# REQUEST FOR QUALIFICATIONS

## PUBLIC WORKS CONTRACTORS

## PRE-QUALIFICATION FOR
## BOISE CITY CANAL MULTI-USE PATHWAY,
## 3RD STREET TO BROADWAY AVENUE
## BOISE, IDAHO

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**QUALIFICATIONS MUST BE RECEIVED BY:**

**3:00 P.M. LOCAL TIME, JUNE 20, 2024**

bids@ccdcboise.com

**REQUEST FOR QUALIFICATIONS**
**Pre-Qualification for Boise City Canal Multi-Use Pathway, 3rd Street to Broadway Avenue**

May 21, 2024

Capital City Development Corporation (CCDC), the urban renewal agency for the city of Boise, Idaho, will accept Statements of Qualifications from Idaho-licensed public works contractors to be pre-qualified, in accordance with Idaho Code § 67-2805(2)(b), to submit competitive bids for construction of the Boise City Canal Multi-Use Pathway (3rd Street to Broadway Avenue) Project in downtown Boise, Idaho. CCDC will prequalify bidders on the following criteria: technical competence; experience constructing similar facilities; available non-financial resources, equipment, and personnel; and overall performance history based upon the contractor's entire body of work. Only contractors pre-qualified through this process will be allowed to submit a bid for the public works construction project.

Licensed public works contractors seeking pre-qualification must complete and submit the pre-qualification forms provided herein.

**Submission deadline is 3:00 P.M. local time, June 20 2024.**

CCDC appreciates your interest in meeting the needs of the agency and the citizens of Boise.

Kathy Wanner
Contracts Manager
kwanner@ccdcboise.com

CAPITAL CITY DEVELOPMENT CORP
121 N 9TH ST, SUITE 501 BOISE, ID 83702
208-391-7304 WWW.CCDCBOISE.COM

## PART 1 – GENERAL INFORMATION

### 1.1 SCOPE OF WORK

The Boise City Canal Multi-Use Pathway (BCCMUP) Project will involve construction of a 10'-12' wide ADA-compliant, concrete, multi-use pathway within multiple public access easements located on private property, generally following the extension of the Grove Street alignment between 3rd Street and Broadway Ave in downtown Boise.

The proposed pathway alignment is constrained between existing features and facilities including an Idaho Power electrical substation, an active irrigation canal, a private parking garage, a parking lot and other existing features which will limit the size of the anticipated work area and may pose challenges for access to the pathway alignment.

Portions of the proposed pathway alignment require extensive cast-in-place, concrete retaining walls within the canal channel as well as adjacent to existing Idaho Power security fencing around the substation, some of which includes integrated pedestrian lighting. Work within the canal will likely necessitate diversion of flows and/or foundation dewatering and will be limited to non-irrigating season when flows within the canal are the lowest between October 15, 2024 to March 15, 2025.

The pathway construction also includes removal of existing trees, installation of new landscaping and associated irrigation systems, extensive handrail fabrication and installation, and installation of electrical conduit and overhead lighting.

All work shall be in accordance with the approved project plans and specifications (included for reference).

CCDC estimates the total construction cost to be: $2-3 million.

CCDC is seeking a contractor capable of meeting the following criteria:

- Experience constructing projects in a constrained work zone footprint within a downtown environment, with the use of small equipment.
- Demonstrated experience wherein relevant projects were completed on time and within budget.
- Demonstrated ability to maintain close communication with owner, authorities having jurisdiction ("AHJ"), and stakeholders through weekly meetings, e-mail correspondence and in-person meetings.
- Demonstrated competence in record keeping and safety protocols (job site related and internal office practices related to cyber security protection).
- Demonstrated ability to construct a complex high-volume concrete form during winter months with below-freezing temperatures.
- Experience working within an active irrigation facility channel, demonstrating flow diversion and/or dewatering during construction.

## 1.2 RFQ SUBMISSION

The submission package must be submitted electronically by email to bids@ccdcboise.com

Please include this subject line on the email:

**RFQ SUBMITTAL: Boise City Canal Multi-Use Pathway, 3rd Street to Broadway Avenue**

To be considered, the submission package must contain:

Exhibit A: Contractor Qualification Application and any supporting documentation.
Exhibit B: Required Certification and Waiver & Release

Exhibit A: Statements of Qualifications requires that the Respondent provide other documents containing requested information and answer all Yes / No questions found throughout. Failure to supply the requested information or complete any form may be cause to deem the submission non-responsive.

All required submittal documents must be ***signed and dated*** and must be submitted via email either in one PDF or a separate PDF of each required document. Electronic signatures are acceptable, provided the signed document is in PDF format and can be opened and read in Adobe Acrobat XI without the need for additional software, applications, or extensions. Scanned signatures are also acceptable. Unsigned submissions will not be accepted. Late or incomplete submissions will not be accepted. Respondent assumes full responsibility for the timely delivery of its submission of all documents by way of the email process.

Respondent will be responsible for all costs (including site visits where needed) incurred in preparing or responding to this RFQ. All materials and documents submitted in response to this RFQ become the property of CCDC and will not be returned.

## 1.3 OBJECTIONS

Written objections to prequalification procedures must be received by CCDC at least three (3) business days before the date and time upon which submissions are due. Objections are to be in writing directed to Kathy Wanner, Contracts Manager, at kwanner@ccdcboise.com.

## 1.4 ADDENDA

In the event it becomes necessary to revise any part of the RFQ, written addenda will be issued. Addenda will be made available by way of the CCDC website: www.ccdcboise.com. It is the Respondent's responsibility to check for addenda prior to submitting a submission package. Respondents are requested to acknowledge all addenda in the space provided on Exhibit A. No addenda will be issued fewer than four (4) business days before the submission deadline unless the deadline is extended.

## 1.5 RIGHTS RESERVED

CCDC reserves the right to act in the public best interest and in furtherance of the purposes of the Idaho Urban Renewal Law, Chapter 20, Title 50, Idaho Code, and the laws for Purchasing by Political Subdivisions, Chapter 28, Title 67, Idaho Code. CCDC reserves the right to waive any formalities or defects as to form, procedure, or content with respect to its RFQ and any minor irregularities in the submissions received, to request additional data and information from any and

all Respondents, to reject any submissions based on real or apparent conflict of interest, to reject any submissions containing inaccurate or misleading information, and to accept the submissions that are in the best interest of CCDC. The issuance of this RFQ and the receipt and evaluation of submissions does not obligate CCDC to take any further action relative to the RFQ. CCDC may in its discretion cancel this process at any time without liability.

### 1.6 PUBLIC RECORDS

CCDC is a public agency. All documents in its possession are public records subject to disclosure under the Idaho Public Records Act, Chapter 1, Title 74, Idaho Code, and will be available for inspection and copying by any person after the RFQ process is complete.

If any Respondent claims any part of its submission is exempt from disclosure under the Idaho Public Records Act, Respondent must: 1.) Indicate by marking the pertinent document "CONFIDENTIAL"; and, 2.) Include the specific basis for the position that it be treated as exempt from disclosure. Marking the entire submission as "Confidential" is not in accordance with the Idaho Public Records Act and will not be honored. CCDC, to the extent allowed by law and in accordance with these Instructions, will honor a designation of nondisclosure. By claiming material to be exempt from disclosure under the Idaho Public Records Act, Respondent expressly agrees to defend, indemnify, and hold CCDC harmless from any claim or suit arising from CCDC's refusal to disclose such materials. Any questions regarding the applicability of the Public Records Act should be addressed to your own legal counsel prior to submission.

END OF PART 1

## PART 2 – QUALIFICATION INFORMATION

### 2.1 BASIS FOR SELECTION AND PRE-QUALIFICATION

In accordance with Idaho Code § 67-2805(2)(b), this Request for Qualifications will be evaluated based upon demonstrated technical competence, experience constructing similar facilities, prior experience with government entities, available nonfinancial resources, equipment and personnel related to the project, and the overall performance history of the contractor being considered.

The Contractor Qualification Application is composed of three distinct sections.

- The **first section** consists of general information about the contractor, including licensing and contact information.
- The **second section** is considered "Minimum Requirements" for a contractor to be considered qualified. Only contractors able to meet these requirements will be considered qualified to bid.
- The **third section** includes questions that the Agency will use to further evaluate the Contractor's qualifications based on past performance relative to quality of work, schedule and budget compliance, safety, cyber security protocols, and dispute history.

The following can result in a contractor being found not qualified:

1. Failure to meet the "Minimum Requirements";
2. Failure to sign the RFQ submittal using the Signature pages provided in Exhibit B;
3. Failure to submit any material information required;
4. Deliberate submission of false information;
5. Inability to verify or contact references;
6. Any combination of substantive factors including, but not limited to, history of failure to perform in contracts, disregard of laws and regulations, inferior quality control and safety programs, and lack of or inferior quality of cyber security, which in the sole discretion of CCDC, do not meet the standards of fitness or reliability expected from those wishing to do business with CCDC; or,
7. Failure to provide a valid Idaho Public Works Contractors License.

CCDC may conduct investigations and interviews, if necessary, to determine the performance record and abilities of Respondent to perform the size and type of work to be contracted. By submitting a response to this RFQ, the Respondent is authorizing CCDC to conduct investigations and interviews as needed. CCDC reserves the right to waive irregularities in the Respondent's RFQ response, provided that the Respondent, in the sole discretion of CCDC, meets the intent of the RFQ by demonstrating that their firm and staff have the experience and capability to successfully complete this Project.

## 2.2 PROJECT SCHEDULE (*Tentative*)

Prequalification

| | |
|---|---|
| Request for Qualifications issued | May 21, 2024 |
| Last Day for Questions | June 12, 2024 by 5 p.m. |
| Last Day addenda issued, if needed | June 14, 2024 |
| Last Day for Objections to procedures | June 17, 2024 by 3 p.m. |
| Qualifications Due | June 20, 2024 by 3 p.m. |
| Selection of Pre-Qualified Contractors | CCDC Board Meeting: July 2024 |

Project Bidding

| | |
|---|---|
| Invitation to Bid to Pre-Qualified Contractors | July 23, 2024 *(anticipated)* |
| Bids Due | August 14, 2024 *(anticipated)* |
| Bid Award \| CCDC Board Meeting | August 28, 2024 or September 9, 2024 |

Project Construction

| | |
|---|---|
| Notice to Proceed | Mid-September 2024 *(anticipated)* |
| Work within Boise City Canal Channel | October 15, 2024 – March 15, 2025 |
| Construction Substantial Completion | August 30, 2025 – no extensions |

END OF PART 2

**EXHIBIT A**

**CONTRACTOR QUALIFICATION APPLICATION**
(REQUIRED FOR SUBMISSION)

**BOISE CITY CANAL MULTI-USE PATHWAY,**
**3RD STREET TO BROADWAY AVENUE**

TO: Capital City Development Corporation
By email: bids@ccdcboise.com
Attn: Kathy Wanner, Contracts Manager
121 N. 9th Street, Suite 501
Boise, Idaho 83702

## SECTION 1: GENERAL INFORMATION AND LICENSING

**1. Name of Company:**_____

Company Type: ___ Corporation ___ Partnership ___ Individual ___ LLC ___ Other

Business Address: _____

Telephone: _____ E-mail Address: _____

Name of current owner, CEO, or president: _____

**2. LICENSE:** Idaho Public Works Contractor License #_____

Provide a list of categories of work that your firm normally performs with its own forces.

_____

_____

Number of years the Company has been in business: _____

Is the Company a parent or subsidiary of another Company? _____ Yes _____ No

If yes, please explain: _____

**3. ADDENDA:** Respondent has reviewed and understands all addenda issued with this RFQ:

Addendum No. _____ Dated: _____

Addendum No. _____ Dated: _____

## SECTION 2: MINIMUM REQUIREMENTS

**1.** Complete and include a signed Certification and Waiver & Release (Exhibit B).

**2.** Does your company have the ability to bond for a minimum of $2,000,000?
_____Yes _____ No

**3.** To demonstrate experience and capability to perform work, the Contractor must provide one relevant project completed for a government entity (including Water Companies and Canal Districts) within the last five (5) years.. *The project must include the following in order to be accepted as relevant experience:*

- Construction of a high-volume cast-in-place concrete retaining wall within a waterway.
- Work within an irrigation facility channel, demonstrating flow diversion and/or dewatering during construction.
- Replacement and installation of curb/gutter/pedestrian ramps.
- Maintaining pedestrian paths and traffic flow during construction.
- An awarded bid value of at least $450,000.
- Name of Government Entity and Contact information.

### Relevant Project Information

*Please fill out the following completely. Information may be completed on a separate sheet and attached to the RFQ submittal.*

Project Name:_____

Project Description:_____

_____

_____

_____

_____

_____

Contractor's Project Manager: _____

Contractor's Superintendent: _____

Original Contract Value: _____

Change Order Amount: _____

Original Project Schedule(days): _____

Revised/Final Project Schedule (days): _____

Describe Change Orders (cost, schedule impact, and reason for change): _____

_____

_____

_____

_____

_____

Were liquidated damages assessed or were there any claims on this project?

_____Yes _____ No

If yes, describe amounts and details. _____

_____

_____

Owner's Contact Information (Entity, Contact Name, Role, Phone Number, email address)

_____

_____

_____

_____

## SECTION 3: PERFORMANCE INFORMATION

**PROVIDE:** Provide answers to the following questions; provide documents where requested.

**1.** Based on the attached project drawings, is your company able to complete all necessary work within the canal channel during the irrigation off-season?
_____Yes _____ No

**2.** Has your company completed a high-volume cast-in-place concrete project in sub-freezing temperatures?
_____Yes _____ No

**3.** Has your company ever completed a public works construction project within a confined footprint (such as an active irrigation canal or stream bed)?
_____Yes _____ No

**4.** Does your company have cyber security liability insurance?
_____ Yes _____ No

**5.** Does your company have cyber security protections in place such as multi-factor authentication for employees?
_____Yes _____ No

**6.** Within the last 3 years, has your company experienced any cyber incident such as social engineering, ransomware, privacy breach, etc.?
_____Yes _____ No

**7.** Does your company have a health and safety training program?
_____Yes _____ No

**8.** Does your company have experience working with the U.S. Army Corps of Engineers, the Environmental Protection Agency, Idaho Department of Environmental Quality, or any other equivalent environmental quality control board?
_____Yes _____ No

**9.** If you responded yes, to the question above, have you ever been cited or had penalties assessed against your company or the owner of a project on which your company was the contractor or deemed responsible for the penalties?
_____Yes _____ No

**10.** Has your firm, or any of its parent company(s) or subsidiaries, in the last five (5) years:

Had any projects with any claims requiring mediation, arbitration, litigation or other formal dispute resolution from ongoing or former projects?
_____Yes _____ No

Had liens placed by subcontractors?
_____Yes _____ No

Received stopwork notice from project owner or AHJ?
_____Yes _____ No

Failed to complete a construction contract or been terminated for any reason?
_____Yes _____ No

Received one or more citations from OSHA or any AHJ's?
_____Yes _____ No

Had any surety company make payments on your company's behalf as a result of default, to satisfy any claims made against a performance or payment bond, in connection with any public or private construction project?
_____Yes _____ No

**If you answered "yes" to any of the questions listed in Question 10, provide the project, dates, circumstances, resolution and/or other pertinent details on a separate page. Provide documents requested.**

**END OF EXHIBIT A**

**EXHIBIT B**

**CERTIFICATION AND WAIVER & RELEASE**
**(REQUIRED FOR SUBMISSION)**

**PART I - CERTIFICATION**

**The undersigned Respondent declares,** that he/she holds the position indicated below as a corporate officer or the owner or a partner in the business entity submitting these Qualifications; that the undersigned is informed of all relevant facts surrounding the preparation and submission of these Qualifications; and that the undersigned represents and warrants that all information provided is true, accurate, and complete.

**PART II – WAIVER & RELEASE**

**The undersigned Respondent has read this waiver and release** and fully accepts Capital City Development Corporation's (CCDC) discretion and non-liability as stipulated herein, and expressly for, but not limited to, CCDC's decision to proceed with a pre-qualification selection process in response to the Request for Qualifications (RFQ) to pre-qualify public works contractors to bid its Boise City Canal Multi-Use Pathway, 3rd Street to Broadway Avenue Project.

A. Discretion of CCDC: The Idaho-licensed public works contractor making a submission to this RFQ agrees that CCDC has the right to, unless contrary to applicable state law:

1) Modify or suspend any and all aspects of the process seeking proposals and making any decisions concerning the RFQ;
2) Obtain further information from any person, entity, or group regarding the Respondent, and to ascertain the depth of Respondent's capability and experience for supplying the desired services and in any and all other respects to meet with and consult with any Respondent or any other person, entity, or group;
3) Waive any formalities or defects as to form, procedure, or content with respect to CCDC's RFQ to pre-qualify contractors and any response by any Respondent thereto;
4) Accept or reject any submission received in response to the RFQ, including any submission by the undersigned; or score one proposal over another in accordance with the selection criteria; and
5) Accept or reject all or any part of any materials or statements, including, but not limited to, the nature and type of proposal.

B. Non-Liability of CCDC:

1) The undersigned agrees that CCDC shall have no liability whatsoever of any kind or character, directly or indirectly, by reason of all or any decision made at the discretion of CCDC as identified above.
2) The undersigned, including all team members, have carefully and thoroughly reviewed the RFQ and has found it to be complete and free from ambiguities and sufficient for their intended purpose.

**SIGNATURE:** **X**_____

Print Name / Title: _____

**Name of Firm:** _____

Date: _____

THE LAND GROUP

# PRELIMINARY

**CCDC Multi-Use Pathway Project | TLG PN: 122112 | May 20, 2024**

| Work Item and Change Order Schedule | | | |
|---|---|---|---|
| **Item No.** | **Work Items (Refer to drawings for more information)** | **Unit of Measure** | **Est. Quantity** |
| *Division 100* | | | |
| 1 | Mobilization / Demobilization / General Conditions | LS | 1 |
| *Division 200* | | | |
| 2 | Clearing and Grubbing | AC | 0.22 |
| 3 | Removal of Obstructions | LS | 1 |
| 4 | Removal of Concrete and Asphalt | SY | 1,280 |
| 5 | Removal of Concrete Curb | LF | 1,011 |
| 6 | Remove and haul away tree and rootball | EA | 32 |
| 7 | Remove and haul away IPCO fence | LF | 523 |
| 8 | Remove and haul away IPCO Fence Angled Security Arm | LF | 410 |
| 9 | Remove and store block wall | LF | 46 |
| 10 | Remove and haul away misc. items (signs, SD pipe, etc) | LS | 1 |
| 11 | Unsuitable Material Excavation | CY | 500 |
| 12 | Import and Compaction at Canal @ 24" Depth | CY | 500 |
| 13 | Dewatering | LS | 1 |
| *Division 300* | | | |
| 14 | Boring for Fiber Conduit @ SLHS | LF | 150 |
| *Division 600* | | | |
| 15 | 4" Día Storm Drain Pipe (Including Excavation, Bedding, and Backfill) | LF | 55 |
| 16 | 8" Día Storm Drain Pipe (Including Excavation, Bedding, and Backfill) | LF | 24 |

| | | | |
|---|---|---|---|
| 17 | Catch Basin – Type I per ISPWC SD-601 (ACHD Supp.). (Including Excavation, Base Prep, and Backfill) | EA | 3 |
| 18 | ADS Nyloplast 10” Drain Basin (2810AG) w/ 10” Standard H-10 Drain Grate with Locking Option (Including Excavation, Base Prep, and Backfill) | EA | 2 |
| 19 | 48” Dia Gravity Irrigation Pipe (Including Excavation, Bedding, Backfill, and Connection to Existing) | LF | 5 |
| *Division 700* | | | |
| 20 | Concrete for Multi-use Pathway – 5” Thick, 4,000 psi Portland Cement with Fibermesh Reinforcement Additive (Including Excavation, Base Prep, and Agg. Base) | SY | 2,210 |
| 21 | Concrete Sidewalk per ACHD SD-709 – 5” Thick (Including Excavation, Base Prep, and Agg. Base) | SY | 26 |
| 22 | Concrete Sidewalk – 4” Thick per ISPWC SD-709 (Including Excavation, Base Prep, and Agg. Base) | SY | 10 |
| 23 | Heavy Duty Concrete – 6” thick on 6” base @ garage entries and vehicle crossings (Including Excavation, Base Prep, and Agg. Base) | SY | 189 |
| 24 | Vertical Curb (no gutter) per Detail 6/C2.50 (Including Excavation, Base Prep, and Agg. Base) | LF | 53 |
| 25 | Rolled Curb and Catch Plate Gutter per Detail 5/C2.50 (Including Excavation, Base Prep, and Agg. Base) | LF | 258 |
| 26 | Ribbon Curb per Detail 7/C2.50 (Including Excavation, Base Prep, and Agg. Base) | LF | 40 |
| 27 | 6” Curb and Catch Plate Gutter per Detail 3/C2.50 (Including | LF | 436 |

| | | | |
|---|---|---|---|
| | Excavation, Base Prep, and Agg. Base) | | |
| 28 | Mow Curb per Detail 4/C2.50 (Including Excavation, Base Prep, and Agg. Base) | LF | 78 |
| 29 | 4'-Wide Concrete Valley Gutter per ISPWC SD-708 (ACHD Supp.) (Including Excavation, Base Prep, and Agg. Base) | LF | 54 |
| 30 | Pedestrian Ramp – 6' Wide w/ Detectable Warning Domes (Tactile Warning Surface) per ISPWC SD-712A (Including Excavation, Base Prep, and Agg. Base) | EA | 1 |
| 31 | Pedestrian Ramp – 10' Wide w/ Detectable Warning Domes (Tactile Warning Surface) per ISPWC SD-712A (Including Excavation, Base Prep, and Agg. Base) | EA | 1 |
| 32 | Detectable Warning Domes (Tactile Warning Surface) per ISPWC SD-712 (ACHD Supp.) | SF | 201 |
| 33 | Concrete Retaining Wall @ Canal (Including Excavation, Base Prep, Agg. Base, Drainage Rock, and Decorative Metal Railing | LF | 555 |
| 34 | Concrete Retaining Wall @ IPCO Substation (Including Excavation, Base Prep, Agg. Base, Drainage Rock, and Cap) | LF | 489 |
| 35 | Concrete Retaining Wall @ Ada County Parking Lot (Including Excavation, Base Prep, Agg. Base, Drainage Rock, and Decorative Metal Railing) | LF | 158 |
| 36 | Block Retaining Wall @ SLHS (Including Excavation, Base Prep, Agg. Base, and Drainage Rock) | LF | 75 |
| *Division 800* | | | |
| 37 | Asphalt Pavement – Broadway Avenue R.O.W. (Including | SY | 7 |

| | | | |
|---|---|---|---|
| | Excavation, Base Prep, Agg. Base, and Fill) | | |
| 38 | Asphalt Pavement – Repair at Private Property (Including Excavation, Base Prep, Agg. Base, and Fill) | SY | 346 |
| 39 | Gravel Repair @ IPCo Substation and Parking Lot | SY | 420 |
| *Division 1000* | | | |
| 40 | Sediment Control (ESC) | LS | 1 |
| *Division 1100* | | | |
| 41 | Greenbelt Light (Including Excavation, Base Prep, Base, Junction Box, and Backfill) | EA | 7 |
| 42 | Integrated Wall Light | LF | 647 |
| 43 | Lighting Conduit and Conductor | LF | 915 |
| 44 | Junction Box @ Integrated Wall Light (Including Excavation, Base Prep, and Backfill) | EA | 9 |
| 45 | Metered Utility Pedestal (Including Excavation, Base Prep, and Backfill) | EA | 1 |
| 46 | 3'X3' Concrete Vault for Fiber Utility (Including Excavation, Base Prep, and Backfill) | EA | 8 |
| 47 | Conduit for Fiber Utility (Including Excavation, Bedding, and Backfill) | LF | 1,835 |
| 48 | Construction Traffic Control | LS | 1 |
| 49 | Traffic Control Signs | LS | 1 |
| 50 | Signage and Pavement Markings | LS | 1 |
| 51 | Relocate Pedestrian Activator @ Broadway (Including Excavation, Base Prep, and Hardware) | LS | 1 |
| Division 2000 | | | |
| 52 | Misc. Utility, Adjust to Grade | EA | 10 |
| *Miscellaneous* | | | |
| 53 | Tree Protection | EA | 16 |

| | | | |
|---|---|---|---|
| 54 | Trees | EA | 6 |
| 55 | Shrubs | EA | 124 |
| 56 | Landscape and Irrigation Repair | SF | 4,165 |
| 57 | Landscape Mulch – 8”-Depth 4-8” Cobble | CY | 75 |
| 58 | Landscape Mulch – 3”-Depth Bark | CY | 11 |
| 59 | Boise Parks and Rec Standard Bollard (Including Excavation, Base Prep, and Hardware) | EA | 11 |
| 60 | Canal Egress Ladder | EA | 12 |
| 61 | Decorative Metal Railing @ Canal | LF | 555 |
| 62 | Decorative Metal Railing @ Ada County Parking Lot | LF | 158 |
| 63 | IPCo Replacement Fence (10’ with security arm, excavation, and base) | LF | 80 |
| 64 | IPCo Fence Vertical Security Arm Replacement | LF | 406 |

LS = Lump Sum, AC = Acre, CY = Cubic Yard, SF = Square Foot, EA = Each, SY = Square Yard, CF = Cubic Foot

# BOISE CITY CANAL MULTI-USE PATHWAY
# CAPITAL CITY DEVELOPMENT CORPORATION

## 3rd Street to Broadway Avenue, Boise

THE LAND GROUP

### Project Contacts:


OWNER / DEVELOPER:
CAPITAL CITY DEVELOPMENT CORPORATION (CCDC)
121 N 9TH STREET, STE 501
BOISE, ID 83702
PHONE: 208.384.4264

CONTACT: ZACH PIEPMEYER
EMAIL: zpiepmeyer@ccdcboise.com

CIVIL ENGINEER & LANDSCAPE ARCHITECT:
THE LAND GROUP, INC.
462 E. SHORE DR., STE. 100
EAGLE, ID 83616
PHONE: 208.939.4041

CONTACT: JASON DENSMER, PE
EMAIL: jason@thelandgroupinc.com
CONTACT: CHRISTOPHER HAWKINS, RLA
EMAIL: christopher@thelandgroupinc.com

STRUCTURAL ENGINEER:
ALLY STRUCTURAL CONSULTING, LLC
3778 PLANTATION RIVER, STE 102
BOISE, ID 83703
PHONE: 208.949.5993

CONTACT: CRAIG BRASHER, PE, SE
EMAIL: cbrasher@allystructural.com

ELECTRICAL ENGINEER:
MUSGROVE ENGINEERING, P.A.
234 S WHISPERWOOD WAY
BOISE, ID 83709
PHONE: 208.384.0585

CONTACT: NICK SCHAFER, PE
EMAIL: nicks@musgrovepa.com

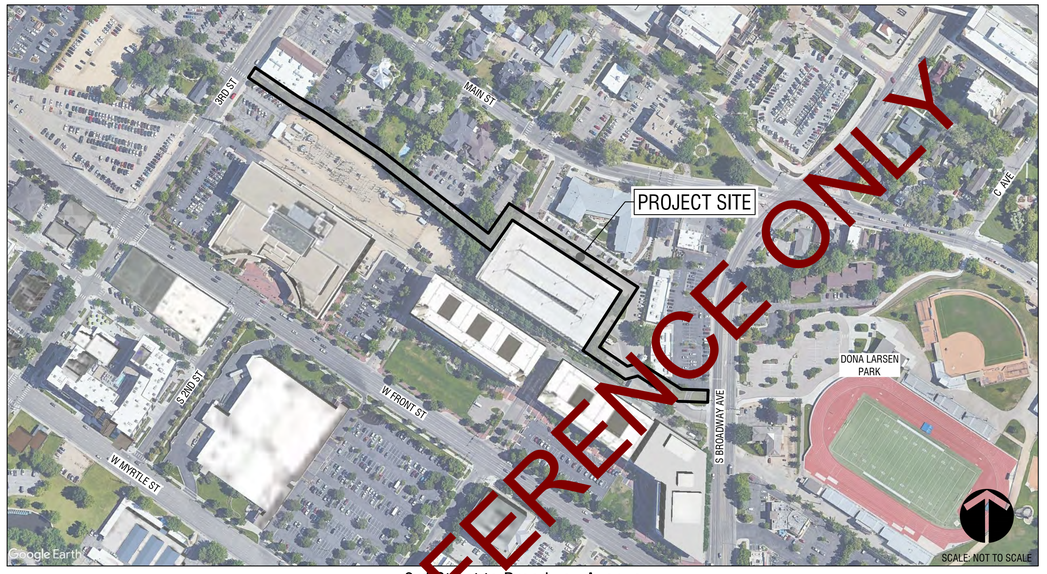

### Survey Data:

THE BASIS OF BEARING FOR THIS PROJECT SITE IS GRID NORTH ON THE IDAHO STATE PLANE COORDINATES SYSTEM (NAD 83) WEST ZONE, AS DETERMINED BY GLOBAL POSITIONING SYSTEMS METHODS. ANY DISTANCES SHOWN ARE HORIZONTAL GROUND DISTANCES IN U.S. SURVEY FEET.

1. CONTROL POINT (SEE SHEET C1.10)
   - 1.1. NORTHING: 709175.803
   - 1.2. EASTING: 2505937.825
   - 1.3. ELEVATION: 2702.89
   - 1.4. DESCRIPTION: MAG NAIL
2. CONTROL POINT (SEE SHEET C1.13)
   - 2.1. NORTHING: 708652.125
   - 2.2. EASTING: 2507017.292
   - 2.3. ELEVATION: 2712.08
   - 2.4. DESCRIPTION: MAG NAIL

**Dig Line, Inc.**
*Call Before You Dig!*
**811**

### Vicinity Map:




3rd Street to Broadway Avenue
Boise, Idaho 83702
Zoning: MX-1 & MX-5



### General Notes:

1. THE CONTRACTOR SHALL HAVE A COPY OF THE LATEST CITY OF BOISE STANDARD SPECIFICATIONS, THE LATEST EDITION OF THE ISPWC, THE ACHD SUPPLEMENTAL SPECIFICATIONS TO THE ISPWC, AND APPROVED DRAWINGS ON SITE OR READILY ACCESSIBLE AT ALL TIMES DURING CONSTRUCTION.
2. THE CONTRACTOR SHALL AT ALL TIMES COORDINATE HIS WORK WITH THAT OF OTHERS ON THE SITE. THE CONTRACTOR SHALL HAVE A RESPONSIBLE PARTY WHO SHALL HAVE THE AUTHORITY TO REPRESENT AND ACT FOR THE CONTRACTOR ON THE JOB SITE DURING ALL WORKING HOURS.
3. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING ALL WORK INDICATED IN THESE PLANS AND SPECIFICATIONS. ANY ITEM INDICATED IN THESE PLANS, BUT NOT ITEMIZED IN THE BID DOCUMENTS, WILL BE INCLUDED UNDER A BID SCHEDULE ITEM TO WHICH IT MOST RELATES.
4. THE CONTRACTOR SHALL EXAMINE THE SITE, COMPARE IT WITH THE PLANS AND SPECIFICATIONS, CAREFULLY EXAMINE ALL OF THE CONTRACT DOCUMENTS, AND SATISFY HIMSELF AS TO THE CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED BEFORE ENTERING INTO CONTRACT. NO ALLOWANCE SHALL SUBSEQUENTLY BE MADE ON BEHALF OF THE CONTRACTOR ON ACCOUNT OF AN ERROR ON HIS PART AND/OR HIS NEGLIGENCE AND/OR FAILURE TO ACQUAINT HIMSELF WITH THE CONDITIONS OF THE SITE.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE EXISTING STREETS, SIDEWALKS, OR EXISTING STRUCTURES DURING THE CONSTRUCTION OF THIS PROJECT, AND SHALL REPAIR SUCH DAMAGE TO THE SATISFACTION OF THE GOVERNING AGENCY, AT NO EXTRA COST TO THE OWNER.
6. ALL EXISTING CONDITIONS AND STRUCTURES NOT SPECIFICALLY NOTED FOR REMOVAL SHALL BE RETAINED AND PROTECTED. EXISTING CONDITIONS AND STRUCTURES THAT ARE DAMAGED DURING THE COURSE OF CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
7. ALL CONTRACTORS WORKING WITHIN THE PUBLIC RIGHT-OF-WAY ARE REQUIRED TO SECURE A RIGHT-OF-WAY CONSTRUCTION PERMIT FROM ADA COUNTY HIGHWAY DISTRICT AT LEAST 24 HOURS PRIOR TO ANY CONSTRUCTION. ALL CONSTRUCTION IN THE PUBLIC RIGHT-OF-WAY SHALL CONFORM TO THE CURRENT EDITION OF THE ISPWC AND THE ACHD SUPPLEMENTAL SPECIFICATIONS. NO EXCEPTIONS TO THESE STANDARDS WILL BE ALLOWED UNLESS SPECIFICALLY AND PREVIOUSLY APPROVED IN WRITING BY THE GOVERNING AGENCY.
8. THE CONTRACTOR SHALL PERFORM ALL CLEARING AND SITE PREPARATION NECESSARY FOR THE PROPER EXECUTION OF ALL WORK INDICATED ON THESE PLANS AND SPECIFICATIONS.
9. THE LAND GROUP, INC. DOES NOT AND CANNOT GUARANTEE THE ACCURACY OF WORK DONE BY OTHERS AND INCLUDES THIS INFORMATION FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. THE CONTRACTOR IS RESPONSIBLE TO CONTACT THE OWNER'S REPRESENTATIVE TO REQUEST CLARIFICATION OF DISCREPANCIES BETWEEN THE INFORMATION SHOWN ON THIS PLAN AND INFORMATION SHOWN ELSEWHERE. IN THE EVENT THE CONTRACTOR PROCEEDS WITH CONSTRUCTION WITHOUT OFFICIAL CLARIFICATION FROM THE OWNER'S REPRESENTATIVE, HE SHALL BE LIABLE FOR THE COST OF CORRECTIVE WORK AND SHALL REPAIR OR RECONSTRUCT THE FAULTY WORK TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE AT NO ADDITIONAL COST TO THE OWNER.
10. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING, ERECTING AND MAINTAINING THE REQUIRED MATERIALS, EQUIPMENT AND MANPOWER NECESSARY FOR PUBLIC SAFETY AND TRAFFIC CONTROL WITHIN THE PROJECT LIMITS AND ON THE APPROACHES TO THE PROJECT.
11. THE CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR SHALL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY, AND THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY, AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL AND ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DESIGN PROFESSIONAL.
12. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ON THESE PLANS ARE APPROXIMATE. A REASONABLE EFFORT HAS BEEN MADE TO LOCATE AND DELINEATE ALL UNDERGROUND FACILITIES, HOWEVER THE LAND GROUP, INC. OR IT'S CONSULTANTS ASSUMES NO LIABILITY FOR THE ACCURACY OR COMPLETENESS OF THE EXISTING FACILITIES SHOWN HERE OR FOR THE EXISTENCE OF OTHER UNDERGROUND UTILITIES OR OBJECTS WHICH MAY BE DISCOVERED BUT ARE NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ANY EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE DUE TO CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE CONTRACTOR SHALL CONTACT DIGLINE 48 HOURS PRIOR TO ANY EXCAVATION. 1-800-342-1585 OR 811.

### Sheet Index:



**BOISE CITY CANAL MULTI-USE PATHWAY**
**Capital City Development Corporation**
3rd Street to Broadway Avenue
Boise, ID 83702

Revisions
1.

PROFESSIONAL ENGINEER
REGISTERED
10961
STATE OF IDAHO
JASON DENSMER
05/03/2024

Project No.: 122112
Date of Issuance: 05.03.2024
Project Milestone: Permit Set

**Cover Sheet**

**C1.00**

File Location: g:\2022\122112\Draft\122112-c100-cover sheet.dwg
Last Saved By: Jason Densmer
Date Plotted: Friday, May 3, 2024 at 08:05 PM

## Earthwork Notes:

GENERAL
1. WHERE IT IS NOT SPECIFICALLY STATED IN THESE SPECIFICATIONS, THE IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION SHALL GOVERN.

2. CONTRACTOR SHALL CONTACT "DIG LINE" 48 HOURS PRIOR TO ANY EXCAVATION. 1-800-342-1585.

STRIP
1. ORGANIC AND/OR DISTURBED SOILS, IF ENCOUNTERED, SHALL BE REMOVED TO DEPTHS OF 1-FOOT (MINIMUM), AND STOCKPILED FOR LATER USE.

2. STOCKPILE EXCAVATED LANDSCAPE FILL MATERIALS AND STRUCTURAL FILL MATERIAL SEPARATELY WITHOUT INTERMIXING. PLACE, GRADE, AND SHAPE STOCKPILES TO DRAIN SURFACE WATER.

EXCAVATION
1. ALL EXISTING ORGANIC AND/OR DISTURBED SOILS ARE TO BE COMPLETELY REMOVED FROM BENEATH THE BUILDING PAD AREAS AND WITHIN THE "LOAD STRESS ENVELOPE" AND FROM BENEATH THE PAVEMENT AREAS.

2. STOCKPILE EXCAVATED LANDSCAPE FILL MATERIALS AND STRUCTURAL FILL MATERIAL SEPARATELY WITHOUT INTERMIXING. PLACE, GRADE, AND SHAPE STOCKPILES TO DRAIN SURFACE WATER.

SOIL FILL
1. STRUCTURAL FILL
   1.1. ACCEPTABLE SOIL CLASSIFICATION GROUPS GW, GP, GM, SW, SP, SM AND ML OR A COMBINATION OF THESE GROUPS; FREE OF ROCK OR GRAVEL LARGER THAN 6 INCHES IN ANY DIMENSION, DEBRIS, WASTE, FROZEN MATERIALS, VEGETATION, AND OTHER DELETERIOUS MATTER.

   1.2. SILT SOILS (GM, SM AND ML) MAY BE USED AS STRUCTURAL FILL IF IT CONTAINS LESS THAN 3% ORGANICS AS DETERMINED BY A GEOTECHNICAL ENGINEER AND THE PLACEMENT AND COMPACTION OF THE MATERIAL IS SUPERVISED AND APPROVED BY A GEOTECHNICAL ENGINEER.

COMPACTION OF SOIL BACKFILLS AND FILLS
1. PLACE BACKFILL AND FILL SOIL MATERIALS IN LAYERS NOT MORE THAN 8 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT, AND NOT MORE THAN 4 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND-OPERATED TAMPERS.

2. COMPACT SOIL MATERIALS TO NOT LESS THAN THE FOLLOWING PERCENTAGES OF MAXIMUM DRY DENSITY ACCORDING TO ASTM D 1557:UNDER STRUCTURES, BUILDING SLABS, STEPS, CONCRETE PAVEMENTS, AND WALKWAYS, COMPACT THE TOP OF EXISTING SUBGRADE AND EACH LAYER OF BACKFILL OR FILL SOIL MATERIAL AT 95 PERCENT. UNDER LAWN OR UNPAVED AREAS, SCARIFY AND RECOMPACT TOP 6 INCHES BELOW SUBGRADE AND COMPACT EACH LAYER OF BACKFILL OR FILL SOIL MATERIAL AT 90 PERCENT. FOR UTILITY TRENCHES, COMPACT EACH LAYER OF INITIAL AND FINAL BACKFILL SOIL MATERIAL AT 95 PERCENT.

3. UNDER FLEXIBLE PAVEMENTS, COMPACT THE TOP OF EXISTING SUBGRADE AND EACH LAYER OF BACKFILL OR FILL SOIL MATERIAL AT 95 PERCENT OF MAXIMUM DRY DENSITY ACCORDING TO ASTM D 698.

4. STRUCTURAL FILL WITHIN THE BUILDING PAD AREAS DESCRIBED ABOVE AND WITHIN THE "LOAD STRESS ENVELOPE" SHALL BE PLACED AND COMPACTED TO THE ELEVATIONS SHOWN ON THE GRADING PLAN.

GRADING
1. UNIFORMLY GRADE AREAS TO A SMOOTH SURFACE, FREE OF IRREGULAR SURFACE CHANGES. COMPLY WITH COMPACTION REQUIREMENTS AND GRADE TO CROSS SECTIONS, LINES, AND ELEVATIONS INDICATED. PROVIDE A SMOOTH TRANSITION BETWEEN ADJACENT EXISTING GRADES AND NEW GRADES. CUT OUT SOFT SPOTS, FILL LOW SPOTS, AND TRIM HIGH SPOTS TO COMPLY WITH REQUIRED SURFACE TOLERANCES.

2. FINISH SUBGRADES TO REQUIRED ELEVATIONS WITHIN THE FOLLOWING TOLERANCES: PAVEMENTS: PLUS OR MINUS 1/2 INCH BASE COURSE, PLUS OR MINUS 0.1 FEET SUBGRADE; UNPAVED AREAS: PLUS OR MINUS 0.3 FEET.

3. MAXIMUM SLOPE SHALL BE 2:1 UNLESS OTHERWISE INDICATED.

FIELD QUALITY CONTROL
1. OWNER WILL ENGAGE A QUALIFIED INDEPENDENT GEOTECHNICAL ENGINEERING TESTING AGENCY TO PERFORM FIELD QUALITY-CONTROL TESTING.

2. ALLOW TESTING AGENCY TO INSPECT AND TEST SUBGRADES AND EACH FILL OR BACKFILL LAYER. PROCEED WITH SUBSEQUENT EARTHWORK ONLY AFTER TEST RESULTS FOR PREVIOUSLY COMPLETED WORK COMPLY WITH REQUIREMENTS.

3. BUILDING PAD AREA AND PAVEMENT AND WALKWAY AREAS SHALL BE TESTED AT A RATE OF 1 TEST PER 2000 SF PER LIFT OR A MINIMUM OF ONE TEST PER LOT BUILDING PAD AREA PER LIFT. SURFACE OF FINISHED GRADE SHALL BE TESTED AT A RATE OF 1 TEST PER 5000 SF.

4. TRENCH BACKFILL: PER IDAHO STANDARD FOR PUBLIC WORKS DIVISION 200.

5. WHEN TESTING AGENCY REPORTS THAT SUBGRADES, FILLS, OR BACKFILLS HAVE NOT ACHIEVED DEGREE OF COMPACTION SPECIFIED, SCARIFY AND MOISTEN OR AERATE, OR REMOVE AND REPLACE SOIL TO DEPTH REQUIRED; RECOMPACT AND RETEST UNTIL SPECIFIED COMPACTION IS OBTAINED WITHOUT ADDITIONAL COMPENSATION.

PROTECTION
1. PROTECT EXCAVATED SUBGRADE AREAS OR AREAS STRIPPED FOR SUBSEQUENT FILL MATERIAL PLACEMENT BENEATH AREAS TO BE PAVED: IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO SCHEDULE AND CONSTRUCT WORK, AND PROVIDE PROTECTION, IN A MANNER TO AVOID CAUSING INSTABILITY OF THE EXISTING SOILS. SUCH PROTECTION MAY INCLUDE AVOIDING TRAFFIC OVER SUCH AREAS WITHOUT PROVISION OF A PROTECTIVE CONSTRUCTION ACCESS ROAD. CONTRACTOR SHALL KEEP SURFACES WELL DRAINED FREE FROM PUDDLING, PONDING, OR POTENTIAL MOISTURE BUILD UP IN THE FORM OF SNOW OR OTHERWISE, WHICH MAY CAUSE THE INSTABILITY OF THE SURFACE SOILS OR UNDERLYING SOILS.

2. UPON COMPLETION OF EXCAVATION TO SUBGRADE LEVELS BENEATH SUBSEQUENT FILL, THE CONTRACTOR SHALL IMMEDIATELY OBTAIN COMPACTION LEVELS AS REQUIRED. IF AFTER APPROVAL, THE SUBGRADE SOILS RECEIVE MOISTURE WHICH RAISES THE MOISTURE CONTENT TO A LEVEL EXCEEDING THE TARGET MOISTURE LEVELS, THEY SHALL BE SCARIFIED AND ALLOWED TO DRY OR REMOVED AND REPLACED WITH ENGINEERED FILL AT THE CONTRACTOR'S EXPENSE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO KEEP THESE SUBGRADE SOILS DRY AND FREE OF TRAFFIC PRIOR TO AND DURING COMPACTION EFFORTS AND UNTIL THE FULL PAVEMENT SECTION HAS BEEN INSTALLED. THE CONTRACTOR SHALL OBTAIN APPROVAL OF THE SUBGRADE IMMEDIATELY AFTER COMPLETION OF SUBGRADE MOISTURE CONDITIONING AND/OR COMPACTION EFFORTS.

## Grading & Drainage Notes:

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE IDAHO SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, THESE PLANS, AND THE GEOTECHNICAL ENGINEERING REPORT BY ATLAS, FILE NO. B231756g, DATED NOVEMBER 13, 2023.

2. CONTRACTOR SHALL HAVE AN APPROVED SET OF PLANS ON SITE AT ALL TIMES. ONLY THESE PLANS SHALL BE USED BY THE PROJECT CONTRACTOR(S). USE OF ANY NON APPROVED SET OF PLANS ON THE JOB SHALL BE GROUNDS FOR THE ISSUANCE OF A STOP WORK ORDER.

3. ALL MATERIALS FURNISHED ON OR FOR THE PROJECT MUST MEET THE MINIMUM REQUIREMENTS OF THE APPROVING AGENCIES OR AS SET FORTH HEREIN, WHICHEVER IS MORE RESTRICTIVE.

4. CONTRACTOR TO VERIFY ALL EXISTING ELEVATIONS NOTED ON THIS PLAN AND NOTIFY DESIGN ENGINEER WHEN ELEVATIONS DO NOT MATCH PLANS.

5. WASTE SOIL SHALL BE HAULED TO AN OFFSITE DISPOSAL SITE FURNISHED BY THE CONTRACTOR.

6. ALL FINISHED GRADES SHALL BE SMOOTH AND UNIFORM.

7. PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDING. PROVIDE POSITIVE DRAINAGE TO ALL CATCH BASINS, DRAINAGE STRUCTURES, CURB CUTS, AND DRAINAGE WINDOWS.

8. ALL CONCRETE SIDEWALKS SHALL HAVE A MINIMUM OF ONE PERCENT (1%) CROSS SLOPE UNLESS OTHERWISE NOTED.

9. ALL CHANGES REQUIRE APPROVAL BY THE DESIGN ENGINEER AND LANDSCAPE ARCHITECT.

10. ALL STORM DRAINAGE PIPING SHALL BE ADS N-12 (HDPE) DRAINAGE PIPE (SOLID WALL AND PERFORATED) OR ASTM 3034, SDR 35 PVC AS SHOWN ON THE PLANS.

11. ALL NON GRATED STORM DRAIN MANHOLE COVERS SHALL BE MARKED "STORM DRAIN".

12. CONCRETE COLLARS SHALL BE POURED AT ALL STORM DRAINAGE INLETS AND MANHOLES. COLLARS SHALL BE PLACED IN ACCORDANCE WITH ISPWC SD-616. CONCRETE COLLARS ARE NOT REQUIRED FOR MANHOLES OR STORM DRAINAGE INLETS LOCATED IN LANDSCAPE AREAS OR NON-HARD SURFACES.

13. PIPE TRENCH SHALL CONFORM TO DIVISION 300 OF THE LATEST EDITION OF THE ISPWC AND SD-301. BEDDING AND BACKFILL SHALL BE CONSTRUCTED PER SECTIONS 305 AND 306 OF THE ISPWC.

14. PIPE LENGTHS SHOWN ARE NOT EXACT. ACTUAL INSTALLATION LENGTHS MAY VARY SLIGHTLY. LENGTHS ARE SHOWN FOR GENERAL INFORMATION ONLY.

15. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES AND IMPROVEMENTS. ANY DAMAGE TO EXISTING FACILITIES OR IMPROVEMENTS RESULTING FROM THE CONTRACTORS' OPERATIONS, SHALL BE REPAIRED OR REPLACED AT CONTRACTORS' EXPENSE.

16. CONTRACTOR IS RESPONSIBLE TO REMOVE ALL CONCRETE AND DEBRIS FROM LANDSCAPE PLANTER AREAS PRIOR TO INSTALLATION OF ANY LANDSCAPE MATERIALS BY THE LANDSCAPE CONTRACTOR.

17. ALL PROPOSED STORM DRAINAGE CATCH BASIN INLETS AND MANHOLES SHALL BE COVERED WITH FILTER FABRIC BY THE STORM DRAIN CONTRACTOR TO PREVENT CONTAMINATION OF STORM DRAINAGE FACILITIES. FABRIC SHALL NOT BE REMOVED UNTIL AFTER CONSTRUCTION IS COMPLETE AND LANDSCAPE TURF AREAS HAVE MATURED.

18. CARE SHALL BE TAKEN TO PREVENT DIRT AND OTHER SUPERFLUOUS MATERIALS FROM ENTERING STORM DRAINAGE FACILITIES DURING CONSTRUCTION.

## ACHD Standard Notes:

ACHD STANDARD CONDITIONS:
1. ANY EXISTING IRRIGATION FACILITIES SHALL BE RELOCATED OUTSIDE OF THE RIGHT-OF-WAY.

2. PRIVATE SEWER OR WATER SYSTEMS ARE PROHIBITED FROM BEING LOCATED WITHIN ANY ACHD ROADWAY OR RIGHT-OF-WAY.

3. REPLACE ANY EXISTING DAMAGED CURB, GUTTER AND SIDEWALK AND ANY THAT MAY BE DAMAGED DURING THE CONSTRUCTION OF THE PROPOSED DEVELOPMENT. CONTACT ACHD INSPECTION SERVICES AT 208-387-6280.

4. COMPLY WITH DISTRICT'S TREE PLANTER POLICY.

5. CONSTRUCT ALL UTILITY CUTS AND STREET REPAIRS PER SD-301, SD-303, AND SD-806. A TRAFFIC CONTROL PLAN WILL ALSO BE NECESSARY FOR ANY UTILITY CUT. SUBMIT ALL TRAFFIC CONTROL PLANS TO THE DISTRICT'S CONSTRUCTION SERVICES DIVISION FOR REVIEW AND APPROVAL. IT IS STRONGLY RECOMMENDED THAT THE NUMBER OF UTILITY CUTS WITHIN A STREET BE REDUCED TO THE FEWEST POSSIBLE.

6. UTILITY STREET CUTS IN PAVEMENT LESS THAN FIVE YEARS OLD ARE NOT ALLOWED UNLESS APPROVED IN WRITING BY THE DISTRICT. CONTACT THE DISTRICT'S UTILITY COORDINATOR AT 208-387-6258 (WITH FILE NUMBERS) FOR DETAILS.

7. CONSTRUCTION, USE AND PROPERTY DEVELOPMENT SHALL BE IN CONFORMANCE WITH ALL APPLICABLE REQUIREMENTS OF THE ACHD PRIOR TO DISTRICT APPROVAL FOR OCCUPANCY.

8. THE APPLICANT SHALL CONTACT ACHD TRAFFIC OPERATIONS 208-387-6190 IN THE EVENT ANY ACHD CONDUITS (SPARE OR FILLED) ARE COMPROMISED DURING ANY PHASE OF CONSTRUCTION.

9. IF REQUIRED, INTERRUPTION TO ACHD'S FIBER OPTIC NETWORK SHALL BE PERMITTED AS WEEKEND WORK. DISRUPTION SHALL OCCUR NO EARLIER THAN FRIDAY AT 10PM AND SHALL BE RETURNED TO SERVICE NO LATER THAN MONDAY AT 5AM. THE CONTRACTOR SHALL PROVIDE A MINIMUM TWO (2) WEEK NOTICE PRIOR TO THE START OF ANY WORK THAT MAY IMPACT ACHD'S NETWORK FOR REVIEW. DEPENDING ON THE IMPACT TO THE DISTRICT OR PARTNERING AGENCIES, ACHD RESERVES THE RIGHT TO MODIFY THE REQUESTED DATES FOR THE SCHEDULED WORK. CONTACT DEVELOPMENT SERVICES AT 208-387-6170 TO SCHEDULE WORK.

ACHD ROADWAY NOTES:
1. ALL CONSTRUCTION IN THE PUBLIC RIGHT-OF-WAY SHALL CONFORM TO THE CURRENT EDITION OF THE ISPWC AND ACHD SUPPLEMENTAL SPECIFICATIONS. NO EXCEPTIONS TO DISTRICT POLICY, STANDARDS, AND THE ISPWC WILL BE ALLOWED UNLESS SPECIFICALLY AND PREVIOUSLY APPROVED IN WRITING BY THE DISTRICT.
   1.1. ACTUAL FIELD CONDITIONS DURING TRENCHING MAY REQUIRE ADDITIONAL PAVEMENT REPAIR BEYOND THE LIMITS SHOWN ON THE PLANS. THE FOLLOWING CONDITIONS ARE LISTED IN SECTION 6000 OF ACHD POLICY MANUAL:
   1.2. ALL ASPHALT MATCH LINES FOR PAVEMENT REPAIRS SHALL BE PARALLEL TO THE CENTERLINE OF THE STREET AND INCLUDE ANY AREA DAMAGED BY EQUIPMENT DURING TRENCHING OPERATIONS.
      1.2.1.1. IF THE CUMULATIVE DAMAGED PAVEMENT AREA EXCEEDS 50% OF THE TOTAL ROAD SURFACE, CONTRACTOR SHALL REPLACE THE ENTIRE ROADWAY SURFACE.
      1.2.1.2. CONTRACTOR SHALL REPLACE THE PAVEMENT SURFACE TO ENSURE MATCH LINE DOES NOT FALL WITHIN THE WHEEL PATH OF A LANE. MATCH LINE SHALL ONLY FALL IN THE CENTER OR EDGE OF A TRAVEL LANE.
      1.2.1.3. FLOWABLE FILL OR IMPORTED MATERIAL MAY BE REQUIRED IF THE NATIVE TRENCH MATERIAL IS DEEMED BY THE ACHD INSPECTOR, DOES NOT MEET COMPACTION STANDARDS OR TIME IS A CRITICAL FACTOR.
      1.2.1.4. ANY EXCEPTIONS TO THESE RULES SHALL BE PRE-APPROVED IN WRITING BY DISTRICT STAFF BEFORE CONSTRUCTION BEGINS.
      1.2.1.5. CONSTRUCT ALL PAVEMENT MATCHES (INCLUDING DRIVEWAY APPROACHES AND UTILITY CUT STREET REPAIRS) WITHIN ACHD RIGHTS-OF-WAY TO MATCH THE EXISTING STREET PAVEMENT SECTION OR THE SECTION NOTED ON THE ASPHALT PAVING SECTION DETAIL 1, SHEET C2.20. USE WHICHEVER SECTION IS GREATER.
2. PIPE TRENCH SHALL CONFORM TO THE LATEST EDITION OF THE I.S.P.W.C. DIVISION 300 AND SD-301. BEDDING AND BACKFILL SHALL BE CONSTRUCTED PER SECTIONS 305 AND 306 OF THE I.S.P.W.C.
3. ANY WORK IN THE PUBLIC RIGHT-OF-WAY REQUIRES INSPECTION AND APPROVAL BY ACHD CONSTRUCTION DIVISION. CONTACT INSPECTION SERVICES AT 208-387-6280 TO OBTAIN A PERMIT TO WORK IN THE RIGHT-OF-WAY. INSPECTION REQUESTS REQUIRE A MINIMUM OF 24-HOUR PRIOR NOTICE.
4. PRIOR TO PLACEMENT OF ANY PAVEMENT MARKINGS, COORDINATE WITH ACHD INSPECTION STAFF. ALL PAVEMENT MARKINGS SHALL COMPLY WITH ACHD POLICY AND ISPWC SECTION 1100. MARKINGS SHALL TRANSITION SMOOTHLY WITH EXISTING PAVEMENT MARKINGS.

## Certification of Compliance with Design Standards:

THE ENGINEER OF RECORD CERTIFIES THAT THE PLANS ARE PREPARED IN SUBSTANTIAL CONFORMANCE WITH THE ACHD POLICY AND STANDARDS IN EFFECT AT THE TIME OF PREPARATION. THE ENGINEER ACKNOWLEDGES THAT ACHD ASSUMES NO LIABILITY FOR ERRORS OR DEFICIENCIES IN THE DESIGN. ALL VARIANCES FROM ACHD POLICY SHALL BE APPROVED IN WRITING. THE FOLLOWING VARIANCES, LISTED BY DATE AND SHORT DESCRIPTION, WERE APPROVED FOR THE PROJECT: NONE.



## Tree Protection Notes:

A. UNLESS OTHERWISE SPECIFIED, ALL EXISTING TREES TO REMAIN WITHIN AND ADJACENT TO THE PROPERTY SHALL BE PROTECTED FROM CONSTRUCTION IMPACTS BEFORE ANY WORK ON THE SITE BEGINS. CONTACT BOISE PARKS & RECREATION (BPR) REPRESENTATIVE AND LANDSCAPE ARCHITECT TO ARRANGE AN ON-SITE MEETING PRIOR TO CONSTRUCTION ACTIVITIES TO SPECIFY PROTECTION BOUNDARIES AND LIMITS OF PROPOSED STAGING AREAS.

B. RETAIN, PROTECT, AND WATER THE TREES TO REMAIN ON THE SITE USING THE FOLLOWING PROCEDURES:

   B.A. EXISTING TREES THAT ARE TO REMAIN SHALL BE PROTECTED BEFORE ANY DEMOLITION/WORK TO THE SITE IS STARTED. REMOVAL OF ANY SUCH PROTECTION SHALL REQUIRE THE APPROVAL OF BPR AND THE LANDSCAPE ARCHITECT.

      B.A.A. PROTECTION SHALL CONSIST OF CONSTRUCTION FENCE TO BE PLACED WITHIN THE CONSTRUCTION AREA A MINIMUM OF 10-FEET FROM THE TRUNK. FENCING SHALL BE MAINTAINED IN GOOD CONDITION AND ERECT UNTIL PROJECT CLOSEOUT.

      B.A.B. ABSOLUTELY NO EQUIPMENT, VEHICLES, BUILDING MATERIALS, CHEMICALS, STOCKPILES, OR OTHER DEBRIS SHALL BE PLACED INSIDE THESE FENCE BARRIERS. IN ADDITION, VEHICULAR AND EQUIPMENT TRAFFIC AND STORAGE OF MATERIALS SHALL BE LIMITED IN AREAS IMMEDIATELY ADJACENT TO THE FENCE BARRIER.

      B.A.C. ALL WORK THAT MUST OCCUR INSIDE THE PHYSICAL FENCE BARRIERS SHALL REQUIRE APPROVAL OF BPR AND THE LANDSCAPE ARCHITECT.

   B.B. WHERE EXCAVATION FOR NEW CONSTRUCTION IS REQUIRED WITHIN 10' OF TREES, EXCAVATE USING AN AIR SPADE TO MINIMIZE DAMAGE TO ROOT SYSTEMS. WHERE EXCAVATION FOR NEW CONSTRUCTION IS REQUIRED WITHIN THE TREE DRIPLINES, BUT OUTSIDE 10' FROM THE TREES, HAND EXCAVATE TO MINIMIZE DAMAGE TO ROOT SYSTEMS. PROVIDE SHEETING AT EXCAVATIONS IF REQUIRED. USE NARROW-TINED SPADING FORK AND COMB SOIL TO EXPOSE ROOTS

      B.B.A. IF ROOTS ARE ENCOUNTERED WITH A DIAMETER OF 2-INCHES OR GREATER IMMEDIATELY ADJACENT TO LOCATION OF NEW CONSTRUCTION, CUT ROOTS APPROXIMATELY 3-INCHES BACK FROM NEW CONSTRUCTION.

   B.C. DO NOT ALLOW EXPOSED ROOTS TO DRY OUT BEFORE PERMANENT BACKFILL IS PLACED; PROVIDE TEMPORARY EARTH COVER OR PACK WITH PEAT MOSS AND WRAP WITH BURLAP. WATER AND MAINTAIN IN MOIST CONDITION AND TEMPORARILY SUPPORT AND PROTECT FROM DAMAGE UNTIL PERMANENTLY COVERED WITH EARTH.

   B.D. WHERE TRENCHING FOR UTILITIES IS REQUIRED WITHIN THE DRIPLINE, TUNNEL UNDER OR AROUND ROOTS BY HAND DIGGING. DO NOT CUT MAIN LATERAL ROOTS OR TAP ROOTS; CUT ONLY SMALLER ROOTS THAT INTERFERE WITH INSTALLATION OF NEW WORK. CUT ROOTS WITH SHARP PRUNING INSTRUMENT; DO NOT BREAK OR CHOP.

   B.E. TEMPORARY IRRIGATION SHALL BE PROVIDED TO ALL TREES DURING CONSTRUCTION. THIS SYSTEM SHALL PROVIDE ADEQUATE COVERAGE AND QUANTITY OF WATER DURING ALL PHASES OF CONSTRUCTION.

   B.F. NO CHANGES IN GRADE SHALL BE MADE WITHIN THE DRIPLINE OF EXISTING TREES UNLESS OTHERWISE SPECIFIED BY BPR OR THE LANDSCAPE ARCHITECT.

C. BEFORE THE CONTRACTOR LEAVES THE SITE, ALL TREES DAMAGED OR DESTROYED DURING CONSTRUCTION SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR BASED ON THE VALUES APPRAISED BY BPR. VALUES OF INDIVIDUAL PUBLIC TREES SHALL BE DETERMINED THROUGH THE USE OF APPROPRIATE METHODS OF TREE APPRAISAL AS DEVELOPED BY THE COUNCIL OF LANDSCAPE APPRAISERS (AND ADOPTED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE 8TH EDITION OR NEWER). REIMBURSEMENT SHALL BE REQUIRED FOR ANY EXISTING HEALTHY TREE INTENTIONALLY REMOVED WITHOUT PERMISSION FROM LANDSCAPE ARCHITECT OR BPR STAFF, ACCIDENTALLY DAMAGED, OR DESTROYED DURING CONSTRUCTION ACTIVITIES.

THE LAND GROUP

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

3rd Street to Broadway Avenue
Boise, ID 83702

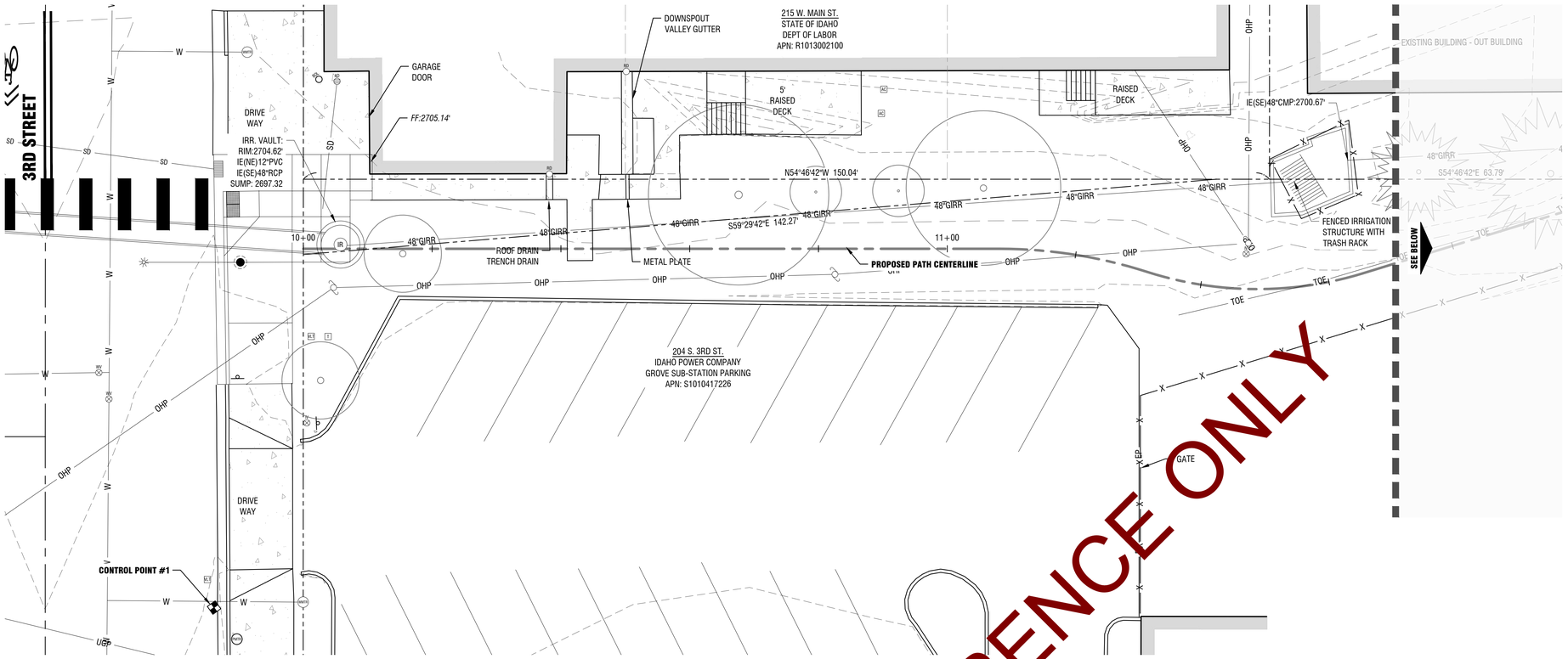
Revisions
1.

PROFESSIONAL ENGINEER — REGISTERED — 10961 — STATE OF IDAHO — JASON DENSMER
05/03/2024

| | |
|---|---|
| Project No.: | 122112 |
| Date of Issuance: | 05.03.2024 |
| Project Milestone: | Permit Set |

**Construction Notes**

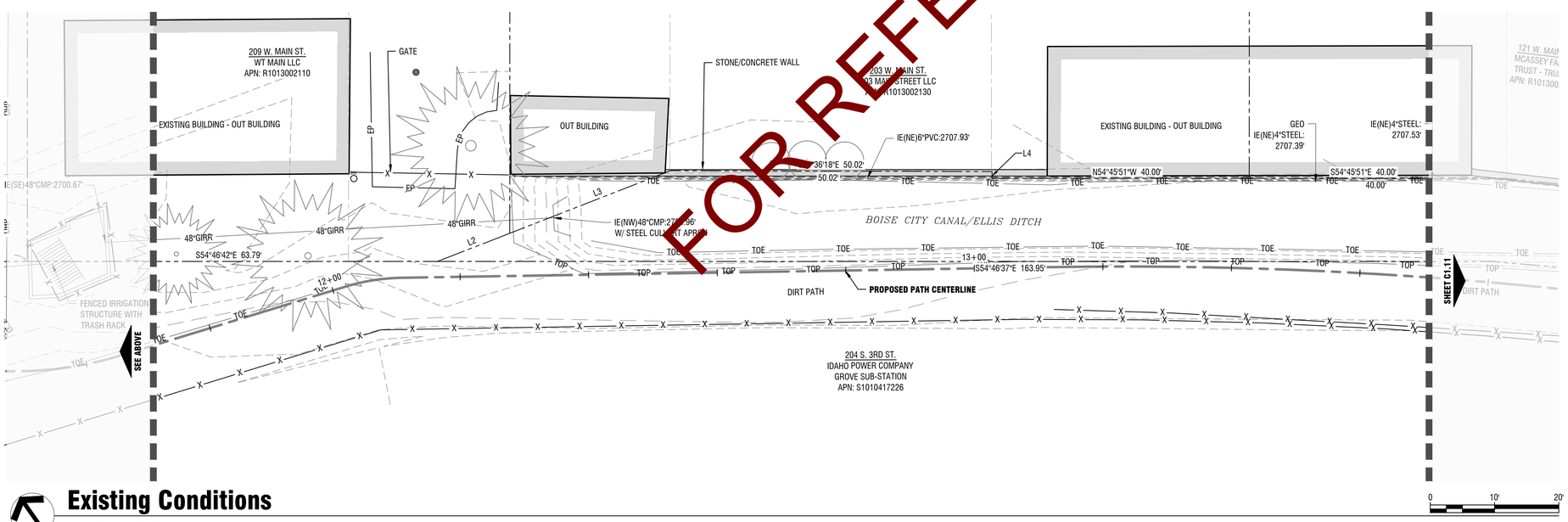
**C1.01**




## Existing Conditions

Horizontal Scale: 1" = 10'

0 10' 20'




## Existing Conditions

Horizontal Scale: 1" = 10'

0 10' 20'



## Sheet Notes:

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- TELEPHONE RISER
- TELEPHONE MANHOLE
- SIGNAL RISER
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- ADA SYMBOL
- BOLLARD
- PARKING METER
- SIGN
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- LANDSCAPING
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- CONCRETE AREA
- CURB AND GUTTER
- EXISTING BUILDING
- EXISTING GROUND CONTOUR

THE LAND GROUP

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

3rd Street to Broadway Avenue
Boise, ID 83702

Revisions
1.

PROFESSIONAL ENGINEER
REGISTERED
10961
STATE OF IDAHO
JASON DENSMER
05/03/2024

Project No.: 122112
Date of Issuance: 05.03.2024
Project Milestone: Permit Set

**Existing Conditions**

**C1.10**

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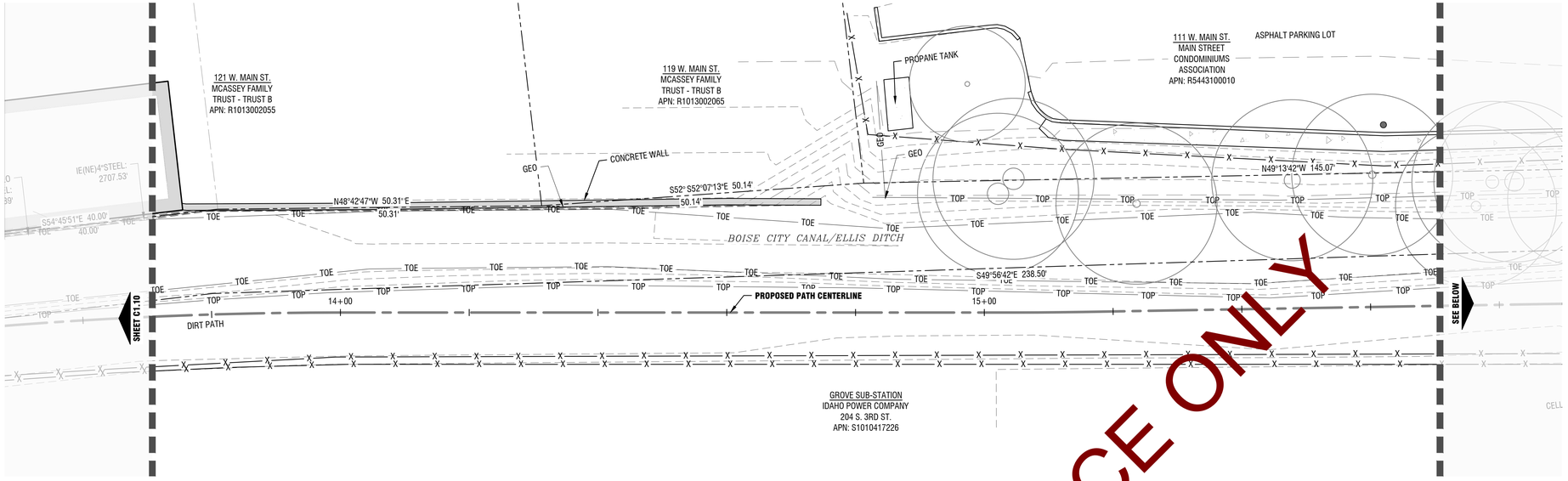
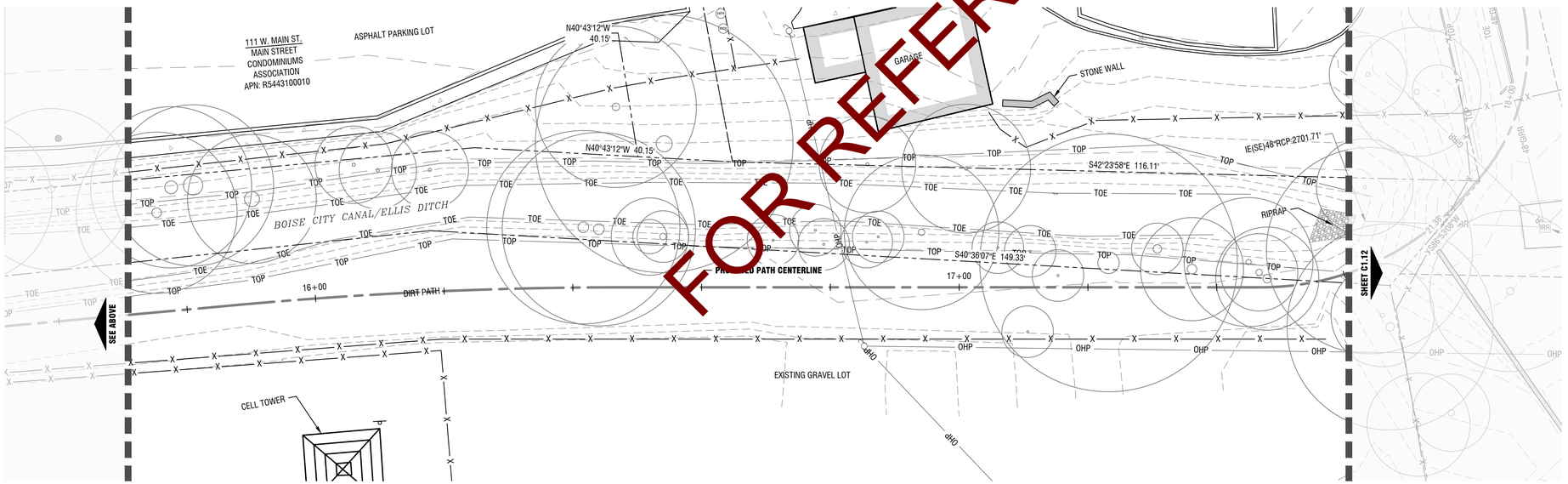



## Existing Conditions

Horizontal Scale: 1" = 10'

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Horizontal Scale: 1" = 10'



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- LSCP — LANDSCAPING
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- EP — EDGE OF PAVEMENT
- FENCE LINE
- SS — SANITARY SEWER LINE
- SD — STORM DRAIN LINE
- W — WATER LINE
- GIRR — GRAVITY IRRIGATION LINE
- TOP — TOP OF DITCH
- TOE — BOTTOM OF DITCH
- OHP — OVERHEAD POWER LINE
- OHT — OVERHEAD TELEPHONE LINE
- UGP — UNDERGROUND POWER LINE
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- CONCRETE AREA
- CURB AND GUTTER
- EXISTING BUILDING
- 2705 — EXISTING GROUND CONTOUR

THE LAND GROUP

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

3rd Street to Broadway Avenue
Boise, ID 83702

Revisions
1.


| | |
|---|---|
| Project No.: | 122112 |
| Date of Issuance: | 05.03.2024 |
| Project Milestone: | Permit Set |

**Existing Conditions**

**C1.11**

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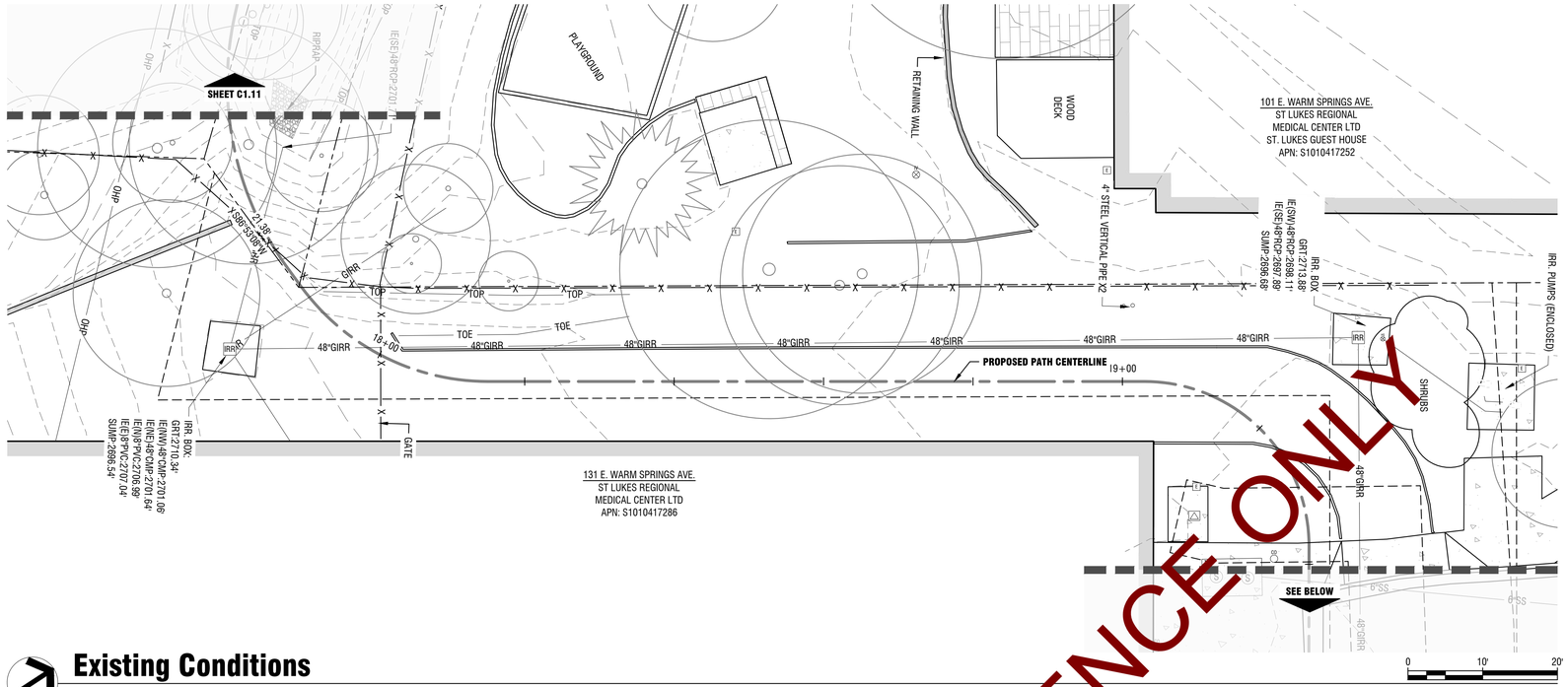
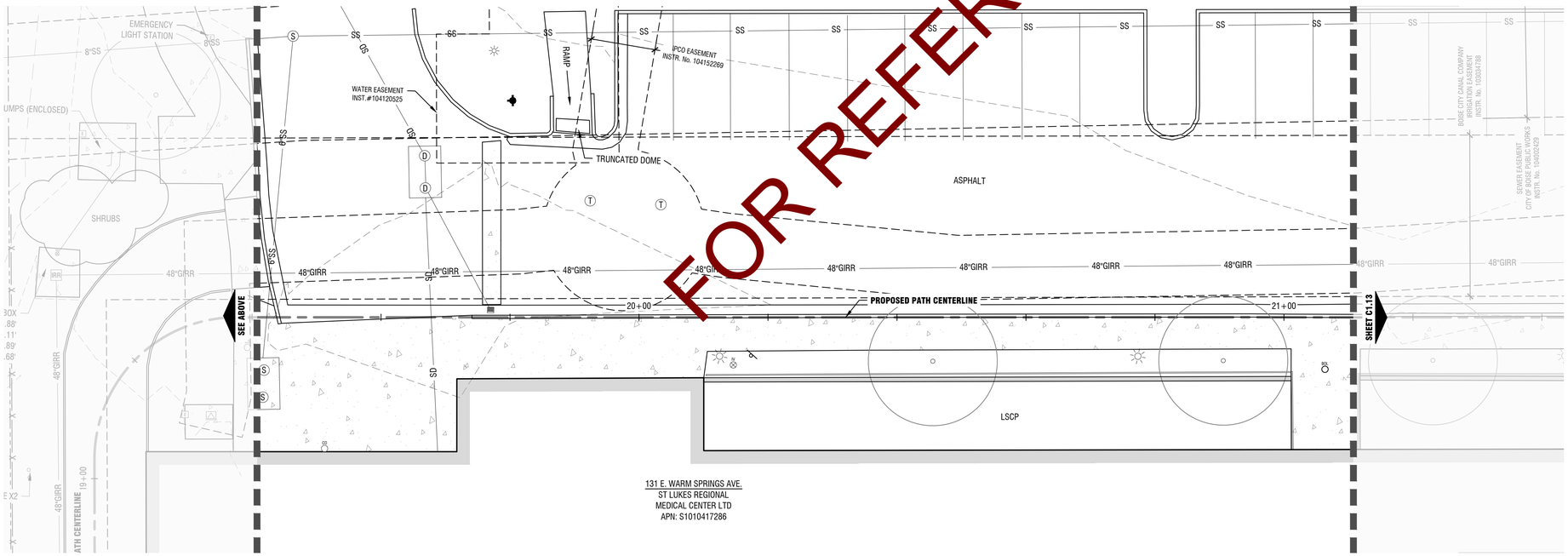



## Existing Conditions

Horizontal Scale: 1" = 10'

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THE LAND GROUP

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## Capital City Development Corporation

3rd Street to Broadway Avenue
Boise, ID 83702

Revisions
1.

JASON DENSMER
PROFESSIONAL ENGINEER
REGISTERED
10961
STATE OF IDAHO
05/03/2024

Project No.: 122112
Date of Issuance: 05.03.2024
Project Milestone: Permit Set

**Existing Conditions**

**C1.12**

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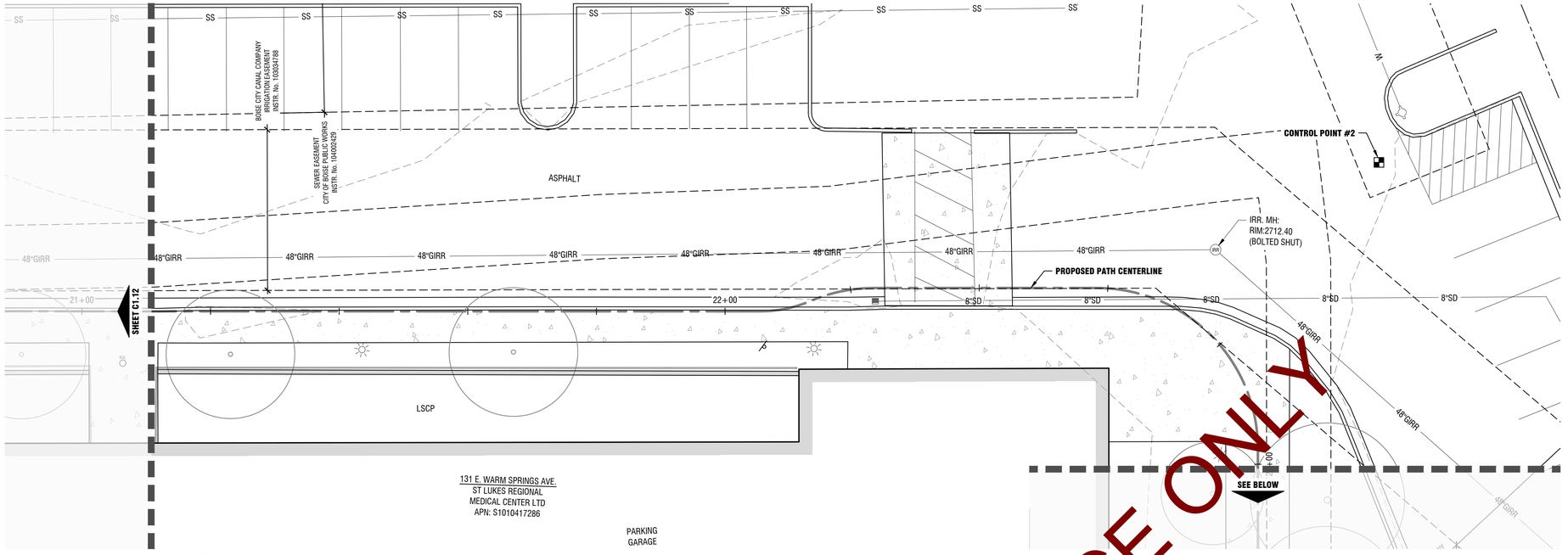


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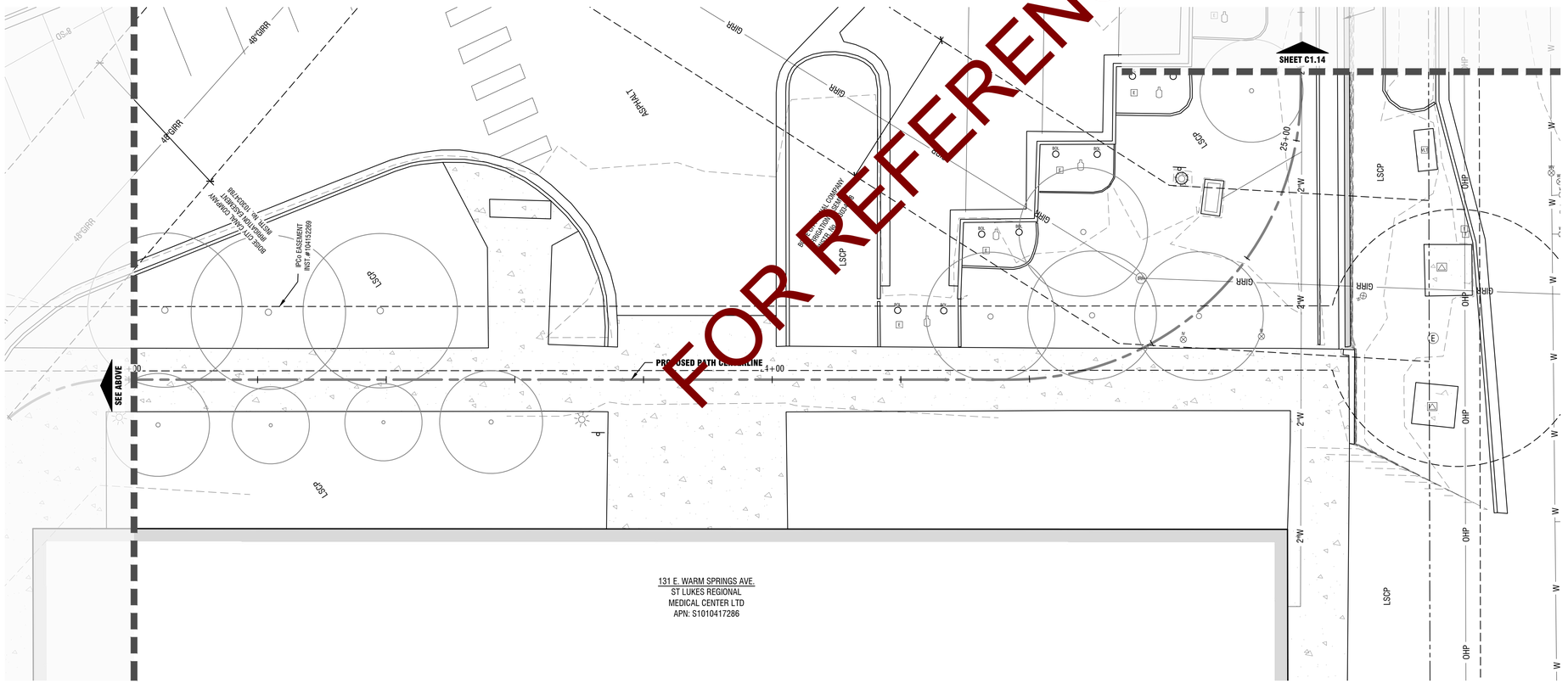
Horizontal Scale: 1" = 10'



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THE LAND GROUP

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

3rd Street to Broadway Avenue
Boise, ID 83702

Revisions
1.

PROFESSIONAL ENGINEER
REGISTERED
10961
STATE OF IDAHO
JASON DENSMER
05/03/2024

Project No.: 122112
Date of Issuance: 05.03.2024
Project Milestone: Permit Set

**Existing Conditions**

**C1.13**

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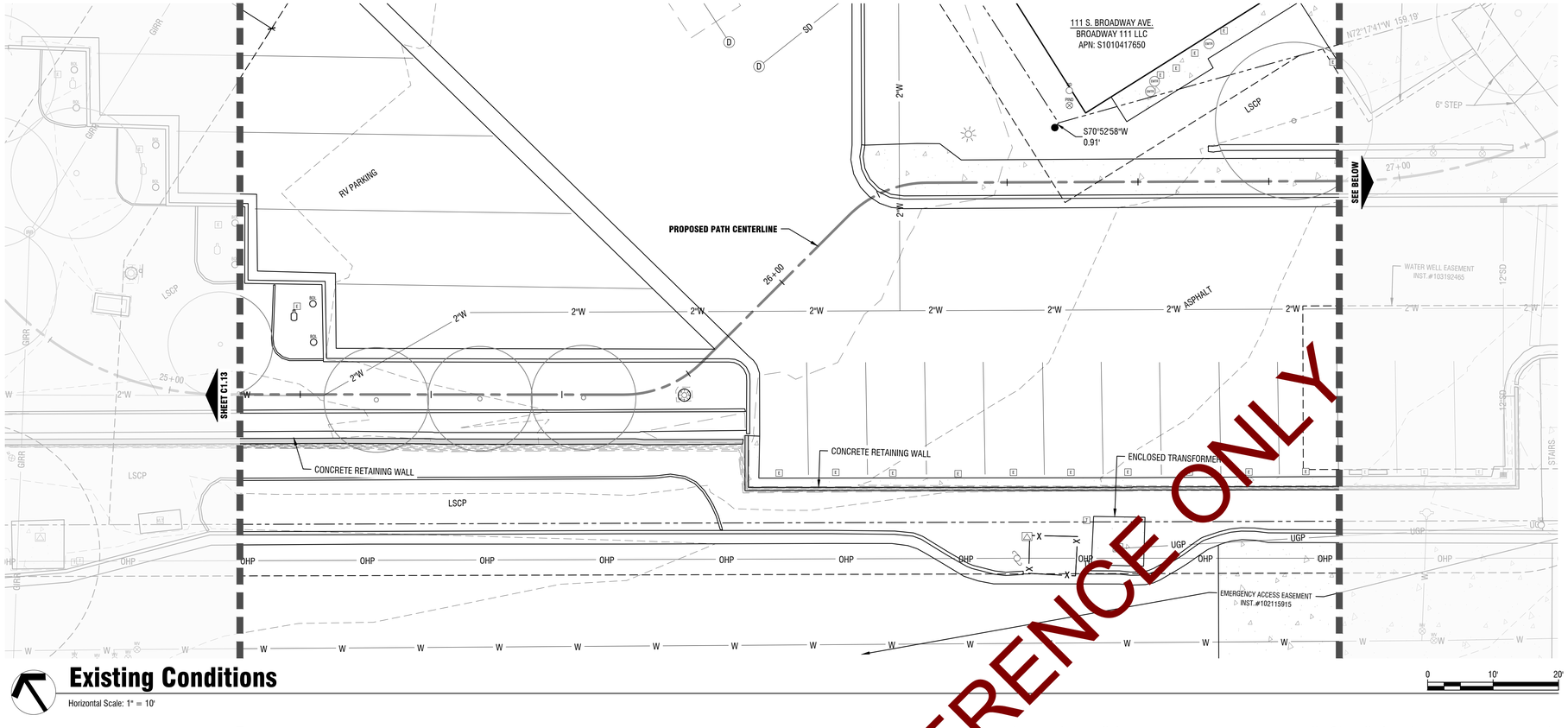


## Existing Conditions

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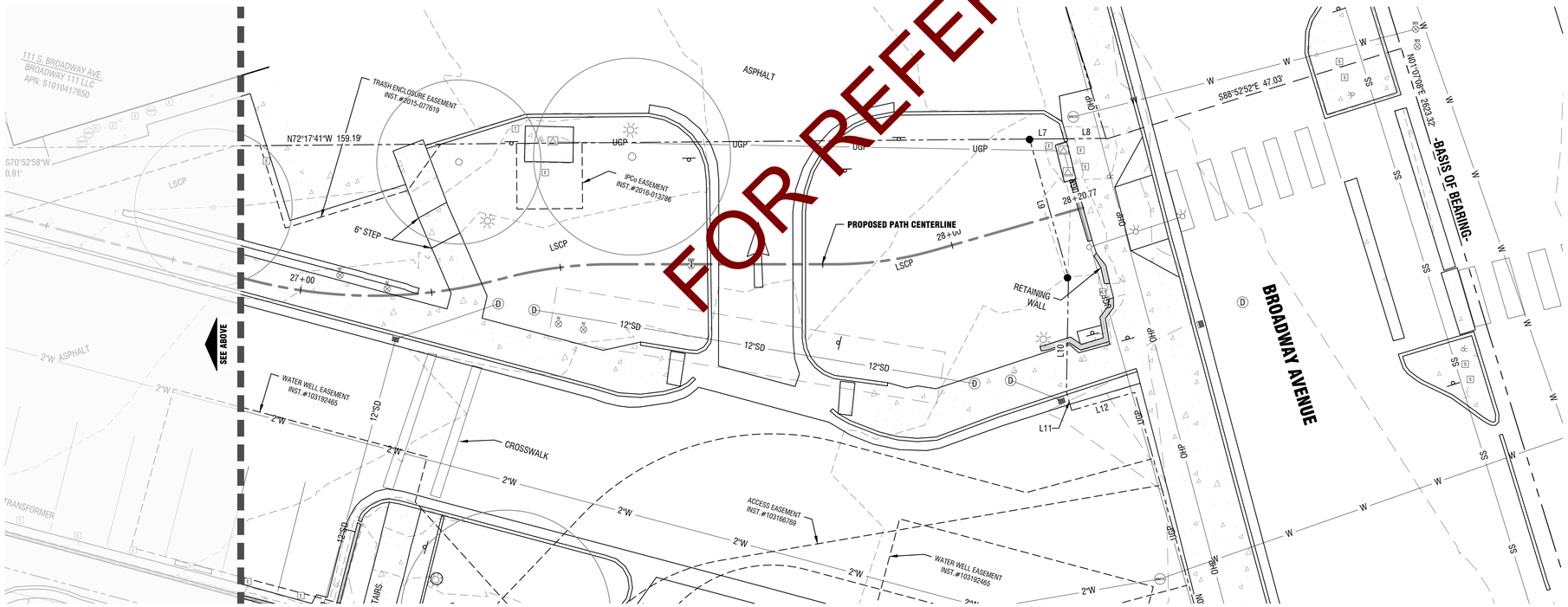


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THE LAND GROUP

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

3rd Street to Broadway Avenue
Boise, ID 83702

Revisions
1.

PROFESSIONAL ENGINEER
REGISTERED
10961
STATE OF IDAHO
JASON DENSMER
05/03/2024

| | |
|---|---|
| Project No.: | 122112 |
| Date of Issuance: | 05.03.2024 |
| Project Milestone: | Permit Set |

**Existing Conditions**

**C1.14**

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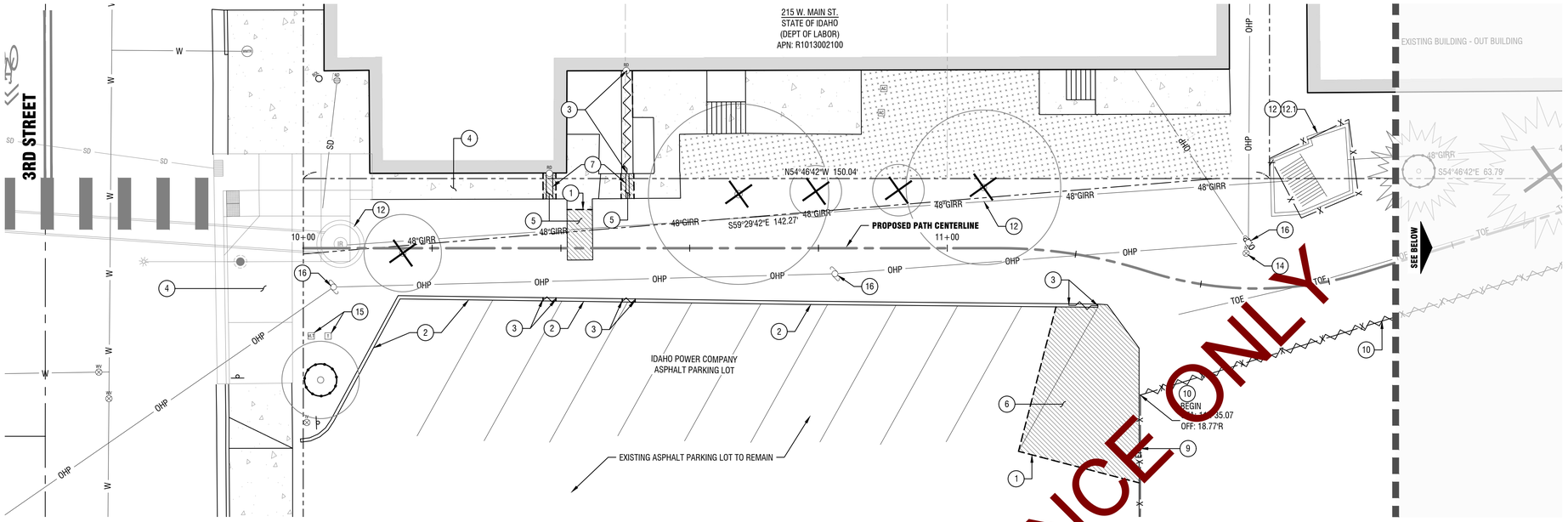
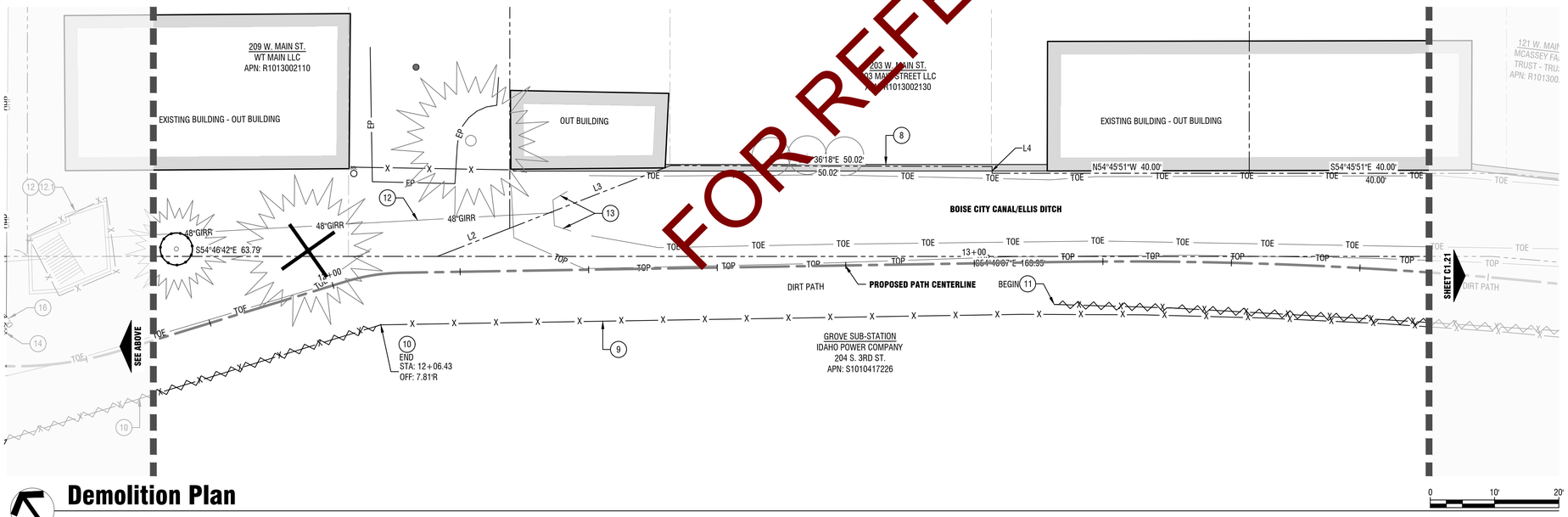
Date Plotted: ...




## Demolition Plan

Horizontal Scale: 1" = 10'

0 10' 20'




## Demolition Plan

Horizontal Scale: 1" = 10'

0 10' 20'



## Sheet Notes:

A. CONTRACTOR IS REQUIRED TO SUBMIT A TRAFFIC CONTROL PLAN FOR CCDC/ST. LUKE'S APPROVAL. PLAN TO INCLUDE ALL NECESSARY BARRICADES FOR GARAGE VEHICLE ACCESS CLOSURE AND ACCESSIBLE ROUTES FOR PEDESTRIANS ENTERING/EXITING THE PARKING GARAGE. CONTRACTOR SHALL MINIMIZE CLOSURES TO THE PARKING STRUCTURE ACCESSES. MAINTAIN CONTINUOUS ACCESS. SIMULTANEOUS CLOSURE OF BOTH ACCESSES WILL NOT BE PERMITTED.

## Demolition Legend:

- REMOVE AND DISPOSE OF HARDSCAPE OFF-SITE.
- RETAIN AND PROTECT EXISTING LANDSCAPING AND IRRIGATION.
- RETAIN AND PROTECT EXISTING CONCRETE SIDEWALK.
- REMOVE AND DISPOSE OF EXISTING TURF SUPPORT SYSTEM IF ENCOUNTERED.
- RETAIN AND PROTECT EXISTING TREE PER TREE PROTECTION NOTES ON SHEET C1.01
- REMOVE EXISTING TREE.
- INFRASTRUCTURE REMOVAL. REFER TO KEYNOTES.
- SAW CUT PER ISPWC SD-303. PROVIDE A NEAT SAW CUT LINE OF ASPHALT AND CONCRETE

## Keynotes (This Sheet Only):

1. SAW CUT PER ISPWC SD-303. PROVIDE A NEAT SAW CUT LINE OF ASPHALT OR CONCRETE.
2. RETAIN AND PROTECT EXISTING CURB AND/OR GUTTER.
3. REMOVE EXISTING CURB AND/OR GUTTER AND DISPOSE OF OFF-SITE.
4. RETAIN AND PROTECT EXISTING CONCRETE SIDEWALK.
5. REMOVE EXISTING CONCRETE SIDEWALK AND DISPOSE OF OFF-SITE.
6. REMOVE EXISTING ASPHALT AND DISPOSE OF OFF-SITE.
7. REMOVE EXISTING TRENCH DRAIN AND DISPOSE OF OFF-SITE.
8. RETAIN AND PROTECT EXISTING STONE/CONCRETE RETAINING WALL.
9. RETAIN AND PROTECT EXISTING IDAHO POWER SECURITY FENCE.
10. REMOVE EXISTING IDAHO POWER SECURITY FENCE AND DISPOSE OF OFF-SITE. COORDINATE WITH IDAHO POWER TO MAINTAIN SECURE PERIMETER OF SUBSTATION. COMPLY WITH IDAHO POWER REQUIREMENTS TO WORK WITHIN SUBSTATION GROUNDS.
11. REMOVE EXISTING CHAIN LINK FENCE AND DISPOSE OF OFF-SITE.
12. RETAIN AND PROTECT EXISTING GRAVITY IRRIGATION STRUCTURE AND PIPES.
    12.1. RETAIN AND PROTECT EXISTING FENCE.
13. REMOVE EXISTING FLARED END SECTION AND DISPOSE OF OFF-SITE.
14. REMOVE EXISTING PRESSURE IRRIGATION STRUCTURE.
15. RETAIN AND PROTECT EXISTING ELECTRICAL STRUCTURE.
16. COORDINATE WITH IDAHO POWER FOR RELOCATION OF POWER POLES, LINES, AND DEVICES.

THE LAND GROUP

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

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05/03/2024

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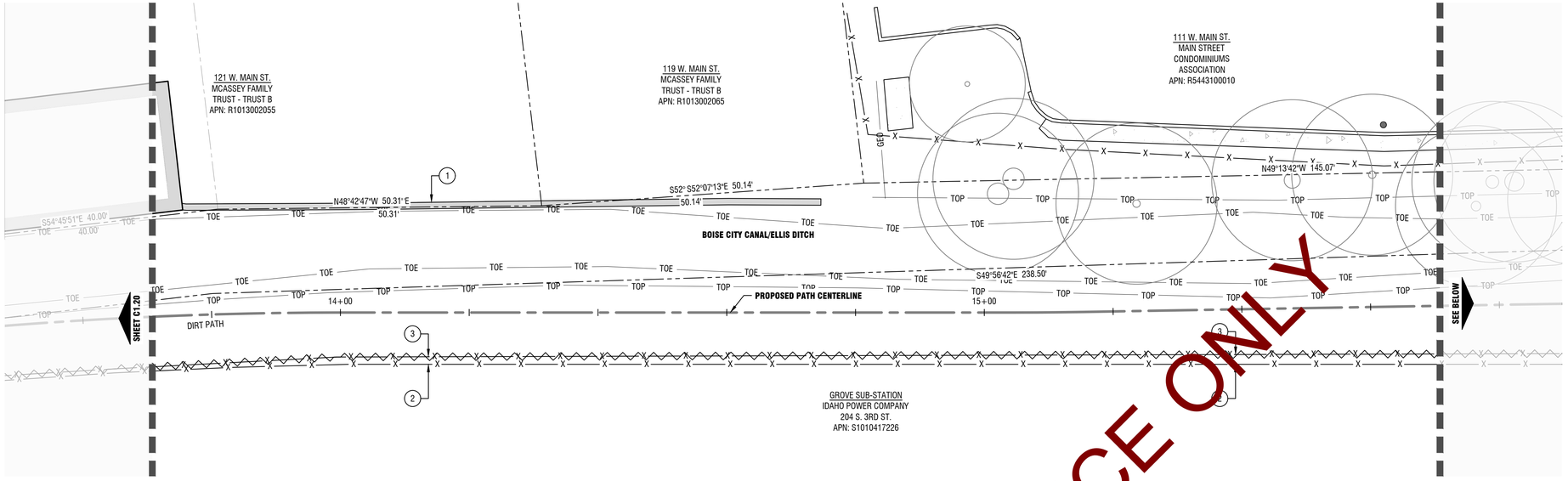
Date of Issuance: 05.03.2024
Project Milestone: Permit Set

**Demolition Plan**

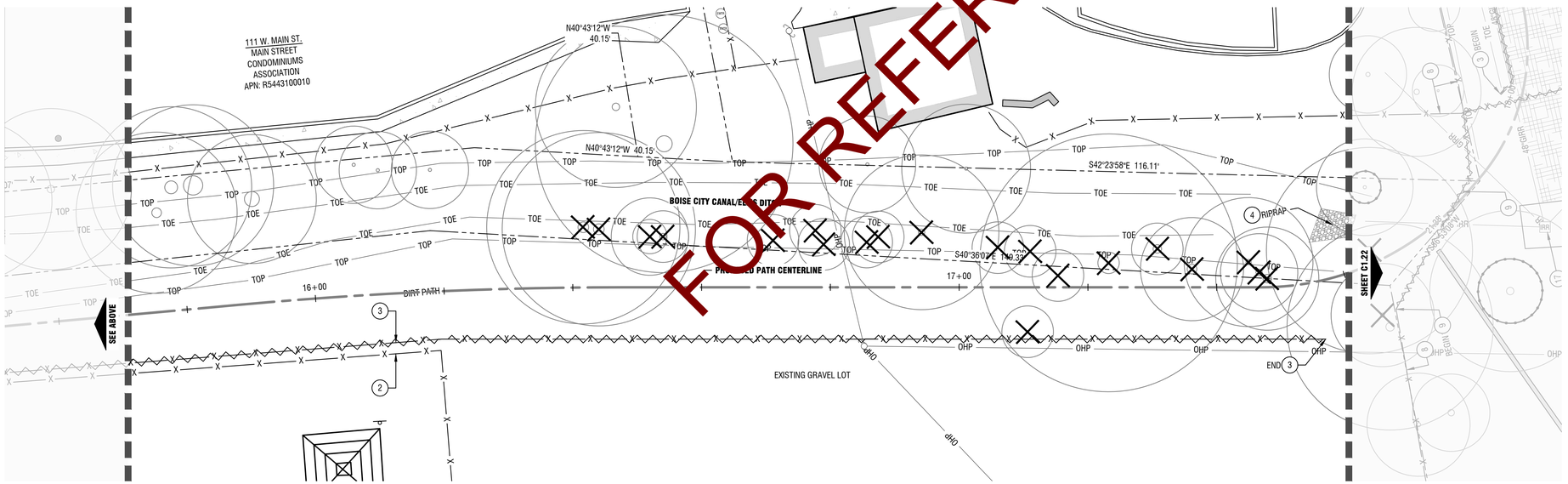
**C1.20**




## Demolition Plan

Horizontal Scale: 1" = 10'

0 10' 20'




## Demolition Plan

Horizontal Scale: 1" = 10'

0 10' 20'



## Sheet Notes:

A. CONTRACTOR IS REQUIRED TO SUBMIT A TRAFFIC CONTROL PLAN FOR CCDC/ST. LUKE'S APPROVAL. PLAN TO INCLUDE ALL NECESSARY BARRICADES FOR GARAGE VEHICLE ACCESS CLOSURE AND ACCESSIBLE ROUTES FOR PEDESTRIANS ENTERING/EXITING THE PARKING GARAGE. CONTRACTOR SHALL MINIMIZE CLOSURES TO THE PARKING STRUCTURE ACCESSES. MAINTAIN CONTINUOUS ACCESS. SIMULTANEOUS CLOSURE OF BOTH ACCESSES WILL NOT BE PERMITTED.

## Demolition Legend:

- REMOVE AND DISPOSE OF HARDSCAPE OFF-SITE.
- RETAIN AND PROTECT EXISTING LANDSCAPING AND IRRIGATION.
- RETAIN AND PROTECT EXISTING CONCRETE SIDEWALK.
- REMOVE AND DISPOSE OF EXISTING TURF SUPPORT SYSTEM IF ENCOUNTERED.
- RETAIN AND PROTECT EXISTING TREE PER TREE PROTECTION NOTES ON SHEET C1.01
- REMOVE EXISTING TREE.
- INFRASTRUCTURE REMOVAL. REFER TO KEYNOTES.
- SAW CUT PER ISPWC SD-303. PROVIDE A NEAT SAW CUT LINE OF ASPHALT AND CONCRETE

## Keynotes (This Sheet Only):

1. RETAIN AND PROTECT EXISTING STONE/CONCRETE RETAINING WALL.
2. RETAIN AND PROTECT EXISTING IDAHO POWER SECURITY FENCE.
3. REMOVE EXISTING CHAIN LINK FENCE AND DISPOSE OF OFF-SITE.
4. REMOVE EXISTING RIP RAP AND DISPOSE OF OFF-SITE.

THE LAND GROUP

# BOISE CITY CANAL MULTI-USE PATHWAY
# Capital City Development Corporation

3rd Street to Broadway Avenue
Boise, ID 83702

Revisions
1.

PROFESSIONAL ENGINEER
REGISTERED
10961
STATE OF IDAHO
JASON DENSMER
05/03/2024

| | |
|---|---|
| Project No.: | 122112 |
| Date of Issuance: | 05.03.2024 |
| Project Milestone: | Permit Set |

**Demolition Plan**

**C1.21**

File Location: g:\2021\122112\cad\122112-c1f3-demolition-plan.dwg
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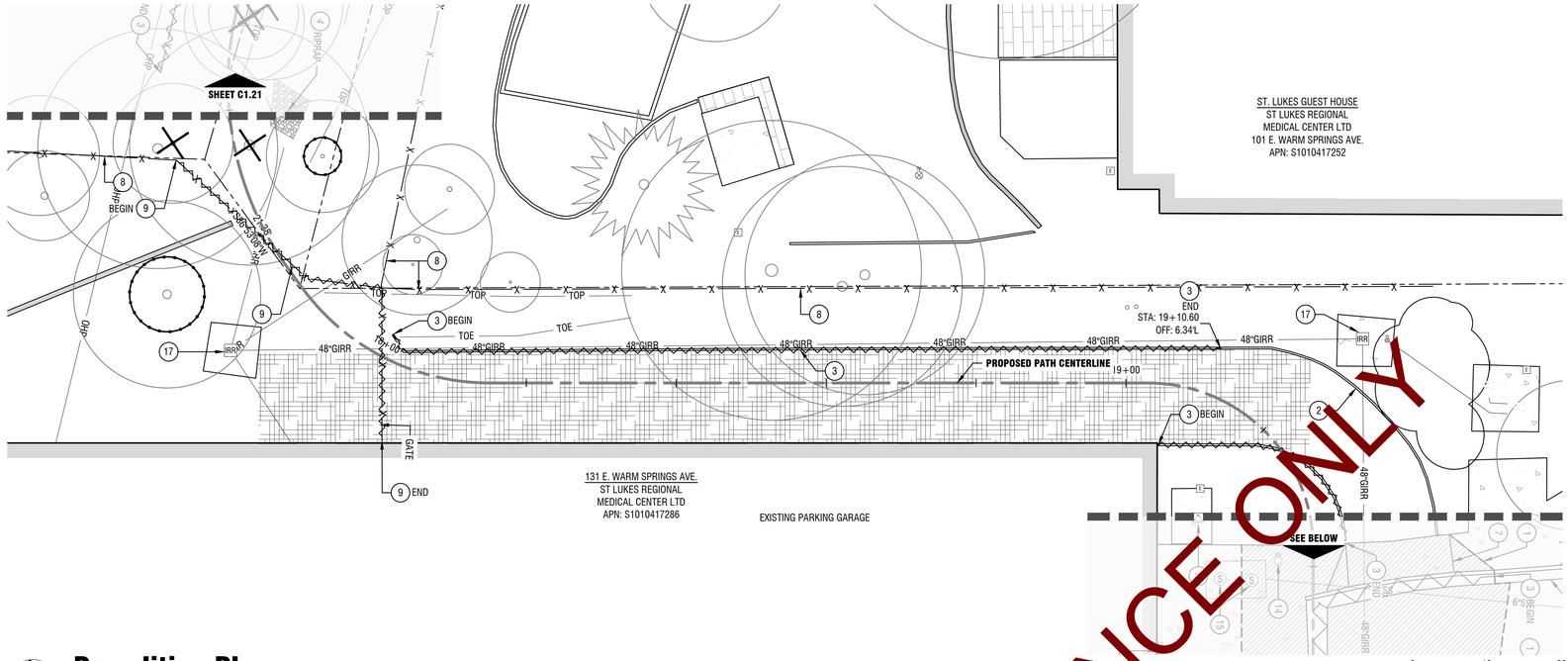
Date Plotted: Friday, May 3, 2024 at 09:53 AM




## Demolition Plan

Horizontal Scale: 1" = 10'



## Demolition Plan

Horizontal Scale: 1" = 10'

## Sheet Notes:

A. CONTRACTOR IS REQUIRED TO SUBMIT A TRAFFIC CONTROL PLAN FOR CCDC/ST. LUKE'S APPROVAL. PLAN TO INCLUDE ALL NECESSARY BARRICADES FOR GARAGE VEHICLE ACCESS CLOSURE AND ACCESSIBLE ROUTES FOR PEDESTRIANS ENTERING/EXITING THE PARKING GARAGE. CONTRACTOR SHALL MINIMIZE CLOSURES TO THE PARKING STRUCTURE ACCESSES. MAINTAIN CONTINUOUS ACCESS. SIMULTANEOUS CLOSURE OF BOTH ACCESSES WILL NOT BE PERMITTED.

## Demolition Legend:

- REMOVE AND DISPOSE OF HARDSCAPE OFF-SITE.
- RETAIN AND PROTECT EXISTING LANDSCAPING AND IRRIGATION.
- RETAIN AND PROTECT EXISTING CONCRETE SIDEWALK.
- REMOVE AND DISPOSE OF EXISTING TURF SUPPORT SYSTEM IF ENCOUNTERED.
- RETAIN AND PROTECT EXISTING TREE PER TREE PROTECTION NOTES ON SHEET C1.01
- REMOVE EXISTING TREE.
- INFRASTRUCTURE REMOVAL. REFER TO KEYNOTES.
- SAW CUT PER ISPWC SD-303. PROVIDE A NEAT SAW CUT LINE OF ASPHALT AND CONCRETE

## Keynotes (This Sheet Only):

1. SAW CUT PER ISPWC SD-303. PROVIDE A NEAT SAW CUT LINE OF ASPHALT OR CONCRETE.
2. RETAIN AND PROTECT EXISTING CURB AND/OR GUTTER.
3. REMOVE EXISTING CURB AND/OR GUTTER AND DISPOSE OF OFF-SITE.
4. RETAIN AND PROTECT EXISTING CONCRETE SIDEWALK.
5. REMOVE EXISTING CONCRETE SIDEWALK AND DISPOSE OF OFF-SITE.
6. REMOVE EXISTING ASPHALT AND DISPOSE OF OFF-SITE.
7. REMOVE EXISTING DRIVE APPROACH AND DISPOSE OF OFF-SITE.
8. RETAIN AND PROTECT EXISTING CHAIN LINK FENCE.
9. REMOVE EXISTING CHAIN LINK FENCE AND DISPOSE OF OFF-SITE.
10. RETAIN AND PROTECT EXISTING KEYSTONE RETAINING WALL.
11. RETAIN AND PROTECT EXISTING GUARDRAIL.
12. RETAIN AND PROTECT EXISTING SIGN.
13. REMOVE AND SALVAGE BOLLARD FOR REINSTALLATION.
14. RETAIN AND PROTECT EXISTING SEWER STRUCTURES. ADJUST TO GRADE IF NECESSARY.
15. RETAIN AND PROTECT EXISTING STORM DRAIN STRUCTURE AND PIPES. ADJUST TO MATCH FINISHED GRADE.
16. REMOVE EXISTING STORM DRAIN STRUCTURE AND PIPES AND DISPOSE OF OFF-SITE.
    16.1. DISCONNECT EXISTING STORM DRAIN PIPE FROM EXISTING MANHOLE. GROUT ABANDONED PIPE INVERT AT THE CONNECTION TO THE MANHOLE.
17. RETAIN AND PROTECT EXISTING GRAVITY IRRIGATION STRUCTURE AND PIPES.
18. RETAIN AND PROTECT EXISTING PRESSURE IRRIGATION STRUCTURE.
19. RETAIN AND PROTECT EXISTING IDAHO POWER TRANSFORMER.
20. RETAIN AND PROTECT EXISTING ELECTRICAL STRUCTURE.
21. RETAIN AND PROTECT EXISTING PARKING LOT LIGHT.

THE LAND GROUP

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

3rd Street to Broadway Avenue
Boise, ID 83702

Revisions
1.


| | |
|---|---|
| Project No.: | 122112 |
| Date of Issuance: | 05.03.2024 |
| Project Milestone: | Permit Set |

**Demolition Plan**

**C1.22**

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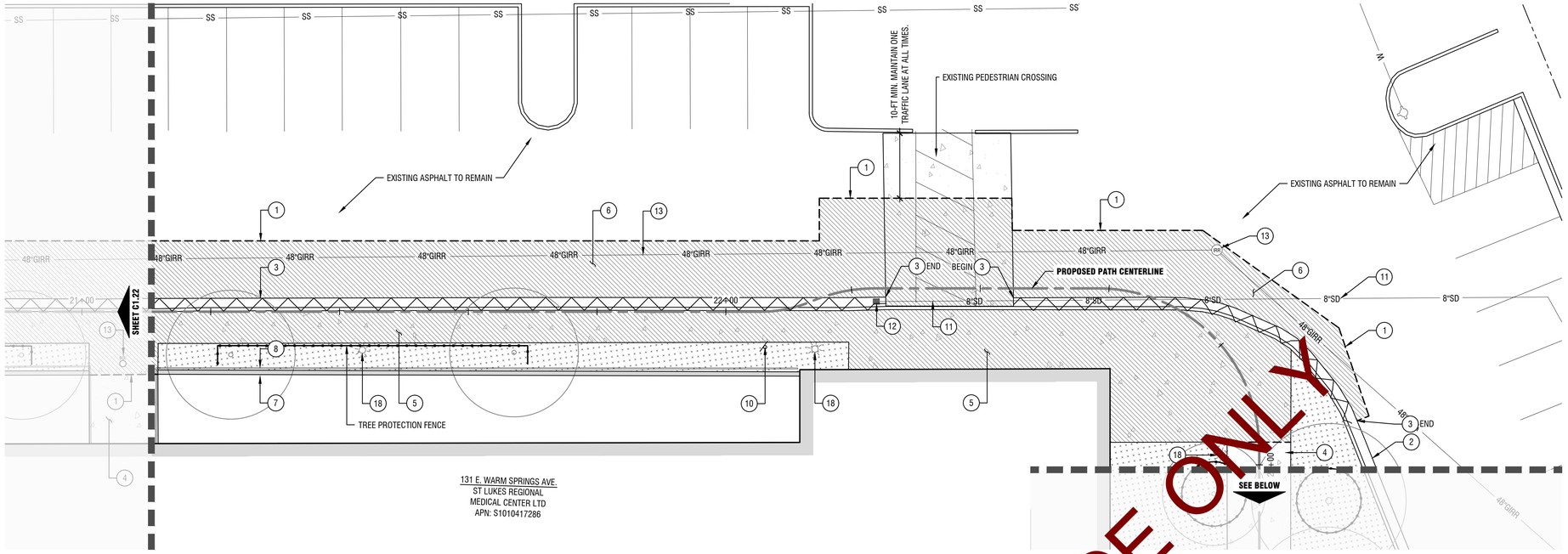
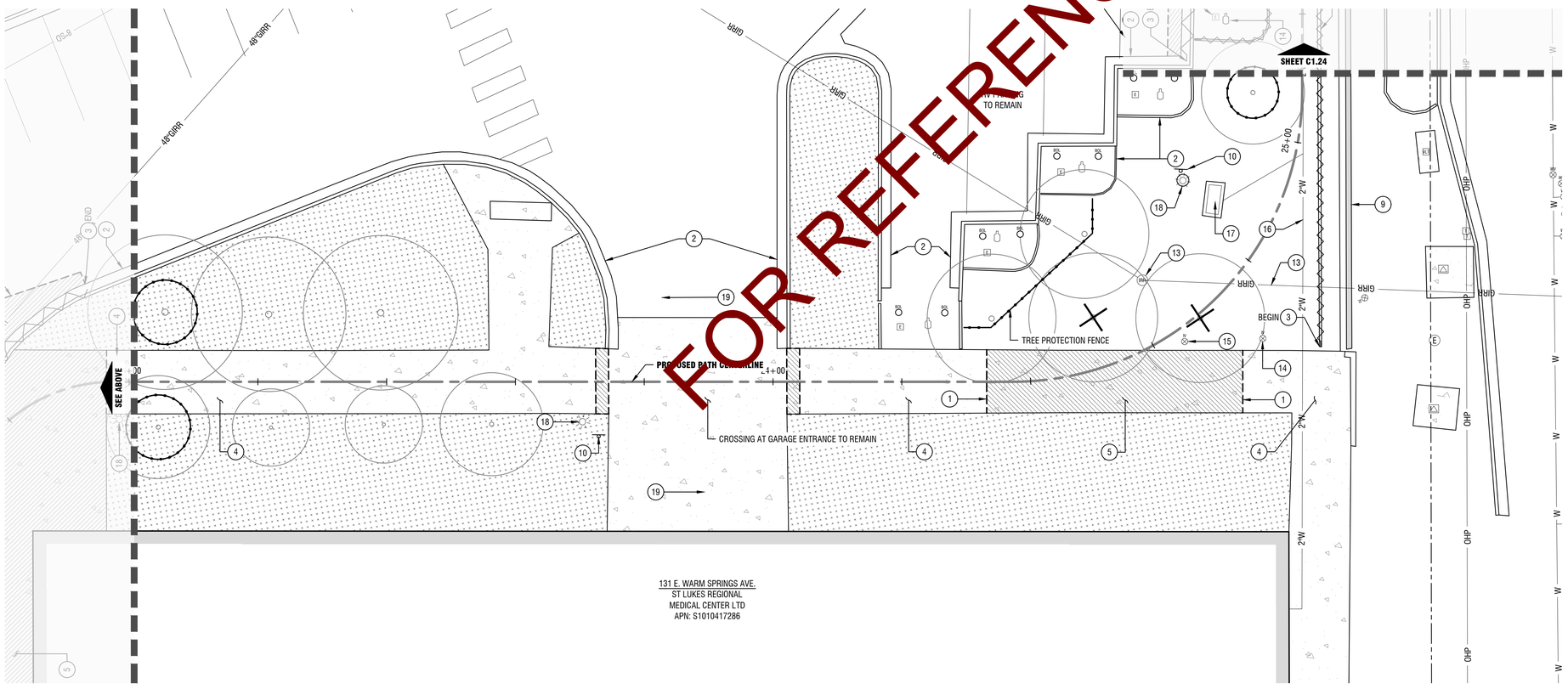



## Demolition Plan

Horizontal Scale: 1" = 10'

0 10' 20'




## Demolition Plan

Horizontal Scale: 1" = 10'

0 10' 20'



## Sheet Notes:

A. CONTRACTOR IS REQUIRED TO SUBMIT A TRAFFIC CONTROL PLAN FOR CCDC/ST. LUKE'S APPROVAL. PLAN TO INCLUDE ALL NECESSARY BARRICADES FOR GARAGE VEHICLE ACCESS CLOSURE AND ACCESSIBLE ROUTES FOR PEDESTRIANS ENTERING/EXITING THE PARKING GARAGE. CONTRACTOR SHALL MINIMIZE CLOSURES TO THE PARKING STRUCTURE ACCESSES. MAINTAIN CONTINUOUS ACCESS. SIMULTANEOUS CLOSURE OF BOTH ACCESSES WILL NOT BE PERMITTED.

## Demolition Legend:

- REMOVE AND DISPOSE OF HARDSCAPE OFF-SITE.
- RETAIN AND PROTECT EXISTING LANDSCAPING AND IRRIGATION.
- RETAIN AND PROTECT EXISTING CONCRETE SIDEWALK.
- REMOVE AND DISPOSE OF EXISTING TURF SUPPORT SYSTEM IF ENCOUNTERED.
- RETAIN AND PROTECT EXISTING TREE PER TREE PROTECTION NOTES ON SHEET C1.01
- REMOVE EXISTING TREE.
- INFRASTRUCTURE REMOVAL. REFER TO KEYNOTES.
- SAW CUT PER ISPWC SD-303. PROVIDE A NEAT SAW CUT LINE OF ASPHALT AND CONCRETE

## Keynotes (This Sheet Only):

1. SAW CUT PER ISPWC SD-303. PROVIDE A NEAT SAW CUT LINE OF ASPHALT OR CONCRETE.
2. RETAIN AND PROTECT EXISTING CURB AND/OR GUTTER.
3. REMOVE EXISTING CURB AND/OR GUTTER AND DISPOSE OF OFF-SITE.
4. RETAIN AND PROTECT EXISTING CONCRETE SIDEWALK.
5. REMOVE EXISTING CONCRETE SIDEWALK AND DISPOSE OF OFF-SITE.
6. REMOVE EXISTING ASPHALT AND DISPOSE OF OFF-SITE.
7. RETAIN AND PROTECT EXISTING KEYSTONE RETAINING WALL.
8. RETAIN AND PROTECT EXISTING GUARDRAIL.
9. RETAIN AND PROTECT EXISTING CONCRETE RETAINING WALL AND GUARDRAIL.
10. RETAIN AND PROTECT EXISTING SIGN.
11. RETAIN AND PROTECT EXISTING STORM DRAIN STRUCTURE AND PIPES.
12. REMOVE EXISTING STORM DRAIN STRUCTURE AND PIPES AND DISPOSE OF OFF-SITE.
13. RETAIN AND PROTECT EXISTING GRAVITY IRRIGATION STRUCTURE AND PIPES. ADJUST TO MATCH FINISHED GRADE.
14. RETAIN AND PROTECT EXISTING PRESSURE IRRIGATION STRUCTURE.
15. RELOCATE EXISTING PRESSURE IRRIGATION STRUCTURE.
16. RETAIN AND PROTECT EXISTING WATER SERVICE.
17. RETAIN AND PROTECT EXISTING BACKFLOW PREVENTERS WITHIN HEATED ENCLOSURE.
18. RETAIN AND PROTECT EXISTING PARKING LOT LIGHT.
19. OBLITERATE EXISTING PAVEMENT MARKINGS.

THE LAND GROUP

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

3rd Street to Broadway Avenue
Boise, ID 83702

Revisions
1.

PROFESSIONAL ENGINEER REGISTERED 10961 STATE OF IDAHO JASON DENSMER
05/03/2024

Project No.: 122112
Date of Issuance: 05.03.2024
Project Milestone: Permit Set

**Demolition Plan**

**C1.23**

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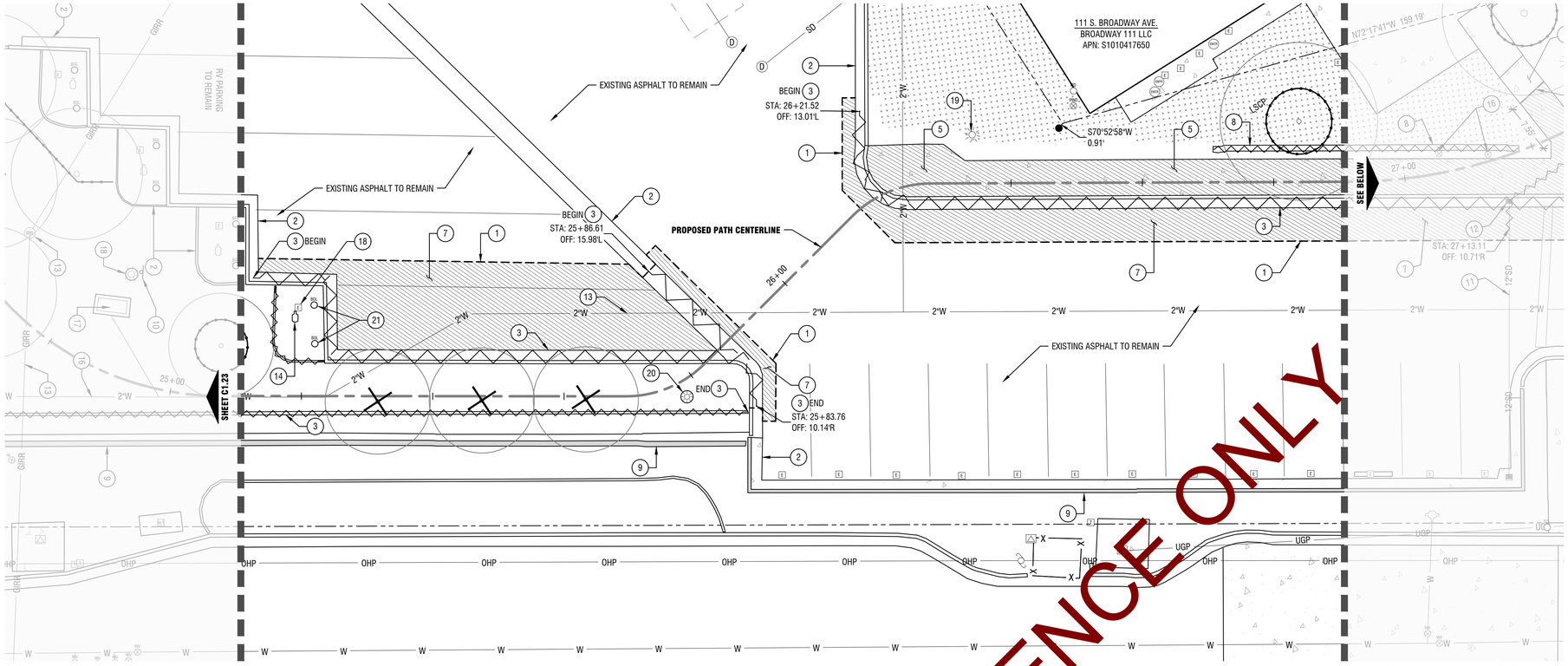
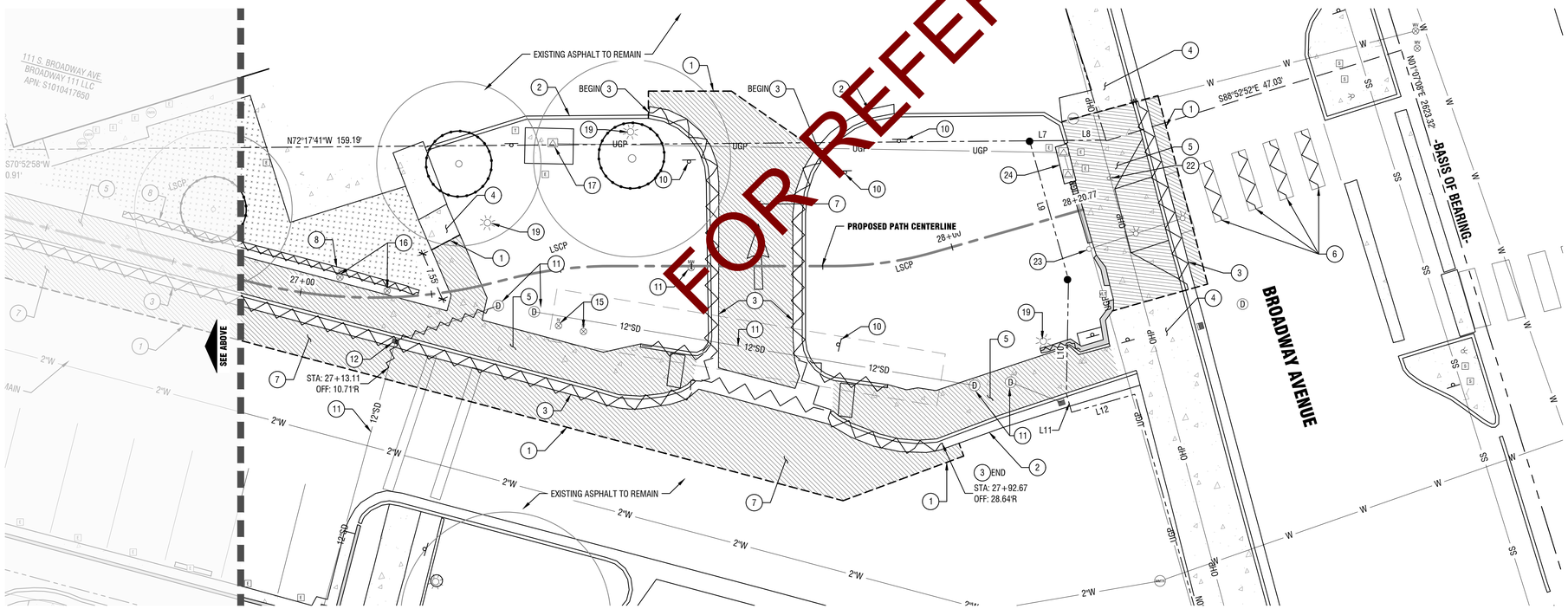



## Demolition Plan

Horizontal Scale: 1" = 10'




## Demolition Plan

Horizontal Scale: 1" = 10'



## Sheet Notes:

A. CONTRACTOR IS REQUIRED TO SUBMIT A TRAFFIC CONTROL PLAN FOR CCDC/ST. LUKE'S APPROVAL. PLAN TO INCLUDE ALL NECESSARY BARRICADES FOR GARAGE VEHICLE ACCESS CLOSURE AND ACCESSIBLE ROUTES FOR PEDESTRIANS ENTERING/EXITING THE PARKING GARAGE. CONTRACTOR SHALL MINIMIZE CLOSURES TO THE PARKING STRUCTURE ACCESSES. MAINTAIN CONTINUOUS ACCESS. SIMULTANEOUS CLOSURE OF BOTH ACCESSES WILL NOT BE PERMITTED.

## Demolition Legend:

- REMOVE AND DISPOSE OF HARDSCAPE OFF-SITE.
- RETAIN AND PROTECT EXISTING LANDSCAPING AND IRRIGATION.
- RETAIN AND PROTECT EXISTING CONCRETE SIDEWALK.
- REMOVE AND DISPOSE OF EXISTING TURF SUPPORT SYSTEM IF ENCOUNTERED.
- RETAIN AND PROTECT EXISTING TREE PER TREE PROTECTION NOTES ON SHEET C1.01
- REMOVE EXISTING TREE.
- INFRASTRUCTURE REMOVAL. REFER TO KEYNOTES.
- SAW CUT PER ISPWC SD-303. PROVIDE A NEAT SAW CUT LINE OF ASPHALT AND CONCRETE

## Keynotes (This Sheet Only): (#)

1. SAW CUT PER ISPWC SD-303. PROVIDE A NEAT SAW CUT LINE OF ASPHALT OR CONCRETE.
2. RETAIN AND PROTECT EXISTING CURB AND/OR GUTTER.
3. REMOVE EXISTING CURB AND/OR GUTTER AND DISPOSE OF OFF-SITE.
4. RETAIN AND PROTECT EXISTING CONCRETE SIDEWALK.
5. REMOVE EXISTING CONCRETE SIDEWALK AND DISPOSE OF OFF-SITE.
6. OBLITERATE PEDESTRIAN CROSSING PAVEMENT MARKINGS. COORDINATE WITH SHEET C2.10 FOR NEW ALIGNMENT.
7. REMOVE EXISTING ASPHALT AND DISPOSE OF OFF-SITE.
8. EXISTING KEYSTONE RETAINING WALL TO BE REMOVED. SALVAGE EXISTING STONES TO RE-USE PER PLAN SHEETS C2.09 AND C2.10.
9. RETAIN AND PROTECT EXISTING CONCRETE RETAINING WALL AND GUARDRAIL.
10. RETAIN AND PROTECT EXISTING SIGN.
11. RETAIN AND PROTECT EXISTING STORM DRAIN STRUCTURE AND PIPES. ADJUST TO GRADE IF NECESSARY.
12. REMOVE EXISTING STORM DRAIN STRUCTURE AND PIPES AND DISPOSE OF OFF-SITE.
13. RETAIN AND PROTECT EXISTING WATER SERVICE.
14. REMOVE EXISTING WATER SPIGOT. CAP SERVICE LINE AT SOURCE WITHIN HEATED ENCLOSURE.
15. RETAIN AND PROTECT EXISTING PRESSURE IRRIGATION STRUCTURE.
16. RELOCATE EXISTING PRESSURE IRRIGATION STRUCTURE.
17. RETAIN AND PROTECT EXISTING IDAHO POWER TRANSFORMER.
18. REMOVE EXISTING ELECTRICAL STRUCTURE.
19. RETAIN AND PROTECT EXISTING PARKING LOT LIGHT.
20. SALVAGE AND RELOCATE EXISTING PARKING LOT LIGHT. REFER TO PLAN AND PROFILE SHEET C2.09 FOR MORE INFORMATION.
21. REMOVE EXISTING BOLLARD AND DISPOSE OF OFF-SITE.
22. SALVAGE AND RELOCATE EXISTING PEDESTRIAN PUSH BUTTON. SEE PLAN AND PROFILE SHEET C2.10 FOR MORE INFORMATION.
23. RETAIN AND PROTECT EXISTING TRAFFIC SIGNAL AND EQUIPMENT.
24. RETAIN AND PROTECT EXISTING TRAFFIC SIGNAL CABINET AND EQUIPMENT.

THE LAND GROUP

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

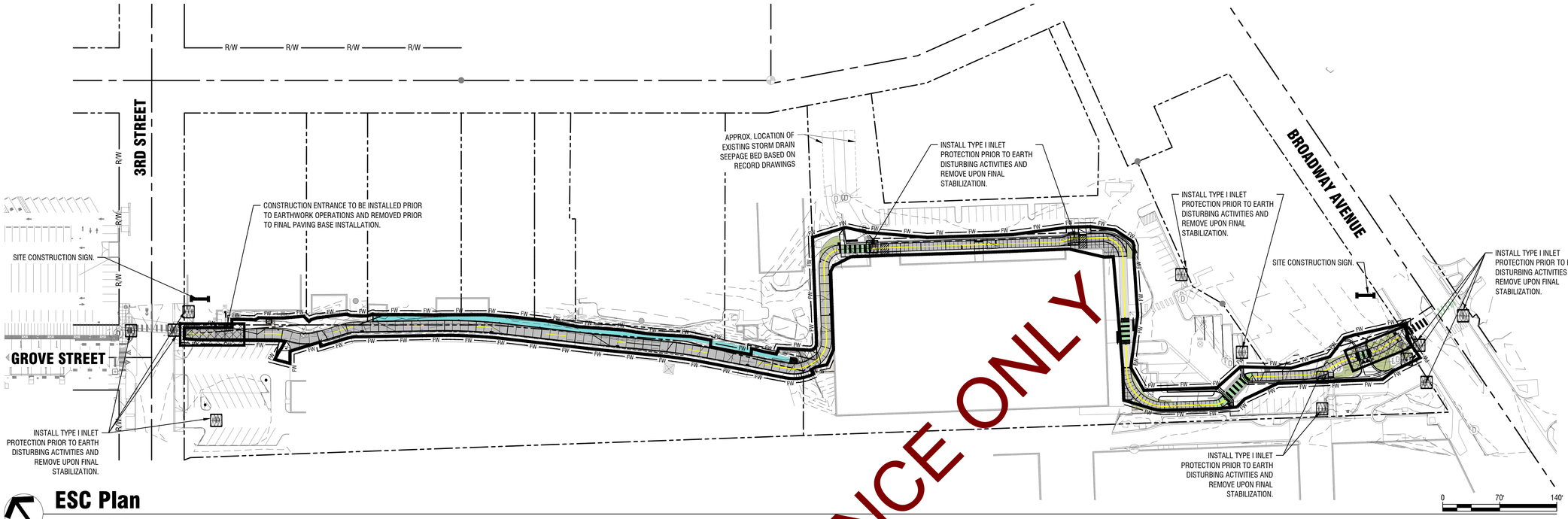
3rd Street to Broadway Avenue
Boise, ID 83702

Revisions
1.


| | |
|---|---|
| Project No.: | 122112 |
| Date of Issuance: | 05.03.2024 |
| Project Milestone: | Permit Set |

**Demolition Plan**

**C1.24**




## ESC Plan

Horizontal Scale: 1" = 70'



## ESC General Notes:

1. ALL BMP NUMBERS ARE REFERENCED FROM IDAHO DEQ BEST MANAGEMENT PRACTICES.
2. ALL STORM WATER WILL BE CONTAINED ON SITE OR FOLLOW ESTABLISHED DRAINAGE PATHS WITH BMPs INSTALLED TO PREVENT SEDIMENT TRANSPORT.
3. ALL BMP'S SHALL BE INSPECTED AT A MINIMUM OF ONCE EVERY 7 DAYS -OR- ONCE EVERY 14 DAYS AND WITHIN 24 HOURS OF A STORM EVENT PRODUCING 0.25 INCHES OR GREATER. INSPECTION FREQUENCY MAY BE REDUCED TO ONCE EVERY MONTH IF:
   A. THE ENTIRE SITE IS TEMPORARILY STABILIZED, OR
   B. RUNOFF IS UNLIKELY DUE TO WINTER CONDITIONS, OR
   C. CONSTRUCTION IS OCCURRING DURING SEASONAL ARID PERIODS (MAY THROUGH SEPTEMBER) IN ARID AREAS AND SEMI-ARID AREAS.
4. DEWATERING IS EXPECTED FOR THIS SITE , CANAL FOOTING CONSTRUCTION, IF REQUIRED, AS PART OF THE ESC PLAN, A DEWATERING PLAN SOULD BE SUBMITTED AND REVIEWED BY A CERTIFIED ENGINEER BEFORE DEWATERING -RELATED WORK. THE PLAN SHOULD DETAIL THE FOLLOWING:
   4.1. LOCATION OF DEWATERING ACTIVITIES AND EQUIPMENT, AS WELL AS DISCHARGE POINTS.
   4.2. EXPECTED QUANTITY OF WATER TO BE DISCHARGED.
   4.3. PUMP CAPACITY.
   4.4. ANY ADDITIONAL EROSION AND SEDIMENT CONTROL REQUIRED AT THE POINT OF DISCHARGE.
   4.5. WATER QUALITY SAMPLING LOCATIONS (IF REQUIRED).
   4.6. ONSITE ESC CONTRACTOR IS RESPONSIBLE FOR ALL NON-STORMWATER MANAGEMENT.
5. CONTRACTOR SHALL SECURE PERMISSION FROM ADJACENT PROPERTY OWNERS FOR THE ESTABLISHMENT OF ANY PARKING, MATERIALS OR EQUIPMENT STORAGE, WASTE DISPOSAL FACILITIES OR OTHER CONSTRUCTION SUPPORT ACTIVITIES PROPOSED OUTSIDE THE IMMEDIATE WORK AREA.
6. STREET SWEEPING WILL BE IMPLEMENTED ON AN AS-NEEDED BASIS AS DETERMINED BY THE ESC RESPONSIBLE PERSON. INCREASE TO LIMITS OF SLHS PROPERTY BOUNDARY IF NEEDED.
7. PROVIDE WASTE CONTAINERS FOR BUILDING MATERIALS IN WASTE STORAGE CONTAINMENT AREA. WASTE DISPOSAL DUMPSTERS MUST HAVE LIDS, OR PROVIDE COVER OR A SIMILARLY EFFECTIVE MEANS TO MINIMIZE THE DISCHARGE OF POLLUTANTS. KEEP WASTE CONTAINER LIDS CLOSED WHEN NOT IN USE AND AT THE END OF THE BUSINESS DAY. DISPOSE AT A FREQUENCY ACCORDING TO CONTAINER SIZE.
8. LOCATE ALL PORTABLE RESTROOMS AS FAR FROM PUBLIC AND PRIVATE STORM DRAIN SYSTEMS AS POSSIBLE. ANCHOR TO PREVENT VANDALISM.
9. SLURRY AND CUTTINGS FROM SAWCUTTING OF CONCRETE OR ASPHALT SHALL BE VACUUMED DURING CUTTING AND SURFACING OPERATIONS. SLURRY AND CUTTINGS SHALL NOT REMAIN ON PERMANENT CONCRETE OR ASPHALT PAVEMENT OVERNIGHT. SLURRY AND CUTTINGS SHALL NOT DRAIN TO ANY NATURAL OR CONSTRUCTED DRAINAGE CONVEYANCE. COLLECTED SLURRY AND CUTTINGS SHALL BE DISPOSED OF IN A MANNER THAT DOES NOT VIOLATE GROUNDWATER OR SURFACE WATER QUALITY STANDARDS.
10. ALL EXCESS MATERIALS SHALL BE HAULED OFF SITE AND DISPOSED OF AT AN APPROVED LOCATION. EXCESS MATERIAL MAY BE TEMPORARILY STORED ON SITE (IF APPROVED BY THE OWNER) AT A PRE-APPROVED LOCATION. IF MATERIAL IS STOCKPILED FOR MORE THAN 14 DAYS STOCKPILE IS TO BE STABILIZED PER BMP #44. UNDER NO CIRCUMSTANCES SHOULD ANY EQUIPMENT OR OTHER MATERIALS BE STORED OUTSIDE IMMEDIATE WORK AREA ON SLHS OR IPCO PROPERTY WITHOUT THEIR PERMISSION.
11. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE ISPWC.
12. SEE LANDSCAPE AND MATERIALS PLANS FOR INFORMATION CONCERNING FINAL SOIL STABILIZATION MEASURES.
13. ALL GRADING, UTILITY, AND ROADWAY CONSTRUCTION SHALL BE LIMITED TO THE HOURS BETWEEN 7:00 A.M. AND 9:00 P.M. MONDAY THROUGH FRIDAY AND 8:00 A.M. TO 9:00 P.M. SATURDAY AND SUNDAY, UNLESS OTHERWISE APPROVED BY THE CONSTRUCTION MANAGER.
14. ANY MODIFICATIONS TO THIS PLAN REQUIRE APPROVAL OF THE DESIGNER OR THE ONSITE RESPONSIBLE PERSON.
15. TOTAL DISTURBED AREA FOR THIS ON-SITE WORK IS APPROXIMATELY: **1.12 ACRES.**
16. UPON CONTRACT APPROVAL BY THE CONTRACTOR, IT IS RECOGNIZED THAT THE CONTRACTOR HAS REVIEWED THE PLAN DRAWINGS AND THE CONTRACTOR AGREES TO ABIDE BY THE REQUIREMENTS AND CONDITIONS CONTAINED HEREIN.

## Soil Stabilization (15,17,18,21,23):

1. IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFF-SITE ACCUMULATIONS OF SEDIMENT MUST BE REMOVED AT A FREQUENCY SUFFICIENT TO MINIMIZE OFF-SITE IMPACTS.
2. LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS THAT COULD BE EXPOSED TO STORM WATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE IN STORM WATER DISCHARGES.
3. EXCEPT AS PROVIDED BELOW, STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICAL IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.
   3.1. WHERE STABILIZATION BY THE 14th DAY IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS, STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICAL.
   3.2. WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 14 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.

NOTE: ONE OF THE FOLLOWING TEMPORARY SOIL STABILIZATION PRACTICES SHALL BE IMPLEMENTED ON ALL DISTURBED AREAS AS SHOWN WHERE SHOWN ON PLAN, UNLESS CONDITIONS AS LISTED ABOVE DICTATE OTHERWISE:

1. MULCHING (BMP 17) - APPLY STRAW, GRASS, COMPOST, WOOD CHIPS OR WOOD FIBERS TO DISTURBED AREAS TO PREVENT EROSION. SEE APPENDIX F OF THE ESC/SWPPP NARRATIVE FOR A COMPLETE DESCRIPTION, **AND/OR**:
2. GEOTEXTILES (BMP 53) - APPLY NONBIODEGRADABLE SYNTHETIC FABRIC TO DISTURBED AREAS TO PREVENT EROSION. SEE APPENDIX F OF THE ESC/SWPPP NARRATIVE FOR A COMPLETE DESCRIPTION, **AND/OR**:
3. MATTING (BMP 54) - APPLY BIODEGRADABLE WOVEN OR JUTE FIBER MAT TO DISTURBED AREAS TO PREVENT EROSION. SEE APPENDIX F OF THE ESC/SWPPP NARRATIVE FOR A COMPLETE DESCRIPTION.

PERMANENT SOIL STABILIZATION BMPS:
LANDSCAPING (BMP 32) - COORDINATE WITH THE APPROVED LANDSCAPE PLAN FOR LOCATIONS AND TIMING.

## ESC Legend:

- APPROXIMATE LIMIT OF DISTURBANCE
- W — CONCRETE WASHOUT PER THE STATE OF IDAHO CATALOG OF STORM WATER BEST MANAGEMENT PRACTICES BMP #49 AND DETAIL ON SHEET C1.60.
- R — PORTABLE RESTROOM PER THE STATE OF IDAHO CATALOG OF STORM WATER BEST MANAGEMENT PRACTICES BMP #50.
- SITE CONSTRUCTION SIGN.
- FW — FW — FIBER ROLL PER THE STATE OF IDAHO CATALOG OF STORM WATER BEST MANAGEMENT PRACTICES BMP #35. SEE THE FOLLOWING SHEET FOR DETAILS.
- STABILIZED ENTRANCE PER THE STATE OF IDAHO CATALOG OF STORM WATER BEST MANAGEMENT PRACTICES BMP #5. THIS SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION UNTIL BASE MATERIAL IS INSTALLED. PROVIDE SWEEPING DAILY OR AS NEEDED TO REMOVE ANY TRACKING OF MUD AND/OR DIRT ONTO EXISTING ASPHALT. SEE THE FOLLOWING SHEET FOR DETAILS.
- ELEV — PROPOSED GROUND CONTOUR (ONE-FOOT INTERVAL) WITH DIRECTIONAL SLOPE ARROWS
- ELEV — APPROXIMATE EXISTING GROUND CONTOUR (FIVE-FOOT INTERVAL) WITH DIRECTIONAL SLOPE ARROWS
- RECTANGULAR DROP INLET PROTECTION TYPE I PER BMP #31, SEE SHEET C1.55 FOR DETAILS

## ESC Posting Requirements:

1. ALL CONSTRUCTION PROJECTS WHICH HOLD AN EROSION CONTROL PERMIT SHALL DISPLAY A SIGN AT THE MAIN ENTRANCE OF THE PROPERTY INDICATING THE FOLLOWING:
   1.a. ADDRESS OF THE PROPERTY, IF ONE HAS BEEN ASSIGNED, OR A LOT OR BLOCK NUMBER,
   1.b. THE ESC PERMIT NUMBER, THE EPA PERMIT NUMBER (IF APPLICABLE),
   1.c. THE RESPONSIBLE PERSON'S NAME AND PHONE NUMBER,
   1.d. THE STORMWATER POLLUTION HOTLINE PHONE NUMBER
2. ALL REQUIRED WRITING ON THE SIGNS SHALL BE LEGIBLE AND OF SUFFICIENT SIZE TO BE EASILY READ FROM THE STREET.
3. ESC AND ANY WAIVER DOCUMENTS MUST BE MADE AVAILABLE UPON REQUEST BY EPA, A STATE, TRIBAL, OR OTHER LOCAL APPROVING AGENCY.

## Contact Information:

| | |
|---|---|
| OWNER/DEVELOPER: | CAPITAL CITY DEVELOPMENT CORPORATION |
| CONTRACTOR: | TO BE DETERMINED<br>ADDRESS<br>CITY, STATE ZIP<br>PRIMARY CONTACT:<br>PH.: |
| ONSITE ESC COORDINATOR: | TO BE DETERMINED<br>CONTACT: TO BE DETERMINED.<br>LICENSE NO: --- EXP: ---<br>PH. (CELL): 208.---.---- |
| PLAN PREPARER:<br>COMPANY: | GARY SCHUMACHER<br>THE LAND GROUP, INC.<br>462 E. SHORE DR., STE. 100<br>EAGLE, IDAHO 83616<br>PH.: 208.939.4041<br>EMAIL: gary@thelandgroupinc.com |
| PROJECT ENGINEER:<br>COMPANY:<br>PH.: | JASON DENSMER, PE<br>THE LAND GROUP, INC.<br>208.939.4041 |

**Facility Information**

| | |
|---|---|
| **Start Date:** 10/02/2024 | **Latitude:** 43.6112 |
| **End Date:** 04/02/2025 | **Longitude:** -116.1964 |

**Calculation Results**

**Rainfall erosivity factor (R Factor) = 3.44**

A rainfall erosivity factor of less than 5.0 has been calculated for your site and period of construction. If you are located in an area where EPA is the permitting authority (pdf), you can submit a LEW through EPA's NPDES eReporting Tool (NeT). Otherwise, contact your state permitting authority to determine if you are eligible for a waiver from NPDES permitting requirements.

If you submitted a LEW through EPA's NeT and your construction activity ultimately extends past the project completion date you specified above, you must recalculate the R factor using the original start date and a new project completion date. If the recalculated R factor is still less than 5.0, you must submit a modification to your LEW through NeT before the end of the original construction period. If the new R factor is 5.0 or greater, you must submit a Notice of Intent (NOI) instead to be covered by the Construction General Permit (CGP) before the original project completion date.

OPERATORS IN IDAHO ELIGIBLE FOR A WAIVER BASED ON LOW EROSIVITY POTENTIAL CAN SUBMIT A RAINFALL EROSIVITY WAIVER ELECTRONICALLY VIA DEQ'S E-PERMITTING SYSTEM (HTTPS://WWW2.DEQ.IDAHO.GOV/WATER/IPDES)

File Location: g:\2021\2211\Cad\122112-105-swppp-plan.dwg
Layout: ESC Plan
Date Plotted: Friday, May 3, 2024 at 11:39 AM

THE LAND GROUP

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

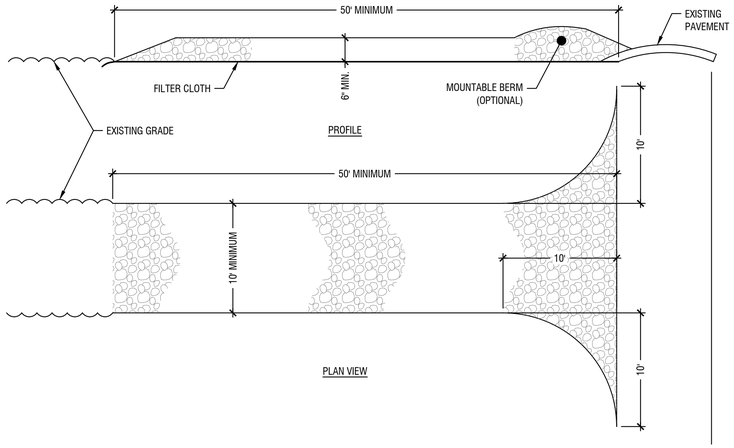
3rd Street to Broadway Avenue
Boise, ID 83702

Revisions
1.


| | |
|---|---|
| Project No.: | 122112 |
| Date of Issuance: | 05.03.2024 |
| Project Milestone: | Permit Set |

**ESC Plan**

**C1.50**

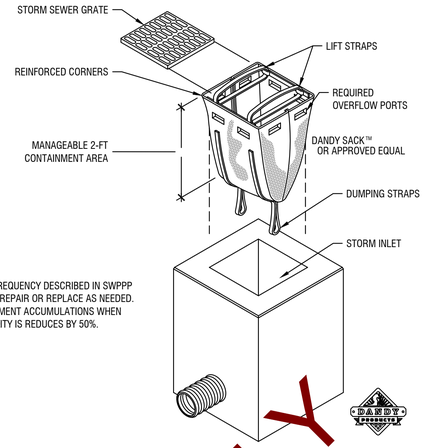



CONSTRUCTION SPECIFICATIONS

1. STONE SIZE-USE CRUSHED 2" STONE OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT FOR TOP LAYER, 2"-8" DIAMETER FOR BASE LAYER.
2. LENGTH-AS REQUIRED, BUT NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
3. THICKNESS-NOT LESS THAN 6 INCHES.
4. WIDTH-10 FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. FILTER CLOTH-WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. FILTER WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENCE LOT.
6. ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE-THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WASHING-WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

## 1 Stabilized Construction Entrance (BMP 5A)

Scale: NTS




NOTES:

1. INSPECT AT FREQUENCY DESCRIBED IN SWPPP DOCUMENTS. REPAIR OR REPLACE AS NEEDED.
2. REMOVE SEDIMENT ACCUMULATIONS WHEN FILTER CAPACITY IS REDUCES BY 50%.

## 2 Drop Inlet Protection Type I (BMP 21)

Scale: NTS

DANDY SACK™
SPECIFICATIONS

NOTE: THE DANDY SACK™ WILL BE MANUFACTURED IN THE U.S.A. FROM A WOVEN MONOFILAMENT FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS:

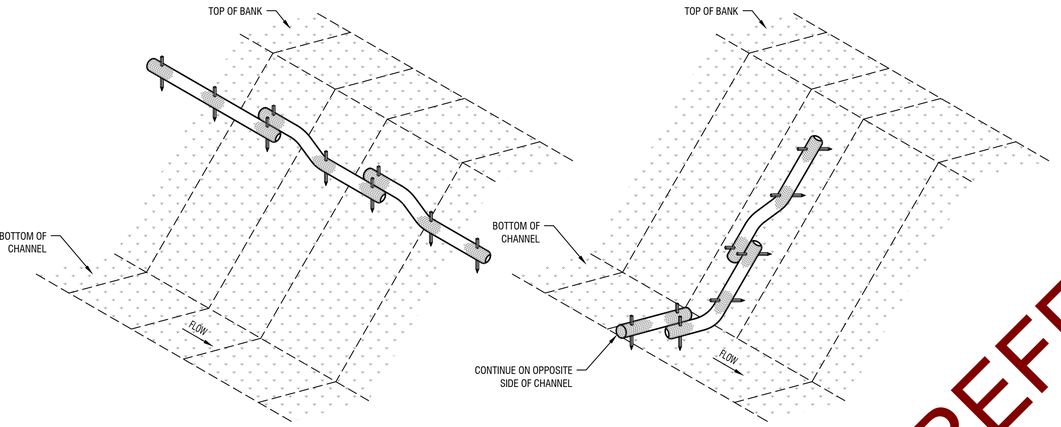
REGULAR FLOW DANDY SACK™ (BLACK)

| MECHANICAL PROPERTIES | TEST METHOD | UNITS | MARV |
|---|---|---|---|
| GRAB TENSILE STRENGTH | ASTM D 4632 | KN (LBS) | 1.78 (400) X 1.40 (315) |
| GRAB TENSILE ELONGATION | ASTM D 4632 | % | 15 X 15 |
| PUNCTURE STRENGTH | ASTM D 4833 | KN (LBS) | 0.67 (150) |
| MULLEN BURST STRENGTH | ASTM D 3786 | KPA (PSI) | 5506 (800) |
| TRAPEZOID TEAR STRENGTH | ASTM D 4533 | KN (LBS) | 0.67 (150) X 0.73 (165) |
| UV RESISTANCE | ASTM D 4355 | % | 90 |
| APPARENT OPENING SIZE | ASTM D 4751 | MM (US STD SIEVE) | 0.425 (40) |
| FLOW RATE | ASTM D 4491 | 1/MIN/M²(GAL/MIN/FT )² | 2852 (70) |
| PERMITTIVITY | ASTM D 4491 | SEC⁻¹ | 0.90 |

HI-FLOW DANDY SACK™ (SAFETY ORANGE)

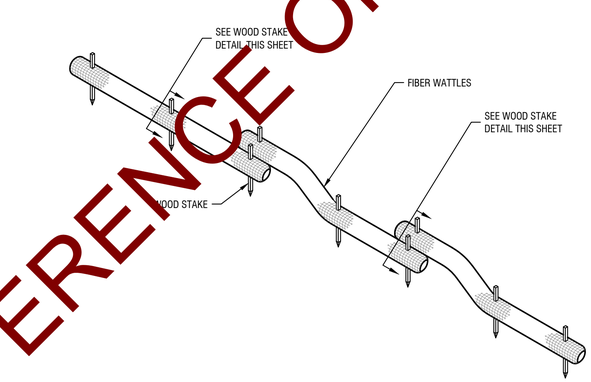
| MECHANICAL PROPERTIES | TEST METHOD | UNITS | MARV |
|---|---|---|---|
| GRAB TENSILE STRENGTH | ASTM D 4632 | KN (LBS) | 1.62 (365) X 0.89 (200) |
| GRAB TENSILE ELONGATION | ASTM D 4632 | % | 24 X 10 |
| PUNCTURE STRENGTH | ASTM D 4833 | KN (LBS) | 0.40 (90) |
| MULLEN BURST STRENGTH | ASTM D 3786 | KPA (PSI) | 3097 (450) |
| TRAPEZOID TEAR STRENGTH | ASTM D 4533 | KN (LBS) | 0.51 (115) X 0.33 (75) |
| UV RESISTANCE | ASTM D 4355 | % | 90 |
| APPARENT OPENING SIZE | ASTM D 4751 | MM (US STD SIEVE) | 0.425 (40) |
| FLOW RATE | ASTM D 4491 | 1/MIN/M²(GAL/MIN/FT )² | 5907 (145) |
| PERMITTIVITY | ASTM D 4491 | SEC⁻¹ | 2.1 |

*Note: All Dandy Sacks™ can be ordered with our optional oil absorbent pillows



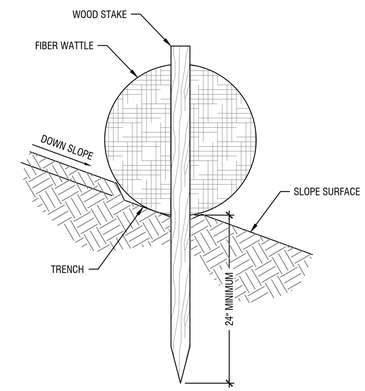

## 3 Fiber Roll Install (BMP 35)

Scale: NTS



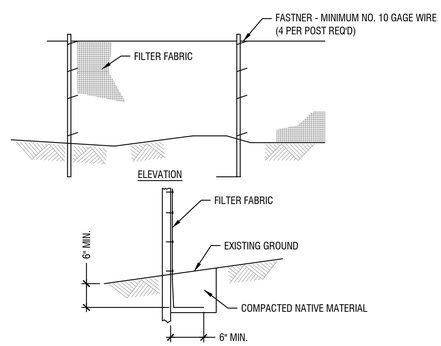

## 4 Fiber Roll (BMP 35)

Scale: NTS




## 5 Fiber Roll Stake Section (BMP 35)

Scale: NTS

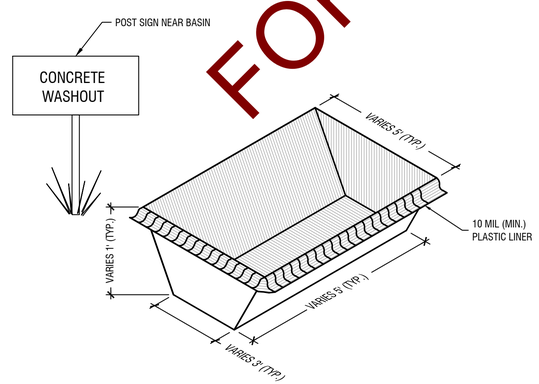



NOTES:

1. TEMPORARY SEDIMENT FENCE SHALL BE INSTALLED PRIOR TO ANY GRADING WORK IN THE AREA TO BE PROTECTED. THEY SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD AND REMOVED IN CONJUNCTION WITH THE FINAL GRADING AND SITE STABILIZATION.
2. FILTER FABRIC SHALL BE CLASS 1 WITH EQUIVALENT OPENING SIZE OF AT LEAST 30 FOR NONWOVEN AND 50 FOR WOVEN.
3. FENCE POSTS SHALL BE EITHER STANDARD STEEL POST OR WOOD POST WITH A MINIMUM CROSS-SECTIONAL AREA OF 3.0 SQ. IN.

## 6 Silt Fence Install 1 (BMP 36)

Scale: NTS




NOTES

1. DIMENSIONS VARY. RESPONSIBLE PERSON SHALL SIZE BASIN APPROPRIATELY.

## 7 Concrete Washout (BMP 13)

Scale: NTS



File Location: g:\2022\122112\cad\122112-ESC-Details.dwg
Last Saved by: mmcgrath
Date Plotted: Wednesday, May 01, 2024 at 08:23:53 AM

THE LAND GROUP

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

3rd Street to Broadway Avenue
Boise, ID 83702

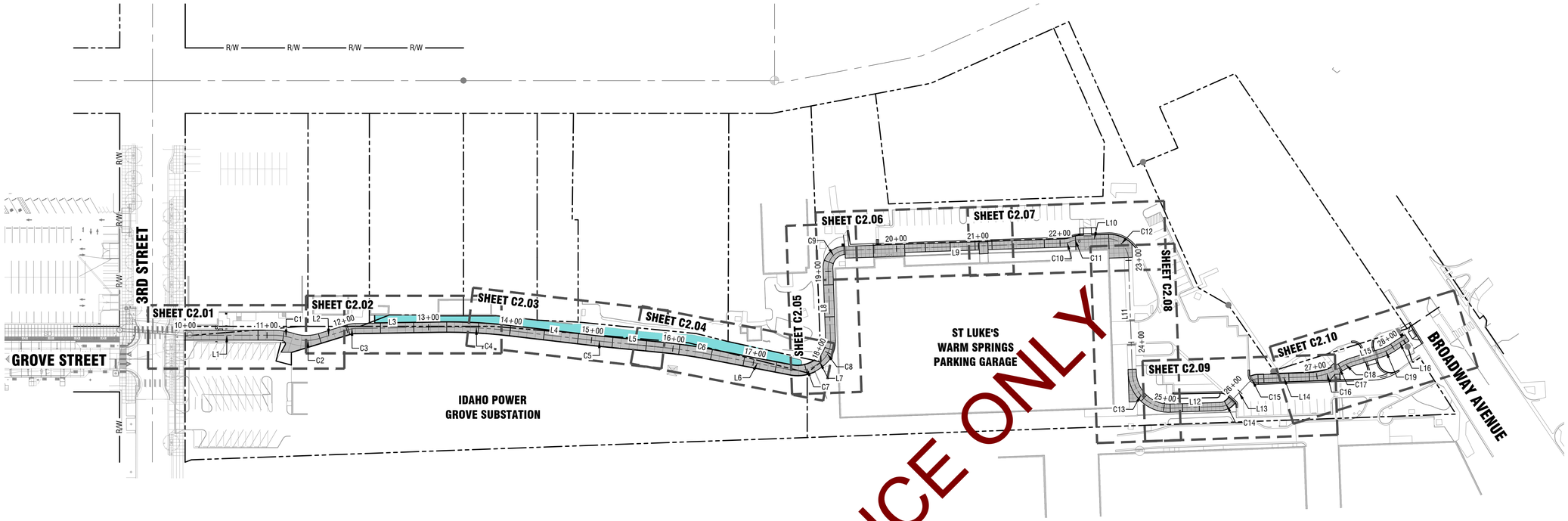
Revisions
1.

PROFESSIONAL ENGINEER
REGISTERED
10961
STATE OF IDAHO
JASON DENSMER
05/03/2024

Project No.: 122112
Date of Issuance: 05.03.2024
Project Milestone: Permit Set

**ESC Details**

**C1.55**




## Pathway Overview

Horizontal Scale: 1" = 70'



### Alignment Segment Table:

| SEGMENT | BEGIN STA. | END STA. | LENGTH | RADIUS | BEARING | BEGIN COORD. | END COORD. |
|---|---|---|---|---|---|---|---|
| L1 | 10+00 | 11+08.13 | 108.13' | | S54°46'42.00"E | N: 709,213.350<br>E: 2,505,981.310 | N: 709,150.985<br>E: 2,506,069.646 |
| C1 | 11+08.13 | 11+31.42 | 23.28' | 75.00' | S45°53'03.33"E | N: 709,150.985<br>E: 2,506,069.646 | N: 709,134.841<br>E: 2,506,086.296 |
| C2 | 11+31.42 | 11+65.44 | 34.02' | 56.00' | S54°23'41.66"E | N: 709,134.841<br>E: 2,506,086.296 | N: 709,115.337<br>E: 2,506,113.534 |
| L2 | 11+65.44 | 12+02 | 36.57' | | S71°47'58.66"E | N: 709,115.337<br>E: 2,506,113.534 | N: 709,103.916<br>E: 2,506,148.270 |
| C3 | 12+02 | 12+10.86 | 8.85' | 31.54' | S63°45'30.88"E | N: 709,103.916<br>E: 2,506,148.270 | N: 709,100.015<br>E: 2,506,156.185 |
| L3 | 12+10.86 | 13+12.64 | 101.78' | | S55°43'03.10"E | N: 709,100.015<br>E: 2,506,156.185 | N: 709,042.685<br>E: 2,506,240.283 |
| C4 | 13+12.64 | 13+99.90 | 87.26' | 656.54' | S51°54'35.60"E | N: 709,042.685<br>E: 2,506,240.283 | N: 708,988.892<br>E: 2,506,308.911 |
| L4 | 13+99.90 | 15+04.46 | 104.56' | | S48°06'08.09"E | N: 708,988.892<br>E: 2,506,308.911 | N: 708,919.064<br>E: 2,506,386.742 |
| C5 | 15+04.46 | 15+15.51 | 11.04' | 643.46' | S48°35'38.29"E | N: 708,919.064<br>E: 2,506,386.742 | N: 708,911.759<br>E: 2,506,395.026 |
| L5 | 15+15.51 | 15+88.03 | 72.52' | | S49°05'08.49"E | N: 708,911.759<br>E: 2,506,395.026 | N: 708,864.262<br>E: 2,506,449.831 |
| C6 | 15+88.03 | 16+47.84 | 59.81' | 656.54' | S46°28'33.95"E | N: 708,864.262<br>E: 2,506,449.831 | N: 708,823.090<br>E: 2,506,493.180 |
| L6 | 16+47.84 | 17+46.98 | 99.14' | | S43°51'59.42"E | N: 708,823.090<br>E: 2,506,493.180 | N: 708,751.614<br>E: 2,506,561.883 |
| C7 | 17+46.98 | 17+82.97 | 35.99' | 42.00' | S68°24'49.80"E | N: 708,751.614<br>E: 2,506,561.883 | N: 708,738.775<br>E: 2,506,594.333 |
| L7 | 17+82.97 | 17+85.99 | 3.03' | | N87°02'19.82"E | N: 708,738.775<br>E: 2,506,594.333 | N: 708,738.932<br>E: 2,506,597.355 |
| C8 | 17+85.99 | 18+15.11 | 29.12' | 31.00' | N60°07'52.27"E | N: 708,738.932<br>E: 2,506,597.355 | N: 708,752.905<br>E: 2,506,621.687 |
| L8 | 18+15.11 | 19+02.98 | 87.87' | | N33°13'24.73"E | N: 708,752.905<br>E: 2,506,621.687 | N: 708,826.409<br>E: 2,506,669.829 |
| C9 | 19+02.98 | 19+37.57 | 34.59' | 22.00' | N78°16'09.00"E | N: 708,826.409<br>E: 2,506,669.829 | N: 708,832.739<br>E: 2,506,700.317 |
| L9 | 19+37.57 | 22+05.43 | 267.86' | | S56°41'06.72"E | N: 708,832.739<br>E: 2,506,700.317 | N: 708,685.621<br>E: 2,506,924.157 |

### Alignment Segment Table:

| SEGMENT | BEGIN STA. | END STA. | LENGTH | RADIUS | BEARING | BEGIN COORD. | END COORD. |
|---|---|---|---|---|---|---|---|
| C10 | 22+05.43 | 22+13.51 | 8.08' | 20.00' | S68°15'53.63"E | N: 708,685.621<br>E: 2,506,924.157 | N: 708,682.647<br>E: 2,506,931.616 |
| C11 | 22+13.51 | 22+23.62 | 10.11' | 25.00' | S68°15'53.62"E | N: 708,682.647<br>E: 2,506,931.616 | N: 708,678.931<br>E: 2,506,940.939 |
| L10 | 22+23.62 | 22+58.33 | 34.71' | | S56°41'06.72"E | N: 708,678.931<br>E: 2,506,940.939 | N: 708,659.867<br>E: 2,506,969.944 |
| C12 | 22+58.33 | 22+97.58 | 39.26' | 25.00' | S11°41'59.26"E | N: 708,659.867<br>E: 2,506,969.944 | N: 708,625.255<br>E: 2,506,977.112 |
| L11 | 22+97.58 | 24+37.18 | 139.60' | | S33°17'08.20"W | N: 708,625.255<br>E: 2,506,977.112 | N: 708,508.559<br>E: 2,506,900.499 |
| C13 | 24+37.18 | 25+07.81 | 70.63' | 45.00' | S11°40'40.17"E | N: 708,508.559<br>E: 2,506,900.499 | N: 708,446.276<br>E: 2,506,913.372 |
| L12 | 25+07.81 | 25+69.38 | 61.57' | | S56°38'28.54"E | N: 708,446.276<br>E: 2,506,913.372 | N: 708,412.420<br>E: 2,506,964.799 |
| C14 | 25+69.38 | 25+82.73 | 13.35' | 17.00' | S79°08'28.54"E | N: 708,412.420<br>E: 2,506,964.799 | N: 708,409.968<br>E: 2,506,977.577 |
| L13 | 25+82.73 | 26+14.51 | 31.78' | | N78°21'31.46"E | N: 708,409.968<br>E: 2,506,977.577 | N: 708,416.380<br>E: 2,507,008.699 |
| C15 | 26+14.51 | 26+27.78 | 13.27' | 17.00' | S79°16'39.05"E | N: 708,416.380<br>E: 2,507,008.699 | N: 708,413.973<br>E: 2,507,021.410 |
| L14 | 26+27.78 | 26+91.64 | 63.86' | | S56°54'49.56"E | N: 708,413.973<br>E: 2,507,021.410 | N: 708,379.111<br>E: 2,507,074.916 |
| C16 | 26+91.64 | 27+27.76 | 36.12' | 75.00' | S70°42'38.80"E | N: 708,379.111<br>E: 2,507,074.916 | N: 708,367.294<br>E: 2,507,108.681 |
| C17 | 27+27.76 | 27+30.83 | 3.07' | 75.00' | S85°40'50.73"E | N: 708,367.294<br>E: 2,507,108.681 | N: 708,367.063<br>E: 2,507,111.743 |
| C18 | 27+30.83 | 27+47.91 | 17.07' | 65.00' | S79°19'43.86"E | N: 708,367.063<br>E: 2,507,111.743 | N: 708,363.910<br>E: 2,507,128.473 |
| L15 | 27+47.91 | 27+81.86 | 33.95' | | S71°48'14.29"E | N: 708,363.910<br>E: 2,507,128.473 | N: 708,353.308<br>E: 2,507,160.727 |
| C19 | 27+81.86 | 27+97.20 | 15.34' | 55.00' | S79°47'39.63"E | N: 708,353.308<br>E: 2,507,160.727 | N: 708,350.599<br>E: 2,507,175.776 |
| L16 | 27+97.20 | 28+20.77 | 23.57' | | S87°47'04.97"E | N: 708,350.599<br>E: 2,507,175.776 | N: 708,349.688<br>E: 2,507,199.330 |

THE LAND GROUP

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

3rd Street to Broadway Avenue
Boise, ID 83702

Revisions
1.

JASON DENSMER
PROFESSIONAL ENGINEER
REGISTERED
10961
STATE OF IDAHO
05/03/2024

Project No.: 122112
Date of Issuance: 05.03.2024
Project Milestone: Permit Set

**Pathway Overview**

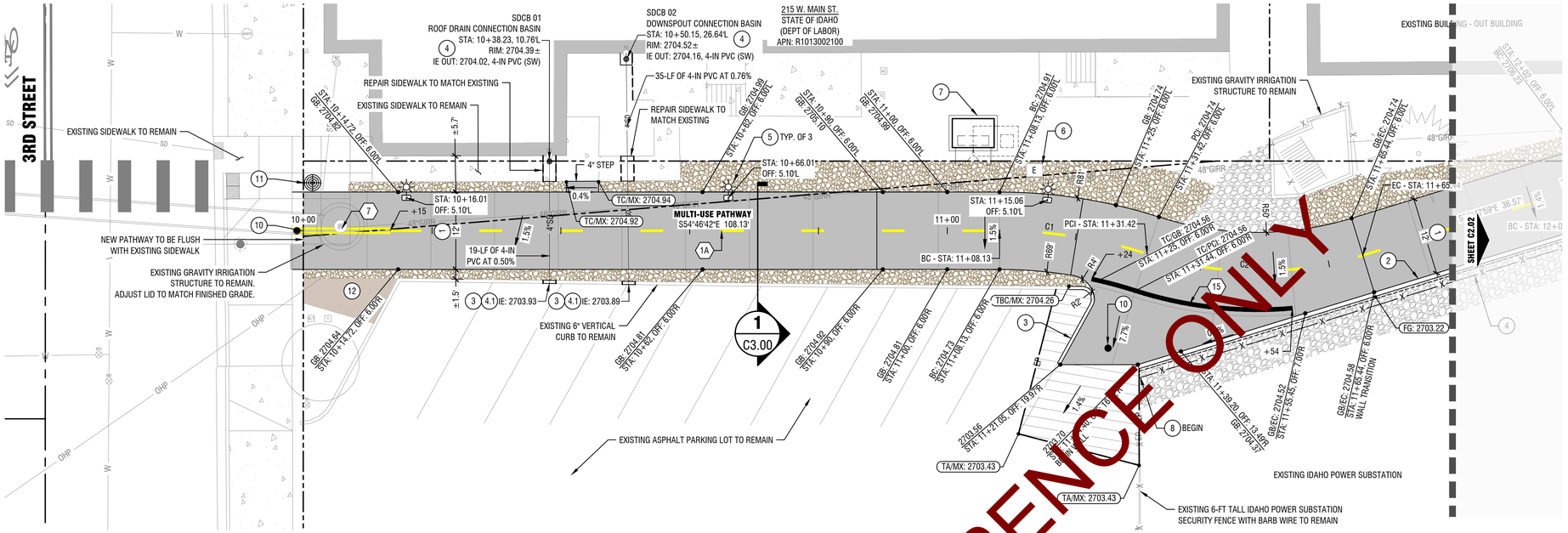
**C2.00**

| Curve Table | | | | | |
|---|---|---|---|---|---|
| CURVE | LENGTH | RADIUS | DELTA | CHORD BEARING | CHORD LENGTH |
| C1 | 23.28' | 75.00' | 017.79 | N45°53'03"W | 23.19' |
| C2 | 34.02' | 56.00' | 034.81 | N54°23'42"W | 33.50' |

## Pavement Marking Legend:

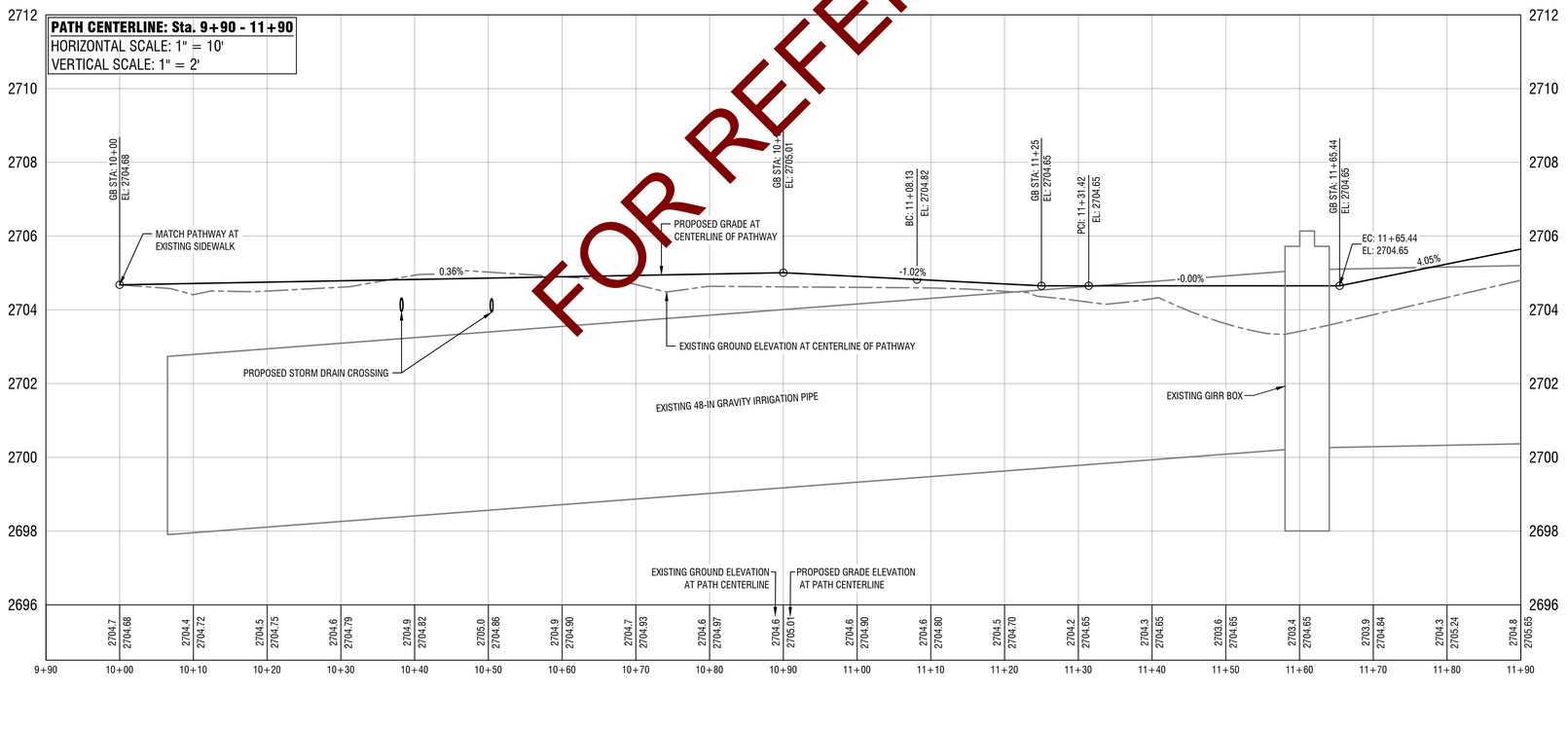
REFER TO ACHD STANDARD TRAFFIC DETAIL TS-1112 FOR STRIPING DETAILS

- 1A — 4" YELLOW PATHWAY CENTERLINE (3' LINE - 9' GAP)
- 7 — 4" DOUBLE YELLOW
- 15 — 8" SOLID WHITE




## Plan and Profile Sta 10+00 - Sta 11+80

Horizontal Scale: 1" = 10'






## Sheet Notes:

A. CONTRACTOR SHALL REPORT TO ENGINEER ALL CONDITIONS WHICH IMPAIR AND/OR PREVENT THE PROPER EXECUTION OF THIS WORK PRIOR TO BEGINNING WORK.

B. CONTRACTOR TO VERIFY LOCATION OF ALL UTILITIES PRIOR TO INITIATION OF ANY DEMOLITION OR CONSTRUCTION OPERATIONS. ANY DAMAGE TO EXISTING UTILITIES SHALL BE CONTRACTOR'S RESPONSIBILITY.

C. CONTRACTOR SHALL VERIFY ALL DIMENSIONS, DISTANCES, AND GRADES IN THE FIELD AND BRING ANY DISCREPANCIES TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE FOR A DECISION PRIOR TO COMMENCING WITH THE WORK.

D. CONTRACTOR SHALL REPAIR ALL LANDSCAPE AND IRRIGATION AREAS DISTURBED OR DAMAGED AS A RESULT OF CONSTRUCTION TO PRE-CONSTRUCTION CONDITIONS.

E. PROVIDE JOINTS AS SHOWN ON PLANS AND PER DETAIL 2/C2.50. JOINTS ARE AN INTEGRAL PART OF THE DESIGN AND SHALL NOT VARY FROM PATTERNS AND LOCATIONS SHOWN. CONTRACTOR SHALL REMOVE ANY FLATWORK THAT DOES NOT CONFORM TO THE DESIGN.

F. TRANSITION OF CURVES TO OTHER CURVES AND CURVES TO TANGENTS SHALL BE SMOOTH AND CONTINUOUS.

G. STATIONING REPRESENTS PATHWAY CENTERLINE ALIGNMENT, OR AS INDICATED ON THE PLANS.

H. LONGITUDINAL SLOPE OF ALL SIDEWALKS SHALL NOT EXCEED 5%. CROSS SLOPE OF SIDEWALKS AND PEDESTRIAN RAMPS SHALL NOT EXCEED 2%. SLOPES WITHIN PEDESTRIAN RAMPS SHALL NOT EXCEED 12:1 SLOPE IN ANY DIRECTION. FLATWORK ADJACENT TO BUILDINGS SHALL NOT EXCEED 2% CROSS SLOPE OR HAVE A CROSS SLOPE LESS THAN 1%.

I. EXISTING AND PROPOSED CONTOURS ARE AT A 1-FT INTERVAL.

J. SPOT ELEVATIONS INDICATE TOP OF CONCRETE SURFACE OR OTHER SURFACE AS INDICATED BY THE FOLLOWING ABBREVIATIONS:

| | | |
|---|---|---|
| ASP | - | TOP OF ASPHALT PAVEMENT |
| BC | - | BEGIN CURVE |
| EC | - | END CURVE |
| FG | - | FINISH GRADE |
| GB | - | GRADE BREAK |
| HP | - | HIGH POINT |
| LIP | - | LIP OF GUTTER |
| LP | - | LOW POINT |
| MX | - | MATCH EXISTING ELEVATION |
| PCI | - | POINT OF CURVE INTERSECT |
| RIM | - | RIM OF STRUCTURE |
| TBC | - | TOP BACK OF CURB |
| TW | - | TOP OF WALL |

## Material Legend (This Sheet Only):

- PROPOSED CONCRETE MULTI-USE PATHWAY PER DETAIL 1/C2.50. WIDTH VARIES, SEE PLANS.
- EXISTING CONCRETE TO REMAIN
- LANDSCAPE REPAIR, MIN. 8"-DEPTH 4-8" COBBLE.
- ASPHALT REPAIR TYPE "P" PER ISPWC SD-303.
- REPAIR GRAVEL SURFACING TO MATCH EXISTING.
- LANDSCAPE PLANTER. SEE SHEET L1.00 FOR PLANTING PLAN.

## Keynotes (This Sheet Only):

1. CONSTRUCT CONCRETE MULTI-USE PATHWAY PER DETAIL 1/C2.50. SEE PLAN FOR WIDTH.
2. CONSTRUCT RETAINING WALL PER STRUCTURAL WITH RECESSED LIGHTING PER ELECTRICAL. SEE TYPICAL SECTIONS ON SHEET C3.00 FOR MORE INFORMATION.
3. CONSTRUCT 6-IN VERTICAL CURB (NO GUTTER) PER DETAIL 6/C2.50.
4. INSTALL ROOF DRAIN/DOWNSPOUT CONNECTION BASIN PER DETAIL 9/C2.50.
   4.1. REPAIR CURB TO MATCH EXISTING AND DAYLIGHT DRAINAGE PIPE THROUGH FRONT.
5. INSTALL PATHWAY LIGHTS WITH JUNCTION BOXES PER PER SITE ELECTRICAL PLAN.
6. INSTALL METERED UTILITY PEDESTAL PER SITE ELECTRICAL PLAN.
7. PROPOSED IDAHO POWER TRANSFORMER. COORDINATE WITH IDAHO POWER.
8. INSTALL 10-FT TALL, CHAIN LINK FENCE WITH BARB WIRE TO MATCH EXISTING IDAHO POWER SECURITY FENCE. CONNECT FENCE TO EXISTING IDAHO POWER SUBSTATION GROUNDING GRID PER IDAHO POWER REQUIREMENTS. COORDINATE WITH IDAHO POWER TO MAINTAIN SECURE PERIMETER OF SUBSTATION. COMPLY WITH IDAHO POWER REQUIREMENTS TO WORK WITHIN SUBSTATION GROUNDS.
9. NOT USED.
10. INSTALL STANDARD BOISE PARKS AND REC BOLLARD PER DETAIL 8/C2.50.
11. INSTALL STANDARD BOISE PARKS AND REC TRASH CAN ON CONCRETE PAD. COORDINATE WITH BOISE PARKS AND REC.
12. LANDSCAPE PLANTER, SEE SHEET L1.00 FOR PLANTING PLAN.

THE LAND GROUP

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

3rd Street to Broadway Avenue
Boise, ID 83702

Revisions
1.

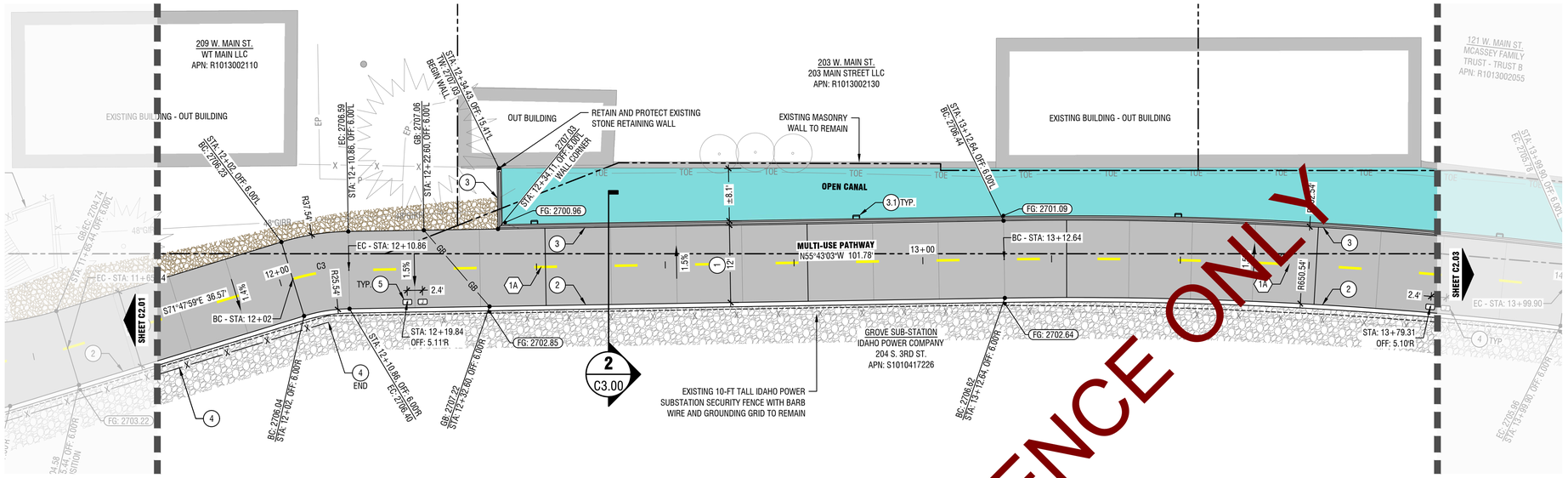
PROFESSIONAL ENGINEER — REGISTERED — 10961 — STATE OF IDAHO — JASON DENSMER
05/03/2024

Project No.: 122112
Date of Issuance: 05.03.2024
Project Milestone: Permit Set

**Plan and Profile Sta 10+00 - Sta 11+80**

**C2.01**

| Curve Table | | | | | |
|---|---|---|---|---|---|
| CURVE | LENGTH | RADIUS | DELTA | CHORD BEARING | CHORD LENGTH |
| C3 | 8.85' | 31.54' | 016.08 | N63°45'31"W | 8.82' |
| C4 | 87.26' | 656.54' | 007.62 | N51°54'36"W | 87.20' |

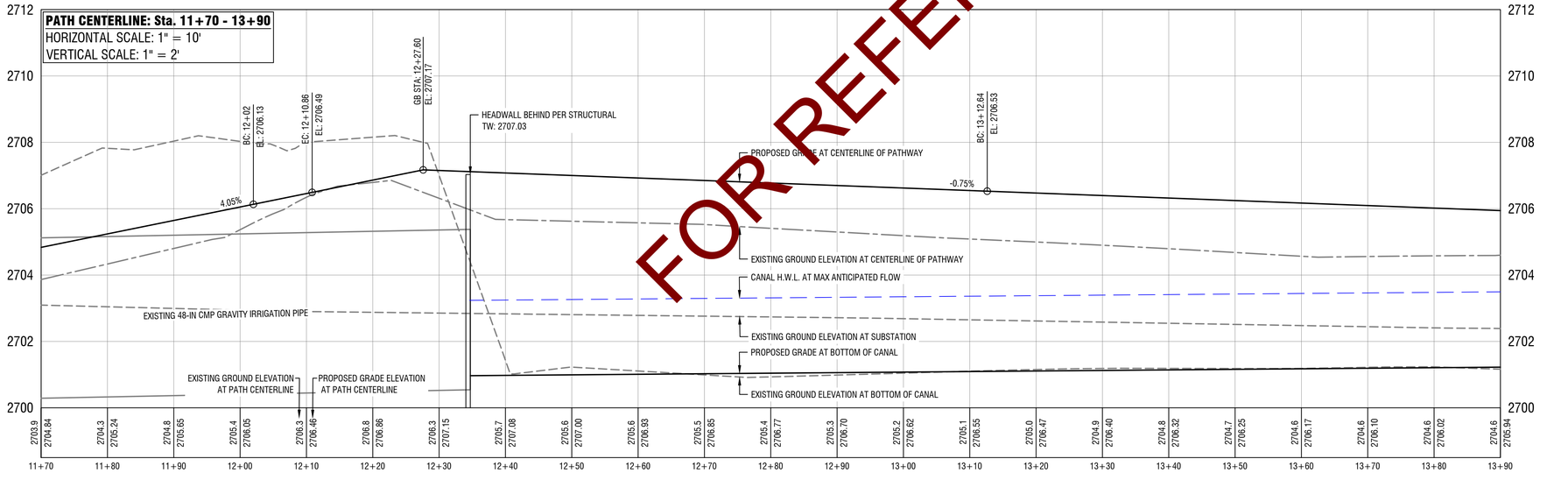





0 10' 20'

# Plan and Profile Sta 11+80 - Sta 13+80

Horizontal Scale: 1" = 10'




## Sheet Notes:

A. CONTRACTOR SHALL REPORT TO ENGINEER ALL CONDITIONS WHICH IMPAIR AND/OR PREVENT THE PROPER EXECUTION OF THIS WORK PRIOR TO BEGINNING WORK.

B. CONTRACTOR TO VERIFY LOCATION OF ALL UTILITIES PRIOR TO INITIATION OF ANY DEMOLITION OR CONSTRUCTION OPERATIONS. ANY DAMAGE TO EXISTING UTILITIES SHALL BE CONTRACTOR'S RESPONSIBILITY.

C. CONTRACTOR SHALL VERIFY ALL DIMENSIONS, DISTANCES, AND GRADES IN THE FIELD AND BRING ANY DISCREPANCIES TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE FOR A DECISION PRIOR TO COMMENCING WITH THE WORK.

D. CONTRACTOR SHALL REPAIR ALL LANDSCAPE AND IRRIGATION AREAS DISTURBED OR DAMAGED AS A RESULT OF CONSTRUCTION TO PRE-CONSTRUCTION CONDITIONS.

E. PROVIDE JOINTS AS SHOWN ON PLANS AND PER DETAIL 2/C2.50. JOINTS ARE AN INTEGRAL PART OF THE DESIGN AND SHALL NOT VARY FROM PATTERNS AND LOCATIONS SHOWN. CONTRACTOR SHALL REMOVE ANY FLATWORK THAT DOES NOT CONFORM TO THE DESIGN.

F. TRANSITION OF CURVES TO OTHER CURVES AND CURVES TO TANGENTS SHALL BE SMOOTH AND CONTINUOUS.

G. STATIONING REPRESENTS PATHWAY CENTERLINE ALIGNMENT, OR AS INDICATED ON THE PLANS.

H. LONGITUDINAL SLOPE OF ALL SIDEWALKS SHALL NOT EXCEED 5%. CROSS SLOPE OF SIDEWALKS AND PEDESTRIAN RAMPS SHALL NOT EXCEED 2%. SLOPES WITHIN PEDESTRIAN RAMPS SHALL NOT EXCEED 12:1 SLOPE IN ANY DIRECTION. FLATWORK ADJACENT TO BUILDINGS SHALL NOT EXCEED 2% CROSS SLOPE OR HAVE A CROSS SLOPE LESS THAN 1%.

I. EXISTING AND PROPOSED CONTOURS ARE AT A 1-FT INTERVAL.

J. SPOT ELEVATIONS INDICATE TOP OF CONCRETE SURFACE OR OTHER SURFACE AS INDICATED BY THE FOLLOWING ABBREVIATIONS:

| | | |
|---|---|---|
| ASP | - | TOP OF ASPHALT PAVEMENT |
| BC | - | BEGIN CURVE |
| EC | - | END CURVE |
| FG | - | FINISH GRADE |
| GB | - | GRADE BREAK |
| HP | - | HIGH POINT |
| LIP | - | LIP OF GUTTER |
| LP | - | LOW POINT |
| MX | - | MATCH EXISTING ELEVATION |
| PCI | - | POINT OF CURVE INTERSECT |
| RIM | - | RIM OF STRUCTURE |
| TBC | - | TOP BACK OF CURB |
| TW | - | TOP OF WALL |

## Material Legend (This Sheet Only):

- PROPOSED CONCRETE MULTI-USE PATHWAY PER DETAIL 1/C2.50. WIDTH VARIES, SEE PLANS.
- EXISTING BOISE CITY CANAL/ELLIS DITCH POST CONSTRUCTION EXTENTS
- LANDSCAPE REPAIR, MIN. 8"-DEPTH 4-8" COBBLE.
- REPAIR GRAVEL SURFACING TO MATCH EXISTING.

## Keynotes (This Sheet Only):

1. CONSTRUCT CONCRETE MULTI-USE PATHWAY PER DETAIL 1/C2.50. SEE PLAN FOR WIDTH.
2. CONSTRUCT RETAINING WALL PER STRUCTURAL WITH RECESSED LIGHTING PER SITE ELECTRICAL. SEE TYPICAL SECTIONS ON SHEET C3.00 FOR MORE INFORMATION.
3. CONSTRUCT RETAINING WALL WITH REMOVABLE GUARDRAIL PER STRUCTURAL. SEE DETAIL 1/C2.51 AND TYPICAL SECTIONS ON SHEET C3.00 FOR MORE INFORMATION.
   3.1. INSTALL LADDERS DOWN TO CANAL BOTTOM AT 50-FT O.C. SEE STRUCTURAL DRAWINGS FOR MORE INFORMATION.
4. INSTALL 10-FT TALL, CHAIN LINK FENCE WITH BARB WIRE TO MATCH EXISTING IDAHO POWER SECURITY FENCE. CONNECT FENCE TO EXISTING IDAHO POWER SUBSTATION GROUNDING GRID PER IDAHO POWER REQUIREMENTS. COORDINATE WITH IDAHO POWER TO MAINTAIN SECURE PERIMETER OF SUBSTATION. COMPLY WITH IDAHO POWER REQUIREMENTS TO WORK WITHIN SUBSTATION GROUNDS.
5. INSTALL JUNCTION BOX PER SITE ELECTRICAL.

## Pavement Marking Legend:

REFER TO ACHD STANDARD TRAFFIC DETAIL TS-1112 FOR STRIPING DETAILS

1A 4" YELLOW PATHWAY CENTERLINE (3' LINE - 9' GAP)

THE LAND GROUP

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

3rd Street to Broadway Avenue
Boise, ID 83702

Revisions
1.

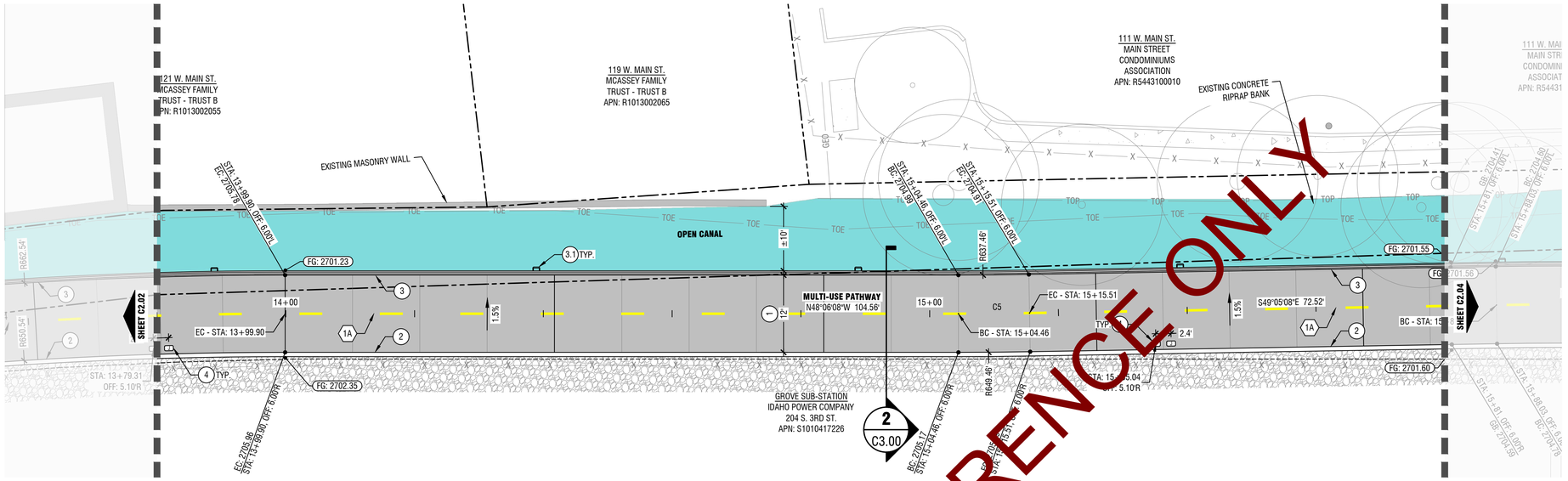
PROFESSIONAL ENGINEER
REGISTERED
10961
STATE OF IDAHO
JASON DENSMER
05/03/2024

Project No.: 122112
Date of Issuance: 05.03.2024
Project Milestone: Permit Set

**Plan and Profile Sta 11+80 - Sta 13+80**

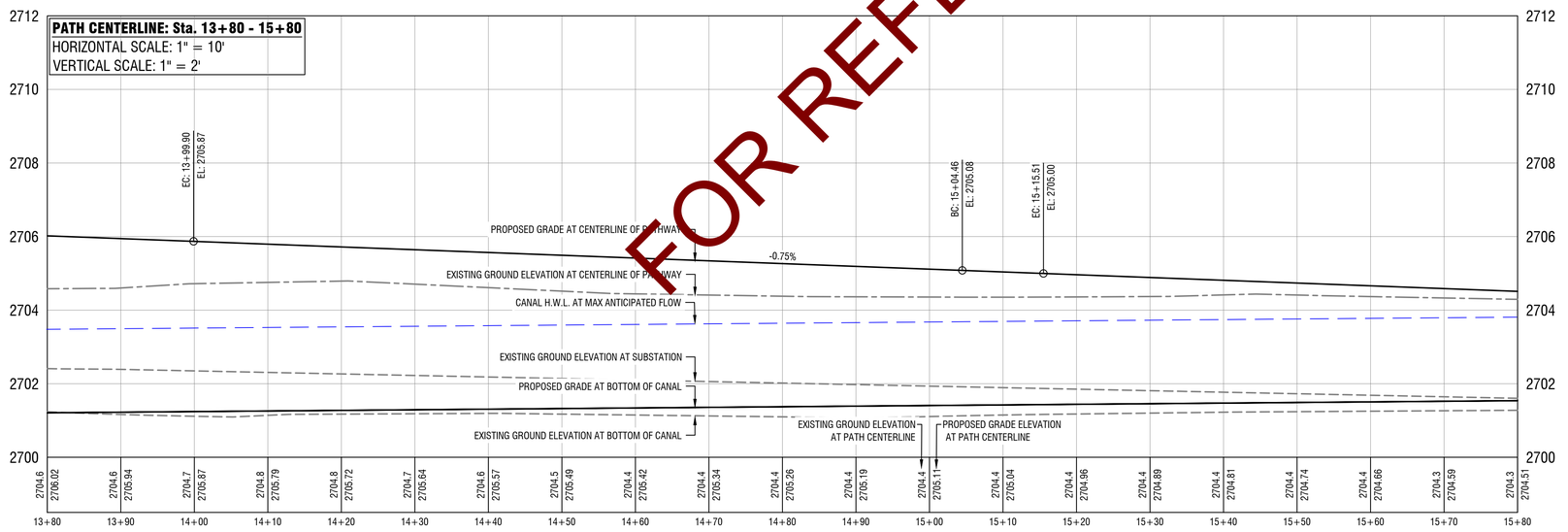
**C2.02**

| Curve Table | | | | | |
|---|---|---|---|---|---|
| CURVE | LENGTH | RADIUS | DELTA | CHORD BEARING | CHORD LENGTH |
| C5 | 11.04' | 643.46' | 000.98 | N48°35'38"W | 11.04' |




# Plan and Profile Sta 13+80 - Sta 15+80

Horizontal Scale: 1" = 10'






## Sheet Notes:

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C. CONTRACTOR SHALL VERIFY ALL DIMENSIONS, DISTANCES, AND GRADES IN THE FIELD AND BRING ANY DISCREPANCIES TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE FOR A DECISION PRIOR TO COMMENCING WITH THE WORK.

D. CONTRACTOR SHALL REPAIR ALL LANDSCAPE AND IRRIGATION AREAS DISTURBED OR DAMAGED AS A RESULT OF CONSTRUCTION TO PRE-CONSTRUCTION CONDITIONS.

E. PROVIDE JOINTS AS SHOWN ON PLANS AND PER DETAIL 2/C2.50. JOINTS ARE AN INTEGRAL PART OF THE DESIGN AND SHALL NOT VARY FROM PATTERNS AND LOCATIONS SHOWN. CONTRACTOR SHALL REMOVE ANY FLATWORK THAT DOES NOT CONFORM TO THE DESIGN.

F. TRANSITION OF CURVES TO OTHER CURVES AND CURVES TO TANGENTS SHALL BE SMOOTH AND CONTINUOUS.

G. STATIONING REPRESENTS PATHWAY CENTERLINE ALIGNMENT, OR AS INDICATED ON THE PLANS.

H. LONGITUDINAL SLOPE OF ALL SIDEWALKS SHALL NOT EXCEED 5%. CROSS SLOPE OF SIDEWALKS AND PEDESTRIAN RAMPS SHALL NOT EXCEED 2%. SLOPES WITHIN PEDESTRIAN RAMPS SHALL NOT EXCEED 12:1 SLOPE IN ANY DIRECTION. FLATWORK ADJACENT TO BUILDINGS SHALL NOT EXCEED 2% CROSS SLOPE OR HAVE A CROSS SLOPE LESS THAN 1%.

I. EXISTING AND PROPOSED CONTOURS ARE AT A 1-FT INTERVAL.

J. SPOT ELEVATIONS INDICATE TOP OF CONCRETE SURFACE OR OTHER SURFACE AS INDICATED BY THE FOLLOWING ABBREVIATIONS:

| | | |
|---|---|---|
| ASP | - | TOP OF ASPHALT PAVEMENT |
| BC | - | BEGIN CURVE |
| EC | - | END CURVE |
| FG | - | FINISH GRADE |
| GB | - | GRADE BREAK |
| HP | - | HIGH POINT |
| LIP | - | LIP OF GUTTER |
| LP | - | LOW POINT |
| MX | - | MATCH EXISTING ELEVATION |
| PCI | - | POINT OF CURVE INTERSECT |
| RIM | - | RIM OF STRUCTURE |
| TBC | - | TOP BACK OF CURB |
| TW | - | TOP OF WALL |

## Material Legend (This Sheet Only):

PROPOSED CONCRETE MULTI-USE PATHWAY PER DETAIL 1/C2.50. WIDTH VARIES, SEE PLANS.

EXISTING BOISE CITY CANAL/ELLIS DITCH POST CONSTRUCTION EXTENTS

REPAIR GRAVEL SURFACING TO MATCH EXISTING.

## Keynotes (This Sheet Only):

1. CONSTRUCT CONCRETE MULTI-USE PATHWAY PER DETAIL 1/C2.50. SEE PLAN FOR WIDTH.
2. CONSTRUCT RETAINING WALL PER STRUCTURAL WITH RECESSED LIGHTING PER SITE ELECTRICAL. SEE TYPICAL SECTIONS ON SHEET C3.00 FOR MORE INFORMATION.
3. CONSTRUCT RETAINING WALL WITH REMOVABLE GUARDRAIL PER STRUCTURAL. SEE DETAIL 1/C2.51 AND TYPICAL SECTIONS ON SHEET C3.00 FOR MORE INFORMATION.
   - 3.1. INSTALL LADDERS DOWN TO CANAL BOTTOM AT 50-FT O.C. SEE STRUCTURAL DRAWINGS FOR MORE INFORMATION.
4. INSTALL JUNCTION BOX PER SITE ELECTRICAL.

## Pavement Marking Legend:

REFER TO ACHD STANDARD TRAFFIC DETAIL TS-1112 FOR STRIPING DETAILS

1A 4" YELLOW PATHWAY CENTERLINE (3' LINE - 9' GAP)

THE LAND GROUP

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

3rd Street to Broadway Avenue
Boise, ID 83702

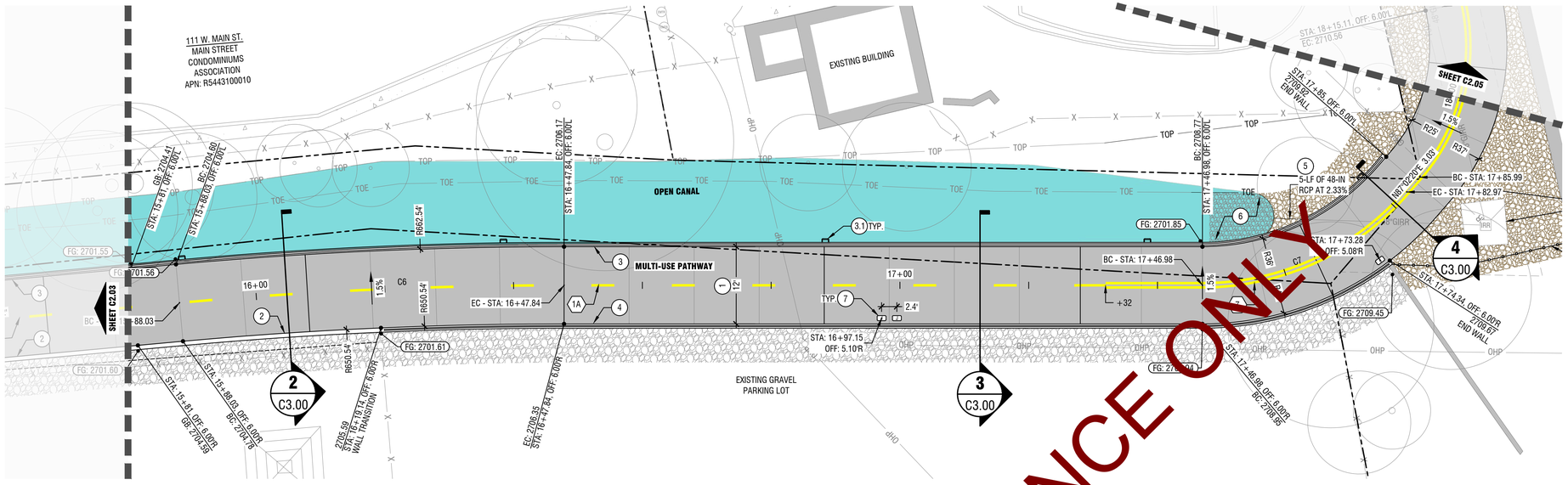
Revisions
1.


| | |
|---|---|
| Project No.: | 122112 |
| Date of Issuance: | 05.03.2024 |
| Project Milestone: | Permit Set |

**Plan and Profile Sta 13+80 - Sta 15+80**

**C2.03**

| Curve Table | | | | | |
|---|---|---|---|---|---|
| CURVE | LENGTH | RADIUS | DELTA | CHORD BEARING | CHORD LENGTH |
| C6 | 59.81' | 656.54' | 005.22 | N46°28'34"W | 59.79' |
| C7 | 35.99' | 42.00' | 049.09 | S68°24'50"E | 34.90' |

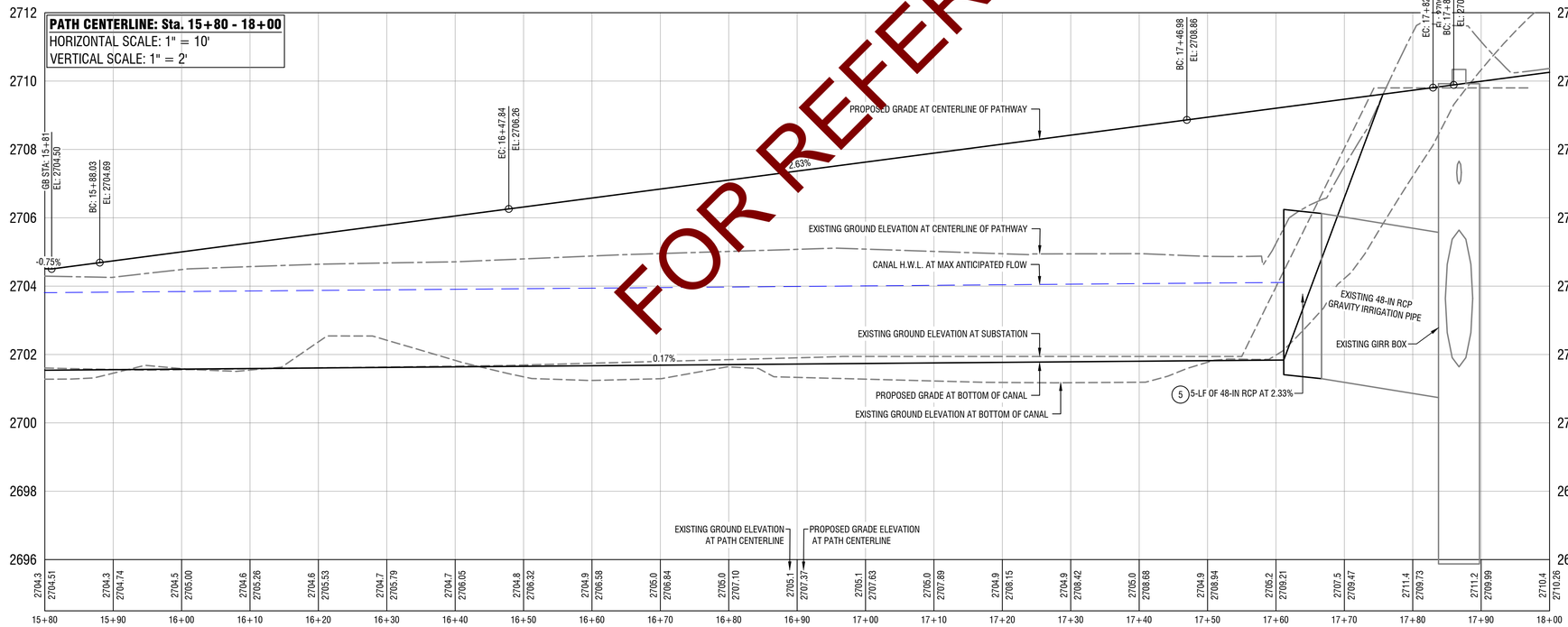





# Plan and Profile Sta 15+80 - Sta 18+00

Horizontal Scale: 1" = 10'

0 10' 20'




## Sheet Notes:

A. CONTRACTOR SHALL REPORT TO ENGINEER ALL CONDITIONS WHICH IMPAIR AND/OR PREVENT THE PROPER EXECUTION OF THIS WORK PRIOR TO BEGINNING WORK.

B. CONTRACTOR TO VERIFY LOCATION OF ALL UTILITIES PRIOR TO INITIATION OF ANY DEMOLITION OR CONSTRUCTION OPERATIONS. ANY DAMAGE TO EXISTING UTILITIES SHALL BE CONTRACTOR'S RESPONSIBILITY.

C. CONTRACTOR SHALL VERIFY ALL DIMENSIONS, DISTANCES, AND GRADES IN THE FIELD AND BRING ANY DISCREPANCIES TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE FOR A DECISION PRIOR TO COMMENCING WITH THE WORK.

D. CONTRACTOR SHALL REPAIR ALL LANDSCAPE AND IRRIGATION AREAS DISTURBED OR DAMAGED AS A RESULT OF CONSTRUCTION TO PRE-CONSTRUCTION CONDITIONS.

E. PROVIDE JOINTS AS SHOWN ON PLANS AND PER DETAIL 2/C2.50. JOINTS ARE AN INTEGRAL PART OF THE DESIGN AND SHALL NOT VARY FROM PATTERNS AND LOCATIONS SHOWN. CONTRACTOR SHALL REMOVE ANY FLATWORK THAT DOES NOT CONFORM TO THE DESIGN.

F. TRANSITION OF CURVES TO OTHER CURVES AND CURVES TO TANGENTS SHALL BE SMOOTH AND CONTINUOUS.

G. STATIONING REPRESENTS PATHWAY CENTERLINE ALIGNMENT, OR AS INDICATED ON THE PLANS.

H. LONGITUDINAL SLOPE OF ALL SIDEWALKS SHALL NOT EXCEED 5%. CROSS SLOPE OF SIDEWALKS AND PEDESTRIAN RAMPS SHALL NOT EXCEED 2%. SLOPES WITHIN PEDESTRIAN RAMPS SHALL NOT EXCEED 12:1 SLOPE IN ANY DIRECTION. FLATWORK ADJACENT TO BUILDINGS SHALL NOT EXCEED 2% CROSS SLOPE OR HAVE A CROSS SLOPE LESS THAN 1%.

I. EXISTING AND PROPOSED CONTOURS ARE AT A 1-FT INTERVAL.

J. SPOT ELEVATIONS INDICATE TOP OF CONCRETE SURFACE OR OTHER SURFACE AS INDICATED BY THE FOLLOWING ABBREVIATIONS:

| | | |
|---|---|---|
| ASP | - | TOP OF ASPHALT PAVEMENT |
| BC | - | BEGIN CURVE |
| EC | - | END CURVE |
| FG | - | FINISH GRADE |
| GB | - | GRADE BREAK |
| HP | - | HIGH POINT |
| LIP | - | LIP OF GUTTER |
| LP | - | LOW POINT |
| MX | - | MATCH EXISTING ELEVATION |
| PCI | - | POINT OF CURVE INTERSECT |
| RIM | - | RIM OF STRUCTURE |
| TBC | - | TOP BACK OF CURB |
| TW | - | TOP OF WALL |

## Material Legend (This Sheet Only):

- PROPOSED CONCRETE MULTI-USE PATHWAY PER DETAIL 1/C2.50. WIDTH VARIES, SEE PLANS.
- EXISTING BOISE CITY CANAL/ELLIS DITCH POST CONSTRUCTION EXTENTS
- LANDSCAPE REPAIR, MIN. 8"-DEPTH 4-8" COBBLE.
- REPAIR GRAVEL SURFACING TO MATCH EXISTING.

## Keynotes (This Sheet Only):

1. CONSTRUCT CONCRETE MULTI-USE PATHWAY PER DETAIL 1/C2.50. SEE PLAN FOR WIDTH.
2. CONSTRUCT RETAINING WALL PER STRUCTURAL WITH RECESSED LIGHTING PER SITE ELECTRICAL. SEE TYPICAL SECTIONS ON SHEET C3.00 FOR MORE INFORMATION.
3. CONSTRUCT RETAINING WALL WITH REMOVABLE GUARDRAIL PER STRUCTURAL. SEE DETAIL 1/C2.51 AND TYPICAL SECTIONS ON SHEET C3.00 FOR MORE INFORMATION.
   - 3.1. INSTALL LADDERS DOWN TO CANAL BOTTOM AT 50-FT O.C. SEE STRUCTURAL DRAWINGS FOR MORE INFORMATION.
4. CONSTRUCT RETAINING WALL WITH GUARDRAIL PER STRUCTURAL AND RECESSED LIGHTING PER ELECTRICAL. SEE DETAIL 2/C2.51 AND TYPICAL SECTIONS ON SHEET C3.00 FOR MORE INFORMATION.
5. EXTEND EXISTING 48-IN RCP GRAVITY IRRIGATION PIPE APPROXIMATELY 5-FT INTO CANAL.
6. INSTALL 12-IN THICK (MIN.)12-IN D50 RIP RAP 10-FT DOWNSTREAM OF PIPE AND 1-FT ABOVE WATER LINE AT SIDES.
7. INSTALL JUNCTION BOX PER SITE ELECTRICAL.

## Pavement Marking Legend:

REFER TO ACHD STANDARD TRAFFIC DETAIL TS-1112 FOR STRIPING DETAILS

- 1A 4" YELLOW PATHWAY CENTERLINE (3' LINE - 9' GAP)
- 7 4" DOUBLE YELLOW

THE LAND GROUP

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

3rd Street to Broadway Avenue
Boise, ID 83702

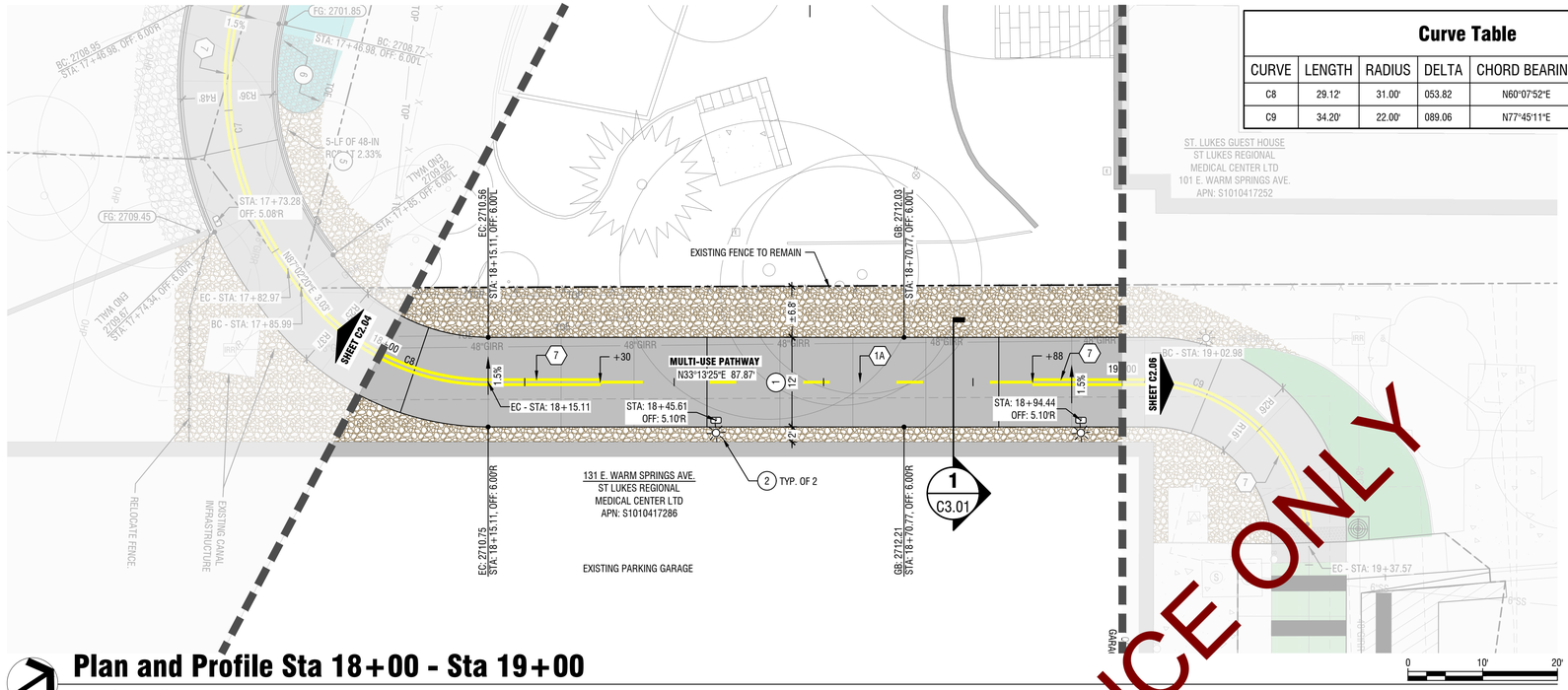
Revisions
1.

PROFESSIONAL ENGINEER REGISTERED 10961 STATE OF IDAHO JASON DENSMER
05/03/2024

Project No.: 122112
Date of Issuance: 05.03.2024
Project Milestone: Permit Set

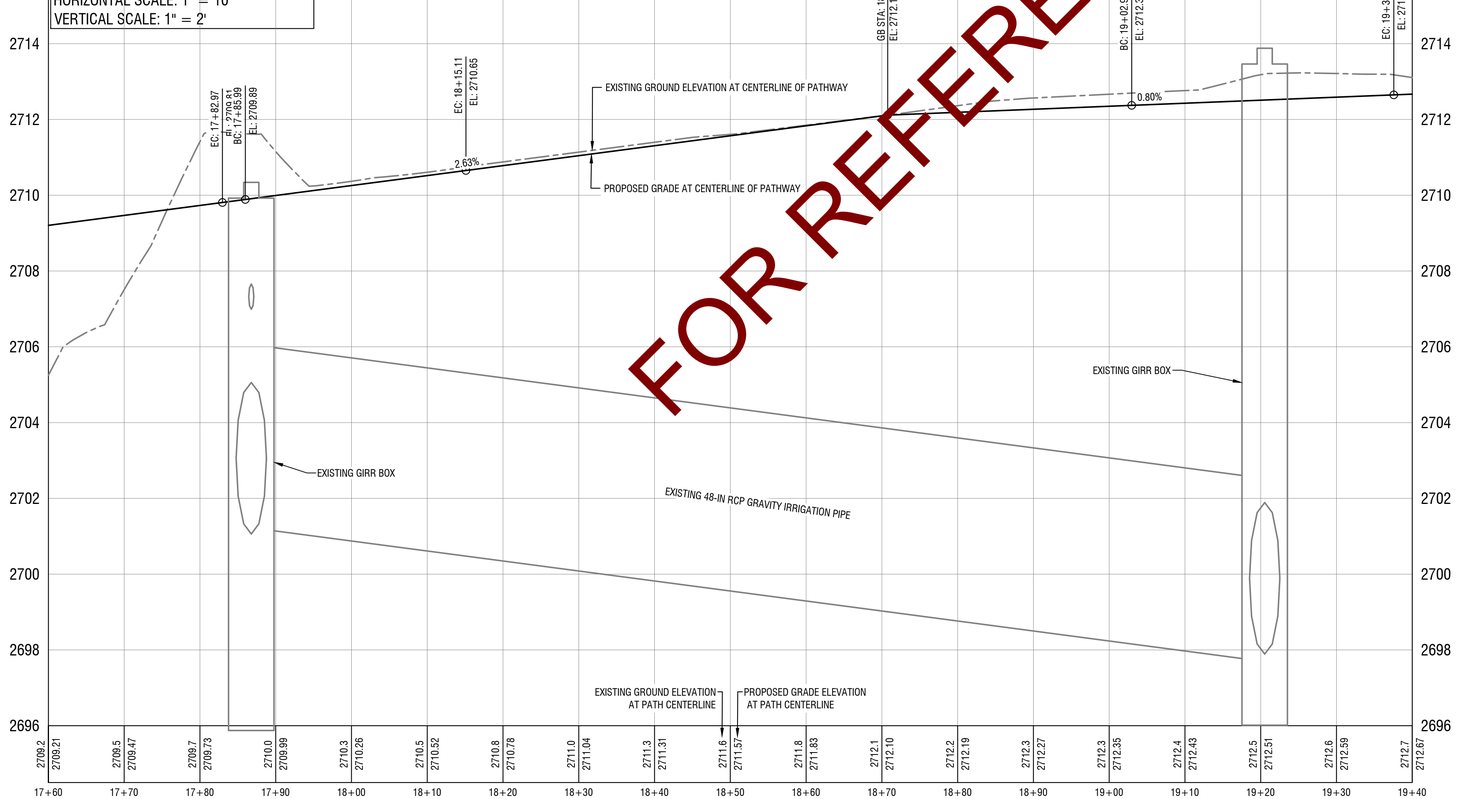
**Plan and Profile Sta 15+80 - Sta 18+00**

**C2.04**




## Plan and Profile Sta 18+00 - Sta 19+00

Horizontal Scale: 1" = 10'






### Curve Table

| CURVE | LENGTH | RADIUS | DELTA | CHORD BEARING | CHORD LENGTH |
|---|---|---|---|---|---|
| C8 | 29.12' | 31.00' | 053.82 | N60°07'52"E | 28.06' |
| C9 | 34.20' | 22.00' | 089.06 | N77°45'11"E | 30.86' |

## Sheet Notes:

A. CONTRACTOR SHALL REPORT TO ENGINEER ALL CONDITIONS WHICH IMPAIR AND/OR PREVENT THE PROPER EXECUTION OF THIS WORK PRIOR TO BEGINNING WORK.

B. CONTRACTOR TO VERIFY LOCATION OF ALL UTILITIES PRIOR TO INITIATION OF ANY DEMOLITION OR CONSTRUCTION OPERATIONS. ANY DAMAGE TO EXISTING UTILITIES SHALL BE CONTRACTOR'S RESPONSIBILITY.

C. CONTRACTOR SHALL VERIFY ALL DIMENSIONS, DISTANCES, AND GRADES IN THE FIELD AND BRING ANY DISCREPANCIES TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE FOR A DECISION PRIOR TO COMMENCING WITH THE WORK.

D. CONTRACTOR SHALL REPAIR ALL LANDSCAPE AND IRRIGATION AREAS DISTURBED OR DAMAGED AS A RESULT OF CONSTRUCTION TO PRE-CONSTRUCTION CONDITIONS.

E. PROVIDE JOINTS AS SHOWN ON PLANS AND PER DETAIL 2/C2.50. JOINTS ARE AN INTEGRAL PART OF THE DESIGN AND SHALL NOT VARY FROM PATTERNS AND LOCATIONS SHOWN. CONTRACTOR SHALL REMOVE ANY FLATWORK THAT DOES NOT CONFORM TO THE DESIGN.

F. TRANSITION OF CURVES TO OTHER CURVES AND CURVES TO TANGENTS SHALL BE SMOOTH AND CONTINUOUS.

G. STATIONING REPRESENTS PATHWAY CENTERLINE ALIGNMENT, OR AS INDICATED ON THE PLANS.

H. LONGITUDINAL SLOPE OF ALL SIDEWALKS SHALL NOT EXCEED 5%. CROSS SLOPE OF SIDEWALKS AND PEDESTRIAN RAMPS SHALL NOT EXCEED 2%. SLOPES WITHIN PEDESTRIAN RAMPS SHALL NOT EXCEED 12:1 SLOPE IN ANY DIRECTION. FLATWORK ADJACENT TO BUILDINGS SHALL NOT EXCEED 2% CROSS SLOPE OR HAVE A CROSS SLOPE LESS THAN 1%.

I. EXISTING AND PROPOSED CONTOURS ARE AT A 1-FT INTERVAL.

J. SPOT ELEVATIONS INDICATE TOP OF CONCRETE SURFACE OR OTHER SURFACE AS INDICATED BY THE FOLLOWING ABBREVIATIONS:

| | | |
|---|---|---|
| ASP | - | TOP OF ASPHALT PAVEMENT |
| BC | - | BEGIN CURVE |
| EC | - | END CURVE |
| FG | - | FINISH GRADE |
| GB | - | GRADE BREAK |
| HP | - | HIGH POINT |
| LIP | - | LIP OF GUTTER |
| LP | - | LOW POINT |
| MX | - | MATCH EXISTING ELEVATION |
| PCI | - | POINT OF CURVE INTERSECT |
| RIM | - | RIM OF STRUCTURE |
| TBC | - | TOP BACK OF CURB |
| TW | - | TOP OF WALL |

## Material Legend (This Sheet Only):

PROPOSED CONCRETE MULTI-USE PATHWAY PER DETAIL 1/C2.50. WIDTH VARIES, SEE PLANS.

LANDSCAPE REPAIR, MIN. 8"-DEPTH 4-8" COBBLE.

## Keynotes (This Sheet Only):

1. CONSTRUCT CONCRETE MULTI-USE PATHWAY PER DETAIL 1/C2.50. SEE PLAN FOR WIDTH.
2. INSTALL PATHWAY LIGHTS WITH JUNCTION BOXES PER PER SITE ELECTRICAL PLAN.

## Pavement Marking Legend:

REFER TO ACHD STANDARD TRAFFIC DETAIL TS-1112 FOR STRIPING DETAILS

1A 4" YELLOW PATHWAY CENTERLINE (3' LINE - 9' GAP)

7 4" DOUBLE YELLOW

THE LAND GROUP

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

3rd Street to Broadway Avenue
Boise, ID 83702

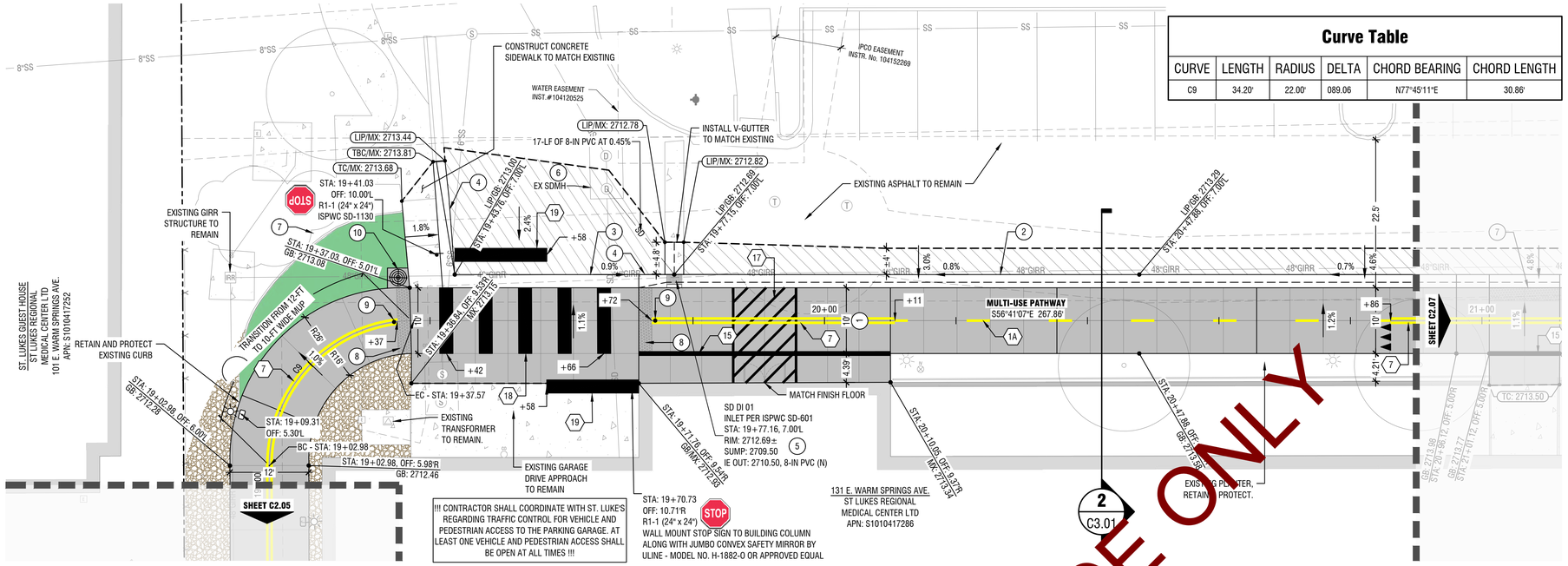
Revisions
1.

PROFESSIONAL ENGINEER
REGISTERED
10961
STATE OF IDAHO
JASON DENSMER
05/03/2024

Project No.: 122112
Date of Issuance: 05.03.2024
Project Milestone: Permit Set

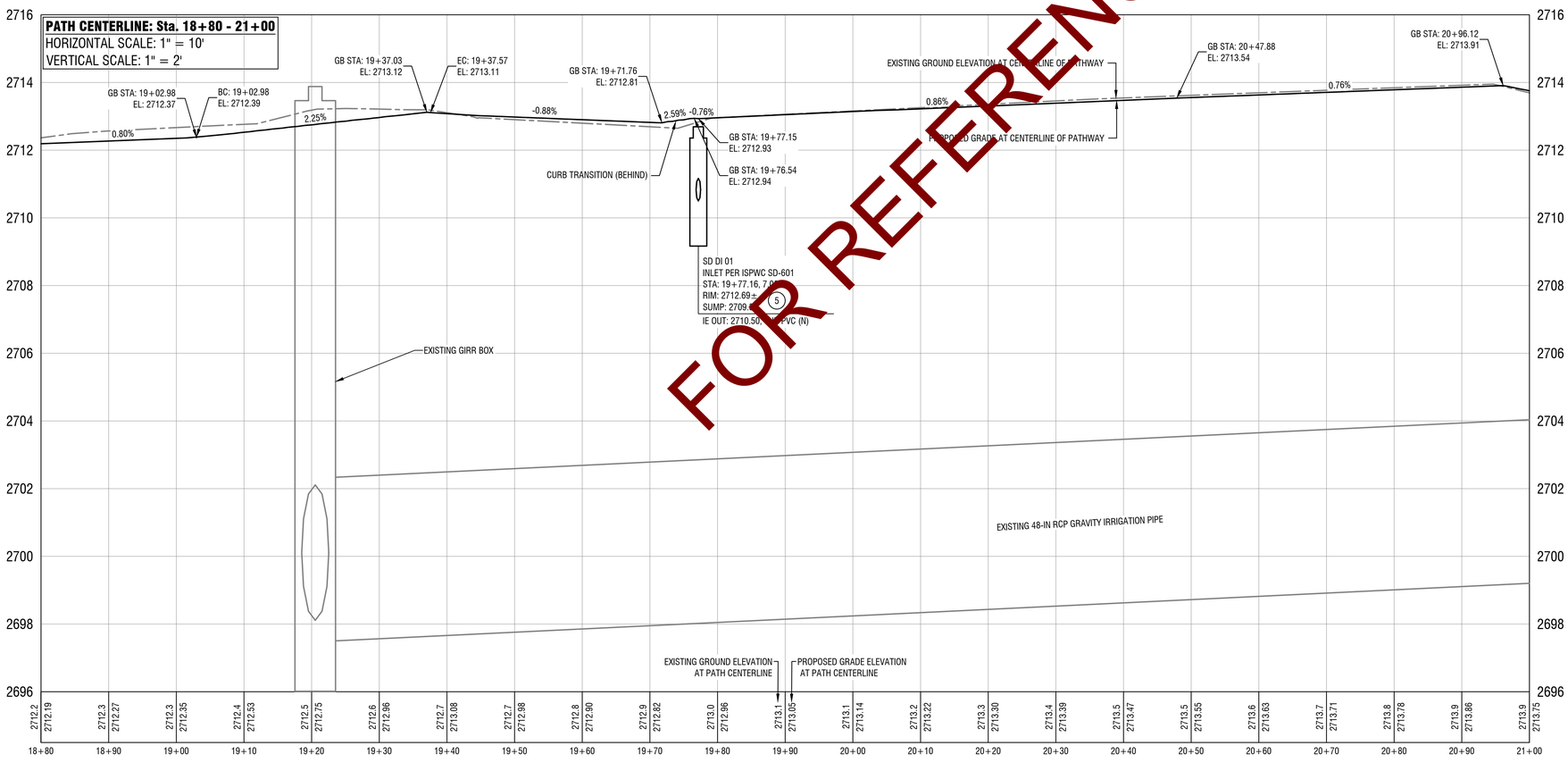
**Plan and Profile Sta 18+00 - Sta 19+00**

**C2.05**




## Plan and Profile Sta 19+00 - Sta 20+90

Horizontal Scale: 1" = 10'






| Curve Table | | | | | |
|---|---|---|---|---|---|
| CURVE | LENGTH | RADIUS | DELTA | CHORD BEARING | CHORD LENGTH |
| C9 | 34.20' | 22.00' | 089.06 | N77°45'11"E | 30.86' |

## Sheet Notes:

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B. CONTRACTOR TO VERIFY LOCATION OF ALL UTILITIES PRIOR TO INITIATION OF ANY DEMOLITION OR CONSTRUCTION OPERATIONS. ANY DAMAGE TO EXISTING UTILITIES SHALL BE CONTRACTOR'S RESPONSIBILITY.

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F. TRANSITION OF CURVES TO OTHER CURVES AND CURVES TO TANGENTS SHALL BE SMOOTH AND CONTINUOUS.

G. STATIONING REPRESENTS PATHWAY CENTERLINE ALIGNMENT, OR AS INDICATED ON THE PLANS.

H. LONGITUDINAL SLOPE OF ALL SIDEWALKS SHALL NOT EXCEED 5%. CROSS SLOPE OF SIDEWALKS AND PEDESTRIAN RAMPS SHALL NOT EXCEED 2%. SLOPES WITHIN PEDESTRIAN RAMPS SHALL NOT EXCEED 12:1 SLOPE IN ANY DIRECTION. FLATWORK ADJACENT TO BUILDINGS SHALL NOT EXCEED 2% CROSS SLOPE OR HAVE A CROSS SLOPE LESS THAN 1%.

I. EXISTING AND PROPOSED CONTOURS ARE AT A 1-FT INTERVAL.

J. SPOT ELEVATIONS INDICATE TOP OF CONCRETE SURFACE OR OTHER SURFACE AS INDICATED BY THE FOLLOWING ABBREVIATIONS:

| | | |
|---|---|---|
| ASP | - | TOP OF ASPHALT PAVEMENT |
| BC | - | BEGIN CURVE |
| EC | - | END CURVE |
| FG | - | FINISH GRADE |
| GB | - | GRADE BREAK |
| HP | - | HIGH POINT |
| LIP | - | LIP OF GUTTER |
| LP | - | LOW POINT |
| MX | - | MATCH EXISTING ELEVATION |
| PCI | - | POINT OF CURVE INTERSECT |
| RIM | - | RIM OF STRUCTURE |
| TBC | - | TOP BACK OF CURB |
| TW | - | TOP OF WALL |

## Material Legend (This Sheet Only):

- PROPOSED CONCRETE MULTI-USE PATHWAY PER DETAIL 1/C2.50. WIDTH VARIES, SEE PLANS.
- ASPHALT REPAIR TYPE "P" PER ISPWC SD-303.
- EXISTING CONCRETE TO REMAIN
- LANDSCAPE REPAIR, MIN. 8"-DEPTH 4-8" COBBLE.
- TURF SOD REPAIR, SEE SHEET L1.00 FOR MORE INFORMATION.

## Keynotes (This Sheet Only):

1. CONSTRUCT CONCRETE MULTI-USE PATHWAY PER DETAIL 1/C2.50. SEE PLAN FOR WIDTH.
2. CONSTRUCT 3" ROLLED CURB AND CATCH PLATE GUTTER PER DETAIL 5/C2.50.
3. CONSTRUCT RIBBON CURB PER DETAIL 7/C2.50.
4. PROVIDE SMOOTH TRANSITION BETWEEN CURB TYPES.
5. INSTALL INLET CATCH BASIN PER ISPWC SD-601.
6. INSTALL 8-IN STORM DRAIN PIPE AT CORED HOLE IN EXISTING STORM DRAIN MANHOLE. INSTALL KOR-N-SEAL BOOT AND PROVIDE WATERTIGHT CONNECTION. NOTIFY ENGINEER IMMEDIATELY IF EXISTING PIPE INVERT ELEVATION IS GREATER THAN 2710.43.
7. INSTALL PATHWAY LIGHTS WITH JUNCTION BOXES PER PER SITE ELECTRICAL PLAN.
8. INSTALL TRUNCATED DOMES PER ISPWC SD-712.
9. INSTALL STANDARD BOISE PARKS AND REC BOLLARD PER DETAIL 8/C2.50.
10. INSTALL STANDARD BOISE PARKS AND REC TRASH CAN ON CONCRETE PAD. COORDINATE WITH BOISE PARKS AND REC.

## Pavement Marking Legend:

REFER TO ACHD STANDARD TRAFFIC DETAIL TS-1112 FOR STRIPING DETAILS

- 1A — 4" YELLOW PATHWAY CENTERLINE (3' LINE - 9' GAP)
- 7 — 4" DOUBLE YELLOW
- 15 — 8" SOLID WHITE
- 17 — 4" SOLID WHITE (24" O.C.)
- 18 — 24" CROSSWALK
- 19 — 24" STOP BAR
- YIELD LINE

THE LAND GROUP

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

3rd Street to Broadway Avenue
Boise, ID 83702

Revisions
1.

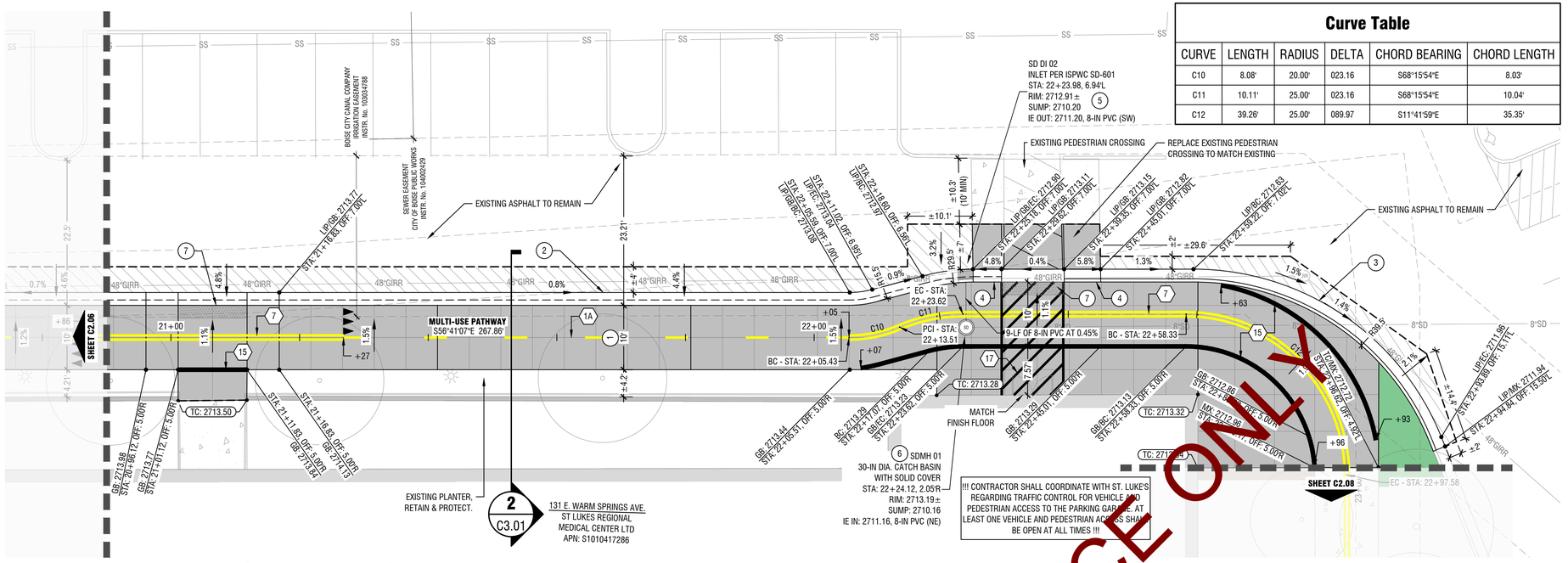
PROFESSIONAL ENGINEER — REGISTERED — 10961 — STATE OF IDAHO — JASON DENSMER
05/03/2024

Project No.: 122112
Date of Issuance: 05.03.2024
Project Milestone: Permit Set

**Plan and Profile Sta 19+00 - Sta 20+90**

**C2.06**

File Location: J:\2022\122112\cad\122112_L200.pathway plan and partial.dwg
Last Modified By: Jason Densmer
Date Plotted: Friday, May 3, 2024 at 09:51 AM

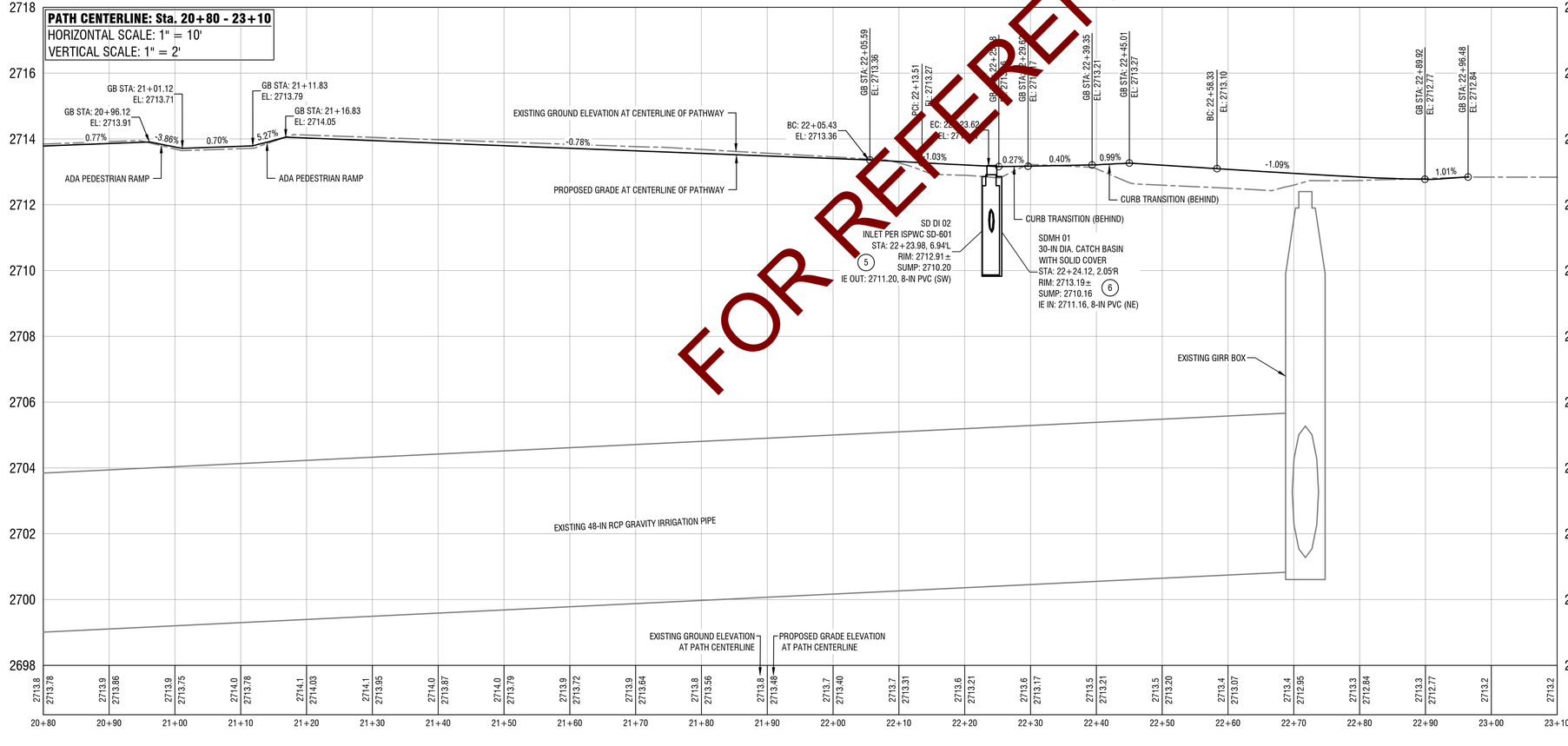



## Curve Table

| CURVE | LENGTH | RADIUS | DELTA | CHORD BEARING | CHORD LENGTH |
|---|---|---|---|---|---|
| C10 | 8.08' | 20.00' | 023.16 | S68°15'54"E | 8.03' |
| C11 | 10.11' | 25.00' | 023.16 | S68°15'54"E | 10.04' |
| C12 | 39.26' | 25.00' | 089.97 | S11°41'59"E | 35.35' |

# Plan and Profile Sta 20+90 - Sta 23+00

Horizontal Scale: 1" = 10'






## Sheet Notes:

A. CONTRACTOR SHALL REPORT TO ENGINEER ALL CONDITIONS WHICH IMPAIR AND/OR PREVENT THE PROPER EXECUTION OF THIS WORK PRIOR TO BEGINNING WORK.

B. CONTRACTOR TO VERIFY LOCATION OF ALL UTILITIES PRIOR TO INITIATION OF ANY DEMOLITION OR CONSTRUCTION OPERATIONS. ANY DAMAGE TO EXISTING UTILITIES SHALL BE CONTRACTOR'S RESPONSIBILITY.

C. CONTRACTOR SHALL VERIFY ALL DIMENSIONS, DISTANCES, AND GRADES IN THE FIELD AND BRING ANY DISCREPANCIES TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE FOR A DECISION PRIOR TO COMMENCING WITH THE WORK.

D. CONTRACTOR SHALL REPAIR ALL LANDSCAPE AND IRRIGATION AREAS DISTURBED OR DAMAGED AS A RESULT OF CONSTRUCTION TO PRE-CONSTRUCTION CONDITIONS.

E. PROVIDE JOINTS AS SHOWN ON PLANS AND PER DETAIL 2/C2.50. JOINTS ARE AN INTEGRAL PART OF THE DESIGN AND SHALL NOT VARY FROM PATTERNS AND LOCATIONS SHOWN. CONTRACTOR SHALL REMOVE ANY FLATWORK THAT DOES NOT CONFORM TO THE DESIGN.

F. TRANSITION OF CURVES TO OTHER CURVES AND CURVES TO TANGENTS SHALL BE SMOOTH AND CONTINUOUS.

G. STATIONING REPRESENTS PATHWAY CENTERLINE ALIGNMENT, OR AS INDICATED ON THE PLANS.

H. LONGITUDINAL SLOPE OF ALL SIDEWALKS SHALL NOT EXCEED 5%. CROSS SLOPE OF SIDEWALKS AND PEDESTRIAN RAMPS SHALL NOT EXCEED 2%. SLOPES WITHIN PEDESTRIAN RAMPS SHALL NOT EXCEED 12:1 SLOPE IN ANY DIRECTION. FLATWORK ADJACENT TO BUILDINGS SHALL NOT EXCEED 2% CROSS SLOPE OR HAVE A CROSS SLOPE LESS THAN 1%.

I. EXISTING AND PROPOSED CONTOURS ARE AT A 1-FT INTERVAL.

J. SPOT ELEVATIONS INDICATE TOP OF CONCRETE SURFACE OR OTHER SURFACE AS INDICATED BY THE FOLLOWING ABBREVIATIONS:

| | | |
|---|---|---|
| ASP | - | TOP OF ASPHALT PAVEMENT |
| BC | - | BEGIN CURVE |
| EC | - | END CURVE |
| FG | - | FINISH GRADE |
| GB | - | GRADE BREAK |
| HP | - | HIGH POINT |
| LIP | - | LIP OF GUTTER |
| LP | - | LOW POINT |
| MX | - | MATCH EXISTING ELEVATION |
| PCI | - | POINT OF CURVE INTERSECT |
| RIM | - | RIM OF STRUCTURE |
| TBC | - | TOP BACK OF CURB |
| TW | - | TOP OF WALL |

## Material Legend (This Sheet Only):

- PROPOSED CONCRETE MULTI-USE PATHWAY PER DETAIL 1/C2.50. WIDTH VARIES, SEE PLANS.
- ASPHALT REPAIR TYPE "P" PER ISPWC SD-303.
- EXISTING CONCRETE TO REMAIN
- TURF SOD REPAIR, SEE SHEET L1.00 FOR MORE INFORMATION.

## Keynotes (This Sheet Only):

1. CONSTRUCT CONCRETE MULTI-USE PATHWAY PER DETAIL 1/C2.50. SEE PLAN FOR WIDTH.
2. CONSTRUCT 3" ROLLED CURB AND CATCH PLATE GUTTER PER DETAIL 5/C2.50.
3. CONSTRUCT 6" CURB AND CATCH PLATE GUTTER PER DETAIL 3/C2.50.
4. PROVIDE SMOOTH TRANSITION BETWEEN CURB TYPES.
5. INSTALL INLET CATCH BASIN PER ISPWC SD-601.
6. INSTALL ROUND 30-INCH CATCH BASIN (OLDCASTLE CB140 OR APPROVED EQUAL)PER DETAIL 10/C250 WITH A SOLID LID. INTERCEPT EXISTING 8-IN STORM DRAIN PIPE TO THE EAST. NOTIFY ENGINEER IMMEDIATELY IF EXISTING PIPE INVERT IS GREATER THAN 2711.16.
7. INSTALL TRUNCATED DOMES PER ISPWC SD-712.

## Pavement Marking Legend:

REFER TO ACHD STANDARD TRAFFIC DETAIL TS-1112 FOR STRIPING DETAILS

- 1A — 4" YELLOW PATHWAY CENTERLINE (3' LINE - 9' GAP)
- 7 — 4" DOUBLE YELLOW
- 15 — 8" SOLID WHITE
- 17 — 4" SOLID WHITE (24" O.C.)
- YIELD LINE

THE LAND GROUP

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

3rd Street to Broadway Avenue
Boise, ID 83702

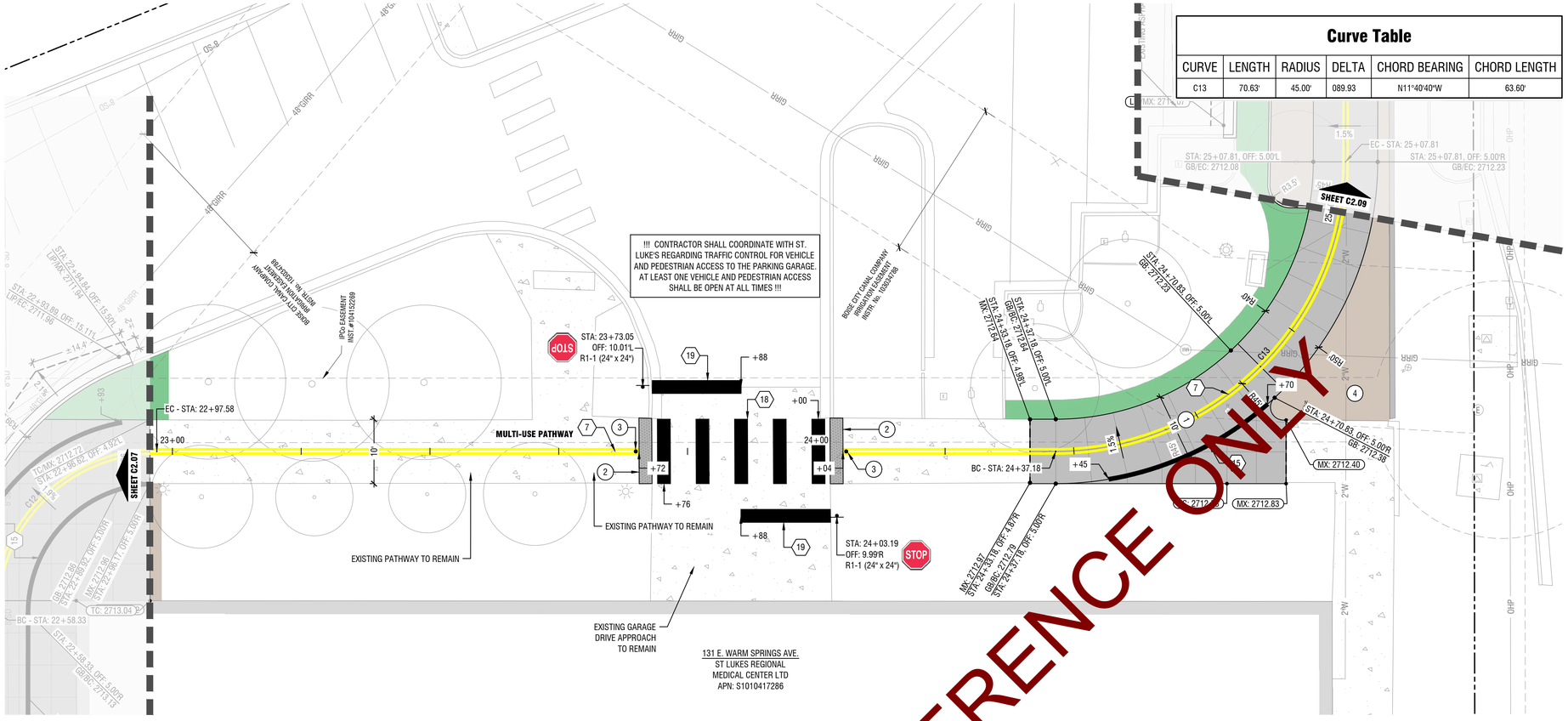
Revisions
1.

PROFESSIONAL ENGINEER
REGISTERED
10961
STATE OF IDAHO
JASON DENSMER
05/03/2024

Project No.: 122112
Date of Issuance: 05.03.2024
Project Milestone: Permit Set

**Plan and Profile Sta 20+90 - Sta 23+00**

**C2.07**

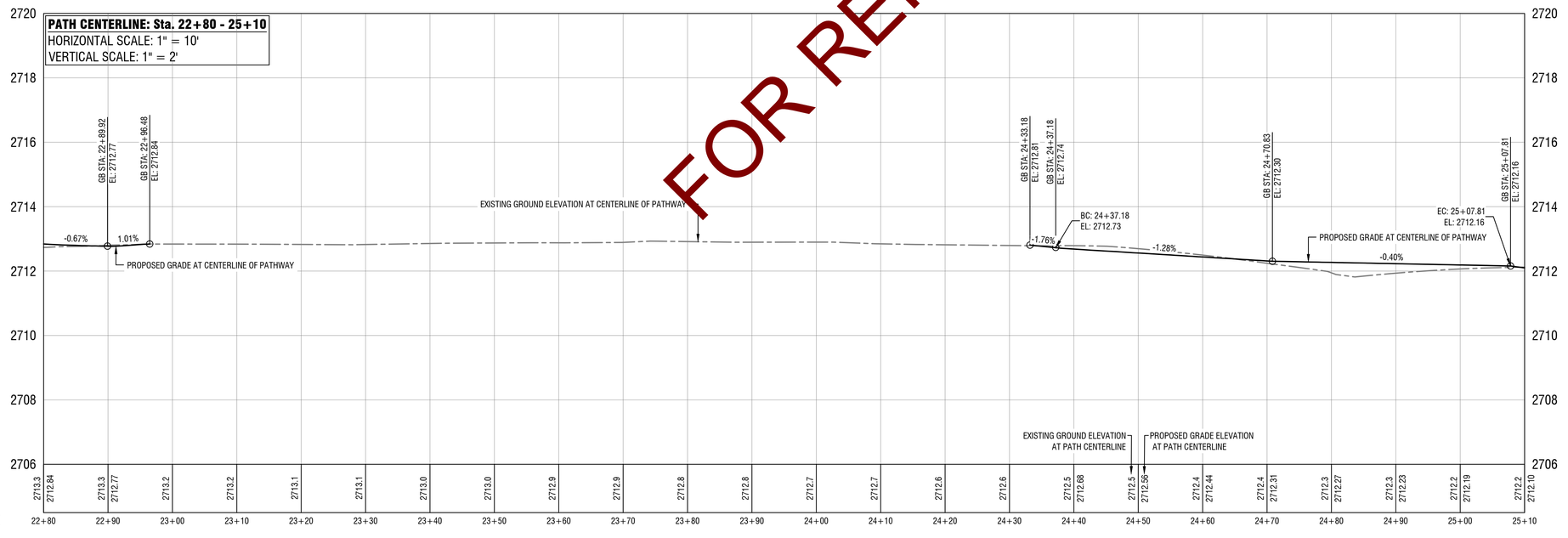



## Curve Table

| CURVE | LENGTH | RADIUS | DELTA | CHORD BEARING | CHORD LENGTH |
|---|---|---|---|---|---|
| C13 | 70.63' | 45.00' | 089.93 | N11°40'40"W | 63.60' |

## Plan and Profile Sta 23+00 - Sta 25+00

Horizontal Scale: 1" = 10'




## Sheet Notes:

A. CONTRACTOR SHALL REPORT TO ENGINEER ALL CONDITIONS WHICH IMPAIR AND/OR PREVENT THE PROPER EXECUTION OF THIS WORK PRIOR TO BEGINNING WORK.

B. CONTRACTOR TO VERIFY LOCATION OF ALL UTILITIES PRIOR TO INITIATION OF ANY DEMOLITION OR CONSTRUCTION OPERATIONS. ANY DAMAGE TO EXISTING UTILITIES SHALL BE CONTRACTOR'S RESPONSIBILITY.

C. CONTRACTOR SHALL VERIFY ALL DIMENSIONS, DISTANCES, AND GRADES IN THE FIELD AND BRING ANY DISCREPANCIES TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE FOR A DECISION PRIOR TO COMMENCING WITH THE WORK.

D. CONTRACTOR SHALL REPAIR ALL LANDSCAPE AND IRRIGATION AREAS DISTURBED OR DAMAGED AS A RESULT OF CONSTRUCTION TO PRE-CONSTRUCTION CONDITIONS.

E. PROVIDE JOINTS AS SHOWN ON PLANS AND PER DETAIL 2/C2.50. JOINTS ARE AN INTEGRAL PART OF THE DESIGN AND SHALL NOT VARY FROM PATTERNS AND LOCATIONS SHOWN. CONTRACTOR SHALL REMOVE ANY FLATWORK THAT DOES NOT CONFORM TO THE DESIGN.

F. TRANSITION OF CURVES TO OTHER CURVES AND CURVES TO TANGENTS SHALL BE SMOOTH AND CONTINUOUS.

G. STATIONING REPRESENTS PATHWAY CENTERLINE ALIGNMENT, OR AS INDICATED ON THE PLANS.

H. LONGITUDINAL SLOPE OF ALL SIDEWALKS SHALL NOT EXCEED 5%. CROSS SLOPE OF SIDEWALKS AND PEDESTRIAN RAMPS SHALL NOT EXCEED 2%. SLOPES WITHIN PEDESTRIAN RAMPS SHALL NOT EXCEED 12:1 SLOPE IN ANY DIRECTION. FLATWORK ADJACENT TO BUILDINGS SHALL NOT EXCEED 2% CROSS SLOPE OR HAVE A CROSS SLOPE LESS THAN 1%.

I. EXISTING AND PROPOSED CONTOURS ARE AT A 1-FT INTERVAL.

J. SPOT ELEVATIONS INDICATE TOP OF CONCRETE SURFACE OR OTHER SURFACE AS INDICATED BY THE FOLLOWING ABBREVIATIONS:

| | | |
|---|---|---|
| ASP | - | TOP OF ASPHALT PAVEMENT |
| BC | - | BEGIN CURVE |
| EC | - | END CURVE |
| FG | - | FINISH GRADE |
| GB | - | GRADE BREAK |
| HP | - | HIGH POINT |
| LIP | - | LIP OF GUTTER |
| LP | - | LOW POINT |
| MX | - | MATCH EXISTING ELEVATION |
| PCI | - | POINT OF CURVE INTERSECT |
| RIM | - | RIM OF STRUCTURE |
| TBC | - | TOP BACK OF CURB |
| TW | - | TOP OF WALL |

## Material Legend (This Sheet Only):

- PROPOSED CONCRETE MULTI-USE PATHWAY PER DETAIL 1/C2.50. WIDTH VARIES, SEE PLANS.
- ASPHALT REPAIR TYPE "P" PER ISPWC SD-303.
- LANDSCAPE PLANTER. SEE L1.00 FOR PLANTING PLAN.
- TURF SOD REPAIR, SEE SHEET L1.00 FOR MORE INFORMATION.
- EXISTING CONCRETE TO REMAIN

## Keynotes (This Sheet Only):

1. CONSTRUCT CONCRETE MULTI-USE PATHWAY PER DETAIL 1/C2.50. SEE PLAN FOR WIDTH.
2. REPLACE CONCERETE FLATWORK AND INSTALL TRUNCATED DOMES PER ISPWC SD-712.
3. INSTALL STANDARD BOISE PARKS AND REC BOLLARD PER DETAIL 8/C2.50.
4. LANDSCAPE PLANTER, SEE L1.00 FOR PLANTING PLAN.

## Pavement Marking Legend:

REFER TO ACHD STANDARD TRAFFIC DETAIL TS-1112 FOR STRIPING DETAILS

- 7 — 4" DOUBLE YELLOW
- 1A — 8" SOLID WHITE
- 18 — 24" CROSSWALK
- 19 — 24" STOP BAR

THE LAND GROUP

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

3rd Street to Broadway Avenue
Boise, ID 83702

Revisions
1.

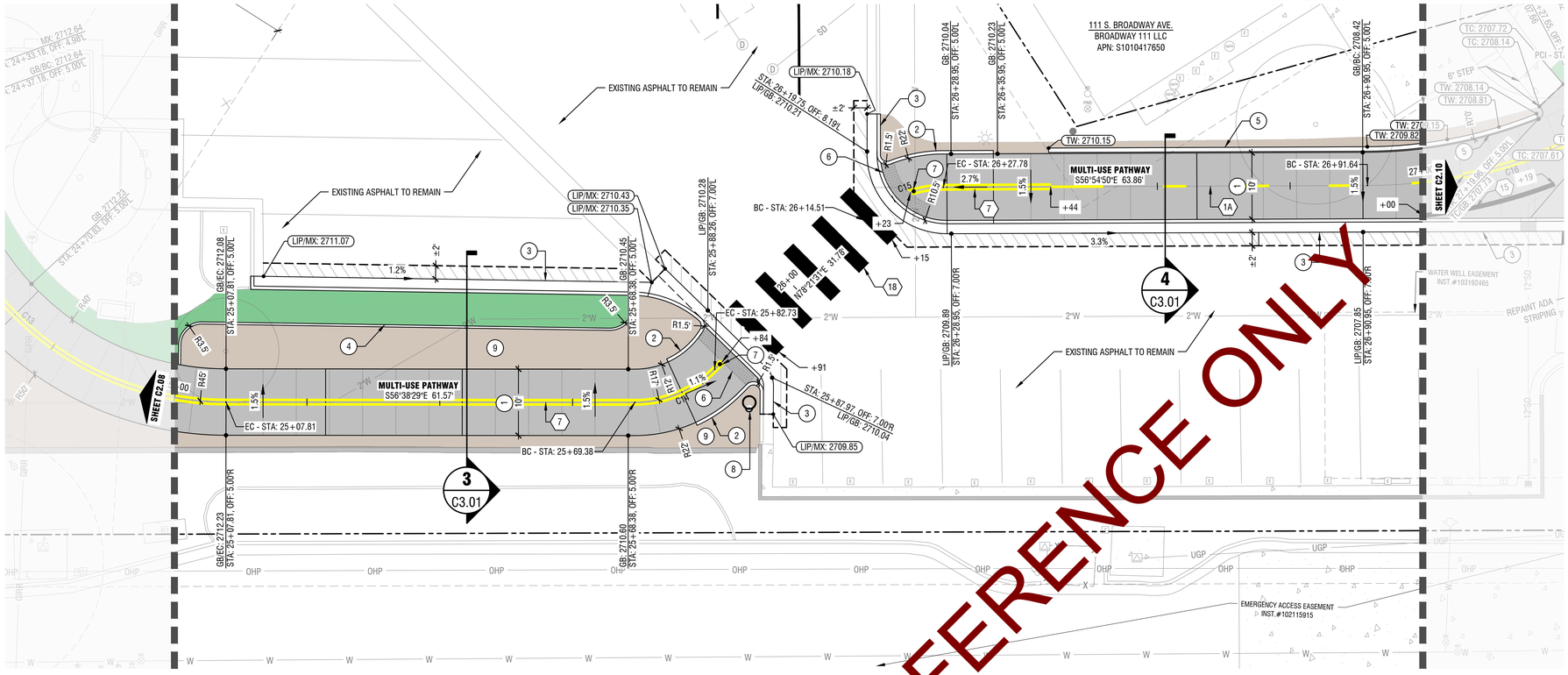
PROFESSIONAL ENGINEER REGISTERED 10961 STATE OF IDAHO JASON DENSMER
05/03/2024

Project No.: 122112
Date of Issuance: 05.03.2024
Project Milestone: Permit Set

**Plan and Profile Sta 23+00 - Sta 25+00**

**C2.08**

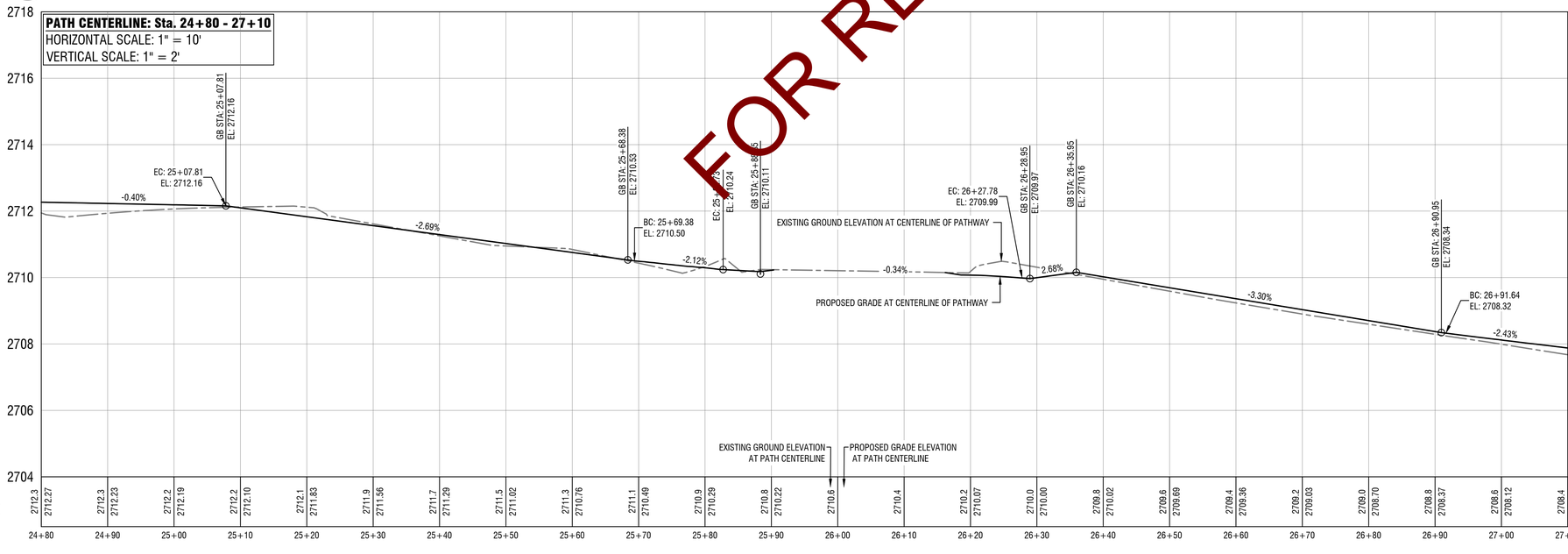
| Curve Table | | | | | |
|---|---|---|---|---|---|
| CURVE | LENGTH | RADIUS | DELTA | CHORD BEARING | CHORD LENGTH |
| C14 | 13.35' | 17.00' | 045.00 | N79°08'29"W | 13.01' |
| C15 | 13.27' | 17.00' | 044.73 | S79°16'39"E | 12.94' |






## Plan and Profile Sta 25+00 - Sta 27+00

Horizontal Scale: 1" = 10'




## Sheet Notes:

A. CONTRACTOR SHALL REPORT TO ENGINEER ALL CONDITIONS WHICH IMPAIR AND/OR PREVENT THE PROPER EXECUTION OF THIS WORK PRIOR TO BEGINNING WORK.

B. CONTRACTOR TO VERIFY LOCATION OF ALL UTILITIES PRIOR TO INITIATION OF ANY DEMOLITION OR CONSTRUCTION OPERATIONS. ANY DAMAGE TO EXISTING UTILITIES SHALL BE CONTRACTOR'S RESPONSIBILITY.

C. CONTRACTOR SHALL VERIFY ALL DIMENSIONS, DISTANCES, AND GRADES IN THE FIELD AND BRING ANY DISCREPANCIES TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE FOR A DECISION PRIOR TO COMMENCING WITH THE WORK.

D. CONTRACTOR SHALL REPAIR ALL LANDSCAPE AND IRRIGATION AREAS DISTURBED OR DAMAGED AS A RESULT OF CONSTRUCTION TO PRE-CONSTRUCTION CONDITIONS.

E. PROVIDE JOINTS AS SHOWN ON PLANS AND PER DETAIL 2/C2.50. JOINTS ARE AN INTEGRAL PART OF THE DESIGN AND SHALL NOT VARY FROM PATTERNS AND LOCATIONS SHOWN. CONTRACTOR SHALL REMOVE ANY FLATWORK THAT DOES NOT CONFORM TO THE DESIGN.

F. TRANSITION OF CURVES TO OTHER CURVES AND CURVES TO TANGENTS SHALL BE SMOOTH AND CONTINUOUS.

G. STATIONING REPRESENTS PATHWAY CENTERLINE ALIGNMENT, OR AS INDICATED ON THE PLANS.

H. LONGITUDINAL SLOPE OF ALL SIDEWALKS SHALL NOT EXCEED 5%. CROSS SLOPE OF SIDEWALKS AND PEDESTRIAN RAMPS SHALL NOT EXCEED 2%. SLOPES WITHIN PEDESTRIAN RAMPS SHALL NOT EXCEED 12:1 SLOPE IN ANY DIRECTION. FLATWORK ADJACENT TO BUILDINGS SHALL NOT EXCEED 2% CROSS SLOPE OR HAVE A CROSS SLOPE LESS THAN 1%.

I. EXISTING AND PROPOSED CONTOURS ARE AT A 1-FT INTERVAL.

J. SPOT ELEVATIONS INDICATE TOP OF CONCRETE SURFACE OR OTHER SURFACE AS INDICATED BY THE FOLLOWING ABBREVIATIONS:

| | | |
|---|---|---|
| ASP | - | TOP OF ASPHALT PAVEMENT |
| BC | - | BEGIN CURVE |
| EC | - | END CURVE |
| FG | - | FINISH GRADE |
| GB | - | GRADE BREAK |
| HP | - | HIGH POINT |
| LIP | - | LIP OF GUTTER |
| LP | - | LOW POINT |
| MX | - | MATCH EXISTING ELEVATION |
| PCI | - | POINT OF CURVE INTERSECT |
| RIM | - | RIM OF STRUCTURE |
| TBC | - | TOP BACK OF CURB |
| TW | - | TOP OF WALL |

## Material Legend (This Sheet Only):

- PROPOSED CONCRETE MULTI-USE PATHWAY PER DETAIL 1/C2.50. WIDTH VARIES, SEE PLANS.
- ASPHALT REPAIR TYPE "P" PER ISPWC SD-303.
- LANDSCAPE PLANTER. SEE SHEET L1.00 FOR PLANTING PLAN.
- TURF SOD REPAIR, SEE SHEET L1.00 FOR MORE INFORMATION.
- EXISTING CONCRETE TO REMAIN

## Keynotes (This Sheet Only):

1. CONSTRUCT CONCRETE MULTI-USE PATHWAY PER DETAIL 1/C2.50. SEE PLAN FOR WIDTH.
2. CONSTRUCT 6" VERTICAL CURB (NO GUTTER) PER DETAIL 6/C2.50.
3. CONSTRUCT 6" CURB AND CATCH PLATE GUTTER PER DETAIL 3/C2.50.
4. CONSTRUCT MOW CURB PER DETAIL 4/C2.50.
5. CONSTRUCT RETAINING WALL TO MATCH EXISTING. RE-USE EXISTING STONES SALVAGED FROM DEMOLITION.
6. INSTALL TRUNCATED DOMES PER ISPWC SD-712.
7. INSTALL STANDARD BOISE PARKS AND REC BOLLARD PER DETAIL 8/C2.50.
8. INSTALL RELOCATED LIGHT POLE. SEE DEMOLITION PLAN AND SITE ELECTRICAL PLAN FOR MORE INFORMATION.
9. LANDSCAPE PLANTER, SEE SHEET L1.00 FOR PLANTING PLAN.

## Pavement Marking Legend:

REFER TO ACHD STANDARD TRAFFIC DETAIL TS-1112 FOR STRIPING DETAILS

- 1A — 4" YELLOW PATHWAY CENTERLINE (3' LINE - 9' GAP)
- 7 — 4" DOUBLE YELLOW
- 18 — 24" CROSSWALK

THE LAND GROUP

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

3rd Street to Broadway Avenue
Boise, ID 83702

Revisions
1.

JASON DENSMER — PROFESSIONAL ENGINEER — REGISTERED — 10961 — STATE OF IDAHO
05/03/2024

| | |
|---|---|
| Project No.: | 122112 |
| Date of Issuance: | 05.03.2024 |
| Project Milestone: | Permit Set |

**Plan and Profile Sta 25+00 - Sta 27+00**

**C2.09**

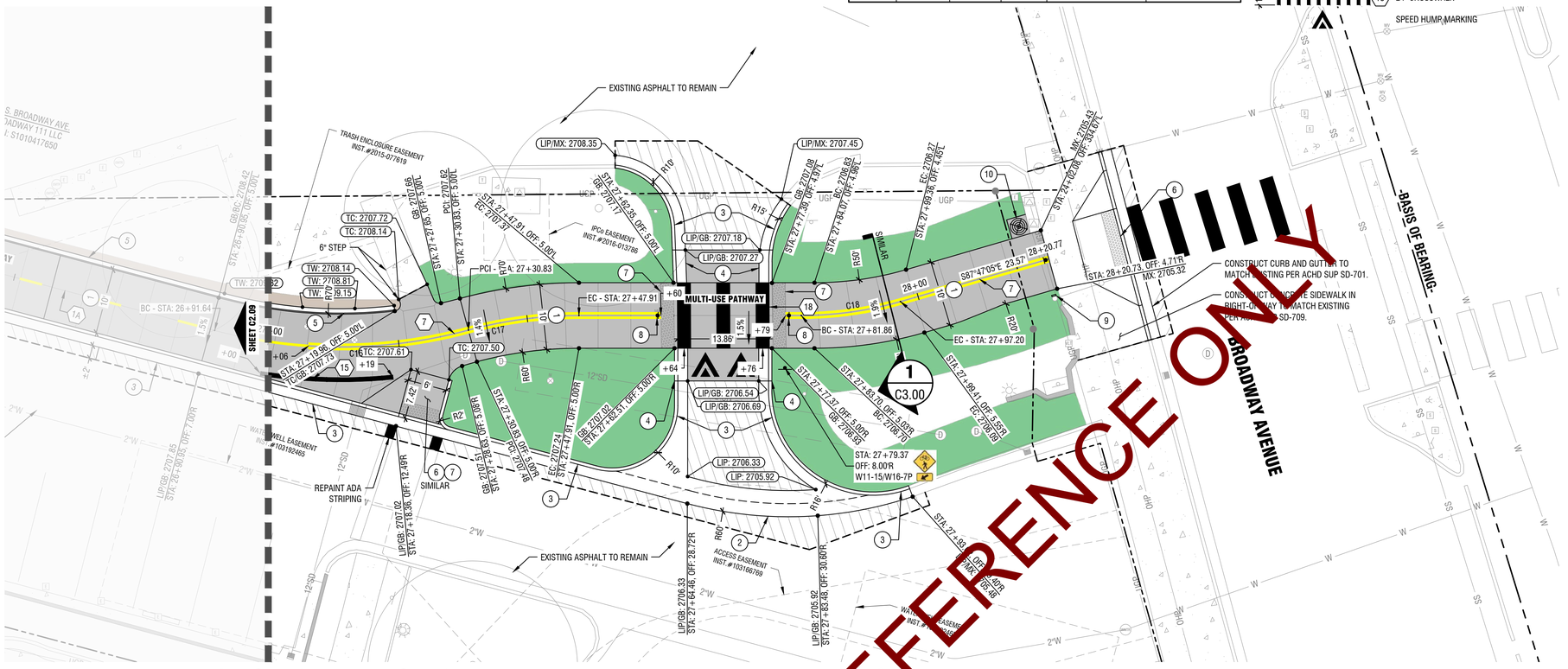
## Curve Table

| CURVE | LENGTH | RADIUS | DELTA | CHORD BEARING | CHORD LENGTH |
|---|---|---|---|---|---|
| C16 | 39.19' | 75.00' | 029.94 | N71°53'01"W | 38.75' |
| C17 | 17.07' | 65.00' | 015.05 | N79°19'44"W | 17.02' |
| C18 | 15.34' | 55.00' | 015.98 | S79°47'40"E | 15.29' |

## Pavement Marking Legend:

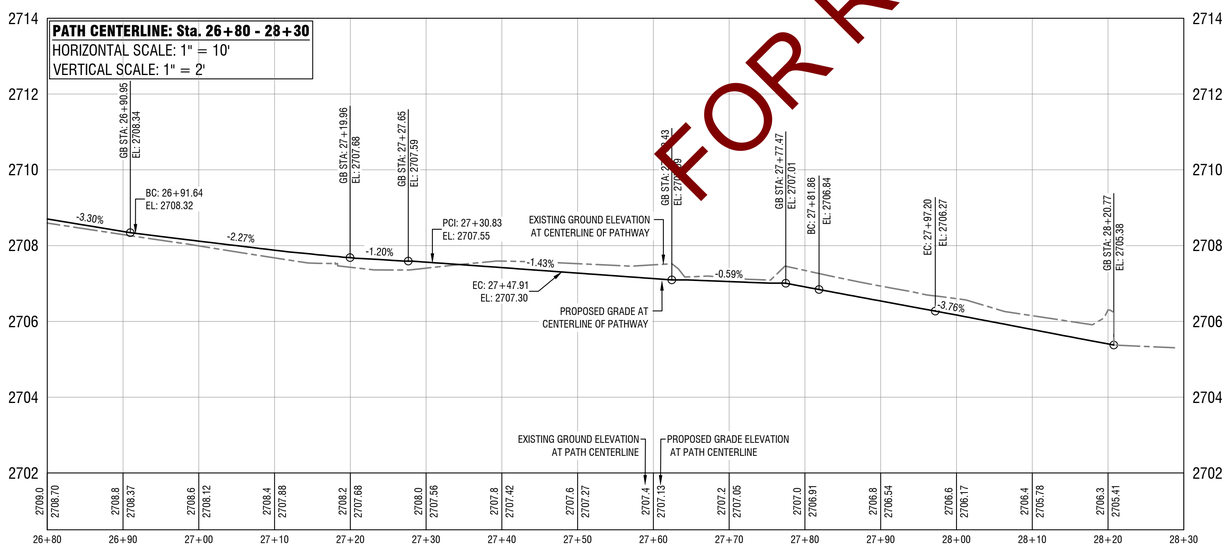
REFER TO ACHD STANDARD TRAFFIC DETAILS TS-1112 AND TS-1113 FOR STRIPING DETAILS

- 1A — 4" YELLOW PATHWAY CENTERLINE (3' LINE - 9' GAP)
- 7 — 4" DOUBLE YELLOW
- 15 — 8" SOLID WHITE
- 18 — 24" CROSSWALK
- SPEED HUMP MARKING




## Plan and Profile Sta 27+00 - Sta 28+40

Horizontal Scale: 1" = 10'




## Sheet Notes:

A. CONTRACTOR SHALL REPORT TO ENGINEER ALL CONDITIONS WHICH IMPAIR AND/OR PREVENT THE PROPER EXECUTION OF THIS WORK PRIOR TO BEGINNING WORK.

B. CONTRACTOR TO VERIFY LOCATION OF ALL UTILITIES PRIOR TO INITIATION OF ANY DEMOLITION OR CONSTRUCTION OPERATIONS. ANY DAMAGE TO EXISTING UTILITIES SHALL BE CONTRACTOR'S RESPONSIBILITY.

C. CONTRACTOR SHALL VERIFY ALL DIMENSIONS, DISTANCES, AND GRADES IN THE FIELD AND BRING ANY DISCREPANCIES TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE FOR A DECISION PRIOR TO COMMENCING WITH THE WORK.

D. CONTRACTOR SHALL REPAIR ALL LANDSCAPE AND IRRIGATION AREAS DISTURBED OR DAMAGED AS A RESULT OF CONSTRUCTION TO PRE-CONSTRUCTION CONDITIONS.

E. PROVIDE JOINTS AS SHOWN ON PLANS AND PER DETAIL 2/C2.50. JOINTS ARE AN INTEGRAL PART OF THE DESIGN AND SHALL NOT VARY FROM PATTERNS AND LOCATIONS SHOWN. CONTRACTOR SHALL REMOVE ANY FLATWORK THAT DOES NOT CONFORM TO THE DESIGN.

F. TRANSITION OF CURVES TO OTHER CURVES AND CURVES TO TANGENTS SHALL BE SMOOTH AND CONTINUOUS.

G. STATIONING REPRESENTS PATHWAY CENTERLINE ALIGNMENT, OR AS INDICATED ON THE PLANS.

H. LONGITUDINAL SLOPE OF ALL SIDEWALKS SHALL NOT EXCEED 5%. CROSS SLOPE OF SIDEWALKS AND PEDESTRIAN RAMPS SHALL NOT EXCEED 2%. SLOPES WITHIN PEDESTRIAN RAMPS SHALL NOT EXCEED 12:1 SLOPE IN ANY DIRECTION. FLATWORK ADJACENT TO BUILDINGS SHALL NOT EXCEED 2% CROSS SLOPE OR HAVE A CROSS SLOPE LESS THAN 1%.

I. EXISTING AND PROPOSED CONTOURS ARE AT A 1-FT INTERVAL.

J. SPOT ELEVATIONS INDICATE TOP OF CONCRETE SURFACE OR OTHER SURFACE AS INDICATED BY THE FOLLOWING ABBREVIATIONS:

| | | |
|---|---|---|
| ASP | - | TOP OF ASPHALT PAVEMENT |
| BC | - | BEGIN CURVE |
| EC | - | END CURVE |
| FG | - | FINISH GRADE |
| GB | - | GRADE BREAK |
| HP | - | HIGH POINT |
| LIP | - | LIP OF GUTTER |
| LP | - | LOW POINT |
| MX | - | MATCH EXISTING ELEVATION |
| PCI | - | POINT OF CURVE INTERSECT |
| RIM | - | RIM OF STRUCTURE |
| TBC | - | TOP BACK OF CURB |
| TW | - | TOP OF WALL |

## Material Legend (This Sheet Only):

- PROPOSED CONCRETE MULTI-USE PATHWAY PER DETAIL 1/C2.50. WIDTH VARIES, SEE PLANS.
- EXISTING CONCRETE TO REMAIN
- LANDSCAPE REPAIR, MIN. 3"-DEPTH BARK MULCH.
- TURF SOD REPAIR, SEE SHEET L1.00 FOR MORE INFORMATION.
- ASPHALT REPAIR TYPE "P" PER ISPWC SD-303.
- PAVEMENT MATCHES WITHIN ACHD R/W ON MINOR ARTERIALS (BROADWAY AVE) SHALL USE 5-IN OF SP-2, 0.5" (1/2") MIX, PG 64-28, 4-IN OF 3/4" MINUS CRUSHED AGGREGATE, 25-IN OF 6" MINUS PIT RUN, OR MATCH THE EXISTING STREET SECTION, WHICHEVER IS GREATER

## Keynotes (This Sheet Only):

1. CONSTRUCT CONCRETE MULTI-USE PATHWAY PER DETAIL 1/C2.50. SEE PLAN FOR WIDTH.
2. CONSTRUCT 4-FT WIDE VALLEY GUTTER PER ISPWC SD-708.
3. CONSTRUCT 6" CURB AND CATCH PLATE GUTTER PER DETAIL 3/C2.50.
4. TRANSITION TO FLUSH CURB AT CROSSING.
5. CONSTRUCT RETAINING WALL TO MATCH EXISTING. RE-USE EXISTING STONES SALVAGED FROM DEMOLITION.
6. CONSTRUCT ADA PEDESTRIAN RAMP PER ISPWC SD-712A.
7. INSTALL TRUNCATED DOMES PER ISPWC SD-712.
8. INSTALL STANDARD BOISE PARKS AND REC BOLLARD PER DETAIL 8/C2.50.
9. INSTALL RELOCATED PEDESTRIAN PUSH BUTTON ON EXISTING TRAFFIC SIGNAL POST. SEE DEMOLITION PLAN AND SITE ELECTRICAL PLAN FOR MORE INFORMATION. COORDINATE WITH ACHD.
10. INSTALL STANDARD BOISE PARKS AND REC TRASH CAN ON CONCRETE PAD. COORDINATE WITH BOISE PARKS AND REC.

THE LAND GROUP

# BOISE CITY CANAL MULTI-USE PATHWAY
# Capital City Development Corporation

3rd Street to Broadway Avenue
Boise, ID 83702

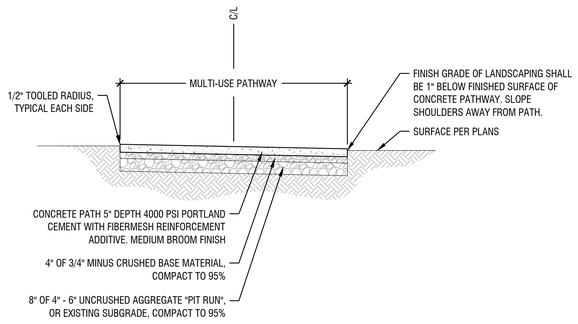
Revisions
1.

PROFESSIONAL ENGINEER — REGISTERED — 10961 — STATE OF IDAHO — JASON DENSMER
05/03/2024

Project No.: 122112
Date of Issuance: 05.03.2024
Project Milestone: Permit Set

**Plan and Profile Sta 27+00 - Sta 28+40**

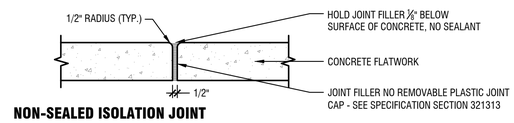
**C2.10**



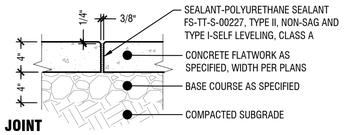

NOTES:
1. ROOT CUT BOTH SIDES OF PATH A MINIMUM OF 24" DEPTH PRIOR TO CONSTRUCTION. REMOVE ROOTS THAT CROSS PATH.
2. MONOBAR-CHLORATE AND TRIFLURALIN APPLIED TO BASE MATERIAL PER MANUFACTURER'S RECOMMENDATIONS.
3. CONTROL JOINTS SHALL BE 10' O.C., SAW-CUT.
4. EXPANSION JOINTS SHALL BE A KEYLOCK JOINT 40' O.C.
5. 1-1/2% CROSS SLOPE TYP., NOT TO EXCEED 2%. RUNNING SLOPE NOT TO EXCEED 5%.

## 1 Multi-Use Pathway Typical Section

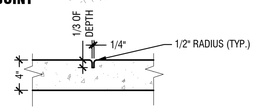
Scale: NTS




**NON-SEALED ISOLATION JOINT**




**SEALED ISOLATION JOINT**

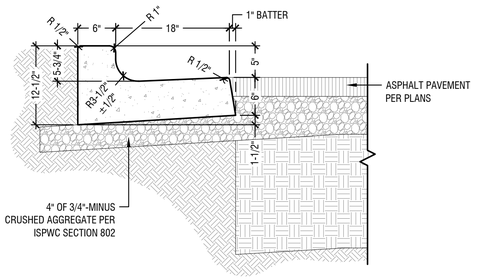



**CONTROL JOINT**

NOTES:
1. SEE LAYOUT PLANS FOR JOINT PATTERN AND LOCATION.
2. USE ISOLATION JOINTS AT ALL LOCATIONS WHERE DIFFERENTIAL MOVEMENT BETWEEN THE PAVEMENT AND A STRUCTURE MAY OCCUR.
3. PROVIDE ISOLATION JOINTS AT ALL ELECTRICAL FIXTURE BASES AND UTILITY STRUCTURES UNLESS NOTED OTHERWISE.

## 2 Concrete Joints

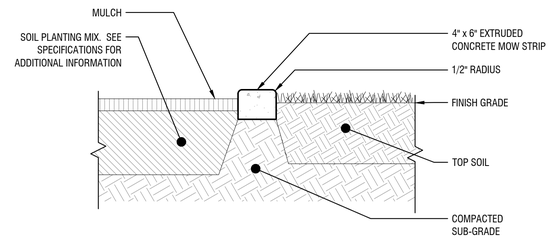
Scale: NTS




NOTES:
1. CONTRACTION JOINTS AT 10' INTERVALS MAXIMUM (OR CONSISTENT WITH 2X SIDEWALK WIDTH FOR CONTRACTION JOINTS).

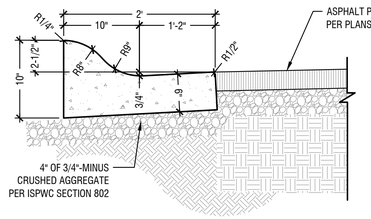
## 3 6" Curb and Catch Plate Gutter

Scale: 1" = 1'




## 4 Mow Curb

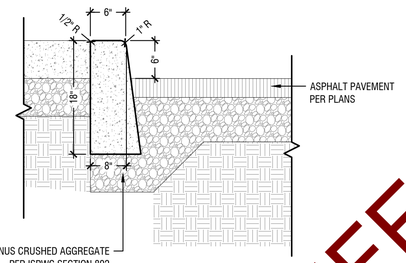
Scale: NTS




NOTES:
1. CONTRACTION JOINTS AT 10' INTERVALS (OR CONSISTENT WITH 2X SIDEWALK WIDTH FOR CONTRACTION JOINTS).

## 5 3" Rolled Curb and Catch Plate Gutter

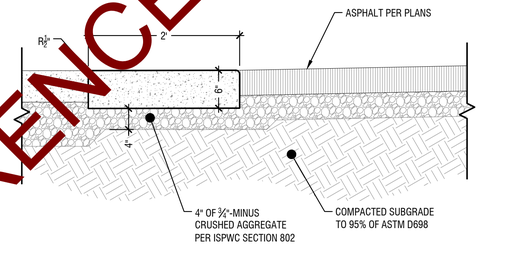
Scale: 1" = 1'




NOTES:
1. CONTROL JOINTS AT 10' INTERVALS MAXIMUM (OR CONSISTENT WITH 2X SIDEWALK WIDTH FOR CONTRACTION JOINTS).

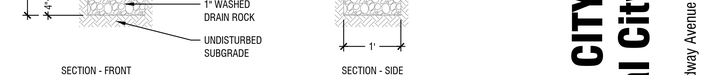
## 6 6" Vertical Curb (No Gutter)

Scale: 1" = 1'




## 7 Ribbon Curb

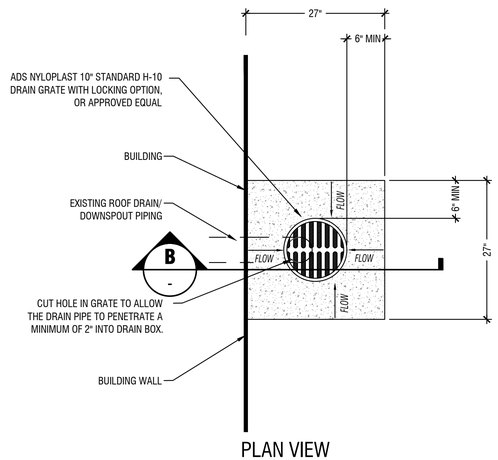
Scale: NTS

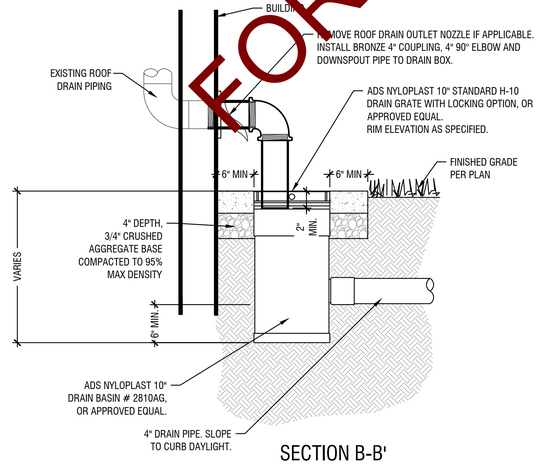



NOTES:
1. ALL CONCRETE TO BE 4,000 PSI. SLOPE GRADE SLIGHTLY AWAY FROM BASE OF BOLLARD.
2. FURNISH AND INSTALL BOISE PARKS AND RECREATION STANDARD METAL BOLLARD MANUFACTURED BY KUNA MACHINE SHOP (208) 922-4546, OR APPROVED EQUAL. COLOR TO BE BLACK POWDER COAT.

## 8 Boise Parks and Rec Bollard

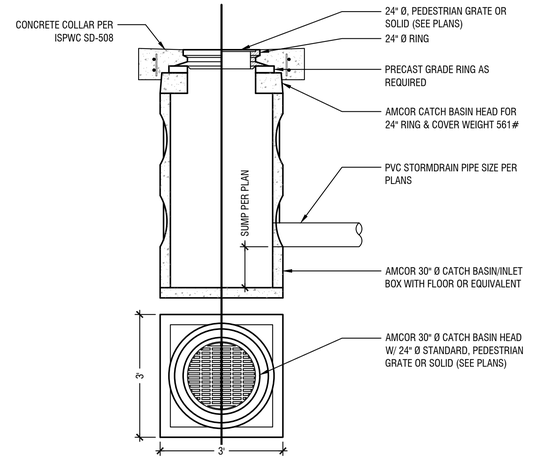
Scale: NTS




## 9 Roof Drain Connection Basin

Scale: NTS




## 10 30-IN Storm Drain Catch Basin

Scale: NTS



THE LAND GROUP

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

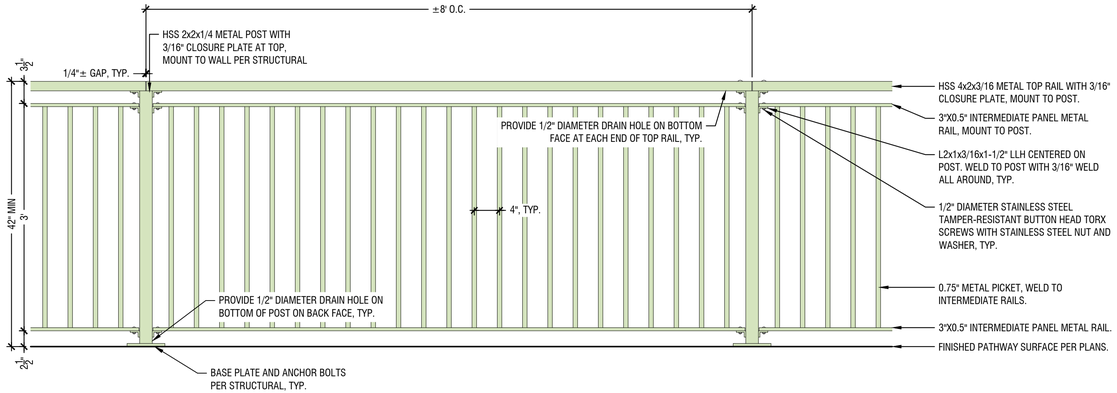
3rd Street to Broadway Avenue
Boise, ID 83702

Revisions
1.


| | |
|---|---|
| Project No.: | 12212 |
| Date of Issuance: | 05.03.2024 |
| Project Milestone: | Permit Set |

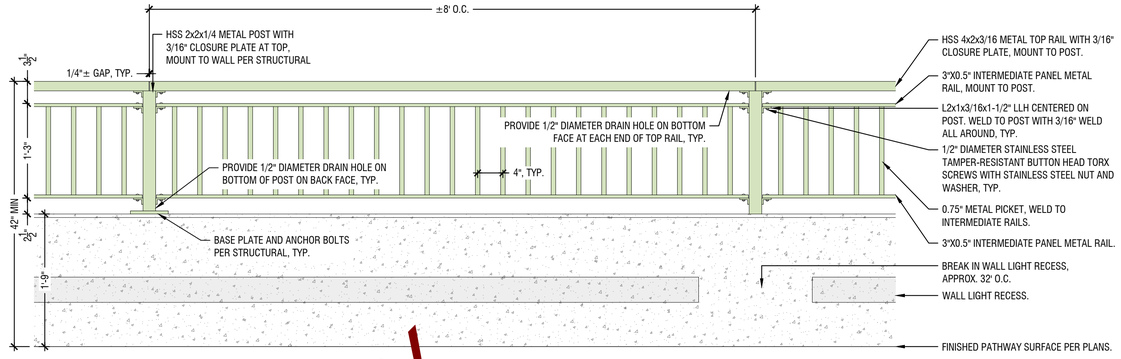
**Site Details**

**C2.50**




## 1 Metal Guardrail @ Canal

Scale: 1" = 1'




## 2 Metal Guardrail @ Wall

Scale: 1" = 1'





THE LAND GROUP

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

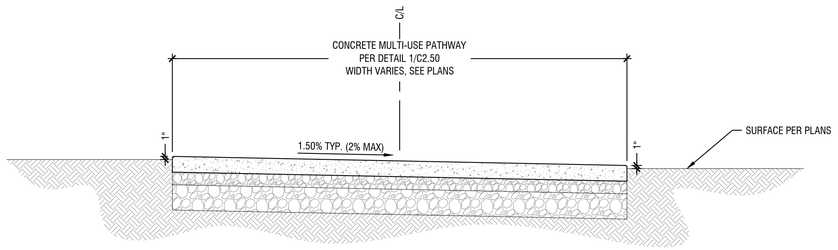
3rd Street to Broadway Avenue
Boise, ID 83702

Revisions
1.


| | |
|---|---|
| Project No.: | 122112 |
| Date of Issuance: | 05.03.2024 |
| Project Milestone: | Permit Set |

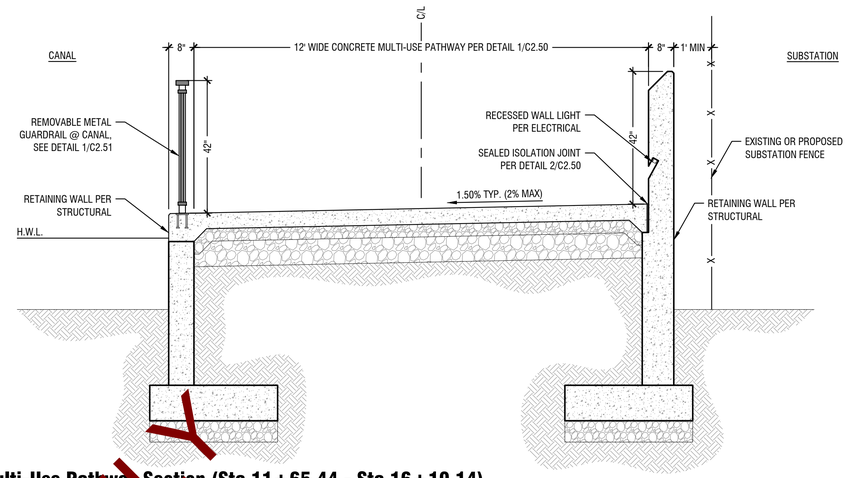
**Site Details**

**C2.51**



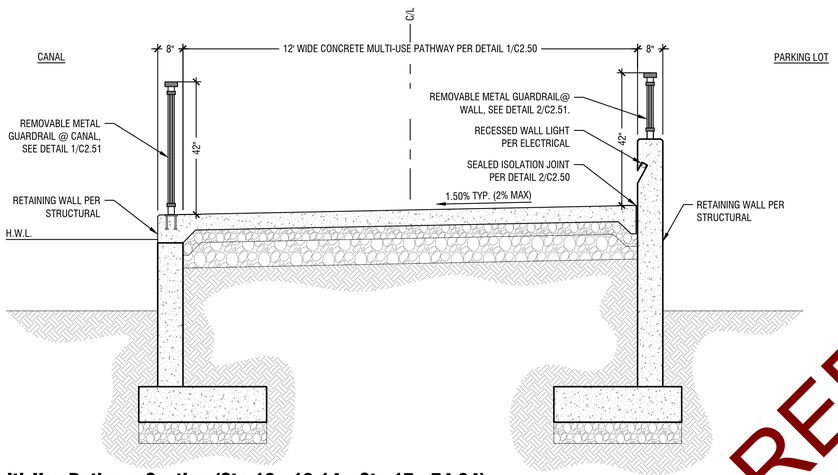

## 1 Multi-Use Pathway Section (Sta 10+00 - Sta 11+65.44)

Scale: NTS



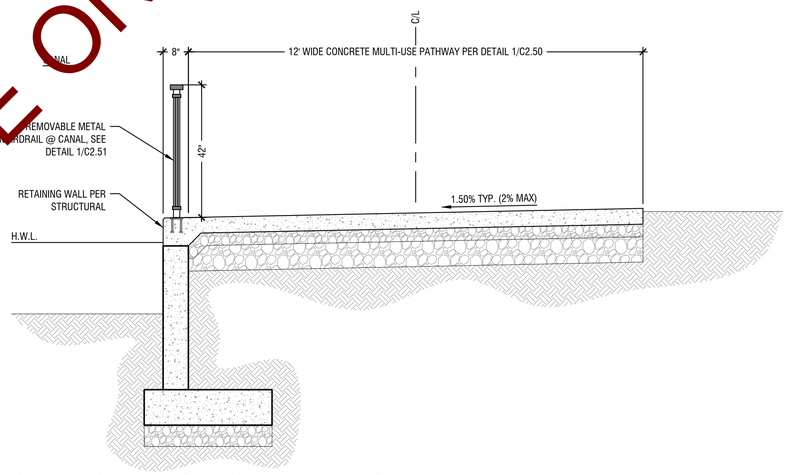

## 2 Multi-Use Pathway Section (Sta 11+65.44 - Sta 16+19.14)

Scale: NTS




## 3 Multi-Use Pathway Section (Sta 16+19.14 - Sta 17+74.34)

Scale: NTS




## 4 Multi-Use Pathway Section (Sta 17+74.34 - Sta 17+85)

Scale: NTS



THE LAND GROUP

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

3rd Street to Broadway Avenue
Boise, ID 83702

Revisions
1.


Project No.: 122112
Date of Issuance: 05.03.2024
Project Milestone: Permit Set

**Typical Sections**

**C3.00**

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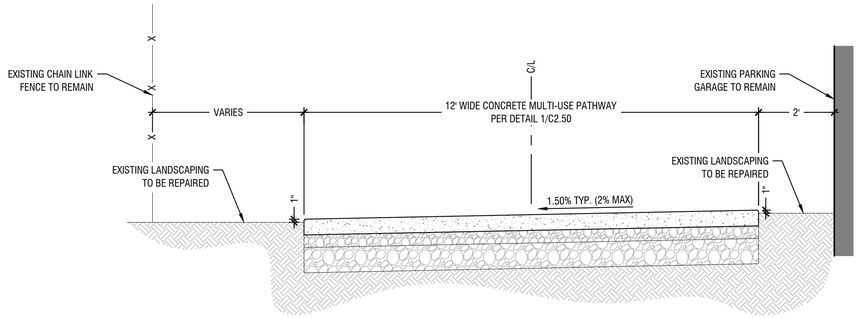
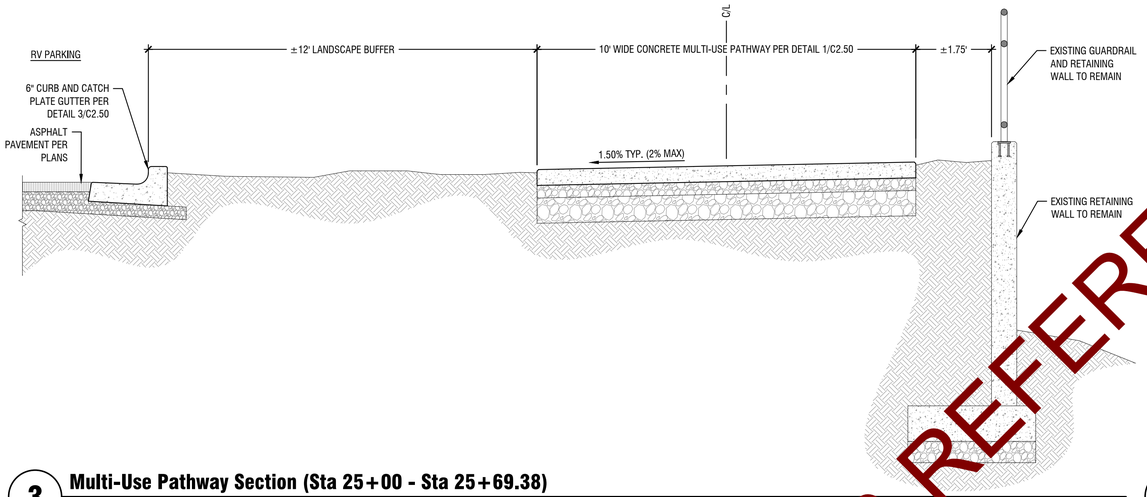
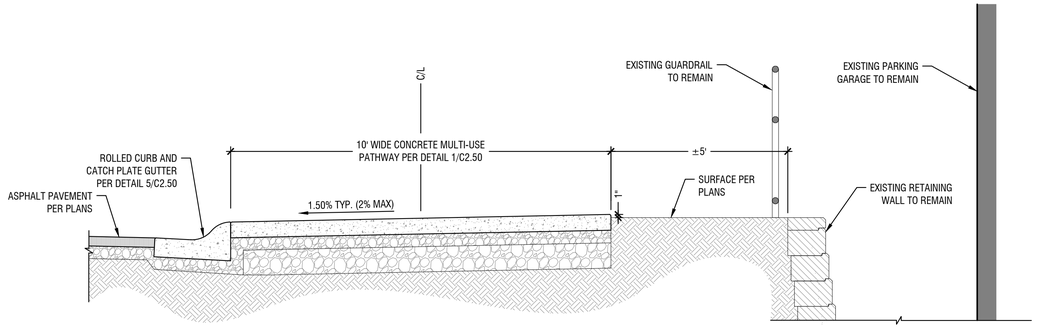
Last Modified By: jdensmer
Date Printed: Friday, May 3, 2024 at 08:53 AM




## 1 Multi-Use Pathway Section (Sta 17+85 - Sta 19+02.98)

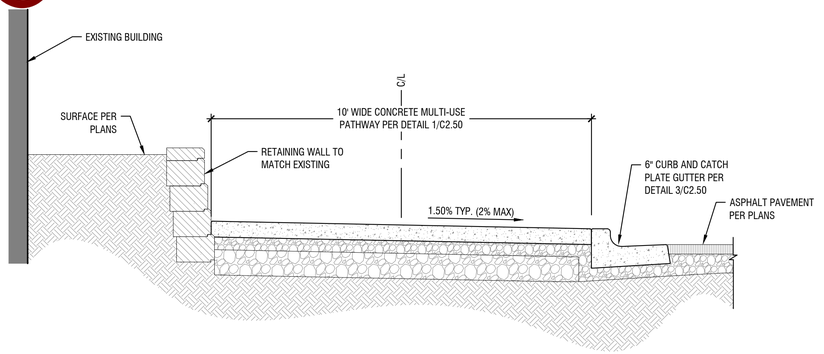
Scale: NTS




## 2 Multi-Use Pathway Section (Sta 19+36.84 - Sta 22+25.18)

Scale: NTS




## 3 Multi-Use Pathway Section (Sta 25+00 - Sta 25+69.38)

Scale: NTS

## 4 Multi-Use Pathway Section (Sta 26+43.66 - Sta 27+19.96)

Scale: NTS



THE LAND GROUP

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

3rd Street to Broadway Avenue
Boise, ID 83702

Revisions
1.

PROFESSIONAL ENGINEER
REGISTERED
10961
STATE OF IDAHO
JASON DENSMER
05/03/2024

Project No.: 122112
Date of Issuance: 05.03.2024
Project Milestone: Permit Set

**Typical Sections**

**C3.01**

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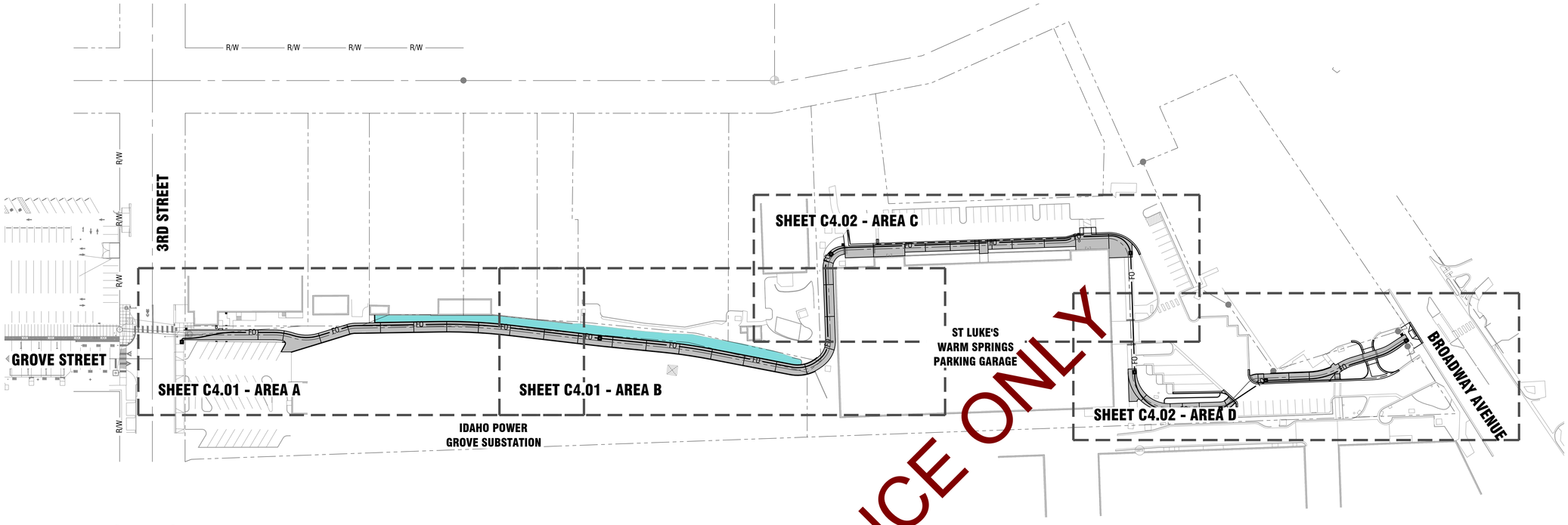
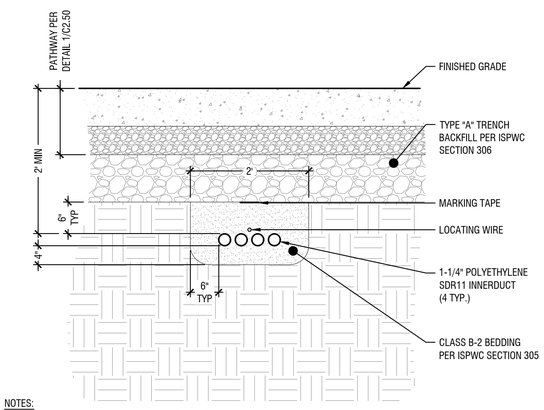
Date Plotted: Friday, May 3, 2024 at 09:31 AM




## Fiber Optic Overview

Horizontal Scale: 1" = 70'

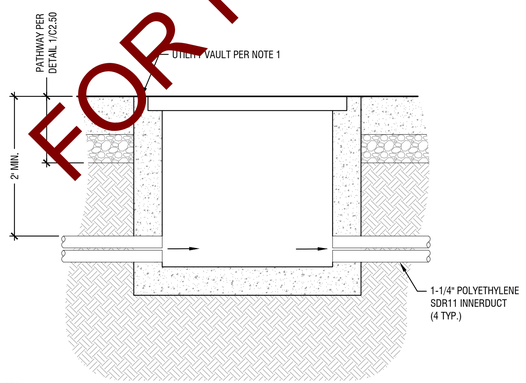





NOTES:
1. TERMINATE INNERDUCTS WITH DUCT PLUGS.
2. CONTRACTOR SHALL COORDINATE INSTALLATION OF ANY ADDITIONAL CONDUIT REQUESTED BY TELECOM PROVIDERS AT TIME OF CONSTRUCTION.

## 1 Wire Utility Trench

Scale: NTS




NOTES:
1. OLDCASTLE PRECAST 3-FT x 3-FT x 3-FT I.D. VAULT WITH Ø30" OPENING IN TOP FOR D&L A-1366 RING AND BOLT DOWN MANHOLE COVER (REFERENCE OLDCASTLE DRAWING NUMBER 240-S04B577-003), OR APPROVED EQUAL.
2. TERMINATE INNERDUCTS WITH DUCT PLUGS.

## 2 Wire Utility Trench Profile & Vault

Scale: NTS

File Location: g:\2021\122112\cad\122112-400-Manabiki.dwg
Layout Name: Fiber Optic Overview
Date Plotted: Friday, May 3, 2024 at 05:01 PM

THE LAND GROUP

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

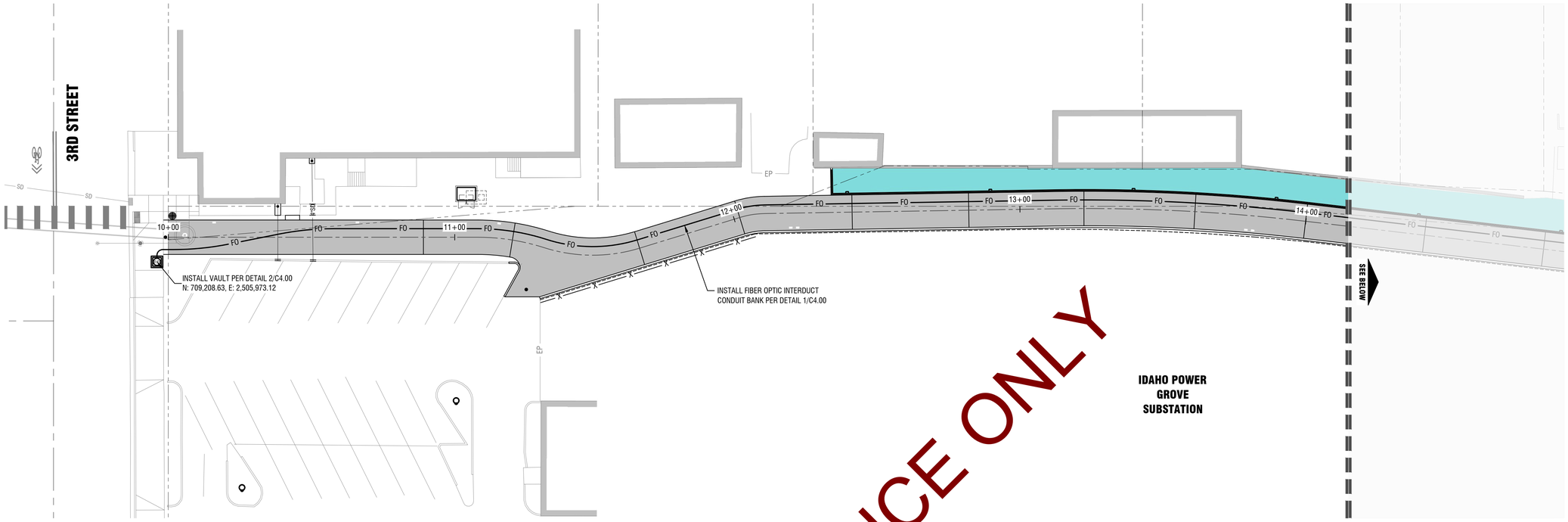
3rd Street to Broadway Avenue
Boise, ID 83702

Revisions
1.


| | |
|---|---|
| Project No.: | 122112 |
| Date of Issuance: | 05.03.2024 |
| Project Milestone: | Permit Set |

**Fiber Optic Overview**

**C4.00**

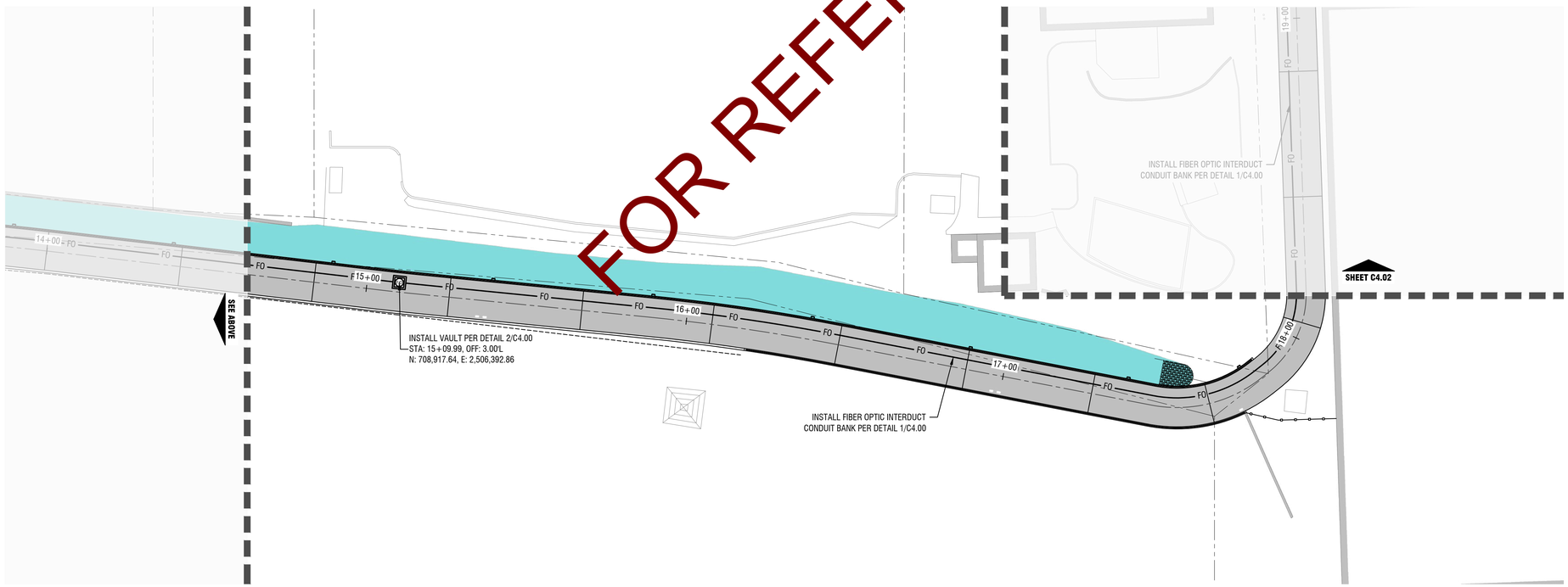



## Fiber Area A

Horizontal Scale: 1" = 20'

0 20' 40'






## Fiber Area B

Horizontal Scale: 1" = 20'

0 20' 40'

File Location: g:\2021\122112\cad\122112-400-Blended.dwg
Drawn By: Author
Date Plotted: Friday, May 3, 2024 at 6:50:51 PM

THE LAND GROUP

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

3rd Street to Broadway Avenue
Boise, ID 83702

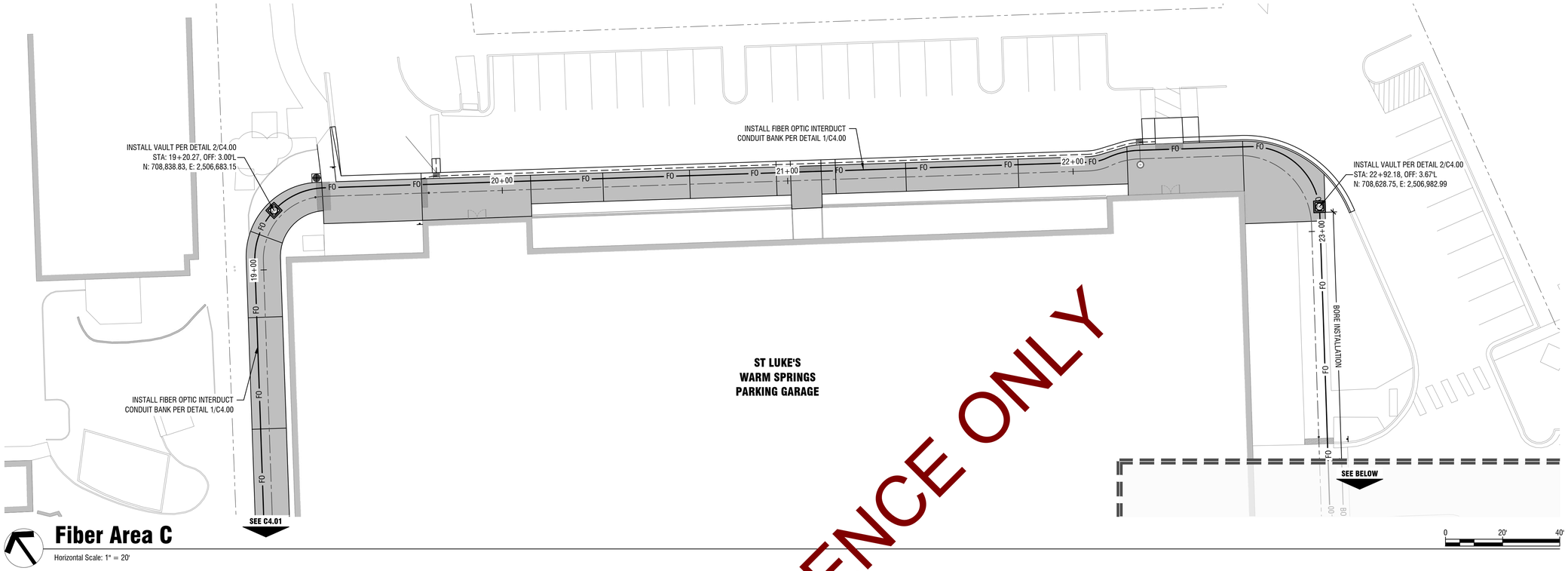
Revisions
1.

PROFESSIONAL ENGINEER
REGISTERED
10961
STATE OF IDAHO
JASON DENSMER
05/03/2024

| | |
|---|---|
| Project No.: | 122112 |
| Date of Issuance: | 05.03.2024 |
| Project Milestone: | Permit Set |

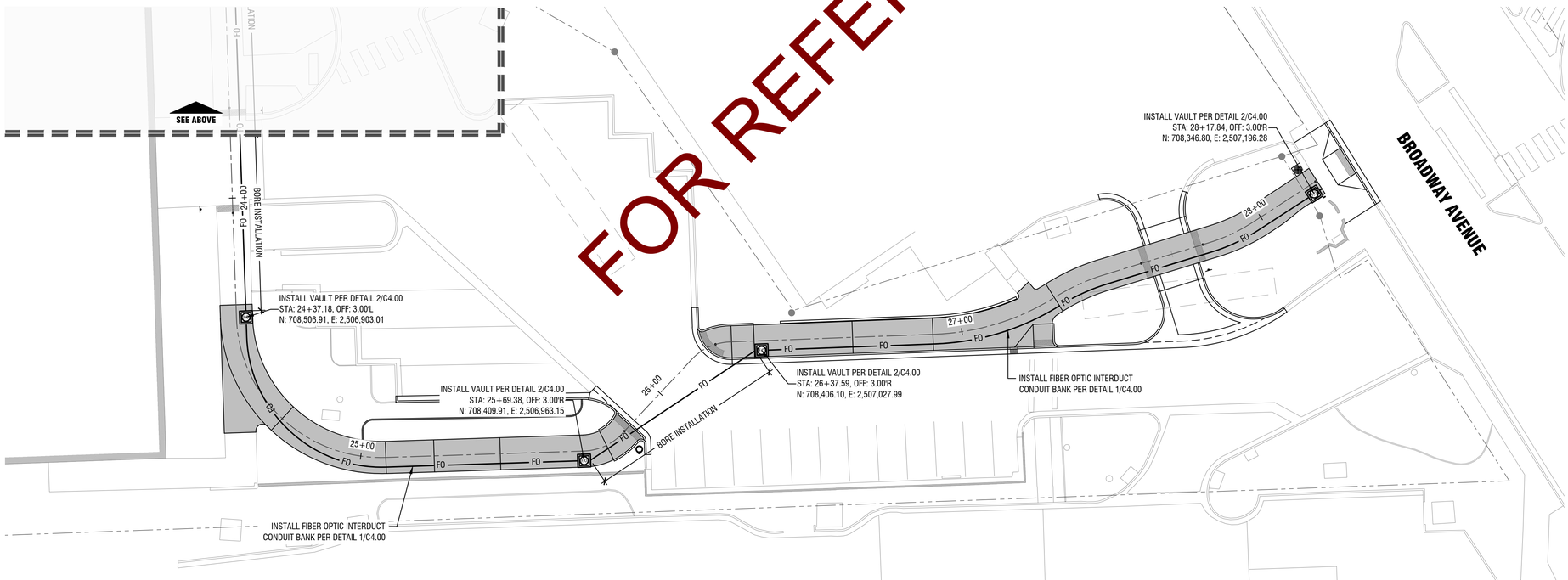
**Fiber Area A & B**

**C4.01**




## Fiber Area C

Horizontal Scale: 1" = 20'




## Fiber Area D

Horizontal Scale: 1" = 20'



THE LAND GROUP

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

3rd Street to Broadway Avenue
Boise, ID 83702

Revisions
1.

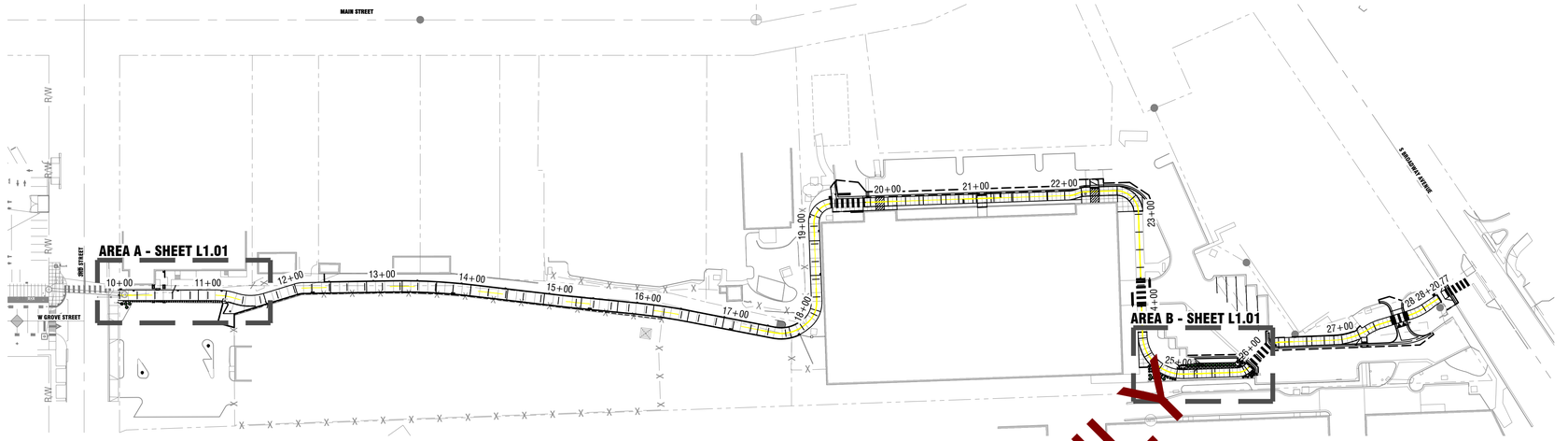
PROFESSIONAL ENGINEER
REGISTERED
10961
STATE OF IDAHO
JASON DENSMER
05/03/2024

| | |
|---|---|
| Project No.: | 122112 |
| Date of Issuance: | 05.03.2024 |
| Project Milestone: | Permit Set |

**Fiber Area C & D**

**C4.02**

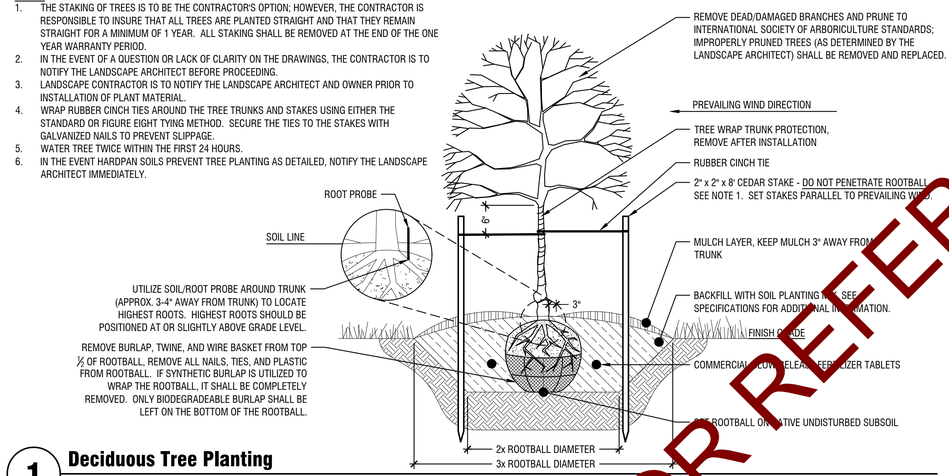
File Location: g:\2021\122112\cad\122112-400-Stands01.dwg
Layout Name: C4.02 Fiber Area C & D
Date Plotted: Friday, May 3, 2024 at 05:51 PM




## Planting Plan Overview

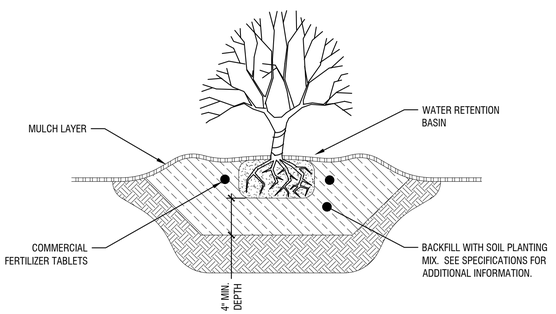
Horizontal Scale: 1" = 80'

NOTES:
1. THE STAKING OF TREES IS TO BE THE CONTRACTOR'S OPTION; HOWEVER, THE CONTRACTOR IS RESPONSIBLE TO INSURE THAT ALL TREES ARE PLANTED STRAIGHT AND THAT THEY REMAIN STRAIGHT FOR A MINIMUM OF 1 YEAR. ALL STAKING SHALL BE REMOVED AT THE END OF THE ONE YEAR WARRANTY PERIOD.
2. IN THE EVENT OF A QUESTION OR LACK OF CLARITY ON THE DRAWINGS, THE CONTRACTOR IS TO NOTIFY THE LANDSCAPE ARCHITECT BEFORE PROCEEDING.
3. LANDSCAPE CONTRACTOR IS TO NOTIFY THE LANDSCAPE ARCHITECT AND OWNER PRIOR TO INSTALLATION OF PLANT MATERIAL.
4. WRAP RUBBER CINCH TIES AROUND THE TREE TRUNKS AND STAKES USING EITHER THE STANDARD OR FIGURE EIGHT TYING METHOD. SECURE THE TIES TO THE STAKES WITH GALVANIZED NAILS TO PREVENT SLIPPAGE.
5. WATER TREE TWICE WITHIN THE FIRST 24 HOURS.
6. IN THE EVENT HARDPAN SOILS PREVENT TREE PLANTING AS DETAILED, NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY.




### 1 Deciduous Tree Planting

Scale: NTS




### 2 Shrub Planting

Scale: NTS

PLANT SCHEDULE

| SYMBOL | CODE | BOTANICAL / COMMON NAME | SIZE | CONTAINER |
|---|---|---|---|---|
| CLASS I TREES | | | | |
| | | CRATAEGUS PHAENOPYRUM 'FASTIGIATA' FASTIGIATE WASHINGTON HAWTHORN SIZE: 20'TX15'W | 3.5" CAL. | B&B |
| SHRUBS | | | | |
| | AL | ARONIA MELANOCARPA 'UCONNAM165' LOW SCAPE MOUND® BLACK CHOKEBERRY SIZE: 2'TX2'W | 2 GAL. | POT |
| | BC | BERBERIS THUNBERGII 'CRIMSON PYGMY' CRIMSON PYGMY JAPANESE BARBERRY SIZE: 3'TX3'W | 3 GAL. | POT |
| | PS | PINUS MUGO 'SLOWMOUND' SLOWMOUND MUGO PINE SIZE: 3'TX3'W | 3 GAL. | POT |
| | SS | SCHIZACHYRIUM SCOPARIUM 'STANDING OVATION' STANDING OVATION LITTLE BLUESTEM | 1 GAL. | POT |

## Seed Mixes:

| TURF SOD | | |
|---|---|---|
| LOLIUM PERENNE ALLAIRELL / PERENNIAL RYEGRASS | 15% | 12 LBS / 1000SF |
| LOLIUM PERENNE MAHATTAN II / PERENNIAL RYEGRASS | 15% | |
| POA PRATENSIS 'IMPERIAL BLUE' / IMPERIAL BLUE KENTUCKY BLUEGRASS | 70% | |

REFER TO SHEET C2.00-2.10 FOR TURF SOD REPAIR LOCATIONS.

## Automatic Underground Irrigation Notes:

A. ALL LANDSCAPED AREAS SHALL HAVE AN AUTOMATIC UNDERGROUND SPRINKLER SYSTEM WHICH ENSURES COMPLETE COVERAGE AND PROPERLY ZONED FOR REQUIRED WATER USES.
B. EACH HYDROZONE IS TO BE IRRIGATED WITH SEPARATE INDIVIDUAL STATIONS.
C. POP-UP SPRINKLER HEADS SHALL HAVE A MINIMUM RISER HEIGHT OF 18" AT PLANTER BEDS, 6" AT LAWN AREAS..
D. PLANTER BEDS ARE TO HAVE DRIP IRRIGATION SYSTEMS - WITH DRIP CONTROL ZONE KIT AND 150 MESH FILTER (MIN.).
E. ELECTRONIC WATER DISTRIBUTION/ TIMING CONTROLLERS ARE TO BE PROVIDED. MINIMUM CONTROLLER REQUIREMENTS ARE AS FOLLOWS:
   E.A. PRECISE INDIVIDUAL STATION TIMING
   E.B. RUN TIME CAPABILITIES FOR EXTREMES IN PRECIPITATION RATES
   E.C. AT LEAST ONE PROGRAM FOR EACH HYDROZONE
   E.D. SUFFICIENT MULTIPLE CYCLES TO AVOID WATER RUN-OFF
   E.E. POWER FAILURE BACKUP FOR ALL PROGRAMMED INDIVIDUAL VALVED WATERING STATIONS WILL BE DESIGNED AND INSTALLED TO PROVIDE WATER TO RESPECTIVE HYDRO-ZONES.
F. INDIVIDUAL VALVED WATERING STATIONS WILL BE DESIGNED AND INSTALLED TO PROVIDE WATER TO RESPECTIVE HYDRO-ZONES.
G. THE IRRIGATION SYSTEM SHALL BE DESIGNED TO PROVIDE 100% COVERAGE WITH HEAD TO HEAD SPACING OR TRIANGULAR SPACING AS APPROPRIATE.
H. SPRINKLER HEADS SHALL BE ADJUSTED TO REDUCE OVERSPRAY ONTO IMPERVIOUS SURFACES SUCH AS SIDEWALKS, DRIVEWAYS, AND PARKING AREA.
I. EACH VALVE SHALL BE INSTALLED IN A VALVE BOX LARGE ENOUGH TO ALLOW FOR MAINTENANCE AND REMOVAL. ONLY ONE VALVE PER BOX.

## Landscape Notes:

A. CONTRACTOR SHALL REPORT TO LANDSCAPE ARCHITECT ALL CONDITIONS WHICH IMPAIR AND/OR PREVENT THE PROPER EXECUTION OF THIS WORK, PRIOR TO BEGINNING WORK.
B. FINISH GRADES TO BE SMOOTH AND EVEN GRADIENTS WITH POSITIVE DRAINAGE IN ACCORDANCE WITH SITE GRADING PLAN. REMOVE RIDGES AND FILL DEPRESSIONS, AS REQUIRED TO MEET FINISH GRADES. PLACE MULCH OVER SUBGRADE SOIL TO ACHIEVE FINISH GRADE, DEPTH AS SPECIFIED ON PLAN SHEETS C2.00-2.10. FINISH GRADE RELATED TO ADJACENT SITE ELEMENTS SHALL BE:
   B.A. 1-INCH BELOW TOP OF ADJACENT PAVEMENT, VALVE BOX, VAULT, ETC.
   B.B. 3-INCHES BELOW TOP OF CURB UNLESS NOTED OTHERWISE.
C. ALL PLANTING BEDS SHALL HAVE A MINIMUM OF 18" OF TOPSOIL. SOD AREAS A MINIMUM OF 12" OF TOPSOIL. SPREAD, COMPACT AND FINE GRADE TOPSOIL TO A SMOOTH AND UNIFORM GRADE.
D. RE-USE EXISTING SURFACE TOPSOIL WHERE POSSIBLE. VERIFY SUITABILITY OF SURFACE SOIL TO PRODUCE TOPSOIL MEETING REQUIREMENTS AND AMEND WHEN NECESSARY. TOPSOIL SHALL BE A LOOSE, FRIABLE, SANDY LOAM, CLEAN AND FREE OF TOXIC MATERIALS, NOXIOUS WEEDS, WEED SEEDS, ROCKS, GRASS OR OTHER FOREIGN MATERIAL AND A PH OF 5.5 TO 7.0. IF ON-SITE TOPSOIL DOES NOT MEET THESE MINIMUM STANDARDS, CONTRACTORS ARE RESPONSIBLE TO EITHER: A) PROVIDE APPROVED IMPORTED TOPSOIL, OR B.) IMPROVE ON-SITE TOPSOIL WITH METHODS APPROVED BY LANDSCAPE ARCHITECT. SUPPLEMENT WITH IMPORTED TOPSOIL WHEN QUANTITIES ARE INSUFFICIENT. CLEAN TOPSOIL OF ROOTS, PLANTS, SODS, STONES, CLAY LUMPS AND OTHER EXTRANEOUS MATERIALS HARMFUL TO PLANT GROWTH.
E. IF IMPORTED TOPSOIL FROM OFF-SITE SOURCES IS REQUIRED, PROVIDE NEW TOPSOIL THAT IS FERTILE, FRIABLE, NATURAL LOAM, SURFACE SOIL, REASONABLY FREE OF SUBSOIL, CLAY LUMPS, BRUSH, WEEDS AND OTHER LITTER, AND FREE OF ROOTS, STUMPS, STONES LARGER THAN 2 INCHES IN ANY DIMENSION, AND OTHER EXTRANEOUS OR TOXIC MATTER HARMFUL TO PLANT GROWTH.
F. OBTAIN TOPSOIL FROM LOCAL SOURCES OR FROM AREAS HAVING SIMILAR SOIL CHARACTERISTICS TO THAT FOUND AT PROJECT SITE. OBTAIN TOPSOIL ONLY FROM NATURALLY, WELL-DRAINED SITES WHERE TOPSOIL OCCURS IN A DEPTH OF NOT LESS THAN 4 INCHES.
G. ALL LANDSCAPE AREAS SHALL BE WEED FREE AT THE TIME OF LANDSCAPE INSTALLATION.REMOVE ALL ROOTS, WEEDS, ROCKS AND FOREIGN MATERIAL ON THE SURFACE.
H. NEW TREE PLANTING, SEE DETAIL 1/L1.00. CONTRACTOR SHALL STAKE ALL TREES DEEMED NECESSARY, I.E..... FROM BEING BLOWN OVER, PLANTED WITH LOOSE ROOT BALL, ETC. CONTRACTOR'S OPTION.
I. NEW SHRUB PLANTING. SEE DETAIL 2/L1.00.
J. ALL PLANT MATERIAL SHALL CONFORM TO THE AMERICAN NURSERYMAN STANDARDS FOR TYPE AND SIZE SHOWN. PLANTS WILL BE REJECTED IF NOT IN A SOUND AND HEALTHY CONDITION.
K. ALL PLANT MATERIAL SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR BEGINNING AT THE DATE OF SUBSTANTIAL COMPLETION. REPLACE ALL PLANT MATERIAL FOUND DEAD OR NOT IN A HEALTHY CONDITION IMMEDIATELY WITH THE SAME SIZE AND SPECIES AT NO COST TO THE OWNER.
L. TREE PIT BACKFILL PLANTING MIX: BLEND TOPSOIL AND SOIL AMENDMENTS AND FERTILIZER FOR TREE PIT BACKFILL AT THE FOLLOWING RATES. BLEND AMENDMENTS THOROUGHLY WITH SOIL BACKFILL. TREE PITS SHALL BE 5'x5'x1.5' (37.5 CF/ 1.5 CY).
   L.A. APPLICATION RATES:
      L.A.A. HUMIC ACID: 25 LBS PER TREE PIT
      L.A.B. COMMERCIAL GRADE COMPOST - 10 CUBIC FEET PER TREE PIT
      L.A.C. PLANTING TABLET FERTILIZER - 4 TABLETS PER TREE PIT
      L.A.D. CALCIFIED DIATOMACEOUS EARTH - 75 LBS PER TREE PIT
M. SHRUB PIT BACKFILL PLANTING MIX: BLEND TOPSOIL AND SOIL AMENDMENTS AND FERTILIZER FOR SHRUB PIT BACKFILL AT THE FOLLOWING RATES. BLEND AMENDMENTS WITH THOROUGHLY WITH SOIL BACKFILL. SHRUB PITS SHALL BE 2.5'x2.5'x1' (6.25 CF/ 0.25 CY).
   M.A. APPLICATION RATES:
      M.A.A. HUMIC ACID: 2 LBS PER SHRUB PIT
      M.A.B. COMMERCIAL GRADE COMPOST - 2 CUBIC FEET PER SHRUB PIT
      M.A.C. PLANTING TABLET FERTILIZER - 2 TABLETS PER SHRUB PIT
      M.A.D. CALCIFIED DIATOMACEOUS EARTH - 15 LBS PER SHRUB PIT
N. IMMEDIATELY CLEAN UP ANY TOPSOIL OR OTHER DEBRIS ON THE SITE CREATED FROM LANDSCAPE OPERATIONS AND DISPOSE OF PROPERLY OFF SITE.
O. CONTRACTOR SHALL SUBMIT MATERIAL SAMPLES FOR LANDSCAPE ROCK MULCH TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO PROCUREMENT. LANDSCAPE BOULDERS, PHOTO SUBMITTAL IS ADEQUATE. FOR ROCK MULCH, SUBMIT 1 GALLON BAG SAMPLE TO OWNER.



THE LAND GROUP

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

3rd Street to Broadway Avenue
Boise, ID 83702

Revisions
1.

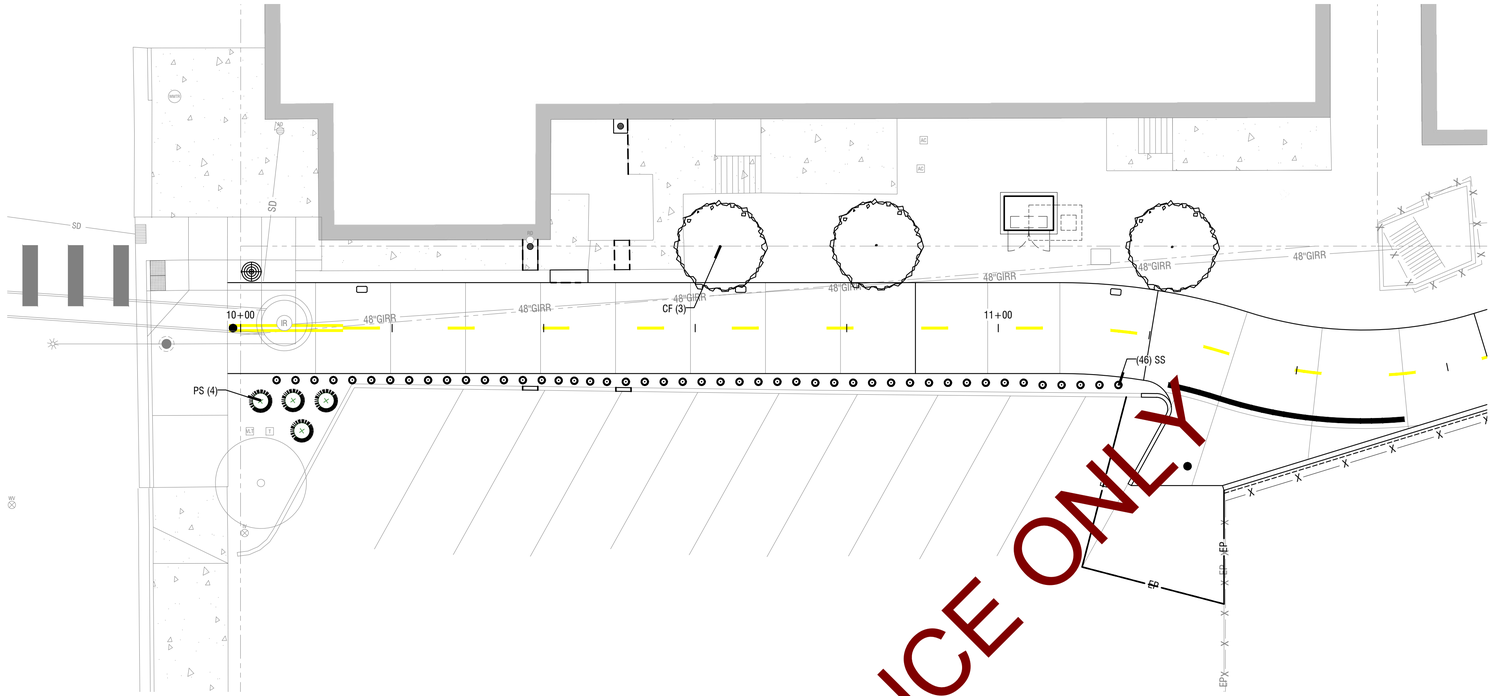
STATE OF IDAHO
CHRISTOPHER HAWKINS
LA-16961
05/03/2024
LICENSED LANDSCAPE ARCHITECT

Project No.: 122112
Date of Issuance: 05.03.2024
Project Milestone: Permit Set

**Planting Plan Overview, Details, and Notes**

**L1.00**

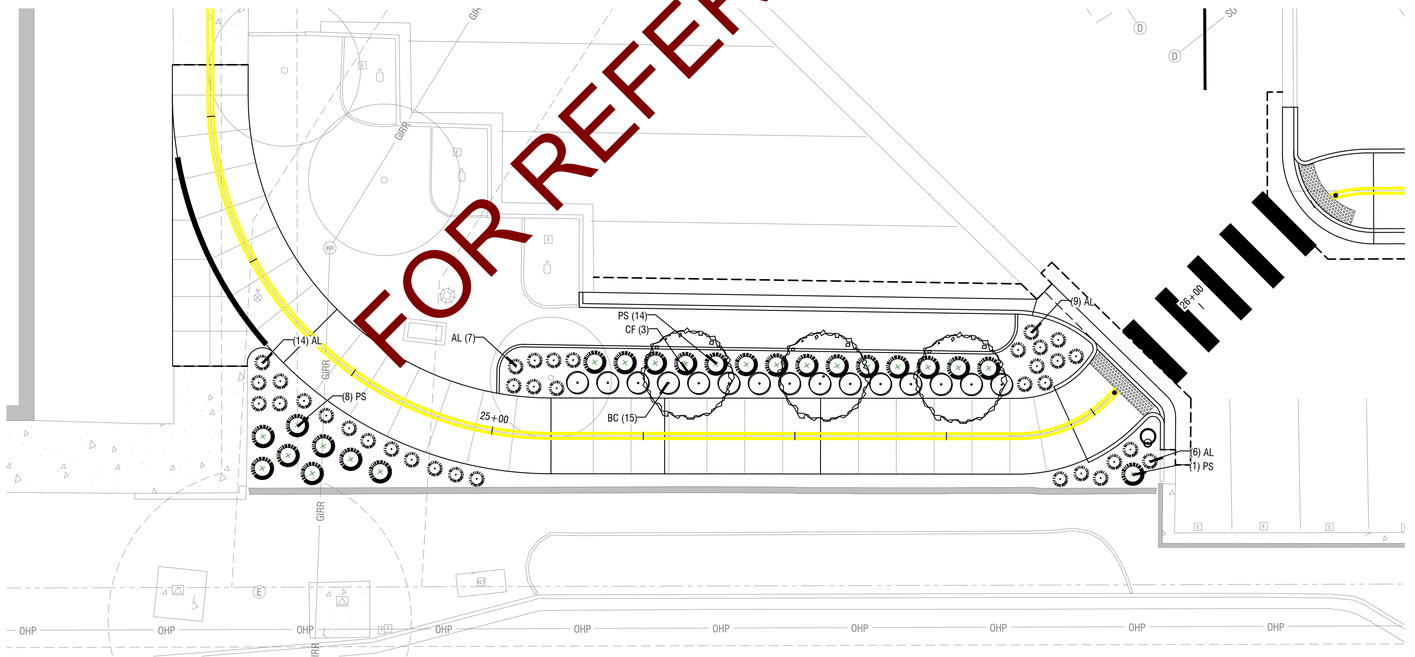
File Location: g:\2021\2121\21xref\12121100 landscape.dwg
Last Edited By: Hawkins, Christopher
Date Plotted: Friday, May 3, 2024 at 08:03 AM




## Planting Plan - Area A

Horizontal Scale: 1" = 10'

0 10' 20'




## Planting Plan - Area B

Horizontal Scale: 1" = 10'

0 10' 20'



File Location: g:\2021\122112\cad\122112-l100 landscape plan.dwg
Layout: Area A and B
Date Plotted: Friday, May 3, 2024 at 09:53 AM

THE LAND GROUP

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

3rd Street to Broadway Avenue
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CHRISTOPHER HAWKINS
LICENSED LANDSCAPE ARCHITECT
LA-16961
05/03/2024

Project No.: 122112
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**Planting Plan - Areas A and B**

**L1.01**

# GENERAL STRUCTURAL NOTES (G.S.N.)

GENERAL

THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS BEFORE STARTING WORK. THE STRUCTURAL ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCY. THESE STRUCTURAL DRAWINGS ARE INTENDED TO PRESENT SUFFICIENT DIMENSIONS TO INDICATE MAJOR PLAN SIZES AND TO LOCATE PRIMARY STRUCTURAL COMPONENTS. THE CONTRACTOR SHALL COORDINATE LOCATION OF SECONDARY ELEMENTS RELATED TO OTHER DISCIPLINES. USE DETAILS MARKED "TYPICAL" WHEREVER APPLICABLE. CHANGES, OMISSIONS OR SUBSTITUTIONS ARE NOT PERMITTED WITHOUT THE WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE 2018 INTERNATIONAL BUILDING CODE (IBC). THE DESIGN, ADEQUACY AND SAFETY OF ERECTION BRACING, SHORING, TEMPORARY SUPPORTS, ETC., IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR, AND HAS NOT BEEN CONSIDERED BY THE STRUCTURAL ENGINEER.

SHOP DRAWINGS

SHOP DRAWINGS ARE TO BE CHECKED AND APPROVED BY THE GENERAL CONTRACTOR PRIOR TO SUBMITTING FOR STRUCTURAL REVIEW. ANY REQUEST FOR MODIFICATION TO THE DRAWINGS MUST BE SUBMITTED IN WRITING. THIS MAY BE ACCOMPLISHED THROUGH THE SHOP DRAWINGS ONLY IF THE CHANGE IS CLEARLY REPRESENTED, CLOUDED AND NOTED AS BEING A REQUESTED CHANGE REQUIRING THE STRUCTURAL ENGINEER APPROVAL. CHANGES TO THE DRAWINGS BY WAY OF THE SHOP DRAWINGS THAT ARE NOT CLEARLY NOTED AS STATED ABOVE, DO NOT CONSTITUTE AN AUTHORIZED CHANGE EVEN THOUGH THE DRAWINGS HAVE BEEN STAMPED WITH THE STRUCTURAL ENGINEER REVIEW STAMP. GENERAL CONTRACTOR IS RESPONSIBLE FOR VERIFICATION AND COORDINATION OF DIMENSIONS AND DETAILS FOR EACH SUBCONTRACTOR.

SHOP DRAWINGS SHALL INCLUDE PLANS AND DETAILS AS NECESSARY TO INDICATE UNDERSTANDING OF THE CONTRACT DOCUMENTS. ENSURE ADEQUATE COPIES OF SHOP DRAWINGS ARE SUBMITTED FOR THE CONTRACTOR, ARCHITECT, AND STRUCTURAL ENGINEER TO RETAIN ONE COPY EACH FOR THEIR FILES.

SHOP DRAWINGS ARE REQUIRED FOR THE FOLLOWING:
* CONCRETE REINFORCING
* STRUCTURAL STEEL
* PRE-CAST CONCRETE

INFORMATIONAL SUBMITTALS

SUBMITTALS ARE TO BE CHECKED AND APPROVED BY THE GENERAL CONTRACTOR PRIOR TO SUBMITTING FOR STRUCTURAL REVIEW. SUBMITTALS SHALL INCLUDE CURRENT PRODUCT ICC/IAMPO REPORTS WHERE APPLICABLE AND INDICATED LOCATIONS OF USAGE FOR THE PRODUCT. ENSURE ADEQUATE COPIES OF SUBMITTALS ARE SUBMITTED FOR THE CONTRACTOR, ARCHITECT, AND STRUCTURAL ENGINEER TO RETAIN ONE COPY EACH FOR THEIR FILES.

INFORMATIONAL SUBMITTALS ARE REQUIRED FOR THE FOLLOWING:
* CONCRETE MIX DESIGN
* MISC. CONCRETE MATERIALS INCLUDING FORM MATERIALS, FORM TIES, AND REPAIR PRODUCTS

PRODUCT AND MATERIAL SUBSTITUTIONS

PRODUCTS AND MATERIALS ARE TO BE AS SPECIFIED IN THE CONTRACT DOCUMENTS AND APPROV4ED IN SUBMITTALS. SUBSTITUTIONS ARE NOT PERMITTED WITHOUT THE APPROVAL OF THE STRUCTURAL ENGINEER AND LANDSCAPE ARCHITECT.

DESIGN LOADS

| | |
|---|---|
| PATHWAY | 100 PSF |
| GROUND SNOW LOAD, $P_g$ | 20 PSF |
| RISK CATEGORY PER IBC | II |
| BASIC WIND SPEED, $V_{ULT}$ | 102 MPH (3 SEC GUST), EXPOSURE C |
| IMPORTANCE FACTOR (SEISMIC) $I_E$ | 1.0 |
| $S_S$ | 0.309 |
| $S_1$ | 0.11 |
| SITE CLASS | D |
| $S_{DS}$ | 0.32 |
| $S_{D1}$ | 0.175 |
| SEISMIC DESIGN CATEGORY | C |

FOUNDATION

PER THE GEOTECHNICAL REPORT #B231756g BY ATLAS:

| | |
|---|---|
| DESIGN ALLOWABLE SOIL BEARING PRESSURE | 3000 PSF |
| ACTIVE LATERAL EARTH PRESSURE | 40 PCF |
| PASSIVE LATERAL EARTH PRESSURE | 422 PCF |
| SEISMIC ACTIVE EARTH PRESSURE | 60 PCF |
| SEISMIC PASSIVE LATERAL EARTH PRESSURE | 334 PCF |
| DRY UNIT WEIGHT | 120 PCF |
| FRICTION COEFFICIENT | 0.4 |

BOTTOM OF ALL FOOTINGS TO BEAR ON COMPETENT, NATIVE, INORGANIC, UNDISTURBED SOIL 1'-0" MINIMUM BELOW EXISTING GRADE OR COMPACTED STRUCTURAL FILL; REFER TO THE GEOTECHNICAL REPORT FOR MORE INFORMATION. EXTEND ALL EXTERIOR FOOTINGS 24" MINIMUM BELOW FINISHED GRADE. NO FOOTING SHALL BEAR HIGHER THAN A 1 VERTICAL TO 1.5 HORIZONTAL SLOPE ABOVE ANY EXCAVATION, EXISTING OR PLANNED. CONTRACTOR SHALL PROVIDE TEMPORARY SHORING TO PREVENT MOVEMENT OF WALLS.

CONCRETE

CONCRETE MIX: FOOTINGS, FOUNDATION WALLS, & PRECAST CAPS:

| | |
|---|---|
| * ATTAIN THE FOLLOWING MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS: | 4500 PSI |
| * MAXIMUM SLUMP: | 4" +/- 1" |
| * MAXIMUM W/C RATIO: | 0.45 |
| * AIR ENTRAINMENT: | 6% +/- 1% |
| * MAXIMUM AGGREGATE SIZE: | ¾" |

FOR SITE FLATWORK, SEE CIVIL & LANDSCAPE ARCHITECTURE DRAWINGS. CONSTRUCTION TO BE IN ACCORDANCE WITH ACI 318-14. LOCATION OF CONSTRUCTION OR CONTRACTION JOINTS MUST BE APPROVED BY THE STRUCTURAL ENGINEER IF DIFFERENT FROM THAT SHOWN ON PLANS.

FORM TIES: FACTORY-FABRICATED REMOVABLE TIES DESIGNED TO RESIST LATERAL PRESSURE OF FRESH CONCRETE ON FORMS AND TO PREVENT SPALLING OF CONCRETE ON REMOVAL. FURNISH TIES WITH TAPERED TIE CONE SPREADERS THAT, WHEN REMOVED, WILL LEAVE HOLES OF CONSISTENT DIAMETER IN CONCRETE SURFACE.

SURFACE QUALITY: LIMIT CONCRETE SURFACE IRREGULARITIES, DESIGNATED BY ACI 347 AS ABRUPT OR GRADUAL TO CLASS B, ¼". SUBMIT REPAIR PROCEDURES AND MATERIALS FOR REVIEW.

FIELD SAMPLES: BEFORE CASTING THE PERMANENT STRUCTURE, PRODUCE FIELD SAMPLE PANELS OF THE WALLS AND WALL CAPS TO DEMONSTRATE THE APPROVED RANGE OF SELECTIONS. PRODUCE A MINIMUM OF THREE SETS OF WALL PANELS APPROXIMATELY 48"x48" MINIMUM AND FULL-SIZE WALL CAPS, TO DEMONSTRATE THE EXPECTED RANGE OF FINISH, COLOR, AND TEXTURE VARIATIONS. SAMPLES SHALL BE REVIEWED AN APPROVED BY THE STRUCTURAL ENGINEER AND LANDSCAPE ARCHITECT.

REINFORCING STEEL

DEFORMED BARS: ASTM A615, GRADE 40 FOR #3; GRADE 60 FOR #4 & LARGER; ASTM A706 FOR WELDED CONDITIONS.

LAP SPLICES (HORIZONTAL AND VERTICAL STEEL)

* CONCRETE: 52-BAR DIA. FOR BEAMS, COLUMNS, RETAINING AND ABOVE-GRADE WALLS FOR #6 & SMALLER.
40-BAR DIA. OTHER, UNLESS NOTED OTHERWISE FOR #6 & SMALLER.

WELDED WIRE FABRIC SPLICES: WIRE SPACING + 2".

CONCRETE COVER:
UNLESS OTHERWISE NOTED ON THESE DRAWINGS, UTILIZE THE FOLLOWING CLEAR EMBEDMENT AT REINFORCING BARS TYPICALLY:

CONCRETE CAST AGAINST SOIL = 3".
FORMED CONCRETE EXPOSED TO EARTH OR WEATHER = 2" (#6 OR GREATER)
FORMED CONCRETE EXPOSED TO EARTH OR WEATHER = 1-1/2" (#5 OR LESS)
SLAB ON GRADE = 1-1/2".

USE ONLY A706 STEEL FOR ALL WELDED REINFORCING. SECURELY TIE ALL REINFORCING IN PLACE WITH DOUBLE ANNEALED 16-GAUGE IRON WIRE OR APPROVED CLIPS. SUBMIT SHOP DRAWINGS OF REINFORCING STEEL FOR REVIEW BY THE STRUCTURAL ENGINEER PRIOR TO FABRICATION.

EPOXY ADHESIVES

EPOXYADHESIVES:

* FOR INSTALLATION IN CONCRETE: HILTI "HIT-RE 500" & "HIT-HY 200"

STRUCTURAL AND MISC. STEEL

CHANNELS, ANGLES, PLATES AND BARS: ASTM A36, $F_y$ = 36 KSI MINIMUM.

HOLLOW STRUCTURAL SHAPES (HSS): ASTM A500, GRADE B, $F_y$ = 46 KSI (RECTANGULAR SECTIONS), $F_y$ = 42 KSI (ROUND SECTIONS).

PIPE: ASTM A53 OR A501, $F_y$ = 35 KSI MINIMUM.

MECHANICAL BOLTS IN CONCRETE AND GROUTED MASONRY, SIMPSON "TITEN HD" OR APPROVED EQUIVALENT

EPOXY ANCHORS: STAINLESS STEEL THREADED ANCHOR RODS CONFORMING TO ASTM F593, ALLOY GROUP 1, TYPE 304, CONDITION CW. INSTALL RODS USING APPROPRIATE EPOXY ADHESIVE FOR THE BASE MATERIAL ACCORDING TO THE "EPOXY ADHESIVE" SECTION ABOVE.

WELDING ELECTRODES OR WIRES: AWS A5.1 OR A5.5, E70XX; AWS A5.18, E70S-X; AWS A5.20, E7XT-X.

ERECTION AND FABRICATION: IN ACCORDANCE WITH AISC "SPECIFICATIONS FOR DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS". WELDING SHALL CONFORM TO AWS "CODE FOR ARC AND GAS WELDING IN BUILDING CONSTRUCTION". ALL WELDING SHALL BE PERFORMED BY AWS CERTIFIED WELDERS. ALL COLUMNS AND BEAMS TO BE FROM UNSPLICED LENGTHS UNLESS NOTED OTHERWISE ON THE DRAWINGS. SUBMIT SHOP DRAWINGS SHOWING SIZES, DIMENSIONS AND REQUIRED CONNECTION DETAILS FOR REVIEW BY THE STRUCTURAL ENGINEER PRIOR TO FABRICATION.

FIELD WELDS: WELDING OF STRUCTURAL STEEL SHALL BE PERFORMED IN THE SHOP WHENEVER PRACTICAL. AN EFFORT HAS BEEN MADE TO INDICATE WELDS THAT CAN BE OR SHOULD BE FIELD WELDED. IT IS, HOWEVER, THE FABRICATORS RESPONSIBILITY TO DECIDE WHERE AND HOW THE WELDING IS TO BE ACCOMPLISHED TO ACHIEVE THE INTENDED RESULT.

SPECIAL STRUCTURAL INSPECTIONS

THE OWNER SHALL EMPLOY A SPECIAL INSPECTION SERVICE TO PERFORM INSPECTIONS IN ACCORDANCE WITH CHAPTER 17 OF THE 2018 INTERNATIONAL BUILDING CODE. INSPECTION REPORTS FOR THE ITEMS LISTED IN THE SPECIAL INSPECTION TABLES SHALL BE FURNISHED TO THE STRUCTURAL ENGINEER OF RECORD IN A TIMELY MANNER. INSPECTION REPORTS SHALL INDICATE THAT WORK INSPECTED WAS DONE IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS. DISCREPANCIES THAT ARE NOT CORRECTED SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER OF RECORD PRIOR TO THE COMPLETION OF THAT PHASE OF THE WORK. A FINAL REPORT DOCUMENTING THE REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS SHALL BE SUBMITTED TO THE OWNER AND STRUCTURAL ENGINEER OF RECORD.



THE LAND GROUP

Ally Structural Consulting, LLC
www.allystructural.com
208-949-5993
PROJECT: 23-045

**BOISE CITY CANAL MULTI-USE PATHWAY**
**Capital City Development Corporation**
3rd Street to Broadway Avenue
Boise, ID 83702

Revisions
1.

PROFESSIONAL ENGINEER LICENSED 14767 2024-05-02 STATE OF IDAHO CRAIG E. BRASHER

| | |
|---|---|
| Project No.: | 12112 |
| Date of Issuance: | 05.03.2024 |
| Project Milestone: | Permit Set |

**MULTI-USE PATHWAY G.S.N.**

**S1.1**

## SPECIAL INSPECTION TABLE 1
## 1705.6 SOILS

| YES | NO | MATERIAL/ACTIVITY | CONTINUOUS | PERIODIC |
|---|---|---|---|---|
| X | | 1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY. | | X |
| X | | 2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL. | | X |
| X | | 3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS. | | X |
| X | | 4. VERIFY USE OF PROPER MATERIALS, DENSITIES, AND LIFT THICKNESS DURING PLACEMENT AND COMPACTION OF COMPACTED | X | |
| X | | 5. PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY | | X |

## SPECIAL INSPECTION TABLE 2
## 1705.3 CONCRETE CONSTRUCTION

| YES | NO | MATERIAL/ACTIVITY | CONTINUOUS | PERIODIC |
|---|---|---|---|---|
| X | | 1. INSPECTION OF REINFORCING STEEL, INCLUDING PRESTRESSING TENDONS, AND PLACEMENT. | | X |
| | X | 2. INSPECTION OF REINFORCING STEEL WELDING IN ACCORDANCE WITH TABLE 1705.2.2 ITEM 2B. | | |
| | X | 3. INSPECTION OF ANCHORS CAST IN CONCRETE WHERE ALLOWABLE LOADS HAVE BEEN INCREASED PER SECTION 1908.5 OR WHERE STRENGTH DESIGN IS USED. | | X |
| X | | 4. INSPECTION OF ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS. | | X |
| X | | 5. VERIFY USE OF REQUIRED DESIGN M | | X |
| X | | 6. AT THE TIME OF FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE. | X | |
| X | | 7. INSPECTION OF CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES. | X | |
| X | | 8. INSPECTION FOR MAINTENANCE OF SPECIFIED ED CURING TEMPERATURE AND TECHNIQUES. | | X |
| | X | 9. INSPECTION OF PRESTRESSED CONCRETE: | | |
| | | A. APPLICATION OF PRESTRESSING FORCES | X | |
| | | B. GROUTING OF BONDED PRESTRESSING TENDONS IN THE SEISMIC-FORCE-RESISTING SYSTEM | X | |
| | X | 10. ERECTION OF PRECAST CONCRETE MEMBERS. | | X |
| | X | 11. VERIFICATION OF IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS. | | X |
| X | | 12. INSPECTION OF FORMWORK FOR SHAPE, LINES, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED. | | X |



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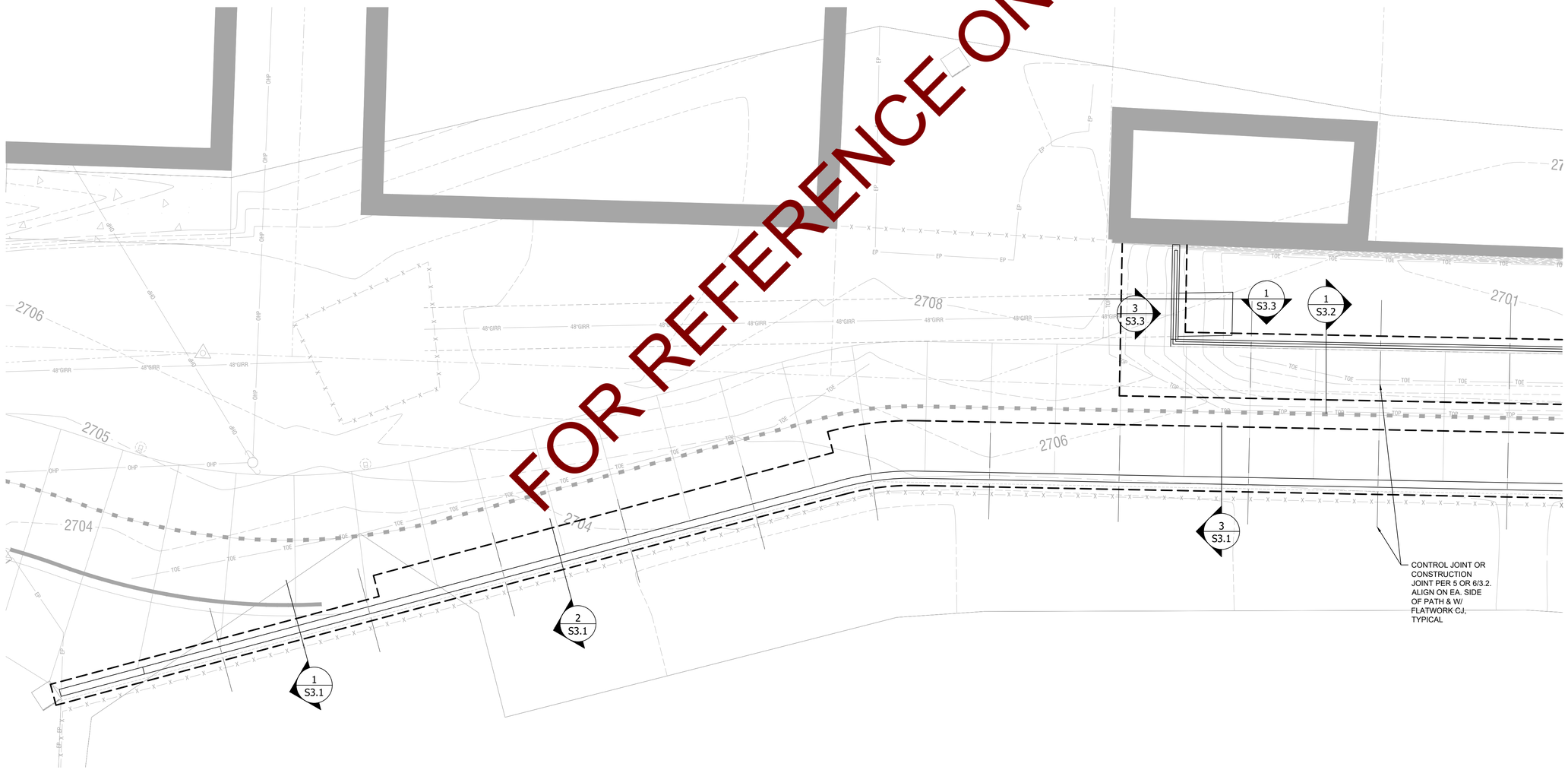
PROFESSIONAL ENGINEER LICENSED 14767 2024-05-02 STATE OF IDAHO CRAIG E. BRASHER

Project No.: 12212
Date of Issuance: 05.03.2024
Project Milestone: Permit Set

**MULTI-USE PATHWAY SPECIAL INSPECTIONS**

**S1.2**

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## Capital City Development Corporation

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14767
2024-05-02
STATE OF IDAHO
CRAIG E. BRASHER

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|---|---|
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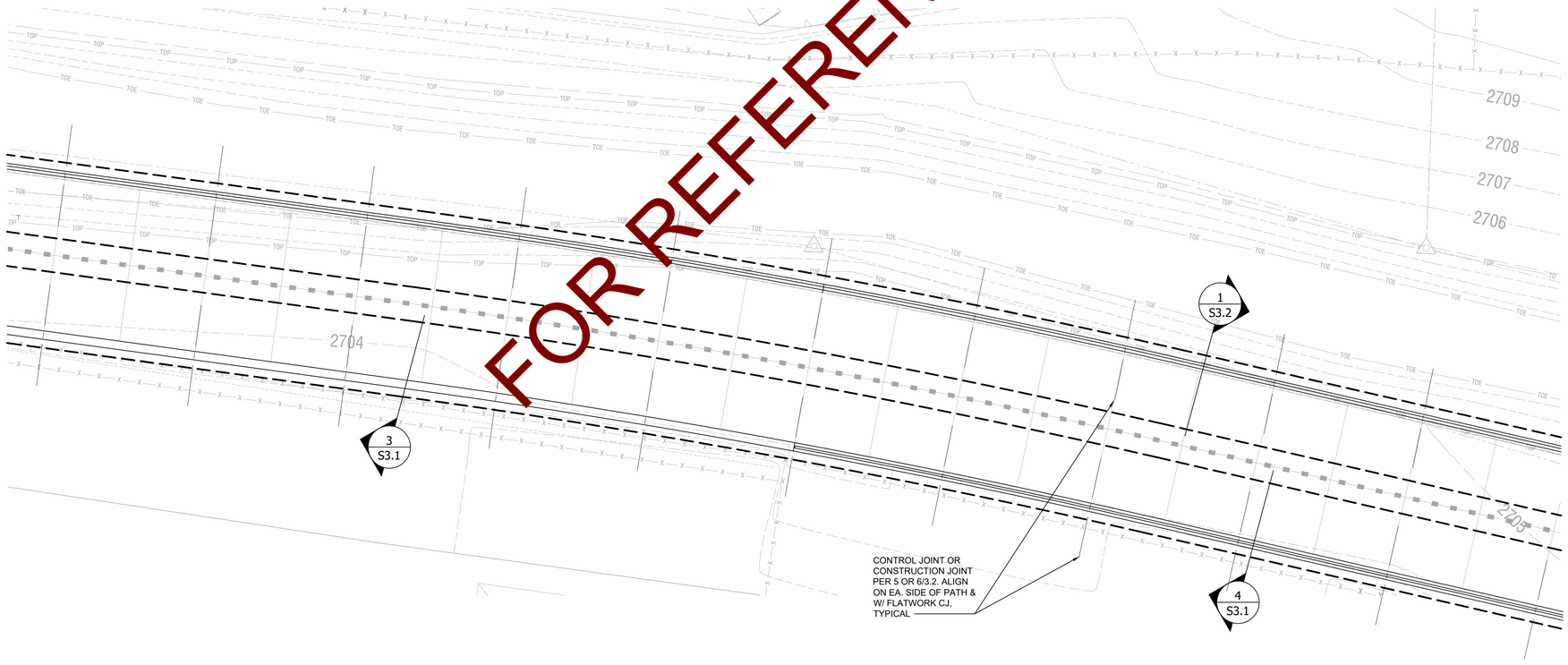
**MULTI-USE PATHWAY STRUCTURAL PLAN**

# S2.1

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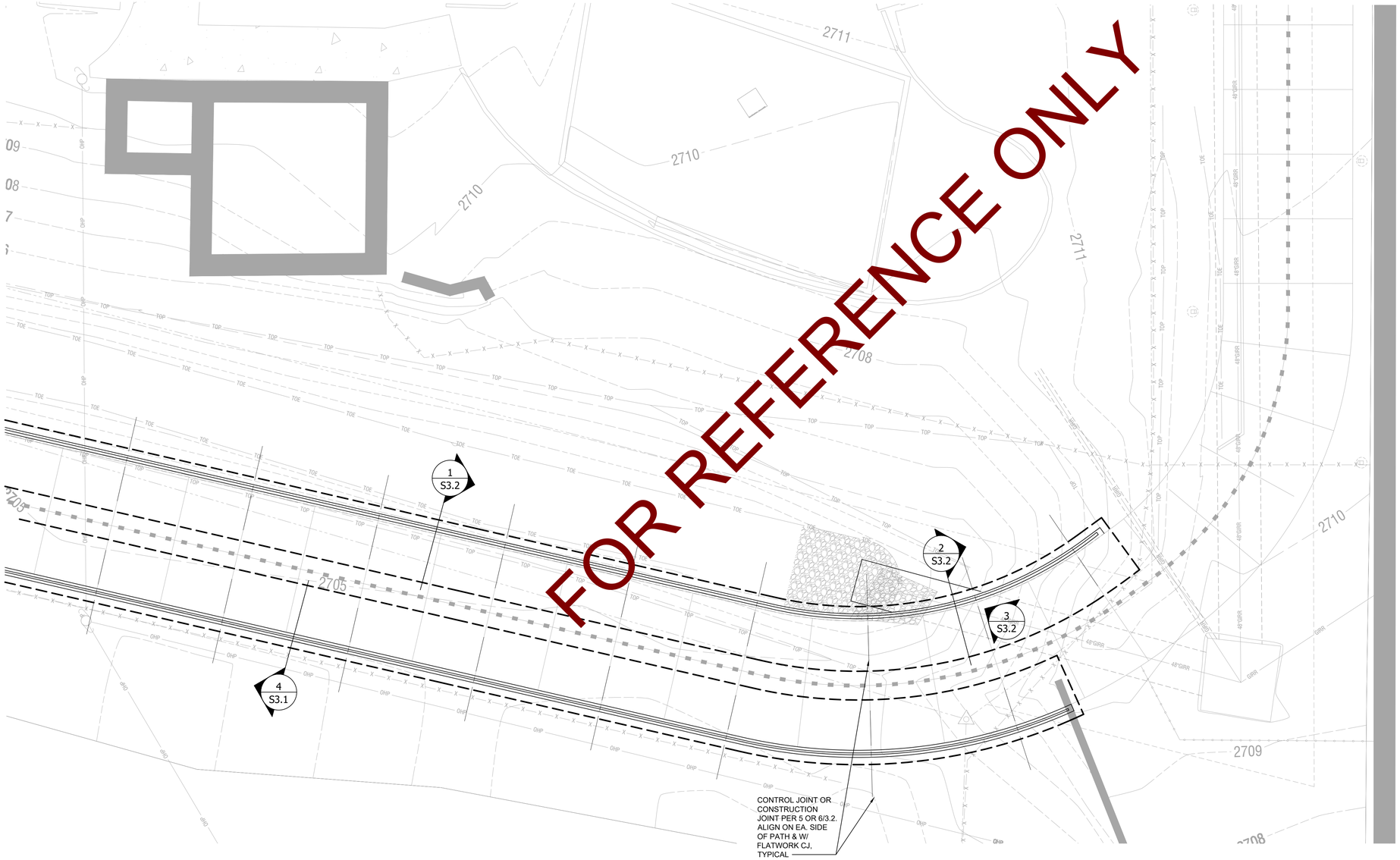
**MULTI-USE PATHWAY STRUCTURAL PLAN**

**S2.2**

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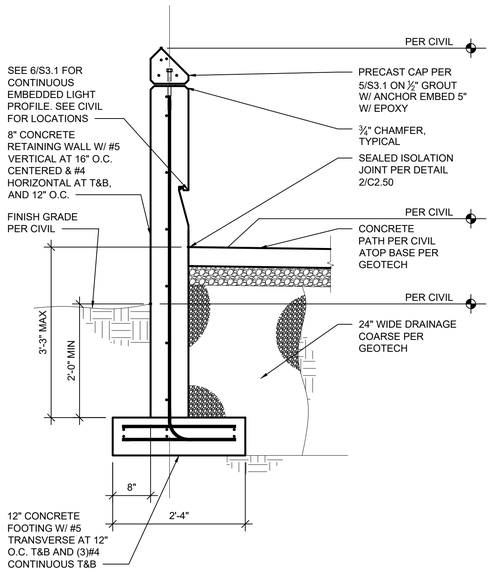
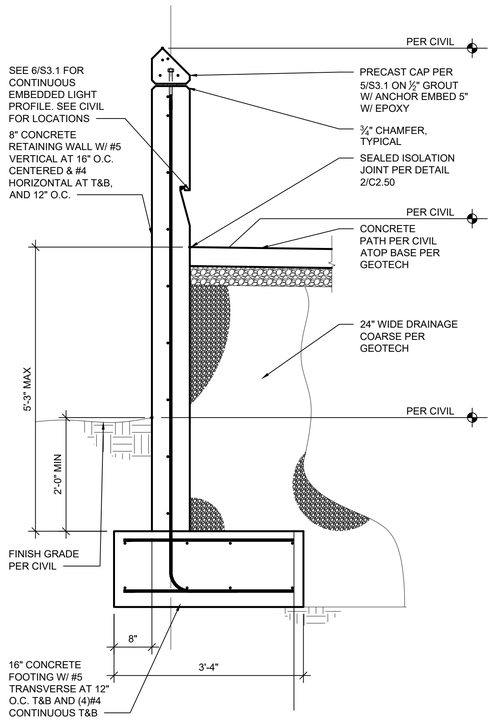
**MULTI-USE PATHWAY STRUCTURAL PLAN**

# S2.3



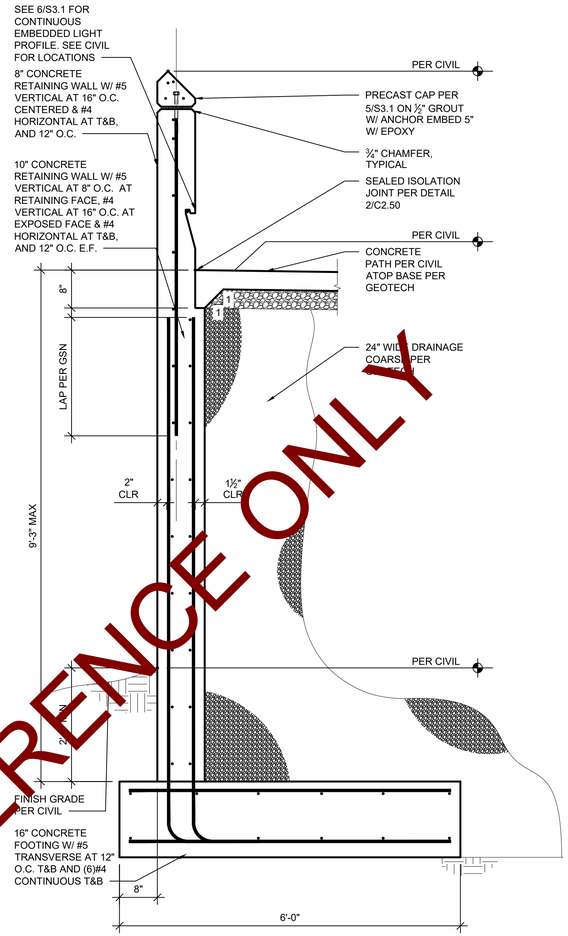

1 PATHWAY RETAINING WALL - WESTERN END

SCALE: 3/4" = 1'-0"



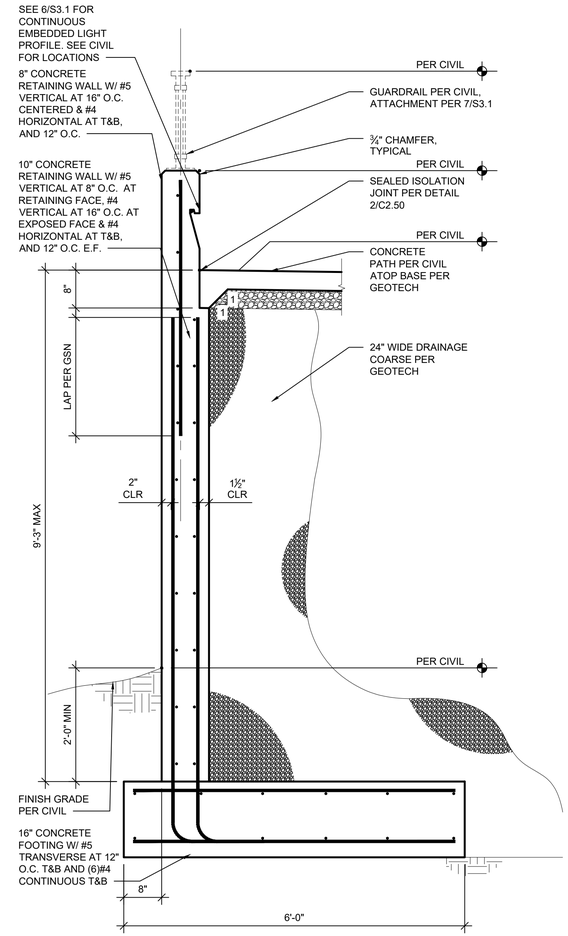

2 PATHWAY RETAINING WALL - WESTERN END

SCALE: 3/4" = 1'-0"



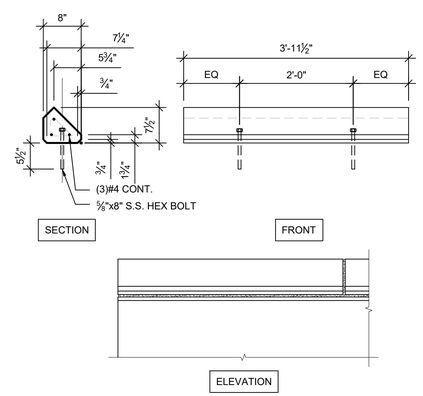

3 PATHWAY RETAINING WALL - ON SOUTHERN SIDE

SCALE: 3/4" = 1'-0"



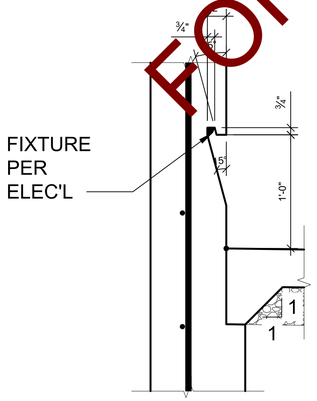

4 PATHWAY RETAINING WALL - ON SOUTHERN SIDE

SCALE: 3/4" = 1'



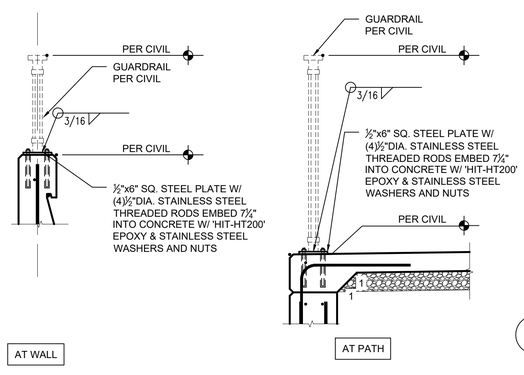

5 TYPICAL CONCRETE CAP

SCALE: 3/4" = 1'-0"




6 TYPICAL LIGHT RECESS

SCALE: 1 1/2" = 1'-0"




7 TYPICAL GUARDRAIL ATTACHMENT

SCALE: 3/4" = 1'-0"



THE LAND GROUP

Ally Structural Consulting, LLC
www.allystructural.com
208-949-5993
PROJECT: 23-045

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

3rd Street to Broadway Avenue
Boise, ID 83702

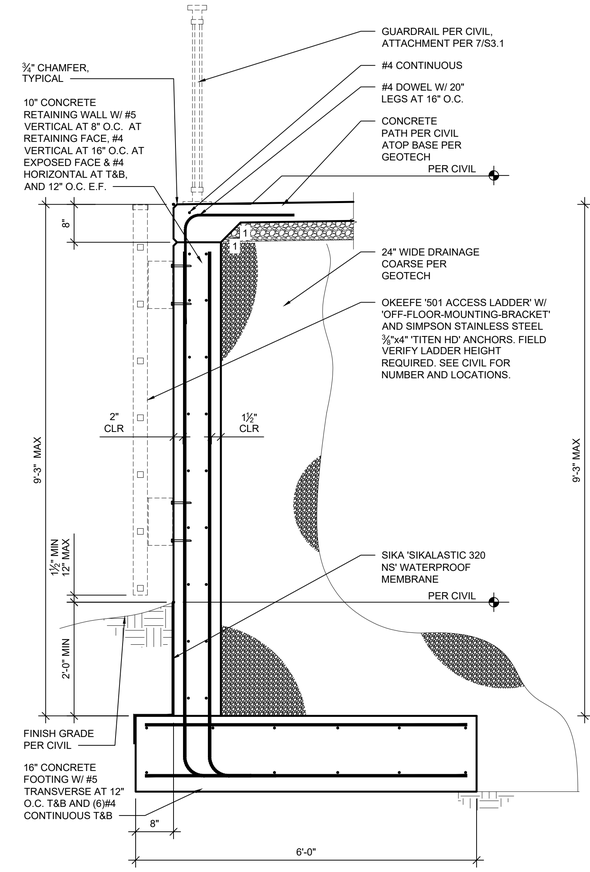
Revisions
1.

PROFESSIONAL ENGINEER LICENSED 14767 2024-05-02 STATE OF IDAHO CRAIG E. BRASHER

| | |
|---|---|
| Project No.: | 122112 |
| Date of Issuance: | 05.03.2024 |
| Project Milestone: | Permit Set |

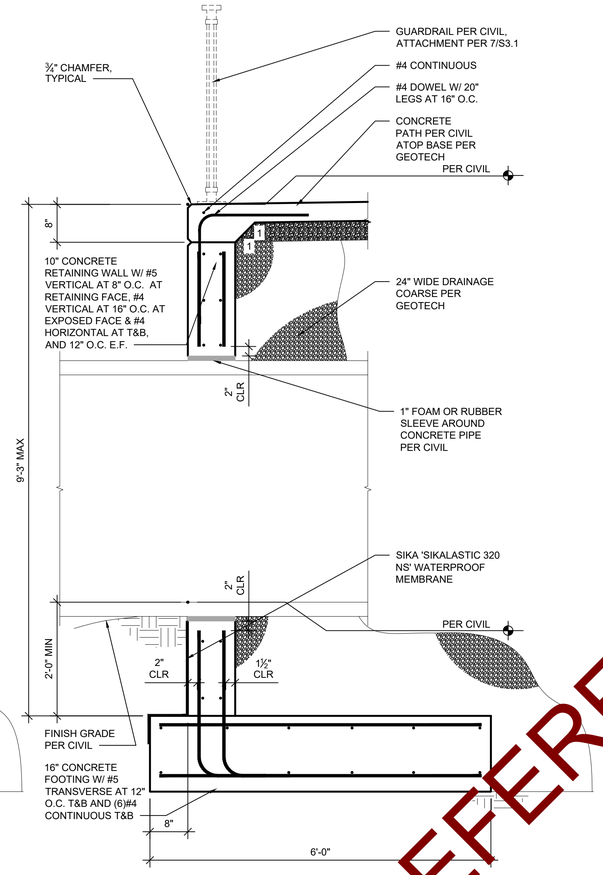
**MULTI-USE PATHWAY STRUCTURAL DETAILS**

# S3.1



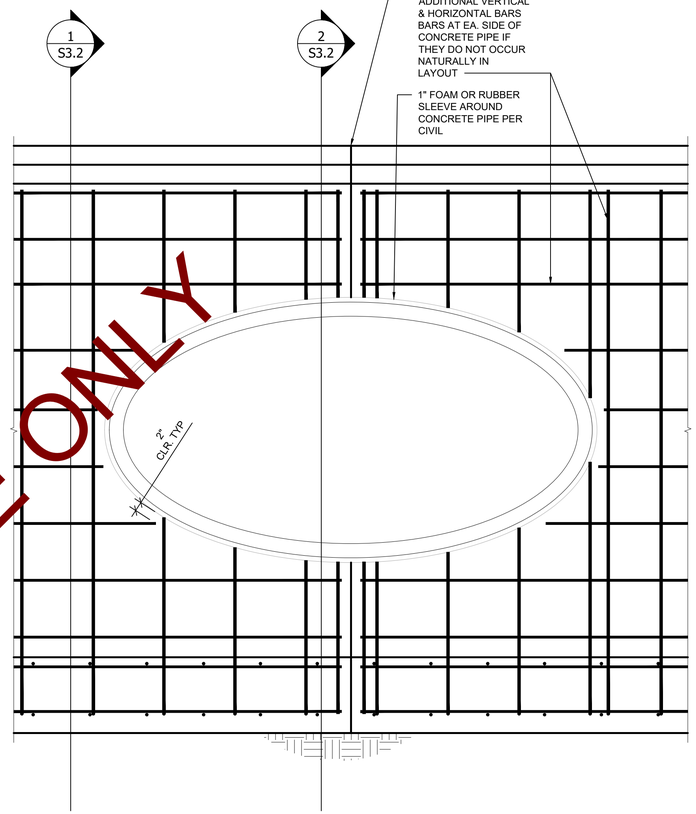

1 PATHWAY RETAINING WALL - NORTHERN SIDE

SCALE: 3/4" = 1'-0"



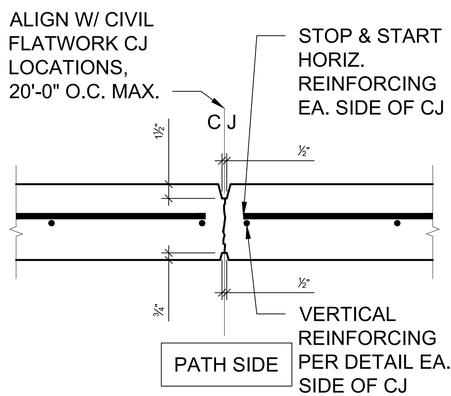

2 PATHWAY RETAINING WALL - NORTHERN SIDE

SCALE: 3/4" = 1'-0"



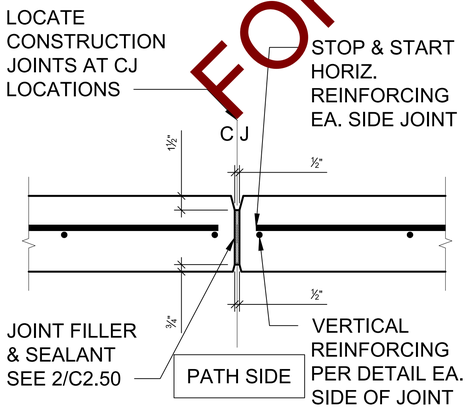

3 CONCRETE PIPE PENETRATION - SKEWED ELEVATION

SCALE: 3/4" = 1'




5 TYPICAL CONTRACTION JOINT

SCALE: 1 1/2" = 1'-0"




6 TYPICAL CONSTRUCTION JOINT (COLD JOINT)

SCALE: 1 1/2" = 1'-0"



THE LAND GROUP

Ally Structural Consulting, LLC
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208-949-5993
PROJECT: 23-045

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

3rd Street to Broadway Avenue
Boise, ID 83702

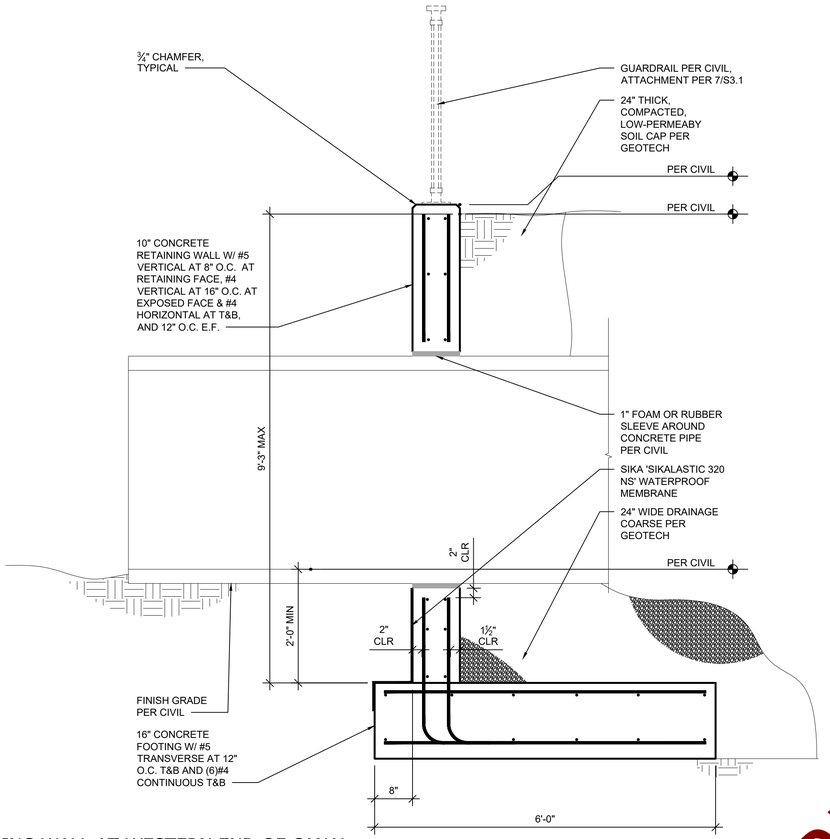
Revisions
1.

PROFESSIONAL ENGINEER LICENSED 14767 2024-05-02 STATE OF IDAHO CRAIG E. BRASHER

Project No.: 122112
Date of Issuance: 05.03.2024
Project Milestone: Permit Set

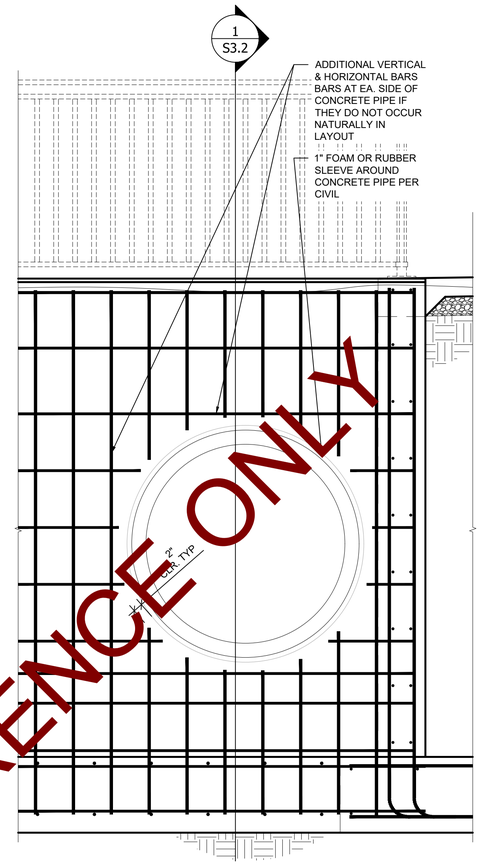
**MULTI-USE PATHWAY STRUCTURAL DETAILS**

# S3.2



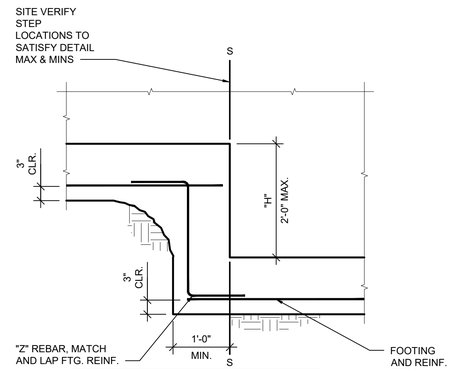

1 RETAINING WALL AT WESTERN END OF CANAL

SCALE: 3/4" = 1'-0"




3 CONCRETE PIPE PENETRATION - ELEVATION

SCALE: 3/4" = 1'-0"




NOTES:
1. SEE G.S.N. FOR LAP LENGTH REQUIREMENTS
2. MINIMUM STEP FOOTING SPACING = 2'H"

4 TYPICAL STEP AT CONCRETE FOUNDATION

SCALE: 3/4" = 1'



THE LAND GROUP

Ally Structural Consulting, LLC
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PROJECT: 23-045

# BOISE CITY CANAL MULTI-USE PATHWAY
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3rd Street to Broadway Avenue
Boise, ID 83702

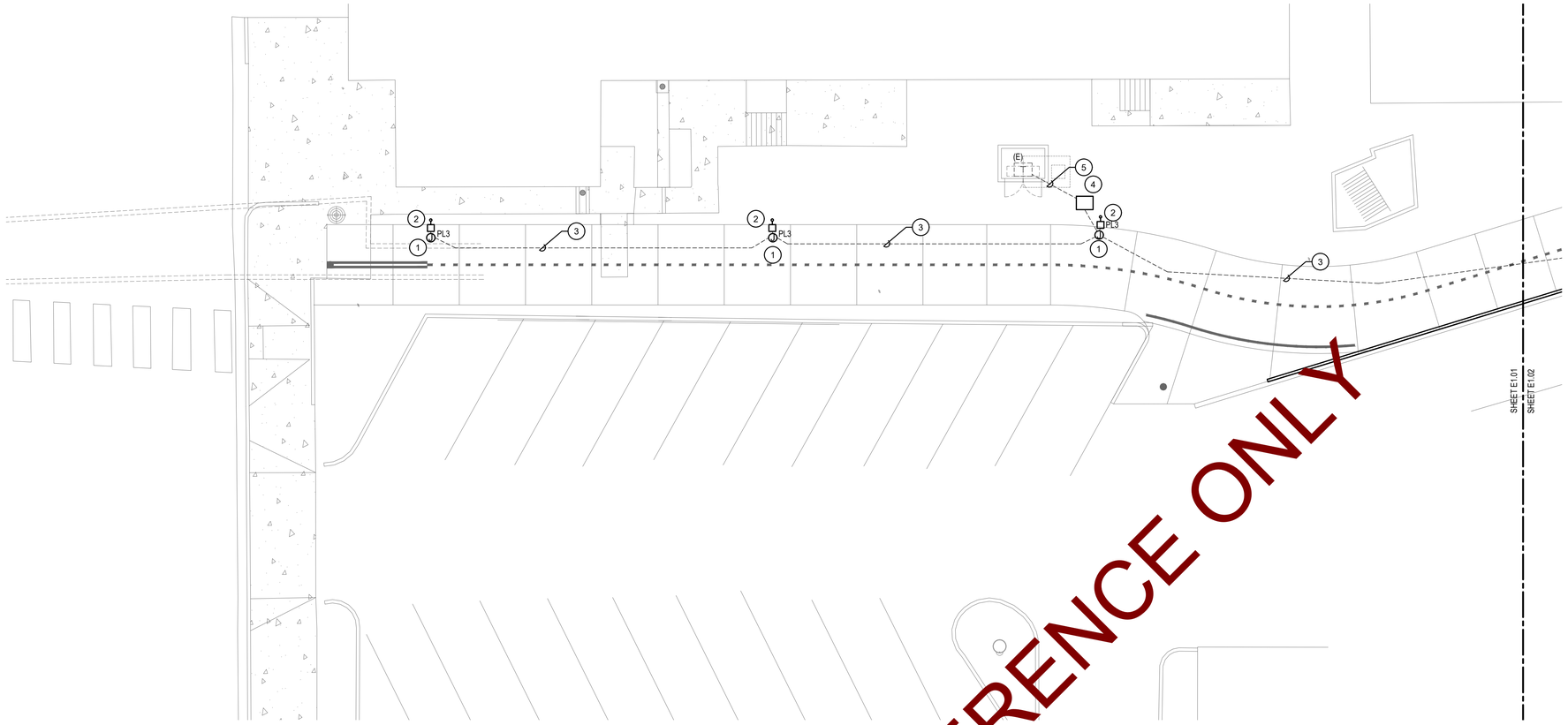
Revisions
1.

PROFESSIONAL ENGINEER LICENSED 14767 2024-05-02 STATE OF IDAHO CRAIG E. BRASHER

Project No.: 122112
Date of Issuance: 05.03.2024
Project Milestone: Permit Set

**MULTI-USE PATHWAY STRUCTURAL DETAILS**

# S3.3




## ELECTRICAL PLAN STA 10+000 - STA 11+80

Horizontal Scale: 1" = 10'



## KEYED NOTES:

(#) SYMBOL USED FOR NOTE CALLOUT.

1. PROVIDE PULL BOX ADJACENT TO THE NEW LIGHT POLE. COORDINATE LOCATION WITH CIVIL ENGINEER PRIOR TO ROUGH-IN. REFER TO DETAILS AND SPECIFICATIONS ON SHEETS EG-2 THROUGH EG-7. PULL BOX LID SHALL BE RAW STEEL WITH NO PAINT OR PRIMER.
2. PROVIDE AND INSTALL NEW LIGHT FIXTURE, AND POLE ON NEW BASE. REFER TO REFERENCED STANDARDS, SPECIFICATIONS AND DETAILS.
3. (1)2" CONDUITS FOR LIGHTING POWER. REFER TO STANDARDS AND DETAILS ON EG-2 THROUGH EG-7.
4. NEW METERED UTILITY PEDESTAL AT SIGNAL CAB. REFER TO EG-4 FOR METERED PEDESTAL REQUIREMENTS. COORDINATE INSTALLATION OF SERVICE CONDUCTORS WITH IDAHO POWER. DIVISION 26 TO PROVIDE AND INSTALL SERVICE CONDUIT TO FEED NEW PEDESTAL, COORDINATE ROUTING, SIZE AND QUANTITY OF CONDUITS WITH IDAHO POWER.
5. PROVIDE NEW UNDERGROUND SERVICE FROM EXISTING TRANSFORMER TO NEW METERED UTILITY PEDESTAL. COORDINATE WITH IDAHO POWER COMPANY.

MUSGROVE
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208.384.0585
www.musgrovepa.com
OVER 40 YEARS OF EXCELLENCE

Project No. 24-026

THE LAND GROUP

PROFESSIONAL ENGINEER REGISTERED 12731 5/3/2024 STATE OF IDAHO NICK SCHAFER

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

3rd Street - S Broadway Ave.
Boise, ID

Revisions
1.

Project No.: 122112
Date of Issuance: 05.03.2024
Project Milestone: Permit Set

**ELECTRICAL PLAN STA 10+000 - STA 11+80**

**E1.01**

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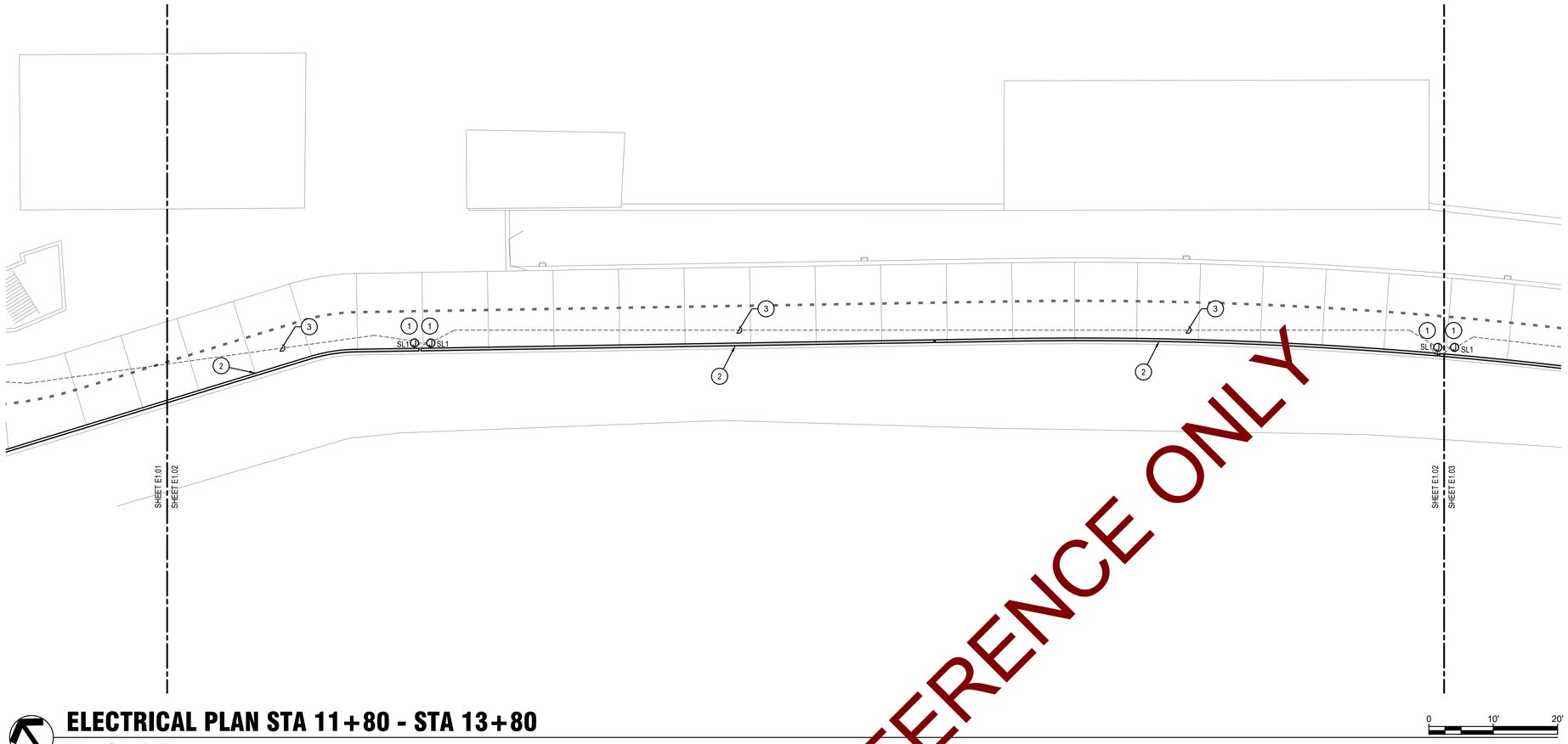
Date Plotted/Time: Mon 3 2024 at 07:34 AM




## ELECTRICAL PLAN STA 11+80 - STA 13+80

Horizontal Scale: 1" = 10'



## KEYED NOTES:

(#) SYMBOL USED FOR NOTE CALLOUT.

1. IN GRADE TRANSFORMER WITH INTEGRATED BACK BOX FOR LINEAR FIXTURES. PROVIDE PULL BOX ADJACENT TO THE WALL BASE. COORDINATE LOCATION WITH CIVIL ENGINEER PRIOR TO ROUGH-IN. REFER TO DETAILS AND SPECIFICATIONS ON SHEETS EG-2 THROUGH EG-7. PULL BOX LID SHALL BE RAW STEEL WITH NO PAINT OR PRIMER.
2. LINEAR LOW VOLTAGE LIGHT FIXTURE MOUNTED IN POURED RECESS OF WALL. COORDINATE WITH CIVIL AND ARCHITECTURAL DETAILS PRIOR TO ROUGH IN. INSTALL CONDUIT ROUTE FROM IN GRADE TRANSFORMER TO EACH SECTION OF LINEAR FIXTURE..
3. (1)2" CONDUITS FOR LIGHTING POWER. REFER TO STANDARDS AND DETAILS ON EG-2 THROUGH EG-7.

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# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

3rd Street - S Broadway Ave.
Boise, ID

Revisions
1.

Project No.: 122112
Date of Issuance: 05.03.2024
Project Milestone: Permit Set

**ELECTRICAL PLAN STA 11+80 - STA 13+80**

**E1.02**

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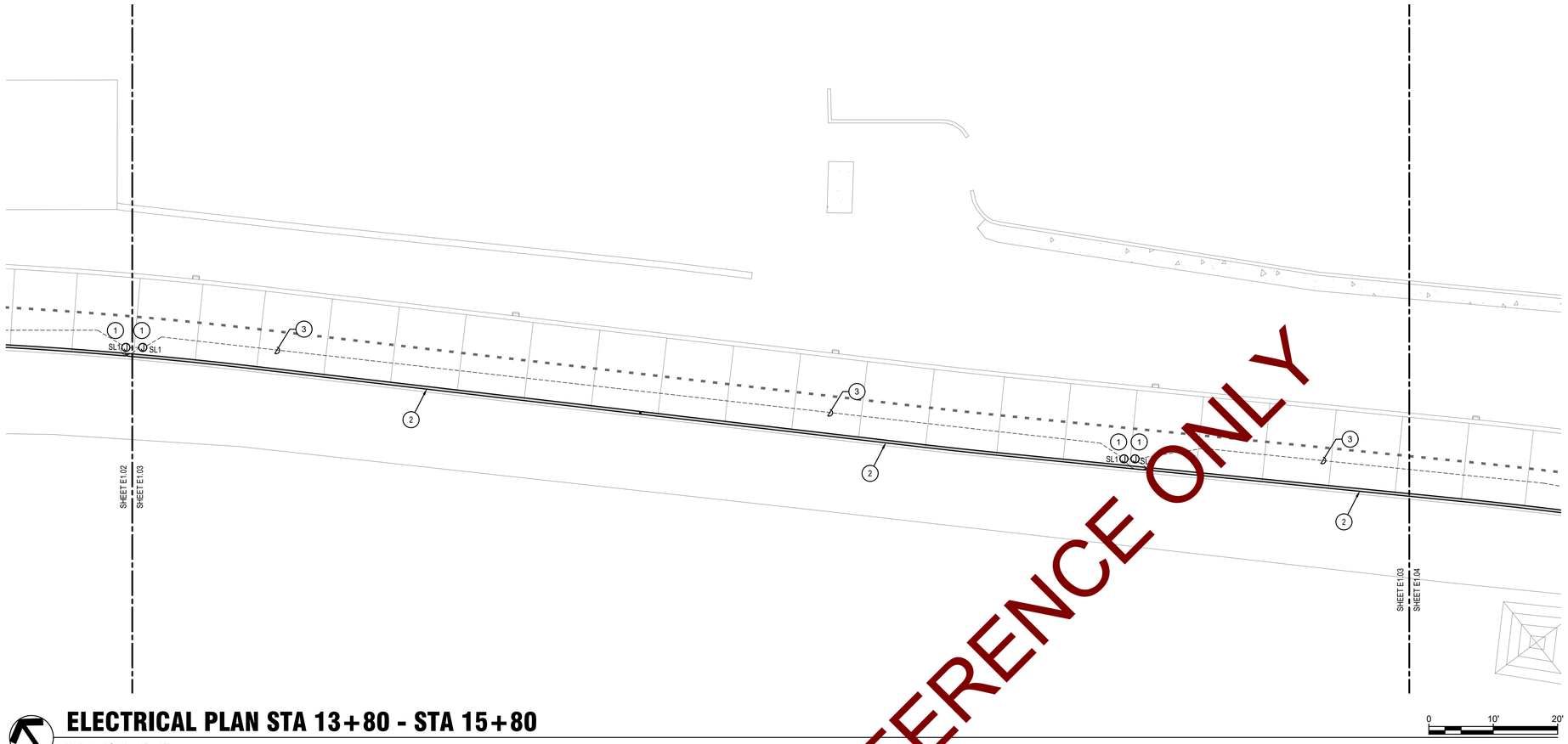


## ELECTRICAL PLAN STA 13+80 - STA 15+80

Horizontal Scale: 1" = 10'



## KEYED NOTES:

(#) SYMBOL USED FOR NOTE CALLOUT.

1. IN GRADE TRANSFORMER WITH INTEGRATED BACK BOX FOR LINEAR FIXTURES. PROVIDE PULL BOX ADJACENT TO THE WALL BASE. COORDINATE LOCATION WITH CIVIL ENGINEER PRIOR TO ROUGH-IN. REFER TO DETAILS AND SPECIFICATIONS ON SHEETS EG-2 THROUGH EG-7. PULL BOX LID SHALL BE RAW STEEL WITH NO PAINT OR PRIMER.
2. LINEAR LOW VOLTAGE LIGHT FIXTURE MOUNTED IN POURED RECESS OF WALL. COORDINATE WITH CIVIL AND ARCHITECTURAL DETAILS PRIOR TO ROUGH IN. INSTALL CONDUIT ROUTE FROM IN GRADE TRANSFORMER TO EACH SECTION OF LINEAR FIXTURE..
3. (1)2" CONDUITS FOR LIGHTING POWER. REFER TO STANDARDS AND DETAILS ON EG-2 THROUGH EG-7.

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Project No. 24-026

THE LAND GROUP

PROFESSIONAL ENGINEER REGISTERED 12731 5/3/2024 STATE OF IDAHO NICK SCHAFER

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

3rd Street - S Broadway Ave.
Boise, ID

Revisions
1.

Project No.: 122112
Date of Issuance: 05.03.2024
Project Milestone: Permit Set

**ELECTRICAL PLAN STA 13+80 - STA 15+80**

**E1.03**

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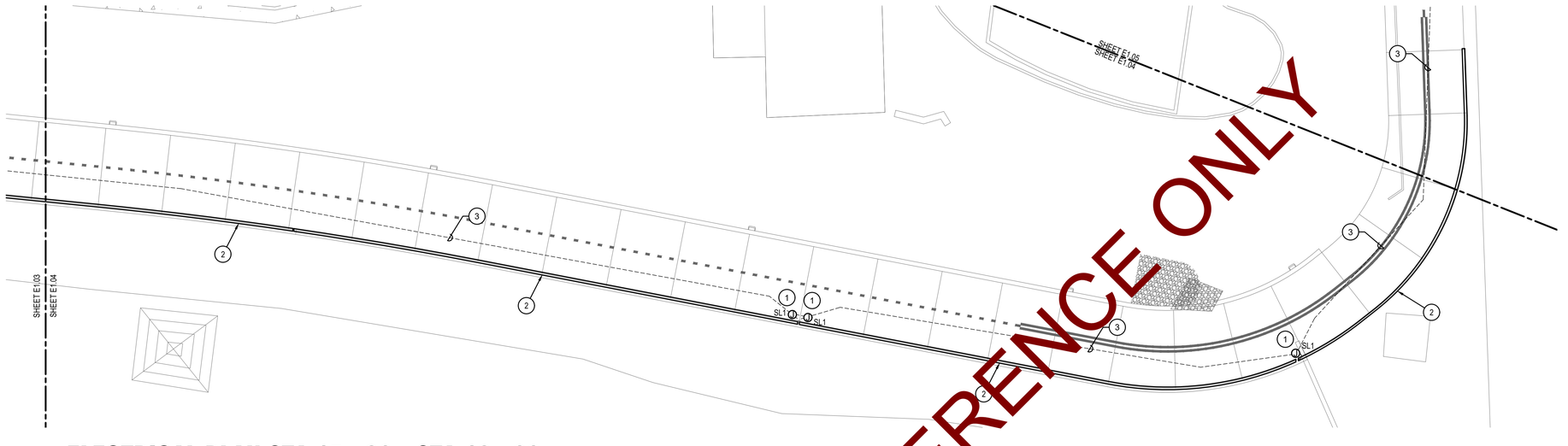




## ELECTRICAL PLAN STA 15+80 - STA 18+00

Horizontal Scale: 1" = 10'

## KEYED NOTES:

(#) SYMBOL USED FOR NOTE CALLOUT.

1. IN GRADE TRANSFORMER WITH INTEGRATED BACK BOX FOR LINEAR FIXTURES. PROVIDE PULL BOX ADJACENT TO THE WALL BASE. COORDINATE LOCATION WITH CIVIL ENGINEER PRIOR TO ROUGH-IN. REFER TO DETAILS AND SPECIFICATIONS ON SHEETS EG-2 THROUGH EG-7. PULL BOX LID SHALL BE RAW STEEL WITH NO PAINT OR PRIMER.
2. LINEAR LOW VOLTAGE LIGHT FIXTURE MOUNTED IN POURED RECESS OF WALL. COORDINATE WITH CIVIL AND ARCHITECTURAL DETAILS PRIOR TO ROUGH IN. INSTALL CONDUIT ROUTE FROM IN GRADE TRANSFORMER TO EACH SECTION OF LINEAR FIXTURE..
3. (1)2" CONDUITS FOR LIGHTING POWER. REFER TO STANDARDS AND DETAILS ON EG-2 THROUGH EG-7.

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THE LAND GROUP

PROFESSIONAL ENGINEER REGISTERED 12731 5/3/2024 STATE OF IDAHO NICK SCHAFER

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

3rd Street - S Broadway Ave.
Boise, ID

Revisions
1.

Project No.: 122112
Date of Issuance: 05.03.2024
Project Milestone: Permit Set

**ELECTRICAL PLAN STA 15+80 - STA 18+00**

**E1.04**

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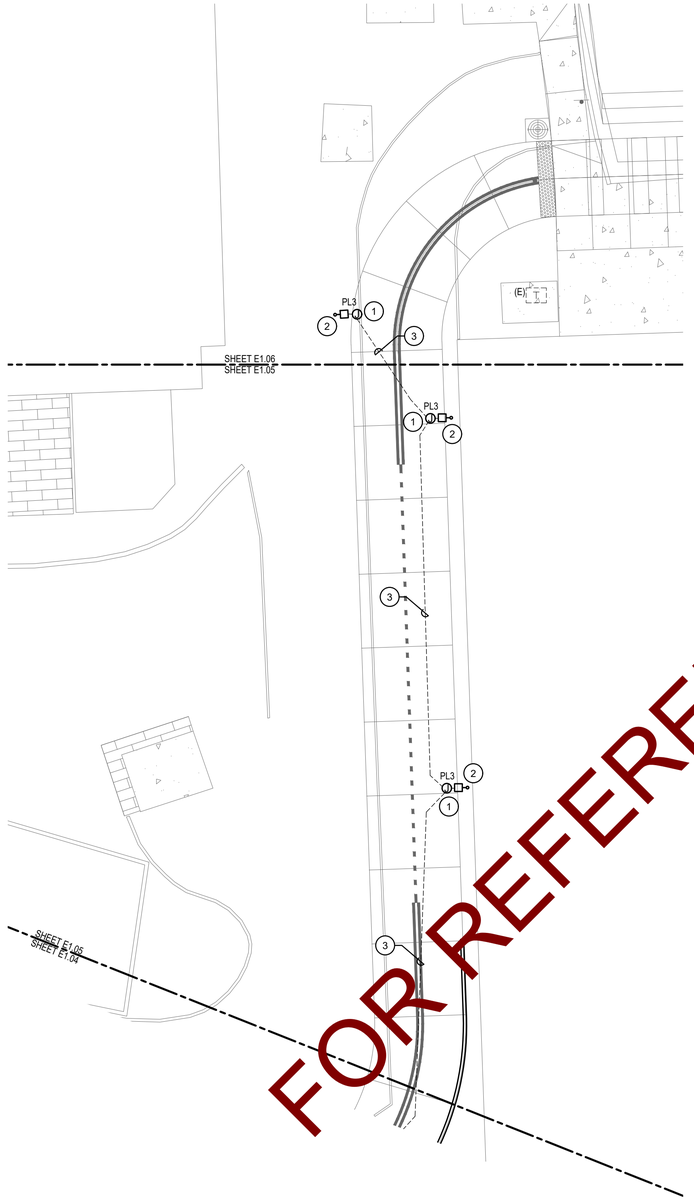
Date Plotted: Friday, May 3, 2024 at 07:34 AM






## ELECTRICAL PLAN STA 18+00 - STA 19+00

Horizontal Scale: 1" = 10'

0 10' 20'

## KEYED NOTES:

(#) SYMBOL USED FOR NOTE CALLOUT.

1. PROVIDE PULL BOX ADJACENT TO THE NEW LIGHT POLE. COORDINATE LOCATION WITH CIVIL ENGINEER PRIOR TO ROUGH-IN. REFER TO DETAILS AND SPECIFICATIONS ON SHEETS EG-2 THROUGH EG-7. PULL BOX LID SHALL BE RAW STEEL WITH NO PAINT OR PRIMER.
2. PROVIDE AND INSTALL NEW LIGHT FIXTURE, AND POLE ON NEW BASE. REFER TO REFERENCED STANDARDS, SPECIFICATIONS AND DETAILS.
3. (1)2" CONDUITS FOR LIGHTING POWER. REFER TO STANDARDS AND DETAILS ON EG-2 THROUGH EG-7.

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Project No. 24-026

THE LAND GROUP

PROFESSIONAL ENGINEER REGISTERED 12731 5/3/2024 STATE OF IDAHO NICK SCHAFER

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

3rd Street - S Broadway Ave.
Boise, ID

Revisions
1.

Project No.: 122112
Date of Issuance: 05.03.2024
Project Milestone: Permit Set

**ELECTRICAL PLAN STA 18+00 - STA 19+00**

**E1.05**

File Location: p:\files\2024\24026\working map\24026_e1.01-1.10 elec plans.dwg
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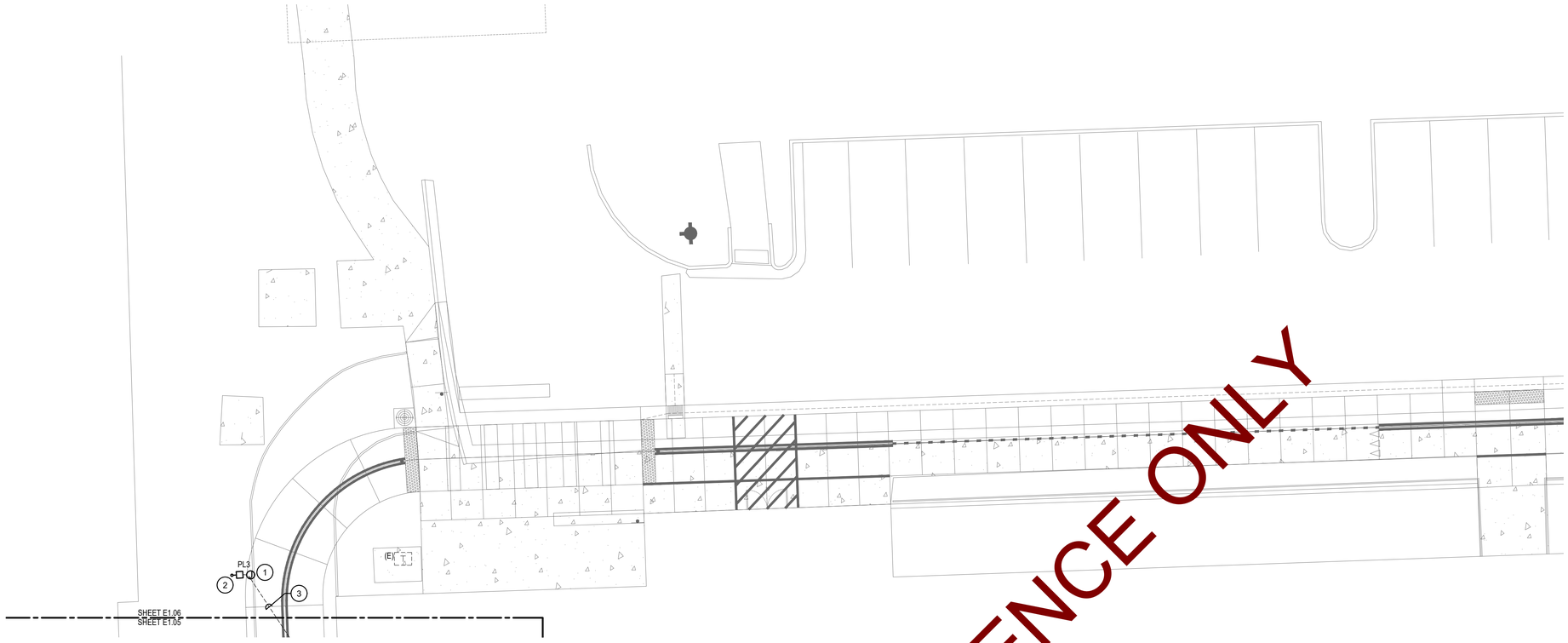


## ELECTRICAL PLAN STA 19+00 - STA 20+90

Horizontal Scale: 1" = 10'

0 10' 20'



## KEYED NOTES:

(#) SYMBOL USED FOR NOTE CALLOUT.

1. PROVIDE PULL BOX ADJACENT TO THE NEW LIGHT POLE. COORDINATE LOCATION WITH CIVIL ENGINEER PRIOR TO ROUGH-IN. REFER TO DETAILS AND SPECIFICATIONS ON SHEETS EG-2 THROUGH EG-7. PULL BOX LID SHALL BE RAW STEEL WITH NO PAINT OR PRIMER.
2. PROVIDE AND INSTALL NEW LIGHT FIXTURE, POLE AND RECEPTACLE ON NEW BASE. REFER TO REFERENCED STANDARDS, SPECIFICATIONS AND DETAILS.
3. (1)2" CONDUITS FOR LIGHTING POWER. REFER TO STANDARDS AND DETAILS ON EG-2 THROUGH EG-7.

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Project No. 24-026

THE LAND GROUP

PROFESSIONAL ENGINEER REGISTERED 12731 5/3/2024 STATE OF IDAHO NICK SCHAFER

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

3rd Street - S Broadway Ave.
Boise, ID

Revisions
1.

Project No.: 122112
Date of Issuance: 05.03.2024
Project Milestone: Permit Set

**ELECTRICAL PLAN STA 19+00 - STA 20+90**

**E1.06**

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Last Saved By: jschaefer
Date Plotted/Time: Mon 3.4.2024 at 07:34 AM

# ELECTRICAL LEGEND - LIGHTING

REFERENCE FIXTURE SCHEDULE FOR MOUNTING TYPE, MOUNTING HEIGHT, AND FIXTURE TYPE.

- DOUBLE FACE EXIT SIGN, CEILING MOUNTED, PROVIDE UNSWITCHED CONDUCTOR.
- WALL MOUNTED DOUBLE FACE EXIT SIGN PROVIDE UNSWITCHED CONDUCTOR. MOUNT AT +8'-0" UNO.
- SINGLE FACE EXIT SIGN, CEILING MOUNTED PROVIDE UNSWITCHED CONDUCTOR.
- WALL MOUNTED SINGLE FACE EXIT SIGN PROVIDE UNSWITCHED CONDUCTOR. MOUNT AT +8'-0" UNO.
- ARROW INDICATES DIRECTION TO BE SHOWN ON SIGN.
- 1'X1' LIGHT FIXTURE.
- 1'X1' LIGHT FIXTURE, PROVIDE EMERGENCY BALLAST CONNECTED TO AN UNSWITCHED CONDUCTOR.
- TRACK LIGHT
- 1'X4' LIGHT FIXTURE.
- 1'X4' LIGHT FIXTURE, PROVIDE EMERGENCY BALLAST CONNECTED TO AN UNSWITCHED CONDUCTOR.
- 2'X4' LIGHT FIXTURE.
- 2'X4' LIGHT FIXTURE, PROVIDE EMERGENCY BALLAST CONNECTED TO AN UNSWITCHED CONDUCTOR.
- 2'X2' LIGHT FIXTURE.
- 2'X2' LIGHT FIXTURE, PROVIDE EMERGENCY BALLAST CONNECTED TO AN UNSWITCHED CONDUCTOR.
- DIRECT/INDIRECT LIGHT FIXTURE. SEE SCHEDULE FOR LENGTH.
- DIRECT/INDIRECT LIGHT FIXTURE. SEE SCHEDULE FOR LENGTH. PROVIDE EMERGENCY BALLAST CONNECTED TO AN UNSWITCHED CONDUCTOR
- STRIP FLUORESCENT LIGHT FIXTURE. SEE SCHEDULE FOR LENGTH.
- STRIP FLUORESCENT LIGHT FIXTURE. SEE SCHEDULE FOR LENGTH. PROVIDE EMERGENCY BALLAST CONNECTED TO AN UNSWITCHED CONDUCTOR
- WALL MOUNTED LIGHT FIXTURE.
- WALL MOUNTED LIGHT FIXTURE, PROVIDE EMERGENCY BALLAST CONNECTED TO AN UNSWITCHED CONDUCTOR.
- RECESSED LIGHT FIXTURE
- RECESSED LIGHT FIXTURE. PROVIDE EMERGENCY BALLAST CONNECTED TO AN UNSWITCHED CONDUCTOR.
- ROUND LIGHT FIXTURE
- ROUND EMERGENCY LIGHT FIXTURE
- WALL MOUNTED LIGHT FIXTURE.
- WALL MOUNTED EMERGENCY LIGHT FIXTURE.
- POLE LIGHT 1 HEAD WITH POLE
- TIME CLOCK
- PHOTO CONTROL CELL LOCATED 12" ABOVE ROOF FACING NORTH.
- OCCUPANCY SENSOR. PROVIDE RELAYS AND POWER PACKS AS REQUIRED
- LED DRIVER
- EMERGENCY EGRESS LIGHTING WITH OUT FIXTURE HEADS. CONNECT TO AN UNSWITCHED CONDUCTOR.
- EMERGENCY EGRESS LIGHTING. CONNECT TO AN UNSWITCHED CONDUCTOR.
- XXX INDICATES FIXTURE TYPE. REFER TO FIXTURE SCHEDULE.
- EXTERIOR WALL PACK
- EMERGENCY EXTERIOR WALL PACK, PROVIDE EMERGENCY BALLAST CONNECTED TO AN UNSWITCHED CONDUCTOR

# DEVICES

- SWITCH, TYPE AS INDICATED. +46"AFF
  - 2 DOUBLE POLE
  - 3 3-WAY
  - 4 4-WAY
  - K KEYED
  - P PILOT LIGHT
  - D DIMMER
  - HP HORSEPOWER RATED
  - TO THERMAL OVERLOAD
  - LV LOW VOLTAGE
  - OS OCCUPANCY SENSOR
  - OR LOW VOLTAGE, MOMENTARY OVERRIDE
  - VS VACANCY SENSOR
  - a SUPERSCRIPT INDICATES LIGHTS TO BE SWITCHED TOGETHER
- DUAL LEVEL SWITCHING, INSIDE AND OUTSIDE LAMPS OF FIXTURE TO BE SWITCHED SEPARATELY.
- DUAL LEVEL SWITCHING WITH OCCUPANCY SENSOR, INSIDE AND OUTSIDE LAMPS OF FIXTURE TO BE SWITCHED SEPARATELY.
- SINGLE CONVENIENCE OUTLET, +18" AFF UNO
- FLOOR MOUNT SINGLE CONVENIENCE OUTLET
- DUPLEX CONVENIENCE OUTLET, +18" AFF UNO
- FLOOR MOUNT DUPLEX CONVENIENCE OUTLET
- EMERGENCY DUPLEX CONVENIENCE OUTLET, +18" AFF UNO
- SWITCHED DUPLEX CONVENIENCE OUTLET, +18" AFF UNO
- FLOOR MOUNTED SWITCHED DUPLEX CONVENIENCE OUTLET
- FOURPLEX CONVENIENCE OUTLET. +18"AFF UNO
- FLOOR MOUNT FOURPLEX CONVENIENCE OUTLET
- CONNECTION POINT TO EQUIPMENT SPECIFIED, ELECTRICAL CONTRACTOR TO SUPPLY RACEWAY AND CONDUCTORS AND MAKE FINAL CONNECTION TO EQUIPMENT UNDER THIS SECTION. UNO
- FLOOR MOUNTED CONNECTION POINT, SEE NOTE ABOVE FOR REQUIREMENTS
- FLOOR MOUNTED JUNCTION BOX
- JUNCTION BOX
- WALL MOUNTED PUSH BUTTON, MOUNT AT SWITCH HEIGHT UNO
- HC WALL MOUNTED PUSH BUTTON, HANDICAPPED MOUNT AT SWITCH HEIGHT UNO
- WALL MOUNTED PUSH BUTTON, MOUNT AT SWITCH HEIGHT UNO
- MOTOR STARTER/CONTACTOR, SIZE/POLES NEMA 1 UNO AS INDICATED
- COMBINATION STARTER AND DISCONNECT, SIZE/POLES, STARTER SIZE AS INDICATED, NEMA 1 UNO
- F FUSED DISCONNECT SWITCH, SIZE/POLES, FUSE SIZES AS INDICATED, NEMA 1 UNO
- NON-FUSED DISCONNECT SIZE/ POLES AS INDICATED, NEMA 1 UNO
- T THERMOSTAT, +46" AFF PROVIDE CONDUIT, J-BOX, CONDUCTORS AS REQUIRED TO CONTROL ASSOCIATED UNITS. UNO COORDINATE WITH DIVISION 15.
- POWER POLE - DUAL CHANNEL
- T TRANSFORMER
- PANELBOARD. SEE SCHEDULE FOR TYPE.
- EQUIPMENT CABINET, SURFACE MOUNTED
- EQUIPMENT CABINET FLUSH MOUNTED
- SURFACE MULTI-OUTLET RACEWAY
- # # MECHANICAL EQUIPMENT CALL OUT
- # KITCHEN EQUIPMENT CALLOUT

# ONE LINE

- DELTA WYE TRANSFORMER UNO
- # PANEL NAME VOLTAGE PHASE — PANEL BOARD, SEE SCHEDULE FOR TYPE AND SIZE
- ##A #P — CIRCUIT BREAKER, SIZE AND POLES INDICATED
- ##A — FUSE, SIZE AND TYPE INDICATED, PROVIDE FUSE FOR EACH POLE
- ##A #P — INTERRUPTER SWITCH, SIZE AND POLES INDICATED
- ##A #P — FUSED SWITCH, SIZE/POLES AND FUSE SIZE INDICATED
- ##A #P — DRAW OUT CIRCUIT BREAKER, SIZE AND POLES INDICATED
- ###A #P S — INDIVIDUAL BREAKER WITH SHUNT TRIP, SIZE AND POLES INDICATED. NEMA 1 UNO
- ###A #P — INDIVIDUAL BREAKER, SIZE AND POLES INDICATED. NEMA 1 UNO
- GFP — GROUND FAULT PROTECTION
- TVSS — TRANSIENT VOLTAGE SURGE SUPPRESSION
- LSIGR — ADJUSTABLE BREAKER SETTINGS (PER SPECIFICATIONS):
  - 'L'-LONG TIME
  - 'S'-SHORT TIME
  - 'I'-INSTANTANEOUS
  - 'G'-GROUND FAULT
  - 'R'-ENERGY REDUCING MAINTENANCE SWITCH WITH STATUS INDICATOR
- GROUND
- ST — SHUNT TRIP COIL
- M — MOTOR
- 100A 3P — DISCONNECT SWITCH, SIZE AND POLES INDICATED. NEMA 1 UNO
- OVERHEAD SERVICE DROP
- XXXA/XP XXEY — GENERATOR SET, MAIN BREAKER SIZE INDICATED
- ATS — AUTOMATIC TRANSFER SWITCH (ATS)
- M — MEYER AND BASE
- N — NEUTRAL
- T — TRANSFORMER
- PAD MOUNT TRANSFORMER



# ELECTRICAL ABBREVIATIONS

| | |
|---|---|
| A | AMPERES |
| AC | 6" ABOVE BACKSPLASH |
| AFF | ABOVE FINISHED FLOOR |
| AFG | ABOVE FINISHED GRADE |
| AIC | AMPS INTERRUPTING CAPACITY |
| AT | AMP TRIP |
| AWG | AMERICAN WIRE GAUGE |
| C | CEILING MOUNTED |
| C | CONDUIT |
| CB | CIRCUIT BREAKER |
| CF | COMPACT FLUORESCENT |
| CKT | CIRCUIT |
| CO | CONDUIT ONLY, PROVIDE PULL-LINE |
| CT | CURRENT TRANSFORMER |
| CTL | CONTROL |
| (D) | DEMOLITION |
| DEMO | DEMOLITION |
| DET | DETAIL |
| E | EMERGENCY |
| (E) | EXISTING |
| EC | ELECTRICAL CONTRACTOR |
| F | FUSE |
| (F) | FUTURE |
| G/GND | GROUND |
| GFCI | GROUND FAULT CIRCUIT INTERRUPTER |
| GFI | GROUND FAULT INTERRUPTER |
| HH | HAND HOLE |
| HID | HIGH INTENSITY DISCHARGE |
| HVAC | HEATING, VENTILATION, AIR CONDITIONING |
| IPCO | IDAHO POWER COMPANY |
| J-BOX | JUNCTION BOX |
| KA | KILOAMP |
| KVA | KILOVOLT-AMP |
| KW | KILOWATT |
| MB | MAIN BREAKER |
| MBR | MAIN CIRCUIT BREAKER |
| MLO | MAIN LUGS ONLY |
| MTG | MOUNTING |
| N | NEUTRAL |
| (N) | NEW |
| NC | NORMALLY CLOSED |
| NEC | NATIONAL ELECTRICAL CODE |
| NIC | NOT IN CONTRACT |
| NO | NORMALLY OPEN |
| NTS | NOT TO SCALE |
| OH | OVERHEAD |
| P | POLES |
| PC | PHOTO-CONTROL |
| PVC | POLYVINYL CHLORIDE |
| PWR | POWER |
| RE: | REFERENCE |
| REC | RECEPTACLE |
| (R) | RELOCATED |
| SF | SQUARE FEET |
| (TYP.) | TYPICAL |
| UG | UNDERGROUND |
| UG S | UNDERGROUND SECONDARY BY IDAHO POWER CO. |
| U.N.O. | UNLESS NOTED OTHERWISE |
| V | VOLT |
| VA | VOLT-AMPERE |
| W | WATT |
| WP | WEATHER PROOF/NEMA 3R |
| XFMR | TRANSFORMER |

| | |
|---|---|
| PROVIDED/ PROVIDE BY INSTALLED/ INSTALL | PROVIDE AND INSTALL / PROVIDED AND INSTALLED BY / PROVIDE AND INSTALL |

NOTE: THIS IS A STANDARD LIST OF COMMONLY USED ELECTRICAL ABBREVIATIONS. SOME OF THE ABBREVIATIONS SHOWN ABOVE MAY NOT BE USED IN THIS DRAWING PACKAGE.

# ELECTRICAL GENERAL NOTES

A. THESE ELECTRICAL DRAWINGS ARE DIAGRAMMATIC IN NATURE; THEREFORE, THE ELECTRICAL CONTRACTOR SHALL COORDINATE ALL ELECTRICAL EQUIPMENT AND DEVICE LOCATIONS WITH ARCHITECTURAL, MECHANICAL, AND PLUMBING DIVISIONS PRIOR TO ROUGH-IN. REFER TO AND COORDINATE WITH ARCHITECTURAL, MECHANICAL, AND PLUMBING DRAWINGS FOR ADDITIONAL WORK THAT IS REQUIRED BY THE ELECTRICAL CONTRACTOR.

B. ALL CONDUIT AND JUNCTION BOXES ARE TO BE CONCEALED UNLESS LOCATED WITHIN DEDICATED ELECTRICAL OR MECHANICAL ROOMS. USE OF SURFACE MOUNTED RACEWAYS IN ALL OTHER SPACES MUST BE APPROVED BY THE ARCHITECT FOR EACH LOCATION. WHERE SURFACE RACEWAYS ARE APPROVED, UTILIZE WIREMOLD, OR APPROVED EQUAL. SURFACE MOUNTED RACEWAYS PAINTED TO MATCH SURROUNDING WALLS.

C. REFER TO ARCHITECTURAL ELEVATIONS FOR OUTLET HEIGHTS WHERE THE SPECIFIC OUTLET HEIGHT IS NOT INDICATED. REFER TO THE ELECTRICAL LEGEND FOR THE DEFAULT OUTLET HEIGHT WHEN NOT INDICATED ON ELEVATIONS OR ON AT THE DEVICES.

D. PROVIDE PULL-LINE IN ALL EMPTY CONDUITS.

E. TERMINATE ALL LOW-VOLTAGE CONDUITS WITH INSULATED THROAT BUSHING.

F. MECHANICAL EQUIPMENT INDICATED IS SHOWN IN AN APPROXIMATE LOCATION. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.

DEMO:

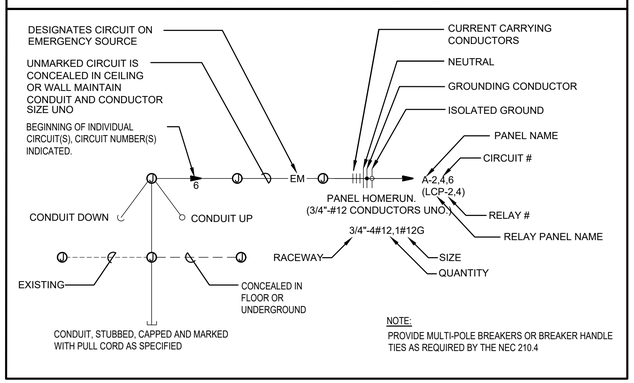
G. THE ELECTRICAL DEMOLITION DRAWING(S) PROVIDED ARE INTENDED TO ASSIST THE ELECTRICAL CONTRACTOR IN ESTABLISHING AREAS REQUIRING DISCONNECTION, REMOVAL, OR RELOCATION OF ELECTRICAL EQUIPMENT, OUTLETS, WIRING, DEVICES, FIXTURES, ETC. AND MAY NOT INDICATE ALL DEVICES OR THE FULL EXTENT OF DEMOLITION AND RECONNECTION WHICH MAY BE REQUIRED. THE ELECTRICAL CONTRACTOR SHALL VISIT THE JOB SITE AND THOROUGHLY EXAMINE ALL REQUIRED DEMOLITION WORK AND INCLUDE ALL LABOR AND INCIDENTALS THAT WILL BE NECESSARY TO PERFORM DEMOLITION RECONNECTION AND TEMPORARY POWER CONNECTIONS IN THE BID.

H. ALL ELECTRICAL DEVICES AND WALLS INDICATED ON THE ELECTRICAL DEMOLITION DRAWING(S) ARE TO REMAIN UNLESS OTHERWISE NOTED.

# Boise City Street Light Plan Review Requirements

1. CONTRACTORS INSTALLING LIGHTING WILL BE REQUIRED TO CONTACT BOISE CITY PUBLIC WORKS INSPECTION SECTION 48 HOURS PRIOR TO SCHEDULE THE PRELIMINARY INSPECTION PRIOR TO PLACING CONCRETE OR COVERING CONDUITS. IN ADDITION, THE ELECTRICAL CONTRACTOR IS REQUIRED TO CALL 24 HOURS IN ADVANCE TO SCHEDULE A FINAL INSPECTION BY THE BOISE CITY PUBLIC WORKS INSPECTION SECTION AFTER ALL WORK HAS BEEN COMPLETED. ELECTRICAL CONTRACTOR MUST BE PRESENT AT FINAL INSPECTION (CALL 388-4725 TO SCHEDULE AN INSPECTION). FOR METERED SERVICES, AN ADDITIONAL INSPECTION IS REQUIRED BY THE ELECTRICAL INSPECTOR HAVING JURISDICTION AT THE PROJECTS LOCATION; BOISE CITY.
2. DEVELOPER OR ELECTRICAL CONTRACTOR IS REQUIRED UPON COMPLETION OF ALL FINAL INSPECTIONS TO NOTIFY BOISE CITY PUBLIC WORKS STREET LIGHTING SECTION AT 208-388-4719 WHEN READY FOR POWER ENERGIZING TO NEWLY INSTALLED STREET LIGHTS WITH IN THE CITY LIMITS. PROVIDE THE CONTRACTOR'S NAME AND SUBDIVISION NAME.
3. ALL STREET LIGHTS SHALL BE INSTALLED PER ISPWC, NEC CODES, ACHD CODES FOR WORKING WITH IN THE PUBLIC RIGHT-OF-WAY, AND BOISE CITY PUBLIC WORKS STREET LIGHT STANDARD REVISIONS TO THE ISPWC.
4. DEVELOPER SHALL NOT CONNECT, OR ALLOW ANY SUBCONTRACTOR TO CONNECT ANY IRRIGATION TIMERS, DECORATIVE LIGHTING, ENTRANCE LIGHTING, OR OUTLETS OR OTHER ELECTRICAL DEVICES TO ANY STREET LIGHTING CIRCUITS. ANY AND ALL IRRIGATION TIMERS, DECORATIVE LIGHTING, ENTRANCE LIGHTING, OR OUTLETS OR OTHER ELECTRICAL DEVICES SHALL BE CONNECTED DIRECTLY TO IDAHO POWER AT AN IDAHO POWER APPROVED LOCATION VIA A SEPARATE CONDUIT SYSTEM.
5. UNDERGROUND WIRE SHALL BE #6 COPPER, AWG, THWN, 600 VOLT INSULATED (NO ALUMINUM WIRE.)
6. ALL ELECTRICAL CONDUITS SHALL BE SCHEDULE 40, PVC, UL LABELED.
7. A LOCATING WIRE IS REQUIRED IN ALL EMPTY PVC ELECTRICAL CONDUITS.
8. FOR SERVICE CABINET INSTALLATIONS, AN ELECTRICAL PERMIT IS REQURIED FROM BOISE CITY BUILDING DEPARTMENT.
9. ALL NEW UNDERGROUND CONDUIT FOR ALL STREET LIGHTING BETWEEN PULL BOXES SHALL BE A MINIMUM OF (2)2" CONDUITS. PROVIDE A MINIMUM (2)1" CONDUITS BETWEEN PULL BOXES AND THE ADJACENT LIGHT POLE. 18" MAX INSTALLATION OFFSET BEHIND BACK OF SIDEWALK. ALL CONDUITS SHOWN ARE NEW.
10. REFER TO HISTORICAL STREET LIGHT POLE DETAILS, METERED UTILITY PEDISTAL DETAIL AND THE BOISE CITY
11. REFER TO SPECIFICATIONS AND STANDARDS ON SHEET EG-2 THROUGH EG-7.

# CIRCUITING SYMBOLS

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THE LAND GROUP

PROFESSIONAL ENGINEER REGISTERED 12731 5/3/2024 STATE OF IDAHO NICK SCHAFER

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

3rd Street - S Broadway Ave.
Boise, ID

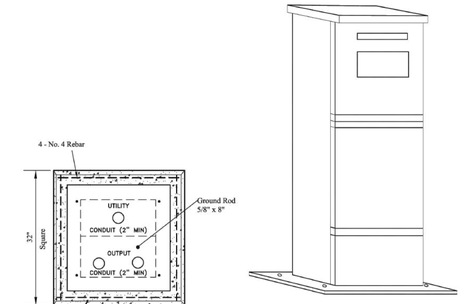
Revisions
1.

Project No.: 122112
Date of Issuance: 05.03.2024
Project Milestone: Permit Set

**ELECTRICAL COVER SHEET**

**EG-1**

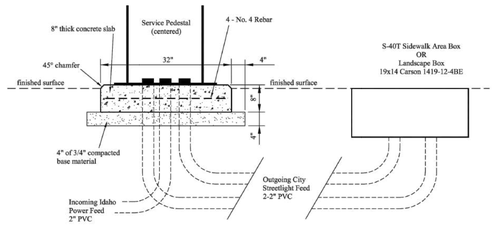
File Location: p:\files\2024\24026\working mep\24026_eg1 cover.dwg
Last Modified By: nschafer
Date Plotted:Friday, May 3 2024 at 07:33 AM




TOP VIEW



TYPICAL SERVICE PEDESTAL

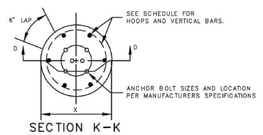



SECTION VIEW

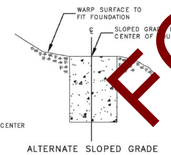
| | | | |
|---|---|---|---|
| Drawn By: W.W.L.<br>Checked By: T.M.<br>Date: REV 6/25/2021 | PUBLIC WORKS DEPARTMENT<br>150 N. CAPITOL BLVD.<br>BOISE, IDAHO 83702<br>(208) 384-3900 | STREET LIGHT SERVICE PEDESTAL BASE | STANDARD DRAWING NO.<br>BC SD-1127 |

POLE FOUNDATION SCHEDULE

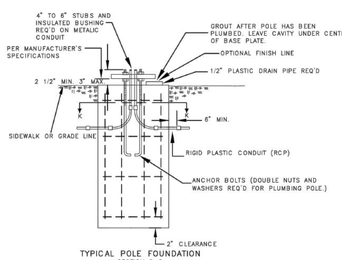
| POLE TYPE | WT. HT. | MASTARM LENTH | FOUNDATION TYPE | X | Y | HOOPS NO. | HOOPS SIZE | HOOPS LIN. FT. | DIAMETER | VERTICAL RODS NO. | VERTICAL RODS SIZE | VERTICAL RODS LIN. FT. | C.U. YDS. CONCRETE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PEDESTRIAN SIGNAL POLE | 10' | – | A | 2'-0" | 5'-0" | 4 | #4 | 23'-0" | – | 6 | #4 | 28'-0" | .6 |
| LIGHT POLE | 25'-30' | ALL | A | 2'-0" | 5'-0" | 4 | #4 | 23'-0" | 20" | 6 | #4 | 28'-0" | .6 |
| LIGHT POLE | 35' | ALL | B | 2'-6" | 7'-0" | 4 | #4 | 29'-4" | 26" | 6 | #6 | 40'-0" | 1.3 |
| LIGHT POLE | 40'-50' | ALL | C | 3'-0" | 8'-0" | 5 | #4 | 44'-2" | 32" | 8 | #6 | 61'-4" | 2.1 |
| SIGNAL POLE | – | 20' – 45' | D | 3'-0" | 9'-0" | 5 | #4 | 44'-2" | – | 8 | #6 | 69'-4" | 2.4 |
| PED. PUSHBUTTON POLE | 4'-0" | – | E | 1'-6" | 2'-6" | – | – | – | – | – | – | – | .2 |
| DUAL MASTARM SIGNAL POLE | – | ALL | F | 3'-0" | 12'-0" | 8 | #5 | 70'-8" | – | 12 | #6 | 140' | 3.1 |
| SIGNAL POLE | – | 50' – 55' | F | 3'-0" | 12'-0" | 8 | #5 | 70'-8" | – | 12 | #6 | 140' | 3.1 |
| SIGNAL POLE | – | 60' – 65' | G | 3'-6" | 14'-0" | 9 | #5 | 78'-10" | – | 12 | #6 | 168' | 3.7 |




SECTION K–K




ALTERNATE SLOPED GRADE SECTION




TYPICAL POLE FOUNDATION
SECTION D–D

NOTES:
A. LOCATE FOUNDATIONS AS INDICATED ON THE PROJECT PLAN SHEETS.
B. ALL CONDUIT ELBOWS USED IN CONCRETE BASES SHALL BE RPC.
C. STEEL CONDUIT SHALL BE USED TO EXTEND ELBOWS BEYOND FOUNDATION.
D. SPARE STUBOUTS SHALL BE TERMINATED WITH A STEEL COUPLING AND PLASTIC PUSH PLUG AT BOTH ENDS
E. DO NOT GROUT IF BREAKAWAY DEVICES ARE USED.
F. SEE GROUNDING DETAIL DRAWING SD–1121

1 NOV 2021

| | | |
|---|---|---|
| IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION | STANDARD SIGNAL POLE FOUNDATION DETAIL | STANDARD DRAWING NO.<br>BC SD–1109 |



www.cityofboise.org
tmarshall@cityofboise.org
P: 208-608-7526
F: 208-384-3905

## JUNCTION BOXES
**Effective May 18, 2017**

Note: Junction boxes used at the service connections to Idaho Power must not have a metal lid.

**SIDEWALK/ROADWAY AREA JUNCTION BOXES WITH STEEL LIDS**

| Manufacturer | Use Locations | Part Number |
|---|---|---|
| Idaho PrecastConcrete | Roadway, Driveway | S-40T ADA |
| | Sidewalk | S-40T |

**SIDEWALK AREA JUNCTION BOXES POLYMER CONCRETE MATERIAL**
(May be used for service connections to Idaho Power)

| Manufacturer | Use Locations | Part Number |
|---|---|---|
| Carson Industries | Sidewalks | Type H1324-18 |
| Hubbell Pwr System | Sidewalks | PG1324HA00 |

**LANDSCAPE/GRASS AREA JUNCTION BOXES COMPOSITE MATERIAL**
(May be used for service connections to Idaho Power)

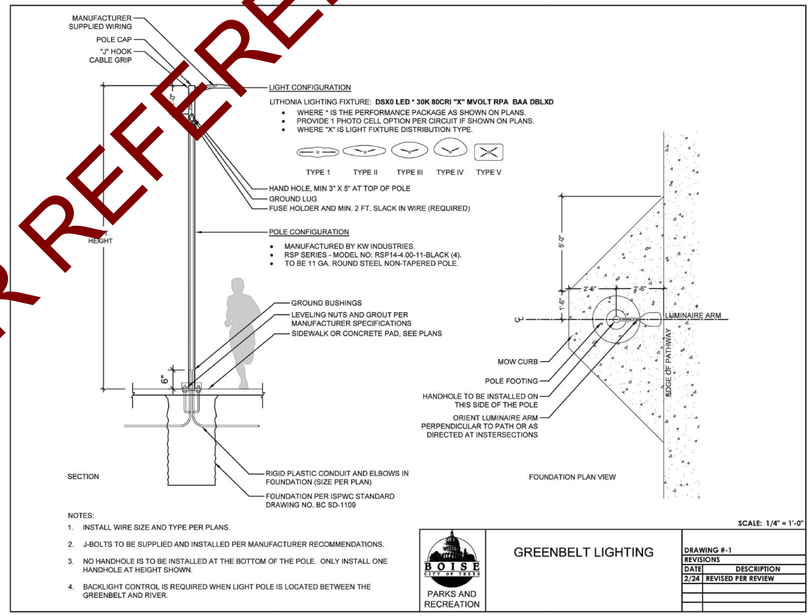
| Manufacturer | Use Locations | Part Number |
|---|---|---|
| Carson Industries | Landscape Area (9" Round) | Carson 910-10-4BE |
| | Landscape Area (19" x 14") | Carson 1419-12-4BE |

## WIRE CONNECTORS FOR UNDERGROUND


| | Part Number |
|---|---|
| 1 In / 1 Out | NSI ISPBS2/0 |
| 2 Port | NSI ISPB2/0-2 |
| 3 Port | NSI ISPB2/0-3 |
| 4 Port | NSI ISPB2/0-4 |
| 1 In / 2 out | NSI ISPB02/0 |

HOMAC USL 36






NOTES:
1. INSTALL WIRE SIZE AND TYPE PER PLANS.
2. J-BOLTS TO BE SUPPLIED AND INSTALLED PER MANUFACTURER RECOMMENDATIONS.
3. NO HANDHOLE IS TO BE INSTALLED AT THE BOTTOM OF THE POLE. ONLY INSTALL ONE HANDHOLE AT HEIGHT SHOWN.
4. BACKLIGHT CONTROL IS REQUIRED WHEN LIGHT POLE IS LOCATED BETWEEN THE GREENBELT AND RIVER.

SCALE: 1/4" = 1'-0"

| | | |
|---|---|---|
| BOISE PARKS AND RECREATION | GREENBELT LIGHTING | DRAWING #-1<br>REVISIONS<br>DATE: 2/24 DESCRIPTION: REVISED PER REVIEW |

**LIGHTING FIXTURE SCHEDULE (24-026)**

| TYPE | DESCRIPTION | MTG. | LAMPS | WATTS | MFG. & CATALOG NUMBER | OR EQUAL BY | NOTES |
|---|---|---|---|---|---|---|---|
| PL3 | BOISE PARKS AND REC GREEN BELT LIGHT<br>STANDARD<br>15' POLE | 16'<br>POLE | LED<br>4736 LUMENS<br>30K | 33W | LITHONIA<br>DSX0-LED-P1-30K-80CRI-T2M-MVOLT-RPA-PIR-BAA-DBLXD<br>POLE: KW RSP15-4.00-11-BLACK | | |
| SL1 | STRIP LIGHTING ALONG RETAINING WALL<br>LED LIGHTING, AL EXTRUSION<br>Q-VAULT FOR EACH DRIVER | RECESSED | LED<br>300LM/FT<br>40K | 3W/FT | QTRAN<br>SW24/3.0-WET-40-300/96-BW-BW-N/A-CL2-XX<br>EXTRUSION: ARKA-ST-SST-DF-S1-XX DRIVER: QSET-100-240-24<br>VAULT: QVAULT-5-BZ-CR | | |

LIGHTING FIXTURE SCHEDULE NOTES:

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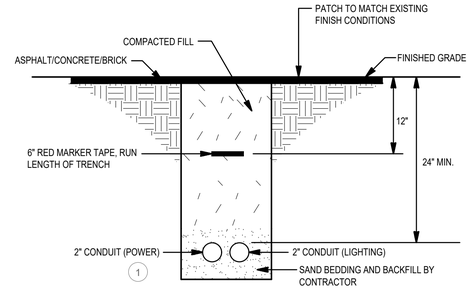


DETAIL NOTES:

1. IF MULTIPLE CONDUITS SHARE TRENCH, PROVIDE SPACING BETWEEN CONDUITS. PROVIDE ZIP TIES, AND TIE ALL CONDUITS TOGETHER TO ENSURE STABILITY.

1 SITE TRENCHING DETAIL
NTS

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

3rd Street - S Broadway Ave.
Boise, ID

Revisions

| Project No.: | 122112 |
|---|---|
| Date of Issuance: | 05.03.2024 |
| Project Milestone: | Permit Set |

**ELECTRICAL SPECIFICATIONS**

**EG-2**

SECTION 16010 - ELECTRICAL GENERAL PROVISIONS

PART 1 - GENERAL

1.1 CONDITIONS AND REQUIREMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

B. Provisions of this Section shall apply to all Sections of Division 16.

1.2 SCOPE OF WORK

A. Furnish and install all materials and equipment and provide all labor required and necessary to complete the work shown on the drawings and/or specified in all Sections of Division 16 and all other work and miscellaneous items, not specifically mentioned, but reasonably inferred for a complete installation, including all accessories required for testing the system. It is the intent of the drawings and specifications that all systems be complete and ready for operation.

1.3 CODE COMPLIANCE

A. All work and materials shall comply with the latest rules, codes and regulations, including, but not limited to, the following:

1.Occupational Safety and Health Act Standards (OSHA)

2.NFPA #70 - National Electric Code (NEC)

3.ADA Standards - Americans with Disabilities Act

4.ANSI/IEEE C-2 - National Electrical Safety Code

5.NECA - Standard of Installation

6.International Building Code

7.International Fire Code

8.International Energy Conservation Code

9.NFPA #72 - Fire Code

10.NFPA #101 - Life Safety Code

11.All other applicable Federal, State and local laws and regulations.

B. Work to be executed and inspected in accordance with local codes and ordinances. Permits, fees or charges for inspection or other services shall be paid for by the contractor. Local codes and ordinances are to be considered as minimum requirements and must be properly executed without expense to the owner; but do not relieve the contractor from work shown that exceeds minimum requirements.

1.4 CONDITIONS AT SITE

A. Visit to site is recommended of all bidders prior to submission of bid. All will be held to have familiarized themselves with all discernible conditions and no extra payment will be allowed for work required because of these conditions, whether specifically mentioned or not.

B. Lines of other service that are damaged as a result of this work shall be promptly repaired at no expense to the owner to the complete satisfaction of the owner.

1.5 DRAWINGS AND SPECIFICATIONS

A. All drawings and all specifications shall be considered as a whole and work of this Division shown anywhere therein shall be furnished under this Division.

B. Drawings are diagrammatic and indicate the general arrangement of equipment and wiring. Most direct routing of conduits and wiring is not assured. Exact requirements shall be governed by architectural, structural and mechanical conditions of the job. Consult all other drawings in preparation of the bid. Extra lengths of wiring or addition of pull or junction boxes, etc., necessitated by such conditions shall be included in the bid. Check all information and report any apparent discrepancies before submitting bid.

C. Change to location, type, function, brand name, finish, etc., shall not be made without permission of engineer.

D. Some equipment is specifically designated on the drawings. It is not the intent to sole source any item unless explicitly stated. Items have been specified based upon design requirements. All bidders are encouraged to submit products for approval. Prior approval must be obtained as required by these contract documents. Bids submitted with non-approved items will be considered invalid and bidders will be held to provide approved materials at no additional cost to the owner. Submittals received by the engineer after award of contract on non-approved equipment will not be reviewed nor will they be returned.

E. Where conflicting direction is given within the specifications and drawings, the contractor shall include the most expensive option in the bid.

1.6 SAFETY AND INDEMNITY

A. Safety: The contractor shall be solely and completely responsible for conditions of the job site, including safety of all persons and property during performance of the work. This requirement will apply continuously and not be limited to normal working hours.

B. No act, service, drawing review or construction review by the owner is intended to include review of the adequacy of the contractor's safety measures in, on, or near the construction site.

1.7 CONSTRUCTION OBSERVATION BY THE ENGINEER

A. Prior to covering: any major portion of the materials installed under this section, notify the engineer so that an observation can be made. Notification shall be made at least three (3) working days in advance of the date the items will be covered.

1.8 PROJECT COMPLETION

A. Upon completion of all work and operational checks on all systems, the contractor shall request that a final construction observation be performed.

B. The engineer shall compile a punch list of items to be completed or corrected. The contractor shall notify the engineer upon completion of the items.

1.9 GUARANTEE

A. All work under this section shall be guaranteed in writing to be free of defective work, materials, or parts for a period of one (1) year, except lamps which shall be guaranteed for ninety (90) days, after final acceptance of the work under this contract or the period indicated under the Division 1 specifications whichever is longer.

B. Repair, revision or replacement of any and all defects, failure or inoperativeness shall be done by the contractor at no cost to the owner.

PART 2 - PRODUCTS

2.1 MATERIAL APPROVAL

A. The design, manufacturer and testing of electrical equipment and materials shall conform to or exceed latest applicable NEMA, IEEE or ANSI standards.

B. All materials must be new, unless noted otherwise, and UL listed. Materials that are not covered by UL testing standards shall be tested and approved by an independent testing laboratory or a governmental agency, which laboratory shall be acceptable to the owner and code enforcing agency.

2.2 SHOP DRAWINGS AND MATERIALS LIST

A. Submit shop drawings and materials lists as specified for review. Seven (7) copies, unless noted otherwise under Division 1, of submittals shall be presented to the architect/engineer.

2.3 OPERATION AND MAINTENANCE MANUALS

A. Submit four (4) sets, unless noted otherwise under Division 1, of the Operation and Maintenance Manuals of all Division 16 equipment to architect/engineer.

2.4 RECORD DRAWINGS

A. Submit record drawings to owner.

2.5 PRODUCT DELIVERY, STORAGE AND HANDLING

A. Deliver, store, and handle materials in a manner to prevent damage.

B. Protect equipment from weather and dampness.

PART 3 - EXECUTION

3.1 WORKMANSHIP AND CONTRACTOR'S QUALIFICATIONS

A. Only quality workmanship will be accepted. Haphazard or poor installation practice will be cause for rejection of work.

B. Provide experienced foreman with a minimum of three years experience working on this type of building placed in charge of this work at all times.

3.2 COORDINATION

A. Coordinate work with other trades to avoid conflict and to provide correct rough-in and connection for equipment furnished under trades that require electrical connections. Inform contractors of other trades of the required access to and clearances around electrical equipment to maintain serviceability and code compliance.

B. Verify equipment dimensions and requirements with provisions specified under this Section. Check actual job conditions before fabricating work. Report necessary changes in time to prevent needless work. Changes or additions subject to additional compensation, which are made without the authorization of the owner, shall be at contractor's risk and expense.

C. Contractors installing lighting will be required to contact Boise City Public Works Inspection Section **48 hours** prior to the start of construction to receive a set of approved construction plans and to schedule the preliminary inspection prior to placing concrete or coving conduits. In addition, the electrical contractor is required to call **24 hours** in advance to schedule a final inspection by the Boise City Public Works Inspection Section after all work has been completed. Electrical Contractor must be present at final inspection. (To schedule Public Works inspection, phone 388-4725.

D. Developer or electrical contractor is required upon completion of all final inspections to notify Boise City Public Works Street Lighting Section (388-4719) when ready for power energizing to newly installed street lights. Provide the contractor's name, Subdivision name.

E. For design information or questions, contact Mike Hedge (208) 388-4719. All street lights shall be installed per NEC, ACHD codes for working within the public right-of-way, and Boise City Public Works street light standards.

3.3 MANUFACTURER'S INSTRUCTIONS

A. All installations are to be made in accordance with manufacturer's recommendations. A copy of such recommendations shall at all times be kept in the job superintendent's office and shall be available to the engineer.

B. Follow manufacturer's instructions where they cover points not specifically indicated on drawings and specifications. If they are in conflict with the drawings and specifications obtain clarification from the engineer before starting work.

3.4 QUALITY ASSURANCE

A. The contractor shall insure that all workmanship, all materials employed, all required equipment and the manner and method of installation conforms to accepted construction and engineering practices, and that each piece of equipment is in satisfactory working condition to satisfactorily perform its functional operation.

B. Provide quality assurance tests and operational check on all components of the electrical distribution system, all lighting fixtures, and special systems.

3.5 CUTTING AND PATCHING

A. Perform all cutting and fittings required for work of this section in rough construction of the building.

B. All patching of finished construction of building shall be performed under the sections of specifications covering these materials.

C. No joists, beams, girders or columns shall be cut by any contractor without obtaining written permission from the architect/engineer.

END OF SECTION 16010

SECTION 16060 - GROUNDING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including Fixed Price Construction Contract and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes grounding of electrical systems and equipment. Grounding requirements specified in this Section may be supplemented by special requirements of systems described in other Sections.

1.3 SYSTEM DESCRIPTION

A. Ground the electrical service system neutral at service entrance equipment to concrete encased electrode, metal underground water pipe, and effectively grounded metal frame of building.

B. Ground each separately-derived system neutral to nearest effectively grounded metal structural frame of building or point of service entrance ground.

C. Bond together system neutrals, service equipment enclosures, exposed non-current carrying metal parts of electrical equipment, metal raceway systems, grounding conductors in raceways and cables, receptacle ground connectors, and plumbing systems.

PART 2 - PRODUCTS

2.1 GROUNDING CONDUCTORS

A. For insulated conductors, comply with Section 16120 - Conductors and Cables.

B. Material: Copper.

C. Equipment Grounding Conductors: Insulated with green-colored insulation. Where green insulation is not available, on larger sizes, black insulation shall be used and suitably identified with green tape at each junction box or device enclosure.

D. Underground Conductors: Bare, tinned, stranded, unless otherwise indicated.

E. Bare Copper Conductors: Medium hard drawn copper conductor, stranded, sized as shown on the drawings.

F. Hardware: Bolts, nuts and washers shall be bronze, cadmium plated steel or other non-corrosive material, approved for the purpose.

G. Grounding Bus: Bare, annealed copper bars of rectangular cross section, with insulators.

2.2 CONNECTOR PRODUCTS

A. Comply with IEEE 837 and UL 467; listed for use for specific types, sizes, and combinations of conductors and connected items.

B. Bolted Connectors: Bolted-pressure-type connectors, or compression type.

C. Welded Connectors: Exothermic-welded type, in kit form, and selected per manufacturer's written instructions.

D. Below grade compression fittings: Thomas & Betts, Series 52000, 53000, and 54000 or equivalent.

E. Use connector and sealant approved for purpose on all below grade clamp or compression type connections.

2.3 GROUNDING ELECTRODES

A. Ground Rods: Copper-clad steel, 5/8 inch diameter, minimum length 8 feet.

PART 3 - EXECUTION

3.1 APPLICATION

A. Use only copper conductors for both insulated and bare grounding conductors in direct contact with earth, concrete, masonry, crushed stone, and similar materials.

B. In raceways, use insulated equipment grounding conductors.

C. Exothermic-Welded Connections: Use for connections to structural steel and for underground connections.

D. Equipment Grounding Conductor Terminations: Use bolted pressure clamps.

F. Underground Grounding Conductors: Use copper conductor, No. 2/0 AWG minimum. Bury at least 24 inches below grade.

3.2 EQUIPMENT GROUNDING CONDUCTORS

A. Comply with NEC Article 250, for types, sizes, and quantities of equipment grounding conductors, unless specific types, larger sizes, or more conductors than required by NEC are indicated.

B. Install equipment grounding conductors in all feeders and circuits.

C. Install insulated equipment grounding conductor with circuit conductors for the following items, in addition to those required by NEC:

1.Feeders and branch circuits.

2.Lighting circuits.

3.Receptacle circuits.

D. Nonmetallic Raceways: Install an equipment grounding conductor in nonmetallic raceways bonded to outlet or equipment, sized per Section 250 of the NEC.

H. Provide green insulated ground conductor to exterior post light standards.

3.3INSTALLATION

A. Ground Rods: Where indicated, install at least three rods spaced at least one-rod length from each other and located at least the same distance from other grounding electrodes.

1.Drive ground rods until tops are 2 inches below finished floor or final grade, unless otherwise indicated.

2.Interconnect ground rods with grounding electrode conductors. Use exothermic welds, unless otherwise indicated. Make connections without exposing steel or damaging copper coating.

B. Grounding Conductors: Route along shortest and straightest paths possible, unless otherwise indicated. Avoid obstructing access or placing conductors where they may be subjected to strain, impact, or damage.

C. Bonding Straps and Jumpers: Install so vibration by equipment mounted on vibration isolation hangers and supports is not transmitted to rigidly mounted equipment. Use exothermic-welded connectors for outdoor locations, unless a disconnect-type connection is required; then, use a bolted clamp. Bond straps directly to the basic structure taking care not to penetrate any adjacent parts. Install straps only in locations accessible for maintenance.

D. Metal Water Service Pipe: Provide insulated copper grounding conductors, in conduit, from building's main service equipment, or grounding bus, to main metal water service entrances to building. Connect grounding conductors to main metal water service pipes by grounding clamp connectors. Where a dielectric main water fitting is installed, connect grounding conductor to street side of fitting. Bond metal grounding conductor conduit or sleeve to conductor at each end.

3.4 CONNECTIONS

A. General: Make connections so galvanic action or electrolysis possibility is minimized. Select connectors, connection hardware, conductors, and connection methods so metals in direct contact will be galvanically compatible.

1.Use electroplated or hot-tin-coated materials to ensure high conductivity and to make contact points closer to order of galvanic series.

2.Make connections with clean, bare metal at points of contact.

3.Make aluminum-to-steel connections with stainless-steel separators and mechanical clamps.

4.Make aluminum-to-galvanized steel connections with tin-plated copper jumpers and mechanical clamps.

5.Coat and seal connections having dissimilar metals with inert material to prevent future penetration of moisture to contact surfaces.

B. Exothermic-Welded Connections: Comply with manufacturer's written instructions. Welds that are puffed up or that show convex surfaces indicating improper cleaning are not acceptable.

C. Equipment Grounding Conductor Terminations: For No. 8 AWG and larger, use pressure-type grounding lugs. No. 10 AWG and smaller grounding conductors may be terminated with winged pressure-type connectors.

D. Noncontact Metal Raceway Terminations: If metallic raceways terminate at metal housings without mechanical and electrical connection to housing, terminate each conduit with a grounding bushing. Connect grounding bushings with a bare grounding conductor to grounding bus or terminal in housing. Bond electrically noncontinuous conduits at entrances and exits with grounding bushings and bare grounding conductors, unless otherwise indicated.

E. Tighten screws and bolts for grounding and bonding connectors and terminals according to manufacturer's published torque-tightening values.

F. Compression-Type Connections: Use hydraulic compression tools to provide correct circumferential pressure for compression connectors. Use tools and dies recommended by connector manufacturer. Provide embossing die code or other standard method to make a visible indication that a connector has been adequately compressed on grounding conductor.

G. Moisture Protection: If insulated grounding conductors are connected to ground rods or grounding buses, insulate entire area of connection and seal against moisture penetration of insulation and cable.

3.5 SYSTEM NEUTRAL GROUND

A. Ground the neutral conductor of each transformer or generator to limit the maximum potential above ground due to normal operating voltage and limit the voltage level due to abnormal conditions.

B. Ground generators or transformers with secondary voltage 600 volt or less as follows:

1.3 phase, 4 wire Wye connected: ground neutral point

C. For transformers 75 kVA or smaller with primary voltage 480 volt or less the primary equipment ground conductor may be used for grounding the secondary neutral provided it is adequately sized in accordance with NEC system ground conductor size.

3.6 EQUIPMENT GROUND

A. Ground non-current carrying metal parts of electrical equipment enclosures, frames, conductor raceways or cable trays to provide a low impedance path for line-to-ground fault current. Install bond all non-current carrying metal parts together. Install a grounding conductor in each raceway system. Equipment grounding conductor shall be electrically and mechanically continuous from the electrical circuit source to the equipment to be grounded. Size grounding conductors per NEC 250 unless otherwise shown on the drawings.

B. Install metal raceway couplings, fittings, and terminations secure and tight to ensure good grounding continuity. Provide grounding conductor per NEC through all raceway and conduit systems.

C. Lighting fixtures shall be securely connected to equipment grounding conductors. Outdoor lighting standards shall have a factory installed ground lug for terminating the grounding conductor.

D. Motors shall be connected to equipment ground conductors with a bolted solderless lug connection on the motor frame.

3.7 FIELD QUALITY CONTROL

A. Inspect grounding and bonding system conductors and connections for tightness and proper installation.

B. Test ground system per Section 16040.

END OF SECTION 16060

SECTION 16113 - UNDER SLAB AND UNDERGROUND ELECTRICAL WORK

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes under slab conduits and related electrical work.

PART 2 - PRODUCTS

2.1 CONDUIT

A. All shall be provided with fittings and accessories approved for the purpose. Refer to Section 16130.

2.2 BARE COPPER GROUND CONDUCTOR

A. Medium hard drawn copper conductor, # 4/0 AWG stranded (unless otherwise noted).

PART 3 - EXECUTION

3.1 GENERAL

A. Electrical system layouts indicated on the drawings are generally diagrammatic, but shall be followed as closely as actual construction and work of other trades will permit.

3.2 CONDUIT INSTALLATION

A. Plastic conduit shall be installed on 2 inch sand base and covered by 2 inch sand back fill. Multiple runs shall maintain 3 inch minimum separation between runs. Plastic conduit shall not be installed in rock base.

B. Underground conduit entering building shall be provided with one 10 foot section of rigid steel conduit at point of penetration of foundation, footing or basement wall, with approximately equal lengths inside and outside building line. Ream the smaller inside diameter conduit smooth to prevent conductor damage.

C. Stagger conduit couplings by a minimum of 12 inches. All risers to grade shall be rigid steel.

D. All rigid steel conduits shall be encased in 3 inch minimum concrete envelope.

E. After completion of concrete encased duct bank, a 12 inch mandrel, ¼ inch less in diameter than a conduit, shall be pulled through each conduit.

F. Install 1/8 inch diameter pull line in each underground conduit.

G. Burial depths of conduits shall comply with the NEC (minimum).

H. Provide underground type plastic line markers: permanent, brightly colored, continuously printed plastic tape, intended for direct burial service, not less than 6 inches wide, reading "Caution Buried Electrical Line." Install continuous line markers located directly over buried line at 6 inches above top of conduit, during back filling operation.

3.3 CONCRETE DUCT BANK CONSTRUCTION

A. Provide plastic spacers at maximum 5'-0" centers to maintain 3 inch spacing between conduits.

B. Drive two reinforcing bars to anchor the conduits at 10'-0" on centers to prevent floating during concrete pour.

C. Provide one warning tape (see 3.2.H. above) for each 12 inch width of concrete duct bank.

END OF SECTION 16113

SECTION 16140 - WIRING DEVICES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

W. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes receptacles, switches, and finish plates.

1.3 DEFINITIONS

A. GFCI: Ground-fault circuit interrupter.

1.4 SUBMITTALS

A. Submit shop drawings and product data.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers:

1.Wiring Devices:

a. Bryant Electric, Inc.

b. GE Company; GE Wiring Devices.

c. Hubbell, Inc.; Wiring Devices Div.

d. Leviton Manufacturing Co., Inc.

e. Pass & Seymour/Legrand; Wiring Devices Div.

f. Cooper Wiring Devices.

g. Or approved equal.

2.2 RECEPTACLES

A. GFCI Receptacles: Duplex convenience receptacle with integral ground fault current interrupter. White color.

2.3 WALL PLATES

A. Size and combination types match corresponding wiring devices.

1.Weatherproof cover plate: While in use, gasketed, cast metal, hinged device covers.

2.Plate-Securing Screws: Metal with head color to match plate finish.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install devices and assemblies plumb and secure.

B. Install wall plates when painting is complete.

E. Arrangement of Devices: Unless otherwise indicated, mount flush, vertically, with height as indicated.

F. Protect devices and assemblies during painting.

G. Install cover plates on switch, receptacle, and blank outlets.

3.2 IDENTIFICATION

A. Receptacles: Identify pedestal and circuit number from which served. Use machine-printed, pressure-sensitive, abrasion-resistant label tape on the outside of the face plate for receptacles and on the inside of the face plate for switches; utilize durable wire markers or tags within all outlet boxes. Labels shall be Brother ½" TZ tape, black ink on clear, extra-strength adhesive tape, with size 18 text or engineer approved equal. Use matching label printer.

3.2 CONNECTIONS

A. Connect wiring device grounding terminal to outlet box with bonding jumper.

B. Connect wiring device grounding terminal to branch-circuit equipment grounding conductor.

C. Tighten electrical connectors and terminals according to manufacturer's published torque-tightening values.

3.4 FIELD QUALITY CONTROL

A. Test wiring devices for proper polarity and ground continuity. Check each device to verify operation.

B. Test GFCI operation according to manufacturer's written instructions.

C. Replace damaged or defective components.

3.5 CLEANING

A. Internally clean devices, device outlet boxes, and enclosures. Replace stained or improperly painted wall plates or devices.

END OF SECTION 16140

SECTION 16521 - STREET LIGHTING

PART 1 - GENERAL

1.1 SECTION INCLUDES:

A. Materials and installation of street lights.

1.2 RELATED SECTIONS

A. Section 301 - Trench Excavation.

B. Section 305 - Pipe Bedding.

C. Section 306 - Trench Backfill.

D. Section 307 - Street Cuts and Surface Repair.

E. Section 308 - Boring and Jacking.

F. Section 703 - Cast-in-Place Concrete.

1.3 REFERENCES

A. National Electrical Code (NEC)

B. Idaho State Electrical Code.

C. City and Local Agency Codes.

1.4 SUBMITTALS

A. Submit shop drawings and manufacturers' cut sheets for materials to be installed under this Section.

B. Submit manufacturer's certification that materials meet or exceed specified requirements.

C. Submit manufacturers' installation instructions and maintain copy at the jobsite.

D. Submit warranty for all supplied materials and workmanship for a period of one year from final acceptance. The warranty must state that the products supplied were free of defects and suitable for the uses set forth in the Specifications.

1.5 PROJECT RECORD DOCUMENTS

A. Accurately record locations of existing street lights and other encountered utilities in relation to existing permanent benchmarks.

B. Provide copy of record documents to owner prior to issuance of substantial completion. Show number and size of components installed, including field wiring diagrams.

1.6 DELIVERY, STORAGE AND HANDLING

A. Deliver, store and handle materials in accordance with the manufacturer's recommendations, to prevent shock, damage or excessive exposure to sunlight and weather.

1.7 GENERAL RESTRICTIONS

A. Contact Local Utility Company for power location and installation requirements. All connections to a utility company facility shall be done by the utility.

B. No privately owned electrical systems, sprinkler irrigation systems, outlets, or area lighting will be allowed to connect to any public street light systems.

1.8 INSPECTIONS

A. Street light installation inspections will be required for the concrete base reinforcing for poles with concrete basis.

B. Visual confirmation of the backfill compaction around the pole base.

C. The conduit trench installation shall be inspected for the depth of trench and verification of the bedding suitability and placement.

D. The final inspection shall be to verify the pole is installed plumb and that the wiring in the pole and junction boxes conform to these specifications.

PART 2 - MATERIALS

2.1 GENERAL

A. All materials to have Underwriter Laboratories, Inc. seal of approval or meet the requirements of the National Electrical Manufacturer's Association, as appropriate.

B. Conform with the National Electrical Code and meet all local codes and requirements of the connecting utility.

2.2 JUNCTION BOXES

A. Junction boxes in driveways or roadways to be concrete with traffic rated lid.

B. Junction boxes in sidewalks and similar areas are to be concrete with steel lid.

C. Junction boxes in landscaped areas may be plastic or fiberglass.

D. All junction boxes to have a means to secure lid (i.e. bolt).

E. See Attachment A for approved products

2.3 FUSE HOLDERS

A. Insulated fuse holders (installed at the base of each metal or fiberglass pole), one per each 'hot' line.

1.Fuses for Boise City installation shall be fast acting - 100k RMS Amps-600VAC.

2.Fuse Holder and Insulating Boot: In-line, waterproof, SEC Model 1791-DF or SEC Model 1791-SF or approved substitution.

B. Insulated fuse holders (in fused junction box), one per each 'hot' line.

1.Fuses for Boise City installation shall be fast acting - 100k RMS Amps-600VAC.

2.Fuse Holder and Insulating Boot: In-line, waterproof, SEC Model 1791-DF or SEC Model 1791-SF or approved substitution.

2.4 CONDUCTOR

A. Underground wire.

1.Minimum standard for fuse system to power source: No.6 AWG copper, Type THWN - 600 volt, insulated.

2.Wires to be color-coated per NEC Code. Phase tape not acceptable.

B. Overhead Wire.

1.General: No. 6 AWG duplex with an ACSR neutral messenger.

2.Overhead installation only: Aluminum wire equivalent to copper wire will be allowed.

C. Pole wiring.

1.Between power source and the over-current protection source (located in the pole). Minimum No. 6 AWG THWN insulated copper wire.

2.Between over-current protection fuse and luminaire: Minimum No. 10 AWG THWN insulated copper wire.

2.5 CONDUIT

A. Above Ground

1.Galvanized metal conduit: UL approved

2.Schedule 40 PVC conduit: UL approved, 1 inch minimum diameter (ground level to disconnect box), ¾ inch minimum diameter (disconnect box to luminaire).

B. Underground Conduit

1.Schedule 40 PVC conduit: UL approved, 1 inch minimum diameter.

2.Standard manufactured bends of no less than 45 degrees.

3.Locating wire only required for empty (spare) conduit.

2.6 PHOTOCELLS

A. Photoelectric (PE) controls to be twist lock type base with a label to mark installed and removed dates.

B. Outdoor Lighting Photoelectric Controls (OLPC) to be of a solid state crystal sensing type with inverted turn-on and turn-off design. Designed to turn-on at 3.0 (FC) 32.3 lux ± 20%, turn-off value will be 60% of the turn-on value (1.8 (FC) 19.4 lux± 20%). Designed to operate in 105 to 285 voltage range. Output control relay to have a 45 second time delay to prevent false turn-off from momentary brightness. Output relay rated at 1800 VA, 15 amps for all HID lamps with a failsafe (fail-on) design. OLPC to have a built-in MOV for lighting and transient/surge protection. OLPC to have secondary zenier diodes and transient filters. Circuit board to be properly coated to prevent corrosion. OLPC cover to be made of blue (ANSI color coding of 105-285 voltage range) hi-impact Noryl plastic, UL approved break resistant and flame retarding material. OLPC window to be acrylic with proper UV stabilizers to prevent discoloration. OLPC to conform to all IES street lighting standards and the ANSI C 136. 10 specification for twist lock photo-control devices.

2.7 DISCONNECT BOXES (as required by governing agency)

A. Boxes shall conform to National Electrical Code (NEC), Article 370-15.

B. Overload protective devices allowed under NEC, Article 240.

C. Grounded as allowed in NEC Article 250-81 through Article 250-155.

D. Disconnect boxes are only required for overhead wiring.

2.12 HISTORICAL POLES

A. Historical style metal poles shall be true copies, approved by Boise City, Department of Public Works, of the original Old Boise Historical Pole. The new historical poles shall have the same surface texture and have the same Dark Green or Black Green color finish that matches the existing Historical poles in the Historical Lighting District. Metal poles shall have a powder coat finish in accordance with ASTM B-117.

B. Historical poles for the City of Boise shall be cast aluminum, in style and texture of the original Old Boise Historical Pole. Refer to Attachment A on sheet EG-3, and details on sheet E-9.

C. Color: To match existing poles, approved color mix for Valspar Anti-Rust gloss, oil enamel paint, base #4, #49437: mixture formula; 114-1Y29.44, 101-4Y42.9, 103-4Y14.55. Color designate for Antique is DGRG, for Continental it is RAL 6009.

D. Additional pole requirement for historic lights installed within the Capitol City Development Corporation (CCDC) shall be:

1.Poles shall be supplied with an electrical outlet as shown on details on sheet E-9.

2.Poles shall be supplied with a manufacturer's adaptor for installation of the approved banner arms.

2.14 CONCRETE POLE BASES

A. Concrete to be Class 3000 psi meeting the requirements of Section 703 - Cast-in-Place Concrete.

B. Steel Reinforcement to be deformed bar conforming to Section 702 - Concrete Reinforcement.

C. Pole anchors to be conform to requirements stipulated by pole manufacturer.

D. Base dimensions and construction shall conform to Standard Drawings SD-1109.

2.15 PREFABRICATED BASES

A. Prefabricated bases for historical poles will be allowed with approval of the local agency.

2.16 SERVICE PEDESTAL

A. Constructed of 12 gage zinc coated steel with hood and covers of 14 gauge zinc coated steel.

B. NEMA Type 3R rainproof enclosure with padlock hasp.

C. White powder coat finish in accordance with ASTM B-1117 or as directed by agency.

D. Complies with Caltrans Specification ES-2E.

E. 12 circuit copper bussed interior.

F. Plug-in breaker with each breaker having a minimum 30 amp, 2 pole rating.

G. Vandal-resistant enclosure with side-hinged door and dead front.

H. Factory wiring to be 600 volt rated copper with pressure type terminal required for (No. 8 through No. 2 AWG) wire.

I. Service cabinet rated 120/240 volt in either 100 amp or 200 amp main breaker.

J. Equipped with a test switch to override photo electric control.

K. Cabinet supplied with a pad mount base available for concrete foundation installation.

L. Cabinet supplied with a meter base as recommended by the manufacturer.

M. See attachment A for approved products.

2.17 LIGHT FIXTURES

A. Fixture type and wattage as required by Boise City Public Works. See Attachment A on sheet EG-3 for approved products.

B. Medium cutoff reflector.

C. Fixtures to have I.E.S. full cutoff distribution reflector.

D. Acrylic or glass lens with internal refractor providing an E.I.S. Type III distribution.

PART 3 - WORKMANSHIP

3.1 EXAMINATIONS

A. Verify pole excavation location and depth matches plans prior to pole installation.

B. Verify that required clearances are available.

1.Transformers: 10 feet, front, 2 feet, side and back. See SD-1122.

2.Primary or Secondary Power Wires: 10 feet vertical and horizontal. See SD-1122.

3.Power Junction Box: 3 feet.

4.Curbing: 2 feet min., 6 feet max. from face of curb.

5.Structures: in accordance with National Electrical Safety Code.

6.Fire Hydrants: 10 feet side, 3 feet to the front.

7.Roadways: 18 feet vertical clearance for wires.

C. Examine pole and fixtures for defects or damage.

D. Verify pole, fixtures, electrical wiring, concrete, and materials delivered to the site meet the requirements of the Contract Documents.

E. Keep copies of electrical permits from the State of Idaho or the applicable municipality on-site.

3.2 JUNCTION BOX INSTALLATION

A. Install to locations as shown on the plans and at the power source (per SD-1117 or SD-1119). If not shown, space equidistant not to exceed 400 feet along straight conduit runs occur, at sharp bends, wire splices, or where direct burial and conduit junctions occur.

B. Excavate for box and aggregate foundation.

C. Install the junction box on 6 in. bed of compacted ¾-inch crushed aggregate base that extends 4 inches beyond the exterior of the box sides.

D. Do not install in any driveway or travel way unless box is fully rated for traffic.

E. Place top of junction box flush with surrounding ground, concrete, or pavement.

F. For historical street lights within the Capital City Development areas, an additional, parallel conduit shall be installed from the street light to the control cabinet to accommodate a separate circuit for the outlets on the poles.

CONTINUED ON SHEET EG-4





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PROFESSIONAL ENGINEER REGISTERED 12731 5/3/2024 STATE OF IDAHO NICK SCHAFER

# BOISE CITY MULTI-USE PATHWAY
## Capital City Development Corporation

3rd Street - S Broadway Ave.
Boise, ID

Revisions
1.

Project No.: 122112
Date of Issuance: 05.03.2024
Project Milestone: Permit Set

## ELECTRICAL SPECIFICATIONS

# EG-3

CONTINUATION OF SECTION 16521 - STREET LIGHTING

3.3 WIRE OR CONDUCTORS

A. Splice underground wire only by means of approved connectors.

B. Splice underground wire only at pole bases or junction boxes.

C. Coil an additional 27 to 36 inches of wire at each connection point with transformer or junction box.

D. Attach overhead wire to the pole top and bond to the pole ground.

E. For overhead installation: Attach to the top of the new pole a complete coil of wire, long enough to span the distance between the new light and the power connection point.

3.4 CONDUIT INSTALLATION

A. Above Ground: All conduits required to be strapped, connected, or fastened to the pole at a minimum 5 feet interval.

B. Underground:

1. Raceways: Separate conduits by minimum of 3 inches.
2. Bedding: Surround conduit with a minimum of 3 inches clean sand.
3. Bends: Use standard manufactured elbows, bends, or couplings.
4. Kinking: Do not allow kinking or flattening of conduit if bending, use greatest radius possible.
5. Locating wires only **required** for conduit in which the conductors are not installed in conjunction with the conduit.
6. In landscaped areas: Minimum burial depth is 18 inches.
7. In travel way: Minimum burial depth is 30 inches or the requirement of the NEC, whichever is greater.
8. At installations where a street light is to be installed at a later date; seal ends of the conduit to prevent moisture and/or debris from entering.
9. For historical street lights within the Capital City Development areas, an additional, parallel conduit shall be installed from the street light to the control cabinet to accommodate a separate circuit for the outlets on the poles.

3.5 PHOTO CELL INSTALLATION

A. Mark date on every new or replacement installation.

B. Install to the manufacturer's recommendations.

C. Test Photoelectric Cell in the presence of the Engineer.

3.7 GROUNDING

A. Drive an 8 foot, 5/8-inch iron or steel rod 7.5 feet into the ground next to the pole.

B. Attach No. 6 AWG bare copper wire fastened to the pole at 5 foot intervals from the ground rod to the disconnect box, mast arm, and fixture.

C. Grounding per NEC, Article 250 and Standard Drawing SD-1121 - Grounding Details. Refer to details on sheet E-9, and City of Boise standard drawings BC SD-23 and BC SD-9.

3.8 CONCRETE POLE BASIS

A. Excavate pole base foundations to neat lines where soil conditions permit.

B. Place metal reinforcement and anchors per the Standard Drawings SD-1109.

C. Engineer to observe reinforcement and anchors prior to placement of concrete. Provide 48 hours' notice.

D. Place and finish concrete per ISPWC Division 700.

E. Concrete forming will be constructed per ISPWC Division 700.

F. Base dimensions and installation details shall conform to Standard Drawings SD-1109, SD-1116 and SD-1117.

G. Place and compact required backfill per ISPWC Division 300, Section 306.

3.9 POLE INSTALLATION

A. Excavate pole foundations to neat lines when soil conditions permit.

B. Refer to City of Boise standard drawing BC SD-23. Install metal poles in accordance with SD-11, SD-1109, SD-1116, SD-1117 and SD-1119.

C. Historical poles to be installed in accordance with standard drawings supplied by governing agency. Refer to City of Boise standard drawing BC SD-8 Historical Pole.

D. All poles shall be installed meeting the power company required clearances as shown on Standard Drawing SD-1112.

E. Street light connections to the power source shall be done by the power company.

F. Place and Compaction Requirements:

1. Backfill voids within 6 inches of the pole with crushed aggregate conforming to Section 802, Type I. Compact the backfill material to 95% maximum dry density. Use of sonotube forms to contain the imported material is acceptable, but is not required.
2. Backfill other disturbed soils in accordance with Section 204. Compact the backfill material to 92% maximum dry density.

G. Set pole plumb and true, mast arm and fixture perpendicular to public roadway or as approved by the Engineer.

H. Install prefabricated base, if applicable, per manufacturer's recommendations.

3.10 LUMINAIRE INSTALLATION

A. Install luminaire to manufacturer's recommendations.

B. Mark lamps with a month and year on the brass screw base to denote an installation date. See Standard Drawing SD-1120.

C. Test light in presence of the Engineer.

3.11 SERVICE PEDESTAL

A. Service pedestal shall be installed in accordance with Standard Drawing SD-1127.

B. Service pedestal wiring shall conform to the wiring diagrams shown on Standard Drawings SD-1125 and SD-1126, as directed by the Engineer. Service pedestals connected to historical street lights shall conform to SD-1125 with an additional meter connected to the electrical outlet circuit. See Attachment A on sheet EG-3 for approved products.

PART 4 - MEASUREMENT AND PAYMENT

4.1 Use the following unit price as designated on the Bid Schedule. If required and not listed in the Bid Schedule, the following Bid Items are to be considered incidental to other Bid Items.

A. Street Light: Measurement and payment per each for the type and size of pole, mast arm and fixtures specified on the Contract Documents. Includes materials, labor, and equipment needed for the excavation, foundation, pole, internal pole wiring, wiring, conduit, mast arms, fixtures, junction boxes, disconnect boxes, fuses, luminaires, connections, cabinets, fittings, connections and all appurtenances not itemized in the Bid Schedule to produce a fully functional street light.

Contractor to include in bid all permit costs and costs to install and initiate electrical service.

1. Bid Schedule Payment Reference: 1102.4.1.A.1.
2. Bid Schedule Description: Street Light Type _____ ... per each (EA).

B. Payment for relocation of an existing light pole per each, all materials to be reused at new location.

1. Bid Schedule Payment Reference: 1102.4.1.B.1.
2. Bid Schedule Description: Relocate Street Light Type _____ ... per each (EA).

C. Payment per each for installing a light pole as an intermediate line pole.

1. Bid Schedule Payment Reference: 1102.4.1.C.1.
2. Bid Schedule Description: Intermediate Pole Type _____ ... per each (EA).

D. Install Wire or Conductors: Measurement and payment on a per horizontal linear foot basis for type (underground or above ground) of the wire following the alignment of the wire provided and installed from the centerline of the pole to power source, including connections in accordance with the Contract Documents.

1. Bid Schedule Payment Reference: 1102.4.1.D.1.
Bid Schedule Description: Wire/Conductor, Type _____ ... per linear foot (LF).

E. Install Conduit: Measurement and payment on a per horizontal linear foot basis for size of conduit installed from the centerline of the pole to power source, including connections in accordance with the Contract Documents.

1. Bid Schedule Payment Reference: 1102.4.1.E.1.
Bid Schedule Description: Conduit, Size _____ ... per linear foot (FT).

F. Junction Box: Measurement and payment on a per each basis for providing and installing junction box as required by the Contract Documents.

1. Bid Schedule Payment Reference: 1102.4.1.F.1.
Bid Schedule Description: Junction Box... per each (EA).

G. Service Pedestal: Measurement and payment on a per each basis for a service pedestal provided and installed in accordance with the Contract Documents. Including the cabinet, base, foundation, wiring, breakers, switches and all other work and materials necessary for a complete installation.

1. Bid Schedule Payment Reference: 1102.4.1.G.1.
Bid Schedule Description: Service Pedestal... per each (EA).

END OF SECTION 16521

SECTION 16800 - ELECTRICAL DEMOLITION AND REPAIR

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes electrical demolition and repair. Work includes removal of obsolete wiring and electrical apparatus; relocation, reconnection or replacement of existing wiring affected by demolition or new construction; capping off concealed wiring abandoned due to demolition or new construction.

PART 2 - PRODUCTS

2.1 EQUIPMENT

A. Conductors and Cables: Refer to Section 16120 - Conductors and Cables.

B. Raceways and Boxes: Refer to Section 16130 - Raceways and Boxes.

PART 3 - EXECUTION

3.1 DEMOLITION

A. Protect existing electrical equipment and installations indicated to remain. If damaged or disturbed in the course of the work, remove damaged portions and install new products of equal capacity, quality, and functionality.

B. Accessible Work: Remove exposed electrical equipment and installations, indicated to be demolished, in their entirety. Completely remove all exposed traces, hardware, wiring and conduit systems to the source. All knockouts and holes shall be patched or plugged.

C. Contractor may re-use existing straight conduit runs and factory bends for conduits 2" and larger, provided that they are not damaged in any way and are installed in accordance with Section 16130.

D. Re-use of all other electrical apparatus and material is subject to approval by owner.

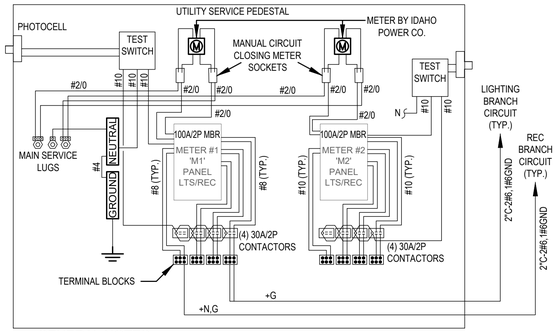
E. Abandoned Work: Cut and remove buried raceway and wiring, indicated to be abandoned in place, 2 inches below the surface of adjacent construction. Cap raceways and patch surface to match existing finish.

F. Remove demolished material for recycling as directed by owner.

G. Remove, store, clean, reinstall, reconnect, and make operational components indicated for relocation.

H. Power outages shall be held to a minimum and coordinated with the owner. Contractor shall schedule outages during off-hours.

END OF SECTION 16800




GENERAL NOTES:

A. IDENTIFICATION LABELS ARE REQUIRED FOR BRANCH BREAKERS. LIGHTING BRANCH BREAKER LABELS TO READ: LIGHTING CIRCUIT NO. (SEE PLANS). POWER BRANCH BREAKER LABELS TO READ: POWER CIRCUIT NO. (SEE PLANS).

B. SERVICE PEDESTAL TO BE NEMA TYPE '3R' FURNISHED WITH PADLOCK HASP.

C. DEAD FRONT CONSTRUCTION IS REQUIRED ON ALL CABINETS.

D. PLUG-IN TYPE BREAKER TO BE USED ON "B" SERVICES. MAIN BREAKERS TO BE BOLT RETAINED.

E. TERMINAL BLOCKS SHALL BE PRESSURE TYPE, AS REQUIRED FOR #8 THROUGH #2 AWG WIRE

F. ALL SERVICES TO BE UL LABELED FOR MAXIMUM 200 AMP BUS RATING AND "APPROVED FOR SERVICE ENTRANCE EQUIPMENT."

G. THE MAIN BREAKER LABEL TO BE MADE OF RED ON WHITE PLASTIC LAMINATE. THE BRANCH BREAKER LABELS TO BE MADE OF BLACK ON WHITE PLASTIC LAMINATE. THE LEGENDS TO BE ENGRAVED INTO THE STRIP SO AS TO PROVIDE WHITE LEGENDS ON THE REQUIRED BACKGROUND. THE LABELS TO BE PERMANENTLY ATTACHED TO THE DEAD FRONT, NEXT TO THE CORRESPONDING BREAKERS.

H. BRANCH CIRCUIT BREAKERS, BRANCH CIRCUIT WIRE, AND PHOTOELECTRIC CONTROL TO BE SUPPLIED BY THE CONTRACTOR. M1:(1)15A/1, (3)20A/1, (3)30A/2. M2:(1)15A/1, (3)20A/1, (3)30A/2.

I. ALL BUSSING TO BE 200 AMP RATED.

J. WIRING TO BE THWN/MTW 600V 90°C RATED

1 METERED UTILITY PEDESTAL DETAIL
NTS



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THE LAND GROUP

PROFESSIONAL ENGINEER REGISTERED 12731 5/3/2024 STATE OF IDAHO NICK SCHAFER

# BOISE CITY CANAL MULTI-USE PATHWAY
## Capital City Development Corporation

3rd Street - S Broadway Ave.
Boise, ID

Revisions

| | |
|---|---|
| Project No.: | 122112 |
| Date of Issuance: | 05.03.2024 |
| Project Milestone: | Permit Set |

**ELECTRICAL SPECIFICATIONS**

**EG-4**

File Location: p:\files\2022\4220\dwg\dwg mep\24220_ep2-gf notes.dwg
Last Saved By: nschafer
Date Plotted Plotter: May 3 2024 at 07:34 AM

**BOISE CITY**
**STANDARD REVISIONS**
**FOR ISPWC DIVISION 1102**
**STREET LIGHTS**

**GENERAL INFORMATION**

All work shall conform to the requirements of the most current edition of the National Electrical Code, the Idaho Standards for Public Works Construction (ISPWC), and the Supplementary Conditions and these Standard Revisions. Contractor shall become familiar with these documents to ensure full understanding of the requirements of this Project. Failure to do so does not relieve the Contractor of the duties, obligations and responsibilities addressed within those documents.

The Idaho State Electrical Board has determined that all street lights are to be provided with an external fuse disconnect, in a junction box between the power source and the street light pole. See attached standard drawings for connection requirements.

Street light installations inspections will be required for the concrete base reinforcing, the trench depth and bedding, and for the pole. Contact City of Boise at 208-608-7526 for inspections, 48 hour notice required. Contractor shall notify the City when street light is ready for turn on.

Approved products for Boise City street light installations are on the city web page. Contact Boise street light staff to seek approval for any substitute products.

**REVISIONS TO THE STANDARD SPECIFICATIONS**

**SECTION 1102**

**STREET LIGHTING**

**PART 2 MATERIALS**

2.2 JUNCTION BOXES

2.2.A Replace with the following:
Junction boxes in driveways or roadways are not allowed.

2.2.B Replace with the following:
Junction boxes in sidewalks and similar areas to be concrete that has steel lid that bolts down with a 3/8" bolt. This lid must be bonded to the equipment grounding conductor with the use of a #6 compression lug.



Add the following:

2.2.C Junction boxes in landscape areas may be plastic or fiberglass.

2.2.D All junction boxes to have a means to secure lid with 3/8" bolt.

2.2.E See city website for approved materials

2.2.F J-boxes used at the Idaho Power service connections may not use a metal lid.

2.3 FUSE HOLDERS

A.1. Add the following sentence.
Fuses for Boise City installation shall be fast acting – 100k RMS Amps-600VAC.

B.1. Add the following sentence.
Fuses for Boise City installation shall be fast acting – 100k RMS Amps-600VAC.

2.4 CONDUCTOR

B.2 Add the following sentence.
Phase "A" shall be colored Black, phase "B" shall be colored Red, and the receptacle conductors shall be in Blue and White.

D.2 Change # 8 AWG THWN insulated copper wire to # 10 AWG THWN or THWN-2 insulated copper wire

2.7 DISCONNECT BOXES

Add paragraph D

D. Disconnect boxes are only required for overhead wiring.

2.8 MAST ARMS FOR WOOD POLES **NOT USED FOR BOISE CITY INSTALLATIONS.**

2.9 WOOD POLES **NOT USED FOR BOISE CITY INSTALLATIONS.**

2.10 METAL POLES

In paragraph C, Direct burial poles are not allowed

Add the following paragraph:

F. Poles may be square, round or tapered round. Decorative poles are prohibited. Poles for decorative fixtures (approved by the City) are to be round. See Street Light Approved poles listed on the city web page.

2.11 FIBERGLASS POLES **NOT USED FOR BOISE CITY INSTALLATIONS**



2.12 HISTORICAL POLES

Replace with the following:

A. Historical style metal poles shall be true copies, approved by Boise City, Department of Public Works, of the original Old Boise Historical Pole. The new historical poles shall have the same surface texture and have the same Dark Green (RAL 6009) color finish that matches the existing Historical poles in the Historical Lighting District. Metal poles shall have a powder coat finish in accordance with ASTM B- 117.

B. Historical poles for the City of Boise shall be cast aluminum, in style and texture of the original Old Boise Historical Pole (see standard drawing BC SD-8). See City website for approved products.

C. Color: To match existing poles, approved color mix for Sherwin Willams DTM Acrylic Coating RAL 6009 Fir Green Order #0174795.

D. Additional pole requirement for historic lights installed within the Capitol City Development Corporation (CCDC) shall be:

1. Poles shall be supplied with an GFCI receptacle with a metal bubble cover having the same color as the pole as shown on standard drawing BC SD-8.
2. Poles shall be supplied with a manufacturer's adaptor for installation of the approved banner arms and a banner arm. The adapter or banner arm shall face the building or lot only.

2.13 BOLLARDS **NOT USED FOR BOISE CITY INSTALLATIONS.**

2.14 PREFABRICATED BASES **NOT USED FOR BOISE CITY INSTALLATIONS.**

2.15 SERVICE PEDESTAL

Add the following:

C. See Street Light Approved list on the city web page for approved products.



2.16 LIGHT FIXTURES

Replace paragraph A & D. with the following and add G.

A. Fixture light level as required by Boise City Public Works. Class "A" Residential 4500 - 5500 lumen, and Class "B" Collector/General Roadway 9,500 – 11,500 lumens.

D. LED lighting color temperature for residential streets to arterial streets is 3000 K and for Arterial/Collector is 4,000 K.

G. Effective 1 October 2015 all fixtures installed shall be labeled with the fixture wattage using a label meeting ANSI C136.15-2011 using the large type. If the manufacturer does not supply the ANSI label then the installer shall mark the fixture with the fixture wattage using black labels with white numbering a minimum of 1.5 inches wide by 2.5 inches high on the bottom of the fixture visible from the ground. If there is not sufficient area on the bottom of the fixture, the wattage label shall be placed on the pole just below the fixture. See examples below. The only exception to this requirement shall be the City of Boise Historical Pole and Fixture. It will not require any wattage label.



**PART 3 WORKMANSHIP**

3.2 JUNCTION BOX INSTALLTION

Modify paragraph D: Do not install in any driveway or roadway.

3.3 WIRE OR CONDUCTORS

Modify paragraph B and add paragraph F.

B. Splice underground wire only at junction boxes adjacent to pole bases.

F. For all street lighting installations within the City of Boise the only approved connectors for # 6 or larger wire shall be a split-bolt type connector for ground wires. Waterproof connectors from the Street Light Approved list on the city web page for all other conductors.



3.4 CONDUIT INSTALLATION

B. Underground:
Modify item 5 to read: Location wires only **required** to be installed inside the conduit in which the conductors are not installed.

Add the following item:

9. For historical street lights within the Capital City Development areas, an additional, parallel conduit shall be installed from the street light to the control cabinet to accommodate a separate circuit for the outlets on the poles.

3.6 DISCONNECT BOXES **NOT USED FOR BOISE CITY INSTALLATIONS.**

3.7 GROUNDING

Add to paragraph D. reference to City of Boise standard drawing BC SD-1117 and ISPWC Standard Drawings.

3.8 CONCRETE POLE BASES

In paragraph F., add reference to City of Boise standard drawing BC SD-9 Historical Pole base.

3.9 POLE INSTALLATION

In paragraph B., delete reference to wood and fiberglass poles.
In paragraph C., add reference to City of Boise standard drawing BC SD-11.

**"G, H, I" - NOT USED FOR BOISE CITY INSTALLATIONS**

3.11 SERVICE PEDESTAL

Modify paragraph A: Service pedestals shall be installed in accordance with standard drawing BC SD-1126.

In paragraph B., Add the following sentence:

Service pedestals connected to historical street lights in the downtown core shall conform to SD-1126 with an additional meter connected to the electrical outlet circuit. Contact Public Works to verify if your locations will need to meet this requirement. See Street Light Approved list on the city web page for approved products.



**ADDITIONAL CITY OF BOISE STANDARD DRAWINGS ATTACHED**

**BC SD-8 HISTORICAL POLE DETAIL**

**BC SD-9 HISTORICAL POLE BASE DETAIL**

**BC SD-11 HISTORICAL STREET LIGHT PLACEMENT**

**BC SD-1127 STREET LIGHT SERVICE PEDESTAL BASE**

**EXAMPLE OF THE ANSI C136.15-2011 LED WATTAGE LABEL**





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**ELECTRICAL SPECIFICATIONS**

**EG-5**

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**CITY OF BOISE SPECIFICATIONS FOR**
**LIGHT EMITTING DIODE (LED) STREET LIGHTING**
**Effective 1 Feb, 2019**

## 1. LIGHT EMITTING DIODE (LED) LUMINAIRES FOR ROADWAY TYPE 3 ILLUMINATION

### A. Testing and Compliance / Manufacturer

1. The luminaire must be listed by a National Recognized Testing Laboratory (NRTL) as defined by the U.S. Department of Labor and recognized by OSHA.
2. A label must be clearly visible on the luminaire that states operating voltage and current range as well as independent third-party testing laboratory approval, i.e. UL, CSA or equivocal.
3. The luminaire must be listed and labeled by a NRTL as being suitable for use in wet locations.
4. The luminaire must have RoHS compliant light source and drivers.
5. The luminaire must be in compliance with Electro Magnetic Interference (EMI) requirements as defined by FCC 47 Sub Part 15.
6. The luminaire must be manufactured in ISO 9001 certified facility or manufacturer must provide a copy of company workmanship standards and or quality control manual.
7. Manufacturer must have product support representation within the Northwest region.
8. Manufacturer must be able to show they have been in business at least two times the length of warranty offered on their product or 10 years, whichever is less.

### B. Fixture Construction

1. Housing and heat sink constructed out of Aluminum.
2. All hardware will be corrosion resistant.
3. Fixture will not weight more than 44 lbs. when fully assembled.
4. Design will not trap water.
5. When installed, simple access to internal components; (terminal block, driver surge protector). Approved fixtures for installation are on the street light approved fixture and materials listing on the City of Boise website.
6. Provisions for a 2 or 4-bolt slip fitter type mounting on nominal 2-inch (2 3/8 OD) pipe brackets. Slip fitter mount shall allow 4 inches of the pole bracket to be inserted in the luminaire mounting assembly.
7. The mounting assembly will permit any necessary adjustment to orient the luminaire with the roadway for proper light distribution.
8. Only passive cooling method can be used to manage thermal output of the LED light engine and power supply.
9. Fixture will have a completely sealed optical system with an IP rating of 65 or greater.
10. Fixture to have NEMA Photocontrol receptacle for either NEMA shorting cap or NEMA photo cell.
11. Fixture shall provide a type 3 light distribution pattern.

### C. Electrical Requirements

1. Luminaire will fully operate in an ambient temperature range of -30˚C to 40˚C (-22˚F to 104˚F).
2. Power supply (electronic driver) will be integral to the fixture.
3. The power supply (electronic driver) will operate within 100 to 300 VAC (rms) at 50/60 hertz.
4. The power supply (electronic driver) will have a power factor of .90 or greater and a total harmonic distortion of 20% or less at full load.
5. The power supply (electronic driver) will have thermal overload protection.
6. A power supply (electronic driver) with a rated life of 70,000 hours with a luminaire operated at an ambient temperature of 25˚C (77˚F).
7. The power supply (electronic driver) will have self-limited short circuit protected and over load protected.
8. The power supply (electronic driver) will be fully incased with IP rating of 65 or greater.
9. Surge protection device, incorporating a circuit module, internal fusing and MOV's rated to withstand 10kV of transient line surge, separate from the power supply (electronic driver), that can easily be replaced but still contained within the housing.
10. A terminal block for terminating pole wiring to the luminaire is required. The terminal block shall be a 3 station, tunnel lug terminal board that will accommodate #6 thru #18 AWG wire.

### D. LED Performance Requirements

Shall meet the Chromaticity requirements as follows:

1. The standard color for the LED luminaire shall be white. The colors shall conform to the following color regions based on the 1931CIE chromaticity diagram.
2. Nominal Correlated Color Temperature, CCT = 3000K for Residential and 4000K for Arterial and Collector streets.
3. No more than plus or minus 300 K variance between fixtures to provide a uniform appearance throughout project installations.
4. Must have a minimum Color Rendering Index (CRI) of 70
5. Intensity and Chromaticity must be confirmed by an Independent test lab.
6. The luminaire must have a minimum efficacy of 112 lumens per watt.
7. The luminaire will deliver an average 90% of initial lumens after 60,000 hours of operation based on TM-21 data.

### E. Warranty

1. The entire luminaire assembly including material, workmanship, finish, photometrics, labor, power supply, surge protectors, and LED modules will have a minimum of ten (10) year warranty from the date of installation.
2. If more than 10% of the individual LEDs fail within the warranty period, the luminaire must be repaired or replaced.

## 2. LIGHT EMITTING DIODE (LED) LUMINAIRES FOR HISTORIC DECORATIVE ILLUMINATION

### A. Testing and Compliance / Manufacturer

1. The luminaire must be listed by a National Recognized Testing Laboratory (NRTL) as defined by the U.S. Department of Labor and recognized by OSHA.
2. A label must be clearly visible on the luminaire that states operating voltage and current range as well as independent third-party testing laboratory approval, i.e. UL, CSA or equivocal.
3. The luminaire must be listed and labeled by a NRTL as being suitable for use in wet locations.
4. The luminaire must have RoHS compliant light source and drivers.
5. The luminaire must be in compliance with Electro Magnetic Interference (EMI) requirements as defined by FCC 47 Sub Part 15.
6. The luminaire must be manufactured in ISO 9001 certified facility and must provide a copy of company workmanship standards and or quality control manual.
7. Manufacturer must have product support representation within the Northwest region.
8. Manufacturer must be able to show they have been in business at least two times the length of warranty offered on their product or 10 years, whichever is less.
9. Manufacturer must have website with downloadable specification sheets and photometric IES files.

### B. Fixture Construction

1. Housing and heat sink constructed out of Aluminum.
2. All hardware will be corrosion resistant.
3. Fixture will not weigh more than 50 lbs. when fully assembled.
4. Design will not trap water.
5. Fixture must be capable of mounting on top of the current approved Boise Historic Light Pole, standard drawing BC SD-8 without any field modification. Current approved poles are on the "Street Light Approved Fixtures and Materials" list on the Boise website. Decorative Cast pole drawing BC SD-8.
6. The mounting assembly will permit any necessary adjustment to orient the luminaire with the roadway for proper light distribution.
7. Only passive cooling method can be used to manage thermal output of the LED light engine and power supply.

### C. Electrical Requirements

1. Luminaire will fully operate in an ambient temperature range of -30˚C to 40˚C (-22˚F to 104˚F).
2. Power supply (electronic driver) will be integral to the fixture.
3. The power supply (electronic driver) will operate within 100 to 300 VAC (rms) at 50/60 hertz.
4. The power supply (electronic driver) will have a power factor of .90 or greater and a total harmonic distortion of 20% or less at full load.
5. The power supply (electronic driver) will have thermal overload protection.
6. A power supply (electronic driver) with a rated life of 70,000 hours with a luminaire operated at an ambient temperature of 25˚C (77F).
7. The power supply (electronic driver) will have self-limited short circuit protected and overload protected.
8. The power supply (electronic driver) will be fully incased with IP rating of 65 or greater.
9. Surge protection device, incorporating a circuit module, internal fusing and MOVs rated to withstand 10kV of transient line surge, separate from the power supply (electronic driver), that can easily be replaced but still contained within the housing.
10. Connections shall be accomplished using standard connections and fittings, meeting NEC electrical codes. These connections must be robust and utilize vibration resistant mechanisms.

### D. LED Performance Requirements

1. Shall meet the Chromaticity requirements as follows:
2. The standard color for the LED luminaire shall be white. The colors shall conform to the following color regions based on the 1931CIE chromaticity diagram.
3. Nominal Correlated Color Temperature, CCT = 5000K
4. No more than plus or minus 300 K variance between fixtures to provide a uniform appearance throughout project installations.
5. Must have a minimum Color Rendering Index (CRI) of 70
6. Intensity and Chromaticity must be confirmed by an Independent test lab.
7. The luminaire must have a minimum efficacy of 115 lumens per watt.
8. The luminaire will deliver an average 90% of initial lumens after 75,000 hours of operation based on TM-21 data.

### E. Warranty

1. The entire luminaire assembly including material, workmanship, finish, photometrics, labor, power supply, surge protectors, and LED modules will have a minimum of ten (10) year warranty from the date of installation.
2. If more than 10% of the individual LEDs within the warranty period the luminaire must be repaired or replaced.



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**ELECTRICAL SPECIFICATIONS**

**EG-6**