

Permit Application Review

Permit No. 2020-16
Received complete: March 27, 2020

Applicant: CREFIV-CCRP Metro Boulevard Edina, LLC
Consultant: Kenny Horns; HGA
Project: 7201 Metro Blvd Reposition
Location: 7201 Metro Boulevard: Edina
Rule(s): 4, 5
Reviewer: BCO/LLH

General Background & Comments

The project proposes building site renovations at CREFIV-CCRP Metro Boulevard Edina, LLC located at 7201 Metro Boulevard in Edina, MN. The existing multi-story office building is located on a 5.4 acre parcel that is developed with surface parking. Proposed site improvements include construction of a courtyard on the south side of the building, renovation of four islands in the existing parking lot, courtyard and island landscaping, and stormwater management facilities. The project includes removal of pavement for construction of the four landscaped islands in the parking lot and removal of pavement at the proposed courtyard on the south side of the building.

The project site information includes the following:

- Total Site Area: 5.37 acres (233,917 square feet)
- Total Site Impervious Area: 4.32 acres (188,179 square feet)
- Total Disturbed Area: 0.16 acres (6,760 square feet)
- Existing Impervious Area (within Disturbed Area): 6,555 square feet
- Proposed Impervious Area (within Disturbed Area): 4,061 square feet (including 1,918 square feet of permeable pavers)
- Proposed Site Pervious Area (within Disturbed Area): 2,699 square feet
- 1.3% decrease in the total site impervious area (a decrease of 2,494 square feet in impervious area). A 2.3% decrease in the site impervious area (4,412 square feet) once the permeable pavers are in-place and functional.

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 parcel. Otherwise, the stormwater requirements will apply only to the disturbed areas and additional impervious area on the parcel. Since less than 50% of the existing impervious area on the 5.37 acre parcel will be disturbed, stormwater management is not required for the entire project parcel. The stormwater requirements will therefore only apply to the 4,061 square feet of proposed site impervious area (including the 1,918 square feet of permeable pavers).

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.

The 100 year frequency floodplain of the North Fork of Nine Mile Creek located near the southeastern boundary of the site is 829.1 M.S.L. No impacts below the flood elevation are proposed, therefore the requirements of Rule 2 do not apply.

Rule 4.3.3 states that a stormwater management facility must be constructed at an elevation that ensures that no adjacent habitable building will be brought into noncompliance with a standard in subsection 4.3.3. The volume of runoff generated from the 4,061 square feet of impervious area for the 100-year frequency storm event will be detained in the 13-inches of sand filter and foundation rock beneath the permeable pavers. With this detention volume and the 4-inch tile system providing an outlet this detention will remain below ground not having an impact on the 834.8 M.S.L. low floor elevation and low opening of the building. The surface overflow from the paver system should it occur, is to the south to an existing stormwater inlet at elevation 833.6 M.S.L., 1.2 feet lower than the existing building elevation.

Stormwater management is to be provided by underground stormwater management facilities (UGSWMF) beneath the proposed landscape and permeable paver system at the courtyard on the south side of the building and beneath the proposed four landscaped islands in the parking lot. The stormwater management facilities will provide rate control, volume retention and water quality management, and will receive runoff from the courtyard area, landscaping and a portion of the parking lot. The UGSWMFs (at the courtyard system and landscaped islands system) will provide a retention volume below an elevated perforated pipe system.

A 100-year frequency floodplain elevation and inundation extent of 829.1 M.S.L. has been established along the North Fork of Nine Mile Creek, which is located west of the project site. The inundation area extends to the southeast corner of the project parcel. The proposed work does not include impact to the floodplain, as all land disturbing activities are proposed above the 100-year flood elevation of Nine Mile Creek. The plans dated February 19, 2020, February 25, 2020, and March 27, 2020 (see sheets below) show no floodplain impacts are proposed. Therefore, Rule 2 Floodplain Management and Drainage Alternations is not triggered (Rule 2.2).

Sediment control logs will be utilized at the perimeter of the courtyard renovation limits of construction. Storm drain inlet protection will be provided onsite for erosion control in the parking areas downgradient from land-disturbing activities.

Exhibits

1. Permit Application dated February 19, 2020.

2. Plan sheets dated February 19, 2020, revised February 25 and March 27, 2020 prepared by HGA.
3. Stormwater Management Report dated February 19, 2020, revised March 27, 2020, prepared by HGA.
4. Land Title Survey dated 2019 prepared by Wenck Associates.
5. MIDS Calculator Results dated March 16, 2020, revised March 27, 2020, prepared by HGA.
6. E-mail correspondence dated March 10th, March 17th and March 19th, 2020 requesting additional information of the applicant for the submittal to be complete and requesting the status of the additional information requested.
7. The submittal is complete.

4.0 Stormwater Management

The proposed work for site renovations includes construction of stormwater management facilities at the proposed courtyard on the south side of the building and at the four landscaped islands in the parking area.

The site is gradually sloped and the majority of the site drains to the south. Currently, stormwater runoff at the parking areas is collected in storm sewers that discharge to the City of Edina storm sewer system along Metro Boulevard and eventually to Nine Mile Creek. The proposed underground stormwater management systems will connect to existing catch basins in the parking area and convey runoff to the City of Edina storm sewer system along Metro Blvd.

Stormwater management is to be provided by underground stormwater management facilities (UGSWMF) beneath the proposed permeable paver system at the courtyard on the south side of the building and beneath the proposed landscaped islands in the parking lot. The subsurface filtration system proposed below the landscaping and permeable pavers at the courtyard will provide stormwater quality and volume abstraction. The subsurface filtration system beneath the courtyard has a perforated underdrain system to promote infiltration. The stormwater management facility accepts runoff from the courtyard and conveys the runoff to an existing catch basin at the parking area south of the building.

Proposed stormwater management at the four landscaped islands in the parking area will be provided by a subsurface filtration system with a perforated underdrain system to promote infiltration. Proposed work at the four landscaped islands includes construction of a flush curb to promote capture of runoff from the parking areas and the landscaped areas. The elevated underdrain that accepts runoff from the four landscaped islands ties into an existing catch basin at the parking area located east of the building.

Rule 4.3.1a requires the retention onsite of 1.1 inches of runoff from the regulated impervious surface. Since proposed redevelopment will disturb less than fifty percent (50%) of the existing impervious surface on the site, the criteria of Rule 4.3 will only apply to the disturbed, replaced

and net additional impervious surface, including 4,061 square feet of post-construction impervious surface.

An infiltration volume of 372 cubic feet is required for 1.1-inches of runoff from the 4,061 square feet of site impervious area. The retention volume requirement calculation is based on the post-construction total impervious area, 4,061 square feet, which includes 1,918 square feet of permeable pavers. The submittal has used the NRCS Soils Survey in determining the on-site soils as Type C soils having an infiltration rate of 0.2 inches/hour. Since specific on-site soils information has not been provided (by boring and field classification) an infiltration rate of 0.06 inches/hour, typically used for a Type D soil and a “worst case” assumption, has been used for the engineer’ review. A volume of 383 cubic feet is proposed to be provided (372 cubic feet required) with an area of 3,314 square feet (1,551 square feet required) at an inundation depth of 0.33 feet (with 35% void space) at the courtyard and landscaped islands’ UGSWMFs. Rule 4.3.1a is met.

A minimum inundation area of 1,551 square feet at the 0.332 foot depth is required for the retention volume to be drawn down within 48 hours, Rule 4.3.1a (ii). The proposed area provided for volume retention onsite is 3,314 square feet (including 1,918 square feet at the courtyard and 1,396 square feet at the landscaped islands).

The maximum inundation depth allowable for the volume retention of 372 cubic feet to be drawn down within 48 hours using an infiltration rate of 0.06 inches per hour is 2.88 inches (4 inches provided). Therefore, the infiltration facility drawdown requirement identified in Rule 4.3.1.a (ii) is met.

In accordance with Rule 4.3.1a (i), where below-ground infiltration facilities, practices or systems are proposed, pretreatment of runoff must be provided. The plans show that the perforated subdrains at the filtration systems are wrapped with geotextile fabric to treat water and serve as the pretreatment for the underground infiltration systems. Rule 4.3.1a (i) is met.

In order to meet the rate control criteria listed in Rule 4.3.1b, the 2-, 10-, and 100-year post development peak runoff rates must be equal to or less than the existing discharge rates at all locations where stormwater leaves the site. As previously stated, the impervious surface within the disturbed area will be reduced by 4,412 square feet (0.10 acres). Rate control is achieved with the reduction in site impervious area. Since there will be no increases in peak stormwater discharge rates from the site, Rule 4.3.1b is met.

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 a MIDS calculator indicate the proposed stormwater management systems will provide an annual removal efficiency of 100% (35.7 lbs.) for Total Suspended Solids (TSS) and 100% (0.197 lbs.) for Total Phosphorus (TP).

Rule 4.3.1c is met.

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.

As previously stated, a Type D soil, having an infiltration rate of 0.06 inches/hour, has been assumed in the engineer's review. Geotechnical evaluation is required to demonstrate that no evidence of groundwater or redoximorphic soil conditions are found within three feet of the bottom of the facilities and to support site-specific infiltration capacity of the soils used in design (Rule 4.5.4.d). As stated in the recommendations, geotechnical evaluation of the soils is required prior to issuance of the permit.

5.0 Erosion and Sediment Control

Sediment control logs will be utilized at the perimeter of the courtyard renovation limits of construction. Storm drain inlet protection will be provided onsite for erosion control in the parking areas downgradient from land-disturbing activities.

Kenny Horns, HGA, is the project contact.

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: Volume Retention: 1,551 sq. ft. x \$12/sq. ft. = \$18,612	\$18,612
Chloride Management:	\$5,000
Rule 5: Perimeter control: 220 L.F. x \$2.50/L.F. = \$550	
Inlet Control: 7 x \$100/each = \$700	
Site restoration: 0.16 acres x \$2500/acre = \$400	\$1,650
Contingency and Administration	\$8,738

Findings

The proposed project includes the information necessary, plan sheets and erosion control plan for review. Rules 4 and 5 are met.

Recommendation

Approval, contingent upon:

1. General Conditions
2. Financial Assurance in the amount of \$34,000, \$29,000 for stormwater management, erosion control, and site restoration, and \$5,000 for compliance with the chloride management requirements.
3. 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.
4. A receipt showing recordation of a maintenance declaration for the on-site stormwater management facilities. A draft of the declaration must be approved by the District prior to recordation.

5. Geotechnical evaluation is required in the areas proposed for volume retention to demonstrate that no evidence of groundwater or redoximorphic soil conditions are found within three feet of the bottom of the facilities and to support site-specific infiltration capacity of the soils used in design (Rule 4.5.4.d).

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 facilities conforming to the design specifications.
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 \$29,000 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. Verification, through daily observation logs and photographs, must be provided showing the stormwater facilities used for volume retention have drawn down within 48 hours from the completion of two 1-inch (approximate) separate rainfall events.

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

NAME: JOHN W. MOORE
DATE: 02/25/20
REGISTRATION NUMBER: 10330

NO DESCRIPTION DATE

RESURANCE HISTORY - THIS SHEET

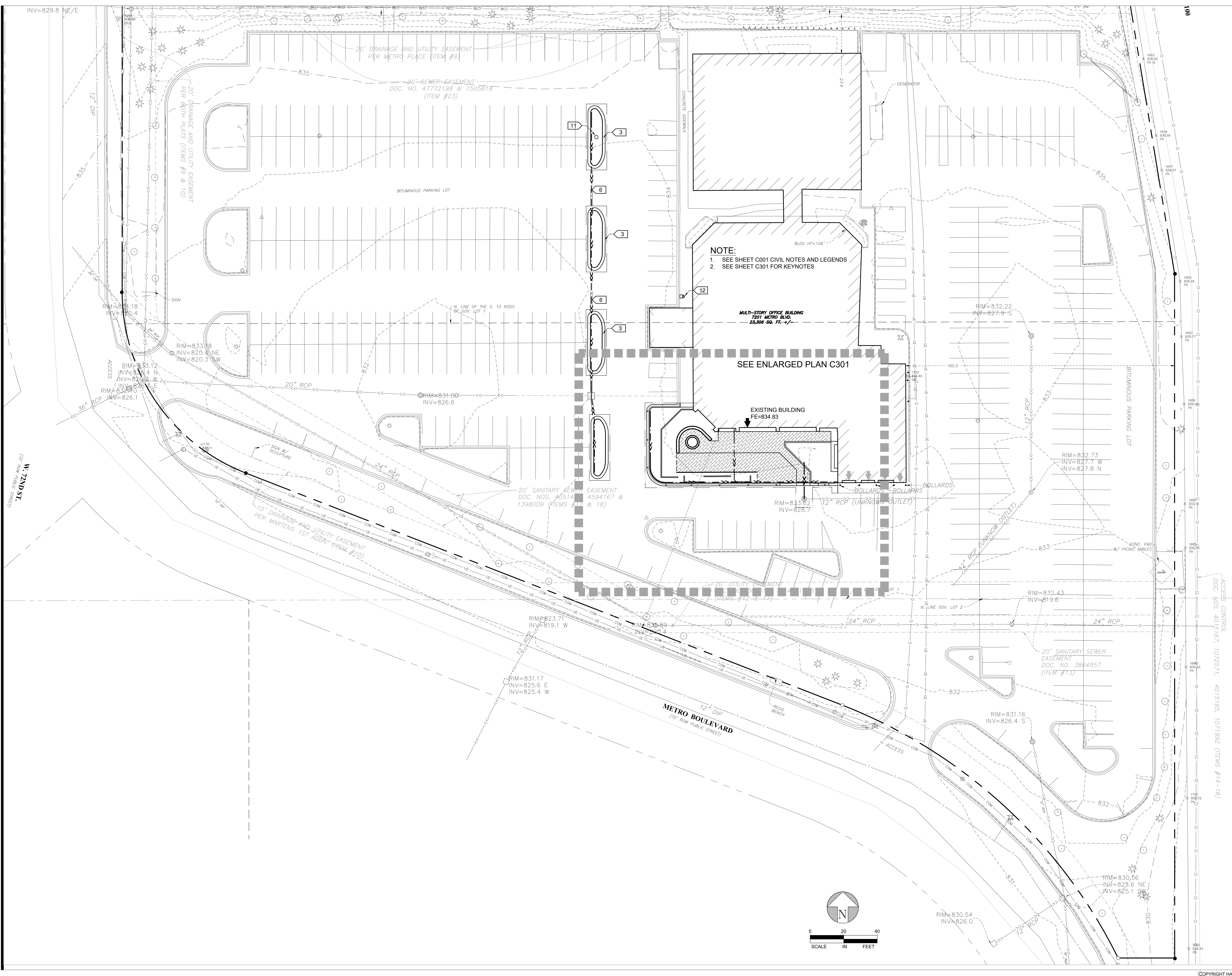
HGA NO: 4532-001-01

SITE PLAN

DATE: FEBRUARY 25, 2020

NMCWD PERMIT

C300



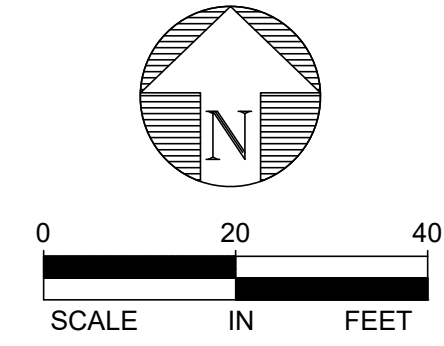
NOTE:
1. SEE SHEET C001 CIVIL NOTES AND LEGENDS
2. SEE SHEET C301 FOR KEYNOTES

SEE ENLARGED PLAN C301

EXISTING BUILDING
FE=834.83

MULTI-STORY OFFICE BUILDING
7201 METRO BLVD.
23,906 SQ. FT. - 1/-

METRO BOULEVARD
(70' ROW PUBLIC STREET)



ACCESS CONTROL
DOC. NOS. 4015167, 1072571, 4015195, 1071992 (ITEMS #14-16)

NOT FOR CONSTRUCTION