surface of the tailboard fabrication shall be provided with an NFPA approved non-slip puncture-fabricated foot grip pattern, which has been tested and "certified" to be compliance with NFPA slip resistance requirements. The puncture grip pattern shall be laser-cut and dimple-formed-up, providing an aggressive non-slip top step/walk surface which spans full width and full depth (multiple rows front-to-rear) of the rear tail board fabrication, Non-slip grip pattern shall be completely self-draining (to the ground), so as to not allow for accumulation of water and ice.

### SLIP RESISTANT SABER-SHAPE TABS ON PERIMETER TAILBOARD FLANGES

The top outboard corners of the tailboard's rear side facing fabricated flanges are to be provided with multiple evenly spaced saber shape tabs. The tabs are to extend slightly above the top step surface, so as to limit foot slippage when climbing aboard the tailboard. As with the puncture grip pattern, the saber-shape tabs must be self draining to the ground.

### TAILBOARD DEPTH

The tailboard shall be 12" deep (front-to-rear flange), across the entire width of the tailboard.

### STAINLESS STEEL PUMP PANEL RUNNING BOARDS

Driver's and passenger's side pump panel running boards to be furnished, extending from the rear of chassis cab (or cab steps) to the front outboard body corners, at a horizontal level "in-line" with the apparatus body side rubrails. Running boards shall be single piece fabrications with double-broke perimeter flanges, and



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shall protrude outboard of pump panel sides, to the same total width as the apparatus body rubrails (101"). Running board fabrications are to be bolted to the bottom sides of the fire pump module, and furnished with forward and rearward angular stainless steel under-support brackets.

Running boards are to be constructed of 12-gauge type 304, #4-brushed stainless steel, provided with the following NFPA approved non-slip foot grip top surface.

The entire top surface of the running board fabrications shall be provided with a third party tested/NFPA approved non-slip puncture-fabricated foot grip pattern. The puncture grip pattern shall be precision-cut and dimple-formed-up, providing an aggressive non-slip top step surface with a concentrated pattern strategically positioned at designated step areas, Non-slip grip pattern shall be completely self-draining, so as to not allow for accumulation of water and ice.

### TOW EYES, TWO (2) EACH

Two (2) tow eyes shall be installed below the rear of body, eyes to be 3" in diameter.

The tow eyes shall be machined into .75" thick steel plate, properly attached to sides of chassis frame rails, so that the truck can be straight-line pulled from both of the eyes.

### COMPARTMENTATION, REAR RUNNINGBOARD LEVEL

A rear apparatus body compartment shall be furnished, located at running board level, ahead of the tailboard, to the rear of the chassis frame rails and water tank, below the hose bed, and between the driver's and passenger's rear side compartments.

The rear compartment shall be fully enclosed and weather sealed, equipped with a "sweep/wash-out" floor, which is raised at least 1" above the compartment door sill and the specified tailboard/bumper. The entire compartment floor shall rest on, and be supported by, the specified rear under body tubular sub frame platform.

Rear compartment shall extend vertically from its interior floor to the underside of hose bed, and longitudinally from inner door liner to the rear of the chassis frame rails.



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The running board level rear compartment (ahead of tailboard) dimensions shall be \_\_\_\_ interior width x \_\_\_\_ interior height x \_\_\_\_ interior depth.

The following specified rear compartment door opening shall be \_\_\_\_ wide x \_\_\_\_ high.

### **REMOVABLE PANEL ACCESS TO FUEL TANK**

A removable body panel shall be furnished, in forward wall of the specified rear apparatus body compartment. Removal of the panel shall allow unobstructed access to the diesel fuel tank's level sending unit and stand-pipe engine feed line. Removable panel is to be "flush" with (not overlaid-on) the surrounding metal surfaces, and water-proof. Not applicable to rear mounted pump systems.

### REAR COMPARTMENT DOORS, VERTICALLY HINGED, ALUMINUM TREADPLATE

The following specified compartment doors shall be "flush" with exterior rear body panel and integral door jambs, fabricated double panel design with perimeter door jamb hollow core clip-on replaceable weather-stripping.

The rear body door panels shall be fabricated with double-broke inboard flanges at doorway sides and top. Striker pins, for use with specified compartment door rotary latches, shall be positioned one (1) in top horizontal door jamb and one (1) in bottom sweep-out door sill. Striker pins to be of minimum length so as to not obstruct door opening. Striker pins shall be threaded stud type, stainless steel or cadmium plated hardened steel, easily accessible for removal.

Rear compartment doors shall be U-formed, with triple-broke 2" perimeter flange, fabricated of .125" 3003 polished 4-way aluminum treadplate. Removable full size inner door liners shall be fabricated of .100" polished 4-way aluminum treadplate, installed after finish painting of exterior door panel. Inner door liners shall be caulked with silicone sealant prior to assembly, held in place with "flush" stainless steel replaceable fasteners (not self-tapping screws or thread tapped flange screws). Inner door cavity, between exterior door pan and removable inner liner shall be packed with sound deadening automotive sheet foam material. All doors shall be of the "flush design" to custom fit the door opening, without overlapping exterior door perimeter body panels. A single D-ring Hansen 102L polished stainless steel slam type door handle, that unlatches counter-clockwise shall be furnished on right hand door. D-ring shall be bent outward for better grasp, with a latch integral mechanism spring-loaded to return to horizontal position.

Two (2) cadmium plated "rotary-slam" automatic door latches shall be furnished, mounted one (1) top and one (1) bottom of vertically hinged right hand compartment door. Neoprene rubber gasket shall be furnished, protecting painted surface between door skin and latch assembly. Exterior door panels shall be smooth with



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no welds or fasteners exposed. Area where double doors meet, on the unlatched door shall have a weather-stripped door flange offset to allow flush fit of the latched door. Back side of offset flange (non-latched door) shall be equipped with rubber bumpers to prevent damage to exterior surface of adjacent door. The vertical offset door flange of unlatched door shall be integral/formed as part of the exterior door skin, not part of the removable interior door liner.

Rod and spring type door holders/props shall be furnished, installed in top outboard interior corners of both vertically hinged compartment doors. Door holders shall be double bolted to the doors and to the door jamb drop flange, easily removable. Interior compartment doors shall include corner reinforcements with crimp-nut fasteners to accommodate bolted door holder bracket. Door holders/props shall be designed to hold the doors in both "open" and "closed" positions, properly adjusted to prevent opening beyond 90 degrees.

In addition to rod/spring door props, the vertically hinged doors shall also be provided with multi-stranded steel cable door stops as added protection in event of failure of rod/spring prop. Cable door stops shall not obstruct door opening.

The compartment door hinges shall be full length piano style type 304 stainless steel with single piece stainless steel hinge pin. Exposed piano hinge knuckles shall be "machine buffed" to a chrome-like high lustrous finish. Hinge leaves shall be lined with 3M dielectric tape on mating surfaces to doors and door jambs. Piano hinges shall be bolted to door and corresponding door jamb using stainless steel button socket head cap screws and Ny-Lok stainless steel self-locking nuts.

**NOTE:** Door hinges, door holders/props, and cable stops which are welded or sheet metal screwed to door jambs, door perimeter flanges, and/or inner door liners are not acceptable. All fasteners shall be of the nut-and-bolt type, allowing tightening with a box end wrench.

### ROM VERTICAL STRIP INTERIOR DOORWAY COMPARTMENT LIGHTING

Two (2) per compartment ROM brand 12-volt multiple LED element, interior compartment vertical "strip" tubular lights, shall be furnished, one (1) each side of each compartment door opening.

Where used with roll-up style compartment doors, the lights are to be inboard the specified roll-up door tracks, activated by "opening" of the respective compartment door, using a magnetic bar latch switch. Lighting shall have polycarbonate lens to resist breakage from impact and damage from light element heat.

### **DRIVER SIDE FRONT STEPS**

The following steps shall be provided on driver side front facing surface of apparatus body or pump module.



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### FOLDING STEP WITH STEP LIGHTING

Two (2) IC brand model 3004234 chrome plated folding steps shall be furnished and installed. Steps shall have integrated lighting to illuminate step surface.

Lighting activated with park brake.

These steps to be located on driver side of pump panel area.

### **OFFICER SIDE FRONT STEPS**

The following steps shall be provided on officer side front facing surface of apparatus body or pump module.

### FOLDING STEP WITH STEP LIGHTING

Two (2) IC brand model 3004234 chrome plated folding steps shall be furnished and installed. Steps shall have integrated lighting to illuminate step surface.

Lighting activated with park brake.

These steps to be located on the officer side opf pump panel area.

### BLACK BAR STOCK POLY, RUNNINGBOARD OUTBOARD FLANGES

The outboard full width flange of the driver and passenger side pump panel running boards are to be lined with rectangular shape extruded Black 1" deep x 3" high Poly (plastic) Bar Stock bumper material, forming a rub rail to match body rub rails. Bar stock rub rail is to be bolted in position, easily replaceable.

### COST ALLOWANCE: TOOLS AND ACCESSORY EQUIPMENT

The apparatus total cost shall include an "Allowance" of \$13,000.00 for installation of customer provided miscellaneous accessory equipment and tools, in the driver and passenger side compartments.

### **RESCUE TOOL LAZY SUSAN**

A Fire and Marine 20" "Lasy Susan" rotating style rescue tool holder shall be furnished, installed floor level interior of the specified body compartment.



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The Lazy Susan shall include two (2) Pac Trac Spreader or Combo Tool base pockets with adjustment and four (4) Handleloks with yellow straps for additional tool securement.

The Design of lazy susan and its location shall provide ergonomic unobstructed access to and removal of all bracket mounted rescue tools and accessories, from the rear and both sides of the device.

IF THIS LAZY SUSAN IS TO BE MOUNTED TO A ROLL OUT TRAY, THE ROLL-OUT TRAY MUST BE SPECIFIED ELSEWHRE IN THE SPECIFICATION.

### EXTENSION AND ROOF LADDERS

Refer to NFPA Equipment Section for optionally specified extension and roof ladders to be furnished.

### EXTENSION AND ROOF LADDERS - TO BE MOUNTED IN SPACE(S) ABOVE:

 Extension Ladder:
 Brand
 Model
 Number of Sections

 Extended Length
 \_\_\_\_\_\_ft.
 Nested Length
 Inches

 Height (Thickness)
 \_\_\_\_\_\_Inches
 Inches

 Roof Ladder:
 Brand
 Model
 Overall Length
 ft.

 Overeall Width
 Inches Height (Thickness)
 Inches

 Folding Ladder:
 Brand
 Model

 Rail Height (Thickness)
 Inches, Collapsed Width
 Inches,

 Collapsed Length w/Foot Pad
 inches.
 Inches.

### ZICO QUIC-LIFT LADDER ACCESS SYSTEM

An electrically operated Zico ladder rack shall be installed on the passenger side of the apparatus mounted to the compartment top. This shall permit side storage of the ladders and allow for easy removal at ground level. The system shall lower ladders approximately 31" from the stored position.

The ladder rack is powered by two (2) durable high cycle 12-volt actuators and controlled by a 30-amp two-pole double-throw momentary switch located on the side pump panel.

The ladder rack shall be capable of carrying the extension and roof ladders as designated to be furnished.

### FOLDING LADDER TRAY



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A fabricated 4-way aluminum treadplate "tray" shall be furnished, designed to accommodate a DuoSafety folding ladder, location to be customer designated.

### PIKE POLES

Refer to NFPA Equipment Section for optionally specified Pike Poles to be furnished.

### FOLDING STEP WITH STEP LIGHTING

Four (4) IC brand model 3004234 chrome plated folding steps shall be furnished and installed. Steps shall have integrated lighting to illuminate step surface.

Lighting activated with park brake.

Two steps on each side of rear of body toaccess the hose bed.

### NFPA REQUIRED FIRE HOSE AND NOZZLES - END USER RESPONSIBILITY

NOTE In order to meet the current requirements of NFPA 1901 it is acknowledged that the end user will furnish and appropriately mount any and all Fire Hose and Nozzles not listed herein but as required by the most recent standards prior to placing this vehicle in service.

### **NFPA REQUIRED GROUND LADDERS:**

All Fire Department ground ladders carried on the apparatus shall meet the requirements of NFPA 1901, unless acceptable substitutions are designated.

### 2-SECTION EXTENSION LADDER

One (1) Duo-Safety 24 ft. model 900-A 2-section aluminum ladder shall be furnished, with rope hoist.

### **ROOF LADDER**

One (1), Duo-Safety 14 ft. model 775-A aluminum roof ladder shall be furnished with folding roof hooks.



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### NFPA REQUIRED ATTIC LADDER:

The Fire Department Attic Ladder carried on the apparatus shall meet the requirements of NFPA 1901, unless an acceptable substitution is designated.

### FOLDING LADDER

One (1), Duo-Safety 10 ft. model 585-A aluminum folding attic ladder shall be furnished.

### FOLDING LADDER TRAY

A fabricated 4-way aluminum treadplate "tray" shall be furnished, designed to accommodate a DuoSafety folding ladder, location to be customer designated.

### PIKE POLE, 6-FOOT FIBERGLASS

One (1), DuoSafety or equivalent 6 ft. "pike" pole(s), with fiberglass straight pole shall be furnished.

### PIKE POLE, 10-FOOT FIBERGLASS

One (1), DuoSafety or equivalent 10 ft. "pike" pole(s), with fiberglass straight pole shall be furnished.

### **PIKE POLE MOUNTING(S)**

Please refer to the Apparatus Body Section for description of Pike Pole mounting location(s).

### AXES - END USER RESPONSIBILITY

NOTE In order to meet the current requirements of NFPA 1901 it is acknowledged that the end user will furnish, the minimum axes specified prior to putting this vehicle in service.

### FIRE EXTINGUISHERS - END USER RESPONSIBILITY



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NOTE In order to meet the current requirements of NFPA 1901 it is acknowledged that the end user will furnish, the minimum fire extinguishers specified prior to putting this vehicle in service.

### SPANNER and HYDRANT WRENCH SET

Two (2) Elkhart model 470 wrench holder(s), each with two (2) spanner wrenches and one (1) hydrant wrench, to be furnished.

### ADAPTERS - NFPA REQUIRED

One (1) double female 2.5" adapter with National Hose (NH) threads shall be furnished, mounted in a bracket fastened to the apparatus.

One (1) double male 2.5" adapter with National Hose (NH) threads shall be furnished, mounted in a bracket fastened to the apparatus.

### RUBBER MALLET

One (1) rubber mallet to be furnished suitable for use on suction hose connections, mounted in a bracket fastened to the apparatus.

### WHEEL CHOCKS

Two (2) Large size "rubber" wheel chocks shall be provided.

### NFPA REQUIRED MISCELLANEOUS - END USER RESPONSIBILTY

NOTE In order to meet the current requirements of NFPA 1901 it is acknowledged that the end user will furnish and appropriately mount any and all equipment not listed herein but as required by the most recent standards prior to placing this vehicle in service.

### NUTS, BOLTS, SCREWS

One (1) bag of chrome, stainless steel, or cadmium plated screws, nuts, bolts and washers, as used in the construction of the unit shall be supplied to mount loose equipment items.



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### ELECTRICAL - 12 VOLT - INDUSTRIAL APPARATUS

### NFPA RELATED NON-EMERGENCY 12-VOLT ELECTRICAL STANDARDS:

### ELECTRICAL WIRING INSTALLATION - 12 VDC

All electrical circuit wiring installed by the apparatus body builder is to be stranded copper alloy conductors of a gauge rated to carry 125% of the maximum current for which the current is protected. Wiring is to be colored and/or printed with circuit function code over each conductor's entire length.

Original non-protected chassis wiring, extending to rear, including: left turn circuit, right turn circuit, brake circuit, and back-up light circuit is to be re-routed to the interior chassis cab. New replacement color coded legend imprinted SXL insulated multi-stranded copper chassis wiring is to extend from chassis cab to rear body electrical chassis functions. Wiring is to be enclosed inside specified apparatus body in heat resistant vinyl loom.

### AMBER TURN LIGHT ACTIVATION

Dedicated wiring shall be provided from chassis turn signal control, to the rear of the apparatus, for signaling of the specified apparatus body left and right side rear amber turn lights. Rear amber turn lights are not to be activated by brake lights.

### **ELECTRICAL WIRING INSTALLATION PERFORMANCE - 12 VDC**

All wires are to be of sufficient size so that voltage drop in any electrical device shall not exceed 15%.

### BATTERY CABLE INSTALLATION STANDARDS

Chassis battery cables are to be routed to a power distribution terminal post located on a frame rail, and then to the apparatus body power distribution center (PDC). All battery cables are to be appropriately sized welding cable, heavily insulated super fine multi-stranded copper enclosed within high temperature vinyl loom and equipped with plated copper soldered terminals/lugs. Edge protector or rubber grommet is to be furnished whereever battery cables pass through sheet metal panels.

### AUDIBLE DEVICE INSTALLATION STANDARDS

When furnished, air horns, electric siren, electronic siren speakers, and other audible emergency equipment are to be mounted as low and as far forward on the apparatus as practical. Audible warning equipment is not to be mounted on the roof of the chassis cab.



## **Custom Pumpers**

## As Per HGAC Proposal FS19EC05

### WIRING HARNESSES

All apparatus body and pump compartment wiring for specified lights and electrical equipment shall be suitably protected inside heat resistant vinyl, forming multiple harnesses. Multiple harnesses to run from chassis cab, pump compartment, and apparatus body to a PDC (power distribution center). Harnesses shall consist of individual legend imprinted multi-stranded copper color coded SAE-J 1128 compliant automotive wires inside vinyl loom. Spare wires shall run throughout apparatus compartmented body and pump compartment, so as to allow future installations of electrical accessories, using original harnesses. All wiring to be identified, "imprinted" with number and function. Auto-reset circuit breakers to be furnished, of various amperage capacity, sized for intended load.

All 12-volt switches, relays, terminals, connectors, and wiring to have a direct current rating of 125% of maximum current for which the current is protected. All wiring terminals to be machine crimped, pull-tested during assembly.

### POWER DISTRIBUTION CENTER

The power distribution center shall be located interior of driver's forward side compartment, and shall contain engineered electrical components and waterproof pin/socket bulkhead connectors. Multiple circuit breaker sockets shall be furnished for future use.

An enclosed electric junction cubby will be provided in the driver's side lower front compartment. This compartment will be recessed through the inside front wall of the compartment to an easily accessible enclosure to house all of the body wiring junction points, terminal strips, relays, etc. The design of this compartment will not decrease the storage capacity area of the compartment in which it is located. A removable panel will be provided for access to this compartment.

### BATTERY CABLE UPGRADE

A 600 amp fuse protected 2-0 multi-stranded copper insulated battery cable shall run from specified battery switch through a 300-amp solenoid and to the chassis frame mounted threaded stud terminal block, providing power to high amperage items such as: primer motor, electrical discharge valves, reel rewind motors, generator starter motor, etc.

"Vehicle Specific" wiring information shall be provided for this particular apparatus "as built" upon completed delivery of the same. Information to be in spreadsheet format, describing PDC connections and functions.



## **Custom Pumpers**

## As Per HGAC Proposal FS19EC05

### **EMERGENCY SWITCH CONSOLE**

See CHASSIS segment of specifications, for description and location of provided emergency switch control console.

### DO NOT MOVE APPARATUS " HAZARD" INDICATOR LIGHT

The forward overhead mounted flashing hazard warning indicator light, as per current NFPA requirements, is to be provided and shall be illuminated automatically, when signaled by events listed below:

The light shall be labeled "DO NOT MOVE APPARATUS IF LIGHT IS ON".

### DEVICES WHICH ACTIVATE THE "DO NOT MOVE APPARATUS" INDICATORS

Opened chassis cab doors and/or open apparatus body exterior compartment doors, are to activate/illuminate the above specified "DO NOT MOVE APPARATUS" warning indicator light located on the forward overhead headliner, and the specified audible alarm.

### **APPARATUS LIGHTING INSTALLATION STANDARDS:**

All specified 12-volt to be in accordance with D.O.T. regulations at time of purchase.

### WALKWAY, STANDING PLATFORM, AND WORK AREA LIGHTING

Specified standing, stepping, and walking surface lighting shall be located to minimize accidental breakage.

### LIGHTING INSTALLATION REQUIREMENTS

All specified light fixtures to be located/fitted prior to and re-installed after finish painting. Where fixture wiring passes through metal body panel, the pass-thru hole to be equipped with a rubber grommet. All specified light fixtures shall be installed, using stainless steel screws with non-metallic "replaceable" threaded inserts, to allow removal of light fixture, from exterior of body. Where light fixtures are to be installed on a painted panel, all light fixture mounting holes, grommet holes, and fastener holes shall be machined/cut-out prior to prime and finish painting, so that all metal edge surfaces receive the same protective coating. Where holes are cut or drilled, after finish painting, same holes shall receive paint finishes prior to insertion of fasteners and threaded inserts.



## **Custom Pumpers**

## As Per HGAC Proposal FS19EC05

### **FMVSS LIGHTING CONFIGURATION**

The following specified rear body tail/stop, turn and back up lights to be positioned: Red (tail/stop) TOP, Amber (turn) MIDDLE, and Clear (back up) BOTTOM, driver's and passenger's side rear of body.

### MASTER BATTERY SWITCH

See CHASSIS segment of specifications, for description, and location of provided master battery cut-off switch.

### LED REAR STEP LIGHTS

Two (2) each, 12-volt Tecniq model E03-W000-1 LED courtesy step lights are to be furnished, located to illuminate step surfaces at the rear of the body, where individual steps are specified. Light fixture to have polished stainless bezel and shielded clear polycarbonate lens. Lights to be activated by parking brake set.

### REAR TAILBOARD STEP LIGHTS, LED

Two (2), 12-volt Grote model 60571 LED courtesy step lights are to be furnished, located to illuminate tailboard step surface at the rear of the body. Light fixture to have polished stainless bezel and shielded clear polycarbonate lens. Lights to be activated by parking brake set.

### **DOT LIGHTING**

### **REAR LED ID/MARKER LIGHTING**

Five (5), rectangular surface mount 12-volt dual LED bulb marker lights with red reflective lenses to be furnished, located: two (2) recessed into outboard rear tailboard corner flanges, and three (3) recessed behind center rear tailboard flange. Diamond shape cut outs are to expose light fixtures. Marker lights to be activated by headlamp switch.

The three (3) LED marker lights located at the rear to be:

As close as practical to the vertical Centerline. Centers spaced not less than six (6) inches or more than twelve (12) inches apart. Red in color. All at the same height.



## **Custom Pumpers**

## As Per HGAC Proposal FS19EC05

The two (2) LED outboard marker lights located at the rear shall be installed:

To indicate the overall width of the vehicle.

At the same height.

To be visible from the rear and the side.

### MID-TURN/MARKERS

Two (2), surface mount mid-ship Weldon model 9186-8580-29 LED dual element, combination marker and turn lights, are to be furnished, located: one (1) driver's side mid-ship vehicle and one (1) passenger's side mid-ship vehicle. Light fixtures are to have Amber lens. Marker Light is to be steady on with headlights, Turn Lights are to have flashing element, activated by vehicle turn signals.

Per FMVSS 108 and CMVSS 108 requirements.

### **REAR BODY RED REFLECTORS**

Four (4) red reflectors shall be furnished, located at rear and rear sides of body.

### **STOP/TAIL , BACK-UP and TURN LIGHTS**

Two (2), Whelen M6BTT, rectangular Red element surface mount "LED" combination stop/taillights to be furnished, mounted each side at rear of body. Lights to be wired for activation by service brake and headlamp switch.

### **REAR TURN SIGNALS**

Two (2), Whelen M6T, rectangular Amber element surface mount "arrow" LED turn signal lights to be furnished, mounted one each side at rear of body. Lights to be wired for activation by left or right turn signal (not by brake lights).

### BACK-UP LIGHTS

Two (2), Whelen M6BUW rectangular Clear element surface mount LED back up lights to be furnished, mounted one each side at rear of body. Lights to be wired for activation by reverse gear of truck transmission.



# **Custom Pumpers**

## As Per HGAC Proposal FS19EC05

Above specified lights to include M6FC, chrome plated bezels, evenly spaced, driver's side and passenger's side rear body corners.

### BACK-UP ALARM

See CHASSIS segment of specifications, for description of: Back-Up Alarm to be furnished.

### **COMPARTMENT INTERIOR LIGHTING**

See APPARATUS BODY segment of specifications, for description, and location of provided body compartments interior lighting.

### UNDER CHASSIS GROUND LIGHTING

See CHASSIS segment of specifications, for description of: underside chassis Ground Lighting, and locations to be provided.

### PERIMETER UNDERBODY LIGHTS

Five (5) each, 4" LED grommet mount under body 12-volt ground lights to be furnished, located: two (2) each driver's side ahead of and behind rear wheels, two (2) each passenger's side ahead of and behind rear wheels, one (1) each center rear underside tailboard. Lights to be completely sealed for weather resistance, lenses 4" diameter. Lights to be wired for activation by setting of the parking brake.

### APPARATUS BODY 12-VOLT SCENE LIGHTING

### 12 VOLT PIONEER PLUS PCP2 LED SCENE LIGHTS: UPPER SIDES, 2-EACH

Two (2), Whelen model PCP2 Dual Panel Combination Pioneer "Plus" flood/spot lights, are to be furnished. Lights are to be located one (1) each side, upper level of the apparatus body, side facing.

The lights shall be switched in the chassis cab, identified as: "DRIVER AND PASSENGER SIDE SCENE LIGHTS".

### LOCATION OF LIGHT FIXTURES



## **Custom Pumpers**

## As Per HGAC Proposal FS19EC05

The above light fixtures are to be located:\_\_\_\_

### **12-VOLT SIDE FACING SCENE LIGHT SWITCHING, CAB SWITCH**

All of the specified Side Facing 12-Volt scene light are to be activated by one (1) cab switch. Switch is to be located on electrical console (where specified) labeled to identify type of light and the side facing location(s).

### 12 VOLT SCENE LIGHTS: UPPER BODY REAR FACING, 2-EACH

Two (2), Whelen Pioneer model PFA1R15, rectangular chrome plated flange, recess mounted LED scene lights to be furnished and installed, located one (1) each side at the upper rear outboard corners of body, rear facing.

The lights shall be switched in the chassis cab, identified as: "DRIVER AND PASSENGER REAR SCENE LIGHTS".

### 12-Volt REAR SCENE LIGHT SWITCHING, CAB SWITCH

Specified 12-Volt scene light(s) are to be activated by one (1) cab dashboard switch. Switch is to be labeled to identify location and type of lights to be switched.

### AIR HORNS

See CHASSIS segment of specifications, for description of: Air Horns to be furnished, Activation Device(s), and mounting locations for same components.

### ELECTRONIC SIREN SPEAKER(S)

See CHASSIS segment of specifications, for description of: Electronic Siren Speaker(s), and Speaker Location(s) to be furnished.

### MECHANICAL SIREN



## **Custom Pumpers**

## As Per HGAC Proposal FS19EC05

See CHASSIS segment of specifications, for description of: Mechanical Siren, Activation Device(s), and Installation of components to be furnished.

### TRAFFIC DIRECTING LIGHT BAR - REAR OF BODY

One (1), Whelen model TAL65 Traffic Directing 36" wide light bar with six (6) Amber LED lamps and one (1) TACTRL1 control head is to be furnished. The light bar is to be surface mounted at center rear of body, as high as possible. Control head is to be installed inside driver's compartment, location as designated by Customer.

### **REAR BODY TRAFFIC BAR PROTECTION**

The optionally specified rear body mounted traffic light bar is to be surface mounted to rear face of the apparatus body, beneath a tubular rear horizontal handrail which is located so as to protect the light bar and lenses.

### HORIZONTAL REAR HANDRAIL, BELOW HOSE BED

Matching material tubular railing is to be provided, horizontally on rear body vertical panel below the hose bed gratings. Railing is to be as wide as is possible, without causing interference with optionally specified rear inlets/outlets or step assemblies.

### A - LOWER ZONE FRONT WARNING LIGHTS

See CHASSIS segment of specifications, for description of: A-Zone Lower Level Emergency Lighting Fixtures, and Installation of same.

### **B and D - LOWER ZONE FRONT SIDE INTERSECTION WARNING LIGHTS**

See CHASSIS segment of specifications, for description of: B and D-Zone Lower Level Front Side Intersection Emergency Lighting Fixtures, and Installation of same.

### ZONE B and D LOWER ZONE MID-SECTION SIDE, LED WARNINGS



### **Custom Pumpers**

### As Per HGAC Proposal FS19EC05

Two (2), Whelen model M6R, M6 Series Super LED, 4" x 7" rectangular light heads with 18-RED flashing Super LED light elements, Red Polycarbonate Lens, and M6FC chrome plated surround bezels are to be furnished, one (1) on each side of the apparatus in the front, center, or the rear portion of the rear wheel wells. Lights are to meet the NFPA Zone B and D lower level lighting requirement.

### SIDE LOWER ZONE, REAR SIDE, LED

Two (2), Whelen M6J surface mount Red and Blue Super LED flashing lights with Clear lenses and chrome trim flanges to be furnished, one (1) on each lower side of the apparatus as close to the rear of the body as possible. Lights are to meet the NFPA Zone B and D lower level lighting requirement. Lights to be activated by an illuminated rocker switch.

### UPPER LEVEL REAR SIDE LED WARNING LIGHTS

Two (2), Whelen M6J surface mount Red/Blue split Super LED flashing lights with chrome trim flanges to be furnished, surface mounted, side facing located driver and passenger upper rear body corner sides. Light lenses to be driver's and passenger's side Clear. Lights to be activated by specified switch, identified by function.

### **REAR OF BODY LOWER LEVEL LED WARNING LIGHTS**

Two (2), Whelen model M6, 7" x 4" rectangular surface mounted LED light heads with colored lenses and two (2) M6FC chrome plated surrounds to be furnished, located one (1) RED driver's side lower rear body corner, one (1) BLUE passenger's side lower rear body corner. Light lenses to be colored and lights to be activated by specified switch, identified by function.

### REAR ZONE B-C-D, UPPER LEVEL LED LIGHTS: 1-"B", 4-"C", AND 1-"D"

Six (6), Whelen 500 series TIR6 Super LED rectangular surface mounted light heads, with six (6) each 5TSMAC chrome plated surrounds, to be furnished and mounted: two (2) rear upper sides (1-each side) two (2) driver's side rear and two (2) passenger's side rear "stacked" one above. All light elements and light lenses to be RED. Lights to be activated by specified switch, identified by function.

#### SPECIAL MOUNTING INSTRUCTIONS



### **Custom Pumpers**

### As Per HGAC Proposal FS19EC05

The six (6) each, above specified:\_\_\_\_\_light fixtures are to be located:\_\_\_\_\_

### REAR UPPER CUSTOM MADE "BOXED" STANCHIONS

Two (2) LED Beacons and two (2) LED Rear Scene lights are to be mounted on custom designed "boxed" stanchions, located at the rear top corners of the body, one (1) driver side and one (1) passenger side. Stanchions are to provide for a top flat mounting surface for the Beacons, and a rear facing flat surface for the Scene lights, at the highest point of the apparatus Upper Zone B, C, and D.

Stanchions are to be fabricated of smooth aluminum, "box" construction, completely enclosing the wiring, and provided with bolt-on bottom panel to access the inside mounting flanges and wiring. Stanchions are to be painted a single job color, matching apparatus body, NOTE: where recessed side mounted ladders are provided, the stanchion is to be located so as to provide a minimum of 2-inches clearance between the stanchion bottom and the highest ladder beam.

### PAINT COLOR/CODE

The paint color (job color) code shall be: Red to match existing apparatus.

### PAINT PROCESS

Body surfaces which are to be painted, are to be cleaned using DX436 wax and grease remover. Next, the entire to be painted surface is to be sprayed with F3963 Etching Primer which exhibits very good adhesion and corrosion resistance. A high build primer surfacer, F3975, is to then be applied directly over the etch primer. After allowing the primer surfacer to air dry, the entire unit is to be sanded using dual action sanders leaving a very smooth surface to be painted.

The paint applied to the apparatus shall be PPG Industries Delfleet® Evolution brand, applied throughout a multi-step process including at least two coats of each color and clearcoat finish.

Special attention will be given to proper application of coatings according to the specified film build (wet and dry) recommendations of PPG. Product or technical data bulletins should be consulted for any needed information above that which has been outlined herein. All paint materials shall be prepared and applied in accordance with this specification and the paint manufacturer's latest written recommendation prior to paint application.



## **Custom Pumpers**

### As Per HGAC Proposal FS19EC05

The coating shall be baked or air dried. The coatings shall provide full gloss when finished curing and must be suitable for application by conventional pressure air atomizing spray.

Body panels and sub-frame area which cannot be painted after assembly shall be pre-primed and painted prior to main painting process.

The coatings shall not contain lead, cadmium or arsenic. The polyiscoyanate component shall consist of only aliphatic isocyanates, with no portion being aromatic isocyanate in character. The solvents used in all components and products shall not contain ethylene glycol, mono-ethyl ethers, or their acetates (commercially recognized as cello solves), nor shall they contain any chlorinated hydrocarbons. The products shall have no adverse health effects or present any unusual hazard to personnel when used according to manufacturer's recommendations for handling and proper protective safety equipment, and for its intended use.

The coating system, as supplied and recommended for application, shall meet all applicable federal, state and local laws and regulations now in force or at any time during the courses of the bid.

The specified apparatus body painted surfaces shall receive the primer coats and the finish coats. These painted surfaces shall have a finish with no runs, sags, craters, pinholes or other defects.

### HIGH LUSTER BUFFING

The specified color painted components (except roll-up door slats) shall be "wet" color sanded with ultra-fine media, machine buffed with rubbing compound and wool pad, machine buffed with glaze and foam pad, and hand wiped to remove residue.

### PAINT COLOR

Finish color of the apparatus body exterior and painted accessories shall be of a single color to match major chassis cab exterior color.

Unless otherwise specified, the chassis frame, axles, and suspension shall remain the OEM color of Black.

#### **COMPARTMENT INTERIORS**

The enclosed compartment interiors, side and rear, are to be metal finish.

Where body material is aluminum, the metal is to have a finish as described in the Paint and Graphics Section of these specifications.

Where metal specified to be stainless steel, the finish is to be mill polished #4-brushed.



### **Custom Pumpers**

### As Per HGAC Proposal FS19EC05

### COMPARTMENT FABRICATED ACCESSORIES

The optionally specified fabricated compartment accessories (shelves and boards, etc), are to be unpainted natural smooth metal finish. Where material is aluminum, the metal is to have a machine "swirl-pattern" finish, where metal is stainless steel, the finish is to be #4-brushed.

#### **BODY RE-ASSEMBLY**

During reassembly of all individually painted fabricated components, special care shall be taken to prevent deterioration of top paint coats of mating flanged areas. Fabricated accessory components, which have been removed prior to painting, shall be seal coated where mated to dissimilar metal painted components. Accessory fabrications to be installed using stainless steel button socket head cap screw fasteners. Edges of accessories, where meeting exterior body painted fabrications, shall be properly caulked with G.E. or equal silver metallic body sealant to prevent moisture accumulation between metal layers.

#### **TOUCH-UP PAINT**

One (1), full quart of original finish color top coat paint material shall be provided for use as future touch-up paint.

### MACHINE "SWIRLED" FINISH ON BULKHEAD WIRE COVERS

The optionally specified interior compartment front and rear bulkhead wire covers are to be abrasive machined, where exposed inside compartment, with a "swirl" pattern, providing a scuff resistant aluminum finish.

#### MACHINE "SWIRLED" FINISH ON ROLL-OUT TRAY(S)

The optionally specified one (1) each Roll-Out Tray(s) to be abrasive machined, fully on interior floor and perimeter flanges, with a "swirl" pattern, providing a scuff resistant marbled natural aluminum finish. Swirl machining of the metal surface is to be performed after profile cutting of tray and prior to its fabrication.

#### DA ORBITAL SANDED FINISH ON TOOLBOARD(S)

The optionally specified one (1) each Tool boards are to be completely machine sanded, on both sides, with a dual-action orbital abrasive sander, providing a scuff resistant light abraded natural aluminum finish.

#### CHASSIS FRAME AND DRIVE TRAIN FINISH, TO REMAIN ORIGINAL OEM FINISH



### **Custom Pumpers**

### As Per HGAC Proposal FS19EC05

The chassis frame assembly is to remain the color and paint quality as received from the chassis manufacturer (OEM). The frame and drive train components are not be repainted.

Components that are considered part of the "frame assembly" are frame rails, cross members, axles, suspension, steering gear and the fuel tank.

### **DISSIMILAR METALS CORROSION PREVENTION**

In an effort to prevent "dissimilar metals corrosion" all apparatus ferrous and non-ferrous metals shall be isolated from one another, using barrier tapes, vinyl or rubberized coatings, and other methods to isolate the mating surfaces. Where aluminum and steel or stainless steel are "mated", the entire mating surface must be lined or coated, even where surfaces are already prime and/or color coat painted.

Since all fasteners must be stainless steel, it is imperative to provide fasteners with the smallest possible head profile, such as button-socket-head cap screws, in lieu of pan head or truss head screws. Additionally, all screw and nut fasteners shall be coated with "Harpen Wax" to prevent fastener discoloration when exposed to dissimilar aluminum. Rubber and/or vinyl washers shall NOT be used, as they collapse as allow fasteners to loosen.

Where stainless steel piano hinges are bolted to aluminum, the hinge leaf shall first be lined with a brush on undercoating.

### ADDITIONAL CORROSION PREVENTION

In addition to the above specified corrosion prevention, the apparatus shall be assembled using ECK or electrolysis corrosion control, on all high corrosion potential areas, such as door latches, door hinges, trim plates, fenderettes, etc. This coating is a high zinc compound that shall act as a sacrificial barrier to prevent electrolysis and corrosion between dissimilar metals.

All .375" diameter and smaller screws and bolts shall be stainless steel with a wax coating, designed to reduce the potential for electrolysis and corrosion to occur where items are assembled and attached.

### CUSTOMER TO PROVIDE NFPA COMPLIANT REFLECTIVE STRIPING OR GRAPHICS

The purchaser (customer) is to provide and apply the NFPA compliant Reflective Striping and/or Graphics package, after delivery of the completed apparatus.



## **Custom Pumpers**

### As Per HGAC Proposal FS19EC05

### REFLECTIVE CHEVRON STRIPING, CAB INTERIOR DOORS

A two-color RUBY RED/LEMON YELLOW Chevron Pattern reflective stripe is to be affixed to the interior of each chassis cab door. The stripes are each to be a minimum of 96 sq. in. so as to meet the NFPA 1901 requirement.

### CHEVRON STRIPING, REAR APPARATUS, RUBY RED and LEMON YELLOW

Up to 48 square feet of 6" multiple diagonal 3M ScotchLite or an equivalent brand reflective stripes are to be provided, full width at rear of apparatus body. Stripes are to form "Chevrons", using alternating Ruby Red/Lemon Yellow reflective stripes, only interrupted by the rear apparatus lighting, handrails, steps, and other bolt-on accessories. Chevron patterned material is to be applied on to the flat metal "painted" surface, prior to the final installation of the specified bolt-on (removable) fixtures and accessories. Stripes shall be oriented at 45-degree angle, sloping downward and away from centerline of vehicle.

### CHEVRONS, FRONT BUMPER SURFACE, RUBY RED and LEMON YELLOW

Multiple diagonal 3M Scotchlite or an equivalent brand reflective stripes are to be provided, full width of the front bumper. Stripes are to form "Chevrons", using alternating colors to match the Ruby Red/Lemon Yellow chevrons on rear of apparatus. Chevron stripes are to only be interrupted by the bumper face mounted accessories.

### CHEVRON STRIPING, ON INTERIOR OF COMPARTMENT DOORS

Multiple diagonal reflective stripes shall be provided, full width of each compartment interior door liner, bottom 24-inches. Stripes shall form "Chevrons", using using standard, non-diamond grade, alternating Ruby Red/Lemon Yellow reflective stripes ONLY. Chevron pattern shall be applied to flat metal surface.

### LINE VOLTAGE SYSTEM

#### 120V/240V ELECTRICAL SYSTEM AND ACCESSORIES

The following specified 120/240 -Volt alternating current system shall meet the requirements of NFPA 1901, as it relates to vehicle mounted systems, including but not limited to: Materials, Grounding, Overcurrent



# **Custom Pumpers**

### As Per HGAC Proposal FS19EC05

Protection, Wiring Methods, Wiring identification, Wet Locations, Dry Locations, Receptacle Listings, Electrical System Testing, Placarding, and Operational Testing.

### POWER INVERTER, 2000W, 12-VDC-TO 120 VAC

One (1), Kisae Tech True Sine Wave Inverter is to be furnished, located within the apparatus body, wired to provide line voltage power to the optionally specified 120-volt receptacles. Inverter is to have a maximum power output of 2000 watts at 120-VAC.

A high idle control shall be provided, activated by a Carling rocker swithc and interlocked through the transmission being in Park and the emergency brake being applied. A resistor shall be included to allow adjustment of the desired high idle speed.

### 125-VOLT 5-20R LINE VOLTAGE RECEPTACLES

Two (2), duplex 5-20R (household), 125-volt, 20-amp, 3-wire plug-in receptacle(s), to be furnished. Receptacle(s) are to be recessed into a single gang outlet box and surface mounted to specified location, provided with a appropriate exterior gasketed hinged cap or stainless steel duplex cover plate. Receptacle's wiring to include: appropriate gauge multi-stranded insulated copper wiring, and a dedicated manual-reset style circuit breaker. A permanently engraved placard, identifying voltage and power source, is to be provided adjacent to receptacle box, and the manual-reset breaker shall also be identified as to receptacle's location.

NOTE: NEMA 5-20R receptacles will accommodate 5-20P plugs and 5-15P plugs.

### **BODY LINE VOLTAGE RECEPTACLE LOCATION(S)**

The above specified Body Line Voltage Receptacles shall be located:\_\_\_\_\_\_.



Custom Fire Apparatus, Inc. ■ 509 68th Ave., Osceola, WI 54020-4044 ■ 715.294.2555 Fax 715.294.2168 www.customfire.com

# **MOTOR VEHICLE PURCHASE CONTRACT**

THIS AGREEMENT, Made by and between CUSTOM FIRE APPARATUS, INC. of Osceola, Wisconsin, Party of the First Part, and: The CITY OF BROOKLYN PARK FIRE DEPARTMENT of Brooklyn Park, Minnesota, Party of the Second Part, hereinafter called the BUYER.

WITNESSETH, That CUSTOM FIRE APPARATUS, INC. Agrees to sell, upon the conditions which are below written, the apparatus and equipment herein before described, all of which are to be in accordance with the specifications and warrantees submitted by CUSTOM FIRE APPARATUS, INC. and which are made a part of this agreement and Contract. As per Proposal Specifications dated April 20, 2020 which includes; "Two (2) FS1219EC05 Fire Department Pumpers with Published and Unpublished Options each to include a 4-door Monarch chassis cab, 1500-GPM Waterous fire pump and FoamPro 2002 foam system, 500-gallon capacity water tank and compartmented style stainless steel body with flush fitting hinged side compartment doors."

The BUYER agrees to purchase and pay for the aforesaid property delivered as aforesaid, the Sum of: USD \$1,286,575.30 (One Million Two Hundred Eighty-Six Thousand Five Hundred Seventy-Five and 30/100 Dollars). NOTE: This price is per HGAC FS12-19 contract pricing and inclusive of the \$2,000 HGAC purchase fees.

TERMS OF PAYMENT: Progress Payment of <u>\$650,000.00</u> is due upon delivery of truck chassis to the Osceola factory, final payment is due on the Day of Factory Acceptance. You may pre-pay any additional undue portion of this contract amount and receive .35% simple interest per each full calendar month until such date as funds become due. 4.2% per annum.) NOTE: To purchase One (1) Custom Pumper, the price is \$650,287.65 which would require a \$327,000 chassis progress payment.

GUARANTY: The BUYER hereby guarantees that the funds will be ready and available for transfer in the form of legal tender, a negotiable check or direct bank wire transfer on or prior to the day of delivery. And it is further mutually agreed that no misunderstanding, verbal or written, regarding equipment or otherwise, shall enjoin CUSTOM FIRE APPARATUS, INC. unless in this contract.

DELIVERY: Is to be made to; The CITY OF BROOKLYN PARK FIRE DEPARTMENT within 365 Calendar Days or sooner following receipt and approval of this Contract duly executed, subject to all causes beyond our control, or as soon thereafter as is consistent with good workmanship and proper finishing, and providing the delivery of the truck chassis has been made to our factory in Osceola, Wisconsin.

LIABILITY: Physical damage to the truck or chassis will be the responsibility of CUSTOM FIRE APPARATUS, INC. on a primary basis, regardless of what other insurance is available, as long as the vehicle is in the care, custody and control of same. Any componentry furnished by the BUYER, including the truck chassis, will be insured for its purchase price, by and when in the possession of CUSTOM FIRE APPARATUS, INC. Upon arrival of delivery engineer with the apparatus, or upon delivery and acceptance of the same at the factory in Osceola, Wisconsin, Party of the Second Part (BUYER) does agree to provide all insurance to hold both parties harmless and free from any loss.

WITNESS our hands and official seal this 22nd day of June 2020.

CUSTOM FIRE APPARATUS, INC.

James M. Kirvida President of Custom Fire Apparatus, Inc.

(Party of the Second Part)

### 7.4F COMMUNITY LEASING PARTNERS



Phone: 888.777.7850 Fax: 888.777.7875 Cell: 785.313.3154 215 S. Seth Child Road Manhattan, KS 66502 www.clpusa.net

June 16, 2020

### Customer Name: Brooklyn Park, MN John Cunningham, Chief

Equipment:	Two Custom Fire - Custom Pumpers
Sales Representative:	Scott Lumby @ Custom Fire
Delivery:	Estimated 1 year

Community Leasing Partners, a Division of *Community First National Bank*, is pleased to present the following financing options for your review and consideration.

Total Cost:	\$ 1,286,575.30	Payment Frequency:	Annual
Down Payment:	\$ 580,000.00	First Payment:	One year from closing
Prepay Discount:	\$ 12,000.00		
Amount Financed:	\$ 694,575.30		
Term in Years:	<u>10</u>		
Payment:	\$80,695.74		
Factor:	0.116180		
Interest Rate:	2.82%		

#### • THERE ARE NO DOCUMENTATION OR CLOSING FEES ASSOCIATED WITH THIS PROPOSAL.

- Fixed interest rate for the terms provided unless otherwise stated.
- This financing is to be executed and funded within 30 days of the date of the proposal, or Lessor reserves the right to adjust the interest rate. The proposal is subject to credit review and approval of mutually acceptable documentation.
- This proposal has been prepared assuming the lessee is bank qualified and that the proposed lease qualifies for Federal Income Tax Exempt Status for the Lessor under Section 103 of the IRS Code.

<u>Thank you</u> for allowing Community Leasing Partners the opportunity to provide this proposal. If you have any questions regarding the options presented, need additional options, or would like to proceed with a financing, please contact me at 1-888-777-7850.

Respectively,

Blake J. Kaus Vice President & Director of Leasing <u>blakekaus@clpusa.net</u>

# City of Brooklyn Park Request for Council Action

Request for Council Action					
Agenda Item:	7.5	Meeting Date:	June 22, 2020		
Agenda Section:	General Action Items	Originating Department:	Fire		
Resolution:	N/A				
Ordinance:	SECOND READING	Prepared By:	Daniel Krier, Fire Marshal		
Attachments:	1	Presented By:	Daniel Krier		
Item:	SECOND READING of an Ordinance Amending Chapter 93A of the Brooklyn Park City Code and Adopting the Minnesota State Fire Code				

### City Manager's Proposed Action:

MOTION \_\_\_\_\_\_, SECOND \_\_\_\_\_, TO WAIVE THE READING AND ADOPT ON SECOND READING ORDINANCE #2020-\_\_\_\_\_ AMENDING CHAPTER 93A, FIRE PREVENTION AND PROTECTION, OF THE CITY CODE AND ADOPTING THE MINNESOTA STATE FIRE CODE.

### **Overview:**

The Commissioner of Labor and Industry, in coordination with the Minnesota State Fire Marshal, adopted the 2020 Minnesota State Fire Code (MSFC), with an effective start date of March 31, 2020. Current City ordinance 93A.03 includes adoption of the MSFC, 2015 edition.

Several sections within City Code Chapter 93A need to be updated to reflect language and other technical changes in the 2020 MSFC. Additionally, some sections can be removed to match requirements of the MSFC.

### Primary Issues/Alternatives to Consider:

The proposed deletions and modifications meet but do not exceed the requirements of the MSFC and/or Minnesota State Building Code, per Minnesota Statute 299F.011, Subd 4.

No new appendices are being considered with this agenda item. Appendices K and L from the 2015 MSFC were changed to Appendices O and P, respectively, in the 2020 MSFC.

Discontinuance of open burning language (93A.07(H)) to be removed; this City Code Chapter is redundant with, and already included in, Section 307.3 of the MSFC.

Language in 93A.07(B) has been removed requiring open burn permits to be submitted at least 15 days prior to the date of proposed burning. This matches language and open burn requirements of the Minnesota Department of Natural Resources. Open burn permits are still required to be reviewed, approved, and issued prior to burning.

### Budgetary/Fiscal Issues: N/A

### Attachments:

7.5A ORDINANCE

### ORDINANCE #2020-

### ORDINANCE AMENDING CHAPTER 93A, FIRE PREVENTION AND PROTECTION, OF THE CITY CODE AND ADOPTING THE MINNESOTA STATE FIRE CODE

Text with strikeout is proposed for deletion. Underlined text is proposed for insertion.

The City of Brooklyn Park Does Ordain:

CHAPTER 93A: FIRE PREVENTION AND PROTECTION be modified as written below. Sections of this Chapter not subject to change with the adoption of this ordinance are not included but will carry forward as previously adopted.

- 93A.02 Fees
- 93A.03 Adoption of the Minnesota State Fire Code
- 93A.04 Amendments to Minnesota State Fire Code
- 93A.07 Open Burning
- 93A.09 D.C. Welders for Thawing Frozen Waterlines
- 93A.10 Pyrotechnics

Section 1. Chapter 93A.02 of the Brooklyn Park City Code is amended to read as follows:

### 93A.02 FEES.

- (A) Licenses, permits, service fees, inspection fees and charges shall be in accordance with the fee schedule adopted by the City Council in the amount provided by the fee resolution, set forth in the Appendix to this code. (Ord. 2017-1219, passed 8-28-17)
- (B) Upon application for a key box, a fee must be paid for the city to supply each key box. The fee shall be determined by the Fire Chief on the basis of the actual costs to the city. Approved key boxes are purchased directly through approved vendor(s). Fees shall be determined by approved vendor(s).
- (C) The installation of any fire suppression system/fire alarm system, equipment or device(s) requires payment by the applicant of fees in the amount provided by the fee resolution, set forth in the Appendix to this code.
- (D) No permit will be issued until the applicant files with the Fire Chief or the Fire Chief's designee a complete set of plans and permit application with appropriate fees and the Fire Chief or the Fire Chief's designee gives final approval. (Ord. 2017-1219, passed 8-28-17)

Section 2. Chapter 93A.03 of the Brooklyn Park City Code is amended to read as follows:

### 93A.03 ADOPTION OF MINNESOTA STATE FIRE CODE.

The Minnesota State Fire Code as promulgated by the Minnesota Department of Labor and Industry (2015 Edition) together with Appendices B, C, D, E, F, G, H, I, K, and L is adopted by reference and incorporated into the city code in whole as if herein set out in full, subject to deletions or modifications contained in this chapter. The Minnesota State Fire Code as promulgated by the Commissioner of Labor and Industry together with Appendices B, C, D, E, F, G, H, I, O, and P is adopted by reference and incorporated into this code as if fully set forth herein, subject to deletions or modifications contained in this chapter.

**Section 3.** Chapter 93A.04 of the Brooklyn Park City Code is amended to read as follows:

### 93A.04 AMENDMENTS TO MINNESOTA STATE FIRE CODE.

Amendments made to the 2015 edition of the Minnesota State Fire Code:

- (A) Standpipe Systems: Class II standpipe hose stations, Class I and Class III standpipe outlets shall not be concealed, obstructed or impaired. A 3-foot (914.4 mm) clear space shall be maintained around the circumference of all standpipe stations and/or outlets, and valving, except as otherwise required by the Fire Chief.
- (B) Fire Extinguishers: Fire extinguishers shall not be obstructed or obscured from view. In rooms or areas in which visual obstruction cannot be completely avoided, means shall be provided to indicate the locations of extinguishers. A 3-foot (914.4 mm) clear space shall be maintained around the circumference of all fire extinguishers, except as otherwise required by the Fire Chief.
- (C) *Fire Extinguishers:* All commercial buildings, regardless of use or occupancy shall use 4A60BC fire extinguishers. *Re-assign subsequent section lettering as necessary*
- (D) Fire Alarm & Detection Systems: Alarm-initiating devices, alarm-signaling devices and annunciators shall not be concealed, obstructed or impaired. A 3-foot (914.4 mm) clear space shall be maintained around the circumference of fire alarm and detection equipment except as otherwise required by the Chief.
- (E) Commercial Cooking Systems: Permits are required to conduct hood cleaning. Every application for such a permit shall be made in writing to the Fire Department at least five working days in advance of the date of proposed cleaning. A permit shall be issued only after the Fire Chief or the Fire Chief's designee has given approval and the applicant has paid the permit fee in accordance with the fee schedule adopted by the City Council in the amount provided by the fee resolution, set forth in the Appendix to this code. Prior to setting an appointment for the hood cleaning, a pre-arranged appointment must be set with the fire department for the inspection. Changes in the appointment time should be communicated as soon as possible. If the Fire Chief or the Fire Chief's designee does not approve the cleaning of the system and/or has to return for additional inspections, the applicant shall be required to apply for additional permits, and pay additional fees as required.
- (F) Alarm System Monitoring: Fire alarm systems shall be electrically monitored by an approved central station service. Electrically monitoring shall require an Underwriters Laboratories (U.L.) 72 "Central Station Fire Alarm System" Certificate Service be issued on all new Fire Alarm Systems and Communicators.

### EXCEPTIONS:

- i. For existing fire alarm systems, monitoring is required when the systems are upgraded or altered with additions.
- ii. Supervisory service is not required for automatic sprinkler systems in one- and two- family dwellings.

General fire alarm, water-flow alarm, trouble, and supervisory signals shall be distinctively different and shall be automatically transmitted to an approved central station in accordance with National Fire Protection Association (N.F.P.A.) Standard 72.

Section 4. Chapter 93A.07 of the Brooklyn Park City Code is amended to read as follows:

### 93A.07 OPEN BURNING

- (A) Except as otherwise permitted by this section, all open burning is prohibited in the City of Brooklyn Park. The Fire Chief or the Fire Chief's designee is authorized to issue burning permits, and is granted the authority to place conditions upon applicants requesting a burning permit. Items that will require a burning permit are:
  - (1) Fires purposely set under the supervision of the City Fire Department for the instruction and training of firefighting personnel.
  - (2) Fires set for the elimination of a fire hazard which cannot be abated by any other practical means.
  - (3) Fires purposely set for forest and game management purposes.
  - (4) The burning of trees, brush, grass and other vegetable matter in the clearing of land, the maintenance of street, road and highway right-of-way, and in accepted agricultural land management practices, located within the City of Brooklyn Park.
  - (5) Fires for which the Fire Chief has deemed necessary.
- (B) Permits are required to conduct open burning. Every application for such a permit shall be made in writing to the Fire Department at least 15 days in advance of the date of proposed burning. The permit application shall include a diagram of the grounds on which the burning is to be conducted showing the point at which the material to be burned is located; the location of buildings, highways and other lines of communication; and the location of nearby trees, telegraph or telephone lines and other overhead obstructions. The Fire Chief shall make an investigation to determine whether the proposed burning location meets the minimum requirements of the code and these ordinances. At the time of permit application, the Fire Chief or the Fire Chief's designee shall be consulted regarding requirements for standby fire apparatus. A permit shall be issued only after the Fire Chief or the Fire Chief's designee has given approval for the open burning and the applicant has paid the permit fee in accordance with the fee schedule adopted by the City Council in the amount provided by the fee resolution, set forth in the Appendix to this code. After the permit has been issued, it shall be lawful for that purpose and time period only. No permit so granted shall be transferable.
- (C) Open burning material restrictions.
- (1) No person shall conduct, cause or permit open burning of oils, petro fuels, rubber, plastics, paper, chemically treated materials or other materials which produce excessive or noxious smoke such as tires, railroad ties, treated, painted or glued wood, composite shingles, tar paper, insulation, composition board, sheetrock, wiring, asbestos material, paint or paint filters.
- (2) No person shall conduct, cause or permit open burning of hazardous waste or salvage operations, solid waste generated from an industrial or manufacturing process or from a service or commercial establishment, or building material generated from demolition of commercial or industrial structures, or discarded material resulting from the handling, processing, storage, preparation, serving or consumption of food.
- (D) *Time and atmospheric restrictions.* Open burning shall only be performed when time limits comply with the time limits set forth in the open-burning permit. The prevailing wind at the time of burning and expected burning duration shall not exceed 10 mph., and must not blow towards nearby residences, or other occupied buildings, roads or high power lines which would create a hazard or nuisance.
- (E) Location.
  - (1) Open burning shall not be conducted within 600 feet (182,880 mm) of any road, high power line, or any occupied structure; other than those occupied structure(s) located on the property on which the open burning is to be conducted. Open burning shall not be conducted within one mile (1.609 km) of an airport or landing strip unless the affected airport or landing strip gives written approval. Open burning shall not be conducted within 50 feet (15,240 mm) of any other combustible material.
  - (2) All combustible materials within 50 feet (15,240 mm) of the open burn site shall be eliminated prior to ignition.

- (F) *Fire-extinguishing equipment*. Appropriate fire-extinguishing equipment (as required by the Fire Chief or the Fire Chief's designee) shall be readily available for use at open-burning sites.
- (G) *Attendance*. Burning material shall be constantly attended by a person knowledgeable in the use of the fire-extinguishing equipment required in Section <del>307.1.6</del> <u>307.5</u>, have a copy of the burn permit at the burn site at all times, and be familiar with the permit limitations which restrict open burning. The Open Burn Fire shall be completely extinguished before the permit holder or permit holder's representative leaves the site.

### (H) Discontinuance.

- (1) The Chief is authorized to require that open burning be immediately discontinued if the Fire Chief or the Fire Chief's designee determines that: a fire hazard exists or develops during the course of the burn: any conditions of the permit are being violated during the course of the burn; smoke emissions are or become offensive to occupants of surrounding property during the course of the burn; or a smoldering fire with no flame is present.
- (2) Any permit burn shall be extinguished within four hours of a public announcement when the Fire Chief, the Fire Chief's designee or Department of Natural Resources official has officially declared a burning ban due to potential hazardous fire conditions, or when the Minnesota Pollution Control Agency has declared an Air Quality Alert. <u>Re-assign subsequent section lettering as necessary</u>
- (I) Permit holder responsibility. The permit holder is responsible for compliance and implementation of all general conditions, and special conditions as established in the permit issued. The permit holder shall be responsible for all costs incurred as a result of the burn including, but not limited to, fire suppression and administrative fees.

Section 5. Chapter 93A.09 of the Brooklyn Park City Code is amended to read as follows:

### 93A.09 D.C. WELDERS FOR THAWING FROZEN WATERLINES.

- (A) It is unlawful to use an electric welding machine within the limits of the city for purposes of thawing frozen water mains or services.
- (B) It is unlawful to make any connection from an electric welding machine to any water main, service, or any appurtenance thereto within the city.
- (C) Exception: Unless the person and/or company obtains a permit from Public Works Division Operations and Maintenance. The person and/or company must show proof of liability and property damage, minimum insurance of \$500,000. Before any machine is turned on, a continuity test must be conducted to ensure proper connection of the effective water pipe.

Section 6. Chapter 93A.10 of the Brooklyn Park City Code is amended to read as follows:

### 93A.10 PYROTECHNICS

- (A) *Pyrotechnic special-effect material*. Temporary storage, use/display and handling of pyrotechnic special effects material used in motion pictures, television and theatrical and group entertainment productions shall be required to obtain a permit.
- (B) Displays. Permits are required to conduct a fireworks display. A fireworks display is only permitted when supervised by a pyrotechnic operator certified by the State Fire Marshal. Every application for such a permit shall be made in writing to the Fire Department at least 15 days in advance of the date of display. In addition to the information required in Section 3308.2, the permit application shall include the number, type and size of the fireworks to be discharged. For proximate audience displays, the plans required by Section 3308.2 shall also show the fallout radius for each pyrotechnic device used during the display. At the time of permit application, the Fire Chief or the Fire Chief's designee shall be

consulted regarding requirements for standby fire apparatus. The Licensing Division shall issue a permit only after the Fire Chief or the Fire Chief's designee has given approval for the display and the applicant has paid the permit fee in accordance with the fee schedule adopted by the City Council in the amount provided by the fee resolution, set forth in the Appendix to this code. After the permit has been issued, sales, possession, use and distribution of fireworks for such display shall be lawful for that purpose only. Permits are required to conduct a fireworks display. Permit fee(s) shall be paid in accordance with the fee schedule adopted by the fee resolution, set forth in the Appendix to this code. No permit so granted shall be transferable.

# City of Brooklyn Park Request for Council Action

Request for obtaining Action					
Agenda Item:	7.6	Meeting Date:	June 22, 2020		
Agenda Section:	General Action Items	Originating Department:	Fire		
Resolution:	x				
Ordinance:	N/A	Prepared By:	T. John Cunningham, Fire Chief		
Attachments:	2	Presented By:	T. John Cunningham		
Item:	Brooklyn Park Firefighters' F	Relief Association Disso	plution		

### City Manager's Proposed Action:

MOTION \_\_\_\_\_, SECOND \_\_\_\_\_, TO WAIVE THE READING AND ADOPT RESOLUTION #2020-\_\_\_\_ APPROVING 2020 MINNESOTA SESSION LAW, CHAPTER 108, ARTICLE 13, SECTION 1 RELATING TO THE DISSOLUTION OF THE BROOKLYN PARK FIREFIGHTERS' RELIEF ASSOCIATION AND RETIREMENT PLAN TERMINATION IN ACCORDANCE WITH MINNESOTA STATUTES, SECTION 645.021, SUBDIVISION 2 AND 3.

### Overview:

In 2019, the Brooklyn Park Firefighters' Relief Association voted overwhelmingly in support of dissolving the Relief Association and terminating the volunteer firefighter pension program. This historic vote of the Relief Association is in support of the city's continued efforts to enhance fire protection and emergency medical care delivery to the Brooklyn Park community. The city's paid on-call firefighter program ended on December 31, 2019.

Existing state laws governing Relief Associations and volunteer firefighter pension programs in Minnesota did not have provisions for plan dissolutions. While there are various federal laws that govern pension plan dissolutions, the city and Relief Association required special language in state law to allow for the plan to be fully dissolved and the disbursement of funds.

City, Fire Department, and Relief Association leadership worked with our state elected officials to introduce language this past session. Representative Mike Nelson authored HF 3153 and Senator Hoffman authorized SF 3900. A bill was included in the Pensions Omnibus Bill and was signed into law by Governor Walz on May 21, 2020.

The law, upon approval by the City Council, dissolves the Relief Association and terminates the volunteer firefighter pension plan. The law also makes each volunteer firefighter's retirement account 100 percent vested as of December 31, 2019, and any forfeitures will be distributed in accordance with the bylaws of the Relief Association.

The city and Relief Association have been working closely with the Legislative Commission on Pensions and Retirement, the Office of the State Auditor, independent auditors, and several attorneys to ensure a smooth transition and disbursement of funds to Relief Association members. The Relief Association is ready to begin fund disbursements quickly after City Council action.

The Relief Association is a separate non-profit entity and is working with an attorney to dissolve as a corporation.

### Primary Issues/Alternatives to Consider: N/A

#### **Budgetary/Fiscal Issues:**

In accordance with the special legislation, the city is required to pay the supplemental lump sum benefit (approximately \$35,000 total) for those over the age of 50. The city will be fully reimbursed by the state.

Upon dissolution of the Relief Association, the city will retain any fire state aid received in 2020. The fire state aid in 2019 was \$362,305.29.

#### Attachments:

- 7.6A RESOLUTION
- 7.6B MINNESOTA 2020 SESSION LAWS, CHAPTER 108, ARTICLE 13

### RESOLUTION #2020-

### RESOLUTION APPROVING 2020 MINNESOTA SESSION LAW, CHAPTER 108, ARTICLE 13, SECTION 1 RELATING TO THE DISSOLUTION OF THE BROOKLYN PARK FIREFIGHTERS' RELIEF ASSOCIATION AND RETIREMENT PLAN TERMINATION IN ACCORDANCE WITH MINNESOTA STATUTES, SECTION 645.021, SUBDIVISION 2 AND 3

BE IT RESOLVED by the City Council of the City of Brooklyn Park, Minnesota ("City") as follows:

### 1. It is determined that:

(a) 2020 Minnesota Session Laws, Chapter 108, Article 13, Section 1 (the "Special Law") terminated the retirement plan administered by the Brooklyn Park Firefighters' Relief Association and dissolved the Brooklyn Park Firefighters' Relief Association.

(b) the Special Law is effective the day after approval by a majority vote of the City Council and filing a certificate with the Secretary of State, all in accordance with Minnesota Statutes, Section 645.021; and

(c) the City Council has determined that is in the best interests of the City and its residents to approve the Special Law.

2. The Special Law is approved in all respects.

3. The City Clerk is authorized and directed to file with the Secretary of State a certified copy of this resolution and the appropriate certificate in the form prescribed by the state attorney general.

4. City staff are authorized and directed to take all actions necessary to implement the Special Law.

### MINNESOTA 2020 SESSION LAWS

### CHAPTER 108, ARTICLE 13

### BROOKLYN PARK FIREFIGHTERS' RELIEF ASSOCIATION DISSOLUTION OF THE RELIEF ASSOCIATION AND PLAN TERMINATION

Section 1.

### **BROOKLYN PARK FIREFIGHTERS' RELIEF ASSOCIATION DISSOLUTION AND PLAN TERMINATION.**

(a) Notwithstanding any provision of Minnesota Statutes, chapters 424A, 424B, or any other law to the contrary, the retirement plan administered by the Brooklyn Park Firefighters' Relief Association is terminated and the relief association is dissolved in accordance with the provisions of this section following the payment by the relief association of all benefits, the settlement of all legal obligations, and the distribution of all remaining assets of the relief association.

(b) For the purposes of this section:

(1) "alternate payee" means a spouse, former spouse, child, or other dependent of a volunteer firefighter, who is recognized by a divorce decree or domestic relations order as having a right to receive all or a portion of the volunteer firefighter's account;

(2) "city" means the city of Brooklyn Park;

(3) "relief association" means the Brooklyn Park Firefighters' Relief Association;

(4) "retirement plan" means the defined contribution retirement plan sponsored, administered, and maintained by the relief association; and

(5) "volunteer firefighter" means a volunteer firefighter, as defined in Minnesota Statutes, section 424A.001, subdivision 10, employed or previously employed by the city and who has an account in the retirement plan.

(c) The retirement plan is terminated and the volunteer firefighters become 100 percent vested in their accounts in the retirement plan effective on December 31, 2019, or, if earlier, the date that the city terminates the employment of the last of its volunteer firefighters. For purposes of this section, the city will be considered to have terminated the employment of a volunteer firefighter even if the city hires or continues to employ the volunteer firefighter as a part-time or full-time city employee performing firefighting or other services.

(d) The account of each volunteer firefighter who becomes fully vested under paragraph (c) shall include an allocation of any forfeiture that is required to occur on December 31, 2019, if the volunteer firefighter is entitled to such allocation under the bylaws of the relief association. Any account so forfeited shall not be included in the accounts that become fully vested under paragraph (c).

(e) The relief association is dissolved effective on the date that the relief association completes the following actions:

(1) prepares and files with the Office of the State Auditor final audited financial statements, pursuant to Minnesota Statutes, section 424A.014, subdivision 1;

(2) satisfies the requirements of Minnesota Statutes, section 424B.20, subdivision 3, including the settlement of legal obligations owed to any party to the extent authorized by Minnesota Statutes, section 424A.05, subdivision 3;

(3) distributes the account of each volunteer firefighter, regardless of the age of the volunteer firefighter, and each alternate payee as soon as possible after enactment. Distribution must be made in the form of a lump sum payment or direct rollover, at the election of the volunteer firefighter or alternate payee; and

(4) satisfies the requirements of Minnesota Statutes, section 424B.20, subdivision 5, including the transfer of records to the city and notice to the commissioner of revenue, the state auditor, and the secretary of state.

(f) Within 60 days after the distribution of the accounts under paragraph (e), clause (3), the city shall (i) pay a supplemental lump sum benefit to each volunteer firefighter and survivor who satisfies the requirements of Minnesota Statutes, section 424A.10, subdivision 2, if the volunteer firefighter is at least age 50, and (ii) reimburse the relief association for any supplemental lump sum benefits paid by the relief association during 2020.

(g) The city shall file for and the commissioner of revenue shall reimburse the city pursuant to Minnesota Statutes, section 424A.10, subdivision 3, for the supplemental benefits paid or reimbursed under paragraph (f).

(h) The city is subject to Minnesota Statutes, section 477B.04, subdivision 3, paragraph (c), for calendar year 2020 with respect to any fire state aid it receives, including the requirement that it disburse the fire state aid solely for the purposes authorized by Minnesota Statutes, section 424A.08.

### EFFECTIVE DATE; LOCAL APPROVAL.

This section is effective the day after the Brooklyn Park City Council and its chief clerical officer timely complete their compliance with Minnesota Statutes, section 645.021, subdivisions 2 and 3.