



April 9, 2018

RE: Rivanna Water & Sewer Authority
Crozet Water Treatment Plant Expansion
and Rehabilitation Project
TMP 57-10A and 57-29B
4685 Three Notch'd Road
**Request for Special Exception –
County Code Chapter 18, Section
26.5.c-d**

County of Albemarle
Department of Community Development
401 McIntire Road
Charlottesville, VA 22902

The Rivanna Water and Sewer Authority (RWSA) is proposing water treatment plant upgrade and rehabilitation improvements to its existing Crozet Water Treatment Plant. The RWSA has contracted with Short Elliott Hendrickson (SEH) to complete engineering design plans for the project. On November 13, 2017 SEH met with county staff in a Pre-application Meeting to discuss the proposed work in regards to site planning and county permitting requirements. One topic discussed was the RWSA's desire to improve the WTP filter backwash storage system as part of the project. This improvement will result in disturbance within an existing 30' undisturbed buffer which runs along the south property line of TMP 57-29B. The RWSA parcel is currently zoned light industrial, and the adjacent property to the south is residential. The proposed disturbance will include installation of a buried 4 inch diameter sanitary sewer pipeline and proposed tree screening improvements. This letter is a formal request to the County Board of Supervisors to grant a Special Exception in regards to the county code (Chapter 18, Sections 26.5.c-d).

Project Background:

Due to consistent growth in the Crozet area, the RWSA is experiencing higher potable water demands at its Crozet WTP facility. In an effort to modernize for better efficiency, and to upgrade the current plant demand capacity, the RWSA has instituted various improvement projects at the plant site in the past few years. The latest proposal is the Crozet WTP Expansion and Rehabilitation Project, which will consist of plant filter and sedimentation basin upgrade/rehabilitation, filter backwash storage and disposal improvements, chemical feed and storage upgrades, and applicable site utility piping improvements.

The improvements proposed for the filter backwash storage system will provide various benefits to plant operation and storage lagoon maintenance. The proposed improvements will consist of a covered storage tank for the backwash water, in place of an open lagoon settling system. The covered storage tank will allow backwash water to be temporarily stored and then slowly pumped out and discharged into the existing ACSA sanitary sewer system, which exists in the residential area adjacent to the south property line of the Crozet WTP. The backwash water will be pumped through a 4 inch diameter buried pipeline. In order to reach the existing sanitary sewer system, the pipeline will have to cross an existing 30' wide undisturbed buffer located within the RWSA parcel. The disturbance caused by this crossing is the basis of the request for Special Exception. The RWSA feels that the proposed backwash water pipeline installation will result in numerous benefits for operation and maintenance of the Crozet WTP. In addition, the temporary ground

Engineers | Architects | Planners | Scientists

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disturbance experienced during pipeline construction will cause minimal, temporary, impacts to the adjacent residential neighborhood. The ground will be restored to its existing grassed condition after the pipeline is placed into service. In an effort to stay within accordance with existing county code requirements for a Special Exception request, the RWSA is proposing to increase the landscape screening between the plant site and adjacent residential home as part of the overall project.

Proposed Screening Improvements:

Currently the only screening within the area of the proposed pipeline disturbance is one evergreen tree approximately 20 feet in height. The RWSA proposes to maintain and protect the existing tree, and also add more landscape screening to meet or exceed current county code requirements. This will consist of planting approximately 8 evergreen trees 15 feet on center in a double staggered row within a 20 foot width. The RWSA respectfully requests that all new tree plantings be kept a minimum of 10 feet away from the new pipeline and appurtenances. This space will allow for future pipeline access and maintenance. See the attached Figure 1 showing the proposed project location and pipeline alignment. Figure 2 shows the proposed new landscape screening in the southwest corner of the RWSA property.

On behalf of the RWSA, SEH respectfully requests that the County of Albemarle Board of Supervisors review and approve this Request for Special Exception.

Sincerely,

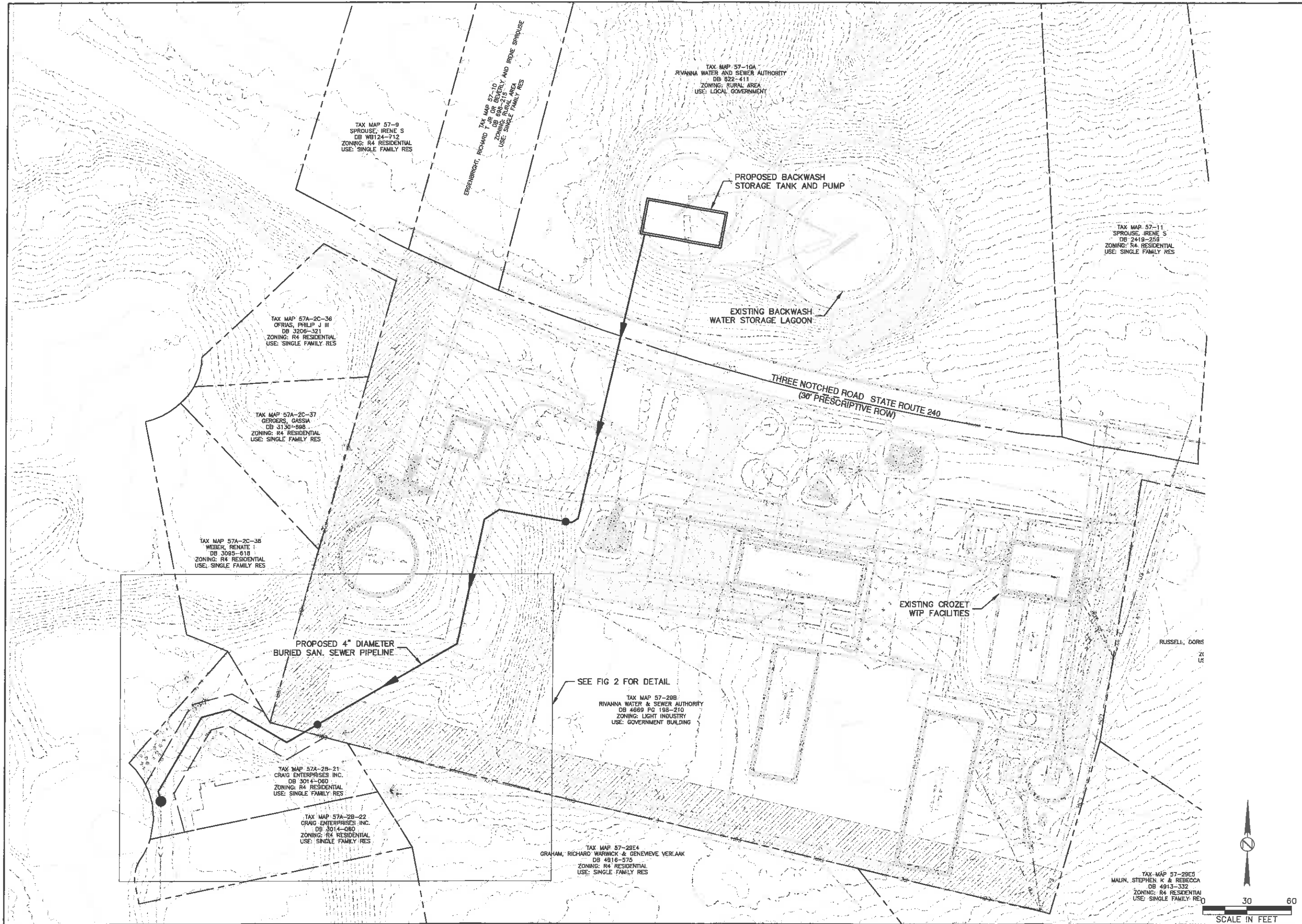
SHORT ELLIOTT HENDRICKSON INC.



Miles B. Jensen, P.E.
Regional Practice Center Leader

Enclosure – Figure 1
Figure 2

RECEIVED
APR 10 2018
COUNTY OF ALBEMARLE



NOT FOR CONSTRUCTION

**CROZET WATER TREATMENT PLANT
EXPANSION AND REHABILITATION
PROJECT
RIVANNA SEWER & WATER AUTHORITY
REQUEST FOR SPECIAL EXCEPTION
ALBEMARLE COUNTY, VIRGINIA**

MARK	DATE	DESCRIPTION REVISIONS
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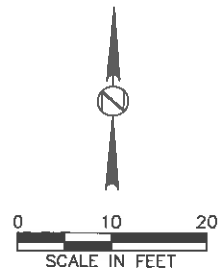
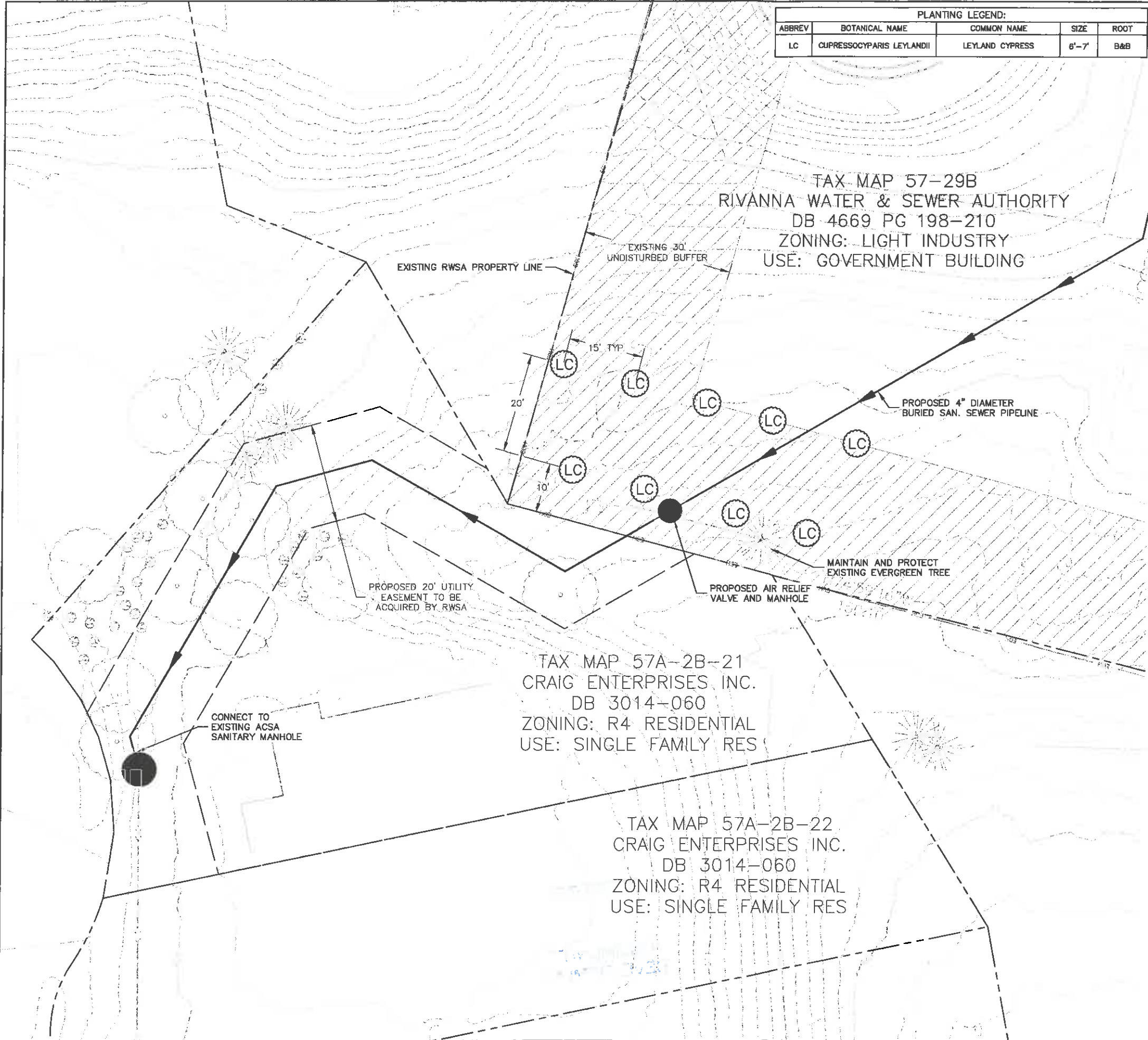
SER FILE NO. KWAN 144134
 RWSA RFB NO. PRELIM
 PROJECT STATUS 02/22/2018
 ISSUE DATE TTR
 DESIGNED BY TTR
 DRAWN BY

Short Elliott Hendrickson, Inc. © (594)

SITE AND EXISTING CONDITIONS

SHEET

FIG 1



3535 VADMAR CENTER DR
ST PAUL, MN 55110
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NOT FOR CONSTRUCTION

**CROZET WATER TREATMENT PLANT
EXPANSION AND REHABILITATION
PROJECT**

RIVANNA SEWER & WATER AUTHORITY
REQUEST FOR SPECIAL EXCEPTION
ALBEMARLE COUNTY, VIRGINIA

MARK	DATE	DESCRIPTION REVISIONS
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SEH FILE NO.	RIVAN 14134
RWSA RFS NO.	PRELIM
PROJECT STATUS	02/22/2018
ISSUE DATE	TTR
DESIGNED BY	TTR
DRAWN BY	

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SHEET TITLE
SITE AND EXISTING
CONDITIONS

SHEET
FIG 2