STATE OF UTAH
DIVISION OF WATER QUALITY
DEPARTMENT OF ENVIRONMENTAL QUALITY
SALT LAKE CITY, UTAH

§401 Water Quality Certification No. DWQ-2019-08001

Pursuant to *§401 of the Federal Clean Water Act(CWA)*, the Utah Department of Environmental Quality (DEQ), Division of Water Quality (DWQ) certifies that the applicant has provided reasonable assurance that any discharges associated with the proposed project will not violate surface water quality standards, or cause additional degradation in surface water not presently meeting water quality standards. In accordance with Section 401(a)(1) of the CWA [33 U.S.C. Sec. 1341(a)(1)], DWQ herby issues this §401 Water Quality Certification provided any listed conditions are met and included in the corresponding U.S. Army Corps of Engineers (USACE) 404 Permit.

Applicant: GT Medical Holdings, LLC
Greg Stuart
541 W 500 S
Bountiful, UT 84010

Project: The applicant is proposing to construct a campus for the proposed Noorda College of Osteopathic Medicine on the existing western three holes of the East Bay Golf Course. The project would include two new buildings, including a four-story educational and research building and a two-story student center. An access roadway, new utilities, site access routes, and parking would also be constructed. Construction will require the filling of portions of three artificial golf course ponds, cumulatively totaling 2.36 acres, and associated wetland fringe, totaling 0.76 acre. Based on the available information, the overall project purpose is to construct a medical education and services facility. The applicant believes there is a need to develop a next-generation medical school.

Location: The approximately 23-acre project site is located south of 1860 South and east of I-15, Latitude 40.2054°, Longitude -111.6537°, Provo, Utah County, Utah

Watercourse(s): Mill Race Creek, 0.76 acres of lacustrine emergent wetlands and 2.36 acres of open water constructed ponds.

Effective Date: **December X, 2019**

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Erica Brown Gaddis, PhD
Director, Division Water Quality

DWQ-2019-015048

Table of Contents

I. Background

A. Other Applicable Permits

1. USACE 404 Permit : SPK-2007-01227

B. Project Description/Purpose

The applicant is proposing to construct a campus for the proposed Noorda College of Osteopathic Medicine on the existing western three holes of the East Bay Golf Course. The project would include two new buildings, including a four-story educational and research building and a two-story student center. An access roadway, new utilities, site access routes, and parking would also be constructed. Construction will require the filling of portions of three artificial golf course ponds, cumulatively totaling 2.36 acres, and associated wetland fringe, totaling 0.76 acre. Based on the available information, the overall project purpose is to construct a medical education and services facility. The applicant believes there is a need to develop a next-generation medical school.

C. Existing Site Conditions

The majority of the 23.12-acre project area is upland and covered in golf course lawn, i.e. poa pratensis (Kentucky bluegrass) and lolium perenne (perennial ryegrass). There are three artificial golf course ponds which are interconnected and convey flows from Mill Race and the Provo City sewer treatment plant to the Provo Bay Delta. Most of the ponds' banks were characterized by steep drop-offs between the playing green and water surface not leaving much transition space between upland conditions and the water surface itself. This arrangement results in thin shoreline wetlands typically dominated by typha latifolia (common cattail). The north bank of the northernmost water body has a shallower slope, appears to be periodically inundated and thus supports a broader range and massing of plant species including common reed (phragmites australis), bulrush (shoenoplectus acutis), common cattail (typha latifolia), and reed canarygrass (phalaris arundinacea).

D. Proposed Mitigation

The proposed project entails the loss of 0.76-acres of lacustrine emergent wetlands. These wetlands are anticipated to be mitigated on site at a minimum of a 2:1 ratio. The proposed mitigation site will occupy approximately 1.52-acres of land at the south of the project, which is currently passive green space with no golf course play. This area is proposed to become a wet meadow. The water flow through the adjacent pond is extremely slow and is expected to remain so even after modifications to site hydrology.

II. Certification Conditions

A. Project Specific Conditions

1. Bridges, Culverts, and Fill

   a. Wetlands outside of the permitted impact area shall be clearly marked to prevent unintentional/additional impacts to water features.

   b. Construction of bridges/culverts shall be conducted in the "dry" to the maximum extent practicable, by diverting flow utilizing cofferdams, berms constructed of sandbags, clean rock (containing no fine sediment) or other non-erodible, non-toxic material. All diversion materials shall be removed at the completion of the work.

   c. The bottom of culverts shall be installed below streambed elevation in a manner that allows for natural substrate to reestablish. All culverts with more than one barrel shall have base flow concentrated into one barrel.

   d. The culverts should not result in a disruption or cause a barrier to the movement of fish or other aquatic life on the downstream side.

2. Best Management Practices (BMPs)

   a. During construction of the culvert in Mill Race, BMPs should be implemented to prevent additional discharges and limit increases in turbidly. A turbidity curtain or other means to prevent impacts to water quality should be utilized to prevent impacts to downstream water quality.

   b. Construction machinery used should be clean to prevent the possible transfer of Aquatic Invasive Species.

3. Monitoring and Reporting

   a. During construction of the culvert and work in Mill Race, monitoring should occur for turbidity, total dissolved solids (TDS) and PCB contamination, following the means and methods outlined in Figure 2. *Proposed Means and Methods* of the application. (Appendix D). Weekly results should be emailed to lnlittler@utah.gov.

b. All monitoring reports associated with mitigation required by the USACE, shall additionally be submitted to the DWQ for review.

B. General Conditions

1. Good Housekeeping

a. Applicant and their subcontractors shall ensure that all workers involved are continuously aware of the water quality protection measures before the start and during the construction period.

b. Retain a copy of this §401 Certification and its affiliated USACE 404 Permit onsite.

2. Stormwater and BMPs

a. Water quality standards in associated water resources could be violated unless appropriate Best Management Practices (BMPs) are incorporated to minimize the erosion-sediment and nutrient load to any adjacent waters during project construction. The applicant shall not use any fill material which may leach organic chemicals (e.g. discarded asphalt), noxious weeds/seeds or nutrients (e.g., phosphate rock) into waters of the State.

b. Construction activities that disturb one acre or more, or are part of a common plan of development, are required to obtain coverage under the Utah Pollutant Discharge Elimination System (UPDES) Stormwater General Permit for Construction Activities, Permit No. UTR300000[1]. The permit requires the development of a Storm Water Pollution Prevention Plan (SWPPP) to be implemented and updated from the commencement of any soil disturbing activities at the site, until final stabilization of the project. The SWPPP should include, but not limited to, final site maps and legible plans, location of stormwater outfalls/discharges, as well as information pertaining to any stormwater retention requirements.

c. Dewatering activities, if necessary during construction, may require coverage under the UPDES General Permit for Construction Dewatering, Permit No. UTG070000[2]. The permit requires water quality monitoring every two weeks to ensure that the pumped water is meeting permit effluent limitations, unless water is contained onsite.

[1]Link: https://documents.deq.utah.gov/water-quality/permits/updes/DWQ-2017-003485.pdf
[2] Link: https://deq.utah.gov/legacy/permits/water-quality/utah-pollutant-discharge-elimination-system/docs/utg070000.pdf

d. A project within a Municipal Separate Storm Sewer System (MS4) jurisdiction, must comply with all the conditions required in that UPDES MS4 Permit and associated ordinances. No condition of this 401 Certification shall reduce or minimize any requirements provided in the MS4 Permit. In the case of conflicting requirements, the most stringent criteria shall apply.

e. Utah Administrative Code R317-2 requires that the Applicant cannot increase water turbidity by 10 NTUs. If violated shall immediately notify the DWQ. A fact sheet describing the Utah Department of Environmental Quality's (DEQ) recommended environmental BMPs for construction sites are located on our web site [[3]].

3. Spills

a. Refueling equipment and storage of lubricants and fuels will occur at designated staging areas and in state approved containers. The storage and refueling areas will be at least 500 feet from the edge of the nearest waterbody (including wetlands), at least 200 feet from the nearest private water supply well, and at least 100 feet from the nearest municipal water supply well.

b. Utah Annotated Code 19-5-114 requires that any spill or discharge of oil or other substances which may cause pollution to waters of the State, including wetlands, must be immediately reported to the Utah DEQ Spill Hotline at (801) 536-4123, a 24-hour phone number.

[3]Link: https://deq.utah.gov/legacy/businesses/business-assistance/construction/index.htm

III. Aquatic Resource Impacts

All Waters of the State of Utah (defined in Administrative Code (UAC) R317-1-1) are protected from pollutant discharges that affect water quality by narrative standards (see UAC R317-2-7.2); broadly, discharges should not become offensive or cause undesirable conditions in human health effects of aquatic life. In addition, some particularly sensitive classes of water are further protected from deleterious effects of specific pollutants by application of numeric criteria to designated (beneficial) uses of that water body. Listed below are the water features within the project area and their associated designated beneficial uses (see UAC R317-2-6):

A. Linear Water Features

1. Mill Race

   a. Class 2B: Protected for infrequent primary contact recreation. Also protected for secondary contact recreation where there is a low likelihood of ingestion of water or a low degree of bodily contact with the water. Examples include, but are not limited to, wading, hunting, and fishing.

   b. Class 3B: Protected for warm water species of game fish and other warm water aquatic life, including the necessary aquatic organisms in their food chain.

   c. Class 4: Protected for agricultural uses including irrigation of crops and stock watering.

B. Wetlands

1. Lacustrine Emergent Wetlands

   a. Class 2B: as described above;

   b. Class 3D: Protected for waterfowl, shore birds and other water-oriented wildlife not included in Classes 3A, 3B, or 3C, including the necessary aquatic organisms in their food chain.

Classifications are based on R317-2-13.13, where it states that "*all waters not specifically classified are presumptively classified: 2B, 3D.*"

C. Impairments and Pollutants of Concern:

Results from the current water quality assessment, as documented in Utah's 2016 Integrated Report [4], indicate that the water quality of the Mill Race is considered to be impaired (Assessment Category 5). Mill Race is impaired for OE Bioassessment, due to human activities, which impacts warm water aquatic life (Class 3B) beneficial use. The CWA directs states to prepare a plan to restore water quality to impaired waters, otherwise known as a total maximum daily load (TMDL) study. A TMDL is required for each parameter and water body to define pollutant reduction requirements necessary for the water body to meet water quality standards. At present, no TMDLs have been finalized for Mill Race.

[4]Link: https://documents.deq.utah.gov/water-quality/monitoring-reporting/integrated-report/DWQ-2017-004941.pdf

IV. Modifications

A. Without limiting DWQ's discretion to take other actions in accordance with UAC R317-15, and, as applicable, 33 USC 1341, DWQ may modify the Certification to add, delete, or modify the conditions in this Certification as necessary and feasible to address:

1. Adverse or potential adverse project effects on water quality of designated beneficial uses that did not exist or were not reasonably apparent when this certification was issued;

2. TMDLs;

3. Changes in Water quality standards;

4. Any failure of Certification conditions to protect water quality or designated uses when the Certification was issued; or

5. Any change in the Project or its operations that will adversely affect water quality of designated beneficial uses when this Certification was issued.

V. Other Information

A. Fees

1. The legislatively-mandated fee for the 2020 fiscal year is $100.00/hour, for review and issuance of the §401 Water Quality Certification [5]. A quarterly invoice will be sent once plans have been approved. Your payment is due within 30 days.

B. Liabilities

1. Applicant must acquire all necessary easements, access authorizations and permits to ensure they are able to implement the project. This §401 Certification does not convey any property rights or exclusive privileges, nor does it authorize access or injury to private property.

2. This §401 Certification does not preclude the applicant's responsibility of complying with all applicable Federal, State or local laws, regulations or ordinances, including water quality standards. Permit coverage does not release the applicant from any liability or penalty, should violations to the permit terms and conditions or Federal or State Laws occur.

[5]Link: https://documents.deq.utah.gov/admin/2020-fee-schedule.pdf

VI. Public Notice and Comments

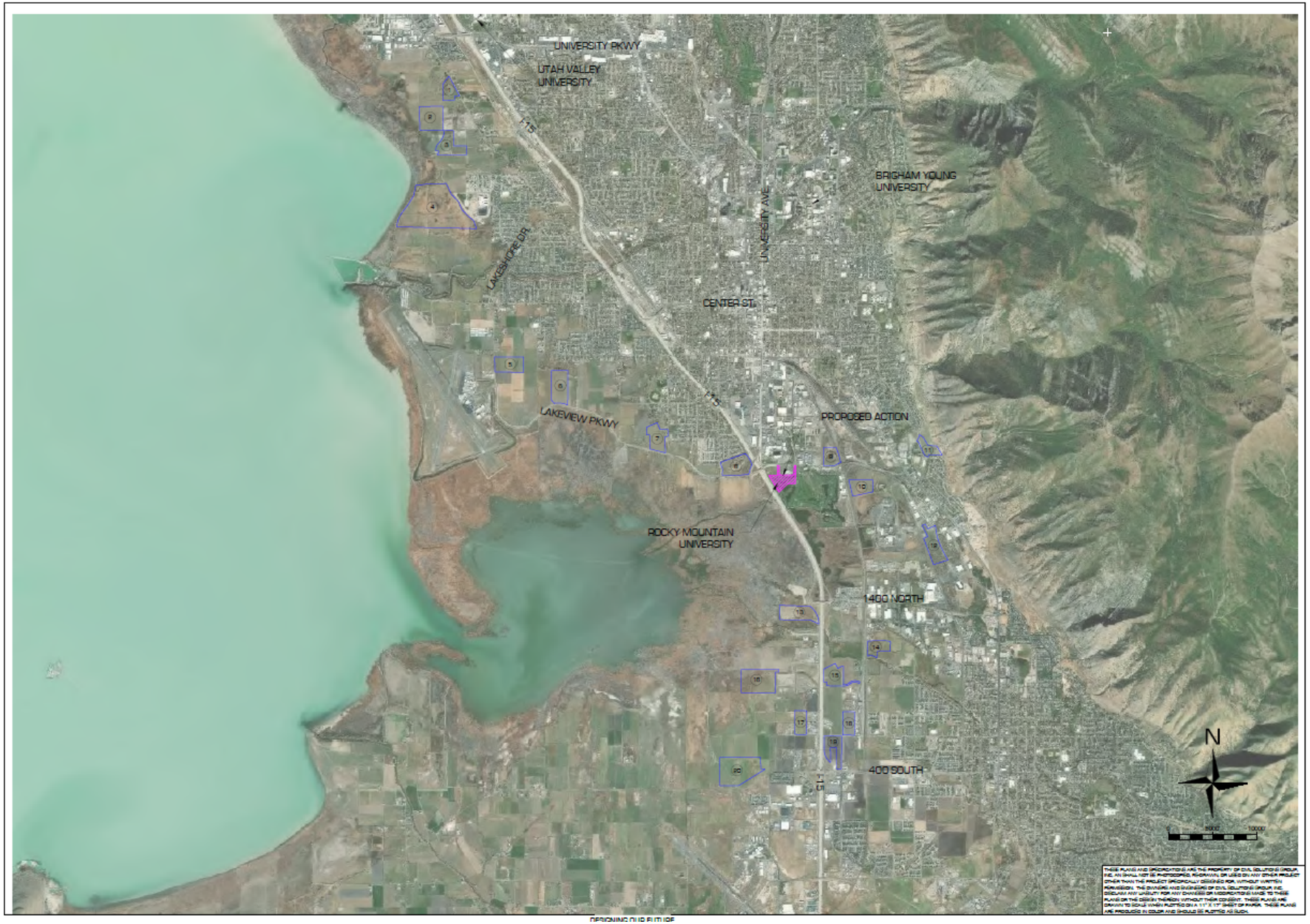
A. Public Notice Dates

1. USACE 404 Permit No. SPK-2007-01227: 08/02/2019-09/05/2019

2. Utah DEQ Certification No. DWQ-2018-08001 :

B. Public Notice Comments/Response

Appendix A: Site Location



DESIGNING OUR FUTURE

civilsolutionsgroup inc
CACHE VALLEY | P: 435.213.3762
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info@civilsolutionsgroup.net
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OFF-SITE ALTERNATIVES
EAST BAY
PROVO, UT 84601

MARK:	DATE:	DESCRIPTION:

PROJECT #:	19-050
DRAWN BY:	S. REED
PROJECT MANAGER:	M. TAYLOR
ISSUED:	07.19.19

OFF-SITE ALTERNATIVES

FIGURE 9

Appendix B: Project Layout and Impacts to Waters of the State

LEGEND

- EXISTING WETLAND TO REMAIN [21,098 SF]
- EXISTING WETLAND IMPACTED [33,190 SF]
- PROPOSED WETLAND [70,045 SF]
- UNDISTURBED OPEN WATER (BELOW OHWM) [89,302 SF]
- OPEN WATER TO BE FILLED (BELOW OHWM) [102,942 SF]
- PROPOSED OPEN WATER (BELOW OHWM) [31,522 SF]

PROPOSED PARKING = 471 STALLS

N

0 200 400

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PROPOSED ACTION
EAST BAY
PROVO, UT 84601

PROJECT #:	19-050
DRAWN BY:	S. REED
PROJECT MANAGER:	M. TAYLOR
ISSUED:	07.30.19

PROPOSED ACTION

FIGURE 1

Appendix C: Draft Planting Plan (Mitigation Site)

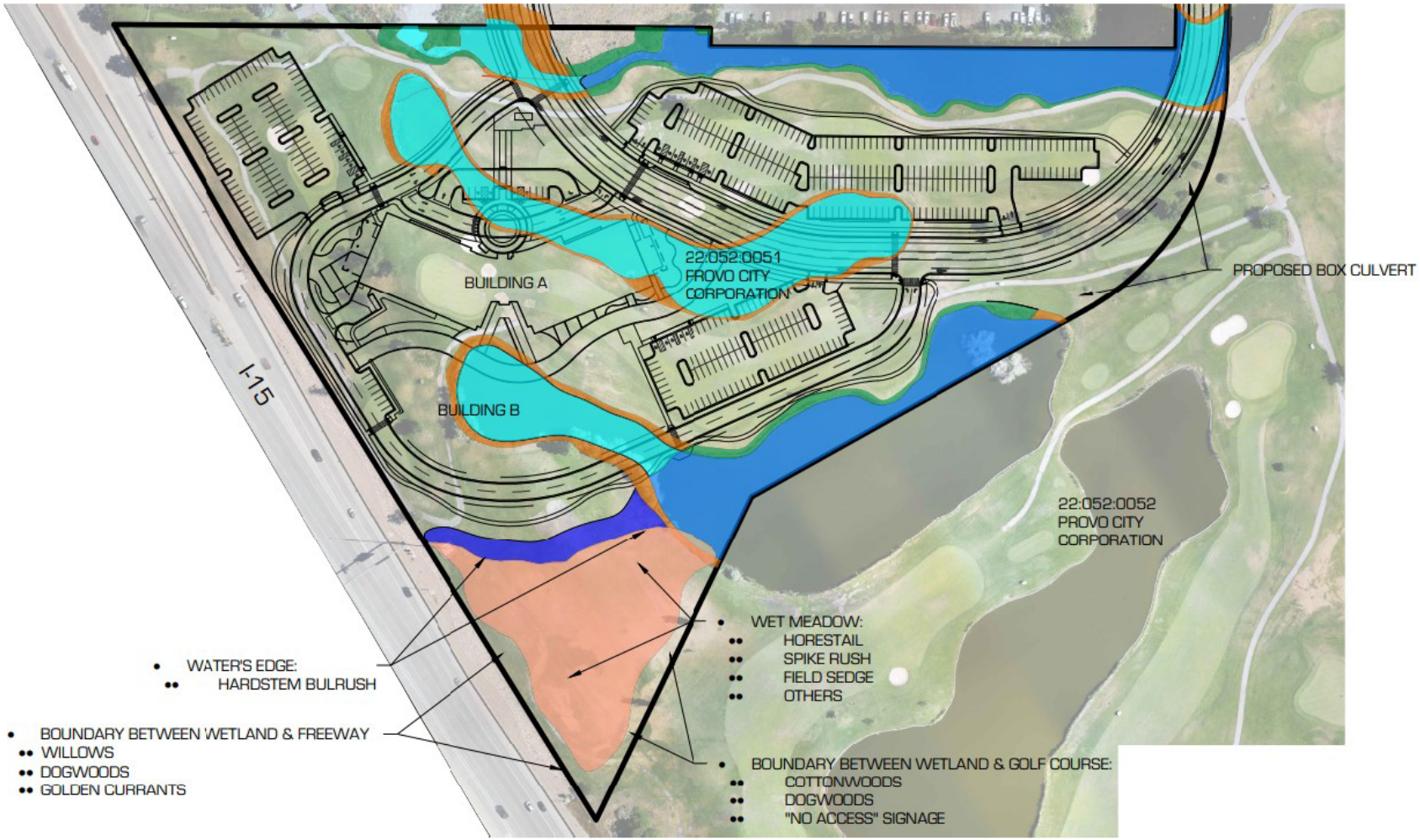

Figure 2. Draft Planting Plan

Appendix D: Proposed Monitoring Methods & Means

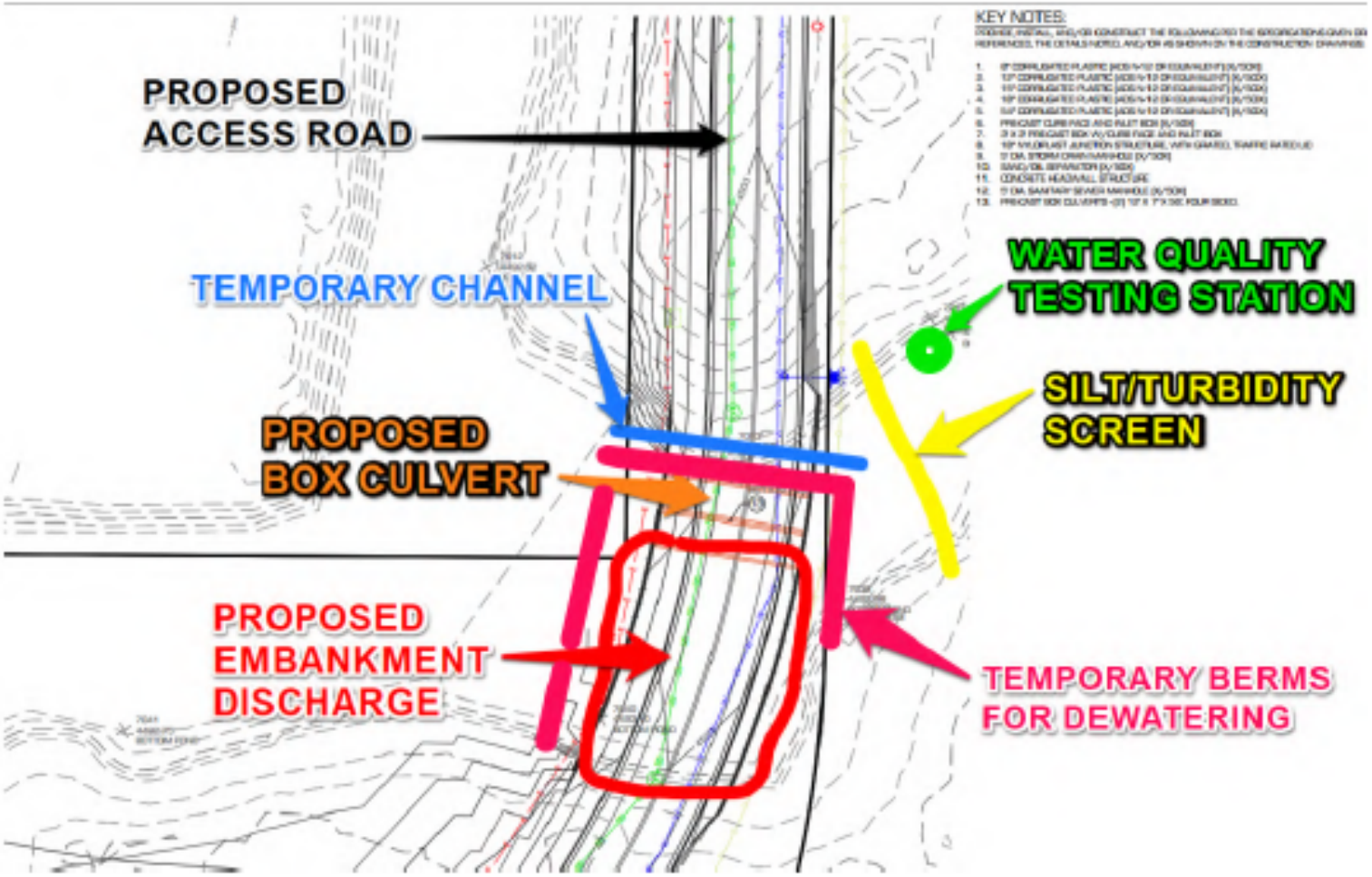

Figure 2. Proposed Means and Methods