City of Falcon HeightsPlanning Commission

City Hall 2077 Larpenteur Avenue West

AGENDA

Tuesday, March 28, 2023 7:00 p.m.

A.	CALL TO ORDER:	7:00 p.m.		
В.	ROLL CALL:	Scott Wilson Joel Gerich Jim Mogen Jake Anderson	Laura Paynter VACANT VACANT	
		Council Liaison - Mayor Gustafson _ Staff Liaison - Hannah Lynch		
C.	. APPROVAL OF AGENDA			
D.	. APPROVAL OF MINUTES 1. February 28, 2023			
E.	PUBLIC HEARING 1. City Code, Amber Union PUD Amendment			
F.	NEW BUSINESS 1. Comprehensive Plan Review			
G.	INFORMATION AND ANNOUNCEMENTS			

Next regular meeting date: April 25, 2023

H. ADJOURN

Staff Liaison Report
 Council Liaison Report

CITY OF FALCON HEIGHTS

Regular Meeting of the City Planning Commission
City Hall
2077 West Larpenteur Avenue
MINUTES
February 28, 2023 at 7:00 P.M.

A. CALL TO ORDER: 7:00 P.M.

B. ROLL CALL:

Scott Wilson _X _ Jake Anderson ___ Laura Paynter _X _ Jim Mogen _X _ Joel Gerich _X _ VACANT VACANT Council Liaison Wehyee ___ City Administrator Linehan _X _

C. APPROVAL OF AGENDA

Staff Liaison Lynch X

Paynter motion to approve agenda; approved 4-0

D. APPROVAL OF MINUTES:

Paynter motion to approve January 24th, 2023 minutes; approved 4-0

E. PUBLIC HEARING

Subdivision of Community Park Land

Staff liaison Lynch provided an overview of the proposed subdivision of Community Park. She explained that the City is in the process of purchasing the northern 15.5 acres of the 40-acre parcel that currently contains Community park. The City has been leasing the land since 1973, and the lease is expiring. The City would like to purchase it so that the existing building can be rebuilt. To facilitate the sale, the parcel needs to be subdivided. The land will remain a park; there are no plans to change the use. The proposal is in alignment with the Comprehensive Plan.

City Administrator Linehan further described the ongoing negotiations with the University of Minnesota. He stated that the Falcon Heights City Council recently

approved a purchase agreement, and the University of Minnesota also approved the sale on February 10th. The final step is the subdivision of the parcel. He described the location of the split, with the southern line being just north of the existing fence. The city's intent is to keep the trails as they are today, but to potentially modify the northern portion of the park, including the existing parking lot, rebuild the community building, and expand and potentially relocate the community gardens.

Chair Wilson then opened the public hearing.

Michelle Caron (1845 Moore St) asked about impacts to the walking path between the neighborhood and the park. Administrator Linehan stated there are no plans to change the path, other than potentially re-paving in the future. Linehan also clarified that the surveyors will find the actual lot lines between the adjacent properties and the park. Linehan also stated there are no plans to change the wooded areas between the park and the residential neighborhoods. The University does not want to maintain the wooded areas north of the fence line, so the City would sign a maintenance agreement to be responsible for those areas. Caron also requested that the signs around the trails be shorter so that children can see them. Linehan stated that the City has applied for a grant to replace those signs and acknowledged Caron's feedback.

Randy Singer (1853 Moore St) asked about plans to increase the usability of the ballpark, which is underutilized. Linehan stated that the City is planning to hire a design consultant that will hold community meetings to get feedback to what the residents would like to see in a new park design. As a result, it is likely that the ball field will be included in those changes.

John Ward (1811 Moore St) asked if a more permanent fence will be added between the park and the University fields. Linehan stated that the University owns the fence and could make changes. The city has no plans to address the topic.

Linda Barnes (1823 Moore St) asked how the park purchase and changes will be funded. Linehan stated that the city has been setting aside funds for several years and has also applied for bonding, which has failed so far. The city has enough in reserves to buy the land outright and has enough budgeted for \$1.5 million in renovations and repairs. Beyond that, they are looking at a bonding bill and would try to replace other bonds that are rolling off in the future.

Donna Daykin (1854 Moore St) asked about the total cost of the purchase. Linehan stated that the City has settled on a price of \$1.625 per square foot, and this was created based on the use of the land as a park. Donna also complimented public works for the paths being kept up and cleared this winter.

Erin Williams (1974 Autumn St) expressed concern about the financial impacts of the purchase. Additional discussion and clarification with Administrator Linehan on the planned costs and funding sources of the project. Approximately \$2.5 million is ready for the land purchase and improvement efforts, which is about \$1 million short of the total expected cost. This gap is the amount that would be bonded.

Chair Wilson called for speakers two more times, after which Mogen motioned to close the public hearing. Gerich motioned to recommend the approval of the subdivision to city council.

Discussion and comments from each of the commissioners followed. Chair Wilson called for a vote on the recommendation to city council, which passed 4-0.

F. NEW BUSINESS

Comprehensive Plan Review

Staff Liaison Lynch outlined an effort to perform a Comprehensive Plan review. The commissioners agreed to form a subcommittee ahead of a workshop. Paynter nominated Scott Wilson and Joel Gerich to the subcommittee. The subcommittee will meet before the next Planning Commission meeting in March and a workshop will be scheduled then.

G. INFORMATION AND ANNOUNCEMENTS

Staff Liaison Lynch announced that the new Commissioner will be attending the next meeting in March. Also, the THC ordinance that was sent to City Council will be coming back to the Planning Commission for review. The March meeting should be full and Lynch encouraged all Commissioners to attend.

H. ADJOURN 7:35 P.M.



ITEM FOR DISCUSSION

Meeting Date	March 28, 2023
Agenda Item	Public Hearing E-1
Attachment	See below.
Submitted By	Hannah Lynch,
	Community Development Coordinator

Item	City Code, Amber Union PUD Amendment
Description	The Amber Union property at 1667 Snelling Avenue was rezoned as a Planned Unit Development (PUD) in June 2019 to allow for a mixed-use of multifamily, affordable housing apartments and a retail space. In October 2019, the plan was amended to increase the number of apartments. Amber Union Apartments was officially opened in late-2022.
	<u>Current Status</u>
	The Amber Union PUD encompasses the 3.78 acres of the parcel located on the southwest corner of the intersection of Snelling and Larpenteur Avenues. The additional two parcels, located just to the west, have served as 214 parking stalls, some reserved for additional Amber Union parking, with approximately 167 of those utilized as overflow parking.
	Proposed Use & Changes to Code
	In February 2023, an application was received for an amendment to City Code to rezone the additional two parcels to PUD, amend the Amber Union PUD to allow a drive-through eating establishment, and amend the definition of "drive-through facility" and supplemental regulations in City Code.
	Historically, drive-through facilities for eating establishments have not been permitted in Falcon Heights. Currently the definition for "drive-through facility" in City Code Sec. 113-3 Definitions states, "the use of land, buildings or structures, or parts thereof, to provide or dispense products or services, either wholly or in part, through an attendant or window or automated machine, to persons remaining in motorized vehicles that are in a designated stacking lane. A drive-through facility may be permitted only as an accessory use in combination with a bank of financial institution. A drive-through facility does not include a vehicle washing facility, a vacuum cleaning station accessory to a vehicle washing facility, or an automobile/gasoline service station."

This definition specifically prohibits drive-through facilities except as an accessory to banking or financial institutions. To allow this project to move forward, this definition would need to be amended, while keeping with the intent of protecting the City from drive-through facilities being permitted by right in any specific zoning district. The suggested amendment to this definition proposes allowing drive-through facilities for eating establishments only as part of a PUD, which would go through an extensive review and public hearing process.

In addition, the Amber Union PUD would be amended to allow drive-through eating establishments as a permitted use and updated with new drawings referenced.

Finally, there are supplemental regulations for drive-through facilities within City Code. Specifically, the section regarding operation time was requested by the applicant to be amended to state it may be operated starting at 6:00 a.m.

The Amendment Process

Notice Required

The process to substantially amend an existing Planned Unit Development is the same as for other amendments to the Zoning Code (Chapter 113) of City Code. The standard notice requirement for amendments to a zoning district boundary is mailing a notice to all property owners within 350' of the property. As a best practice however, the City mails to all property owners and residents within 500'. The notice was also posted at City Hall and published in the Pioneer Press on March 16 and March 18, 2023.

Comprehensive Plan Consistency

No amendment to the chapter may be adopted unless it is found to be consistent with the city's comprehensive plan. The term "drive-through" is not specifically stated anywhere in the 2040 Comprehensive Plan. Because of this, the general goals and policies of the plan should be assessed to determine if the addition of a drive-through facility for an eating establish is or is not consistent with the plan. Several relevant goals have been provided below for reference, however a full copy of the 2040 Comprehensive Plan can be found online:

https://www.falconheights.org/government/departments/community-development-planning-and-zoning/comprehensive-plan

General Land Use Goals:

2. To minimize land use and traffic intrusions that adversely impact established neighborhoods. (Page 44)

General Land Use Policies:

8. Permit only compatible businesses adjacent to residential uses and in mixed commercial-residential development, and place special conditions upon business uses to assure compatibility when appropriate. (Page 45)

Commercial / Business Goals: (Page 63)

- 1. To allow an appropriate range of businesses that satisfy the convenience goods and service needs of residents.
- 2. To ensure maximum compatibility with adjacent neighborhoods.
- 3. To ensure access and safety for pedestrians and those using non-motorized transportation.
- 4. To improve the image and function of the Larpenteur Corridor and the commercial core at Snelling / Larpenteur.
- 5. To improve access, traffic circulation and on-site parking for the Commercial Core at Snelling / Larpenteur.
- 7. To provide high density mixed use development close to bus transit routes when larger sites are redeveloped.

Commercial / Business Policies:

7. Maximize land use compatibility by requiring buffering, screening and landscaping between new commercial uses and residential areas, and wherever possible, between existing commercial uses and residential uses to minimize conflicts. (Page 63)

Economic Development Policies:

1. Encourage growth in tax base through upgrading of retail centers and small business zones. (Page 146)

Conclusion

Since drive-throughs are not specifically mentioned in the 2040 Comprehensive Plan, the Planning Commission should discuss whether the proposed ordinance would create situations where the goals and policies of the plan are not contradicted.

<u>Future Steps</u>

After recommendation from the Planning Commission, City Council may act upon the proposed amendment. Pursuant to Minn. Stats. §15.99, the amendment must be approved or denied within 60 days from the date a property completed application is received by the city.

Budget Impact

None.

Attachment(s)	- Application for Amendment to Amber Union PUD			
	- Narrative from Applicant			
	- Proposed Plans from Applicant			
	- Traffic Study from SRF			
	- Stormwater Management Memorandum from Kimley-Horn			
	- Posted Notice			
	- Newspaper Notice			
	- Newspaper Notice Affidavit			
	- Notice to Property Owners			
	- Notice to Residents			
	- Comments from Fire Marshal, City Engineer			
	- Section 113-35 from Falcon Heights City Code - Amendments to Zoning			
	Code			
	- An Ordinance Amending Chapter 113 of the Falcon Heights City Code			
Concerning Drive-Through Facilities and Amber Union PUD				
Action(s)	Staff requests a public hearing on the draft ordinance and a recommendation			
Requested	to City Council on the proposed amendments to City Code.			



FOR INTERNAL USE:	
Date received:	
Receipt:	

Receipi.
Action Requested By:
Name of Property Owner BUHL LARPENTEUR WEST LLC
Phone (h) 612-968-3728 (w) 612-968-3728
Address of Property Owner 5100 Eden Ave, Suite 317, Edina, MN 55436
Name of Applicant (if different) Pete Deanovic
Address 5100 Eden Ave, Suite 317, Edina, MN 55436 Phone 612-968-3728
Property Involved:
Address Parcel 1
Legal Description The East 250 feet of the North 500 feet except the West 150 feet of the East 1
feet of the North 283 feet of the Northwest quarter of the Northeast quarter of the Northeast quarter
of Section 21, Township 29, Range 23.
Property Identification Number (PIN) 212923110029
Present Use of Property (check one):
□ Single Family Dwelling □ Business/Commercial
□ Duplex/Two Family Dwelling □ Government/Institutional
☐ Multi Family Complex ☐ Vacant Land
Action Requested (NON-REFUNDABLE):
□ Variance (\$500.00) □ Lot Split (\$250.00)
☐ Conditional Use Permit (\$500.00) ☐ Site Plan Review (\$100.00)
Rezoning, Zoning Amendment (\$500.00)
Comprehensive Plan Amendment (\$550.00) Other (Please Specify)
The above Application Fees do not include any additional fees that might be required, including legal, engineering,
consulting and additional City services. Applicants should meet with City Staff prior to submitting application to discussion applicable ordinances, required attachments, timelines and fees. Credit card charges will incur a 3.1% + \$0.30 convenience fee.
Brief Summary of Request (applicant may submit letter to Planning Commission with details of request):
Please see attached narrative.
Tiede de diadied halfaire.
I certify that all statements on this application are true and correct:
Signature of Property Owner (required) Signature of Applicant (if applicable)
Planning Commission meeting: City Council meeting: Approved Denied

Project Narrative – Amber Union

Site History

The Site was undeveloped until sometime between 1908 and 1916 when two dwellings and associated structures were constructed on the eastern two-thirds of the Site. By 1940, the western portion of the Site had been developed for cultivated cropland. Residential and cultivated cropland use continued until 1946 when the original portions of the existing Site buildings were constructed. In 1946/1947, the eastern Site building was used for office, post office, and printing purposes, while the western building (now an event center) was occupied by an automotive service and repair garage, a filling station, a crop testing laboratory, and two levels of tempered parking. In 1957, an addition was built on to the eastern building and in approximately 1977, a third level office space was constructed on the southern portion of the existing event center building, directly above the two levels of tempered parking.

Buhl GTA, LP purchased the Site in April 2019 as a vacant building and slated for redevelopment. The entire building was repositioned in 2022 to accommodate 125 units of income restricted housing, which are now 100% leased. At the time of the development, the excess land and parking was transferred to a Buhl controlled entity, Buhl Larpenteur West LLC. The scope of this project is exclusively tied to that portion of land.

Since 2019 acquisition, the adjacent parking lot was serving as overflow parking. This area is currently configured 214 car parking lot, some of which is reserved for additional Amber Union parking and was contemplated to be revisited as a continued need once occupancy stabilization was reached. The proposed plan isn't contemplating changing the ratios agreed to during the 2020 council meetings. This development relates to the or adjusting this but instead works within the 2.58 acres located to the West of the building. Parking impact can be detailed as follows:

Pre Development	Current Configuration	Proposed Redevelopment
Amber Union Parcel (PID 212923110030)	92	92
Restricted for Amber Union Use within excess land	<u>47</u>	<u>47</u>
	139	139
Pre Development		
Totally Unencumbered within excess land (A)	167	167
Proposed parking changes for development		
Removed in Construction		(67)
Added back per Retail Standard Ratios (11/1,000 SF)		9
Resulting impact		(58)
Remaining excess Parking		109

To date, the excess 167 parking stalls have only served as State Fair parking for those 12 days and doesn't service the broader community during non-state fair parking days. Buhl has been working for the last 2 years to attract retailers that might be a suitable anchor for the street frontage and are excited to report securing terms with an established food and beverage operator that compliments the adjacent residential.

If approved, and once completed, the project would comprise approximately 0.43 acres of the 2.58Acres located to the west of the property and approximately 1/3 of the taxable parcel (note there are two parcels that are parking located to the west of the building). The following highlights the area impacted relative to the overall project:



Proposed Development

Buhl Larpenteur West LLC is proposing to develop a stand alone 630 SF building on a total 1.78 acre site, disturbing just .43 acres of existing impervious parking surface. Once completed, this project would provide the following benefits:

- \$2,000,000 valuation upon completion, resulting in approximately \$33,000/year in taxes.
- Proposed impervious is shrinking existing pavement surface.
- Incorporates improved patio space and connectivity to Amber Union Apartment project.
- Retains additional land/parking for future uses while delivering complimentary uses and not impacting the parking reserved for Amber Union apartments.

In order to realize this project, Buhl Larpenteur West LLC has assembled many of the same folks that assisted in bringing Amber Union Apartments to fruition, including Mohagen Hansen Architects and Kimley Horn. Collectively, we feel this group is well positioned to execute on the overall plan.

Supporting Ramsey County Goals and Objectives

We believe that this project will support the Ramsey County Goals and Objectives as presented in the ERF Application and as described below:

- Strengthening individual, family, and community health, safety and well-being by providing walkable food offerings immediately adjacent to the Amber Union Apartments
- Cultivate economic prosperity and invest in neighborhoods with concentrated financial poverty
- Enhance access to opportunity and mobility for all residents and businesses

The proposed project is consistent with the City's future plans which promotes the Larpenteur Corridor as the "Axis of Redevelopment". The proposed project would help achieve the goals and objectives as stated within the City Comprehensive plan by bringing an increased sense of community directly to the central commercial core of the city, contributing to the City's affordable housing needs and bringing 3.7 acres of previously tax-exempt land onto the City's tax basis plan.

The project team believes that surrounding retail uses are complimentary to establishing a vibrant walkable and livable community. The increase in residents and families immediately adjacent to these uses will provide additional customers and patrons for neighboring restaurants and businesses and contribute to a sense of community and connectedness in the central core of the City.

KEY NOTES

- ILLUMINATED CARIBOU SIGNAGE N.I.C. SUPPLIED AND INSTALLED BY SIGN VENDOR. PROVIDE ELECTRICAL AS SHOWN ON ELECTRICAL PLANS. G.C. TO VERIFY DESIGN, DIMENSIONS, BRACKET INSTALLATION REQUIREMENTS, AND ELECTRICAL REQUIREMENTS WITH SIGN VENDOR PRIOR TO ROOFING INSTALL.
- 2 LIGHT FIXTURE SEE ELECTRICAL PLANS INSTALL FIXTURE ON 4/4 SMOOTH HARDIE TRIM BOARD MOUNTING PLATE PAINTED TO MATCH ADJACENT LAP SIDING.
- INSULATED, PRE-FINISHED HM DOOR & FRAME COLOR: BENJAMIN MOORE: BITTERSWEET CHOCOLATE 2114-10. SEALANT AROUND FRAME: MASTERSEAL: SPECIAL BRONZE 259N (TO MATCH
- ADJACENT SIDING)
 STONE CULTURED/MANUFACTURED STONE: ENVIRONMENTAL STONEWORKS STYLE: TUSCAN LEDGESTONE, COLOR: LANTANA, SILL CAP: ENVIRONMENTAL STONEWORKS, DRIP LEDGE COLOR: KODIAK. SEALANT COLOR TO MATCH GROUT/MORTAR COLOR (STANDARD GREY)
- 5 PREFINISHED METAL FLASHING COLOR TO MATCH ADJACENT STONE SILL CAP / DRIP LEDGE: EXCEPTIONAL METALS DARK BRONZE OR FIRESTONE UNA—CLAD DARK BRONZE
- 6 HARDIE PLANK LAP SIDING: 6" EXPOSURE STYLE: CEDARMILL COLOR: PRE—FINISHED (REQ'D, NO EXCEPTIONS) TO MATCH SHERWIN WILLIAMS PAINT COLOR 'CLOUDBURST' SW6487 ALTERNATE: LP SMARTSIDE LAP SIDING, CEDAR TEXTURE
- 7 HARDIE TRIM BOARDS: 1x8, 1x6 & 1x4 STYLE: 4/4 RUSTIC.
 COLOR: PRE-FINISHED (REQ'D, NO EXCEPTIONS) TO MATCH
 BENJAMIN MOORE PAINT COLOR BITTERSWEET CHOCOLATE 2114-10
 ALTERNATE: LP SMARTSIDE TRIM BOARDS, CEDAR TEXTURE
- B HARDIE TRIM FASCIA BOARDS: 1X8 STYLE: 4/4 RUSTIC. COLOR: PRE—FINISHED (REQ'D, NO EXCEPTIONS) TO MATCH BENJAMIN MOORE PAINT COLOR BITTERSWEET CHOCOLATE 2114—10 ALTERNATE: LP SMARTSIDE FASCIA BOARDS, CEDAR TEXTURE
- 9 STAINLESS STEEL TRANSACTION SHELF. SEE WINDOW TYPES ON A-100. NOTE: SHELF TO BE SOURCED AND INSTALLED BY SHELL G.C. SEE1/A-304 FOR WALL DETAILS
- STANDING SEAM METAL ROOFING WITH RIDGE VENT: MATCH UNA-CLAD UC-7 SNAP-ON BATTEN ARCHITECTURAL SERIES ROOFING, 16" O.C., 24 GA. GALVINIZED STEEL W/ KYNAR 500 COATING. COLOR: DARK BRONZE.
- ROOF METAL FLASHING COLOR: DARK BRONZE TO MATCH ROOF

 11 METAL ROOFING SNOW GUARD: S-5 COLORGARD OR EQUAL. MATCH
- UNA-CLAD COLOR: DARK BRONZE

 DECORATIVE END TRUSS: LP SMARTSIDE 540 SERIES CEDAR
 TEXTURE TRIM, PRE-FINISHED (REQ'D, NO EXCEPTIONS) TO MATCH
- BENJAMIN MOORE PAINT COLOR BITTERSWEET CHOCOLATE 2114-10

 13 4'-0"HIGH x 6" DIA. CONCRETE FILLED STEEL PIPE BOLLARD WITH 1/4" "IDEAL SHIELD" BOLLARD COVER IN CARIBOU COFFEE COLOR
- FIELD VERIFY AND COORDINATE LOCATION OF EXTERIOR ELECTRICAL AND OTHER UTILITY SERVICE EQUIPMENT WITH SITE CONDITIONS AND OTHER SITE AND BUILDING EQUIPMENT (I.E. ROOF DRAINAGE AND DOWNSPOUTS, ETC.) SEE MECHANICAL,

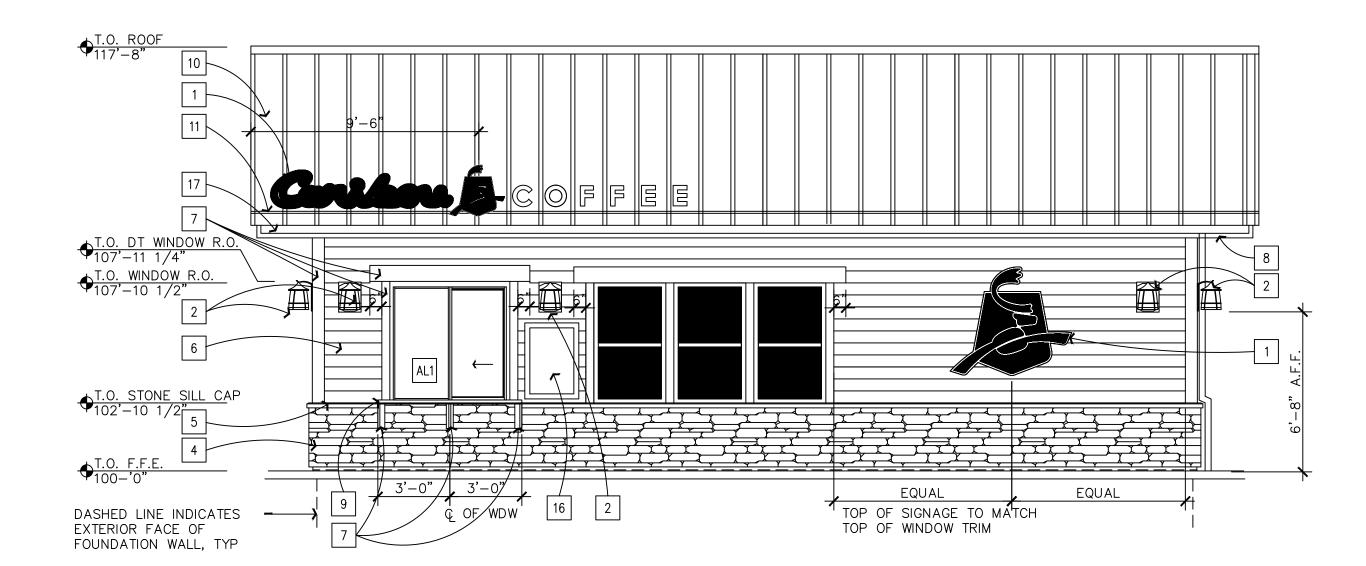
ELECTRICAL AND PLUMBING PLANS FOR MORE INFORMATION

'SUMATRA' WITH SMOOTH DOME-TOP FINISH. SEE DETAIL 9/A-400

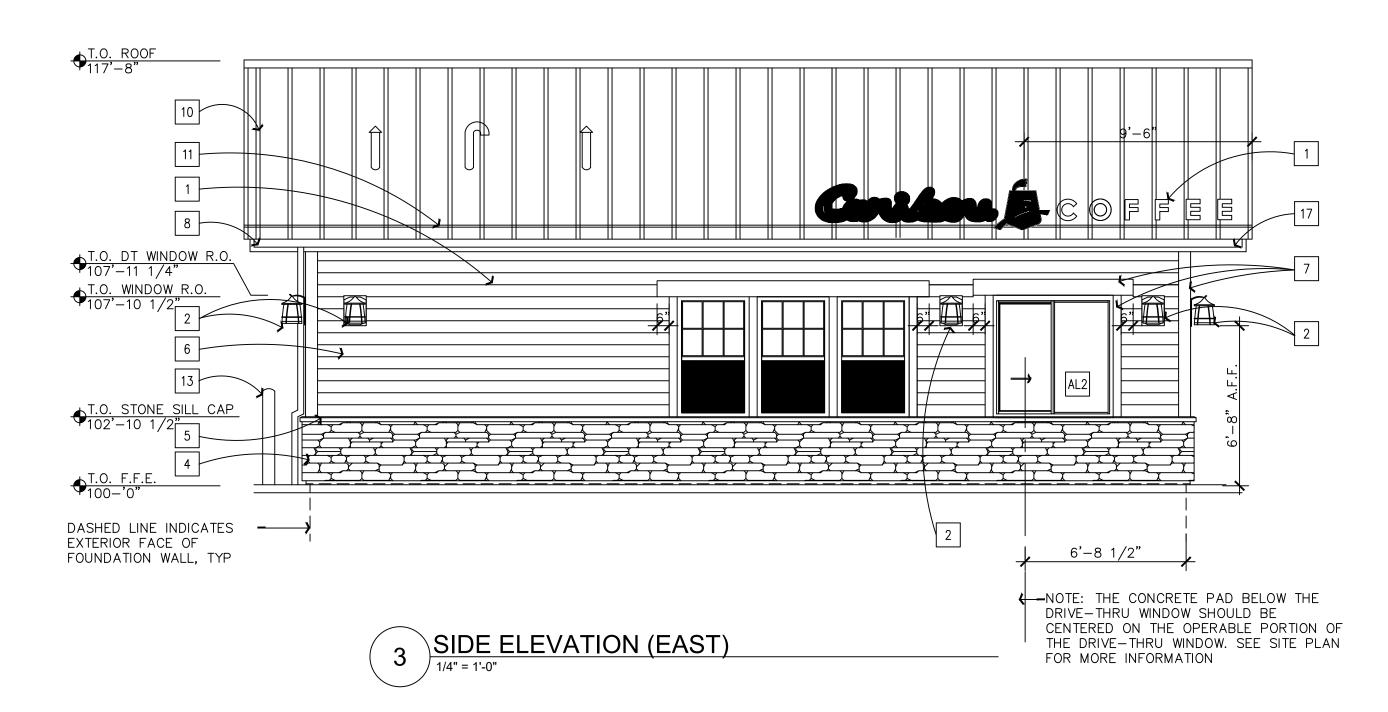
- EXTERIOR HOSE-BIBB SEE PLUMBING PLANS FOR MORE INFORMATION
- 27"x38 WALK-UP MENU BOARD (BY TENANT, VERIFY SIZE) COORDINATE WITH TENANT PRIOR TO SIDING INSTALL.
- 5" PRE-FINISHED METAL GUTTERS WITH 4"x4" OPEN-FACED DOWNSPOUT SYSTEM. COLOR TO BE DARK BRONZE TO MATCH STANDING SEAM ROOF. PROVIDE CONNECTION TO STORM SEWER SYSTEM AT DOWNSPOUTS SEE CIVIL DRAWINGS FOR MORE INFORMATION. PROVIDE HEAT TAPE SEE ELECTRICAL DRAWINGS FOR MORE INFORMATION.
- 18 INTAKE LOUVER AT GABLE END WALL PAINT TO MATCH ADJACENT LAP SIDING. SEE MECHANICAL DRAWINGS FOR MORE INFORMATION.

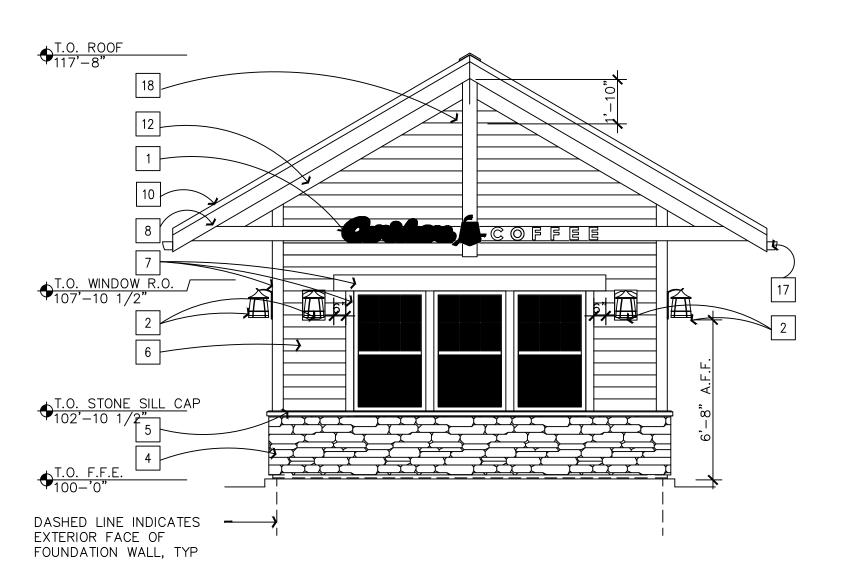
1. SUBMIT SAMPLES AND COLOR CHARTS FOR ALL BUILDING FINISHES. COLORS & FINISHES INCLUDING ROOFING, SIDING, TRIM AND CULTURED STONE ARE SUBJECT TO CHANGE PENDING LEAD TIMES AND FINAL REVIEW AND APPROVAL BY OWNER & ARCHITECT.

2. SEE PROTOTYPE SHELL BUILDING COLOR SELECTIONS DOCUMENT FOR ADDITIONAL INFORMATION

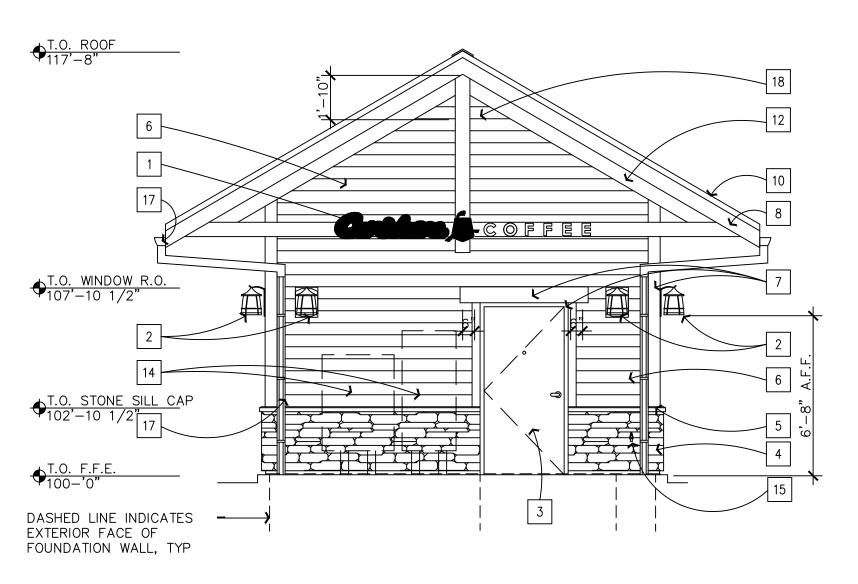








2 FRONT ELEVATION (NORTH)



4 REAR ELEVATION (SOUTH)

SITE DEVELOPMENT PLANS **FOR**

CARIBOU CABIN - FALCON HEIGHTS

SECTION 21, TOWNSHIP 29N, RANGE 23W FALCON HEIGHTS, RAMSEY COUNTY, MN

PROJECT TEAM:

ENGINEER
KIMLEY-HORN AND ASSOCIATES, INC.



PREPARED BY: DAN L. ELENBASS, PE 767 EUSTIS STREET, SUITE 100 ST. PAUL, MN 55114 TELEPHONE (651) 645-4197

LANDSCAPE ARCHITECT KIMLEY-HORN AND ASSOCIATES, INC.

PREPARED BY:MITCHELL COOKAS 767 EUSTIS STREET, SUITE 100 ST. PAUL, MN 55114 TELEPHONE: (651) 645-4197

OWNER / DEVELOPER BUHL INVESTORS



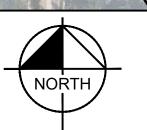
5100 EDEN AVENUE **SUITE 317** EDINA MN, 55346 TELEPHONE: (612) 968-3728 CONTACT: PETE DEANOVIC

ARCHITECT

1000 TWELVE OAKS CENTER DR SUITE 200 WAYZATA MN, 55391 TELEPHONE: (952) 462-7400 **CONTACT: STEVE PAETZEL**



VICINITY N.T.S.



SITE

NOTES:

- CONTRACTOR SHALL CONFIRM THAT THE EXISTING CONDITIONS FOR THE SITE MATCH WHAT IS SHOWN ON THE DRAWINGS INCLUDED PRIOR TO CONSTRUCTION.
- 2. IF REPRODUCED, THE SCALES SHOWN ON THESE PLANS ARE BASED ON A 22x34 SHEET. 3. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICES COMPANIES SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING
- POSSESSION AND THE FINAL CONNECTION OF SERVICES. 4. ALL GENERAL CONTRACTOR WORK TO BE COMPLETED (EARTHWORK, FINAL UTILITIES, AND FINAL GRADING) BY THE MILESTONE DATE IN PROJECT DOCUMENTS.

Sheet List Table			
Sheet Number	Sheet Title		
C000	COVER SHEET		
C100	GENERAL NOTES		
V001	SURVEY		
V002	SURVEY		
C200	DEMOLITION PLAN		
C300	EROSION AND SEDIMENT CONTROL PLAN - PHASE 1		
C301	EROSION AND SEDIMENT CONTROL PLAN - PHASE 2		
C302	EROSION AND SEDIMENT CONTROL DETAILS		
C400	SITE DIMENSION PLAN		
C500	GRADING AND DRAINAGE PLAN		
C600	UTILITY PLAN		
C700	CONSTRUCTION DETAILS		
C701	CONSTRUCTION DETAILS		
L100	LANDSCAPE PLAN		
L101	LANDSCAPE DETAILS		

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C400	SITE DIMENSION PLAN		
C500	GRADING AND DRAINAGE PLAN		
C600	UTILITY PLAN		
C700	CONSTRUCTION DETAILS		
C701	CONSTRUCTION DETAILS		
L100	LANDSCAPE PLAN		
L101	LANDSCAPE DETAILS		

Know what's **below. Call** before you dig.

C000

GENERAL CONSTRUCTION NOTES

- THE CONTRACTOR AND SUBCONTRACTORS SHALL OBTAIN A COPY OF THE LATEST EDITION OF THE STANDARD SPECIFICATIONS OF THE LOCAL JURISDICTION AND STATE DEPARTMENT OF TRANSPORTATION AND BECOME FAMILIAR WITH THE CONTENTS PRIOR TO COMMENCING WORK, UNLESS OTHERWISE NOTED. ALL WORK SHALL CONFORM AS APPLICABLE TO THESE STANDARDS AND SPECIFICATIONS.
- PERFORM ALL WORK IN COMPLIANCE WITH APPLICABLE CITY REGULATIONS, STATE CODES, AND O.S.H.A. STANDARDS. THE CONTRACTOR IS RESPONSIBLE FOR FURNISHING THE NECESSARY MATERIALS & LABOR TO CONSTRUCT THE FACILITY AS SHOWN AND DESCRIBED IN THE CONSTRUCTION DOCUMENTS, AND IN ACCORDANCE WITH THE SPECIFICATIONS AND REQUIREMENTS OF THE APPROPRIATE APPROVING AUTHORITIES.
- CONTRACTOR SHALL CLEAR AND GRUB ALL AREAS UNLESS OTHERWISE INDICATED, REMOVING TREES, STUMPS, ROOTS, MUCK, EXISTING PAVEMENT AND ALL OTHER DELETERIOUS MATERIAL.
- THE EXISTING SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS QUALITY LEVEL "D" UNLESS OTHERWISE NOTED. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ACSE 38/02, ENTITLED STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF SUBSURFACE QUALITY DATA BY THE FHA. EXISTING UTILITIES SHOWN ARE LOCATED ACCORDING TO THE INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME OF THE TOPOGRAPHIC SURVEY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR THE ENGINEER. GUARANTEE IS NOT MADE THAT ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN OR THAT THE LOCATION OF THOSE SHOWN ARE ENTIRELY ACCURATE. FINDING THE ACTUAL LOCATION OF ANY EXISTING UTILITIES IS THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE DONE BEFORE COMMENCING ANY WORK IN THE VICINITY. FURTHERMORE, THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES DUE TO THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE OWNER OR ENGINEER WILL ASSUME NO LIABILITY FOR ANY DAMAGES SUSTAINED OR COST INCURRED BECAUSE OF THE OPERATIONS IN THE VICINITY OF EXISTING UTILITIES OR STRUCTURES, NOR FOR TEMPORARY BRACING AND SHORING OF SAME. IF IT IS NECESSARY TO SHORE, BRACE, SWING OR RELOCATE A UTILITY, THE UTILITY COMPANY OR DEPARTMENT AFFECTED SHALL BE CONTACTED AND THEIR PERMISSION OBTAINED REGARDING THE METHOD TO USE FOR SUCH WORK.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES WHICH MAY HAVE BURIED OR AERIAL UTILITIES WITHIN OR NEAR THE CONSTRUCTION AREA BEFORE COMMENCING WORK. THE CONTRACTOR SHALL PROVIDE 48 HOURS MINIMUM NOTICE TO ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED CONSTRUCTION PERMITS AND BONDS IF REQUIRED PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES ONE COPY OF THE CONSTRUCTION DOCUMENTS INCLUDING PLANS, SPECIFICATIONS, GEOTECHNICAL REPORT AND SPECIAL CONDITIONS AND COPIES OF ANY REQUIRED CONSTRUCTION PERMITS.
- ANY DISCREPANCIES ON THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE OWNER AND NOTIFICATION TO THE ENGINEER.
- 10. ALL COPIES OF COMPACTION, CONCRETE AND OTHER REQUIRED TEST RESULTS ARE TO BE SENT TO THE OWNER DIRECTLY FROM THE TESTING AGENCY.
- 11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DOCUMENTING AND MAINTAINING AS-BUILT INFORMATION WHICH SHALL BE RECORDED AS CONSTRUCTION PROGRESSES OR AT THE COMPLETION OF APPROPRIATE CONSTRUCTION INTERVALS AND SHALL BE RESPONSIBLE FOR PROVIDING AS-BUILT DRAWINGS TO THE OWNER FOR THE PURPOSE OF CERTIFICATION TO JURISDICTIONAL AGENCIES AS REQUIRED. ALL AS-BUILT DATA SHALL BE COLLECTED BY A STATE PROFESSIONAL LAND SURVEYOR WHOSE SERVICES ARE ENGAGED BY THE CONTRACTOR.
- 12. ANY WELLS DISCOVERED ON SITE THAT WILL HAVE NO USE MUST BE PLUGGED BY A LICENSED WELL DRILLING CONTRACTOR IN A MANNER APPROVED BY ALL JURISDICTIONAL AGENCIES. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY WELL ABANDONMENT PERMITS REQUIRED.
- 13. ANY WELL DISCOVERED DURING EARTH MOVING OR EXCAVATION SHALL BE REPORTED TO THE APPROPRIATE JURISDICTIONAL AGENCIES WITHIN 24 HOURS AFTER DISCOVERY IS MADE.
- 14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS DO NOT CONFLICT WITH ANY KNOWN EXISTING OR OTHER PROPOSED IMPROVEMENTS. IF ANY CONFLICTS ARE DISCOVERED, THE CONTRACTOR SHALL NOTIFY THE OWNER PRIOR TO INSTALLATION OF ANY PORTION OF THE SITE WORK THAT WOULD BE AFFECTED. FAILURE TO NOTIFY OWNER OF AN IDENTIFIABLE CONFLICT PRIOR TO PROCEEDING WITH INSTALLATION RELIEVES OWNER OF ANY OBLIGATION TO PAY FOR A RELATED CHANGE ORDER.
- 15. SHOULD CONTRACTOR ENCOUNTER ANY DEBRIS LADEN SOIL, STRUCTURES NOT IDENTIFIED IN THE DOCUMENTS, OR OTHER SOURCE OF POTENTIAL CONTAMINATION, THEY SHALL IMMEDIATELY CONTACT THE ENGINEER AND OWNER.
- 16. CONTRACTOR SHALL NOTIFY OWNER AND/OR ENGINEER 48 HOURS IN ADVANCE OF THE FOLLOWING ACTIVITIES: PRE-CONSTRUCTION MEETING, SUBGRADE PREPARATION, BASE INSTALLATION, ASPHALT INSTALLATION, UNDERGROUND PIPING AND UTILITIES INSTALLATION, INSTALLATION OF STRUCTURES, CHECK VALVES, HYDRANTS, METERS, ETC., SIDEWALK INSTALLATION, CONNECTIONS TO WATER AND SEWER MAINS, TESTS OF UTILITIES.

THIRD PARTY SUPPLEMENTAL INFORMATION

KIMLEY-HORN ASSUMES NO LIABILITY FOR ANY ERRORS, INACCURACIES, OR OMISSIONS CONTAINED WITHIN SUPPLEMENTAL INFORMATION PROVIDED BY THIRD PARTY CONSULTANTS.

- TEST REPORTS REQUIRED FOR CLOSE OUT INCLUDE, BUT ARE NOT LIMITED TO:
- DENSITY TEST REPORTS • BACTERIOLOGICAL TESTS OF WATER SYSTEM
- PRESSURE TEST OF WATER/SEWER • LEAK TESTS ON SEWER SYSTEM AND GREASE TRAPS
- ANY OTHER TESTING REQUIRED BY THE AGENCY/MUNICIPALITY

EROSION CONTROL NOTES

- 1. THE STORM WATER POLLUTION PREVENTION PLAN ("SWPPP") IS COMPRISED OF THE EROSION CONTROL PLAN, THE STANDARD DETAILS, THE PLAN NARRATIVE, ATTACHMENTS INCLUDED IN THE SPECIFICATIONS OF THE SWPPP, PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
- 2. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORM WATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE STATE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.
- 3. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY THE PERMITTING AGENCY OR OWNER.
- 4. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR COMPLYING WITH THE REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION. AND SHALL MAINTAIN COMPLIANCE WITH APPLICABLE LAWS AND REGULATIONS FOR THE DURATION OF CONSTRUCTION.
- THE CONTRACTOR SHALL FIELD ADJUST AND/OR PROVIDE ADDITIONAL EROSION CONTROL BMP'S AS NEEDED TO PREVENT EROSION AND OFF-SITE SEDIMENT DISCHARGE FROM THE CONSTRUCTION SITE, LOG AND RECORD ANY ADJUSTMENTS AND DEVIATIONS FROM THE APPROVED EROSION CONTROL PLANS WITHIN THE SWPPP DOCUMENTS STORED IN THE JOB SITE TRAILER.
- BMPS SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION AS REQUIRED BY ALL JURISDICTIONS UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A CERTIFIED PERSON AT LEAST ONCE EVERY 7 CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A 0.5-INCH OR GREATER RAINFALL EVENT.
- 7. EROSION & SEDIMENT CONTROL BMPS SHALL BE MAINTAINED IN ACCORDANCE WITH THE FOLLOWING:
- 7.1. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.
- 7.2. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO VERIFY THAT A HEALTHY STAND OF VEGETATION IS MAINTAINED. SEEDED AREAS SHOULD BE FERTILIZED, WATERED AND RE-SEEDED AS NEEDED. REFER TO THE LANDSCAPE PLAN AND PROJECT SPECIFICATIONS.
- 7.3. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-THIRD THE HEIGHT OF THE SILT FENCE.
- 7.4. THE ROCK CONSTRUCTION ENTRANCE(S) SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC ADDITIONS OF ROCK TOP DRESSING AS CONDITIONS DEMAND.
- 7.5. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC ADDITIONS OF TOP DRESSING IF THE TEMPORARY PARKING CONDITIONS DEMAND.
- 7.6. PERFORM ALL MAINTENANCE OPERATIONS IN A TIMELY MANNER BUT IN NO CASE LATER THAN 2 CALENDAR DAYS FOLLOWING THE INSPECTION.

PAVING AND STRIPING NOTES

- ALL PAVING, CONSTRUCTION, MATERIALS, AND WORKMANSHIP WITHIN JURISDICTION'S RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE LOCAL CITY OR COUNTY SPECIFICATIONS AND STANDARDS, OR THE STATE DOT SPECIFICATIONS AND STANDARDS IF NOT COVERED BY LOCAL CITY OR COUNTY REGULATIONS.
- 2. ALL SIGNS, PAVEMENT MARKINGS, AND OTHER TRAFFIC CONTROL DEVICES SHALL CONFORM TO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D) AND CITY STANDARDS.
- CONTRACTOR SHALL FURNISH ALL PAVEMENT MARKINGS FOR FIRE LANES, ROADWAY LANES, PARKING STALLS, ACCESSIBLE PARKING SYMBOLS, ACCESS AISLES, STOP BARS AND SIGNS, AND MISCELLANEOUS STRIPING WITHIN THE PARKING LOT AS SHOWN ON THE PLANS.
- ALL EXPANSION JOINTS SHALL EXTEND THROUGH THE CURB.
- 5. THE MINIMUM LENGTH OF OFFSET JOINTS AT RADIUS POINTS SHALL BE 2 FEET.
- 6. ALL JOINTS, INCLUDING EXPANSION JOINTS WITH REMOVABLE TACK STRIPS, SHALL BE SEALED WITH JOINT SEALANT.
- THE MATERIALS AND PROPERTIES OF ALL CONCRETE SHALL MEET THE APPLICABLE REQUIREMENTS IN THE A.C.I. (AMERICAN CONCRETE INSTITUTE) MANUAL OF CONCRETE PRACTICE.
- CONTRACTOR SHALL APPLY A SECOND COATING OVER ALL PAVEMENT MARKINGS PRIOR TO ACCEPTANCE BY OWNER FOLLOWED BY A COAT OF GLASS BEADS AS APPLICABLE PER THE PROJECT DOCUMENTS.
- 9. ANY EXISTING PAVEMENT, CURBS AND/OR SIDEWALKS DAMAGED OR REMOVED WILL BE REPAIRED BY THE
- 10. BEFORE PLACING PAVEMENT, CONTRACTOR SHALL VERIFY SUITABLE ACCESSIBLE ROUTES (PER A.D.A). GRADING FOR ALL SIDEWALKS AND ACCESSIBLE ROUTES INCLUDING CROSSING DRIVEWAYS SHALL CONFORM TO CURRENT ADA STATE/NATIONAL STANDARDS. IN NO CASE SHALL ACCESSIBLE RAMP SLOPES EXCEED 1 VERTICAL TO 12 HORIZONTAL. IN NO CASE SHALL SIDEWALK CROSS SLOPES EXCEED 2%. IN NO CASE SHALL LONGITUDINAL SIDEWALK SLOPES EXCEED 5%. IN NO CASE SHALL ACCESSIBLE PARKING STALLS OR AISLES EXCEED 2% (1.5% TARGET) IN ALL DIRECTIONS. SIDEWALK ACCESS TO EXTERNAL BUILDING DOORS AND GATES SHALL BE ADA COMPLIANT. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF ADA CRITERIA CANNOT BE MET IN ANY LOCATION PRIOR TO PAVING. NO CONTRACTOR CHANGE ORDERS WILL BE ACCEPTED FOR A.D.A COMPLIANCE ISSUES.
- 11. MAXIMUM JOINT SPACING IS TWICE THE DEPTH OF THE CONCRETE PAVEMENT IN FEET.

CONTRACTOR AT HIS EXPENSE TO THE SATISFACTION OF THE ENGINEER AND OWNER.

GRADING AND DRAINAGE NOTES

- GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL VERIFY THE SUITABILITY OF ALL EXISTING AND PROPOSED SITE CONDITIONS INCLUDING GRADES AND DIMENSIONS BEFORE START OF CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES.
- THE CONTRACTOR SHALL GRADE THE SITE TO THE ELEVATIONS INDICATED AND SHALL ADJUST BMP'S AS NECESSARY AND REGRADE WASHOUTS WHERE THEY OCCUR AFTER EVERY RAINFALL UNTIL A GRASS STAND IS WELL ESTABLISHED OR ADEQUATE STABILIZATION OCCURS.
- CONTRACTOR SHALL ENSURE THERE IS POSITIVE DRAINAGE FROM THE PROPOSED BUILDINGS SO THAT SURFACE RUNOFF WILL DRAIN BY GRAVITY TO NEW OR EXISTING DRAINAGE OUTLETS. CONTRACTOR SHALL ENSURE NO PONDING OCCURS IN PAVED AREAS AND SHALL NOTIFY ENGINEER IF ANY GRADING DISCREPANCIES ARE FOUND IN THE EXISTING AND PROPOSED GRADES PRIOR TO PLACEMENT OF PAVEMENT OR UTILITIES.
- CONTRACTOR SHALL PROTECT ALL MANHOLE COVERS, VALVE COVERS, VAULT LIDS, FIRE HYDRANTS, POWER POLES, GUY WIRES, AND TELEPHONE BOXES THAT ARE TO REMAIN IN PLACE AND UNDISTURBED DURING CONSTRUCTION, EXISTING CASTINGS AND STRUCTURES TO REMAIN SHALL BE ADJUSTED TO MATCH THE PROPOSED FINISHED GRADES.
- BACKFILL FOR UTILITY LINES SHALL BE PLACED PER DETAILS, STANDARDS, AND SPECIFICATIONS SO THAT THE UTILITY WILL BE STABLE. WHERE UTILITY LINES CROSS THE PARKING LOT, THE TOP 6 INCHES SHALL BE COMPACTED SIMILARLY TO THE REMAINDER OF THE LOT. UTILITY DITCHES SHALL BE VISUALLY INSPECTED DURING THE EXCAVATION PROCESS TO ENSURE THAT UNDESIRABLE FILL IS NOT USED.
- CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND REPLACEMENT OF 4" OF TOPSOIL AT COMPLETION OF WORK. ALL UNPAVED AREAS IN EXISTING RIGHTS-OF-WAY DISTURBED BY CONSTRUCTION SHALL BE REGRADED AND SODDED.
- AFTER PLACEMENT OF SUBGRADE AND PRIOR TO PLACEMENT OF PAVEMENT, CONTRACTOR SHALL TEST AND OBSERVE PAVEMENT AREAS FOR EVIDENCE OF PONDING. ALL AREAS SHALL ADEQUATELY DRAIN TOWARDS THE INTENDED STRUCTURE TO CONVEY STORM RUNOFF. CONTRACTOR SHALL IMMEDIATELY NOTIFY OWNER AND ENGINEER IF ANY DISCREPANCIES ARE DISCOVERED.
- WHERE EXISTING PAVEMENT IS INDICATED TO BE REMOVED AND REPLACED, THE CONTRACTOR SHALL SAW CUT FULL DEPTH FOR A SMOOTH AND STRAIGHT JOINT AND REPLACE THE PAVEMENT WITH THE SAME TYPE AND DEPTH OF MATERIAL AS EXISTING OR AS INDICATED.
- THE CONTRACTOR SHALL INSTALL PROTECTION OVER ALL DRAINAGE STRUCTURES FOR THE DURATION OF CONSTRUCTION AND UNTIL ACCEPTANCE OF THE PROJECT BY THE OWNER. ALL DRAINAGE STRUCTURES SHALL BE CLEANED OF DEBRIS AS REQUIRED DURING AND AT THE END OF CONSTRUCTION TO PROVIDE POSITIVE DRAINAGE FLOWS.
- 10. IF DEWATERING IS REQUIRED. THE CONTRACTOR SHALL OBTAIN ANY APPLICABLE REQUIRED PERMITS. THE CONTRACTOR IS TO COORDINATE WITH THE OWNER AND THE DESIGN ENGINEER PRIOR TO ANY EXCAVATION.
- 11. FIELD DENSITY TESTS SHALL BE TAKEN AT INTERVALS IN ACCORDANCE WITH THE LOCAL JURISDICTIONAL AGENCY OR TO STATE DOT STANDARDS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
- 12. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED AS PER PLANS. THE AREAS SHALL THEN BE SODDED OR SEEDED AS SPECIFIED IN THE PLANS, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL GROWTH IS ESTABLISHED TO MINIMUM COVERAGE OF 70% IN ALL AREAS. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE JOB SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. ALL EARTHEN AREAS WILL BE SODDED OR SEEDED AND MULCHED AS SHOWN ON THE LANDSCAPING PLAN.
- 13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER SUITABLE METHODS OF CONTROL. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.
- 14. SOD, WHERE CALLED FOR, MUST BE INSTALLED AND MAINTAINED ON EXPOSED SLOPES WITHIN 48 HOURS OF COMPLETING FINAL GRADING, AND AT ANY OTHER TIME AS NECESSARY, TO PREVENT EROSION, SEDIMENTATION OR TURBID DISCHARGES.
- 15. THE CONTRACTOR SHALL ENSURE THAT LANDSCAPE ISLAND PLANTING AREAS AND OTHER PLANTING AREAS ARE NOT COMPACTED AND DO NOT CONTAIN ROAD BASE MATERIALS. THE CONTRACTOR SHALL ALSO EXCAVATE AND REMOVE ALL UNDESIRABLE MATERIAL FROM ALL AREAS ON THE SITE TO BE PLANTED AND PROPERLY DISPOSED OF IN A LEGAL MANNER.
- 16. THE CONTRACTOR SHALL INSTALL ALL UNDERGROUND STORM WATER PIPING PER MANUFACTURER'S RECOMMENDATIONS AND STATE DOT SPECIFICATIONS.
- 17. PAVEMENTS SHALL BE INSTALLED IN ACCORDANCE WITH THE RECOMMENDATION OF THE SITE SPECIFIC GEOTECHNICAL EVALUATION REPORT AND CITY & STATE DOT SPECIFICATIONS.
- 18. SPOT ELEVATIONS REPRESENT THE FINISHED SURFACE GRADE OR FLOWLINE OF CURB UNLESS OTHERWISE NOTED
- 19. LIMITS OF CONSTRUCTION ARE TO THE PROPERTY LINE UNLESS OTHERWISE SPECIFIED ON THE PLAN.
- 20. IMMEDIATELY REPORT TO THE OWNER ANY DISCREPANCIES FOUND BETWEEN ACTUAL FIELD CONDITIONS AND CONSTRUCTION DOCUMENTS.
- 21. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING EXISTING UTILITIES, AND SHALL REPAIR ALL DAMAGE TO EXISTING UTILITIES THAT OCCUR DURING CONSTRUCTION WITHOUT
- 22. BLEND NEW EARTHWORK SMOOTHLY TO TRANSITION BACK TO EXISTING GRADE.
- 23. ALL PROPOSED GRADES ONSITE SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE INDICATED ON THE PLANS. ANY SLOPES STEEPER THAN 4:1 REQUIRE EROSION AND SEDIMENT CONTROL BLANKET.
- 24. ADHERE TO ALL TERMS AND CONDITIONS AS NECESSARY IN THE GENERAL N.P.D.E.S. PERMIT AND STORMWATER POLLUTION PREVENTION PLAN (SWPPP) FOR STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
- 25. ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS

WATER STORM SEWER & SANITARY SEWER NOTES

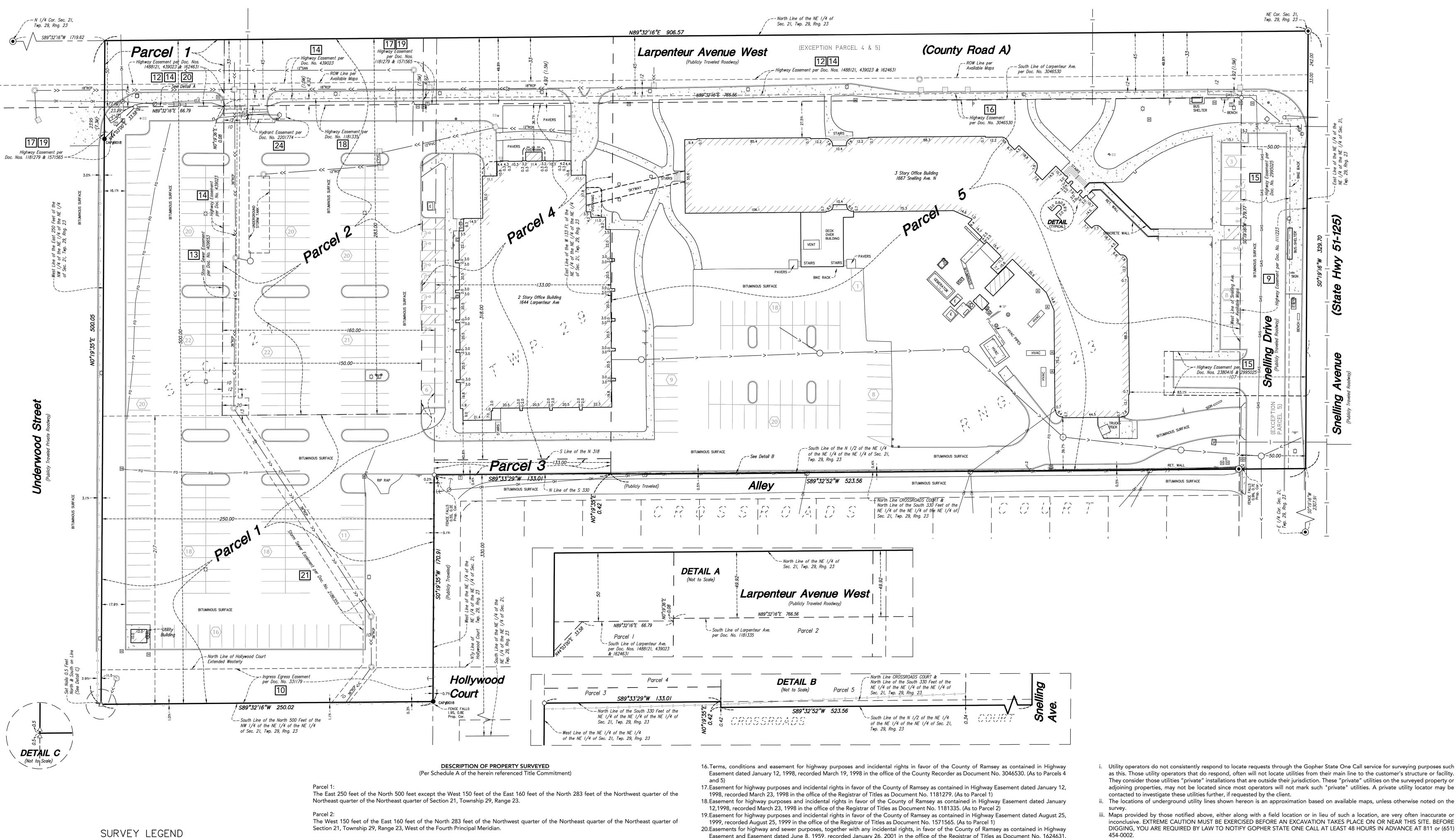
- THE CONTRACTOR SHALL CONSTRUCT GRAVITY SEWER LATERALS, MANHOLES, GRAVITY SEWER LINES, AND DOMESTIC WATER AND FIRE PROTECTION SYSTEM AS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL FURNISH ALL NECESSARY MATERIALS. EQUIPMENT. MACHINERY. TOOLS. MEANS OF TRANSPORTATION AND LABOR NECESSARY TO COMPLETE THE WORK IN FULL AND COMPLETE ACCORDANCE WITH THE SHOWN, DESCRIBED AND REASONABLY INTENDED REQUIREMENTS OF THE CONTRACT DOCUMENTS AND JURISDICTIONAL AGENCY REQUIREMENTS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
- ALL EXISTING UNDERGROUND UTILITY LOCATIONS SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS FOR UTILITY LOCATION AND COORDINATION IN ACCORDANCE WITH THE NOTES CONTAINED IN THE GENERAL CONSTRUCTION SECTION OF THIS SHEET.
- 3. THE CONTRACTOR SHALL RESTORE ALL DISTURBED VEGETATION IN KIND, UNLESS SHOWN OTHERWISE.
- DEFLECTION OF PIPE JOINTS AND CURVATURE OF PIPE SHALL NOT EXCEED THE MANUFACTURER'S SPECIFICATIONS. SECURELY CLOSE ALL OPEN ENDS OF PIPE AND FITTINGS WITH A WATERTIGHT PLUG WHEN WORK IS NOT IN PROGRESS. THE INTERIOR OF ALL PIPES SHALL BE CLEAN AND JOINT SURFACES WIPED CLEAN AND DRY AFTER THE PIPE HAS BEEN LOWERED INTO THE TRENCH. VALVES SHALL BE PLUMB AND LOCATED ACCORDING TO THE PLANS.
- ALL PIPE AND FITTINGS SHALL BE CAREFULLY STORED FOLLOWING MANUFACTURER'S RECOMMENDATIONS. CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE COATING OR LINING IN ANY D.I. PIPE FITTINGS. ANY PIPE OR FITTING WHICH IS DAMAGED OR WHICH HAS FLAWS OR IMPERFECTIONS WHICH, IN THE OPINION OF THE ENGINEER OR OWNER, RENDERS IT UNFIT FOR USE, SHALL NOT BE USED. ANY PIPE NOT SATISFACTORY FOR USE SHALL BE CLEARLY MARKED AND IMMEDIATELY REMOVED FROM THE JOB SITE, AND SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- 6. WATER FOR FIRE FIGHTING SHALL BE MADE AVAILABLE FOR USE BY THE CONTRACTOR PRIOR TO COMBUSTIBLES BEING BROUGHT ON SITE.
- ALL UTILITY AND STORM DRAIN TRENCHES LOCATED UNDER AREAS TO RECEIVE PAVING SHALL BE COMPLETELY BACK FILLED IN ACCORDANCE WITH THE GOVERNING JURISDICTIONAL AGENCY'S SPECIFICATIONS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
- UNDERGROUND UTILITY LINES SHALL BE SURVEYED BY A STATE LICENSED PROFESSIONAL LAND SURVEYOR PRIOR TO BACK FILLING.
- CONTRACTOR SHALL PERFORM, AT THEIR OWN EXPENSE, ANY AND ALL TESTS REQUIRED BY THE SPECIFICATIONS AND/OR ANY AGENCY HAVING JURISDICTION. THESE TESTS MAY INCLUDE. BUT MAY NOT BE LIMITED TO, INFILTRATION AND EXFILTRATION, TELEVISION INSPECTION AND A MANDREL TEST ON GRAVITY SEWER. A COPY OF THE TEST RESULTS SHALL BE PROVIDED TO THE UTILITY PROVIDER, OWNER AND JURISDICTIONAL AGENCY AS REQUIRED.
- 10. BETWEEN WATER AND SEWER MANHOLES AND PIPES, CONTRACTOR SHALL PROVIDE FOR A MINIMUM HORIZONTAL CLEARANCE OF 10-FEET AND A MINIMUM VERTICAL SEPARATION OF 18-INCHES.
- 11. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
- 12. ALL STORM PIPE ENTERING STRUCTURES SHALL BE GASKETED AND/OR GROUTED TO ASSURE CONNECTION AT STRUCTURE IS WATERTIGHT UNLESS OTHERWISE STATED BY CITY AND STATE DESIGN STANDARDS AND SPECIFICATIONS.
- 13. UNLESS OTHERWISE STATED IN CITY AND STATE DESIGN STANDARDS AND SPECIFICATIONS, ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT, AND SHALL HAVE TRAFFIC BEARING RING & COVERS. MANHOLES IN UNPAVED AREAS SHALL BE 6" ABOVE FINISH GRADE. LIDS SHALL BE LABELED "STORM SEWER". EXISTING CASTINGS AND STRUCTURES WITHIN PROJECT LIMITS SHALL BE ADJUSTED TO MEET THESE CONDITIONS AND THE PROPOSED FINISHED GRADE.
- 14. TOPOGRAPHIC INFORMATION IS TAKEN FROM A TOPOGRAPHIC SURVEY BY LAND SURVEYORS. IF THE CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, THEN THE CONTRACTOR SHALL SUPPLY, AT THEIR EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR TO THE OWNER FOR REVIEW.
- 15. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO
- 16. ALL STORM STRUCTURES SHALL HAVE A SMOOTH UNIFORM POURED MORTAR FROM INVERT IN TO INVERT
- 17. ROOF DRAINS SHALL BE CONNECTED TO STORM SEWER BY PREFABRICATED WYES OR AT STORM STRUCTURES. ROOF DRAINS AND TRUCK WELL DRAIN SHALL RUN AT A MINIMUM 2.0% SLOPE, UNLESS
- 18. PROVIDE INSULATION OF UNDERGROUND ROOF DRAINS AND SANITARY SEWER SERVICES IF ADEQUATE FROST DEPTH CANNOT BE PROVIDED.
- 19. THE CONTRACTOR SHALL PROTECT EXISTING UNDERGROUND UTILITIES AND APPURTENANCES THAT ARE
- 20. THE LOCATION OF EXISTING UTILITIES, STORM DRAINAGE STRUCTURES AND OTHER ABOVE AND BELOW-GRADE IMPROVEMENTS ARE APPROXIMATE AS SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION, SIZE AND INVERT ELEVATIONS OF EACH PRIOR TO THE START OF CONSTRUCTION.
- 21. A MINIMUM SEPARATION OF 5-FEET IS REQUIRED BETWEEN UNDERGROUND UTILITIES AND TREES UNLESS A ROOT BARRIER IS UTILIZED.
- 22. GAS, PHONE AND ELECTRIC SERVICES SHOWN FOR INFORMATIONAL PURPOSES ONLY. DRY UTILITY COMPANIES MAY ALTER THE DESIGN LAYOUT DURING THEIR REVIEW. CONTRACTOR TO COORDINATE FINAL DESIGN AND INSTALLATION WITH UTILITY COMPANIES.
- 23. COORDINATE UTILITY INSTALLATION WITH IRRIGATION DESIGN AND INSTALLATION.

NOTED OTHERWISE, AND TIE IN AT THE CENTERLINE OF THE STORM MAIN.

TO REMAIN FROM DAMAGE DURING CONSTRUCTION OPERATIONS.

- 24. ALL DIMENSIONS ARE TO FLOW LINE OF CURB UNLESS OTHERWISE NOTED. PERIMETER WALL DIMENSIONS ARE TO INSIDE WALL FACE. REFERENCE ARCHITECTURAL PLANS FOR EXACT WALL WIDTH AND
- 25. REFERENCE ARCHITECTURAL PLANS (BY OTHERS) FOR EXACT BUILDING DIMENSIONS, MATERIALS
- 26. REFERENCE M.E.P. PLANS (BY OTHERS) FOR MECHANICAL EQUIPMENT DIMENSIONS AND SPECIFICATIONS.
- 27. CONTRACTOR SHALL REFERENCE STRUCTURAL PLANS (BY OTHERS) FOR FOOTING AND FOUNDATION PAD PREPARATION SPECIFICATIONS.
- 28. CONTRACTOR SHALL REFERENCE M.E.P PLANS (BY OTHERS) FOR ROUTING OF PROPOSED ELECTRICAL & COMMUNICATIONS SERVICES AND SITE LIGHTING LAYOUT.

SHEET NUMBER



- CATCH BASIN AS ASH STORM MANHOLE BO BOXELDER -----> ----- SANITARY SEWER DE DEAD TREE SANITARY MANHOLE — I — WATERMAIN LN LINDEN HYDRANT ----- ELE ----- UNDERGROUND ELECTRIC LO LOCUST M GATE VALVE ----- FO ------ UNDERGROUND FIBER OPTIC MA MAPLE C LIGHT POLE —— GAS—— UNDERGROUND GAS OA OAK Ø POWER POLE —— OH —— OVERHEAD UTILITY SP SPRUCE A/C UNIT -o--o--o-- CHAIN LINK FENCE TR TREE (GEN) © ELECTRIC MANHOLE ---- WOOD/PLASTIC FENCE TRAFFIC SIGNAL "RD ROOF DRAIN © ELECTRIC METER CONCRETE CURB ⊸ SIGN "EO ELECTRIC OUTLET E ELECTRIC TRANSFORMER x972.5 SPOT ELEVATION CONCRETE CONCRETE □ TELEPHONE PEDESTAL

 FLAG POLE

 FLAG POLE

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 - _872 CONTOUR TC TOP OF CURB
 - O 1/2 INCH X 14 INCH IRON MONUMENT SET, MARKED "LS 17255" IRON MONUMENT FOUND DECIDUOUS TREE

SCALE IN FEET

CONIFEROUS TREE

ALUMINUM DISK MONUMENT FOUND CAST IRON MONUMENT FOUND

TNH TOP NUT HYDRANT

- © GAS VALVE △ NAIL MONUMENT SET G GENERATOR PARKING NUMBER GUARD POST
- 10 TITLE ITEM NUMBER ← GUY WIRE □ HAND HOLE

UTILITY MANHOLE

FLARED END

© GAS METER

FC FIRE CONNECTION

☑ VAULT

HANDICAP

- That part of the West 133.00 feet of the Northeast quarter of the Northeast quarter of the Northeast quarter of Section 21, Township 29, Range 23, which lies South of the North 318.00 feet thereof and which lies North of the South 330.00 feet.
- (Parcels 1, 2 and 3 are Torrens Property-Certificate of Title No. 590824)
- The Westerly 133 feet of the Northerly 318 feet excepting therefrom that part taken for Larpenteur Avenue, of the Northeast Quarter of the Northeast Quarter of the Northeast Quarter, Section 21,

(Abstract Property)

Township 29, Range 23, Ramsey County, Minnesota.

The North Half of the Northeast Quarter of the Northeast Quarter of the Northeast Quarter, except the West 133 feet thereof, in Section 21, Township 29, Range 23, Ramsey County, Minnesota, except that part taken for Snelling and Larpenteur Avenues.

TITLE COMMITMENT EXCEPTIONS (Per Schedule B, Part II of the herein referenced Title Commitment)

The property depicted on this survey and the easements of record shown hereon are the same as the property and the easements described in the Commitment for Title Insurance issued by First American Title Insurance Company, File No. NCS-904443-MPLS, effective date May 04, 2018. The numbers below correspond to those in the title commitment.

- 1-8, 11, 22, 23 & 25 do not require comment.
- 9. Easement for highway purposes in favor of the State of Minnesota as contained in Final Certificate dated January 15, 1945, recorded June 3, 1945 in the office of the County Recorder in Book 1177, Page 269 as Document No. 1073330; Amended Final Certificate recorded May 20,
- 1946 in Book 1208, Page 23 as Document No. 1111223. (As to Parcel 5) 10. Easement for ingress and egress purposes in favor of the Regents of the University of Minnesota as reserved Warranty Deed dated April 5, 1954, recorded April 12, 1954 in the office of the Registrar of Titles as Document No. 331179 and appearing in documents of record. (As to
- 12. Easements for highway and sewer purposes, together with any incidental rights, in favor of the County of Ramsey as contained in Highway
- Easement and Easement dated June 8, 1959, recorded July 9, 1959 in the office of the County Recorder in Book 1636, Page 806 as Document No. 1488121.(As to Parcels 4 and 5) 13. Easement for storm sewer purposes and incidental rights in favor of the County of Ramsey as contained in Easement dated July 23, 1953,

recorded October 16, 1959 in the office of the Registrar of Titles as Document No. 409653. (As to Parcel 2)

1962 in the office of the County Recorder in Book 1775, Page 591 as Document No. 1555737 and in the office of the Registrar of Titles as Document No. 439023. (As to Parcels 1, 2, 4 and 5) 15. Easement for highway purposes and incidental rights in favor of the State of Minnesota as contained in Highway Easement dated March 16, 1987, recorded May 15, 1987 in the office of the County Recorder as Document No. 2380416; and subject to access restrictions as contained in Quit Claim Deed from the State of Minnesota to the City of Falcon Heights dated May 14, 1997, recorded June 4, 1997 in the office of the County Recorder as Document No. 2995025. (As to Parcels 4 and 5)

14.Easement for highway purposes in favor of the County of Ramsey as contained in Final Certificate dated June 14,1961, recorded January 26,

- Easement and Easement dated June 8, 1959, recorded January 26, 2001 in the office of the Registrar of Titles as Document No. 1624631. (As to Parcels 1 and 2)
- 21. Terms, conditions and easement for storm sewer purposes in favor of the City of Falcon Heights as contained in Storm Sewer Easement Agreement dated September 12, 2012, recorded September 25, 2012 in the office of the Registrar of Titles as Document No. 2186355. (As
- 24.Terms, conditions and easement for fire hydrant purposes in favor of the Board of Water Commissioners of the City of St. Paul as contained
- in Fire Hydrant Easement Agreement dated October 19, 2012, recorded February 19, 2013 in the office of the Registrar of Titles as Document No. 2201774. (As to Parcel 2)

ALTA/NSPS OPTIONAL TABLE A NOTES (The following items refer to Table A optional survey responsibilities and specifications)

- 1. Monuments placed (or a reference monument or witness to the corner) at all major corners of the boundary of the property, unless already marked or referenced by existing monuments or witnesses to the corner are shown hereon.
- 2. The address, if disclosed in documents provided to or obtained by the surveyor, or observed while conducting the fieldwork is 1667 Snelling
- Avenue North, Falcon Heights, MN 55108.
- 3. This property is contained in Flood Insurance Rate Map, Community Panel No. 27123C0085G, and is a non-printed panel (no special flood hazard areas).
- 4. The Gross land area is 341,365 +/- square feet or 7.84 +/- acres. The Highway ROW/ easement land area is 61,411 +/- square feet or 1.41 +/- acres.
- The Net land area is 279,954 +/- square feet or 6.43 +/- acres. 6. (a) Zoning information was not provided by the client.
- 7. (a) Exterior dimensions of all buildings are shown at ground level.
- 8. Substantial features observed in the process of conducting fieldwork, are shown hereon.
- 9. Striping of clearly identifiable parking spaces on surface parking areas and lots are shown hereon. The number and type of clearly identifiable
- parking stalls on this site are as follows: 303 Regular + 11 Disabled = 314 Total Parking Stalls. 11. We have shown underground utilities on and/or serving the surveyed property per Gopher State One-Call Ticket Nos. 181450690 &

181450732. The following utilities and municipalities were notified:					
(218)346-5500	CITY OF FALCON HEIGHTS	(651)792-7600			
(800)762-0592	CENTURYLINK	(800)283-4237			
(612)349-7547	MINNESOTA STATE FAIR	(320)963-2400			
(651)366-5750	MP NEXLEVEL	(320)963-2400			
(651)266-6868	ST PAUL SEWER	(651)266-9850			
(651)266-9777	ST PAUL PARKS	(651)632-5129			
(612)625-6537	XCEL ENERGY	(651)229-2552			
(888)267-1063					
	(218)346-5500 (800)762-0592 (612)349-7547 (651)366-5750 (651)266-6868 (651)266-9777 (612)625-6537	(218)346-5500 CITY OF FALCON HEIGHTS (800)762-0592 CENTURYLINK (612)349-7547 MINNESOTA STATE FAIR (651)366-5750 MP NEXLEVEL (651)266-6868 ST PAUL SEWER (651)266-9777 ST PAUL PARKS (612)625-6537 XCEL ENERGY			

- i. Utility operators do not consistently respond to locate requests through the Gopher State One Call service for surveying purposes such as this. Those utility operators that do respond, often will not locate utilities from their main line to the customer's structure or facility. They consider those utilities "private" installations that are outside their jurisdiction. These "private" utilities on the surveyed property or adjoining properties, may not be located since most operators will not mark such "private" utilities. A private utility locator may be
- ii. The locations of underground utility lines shown hereon is an approximation based on available maps, unless otherwise noted on the ii. Maps provided by those notified above, either along with a field location or in lieu of such a location, are very often inaccurate or

SURVEY REPORT

- 1. The Surveyor was not provided utility easement documents for the subject property except for those shown on the Survey.
- 2. The bearings for this survey are based on the Ramsey County Coordinate System NAD 83 (1986 Adjust).
- 3. Site Benchmark: Top nut of fire hydrant near the NE corner of the site. Elevation = 959.18 (NGVD 29)
- 4. Trees shown hereon are 8 inch diameter at breast height or greater. Other trees less than 8 inches may be on site but are not shown hereon.
- 5. The surveyor was not provided documents for fee taking of Larpenteur Avenue West or Snelling Avenue. Available maps show 33 feet Right of Way lines along Larpenteur Avenue West and 50 feet along Snelling Avenue adjacent to subject property indicating possible prescriptive rights, several highway easement documents have been provided and shown hereon.

CERTIFICATION

To Technology and Information Educational Services, a Minnesota joint powers organization and First American Title Insurance Company:

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1 - 4, 6(a), 7(a), 8, 9 and 11 of Table A thereof. The field work was completed on June 22, 2018.

Date of Plat or Map: June 29, 2018



EDUCATIOI CENTER

CIVIL ENGINEERING LAND SURVEYING LANDSCAPE ARCHITECTURE **ENVIRONMENTA** 7200 Hemlock Lane, Suite 300

Maple Grove, MN 55369

763.424.5505 www.loucksinc.com

CADD QUALIFICATION CADD files prepared by the Consultant for this project a with respect to this project. These CADD files shall not be use on other projects, for additions to this project, or for completic onsultant. With the Consultant's approval, others may be nformation and reference only. All intentional or unintention made at the full risk of that party making such revisions, addition onsultant from any & all responsibilities, claims, and liabilities.

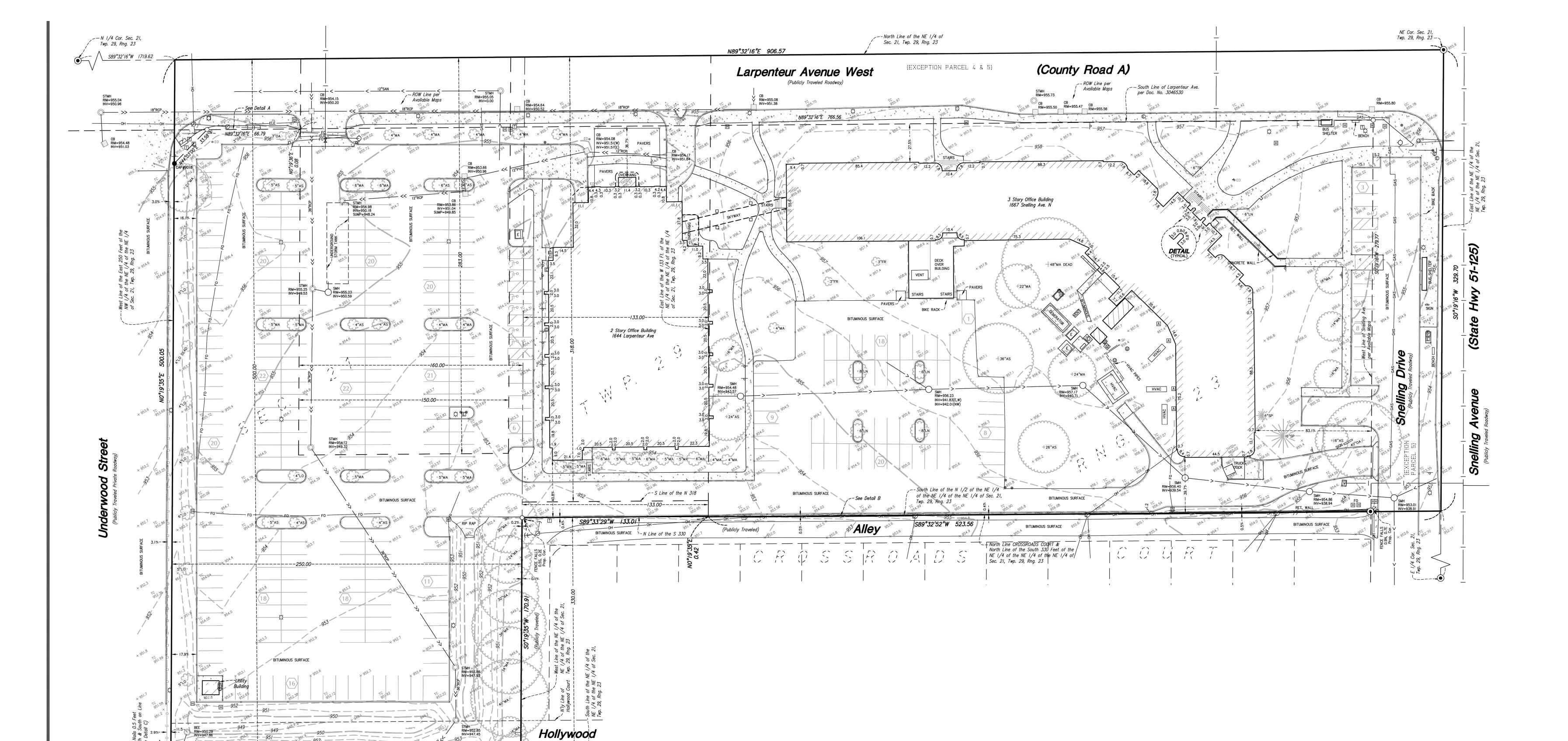
SUBMITTAL/REVISIONS SURVEY ISSUED

prepared by me or under my direct supervision and tha I am a duly Licensed Land Surveyor under the laws of QUALITY CONTROL Loucks Project No 11273B HDN Project Lead SFH Drawn By HDN Checked By BRS, BEP Field Crew VICINITY MAP <u>_____</u>

PROFESSIONAL SIGNATURE

I hereby certify that this survey, plan or report was

ALTA/NSPS LAND TITLE **SURVEY**



SURVEY LEGEND

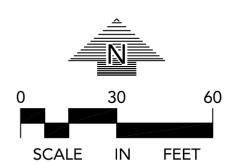
, —— South Line of the North 500 Feet of the NW 1/4 of the NE 1/4 of the NE 1/4 of Sec. 21, Twp. 29, Rng. 23

ட் HANDICAP

SONVET LEGEND				
AS	ASH (9 2	CATCH BASIN	
во	BOXELDER	\bigcirc	STORM MANHOLE	> SANITARY SEWER
DE	DEAD TREE	\bigcirc	SANITARY MANHOLE	I WATERMAIN
LN	LINDEN	\Diamond	HYDRANT	—— ELE —— UNDERGROUND ELECTRIC
LO	LOCUST	\bowtie	GATE VALVE	FO UNDERGROUND FIBER OPTIC
MA	MAPLE	Þ	LIGHT POLE	GAS UNDERGROUND GAS
OA	OAK	Ø	POWER POLE	OVERHEAD UTILITY
SP	SPRUCE	A	A/C UNIT	
TR	TREE (GEN)	Œ	ELECTRIC MANHOLE	WOOD/PLASTIC FENCE
□ RD	ROOF DRAIN	Œ	ELECTRIC METER	TRAFFIC SIGNAL
-6-	SIGN	• _{EO}	ELECTRIC OUTLET	CONCRETE CURB
_× 972.5	SPOT ELEVATION	E	ELECTRIC TRANSFORMER	CONCRETE
T	TELEPHONE PEDESTAL	<u>~</u>	FLAG POLE	_872 CONTOUR
0	UTILITY MANHOLE	0	I/2 INCH X I4 INCH IRON MONU	MENT
V	VAULT		SET, MARKED "LS 17255"	CONIFEROUS TREE
\Diamond	VENT	_	IRON MONUMENT FOUND	
^	FLARED END	\bigcirc	ALUMINUM DISK MONUMENT	
FC	FIRE CONNECTION	\odot	CAST IRON MONUMENT FOUN	DECIDUOUS TREE
©	GAS METER	X	CHISELED "X"	400
©	GAS VALVE	\triangle	NAIL MONUMENT SET	
G	GENERATOR	(13)	PARKING NUMBER	
•	GUARD POST	10	TITLE ITEM NUMBER	
\leftarrow	GUY WIRE			
H	HAND HOLE			
Q				

SURVEY REPORT

- 1. Note: The purpose of this sheet is to show existing trees, contours and spot
- Site Benchmark: Top nut of fire hydrant near the NE corner of the site. Elevation = 959.18 (NGVD 29)
- 3. Trees shown hereon are 8 inch diameter at breast height or greater. Other trees less than 8 inches may be on site but are not shown hereon.



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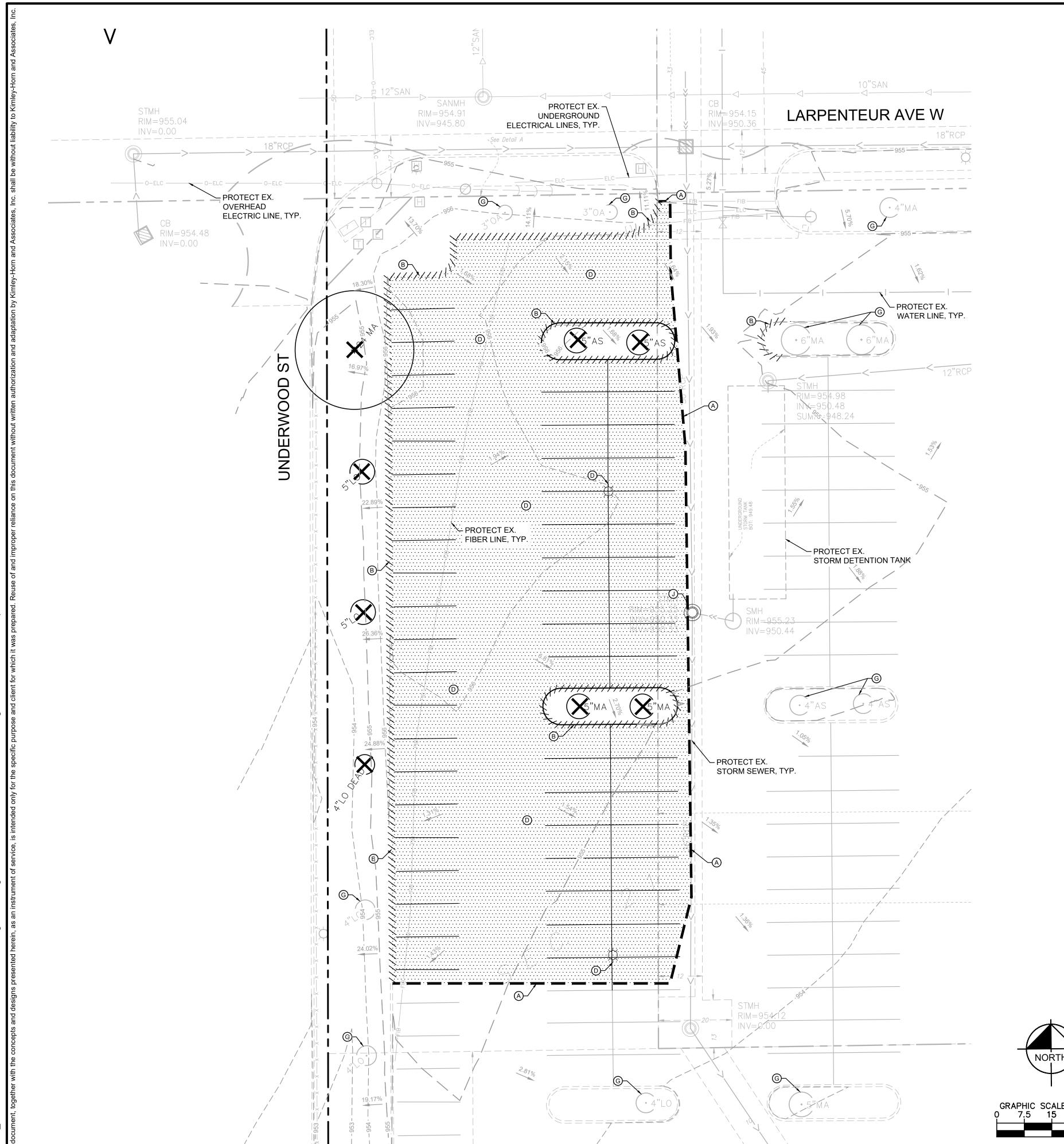
CADD QUALIFICATION CADD files prepared by the Consultant for this project are instruments of the Consultant professional services for use solely with respect to this project. These CADD files shall not be used on other projects, for additions to this project, or for completion of this project by others without written approval by the Consultant. With the Consultant's approval, others may be permitted to obtain copies of the CADD drawing files for information and reference only. All intentional or unintentional revisions, additions, or deletions to these CADD files shall be made at the full risk of that party shall hold harmless and indemnify the Consultant from any & all responsibilities, claims, and liabilities.

SURVEY ISSUED

PROFESSIONAL SIGNATURE I hereby certify that this survey, plan or report was prepared by me or under my direct supervision and that I am a duly Licensed Land Surveyor under the laws of 11273B Loucks Project No.

HDN SFH Project Lead Drawn By HDN Checked By BRS, BEP Field Crew

> ALTA/NSPS LAND TITLE SURVEY



LEGEND

////////////// $X \cdot X \cdot X \cdot X \cdot X \cdot X \cdot X \cdot X$

772

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PROPERTY LINE REMOVE BITUMINOUS SURFACE REMOVE CONCRETE SURFACE REMOVE BUILDING

CLEARING & GRUBBING **FULL DEPTH SAWCUT** 

REMOVE TREE

REMOVE CONCRETE CURB & GUTTER REMOVE UTILITY LINES

FILL & ABANDON UTILITY LINES LIMITS OF CONSTRUCTION EXISTING OVERHEAD POWER LINE EXISTING CHAINLINK FENCE EXISTING J-BARRIER **EXISTING RETAINING WALL EXISTING SANITARY SEWER** 

EXISTING STORM SEWER EXISTING WATERMAIN EXISTING GAS MAIN EXISTING UNDERGROUND TELEPHONE EXISTING UNDERGROUND CABLE EXISTING CONTOUR **EXISTING CURB & GUTTER** 

EXISTING SIGN EXISTING FLARED END SECTION EXISTING STORM MANHOLE EXISTING STORM CATCHBASIN EXISTING GAS METER

EXISTING POST INDICATOR VALVE EXISTING WELL EXISTING AUTOMATIC SPRINKLER EXISTING ROOF DRAIN EXISTING GATE VALVE EXISTING HYDRANT EXISTING METAL COVER

EXISTING ELECTRICAL METER EXISTING AIR CONDITIONER **EXISTING TELEPHONE MANHOLE** EXISTING CABLE BOX

EXISTING LIGHT POLE EXISTING TREE

EXISTING GUY WIRE

EXISTING POWER POLE

EXISTING TREE LINE

**DEMOLITION PLAN NOTES** 

- 1. THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION, REMOVAL, AND DISPOSAL (IN A LOCATION APPROVED BY ALL GOVERNING AUTHORITIES) OF ALL STRUCTURES, PADS, WALLS, FLUMES, FOUNDATIONS, PARKING, DRIVES, DRAINAGE STRUCTURES, UTILITIES, ETC. SUCH THAT THE IMPROVEMENTS ON THE PLANS CAN BE CONSTRUCTED. FACILITIES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL PER THE PROJECT DOCUMENTS.
- 2. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL DEBRIS FROM THE SITE AND DISPOSING OF THE DEBRIS IN A LAWFUL MANNER AND IN ACCORDANCE WITH LOCAL AND STATE REGULATIONS. THE CONTRACTOR SHALL OBTAIN ANY REQUIRED PERMITS FOR DEMOLITION AND DISPOSAL FROM THE APPROPRIATE LOCAL AND STATE AGENCIES. CONTRACTOR SHALL PROVIDE COPIES OF THE PERMIT AND RECEIPTS OF DISPOSAL OF MATERIALS TO THE OWNER AND OWNERS REPRESENTATIVE, INCLUDING THE TYPE OF DEBRIS AND LOCATION WHERE IT WAS DISPOSED.
- THE CONTRACTOR SHALL MAINTAIN UTILITY SERVICES TO ADJACENT PROPERTIES AT ALL TIMES. UTILITY SERVICES SHALL NOT BE INTERRUPTED WITHOUT APPROVAL FROM THE CONSTRUCTION MANAGER AND COORDINATION WITH THE ADJACENT PROPERTIES AND/OR THE CITY.
- 4. THE CONTRACTOR SHALL COORDINATE WITH RESPECTIVE UTILITY COMPANIES PRIOR TO THE REMOVAL AND/OR RELOCATION OF UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY CONCERNING PORTIONS OF WORK WHICH MAY BE PERFORMED BY THE UTILITY COMPANY'S FORCES AND ANY FEES WHICH ARE TO BE PAID TO THE UTILITY COMPANY FOR THEIR SERVICES. THE CONTRACTOR IS RESPONSIBLE FOR PAYING ALL FEES AND CHARGES.

5. THE LOCATIONS OF EXISTING UTILITIES SHOWN ON THE PLAN HAVE BEEN DETERMINED FROM THE BEST

- INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY DEMOLITION ACTIVITY, THE CONTRACTOR SHALL NOTIFY THE AFFECTED UTILITY COMPANIES TO PROVIDE LOCATIONS OF EXISTING UTILITIES WITHIN PROPOSED WORK AREA.
- 6. EXISTING SEWERS, PIPING AND UTILITIES SHOWN ARE BASED ON AVAILABLE RECORD PLAN DATA AND/OR FIELD UTILITY MARKINGS AND ARE NOT TO BE INTERPRETED AS THE EXACT LOCATION. ADDITIONAL UNMARKED OBSTACLES MAY EXIST ON THE SITE. VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED UNDERGROUND FEATURES. GIVE NOTICE TO AFFECTED UTILITY COMPANIES REGARDING REMOVAL OF SERVICE LINES AND CAP ANY ABANDONED LINES BEFORE PRECEDING WITH THE PROPOSED WORK.
- 7. ELECTRICAL, TELEPHONE, CABLE, WATER, FIBER OPTIC, AND/OR GAS LINES NEEDING TO BE REMOVED OR RELOCATED SHALL BE COORDINATED WITH THE AFFECTED UTILITY COMPANY. ADEQUATE TIME SHALL BE PROVIDED FOR RELOCATION AND CLOSE COORDINATION WITH THE UTILITY COMPANY IS NECESSARY TO PROVIDE A SMOOTH TRANSITION IN UTILITY SERVICE. CONTRACTOR SHALL PAY CLOSE ATTENTION TO EXISTING UTILITIES WITHIN ANY ROAD RIGHT-OF-WAY DURING CONSTRUCTION.
- 8. CONTRACTOR MUST PROTECT THE PUBLIC AT ALL TIMES WITH FENCING, BARRICADES, ENCLOSURES, ETC. (AND OTHER APPROPRIATE BEST MANAGEMENT PRACTICES) AS APPROVED BY THE CONSTRUCTION MANAGER. MAINTENANCE OF TRAFFIC CONTROL SHALL BE COORDINATED IN ACCORDANCE WITH THE CITY, COUNTY, AND STATE DOT AS NECESSARY.
- 9. CONTRACTOR SHALL MAINTAIN ACCESS TO ADJACENT PROPERTIES DURING CONSTRUCTION, AND SHALL NOTIFY ADJACENT PROPERTY OWNERS IF ACCESS WILL BE INTERRUPTED OR ALTERED AT ANY
- 10. PRIOR TO THE START OF DEMOLITION, INSTALL EROSION CONTROL BMP'S IN ACCORDANCE WITH THE EROSION & SEDIMENT CONTROL PLANS / SWPPP.
- 11. CONTRACTOR MAY LIMIT SAW-CUT AND PAVEMENT REMOVAL TO ONLY THOSE AREAS WHERE IT IS REQUIRED AS SHOWN ON THESE CONSTRUCTION PLANS BUT IF ANY DAMAGE IS INCURRED ON ANY OF THE SURROUNDING PAVEMENT OR CURB, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS REMOVAL
- 12. THE CONTRACTOR SHALL COORDINATE WATER MAIN WORK WITH THE CITY WATER AND FIRE DEPARTMENTS TO ENSURE ADEQUATE FIRE PROTECTION IS CONSTANTLY AVAILABLE TO THE SITE AND SURROUNDING PROPERTIES THROUGH ALL PHASES OF CONSTRUCTION. CONTRACTOR WILL BE RESPONSIBLE FOR ARRANGING/PROVIDING ANY REQUIRED WATER MAIN SHUT OFFS WITH THE CITY. ANY COSTS ASSOCIATED WITH WATER MAIN SHUT OFFS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND NO EXTRA COMPENSATION WILL BE PROVIDED.
- 13. IN THE EVENT A WELL IS FOUND, THE CONTRACTOR SHALL CONTACT THE ENGINEER AND OWNER IMMEDIATELY. ALL WELLS SHALL BE SEALED BY A LICENSED WELL CONTRACTOR IN ACCORDANCE WITH STATE REQUIREMENTS.
- 14. IN THE EVENT THAT UNKNOWN CONTAINERS OR TANKS ARE ENCOUNTERED, THE CONTRACTOR SHALL CONTACT THE OWNER AND/OR OWNERS REPRESENTATIVE IMMEDIATELY. ALL CONTAINERS SHALL BE DISPOSED OF AT A PERMITTED LANDFILL PER THE PROJECT DOCUMENTS.
- 15. CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY EXISTING DRAINTILE IS ENCOUNTERED ON SITE; ACTIVE DRAINTILE SHALL NOT BE REMOVED WITHOUT APPROVAL FROM THE ENGINEER.
- 16. IF CONTAMINATED MATERIAL IS ENCOUNTERED ON THE PROJECT SITE, THE CONTRACTOR SHALL STOP WORK AND NOTIFY THE OWNER AND ENGINEER IMMEDIATELY.

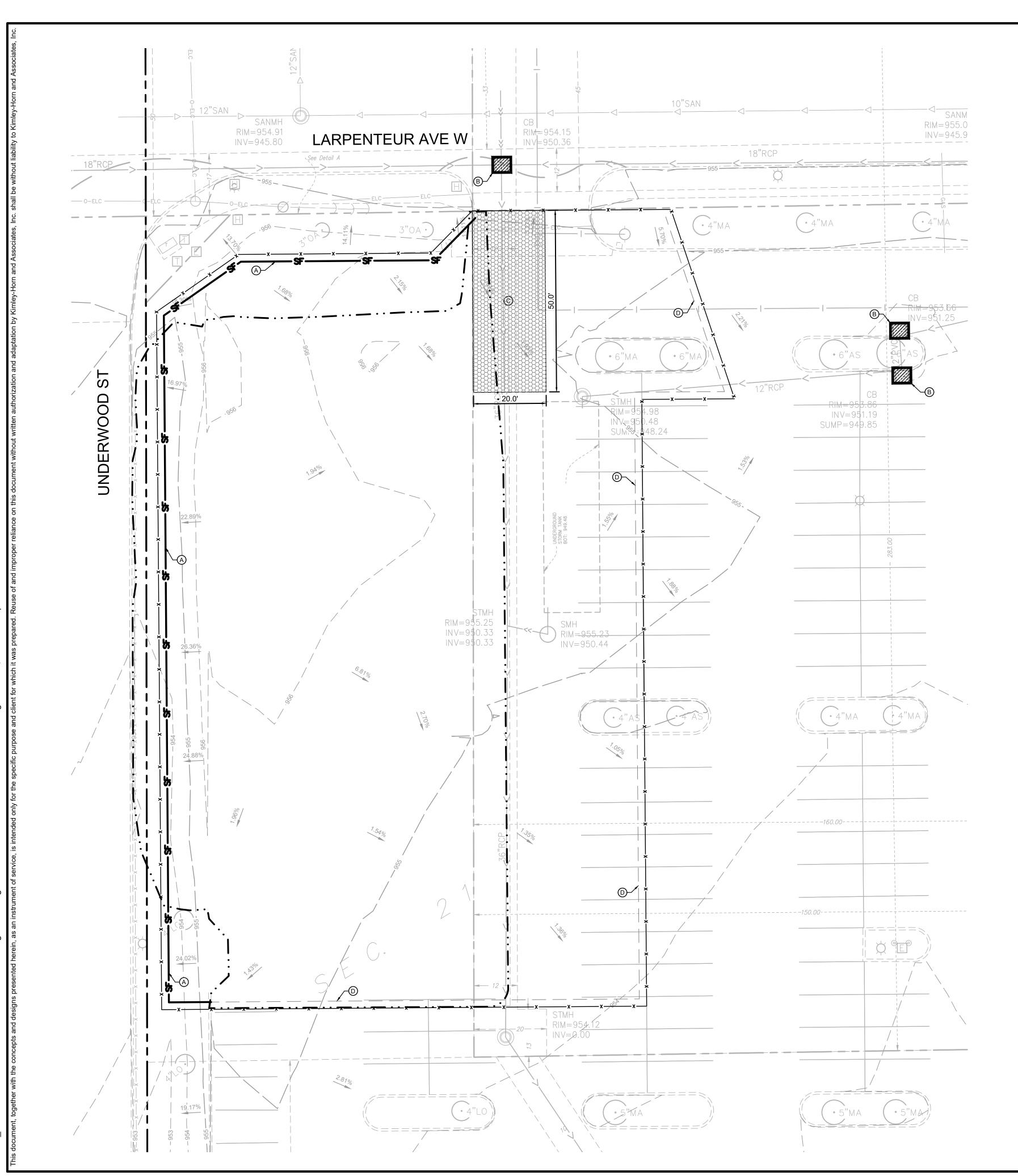
# **KEYNOTE LEGEND**

- SAWCUT EXISTING PAVEMENT
- REMOVE EXISTING CURB
- REMOVE EXISTING PAVEMENT
- REMOVE EXISTING LIGHT POLE, MODIFY EXISTING CIRCUITRY TO
- ALLOW REMAINING LIGHT POLES TO FUNCTION REMOVE EXISTING SEWER LINE / STRUCTURE
- PROTECT EXISTING LIGHT POLE
- PROTECT EXISTING TREE

DEM

SHEET NUMBER C200

Know what's **below. Call** before you dig.



| AREA SUMMARY             |                     |  |  |
|--------------------------|---------------------|--|--|
| TOTAL PROPERTY AREA      | 1.90 AC / 82,557 SF |  |  |
| EXISTING IMPERVIOUS AREA | 1.17 AC / 50,690 SF |  |  |
| EXISTING PERVIOUS AREA   | 0.73 AC / 31,867 SF |  |  |
| PROPOSED IMPERVIOUS AREA | 1.12 AC / 48,744 SF |  |  |
| PROPOSED PERVIOUS AREA   | 0.78 AC / 33,813 SF |  |  |
| TOTAL DISTURBED AREA     | 0.43 AC / 18,816 SF |  |  |

| PHASE 1 BMP QUANTITIES     |        |  |  |  |  |
|----------------------------|--------|--|--|--|--|
| SILT FENCE ±300 LF         |        |  |  |  |  |
| INLET PROTECTION           | 3 EA   |  |  |  |  |
| ROCK CONSTRUCTION ENTRANCE | 1 EA   |  |  |  |  |
| BIO ROLL                   | 360 LF |  |  |  |  |

## **KEYNOTE LEGEND**

- (A) SILT FENCE
- (B) INLET PROTECTION
  - ROCK CONSTRUCTION ENTRANCE
- **BIO ROLL**
- EROSION CONTROL BLANKET

# **LEGEND**

|                 | ROCK ENTRANCE           |
|-----------------|-------------------------|
|                 | EROSION CONTROL BLANKET |
|                 | INLET PROTECTION        |
| —— <b>\$</b> —— | SILT FENCE              |
| <b>—··</b> —··— | LIMITS OF DISTURBANCE   |
| xx              | SAFETY FENCE            |

# **EROSION CONTROL PLAN NOTES**

THE STORM WATER POLLUTION PREVENTION PLAN ("SWPPP") IS COMPRISED OF THE EROSION CONTROL PLAN, THE STANDARD DETAILS, THE PLAN NARRATIVE, ATTACHMENTS INCLUDED IN THE SPECIFICATIONS OF THE SWPPP, PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.

**BIOROLL** 

- ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH LAND DISTURBING ACTIVITIES SHALL OBTAIN A COPY OF THE SWPPP AND NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT, AND BECOME FAMILIAR WITH THEIR CONTENTS.
- 3. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE AND LOCAL REQUIREMENTS, AS APPLICABLE. THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY THE PERMITTING AGENCY, ENGINEER OR OWNER.
- 4. SITE ENTRY AND EXIT LOCATIONS SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT THE TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAYS. SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO A PUBLIC ROADWAY FROM THE CONSTRUCTION SITE MUST BE REMOVED AS SOON AS PRACTICABLE. WHEN WASHING IS REQUIRED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO A PUBLIC ROADWAY, IT SHALL BE DONE IN AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT BASIN. ANY FINES IMPOSED FOR DISCHARGING SEDIMENT ONTO A PUBLIC RIGHT OF WAY SHALL BE PAID BY THE CONTRACTOR.
- 5. TEMPORARY SEEDING OR OTHER APPROVED METHODS OF STABILIZATION SHALL BE INITIATED WITHIN 7 DAYS OF THE LAST DISTURBANCE ON ANY AREA OF THE SITE.
- 6. THE CONTRACTOR SHALL MINIMIZE LAND DISTURBANCE AND CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
- 7. CONTRACTOR SHALL DENOTE ON THE PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS. AND TOILET FACILITIES.
- 8. ALL WASH WATER FROM THE CONSTRUCTION SITE (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED
- 9. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL ON SITE. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
- 11. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORM WATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
- 12. STAGING AREAS, STOCKPILES, SPOILS, ETC. SHALL BE LOCATED OUTSIDE OF DRAINAGE WAYS SUCH THAT STORM WATER RUNOFF WILL NOT BE ADVERSELY AFFECTED. PROVIDE STABILIZATION MEASURES SUCH AS PERIMETER EROSION CONTROL BMP'S, SEEDING, OR OTHER COVERING AS NECESSARY TO PREVENT EROSION.
- 13. CONTRACTOR SHALL BE RESPONSIBLE FOR RE-ESTABLISHING ANY EROSION CONTROL BMP DISTURBED DURING CONSTRUCTION OPERATIONS. NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DEFICIENCIES IN THE ESTABLISHED EROSION CONTROL MEASURES THAT MAY LEAD TO UNAUTHORIZED DISCHARGE OF STORM WATER POLLUTANTS. UNAUTHORIZED POLLUTANTS INCLUDE (BUT ARE NOT LIMITED TO) EXCESS CONCRETE DUMPING, CONCRETE RESIDUE, PAINTS, SOLVENTS, GREASES, FUELS, LUBRICANT OILS, PESTICIDES, AND SOLID WASTE MATERIALS.
- 14. EROSION CONTROL BMP'S SHOWN ON THESE PLANS SHALL BE INSTALLED PRIOR TO THE START OF LAND-DISTURBING ACTIVITIES ON THE PROJECT, AND INITIATED AS SOON AS PRACTICABLE.
- 15. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR COMPLYING WITH THE REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION, AND SHALL MAINTAIN COMPLIANCE WITH APPLICABLE LAWS AND REGULATIONS FOR THE DURATION OF CONSTRUCTION.
- 16. THE CONTRACTOR SHALL FIELD ADJUST AND/OR PROVIDE ADDITIONAL EROSION CONTROL BMP'S AS NEEDED TO PREVENT EROSION AND OFF-SITE SEDIMENT DISCHARGE FROM THE CONSTRUCTION SITE. LOG AND RECORD ANY ADJUSTMENTS AND DEVIATIONS FROM THE APPROVED EROSION CONTROL PLANS WITHIN THE SWPPP DOCUMENTS STORED IN THE

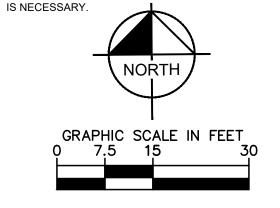
# **SWPPP UPDATES & AMENDMENTS**

THE CONTRACTOR MUST UPDATE THE SWPPP BY NOTING ON THE SITE MAPS IN THE JOB SITE BINDER TO REFLECT THE PROGRESS OF CONSTRUCTION ACTIVITIES AND GENERAL CHANGES TO THE PROJECT SITE FOR THE DURATION OF LAND DISTURBING ACTIVITIES. AT A MINIMUM, UPDATES SHALL BE MADE DAILY TO TRACK CONSTRUCTION PROGRESS DESCRIBED IN THE SEQUENCE OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR NOTING THE LOCATION OF THE JOB SITE TRAILER, TEMPORARY PARKING & LAYDOWN AREAS, PORTA-POTTY WHEEL WASH, CONCRETE WASHOUT, FUEL & MATERIAL STORAGE, SOLID WASTE CONTAINERS, AND OTHER CONSTRUCTION RELATED FACILITIES THAT MAY IMPACT STORMWATER RUNOFF.

# PHASE 1 SEQUENCE OF CONSTRUCTION

- INSTALL PERIMETER EROSION CONTROL (I.E. SILT FENCE) AND INLET PROTECTION AT EXISTING STORMWATER INLETS.
- CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE AND CONCRETE WASHOUT PREPARE TEMPORARY PARKING AND STORAGE AREA.
- CONSTRUCT AND STABILIZE DIVERSIONS AND TEMPORARY SEDIMENT BASINS. CLEAR AND GRUB THE SITE.
- BEGIN MASS SITE GRADING AND ROUGH GRADE SITE SUFFICIENTLY TO ESTABLISH PROPOSED DRAINAGE PATTERNS.
- START CONSTRUCTION OF THE BUILDING PAD AND STRUCTURES. TEMPORARILY SEED, THROUGHOUT CONSTRUCTION, DISTURBED AREAS THAT WILL BE INACTIVE FOR 14 DAYS OR MORE OR AS REQUIRED BY THE NPDES AND/OR CITY GRADING PERMIT(S).

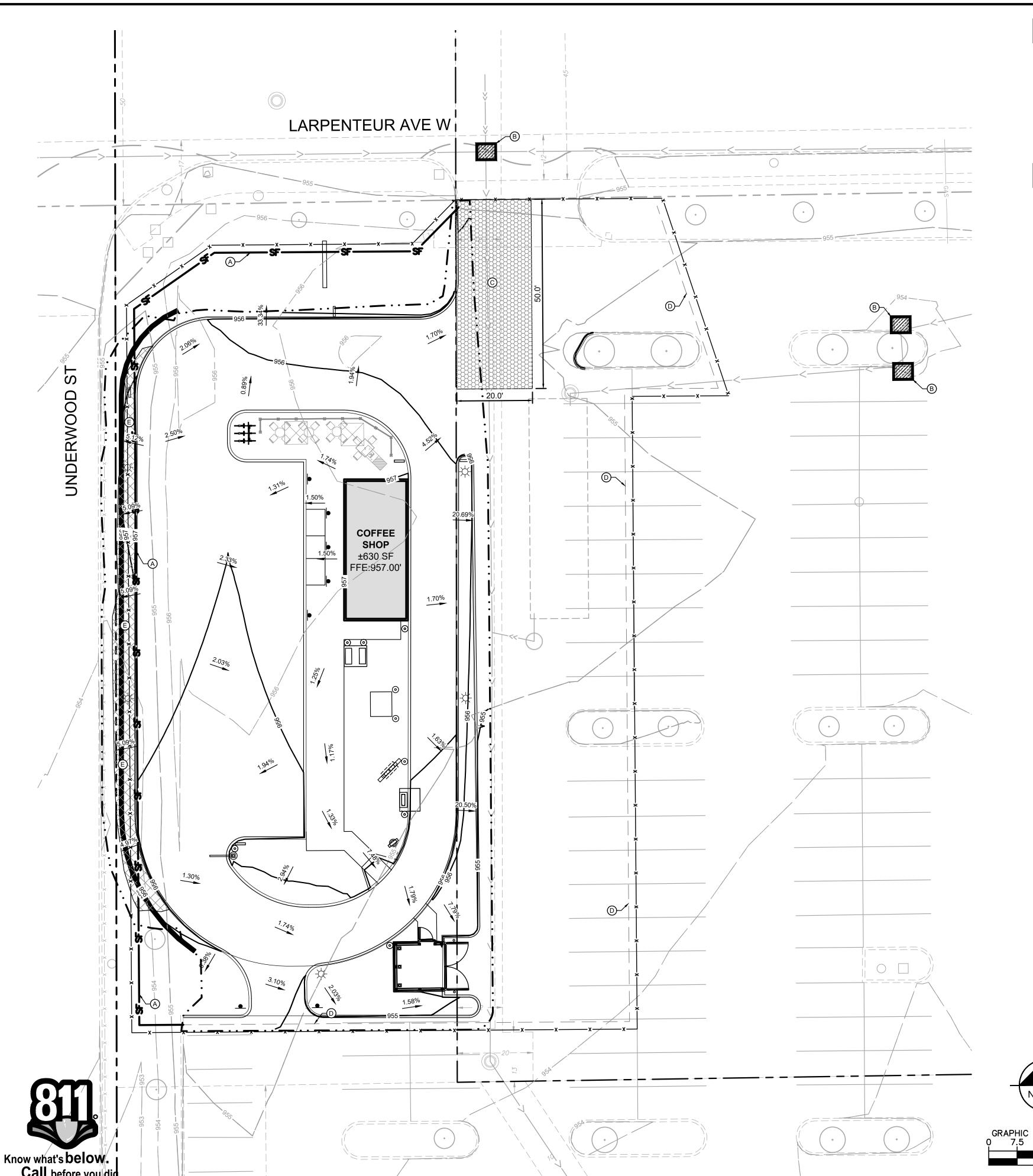
NOTE: THE SEQUENCE OF CONSTRUCTION IS INTENDED TO CONVEY THE GENERAL CONCEPTS OF THE EROSION CONTROL DESIGN AND SHOULD NOT BE RELIED UPON FOR CONSTRUCTION PURPOSES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETAILED PHASING AND CONSTRUCTION SEQUENCING NECESSARY TO CONSTRUCT THE PROPOSED IMPROVEMENTS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING IMMEDIATELY, PRIOR TO AND/OR DURING CONSTRUCTION IF ANY ADDITIONAL INFORMATION ON THE CONSTRUCTION SEQUENCE





SEDIME 0

SHEET NUMBER



| AREA SUMM                | IARY                |
|--------------------------|---------------------|
| TOTAL PROPERTY AREA      | 1.90 AC / 82,557 SF |
| EXISTING IMPERVIOUS AREA | 1.17 AC / 50,690 SF |
| EXISTING PERVIOUS AREA   | 0.73 AC / 31,867 SF |
| PROPOSED IMPERVIOUS AREA | 1.12 AC / 48,744 SF |
| PROPOSED PERVIOUS AREA   | 0.78 AC / 33,813 SF |
| TOTAL DISTURBED AREA     | 0.43 AC / 18,816 SF |

| PHASE 2 BMP QUANTITIES     |         |  |  |  |
|----------------------------|---------|--|--|--|
| SILT FENCE                 | ±300 LF |  |  |  |
| INLET PROTECTION           | 3 EA    |  |  |  |
| ROCK CONSTRUCTION ENTRANCE | 1 EA    |  |  |  |
| BIO ROLL                   | 360 LF  |  |  |  |

## **KEYNOTE LEGEND**

- (A) SILT FENCE
- (B) INLET PROTECTION
- ROCK CONSTRUCTION ENTRANCE
- BIO ROLL
- E EROSION CONTROL BLANKET

# LEGEND

|        | ROCK ENTRANCE  EROSION CONTROL BLANKET |
|--------|----------------------------------------|
|        | INLET PROTECTION                       |
| ——sF—— | SILT FENCE                             |
|        | LIMITS OF DISTURBANCE                  |
| xx     | SAFETY FENCE                           |

## **EROSION CONTROL PLAN NOTES**

**BIOROLL** 

- . THE STORM WATER POLLUTION PREVENTION PLAN ("SWPPP") IS COMPRISED OF THE EROSION CONTROL PLAN, THE STANDARD DETAILS, THE PLAN NARRATIVE, ATTACHMENTS INCLUDED IN THE SPECIFICATIONS OF THE SWPPP, PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
- 2. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH LAND DISTURBING ACTIVITIES SHALL OBTAIN A COPY OF THE SWPPP AND NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT, AND BECOME FAMILIAR WITH THEIR CONTENTS.
- 3. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE AND LOCAL REQUIREMENTS, AS APPLICABLE. THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY THE PERMITTING AGENCY, ENGINEER OR OWNER.
- 4. SITE ENTRY AND EXIT LOCATIONS SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT THE TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAYS. SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO A PUBLIC ROADWAY FROM THE CONSTRUCTION SITE MUST BE REMOVED AS SOON AS PRACTICABLE. WHEN WASHING IS REQUIRED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO A PUBLIC ROADWAY, IT SHALL BE DONE IN AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT BASIN. ANY FINES IMPOSED FOR DISCHARGING SEDIMENT ONTO A PUBLIC RIGHT OF WAY SHALL BE PAID BY THE CONTRACTOR.
  - TEMPORARY SEEDING OR OTHER APPROVED METHODS OF STABILIZATION SHALL BE INITIATED WITHIN 7 DAYS OF THE LAST DISTURBANCE ON ANY AREA OF THE SITE.
- 6. THE CONTRACTOR SHALL MINIMIZE LAND DISTURBANCE AND CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
- 7. CONTRACTOR SHALL DENOTE ON THE PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES.
- 8. ALL WASH WATER FROM THE CONSTRUCTION SITE (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED BEFORE DISPOSAL.
- SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL ON SITE. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
- 11. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORM WATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
- 12. STAGING AREAS, STOCKPILES, SPOILS, ETC. SHALL BE LOCATED OUTSIDE OF DRAINAGE WAYS SUCH THAT STORM WATER RUNOFF WILL NOT BE ADVERSELY AFFECTED. PROVIDE STABILIZATION MEASURES SUCH AS PERIMETER EROSION CONTROL BMP'S, SEEDING, OR OTHER COVERING AS NECESSARY TO PREVENT EROSION.
- 13. CONTRACTOR SHALL BE RESPONSIBLE FOR RE-ESTABLISHING ANY EROSION CONTROL BMP DISTURBED DURING CONSTRUCTION OPERATIONS. NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DEFICIENCIES IN THE ESTABLISHED EROSION CONTROL MEASURES THAT MAY LEAD TO UNAUTHORIZED DISCHARGE OF STORM WATER POLLUTANTS. UNAUTHORIZED POLLUTANTS INCLUDE (BUT ARE NOT LIMITED TO) EXCESS CONCRETE DUMPING, CONCRETE RESIDUE, PAINTS, SOLVENTS, GREASES, FUELS, LUBRICANT OILS, PESTICIDES, AND SOLID WASTE MATERIALS.
- 14. EROSION CONTROL BMP'S SHOWN ON THESE PLANS SHALL BE INSTALLED PRIOR TO THE START OF LAND-DISTURBING ACTIVITIES ON THE PROJECT, AND INITIATED AS SOON AS PRACTICABLE.
- 15. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR COMPLYING WITH THE REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION, AND SHALL MAINTAIN COMPLIANCE WITH APPLICABLE LAWS AND REGULATIONS FOR THE DURATION OF CONSTRUCTION.
- 16. THE CONTRACTOR SHALL FIELD ADJUST AND/OR PROVIDE ADDITIONAL EROSION CONTROL BMP'S AS NEEDED TO PREVENT EROSION AND OFF-SITE SEDIMENT DISCHARGE FROM THE CONSTRUCTION SITE. LOG AND RECORD ANY ADJUSTMENTS AND DEVIATIONS FROM THE APPROVED EROSION CONTROL PLANS WITHIN THE SWPPP DOCUMENTS STORED IN THE JOB SITE TRAILER

# **SWPPP UPDATES & AMENDMENTS**

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LOCATION OF THE JOB SITE TRAILER, TEMPORARY PARKING & LAYDOWN AREAS, PORTA-POTTY, WHEEL WASH, CONCRETE WASHOUT, FUEL & MATERIAL STORAGE, SOLID WASTE CONTAINERS, AND OTHER CONSTRUCTION RELATED FACILITIES THAT MAY IMPACT STORMWATER RUNOFF.

# PHASE 2 SEQUENCE OF CONSTRUCTION

- 1. TEMPORARILY SEED, THROUGHOUT CONSTRUCTION, DENUDED AREAS THAT WILL BE INACTIVE FOR 14 DAYS OR MORE.
- 2. CONSTRUCT UNDERGROUND SITE UTILITIES AND STORM SEWER, INCLUDING UNDERGROUND STORMWATER MANAGEMENT SYSTEM.
- INSTALL APPROPRIATE INLET PROTECTION AT ANY NEW STORM SEWER STRUCTURES AS EACH STRUCTURE IS CONSTRUCTED.
   COMPLETE SITE GRADING AND PERMANENTLY STABILIZE AREAS TO BE VEGETATED AS
- THEY ARE BROUGHT TO FINAL GRADE.
- PLACE PAVEMENT BASE MATERIAL AND INSTALL SUBDRAINAGE SYSTEM.
  CONSTRUCT PAVEMENTS, CURB & GUTTER, AND SIDEWALKS.
- AS APPROPRIATE, REPLACE & MAINTAIN INLET PROTECTION DEVICES WITHIN PAVED AREAS AS WORK PROGRESSES.
   COMPLETE FINAL GRADING AND INSTALL OF PERMANENT STABILIZATION (SEEDING,
- SODDING, ETC.) WITHIN LANDSCAPED AREAS.
  WHEN THE SITE HAS ACHIEVED FINAL STABILIZATION AS DEFINED BY THE APPLICABLE EROSION CONTROL PERMITS, REMOVE ALL REMAINING TEMPORARY EROSION &
- SEDIMENT CONTROL BMP'S AND RE-STABILIZE ANY AREAS DISTURBED BY THE REMOVAL

  NOTE: THE SEQUENCE OF CONSTRUCTION IS INTENDED TO CONVEY THE GENERAL CONCEPTS
  OF THE FROSION CONTROL DESIGN AND SHOULD NOT BE RELIED LIPON FOR CONSTRUCTION

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No. REVISIONS DATE BY

2022 KIMLEY-HORN AND ASSOCIATES, INC.
EUSTIS STREET, SUITE 100, ST. PAUL, MN 55114
PHONE: 651-645-4197
WWW.KIMLEY-HORN.COM

DAN L. ELENBASS, PE

DATE HALL IN HALL BOOK BY BY RAV BY RAV

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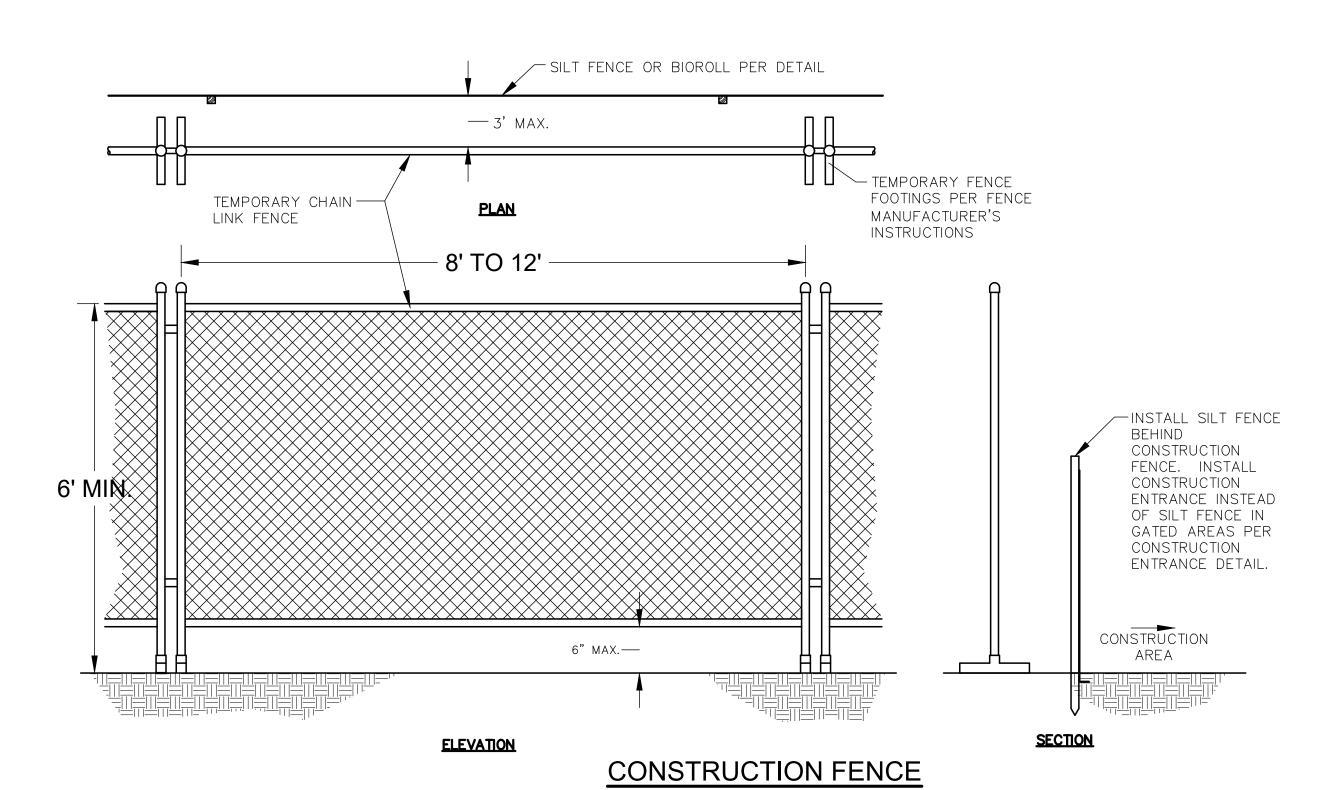
# BIO-ROLL BLANKET SYSTEM

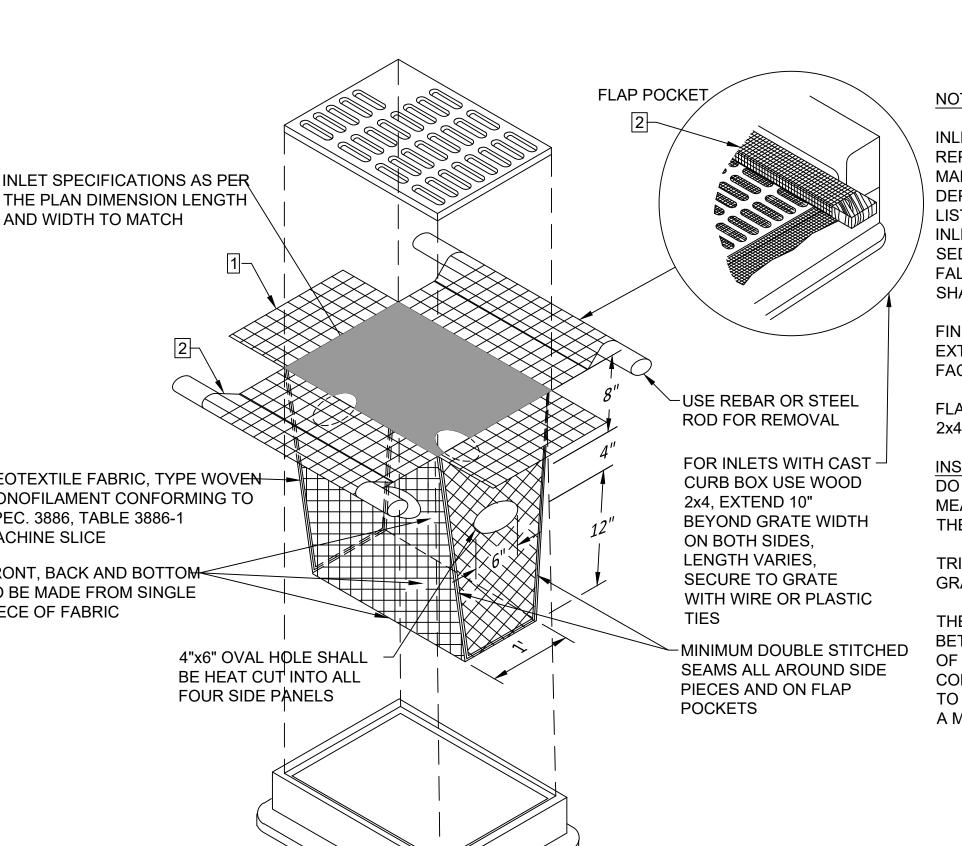
( TYPE 3 SPEC. 3889 )

POST LENGTH, 5 FT. MIN. PLASTIC ZIP TIES (50 LB. TENSILE) LOCATED IN TOP 8" DIRECTION OF GEOTEXTILE FABRIC, RUNOFF FLOW 36" WIDTH MACHINE SLICE 8" - 12" DEPTH

# STANDARD MACHINE SLICED SILT FENCE DETAILS

TO PROTECT AREAS FROM SHEET FLOW





INLET PROTECTION DEVICES SHALL BE MAINTAINED OR MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENTS EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED. WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL IN THE INLET. ANY MATERIAL FALLING INTO THE INLET

FINISHED SIZE, INCLUDING POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO

DO NOT INSTALL PROTECTION IN INLETS SHALLOWER THAN 30". MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF

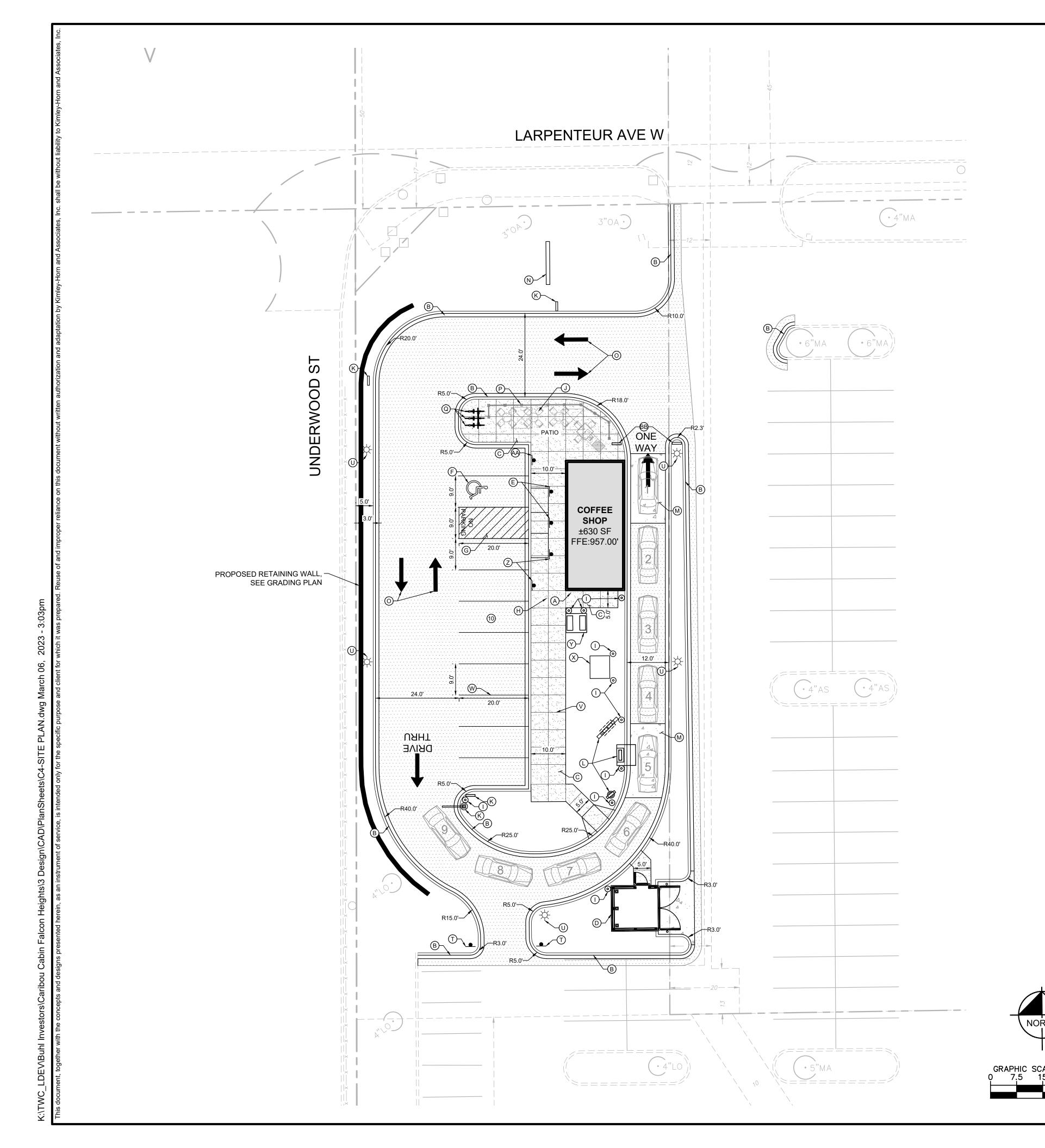
TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE  $\overline{f O}$ 

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CLINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

S DIME OL DI 80

SHEET NUMBER C302

INLET SPECIFICATIONS AS PER THE PLAN DIMENSION LENGTH AND WIDTH TO MATCH SHALL BE REMOVED IMMEDIATELY. FACILITATE MAINTENANCE OR REMOVAL. FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD **INSTALLATION NOTES:** GEOTEXTILE FABRIC, TYPE WOVEN MONOFILAMENT CONFORMING TO SPEC. 3886, TABLE 3886-1 THE GRATE. MACHINE SLICE ( PLUS 6" FLAP ) FRONT, BACK AND BOTTOM TO BE MADE FROM SINGLE PIECE OF FABRIC ( SEE SPEC. 3886 ) **INLET PROTECTION GEOTEXTILE BAG** NOT TO SCALE



# SITE PLAN NOTES

- ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY/COUNTY REGULATIONS AND CODES AND O.S.H.A. STANDARDS.
- CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF VESTIBULES, SLOPE PAVING, SIDEWALKS, EXIT PORCHES, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.
- ALL INNER CURBED RADII ARE TO BE 3' AND OUTER CURBED RADII ARE TO BE 10' UNLESS OTHERWISE NOTED. STRIPED RADII ARE TO BE 5'.
- 4. ALL DIMENSIONS AND RADII ARE TO THE FACE OF CURB UNLESS OTHERWISE
- 5. EXISTING STRUCTURES WITHIN CONSTRUCTION LIMITS ARE TO BE ABANDONED, REMOVED OR RELOCATED AS NECESSARY. ALL COST SHALL BE INCLUDED IN BASE
- 6. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATIONS, (UNLESS OTHERWISE NOTED ON PLANS) INCLUDING BUT NOT LIMITED TO, ALL UTILITIES, STORM DRAINAGE, SIGNS, TRAFFIC SIGNALS & POLES, ETC. AS REQUIRED. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING AUTHORITIES REQUIREMENTS AND PROJECT SITE WORK SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. ALL COST SHALL BE INCLUDED IN BASE BID.
- SITE BOUNDARY, TOPOGRAPHY, UTILITY AND ROAD INFORMATION TAKEN FROM A SURVEY BY LOUCKS INC., DATED 06/22/2018.
- KIMLEY-HORN ASSUMES NO LIABILITY FOR ANY ERRORS, INACCURACIES, OR OMISSIONS CONTAINED THEREIN.
- 8. TOTAL LAND AREA IS 1.78 ACRES.
- PYLON / MONUMENT SIGNS SHALL BE CONSTRUCTED BY OTHERS. SIGNS ARE SHOWN FOR GRAPHICAL & INFORMATIONAL PURPOSES ONLY. CONTRACTOR TO VERIFY SIZE, LOCATION AND ANY REQUIRED PERMITS NECESSARY FOR THE CONSTRUCTION OF THE PYLON / MONUMENT SIGN.
- 10. CONTRACTOR SHALL REFERENCE ARCH / MEP PLANS FOR SITE LIGHTING AND
- 11. NO PROPOSED LANDSCAPING SUCH AS TREES OR SHRUBS, ABOVE AND UNDERGROUND STRUCTURES, OR OTHER OBSTRUCTIONS SHALL BE LOCATED WITHIN EXISTING OR PROPOSED UTILITY EASEMENTS AND RIGHTS OF WAY UNLESS SPECIFICALLY NOTED ON PLANS OTHERWISE.
- 12. REFERENCE ARCHITECTURAL PLANS FOR DUMPSTER ENCLOSURE DETAILS.
- 13. REFER TO FINAL PLAT OR ALTA SURVEY FOR EXACT LOT AND PROPERTY BOUNDARY DIMENSIONS.
- 14. ALL AREAS ARE ROUNDED TO THE NEAREST SQUARE FOOT.
- 15. ALL DIMENSIONS ARE ROUNDED TO THE NEAREST TENTH FOOT.
- 16. ALL PARKING STALLS TO BE 9' IN WIDTH AND 19' IN LENGTH UNLESS OTHERWISE

| PROPERTY SUMMARY                        |                                                 |  |  |  |  |
|-----------------------------------------|-------------------------------------------------|--|--|--|--|
| CARIBOU CABIN - FALCON HEIGHTS          |                                                 |  |  |  |  |
| TOTAL PROPERTY AREA 82,557 SF (1.90 AC) |                                                 |  |  |  |  |
| DISTURBED AREA                          | 18,816 SF (0.43 AC)                             |  |  |  |  |
| EXISTING PERVIOUS AREA                  | 31,867 SF (0.73 AC)                             |  |  |  |  |
| EXISTING IMPERVIOUS AREA                | 50,690 SF (1.17 AC)                             |  |  |  |  |
| PROPOSED PERVIOUS AREA                  | 48,744 SF (1.12 AC)                             |  |  |  |  |
| PROPOSED IMPERVIOUS AREA                | 33,813 SF (0.78 AC)                             |  |  |  |  |
| ZONING SUI                              | MMARY                                           |  |  |  |  |
| EXISTING ZONING                         | HIGH DENSITY<br>RESIDENTIAL MIXED USE<br>(R-5M) |  |  |  |  |
| PROPOSED ZONING                         | HIGH DENSITY<br>RESIDENTIAL MIXED USE<br>(R-5M) |  |  |  |  |
| PARKING SETBACKS                        | FRONT/SIDE/REAR = 10'                           |  |  |  |  |
| BUILDING SETBACKS                       | FRONT = 30'<br>SIDE = 10'                       |  |  |  |  |

# **BUILDING DATA SUMMARY**

REAR = 30"

| DOILDING DATA GOMINANT                                       |                                          |  |  |  |
|--------------------------------------------------------------|------------------------------------------|--|--|--|
| AREAS                                                        |                                          |  |  |  |
| PROPOSED PROPERTY                                            | 77,536 SF (1.78 AC)                      |  |  |  |
| BUILDING AREA                                                | 630 SF (0.82% OF TOTAL<br>PROPERTY AREA) |  |  |  |
| PARKING                                                      |                                          |  |  |  |
| REQUIRED PARKING                                             | 5 SPACES*                                |  |  |  |
| PROPOSED PARKING                                             | 7 SPACES                                 |  |  |  |
| EXISTING SPACES REMOVED                                      | 58 SPACES                                |  |  |  |
| ADA STALLS REQ'D / PROVIDED                                  | 1 STALLS / 1 STALLS                      |  |  |  |
| * 4 004.05 500 51/501/ 450 001/405 5557 05 00000 51 000 4054 |                                          |  |  |  |

<sup>\* 1</sup> SPACE FOR EVERY 150 SQUARE FEET OF GROSS FLOOR AREA.

# **LEGEND**

|       | PROPERTY |
|-------|----------|
| xxxx- | PROPOSED |

D FENCE SETBACK LINE PROPOSED CURB AND GUTTER

PROPOSED STANDARD DUTY ASPHALT PROPOSED CONCRETE PAVEMENT

PROPOSED CONCRETE SIDEWALK

MATCH EXISTING EDGE OF PAVEMENT / CURB & GUTTER

B612 CURB AND GUTTER

CONCRETE SIDEWALK/PATIO/SLAB (SEE CIVIL DETAILS)

TRASH ENCLOSURE (SEE ARCHITECTURAL)

AREA STRIPED WITH 4" SYSL @ 45° 2' O.C.

BOLLARD (SEE ARCHITECTURAL)

INTERNALLY ILLUMINATED DIRECTIONAL SIGNAGE (BY OTHERS) SPEAKER BOX, MENU BOARD, AND CLEARANCE ARM SIGN (SEE

CONCRETE PAD WITH SENSOR LOOPS (SEE ARCHITECTURAL)

MONUMENT SIGN (SEE ARCHITECTURAL)

PAINTED MESSAGE, STOP BAR, AND DIRECTIONAL ARROWS

"DO NOT ENTER" SIGN

4" WHITE PARKING STRIPING

MECHANICAL EQUIPMENT PAD (COORDINATE WITH ARCHITECTURAL/MECHANICAL)

"ORDER AHEAD" PARKING STALL & SIGN POST (SEE ARCHITECTURAL)

ILLUMINATED SIGN 'DO NOT ENTER' (NORTH FACE) AND 'THANK

YOU' (SOUTH FACE); SEE ARCHITECTURAL

# **KEYNOTE LEGEND**

ACCESSIBLE PARKING SIGN WITH BOLLARD

ACCESSIBLE PARKING

ACCESSIBLE CURB RAMP

PATIO FURNITURE (BY OTHERS)

ARCHITECTURAL)

PATIO RAILING (SEE ARCHITECTURAL)

BIKE RACK (SEE ARCHITECTURAL)

LANDSCAPE AREA, SEE LANDSCAPE PLAN

"STOP" SIGN AND POST

LIGHT POLE (SEE ELECTRICAL)

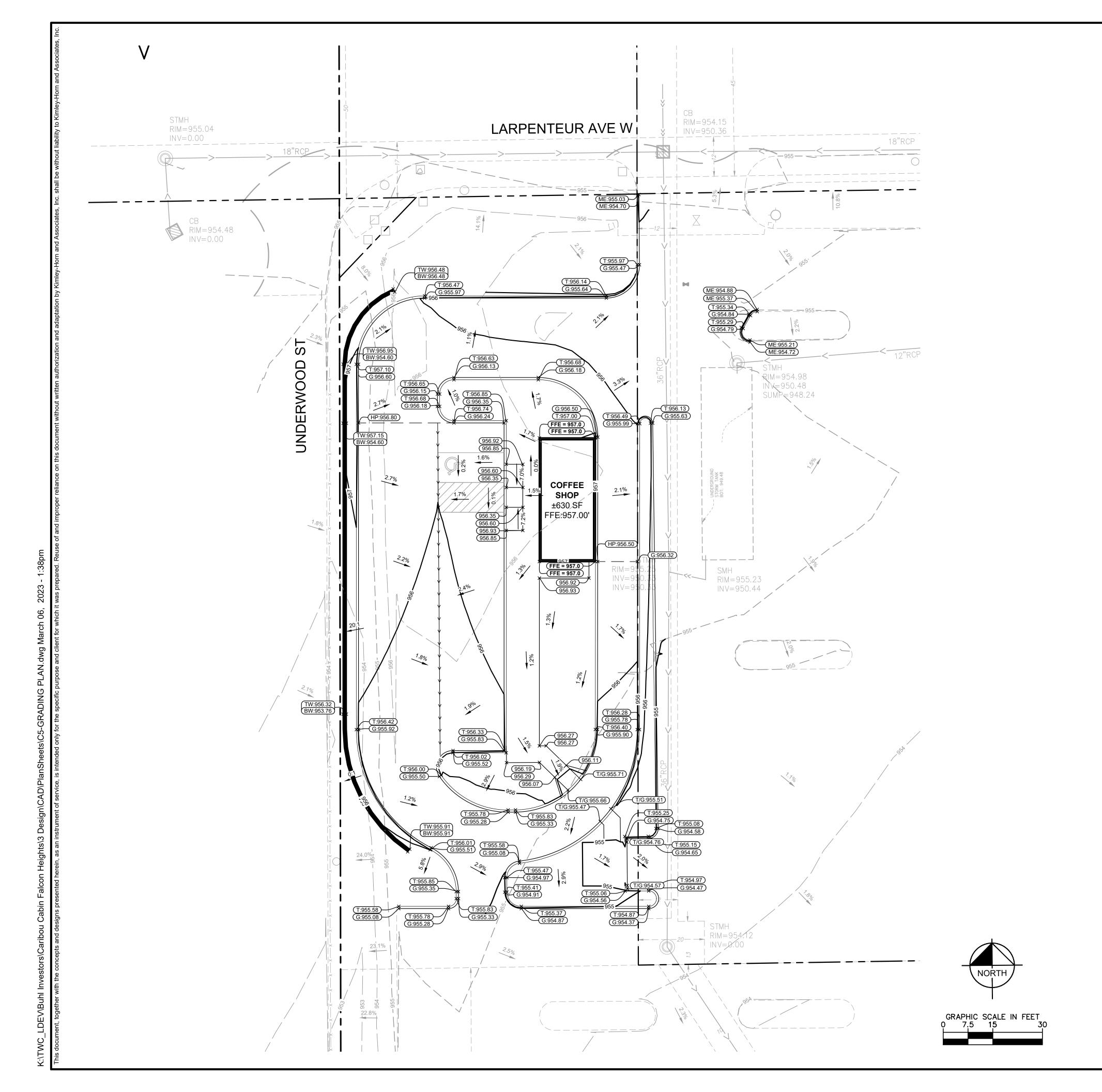
CONCRETE JOINT LINE

TRANSFORMER AND TRANSFORMER PAD (COORDINATE WITH ELECTRICAL)

"WAIT" PARKING STALL & SIGN POST (SEE ARCHITECTURAL)

SHEET NUMBER C400





## LEGEND

| LEGEND            |                                                          |
|-------------------|----------------------------------------------------------|
|                   | PROPERTY LINE                                            |
| 928               | EXISTING CONTOUR                                         |
| 925               | PROPOSED CONTOUR                                         |
|                   | PROPOSED RIDGE LINE                                      |
| $\longrightarrow$ | PROPOSED SWALE                                           |
| 0                 | PROPOSED STORM MANHOLE (SOLID CASTING)                   |
|                   | PROPOSED STORM MANHOLE (ROUND INLET CASTING)             |
|                   | PROPOSED STORM MANHOLE/ CATCH BASIN (CURB INLET CASTING) |
| <b>©</b>          | PROPOSED STORM SEWER CLENOUT                             |
|                   | PROPOSED FLARED END SECTION                              |
| ₩                 | PROPOSED RIPRAP                                          |
| <del></del>       | PROPOSED STORM SEWER                                     |
| (100.00) ×        | PROPOSED SPOT ELEVATION                                  |
| (HP:0.0)          | PROPOSED HIGH POINT ELEVATION                            |
| (LP:0.0) ×        | PROPOSED LOW POINT ELEVATION                             |
| (G:0.00) ×        | PROPOSED GUTTER ELEVATION                                |
| (T:0.00) ×        | PROPOSED TOP OF CURB ELEVATION                           |
| (T/G:0.0) ×       | PROPOSED FLUSH PAVEMENT ELEVATION                        |
| (ME:0.0) ×        | MATCH EXISTING ELEVATION                                 |
| (EOF:0.0)         | PROPOSED EMERGENCY OVERFLOW ELEVATION                    |
| TW:0.0<br>BW:0.0  | PROPOSED TOP/BOTTOM OF WALL ELEVATION                    |

# **GRADING PLAN NOTES**

PERFORM GRADING WORK IN ACCORDANCE WITH APPLICABLE CITY SPECIFICATIONS AND BUILDING PERMIT REQUIREMENTS.

PROPOSED DRAINAGE DIRECTION

- 2. CONTACT STATE 811 CALL-BEFORE-YOU-DIG LOCATING SERVICE AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATION FOR UNDERGROUND UTILITY LOCATIONS.
- 3. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL HORIZONTAL AND VERTICAL CONTROL.
- FIELD VERIFY THE LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES AND TOPOGRAPHIC FEATURES PRIOR TO THE START OF LAND DISTURBING ACTIVITIES.

  NOTIFY THE PROJECT ENGINEER OF ANY DISCREPANCIES OR VARIATIONS IMPACTING THE PROPOSED DESIGN OF THE PROJECT.
- 5. IN PAVED AREAS, ROUGH GRADE TO SUBGRADE ELEVATION AND LEAVE THE SITE READY FOR SUB-BASE.
- SUBGRADE EXCAVATION SHALL BE BACKFILLED IMMEDIATELY AFTER EXCAVATION TO HELP OFFSET ANY STABILITY PROBLEMS DUE TO WATER SEEPAGE OR STEEP SLOPES. WHEN PLACING NEW SURFACE MATERIAL ADJACENT TO EXISTING PAVEMENT, THE EXCAVATION SHALL BE BACKFILLED PROMPTLY TO AVOID UNDERMINING OF EXISTING
- 7. ELEVATIONS SHOWN REPRESENT FINISHED SURFACE GRADES. SPOT ELEVATIONS ALONG CURB & GUTTER REPRESENT THE FLOW LINE UNLESS OTHERWISE NOTED
- 8. EXCESS MATERIAL, BITUMINOUS SURFACING, CONCRETE ITEMS, ABANDONED UTILITY ITEMS, AND OTHER UNSTABLE MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFF THE CONSTRUCTION SITE.
- 9. CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION OF PAVEMENTS AND CURB AND GUTTER WITH SMOOTH UNIFORM SLOPES THAT PROVIDE POSITIVE DRAINAGE TO COLLECTION POINTS. MAINTAIN A MINIMUM SLOPE OF 1.25% IN ASPHALT PAVEMENT AREAS AND A MINIMUM SLOPE OF 0.50% IN CONCRETE PAVEMENT AREAS.
- 10. MAINTAIN A MINIMUM SLOPE OF 0.50% ALONG CURB & GUTTER. REVIEW PAVEMENT GRADIENT AND CONSTRUCT "INFALL" CURB WHERE PAVEMENT DRAINS TOWARD THE GUTTER, AND "OUTFALL" CURB WHERE PAVEMENT DRAINS AWAY FROM THE GUTTER.
- 11. INSTALL A MINIMUM OF 4-INCHES OF AGGREGATE BASE MATERIAL UNDER PROPOSED CONCRETE CURB & GUTTER, SIDEWALKS, AND TRAILS UNLESS OTHERWISE DETAILED.
- GRADING FOR SIDEWALKS AND ACCESSIBLE ROUTES, INCLUDING CROSSI DRIVEWAYS, SHALL CONFORM TO CURRENT STATE & NATIONAL ADA STANDARDS:

ACCESSIBLE RAMP SLOPES SHALL NOT EXCEED 8.3% (1:12). SIDEWALK CROSS-SLOPES SHALL NOT EXCEED 2.0%. LONGITUDINAL SIDEWALK SLOPES SHALL NOT EXCEED 5.0%. ACCESSIBLE PARKING STALLS AND ACCESS AISLES SHALL NOT EXCEED 2.0% IN ANY DIRECTION. A MAXIMUM SLOPE OF 1.50% IS PREFERRED.

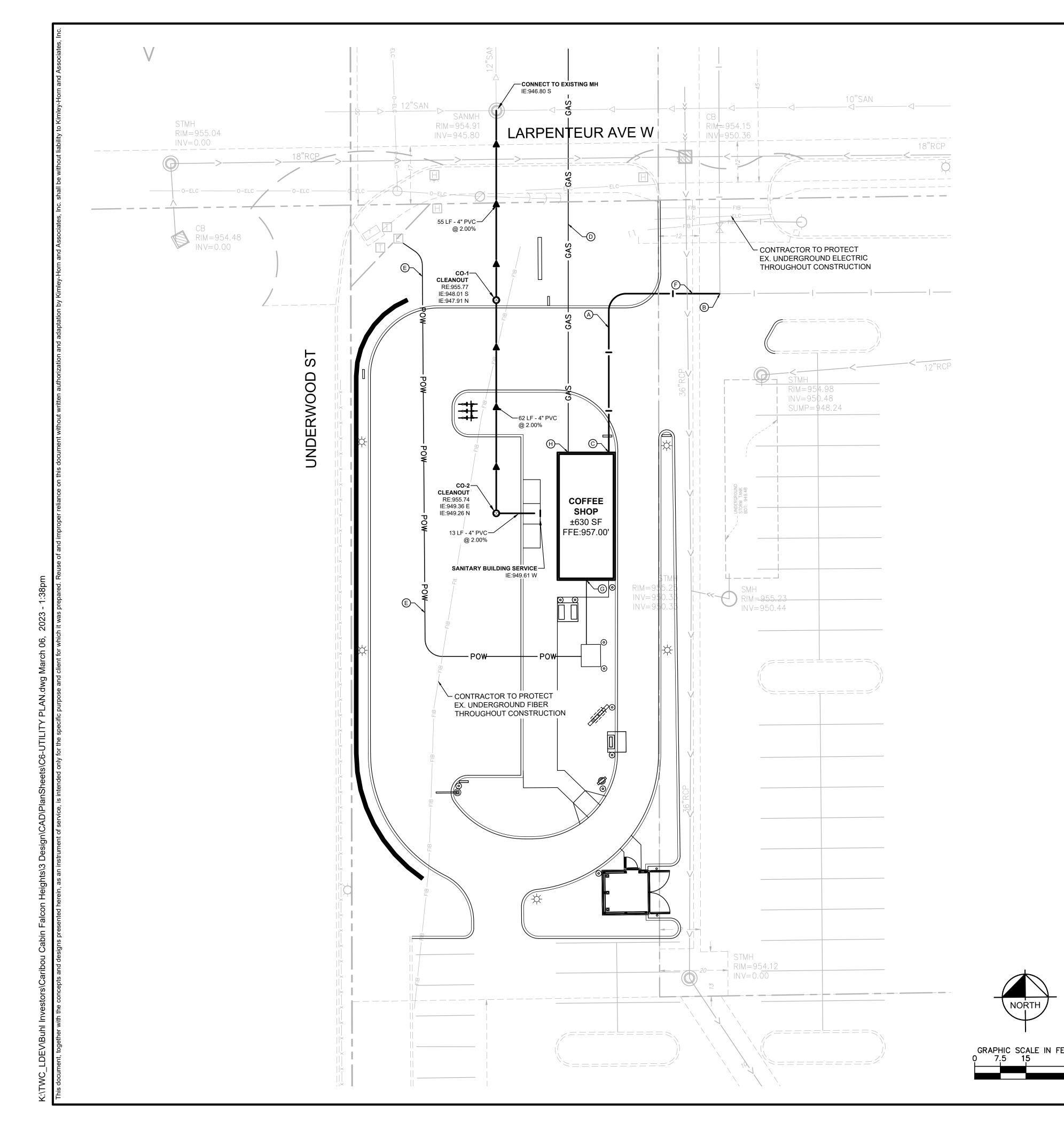
SIDEWALK ACCESS TO EXTERNAL BUILDING DOORS AND GATES SHALL BE ADA COMPLIANT. NOTIFY ENGINEER IMMEDIATELY IF ADA CRITERIA CANNOT BE MET IN ANY LOCATION PRIOR TO PAVEMENT INSTALLATION. CHANGE ORDERS WILL NOT BE ACCEPTED FOR ADA COMPLIANCE ISSUES.

- 13. UPON COMPLETION OF LAND DISTURBING ACTIVITIES, RESTORE ADJACENT OFFSITE AREAS DISTURBED BY CONSTRUCTION TO MATCH OR EXCEED THE ORIGINAL CONDITION. LANDSCAPE AREAS SHALL BE RE-VEGETATED WITH A MINIMUM OF 4-INCHES
- 14. EXCAVATE DRAINAGE TRENCHES TO FOLLOW PROPOSED STORM SEWER ALIGNMENTS. REFER TO THE UTILITY PLANS FOR LAYOUT AND ELEVATIONS FOR PROPOSED SANITARY SEWER, WATER MAIN, AND OTHER BUILDING UTILITY SERVICE CONNECTIONS.

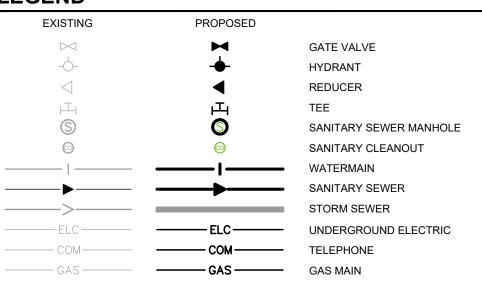
SHEET NUMBER

Know what's below.

Call before you dig.







## **UTILITY PLAN NOTES**

1. INSTALL UTILITIES IN ACCORDANCE WITH APPLICABLE CITY SPECIFICATIONS, STATE PLUMBING CODE, AND BUILDING PERMIT REQUIREMENTS.

- 2. CONTACT STATE 811 CALL-BEFORE-YOU-DIG LOCATING SERVICE AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATION FOR UNDERGROUND UTILITY LOCATIONS.
- 4. CONTRACTOR IS RESPONSIBLE FOR ALL HORIZONTAL AND VERTICAL CONTROL.
- 5. SANITARY SEWER PIPE SHALL BE AS FOLLOWS: 8" PVC SDR35 PER ASTM D-3034, FOR PIPES LESS THAN 12' DEEP 8" PVC SDR26 PER ASTM D-3034, FOR PIPES MORE THAN 12' DEEP 6" PVC SCHEDULE 40 PER ASTM D-1785 DUCTILE IRON PIPE PER AWWA C150
- 6. WATER LINES SHALL BE AS FOLLOWS: 6" AND LARGER, PVC C-900 PER ASTM D 2241 CLASS 200 UNDER COUNTY ROADS, OTHERWISE CLASS 150 4" AND LARGER DUCTILE IRON PIPE PER AWWA C150 SMALLER THAN 3" PIPING SHALL BE COPPER TUBE TYPE "K" PER

ANSI 816.22 OR PVC, 200 P.S.I., PER ASTM D1784 AND D2241.

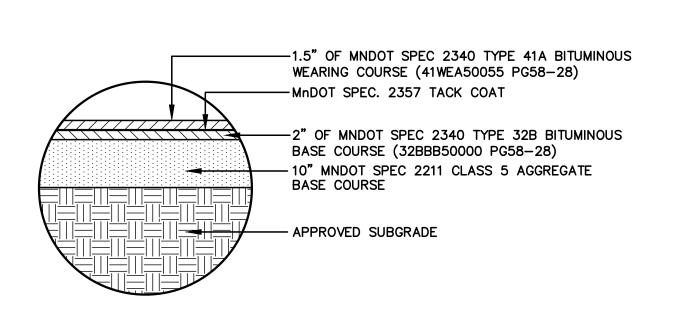
- 5. WHEN CONNECTING TO AN EXISTING UTILITY LINE, FIELD VERIFY THE LOCATION, DEPTH, AND SIZE OF THE EXISTING PIPE(S) PRIOR TO INSTALLATION OF THE NEW LINES. NOTIFY THE PROJECT ENGINEER OF ANY DISCREPANCIES OR VARIATIONS IMPACTING THE PROPOSED DESIGN OF THE PROJECT.
- 6. PLACE AND COMPACT ALL FILL MATERIAL PRIOR TO INSTALLATION OF PROPOSED UNDERGROUND UTILITIES. MINIMUM TRENCH WIDTH SHALL BE 2 FEET.
- 7. MAINTAIN A MINIMUM OF 7'-6" COVER ON ALL WATER LINES.
- 8. FOR WATER LINES AND STUB-OUTS UTILIZE MECHANICAL JOINTS WITH RESTRAINTS SUCH AS THRUST BLOCKING, WITH STAINLESS STEEL OR COBALT BLUE BOLTS, OR AS INDICATED IN THE CITY SPECIFICATIONS AND PROJECT DOCUMENTS.
- 9. MAINTAIN 18-INCH MINIMUM VERTICAL SEPARATION WHERE SEWER PIPE CROSSES WATER LINES (OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE OR STRUCTURE). PROVIDE 10-FOOT HORIZONTAL SEPARATION BETWEEN SEWER PIPE AND WATER LINES.
- 10. IN THE EVENT OF A VERTICAL CONFLICT BETWEEN WATER LINES, SANITARY LINES, STORM LINES AND GAS LINES (OR ANY OBSTRUCTION EXISTING AND PROPOSED), THE SANITARY PIPE MATERIAL SHALL BE PVC SCHEDULE 40 OR PVC C900 AND HAVE MECHANICAL JOINTS AT LEAST 10 FEET ON EITHER SIDE OF THE CENTER LINE OF THE CROSSING. THE WATER LINE SHALL HAVE MECHANICAL JOINTS WITH APPROPRIATE FASTENERS AS REQUIRED TO PROVIDE A MINIMUM OF 18-INCH VERTICAL SEPARATION MEETING REQUIREMENTS OF ANSI A21.10 OR ANSI 21.11 (AWWA C-151) (CLASS 50).
- 11. UNDERGROUND UTILITY LINES SHALL BE INSTALLED, INSPECTED AND APPROVED PRIOR TO PLACING BACKFILL.
- 12. IN PAVEMENT AREAS, RAISE MANHOLE CASTINGS TO BE FLUSH WITH PROPOSED FINISHED SURFACE GRADE. IN GREEN AREAS, RAISE MANHOLE CASTINGS TO BE ONE FOOT ABOVE FINISHED GROUND ELEVATION & INSTALL A WATERTIGHT LID.
- 13. REFER TO PLUMBING PLANS FOR LOCATION, SIZE AND ELEVATION OF UTILITY SERVICE CONNECTIONS AND ROOF DRAINS TO THE INTERIOR BUILDING SYSTEMS. BACKFLOW DEVICES (DDCV AND PRZ ASSEMBLIES) & METERS ARE LOCATED INSIDE THE BUILDING.
- EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES. AND WHERE POSSIBLE. MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
- 15. CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES. COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS.
- 16. REFER TO THE SITE ELECTRICAL PLANS FOR SPECIFICATIONS OF THE PROPOSED SITE LIGHTING AND ELECTRICAL EQUIPMENT.
- 17. EXCAVATE DRAINAGE TRENCHES TO FOLLOW PROPOSED STORM SEWER ALIGNMENTS. REFER TO THE UTILITY PLANS FOR LAYOUT AND ELEVATIONS FOR PROPOSED SANITARY SEWER, WATER MAIN, AND OTHER BUILDING UTILITY SERVICE CONNECTIONS. REFER TO THE GRADING PLAN FOR DETAILED SURFACE ELEVATIONS.
- 18. EXCESS MATERIAL, ABANDONED UTILITY ITEMS, AND OTHER UNUSABLE MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFF THE CONSTRUCTION SITE.

# **KEYNOTE LEGEND**

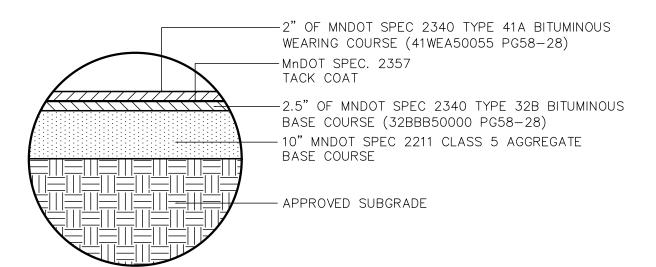
- A) 1.5" COPPER DOMESTIC WATER
- TAP INTO EXISTING DOMESTIC WATER LINE
- 1.5" DOMESTIC WATER BUILDING SERVICE (COORDINATE WITH MEP)
- COORDINATE WITH LOCAL GAS COMPANY FOR LOCATION AND CONNECTION OF PROPOSED 1-1/4" NATURAL GAS LINE
  - COORDINATE WITH LOCAL ELECTRIC COMPANY FOR LOCATION AND CONNECTION OF PROPOSED ELECTRIC SERVICE
- DIP WATER LINE UNDER STORM, MAINTAIN 18" VERTICAL SEPERATION
- ELECTICAL BUILDING SERVICE (COORDINATE WITH MEP)
- GAS BUILDING SERVICE (COORDINATE WITH MEP)
- EXISTING GATE VALVE, TO REMAIN



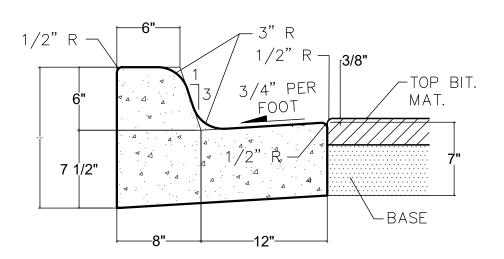
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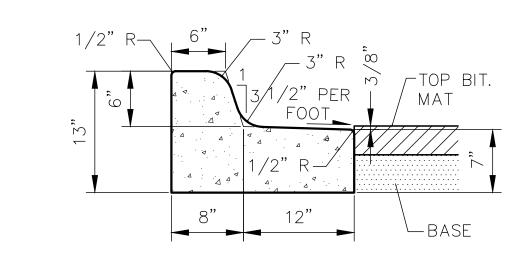
INSET X
LIGHT DUTY BITUMINOUS



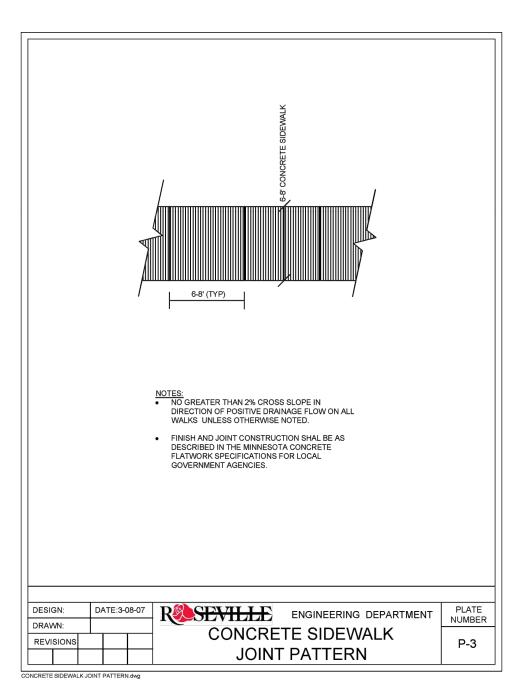
INSET X
HEAVY DUTY BITUMINOUS

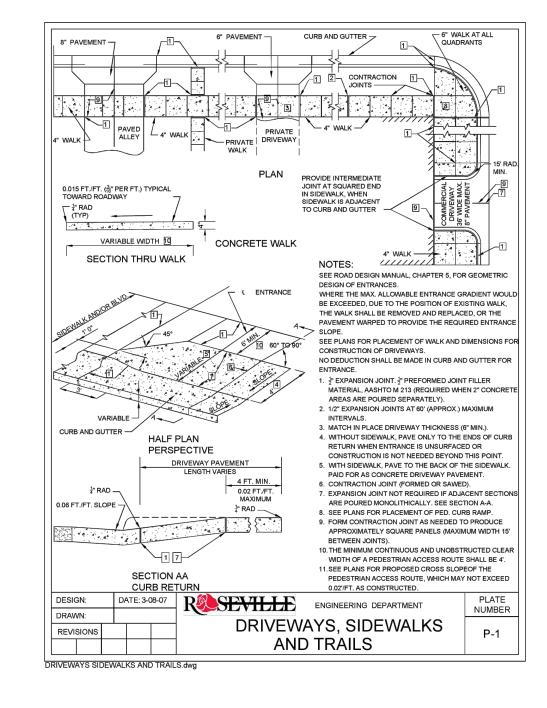


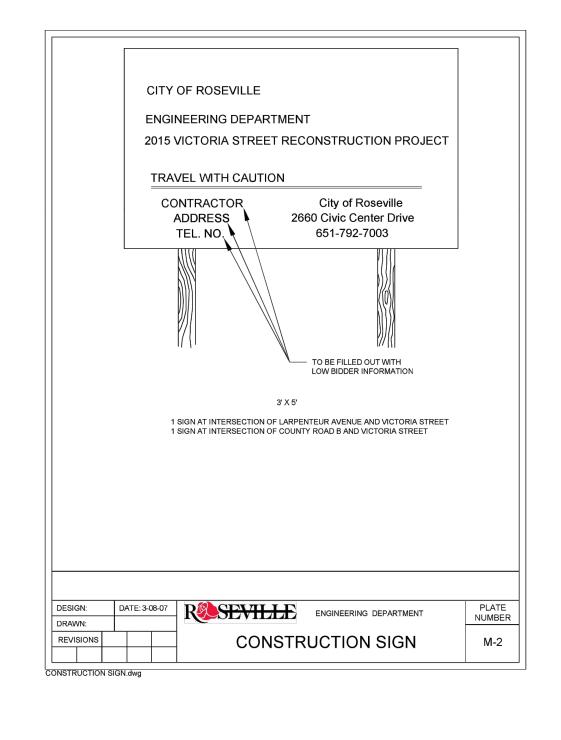
B612 CURB & GUTTER

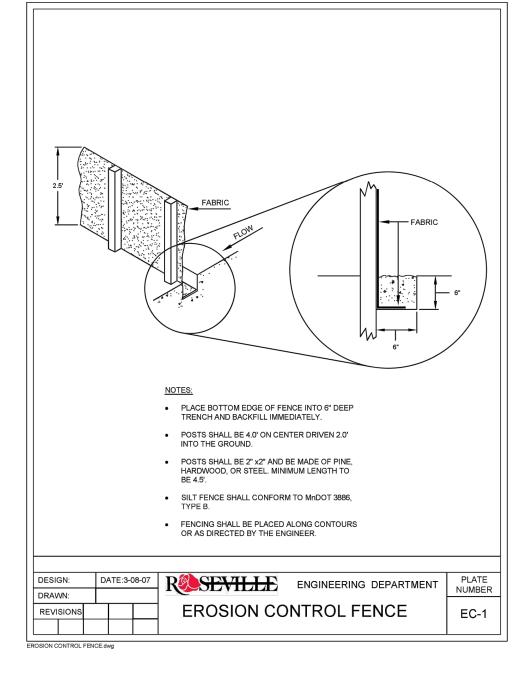


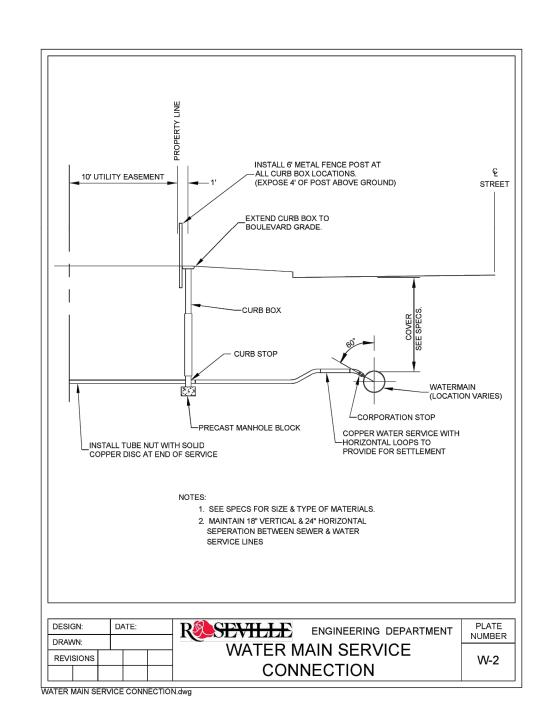
B612 CURB & GUTTER (OUTFALL)

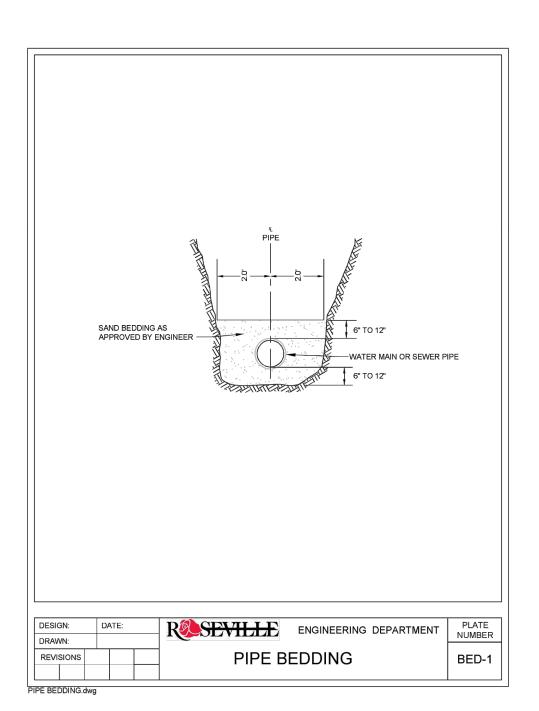


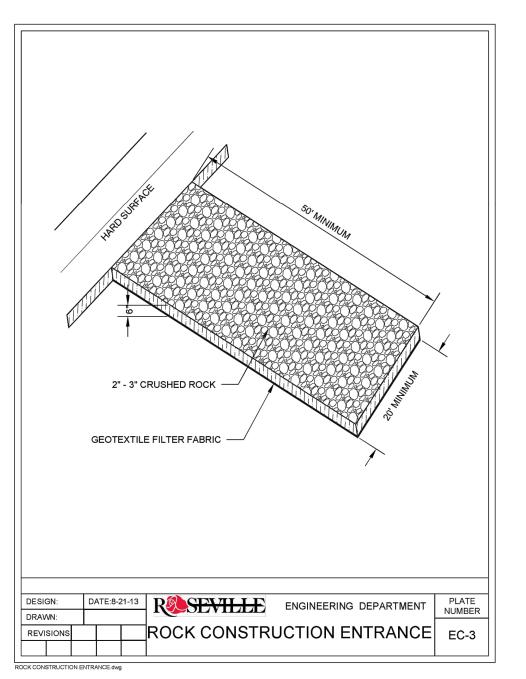


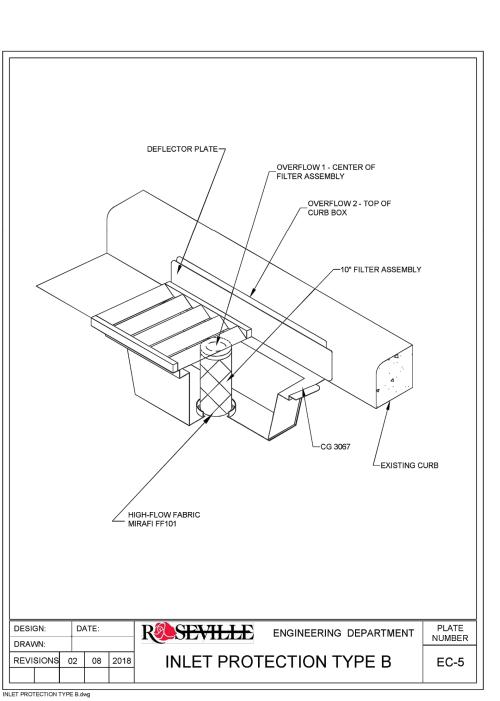










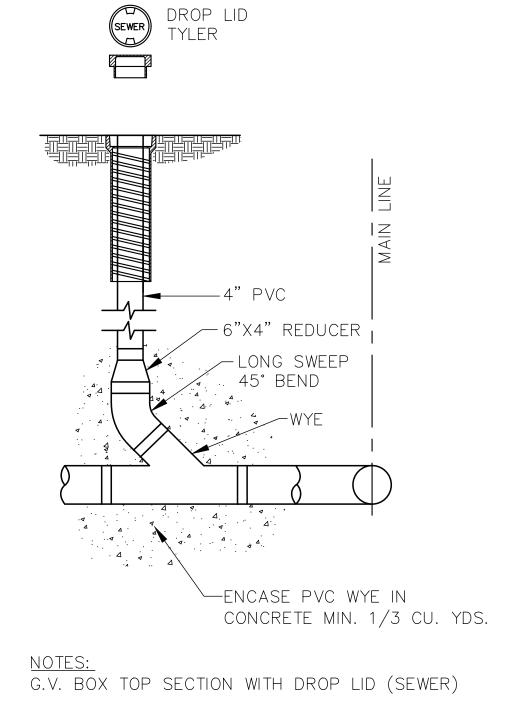


TRUCTION

NOIL

CONSTRUCT DETAILS

SHEET NUMBER



ENCLOSE LONG SWEEP BEND OR COMBINATION

SANITARY SEWER CLEANOUT

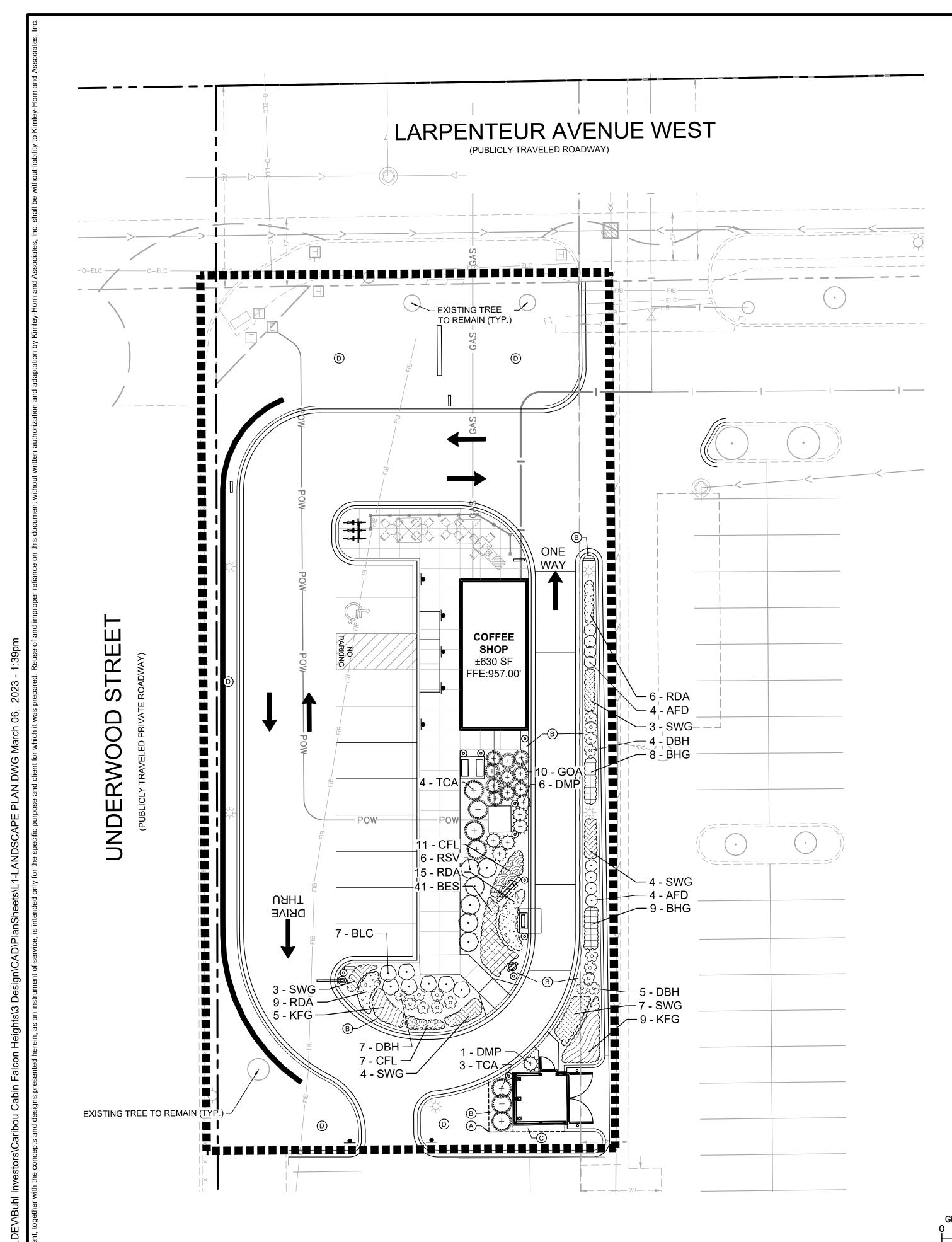
WYE IN CONCRETE AS SHOWN.

MAX. 1.5% SLOPE IN ANY DIRECTION - PAINT TRANSITION CURB OSHA YELLOW MAX. 1.5% CROSS SLOPE MAX. 8.3% RUNNING SLOPE - SLEEVE EXTENDED 3" ABOVE GRADE WITH (3) TRIANGULAR SPACED HOLES PARKING FOR 3/8" DIA. ANCHORING BOLTS TRANSITION FROM BOTTOM OF RAMP, GUTTER, AND CONCRETE PAVEMENT SHALL BE FLUSH AND SLOPED AT NO MORE THAN 1.5% IN ANY DIRECTION TRAFFIC SIGN, INCLUDING NO PARKING, HANDICAP PARKING, AND STOP SIGNS. HANDICAP LOCATIONS 2—SIDED WHERE VEHICLE ID REQUIRED UP TO \$200 FINE STALLS FACE EACH OTHER. FOR VIOLATION EXISTING BUILDING OR — 2" DIA. GALV. STEEL ROUND PIPE WITH CAP SET IN CONCRETE NON WALKING AREA - LANDING 1.5% MAX. SLOPE IN ANY DIRECTION 6" DIA. GALV. STEEL PIPE, SIGN, CENTER ON STALL 60"-66" PER ADA CODES PAINTED (COLOR BY OWNER).
FILL WITH NON-SHRINK GROUT
WITH ROUND TOP. 8' MAX FROM HEAD SIGN R7-8A - PAINT TRANSITION CURB OSHA YELLOW OF PARKING SPACE MAX. 1.5% CROSS SLOPE MAX. 8.3% RUNNING SLOPE DOME TOP OF CONC. FOOTING FACE OF CURB OR PAVEMENT MARKING — JOINT FILLER WHERE NOT PROTECTED BY CURB ACCESSIBLE ← MAX. 1.5% SLOPE IN ANY DIRECTION PAVEMENT SURFACE PAINTED WHITE 4" STRIPE @ 45° GALVANIZED PIPE SLEEVE SIGN R7-8A SIGN R7-8B CONCRETE FOOTING COLORS: LEGEND AND BORDER — WHITE WHITE SYMBOL ON BLUE BACKGROUND STENCILED WHITE -BACKGROUND - BLUE NO PARKING REDUCE SPACING 50% SEE APPENDIX "E" FOR SYMBOL PROPORTIONS PAINTED WHITE LOCATION AND SIZE PER STATE STANDARDS (TYP.) NOTE: SIGNAGE REQUIREMENTS VARY: VERIFY ALL DIMENSIONS, COLOR, AND MOUNTING HEIGHTS, ETC. WITH LOCAL AND STATE 8.0' MINIMUM TYP.) ACCESSIBLE CURB RAMP DETAIL

ACCESSIBLE PARKING STALL LAYOUT

VAN ACCESSIBLE HANDICAP SIGN WITH BOLLARD

C701



LANDSCAPE SUMMARY

**ZONE: R5M - HIGH DENSITY RESIDENTIAL MIXED USE** 

TREES PROVIDED: 3 EXISTING TREES TO REMAIN

SHRUBS PROVIDED: 61 SHRUBS = (37 DECIDUOUS SHRUBS + 24 EVERGREEN SHRUBS)

EXISTING DECIDUOUS TREE (TYP.)

PERENNIALS PROVIDED: 142 PERENNIALS

# LANDSCAPE LEGEND

LANDSCAPE KEYNOTES

A EDGER (TYP.)

(B) DOUBLE SHREDDED HARDWOOD MULCH (TYP.)

© ROCK MULCH (TYP.)

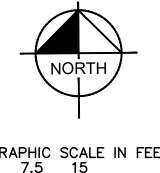
D SOD (TYP.)

EDGER (TYP.)

APPROXIMATE LIMITS OF SOD / IRRIGATION, SOD ALL DISTURBED AREAS (TYP.)

| LAN <sup>-</sup> | T SCHEDL | JLE |
|------------------|----------|-----|
|------------------|----------|-----|

| PLANT SCHEDULE    | Ē    |            |                                            |                                  |           |          |
|-------------------|------|------------|--------------------------------------------|----------------------------------|-----------|----------|
| CONIFEROUS SHRUBS | CODE | <u>QTY</u> | BOTANICAL NAME                             | COMMON NAME                      | CONTAINER | SPACING  |
| ++                | DMP  | 7          | PINUS MUGO 'COMPACTA'                      | DWARF MUGO PINE                  | #5 CONT.  | 36" O.C. |
| Manhor Hall       | GOA  | 10         | THUJA OCCIDENTALIS AUREA                   | GOLDEN AROBORVITAE               | #5 CONT.  | 4` O.C.  |
| + + Marana        | TCA  | 7          | THUJA OCCIDENTALIS 'TECHNY'                | TECHNY ARBORVITAE                | #5 CONT.  | 5` O.C.  |
| DECIDUOUS SHRUBS  | CODE | <u>QTY</u> | BOTANICAL NAME                             | COMMON NAME                      | CONTAINER | SPACING  |
| $\odot$           | AFD  | 8          | CORNUS SERICEA 'ARTIC FIRE'                | ARTIC FIRE DOGWOOD               | #5 CONT.  | 5` O.C.  |
| $\odot$           | BLC  | 7          | ARONIA MELANOCARPA `IROQUOIS BEAUTY` TM    | IROQUOIS BEAUTY BLACK CHOKEBERRY | #5 CONT.  | 4` O.C.  |
| €)                | DBH  | 16         | DIERVILLA LONICERA                         | DWARF BUSH HONEYSUCKLE           | #5 CONT.  | 3` O.C.  |
| $\odot$           | RSV  | 6          | AMELANCHIER ALNIFOLIA 'REGENT'             | REGENT SERVICEBERRY              | #5 CONT.  | 5` O.C.  |
| PERENNIALS        | CODE | QTY        | BOTANICAL NAME                             | COMMON NAME                      | CONT      | SPACING  |
|                   | BES  | 41         | RUDBECKIA FULGIDA `GOLDSTURM`              | BLACK-EYED SUSAN                 | #1 CONT   | 18" O.C. |
|                   | BHG  | 17         | SCHIZACHYRIUM SCOPARIUM 'BLUE HEAVEN'      | BLUE HEAVEN LITTLE BLUESTEM      | #1 CONT   | 24" O.C. |
|                   | CFL  | 18         | ECHINACEA PURPUREA                         | PURPLE CONEFLOWER                | #1 CONT.  | 24" O.C. |
|                   | KFG  | 15         | CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER' | KARL FOERSTER FEATHER REED GRASS | #1 CONT.  | 36" O.C. |
|                   | RDA  | 30         | ASTILBE X ARENDSII 'RAZZLE DAZZLE'         | RAZZLE DAZZLE ASTILBE            | #1 CONT.  | 24" O.C. |
|                   | SWG  | 21         | PANICUM VIRGATUM ' SHENANDOAH'             | SWITCH GRASS                     | #1 CONT.  | 36" O.C. |





SHEET NUMBER

## NOTES

- 1. SCARIFY SIDES AND BOTTOM OF HOLE.
- 2. PROCEED WITH CORRECTIVE PRUNING OF TOP AND ROOT.
- 3. REMOVE CONTAINER AND SCORE OUTSIDE OF SOIL MASS TO REDIRECT AND PREVENT CIRCLING FIBROUS ROOTS. REMOVE OR CORRECT STEM GIRDLING ROOTS.
- 4. PLUMB AND BACKFILL WITH PLANTING SOIL.
- 5. WATER THOROUGHLY WITHIN 2 HOURS TO SETTLE PLANTS AND FILL
- 6. BACK FILL VOIDS AND WATER SECOND TIME.7. PLACE MULCH WITHIN 48 HOURS OF THE SECOND WATERING UNLESS
- SOIL MOISTURE IS EXCESSIVE.

  8. MIX IN 3-4" OF ORGANIC COMPOST.



E: N.T.S.

# STEEL EDGER DETAIL

LANDSCAPE NOTES

OF NO LESS THAN 5:3.

- CONTRACTOR SHALL CONTACT COMMON GROUND ALLIANCE AT 811 OR CALL811.COM TO VERIFY LOCATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF ANY PLANTS OR LANDSCAPE MATERIAL.
- 2. ACTUAL LOCATION OF PLANT MATERIAL IS SUBJECT TO FIELD AND SITE CONDITIONS.
- 3. NO PLANTING WILL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
- 4. ALL SUBSTITUTIONS MUST BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO SUBMISSION OF ANY BID AND/OR QUOTE BY THE LANDSCAPE CONTRACTOR.
- 5. CONTRACTOR SHALL PROVIDE TWO YEAR GUARANTEE OF ALL PLANT MATERIALS. THE GUARANTEE BEGINS ON THE DATE OF THE LANDSCAPE ARCHITECT'S OR OWNER'S WRITTEN ACCEPTANCE OF THE INITIAL PLANTING. REPLACEMENT PLANT MATERIAL SHALL HAVE A ONE YEAR GUARANTEE COMMENCING UPON PLANTING.
- 6. ALL PLANTS TO BE SPECIMEN GRADE, MINNESOTA-GROWN AND/OR HARDY. SPECIMEN GRADE SHALL ADHERE TO, BUT IS NOT LIMITED BY, THE FOLLOWING STANDARDS:
  ALL PLANTS SHALL BE FREE FROM DISEASE, PESTS, WOUNDS, SCARS, ETC.
  ALL PLANTS SHALL BE FREE FROM NOTICEABLE GAPS, HOLES, OR DEFORMITIES.
  ALL PLANTS SHALL BE FREE FROM BROKEN OR DEAD BRANCHES.
  ALL PLANTS SHALL HAVE HEAVY, HEALTHY BRANCHING AND LEAFING.
  CONIFEROUS TREES SHALL HAVE AN ESTABLISHED MAIN LEADER AND A HEIGHT TO WIDTH RATIO
- 7. PLANTS TO MEET AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1-2014 OR MOST CURRENT VERSION) REQUIREMENTS FOR SIZE AND TYPE SPECIFIED.
- 8. PLANTS TO BE INSTALLED AS PER MNLA & ANSI STANDARD PLANTING PRACTICES.
- 9. PLANTS SHALL BE IMMEDIATELY PLANTED UPON ARRIVAL AT SITE. PROPERLY HEEL-IN MATERIALS IF NECESSARY; TEMPORARY ONLY.
- 10. PRIOR TO PLANTING, FIELD VERIFY THAT THE ROOT COLLAR/ROOT FLARE IS LOCATED AT THE TOP OF THE BALLED & BURLAP TREE. IF THIS IS NOT THE CASE, SOIL SHALL BE REMOVED DOWN TO THE ROOT COLLAR/ROOT FLARE. WHEN THE BALLED & BURLAP TREE IS PLANTED, THE ROOT COLLAR/ROOT FLARE SHALL BE EVEN OR SLIGHTLY ABOVE FINISHED GRADE.
- 11. OPEN TOP OF BURLAP ON BB MATERIALS; REMOVE POT ON POTTED PLANTS; SPLIT AND BREAK APART PEAT POTS.
- 12. PRUNE PLANTS AS NECESSARY PER STANDARD NURSERY PRACTICE AND TO CORRECT POOR BRANCHING OF EXISTING AND PROPOSED TREES.
- 13. WRAP ALL SMOOTH-BARKED TREES FASTEN TOP AND BOTTOM. REMOVE BY APRIL 1ST.
- 14. STAKING OF TREES AS REQUIRED; REPOSITION, PLUMB AND STAKE IF NOT PLUMB AFTER ONE YEAR.
- 15. THE NEED FOR SOIL AMENDMENTS SHALL BE DETERMINED UPON SITE SOIL CONDITIONS PRIOR TO PLANTING. LANDSCAPE CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT FOR THE NEED OF ANY SOIL AMENDMENTS.
- 16. BACKFILL SOIL AND TOPSOIL TO ADHERE TO MN/DOT STANDARD SPECIFICATION 3877 (LOAM TOPSOIL BORROW) AND TO BE EXISTING TOP SOIL FROM SITE FREE OF ROOTS, ROCKS LARGER THAN ONE INCH, SUBSOIL DEBRIS, AND LARGE WEEDS UNLESS SPECIFIED OTHERWISE. MINIMUM 4" DEPTH TOPSOIL FOR ALL LAWN GRASS AREAS AND 12" DEPTH TOPSOIL FOR TREE, SHRUBS, AND PERENNIALS.

- 17. MULCH TO BE AT ALL TREE, SHRUB, PERENNIAL, AND MAINTENANCE AREAS. TREE AND SHRUB PLANTING BEDS SHALL HAVE 4" DEPTH OF DOUBLE SHREDDED HARDWOOD MULCH. DOUBLE SHREDDED HARDWOOD MULCH TO BE USED AROUND ALL PLANTS WITHIN TURF AREAS. PERENNIAL AND ORNAMENTAL GRASS BEDS SHALL HAVE 2" DEPTH DOUBLE SHREDDED HARDWOOD MULCH. MULCH TO BE FREE OF DELETERIOUS MATERIAL AND NATURAL IN COLOR, OR APPROVED EQUAL. ROCK MULCH TO BE RIVER ROCK, 1 1/2" DIAMETER, AT MINIMUM 3" DEPTH, OR APPROVED EQUAL. ROCK MULCH TO BE ON COMMERCIAL GRADE FILTER FABRIC, BY TYPAR, OR APPROVED EQUAL WITH NO EXPOSURE. MULCH AND FABRIC TO BE APPROVED BY OWNER PRIOR TO INSTALLATION. MULCH TO MATCH EXISTING CONDITIONS (WHERE APPLICABLE).
- 18. EDGING TO BE COMMERCIAL GRADE COL-MET (OR EQUAL) STEEL EDGING; 3/16" THICK x 5" TALL, COLOR BLACK, OR SPADED EDGE, AS INDICATED. STEEL EDGING SHALL BE PLACED WITH SMOOTH CURVES AND STAKED WITH METAL SPIKES NO GREATER THAN 4 FOOT ON CENTER WITH TOP OF EDGER AT GRADE, FOR MOWERS TO CUT ABOVE WITHOUT DAMAGE. UTILIZE CURBS AND SIDEWALKS FOR EDGING WHERE POSSIBLE. SPADED EDGE TO PROVIDE V-SHAPED DEPTH AND WIDTH TO CREATE SEPARATION BETWEEN MULCH AND GRASS. INDIVIDUAL TREE, SHRUB, OR RAIN-GARDEN BEDS TO BE SPADED EDGE, UNLESS NOTED OTHERWISE. EDGING TO MATCH EXISTING CONDITIONS (WHERE APPLICABLE).
- 19. ALL DISTURBED AREAS TO BE SODDED OR SEEDED, UNLESS OTHERWISE NOTED. PARKING LOT ISLANDS TO BE SODDED WITH SHREDDED HARDWOOD MULCH AROUND ALL TREES AND SHRUBS. SOD TO BE STANDARD MINNESOTA GROWN AND HARDY BLUEGRASS MIX, FREE OF LAWN WEEDS. ALL TOPSOIL AREAS TO BE RAKED TO REMOVE DEBRIS AND ENSURE DRAINAGE. SLOPES OF 3:1 OR GREATER SHALL BE STAKED. SEED AS SPECIFIED AND PER MN/DOT SPECIFICATIONS. IF NOT INDICATED ON LANDSCAPE PLAN, SEE EROSION CONTROL PLAN.
- 20. PROVIDE IRRIGATION TO ALL PLANTED AREAS ON SITE. IRRIGATION SYSTEM TO BE DESIGN/BUILD BY LANDSCAPE CONTRACTOR. LANDSCAPE CONTRACTOR TO PROVIDE SHOP DRAWINGS TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION OF IRRIGATION SYSTEM. CONTRACTOR TO PROVIDE OPERATION MANUALS, AS-BUILT PLANS, AND NORMAL PROGRAMMING. SYSTEM SHALL BE WINTERIZED AND HAVE SPRING STARTUP DURING FIRST YEAR OF OPERATION. SYSTEM SHALL HAVE ONE-YEAR WARRANTY ON ALL PARTS AND LABOR. ALL INFORMATION ABOUT INSTALLATION AND SCHEDULING CAN BE OBTAINED FROM THE GENERAL CONTRACTOR. SYSTEM SHALL INCLUDE A RAIN SENSOR AND APPROPRIATE TECHNOLOGY.
- 21. CONTRACTOR SHALL PROVIDE NECESSARY WATERING OF PLANT MATERIALS UNTIL THE PLANT IS FULLY ESTABLISHED OR IRRIGATION SYSTEM IS OPERATIONAL. OWNER WILL NOT PROVIDE WATER FOR CONTRACTOR.
- 22. REPAIR, REPLACE, OR PROVIDE SOD/SEED AS REQUIRED FOR ANY ROADWAY BOULEVARD AREAS ADJACENT TO THE SITE DISTURBED DURING CONSTRUCTION.
- 23. REPAIR ALL DAMAGE TO PROPERTY FROM PLANTING OPERATIONS AT NO COST TO OWNER.
- 24. MAINTAIN TREES, SHRUBS, AND OTHER PLANTS UNTIL PROJECT COMPLETION, BUT IN NO CASE, LESS THAN FOLLOWING PERIOD; 1 YEAR AFTER PROJECT COMPLETION. MAINTAIN TREES, SHRUBS, AND OTHER PLANTS BY PRUNING, CULTIVATING, AND WEEDING AS REQUIRED FOR HEALTHY GROWTH. RESTORE PLANTING SAUCERS. TIGHTEN AND REPAIR STAKE AND GUY SUPPORTS AND RESET TREES AND SHRUBS TO PROPER GRADES OR VERTICAL POSITION AS REQUIRED. RESTORE OR REPLACE DAMAGED WRAPPINGS. SPRAY AS REQUIRED TO KEEP TREES AND SHRUBS FREE OF INSECTS AND DISEASE. REPLENISH MULCH TO THE REQUIRED DEPTH. MAINTAIN LAWNS FOR 45 DAYS AFTER INSTALLING SOD INCLUDING MOWING WHEN SOD RECITES 4" IN HEIGHT. WEED PLANTING BEDS AND MULCH SAUCERS AT MINIMUM ONCE A MONTH DURING THE GROWING SEASON. PROVIDE A MONTHLY REPORT TO THE OWNER ON WEEDING AND OTHER MAINTENANCE RESPONSIBILITIES.
- 25. SEE ELECTRICAL PLANS FOR SITE LIGHTING
- 26. OWNER AND ARCHITECT TO CONFIRM SITE FURNISHING SUCH AS BENCHES, TABLES AND CHAIRS, BIKE RACK AND TRASH/RECYCLING RECEPTACLES

3/16" X 5" STEEL EDGER
TURF/SOD
TOP OF EDGER TO BE
FLUSH WITH SOD

12" STEEL EDGER SPIKE

12" STEEL EDGER SPIKE

3/16" X 5" STEEL EDGER

SUBGRADE

SECTION

PLAN

L101

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 PROFESSIONAL
LANDSCAPE ARCHITECT UNDER THE LAWS OF
THE STATE OF MINNESOTA.

SHOWN
SSL
SSL

DATE LANDS

03/06/2023
THE STANDS

SCALE AS SHOWN

DESIGNED BY SSI

ANDSCAPE DETAILS

Y - NOT FOR CONS
IBOU CABIN CON HEIGHTS
PREPARED FOR

FALC PF BUHL

SHEET NUMBER

eights\3 Design\CAD\PlanSheets\LANDSCAPE DETAILS.dwg



## **DRAFT Memorandum**

SRF No. 16560

**To:** Jack Linehan, City Administrator

City of Falcon Heights

From: Tom Sachi, PE, Project Manager

Eric Wurst, EIT, Engineer I

**Date:** March 10, 2023

**Subject:** Caribou Coffee Cabin Traffic Study; Falcon Heights, MN

#### Introduction

SRF has completed a traffic study for the proposed Caribou Coffee Cabin located in the southwest quadrant of the Snelling Avenue and Larpenteur Avenue intersection in the City of Falcon Heights (see Figure 1: Project Location). The main objectives of the study are to review existing traffic operations within the study area, evaluate impacts to the adjacent roadway network, particularly with the drive thru operations, and recommend any necessary improvements to accommodate the proposed development. The following information provides the assumptions, analysis, and study findings offered for consideration.

## **Existing Conditions**

Existing conditions were reviewed to establish a baseline to identify any future impacts associated with the proposed development. Evaluation of the existing conditions includes a review of traffic volumes, roadway characteristics, and an intersection capacity analysis, which are summarized in the following sections.

#### **Data Collection**

Weekday a.m. and midday peak period vehicular turning movement and pedestrian/bicyclist counts were collected by SRF during the week of February 20, 2022, at the Larpenteur Avenue and Fry Street/Access Driveway intersection. Note, observations were also collected at the immediately adjacent Underwood Street intersection to the west, however, no vehicles enter/exited from Underwood Street as the access is currently closed.

Observations were completed to identify roadway characteristics (i.e. roadway geometry, posted speed limits, and traffic controls) within the study area. Larpenteur Avenue is currently a four-lane undivided roadway with a center two-way left-turn lane within the study area with a speed limit of 40 mph. Underwood Street is located just west of the study intersection and serves as an access road for the Minnesota State Fair, but is closed off when the Fairgrounds are not active.





**Project Location** 

The Larpenteur Avenue and Fry Street/Access Driveway intersection is side-street stop controlled. Larpenteur Avenue is classified as an A Minor Augmentor, while Fry Street and Underwood Street are local roadways. Existing geometrics, traffic controls, and traffic volumes in the study are shown in Figure 2.

#### **Intersection Operations Analysis**

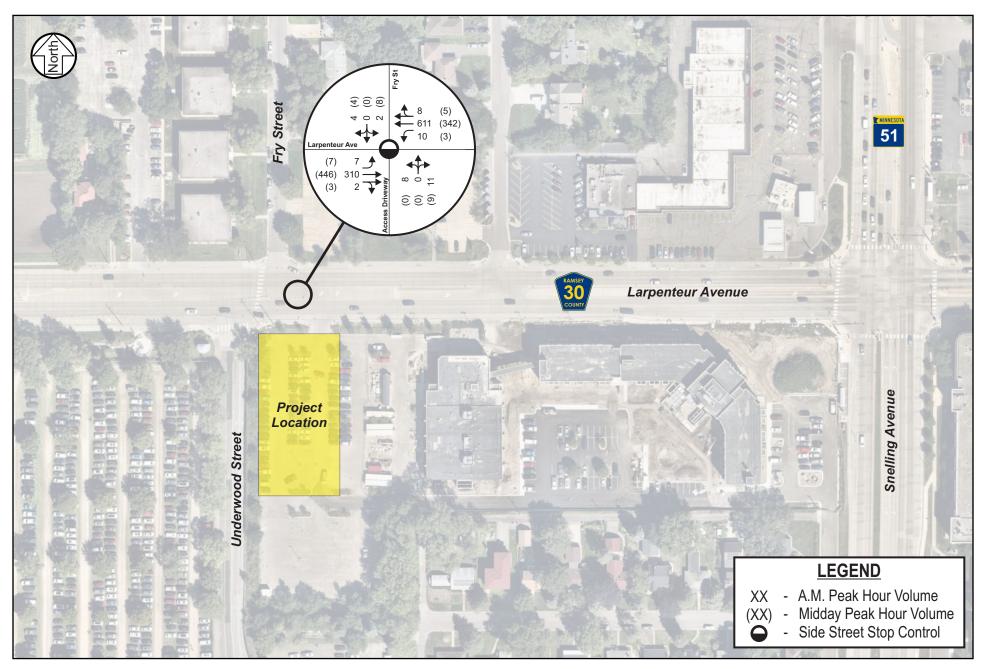
An intersection capacity analysis was completed for the weekday a.m. and midday peak hours to identify any areas of queuing or congestion concern under existing conditions. Note, the proposed development is expected to peak in the morning and midday, and therefore the p.m. peak hour was not analyzed. The study intersections were analyzed using Synchro/SimTraffic (Version 11). Capacity analysis results identify a Level of Service (LOS), which indicates the quality of traffic flow through an intersection. Intersections are given a ranking from LOS A through LOS F. The LOS results are based on average delay per vehicle, which correspond to the delay threshold values shown in Table 1. LOS A indicates the best traffic operation, with vehicles experiencing minimal delays. LOS F indicates an intersection where demand exceeds capacity, or a breakdown of traffic flow. Overall intersection LOS A though LOS D is generally considered acceptable based on MnDOT guidelines.

Table 1. Level of Service Criteria for Signalized and Unsignalized Intersections

| LOS Designation | Signalized Intersection<br>Average Delay/Vehicle (seconds) | Unsignalized Intersection<br>Average Delay/Vehicle (seconds) |
|-----------------|------------------------------------------------------------|--------------------------------------------------------------|
| А               | ≤ 10                                                       | ≤ 10                                                         |
| В               | > 10 - 20                                                  | > 10 - 15                                                    |
| С               | > 20 - 35                                                  | > 15 - 25                                                    |
| D               | > 35 - 55                                                  | > 25 - 35                                                    |
| E               | > 55 - 80                                                  | > 35 - 50                                                    |
| F               | > 80                                                       | > 50                                                         |

For side-street stop-controlled intersections, special emphasis is given to providing an estimate for the level of service of the side-street approach. Traffic operations at an unsignalized intersection with side-street stop control can be described in two ways. First, consideration is given to the overall intersection level of service. This takes into account the total number of vehicles entering the intersection and the capability of the intersection to support these volumes. Second, it is important to consider the delay on the minor approach. Since the mainline does not have to stop, the majority of delay is attributed to the side-street approaches. It is typical of intersections with higher mainline traffic volumes to experience high levels of delay (i.e. poor levels of service) on the side-street approaches, but an acceptable overall intersection level of service during peak hour conditions.

Results of the existing operations analysis shown in Table 2 indicate that the study intersection operates at an acceptable LOS A during the a.m. and midday peak hours with the existing traffic control and geometric layout. No significant side-street delays or queuing issues were observed at the study intersections.





# **Existing Conditions**

**Table 2. Existing Peak Hour Capacity Analysis** 

| Intersection                                       | Weekday<br>A.M. Peak Hour |         | Weekday<br>Midday Peak Hour |        |
|----------------------------------------------------|---------------------------|---------|-----------------------------|--------|
|                                                    | LOS                       | Delay   | LOS                         | Delay  |
| Larpenteur Avenue & Fry Street/Access Driveway (1) | A/B                       | 14 sec. | A/A                         | 6 sec. |

<sup>(1)</sup> Indicates an unsignalized intersection with side-street stop control, where the overall LOS is shown followed by the worst approach LOS. The delay shown represents the worst side-street approach delay.

### **Proposed Development**

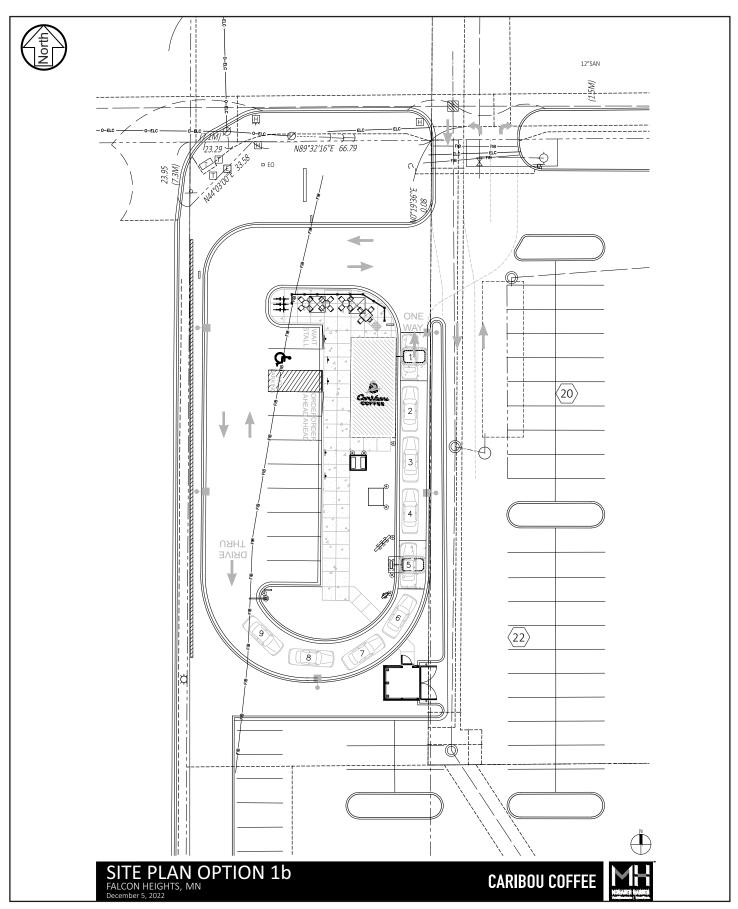
The proposed development, shown in Figure 3, is located in the southwest quadrant of the Snelling Avenue and Larpenteur Avenue intersection and is anticipated to be fully operational by the year 2025. The proposed development includes an approximately 650-square-foot (SF) coffee shop with a drive-through lane and no indoor seating. Note, there are a few outdoor tables that will be available seasonally. The primary access to the proposed development is located on Larpenteur Avenue via the existing access driveway located approximately 125 feet east of Underwood Street, opposite Fry Street. As shown in the site plan, it is assumed that the access to Larpenteur Avenue will have a dedicated northbound right and left turn lane. The development is adjacent to the Amber Union building, which contains affordable residential and commercial uses.

#### **Year 2025 Conditions**

To identify potential impacts associated with the proposed development, traffic forecasts for year 2025 conditions (i.e. one-year after opening) were developed. The year 2025 conditions take into account general area background growth and traffic generated by the proposed development. The following sections provide details on the background traffic forecasts, estimated trip generation, and the intersection capacity analysis for year 2025 conditions.

#### **Background Traffic Growth**

To account for general background growth in the area, an annual growth rate of one-half (0.5) percent was applied to the existing peak hour traffic volumes to develop year 2025 background forecasts. This growth rate was developed using a combination of historical average daily traffic (ADT) volumes from surrounding roadways as published by MnDOT, traffic forecasts from the 2040 Falcon Heights Comprehensive Plan, and engineering judgment.





#### **Trip Generation**

To account for traffic impacts associated with the proposed development, trip generation estimates were developed for the weekday a.m. and midday peak hours, as well as on a daily basis. These estimates, shown in Table 3, were developed using data collected at a similar-type land use and the ITE Trip Generation Manual, 11th Edition.

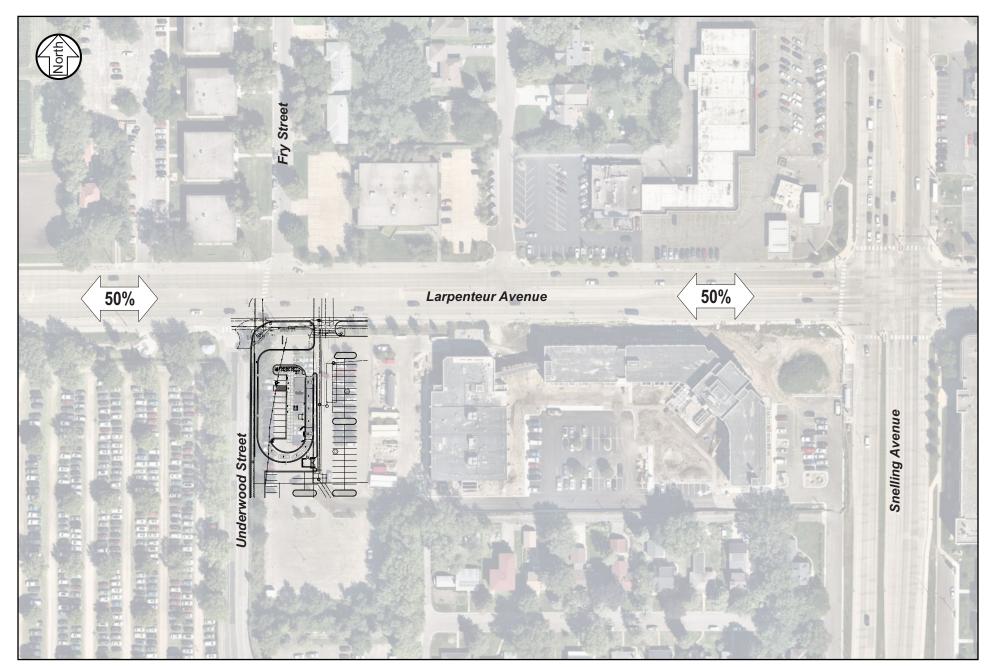
**Table 3. Trip Generation Estimate** 

| Land Use Type (ITE Code)                              | Size       | A.M. Peak Hour |       | Midday Peak Hour |       | Doily Tring |
|-------------------------------------------------------|------------|----------------|-------|------------------|-------|-------------|
|                                                       |            | In             | Out   | In               | Out   | Daily Trips |
| Coffee/Donut Shop with Drive-<br>through Window (937) | 650 SF     | 38             | 38    | 27               | 27    | 760         |
| Pass-by/Diverted-link Tr                              | rips (89%) | (-34)          | (-34) | (-24)            | (-24) | (-676)      |
| Net New                                               | Area Trips | 4              | 4     | 3                | 3     | 84          |

Results of the trip generation estimate indicate that the proposed development is expected to generate 76 weekday a.m. peak hour, 54 weekday midday peak hour, and 760 weekday daily trips. However, a majority of the trips are expected to be made up of vehicles already travelling within the study area (i.e., pass-by/diverted-link trips). According to the *ITE Trip Generation Handbook*, 3<sup>rd</sup> Edition, 89 percent of trips generated by this land use are pass-by/diverted-link trips. Therefore, the proposed development is expected to generate 8 weekday a.m. peak hour, 6 weekday midday peak hour, and 84 weekday daily trips that are new to the study area. The trips generated were distributed to the study area based on the directional distribution shown in Figure 4, which was developed based on a combination of existing daily traffic volumes/travel patterns and engineering judgment. The resultant year 2025 peak hour traffic forecasts, which include general background growth and trips generated by the development, are illustrated in Figure 5.

#### **Year 2025 Build Conditions Intersection Capacity Analysis**

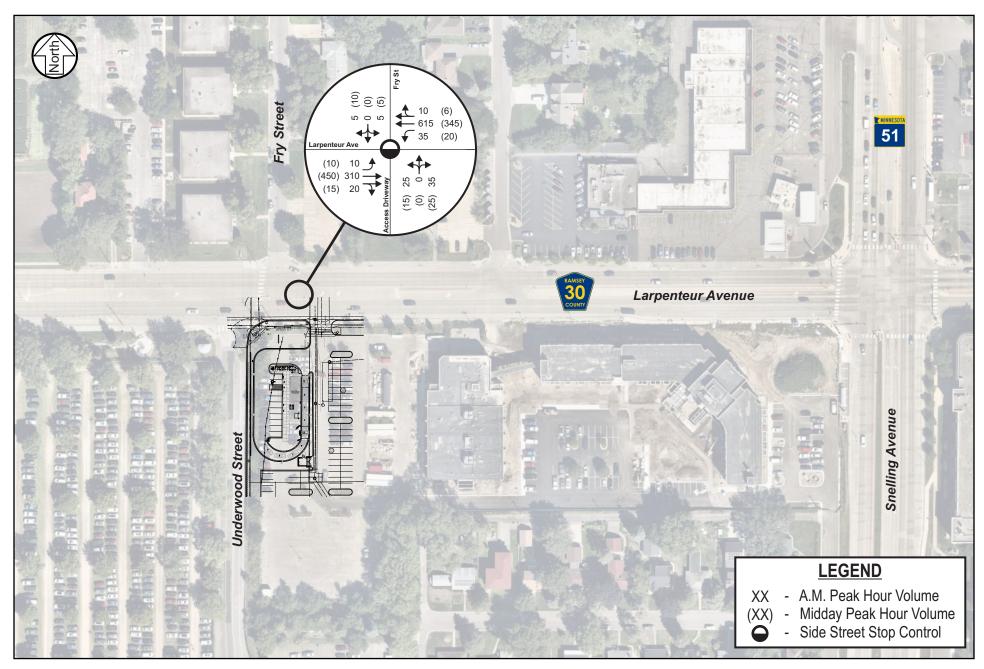
To determine how the study intersections will operate under year 2025 build conditions, an intersection capacity analysis was completed using Synchro/SimTraffic software (Version 11). Results of the year 2025 build intersection capacity analysis shown in Table 4 indicate that the study intersection is expected to continue to operate at an acceptable overall LOS A during the a.m. and midday peak hours, with minimal increases in delay (i.e. zero to two (2) seconds). There are not expected to be any internal queuing issues entering or exiting the proposed development along Larpenteur Avenue. The northbound average and 95th percentile queues exiting the site to Larpenteur Avenue are expected to be one (1) and three (3) vehicles, respectively. The westbound left turn along Larpenteur Avenue is expected to have a maximum queue of one (1) vehicle during the a.m. and midday peak hours. No significant side-street delays or queuing issues were observed in the study area.





## **Directional Distribution**

City of Falcon Heights





# **Year 2025 Build Conditions**

**Table 4. Year 2025 Intersection Capacity Analysis** 

| Intersection                                       |     | ekday<br>eak Hour | Wee<br>Midday P | ,       |
|----------------------------------------------------|-----|-------------------|-----------------|---------|
|                                                    | LOS | Delay             | LOS             | Delay   |
| Larpenteur Avenue & Fry Street/Access Driveway (1) | A/B | 14 sec.           | A/B             | 10 sec. |

<sup>(1)</sup> Indicates an unsignalized intersection with side-street stop control, where the overall LOS is shown followed by the worst approach LOS. The delay shown represents the worst side-street approach delay.

#### **Site Plan Review**

A review of the proposed site plan was completed to identify any issues and recommend potential improvements with regard to drive-through operations, access, and circulation. Based on field observations, there is adequate sight distance at the existing access location on Larpenteur Avenue to clearly identify approaching vehicles. Special consideration should be made to limit any sight distance impacts from future landscaping and signing. No other traffic control or circulation issues are expected.

#### **Drive-Thru Queuing Review**

A review of the drive-thru queuing storage area was completed to identify if queues from the proposed drive-thru would be expected to extend beyond the provided storage distance. Therefore, a literature review and field observations were completed to understand expected queueing lengths for the proposed coffee shop. Observations were completed at an existing Starbucks in Roseville, MN and the existing Caribou Coffee Cabin at 2351 County Road 42 W in Burnsville during the weekday morning peak hour.

According to the *Drive-Through Queue Generation Study* completed by Counting Cars in 2012, maximum queues at a coffee shop can extend to 16 vehicles, with an 85th percentile queue of 14 vehicles. Drive-thru queuing observations from the existing Starbucks location indicate a maximum of 15 vehicles and an approximate 85th percentile of 13 vehicles during those peak hours, which is consistent with the *Drive-Through Queue Generation Study*. Additionally, on average there were approximately 10 vehicles queued at the Starbucks. Note, the maximum observed queues typically lasted for less than one (1) minute in duration. At the existing Caribou Cabin in Burnsville, there were maximum queues of six (6) vehicles and average queues of four (4) vehicles, which is less than the observed queueing at Starbucks and the *Drive-Through Queue Generation Study*. However, this location is near a high concentration of retail that may not be open during the morning peak hours, and therefore, may be underrepresenting the peak queues of the site which likely occur later in the day.

Based on the site plan provided, there is room for 9 vehicles to queue within the drive-thru lane before impacting the internal parking lot circulation, and room for 19 vehicles to queue within the site before spilling into the external parking lot. Therefore, it is expected that the proposed drive-thru will accommodate all the expected drive-thru queues at the site, and no vehicles are expected to queue beyond the internal site and into the external parking lot or to Larpenteur Avenue.

#### **Conclusions and Recommendations**

The following study conclusions and recommendations are offered for consideration:

- 1) Results of the existing operations analysis indicate that the study intersection currently operates at an acceptable overall LOS A during the a.m. and midday peak hours. No significant side-street delays or queuing issues were observed at the study intersections.
- 2) The proposed development includes a 650 SF coffee shop with a drive-through and no indoor seating. The primary access to the proposed development is located on Larpenteur Avenue via an access driveway located approximately 125 feet east of Underwood Street. The development also is connected to the Amber Union building, which contains affordable residential and commercial uses.
- 3) Results of the trip generation estimates indicate the proposed development site is expected to generate 76 weekday a.m. peak hour, 54 weekday midday peak hour, and 760 weekday daily trips.
  - a. However, 89 percent of trips generated by this land use are expected to be pass-by/diverted-link trips that already existing along the study area roadways.
  - b. Therefore, the proposed development is expected to generate 8 weekday a.m. peak hour, 6 weekday midday peak hour, and 84 weekday daily trips that are new to the study area.
- 4) Results of the year 2025 build intersection capacity analysis indicate that the study intersection and proposed access locations are expected to continue to operate at an acceptable overall LOS A during the a.m. and midday peak hours.
  - a. There are not expected to be any internal queuing issues entering or exiting the proposed development along Larpenteur Avenue. The northbound average and 95th percentile queues exiting the site are expected to be one (1) and three (3) vehicles, respectively. The westbound left turn along Larpenteur Avenue is expected to have a maximum queue of one (1) vehicle during the a.m. and midday peak hours.
- 5) The proposed Caribou Coffee Cabin is expected to accommodate all drive-thru queues at the site, and no peak hour trips are expected to queue beyond the storage provided.



*To:* Hannah Lynch, City of Falcon Heights

From: Dan Elenbaas, P.E., Kimley-Horn

Date: March 17, 2023

Subj: Caribou Cabin

Falcon Heights, MN

Stormwater Management Memorandum

Buhl Larpenteur West LLC proposes to develop a stand-alone coffee shop with a drive through. This site is adjacent to the Amber Union Development and will disturb a portion of the existing Parcel 1. The plan proposes a 630 SF building with 10 parking stalls and a drive through lane for the coffee shop. There will be a patio area for outdoor seating and a walk-up window for ordering.

Kimley-Horn has analyzed the drainage conditions of the site and provides computations for applicable CRWD stormwater requirements in this memorandum. The analysis of existing and proposed drainage models was completed using HydroCAD, Version 10.00, a computer aided design system for modeling the hydrology and hydraulics of stormwater runoff. These calculations are largely based on the hydrology techniques developed by the Soil Conservation Service (SCS/NRCS), combined with other hydrology and hydraulics calculations. All calculations and hydrographs are provided in the appendix of this memorandum.

#### **Existing Conditions**

The existing site is an asphalt parking lot with its drainage patterns flowing to the east and southeast. There are landscape islands within the existing parking lot providing pervious area in the lot. The site surface flows to low points of existing catch basins and curb cuts that lead to existing BMPs.

The existing hydrocad model can be found in the appendix.

#### **Proposed Conditions**

The proposed plan will have asphalt and concrete surfaces with curb that will convey drainage to similar patterns that are in the existing conditions. There will be additional landscape areas around the building and within the proposed site. The proposed condition creates more pervious area than the existing condition within the site boundary. The existing BMPs within and around the Amber Union Development will not be modified in the proposed plan.

The proposed hydrocad model can be found in the appendix.

#### **City of Falcon Heights Stormwater Management Requirements**

The City provides requirements for rate control. Below is a summary of the existing and proposed runoff rates for the proposed project.



| Drainage Area Summary (1.90 acres) |          |          |                  |  |  |  |
|------------------------------------|----------|----------|------------------|--|--|--|
|                                    | 2-Year   | 10-Year  | 100-Year (7.45") |  |  |  |
| Pre-Development Rate               | 3.99 cfs | 7.45 cfs | 15.83 cfs        |  |  |  |
| Post-Development Rate              | 3.79 cfs | 7.21 cfs | 15.57 cfs        |  |  |  |

In conclusion, this project will not be increasing the existing runoff rates which meet the requirements for the City of Falcon Heights.

Please contact me at (763) 251-1011 if you have any questions.

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.

Dan Cleubren

Dan Elenbaas, P.E.

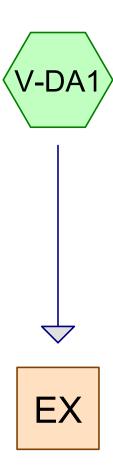
#### Appendix:

- Existing Conditions HydroCAD Model
- Proposed Conditions HydroCAD Model



# EXISTING CONDITIONS HYDROCAD MODEL

# Existing











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# Rainfall Events Listing (selected events)

| Event# | Event      | Storm Type | Curve | Mode    | Duration | B/B | Depth    | AMC |
|--------|------------|------------|-------|---------|----------|-----|----------|-----|
|        | Name       |            |       |         | (hours)  |     | (inches) |     |
| 1      | MSE - 1 YR | MSE 24-hr  | 3     | Default | 24.00    | 1   | 2.45     | 2   |
| 2      | MSE-100YR  | MSE 24-hr  | 3     | Default | 24.00    | 1   | 7.45     | 2   |
| 3      | MSE-10YR   | MSE 24-hr  | 3     | Default | 24.00    | 1   | 4.20     | 2   |
| 4      | MSE-2YR    | MSE 24-hr  | 3     | Default | 24.00    | 1   | 2.81     | 2   |

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# **Area Listing (selected nodes)**

| Area    | CN | Description                           |
|---------|----|---------------------------------------|
| (acres) |    | (subcatchment-numbers)                |
| 0.730   | 61 | >75% Grass cover, Good, HSG B (V-DA1) |
| 1.170   | 98 | Paved parking, HSG B (V-DA1)          |
| 1.900   | 84 | TOTAL AREA                            |

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# Soil Listing (selected nodes)

| Area    | Soil  | Subcatchment |
|---------|-------|--------------|
| (acres) | Group | Numbers      |
| 0.000   | HSG A |              |
| 1.900   | HSG B | V-DA1        |
| 0.000   | HSG C |              |
| 0.000   | HSG D |              |
| 0.000   | Other |              |
| 1.900   |       | TOTAL AREA   |

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# **Ground Covers (selected nodes)**

| HSG-A       | HSG-B   | HSG-C   | HSG-D   | Other   | Total   | Ground                 | Subcatchment |
|-------------|---------|---------|---------|---------|---------|------------------------|--------------|
| <br>(acres) | (acres) | (acres) | (acres) | (acres) | (acres) | Cover                  | Numbers      |
| 0.000       | 0.730   | 0.000   | 0.000   | 0.000   | 0.730   | >75% Grass cover, Good | V-DA1        |
| 0.000       | 1.170   | 0.000   | 0.000   | 0.000   | 1.170   | Paved parking          | V-DA1        |
| 0.000       | 1.900   | 0.000   | 0.000   | 0.000   | 1.900   | TOTAL AREA             |              |

MSE 24-hr 3 MSE - 1 YR Rainfall=2.45"

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Time span=0.01-72.00 hrs, dt=0.10 hrs, 721 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

SubcatchmentV-DA1: Runoff Area=1.900 ac 61.58% Impervious Runoff Depth=1.08"

Tc=7.0 min CN=84 Runoff=3.15 cfs 0.171 af

Reach EX:

Inflow=3.15 cfs 0.171 af
Outflow=3.15 cfs 0.171 af

Total Runoff Area = 1.900 ac Runoff Volume = 0.171 af Average Runoff Depth = 1.08" 38.42% Pervious = 0.730 ac 61.58% Impervious = 1.170 ac

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# **Summary for Subcatchment V-DA1:**

[49] Hint: Tc<2dt may require smaller dt

3.15 cfs @ 12.14 hrs, Volume=

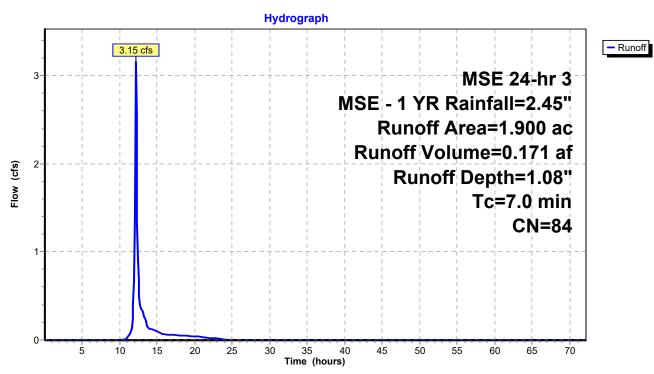
0.171 af, Depth= 1.08" Routed to Reach EX:

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.01-72.01 hrs, dt= 0.10 hrs MSE 24-hr 3 MSE - 1 YR Rainfall=2.45"

| _                             | Area                                   | (ac) | CN  | Desc    | cription  |           |               |
|-------------------------------|----------------------------------------|------|-----|---------|-----------|-----------|---------------|
| 1.170 98 Paved parking, HSG B |                                        |      |     |         |           |           |               |
| _                             | 0.730 61 >75% Grass cover, Good, HSG B |      |     |         |           |           |               |
| 1.900 84 Weighted Average     |                                        |      |     |         | hted Aver | age       |               |
|                               | 0.730 61 38.42% Pervious Area          |      |     |         |           | us Area   |               |
|                               | 1.                                     | 170  | 98  | 61.5    | 8% Imperv | ious Area |               |
|                               |                                        |      |     |         |           |           |               |
|                               | Tc                                     | Leng |     | Slope   | Velocity  | Capacity  | Description   |
| _                             | (min)                                  | (fee | et) | (ft/ft) | (ft/sec)  | (cfs)     |               |
|                               | 7.0                                    |      |     |         |           |           | Direct Entry, |

Direct Entry,

#### **Subcatchment V-DA1:**



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# **Summary for Reach EX:**

[40] Hint: Not Described (Outflow=Inflow)

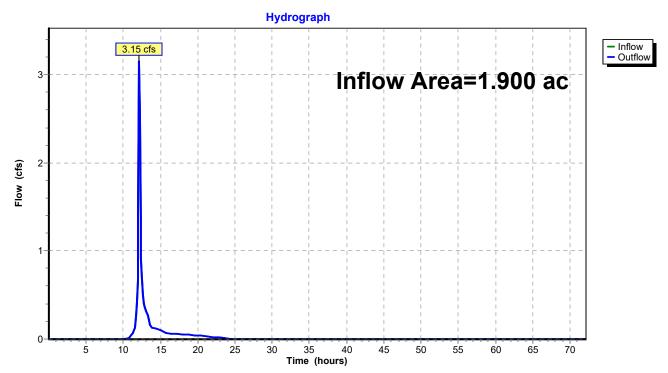
Inflow Area = 1.900 ac, 61.58% Impervious, Inflow Depth = 1.08" for MSE - 1 YR event

Inflow = 3.15 cfs @ 12.14 hrs, Volume= 0.171 af

Outflow = 3.15 cfs @ 12.14 hrs, Volume= 0.171 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.01-72.01 hrs, dt= 0.10 hrs / 3

#### Reach EX:



MSE 24-hr 3 MSE-100YR Rainfall=7.45"

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Time span=0.01-72.00 hrs, dt=0.10 hrs, 721 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

SubcatchmentV-DA1: Runoff Area=1.900 ac 61.58% Impervious Runoff Depth=5.57"

Tc=7.0 min CN=84 Runoff=15.83 cfs 0.882 af

**Reach EX:**Inflow=15.83 cfs 0.882 af
Outflow=15.83 cfs 0.882 af

Total Runoff Area = 1.900 ac Runoff Volume = 0.882 af Average Runoff Depth = 5.57" 38.42% Pervious = 0.730 ac 61.58% Impervious = 1.170 ac

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# **Summary for Subcatchment V-DA1:**

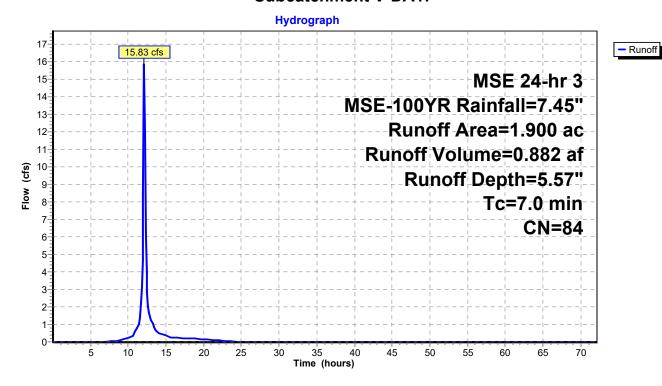
[49] Hint: Tc<2dt may require smaller dt

Runoff = 15.83 cfs @ 12.13 hrs, Volume= 0.882 af, Depth= 5.57" Routed to Reach EX :

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.01-72.01 hrs, dt= 0.10 hrs MSE 24-hr 3 MSE-100YR Rainfall=7.45"

| Are                           | ea (ac)                                | CN CN | Desc    | cription   |           |               |
|-------------------------------|----------------------------------------|-------|---------|------------|-----------|---------------|
|                               | 1.170                                  | 98    | Pave    | ed parking | , HSG B   |               |
|                               | 0.730 61 >75% Grass cover, Good, HSG B |       |         |            |           |               |
| 1.900 84 Weighted Average     |                                        |       |         |            | age       |               |
| 0.730 61 38.42% Pervious Area |                                        |       |         |            | us Area   |               |
|                               | 1.170                                  | 98    | 61.5    | 8% Imper   | ious Area |               |
|                               |                                        |       |         |            |           |               |
| Т                             | c Le                                   | ngth  | Slope   | Velocity   | Capacity  | Description   |
| (mir                          | ገ) (՟                                  | feet) | (ft/ft) | (ft/sec)   | (cfs)     |               |
| 7.                            | .0                                     |       |         |            |           | Direct Entry, |

#### **Subcatchment V-DA1:**



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# **Summary for Reach EX:**

[40] Hint: Not Described (Outflow=Inflow)

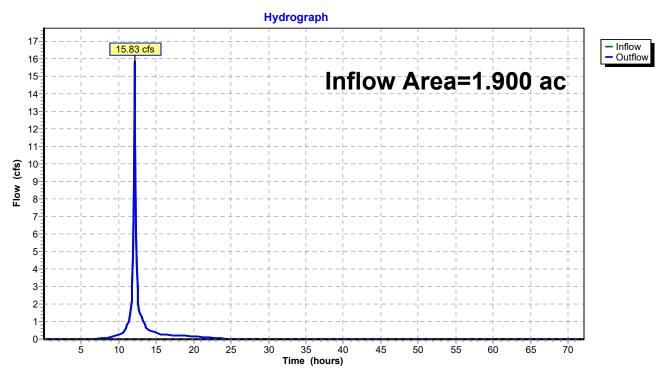
Inflow Area = 1.900 ac, 61.58% Impervious, Inflow Depth = 5.57" for MSE-100YR event

Inflow = 15.83 cfs @ 12.13 hrs, Volume= 0.882 af

Outflow = 15.83 cfs @ 12.13 hrs, Volume= 0.882 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.01-72.01 hrs, dt= 0.10 hrs / 3

#### Reach EX:



MSE 24-hr 3 MSE-10YR Rainfall=4.20"

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Time span=0.01-72.00 hrs, dt=0.10 hrs, 721 points x 3 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

SubcatchmentV-DA1: Runoff Area=1.900 ac 61.58% Impervious Runoff Depth=2.55"

Tc=7.0 min CN=84 Runoff=7.45 cfs 0.403 af

Reach EX: Inflow=7.45 cfs 0.403 af Outflow=7.45 cfs 0.403 af

> Total Runoff Area = 1.900 ac Runoff Volume = 0.403 af Average Runoff Depth = 2.55" 38.42% Pervious = 0.730 ac 61.58% Impervious = 1.170 ac

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# **Summary for Subcatchment V-DA1:**

[49] Hint: Tc<2dt may require smaller dt

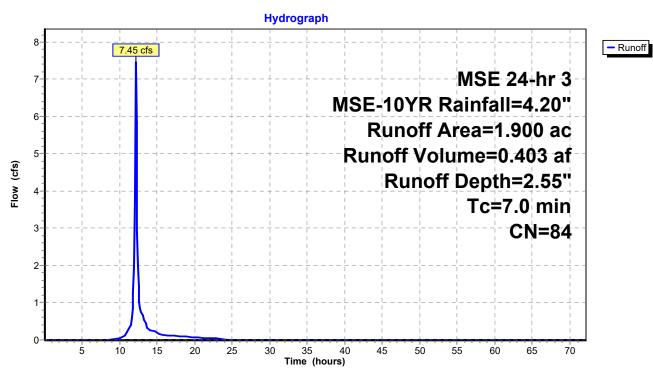
Runoff = 7.45 cfs @ 12.13 hrs, Volume= 0.403 af, Depth= 2.55"

Routed to Reach EX:

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.01-72.01 hrs, dt= 0.10 hrs MSE 24-hr 3 MSE-10YR Rainfall=4.20"

|                               | Area                                   | (ac) | CN  | Desc    | cription  |            |               |
|-------------------------------|----------------------------------------|------|-----|---------|-----------|------------|---------------|
| 1.170 98 Paved parking, HSG B |                                        |      |     |         |           |            |               |
|                               | 0.730 61 >75% Grass cover, Good, HSG B |      |     |         |           |            | I, HSG B      |
| 1.900 84 Weighted Average     |                                        |      |     |         |           |            |               |
| 0.730 61 38.42% Pervious Area |                                        |      |     |         |           |            |               |
|                               | 1.                                     | 170  | 98  | 61.5    | 8% Imperv | /ious Area |               |
|                               | _                                      |      |     |         |           | _          |               |
|                               | Tc                                     | Leng | yth | Slope   | Velocity  | Capacity   | Description   |
|                               | (min)                                  | (fee | et) | (ft/ft) | (ft/sec)  | (cfs)      |               |
|                               | 7.0                                    |      |     |         |           |            | Direct Entry, |

#### **Subcatchment V-DA1:**



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# **Summary for Reach EX:**

[40] Hint: Not Described (Outflow=Inflow)

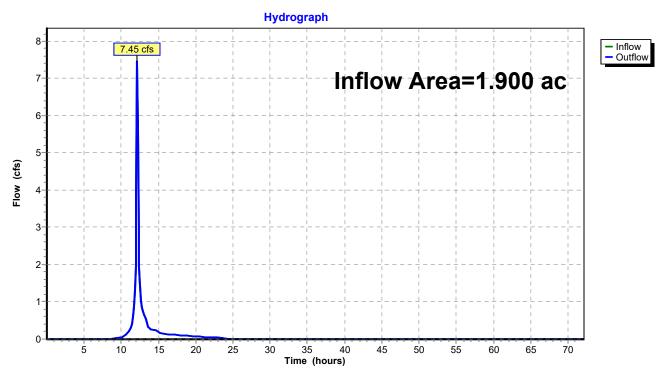
Inflow Area = 1.900 ac, 61.58% Impervious, Inflow Depth = 2.55" for MSE-10YR event

Inflow = 7.45 cfs @ 12.13 hrs, Volume= 0.403 af

Outflow = 7.45 cfs @ 12.13 hrs, Volume= 0.403 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.01-72.01 hrs, dt= 0.10 hrs / 3

#### Reach EX:



MSE 24-hr 3 MSE-2YR Rainfall=2.81"

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Time span=0.01-72.00 hrs, dt=0.10 hrs, 721 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

SubcatchmentV-DA1: Runoff Area=1.900 ac 61.58% Impervious Runoff Depth=1.36"

Tc=7.0 min CN=84 Runoff=3.99 cfs 0.216 af

Reach EX:

Inflow=3.99 cfs 0.216 af
Outflow=3.99 cfs 0.216 af

Total Runoff Area = 1.900 ac Runoff Volume = 0.216 af Average Runoff Depth = 1.36" 38.42% Pervious = 0.730 ac 61.58% Impervious = 1.170 ac

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# **Summary for Subcatchment V-DA1:**

[49] Hint: Tc<2dt may require smaller dt

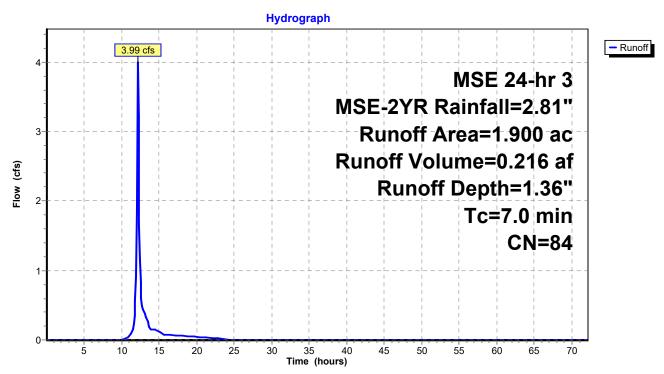
3.99 cfs @ 12.13 hrs, Volume= 0.216 af, Depth= 1.36" Runoff

Routed to Reach EX:

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.01-72.01 hrs, dt= 0.10 hrs MSE 24-hr 3 MSE-2YR Rainfall=2.81"

|                               | Area                                   | (ac) | CN  | Desc    | cription   |           |               |
|-------------------------------|----------------------------------------|------|-----|---------|------------|-----------|---------------|
| 1.170 98 Paved parking, HSG B |                                        |      |     |         |            |           |               |
|                               | 0.730 61 >75% Grass cover, Good, HSG B |      |     |         |            |           | d, HSG B      |
|                               | 1.                                     | 900  | 84  | Weig    | ghted Aver | age       |               |
| 0.730 61 38.42% Pervious Area |                                        |      |     |         |            |           |               |
|                               | 1.                                     | 170  | 98  | 61.5    | 8% Imper\  | ious Area |               |
|                               | _                                      |      |     |         |            |           |               |
|                               | Tc                                     | Leng | ,   | Slope   | Velocity   | Capacity  | Description   |
|                               | (min)                                  | (fe  | et) | (ft/ft) | (ft/sec)   | (cfs)     |               |
|                               | 7.0                                    |      |     |         |            |           | Direct Entry, |

#### **Subcatchment V-DA1:**



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# **Summary for Reach EX:**

[40] Hint: Not Described (Outflow=Inflow)

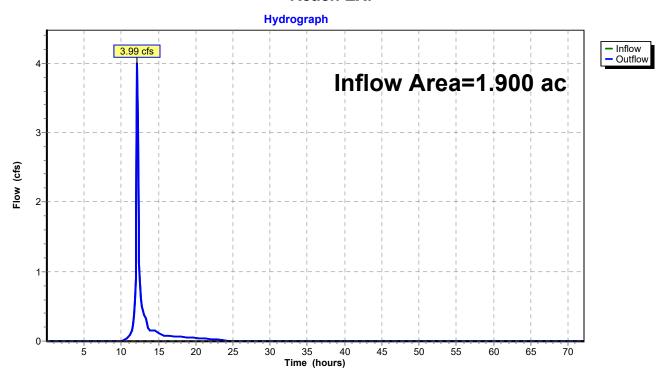
Inflow Area = 1.900 ac, 61.58% Impervious, Inflow Depth = 1.36" for MSE-2YR event

Inflow = 3.99 cfs @ 12.13 hrs, Volume= 0.216 af

Outflow = 3.99 cfs @ 12.13 hrs, Volume= 0.216 af, Atten= 0%, Lag= 0.0 min

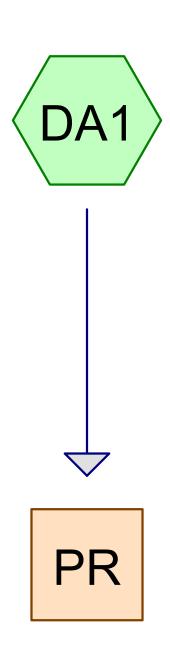
Routing by Dyn-Stor-Ind method, Time Span= 0.01-72.01 hrs, dt= 0.10 hrs / 3

#### Reach EX:





# PROPOSED CONDITIONS HYDROCAD MODEL











# Rainfall Events Listing (selected events)

| Event# | Event      | Storm Type | Curve | Mode    | Duration | B/B | Depth    | AMC |
|--------|------------|------------|-------|---------|----------|-----|----------|-----|
|        | Name       |            |       |         | (hours)  |     | (inches) |     |
| 1      | MSE - 1 YR | MSE 24-hr  | 3     | Default | 24.00    | 1   | 2.45     | 2   |
| 2      | MSE-100YR  | MSE 24-hr  | 3     | Default | 24.00    | 1   | 7.45     | 2   |
| 3      | MSE-10YR   | MSE 24-hr  | 3     | Default | 24.00    | 1   | 4.20     | 2   |
| 4      | MSE-2YR    | MSE 24-hr  | 3     | Default | 24.00    | 1   | 2.81     | 2   |

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# **Area Listing (selected nodes)**

| Area    | CN | Description                         |
|---------|----|-------------------------------------|
| (acres) |    | (subcatchment-numbers)              |
| 0.780   | 61 | >75% Grass cover, Good, HSG B (DA1) |
| 1.120   | 98 | Paved parking, HSG B (DA1)          |
| 1.900   | 83 | TOTAL AREA                          |

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# Soil Listing (selected nodes)

| Area    | Soil  | Subcatchment |
|---------|-------|--------------|
| (acres) | Group | Numbers      |
| 0.000   | HSG A |              |
| 1.900   | HSG B | DA1          |
| 0.000   | HSG C |              |
| 0.000   | HSG D |              |
| 0.000   | Other |              |
| 1.900   |       | TOTAL AREA   |

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# **Ground Covers (selected nodes)**

| HSG-A       | HSG-B   | HSG-C   | HSG-D   | Other   | Total   | Ground                 | Subcatchment |
|-------------|---------|---------|---------|---------|---------|------------------------|--------------|
| <br>(acres) | (acres) | (acres) | (acres) | (acres) | (acres) | Cover                  | Numbers      |
| <br>0.000   | 0.780   | 0.000   | 0.000   | 0.000   | 0.780   | >75% Grass cover, Good | DA1          |
| 0.000       | 1.120   | 0.000   | 0.000   | 0.000   | 1.120   | Paved parking          | DA1          |
| 0.000       | 1.900   | 0.000   | 0.000   | 0.000   | 1.900   | TOTAL AREA             |              |

MSE 24-hr 3 MSE - 1 YR Rainfall=2.45"

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Time span=0.01-72.00 hrs, dt=0.10 hrs, 721 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

SubcatchmentDA1: Runoff Area=1.900 ac 58.95% Impervious Runoff Depth=1.02"

Tc=7.0 min CN=83 Runoff=2.96 cfs 0.161 af

Reach PR: Inflow=2.96 cfs 0.161 af
Outflow=2.96 cfs 0.161 af

Total Runoff Area = 1.900 ac Runoff Volume = 0.161 af Average Runoff Depth = 1.02" 41.05% Pervious = 0.780 ac 58.95% Impervious = 1.120 ac

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# **Summary for Subcatchment DA1:**

[49] Hint: Tc<2dt may require smaller dt

2.96 cfs @ 12.14 hrs, Volume= 0.161 af, Depth= 1.02" Runoff

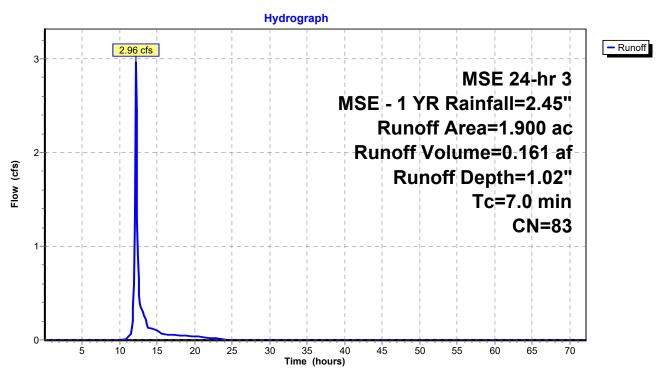
Routed to Reach PR:

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.01-72.01 hrs, dt= 0.10 hrs MSE 24-hr 3 MSE - 1 YR Rainfall=2.45"

| _                               | Area  | (ac)                          | CN  | Desc    | Description                   |           |               |  |  |
|---------------------------------|-------|-------------------------------|-----|---------|-------------------------------|-----------|---------------|--|--|
|                                 | 1.    | 120                           | 98  | Pave    | Paved parking, HSG B          |           |               |  |  |
| _                               | 0.    | 780                           | 61  | >75%    | >75% Grass cover, Good, HSG B |           |               |  |  |
|                                 | 1.    | 900 83 Weighted Average       |     |         |                               |           |               |  |  |
|                                 | 0.    | 0.780 61 41.05% Pervious Area |     |         |                               |           |               |  |  |
| 1.120 98 58.95% Impervious Area |       |                               |     | 58.9    | 5% Imperv                     | ious Area |               |  |  |
|                                 | _     |                               |     |         |                               |           |               |  |  |
|                                 | Tc    | Leng                          | ,   | Slope   | Velocity                      | Capacity  | Description   |  |  |
| _                               | (min) | (fee                          | et) | (ft/ft) | (ft/sec)                      | (cfs)     |               |  |  |
|                                 | 7.0   |                               |     |         |                               |           | Direct Entry, |  |  |

**Direct Entry**,

#### **Subcatchment DA1:**



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# **Summary for Reach PR:**

[40] Hint: Not Described (Outflow=Inflow)

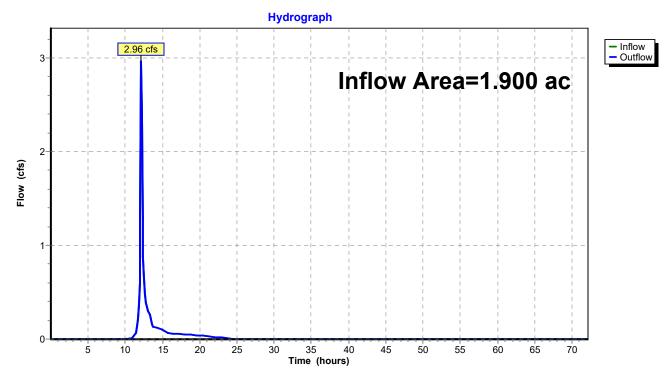
Inflow Area = 1.900 ac, 58.95% Impervious, Inflow Depth = 1.02" for MSE - 1 YR event

Inflow = 2.96 cfs @ 12.14 hrs, Volume= 0.161 af

Outflow = 2.96 cfs @ 12.14 hrs, Volume= 0.161 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.01-72.01 hrs, dt= 0.10 hrs / 3

#### Reach PR:



MSE 24-hr 3 MSE-100YR Rainfall=7.45"

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Time span=0.01-72.00 hrs, dt=0.10 hrs, 721 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

SubcatchmentDA1: Runoff Area=1.900 ac 58.95% Impervious Runoff Depth=5.45"

Tc=7.0 min CN=83 Runoff=15.57 cfs 0.864 af

**Reach PR:**Inflow=15.57 cfs 0.864 af
Outflow=15.57 cfs 0.864 af

Total Runoff Area = 1.900 ac Runoff Volume = 0.864 af Average Runoff Depth = 5.45" 41.05% Pervious = 0.780 ac 58.95% Impervious = 1.120 ac

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# **Summary for Subcatchment DA1:**

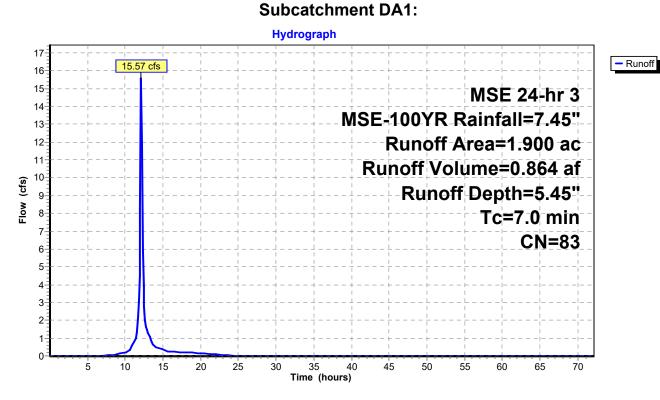
[49] Hint: Tc<2dt may require smaller dt

Runoff = 15.57 cfs @ 12.13 hrs, Volume= 0.864 af, Depth= 5.45"

Routed to Reach PR:

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.01-72.01 hrs, dt= 0.10 hrs MSE 24-hr 3 MSE-100YR Rainfall=7.45"

| Area                            | (ac)                          | CN | Desc             | Description                   |                   |               |  |  |
|---------------------------------|-------------------------------|----|------------------|-------------------------------|-------------------|---------------|--|--|
| 1                               | .120                          | 98 | Pave             | Paved parking, HSG B          |                   |               |  |  |
| 0                               | .780                          | 61 | >75%             | >75% Grass cover, Good, HSG B |                   |               |  |  |
| 1                               | 1.900 83 Weighted Average     |    |                  |                               |                   |               |  |  |
| 0                               | 0.780 61 41.05% Pervious Area |    |                  |                               |                   |               |  |  |
| 1.120 98 58.95% Impervious Area |                               |    |                  | 5% Imperv                     | ious Area         |               |  |  |
| Tc<br>(min)                     | Leng<br>(fee                  | •  | Slope<br>(ft/ft) | Velocity<br>(ft/sec)          | Capacity<br>(cfs) | Description   |  |  |
| 7.0                             |                               |    |                  |                               |                   | Direct Entry, |  |  |



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## **Summary for Reach PR:**

[40] Hint: Not Described (Outflow=Inflow)

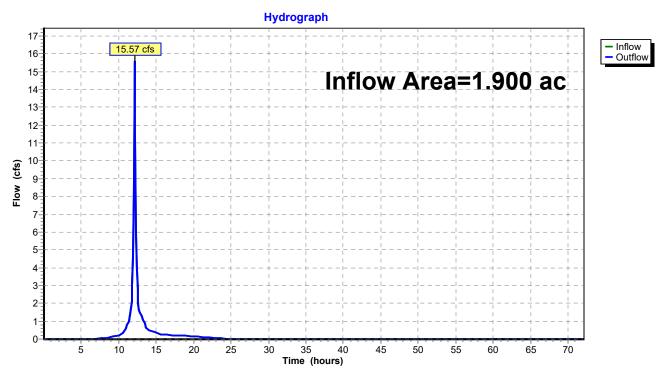
Inflow Area = 1.900 ac, 58.95% Impervious, Inflow Depth = 5.45" for MSE-100YR event

Inflow = 15.57 cfs @ 12.13 hrs, Volume= 0.864 af

Outflow = 15.57 cfs @ 12.13 hrs, Volume= 0.864 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.01-72.01 hrs, dt= 0.10 hrs / 3

#### Reach PR:



MSE 24-hr 3 MSE-10YR Rainfall=4.20"

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Time span=0.01-72.00 hrs, dt=0.10 hrs, 721 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

SubcatchmentDA1: Runoff Area=1.900 ac 58.95% Impervious Runoff Depth=2.46"

Tc=7.0 min CN=83 Runoff=7.21 cfs 0.390 af

Reach PR: Inflow=7.21 cfs 0.390 af Outflow=7.21 cfs 0.390 af

Total Runoff Area = 1.900 ac Runoff Volume = 0.390 af Average Runoff Depth = 2.46" 41.05% Pervious = 0.780 ac 58.95% Impervious = 1.120 ac HydroCAD® 10.20-2b s/n 02344 © 2021 HydroCAD Software Solutions LLC

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## **Summary for Subcatchment DA1:**

[49] Hint: Tc<2dt may require smaller dt

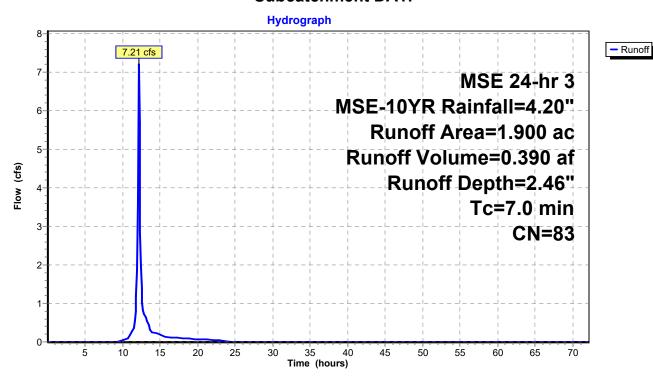
Runoff = 7.21 cfs @ 12.13 hrs, Volume= 0.390 af, Depth= 2.46"

Routed to Reach PR:

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.01-72.01 hrs, dt= 0.10 hrs MSE 24-hr 3 MSE-10YR Rainfall=4.20"

|                                        | Area                          | (ac) | CN  | Desc    | cription  |           |               |
|----------------------------------------|-------------------------------|------|-----|---------|-----------|-----------|---------------|
|                                        | 1.120 98 Paved parking, HSG B |      |     |         |           | HSG B     |               |
| 0.780 61 >75% Grass cover, Good, HSG B |                               |      |     |         |           | d, HSG B  |               |
|                                        | 1.                            | 900  | 83  | Weig    | hted Aver | age       |               |
|                                        | 0.                            | 780  | 61  | 41.0    | 5% Pervio | us Area   |               |
|                                        | 1.                            | 120  | 98  | 58.9    | 5% Imperv | ious Area |               |
|                                        |                               |      |     |         |           |           |               |
|                                        | Тс                            | Leng | th  | Slope   | Velocity  | Capacity  | Description   |
|                                        | (min)                         | (fee | et) | (ft/ft) | (ft/sec)  | (cfs)     |               |
|                                        | 7.0                           |      |     |         |           |           | Direct Entry, |

#### **Subcatchment DA1:**



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## **Summary for Reach PR:**

[40] Hint: Not Described (Outflow=Inflow)

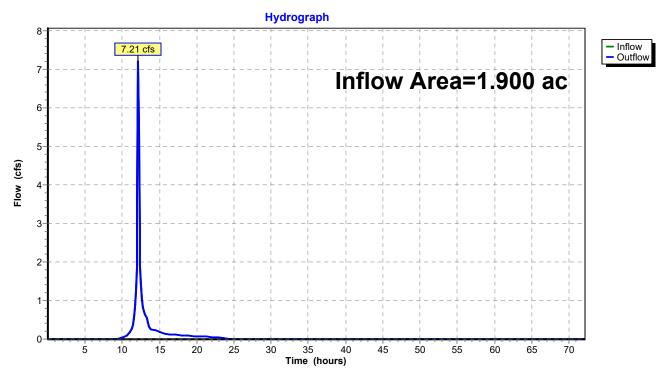
Inflow Area = 1.900 ac, 58.95% Impervious, Inflow Depth = 2.46" for MSE-10YR event

Inflow = 7.21 cfs @ 12.13 hrs, Volume= 0.390 af

Outflow = 7.21 cfs @ 12.13 hrs, Volume= 0.390 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.01-72.01 hrs, dt= 0.10 hrs / 3

#### Reach PR:



### Caribou Cabin - Falcon Heights, MN

MSE 24-hr 3 MSE-2YR Rainfall=2.81"

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Time span=0.01-72.00 hrs, dt=0.10 hrs, 721 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

SubcatchmentDA1: Runoff Area=1.900 ac 58.95% Impervious Runoff Depth=1.30"

Tc=7.0 min CN=83 Runoff=3.79 cfs 0.205 af

Reach PR: Inflow=3.79 cfs 0.205 af Outflow=3.79 cfs 0.205 af

Total Runoff Area = 1.900 ac Runoff Volume = 0.205 af Average Runoff Depth = 1.30" 41.05% Pervious = 0.780 ac 58.95% Impervious = 1.120 ac

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## **Summary for Subcatchment DA1:**

[49] Hint: Tc<2dt may require smaller dt

3.79 cfs @ 12.14 hrs, Volume= 0.205 af, Depth= 1.30" Runoff

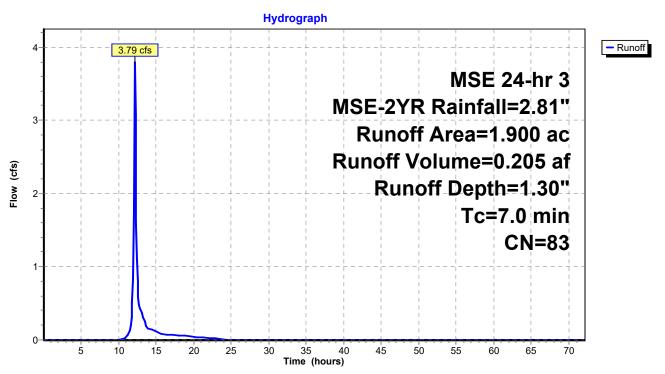
Routed to Reach PR:

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.01-72.01 hrs, dt= 0.10 hrs MSE 24-hr 3 MSE-2YR Rainfall=2.81"

|                        | Area                          | (ac) | CN  | Desc                   | cription             |            |               |  |  |  |
|------------------------|-------------------------------|------|-----|------------------------|----------------------|------------|---------------|--|--|--|
| 1.120 98 Paved parking |                               |      |     | Pave                   | ed parking           | , HSG B    |               |  |  |  |
|                        | 0.780 61 >75% Grass cover, Go |      |     |                        | % Grass co           | over, Good | d, HSG B      |  |  |  |
|                        | 1.                            | 900  | 83  | Weig                   | ghted Aver           | age        |               |  |  |  |
|                        | 0.780 61                      |      | 61  | 41.0                   | 41.05% Pervious Area |            |               |  |  |  |
| 1.120                  |                               |      | 98  | 58.95% Impervious Area |                      |            |               |  |  |  |
|                        |                               |      |     |                        |                      |            |               |  |  |  |
|                        | Тс                            | Leng | •   | Slope                  | Velocity             | Capacity   | Description   |  |  |  |
|                        | (min)                         | (fee | et) | (ft/ft)                | (ft/sec)             | (cfs)      |               |  |  |  |
|                        | 7.0                           |      |     |                        |                      |            | Direct Entry, |  |  |  |

Direct Entry,

#### Subcatchment DA1:



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## **Summary for Reach PR:**

[40] Hint: Not Described (Outflow=Inflow)

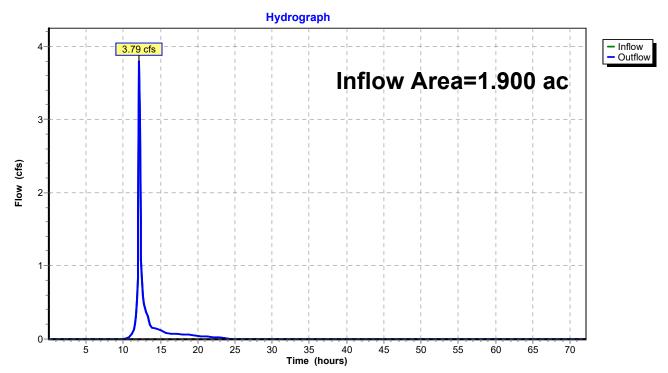
Inflow Area = 1.900 ac, 58.95% Impervious, Inflow Depth = 1.30" for MSE-2YR event

Inflow = 3.79 cfs @ 12.14 hrs, Volume= 0.205 af

Outflow = 3.79 cfs @ 12.14 hrs, Volume= 0.205 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.01-72.01 hrs, dt= 0.10 hrs / 3

#### Reach PR:



CITY OF FALCON HEIGHTS, MINNESOTA

PUBLIC HEARING NOTICE

NOTICE IS HEREBY GIVEN, that the Planning Commission at its regular meeting at

7:00 p.m. on March 28, 2023, in the City Hall Council Chambers, 2077 W. Larpenteur Ave, will

hold a public hearing to consider the application of Buhl Larpenteur West LLC to amend City

Code to allow drive-through facilities for eating establishments as part of a Planned Unit

Development (PUD), and to amend the existing Amber Union PUD.

The application and other planning documents will be available upon request no later

than March 24, 2023. It will also be available on the City's website at www.falconheights.org. If

you have any questions regarding the public hearing, please contact Hannah Lynch, Community

Development Coordinator at (651) 792-7613 or hannah.b.lynch@falconheights.org.

Dated: March 16, 2023

Hannah B. Lynch, Community Development Coordinator

City of Falcon Heights, Minnesota

## CITY of FALCON HEIGHTS PUBLIC HEARING NOTICE

Notice is hereby given that the Planning Commission at its regular meeting at 7:00 p.m. on March 28, 2023, in the City Hall Council Chambers, 2077 W. Larpenteur Ave, will hold a public hearing to consider the application of Buhl Larpenteur West LLC to amend City Code to allow drive-through facilities for eating establishments as part of a Planned Unit Development (PUD), and to amend the existing Amber Union PUD.

The application and other planning documents will be available upon request no later than March 24, 2023. It will also be available on the City's website. If you have any questions regarding the public hearing, please contact Hannah Lynch, Community Development Coordinator at (651) 792-7613 or hannah.b.lynch@falconheights.org.

To be published on March 16 and 18, 2023 in the Pioneer Press.

## AFFIDAVIT OF PUBLICATION STATE OF MINNESOTA **COUNTY OF RAMSEY**

Kayla Tsuchiya, being duly sworn on oath, says: that she is, and during all times herein state has been, Inside Sales Representative of Northwest Publication, LLC., Publisher of the newspaper known as the Saint Paul Pioneer Press, a newspaper of General circulation within the City of St. Paul and the surrounding Counties of Minnesota and Wisconsin including Ramsey and Kanabec.

That the notice hereto attached was cut from the columns of said newspaper and was printed and published therein on the following date(s): Thursday, March 16, 2023 Saturday, March 18, 2023

Newspaper Ref./AD Number#: 71500777

Client/Advertiser: City of Falcon Heights

Kayla Tsuchiya (Mar 20, 2023 12:55 CDT)

**AFFIANT SIGNATURE** 

Subscribed and sworn to before me this 20th day of March, 2023

True Lee

**NOTARY PUBLIC** 

Ramsey County, MN

My commission expires January 31, 2025

TRUE LEE
NOTARY PUBLIC
STATE OF MINNESOTA
MY COMMISSION EXPIRES
JANUARY 31, 2025

CITY of FALCON HEIGHTS PUBLIC HEARING

Notice is hereby given that the Planning Commission at its regular meeting at 7:00 p.m. on March 28, 2023, in the City Hall Council Chambers, 2077 W. Larpenteur Ave, will hold a public hearing to consider the application of Buhl Larpenteur West LLC to amend City Code to allow drive-through facilities for eating establishments as part of a Planned Unit Development (PUD), and to amend the existing Amber Union PUD.

The application and other planning documents will be available upon request no later than March 24, 2023. It will also be available on the City's website. If you have any questions regarding the public hearing, please contact Hannah Lynch, Community Development Coordinator at (651) 792-7613 or hannah.b.lynch@talconheights.org.

# CITY OF FALCON HEIGHTS

THE CITY THAT SOARS!

P: 651-792-7600 F: 651-792-7610

March 15, 2023

#### Dear Property Owner:

You are cordially invited to a public hearing before the Falcon Heights Planning Commission for the purpose of taking public comment regarding the amendment of City Code to allow drive-through facilities for eating establishments as part of a Planned Unit Development (PUD), and to amend the existing Amber Union PUD.

Buhl Larpenteur West LLC has submitted an application to amend City Code to allow drive-through facilities for eating establishments as part of PUDs, and to amend the existing Amber Union PUD. Specifically, they are proposing to develop a stand alone 630 SF building on a total 1.78 acre site with a drive-through facility. The location of this development is PIN 212923110029, to the west of Amber Union apartments with a driveway along Larpenteur Avenue West.

The Planning Commission will meet and hold a Public Hearing on these matters on Tuesday, March 28, 2023 at 7:00 PM at Falcon Heights City Hall, 2077 Larpenteur Avenue West, Falcon Heights, MN 55113.

During the meeting on Tuesday, March 28, city staff will present information regarding the potential amendments to City Code and PUD. The Planning Commission will also hear public comment and discuss before making a recommendation to City Council.

The application and other planning documents will be available upon request no later than March 24, 2023. It will be also be available on the City's website. If you have questions or comments before the hearing, you may contact City Hall at 651-792-7600 or myself directly at hannah.b.lynch@falconheights.org.

Sincerely,

Hannah B. Lynch City of Falcon Heights

Community Development Coordinator

Hannah B. Tynch

## CITY OF FALCON HEIGHTS

## THE CITY THAT SOARS!

P: 651-792-7600 F: 651-792-7610

March 15, 2023

#### Dear Resident:

You are cordially invited to a public hearing before the Falcon Heights Planning Commission for the purpose of taking public comment regarding the amendment of City Code to allow drive-through facilities for eating establishments as part of a Planned Unit Development (PUD), and to amend the existing Amber Union PUD.

Buhl Larpenteur West LLC has submitted an application to amend City Code to allow drive-through facilities for eating establishments as part of PUDs, and to amend the existing Amber Union PUD. Specifically, they are proposing to develop a stand alone 630 SF building on a total 1.78 acre site with a drive-through facility. The location of this development is PIN 212923110029, to the west of Amber Union apartments with a driveway along Larpenteur Avenue West.

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The application and other planning documents will be available upon request no later than March 24, 2023. It will be also be available on the City's website. If you have questions or comments before the hearing, you may contact City Hall at 651-792-7600 or myself directly at hannah.b.lynch@falconheights.org.

Sincerely,

Hannah B. Lynch City of Falcon Heights

Community Development Coordinator

Hannah B. Tynch

#### **Comments from Adrian Neis, Fire Marshal:**

I did not see any major concerns from the Fire side on the site.

From the traffic side particularly during the fair and emergency access getting in would be my main concern.

#### **Comments from Stephanie Smith, City Engineer:**

We have reviewed the proposed plans for the project noted above and offer the following comments with regard to the project's impact on City services and/or infrastructure requirements:

- 1. The stormwater modeling submitted demonstrates rate reduction, therefore meets the stormwater management requirements for rates.
- 2. Applicant shall show the location of the concrete washout on erosion control plan.
- 3. Water would be provided by St. Paul Regional Water (SPRW) and is available on site for connection. SPRW detail plates shall be used for water utilities.
- 4. Applicant shall coordinate with SPRW for installation of watermain and services and shall meet their requirements.
- 5. Permits for installation of the watermain from the appropriate regulatory agencies will be required, including the SPRW, MPCA and the Dept. of Health.
- 6. Sanitary sewer is available in Larpenteur Avenue for connection. Applicant shall revise plans to include removals and restoration of disturbed right-of-way.
- 7. An approximately 180-foot long retaining wall is proposed along the western side of the parcel, such that the new site will sit higher than Underwood Street. If retaining wall exceeds 4-feet in height at any location, the wall plans shall be signed by a structural engineer licensed in the state of Minnesota.
- 8. Ramsey County right-of-way permit is required for work in the Larpenteur Avenue right-of-way.
- 9. As this parcel has access onto Larpenteur Avenue, the City has submitted the plans and traffic study to Ramsey County for review. The applicant shall meet Ramsey County requirements.
- 10. After site stabilization, the adjacent underground stormwater storage applicant shall inspect and clean, as needed, to remove any sediment that escaped the site during construction.
- 11. Applicant shall dedicate drainage and utility easements over the private watermain.
- 12. Applicant shall dedicate perimeter drainage and utility easements for PUD subject properties, to consist of 5-foot side-yard easements and 10-foot easements adjacent to public right-of-way.
- 13. Applicant shall revise plans to include a pedestrian connection from the internal walkway to Larpenteur Avenue's sidewalk.

Additionally, we have the following observations on drainage within their site. These would not impact City facilities.

- The proposed bituminous swale is going to dead end at a curb, which is ever so slightly lower than where the water needs to get to so it overflows. Staff would recommend valley gutter and allowing more tolerance for construction, since it will either drain better, or worse if the contractor doesn't build it perfectly.
- The general drainage pattern is likely to create icy conditions within the site during the fall, winter, and spring as water needs to overland flow to the valley gutter, south towards the drive thru, and then cross the drive thru lane to go out of the parcel. Note, maintenance of this condition shall be the responsibility of the property owner.

#### Sec. 113-35 - Amendments

- (a) *Initiation of amendments*. An amendment to this chapter may be initiated by the city council, the planning commission, or by petition of a property owner whose property would be affected by the proposed amendment.
- (b) Application for amendment. All applications for amendments initiated by a property owner shall be filed with the zoning administrator on an official application form. The application shall be accompanied by a fee established by city council resolution and a cash escrow, in an amount determined by the zoning administrator, to reimburse the city for all out-of-pocket costs the city may incur in reviewing the application. When the amendment involves the changing of zoning district boundaries, the application shall be accompanied by an abstractor's certified property certificate listing the property owners within 350 feet of the boundaries of the property to which the amendment relates.
- (c) *Public hearing*. When a proposed amendment to this chapter has been properly initiated, the city clerk shall call a public hearing before the planning commission. A notice of the time, place, and purpose of the hearing shall be published in the city's official newspaper at least ten days prior to the hearing. When an amendment involves changes in district boundaries affecting an area of five acres or less, a similar notice shall be mailed at least ten days before the date of the hearing to each owner of affected property and property situated wholly or partly within 350 feet of the property to which the amendment relates. The failure to give mailed notice to individual property owners, or defects in the notice shall not invalidate the proceeding, provided a bona fide attempt to comply has been made. The planning commission shall conduct the hearing and make a recommendation to the city council.
- (d) Action by city council. The city council shall not act upon a proposed amendment until it has received the recommendation of the planning commission or until 60 days after the first regular planning commission meeting at which the proposed amendment was considered.
- (e) *Consistency with comprehensive plan*. No amendment to this chapter shall be adopted which is in conflict with the city's comprehensive plan.
- (f) *Time deadline; approval requirements*. Pursuant to Minn. Stats. § 15.99, an application for an amendment must be approved or denied within 60 days from the date a properly completed application is received by the city unless the time period is waived by the applicant or extended as provided by statute. Approval of an amendment shall require a majority vote of all the members of the city council. Amendments which change all or part of the existing classification of a zoning district from residential to either commercial or industrial require a two-thirds majority vote of all members of city council.

(Code 1993, § 9-15.05; Ord. No. 97-06, § 1, 9-24-1997)

**State Law reference** – Amendments, Minn. Stats. § 462.357, subds. 2 – 4.

#### ORDINANCE NO. 23-

### CITY OF FALCON HEIGHTS RAMSEY COUNTY, MINNESOTA

# AN ORDINANCE AMENDING CHAPTER 113 OF THE FALCON HEIGHTS CITY CODE CONCERNING DRIVE-THROUGH FACILITIES AND AMBER UNION PUD THE CITY COUNCIL OF FALCON HEIGHTS ORDAINS:

**SECTION 1.** Section 113-3 of the City Code of Falcon Heights, Minnesota, is hereby amended to read as follows (Deletions are shown with a strikethrough. Additions are underlined):

### Sec. 113-3 - Definitions

Drive-through facility means the use of land, buildings or structures, or parts thereof, to provide or dispense products or services, either wholly or in part, through an attendant or window or automated machine, to persons remaining in motorized vehicles that are in a designated stacking lane. A drive-through facility may be permitted only as an accessory use in combination with a bank of financial institution. A drive-through facility may be permitted as an accessory use in combination with a bank or financial institution. A drive-through facility for an eating establishment may be permitted only as part of a PUD. A drive-through facility does not include a vehicle washing facility, a vacuum cleaning station accessory to a vehicle washing facility, or an automobile/gasoline service station.

**SECTION 2.** Section 113-2-11 of the City Code of Falcon Heights, Minnesota, is hereby amended to read as follows (Deletions are shown with a strikethrough. Additions are underlined):

#### Sec. 113-211 – Amber Union planned unit development

- (a) Legal description. The legal description of this PUD is the North Half of the Northeast Quarter of the Northeast Quarter, in section 21, township 29, range 23, Ramsey County, Minnesota, except that part taken for Snelling and Larpenteur Avenues. The East 250 feet of the North 500 feet except the West 150 feet of the East 160 feet of the North 283 feet of the Northwest quarter of the Northeast quarter of the Northeast quarter of Section 21, Township 29, Range 23. The West 150 feet of the Northeast quarter of Section 21, Township 29, Range 23, West of the Fourth Principal Meridian.
- (b) *Purpose*. The purpose of the Amber Union planned unit development is to provide for the mixed uses of multi-family apartments and a retail space.
- (c) *Permitted uses and zoning regulations*. The R5-M mixed use high density residential district regulations shall apply to the property subject to the following modifications:
  - (1) Permitted uses: One principal structure consisting of 111,640 square feet and 89 apartment units and one principal structure consisting of 59,195 square feet, 39

apartment units, and one retail space. <u>One eating establishment consisting of 630 square feet and an accessory drive-through facility, including all restrictions as outlined in section 113-252, except 113-252(1). Speaker for drive-through facility must be located no more than 100' from residential used property.</u>

- (2) No conditional uses.
- (3) No interim uses.
- (4) Setbacks as depicted in the site plan dated September 23, 2019 prepared by Kimley Horn and Mohagen Hansen.
- (d) Parking. Vehicle parking shall be as follows:
  - (1) 108 parking stalls as depicted on the Site Plan dated September 23, 2019 prepared by Kimley Horn.
  - (2) 41 parking stalls as depicted on Exhibit A (Parking Easement) dated [inset date] prepared by Buhl GTA, recorded at Ramsey County as document number [insert number]. in the Easement Agreement (Parking and Ingress/Egress) by and between Buhl Larpenteur West, LLC and Buhl GTA, LP, dated July 1, 2021, recorded on June 30, 2021 in the Ramsey County Office of the Registrar of Titles as document number T02704513.
  - (3) 10 parking stalls as depicted on Exhibit B dated (Encroachment Agreement) [insert date] prepared by the City of Falcon Heights, recorded at Ramsey County as document number [insert number]. in the Encroachment, Use and Maintenance Agreement (Parking Improvements) by, between and among the City of Falcon Heights, Buhl GTA, LP, Buhl GTA GP, LLC and Peter Deanovic, dated June 24. 2021, recorded on June 30, 2021 in the Ramsey County Office of the Registrar of Titles as document number T02704512.
  - (4) At no time shall there be less than 149 parking stalls dedicated to the permitted uses of the Amber Union Planned Unit Development. A different arrangement of parking is subject to approval by the city administrator.
- (e) Development plan. The PUD must be maintained in accordance with the following development plan, which is on file with the city and which is incorporated herein by reference.
  - (1) The following plans prepared by Buhl GTA, LP and their contractors/partners with up to five percent variance as approved by the city administrator:
    - a. Site development plans, dated September 23, 2019 prepared by Kimley Horn and Mohagen Hansen including:
      - 1. Demo plan.
      - 2. Erosion and sediment control plan.
      - 3. Site plan.
      - 4. Grading plan.
      - 5. Storm sewer plan.

- 6. Utility plan.
- 7. Security plan.
- b. Security Plan, dated May 6, 2019 prepared by Kimley Horn and Mohagen Hansen
- c. Landscaping plans, dated July 15, 2019 prepared by Damon Farber.
  - 1. Tree protection plan.
  - 2. Landscape plan.
- d. Floor plans, dated September 23, 2019 prepared by Mohagen Hansen.
- e. Site development plans for Caribou Cabin Falcon Heights, dated March 6, 2023 prepared by Kimley Horn and Mohagen Hansen including:
  - 1. Demo plan.
  - 2. Erosion and sediment control plan, phases 1 and 2, and details.
  - 3. Site dimension plan.
  - 4. Grading and drainage plan.
  - 5. Utility plan.
  - 6. Construction details.
  - 7. Landscape plan and details.

**SECTION 3.** <u>AMENDMENT</u>. Section 113-252 of the City Code of Falcon Heights, Minnesota, is hereby amended to read as follows (Deletions are shown with a strikethrough. Additions are underlined):

## Sec. 113-252 – Drive-through facilities

Drive-through facilities are prohibited except when specifically allowed by a conditional use permit in a zoning district, <u>or PUD</u>. When allowed, all drive-through facilities must comply with the following requirements:

- (1) The drive-through facility, service window and speakers must be located at least 100 feet from a residential zoned or used property and must be visually screened from adjoining residential property.
- (2) The entrance and exit drive lanes to the drive-through facility must be at least 75 feet from a street intersection.
- (3) The lot on which the drive-through facility is located must be at least 35,000 square feet in area.
- (4) The minimum on-site stacking distance available for the drive-through must be 180 feet in length.

- (5) Drive-through facilities may only be operated between the hours of 7:00 a.m. 6:00 a.m. and 8:00 p.m.
- (6) No speaker noise may be audible from adjacent residential property.

Against

**MEYER** 

WEHYEE

WASSENBERG

(7) A traffic study must be completed documenting that the drive-through facility will not create traffic problems.

SECTION 4. EFFECTIVE DATE. This ordinance shall be effective upon its passage and a summary published in the official newspaper.

ADOPTED this \_\_\_ day of \_\_\_\_\_\_, 2023, by the City Council of the City of Falcon Heights, Minnesota.

Moved By:

Approved by:

Randall C. Gustafson Mayor

GUSTAFSON \_\_\_ In Favor Attested by:

LEEHY

Jack Linehan

City Administrator



## ITEM FOR DISCUSSION

| Meeting Date | March 28, 2023                    |
|--------------|-----------------------------------|
| Agenda Item  | F-1                               |
| Attachment   | None.                             |
| Submitted By | Hannah Lynch,                     |
|              | Community Development Coordinator |

| Item        | Comprehensive Plan Update                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |  |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
| Description | At the February 28, 2023 Planning Commission meeting, a subcommittee was formed to begin looking at the 2040 Comprehensive Plan and assessing the current status of goals and implementation. As the document has many different goals and policies, the subcommittee's task has been to prioritize topics for review with the Planning Commission.                                                                                                                                                                                                                 |  |  |  |  |
|             | The subcommittee met on March 21 to discuss the best way to move forward with this. At this meeting, it was determined the most important sections to begin looking at would be the Larpenteur and Snelling Corridors, establishing more of a connection between neighborhoods, and pedestrian safety. The subcommittee believes the next logical step is to hold a workshop with all members of the Planning Commission to review these items more in depth.                                                                                                       |  |  |  |  |
|             | From the 2040 Comprehensive Plan: The Larpenteur Avenue and Snelling Avenue corridors have long functioned as divisions within Falcon Heights, separating the city north from south, east from west. The primary function of these highways is to conduct motorized traffic as quickly as possible from one end of the City to the other. Larpenteur and Snelling have imposed barriers to pedestrian traffic and an impediment to retail cohesiveness, separating neighborhoods and encouraging residents to orient their lives outward toward surrounding cities. |  |  |  |  |
|             | <ol> <li>Larpenteur Corridor Goals</li> <li>To encourage the evolution of the Snelling/Larpenteur hub, especially between Arona Street and Cleveland Avenue, into an extended "city center" connecting, rather than dividing, the community.</li> <li>To encourage the evolution of the Cleveland/Larpenteur hub into a well-designed civic, cultural and recreational precinct and an attractive gateway to both the City of Falcon Heights and the University of Minnesota.</li> </ol>                                                                            |  |  |  |  |
|             | Larpenteur Corridor Policies                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |

| Budget Impact | <ol> <li>Conduct in-depth corridor studies of both Larpenteur and Snelling Avenues in Falcon heights to determine the design priorities for these arteries and to determine the best ways to meet the City's objectives.</li> <li>Establish mixed-use overlay districts to encourage infill and redevelopment of existing commercial and multi-family properties along the Larpenteur corridor. Exact location of these districts would be determined by the results of the corridor studies; this plan will be amended to recognize those results.</li> <li>Allow flexibility in development standards on Larpenteur to recognize the challenge of redeveloping small properties on a scale similar to surrounding residential development</li> <li>Require pedestrian and local traffic connectivity between new development and surrounding portions of the City. Discourage plans that restrict vehicular access to new developments to Larpenteur Avenue only.</li> <li>Require appropriate transitional zones of open space between existing single-family neighborhoods and any new development of institutional or agricultural land.</li> <li>Employ the health impact assessment and other tools to ensure that new development along Larpenteur Avenue is safe, attractive and walkable and enhances the quality of life for residents of the City.</li> <li>Work with the University of Minnesota to improve the streetscape along Larpenteur west of Fairview.</li> <li>Make sure all development follows the City's sustainability and resiliency goals.</li> <li>The goal of this workshop will be to develop a set of priorities for a study of the Larpenteur and Snelling Corridors, community engagement, and look at potential updates to the plan and/or City Code to move these goals forward.</li> <li>None.</li> </ol> |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Attachment(s) | None.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Action(s)     | Staff requests the Planning Commission schedule a workshop to discuss and                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Requested     | review the Larpenteur and Snelling Corridor goals and policies of the 2040 Comprehensive Plan.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |