

November 9, 2021

Laura Jester Keystone Waters 16145 Hillcrest Lane Eden Prairie, MN 55346	Jim Herbert, P.E. Barr Engineering Co. 4300 Market Point Dr Minneapolis, MN 55435
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RE: BCWMC Comments to North Loop Green Phase III Mixed Use Development – Minneapolis, MN

Dear Laura and Jim,

Thank you for the comments related to the North Loop Green Phase III development project proposed to be constructed over the Bassett Creek tunnel and access shaft and drop structure. The City of Minneapolis (City) highly values the Bassett Creek Watershed Management Commission (BCWMC) and the unique partnership with the City operating and maintaining the new Bassett Creek tunnel. The tunnel is a key asset of regional significance that must be maintained for the public benefit.

A Hines consultant reached out to BCWMC (Barr) and the City beginning in 2018 to discuss working around the tunnel. From 2018 into 2021, the project worked its way through City approvals, but it wasn't until recently that the City and Hines began to work on the specifics of how to retain reasonable access as required by the City's easement referenced below. As those discussions began, the City reached out to BCWMC (Barr) in September 2021 and shared Hines' plans. Since receiving BCWMC's comment letter, Hines, the City, and the BCWMC Engineer have met weekly to learn more about the project, share information, and evaluate alternative methods of access to the shaft and drop structure. The City values BCWMC's input and feedback, and seeks to continue our collaboration as this project progresses.

The BCWMC comments were very detailed and have been shared with the applicant, Hines, to respond as appropriate. Below are responses from Hines and the City:

A. Station 116+50 Drop Structure and Access Shaft

1. Hines' Response: We understand that the ideal scenario is to have no physical improvements directly over the Bassett Creek Tunnel access shaft; however, pursuant to the Underground Storm Sewer Easement Agreement (Easement) dated 11/16/1988 (Attached as Exhibit A) the landowner (Grantor) has the right to construct improvements on the easement as long as there is reasonable access to get to and from the access point. It goes on to further say that all "location, construction, operation, maintenance, alteration, repair and patrol activities conducted by the City of Minneapolis (Grantee) will be from inside the underground storm sewer". As such we are working with Grantor to arrive at a reasonable solution that will allow access for people and equipment to allow the future repair work to occur through the access point in question.
 - a. Hines' Response: The area directly outside of the Drop Shaft Room C-435, attached Exhibit B (Sketch A1.2C) is potentially available for staging of material, equipment and personnel for maintenance projects contemplated. See the attached Exhibit C (Sketch C4.5 Exterior) with highlighted areas for potential staging and access. All non-surface improvements in the park area, "The Green", will be readily movable to provide MnDOT access to the 3rd and 4th Street Bridges for repairs, maintenance, and inspections. The property indicated for staging is subject to MnDOT access permitting on the Highway Easement Property which would be required today as well as post development. Nothing in

- the existing Easement provides for use of the property on which the tunnel or drop shaft exists other than reasonable access and egress to access the drop shaft - Grantors willingness to provide additional staging area is an improvement from the rights currently contemplated by the Easement.
- b. Hines' Response: It is acknowledged by the Grantor that the drop shaft in Room C-435 provides access to the Third Avenue and Second Street tunnel systems. The Owners have committed to work jointly with the Grantee to develop a reasonable access plan for the activities identified in Easement.
 - c. Hines' Response: Inspections of the tunnel systems have been, as a matter of normal process, carried out via access to the tunnel systems through other access points since the original installation of the tunnel system to the best of Grantor's knowledge. While Grantor is committed to working with the Grantee to develop reasonable access/logistics plans that allow both Grantor and Grantee use of their respective improvements, there is no provision in the Easement that requires a neutral cost position to either party. Regardless, Grantor, in good faith, is willing to participate in development of a reasonable solution.
 - d. Hines' Response: Grantor acknowledges the need to develop personnel emergency egress access and procedures during construction activities in the tunnel, which can be developed and implemented with alternate equipment to a traditional crane. The City and Grantor are committed through this process to work collaboratively with the Grantee to develop OSHA compliant procedures.
2. Hines' Response: Please see a copy of the Easement attached that identifies the rights of the parties and it does not prohibit the proposed development or development directly over the shaft.

City Response: Hines, City, and BCWMC Engineer have been meeting to evaluate and refine Hines' proposal of reasonable access to the drop shaft. An amendment to the easement will be developed that further defines how reasonable access will be maintained once the development is built. City will consult with BCWMC before it approves the final language of the amendment. The amendment will be recorded, run with the land, and be binding to any successors or assigns.

Box Culvert and Third Avenue Tunnel

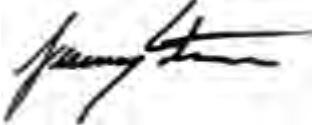
1. Hines' Response: The design of the NLG III structural system utilizes a combination of driven H-pile and drilled concrete caissons coupled with transfer grade beams that will impart no additional loads onto the tunnel structures. (Please see the structural design narrative by WSP Engineers and plans S1.01 and S1.02 attached as Exhibit D for reference).
2. Hines' Response: No dewatering of ground water is planned, expected, or anticipated. Ground water elevation has been established through soil boring investigation of the site at elevation 803' above sea level. Deep foundations are either driven H-pile or drilled concrete caissons to bedrock. The drilled caisson shafts will be cased and will not be dewatered as concrete will be installed via tremie through and below any accumulated water in the drill hole. As the drill shaft is filled with concrete, any accumulated water head will rise to the surface ahead of the pumped concrete.
 - a. Ground water is not expected or anticipated to be drawn down.
 - b. No impact to the tunnels as no drawdown is expected or anticipated.
 - c. Not applicable as no drawdown is expected or anticipated.
 - d. Tunnel will be inspected pre-construction and again post construction for any evidence of changes due to construction. Vibration monitoring will also be conducted during deep foundation installation.
3. Hines' Response: The sides of the tunnel are not expected to be exposed during the construction of the NLG III project. The lowest floor elevation is 815' above sea level. The only exposed surface of the box culvert anticipated is the top surface of the tunnel at expected elevation of 807'+/- above sea level for coordination with the installation of the transfer grade beams described above. (See Exhibit E for Reference).
4. Hines' Response: All storm water run-off from impervious surfaces will be collected and conveyed via existing underground storm sewer to the City of Minneapolis storm sewer system currently in the Cedar Lake Trail easement and in compliance with existing City regulations. Storm water inside of the excavated site will infiltrate back into the ground or if needed, will be collected, filtered and conveyed to the city storm system in compliance with City of Minneapolis regulations and Minnesota Pollution Control Agency (MPCA) provisions evidenced in the approved SWPPP Plan.
5. Hines' Response: As referenced above, the improvements in the near vicinity of the tunnel will be either driven H-Pile or drilled concrete caisson which are not expected to cause any consolidation of soils supporting the tunnel sections.

Cooperative Agreements

1&2. City Response: The City will involve the various agencies identified, in conformance with the identified agreements. As part of this effort, the City initiated discussions with the USACE, who stated their involvement would be limited to a Section 408 review. Based on the City's preliminary legal assessment, a Section 408 review is not required for the project *as currently proposed*. Regardless, the City has encouraged Hines to seek its own legal counsel to ensure all its legal obligations are being met. City staff plan to continue to closely coordinate with BCWMC in review of materials to be provided by the applicant and conversations to ensure the integrity of the tunnel is not negatively impacted and the ability to efficiently access the tunnel for operation and maintenance purposes is maintained.

If you have comments or questions, please contact me at 612-673-3973 or Jeremy.Strehlo@minneapolismn.gov.

Sincerely,



City of Minneapolis, Department of Public Works

Surface Water & Sewers

Jeremy Strehlo

Professional Engineer

UNDERGROUND STORM WATER SEWER EASEMENT AGREEMENT

THIS INDENTURE is made this 16th day of November, 1988, between LAND PARTNERS II LIMITED PARTNERSHIP, a Minnesota limited partnership, Grantor, and the CITY OF MINNEAPOLIS, a Minnesota municipal corporation, Grantee.

WHEREAS, Land Partners II Limited Partnership is the owner of the tracts of land in Hennepin County, Minnesota, described in the attached Exhibit A (the "Property"); and,

WHEREAS, Grantor desires to grant to Grantee a permanent easement for underground storm sewer purposes in, on, over, under and across a part of the Property.

NOW, THEREFORE, in consideration of one dollar (\$1.00) paid by Grantee to Grantor, the mutual covenants contained herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. Grantor hereby grants and conveys to Grantee, its successors and assigns, a perpetual and assignable easement in, on, over and across that part of the Property legally described in the attached Exhibit B ("Easement Property"), for location, construction, operation, maintenance, alteration, repair, and patrol of a twenty-five foot (25') to seventy-five (75') wide box culvert, underground storm water sewer channel ("Tunnel").

2. Grantor may continue to operate a parking lot over the Easement Property and to construct improvements on the Easement Property, provided that such improvements shall not damage the Tunnel or interfere with the rights herein granted to Grantee. Grantor understands and agrees that, prior to constructing any building or other structure on the Easement Property, Grantor must obtain approval of the plans for such building or structure from the Grantee and that in making its decision, Grantee will seek the advice of the United States Army Corps of Engineers. Grantee agrees not to unreasonably withhold approval of any such plans.

3. Grantor further grants to Grantee the right of reasonable ingress and egress over the Property as necessary to access two surface maintenance access points to the Tunnel. All location, construction, operation, maintenance, alteration, repair, and patrol activities conducted by Grantee pursuant to this easement will be from inside the underground storm sewer. Grantee is not entitled to damage improvements constructed on the Easement Property while locating, constructing, operating, maintaining, altering, repairing or patrolling the underground storm sewer.

TRANSFER ENTERED
DEPT. OF PROPERTY TAX & PUBLIC RECORDS

MAR 17 1989

[Signature]
HENNEPIN COUNTY, MINN.
BY *[Signature]* DEPUTY

4. Grantee shall be responsible for maintaining safe conditions in, on, over, across and under the Easement Property and agrees to indemnify and hold harmless Grantor, its officers, directors, and agents, from any and all claims and disputes by third parties, including but not limited to the reasonable cost of attorney's fees and claims for personal injuries or property damage, arising in whole or in part from storm sewer construction activities. Grantee expressly reserves all defenses it may have against third parties for such claims, including municipal tort liability limits or any other statutory limitations on liability.

5. Grantee agrees to restore the Easement Property following repair or maintenance to the Tunnel to its condition existing prior to commencement of such repair or maintenance. Such restoration or repair of the Easement Property shall include but not be limited to repaving and relining of parking lots. Grantee agrees to reimburse Grantor for reasonable costs incurred by Grantor to so restore the Easement Property in the event that the Grantee fails to properly restore the Easement Property within 15 days after written notice from Grantor to Grantee.

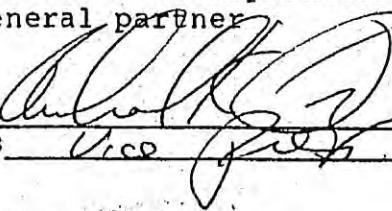
6. Grantor covenants that Grantor has the right to convey the easement granted herein.

7. This Easement Agreement shall run with the land and shall bind and inure to the benefit of the parties hereto and their respective successors and assigns.

IN WITNESS WHEREOF, the parties hereto have set their hands as of the date first above written.

LAND PARTNERS II LIMITED
PARTNERSHIP, a Minnesota
limited partnership

By INVESTMENT MANAGEMENT, INC.,
a Minnesota corporation, its
general partner

By 
Its Vice Pres

CITY OF MINNEAPOLIS

By 
Its City Manager

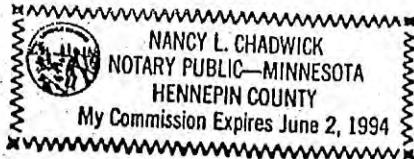
By 
Its City Clerk

By _____
Its _____

Melvyn Mendel
Executive Officer

STATE OF MINNESOTA)
) ss.
COUNTY OF HENNEPIN)

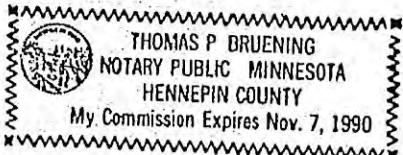
The foregoing instrument was acknowledged before me, a notary public, this 10th day of November, 1988, by Richard K. Pogin, the Vice President of Investment Management, Inc., a Minnesota corporation, a general partner in Land Partners II Limited Partnership, a Minnesota limited partnership, on behalf of the limited partnership.



Nancy L. Chadwick
Notary Public

STATE OF MINNESOTA)
) ss.
COUNTY OF HENNEPIN)

The foregoing instrument was acknowledged before me, a notary public, this 23rd day of February, 1989, by Donald Fraser, Steven J. Stenberg, and Melvyn Mendel, the Mayor, Asst. City Clerk, and Finance Officer, respectively, of the City of Minneapolis, a Minnesota municipal corporation, on behalf of the municipal corporation.



Thomas P. Bruening
Notary Public

THIS INSTRUMENT WAS DRAFTED BY:

LeFEVERE, LEFLER, KENNEDY,
O'BRIEN & DRAWZ
a Professional Association
2000 First Bank Place West
120 South Sixth Street
Minneapolis, MN 55402
(612) 333-0543 (CAH)

1201EA01.I34

PERMANENT TUNNEL EASEMENT

EXHIBIT A

Parcel 1: That part of Abandoned Fourth Avenue North adjoining Blocks 4, 5, 9 and 85, Hoag's Addition to Minneapolis, Hennepin County, Minnesota, being 80 feet in width which lies between the Northeasterly line of Sixth Street North and the Southwesterly line of Fourth Street North.

Parcel 2 (Abstract): All those parts of the Northeast Quarter of the Southwest Quarter of Section 22, Township 29 North, Range 24 West of the 4th Principal Meridian, and of Block 4 and 5, Hoag's Addition to Minneapolis, and of Block 3, Wilson Bell & Wagner's Addition to Minneapolis, and of vacated Sixth Street North, described as follows:

Commencing at the most southerly corner of the northeasterly 210 feet of said Block 4, Hoag's Addition; thence northwesterly along the southwesterly line of said northeasterly 210 feet, 258.36 feet; thence deflecting left 83 degrees 51 minutes 10 seconds on a bearing of south 52 degrees 13 minutes 14 seconds west, 105.6 feet to the point of beginning of the property being described; thence south 46 degrees 6 minutes 24 seconds west, 24.83 feet, more or less, to the northeasterly line of vacated Sixth Street North; thence south 63 degrees 35 minutes 34 seconds west, 86.46 feet to the southwesterly line of vacated Sixth Street North; thence south 60 degrees 40 minutes 50 seconds west, 156.74 feet; thence southwesterly 5.49 feet along a non-tangential curve concave to the northwest having a radius of 5779.58 feet and a chord which bears south 50 degrees 26 minutes 58 seconds west; thence south 58 degrees 28 minutes 40 seconds west, 235 feet; thence southwesterly 50.67 feet along a non-tangential curve concave to the northwest having a radius of 5751.58 feet and a chord which bears south 53 degrees 2 minutes 52 seconds west; thence south 53 degrees 18 minutes 1 second west and tangent to the last described curve, 588.12 feet; thence north 39 degrees 12 minutes 33 seconds east, 274.74 feet to a line parallel with and 25 feet southeasterly from the centerline of the east bound main track of the Burlington Northern Railroad; thence north 46 degrees 22 minutes 36 seconds east and parallel with said centerline, 831.63 feet to the northeast line of said vacated Sixth Street North; thence south 43 degrees 28 minutes 41 seconds east along the northeast line of vacated Sixth Street North, 146.05 feet to the most westerly corner of said Block 4; thence north 46 degrees 15 minutes 54 seconds east, 339.51 feet along the northwest line of said Block 4 to the most northerly corner thereof; thence south 43 degrees 48 minutes 47 seconds east, 78.28 feet along the northeast line of said Block 4 to a point 268.14 feet northwesterly from the most easterly corner of said Block 4; thence south 46 degrees 8 minutes 51 seconds west, 314.92 feet to the point of beginning.

Excepting therefrom that part of said Northeast Quarter of Southwest Quarter of Section 22, described as follows:

Commencing at the most southerly corner of the northeasterly 210 feet of said Block 4; thence northwesterly along the southwesterly line of said northeasterly 210 feet of said Block 4, 258.36 feet; thence southwesterly deflecting to the left 83 degrees 51 minutes 10 seconds, 105.6 feet; thence deflecting left 6 degrees 6 minutes 50 seconds, to the northeasterly line of vacated Sixth Street North; thence deflecting right 17 degrees, 29 minutes, 10 seconds to the southwesterly line of said vacated Sixth Street North to the point of beginning of the exception being described; thence southwesterly deflecting left 2 degrees 54 minutes 44 seconds, 156.74 feet; thence northeasterly along a non-tangential curve concave to the northwest having a radius of 5779.58 feet, to a point on the southwesterly line of vacated Sixth Street North, 30 feet northwesterly from the point of beginning; thence southeasterly along said southwesterly line to the point of beginning.

Parcel 3 (Abstract):

TRACT 1: Those parts of Lots 1, 2, 9 and 10, Block 85, Hoag's Addition to Minneapolis, lying Northwesterly of a line which begins at a point on the Southwest line of said Block 85, distant 267.56 feet Northwesterly of the most Southerly corner thereof and runs Northeasterly to a point on the Northeast line of said Block 85, distant 265.87 feet Northwesterly of the most Easterly corner thereof and there ends.

TRACT 2: Those parts of Lots 4, 5, 6 and 7, Block 9 Hoag's Addition to Minneapolis, lying Southeasterly of a line which begins at a point on the Southwesterly line of said Block 9, distant 65.22 feet Northwest of the most Southerly corner thereof and runs Northeasterly to a point on the Northeasterly line of said Block 9, distant 64.56 feet Northwest of the most Easterly corner thereof and there ends; said line is 25 feet Southeast of and parallel with the centerline of the East bound main track of the Burlington Northern Railroad as constructed.

TRACT 3: That part of Block 5, Hoag's Addition to Minneapolis, lying Southeasterly of a line which begins at a point on the Southwesterly line of said Block 5, distant 66.05 feet Northwest of the most Southerly corner thereof and runs Northeasterly to a point on the Northeasterly line of said Block 5, distant 65.39 feet Northwest of the most Easterly corner thereof and there ends; said line is 25 feet Southeast of and parallel with the centerline of the East bound main track of the Burlington Northern Railroad as constructed.

Parcel 4: That part of Fifth Street North adjoining Blocks 4, 5, 9 and 85, HOAG'S ADDITION TO MINNEAPOLIS, Hennepin County, Minnesota, lying southeasterly of the following described line:

Beginning at the point of intersection of the northeasterly line of said Block 5 and a line which is parallel with and 25 feet southeasterly of the centerline of the eastbound main track of the Burlington Northern Railroad, said point of beginning being distant 65.18 feet northwesterly of the most easterly corner of said Block 5; thence northeasterly along said line which is parallel with and 25 feet southeasterly of the centerline of the eastbound main track to a point on the southwesterly line of said Block 9, distant 65.09 feet northwesterly of the most southerly corner thereof and said line there terminating.

and lying northwesterly of the following described line:

Beginning at a point on the northeasterly line of said Block 4, distant 268.14 feet northwesterly from the most easterly corner of said Block 4; thence northeasterly to a point on the southwesterly line of said Block 85, distant 267.56 feet northwesterly from the most southerly corner thereof and said line there terminating.

Parcel 5: That part of Section 22, Township 29, Range 24, described as commencing at the most Southerly corner of the Northeasterly 210 feet of Block 4, Hoag's Addition to Minneapolis; thence Northwesterly along the Southwesterly line of the Northeasterly 210 feet of said Block 4 a distance of 258.36 feet; thence Southwesterly, deflecting to the left 83 degrees 51 minutes 10 seconds, a distance of 105.60 feet; thence Southwesterly, deflecting to the left 6 degrees 06 minutes 50 seconds, a distance of 25 feet to the Northeasterly line of vacated Sixth Street North; thence Southwesterly, deflecting to the right 17 degrees 29 minutes 10 seconds, a distance of 86.46 feet to the Southwesterly line of vacated Sixth Street North, said point being the actual point of beginning; thence Southwesterly, deflecting to the left 2 degrees 54 minutes 44 seconds, a distance of 156.74 feet; thence Northeasterly along a non-tangential curve, concave to the Northwest, having a radius of 5779.58 feet, to a point on the Southwesterly line of vacated Sixth Street North distant 30 feet Northwesterly from the actual point of beginning; thence Southeasterly along said Southwesterly line to the actual point of beginning.

Parcel 6: That part of Block 85, Hoag's Addition to Minneapolis, described as beginning at a point on the Southwesterly line of said Block 85 distant 255.56 feet Northwesterly from the most Southerly corner of said Block 85; thence Northwesterly along said Southwesterly line a distance of 12 feet; thence Northeasterly to a point on the Northeasterly line of said Block 85 distant 265.87 feet Northwesterly from the most Easterly

corner of said Block 85; thence Southeasterly along said Northeasterly line a distance of 12 feet; thence Southwesterly to the point of beginning; and,

That part of Lots 2 and 9, Block 85, Hoag's Addition to Minneapolis, lying Southeasterly of a line drawn from a point on the Southwesterly line of said Block 85 distant 255.56 feet Northwesterly from the most Southerly corner of said Block 85 to a point on the Northeasterly line of said Block 85 distant 253.87 feet Northwesterly from the most Easterly corner of said Block 85; EXCEPT those parts of the above-described tracts of land which lie Northwesterly and Northeasterly of a line described as follows: Commencing at a point on the center line of Second Avenue North distant 5.5 feet Northeasterly of its intersection with the center line of Fourth Street North; thence Northwesterly, parallel with the center line of Fourth Street North, a distance of 308.11 feet; thence Northwesterly a distance of 794.64 feet along a tangential curve concave to the Southwest, having a radius of 5729.58 feet and a central angle of 7 degrees, 56 minutes, 47 seconds; thence Southeasterly along the above-described curve a distance of 438.19 feet to the point of beginning of the line to be described; thence Southwesterly, radial to said curve, a distance of 43.00 feet; thence Northwesterly, parallel with said curve, 100 feet of said line there terminating.

EXCEPT that part of Lot 9 lying Northeasterly of the extension Southeasterly of the last line described in the Exception set forth in this Parcel 8.

(Parcel 5 is Registered, evidenced by Certificate of Title
No. _____)

EXHIBIT B

Those parts of Section 22, Township 29 North, Range 24 West of the 4th Principal Meridian, and of Blocks 4, 5, 9 and 85, Hoag's Addition to Minneapolis, and of Block 3, Wilson Bell & Wagner's Addition to Minneapolis, and of Lot 13, Block 3, Camp & Walker's Addition to Minneapolis and of abandoned Fourth Avenue North and Fifth Street North and of vacated Sixth Street North that lies 25 feet on each side of the following described line:

Commencing at the most easterly corner of Block 85, Hoag's Addition to Minneapolis, Hennepin County, Minnesota; thence North 45 degrees 19 minutes 06 seconds West, assumed bearing, along the northeasterly line of said Block 85, a distance of 281.45 feet to the point of beginning of the line to be described; thence South 80 degrees 09 minutes 16 seconds West 241.88 feet; thence 63.06 feet southwesterly along a tangential curve concave to the southeast having a central angle of 36 degrees 07 minutes 44 seconds and a radius of 100.00 feet; thence South 44 degrees 01 minutes 32 seconds West, tangent to said curve, 449.02 feet; thence South 42 degrees 14 minutes 12 seconds West 626.62 feet; thence southwesterly 13.71 feet along a tangential curve concave to the northwest having a central angle of 7 degrees 51 minutes 21 seconds and a radius of 100.00 feet; thence South 50 degrees 05 minutes 33 seconds West, tangent to said curve, 939.76 feet and said line there terminating.

Said perpetual easement contains 84,500± sq. ft.

a:1201ea02.cah

74

5518166

23MAR89 15:25 B5518166 DOC \$10.00

OFFICE OF COUNTY RECORDER
HENNEPIN COUNTY, MINNESOTA

CERTIFIED FILED AND OR
RECORDED ON

89 MAR 23 PM 3:24

AS DOCUMENT # 5518166

R. Dan Carlson CO. RECORDER

BY LeRoy DEPUTY

bx 62

EXHIBIT C

es ARCHITECTURE
PROJECTS

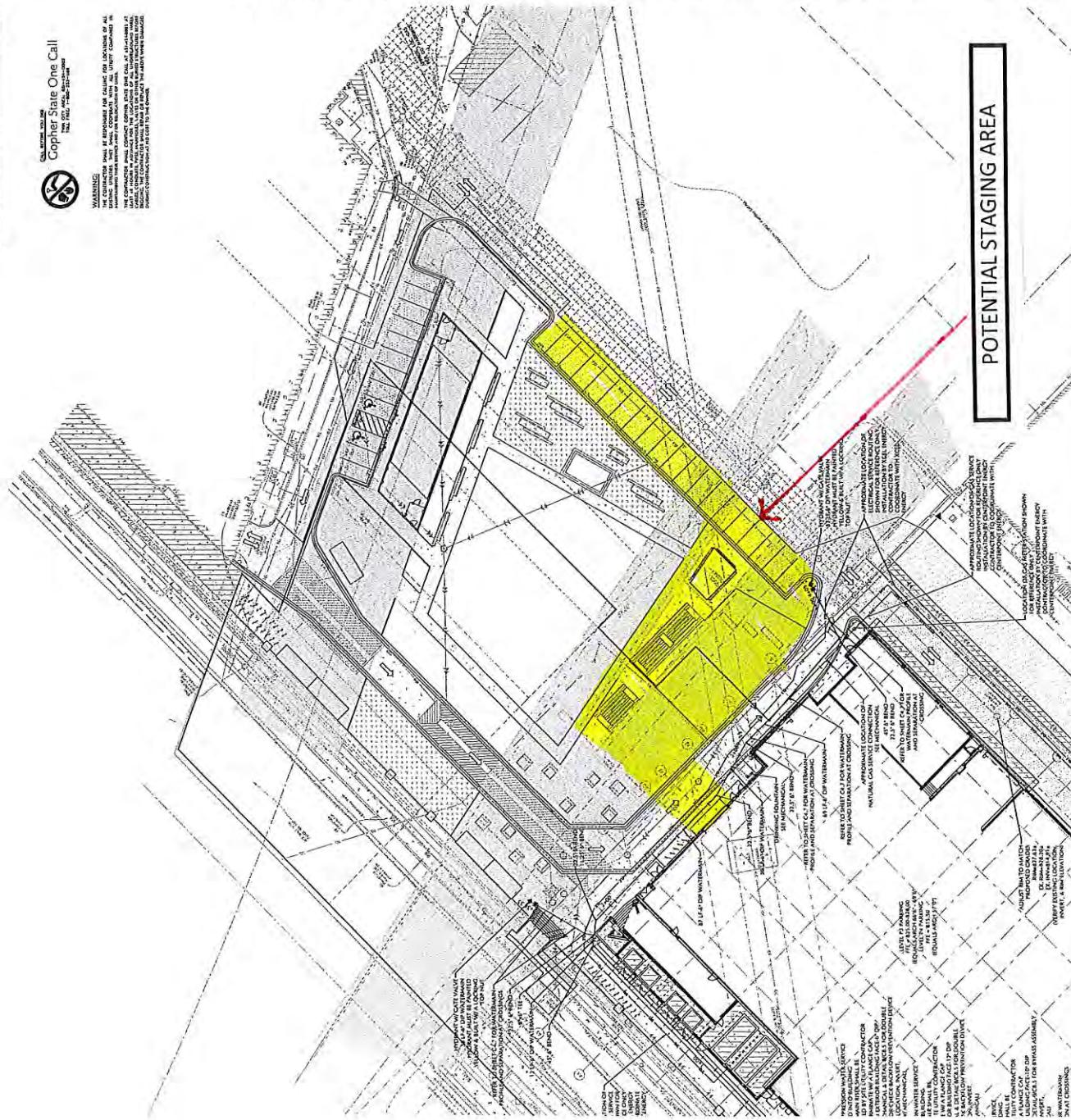
NOTE:
EXISTING SURVEY INFORMATION PROVIDED BY
LOUCKS, REFER TO ALTANSPS LAND TITLE SURVEY
DATED APRIL 2020 FOR COMPLETE SURVEY
INFORMATION.

A detailed legend titled "CIVIL" located on the left side of the map. It includes symbols for roads, rivers, mountains, forests, deserts, and various types of settlements like cities, towns, and villages. There are also symbols for industrial facilities, powerplants, and agricultural areas.

SANITARY SEWER STRUCTURE SCHEDULE		
STRUCTURE NUMBER	STRUCTURE TYPE	NEENAH CASTING TYPE (OR EQUAL)
SANIMH 1	#8" PRECAST	R-16x2



WARNING: THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL UTILITY COMPONENETS IN THE CONTRACTOR'S WORK AREA. THE CONTRACTOR SHALL NOT DAMAGE ANY UTILITY OR OTHER CONSTRUCTION LINE, PIPE, CABLE, STRUCTURE, PAVING, LANDSCAPING, ETC. IN THE CONTRACTOR'S WORK AREA. THE CONTRACTOR SHALL CALL FOR LOCATIONS OF UTILITY LINES PRIOR TO COMMENCING ANY WORK.



North Loop Green!!!
Utility Plan
Sanitary Sewer & Water/main
The Green
C4.5

C4.5
The Green
Sanitary Sewer & Water/main
Utility Plan
North Loop Green !!!



NORTH LOOP GREEN III - FOUNDATIONS ADJACENT TO BASSETT CREEK TUNNEL

The proposed development of **North Loop Green – III** is to be located on a site bound by the 5th St bridge on the west side, 3rd Ave on the south side, the railroad tracks on the north side and the I-94 ramp on the east side.

The Bassett creek tunnel runs East-West on the north side of the site and crosses the site at an angle going from north side to the east side. The majority portion of the tunnel located under the Level P4 (Basement level) and a small portion of the tunnel is located under the Level P3 (Grade level). The foundation structure has been designed to avoid imparting any adverse effect to the existing Bassett Creek Tunnel structure. The following strategies have been used to achieve this:

1. Where column and wall loads from the superstructure are located directly above the Bassett Creek Tunnel, spread footings have been avoided to not overload the tunnel's lid structure. Instead, reinforced concrete grade beams are used to span across the full width of the tunnel and transfer the loads into deep foundations (drilled shafts or driven H-Piles) on either side of the tunnel.
2. The deep foundation elements on each side of the tunnel are located a minimum of 28'-0" (clear distance) away from each other. Based on the 18'-0" out-to-out width of the existing tunnel, this allows a minimum of 5'-0" clear distance between the outside edge of the tunnel walls and the edge of the new deep foundation elements. This also ensures that the new deep foundation elements are completely clear of the tunnel footings.
3. Where drilled shafts are adjacent to the Bassett Creek Tunnel, these elements have a bearing elevation which is a minimum of 10'-0" lower than the tunnel foundation to prevent loads from the superstructure from affecting the tunnel structure or its soil bearing capacity.
4. Before the commencement of the foundations, the tunnel will be surveyed in order to confirm that the dimensions derived from the existing drawings of the tunnel are accurate or if the foundations structure needs to be adjusted based on the as-built conditions.

If there are any further questions or concerns, feel free to contact us at 312.274.2400 or via email at
patrick.ragan@wsp.com or viral.shah@wsp.com

Suite 4200
30 North LaSalle Street
Chicago, IL 60602

Tel.: +1 312 274-2400
Fax: +1 312 274-2401
www.wsp.com

North Loop Green

III
Minneapolis, MN 55401

WSP USA BUILDINGS, INC.
30 NORTH LASALLE ST., SUITE 4200
CHICAGO, ILLINOIS 60602
TEL: +1 312.274.2480
www.wsp-usa.com

esg
ARCHITECTURE & DESIGN

I hereby certify that this plan, dated November 19,
2007, was prepared by me or under my direct
supervision and that it is a fair financial
professionals' judgment under the laws of the
State of Minnesota.
John M. Miller
John M. Miller, CFA

EXHIBIT D

Foundation Permit
Application
09/17/2021

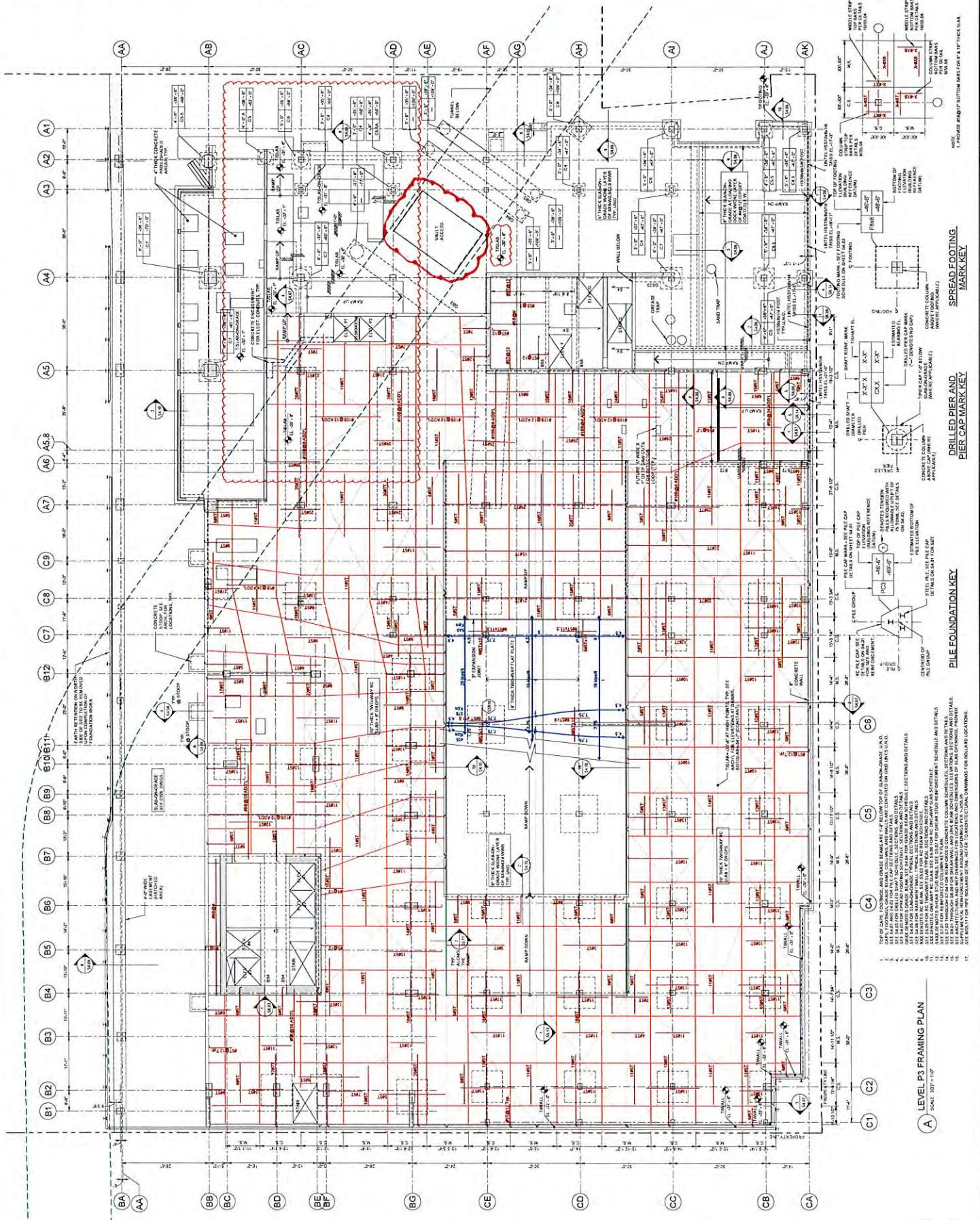


EXHIBIT E

Issued for Bid
07/12/2021

ORIGINAL ISSUE:
22/2001 VISIONS:

219802
PROJECT NUMBER
BG
LIBRARY BY
REF/BG
CHECKED BY

TUNNEL 3D VIEWS

