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te: November 4, 2019 Chad Isakson, P.E.

To: Ken Roberts, Planning Director Re: Inwood 7th Addition -Apartments

Cc: Chad Isakson, Assistant City Engineer Preliminary Plan Review

From: Jack Griffin, P.E., City Engineer

An engineering review has been completed for the Inwood 7th Addition – Apartments. A Preliminary Plan submittal was received on October 18, 2019. The submittal consisted of the following documentation prepared by Carlson McCain:

• Inwood 7th Addition Preliminary Plat dated September 26, 2019.

- Inwood 7th Addition Preliminary Site Plans dated September 26, 2019.
- Storm Water Management Plan dated September 26, 2019.
- Preliminary PUD Plan Application Materials.

STATUS/FINDINGS: Engineering has prepared the following review comments based on the plans submitted. Final Construction Plans and Specifications must be prepared in accordance with the latest version of the City Engineering Design Standards Manual dated **APRIL 2019**, using City details, plan notes and specifications and meeting City Engineering Design Guidelines. A detailed construction plan review will be completed prior to the start of construction of the site improvements.

PRELIMINARY PLAT AND EASEMENTS

- 1. The proposed plat creates a new Lot for the Apartment complex along with Outlot A. Outlot A is shown to remain developer owned for future development.
- 2. Minimum 10-foot drainage and utility easements are shown along the 5th Street North and Island Trail right-of-way as required, and over existing storm sewer and drainage ways. The site improvements must be designed to reserve the full easement utility corridors without encroachment.
- 3. A 30-foot wide drainage and utility easement is shown as required for the public watermain and hydrants extended internal to the site. The preliminary/final plat easements must be revised and updated as necessary to accommodate any watermain/hydrant layout changes.
- 4. Consideration should be given to adjusting the south lot line of Lot 1, Block 1 further north to facilitate a shared commercial driveway access between Lot 1, Block 1 and Outlot A. See comment #2 below for Site Plans, Traffic and Access Management.

SITE PLANS, TRAFFIC AND ACCESS MANAGEMENT

- 1. A secondary access for Lot 1, Block 1 is required to meet the Fire Code. The secondary access should connect to the shared driveway for Outlot A of the Inwood PUD 6th Addition. No additional access along 5th Street North will be allowed from either the Phase 1 or Phase 2 development on Lot 1, Block 1.
- 2. The proposed site access from Island Trail must be designed as a shared driveway access for both Lot 1, Block 1 and Outlot A, Inwood PUD 7th Addition, in order to allow for two potential accesses, as may be required by the Fire Code, for the future development of Outlot A; or an alternative access plan for both properties must be submitted for review and approval by the City.

- 3. No additional right-of-way dedication is required along 5th Street North or Island Trail.
- 4. Minimum 10-foot drainage and utility easements are shown along the 5th Street North and Island Trail right-of-way as required. The site improvements must be designed to reserve the full easement utility corridors without encroachment.
- 5. The site plans must be revised to address Fire Code requirements for emergency access roads. Access roads must be identified with signage and markings. Aerial Fire Apparatus Access Roads must be a minimum of 26-feet wide.
- 6. Construction parking and staging (preservation of 5th Street North or Island Trail). As part of any development or site improvement agreement the developer will be required to manage all construction parking, construction staging and material deliveries internal to the site. No parking and construction staging, including loading and unloading materials and equipment will be allowed along 5th Street North or Island Trail at any time during the construction of the site improvements and buildings. All street and boulevard damage caused by the construction activities must be repaired or replaced at no cost to the City and meeting City standards and specifications.
- 7. Landscaping. The landscape plans must be revised to maintain all tree plantings outside of the front, side and rear drainage and utility easements.

STORMWATER MANAGEMENT

- 1. A State and South Washington Watershed District (SWWD) permit will be required. The site plan is subject to a storm water management plan meeting State, SWWD and City rules and regulations.
- 2. No additional storm water BMPs are proposed or needed. The proposed site was designed as part of the Inwood development to accommodate 75% impervious surfaces for both storm water rate and volume control. The proposed 68-unit Phase 1 Apartment together with the future Phase 2 Apartment building to be located on Lot 1, Block 1 will contain 53% impervious surfaces. Stormwater management will be handled by the existing storm water pond and infiltration basin located to the south of the proposed site.
- 3. The applicant is proposing a private storm sewer system internal to the proposed Lot 1, Block 1 apartment site to collect and convey storm water runoff. The storm water will be discharged to the existing City owned storm water pond and infiltration basin located to the south of the proposed site that was constructed as part of the Inwood PUD development and will be turned over to the City upon acceptance of the Inwood PUD 1st Addition development improvements.
- 4. The internal storm sewer system must be sized and designed to accommodate the Phase 2 Apartment building and impervious surfaces, and the future development for Outlot A. No additional direct discharge to the City storm water pond will be permitted.
- 5. A storm sewer stub must be constructed from CBMH-101 to Outlot A to accommodate a connection for storm water runoff from Outlto A future development. The 18-inch RCP pipe should be upsized accordingly, if needed.
- 6. The storm sewer system constructed for this development will remain privately owned and maintained. The applicant will be required to execute and record a Stormwater Maintenance and Easement Agreement in the City's standard form of agreement. The agreement should provide a maintenance plan defining the maintenance responsibilities for the private owner, the type of maintenance and the maintenance intervals, including minimum cleaning frequencies for the sump manhole.

MUNICIPAL WATER SUPPLY

- 1. The proposed property is located in the Southwest Planning MUSA and high-pressure zone water system.
- 2. Water availability charges and connection charges will apply to the service connections. A Met Council SAC determination will be required to determine the WAC/Connection charges for the development.
- 3. Connection to the municipal water supply is readily available to serve this property. The applicant will be required to connect, at its sole cost, to the existing 8-inch DIP stub that was installed to serve this property located along Island Trail, as shown on the proposed utility plans.
- 4. The applicant will be responsible to place hydrants and gate valves throughout the property at the direction of the Fire Department and Public Works Department. All fire hydrants and connecting watermains shall be owned and maintained by the City.
- 5. Any watermain lines and hydrants placed internal to the site will require minimum 30-foot easements centered over the hydrant or pipe. Easements must be dedicated to the City and be provided in the City's standard form

- of easement agreement. Easements have been shown on the proposed plat accordingly, however, easement revisions may be required as changes are made to the watermain and hydrant layout.
- 6. The watermain plans must be updated to show both the Phase 1 and Phase 2 watermain/hydrant layout for Lot 1, Block 1 to ensure the Phase 1 watermain plans are installed efficiently for both the proposed and future development. The applicant may be required to construct a looped watermain with a second connection point, depending upon site layout.
- 7. The project proposes to extend a 6-inch DIP watermain internal to the site with a hydrant placed near the rear of the proposed building. This watermain may need to be upgraded to an 8-inch DIP pipe based on fire suppression requirements. The applicant must submit fire suppression requirements for the building to determine the size of watermain up to each hydrant.

MUNICIPAL SANITARY SEWER

- The proposed property is located in the Southwest Planning MUSA current Regional Sewer Staging Plan and would discharge to the MCES WONE Interceptor.
- Sewer availability charges and connection charges will apply to the service connections. A Met Council SAC determination will be required to determine the SAC/Connection charges for each building.
- Connection to the municipal sanitary sewer system is readily available to serve this property. The applicant will
 be required to connect, at its sole cost, to the existing 8-inch PVC stub that was installed to serve this property
 located along Island Trail, as shown on the proposed utility plans. No public sanitary sewer mains are proposed
 to be extended internal to the site.
- The sanitary sewer plans must be updated to show both the Phase 1 and Phase 2 sanitary sewer connections for Lot 1, Block 1 to ensure the Phase 1 sanitary sewer plans are installed efficiently for both the proposed and future development.