STORMWATER MANAGEMENT PLAN (SWMP) for MAYBERRY, COLORADO SPRINGS – PHASE 1 PUD

(formerly known as "Ellicott Town Center")

Prepared for:

Mayberry Communities, LLC 3296 Divine Heights #207 Colorado Springs, CO 80922

Prepared by:



1635 West 13th Avenue Suite 310 Denver, CO 80204

R&R Project No. MC22110 EPC Project No. PUDSP-21-009 SF-22-019

Qualified Stormwater Manager: Raw Land Detailing

Attn: Larry Lee 10475 Accipiter Dr. Peyton, CO 80831

Contractor: Mayberry Communities, LLC

Attn: Jason Kvols

3296 Divine Heights #207 Colorado Springs, CO 80922

MAYBERRY, COLORADO SPRINGS – PHASE 1 PUD STORMWATER MANAGEMENT PLAN (SWMP) TABLE OF CONTENTS

| I. QUALIFIED STORMATER MANAGER | 1 |
|---|----|
| II. SPILL PREVENTION AND RESPONSE PLAN | 1 |
| III. MATERIALS HANDLING | 2 |
| IV. POTENTIAL SOURCES OF POLLUTION | 5 |
| V. IMPLEMENTATION OF CONTROL MEASURES | |
| VI. SITE DESCRIPTION | 7 |
| VII. SITE MAP | 8 |
| VIII. FINAL STABILIZATION AND LONG-TERM STORMWATER MANAGEMENT | 9 |
| IX. INSPECTION REPORTS | LO |

APPENDICES

Appendix A Standard SCM Details

Appendix B Drawings

Figure A1: Vicinity Map

Grading & Erosion Control (GEC) Plans

Appendix C Mayberry Filing 3 Grading and Erosion Control Plans

*Note: Filing 3 GEC plans supersede previously approved plans from master

development.

General SWMP Notes:

- 1. There are no existing streams, wetlands, or other surface waters within 50 feet of the construction limits.
- 2. There are no dedicated asphalt / concrete batch plants proposed.
- 3. There are no anticipated allowable non-stormwater discharges from this site (no groundwater, springs, irrigation, discharge covered by CDPHE Low Risk Guidance, etc.).

MAYBERRY, COLORADO SPRINGS – PHASE 1 PUD (formerly know as "Ellicott Town Center") STORMWATER MANAGEMENT PLAN (SWMP)

I. QUALIFIED STORMWATER MANAGER

A. Qualified Stormwater Manager

Contractor: Raw Land Detailing

10475 Accipiter Dr. Peyton, CO 80831

Attn: Larry Lee (719)-495-7770 larry@rawlanddetailing.com

B. Applicant / Contact Information

Owner/Developer: Mayberry Communities, LLC

3296 Divine Heights #207 Colorado Springs, CO 80922

Attn: Jason Kvols (719)-426-7810

jasonkvols@mayberrycoloradosprings.com

Engineer: R&R Engineers – Surveyors, Inc.

1635 West 13th Avenue Denver, CO 80204

Attn: Cliff Dayton, P.E. (303)-753-6730

cdayton@rrengineers.com

II. SPILL PREVENTION AND RESPONSE PLAN

- A. Spill Prevention and Response Procedures:
 - The primary objective in responding to a spill is to quickly contain the material(s) and
 prevent or minimize their migration into storm water runoff and conveyance systems. If the
 release has impacted on-site storm water, it is critical to contain the released materials on
 site and prevent their release into receiving waters.
 - Spill Response Procedures:
 - Notify site superintendent immediately when a spill, or the threat of a spill, is observed. The superintendent shall assess the situation and determine the appropriate response.

- If spills represent an imminent threat of escaping on-site facilities and entering the receiving waters, site personnel shall respond immediately to contain the release and notify the superintendent after the situation has stabilized.
- The site superintendent, or his designee, shall be responsible for completing a spill reporting form and for reporting the spill to the appropriate agency.
- Spill response equipment shall be inspected and maintained as necessary to replace any materials used in spill response activities.
- Spill kits shall be on-hand at all fueling sites. Spill kit location(s) shall be reported to the SWMP Administrator.
- Absorbent materials shall be on-hand at all fueling areas for use in containing inadvertent spills. Containers shall be on-hand at all fueling sites for disposal of used absorbents.
- Recommended components of spill kits include the following:
 - Oil absorbent pads (one bale)
 - Oil absorbent booms (40 feet)
 - o 55-gallon drums (2)
 - 9-mil plastic bags (10)
 - o Personal protective equipment including gloves and goggles

B. Notification Procedures:

- In the event of an accident or spill, the SWMP Administrator shall be notified as a minimum.
- Depending on the nature of the spill material involved, the Colorado Department of Public Health and Environment (24-hour spill reporting line: 877-518-5608), downstream water users, or other agencies may also need to be notified.
- Any spill of oil which 1) violates water quality standards, 2) produces a "sheen" on a surface water, or 3) causes a sludge or emulsion, or any hazardous substance release, or hazardous waste release which exceeds the reportable quantity, must be reported immediately by telephone to the National Response Center Hotline at (800)-424-8802.

III. MATERIALS HANDLING

A. General Materials Handling Practices:

- Potential pollutants shall be stored and used in a manner consistent with the
 manufacturer's instructions in a secure location. To the extent practical, material storage
 areas should not be located near storm drain inlets and should be equipped with covers,
 roofs, or secondary containment as required to prevent storm water from contacting stored
 materials.
- Chemicals that are not compatible shall be stored and segregated areas so that spilled materials cannot combine and react.
- Disposal of materials shall be in accordance with the manufacturer's instructions and applicable local, state, and federal regulations.
- Materials no longer required for construction shall be removed from the site as soon as possible.

- B. Adequate garbage, construction waste, and sanitary waste handling and disposal facilities shall be provided as necessary to keep the site clear of obstruction and Stormwater Control Measures (SCMs) clear and functional.
- C. Specific Materials Handling Practices:
 - All pollutants, including waste materials and demolition debris, that occur on-site during construction shall be handled in a way that does not contaminate storm water.
 - All chemicals including liquid products, petroleum products, water treatment chemicals, and wastes stored on site shall be covered and contained and protected from vandalism.
 - Maintenance and repair of all equipment and vehicles involving oil changes, hydraulic system drain down, de-greasing operations, fuel tank drain down and removal, and other activities which may result in the accidental release of contaminants, shall be conducted under cover during wet weather and on an impervious surface to prevent release of contaminants onto the ground. Materials spilled during maintenance operations shall be cleaned up immediately and properly disposed of.
 - Wheel wash water shall be settled and discharged on site by infiltration. Wheel wash water shall not be discharged to the storm water system.
 - Application of agricultural chemicals, including fertilizers and pesticides, shall be conducted
 in a manner and ad application rates that will not result in loss of chemical to storm water
 runoff. Follow manufacturer's recommendations for application rates and procedures.
 - pH-modifying sources shall be managed to prevent contamination of runoff and storm
 water collected on site. The most common sources of pH-modifying materials are bulk
 cement, cement kiln dust (CKD), fly ash, new concrete washing and curing waters, waste
 streams generated from concrete grinding and sawing, exposed aggregate processes, and
 concrete pumping and mixer washout waters.
- D. Equipment maintenance and fueling: Contractor shall implement appropriate spill prevention and response procedures
- E. Concrete Wash Water: Unless confined in a pre-defined, bermed containment area, the cleaning of concrete truck delivery chutes is prohibited at the job site. The discharge of water containing waste cement to the storm drainage system is prohibited.

IV. POTENTIAL SOURCES OF POLLUTION

Potential pollutant sources will be addressed as follows:

POTENTIAL POLLUTION SOURCES

| Potential Pollution Sources | Possible Site Contributions of Pollutants to Stormwater Discharges | Location |
|---|--|--------------|
| All disturbed and stored | Stockpiles of fill from site excavations, topsoil | Stockpiles |
| soils | stockpiles. | ' |
| Vehicle tracking of sediments | See GEC Plans for vehicle entrance and exits. | VTC (per GEC |
| | Vehicle tracking control pads will be installed and | Plans) |
| | maintained at all construction access points. | |
| Management of contaminated soils | No contaminated soils are expected to be | N/A |
| | encountered. | , |
| Loading and unloading operations | Loading and unloading of construction materials | TBD* |
| Outdoor storage activities (building | Stockpiles and equipment storage areas (no | TBD* |
| material, fertilizers, chemicals, etc.) | fertilizers, petroleum or chemical products will be | |
| | stored on-site). | |
| Vehicle and equipment | Fueling will occur on-site using mobile equipment | TBD* |
| maintenance and fueling | (will not be stored on-site). Equipment | |
| | maintenance will occur off-site | |
| Significant dust or particulate-generating | Vehicle tracking, soil removed from excavation, | TBD* |
| processes | stockpiles. | |
| Routine maintenance activities involving | All equipment maintenance will occur off-site. No | TBD* |
| fertilizers, pesticides, detergents, fuels, | fertilizers, pesticides, detergents, and/or | |
| solvents, oils, etc. | solvents will be used or stored on-site. | |
| On-site waste management practices | All waste will be removed from site as soon as | TBD* |
| (waste piles, liquid wastes, dumpsters, | possible, and disposed of at a permitted off-site | |
| etc.) | disposal site | |
| Concrete truck/equipment washing, | Properly contained concrete washout areas may | CWA |
| including the concrete truck chute and | be designated and maintained within the site, | |
| associated fixtures and equipment | based on construction phasing. | |
| Dedicated asphalt and | No dedicated asphalt or concrete batch plants are | N/A |
| concrete batch plants | planned on-site. | |
| Non-industrial waste sources such as | Worker trash will be removed from the site as | TBD* |
| worker trash and portable toilets | soon as possible. Portable toilets will be utilized | |
| | and maintained as required based on construction | |
| | phasing. | |
| Other areas or procedures where | Petroleum releases from equipment are possible. | TBD* |
| potential spills can occur | | |

^{*} Contractor to add locations of any items not specified at this time*

V. IMPLEMENTATION OF CONTROL MEASURES

Narrative Description of Appropriate Stormwater Controls and Measures

Construction Phasing

Phase 1 – Mobilization, Clearing & Grubbing Operations

Clearing and grubbing will be completed prior to initial overlot grading activities for this site. Perimeter control measures will be installed prior to the start of construction operations. These perimeter controls will include silt fencing and a vehicle tracking control pad.

Phase 2 – Earthwork, Road Grading, and Utility Installation

Major earthwork activities will include overlot grading, foundation over-excavation, backfill, and compaction, utility construction, and rough and final grading for site improvements.

Phase 3 – Building Construction and Final Grading Activities

This phase will include final grading of building sites and landscape areas. Appropriate temporary SCM's will be maintained until vegetation is re-established throughout the site.

Phase 4 - Stabilization

All disturbed areas within the project will be revegetated. The specific revegetation requirements will include the following:

- Landscape plantings per approved landscape plans
- Native seeding all other disturbed areas

Phase 5 – Removal of Temporary Control Measures

Temporary sediment control measures shall remain in place until vegetation has been adequately established to prevent erosion from storm runoff. Once adequate vegetation has been established, the temporary erosion control measures will be removed and disposed of off-site.

SCM's for Stormwater Pollution Prevention (See GEC Plans):

Phase SCM
Clearing and Grubbing necessary for perimeter controls VTC's
Initiation of perimeter controls Silt Fence

Remaining clearing and grubbing

Site Grading IP / SCL Extended detention basins (sediment ponds during construction) EDB / SB Stabilization SM

Removal of erosion control measures

<u>Proposed Sequence of Major Activities / Timing Schedule</u>

The anticipated start and completion time period of the construction activities is from April, 2021 through August, 2022. The estimated schedule for erosion control activities is as follows:

Install Initial SCM's: April, 2021
 Site Grading: April, 2021
 Seeding & Mulching: August, 2022
 Final Stabilization: August, 2023

Erosion and Sediment Controls:

- 1) Structural Practices / Control Measures (all structural Control Measures shall conform to ECM / DCM and MHFD standards and details):
 - a. Silt fence at toe of slope along downstream limits of disturbed areas
 - b. Sediment control logs (SCL) along drainage swales
 - c. Inlet protection (IP) at storm inlets
 - d. Sediment Basins (SB)
 - e. Extended Detention Basins (EDB)
- 2) Non-Structural Practices:
 - Preserve existing vegetation beyond limits of work
 - Temporary seeding of areas to remain disturbed for significant periods of time
 - Permanent seeding/mulching (SM) upon completion of rough grading

Other Controls:

- Contractor shall dispose of all waste materials at a permitted off-site disposal site.
- Vehicle tracking pads will be installed at all access points to limit off-site soil tracking.
- Street Sweeping: Contractor shall perform street sweeping following storm events and as required to keep adjoining public streets clean.

Control Measure / SCM Details:

- Refer to Standard SCM Details in GEC Plans.
- Refer to additional Standard Details in MHFD Volume 3 where applicable.

VI. SITE DESCRIPTION

- A. Nature of Construction Activity
 - The Mayberry, Colorado Springs (formerly known as "Ellicott Town Center") Phase 1 PUD is a new residential subdivision in eastern El Paso County, Colorado consisting of 240 single-family residential lots on 71.4 acres. Filing No. 1, recorded in December 2020, includes 98 residential lots, and Filing No. 4 (in process) will comprise the remaining 142 lots on the east side of the Phase 1 PUD area. The site is located along the south side of State Highway 94 (SH94) between Peyton Highway and Ellicott Highway. Site development activities will include site grading, utilities, roadways, and associated subdivision improvements.

- B. Proposed sequence of major activities:
 - Mobilization / implementation of SCM's
 - Clearing and grubbing
 - Rough grading
 - Utility installation
 - Final grading
 - Roadway construction and paving
- C. Total site area = 140-acres; Projected disturbed area = 140-acres (approx.)
- D. Soil erosion potential and potential impacts upon discharge:
 - On-site soils are comprised primarily of "Blakeland series" soils, which are characterized as well-drained loamy sand with rapid permeability, slow surface runoff rates, and moderate hazard of erosion (Hydrologic Soils Group A).
 - Potential impacts upon discharge would include sedimentation adversely affecting downstream waterways and habitat.
- E. Existing vegetation on site:
 - Native meadow grasses and trees (approx. 70% coverage, based on site inspection)
- F. Allowable non-stormwater components of discharge: none anticipated
- G. Receiving water: Surface drainage from this site flows southeasterly into the existing downstream grass-lined drainage swales and channels which ultimately flow to Black Squirrel Creek (ultimate receiving water).
- H. Stream Crossings: There are no stream crossings located within the construction site boundary.

VII. SITE MAP

- o SWMP Maps are provided on the attached GEC Plans
- Qualified Stormwater Manager shall update SWMP Maps as required based on field conditions throughout the project.
- Contractor shall update and annotate the SWMP Maps to show the location of the construction trailer, stabilized staging area, CWA, and other items as these locations are determined on site.

VIII. FINAL STABILIZATION AND LONG-TERM STORMWATER MANAGEMENT

- A. Permanent seeding will be provided to achieve long-term stabilization of the site.
- B. Seed Mix: "Foothills Mix" or approved equal
- C. Seeding Application Rate: Drill seed 0.25" to 0.5" into the soil. In small areas not accessible to a drill, hand broadcast at double the rate and rake 0.25" to 0.5" into the soil. Apply seed at the following rates:

Dryland: 20-25 lbs/acreIrrigated: 40 lbs/acre

- D. Soil Stabilization Practices:
 - Mulching Application: Apply 1-1/2 tons of certified weed free hay per acre mechanically crimped into the soil in combination with an organic mulch tackifier. On slopes and ditches requiring a blanket, the blanket shall be placed in lieu of much and mulch tackifier.
- E. Soil Conditioning and Fertilizer Requirements:
 - Soil conditioner, organic amendment shall be applied to all seeded areas at 3 CY / 1000
 SF.
 - Fertilizer shall consist of 90% fungal biomass (mycelium) and 10% potassium-magnesia with a grade of 6-1-3 or approved equal. Fertilizer shall be applied as recommended by seed supplier.
- F. Final stabilization is reached when all soil-disturbing activities at the site have been completed, and uniform vegetative cover has been established with an individual plant density of at least 70 percent of pre-disturbance levels, or equivalent permanent, physical erosion reduction methods have been employed.
- G. Structural Control Measures:
 - o Re-Seeding and Landscaping for site stabilization
 - Permanent Stormwater Detention & Water Quality Pond C1
 - Permanent Stormwater Detention & Water Quality Pond D
- H. Non-Structural Control Measures:
 - Proper Housekeeping Procedures
 - o Proper Spill Containment Procedures

IX. INSPECTION REPORTS

A. Qualified Stormwater Manager: Designated Inspector shall be a Qualified Stormwater Manager per CDPHE criteria.

B. Inspection Frequency:

Contractor shall inspect SCMs bi-weekly as a minimum, and immediately (within 24 hours) after any precipitation or snowmelt event that causes surface erosion (i.e. that results in stormwater running across the ground), to ensure that SCMs are maintained in effective operating condition.

C. Inspection Procedures:

Site Inspection / Observation Items:

- Construction site perimeter and discharge points (including discharges into a storm sewer system)
- All disturbed areas
- o Areas used for material / waste storage that are exposed to precipitation
- Other areas having a significant potential for stormwater pollution, such as demolition areas or concrete washout locations, or locations where vehicles enter or leave the site
- o Erosion and sediment control measures identified in the SWMP
- Any other structural SCMs that may require maintenance, such as secondary containment around fuel tanks, or the condition of spill response kits.

D. Inspection Requirements:

- Determine if there is any evidence of, or potential for, pollutants entering the drainage system.
- Review SCMs to determine if they still meet design and operational criteria in the SWMP, and if they continue to adequately control pollutants at the site.
- Upgrade and/or revise any SCMs not operating in accordance with the SWMP and update the SWMP to reflect any revisions.

SCM Maintenance / Replacement and Failed SCMs:

- Contractor shall remove sediment that has been collected by perimeter controls, such as silt fence and inlet protection, on a regular basis to prevent failure of SCMs, and remove potential of sediment from being discharged from the site in the event of SCM failure.
- Removed sediment must be moved to an appropriate location where it will not become an additional pollutant source, and should never be placed in ditches or streams.
- Contractor shall update Erosion Control Plans / SWMP Maps and SWMP Plan as required with any new SCMs added during the construction period.
- Contractor shall address SCMs that have failed or have the potential to fail without maintenance or modifications, as soon as possible, immediately in most cases, to prevent discharge of pollutants.

E. Inspection Reports:

- Contractor shall maintain records of all inspection reports, including signed inspection logs, at the project site. SWMP records shall be located in the project trailer.
- o Inspection logs shall be signed by the Qualified Stormwater Manager.
- Permittee shall document inspection results and maintain a record of the results for a period of 3 years following expiration or inactivation of permit coverage.
- Site inspection records shall include the following:
 - Inspection date
 - Name and title of personnel making the inspection, along with Inspector's signature
 - Location of discharges of sediment or other pollutants from the site
 - Location(s) of SCMs that need to be maintained
 - Location(s) of SCMs that failed to operate as designed or proved inadequate for a particular location
 - Location(s) where additional SCMs are needed that were not in place at the time of inspection
 - Deviations from the minimum inspection schedule
 - Notations regarding updates and revisions to SWMP Maps based on field conditions

Note: This project does not rely on control measures owned or operated by another entity.

APPENDIX A

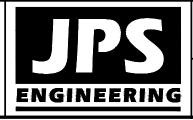
STANDARD SCM DETAILS (REFER TO STANDARD DETAILS IN DRAINAGE CRITERIA MANUAL VOLUME 2)

APPENDIX B FIGURES

VICINITY MAP



VICINITY MAP



ELLICOTT TOWN CENTER

FIGURE A1
JPS PROJ NO. 090001

SUBDIVISION

BENCHMARK:

A # 5 REBAR LOCATED AT THE NORTH 1/4 CORNER OF SECTION 14. AIR PHOTO PANEL NEAR NORTH 1/4 CORNER, SECTION 14 NO. 5 REBAR EL=6058.55.

SITE MAP

NOT TO SCALE

BASIS OF BEARINGS:

THE BASIS OF BEARING FOR THIS SURVEY IS THE NORTH LINE OF SECTION 14, T.14S., R.63W. ASSUMED AS S 89-44-49 E FROM REBAR & 3-1/2" ALUM. CAP NW CORNER SEC 14, T14S, R63W TO REBAR & 2" ALUM. CAP IN RANGE BOX. N 1/4 CORNER SEC. 14.

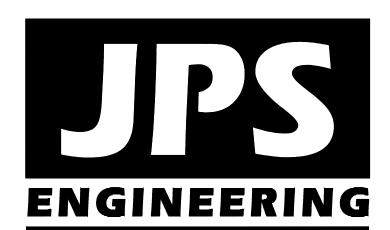
Mayberry, Colorado Springs

Phase 1 PUD - Pre-Development Grading & Erosion Control Plans El Paso County, Colorado

PREPARED FOR: Colorado Springs Mayberry, LLC 32823 Temecula Parkway

Temecula, CA 92592

PREPARED BY:



PREPARED BY:

19 East Willamette Avenue Colorado Springs, Colorado 80903

October, 2021

GAS DEPARTMENT:

AGENCIES/CONTACTS

SURVEYOR:

STATE HIGHWAY

| DEVELOPER: | COLORADO SPRINGS MAYBERRY, LLC 32823 TEMECULA PARKWAY TEMECULA, CA 92592 | WATER/WASTEWATER: | ELLICO MR. R |
|------------|--|-------------------|-----------------|
| | MR. RANDY GOODSON (858) 692-6262 | | |

CIVIL ENGINEER: JPS ENGINEERING, INC. 19 E. WILLAMETTE AVENUE COLORADO SPRINGS, CO 80903 MR. JOHN P. SCHWAB, P.E. (719)477-9429

> RAMPART SURVEYS P.O. BOX 5101 WOODLAND PARK, CO 80866 MR. ERIC SIMONSON, PLS (719) 687-6300

COUNTY ENGINEERING: EL PASO COUNTY DEVELOPMENT SERVICES 2880 INTERNATIONAL CIRCLE COLORADO SPRINGS, CO 80922 (719) 520-6300

> COLORADO DEPARTMENT OF TRANSPORTATION REGION 2 5615 WILLS BLVD. PUEBLO, CO 81008 MS. VALERIE SWORD (719)546-5407

OTT UTILITIES COMPANY, LLC RANDY GOODSON (858) 692-6262

> BLACK HILLS ENERGY MR. SEBASTIAN SCHWENDER (719) 359-3176

MOUNTAIN VIEW ELECTRIC ASSOCIATION ELECTRIC DEPARTMENT: 11140 E. WOODMEN ROAD COLORADO SPRINGS, CO 80908 MR. DAVE WALDNER (719)495-2283

TELEPHONE COMPANY: QWEST COMMUNICATIONS (LOCATORS) (800)922-1987

> A.T. & T. (LOCATORS) (719)635-3674

> > PCD File No. PUDSP219

SHEET INDEX

| GEC TITLE SHEET |
|--------------------------------------|
| GENERAL NOTES & LEGEND |
| PHASE ONE PUD MASTER GRADING PLAN |
| LOT GRADING NOTES & DETAILS |
| FILING 1 GRADING & EROSION CONTROL P |
| FILING 2-4 GRADING & EROSION CONTROL |
| DETENTION POND C1 PLAN |
| DETENTION POND D PLAN |
| EROSION CONTROL NOTES |
| EROSION CONTROL DETAILS |
| EROSION CONTROL DETAILS |
| CHANNEL C1 PLAN & PROFILE |
| CHANNEL C2 PLAN & PROFILE |
| CHANNEL D PLAN & PROFILE |
| CHANNEL E PLAN & PROFILE |
| |

ENGINEER'S STATEMENT:

THIS GRADING AND EROSION CONTROL PLAN WAS PREPARED UNDER MY DIRECTION AND SUPERVISION AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. SAID PLAN HAS BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR GRADING AND EROSION CONTROL PLANS. I ACCEPT RESPONSIBILITY FOR LIABILITY CAUSED BY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARING THIS PLAN.

ENGINEER OF RECORD SIGNATURE JOHN P. SCHWAB, CO. P.E. 29891

DATE

OWNER'S STATEMENT:

I, THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN.

OWNER SIGNATURE COLORADO SPRINGS MAYBERRY, LLC DATE

DATE

COUNTY:

COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, AND/OR ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE APPROVAL OF THIS DOCUMENT ASSUMES NO RESPONSIBILITY FOR COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.

FILED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EL PASO COUNTY LAND DEVELOPMENT CODE, DRAINAGE CRITERIA MANUAL VOLUMES 1 AND 2, AND ENGINEERING CRITERIA MANUAL AS AMENDED.

IN ACCORDANCE WITH ECM SECTION 1.12, THESE CONSTRUCTION DOCUMENTS WILL BE VALID FOR CONSTRUCTION FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER. IF CONSTRUCTION HAS NOT STARTED WITHIN THOSE 2 YEARS THE PLANS WILL NEED TO BE RESUBMITTED FOR APPROVAL, INCLUDING PAYMENT OF REVIEW FEES AT THE PLANNING AND COMMUNITY DEVELOPMENT DIRECTOR'S DISCRETION.

JENNIFER IRVINE, P.E. COUNTY ENGINEER/FCM ADMINISTRATOR



SEE Ш

HORZ. SCALE: VERT. SCALE: RAMPART : 11/20/20 LAST MODIFIED: 10/11/21
NO: 000001 MODIFIED BY: P. I. SHEET:

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C1.0

COUNTY GENERAL NOTES:

. ALL DRAINAGE AND ROADWAY CONSTRUCTION SHALL MEET THE STANDARDS AND SPECIFICATIONS OF THE CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2, AND THE EL PASO COUNTY ENGINEERING CRITERIA MANUAL.

2. CONTRACTOR SHALL BE RESPONSIBLE FOR THE NOTIFICATION AND FIELD LOCATION OF ALL EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, BEFORE BEGINNING CONSTRUCTION. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CALL 811 TO CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC).

3. CONTRACTOR SHALL KEEP A COPY OF THESE APPROVED PLANS, THE GRADING AND EROSION CONTROL PLAN, THE STORMWATER MANAGEMENT PLAN (SWMP), THE SOILS AND GEOTECHNICAL REPORT, AND THE APPROPRIATE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS AT THE JOB SITE AT ALL TIMES, INCLUDING THE FOLLOWING:

A. EL PASO COUNTY ENGINEERING CRITERIA MANUAL (ECM)

B. CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2 C. COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION

D. CDOT M & S STANDARDS

4. NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS FROM REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING. ANY MODIFICATIONS NECESSARY TO MEET CRITERIA AFTER-THE-FACT WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY TO RECTIFY.

5. IT IS THE DESIGN ENGINEER'S RESPONSIBILITY TO ACCURATELY SHOW EXISTING CONDITIONS, BOTH ONSITE AND OFFSITE, ON THE CONSTRUCTION PLANS. ANY MODIFICATIONS NECESSARY DUE TO CONFLICTS, OMISSIONS, OR CHANGED CONDITIONS WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY TO RECTIFY.

6. CONTRACTOR SHALL SCHEDULE A PRE—CONSTRUCTION MEETING WITH EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT (PCD) — INSPECTIONS, PRIOR TO STARTING CONSTRUCTION.

7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND THE REQUIREMENTS OF ALL JURISDICTIONAL AGENCIES AND TO OBTAIN ALL REQUIRED PERMITS, INCLUDING BUT NOT LIMITED TO EL PASO COUNTY EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP), REGIONAL BUILDING FLOODPLAIN DEVELOPMENT PERMIT, U.S. ARMY CORPS OF ENGINEERS-ISSUED 401 AND/OR 404 PERMITS, AND COUNTY AND STATE FUGITIVE DUST PERMITS.

8. CONTRACTOR SHALL NOT DEVIATE FROM THE PLANS WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE DESIGN ENGINEER AND PCD. CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY UPON DISCOVERY OF ANY ERRORS OR INCONSISTENCIES.

9. ALL STORM DRAIN PIPE SHALL BE CLASS III RCP WITH CLASS B BEDDING UNLESS OTHERWISE NOTED AND APPROVED BY PCD.

10. CONTRACTOR SHALL COORDINATE GEOTECHNICAL TESTING PER ECM STANDARDS. PAVEMENT DESIGN SHALL BE APPROVED BY EL PASO COUNTY PCD PRIOR TO PLACEMENT OF CURB AND GUTTER AND PAVEMENT.

11. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.

12. SIGHT VISIBILITY TRIANGLES AS IDENTIFIED IN THE PLANS SHALL BE PROVIDED AT ALL INTERSECTIONS. OBSTRUCTIONS GREATER THAN 18 INCHES ABOVE FLOWLINE ARE NOT ALLOWED WITHIN SIGHT TRIANGLES.

13. SIGNING AND STRIPING SHALL COMPLY WITH EL PASO COUNTY DPW (DEPT. OF PUBLIC WORKS) AND MUTCD CRITERIA.

14. CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED BY EL PASO COUNTY DPW, INCLUDING WORK WITHIN THE RIGHT—OF—WAY AND SPECIAL TRANSPORT PERMITS.

15. THE LIMITS OF CONSTRUCTION SHALL REMAIN WITHIN THE PROPERTY LINE UNLESS OTHERWISE NOTED. THE OWNER/DEVELOPER SHALL OBTAIN WRITTEN PERMISSION AND EASEMENTS, WHERE REQUIRED, FROM ADJOINING PROPERTY OWNER(S) PRIOR TO ANY OFF-SITE DISTURBANCE, GRADING, OR CONSTRUCTION.

GENERAL DRAINAGE NOTES:

1. INDIVIDUAL BUILDERS SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM STRUCTURES AND ACCOUNT FOR POTENTIAL CROSS—LOT DRAINAGE IMPACTS WITHIN EACH LOT.

2. BUILDERS AND PROPERTY OWNERS SHALL IMPLEMENT & MAINTAIN EROSION CONTROL BEST MANAGEMENT PRACTICES FOR PROTECTION OF DOWNSTREAM PROPERTIES AND FACILITIES INCLUDING PROTECTION OF EXISTING GRASS BUFFER STRIPS ALONG THE DOWNSTREAM PROPERTY BOUNDARIES.

3. GRADING AND DRAINAGE WITHIN LOTS IS THE RESPONSIBILITY OF THE INDIVIDUAL BUILDERS AND PROPERTY OWNERS.

COUNTY SIGNING AND STRIPING NOTES:

1. ALL SIGNS AND PAVEMENT MARKINGS SHALL BE IN COMPLIANCE WITH THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

2. REMOVAL OF EXISTING PAVEMENT MARKINGS SHALL BE ACCOMPLISHED BY A METHOD THAT DOES NOT MATERIALLY DAMAGE THE PAVEMENT. THE PAVEMENT MARKINGS SHALL BE REMOVED TO THE EXTENT THAT THEY WILL NOT BE VISIBLE UNDER DAY OR NIGHT CONDITIONS. AT NO TIME WILL IT BE ACCEPTABLE TO PAINT OVER EXISTING PAVEMENT MARKINGS.

3. ANY DEVIATION FROM THE STRIPING AND SIGNING PLAN SHALL BE APPROVED BY EL PASO COUNTY.

4. ALL SIGNS SHOWN ON THE SIGNING AND STRIPING PLAN SHALL BE NEW SIGNS. EXISTING SIGNS MAY REMAIN OR BE REUSED IF THEY MEET CURRENT EL PASO COUNTY AND MUTCD STANDARDS.

5. STREET NAME AND REGULATORY STOP SIGNS SHALL BE ON THE SAME POST AT INTERSECTIONS.

6. ALL REMOVED SIGNS SHALL BE DISPOSED OF IN A PROPER MANNER BY THE CONTRACTOR.

7. ALL STREET NAME SIGNS SHALL HAVE "D" SERIES LETTERS. WITH LOCAL ROADWAY SIGNS BEING 4" UPPER-LOWER CASE LETTERING ON 8" BLANK AND NON-LOCAL ROADWAY SIGNS BEING 6" LETTERING, UPPER-LOWER CASE ON 12" BLANK, WITH WHITE BORDER THAT IS NOT RECESSED. MULTI-LANE ROADWAYS WITH SPEED LIMITS OF 40 MPH OR HIGHER SHALL HAVE 8" UPPER-LOWER CASE LETTERING ON 18" BLANK WITH A WHITE BORDER THAT IS NOT RECESSED. THE WIDTH OF THE NON-RECESSED WHITE BORDERS SHALL MATCH PAGE 255 OF THE 2012 MUTCD "STANDARD HIGHWAY SIGNS".

8. ALL TRAFFIC SIGNS SHALL HAVE A MINIMUM HIGH INTENSITY PRISMATIC GRADE SHEETING.

9. ALL LOCAL RESIDENTIAL STREET SIGNS SHALL BE MOUNTED ON A 1.75" X 1.75" SQUARE TUBE SIGN POST AND STUB POST BASE. FOR OTHER APPLICATIONS. REFER TO THE CDOT STANDARD S-614-8 REGARDING USE OF THE P2 TUBULAR STEEL POST SLIPBASE DESIGN.

10. ALL SIGNS SHALL BE SINGLE SHEET ALUMINUM WITH 0.100" MINIMUM THICKNESS.

11. ALL LIMIT LINES/STOP LINES, CROSSWALK LINES, PAVEMENT LEGENDS, AND ARROWS SHALL BE A MINIMUM 125 MIL THICKNESS PREFORMED THERMOPLASTIC PAVEMENT MARKINGS WITH TAPERED LEADING EDGES PER CDOT STANDARD S-627-1. WORD AND SYMBOL MARKINGS SHALL BE THE NARROW TYPE. STOP BARS SHALL BE 24" IN WIDTH. CROSSWALKS LINES SHALL BE 12" WIDE AND 8' LONG PER CDOT S-627-1.

12. ALL LONGITUDINAL LINES SHALL BE A MINIMUM 15MIL THICKNESS EPOXY PAINT. ALL NON-LOCAL RESIDENTIAL ROADWAYS SHALL INCLUDE BOTH RIGHT AND LEFT EDGE LINE STRIPING AND ANY ADDITIONAL STRIPING AS REQUIRED BY CDOT S-627-1.

13. THE CONTRACTOR SHALL NOTIFY EL PASO COUNTY (719) 520-6819 PRIOR TO AND UPON COMPLETION OF SIGNING AND STRIPING.

14. THE CONTRACTOR SHALL OBTAIN A WORK IN THE RIGHT OF WAY PERMIT FROM THE EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS PRIOR TO ANY SIGNAGE OR STRIPING WORK WITHIN AN EXISTING EL PASO COUNTY ROADWAY.

PROJECT GENERAL NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE NOTIFICATION AND FIELD LOCATION OF ALL EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, BEFORE BEGINNING CONSTRUCTION. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ACTUAL CONSTRUCTION.

2. EXISTING CONTOUR DATA PROVIDED BY OWNER GENERALLY CONSISTS OF AERIAL MAPPING FROM UNITED PLANNING & ENGINEERING. JPS ENGINEERING TAKES NO RESPONSIBILITY FOR THE ACCURACY OF EXISTING TOPOGRAPHIC MAPPING.

3. THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY OF THESE APPROVED PLANS AND ONE (1) COPY OF THE APPROPRIATE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS AT THE JOB SITE AT ALL TIMES:

A. EL PASO COUNTY ENGINEERING CRITERIA MANUAL

B. CDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION

C. ELLICOTT UTILITIES STANDARDS SPECIFICATIONS (REFER TO CSU STANDARDS IN THE ABSENCE OF PUBLISHED SPECIFICATIONS)

4. STORM DRAIN PIPE SHALL BE RCP CLASS III WITH CLASS C BEDDING UNLESS OTHERWISE NOTED. PROVIDE WATER-TIGHT JOINTS ON STORM SEWER PIPE.

5. STATIONING IS AT CENTERLINE UNLESS OTHERWISE NOTED. ALL ELEVATIONS ARE AT FLOWLINE UNLESS OTHERWISE NOTED. ALL DIMENSIONS ARE FROM FACE OF CURB UNLESS OTHERWISE NOTED.

6. PROPOSED CONTOURS SHOWN ARE TO FINISHED GRADE.

7. LENGTHS SHOWN FOR STORM SEWER PIPES ARE TO CENTER OF MANHOLE.

8. CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING STRUCTURES, DEBRIS, WASTE AND OTHER UNSUITABLE FILL MATERIAL FOUND WITHIN THE LIMITS OF EXCAVATION.

9. MATCH INTO EXISTING GRADES AT 3:1 MAX CUT AND FILL SLOPES.

10. REVEGETATION OF ALL DISTURBED AREAS SHALL BE DONE WITH SPECIFIED SEED MIX WITHIN 30 DAYS AFTER FINE GRADING IS COMPLETE.

11. EROSION CONTROL SHALL CONSIST OF SILT FENCE AND OTHER BMP'S AS SHOWN ON THE DRAWINGS, AND TOPSOIL WITH GRASS SEED, WHICH WILL BE WATERED UNTIL VEGETATION HAS BEEN REESTABLISHED.

12. THE EROSION CONTROL MEASURES OUTLINED ON THIS PLAN ARE THE RESPONSIBILITY OF THE DEVELOPER TO MONITOR AND REPLACE, REGRADE, AND REBUILD AS NECESSARY UNTIL VEGETATION IS REESTABLISHED.

13. EROSION CONTROL MEASURES SHALL BE IMPLEMENTED IN A MANNER THAT WILL PROTECT ADJACENT PROPERTIES AND PUBLIC FACILITIES FROM THE ADVERSE EFFECTS OF EROSION AND SEDIMENTATION AS A RESULT OF CONSTRUCTION AND EARTHWORK ACTIVITIES WITHIN THE PROJECT SITE.

14. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED AS DETERMINED BY SITE CONDITIONS.

15. THE CONTRACTOR WILL TAKE THE NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES FROM DAMAGE DUE TO THIS OPERATION. ANY DAMAGE TO THE UTILITIES WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE, AND ANY SERVICE DISRUPTION WILL BE SETTLED BY THE CONTRACTOR

16. PEDESTRIAN RAMPS SHALL BE INSTALLED AT ALL INTERSECTIONS AND CONFORM TO COUNTY ENGINEERING STANDARDS AND SPECIFICATIONS.

17. ALL FINISHED GRADES SHALL HAVE A MINIMUM 0.5% SLOPE TO PROVIDE POSITIVE DRAINAGE.

18. WHERE PROPOSED SLOPES CONFLICT WITH PROPOSED SPOT ELEVATIONS, SPOT ELEVATIONS SHALL GOVERN.

19. CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS PRIOR TO BEGINNING WORK.

20. ALL RESIDENTIAL STREET CURB RETURN RADII ARE 20-FEET AT FLOWLINE UNLESS OTHERWISE NOTED. ARTERIAL STREET CURB RETURN RADII ARE 35' UNLESS NOTED OTHERWISE.

21. 25-FOOT SIGHT VISIBILITY TRIANGLES SHALL BE PROVIDED AT ALL RESIDENTIAL STREET INTERSECTIONS. 50-FOOT SIGHT TRIANGLES SHALL BE PROVIDED AT ARTERIAL STREET INTERSECTIONS. NO OBSTRUCTIONS TALLER THAN 18" ARE PERMITTED WITHIN THESE TRIANGLES.

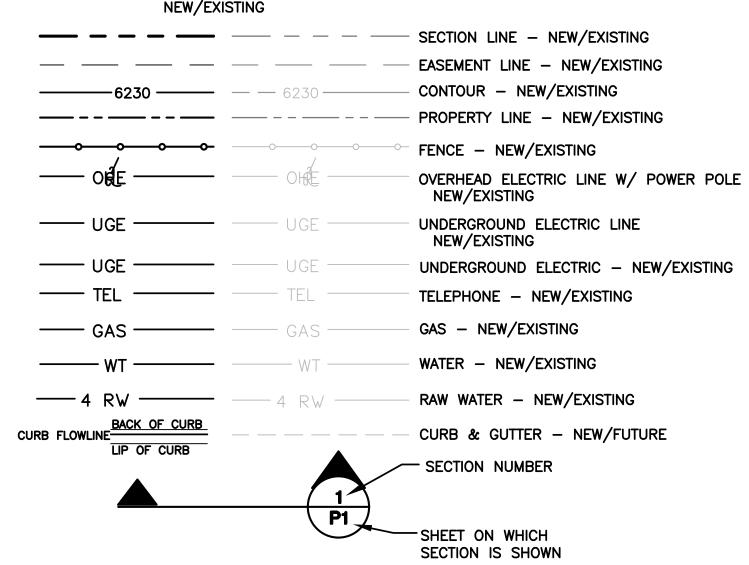
22. CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH EL PASO COUNTY AND ALL UTILITIES INVOLVED IN PROJECT PRIOR TO MOBILIZING ON SITE.

23. TYPE C STORM INLETS SHALL HAVE CLOSE-MESH GRATES.

24. PROVIDE 10' TRANSITION FROM RAMP CURB TO VERTICAL CURB ON EACH SIDE OF STORM INLETS.

25. ALL BACKFILL, SUB-BASE, AND/OR BASE COURSE MATERIAL SHALL BE COMPACTED PER EL PASO COUNTY AND CDOT STANDARDS AND SPECIFICATIONS AND PROJECT GEOTECHNICAL REPORT. CONTRACTOR SHALL STABILIZE ALL SUBGRADE AREAS PER GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.

LEGEND:



ENGINEERING

19 E. Willamette Ave. Colorado Springs, CO 80903

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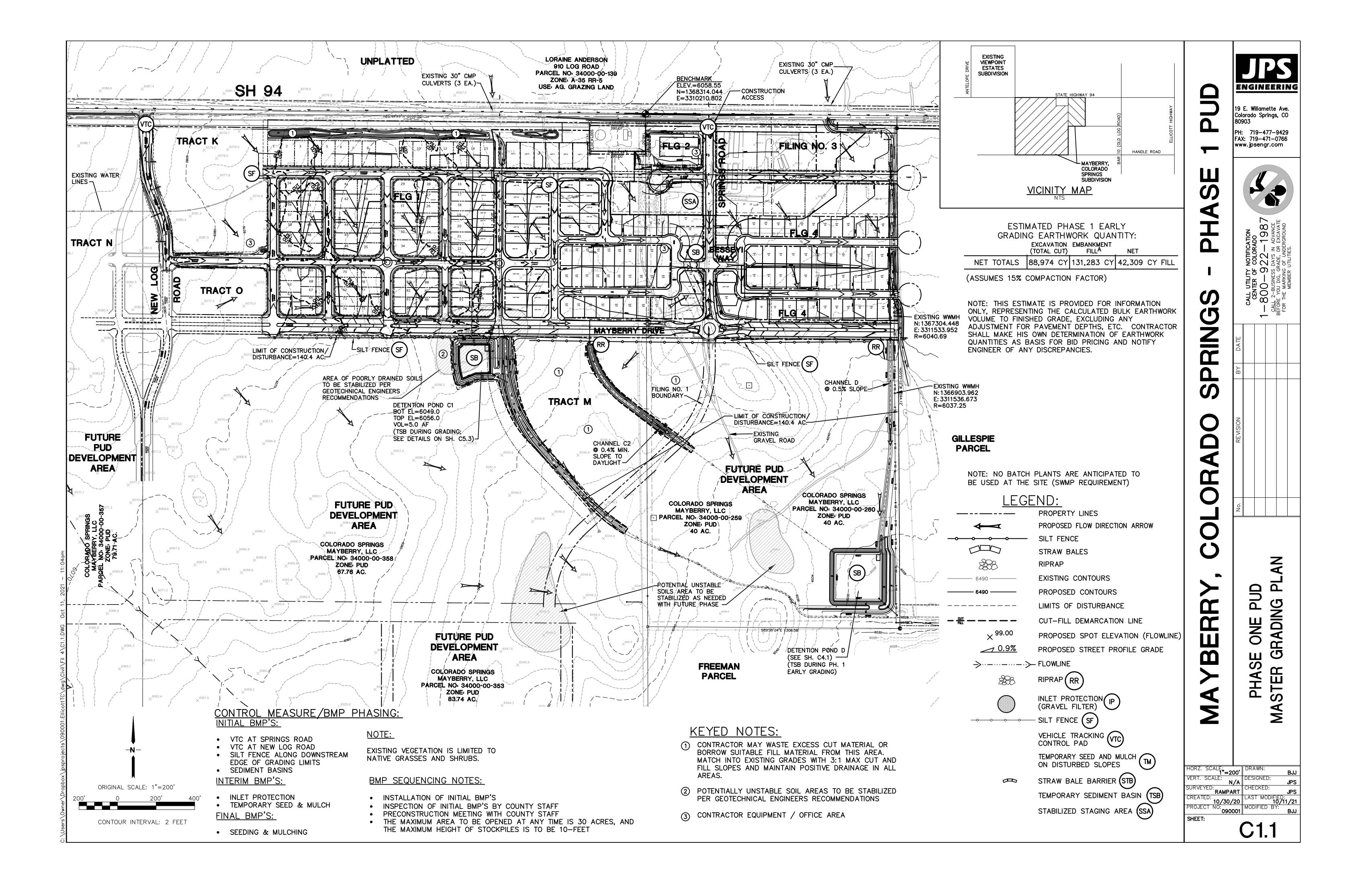


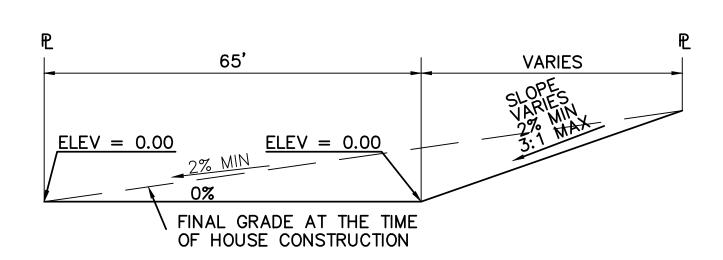
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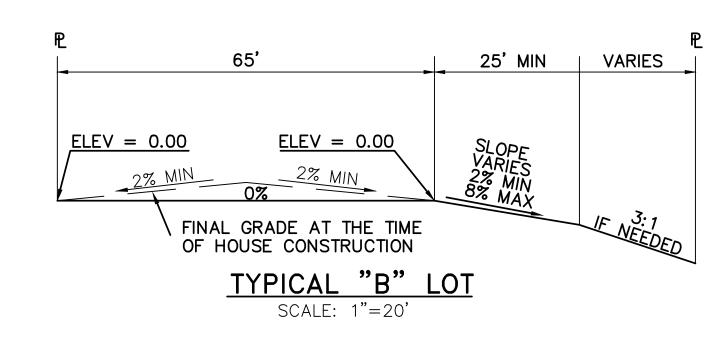
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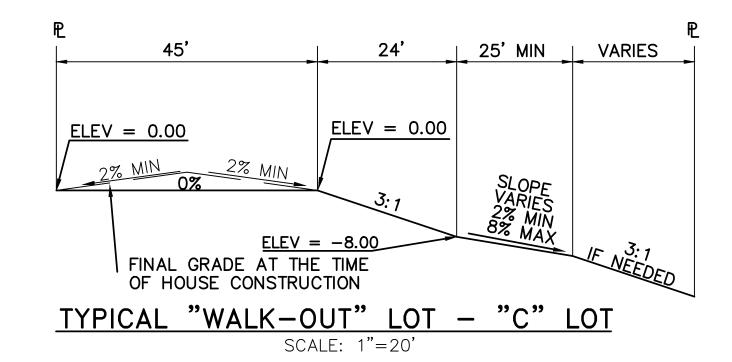
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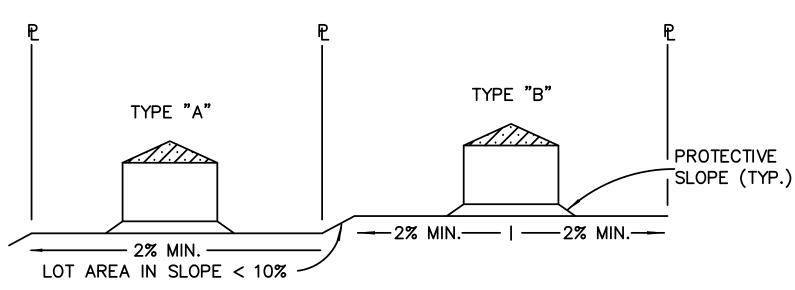




TYPICAL "A" LOT SCALE: 1"=20'

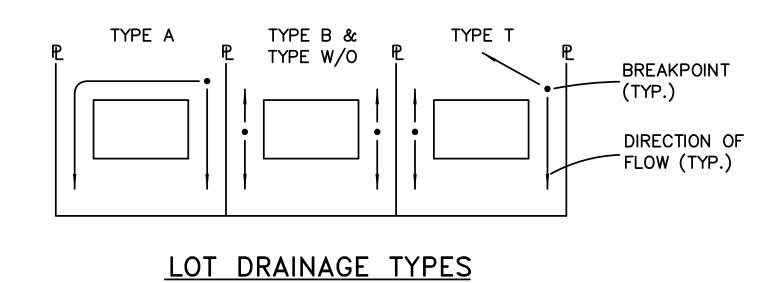




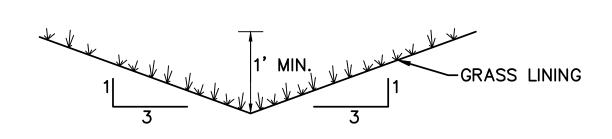


TYPICAL LOT SECTION DETAIL N.T.S.

NOTE: FINAL GRADING TO COMPLY WITH H.U.D. STANDARDS CONTAINED IN SECTION 310 AND 602 OF THE MINIMUM PROPERTY STANDARDS (MPS) 4900.1, HANDBOOK 4140.3 CHG (DATA SHEET 79g), IF APPLICABLE, AND ALL LEGAL STANDARDS.

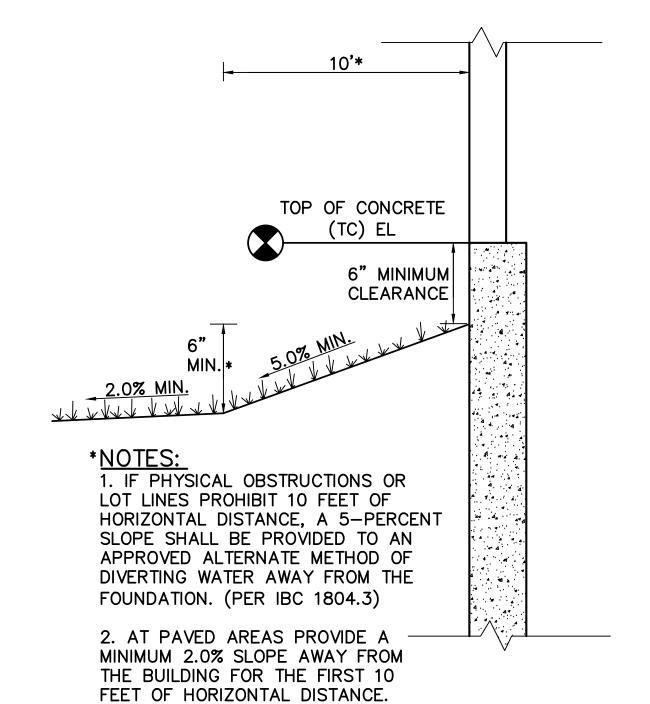


N.T.S.



TYPICAL SIDE/REAR LOT SWALE A

NOTE: BUILDERS AND OWNERS SHALL MAINTAIN PROPER PROTECTIVE SLOPES & SIDE/REAR LOT SWALES DURING AND AFTER HOME CONSTRUCTION.



TYPICAL BUILDING

DRAINAGE DETAIL

NOTES:

1. LOT GRADING & DRAINAGE IS THE RESPONSIBILITY OF THE INDIVIDUAL LOT BUILDERS & OWNERS.

2. INDIVIDUAL BUILDERS SHALL PROVIDE POSITIVE DRAINAGE WITHIN EACH LOT AND ACCOUNT FOR POTENTIAL CROSS-LOT DRAINAGE ON DOWNGRADIENT LOTS.

3. FINAL GRADING TO COMPLY WITH H.U.D. STANDARDS CONTAINED IN SECTION 310 AND 602 OF THE MINIMUM PROPERTY STANDARDS (MPS) 4900.1, HANDBOOK 4140.3 CHG (DATA SHEET 79g), IF APPLICABLE, AND ALL LEGAL STANDARDS.

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ENGINEERING

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Colorado Springs, CO 80903

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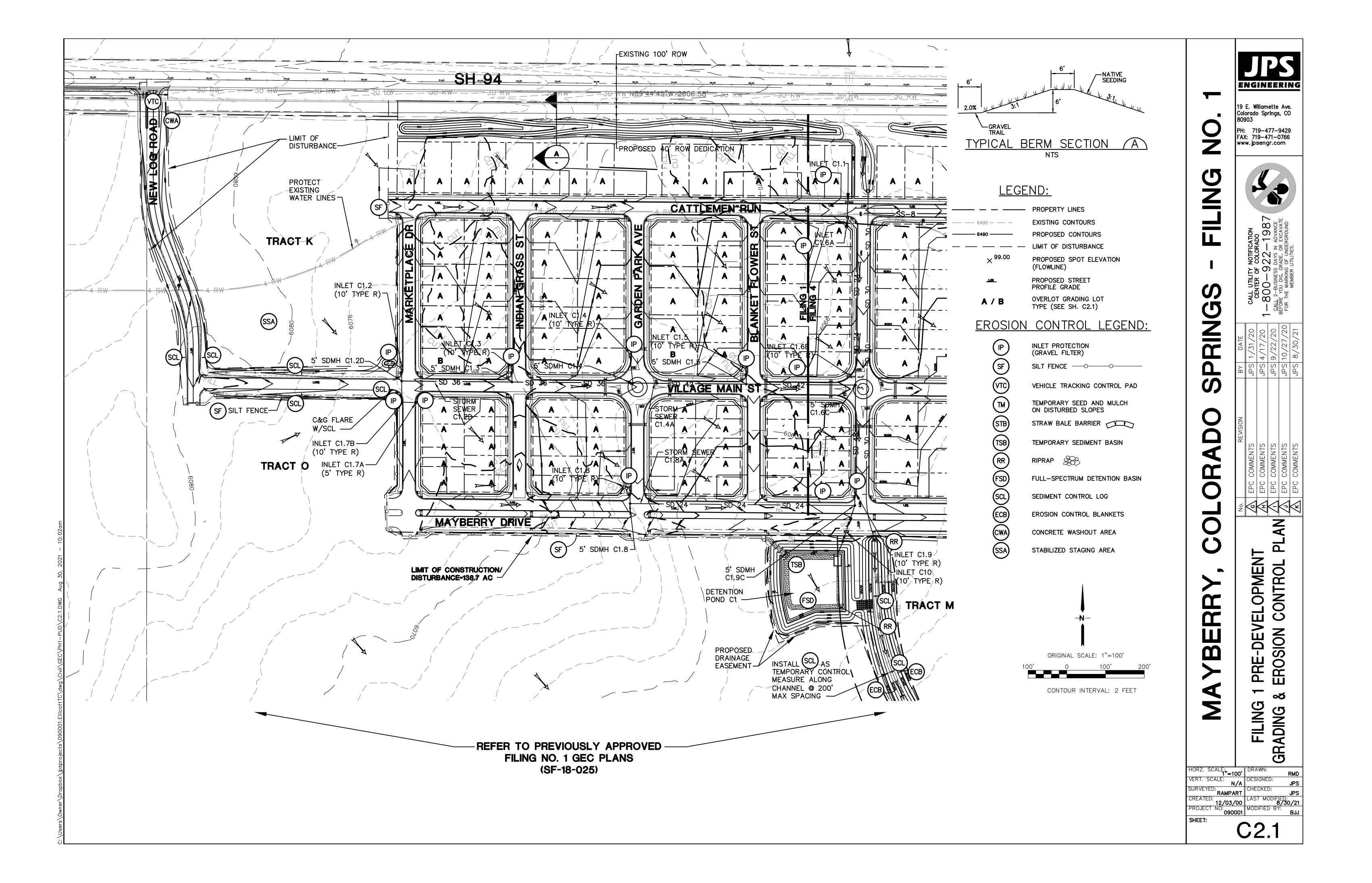
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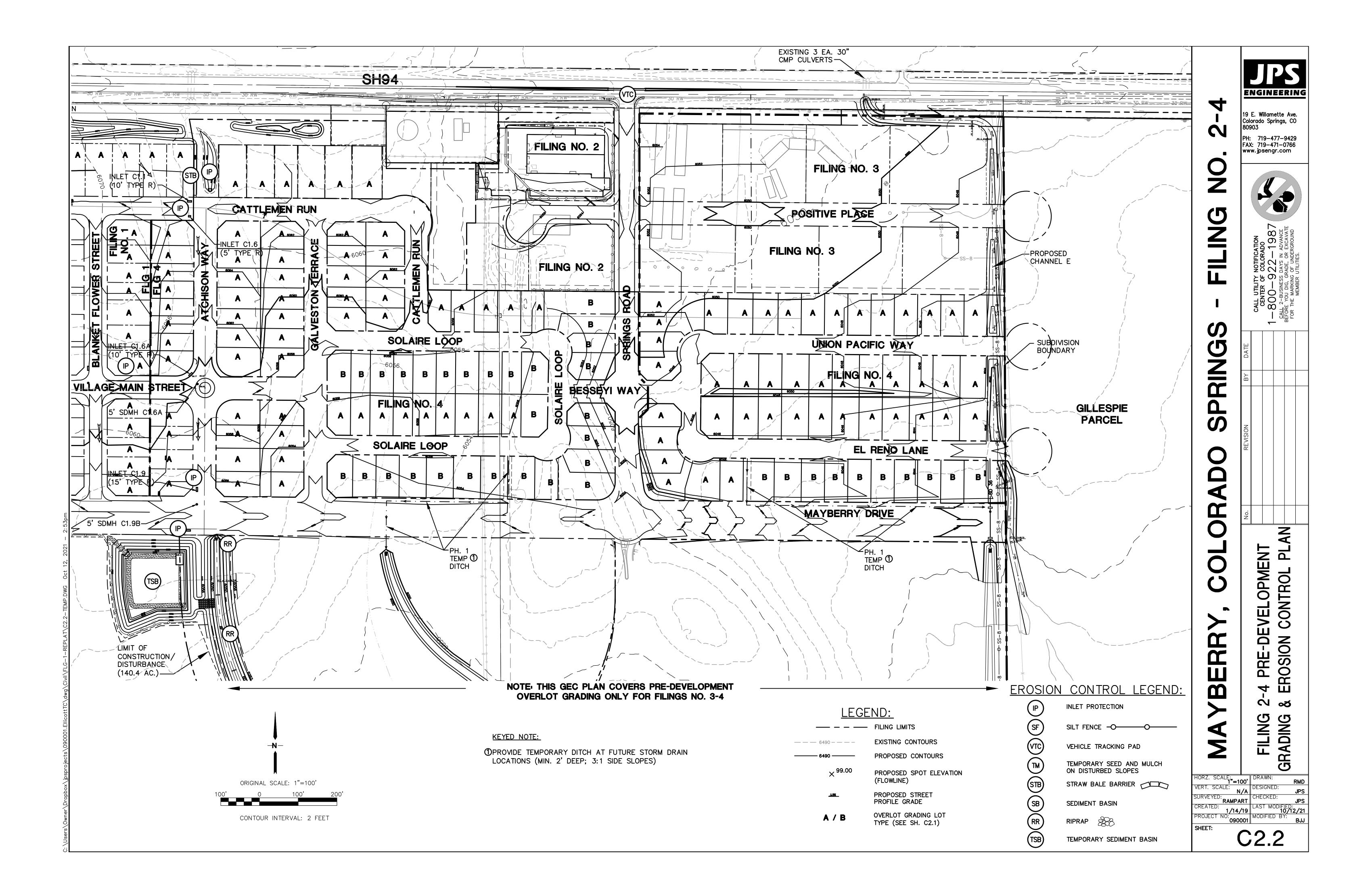
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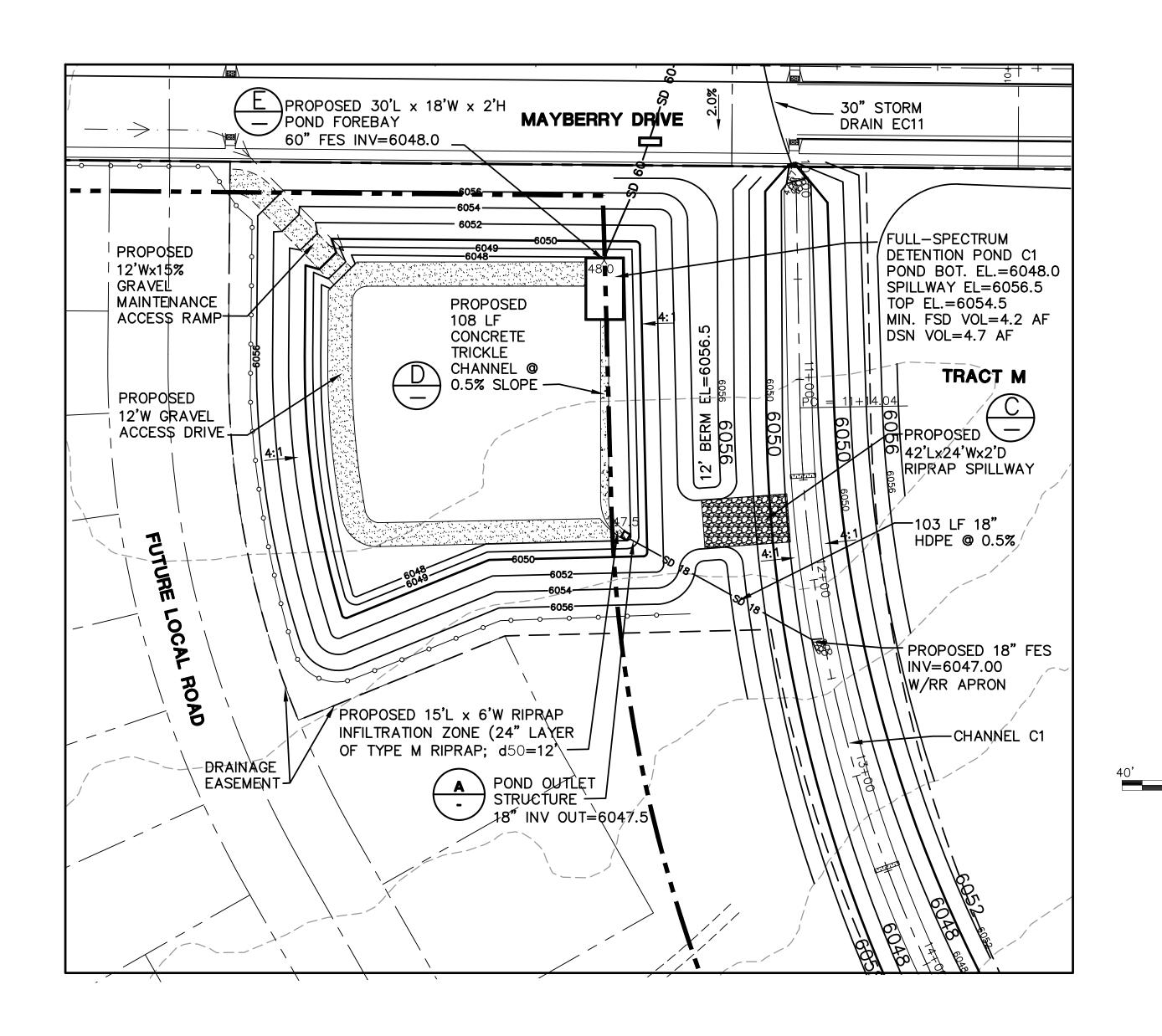
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S E E BERR **Σ**

DETENTION POND C1
PLAN

ENGINEERING

19 E. Willamette Ave. Colorado Springs, CO

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NOTES:

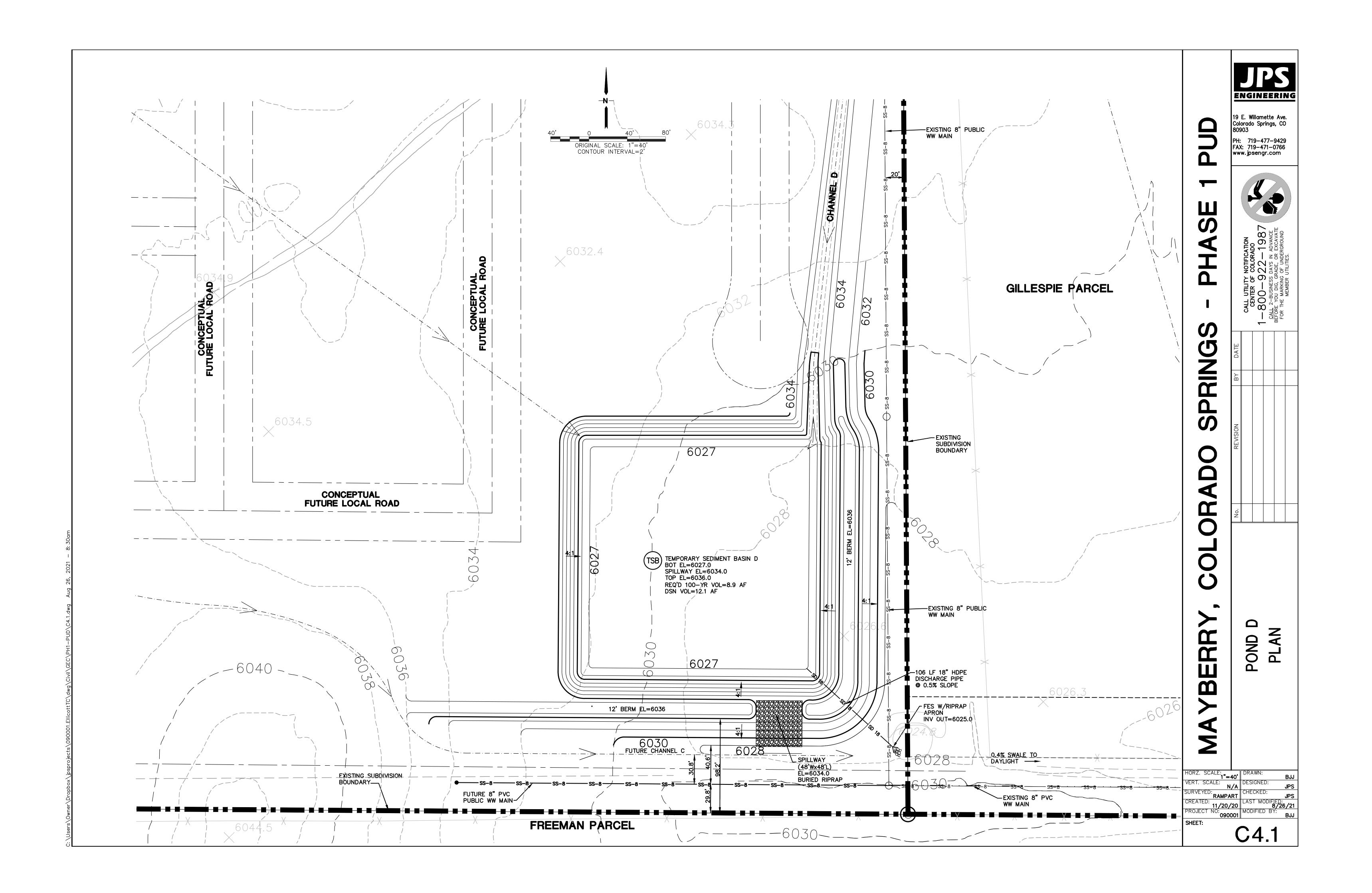
1. THIS PLAN WAS INITIALLY APPROVED AS SH. C1.5 WITHIN THE FILING NO. 1 GEC PLANS. CURRENT PLAN REVISIONS INCORPORATE UPDATES BASED ON THE FILING NO. 1A REPLAT.

2. POND DETAILS ARE FOR REFERENCE ONLY. FINAL POND CONSTRUCTION DETAILS ARE APPROVED WITH THE CONSTRUCTION DRAWINGS AT THE FINAL PLAT STAGE.

ORIGINAL SCALE: 1"=40' CONTOUR INTERVAL=2'

GEC
NG NO. PROJECT |
SHEET:

4/4/06 LAST MODIFIED 8/2 NO: 090001 MODIFIED BY:



STANDARD NOTES OR EL PASO COUNTY GRADING AND EROSION CONTROL PLANS:

REVISED 7/02/19

- . STORMWATER DISCHARGES FROM CONSTRUCTION SITES SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR DEGRADATION OF STATE WATERS, ALL WORK AND EARTH DISTURBANCE SHALL BE DONE IN A MANNER THAT MINIMIZES POLLUTION OF ANY ON-SITE OR OFF-SITE WATERS, INCLUDING WETLANDS.
- . NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE ENGINEERING CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS FROM REGULATIONS AND STANDARDS MUST BE REQUESTED. AND APPROVED. IN WRITING.
- . A SEPARATE STORMWATER MANAGEMENT PLAN (SMWP) FOR THIS PROJECT SHALL BE COMPLETED AND AN EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP) ISSUED PRIOR TO COMMENCING CONSTRUCTION. MANAGEMENT OF THE SWMP DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE DESIGNATED QUALIFIED STORMWATER MANAGER OR CERTIFIED EROSION CONTROL INSPECTOR. THE SWMP SHALL BE LOCATED ON SITE AT ALL TIMES DURING CONSTRUCTION AND SHALL BE KEPT UP TO DATE WITH WORK PROGRESS AND CHANGES IN THE FIELD.
- I. ONCE THE ESQCP IS APPROVED AND A "NOTICE TO PROCEED" HAS BEEN ISSUED, THE CONTRACTOR MAY INSTALL THE INITIAL STAGE EROSION AND SEDIMENT CONTROL MEASURES AS INDICATED ON THE APPROVED GEC. A PRECONSTRUCTION MEETING BETWEEN THE CONTRACTOR, ENGINEER, AND EL PASO COUNTY WILL BE HELD PRIOR TO ANY CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE APPLICANT TO COORDINATE THE MEETING TIME AND PLACE WITH COUNTY STAFF.
- 5. CONTROL MEASURES MUST BE INSTALLED PRIOR TO COMMENCEMENT OF ACTIVITIES THAT COULD CONTRIBUTE POLLUTANTS TO STORMWATER. CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, AND DISTURBED LAND AREAS SHALL BE INSTALLED IMMEDIATELY UPON COMPLETION OF THE DISTURBANCE.
- 3. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MAINTAINED AND REMAIN IN EFFECTIVE OPERATING CONDITION UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND FINAL STABILIZATION IS ESTABLISHED. ALL PERSONS ENGAGED IN LAND DISTURBANCE ACTIVITIES SHALL ASSESS THE ADEQUACY OF CONTROL MEASURES AT THE SITE AND IDENTIFY IF CHANGES TO THOSE CONTROL MEASURES ARE NEEDED TO ENSURE THE CONTINUED EFFECTIVE PERFORMANCE OF THE CONTROL MEASURES. ALL CHANGES TO TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES MUST BE INCORPORATED INTO THE STORMWATER MANAGEMENT PLAN
- . TEMPORARY STABILIZATION SHALL BE IMPLEMENTED ON DISTURBED AREAS AND STOCKPILES WHERE GROUND DISTURBING CONSTRUCTION ACTIVITY HAS PERMANENTLY CEASED OR TEMPORARILY CEASED FOR LONGER THAN 14 DAYS.
- S. FINAL STABILIZATION MUST BE IMPLEMENTED AT ALL APPLICABLE CONSTRUCTION SITES. FINAL STABILIZATION IS ACHIEVED WHEN ALL GROUND DISTURBING ACTIVITIES ARE COMPLETE AND ALL DISTURBED AREAS EITHER HAVE A UNIFORM VEGETATIVE COVER WITH INDIVIDUAL PLANT DENSITY OF 70 PERCENT OF PRE-DISTURBANCE LEVELS ESTABLISHED OR EQUIVALENT PERMANENT ALTERNATIVE STABILIZATION METHOD IS IMPLEMENTED. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE REMOVED UPON FINAL STABILIZATION AND BEFORE PERMIT CLOSURE.
-). ALL PERMANENT STORMWATER MANAGEMENT FACILITIES SHALL BE INSTALLED AS DESIGNED IN THE APPROVED PLANS. ANY PROPOSED CHANGES THAT AFFECT THE DESIGN OR FUNCTION OF PERMANENT STORMWATER MANAGEMENT STRUCTURES MUST BE APPROVED BY THE ECM ADMINISTRATOR PRIOR TO IMPLEMENTATION.
- 0. EARTH DISTURBANCES SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY MINIMIZE ACCELERATED SOIL EROSION AND RESULTING SEDIMENTATION. ALL DISTURBANCES SHALL BE DESIGNED, CONSTRUCTED, AND COMPLETED SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST PRACTICAL PERIOD OF TIME. PRE-EXISTING VEGETATION SHALL BE PROTECTED AND MAINTAINED WITHIN 50 HORIZONTAL FEET OF A WATERS OF THE STATE UNLESS SHOWN TO BE INFEASIBLE AND SPECIFICALLY REQUESTED AND APPROVED.
- I. COMPACTION OF SOIL MUST BE PREVENTED IN AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES OR WHERE FINAL STABILIZATION WILL BE ACHIEVED BY VEGETATIVE COVER. AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES SHALL ALSO BE PROTECTED FROM SEDIMENTATION DURING CONSTRUCTION UNTIL FINAL STABILIZATION IS ACHIEVED. IF COMPACTION PREVENTION IS NOT FEASIBLE DUE TO SITE CONSTRAINTS, ALL AREAS DESIGNATED FOR INFILTRATION AND VEGETATION CONTROL MEASURES MUST BE LOOSENED PRIOR TO INSTALLATION OF THE CONTROL MEASURE(S).
- ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND, THROUGH, OR FROM THE EARTH DISTURBANCE AREA SHALL BE A STABILIZED CONVEYANCE DESIGNED TO MINIMIZE EROSION AND THE DISCHARGE OF SEDIMENT OFF SITE.
- CONCRETE WASH WATER SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE SWMP. NO WASH WATER SHALL BE DISCHARGED TO OR ALLOWED. TO ENTER STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES. CONCRETE WASHOUTS SHALL NOT BE LOCATED IN AN AREA WHERE SHALLOW GROUNDWATER MAY BE PRESENT, OR WITHIN 50 FEET OF A SURFACE WATER BODY, CREEK OR STREAM.
- 14. DURING DEWATERING OPERATIONS OF UNCONTAMINATED GROUND WATER MAY BE DISCHARGED ON SITE, BUT SHALL NOT LEAVE THE SITE IN THE FORM OF SURFACE RUNOFF UNLESS AN APPROVED STATE DEWATERING PERMIT IS IN PLACE.
- 15. EROSION CONTROL BLANKETING OR OTHER PROTECTIVE COVERING SHALL BE USED ON SLOPES STEEPER THAN 3:1.
- 16. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL WASTES FROM THE CONSTRUCTION SITE FOR DISPOSAL IN ACCORDANCE WITH LOCAL AND STATE REGULATORY REQUIREMENTS. NO CONSTRUCTION DEBRIS, TREE SLASH, BUILDING MATERIAL WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED, OR DISCHARGED AT THE SITE.
- 7. WASTE MATERIALS SHALL NOT BE TEMPORARILY PLACED OR STORED IN THE STREET, ALLEY, OR OTHER PUBLIC WAY, UNLESS IN ACCORDANCE WITH AN APPROVED TRAFFIC CONTROL PLAN. CONTROL MEASURES MAY BE REQUIRED BY EL PASO COUNTY ENGINEERING IF DEEMED NECESSARY, BASED ON SPECIFIC CONDITIONS AND CIRCUMSTANCES.
- 8. TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFF-SITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.
- THE OWNER/DEVELOPER SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION DEBRIS, DIRT, TRASH, ROCK, SEDIMENT, SOIL, AND SAND THAT MAY ACCUMULATE IN ROADS, STORM DRAINS AND OTHER DRAINAGE CONVEYANCE SYSTEMS AND STORMWATER APPURTENANCES AS A RESULT OF SITE DEVELOPMENT.
- 20. THE QUANTITY OF MATERIALS STORED ON THE PROJECT SITE SHALL BE LIMITED, AS MUCH AS PRACTICAL, TO THAT QUANTITY REQUIRED TO PERFORM THE WORK IN AN ORDERLY SEQUENCE. ALL MATERIALS STORED ON-SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER, IN THEIR ORIGINAL CONTAINERS, WITH ORIGINAL MANUFACTURER'S LABELS.
- 11. NO CHEMICAL(S) HAVING THE POTENTIAL TO BE RELEASED IN STORMWATER ARE TO BE STORED OR USED ONSITE UNLESS PERMISSION FOR THE USE OF SUCH CHEMICAL(S) IS GRANTED IN WRITING BY THE ECM ADMINISTRATOR. IN GRANTING APPROVAL FOR THE USE OF SUCH CHEMICAL(S), SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.
- 22. BULK STORAGE OF ALLOWED PETROLEUM PRODUCTS OR OTHER ALLOWED LIQUID CHEMICALS IN EXCESS OF 55 GALLONS SHALL REQUIRE ADEQUATE SECONDARY CONTAINMENT PROTECTION TO CONTAIN ALL SPILLS ONSITE AND TO PREVENT ANY SPILLED MATERIALS FROM ENTERING STATE WATERS, ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR OTHER FACILITIES.
- 23. NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE CURB AND GUTTER OR DITCH EXCEPT WITH APPROVED SEDIMENT CONTROL MEASURES.
- 24. OWNER/DEVELOPER AND THEIR AGENTS SHALL COMPLY WITH THE "COLORADO WATER QUALITY CONTROL ACT" (TITLE 25, ARTICLE 8, CRS), AND THE "CLEAN" WATER ACT" (33 USC 1344), IN ADDITION TO THE REQUIREMENTS OF THE LAND DEVELOPMENT CODE, DCM VOLUME II AND THE ECM APPENDIX I. ALL APPROPRIATE PERMITS MUST BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION (1041, NPDES, FLOODPLAIN, 404, FUGITIVE DUST, ETC.). IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND OTHER LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL, STATE, LOCAL, OR COUNTY AGENCIES, THE MOST RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.
- 25. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE ONLY AT APPROVED CONSTRUCTION ACCESS POINTS.
- PRIOR TO CONSTRUCTION THE PERMITTEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
- 27. A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND SHALL BE UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.
- 28. THE SOILS REPORT FOR THIS SITE HAS BEEN PREPARED BY CTL THOMPSON, DATED JULY 13, 2006 AND SHALL BE CONSIDERED A PART OF THESE PLANS.
- 29. AT LEAST TEN (10) DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB ONE (1) ACRE OR MORE, THE OWNER OR OPERATOR OF CONSTRUCTION ACTIVITY SHALL SUBMIT A PERMIT APPLICATION FOR STORMWATER DISCHARGE TO THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY DIVISION. THE APPLICATION CONTAINS CERTIFICATION OF COMPLETION OF A STORMWATER MANAGEMENT PLAN (SWMP), OF WHICH THIS GRADING AND EROSION CONTROL PLAN MAY BE A PART. FOR INFORMATION OR APPLICATION MATERIALS CONTACT:
- COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
- WATER QUALITY CONTROL DIVISION WQCD - PERMITS
- 4300 CHERRY CREEK DRIVE SOUTH DENVER, CO 80246-1530
- ATTN: PERMITS UNIT

EXISTING VEGETATION:

NATIVE GRASSES (APPROXIMATELY 70 PERCENT COVERAGE)

| SEEDING MIX: GRASS | | OUNT IN PLS |
|---|----------------|--|
| CRESTED WHEAT GRASS PERENIAL RYE WESTERN WHEATGRASS SMOOTH BROME GRASS SIDEOATS GRAMA | LINN SARTON | 4.0 LBS. 2.0 LBS. 3.0 LBS. 5.0 LBS. 2.5 LBS. |
| | TOTAL: | 16.5 LBS. |

SEEDING & FERTILIZER APPLICATION: DRILL SEED OR HYDRO-SEED PER CDOT SPEC. SECTION 212.

MULCHING APPLICATION:

CONFORM TO CDOT SPEC-SECTION 213.

SEEDING MIX:

| <u>GRASS</u> | | OUNT IN PLS S. PER ACRE |
|---|----------------|----------------------------|
| CRESTED WHEAT GRASS PERENIAL RYE WESTERN WHEATGRASS SMOOTH BROME GRASS SIDEOATS GRAMA | LINN SARTON | 2.0 LBS. 3.0 LBS. |
| | TOTAL: | 16.5 LBS. |

SEEDING & FERTILIZER APPLICATION: HYDRO-SEED PER

CDOT SPEC. SECTION 212.

MULCHING APPLICATION: CONFORM TO CDOT SPEC-SECTION 213.

EROSION CONTROL NOTES:

AT LEAST TEN DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB 1 ACRE OR MORE. THE OWNER OR OPERATOR OF THE CONSTRUCTION ACTIVITY SHALL SUBMIT A PERMIT APPLICATION FOR STORMWATER DISCHARGE TO THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY CONTROL DIVISION. THE APPLICATION CONTAINS CERTIFICATION OF COMPLETION OF A STORMWATER MANAGEMENT PLAN (SWMP), OF WHICH THIS GRADING AND EROSION CONTROL PLAN MAY BE A PART. FOR INFORMATION OR APPLICATION MATERIALS CONTACT:

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT WATER QUALITY CONTROL DIVISION ATTN.: PERMITS UNIT

| INSTALL BMP'S | APRIL, 202 |
|--------------------|-------------|
| GRADING START | APRIL 202 |
| GRADING COMPLETION | AUGUST, 202 |
| SEEDING & MULCHING | AUGUST, 202 |
| STABILIZATION | AUGUST, 202 |
| | |

FREQUENCY

PERIODIC SITE INSPECTIONS RE-VEGETATION OF EXPOSED SOILS WITHIN 21 DAYS OF GRADING SEDIMENT REMOVAL FROM BMP'S REMOVAL OF BMP'S AFTER STABILIZATION ACHIEVED

CAUSES SURFACE EROSION.

²ACCUMULATED SEDIMENT AND DEBRIS SHALL BE REMOVED WHEN THE SEDIMENT LEVEL REACHES ONE HALF THE HEIGHT OF THE BMP OR AT ANY TIME THAT SEDIMENT OR DEBRIS ADVERSELY IMPACTS THE FUNCTION OF THE BMP.

4300 CHERRY CREEK DRIVE SOUTH

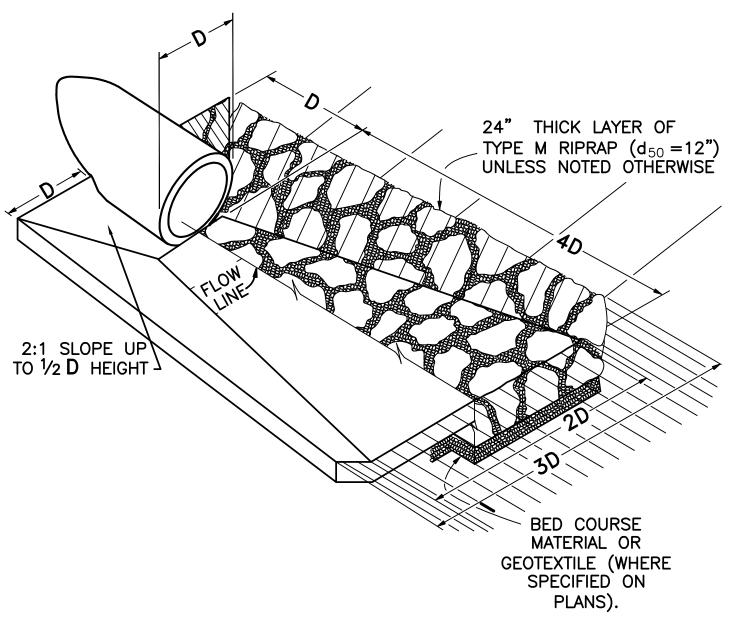
WQCD-PERMITS DENVER, COLORADO 80246-1530

ESTIMATED TIME SCHEDILLE.

| | <u> </u> | <u>IMA IED</u> | <u> IIIVI⊏</u> | SCHEDULE | <u>. • </u> | |
|--------------|----------|----------------|----------------|-----------|---|---|
| INSTALL | BMP'S | S | | | APRIL, | 2 |
| GRADING | STAF | T F | | | APRIL | 2 |
| GRADING | COM | PLETION | | A | AUGUST, | 2 |
| SEEDING | & MI | JLCHING | | A | AUGUST, | 2 |
| STABILIZ | ATION | | | Α | UGUST, 2 | 2 |
| <u>SEDIM</u> | ENT | CONTRO | L MA | INTENANCE | PROGE | 3 |
| | | | | | | |

BI-WEEKLY MONTHLY 2

AND AFTER ANY PRECIPITATION OR SNOW MELT EVENT THAT



CULVERT OUTLET PAVING (A)

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ENGINEERING

19 E. Willamette Ave.

Colorado Springs, CO

PH: 719-477-9429

1FICATION OR ADDO OR EXCAN

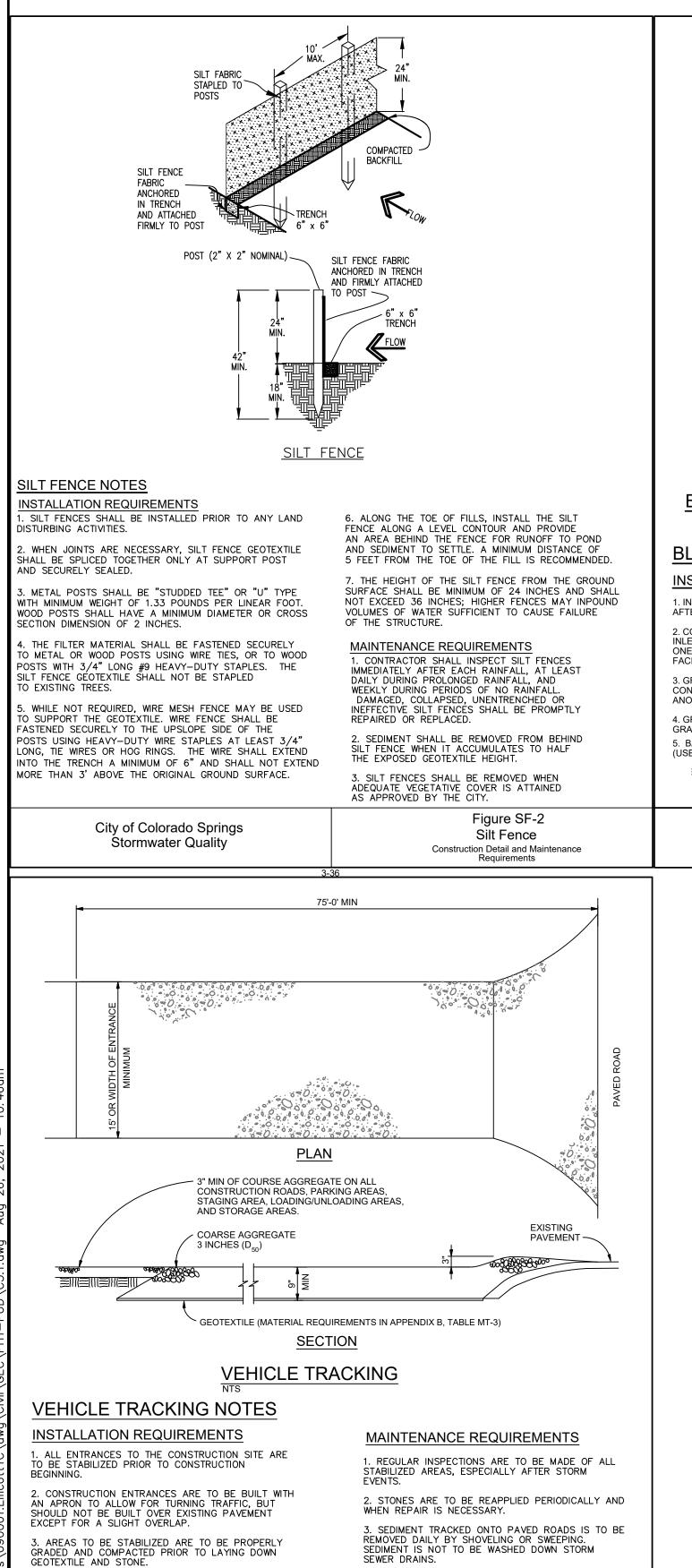
COLC COLC COLC CADE, OF UN

CALL UTILITY
CENTER
-800—

FAX: 719-471-0766

www.jpsengr.com

| DRAWN: BJJ |
|----------------------------------|
| DESIGNED: JPS |
| CHECKED: JPS |
| LAST MODIFIED: 8/26/21 |
| MODIFIED BY: |
| |



4. STORM SEWER INLET PROTECTION IS TO BE IN

PLACE, INSPECTED, AND CLEANED IF NECESSARY.

5. OTHER ASSOCIATED SEDIMENT CONTROL MEASURES ARE TO BE INSPECTED TO ENSURE GOOD WORKING

Figure VT-2

Vehicle Tracking

Application Examples

4. CONSTRUCTION ROADS, PARKING AREAS,

LOADING/UNLOADING ZONES, STORAGE AREAS, AND STAGING AREAS ARE TO BE STABILIZED.

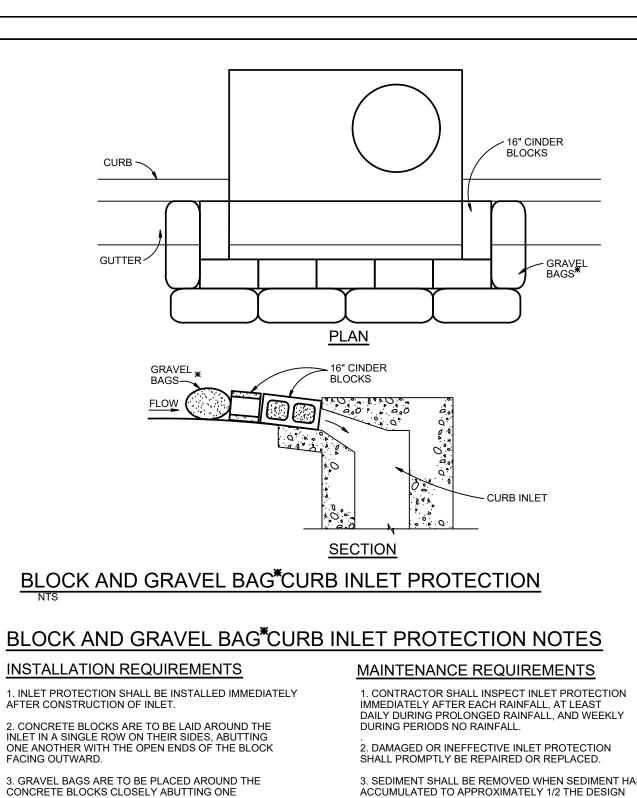
CONFORM TO SITE GRADES, BUT SHOULD NOT HAVE SIDE SLOPES OR ROAD GRADES THAT ARE EXCESSIVELY STEEP.

City of Colorado Springs

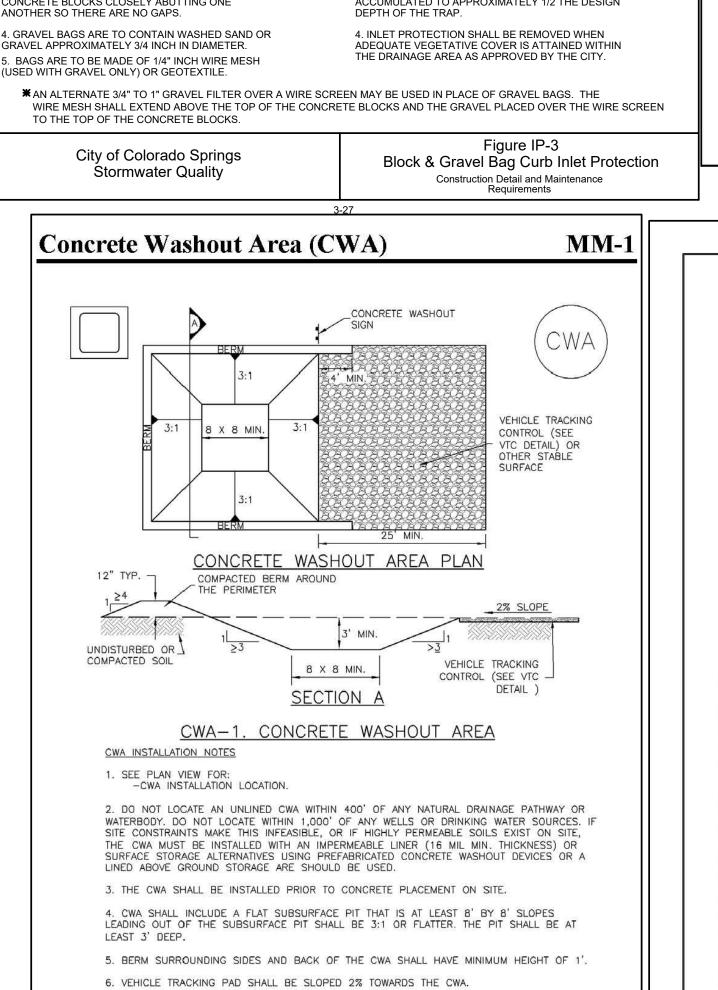
Stormwater Quality

3-54

. CONSTRUCTION ROADS ARE TO BE BUILT TO



3. SEDIMENT SHALL BE REMOVED WHEN SEDIMENT HAS ACCUMULATED TO APPROXIMATELY 1/2 THE DESIGN DEPTH OF THE TRAP. 4. INLET PROTECTION SHALL BE REMOVED WHEN ADEQUATE VEGETATIVE COVER IS ATTAINED WITHIN THE DRAINAGE AREA AS APPROVED BY THE CITY.



7. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND

Urban Drainage and Flood Control District

Urban Storm Drainage Criteria Manual Volume 3

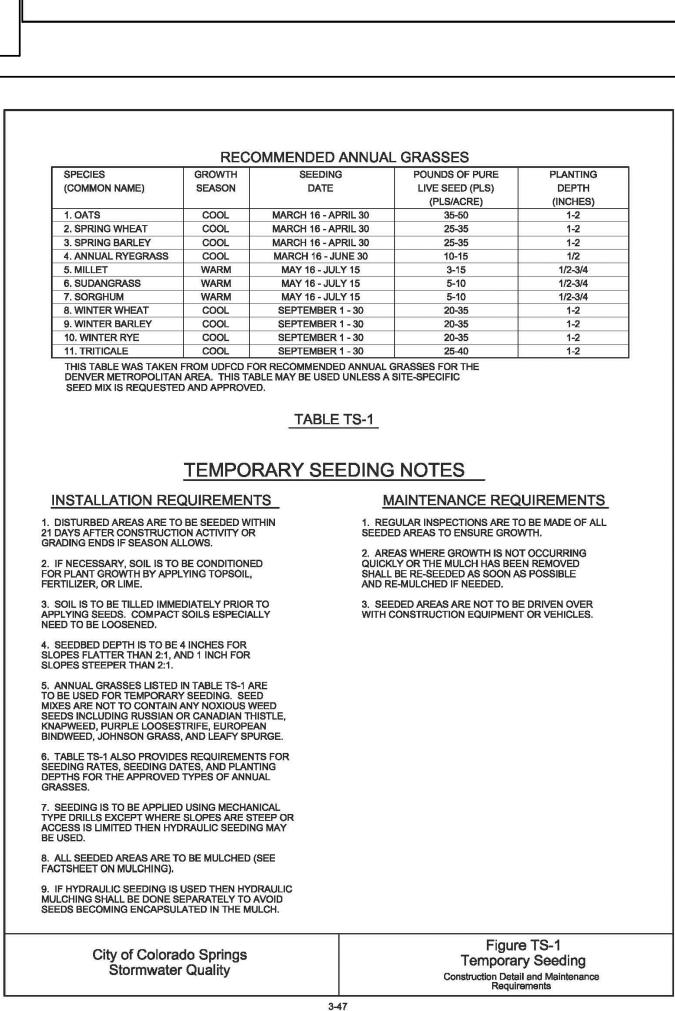
8. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

OF CONCRETE TRUCKS AND PUMP RIGS.

November 2010

ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS

CWA-3



MULCHING NOTES

INSTALLATION REQUIREMENTS

1. ALL DISTURBED AREAS MUST BE MULCHED WITHIN 21 DAYS AFTER FINAL GRADE AND SEEDED AREAS ARE TO BE MULCHED WITHIN 24 HOURS AFTER SEEDING.

2. MATERIAL USED FOR MULCH CAN BE CERTIFIED CLEAN, WEED-AND SEED-FREE LONG STEMMED FIELD OR MARSH HAY, OR STRAW OF OATS, BARLEY, WHEAT, RYE, OR TRITICALE CERTIFIED BY THE COLORADO DEPARTMENT OF AGRICULTURE

3. HYDRAULIC MULCHING MATERIAL SHALL CONSIST OF VIRGIN WOOD FIBER MANUFACTURED FROM CLEAN WHOLE WOOD CHIPS. WOOD CHIPS CANNOT CONTAIN ANY GROWTH OR GERMINATION INHIBITORS OR BE PRODUCED FROM RECYCLED MATERIAL. GRAVEL CAN ALSO BE USED.

4. MULCH IS TO BE APPLIED EVENLY AT A RATE OF 2 TONS PER ACRE.

5. MULCH IS TO BE ANCHORED EITHER BY CRIMPING (TUCKING MULCH FIBERS 4 INCHES INTO THE SOIL), USING NETTING

MAINTENANCE REQUIREMENTS

. REGULAR INSPECTIONS ARE TO BE MADE OF ALL MULCHED

2. MULCH IS TO BE REPLACED IMMEDIATELY IN THOSE AREAS IT HAS BEEN REMOVED, AND IF NECESSARY THE AREA SHOULD BE RESEEDED.

Mulching

Construction Detail and Maintenance Requirements

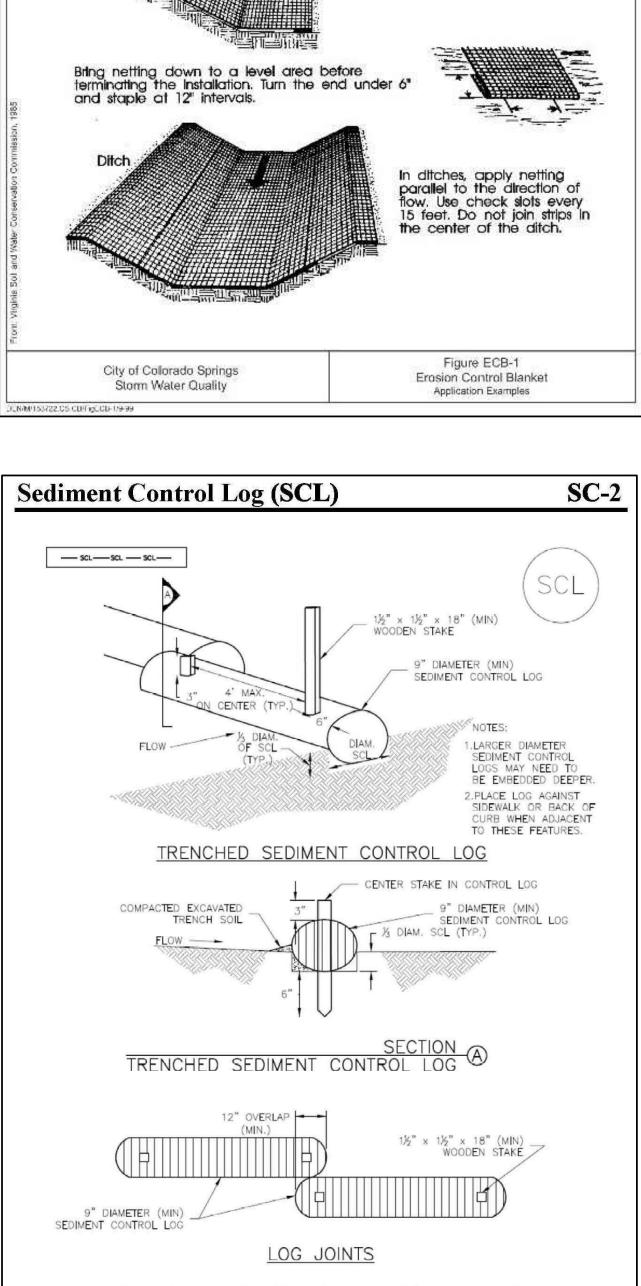
City of Colorado Springs

Stormwater Quality

USED ON SMALL AREAS WITH STEEP SLOPES), OR WITH A

6. HYDRAULIC MULCHING AND TACKIFIERS ARE NOT TO BE USED IN THE PRESENCE OF FREE SURFACE WATER.

WEED FREE FORAGE CERTIFICATION PROGRAM.

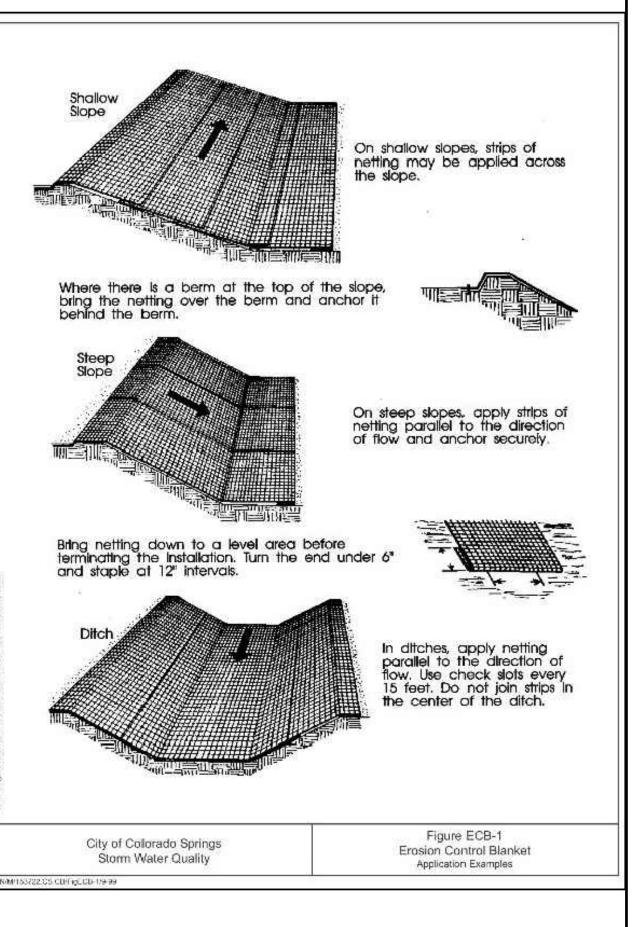


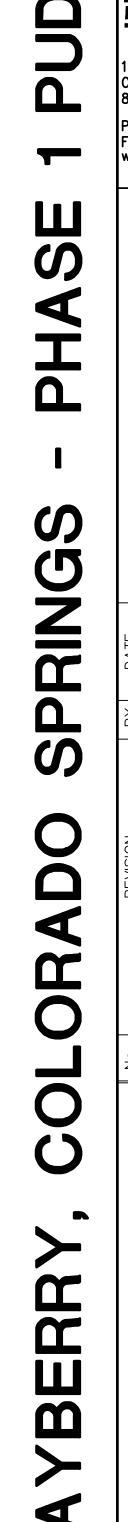
SCL-1. TRENCHED SEDIMENT CONTROL LOG

Urban Drainage and Flood Control District

Urban Storm Drainage Criteria Manual Volume 3

November 2015







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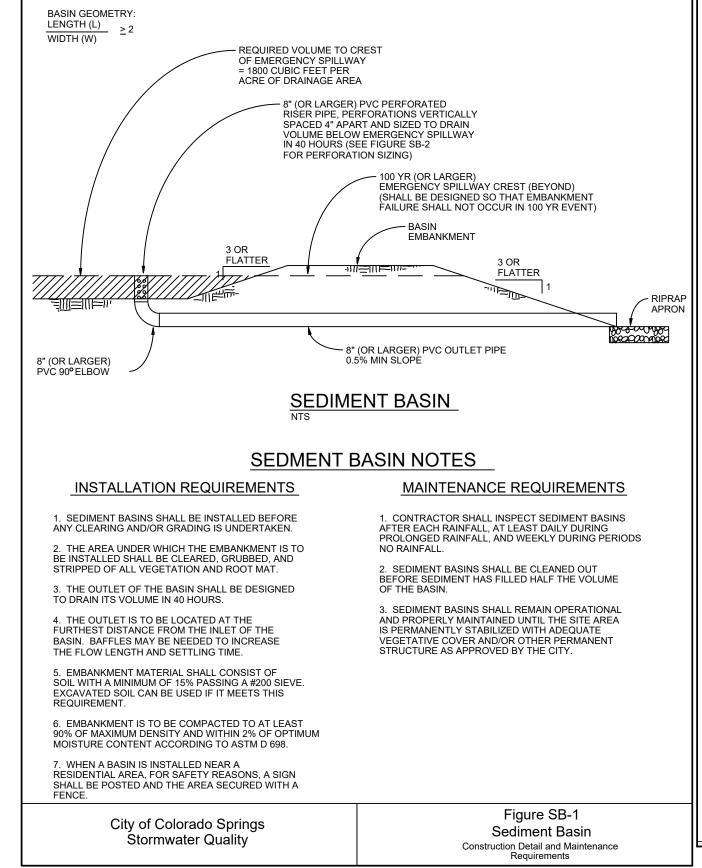
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DESIGNED: UP&E LAST MODIFIF CREATED 090001 SHEET:

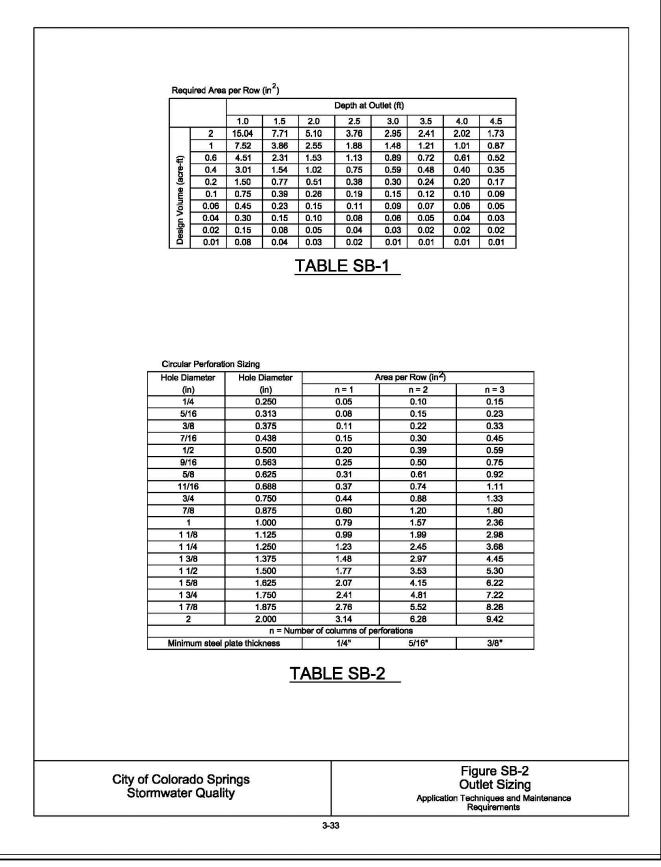
SCL-3

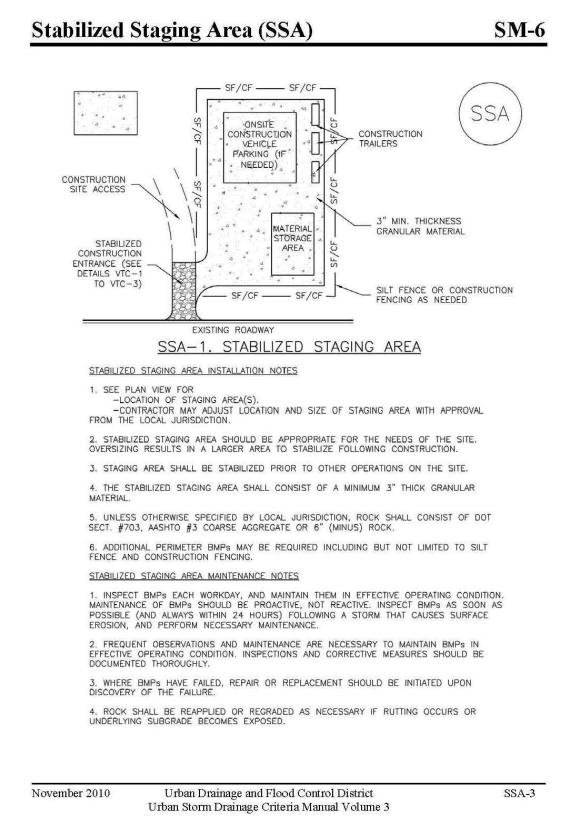
| TEMPORARY SEDIMENT BASIN DESIGN DATA | | | | | | |
|--------------------------------------|-----------------------|----------------------|-----------|-------------|--------------|-----------|
| BASIN | DRAINAGE AREA (AC) | REQUIRED VOLUME (AF) | D (FT) | HD* (IN) | # COLUMNS | # ROWS |
| C1 | 44.8 | 1.9 | 4.5 | 7/8" | 3 | 13 |
| D | 113.2 | 4.7 | 4.5 | 7/8" | 3 | 13 |

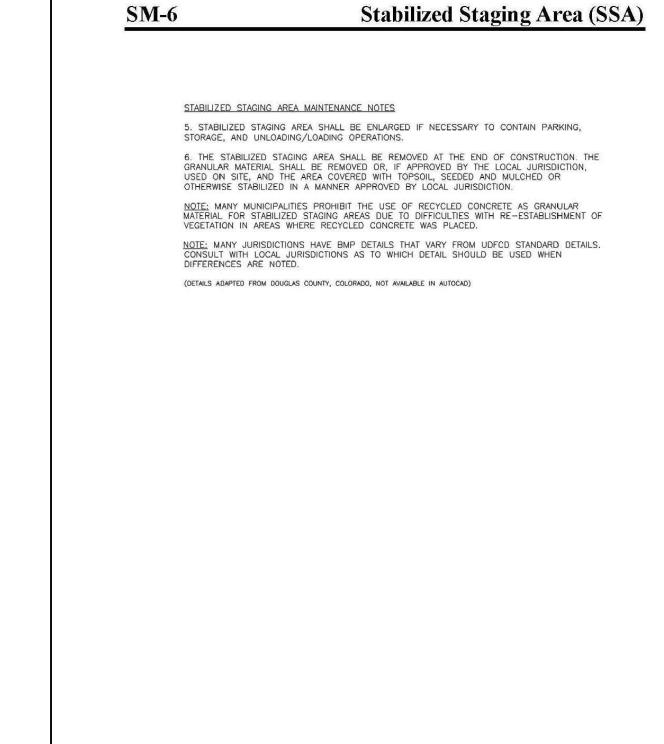
^{*} PERFORATIONS AT 4" VERTICAL SPACING



3-32







Urban Drainage and Flood Control District

Urban Storm Drainage Criteria Manual Volume 3

November 2010

SSA-4

ENGINEERING

19 E. Willamette Ave. Colorado Springs, CO

PH: 719-477-9429

NOTIFICATION
COLORADO
22—198
DAYS IN ADVANG
RADE, OR EXCAV,
OF UNDERGROUN

FAX: 719-471-0766 www.jpsengr.com

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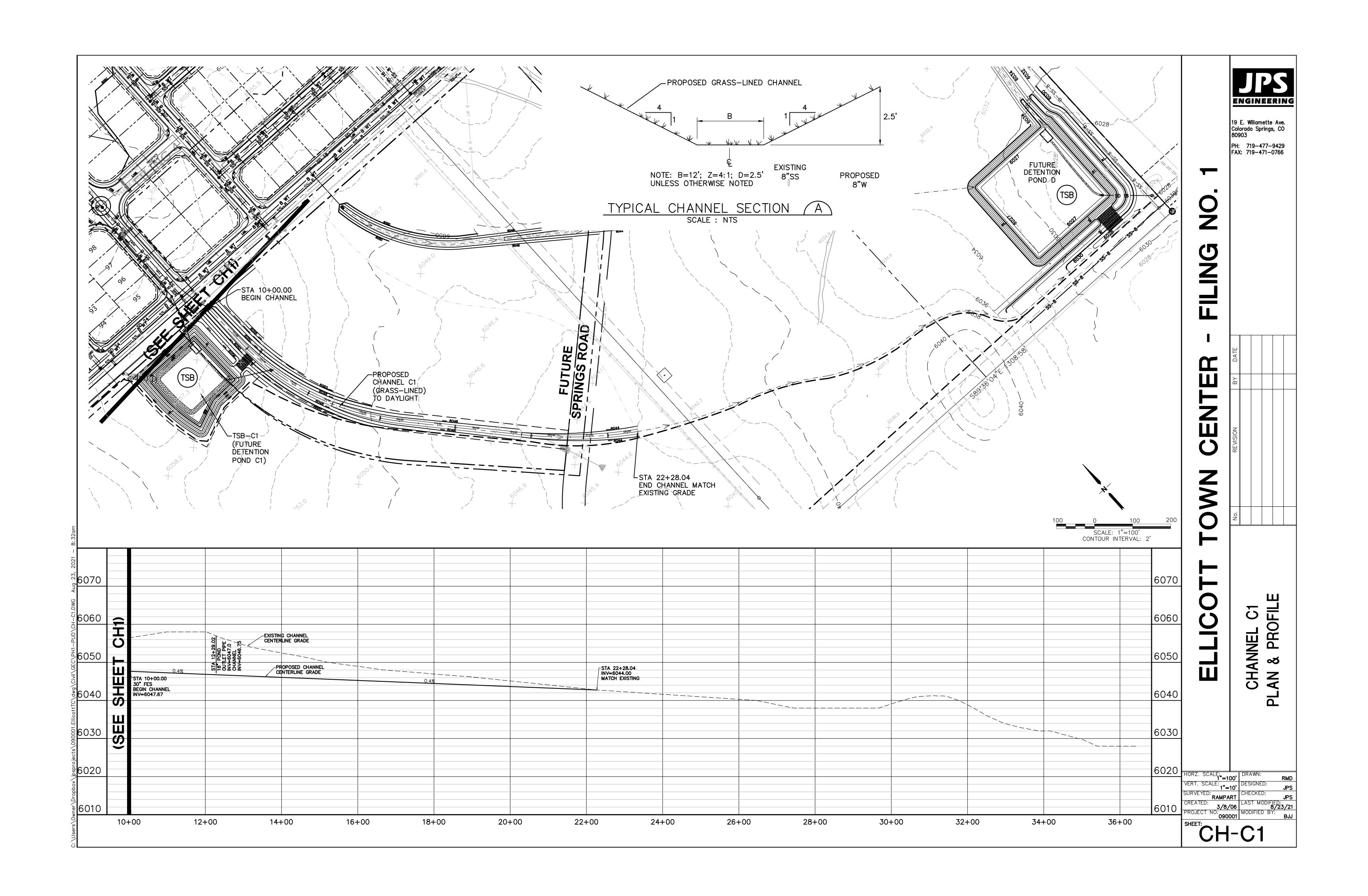
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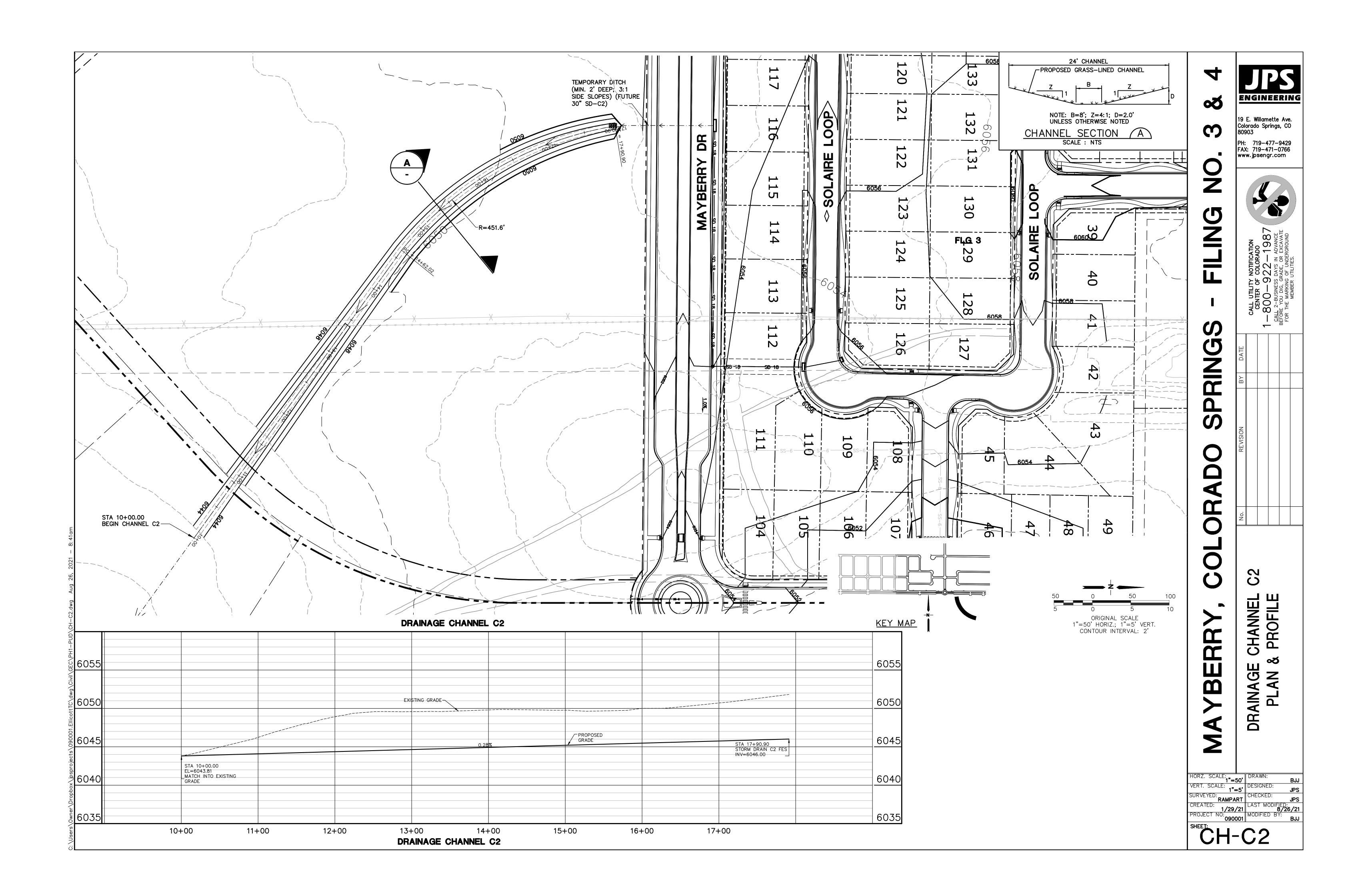
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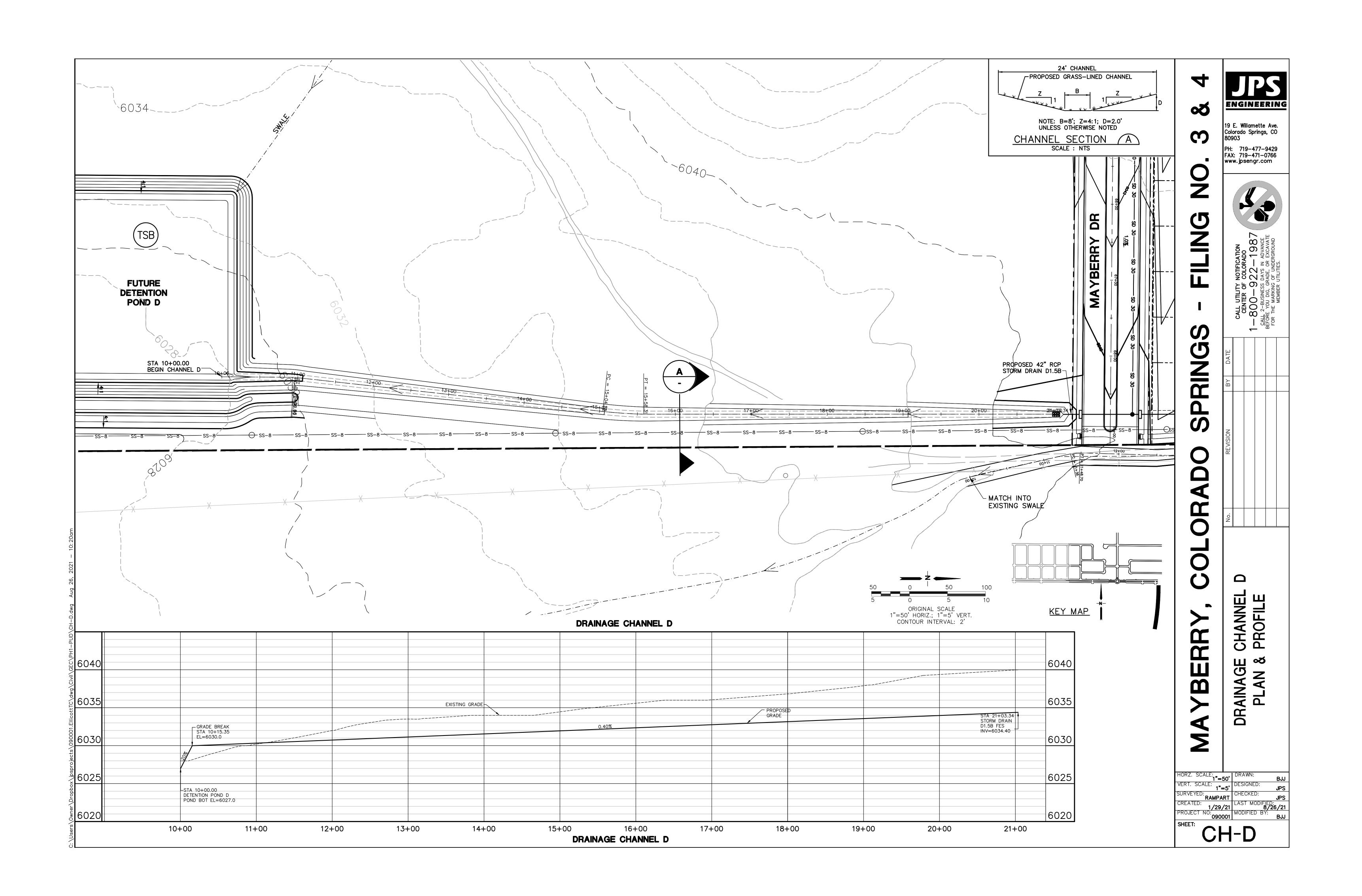
HORZ. SCALE:

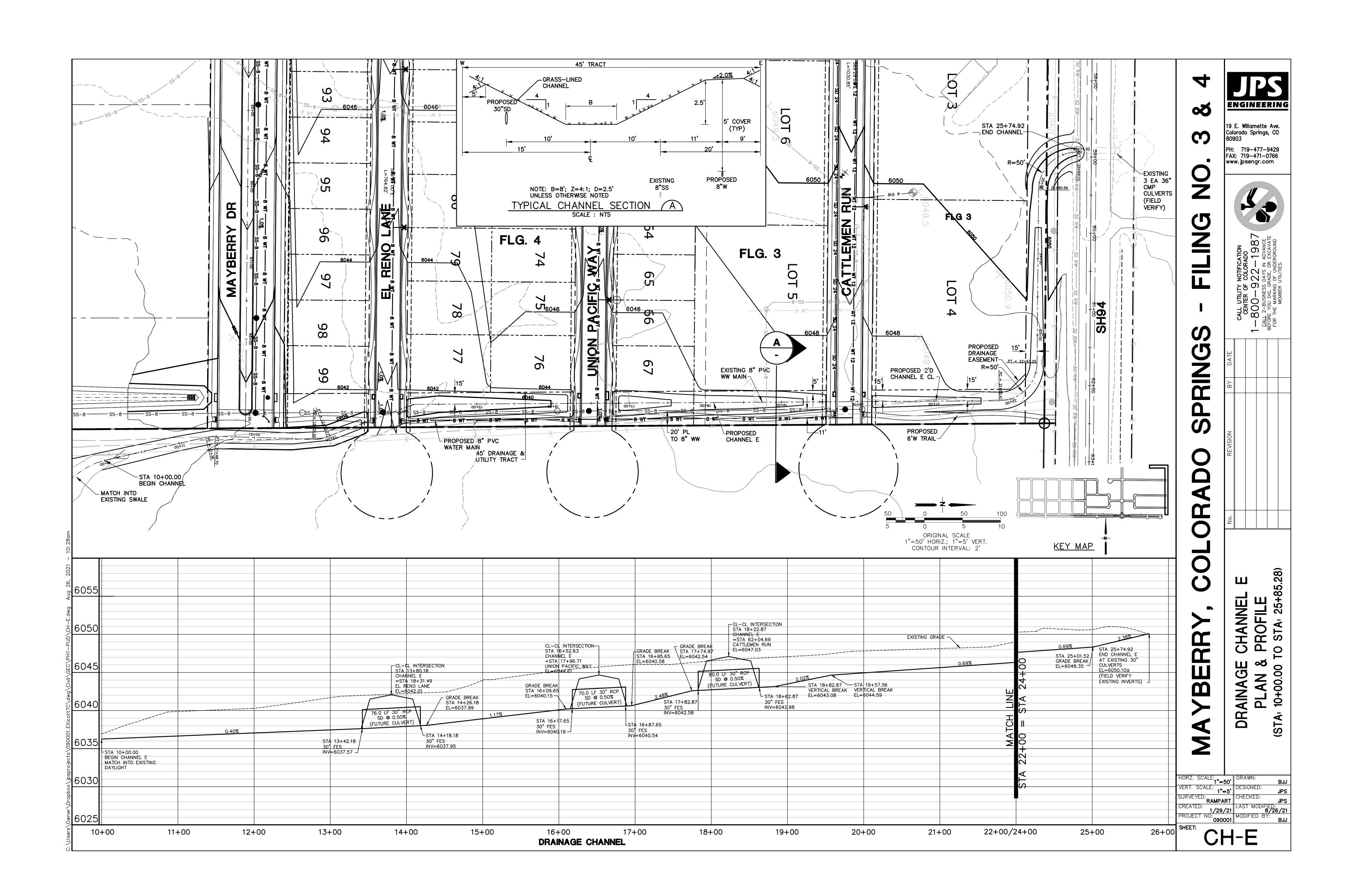
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APPENDIX C MAYBERRY FILING 3 GEC

GRADING & EROSION CONTROL PLANS MAYBERRY, COLORADO - FILING NO. 3

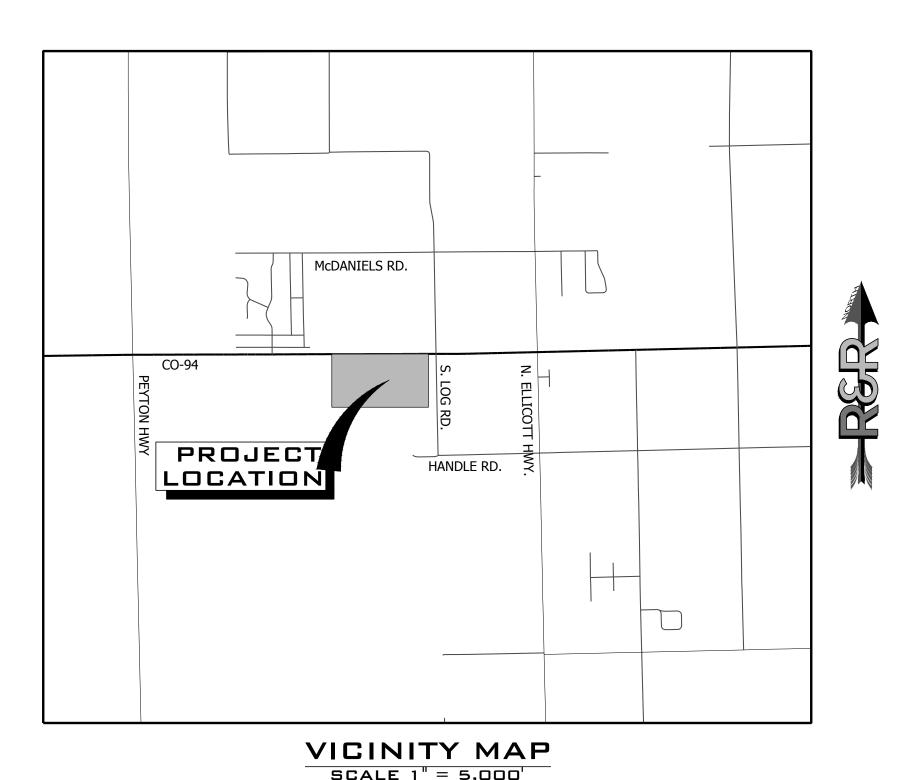
A REPLAT OF PART OF TRACT M AND ALL OF TRACT P, MAYBERRY, COLORADO SPRINGS FILING NO. 1, AND ALL OF TRACTS A, B, C AND D, MAYBERR, COLORADO SPRINGS FILING NO. 2, AND THAT PART OF SPRINGS ROAD RIGHT-OF-WAY LYING SOUTH OF SAID TRACT A AND THAT PART OF VILLAGE MAIN STREET RIGHT-OF-WAY LYING EAST OF ATCHISON WAY ALL LOCATED IN THE NORTH HALF OF SECTION 14, TOWNSHIP 14 SOUTH, RANGE 63 WEST OF THE 6TH PRINCIPAL MERIDIAN COUNTY OF EL PASO (UNINCORPORATED), STATE OF COLORADO

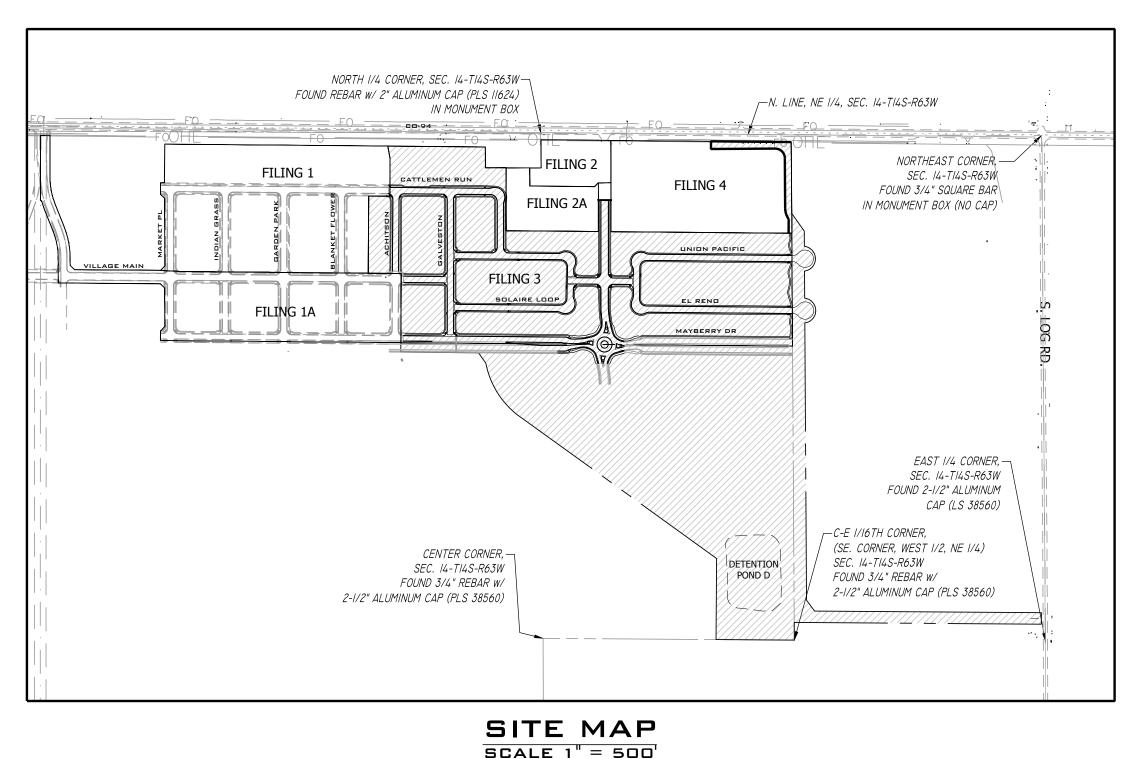


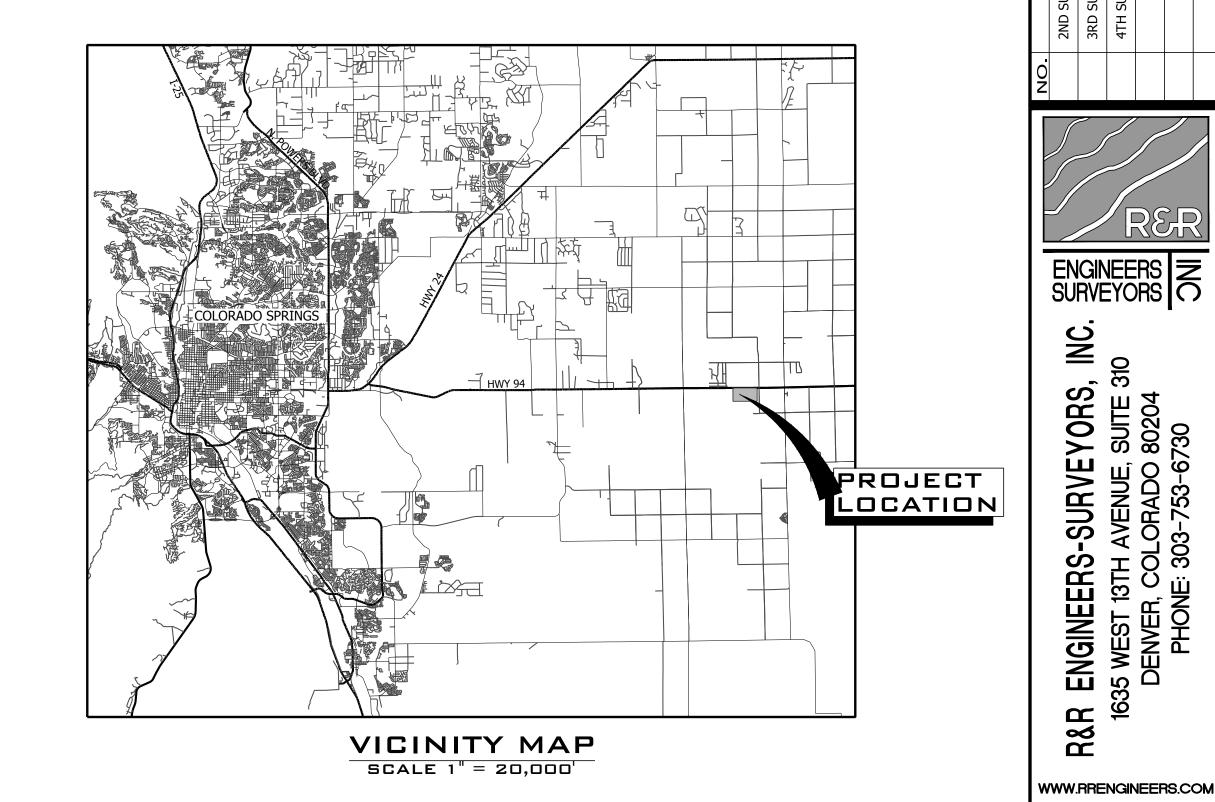


SURVEYORS

ENGINEERS







| CONTACT LIST | | | |
|---|----------------------------------|------------------------------|--|
| DEVELOPER | CIVIL ENGINEER | SURVEYOR | COUNTY ENGINEERING |
| MAYBERRY COMMUNITIES, LLC | R&R ENGINEERS-SURVEYORS, LLC | R&R ENGINEERS-SURVEYORS, LLC | EL PASO COUNTY DEVELOPMENT SERVICES |
| 3296 DIVINE HEIGHTS #208 | 1635 WEST 13TH AVENUE, SUITE 310 | 1635 13TH AVENUE, SUITE 310 | 2880 INTERNATIONAL CIRCLE |
| COLORADO SPRINGS, CO 80922 | DENVER, CO 80204 | DENVER, CO 80204 | COLORADO SPRINGS, CO 80922 |
| 719-922-2181 | 303-753-6730 | 303-753-6730 | 719-520-6300 |
| CONTACT: SCOTT SOUDERS, P.E. | CONTACT: CLIF DAYTON, P.E. | CONTACT: MR. DARELL DeLAP | |
| STATE HIGHWAY | WATER/WASTEWATER | GAS DEPARTMENT | ELECTRIC DEPARTMENT |
| COLORADO DEPARTMENT OF TRANSPORATION, REGION 2 | ELLICOTT UTILITIES COMPANY, LLC | BLACK HILLS ENERGY | MOUNTAIN VIEW ELECTRIC ASSOCIATION |
| 5615 WILLS BLVD. | | 1515 WYNKOOP ST #500 | 11140 E. WOODMEN ROAD |
| PUEBLO, CO 81008 | | DENVER, CO 80202 | COLORADO SPRINGS, CO 80908 |
| MR. ART GONZALES | 719-426-7810 | 719-359-3176 | 719-495-2283 |
| (REFERENCE CDOT ACCESS PERMITS NO. 218053 & 218054) | CONTACT: JASON KVOLS | CONTACT: SEBASTIAN SCHWENDER | CONTACT: MR. DAVE WALDNER |

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NGS Benchmark PID: JK003, Designation: Z 76

Disk Stamped Z 76 1935 in top of concrete monument.

Project Elevation: 6041.98 Feet

Elevation Note: Project Vertical Datum is based upon previous surveys conducted by Rampart Surveys LLC where the elevation of 6041.98 feet was established on this benchmark. This elevation has been verified by R&R Engineers and Surveyors by running closed bench level loops from Z 76 to other aerial control points that were used for the topographic survey and design on previous projects. The current NGS published elevation was Not Used. Benchmark Located in the Southeast quadrant of the intersection of State Highway 94 and Log Road. The benchmark lies 65.5 feet South and 30 feet

East of the intersection. **Horizontal Values:**

State Plane 1983 Central Coordinate Values in US Survey Feet: Grid Northing: 1367803.3380' Grid Easting: 3311725.4580'

Project Coordinate Values in US Survey Feet: Northing: 1368261.2691' Easting: 3312880.8395'

Bearings are based on the North line of the Northeast Quarter of Section 14, Township 14 South, Range 63 West of the 6th Principal Meridian having a bearing of South 89° 44' 50" East as shown on the recorded plats of Mayberry, Colorado Springs Filing No. 1 recorded as Reception No. 220714655 and as shown on Mayberry, Colorado Springs Filing No. 2 recorded as Reception No. 221714698, said North line having a ground distance of 2606.58 feet and monumented at each end as shown on sheet 2 of the Mayberry, Colorado Springs Filing No. 3 Plat.

| Sheet List Table | |
|------------------|--|
| Sheet Number | Sheet Title |
| C8.0 | GESC COVER SHEET |
| C8.1 | GENERAL NOTES & LEGEND |
| C8.2 | E&S PLAN-NORTH WEST |
| C8.3 | E&S PLAN-NORTH EAST |
| C8.4 | E&S PLAN-SOUTH WEST |
| C8.5 | E&S PLAN-SOUTH EAST |
| C8.6 | E&S DETAILS |
| C8.7 | E&S DETAILS |
| C8.8 | E&S DETAILS |
| C8.9 | E&S DETAILS |
| C8.10 | OVERALL GRADING PLAN |
| C8.11 | GRADING PLAN - WEST |
| C8.12 | GRADING PLAN - EAST |
| C8.13 | BERM, BRIDGE, & TRAIL DETAILS |
| C8.14 | GRADING PLAN - DETENTION POND |
| C8.15 | CHANNEL C2 PLAN & PROFILE 9+00 TO 20+00 |
| C8.16 | CHANNEL C2 PLAN & PROFILE 20+00 TO 29+00 |
| C8.17 | CHANNEL D PLAN & PROFILE |
| C8.18 | CHANNEL E 9+50 TO 24+00 |
| C8.19 | CHANNEL E 24+00 to 38+50 |
| C8.20 | CHANNEL F PLAN & PROFILE |
| C8.21 | LOT GRADING DETAILS |
| C8.22 | DETENTION POND DETAILS |
| C8.23 | DETENTION POND DETAILS |

PCD FILE NO. SF2219

Engineer's Statement (for standalone GEC Plan): This Grading and Erosion Control Plan was prepared under my direction and supervision and is correct to the best of my knowledge and belief. Said Plan has been prepared according to the criteria established by the County for Grading and Erosion Control Plans. I accept responsibility for any liability caused by any negligent acts, errors or omissions on my part in preparing this plan.

Clif Dayton, P.E. #48189

Owner's Statement (for standalone GEC Plan): I, the owner/developer have read and will comply with the requirements of the Grading and Erosion Control Plan.

Owner Signature

El Paso County:

County plan review is provided only for general conformance with County Design Criteria. The County is not responsible for the accuracy and adequacy of the design, dimensions, and/ or elevations which shall be confirmed at the job site. The County through the approval of this document assumes no responsibility for completeness and/ or accuracy of this document.

Filed in accordance with the requirements of the El Paso County Land Development Code, Drainage Criteria Manual Volumes 1 and 2, and Engineering Criteria Manual, as amended.

In accordance with ECM Section 1.12, these construction documents will be valid for construction for a period of 2 years from the date signed by the El Paso County Engineer. If construction has not started within those 2 years, the plans will need to be resubmitted for approval, including payment of review fees at the Planning and Community Development Director's discretion.

Joshua Palmer, P.E. County Engineer/ECM Administrator

C8.0

GESC PLANS

MC22110

RG. SUBM. DATE 06/16/2022

GESC COVER

SHEET

LAO CHKD: CJE

EL PASO COUNTY GRADING & EROSION CONTROL STANDARD NOTES:

- 1. STORMWATER DISCHARGES FROM CONSTRUCTION SITES SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR DEGRADATION OF STATE WATERS. ALL WORK AND EARTH DISTURBANCE SHALL BE DONE IN A MANNER THAT MINIMIZES POLLUTION OF ANY ON-SITE OR OFF-SITE WATERS, INCLUDING WETLANDS.
- 2. NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE ENGINEERING CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS FROM REGULATIONS AND STANDARDS MUST BE REQUESTED. AND APPROVED. IN WRITING.
- 3. A SEPARATE STORMWATER MANAGEMENT PLAN (SMWP) FOR THIS PROJECT SHALL BE COMPLETED AND AN EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP) ISSUED PRIOR TO COMMENCING CONSTRUCTION.

 MANAGEMENT OF THE SWMP DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE DESIGNATED QUALIFIED STORMWATER MANAGER OR CERTIFIED EROSION CONTROL INSPECTOR. THE SWMP SHALL BE LOCATED ON-SITE AT ALL TIMES DURING CONSTRUCTION AND SHALL BE KEPT UP TO DATE WITH WORK PROGRESS AND CHANGES IN THE FIELD.
- 4. ONCE THE ESQCP IS APPROVED AND A "NOTICE TO PROCEED" HAS BEEN ISSUED, THE CONTRACTOR MAY INSTALL THE INITIAL STAGE EROSION AND SEDIMENT CONTROL MEASURES AS INDICATED ON THE APPROVED GEC. A PRECONSTRUCTION MEETING BETWEEN THE CONTRACTOR, ENGINEER, AND EL PASO COUNTY WILL BE HELD PRIOR TO ANY CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE APPLICANT TO COORDINATE THE MEETING TIME AND PLACE WITH COUNTY STAFF.
- 5. CONTROL MEASURES MUST BE INSTALLED PRIOR TO COMMENCEMENT OF ACTIVITIES THAT COULD CONTRIBUTE POLLUTANTS TO STORMWATER. CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, AND DISTURBED LAND AREAS SHALL BE INSTALLED IMMEDIATELY UPON COMPLETION OF THE DISTURBANCE.
- 6. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MAINTAINED AND REMAIN IN EFFECTIVE OPERATING CONDITION UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND FINAL STABILIZATION IS ESTABLISHED. ALL PERSONS ENGAGED IN LAND DISTURBANCE ACTIVITIES SHALL ASSESS THE ADEQUACY OF CONTROL MEASURES AT THE SITE AND IDENTIFY IF CHANGES TO THOSE CONTROL MEASURES ARE NEEDED TO ENSURE THE CONTINUED EFFECTIVE PERFORMANCE OF THE CONTROL MEASURES. ALL CHANGES TO TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES MUST BE INCORPORATED INTO THE STORMWATER MANAGEMENT PLAN.
- 7. TEMPORARY STABILIZATION SHALL BE IMPLEMENTED ON DISTURBED AREAS AND STOCKPILES WHERE GROUND DISTURBING CONSTRUCTION ACTIVITY HAS PERMANENTLY CEASED OR TEMPORARILY CEASED FOR LONGER THAN 14 DAYS.
- 8. FINAL STABILIZATION MUST BE IMPLEMENTED AT ALL APPLICABLE CONSTRUCTION SITES. FINAL STABILIZATION IS ACHIEVED WHEN ALL GROUND DISTURBING ACTIVITIES ARE COMPLETE AND ALL DISTURBED AREAS EITHER HAVE A UNIFORM VEGETATIVE COVER WITH INDIVIDUAL PLANT DENSITY OF 70 PERCENT OF PRE-DISTURBANCE LEVELS ESTABLISHED OR EQUIVALENT PERMANENT ALTERNATIVE STABILIZATION METHOD IS IMPLEMENTED. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE REMOVED UPON FINAL STABILIZATION AND BEFORE PERMIT CLOSURE.
- 9. ALL PERMANENT STORMWATER MANAGEMENT FACILITIES SHALL BE INSTALLED AS DESIGNED IN THE APPROVED PLANS. ANY PROPOSED CHANGES THAT EFFECT THE DESIGN OR FUNCTION OF PERMANENT STORMWATER MANAGEMENT STRUCTURES MUST BE APPROVED BY THE ECM ADMINISTRATOR PRIOR TO IMPLEMENTATION.
- 10. EARTH DISTURBANCES SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY MINIMIZE ACCELERATED SOIL EROSION AND RESULTING SEDIMENTATION. ALL DISTURBANCES SHALL BE DESIGNED, CONSTRUCTED, AND COMPLETED SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST PRACTICAL PERIOD OF TIME. PRE-EXISTING VEGETATION SHALL BE PROTECTED AND MAINTAINED WITHIN 50 HORIZONTAL FEET OF A WATERS OF THE STATE UNLESS SHOWN TO BE INFEASIBLE AND SPECIFICALLY REQUESTED AND APPROVED.
- 11. COMPACTION OF SOIL MUST BE PREVENTED IN AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES OR WHERE FINAL STABILIZATION WILL BE ACHIEVED BY VEGETATIVE COVER. AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES SHALL ALSO BE PROTECTED FROM SEDIMENTATION DURING CONSTRUCTION UNTIL FINAL STABILIZATION IS ACHIEVED. IF COMPACTION PREVENTION IS NOT FEASIBLE DUE TO SITE CONSTRAINTS, ALL AREAS DESIGNATED FOR INFILTRATION AND VEGETATION CONTROL MEASURES MUST BE LOOSENED PRIOR TO INSTALLATION OF THE CONTROL MEASURE(S).
- 12. ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND, THROUGH, OR FROM THE EARTH DISTURBANCE AREA SHALL BE A STABILIZED CONVEYANCE DESIGNED TO MINIMIZE EROSION AND THE DISCHARGE OF SEDIMENT OFF-SITE.
- 13. CONCRETE WASH WATER SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE SWMP. NO WASH WATER SHALL BE DISCHARGED TO OR ALLOWED TO ENTER STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES. CONCRETE WASHOUTS SHALL NOT BE LOCATED IN AN AREA WHERE SHALLOW GROUNDWATER MAY BE PRESENT, OR WITHIN 50 FEET OF A SURFACE WATER BODY, CREEK OR STREAM.
- 14. DURING DEWATERING OPERATIONS, UNCONTAMINATED GROUNDWATER MAY BE DISCHARGED ON-SITE, BUT SHALL NOT LEAVE THE SITE IN THE FORM OF SURFACE RUNOFF UNLESS AN APPROVED STATE DEWATERING PERMIT IS IN PLACE.
- 15. EROSION CONTROL BLANKETING OR OTHER PROTECTIVE COVERING SHALL BE USED ON SLOPES STEEPER THAN 3:1.
- 16. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL WASTES FROM THE CONSTRUCTION SITE FOR DISPOSAL IN ACCORDANCE WITH LOCAL AND STATE REGULATORY REQUIREMENTS. NO CONSTRUCTION DEBRIS, TREE SLASH, BUILDING MATERIAL WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED, OR DISCHARGED AT THE SITE
- 17. WASTE MATERIALS SHALL NOT BE TEMPORARILY PLACED OR STORED IN THE STREET, ALLEY, OR OTHER PUBLIC WAY, UNLESS IN ACCORDANCE WITH AN APPROVED TRAFFIC CONTROL PLAN. CONTROL MEASURES MAY BE REQUIRED BY EL PASO COUNTY ENGINEERING IF DEEMED NECESSARY, BASED ON SPECIFIC CONDITIONS AND CIRCUMSTANCES.
- 18. TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFF-SITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.
- 19. THE OWNER/DEVELOPER SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION DEBRIS, DIRT, TRASH, ROCK, SEDIMENT, SOIL, AND SAND THAT MAY ACCUMULATE IN ROADS, STORM DRAINS AND OTHER DRAINAGE CONVEYANCE SYSTEMS AND STORMWATER APPURTENANCES AS A RESULT OF SITE DEVELOPMENT.
- 20. THE QUANTITY OF MATERIALS STORED ON THE PROJECT SITE SHALL BE LIMITED, AS MUCH AS PRACTICAL, TO THAT QUANTITY REQUIRED TO PERFORM THE WORK IN AN ORDERLY SEQUENCE. ALL MATERIALS STORED ON-SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER, IN THEIR ORIGINAL CONTAINERS, WITH ORIGINAL MANUFACTURER'S LABELS.
- 21. NO CHEMICAL(S) HAVING THE POTENTIAL TO BE RELEASED IN STORMWATER ARE TO BE STORED OR USED ON-SITE UNLESS PERMISSION FOR THE USE OF SUCH CHEMICAL(S) IS GRANTED IN WRITING BY THE ECM ADMINISTRATOR. IN GRANTING APPROVAL FOR THE USE OF SUCH CHEMICAL(S), SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.
- 22. BULK STORAGE OF ALLOWED PETROLEUM PRODUCTS OR OTHER ALLOWED LIQUID CHEMICALS IN EXCESS OF 55 GALLONS SHALL REQUIRE ADEQUATE SECONDARY CONTAINMENT PROTECTION TO CONTAIN ALL SPILLS ON-SITE AND TO PREVENT ANY SPILLED MATERIALS FROM ENTERING STATE WATERS, ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR OTHER FACILITIES.
- 23. NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE CURB AND GUTTER OR DITCH EXCEPT WITH APPROVED SEDIMENT CONTROL MEASURES.
- 24. OWNER/DEVELOPER AND THEIR AGENTS SHALL COMPLY WITH THE "COLORADO WATER QUALITY CONTROL ACT" (TITLE 25, ARTICLE 8, CRS), AND THE "CLEAN WATER ACT" (33 USC 1344), IN ADDITION TO THE REQUIREMENTS OF THE LAND DEVELOPMENT CODE, DCM VOLUME II AND THE ECM APPENDIX I. ALL APPROPRIATE PERMITS MUST BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION (1041, NPDES, FLOODPLAIN, 404, FUGITIVE DUST, ETC.). IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND OTHER LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL, STATE, LOCAL, OR COUNTY AGENCIES, THE MOST RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.
- 25. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE ONLY AT APPROVED CONSTRUCTION ACCESS POINTS.
- 26. PRIOR TO CONSTRUCTION THE PERMITTEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
- 27. A WATER SOURCE SHALL BE AVAILABLE ON-SITE DURING EARTHWORK OPERATIONS AND SHALL BE UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.
- 28. THE SOILS REPORT FOR THIS SITE HAS BEEN PREPARED BY CTL THOMPSON, DATED FEBRUARY 6, 2019 AND SHALL BE CONSIDERED A PART OF THESE PLANS.
- 29. AT LEAST TEN (10) DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB ONE (1) ACRE OR MORE, THE OWNER OR OPERATOR OF CONSTRUCTION ACTIVITY SHALL SUBMIT A PERMIT APPLICATION FOR STORMWATER DISCHARGE TO THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY DIVISION. THE APPLICATION CONTAINS CERTIFICATION OF COMPLETION OF A STORMWATER MANAGEMENT PLAN (SWMP), OF WHICH THIS GRADING AND EROSION CONTROL PLAN MAY BE A PART. FOR INFORMATION OR APPLICATION MATERIALS CONTACT:

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
WATER QUALITY CONTROL DIVISION
WQCD - PERMITS
4300 CHERRY CREEK DRIVE SOUTH
DENVER, CO 80246-1530
ATTN: PERMITS UNIT

GENERAL NOTES:

MASTER LEGEND

DESCRIPTION

PROPERTY LINE

LOT LINE

RIGHT OF WAY

CENTERLINE

FLOOD PLAIN

LIMITS OF DISTURBANCE

SWALE / STREAM FLOWLINE

OVERFLOW RELIEF PATH

FENCE LINE

EASEMENT

EDGE OF PAVEMENT

VERTICAL CURB AND GUTTER

MOUNTABLE CURB AND GUTTER

SPILL GUTTER

TRANSITION GUTTER

CONCRETE SIDEWALK

HANDICAP PARKING

SIGHT TRIANGLE

SIGN(S)

PARKING COUNT INDICATOR

MAJOR CONTOUR

MINOR CONTOUR

GRADE BREAK

SPOT ELEVATION

RIP RAP

WATER LINE

WATER METER

WATER VALVE

WATER REDUCER

WATER FITTINGS

FIRE HYDRANT

SANITARY LINE

SANITARY MANHOLE

SANITARY CLEANOUT

STORM SEWER PIPE

STORM SEWER MANHOLE

STORM SEWER INLET

STORM SEWER FLARED END SECTION

STORM SEWER HEADWALL

UNDERGROUND ELECTRIC

OVERHEAD ELECTRIC

UTILITY POLE

STREET LIGHT

CABLE TV SERVICE

TELECOM SERVICE

FIBER OPTIC SERVICE

NATURAL GAS SERVICE

DRY UTILITIES ALIGNMENT

TRANSFORMER & PEDESTAL

TREE LINE

EXISTING

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- 1. THE EXISTING VEGETATION INCLUDES NATIVE GRASSES AND NO TREES.
- 2. NO BATCH PLANTS WILL BE UTILIZED ONSITE.

Know what's below Call before you dig.

MO. REVISION 2ND SUBMISSION 3RD SUBMISSION 4TH SUBMISSION

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ENGINEERS SURVEYORS C

8R ENGINEERS-SURVEYORS
1635 WEST 13TH AVENUE, SUITE 3
DENVER, COLORADO 80204
PHONE: 303-753-6730

WWW.RRENGINEERS.COM

TLING NO. 3
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YBERRY, COLORADO SPR EL PASO COUNTY 1AYBERRY COMMUNITIES,

> SITE ADDRESS: PREPARED FOR:

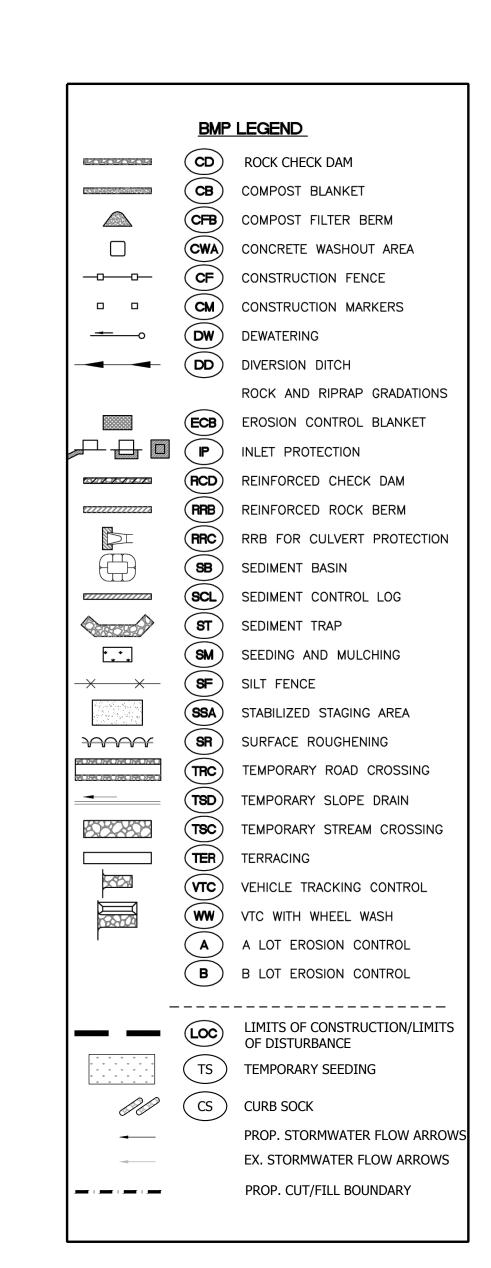
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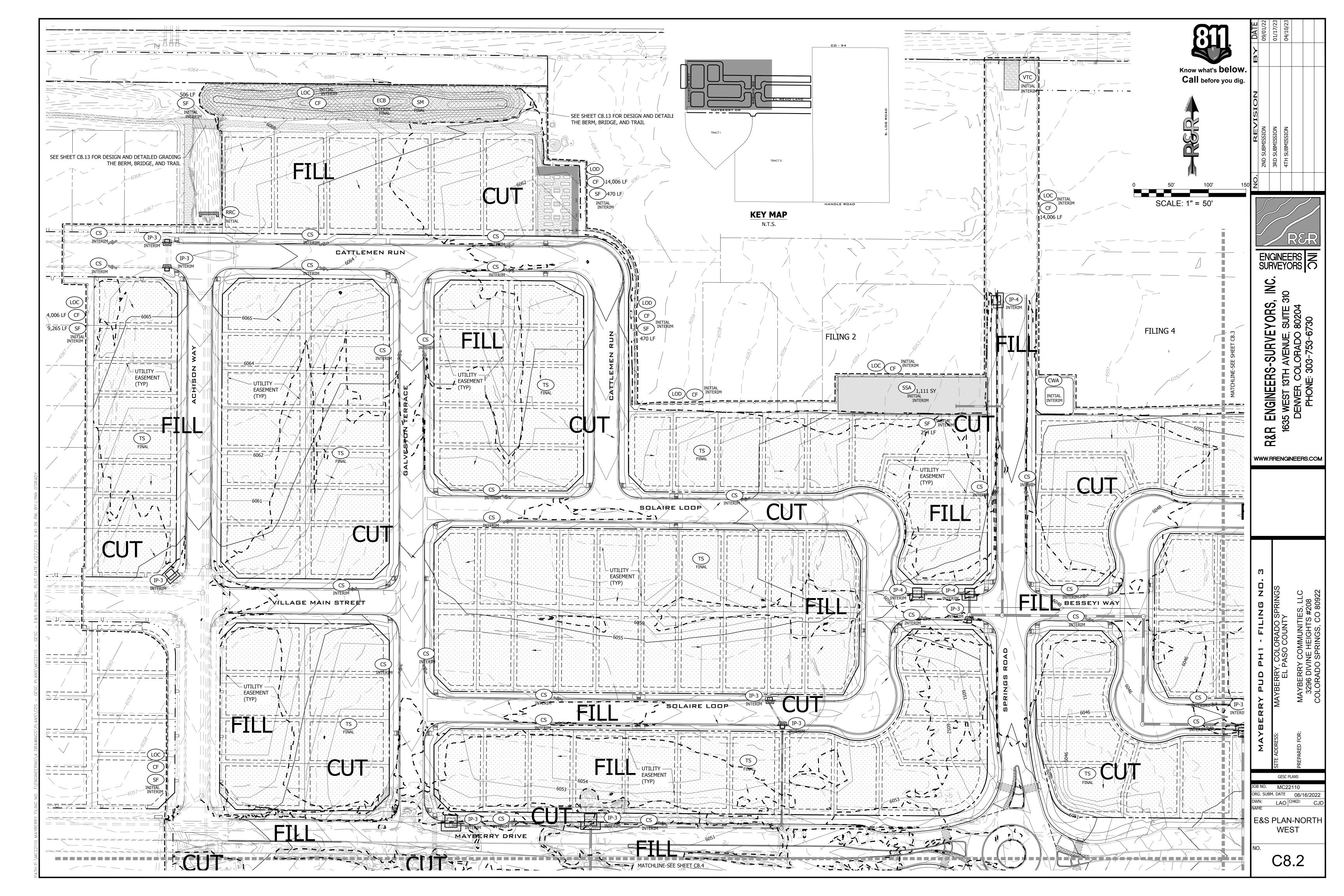
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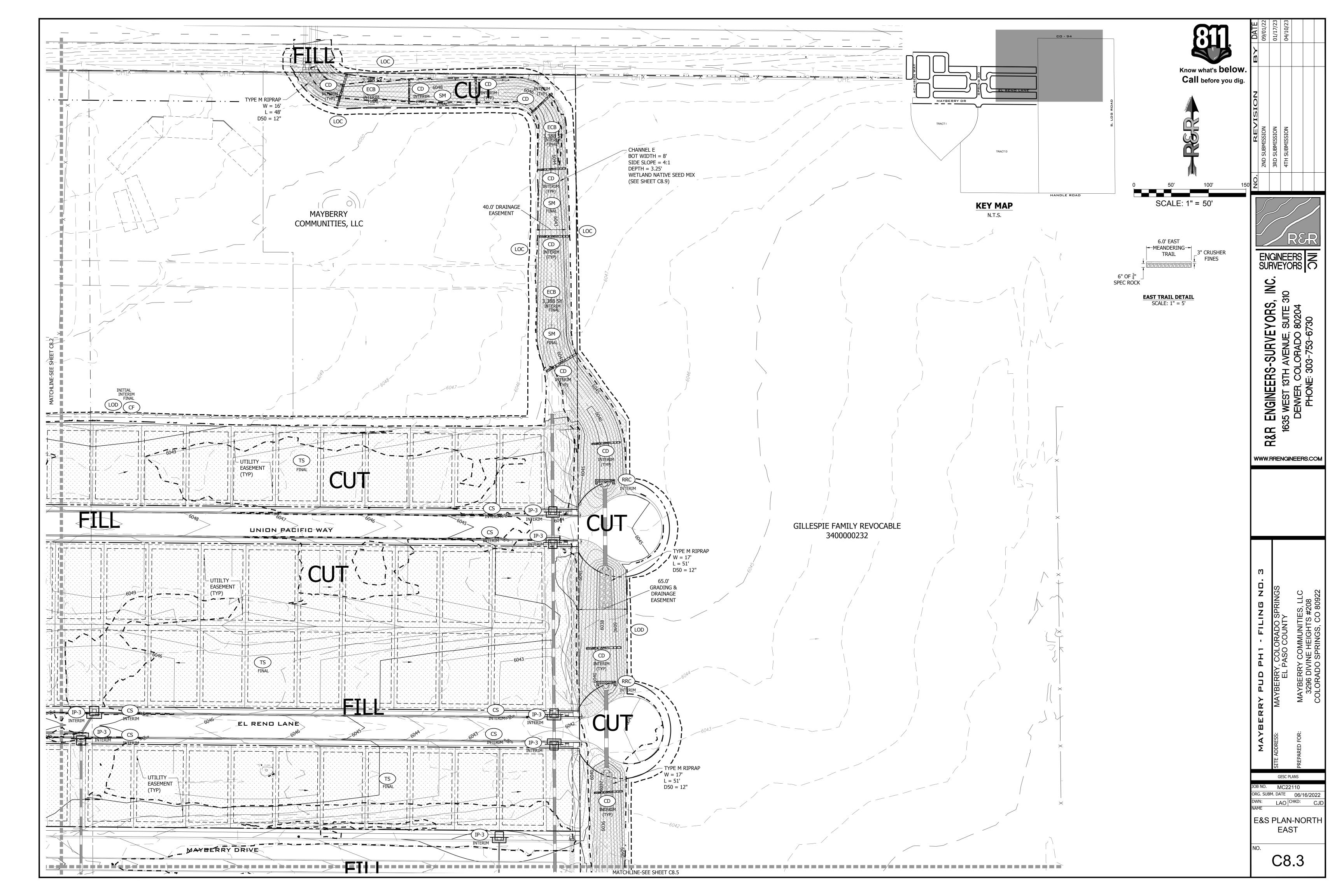
OWN: LAO CHKD: CJ

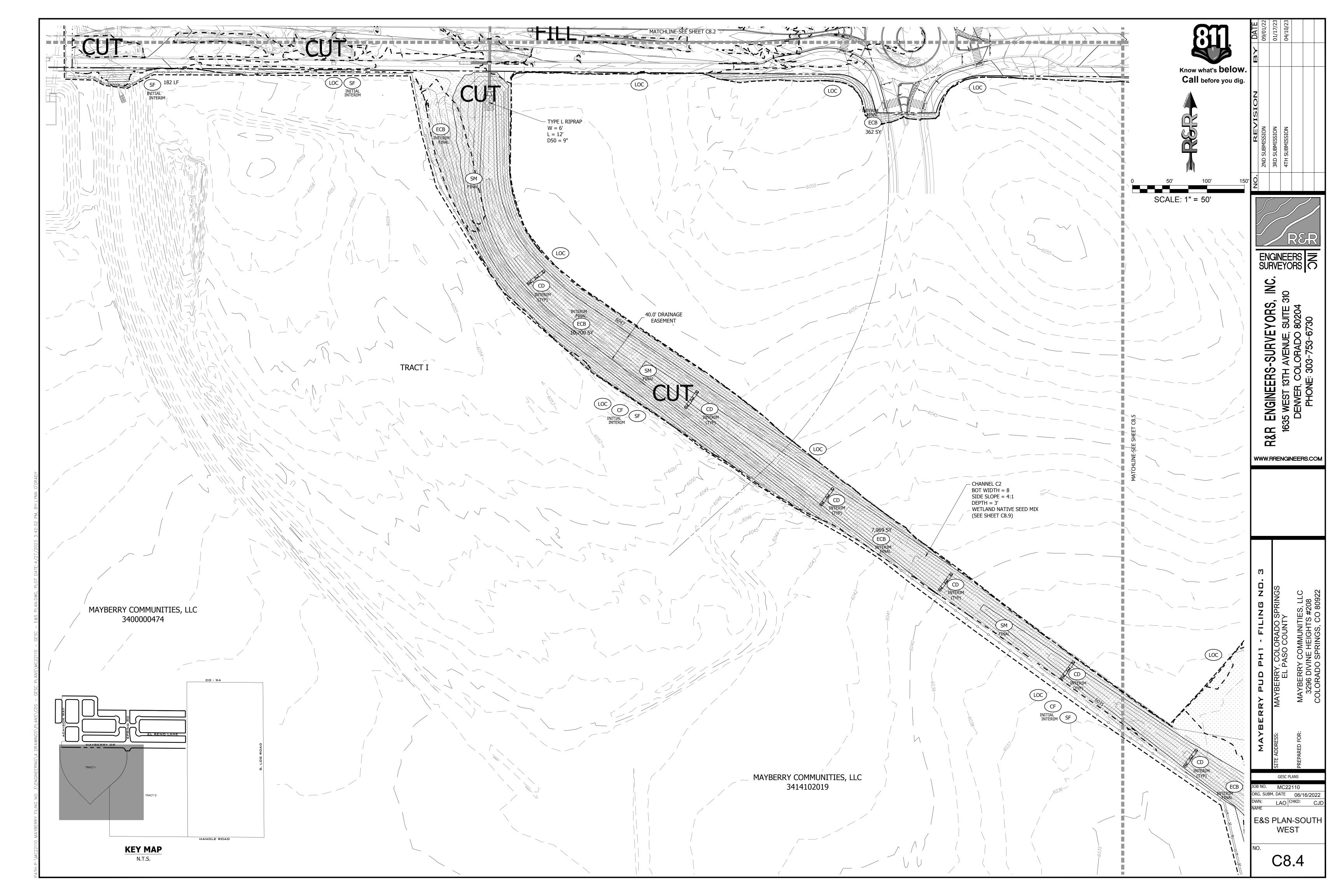
GENERAL NOTES & LEGEND

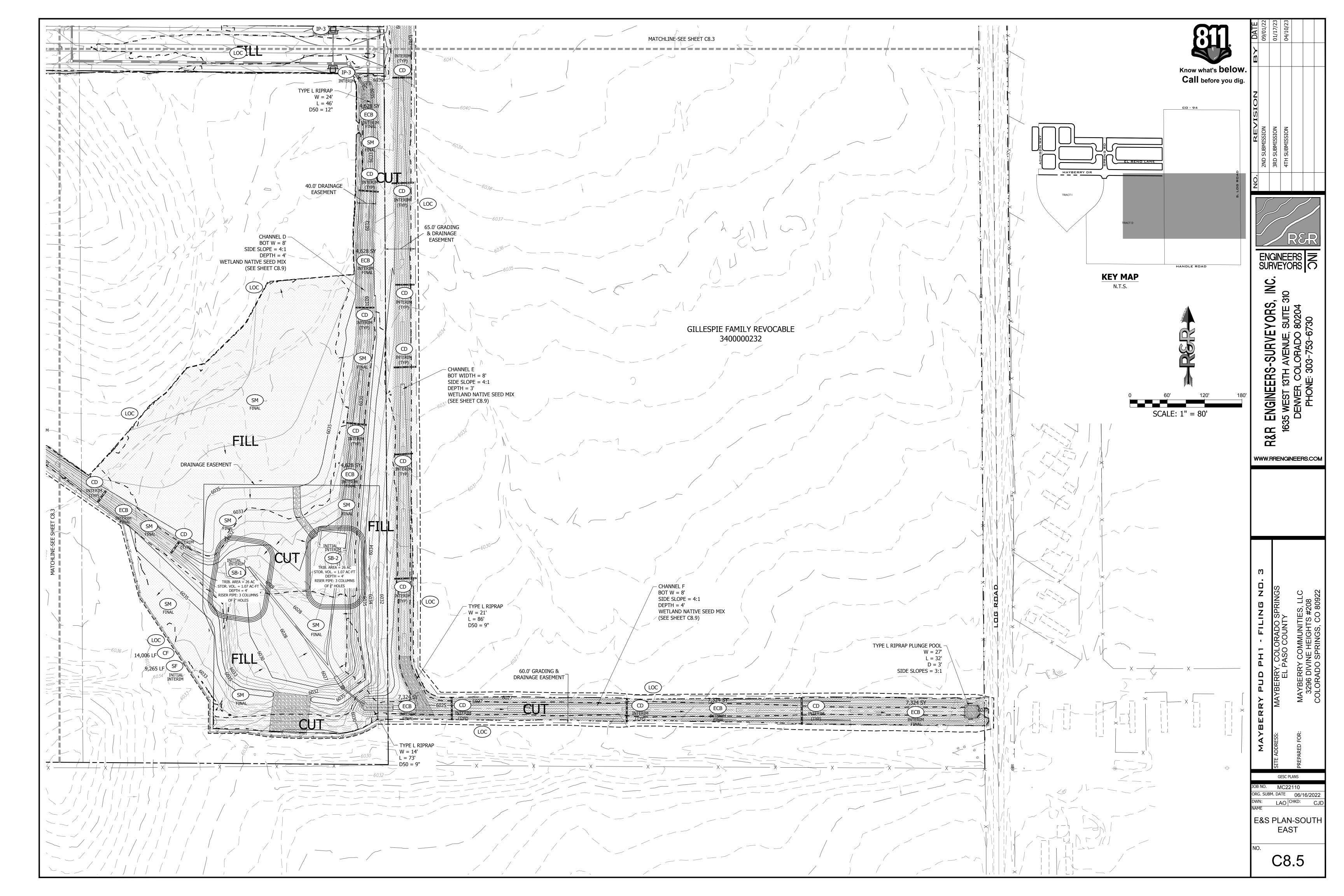
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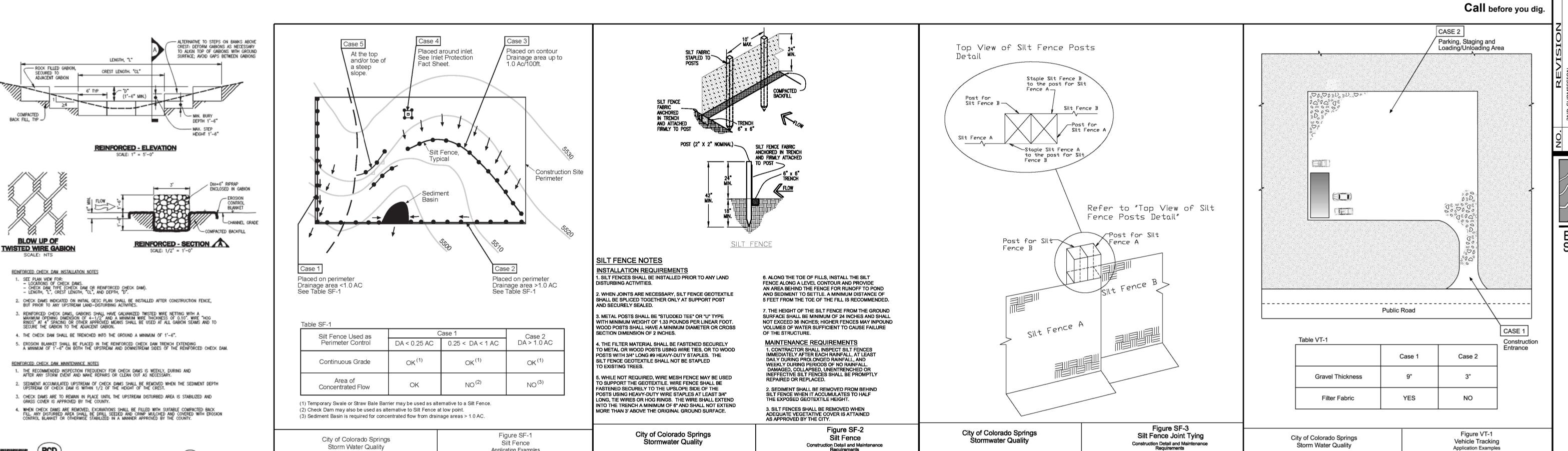




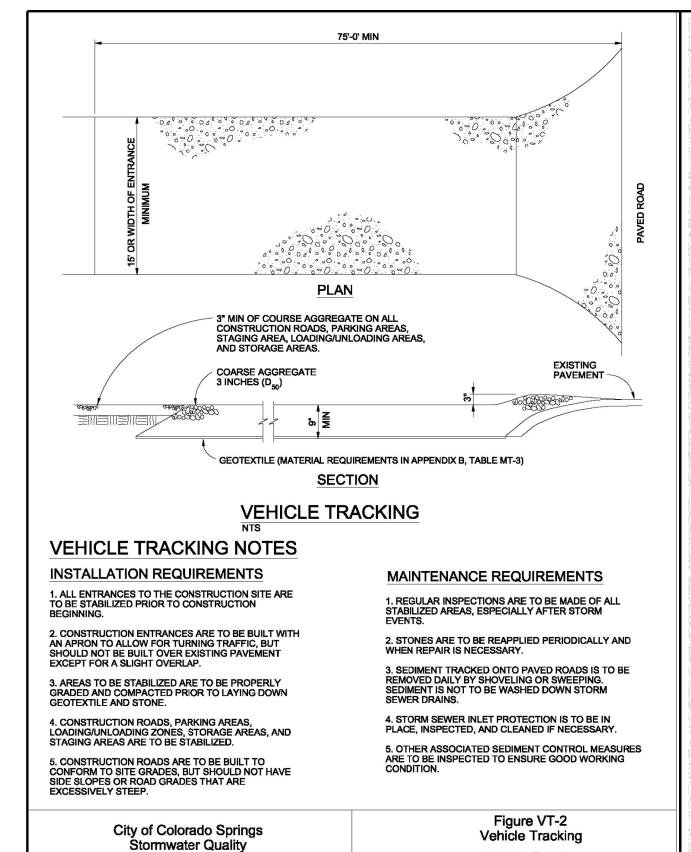








Construction Detail and Maintenance Requirements

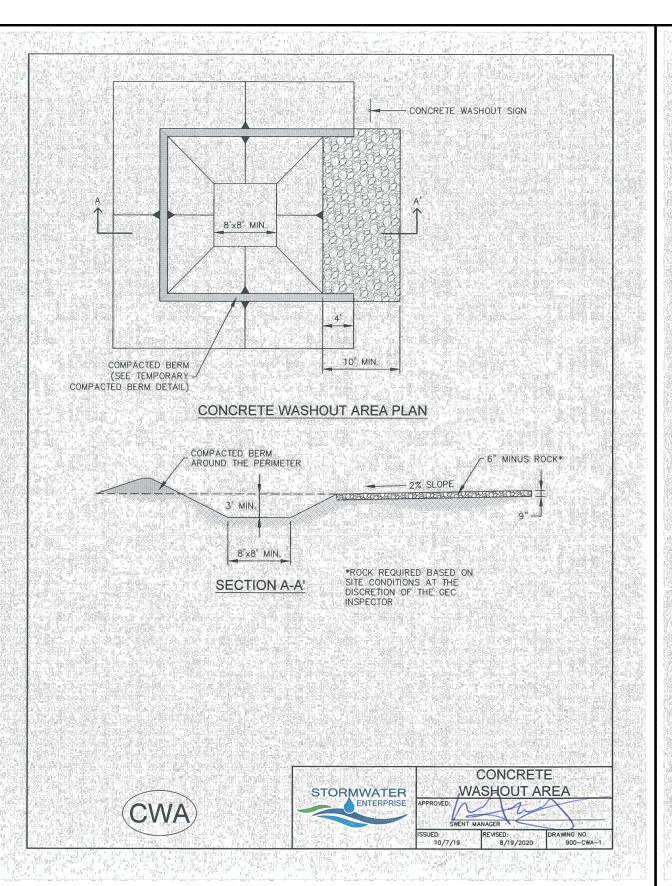


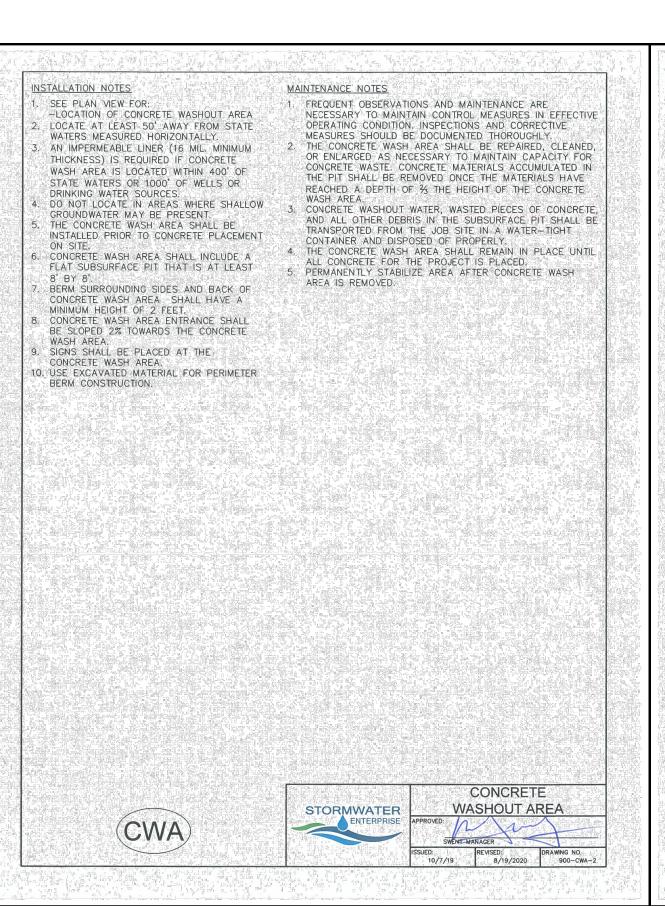
Application Examples

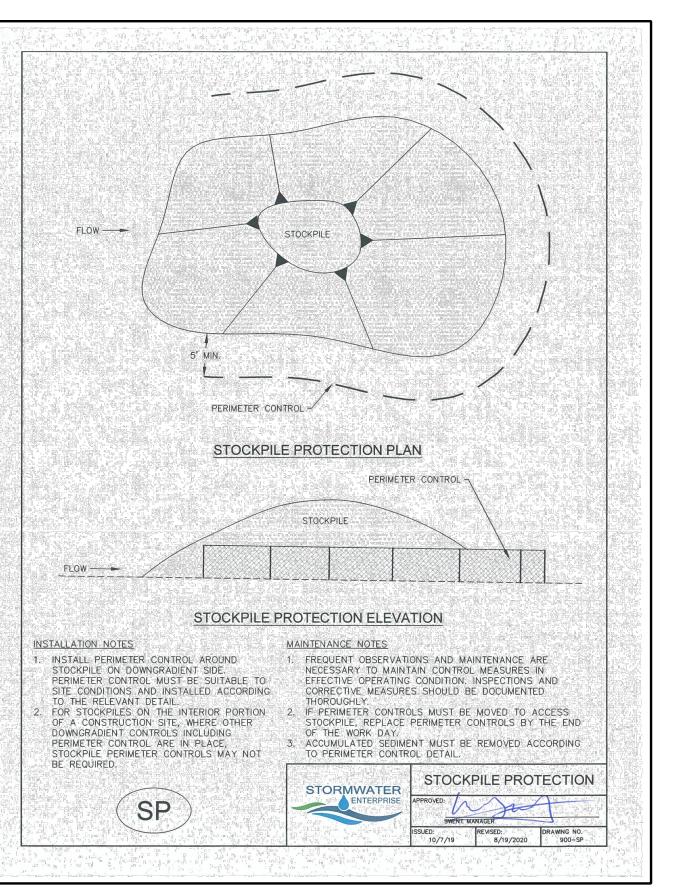
Storm Water Quality

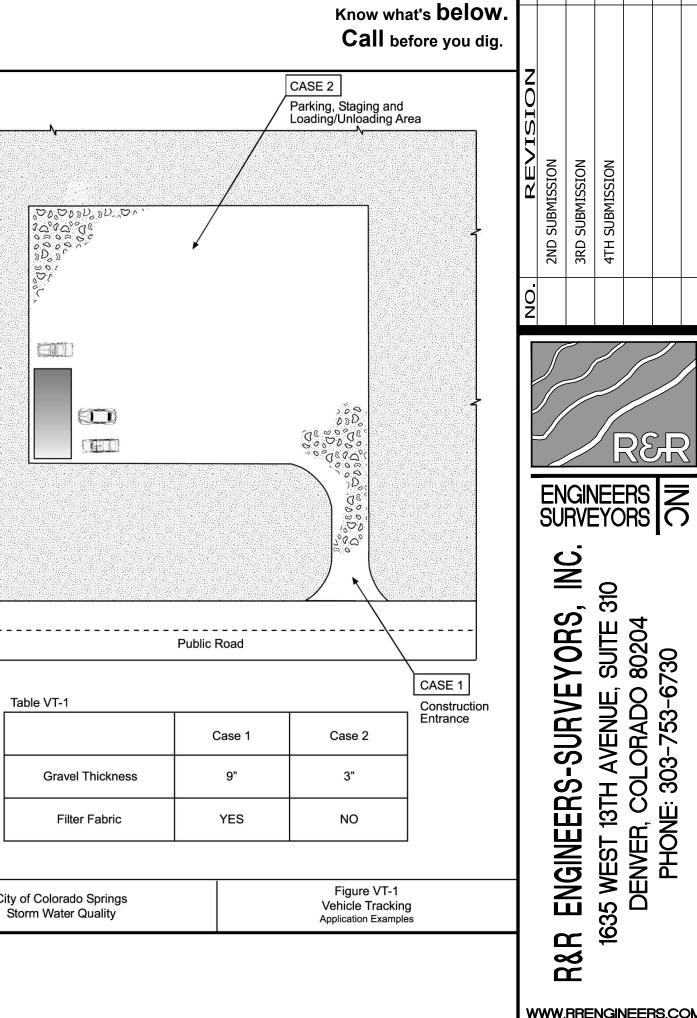
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Application Examples









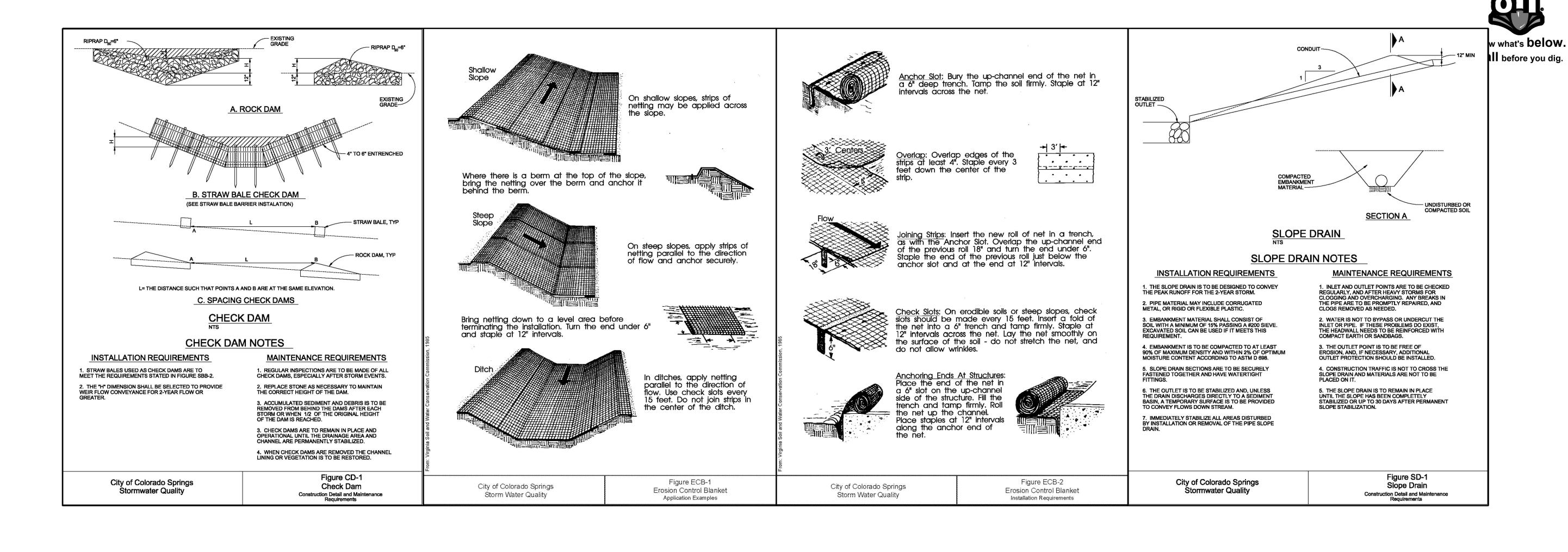
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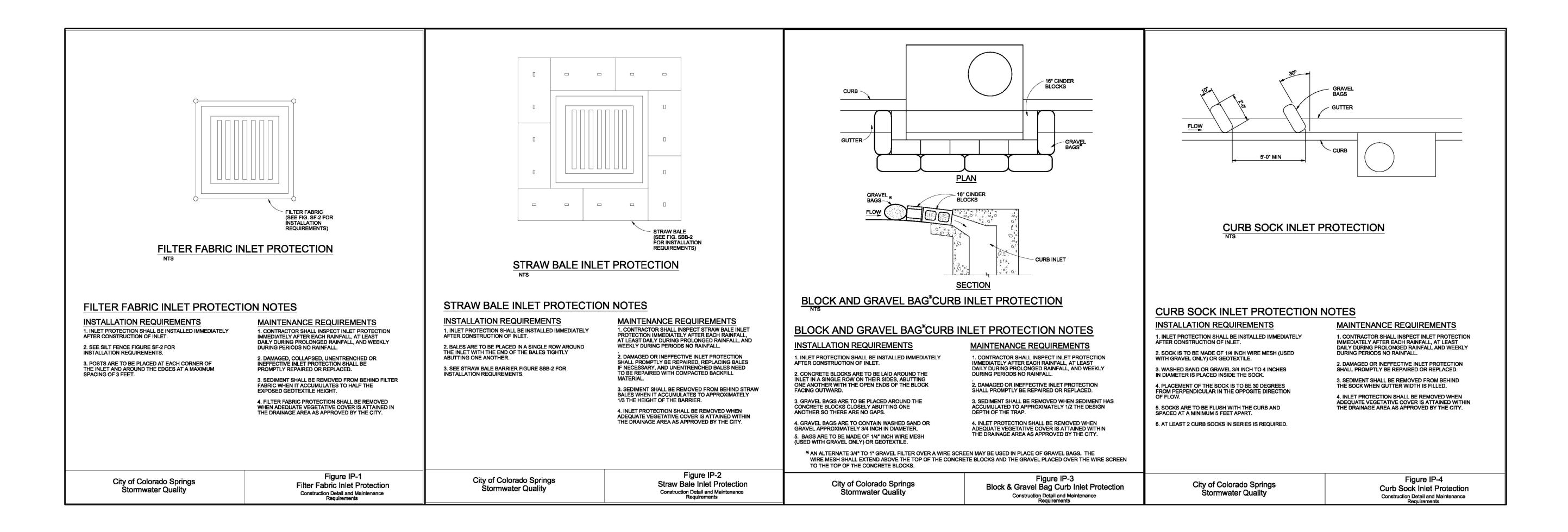
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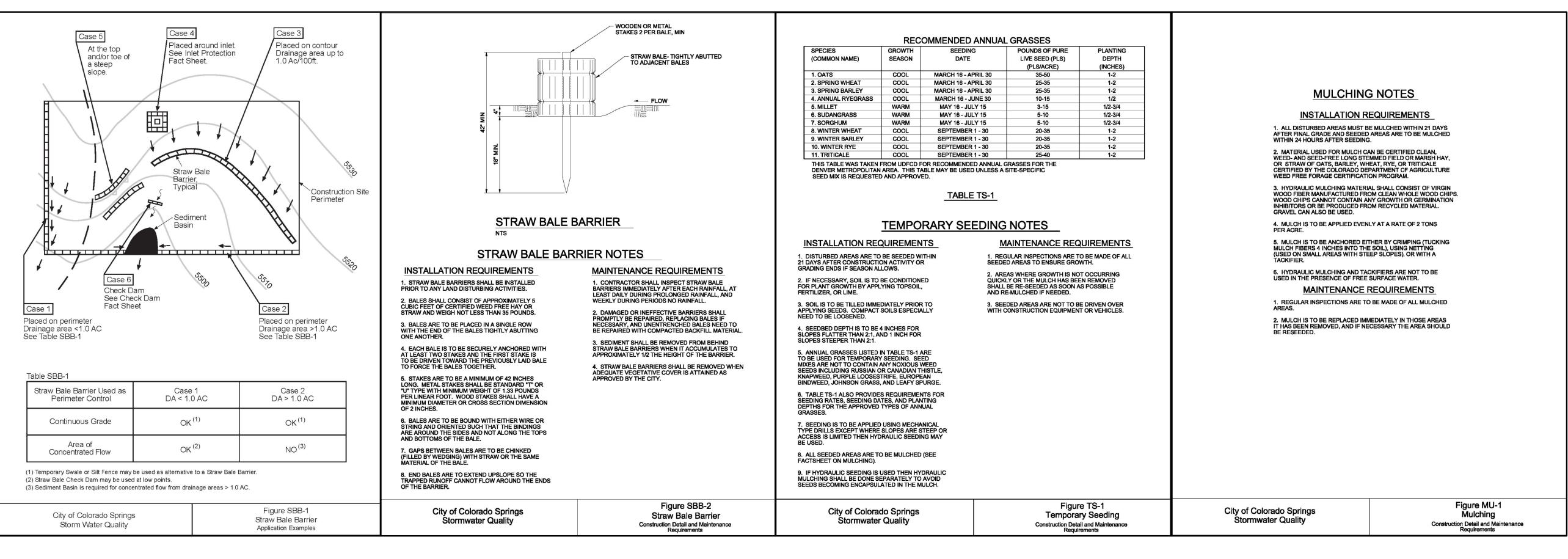
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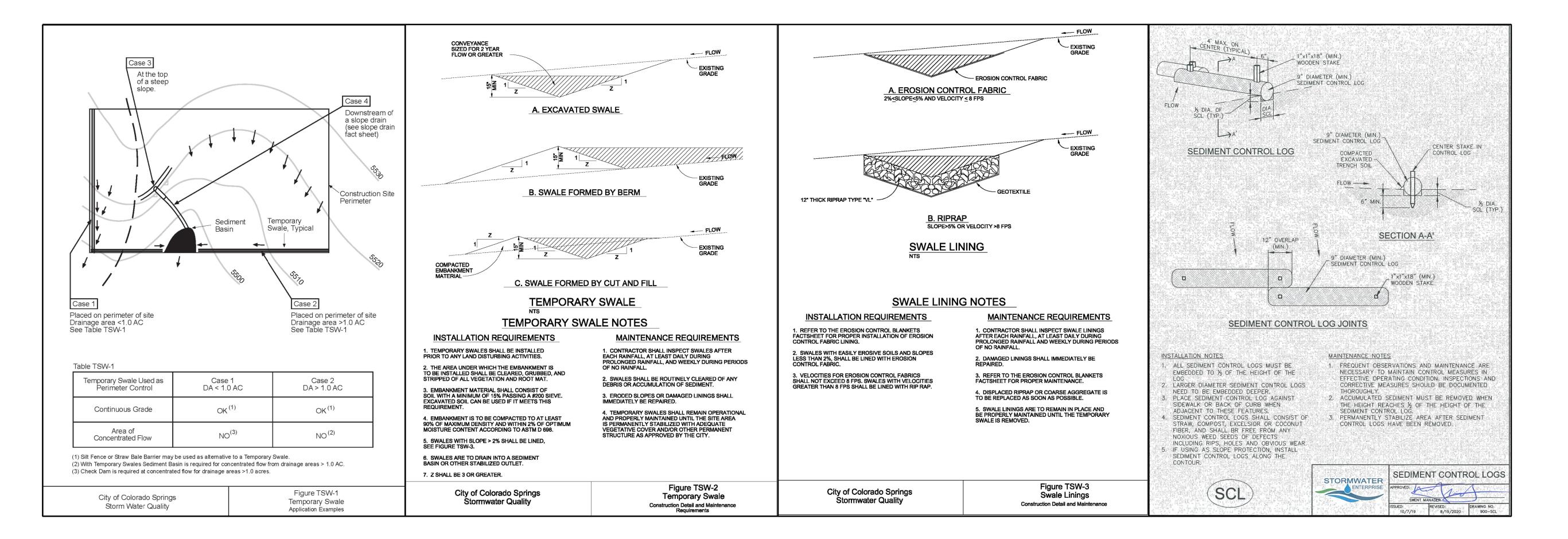
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Wetland Native Seed Mixes

Table A-8. Wetland seed mix – loamy to sandy soils (Recommended for detention ponds and less eroding wetland areas.)

| Common Name | Scientific Name | Growth Season | Growth Form | % Mix | Wetland Indicator* | Lb/ac (PLS¹) |
|-----------------------|-----------------------|------------------|----------------|----------|-----------------------|-----------------|
| | Grasses and | Herbaceo | us Species | | | |
| American Sloughgrass | Beckmannia syzigachne | Cool | Sod | 15 | OBL | 0.8 |
| Prairie cordgrass | Spartina pectinata | Warm | Sod | 15 | FACW | 4.6 |
| Switchgrass | Panicum virgatum | Warm | Sod/Bunch | 15 | FAC | 2.3 |
| Western wheatgrass | Pascopyrum smithii | Cool | Sod | 10 | FACU | 5.5 |
| Fowl mannagrass | Glyceria striata | Cool | Sod | 10 | OBL | 3.3 |
| Hardstem bulrush | Scirpus acutus | | | 10 | OBL | 1.6 |
| Baltic rush | Juncus balticus | | | 10 | OBL | 0.1 |
| Creeping spikerush | Eleocharis palustris | | | 10 | OBL | 1.0 |
| | W | ildflowers | | | • | |
| Blue vervain | Verbena hastata | | | 2.5 | FACW | 0.1 |
| Nuttall's sunflower | Helianthus nuttallii | | | 2.5 | FAC | 0.5 |
| TOTAL PLS POUNDS/ACRE | | | | 100 | | 19.8 |

PLS = Pure Live Seed – If broadcast seeding, double the rate

Table A-9. Wetland seed mix – clay and alkali soils (Recommended for detention ponds and wetland areas.)

| Common Name | Scientific Name | Growth Season | Growth Form | % Mix | Wetland Indicator* | Lb/ac (PLS ¹ | |
|--------------------------------|--------------------------|---------------|----------------|----------|-----------------------|-------------------------|--|
| Grasses and Herbaceous Species | | | | | | | |
| Alkali sacaton | Sporobolus airoides | Warm | Bunch | 10 | FAC | 0.4 | |
| Inland saltgrass | Distichlis spicata | Warm | Sod | 10 | FACW | 1.2 | |
| Nuttall's alkaligrass | Puccinellia nuttalliana | Cool | Bunch | 10 | OBL | 0.2 | |
| Prairie cordgrass | Spartina pectinata | Warm | Sod | 10 | FACW | 3.0 | |
| Slender wheatgrass | Elymus trachycaulus spp. | Cool | Bunch | 10 | FACU | 3.8 | |
| Western wheatgrass | Pascopyrum smithii | Cool | Sod | 10 | FACU | 5.5 | |
| Fowl mannagrass | Glyceria striata | Cool | Sod | 10 | OBL | 3.3 | |
| Hardstem bulrush | Scirpus acutus | | | 10 | OBL | 1.6 | |
| Baltic rush | Juncus balticus | | | 10 | OBL | 0.1 | |
| Creeping spikerush | Eleocharis palustris | | | 10 | OBL | 1.0 | |
| TOTAL PLS POUNDS/ACRE | | | | | | 20.1 | |

¹PLS = Pure Live Seed – If broadcast seeding, double the rate
Note: Wildflowers species not recommended for clay or alkali soils.

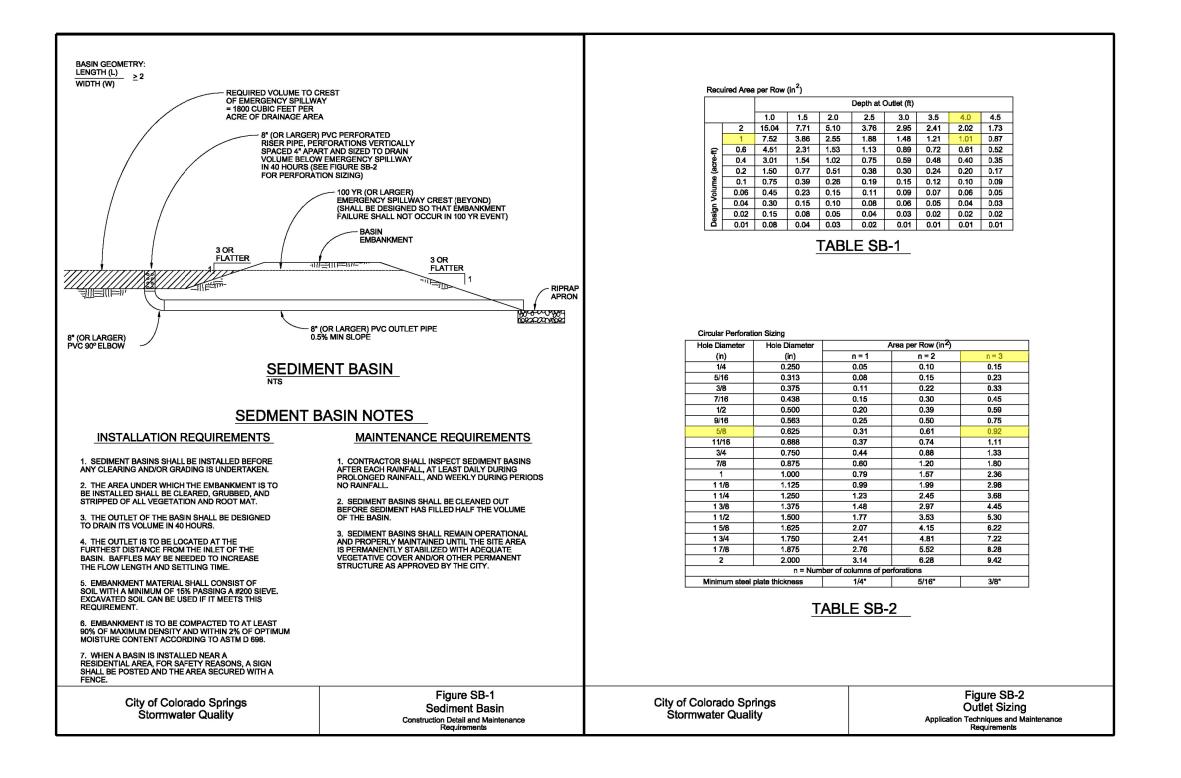
Wetland Indicator Key for Tables A-8 and A-9: FAC = Facultative – Equally occurs in both wetlands and uplands.

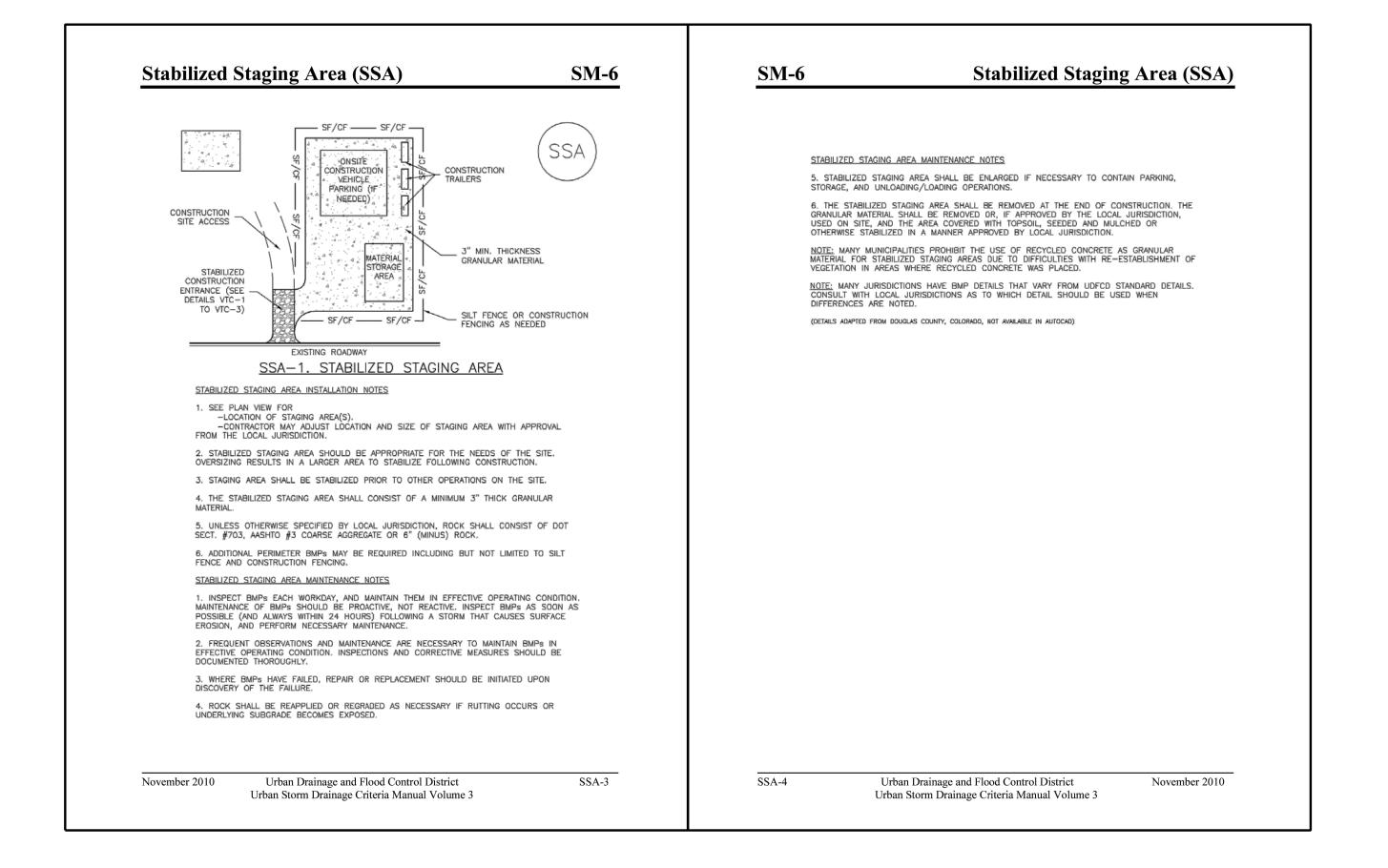
- FACU = Facultative Upland Occurs mostly in uplands, but can occur in wetlands about 1/3 of the time.
- FACW = Facultative Wetlands Occurs mostly in wetlands, but can occur in uplands about 1/3 of the time.
- OBL = Obligate Wetlands Almost always occurs in wetlands.
 UPL = Uplands Almost always occurs in uplands.

13-70 Urban Drainage and Flood Control District
Urban Storm Drainage Criteria Manual Volume 2

January 2016

Chapter 13







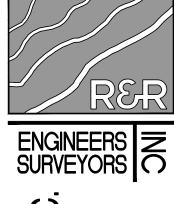
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4TH SUBMISSION

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1635 WEST 13TH AVENUE, SUITE 31
DENVER, COLORADO 80204
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GESC PLANS

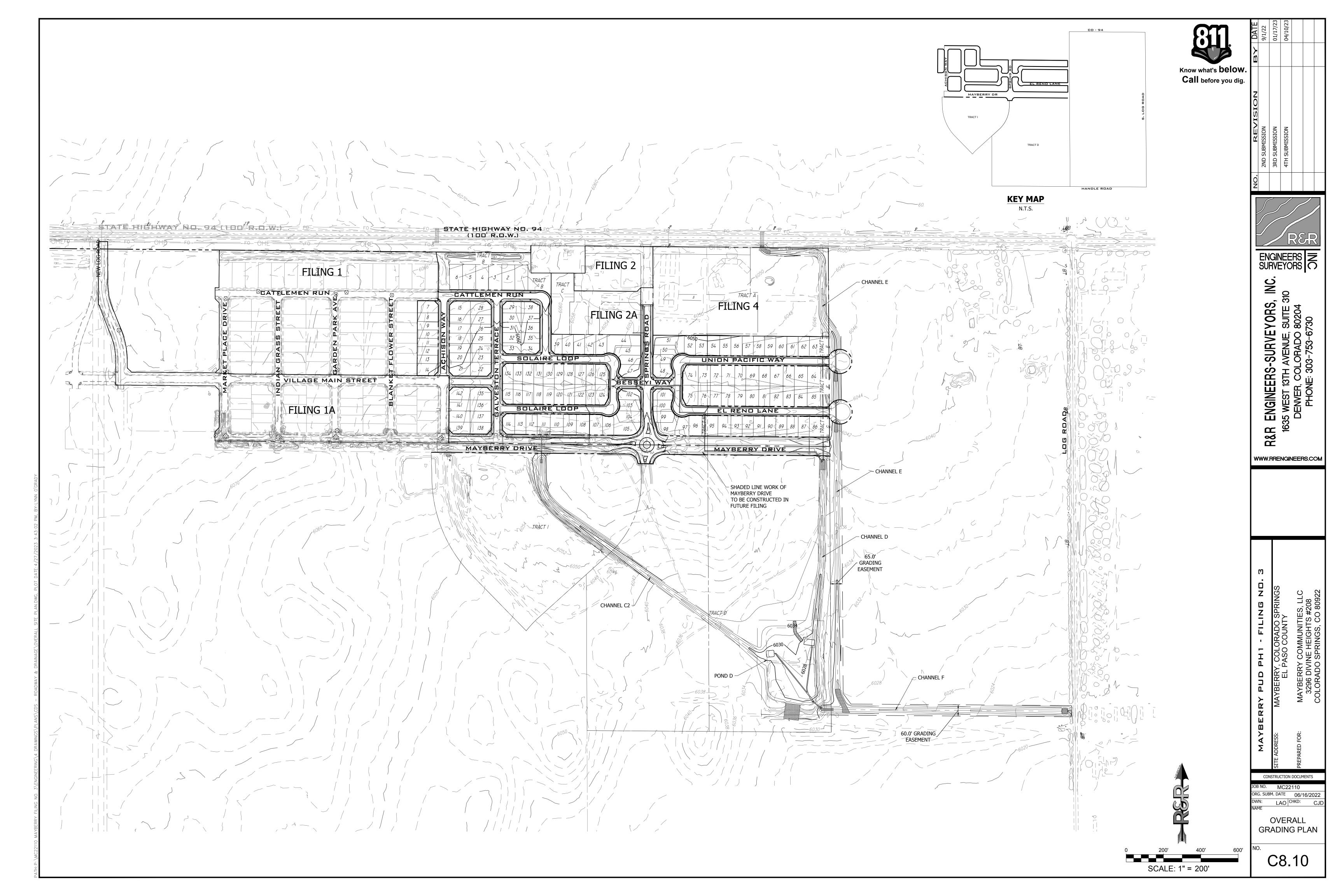
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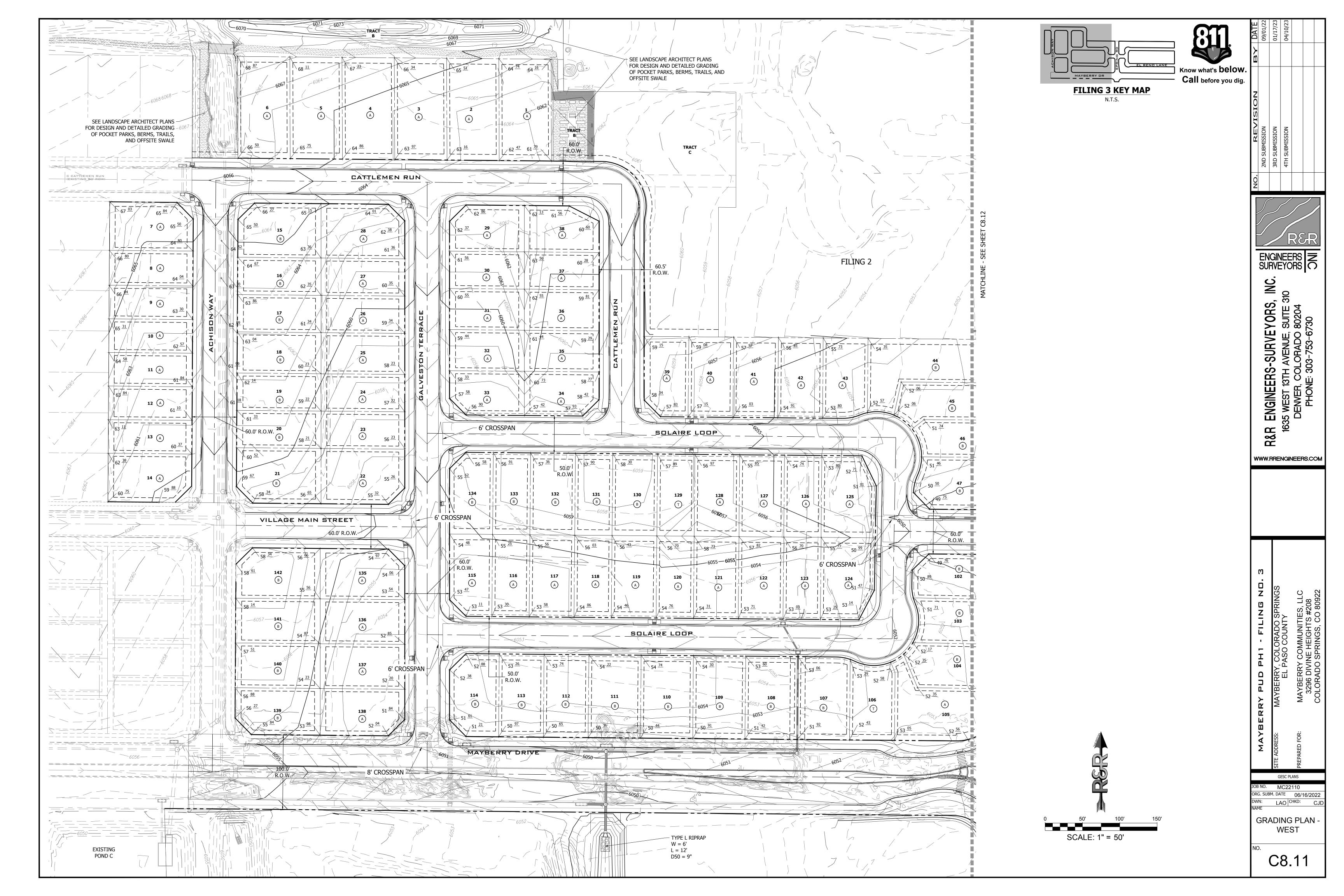
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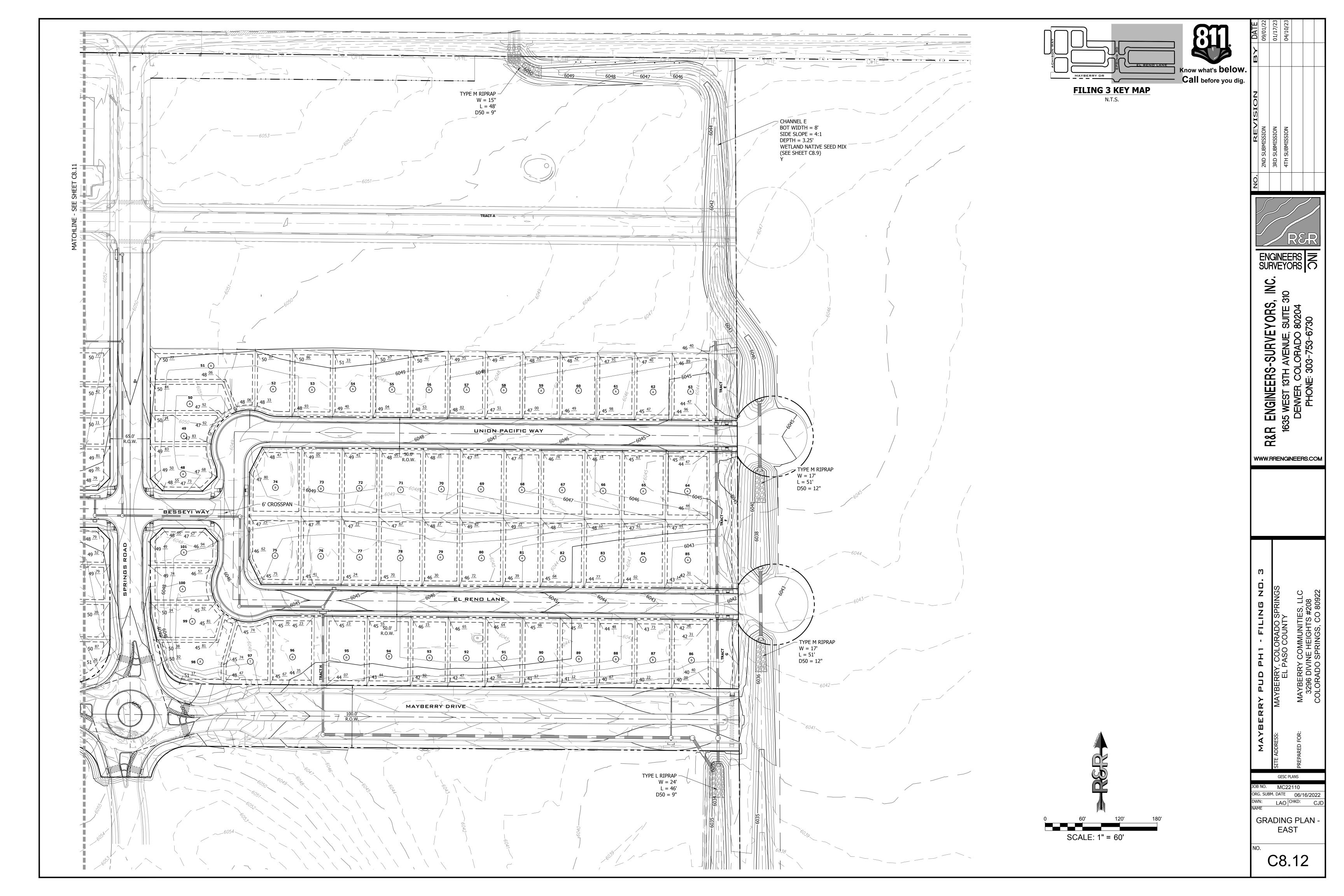
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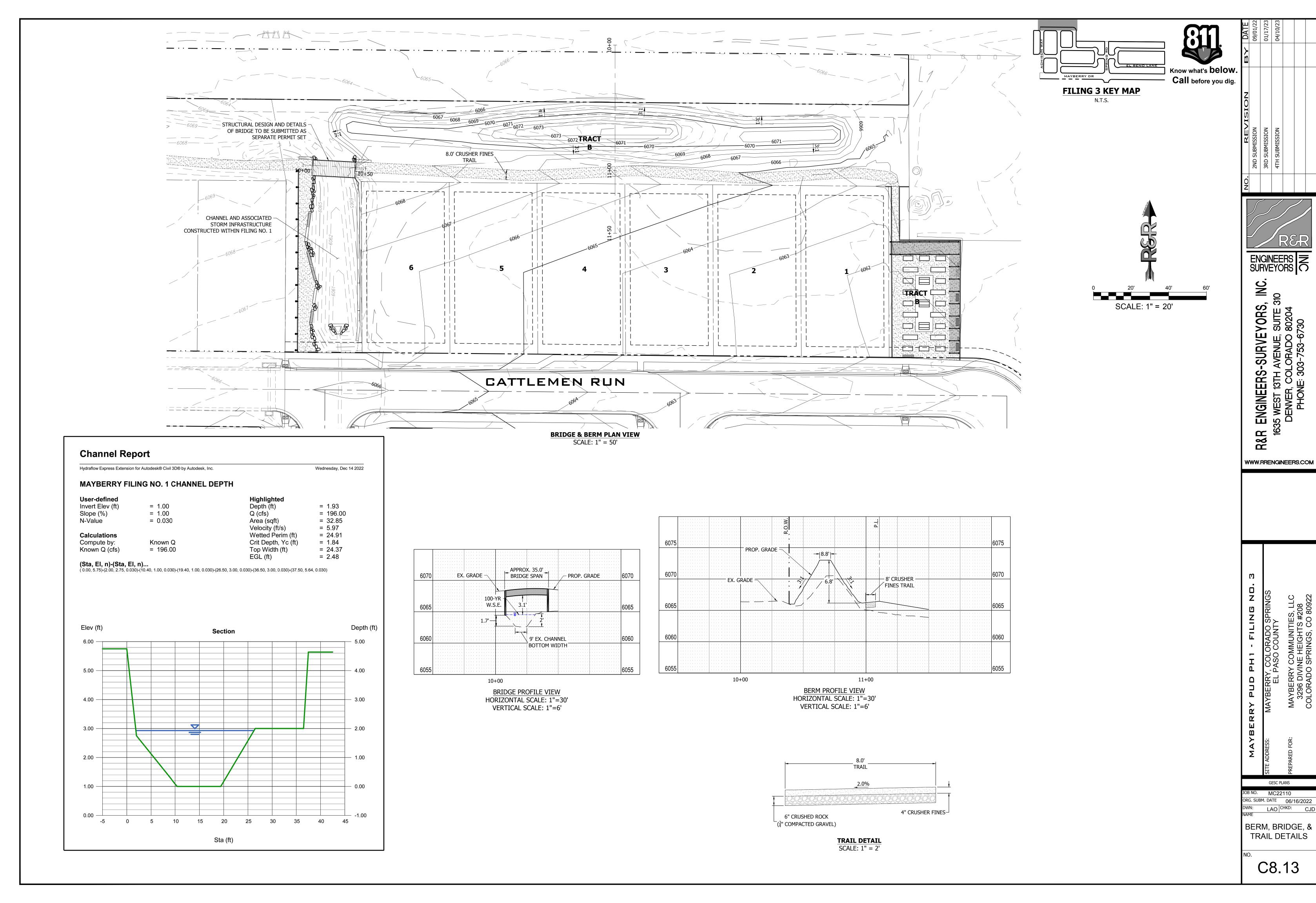
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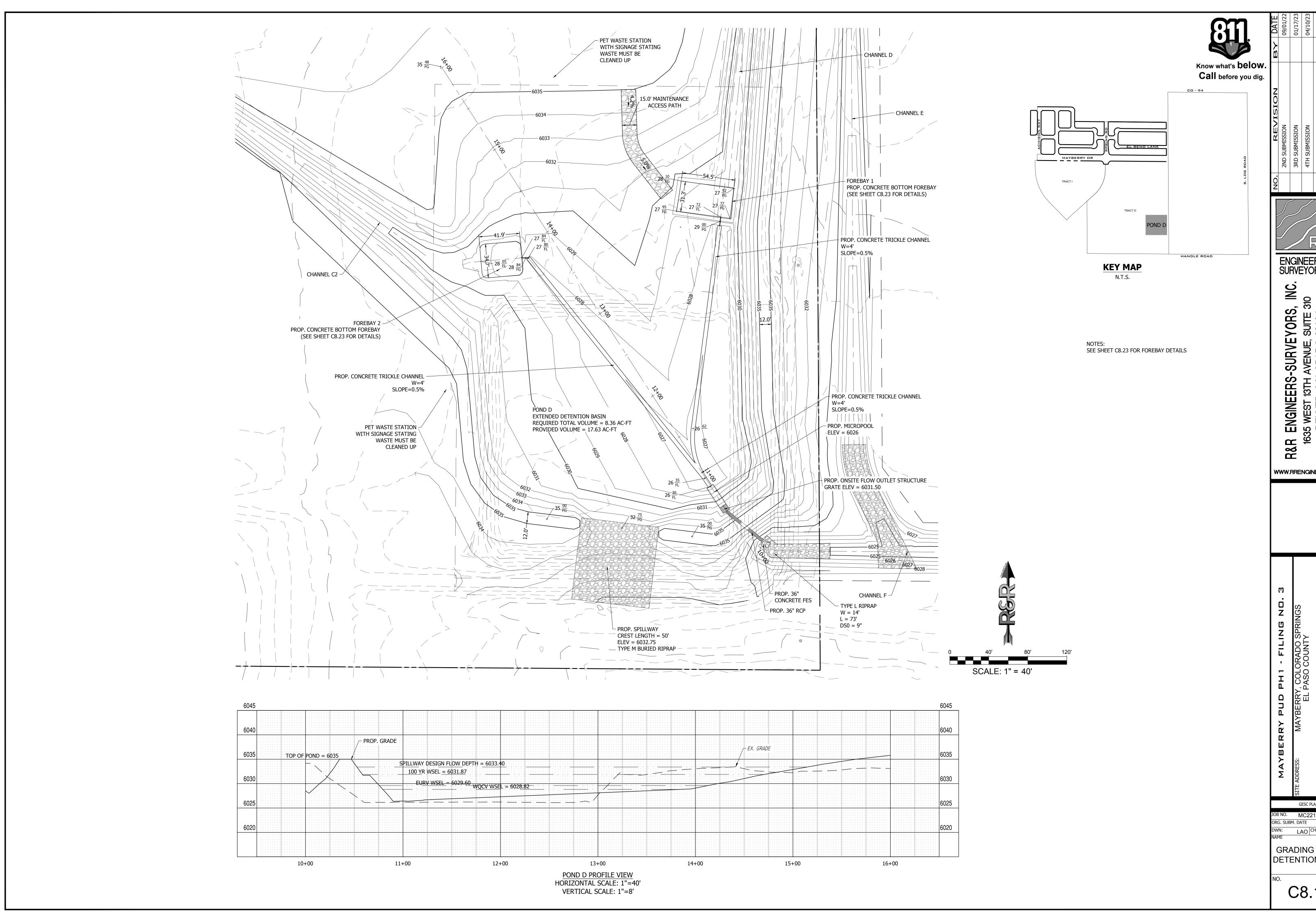
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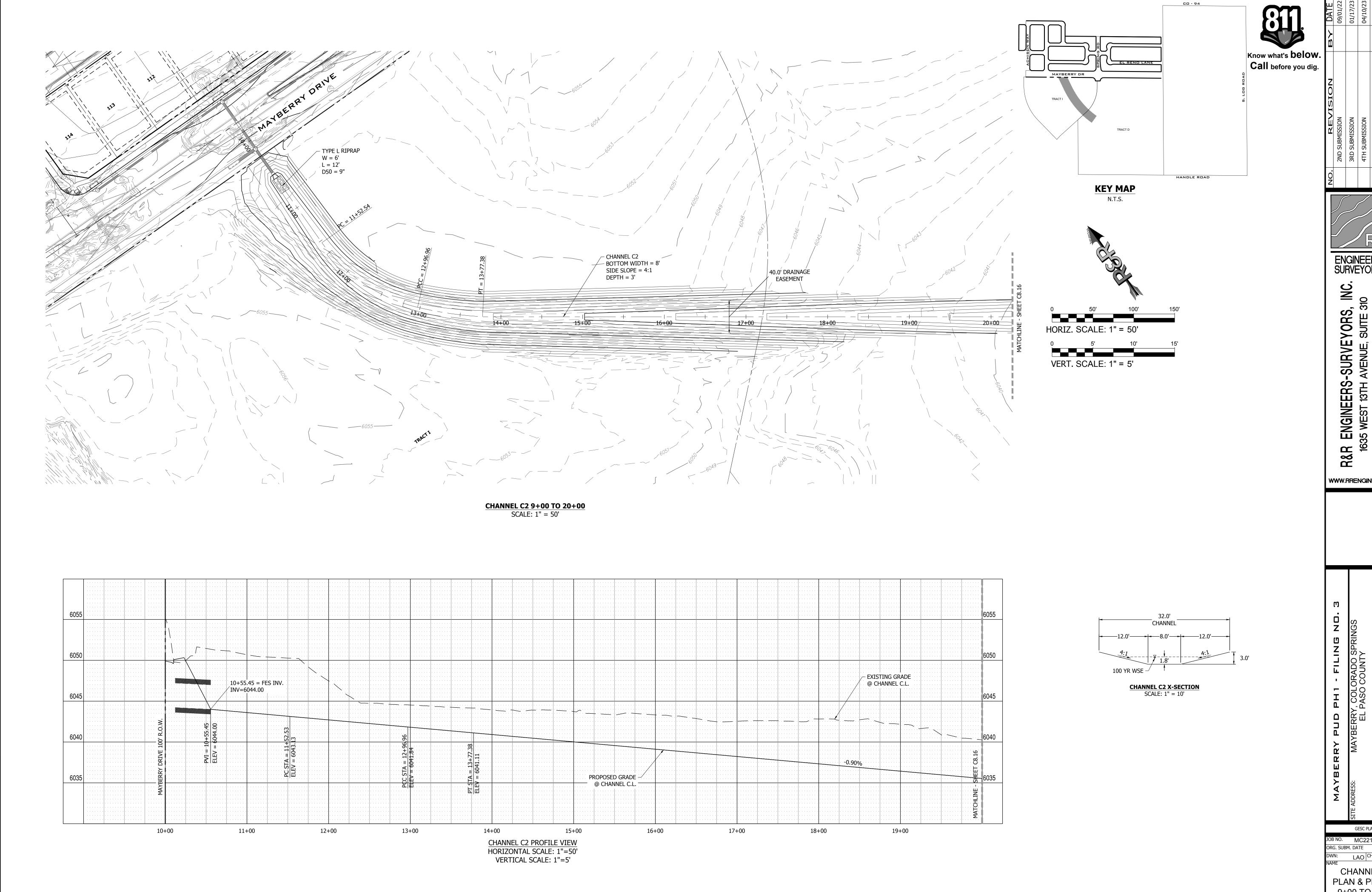


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GRADING PLAN -DETENTION POND

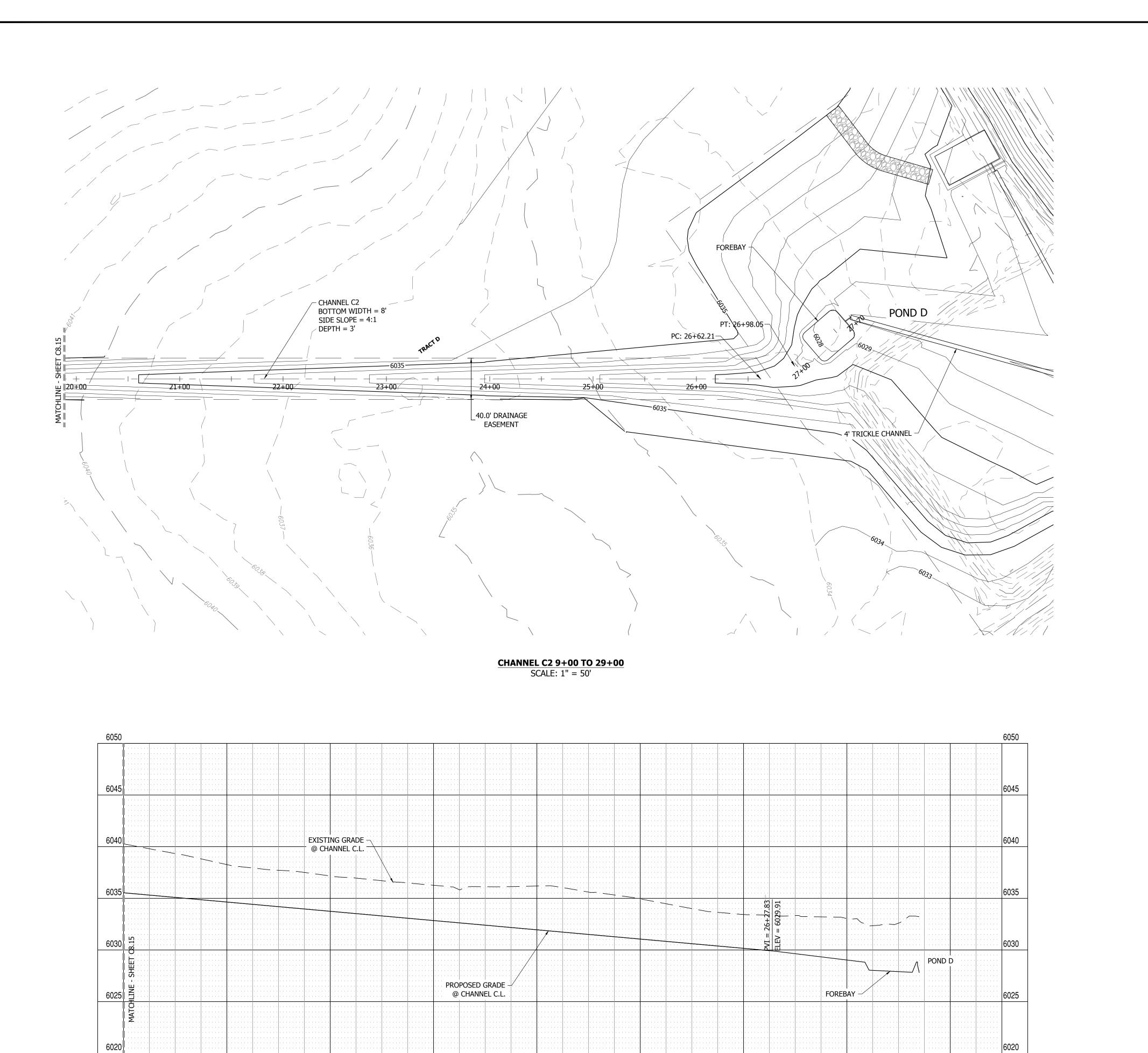


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MAYBERRY COMMUNITIES, LLC 3296 DIVINE HEIGHTS #208 COLORADO SPRINGS, CO 80922

GESC PLANS JOB NO. MC22110 ORG. SUBM. DATE 06/16/2022 LAO CHKD: CJE

CHANNEL C2 PLAN & PROFILE 9+00 TO 20+00



23+00

22+00

21+00

24+00

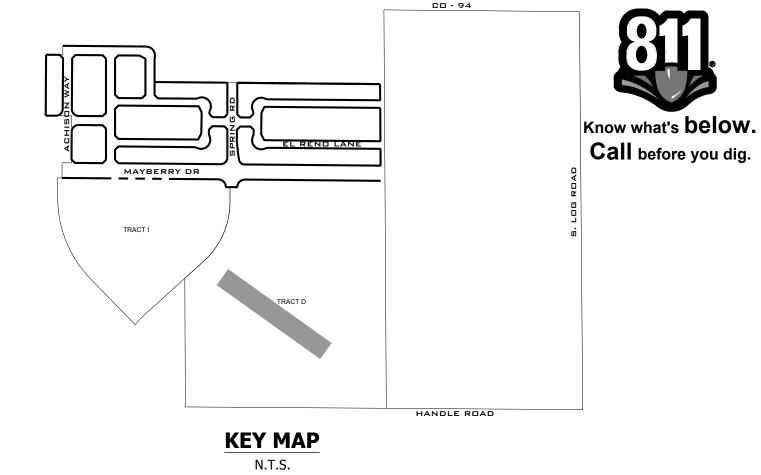
CHANNEL C2 PROFILE VIEW HORIZONTAL SCALE: 1"=50' VERTICAL SCALE: 1"=5'

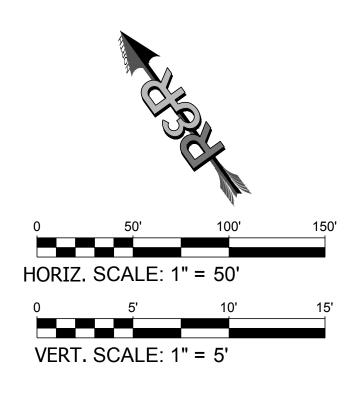
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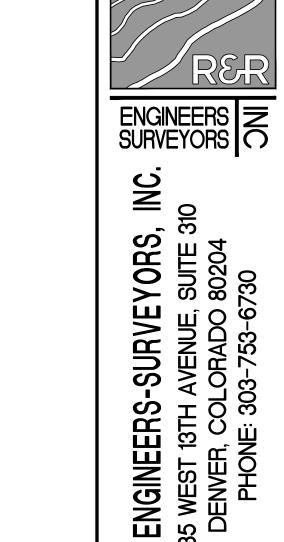




__ 32.0' _ CHANNEL

CHANNEL C2 X-SECTION SCALE: 1" = 10'

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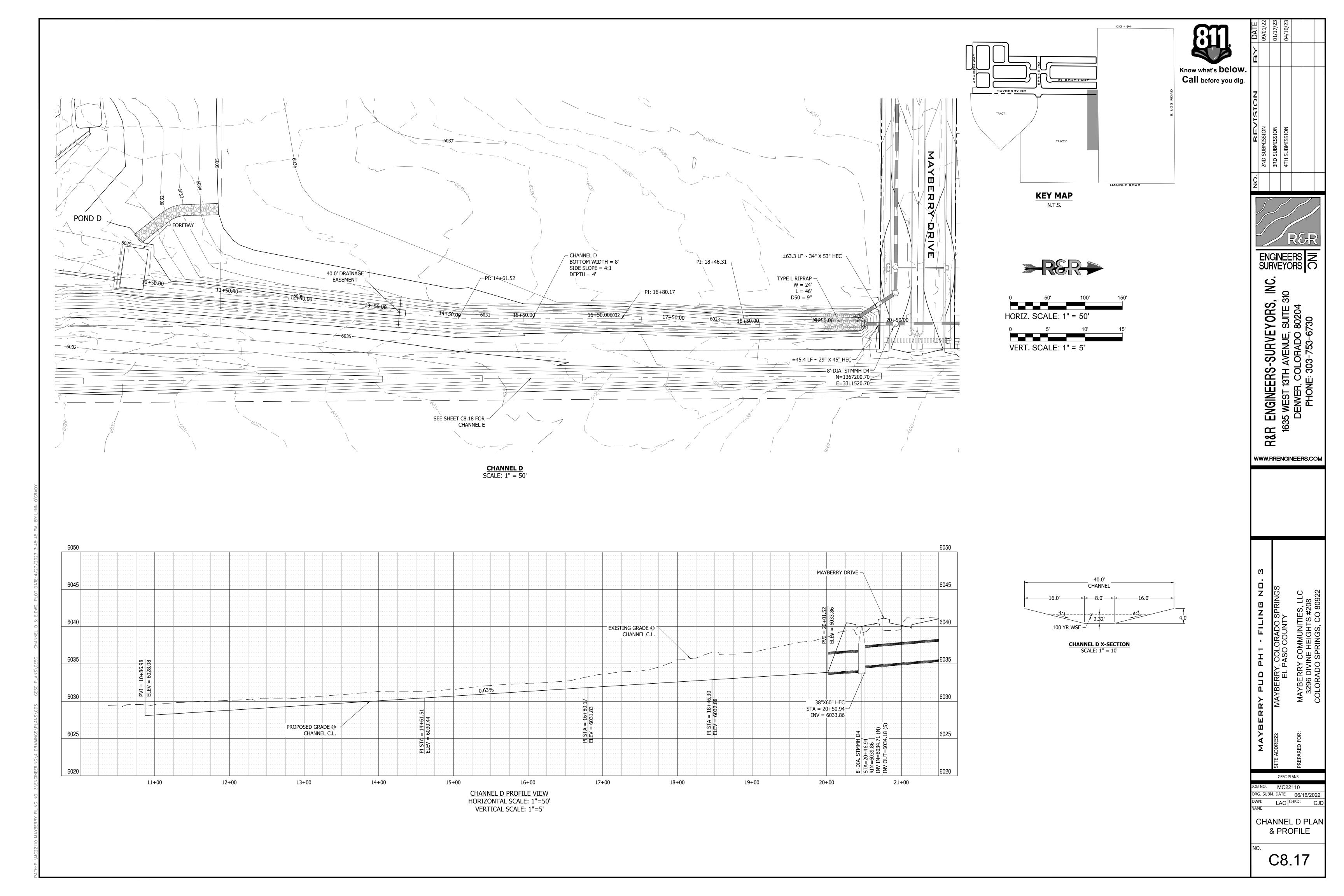
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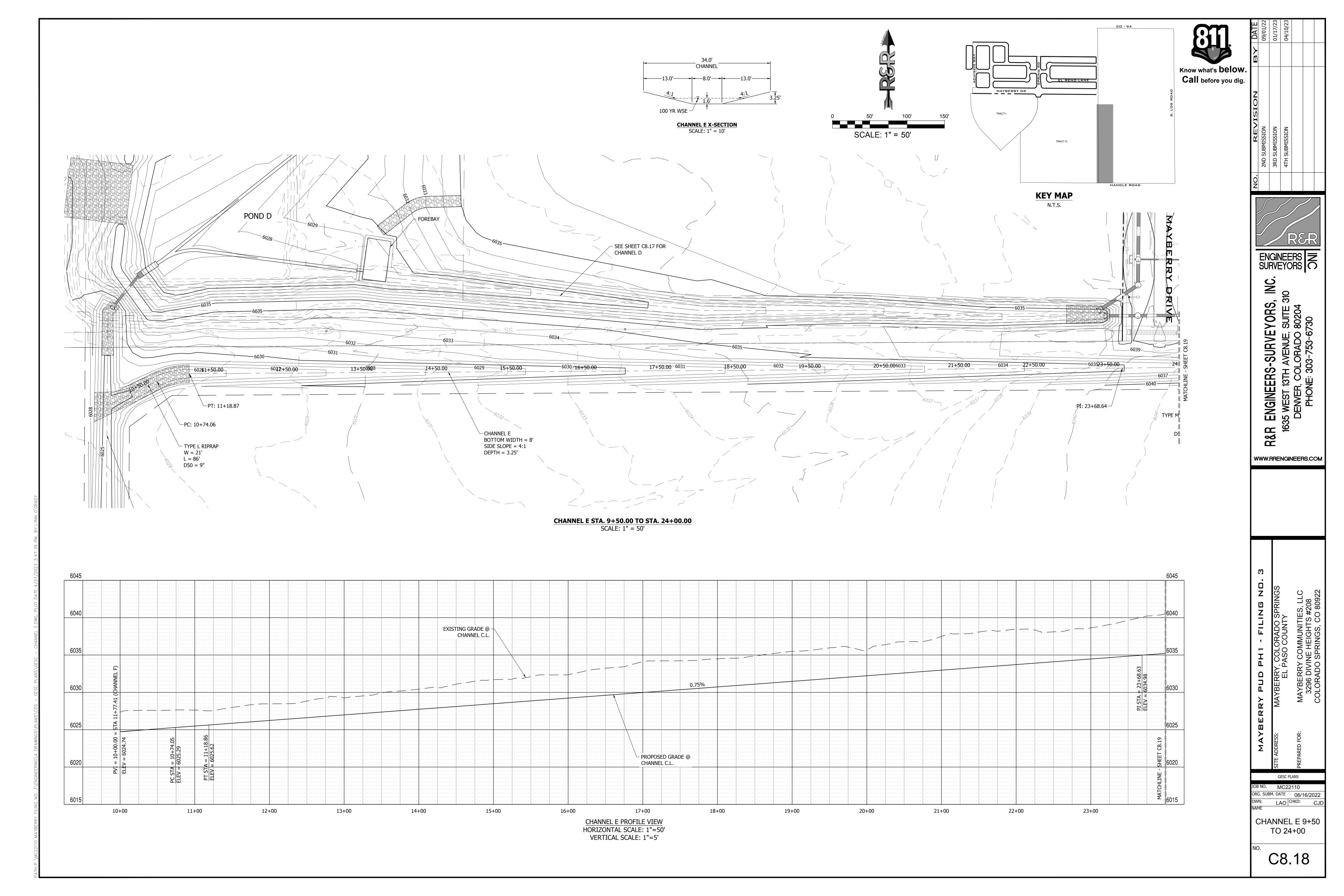
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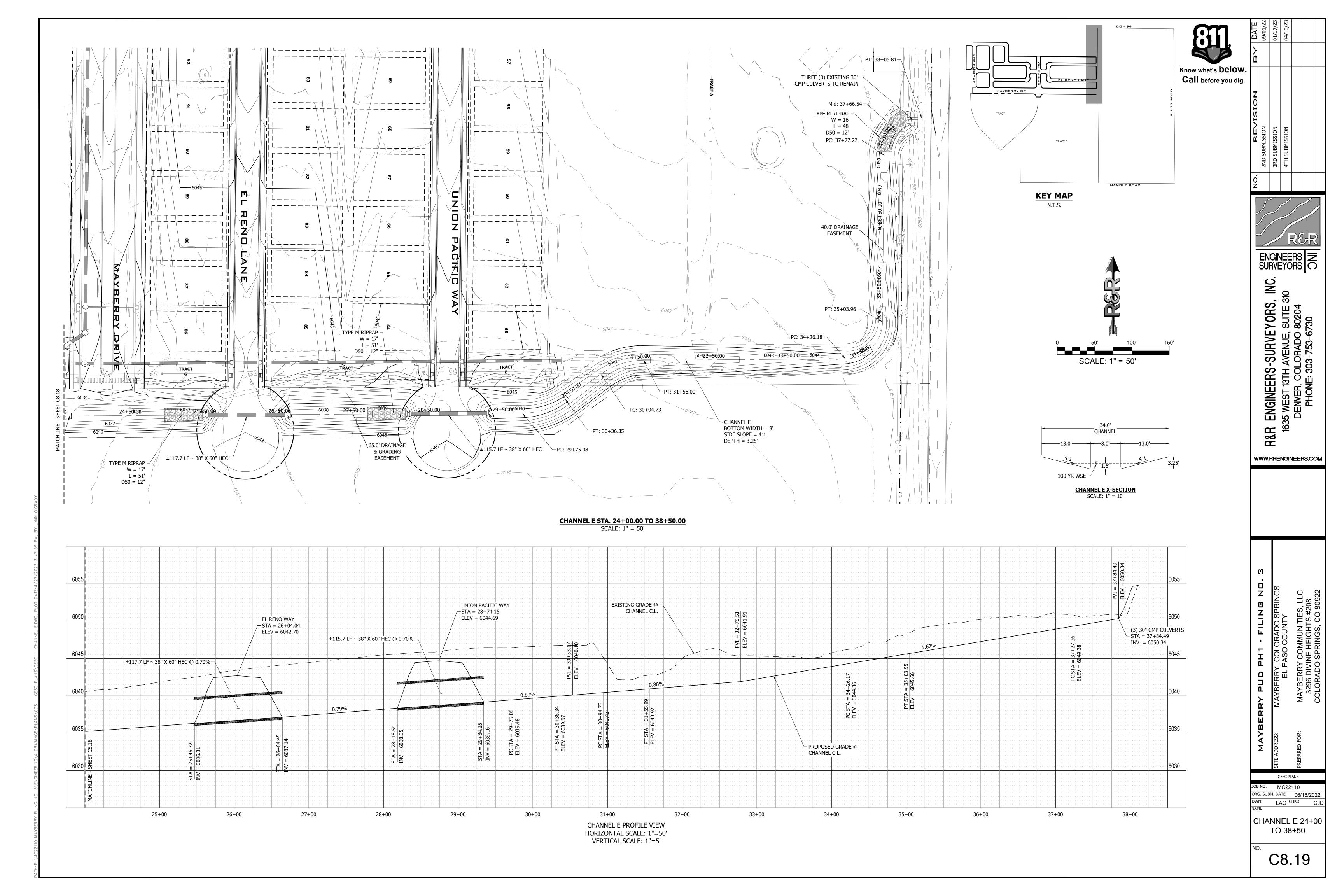
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EL PASO COUNTY

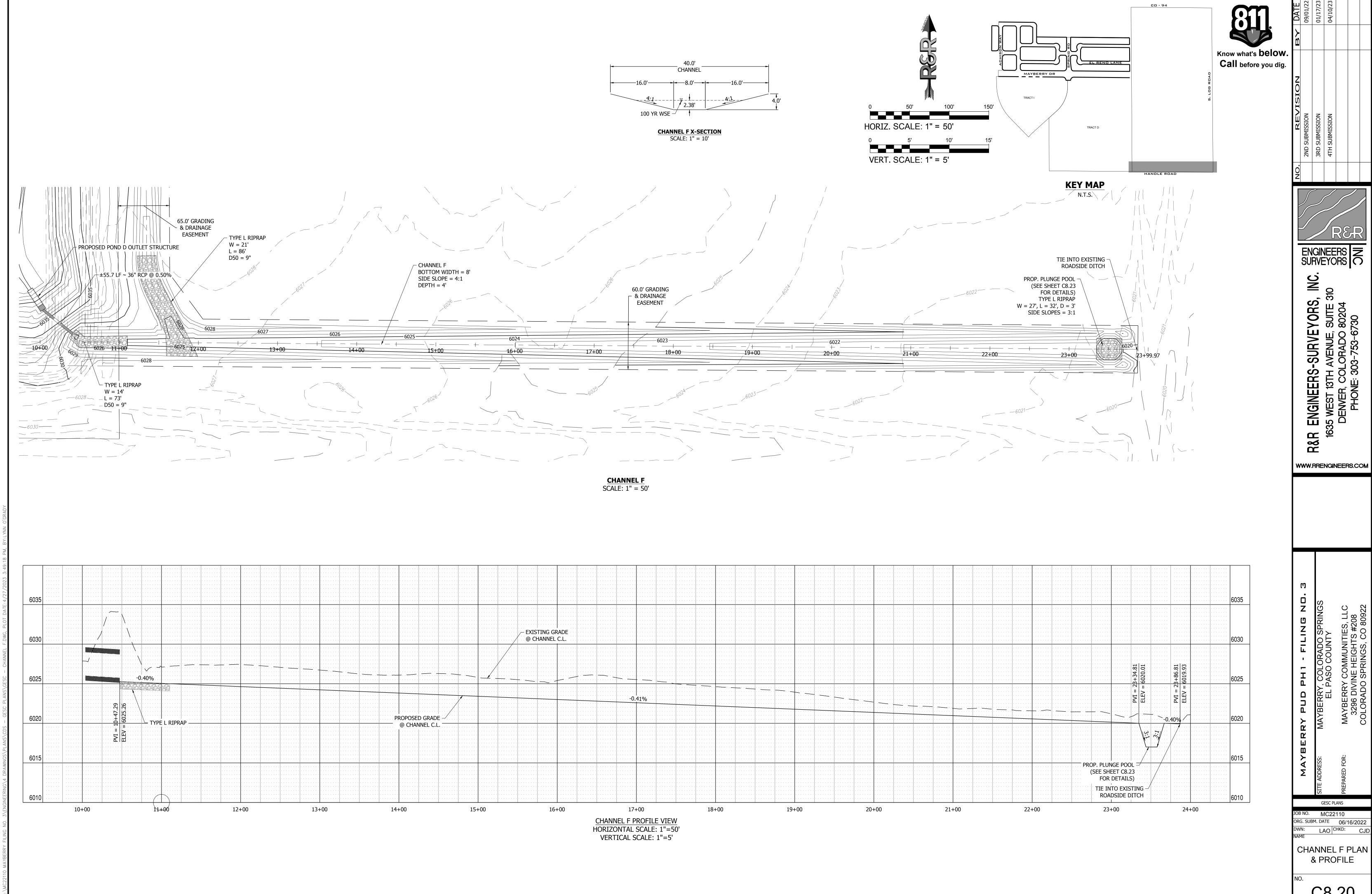
GESC PLANS JOB NO. MC22110 ORG. SUBM. DATE 06/16/2022 LAO CHKD: CJE

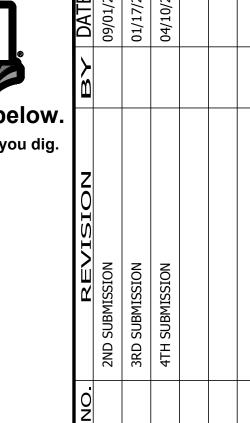
CHANNEL C2 PLAN & PROFILE 20+00 TO 29+00

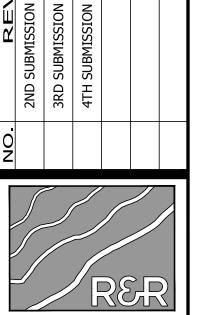












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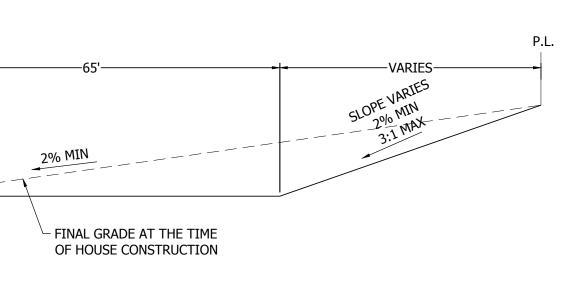
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EL PASO COUNTY

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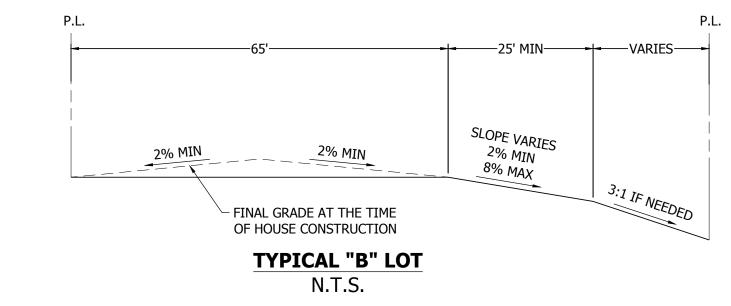
LAO CHKD: CJE LOT GRADING

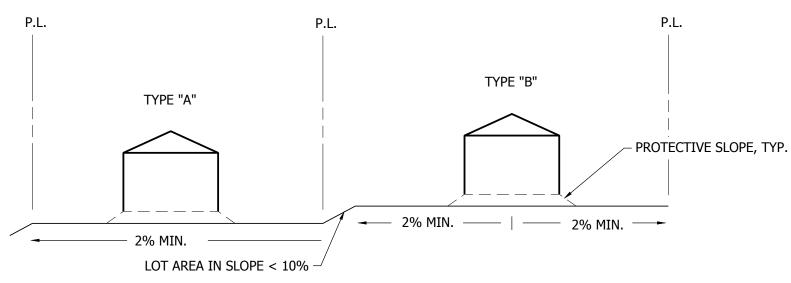
DETAILS

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TYPICAL "A" LOT N.T.S.

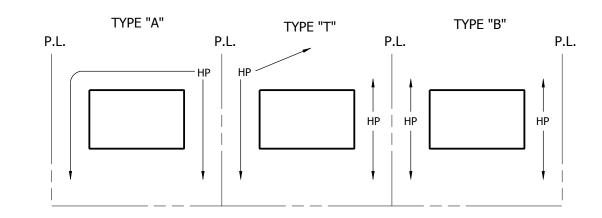




TYPICAL LOT SECTION DETAIL

N.T.S.

FINAL GRADING TO COMPLY WITH H.U.D. STANDARDS CONTAINED IN SECTION 310 AND 602 OF THE MINIMUM PROPERTY STANDARDS (MPS) 4900.1, HANDBOOK 4140.3 CHG (DATA SHEET 79G), IF APPLICABLE, AND ALL LEGAL STANDARDS.



LOT DRAINAGE TYPES N.T.S.

TOP OF CONCRETE (TC) EL 6" MINIMUM_ CLEARANCE 2% MIN *NOTES: 1. IF PHYSICAL OBSTRUCTIONS OR LOT LINES PROHIBIT 10 FEET OF HORIZONTAL DISTANCE, A 5-PERCENT SLOPE SHALL BE PROVIDED TO AN APPROVED ALTERNATE METHOD OF DIVERTING WATER AWAY FROM THE FOUNDATION. (PER IBC 1804.3) 2. AT PAVED AREAS PROVIDE A MINIMUM 2 0% SLOPE AWAY FROM THE BUILDING

TYPICAL BUILDING DRAINAGE DETAIL

N.T.S.

2.0% SLOPE AWAY FROM THE BUILDING FOR THE FIRST 10 FEET OF HORIZONTAL

DISTANCE.

TYPICAL SIDE/REAR LOT SWALE

N.T.S.

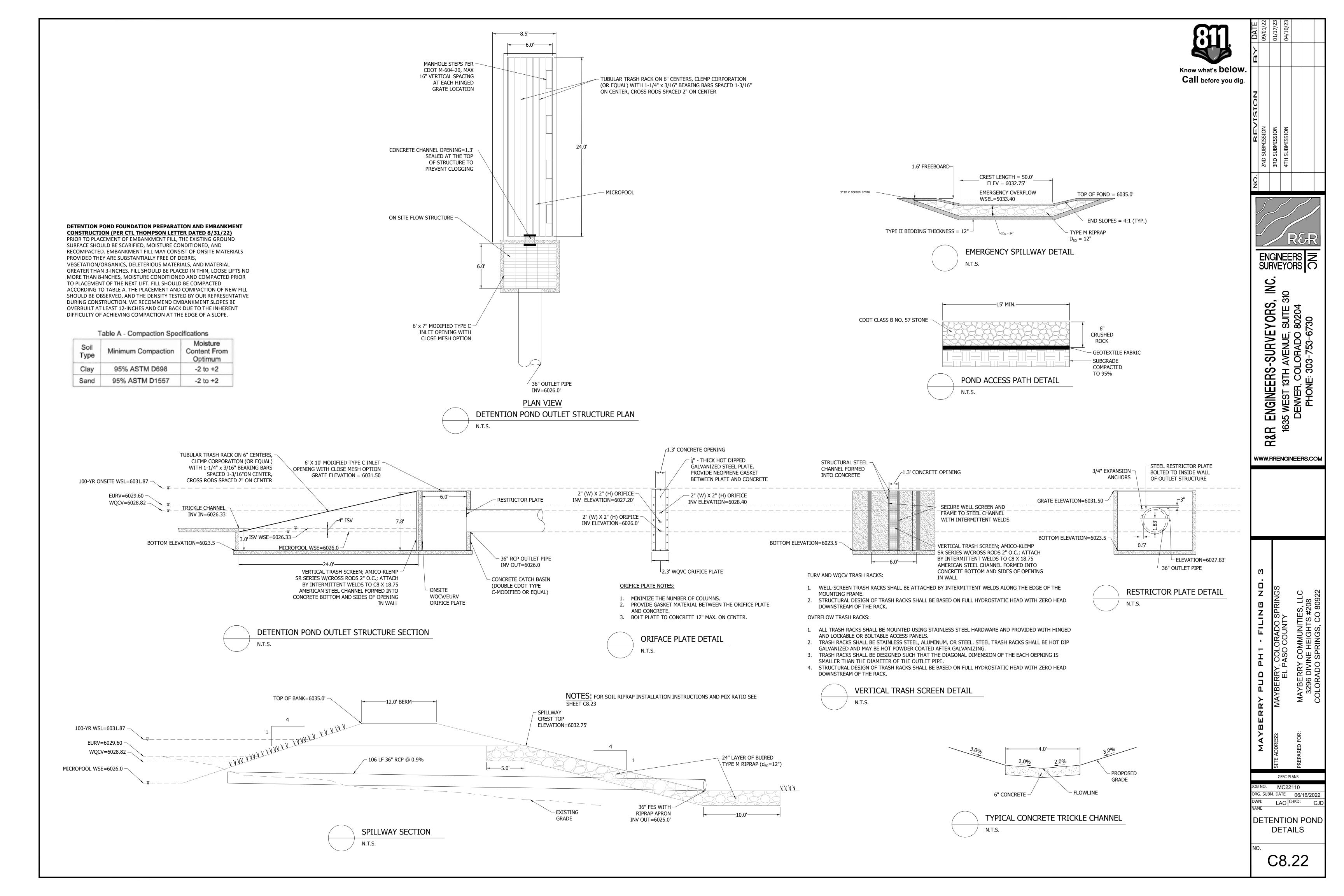
NOTE:
BUILDERS AND OWNERS SHALL MAINTAIN

CONSTRUCTION.

PROPER PROTECTIVE SLOPES AND SIDE/REAR LOT SWALES DURING AND AFTER HOME

1. LOT GRADING & DRAINAGE IS THE RESPONSIBILITY OF THE INDIVIDUAL LOT BUILDERS AND **OWNERS**

- 2. INDIVIDUAL BUILDERS SHALL PROVIDE POSITIVE DRAINAGE WITHIN EACH LOT AND ACCOUNT FOR POTENTIAL CROSS-LOT DRAINAGE ON DOWN GRADIENT LOTS.
- 3. FINAL GRADING TO COMPLY WITH H.U.D. STANDARDS CONTAINED IN SECTION 310 AND 602 OF THE MINIMUM PROPERTY STANDARDS (MPS) 4900.1, HANDBOOK 4140.3 CHG (DATA SHEET 79G), IF APPLICABLE AND ALL LEGAL STANDARDS.



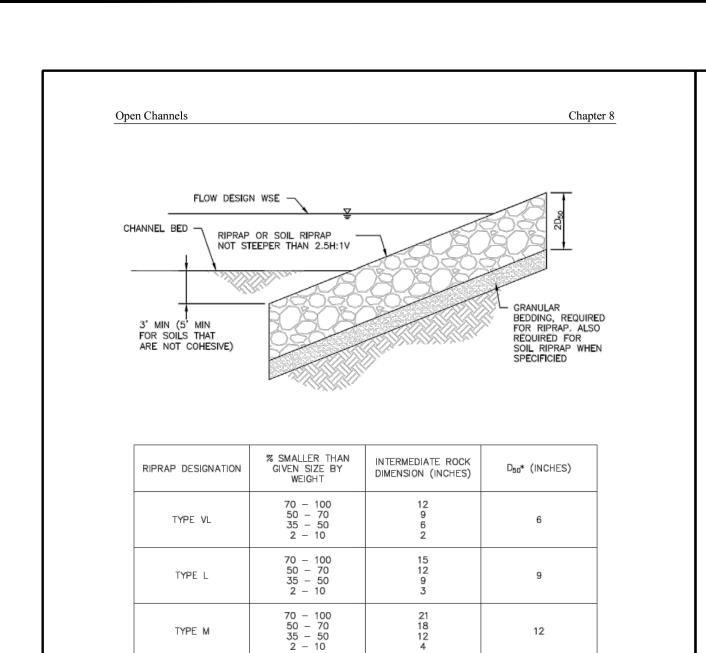


Figure 8-34. Riprap and soil riprap placement and gradation (part 1 of 3)

TYPE H

*D50 = MEAN ROCK SIZE

8-76 Urban Drainage and Flood Control District January 2016 Urban Storm Drainage Criteria Manual Volume 1

Chapter 8 Open Channels

SOIL RIPRAP NOTES:

- ELEVATION TOLERANCES FOR THE SOIL RIPRAP SHALL BE 0.10 FEET. THICKNESS OF SOIL RIPRAP SHALL BE NO LESS THAN THICKNESS SHOWN AND NO MORE THAN 2—INCHES GREATER THAN THE THICKNESS SHOWN.
- WHERE "SOIL RIPRAP" IS DESIGNATED ON THE CONTRACT DRAWINGS, RIPRAP VOIDS ARE TO BE FILLED WITH NATIVE SOIL. THE RIPRAP SHALL BE PRE-MIXED WITH THE NATIVE SOIL AT THE FOLLOWING PROPORTIONS BY VOLUME: 65PERCENT RIPRAP AND 35 PERCENT SOIL. THE SOIL USED FOR MIXING SHALL BE NATIVE TOPSOIL AND SHALL HAVE A MINIMUM FINES CONTENT OF 15 PERCENT. THE SOIL RIPRAP SHALL BE INSTALLED IN A MANNER THAT RESULTS IN A DENSE, INTERLOCKED LAYER OF RIPRAP WITH RIPRAP VOIDS FILLED COMPLETELY WITH SOIL, SEGREGATION OF MATERIALS SHALL BE AVOIDED AND IN NO CASE SHALL THE COMBINED MATERIAL CONSIST PRIMARILY OF SOIL; THE DENSITY AND INTERLOCKING NATURE OF RIPRAP IN THE MIXED MATERIAL SHALL ESSENTIALLY BE THE SAME AS IF THE RIPRAP WAS PLACED WITHOUT SOIL.
- WHERE SPECIFIED (TYPICALLY AS "BURIED SOIL RIPRAP"), A SURFACE LAYER OF TOPSOIL SHALL BE PLACED OVER THE SOIL RIPRAP ACCORDING TO THE THICKNESS SPECIFIED ON THE CONTRACT DRAWINGS. THE TOPSOIL SURFACE LAYER SHALL BE COMPACTED TO APPROXIMATELY 85% OF MAXIMUM DENSITY AND WITHIN TWO PERCENTAGE POINTS OF OPTIMUM MOISTURE IN ACCORDANCE WITH ASTM D698.

| GRADATION FOR GRANULAR BEDDING | | | | | |
|--------------------------------|---------------------------|-----------------------------------|--|--|--|
| U.S. STANDARD SIEVE SIZE | PERCENT PASSING BY WEIGHT | | | | |
| | TYPE I CDOT SECT. 703.01 | TYPE II CDOT SECT. 703.09 CLASS A | | | |
| 3 INCHES | ı | 90 - 100 | | | |
| 1½ INCHES | - | _ | | | |
| ¾ INCHES - | | 20 - 90 | | | |
| ¾ INCHES | 100 | _ | | | |
| #4 | 95 - 100 | 0 - 20 | | | |
| #16 | 45 - 80 | - | | | |
| #50 10 - 30 | | - | | | |
| #100 | 2 - 10 | _ | | | |
| #200 | 0 - 2 | 0 - 3 | | | |

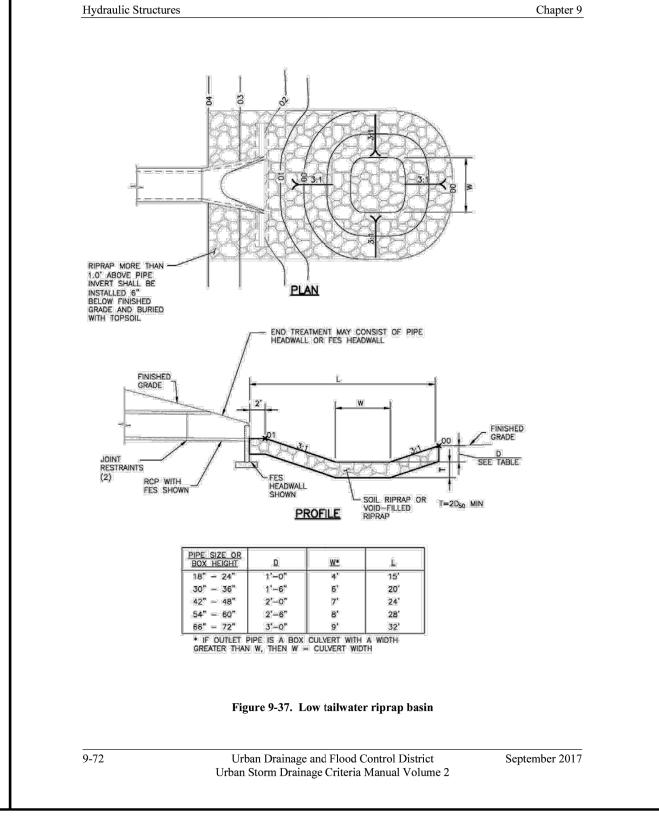
January 2016 Urban Drainage and Flood Control District

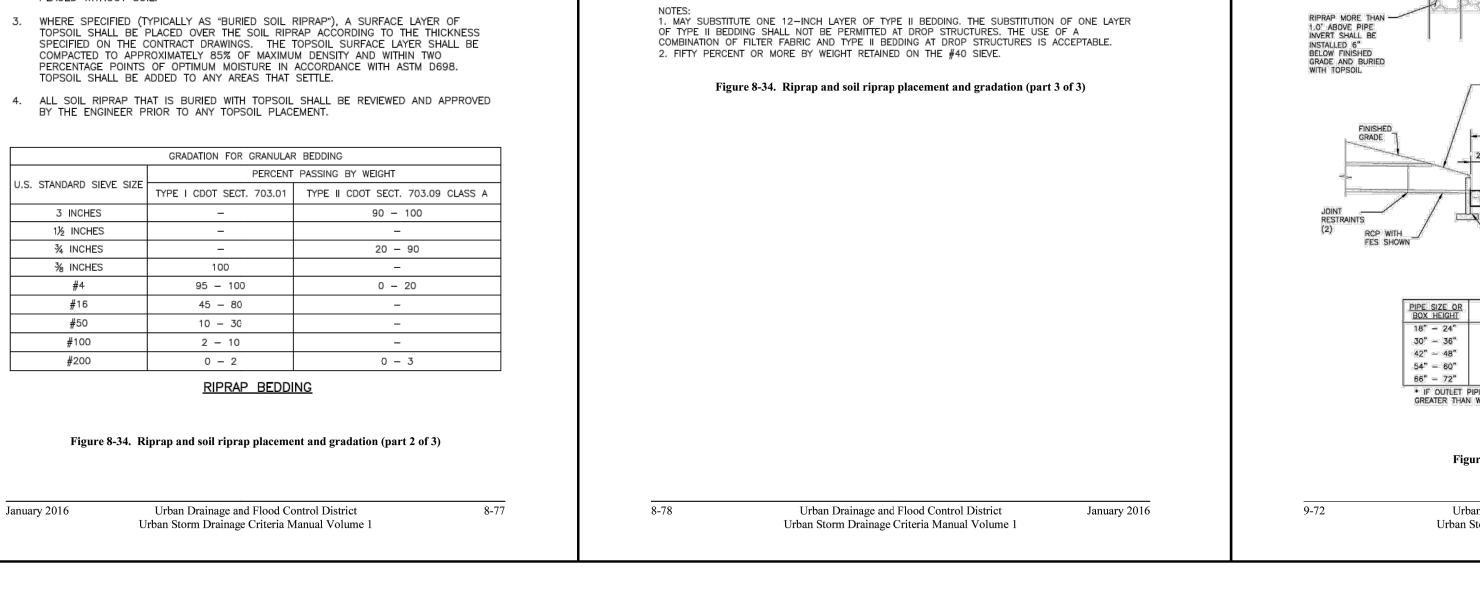
Chapter 8 Open Channels

| THICKNESS REQUIREMENTS FOR GRANULAR BEDDING | | | | | |
|---|------------------------------------|------------------------|---------|--|--|
| | MINIMUM BEDDING THICKNESS (INCHES) | | | | |
| RIPRAP DESIGNATION | FINE-GRAIN | COARSE-GRAINED SOILS 2 | | | |
| | TYPE I (LOWER LAYER) | TYPE II (UPPER LAYER) | TYPE II | | |
| $VL (D_{50} = 6 IN)$ | 4 | 4 | 6 | | |
| $L (D_{50} = 9 IN)$ | 4 | 4 | 6 | | |
| $M (D_{50} = 12 IN)$ | 4 | 4 | 6 | | |
| $H (D_{50} = 18 IN)$ | 4 | 6 | 8 | | |
| VH ($D_{50} = 24 \text{ IN}$) | 4 | 6 | 8 | | |
| | | | | | |

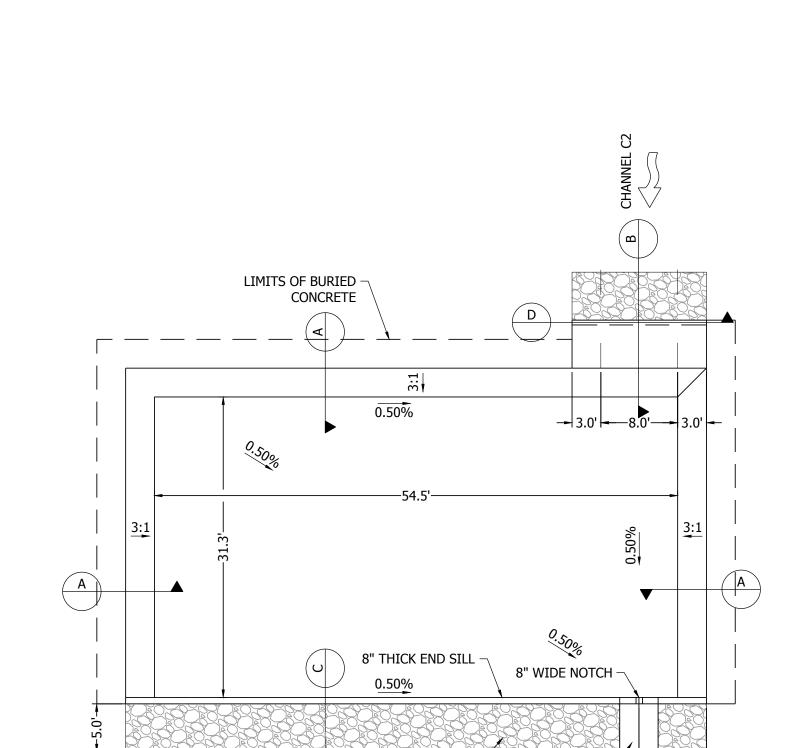
CHANNEL SIDE SLOPE

- CUTOFF WALL



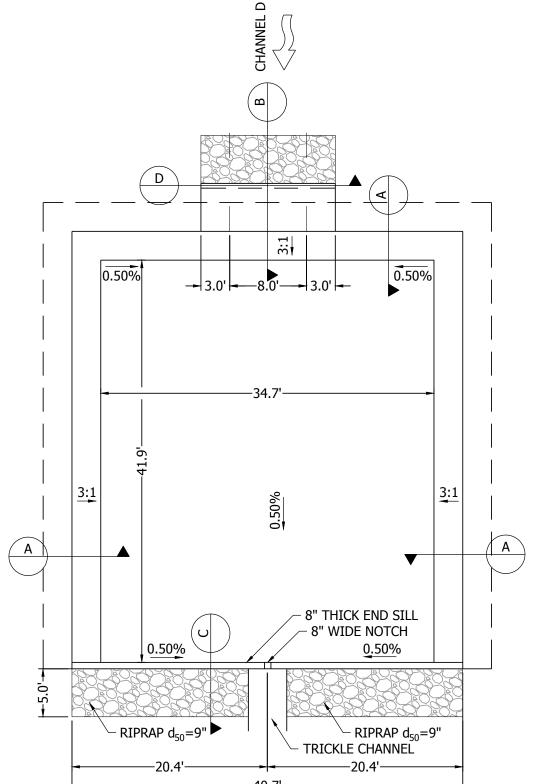


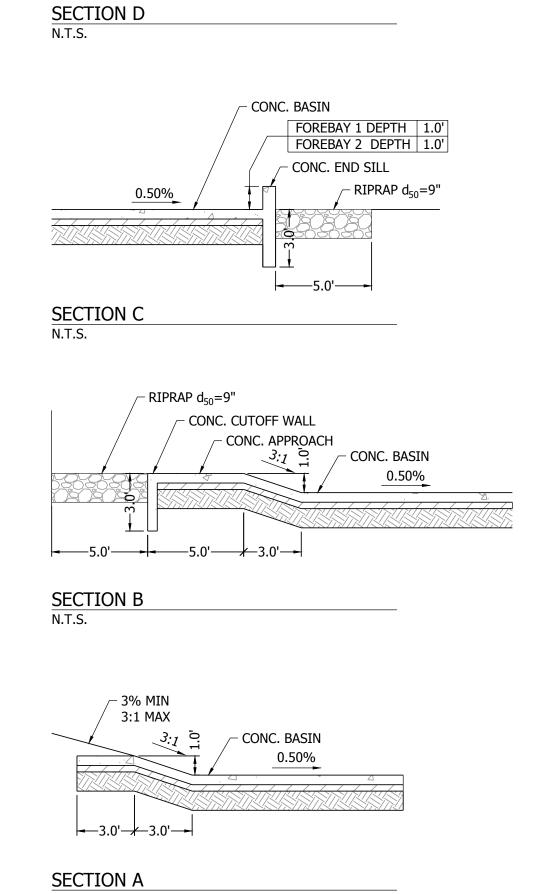
N.T.S.

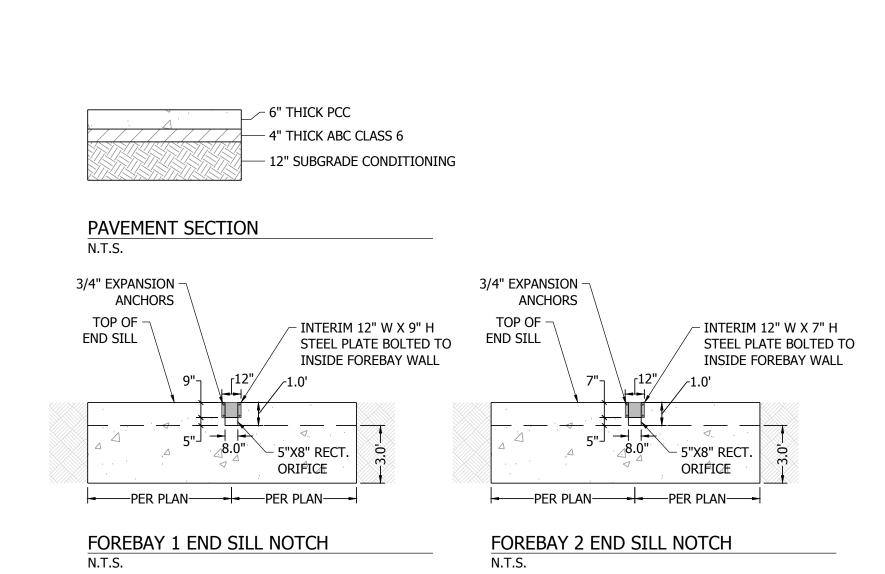


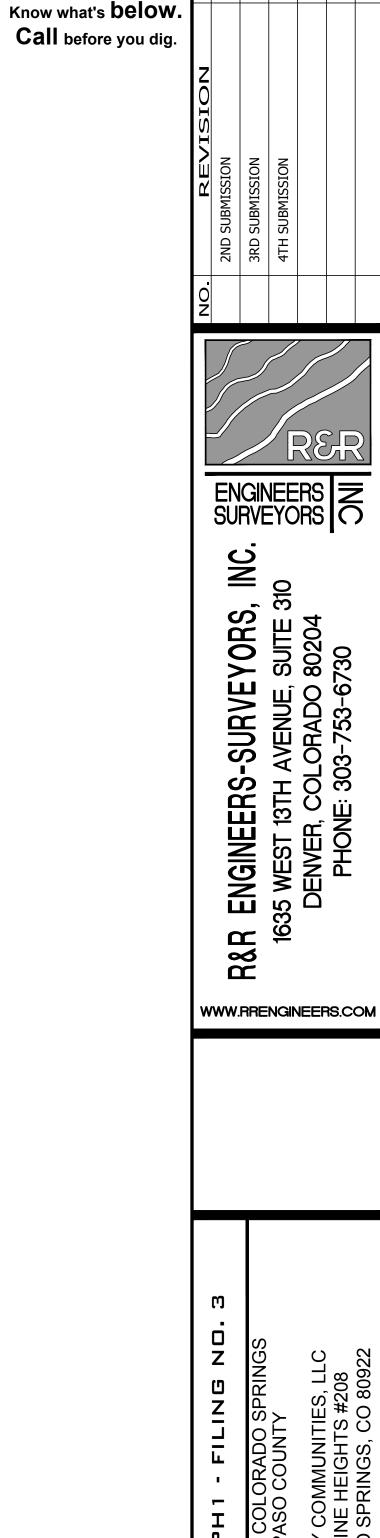


RIPRAP d₅₀=9" — TRICKLE CHANNEL











DETENTION POND

DETAILS