

Permit Application Review

Permit No. 2020-26
Received complete: April 17, 2020

Applicant: Peter Worthington; MWF Properties, LLC
Consultant: David Knaeble; Civil Site Group
Project: Amundson Flats
Location: 7075 Amundson Avenue: Edina
Rule(s): 4, 5
Reviewer(s): BCO/LLH

General Background & Comments

The project proposes the redevelopment of a 1.2-acre site comprising two adjoining parcels under common ownership located at 7075 Amundson Avenue in Edina, MN. An existing dry cleaning facility is located on the site. Proposed redevelopment includes construction of a 21,780-square foot multi-story apartment building with one level of underground parking. Proposed site improvements include playground equipment, site furniture, concrete sidewalks, asphalt trail sections, utilities, a stormwater management system, surface parking and landscaping. The proposed work will include the demolition and removal of the existing building, foundation, footings, retaining walls, and pavement and associated base materials.

The proposed work will extend onto City of Edina right-of-way to “tie-in” with the existing topography and for the construction of future concrete sidewalks, bituminous trail sections and associated site elements as shown on the plans along the eastern and western boundaries of the site. The City of Edina is in the process of redesigning 70th Street for these improvements including the addition of a bituminous trail.

The site is enrolled in the MPCA Minnesota Brownfields Voluntary Investigation and Cleanup (VIC) Program due to soil, groundwater and soil vapor impacts from volatile organic compounds (VOCs) attributed to former dry-cleaning operations. A Phase I and Phase II Environment Site Assessment was completed for this site. The assessments found concentrations of tetrachloroethene (PCE) and trichloroethene (TCE) in the soil, and PCE present in the groundwater. The levels were found to exceed the MPCA Soil Leaching Value. Due to soil and groundwater contamination, infiltration would in all probability mobilize contamination into and through groundwater. The applicant has requested that the site be considered restricted under subsection 4.3.2 of the NMCWD rules. We have reviewed findings

from the environmental site assessments and concur that infiltration is precluded on the site and the site is restricted. The stormwater management facility should be constructed to minimize mobilization of soil and groundwater contamination.

Other forms of volume retention practices, such as reuse, are not practicable due to the volume of stormwater generated from the 70% impermeable surface coverage and lack of green space for reuse. Under District Rule 4.3.2, Restricted Sites, retention to the standard identified in subsection 4.3.1a (1.1. inches) is not practicably feasible, and site conditions (as described above) are such that 0.55 inches of retention is not practicable and indeed retention to the maximum extent practicable is 0. The applicant must provide rate control and water quality treatment in accordance with paragraphs 4.3.1b and 4.3.1c, respectively.

The proposed site information includes the following:

- Total Site Area: 1.20 acres (52,399 square feet)
- Existing Site Impervious Area: 1.03 acres (45,028 square feet)
- Proposed Site Impervious Area: 0.89 acres (38,864 square feet)
- Decrease in site impervious area by 13.7% (0.14 acres or 6,164 square feet)
- 100% of existing impervious area will be disturbed

The Nine Mile Creek Watershed District's Rule for Redevelopment, Rule 4.2.3, states, if a proposed activity will disturb more than 50% of the existing impervious surface on a parcel or will increase the imperviousness of the parcel by more than 50%, stormwater management will apply to the entire project site. Otherwise, the stormwater requirements will apply only to the disturbed areas, replaced and net additional impervious area on the project site. Since the project will disturb more than 50% of the existing impervious surface on the project site, applicable stormwater management criteria is required for the 38,864 square feet of new site impervious surface.

The District's requirements for both stormwater management and erosion and sediment control apply to the project because more than 5,000 square feet or more surface area will be disturbed, Rules 4.2.1b and 5.2.1b.

Stormwater management is to be provided by an underground stormwater management facility (UGSWMF) that will provide rate control and water quality management. The underground sand filtration system will receive runoff from the new building, surface parking areas and other site improvements. A portion of stormwater runoff from landscaping and impervious surface will drain to the east and south towards the adjacent properties. The system, however, has been sized to handle the design runoff generated from the entire site. The impervious surface will be reduced by 6,164 square feet as a result of the project. Rate control is achieved with the reduction in stormwater runoff as a result of the reduction in site impervious area for compliance with Rule 4.3.1b. In addition, the underground stormwater management facility will attenuate surface runoff, further reducing discharge rates.

Sump manholes will provide pretreatment for runoff entering the underground sand filtration system. The site runoff conveyed to the UGSWMF will discharge to the City of Edina storm sewer system via a proposed manhole on the east side of the property which will tie into the City system.

The Braun Intertec geotechnical report dated June 21, 2018 indicates five standard penetration test (SPT) borings were performed onsite to nominal depths of 25 feet below grade across the site. As identified by the geotechnical report, at the time of observation, groundwater was not encountered in the soil borings and is anticipated to be below the depths explored. Braun Intertec completed five environmental push probe soil borings as part of the 2017 Phase II ESA at the project site. The environmental probes performed at the site indicate groundwater is present at depths of approximately 32 to 35 feet below grade. No District rule requires a specific distance separation between the low floor elevation of a structure and groundwater; however, the applicant is advised that seasonal fluctuations of the groundwater elevation can occur.

Perimeter control (silt fence or bioroll) is to be constructed at the site limits of disturbance. Inlet protection, a stabilized rock construction entrance and erosion control blanket will be provided for erosion prevention and sediment control.

Exhibits

1. Signed Permit Application dated March 16, 2020 and March 20, 2020. Permit Application received April 2, 2020.
2. Revised plans dated March 25, 2020 with previous submittal plans dated March 2, 2020 prepared by Civil Site Group.
3. Stormwater Management Report dated April 5, 2019, revised March 25, 2020 and April 17, 2020 (including a HydroCAD Report dated March 15, 2020 and P8 Model Results dated April 17, 2020) prepared by Civil Site Group.
4. Geotechnical Evaluation Report dated June 21, 2018 prepared by Braun Intertec.
5. Phase II Environmental Site Assessment dated August 22, 2019 prepared by Wenck Associates, Inc.
6. Response Action Plan and Construction Contingency Plan revised October 2019 prepared by Wenck Associates, Inc.
7. E-mail correspondence dated March 25, 2020 and April 17, 2020 indicating P8 model requests that needed to be addressed for the submittal to be complete.

The applicant with the revised submittal has addressed the items identified in our March 25, 2020 and April 17, 2020 e-mails. The submittal is complete.

4.0 Stormwater Management

Stormwater management will be provided by an underground stormwater management facility (USWMF) located at the southeast corner of the project site. The USWMF will provide rate control and water quality management.

As previously stated, the site has been impacted by hazardous substances, pollutants or contaminants at concentrations of potential concern. The Phase I and II Environmental Site

Assessments found that the onsite soils were contaminated and the groundwater below the site was contaminated as well. Due to soil and groundwater contamination, infiltration presents too great a risk of mobilizing groundwater contamination. The applicant has requested that the site be considered restricted under subsection 4.3.2 of the NMCWD rules. We have reviewed findings from the environmental site assessments and concur that infiltration processes could potentially mobilize harmful contaminants in the groundwater. As a result, infiltration is precluded.

Stormwater management will be provided by an underground sand filtration system consisting of four rows of 60-inch diameter perforated CMP pipe surrounded by free draining stone beneath topsoil and pavement. A system of 6-inch perforated CPP drain tile surrounded by subdrain filter media material is proposed below the CMP pipe and stone layer. The plans indicate the stormwater management facility sides and bottom will be wrapped with HPDE impermeable membrane as a method to “seal” the bottom and sides of the system to prevent seepage/infiltration from occurring.

In existing conditions, stormwater runoff from the majority of the site drains west to Amundson Avenue and is conveyed to the City of Edina storm sewer system that runs east through the property site. The remaining site runoff drains east and south to adjacent properties. In proposed conditions, the majority of runoff including the new building roof and a portion of the surface parking is conveyed to the USWMF. The proposed stormwater management facility will discharge to the City of Edina storm sewer system via a constructed manhole over the existing City storm sewer pipe that runs east through the property. The remaining runoff in proposed conditions will drain east and south towards adjacent properties. As previously stated, the system has been sized to handle the design runoff generated from the entire site.

As previously stated, the impervious surface will be reduced by 6,164 square feet as a result of the project. Rate control is achieved with the reduction in stormwater runoff as a result of the reduction in site impervious area. Therefore, Rule 4.3.1b is met. In addition, the underground stormwater management facility will attenuate surface runoff, further reducing discharge rates.

The existing and proposed 2, 10 and 100 year frequency discharges from the site are as follows:

Discharge Points (Existing/Proposed Subcatchments)	Storm Recurrence Interval	2-yr, 24-hr.	10-yr., 24-hr.	100-yr., 24-hr.
Total Site	Pre-Development (cfs)	4.2	6.7	12.5
	Post-Development (cfs)	<1.0	2.3	6.7
City of Edina Storm Sewer (EX1/PR1A, B, C)	Pre-Development (cfs)	3.2	4.9	8.8
	Post Development (cfs)	<1.0	1.9	5.5
East to Adjacent Property	Pre-Development (cfs)	<1.0	<1.0	1.7

Discharge Points (Existing/Proposed Subcatchments)	Storm Recurrence Interval	2-yr, 24-hr.	10-yr., 24-hr.	100-yr., 24-hr.
(EX2/PR2)	Post Development (cfs)	<1.0	<1.0	<1.0
South to Adjacent Property (EX3/PR3)	Pre-Development (cfs)	<1.0	1.1	2.0
	Post Development (cfs)	<1.0	<1.0	<1.0

There are three discharge points from the site. Rule 4.3.1b is met.

Soil borings indicate a top layer of urban fill comprising a mixture of silty sand (SM), clayey sand (SC) and poorly graded sand (SP) with underlying soils as poorly graded sands and silty sands throughout the site.

The proposed bottom of the filtration system (water quality management - invert of the 6-inch drain tile) is at an elevation of 839.0 M.S.L. with an outlet invert elevation at 842.9 M.S.L., resulting in a filtration system depth of approximately 3.9 feet.

The District's water quality criterion requires a 60% annual removal efficiency for phosphorus and 90% annual removal efficiency for total suspended solids. The results of the P8 model indicate the underground sand filtration system will provide an annual removal efficiency of 96.0% (6,008 lbs.) for Total Suspended Solids and 67.6% (13.5 lbs.) for Total Phosphorus. Therefore, water quality requirements identified in Rule 4.3.1c are met.

In accordance with Rule 4.3.1a (i), where filtration facilities, practices or systems are proposed, pretreatment of runoff must be provided. Proposed pretreatment will be achieved with a sumped manhole with a SAFL baffle for stormwater conveyed to the UGSWMF from the new building and a portion of the surface parking. A sumped catch basin manhole will be provided for pretreatment of the remaining stormwater runoff from surface parking. Rule 4.3.1a (i) is met.

Rule 4.3.3.a states that all new and reconstructed buildings must be constructed such that the low floor is at least two feet above the 100-year high water elevation or one foot above the emergency overflow of a constructed facility. The ground floor elevation and the low floor garage door opening for the underground parking level is shown to be 849 M.S.L. The 100-year frequency flood elevation of the stormwater management facility is 845.07 M.S.L., providing a separation of 3.93 feet. Therefore, Rule 4.3.3 is met. In addition, in the event that the emergency overflow elevation would be reached, the stormwater would drain away from the building and towards Amundson Avenue and enter the City storm sewer system.

The Braun Intertec geotechnical report dated June 21, 2018 indicates five standard penetration test (SPT) borings were performed onsite to nominal depths of 25 feet below grade across the site. At the time of observation, groundwater was not encountered in the soil borings and is anticipated to be below the depths explored. In addition, Braun Intertec completed five environmental push probe soil borings as part of the 2017 Phase II ESA at the project site. The environmental probes performed at the site indicate groundwater is present at depths of approximately 32 to 35 feet below grade. Since infiltration is not proposed due to potential mobilization of existing soil and groundwater contamination, Rule 4.5.4d (i) is not applicable to the project.

In accordance with Rule 4.3.4, a post-project chloride management plan must be provided that will, 1) designate an individual authorized to implement the chloride-use plan and 2) designate a MPCA certified salt applicator engaged in the implementation of the chloride-use plan for the site.

5.0 Erosion and Sediment Control

Perimeter control (silt fence or bioroll) is to be constructed at the site limits of disturbance. Inlet protection, a stabilized rock construction entrance and erosion control blanket will be provided for erosion prevention and sediment control. The project contact is David Knaeble, Civil Site Group

11.0 Fees

Fees for the project are:

Rules 4.0 and 5.0	\$1,500
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12.0 Financial Assurances

Financial Assurances for the project are:

Rule 4: Stormwater Management Filtration Facility:	\$104,000 ¹
Chloride Management:	\$5,000

Rule 5: Perimeter control: 850 L.F. x \$2.50/L.F.= \$2,125

Inlet Control: 9 x \$100/each = \$900

Site restoration: 1.2 acres x \$2500/acre = \$3,000	\$6,025
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Contingency and Administration	\$47,375
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Findings

The proposed project includes the information necessary, plan sheets and erosion control plan for review.

1. Rules 4 and 5 are met.
2. The site is enrolled in the MPCA Minnesota Brownfields Voluntary Investigation and Cleanup (VIC) Program due to soil, groundwater and soil vapor impacts from volatile organic compounds (VOCs) attributed to former dry-cleaning operations. Our findings concur with the applicant that the project meets restricted site criteria, Rule 4.3.2. In addition to the reduction in impervious area, the proposed stormwater management facility will provide rate control and water quality management. Infiltration is precluded for the site as it is likely to cause or exacerbate migration of underground contaminants.

Recommendation

Approval, contingent upon:

1. General Conditions

¹ A cost of \$83,200 was provided by Civil Site Group for the filtration system. In accordance with Schedule B-Financial Assurance Rates, a cost of \$104,000, 125% of the construction and maintenance costs, is shown.

2. Financial Assurance in the amount of \$162,400, \$157,400 for stormwater management, erosion control and site restoration, and \$5,000 for compliance with the chloride management requirements.
3. Submittal of written documentation demonstrating that the necessary approval and permissions have been obtained from the City of Edina to perform proposed work for land disturbing activities that will occur within City of Edina property.
4. Submittal of documentation that a drainage easement over hydrologic features has been submitted to the City of Edina (Rule 4.5.4i), if such easement is required by the City.
5. A receipt showing recordation of a maintenance declaration for the on-site stormwater management system. A draft of the declaration must be approved by the District prior to recordation.

By accepting the permit, when issued, the applicant agrees to the following stipulations:

1. Per Rule 4.5.8, an as-built drawing of the stormwater facility conforming to the design specifications, including a stage volume relationship in tabular form for the underground filtration system.
2. Submission of a plan for post-project management of Chloride use on the site. The plan must include 1) the designation of an individual authorized to implement the chloride use plan and 2) the designation of a Minnesota Pollution Control Agency certified salt applicator engaged in the implementation of the chloride-use plan for the site. The release of the \$5,000 of the financial assurance required for the chloride-management plan requires that chloride-management plan has been provided and approved by the District's Administrator.
3. For the release of the \$157,400 financial assurance required, Rule 12.4.1b requires demonstration and confirmation that the stormwater management facility has been constructed or installed and is functioning as designed and permitted.

AMUNDSON FLATS
7075 AMUNDSON AVENUE, EDINA, MN 55439
MWF PROPERTIES
7645 LYNDALE AVE. S., MINNEAPOLIS, MN 55423

PROJECT
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 ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Matthew R. Pavek
DATE: 03/02/20 LICENSE NO. 44283

DATE	DESCRIPTION
4/5/19	CITY SUBMITTAL
2/2/20	FINAL REVISION DRAWINGS
03/02/20	PERMIT SUBMITTAL

DATE	DESCRIPTION

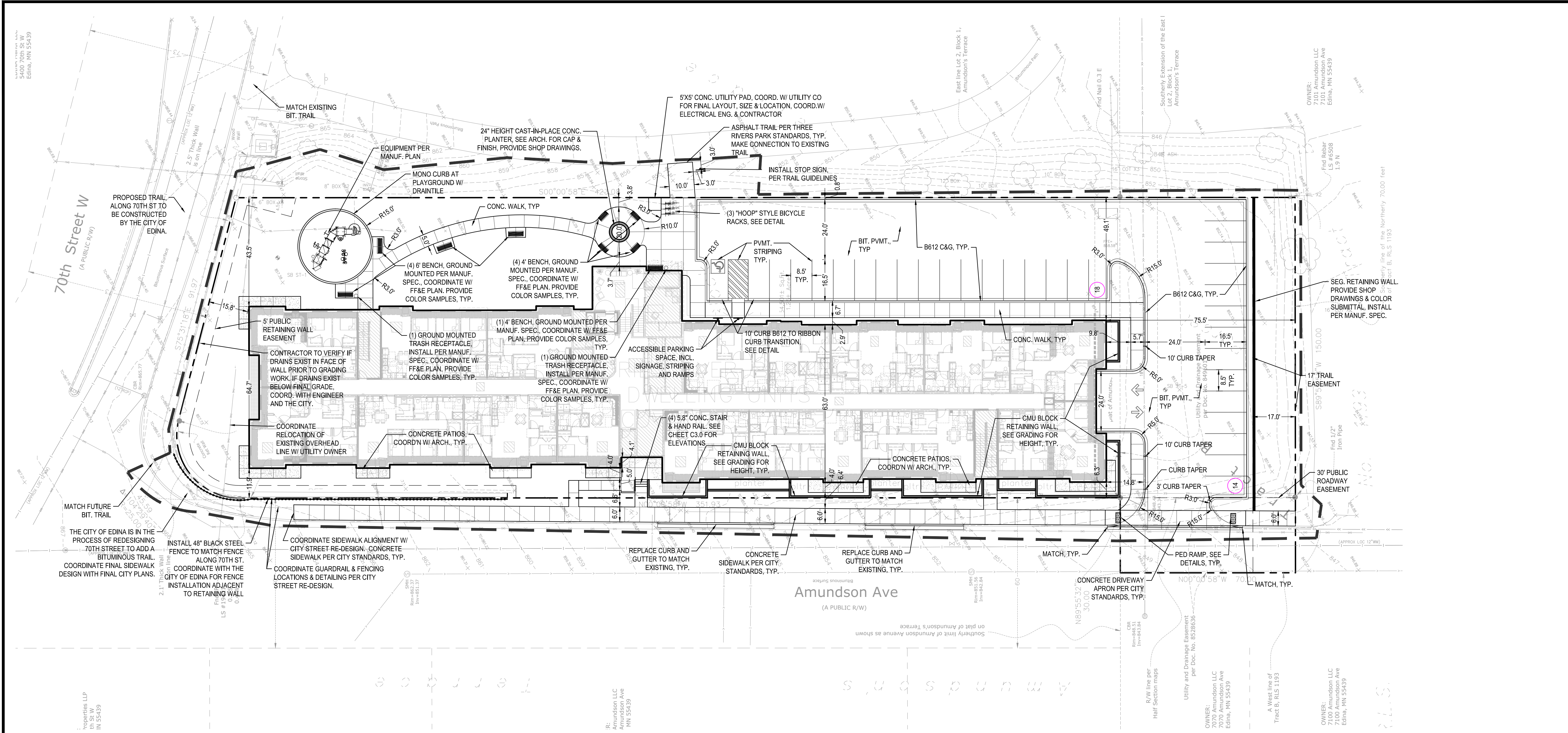
DRAWN BY: BN REVIEWED BY: DK
PROJECT NUMBER: 19033

DATE	DESCRIPTION

DRAWN BY: BN REVIEWED BY: DK
PROJECT NUMBER: 19033

SITE PLAN

C2.0
COPYRIGHT 2019 CIVIL SITE GROUP INC.



SITE LAYOUT NOTES:

- CONTRACTOR SHALL VERIFY LOCATIONS AND LAYOUT OF ALL SITE ELEMENTS PRIOR TO BEGINNING CONSTRUCTION, INCLUDING BUT NOT LIMITED TO, LOCATIONS OF EXISTING AND PROPOSED PROPERTY LINES, EASEMENTS, SETBACKS, UTILITIES, BUILDINGS AND PAVEMENTS. CONTRACTOR IS RESPONSIBLE FOR FINAL LOCATIONS OF ALL ELEMENTS FOR THE SITE. ANY REVISIONS REQUIRED AFTER COMMENCEMENT OF CONSTRUCTION, DUE TO LOCAL ADJUSTMENTS SHALL BE CORRECTED AT NO ADDITIONAL COST TO OWNER. ADJUSTMENTS TO THE LAYOUT SHALL BE APPROVED BY THE ENGINEER/LANDSCAPE ARCHITECT PRIOR TO INSTALLATION OF MATERIALS. STAKE LAYOUT FOR APPROVAL.
- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION, INCLUDING A RIGHT-OF-WAY AND STREET OPENING PERMIT.
- THE CONTRACTOR SHALL VERIFY RECOMMENDATIONS NOTED IN THE GEO TECHNICAL REPORT PRIOR TO INSTALLATION OF SITE IMPROVEMENT MATERIALS.
- CONTRACTOR SHALL FIELD VERIFY COORDINATES AND LOCATION DIMENSIONS OF THE BUILDING AND STAKE FOR REVIEW AND APPROVAL BY THE OWNERS REPRESENTATIVE PRIOR TO INSTALLATION OF FOOTING MATERIALS.
- LOCATIONS OF STRUCTURES, ROADWAY PAVEMENTS, CURBS AND GUTTERS, BOLLARDS, AND WALKS ARE APPROXIMATE AND SHALL BE STAKED IN THE FIELD, PRIOR TO INSTALLATION, FOR REVIEW AND APPROVAL BY THE ENGINEER/LANDSCAPE ARCHITECT.
- CURB DIMENSIONS SHOWN ARE TO FACE OF CURB. BUILDING DIMENSIONS ARE TO FACE OF CONCRETE FOUNDATION. LOCATION OF BUILDING IS TO BUILDING FOUNDATION AND SHALL BE AS SHOWN ON THE DRAWINGS.
- THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OR SAMPLES AS SPECIFIED FOR REVIEW AND APPROVAL BY THE ENGINEER/LANDSCAPE ARCHITECT PRIOR TO FABRICATION FOR ALL PREFABRICATED SITE IMPROVEMENT MATERIALS SUCH AS, BUT NOT LIMITED TO THE FOLLOWING, FURNISHINGS, PAVEMENTS, WALLS, RAILINGS, BENCHES, FLAGPOLES, LANDING PADS FOR CURB RAMPS, AND LIGHT AND POLES. THE OWNER RESERVES THE RIGHT TO REJECT INSTALLED MATERIALS NOT PREVIOUSLY APPROVED.
- PEDESTRIAN CURB RAMPS SHALL BE CONSTRUCTED WITH TRUNCATED DOME LANDING AREAS IN ACCORDANCE WITH A.D.A. REQUIREMENTS-SEE DETAIL.
- CROSSWALK STRIPING SHALL BE 24" WIDE WHITE PAINTED LINE, SPACED 48" ON CENTER PERPENDICULAR TO THE FLOW OF TRAFFIC. WIDTH OF CROSSWALK SHALL BE 5' WIDE. ALL OTHER PAVEMENT MARKINGS SHALL BE WHITE IN COLOR UNLESS OTHERWISE NOTED OR REQUIRED BY ADA OR LOCAL GOVERNING BODIES.
- SEE SITE PLAN FOR CURB AND GUTTER TYPE. TAPER BETWEEN CURB TYPES-SEE DETAIL.
- ALL CURB RADII ARE MINIMUM 3' UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL REFER TO FINAL PLAT FOR LOT BOUNDARIES, NUMBERS, AREAS AND DIMENSIONS PRIOR TO SITE IMPROVEMENTS.
- FIELD VERIFY ALL EXISTING SITE CONDITIONS, DIMENSIONS.
- PARKING IS TO BE SET PARALLEL OR PERPENDICULAR TO EXISTING BUILDING UNLESS NOTED OTHERWISE.
- ALL PARKING LOT PAINT STRIPING TO BE WHITE, 4" WIDE TYP.
- BITUMINOUS PAVING TO BE "LIGHT DUTY" UNLESS OTHERWISE NOTED. SEE DETAIL SHEETS FOR PAVEMENT SECTIONS.
- ALL TREES THAT ARE TO REMAIN ARE TO BE PROTECTED FROM DAMAGE WITH A CONSTRUCTION FENCE AT THE DRIP LINE. SEE LANDSCAPE DOCUMENTS.

CITY OF EDINA SITE SPECIFIC NOTES:

- ALL WORK WITHIN CITY RIGHT-OF-WAY TO FOLLOW CITY OF EDINA STANDARD SPECIFICATIONS AND DETAILS.

OPERATIONAL NOTES:

- SNOW REMOVAL:**
ALL SNOW SHALL BE PUSHED TO LANDSCAPED AREAS.
- TRASH REMOVAL:**
TRASH REMOVAL TO BE COORDINATED W/ BUILDING MANAGEMENT COMPANY AND TRASH HAULER.
- DELIVERIES:**
DELIVERIES SHALL OCCUR ALONG AMUNDSON AVENUE.

SITE AREA TABLE:

SITE AREA CALCULATIONS	EXISTING CONDITION		PROPOSED CONDITION	
	EXISTING	%	PROPOSED	%
BUILDING COVERAGE	18,462 SF	33.9%	21,870 SF	40.1%
ALL PAVEMENTS	27,409 SF	50.3%	18,382 SF	33.7%
ALL NON-PAVEMENTS	8,630 SF	15.8%	14,249 SF	26.1%
TOTAL SITE AREA	54,501 SF	100.0%	54,501 SF	100.0%
IMPERVIOUS SURFACE	45,871 SF	84.2%	40,252 SF	73.9%
DIFFERENCE (EX. VS PROP.)	-5,619 SF	-10.3%		

SITE PLAN LEGEND:

- HEAVY DUTY BITUMINOUS PAVEMENT. SEE GEOTECHNICAL REPORT FOR AGGREGATE BASE & WEAR COURSE DEPTH. SEE DETAIL.
- CONCRETE PAVEMENT AS SPECIFIED (PAD OR WALK) SEE GEOTECHNICAL REPORT FOR AGGREGATE BASE & CONCRETE DEPTHS. SEE DETAIL.
- PROPERTY LINE
- CONSTRUCTION LIMITS
- CURB AND GUTTER-SEE NOTES (T.O.) TIP OUT GUTTER WHERE APPLICABLE-SEE PLAN
- TRAFFIC DIRECTIONAL ARROW PAVEMENT MARKINGS
- SIGN AND POST ASSEMBLY. SHOP DRAWINGS REQUIRED.
HC = ACCESSIBLE SIGN
NP = NO PARKING FIRE LANE
ST = STOP
CP = COMPACT CAR PARKING ONLY

