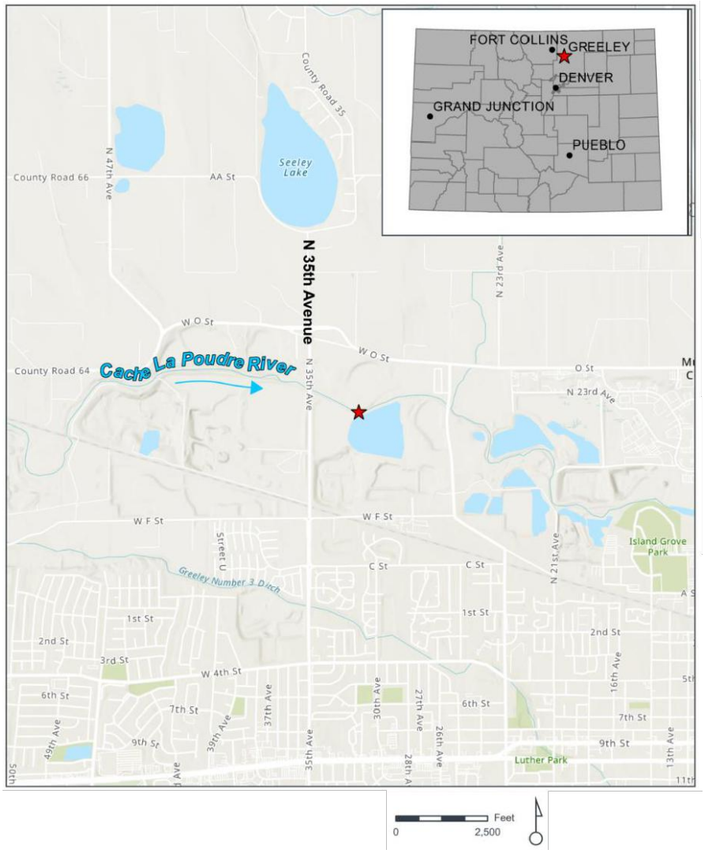
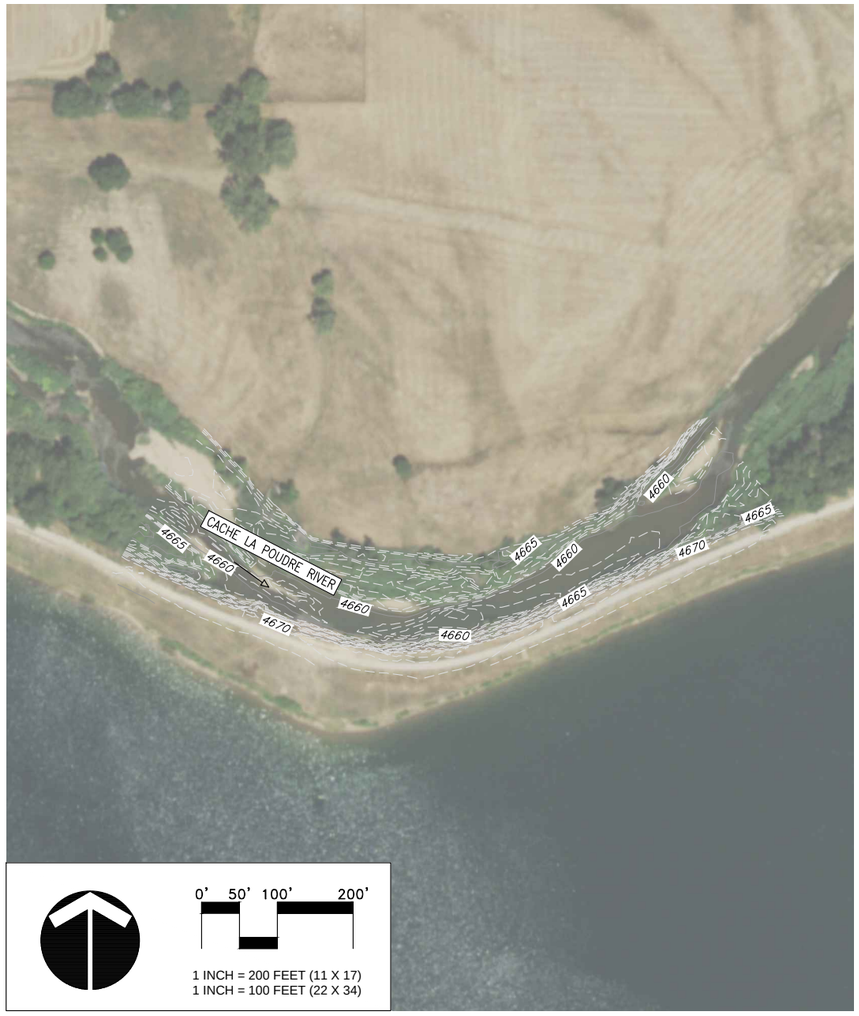
# POUDRE PONDS BANK STABILIZATION PROJECT
# CITY OF GREELEY
# 90% DESIGN DRAWINGS - NOT FOR CONSTRUCTION
# GREELEY, COLORADO





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| Sheet Revisions | | |
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No Revisions:
Revised:
Void:

POUDRE PONDS BANK STABILIZATION PROJECT
COVER

Designer: CR
Detailer: KM
Sheet Subset:
Structure Numbers:
Subset Sheets:

Project No./Code: 20119B

Sheet Number: G1

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ABBREVIATIONS

| | |
|---|---|
| FDP | FLOODPLAIN DEVELOPMENT PERMIT |
| FDP XS | FLOODPLAIN DEVELOPMENT PERMIT CROSS SECTION |
| BMPs | BEST MANAGEMENT PRACTICES |

LEGEND

- EXISTING CONTOURS 1FT & 5FT
- PROPOSED 1FT & 5FT
- EXISTING TREE WITH CALIPER 2”
- CONCRETE TRAIL
- PARCELS
- SOIL RIPRAP
- PLANTING BENCH
- ROCK WALL
- EXISTING RIPRAP SPILLWAY
- EXISTING SLURRY WALL
- STAGING AREA
- SITE ACCESS
- EXISTING ECO BLOCKS
- EXISTING RIPRAP BANK
- EXISTING BUCK AND RAIL FENCE
- PROPOSED FENCE
- LIMITS OF DISTURBANCE LDA
- SURVEYED EDGE OF WATER
- STACKED BOULDER WALL
- EROSION CONTROL FABRIC

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No Revisions:
Revised:
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POUDRE PONDS BANK STABILIZATION PROJECT

INDEX AND LEGEND

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|---|---|---|---|
| Designer: | CR | Structure Numbers | |
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Project No./Code: 20119B

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## GENERAL NOTES

### SAFETY AND SECURITY

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASPECTS OF SAFETY INCLUDING, BUT NOT LIMITED TO EXCAVATION, TRENCHING, SHORING, TRAFFIC CONTROL, AND SECURITY.
2. EXISTING FACILITIES NOT INDICATED TO BE REMOVED SHALL BE PROTECTED IN PLACE OR REMOVED IN KIND, AS APPROVED BY THE OWNER AND ENGINEER. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROVIDING STABLE EXCAVATIONS AND TEMPORARY SLOPES AND FOR SATISFYING ALL APPLICABLE OSHA, FEDERAL, STATE, AND LOCAL REGULATIONS. TEMPORARY EXCAVATIONS SHALL PROVIDE, AT A MINIMUM, THE TRENCH DIMENSIONS AND CLEARANCES SHOWN ON PLANS OR IN SPECIFICATIONS.
3. TEMPORARY CONSTRUCTION SLOPES SHALL BE SLOPED, SHORED, SHEETED, AND/OR BRACED IN ACCORDANCE WITH STABILITY REQUIREMENTS AND APPLICABLE REGULATIONS, AND SHALL BE NO STEEPER THAN THE SLOPES SHOWN OR SPECIFIED WITHOUT THE APPROVAL OF THE ENGINEER. ANY SUCH APPROVALS BY THE ENGINEER WILL NOT RELIEVE THE CONTRACTOR FROM SOLE RESPONSIBILITY FOR PROVIDING STABLE EXCAVATIONS AND TEMPORARY SLOPES.

### CONTRACT DOCUMENTS AND REQUIREMENTS

1. EXCEPT WHERE OTHERWISE PROVIDED FOR IN THESE PLANS AND SPECIFICATIONS, THE CURRENT VERSION OF THE MHFD STANDARD SPECIFICATIONS.
2. THE CONTRACTOR SHALL HAVE (1) SIGNED COPY OF THE APPROVED PLANS, ONE (1) COPY OF THE APPROPRIATE PROJECT SPECIFICATIONS, INCLUDING THE MHFD STANDARD SPECIFICATIONS, AND A COPY OF ANY REQUIRED PERMITS AT THE JOB SITE AT ALL TIMES.
3. IN THE EVENT OF A CONFLICT, THE ORDER OF PRECEDENCE SHALL BE AS FOLLOWS: (1) PERMIT CONDITIONS, (2) PROJECT SPECIFICATIONS, (3) CONSTRUCTION PLANSET.
4. THE CONTRACTOR SHALL REFER TO THE CONTRACT SPECIFICATIONS FOR DESCRIPTION OF MATERIALS REFERRED TO BY SIZE, CLASS, TYPE, DESCRIPTION, OR OTHERWISE SPECIFIED ON THE DRAWINGS.
5. NO FIELD FIT CHANGES SHALL BE MADE WITHOUT THE ENGINEER BEING PRESENT ON-SITE AND WITHOUT CONCURRENCE OF THE OWNER. OTAK DOES NOT TAKE RESPONSIBILITY FOR MODIFICATIONS OF THESE PLANS OR DESIGN CHANGES THAT OCCUR DURING CONSTRUCTION WITHOUT PRIOR APPROVAL THE ENGINEER.
6. THE CONTRACTOR SHALL CONFINE ALL WORK TO THE CONSTRUCTION LIMITS SHOWN ON THE PLANS AND DETAILED IN THE CONTRACT DOCUMENTS.
7. THE CONTRACTOR SHALL VERIFY ALL SCALES PRIOR TO USING THE PLANS.
8. ALL GRADES SHOWN ARE FINISHED GRADES, UNLESS OTHERWISE NOTED ON THE DRAWINGS.
9. DIMENSION AND NOTATIONS SUPERSEDE SCALE OF THE DRAWINGS
10. THE WORK WILL TAKE PLACE IN AND AROUND A STREAM, WHICH IS SUBJECT TO PERIODIC FLOODING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF SURFACE AND SUBSURFACE WATER DURING THE COURSE OF THE WORK. ANY DAMAGE TO THE WORK RESULTING FROM SURFACE FLOWS, BASE FLOWS, OR FLOOD FLOWS SHALL BE CORRECTED BY THE CONTRACTOR AT THE CONTRACTOR'S SOLE COST.
11. CONSTRUCTION OF THE PROPOSED WORK WILL TAKE PLACE WITHIN THE CHANNEL AND WATER CONTROL MEASURES MAY BE REQUIRED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCEPTANCE AND CONTROL OF DRAINAGE WATER FROM AREAS ADJACENT TO THE CREEK AND ITS TRIBUTARIES INCLUDING STORMWATER OUTFALLS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ESTABLISHING MEANS AND METHODS OF GROUND AND SURFACE WATER CONTROL APPROPRIATE FOR THIS CONSTRUCTION IN ACCORDANCE WITH THE REQUIREMENTS OF THE PROJECT DRAWINGS AND SPECIFICATIONS AND ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS AND ALL PERMITS.
12. UNAUTHORIZED CHANGES AND USES: THE ENGINEER WHO PREPARED THESE PLANS WILL NOT BE RESPONSIBLE OR LIABLE FOR UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS AND SPECIFICATIONS MUST BE IN WRITING AND MUST BE APPROVED BY THE OWNER AND THE PREPARER OF THESE PLANS.
13. A CONCRETE WASHOUT IS REQUIRED FOR ALL CONCRETE WORK. CONTRACTOR SHALL MEET THE REQUIREMENTS LAID OUT IN THE SPECIFICATIONS IN REGARD TO LOCATION, DISTANCE FROM THE STREAM AND NECESSARY CONTROL MEASURES.

### STAGING, ACCESS, AND TRAFFIC CONTROL

1. THE CONTRACTOR SHALL SUBMIT AN ACCESS CONTROL PLAN AND PEDESTRIAN TRAFFIC CONTROL PLAN, AS NEEDED, FOR REVIEW AND APPROVAL BY THE LOCAL JURISDICTION PRIOR TO THE START OF CONSTRUCTION.
2. THE EXACT LIMITS OF THE CONTRACTOR'S PARKING AND STAGING AREA FOR MATERIAL STOCKPILING, OFFICE TRAILERS, AND PARKING FOR PUBLIC SHALL BE SUBMITTED BY THE CONTRACTOR FOR THE REVIEW AND APPROVAL BY THE ENGINEER AND OWNER'S REPRESENTATIVE AND LAND OWNER.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL IN ACCORDANCE WITH MHFD STANDARD SPECIFICATIONS. TRAFFIC CONTROL SHALL MEET THE SPECIFIC NEEDS OF THE LAND OWNER(S) FOR MAINTAINING OPERATIONS ON THEIR PROPERTY.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEAN-UP OF ANY TRASH OR MUD ON THE SITE OR ADJACENT STREETS AS A RESULT OF CONSTRUCTION. THE CONTRACTOR SHALL RESTORE ACCESS AREAS AND ACCESS ROADS TO THEIR ORIGINAL GRADES AND CONDITIONS. THE COST TO RESTORE THESE AREAS SHALL NOT BE MEASURED AND PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE WORK.
5. INITIATE REHABILITATION OF ALL DISTURBED AREAS IN A MANNER THAT RESULTS IN SIMILAR OR BETTER THAN PRE-WORK CONDITIONS. WHEN NECESSARY, SCARIFY COMPACTED AREAS, SUCH AS ACCESS ROADS, STREAM CROSSING, STAGING AND STOCKPILE AREAS.
6. THE CONTRACTOR SHALL REMOVE ALL TEMPORARY CONSTRUCTION FACILITIES SUCH AS HAUL ROADS, WORK AREAS, STRUCTURES, FOUNDATIONS OF TEMPORARY STRUCTURES, STOCKPILES OF EXCESS WASTE MATERIALS, OR ANY OTHER VESTIGES OF CONSTRUCTION AS DIRECTED BY THE ENGINEER.

### UTILITIES

1. THE CONTRACTOR IS RESPONSIBLE FOR SCHEDULING UTILITY LOCATES A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATIONS. CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO AT TOLL FREE 811.
2. THE TYPE, SIZE, LOCATION, AND NUMBER OF ALL KNOWN UNDERGROUND UTILITIES ARE APPROXIMATE WHEN SHOWN ON THE DRAWINGS, UNLESS OTHERWISE NOTED. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES WITHIN THE CONSTRUCTION LIMITS BEFORE COMMENCING WORK. THE CONTRACTOR SHALL COOPERATE WITH COMPANIES TRYING TO COORDINATE THE RELOCATION EFFORT. LINES NOT RELOCATED SHALL BE PROTECTED IN PLACE BY THE CONTRACTOR.
3. LOCATIONS OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ACTUAL CONSTRUCTION. LOCATION OF UNDERGROUND UTILITIES HAS NOT BEEN INDEPENDENTLY VERIFIED BY THE ENGINEER. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY POTENTIAL CONFLICTS WITH UTILITIES ENCOUNTERED DURING CONSTRUCTION.
4. THE CONTRACTOR SHALL NOTE THAT ALL UTILITIES MAY NOT APPEAR ON THESE PLANS AND THAT THE POTENTIAL CONFLICT WITH UTILITIES SHALL BE CONSIDERED IN THE PREPARATION OF COST ESTIMATES AND BIDS.

### PERMITTING

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL PERMITS, LICENSES, FEES, AND BONDS THAT ARE NECESSARY AS REQUIRED BY THE LOCAL JURISDICTION OR OTHER AGENCIES REQUIRED TO CONSTRUCT THE PROJECT.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND SATISFYING THE REQUIREMENTS OF ANY APPLICABLE PERMITS PERTAINING TO WATER AND EROSION CONTROL.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH ALL PERMIT CONDITIONS, LAWS ORDINANCES, CODES AND/OR REGULATIONS APPLICABLE FOR PROJECT IMPLEMENTATION.
4. THE CONTRACTOR SHALL HANDLE AND DISPOSE OF SOLID WASTE IN SUCH A MANNER THAT WILL PREVENT CONTAMINATION OF THE ENVIRONMENT. PLACE SOLID WASTE IN CONTAINERS THAT ARE EMPTIED ON A REGULAR SCHEDULE. TRANSPORT ALL SOLID WASTE OFF SITE AND DISPOSE WASTE IN COMPLIANCE WITH FEDERAL, STATE, AND LOCAL REQUIREMENTS. STORE CHEMICAL WASTE AWAY FROM THE WORK AREAS IN CORROSION RESISTANT CONTAINERS AND DISPOSE OF WASTE IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REQUIREMENTS.
5. ALL DEBRIS AND EXCESS MATERIAL SHALL BE DISPOSED OF OUTSIDE OF WATERBODIES, WETLAND, OR FLOODPLAIN AREAS.

### SURVEYING, TOPOGRAPHIC DATA AND RIGHT-OF-WAY

1. PARCEL, RIGHT OF WAY AND EASEMENT INFORMATION IS APPROXIMATE AND SHOULD BE VERIFIED PRIOR TO WORK. CONSTRUCTION IS ONLY ALLOWED ON PARCELS WITH OWNERSHIP APPROVAL.
2. EXISTING GRADES, LINES, AND ANY EXISTING VERTICAL DATA ARE APPROVED AS THE BEST AVAILABLE INFORMATION. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING GRADES AND NOTIFY THE ENGINEER OF ANY SUBSTANTIAL VARIATIONS PRIOR TO INSTALLATION OF A STRUCTURE AND CONFORMANCE WITH THE GRADES/ELEVATIONS.
3. ACTUAL FEATURES COULD VARY AND THE CONTRACTOR SHALL VERIFY SITE CONDITIONS BEFORE THE START OF WORK. CONTRACTOR MUST VERIFY OR RE-ESTABLISH CONTROL PRIOR TO START OF CONSTRUCTION.
4. SURVEY WAS PERFORMED BY BOULDER LAND CONSULTANTS IN APRIL OF 2021. THE SURVEY COLLECTED ARE NAD 1983 (NSRS 2011) COLORADO NORTH ZONE, STATE PLANE COORDINATES BASED LOCALLY ON NGS MONUMENT "Q 136", PID LL0263 (NAVD88 ELEV =4767.82').
5. THE CONTRACTOR SHALL PRESERVE, AND IF DISTURBED, RELOCATE, OR REPLACE SURVEY POINTS, INCLUDING PROPERTY BOUNDARY CORNERS, LAND CORNERS, RANGE POINTS, AND SURVEY CONTROL MARKERS AND BENCHMARKS. IF REQUIRED, ALL PROPERTY BOUNDARY CORNERS SHALL BE PLACED BY A COLORADO PROFESSIONAL LAND SURVEYOR (PLS).
6. THE CONTRACTOR SHALL PROVIDE ALL CONSTRUCTION SURVEYING. IT IS RECOMMENDED THAT THE CONTRACTOR MAINTAIN A SURVEY GRADE GPS UNIT ONSITE WITH THE DESIGN GRADES, DESIGN CONTROL POINTS, AND FEATURE LOCATIONS LOADED FOR REFERENCE.
7. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION (HORIZONTAL AND VERTICAL) AT CONNECTIONS TO ALL EXISTING INFRASTRUCTURE. THIS INFORMATION SHALL BE COLLECTED AND SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION AND/OR PRIOR TO INSTALLATION OF ANY NEW FACILITIES SHOWN ON THESE CONTRACT PLANS. THE ENGINEER SHALL DETERMINE IF ANY MINOR MODIFICATIONS TO THE NEW FACILITIES SHOWN ON THE CONTRACT PLANS ARE NECESSARY SUCH AS HORIZONTAL AND VERTICAL ADJUSTMENTS. .

### TREE PROTECTION, PRESERVATION, AND SALVAGE

1. THE WORK SHALL BE DONE IN A MANNER THAT PRESERVES EXISTING TREES (INCLUDING SEEDLINGS) AND SHRUBS IN THEIR PRESENT LOCATION TO THE MAXIMUM EXTENT POSSIBLE. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR WILL COMPLETE A SITE WALK WITH THE ENGINEER TO REVIEW TREES AND SHRUBS APPROVED FOR REMOVAL. ALL REMOVED TREES AND SHRUBS SHALL BE STOCKPILED FOR USE ON-SITE UNLESS OTHERWISE IDENTIFIED BY THE ENGINEER/OWNER FOR REMOVAL AND HAULED OFF-SITE. THE CONTRACTOR SHALL MAKE REASONABLE EFFORTS TO PRESERVE THE ROOTWAD ON TREES WITH A MINIMUM DIAMETER AT BREAST HEIGHT (DBH) OF 12 INCHES AND MINIMUM 20 FEET IN LENGTH WHICH WILL BE DESIGNATED FOR HABITAT FEATUURES.
2. BEFORE BEGINNING OPERATIONS NEAR TREES, PROTECT TREES (USING ORANGE CONSTRUCTION FENCE) THAT MAY POSSIBLY BE DEFACED, BRUISED, INJURED, OR OTHERWISE DAMAGED BY THE CONSTRUCTION EQUIPMENT, DUMPING, OR OTHER OPERATIONS. REPAIRING DAMAGE TO TREES, OR TREE REPLACEMENT, WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
3. MATURE STANDS OF VEGETATION TO BE PROTECTED SHALL BE FENCED WITH ORANGE CONSTRUCTION FENCING. INDIVIDUAL MATURE TREES TO BE PROTECTED WILL BE FLAGGED BY OWNER/OWNER REPRESENTATIVE.
4. WHERE EQUIPMENT ACCESS RESULTS IN DAMAGE TO THE INTEGRITY OF INDIVIDUAL TREES OR STREAM SIDE WOODY VEGETATION, EFFORT SHALL BE MADE TO PRUNE ALL DAMAGED VEGETATION IN A MANNER MOST LIKELY TO ENSURE CONTINUED VIABILITY AND RECOVERY OF INDIVIDUAL PLANTS.
5. EXISTING BANK NOT IDENTIFIED FOR GRADING (INCLUDING VERTICAL BANKS) SHALL BE PROTECTED 'AS IS' FOR HABITAT PURPOSES.

### ON-SITE MATERIALS

1. TOPSOIL PRESENT WITHIN THE GRADING EXTENTS SHALL BE STRIPPED AND STOCKPILED TO AN APPROVED ON-SITE AREA. IT SHALL BE REDISTRIBUTED IN THE GRADING AREA AT THE ENGINEER'S DIRECTION (WITH AMENDMENTS AS REQUIRED) TO THE FINAL GRADES SHOWN IN THE PLANS.
2. WHEN IT IS POSSIBLE TO SALVAGE TREES, SEEDLINGS, SHRUBS AND STREAM SIDE VEGETATION, THE CONTRACTOR SHALL REMOVE AND STOCKPILE THESE MATERIALS WITH AS MUCH ROOT AND EARTHEN MATERIAL AS POSSIBLE AND IN SUCH A WAY TO HELP KEEP THEM ALIVE UNTIL THEY CAN BE TRANSPLANTED (I.E. IN WATER).
3. TREES AND SHRUBS NOT DEEMED VIABLE FOR LIVE SALVAGE, SHALL BE STOCKPILED FOR USE ON-SITE UNLESS OTHERWISE IDENTIFIED BY THE ENGINEER/OWNER FOR REMOVAL AND HAULED OFF-SITE.
4. COARSE EXISTING STREAM BED SUBSTRATE (E.G. GRAVEL OR COBBLE) SHALL BE SALVAGED DURING EXCAVATION AND STOCKPILED FOR LATER REUSE.
5. SALVAGED ELM TREES SHALL BE STOCKPILED FOR A MINIMUM OF THREE WEEKS TO ALLOW TREE TO DRY OUT BEFORE BURYING.

### FINISH WORK

1. WHERE ACCESS TO THE STREAM RESULTS IN DAMAGE TO EXISTING STREAM BANKS SUCH AS BANK SLUMPING OR CRACKING, REASONABLE EFFORTS WILL BE MADE, WITH THE DIRECTION OF THE ENGINEER, TO REPAIR THE DAMAGE FOLLOWING COMPLETION OF WORK AT THAT PARTICULAR SITE. REASONABLE EFFORT INCLUDES LOCALE RE-CONTOURING SLUMPED BANKS PLACEMENT EROSION BLANKET/FABRIC, AND PLANTING OF WILLOW STAKES.
2. IF THE CONTRACTOR DAMAGES ANY EXISTING SITE OR PUBLIC AMENITIES (PAVEMENTS, CURBS, CURB AND GUTTER, SOD, TREES, FENCES, ETC.) OUTSIDE OR WITHIN THE EASEMENTS OR CONSTRUCTION LIMITS, THE CONTRACTOR SHALL REMOVE AND REPAIR SUCH TO THE SATISFACTION OF THE INDIVIDUAL PROPERTY OWNERS.
3. FOR ALL SITE GRADING, SMOOTH, ROUNDED TRANSITIONS SHALL BE MADE BETWEEN CHANGES IN SLOPE, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
4. TO THE GREATEST EXTENT PRACTICAL, THE INSTREAM STRUCTURES SHALL BE CONSTRUCTED OF ROUNDED MATERIALS THAT ARE REPRESENTATIVE OF THE NATIVE MATERIAL.
5. IF DRILL SEEDING, GRADED FLOODPLAIN AREAS SHALL BE SCARIFIED WITH EXCAVATOR TEETH, REVEGETATED IN ACCORDANCE WITH THE REVEGETATION PLAN, THEN SCATTERED WITH SMALL BRANCHES AND DOWNED TREES (AS APPROPRIATE AND AVAILABLE).

### REVIEW AND INSPECTIONS:

1. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE OWNER, THE ENGINEER AND/OR THEIR REPRESENTATIVES. THE PROJECT OWNER RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO ITS STANDARDS AND SPECIFICATIONS SHOWN IN THE CONTRACT DOCUMENTS.
2. ALL STRUCTURES SHALL BE CONSTRUCTED IN DEWATERED CONDITIONS UNLESS OTHERWISE NOTED IN THE CONTRACT DOCUMENTS. GROUNDWATER SHALL BE MAINTAINED A MINIMUM OF TWO (2) FEET BELOW THE LOWEST POINT OF EXCAVATION FOR ANY GIVEN STRUCTURE.
3. PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL MEET WITH THE OWNER'S REPRESENTATIVE AND RECORD NOTES OF EXISTING CONDITIONS OF THE SITE, ADJACENT PROPERTY, AND ACCESS ROADS. THIS IS TO DOCUMENT EXISTING CONDITIONS. PHOTO AND VIDEO LOGS ARE REQUIRED FOR PERMIT ISSUANCE PRIOR TO MOBILIZATION.

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Otak

City of Greeley Colorado

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POUDRE PONDS BANK STABILIZATION PROJECT

GENERAL NOTES

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| Designer: | CR | Structure Numbers | |
| Detailer: | KM | | |
| Sheet Subset: | | Subset Sheets: | |

Project No./Code: 20119B

Sheet Number: G3

0' 15' 30' 60'

1 INCH = 60 FEET (11 X 17)
1 INCH = 30 FEET (22 X 34)


THIS MAP WAS PREPARED BY

BOULDER LAND CONSULTANTS, INC.

950 LARAMIE BLVD, UNIT D
BOULDER, CO 80304 (303) 443-3616
www.BLCsurveyors.com


NOTE:

*THIS MAP DOES NOT REPRESENT A BOUNDARY SURVEY OR TITLE SEARCH PERFORMED BY BOULDER LAND CONSULTANTS, INC. THERE MAY EXIST EASEMENTS AND/OR OTHER ENCUMBRANCES AFFECTING THE SUBJECT PROPERTY THAT ARE NOT SHOWN HEREON.*

NOTES:

1. THIS MAP DOES NOT REPRESENT A BOUNDARY SURVEY OR TITLE SEARCH PERFORMED BY BOULDER LAND CONSULTANTS, INC OR THE UNDERSIGNED. THERE MAY EXIST EASEMENTS AND/OR OTHER ENCUMBRANCES AFFECTING THE SUBJECT PROPERTY THAT ARE NOT SHOWN HEREON.

2. LOCATION FOR THE INFORMATION SHOWN HEREON IS BASED ON MODIFIED STATE PLANE COORDINATES, COLORADO NORTH ZONE 501. ALL DIMENSIONS ARE IN U.S. SURVEY FEET (AT GRID). DIMENSIONS SHOWN HEREON ARE IN U.S. SURVEY FEET.

3. SITE BENCHMARKS ARE CONTROL POINT "1000", "1001", 1002", "1003", "1004" AND "1005". PROJECT BENCHMARK FOR VERTICAL INFORMATION SHOWN HEREON IS "Q 136", AN NGS BENCH MARK DISK ON LOCATED ON THE WEST SIDE OF COUNTY ROAD 23 AND NORTH OF EASTMAN PARK DRIVE ON THE SOUTH SIDE OF RAILROAD TRACKS, NAVD 88 ELEVATION: 4767.82'. CONTOUR INTERVAL IS 1 FOOT.

4. NO UNDERGROUND UTILITIES WERE DELINEATED OR SURVEYED FOR THIS PROJECT.

5. DATE OF FIELDWORK: SEPTEMBER - NOVEMBER 2021

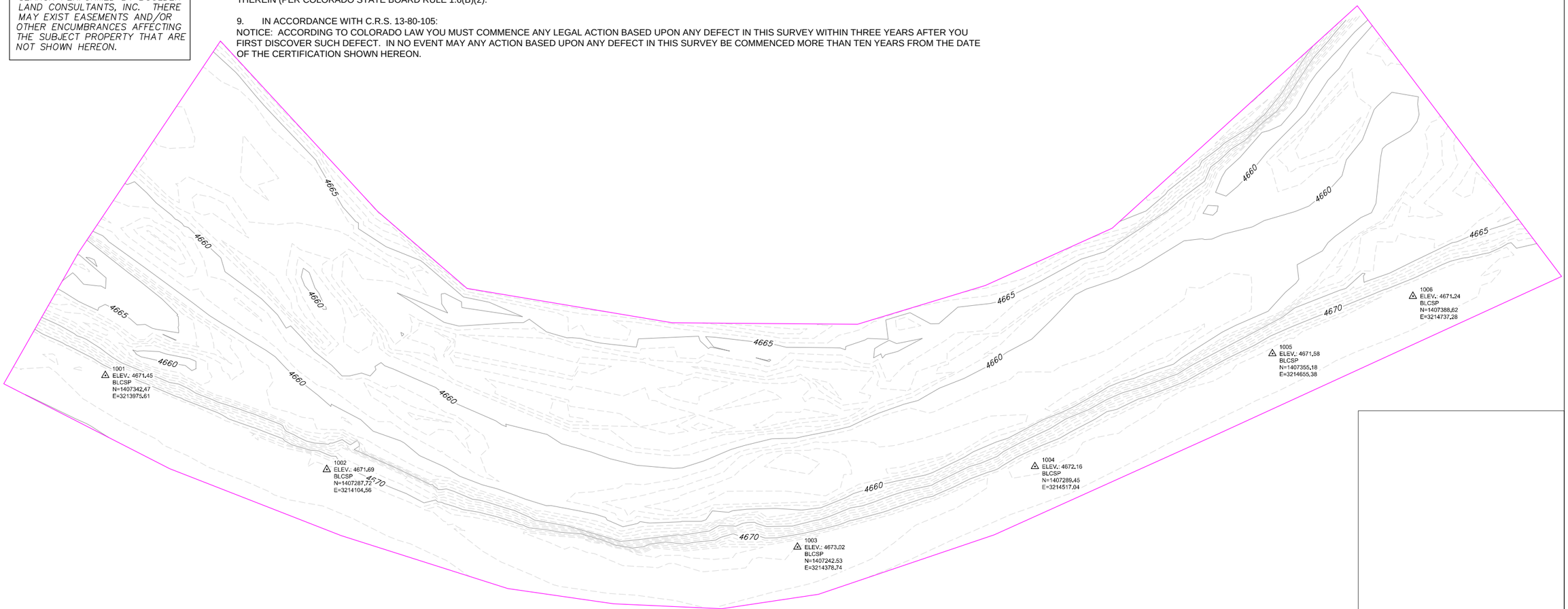
6. TREES OF 12" AND GREATER HAVE BEEN LOCATED.

7. FEMA INFORMATION: THE SELECT TOPOGRAPHIC AREAS ARE LOCATED IN TWO ZONES ACCORDING TO THE FEMA FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 08123C1528E, DATED JANUARY 20, 2016. FLOOD INFORMATION IS SUBJECT TO CHANGE AND IS APPROXIMATED HEREON.
ZONE AE BASE FLOOD ELEVATIONS DETERMINED
ZONE AE (FLOODWAY) THE FLOODWAY IS THE CHANNEL OF A STREAM PLUS ANY ADJACENT FLOODPLAIN AREAS THAT MUST BE KEPT FREE OF ENCROACHMENT SO THAT THE 1% CHANCE FLOOD CAN BE CARRIED WITHOUT SUBSTANTIAL INCREASES IN FLOOD HEIGHTS.

8. CERTIFICATION DEFINED: THE USE OF THE WORDS "CERTIFY" OR "CERTIFICATION" BY A REGISTERED PROFESSIONAL LAND SURVEYOR CONSTITUTES AN EXPRESSION OF PROFESSIONAL OPINION REGARDING THE FACTS AND FINDINGS WHICH ARE THE SUBJECT OF THE CERTIFICATION, AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTY, EITHER EXPRESSED OR IMPLIED. THE CERTIFICATION SHOWN HEREON EXTENDS ONLY TO THOSE PARTIES SPECIFICALLY MENTIONED THEREIN (PER COLORADO STATE BOARD RULE 1.6(B)(2).

9. IN ACCORDANCE WITH C.R.S. 13-80-105:
NOTICE: ACCORDING TO COLORADO LAW YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF THE CERTIFICATION SHOWN HEREON.

| PROJECT CONTROL POINT TABLE | | | | |
|---|---|---|---|---|
| POINT # | NORTHING | EASTING | ELEVATION | DESCRIPTION |
| 1001 | 1407342.467 | 3213975.611 | 4671.45 | BLCSP |
| 1002 | 1407287.717 | 3214104.565 | 4671.69 | BLCSP |
| 1003 | 1407242.534 | 3214378.74 | 4673.022 | BLCSP |
| 1004 | 1407289.451 | 3214517.04 | 4672.16 | BLCSP |
| 1005 | 1407355.184 | 3214655.375 | 4671.58 | BLCSP |
| 1006 | 1407388.625 | 3214737.277 | 4671.24 | BLCSP |

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Print Date: Aug 29, 2023
File Name: Survey Control 20119B.dwg

| Sheet Revisions | | |
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| Date: | Comments | Init. |
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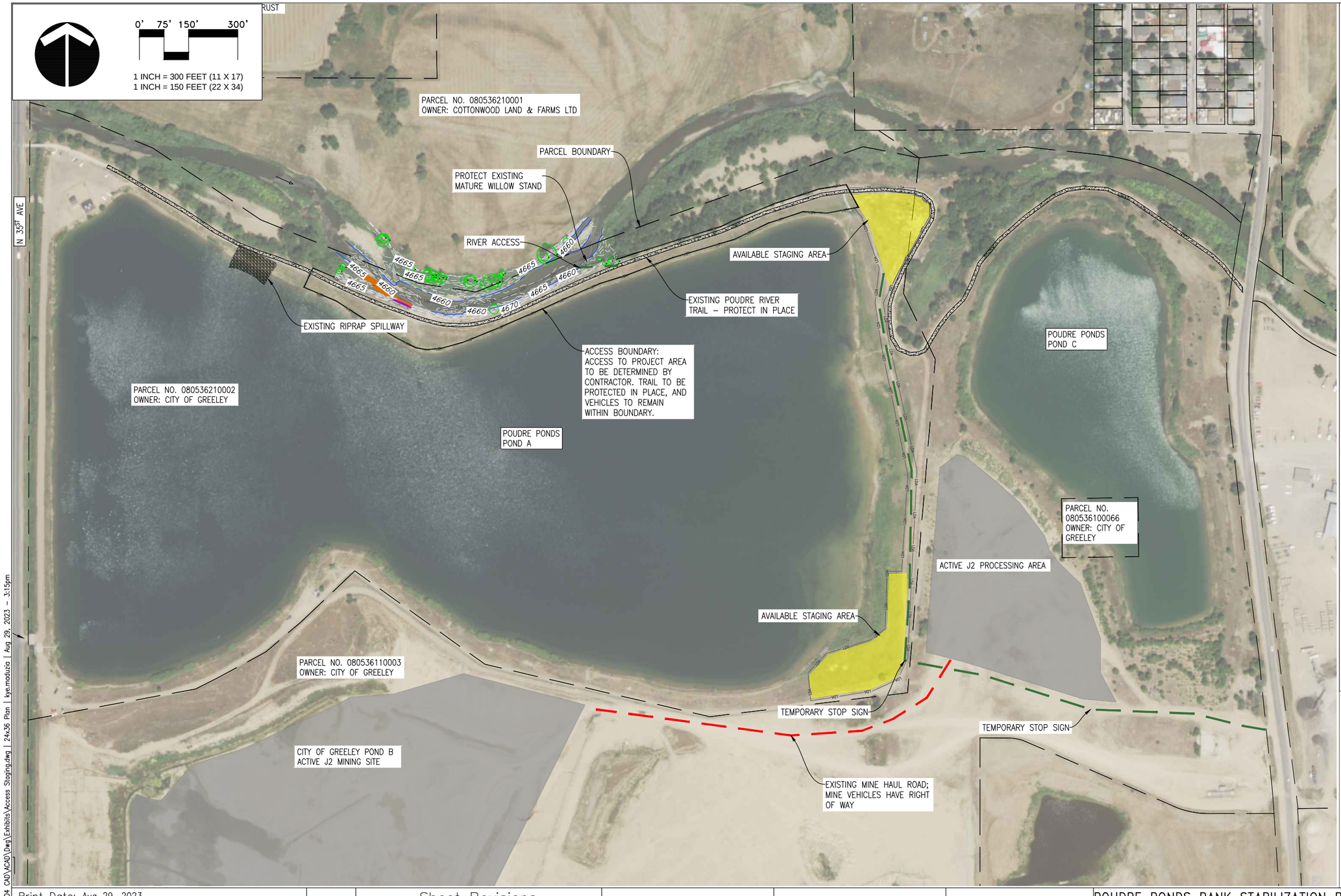
No Revisions:
Revised:
Void:

POUDRE PONDS BANK STABILIZATION PROJECT
SURVEY CONTROL

Designer: CR
Detailer: KM
Structure Numbers
Sheet Subset:
Subset Sheets:

Project No./Code: 20119B

Sheet Number: G4




NOTE:
SELECTED CONTRACTOR MUST COMPLETE ONSITE SAFTEY TRAINING WITH J2 CONTRACTING TO ACCESS AND STAGE MATERIAL WITHIN THE ACTIVE MINE SITE

90% DESIGN - August 29, 2023

0:\PROJECT\20100\20119B\04 CAD\ACAD\Dwg\Exhibits\Access Staging.dwg | 24x36 Plan | kye.moduzio | Aug 29, 2023 - 3:15pm

Print Date: Aug 29, 2023
File Name: Access Staging.dwg

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POUDRE PONDS BANK STABILIZATION PROJECT

ACCESS AND STAGING

Designer: CR
Detailer: KM
Sheet Subset:
Structure Numbers
Subset Sheets:

Project No./Code: 20119B

Sheet Number: G5

0' 25' 50' 100'

1 INCH = 100 FEET (11 X 17)
1 INCH = 50 FEET (22 X 34)


90% DESIGN - August 29, 2023

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Print Date: Aug 29, 2023
File Name: ExistingConditions.dwg

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No Revisions:
Revised:
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POUDRE PONDS BANK STABILIZATION PROJECT

DEMOLITION PLAN

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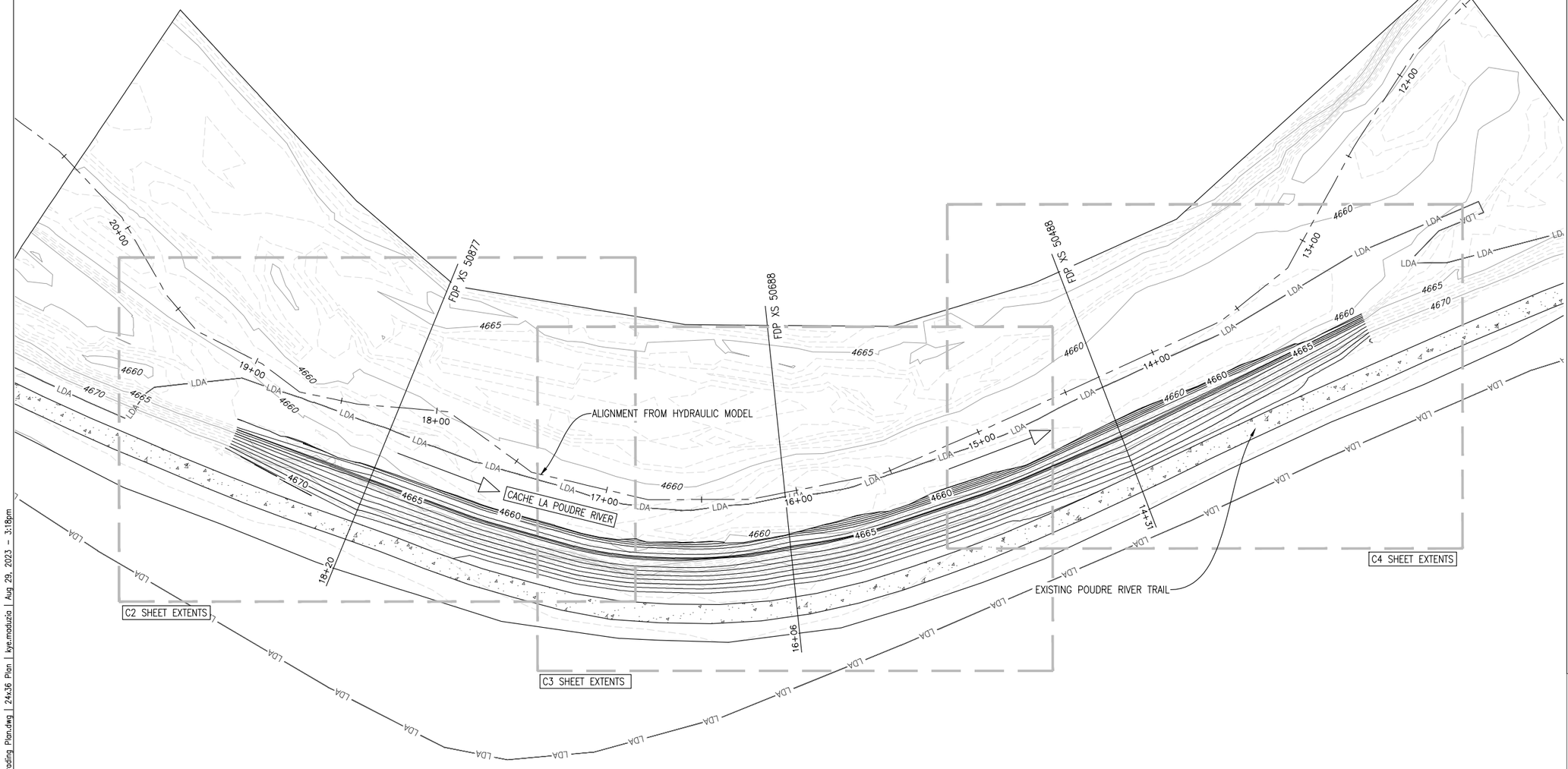
| Designer: | CR | Structure Numbers | |
| Detailer: | KM | | |
| Sheet Subset: | | Subset Sheets: | |

Project No./Code: 20119B

Sheet Number: G6

0' 15' 30' 60'

1 INCH = 60 FEET (11 X 17)
1 INCH = 30 FEET (22 X 34)




90% DESIGN - AUGUST 29, 2023

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| Print Date: Aug 29, 2023 | | Sheet Revisions | | | Otak | City of Greeley Colorado | No Revisions: |
| File Name: Proposed Grading Plan.dwg | | Date: | Comments | Init. | | | Revised: |
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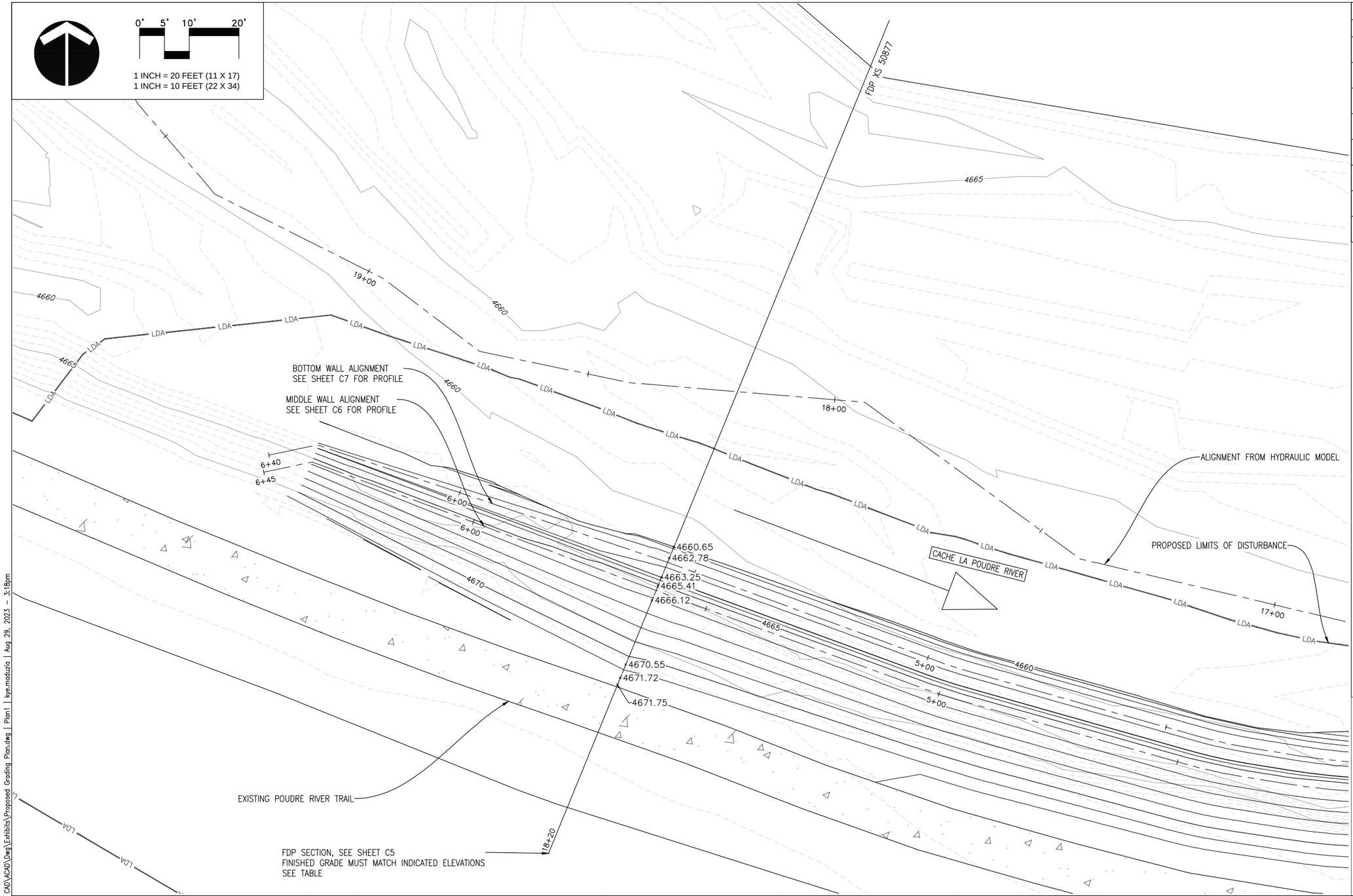
| POUDRE PONDS BANK STABILIZATION PROJECT | | | Project No./Code |
|---|---|---|---|
| PROPOSED GRADING PLAN OVERVIEW | | | 20119B |
| Designer: CR | Structure Numbers | | |
| Detailer: KM | | | Sheet Number C1 |
| Sheet Subset: | Subset Sheets: | | |




| FDP XS 50877 | | |
|---|---|---|
| NOTRHING | EASTING | ELEVATION |
| 1407298.637' | 3214143.988' | 4660.65'' |
| 1407296.416' | 3214143.079' | 4662.78' |
| 1407292.529' | 3214141.488' | 4663.25' |
| 1407290.771' | 3214140.768' | 4665.41' |
| 1407287.902' | 3214139.594' | 4666.12' |
| 1407274.945' | 3214134.290' | 4670.55' |
| 1407272.261' | 3214133.192' | 4671.72' |
| 1407270.873' | 3214132.623' | 4671.75' |

90% DESIGN - August 29, 2023

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Print Date: Aug 29, 2023
File Name: Proposed Grading Plan.dwg

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City of Greeley Colorado

No Revisions:
Revised:
Void:

POUDRE PONDS BANK STABILIZATION PROJECT

PROPOSED GRADING PLAN 1

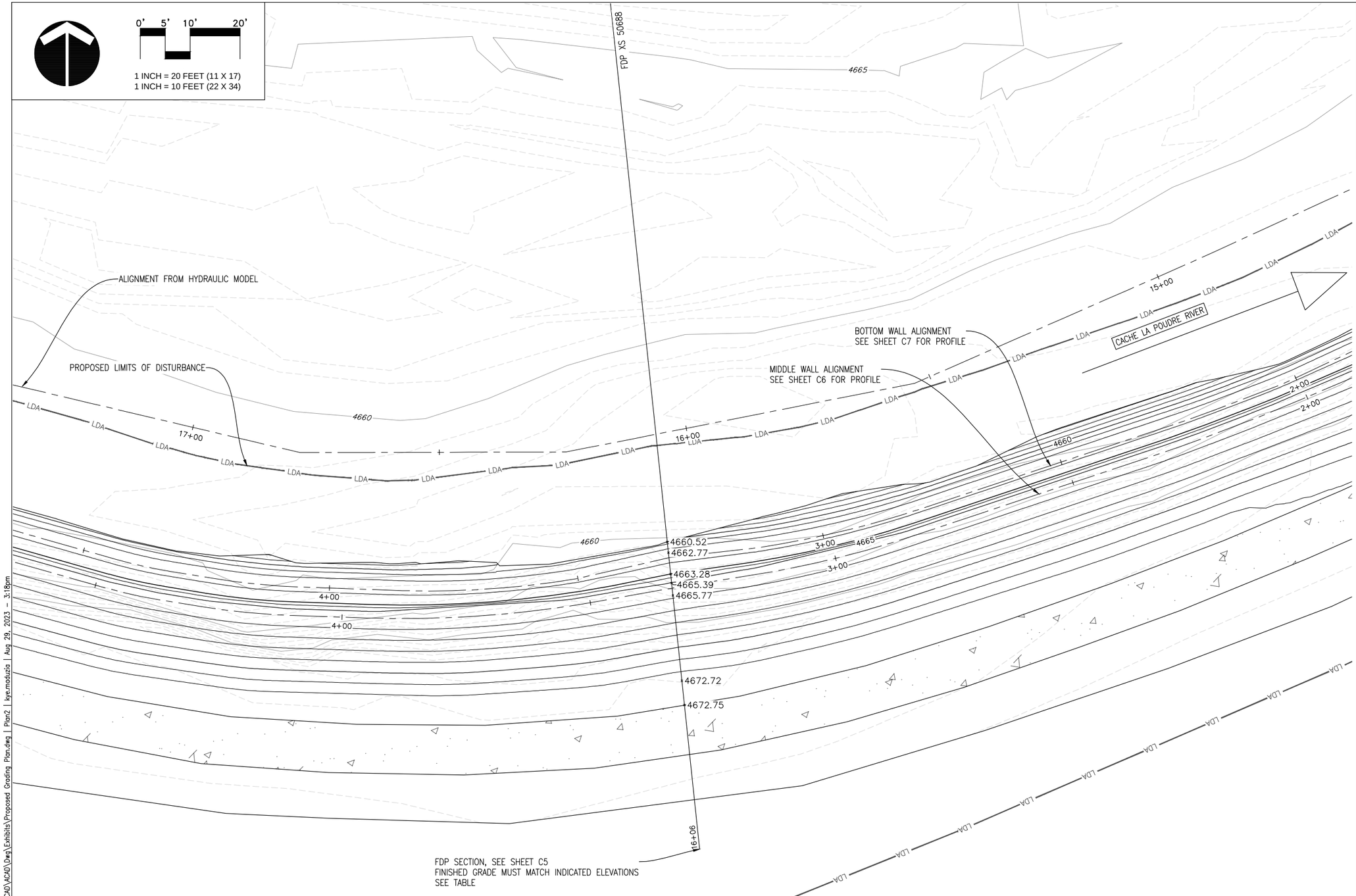
Designer: CR
Detailer: KM
Sheet Subset:
Structure Numbers
Subset Sheets:

Project No./Code: 20119B

Sheet Number: C2

0' 5' 10' 20'

1 INCH = 20 FEET (11 X 17)
1 INCH = 10 FEET (22 X 34)




| FDP XS 50688 | | |
|---|---|---|
| NOTRHING | EASTING | ELEVATION |
| 1407264.006' | 3214360.193' | 4660.52' |
| 1407261.818' | 3214360.423' | 4662.77' |
| 1407257.541' | 3214360.873' | 4663.28' |
| 1407255.751' | 3214361.062' | 4665.39' |
| 1407253.265' | 3214361.323' | 4665.77' |
| 1407236.159' | 3214363.124' | 4672.72' |
| 1407231.285' | 3214363.637' | 4672.75' |

90% DESIGN - August 29, 2023

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Print Date: Aug 29, 2023
File Name: Proposed Grading Plan.dwg

Sheet Revisions

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City of Greeley Colorado

No Revisions:
Revised:
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POUDRE PONDS BANK STABILIZATION PROJECT

PROPOSED GRADING PLAN 2

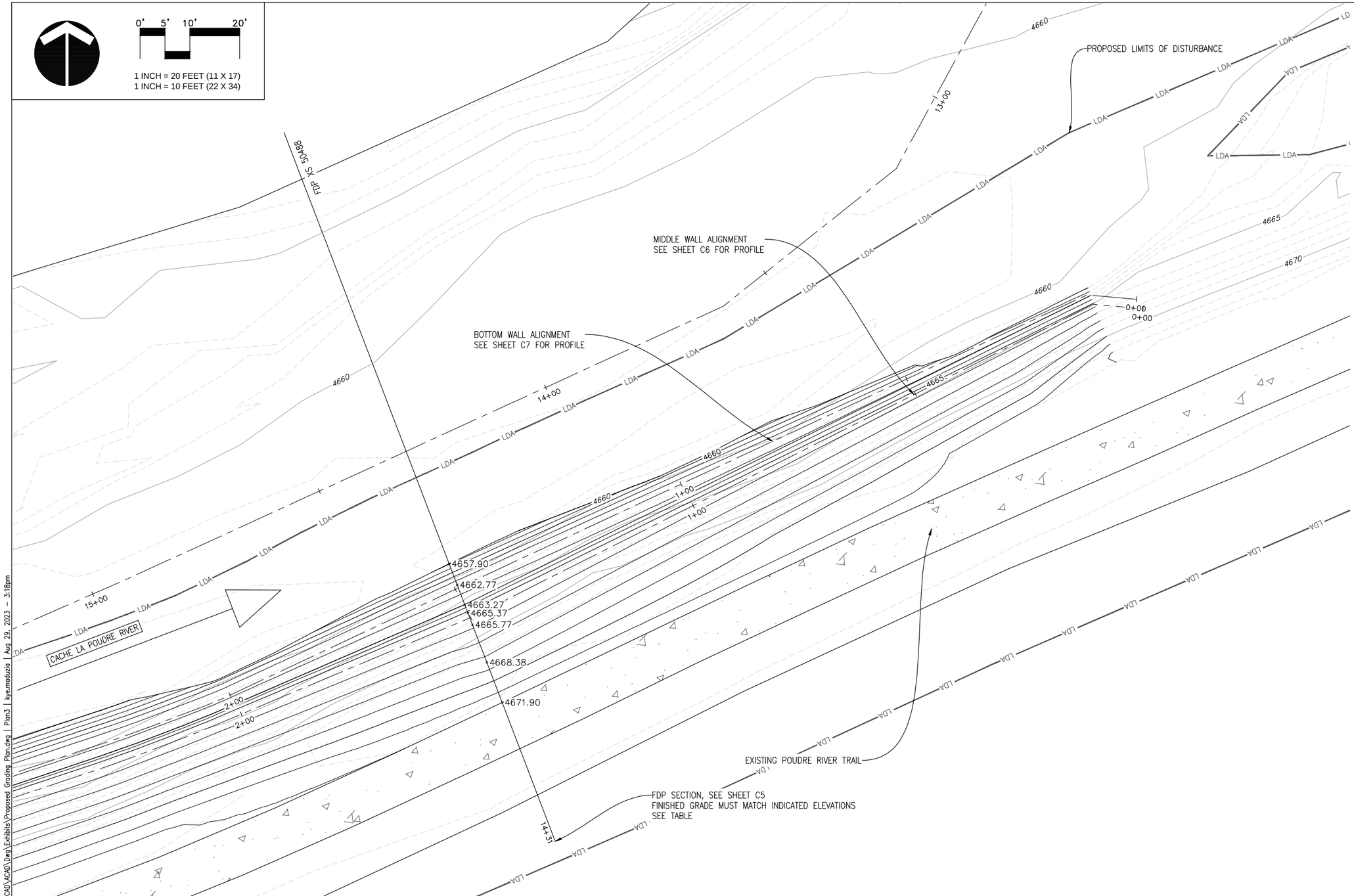
Designer: CR
Detailer: KM
Sheet Subset:
Structure Numbers
Subset Sheets:

Project No./Code
20119B

Sheet Number C3

0' 5' 10' 20'

1 INCH = 20 FEET (11 X 17)
1 INCH = 10 FEET (22 X 34)




| FDP XS 50488 | | |
|---|---|---|
| NOTRHING | EASTING | ELEVATION |
| 1407323.260' | 3214530.248' | 4657.90' |
| 1407319.058' | 3214531.857' | 4662.77' |
| 1407315.042' | 3214533.393' | 4663.27' |
| 1407313.361' | 3214534.037' | 4665.37' |
| 1407311.026' | 3214534.930' | 4665.77' |
| 1407303.461' | 3214537.825' | 4668.38' |
| 1407295.429' | 3214540.899' | 4671.90' |

90% DESIGN - August 29, 2023

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Print Date: Aug 29, 2023
File Name: Proposed Grading Plan.dwg

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POUDRE PONDS BANK STABILIZATION PROJECT

PROPOSED GRADING PLAN 3

Designer: CR
Detailer: KM
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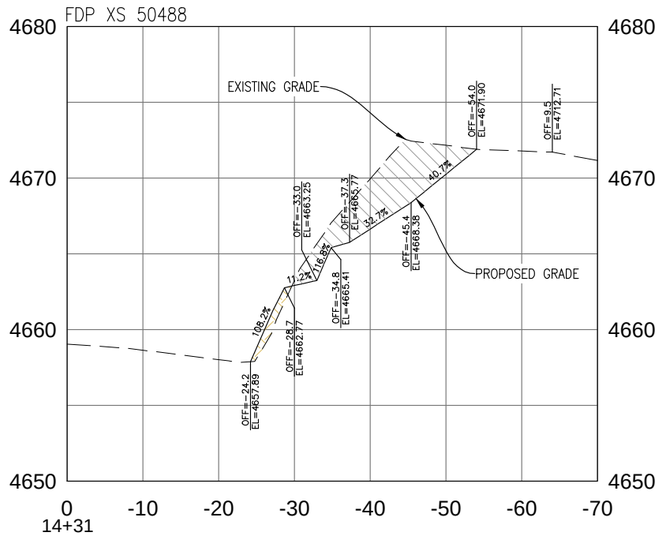
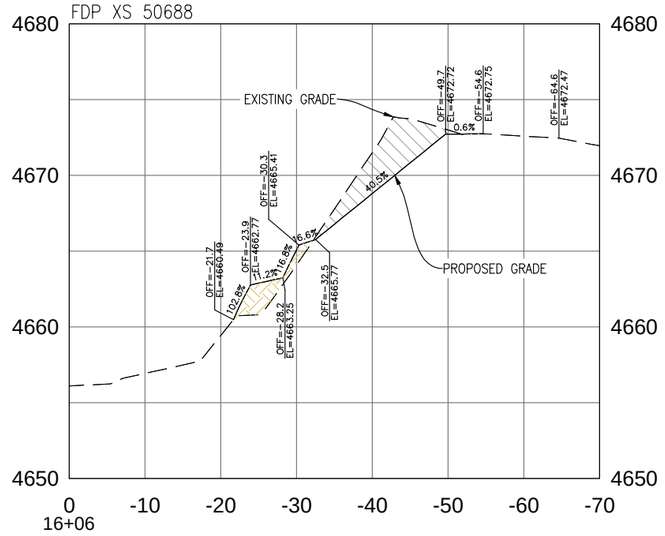
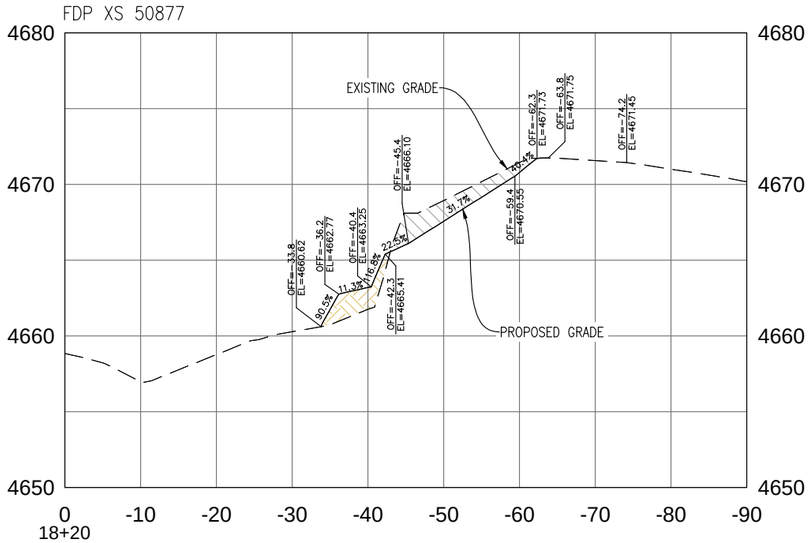
Structure Numbers
Subset Sheets:

Project No./Code: 20119B

Sheet Number: C4




PROPOSED CONDITION (PC)

EXISTING CONDITION (EC)

PROPOSED CUT

PROPOSED FILL

2X VERTICAL EXAGGERATION

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90% DESIGN - August 29, 2023

Print Date: Aug 29, 2023

File Name: Proposed Grading Plan.dwg

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POUDRE PONDS BANK STABILIZATION PROJECT

SECTIONS

Designer: CR

Detailer: KM

Structure Numbers

Sheet Subset:

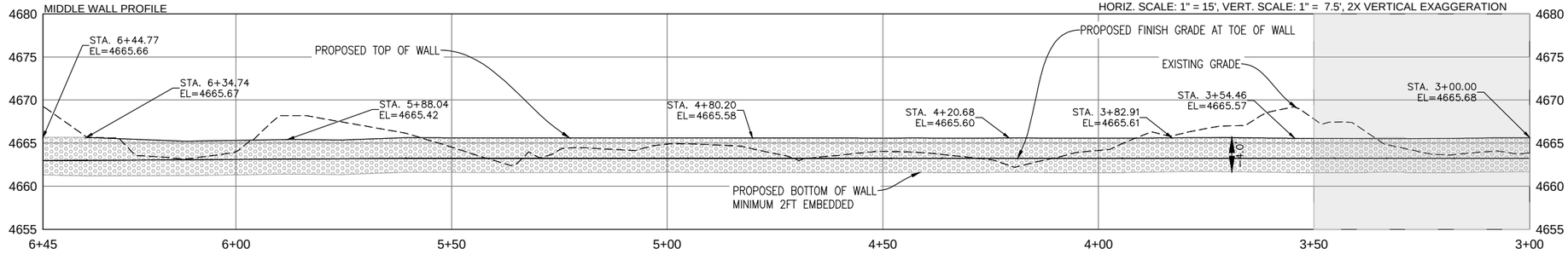
Subset Sheets:

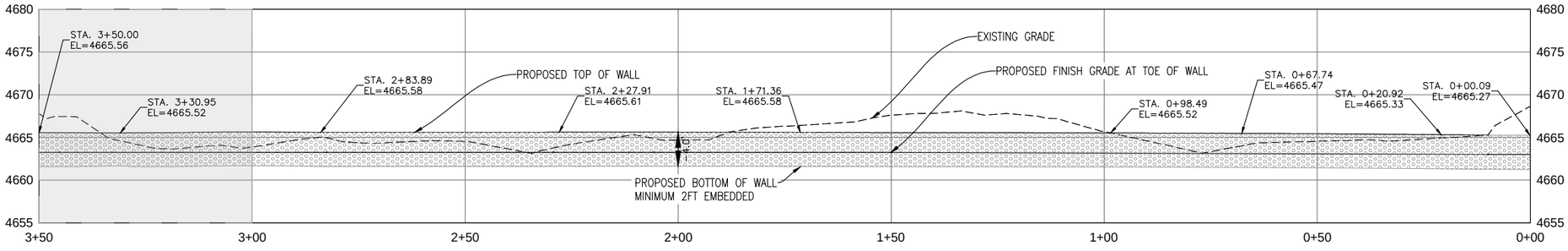
Project No./Code 20119B

Sheet Number C5

MIDDLE WALL PROFILE

HORIZ. SCALE: 1" = 15', VERT. SCALE: 1" = 7.5', 2X VERTICAL EXAGGERATION




90% DESIGN - August 29, 2023

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Print Date: Aug 29, 2023
File Name: Proposed Grading Plan.dwg

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No Revisions:
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POUDRE PONDS BANK STABILIZATION PROJECT

MIDDLE WALL PROFILE

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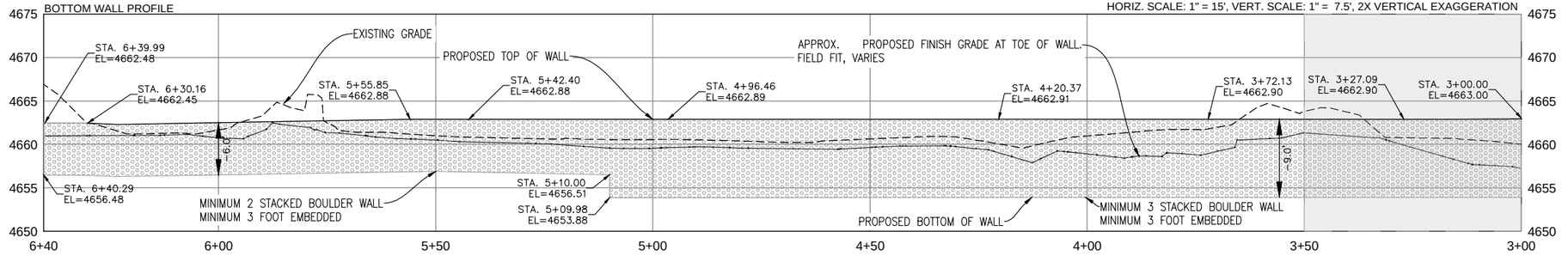
|---|---|---|---|
| Designer: | CR | Structure Numbers | |
| Detailer: | KM | | |
| Sheet Subset: | | Subset Sheets: | |

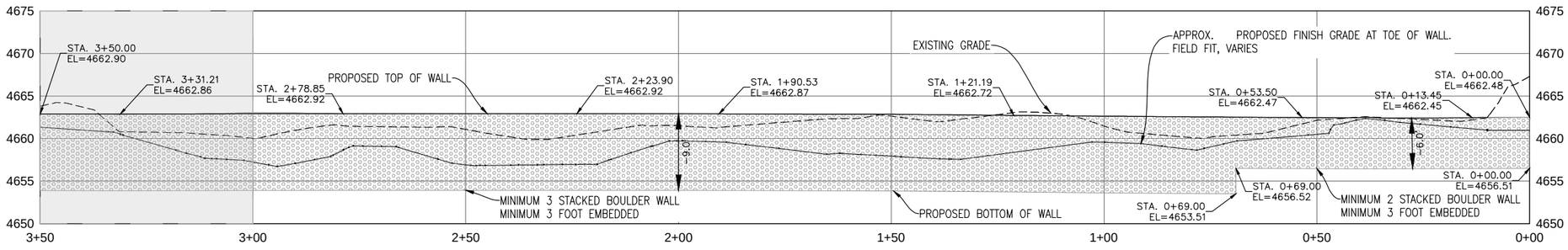
Project No./Code: 20119B

Sheet Number: C6

BOTTOM WALL PROFILE

HORIZ. SCALE: 1" = 15', VERT. SCALE: 1" = 7.5', 2X VERTICAL EXAGGERATION




90% DESIGN - August 29, 2023

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Print Date: Aug 29, 2023
File Name: Proposed Grading Plan.dwg

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Void:

POUDRE PONDS BANK STABILIZATION PROJECT

BOTTOM WALL PROFILE

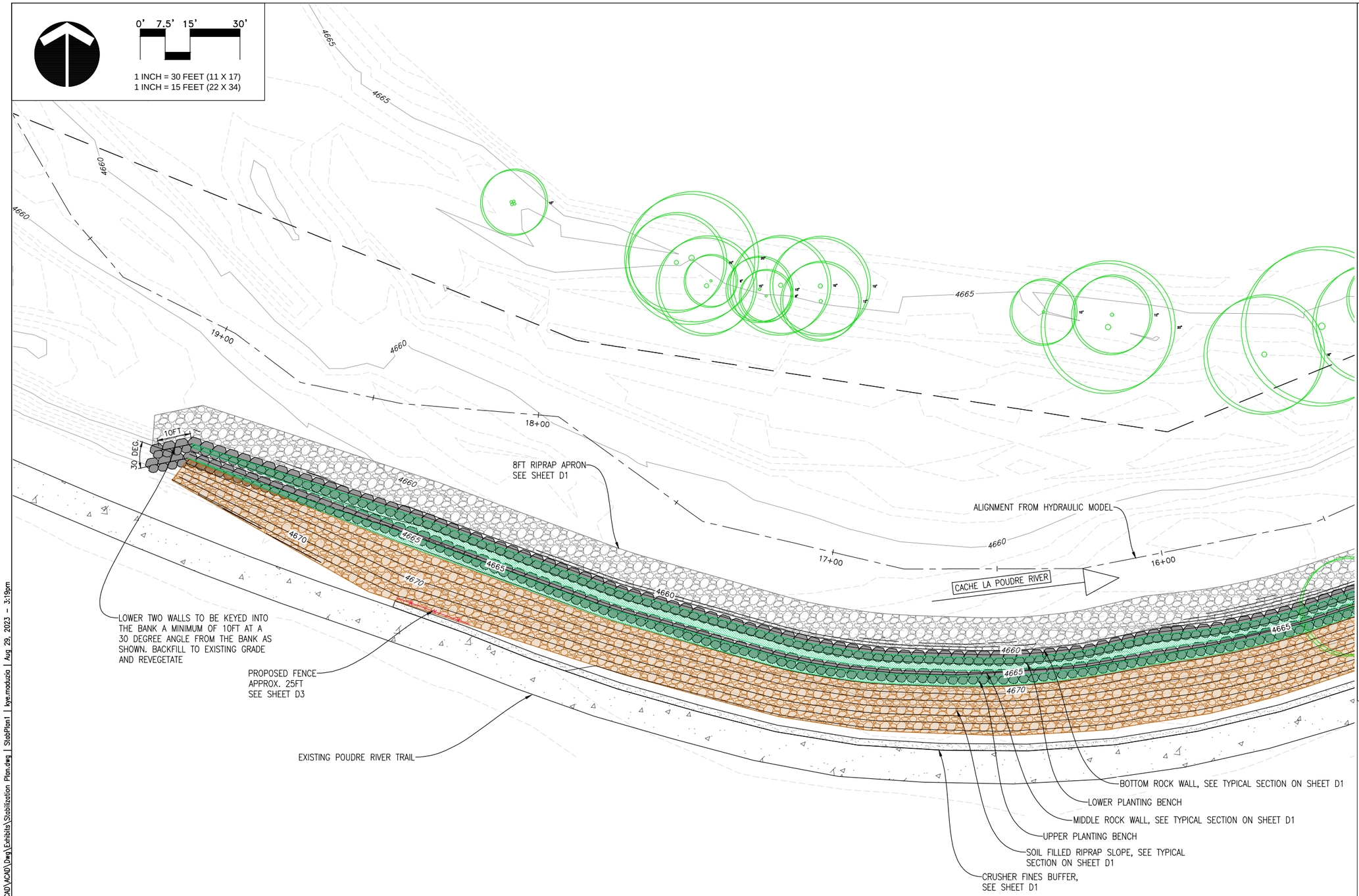
Designer: CR
Detailer: KM
Sheet Subset:
Structure Numbers:
Subset Sheets:

Project No./Code: 20119B

Sheet Number: C7

0' 7.5' 15' 30'

1 INCH = 30 FEET (11 X 17)
1 INCH = 15 FEET (22 X 34)




NOTE:
ONLY THE TOP TWO COURSES OF BOULDERS ARE SHOWN FOR CLARITY

90% DESIGN - August 29, 2023

O:\PROJECT\20100\20119B\04 CAD\ACAD\Dwg\Exhibits\Stabilization Plan.dwg | StabPlan1 | kye.maduzia | Aug 29, 2023 - 3:19pm

Print Date: Aug 29, 2023
File Name: Stabilization Plan.dwg

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Revised:
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POUDRE PONDS BANK STABILIZATION PROJECT

STABILIZATION PLAN 1

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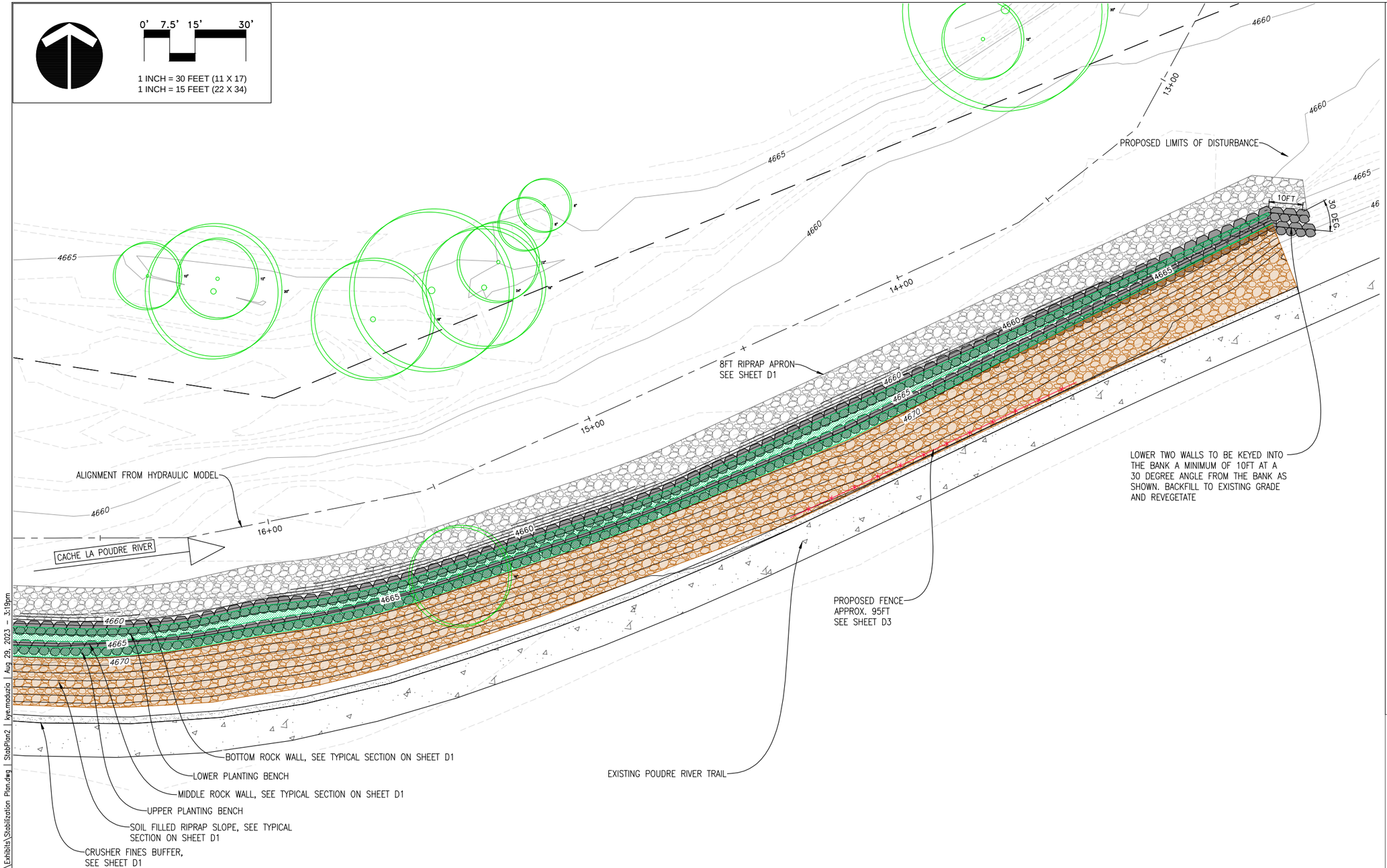
| Designer: | CR | Structure Numbers | |
| Detailer: | KM | | |
| Sheet Subset: | | Subset Sheets: | |

Project No./Code: 20119B

Sheet Number: C8

0' 7.5' 15' 30'

1 INCH = 30 FEET (11 X 17)
1 INCH = 15 FEET (22 X 34)




NOTE:
ONLY THE TOP TWO COURSES OF BOULDERS ARE SHOWN FOR CLARITY

90% DESIGN - August 29, 2023

O:\PROJECT\20100\20119B\04 CAD\ACAD\Dwg\Exhibits\Stabilization Plan.dwg | StabPlan2 | kye.moturzo | Aug 29, 2023 - 3:19pm

Print Date: Aug 29, 2023
File Name: Stabilization Plan.dwg

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City of Greeley Colorado

No Revisions:
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POUDRE PONDS BANK STABILIZATION PROJECT

STABILIZATION PLAN 2

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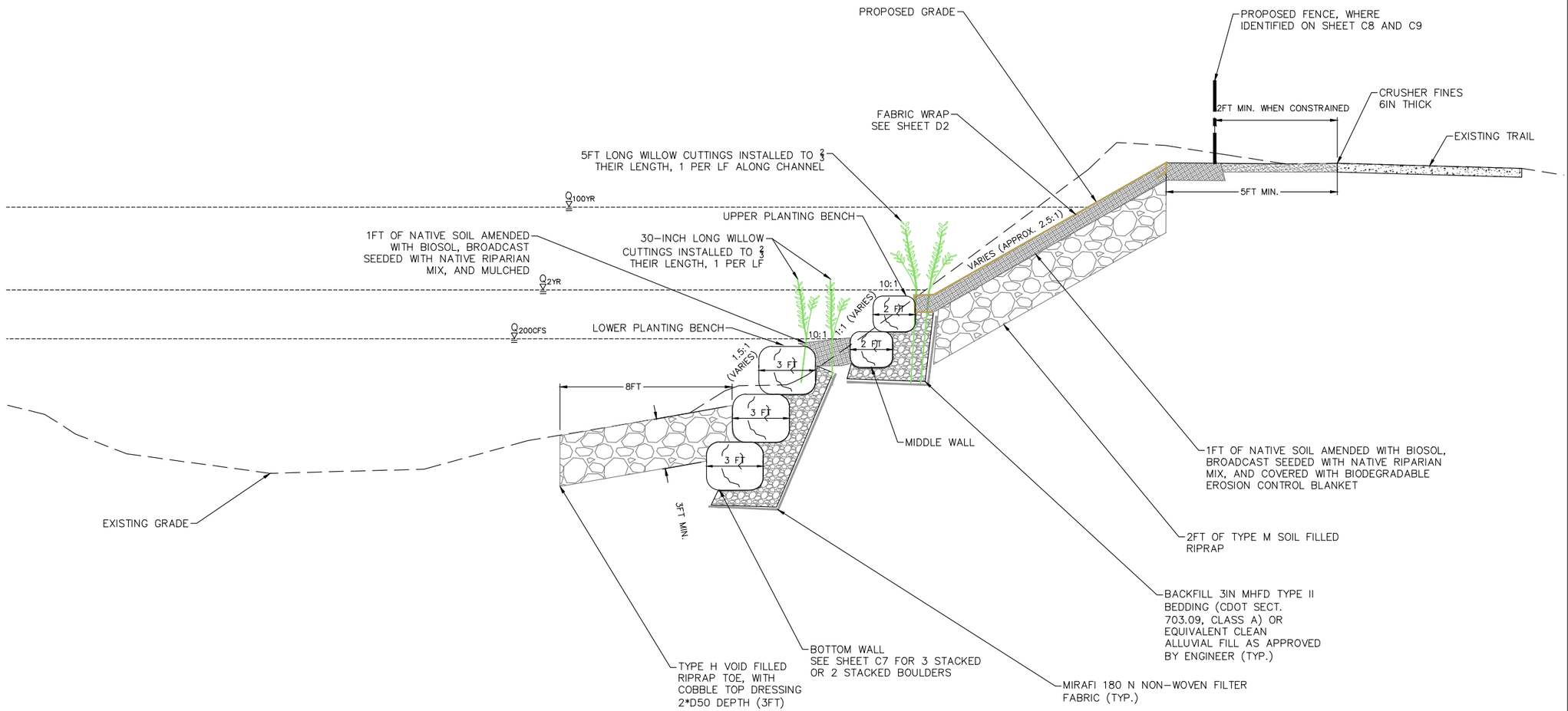
| Designer: | CR | Structure Numbers | |
| Detailer: | KM | | |
| Sheet Subset: | | Subset Sheets: | |

Project No./Code: 20119B

Sheet Number: C9




## TYPICAL BANK CROSS SECTION

NOT TO SCALE (SECTION LOOKING DOWNSTREAM)

90% DESIGN - August 29, 2023

O:\PROJECT\20100\20119B\04 CAD\ACAD\Dwg\Exhibits\Details\TypicalChannelDetail.dwg | 22x34 PLAN | kye.moduzio | Aug 29, 2023 - 3:20pm

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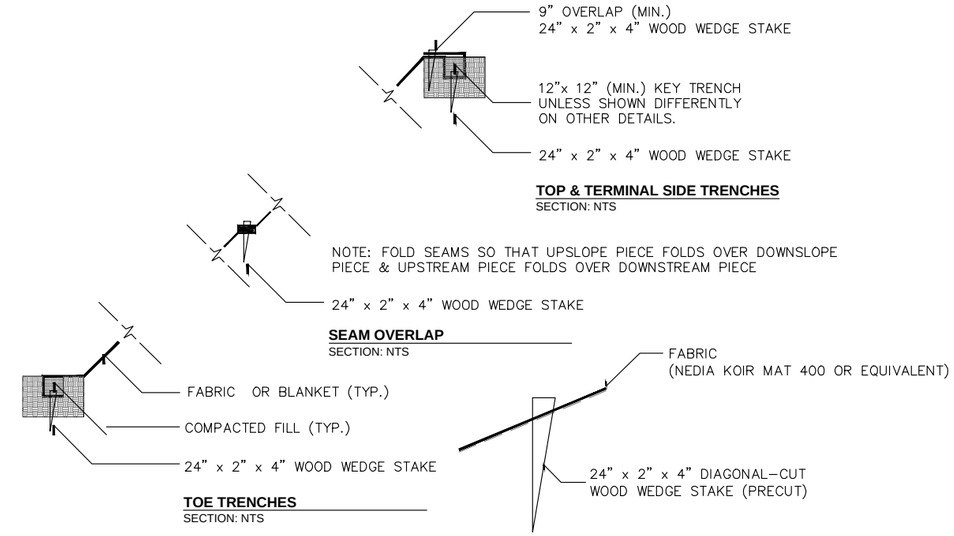
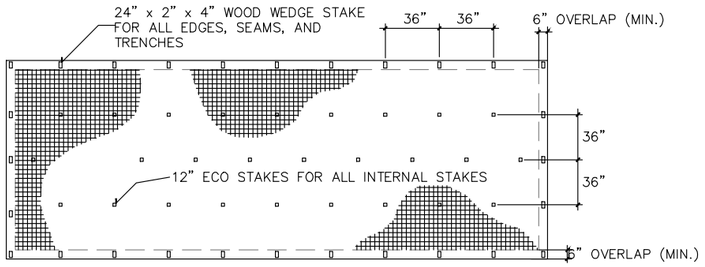
| Print Date: Aug 29, 2023 | | Sheet Revisions | | | Otak | City of Greeley Colorado | POUDRE PONDS BANK STABILIZATION PROJECT | Project No./Code |
| File Name: TypicalChannelDetail.dwg | | Date: | Comments | Init. | | | TYPICAL BANK DETAIL | 20119B |
| | | | | | | No Revisions: | Designer: CR / Detailer: KM / Sheet Subset: | Structure Numbers / Subset Sheets: | |
| | | | | | | Revised: | | | Sheet Number D1 |
| | | | | | | Void: | | | |




TYPICAL TRENCH DETAIL
CROSS-SECTION: NTS

STAKE DETAIL FOR EDGES
CROSS-SECTION: NTS

FABRIC PLACEMENT AREAS:
RIVER LEFT TIE-IN SLOPE FROM APPROX. STA. 11+50 TO STA. 15+50




NOTES:
1. WHERE FEASIBLE, FABRIC WILL BE ROLLED OUT AND INSTALLED PARALLEL WITH THE STREAM.
2. UPSTREAM PIECES WILL OVERLAP DOWNSTREAM PIECES AND UPSLOPE PIECES WILL OVERLAP DOWNSLOPE PIECES.
3. FOLD OVERLAPPING SEAMS AT LEAST TWICE AND THEN STAKE.
4. AFTER INITIAL STAKING, STAKE FABRIC AS NECESSARY SO THAT IT IS COMPLETELY FLUSH WITH THE GROUND SURFACE.
5. SEED, RAKE & INSTALL MULCH AT SPECIFIED RATE PRIOR TO LAYING FABRIC.
6. SEED, RAKE & MULCH ALL KEY TRENCHES PRIOR TO CLOSING FABRIC.
7. ALL DISTURBED SLOPES 3:1 OR STEEPER SHALL HAVE EROSION CONTROL FABRIC NEDIA KOIRMAT 400 OR APPROVED EQUIVALENT.
8. SEE THE EROSION CONTROL PLAN FOR THE LOCATION OF EROSION CONTROL BLANKET.

90% DESIGN - August 29, 2023

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Print Date: Aug 29, 2023
File Name: FabricDetail.dwg

Sheet Revisions

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City of Greeley Colorado

No Revisions:
Revised:
Void:

POUDRE PONDS BANK STABILIZATION PROJECT

FABRIC DETAIL

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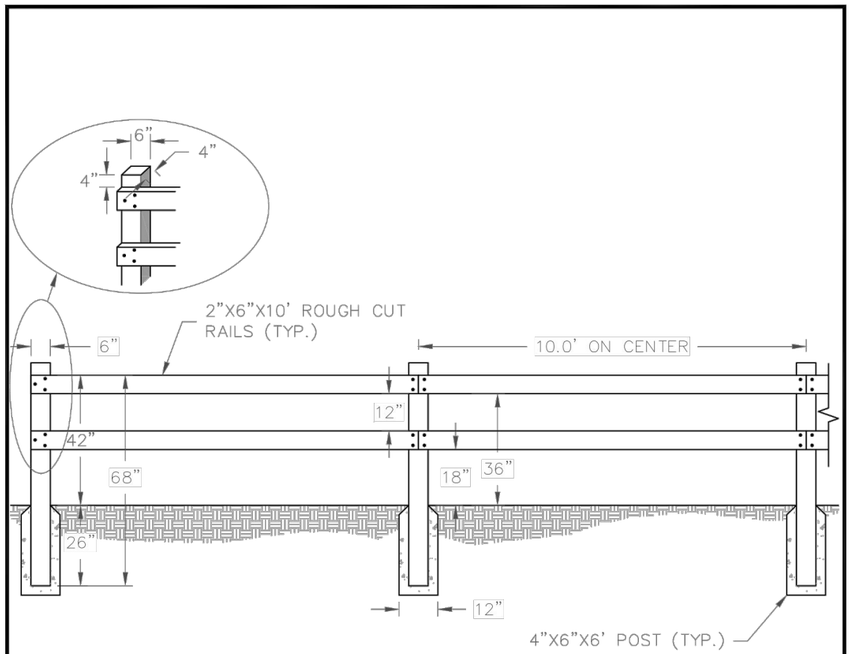
| Designer: | CR | Structure Numbers | |
| Detailer: | KM | | |
| Sheet Subset: | | Subset Sheets: | |

Project No./Code
20119B

Sheet Number D2




NOTES:

1. FENCE SHALL HAVE A 5–FOOT SETBACK FROM TRAIL/SIDEWALK TO ALLOW FOR MOWING MAINTENANCE CLEARANCE WIDTH, UNLESS OTHERWISE SPECIFIED.
2. FENCE IS TO BE CONSTRUCTED OF ROUGH SAWN DIMENSIONAL CEDAR LUMBER.
3. POST SHALL BE 26 INCHES BELOW GROUND, SET IN CONCRETE.
4. POST HOLE SHALL BE 12" DIAMETER WITH THE POST CENTERED IN THE HOLE. CONCRETE SHALL SLOPE AWAY FROM POST.
5. RAILS SHALL BE ATTACHED TO THE FACE OF THE POSTS ON THE EXTERIOR SIDE.
6. RAILS SHALL BE INSTALLED WITH DARK COLORED 4–1/2" STRUCTURAL WOOD SCREWS WITH A SPIDERDRIVE™. SCREWS SHALL BE HEADLOK BY FASTENMASTER OR APPROVED EQUIVALENT. PRE–DRILL SCREWHOLES IF WOODEN RAILS SPLIT AS SCREWS ARE DRIVEN.
7. ALL LUMBER SHALL BE TREATED WITH TRANSPARENT WESTERN RED CEDAR ULTRA PREMIUM PENETRATING OIL FINISH (PENOFIN) OR APPROVED EQUIVALENT.

City of Greeley Colorado

# NATURAL AREA AND TRAILS FENCE

DETAIL NO. F–1

DATE: APRIL, 2019 SCALE: N.T.S.

90% DESIGN - August 29, 2023

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Print Date: Aug 29, 2023
File Name: Details.dwg

Sheet Revisions

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City of Greeley Colorado

No Revisions:
Revised:
Void:

POUDRE PONDS BANK STABILIZATION PROJECT

FENCE DETAIL

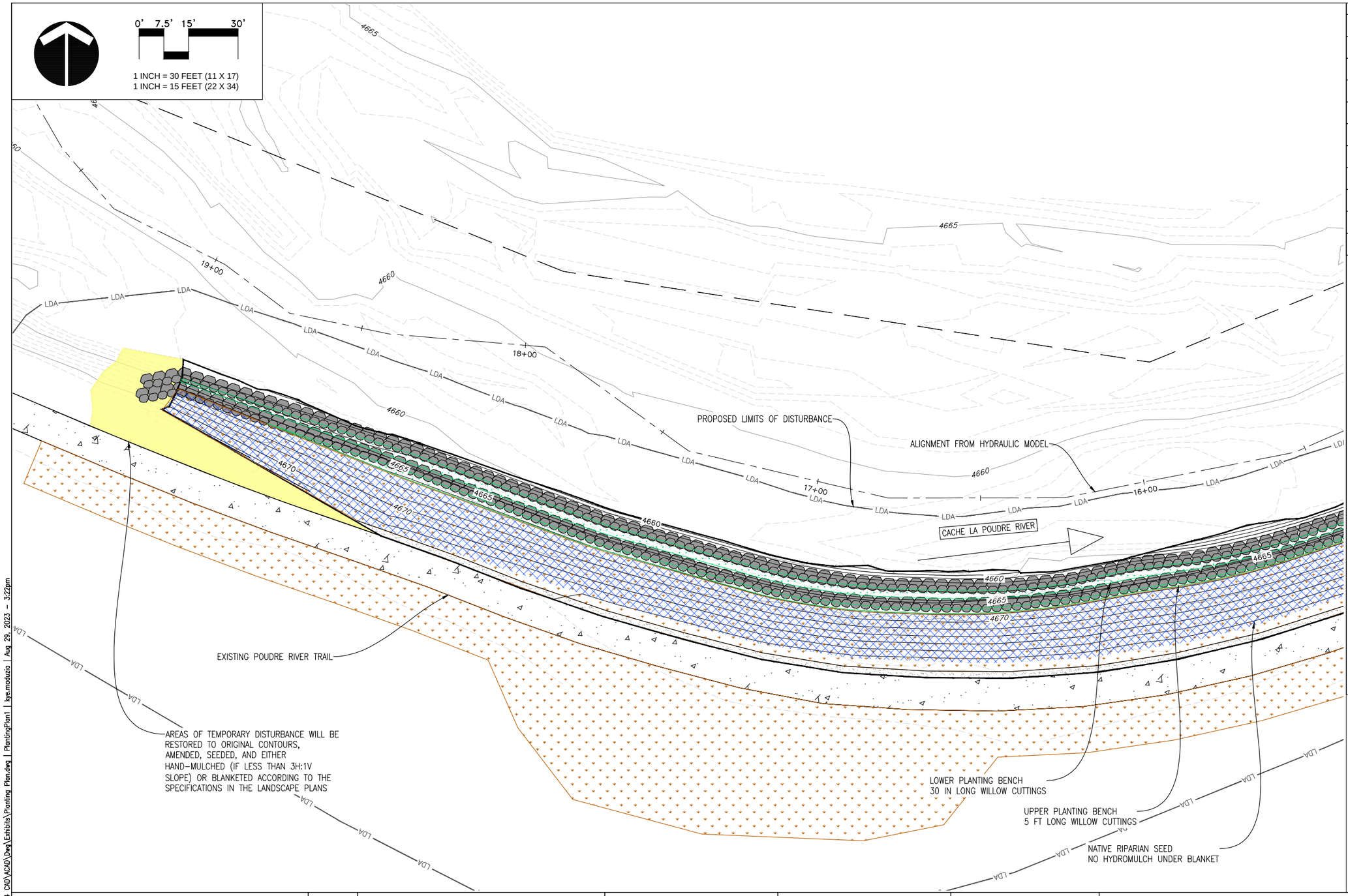
Designer: CR
Detailer: KM
Sheet Subset:
Structure Numbers
Subset Sheets:

Project No./Code: 20119B

Sheet Number: D3

0' 7.5' 15' 30'

1 INCH = 30 FEET (11 X 17)
1 INCH = 15 FEET (22 X 34)




LEGEND

- EXISTING CONTOURS 1FT & 5FT
- PROPOSED 1FT & 5FT
- CONCRETE TRAIL
- NATIVE RIPARIAN SEEDING
- PLANTING BENCH
- STACKED BOULDER WALL
- TEMPORARY DISTURBANCE AREA
- EROSION CONTROL BLANKET
- CRUSHER FINES
- SITE ACCESS
- LIMITS OF DISTURBANCE — LDA

90% DESIGN - August 29, 2023

O:\PROJECT\20100\20119B\04 CAD\ACAD\Dwg\Exhibits\Planting Plan.dwg | PlantingPlan1 | kye.maduzia | Aug 29, 2023 - 3:22pm

Print Date: Aug 29, 2023
File Name: Planting Plan.dwg

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City of Greeley Colorado

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POUDRE PONDS BANK STABILIZATION PROJECT

PLANTING PLAN 1

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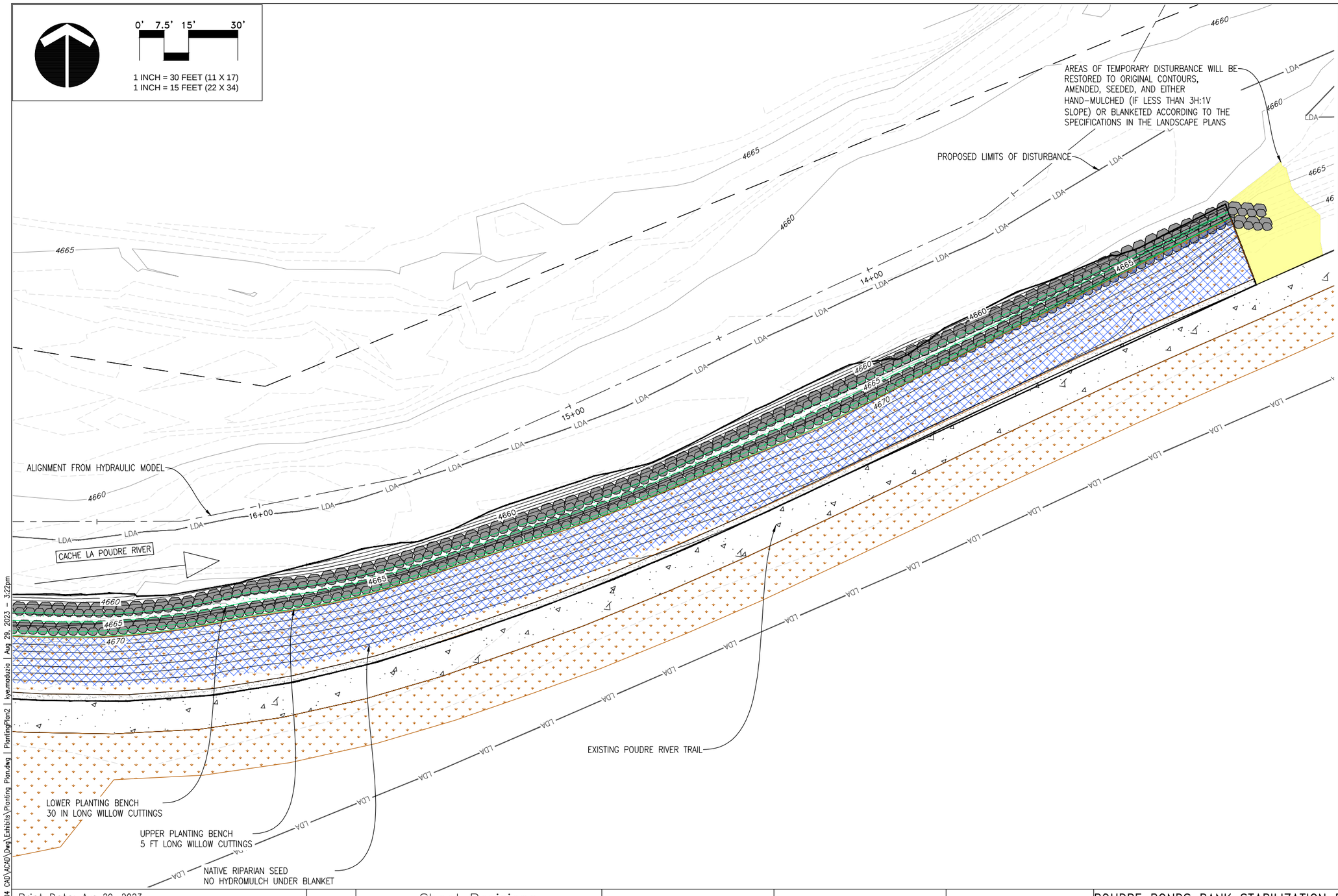
| Designer: | CR | Structure Numbers | |
| Detailer: | KM | | |
| Sheet Subset: | | Subset Sheets: | |

Project No./Code: 20119B

Sheet Number: LS1

0' 7.5' 15' 30'

1 INCH = 30 FEET (11 X 17)
1 INCH = 15 FEET (22 X 34)




LEGEND

- EXISTING CONTOURS 1FT & 5FT
- PROPOSED 1FT & 5FT
- CONCRETE TRAIL
- NATIVE RIPARIAN SEEDING
- PLANTING BENCH
- STACKED BOULDER WALL
- TEMPORARY DISTURBANCE AREA
- EROSION CONTROL BLANKET
- CRUSHER FINES
- SITE ACCESS
- LIMITS OF DISTURBANCE — LDA

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Print Date: Aug 29, 2023
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POUDRE PONDS BANK STABILIZATION PROJECT

PLANTING PLAN 2

Designer: CR
Detailer: KM
Sheet Subset:
Structure Numbers
Subset Sheets:

Project No./Code: 20119B

Sheet Number: LS2

0' 50' 100' 200'

1 INCH = 200 FEET (11 X 17)
1 INCH = 100 FEET (22 X 34)

PARCEL NO. 080536210001
OWNER: COTTONWOOD LAND & FARMS LTD

RECLAIMED STAGING AREA

EXISTING POUDRE RIVER TRAIL
PROTECT IN PLACE

PARCEL NO. 080536100066
OWNER: CITY OF GREELEY

RECLAIMED STAGING AREA

LDA

| LEGEND | |
|---|---|
| EXISTING CONTOURS 1FT & 5FT | |
| PROPOSED 1FT & 5FT | |
| CONCRETE TRAIL | |
| NATIVE RIPARIAN SEEDING | |
| PLANTING BENCH | |
| STACKED BOULDER WALL | |
| TEMPORARY DISTURBANCE AREA | |
| EROSION CONTROL BLANKET | |
| CRUSHER FINES | |
| SITE ACCESS | |
| LIMITS OF DISTURBANCE | LDA |

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Print Date: Aug 29, 2023
File Name: Planting Plan.dwg

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Revised:
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POUDRE PONDS BANK STABILIZATION PROJECT

PLANTING PLAN 3

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|---|---|---|---|
| Designer: | CR | Structure Numbers | |
| Detailer: | KM | | |
| Sheet Subset: | | Subset Sheets: | |

Project No./Code: 20119B

Sheet Number: LS3

**Poudre Ponds Bank Stabilization Project**
**Revegetation Plan**
**July 7, 2023**

General Notes:

1. This Revegetation Plan was prepared by Andy Herb, AlpineEco.
2. Any trees to be removed for the project will be removed during the non-nesting season for migratory birds (between September 1 and March 31). If this is not possible, active nest surveys will be required.
3. Unnecessary impacts will be avoided by fencing the limits of construction. There will be no vehicle access outside the limits of construction.
4. To avoid the continued spread of noxious weeds, all discrete populations of Colorado List A or B noxious weeds found in or within 100 feet of the restoration area will be sprayed with the appropriate herbicide(s) prior to construction. Russian Olive (*Elaeagnus angustifolia*) and Saltcedar (*Tamarisk* spp.) must be removed using the "cut-stump" method (see Specifications). Weed populations must be identified by a qualified ecologist during the growing season.
5. All best management practices (BMPs) shall be selected, installed, implemented, and maintained according to appropriate engineering, hydrologic, and pollution control practices. All erosion control materials will be biodegradable and not use plastic netting.
6. No chemicals shall be used, stored, or stockpiled within 50 horizontal feet of the river or other aquatic habitats.
7. All waste materials generated by the construction (garbage, excess soil or rock, etc.) will be stockpiled and disposed of in an approved upland location.
8. The project must meet the revegetation performance standards outlined in the specifications before the contractor is released from maintenance responsibilities.

Earthwork Notes:

9. If topsoil will be imported, a qualified ecologist will inspect the donor site for undesirable species, noxious weeds, and other indicators of poor soil quality prior to harvest. If problems are observed, the ecologist will make recommendations to City staff.
10. All areas to be revegetated will be decompacted to a depth of 12 inches, being sure to leave the finish grade loose. **See photos**.
11. All areas to revegetated will also receive 1,000 pounds per acre of Biosol Forte 7-2-1.
12. Areas of temporary disturbance for equipment access will be restored to original contours, amended, seeded, and either mulched (if less than 3H:1V slope) or blanketed according to the following specifications.

Planting and Seeding Notes:

13. A qualified ecologist will direct and supervise all plant harvest and installation. The exact installation locations for live plant material will be based on the final grading, as determined by a qualified ecologist.
14. Live cuttings will be collected on-site or from elsewhere in Weld County (or nearby counties) within 500 vertical feet of near the site. A qualified ecologist must approve collection site(s).

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15. Live cuttings to be installed on the Lower and Upper Planting Benches (**Table 1**) will be harvested when dormant (before leaves emerge or after they are dropped) from live plants 0.5 to 1.0 inch in diameter. The stem will be stripped of all branches before cutting and then trimmed to the desired length. The lower (rooting) end of the stem will be cut at a 45-degree angle and the upper end will be cut at a 90-degree angle. The lower end of the cuttings will be placed into cold water (<50 degrees F) within one minute of cutting and then transferred to a storage vessel within 1 hour where they will remain completely submerged for at least 72 hours, but not more than 14 days, prior to planting. The water will be kept cold during the entire soaking period. During planting, the cuttings will be kept wet until placed into the ground and will not be allowed out of water for more than 10 minutes.
16. Cuttings will be installed to a depth of two-thirds their length (20 inches for the Lower Planting Bench and 40 inches for the Upper Planting Bench), being sure to have the rooting end (45-degree angle cut) at the bottom. After installing, the hole will be backfilled or tamped to ensure no air pockets.
17. All seeded areas will be hand-broadcast with the *Riparian Seed Mix* (**Table 2**). Seeding will only be performed between October 1 and when the ground freezes, and when the ground thaws and May 1, unless approved by a qualified ecologist.
18. The Lower Planting Bench will be seeded after planting, whereas the Upper Planting Bench will be planted after seeding and blanket installation (planting through the blanket).
19. After seeding, all areas to be revegetated that are not blanketed will be hydromulched per the manufacturer's specifications to achieve approximately 80 percent ground cover. Hydromulch will include a cellulose-based tackifier.
20. No equipment will be allowed in the restoration area after decompaction. Biosol, blanket, seed, and mulch must be applied either by hand or by working from the edge of the restoration area.

Literature Cited

Granite Seed and Erosion Control (Granite Seed). 2023. *Revegetation & Conservation Seed*. http://www.graniteseed.com/

Prairie Moon Nursery. 2023. *Seeds*. https://www.prairiemoon.com/seeds/.

US Army Corps of Engineers (USACE). 2020. *National Wetland Plant List,* version 3.5. http://wetland_plants.usace.army.mil/.

US Department of Agriculture (USDA). 2023. *The PLANTS Database.* http://plants.usda.gov. National Plant Data Team, Greensboro, NC 27401-4901 USA.

Western Native Seed. 2023. *Guides*. http://www.westernnativeseed.com/

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Print Date: Aug 29, 2023
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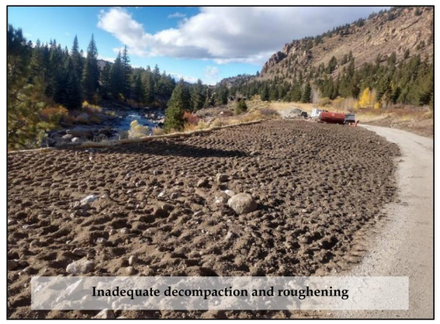
POUDRE PONDS BANK STABILIZATION PROJECT
PLANTING NOTES

Designer: CR
Detailer: KM
Sheet Subset:
Structure Numbers:
Subset Sheets:

Project No./Code: 20119B

Sheet Number: LS4

AlpineEco

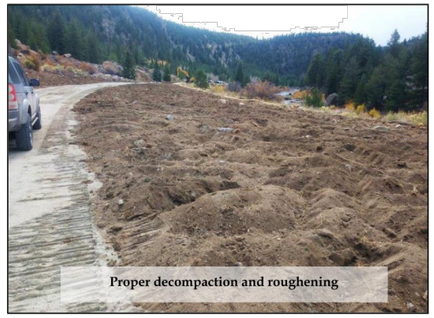





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**Table 1: Live Plants Needed for Restoration**

| Common Name[1] | Scientific Name[1] | Plant Size | Total Plants Needed |
|---|---|---|---|
| **Lower Planting Bench (one cutting per linear foot; 622 feet)** | | | |
| Peachleaf willow | *Salix amygdaloides* | 30-inch cutting | 62 |
| Narrowleaf willow | *Salix exigua* | 30-inch cutting | 560 |
| | | **Total** | **622** |
| **Upper Planting Bench (one cutting per linear foot; 625 feet)** | | | |
| Peachleaf willow | *Salix amygdaloides* | 60-inch cutting | 63 |
| Narrowleaf willow | *Salix exigua* | 60-inch cutting | 562 |
| | | **Total** | **625** |

[1]Plant nomenclature from the *National Wetland Plant List* (USACE 2020)

**Summary of Revegetation Sequence**

1. Survey and treat noxious weeds
2. Install BMPs and fence work area
3. Complete earthwork
4. Decompact revegetation areas
5. Apply Biosol
6. Install live plants on Lower Planting Bench, then seed and mulch
7. Seed Upper Planting Bench, then install blanket. Install live plants after blanketing.
8. Restore staging area(s) and access road(s) to original contours, decompact, amend the soil, seed, and mulch or blanket.

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POUDRE PONDS BANK STABILIZATION PROJECT
PLANTING DETAILS

Designer: CR
Detailer: KM
Sheet Subset:
Structure Numbers:
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Project No./Code: 20119B

Sheet Number: LS5

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**Table 2: Riparian Seed Mix**

| Type | Common Name[1] | Scientific Name[1] | Variety | Seeds per Pound | Seeds per Square Foot | Percent of Mix (by weight) | Pounds of Pure Live Seed/Acre |
|---|---|---|---|---|---|---|---|
| Graminoids | Indian Ricegrass | *Achnatherum hymenoides* | White River, Paloma, Rimrock, Nezpar | 141,000 | 6.5 | 4.9 | 2.00 |
| | Sideoats Grama | *Bouteloua curtipendula* | Butte or Pierre | 191,000 | 6.6 | 3.7 | 1.50 |
| | Buffalograss | *Bouteloua dactyloides* | Plains | 56,000 | 6.4 | 12.3 | 5.00 |
| | Blue Grama | *Bouteloua gracilis* | Birds Eye, Alma, Lovington, or Hachita | 825,000 | 9.5 | 1.2 | 0.50 |
| | Canada Wild Rye | *Elymus canadensis* | Mandan | 114,000 | 5.2 | 4.9 | 2.00 |
| | Squirreltail | *Elymus elymoides* | Pueblo or Wapiti | 192,000 | 6.6 | 3.7 | 1.50 |
| | Fowl Manna Grass | *Glyceria striata* | - | 1,600,000 | 7.3 | 0.5 | 0.20 |
| | Needle and Thread | *Hesperostipa comata* | - | 115,000 | 6.6 | 6.1 | 2.50 |
| | Baltic Rush | *Juncus balticus* | - | 8,000,000 | 9.2 | 0.1 | 0.05 |
| | Prairie Junegrass | *Koeleria macrantha* | Sims Mesa | 2,300,000 | 5.3 | 0.2 | 0.10 |
| | Alkali Muhly | *Muhlenbergia asperifolia* | - | 2,400,000 | 5.5 | 0.2 | 0.10 |
| | Green Needlegrass | *Nassella viridula* | Cucharas or Lodorm | 181,000 | 4.2 | 2.5 | 1.00 |
| | Western-Wheat Grass | *Pascopyrum smithii* | Arriba | 110,000 | 8.8 | 8.6 | 3.50 |
| | Little Bluestem | *Schizachyrium scoparium* | Pastura, Cimarron, or Camper | 260,000 | 6.0 | 2.5 | 1.00 |
| | Indiangrass | *Sorghastrum nutans* | Cheyenne, Llano, or NE54 | 180,000 | 3.3 | 2.0 | 0.80 |
| | Freshwater Cord Grass | *Spartina pectinata* | - | 197,000 | 6.8 | 3.7 | 1.50 |
| | Sand Dropseed | *Sporobolus cryptandrus* | - | 5,300,000 | 6.1 | 0.1 | 0.05 |
| Forbs | Common Yarrow | *Achillea millefolium var. occidentalis* | Eagle, Great Northern, or Yakima | 2,700,000 | 6.2 | 0.2 | 0.10 |
| | Showy Milkweed | *Asclepias speciosa* | - | 58,000 | 2.7 | 4.9 | 2.00 |
| | Rocky Mountain Bee Plant | *Cleome serrulata* | - | 66,000 | 3.8 | 6.1 | 2.50 |
| | Golden Tickseed | *Coreopsis tinctoria* | - | 1,400,000 | 3.2 | 0.2 | 0.10 |
| | Purple Prairie Clover | *Dalea purpurea* | Kaneb | 210,000 | 3.4 | 1.7 | 0.70 |
| | Blanketflower | *Gaillardia aristata* | Meriweather | 132,000 | 3.6 | 2.9 | 1.20 |
| | Common Sunflower | *Helianthus annuus* | - | 115,000 | 3.4 | 3.2 | 1.30 |
| | Maximilian Sunflower | *Helianthus maximiliani* | - | 208,000 | 3.3 | 1.7 | 0.70 |

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| Type | Common Name[1] | Scientific Name[1] | Variety | Seeds per Pound | Seeds per Square Foot | Percent of Mix (by weight) | Pounds of Pure Live Seed/Acre |
|---|---|---|---|---|---|---|---|
| | Hairy False Goldenaster | *Heterotheca villosa* | - | 336,000 | 3.9 | 1.2 | 0.50 |
| | Dotted Blazingstar | *Liatris punctata* | - | 168,000 | 3.5 | 2.2 | 0.90 |
| | Lewis Flax | *Linum lewisii* | Maple Grove | 295,000 | 3.4 | 1.2 | 0.50 |
| | Upright Blue Beardtongue | *Penstemon virgatus* | - | 500,000 | 3.4 | 0.7 | 0.30 |
| | Upright Prairie Coneflower | *Ratibida columnifera* | - | 729,500 | 3.3 | 0.5 | 0.20 |
| | Canada Goldenrod | *Solidago altissima* | - | 700,000 | 3.2 | 0.5 | 0.20 |
| | Simpler's-Joy | *Verbena hastata* | - | 1,600,000 | 3.7 | 0.2 | 0.10 |
| Shrubs | Fourwing Saltbush | *Atriplex canescens* | - | 44,000 | 1.5 | 3.7 | 1.50 |
| | Woods' Rose | *Rosa woodsii* | - | 49,000 | 1.1 | 2.5 | 1.00 |
| | Skunkbush Sumac | *Rhus trilobata* | - | 15,500 | 1.1 | 7.4 | 3.00 |
| | Western Snowberry | *Symphoricarpos occidentalis* | Trapper | 74,000 | 1.2 | 1.7 | 0.70 |
| | | | | **Total** | **168.8** | **100.0** | **40.80** |

[1]Nomenclature follows *PLANTS Database* (USDA 2023); seeding rate based on hand-broadcasting; any substitutions must be approved by the project ecologist; seeds per pound from USDA 2023, Granite Seed 2023, Prairie Moon Nursery 2023, Western Native Seed 2023

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POUDRE PONDS BANK STABILIZATION PROJECT
PLANTING SCEDULES

Designer: CR
Detailer: KM
Sheet Subset:
Structure Numbers:
Subset Sheets:

Project No./Code: 20119B

Sheet Number: LS6


GENERAL NOTES:

1. CONTRACTOR SHALL INSTALL ALL PERIMETER SEDIMENT AND EROSION CONTROL DEVICES IN ACCORDANCE WITH THE MILE HIGH FLOOD DISTRICT (MHFD), VOLUME 3 CONSTRUCTION BEST MANAGEMENT PRACTICES. THESE BEST MANAGEMENT PRACTICES INCLUDE, BUT ARE NOT LIMITED TO, SILT FENCE, INLET PROTECTION, VTC PAD, WHEEL WASHOUT, AND SEDIMENT BASINS. BEST MANAGEMENT PRACTICES SHALL BE INSTALLED BEFORE COMMENCING ANY LAND CLEARING OR GRADING ACTIVITIES. THE CONTRACTOR SHALL LIMIT TOPSOL STRIPPING OPERATIONS TO WITHIN THE AREAS IN WHICH THEY WILL BE IMMEDIATELY WORKING. THE CONSTRUCTION OF UNDERGROUND UTILITIES SHALL BE INCLUDED AS A LAND DISTURBING ACTIVITY. ALL EXCAVATED MATERIAL SHALL BE PLACED WHERE SEDIMENT WILL ERODE BACK INTO THE TRENCH. ALL TRENCHES SHALL BE BACKFILLED BY THE END OF THE DAYS WORK; BACKFILL SHALL BE PERMANENTLY STABILIZED BEFORE CONSTRUCTION IS CONSIDERED COMPLETE.
2. ALL DISTURBED AREAS AND SOIL STOCKPILES SHALL BE ADEQUATELY STABILIZED AS DEFINED IN MHFD, VOLUME 3, CONSTRUCTION BEST MANAGEMENT PRACTICES. ALL DISTURBED SOILS AND SOIL STOCKPILES SHALL BE WATERED AND MAINTAINED IN A ROUGHENED CONDITION AT ALL TIMES DURING CONSTRUCTION ACTIVITIES TO PREVENT WIND-CAUSED EROSION. ALL LAND DISTURBING ACTIVITIES WILL BE IMMEDIATELY DISCONTINUED WHEN FUGITIVE DUST IMPACTS ADJACENT PROPERTIES, AS DETERMINED BY CITY INSPECTOR. PERMANENT OR TEMPORARY NATIVE SEED (SEE EROSION CONTROL STRUCTURES – DETAIL 12-2 FOR SEEDING SPECIFICATIONS) SOIL STABILIZATION SHALL BE REQUIRED WITHIN 14 DAYS AFTER FINAL GRADE IS REACHED. IF DISTURBED AREAS OR STOCKPILES ARE NOT BROUGHT TO FINAL GRADE WITHIN 30 DAYS FOLLOWING THE INITIAL DISTURBANCE, OR RE-DISTURBANCE, TEMPORARY STABILIZATION MEASURES SHALL BE REQUIRED. NO SOIL STOCKPILE SHALL EXCEED TEN (10) FEET IN HEIGHT. ALL SOIL STOCKPILE SIDE SLOPES SHALL NOT EXCEED A SLOPE OF 4V:1H.
3. ALL STORM SEWER INLETS SHALL BE PROTECTED FROM THE ENTRY OF SEDIMENT-LADEN WATER. HAY BALES ARE NOT RECOGNIZED BY THE CITY OF GREELEY AS AN ACCEPTABLE FORM OF EROSION CONTROL.
4. INSPECTION OF ALL EROSION AND SEDIMENT CONTROL BMP'S SHALL BE REQUIRED AT THE END OF EACH DAY'S WORK, WITH NECESSARY MAINTENANCE AND REPAIRS PROVIDED IMMEDIATELY. THE CITY OF GREELEY INSPECTOR SHALL, AT THEIR DISCRETION, REQUIRE ANY EROSION CONTROL DEVICES TO BE REPAIRED, REPLACED, RELOCATED, MODIFIED, OR REMOVED. SUCH REQUESTS SHALL BE COMPLETED WITHIN 5 WORKING DAYS FOLLOWING THE RECEIPT OF THE WRITTEN REQUEST FROM THE INSPECTOR. ALL PUBLIC RIGHT OF WAY POLLUTED WITH DIRT, MUD, OR DEBRIS SHALL BE SWEPT CLEAN AT THE END OF EACH DAYS WORK OR AFTER STORM EVENTS, AS NECESSARY. ALL TEMPORARY AND PERIMETER EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED AS SOON AS THEIR FUNCTION HAS BEEN FULFILLED. SEDIMENT TRAPS/BASINS SHALL BE CLEANED AND REMOVED, OR STABILIZED, WHEN ALL UPSTREAM AREAS ARE PERMANENTLY STABILIZED. THE SITE CONTRACTOR IS RESPONSIBLE FOR PROPERLY DISPOSING OFF ALL SILT FROM THE SITE, IF IT IS NOT REUSABLE ON SITE.
5. THE LANDOWNER SHALL BE HELD RESPONSIBLE FOR THE LONG-TERM STABILITY OF CUT AND FILL SLOPES AND THE SUCCESSFUL ESTABLISHMENT OF PERMANENT VEGETATIVE COVER ON EXPOSED SOIL AS DEFINED IN THE MHFD, VOLUME 3, CONSTRUCTION BEST MANAGEMENT PRACTICES.
6. ALL CONSTRUCTION SUPPLIES OR MATERIALS USED OR STORED ON SITE MUST BE DISPOSED OF PROPERLY AND MUST MEET ALL APPLICABLE MATERIAL SAFETY DATA SHEET CRITERIA.
7. THE STATE STORMWATER DISCHARGE PERMIT HOLDER MAY BE LIABLE FOR ANY VIOLATIONS RESULTING FROM THE ACTIONS TAKEN BY SITE CONTRACTORS, SUBCONTRACTORS, MAINTENANCE CREWS, ETC.

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POUDRE PONDS BANK STABILIZATION PROJECT

EROSION CONTROL PLAN OVERVIEW

Designer: CR
Detailer: KM
Sheet Subset:
Structure Numbers
Subset Sheets:

Project No./Code: 20119B

Sheet Number: ESC1

0' 50' 100' 200'

1 INCH = 200 FEET (11 X 17)
1 INCH = 100 FEET (22 X 34)

EROSION CONTROL MEASURES REQUIRED TO THE NORTH OF POUDRE RIVER TRAIL WHERE EXISTING BERM IS NOT PRESENT

LOD

VTC

SSA

PT

STABILIZED STAGING AREA

SF

EXISTING POUDRE RIVER TRAIL – PROTECT IN PLACE

POUDRE PONDS PIT C

N 25TH AVE

POUDRE PONDS POND A

ACTIVE J2 PROCESSING AREA

CITY OF GREELEY POND B
ACTIVE J2 MINING SITE

LEGEND:

- SF — SILT FENCE
- EROSION CONTROL FABRIC
- SSA — STABILIZED STAGING AREA
- PT — PORTABLE TOILET
- SM — SEEDING AND MULCHING
- VTC — VEHICLE TRACKING CONTROL
- LOD — LIMITS OF DISTURBANCE
- ACCESS ROAD
- CONSTRUCTION FENCE
- DW — DEWATERING
- TEMPORARY DIVERSION

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POUDRE PONDS BANK STABILIZATION PROJECT

INITIAL EROSION CONTROL PLAN 1

Designer: CR
Detailer: KM
Sheet Subset:
Structure Numbers
Subset Sheets:

Project No./Code: 20119B

Sheet Number: ESC2

0' 20' 40' 80'

1 INCH = 80 FEET (11 X 17)
1 INCH = 40 FEET (22 X 34)


LEGEND:

- SF — SILT FENCE
- EROSION CONTROL FABRIC
- SSA — STABILIZED STAGING AREA
- PT — PORTABLE TOILET
- SM — SEEDING AND MULCHING
- VTC — VEHICLE TRACKING CONTROL
- LOD — LIMITS OF DISTURBANCE
- ACCESS ROAD
- CONSTRUCTION FENCE
- DW — DEWATERING
- TEMPORARY DIVERSION

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Print Date: Aug 29, 2023
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City of Greeley Colorado

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POUDRE PONDS BANK STABILIZATION PROJECT

INITIAL EROSION CONTROL PLAN 2

Designer: CR
Detailer: KM
Sheet Subset:
Structure Numbers
Subset Sheets:

Project No./Code: 20119B

Sheet Number: ESC3

0' 20' 40' 80'

1 INCH = 80 FEET (11 X 17)
1 INCH = 40 FEET (22 X 34)


LEGEND:

- SF — SILT FENCE
- EROSION CONTROL FABRIC
- SSA — STABILIZED STAGING AREA
- PT — PORTABLE TOILET
- SM — SEEDING AND MULCHING
- VTC — VEHICLE TRACKING CONTROL
- LOD — LIMITS OF DISTURBANCE
- ACCESS ROAD
- CONSTRUCTION FENCE
- DW — DEWATERING
- TEMPORARY DIVERSION

90% DESIGN - August 29, 2023

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Print Date: Aug 29, 2023
File Name: Erosion Control Plan.dwg

Sheet Revisions

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City of Greeley Colorado

No Revisions:
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POUDRE PONDS BANK STABILIZATION PROJECT

INITIAL EROSION CONTROL PLAN 3

Designer: CR
Detailer: KM
Sheet Subset:
Structure Numbers:
Subset Sheets:

Project No./Code: 20119B

Sheet Number: ESC4

0' 50' 100' 200'

EROSION CONTROL MEASURES REQUIRED TO THE NORTH OF POUDRE RIVER TRAIL WHERE EXISTING BERM IS NOT PRESENT

LOD

VTC

SSA

PT

STABILIZED STAGING AREA

SF

EXISTING POUDRE RIVER TRAIL – PROTECT IN PLACE

POUDRE PONDS POND A

POUDRE PONDS PIT C

N 25TH AVE

ACTIVE J2 PROCESSING AREA

CITY OF GREELEY POND B ACTIVE J2 MINING SITE

LEGEND:

- SF SILT FENCE
- EROSION CONTROL FABRIC
- SSA STABILIZED STAGING AREA
- PT PORTABLE TOILET
- SM SEEDING AND MULCHING
- VTC VEHICLE TRACKING CONTROL
- LOD LIMITS OF DISTURBANCE
- ACCESS ROAD
- CONSTRUCTION FENCE
- DW DEWATERING
- TEMPORARY DIVERSION

90% DESIGN - August 29, 2023

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Print Date: Aug 29, 2023
File Name: Erosion Control Plan.dwg

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POUDRE PONDS BANK STABILIZATION PROJECT

INTERIM EROSION CONTROL PLAN 1

Designer: CR
Detailer: KM
Sheet Subset:
Structure Numbers
Subset Sheets:

Project No./Code: 20119B

Sheet Number: ESC5

0' 20' 40' 80'

1 INCH = 80 FEET (11 X 17)
1 INCH = 40 FEET (22 X 34)


LEGEND:

- SF — SILT FENCE
- EROSION CONTROL FABRIC
- SSA — STABILIZED STAGING AREA
- PT — PORTABLE TOILET
- SM — SEEDING AND MULCHING
- VTC — VEHICLE TRACKING CONTROL
- LOD — LIMITS OF DISTURBANCE
- ACCESS ROAD
- CONSTRUCTION FENCE
- DW — DEWATERING
- TEMPORARY DIVERSION

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Print Date: Aug 29, 2023
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POUDRE PONDS BANK STABILIZATION PROJECT

INTERIM EROSION CONTROL PLAN 2

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| Designer: | CR | Structure Numbers | |
| Detailer: | KM | | |
| Sheet Subset: | | Subset Sheets: | |

Project No./Code: 20119B

Sheet Number: ESC6

0' 20' 40' 80'

1 INCH = 80 FEET (11 X 17)
1 INCH = 40 FEET (22 X 34)


LEGEND:

- SF — SILT FENCE
- EROSION CONTROL FABRIC
- SSA — STABILIZED STAGING AREA
- PT — PORTABLE TOILET
- SM — SEEDING AND MULCHING
- VTC — VEHICLE TRACKING CONTROL
- LOD — LIMITS OF DISTURBANCE
- ACCESS ROAD
- CONSTRUCTION FENCE
- DW — DEWATERING
- TEMPORARY DIVERSION

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POUDRE PONDS BANK STABILIZATION PROJECT

INTERIM EROSION CONTROL PLAN 3

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| Designer: | CR | Structure Numbers | |
| Detailer: | KM | | |
| Sheet Subset: | | Subset Sheets: | |

Project No./Code: 20119B

Sheet Number: ESC7

0' 50' 100' 200'

1 INCH = 200 FEET (11 X 17)
1 INCH = 100 FEET (22 X 34)


LEGEND:

- SF — SILT FENCE
- EROSION CONTROL FABRIC
- SSA — STABILIZED STAGING AREA
- PT — PORTABLE TOILET
- SM — SEEDING AND MULCHING
- VTC — VEHICLE TRACKING CONTROL
- LOD — LIMITS OF DISTURBANCE
- ACCESS ROAD
- CONSTRUCTION FENCE
- DW — DEWATERING
- TEMPORARY DIVERSION

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POUDRE PONDS BANK STABILIZATION PROJECT

FINAL EROSION CONTROL PLAN 1

Designer: CR
Detailer: KM
Sheet Subset:
Structure Numbers
Subset Sheets:

Project No./Code: 20119B

Sheet Number: ESC8

0' 20' 40' 80'

1 INCH = 80 FEET (11 X 17)
1 INCH = 40 FEET (22 X 34)


LEGEND:

- SF — SILT FENCE
- EROSION CONTROL FABRIC
- SSA — STABILIZED STAGING AREA
- PT — PORTABLE TOILET
- SM — SEEDING AND MULCHING
- VTC — VEHICLE TRACKING CONTROL
- LOD — LIMITS OF DISTURBANCE
- ACCESS ROAD
- CONSTRUCTION FENCE
- DW — DEWATERING
- TEMPORARY DIVERSION

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FINAL EROSION CONTROL PLAN 2

Designer: CR
Detailer: KM
Sheet Subset:
Structure Numbers
Subset Sheets:

Project No./Code: 20119B

Sheet Number: ESC9

0' 20' 40' 80'

1 INCH = 80 FEET (11 X 17)
1 INCH = 40 FEET (22 X 34)


LEGEND:

- SF — SILT FENCE
- EROSION CONTROL FABRIC
- SSA — STABILIZED STAGING AREA
- PT — PORTABLE TOILET
- SM — SEEDING AND MULCHING
- VTC — VEHICLE TRACKING CONTROL
- LOD — LIMITS OF DISTURBANCE
- ACCESS ROAD
- CONSTRUCTION FENCE
- DW — DEWATERING
- TEMPORARY DIVERSION

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POUDRE PONDS BANK STABILIZATION PROJECT

FINAL EROSION CONTROL PLAN 3

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| Detailer: | KM | | |
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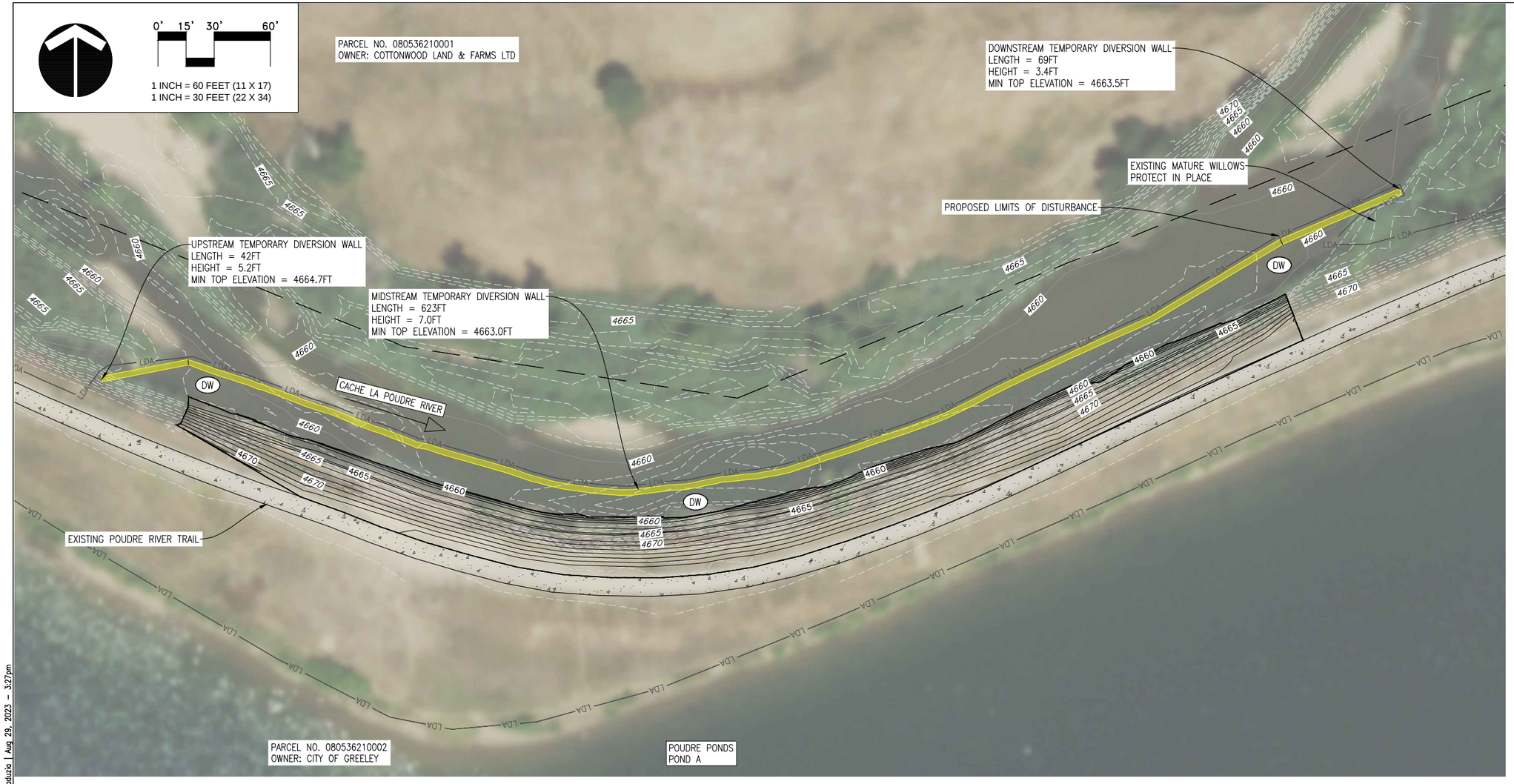
Project No./Code: 20119B

Sheet Number: ESC10

0' 15' 30' 60'

1 INCH = 60 FEET (11 X 17)
1 INCH = 30 FEET (22 X 34)




LEGEND:

- SF — SILT FENCE
- EROSION CONTROL FABRIC
- SSA — STABILIZED STAGING AREA
- PT — PORTABLE TOILET
- SM — SEEDING AND MULCHING
- VTC — VEHICLE TRACKING CONTROL
- LOD — LIMITS OF DISTURBANCE
- ACCESS ROAD
- CONSTRUCTION FENCE
- DW — DEWATERING
- TEMPORARY DIVERSION

DEWATERING AND DIVERSION MAINTENANCE NOTES:

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs, AND PERFORM NECESSARY MAINTENANCE. AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION.
2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHALLBE DOCUMENTED THOROUGHLY.
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
4. DEWATERING BMPs ARE REQUIRED IN ADDITION TO ALL OTHER PERMIT REQUIREMENTS.
5. TEMPORARY SETTLING BASINS SHALL BE REMOVED WHEN NO LONGER NEEDED FOR DEWATERING OPERATIONS. ANY DISTURBED AREA SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.
6. DIVERSION CHANNELS ARE TO REMAIN IN PLACE UNTIL WORK IN THE DOWNGRADIENT AREA OR NATURAL CHANNEL IS NO LONGER REQUIRED.
7. IF DIVERSION CHANNELS ARE REMOVED, THE DISTURBED AREA SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

NOTES:

1. WATER CONTROL PLAN IS BASED ON AN AVERAGE OF FLOWS OVER THE LAST 10 YEARS, IN THE MONTHS OF OCTOBER – MAY. THE FLOW RATE USED WAS 308CFS, AND 1 FOOT OF FREEBOARD WAS ADDED TO THAT.

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POUDRE PONDS BANK STABILIZATION PROJECT

DEWATERING AND DIVERSION PLAN

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Project No./Code: 20119B

Sheet Number: ESC11