## USU Quad Portal NW Addenda #1

#### Added:

Gramoll Construction sub contract agreement

Quad Portal Bid Set: The majority of this project was bid in an earlier package. Work remaining to be bid with this package is.

- 1. Landscaping
- 2. Electrical

Please include these items in the base bid.

#### NO. XXXXX

#### SUBCONTRACT AGREEMENT

THIS SUBCONTRACT AGREEMENT ("Subcontract") by and between GRAMOLL CONSTRUCTION COMPANY, a Utah corporation, hereinafter referred to as "Contractor," and (SUBCONTRACTOR NAME AND ADDRESS) hereinafter referred to as "Subcontractor," is entered into and shall be effective as of the date it has been signed by both parties hereto (the "Subcontract Date"). If Subcontractor commences work prior to signing this Subcontract, the Subcontract Date shall be deemed to be the date Subcontractor commenced the Work.

#### **RECITALS**

- 1. Contractor has entered into a contract with [PROJECT OWNER] for the construction, performance and completion of a certain project known as [PROJECT TITLE] said contract being hereinafter referred to as the "General Contract".
- 2. Subcontractor desires to furnish, and Contractor desires to have Subcontractor furnish a portion of the work for Contractor. Contractor and Subcontractor desire to establish the terms and conditions that govern the relationship between them when Subcontractor furnishes such labor, materials, and equipment pursuant to this Subcontract.

#### ARTICLE I

1.1 Scope of Work. Subcontractor shall furnish all labor, materials, permits, tools, machinery, equipment, facilities, supplies and services, pay all applicable taxes, and comply with any and all additional requirements imposed by the jurisdiction in which the work is performed, and to do all things necessary to complete the following items of work under the General Contract (the "Work"):

Furnish all labor, materials, equipment and supervision required to complete all [LABOR TYPE] work required, as described in specifications sections [SECTION NUMBER AND DESCRIPTION] and as shown on the drawings in [BID PACKAGE] and comply with all other sections of the specifications and the drawings dated [DATE], for [PROJECT NAME] prepared by [ARCHITECT], as related to such work.

Addenda:	
Alternates:	
Includes:	
Excludes:	SALES TAX

Hereinafter, all such documents, plus this Subcontract and the General Contract are collectively referred to as the "Subcontract Documents." All Subcontract Documents other than this Subcontract are incorporated herein by reference and hereby adopted and made a part of this Subcontract as fully as if it were set forth in full herein, subject to the limitations set forth in Article I hereof. All General, Supplemental General, and Special Conditions of the specifications and all terms and conditions of the General Contract shall apply to this Subcontract, except where ambiguous or inconsistent with this Subcontract, in which case the provisions of this Subcontract shall control. Subcontractor acknowledges that the Work to be performed by Subcontractor is not confined to any particular portion of the drawings or section of the specifications but may be scattered throughout those documents. In the performance of this Subcontract, Subcontractor binds itself to Contractor to comply fully with all undertakings and obligations of the Contractor to the extent that they apply to the scope of the Work.

#### ARTICLE II

2.1 Subcontract Price. Contractor shall pay Subcontractor for completion of the Work in accordance with the Subcontract Documents the lump sum of [Subcontract Price] (the "Subcontract Price.") The Subcontract Price includes all costs and expenses to perform the Work, and associated with the performance of the Work, including, without limitation, (1) all applicable transportation charges, costs and expenses, and (2) all applicable taxes including, without limitation, applicable taxes under any law now existing, or which may hereafter be

adopted by federal, state, local or other governmental authorities, taxing the labor, materials, or equipment furnished, or any other tax levied as a result of performance of the Work. The Subcontract Price may be adjusted only as provided for in Article V.

#### ARTICLE III

- 3.1 Independent Contractor. The relationship of Subcontractor to Contractor during the term of this Subcontract shall be that of an independent contractor. Subcontractor shall take any and all actions necessary to maintain that independent contractor relationship throughout the term of the Subcontract, and neither Subcontractor nor its employees shall be considered employees of Contractor. Subcontractor shall exercise exclusive control for the means, methods, techniques, and procedures in performance of the Work.
- 3.2 Examination of Subcontract Documents/ Site. Subcontractor has examined the Subcontract Documents and the applicable Laws and Regulations, as that term is defined below, and has examined the site of the work and satisfied itself as to all conditions to be encountered in the performance of the Work. Subcontractor enters this Subcontract on the basis of its own examination, investigation and evaluation of all such matters, and not in reliance on the opinions or representations of Contractor or Owner. If there are any inconsistencies between the Subcontract Documents or ambiguities in any Subcontract Document, Subcontractor shall bring such inconsistencies or ambiguities to the attention of Contractor before the execution of this Subcontract; otherwise, Subcontractor shall be bound by Contractor's resolution of such inconsistencies or ambiguities.

In the event of any discrepancy (1) in the Subcontract Documents, or (2) between the Subcontract Documents and the Laws and Regulations, those which are more stringent, provide persons and property with greater protection, or provide for a better product shall govern. In the event of any discrepancy in the Subcontract Documents between dimensions and measurements for the Work based on scaling, the Work shall comply with the dimensions for such Work. Subcontractor shall promptly notify Contractor in writing of any such discrepancy. To the extent that the Subcontract Documents include plans, specifications or other documents that depict, refer or relate to mechanical, plumbing, electrical or fire protection systems, such documents are diagrammatic only, and are not intended to show the precise alignment, physical locations, or configurations of such Work. The Subcontract Price includes all costs and expenses for such systems to be installed such that they clear all obstructions, permit proper clearances for the Work of other trades, and present an orderly appearance.

Before commencing Work, Subcontractor will satisfy itself as to the location of all utilities that may affect or interfere with Subcontractor's Work. Subcontractor will fully protect all utilities, and keep them operating at all times, unless otherwise provided in the Subcontract Documents. Subcontractor shall take such field measurements as are necessary for the proper execution of its work. It shall be assumed that the Subcontractor has fully accepted the work of others as being satisfactory and he shall be fully responsible thereafter for the satisfactory performance of the work covered by this Agreement, regardless of the defective work of others.

- 3.3 Lines, Levels, Dimensions and Measurements. Subcontractor assumes full responsibility for the proper interpretation and interpolation of all lines, levels, dimensions, and measurements and their relation to benchmarks, property lines, reference lines and the work of Contractor and other trades. In all cases where dimensions are governed by conditions already established, the responsibility for correct knowledge of the condition's rests entirely on Subcontractor. The Work shall comply with the dimensions provided in the Subcontract Documents and shall not be performed based on scales indicated in those documents. No variations from specified lines, levels or dimensions shall be made except on prior written approval of Contractor clearly setting forth the variation.
- 3.4 Shop Drawings/ Submittals. Shop drawings and submittals shall be provided in a minimum of one (1) digital copy to Contractor's office in North Salt Lake. Additional copies shall be provided if required by the Subcontract Documents. Shop drawings and/ or submittals and/ or samples are due within fourteen (14) days of Subcontract's date of issuance. At the time of submission, Subcontractor shall clearly identify in writing any deviation in its shop drawings/ submittals/ samples from the requirements of the Subcontract Documents and must receive from Contractor specific written approval for any deviation.

- 3.5 Warranty. Subcontractor warrants that:
  - 3.5.1 all materials and equipment furnished under this Subcontract will be of good quality and new, unless otherwise required or permitted by the Subcontract Documents.
  - 3.5.2 the materials and equipment provided as part of the Work will be suitable for the purposes intended in the Subcontract Documents.
  - 3.5.3 the Work will be performed in a good and workmanlike manner.
  - 3.5.4 the Work will conform to the requirements of the Subcontract Documents; and
  - 3.5.5 the Work will be free from defects.

Work not conforming to these requirements including, without limitation, substitutions not properly approved and authorized, shall be considered defective (all such work, "Defective Work"). Subcontractor shall (1) execute any special guarantees, and (2) assign to Contractor all warranties, as required by the Subcontract Documents.

- 3.6 Correction and Replacement of Defective Work. During performance of the Work, Subcontractor shall promptly correct or replace Defective Work. Contractor shall determine whether Work is defective and whether work performed by Subcontractor to correct or replace Defective Work complies with Subcontractor's warranty obligations.
  - 3.6.1 If, within the greater of (1) the period established in the Subcontract Documents, or (2) one year after the Completion Date, (hereinafter the "Warranty Period"), any of Subcontractor's Work is found to be defective, Subcontractor shall correct or replace it promptly after receipt of written notice of the Defective Work. If Contractor prefers to accept, rather than correct or repair Defective Work, Contractor may, in its sole discretion, accept the work subject to its right of reimbursement, as set forth below.
  - 3.6.2 Subcontractor shall pay all costs to correct or replace Defective Work without any adjustment to the Subcontract Price or Subcontract Time. If Subcontractor fails to correct Defective Work within the time allowed by Contractor, or if no time is specified, a reasonable time after receipt of notice of such defects, Contractor may correct or replace the Defective Work. Subcontractor shall reimburse Contractor for (1) the costs to correct or replace defective Work, including, without limitation, the costs of additional sampling, testing and inspections, if any, made necessary by Defective Work, corrections or replacements, (2) all Losses that Contractor incurs that arise out of or result from Defective Work, (3) any amounts assessed and collected by Owner from Contractor for acceptance of Defective Work, and (4) any other amounts for which Subcontractor is responsible at law or in equity.
- 3.7 Safety. Subcontractor shall initiate, maintain and supervise all safety precautions and programs in connection with the Work including, without limitation, such precautions and programs as necessary to comply with the Gramoll Project Safety Rules and Regulations that are expressly made a part of the Subcontract Documents. Subcontractor shall take all necessary precautions to prevent damage, injury or loss to (a) all persons performing the Work or who may be affected by the Work; and (b) all Work, whether stored on or off the Project site. Subcontractor shall promptly report to Contractor all accidents incidental to the Work which result in death or injury to persons or in damage to property. Subcontractor shall provide to Contractor any reasonable documentation requested by Contractor related to any such death, injury, damages.
- 3.8 Compliance with Laws and Regulations. Subcontractor shall comply with and give all notices required by all federal, state, local, and municipal laws, regulations, codes, ordinances, and orders that directly or indirectly bear on the Work and/or the performance of the Work including, without limitation:
  - 3.8.1 building codes and ordinances.
  - 3.8.2 worker's compensation laws and regulations.
  - 3.8.3 safety laws, codes, regulations and orders, including, without limitation, the Occupational Safety & Health Act of 1970, as enacted and amended, and regulations issued under that act.

- 3.8.4 environmental laws including, without limitation, the Comprehensive Environmental Response, Compensation and Liability Act, the Clean Water Act, the Clean Air Act, and the Resources Conservation and Recovery Act, as enacted and amended, regulations issued under those acts, and counterpart state laws;
- 3.8.5 wage, hour, labor, and anti-discrimination laws, including, without limitation, the Equal Employment Opportunity (EEO) Executive Order 11246, Title VII of the Civil Rights Act of 1964, the Age Discrimination in Employment Act of 1967, the Equal Pay Act of 1963, the Family and Medical Leave Act, the Americans with Disabilities Act, the National Labor Relations Act, the Fair Labor Standards Act; Sections 503 and 504 of the Rehabilitation Act of 1973, Section 402 of the Vietnam Era Veterans Readjustment Assistance Act of 1974, the Immigration Reform Control Act of 1986, as enacted and amended, and all regulations issued under those acts; and
- 3.8.6 tax laws and regulations; all as enacted and amended, and all regulations issued under such

Collectively, these are referred to in this Subcontract as the "Laws and Regulations."

3.9 Subcontractors. Subcontractor shall not assign this contract, in part or in whole, without Contractor's prior written consent, nor shall Subcontractor assign any monies due or to become due to it hereunder, without Contractor's prior written consent. Subcontractor shall, upon request from Contractor at the inception of this Subcontract, provide to Contractor or supplier a written list of sub-subcontractors or suppliers that Subcontractor intends to use in connection with the performance of its obligations under this Subcontract where the dollar amount individually or in the aggregate with the same sub-subcontractor will exceed 5% of the Subcontract Price. Subcontractor shall require all of its sub-subcontractors to comply with the Subcontract Documents to the extent that they apply to the scope of work of such sub-subcontractor. Subcontractor shall not change sub-subcontractors without prior written approval of Contractor.

Upon Contractor's request, Subcontractor agrees to provide documentation evidencing full payment of all subsubcontractors and/or suppliers engaged by Subcontractor with respect to its performance of this Subcontract.

- If this Subcontract is terminated, each of Subcontractor's contracts for performance of the Work shall be assigned to Contractor, provided that Contractor accepts such assignment in writing and assumes all rights and obligations of Subcontractor pursuant to each such contract.
- 3.10 Cleanup. Subcontractor will continuously clean, and remove from the jobsite, its debris and excess materials and at the end of each day will leave its working areas in broom-clean condition. Also, he shall clean up to the satisfaction of the inspectors, all dirt, grease marks, etc., from walls, ceilings, floors, fixtures, etc., deposited or placed thereon as a result of the execution of this Subcontract. If Subcontractor fails to do so, Contractor may perform the cleanup and backcharge Subcontractor for the cost of performing such cleanup.
- 3.11 Supervision. Subcontractor shall have available on the project, at all times, a qualified superintendent, who is acceptable to Contractor, to coordinate the Subcontractor's work with that of the Contractor and of the other subcontractors, and any instruction given by the Contractor to said representative on the project shall have the same force and effect as if given to the Subcontractor either at the project or at the Subcontractor's office away from the project site.

#### ARTICLE IV

4.1 Subcontract Time. Subcontractor shall commence and complete the Work in accordance with the most current schedule prepared by Contractor, as may be revised from time to time during the course of the Project (the "Project Schedule"). Subcontractor shall commence and complete all activities in compliance with the time periods expressly provided for such activities in the Project Schedule. The periods of time provided in the Project Schedule for commencement and final completion of all activities that comprise the Work shall constitute the "Subcontract Time." Except as otherwise expressly noted, as used herein and in the Project Schedule, the term "day" shall refer to a calendar day. The date on which all the work performed by Contractor and its subcontractors is completed and accepted by the Owner shall be referred to hereinafter as the "Completion Date."

Subcontractor's commencement, prosecution, and completion of the Work in the Subcontract Time and in compliance with the Project Schedule is of the essence of this Subcontract.

Subcontractor acknowledges that the precise time periods scheduled for its performance are estimates only. Subcontractor shall cooperate with Contractor in scheduling and performing its work to avoid conflict or interference with the work of Contractor or other trades. Contractor reserves the right, in its sole discretion, to extend or to delay the scheduling of Subcontractor's work if such extension or delay becomes necessary in the opinion of Contractor. Each Subcontractor shall review the schedule of all items of work other than his own, to anticipate completion of specific items of its Work as it affects other trades, to be certain that work following Subcontractor's Work is not delayed. In the event of any conflicts in the Project Schedule between the work of Subcontractor and Contractor or another trade, Contractor shall determine, in its sole discretion, which work shall have precedence and how the parties will coordinate their respective work. All other work not specifically scheduled shall be coordinated as necessary to avoid delaying Work as scheduled. Subcontractor shall not be entitled to an adjustment in the Subcontract Price or the Subcontract Time based on the coordination of such activities with Contractor or any determination by Contractor concerning coordination of the work.

If Contractor determines, in its sole discretion, that Subcontractor has failed to diligently prosecute the Work in accordance with the Project Schedule, or that Subcontractor will not complete the Work within the Subcontract Time, Contractor may, in its sole discretion, (1) require Subcontractor to work overtime and/or use such additional labor and equipment as necessary to accelerate the Work and bring Subcontractor's performance into compliance with the Project Schedule, (2) supplement Subcontractor's work by furnishing additional labor and equipment to the Project as necessary to accelerate the Work and bring Subcontractor's performance into compliance with the Project Schedule, (3) require Subcontractor to provide reasonable assurances of timely performance in accordance with the Project Schedule, (4) terminate this Subcontract pursuant to Article X, and/or (5) exercise all other rights and remedies available under this Subcontract. Subcontractor shall not be entitled to an adjustment in the Subcontract Price or the Subcontract Time as a result of any such action by Contractor.

#### ARTICLE V

- 5.1 Changes and Modifications to Subcontract. Without invalidating the Subcontract and without notice to any surety, Contractor may, at any time or from time to time, order additions, deletions or revisions in the Work or acceleration of the Work. Any such additions, deletions, revisions, or acceleration shall be binding upon Contractor and Subcontractor exclusively when made in writing executed by James Gramoll. Upon receipt of such an order, Subcontractor shall promptly proceed with the Work involved, which shall be performed under the applicable conditions of this Subcontract and the Subcontract Documents, except as otherwise specifically provided. Subcontractor shall not proceed to perform changes in the Work without prior written authorization from Contractor as provided herein. Subcontractor shall not be entitled to an adjustment in the Subcontract Price or the Subcontract Time for any work performed without such prior written authorization. Except as provided in this Article V or Section 12.1, the terms and conditions of this Subcontract are not otherwise subject to addition, modification, or change.
- Claims. The Subcontract Price and the Subcontract Time may be changed only by a written directive by Contractor, change order, or written Amendment to this Subcontract signed by James Gramoll. Within seven (7) working days of an occurrence or event giving rise to a claim for a adjustment in the Subcontract Price or Subcontract Time, Subcontractor shall provide to Contractor written notice (hereinafter, a "Claim") stating the nature of the Claim and the adjustment in Subcontract Price and Subcontract Time requested, accompanied by supporting documentation. All Claims shall include and/ or be accompanied by the following supporting information and/ or documents: (a) the specific amount of the requested adjustment in the Subcontract Price, if any, (b) the specific number of days' adjustment in the Subcontract Time requested, if any, (c) the reasons justifying the request for an adjustment in the Subcontract Price and the Subcontract Time, including a CPM analysis demonstrating a critical path delay for any requested adjustment in the Subcontract Time, if any, (d) the party or parties whose orders, decisions, acts or omissions give rise to the requested adjustment in the Subcontract Price and/ or the Subcontract Time, and (e) a revised schedule based on the requested adjustments in the Subcontract Time, if any.

A Claim shall be deemed to include all adjustments in Subcontract Price and/ or Subcontract Time to which the claimant is entitled as a result of the occurrence or events giving rise to the Claim. No Claim by Subcontractor for an adjustment of the Subcontract Price or Subcontract Time will be valid if not delivered to the Contractor within the seven (7) working day period prescribed above. Subject to Contractor's right to terminate Subcontractor's rights under this Subcontract, Subcontractor shall continue performance of its

obligations under this Subcontract notwithstanding any dispute between Contractor and Subcontractor concerning a Claim asserted by either party.

Subcontractor's sole and exclusive right to an adjustment in the Subcontract Price and/ or the Subcontract Time shall be the adjustment in the contract price and/ or the contract time to the General Contract actually received by Contractor from Owner on behalf of Subcontractor as a result of any such Claim. Subcontractor shall not be entitled to any adjustment in the Subcontract Price or the Subcontract Time or any other remedy under this Subcontract or remedy for breach thereof as a result of any event, occurrence, or act or omission of Contractor or Owner beyond such adjustment in the contract price and/or the contract time to the General Contract received by Contractor from Owner. Receipt by Contractor of a fully-executed written change order from Owner is a condition precedent to Subcontractor's right, if any, to an adjustment in the Subcontract Price and/ or the Subcontract Time, a remedy under this Subcontract, or remedy for breach of this Subcontract. Subcontractor's right to recover for such change, remedy, or breach shall be limited to the adjustment in contract price and/ or contract time received by Contractor from Owner for such change, remedy, or breach.

5.3 Delays If events, occurrences, acts, or omissions beyond the control of Subcontractor including, without limitation, the work of other trades or contractors, fire, earthquake, acts of God, terrorist acts, riots, war, strikes or other force majeure events delay Subcontractor's Work, the Subcontract Time and/ or the Subcontract Price will be adjusted to the extent of any adjustment in the contract price and/ or the contract time in the General Contract received by Contractor from Owner on behalf of Subcontractor. Subcontractor may make a Claim for an adjustment in the Subcontract Time and/ or the Subcontract Price if, and only if, Subcontractor timely presents to Contractor a Claim in compliance with Section 5.2. Any such adjustment in the contract price and/ or the contract time under the General Contract received by Contractor from Owner shall be Subcontractor's sole and exclusive remedy for such delays, if any, to Subcontractor's Work on the Project. Receipt by Contractor of a fully executed written change order from Owner is a condition precedent to Subcontractor's right, if any, to an adjustment in the Subcontract Price and/ or the Subcontract Time for delays of any kind or nature.

The Subcontract Time and the Subcontract Price shall not be adjusted and Subcontractor shall not be entitled to any remedy under this Subcontract, or for breach of this Subcontract for (a) delays caused concurrently by Subcontractor and Contractor, Owner or any other person, or (b) any other delays to Subcontractor's Work on the Project for any other events, occurrences, acts or omissions of any person or entity or of any other kind or nature other than that for which an adjustment in the Subcontract Price and/ or the Subcontract Time are expressly authorized in this Section.

Subcontractor-Caused Delays. Subcontractor recognizes and acknowledges that Contractor will suffer substantial Losses if Subcontractor fails to perform the Work in compliance with the Project Schedule. Subcontractor shall indemnify and hold Contractor harmless from and against any and all Losses and liquidated damages that are attributable to or caused by Subcontractor's failure to perform the Work in compliance with the Project Schedule. In addition to liquidated damages, such Losses may include, without limitation, direct jobsite overhead costs such as costs for project management and supervision, quality control, utilities, and other costs such as home office overhead, attorneys' and other professional fees, and other usual and customary mark-ups. If Contractor incurs Losses and/ or is assessed liquidated damages as a result of delays caused concurrently by Subcontractor and other trades or contractors, such Losses and/ or liquidated damages shall be pro rated by Contractor, in its sole discretion, between Subcontractor and all other responsible parties. Contractor's allowing Subcontractor to proceed with Work beyond the time specified for Subcontractor's performance of that Work shall not constitute a waiver of any rights by Contractor to recover damages for Subcontractor's delay.

#### ARTICLE VI

- 6.1 Payment. Contractor shall pay Subcontractor in monthly payments of 95% percent of the work performed in any preceding month, in accordance with estimates prepared by Subcontractor. All such pay estimates shall be made on the sample form provided, entitled "Subcontractor's Application for Payment." Contractor has the unfettered right, at its discretion, to adjust Subcontractor's statements to reflect any overestimation of the percent of work complete made by Subcontractor in a pay estimate.
- 6.2 Pay-If-Paid. When such pay estimates are approved by Contractor and/ or the Owner, Contractor will pay Subcontractor as payments are received by Contractor from the Owner covering the monthly pay estimates of the Contractor, including the approved portion of Subcontractor's monthly pay estimate.

All payments to Subcontractor will be made only from a special fund, namely, from payments made by Owner to Contractor in respect of work performed by Subcontractor. No payments will be made to Subcontractor unless that fund comes into existence. Owner's payment to Contractor for Subcontractor's Work is an express condition precedent to Contractor's obligation to make any payment to Subcontractor.

- 6.3 Delayed Pay Estimate/ Retainage. If the Subcontractor fails to submit a timely request for payment in an amount approved by Contractor, Subcontractor's payment may be delayed. Contractor shall have the right to withhold from any payment the percentage of retention set forth in the General Contract between Contractor and the Owner, but in no case less than five percent of all amounts due Subcontractor until the project is fully completed and accepted by the architect or Owner, and Contractor has received final payment from the Owner.
- 6.4 Payroll Summaries/ Prevailing Wages. Subcontractor agrees to furnish to Contractor one copy of each weekly payroll summary within seven days after the date of payment. Subcontractor agrees to comply with any and all provisions in the General Contract relating to labor standards, minimum wages and other wage and hour provisions to the same extent as they are binding upon Contractor. In the event the Owner requires Contractor to furnish payroll affidavits, subcontractor agrees to furnish similar affidavits to the Contractor.
- 6.5 Withholding. Contractor may withhold payment to Subcontractor in whole or in part to the extent necessary, in Contractor's sole discretion, to protect Contractor against Losses for which Subcontractor is responsible as a result of any Default, as that term is defined below.
- If, at any time prior to final payment, Contractor determines, in its sole discretion, that it is insecure regarding Subcontractor's ability, willingness, or intent to fulfill its warranty obligations under the Subcontract Documents, Contractor may, at its option, withhold final payment during the entire Warranty Period. Subcontractor waives any right to recover interest on the amount withheld during that time. Contractor shall make final payment for Subcontractor's Work within ten (10) days of (1) expiration of the Warranty Period, or (2) Contractor's receipt of adequate assurances from Subcontractor of its ability, willingness and intent to perform the warranty work, subject to receipt of by Contractor of final payment from Owner as provided in Section 6.2.
- 6.6 Backcharges. Where feasible, Contractor shall use reasonable efforts to give Subcontractor notice before any costs are incurred which will be offset against the Subcontract Price. If Subcontractor disagrees with the nature or amount of costs to be incurred, it shall advise Contractor promptly in writing, and in no event later than three (3) days after its receipt of notice from Contractor. Such notification shall include reasons for Subcontractor's dispute and shall propose a reasonable and acceptable alternative along with an estimate of the cost of the alternative, where applicable.
- If Contractor receives no protest to a proposed backcharge or Subcontractor protests and does not provide an alternative to Contractor's proposed action, Contractor may proceed to incur the costs and offset them against the Subcontract Price. Costs so offset shall be deemed to be reasonable and beyond dispute by Subcontractor. If Subcontractor timely protests and proposes a reasonable alternative that Contractor rejects, the disputed costs incurred shall be subject to the dispute resolution procedure outlined in Article XI, if Subcontractor gives Contractor written notice within ten (10) days of such rejection.
- 6.7 Lien Waivers. Subcontractor shall present to Contractor lien waivers for all labor, materials and equipment furnished by others in connection with this Subcontract prior to receiving each payment hereunder. Contractor may require such lien waivers as a condition of progress or final payment.
- Liens. Subcontractor shall timely pay all claims for labor, materials, and equipment incurred in the performance of the Work and shall (1) keep the property on which the Project is situated (the "Property") free from mechanic's liens or attachments, and (2) prevent the filing of any claim or stop notice against funds or the payment of funds owed to Contractor, by any person or entity performing a portion of the Work. If any mechanic's lien, attachment, claim against funds, or stop notice is filed against the Property or funds owed to Contractor arising out of or related to performance of the Work, Subcontractor shall, within ten (10) days after written demand by Contractor, take all reasonable steps necessary to cause the effect of such lien, attachment, claim, or stop notice to be released. Upon request by Contractor, Subcontractor shall obtain a lien release or discharge bond or other bond satisfactory to Contractor in the amount of 150% all liens, attachments, claims, or stop notices so recorded or served.
- 6.9 Acceptance of, or payment for, Subcontractor's defective or late work shall not constitute a waiver of any claim or offset that Contractor may have under the terms of this Subcontract.

#### ARTICLE VII

Indemnification. To the fullest extent allowed by law, Subcontractor shall indemnify and hold harmless 7.1 Contractor, Owner, the project architects and engineers, and all of their respective agents and employees (the "Indemnitees") from and against all claims, damages, losses and expenses including, without limitation, attorney's fees ("Losses"), arising out of or resulting from (1) any Default, or failure by Subcontractor to comply with any express duty, warranty, representation, acknowledgment or covenant in this Subcontract, (2) any charges, claims, or liquidated damages assessed and collected by the Owner against Contractor as a result of and to the extent caused by any act or omission of Subcontractor or its sub-subcontractors, guests or invitees; (3) personal or bodily injury to or death of any person, including, without limitation, any agent, employee, guest or invitee of Subcontractor or its sub-subcontractors, other contractors, Contractor, or Owner, to the extent caused by any act or omission of Subcontractor or its sub-subcontractors, guests or invitees, (4) damage to or loss of property to the extent caused by any act or omission of Subcontractor or its subsubcontractors, guests or invitees, (5) any use of Contractor's equipment, tools, rigging, blocking, hoists, or scaffolding, (6) liens, attachments, claims, or stop notices against funds or payments owed to Contractor, recorded or served by any of Subcontractor's sub-subcontractors, or (7) infringement of any patent or copyright by Subcontractor. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described in this paragraph.

The indemnity agreement shall be covered by Subcontractor's comprehensive general liability insurance policy. The indemnity obligations set forth in this Subcontract shall not be limited by (1) the Subcontract Price, or (2) the amount or type of proceeds, compensation, or benefits available to Subcontractor under any insurance policy including, without limitation, any self-insurance or similar program or policy maintained by Subcontractor.

At the request of an Indemnitee, Subcontractor shall defend any claim for Losses against an Indemnitee. The Indemnitee shall be entitled to approve the legal counsel to be paid for by Subcontractor for the purpose of defending such claims for Losses. No claim for Losses shall be settled or discontinued, nor shall judgment be permitted to be entered without the written consent of the Indemnitee, which consent shall not be unreasonably withheld.

#### ARTICLE VIII

- 8.1 Insurance. Unless otherwise specified in the Subcontract Documents indicating that insurance shall be provided pursuant to an owner-controlled or contractor-controlled insurance program, Subcontractor shall purchase and maintain the following insurance coverages for itself and the Additional Insureds during the course of the Work and during the Warranty Period, and shall maintain completed operations coverage for itself and the Additional Insureds for the length of time necessary to cover any manifestation date within the applicable statutes of limitations and/ or repose which pertain to the Work. If additional insurance coverage or greater limits of liability are required by the General Contract Documents, such provisions shall control.
  - 8.1.1 Commercial General Liability coverage on an occurrence basis with a deductible not to exceed \$1,000 per occurrence that includes coverage for liability assumed under any oral or written contract relating to the conduct of Subcontractors' business, including this Subcontract, and also including (1) broad form property damage liability coverage; (2) premises-operations coverage; (3) explosion and collapse hazard coverage; (4) underground hazard; (5) products and completed operations hazard coverage, and (6) independent contractor coverage. The limit of liability shall be not less than \$1,000,000 each occurrence, \$2,000,000 general aggregate (subject to a per project general aggregate provision applicable to the project per ISO form CG 2503 or its equivalent), \$2,000,000 products/completed operations aggregate and \$1,000,000 personal and advertising injury.

Claims Made/Self-Insurance Provisions. Subcontractor shall not provide general liability insurance under any Claims-Made General Liability form without express prior written consent of Contractor. Any self-insurance program providing coverage in excess of \$25,000 per occurrence requires the prior written consent of the contractor.

8.1.2 Automobile Liability coverage in comprehensive form affording coverage for owned, hired, and non-owned vehicles. The limit of liability shall not be less than \$1,000,000 for bodily injury and property damage combined, \$1,000,000 for each accident. (No aggregate on automobile

- insurance). The General Contractor, Owner and all other parties required of the General Contractor, shall be included as insureds on the auto policy.
- 8.1.3 Workers Compensation and Employers Liability coverage with Workers Compensation limits complying with statutory requirements, and Employers Liability Insurance limits of at least \$1,000,000 each accident, \$1,000,000 for bodily injury by accident, and \$1,000,000 each employee for injury by disease. Workers' compensation insurance shall comply with the statutory form.
- 8.1.4 Commercial Umbrella coverage with limits of at least \$1,000,000. Umbrella coverage must include as insureds all entities that are additional insureds on the CGL. Umbrella coverage for such additional insureds shall apply as primary before any other insurance or self-insurance, including any deductible, maintained by, or provided to, the additional insured other than the CGL, Auto Liability and Employers Liability coverages maintained by the Subcontractor.
- 8.1.5 Hazardous Materials If Subcontractor and/or its subcontractors or suppliers, regardless of tier, perform remediation of hazardous material, or if their operations create an exposure to hazardous materials as those terms are defined in federal, state, or local law, Subcontractor and its subcontractors and suppliers must obtain a "Contractor's Pollution Liability" policy with limits not less than \$1,000,000 per occurrence and \$2,000,000 aggregate for Bodily Injury, Personal Injury, and Property Damage, naming Contractor and Owner as additional insured. If Subcontractor or its subcontractors or suppliers haul hazardous material (including, without limitation, waste), they must carry Auto Liability insurance with a \$1,000,000 Combined Single Limit for Bodily Injury and Property Damage applicable to all hazardous waste hauling vehicles, and include MCS 90 and CA9948.
- 8.1.6 Professional Liability Coverage Any subcontractor performing work that includes design/build work or services shall obtain a Professional Liability Insurance Policy. Design/build work includes, without limitation, design/build work with respect to mechanical, structural, plumbing, and fire sprinkler systems. Coverage must allow for a minimum of two years following the completion of the project. If Owner or Contractor elects to purchase a project design policy, Subcontractor's policy shall be endorsed to provide excess coverage only.

The liability insurance policies, including commercial general liability, automobile liability and excess liability, shall be endorsed to provide: (1) that Contractor and Owner are additional insureds (the "Additional Insureds") per ISO form CG 20 10 07 04 and CG 20 37 07 04 or their equivalent, (2) that the insurance afforded by the policies shall apply to Contractor as though a separate policy had been issued to Contractor, and (3) that the coverage afforded to Contractor is primary and any other insurance in force for Contractor will be excess and will not contribute to the primary policies. All required insurance shall be provided by insurance companies with a rating of A- VII or better by A.M. Best Company.

Prior to performing any Work, Subcontractor shall provide Contractor with a certificate of insurance demonstrating that Subcontractor has obtained all of the insurance coverages required by this Section. An additional insured endorsement shall be attached to such certificate of insurance. The certificate of insurance and the insurance policies effectuating coverages required by this Section shall contain a provision that coverage afforded under the policies will not be canceled or allowed to expire until at least 30 days prior written notice has been given to Contractor.

- 8.2 Subcontractor waives all rights against Contractor, Owner and Architect and their respective agents, officers, directors and employees for recovery of damages to the extent these damages are covered by commercial general liability, commercial umbrella liability, business auto liability or workers compensation or employers liability insurance.
- 8.3 Subcontractor will protect the job site, the work of Contractor and subcontractors, and its own work until completion and acceptance of the entire project. Contractor and Subcontractor waive all rights against each other and against all other subcontractors and Owner for loss or damage to the extent reimbursed by Builder's Risk or any other property or equipment insurance applicable to the work, except such rights as they may have to the proceeds of such insurance. If the Subcontractors policies of insurance referred to in this Section require an endorsement or consent of the insurance company to provide for continued coverage where there is a waiver of subrogation, the owners of such policies will cause them to be so endorsed or obtain such consent.

Upon written request of the Subcontractor, Contractor shall provide Subcontractor with a copy of the Builder's Risk policy of insurance or any other property or equipment coverage in force for the project and procured by Contractor. Subcontractor shall satisfy himself as to the existence and extent of such coverage prior to commencement of Subcontractor's work.

If Builder's Risk insurance purchased by Owner or Contractor provides coverage for Subcontractor for loss or damage to Subcontractor's work, Subcontractor shall be responsible for the insurance policy deductible amount applicable to damage to the Subcontractor's work and/or damage to other work caused by Subcontractor. If not covered under the Builder's Risk policy of insurance or any other property or equipment insurance required by the Contract Documents, Subcontractor shall procure and maintain at his own expense property and equipment insurance for portions of Subcontractor's work stored off the site or in transit.

If Owner or Contractor has not purchased Builder's Risk or equivalent insurance including the full insurable value of Subcontractor's work, then Subcontractor may procure such insurance at his own expense as will protect the interests of Subcontractor, and his subcontractors in the work. Such insurance shall also apply to any of the Owner's or Contractor's property in the care, custody, or control of Subcontractor.

8.4 Health Insurance Certification. Subcontractor hereby certifies that the Subcontractor and all applicable subcontractors and suppliers at any tier that is subject to UCA 63A-5-205 and Utah Administrative Code Rule R23-23, has and will maintain for the duration of this contract, an offer of qualified health insurance coverage for their employees; all in accordance with UCA 63A-5-205, and Utah Administrative Code Rule R23-23.

#### ARTICLE IX

- 9.1 Default. The following acts or omissions by Subcontractor shall constitute events of default ("Default") under this Subcontract and shall give rise to all rights and remedies for material breach of this Subcontract, including, without limitation, termination of this Subcontract:
  - (a) failure to perform the Work in strict compliance with this Subcontract and the Subcontract Documents.
  - (b) failure to promptly and diligently correct or replace Defective Work.
  - (c) failure to diligently perform the Work in compliance with the Project Schedule including, without limitation, failure to supply sufficient skilled laborers, materials, or equipment.
  - (d) failure to provide reasonable assurances of timely performance.
  - (e) failure to provide timely submittal information for review and approval as provided in the Subcontract Documents.
  - (f) failure or evidence of failure to timely pay workers, subcontractors, or health, welfare, pension or other benefit funds for labor, materials or equipment furnished as part of the Work.
  - (g) failure to keep the Property free from mechanic's liens.
  - (h) third party claims or evidence indicating, in Contractor's sole discretion, probable filing of such claims unless Subcontractor provides security against such claims in a form acceptable to Contractor.
  - (i) failure to pay prevailing wages, if required.
  - (j) assignment or subcontracting the majority of the Work without prior written authorization from Contractor.
  - (k) failure to perform the Work in strict compliance with the Laws and Regulations or the Safety Rules and Regulations.

- (I) evidence that the Work can not be completed for the unpaid balance of the Subcontract Price, as determined by Contractor in its sole discretion.
- (m) evidence that the Work will not be completed within the Subcontract Time, and/ or that the unpaid balance will not be adequate to cover actual or liquidated damages for the anticipated delay, as determined by Contractor in its sole discretion.
- (n) damage to the work of Contractor or others on the Project.
- (o) insolvency, inability to pay its current obligations, filing of any action seeking the protection of a bankruptcy court where this Subcontract is rejected by the trustee or the Subcontractor is unable to satisfy the requirements for assuming this Subcontract under the applicable provisions of the bankruptcy code, seeking to effect reorganization or workout with its creditors, filing in bankruptcy court by its creditors seeking to compel Subcontractor to reorganize or liquidate assets, appointment of a receiver or trustee related to any insolvency of Subcontractor, and garnishment of any amounts owed by Contractor to Subcontractor;
- (p) any other material breach of this Subcontract or the Subcontract Documents; and
- (q) any act, occurrence or event that places Subcontractor in default under any agreement between Contractor and Subcontractor other than this Subcontract.
- 9.2 Notice of Default. Upon written notice of Default, Subcontractor shall, within forty-eight (48) hours of receipt of such notice, take all actions requested by Contractor and such other actions as may be necessary to cure such Default. Subcontractor shall not be entitled to any adjustment in the Subcontract Price or the Subcontract Time as a result of any efforts to cure such Default.
- 9.3 If Subcontractor fails to cure any Default within forty-eight (48) hours after receipt of written notice of Default, Contractor may cure or remedy any Default by Subcontractor. Subcontractor shall reimburse Contractor and/or Contractor may backcharge Subcontractor for, any and all Losses it incurs, plus a reasonable allowance for profit, to cure or remedy any Default, or as a result of any other failure of Subcontractor to comply with the terms and conditions of this Subcontract or the Subcontract Documents. Contractor may offset against the Subcontract Price any Losses incurred as a result of a Default or any amounts owed to Contractor pursuant to this Section.

#### ARTICLE X

10.1 Termination for Cause. If (1) Subcontractor fails to cure any Default within forty-eight (48) hours after receipt of written notification of such Default, or (2) a Default threatens to cause immediate personal or bodily injury or death, Contractor may terminate Subcontractor's rights under this Subcontract in its entirety and Contractor shall have all the rights and remedies available under this Subcontract and at law or in equity including, without limitation, those remedies specified below.

If Contractor terminates this Subcontract for cause as provided herein, Contractor may, without prejudice to any other of its rights or remedies, perform and complete the Work and in connection therewith, Contractor may do any or all of the following:

- 10.1.1 exclude Subcontractor from the Project.
- 10.1.2 take possession of all materials, equipment, and tools intended for performance of the Work including materials and equipment at the Project site, stored materials and equipment, and materials and equipment in the course of preparation wherever located (without liability to Subcontractor for trespass or conversion),
- 10.1.3 accept assignment of Subcontractor's rights under all of Subcontractor's contracts with subsubcontractors for performance of the Work, pursuant to Section 3.9 and/or
- 10.1.4 otherwise obtain materials and equipment and employ persons which, in Contractor's sole discretion, are necessary to complete the Work.

Upon termination for cause as provided herein, Subcontractor shall not be entitled to receive any further payment until completion of all of the Work and acceptance of the entire Project. Subcontractor shall reimburse Contractor for all Losses it incurs to complete Subcontractor's Work, plus a reasonable allowance for overhead and profit. If the unpaid balance of the Subcontract Price exceeds the Contractor's Losses, plus allowance for overhead and profit, Contractor shall pay such excess to Subcontractor. If such Losses, overhead, and profit exceed the unpaid balance of the Subcontract Price, the Subcontractor shall pay the difference to Contractor. In addition, Contractor shall be entitled to such other and further remedies available at law or in equity.

- 10.2 Suspension for Convenience. Contractor may, without cause, suspend, delay or interrupt the Work in whole or in part for such period of time as the Contractor may determine and/ or as provided in the Subcontract Documents. Subject to the requirements and limitations of Article V, the Subcontract Price and Subcontract Time may be adjusted for increases in the cost and time to complete the Work caused by such suspension. No adjustment shall be made, however, to the extent that (a) performance is, was or would have been so suspended, delayed or interrupted by another cause for which the Subcontractor is responsible, (b) an adjustment is made or denied under another provision of this Subcontract, or (c) Contractor is not entitled to a adjustment in the contract price and/ or the contract time under the General Contract on behalf of Subcontractor as a result of such suspension.
- 10.3 Termination for Convenience. The Contractor may, at any time, terminate this Subcontract for the convenience of Contractor and without cause. Subcontractor's sole and exclusive right to compensation for Losses resulting from such termination shall be the compensation actually received by Contractor from Owner on behalf of Subcontractor as a result of any such termination. Subcontractor shall not be entitled to any compensation for Losses or any other remedy under this Subcontract or for breach thereof as a result of such termination beyond such adjustment in the contract price and/ or the contract price to the Prime Contract received by Contractor from Owner on behalf of Subcontractor. Receipt by Contractor of such compensation is a condition precedent to Subcontractor's right, if any, to compensation for Losses resulting from such termination. Subcontractor's right to recover for such termination shall be limited to the compensation received by Contractor from Owner for such termination on behalf of Subcontractor.

#### ARTICLE XI

- 11.1 Dispute Resolution. Disputes, if any, between Subcontractor and Contractor arising out of or relating to this Subcontract or the Work shall be resolved as provided in this Article.
- 11.2 Disputes Involving the Owner or the Architect. Any disputes in which the Owner or the Architect is a party shall be governed by the dispute resolution procedures in the Subcontract Documents other than this Subcontract. If those Subcontract Documents contain no dispute resolution procedures, such disputes shall be resolved as provided in Section 11.3 below.
- 11.3 Disputes Not Involving the Owner or the Architect. At the sole and exclusive discretion of Contractor, all disputes in which neither the Owner nor the Architect is a party shall be resolved in (1) binding arbitration, or (2) litigation in a state or federal court of competent jurisdiction situated in the state of the location of the Project. If Contractor determines to resolve disputes under this Subcontract by binding arbitration, the following rules shall apply.
  - 11.3.1 Binding Arbitration shall be pursuant to the current Construction Industry Arbitration Rules of the American Arbitration Association unless the parties mutually agree otherwise. A written demand for arbitration shall be filed with the American Arbitration Association and the other party within a reasonable time after the dispute or claim has arisen, but in no event after the applicable statute of limitations for a legal or equitable proceeding would have run.
  - 11.3.2 Any Arbitration pursuant to this Subcontract may be joined or consolidated with any arbitration involving (1) any other person or entity necessary to resolve the claim, dispute or controversy, (2) the same transaction or series of related transactions as those in the Arbitration, or (3) a common issue of law or fact with those in the Arbitration creating the possibility of conflicting rulings by more than one arbitrator or panel of arbitrators. The location of the arbitration proceedings shall be in the state of the location of the Project. The arbitration award shall be final.
  - 11.3.3 Arbitration pursuant to this Section shall be governed by the applicable version of the Uniform Arbitration Act in enacted by the state of the location of the Project. The arbitrator, in

determining an award, shall be without jurisdiction to enter any award not in conformity with the laws determined by the parties to be controlling pursuant to Section 12.4. The arbitrator shall have all authority necessary to enforce all the terms and conditions of this Subcontract and provide for all remedies available hereunder including, without limitation, interim relief, if appropriate. The arbitrator shall prepare a (1) reasoned award, or (2) findings of fact and conclusions of law, applying the governing laws to the facts of the case.

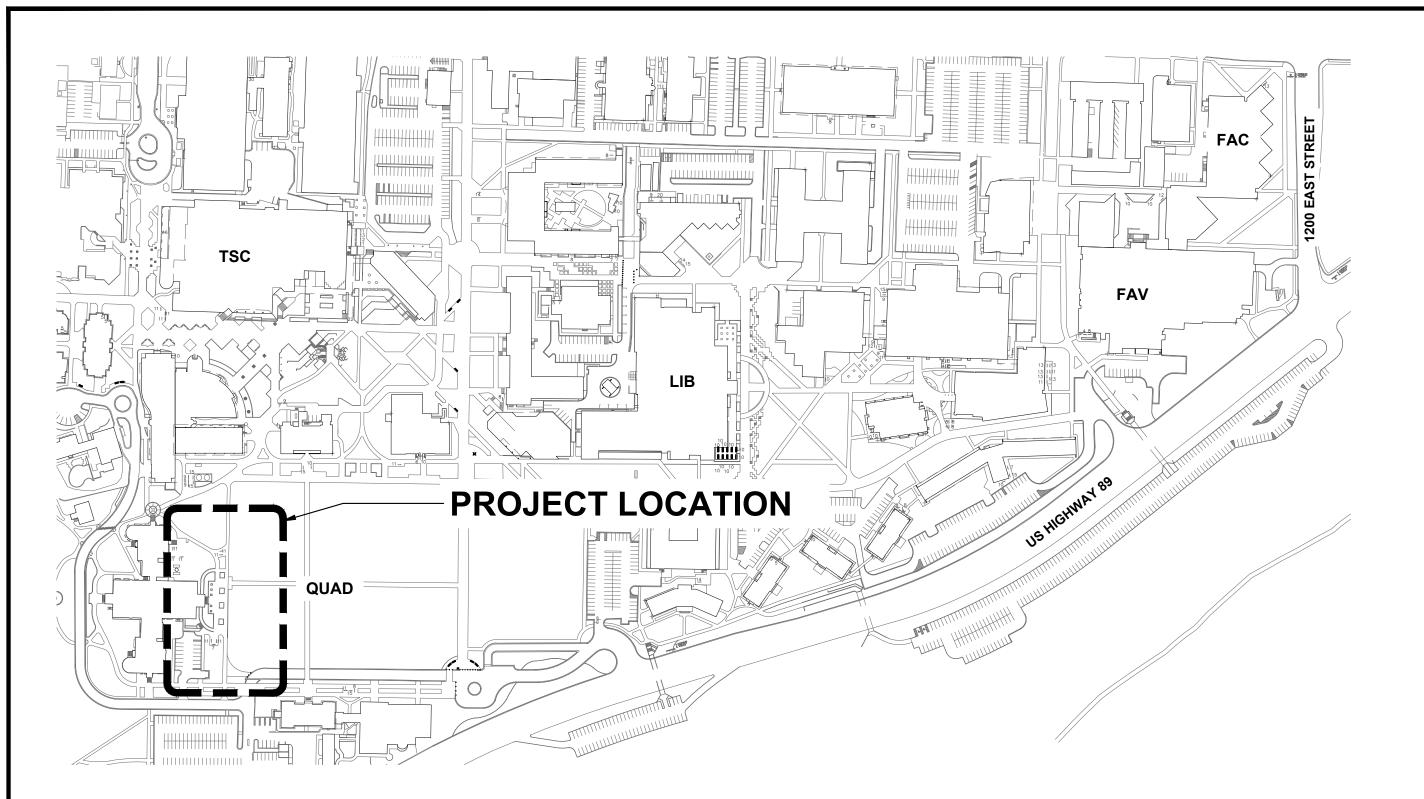
- 11.3.4 Notwithstanding the foregoing, the arbitrator shall be deemed to have exceeded the authority granted under this Subcontract if, and to the extent, an award does not comply with the requirements of this Subcontract. The Parties consent to the jurisdiction of the state and federal courts of the state in which the Project is located for the purposes of (1) enforcing the parties' obligation to arbitrate disputes, claims and controversies under this Subcontract, (2) determining the scope of the matters that are subject to arbitration, (3) requiring the joinder and/or consolidation of matters subject to arbitration, and (4) enforcing and entering judgment upon the arbitration award entered by the arbitrator. Each Party waives any objection that it may now have or hereafter have to venue in such courts.
- 11.3.5 If any action or proceeding is brought in connection with this Subcontract, the prevailing party shall be entitled to recover its costs and reasonable expert and attorneys' fees.

#### ARTICLE XII

- 12.1 This Subcontract and the Subcontract Documents constitute the final, complete, and exclusive statement of the agreement between the parties, and supersedes and replaces in their entirety all prior oral or written agreements, including but not limited to, bids and bid acceptances. This Subcontract may not be altered, amended or extended, except by written agreement of the parties hereto executed by James Gramoll on behalf of Contractor.
- 12.2 This Subcontract shall inure to the benefit of and be binding upon the parties hereto, their successors and permitted assigns.
- 12.3 Delay by Contractor in enforcing any rights or remedies in the event of Default or a breach of any term or condition of this Subcontract or any other contract between Contractor or Subcontractor, shall not be construed as a waiver of such Default or breach. Payment by Contractor of progress payments or final payment shall not be construed as acceptance of any work for which payment is made or waiver of any Claims, rights, or remedies under this Subcontract.
- 12.4 This Subcontract shall be construed and interpreted as a whole in accordance with its fair meaning and in accordance with the laws of the state of the location of the Project. Under no circumstances, however, shall such laws be interpreted to apply conflict of laws principles to require the laws of another state to determine the interpretation or construction of this Subcontract.
- 12.5 Performance Guaranty. If Subcontractor operates as a corporation, limited liability company, partnership or a business entity other than as an individual or sole proprietor, this Subcontract will be signed by the President and Secretary of the corporation, the managing member(s), partners, or other authorized principals of Subcontractor's company, and the officers, managing member(s), partners, and/ or other principals signing this Subcontract on behalf of the corporation, limited liability company, partnership or other business entity do jointly and severally, guarantee to the Contractor the full and faithful performance of this Subcontract by Subcontractor, and do further agree, jointly and severally, that they shall be personally liable to Contractor for the full and faithful performance of Subcontractor's obligations under this Subcontract. Failure of Contractor to request a performance bond from Subcontractor shall not affect the obligation assumed by the officers, managing members, partners or other principals signing this Subcontract on behalf of Subcontractor.

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Print \_\_\_\_\_ James C. Gramoll, President



# Utah State University QUAD PORTAL - OLD MAIN

#### INDEX OF SHEETS:

#### CIVIL/SITE IMPROVEMENT DRAWINGS

sheet name	sheet #	
COVER & INDEX SHEET	G001	
CIVIL/SITE NOTES	G002	
EXISTING SITE & DEMOLITION PLAN	C001	
SITE LAYOUT PLAN	C100	
SITE UTILITY & GRADING PLAN	C200	
SITE DETAILS	C500	

#### LANDSCAPE DRAWINGS

sheet name	sheet #
PLANTING PLAN	L100
IRRIGATION PLAN	L200

## VICINITY MAP

OWNER CONTACT

UTAH STATE UNIVERSITY 1295 East 700 North - UMC 6600 Logan, Utah 84322-6600 ATTN: Lorin Wilcox Office: 435-797-0073 Mobile: 605-323-5047

Email: lorin.wilcox@usu.edu

#### STEERING COMMITTEE MEMBERS:

Ben Berrett, Director - USU Facilities Planning, Design & Construction Lorin Wilcox, Construction Project Manager - USU Facilities Planning, Design & Construction Jordy Guth, Project Planning Project Manager - USU Facilities Planning, Design & Construction Jim Huppi, Campus Landscape Architect - USU Facilities Planning, Design & Construction

Engineering

#### TECHNICAL DESIGN TEAM:

PROJECT MANAGER (CONSULTANT) CACHE LANDMARK 95 Golf Course Rd, Suite 101 Logan, Utah 84321 435-713-0099 ph ATTN: Lance Anderson, PE lance@cachelandmark.com

LANDSCAPE ARCHITECT CACHE LANDMARK 95 Golf Course Rd, Suite 101 Logan, Utah 84321 435-713-0099 ph ATTN: Jennifer Maughan, LA jmaughan@cachelandmark.com CONSTRUCTION MANAGER/GENERAL CONTRACTOR:

GRAMOLL CONSTRUCTION 155 South 750 West North Salt Lake, Utah 84054 801-295-2341 office ATTN: Gary Hansen gary@gramoll.com 801-949-2304

QUAD UTAH STAT



95 Golf Course Rd. Suite 101 Logan, UT 84321 435.713.0099

29 SEPTEMBER 2021

J. MAUGHAN CHECKED BY:

APPROVED BY: L. ANDERSON

L. ANDERSON

690-2101

G001

Surveying

EROSION CONTROL NOTES AND SYMBOLS SHOWN ON THE PLANS ARE DIAGRAMMATIC AND ARE INTENDED TO BE VIEWED AS A GUIDELINE FOR LOCATING AND IMPLEMENTING EROSION CONTROL BEST MANAGEMENT PRACTICES (BMPs).

IT IS THE CONTRACTORS RESPONSIBILITY TO PREPARE THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) & FINALIZE THE TYPE AND LOCATION OF ALL BMPs IN ORDER TO MEET THE REGULATIONS OF THE STATE OF UTAH. IT IS THE CONTRACTORS RESPONSIBILITY TO SUBMIT NOTICE OF INTENT (NOI) PRIOR TO ANY EARTH DISTURBING ACTIVITIES.

THE PREPARATION OF A STORMWATER POLLUTION PREVENTION PLAN IS REQUIRED TO BE COMPLETED BY THE CONTRACTOR. THE CONTRACTOR IS REQUIRED TO REVIEW OPERATIONS PLANS WITH UTAH STATE'S MS4 PROGRAM COORDINATOR PRIOR TO ANY EARTH DISTURBING ACTIVITIES.

#### PROGRAM COORDINATOR: LANCE MAUGHAN (435)797-7309

OWNER/CONTRACTOR IS RESPONSIBLE TO OBTAIN A UPDES STORMWATER DISCHARGE PERMIT AND IS RESPONSIBLE FOR DEVELOPING AND IMPLEMENTING A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AS PER THE REQUIREMENTS OF THE UPDES STORMWATER CONSTRUCTION PERMIT (NOI PERMIT #

#### 2. LIMITS OF DISTURBANCE

THE LIMIT OF DISTURBANCE LINE SHOWN ON THIS DRAWING IS FOR MAJOR DEMOLITION AND EXCAVATION OF CIVIL RELATED ELEMENTS. IT IS ANTICIPATED THAT THERE MAY BE SOME ADDITIONAL DISTURBANCE OUTSIDE OF THESE LIMITS.

THE CONTRACTOR IS RESPONSIBLE FOR ENSURING EROSION CONTROL BMPs ARE IMPLEMENTED FOR ALL EARTH DISTURBING ACTIVITIES, AND THAT DISCHARGE OF SEDIMENT LADEN RUN-OFF IS NOT PERMITTED.

#### STREET CLEANING:

IF SEDIMENT IS TRANSPORTED ON TO THE STREET, IT SHALL BE REMOVED ON A DAILY BASIS. SEDIMENT SHOULD BE SHOVELED AND/OR SWEPT FROM THE ASPHALT OR CONCRETE SURFACE AND DISPOSED OF IN A MANNER, WHICH PREVENTS CONTAMINATION WITH STORMWATER OR SURFACE WATER (E.G., COVERED SOIL STOCKPILE). IN ADDITION, A STREET SWEEPER MAY BE USED TO MAINTAIN CLEAN HARDSCAPE AREAS ON AN AS-NEEDED BASIS.

#### 4. CONSTRUCTION ENTRANCES & VEHICLE WASH-DOWN AREAS:

CONTRACTOR TO ENSURE CONTROL OF SEDIMENT AT THE CONSTRUCTION EXIT POINT.

THE STABILIZED CONSTRUCTION ENTRANCE CONSISTS OF A COBBLE PAD (STABILIZED AREA) LINED BELOW WITH FILTER FABRIC, GRADED TO DRAIN AND CONNECT TO AN ADJACENT DRAINAGE SWALE AND CONVEY WATER TO A TEMPORARY SEDIMENTATION BASIN TO COLLECT WASH WATER FOR SETTLEMENT OF DEBRIS. WASH WATER MAY BE RE-USED AFTER SETTLING, INFILTRATED ON SITE, OR TRANSPORTED OFF SITE FOR DISPOSAL. ACCUMULATED SEDIMENTS MAY BE REUSED ON SITE OR DISPOSED OF OFF SITE.

#### 5. CONCRETE CLEANOUT BASIN:

A LINED BASIN SHALL BE PLACED AS NECESSARY FOR ALL CONCRETE DELIVERY VEHICLES & THEY SHALL BE REQUIRED TO WASH OUT ONLY INTO THE BASIN. CONTRACTOR SHALL REMOVE WASTE AND DISPOSE OF IN A LAWFUL MANNER AS NECESSARY.

CONCRETE WASH OUT MAY NOT BE DISPOSED OF ON-SITE OR ALLOWED TO INFILTRATE.

#### DUST CONTROL

SOILS, GRAVELS, AND ETC., WHETHER STOCKPILED OR PLACED, SHALL BE KEPT COVERED AND/OR ADEQUATELY MOIST TO PREVENT AIRBORNE DUST FROM LEAVING THE SITE. ALL CONSTRUCTION AREAS AND EXISTING PAVED AREAS SHALL BE KEPT ADEQUATELY MOIST TO PREVENT AIRBORNE DUST FROM LEAVING THE SITE.

#### 7. DRAIN INLET PROTECTION:

ALL EXISTING STORM DRAIN INLETS, SUMPS AND STORM DRAIN PIPES WITHIN THE PROJECT AREA OR WHICH MAY RECEIVE RUNOFF FROM THE PROJECT AREA SHALL BE PROTECTED ON-SITE. INLET PROTECTION TO BE INSTALLED AND APPROVED/INSPECTED PRIOR TO ANY EARTH DISTURBING ACTIVITIES.

ALL STORM DRAINS, SUMPS, AND STORM DRAIN PIPES THAT ARE INSTALLED OR MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED TO PREVENT STORM WATER FROM ENTERING WITHOUT FIRST BEING FILTERED OR TREATED TO REMOVE SEDIMENT. METHOD OF PROTECTION SHALL BE AS SHOWN OR APPROPRIATE TO NEED.

#### 8. PERIMETER CONTROL

### SILT FENCING:

SILT FENCING or OTHER SUITABLE PERIMETER CONTROL SHALL BE INSTALLED IN LIMITED LOCATIONS ALONG THE PROJECT LIMIT LINE, ESPECIALLY AT LOW AREAS AND OTHER AREA WHERE STORMWATER DISCHARGES FROM THE

IT IS THE CONTRACTORS RESPONSIBILITY TO WALK THE PERIMETER OF THE CONSTRUCTION SITE AND TO DETERMINE ALL APPROPRIATE LOCATIONS FOR SILT FENCING. SILT FENCING MAY BE COORDINATED AND INSTALLED IN CONJUNCTION WITH OTHER BMPs TO PREVENT RUNOFF FROM LEAVING THE SITE DURING CONSTRUCTION.

#### SANDBAGGING:

SANDBAGS MAY BE REQUIRED TO PREVENT RUNOFF ON HARDSCAPE AREAS THAT MAY NOT BE REMOVED AS PART OF DEMOLITION, AND DO NOT ALLOW FOR PROPER INSTALLATION OF SILT FENCE. SANDBAGS MAY BE USED ON EXISTING CONCRETE, ASPHALT, OR CURB AND GUTTER AREAS. SANGBAGS ARE TO BE USED TO ENSURE NO UNTREATED RUNOFF ESCAPES THE SITE.

#### 9. TEMPORARY SWALE

A TEMPORARY SWALE MAY BE INSTALLED PROVIDING CONVEYANCE FROM THE CONSTRUCTION WASHDOWN AREA TO A TEMPORARY SEDIMENTATION BASIN LOCATED ON-SITE. THE SWALE SHALL BE SIZED AS NECESSARY TO MEET THE NEED, BUT SHALL NOT EXCEED 4' WIDE AND 6" DEEP. THE SWALE SHALL BE INSTALLED IN CONJUNCTION WITH THE OTHER SELECTED BMPs TO ENSURE NO UNFILTERED RUNOFF LEAVES THE SITE.

#### 10. TEMPORARY SEDIMENTATION BASIN:

A TEMPORARY SEDIMENTATION BASIN MAY BE USED TO ALLOW SEDIMENT TO FALL OUT OF RUNOFF FROM STORM EVENTS AND FROM THE WASHOUT AREA AND OTHER AREAS ON SITE WHERE RUNOFF IS NOT CONTAINED AND IS LIKELY TO CONTAIN SEDIMENT.

#### 11. CHECK DAM:

CONTRACTOR TO PROVIDE A CHECK DAM AS SHOWN ON THE PLANS WITHIN THE EXISTING ROADWAY DITCH/SWALE. CHECK DAMS TO BE CONSTRUCTED PER THE STORM WATER POLLUTION PREVENTION PLAN AND INSTALLED NEAR THE LOCATIONS SHOWN ON PLAN OR AT A MINIMUM SPACING OF 500 FEET.

#### 12. INSTALLATION SEQUENCING:

INLET PROTECTION, TEMPORARY SEDIMENT BASINS, SILT FENCE, SANDBAGS, AND OTHER BMPs INTENDED TO TRAP SEDIMENT ON SITE SHALL BE INSTALLED BEFORE LAND-DISTURBING ACTIVITIES TAKE PLACE. TEMPORARY SWALE/CONVEYANCE AND STABILIZED CONSTRUCTION ACCESS AND WASH-DOWN AREAS SHOULD BE CREATED IMMEDIATELY UPON INITIAL REMOVAL OF EXISTING MATERIAL AS A PRELIMINARY STEP IN THE SITE DEMOLITION PROCESS INLET PROTECTION MEASURES SHOULD REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETE AND ALL FINISH GRADE MATERIALS HAVE BEEN PLACED.

#### AS DETERMINED BY CONTRACTOR.

13. OTHER SELECTED BMPS:

#### **DEMOLITION GENERAL NOTES**

- 1. THE CONTRACTOR SHALL REVIEW DEMOLITION PLAN AND COMPARE WITH EXISTING CONDITIONS. THE CONTRACTOR SHALL RESOLVE ANY DISCREPANCIES BETWEEN THE DEMOLITION PLAN AND EXISTING CONDITIONS WITH UNIVERSITY PERSONNEL, THE CIVIL ENGINEER AND/OR THE RESPECTIVE UTILITY COMPANY PRIOR TO ANY DEMOLITION ACTIVITIES.
- 2. THE CONTRACTOR SHALL PROMPTLY REPAIR ANY DAMAGES TO ADJACENT FACILITIES OR FINISHES CAUSED BY DEMOLITION OR CONSTRUCTION WORK. ALL REPAIR WORK SHALL BE AT NO ADDITIONAL COST TO THE UNIVERSITY.
- 3. THE PROJECT AREA SHALL BE KEPT CLEAN AND FREE OF DEBRIS AND REFUSE AT ALL TIMES. CONTRACTOR TO REMOVE ALL DEMOLITION DEBRIS FROM SITE IMMEDIATELY UPON DECONSTRUCTION AND TO ENSURE PROPER AND LEGAL DISPOSAL OF ALL DEMOLITION MATERIAL.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL EXISTING UTILITIES. IF DISCREPANCIES EXIST BETWEEN THE DEMOLITION PLAN AND EXISTING SITE CONDITIONS, THE CIVIL ENGINEER MUST BE NOTIFIED IMMEDIATELY.
- 5. THE CONTRACTOR SHALL CONTACT THE CIVIL ENGINEER IMMEDIATELY IF THERE IS ANY DOUBT AS TO THE REMOVAL OR PRESERVATION OF ANY ELEMENT WITHIN THE PROJECT AREA.
- EXISTING UNDERGROUND INSTALLATIONS AND PRIVATE UTILITIES SHOWN ON THE DEMOLITION PLAN ARE APPROXIMATE LOCATIONS. THE CIVIL ENGINEER DOES NOT GUARANTEE THE ACCURACY OF SUCH INFORMATION, BUT PROVIDES IT FOR REFERENCE ONLY. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES PRIOR TO ANY DEMOLITION ACTIVITIES.
- 7. THE CONTRACTOR SHALL COORDINATE ALL INFORMATION SHOWN ON DEMOLITION PLAN WITH ALL OTHER PLANS IN DOCUMENT SET PRIOR TO CONSTRUCTION.
- 8. ALL EXISTING TREES TO REMAIN SHALL BE IRRIGATED AND PROTECTED WITH A TEMPORARY FENCE PLACED AT THE DRIP LINE OF THE TREE FOR THE DURATION OF ALL CONSTRUCTION ACTIVITIES. CONTRACTOR TO COORDINATE TREE PROTECTION WITH LANDSCAPE (L) DRAWINGS.
- 9. CONTRACTOR TO WORK WITH USU LANDSCAPE OPERATIONS AND MAINTENANCE (LOAM) TO CLEARLY IDENTIFY ROLES AND RESPONSIBILITIES FOR TREE REMOVAL & WORK UNDER DRIP LINES AND TREE CARE DURING CONTSTRUCTION.
- 10. USU AND BLUE STAKES DIGGING PERMIT REQUIRED.
- 11. CONTRACTOR TO LEGALLY DISPOSE OF ALL WASTE AND DEBRIS.
- 12. RECYCLE ASPHALT, CONCRETE, METALS, ETC, WHERE POSSIBLE. TREES AND OTHER VEGETATION TO GO TO LOGAN GREEN WASTE FACILITY.
- 13. CONTRACTOR TO COORDINATE ALL EXISTING ROOF DRAIN LOCATIONS (IF IMPACTED AND APPLICABLE) AND PROVIDE FOR NECESSARY ROOF DRAINAGE AND DISCHARGE AS NECESSARY DURING CONSTRUCTION

#### TREE PROTECTION NOTES:

WITIHIN THE ACTIVE ROOT ZONE

1. WHEN REMOVING EXISTING CONCRETE FROM WITHIN ROOT PROTECTION ZONE, DO NOT STRIP EXISTING SOIL BELOW CONCRETE

2. ROOT PROTECTION ZONE TO BE FENCED OFF USING ORANGE CONSTRUCTION FENCING. PORTIONS OF ROOT ZONE UNABLE TO BE PROTECTED BY FENCING DUE TO ACCESS ISSUES MUST BE PROTECTED WITH STRUCTURAL GRID AND APPROVED BY USU LOAM PRIOR TO PLACEMENT OF GRID

3. UNDER NO CIRCUMSTANCES ARE ANY FORM OF CONSTRUCTION MATERIALS, EQUIPMENT OR OTHER RELATED ITEMS TO BE PARKED, STORED OR PLACED WITHIN THE ROOT PROTECTION ZONE.

4. UPON FINAL LANDSCAPING, ROOT PROTECTION ZONE MAY BE ALTERED DUE TO REQUIRED DESIGN

ELEMENTS. AVOID CURB AND EDGE TRENCHING INTO THE ACTIVE ROOT ZONE. ALL TRENCHING IN ROOT ZONE TO BE COMPLETED BY USU AND AIR SPADE. ANY REQUIRED UTILITY OR PIPE INSTALLATIONS TO BE BORED BELOW ACTIVE ROOT ZONE.

APPROXIMATELY 3 FEET IN DEPTH. VERIFY ACTIVE ROOT ZONE DEPTH PRIOR TO BORING AND INFORM LANDSCAPE ARCHITECT OF FINDINGS.

AREA. INJECT FERTILIZER ON 3'X3' GRID THROUGHOUT ROOT PROTECTION ZONE. 7. FINAL SOIL/MULCH TREATMENTS TO INCLUDE 4 INCHES OF MINI-BARK; PLACED DIRECTLY ON TOPSOIL

6. PRIOR TO FINAL LANDSCAPE/HARDSCAPE INSTALLATION, DEEP FERTILIZE ROOT ZONE PROTECTION

#### LAYOUT GENERAL NOTES:

- 1. NO WORK IS TO BEGIN UNTIL ALL NECESSARY PERMITS HAVE BEEN OBTAINED. GENERAL CONTRACTOR TO OBTAIN AND PAY FOR ALL NECESSARY PERMITS.
- 2. REQUIREMENTS SHOWN ON SITE PLAN SHALL GOVERN. GENERAL CONTRACTOR SHALL POINT OUT ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
- 3. ENTIRE INSTALLATION SHALL MEET ALL APPLICABLE CODES.
- 4. CONTRACTOR TO FIELD VERIFY ALL CONDITIONS AND DIMENSIONS ON-SITE
- GENERAL CONTRACTOR TO PROVIDE ALL EQUIPMENT, PERSONNEL AND CONSTRUCTION STAKING REQUIRED FOR FINAL CHECKOUT OF ALL FACILITIES BY OWNER'S REPRESENTATIVE.
- GENERAL CONTRACTOR TO KEEP THE PROJECT SITE NEAT AND ORDERLY. GENERAL YARD CLEAN UP SHALL BE CONDUCTED AT THE END OF EACH DAY AND SHALL MEET THE APPROVAL OF THE OWNER'S REPRESENTATIVE PRIOR TO PROJECT COMPLETION.
- 7. THE GENERAL CONTRACTOR SHALL PROVIDE A COMPREHENSIVE TRAFFIC CONTROL PLAN WHICH SHALL BE SUBMITTED TO AND APPROVED BY USU PRIOR TO COMMENCEMENT OF WORK.
- 8. THE STANDARDS AND SPECIFICATIONS GOVERNING THIS PROJECT SHALL BE THE CURRENT UTAH STATE UNIVERSITY CONSTRUCTION STANDARDS AND SPECIFICATIONS, LATEST REVISION. ALL WORK SHALL BE IN CONFORMANCE WITH THESE STANDARDS AND SPECIFICATIONS. USU STANDARDS AND SPECIFICATION MAY BE FOUND AT THE FOLLOWING WEB PAGE. http://www.usu.edu/facilities/planning/designreq.cfm
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE APPROPRIATE USU PERSONNEL WHEN CONSTRUCTION COMMENCES IN THE VICINITY OF ANY EXISTING UTILITY LINES AND TO ARRANGE FOR A REPRESENTATIVE OF THE UNIVERSITY TO BE PRESENT IF THE CONTRACTOR'S OPERATIONS ARE IN CLOSE PROXIMITY TO ANY EXISTING OR RELOCATED LINES WHICH COULD CREATE A HAZARDOUS CONDITION.
- 10. IN ADDITION, IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY ALL UTILITIES WHEN CONSTRUCTION WORK BEGINS IN THE VICINITY OF ANY UTILITY LINES AND TO ARRANGE FOR A REPRESENTATIVE OF THE UTILITY TO BE PRESENT IF THE CONTRACTOR'S OPERATIONS ARE IN CLOSE PROXIMITY TO ANY LINES IN THEIR EXISTING OR RELOCATED POSITION WHICH COULD CREATE A HAZARDOUS CONDITION.
- 11. CONTRACTOR TO PROVIDE A WRITTEN 7-DAY ADVANCE NOTICE TO USU FACILITIES FOR ALL UTILITY SHUT DOWNS, ROADWAY CLOSURES, SIDEWALK CLOSURES, OR ANY OTHER ACTIVITY THAT IMPACTS NORMAL CAMPUS OPERATIONS.
- 12. WHERE THERE IS A CONFLICT BETWEEN THESE PLANS AND THE SPECIFICATIONS, OR ANY APPLICABLE STANDARDS, THE HIGHER QUALITY STANDARD SHALL APPLY.
- 13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ROADS & WALKWAYS FREE AND CLEAR OF ALL CONSTRUCTION DEBRIS AND DIRT TRACKED FROM THE SITE.
- 14. DIMENSIONS FOR LAYOUT AND CONSTRUCTION ARE NOT TO BE SCALED FROM ANY DRAWING. IF PERTINENT DIMENSIONS ARE NOT SHOWN, CONTACT THE ENGINEER FOR CLARIFICATION, AND ANNOTATE THE DIMENSION ON THE AS-BUILT RECORD DRAWINGS.
- 15. CONTRACTOR TO PROVIDE A PEDESTRIAN ACCESS PLAN PRIOR TO CONSTRUCTION.
- 16. GENERAL CONTRACTOR TO PROVIDE ALL EQUIPMENT, PERSONNEL, AND CONSTRUCTION STAKING REQUIRED FOR FINAL CHECKOUT OF ALL FACILITIES BY OWNER'S REPRESENTATIVE.
- 17. GENERAL CONTRACTOR TO PERFORM SITE CLEAN-UP AT COMPLETION OF WORK.

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29 SEPTEMBER 2021 N/A

J. MAUGHAN CHECKED BY:

J. MAUGHAN

APPROVED BY: L. ANDERSON

690-2101

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NO.: DATE: DESCRIPTION:



XISTING SITE &

QUAD PORTALS
UTAH STATE UNIVERSIT



Cache • Landmark

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29 SEPTEMBER 2021
SCALE:

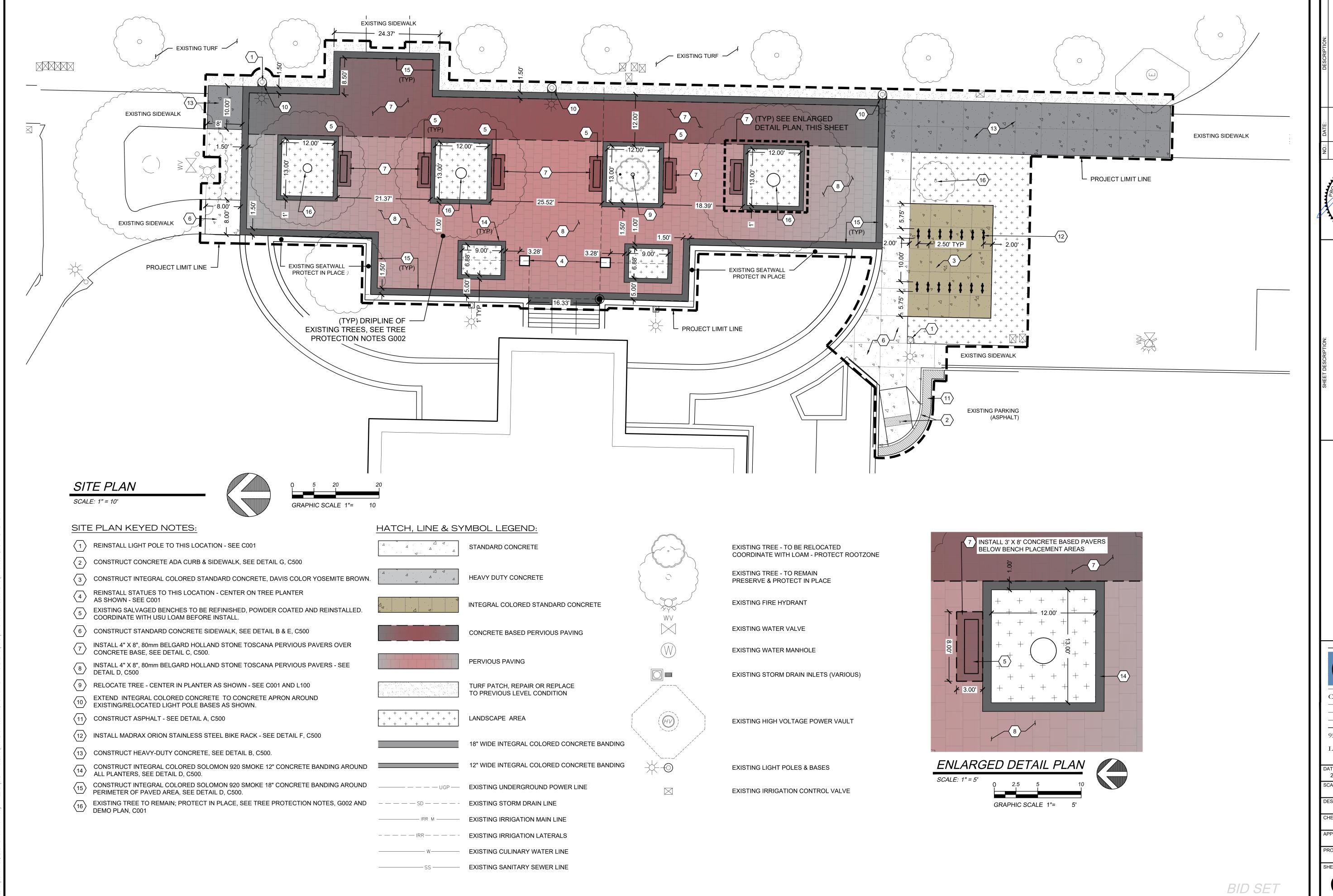
1" = 10' DESIGN BY:

J. MAUGHAN
CHECKED BY:
L. ANDERSON

APPROVED BY:
L. ANDERSON
PROJECT NUMBER:

690-2101 SHEET:

BID SET C00







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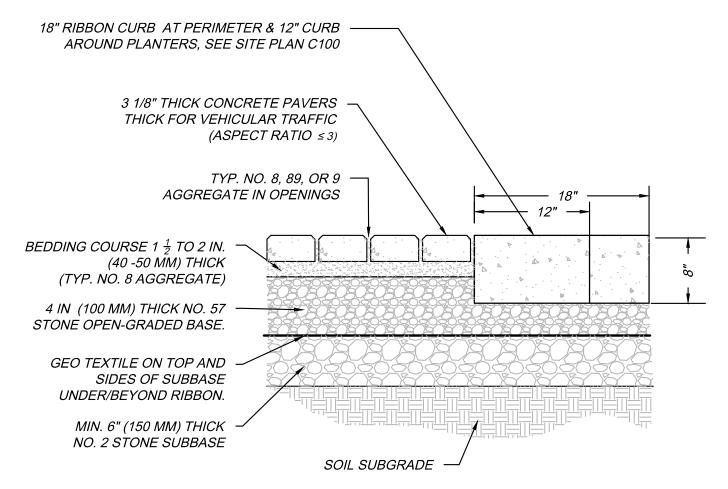
SCALE:

DESIGN BY: J. MAUGHAN CHECKED BY: L. ANDERSON

APPROVED BY: L. ANDERSON PROJECT NUMBER: 690-2101

#### CIVIL - TYPICAL ASPHALT SECTIONS

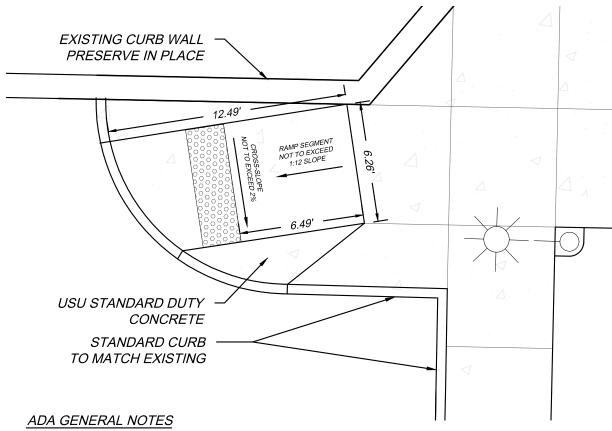
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#### NOTES:

- 1. ALL RIBBON CURB TO BE STANDARD EXCEPT AS INDICATED.
- 2. CONCRETE SHALL BE 4000 PSI, 28 DAY STRENGTH. 3. PROVIDE CONTRACTION JOINTS @ 10'-0" O.C.
- 4. PROVIDE EXPANSION JOINTS @ 50'-0" O.C.

#### PERVIOUS PAVEMENT WITH FULL EXFILTRATION TO SOIL SUBGRADE

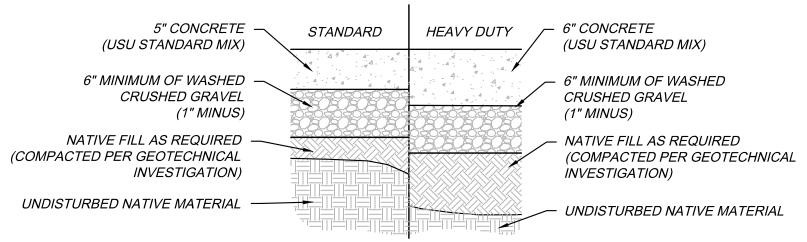


- 1. NO LIP IN CURB GREATER THAN 1/4" HIGH ALLOWED ALONG LENGTH OF LANDING.
- 2. LENGTHS OF RAMPS VARY AS REQUIRED TO MEET 1(V):12(H) SLOPE OR FLATTER.
- 3. ABSOLUTE MINIMUM DIMENSIONS OF LANDINGS TO BE 36" x 36".
- 4 ALL RAMPS TO MEET LOGAN CITY & APWA STANDARDS.



#### ADA RAMP WITH TRUNCATED DOMES

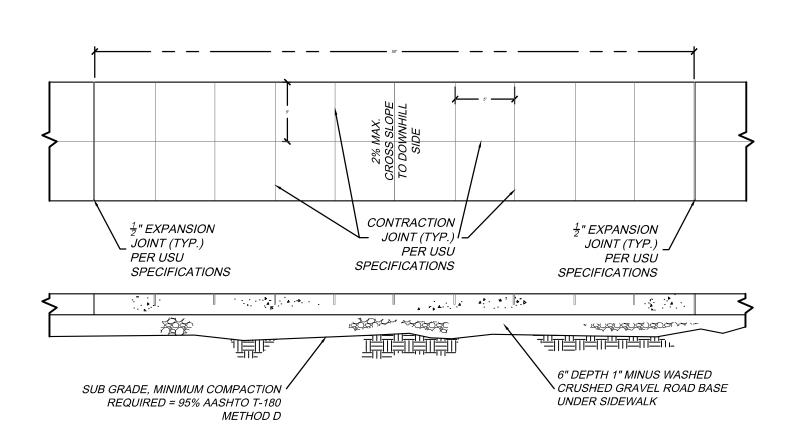
SCALE: 1" = 5'



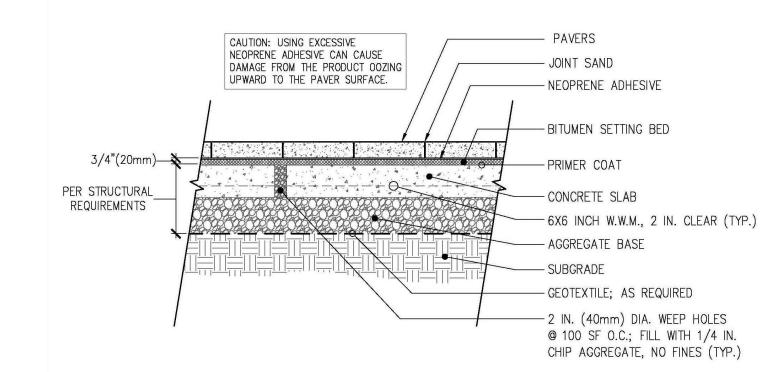
- 1. CONCRETE MIX DESIGN TO MEET USU STANDARDS AND SPECIFICATIONS.
- 2. ALL OTHER WORK IN RIGHT-OF-WAY SHALL MEET LOGAN CITY APWA STANDARDS & SPECIFICATIONS FOR QUALITY, INSTALLATION & WORKMANSHIP - SEE http://www.loganutah.org/PW/Engineering/index.cfm#tab6 FOR CURRENT REVISIONS

## CIVIL - TYPICAL CONCRETE SECTIONS

SCALE: NTS



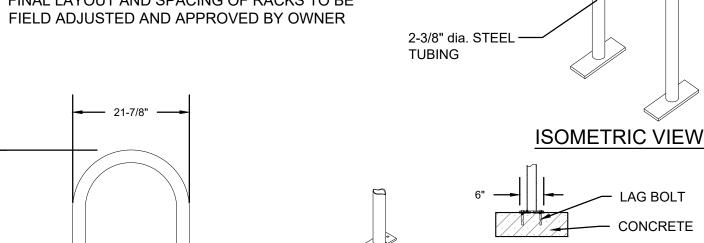




## CONCRETE BASED PAVER INSTALL

#### NOTES:

- 1. INSTALL BIKE RACKS ACCORDING TO MANUFACTURERS SPECIFICATIONS
- 2. BRONZE POWDER COAT FINISH PER MANUFACTURERS SPECIFICATIONS 3. CONTRACTOR TO RE-FINISH EXISTING SALVAGED BIKE RACKS TO MATCH
- BRONZE FINISH PRIOR TO RE-INSTALLATION.
- 4. STANDARD SPACING OF BIKE RACK 30" O.C. MIN. 5. AVOID PLACING MOUNTING HARDWARE ON CONCRETE JOINTS
- 6. USE ONLY STAINLESS STEEL MOUNTING HARDWARD
- 7. FINAL LAYOUT AND SPACING OF RACKS TO BE



### SIDE VIEW

PRODUCT NAME: 'U' BIKE RACK

PRODUCT #: U238-SF



2 EACH 3/8" SQ. HOLE (TYPICAL)

- 3"x6"x ¾" THICK

A DIVISION OF TRILARY, INC. 1080 UNIEK DRIVE WAUNAKEE, WI 53597 800-448-7931 toll free 608-849-1080 ph 608-849-1081 fax www.madrax.com



#### MADRAX ORION BIKE RACK

FINISH GRADE



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20 MAY 2021

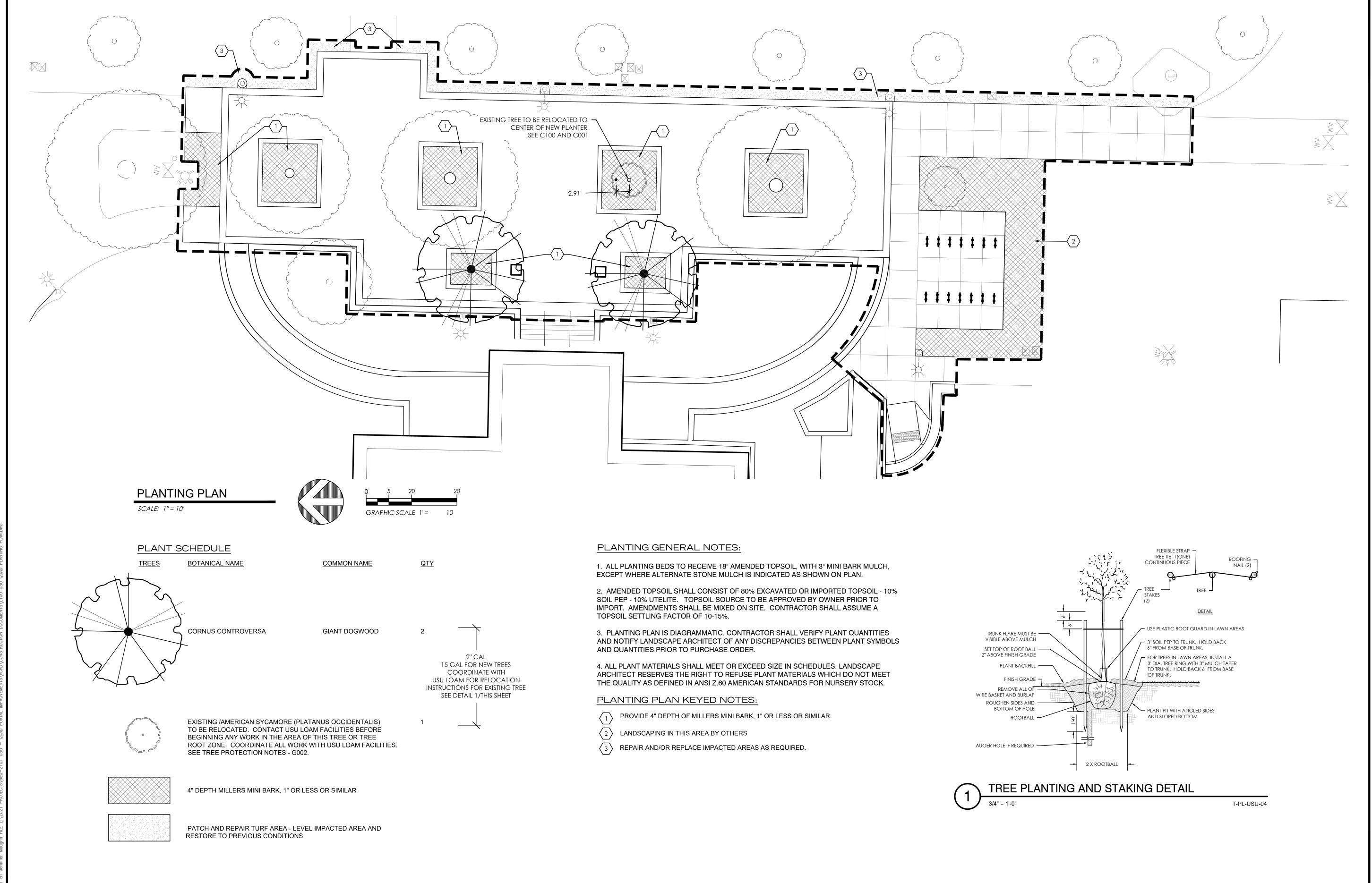
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L. ANDERSON PPROVED BY:

L. ANDERSON 690-2101

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PORTAL ING PLAN

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29 SEPTEMBER 2021
SCALE:
1" - 10'

1" = 10' DESIGN BY:

DESIGN BY:

J. MAUGHAN

CHECKED BY:

L. ANDERSON

APPROVED BY:
L. ANDERSON
PROJECT NUMBER:

690-2101 SHEET:

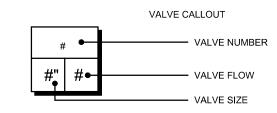
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#### IRRIGATION KEYED NOTES:

- ALL PLANTING BEDS AND TURF AREAS IMPACTED BY NEW INSTALLATION SHALL BE REPAIRED OR REPLACED AND ALL WORK IS TO BE COORDINATED WITH USU LOAM.
- $\langle 2 \rangle$  ALL TRENCHING IN ROOT ZONE TO BE AIR SPADE BY USU, SEE G002 TREE PROTECTION NOTES.
- NEW SLEEVING TO BE PROVIDED. ENSURE ALL SLEEVING IS PLACED PRIOR TO HARDSCAPE
- EXISTING VALVE TO BE REPLACED THIS LOCATION OLD VALVE TO BE SALVAGED AND RETURNED TO USU LANDSCAPE OPERATIONS.

#### IRRIGATION SCHEDULE:

<u>SYMBOL</u>	MANUFACTURER/MODEL	<u>QTY</u>	<u>PSI</u>	DETAIL
14 ADJ 14 F	RAIN BIRD R-VAN14 RD-06-SAM-P45	24	45	4&5/L201
<u>SYMBOL</u>	MANUFACTURER/MODEL	QTY		DETAIL
lacktriangle	HUNTER ICV-G	1		2&3/L201
	- IRRIGATION LATERAL LINE: PVC SCHEDULE 40	312.1 L.F.		1/L201
	PIPE SLEEVE: POLYETHYLENE AND PVC CLASS 200	112.6 L.F.		1/L201



### **IRRIGATION GENERAL NOTES:**

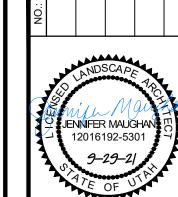
- A. ALL EXISTING IRRIGATION HEADS, VALVES AND EQUIPMENT TO BE REMOVED FROM G. THIS SYSTEM IS BASED UPON AN AVAILABLE WORKING PRESSURE OF 45 PSI SITE, EXISTING LATERAL AND MAIN LINES TO BE ABANDONED AND REMOVED FROM SITE ONLY AS NECESSARY FOR NEW INSTALLATION. NO REMNANTS, MATERIALS OR EQUIPMENT ARE TO BE SALVAGED AND/OR RE-USED IN NEW IRRIGATION SYSTEM INSTALLATION.
- B. CONTRACTOR TO ADHERE TO USU STANDARDS AND **COORDINATE WITH** LANDSCAPE OPERATIONS BEFORE BEGINNING ANY WORK.
- C. CONTRACTOR TO COORDINATE NEW IRRIGATION MAINLINE, LATERAL LINE AND SLEEVING WITH NEW CONCRETE INSTALLATION.
- D. THIS PLAN IS DIAGRAMMATIC, SOME SYSTEM COMPONENTS ARE SHOWN IN PAVED AREAS AND BUILDINGS FOR CLARITY AND LEGIBILITY. ALL IRRIGATION EQUIPMENT AND COMPONENTS ARE TO BE INSTALLED IN LANDSCAPE AREAS. SLEEVES TO BE PLACED AS NECESSARY AND WHERE USEFUL.
- CONTRACTOR TO BEST FIT IRRIGATION HEADS AS SHOWN IN DESIGN DRAWINGS TO ACTUAL SITE CONDITIONS, SOME AREAS MAY VARY DUE TO ACTUAL ON-SITE CONDITIONS. CONTRACTOR TO COORDINATE ALL NECESSARY SLEEVING ACCORDINGLY.
- F. CONTRACTOR TO MINIMIZE DAMAGE TO ROOTS OF EXISTING TREES AND SHRUBS, MAKING CLEAN SAW-CUTS WHERE POSSIBLE.

- MINIMUM AT THE WORST CASE HEAD AND 50-65 PSI MINIMUM PRIOR TO EACH VALVE. CONTRACTOR TO VERIFY PRIOR TO CONSTRUCTION. CONTACT LANDSCAPE ARCHITECT IMMEDIATELY IF THESE PRESSURES ARE NOT ATTAINABLE.
- H. ALL VALVE BOXES TO BE PLACED IN SHRUB BEDS AND EASILY ACCESSED AND MAINTAINED (WITHIN 12" FROM BACK OF CURB, SIDEWALK OR MOWSTRIP). REFER M. PULLING OF PIPE IS NOT PERMITTED. TO IRRIGATION DETAILS FOR MORE INFORMATION.
- CONTRACTOR TO LOCATE SLEEVES WHERE MAINLINE AND LATERAL IRRIGATION LINES CROSS UNDER ANY PAVED SURFACE AS SHOWN ON PLAN. SLEEVES SHALL BE TWO SIZES LARGER THAT PIPES TO BE SLEEVED. MULTIPLE SLEEVES MAY BE PLACED IN A SINGLE TRENCH. SLEEVES TO EXTEND 6" BEYOND PAVED SURFACE ON EACH SIDE. ALL WIRES ARE TO BE SLEEVED.
- J. IT IS RECOMMENDED THAT ALL IRRIGATION SYSTEM INSTALLATION WORK BE COMPLETED UNDER DIRECTION OF A FOREMAN OR SUPERVISOR WITH FIVE YEARS MINIMUM EXPERIENCE IN IRRIGATION SYSTEM INSTALLATION.
- K. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL PRODUCTS AND MATERIALS INSTALLED ARE IN ACCORDANCE WITH CURRENT LAWS AND LOCAL REGULATIONS & SHALL MEET ALL UTAH STATE UNIVERSITY STANDARDS AND SPECIFICATIONS FOR IRRIGATION SYSTEMS.
- L. ALL IRRIGATION SYSTEM PIPING TO BE GRADED SO THE SYSTEM CAN BE

COMPLETELY DRAINED OR BLOWN OUT WITH COMPRESSED AIR, TO ENSURE THE PROPER WINTERIZATION OF THE IRRIGATION SYSTEM. INSTALL MUELLER OR SEAL MANUAL DRAINS AT ALL LOW POINTS ON MAIN AND AT A MINIMUM OF EVERY 250' ALONG LATERAL LINES AS PER DETAIL 6, L-2.1. AUTOMATIC DRAINS ARE NOT PERMITTED.

- N. CONTRACTOR TO ADHERE TO ALL PROCEDURES FOR INSTALLATION AS DESCRIBED IN THE UTAH STATE STANDARDS & SPECIFICATIONS.
- O. CONTRACTOR SHALL USE NO PIPE SMALLER THAN 1" FOR ANY WATER DELIVERY PORTIONS OF THE IRRIGATION SYSTEM.
- P. PIPE SIZE RELATES TO THE ACCUMULATION OF HEADS AND THE FLOW NEEDS OF EACH HEAD. GENERALLY THE PIPE SIZE IS LARGEST NEAR THE VALVE AND GETS SMALLER AS IT MOVES TOWARD THE END-LINE SPRINKLER HEADS. MINIMUM LATERAL SIZE 1".
- CONTRACTOR TO PROVIDE ALL ADDITIONAL WIRING NECESSARY TO TIE EXISTING ZONES INTO EXISTING CONTROLLER.
- R. CONTROL WIRES SHALL BE 14 GA AND SHALL BE DIFFERENT COLORS. USE OF MULTI-STRAND CONTROL WIRE, 18 GA, WITH 14 GA GOUND WIRES, IS ALLOWED WITH APPROVAL FROM FACILITIES PLANNING, DESIGN AND CONSTRUCTION. FOR COLOR SPECIFICATIONS SEE USU A&E MANUAL 32 80 C5.

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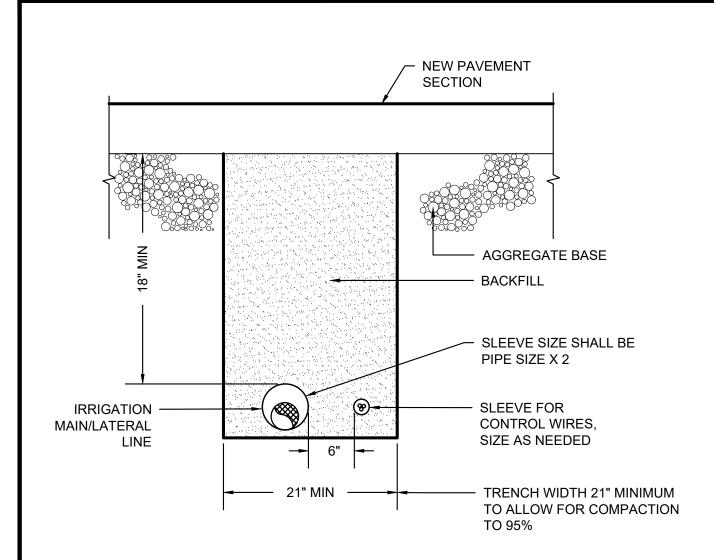
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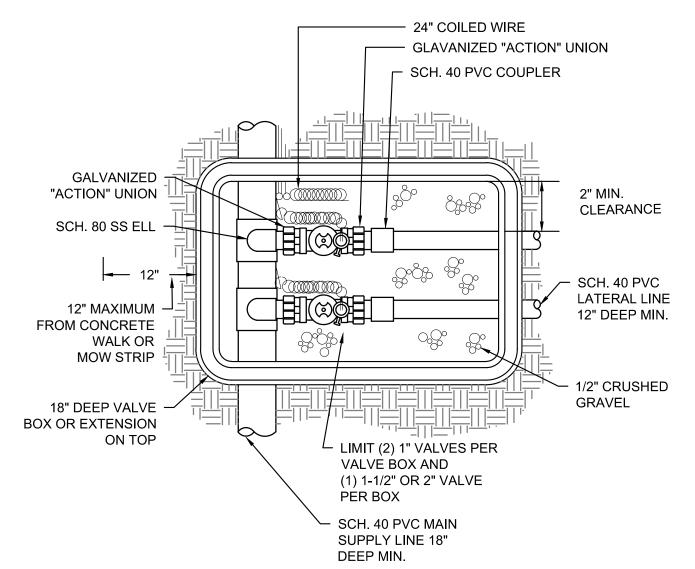
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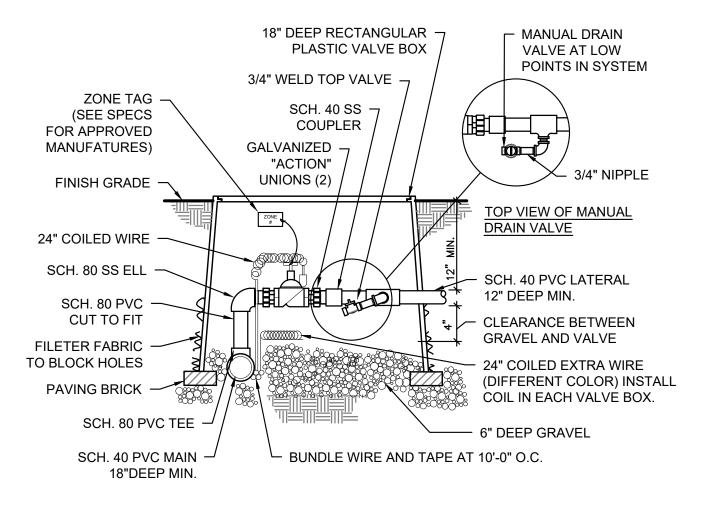
J. MAUGHAN HECKED BY:

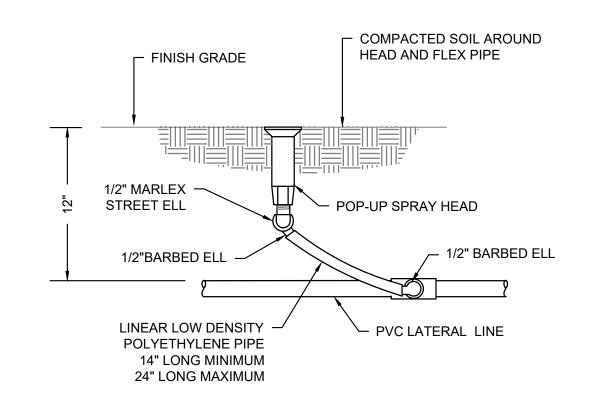
L. ANDERSON PPROVED BY: L. ANDERSON

690-2101







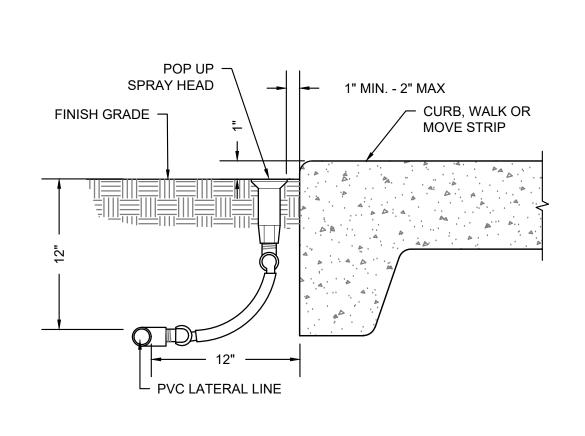


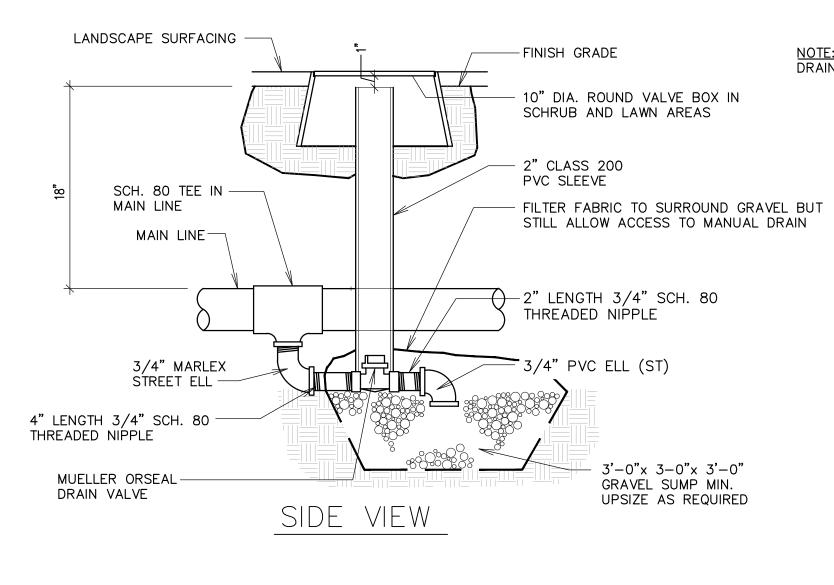
MISC. PIPE TRENCH - NEW PAVEMENT

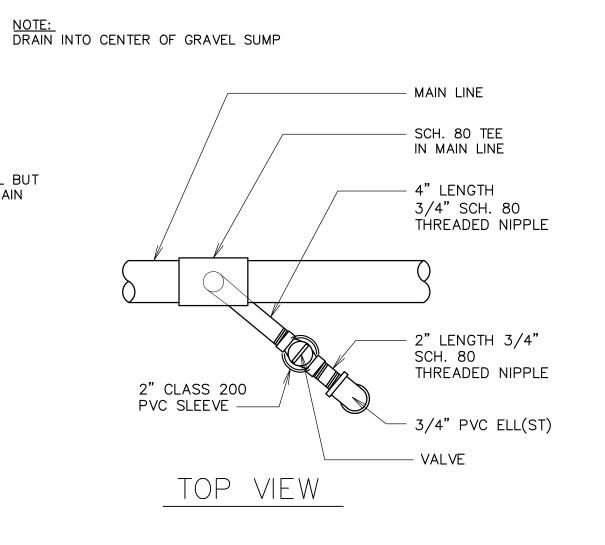
VALVE ASSEMBLY DETAIL - PLAN VIEW

**AUTOMATIC VALVE WITH DRAIN** 

SPRAY HEAD ASSEMBLY

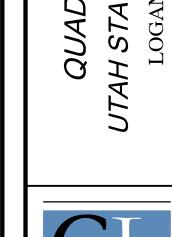






SPRAY HEAD NEXT TO CURB OR WALK

MANUAL DRAIN VALVE



JENNIFER MAUGHAN

12016192-5301



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29 SEPTEMBER 2021 SCALE:

DESIGN BY: J. MAUGHAN CHECKED BY:

L. ANDERSON APPROVED BY: L. ANDERSON

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