

Meeting: Board Meeting Meeting date: 3/11/2021 Agenda Item #: 11.1

Item type: Permit Consideration

Title: Permit 21-065: Target Knollwood, 8900 Hwy 7, St. Louis Park

Prepared by: Name: Erin Manlick

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Recommendation:

Approval of MCWD permit application on the following conditions:

Conditions for permit issuance:

- 1. Submission of draft maintenance declaration for Stormwater Management, Waterbody Crossings and Structures, and Wetland Buffers for District approval, then recordation and submission of receipt
- 2. Submission of a wetland buffer monumentation plan
- 3. Reimbursement of District fees for engineering and legal review
- 4. Submission of Financial Assurance for Wetland Protection
- 5. Board of Managers approval of requested variance from wetland buffer requirement

Condition for permit closeout:

6. Submission of an as-built survey upon completion of the project, which documents the location and volume of both fill and compensatory storage

Summary:

The Target Corporation (Applicant) has applied for a Minnehaha Creek Watershed District (MCWD) permit for the replacement of a portion of Boone Avenue, a private road adjacent to the Target store parking lot. The project triggers the Wetland Conservation Act (WCA), as well as MCWD's Erosion Control, Stormwater Management, Floodplain Alteration, Waterbody Crossings and Structures, and Wetland Protection rules. The City of St. Louis Park maintains authority for Erosion Control. The District is responsible for implementing the WCA within the City of St. Louis Park. The project meets the requirements for all applicable rules, with the exception of the Wetland Protection rule. The Applicant has requested a variance to the required buffer width along 163 feet of the proposed road, as shown in Attachment 2. In accordance with established policy, the Board of Managers is asked to consider the application and variance request.

Background:

The Applicant is proposing to reconstruct 1.64 acres of an existing private road (Boone Avenue) and the adjoining parking lot located at 8900 Highway 7 in the City of St. Louis Park to raise the road out of the 100-year floodplain of Minnehaha Creek. The backwaters of Minnehaha Creek, as well as one wetland, are adjacent to the proposed reconstruction.

A Type 1 Floodplain Forest wetland has been delineated on the eastern side of the existing road and approved under a Notice of Decision issued by MCWD on December 22, 2020 (Attachment 3). The wetland protection rule requires that a wetland buffer must be provided around all disturbed wetlands and on wetland edges downgradient of disturbance. The rule analysis summarizes the applicable rules being met, as well as the application of the Wetland Protection rule and the variance request from the Applicant.

District Rule Analysis:

Floodplain Alteration:

The District's Floodplain Alteration rule is triggered for any alteration or filling of land below the 100-year high water elevation of a waterbody. In its existing condition, the grade and alignment of Boone Avenue results in 383 linear feet of the road falling within the 100-year floodplain of Minnehaha Creek. This project proposes to add fill to raise Boone Avenue out of the floodplain, while maintaining the existing alignment of the road. The stated purpose of raising Boone Avenue is to minimize seasonal flooding that occurs along the road, which disrupts the flow of traffic and requires annual maintenance. The District requires compensatory storage to be provided at a 1:1 ratio for any fill placed between the Ordinary High Water Level (OHWL) and 100-year flood elevation. The project proposes 599 cubic yards of fill, thus requiring 599 cubic yards of compensatory storage.

To compensate for the amount of fill, the Applicant has sized the proposed stormwater pond to provide 928 cubic yards of storage between the ordinary water level (899.58, NAVD88) and 100-year flood level (902.99, NAVD88) of Minnehaha Creek. The project proposes to connect the stormwater pond to the creek via a pipe under Boone Avenue, which will provide a hydraulic connection between the proposed pond and Minnehaha Creek. The connection will allow the flow of floodwater into the pond for compensatory flood storage.

Staff and the District Engineer have confirmed that the project, as proposed, will result in a net increase of 329 cubic yards of flood storage.

The submission of an as-built survey upon completion of the project, which documents the location and volume of both fill and compensatory storage, is listed as a condition of approval.

The project as designed meets the District's Floodplain Alteration Rule.

Wetland Conservation Act (WCA)

The application includes requests for De Minimis Exemption and No-Loss Determinations under WCA. These are technical determinations ordinarily made by staff in conjunction with the WCA technical evaluation panel (TEP). However, under Resolution 13-025, a WCA determination must be made by the Board of Managers when the applicant's permit request includes a variance or exception from the District Wetland Protection rule. The Applicant has requested a variance to the District's Wetland Protection rule, therefore, the WCA De Minimis Exemption and No-Loss Determination requests for 46 square feet of permanent wetland fill and roughly 436 square feet of temporary impacts in Wetland 1 (Table 1) are before the Board of Managers for approval.

AquaticResource ID (as noted on overheadview)	Aquatic Resource Type (wetland, lake, tributary etc.)	drain, or		Size of Impact ²	Overall Size of Aquatic Resource ³	Community Type(s) in	County, Major Watershed#, and Bank Service Area # ofImpactArea ⁵
Wetland 1	Wetland	Fill	P T (<180)	46sf 0.01 ac	0.21 acres	Floodplain Forest	Hennepin, WM #20, BSA #7
Minnehaha Creek Backwaters	Tributary	Fill	P T (<180)	15sf 180sf	0.09 acres	Riverine	Hennepin, WM #20, BSA #7

Table 1: Proposed Wetland Impacts

The wetland boundary and type of one wetland, Wetland 1, was approved under W20-16 Notice of Decision (NOD) on December 22, 2020. The WCA regulates draining, filling, and excavation in wetlands. The project is proposing to fill 46 square feet of Wetland 1 for the construction of a retaining wall and stormwater outfall. Under MN WCA Rule 8420.0420 Exemption Standards, Subpart 8- De Minimis, a replacement plan is not required for projects that propose less than 400 square feet of impact to wetland types 1, 2, or 6 for wetlands that are outside the building setback zone as defined in the local shoreland management ordinance.

NOD W20-32 approved Wetland 1 as Type 1 Floodplain Forest, the City of St. Louis Park has no shoreland management ordinance, and the impacts are less than 400 square feet.

The project is also proposing 436 square feet of temporary disturbance within Wetland 1 for the installation of the stormwater pond outlet pipe. Under MN WCA Rule 8420.0415 No-Loss Criteria, Subpart H, temporary impacts that are rectified by repairing, rehabilitating, or restoring the affected wetland to existing conditions are considered as "no loss" of wetland function, and permitted. The proposed temporary impacts to Wetland 1 will be rectified by restoring the affected area to its original characteristics within 6 months of disturbance.

The Notice of Application for the De Minimis Exemption and No-Loss Determination application was provided to the Technical Evaluation Panel (TEP) on February 9th, 2021 (Attachment 4). The Board of Soil and Water Resources (BWSR), provided comment on February 10th, 2021 that the project qualifies for the De Minimis Exemption as long as the impacts are outside of the building setback zone as defined in the local shoreland management ordinance. The City of St. Louis Park provided comment on February 19th, 2021 that no shoreland management ordinance exists. No additional comments were received.

Additionally, 15 square feet of permanent impacts and 180 square feet of temporary disturbance are proposed for the placement of the stormwater pipe outfall within the backwaters of Minnehaha Creek. These impacts are addressed in the *Waterbody Crossings and Structures Rule* section of this report.

Staff recommends approval of both the De Minimis Exemption and No-Loss determination.

Wetland Protection Rule

The Wetland Protection rule is applicable for any project that proposes temporary or permanent wetland impact. The buffer provisions of the rule do not apply to wetland impacts that don't require a permit, which includes de minimis and no-loss impacts. However, the buffer requirements apply if the work requires a permit under the Stormwater Management or Waterbody Crossings & Structures rule. Both the Stormwater Management and Waterbody Crossings and Structures rules are triggered, therefore the buffer requirement is triggered.

Per section 5(a) of the Wetland Protection rule, buffers must be provided on wetland edges downgradient of disturbance. The applicant has provided plans that include a wetland buffer provided on the northern edge and southern edge of the downgradient wetland, and has requested a variance to meeting the minimum buffer width requirement on the edge of the wetland immediately east of the proposed road. Additional analysis on buffer width has been provided under section 6(c) below.

Per section 5(b) of the rule, buffers are required, and have been analyzed under section 6, below.

Per section 5(c) of the rule, buffers must be documented by a declaration or other recordable instrument. Submission of a maintenance declaration is listed as a recommended condition of approval to satisfy this requirement.

Section 5(d) of the rule requires a permanent wetland buffer monument to be installed at each lot line where it intersects the buffer, and where needed to indicate the contour of the buffer, with a maximum spacing of 100 feet. Submission of a wetland buffer monumentation plan that is in accordance with the rule is listed as a recommended condition of approval to satisfy this requirement, provided that the variance to the minimum wetland buffer width requirement is granted.

Per section 6(a) of the rule, buffer width requirements are determined by the management class of the wetland. The District's Functional Assessment of Wetlands inventory classified Wetland 1 as Manage 1, which corresponds to a 40-foot buffer.

Per section 6(c) of the rule, buffer averaging is permitted should the full width of the buffer not be able to be provided in all locations. Under this provision of the rule, buffer averaging may encompass minimum buffer widths of 20 feet (50%),

with a maximum width of 80 feet (200%) for Manage 1 wetlands, provided that there is no reduction in total buffer area (assumes an area equal to a uniform 40-foot buffer along the length of the wetland). Based on review of the plans and specifications, the Applicant is able to provide the required 40-foot buffer along all but 163 linear feet of the wetland boundary, where no buffer can be provided.

Staff have calculated the total buffer area required within the project area to be 14,765 square feet. The Applicant has submitted a wetland buffer plan that demonstrates a wetland buffer area of 11,283 square feet, resulting in a deficit of 3,482 square feet. The minimum buffer width and buffer area requirement is not being met due to the alignment of the existing road, and the proposal to replace it in the same location. The Applicant has requested a variance to section 6(c) of the Wetland Protection rule, which has been analyzed under the 'Variance' heading below.

Section 6(d) of the rule does not apply, as the Applicant has not requested a reduction in Applied Buffer Width.

Section 6(e) of the rule does not apply, because the project is not resurfacing, but reconstruction, and further while the project involves the reconstruction of a road, the road is privately owned and therefore has no public right-of-way.

Section 6(f) of this rule does not apply as this project is not a New Principal Residential Structure.

The criteria of section 7(a) of the Wetland Protection rule, which prohibits actions such as mowing, fertilizing or placement of yard waste within the buffer area, is memorialized with the maintenance declaration. Submission of a maintenance declaration including these provisions is listed as a recommended condition of approval.

Section 7(b) of the rule does not apply as the site is not considered public land, a homeowner's association property, or public right-of-way.

Section 7(c) of the rule does not apply as the applicant is requesting a variance to provide no wetland buffer along the wetland edge immediately adjacent to the road, and no areas of the proposed northern and southern buffer will be disturbed by grading or other site activities.

In summary, upon satisfaction of the recommended condition, the project meets the requirements of the Wetland Protection Rule, apart from section 6(c), as noted above, for which the Applicant has requested a variance.

Waterbody Crossings and Structures Rule

The District Waterbody Crossings & Structures rule is applicable for any project that proposes to place a road, highway, utility, bridge, boardwalk, or associated structure in contact with the bed or bank of any waterbody. The proposed stormwater pond will include a pipe (24" RCP, inv = 898.92) under Boone Avenue that outlets to the bank of Minnehaha Creek, resulting in 15 square feet of permanent impacts and 180 square feet of temporary disturbance.

Per section 3(a), structures in public waters shall meet a demonstrated public benefit and meet a specific need for all other projects. The proposed outfall is necessary to connect the proposed stormwater pond to Minnehaha Creek, which allows for the compensatory flood storage. In addition, the proposed pond and associated pipe will allow Boone Avenue to be raised out of the 100-year floodplain of Minnehaha Creek, providing an added public safety benefit.

Per section 3(b), the placement of the outfall shall retain adequate hydraulic capacity, and any changes in hydraulic capacity may not result in upstream or downstream increases in flood stage. The proposed stormwater pond will provide an additional 329 cubic yards of flood storage, and the proposed rates of stormwater leaving the site will be reduced during the 1-year, 10-year, and 100-year storm events. After review of the proposed plans, the District Engineer has confirmed that the applicant has demonstrated that hydraulic capacity will be retained.

Per section 3(c) structures that use the bed or bank of a waterbody shall retain adequate navigational capacity. The outfall is proposed within the backwaters of Minnehaha Creek, where the existing navigational capacity is limited. There is no proposed increase to the 100-year flood elevation, and there is no proposed change to the cross section of the navigable portion of the creek, therefore navigational capacity will not change from existing to proposed conditions.

Per section 3(d), aquatic and upland wildlife passages shall be preserved. The proposed outfall is for stormwater conveyance from the proposed pond and will not impede wildlife passage. Aquatic and upland wildlife passages will be preserved from existing to proposed conditions.

Per Section 3(e), the placement of a structure shall not adversely affect water quality. Currently, 35,954 square feet of impervious surface within the project area drains, untreated, to Minnehaha Creek via the existing storm sewer. The Applicant proposes to both reduce the area of impervious surface that drains to the creek by 1,138 square feet (3.15%), and provide Total Suspended Solids (TSS) and Total Phosphorus (TP) reduction through the proposed stormwater pond. Per the MIDS model submitted by the Applicant, the pond will provide 60% TSS and 34% TP removal for the areas disturbed as part of the proposed development. As proposed, no negative effects on water quality are associated with this project.

Per Section 3(f), the applicant has submitted design alternatives to show the proposed plan meets the minimal impact solution with respect to all other reasonable alternatives. One alternative submitted was a no-build scenario. This option would not provide an increase in flood storage, nor would it provide any treatment for water quality. Additionally, a no-build scenario does not meet the project goals. The second alternative submitted was to reconstruct Boone Avenue without creating a hydraulic connection between the proposed pond and Minnehaha Creek. This alternative would provide the water quality benefits associated with the pond, but would not allow for compensatory flood storage. Based on the two alternatives submitted for the project, MCWD staff concur that the applicant has demonstrated that the proposed plan represents a minimal impact solution.

Sections 3(g) and 3(h) do not apply to this project, as no work is proposed below the bed of Minnehaha Creek.

The maintenance requirement of waterbody crossings and structures will be satisfied through the recordation of a maintenance declaration, listed as a condition of approval.

The project, as designed, meets the District's Waterbody Crossings and Structures rule.

Stormwater Management Rule

The District's Stormwater Management Rule is applied to projects that propose the creation of new or replacement of existing impervious surface. The proposed project will disturb 1.64 acres of the 15.53 acre site, and reduce impervious within the project area from 1.2 acres to 0.85 acres, therefore the rule is applied. The project proposes redevelopment of a site larger than one acre; less than 40% of the site will be disturbed, and a reduction in impervious of 0-9%, therefore, per section 4(d), the Applicant is required to incorporate a BMP.

Site Size	Project	Drains To	Existing	Proposed	Proposed Net Decrease in
	Area Size		Impervious	Impervious	Impervious Surface Within
	(ac)		Within Project	Within Project	Project Area (ac)
			Area (ac)	Area (ac)	
15.53	1.64	Minnehaha	0.825	0.799	0.026
		Creek	(35,954 sf)	(34,816 sf)	(3.15%)

Table 2: Existing and Proposed Site Conditions

The Applicant has proposed to meet the District's Stormwater Management rule by constructing a wet pond with an infiltration bench to treat runoff from the entire 34,816 square feet of proposed impervious within the project area. The existing impervious (35,954 sf) is currently untreated.

Best Management Practices

Per section 3(d) of the rule, best management practices must be incorporated to limit the creation of impervious surface, maintain or enhance on-site infiltration, peak flow, and limit pollution generation on and discharge from the site. The Applicant has provided plans, stormwater modeling, stormwater calculations, and a narrative to demonstrate conformance with this requirement. Based on review of the Applicant's submittals, staff and the District Engineer have

determined that the proposed stormwater pond and infiltration bench have been designed in conformance with the criteria as outlined in the Minnesota Stormwater Manual, and their incorporation satisfies the requirements of this provision.

High Water Elevation

The high water elevation requirement of the rule requires two vertical feet of separation between the 100 year flood elevation and the low openings to structures. Based on the Applicant's submittals, and review and analysis by staff and the District Engineer, the 100-year high water elevation of the BMP is 903.15 and the low opening of the existing building is 907.0. The applicant has demonstrated 3.85 feet of freeboard, meeting the minimum 2 foot requirement.

Downstream Waterbodies

The impacts to downstream waterbodies section of the rule regulates new point source discharges and impacts to the bounce, inundation, and runout control elevations of waterbodies. The project does not propose a new point source or a change in the runout control elevation of any waterbody. The District Engineer has reviewed the proposed reconstruction and has determined that because there is no increase in the proposed rates leaving the site (described below in Table 3), the project will not change the bounce or inundation of Minnehaha Creek or the hydraulically connected wetland during the 1-year, 10-year, or 100-year storm events. The project as proposed is in conformance with the downstream waterbody requirements of the rule.

Total Site Rate Summary					
	Pre-Development	Maximum	Post-Development		
	Discharge Rate	Allowable	Discharge Rate		
	CFS	Discharge Rate	CFS		
		CFS			
1-year	2.86	2.86	1.33		
10-year	5.21	5.21	3.18		
100-year	9.58	5.21	0.00		

Table 3: Existing and Proposed Rates Leaving the Site

The maintenance requirement of stormwater facilities will be satisfied through the recordation of a maintenance declaration, listed as a condition of approval.

The project as proposed, upon fulfillment of the recommended condition, meets the requirements of the Stormwater Management Rule.

Variance

The Applicant is requesting a variance to section 6(c) of the Wetland Protection rule, which requires that a buffer width of at least 50% of the applied buffer width be maintained at all points along the wetland boundary. The variance request states that the Applicant is unable to provide the required buffer width along 163 linear feet of Boone Avenue, where no buffer can be provided due to the proximity of the road to the delineated wetland boundary. The Applicant is proposing to provide a 40-foot buffer on the northern and southern project boundaries, creating a total buffer area of 11,283 square feet, which results in a buffer area deficit of 3,482 square feet.

The District's Variance and Exception Rule states that the Managers may grant a variance from a provision of the rules if the applicant demonstrates the following:

- Because of special conditions inherent to the property that do not apply generally to other land or structures in the District, strict compliance with a provision of the a District rule will cause undue hardship to the applicant;
- The hardship was not created by the applicant, its owner or representative, or a contractor. Economic hardship is not grounds for issuing a variance;

- Granting the variance will not serve merely as a convenience to the applicant;
- There is no feasible and prudent alternative to the proposed activity requiring the variance; and
- Granting the variance will not impair or be contrary to the intent of the rules.

The Applicant has submitted a variance application (Attachment 5), citing the alignment and grade of the existing road within the 100-year floodplain of Minnehaha Creek as a special condition inherent to the property, and an existing condition that was not created by the Applicant.

Additionally, per City of St. Louis Park Zoning Code, 834 parking spaces are required on the Target parcel. The site currently includes 890 parking spaces, and in the proposed condition, the number of spaces will be reduced to 843. The loss of 47 parking spaces is due to the inclusion of the proposed stormwater pond, which has been sized to not only treat all of the proposed impervious surface associated with the project, but also to provide additional compensatory flood storage. Per the Applicant's calculations, realigning Boone Avenue out of the Minnehaha Creek floodplain would result in the loss of approximately 130-150 parking spaces, which would fall short of City requirements.

Furthermore, Boone Avenue is owned, in part, by multiple property owners. The Applicant has proposed to reconstruct a portion of the road that exists on their property, but realignment would require disturbing sections that the Applicant does not own. Because of the loss of required parking spaces and the joint-ownership of Boone Avenue, the Applicant deemed it infeasible to realign the road farther from Minnehaha Creek and the adjacent wetland.

A chief purpose of the wetland buffer provision of the Wetland Protection rule is to treat runoff from impervious surfaces prior to it entering a wetland. To address stormwater treatment loss as a result of the reduced buffer, the Applicant has proposed to curb the roadway and direct runoff to a stormwater pond that exceeds District stormwater management requirements for the project, and will prevent any hard surface runoff from directly entering the wetland in the area where buffer is absent.

The project proposes redevelopment of a site larger than one acre; less than 40% site disturbance, and a reduction in impervious of 0-9%, therefore, per section 4(d) of the Stormwater Management Rule, the Applicant is required to incorporate a BMP. The Applicant chose to incorporate a wet pond with an infiltration bench, which would exceed District requirements for volume control, rate control, and phosphorus control, if those requirements applied to this project.

The volume control requirement of the rule requires the abstraction of the first inch of runoff from the site's impervious surface. Based on the plans, stormwater calculations, and narrative the Applicant submitted, the project proposes to reduce impervious surface by 1,138 square feet, resulting in 34,816 square feet of impervious, post-development. If required to treat this impervious, an abstraction volume of 2,901 cubic feet would be required. The Applicant has provided an abstraction volume of 5,564 cubic feet. Based on staff and the District Engineer's analysis of the submittals provided by the Applicant, the provided abstraction volume is in excess of the required abstraction.

The rate control requirement dictates that no net increase in the peak runoff rates for the 1-, 10-, and 100-year design storms may occur anywhere stormwater discharges across the downgradient site boundary. As shown in Table 3, the proposed stormwater pond will reduce rates leaving the site in the 1, 10, and 100-year storm events. The Applicant has submitted plans, a stormwater model, stormwater calculations, and a narrative to demonstrate conformance with this criteria.

The phosphorus control requirement is met by meeting the abstraction requirements as outlined in the Volume Control section. Because the Applicant has demonstrated that the proposed pond will exceed volume control requirements, the phosphorus control requirement has been exceeded as well. The MIDS model provided by the Applicant showed 60% TSS and 34% TP removal (0.06 lbs/year) for the areas disturbed as part of the proposed development.

Based on staff and the District Engineer's analysis of the submittals provided by the Applicant, the proposed stormwater pond provides stormwater treatment in excess of what the District requires for this project.

Staff concurs in the factual statements and technical justifications stated above and in the variance application. Accordingly, staff finds there is an adequate technical basis and justification to grant the requested variance.

Conclusion:

The Target Corporation has applied for a MCWD permit for the Stormwater Management, Floodplain Alteration, Waterbody Crossings and Structures, and Wetland Protection rules, and has requested a variance to the buffer provision of the Wetland Protection rule for a portion of the proposed road replacement. Staff find that the Applicant has provided a satisfactory analysis for the Board of Managers to consider the variance request for providing no wetland buffer for 163 linear feet, and have exceeded the stormwater management regulatory requirements. Staff have found that the proposed project meets the applicable rule requirements, and recommends approval on condition that the Board approves the variance request and subject to the recommended conditions of approval. Furthermore, Staff recommend approval of the WCA De Minimis and No-Loss application.

Supporting documents (list attachments):

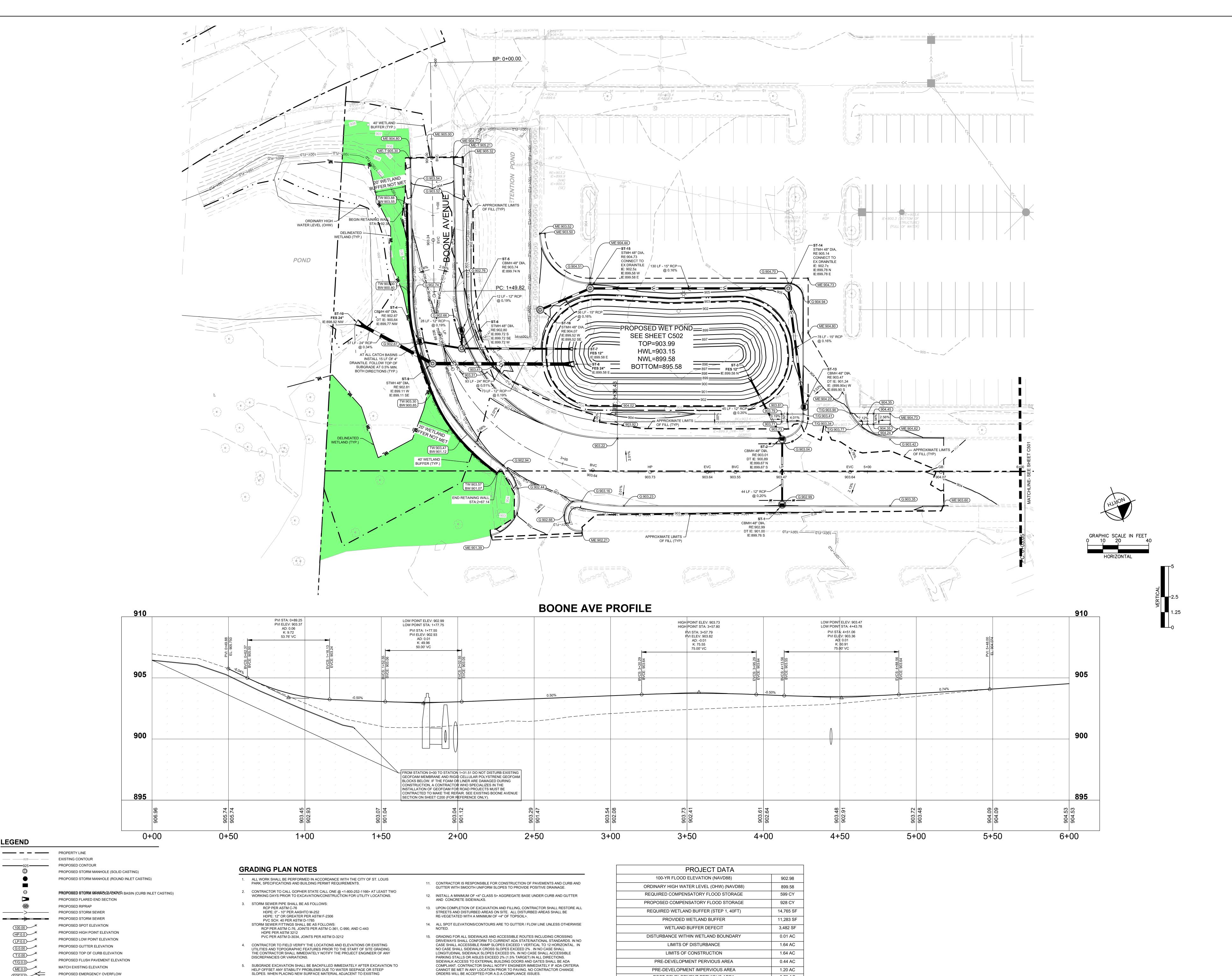
- 1. Application Form
- 2. Wetland Buffer Plan
- 3. Notice of Decision 2020
- 4. Notice of Application 2021
- 5. Variance Request
- 6. Site Plans

WATER RESOURCE PERMIT APPLICATION FORM

Use this form to notify/apply to the Minnehaha Creek Watershed District (MCWD) of a proposed project or work which may fall within their jurisdiction. Fill out this form completely and submit with your site plan, maps, etc. to the MCWD at:

15320 Minnetonka Blvd. Minnetonka, MN 55345.

Keep a copy for your records. YOU MUST OBTAIN ALL REQUIRED AUTHORIZATIONS BEFORE BEGINNING WORK.
1. Name of each property owner: Target Corporation- Zack Kartak, Sr. Development Manager
Mailing Address: 1000 Nicollet Mall, TPN-12H City: Minneapolis State: MN Zip: 55403
Email Address: Zack.Kartak@target.com Phone: 612-761-1664 Fax:
2. Property Owner Representative Information (not required) (licensed contractor, architect, engineer, etc) Business Name: Kimley-Horn Representative Name: Ryan Hyllested
Business Address: 767 N Eustis Street, Suite 100 City: St Paul State: MN Zip: 55114
Email Address: Ryan.Hyllested@kimley-horn.com Phone: 612-568-0698 Fax:
3. Project Address: 8900 MN-7 City: St Louis Park
State: MN Zip: 55426 Qtr Section(s): SW Section(s): 21 Township(s): 11 Range(s): 21
Lot: 003 Block: 001 Subdivision: PID: 1811721340011
4. Size of project parcel (square feet or acres): 15.53
Area of disturbance (square feet): 1.64 Volume of excavation/fill (cubic yards): 599 in floodplain
Area of existing impervious surface: 1.20 Area of proposed impervious surface: 0.85
Length of shoreline affected (feet): 160 Waterbody (& bay if applicable): Minnehaha Creek
5. Type of permit being applied for (Check all that apply):
\square EROSION CONTROL \square WATERBODY CROSSINGS/STRUCTURES
☑ FLOODPLAIN ALTERATION □ STORMWATER MANAGEMENT
□ WETLAND PROTECTION □ APPROPRIATIONS
□ DREDGING □ ILLICIT DISCHARGE
□ SHORELINE/STREAMBANK STABILIZATION
6. Project purpose (Check all that apply):
□ SINGLE FAMILY HOME □ MULTI FAMILY RESIDENTIAL (apartments)
☐ ROAD CONSTRUCTION ☐ COMMERCIAL or INSTITUTIONAL
☐ UTILITIES ☐ SUBDIVISIONS (include number of lots)
□ DREDGING □ LANDSCAPING (pools, berms, etc.)
□ SHORELINE/STREAMBANK STABILIZATION □ OTHER (DESCRIBE):
7. NPDES/SDS General Stormwater Permit Number (if applicable):
8. Waterbody receiving runoff from site: Minnehaha Creek
9. Project Timeline: Start Date: SPRING 2021 Completion Date: FALL 2021
Permits have been applied for: City
By signing below, I hereby request a permit to authorize the activities described herein. I certify that I am familiar with MCWD Rules and that the proposed activity will be conducted in compliance with these Rules. I am familiar with the information contained in this application and, to the best of my knowledge and belief, all information is true, complete and accurate. I understand that proceeding with work before all required authorizations are obtained may be subject to federal, state and/or local administrative, civil and/or criminal penalties.
7 llm 1/27/2021
Signature of Each Property Owner Date



0.79 AC

0.85 AC

POST-DEVELOPMENT PERVIOUS AREA

POST-DEVELOPMENT IMPERVIOUS AREA

LEGEND

---->----

(100.00)

(HP:0.0)

(LP:0.0)

G:0.00

T:0.00

T/G:0.0

ME:0.0

-----100Y-FLD-----

BEGIN VERTICAL CURVE

GRADE BREAK (VERTICAL PROFILE)

PROPOSED DRAINAGE DIRECTION

END VERTICAL CURVE

PROPOSED ADA SLOPE

100-YEAR FLOOD ELEVATION

ORDINARY HIGH WATER LEVEL (OHW)

PROPOSED WETLAND BUFFER (TYP.)

———— WL ———— DELINEATED WETLAND (TYP.)

• • • 40' WETLAND BUFFER LINE (TYP.)

PAVEMENT, THE EXCAVATION SHALL BE BACKFILLED PROMPTLY TO AVOID

6. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL HORIZONTAL AND VERTICAL

SUBGRADE ELEVATION AND LEAVE STREET READY FOR SUBBASE.

9. ALL EXCESS MATERIAL, BITUMINOUS SURFACING, CONCRETE ITEMS, ANY

LAYOUT AND ELEVATIONS AND CASTING / STRUCTURE NOTATION.

7. CONTRACTOR SHALL EXCAVATE DRAINAGE TRENCHES TO FOLLOW PROPOSED

8. GRADES SHOWN ARE FINISHED GRADES. CONTRACTOR SHALL ROUGH GRADE TO

PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFF THE

10. REFER TO THE UTILITY PLAN FOR SANITARY SEWER MAIN, WATER MAIN SERVICE

ABANDONED UTILITY ITEMS, AND OTHER UNSTABLE MATERIALS SHALL BECOME THE

16. MAINTAIN A MINIMUM OF 0.5% GUTTER SLOPE TOWARDS LOW POINTS.

18. ALL STORM SEWER CONNECTIONS SHALL BE GASKETED AND WATER TIGHT

INCLUDING MANHOLE CONNECTIONS.

IN CONCRETE PAVEMENT AREAS.

PAVEMENT DRAINS AWAY FROM GUTTER.

17. CONTRACTOR TO PROVIDE 3" INSULATION BY 5' WIDE CENTERED ON STORM PIPE IF LESS THAN 4' OF COVER IN PAVEMENT AREAS AND LESS THAN 3' OF COVER IN

19. ALL STORM SEWER PIPE SHALL BE AIR TESTED IN ACCORDANCE WITH THE CURRENT

20. MAINTAIN A MINIMUM OF 1.25% SLOPE IN BITUMINOUS PAVEMENT AREAS, 0.5% SLOPE

21. CONTRACTOR SHALL REVIEW PAVEMENT GRADIENT AND CONSTRUCT "INFALL CURB" WHERE PAVEMENT DRAINS TOWARD GUTTER, AND "OUTFALL" CURB WHERE

UNDERMINING OF EXISTING PAVEMENT.

STORM SEWER ALIGNMENTS.

CONSTRUCTION SITE.

1000 NICOLLET MALL MINNEAPOLIS, MN 55403

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No.	Description
0	CITY / WATERSHED SUBMITTAL
1	CITY / WATERSHED RE-SUBMITTA
	0

Project Number

Drawn By Checked By

GRADING PLAN

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

RAH / EW



Minnesota Wetland Conservation Act Notice of Decision

A wetland delineation was conducted by Kimley-Horn on 09/24/2020.

Resource ID	Wetland Plant Community	C-39 Type	Size (acres)¹	NWI?	Hydric Soils?	Photo ID	Associated Sample Points	NOTES
Wetland 1	Floodplain Forest	1	0.21	PF01A	No	2, 3, 5-7	SP2, SP3, SP4 (Wet) SP1, (Up)	Floodplain forest wetland surrounding Minnehaha Creek backwaters. There were no culverts identified flowing from Boone Avenue or adjacent parking areas that appear to drain into Wetland 1; therefore, the wetland appears to gain hydrology from the creek. The wetland boundary was based on slight change in topography, presence of hydric soil, presence of FACW and OBL hydrophytes, and water marks visible on FAC vegetation.
Minnehaha Creek Backwaters	Riverine	N/A	0.09	R2UBH	No	2&3	N/A	Minnehaha Creek is a perennial stream flowing south adjacent to the study area. The study area is not located along the main channel of the stream; however, the stream appears to have a pooling area which enters the study area. The edge of water was delineated during field review which was an elevation of 898.92.

MCWD and Kimley-Horn reviewed the boundaries in the field on 11/06/2020. MCWD was in agreement with the wetland types identified on site and shown in the delineation report, but the boundary was expanded to include an additional 0.03 acres on the northern edge, based on field observations of wetland hydrology.

MCWD approves the wetland boundaries and types as shown in the updated delineation report (attached). This decision is valid for five years. A future project located on this property may require a permit from the MCWD, as well as the MN DNR, as a portion of the study area is a public waterbody.

Attached Project Documents

$oximes$ Site Location Map \oximes Project Plan(s)/Descriptions/Reports (specify): Wetl	and Delineation Exhibit
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Appeals of LGU Decisions

If you wish to appeal this decision, you must provide a written request within 30 calendar days of the date you received the notice. All appeals must be submitted to the Board of Water and Soil Resources Executive Director along with a check payable to BWSR for \$500 unless the LGU has adopted a local appeal process as identified below. The check must be sent by mail and the written request to appeal can be submitted by mail or e-mail. The appeal should include a copy of this notice, name and contact information of appellant(s) and their representatives (if applicable), a statement clarifying the intent to appeal and supporting information as to why the decision is in error. Send to:

Appeals & Regulatory Compliance Coordinator Minnesota Board of Water & Soils Resources 520 Lafayette Road North St. Paul, MN 55155 travis.germundson@state.mn.us

Does the LGU	have a local	l anneal	nracess a	annlıcah	IA to this	S UDCISION S

 \boxtimes Yes¹ ☐ No

Local Appeals Submittal Requirements (LGU must describe how to appeal, submittal requirements, fees, etc. as applicable)

Appeal of an LGU staff decision. Send petition and \$100 fee to: Minnehaha Creek Watershed District 15320 Minnetonka Boulevard Minnetonka, MN 55345

Notice Distribution (include name)

wca@minnehahacreek.org

Required on all notices:

¹ Findings must consider any TEP recommendations.

¹If yes, all appeals must first be considered via the local appeals process.

⊠ SWCD TEP Member: Stacey Lijewski-stacey.lijewski@co.hennepin.n	nn.us 🗵 BWSR TEP Member: Ben					
Carson- ben.carlson@state.mn.us						
☐ LGU TEP Member (if different than LGU contact):						
☑ DNR Representative: Melissa Collins – melissa.collins@state.mn.us; Lucas Youngsma – lucas.youngsma@state.mn.us						
☐ Watershed District or Watershed Mgmt. Org.:						
☐ ☐ Applicant: Zack Kartak - Zack.Kartak@target.com ☐ Agent/Consultant:	Aaron Stolte - Aaron.stolte@kimley-					
horn.com						
Optional or As Applicable:						
□ Corps of Engineers: usace_requests_mn@usace.army.mil						
☐ BWSR Wetland Mitigation Coordinator (required for bank plan applications only):						
oximes Members of the Public (notice only): City Staff $oximes$ Other:						
Ct	D. L.					
Signature:	Date:					
En mantick 12/22/2020						
Permitting Assistant, MCWD						

This notice and accompanying application materials may be sent electronically or by mail. The LGU may opt to send a summary of the application to members of the public upon request per 8420.0255, Subp. 3.



Minnesota Wetland Conservation Act Notice of Application

Local Government Unit: Minnehaha Creek Watershed District	County: Hennepin				
pplicant Name: Target Real Estate, Zack Kartak					
Applicant Representative: Kimley-Horn, Aaron Stolte					
Project Name: Boone Avenue Reconstruction LGU Project No.	(if any): W21-02				
Date Complete Application Received by LGU: 02/08/2021					
Date this Notice was Sent by LGU: 02/09/2021					
Date that Comments on this Application Must Be Received By LGU¹: 02/					
¹ minimum 15 business day comment period for Boundary & Type, Sequencing, Replacemen	nt Plan and Bank Plan Applications				
WCA Decision Type - check all that apply					
☐ Wetland Boundary/Type ☐ Sequencing ☐ Replacement Plan	☐ Bank Plan (not credit purchase)				
	(8420.0420)				
Part: □ A □ B □ C □ D □ E □ F □ G ☑ H Subpart: [□2□3□4□5 □6□7 図8□9				
De de la constante de la const					
Replacement Plan Impacts (replacement plan decisions only)					
Total WCA Impact Area Proposed:					
Application Materials					
⊠ Attached □ Other¹ (specify):					
¹ Link to ftp or other accessible file sharing sites is acceptable.					
Comments on this application should be sent to:					
Comments on this application should be sent to: LGU Contact Person: Erin Manlick, MCWD Permitting Assistant					
E-Mail Address: EManlick@minnehahacreek.org					
Address and Phone Number: 15320 Minnetonka Blvd, Minnetonka, MN	I 55345 952-641-4504				
Decision-Maker for this Application:	33313 332 011 1301				
Staff □ Governing Board/Council □ Other (specify):					
Notice Distribution (include name)					
Required on all notices:					
SWCD TEP Member: Stacey Lijewski-stacey.lijewski@co.hennepin.mn.us					
☐ BWSR TEP Member: Ben Carlson-ben.carlson@state.mn.us					
☐ LGU TEP Member (if different than LGU contact):					
☑ DNR Representative: Melissa Collins – melissa.collins@state.mn.us; Lucas Yo	ungsma – lucas.youngsma@state.mn.us				
☐ Watershed District or Watershed Mgmt. Org.:					
☑ Applicant (notice only): Zack Kartak - Zack.Kartak@target.com					
☐ Agent/Consultant (notice only): Aaron Stolte - Aaron.stolte@kimley-horn.con	n				
Optional or As Applicable:					
☐ Corps of Engineers: usace_requests_mn@usace.army.mil					
☐ BWSR Wetland Mitigation Coordinator (required for bank plan applications or					
⊠ Members of the Public (notice only): City Staff	□ Other:				

Signature:	Date:
Ern mantick	2/9/2021

This notice and accompanying application materials may be sent electronically or by mail. The LGU may opt to send a summary of the application to members of the public upon request per 8420.0255, Subp. 3.

REQUEST FOR VARIANCE AND STATEMENT OF HARDSHIP

Phone: 952-471-0590

Fax: 952-471-0682

MINNEHAHA CREEK WATERSHED DISTRICT (MCWD) 15320 MINNETONKA BLVD. MINNETONKA, MN 55345

A request for a Variance must be accompanied by a MCWD Water Resources Application

Project Details:			
Project address:	City:	State:	Zip:
County:	Property ID number (PID):		

The Board of Managers may hear requests for variances from strict compliance with provisions of the District Rules in instances where strict enforcement of the rules would cause an undue hardship because of circumstances unique to the property under consideration. The Board of Managers may grant variances where it is demonstrated that such action will remain in spirit and with the intent of these rules. An applicant granted a variance form full compliance with a requirement of the rules would be required to meet the requirement to the greatest degree feasible short of full compliance. A variance must be approved by a two-thirds majority of managers voting.

To grant a variance, the Board of Managers must determine, based on a showing by the applicant:

- That because of special conditions inherent to the property, which do not apply generally to other land or structures in the District, strict compliance with a provision of a District rule will cause undue hardship to the applicant or property owner;
- That the hardship was not created by the landowner, the landowner's agent or representative, or a contractor. Economic hardship is not grounds for issuing a variance.
- That granting such variance will not merely serve as a convenience to the applicant.
- That there is no feasible and prudent alternative to the proposed activity requiring the variance.
- That granting the variance will not impair or be contrary to the intent of these rules.

A variance will remain valid only as long as the underlying permit remains valid.

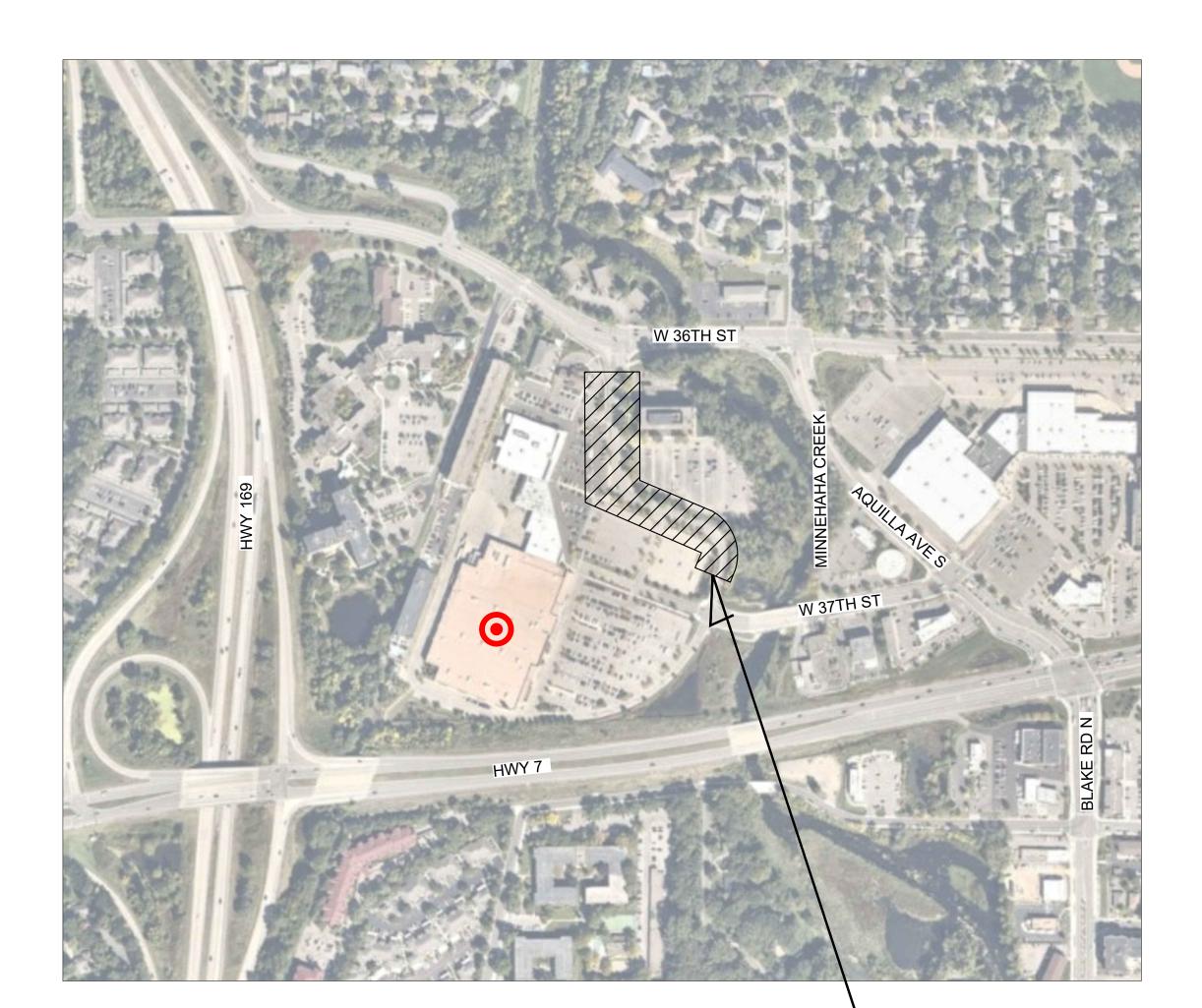
A violation of any condition of approval of a permit subject to a variance shall constitute grounds for termination of the variance.

Variance Requested From MCWD Rule(s):	
 □ Erosion Control □ Floodplain Alteration □ Wetland Protection □ Shoreline & Streambank Stabilization 	
Provision(s) and Requirement(s) of the Rule(s):	
Requested Variance:	
Please complete the below narrative to be used as the variance Managers. Please note that economic hardship is not grounds	
Describe the special conditions inherent to the property and how hardship.	v strict compliance with the rule will cause an undue
Describe how the special condition was not created by the appli	cant, the representative, or a contractor.
Provide a minimum of two alternatives that were considered and feasible and prudent alternative to the proposed activity requirin	
Referring to the Policy of the Rule(s), describe how the intent of	the rule(s) will be met.

SITE DEVELOPMENT PLANS **FOR**

BOONE AVENUE RECONSTRUCTION T-2189

ST. LOUIS PARK, MINNESOTA



VICINITY MAP N.T.S.



\SITE - BOONE AVE

- 1. 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 36X48 INCH
- 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.
 ALL GENERAL CONTRACTOR WORK TO BE COMPLETED (EARTHWORK, FINAL UTILITIES, AND FINAL GRADING) BY THE MILESTONE DATE IN PROJECT DOCUMENTS.

PROJECT TEAM:

ENGINEER / LANDSCAPE ARCHITECT KIMLEY-HORN AND ASSOCIATES, INC.

PREPARED BY: BRIAN WURDEMAN, P.E./ RYAN HYLLESTED P.L.A. 767 EUSTIS STREET, SUITE 100 ST. PAUL, MN 55114 TELEPHONE (651) 645-4197

SURVEYOR EGAN, FIELD & NOWAK, INC. 1229 TYLER STREET NE, SUITE 100 MINNEAPOLIS, MN 55413 TELEPHONE: (612) 466-3300 CONTACT: ERIC ROESER, PLS

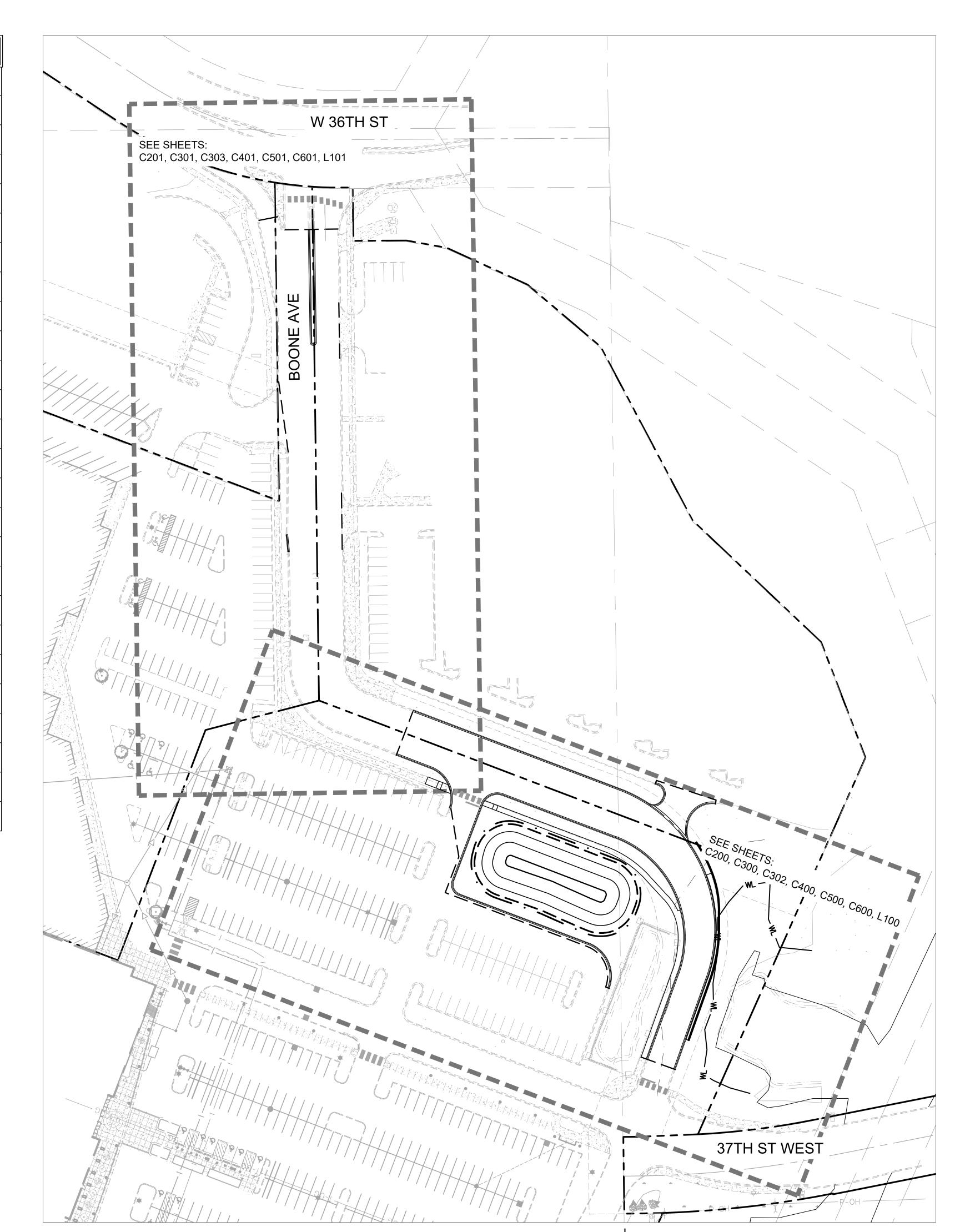
OWNER / DEVELOPER



1000 NICOLLET MALL MINNEAPOLIS, MN 55403 EMAIL: ZACK.KARTAK@TARGET.COM CONTACT: ZACK KARTAK, P.E. | SR. DEVELOPMENT MANAGER

GEOTECHNICAL ENGINEER BRAUN INTERTEC 1826 BUERKLE RD SAINT PAUL, MN 55110 TELEPHONE: (612) 221-2504 CONTACT: STEVE MARTIN, P.E.

BOONE AVE RECONSTRUCTION					
SHEET NO	SHEET TITLE				
C000	COVER SHEET				
V000	ALTA SURVEY				
V001	ALTA SURVEY				
V002	ALTA SURVEY				
V003	ALTA SURVEY				
C001	GENERAL MASTER PLAN				
C100	GENERAL NOTES				
C200	EXISTING CONDITIONS - DEMO PLAN				
C201	EXISTING CONDITIONS - DEMO PLAN				
C300	PHASE 1 EROSION AND SEDIMENT CONTROL PLAN				
C301	PHASE 1 EROSION AND SEDIMENT CONTROL PLAN				
C302	PHASE 2 EROSION AND SEDIMENT CONTROL PLAN				
C303	PHASE 2 EROSION AND SEDIMENT CONTROL PLAN				
C304	SWPPP				
C400	PLAN & PROFILE				
C401	PLAN & PROFILE				
C500	GRADING PLAN				
C501	GRADING PLAN				
C502	TYPICAL SECTIONS				
C600	TRAFFIC CONTROL PHASING PLAN				
C601	TRAFFIC CONTROL PHASING PLAN				
C700	GENERAL DETAILS				
C701	GENERAL DETAILS				
L100	LANDSCAPE PLAN				
L101	LANDSCAPE PLAN				



SITE MAP

1" = 50'

1" = 50'

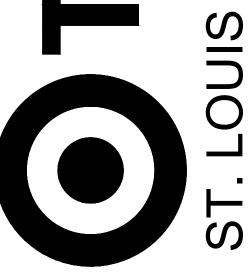




· · - · - · - · - · - · - · - · - ·	Date No.		Description		
2/24/2021 1 CITY / WATERSHED RE-SUBMITT	1/25/2021	0	CITY / WATERSHED SUBMITTAL		
	2/24/2021		CITY / WATERSHED RE-SUBMITTAL		







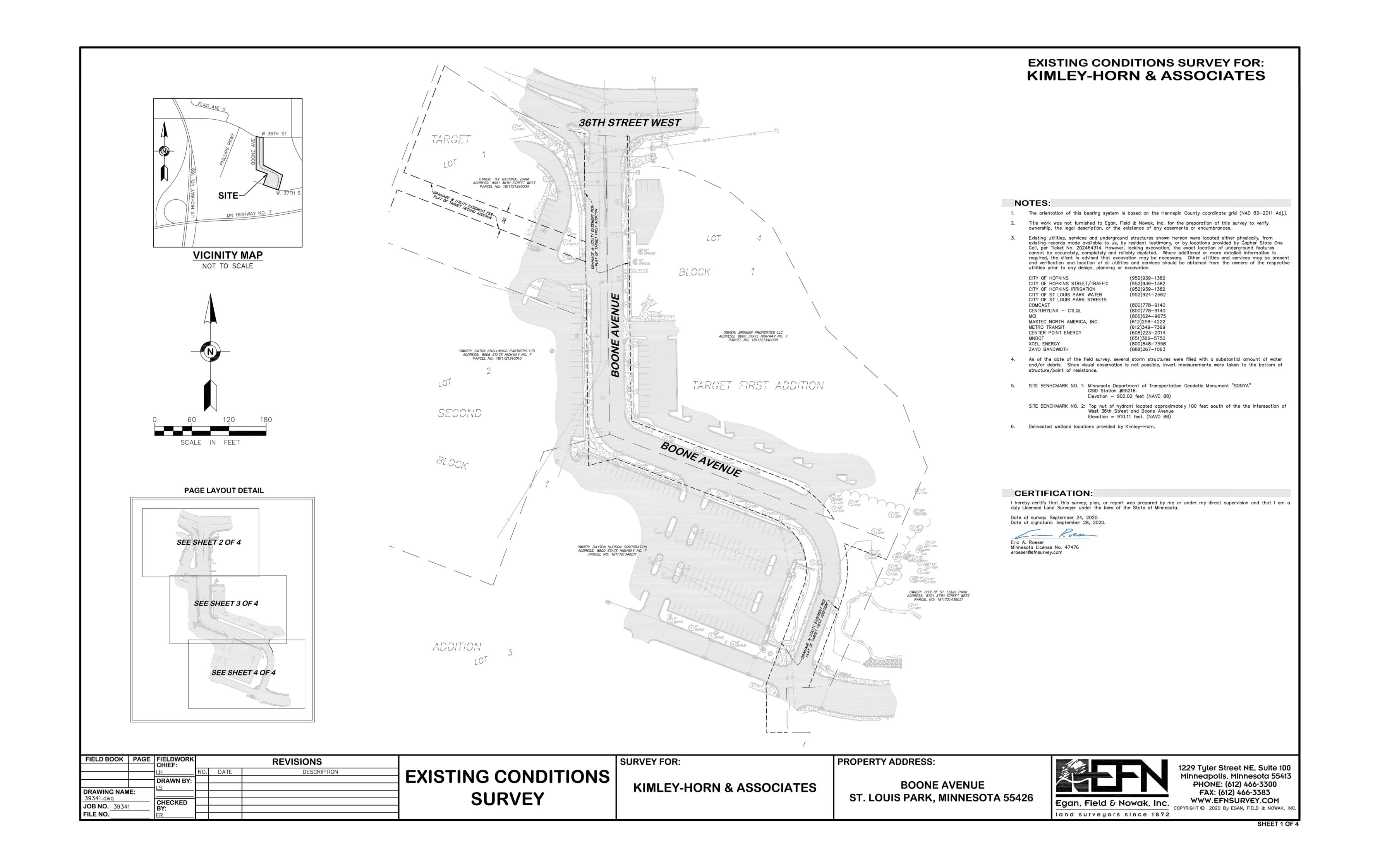
T-2189

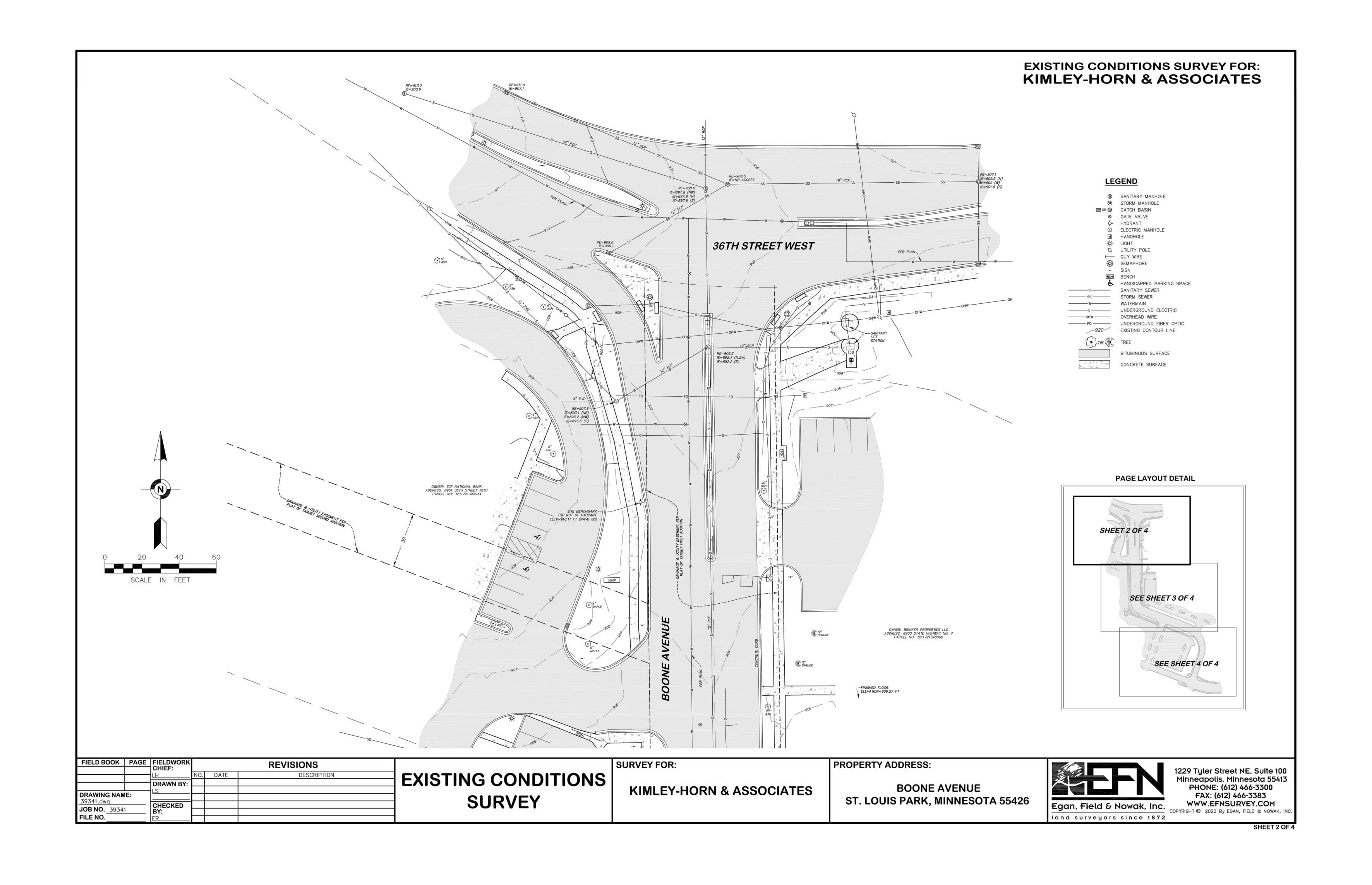
COVER SHEET

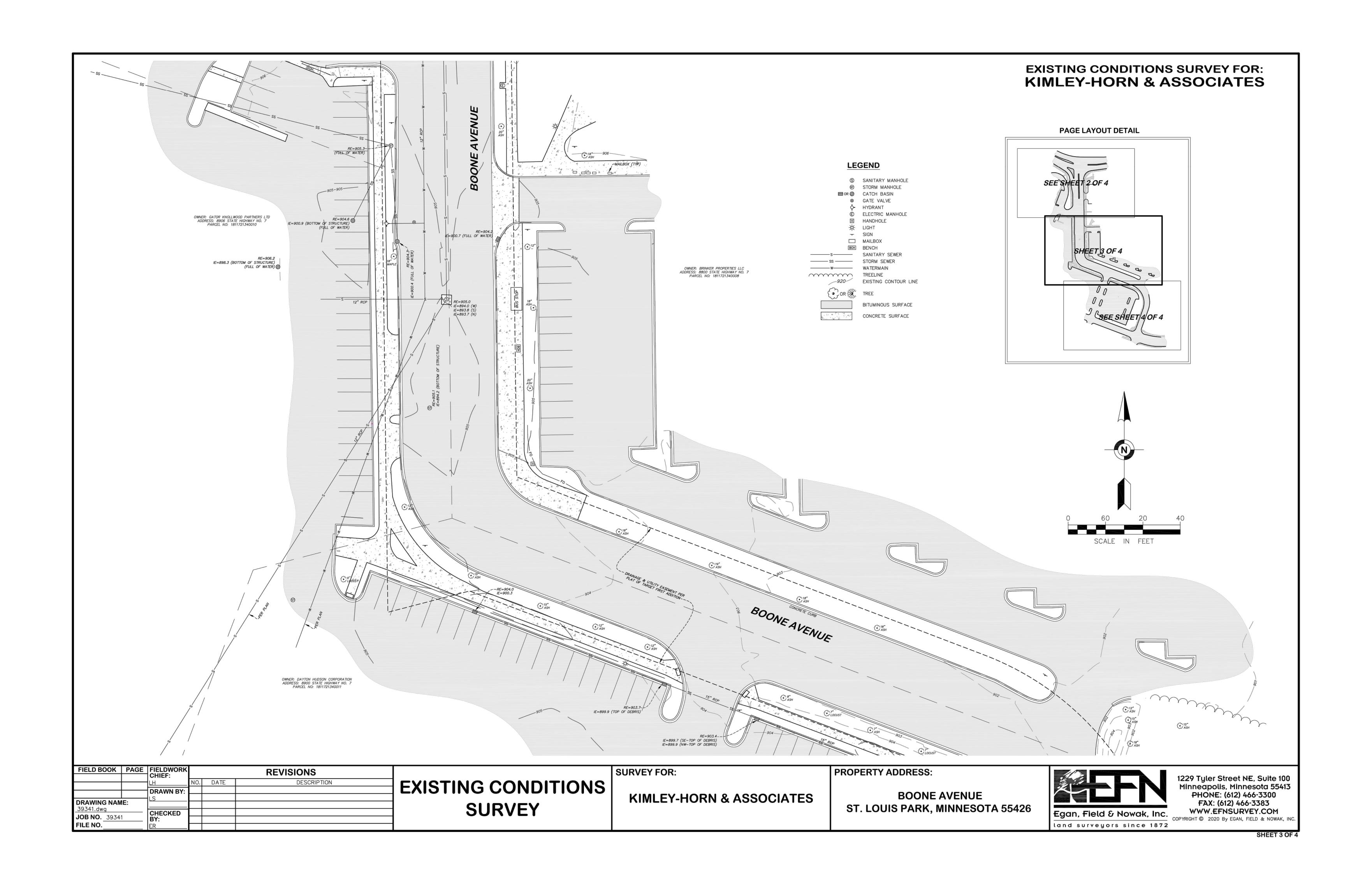
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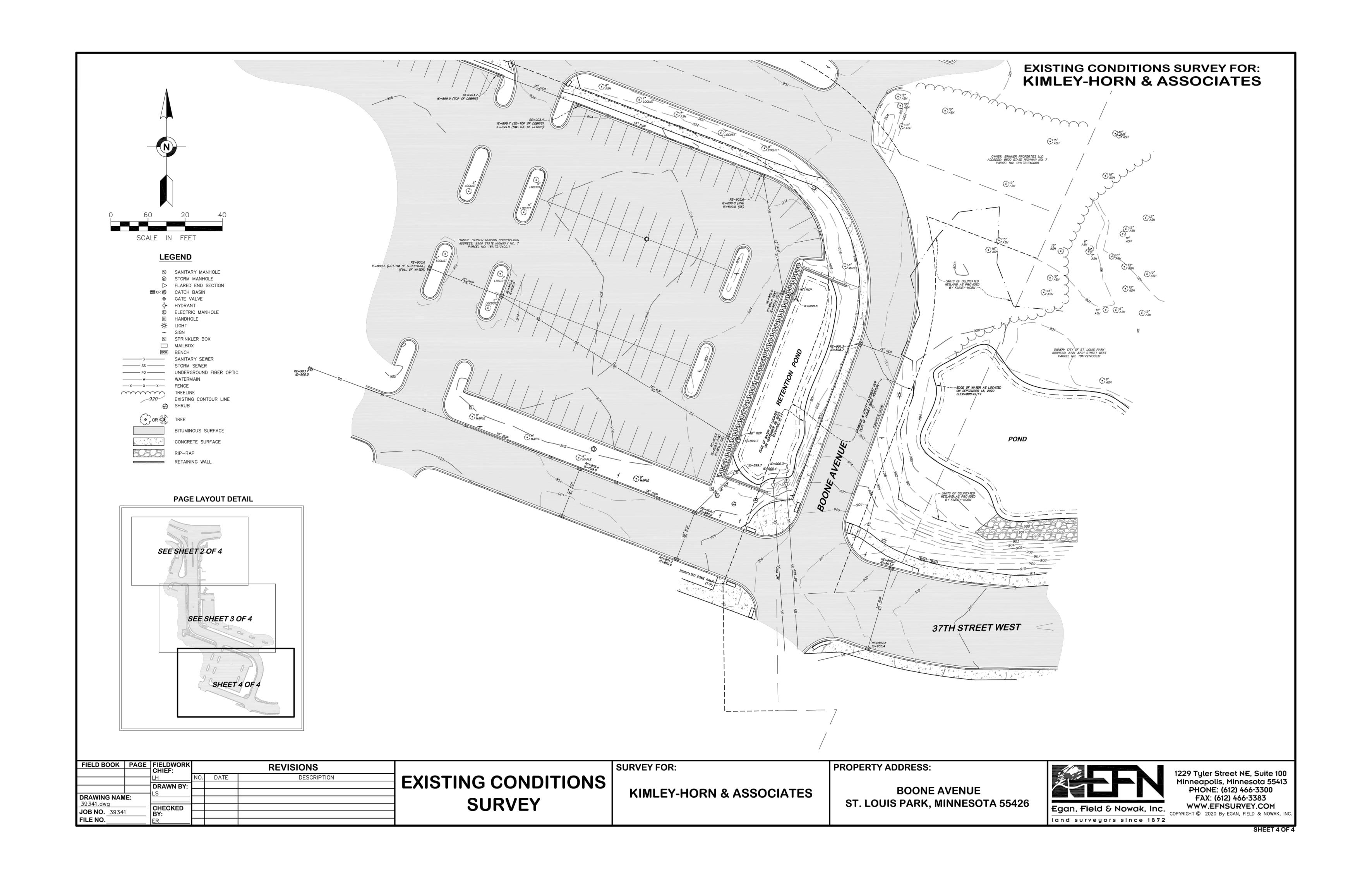
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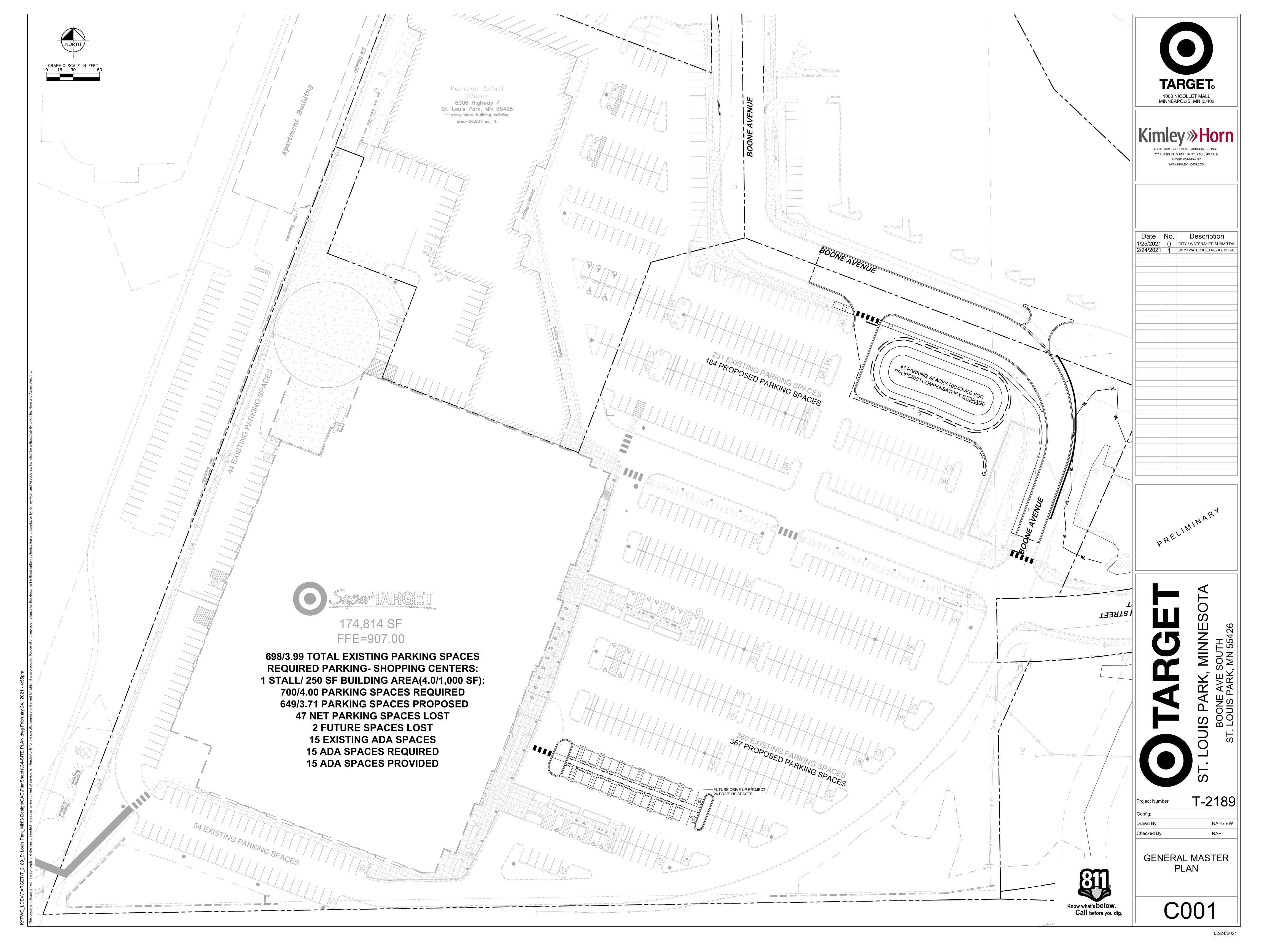












GENERAL CONSTRUCTION NOTES

- THE CONTRACTOR AND SUBCONTRACTORS SHALL OBTAIN A COPY OF THE MN DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" (LATEST EDITION) AND BECOME FAMILIAR WITH THE CONTENTS PRIOR TO COMMENCING WORK, AND, UNLESS OTHERWISE NOTED, ALL WORK SHALL CONFORM AS APPLICABLE TO THESE STANDARDS AND SPECIFICATIONS.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL MATERIAL AND LABOR TO CONSTRUCT THE FACILITY AS SHOWN AND DESCRIBED IN THE CONSTRUCTION DOCUMENTS IN ACCORDANCE WITH THE APPROPRIATE APPROVING AUTHORITIES, SPECIFICATIONS AND REQUIREMENTS. CONTRACTOR SHALL CLEAR AND GRUB ALL AREAS UNLESS OTHERWISE INDICATED, REMOVING TREES, STUMPS, ROOTS, MUCK, EXISTING PAVEMENT AND ALL OTHER DELETERIOUS MATERIAL.
- 3. 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.
- 4. 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.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED CONSTRUCTION PERMITS AND BONDS IF REQUIRED PRIOR TO CONSTRUCTION.
- 6. 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.
- 7. 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.
- ALL COPIES OF COMPACTION, CONCRETE AND OTHER REQUIRED TEST RESULTS ARE TO BE SENT TO THE OWNER DIRECTLY FROM THE TESTING AGENCY.
- 9. 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 OF MN PROFESSIONAL LAND SURVEYOR WHOSE SERVICES ARE ENGAGED BY THE CONTRACTOR.
- 10. 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.
- 11. ANY WELL DISCOVERED DURING EARTH MOVING OR EXCAVATION SHALL BE REPORTED TO THE APPROPRIATE JURISDICTIONAL AGENCIES WITHIN 24 HOURS AFTER DISCOVERY IS MADE.
- 12. 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.
- 13. 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.

EROSION CONTROL MAINTENANCE

ALL MEASURES STATED 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" RAINFALL EVENT, AND CLEANED AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING, OR DETERIORATION.

- ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED AND RESEEDED AS NEEDED. FOR MAINTENANCE REQUIREMENTS REFER TO THE STANDARD SPECIFICATIONS.
- 2. 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.
- 3. THE 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 TOP DRESSING OF THE CONSTRUCTION ENTRANCES AS CONDITIONS DEMAND.
- THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AS CONDITIONS DEMAND.
- 5. ALL MAINTENANCE OPERATIONS SHALL BE DONE IN A TIMELY MANNER BUT IN NO CASE LATER THAN 2 CALENDAR DAYS FOLLOWING THE INSPECTION.

TYPICAL OWNER/ENGINEER OBSERVATIONS

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

EROSION CONTROL NOTES

DETAINED AND PROPERLY TREATED OR DISPOSED.

- 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 OF MN 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. SITE ENTRY AND EXIT LOCATIONS SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT THE TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAYS. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ON A PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY. 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. ALL

FINES IMPOSED FOR DISCHARGING SEDIMENT ONTO PUBLIC AREAS SHALL BE PAID BY THE CONTRACTOR.

3. THE CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY

- 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.
- THE GENERAL PERMIT.

 7. CONTRACTOR SHALL DENOTE ON 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 (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE
- 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. ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THE PLAN SHALL BE INITIATED AS SOON AS IS PRACTICABLE.
- ALL STAGING AREAS, STOCKPILES, SPOILS, ETC. SHALL BE LOCATED SUCH THAT THEY WILL NOT ADVERSELY AFFECT STORM WATER QUALITY. OTHERWISE, COVERING OR ENCIRCLING THESE AREAS WITH SOME PROTECTIVE MEASURE WILL BE NECESSARY.
 CONTRACTOR SHALL BE RESPONSIBLE FOR RE-ESTABLISHING ANY EROSION CONTROL DEVICE WHICH
- 14. CONTRACTOR SHALL BE RESPONSIBLE FOR RE-ESTABLISHING ANY EROSION CONTROL DEVICE WHICH THEY DISTURB. EACH CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DEFICIENCIES IN THE ESTABLISHED EROSION CONTROL MEASURES THAT MAY LEAD TO UNAUTHORIZED DISCHARGE OR STORM WATER POLLUTION, SEDIMENTATION, OR OTHER POLLUTANTS. UNAUTHORIZED POLLUTANTS INCLUDE (BUT ARE NOT LIMITED TO) EXCESS CONCRETE DUMPING OR CONCRETE RESIDUE, PAINTS, SOLVENTS, GREASES, FUEL AND LUBRICANT OIL, PESTICIDES, AND ANY SOLID WASTE MATERIALS.
- 15. EROSION CONTROL DEVICES SHOWN ON THESE PLANS SHALL BE INSTALLED PRIOR TO THE START OF LAND-DISTURBING ACTIVITIES ON THE PROJECT.16. ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS AND
- SPECIFICATIONS FOR THIS PROJECT. CHANGES ARE TO BE APPROVED BEFORE CONSTRUCTION BY THE DESIGN ENGINEER AND THE CITY OF ST. LOUIS PARK ENGINEERING DIVISION.

 17. IF THE EROSION CONTROL PLAN AS APPROVED CANNOT CONTROL EROSION AND OFF-SITE SEDIMENTATION FROM THE PROJECT, THE EROSION CONTROL PLAN WILL HAVE TO BE REVISED AND/OR

CONTROL PLAN MADE BY THE CONTRACTOR MUST BE APPROVED BY THE ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES WILL BE REQUIRED ON SITE. ANY REVISIONS TO THE EROSION

18. NO VEHICLE WASHING SHALL CONDUCTED ON SITE.

PAVING AND STRIPING NOTES

- ALL PAVING, CONSTRUCTION, MATERIALS, AND WORKMANSHIP WITHIN JURISDICTION'S RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH LOCAL OR COUNTY SPECIFICATIONS AND STANDARDS (LATEST EDITION) OR MN/DOT SPECIFICATIONS AND STANDARDS (LATEST EDITION) IF NOT COVERED BY LOCAL OR COUNTY REGULATIONS.
- 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.
- 3. 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.
- 4. 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.
- ANY EXISTING PAVEMENT, CURBS AND/OR SIDEWALKS DAMAGED OR REMOVED WILL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE TO THE SATISFACTION OF THE ENGINEER AND OWNER.
 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.

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.
- 3. 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.
- 4. 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.
- 5. 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.
- 6. 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.
- 7. 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.
- 8. 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.

- 9. 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 MN/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 HARDY GRASS GROWTH IS ESTABLISHED 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 MN/DOT SPECIFICATION.
- 17. ALL CONCRETE/ASPHALT SHALL BE INSTALLED PER GEOTECH REPORT, CITY OF ST. LOUIS PARK AND MN/DOT SPECIFICATIONS.
- 18. SPOT ELEVATIONS ARE TO 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 LITHLITIES. AND SHALL
- 21. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING EXISTING UTILITIES, AND SHALL REPAIR ALL DAMAGE TO EXISTING UTILITIES THAT OCCUR DURING CONSTRUCTION WITHOUT COMPENSATION.
- 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 FOR STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
- 25. ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
- 26. CONTRACTOR SHALL ENSURE MINIMUM GRADES ARE MET WITHIN PAVED AREAS, 1.2% FOR ASPHALT PAVING AND 0.6% FOR CONCRETE PAVING.

3RD PARTY TEST REPORTS REQ'D

- 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

WATER STORM SEWER & SANITARY SEWER NOTES

- 1. 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.
- 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

5. 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.

PLUMB AND LOCATED ACCORDING TO THE PLANS.

TO RETURN IT TO EXISTING CONDITIONS OR BETTER.

- 6. WATER FOR FIRE FIGHTING SHALL BE MADE AVAILABLE FOR USE BY THE CONTRACTOR PRIOR TO COMBUSTIBLES BEING BROUGHT ON SITE.
- 7. 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.
- 8. UNDERGROUND LINES SHALL BE SURVEYED BY A STATE OF MN PROFESSIONAL LAND SURVEYOR PRIOR
- 9. CONTRACTOR SHALL PERFORM, AT HIS 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.
- AND JURISDICTIONAL AGENCY AS REQUIRED.

 10. CONTRACTOR SHALL PROVIDE FOR A MINIMUM HORIZONTAL CLEARANCE OF 10' AND A VERTICAL
- CLEARANCE OF 18" BETWEEN WATER AND SANITARY SEWER MANHOLES AND LINES.

 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
- ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STRUCTURE IS WATERTIGHT UNLESS OTHERWISE STATED BY CITY AND STATE DESIGN STANDARDS AND SPECIFICATIONS.
 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 SAME.
- 16. ALL STORM STRUCTURES SHALL HAVE A SMOOTH UNIFORM POURED MORTAR FROM INVERT IN TO INVERT
- ALL ROOF AND SANITARY SEWER DRAINS SHALL BE INSULATED IF 7' OF COVER CANNOT BE PROVIDED.
 THE CONTRACTOR SHALL PROTECT EXISTING UNDERGROUND UTILITIES AND APPURTENANCES THAT ARE TO REMAIN FROM DAMAGE DURING CONSTRUCTION OPERATIONS.
 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
- 20. A MINIMUM OF 5' SEPARATION IS REQUIRED BETWEEN UTILITIES AND TREES UNLESS A ROOT BARRIER IS

TO DETERMINE THE EXACT LOCATION, SIZE AND INVERT ELEVATIONS OF EACH PRIOR TO THE START OF

COMPANIES MAY ALTER THE DESIGN LAYOUT DURING THEIR REVIEW. CONTRACTOR TO COORDINATE

- 21. GAS, PHONE AND ELECTRIC SERVICES SHOWN FOR INFORMATIONAL PURPOSES ONLY. DRY UTILITY
- FINAL DESIGN AND INSTALLATION WITH UTILITY COMPANIES.

 22. COORDINATE UTILITY INSTALLATION WITH IRRIGATION DESIGN AND INSTALLATION.
- 23. ALL DIMENSIONS ARE TO FLOW LINE OF CURB UNLESS OTHERWISE NOTED.24. CONTRACTOR SHALL REFERENCE M.E.P PLANS (BY OTHERS) FOR LIGHT POLE WIRING.





PRELIMINAR

Drawn By Checked By

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

GENERAL NOTES

C100

T-2189

VIDEOTAPE THE SITE PRIOR TO COMPLETING REMOVALS AND AFTER PLACING SUBGRADE TO CONFIRM CONDITION OF EXISTING ELEMENTS. ANY DAMAGE TO EXISTING ELEMENTS THAT ARE TO REMAIN MUST BE REPAIRED, RECONSTRUCTED, OR REPLACED BY CONTRACTOR AT NO COST TO OWNER.



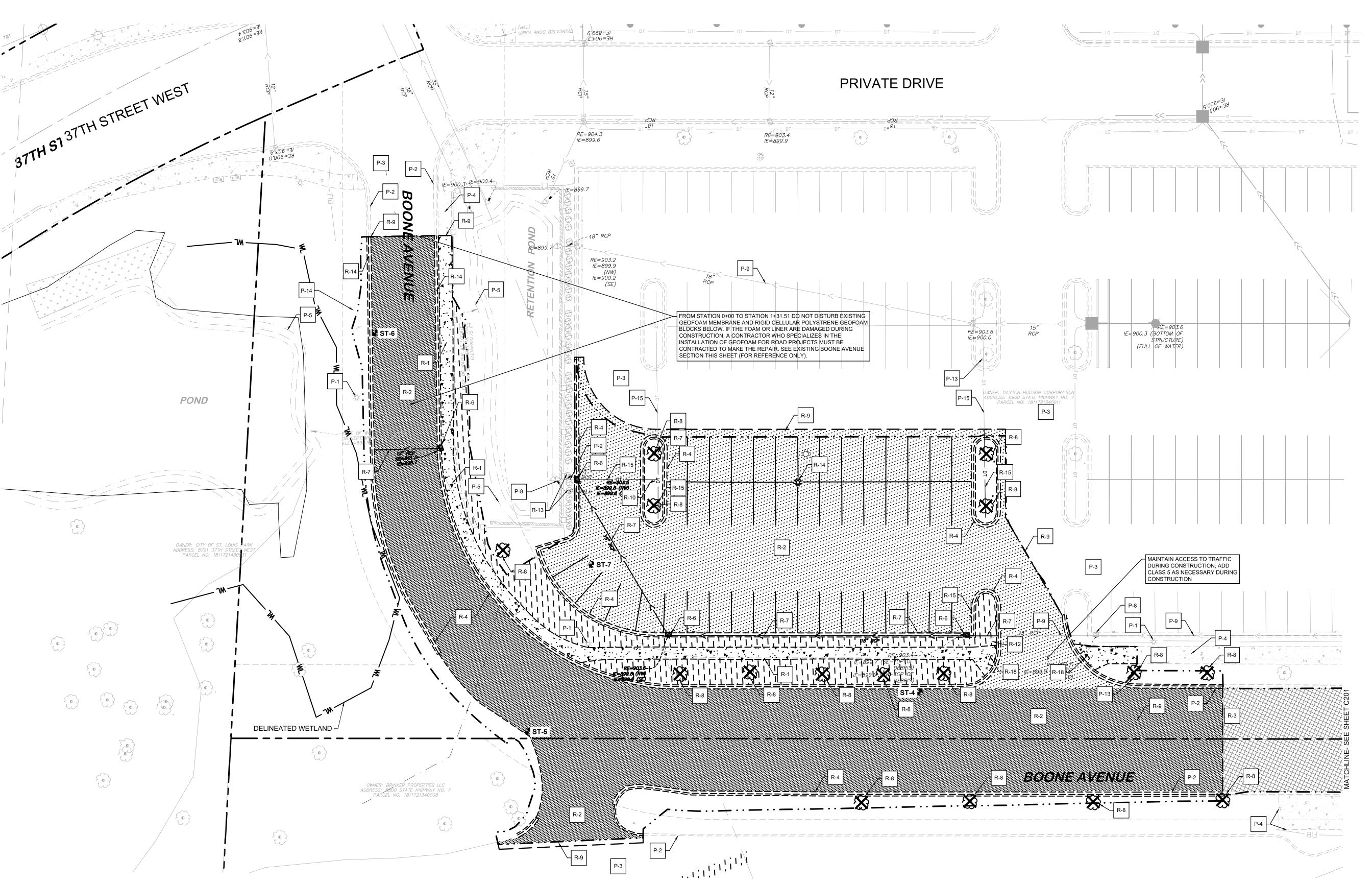
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Description 1/25/2021 0 CITY / WATERSHED SUBMITTAL 2/24/2021 1 CITY / WATERSHED RE-SUBMITTAL

Drawn By

Checked By

EXISTING



WL —	PROPERTY LINE EASEMENT LINE WETLAND LINE ASPHALT PAVEMENT & BASE, F ASPHALT PAVEMENT & BASE, F CONCRETE SURFACE ASPHALT PAVEMENT ONLY CLEARING & GRUBBING FULL DEPTH SAWCUT TREE / SHRUB LIMITS OF CONSTRUCTION
X X X	WETLAND LINE ASPHALT PAVEMENT & BASE, F ASPHALT PAVEMENT & BASE, E CONCRETE SURFACE ASPHALT PAVEMENT ONLY CLEARING & GRUBBING FULL DEPTH SAWCUT TREE / SHRUB
X X X	ASPHALT PAVEMENT & BASE, F ASPHALT PAVEMENT & BASE, E CONCRETE SURFACE ASPHALT PAVEMENT ONLY CLEARING & GRUBBING FULL DEPTH SAWCUT TREE / SHRUB
	ASPHALT PAVEMENT & BASE, E CONCRETE SURFACE ASPHALT PAVEMENT ONLY CLEARING & GRUBBING FULL DEPTH SAWCUT TREE / SHRUB
	CONCRETE SURFACE ASPHALT PAVEMENT ONLY CLEARING & GRUBBING FULL DEPTH SAWCUT TREE / SHRUB
	ASPHALT PAVEMENT ONLY CLEARING & GRUBBING FULL DEPTH SAWCUT TREE / SHRUB
	CLEARING & GRUBBING FULL DEPTH SAWCUT TREE / SHRUB
	FULL DEPTH SAWCUT TREE / SHRUB
	TREE / SHRUB
——————————————————————————————————————	LIMITS OF CONSTRUCTION
—— 0-ELC ——— × ——	
——x——x—	OVERHEAD POWER LINE
	CHAINLINK FENCE
	J-BARRIER
	RETAINING WALL
——————————————————————————————————————	SANITARY SEWER
	STORM SEWER
	WATERMAIN GAS MAIN
GAS — TEL —	UNDERGROUND TELEPHONE
CTV	UNDERGROUND CABLE
3.1	CONTOUR
	CURB & GUTTER
	SIGN
_	FLARED END SECTION
	SANITARY MANHOLE
	STORM MANHOLE
	STORM CATCHBASIN
	GAS METER
₩.TEP	POST INDICATOR VALVE WELL
&	AUTOMATIC SPRINKLER
	ROOF DRAIN
Ø	GATE VALVE
-	HYDRANT
©	METAL COVER
E	ELECTRICAL METER
AC	AIR CONDITIONER
<u>•</u>	TELEPHONE MANHOLE
	CABLE BOX
→	GUY WIRE
- O-	POWER POLE
杂	LIGHT POLE TREE LINE
	• * * * * * * * * * * * * * * * * * * *

LEGEND

BITUMINOUS TACK COAT BETWEEN

------ 2" - 2360 TYPE SP 12.5 BITUMINOUS WEARING COURSE MIXTURE (SPWEB340C)

COURSES MNDOT SPEC. 2357 (INCIDENTAL)

----- 3" - 2360 TYPE SP 12.5 BITUMINOUS WEARING COURSE MIXTURE (SPWEB340C) 8" - AGGREGATE BASE (CV) CLASS 5 ---- 35" - SELECT GRANULAR BORROW

GEOFOAM MEMBRANE CONSISTING OF 30-MIL THICKNESS HIGH DENSITY POLYETHYLENE SHOULD BE PLACED OVER THE TOP OF THE GEOFOAM. SEE SPECIAL PROVISIONS FOR MATERIAL DETAILS.

GEOFOAM MEMBRANE SHALL BE INCIDENTAL TO PLACING OF GEOFOAM

DEPTH VARIES WITH FILL DEPTH RIGID CELLULAR POLYSTYRENE
GEOFOAM (ASTM D6817-02)

EXISTING BOONE AVENUE SECTION

STATION 0+00-1+31.51 \ (FOR REFERENCE ONLY)

SCALE: N.T.S.

SEE GEOFOAM TABULATION ON SHEETS 11R TO 13R OR CROSS SECTIONS ON SHEETS X1R TO X12R FOR THICKNESS OF GEOFOAM.

KEYNOTE LEGEND/QUANTITIES ASPHALT PAVEMENT & BASE, PARKING LOT ASPHALT PAVEMENT & BASE, BOONE AVE REMOVE CONCRETE SIDEWALK (TYP.) REMOVE ASPHALT PAVEMENT AND AGGREGATE BASE REMOVE ASPHALT PAVEMENT, AGGREGATE BASE TO REMAIN (TYP.) REMOVE CONCRETE CURB AND GUTTER (TYP.) REMOVE STORM STRUCTURE (TYP.) REMOVE STORM SEWER PIPE (TYP.) REMOVE TREE (TYP.) SAWCUT LINE / REMOVE CONCRETE AT NEAREST JOINT (TYP.) REMOVE SIGN REMOVE AND SALVAGE STOP SIGN REMOVE SHRUB (TYP.) REMOVE AND SALVAGE LIGHT POLE REMOVE DRAINTILE REMOVE ASPHALT PAVEMENT& BASE. PARKING LOT REMOVE CONCRETE PAVEMENT REMOVE AND SALVAGE TRUNCATED DOMES REMOVE MONOLITHIC CONCRETE MEDIAN MEET MILL AND OVERLAY LIMITS FROM PREVIOUS CITY PROJECT. FIELD VERIFY LIMITS

PROTECT LIGHT POLE IN PLACE (TYP.) PROTECT CURB & GUTTER IN PLACE (TYP.) PROTECT ASPHALT PAVEMENT IN PLACE (TYP.) PROTECT CONCRETE IN PLACE (TYP.) PROTECT WETLAND IN PLACE, DO NOT ENCROACH PROTECT SANITARY SEWER MANHOLE IN PLACE PROTECT SANITARY SEWER LINE IN PLACE (TYP.) PROTECT STORM SEWER STRUCTURE IN PLACE PROTECT STORM SEWER LINE IN PLACE (TYP.) PROTECT GAS LINE AND APPURTENANCES IN PLACE PROTECT ELECTRIC LINE AND STRUCTURES IN PLACE PROTECT FIBER OPTICS LINE IN PLACE (TYP.) EXISTING TREE TO REMAIN (TYP.) EXISTING "SPEED LIMIT 20" SIGN TO REMAIN, PROTECT IN PLACE PROTECT DRAINTILE IN PLACE (TYP.) PROTECT HYDRANT IN PLACE (TYP.) PROTECT GATE VALVE IN PLACE (TYP.) EXISTING METRO TRANSIT BUS SIGN TO REMAIN, PROTECT IN PLACE EXISTING BREMER BANK SIGN TO REMAIN, PROTECT EXISTING SIGNAL LOOPS TO REMAIN, PROTECT IN PLACE. REPLACE IF DAMAGED DURING CONSTRUCTION. CONTRACTOR TO VERIFY LOOPS ARE WORKING AFTER CONSTRUCTION REMOVE EXISTING CROSSWALK BLOCKS, SEE SHEET

C401 FOR REPLACEMENT (TYP.)

2020 CORE KEY 1.5-4: CLAYEY SAND GRAVEL/RECYCLED 4-6: SILTY SAND 6-11: CLAYEY SAND 1.1-4: CLAYEY SAND 4-11: SILTY SAND 1-5: LEAN CLAY 5-7: SILTY SAND 7-11: POORLY GRADED SAND WITH SILT 1.8-4: POOLY GRADED SAND WITH GRAVEL/RECYCLED 4-12: ORGANIC SILT 9-3/4 12-14.5: POORLY GRADED SAND WITH 1-7: SILTY SAND 7-13: CLAYEY SAND GRAVEL/RECYCLED 13-14.5: POORLY GRADED SAND WITH 1-4: SILTY SAND 4-7: CLAYEY SAND GRAVEL/RECYCLED 7-10: SILTY SAND 10-14.5: POORLY GRADED SAND 0.7-6: POORLY GRADED SAND WITH GRAVEL/RECYCLED 6-9: CLAYEY SAND 9-14.5: POORLY GRADED SAND WITH

DEMOLITION PLAN NOTES

- GOVERNING AUTHORITIES) ALL STRUCTURES, PADS, WALLS, FLUMES, FOUNDATIONS, PARKING, DRIVES, DRAINAGE STRUCTURES, UTILITIES, ETC. SUCH THAT THE IMPROVEMENTS ON THE PLANS CAN BE CONSTRUCTED. ALL FACILITIES TO BE REMOVED SHALL BE
- MANNER. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL. CONTRACTOR SHALL PROVIDE COPIES OF THE PERMIT AND RECEIPTS OF DISPOSAL OF MATERIALS TO THE OWNER AND OWNERS
- THE CONTRACTOR SHALL MAINTAIN ALL 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.
- 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
- 5. THE LOCATIONS OF ALL 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 UTILITY COMPANIES FOR LOCATIONS OF EXISTING UTILITIES WITHIN ALL AREAS OF PROPOSED WORK. 6. ALL EXISTING SEWERS, PIPING AND UTILITIES SHOWN ARE NOT TO BE INTERPRETED AS THE EXACT LOCATION, OR AS ANY
- OBSTACLES THAT MAY OCCUR ON THE SITE. VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES. GIVE NOTICE TO ALL UTILITY COMPANIES REGARDING DESTRUCTION AND REMOVAL OF ALL SERVICE LINES AND CAP ALL LINES BEFORE PRECEDING WITH THE 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 ST. LOUIS PARK, HENNEPIN COUNTY AND MN/DOT.
- 9. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES DURING CONSTRUCTION, AND SHALL NOTIFY ALL PROPERTIES IF ACCESS WILL BE INTERRUPTED OR ALTERED AT ANY TIME DURING CONSTRUCTION.
- 10. PRIOR TO DEMOLITION OCCURRING, ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED. 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, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS REMOVAL AND REPAIR.
- 12. THE CONTRACTOR SHALL COORDINATE WATER MAIN WORK WITH THE FIRE DEPT. AND THE CITY WATER DEPARTMENT TO PLAN PROPOSED IMPROVEMENTS AND TO ENSURE ADEQUATE FIRE PROTECTION IS CONSTANTLY AVAILABLE TO THE SITE THROUGHOUT THIS SPECIFIC WORK AND THROUGH ALL PHASES OF CONSTRUCTION. CONTRACTOR WILL BE RESPONSIBLE FOR ARRANGING/PROVIDING ANY REQUIRED WATER MAIN SHUT OFFS WITH THE CITY OF ST. LOUIS PARK DURING CONSTRUCTION. ANY COSTS ASSOCIATED WITH WATER MAIN SHUT OFFS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND NO EXTRA COMPENSATION WILL BE PROVIDED.
- 13. REFER TO SURVEY FOR ALL EXISTING INVERT AND RIM ELEVATIONS.

BE REMOVED WITHOUT APPROVAL FROM THE ENGINEER.

- 14. ALL UTILITIES SHOWN ARE EXISTING UTILITIES.
- 15. 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 ALL STATE OF MN REQUIREMENTS.
- 16. 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
- 17. CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY EXISTING DRAINTILE IS ENCOUNTERED ON SITE. NO ACTIVE DRAINTILE SHALL



RAH / EW

NOTE:
PAVEMENT REMOVAL TO BE DONE AT NIGHT. TRAFFIC TO BE
MAINTAINED THROUGHOUT CONSTRUCTION. PROVIDE CLASS 5 UNTIL
PAVEMENT IS PLACED.

VIDEOTAPE THE SITE PRIOR TO COMPLETING REMOVALS AND AFTER PLACING SUBGRADE TO CONFIRM CONDITION OF EXISTING ELEMENTS. ANY DAMAGE TO EXISTING ELEMENTS THAT ARE TO REMAIN MUST BE REPAIRED, RECONSTRUCTED, OR REPLACED BY CONTRACTOR AT NO COST TO OWNER.



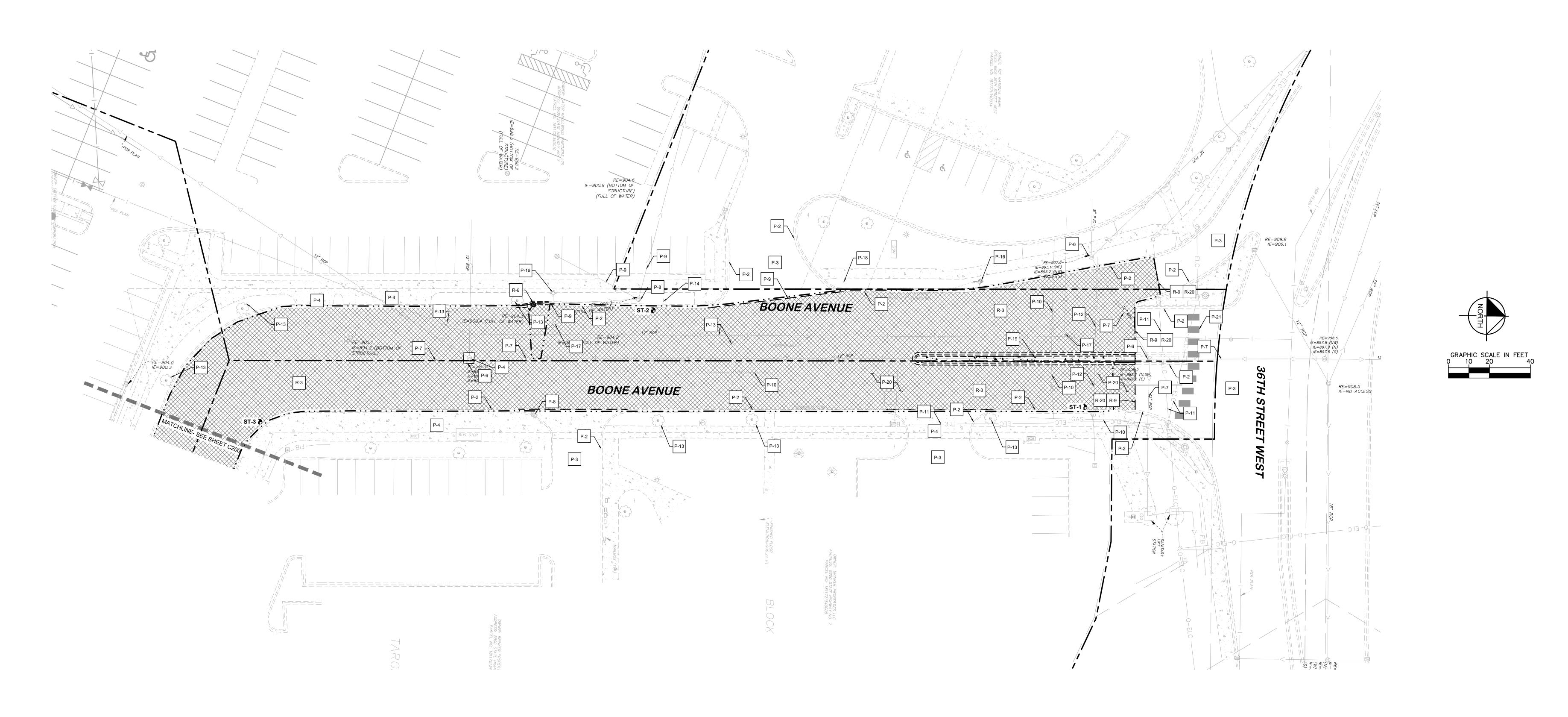


Date	No.	Description
1/25/2021	0	CITY / WATERSHED SUBMITTAL
2/24/2021	1	CITY / WATERSHED RE-SUBMITTAL

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> **EXISTING CONDITIONS -**DEMO PLAN

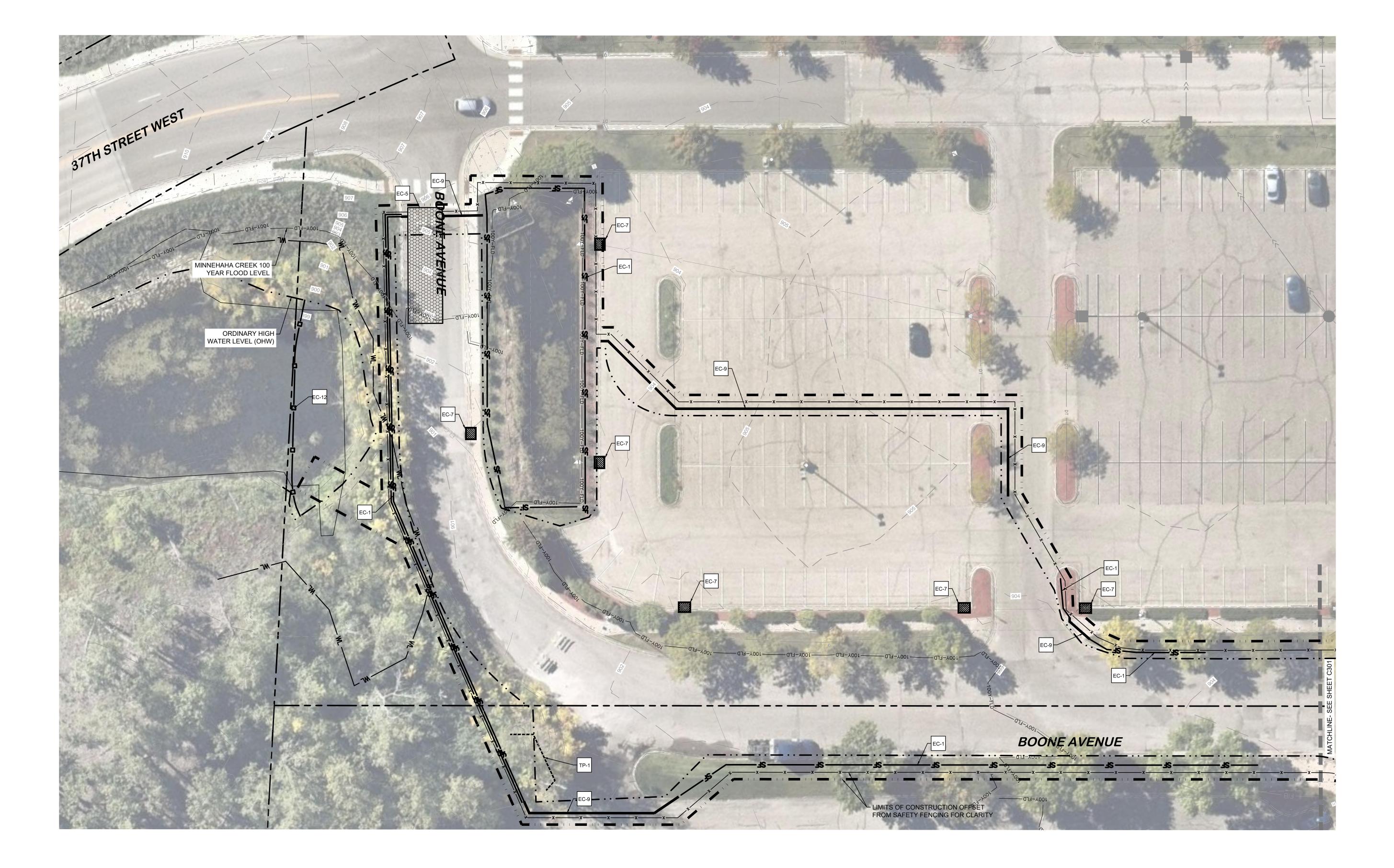


LEGEND													
EXISTING	REMOVALS												
		PROPERTY LINE											
		EASEMENT LINE	KEYNOTE LEGE	END / QUANTITIES		P-1	PROTECT LIGHT POLE IN PLACE (TYP.)	2020 CO	RE KEY				
	WL	WETLAND LINE	DETAIL	·	TUICKNESS		, ,		BITUMINOUS	APPARENT	AGGREGATE BASE	ACCEPTOATE DASE SUB	BGRADE
		ASPHALT PAVEMENT & BASE, PARKING LO	REFERENCE/ NAME/ NOT KEYNOTE	<u>/TE</u>	THICKNESS/ DEPTH/ TYPE UNIT TYPE QUANTITY	P-2	PROTECT CURB & GUTTER IN PLACE (TYP.)	LOCATION	THICKNESS (INCHES)	BITUMINOUS LAYERS	AGGREGATE BASE THICKNESS (INCHES)	TVDE MATER	ERIALS BY DEPTH
	***************************************	ASPHALT PAVEMENT & BASE, BOONE AVE	R-1 REMOVE C	CONCRETE SIDEWALK (TYP.)		P-3	PROTECT ASPHALT PAVEMENT IN PLACE (TYP.)					1.5-4: CLA	AYEY SAND
		CONCRETE SURFACE		ACDUALT DAVIMENT AND ACCRECATE DAG	OF			ST-1	5-1/2	2	12-1/2	GRAVEL/RECYCLED 4-6: SILTY	
		ASPHALT PAVEMENT ONLY	R-2 (TYP.)	ASPHALT PAVEMENT AND AGGREGATE BAS	SE	P-4	PROTECT CONCRETE IN PLACE (TYP.)					6-11: CLA	AYEY SAND
		CLEARING & GRUBBING	REMOVE A	ASPHALT PAVEMENT, AGGREGATE BASE TO	O	P-5	PROTECT WETLAND IN PLACE, DO NOT ENCROACH					4.4.01	AVEV CAND
		FULL DEPTH SAWCUT	R-3 REMAIN (T	ſYP.)		[1-3]	(TYP.)	ST-2	5-1/4	2	9	GRAVEL/RECYCLED 1.1-4: CLAY 4-11: SILTY	AYEY SAND .TY SAND
Stord Co	XXX	TREE / SHRUB	R-4 REMOVE C	CONCRETE CURB AND GUTTER (TYP.)		P-6	PROTECT SANITARY SEWER MANHOLE IN PLACE (TYP.)						
Zna Co	AAA											1-5: LEAN 5-7: SILTY	
		LIMITS OF CONSTRUCTION	R-5 NOT USED)		P-7	PROTECT SANITARY SEWER LINE IN PLACE (TYP.)	ST-3	10	4	NONE OBSERVED	N/A 7-11: POO	
——————————————————————————————————————	—— 0-ELC ——	OVERHEAD POWER LINE CHAINLINK FENCE				P-8	PROTECT STORM SEWER STRUCTURE IN PLACE					GRADED S	SAND WITH
		J-BARRIER	R-6 REMOVE S	STORM STRUCTURE (TYP.)		[P-8	(TYP.)					SILT 1.8-4: POO	ıOl V
		RETAINING WALL	R-7 REMOVE S	STORM SEWER PIPE (TYP.)		P-9	PROTECT STORM SEWER LINE IN PLACE (TYP.)						SAND WITH
		SANITARY SEWER	R-7 REMOVE S	JIONW OLWENT II L (TTT.)			DROTECT CAS LINE AND ADDURTENANCES IN DLACE	07.4	0.044		40	SILT	
		STORM SEWER WATERMAIN	R-8 REMOVE T	TREE (TYP.)		P-10	PROTECT GAS LINE AND APPURTENANCES IN PLACE (TYP.)	ST-4	9-3/4	4	12	GRAVEL/RECYCLED 4-12: ORG 12-14.5: PC	
——— GAS ———	——— GAS ———	GAS MAIN	CAMCUT I	LINE / REMOVE CONCRETE AT NEAREST			PROTECT ELECTRIC LINE AND STRUCTURES IN PLACE						SAND WITH
TEL	——— TEL ———	UNDERGROUND TELEPHONE	R-9 JOINT (TYP			P-11	(TYP.)					SILT	V 0 4 N D
CTV	стv	UNDERGROUND CABLE		·		P-12	PROTECT FIBER OPTICS LINE IN PLACE (TYP.)					1-7: SILTY 7-13: CLAY	Y SAND AYEY SAND
928 = = = = = = = = =		CONTOUR CURB & GUTTER	R-10 REMOVE S	3IGN		F-12	THOTEST FIBER OF FIGS EINE INTERIOR (TTT.)	ST-5	6 1/4	2	6	GRAVEL/RECYCLED 13-14.5: PC	
		SIGN	P 12 PEMOVE A	AND SALVAGE STOP SIGN		P-13	EXISTING TREE TO REMAIN (TYP.)						SAND WITH
	\triangleright	FLARED END SECTION	K-12 KLWOVL A	AND SALVAGE STOP SIGN			EVICTING TORES LIMIT OUT OLON TO DEMAIN					SILT 1-4: SILTY	Y SAND
(S)	S	SANITARY MANHOLE	R-13 REMOVE S	SHRUB (TYP.)		P-14	EXISTING "SPEED LIMIT 20" SIGN TO REMAIN, PROTECT IN PLACE					4-7: CLAYE	
	Ŏ	STORM MANHOLE						ST-6	6	2	6	GRAVEL/RECYCLED 7-10: SILT	
		STORM CATCHBASIN	R-14 REMOVE A	AND SALVAGE LIGHT POLE		P-15	PROTECT DRAINTILE IN PLACE (TYP.)					10-14.5: PC GRADED S	
GAS METER	CAS METER	GAS METER				P-16	PROTECT HYDRANT IN PLACE (TYP.)					0.7-6: POC	ORLY
\Longrightarrow	↔	POST INDICATOR VALVE WELL	R-15 REMOVE D	DRAINTILE		P-16	THOTEOTHIBIOATINT LAGE (TTT.)						SAND WITH
\$	&	AUTOMATIC SPRINKLER	REMOVE A	ASPHALT PAVEMENT& BASE. PARKING LOT	-	P-17	PROTECT GATE VALVE IN PLACE (TYP.)	ST-7	4	2	Δ	SILT GRAVEL/RECYCLED 6-9: CLAYE	YEY SAND
	0	ROOF DRAIN	(TYP)				EVICTING METEO TRANSIT BUG SIGN TO BEMAIN	01-7	7	2	7	9-14.5: PO	
\oslash	0	GATE VALVE	R-17 REMOVE C	CONCRETE PAVEMENT		P-18	EXISTING METRO TRANSIT BUS SIGN TO REMAIN, PROTECT IN PLACE						SAND WITH
₩.	A	HYDRANT METAL COVER					EXISTING BREMER BANK SIGN TO REMAIN, PROTECT					SILT	
w -		ELECTRICAL METER	R-18 REMOVE A	AND SALVAGE TRUNCATED DOMES		P-19	IN PLACE						
	드						EXISTING SIGNAL LOOPS TO REMAIN, PROTECT IN						
AC T	A Q	AIR CONDITIONER TELEPHONE MANHOLE	R-19 REMOVE M	MONOLITHIC CONCRETE MEDIAN		P-20	PLACE. REPLACE IF DAMAGED DURING						
CTRL BOX		CABLE BOX	MEET MILL	L AND OVERLAY LIMITS FROM PREVIOUS			CONSTRUCTION. CONTRACTOR TO VERIFY LOOPS ARE WORKING AFTER CONSTRUCTION						
——————————————————————————————————————	<u></u>	GUY WIRE		JECT. FIELD VERIFY LIMITS									

REMOVE EXISTING CROSSWALK BLOCKS, SEE SHEET C401 FOR REPLACEMENT (TYP.)

POWER POLE LIGHT POLE

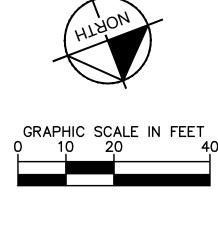
MEET MILL AND OVERLAY LIMITS FROM PREVIOUS CITY PROJECT. FIELD VERIFY LIMITS





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- 1			
	Date	No.	Description
	1/25/2021	0	CITY / WATERSHED SUBMITTAI
	2/24/2021	1	CITY / WATERSHED RE-SUBMITTA
- 1			



Checked By

Project Number RAH / EW Drawn By

PHASE 1 EROSION

LEGEND

ROCK ENTRANCE (TYP.) EROSION CONTROL BLANKET (TYP.) INLET PROTECTION (TYP.) SILT FENCE (TYP.) LIMITS OF DISTURBANCE (TYP.) ■ | | ■ | | ■ | | ■ LIMITS OF CONSTRUCTION TREE PROTECTION FENCE (TYP.)

ROCK LOG (TYP.)

KEYNOTE LEGEND/QUANTITIES

KETNUT	E LEGEND/QUANTITIES			
DETAIL REFERENCE/ KEYNOTE	NAME/ NOTE	THICKNESS/ DEPTH/ TYPE	UNIT TYPE	QUANTITY
EC-1	SILT FENCE MACHINE SLICED (SEE DETAIL) (TYP.)		LINEAR FEET	953
EC-3	BIO-LOG (SEE DETAIL) (TYP.)		LINEAR FEET	-
EC-5	CONSTRUCTION ENTRANCE (SEE DETAIL) (TYP.)		EACH	1
EC-7	INLET PROTECTION GEOTEXTILE BAG (SEE DETAIL) (TYP.)		EACH	9
EC-9	ROCK LOG		LINEAR FEET	110
EC-11	EROSION CONTROL BLANKET (SEE DETAIL) (TYP.)		SQUARE FEET	4,315
EC-12	FLOATING SILT CURTAIN (SEE DETAIL)		LINEAR FEET	96
TP-1	TREE PROTECTION FENCE		LINEAR FEET	38

LIMITS OF DISTURBANCE	1.64 AC
LIMITS OF CONSTRUCTION	1.64 AC
PRE-DEVELOPMENT PERVIOUS AREA	0.44 AC
PRE-DEVELOPMENT IMPERVIOUS AREA	1.20 AC
POST-DEVELOPMENT PERVIOUS AREA	0.79 AC
POST-DEVELOPMENT IMPERVIOUS AREA	0.85 AC

EROSION CONTROL PLAN NOTES

ALL PERIMETER SILT FENCE AND ROCK CONSTRUCTION ENTRANCES SHALL BE INSTALLED PRIOR TO CONSTRUCTION.

2. THE CONTRACTOR SHALL CONSTRUCT DRAINAGE BASINS PRIOR TO SITE GRADING.

3. THE CONTRACTOR SHALL INSTALL CATCH BASIN EROSION CONTROL MEASURES. 4. WITHIN ONE WEEK (7 DAYS) OF SITE GRADING, ALL DISTURBED AREAS SHALL BE STABILIZED WITH SEED, SOD, OR ROCK BASE. REFER TO LANDSCAPE PLANS FOR

ALL EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH CITY, STATE, AND WATERSHED DISTRICT PERMITS.

6. THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES, INCLUDING THE REMOVAL OF SILT IN FRONT OF SILT FENCES DURING THE DURATION OF THE CONSTRUCTION. 7. ANY EXCESS SEDIMENT IN PROPOSED BASINS SHALL BE REMOVED BY THE

8. REMOVAL ALL EROSION CONTROL MEASURES AFTER VEGETATION IS ESTABLISHED.

9. THE CONTRACTOR SHALL REMOVE ALL SOILS AND SEDIMENT TRACKED ONTO EXISTING STREETS AND PAVED AREAS AND SHALL SWEEP ADJACENT STREETS AS NECESSARY IN ACCORDANCE WITH CITY REQUIREMENTS.

10. IF BLOWING DUST BECOMES A NUISANCE, THE CONTRACTOR SHALL APPLY WATER FROM A TANK TRUCK TO ALL CONSTRUCTION AREAS.

11. THE CONTRACTOR SHALL MONITOR THE MINNEHAHA CREEK DAM ELEVATIONS AND THE WEATHER FORECAST AND BE PREPARED FOR INCLEMENT WEATHER

SEQUENCE OF CONSTRUCTION: UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILER, PARKING,

FINAL GRADE.

LAYDOWN, PORTA-POTTY, WHEEL WASH, CONCRETE WASHOUT, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC., IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS.

BMP AND EROSION CONTROL INSTALLATION SEQUENCE SHALL BE AS FOLLOWS: 1. TEMPORARILY SEED, THROUGHOUT CONSTRUCTION, DENUDED AREAS THAT WILL

- BE INACTIVE FOR 7 DAYS OR MORE. 2. INSTALL UTILITIES, UNDERDRAINS, STORM SEWERS, UNDERGROUND SYSTEM, CURBS AND GUTTERS. 3. INSTALL APPROPRIATE INLET PROTECTION AT ALL STORM SEWER STRUCTURES AS EACH INLET STRUCTURE IS INSTALLED. 4. PERMANENTLY STABILIZE AREAS TO BE VEGETATED AS THEY ARE BROUGHT TO
- PREPARE SITE FOR PAVING. 6. PAVE SITE AND INSTALL STRIPING. 7. INSTALL APPROPRIATE INLET PROTECTION DEVICES FOR PAVED AREAS AS WORK

2. STABILIZE ANY AREAS DISTURBED BY THE REMOVAL OF BMPS.

- PROGRESSES. 8. COMPLETE GRADING AND INSTALLATION OF PERMANENT STABILIZATION OVER ALL
- 9. OBTAIN CONCURRENCE WITH THE CIVIL ENGINEERING CONSULTANT THAT THE SITE HAS BEEN FULLY STABILIZED THEN:

 1. REMOVE ALL REMAINING TEMPORARY EROSION ADN SEDIMENT CONTROL



RAH



NOTE

SEE SHEET 300 FOR EROSION CONTROL AND SEQUENCE OF CONSTRUCTION



Kimley Horn

2020 KIMLEY-HORN AND ASSOCIATES, INC.

767 EUSTIS ST, SUITE 100, ST. PAUL, MN 55114

PHONE: 651-645-4197

- 1			
	Date	No.	Description
	1/25/2021	0	CITY / WATERSHED SUBMITTA
١	2/24/2021	1	CITY / WATERSHED RE-SUBMITTA

PRELIMINAP

TARK, MINNESOTA

Project Number T-2189

Config:

Drawn By

Checked By

RAH

PHASE 1 EROSION AND SEDIMENT CONTROL PLAN

C301

ROCK ENTRANCE (TYP.)

EROSION CONTROL BLANKET (TYP.)

INLET PROTECTION (TYP.)

SILT FENCE (TYP.)

LIMITS OF DISTURBANCE (TYP.)

SAFETY FENCE (TYP.)

TREE PROTECTION FENCE (TYP.)

ROCK LOG (TYP.)

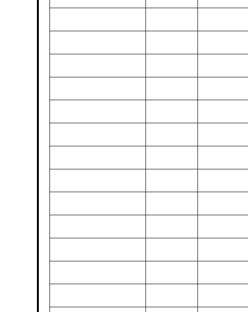
KEYNOTE LEGEND/QUANTITIES DETAIL
REFERENCE/ NAME/ NOTE
KEYNOTE THICKNESS/ DEPTH/ TYPE UNIT TYPE QUANTITY SILT FENCE MACHINE SLICED (SEE DETAIL) (TYP.) LINEAR FEET 953 BIO-LOG (SEE DETAIL) (TYP.) LINEAR FEET CONSTRUCTION ENTRANCE (SEE DETAIL) (TYP.) INLET PROTECTION GEOTEXTILE BAG (SEE DETAIL) **ROCK LOG** LINEAR FEET 110 EROSION CONTROL BLANKET (SEE DETAIL) (TYP.) SQUARE FEET 4,315 FLOATING SILT CURTAIN (SEE DETAIL) LINEAR FEET 96 TREE PROTECTION FENCE LINEAR FEET 38

	LIMITS OF DISTURBANCE	1.64 AC
Ī	LIMITS OF CONSTRUCTION	1.64 AC
	PRE-DEVELOPMENT PERVIOUS AREA	0.44 AC
Ī	PRE-DEVELOPMENT IMPERVIOUS AREA	1.20 AC
Ī	POST-DEVELOPMENT PERVIOUS AREA	0.79 AC
Ī	POST-DEVELOPMENT IMPERVIOUS AREA	0.85 AC
_		



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Date	No.	Description
1/25/2021	0	CITY / WATERSHED SUBMITTAL
2/24/2021	1	CITY / WATERSHED RE-SUBMITTAL





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Project Number

RAH / EW Drawn By Checked By RAH PHASE 2 EROSION

LEGEND

ROCK ENTRANCE (TYP.) EROSION CONTROL BLANKET (TYP.) INLET PROTECTION (TYP.) SILT FENCE (TYP.) LIMITS OF DISTURBANCE (TYP.) **____x___** SAFETY FENCE (TYP.) ■ | | ■ | | ■ | | ■ LIMITS OF CONSTRUCTION TREE PROTECTION FENCE (TYP.) FLOATING SILT CURTAIN (TYP.)

ROCK LOG (TYP.)

FLARED END SECTION

KE	YNOT	E LEGEND / QUANTITIES			
REF	DETAIL ERENCE/ EYNOTE	NAME/ NOTE	THICKNESS/ DEPTH/ TYPE	UNIT TYPE	QUANTITY
	EC-1	SILT FENCE MACHINE SLICED (SEE DETAIL) (TYP.)		LINEAR FEET	1,363
	EC-3	BIO-LOG (SEE DETAIL) (TYP.)		LINEAR FEET	-
	EC-5	CONSTRUCTION ENTRANCE (SEE DETAIL) (TYP.)		EACH	2
	EC-7	INLET PROTECTION GEOTEXTILE BAG (SEE DETAIL) (TYP.)		EACH	11
	EC-9	ROCK LOG		LINEAR FEET	110
	EC-11	EROSION CONTROL BLANKET (SEE DETAIL) (TYP.)		SQUARE FEET	4,315
	EC-12	FLOATING SILT CURTAIN (SEE DETAIL)		LINEAR FEET	96
	TP-1	TREE PROTECTION FENCE		LINEAR FEET	38

LIMITS OF DISTURBANCE	1.64 AC
LIMITS OF CONSTRUCTION	1.64 AC
PRE-DEVELOPMENT PERVIOUS AREA	0.44 AC
PRE-DEVELOPMENT IMPERVIOUS AREA	1.20 AC
POST-DEVELOPMENT PERVIOUS AREA	0.79 AC
POST-DEVELOPMENT IMPERVIOUS AREA	0.85 AC

EROSION CONTROL PLAN NOTES

1. ALL PERIMETER SILT FENCE AND ROCK CONSTRUCTION ENTRANCES SHALL BE INSTALLED PRIOR TO CONSTRUCTION.

2. THE CONTRACTOR SHALL CONSTRUCT DRAINAGE BASINS PRIOR TO SITE GRADING.

3. THE CONTRACTOR SHALL INSTALL CATCH BASIN EROSION CONTROL MEASURES. 4. WITHIN ONE WEEK (7 DAYS) OF SITE GRADING, ALL DISTURBED AREAS SHALL BE STABILIZED WITH SEED, SOD, OR ROCK BASE. REFER TO LANDSCAPE PLANS FOR

5. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH CITY, STATE, AND WATERSHED DISTRICT PERMITS.

6. THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES, INCLUDING THE REMOVAL OF SILT IN FRONT OF SILT FENCES DURING THE DURATION OF THE CONSTRUCTION.

7. ANY EXCESS SEDIMENT IN PROPOSED BASINS SHALL BE REMOVED BY THE CONTRACTOR.

8. REMOVAL ALL EROSION CONTROL MEASURES AFTER VEGETATION IS ESTABLISHED. 9. THE CONTRACTOR SHALL REMOVE ALL SOILS AND SEDIMENT TRACKED ONTO EXISTING STREETS AND PAVED AREAS AND SHALL SWEEP ADJACENT STREETS AS

NECESSARY IN ACCORDANCE WITH CITY REQUIREMENTS. 10. IF BLOWING DUST BECOMES A NUISANCE, THE CONTRACTOR SHALL APPLY WATER FROM A TANK TRUCK TO ALL CONSTRUCTION AREAS.

11. THE CONTRACTOR SHALL MONITOR THE MINNEHAHA CREEK DAM ELEVATIONS AND THE WEATHER FORECAST AND BE PREPARED FOR INCLEMENT WEATHER

SEQUENCE OF CONSTRUCTION:

UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILER, PARKING, LAYDOWN, PORTA-POTTY, WHEEL WASH, CONCRETE WASHOUT, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC., IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS.

BMP AND EROSION CONTROL INSTALLATION SEQUENCE SHALL BE AS FOLLOWS:

1. TEMPORARILY SEED, THROUGHOUT CONSTRUCTION, DENUDED AREAS THAT WILL BE INACTIVE FOR 7 DAYS OR MORE. 2. INSTALL UTILITIES, UNDERDRAINS, STORM SEWERS, UNDERGROUND SYSTEM, CURBS AND GUTTERS. 3. INSTALL APPROPRIATE INLET PROTECTION AT ALL STORM SEWER STRUCTURES AS EACH INLET STRUCTURE IS INSTALLED. 4. PERMANENTLY STABILIZE AREAS TO BE VEGETATED AS THEY ARE BROUGHT TO FINAL GRADE. PREPARE SITE FOR PAVING.

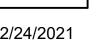
6. PAVE SITE AND INSTALL STRIPING. 7. INSTALL APPROPRIATE INLET PROTECTION DEVICES FOR PAVED AREAS AS WORK PROGRESSES. 8. COMPLETE GRADING AND INSTALLATION OF PERMANENT STABILIZATION OVER ALL

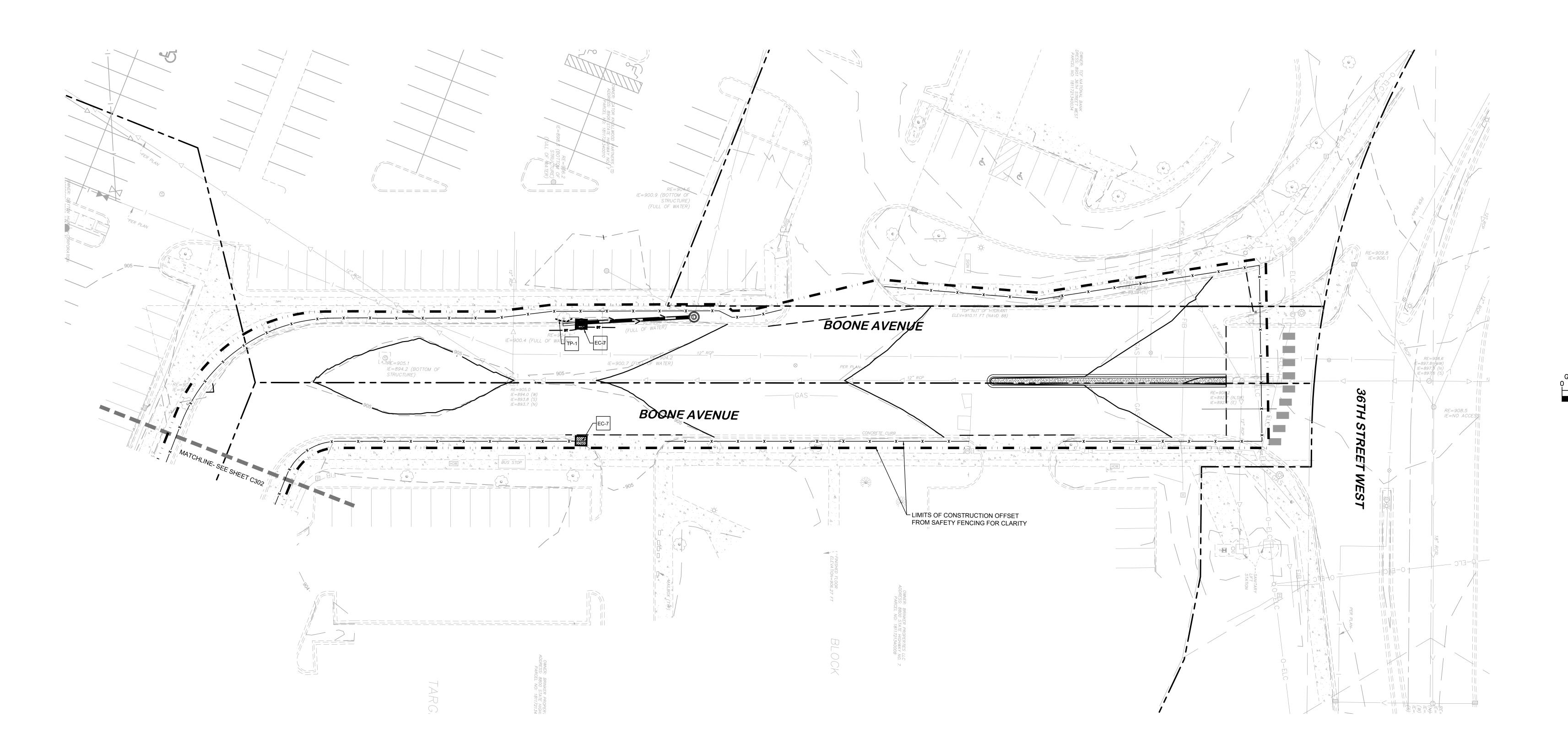
9. OBTAIN CONCURRENCE WITH THE CIVIL ENGINEERING CONSULTANT THAT THE SITE HAS BEEN FULLY STABILIZED THEN:

 REMOVE ALL REMAINING TEMPORARY EROSION ADN SEDIMENT CONTROL 2. STABILIZE ANY AREAS DISTURBED BY THE REMOVAL OF BMPS.

Know what's **below.**

Call before you dig.







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Ι.			
	Date	No.	Description
	1/25/2021	0	CITY / WATERSHED SUBMITTAL
	2/24/2021	1	CITY / WATERSHED RE-SUBMITTAL

Checked By

Know what's **below.**

Call before you dig.

Project Number RAH / EW Drawn By

PHASE 2 EROSION

LEGEND ROCK ENTRANCE (TYP.) INLET PROTECTION (TYP.) SILT FENCE (TYP.) LIMITS OF DISTURBANCE (TYP.)

TREE PROTECTION FENCE (TYP.)

ROCK LOG (TYP.)

EROSION CONTROL BLANKET (TYP.) **____x___** SAFETY FENCE (TYP.) LIMITS OF CONSTRUCTION

KEYNOTE LEGEND/QUANTITIES

KETNUTI	E LEGEND/QUANTITIES			
DETAIL REFERENCE/ KEYNOTE	NAME/ NOTE	THICKNESS/ DEPTH/ TYPE	UNIT TYPE	QUANTITY
EC-1	SILT FENCE MACHINE SLICED (SEE DETAIL) (TYP.)		LINEAR FEET	1,363
EC-3	BIO-LOG (SEE DETAIL) (TYP.)		LINEAR FEET	-
EC-5	CONSTRUCTION ENTRANCE (SEE DETAIL) (TYP.)		EACH	2
EC-7	INLET PROTECTION GEOTEXTILE BAG (SEE DETAIL) (TYP.)		EACH	11
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EC-11	EROSION CONTROL BLANKET (SEE DETAIL) (TYP.)		SQUARE FEET	4,315
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TP-1	TREE PROTECTION FENCE		LINEAR FEET	38

1.64 AC
1.64 AC
0.44 AC
1.20 AC
0.79 AC
0.85 AC

EROSION CONTROL PLAN NOTES

1. ALL PERIMETER SILT FENCE AND ROCK CONSTRUCTION ENTRANCES SHALL BE INSTALLED PRIOR TO CONSTRUCTION.

2. THE CONTRACTOR SHALL CONSTRUCT DRAINAGE BASINS PRIOR TO SITE GRADING. 3. THE CONTRACTOR SHALL INSTALL CATCH BASIN EROSION CONTROL MEASURES.

4. WITHIN TWO WEEKS (14 DAYS) OF SITE GRADING, ALL DISTURBED AREAS SHALL BE STABILIZED WITH SEED, SOD, OR ROCK BASE. REFER TO LANDSCAPE PLANS FOR

ALL EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH CITY, STATE, AND WATERSHED DISTRICT PERMITS.

THE REMOVAL OF SILT IN FRONT OF SILT FENCES DURING THE DURATION OF THE CONSTRUCTION. 7. ANY EXCESS SEDIMENT IN PROPOSED BASINS SHALL BE REMOVED BY THE

6. THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES, INCLUDING

CONTRACTOR. 8. REMOVAL ALL EROSION CONTROL MEASURES AFTER VEGETATION IS ESTABLISHED.

9. THE CONTRACTOR SHALL REMOVE ALL SOILS AND SEDIMENT TRACKED ONTO EXISTING STREETS AND PAVED AREAS AND SHALL SWEEP ADJACENT STREETS AS NECESSARY IN ACCORDANCE WITH CITY REQUIREMENTS.

10. IF BLOWING DUST BECOMES A NUISANCE, THE CONTRACTOR SHALL APPLY WATER FROM A TANK TRUCK TO ALL CONSTRUCTION AREAS.

SEQUENCE OF CONSTRUCTION: UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILER, PARKING, LAYDOWN, PORTA-POTTY, WHEEL WASH, CONCRETE WASHOUT, FUEL AND MATERIAL

STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC., IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS.

BMP AND EROSION CONTROL INSTALLATION SEQUENCE SHALL BE AS FOLLOWS: 1. TEMPORARILY SEED, THROUGHOUT CONSTRUCTION, DENUDED AREAS THAT WILL

BE INACTIVE FOR 7 DAYS OR MORE. 2. INSTALL UTILITIES, UNDERDRAINS, STORM SEWERS, UNDERGROUND SYSTEM, CURBS AND GUTTERS.

3. INSTALL APPROPRIATE INLET PROTECTION AT ALL STORM SEWER STRUCTURES AS EACH INLET STRUCTURE IS INSTALLED. 4. PERMANENTLY STABILIZE AREAS TO BE VEGETATED AS THEY ARE BROUGHT TO FINAL GRADE.

5. PREPARE SITE FOR PAVING. PAVE SITE AND INSTALL STRIPING.

7. INSTALL APPROPRIATE INLET PROTECTION DEVICES FOR PAVED AREAS AS WORK 8. COMPLETE GRADING AND INSTALLATION OF PERMANENT STABILIZATION OVER ALL 9. OBTAIN CONCURRENCE WITH THE CIVIL ENGINEERING CONSULTANT THAT THE

SITE HAS BEEN FULLY STABILIZED THEN: 1. REMOVE ALL REMAINING TEMPORARY EROSION ADN SEDIMENT CONTROL 2. STABILIZE ANY AREAS DISTURBED BY THE REMOVAL OF BMPS.

RAH

GENERAL NOTES

A. PROJECT OFFICE WALL SWPPP POSTINGS:

THE FOLLOWING ITEMS MUST BE POSTED TOGETHER IN A SINGLE, ORGANIZED LOCATION ON A WALL INSIDE THE PROJECT OFFICE: 1) SWPPP SITE MAPS (ALL PHASES); 2) SWPPP DETAIL SHEETS; 3) MAP SHOWING LOCATION OF OFFSITE IMPORT OR EXPORT FACILITY; 4) REVISIONS TO DETAILS, SITE MAPS, OR SWPPP-RELATED RFIS; 5) SITE SWPPP BINDER; 6) SWCT PLACARD; 7) CURRENT OWNER STORMWATER COMPLIANCE TRAINING CERTIFICATES FOR SUPERINTENDENT(S) AND COMPLIANCE OFFICER(S); AND 8) CERTIFICATIONS AND/OR TRAINING CERTIFICATES REQUIRED TO PERFORM INSPECTIONS BY THE APPLICABLE CONSTRUCTION GENERAL PERMIT OR AUTHORITY HAVING JURISDICTION.

B. PERMITTED PROJECT AREA: FOR PURPOSES OF THIS SWPPP AND ASSOCIATED STORMWATER PERMIT, 'PERMITTED PROJECT AREA' IS DEFINED AS ANY AND ALL AREAS WITHIN THE PROJECT LIMITS OF DISTURBANCE, AS SHOWN ON THE SWPPP SITE MAPS AND IDENTIFIED IN THE NOTICE OF INTENT TO THE AGENCY. ALL GROUND-DISTURBING AND CONSTRUCTION-RELATED ACTIVITIES (MATERIAL STORAGE, DUMPSTERS, PARKING AREAS, PROJECT OFFICE TRAILER, ETC.) MUST BE INCLUDED WITHIN THE PERMITTED PROJECT AREA LIMITS OF DISTURBANCE.

ALL AREAS OUTSIDE THE PERMITTED PROJECT AREA (I.E., LIMITS OF DISTURBANCE) ACQUIRED FOR USE BY THE GC OR A SUBCONTRACTOR OF THE GC (BORROW SOURCES, DISPOSAL AREAS, ETC.) MUST BE MANAGED IN ACCORDANCE WITH THE NPDES PERMIT. THE CONTRACTOR IS REQUIRED TO LOCATE OFFICE TRAILERS AND MATERIAL STORAGE AREAS FOR THE PROJECT WITHIN THE LIMITS OF DISTURBANCE. THE CONTRACTOR MAY REQUEST USE OF OFF-SITE LOCATIONS FOR OFFICE TRAILERS OR NON-ERODIBLE MATERIAL STORAGE; HOWEVER, APPROVAL MUST BE OBTAINED FROM THE CONSTRUCTION MANAGER, AND THE CEC PRIOR TO THEIR USE. REQUESTS WILL BE REVIEWED ON A CASE BY CASE BASIS AND IF APPROVED, LIMITATIONS ON USE WILL BE PROVIDED BY THE CEC.

C. SPECIAL PROJECT AREAS: THERE ARE NO SPECIAL PROJECTS, LOCATED BEYOND THE OWNER PERMITTED PROJECT AREA, REQUIRING INSPECTION AND MAINTENANCE ASSOCIATED WITH THIS CONSTRUCTION PROJECT.

D.1 NON-STORMWATER DISCHARGES: THE GENERAL PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES PROHIBITS MOST NON-STORMWATER DISCHARGES DURING THE CONSTRUCTION PHASE.

PROJECT, ARE INCLUDED IN THE SECTION PART IV.D. OF THE GENERAL PERMIT.

BEST MANAGEMENT PRACTICES (BMPS) MUST BE IMPLEMENTED FOR THE GENERAL PERMIT ALLOWABLE DISCHARGES FOR THE DURATION OF THE PERMIT. THE TECHNIQUES DESCRIBED IN THIS SWPPP FOCUS ON PROVIDING CONTROL OF POLLUTANT DISCHARGES WITH PRACTICAL APPROACHES THAT UTILIZE READILY AVAILABLE EXPERTISE, MATERIAL, AND EQUIPMENT.

ALLOWABLE NON-STORMWATER DISCHARGES THAT OCCUR DURING CONSTRUCTION ON THIS

NON-STORMWATER COMPONENTS OF SITE DISCHARGES MUST BE UNCONTAMINATED NON-TURBID WATER. ALL NON-STORMWATER DISCHARGES MUST BE ROUTED TO A STORMWATER CONTROL PRIOR TO DISCHARGE. WATER USED FOR CONSTRUCTION WHICH DISCHARGES FROM THE SITE MUST ORIGINATE FROM A PUBLIC WATER SUPPLY OR PRIVATE WELL APPROVED BY THE STATE HEALTH DEPARTMENT. WATER USED FOR CONSTRUCTION THAT DOES NOT ORIGINATE FROM AN APPROVED PUBLIC SUPPLY MUST NOT DISCHARGE FROM THE SITE; IT CAN BE RETAINED IN RETENTION PONDS UNTIL IT INFILTRATES OR EVAPORATES. WHEN NON-STORMWATER IS DISCHARGED FROM THE SITE, IT MUST BE DONE IN A MANNER SUCH THAT IT DOES NOT CAUSE EROSION OF THE SOIL DURING DISCHARGE.

D.2 POWER WASHING: PROCESS WATER SUCH AS POWER WASHING WATER AND CONCRETE CUTTING EFFLUENT, AMONG OTHERS, MUST BE COLLECTED FOR TREATMENT AND DISPOSAL. IT MUST NOT BE FLUSHED INTO THE SITE STORM DRAIN SYSTEM OR DISCHARGED OFF-SITE.

D. DISCHARGE POINTS: ALL DISCHARGE POINTS MUST BE INSPECTED TO DETERMINE WHETHER EROSION AND SEDIMENTATION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING DISCHARGE OF SEDIMENT FROM THE SITE AND/OR IMPACTS TO RECEIVING WATERS. SEDIMENT ACCUMULATION DOWNGRADIENT OF DISCHARGE LOCATIONS SHALL BE REPORTED AS A SEDIMENT DISCHARGE AND THE POTENTIAL UPSTREAM CAUSE SHALL BE INVESTIGATED TO PREVENT FUTURE OCCURRENCE. CONTACT THE CM AND CEC TO DETERMINE APPROPRIATE ACTION FOR CLEANUP OF DISCHARGED SEDIMENT THAT MAY BE OUTSIDE OF THE LIMITS OF DISTURBANCE. SEE SAMPLING AND MONITORING OF EFFLUENT PLAN (IF APPLICABLE).

THE NATURAL RESOURCES CONSERVATION SERVICE'S (NRCS) WEB SOIL SURVEY FOR HENNEPIN COUNTY WAS REVIEWED FOR THE PROJECT SITE. ACCORDING TO THE SURVEY, THERE ARE FOUR SOIL MAPPING UNITS WITHIN THE STUDY AREA WHICH ARE GENERALLY CATEGORIZED AS URBAN LAND AND WATER, NONE OF WHICH HAVE A HYDRIC SOIL INDICATOR. ACCORDING TO SOIL INFORMATION COLLECTED DURING WETLAND DELINEATION (9/24/2020), THE TOP 24" OF THE SOIL CONSISTED OF SANDY LOAMS.

F. INVASIVE SPECIES: THE PROJECT SITE CONTAINS SEVERAL INVASIVE SPECIES INCLUDING COMMON BUCKTHORN (RHAMNUS CATHARTICA), PURPLE LOOSESTRIFE (LYTHRUM SALICARIA). THESE PLANTS SHOULD BE IDENTIFIED AND ERADICATION ON-SITE WHEN POSSIBLE. IF REMOVAL OF PLANT MATERIAL IS NECESSARY, PROPERLY CONTAIN AND TRANSPORT MATERIALS TO A DISPOSAL SITE THAT WILL ACCEPT NOXIOUS WEEDS.

G. HISTORIC SITE: THE PROJECT SITE DOES NOT CONTAIN ANY KNOWN HISTORICAL SITES.

H. ENCOUNTERING CONTAMINATION: BASED ON A REVIEW OF THE MINNESOTA POLLUTION CONTROL AGENCY (MPCA) WHAT'S IN MY NEIGHBORHOOD (WIMN) DATABASE, THERE IS POTENTIAL FOR CONTAMINATED SOIL AND/OR GROUNDWATER TO EXIST ON THE PROJECT SITE. CONTAMINATED MATERIALS ENCOUNTERED MUST BE PROPERLY HANDLED AND TREATED IN ACCORDANCE WITH STATE AND FEDERAL REGULATIONS.

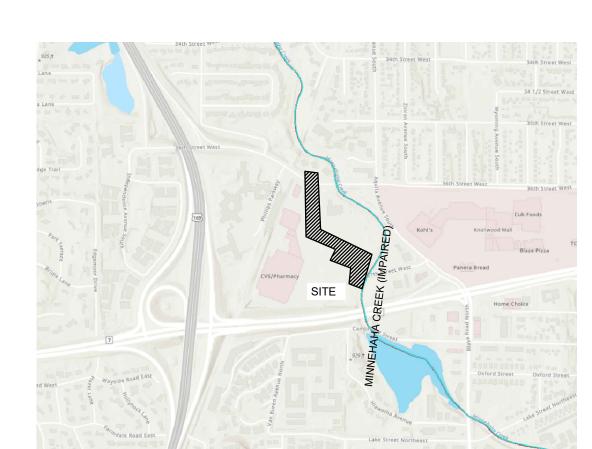
PORTABLE TOILETS SHALL NOT BE LOCATED UPSTREAM OF ANY DISCHARGE POINTS, AND SHALL BE POSITIONED SO THAT THEY ARE SECURE AND CANNOT BY TIPPED OR KNOCKED OVER. PROPERLY DISPOSE OF ALL SANITARY WASTE

DEWATERING: THE CONTRACTOR SHALL COORDINATE WITH THE CITY AND OBTAIN ANY APPLICABLE DEWATERING PERMITS FOR THIS PROJECT.

K. CONTRACTOR SHALL UTILIZE TYPICAL CONSTRUCTION METHODS TO PROMOTE GROWTH IN RESTORING WITH TOPSOIL.

L. LOCAL RAINFALL INTENSITIES WERE CONSIDERED WHEN DEVELOPING BMP'S.

M. NO CONCRETE WASHOUTS ARE ALLOWED ON SITE. N. ALL CONCRETE SHALL BE CLEANED UP IMMEDIATELY.



IMPAIRED WATERS

MINNEHAHA CREEK IS ADJACENT TO THE SITE AND IS IMPAIRED FOR AQL, AQR, DO, FISHESBIO, AND INVERTBIO

BMP QUANTITIES NAME/ NOTE UNIT TYPE QUANTITY SILT FENCE MACHINE SLICED (SEE DETAIL) (TYP.) LINEAR FEET BIO-LOG (SEE DETAIL) (TYP.) CONSTRUCTION ENTRANCE (SEE DETAIL) (TYP.) INLET PROTECTION GEOTEXTILE BAG (SEE DETAIL) ROCK LOG EROSION CONTROL BLANKET (SEE DETAIL) (TYP.) SQUARE FEET 4,315 TREE PROTECTION FENCE LINEAR FEET

EROSION AND SEDIMENT CONTROL NOTES

PHASES OF CONSTRUCTION.

B. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR OF FLAMMABLE AND COMBUSTIBLE LIQUIDS. LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.

C. SITE MAP MUST CLEARLY DELINEATE ALL STATE WATERS. PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.

UNNECESSARY OR IMPROPERLY SEQUENCED CLEARING AND/OR GRADING SHALL BE PERMITTED. IMMEDIATELY UPON COMPLETION OF MOST RECENT GRADING ACTIVITY, WITH THE USE OF

TACKIFIERS, NETTING AND/OR BLANKETS. COMPLETION MUST BE ACHIEVED WITHIN 7 DAYS.

DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED LANDSCAPE PLAN.

VELOCITIES AND EROSION. TEMPORARY AND/OR PERMANENT STABILIZATION SHALL BE APPLIED PER THE EPA NATIONAL RESPONSE CENTER (1-800-424-8802) AND THE MINNESOTA DEPARTMENT OF NATURAL SWPPP UPDATES AND AMMENDMENTS REQUIREMENTS IN THESE E&S CONTROL NOTES. RESOURCES (1-800-943-0003)

DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL

THE STATE REQUIRES REPORTING WHEN: BE RESPONSIBLE FOR ADJUSTING THE EROSION AND SEDIMENT CONTROL MEASURES (SILT FENCES, ETC.) TO PREVENT EROSION AND POLLUTANT DISCHARGE OFF-SITE.

ALL MEASURES STATED ON THIS SITE MAP, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION 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 QUALIFIED PERSON IN ACCORDANCE WITH THE IN ACCORDANCE WITH THE SITE PLANS.

STORM WATER POLLUTANT CONTROL MEASURES INSTALLED DURING CONSTRUCTION, THAT WILL ALSO

DOCUMENTS. THE SITE-SPECIFIC POST CONSTRUCTION STORM WATER OPERATION AND MAINTENANCE WEBSITE: (O&M) MANUAL IS INCLUDED IN THE CONTRACT DOCUMENTS. K. ALL PERMANENT CONTROLS AND SYSTEMS MUST BE INSTALLED AND FUNCTIONING AS DESIGNED AND

FREE OF ACCUMULATED SEDIMENT AND DEBRIS DURING FINAL PROJECT INSPECTION AND APPROVAL.

L. SILT FENCE OR FABRIC PLACED UNDER THE GRATE IS NOT AN APPROVED FORM OF INLET PROTECTION.

SWPPP DESIGNER: BRIAN WURDEMAN, P.E. 767 EUSTIS STREET, SUITE 100 ST. PAUL, MN 55114 **CERTIFICATION EXPIRES 2021**

INSTALLER CERTIFICATION

ADDRESS: SWPPP CERTIFICATION SIGNATURE:

SIGNATURE:

INSPECTOR CERTIFICATION ADDRESS: SWPPP CERTIFICATION

SIGNATURE:

HAZARDOUS MATERIAL MANAGEMENT & SPILL REPORTING

A. SUBCONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THIS STORM SHALL BE HANDLED PROPERLY TO REDUCE THE POTENTIAL FOR STORMWATER POLLUTION. ALL MATERIALS WATER POLLUTION PREVENTION PLAN. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE USED ON THIS CONSTRUCTION SITE SHALL BE PROPERLY STORED, HANDLED, DISPENSED AND DISPOSED OF IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST OF OWNER THROUGHOUT ALL FOLLOWING ALL APPLICABLE LABEL DIRECTIONS. FLAMMABLE AND COMBUSTIBLE LIQUIDS SHALL BE STORED AND HANDLED ACCORDING TO APPLICABLE REGULATIONS, AND, AT A MINIMUM, ACCORDING TO 29 CFR 1926.152. ONLY APPROVED CONTAINERS AND PORTABLE TANKS SHALL BE USED FOR STORAGE AND HANDLING

BMP AND EROSION CONTROL INSTALLATION SEQUENCE SHALL BE AS FOLLOWS:

> MATERIAL SAFETY DATA SHEETS (MSDS) INFORMATION SHALL BE KEPT ON SITE FOR ANY AND ALL APPLICABLE MATERIALS. HOWEVER, MSDS MAY ALSO BE ACCESSED VIA TELEPHONE OR OTHER ELECTRONIC MEANS OR

IN THE EVENT OF AN ACCIDENTAL SPILL, IMMEDIATE ACTION SHALL BE TAKEN BY THE SUBCONTRACTOR TO SUBCONTRACTOR TO LIMIT DISTURBANCE OF SITE IN STRICT ACCORDANCE WITH SWPPP CONTAIN AND REMOVE THE SPILLED MATERIAL. THE SPILL SHALL BE REPORTED TO THE APPROPRIATE IMPLEMENTATION SEQUENCE, OR AS REQUIRED BY THE APPLICABLE GENERAL PERMIT. NO AGENCIES IN THE REQUIRED TIME FRAMES. AS REQUIRED UNDER THE PROVISIONS OF THE CLEAN WATER ACT, ANY SPILL OR DISCHARGE ENTERING WATERS OF THE UNITED STATES SHALL BE PROPERLY REPORTED. ALL DENUDED/BARE AREAS THAT WILL BE INACTIVE FOR 7 DAYS OR MORE, MUST BE STABILIZED ALL HAZARDOUS MATERIALS, INCLUDING CONTAMINATED SOIL AND LIQUID CONCRETE WASTE, SHALL BE DISPOSED OF BY THE SUBCONTRACTOR IN THE MANNER SPECIFIED BY FEDERAL, STATE AND LOCAL FAST-GERMINATING ANNUAL GRASS/GRAIN VARIETIES, STRAW/HAY MULCH, WOOD CELLULOSE FIBERS, REGULATIONS AND BY THE MANUFACTURER OF SUCH PRODUCTS.

THE SUBCONTRACTOR SHALL PREPARE A WRITTEN RECORD OF ANY SPILL AND ASSOCIATED CLEAN-UP ACTIVITIES OF PETROLEUM PRODUCTS OR HAZARDOUS MATERIALS IN EXCESS OF 1 GALLON OR REPORTABLE QUANTITIES, WHICHEVER IS LESS, ON THE DAY OF THE SPILL. THE SUBCONTRACTOR SHALL PROVIDE NOTICE SHALL BE PERMANENTLY STABILIZED AS SHOWN ON THE PLANS. THESE AREAS SHALL BE SEEDED, TO OWNER, VIA THE ONLINE CRITICAL INCIDENT REPORT, IMMEDIATELY UPON IDENTIFICATION OF ANY SPILL. SODDED, AND/OR VEGETATED IMMEDIATELY, AND COMPLETED NO LATER THAN 7 DAYS AFTER THE LAST SPILL REPORT FORMS ARE AVAILABLE IN THE ONLINE SWPPP REPORTING SYSTEM PROVIDED BY THE OWNER. CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. REFER TO THE GRADING PLAN AND/OR COPIES OF SPILL CRITICAL INCIDENT REPORTS SHALL BE PRINTED AND MAINTAINED IN THE JOBSITE BINDER. ANY SPILLS OF PETROLEUM PRODUCTS OR HAZARDOUS MATERIALS IN EXCESS OF REPORTABLE QUANTITIES SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF AS DEFINED BY EPA OR THE STATE OR LOCAL AGENCY REGULATIONS, SHALL BE IMMEDIATELY REPORTED TO

THERE IS AN IMPACT TO HUMAN HEALTH THERE IS AN IMPACT TO THE ENVIRONMENT THERE IS A FIRE, EXPLOSION, OR SAFETY HAZARD

THE PRODUCT LABEL AND REGULATIONS.

Question

Does the site have known soil or groundwater

If the answer to Box 2 is yes, has the contaminated soil

or groundwater been remediated to acceptable levels?

Underground storage tank vent(s) or fill port(s)

Soil pile(s) covered with plastic sheeting or tarp

Mismanaged drum(s) or chemical contained Excavation(s) that is/are not backfilled with cle

Presence of debris that may indicate presence of structure(s) or activity(ies) that could result in

For all potential sources identified (checked) in Boxes 5 through 13, can adequate separation be achieved? If

Known groundwater or soil contamination on adjace

Underground storage tank vents or fill po

Soil piles covered with plastic sheeting or targ

Staining of soils and/or dead vegetation

Mismanaged drums or chemical contain

Presence of debris that may indicate presence structures or activities that could result in

Site is a confirmed stormwater hots

17 through 26? If yes, proceed to Box 28

If no, proceed to Box 2

 $ttp://stormwater.pca.state.mn.us/index.php/Stormwater_infiltration_and_contaminated_soils_and_groundwater.$

MPCA CONTAMINATION SCREENING CHECKLIST

Excavations that are not backfilled with clean materia

Are any potential sources identified (checked) in Boxe

For all potential sources identified (checked) in Boxes 7 through 26, can adequate separation be achieved

sites with off-site contamination at

Staining of soil(s) and/or dead vegetation

contamination? If no, proceed to Box 2

If yes, proceed to Box 4.

Monitoring well(s

Unusual odor

yes, proceed to Box 16.

Unusual odo

A SPILL IS NOT IMMEDIATELY CLEANED UP THE SPILL WAS MORE THAN THE REPORTABLE QUANTITY OF 1 GALLON OF A PETROLEUM PRODUCT

CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED THE REPORT SHOULD BE FILED WITH THE STATE OF MINNESOTA. ALL REPORTS SHOULD BE FILED WITHIN 24 HOURS OF A SPILL OCCURRING.

PROVIDE STORM WATER MANAGEMENT AFTER CONSTRUCTION, ARE INCLUDED IN THE CONTRACT

THE REPORTABLE QUANTITY FOR HAZARDOUS MATERIALS CAN BE FOUND IN 40 CFR 302 AND THE US EPA HTTP://WWW.EPA.GOV/SUPERFUND/POLICY/RELEASE/RG

> TO MINIMIZE THE POTENTIAL FOR A SPILL OF PETROLEUM PRODUCT OR HAZARDOUS MATERIALS TO COME IN CONTACT WITH STORMWATER, THE FOLLOWING STEPS SHALL BE IMPLEMENTED: 1) ALL MATERIALS WITH HAZARDOUS PROPERTIES, SUCH AS PESTICIDES, PETROLEUM PRODUCTS FERTILIZERS, SOAPS, DETERGENTS, CONSTRUCTION CHEMICALS, ACIDS, BASES, PAINTS, PAINT SOLVENTS, ADDITIVES FOR SOIL STABILIZATION, CONCRETE, CURING COMPOUNDS AND ADDITIVES, ETC., SHALL BE STORED IN A SECURE LOCATION, UNDER COVER AND IN APPROPRIATE, TIGHTLY SEALED CONTAINERS

WHEN NOT IN USE. 2) THE MINIMUM PRACTICAL QUANTITY OF ALL SUCH MATERIALS SHALL BE KEPT ON THE JOB SITE AND SCHEDULED FOR DELIVERY AS CLOSE TO TIME OF USE AS PRACTICAL. 3) A SPILL CONTROL AND CONTAINMENT KIT (CONTAINING FOR EXAMPLE, ABSORBENT MATERIAL SUCH AS KITTY LITTER OR SAWDUST, ACID, BASE, NEUTRALIZING AGENT, BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, PLASTIC AND METAL TRASH CONTAINERS, ETC.) SHALL BE PROVIDED AT THE CONSTRUCTION SITE AND ITS LOCATION(S) SHALL BE IDENTIFIED WITH LEGIBLE SIGNAGE AND SHOWN ON

a. THE SPILL CONTROL AND CONTAINMENT KIT SUPPLIES SHALL BE OF SUFFICIENT QUANTITIES AND APPROPRIATE CONTENT TO CONTAIN A SPILL FROM THE LARGEST ANTICIPATED PIECE OF EQUIPMENT AND FROM THE LARGEST ANTICIPATED QUANTITIES OF PRODUCTS STORED ON THE SITE AT ANY b. CONTENTS SHALL BE INSPECTED DAILY DURING THE DAILY STORMWATER INSPECTION.

PRODUCT LABEL. CONTAINERS MUST BE STORED IN A MANNER TO PROTECT THEM FROM THE ELEMENTS AND INCIDENTAL DAMAGE. 5) ALL PRODUCTS SHALL BE USED IN STRICT COMPLIANCE WITH INSTRUCTIONS ON THE PRODUCT LABEL. 6) THE DISPOSAL OF EXCESS OR USED PRODUCTS SHALL BE IN STRICT COMPLIANCE WITH INSTRUCTIONS ON

Step I - Determine if the site has known contamination

Step II - Assess the site and proposed location of the BMP Does the site have a history of soil or groundwater contamination? If Yes, proceed to Box 3; if No, proceed to Box 4.

For Boxes 5 through 13, check each box in which the item occurs on the site with the proposed BMP?

Are there any potential sources identified (checked) in Boxes 5 through 13? If Yes, proceed to Box 15; if no proceed to Box 16.

For Boxes 17 through 26, check each box in which the item occurs within the influence zone of the site property. See Influence zone

nittees, infiltration is prohibited when the infiltration system will be constructed in areas where high levels of contain

OOTNOTE: If infiltration is pursued, additional investigation, such as a Phase 1 or Phase 2 Environmental Site Assessment, is highly recommended.

or more information, see Stormwater management guidelines for sites with on-site contamination or Stormwater management guidelines for

Step III - Assessing adjacent properties

Criteria or check box

ves. Stop. There is sufficient information to suggest that contaminants may

pilized by infiltration. For Construction Stormwater permittees, infiltration

stormwater. **SEE FOOTNOTE**

may be mobilized by infiltration. For Construction Stormwater permittees ration is prohibited when the infiltration system will be constructed in are

ere high levels of contaminants in soil or groundwater will be mobilized by

infiltrating stormwater. **SEE FOOTNOTE**

If no, Stop - Infiltration is appropriate

If yes, Stop - Infiltration is appropriate

ibited when the infiltration system will be constructed in areas where high

of contaminants in soil or groundwater will be mobilized by the infiltrat

4) ALL PRODUCTS SHALL BE STORED IN AND USED FROM THE ORIGINAL CONTAINER WITH THE ORIGINAL

SEQUENCE OF CONSTRUCTION

- ANY HAZARDOUS OR POTENTIALLY HAZARDOUS MATERIAL THAT IS BROUGHT ONTO THE CONSTRUCTION SITE UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILER, PARKING, LAYDOWN, PORTA-POTTY, WHEEL WASH, CONCRETE WASHOUT, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC., IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS.
 - TEMPORARILY SEED, THROUGHOUT CONSTRUCTION, DENUDED AREAS THAT WILL BE INACTIVE FOR 7 DAYS OR MORE.
 - INSTALL UTILITIES, UNDERDRAINS, STORM SEWERS, UNDERGROUND SYSTEM, CURBS AND GUTTERS. INSTALL APPROPRIATE INLET PROTECTION AT ALL STORM SEWER STRUCTURES AS EACH INLET STRUCTURE IS INSTALLED PERMANENTLY STABILIZE AREAS TO BE VEGETATED AS THEY ARE BROUGHT TO FINAL GRADE.
 - PREPARE SITE FOR PAVING. PAVE SITE AND INSTALL STRIPING INSTALL APPROPRIATE INLET PROTECTION DEVICES FOR PAVED AREAS AS WORK PROGRESSES.
 - COMPLETE GRADING AND INSTALLATION OF PERMANENT STABILIZATION OVER ALL AREAS. OBTAIN CONCURRENCE WITH THE CIVIL ENGINEERING CONSULTANT THAT THE SITE HAS BEEN FULLY STABILIZED THEN:
 - REMOVE ALL REMAINING TEMPORARY EROSION ADN SEDIMENT CONTROL DEVICES STABILIZE ANY AREAS DISTURBED BY THE REMOVAL OF BMPS.

THE GC MUST UPDATE THE SWPPP. INCLUDING THE JOBSITE BINDER AND SITE MAPS. TO REFLECT THE PROGRESS OF CONSTRUCTION ACTIVITIES AND GENERAL CHANGES TO THE PROJECT SITE. UPDATES SHALL BE MADE DAILY TO TRACK PROGRESS WHEN ANY OF THE FOLLOWING ACTIVITIES OCCUR: BMP INSTALLATION, MODIFICATION OR REMOVAL, CONSTRUCTION ACTIVITIES (E.G., PAVING, STORM SEWER INSTALLATION, FOOTING INSTALLATION, ETC.), CLEARING, GRUBBING OR GRADING, OR TEMPORARY OR PERMANENT STABILIZATION.

THE GENERAL CONTRACTOR MUST SUBMIT A REQUEST FOR INFORMATION (RFI) TO THE CEC AND OBTAIN WRITTEN CEC APPROVAL BEFORE DOING ANY OF THE FOLLOWING:

1. MODIFYING EROSION OR SEDIMENT CONTROL BMPS (SUBSTITUTIONS ARE TYPICALLY ONLY APPROVED IF SPECIFIED MATERIALS ARE NOT AVAILABLE OR THERE IS A VALID REASON THE SPECIFIED BMP WILL NOT WORK) 2. ADDING/DELETING EROSION OR SEDIMENT CONTROL BMPS; 3. MODIFYING THE SWPPP IMPLEMENTATION SEQUENCE: OR 4. PERFORMING ANY ACTIONS OR IN ANY MANNER THAT IS CONTRARY TO THE SWPPP.

THE CONTRACTOR MAY MODIFY OR ADD ADDITIONAL BMPS, WITHOUT CEC APPROVAL, IN AN EMERGENCY SITUATION TO PREVENT SEDIMENT DISCHARGE OR PROTECT WATER QUALITY: HOWEVER, GC MUST NOTIFY THE CEC AS SOON AS PRACTICAL AS TO THEIR ACTIONS TO DISCUSS THE NEED FOR ADDITIONAL OR SUPPLEMENTAL MEASURES AND TO OBTAIN THE REQUIRED APPROVALS. THE CONTRACTOR IS ULTIMATELY RESPONSIBLE TO ENSURE COMPLIANCE WITH THE PERMIT AND PROTECTION OF DOWNSTREAM WATER QUALITY.

AMENDING THE SWPPP DOES NOT MEAN THAT IT HAS TO BE REPRINTED. IT IS ACCEPTABLE TO ADD ADDENDA, SKETCHES, NEW SECTIONS, DETAILS, AND/OR REVISED DRAWINGS THAT HAVE THE CEC NAME IN PRINT, ARE STAMPED, SIGNED, DATED, AND ARE ACCOMPANIED BY WRITTEN COPY OF THE ASSOCIATED RFI AND ITS RESPONSE FROM CEC. ENGINEERED ITEMS MUST BE SIGNED AND STAMPED BY THE CEC OF RECORD FOR THE PROJECT.

MAINTENANCE

- 1. ALL MEASURES STATED ON THE EROSION AND SEDIMENT CONTROL PLAN AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL FINAL STABILIZATION OF THE SITE. ALL EROSION SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON AT LEAST ONCE EVERY SEVEN CALENDAR DAYS, AND WITHIN 24 HOURS AT THE END OF A RAINFALL EVENT AND SHOULD BE CLEANED AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING
- 1.1. INLET PROTECTION AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNERMINING OR SHALL BE REPLACED IF THEY SHOW SIGNS OF DETERIORATION 1.2. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED.
- AREAS SHOULD BE FERTILIZED AND RESEEDED AS NEEDED 1.3. SILT FENCES AND BRIO-ROLL SHALL BE REPAIRED TO THEIR ORIGINAL CONDITION IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-THIRD TO ONE-HALF HEIGHT OF THE FENCE.
- 1.4. THE CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS OF WAY. 1.5. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY

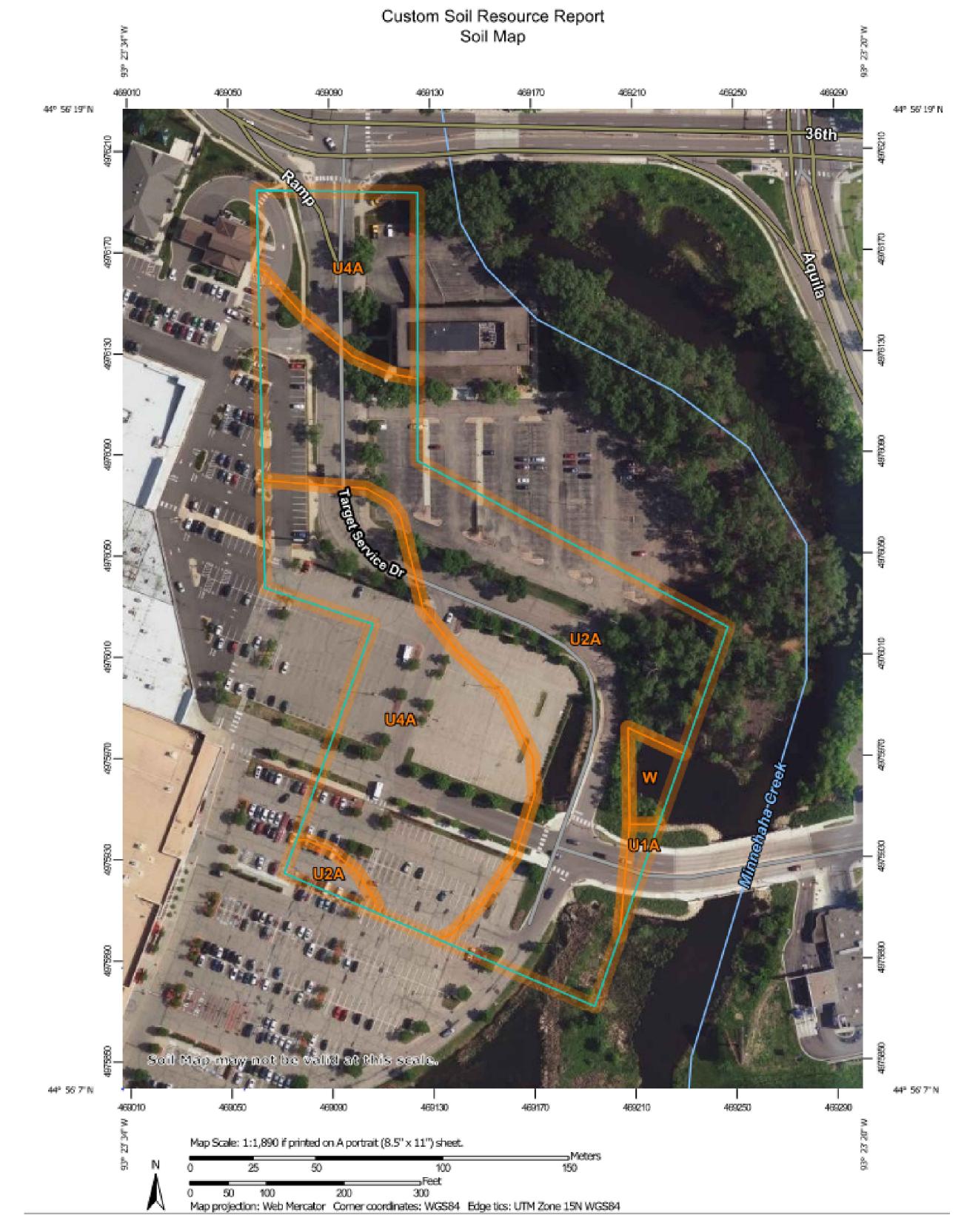
WET POND NOTES

PARKING AREA AS CONDITIONS DEMAND.

- 1. INSTALLATION OF INFILTRATION PRACTICES SHALL BE DONE DURING PERIODS OF DRY WEATHER AND COMPLETED BEFORE A RAIN EVENT. PLACEMENT OF ENGINEERED SOILS SHALL BE ON DRY NATIVE SOIL
- 2. EXCAVATION OF POND AREAS SHALL BE COMPLETED USING A BACKHOE WITH A TOOTHED BUCKET. 3. NATIVE SOILS IN POND AREAS SHALL BE DECOMPACTED TO A MINIMUM DEPTH OF 18"
- 4. DURING CONSTRUCTION, STORM WATER MUST BE ROUTED AROUND POND AREAS UNTIL ALL CONSTRUCTION ACTIVITY HAS CEASED AND TRIBUTARY SURFACES ARE CLEANED OF SEDIMENT.

ol Map Unit Name	Acres in AOI	Percent of AOI
Urban land-Udorthents, wet substratum, complex, 0 to 2 percent slopes	0.1	0.8%
Udorthents, wet substratum, 0 to 2 percent slopes	4.2	53.0%
Urban land-Udipsamments (cut and fill land) complex, 0 to 2 percent slopes	3.5	44.4%
Water	0.1	1.8%
est	7.9	100.0%
	Urban land-Udorthents, wet substratum, complex, 0 to 2 percent slopes Udorthents, wet substratum, 0 to 2 percent slopes Urban land-Udipsamments (cut and fill land) complex, 0 to 2 percent slopes	Urban land-Udorthents, wet substratum, complex, 0 to 2 percent slopes Udorthents, wet substratum, 0 to 2 percent slopes Urban land-Udipsamments (cut and fill land) complex, 0 to 2 percent slopes Water 0.1

WEB SOIL SURVEY LEGEND



WEB SOIL SURVEY MAP

NOT TO SCALE

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

1000 NICOLLET MALL MINNEAPOLIS, MN 55403

2020 KIMLEY-HORN AND ASSOCIATES, IN 767 EUSTIS ST. SUITE 100, ST. PAUL, MN 55114 PHONE: 651-645-4197 WWW.KIMLEY-HORN.COM

No. 0 1	Description CITY / WATERSHED SUBM CITY / WATERSHED RE-SUBM
1	CITY / WATERSHED RE-SUBM

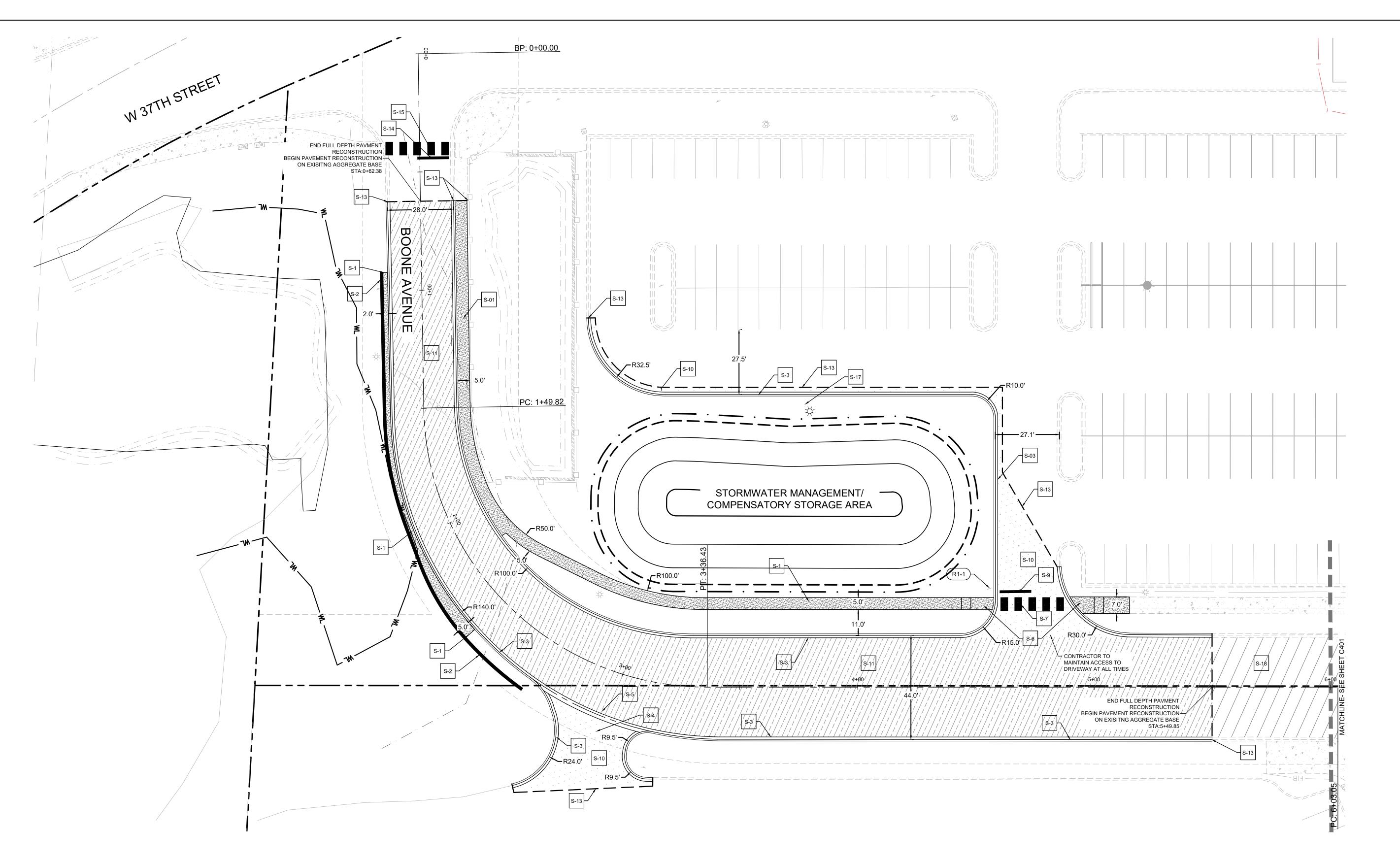
SWPPP

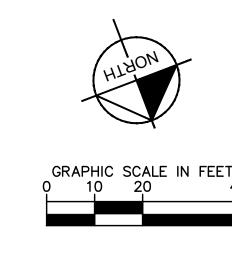
Project Number

Drawn By

Checked By

RAH / EW





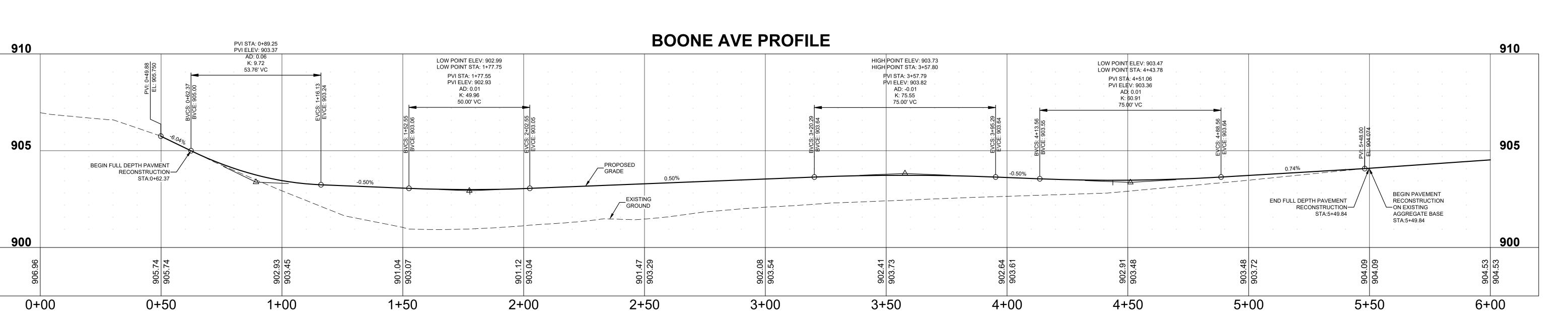




Date	No.	Description
1/25/2021	0	CITY / WATERSHED SUBMIT
2/24/2021	1	CITY / WATERSHED RE-SUBMIT

RAH / EW Drawn By Checked By

PLAN & PROFILE



LEGEND	
	PROPERTY LINE (TYP.)
xx	PROPOSED FENCE (TYP.)
	EASEMENT LINE (TYP.)
	DELINEATED WETLAND (TYP.)
	RETAINING WALL (TYP.)
	SAWCUT LINE, MATCH EXISTING (TYP.)
	CURB AND GUTTER (TYP.)
	HEAVY DUTY ASPHALT (TYP.)
	STANDARD DUTY ASPHALT (TYP.)
	CONCRETE PAVEMENT (TYP.)
	BITUMINOUS PAVEMENT RECONSTRUCTION OF EXISTING AGREGATE BASE - BOONE AVE (TYP.
	CONCRETE SIDEWALK (TYP.)

LIGHT POLE (TYP.)

ETAIL ERENCE/ EYNOTE	NAME/ NOTE	THICKNESS/ DEPTH/ TYPE	UNIT TYPE	QUANTITY
S-1	SIDEWALK (SEE DETAIL)(TYP.)		SQUARE YARD	315
S-2	MODULAR BLOCK RETAINING WALL, SEE STRUCTURAL PLANS BY OTHERS		LINEAR FEET	200
S-3	B612 CURB & GUTTER (SEE DETAIL) (TYP.)		LINEAR FEET	1,500
S-4	MONOLITHIC CONCRETE MEDIAN, MATCH EXISTING		LINEAR FEET	110
S-5	CONCRETE CROSS GUTTER (SEE DETAIL) (TYP.)		LINEAR FEET	60
S-6	PEDESTRIAN CURB RAMP (SEE DETAIL) (TYP.)		EACH	2
S-7	CROSS WALK STRIPING (SEE DETAIL) (TYP.)		SQ FT	85
S-8	REPLACE CROSSWALK BLOCKS IN KIND WITH GROUND-IN THERMOPLASTIC CROSSWALK BLOCKS (TYP.)		EA	±10
S-9	PAINTED STOP BAR & STOP SIGN POST BASE (SEE DETAIL) (TYP.)		EACH	1
S-10	STANDARD DUTY BITUMINOUS PAVEMENT PARKING LOT (SEE DETAIL) (TYP.)		SQUARE YARD	335
S-11	HEAVY DUTY BITUMINOUS PAVEMENT BOONE AVENUE (SEE DETAIL) (TYP.)		SQUARE YARD	1,935
6-12	4" SOLID LINE, COLOR WHITE, MULTI COMPONENT LIQUID, WET REFLECTIVE OR 4" SOLID LINE, COLOR WHITE, PREFORM THERMOPLASTIC GROUND IN		LINEAR FEET	±34
S-13	SAWCUT & MATCH EXISTING EDGE OF PAVEMENT/ CURB & GUTTER		LINEAR FEET	690
S-14	24" SOLID LINE, COLOR WHITE, MULTI COMPONENT LIQUID, WET REFLECTIVE OR 24" SOLID LINE, COLOR WHITE, PREFORM THERMOPLASTIC GROUND IN		LINEAR FEET	12
S-15	CROSSWALK, COLOR WHITE, MULTI COMPONENT LIQUID, WET REFLECTIVE OR COLOR WHITE, PREFORM THERMOPLASTIC GROUND IN		SQ FT	83
S-16	NOT USED			
S-17	INSTALL SALVAGED LIGHTPOLE		EACH	1
S-18	BITUMINOUS PAVEMENT RECONSTRUCTION ON		SQUARE	3,000

SIGN LEGEND/ QUANTITIES							
KEYNOTE	NAME	MNDOT SIGN NUMBER	SIGN SIZE	QUANTITY			
R1-1	STOP SIGN (SALVAGED, SEE EXISTING CONDITIONS - DEMO PLAN)	R1-1	30" X 30"	2			

SITE PLAN NOTES

7. TOTAL DISTURBANCE AREA IS 31,725 SF.

- 1. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY/COUNTY REGULATIONS AND CODES AND O.S.H.A. STANDARDS.
- 2. 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'.
- 3. ALL DIMENSIONS AND RADII ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
- 4. EXISTING STRUCTURES WITHIN CONSTRUCTION LIMITS ARE TO BE ABANDONED, REMOVED OR RELOCATED AS NECESSARY. ALL COST SHALL BE INCLUDED IN BASE

5. 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. 6. SITE BOUNDARY, TOPOGRAPHY, UTILITY AND ROAD INFORMATION TAKEN FROM A

- SURVEY BY EFN, DATED 07/21/2020. KIMLEY-HORN ASSUMES NO LIABILITY FOR ANY ERRORS, INACCURACIES, OR OMISSIONS CONTAINED THEREIN.
- 8. CONTRACTOR SHALL REFERENCE ARCH / MEP PLANS FOR SITE LIGHTING AND ELECTRICAL PLAN.
- 9. 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.
- 10. ALL AREAS ARE ROUNDED TO THE NEAREST SQUARE FOOT.
- 11. ALL DIMENSIONS ARE ROUNDED TO THE NEAREST TENTH FOOT.

STRIPING NOTES

PLANNED DIMENSIONS.

BEFORE THE MARKING MATERIAL CAN BE APPLIED.

ENTIRELY COOLED DOWN).

THE ENGINEER'S INVOLVEMENT IN THE APPLICATION OF THE MATERIAL SHALL BE LIMITED TO FIELD CONSULTATION AND INSPECTION. THE CONTRACTOR WILL PLACE NECESSARY "SPOTTING" AT APPROPRIATE POINTS TO PROVIDE HORIZONTAL CONTROL FOR STRIPING AND TO DETERMINE NECESSARY STARTING AND CUTOFF POINTS. LONGITUDINAL JOINTS, PAVEMENT EDGES AND EXISTING MARKINGS MAY SERVE AS HORIZONTAL CONTROL WHEN SO DIRECTED.

EDGE LINES AND LANE LINES ARE TO BE BROKEN ONLY AT INTERSECTIONS WITH PUBLIC ROADS AND AT PRIVATE ENTRANCES IF THEY ARE CONTROLLED BY A AGENCY PLACED YIELD SIGN, STOP SIGN OR TRAFFIC SIGNAL. THE BREAK POINT IS TO BE AT THE START OF THE RADIUS FOR THE INTERSECTION OR AT MARKED STOP LINES OR CROSSWALKS. A TOLERANCE OF 1/4 INCH UNDER OR 1/4 INCH OVER THE SPECIFIED WIDTH WILL BE ALLOWED FOR STRIPING PROVIDED THE VARIATION IS GRADUAL AND DOES NOT DETRACT FROM THE GENERAL APPEARANCE. BROKEN LINE SEGMENTS MAY VARY UP TO 3 INCHES FROM THE SPECIFIED LENGTHS PROVIDED THE OVER AND UNDER VARIATIONS ARE REASONABLY COMPENSATORY. ALIGNMENT DEVIATIONS FROM THE CONTROL GUIDE SHALL NOT EXCEED 1 INCH. MATERIAL SHALL NOT BE APPLIED OVER LONGITUDINAL JOINTS. ESTABLISHMENT OF APPLICATION TOLERANCES SHALL NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY TO COMPLY AS CLOSELY AS PRACTICABLE WITH THE

JUST PRIOR TO THE PLACEMENT OF PAVEMENT MARKINGS THE ROAD SURFACE SHALL BE CLEANED AND FREE OF CONTAMINATION AS RECOMMENDED BY THE MATERIAL MANUFACTURER AND ACCEPTABLE TO THE ENGINEER. PORTLAND CEMENT CONCRETE SURFACES SHALL BE SANDBLAST CLEANED TO REMOVE ANY SURFACE TREATMENTS

PERMANENT PAVEMENT MARKINGS SHALL NOT BE PLACED OVER TEMPORARY TAPE MARKINGS. THE FILLING OF TANKS, POURING OF MATERIALS OR CLEANING OF EQUIPMENT SHALL NOT BE PERFORMED ON UNPROTECTED PAVEMENT SURFACES UNLESS ADEQUATE PROVISIONS ARE MADE TO PREVENT SPILLAGE OF

REFER TO SPECIAL PROVISIONS OR SPEC BOOK FOR GROUND IN/RECESSED PAVEMENT MARKING APPLICATION

APPLY ALL PAVEMENT MARKINGS AS RECOMMENDED BY THE MATERIAL MANUFACTURER.

MULTI-COMPONENT LIQUID
THE ROAD SURFACE SHALL BE CLEANED AT THE DIRECTION OF THE ENGINEER JUST PRIOR TO APPLICATION. PAVEMENT CLEANING SHALL CONSIST OF AT LEAST BRUSHING WITH A ROTARY TO THE ENGINEER. NEW PORTLAND CEMENT CONCRETE SURFACES SHALL BE SANDBLAST CLEANED TO REMOVE ANY SURFACE TREATMENTS AND/OR

THE MULTI-COMPONENT LIQUID MARKING APPLICATION SHALL IMMEDIATELY FOLLOW THE PAVEMENT CLEANING. GLASS BEADS SHALL BE APPLIED IMMEDIATELY AFTER APPLICATION OF THE MULTI-COMPONENT LIQUID PAVEMENT

BE APPLIED AT A RATE OF AT LEAST 25 LB/GAL. THE "NO-TRACKING" CONDITION SHALL BE DETERMINED ON AN APPLICATION OF SPECIFIED THICKNESS TO THE PAVEMENT AND COVERED WITH GLASS BEADS AT THE RATE OF AT SURFACE TEMPERATURES ARE 40^F OR HIGHER AND SHALL NOT BE APPLIED WHEN THE WIND OR CLEANING AND

PREFORMED MARKINGS
MANUFACTURER CERTIFICATIONS ARE REQUIRED FOR INSTALLERS, AND WRITTEN CERTIFICATION SHALL BE PRESENTED AT ANYTIME UPON REQUEST OF ENGINEER OR OTHER PERSONAL. DO NOT USE LINE MATERIAL TO PIECE TOGETHER INDIVIDUAL LETTERS, SYMBOLS, OR CROSSWALKS BLOCKS. UTILIZE PRECUT KITS PROVIDED BY THE MANUFACTURER. TWO STRIPS OF 18" LINE MATERIAL MAY BE USED TO FORM CROSSWALK BLOCKS OF 36" WIDTH. DO NOT USE NARROWER LINE MATERIAL TO PIECE TOGETHER WIDER LINES.

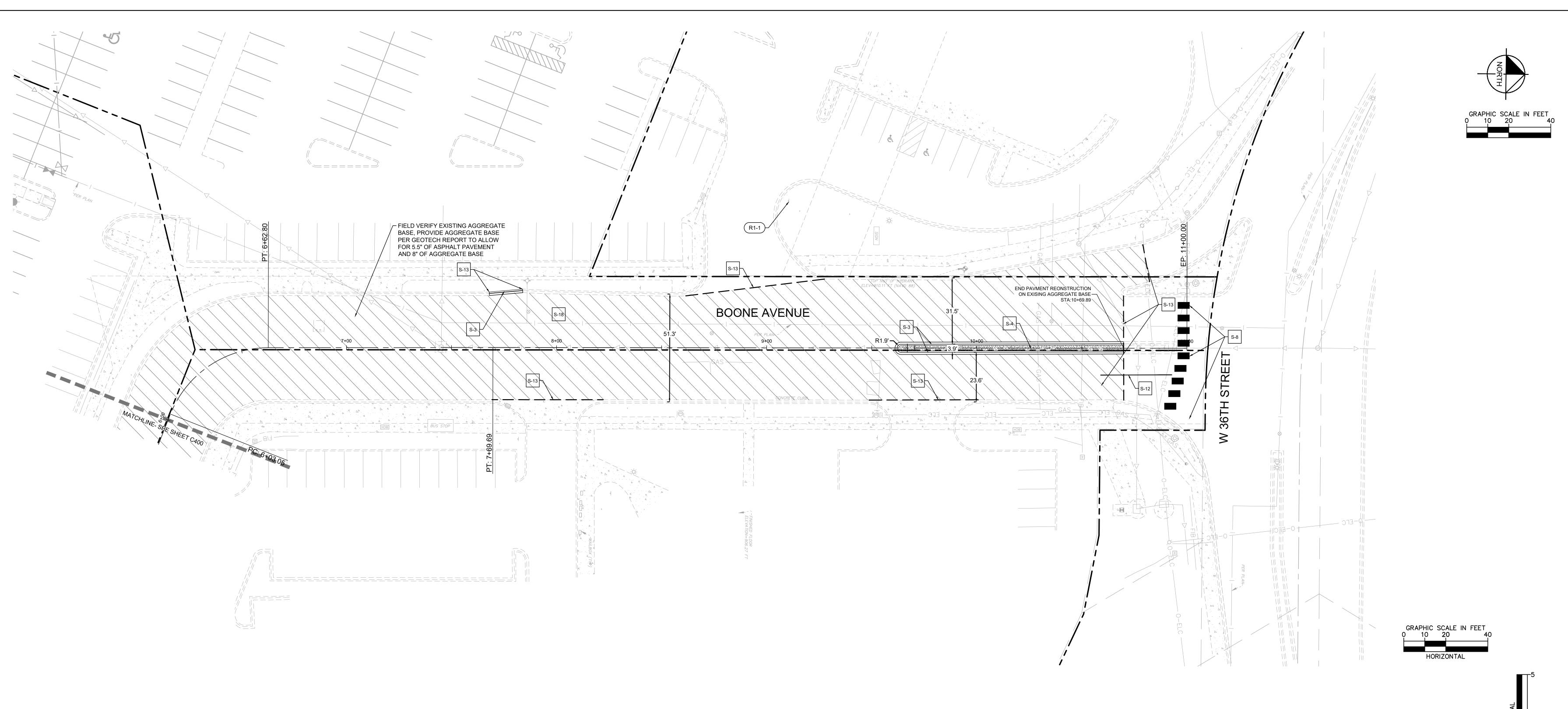
IF THERE IS A CRACK OR JOINT IN ROAD SURFACE. (FOR TAPE LAY OVER CRACK OR JOINT THEN CUT TAPE 1" ON EACH

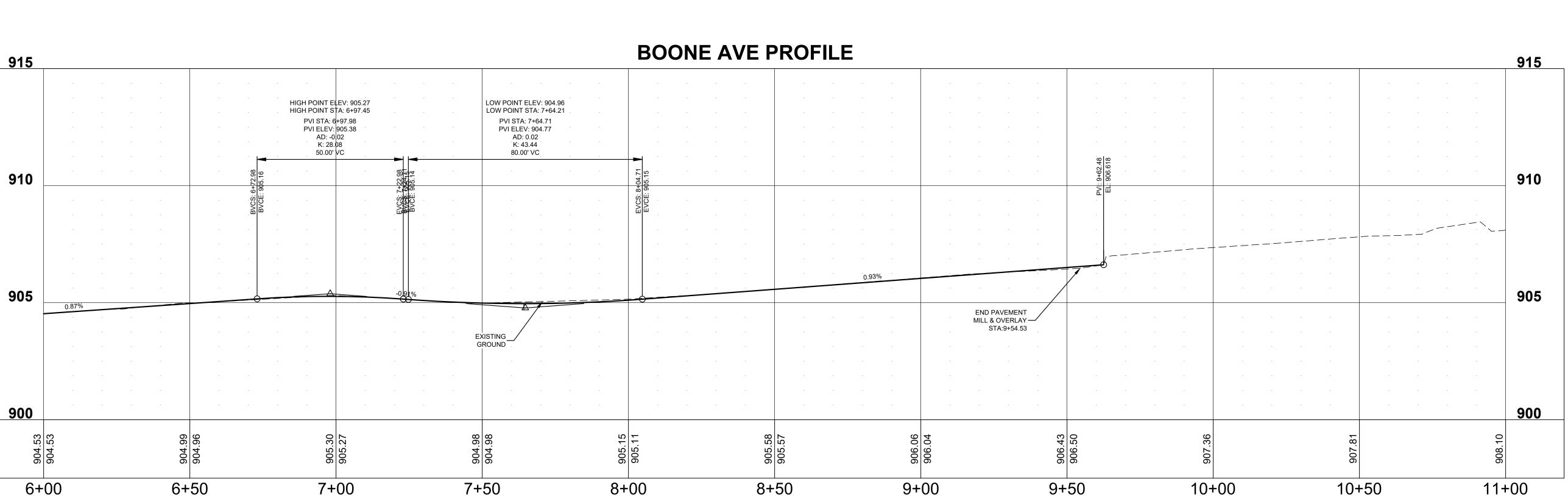
SIDE OF CRACK OR JOINT). (FOR THERMO MAKE A DEEP SCORE IN THE MATERIAL ONCE IT HAS SET UP BUT NOT

PAVING NOTES

- 1. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY/COUNTY REGULATIONS AND CODES AND O.S.H.A. STANDARDS.
- 2. CONTRACTOR SHALL ADJUST EXISTING VALVES, MANHOLE RIMS, ETC. AS NECESSARY TO MATCH FINISHED GRADE.
- 3. CONTRACTOR TO EXTEND ALL PAVING JOINTS THROUGH CURBS. JOINTS SHALL BE PERPENDICULAR TO CURBS. 4. EXPANSION JOINTS SHALL BE PLACE BETWEEN CURB AND PROPOSED
- 5. MAXIMUM CONTROL JOINT SPACING SHALL NOT EXCEED 12' FOR CONCRETE SIDEWALK AND 16' FOR 8" CONCRETE PAVEMENT.
- 6. EXPANSION JOINTS SHOULD BE USED WHEREVER THE PAVEMENT WILL ABUT A STRUCTURAL ELEMENT, E.G. (LIGHT POLES, RETAINING WALLS, EXISTING PAVEMENT, BUILDING WALLS OR MANHOLES) AND SEALED WITH POLYURETHANE SEALANT.
- 7. EXPANSION JOINTS SHALL BE SPACED 60' MAX AND SEALED TO MINIMIZE MOISTURE
- 8. SAW-CUT CONTROL JOINTS WITHIN 12 HOURS OF POUR.
- 9. EXPANSION AND CONSTRUCTION JOINTS SHOULD HAVE 14" LONG NO. 3 DOWEL BARS SPACED 18" ON CENTER.
- 10. ALL EARTHWORK, PAVING, AND JOINTING SHALL CONFORM TO CITY OF OMAHA SPECIFICATIONS.







	6+00	6+50	7+00	7+50	8+00		8+50	9+(9+	-50	10+00	10+50	11+00
LEGEND		EGEND / QUANTITIES		SIGN LEGE	ND/ QUANTITIES								
PROPERTY LINE (TYP.)	DETAIL REFERENCE/ NAME	:/ NOTE	THICKNESS/ DEPTH/ TYPE UNIT TYPE QUANT	KEYNOTE NAM	<u>E</u>	MNDOT SIGN NUMBER	SIGN SIZE QUANTITY		NOTE:				
x x PROPOSED FENCE (TYP.)	KEYNOTE S-1 SIDEW	VALK (SEE DETAIL)(TYP.)	SQUARE YARD 315	(R1-1) EXIS	P SIGN (SALVAGED, SEE STING CONDITIONS - DEMO	R1-1	30" X 30" 2		SEE SHEET C400 FOR SITE AND PA	IVING NOTES			
DELINEATED WETLAND (T		JLAR BLOCK RETAINING WALL, SEE STRUC S BY OTHERS		PLA	N)								
RETAINING WALL (TYP.) SAWCUT LINE, MATCH EX	STING (TYP.)	CURB & GUTTER (SEE DETAIL) (TYP.)	LINEAR FEET 1,500										
CURB AND GUTTER (TYP.)	S-4 MONO	DLITHIC CONCRETE MEDIAN, MATCH EXIST	ING LINEAR FEET 110										
HEAVY DUTY ASPHALT (T	(P.) S-5 CONC	RETE CROSS GUTTER (SEE DETAIL) (TYP.) LINEAR FEET 60										
STANDARD DUTY ASPHAL	T (TYP.)	STRIAN CURB RAMP (SEE DETAIL) (TYP.)	EACH 2										
CONCRETE PAVEMENT (T	YP.) REPLA	S WALK STRIPING (SEE DETAIL) (TYP.) ACE CROSSWALK BLOCKS IN KIND WITH	SQ FT 85										
BITUMINOUS PAVEMENT F EXISTING AGREGATE BAS	RECONSTRUCTION ON (TYP.)												
	S-9 DETAI	ED STOP BAR & STOP SIGN POST BASE (S IL) (TYP.) DARD DUTY BITUMINOUS PAVEMENT PARK	EACH 1										
CONCRETE SIDEWALK (T)	S-10 (SEE D	DARD DOTT BITOMINOUS PAVEMENT PART DETAIL) (TYP.) Y DUTY BITUMINOUS PAVEMENT BOONE A	YARD 335										
LIGHT POLE (TYP.)	S-11 (SEE D	DETAIL) (TYP.) LID LINE, COLOR WHITE, MULTI COMPONEI	YARD 1,935										
CLASS 5	S-12 LIQUIE WHITE	D, WET REFLECTIVE OR 4" SOLID LINE, COI E, PREFORM THERMOPLASTIC GROUND IN	LOR LINEAR FEET ±34										
	S-13 & GUT	CUT & MATCH EXISTING EDGE OF PAVEMEI ITER DLID LINE, COLOR WHITE, MULTI COMPONI	LINEAR FEET 690										
	S-14 LIQUIE	D, WET REFLECTIVE OR 24" SOLID LINE, CO E, PREFORM THERMOPLASTIC GROUND IN	DLOR LINEAR FEET 12										
	S-15 WET F	SWALK, COLOR WHITE, MULTI COMPONEN REFLECTIVE OR COLOR WHITE, PREFORM MOPLASTIC GROUND IN											
	S-16 NOT U	JSED											
		LL SALVAGED LIGHTPOLE	EACH 1										
		MINOUS PAVEMENT RECONSTRUCTION ON TING AGGREGATE BASE - BOONE AVENUE											





Date	No.	Description
1/25/2021	0	CITY / WATERSHED SUBMITTA
2/24/2021	1	CITY / WATERSHED RE-SUBMITTA

PRELIMINARY

DISPARK, MINNESOTA

ct Number T-218

Project Number T-2189

Config:

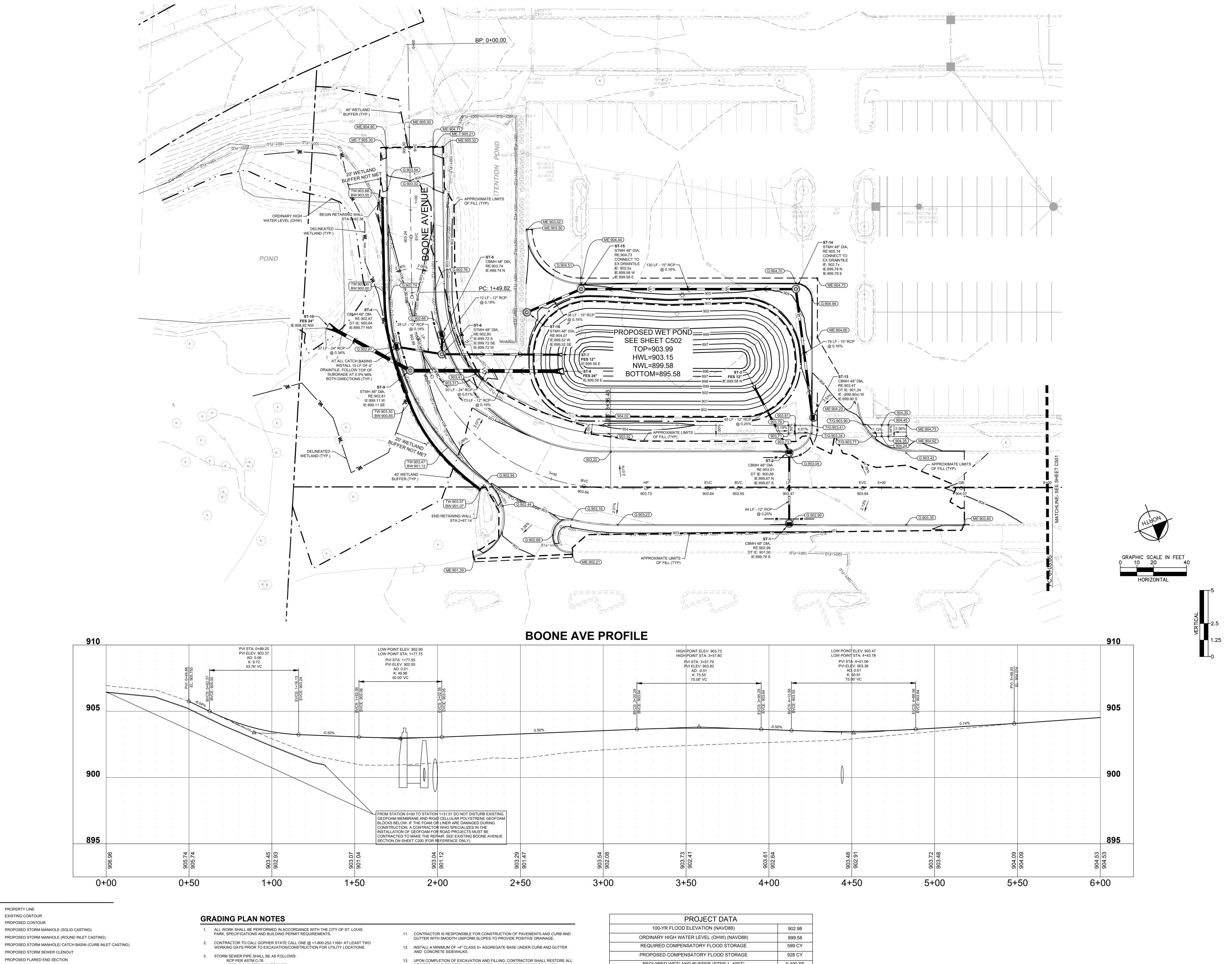
Drawn By

RAH / EW

PLAN & PROFILE



C401



, AND C-443
VATIONS OR EX TART OF SITE G JECT ENGINEER
TEL

PROPOSED HIGH POINT ELEVATION PROPOSED LOW POINT ELEVATION PROPOSED GUTTER ELEVATION PROPOSED TOP OF CURB ELEVATION PROPOSED FLUSH PAVEMENT ELEVATION

LEGEND

-----928------

(100.00) ×

(HP:0.0)

(LP:0.0) ×

G:0.00

T:0.00

T/G:0.0

ME:0.0

0.0%

EOF:0.0

PROPERTY LINE

EXISTING CONTOUR

PROPOSED CONTOUR

PROPOSED RIPRAP

PROPOSED STORM SEWER

PROPOSED SPOT ELEVATION

PROPOSED STORM SEWER

MATCH EXISTING ELEVATION PROPOSED EMERGENCY OVERFLOW BEGIN VERTICAL CURVE

END VERTICAL CURVE GRADE BREAK (VERTICAL PROFILE) PROPOSED DRAINAGE DIRECTION PROPOSED ADA SLOPE

———— WL ———— DELINEATED WETLAND (TYP.) ——— 100Y–FLD——— 100-YEAR FLOOD ELEVATION • • ORDINARY HIGH WATER LEVEL (OHW) • • • 40' WETLAND BUFFER LINE (TYP.)

- HDPE: 0" 10" PER AASHTO M-252 HDPE: 12" OR GREATER PER ASTM F-2306
- PVC SCH. 40 PER ASTM D-1785 STORM SEWER FITTINGS SHALL BE AS FOLLOWS: RCP PER ASTM C-76, JOINTS PER ASTM C-361, C-990, A HDPE PER ASTM 3212 PVC PER ASTM D-3034, JOINTS PER ASTM D-3212
- 4. CONTRACTOR TO FIELD VERIFY THE LOCATIONS AND ELEVA UTILITIES AND TOPOGRAPHIC FEATURES PRIOR TO THE STA GRADING. ER OF ANY THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT DISCREPANCIES OR VARIATIONS.
- 5. 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 PAVEMENT.

STORM SEWER ALIGNMENTS.

CONSTRUCTION SITE.

- 6. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL HORIZONTAL AND VERTICAL 7. CONTRACTOR SHALL EXCAVATE DRAINAGE TRENCHES TO FOLLOW PROPOSED
- 8. GRADES SHOWN ARE FINISHED GRADES. CONTRACTOR SHALL ROUGH GRADE TO SUBGRADE ELEVATION AND LEAVE STREET READY FOR SUBBASE.
- 9. ALL EXCESS MATERIAL, BITUMINOUS SURFACING, CONCRETE ITEMS, ANY ABANDONED UTILITY ITEMS, AND OTHER UNSTABLE MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFF THE
- 10. REFER TO THE UTILITY PLAN FOR SANITARY SEWER MAIN, WATER MAIN SERVICE LAYOUT AND ELEVATIONS AND CASTING / STRUCTURE NOTATION.

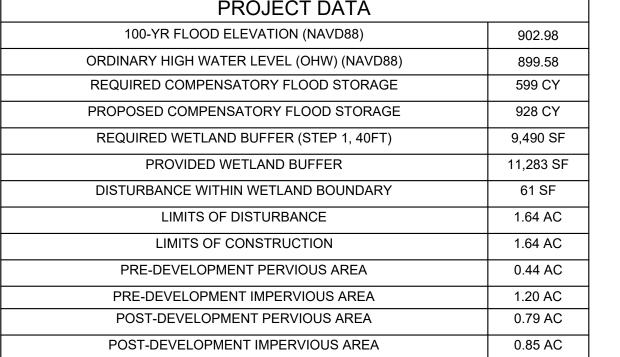
- STREETS AND DISTURBED AREAS ON SITE. ALL DISTURBED AREAS SHALL BE RE-VEGETATED WITH A MINIMUM OF <4" OF TOPSOIL>.
- 14. ALL SPOT ELEVATIONS/CONTOURS ARE TO GUTTER / FLOW LINE UNLESS OTHERWISE
- 15. GRADING FOR ALL SIDEWALKS AND ACCESSIBLE ROUTES INCLUDING CROSSING DRIVEWAYS SHALL CONFORM TO CURRENT 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
- 16. MAINTAIN A MINIMUM OF 0.5% GUTTER SLOPE TOWARDS LOW POINTS. 17. CONTRACTOR TO PROVIDE 3" INSULATION BY 5' WIDE CENTERED ON STORM PIPE IF LESS THAN 4' OF COVER IN PAVEMENT AREAS AND LESS THAN 3' OF COVER IN

ORDERS WILL BE ACCEPTED FOR A.D.A COMPLIANCE ISSUES.

- 18. ALL STORM SEWER CONNECTIONS SHALL BE GASKETED AND WATER TIGHT INCLUDING MANHOLE CONNECTIONS.
- 19. ALL STORM SEWER PIPE SHALL BE AIR TESTED IN ACCORDANCE WITH THE CURRENT PLUMBING CODE. 20. MAINTAIN A MINIMUM OF 1.25% SLOPE IN BITUMINOUS PAVEMENT AREAS, 0.5% SLOPE
- 21. CONTRACTOR SHALL REVIEW PAVEMENT GRADIENT AND CONSTRUCT "INFALL CURB" WHERE PAVEMENT DRAINS TOWARD GUTTER, AND "OUTFALL" CURB WHERE PAVEMENT DRAINS AWAY FROM GUTTER.

IN CONCRETE PAVEMENT AREAS.

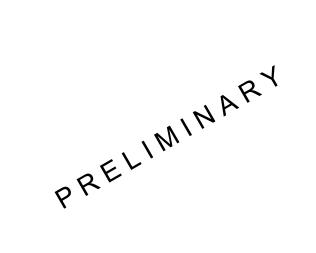
PROJECT DATA	
100-YR FLOOD ELEVATION (NAVD88)	902.98
ORDINARY HIGH WATER LEVEL (OHW) (NAVD88)	899.58
REQUIRED COMPENSATORY FLOOD STORAGE	599 CY
PROPOSED COMPENSATORY FLOOD STORAGE	928 CY
REQUIRED WETLAND BUFFER (STEP 1, 40FT)	9,490 SF
PROVIDED WETLAND BUFFER	11,283 SF
DISTURBANCE WITHIN WETLAND BOUNDARY	61 SF
LIMITS OF DISTURBANCE	1.64 AC
LIMITS OF CONSTRUCTION	1.64 AC
PRE-DEVELOPMENT PERVIOUS AREA	0.44 AC
PRE-DEVELOPMENT IMPERVIOUS AREA	1.20 AC
POST-DEVELOPMENT PERVIOUS AREA	0.79 AC
POST-DEVELOPMENT IMPERVIOUS AREA	0.85 AC





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Date	No.	Description
1/25/2021	0	CITY / WATERSHED SUBMIT
2/24/2021	1	CITY / WATERSHED RE-SUBMIT

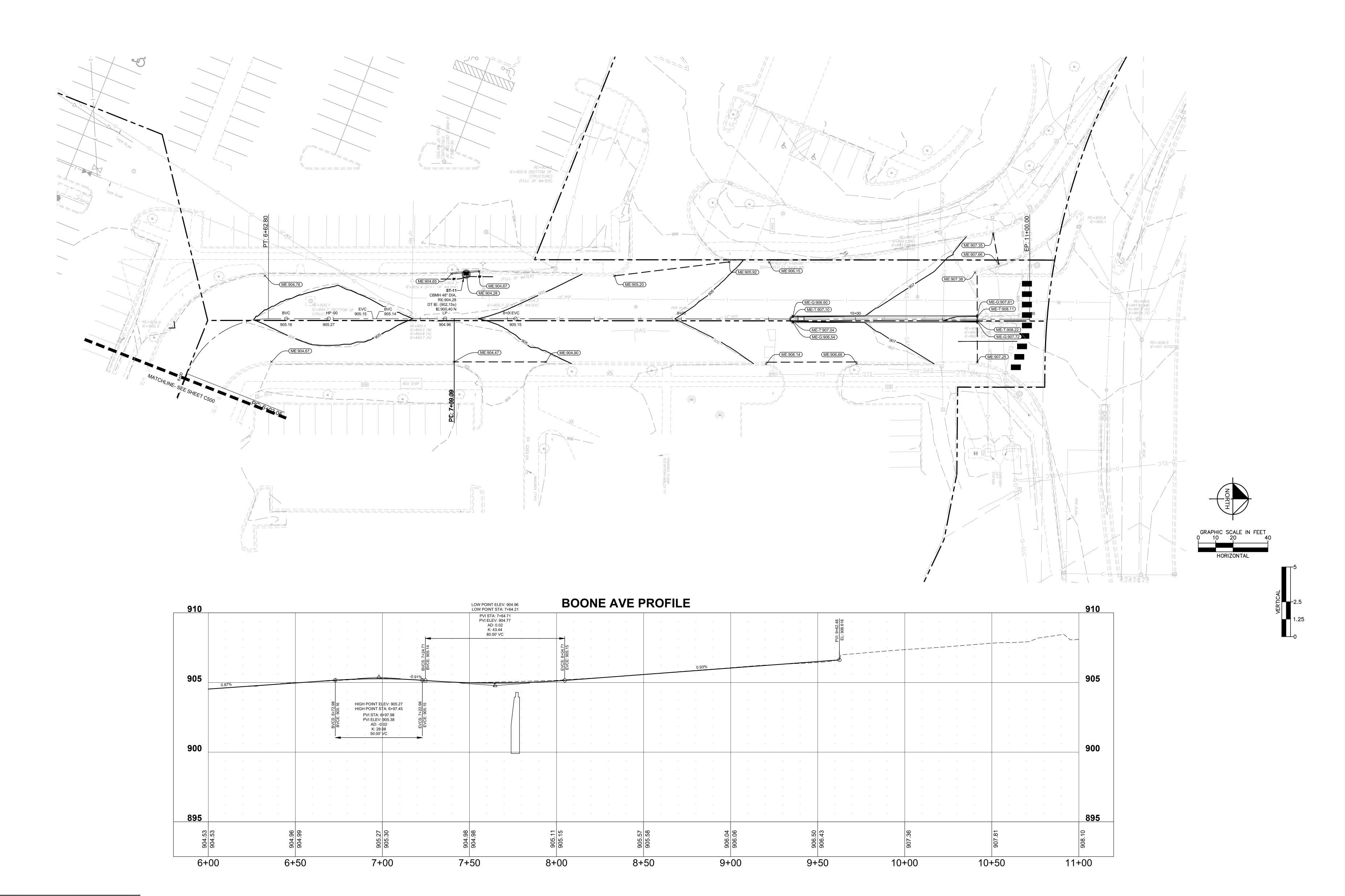


Project Number

Checked By **GRADING PLAN**

Drawn By

RAH / EW





767 EUSTIS ST, SUITE 100, ST. PAUL, MN 55114 PHONE: 651-645-4197 WWW.KIMLEY-HORN.COM

Date	No.	Description
1/25/2021	0	CITY / WATERSHED SUBMITTAI
2/24/2021	1	CITY / WATERSHED RE-SUBMITTA

Project Number

Drawn By RAH / EW Checked By RAH

GRADING PLAN

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

	F
©	F
	F
>	F
>	. F

0.00 0.0%

LEGEND

PROPERTY LINE ————928——— EXISTING CONTOUR 925—PROPOSED CONTOUR PROPOSED STORM MANHOLE (SOLID CASTING) PROPOSED STORM MANHOLE (ROUND INLET CASTING) PROPOSED STORM SEWER CLENOUT PROPOSED FLARED END SECTION PROPOSED RIPRAP PROPOSED STORM SEWER

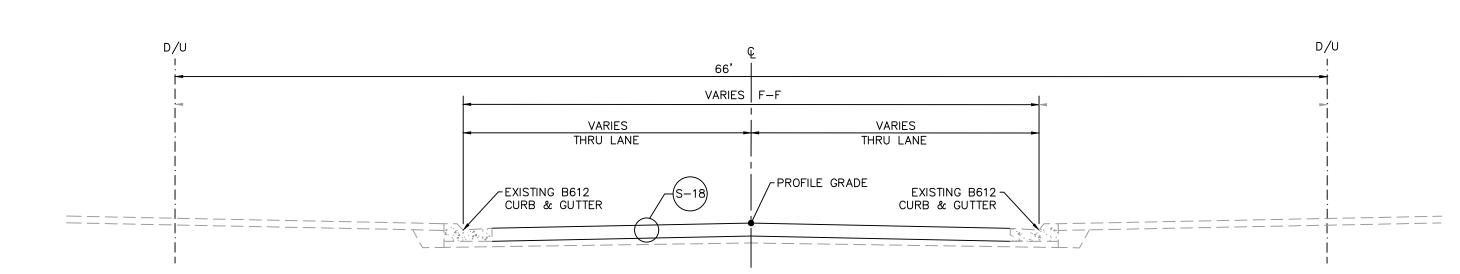
NOTE: SEE SHEET C500 FOR PROJECT DATA, GRADING AND UTILITY NOTES

PROPOSED STORM SEWER (100.00) × PROPOSED SPOT ELEVATION PROPOSED HIGH POINT ELEVATION (HP:0.0) PROPOSED LOW POINT ELEVATION (LP:0.0) PROPOSED GUTTER ELEVATION G:0.00 PROPOSED TOP OF CURB ELEVATION T:0.00 PROPOSED FLUSH PAVEMENT ELEVATION MATCH EXISTING ELEVATION ME:0.0 EOF:0.0

PROPOSED EMERGENCY OVERFLOW BEGIN VERTICAL CURVE END VERTICAL CURVE GRADE BREAK (VERTICAL PROFILE)

PROPOSED DRAINAGE DIRECTION PROPOSED ADA SLOPE

——— WL ———— DELINEATED WETLAND (TYP.) 100-YEAR FLOOD ELEVATION • • • ORDINARY HIGH WATER LEVEL (OHW) - • - 40' WETLAND BUFFER LINE (TYP.)



BOONE AVENUE PAVEMENT RECONSTRUCTION ON EXISTING AGGREGATE BASE

VARIES F-F

BOONE AVENUE

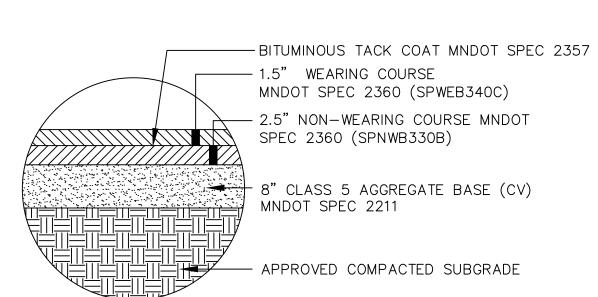
FULL DEPTH PAVEMENT RECONSTRUCTION

S-18 SCALE: N.T.S.

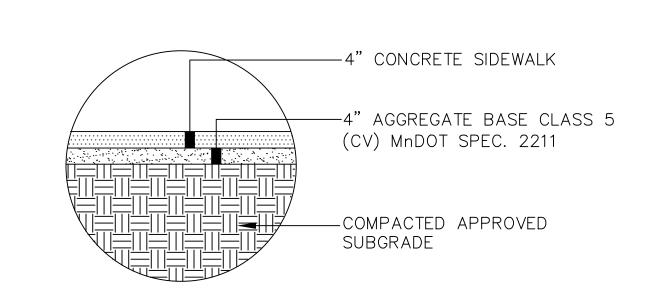
- BITUMINOUS TACK COAT MNDOT SPEC 2357 _____ 2.5" WEARING COURSE MNDOT SPEC 2360 (SPWEB340C) 3" NON-WEARING COURSE MNDOT SPEC 2360 (SPNWB330B)

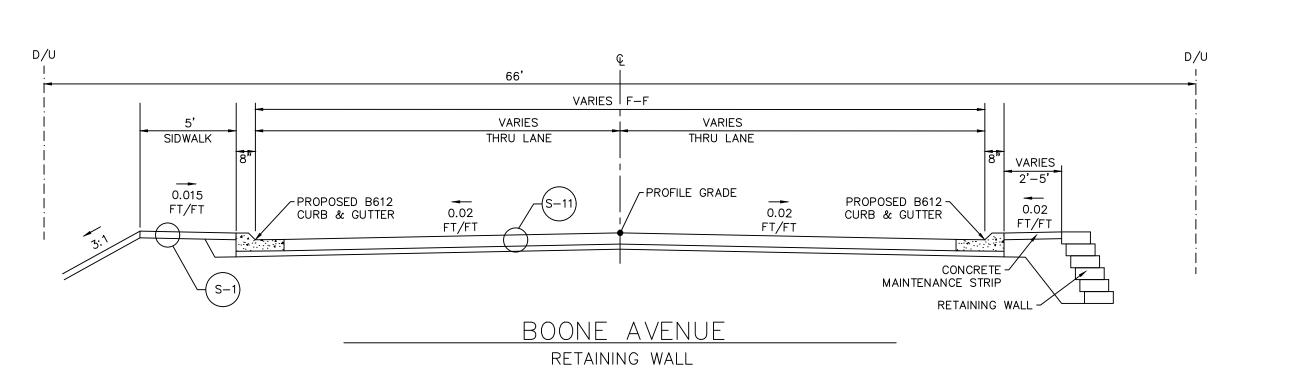
8" CLASS 5 AGGREGATE BASE (CV)
MNDOT SPEC 2211 12" SELECT GRANULAR (CV) MNDOT SPEC 2105 APPROVED SUBGRADE



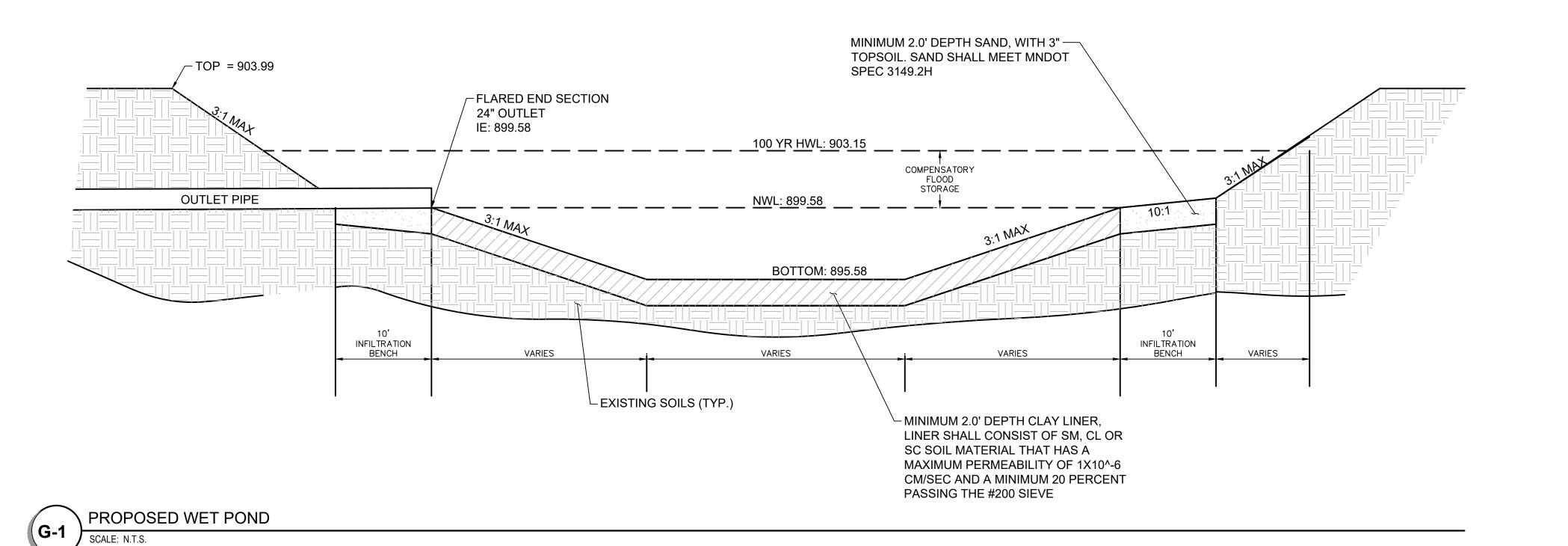


S-10 STANDARD DUTY BITUMINOUS PAVEMENT - PARKING LOT DETAIL SCALE: N.T.S.





CONCRETE SIDEWALK - BOONE AVENUE SCALE: N.T.S.



0.015 FT/FT

VARIES



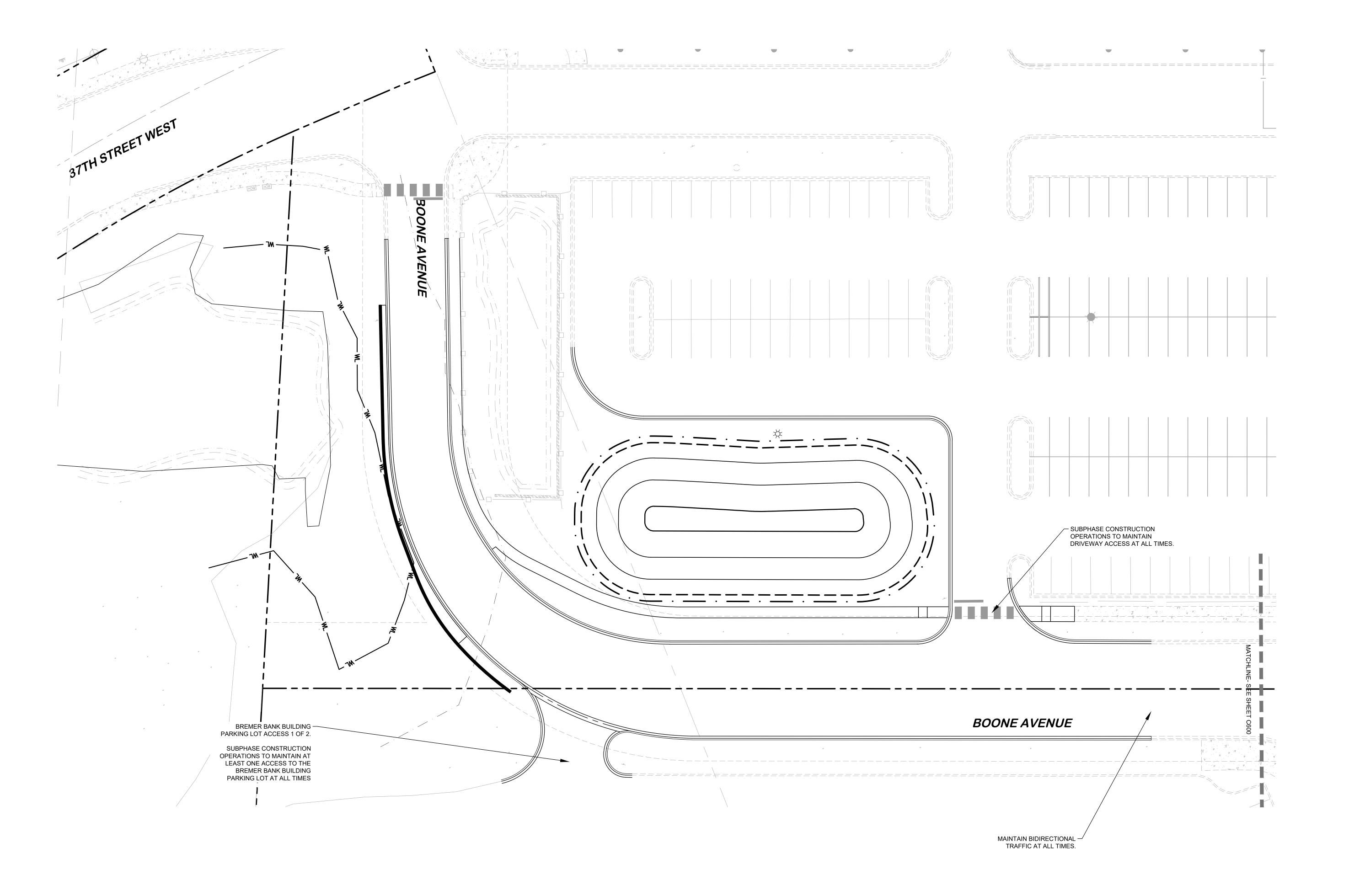
2020 KIMLEY-HORN AND ASSOCIATES, INC. 767 EUSTIS ST, SUITE 100, ST. PAUL, MN 55114 PHONE: 651-645-4197 WWW.KIMLEY-HORN.COM

Date	No.	Description
1/25/2021	0	CITY / WATERSHED SUBMITTAL
2/24/2021	1	CITY / WATERSHED RE-SUBMITTAL

T-2189 RAH / EW Drawn By

Checked By

TYPICAL SECTIONS





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Project Number

Drawn By RAH / EW Checked By

TRAFFIC CONTROL PHASING PLAN

1. THE STORE WILL REMAIN OPEN DURING CONSTRUCTION. ACCESS SHALL BE

MAINTAINED DURING ALL HOURS OF OPERATION. 2. WORK SHALL BE PHASED TO MINIMIZE IMPACTS TO THE STORE AND GUESTS. AN ALTERNATE PHASING PLAN MAY BE UTILIZED BY CONTRACTOR IF APPROVED BY

3. PROVIDE ALL REQUIRED TRAFFIC CONTROL AND SIGNAGE. 4. PAVING DIRECTION SHALL FOLLOW THE MAIN FLOW/DIRECTION OF TRAFFIC.

5. ADHERE TO THE STANDARDS IN THE MN MUTCD FOR PROTECTING WORK ZONES. 6. SUBMIT A PHASING PLAN TO THE ENGINEER FOR REVIEW PRIOR TO BEGINNING CONSTRUCTION OPERATIONS. PHASING PLAN SHALL DETAIL BARRICADE PLACEMENT, BARREL SPACING, AND ADDITIONAL TEMPORARY TRAFFIC CONTROL. 7. ALLOWED TO UTILIZE THE TARGET PARKING LOT TO ROUTE VEHICULAR TRAFFIC AROUND THE CONSTRUCTION AREA AT THE DISCRETION OF THE OWNER.

PAVEMENT REMOVAL TO BE DONE AT NIGHT. TRAFFIC TO BE MAINTAINED THROUGHOUT CONSTRUCTION. PROVIDE CLASS 5 UNTIL PAVEMENT IS PLACED.

VIDEOTAPE THE SITE PRIOR TO COMPLETING REMOVALS AND AFTER PLACING SUBGRADE TO CONFIRM CONDITION OF EXISTING ELEMENTS. ANY DAMAGE TO EXISTING ELEMENTS THAT ARE TO REMAIN MUST BE REPAIRED, RECONSTRUCTED, OR REPLACED BY CONTRACTOR AT NO COST TO OWNER.



NOTES:
1. THE STORE WILL REMAIN OPEN DURING CONSTRUCTION. ACCESS SHALL BE

MAINTAINED DURING ALL HOURS OF OPERATION.

2. WORK SHALL BE PHASED TO MINIMIZE IMPACTS TO THE STORE AND GUESTS. AN ALTERNATE PHASING PLAN MAY BE UTILIZED BY CONTRACTOR IF APPROVED BY

TARGET,
3. PROVIDE ALL REQUIRED TRAFFIC CONTROL AND SIGNAGE.
4. PAVING DIRECTION SHALL FOLLOW THE MAIN FLOW/DIRECTION OF TRAFFIC.

5. ADHERE TO THE STANDARDS IN THE MN MUTCD FOR PROTECTING WORK ZONES.
6. SUBMIT A PHASING PLAN TO THE ENGINEER FOR REVIEW PRIOR TO BEGINNING

CONSTRUCTION OPERATIONS. PHASING PLAN SHALL DETAIL BARRICADE PLACEMENT, BARREL SPACING, AND ADDITIONAL TEMPORARY TRAFFIC CONTROL.

7. ALLOWED TO UTILIZE THE TARGET PARKING LOT TO ROUTE VEHICULAR TRAFFIC

AROUND THE CONSTRUCTION AREA AT THE DISCRETION OF THE OWNER.

NOTE:
PAVEMENT REMOVAL TO BE DONE AT NIGHT. TRAFFIC TO BE MAINTAINED
THROUGHOUT CONSTRUCTION. PROVIDE CLASS 5 UNTIL PAVEMENT IS PLACED.

VIDEOTAPE THE SITE PRIOR TO COMPLETING REMOVALS AND AFTER PLACING SUBGRADE TO CONFIRM CONDITION OF EXISTING ELEMENTS. ANY DAMAGE TO EXISTING ELEMENTS THAT ARE TO REMAIN MUST BE REPAIRED, RECONSTRUCTED, OR REPLACED BY CONTRACTOR AT NO COST TO OWNER.



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PRELIMINARY

LOUIS PARK, MINNESOTA

ROONF AVE SOUTH

Project Number T-2189

Config:

Drawn By

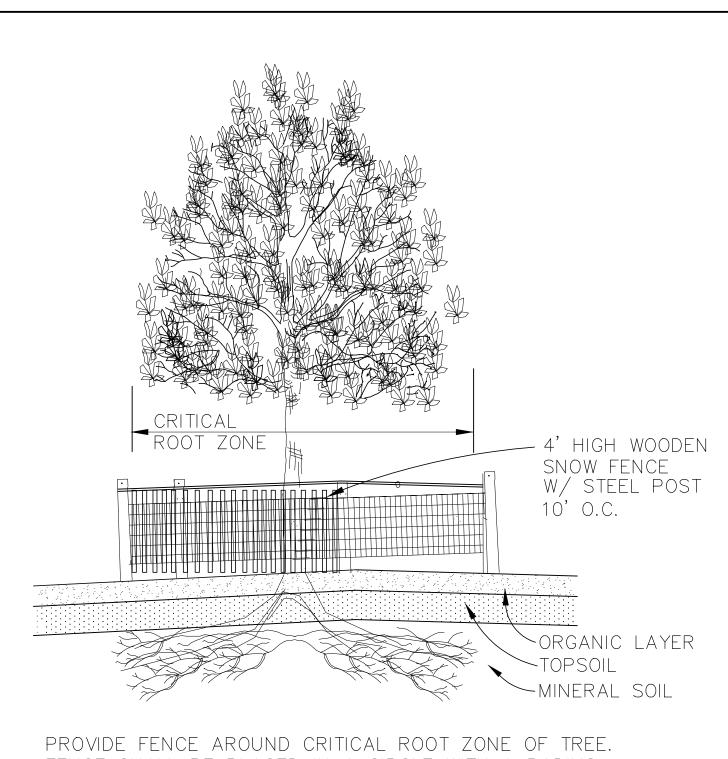
RAH / EW

Checked By

TRAFFIC CONTROL

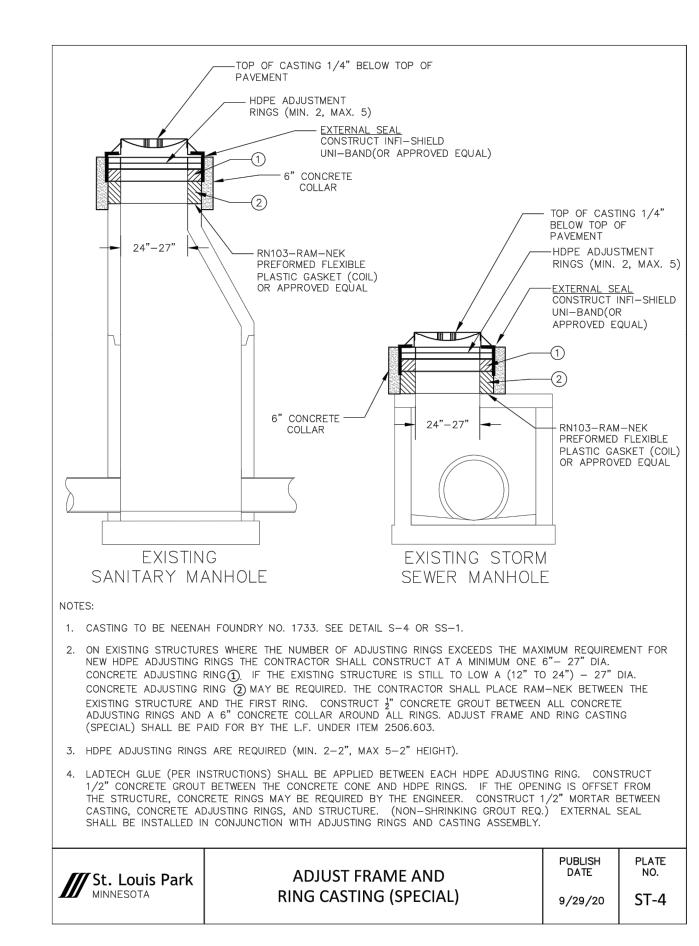
PHASING PLAN

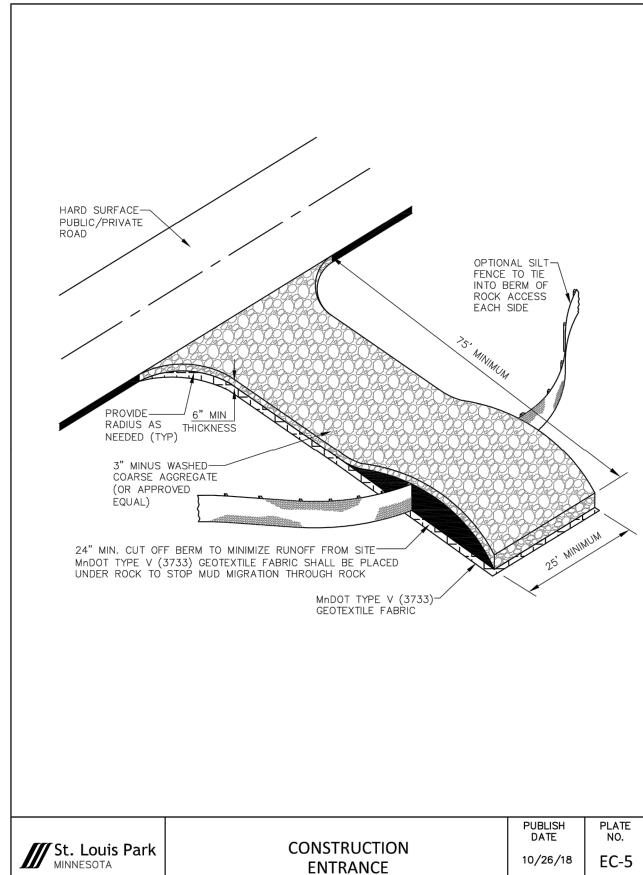
C601

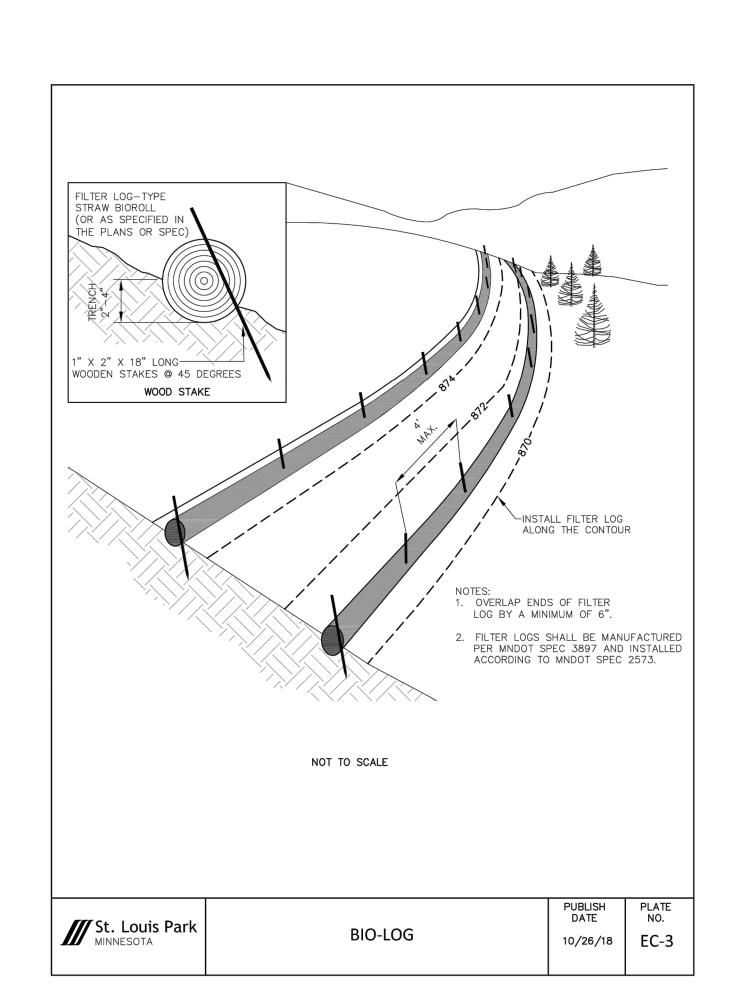


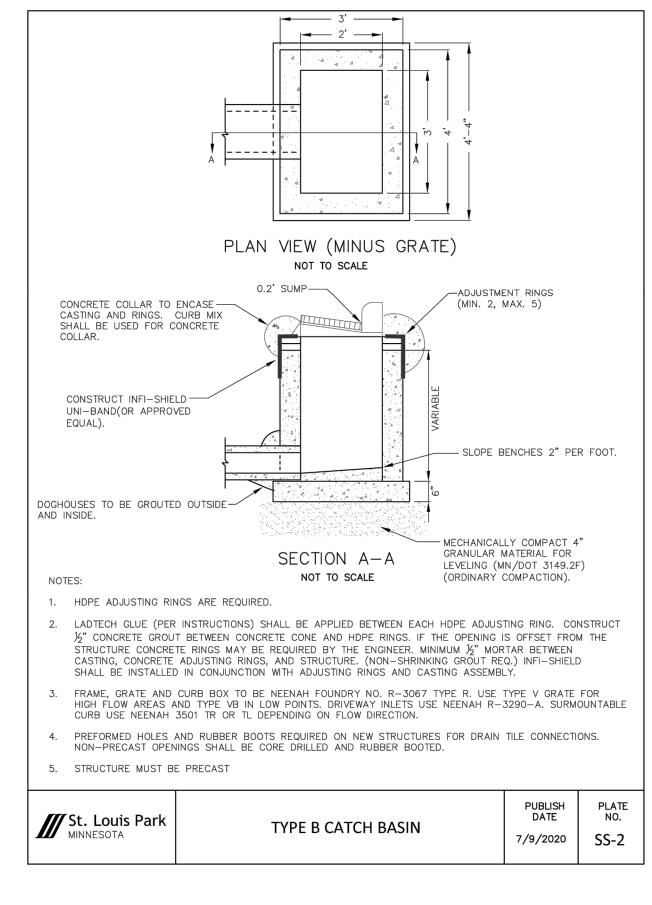
FENCE SHALL BE PLACED IN A CIRCLE WITH A RADIUS OF 1' PER 1" DIAMETER OF THE TREE MEASURED AT 4.5' ABOVE GROUND FOR INDIVIDUAL TREES OR STANDS

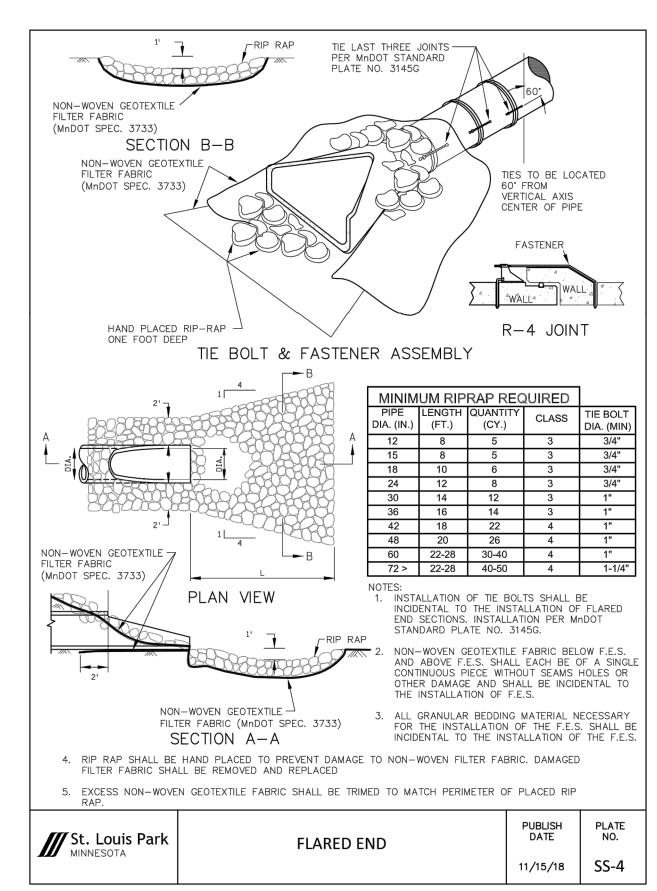


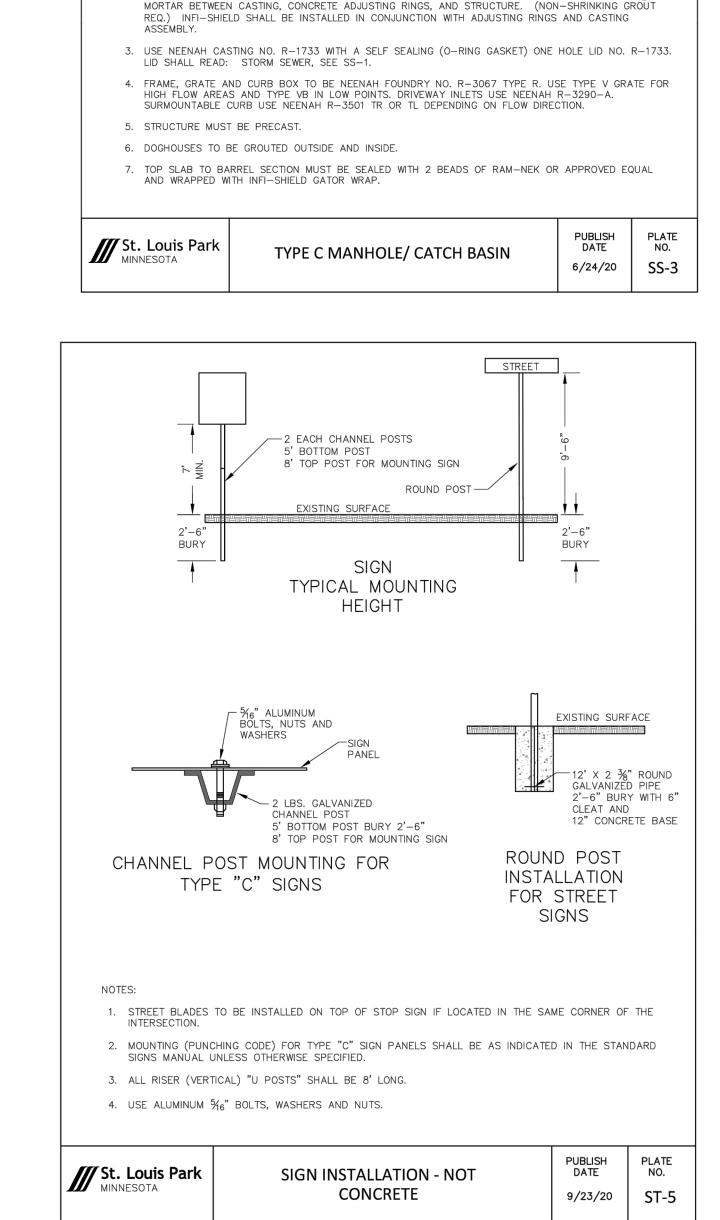












DEFLECTOR PLATE

HIGH-FLOW FABRIC -

1. AS PART OF SWPPP REQUIREMENTS, THE CONTRACTOR SHALL INSPECT ALL INLET PROTECTION AT DEFINED INTERVALS, AS WELL AS AFTER QUALIFYING RAIN EVENTS. INLET PROTECTION

SHALL BE MAINTAINED PER MANUFACTURES INSTRUCTIONS AND IN ACCORDANCE WITH ALL

2. INLET PROTECTION DEVICE MUST BE SPECIFIC FOR CURB TYPE AND FIT PROPERLY. THIS WILL

3. AN ATTACHED BACKSTOP IS REQUIRED FOR INLET PROTECTION. ROCK LOGS OR OTHER

4. ALL LABOR, MATERIALS, AND EQUIPMENT TO FURNISH, INSTALL, MAINTAIN, REMOVE DEBRIS

CATCH BASIN

METAL INLET PROTECTION

SECTION A-A NOT TO SCALE

CONSTRUCT 1/2" CONCRETE GROUT BETWEEN CONCRETE CONE AND HDPE RINGS. IF THE OPENING IS

OFFSET FROM THE STRUCTURE CONCRETE RINGS MAY BE REQUIRED BY THE ENGINEER. MINIMUM 1/2"

2. LADTECH GLUE (PER INSTRUCTIONS) SHALL BE APPLIED BETWEEN EACH HDPE ADJUSTING RING.

PLAN VIEW

NOT TO SCALE

1. HDPE ADUSTING RINGS ARE REQUIRED.

MANHOLE OR CATCH BASIN COVER STANDARD PLATE NO. 4020J OR 4022A

SWPPP REQUIREMENTS AND/OR AT THE DIRECTION OF THE ENGINEER.

ENSURE WATER AND SEDIMENT DO NOT BYPASS THE DEVICE.

AND REMOVE DEVICE SHALL BE PAID PER EACH UNIT.

DEVICES ARE NOT ALLOWED.

St. Louis Park

NOTES:

OVERFLOW 1 - CENTER OF FILTER OVERFLOW 2 - TOP OF CURB BOX

PUBLISH PLATE NO.

3/18/20 EC-6

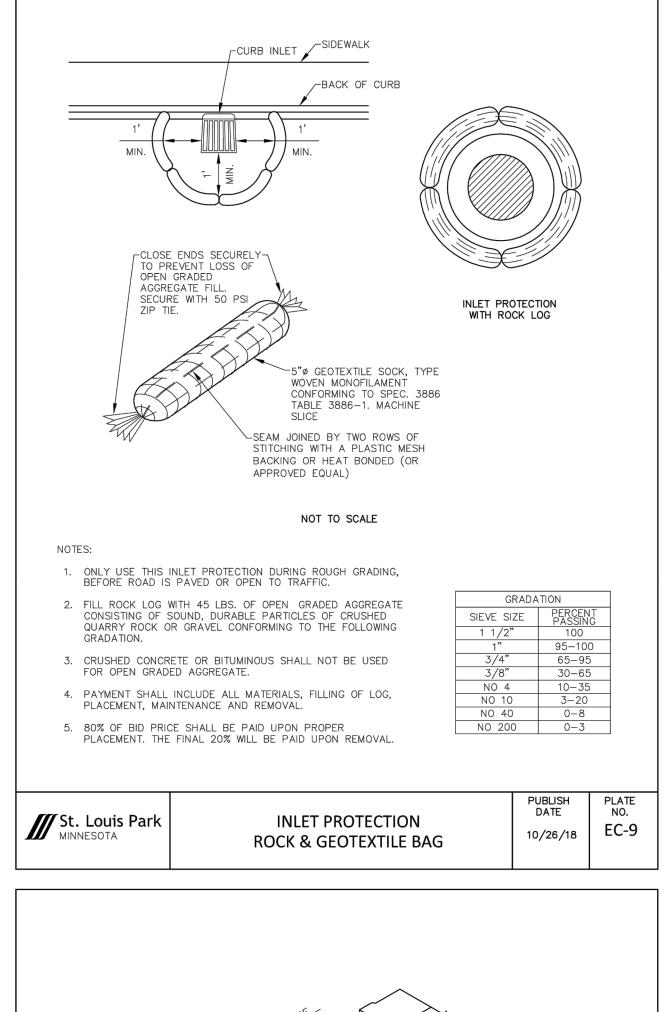
-ADJUSTMENT RINGS (MIN. 2, MAX. 5)

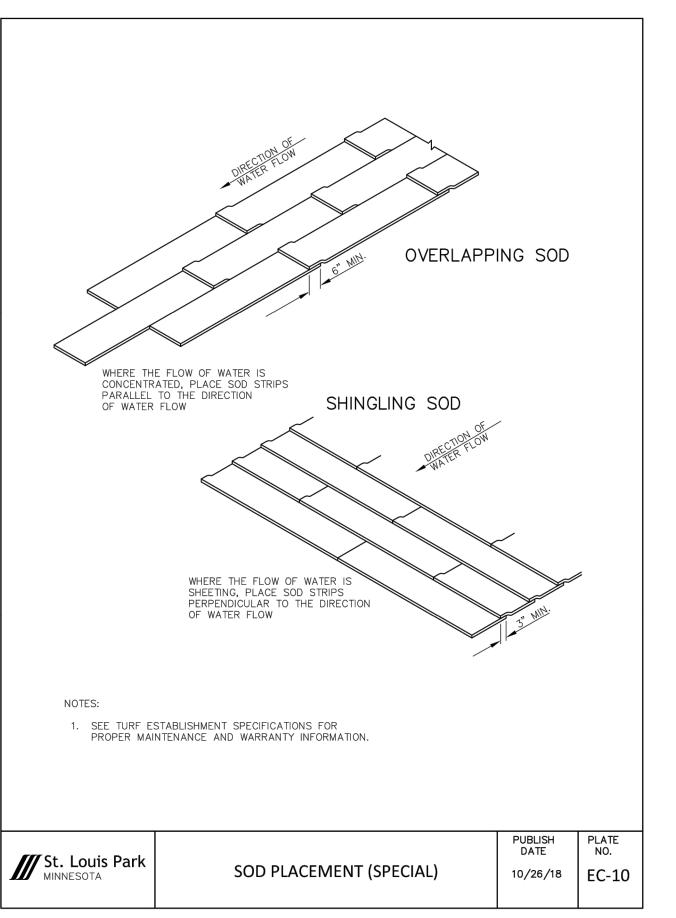
JNI-BAND(OR APPROVED

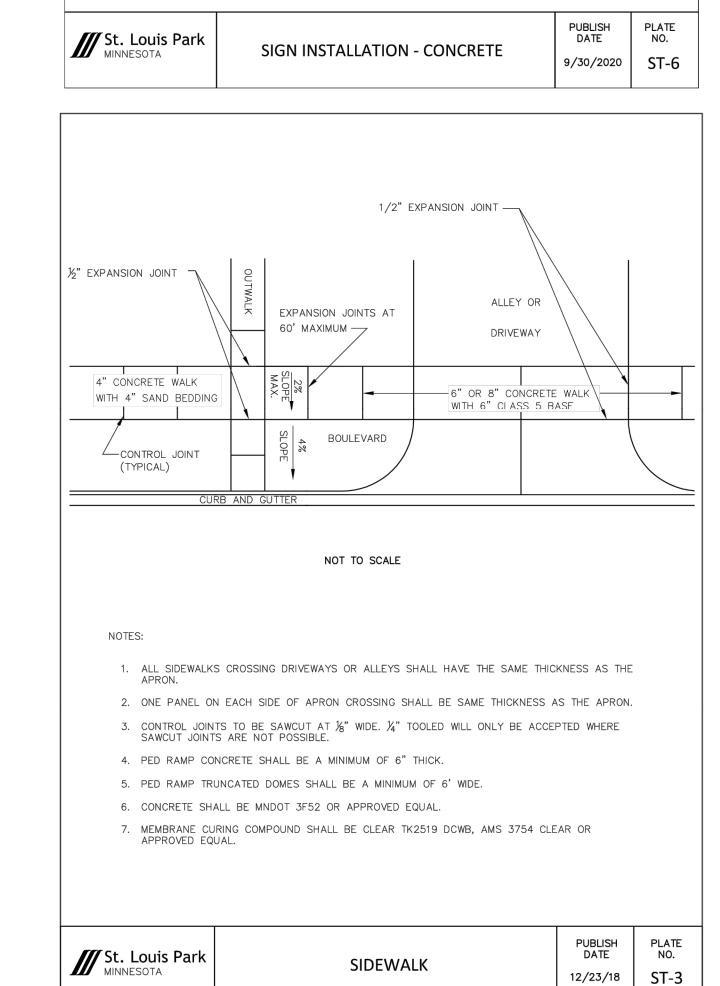
- CONSTRUCT INFI-SHIELD

GATOR WRAP(OR APPROVED

____10" FILTER ASSEMBLY







SILT CURTAIN OR

INSTALLATION GUIDELINES FLOTATION SILT CURTAIN TYPE: MOVING WATER

SILT CURTAIN OR TURBIDITY BARRIER

- SQUARE TUBE-

TYPICAL SIGN MOUNTING HEIGHT

CROSS SECTION VIEW

A SURFACE MOUNT ANCHOR BASE

F 5/8"-11 SERRATED FLANGE NUT

H SIGN SUPPORT LOCKING WEDGE

FASTENER - RED HEAD LDT

 $\frac{1}{2}$ " X 4" (CAT. NO. LDT -1240)

D $\frac{5}{8}$ "-11 X 4" SHEAR BOLT

E TOP HALF COUPLER

I CONCRETE MOUNTING

B RUBBER BUSHING

C LOCK WASHER

G SIGN SUPPORT

D-1 SHOULDER

1. STREET BLADES TO BE INSTALLED ON TOP OF STOP SIGN IF LOCATED IN THE SAME CORNER OF

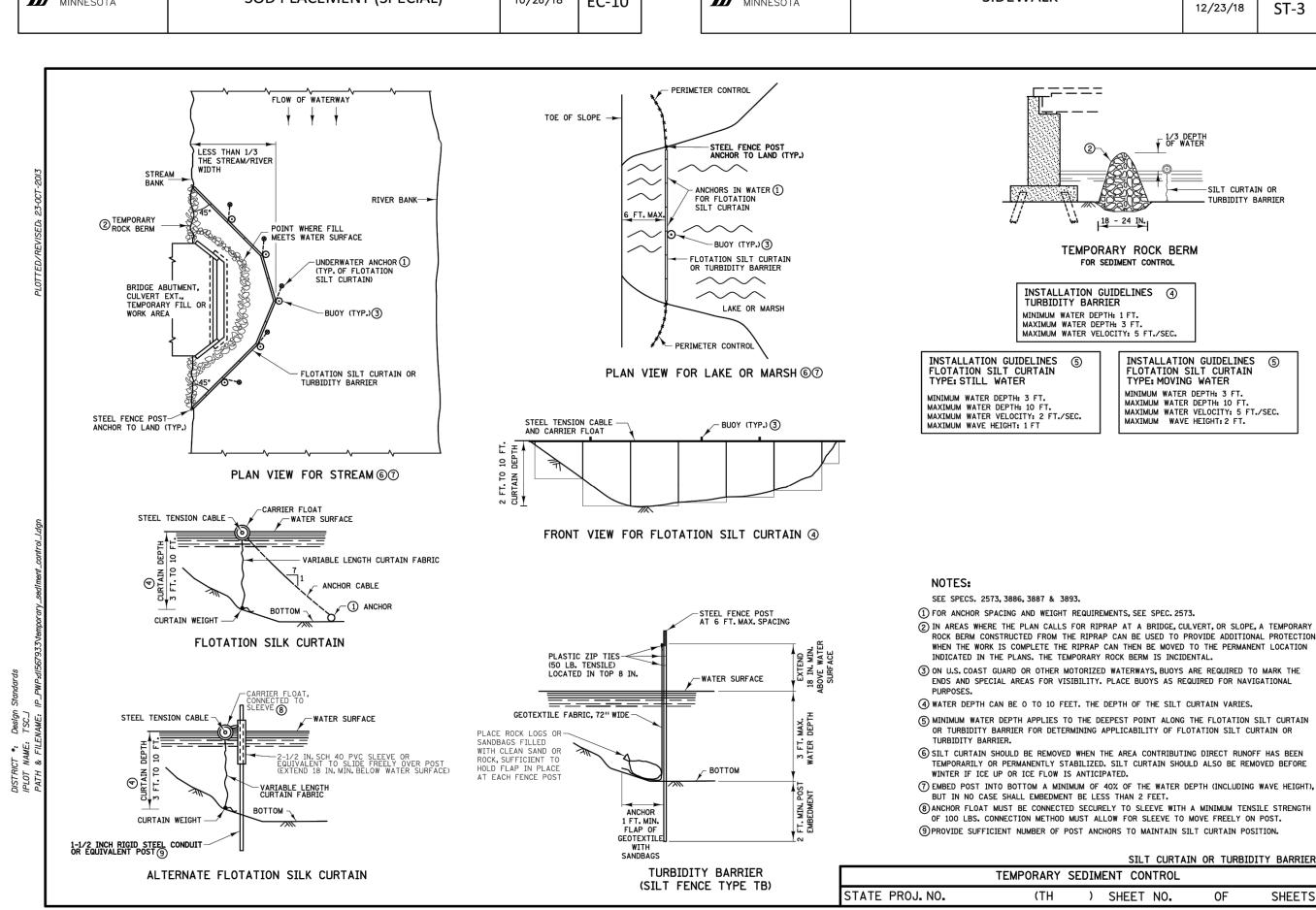
2. MOUNTING (PUNCHING CODE) FOR TYPE "C" SIGN PANELS SHALL BE AS INDICATED IN THE

STANDARD SIGNS MANUAL UNLESS OTHERWISE SPECIFIED.

3. SQUARE TUBE SIGN POSTS PER MnDOT SPEC. 3402.

4. USE ALUMINUM $\frac{5}{16}$ " BOLTS, WASHERS, AND NUTS.

KLEEN BREAK MODEL 425





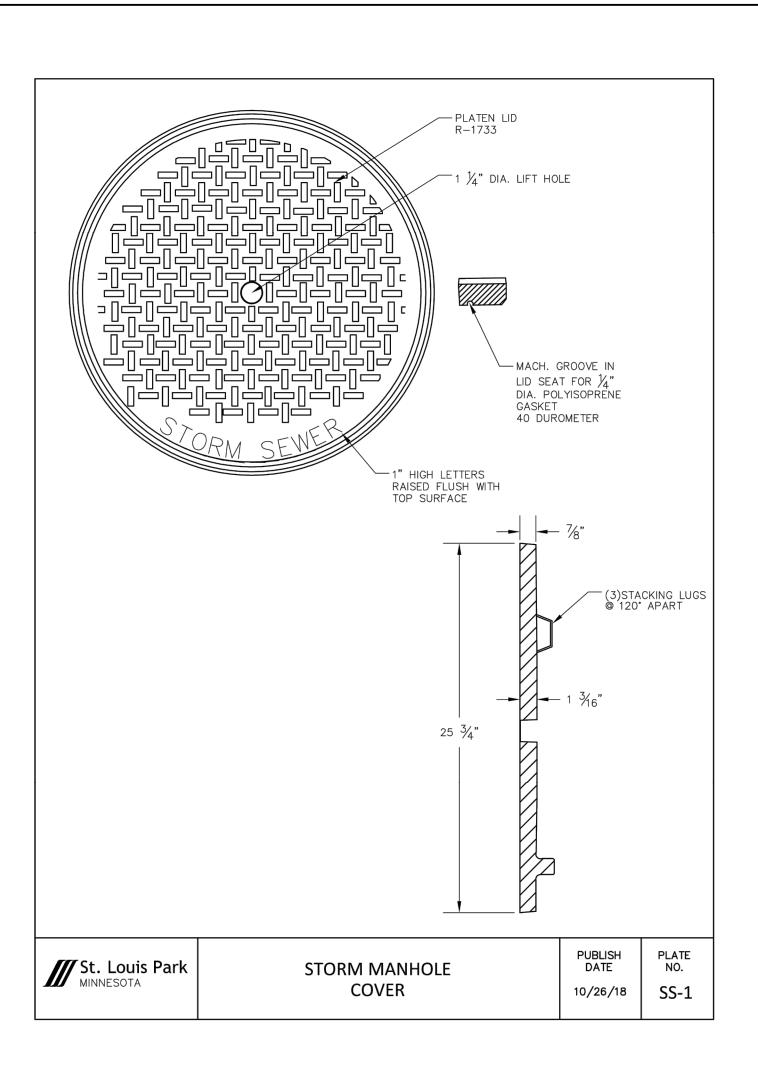
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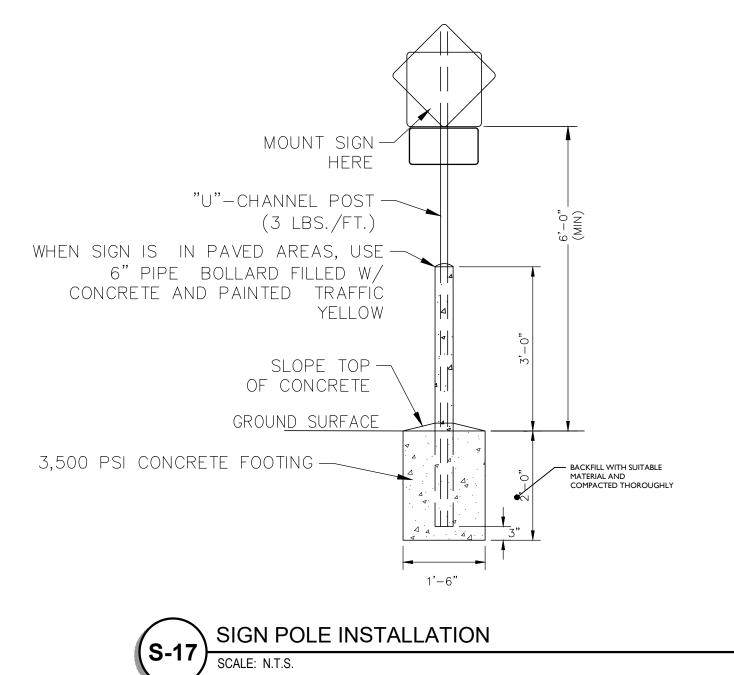
	No.	Description
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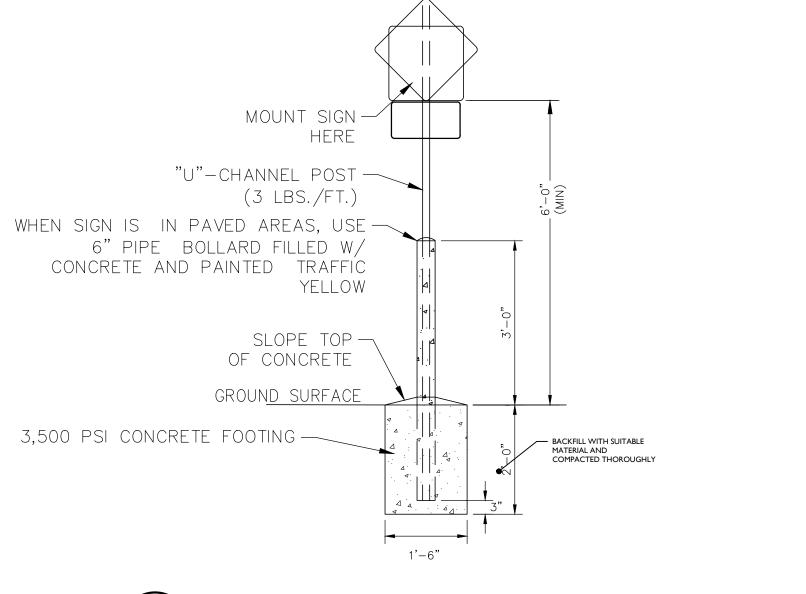
T-2189 Project Number Config:

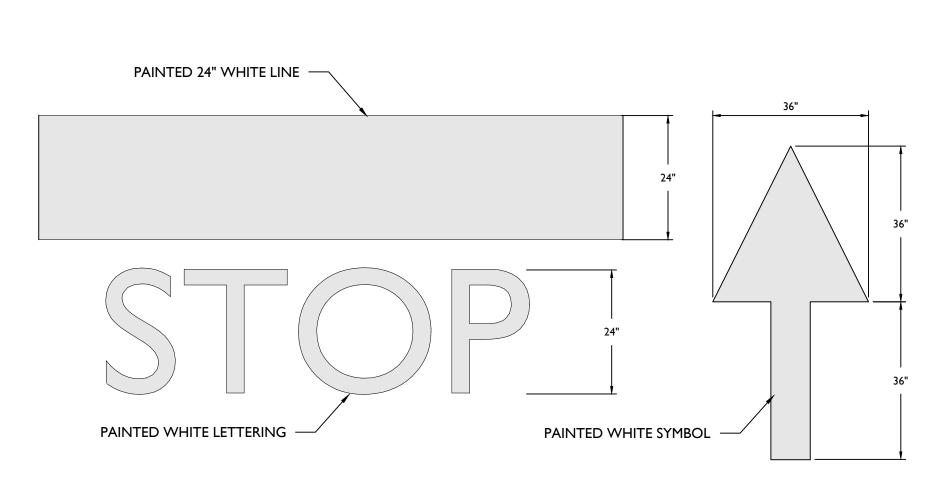
RAH / EW Drawn By RAH Checked By

GENERAL DETAILS

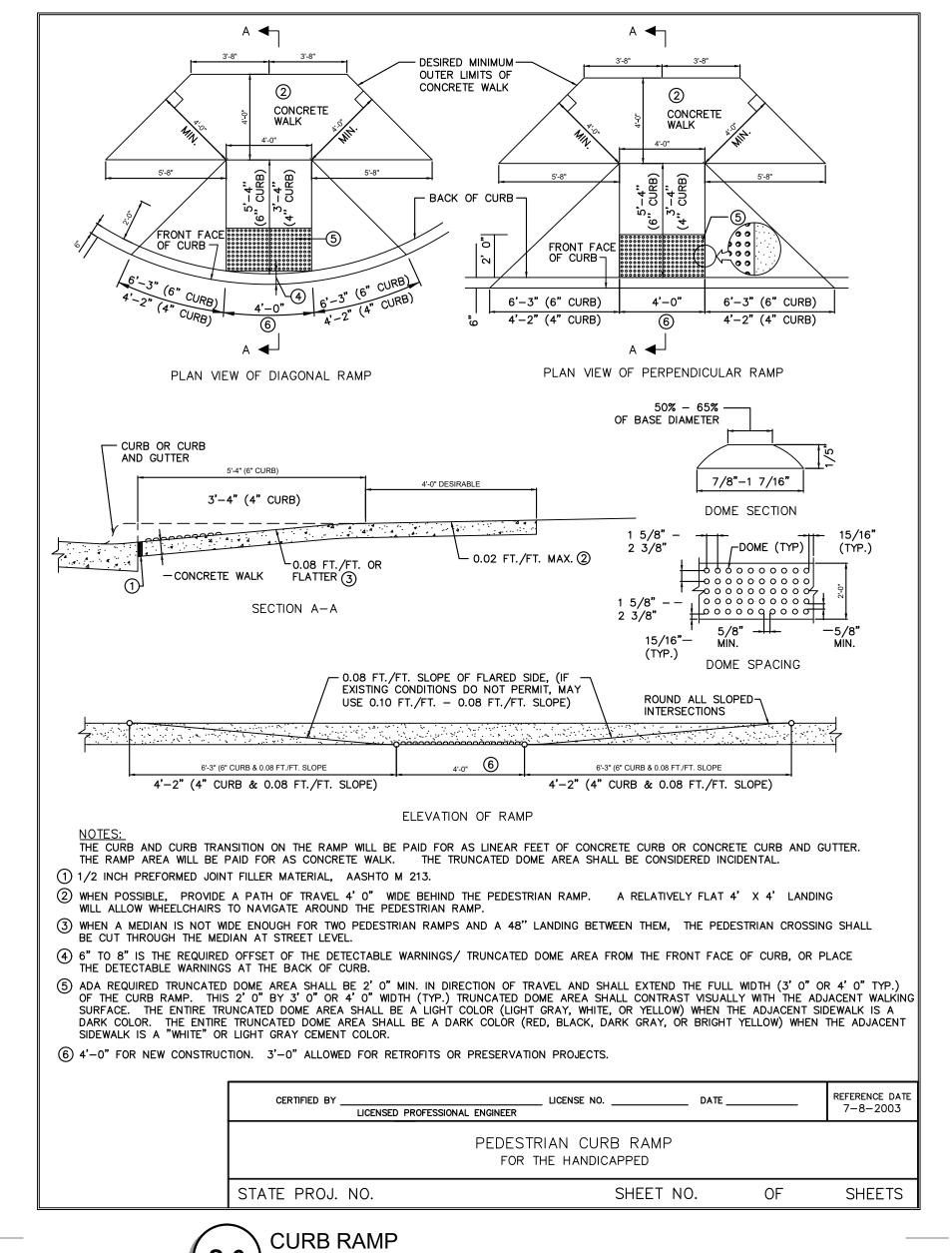


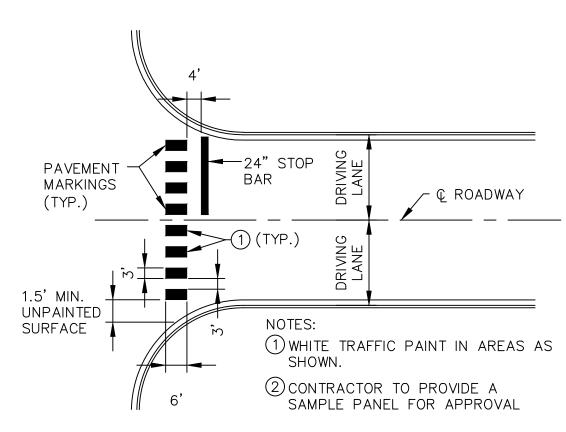












NOTES: CROSSWALKS:

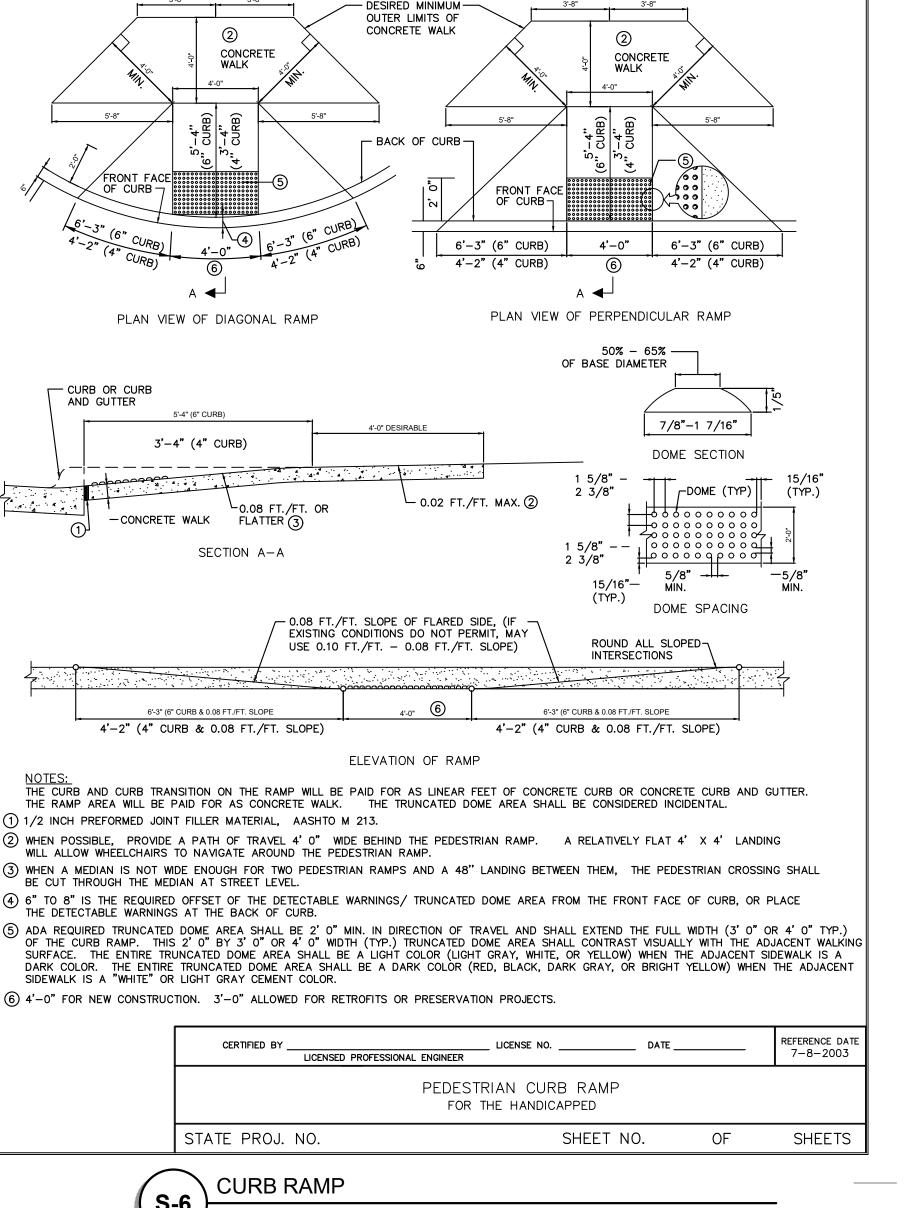
INTERSECTION.

- 1.) PAINTED AREAS ARE TO BE CENTERED ON CENTER AND LANE LINES, EVEN IF INTERSECTION IS NOT ALIGNED. 2.) LOCATION OF ZEBRA CROSSWALKS AND STOP BARS, SIGNAL LOOPS AND PED RAMPS ARE APPROXIMATE. FINAL LOCATIONS ARE TO BE
- FIELD ENGR. 3.) ZEBRA CROSSWALKS ARE TO BE PARALLEL TO THE DRIVING LANE OR LANES. EVEN IF THE STREET IS ON AN ANGLE TO THE

DETERMINED AND FIELD VERFIED DURING CONSTRUCTION BY THE

4.) A MIN. OF 1.5' CLEAR DISTANCE MUST BE LEFT ADJACENT TO THE CURB. IF LAST PAINTED AREA FALLS INTO THIS AREA, IT MUST BE







TARGET®

1000 NICOLLET MALL

MINNEAPOLIS, MN 55403

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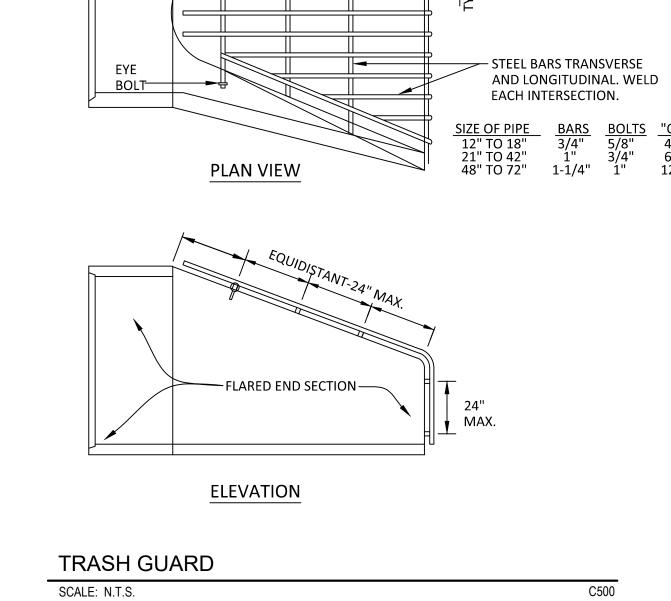
PHONE: 651-645-4197

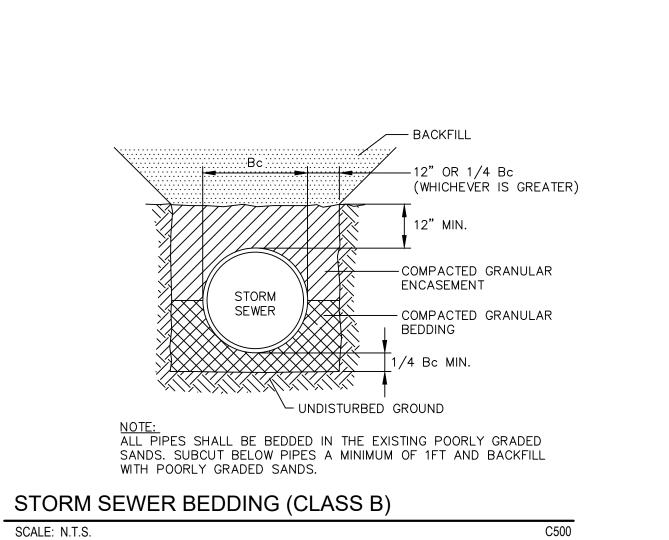
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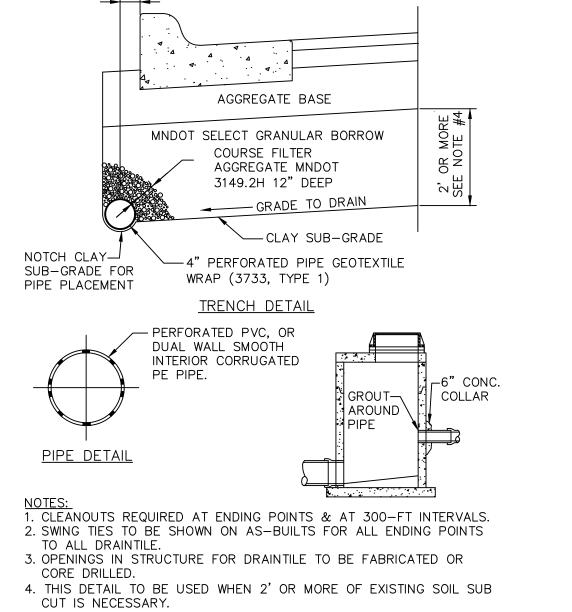
1/25/2021 0 CITY / WATERSHED SUBMITTAL 2/24/2021 1 CITY / WATERSHED RE-SUBMITTAL

Description

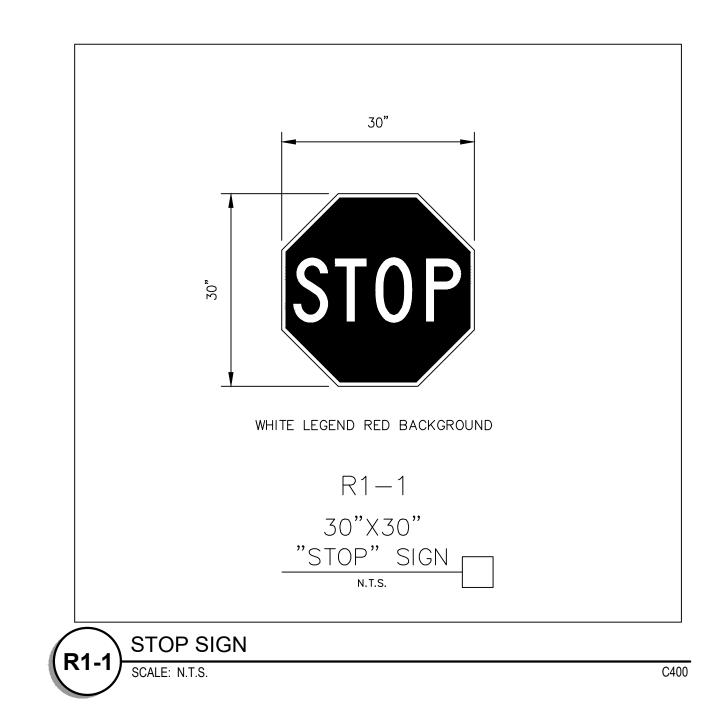
TYPE B612 CURB & GUTTER

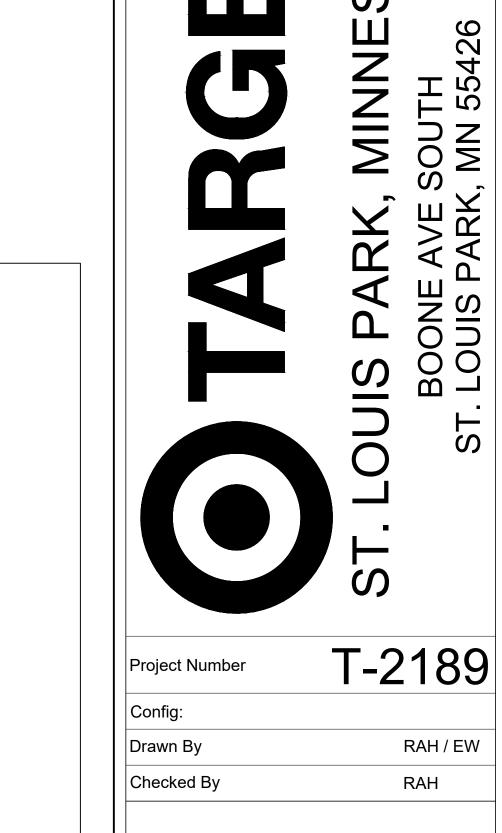






SCALE: N.T.S.



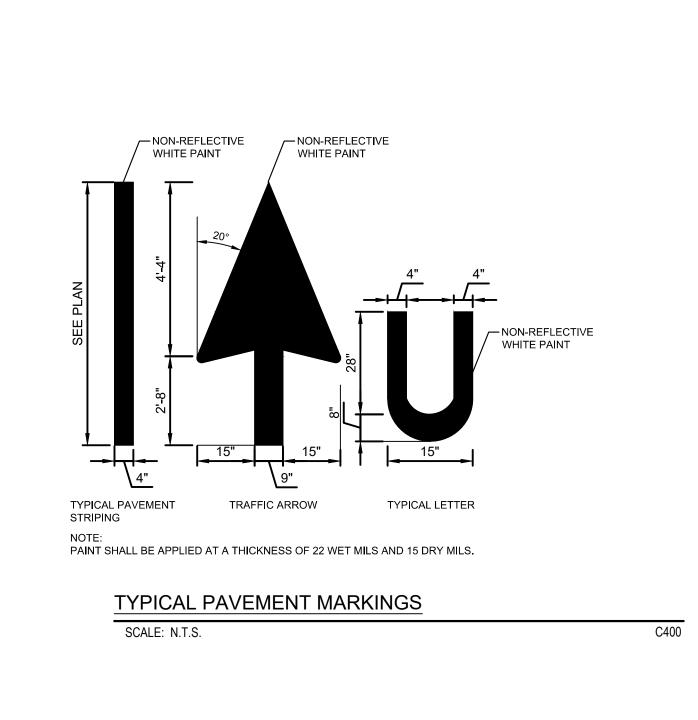


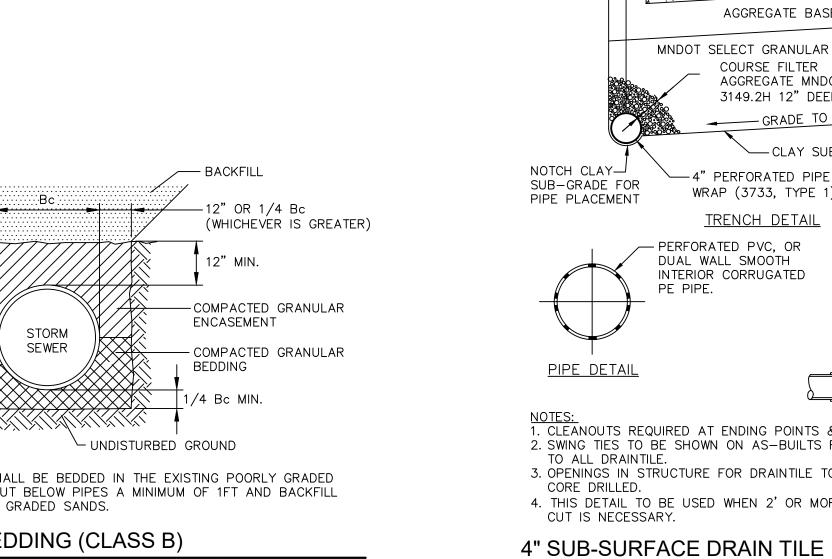
GENERAL DETAILS

02/24/2021

RAH / EW

RAH





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T-2189

LANDSCAPE PLAN

LANDSCAPE KEYNOTES (A) A EDGER (TYP.) B DOUBLE SHREDDED HARDWOOD MULCH (TYP.) © ROCK MULCH (TYP.) D SOD (TYP.) E MAINTENANCE STRIP (TYP.)

SEEDING KEYNOTES

F ANNUALS BY OWNER (TYP.)

(25-131) SEED WITH MNDOT 25-131: LOW MAINTENANCE TURF SEED MIX (TYP.) (33-261) SEED WITH MNDOT 33-261: STORMWATER SOUTH & WEST SEED MIX (TYP.)

(34-261) SEED WITH MNDOT 34-261: RIPARIAN SOUTH & WEST SEED MIX (TYP.)

35-641) SEED WITH MNDOT 35-641: MESIC PRAIRIE SOUTHEAST SEED MIX (TYP.)

BOONEAVENUE

PLANT SCHEDULE							
PLAINT SCHEDU	ᆫ						
ORNAMENTAL TREE	CODE	<u>QTY</u>	BOTANICAL NAME	COMMON NAME	CONT	<u>CAL</u>	SIZE
•	RVB	3	BETULA NIGRA	RIVER BIRCH MULTI-TRUNK	В&В		6` HT.
OVERSTORY TREE	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	SIZE
	HCK	3	CELTIS OCCIDENTALIS	COMMON HACKBERRY	В&В	2.5" CAL.	
\cdot	SKH	9	GLEDITSIA TRIACANTHOS VAR. INERMIS 'SKYCOLE'	SKYLINE HONEYLOCUST	B & B	2.5" CAL.	
\odot	SWO	1	QUERCUS BICOLOR	SWAMP WHITE OAK	В&В	2.5" CAL.	
SEED AND SOD	CODE	QTY	BOTANICAL NAME	COMMON NAME			
\(\psi \)	25-131	823 SF	LOW MAINTENACE TURF	MNDOT 25-131			
	33-261	4,864 SF	STORMWATER SOUTH & WEST	MNDOT 33-261			
++++++++ ++++++++ ++++++++ +++++++ +++++	34-261	1,167 SF	RIPARIAN SOUTH & WEST	MNDOT 34-261			
	35-641	572 SF	MESIC PRAIRIE SOUTHEAST	MNDOT 35-641			
	COD	11 001 CE	COD	COD			

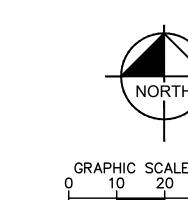
LANDSCAPE SUMMARY

NOTE: SEE SHEET L101 FOR LANDSCAPE NOTES AND DETAILS

TREES REMOVED: 16

TREES PROPOSED: 16

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







PHONE: 651-645-4197

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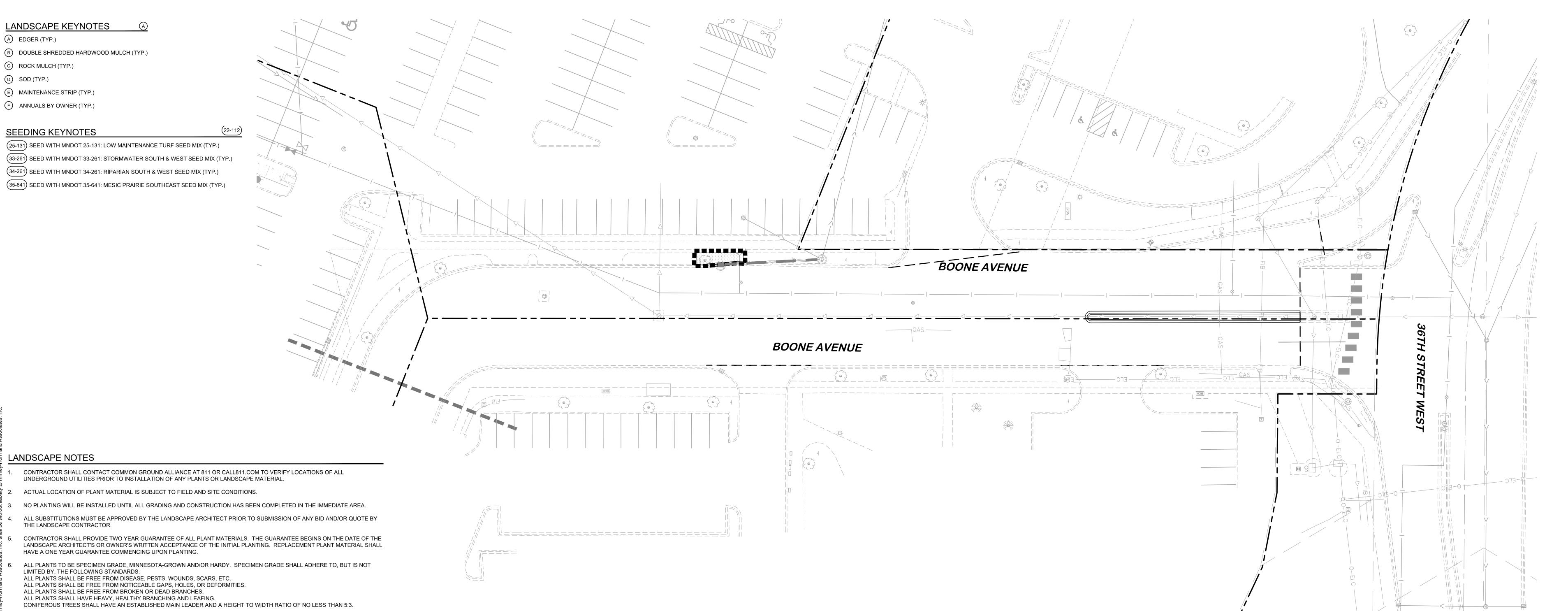
No.	Description
0	CITY / WATERSHED SUBMITTA
1	CITY / WATERSHED RE-SUBMITT





Project Number	T-2189
Config:	
Drawn By	RAH / EW
Checked By	RAH

LANDSCAPE PLAN



1. SCARIFY SIDES AND BOTTOM OF HOLE. 2. PROCEED WITH CORRECTIVE PRUNING. 3. SET PLANT ON UNDISTURBED NATIVE SOIL OR THOROUGHLY COMPACTED PLANTING SOIL. INSTALL PLANT SO THE ROOT FLARE IS AT OR UP TO 2" ABOVE THE FINISHED GRADE WITH BURLAP AND WIRE BASKET, (IF USED), INTACT. 4. SLIT REMAINING TREATED BURLAP AT 6" INTERVALS. 5. BACKFILL TO WITHIN APPROXIMATELY 12" OF THE TOP OF THE ROOTBALL, THEN WATER PLANT. REMOVE THE TOP 1/3 OF THE BASKET OR THE TOP TWO HORIZONTAL RINGS WHICHEVER IS GREATER. REMOVE ALL BURLAP AND NAILS FROM THE TOP 1/3 OF THE BALL. REMOVE ALL TWINE. REMOVE OR CORRECT STEM GIRDLING ROOTS. 6. PLUMB AND BACKFILL WITH PLANTING SOIL. 7. WATER THOROUGHLY WITHIN 2 HOURS TO SETTLE PLANTS AND FILL VOIDS. 8. BACK FILL VOIDS AND WATER SECOND TIME. 9. PLACE MULCH WITHIN 48 HOURS OF THE SECOND WATERING UNLESS SOIL MOISTURE IS EXCESSIVE. 10. FINAL LOCATION OF TREE TO BE APPROVED BY 2X ROOT BALL WIDTH DOUBLE SHREDDED HARDWOOD MULCH ∕—4" TOPSOIL PLANTING SOIL-

\ TREE PLANTING DETAIL

- EXISTING GRADE - CUT AREA PLANT ACCORDING TO PLANTING DETAILS APPLICABLE AS SHOWN BACKFILL AREA NOTE:

1. EXTENDED EXCAVATION AND BACKFILL SOIL TO A POINT DOWNSLOPE EQUAL TO OR LOWER IN ELEVATION THAN THE BOTTOM OF THE HOLE DIRECTLY BENEATH THE PLANT TO INSURE ADEQUATE DRAINAGE IN HEAVY SOILS. GRANULAR SOIL MUST BE ADDED AS BACKFILL IN AREAS OF POOR DRAINAGE.



A EDGER (TYP.)

D SOD (TYP.)

© ROCK MULCH (TYP.)

- 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.
- ACTUAL LOCATION OF PLANT MATERIAL IS SUBJECT TO FIELD AND SITE CONDITIONS.
- 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.
- 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.
- LIMITED BY, THE FOLLOWING STANDARDS: ALL PLANTS SHALL BE FREE FROM DISEASE, PESTS, WOUNDS, SCARS, ETC.
- 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 OF NO LESS THAN 5:3.
- PLANTS TO MEET AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1-2014 OR MOST CURRENT VERSION) REQUIREMENTS FOR SIZE AND TYPE SPECIFIED.
- B. 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
- 10. PRIOR TO PLANTING, FIELD VERIFY THAT THE ROOT COLLAR/ROOT FLAIR 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 FLAIR. WHEN THE BALLED & BURLAP TREE IS PLANTED, THE ROOT COLLAR/ROOT FLAIR 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 (SELECT 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.
- 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 COLORED RED, OR APPROVED EQUAL. ROCK MULCH TO BE BUFF LIMESTONE, 1 1/2" TO 3" 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).
- 8. EDGING TO BE COMMERCIAL GRADE VALLEY-VIEW BLACK DIAMOND (OR EQUAL) POLY EDGING OR SPADED EDGE, AS INDICATED. POLY EDGING SHALL BE PLACED WITH SMOOTH CURVES AND STAKED WITH METAL SPIKES NO GREATER THAN 4 FOOT ON CENTER WITH BASE OF TOP BEAD 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).
- EDGING TO BE COMMERCIAL GRADE COL-MET (OR EQUAL) STEEL EDGING; 3/16" THICK, 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).
- 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.
- 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.
- 22. 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.
- 23. REPAIR, REPLACE, OR PROVIDE SOD/SEED AS REQUIRED FOR ANY ROADWAY BOULEVARD AREAS ADJACENT TO THE SITE DISTURBED DURING CONSTRUCTION.
- 24. REPAIR ALL DAMAGE TO PROPERTY FROM PLANTING OPERATIONS AT NO COST TO OWNER.
- 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.