

MEMORANDUM

Date: December 12, 2022

To: Darren Anderson, Carson City Public Works

From: NCE

Subject: East William Complete Streets and Utility Undergrounding Project:
Aquatic Resources Technical Memo

Carson City has retained NCE to conduct background research and database searches on behalf of the East William Complete Streets and Utility Undergrounding (project) to inform environmental and planning tasks that will need to be addressed during a future National Environmental Protection Act (NEPA) action. The areas of focus for this technical memorandum include aquatic resources as described below.

PROJECT DESCRIPTION

The project is located in Carson City County, Nevada, south of Reno and Washoe Lake (**Figure 1**, figures are provided in **Appendix A**). The project area established for the project runs along roughly 1.5 miles of East William Street for a total size of roughly 29.5 acres (**Figure 2**). Most of the project improvements will be placed within existing rights-of-way. Permanent and temporary construction easements on up to 30 parcels are proposed. The permanent easements are required for pedestrian ramps, sidewalks, utilities, and signal modification improvements. The temporary construction easements are required for construction of sidewalk improvements, pedestrian ramps, bus stops, landscaping, lighting, driveway transitions, utilities, grading, and signal modifications (see staging areas in **Figure 2**).

The project will provide roadway, bicycle, pedestrian, safety, beautification, and utility improvements to East William Street, creating an efficient multimodal roadway along one of Carson City's primary commercial corridors. The project specifically includes pavement rehabilitation and reconstruction treatments throughout the corridor, access management infrastructure to improve safety and circulation for commercial driveways and side streets, enhanced street lighting, a signalized pedestrian crossing, bus stop amenities to support a planned transit line along the corridor, electric vehicle charging stations at Mills Park, sidewalk infrastructure to establish compliance with the Americans with Disabilities Act (ADA), traffic signal infrastructure upgrades, added bike facilities, landscaping and streetscape beautification, undergrounding of overhead power and communication lines and upgrades to water, sewer, and storm water utility systems, including low-impact-development (LID) storm water infrastructure.

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Proposed project activities were evaluated for potential impact to aquatic resources as described below.

AQUATIC RESOURCES EVALUATION

NCE's aquatic resources team conducted project mapping to determine whether the project area contained aquatic resources such as drainages and/or wetlands and evidence if these features demonstrate a hydrologic connection to a traditional navigable waterway (TNW). Features with these characteristics would be indicative of federal U.S. Army Corps of Engineers (USACE) jurisdictional waters of the U.S. (WOUS) due to proximity and connection to the Carson River, a TNW, as well as State of Nevada jurisdictional waters of the state (WoS).

Results

NCE reviewed the project mapping and aerial imagery to assist in the determination of whether the project contains potential jurisdictional aquatic resources. The project area was plotted on a USGS 7.5-minute quadrangle map to understand if the project contained "blue line drainages" which are indicative of aquatic resources (**Figure 3**). As indicated on Figure 3, there are no blue line drainages within the project area boundaries. Also, the project area was placed on the U.S. Fish and Wildlife Service (USFWS), National Wetland Inventory (NWI) map to understand if the project area contained mapped wetlands (**Figure 4**). As indicated on Figure 4, the project area does not contain any USFWS NWI mapped wetlands. Lastly, the project area was compared to the Natural Resources Conservation Service (NRCS) soils database to understand if hydric soils are present within the project area (**Figure 5**). The NRCS data indicates one type of hydric soil (Orizaba loam, saline-alkali) is present within the project area at the easternmost corner of the site, just east of Russell Way. Although this soil type suggests potential WOUS and/or WoS, based on project mapping and review of aerial imagery, it is NCE's professional opinion that this hydric soil is not an indicator of a potential WOUS and/or WoS.

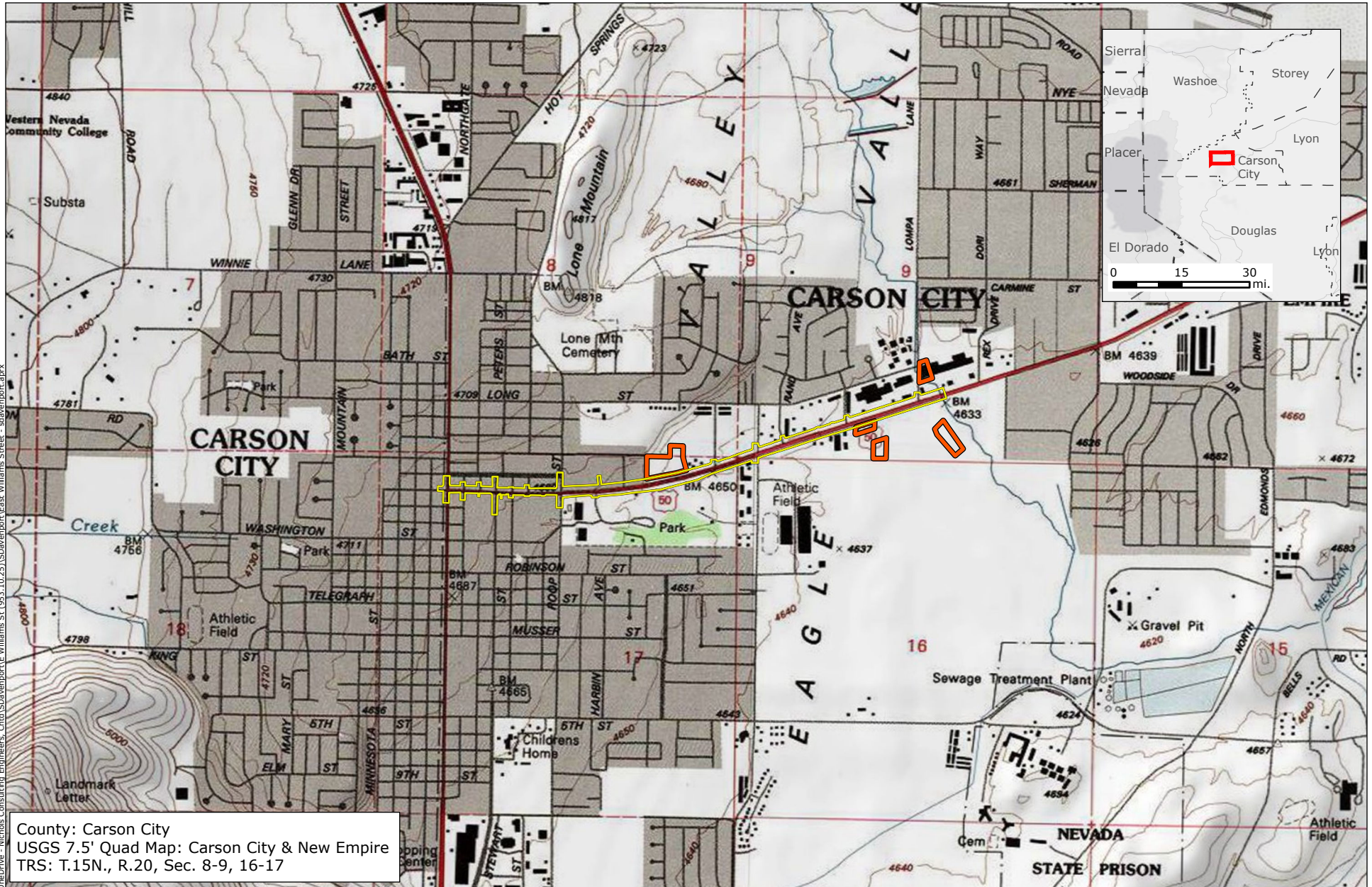
Using current aerial imagery, NCE identified a drainage ditch east of the Carson City Skate Park in Mills Park (**Figure 6**). This drainage ditch has not been identified on USGS or USFWS mapping; however, it may be a WoS per Nevada Revised Statutes 445A.415. The term "Waters of the State" means: *all waters situated wholly or partly within or bordering upon this State, including but not limited to:*

1. *all streams, lakes, ponds, impounding reservoirs, marshes, water courses, waterways, wells, springs, irrigation systems and drainage systems; and*
2. *all bodies or accumulations of water, surface and underground, natural or artificial".*

The drainage ditch may be a state water course, waterway, or an irrigation or drainage system. NCE understands there are no proposed construction activities that would impact this drainage ditch. If there is a need to work within the drainage ditch, NCE recommends conducting a formal aquatic resources delineation to determine the jurisdictional limits.

Based on a review of existing mapping and imagery, it is NCE's professional opinion the project area does not contain federal or State of Nevada potentially jurisdictional aquatic resources.

Appendix A Figures



Legend

- Project Area
- Potential Staging Area

NCE

SOURCE
 ESRI USGS Topography Basemap

East William Complete Streets and Utility Undergrounding Project

Project Vicinity Map

JOB NUMBER
 953.10.25

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 sdavenport

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 1/25/2022

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Scale:
 1:24,000
 0 1,000 2,000 ft.



FIGURE
1

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Legend

-  Project Area
-  Potential Staging Area



SOURCE
Carson City Ortho Imagery

East William Complete Streets and Utility Undergrounding Project

Project Location Map

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1 in. = 250 ft.



FIGURE
2a

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Legend

- Project Area
- Potential Staging Area



SOURCE
Carson City Ortho Imagery

East William Complete Streets and Utility Undergrounding Project

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1 in. = 250 ft.
0 250 ft.

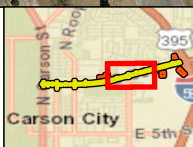


FIGURE
2b

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- Legend**
- Project Area
 - Potential Staging Area



SOURCE
Carson City Ortho Imagery

East William Complete Streets and Utility Undergrounding Project

Project Location Map

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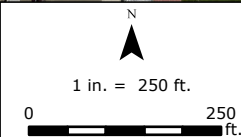
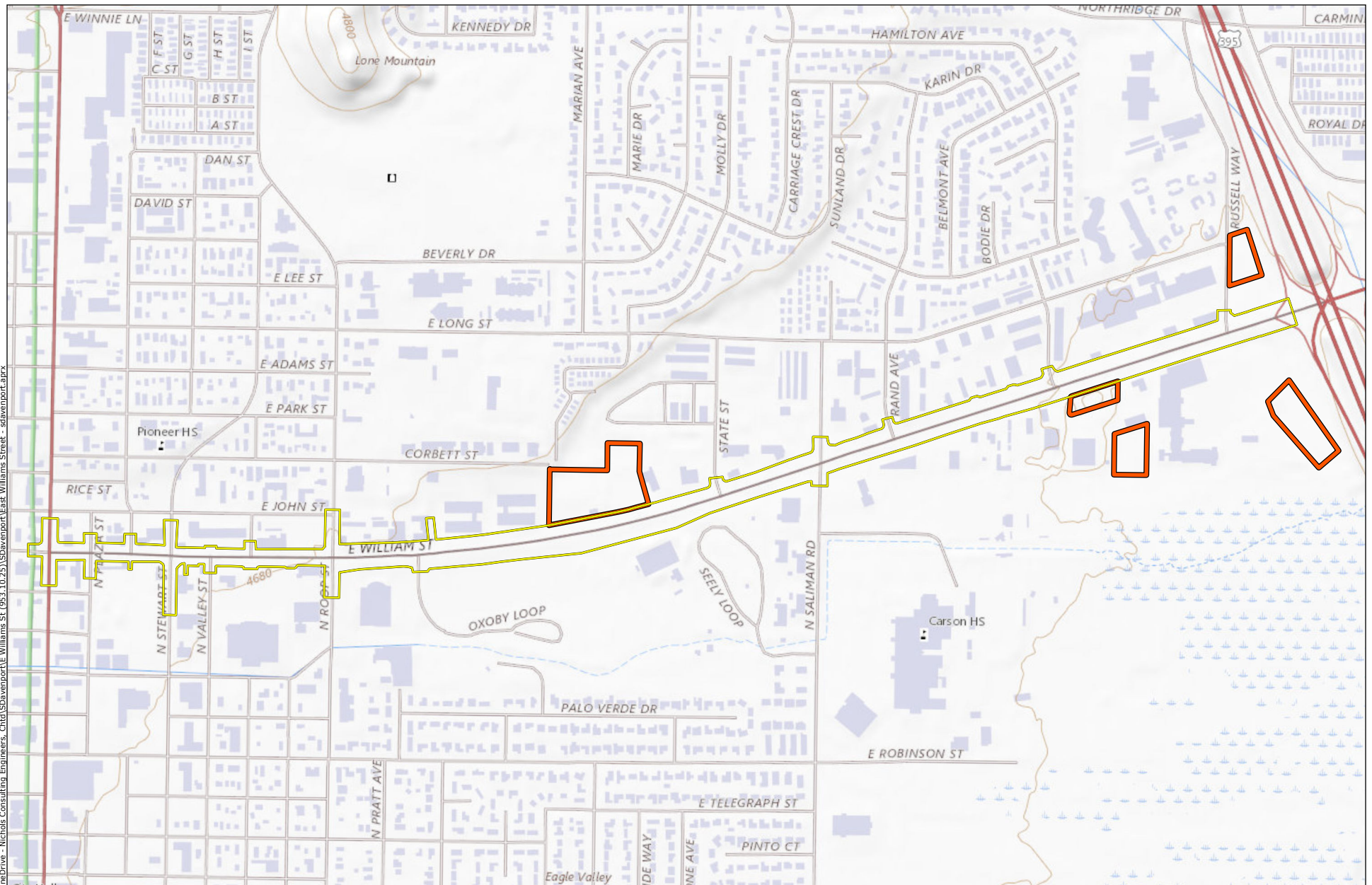



FIGURE
2c




<p>Legend</p> <p> Project Area</p> <p> Potential Staging Area</p>	<p>SOURCE Carson City Ortho Imagery</p>	<p>East William Complete Streets and Utility Undergrounding Project</p> <p>Project Location Map</p>	<p>1 in. = 250 ft.</p> <p>0 250 ft.</p>	<p>NCE</p>	<p>FIGURE 2d</p> <p>APPROVED jhall</p>
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Legend

 Project Area

 Potential Staging Area



East William Complete Streets and Utility Undergrounding Project

USGS Topographic Map

SOURCE	USGS Topographic Basemap
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1 in. = 800 ft.



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FIGURE

3

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Legend

Project Area

Potential Staging Area

Wetland Type

Freshwater Emergent Wetland



East William Complete Streets and Utility Undergrounding Project

National Wetland Inventory (NWI) Map

SOURCE
ESRI Imagery with Metadata; NWI

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1 in. = 800 ft.

0 400 800 ft.

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FIGURE
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East William Complete Streets and Utility Undergrounding Project

NRCS Soils Map



1 in. = 800 ft.
0 400 800 ft.

FIGURE
5

SOURCE
ESRI Imagery with Metadata; NRCS Soils

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- Legend**
- Project Area
 - Potential Staging Area



SOURCE
Carson City Ortho Imagery

East William Complete Streets and Utility Undergrounding Project

Potential Waters of the State Map

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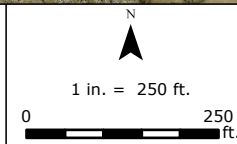


FIGURE
6